RED AHEAD

Red Line Extension

RED LINE EXTENSION

COMBINED FINAL ENVIRONMENTAL IMPACT STATEMENT/RECORD OF DECISION AND SECTION 4(f) EVALUATION

AUGUST 2022

Chicago, Illinois

Prepared by:
Federal Transit Administration
Chicago Transit Authority

In Cooperation with:
Federal Highway Administration

Combined Final Environmental Impact Statement, Record of Decision,

and Section 4(f) Evaluation

for the

Chicago Red Line Extension Project

Chicago, Illinois

prepared by the

U.S. Department of Transportation

Federal Transit Administration

and the

Chicago Transit Authority

in cooperation with the

Federal Highway Administration

pursuant to:

National Environmental Policy Act of 1969 (42 USC § 4332), Efficient Environmental Reviews for Project Decision Making (23 USC § 139), Council on Environmental Quality Regulations for Implementing the Procedures of the National Environmental Policy Act (40 CFR Parts1500-1508), FHWA/FTA Environmental Impact and Related Procedures (23 CFR Part 771), and Section 4(f) requirements (49 USC § 303 and 23 USC § 138) and regulations (23 CFR Part 774)

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Date of Approval

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Abstract

The Federal Transit Administration (FTA), the lead Federal agency, and the Chicago Transit Authority (CTA), the local project sponsor, in cooperation with the Federal Highway Administration (FHWA), have prepared this combined Final Environmental Impact Statement (EIS)/Record of Decision (combined Final EIS/ROD) and Final Section 4(f) Evaluation for the Red Line Extension (RLE) Project on the Far South Side of Chicago in Cook County, Illinois. This combined Final EIS/ROD was prepared in accordance with regulations developed by the Council on Environmental Quality (CEQ) for the National Environmental Policy Act (NEPA) (40 CFR Parts 1500-1508) and FTA's Environmental Impact and Related Procedures (23 CFR Parts 771 and 774). The combined Final EIS/ROD complies with 23 US § 139(n)(2) as amended by the Fixing America's Surface Transportation Act (Public Law 114-94) and succeeded by the Infrastructure Investments and Jobs Act (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") in November 2021.

The RLE Project would extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. This Final EIS includes the project's purpose and need, and a description of the alternatives considered. The Final EIS evaluates the impacts and the benefits of the project's Preferred Alignment in comparison with the No Build Alternative. The following environmental categories are addressed in the Final EIS, including related methods and regulations, agency coordination (where applicable), anticipated permanent, temporary (construction), and cumulative impacts, and committed mitigation measures: transportation; land use and economic development; displacements and relocations; neighborhoods and communities; visual and aesthetic conditions; noise and vibration; safety and security; historic and cultural resources; hazardous materials; wetlands; air quality; water quality; floodplains; vegetation and wildlife; threatened and endangered species; geology and soils; energy; environmental justice; and Section 4(f) evaluation. The evaluation of alternatives includes potential capital and operating funding strategies. The Final EIS includes the corresponding public and agency coordination.

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Table of Contents

Executive Summary 1

Chapter 1 Purpose and Need 1-1

1.1 Project Area Overview and Background 1-1

1.2 Statement of Purpose and Need 1-4

1.3 Justification of Purpose and Need 1-5

1.4 Organization of the Document 1-11

Chapter 2 Alternatives Considered 2-1

2.1 Alternatives Development Process 2-1

2.2 Alternatives Evaluated in the Final EIS 2-3

2.3 Summary of Construction Activities 2-11

2.4 Environmental Processes 2-17

Chapter 3 Transportation 3-1

3.1 Regulatory Framework/Methods 3-1

3.2 Existing Conditions 3-6

3.3 Environmental Consequences 3-14

Chapter 4 Environmental Impacts and Mitigation 4-1

4.1 Land Use and Economic Development 4-1

4.2 Displacements and Relocation of Existing Uses 4-5

4.3 Neighborhoods and Communities 4-11

4.4 Visual and Aesthetic Conditions 4-22

4.5 Noise and Vibration 4-35

4.6 Safety and Security 4-49

4.7 Historic and Cultural Resources 4-52

4.8 Hazardous Materials 4-61

4.9 Wetlands 4-71

Chapter 5 Indirect and Cumulative Impacts 5-1

5.1 Regulatory Framework Methods 5-1

5.2 Existing Conditions 5-1

5.3 Environmental Consequences 5-3

Chapter 6 Resources with Limited or No Adverse Impacts 6-1

6.1 Air Quality 6-1

6.2 Water Quality 6-2

6.3 Floodplains 6-3

6.4 Vegetation and Wildlife Habitat 6-4
6.5 Threatened and Endangered Species 6-6
6.6 Geology and Soils 6-8
6.7 Energy 6-8
Chapter 7 Environmental Justice 7-1
7.1 Regulatory Framework/Methods 7-1
7.2 Existing Conditions 7-2
7.3 Specialized Outreach 7-2
7.4 Environmental Consequences 7-6
Chapter 8 Section 4(f) Evaluation 8-1
8.1 Regulatory Framework 8-1
8.2 Identification of Section 4(f) Properties 8-3
8.3 Use of Section 4(f) Properties 8-8
Chapter 9 Evaluation of Alternatives 9-1
9.1 Potential Capital and Operating Funding Strategies 9-1
9.2 Comparison of Alternatives 9-6
Chapter 10 Public and Agency Coordination 10-1
10.1 Public Participation Plan 10-1
10.2 Agency Coordination 10-2
10.3 Public Outreach 10-4
10.4 Environmental Justice, Limited English Proficiency, and People with Disabilities 10-7
Chapter 11 List of Acronyms and Abbreviations 11-1
Chapter 12 References 12-1
Chapter 13 List of Preparers 13-1
Chapter 14 List of Recipients 14-1
Chapter 15 Glossary 15-1

Appendices

Appendix A: Alternatives Analysis - Locally Preferred Alternative Report
Appendix B: Scoping Report
Appendix C: Agency Coordination and Public Involvement
Appendix D: Purpose and Need Report
Appendix E: Description of Alternatives
Appendix F: Plans and Profiles
Appendix G: Description of Construction and Phasing for Build Alternatives

Appendix H: Transportation Technical Memorandum
Appendix I: Construction Impacts Technical Memorandum
Appendix J: Land Use and Economic Development Technical Memorandum
Appendix K: Displacements and Relocation of Existing Uses Technical Memorandum
Appendix L: Neighborhoods and Community Impacts Technical Memorandum
Appendix M: Parklands and Community Facilities Technical Memorandum
Appendix N: Visual and Aesthetic Conditions Technical Memorandum
Appendix O: Noise and Vibration Technical Memorandum
Appendix P: Safety and Security Technical Memorandum
Appendix Q: Historic and Cultural Resources Technical Memorandum
Appendix R: Hazardous Materials Technical Memorandum
Appendix S: Water Resources Technical Memorandum
Appendix T: Cumulative Impacts Technical Memorandum
Appendix U: Air Quality Technical Memorandum
Appendix V: Biological Resources Technical Memorandum
Appendix W: Energy Technical Memorandum
Appendix X: Environmental Justice Technical Memorandum
Appendix Y: Section 4(f) Replacement Park Analysis Technical Memorandum

Figures

Figure 1-1: Red Line Extension Project Area 1-3
Figure 1-2: Travel Time to Work 1-6
Figure 1-3: Michigan Avenue and 111th Street INVEST South/West Corridors 1-12
Figure 2-1: Preferred Alignment 2-5
Figure 2-2: Structure Types along Preferred Alignment 2-6
Figure 2-3: Rendering of the 103rd Street Station (Looking East along 103rd Street) 2-7
Figure 2-4: Example Station Rendering: Michigan Avenue Station Aerial View (Looking West) 2-8
Figure 2-5: Example Station Rendering: 103rd Street Station (Looking North) 2-9
Figure 2-6: Construction Segments of the Preferred Alignment 2-14
Figure 3-1: Study Intersections for Transportation Impact Analysis in the Area of Potential Impact 3-3
Figure 3-2: Existing Public Transportation within and near the Area of Potential Impact 3-7
Figure 3-3: Existing Bicycle Facilities within the Area of Potential Impact 3-11
Figure 3-4: Freight Railroads in the Area of Potential Impact 3-13
Figure 4-1: Existing Land Use 4-4

Figure 4-2: Permanent Displacements (North of Michigan Avenue Station) (1 of 2) 4-9
Figure 4-3: Permanent Displacements (South of Michigan Avenue Station) (2 of 2)..... 4-10
Figure 4-4: Photo of Residential Street near the RLE Project Corridor in Roseland..... 4-13
Figure 4-5: Community Areas in and Adjacent to the Area of Potential Impact 4-14
Figure 4-6: Community Facilities in the Area of Potential Impact (1 of 2)..... 4-17
Figure 4-7: Community Facilities in the Area of Potential Impact (2 of 2)..... 4-18
Figure 4-8: Existing Conditions and Photo Simulation of the Elevated Structure North of I-57 (Looking East from 98th Place and Princeton Avenue) 4-28
Figure 4-9: Existing Conditions and Photo Simulation of the Elevated Structure at Fernwood Parkway (Looking South from Eggleston Avenue near 101st Place) 4-29
Figure 4-10: Existing Conditions and Photo Simulation of the 103rd Street Station (Looking East along 103rd Street) 4-30
Figure 4-11: Existing Conditions and Photo Simulation of 107th Place Cross-over (Looking West from 108th Street) 4-31
Figure 4-12: Existing Conditions and Photo Simulation of the Michigan Avenue Station Park & Ride Facility (Looking South along State Street from North of 115th Street) 4-32
Figure 4-13: Existing Conditions and Photo Simulation of the Elevated Structure at 117th Street and Prairie Avenue (Looking Southeast from 117th Street, East of Prairie Avenue) 4-33
Figure 4-14: Existing Conditions and Photo Simulation of the 130th Street Station (Looking East from the Eastern Edge of the Altgeld Gardens Neighborhood).... 4-34
Figure 4-15: Permanent Noise Impacts without Mitigation (1 of 4)..... 4-39
Figure 4-16: Permanent Noise Impacts without Mitigation (2 of 4)..... 4-40
Figure 4-17: Permanent Noise Impacts without Mitigation (3 of 4)..... 4-41
Figure 4-18: Permanent Noise Impacts without Mitigation (4 of 4)..... 4-42
Figure 4-19: Recommended Noise Barrier Locations and Residual Noise Impacts (1 of 3) ... 4-44
Figure 4-20: Recommended Noise Barrier Locations and Residual Noise Impacts (2 of 3) ... 4-45
Figure 4-21: Recommended Noise Barrier Locations and Residual Noise Impacts (3 of 3) ... 4-46
Figure 4-22: Preferred Alignment and Area of Potential Effect 4-56
Figure 4-23: Existing Conditions and Photo Simulation of the Michigan Avenue Station (Facing South from 11421-11433 S. Michigan Avenue)..... 4-58
Figure 4-24: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided(1 of 3) 4-65
Figure 4-25: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (2 of 3) 4-66
Figure 4-26: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (3 of 3) 4-67

Figure 4-27: Existing Wetlands Delineated in the Area of Potential Impact North of 130th Street 4-73
Figure 4-28: Wetlands Delineated in the Area of Potential Impact (1 of 2) 4-74
Figure 4-29: Wetlands Delineated in the Area of Potential Impact (2 of 2) 4-75
Figure 6-1: Waterbodies and Floodplains in the Vicinity of the Area of Potential Impact 6-5
Figure 7-1: Minority Populations within the Area of Potential Impact 7-3
Figure 7-2: Low-Income Populations within the Area of Potential Impact 7-4
Figure 7-3: Limited English Proficiency Populations within the Area of Potential Impact 7-5
Figure 8-1: Publicly Owned Park and Recreational Properties Adjacent to the Preferred Alignment (1 of 2) 8-6
Figure 8-2: Publicly Owned Park and Recreational Properties Adjacent to the Preferred Alignment (2 of 2) 8-7
Figure 8-3: Impacts on Wendell Smith Park 8-9
Figure 8-4: Impacts on Fernwood Parkway 8-12

Tables

Table ES-1: Environmental Impact Statement Document Organization 1
Table ES-2: Summary of Benefits and Impacts 5
Table ES-3: Comparative Evaluation of Alternatives 12
Table 1-1: Environmental Impact Statement Document Organization 1-13
Table 2-1: Summary of Park and Ride Facilities 2-10
Table 2-2: Construction Segments and Summary of Work Activities 2-12
Table 3-1: Transportation - Impact Summary 3-1
Table 3-2: Existing Intersection Level of Service Comparing Draft and Final EIS Values 3-8
Table 3-3: Recommended Potential Mitigations for the Preferred Alignment 3-16
Table 3-4: Preferred Alignment Intersections (2050) LOS with Potential Mitigation 3-18
Table 3-5: Proposed Parking Facilities 3-22
Table 4-1: Land Use and Economic Development – Impact Summary 4-1
Table 4-2: Displacements and Relocation of Existing Uses – Impact Summary 4-6
Table 4-3: Displacements Compared to the Draft EIS East and West Options 4-8
Table 4-4: Neighborhoods and Communities – Impact Summary 4-11
Table 4-5: Visual and Aesthetic Conditions – Impact Summary 4-22
Table 4-6: Noise and Vibration - Impact Summary 4-36
Table 4-7: Summary of FTA Category 2 (Residential) Noise Impacts for the Preferred Alignment without Mitigation 4-38
Table 4-8: Summary of Residential Noise Impacts for the Preferred Alignment with Noise Barrier Mitigation 4-47

Table 4-9: Summary of Vibration Impacts for the Preferred Alignment without Mitigation 4-48
Table 4-10: Safety and Security – Impact Summary 4-49
Table 4-11: Historic and Cultural Resources – Impact Summary 4-53
Table 4-12: Eligibility and Effects Findings for the Preferred Alignment 4-59
Table 4-13: Hazardous Materials – Impact Summary 4-61
Table 4-14: Groupings Containing Potentially Hazardous or Regulated Materials 4-63
Table 4-15: Type of Soil Exceedance Encountered During the Phase II ESA Investigations . 4-64
Table 4-16: Wetlands – Impact Summary 4-71
Table 7-1: Summary of Benefits 7-8
Table 7-2: Summary of Potential Impacts after Mitigation 7-8
Table 8-1: NRHP-Eligible Resources in the Area of Potential Effects 8-3
Table 8-2: Park and Recreational Properties Evaluated for Section 4(f) Use 8-8
Table 9-3: Comparative Evaluation of Alternatives 9-8
Table 10-1: Outreach Meetings Held to Date 10-5

Executive Summary

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. The RLE Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA system. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

The National Environmental Policy Act of 1969 (NEPA) mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined (42 United States Code [USC] § 4332). FTA and CTA prepared this Red Line Extension (RLE) Project Final Environmental Impact Statement (EIS) in accordance with regulations developed by the Council on Environmental Quality (CEQ) for the National Environmental Policy Act (NEPA) (40 CFR Parts 1500-1508) and FTA's Environmental Impact and Related Procedures (23 CFR Parts 771 and 774). Other applicable regulations include Section 106 of the National Historic Preservation Act (NHPA), Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966, joint guidance and regulations from FTA and the Federal Highway Administration, and other agency regulations and guidelines. The Final EIS has been combined with the FTA Record of Decision (ROD) pursuant to 23 CFR 771.125 and complies with 23 USC § 139(n)(2) as amended by the Fixing America's Surface Transportation Act (Public Law 114-94) and succeeded by the Infrastructure Investments and Jobs Act (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") in November 2021. Any reference to the Final EIS is inclusive of the ROD.

NEPA documents, such as this EIS, must provide sufficient technical detail to meet a range of legal requirements and are required to be organized in a specific way, as described in 40 Code of Federal Regulations (CFR) § 1502. **Table ES-1** provides an overview of the chapters and the major topics covered in this document.

Table ES-1: Environmental Impact Statement Document Organization

Chapter 1 Purpose and Need	This chapter is the foundation of the document. It introduces the RLE Project, provides background information, and explains why the RLE Project is proposed and important.
Chapter 2 Alternatives Considered	This chapter reviews the planning process and alternatives under further consideration in this Final EIS.
Chapter 3 Transportation	This chapter presents the potential for impacts on the transportation network. This chapter also discusses measures to avoid or minimize those impacts.
Chapter 4 Environmental Impacts and Mitigation	This chapter discusses the social, economic, and environmental resources that could be affected by the construction and operation of the RLE Project and measures to avoid or minimize those impacts.

Chapter 5 Indirect and Cumulative Impacts	This chapter discusses impacts to resources that may not be directly caused by the RLE Project, but instead may result from or be attributable to the environment created by the RLE Project.
Chapter 6 Resources with Limited or No Adverse Impacts	This chapter summarizes the resources that would have limited or no adverse impacts due to operation or construction of the RLE Project.
Chapter 7 Environmental Justice	This chapter discusses the impacts of the RLE Project on environmental justice communities in the area of potential impact.
Chapter 8 Section 4(f) Evaluation	This chapter focuses on meeting the federal requirements of Section 4(f) of the USDOT Act of 1966, which protects significant historic sites, publicly owned parks, recreation areas, and wildlife and waterfowl refuges.
Chapter 9 Evaluation of Alternatives	This chapter presents potential capital and operating funding strategies for the RLE Project.
Chapter 10 Public and Agency Coordination	This chapter discusses the process for public involvement and agency coordination and addresses public comments and suggestions.
Chapter 11 List of Acronyms and Abbreviations	This chapter provides definitions for the acronyms and abbreviations used within the document.
Chapter 12 References	This chapter provides the references used within the document.
Chapter 13 List of Preparers	This chapter lists the preparers of this document.
Chapter 14 List of Recipients	This chapter lists the agencies, local officials, and public libraries that were notified of the availability of this document.
Chapter 15 Glossary	This chapter provides definitions for the phrases and terms used throughout the document.

Red Line Extension Project Background

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connections to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility at 120th Street. Supporting information on the purpose and need for this project is provided in **Chapter 1**.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated

the Union Pacific Railroad (UPRR) Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; preserve properties slated for future development surrounding the station areas; and would accommodate UPRR's potential tracks. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure. Lowering the platform makes the height more typical to what is existing throughout CTA's system thus improving passenger comfort ascending/descending the stairs

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Consolidated Rail Corporation (Conrail) and Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to the CN tracks along the MED corridor. In addition, this design refinement would

provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA) that was published on January 31, 2022. The public hearing for the Supplemental EA was held in two formats: one virtual meeting and one in-person meeting. The virtual hearing was February 15, 2022 and the in-person hearing was February 17, 2022. Each public hearing solicited comments from agencies and the community about findings presented in the Supplemental EA and comments were accepted from January 31, 2022 to March 1, 2022. The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment that is analyzed in this Final EIS shown in **Figure 1-1** and as described in **Chapter 2**.

The following key features of the Preferred Alignment remain similar to that disclosed in the Draft EIS:

- 5.6-mile heavy rail transit line extension from the existing 95th/Dan Ryan terminal to 130th Street. The original project length was 5.3 miles and was lengthened to 5.6 miles when the 130th Street station was relocated.
- Four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street
- Multimodal connections at each station including bus, bike, pedestrian, and park & ride facilities. Park & ride facilities total up to 1,340 parking spaces along the corridor.
- New yard and shop at 120th Street

Environmental Benefits and Impacts

Potential environmental benefits and impacts are detailed in **Chapters 3–8** of the Final EIS and are summarized in **Table ES-2**. CTA evaluated the impacts of the Preferred Alignment in comparison with the respective portions of the East and West Options of the UPRR Rail Alternative to identify any changes to the resource benefits or impacts resulting from the Preferred Alignment.

Table ES-2: Summary of Benefits and Impacts

No Build Alternative	Preferred Alignment
Transportation (*Chapter 3*)	
No additional rapid rail transit service would be provided. Eight intersections would operate at an undesirable level of service (LOS) of E or F in either the AM or PM peak hours or both in the 2050 design year. Traffic flow would continue to deteriorate.	Permanent *Public Transportation* ▪ CTA passengers would benefit from faster travel times by accessing rail service farther south. ▪ CTA passengers would benefit from reduced congested conditions at the 95th/Dan Ryan terminal with bus reroutes that would more directly connect passengers to new stations farther south. ▪ Permanent impacts would be beneficial. *Vehicular Traffic* ▪ Five intersections would operate at a LOS worse than the No Build condition in 2050, and five others would operate at an undesirable LOS, which is defined as a LOS of E or F. ▪ Closure of Old 130th Street would eliminate one of three access routes to Carver Military Academy High School and a connection to the access road into the Beaubien Woods Forest Preserve. Closure of this access would not result in adverse impacts because the primary access to Carver Military Academy High School and Beaubien Woods Forest Preserve amenities from 130th Street to Greenwood Avenue and 132nd Street would remain. The secondary access from Doty Avenue would remain unchanged. ▪ Permanent impacts would not be adverse after mitigation. *Pedestrian* ▪ Pedestrians would benefit from upgraded intersections immediately adjacent to stations with Americans with Disabilities Act (ADA) accessible curb ramps, replacement of deteriorated sidewalks, and in-fill of sidewalk gaps. ▪ With the exception of the 130th Street station, pedestrians may need to use the UPRR at-grade crossings to access the RLE stations, depending on the direction of travel on foot, resulting in pedestrian safety impacts. ▪ Permanent impacts would not be adverse after mitigation.

No Build Alternative	Preferred Alignment
	Bicycle ▪ Bicyclists would benefit from the addition of bicycle parking at the four RLE stations and connections to nearby existing and proposed bike routes via expanded transit access from the RLE Project. ▪ Permanent impacts would be beneficial. *Freight Transportation* ▪ There would be no permanent impacts. *Parking Facilities* ▪ The 111th Street station would affect the existing parking at the Agape Community Center. This RLE station would require the use of a City-owned parcel that would affect its current use by the Agape Community Center for parking. ▪ Access to the TCA Health parking lot would be maintained and parking space impacts from the 130th Street station, if any, would be replaced at a ratio of 1 to 1. ▪ Benefits would accrue by providing additional park & ride opportunities to attract passengers to transit and potentially improve connections to regional commuter rail. ▪ Permanent impacts would not be adverse after mitigation. Construction ▪ Construction activities would temporarily affect the physical capacity of roadways, sidewalks, and intersections subject to lane closures, narrowing, and detours. This would affect bus transportation, vehicular traffic, bicycle traffic, truck freight, pedestrians, on-street parking, and potentially access to off-street parking. ▪ Increased congestion due to construction may temporarily increase travel times along roadways within the RLE project area. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Land Use and Economic Development (*Chapter 4.1*)	
No Impact	Permanent ▪ Economic development benefits would improve from new public transportation options. ▪ Incompatible zoning for stations, substations, and park & ride facilities would be rezoned. ▪ Permanent impacts would not be adverse after mitigation.

No Build Alternative	Preferred Alignment
	Construction ▪ Construction could be disruptive to businesses along the Preferred Alignment. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Displacements and Relocation of Existing Uses (*Chapter 4.2*)	
No Impact	Permanent ▪ Accommodation of tracks, stations, yard and shop, and other ancillary facilities would require acquisition of 228 parcels, of which 97 of these parcels have buildings that would be permanently displaced. These parcels with displacements are primarily residential with some commercial/industrial uses. ▪ Permanent impacts would not be adverse after mitigation. Construction ▪ Construction impacts would not occur.
Neighborhoods and Communities (*Chapter 4.3*)	
No Impact	Permanent *Community Character and Cohesion* ▪ In the Washington Heights and Roseland communities, the elevated structure between 99th Street and 103rd Street would change the neighborhood setting of the houses facing it, which represents an adverse visual impact. The adverse impact would also include the 103rd Street station and the area near the 107th Place cross-over due to the change in residential character. ▪ There would be adverse visual impacts in the West Pullman community at 117th Street and Prairie Avenue due to the elevated structure, and in the Riverdale community near the Altgeld Gardens neighborhood due to the 130th Street station park & ride facility. ▪ Permanent impacts would be adverse despite mitigation. *Mobility* ▪ All communities in the vicinity of the RLE Project would benefit from improved mobility with reduced travel times. ▪ Closure of Old 130th Street would eliminate one of three access routes to Carver Military Academy High School and a connection to the access road into the Beaubien Woods Forest Preserve. The primary access to Carver Military Academy High School and Beaubien Woods Forest Preserve amenities from 130th Street to Greenwood Avenue and 132nd Street would remain and be improved as part of the RLE Project. The secondary access from Doty Avenue would remain unchanged. ▪ Permanent impacts would not be adverse after mitigation.

No Build Alternative	Preferred Alignment
	Community Resources ▪ Permanent impacts would not occur. Construction *Community Character and Cohesion* ▪ Construction would introduce temporary, intermittent visual, noise, and dust impacts. ▪ Construction impacts are temporary and would not be adverse after mitigation. *Mobility* ▪ Construction would create truck traffic, and temporary street closures and detours would be needed. Access to businesses could be temporarily limited on an intermittent basis. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Visual and Aesthetic Conditions (*Chapter 4.4*)	
No Impact	Permanent ▪ Adverse impacts would be north of I-57, between 99th Street and the 103rd Street station, at 107th Place near the crossing over the UPRR, at 117th Street and Prairie Avenue, and at the 130th Street station. ▪ Permanent impacts would be adverse despite mitigation. Construction ▪ Construction would create temporary visual impacts due to construction activities in the work zone. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Noise and Vibration (*Chapter 4.5*)	
No Impact	Permanent *Noise* ▪ Before mitigation, 278 residences and two institutions (Agape Community Center and My Holy Rock Missionary Baptist Church) would have moderate impacts, and 91 residences and one institution (Kingdom Global Outreach Ministries) would have severe noise impacts. ▪ After mitigation with noise barriers, 15 residences would have moderate impacts. *Vibration* ▪ Permanent impacts would not occur.

No Build Alternative	Preferred Alignment
	Construction *Noise* ▪ Construction impacts are temporary and would not be adverse after mitigation. *Vibration* ▪ Construction impacts would not occur.
Safety and Security (*Chapter 4.6*)	
No Impact	Permanent *Safety* ▪ Increased pedestrian traffic crossing streets near stations without positive traffic control (such as crosswalks or traffic signals) would have an adverse impact on pedestrian safety. ▪ The closure of Old 130th Street would not adversely impact emergency access to Carver Military Academy High School. The closure would be necessary to prevent the interaction of all modes of transportation with the new at-grade crossing and enhance safety. ▪ Permanent impacts would not be adverse after mitigation. *Security* ▪ Permanent impacts would not occur. Construction ▪ Construction impacts are temporary and would not be adverse after mitigation.
Historic and Cultural Resources (*Chapter 4.7*)	
No Impact	Permanent ▪ Permanent adverse effects to historic or cultural resources would not occur. Construction ▪ Adverse construction effects to historic or cultural resources would not occur.
Hazardous Materials (*Chapter 4.8*)	
No Impact	Permanent ▪ Hazardous material spills or releases that occur along the existing railroad tracks immediately adjacent to the Preferred Alignment would have the potential to migrate and affect the properties associated with the Preferred Alignment.

No Build Alternative	Preferred Alignment
	▪ Permanent impacts would not be adverse after Best Management Practices (BMPs) and standard practices, such as following the local, state, and federal laws regarding handling of hazardous materials. Construction ▪ Based on the findings of Phase II Environmental Site Assessments (ESAs), construction activities would have the potential to encounter contaminated materials. ▪ Construction-related impacts would not be adverse after BMPs and standard practices, such as following the local, state, and federal laws regarding handling of hazardous materials.
Wetlands (*Chapter 4.9*)	
No Impact	Permanent ▪ The Preferred Alignment would affect up to 15.7 acres of wetlands. This acreage is primarily in the vicinity of the 120th Street yard and shop. ▪ The United States Army Corps of Engineers (USACE) documented in a letter dated January 19, 2022, that there are no waterways, wetlands, or other areas considered “waters of the United States” under USACE jurisdiction. ▪ Permanent impacts would not be adverse after mitigation. Construction ▪ Construction staging areas would be sited outside of wetlands as much as possible, but if there were any temporary impacts, those areas would be restored to wetlands after construction. There would be up to 0.19 acre of temporary wetland impacts on Kensington Marsh. This wetland would be mitigated or restored to preconstruction conditions and monitored for a period to be determined in coordination with the Metropolitan Water Reclamation District of Greater Chicago (MWRD). The USACE would not require mitigation. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Indirect and Cumulative Impacts (*Chapter 5*)	
No Impact	Indirect ▪ Implementation of the Preferred Alignment would have the potential for redevelopment from accessibility to new employment opportunities, attraction of new development near RLE stations, and overall livability improvements.

No Build Alternative	Preferred Alignment
	Cumulative ▪ The surrounding communities would benefit from the cumulative impacts of other planned and programmed projects because of improved access to jobs, places of interest, residences, and the reduction of air pollution emissions.
Resources with Limited or No Adverse Impacts (*Chapter 6*)	
No Impact	▪ The Preferred Alignment would have limited or no adverse impacts on the following resource areas: air quality, water quality, floodplains, vegetation, wildlife habitat, threatened and endangered species, geology and soils, and energy.
Environmental Justice (*Chapter 7*)	
No Impact	▪ The Preferred Alignment would have permanent adverse impacts on community character and cohesion that could not be mitigated because the elevated structure would alter the character and scale of residential neighborhoods. Due to the proximity of the elevated structure to residential areas, adverse impacts would remain despite mitigation. ▪ However, both the impacts and benefits of the project would affect primarily minority and low-income populations, as the purpose of this project is to connect the disadvantaged communities to Chicago's major employment and activity centers. Therefore, no disproportionately high and adverse impacts on minority or low-income populations would occur.
Section 4(f) (*Chapter 8*)	
No Impact	▪ No adverse impacts on the attributes, features, or activities of Wendell Smith Park or Fernwood Parkway would occur after mitigation. The 0.1-acre temporary easement needed in the northwest corner of Wendell Smith Park for construction would be a Section 4(f) temporary occupancy under 23 CFR § 774.13 and would not constitute a use under Section 4(f). A *de minimis* finding is documented in this Final EIS for the Section 4(f) use of approximately 4.5 acres of Fernwood Parkway. The Chicago Park District concurred with the temporary occupancy and *de minimis* determinations on April 19, 2022.

Evaluation of Alternatives

CTA used the following evaluation goals and criteria, based on the purpose and need, to compare the benefits and drawbacks of the Preferred Alignment as described in **Chapter 9**.

- Goal 1 - Reduce Transit Times

- Goal 2 - Increase Travel Choices
- Goal 3 - Increase Economic Competitiveness
- Goal 4 - Minimize Environmental Impacts
- Goal 5 - Provide the Best Value

Table ES-3 provides specific measures for the goals and compares the extent to which the Preferred Alignment and the No Build would meet the goals.

Table ES-3: Comparative Evaluation of Alternatives

Criteria	No Build Alternative	Preferred Alignment
Goal 1 - Reduce Transit Times		
Travel Times Between Stations[1] 130th Street to 95th/Dan Ryan terminal 130th Street to Jackson Station (Loop)	 38 minutes 69 minutes	 15 minutes 40 minutes
Would the proposed stations serve transit-dependent communities?	No	Yes
Would there be new direct service to Altgeld Gardens?	No	Yes
Goal 2 - Increase Travel Choices		
Would there be better access to regional employment centers and local commercial areas?	No	Yes
Would potential connections to other public transportation modes in the communities adjacent to the RLE Project be possible?	No	Yes
Would geographic isolation be reduced?	No	Yes
How many stations would have park & ride facilities?	0	4 of 4
Total park & ride spaces	0	Up to 1,340
Goal 3 - Increase Economic Competitiveness		
Could nearby development be encouraged?	No	Yes
Goal 4 - Minimize Environmental Impacts		
Displacements and Relocations Properties Buildings	 0 0	 228 97
Noise Impacts After Mitigation Receivers with Moderate Noise Impacts (before mitigation/after mitigation) Receivers with Severe Noise Impacts (before mitigation/after mitigation)	No change 0 0	Not adverse 278/15 91/0
Park Impacts (Not Adverse After Mitigation) Construction Phase Permanent Permanent (acres)	 0 parks 0 parks 0 acres	 1 park 1 park 4.5 acres
Would there be community impacts after mitigation?	No	Yes
Would there be visual and aesthetic impacts after mitigation?	No	Yes
Goal 5 - Provide the Best Value		
Projected Ridership (per weekday)[2]	0	41,500
Capital Costs (in Billions, YOE)	$0	$3.6
Annual Change in O&M Costs (in Millions)[3]	No Change	$32.7

1 No Build travel time is based on a Northbound trip using bus route #34 and transferring to Red Line at 95th/Dan Ryan terminal in AM peak period; it includes bus and rail running times, wait times, and transfer time at 95th terminal. Preferred Alignment travel time includes RLE running time and wait time at 130th Street station. Travel times have been updated since Draft EIS based on 2021 schedules and project engineering.
2 Ridership is based on Simplified Trips-on-Project Software (STOPS) ridership model output projecting 2040 ridership.
3 O&M = Operations and maintenance. Difference from No Build Alternative shown in 2020 dollars

Public Input

In addition to determinations and findings, the combined Final EIS/ROD **Appendix C** includes responses to substantive comments from the public and agencies gathered throughout the NEPA process, namely, input received from the Draft EIS and Supplemental EA public hearings as well as input received from continued outreach and coordination of the Final EIS. The Final EIS serves as the primary document to facilitate agency review and issuance of the ROD and is inclusive of all the design changes since circulation of the Draft EIS, clearly identifying the Preferred Alignment. The Final EIS is available on the CTA website (https://www.transitchicago.com/rle/finaleis), and hard copies of the Final EIS are available at the following locations:

- FTA Region 5 Office, 200 W. Adams Street, Suite 320, Chicago, IL 60606
- CTA headquarters, 567 W. Lake Street, 1st Floor, Chicago, IL 60661
- 9th Ward Aldermanic Office, 34 E. 112th Place, Chicago, IL 60628
- 34th Ward Aldermanic Office, 507 W. 111th Street, Chicago, IL 60628
- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628
- Palmer Park, 11101 S. Cottage Grove, Chicago, IL 60628
- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library, 955 E. 131st Street, Chicago IL 60827
- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605

Chapter 1 Purpose and Need

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. Since the Red Line Extension (RLE) Project began in 2006 through the present, it remains consistent with past and current federal funding and authorization bills.

The National Environmental Policy Act (NEPA) mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined. CTA and FTA published a Draft Environmental Impact Statement (EIS) on October 6, 2016 that evaluated the environmental impacts of constructing and operating the RLE Project in accordance with NEPA and other applicable regulations, including Section 106 of the National Historic Preservation Act (NHPA), Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966, joint guidance and regulations from FTA and the Federal Highway Administration, and other agency regulations and guidelines. The Final EIS analyzes the benefits and impacts of implementing the No Build Alternative and the Preferred Alignment on the physical, human, and natural environments along the corridor and near stations, with a focus on benefits and impacts that have changed since the issuance of the Draft EIS in 2016. The Final EIS has been combined with the FTA Record of Decision (ROD) pursuant to 23 CFR 771.125. Any reference to the Final EIS is inclusive of the ROD.

This chapter describes the purpose and need for transit improvements associated with the RLE Project. This purpose and need has been maintained from the purpose and need statement presented in the RLE Alternatives Analysis (AA) document (**Appendix A**), input received from the public during the EIS scoping process (**Appendix B**), ongoing public outreach (summarized in **Chapter 10** and **Appendix C** of the Final EIS), and the *Improving Access, Increasing Livability: The CTA Red Line South Extension Technical Report* prepared in December 2012 by Chicago Metropolitan Agency for Planning (CMAP), CTA, and Developing Communities Project, Inc. (DCP). This chapter also describes CTA's basis for advancing the RLE Project, identifies objectives that frame the development and evaluation of the alternatives, and sets the stage for NEPA analysis leading to the final decision on the project. Additional background data supporting this statement of purpose and need are provided in the *Purpose and Need Report* (**Appendix D**).

1.1 Project Area Overview and Background

CTA's Red Ahead Program is a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line, the Red Line. As part of the program, FTA and CTA have been analyzing the proposed extension of the Red Line south from its existing terminus.

The RLE Project is located approximately 11 miles south of the Loop (Chicago's central business district) on Chicago's Far South Side. The project area defined in the Draft EIS encompassed approximately 20 square miles; however, it was expanded farther south for the Final EIS to include

the relocation of the 130th Street station south of 130th Street. This extension south incorporates the entire Riverdale community into the project area. The overall boundaries of the project area were 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The new southern boundary for the Final EIS project area corresponds to the City boundary, then I-94, and then connects with the previous Draft EIS project area boundary at 134th Street east of I-94 as shown in **Figure 1-1**. The project area includes expressways, regional arterials, commuter and freight railroads, intermodal connectors, local streets, bicycle facilities, and pedestrian facilities. The expressways that pass through the project area are Interstate 94 (I-94, also known as the Dan Ryan Expressway, north of 95th Street and the Bishop Ford Freeway south of 95th Street) and Interstate 57 (I-57). From the northern border of the project area, I-94 runs south to 99th Street, curves east, then curves south and runs along the west side of Lake Calumet. I-57 joins I-94 at 95th Street and runs east of the Metra Rock Island District commuter rail line to 115th Street, and then curves south along the western limit of the project area.

CTA's Red Line service currently terminates at the 95th/Dan Ryan terminal, in the northern portion of the project area. From there, a network of CTA and Pace Suburban Bus Service (Pace) bus routes serves the surrounding Far South Side communities. The 95th/Dan Ryan terminal is among CTA's busiest stations, and many residents in the project area use bus service to transfer to the Red Line, causing lengthy travel times. The Red Line operates 24 hours per day, 7 days per week, as do some of the connecting bus routes.

Metra operates commuter rail in the project area. The commuter rail lines include the Rock Island District, Electric District mainline, and Electric District Blue Island branch. Northern Indiana Commuter Transportation District (NICTD) operates the South Shore Line, which shares tracks with Metra Electric District (MED) mainline north of 115th Street. These commuter rail lines offer primarily peak-hour, peak-direction service to and from downtown Chicago, with infrequent service outside of peak hours.

The overall project area has residential (primarily single-family), commercial (urban mixed-use), industrial, transportation, utility, and vacant land uses. Commercial land uses are clustered around the major thoroughfares in the area, including Michigan Avenue and Halsted Street. Vacant properties are interspersed throughout most residential and commercial blocks. The project area encompasses parts of ten community areas in the Far South Side of Chicago as shown in **Figure 1-1**. The community areas include Beverly, Washington Heights, Roseland, Pullman, Morgan Park, West Pullman, Riverdale, South Deering, Village of Calumet Park, and Hegewisch. The project area includes several schools, universities (including Chicago State University), and the Altgeld Gardens neighborhood.

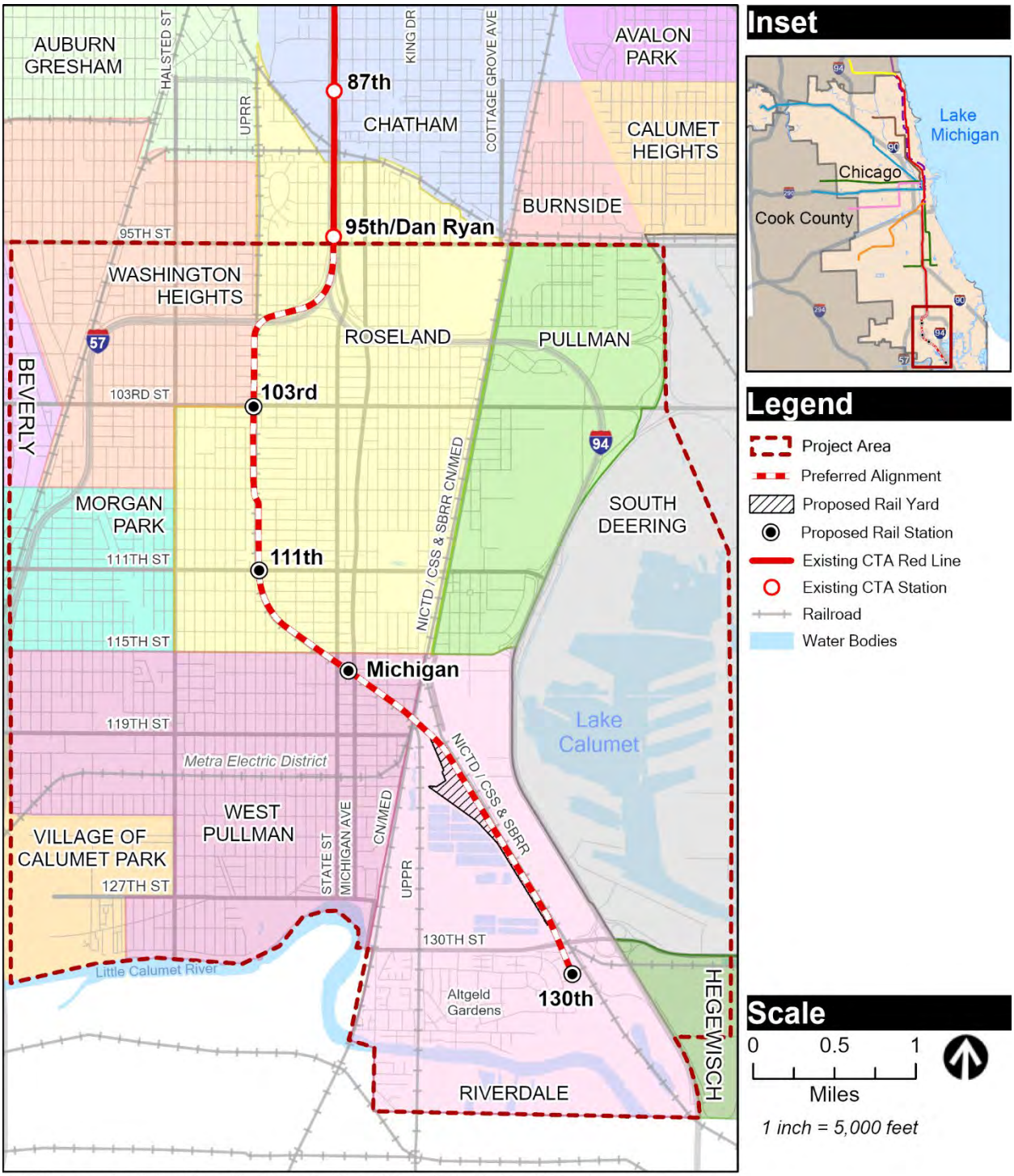

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-1: Red Line Extension Project Area

1.2 Statement of Purpose and Need

The Final EIS builds upon the conceptual design, community outreach and planning advanced between 2006 and 2022. The formal approval and design process began with the RLE AA process from 2006-2009 and continued with the Draft EIS. The purpose and need reflects the project objectives discussed with the public during the AA process (**Appendix A**), EIS scoping (**Appendix B**) (including the public scoping meetings), and ongoing public involvement activities (**Appendix C**). This purpose and need (**Appendix D**) is unchanged since the Draft EIS and is presented in the Final EIS for the convenience of the reader. As mentioned in **Section 1.1**, the project area identified in the Draft EIS purpose and need and provided below in **Sections 1.2.1** and **1.2.2** encompasses the areas of potential impact (APIs) within the Final EIS. Therefore, the Preferred Alignment was developed to satisfy the established purpose and need for the RLE Project.

1.2.1 Purpose

The purpose of the RLE Project is as follows:

- Reduce commute times for residents both within and south of the project area.
- Improve mobility and accessibility for transit-dependent residents in the project area.
- Improve rapid transit rail service to isolated areas and provide viable linkages between affordable housing (e.g., the Altgeld Gardens neighborhood), jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Provide an opportunity for potential connections and linkages to other public transportation modes, including regional commuter rail in the project area.
- Foster economic development in the project area, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.
- Provide a modern, efficient railcar storage yard and shop facility to provide storage and cost-effective preventive maintenance for railcars associated with the RLE Project, railcars currently stored in the existing 98th Street Yard and Shop, and railcars supporting additional Red Line expansion of service.

1.2.2 Need

The need for the RLE Project is demonstrated by the following existing conditions:

- Transit trips to jobs are longer for Far South Side residents than they are for residents in the Chicago seven-county region as a whole. The Chicago seven-county region includes the counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.

- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limits access between affordable housing (e.g., the Altgeld Gardens neighborhood) and employment centers outside of the project area.
- Existing transit markets are underserved, and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Street Yard does not have capacity to store railcars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

1.3 Justification of Purpose and Need

This section documents the elements of the purpose and need for the RLE Project as identified in **Section 1.2**. Supporting data are summarized in the following sections, and more detailed supporting data are available in the *Purpose and Need Report* (**Appendix D**). The justifications have not changed since the issuance of the Draft EIS.

1.3.1 Long Transit Trips to Job Centers for Far South Side Residents

The commute times in the vicinity of the RLE Project are among the longest in the city, as shown in the map in **Figure 1-2**, which details commute times in the project area. According to the U.S. Census Bureau 2018 5-Year American Community Survey (ACS), commute times were 25 percent longer for residents (approximately 44 minutes) within this portion of the communities than the seven-county regional average (approximately 35 minutes) (U.S. Census Bureau 2018). Expressway and arterial traffic congestion limit the mobility of residents in the vicinity of the RLE Project, including bus passengers who are frequently stuck on the same congested roadways. Traffic congestion in the Chicago metropolitan area has steadily increased in recent decades, and roadways serving the communities adjacent to the RLE Project are approaching capacity limits during the morning peak.

Public transit passengers and those who depend on public transit for meeting their travel needs are hardest affected by these long commute times. Complex transfers to reach the 95th/Dan Ryan terminal make commute times greater than 2 hours one-way for some residents in proximity to the RLE Project (CMAP 2012a). This condition has not changed since the Draft EIS. Residents accessing the 95th/Dan Ryan terminal by bus and other transportation modes experience measurable delays resulting from congestion along arterial streets. The need for improved access to job centers outside of the project area defined in the Draft EIS is evidenced by an unemployment rate of 22 percent in the project area (U.S. Census Bureau 2018).

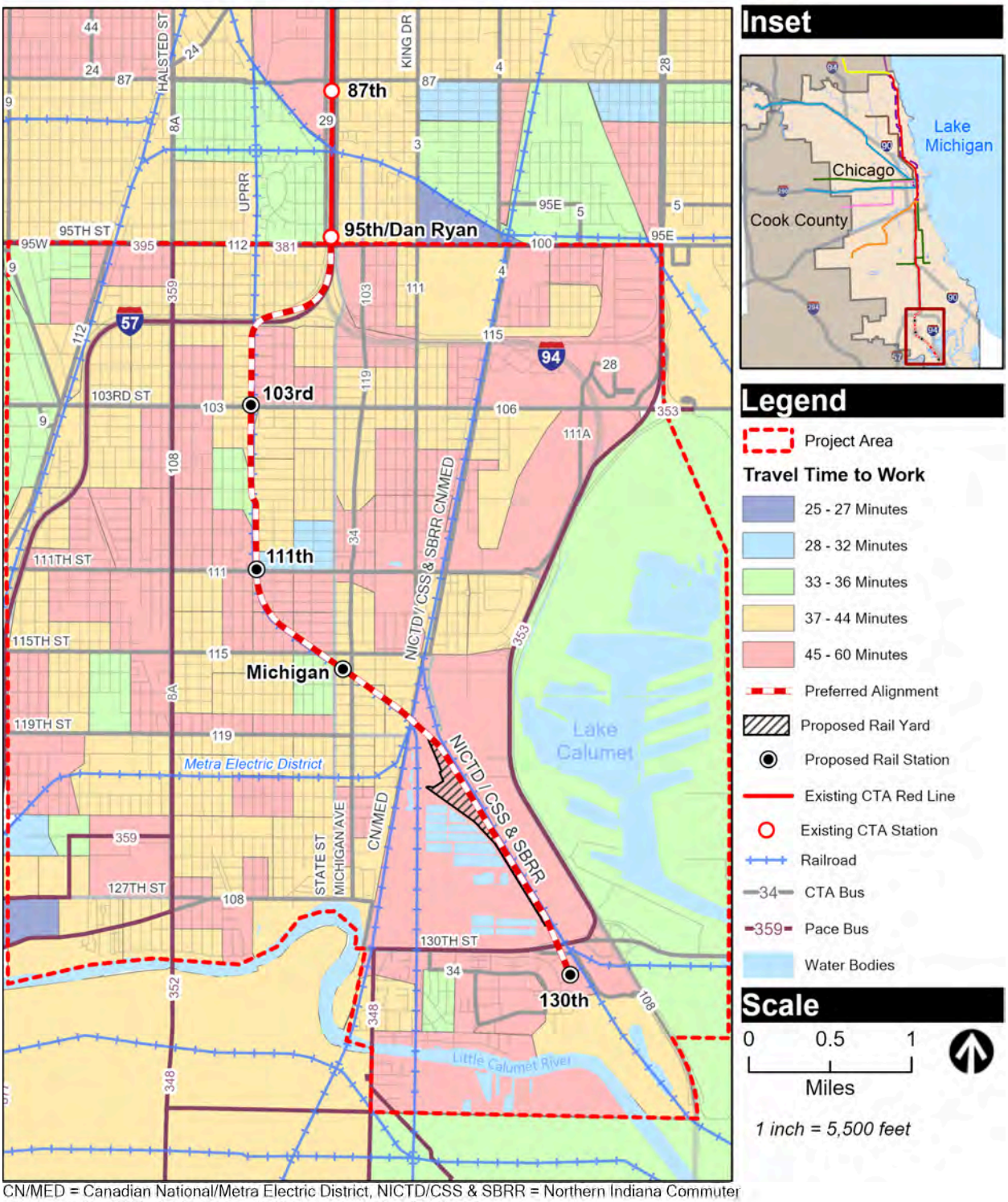

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-2: Travel Time to Work

Some neighborhoods adjacent to the RLE Project, such as Riverdale, have unemployment rates as high as 33 percent (U.S. Census Bureau 2018). The RLE Project would reduce transit travel times to jobs from many neighborhoods in the adjacent communities, which would help facilitate job access and result in additional viable employment opportunities. Reduced commute times would directly support the first goal of CMAP's *ON TO 2050*, to promote inclusive growth by improving mobility options that spur economic opportunity for low-income communities, people of color, and people with disabilities (CMAP 2018). Currently, nearly 25 percent of workers from the RLE project area travel 60-plus minutes to their jobs, compared to the Chicago average of just over 16 percent.

The data regarding the long transit trips to job centers for Far South Side residents have not changed markedly since the Draft EIS.

1.3.2 Transit-Dependent Populations Lack Direct Access to Rapid Transit Rail Service

A large share of the population in the vicinity of the RLE Project falls within several demographic categories that typically indicate transit dependency: low-income populations, senior citizens, people who are too young to drive, people with disabilities, and people living in households without cars. For transit-dependent populations, the availability of quality transit service that connects them to job centers is particularly important. The following comparisons highlight the transit-dependent characteristics of the project area:

- The median annual household income in the project area is approximately $40,750, which is below the seven-county median of approximately $68,220 (U.S. Census Bureau 2018). Some community areas, such as Riverdale, have median annual household incomes as low as $17,097. Low-income households are less likely to own cars, and frequently rely on transit as their primary mode of transportation.

- Approximately 16 percent of residents in the project area are over the age of 65, compared to 14 percent of the Chicago metropolitan area (U.S. Census Bureau 2018). Senior citizens are more likely to be transit dependent because they may no longer be physically able to drive.

- Approximately 24 percent of residents in the project area are under the age of 18, which is higher than the Chicago metropolitan area that has 23 percent of the population below age 18 (U.S. Census Bureau 2018). Minors are more likely to be transit dependent because many are too young to obtain driver's licenses, or do not have the financial means to purchase a car.

- Approximately 16 percent of residents in the project area are living with a disability, compared to 10 percent region-wide (U.S. Census Bureau 2018). People with disabilities are more likely to be transit dependent if their disabilities prevent them from driving a car.

- The average household size in the project area (2.85 persons per household) is higher than the Chicago metropolitan area (2.58 persons) (U.S. Census Bureau 2018). Approximately 22 percent of the households in the project area have no vehicle available, versus 13 percent region-wide. Of the households in the project area that do have cars, there are generally fewer cars per household than in the greater Chicago region, causing some household members to rely on non-automobile modes of transportation.

The CTA Red Line currently serves only the northernmost terminus of the RLE Project. Most residents in the vicinity of the RLE Project must use connecting bus service to reach the 95th/Dan Ryan terminal, which results in long travel times, as described in **Section 1.3.1**. Direct access to rapid transit from a greater share of the residences would improve job access. *ON TO 2050* recommends making transit more competitive by providing fast, frequent, reliable, and affordable service that connects people to important destinations (CMAP 2018). This directly supports the need for direct access for transit dependent populations.

The level of transit-dependent populations lacking direct access to rapid rail transit service has not changed since the Draft EIS.

1.3.3 Isolation from Major Activity Centers and Limited Viable Transportation Options

Despite the magnitude of roadway infrastructure in the Far South Side, expressways and arterial streets frequently become congested, thereby limiting mobility. Mobility is further inhibited by the limited options for connecting to CTA's rail system. Although bus routes operated by CTA and Pace provide service 24 hours a day, buses are frequently delayed by congestion on arterial streets leading to the 95th/Dan Ryan terminal. None of the Red Line stations along the Dan Ryan branch currently have park & ride facilities, precluding residents from accessing the stations by car unless they are dropped off. Several bus routes serve the 95th/Dan Ryan terminal and Metra stations; however, the large residential tracts surrounded by local streets limit the bus network. It is important to note that travel patterns are not limited to residents of the Far South Side traveling to downtown Chicago. The need for access includes activity centers and destinations south, north, and west of the Loop. Over 70 percent of riders who board at the 95th/Dan Ryan terminal have destinations beyond the Loop or are transferring to other CTA lines to reach destinations throughout the City of Chicago.

While the communities adjacent to the RLE Project have an extensive sidewalk and crosswalk system along the road network, this network is interrupted by various physical divisions. Physical divisions between communities that include the MED mainline, which is on an embankment; I-94 and I-57; Lake Calumet; the Little Calumet River; the UPRR right-of-way, which extends north-south from 99th Street to 119th Street; and large tracts of industrial land. These physical divisions are difficult to cross for pedestrians and bicyclists, and effectively separate the communities on either side. This geographic isolation is particularly problematic for residents of the Altgeld Gardens neighborhood at the south end of the RLE Project between 130th Street and 134th Street in the Riverdale community area. Residents in this area have limited employment opportunities and transportation choices within walking distance of their homes.

Based on a field review of potentially affected parcels, there is a higher percentage of vacant homes in the vicinity of the RLE Project since the Draft EIS. Several factors contribute to housing vacancy rates in a particular community. These factors include, but are not limited to, safety and security, proximity to public services, access to jobs, quality of schools, age and type of available housing units, quality of life, and the overall health of the community. Improved public transportation options, combined with affordable housing stock, would serve as a catalyst to bring people to the area that would not otherwise consider communities in the Far South Side as a viable place to live.

The isolation from major activity centers and limited viable transportation options has not changed since the Draft EIS.

1.3.4 Underserved Transit Markets and Limited Transit Connectivity

Several groups of potential passengers ("transit markets") in the Far South Side are underserved by the existing transit system. Transit service enhancements, including those proposed as part of the RLE Project, would improve service for these groups. The largest underserved groups are as follows:

- Residents who must use connecting bus routes to reach the Red Line - Most of CTA and Pace bus routes in the communities adjacent to the RLE Project serve the 95th/Dan Ryan terminal. As discussed above, average travel times for work trips and the number of transit-dependent residents are higher in the project area (compared to the seven-county region) due to traffic congestion and the time required to ride a bus to the 95th/Dan Ryan terminal and transfer to the CTA Red Line. The combination of these conditions underscores the need to improve connectivity and provide faster transit service.

- People driving to Chicago activity centers from the Far South Side and points south - No CTA parking facilities are currently on the Red Line Dan Ryan branch, which leaves motorists coming from the project area and points south few options for parking at a Red Line station and completing their trips via transit. CTA park & ride facilities near major expressways or arterial streets would provide new, convenient access possibilities on the Red Line. The need for park & ride facilities was originally identified based on travel demand modeling performed in 2009, as part of the RLE AA process (see **Appendix A**) and further refined by CTA since the Draft EIS. Year 2040 ridership estimates were projected, and parking needs were updated in the Final EIS.

- Transit passengers traveling to other potential transit destinations - This group includes those taking reverse commute trips (residents in the central areas of the city commuting to jobs in outer communities), school trips, and trips entirely within the project area. There are several educational facilities in the greater project area defined in the Draft EIS, including Chicago State University (3,000 students), Olive-Harvey College (2,700 students), and several high schools (including Harlan, Corliss, Fenger, Julian, Brooks, and Carver Military Academy).

The underserved transit markets and limited transit connectivity have not changed since the Draft EIS.

1.3.5 Disinvestment and Limited Economic Development Have Affected Far South Side Communities

The communities adjacent to the RLE Project have experienced ongoing disinvestment, including loss of manufacturing jobs, which has led to a decline in population, services, and job opportunities. Once-vibrant retail districts, such as Michigan Avenue and Halsted Street, now contain vacant land and storefronts. This decline has been further exacerbated by the lack of access to opportunities that exist beyond the project area.

A strong transportation system is a key part of the health of any community and of the prosperity of its residents. The RLE Project would provide accessible, reliable, and safe transit that is necessary

to support access to employment centers and economic opportunities within the project area and to areas beyond. The RLE Project would also provide essential linkages between academic centers and workforce training opportunities to the jobs requiring those skills. The RLE Project would not only connect residents to other areas of the City and region, but it would create transit stations that would serve as catalytic community hubs that drive local market demand. Future station areas would attract local businesses to serve nearby residents, creating center points that provide more economic opportunity and a place to start or expand a small business, increasing the attractiveness of the RLE communities.

In order to fully leverage the RLE investment to benefit Far South Side communities, CTA, in partnership with the City of Chicago's Department of Planning and Development (DPD) and the Cook County Land Bank Authority, created the RLE Transit-Supportive Development (TSD) Plan. This is a proactive effort to create a guide for future development in communities located in the RLE project area. The plan identifies methods and resources needed to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment. Importantly, the TSD Plan utilizes an equitable Transit Oriented Development (eTOD) planning approach. eTOD planning seeks to promote development without the displacement of existing residents and achieve community-focused benefits, such as affordable housing, local economic development, and environmental sustainability. It can be a driver for more vibrant, prosperous, and resilient neighborhoods that puts people of color and lower- and moderate-income residents at the center.

The City of Chicago is focused on stabilizing, improving, and redeveloping communities in and around the project area. As a result, the City has designated several tax increment financing (TIF) districts, redevelopment areas, special service areas, and industrial corridors in the project area (see **Appendix D** for more information). Four of the City of Chicago's industrial corridors are within the RLE project area: Burnside, Pullman, West Pullman, and Calumet. Most notable is the growth and development within the Pullman Industrial Corridor, which contains 692 acres of land zoned primarily for manufacturing and extends for approximately two miles along the west side of I-94. Proximity to the growing number of jobs in the Pullman Industrial Corridor would aid in residential housing demand in this area as well as promote RLE transit ridership.

CTA and the City of Chicago are also working together to coordinate the RLE Project and INVEST South/West to bring improvements to the Michigan Avenue commercial corridor and the intersecting 111th Street corridor and Roseland Medical District. INVEST South/West is an unprecedented community improvement initiative being led by the City of Chicago. It will leverage $750 million dollars of public funding over three years to attract new investment. This initiative is assembling the resources of multiple City departments, community organizations, the private sector, and philanthropic partners toward 10 communities on Chicago's South and West Sides that include the Greater Roseland and Pullman communities. Without exception, these neighborhoods have experienced public and private disinvestment for many decades and this investment is long overdue. INVEST South/West collectively supports infrastructure development, improved programming for residents and businesses, and policies that have a lasting impact. The Michigan Avenue and 111th Street corridors of INVEST South/West are shown in **Figure 1-3**.

Despite the INVEST South/West initiatives and other City investments to date, the effects of disinvestment and limited economic developments on Far South Side communities have not changed since the Draft EIS. Nonetheless, community planning initiatives like these described above support the strategic and sustainable development goal of *ON TO 2050*, to invest in disinvested areas (CMAP 2018). Economic development requires both stability and a continuum of diversified investment. As such, the RLE transit investment combined with the TSD Plan and existing financial incentive programs would result in a transformational impact that increases market confidence and encourages more investment. The success of the TSD Plan is predicated on the realization of the RLE investment in order to be implementable and effective.

1.3.6 Railcar Storage Yard and Maintenance Facility

The existing 98th Street Yard does not have capacity to store railcars required for any considerable increase in Red Line capacity accompanying future Red Line expansion. Two yard and shop facilities (Howard Yard at the north end of the Red Line and 98th Street Yard at the south end of the Red Line) provide storage for railcars operating along the Red Line. Any Red Line expansion must consider the capacity of both yards. The Howard Yard and the 98th Street Yard together supply railcars for both the northern and southern portion of the Red Line. Both yards are necessary to efficiently provide trains to meet the current and future operating plans for the entire Red Line. All northbound trains currently begin their run at 98th Street Yard, and any expansion of Red Line service would require expanded yard capacity at or near the southern end of the Red Line. The existing 98th Street Yard is landlocked between interstate ramps for I-94 and I-57. There is no room to expand the yard without major realignments of the two highways. In addition, the existing 98th Street Yard is oriented as a terminal yard for service to and north of the 95th/Dan Ryan terminal. With the RLE Project expanding service to the south, use of the 98th Street Yard would lead to inefficient operations. Moving trains into and out of the existing yard, due to the orientation of the yard, would cause operational inefficiencies and potential capacity constraints to Red Line service.

The need for a railcar storage yard and maintenance facility has not changed since the Draft EIS.

1.4 Organization of the Document

The Final EIS analyzes how well the Preferred Alignment would satisfy the purpose and need stated above. It also analyzes the potential impacts of the No Build Alternative and Preferred Alignment.

NEPA documents, such as this EIS, must provide sufficient technical detail to meet a range of legal requirements and are required to be organized in a specific way, as described in 40 Code of Federal Regulations (CFR) § 1502. **Table 1-1** provides an overview of the chapters and the major topics covered in this document.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-3: Michigan Avenue and 111th Street INVEST South/West Corridors

Table 1-1: Environmental Impact Statement Document Organization

Chapter 1 Purpose and Need	This chapter is the foundation of the document. It introduces the RLE Project, provides background information, and explains why the RLE Project is proposed and important.
Chapter 2 Alternatives Considered	This chapter reviews the planning process and alternatives under further consideration in this Final EIS.
Chapter 3 Transportation	This chapter presents the potential for impacts on the transportation network. This chapter also discusses measures to avoid or minimize those impacts.
Chapter 4 Environmental Impacts and Mitigation	This chapter discusses the social, economic, and environmental resources that could be affected by the construction and operation of the RLE Project and measures to avoid or minimize those impacts.
Chapter 5 Indirect and Cumulative Impacts	This chapter discusses impacts to resources that may not be directly caused by the RLE Project, but instead may result from or be attributable to the environment created by the RLE Project.
Chapter 6 Resources with Limited or No Adverse Impacts	This chapter summarizes the resources that would have limited or no adverse impacts due to operation or construction of the RLE Project.
Chapter 7 Environmental Justice	This chapter discusses the impacts of the RLE Project on environmental justice communities in the area of potential impact.
Chapter 8 Section 4(f) Evaluation	This chapter focuses on meeting the federal requirements of Section 4(f) of the USDOT Act of 1966, which protects significant historic sites, publicly owned parks, recreation areas, and wildlife and waterfowl refuges.
Chapter 9 Evaluation of Alternatives	This chapter presents potential capital and operating funding strategies for the RLE Project.
Chapter 10 Public and Agency Coordination	This chapter discusses the process for public involvement and agency coordination and addresses public comments and suggestions.
Chapter 11 List of Acronyms and Abbreviations	This chapter provides definitions for the acronyms and abbreviations used within the document.
Chapter 12 References	This chapter provides the references used within the document.
Chapter 13 List of Preparers	This chapter lists the preparers of this document.
Chapter 14 List of Recipients	This chapter lists the agencies, local officials, and public libraries that were notified of the availability of this document.
Chapter 15 Glossary	This chapter provides definitions for the phrases and terms used throughout the document.

Chapter 2 Alternatives Considered

Two alternatives are evaluated within the Final EIS: the No Build Alternative and the Preferred Alignment. Development of the Preferred Alignment has occurred through extensive analysis and public and agency coordination between 2006 and 2022. This chapter includes documentation of alternatives that were analyzed and subsequently eliminated from further consideration through project planning activities. It further describes the alternatives studied in the Final EIS and summarizes construction needed for implementation of the Preferred Alignment. For additional information on the alternatives, refer to **Appendix E**.

2.1 Alternatives Development Process

CTA undertook an extensive Alternatives Analysis (AA) process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Draft EIS and the AA described the process through which a wide range of methods of extending the CTA Red Line south from its current terminus at the 95th/Dan Ryan terminal were narrowed to the Locally Preferred Alternative.

In brief, 12 transportation modes, nine corridors, and four profiles resulted in many combinations to be analyzed. Three rounds of preliminary screening and public outreach resulted in three build alternatives, plus the No Build Alternative. The three build alternatives analyzed were:

- Halsted Rail Alternative (Elevated)
- UPRR Rail Alternative (Elevated)
- Bus Rapid Transit Alternative (At-Grade)

The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of No Build Alternative and the two UPRR Rail Alternative options: the East and West Options.

The UPRR Rail Alternative East and West Options would be elevated and generally run south along I-94 Bishop Ford Freeway from 95th/Dan Ryan terminal, then curve west along the north side of I-57 Expressway (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor, either east or west of the existing UPRR tracks, to Prairie Avenue, where the RLE Project would cross over the Metra Electric District (MED) tracks near 119th Street. South of 119th Street, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway (NS) and Consolidated Rail Corporation (Conrail) right-of-way to the terminus of the RLE Project at 130th Street. Southeast of the Canadian National (CN)/MED tracks, the elevated RLE Project, as described in the Draft EIS, would descend

to an at-grade profile, travel past the proposed 120th Street yard and shop, and terminate at the 130th Street station located north of 130th Street.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selection of the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts to schools, residences, and the historic Roseland Pumping Station; preserve properties slated for future development surrounding the station areas; and would accommodate UPRR's potential tracks. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height for easier vertical access and would lower the profile of the elevated structure. Lowering the platform makes the height more typical to what is existing throughout CTA's system thus improving passenger comfort ascending/descending the stairs.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Public outreach, stakeholder input, and agency coordination have continued to influence CTA's ongoing design efforts. NS shared their plans for future potential access to the CN/MED tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to the national freight rail network and access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA then evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area, who both expressed support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood. Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA influenced the design refinements incorporated into the Preferred Alignment and is analyzed in this Final EIS.

2.2 Alternatives Evaluated in the Final EIS

The Final EIS discusses the No Build Alternative and Preferred Alignment as compared to the UPRR East and West Options. **Appendix F** contains plans and profiles for the Preferred Alignment.

2.2.1 No Build Alternative

The No Build Alternative represents future conditions if the Preferred Alignment were not implemented. The No Build Alternative includes all projects currently included in the fiscally constrained portion of the CMAP *Federal Fiscal Years 2019–2024 Transportation Improvement Program* (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

The No Build Alternative differs from the No Build Alternative disclosed in the Draft EIS only by the passage of time; changes include the completion of the 95th/Dan Ryan terminal renovation, and demographic and development fluctuations that are reasonably anticipated to occur in the intervening time period between these documents.

2.2.2 Union Pacific Railroad Alternative - Preferred Alignment

The Preferred Alignment would extend the heavy rail CTA Red Line 5.6 miles from the existing 95th/Dan Ryan terminal to the Altgeld Gardens neighborhood immediately south of 130th Street. The RLE Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and

park & ride facilities. The Preferred Alignment would provide travel time savings of up to 29 minutes for passengers travelling from the 130th Street station to downtown Chicago.

Alignment

The Preferred Alignment would run south along I-94 from the 95th/Dan Ryan terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) on an elevated structure for nearly a ½ mile until reaching and crossing over to the west side of the UPRR corridor in the vicinity of Eggleston Avenue, as shown on **Figure 2-1**. The alignment would turn south to follow the UPRR corridor on the elevated structure along the west side of the UPRR to 107th Place. At 107th Place the elevated structure would cross over to the east side of the UPRR corridor.

The Preferred Alignment would continue along the east side of the UPRR corridor south and southeast to near 119th Street, where it would cross over the CN/MED tracks. South of this point, the Preferred Alignment would descend to at-grade while continuing southeast parallel to the NICTD/CSS & SBRR corridor, using a portion of the NS right-of-way. The alignment would continue south, going under 130th Street to the terminus (end) of the RLE Project south of 130th Street.

This alignment is a hybrid of the East and West Options of the UPRR Rail Alternative disclosed in the Draft EIS, with the cross-over at 107th Place connecting the West Option north of the cross over location with the East Option south of the cross over location.

Structure and Track

The elevated structure starts shortly south of the 95th/Dan Ryan terminal, and continues over the CN/MED tracks near 119th Street, where it descends to grade by an embankment, as shown in **Figure 2-2**. No major improvements or modifications would be required for the 95th/Dan Ryan terminal to accommodate the RLE Project. Only minor signal and communication systems related modifications would be needed at this location to tie the RLE Project into the existing CTA network. It would be a closed-deck, concrete, aerial track structure with direct-fixation track and continuously welded rail. With direct-fixation track, rails are mounted to small concrete and rubber supports that are fixed to the concrete deck. Noise barriers (a minimum height of 3.5 feet above the top-of-rail elevation) are planned for portions of the structure on both sides of the track deck to reduce noise transmission at and below track level. The *Noise and Vibration Technical Memorandum* (**Appendix O**) provides more detail on locations and heights of these noise barriers. Noise walls also perform a secondary function related to worker and emergency evacuation safety.

The elevated structure would vary in height from 14 feet 9 inches to approximately 55 feet above existing grade to the bottom of the structure, depending on the general vertical geometry and the required clearances above existing roadways and railroads at different locations. The two tracks would generally have a spacing of 13 feet (centerline to centerline), except where diverging to accommodate boarding platforms at stations. The elevated deck, on which the tracks would run, would vary in width from approximately 31 feet to approximately 53 feet at stations. A rendering of the elevated structure is shown in **Figure 2-3**.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 2-1: Preferred Alignment

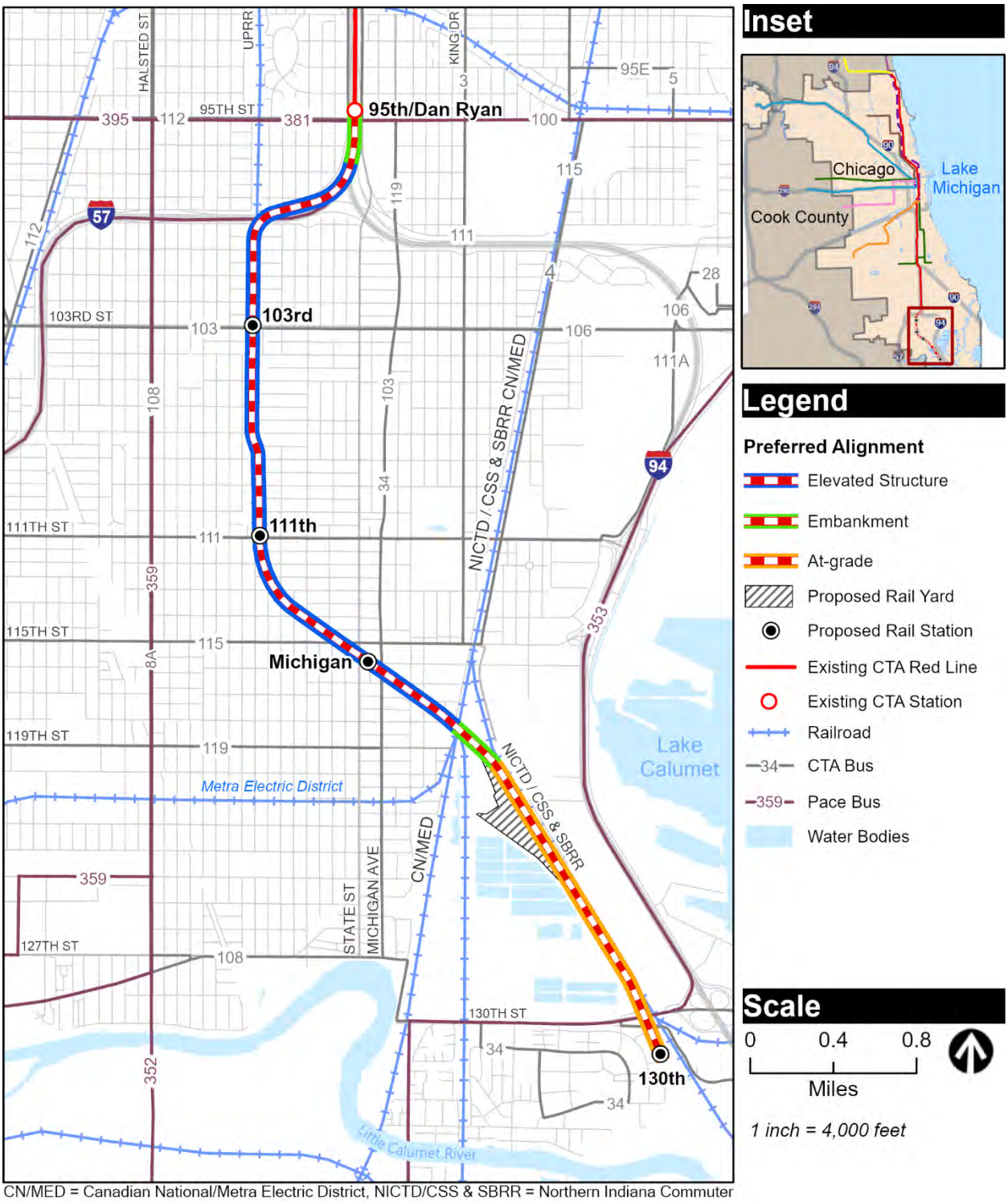

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 2-2: Structure Types along Preferred Alignment

CTA has selected concrete segmental box girders for the track superstructure for the typical elevated section, where the track runs parallel to the UPRR, as opposed to a steel structure type which was assumed for the entire corridor at the time of the Draft EIS. A steel superstructure would be used at the north end of the project where the proposed alignment crosses I-57, as well as at all major crossings, including the 107th Place cross-over and the crossing over the CN/MED.

A concrete deck is still included in the elevated structure, as it was in the Draft EIS. Along at-grade segments and sections on earth structures, tracks would be placed on ballast and ties after grading and soil preparation. Two general categories of earth structures may be used on this project. The first is earth embankment, which consists of compacted earth with slopes on either side of the tracks. Typically, the slopes would include vegetation. Fencing for security would also be included. Earth embankments are appropriate in areas without right-of-way constraints, such as south of the 120th Street yard and shop.

The second category of earth structures is earth retained between concrete walls. These walls may use cast-in-place concrete or precast concrete panels. Retained embankments are appropriate in areas where additional right-of-way acquisition would cause additional impacts. Retained earth embankments are anticipated near the 96th Street Interlocking and in the vicinity of the 120th yard and shop.

Figure 2-3: Rendering of the 103rd Street Station (Looking East along 103rd Street)

Stations

As part of the Preferred Alignment, four new stations would be constructed at the following locations along the alignment:

- 103rd Street (elevated station)
- 111th Street (elevated station)
- Michigan Avenue (elevated station)
- 130th Street (at-grade station)

Each station would have a center platform, approximately 26 feet wide and 520 feet long. Platforms would accommodate ten-car trains. Each station would be Americans with Disabilities Act (ADA) accessible with elevators. Each station area would include areas for bus boarding, new crosswalks where needed to accommodate pedestrian traffic, bicycle parking and access, and park & ride facilities. Aerial and street view renderings of typical station features are shown in **Figure 2-4** and **Figure 2-5**. Actual design features of each station may differ based on design decisions for colors, textures, finishes and choice of specified design features based on the needs of each station and the constraints posed at each site. The 130th Street station would have offices for CTA station staff, and an additional track and alternative platform to provide flexibility in its role as a terminal station.

Figure 2-4: Example Station Rendering: Michigan Avenue Station Aerial View (Looking West)

Figure 2-5: Example Station Rendering: 103rd Street Station (Looking North)

Bus access to the 103rd Street and 111th Street stations would be provided along the respective street with station frontage. The Michigan Avenue and 130th Street stations would have bus plazas integrated into the station.

The fundamental designs of the 103rd, 111th, and Michigan Avenue stations have remained the same since the publication of the Draft EIS but advancing design has provided further details. For instance, the Michigan Avenue station design has been refined since the Draft EIS to locate the parking and bus facilities from the south side to the north side of the UPRR. The location of the station parking is dependent on confirmation of availability of parcels and future coordination with the City of Chicago. The park & ride facilities were also modified such that the Michigan Avenue station garage was replaced by a surface parking lot and the 130th Street station garage was reduced in size and the 130th Street station now also includes an adjacent surface parking lot. Preliminary plans are available in **Appendix F**.

The 130th Street station has undergone a change in design since the publication of the Draft EIS, moving from a location north of 130th Street adjacent to the MWRD Calumet Water Reclamation Plant to a location south of 130th Street in the Altgeld Gardens neighborhood. The Supplemental EA determined that this design change either had no impact or no impacts after mitigation on environmental resources, while bringing benefits to pedestrian access and safety and security.

Park & Ride Facilities

To accommodate passengers arriving by car, park & ride facilities would be constructed near each RLE station. **Table 2-1** lists the planned park & ride locations, approximate number of parking spaces (not including CTA employee parking) at each location, and the planned parking facility type. A total of up to 1,340 park & ride spaces would be available at the new stations along the Preferred Alignment.

The Draft EIS originally called for a total of 3,700 parking spaces along the corridor, based on travel demand modeling performed as part of the RLE AA Study completed in August 2009. CTA has since reduced the number of planned parking spaces to up to 1,340 based on community feedback, site availability, and analysis of peer stations throughout the CTA system. Recent ridership modeling conducted using the FTA Simplified Trips-on-Project Software (STOPS) ridership model confirms the demand for parking facilities.

Table 2-1: Summary of Park and Ride Facilities

Station	Number of Parking Spaces for Preferred Alignment	Parking Facility Description
103rd Street	175	Station Area Surface Parking Lot
111th Street	225	Station Area Surface Parking Lot
Michigan Avenue	180	Station Area Surface Parking Lot
130th Street	760	Parking Garage and Station Area Surface Parking Lot
Total Parking Spaces	**Up to 1,340**	

Yard and Shop

The 120th Street yard and shop would be sited on a combination of industrial and vacant land east of the CN/MED tracks and west of the NICTD/CSS & SBRR tracks near 120th Street and Cottage Grove Avenue. The yard would be entirely at-grade. This facility would provide inspections, minor repairs, and railcar cleaning (interior and exterior) for a portion of the Red Line railcar fleet. The shop would handle up to ten-car train sets, eliminating the need to uncouple (or cut) the railcars for the routine periodic inspections. This new and modern facility would provide CTA with an efficient maintenance facility not only serving the RLE Project but the Red Line as a whole. Parking spaces for CTA employees would be included at the yard. The yard would be capable of storing up to 330 railcars with expansion to 360. The majority of these railcars would be stored in complete train sets of 8 or 10 railcars. This new facility would improve operations on the Red Line by providing CTA with an efficient and strategically located railcar maintenance facility at the south end of the CTA system.

Since the Draft EIS, coordination with NS resulted in adjustments to the Preferred Alignment near the 120th Street yard and shop to accommodate:

- 100-foot-wide right-of-way for the NS line immediately west of the NICTD/CSS & SBRR
- Future connection from the NS track to CN tracks along the MED corridor
- Maintain connection from the NS tracks to the All American Recycling facility
- Rail connection to facilitate rail delivery of ballast, ties, and other material to CTA

Based on these considerations, the 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west. Preliminary plans are available in **Appendix F**.

Substations

Substations are buildings along the alignment that house equipment to regulate the flow of electricity to the third rail, which supplies power to the trains. Substations would be placed approximately 0.8 to 1 mile apart along the Preferred Alignment. Six new and upgraded substation locations are proposed: 96th Street, near 104th Street, near 109th Place, near 116th Street, within the new yard and shop, and north of 130th Street.

Operating Plan

The RLE Project would operate 24 hours a day, each day of the year. Service frequency is anticipated to be the same as with the current service at the 95th/Dan Ryan terminal—approximately 3-minute to 6-minute headways during morning and afternoon peak hours. Headways during off-peak periods during the day would be approximately 6-10 minutes. Headways at night (between 1 AM and 4 AM) would be approximately 15 minutes. Service frequency would be adjusted to accommodate demand once the RLE service is implemented.

Based on the estimated running time for the RLE Project, an additional 78 railcars would be required as part of this project. The additional 78 railcars would include 64 railcars to meet the peak period schedule, plus 14 spare railcars. Train sets would be eight cars long. No additional railcars would be purchased as part of the RLE Project. Stations and track alignment would accommodate ten-car trains to maintain the option of running ten-car trains in the future. With the extension of the Red Line, some existing bus routes would be rerouted to feed into the new stations.

2.3 Summary of Construction Activities

This section summarizes the construction that would be needed for the Preferred Alignment. The *Description of Construction and Phasing for Build Alternatives* (**Appendix G**) provides additional details. The tentative opening year for the RLE Project is 2029 and construction is expected to take up to five years. The construction timeline is dependent on federal reviews and federal, state, and local funding. Construction activities are not expected to be markedly different than those described in the Draft EIS.

2.3.1 Construction Segments and Phasing

Construction activities would be grouped by type of work and location. Overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th/Dan Ryan terminal and 98th Yard and Shop and vehicular traffic on affected expressways and roadways, and in each case with only temporary interruptions.

For the purposes of describing construction activities, the RLE Project was divided into seven segments. The segments indicate similar construction activities and are not intended to indicate any sequencing or phasing. **Table 2-2** describes work activities for each proposed construction segment shown in **Figure 2-6**. The construction segments and phasing plans described here are based on preliminary engineering completed to date and provide the greatest amount of flexibility for future design within a maximum envelope for evaluating environmental impacts. Construction activities and phasing would be determined during final design of the RLE Project, in coordination with contractors. Preliminary engineering plans (30 percent completion level) are provided in **Appendix F** and construction is anticipated during 2025 through 2029.

Table 2-2: Construction Segments and Summary of Work Activities

Segment	Location	Work Activities
U-1	From the 95th/Dan Ryan terminal to the beginning of the horizontal curve at the UPRR crossing	▪ Install trackwork and signals to tie into the 95th/Dan Ryan terminal. ▪ Relocate trackwork between the 95th/Dan Ryan terminal and the 98th Street Yard and Shop. ▪ Construct approximately 500 feet of retained fill structure south of the 95th/Dan Ryan terminal. ▪ Construct single-track, elevated structures over existing CTA tracks leading to the 98th Yard and Shop over the existing CTA/southbound I-94 tunnel. ▪ Construct the dual-track, elevated structure through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from southboundI-94, and north of the southbound I-57 lane. ▪ Replace the 95th Street substation with a new 96th Street substation.
U-2	The horizontal curve at the UPRR crossing	▪ Construct the dual-track, elevated structure spanning both lanes of I-57.
U-3a	From the end of the horizontal curve at the UPRR crossing to the CN/MED track crossing near 119th Street	▪ Demolish existing buildings and structures in the proposed right-of-way where necessary. ▪ Construct the dual-track, elevated structure along the UPRR corridor. ▪ Construct stations near 103rd Street, 111th Street, and Michigan Avenue. ▪ Construct parking lots and bus turnarounds at stations. ▪ Construct three substations.
U-3b	From the end of the curves at the UPRR crossing at 107th Place	

Segment	Location	Work Activities
U-4	From the CN/MED track crossing near 119th Street to the at-grade track	▪ Demolish existing buildings and structures in the proposed right-of-way where necessary. ▪ Construct the dual-track, elevated structure along the UPRR corridor and over the CN/MED tracks near 119th Street. ▪ Construct the 120th Street yard and shop track tie-in. ▪ Construct retained embankment structure to carry the elevated structure to grade.
U-5	From the end of the aerial structure crossing the CN/MED tracks near 119th Street to the south end of the yard test track near 124th Street	▪ Construct the track roadbed. ▪ Construct the Metropolitan Water Reclamation District of Greater Chicago (MWRD) access road and bridge over the RLE tracks and the NICTD/CSS & SBRR crossing.
U-6	From the yard test track to the south end of the project including the 130th Street station	▪ Construct the track roadbed. ▪ Construct the 130th Street station. ▪ Construct an underpass at 130th Street for track alignment. ▪ Construct the parking garage/lot for the 130th Street station. ▪ Construct bus bays and road access for the 130th Street station. ▪ Construct the MWRD access road to 130th Street. ▪ Construct the substation.
U-7	120th Street yard and shop	▪ Construct the yard and track. ▪ Construct the shop building. ▪ Construct the access road and CTA employee parking. ▪ Construct the substation.

2.3.2 Construction Staging

Construction staging areas provide space to store equipment and materials, load trucks, and have workers perform parts of the construction process. Construction staging areas are currently anticipated to be within the project right-of-way or within property acquired for stations, park & ride facilities, and the yard and shop. Final staging would depend upon final design and the means and methods of the design builder. Staging and item assembly would be performed off-street to the fullest extent practicable, to minimize traffic and community disruption.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 2-6: Construction Segments of the Preferred Alignment

Construction vehicles would access the staging areas on a regular basis and would require special hauling routes designating the use of existing roadways and queuing locations to deliver materials and equipment, as well as remove debris. These special routes would require temporary lane closures or reconfigurations. Hauling routes would be coordinated throughout the RLE Project to minimize impacts on noise- and dust-sensitive areas, such as residential neighborhoods, to the extent practicable. The RLE Project would utilize highways and major arterials over local roads, to the extent feasible and practicable, to minimize the number of trucks and equipment passing through sensitive areas of the community. Specific design of each construction staging area would be determined during future design phases.

2.3.3 Pre-Construction Activities

Pre-construction activities would include development of construction schedules, quality plans, and procurement schedules. Applicable utility protection and relocation information would be coordinated in advance of the early construction activities. CTA and contractors performing primary construction activities would initiate community notifications as early as possible and provide opportunities for community input and preparation for major construction activities. Demolition and building permits would be obtained during pre-construction as well. Construction mitigation measures, such as fencing, would be put in place in advance of commencing major construction activities. Hazardous materials requiring mitigation, such as asbestos-containing materials (ACM), lead-based paint (LBP), and contaminated soil, would be identified and addressed before the start of demolition and excavation activities, or as discovered, as applicable. The Preferred Alignment is in a residential area with homes, parks, schools, and businesses. The impacts to these areas were evaluated in the Draft EIS, during which, CTA reached out to property owners to discuss potential land acquisition and temporary construction impacts. CTA continues those communications throughout the Final EIS process and will do so throughout future design phases leading to acquisition and relocation and construction.

2.3.4 Traffic Rerouting

During construction, auto traffic, pedestrians, and buses may need to be rerouted around the construction sites. Rerouting of traffic is normally done by using detours and complete street closures. Street closures may include main streets, side streets, alleys, and driveways. Temporary traffic lanes and driveways would be used as needed to provide alternate access. The following activities would occur as part of traffic rerouting:

- Placement of construction signage and temporary traffic barriers
- Temporary reduction in the number of available lanes or complete street closures
- Conversion of two-way streets to one-way operation on a temporary basis
- Implementation of detours around lane and street closures
- Provision of temporary traffic lanes

- Provision of special access points for construction vehicles traveling to and from construction staging areas and the proposed rail right-of-way
- Implementation of sidewalk detours and temporary parking restrictions
- Temporary partial closure of tracks leading to the 98th Street Yard and Shop

Specific maintenance of traffic measures for each affected roadway and for each construction phase would be determined in a traffic management plan. As part of the traffic management plan, construction traffic must also be addressed to preserve the overall transportation flow of the area of potential impact (API). As part of the preliminary engineering phase of the project, an overall traffic management plan for the API is being prepared, along with haul routes that can accommodate transportation of anticipated structural components and other large equipment. These will be reviewed with the agencies with jurisdiction over the affected roadways.

2.3.5 Demolition

Construction of the Preferred Alignment would require the demolition of 97 buildings throughout the entire 5.6-mile corridor The demolition process would temporarily result in increased noise and debris. Work would be performed in accordance with local ordinances for construction activities. Pedestrian and vehicular traffic would not be allowed into demolition areas. The demolition process may include concrete removal, use of jackhammers, excavation, and removal of foundations. Materials requiring disposal would be stored in construction staging areas, loaded into dump trucks, and moved off-site. All materials would be handled and disposed of in a proper manner, in accordance with applicable federal, state, and local regulations.

2.3.6 Elevated Structures and Track Placement

Foundations for elevated structures and the parking garage would consist of concrete and steel footings or drilled concrete shafts, depending on site conditions. Some exploratory borings have been completed to determine soil type and capacity in the vicinity of the project. A geotechnical engineer would perform exploratory borings during future design phases to determine soil type, soil capacity, and physical obstructions. The soil would be sampled to determine whether contaminants are likely to be present in the soil. All types of foundations would require excavation and removal of soil from the construction area via truck. Materials shipped off-site for disposal would be handled through approved facilities. Large cranes would be used to guide drilled shafts or piles into position. Impact pile driving would be generally avoided but may be used in areas unlikely to negatively affect residential neighborhoods, such as the 120th Street yard and shop. Impact pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station.

After placement of foundations for the elevated structures, reinforced concrete piers would be constructed. The superstructure would use steel or concrete beams with a concrete deck to support the tracks. Along at-grade segments, tracks would be placed on ballast and ties after grading and soil preparation.

2.3.7 Earth Retention Structures

Embankment retention structures would be built from the track-facing side as much as feasible to minimize the construction footprint. A geotechnical engineer would perform exploratory borings during future design phases to determine soil type, soil capacity, and physical obstructions near the earth retention structures. The soil would be sampled to determine whether contaminants are likely to be present in the soil. All types of foundations would require excavation and removal of soil from the construction area using trucks. Materials shipped off-site for disposal would be handled through approved facilities. Large cranes would be used to guide any required drilled shafts or piles into position, though earth retention structures are more likely to use spread footings than elevated structures. Impact pile driving would be generally avoided.

2.3.8 Temporary Shoring

During excavation, temporary shoring may be required to facilitate construction and protect adjacent structures. Shoring would typically consist of steel sheet piling driven into the ground where applicable. Temporary shoring for excavations may also include h-piles and lagging, cofferdams, and trench boxes. Temporary shoring of elevated structures may include temporary columns, footings, and shoring towers. Elevated structural work may include temporary protective barriers, fencing, barricades, and containments. The rig for the vibratory pile driver may be located within the construction staging areas, the permanent right-of-way for the project, or the street right-of-way depending on the space limitations and access points.

2.4 Environmental Processes

After public review of the Draft EIS, CTA and FTA continued refining the design of the RLE Project based on the public and agency input on the Draft EIS. CTA and FTA then prepared this Final EIS to publish the results of the additional analyses required to evaluate the Preferred Alignment, which was influenced by comments on the Draft EIS and subsequent Supplemental EA. The Final EIS documents the comments received during the Draft EIS public comment period, as well as comments received during the public comment period for the Supplemental EA. The responses to the comments are documented in the *Agency Coordination and Public Involvement* (**Appendix C**).

In accordance with the 23 United States Code (USC) § 139(n), FTA will issue this single document that consists of the Final EIS and Record of Decision (ROD) prepared in accordance with regulations developed by the Council on Environmental Quality (CEQ) for the National Environmental Policy Act (NEPA) (40 CFR Parts 1500-1508) and FTA's Environmental Impact and Related Procedures (23 CFR Parts 771 and 774). The combined Final EIS/ROD complies with 23 USC § 139(n)(2) as amended by the Fixing America's Surface Transportation Act (Public Law 114-94) and succeeded by the Infrastructure Investments and Jobs Act (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") in November 2021. This combined Final EIS/ROD includes the alternatives and options that FTA considered and CTA's commitments to mitigate the adverse impacts of the RLE Project. Additionally, in accordance with 40 CFR § 1505.2(b) of NEPA, the ROD includes an identification of the environmentally preferred alternative. Finally, the ROD includes a list of mitigation commitments that must be implemented when the project is initiated. The mitigation measures will be monitored by CTA and FTA for implementation. In addition, CTA

would continue to avoid and minimize environmental impacts wherever feasible. FTA's issuance of the ROD concludes the NEPA environmental process and is required for federal funding and approvals to proceed.

Chapter 3 Transportation

This chapter describes the potential benefits and adverse impacts that would result from the Preferred Alignment on the existing transportation facilities in the area of potential impact (API), including public transportation, vehicular and freight traffic, bicycling, pedestrians, and parking facilities. Also described here are mitigation measures to minimize adverse impacts where feasible. The information in this chapter is based on the *Transportation Technical Memorandum* (**Appendix H**). **Table 3-1** summarizes the transportation impact findings.

Table 3-1: Transportation - Impact Summary

Alternative	Permanent Impacts						Construction Impacts
	Public Transportation	Vehicular Traffic	Freight Transportation	Bicycles Facilities	Pedestrians	Parking	
No Build Alternative	No Impacts	Adverse Impacts	No Impacts	No Impacts	No Impacts	No Impacts	No Impacts
Preferred Alignment	Beneficial	Impacts would not be adverse after mitigation	No Impacts	Beneficial	Impacts would not be adverse after mitigation	Impacts would not be adverse after mitigation	No Impacts

3.1 Regulatory Framework/Methods

CTA conducted the transportation analysis in compliance with current FTA guidelines and NEPA regulations, in addition to the requirements of the Federal transportation bill, Public Law 114-94, Fixing America's Surface Transportation Act that was succeeded by the Infrastructure Investments and Jobs Act (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") in November 2021. Illinois state law does not require additional environmental analysis beyond the requirements of NEPA. Other than CMAP *GO TO 2040* being superseded by CMAP *ON TO 2050*, the local regulatory framework for transportation has not changed considerably since the issuance of the Draft EIS.

3.1.1 Public Transportation

Ridership estimates for the Draft EIS were developed in 2009, during the Alternatives Analysis phase, using a regional travel demand model for a 2030 project horizon year. For the Final EIS, Year 2040 ridership estimates were projected using STOPS, which is the FTA's preferred ridership forecasting tool. STOPS was developed by FTA and is customized using local data for application to a specific region and project. CTA assembled local data on existing transit service, ridership, demographics, and traffic, and calibrated STOPS to existing conditions in the Chicago region, with an emphasis on the South Side of Chicago, as well as surrounding south suburbs. All STOPS data

inputs were pre-COVID and calibrated to Fall 2017 ridership data. The local STOPS application and resulting RLE forecast were developed in coordination with FTA travel demand modeling staff. The analysis of public transportation impacts of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS. An adverse impact on public transportation would occur if there were negative changes associated with geographic areas of service and routing, travel time, frequency and hours of service, transit patronage and demand (including transit mode share), station access and circulation, and/or traffic around station. **Appendix H** provides additional details on the methods used for this analysis.

3.1.2 Vehicular Traffic

Existing and historic traffic count data from CTA, the Chicago Department of Transportation (CDOT), CMAP, and Illinois Department of Transportation (IDOT) were compiled for different intersections within the API. Additionally, new manual traffic counts were collected at intersections where historical data were not available. These new traffic counts were conducted at the Altgeld Gardens neighborhood intersections and the I-94 ramps at 130th Street. The traffic data also included traffic distribution and local circulation patterns; vehicle occupancy levels; road capacity levels; road peak-hour traffic volumes, intersection lane geometry and traffic signal timing plans; and planned roadway improvements. Traffic data was pre-COVID with the exception of data associated with the relocated 130th Street station and the additional counts requested by IDOT during ongoing coordination with the development of this Final EIS.

Much of the vehicular traffic analysis occurred during 2020, when there were numerous deviations from historic traffic patterns caused by the COVID-19 pandemic and the associated social distancing measures. As simple manual counts would likely have undercounted typical traffic demand, observed traffic volumes were further calibrated to levels expected to be seen during a typical time period. These calibrations to the traffic data are described in **Appendix H**. This analysis also updated the projections from 2030 to 2050 for the horizon year.

While the traffic analysis in the Draft EIS did not identify vehicle storage capacity deficiencies, the Final EIS traffic analysis identifies instances where storage capacity for turning lanes would not be adequate for vehicle traffic generated by vehicles accessing the station areas. These storage capacity deficiencies would be considered an adverse impact. Storage capacity for turning lanes is based on red time queue formula provided in the IDOT Bureau of Design and Environment manual. The IDOT red time queue analysis can be found in **Appendix H**.

The area of analysis for the Final EIS was refined since the Draft EIS, to focus on the intersections at proposed stations and those along the corridor that would feed traffic to the proposed stations along the Preferred Alignment. The transportation API and Preferred Alignment are shown in **Figure 3-1**.

The API for transportation resources in the Draft EIS encompassed a larger area in order to evaluate several alternative alignments, including the UPRR East and West Options. Since the Draft EIS, the Preferred Alignment was announced, and the API used in the Final EIS was updated to study the intersections along the Preferred Alignment.

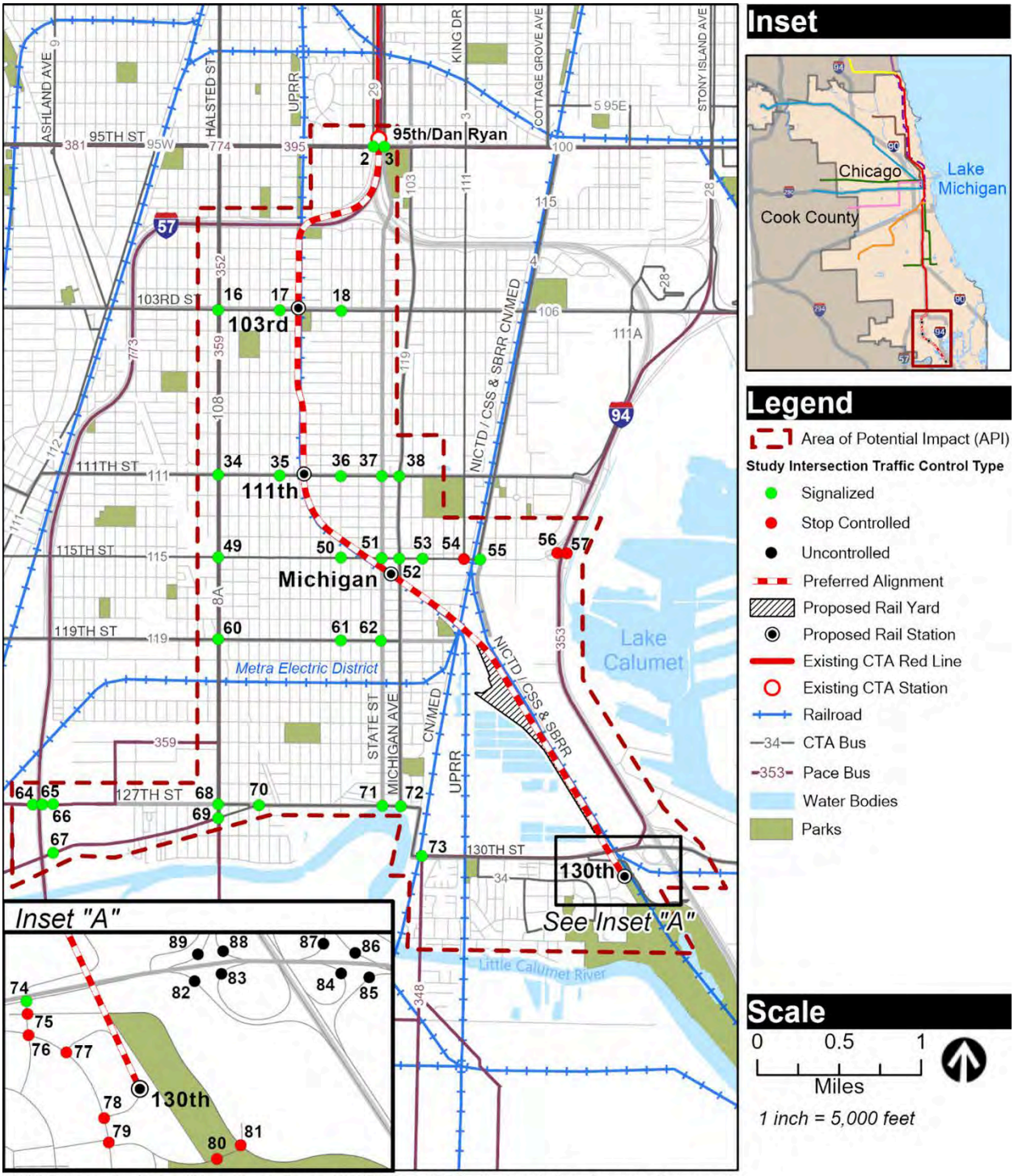

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Study Intersections for Transportation Impact Analysis in the Area of Potential Impact

The Final EIS transportation API boundaries are as follows:

- On the north by 95th Street
- On the south by a varying boundary that includes Vermont Street, 127th Street, and 134th Street
- On the east by a varying boundary that includes State Street, Michigan Avenue, and I-94 (from the north to south)
- On the west by a varying boundary that includes Halsted Street and I-57 (from north to south)

Previously in the Draft EIS, the API was much larger to capture the various design options, some of which, extended beyond the footprint of the Preferred Alignment. Focusing on the Preferred Alignment, intersections were removed from analysis because they were not along a corridor where a new station would be constructed. This accounted for a reduction of 42 intersections from the analysis. The relocation of the 130th Street station into the Altgeld Gardens neighborhood resulted in the addition of seven intersections not previously studied in the Draft EIS. In addition, IDOT requested the inclusion of the eight I-94 ramps on 130th Street, bringing the total number of new intersections studied to 15. The total number of study intersections from the Draft EIS was reduced from 76 intersections to 49 intersections for the Final EIS. Study intersections are shown in **Figure 3-1**. For consistency and comparison of analysis conducted between the time of the Draft EIS and Final EIS, the intersection numbering used in the Draft EIS was used whenever the intersection was also studied in the Final EIS. The intersections introduced as new in the Final EIS, not previously studied in the Draft EIS, appear as intersections numbered 75-89 in **Figure 3-1**.

3.1.3 Pedestrians

There are no markedly different changes to the evaluation of pedestrian traffic from the Draft EIS, as described in **Appendix H**. Aerial photographs, City of Chicago geographic information system and geospatial datasets, and the *Chicago Pedestrian Plan* (City of Chicago 2012b) were reviewed. CTA reviewed pedestrian facilities within the immediate area of the proposed station locations for Americans with Disabilities Act (ADA) accessibility and conformity to transit station planning.

A pedestrian impact would be considered adverse if it were to result in the disruption of an existing or planned pedestrian pathway, if it were to limit pedestrian access to proposed station entrances, or if pedestrian access to a proposed station were limited because the area in the vicinity of the station did not have ADA-accessible sidewalks.

3.1.4 Bicycle Facilities

There are no markedly different changes to the evaluation of bicycle traffic from the Draft EIS, as described in **Appendix H**. CTA reviewed IDOT's bicycle map and existing and proposed bicycle facilities for the City of Chicago based on the *Chicago Streets for Cycling Plan 2020* (City of Chicago 2012a). CTA evaluated the relationship of the existing bicycle facilities to the proposed station locations and assessed whether the proposed station locations would conform to the objectives of the bicycle plans for an area within a ½ mile of the stations.

For the Final EIS, a bicycle facility impact would be considered adverse if it were to result in a disruption of existing or planned bicycle pathways or bicycle parking facilities.

3.1.5 Freight Transportation

CTA qualitatively examined the existing and projected freight traffic in the API and determined whether the RLE Project would permanently interrupt freight movements. These freight movements include freight moved by both rail and truck modes. Through a coordination process, CTA, UPRR, NS, CN, and CSX identified potential impacts and discussed them qualitatively. A result of this coordination process is the 120th Street yard and shop refinements. This was developed from NS direct input and their desire to maintain service connections to the All American Recycling facility and a connection to the national freight rail network.

For the Final EIS, an impact on freight transportation would be considered adverse if the movement of goods and services would be disrupted or delayed to a greater degree than the No Build conditions.

3.1.6 Parking

The evaluation methodology for parking referenced in **Appendix H** has been carried forward for the Final EIS. CTA reviewed community resources and aerial photographs and performed field observations. Using the No Build Alternative as the baseline, CTA analyzed the extent to which the Preferred Alignment would affect on-street parking and off-street parking facilities. CTA reviewed parking capacity near the location of each proposed station and park & ride facility for potential impacts on the surrounding neighborhoods. Potential parking impacts would include changes in parking supply (relative to changes in parking demand) as a result of transit facility construction/service expansion, addition of park & ride facilities, and removal of existing parking spaces. To determine the potential for impacts and the intensity of those impacts, CTA developed guidelines based on standard industry practices.

For the Final EIS, a parking impact would be adverse if it were to result in the following:

- Reduction in on-street parking capacity by more than 25%
- Reduction in off-street parking capacity that falls below the City of Chicago Zoning Code
- Reduction in accommodation for future programs requiring parking spaces, such as car sharing
- Reduction in existing transit parking and park & ride capacity
- Inadequate parking capacity for proposed transit service

3.2 Existing Conditions

The existing transportation environment in the API has not considerably changed from that described in the Draft EIS. The API includes transit facilities for rail and bus, expressways, regional arterials (through roads), truck routes, intermodal connectors, secondary arterials, local streets, and bicycle and pedestrian facilities. Expressways in the API include I-57 and I-94.

The 95th/Dan Ryan terminal is currently the southern end of the Red Line. Many existing bus routes within the API terminate at this location. From this station, passengers travel north on the Red Line or transfer to a different bus route. The 95th/Dan Ryan terminal underwent a major reconstruction and renovation project from 2014 through 2019 that increased the space available for bus parking and transfers and made numerous improvements to the user experience of the station. This reconstruction was expected and included in the analysis of the Draft EIS. No major improvements or modifications would be required for the 95th/Dan Ryan terminal to accommodate the RLE Project. Only minor signal and communication systems related modifications would be needed at this location to tie the RLE Project into the existing CTA network.

Sizable expressway congestion occurs within and surrounding the API. The expressway network was at or over capacity during the morning peak periods in 2019 and congestion is expected to worsen by 2050. Arterial street reliability is compromised by delays from at-grade freight railroad crossings, affecting travel times to the 95th/Dan Ryan terminal. MED commuter trains that operate at-grade and cross several arterials in the API also cause short traffic delays.

3.2.1 Public Transportation

The existing public transportation systems in use within and near the API, as shown in **Figure 3-2**, are CTA rail service, CTA bus routes, Pace bus routes, and Metra commuter rail service. The Red Line 95th/Dan Ryan terminal is the only CTA rail station within the API and is the southern end of the CTA Red Line.

CTA and Pace routes are on east-west and north-south thoroughfares through the API, with 14 CTA and 6 Pace bus routes operating within the API (not including night bus routes). Two bus routes that were evaluated in the Draft EIS are not within the API for the Preferred Alignment. CTA bus Routes #3 King Drive and #28 Stony Island no longer fall within the updated API and are not discussed further. Conversely, Route #4 Cottage Grove has been added to the analysis because the bus route now extends to 95th Street and beyond to 115th Street.

Metra commuter rail service in the API includes the MED mainline, the MED Blue Island branch, and the Metra Rock Island District mainline. NICTD/CSS & SBRR does not serve any of the stations in the API, though it shares trackage with the MED mainline north of the Metra Kensington Station. Both Metra and NICTD have experienced service reductions in response to the decrease in ridership during the COVID-19 pandemic, but it is expected that these service reductions will be reversed in the near future after the pandemic. **Figure 3-2** shows the existing public transportation in the API.

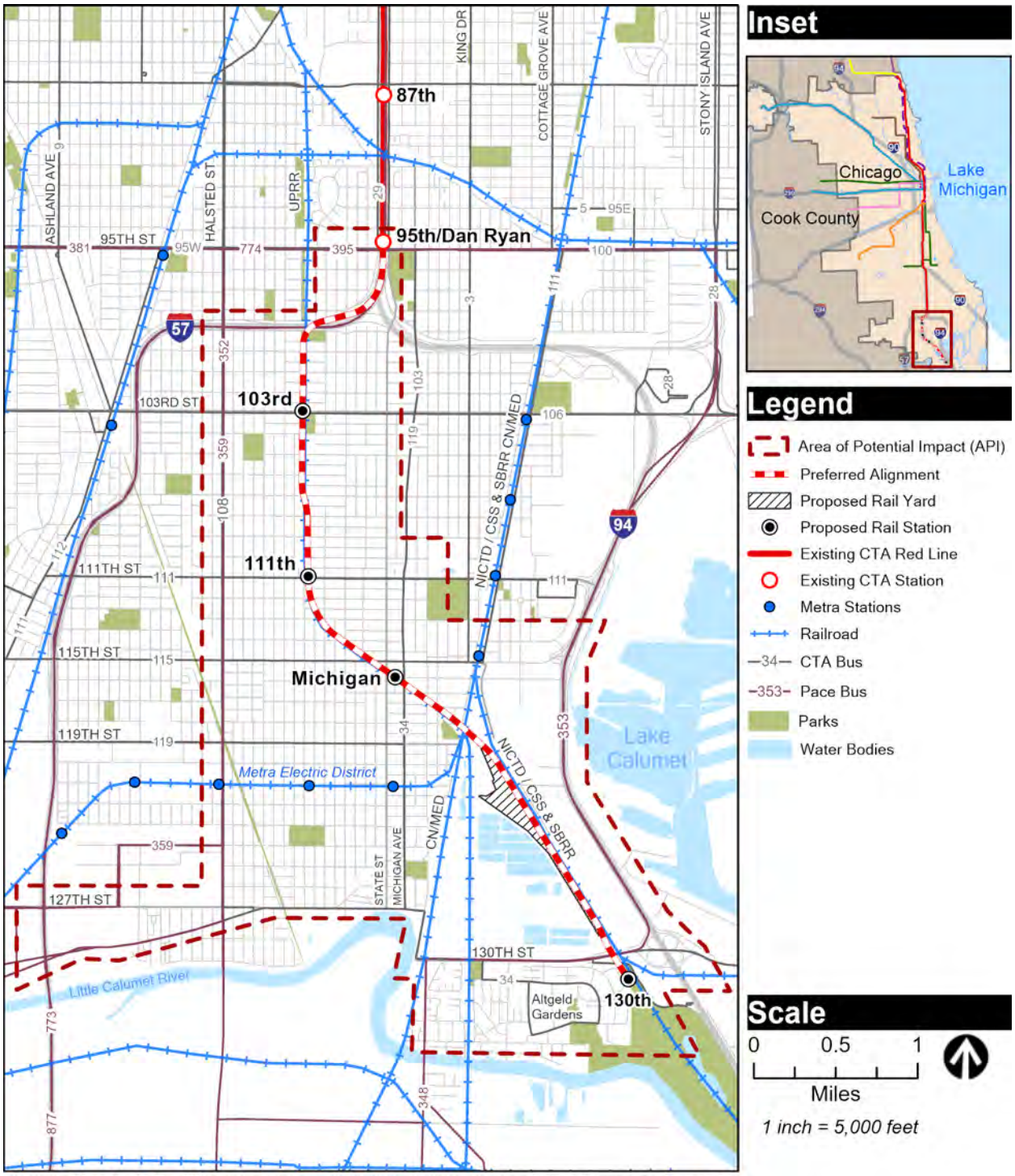

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-2: Existing Public Transportation within and near the Area of Potential Impact

3.2.2 Vehicular Traffic

Numerous interstate, regional, and local roadways crisscross the API, providing vital linkages to regional and local destinations. Local and regional streets generally conform to the larger east-west/north-south Chicago street grid. The existing roadway network in the API has not experienced geometric improvements that would affect traffic operations since the issuance of the Draft EIS.

Traffic volumes were analyzed at 49 signalized and unsignalized roadway intersections in the API to determine the existing level of service (LOS) that the intersections provide. The LOS for roadway intersections typically ranges from A to F (Transportation Research Board 2016). Essentially, LOS A is free flow with almost no delay, while LOS F is congested with delay affecting nearly all drivers.

- LOS A - Virtually free flow of traffic with no congestion or delay
- LOS B - Stable traffic flow (However, other vehicles in the flow are noticeable.)
- LOS C - Stable flow (However, LOS marks the beginning of the range where individual vehicles become affected by interactions with other vehicles in the traffic stream.)
- LOS D - High density of traffic but stable flow
- LOS E - Operating conditions at or near capacity level (All speeds are reduced to a low but relatively uniform flow.)
- LOS F - A breakdown in the operating conditions resulting in congestion and delay

In general, the intersection LOS values for the Final EIS are similar to those shown in the Draft EIS. Changes in intersection LOS values were a result of updates to signal timings and intersection geometrics since the Draft EIS analysis. These changes would affect both signalized and unsignalized intersections since the traffic analysis takes into account traffic flow along the entire street. **Table 3-2** provides a comparison of the existing conditions from the Draft EIS and the Final EIS intersection LOS.

Table 3-2: Existing Intersection Level of Service Comparing Draft and Final EIS Values

Intersection ID	Intersection	Control Type[1]	Draft EIS		Final EIS	
			AM Peak Hour LOS[2]	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
2	95th Street and Lafayette Avenue	Signalized	D	D	C	C
3	95th Street and State Street	Signalized	C	C	D	D
16	103rd Street and Halsted Street	Signalized	E	D	E	C
17	103rd Street and Normal Avenue	Signalized	B	B	A	A
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
34	111th Street and Halsted Street	Signalized	C	C	B	B

Intersection ID	Intersection	Control Type[1]	Draft EIS		Final EIS	
			AM Peak Hour LOS[2]	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
35	111th Street and Normal Avenue	Signalized	A	A	A	A
36	111th Street and Wentworth Avenue	Signalized	A	A	A	B
37	111th Street and State Street	Signalized	A	B	A	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	B	C	B	D
53	115th Street and Indiana Avenue	Signalized	B	B	B	B
54	115th Street and Martin Luther King Jr Drive	Unsignalized	A	A	C	E
55a	115th Street and Cottage Grove Avenue (West)	Signalized	C	C	D	C
55b	115th Street and Cottage Grove Avenue (East)	Signalized	D	C	F	D
56	115th Street and I-94 EB Ramps	Unsignalized	A	A	A	A
57	115th Street and I-94 WB Ramps	Unsignalized	C	B	C	B
60	119th Street and Halsted Street	Signalized	C	C	C	C
61	119th Street and Wentworth Avenue	Signalized	B	B	B	A
62	119th Street and State Street	Signalized	B	B	A	A
64	127th Street and Paulina Street	Signalized	C	C	C	C
65	127th Street and Marshfield Avenue	Signalized	C	B	D	C
66	127th Street and Ashland Avenue	Signalized	C	C	C	C
67	Vermont Street and Ashland Avenue	Signalized	C	C	C	C
68	127th Street and Halsted Street	Signalized	C	C	C	C
69	Vermont Street and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Street and Wallace Street	Signalized	C	D	C	D
71	127th Street and State Street	Signalized	A	B	A	B
72	127th Street and Michigan Avenue	Signalized	A	B	A	B

Intersection ID	Intersection	Control Type[1]	Draft EIS		Final EIS	
			AM Peak Hour LOS[2]	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
73	130th Street and Indiana Avenue	Signalized	B	C	B	B
74	130th Street and Ellis Avenue	Signalized	A	A	B	A
75	Old 130th Street and Ellis Avenue	Unsignalized	---[4]	---	A	A
76	Greenwood Avenue and Ellis Avenue	Unsignalized	---	---	A	A
77	130th Place and Greenwood Avenue	Unsignalized	---	---	A	A
78	131st Street and Greenwood Avenue	Unsignalized	---	---	A	A
79	132nd Street and Greenwood Avenue	Unsignalized	---	---	A	A
80	132nd Street and Beaubien Woods Driveway	Unsignalized	---	---	A	A
81	132nd Street and Doty Avenue	Unsignalized	---	---	A	A
82	EB 130th Street and I-94E On-Ramp (Ramp A)	Uncontrolled	---	---	A	B
83	EB 130th Street and I-94E Off-Ramp (Ramp B)[3]	Uncontrolled	---	---	B	B
84	EB 130th Street and I-94W On-Ramp (Ramp C)[3]					
85	EB 130th Street and I-94W Off-Ramp (Ramp D)	Uncontrolled	---	---	B	B
86	WB 130th Street and I-94W On-Ramp (Ramp E)	Uncontrolled	---	---	A	B
87	WB 130th Street and I-94W Off-Ramp (Ramp F)[3]	Uncontrolled	---	---	B	B
88	WB 130th Street and I-94E On-Ramp (Ramp G)[3]					
89	WB 130th Street and I-94E Off-Ramp (Ramp H)	Uncontrolled	---	---	B	A

1 Signalized and unsignalized intersection LOS reported in the columns to the right as the average for all movements.
2 LOS = level of service
3 I-94 ramps B and C, as well as ramps F and G, were analyzed as weaving segments and therefore analyzed as one location per ramp pair.
4 "---" indicates that no LOS was reported for those intersections for the Draft EIS since they were not originally included in the Draft EIS API.

3.2.3 Bicycle Facilities

Chicago has over 200 miles of on-street bicycle pathways and 36 miles of trails. In addition, the city has more than 12,000 racks for bicycle parking, including racks at CTA stations (City of Chicago 2012a). CTA identified existing bicycle facilities within the API (see **Figure 3-3**). Bicycle facilities recommended in the *City of Chicago's Bike 2015 Plan* (City of Chicago 2006) and pertinent recommended cycling routes from the *Chicago Streets for Cycling Plan 2020* are also shown on the figure.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-3: Existing Bicycle Facilities within the Area of Potential Impact

Chicago's bicycle sharing system, Divvy, currently has over 6,000 bicycles at over 600 stations across the city. In the summer and fall of 2020 Divvy expanded to Chicago's Far South Side. As shown in **Figure 3-3**, currently there are 12 Divvy stations located within the API. Of the 12 Divvy stations, four Divvy stations are within a ½ mile of the three northern RLE Project stations and these can be found at 104th Street and Wentworth Avenue, 111th Street and Halsted Street, 111th Street and Wentworth Avenue, and 114th Street and Michigan Avenue. In addition, there is one Divvy station within the Altgeld Gardens neighborhood, located at the Altgeld Branch of the Chicago Public Library and within a ½ mile of the 130th Street station. There were no Divvy stations present in the API in the Draft EIS.

Major Taylor Trail is an off-street cycling trail that runs through the API. Bicycle facilities, which have been constructed within the API since the Draft EIS, are bike lanes located on 103rd Street, 111th Street, 115th Street, and State Street and a greenway located on 124th Street.

3.2.4 Pedestrians

As disclosed in the Draft EIS, sidewalks are located on both sides of most of the arterial and collector roads throughout the API. Arterial streets have a standard, 6-foot-wide sidewalk and collector streets have sidewalks that are 12 to 17 feet wide. There are no pedestrian gates along the sidewalks at the existing UPRR grade crossings within the API.

The City of Chicago is continually updating intersection curb ramps to meet current ADA guidelines and design standards. There are wheelchair accessible curb ramps at most of the intersections within the API, but many of these curb ramps are not fully compliant under current ADA standards, which require detectable warning tiles for the visually impaired.

CDOT is implementing its *Chicago Pedestrian Plan* (City of Chicago 2012b). The plan aims to increase pedestrian safety, identify, and eliminate gaps and barriers in the pedestrian network, increase the amount and quality of pedestrian space, and increase the number of pedestrian trips for enjoyment, school, work, and daily errands. Pedestrian facilities for the Final EIS are not markedly different than those shown in the Draft EIS.

3.2.5 Freight Transportation

Approximately 500 freight trains per day operate in the Chicago region (CMAP 2014). In 2007, regional rail tonnage was estimated at more than 631 million tons, with about 24,000 trailers and containers and about 16,800 carload units moving into, out of, or through the region daily (CMAP 2012b). The 2007 forecast has not been updated since the Draft EIS. The following active freight railways operate through the API and are identified on **Figure 3-4**.

- UPRR
- CN/MED
- NICTD/CSS & SBRR
- NS Railway

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad, NS = Norfolk Southern, IHB = Indiana Harbor Belt Railroad

Figure 3-4: Freight Railroads in the Area of Potential Impact

- IHB Railroad
- Conrail (operated on NS Railway)

The UPRR reported 14 freight trains per day currently within the API, although multi-day data collection efforts conducted on May 20, 21, 22, and 28 and June 4, 2021 indicate a current average of only 8 to 10 trains per day. In addition, Amtrak runs two passenger trains three times a week on the UPRR tracks within the API. The CN/MED tracks carry 34 passenger and 12 freight trains. The NICTD/CSS & SBRR tracks carry 34 passenger and 6 freight trains and converge with the CN/MED tracks between 115th Street and Kensington Avenue and both carry passenger and freight trains.

3.2.6 Parking

Most of the streets in the API have on-street parking, and there have been no notable changes to on-street parking since the Draft EIS.

Many of the commercial and retail buildings within the API have parking available either through on-street parking or parking lots associated with the buildings. The Agape Community Center uses a City-owned parcel of land that is located immediately west of the center for parking. TCA Health has a parking lot adjacent to Old 130th Street in the Altgeld Gardens neighborhood.

The Altgeld Gardens neighborhood has on-street parking on most of its internal access roadways, as well as having off-street parking in lots around the neighborhood.

3.3 Environmental Consequences

The following sections summarize the potential transportation impacts and mitigation measures of the No Build Alternative and Preferred Alignment, and the differences in the Final EIS from the Draft EIS.

3.3.1 No Build Alternative

Under the No Build Alternative, the project would not be constructed and as travel demand rises, traffic flow in the API would continue to deteriorate. Under No Build (2050) conditions, 84 percent of the study intersections within the API would operate at LOS D or better in both the AM and PM peak hours. Eight intersections would operate at a LOS E or F in either or both the AM and PM peak hours under the No Build Alternative (**Appendix H**). The deteriorating LOS at these eight intersections would be an adverse impact on transportation, specifically vehicular traffic, under the No Build Alternative. There would be a continued lack of rapid transit rail service south of 95th Street. CMAP *ON TO 2050* calls for investment in the existing transit infrastructure in the region, and the No Build Alternative would not achieve this. There would be no major construction associated with the No Build Alternative; therefore, no construction-related transportation impacts would occur.

The environmental consequences of the No Build Alternative are not markedly different than those in the Draft EIS. The No Build Alternative in the Final EIS utilized 2050 conditions versus 2030 conditions in the Draft EIS.

3.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

Public Transportation

The environmental consequences of the Preferred Alignment on public transportation are not markedly different than those of the East and West Options shown in the Draft EIS unless otherwise stated. With the extension of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations (see **Appendix H** for additional details). CTA passengers would benefit from faster travel times with access to rapid transit service farther south, compared to non-rapid transit modes (CTA and Pace buses) that are currently available in this area. CTA passengers would benefit from a one seat ride, eliminating the need to take a bus to access the Red Line if they live near a proposed station. Implementation of the Preferred Alignment would also reduce congestion at the 95th/Dan Ryan terminal. The addition of the four stations from the RLE Project would spread out traffic among the newly constructed stations by distributing vehicular drop-offs and pick-ups, distributing bus-to-rail transfers, and distributing bus routes by having them terminate at stations other than 95th/Dan Ryan.

Public transportation would benefit from the Preferred Alignment because of the new, direct rail service within the API. The RLE Project would operate 24 hours a day, each day of the year. Service frequency is anticipated to be the same as with the current service at the 95th/Dan Ryan terminal—approximately 3-minute to 6-minute headways during morning and afternoon peak hours and approximately 6-minute to 10-minute headways during the off-peak periods. Headways at night (between 1 AM and 4 AM) would be approximately 15 minutes. Service frequency would be adjusted to accommodate demand once the RLE service is implemented. In addition, the Preferred Alignment would provide a station at Michigan Avenue and 115th Street with bus and wayfinding connections to Metra MED 115th station.

Vehicular Traffic

The environmental consequences of the Preferred Alignment on vehicular traffic are not markedly different than those of the East and West Options described in the Draft EIS unless otherwise stated. Traffic impacts would arise from changed travel patterns to reach the proposed stations. The Preferred Alignment would be adjacent to an existing active freight railroad corridor, similar to the East and West Options presented in the Draft EIS. Impacts would occur due to the additional station-generated traffic crossing active roadway/railroad at-grade crossings.

With the Preferred Alignment, adverse vehicular traffic impacts are projected to occur under 2050 traffic volumes at the five intersections listed below. Adverse impacts would occur because these intersections would operate at a LOS worse than the No Build condition. The intersections that would operate worse, without mitigation, than the No Build conditions are:

- Intersection #16: 103rd Street and Halsted Street
- Intersection #54: 115th Street and Martin Luther King Jr Drive

- Intersection #64: 127th Street and Paulina Street
- Intersection #70: 127th Street and Vermont Street and Wallace Street
- Intersection #71: 127th Street and State Street

Additionally, five other intersections (for a total of 10) would operate at an undesirable LOS, which is defined as a LOS of E or F. This represents an improvement on the conditions modeled in the Draft EIS, which indicated that 21 intersections would have an undesirable LOS in the East or West Options. Of the 21 intersections with an undesirable LOS in the Draft EIS, 18 intersections are still a part of the Final EIS API. The decrease of intersections operating at an undesirable LOS from 21 intersections in the Draft EIS to 10 intersections in the Final EIS is a result of adjusting the distribution of traffic on the roadway network based on the updated CMAP 2050 travel demand model, as well as the reduction in intersections analyzed.

Mitigation measures to reduce or minimize the impacts were evaluated for the transportation network surrounding the Preferred Alignment. Mitigation measures for intersections near the affected intersection may also be necessary to provide better flow of traffic. Coordination regarding the implementation of mitigation measures is ongoing with the agencies of jurisdiction. **Table 3-3** lists recommendations for consideration by the agencies of jurisdiction – IDOT, CDOT, and CCDoTH – based on the Preferred Alignment in 2050 conditions. At intersections where adverse impacts are projected (2050), potential improvements have been identified to offset the portion of the LOS deterioration or insufficient storage length attributable to the RLE Project. CTA has provided RLE Project traffic analysis and recommended improvements to these agencies of jurisdiction through ongoing coordination. CTA would coordinate intersection improvements with IDOT, CDOT, and CCDoTH for intersections affected by the change in traffic volumes and patterns associated with the final design of the RLE Project. However, the mitigation measures would be based on actual (measured) traffic volumes, agency requirements, coordination within the traffic network, and any traffic demand management and/or traffic calming measures being implemented at the time of mitigation. Agency requirements may include LOS analysis under Complete Streets guidelines, examining an overall LOS for pedestrians, bicycles, transit modes, and other vehicles (rather than placing an emphasis on the movement of automobiles). Permanent impacts on vehicular traffic would not be adverse after mitigation.

Table 3-3: Recommended Potential Mitigations for the Preferred Alignment

Intersection ID	Intersection	Recommendations
16	103rd Street and Halsted Street	AM/PM: Adjust signal timing splits AM/PM: Change westbound left movements to protected-permissive
52	115th Street and Michigan Avenue	PM: Increase cycle length to 85 seconds
55a	115th Street and Cottage Grove Avenue (West)	AM/PM: Adjust signal timing splits
55b	115th Street and Cottage Grove Avenue (East)	AM/PM: Adjust signal timing splits

Intersection ID	Intersection	Recommendations
60	119th Street and Halsted Street	PM: Adjust signal timing splits
64	127th Street and Paulina Street	AM/PM: Adjust signal timing splits (Maintain existing offset timing)
65*	127th Street and Marshfield Avenue	AM/PM: Adjust signal timing splits (Maintain existing offset timing)
66*	127th Street and Ashland Avenue	AM: Adjust signal timing splits (Maintain existing offset timing)
68	127th Street and Halsted Street	AM/PM: Increase cycle length to 90 seconds
70	127th Street and Vermont Street and Wallace Street	AM/PM: Adjusted signal timing splits AM/PM: Prohibit left turn lanes for the northeast bound lane, right turn only AM/PM: Change the northeast-bound right turn movement to "overlap" AM/PM: Convert westbound through/left lane to a westbound left-turn-only lane
71	127th Street and State Street	PM: Increase cycle length to 90 seconds
73	130th Street and Indiana Avenue	AM/PM: Increase cycle length to 85 seconds

*These additional intersections were included in the recommendations because their signal timings are coordinated with Intersection ID 64.

Under the Preferred Alignment (2050) conditions, if the recommended potential mitigations were implemented by the respective jurisdictions, then most of the study intersections within the API would operate at LOS D or better in both the AM and PM peak hours, as shown in **Table 3-4**. Under these Preferred Alignment mitigated (2050) conditions, some intersections would operate at LOS E or F; however, these intersections would be no worse than No Build (2050) conditions. In addition, the RLE Project would provide an improved public transportation alternative to vehicular travel. Mitigated conditions would not result in additional intersections with undesirable LOS compared to the No Build conditions. As such, there would be no adverse permanent traffic impacts for the Preferred Alignment. The traffic data and Synchro results are in **Appendix H** for the Preferred Alignment (Mitigated).

Table 3-4: Preferred Alignment Intersections (2050) LOS with Potential Mitigation

Intersection ID	Intersection	Control Type[1]	No Build (2050)		Preferred Alignment (2050) Mitigated	
			AM Peak Hour LOS[2]	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	F	E	F	E
16	103rd Street and Halsted Street	Signalized	F	D	F	D
17	103rd Street and Normal Avenue	Signalized	B	A	B	B
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	A	B	A	B
36	111th Street and Wentworth Avenue	Signalized	B	B	B	B
37	111th Street and State Street	Signalized	A	B	B	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	C	E	C	D
53	115th Street and Indiana Avenue	Signalized	B	C	B	C
54	115th Street and Martin Luther King Jr Drive	Unsignalized	A	C	E	F
55a	115th Street and Cottage Grove Avenue (West)	Signalized	D	D	D	D
55b	115th Street and Cottage Grove Avenue (East)	Signalized	F	F	F	F
56	115th Street and I-94 EB Ramps	Unsignalized	A	A	A	A
57	115th Street and I-94 WB Ramps	Unsignalized	D	B	E	B
60	119th Street and Halsted Street	Signalized	C	D	C	D
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	B	B	B	B
64	127th Street and Paulina Street	Signalized	D	E	D	D
65	127th Street and Marshfield Avenue	Signalized	D	D	D	D
66	127th Street and Ashland Avenue	Signalized	D	C	C	C

Intersection ID	Intersection	Control Type[1]	No Build (2050)		Preferred Alignment (2050) Mitigated	
			AM Peak Hour LOS[2]	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
67	Vermont Street and Ashland Avenue	Signalized	C	D	C	D
68	127th Street and Halsted Street	Signalized	C	D	C	C
69	Vermont Street and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Street and Wallace Street	Signalized	E	F	B	B
71	127th Street and State Street	Signalized	B	C	B	B
72	127th Street and Michigan Avenue	Signalized	A	B	A	B
73	130th Street and Indiana Avenue	Signalized	C	C	C	B
74	130th Street and Ellis Avenue	Signalized	B	B	B	B
75	Old 130th Street and Ellis Avenue	Unsignalized	A	A	A	A
76	Greenwood Avenue and Ellis Avenue	Unsignalized	A	A	A	A
77	130th Place and Greenwood Avenue	Unsignalized	A	A	A	A
78	131st Street and Greenwood Avenue	Unsignalized	A	A	A	A
79	132nd Street and Greenwood Avenue	Unsignalized	A	A	A	A
80	132nd Street and Beaubien Woods Driveway	Unsignalized	A	A	A	A
81	132nd Street and Doty Avenue	Unsignalized	A	A	A	A
82	EB 130th Street and I-94E On-Ramp (Ramp A)	Uncontrolled	A	B	A	B
83	EB 130th Street and I-94E Off-Ramp (Ramp B)[3]	Uncontrolled	B	B	B	B
84	EB 130th Street and I-94W On-Ramp (Ramp C)[3]					
85	EB 130th Street and I-94W Off-Ramp (Ramp D)	Uncontrolled	B	B	B	B
86	WB 130th Street and I-94W On-Ramp (Ramp E)	Uncontrolled	B	B	B	B
87	WB 130th Street and I-94W Off-Ramp (Ramp F)[3]	Uncontrolled	C	C	C	C
88	WB 130th Street and I-94E On-Ramp (Ramp G)[3]					
89	WB 130th Street and I-94E Off-Ramp (Ramp H)	Uncontrolled	B	B	B	B

1 Signalized and unsignalized intersection LOS reported in the columns to the right as the average for all movements.
2 LOS = level of service, UPRR = Union Pacific Railroad
3 I-94 ramps B and C, as well as ramps F and G, were analyzed as weaving segments and therefore analyzed as one location per ramp pair.

A red time queue analysis using Preferred Alignment volumes was performed at 130th Street/Ellis Avenue and 127th Street/Vermont Street/Wallace Street intersections to determine the storage lengths required for the auxiliary turn lanes. The results of this analysis determined that the eastbound right turn and westbound left turn lanes at the 130th Street/Ellis Avenue intersection currently provide sufficient storage space to accommodate Preferred Alignment traffic volumes in the AM and PM peak hours, which also considered the traffic from the southbound I-94 exit ramp to avoid back-ups onto the ramp. However, in coordination with IDOT (having jurisdiction of 130th Street) and CDOT (having jurisdiction of Ellis Avenue), CTA could extend turn lane storage lengths and recommend adjusting the signal timing per the Intersection Design Study and the traffic analysis results to support potential ancillary development associated with the 130th Street station. This mitigation would be based on actual (measured) traffic volumes, agency requirements, coordination within the traffic network, and any traffic demand management and/or traffic calming measures being implemented at the time of mitigation.

The 130th Street station would close Old 130th Street across the new RLE tracks. Old 130th Street currently provides access to the TCA Health building and Carver Military Academy High School and would serve as the park & ride exit from the 130th Street station. Access from Old 130th Street would remain to both driveways leading to TCA Health and from 130th Place to Greenwood Avenue. Carver Military Academy High School has two existing access points: the primary inbound and outbound access from Greenwood Avenue to 132nd Street and secondary access via Doty Avenue and Old 130th Street when traveling north to/from the high school. Under the Preferred Alignment, the secondary access via Doty Avenue would be closed, and vehicles traveling to Carver Military Academy High School would only use the primary entrance at Greenwood Avenue to 132nd Street. However, Doty Avenue can still be used for access to/from the south of the high school.

Bicycle Facilities

The permanent impacts to bicycle facilities are the same as described in the Draft EIS.

The Preferred Alignment would have no permanent adverse impacts on existing bike routes. Bike routes along 103rd Street, 111th Street, 115th Street, and State Street have the potential to be used by bicyclists to access the RLE stations. CTA would provide bicycle parking at the four RLE stations to accommodate bicyclists.

Pedestrians

The permanent impacts to pedestrians are the same as the Draft EIS, unless otherwise stated.

The Preferred Alignment would provide pedestrians with more choices, flexibility, and potentially reduced travel times as compared to the No Build Alternative. The final design of the four RLE stations would include appropriate improvements to enhance safety for crossing pedestrians. All potential improvements would be coordinated with CDOT. Crosswalks would be included at the existing intersection adjacent to 103rd Street station and CTA would coordinate with CDOT to determine if additional improvements are merited at this location. At 111th Street station, where the proposed pedestrian roadway crossing is considered “mid-block,” enhanced crosswalk warning devices would be included; for example, this crosswalk enhancement may include a raised-table style crosswalk with the addition of rapid flash, pedestrian-activated warning lights. At Michigan

Avenue station, crosswalks would be included at an existing intersection at Michigan Avenue and Kensington Avenue and the need for a traffic signal related to exiting buses would be evaluated during final design. If the intersection is signalized, pedestrian signals with pedestrian activation will be included.

The relocation of the 130th Street station south into the Altgeld Gardens neighborhood would benefit pedestrians. Although increased vehicle traffic would now enter the Altgeld Gardens neighborhood, this increased traffic would be limited to two roadways and would be accompanied by pedestrian friendly features. Adjacent intersections would be upgraded with ADA-accessible curb ramps, visible crossing pavement markings would be added, and deteriorated sidewalks in the Altgeld Gardens neighborhood, adjacent to the 130th Street station, would be replaced. These improvements would provide access for all users and would improve pedestrian safety. Permanent impacts on pedestrians would not be adverse after mitigation. The relocation of the 130th Street station would be beneficial to pedestrians because it would be located within the Altgeld Gardens neighborhood and would no longer require pedestrians to cross 130th Street as proposed in the Draft EIS.

The existing at-grade crossings at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 113th Street (pedestrian only), Wentworth Avenue, 115th Street, and State Street would remain. At the crossings directly adjacent to stations, CTA would include implementation of at-grade warning device enhancements including pedestrian gates and improvements for ADA compliance in the final design of the RLE Project in coordination with the UPRR, Illinois Commerce Commission, CDOT, and CCDoTH. At stations, parking would be provided on the same side of the tracks so riders that use park & ride facilities will not have to cross the UPRR tracks to access the stations. CTA would coordinate with the UPRR regarding fencing or other appropriate design elements and include the agreed upon design features in final design of the RLE Project to deter trespassing into UPRR property. In addition, pedestrian gates would be included in final design to enhance at-grade crossing protections. These improvements would provide access for all users and increase pedestrian safety.

Freight Transportation

The permanent impacts to freight transportation are the same as described in the Draft EIS, unless otherwise stated.

As part of the Preferred Alignment, the UPRR tracks would continue to be operational. Because the proposed RLE track would be elevated, there would be no permanent impacts on UPRR freight train operations. As the Preferred Alignment would also be elevated above local streets, there would be no permanent impacts on truck routes, other than the impacts on all motorized vehicular traffic.

Since the Draft EIS, the 120th Street yard and shop was shifted approximately 100 feet to the west to accommodate the NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. Old 130th Street would be closed to through vehicle traffic just west of the existing Conrail at-grade crossing. This would reduce the amount of vehicle traffic that would use the at-grade crossing. See **Appendix F**, *Plans and Profiles*, for additional details.

Parking

The permanent impacts differ from those described in the Draft EIS.

Sufficient parking capacity would be provided at all stations to avoid spillover parking into residential areas near the stations. As shown in **Table 3-5**, each of the station locations would have surface parking lots and 130th Street station would also have a parking garage. These parking facilities would expand the reach of the RLE Project and would provide an opportunity for users to access the station by car. Permanent impacts on parking would not be adverse after mitigation.

Table 3-5: Proposed Parking Facilities

Station	Number of Parking Spaces for Preferred Alignment	Parking Facility Description
103rd Street	175	Station Area Surface Parking Lot
111th Street	225	Station Area Surface Parking Lot
Michigan Avenue	180	Station Area Surface Parking Lot
130th Street	760	Parking Garage and Surface Station Area Parking Lot at Station
Total	**1,340**	

The parking capacity at each station has changed since the Draft EIS. While the parking at 111th Street station would increase by 25 spaces, parking at all three other stations has been reduced since the Draft EIS proposed a total of 3,700 parking spaces. The Draft EIS originally called for a total of 3,700 parking spaces along the corridor, based on travel demand modeling performed as part of the RLE Alternatives Analysis Study completed in August 2009. CTA has since reduced the number of planned parking spaces to up to 1,340 based on community feedback, site availability, and analysis of peer stations throughout the CTA system. Recent ridership modeling conducted using the FTA Simplified Trips-on-Project Software (STOPS) ridership model confirms the demand for parking facilities.

Existing parking facilities at the Agape Community Center would be affected by the Preferred Alignment because a City-owned parcel that is currently used for parking would be acquired. Access and parking at TCA Health would be maintained. Information on these impacts and associated mitigation measures can be found in **Section 4.3**.

Existing on-street parking along the east side of Greenwood Avenue from Ellis Avenue to the proposed 130th Street station entrance would be removed to allow for CTA buses to travel on Greenwood Avenue. On-street parking along the west side of Greenwood Avenue, from Ellis Avenue to 132nd Street, and along the east side of Greenwood Avenue south of the 130th Street station entrance would remain.

Construction Impacts

The construction impacts and mitigation measures to public transportation are not markedly different than those described in the Draft EIS, unless otherwise stated.

Construction activities would temporarily affect the physical capacity of roadways, sidewalks, and intersections subject to lane closures, narrowing, and detours. This would affect bus transportation, vehicular traffic, bicycle traffic, truck freight, pedestrians, on-street parking, and potentially access to off-street parking. CTA would prepare traffic management and maintenance of traffic plans that identify traffic detours and emergency response access routes. Increased congestion due to construction may temporarily increase travel times along roadways within the RLE project area. CTA would mitigate these impacts on a case-by-case basis, coordinating with IDOT, Cook County CCDoTH, CDOT, and local businesses, organizations, and residents to select the most appropriate mitigation measures for each situation. Likewise, contractors would adhere to local, state, and federal guidelines for maintaining pedestrian and ADA access during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Temporary shutdown of other traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Proposed structure construction in the vicinity of the I-94/I-57 interchange would be sequenced to limit effect on I-57 traffic flow to the extent practicable per IDOT traffic management requirements. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

Freight railroad traffic adjacent and underneath the Preferred Alignment would experience minimal impacts during construction. The most notable impacts would be the need to stop railroad traffic during bridge erections over tracks on both the UPRR and CN/MED. Coordination would be needed with the UPRR, NS, CN, Metra, and NICTD/CSS & SBRR for work near, adjacent to, or on their property. Impacts to freight and passenger rail would be minimized by efforts such as sequencing construction of crossings and through coordination with the affected railroads, appropriate flagging, and scheduled track outages.

Impacts Remaining After Mitigation

The Preferred Alignment would result in permanent benefits to public transportation. Permanent impacts on vehicular traffic, pedestrians, and parking at the Agape Community Center and TCA Health would not be adverse after mitigation. There would be no permanent impacts on freight transportation. Construction-related impacts would not be adverse and best management practices (BMPs) would be employed to minimize disruptions.

Chapter 4 Environmental Impacts and Mitigation

This chapter describes the potential beneficial and adverse impacts that would result from the alternatives along with mitigation measures to avoid or minimize adverse impacts where feasible and applicable. The *Construction Impacts Technical Memorandum* (**Appendix I**) summarizes how construction activities would temporarily affect many of the resources as well as the mitigation for potential construction impacts as described in this chapter.

4.1 Land Use and Economic Development

This section describes the impacts of the Preferred Alignment and No Build Alternative on the land uses and economic development in the area of potential impact (API), including consistency with applicable land use plans. The information in this section is based on the *Land Use and Economic Development Technical Memorandum* (**Appendix J**). **Table 4-1** summarizes the land use and economic development impact findings.

The API for determining potential land use and economic development impacts and benefits includes parcels directly adjacent to the Preferred Alignment for the full length of the alignment, as well as those parcels within a ½ mile radius of station locations per FTA guidance. The Preferred Alignment was analyzed for potential impacts on existing and expected land use types, densities, and character.

Table 4-1: Land Use and Economic Development – Impact Summary

Alternative	Permanent Impacts		Construction Impacts
	Land Use	Economic Development	
No Build Alternative	No impact	No impact	No impact
Preferred Alignment	Impacts would not be adverse after mitigation	Beneficial	Impacts would not be adverse after mitigation

4.1.1 Regulatory Framework/Methods

Regional and local planning bodies govern land use and zoning regulations. Within Chicago, CMAP acts as the regional planning body and defines the regional planning principles, while the City of Chicago regulates land use policies and zoning within its local jurisdictional boundaries. CTA evaluated existing land use, zoning, and relevant land use and economic development plans for parcels directly adjacent to the alignment, for the full length of the alignment, as well as those parcels within a ½ mile of stations per FTA's 2014 *Planning for Transit-Supportive Development: A Practitioner's Guide* (FTA 2014). The project could directly or indirectly affect land uses and economic development plans within a ½ mile of project stations.

A land use change may result in an adverse impact if it would be incompatible with surrounding land uses or could encourage land use and development inconsistent with local plans, goals, and objectives. An economic impact may result if one or more of the following occurs:

- Direct or indirect changes to the tax code or property taxes
- Displacement of businesses (especially major employers) and individuals, defined in this analysis as those of a magnitude that would preclude relocation in the immediate area due to lack of available real estate
- Short- and/or long-term disruption of business activities
- Impacts that would influence regional construction costs

The City of Chicago is divided into 77 community areas for statistical and planning purposes. Census data and other statistics are tied to the areas, which serve as the basis for a variety of urban planning initiatives on both the local and regional levels. The areas' boundaries do not generally change, allowing comparisons of statistics across time. CTA used data from four community areas near the Preferred Alignment for analysis of project impacts: Roseland, Washington Heights, West Pullman, and Riverdale. For more information on each of the community areas, see **Section 4.3**.

For each community area reviewed, CTA analyzed whether the RLE Project would cause adverse land use and economic impacts using the following:

- Analysis of the potential for short-term and long-term conflict with, or disruption of access to, land uses adjacent to the Preferred Alignment
- Identification of potential conflicts with local land use plans, policies, or regulations
- Identification of potential land use benefits of the Preferred Alignment, such as opportunities for economic development and transit-supportive land uses

The analysis included reviewing existing land use plans and zoning maps and using field observations of the project corridor to determine consistency of the RLE Project with the goals and policies presented in the local and regional land use plans and studies of the City of Chicago and CMAP. A list of these plans and studies can be found in **Appendix J**.

4.1.2 Existing Conditions

The API has residential (primarily single-family), commercial (urban mixed-use), industrial, transportation, utility, and vacant land uses.

The Preferred Alignment would begin within the I-57 right-of-way, north of the southbound lanes of I-57, and would follow the UPRR track southward. The surrounding land uses are primarily single-family residential properties north of I-57 and on the eastern side of the alignment, with a mix of primarily single-family residential properties and industrial properties to the west. There are typically one or two vacant properties per block in the residential areas and large vacant parcels near Michigan Avenue.

South of 119th Street, the surrounding land uses abruptly transition to industrial, railroad, and major utility sites. The Altgeld Gardens neighborhood is at the southern end of the Preferred Alignment adjacent to the 130th Street station. See **Figure 4-1** for a map of land uses.

Appendix J contains a more detailed description of the API. The existing land uses have not considerably changed since the issuance of the Draft EIS. Two areas that have changed are:

- 95th/Dan Ryan terminal – The reconstruction of the terminal that was planned at the time of the Draft EIS, including a new station house, a bus terminal, a pedestrian bridge, and a pick-up/drop-off area for vehicles, is now complete and open to the public.
- 130th Street station area – The 130th Street station area has changed since the Draft EIS. The new station area would be located south of 130th Street, east of Greenwood Avenue. This area is vacant. It previously consisted of multifamily housing units for the Altgeld Gardens neighborhood. In 2017, approximately 500 housing units in this area (i.e., Blocks 11, 12, and 13) were demolished by CHA.

4.1.3 Environmental Consequences

The following sections summarize the potential land use and economic impacts of each alternative.

4.1.3.1 No Build Alternative

The No Build Alternative would not create any new inconsistencies to land uses and economic development beyond those that already exist, and therefore would have no impact on land use or economic development. The environmental consequences of the No Build Alternative are not different than those in the Draft EIS. For each of the four neighborhoods within the API, Washington Heights, Roseland, West Pullman and Riverdale, no considerable changes to land use or economic development have occurred since the Draft EIS for the No Build Alternative.

4.1.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

Implementation of the Preferred Alignment could foster economic benefits by providing new public transit options (**Chapter 3**) and opportunities for economic development (**Chapter 5**). The CTA prepared a Transit-Supportive Development (TSD) Plan that would also help minimize adverse impacts due to incompatible land use types resulting from the RLE Project. The TSD plan is described in **Section 5.3**.

The Preferred Alignment would cause displacements as a result of construction of the track structure, stations, substations, and park & ride facilities. The Preferred Alignment would affect the land uses of 14 additional parcels that were not affected by either the East or West Options. These parcels are located in the vicinity of the 107th Place cross-over and would be permanently acquired

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-1: Existing Land Use

for staging of construction equipment and for the overhead RLE supports to cross the UPRR track. With just compensation and relocation assistance as described in **Section 4.2**, the displacement impacts would not be adverse after mitigation.

Where stations, substations, and park & ride facilities would be inconsistent with current zoning, CTA would coordinate with City of Chicago to rezone the parcels or receive appropriate zoning approvals (e.g., special use permit, variance, etc.).

There are no impacts to land use with mitigation for the four communities within the API, and there are no considerable changes to land use or economic development since the publication of the Draft EIS.

Construction Impacts

Construction activities would cause temporary impacts such as truck traffic, roadway detours, noise, vibration, and dust. Mitigation associated with truck traffic and roadway detours can be found in **Section 3.3** and **Section 4.3**; noise and vibration mitigation can be found in **Section 4.5**; dust mitigation can be found in **Section 6.1**. There could be short-term economic benefits due to jobs created by construction. Construction could be disruptive to businesses along the alignment, which would be an adverse impact. Construction impacts and mitigation recommended for land use and economic development under the Preferred Alignment would be similar to the East and West Options in the Draft EIS.

To minimize the adverse impact, CTA would develop and implement a Construction Outreach and Coordination Plan. CTA would coordinate with communities, businesses, and aldermen's local ward offices to finalize and implement a Construction Outreach and Coordination Plan. The plan would include a Business Outreach Program to assist local businesses and residents affected by construction. The plan would be tailored to business and community needs and would include a series of initiatives to minimize construction disruption to businesses and the surrounding community. Examples of these initiatives include a community calendar to inform residents of the construction schedule and avoid affecting special events or festivals, advertising campaigns, any provisions for additional parking during construction, and signage.

Impacts Remaining After Mitigation

Consistent with the results of the Draft EIS analysis for the East and West Options, there would be no adverse permanent or construction-related impacts on land use and economic development for the Preferred Alignment after mitigation measures are implemented.

4.2 Displacements and Relocation of Existing Uses

The following sections summarize the potential displacements and relocations of existing uses of land and buildings. Displacements and relocations may occur when land and/or structures are needed to accommodate construction or the permanent footprint of a project.

Displaced residents and businesses would be relocated in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended ("Uniform Act," 42 USC

§ 4601, et seq.) With compensation and relocation assistance per the Uniform Act, the impact would be considered not adverse because of the general availability of vacant land near the project and the beneficial impacts of the project including new rail transit with four stations, greater accessibility to the region, improved access to jobs, and new development opportunities in the vicinity of the project. In addition, the availability of similar real estate near the project would facilitate relocation. The *Displacements and Relocation of Existing Uses Technical Memorandum* (**Appendix K**) includes additional details. **Table 4-2** summarizes the displacements and relocation impact findings.

Table 4-2: Displacements and Relocation of Existing Uses - Impact Summary

Alternative	Total Affected Parcels	Parcels with Building Displacements	Permanent Impacts	Construction Impacts
No Build Alternative	0	0	No impacts	No impacts
Preferred Alignment	228	97	Impacts would not be adverse after mitigation	No impacts

4.2.1 Regulatory Framework/Methods

The regulatory framework for assessing displacement and relocation impacts has not changed since the Draft EIS. Please refer to **Appendix K** for a complete discussion of the regulatory framework and methods.

4.2.2 Existing Conditions

There have been no considerable changes in the existing conditions of the existing uses of properties along the Preferred Alignment since the Draft EIS.

Along the Preferred Alignment, the existing development pattern consists primarily of single-family residential properties north of I-57 and between 99th Street and the proposed Michigan Avenue station, with some multifamily units interspersed. Between 103rd and 111th Streets, there are several vacant and light industrial properties along the western edge of the corridor. There are also neighborhood-scale commercial retail buildings near the 103rd Street, 111th Street, and Michigan Avenue station sites. South of the proposed Michigan Avenue station location, the land uses around the alignment transition to industrial, vacant, and public utility sites. The Altgeld Gardens neighborhood is at the southern end of the alignment, near 130th Street. Most of the neighborhoods along the alignment have at least a few vacant buildings and parcels per block.

4.2.3 Environmental Consequences

The following sections summarize the potential displacements and relocation of existing uses of each alternative.

4.2.3.1 No Build Alternative

The No Build Alternative would not create any environmental consequences beyond those that already exist, and therefore would have no impact on displacements or relocations.

4.2.3.2 Union Pacific Railroad Alternative – Preferred Alignment

Permanent Impacts

In the Draft EIS, based on conceptual design, the East Option would require 106 building displacements, most of which would be residential, and the West Option would require 46 building displacements, which would be a mix of residential, commercial, and industrial. However, the Preferred Alignment development has advanced through 30 percent design including substantial design refinements. Based on 30 percent design, as shown in **Table 4-2**, the Preferred Alignment would require 228 parcel acquisitions and 97 building displacements. **Table 4-3** indicates the impacts on different land uses by the Preferred Alignment and compares them with the impacts documented in the Draft EIS for both the East and West Options. Parcels used as easements are not considered permanent impacts and are not included in this analysis. **Figures 4-2** and **4-3** show the locations of the permanent displacements.

The increase in parcels affected as compared to the West Option in the Draft EIS includes but is not limited to the addition of parking areas; proposed changes to the 120th Street yard and shop; moving the proposed 130th Street station south; and refined engineering and constructability considerations. Another change from the Draft EIS is that the percentage of total vacant parcels has increased.

CTA would provide informational resources, permitting support, and points of contact for displaced business owners to find suitable sites for relocation. For example, CTA's Uniform Act public outreach specialists would provide specific outreach as a one-stop resource to potentially displaced residents and/or businesses to answer questions regarding relocation rights, requirements, processes, and anticipated timelines. With compensation and relocation assistance to displaced property owners and renters provided by CTA per the Uniform Act (42 USC § 4601, et seq.), the impact would be considered not adverse because of the general availability of vacant land near the project and the beneficial impacts of the project including new rail transit with four stations, greater accessibility to the region, improved access to jobs, and new development opportunities in the vicinity of the project. CTA would continue to coordinate with the Chicago Department of Planning and Development on the TSD Plan to maximize the economic development and community benefits of the RLE Project. In addition, the availability of similar real estate near the project would facilitate relocation. **Appendix K** explains this in greater detail.

Table 4-3: Displacements Compared to the Draft EIS East and West Options

Land Use Type	Total Affected Parcels			Building Displacements		
	East Option	West Option	Preferred Alignment	East Option	West Option	Preferred Alignment
Vacant	50	41	**96**	---	---	---
Single-family Residential	87	35	**50**	75	22	**47**
Multifamily Residential	16	4	**18**	15	4	**18**
Commercial	6	13	**9**	3	6	**4**
Mixed-use (Commercial/Residential)	1	2	---	1	2	---
Institutional (Place of Worship)	1	2	**2**	1	1	**2**
Institutional (School)	2	---	**7**	---	---	**5**
Industrial	17	18	**26**	10	11	**19**
Utility	15	15	**3**	---	---	**---**
Transportation (Railroad)	29	47	**11**	---	---	**---**
Public	34	24	**5**	1	---	**2**
Parkland	2	4	**1**	---	---	**---**
Totals	260	205	**228**	106	46	**97**

Displaced businesses and residents are expected to be able to relocate near the RLE Project because of the existing availability of replacement housing, commercial buildings, and vacant parcels. The new stations would improve regional accessibility and help attract new development to the area, thereby reducing the long-term impacts of displacements. CTA has undertaken early outreach to potentially affected property owners by contacting each owner and occupant (based on available public records). Agreements would be negotiated with City of Chicago, IDOT, various railroads (CN, CSX, UP, NS, and Metra), and MWRD. In addition, there would be agreements between CTA and IDOT regarding the RLE Project proposed within the I-57/94 right-of-way that would also require Federal Highway Administration approval.

Construction Impacts

Some of the parcels acquired may be used partially or primarily for staging, crane erection, site access, or storage of materials during construction; however, these impacts would last long enough that use of the parcels would prevent any use of the property, and in some cases buildings on site would need to be displaced. Therefore, these are considered permanent impacts, included in **Table 4-3**, and not noted as temporary construction (easement) impacts. There would be parcels needed for easements related to construction equipment access and staging of materials; these affected parcels would be considered temporary construction easements. Temporary construction easements would not result in displacement or relocation impacts.

Impacts Remaining After Mitigation

The Draft EIS disclosed that the East Option would affect 260 parcels, displace 106 buildings, and that the impacts would not be adverse after mitigation. Similarly, the Draft EIS disclosed that the West Option would affect 205 parcels, displace 46 buildings, and that impacts would not be adverse after mitigation. With the Preferred Alignment affecting 228 parcels with 97 building displacements, the impacts would not be adverse after mitigation, and the impacts do not represent a considerable change since the Draft EIS. **Table 4-3** shows more vacant and industrial properties affected by the Preferred Alignment but fewer public, parkland, and transportation parcels.

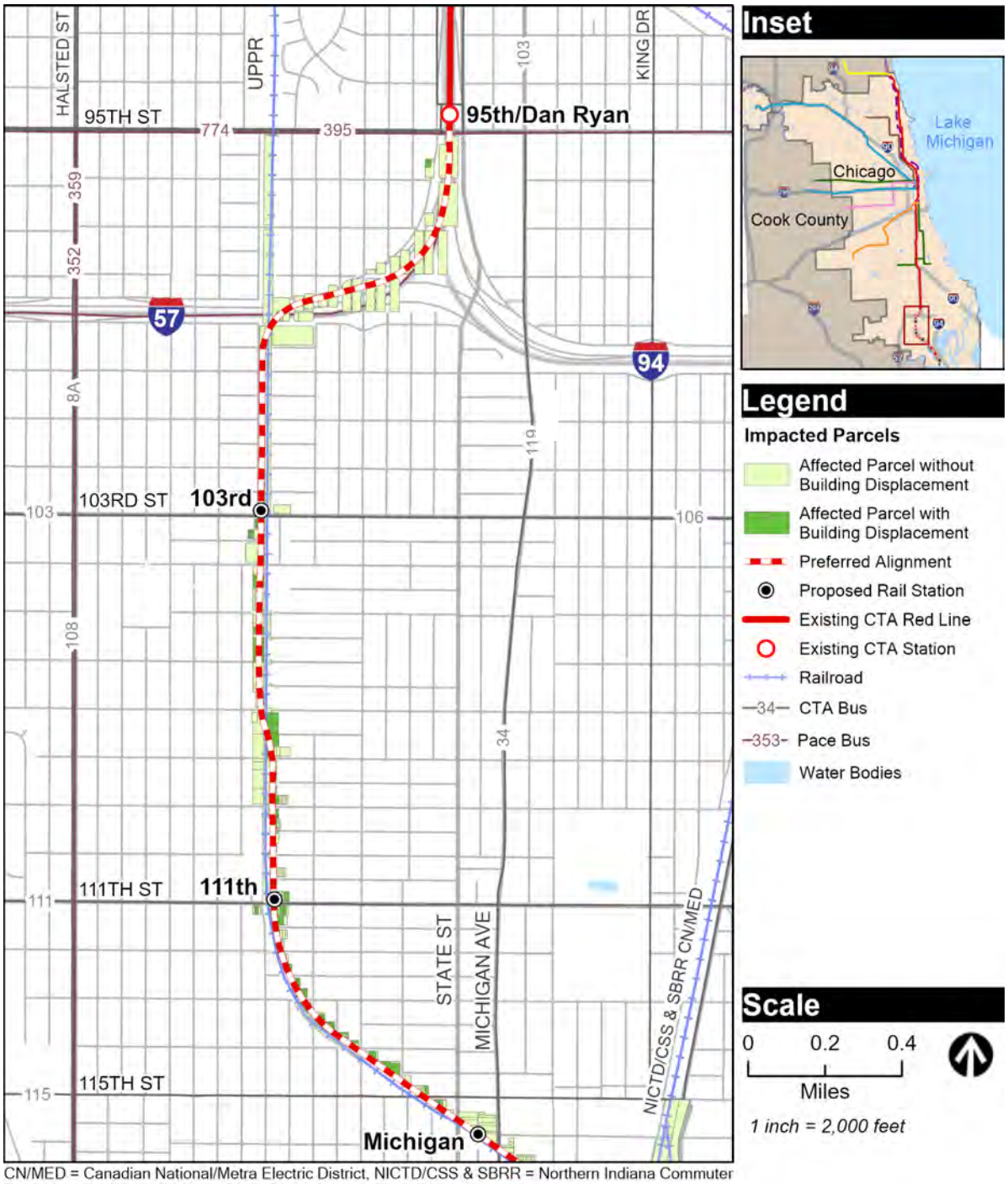

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-2: Permanent Displacements (North of Michigan Avenue Station) (1 of 2)

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-3: Permanent Displacements (South of Michigan Avenue Station) (2 of 2)

4.3 Neighborhoods and Communities

This section describes the impacts of the Preferred Alignment on the surrounding neighborhood and community resources. The analysis considered the surrounding community context and character, community mobility, and community facilities near the project corridor such as schools, parks, and community centers. The *Neighborhood and Community Impacts Technical Memorandum* (**Appendix L**) and the *Parklands and Community Facilities Technical Memorandum* (**Appendix M**) contain additional details. **Table 4-4** summarizes the neighborhood and community impact findings.

Table 4-4: Neighborhoods and Communities - Impact Summary

Alternative	Permanent Impacts			Construction Impacts
	Community Character and Cohesion	Mobility	Community Resources	
No Build Alternative	No Impacts	No Impacts	No Impacts	No Impacts
Preferred Alignment	▪ In the communities of Washington Heights and Roseland, the elevated structure between 99th Street and 103rd Street would change the neighborhood setting of the houses facing it, which represents an adverse visual impact remaining after mitigation. The adverse impact would also include the 103rd Street station and the area near the 107th Place cross-over due to the change in residential character. ▪ There would be adverse visual impacts remaining after mitigation in the West Pullman community at 117th Street and Prairie Avenue due to the elevated structure and in the Riverdale community near the Altgeld Gardens neighborhood due to the 130th Street station park & ride facility.	Beneficial impacts for all communities near the project	Impacts would not be adverse after mitigation for all communities near the project.	Impacts would not be adverse after mitigation for all communities near the project.

4.3.1 Regulatory Framework/Methods

Federal Highway Administration (FHWA) and IDOT both have Community Impact Assessment Manuals (FHWA 2018, IDOT 2007a), which CTA used to evaluate potential neighborhood and community impacts of the Preferred Alignment. The analysis considers the following types of impacts:

- **Community Character and Cohesion** – Impacts due to commercial and residential displacements and changes in land use, visual/aesthetics, noise levels, and population/ demographics. Community character is an attribute of a geographic area with identifiable characteristics that make it unique. Community cohesion is an attribute of a geographic area, where segmentation or division of the area would reduce its desirability to current and future residents. An impact on community character and cohesion would be adverse if impacts related to displacements and changes in land use, visual/aesthetics, noise levels, and population/demographics are adverse.

- **Mobility** - Overall community impacts of changes in transportation options, travel patterns, business activity, access to jobs, and access for emergency service providers. For the Final EIS, an impact on mobility would be adverse if transportation options, access to jobs, and access for emergency service providers would be reduced.

- **Community Resources** - Impacts on key facilities in the API that play an important role in shaping and defining the community, such as landmarks, parks, community centers, and other places that serve as focal points or provide community services. For the Final EIS, an impact on community resources would be adverse if key facilities in the API would be directly affected or access to key facilities would be reduced.

The neighborhood and community impact analysis involved creating detailed demographic and community profiles based on existing community area boundaries within a ½ mile of the Preferred Alignment. CTA conducted field investigations to identify physical, social, or perceived barriers within the established community. In addition, the analysis considered other potential visual, noise, and environmental impacts that could have ripple effects on the surrounding neighborhood. Mitigation measures would offset identified impacts, with an emphasis on community and transit-supportive solutions to address temporary construction impacts. The regulatory framework for analysis of neighborhood and community impacts has changed slightly since the issuance of the Draft EIS. Notably, a critical part of the federal framework, the FHWA's manual titled *Community Impact Assessment: A Quick Reference for Transportation*, was updated in 2018. This update was reviewed to inform the assessment of neighborhood and community impacts for the Preferred Alignment. Otherwise, the regulatory framework has not changed considerably since the Draft EIS.

4.3.2 Existing Conditions

The API for the neighborhood and community impacts analysis consists of the community areas through which the Preferred Alignment would pass. Each community area along the Preferred Alignment is described below. The *Neighborhood and Community Impacts Technical Memorandum* (**Appendix L**) contains additional information about each community area. **Figure 4-4** shows a typical street in the API, and **Figure 4-5** shows the locations of the referenced community areas.

Figure 4-4: Photo of Residential Street near the RLE Project Corridor in Roseland

Roseland

Roseland in the API consists primarily of single-family homes along one-way streets with block associations similar to Washington Heights. Michigan Avenue serves as a major retail and commercial corridor, and several blocks also contain single-family and multifamily housing. Michigan Avenue and 111th Street have been identified as corridors of focus within the INVEST South/West initiative, which are corridors that support existing business development and create opportunities for investment. Within Roseland, the greatest amount of retail activity occurs between 111th and 115th Streets, with the areas to the north consisting of automobile-oriented land uses. Subsequent to the issuance of the Draft EIS, the CTA 95th/Dan Ryan terminal improvements have been completed and are open to the public, including a new station house, a bus terminal, a pedestrian bridge, and a pick-up/drop-off area for vehicles. This facility was under construction during the Draft EIS.

Washington Heights

Washington Heights in the API primarily consists of single-family homes along a grid of one-way streets with low- to medium-density commercial areas with off-street parking along major arterial streets. Blocks are well maintained, and many have community-organized block associations that provide neighborhood watch programs and other initiatives.

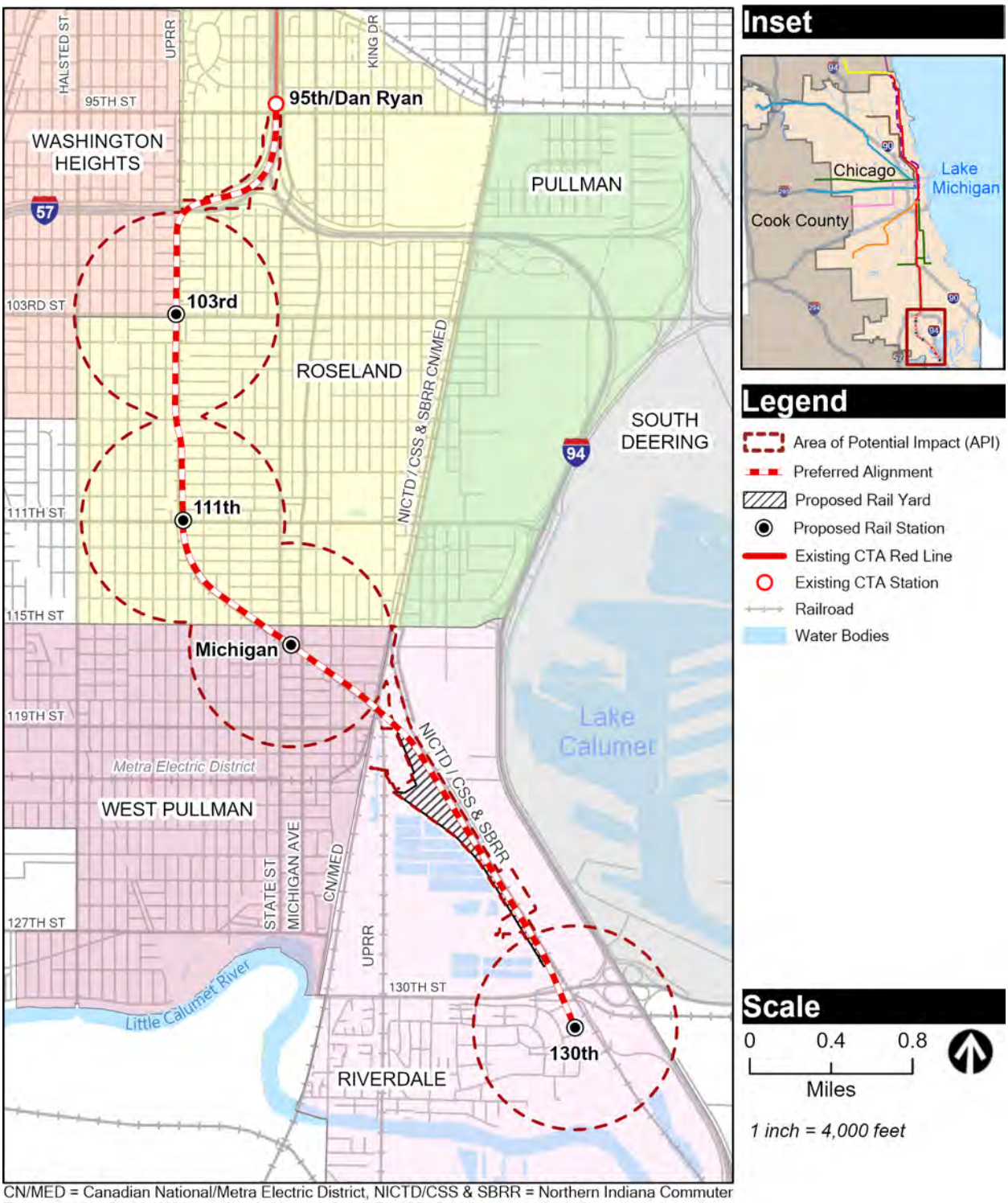

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-5: Community Areas in and Adjacent to the Area of Potential Impact

West Pullman

West Pullman in the API includes portions of the Michigan Avenue commercial corridor, as well as several large industrial and utility properties. Along Michigan Avenue, many commercial buildings have residential units in their upper floors. Several Spanish-speaking businesses and households are also in the area.

Riverdale

Much of the Riverdale community area in the API is occupied by MWRD's facility and freight railroad properties. The southern portion of Riverdale contains the Altgeld Gardens neighborhood and the single-family Eden Green and Golden Gate neighborhoods. The Altgeld Gardens neighborhood is a CHA project built in 1945. Since the Draft EIS, units to the east of Greenwood Avenue (Blocks 11, 12, and 13) were demolished by CHA. The remaining units have been renovated since the Draft EIS was published.

The demographic characteristics in the API are described in detail in **Appendix L** and are summarized below (U.S. Census Bureau 2018).

- The API of the Preferred Alignment contains approximately 24,556 residents, 7,987 households, and 2,887 jobs. There is high unemployment in the API (22.6 percent).
- The racial composition in the API is predominantly African American (92.3 percent). All community areas in the API have African American population percentages ranging from 83.5 percent to 96.9 percent, compared with a citywide average of 29.7 percent.
- The population is predominantly English-speaking, with some pockets of households that speak only Spanish. 3.8 percent identify with Hispanic as their ethnicity.
- Median home prices range from $68,266 in Riverdale to $123,848 in Roseland, which is below the City of Chicago median of $227,600.

The API evaluated by the *Neighborhood and Community Impact Technical Memorandum* (**Appendix L**) has changed since the Draft EIS, to represent the reduction in alternatives (e.g., Halsted Street and Michigan Avenue Bus Rapid Transit alternatives, etc.) to only the Preferred Alignment that was derived from the East and West Options presented in the Draft EIS. This has had the effect of changing the number of residents present in the API by a considerable amount versus the number evaluated during the Draft EIS, which does not reflect an actual change in the number of residents.

Community facilities that are adjacent to the Preferred Alignment and/or are within a ½ mile of a proposed station location and parks within 500 feet of the Preferred Alignment and/or are within a ½ mile of a proposed station location were evaluated for impacts. The *Parklands and Community Facilities Technical Memorandum* (**Appendix M**) contains a full listing of the community and park resources. The number of community resources has been updated to reflect resources within the API of the Preferred Alignment. There are 100 community facilities within the API of the Preferred Alignment compared to 76 community facilities within the API for the East and West Options in the Draft EIS. They included: 62 religious facilities, 12 schools, 6 community centers, 3 fire stations,

4 healthcare centers or hospitals, 1 library, 9 landmarks, and 5 government facilities (Note that one facility, the Chicago Fire Department – Engine 93, is both a fire station and a landmark but is only counted once; Mary Magdalene Missionary Baptist Church, is both a place of worship and a landmark but is only counted once). **Figures 4-6** and **4-7** show the community facilities in the API.

The Agape Community Center is located east of the Preferred Alignment. In the comments on the Draft EIS, there was concern about the potential impacts to parking associated with the Agape Community Center. Currently, the Agape Community Center uses a City-owned parcel of land that is located immediately west of the center for parking.

There are nine park resources within the API for the Preferred Alignment, as compared to 10 within the API for the UPRR East and West Options. Golden Gate Park was within the API for the 130th Street station in the Draft EIS. However, it is outside the API for the relocated 130th Street station. **Figure 4-6** and **Figure 4-7** depict the locations of these parklands. The relocation of the 130th Street station brought the station closer to Beaubien Woods Forest Preserve and George Washington Carver Park. There are no other changes to parklands from the Draft EIS.

Beaubien Woods Forest Preserve is a 279-acre forest preserve, owned by the Forest Preserves of Cook County (FPCC) and is located in Riverdale. The northern end of the Beaubien Woods Forest Preserve is a linear green space that parallels the Conrail tracks from just south of Old 130th Street to 132nd Street. This linear green space is open space except for an access road. The Beaubien Woods Forest Preserve has a boat launch area connecting to the Little Calumet River. George Washington Carver Park is a 19-acre park that offers a swimming pool and indoor and outdoor recreational facilities. It is owned by the Chicago Park District.

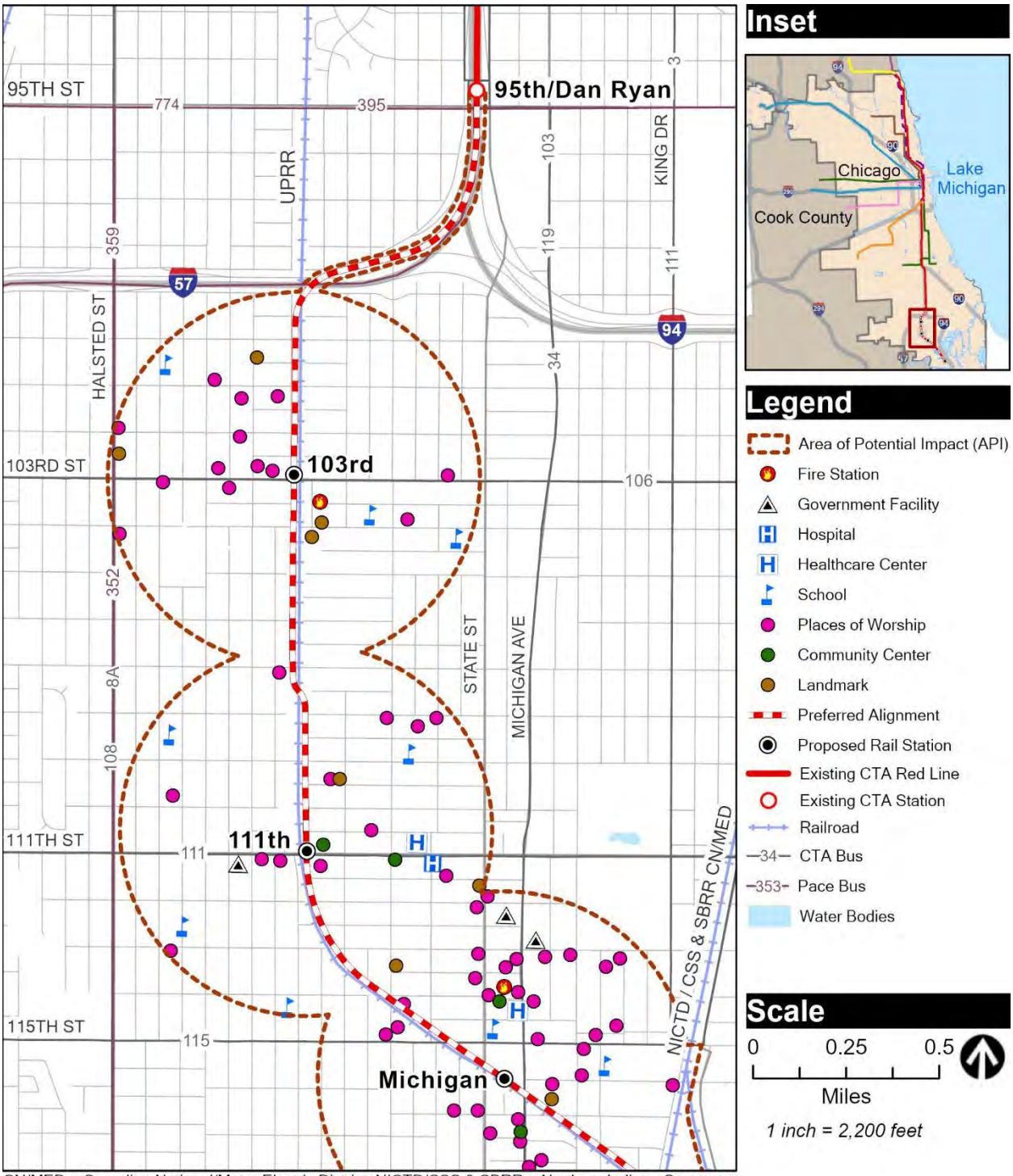

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-6: Community Facilities in the Area of Potential Impact (1 of 2)

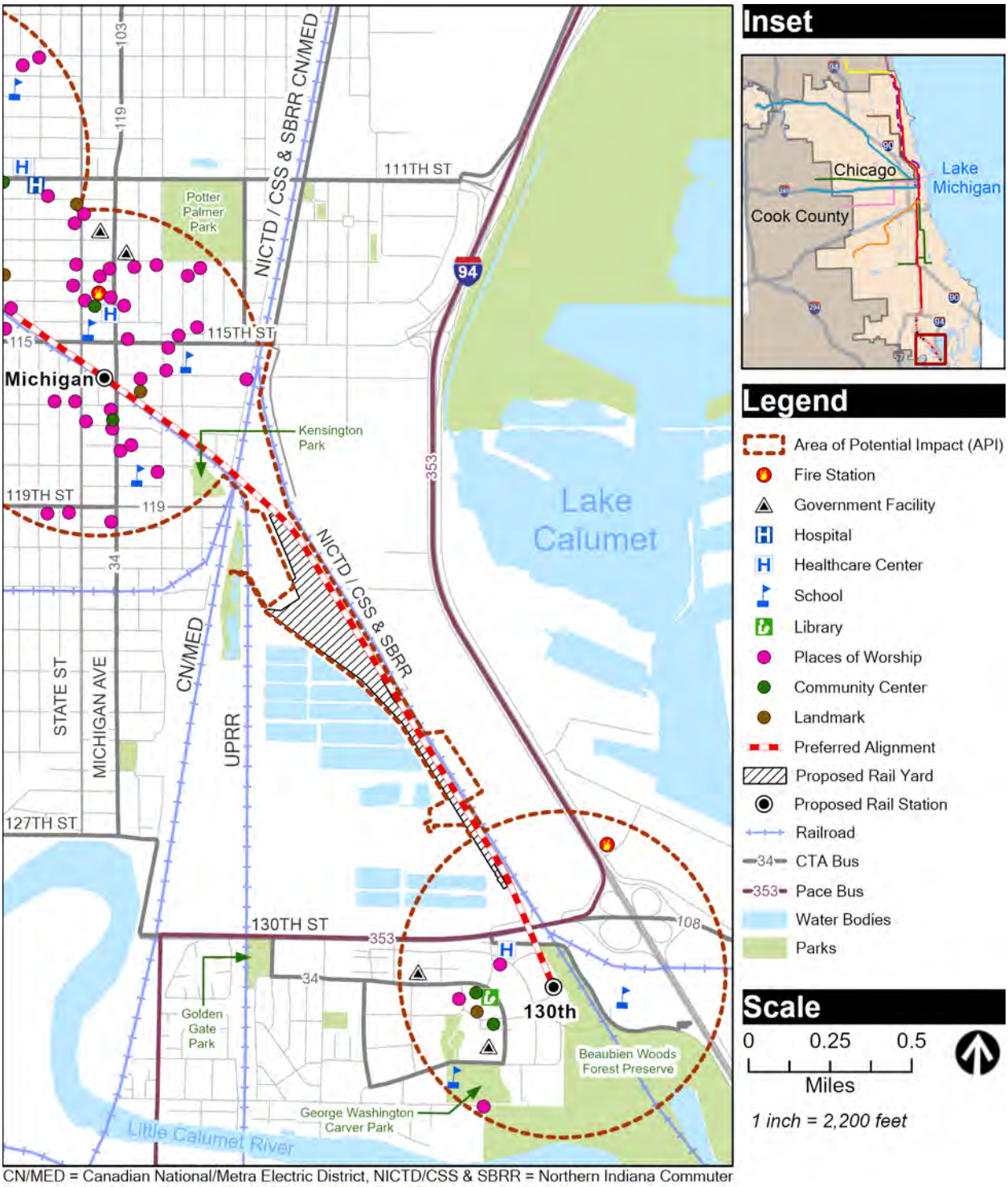

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-7: Community Facilities in the Area of Potential Impact (2 of 2)

4.3.3 Environmental Consequences

The following sections summarize the potential neighborhood and community impacts of each alternative.

4.3.3.1 No Build Alternative

Under the No Build Alternative, the project would not be built, and there would be no changes to community character and cohesion. The No Build Alternative would lack the mobility and livability enhancements that the Preferred Alignment would provide. It would also fail to address the community's desire for growth initiatives that could attract new economic development interests to the area. There would be no impacts on community resources. Construction would not occur under the No Build Alternative. The No Build Alternative would not have adverse community or neighborhood impacts, and no mitigation measures would be required. This does not represent a considerable change since the Draft EIS.

4.3.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

Community Character and Cohesion

The following permanent adverse impacts related to community character and cohesion that were not disclosed in the Draft EIS include:

The removal of vegetation for the elevated structure of the Preferred Alignment would alter the viewshed of the remaining residences in Roseland, Washington Heights, and West Pullman. Because the relocated 130th Street station would include a park & ride facility with a four-level garage and surface parking lot, and other structures, there would also be adverse visual impacts in Riverdale due to the relocation of the 130th Street station for residences that front Greenwood Avenue. The residential character and scale would be noticeably altered by the addition of the RLE Project. Detailed information on the adverse visual impacts and associated mitigation measures can be found in **Section 4.4** and **Appendix N**.

Mobility

There would be beneficial impacts on mobility throughout Roseland, Washington Heights, West Pullman, and Riverdale. As discussed in **Chapter 3**, there would be increased access to transportation options, beneficial impacts to travel patterns, increased opportunities for business activity, better access to jobs, and no change in access for emergency service providers. There would be beneficial impacts to pedestrian and bicycle access as gaps in sidewalks near stations would be improved and would be ADA-compliant. The existing at-grade crossings would be improved with gates at the sidewalks and increased lighting. This does not represent a considerable change since the Draft EIS.

In Riverdale, the closure of Old 130th Street would eliminate one of three access routes to the Carver Military Academy High School. However, closure of this route would not result in an adverse impact because the primary access to the school is from 130th Street to Ellis Avenue to Greenwood Avenue

to 132nd Street. The secondary access from Doty Avenue from the south would remain unchanged. This change in access to the high school is not considered an adverse impact since two access points would remain. No mitigation measures would be required.

Community Resources

Community resources in Roseland would be affected by the RLE Project. For Wendell Smith Park detailed information on the impacts and associated mitigation measures can be found in **Chapter 8** of the Final EIS and **Appendix Y**. Two churches within the API would be displaced because they fall within the proposed right-of-way for the Preferred Alignment. The Now Faith Church of God Holiness was disclosed in the Draft EIS. In Roseland, the New St. Mary Church of Prayer located at 341 W. 111th Street is a place of worship east of the Preferred Alignment. The entire building and parcel would be acquired for the project and the parcel used as parking for the 111th Street station. This is a new displacement because this proposed parcel use had not been identified when the Draft EIS was completed. The Preferred Alignment would require the use of a City-owned parcel that would affect its current use by the Agape Community Center for parking. In addition, trucks delivering to the Agape Community Center rear garage door (north side) use the City-owned parcel for turn around due to limited turning radius from the alley. However, the impacts to the Agape Community Center would not be adverse with mitigation because CTA would continue to coordinate with the Agape Community Center to include an alternative parking location for the Agape Community Center in the final design of the RLE Project. The RLE Project would not impede truck access to the north side of the Agape Community Center building.

In Washington Heights, Fernwood Parkway detailed information on the impacts and associated mitigation measures can be found in **Chapter 8** and **Appendix Y**. Aside from Wendell Smith Park discussed in the Roseland impacts above, no other community parklands discussed in **Section 4.3** would be affected by the RLE Project. In addition, no community resources in West Pullman would be affected by the RLE Project.

In Riverdale, the 130th Street station access road requires closure of Old 130th Street at the new RLE track crossing. Old 130th Street provides an existing connection to the Beaubien Woods Forest Preserve access road east of the new RLE at-grade track crossing. Closure of Old 130th Street would eliminate the access road connection into the Beaubien Woods Forest Preserve from Old 130th Street. However, the main access route to the Beaubien Woods Forest Preserve would continue to be from Ellis Avenue to Greenwood Avenue to 132nd Street. The relocation of the 130th Street station was not part of the Draft EIS. Impacts to the Beaubien Woods Forest Preserve are new and were not disclosed in the Draft EIS and, therefore, did not include the closure of Old 130th Street or removal of any trees south of 130th Street. However, with mitigation measures, no adverse impacts to Beaubien Woods Forest Preserve are anticipated. The mitigation and enhancement measures for Beaubien Woods Forest Preserve would follow the lower-impact scenario discussed in FPCC's mitigation concurrence letter to offset the diminished access to the boat launch access road. FPCC and CTA coordination letters can be found in **Appendix M**. CTA would uphold their role in the mitigation measures agreed upon by the FPCC. Mitigation and enhancement measures are currently anticipated to include the following:

- Transfer of two City-owned parcels into FPCC ownership

- $250,000 payment to FPCC for ecological restoration, habitat enhancement and beautification of expanded Beaubien Woods Boat Launch land
- New trail connection from Altgeld Gardens recreation facilities on 133rd Street to the Beaubien Woods Boat Launch
- Wayfinding and information signage inside the proposed station and outdoor signage at 130th Street and Ellis Avenue and other locations
- Forest Preserve advertising to encourage CTA riders to use public transportation to visit the Forest Preserves at the 130th Street station, other Red Line stations south of Roosevelt, and inside local trains and buses

FPCC provided their mitigation concurrence letter on May 13, 2021. This letter is included in **Appendix M**.

The relocation of the 130th Street station also affects the eastern portion of TCA Health because some of its property would be located within the proposed RLE Project right-of-way; this parcel would be partially acquired as part of the RLE Project. CTA would continue to coordinate with TCA Health to maintain access to the TCA Health parking lot and replace parking space impacts, if any, at a ratio of 1 to 1 in the final design of the RLE Project. With mitigation measures, the impacts to TCA Health would not be adverse.

Construction Impacts

Community disruption would occur temporarily during construction for the Preferred Alignment. Most of the construction activities and staging would occur within street right-of-way, properties to be acquired as part of the project's permanent envelope, and potentially other nearby vacant parcels through the establishment of temporary construction easements. Construction activities would cause temporary impacts such as truck traffic, roadway detours, noise, vibration, and dust. Mitigation associated with truck traffic and roadway detours can also be found in **Section 3.3**; noise and vibration mitigation can be found in **Section 4.5**; dust mitigation can be found in **Section 6.1**. Construction impacts and mitigation recommended for neighborhoods and community facilities under the Preferred Alignment would be similar to the East and West Options in the Draft EIS.

Neighborhoods would experience visual impacts, noise, and dust during construction on an intermittent basis, but impacts on the Washington Heights, Roseland, West Pullman, and Riverdale would not be adverse through the use of best management practices (BMPs). For example, construction lighting infiltration into adjacent neighborhoods would be limited and debris-free construction areas would mitigate visual impacts. Additional BMPs may be found in the respective appendices for noise (**Appendix O**), and air quality regarding dust (**Appendix U**). The 120th Street yard and shop would be located far enough from established communities so that no construction impacts would occur. Mitigation measures associated with visual impacts, noise, and dust can be found in **Section 4.4**, **Section 4.5**, and **Section 6.1**, respectively.

Construction activities would result in additional truck traffic and temporary street closures throughout Roseland, Washington Heights, West Pullman, and Riverdale. Anticipated hauling

routes would be coordinated throughout the RLE Project to minimize the number of trucks and equipment passing through sensitive areas of the community and would utilize highways and major arterials over local roads to the extent feasible and practicable. Religious facilities, schools, community centers, and other facilities near the alignment and stations would be subject to temporary adverse impacts associated with potential traffic detours; however, access would be maintained throughout the duration of the project. Detours would be provided to maintain access to adjacent properties during construction, and CTA would coordinate with Pace so bus transit service would detour around roadway closures. Businesses around the alignment and station park & ride facilities could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Temporary roadway delays due to truck traffic and construction equipment would occur. CTA would provide early notification of construction activities and provision of temporary alternative access routes for the community and advertising programs to increase the visibility of affected businesses during construction. Contractors would perform work in a manner consistent with local ordinances.

Construction-related impacts on neighborhoods and communities under the Preferred Alignment would not be adverse after implementation of mitigation measures as described above.

Impacts Remaining After Mitigation

In the communities of Washington Heights and Roseland, the elevated structure between 99th Street and 103rd Street would change the neighborhood setting of the houses facing it, which represents an adverse visual impact remaining after mitigation. In West Pullman, there would be adverse visual impact after mitigation at 117th Street and Prairie Avenue due to the elevated structure. In Riverdale, there would be an adverse visual impact after mitigation due to the height and mass of the proposed 130th Street station parking garage changing the residential character of the neighborhood.

4.4 Visual and Aesthetic Conditions

This section summarizes the existing visual and aesthetic conditions in the API and describes the visual and aesthetic impacts of the No Build Alternative and the Preferred Alignment. See also the *Visual and Aesthetic Conditions Technical Memorandum* (**Appendix N**). **Table 4-5** summarizes the visual and aesthetic impact findings.

Table 4-5: Visual and Aesthetic Conditions - Impact Summary

Alternative	Permanent Impacts	Construction Impacts
No Build Alternative	No impacts	No impacts
Preferred Alignment	Adverse impacts despite mitigation north of I-57, between 99th Street and the 103rd Street station area, near the 107th Place cross-over, at 117th Street and Prairie Avenue, and at the 130th Street station	No adverse impacts

4.4.1 Regulatory Framework/Methods

CTA analyzed the visual and aesthetic conditions to be consistent with State of Illinois Public Act 093-0545, which requires projects to take the visual context of the API into consideration. The context includes existing and proposed land uses and zoning and the potential for degradation of the existing visual character or quality of the surrounding community areas. The analysis also considered the potential for the project to create new shade or shadow effects. CTA considered the guidelines and ordinances that govern visual integrity and quality in the City of Chicago including the Zoning Ordinance, Land Use Ordinance, and the Landmarks Ordinance.

For this analysis, CTA assessed visual and aesthetic impacts by first analyzing existing visual resources in the API, including any sensitive views, and assessing existing visual quality of the surrounding environment. Sensitive views were determined from research and field observations as well as public comments received as part of CTA's outreach efforts (see **Chapter 10**). CTA then considered changes to the visual environment that would result from the Preferred Alignment. The analysis included an assessment of any changes to the viewsheds or other sensitive views that would affect the essential character or context of the visual environment and any other visual quality impacts. Where any adverse visual impacts were determined to be likely in the context of the visual environment, mitigation methods were proposed.

For the Final EIS, an impact would be adverse if it resulted in one of the following:

- A change that is inconsistent with the community's aesthetic character
- Incompatibility of a project element with the character of the area
- Incompatibility of a project element with community aesthetic goals
- A degradation of the existing visual character or quality of a site and its surroundings
- Effects on a historic site through extensive remodeling or removal of buildings or their surrounding area (discussed further in **Section 4.7**)
- Creation of new shade and shadow effects

CTA categorized visual and aesthetic changes to the environment as low, moderate, or high based on the following characteristics:

- Low visual changes generally occur when the transit facility is already part of the view and there would be minor or few changes to the transit facility that would create noticeable changes in the view. Low visual changes can be beneficial; low visual changes are not considered adverse.
- Moderate visual changes occur when the existing view would be noticeably different but not substantially different. Removal of vegetation or a single property displacement would be examples of a moderate visual change. Depending on the individual case, moderate visual changes may or may not be adverse, and may be beneficial.

- High visual changes would occur when there is a substantial change to the existing view or when visually sensitive resources would have a change in view. In some cases, high visual changes may improve an area. Like other visual changes, high visual changes can be beneficial or adverse.

In addition to categorizing the visual change of a view, CTA also considered the response to a view depending on the viewer type that would interact with the view. A viewer type's sensitivity to a change in a view could affect the level of impact on a viewshed. Major viewer types along the project corridor include residents, passengers, business owners, recreational groups, and visitors.

- Residents are very familiar with their surroundings and interact with the visual environment on a daily basis. Residents would have high viewer sensitivity because of daily interaction with the visual environment.

- Passengers interact with the visual environment daily because they travel to and from the transit facility. Passengers have less viewer sensitivity than other viewer groups because they only pass through the visual environment and do not reside in the environment.

- Business owners are familiar with their surroundings and have a vested interest in the visual environment. Business owners would have a higher sensitivity than other groups, such as visitors or passenger groups, based on their familiarity and vested interest in the environment.

- Recreational groups are people who may walk, run, or cycle near the transit facility. Recreational groups have different expectations of the visual environment and have a higher sensitivity to scenic views or neighborhood character than other viewer groups.

- Visitors are individuals who have limited interaction with the area and are not familiar with the visual environment. Visitors have some sensitivity to the surrounding environment.

The *Visual and Aesthetic Conditions Technical Memorandum* (**Appendix N**) includes specific information on the visual assessment process. **Section 4.7** includes a discussion of potential visual effects on historic resources.

The regulatory framework for assessing visual and aesthetic impacts has not changed since the Draft EIS.

4.4.2 Existing Conditions

The visual environment that would be affected by the RLE Project includes areas that would have a view of the new facilities and areas visible from the new facilities. The overall API has residential (primarily single-family), commercial (urban mixed-use), industrial, transportation, utility, and vacant land uses.

The Preferred Alignment would run south along I-94 from the 95th/Dan Ryan terminal, and then curve west along the north side of I-57. This portion of the corridor has a relatively cohesive landscape. South of I-57, the Preferred Alignment would run along an existing railroad corridor that is surrounded by a mix of residential and light commercial districts. The residential development

consists of one- to two-story structures of similar style. Light commercial buildings are typically at intersections that meet the existing UPRR tracks at-grade. A sizable portion of the development along the corridor is vacant and contains minimum architectural embellishments. The Roseland Pumping Station at 104th Street and Harvard Avenue is one of the few non-residential structures in the area with architectural character. South of 119th Street, the Preferred Alignment would run along the MWRD property and end south of 130th Street in the Altgeld Gardens neighborhood. Aside from the residences at Altgeld Gardens, this area has a light industrial character. The neighborhood is relatively isolated from other neighborhoods by 130th Street, I-94, and the Little Calumet River.

Other than the removal of Blocks 11, 12, and 13 of Altgeld Gardens that contributed to the movement of the planned 130th Street station from north of 130th Street to south of 130th Street, the existing conditions have not changed considerably since the Draft EIS.

4.4.3 Environmental Consequences

The following sections summarize the potential visual and aesthetic impacts of each alternative.

4.4.3.1 No Build Alternative

There would be no visual or aesthetic impacts associated with the No Build Alternative; no mitigation measures would be required. This does not represent a change since the Draft EIS.

4.4.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

The Preferred Alignment would result in impacts to visual and aesthetic conditions at locations along it, similar to those identified for the East and West Options presented in the Draft EIS.

A high level of visual change in the visual setting due to the elevated track structure in the highway right-of-way shown in **Figure 4-8** would result in an adverse visual impact north of I-57. The track structure would change the scale, density, and character of the residential neighborhood north of I-57, as presented in the Draft EIS.

The elevated structure for the Preferred Alignment would run over the existing Fernwood Parkway between 99th Street and 103rd Street. In addition to shadows and light patterns created by the elevated structure, the removal of vegetation within Fernwood Parkway would alter the visual quality for the residential community to the west. Because of the high level of visual change, visual impacts between 99th Street and the 103rd Street station area would be adverse.

Figure 4-9 shows the existing conditions and rendering of the elevated structure looking south along Eggleston Avenue near 101st Place toward the 103rd Street station. Several buildings and some vegetation along the west side of the existing UPRR corridor would be removed to accommodate the new 103rd Street station and surface parking lot. Note the appearance of project elements and residences in visualizations is intended to show the scale of project elements.

Actual construction appearance may differ based on design refinements and design decisions for color, textures, finishes, and choice of specific design features.

Figures 4-10 through **4-13** are intended to show the scale of project elements. **Figure 4-10** shows a rendering of the 103rd Street station. The elevated platforms and track structure would have a high impact on the viewshed of residences adjacent to the Preferred Alignment and would create new shadows.

Figure 4-11 shows existing conditions and a photo simulation of the 107th Place cross-over. The residential character and scale would be considerably altered by the addition of the elevated structure. The elevated structure would be approximately 48 feet high (existing grade to top of rail) to provide the required clearance over the UPRR tracks.

Because of the height of the elevated 107th Place cross-over, the existing vegetation would not effectively block the views from adjacent residences, permanently changing the visual setting of the area. Because of the high level of visual change, there would be adverse visual and aesthetic impacts on the residential neighborhood.

The park & ride facility for the Michigan Avenue station has been refined from the Draft EIS and is now located on the north side of the existing UPRR track within a light industrial/commercial area. The height of the park & ride facility is in context of the surrounding community and would not be adverse after mitigation. **Figure 4-12** shows the existing conditions and rendering of the park & ride facility.

The area at 117th Street and Prairie Avenue would have a high visual impact. Construction of the elevated structure would result in removal of some vegetation and neighborhood fabric, which would alter the residential character and scale of the area as shown in **Figure 4-13**. Because the relocated 130th Street station would include a park & ride facility comprised of a four-level garage and surface parking lot, and other structures, there would be a high level of visual change and, therefore, adverse visual impacts due to the relocation of the 130th Street station. **Figure 4-14** shows existing conditions and a rendering of the 130th Street station facing east from Greenwood Avenue and just north of 132nd Street. The existing view is from the eastern edge of the Altgeld Gardens neighborhood. The residential character and scale would be considerably altered by the removal of vegetation and the addition of the park & ride facility and station for the residences that face Greenwood Avenue.

Mitigation measures include considering community input for the appearance of the stations in the final design of the RLE Project. CTA would include landscaping with security prioritized in the detailed landscape design. Based on community input to date, design elements are anticipated to include:

- Replacing/restoring removed vegetation
- Addressing neighborhood plan recommendations
- Creating pedestrian friendly surroundings

- Shielding exterior lighting and/or use of "down lighting" light fixtures to prevent light pollution into nearby residences. Additional lighting conditions associated with species impacts are provided in **Section 6.5**.
- Providing landscaping (trees) as visual screening for the residences located on the west side of Eggleston Avenue north of 103rd Street station
- Planting trees in front of the structure, where space allows, to break sight lines of the 107th Place cross-over and the 130th Street station
- Using good urban design to reduce adverse impacts

Figure 4-8: Existing Conditions and Photo Simulation of the Elevated Structure North of I-57 (Looking East from 98th Place and Princeton Avenue)

Figure 4-9: Existing Conditions and Photo Simulation of the Elevated Structure at Fernwood Parkway (Looking South from Eggleston Avenue near 101st Place)

Figure 4-10: Existing Conditions and Photo Simulation of the 103rd Street Station (Looking East along 103rd Street)

Figure 4-11: Existing Conditions and Photo Simulation of 107th Place Cross-over (Looking West from 108th Street)

Figure 4-12: Existing Conditions and Photo Simulation of the Michigan Avenue Station Park & Ride Facility (Looking South along State Street from North of 115th Street)

Figure 4-13: Existing Conditions and Photo Simulation of the Elevated Structure at 117th Street and Prairie Avenue (Looking Southeast from 117th Street, East of Prairie Avenue)

Figure 4-14: Existing Conditions and Photo Simulation of the 130th Street Station (Looking East from the Eastern Edge of the Altgeld Gardens Neighborhood)

Construction Impacts

Construction-related visual impacts would not be adverse and would include construction fencing, demolition of existing buildings, temporary walls, temporary street closures and related signage, temporary lighting or entrances, and/or shoring of concrete structures or existing viaducts.

Although construction-related visual impacts related to the Preferred Alignment would not be adverse, CTA would maintain as much existing vegetation as practical, including shielding of tree root zones to prevent construction damage to existing trees that would remain. Temporary construction impacts on neighborhoods would be minimized by limiting construction light infiltration into adjacent neighborhoods when nighttime work would be required. In addition, BMPs and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

Impacts Remaining After Mitigation

Due to the proximity and height of the elevated structure and stations near residential areas, impacts on visual and aesthetic conditions would remain adverse after mitigation. The Preferred Alignment would have permanent adverse visual and aesthetic impacts north of I-57, between 99th Street and the 103rd Street station area, at 107th Place near the cross-over, at 117th Street and Prairie Avenue, and at the 130th Street station, despite implementation of mitigation measures.

4.5 Noise and Vibration

This section summarizes the predicted noise and vibration impacts of the Preferred Alignment and No Build Alternative.

Noise is "unwanted sound," generally measured in terms of loudness. The loudness, or magnitude, of noise determines its intensity and is measured in decibels (dB). The overall noise level from environmental sources is described in A-weighted decibels (dBA). The A-weighted decibel scale was developed to better approximate the sensitivity of human hearing. Because the decibel is based on a logarithmic scale, a 10-dB increase in noise level is generally perceived as a doubling of loudness, while a 3-dB increase in noise is just barely perceptible to the human ear (FHWA 2011).

Ground-borne vibration can be caused by the vibration of a transit structure, creating vibration waves that propagate through the soil and rock to the foundations of nearby buildings. The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, a rumble noise, or damage to buildings in extreme cases. Vibration is described in terms of the root mean square velocity level (Lv) and is measured in decibels (VdB), relative to 1 microinch per second (FTA 2018).

The *Noise and Vibration Technical Memorandum* (**Appendix O**) contains additional information. **Table 4-6** summarizes the noise and vibration impact findings.

Table 4-6: Noise and Vibration - Impact Summary

Alternative	Permanent Impacts		Construction Impacts	
	Noise	Vibration	Noise	Vibration
No Build Alternative	No impacts	No impacts	No impacts	No impacts
Preferred Alignment	▪ Before mitigation, 278 residences and two institutions (Agape Community Center and My Holy Rock Missionary Baptist Church) would have moderate impacts, and 91 residences and one institution (Kingdom Global Outreach Ministries) would have severe impacts. ▪ After mitigation with noise barriers, 15 residences would have moderate impacts.	No impacts	Impacts would not be adverse after mitigation	No impacts

4.5.1 Regulatory Framework/Methods

The Final EIS noise and vibration analyses for the RLE Project were prepared in accordance with federal guidelines, in line with the analysis for the Draft EIS. The current federal guidelines are included in the *FTA Transit Noise and Vibration Impact Assessment Manual* (FTA 2018), which is an updated version of the 2006 guidance manual available when the Draft EIS analyses were conducted. Although the 2018 version of the manual includes some minor updates to the methodology, the noise and vibration impact criteria are the same as in the 2006 version. The primary difference relevant to the Final EIS evaluation is that the FTA detailed noise and vibration analysis procedures were used, whereas the FTA general noise and vibration assessment procedures were used for the Draft EIS analyses. The detailed analysis procedures are comprehensive assessment methods that produce the most accurate estimates of impacts for a proposed project and are often employed during the development of the Final EIS/ROD in the NEPA process. In a detailed noise analysis, impact is assessed based on predictions at specific receivers rather than on contours as in a general assessment, and equations are employed for computations of ground and barrier propagation effects rather than graphs or tables. For vibration, a detailed analysis requires site-specific testing and complex analytical techniques to develop estimates of the frequency components of the vibration.

There are no changes to the state or local regulations referenced in **Appendix O** of the Draft EIS. **Appendix O** further notes that the noise and vibration limits in these regulations are not applicable to the RLE Project. The noise and vibration prediction methods used for the detailed noise and vibration analyses are described in **Appendix O**.

4.5.2 Existing Conditions

Noise-sensitive land uses along the Preferred Alignment include numerous residences as well as churches, schools, parks, and community facilities. Existing noise sources along the RLE Project

include roadway traffic, freight rail operations on the UPRR tracks, and local activities. The existing ambient sound levels vary by location, depending on the proximity to highways, railways, and other noise sources, and are generally typical of an urban environment. Sensitive receivers were identified with FTA impact screening distances, based on current land use data and information on proposed property acquisitions. Updated existing ambient noise level measurements were conducted in September 2020 at representative sites in the API, as described in **Appendix O**.

Vibration-sensitive land use along the RLE corridor is essentially the same as the noise-sensitive land use, except for parks and other outdoor sites that are not considered vibration-sensitive. Although existing vibration sources along the corridor include motor vehicles on nearby roadways, vibrations from traffic are not generally perceptible unless the roads have sizable bumps, potholes, or other uneven surfaces. Thus, the only major sources of existing ground vibration along the RLE corridor are freight train operations on the UPRR tracks. The vibration environment and the types and number of vibration-sensitive receivers have not considerably changed since the issuance of the Draft EIS. Additional vibration propagation tests and vibration measurements were conducted along the RLE corridor in September 2020 (**Appendix O**) indicating that existing ground-borne vibration levels from freight train operations are in the range of 75-80 VdB at distances of 70 to 80 feet from the UPRR tracks, consistent with the vibration measurement results reported in the Draft EIS.

4.5.3 Environmental Consequences

The following sections summarize the potential noise and vibration impacts projected for each alternative.

4.5.3.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current CMAP Transportation Improvement Program (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

There would be no noise or vibration impacts from the No Build Alternative, which does not represent a change from the Draft EIS.

4.5.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

The analyses of noise and vibration for the Preferred Alignment were carried out using the FTA detailed analysis methodologies (FTA 2018). The detailed analysis methods for the Preferred Alignment are more refined in the prediction of project noise and vibration and in the evaluation of mitigation than the FTA general assessment methodology of noise and vibration in the Draft EIS. The detailed analyses of noise and vibration included an evaluation of noise and vibration sources from RLE train operations and stationary sources (120th Street rail yard and shop, park & ride facilities, and traction power substations).

Comparisons of the existing and future project noise levels at residential receivers are presented in **Table 4-7**, which includes the existing noise levels and the projected noise levels from RLE train operations without mitigation. The table also includes an inventory of the number of moderate and severe noise impacts under FTA noise impact criteria.

Without mitigation, the Preferred Alignment would result in noise impacts at a total of 369 residences, with moderate impacts at 278 residences and severe impacts at 91 residences. For noise-sensitive institutional receivers along the RLE corridor, the Preferred Alignment is projected to result in two moderate impacts (Agape Community Center and My Holy Rock Missionary Baptist Church) and one severe noise impact (Kingdom Global Outreach Ministries) without mitigation. There are no noise impacts projected along the segment of the Preferred Alignment to the south of the CN/MED rail corridor, which includes the location of the 130th Street station.

The locations of all projected moderate and severe noise impacts for the Preferred Alignment without mitigation are shown on the maps in **Figures 4-15**, **4-16**, **4-17**, and **4-18**. These figures also show the institutional land uses that are located within the FTA noise impact screening distances with respect to the Preferred Alignment. See **Appendix O** for additional details regarding the analysis of the institutional land uses associated with the RLE Project.

Table 4-7: Summary of FTA Category 2 (Residential) Noise Impacts for the Preferred Alignment without Mitigation

Area of Impact	Distance from Near Track (feet)	Train Speed (mph)	Existing Noise Level (L_{dn}, dBA)	Project Noise Level (L_{dn}[1], dBA[2])			Number of Residential Noise Impacts	
				Predicted	Moderate Impact Criterion	Severe Impact Criterion	Moderate	Severe
95th Street to 103rd Street								
West of Track Structure	76 to 281	33 to 40	64 to 77	61 to 72	60 to 65	66 to 74	40	12
East of Track Structure	137 to 251	33 to 40	67 to 77	62 to 71	62 to 65	67 to 75	23	0
103rd Street to 111th Street								
West of Track Structure	48 to 232	26 to 48	63 to 75	63 to 71	60 to 65	65 to 73	40	4
East of Track Structure	30 to 273	26 to 48	65 to 77	62 to 79	61 to 65	66 to 75	31	13
111th Street to Michigan Avenue at 116th Street								
West of Track Structure	172 to 338	42 to 50	68 to 73	63 to 67	63 to 65	68 to 71	44	0
East of Track Structure	33 to 217	21 to 50	66 to 74	61 to 76	61 to 65	67 to 73	35	21
Michigan Avenue to CN/MED Rail Corridor								
West of Track Structure	214 to 399	15 to 49	60 to 64	58 to 68	58 to 60	64 to 65	18	8
East of Track Structure	62 to 316	15 to 52	60 to 62	58 to 73	58 to 59	63 to 64	47	33
Total Number of Impacts:							278	91
							369	

1 L_{dn} = Day-Night Sound Level
2 dBA = A-weighted decibels

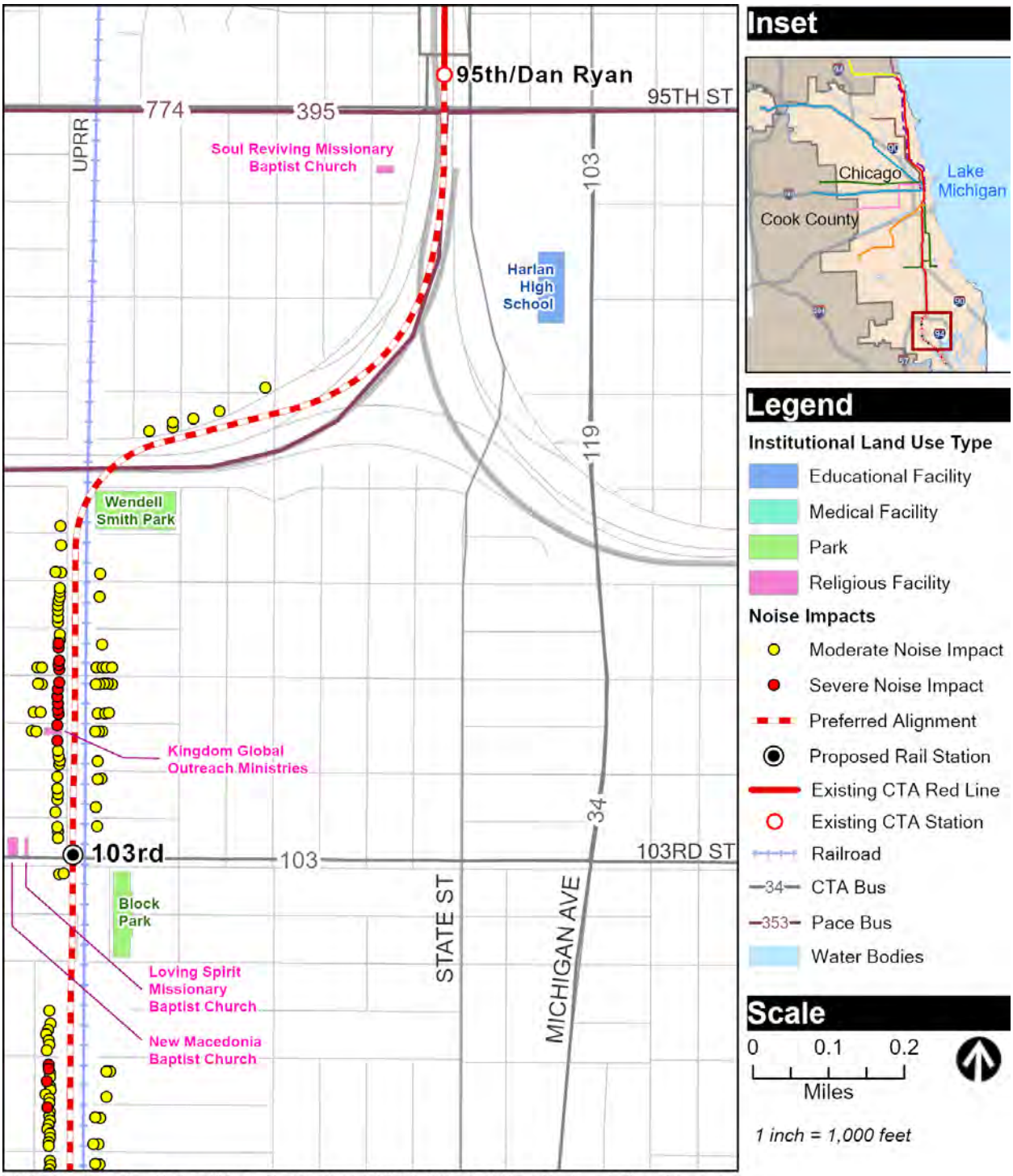

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-15: Permanent Noise Impacts without Mitigation (1 of 4)

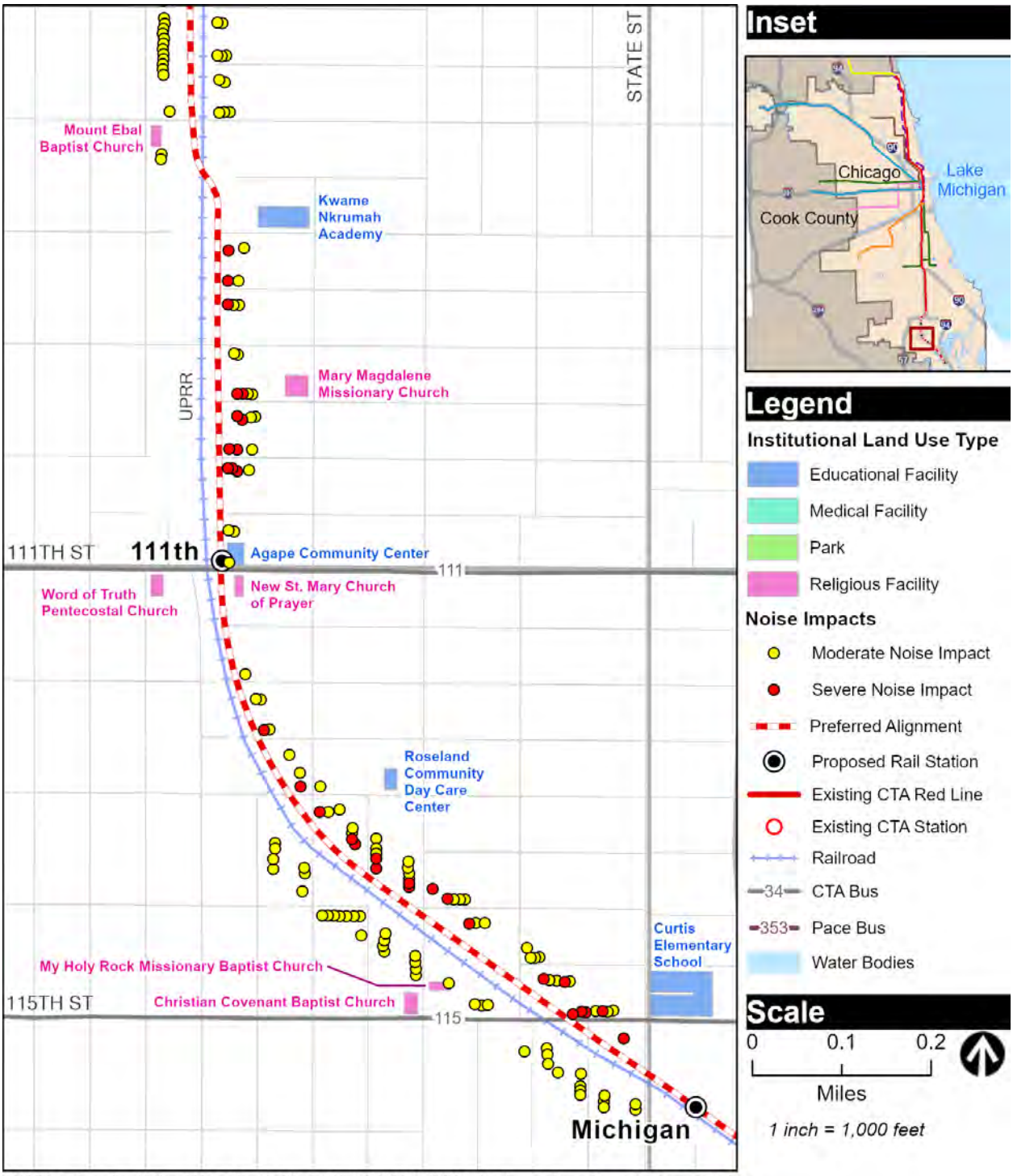

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-16: Permanent Noise Impacts without Mitigation (2 of 4)

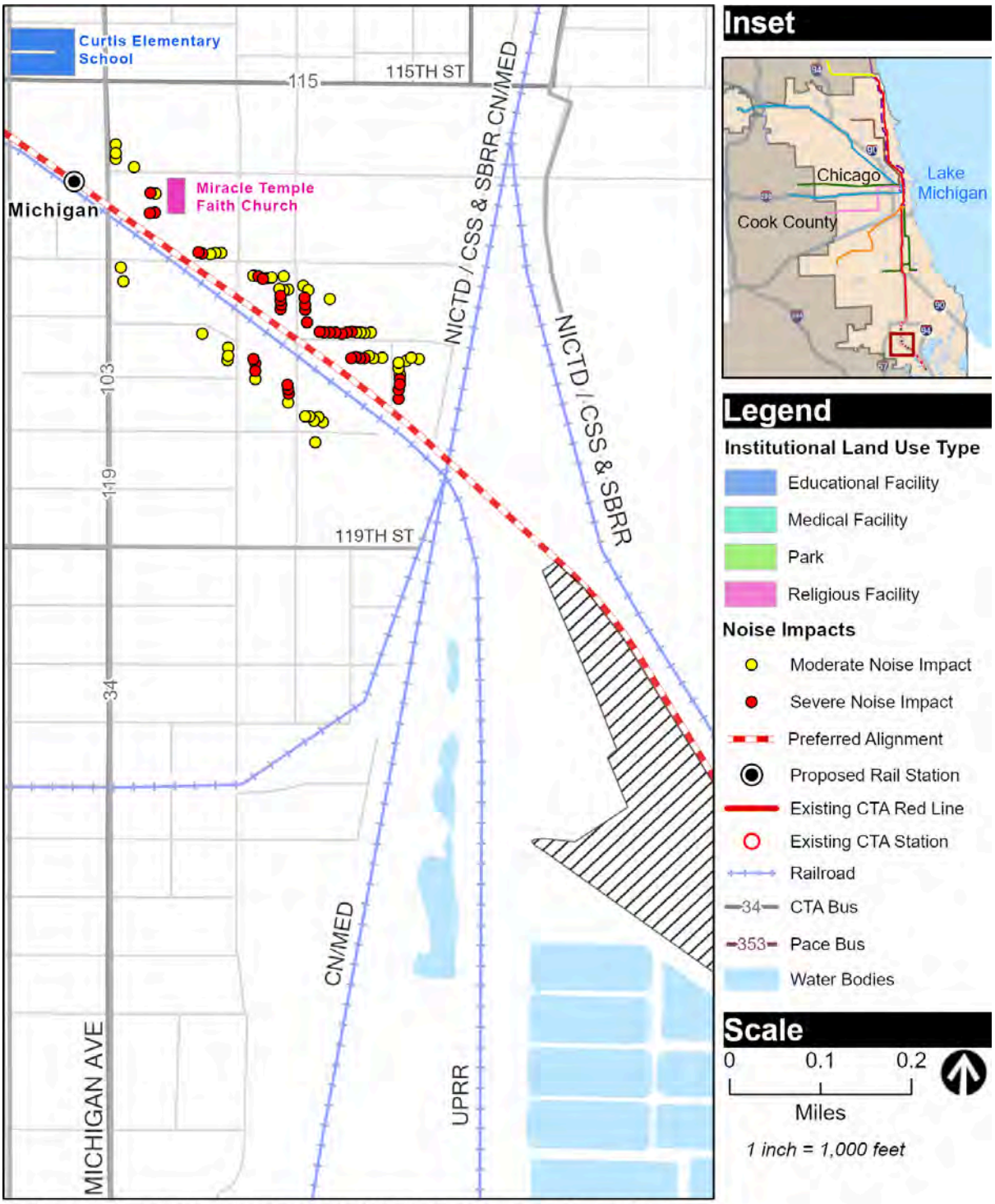

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-17: Permanent Noise Impacts without Mitigation (3 of 4)

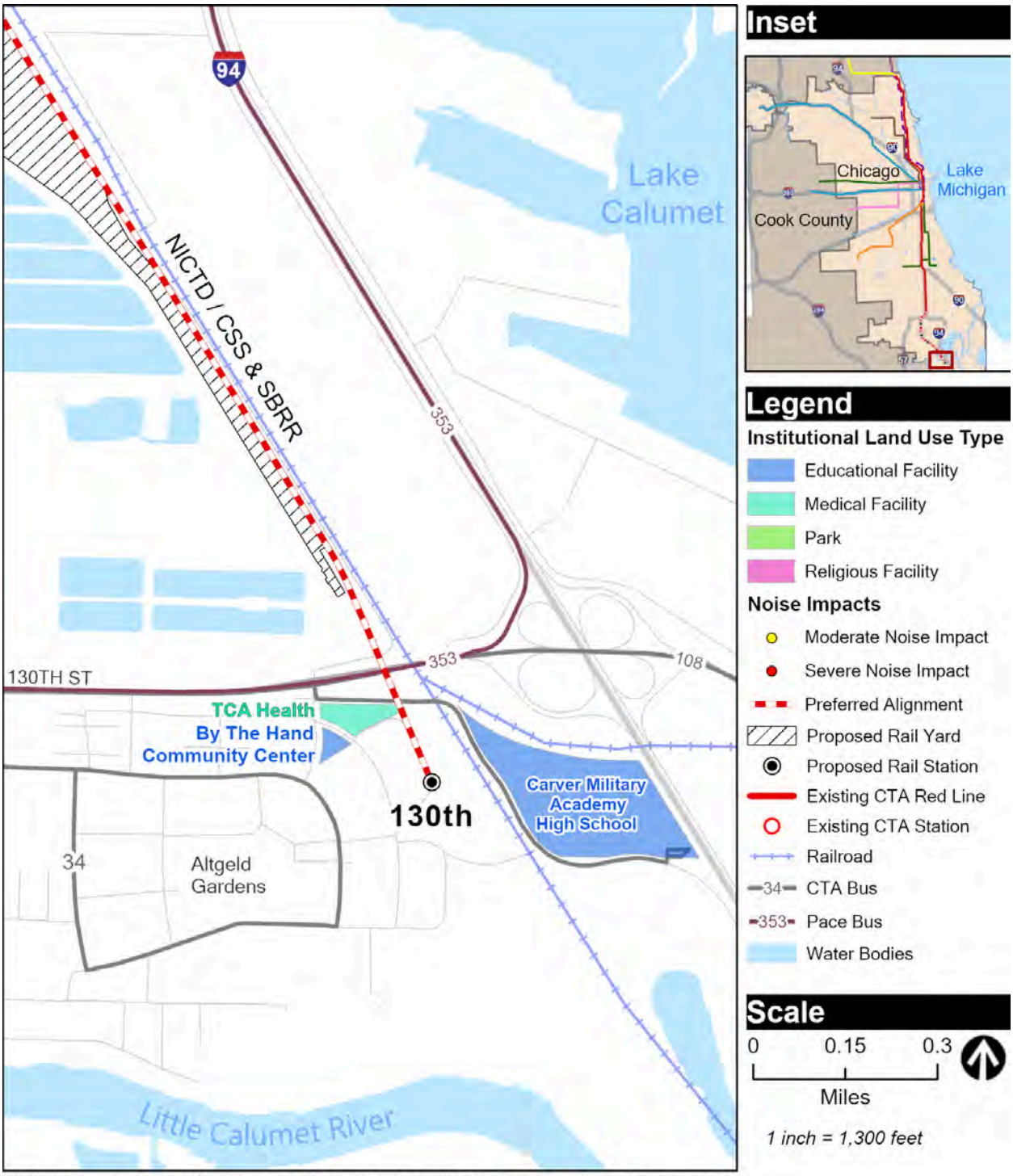

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-18: Permanent Noise Impacts without Mitigation (4 of 4)

The detailed analysis for the Preferred Alignment projects slightly more severe noise impacts but fewer moderate noise impacts at locations along the alignment, compared to the results of the general assessment for the East and West Options presented in the Draft EIS. To mitigate these impacts, the Draft EIS called for noise barriers approximately 4 feet in height (measured from the top surface of the concrete deck) to be placed on both sides of the tracks from the 95th/Dan Ryan terminal to the CN/MED tracks to reduce noise transmission at and below the height of the tracks. Additional analysis at 30 percent design during the Final EIS has refined the minimum barrier height to 3.5 feet above the top-of-rail elevation and has reduced the lineal extent of the noise barriers from approximately 40,000 feet to approximately 33,600 feet (6.36 miles) by more closely evaluating the locations of noise sensitive receivers where impacts would actually be mitigated by the placement of noise barriers. The noise barriers would provide a noise reduction of up to 15 dBA for RLE Project train noise. The recommended barrier locations are shown in **Figures 4-19**, **4-20**, and **4-21**. However, the final design would be analyzed for noise to confirm impact thresholds would be met before final design would be approved. Mitigation would be modified, if needed, to ensure impacts are the same or less than those identified in this Final EIS. Noise walls also perform a secondary function related to worker and emergency evacuation safety.

As indicated above, the major differences in recommended noise barrier mitigation for the Final EIS detailed analysis compared to the Draft EIS general assessment are that:

- The recommended lineal extent of the barriers is reduced by approximately 6,400 feet as noise barriers are not required from the 95th/Dan Ryan terminal to just east of Wentworth Avenue in the I-57 ROW, and

- Based on the updated noise analysis of 30 percent design, barriers with a minimum height of 3.5 feet above the top-of-rail elevation are recommended compared to a height of approximately 4 feet above the top surface of the concrete deck. The primary difference in the analysis is that the FTA detailed analysis methodology was used for the Preferred Alignment rather than the FTA general assessment methodology used for the Draft EIS.

For the Final EIS analysis, the noise barrier effectiveness was modeled using FTA methodology, and accounts for the separation of tracks and some shielding of the far track by the elevated structure.

A summary of the noise impact analysis with the recommended barriers is presented in **Table 4-8**. Moderate noise impacts are expected to remain at 15 residences after noise barrier mitigation, primarily because of their proximity to track turnouts and crossovers. However, these residual impacts are in the lower 50 percent of the moderate noise impact zone, with projected noise increases of less than 3 dBA.

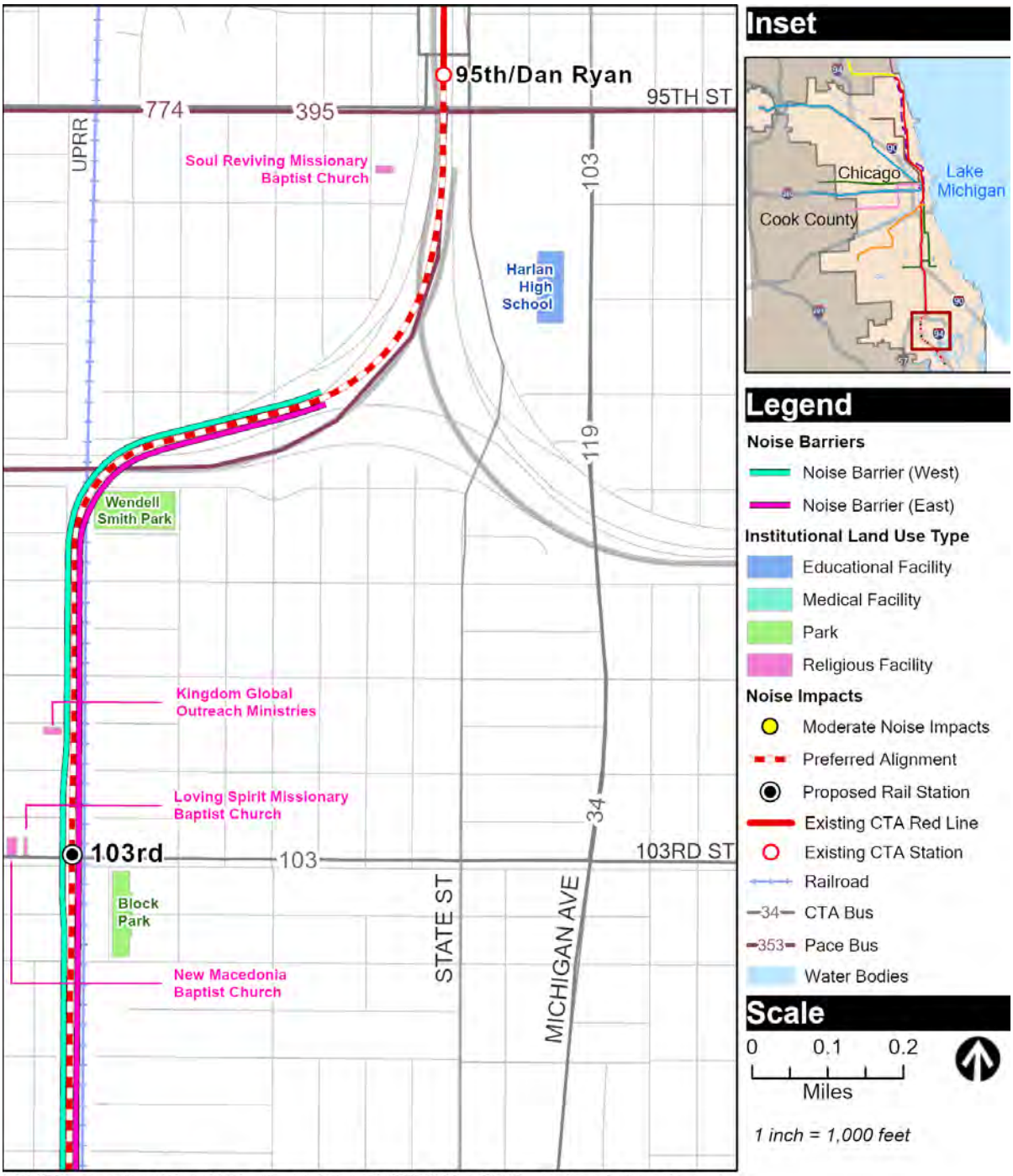

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-19: Recommended Noise Barrier Locations and Residual Noise Impacts (1 of 3)

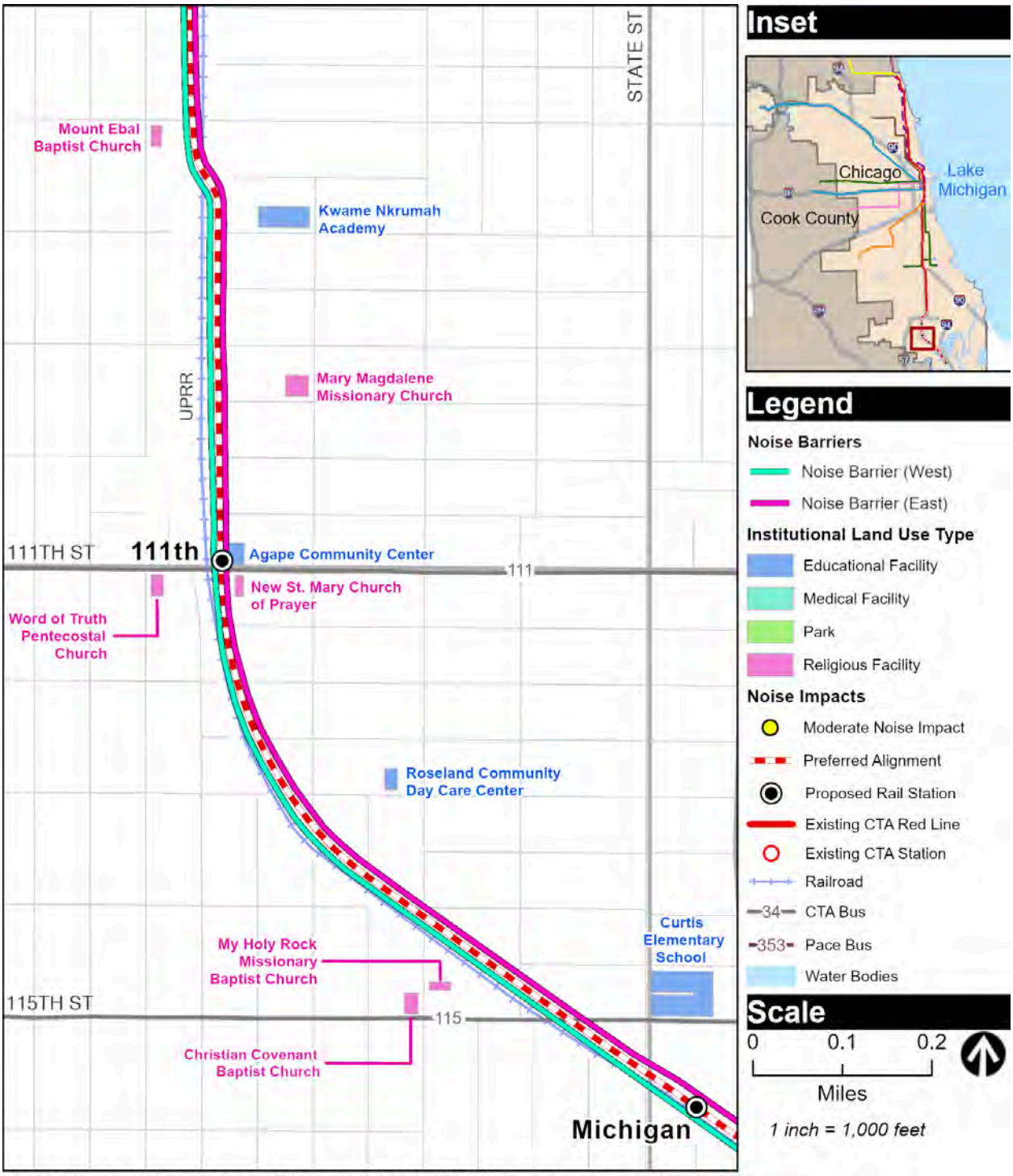

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-20: Recommended Noise Barrier Locations and Residual Noise Impacts (2 of 3)

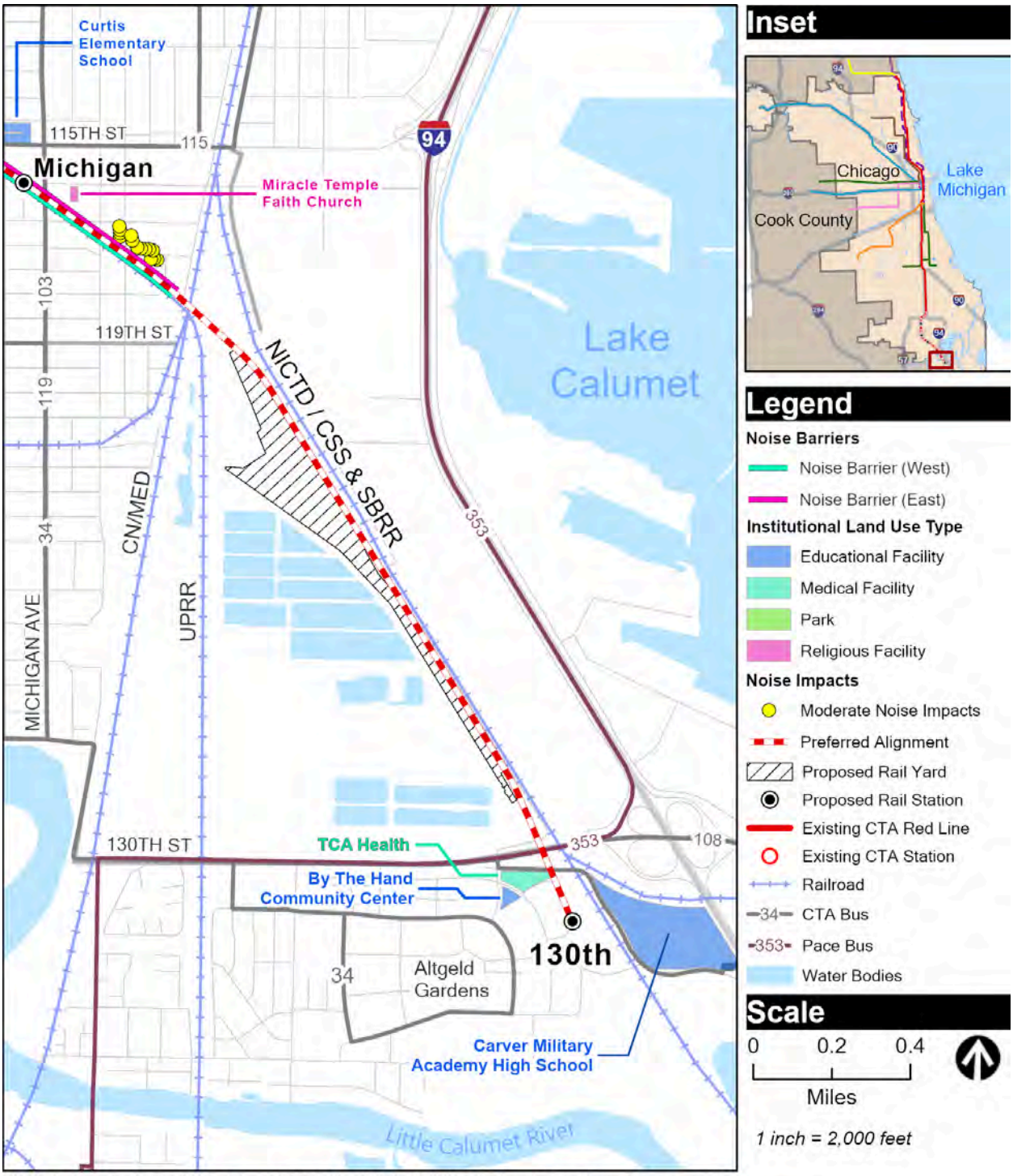

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-21: Recommended Noise Barrier Locations and Residual Noise Impacts (3 of 3)

Table 4-8: Summary of Residential Noise Impacts for the Preferred Alignment with Noise Barrier Mitigation

Area of Impact	Distance from Near Track (feet)	Train Speed (mph)[1]	Existing Noise Level (Ldn[2], dBA[3])	Project Noise Level (Ldn, dBA)			Number of Residential Noise Impacts	
				Predicted	Moderate Impact Criterion	Severe Impact Criterion	Moderate	Severe
95th Street to 103rd Street								
West of Track Structure	273	40	70	63	64	69	0	0
East of Track Structure	137	39	76	61	65	74	0	0
103rd Street to 111th Street								
West of Track Structure	135	44	67	59	62	68	0	0
East of Track Structure	34	40	74	65	65	73	0	0
111th Street to Michigan Avenue at 116th Street								
West of Track Structure	213	50	70	58	65	70	0	0
East of Track Structure	33	50	71	63	65	70	0	0
Michigan Avenue to CN/MED Rail Corridor								
West of Track Structure	214	37	64	58	60	65	0	0
East of Track Structure	70 to 160	34 to 48	61	59 to 61	58 to 59	64	15	0
Total Number of Impacts:							15	0
							15	

1 Based on speed data provided by CTA, train speeds are assumed to vary by location along the Preferred Alignment, with a maximum speed of 53 mph.
2 L_{dn} = Day-Night Sound Level
3 dBA = A-weighted decibels

A summary of the detailed vibration impact analysis is presented in **Table 4-9**, which compares the projected maximum vibration levels from RLE train operations with the FTA vibration impact criteria. No vibration impacts are projected at residential receivers for the Preferred Alignment. Similarly, no vibration impacts are projected at any of the institutional receivers along the Preferred Alignment. Thus, consistent with the results of the Draft EIS analysis for the East Option and West Option, there would be no vibration impacts from RLE train operations and no vibration mitigation measures would be required.

Table 4-9: Summary of Vibration Impacts for the Preferred Alignment without Mitigation

Area of Impact	Distance from Near Track (feet)	Train Speed (mph)[1]	Vibration Level (VdB)[2]		Number of Residential Impacts
			Maximum Predicted	Impact Criterion	
95th Street to 103rd Street					
West of Track Structure	76	33	55	72	0
East of Track Structure	139	37	49	72	0
103rd Street to 111th Street					
West of Track Structure	48	37	54	72	0
East of Track Structure	34	40	70	72	0
111th Street to Michigan Avenue at 116th Street					
West of Track Structure	172	44	43	72	0
East of Track Structure	33	50	66	72	0
Michigan Avenue to CN/MED Rail Corridor					
West of Track Structure	223	42	40	72	0
East of Track Structure	70	34	61	72	0
Total Number of Vibration Impacts:					0

1 Based on speed data provided by CTA, train speeds are assumed to vary by location along the Preferred Alignment, with a maximum speed of 53 mph.
2 RMS vibration velocity level (in VdB re 1 micro-inch/sec) as measured in 1/3-octave bands of frequency over the frequency range from 8 to 80 Hz

Construction Impacts

The Preferred Alignment would include the construction of elevated and at-grade track structure, stations, parking facilities at the stations, and roadway improvements. Similar to the findings for the East Option and West Option, construction noise levels for the Preferred Alignment are not expected to exceed the FTA construction noise criteria and this would be included in the mitigation measures and commitments for contractor adherence and compliance with local noise ordinances. Similarly, construction vibration levels for the Preferred Alignment are not expected to exceed the FTA construction criteria for vibration damage. Construction BMPs would be used to reduce noise and vibration, as described in the Draft EIS.

Contractors would employ noise-reducing construction BMPs. For example, contractors would keep all construction equipment exhaust mufflers in a state of good repair. As part of the construction specifications, contractors would be responsible for adhering to the noise control requirements of the project. To the extent possible, contractors would avoid idling of vehicles that are not in use on construction sites. CTA would limit nighttime construction near residences to the extent practical. Impact pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station and the vicinity from the I-94 ramp crossing to the east of CN/MED and south of 130th Street, as well as adjacent to sensitive noise and vibration receivers identified in the Final EIS such as residences, parks, churches, etc. CTA would inform community members about construction schedules and would coordinate in advance with aldermen and local officials.

Impacts Remaining After Mitigation

The minimum 3.5-foot high noise barrier (above the top-of-rail elevation) would mitigate all severe noise impacts; however, 15 moderate noise impacts would remain after mitigation. Beyond the use of noise-reducing construction BMPs and limits on nighttime construction and pile driving near residences, construction noise mitigation measures would not be required. There would be no vibration impacts; no mitigation measures for vibration would be required.

4.6 Safety and Security

This section summarizes the safety and security impacts of the No Build Alternative and Preferred Alignment. The *Safety and Security Technical Memorandum* (**Appendix P**) includes additional details. **Table 4-10** summarizes the safety and security impact findings.

The definitions of safety and security have not changed since the Draft EIS. Safety refers to freedom from harm resulting from unintentional acts or circumstances (49 CFR § 659.5). Unintentional acts or circumstances include all incidents within CTA right-of-way (including areas along tracks, in yards, and at stations). Examples of incidents include collisions, derailments, fires, property damage, injuries, and fatalities. Security refers to freedom from harm resulting from intentional acts or circumstances (49 CFR § 659.5). Intentional harm includes crimes and must be reported if the intentional act meets thresholds for notification as specified in FTA's State Safety Oversight Rule (49 CFR § 674).

Table 4-10: Safety and Security - Impact Summary

Alternative	Permanent Impacts		Construction Impacts	
	Safety	Security	Safety	Security
No Build Alternative	No impacts	No impacts	No impacts	No impacts
Preferred Alignment	Impacts would not be adverse after mitigation	Impacts would not be adverse after mitigation	No adverse impacts	No adverse impacts

4.6.1 Regulatory Framework/Methods

Federal safety and security requirements for rail systems are primarily provided in 49 CFR § 659, and through Occupational Safety and Health Administration (OSHA) standards and regulations for providing a safe and healthy workplace (namely the Occupational Safety and Health Act of 1970). Safety and security planning is included in CTA's System Safety Program Plan and Security Emergency Preparedness Plan, both of which are required of CTA to comply with provisions under 49 CFR § 659. CTA's *Infrastructure Design Criteria Manual* also addresses safety and security (CTA 2013b). The standards address system safety, security, fire protection, human factors, reliability, maintainability, configuration management, and quality control. Passenger safety is the highest priority in system safety objectives, along with the safety of CTA employees. Construction, installation, inspection, and testing procedures are also objectives covered by the standards.

For the Final EIS, an adverse safety and security impact is defined as one that would cause one or more of the following:

- Creation of the potential for increased major safety or security incidents reportable to FTA
- Failure to meet the applicable design standards where such failure results in a safety or security impact
- Marked increase in safety or security risks on or off the CTA system
- Marked increase in pedestrian and/or public safety incidents in the immediate vicinity of proposed CTA stations
- Marked increase in crime incidents near proposed CTA stations
- Notable increases in calls for police service and/or emergency response time

The regulatory framework for safety and security has not changed since the Draft EIS.

4.6.2 Existing Conditions

The existing conditions for safety and security have not changed since the Draft EIS.

The affected environment for this analysis includes areas that could be affected by impacts on the CTA system (e.g., tracks, vehicles, stations, and rail yards) and impacts within a ½ mile of stations. The ½ mile distance is used as an approximation of the distance most patrons would walk to a station and is therefore used when evaluating general pedestrian safety and security in the surrounding neighborhood.

Groups covered in the affected environment include transit passengers, operators, employees, contractors, and the general public. Members of these groups all come in contact with the system in some way and could be susceptible to safety and security impacts. The main pedestrian safety risk in the API is from motor vehicle crashes.

Over the 3-year period, there was an average of 2.8 incidents per day reported on CTA trains, 1.3 incidents per day reported on CTA train platforms, 1.5 incidents per day on CTA stations, and 0.4 per day at CTA garages and other property. Theft, battery, and criminal damage were more common on trains than on train platforms whereas narcotics crimes were more common at train stations and platforms than on trains.

There were six pedestrian crashes within one block of the proposed station entrances between 2016 and 2020.

The areas with the highest crime density for 2020 are clustered at the existing 95th/Dan Ryan terminal and in the area west of Greenwood Avenue, south of 130th Street (City of Chicago 2021c).

Crashes between 1995 and 2020 at the six existing highway-rail at-grade crossings near the proposed stations ranged between one for the crossings at 103rd Street and Old 130th Street and six at the crossing at 115th Street.

4.6.3 Environmental Consequences

The following sections summarize the potential safety and security impacts of each alternative.

4.6.3.1 No Build Alternative

There would be no permanent or construction-related safety and security impacts for the No Build Alternative.

4.6.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

The proposed stations would generate a large amount of pedestrian traffic, causing an increase in the number of pedestrians crossing streets to access the stations, similar to the East and West Options in the Draft EIS. The controlled intersections are approximately one block away. It is still likely that pedestrians would want to cross the streets adjacent to station entrances, which would result in a large number of pedestrians crossing the major streets without positive traffic control. This would be an adverse impact on pedestrian safety without additional improvements or mitigation measures. Mitigation for pedestrian access is described in **Section 3.3**. In addition, lighting would be provided under the elevated structure in station, parking, and on CTA right-of-way to contribute to improved safety and security, and to improve surveillance visibility.

Based on data from transit stations in Chicago and across the United States, the new stations would be unlikely to have significant impact on neighborhood crime (Ridgeway and MacDonald 2015). However, research also indicates that some risk would remain, particularly in low-income neighborhoods (Ihlanfeldt 2003), consistent with the Draft EIS. CTA has prepared a Threat and Vulnerability Assessment (TVA) and has conducted a Preliminary Hazard Analysis (PHA) as part of the RLE Project. The TVA and PHA identify threats and make recommendations to mitigate for those threats and reduce the risks. The analysis, conclusions, and mitigation measures presented in this Final EIS are in keeping with the TVA and PHA. While the information was considered, no specific information was brought forward from the documents due to their sensitive security status, controlled under 49 CFR Parts 15 and 1520. CTA would continue the TVA and PHA through final design of the RLE Project to determine appropriate security measures in the public right-of-way, such as security surveillance cameras and/or lighting at cross-street areas in the vicinity of the four RLE Project stations. CTA would coordinate the implementation of any improvements in the City right-of-way with the City of Chicago.

The potential for an increase in crash frequencies at the UPRR at-grade rail crossings adjacent to the RLE stations would be mitigated as described in **Section 3.3**. The closure of Old 130th Street is necessary to prevent the interaction of all modes of transportation with the new at-grade crossing that would be introduced with the RLE Project. The frequency of trains entering and departing the station warrants closure of the roadway to enhance safety. Emergency access to the Carver Military

Academy High School and Beaubien Woods Forest Preserve would be maintained from 132nd Street from the north and from Doty Avenue from the south.

The impacts would not be adverse after mitigation measures are implemented.

Construction Impacts

Consistent with the Draft EIS, the contractors performing primary construction activities would need to have an approved Construction Safety and Security Plan in place before any construction work begins. Contractors would perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of CTA's *Safety and Security Management Plan* (CTA 2011) or CTA's other manuals and policies. Contractors would be contractually committed to take prompt and decisive corrective action on safety deficiencies identified at the work sites. For example, CTA would require contractors performing work on, above, or adjacent to the CTA rail system to follow CTA's Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System (Construction Safety Manual) to protect themselves, their employees, sub-contractors, CTA passengers, employees, and the public.

Emergency services would have access to construction sites at all times and would access construction sites in the same way as contractors, using side streets and recommended detours. An access road for the MWRD would be constructed prior to commencing operation on the new CTA tracks, if necessary, to maintain access to the MWRD facility. This roadway would also be used by emergency services. The impacts would not be adverse, which is consistent with what is outlined in the Draft EIS.

Impacts Remaining After Mitigation

Consistent with the results of the Draft EIS analysis for the East and West Options, there would be no adverse permanent or construction-related impacts on safety or security for the Preferred Alignment after mitigation measures are implemented.

4.7 Historic and Cultural Resources

This section summarizes the findings under Section 106 of the National Historic Preservation Act (NHPA) and in coordination with the Illinois State Historic Preservation Office (SHPO) in the Historic Preservation Division of the Illinois Department of Natural Resources and consulting parties to the Section 106 process.

The content and organization of this section are modified from the standard EIS format to fully characterize the process and consultation required under Section 106 for a linear project of this nature. In addition, the term "effects" is used in this section rather than "impacts" because of the unique requirements and terminology related to historic properties in the Section 106 process. The *Historic and Cultural Resources Technical Memorandum* (**Appendix Q**) includes additional details. **Table 4-11** summarizes the historic and cultural resources impact findings.

Table 4-11: Historic and Cultural Resources - Impact Summary

Alternative	Effects
No Build Alternative	No effects
Preferred Alignment	No adverse effects

4.7.1 Regulatory Framework/Methods

Cultural and historic resources are protected by various federal regulations; Section 106 of the NHPA requires federal agencies to consider effects on historic properties from their actions and to balance preservation needs with the need for the actions. As provided in 36 CFR Part 800, the Section 106 process "seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation" (36 CFR § 800.1(a)). The goal of the consultation is to identify historic properties potentially affected by the undertaking, assess project effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

For the Section 106 assessment of historic and archaeological resources, FTA and CTA conducted a four-step process following requirements of 36 CFR Part 800:

1. Define the Area of Potential Effects (APE).
2. Identify Historic and Archaeological Resources.
3. Assess Effects on Historic and Archaeological Resources.
4. Mitigate any Adverse Effects.

Except for the item described below, there are no considerable changes to the applicable federal, state, or local regulations noted in the Draft EIS. The following was applied to re-evaluate the effects findings from the Draft EIS:

> For the National Parks Conservation Association v. Semonite, 925 F.3d 500 court case (D.C. Cir. 2019), the U.S. Court of Appeals issued an opinion that clarified the meaning of term "Directly" in Section 110(f) of the NHPA as referring to causality, not the physicality, of the effect. This has changed the approach for defining visual, auditory, or atmospheric effects on historic properties.
>
> The Advisory Council on Historic Preservation (ACHP) issued a memorandum related to the court opinion clarifying the distinction between direct and indirect effects under Section 106 of the NHPA. It clarified that direct effects may be the result of physical connection, but may also include visual, auditory, or atmospheric impacts as well. Indirect effects would be effects to historic properties caused by the undertaking in the future or farther removed in distance, but still reasonably foreseeable.

Field methods employed during the Phase I archaeological reconnaissance survey were in accordance with the Illinois SHPO *Guidelines for Archaeological Reconnaissance Surveys and Reports* (IDNR). The Archaeological Survey Short Report can be found in **Appendix Q**.

4.7.2 Section 106 Consultation Process

During the Draft EIS, FTA sent 11 letters to Native American tribes and 19 letters to state and local preservation interest groups to inform them of the project and invite them to participate in the consultation process. At the conclusion of the Draft EIS, none of the tribes and eleven of the state and local groups requested to participate in the consultation process.

Due to the time passed between the publication of the Draft EIS and the selection of the Preferred Alignment and the relocation of the 130th Street station, CTA and FTA reviewed the previous consulting party list for potential additions. In November 2020, CTA and FTA sent invitation letters to potential consulting parties that were not included in the Section 106 consultation for the Draft EIS. New invitees included: By the Hand Club Altgeld-Murray, Carver Military Academy High School, Chicago Housing Authority, People for Community Recovery, Red Line Extension Coalition, TCA Health, Pullman Civic Organization, Kickapoo Tribe of Oklahoma, Little Traverse Bay Bands of Odawa Indians, and Menominee Indian Tribe of Wisconsin. In February 2021, the Greater Roseland Chamber of Commerce contacted CTA with a request to participate in the Section 106 process as a consulting party. This request was accepted by CTA and FTA. In April 2021, CTA sent an invitation letter to one additional consulting party, the National Park Service (NPS) Pullman National Monument and they accepted participation as a consulting party. The list of organizations invited and their participation throughout the Draft and Final EIS process is included in **Appendix Q**. Based on all invitations sent to potential consulting parties, a total of 22 new and returning organizations accepted participation as consulting parties. The consulting parties consisted of state and local organizations and one Native American tribe.

On February 18, 2021, CTA conducted the first consulting party meeting for the RLE Project since selection of the Preferred Alignment. This meeting included a summary of the RLE Project and Section 106 activities conducted to date. Review and discussion focused on areas of APE expansion due to changes since the last Section 106 consultation meeting (discussed in greater detail below), corresponding historic property identification, and eligibility recommendations. A 30-day comment period was established to take consulting party and SHPO comments on eligibility findings. Comments received confirmed findings of the eligibility assessment and SHPO provided their concurrence on eligibility findings in March 2021.

In June 2021, the draft RLE Section 106 Effects Report was submitted to SHPO and consulting parties for review. This report included updates to the effects recommendations from the Draft EIS and effects recommendations for historic properties within the expanded APE. A Section 106 consulting party meeting was held on June 30, 2021 to review findings of the effects assessment on eligible historic and cultural properties and obtain additional consulting party input. A 30-day comment period was established to take comments from consulting parties on effects determinations. Comments received from consulting parties and SHPO confirmed these effects findings. SHPO provided their comments on the effects findings on July 9, 2021, requesting additional information on the RLE Project for evaluation. Detailed information was provided to the SHPO at a meeting on July 26, 2021. As a result, SHPO provided an August 10, 2021 letter of concurrence on no adverse effect under the following conditions associated with the 130th Street station:

- A parking garage of four stories or less.
- Option to use the existing 130th Place as the station entrance. The SHPO accepts this option would eliminate on-street parking on Greenwood Avenue for one block between Ellis Avenue and 130th Place.
- Option to place the entrance to the station between 130th Place and 132nd Street into the original parking lot in Block 11. Doing so would result in the elimination of two blocks of historically appropriate on-street parking along the east side of Greenwood Avenue and bring traffic deeper (farther south) into Altgeld Gardens-Philip Murray Homes Historic District. The SHPO would accept this option as meeting the Secretary of the Interior's Standards and not adversely affecting Altgeld Gardens-Philip Murray Homes Historic District if residents of Altgeld Gardens-Philip Murray Homes Historic District are also in favor.

The Section 106 eligibility and effects reports and comments received are located in **Appendix Q**.

After finalization of the Section 106 eligibility and effects reports in September 2021, revisions were made to the National Register nomination for the Altgeld Gardens-Philip Murray Homes Historic District and approved by NPS and the SHPO on April 13, 2022. These include a change to the historic district boundary and the historic status of one property within the APE. These changes do not affect the effects evaluations for historic properties by this project but are noted in the Final EIS.

4.7.3 Existing Conditions

Figure 4-22 is a map of the revised APE and National Register of Historic Places (NRHP) eligible properties for the Preferred Alignment. Generally, the APE developed for the Draft EIS contains parcels within one block of the centerline of the Preferred Alignment. Since the Draft EIS, there are some changes to the APE associated with the locations of the Michigan Avenue station, 120th Street yard and shop, and the 130th Street station. At the Michigan Avenue station, the APE was expanded one block to the north and east. Two locations for the station parking were being considered through the announcement of the Preferred Alignment in 2018. The locations were to the north and to the south of the UPRR. The Draft EIS Section 106 APE included only the south option. The north option has been carried forward into the Final EIS; therefore, the APE is expanding to include the north option. The selection of the station parking location is dependent on confirmation of availability of parcels and future coordination with the City of Chicago. The APE has also been expanded to one full block in the south and west to adequately address potential effects in these areas. The 120th Street yard and shop location has been shifted and the layout refined since the Draft EIS. Therefore, the APE has been shifted approximately 100 feet to the west consistent with the shift in location of the 120th Street yard and shop. At the 130th Street station, the APE was expanded to include the full site under consideration for construction and an approximate buffer of a ¼ mile, except at visual obstructions where it is slightly truncated. This area is based on building density, height of the proposed work, visual observations on site, intended to encompass changes in traffic, noise, and vibration, caused by the RLE Project.

Fifteen historic-age properties within the Preferred Alignment APE were surveyed and evaluated for eligibility on the NRHP. Of these fifteen, seven were identified as eligible for listing on the NRHP. A complete listing and evaluation of NRHP eligibility can be found in **Appendix Q**.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-22: Preferred Alignment and Area of Potential Effect

The Draft EIS identified eight archeological sites within 0.6 miles of the project vicinity. The Phase I archeological survey required for the Preferred Alignment and conducted by CTA in June 2020, identified twelve archaeological sites recorded within 1 mile of the RLE Project vicinity. As explained in the *Phase I Archaeological Report* (**Appendix Q**), the Preferred Alignment is located within four communities (Roseland, Washington Heights, West Pullman, and Riverdale). The historic development of these four communities is discussed in detail in **Appendix Q**. The development of the communities has not changed considerably since the Draft EIS.

Note the boundary of Altgeld Gardens-Philip Murray Homes Historic District shown in **Figure 4-22** has been updated since finalization of the Section 106 consultation process. The resulting geometry is slightly different than that shown in **Figure 4-22**. This update does not affect the number of historic resources within the historic district which overlap with the project APE or the project's effects on historic properties.

4.7.4 Environmental Consequences

Section 106 regulations state that if there are historic or cultural resources in the APE that may be affected by a federal undertaking, the agency official will assess adverse effects, if any, in accordance with the Criteria of Adverse Effect described in 36 CFR § 800.5. As stated in the regulation, an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR § 800.5(a)(1)). Effects can be direct, indirect, or cumulative (36 CFR § 800.5(a)(1)). The following sections summarize the potential effects on historic districts and properties that are eligible for NRHP listing.

4.7.4.1 No Build Alternative

No adverse effects on historic and cultural resources would result from implementation of the No Build Alternative; therefore, no mitigation measures would be required.

4.7.4.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

Consistent with findings in the Draft EIS, the Preferred Alignment would cause displacements and visual, noise, and other environmental effects within the APE, but none of the effects would alter the characteristics that qualify any of the identified historic properties for inclusion on the NRHP. No mitigation measures would be required. Because none of the NRHP-eligible properties in the APE would be physically affected (they would not be displaced or altered), each resource was evaluated for potential visual effects from the aerial structure, stations, and park & ride facilities. While the historic properties in the APE would encounter direct visual impacts as a result of their proximity of the RLE Project, this impact would not compromise the integrity of the historic properties or any of their character defining features which qualify them for listing in the NRHP. To comply with the agreements with SHPO, CTA would include the following anticipated conditions in the final design of the RLE Project:

- Limit the construction of a park & ride facility at the 130th Street station to 4 stories or less, and

- Locate the new entrance to the 130th Street station park & ride facility at one of the two accepted locations: (1) Existing 130th Place, which eliminates on-street parking on Greenwood Avenue for one block between Ellis Avenue and 130th Place; (2) Between 130th Place and 132nd Street in the original parking lot in Block 11 which eliminates two blocks of on-street parking along the east side of Greenwood Avenue.

Figure 4-23 includes an existing condition photo and rendering of the RLE Project from the historic property at 11431-11433 S. Michigan Avenue. **Table 4-12** summarizes the effects findings for the Preferred Alignment. Note that the final Altgeld Gardens-Philip Murray Homes Historic District nomination no longer includes property #18, 975 E. 32nd Street as a contributing resource.

Figure 4-23: Existing Conditions and Photo Simulation of the Michigan Avenue Station (Facing South from 11421-11433 S. Michigan Avenue)

Table 4-12: Eligibility and Effects Findings for the Preferred Alignment

Map ID	Address	Description	NRHP Status	Assessment of Effect
1	444 W. 100th Place	Eclectic Neo-Traditional Home	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
2	324 W. 104th Street	Fire Department Engine Company 93	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
3	351 W. 104th Street	Roseland Pumping Station	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
6	133-139 E. Kensington Avenue	Former Venetian Hall	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
7	11431-11433 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
8	11445-11447 S. Michigan Avenue	Mixed-Use Commercial/Residential	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
9	11451 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
10	11452 S. Indiana Avenue	Single-Family Residence	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
11	11725 S. Perry Avenue	Scanlan Elementary School	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
12	11445 S. State Street	George William Curtis Public School	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
13	13100 S. Doty Avenue	Carver Military Academy High School	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
14	Multiple	53 Residences Contributing to Altgeld Gardens-Philip Murray Homes (AGPMH) National Register Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
15	13015 S. Ellis Avenue	By The Hand Club, included in (AGPMH) Historic District	Contributing to NRHP District, Criteria A, B and C	No Adverse Effect
16	13100 S. Ellis Avenue	Grocery / Retail Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
17	940 E. 132nd Street	Administration / Maintenance Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect

Map ID	Address	Description	NRHP Status	Assessment of Effect
18	975 E. 132nd Street	CYC - Dorothy Gautreaux Child Development Center, within boundary of AGPMH Historic District	Update from Section 106 reports: Not Contributing to NRHP District	No Adverse Effect
19	941 E. 132nd Street	Children's Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
20	951 E. 132nd Place	Altgeld Gardens Community Building No. 2, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
21	Multiple (Public Housing Project)	Altgeld Gardens-Philip Murray Homes Historic District[1]	Previously Determined Eligible for NRHP, Criteria A, B, and C	No Adverse Effect

Notes:
1 Residences within the APE which contribute to the Altgeld Gardens-Philip Murray Homes Historic District include: 13022 S. Greenwood Avenue, 13030 S. Greenwood Avenue, 13072 S. Greenwood Avenue, 13200 S. Greenwood Avenue, 13240 S. Greenwood Avenue, 13088 S. Ellis Avenue, 13016 S. Ellis Avenue, 13023 S. Ellis Avenue, 13028 S. Ellis Avenue, 13047 S. Ellis Avenue, 13052 S. Ellis Avenue, 13059 S. Ellis Avenue, 13064 S. Ellis Avenue, 13083 S. Ellis Avenue, 13088 S. Ellis Avenue, 13101 S. Ellis Avenue, 13133 S. Ellis Avenue, 13201 S. Ellis Avenue, 13218 S. Ellis Avenue, 13226 S. Ellis Avenue, 13230 S. Ellis Avenue, 13262 S. Ellis Avenue, 13286 S. Ellis Avenue, 13241 S. Ellis Avenue, 13250 S. Ellis Avenue, 929 E 130th Place, 933 E 130th Place, 932 E. 131st Street, 967 E 132nd Place, 1000 E. 132nd Street, 1001 E. 132nd Street, 1008 E. 132nd Street, 1009 E. 132nd Street, 1032 E. 132nd Street, 1033 E. 132nd Street, 1044 E. 132nd Street, 1045 E. 132nd Street, 1068 E. 132nd Street, 1069 E. 132nd Street, 900 E. 133rd Street, 972 E. 133rd Street, 1000 E. 133rd Street, 1008 E. 133rd Street, 1032 E. 133rd Street, 1044 E. 133rd Street, 1068 E. 133rd Street, 901 E. 130th Place, 13029 S. Drexel Avenue, 13053 S. Drexel Avenue, 13065 S. Drexel Avenue, 900 E. 131st Street, 901 E. 131st Street, 13100 S. Ingleside Avenue. Source: JLK Architects

CTA found that the RLE Project would result in no noise or vibration impacts due to construction, no permanent vibration impacts, and 15 permanent moderate noise impacts after mitigation, none of which effect historic properties. Mitigation would consist of construction of a noise barrier approximately 3.5 feet in height (minimum height above the top of rail) to reduce noise transmission at and below the height of the tracks. Therefore, historic properties identified within the APE north of the 130th Street station would not be affected by RLE Project noise and vibration.

Analysis for the relocation of the 130th Street station found there would be no noise impacts and no mitigation measures required. For vibration, there would be no new adverse vibration impacts from the 130th Street station relocation.

Construction Impacts

During project construction, the visual, noise, and vibration effects are not anticipated to affect the characteristics that qualify properties for inclusion on the NRHP. Construction noise and vibration levels for the Preferred Alignment with mitigation described in **Section 4.5** would not exceed FTA-recommended construction impact criteria. Contractors would be required to avoid impact pile-driving methods in the vicinity of the historic Roseland Pumping Station.

Impacts Remaining After Mitigation

The RLE Project would result in visual changes along the Preferred Alignment and cause temporary changes in traffic patterns during construction. Although these changes would have direct and indirect impacts on historic properties in the APE, they would not compromise the integrity of historic properties in the APE, nor would they diminish the characteristics that qualify them for inclusion in the NRHP. Therefore, the identified impacts do not rise to the level of an adverse effect and no mitigation is required. This does not represent a change since the Draft EIS.

4.8 Hazardous Materials

This section summarizes the potential for encountering hazardous materials during operation and construction of the Preferred Alignment. Hazardous materials may include petroleum products, pesticides, organic compounds, heavy metals, or other compounds that could harm human health or the environment (42 CFR § 9601).

The nature and extent of contamination can vary widely. Early detection, evaluation, and determination of appropriate remediation of hazardous materials are essential to avoid or minimize the potential for hazardous material impacts from the project. The *Hazardous Materials Technical Memorandum* **(Appendix R)** contains additional details. **Table 4-13** summarizes the impact findings related to hazardous materials.

Table 4-13: Hazardous Materials - Impact Summary

Alternative	Permanent Impacts	Construction Impacts
No Build Alternative	No impacts	No impacts
Preferred Alignment	Beneficial	No adverse impacts

4.8.1 Regulatory Framework/Methods

Although NEPA requires an evaluation of potential impacts related to hazardous materials, it does not define impact analysis thresholds for determining potential adverse impacts. For the purposes of this impact analysis, a hazardous material impact would be considered adverse if it would result in the following:

- Harm to human health or the environment through the routine transport, use, or disposal of hazardous materials
- Harm to human health or the environment through the accidental release of hazardous materials into the environment

Federal and state laws have been established for the protection of human health and the environment. At the federal level, the regulations include the following: the Resource Conservation and Recovery Act (RCRA) (42 USC § 6901 et seq); the Comprehensive Environmental Response, Compensation, and Liability Act (42 USC § 9601 et seq.); the Superfund Amendments and Reauthorization Act (42 USC § 9601 et seq.); the Clean Air Act (42 USC § 7401 et seq.); the Toxic Substances Control Act (15 USC § 2601); and the federal Occupational Safety and Health Act (29 USC § 651). At the state level, regulations and programs include the Illinois Environmental

Protection Act and the Illinois Occupational Safety and Health Program, with oversight by the Office of the State Fire Marshal. Locally, the City of Chicago Police Department, City of Chicago Fire Department, City of Chicago Department of Public Health, and City of Chicago Department of Assets, Information and Services regulate and oversee issues related to hazardous material.

The American Society for Testing and Materials International Standard E1527-13, *Standard Practice for Environmental Site Assessments* (the Practice) was used to perform Phase I Environmental Site Assessments (ESA) for the Preferred Alignment. Phase I ESAs were performed to satisfy the requirements of FTA through Standard Operating Procedure (SOP) 19 *Consideration of Contaminated Properties including Brownfields*. Limitations and exceptions from the Practice are defined as data gaps. The Practice defines a data gap as a lack of or inability to obtain required information despite good faith efforts of the environmental professional. The Practice requires the environmental professional to comment on the impact of significant data gaps on their ability to identify recognized environmental conditions (RECs). Data gaps identified are presented in all of the Phase I ESA reports prepared for the RLE Project. A corridor level Phase I ESA was prepared and is provided in **Appendix R**. In addition, 53 site-specific Phase I ESAs were prepared. The goal of the Practice is to identify RECs in connection with the Preferred Alignment. Further definition of a REC is provided below.

> A REC is defined by the Practice as the presence or likely presence of any hazardous substances or petroleum products in, on, or at the Subject Property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

Phase II ESAs were conducted using CTA-developed SOPs to be followed specifically for the RLE Project. Sampling and Analysis Plans were prepared for each Phase II ESA. Some Phase II ESAs included conducting ground penetrating radar (GPR) surveys and collecting industrial hygiene samples, including asbestos-containing materials (ACMs) and lead-based paint (LBP), within buildings, and conducting an inventory of the remaining universal and hazardous waste present, such as chemical wastes, lighting ballasts, and thermostats.

The Phase II ESA identified two categories of soil in the project study area. These categories are based on the levels of contamination encountered, if any, and defined based on regulatory levels and guidelines, where established by the Illinois Environmental Protection Agency (IEPA). The results from the samples collected as part of the Phase II ESAs were compared to the appropriate IEPA Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Remediation Objectives (RO) for residential or industrial/commercial properties as well as the construction worker population presented in 35 IAC Part 742. Soil analytical results were compared to the Maximum Allowable Concentrations (MACs) outlined in 35 IAC Part 1100. Groundwater analytical results were compared to the Tier I ROs applicable to Class I and Class II groundwater resources presented in 35 IAC Part 742.

The results of the Phase II ESAs were analyzed and compared to the appropriate ROs and then classified into two categories for the proper handling of soil in the RLE Project:

- **Uncontaminated Soil**: Soil meeting all Tier 1 Soil Remediation Objectives (SROs) and MAC levels to be classified as uncontaminated soil that can be either reused on or off the RLE Project,

disposed of at an approved clean construction or demolition debris (CCDD) facility, or used as fill material at an uncontaminated soil fill operation (35 IAC 1100, Subpart F).

- **Contaminated Soil**: Soil exceeding the Tier 1 SROs and MAC for one or more contaminants. The soil is considered impacted, and any material removed as part of RLE Project construction is required to be disposed at a landfill permitted to accept the material.

The subsequent sections summarize the potential impacts of the No Build Alternative and Preferred Alignment from hazardous materials.

4.8.2 Existing Conditions

CTA conducted a Corridor Level Phase I ESA for the Preferred Alignment since the Draft EIS had conducted a hazardous materials assessment that was conducted prior to issuance of the requirements of SOP 19. The site reconnaissance for the Corridor Level Phase I ESA was conducted from June 8 to June 10, 2020. The Corridor Level Phase I ESA identified at total of 48 locations of potential concern: 26 on-site RECs, 18 off-site RECs, 1 controlled RECs, and 3 historical RECs for the Preferred Alignment. Additionally, six *de minimis* conditions were identified in the Corridor Level Phase I ESA. The Corridor Level Phase I ESA is provided in **Appendix R**.

CTA has also completed site-specific Phase I ESAs on the 48 locations of potential concern that had been identified with RECs in the Corridor Level Phase I ESA report and on additional properties that were not evaluated as part of the Corridor Level Phase I ESA due to refinement of engineering and identification of new locations for substations for the Preferred Alignment. The site-specific Phase I ESAs were conducted according to groupings of property owners and contiguous parcels of land. The 53 groupings included a total of 99 parcels of property. CTA prepared these 53 site-specific Phase I ESAs to further identify the potential for RECs associated with properties that would be needed for the RLE Project. **Table 4-14** shows the number of groupings containing RECs based on the site-specific Phase I ESAs that were conducted for the Preferred Alignment. **Appendix R** includes a figure showing the location of where the site-specific Phase I ESAs were conducted.

Table 4-14: Groupings Containing Potentially Hazardous or Regulated Materials

Type of Recognized Environmental Condition	Number of Groupings
On-Site and Off-Site REC	32
On-Site Only REC	1
Off-Site Only REC	14
None	6
Total Groupings	53

Source: CDM Smith 2021; EDI 2021, 2022; Wight & Company 2022

Based on the results of the site-specific Phase I ESAs there were a total of 78 parcels of property identified to have Phase II ESAs conducted. The 78 parcels were assembled into 31 groupings based on criteria including land ownership and adjacencies. The Phase II ESA work is ongoing as the CTA gains access to the sites in order to conduct the Phase II ESAs. CTA has performed 21 Phase II ESAs at the time of publication of this Final EIS. CTA will continue to pursue access to the remaining 23 parcels of property where Phase II ESAs were not conducted. The 23 parcels of property were

assembled into 10 groupings for Phase II ESAs. CTA presumed that there would be some contaminated soil present within the 10 groupings based on the RECs identified in the Phase I ESA report for those parcels. CTA is assuming full mitigation until a Phase II ESA is completed.

The Phase I ESA results in **Table 4-14** were used to evaluate impacts for the Preferred Alignment. **Table 4-15** lists the number of groupings by soil exceedance type based on the Phase II ESA investigations that have been conducted to date. The type of soil exceedances was used to determine which groupings have uncontaminated or contaminated soil and how the soil excavated from those groupings would be handled, either through reuse or off-site disposal. **Figures 4-24** through **4-26** show the groupings where Phase II ESAs were conducted and which groupings where CTA has not been provided access and therefore a Phase II ESA has not been conducted for those groupings to date.

Table 4-15: Type of Soil Exceedance Encountered During the Phase II ESA Investigations

Type of Exceedance	Number of Groupings
TACO Tier 1 Residential SRO	19
TACO Tier 1 Industrial/Commercial SRO	17
Construction Worker SRO	16
MACs	20
Non-exceedances	1

The results of the Phase II ESAs were compared to the applicable TACO Tier 1 RO based on the end use of the property after the RLE Project would be constructed. In most cases, the end use would be as a transportation facility that would be considered an industrial/commercial property. However, some parcels that would be transferred to the either the Forest Preserves of Cook County (FPCC) or the Chicago Park District would have an end use that would be compared to the residential ROs.

Contaminants detected in soil analytical samples were typical of an urban area and included volatile organic compounds, target analyte list inorganics, and polynuclear aromatic hydrocarbons (PNAs). Based on the results of the Phase II ESAs, CTA found that each grouping had the presence of contaminated soil in one or more boings within that grouping, except for one grouping. For the 10 groupings that CTA did not conduct Phase II ESAs it was presumed that there would be some contaminated soil present within the grouping.

GPR surveys indicated there are potential underground storage tanks (USTs) and the ACM and LBP surveys found that some of the groupings with buildings do have ACMs and LBP. Creosote railroad ties that are associated with the existing railroad sidings located on multiple sites in the RLE Project corridor need to be disposed at a facility that accepts railroad ties.

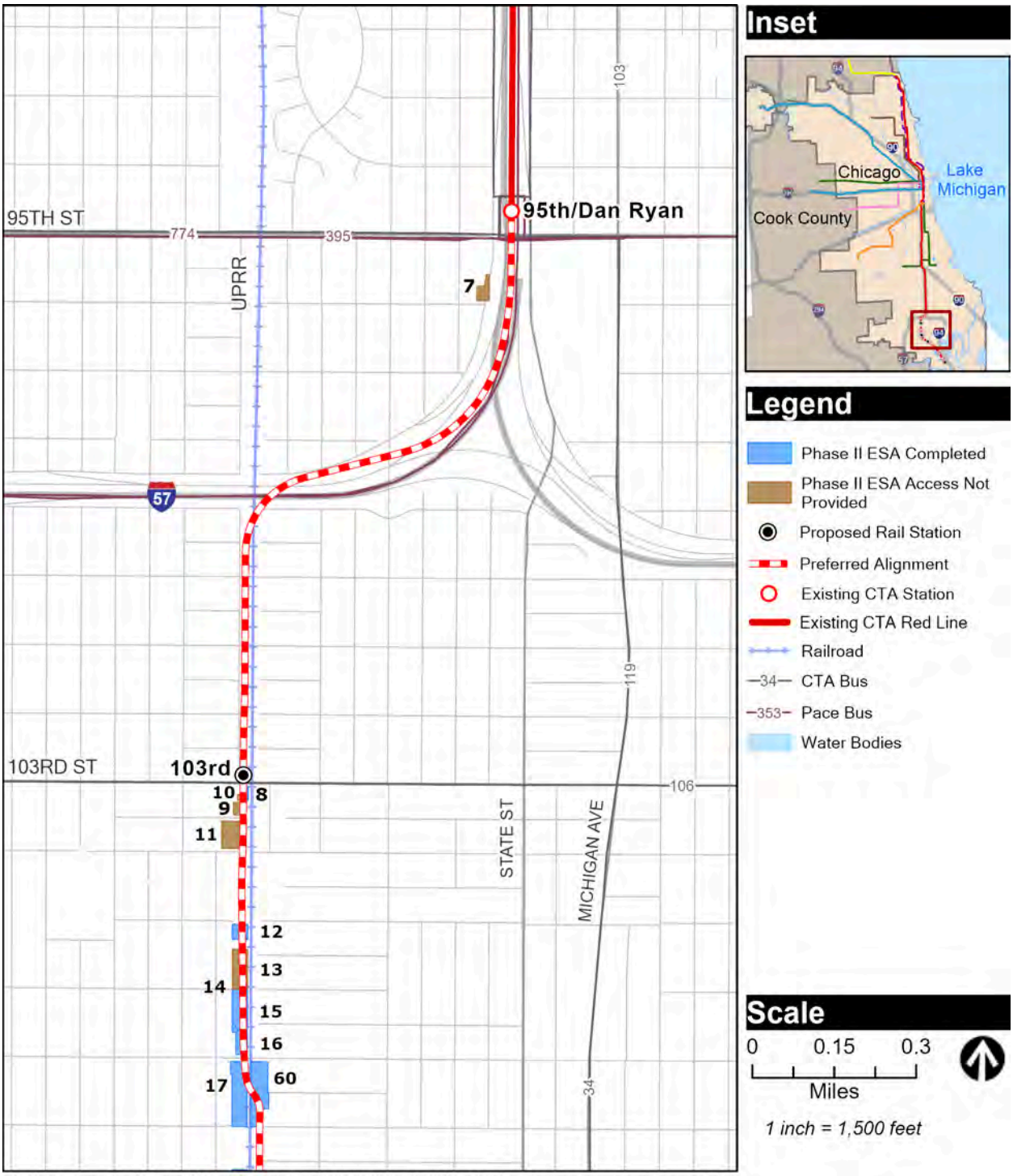

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-24: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (1 of 3)

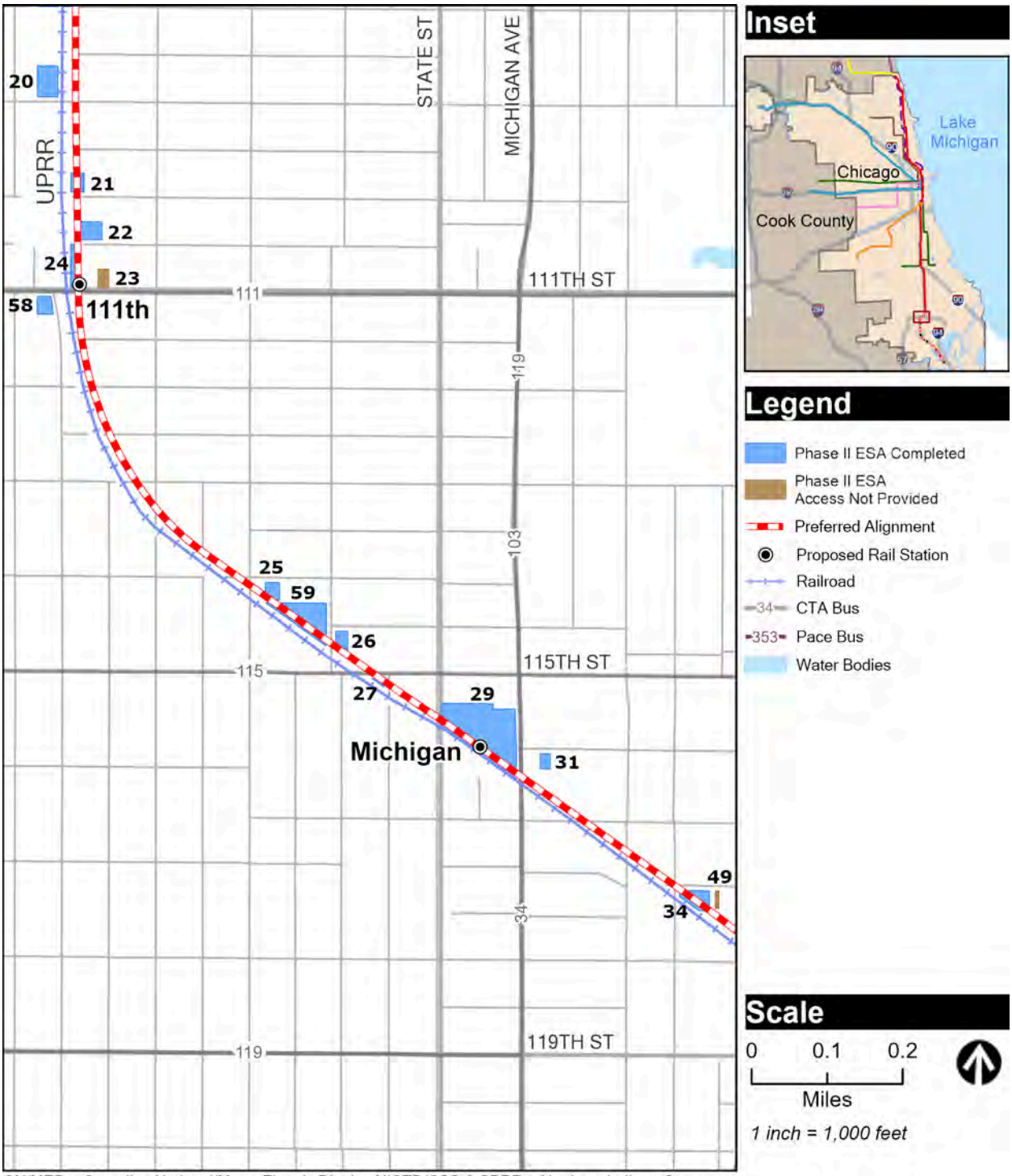

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-25: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (2 of 3)

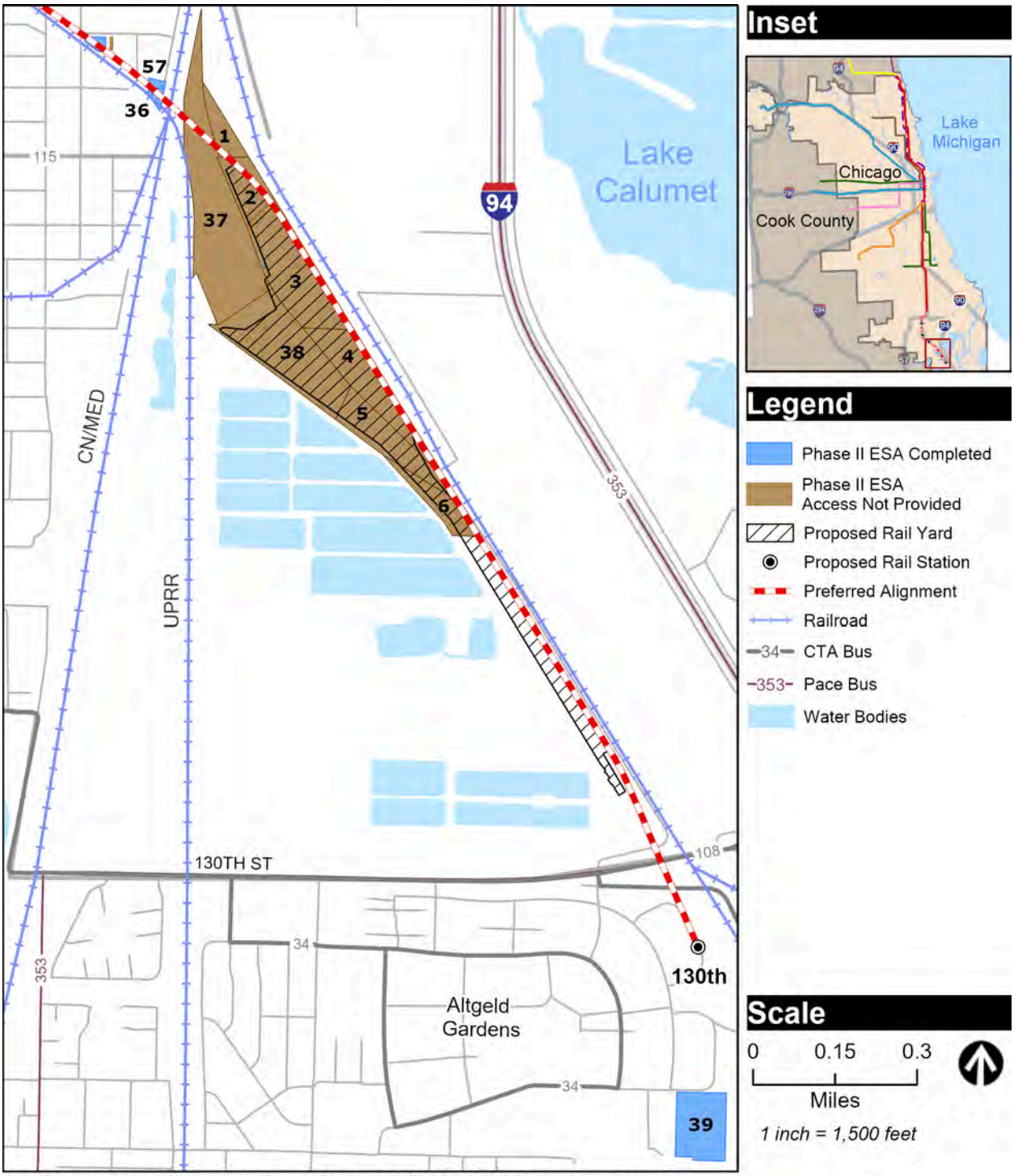

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-26: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (3 of 3)

4.8.3 Environmental Consequences

4.8.3.1 No Build Alternative

No adverse construction or permanent impacts related to hazardous materials would occur as part of the No Build Alternative. Potential benefits of remediation associated with the Preferred Alignment would not occur with the No Build Alternative.

4.8.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

Implementation of the Preferred Alignment would result in beneficial impacts through the cleanup and/or removal of contaminated material (soil and groundwater) during construction. Demolition of buildings would result in beneficial impacts through cleanup and/or removal of ACM and LBP. Without implementation of the Preferred Alignment, this cleanup and removal would occur either at a later date or not at all.

Daily operations or maintenance activities under the RLE Project that require earthmoving in contaminated areas would have the potential to result in hazardous material impacts from accidental spills or hazardous material releases. Spills are most likely to occur during activities such as equipment and grounds maintenance. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, pesticides, creosote, and PNAs. Examples of maintenance that could require earthmoving include at-grade track repair, underground utility work, and foundation repairs, although these activities are not expected to occur within the first 10–20 years.

The Preferred Alignment also has the potential for hazardous material impacts associated with adjacent freight rail lines. Due to the proximity of the freight lines to the Preferred Alignment, hazardous material spills or releases that occur along these railroads would have the potential to migrate and affect the Preferred Alignment API. These materials potentially exist along the railroad currently, but the Preferred Alignment would bring transit vehicles closer to them. Spills along the freight lines could occur from the use of chemicals for ground maintenance along the tracks. In addition, because these are freight lines, releases could occur from creosote used to preserve wood railroad ties; polynuclear aromatic compound deposition from diesel exhaust; asbestos dust from brakes; and previous releases of coal ash from engines. Freight lines might also transport hazardous material cargo, which could be released if there were a spill or accident. Releases from adjacent freight lines could affect transit passengers or operations. If adjacent freight lines have a release of hazardous materials, transit operations may need to be stopped to avoid traveling through the release area. First responders would follow the procedures and protocols for hazardous materials incidents established by the Hazardous Materials Unit of the City of Chicago Fire Department.

Impacts associated with the adjacent freight lines would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 CFR Parts 171–180) that among other things, specify requirements for the safe transportation of hazardous materials by rail and require rail carriers to conduct a security and safety risk analysis, to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route.

The Preferred Alignment would not have permanent adverse impacts related to hazardous materials. Although there would be no adverse permanent impacts related to hazardous materials, CTA would adhere to all applicable federal, state, and local regulations, as well as existing system-wide hazardous material usage, storage, and disposal plans and procedures, further minimizing the potential for hazardous material impacts.

Construction Impacts

Construction of the Preferred Alignment would include subsurface excavation, which would result in the generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. The results of the Phase II ESAs show the locations of where contaminated materials would be encountered and indicate how the materials should be handled (see **Appendix R**). Hazardous materials typically used during construction, such as paints, solvents, fuels, and hydraulic fluids, could also be released accidentally during construction. In addition, there is the potential for encountering contaminated groundwater during construction.

Construction would require the demolition of existing structures that were likely constructed before 1978–1979. These structures may contain ACM and LBP that could result in a release of asbestos fibers and lead dust during construction. Prior to demolition of any structures, CTA would test for lead and asbestos and remediate, as necessary.

Maintenance and operation of railroad corridors typically include the use of fuel, oil, paints, herbicides, pesticides, creosote, and PNAs. Therefore, construction activities within or adjacent to existing railroad corridors may encounter these materials. There would be adverse construction-related impacts associated with the Preferred Alignment, but the impacts would be mitigated by implementing the BMPs and standard practices discussed below.

CTA would follow federal, state, and local laws and regulations regarding hazardous materials before and during construction. The following BMPs, at a minimum, would be implemented before and during construction to avoid and minimize the potential for impacts:

- CTA would continue to conduct Phase II ESAs on properties identified as RECs in the site-specific Phase I ESAs before purchasing a property. The assessments would include characterization and evaluation of the potential for encountering hazardous materials and contaminated soil.
- CTA would prepare a Soil Management Plan for the RLE Project.
- CTA would manage soil by two categories, uncontaminated and contaminated soil. Uncontaminated soils meet all Tier 1 SROs and MAC levels that can be either reused on or off the RLE Project, disposed of at an approved CCDD facility, or used as fill material at an uncontaminated soil fill operation (35 IAC 1100, Subpart F). Contaminated soil exceeds the Tier 1 SROs and MAC for one or more contaminants. The soil is considered impacted, and any material removed as part of RLE Project construction is required to be disposed at a landfill permitted to accept the material.

- CTA would remove and dispose of creosote railroad ties that are encountered during construction at an approved disposal facility.
- CTA would require that any USTs encountered during construction or previously identified during the Phase II ESAs be removed and disposed and any UST that was determined to be leaking would go through closure through the appropriate regulatory agency.
- CTA would close out any open leaking UST sites and obtain a No Further Remediation Letter from the appropriate regulatory agency.
- ACM, LBP, and hazardous material surveys of buildings or structures would be required before demolition to identify any ACM, LBP, and hazardous materials, such as polychlorinated biphenyls or mercury-containing equipment. Any ACM, LBP, and hazardous materials identified would be abated and disposed of in accordance with federal, state, and local regulations. Removal, abatement, and disposal of these materials would be completed by specialists that are trained and certified to conduct such activities.

The following specific and required plans would be developed before construction to further minimize or avoid the potential for hazardous material impacts:

- A Contaminated Material Management Plan that provides the procedures for identifying, characterizing, managing, storing, and disposing of contaminated soil and groundwater encountered during construction activities would be required. The plan would comply with all applicable federal and state cleanup standards and would cover the entire RLE Project, as it is assumed that all material has at least some level of contamination associated with it.
- If required, a Spill Prevention, Control and Countermeasure (SPCC) Plan to address the use, storage, and disposal of materials such as asphalt, fuel, paint, solvents, and cleaning agents would be developed. The SPCC Plan would provide BMPs to limit the potential for accidental releases of potentially hazardous materials.
- Construction Stormwater Pollution Prevention Plans, which describe methods to prevent or minimize stormwater runoff from encountering contaminated soil or other hazardous materials, would be required.
- Health and Safety Plans for construction activities would be developed by the contractors and approved by CTA before starting any work. The Health and Safety Plans would identify potential contaminants of concern, required personal protective equipment and procedures, and emergency response procedures.

Construction-related impacts would not be adverse after the implementation of the BMPs and standard practices.

Impacts Remaining After Mitigation

After BMPs and standard practices are implemented, the Preferred Alignment would not have permanent or construction-related adverse impacts due to hazardous materials. Implementation of

the Preferred Alignment could also result in beneficial impacts through the cleanup and/or removal of contaminated materials during construction.

4.9 Wetlands

This section describes the impacts of the Preferred Alignment on wetlands. The Water Resources Technical Memorandum (**Appendix S**) provides additional details, including the wetland delineation report. **Table 4-16** summarizes the wetland impact findings.

Table 4-16: Wetlands - Impact Summary

Alternative	Permanent Impacts	Construction Impacts
No Build Alternative	No impacts	No impacts
Preferred Alignment	Up to 15.7 acres of low floristic quality wetlands would be affected. Mitigation would not be required per the USACE Approved Jurisdictional Determination.	There would be up to 0.19 acre temporary wetland impacts on Kensington Marsh. The temporarily affected areas related to installation of a stormwater outlet in Kensington Marsh would be restored to preconstruction conditions and monitored for a period to be determined in coordination with MWRD. Any unexpected or unintentional impacts would be mitigated through restoration or as otherwise required by MWRD.

4.9.1 Regulatory Framework/Methods

Executive Order 11990 directs federal agencies to minimize the destruction, loss, or degradation of wetlands. It also assures the protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable during the planning, construction, funding, and operation of transportation facilities and projects.

The Illinois Interagency Wetlands Policy Act of 1989 (the Act [20 ILCS § 830 et seq.]) is intended to ensure that there is no overall net loss of Illinois' existing wetland acres or their functional values resulting from State-supported activities. The Act charges State agencies with a further duty to "preserve, enhance, and create wetlands where necessary to increase the quality and quantity of the State's wetland resource base." The Act uses the same definition for wetlands as in the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual used by federal agencies in implementation of the federal Clean Water Act. All three parameters (hydric [wet] soils, hydrophytic [adapted to growing in saturated soil conditions] vegetation, and wetland hydrology) are required for a location to be considered a wetland; however, areas that have been restored or created as the result of mitigation or planned construction projects, and that function as wetlands, are also defined as wetlands under the Act even when all three wetland parameters are not yet present. The Navigable Waters Protection Rule was vacated by a federal court in September 2021. The definition of Waters of the U.S. (WOTUS), in the absence of the rule, is the same as that

outlined in the Draft EIS. The analysis of this document is conducted under the same pre-2015 WOTUS definition.

Shapefiles (geospatial data for geographic information system (GIS) software) collected during the 2015 Wetland Delineation were analyzed in ArcGIS against the API to identify wetland impacts. Additional potential wetland areas were noted during a May 11, 2021 site review with a representative of USACE. These wetlands were mapped by combining site observations with interpretation of aerial imagery. A "pre-application" meeting with USACE occurred on March 4, 2021, in advance of submitting an Approved Jurisdictional Determination (AJD) update request for wetlands in the project vicinity. A subsequent site review in advance of the AJD submittal was completed with USACE on May 11, 2021. USACE comments were incorporated into a formal AJD request that was submitted on September 15, 2021. A copy of this request, with associated attachments, is included in **Appendix S**. USACE determined that the API does not contain any waterways, wetlands or other areas considered "waters of the United States" under USACE jurisdiction in a letter dated January 19, 2022, included in **Appendix S.**

All wetlands located in the API are considered to be a permanent loss in this analysis. Temporary construction disturbance is anticipated to occur entirely within this API. The final disturbance area is expected to be smaller than the identified API.

4.9.2 Existing Conditions

The existing wetland conditions remain functionally the same as evaluated during the Draft EIS. The 2015 wetland delineation mapped 18.72 acres of wetland. An additional 1.29 acres of potential wetlands were identified during the May 11, 2021 meeting with USACE. These areas are assumed to meet the three point wetland criteria used by USACE. Most of the Preferred Alignment is urbanized with underground drainage and does not contain wetlands or areas that could contain wetlands. South of the CN/MED tracks, the area near the 120th Street yard and shop and 130th Street station is less developed and has flat topography. There are depressions with some standing water. These depressions do not exhibit connectivity through drainage systems. Fill and other manmade features define most of the wetland boundaries. Isolated depressions within the flat topography, combined with the highly compacted soils, lead to the development of wetland conditions in this area.

Kensington Marsh is proposed to be a receiving location for treated stormwater from the 120th Street yard and shop. Kensington Marsh is an MWRD developed compensatory mitigation property approved by USACE in 1985 to offset impacts related to construction of the nearby MWRD facilities. The total marsh area is approximately 9 acres. The marsh consists of open water areas surrounded by emergent wetland vegetation. The vegetated portions of the marsh are dominated by common reed (*Phragmites australis*).

All wetland areas identified throughout this area are of low floristic quality and wetland function. Most of the wetlands are dominated by common reed, often in dense monotypic stands. There are no High Quality Aquatic Resources in the API or mapped on adjacent properties. **Figure 4-27** shows an example of typical wetland composition and quality in the API. The wetlands shown below are located north of 130th Street. **Figures 4-28** and **4-29** show the locations of wetlands delineated in 2015 within the API.

Figure 4-27: Existing Wetlands Delineated in the Area of Potential Impact North of 130th Street

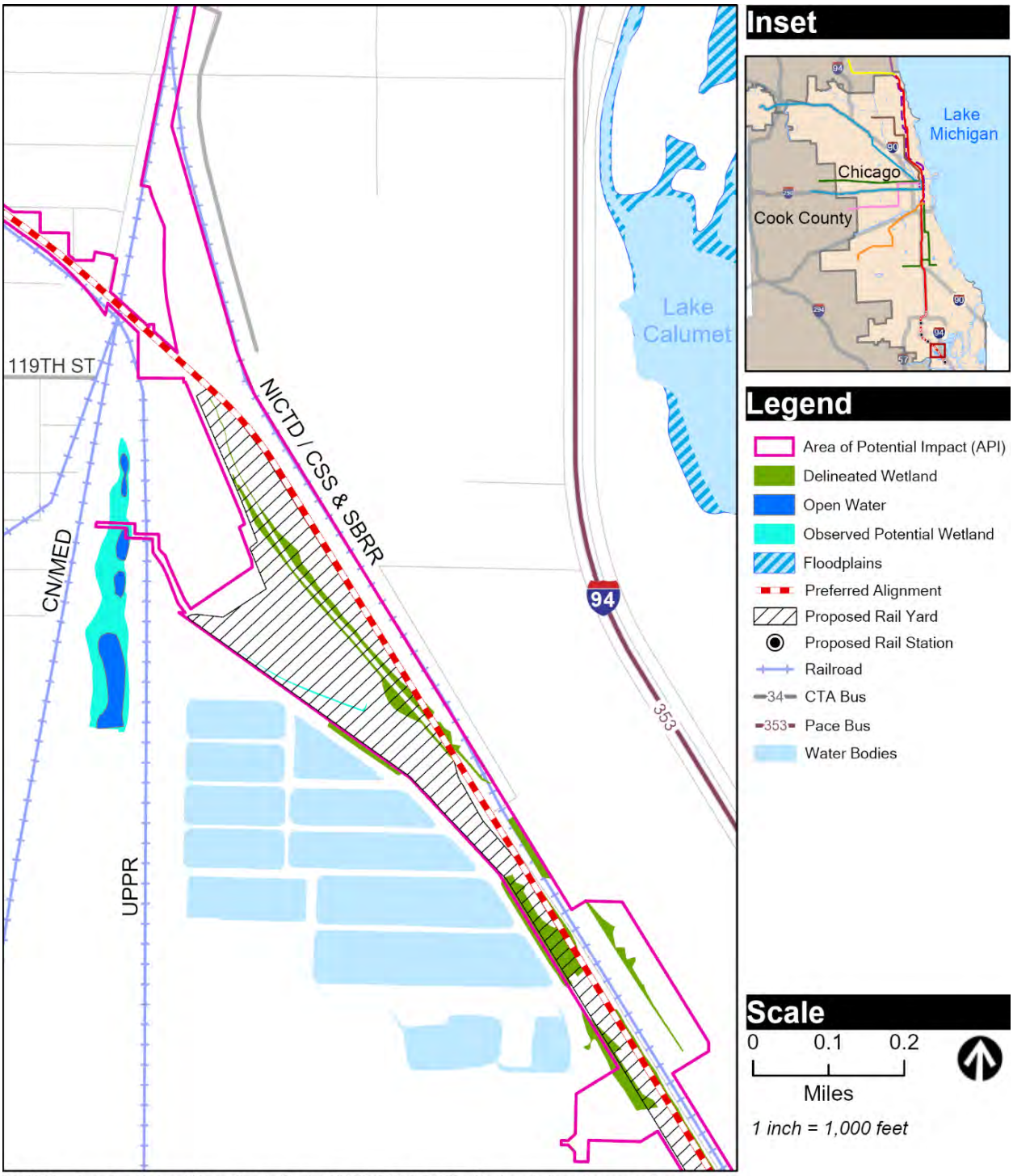

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-28: Wetlands Delineated in the Area of Potential Impact (1 of 2)

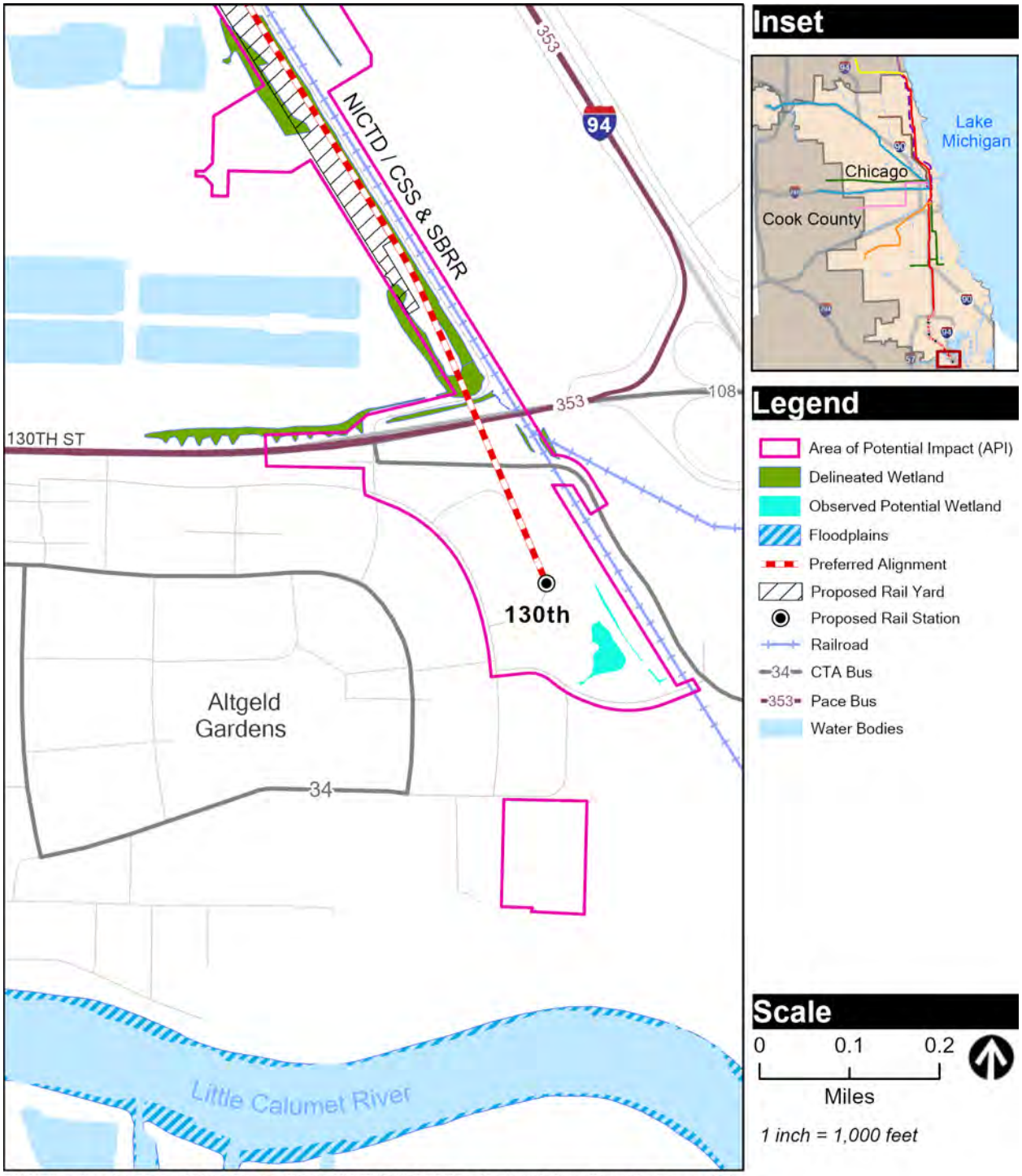

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-29: Wetlands Delineated in the Area of Potential Impact (2 of 2)

4.9.3 Environmental Consequences

4.9.3.1 No Build Alternative

There would be no permanent or construction impacts on wetlands as a result of the No Build Alternative.

4.9.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Permanent Impacts

The Draft EIS identified 15.34 acres of impact to wetlands. The Preferred Alignment would affect up to 15.7 acres of wetlands, including a small quantity of wetland area limited to the footprint of a culvert outlet into Kensington Marsh. The nature of impact, fill of wetlands, remains the same as that identified in the Draft EIS. Fill of wetlands would be necessary due to placement of the yard and shop, mainline tracks, and supporting infrastructure. All wetlands in the API are assumed to require total fill in the absence of final grading limits. All federal, state, and local regulations regarding wetland impacts would be adhered to. The USACE will not require mitigation, based on the information documented in the AJD. While no mitigation measures nor commitments are applicable based on the area of potential impacts associated with the 30 percent plans, CTA would comply with all federal, state, and local regulations regarding wetland impacts for the RLE Project.

Construction Impacts

Temporary construction access for installation of a stormwater outlet to Kensington Marsh would necessitate temporary impacts on wetlands. Temporary impacts on the marsh would not exceed 0.19 acre. Temporary affected areas would be restored to pre-construction conditions and would be monitored for a period to be determined in coordination with MWRD. USACE determined they do not object to utilization of Kensington Marsh, provided that coordinated BMPs are implemented. In addition to restoration, BMPs would include nine proposed detention ponds per 30 percent design, which would limit runoff volumes. If modifications are made during final design regarding the outflow or use of detention ponds to limit runoff volumes, then CTA would coordinate with the USACE for concurrence. Construction staging areas would be sited outside of wetlands as much as practicable, but if there were any temporary impacts, those areas would be restored to wetlands after construction. If any staging area is proposed to be sited outside of the previously cleared area, then contractors would coordinate with CTA to review the proposed site for the presence of wetlands.

Impacts Remaining After Mitigation

Impacts on wetlands would be mitigated through adherence to federal, state, and local regulations. No impacts would remain after mitigation.

Chapter 5 Indirect and Cumulative Impacts

While the other chapters of the Final EIS provide analysis and findings on direct impacts of the project, NEPA also requires the consideration of the potential indirect and cumulative impacts of federally funded projects.

5.1 Regulatory Framework/Methods

The regulatory framework and methodology for reviewing indirect and cumulative impacts is largely the same as that used during the Draft EIS. In brief, indirect impacts, also known as secondary impacts, are defined under 40 CFR § 1508.8. As defined, indirect impacts are caused by the project or plan, but are separated from direct impacts by time and/or distance (yet still in the foreseeable future). Indirect impacts include induced growth and related environmental impacts, such as changes to land use patterns, population density or growth rates, and related impacts on air quality, water, and other natural systems. Cumulative impacts are defined under 40 CFR § 1508.7 as the aggregate result of the incremental direct and indirect effects of a project or plan, the effects of past and present actions, and impacts of reasonably foreseeable future actions by others on resources of concern.

To determine the potential indirect impacts of this project, CTA followed the eight-step method described in the NCHRP Report 466. The API boundary for the analysis was based on all proposed elements of the project, including construction limits and proposed property acquisitions. For the analysis, CTA reviewed the findings from the environmental resource analyses to properly evaluate the potential for indirect impacts on land use, transportation, and economic development plans and goals, as well as to identify notable or sensitive resources such as community facilities, historic resources, and other vulnerable or unique resources. The potential for and impacts of induced growth that could result from this project were then determined through a qualitative assessment of changes in growth and development expected as a result of the increases in transit accessibility from the project. Based on these factors, a determination was made on the potential and magnitude of impacts that could result from the project and whether those impacts would be consistent with surrounding growth, trends, and goals within the API.

To identify the potential for cumulative impacts, CTA followed the 11-step method identified in CEQ guidance described in *Cumulative Impacts Technical Memorandum* (**Appendix T**) to meet best practice methods for conducting this type of analysis. Areas within a ½ mile of the project corridor (consistent with other analyses conducted for this Final EIS) were used to evaluate the potential for indirect effects. CTA reviewed applicable current and future regional and local plans.

5.2 Existing Conditions

Reasonably foreseeable projects include projects identified by CMAP in its *FFY 2019-2024 Transportation Improvement Program* (TIP) and known private development and redevelopment projects. **Appendix T** presents a list of projects in the vicinity of the RLE Project and analyzes the potential cumulative impacts in more detail. None of the projects in the *FFY 2019-2024 TIP* and its amendments would have the potential to have cumulative impacts together with the RLE Project.

The specific projects discussed in this section were evaluated as having the potential for cumulative impacts when considered with the RLE Project. The projects that were considered were within the general vicinity of the RLE Project, anticipated to be completed before the start of construction in 2025, or that may be under construction during the RLE Project's construction period of 2025 through 2029. Projects identified in CMAP's *ON TO 2050* comprehensive regional transportation plan were also considered. The analysis was based on known projects from information available from CTA, the City of Chicago, CMAP, the Chicago Region Environmental and Transportation Efficiency Program (CREATE), IDOT, the Illinois State Toll Highway Authority (ISTHA), Metra, and NICTD.

Past, present, and reasonably foreseeable future actions that have the potential for benefits or impacts include the CREATE 75th Street Corridor Improvement Program (CIP); Metra's Southeast Service (SES); NICTD's West Lake Corridor Project; CTA's Red and Purple Modernization (RPM) Program; the Roseland Plaza Redevelopment; the Pullman Historic District; and the Altgeld Gardens-Philip Murray Homes Historic District. Updates to these actions since the Draft EIS include:

- The CREATE 75th Street CIP would provide improvements in the Union Pacific Railroad (UPRR) corridor. The program and rail traffic expectations remain in line with those at the time of the Draft EIS. Initial contracts have been let, and final engineering design on other contracts are ongoing.

- Metra's SES expansion project consists of 33.2 miles of proposed rail line from LaSalle Street station to a terminal near Balmoral Park. The rail line would run along four existing railroad rights-of-way. The SES would, if implemented, run along the UPRR tracks adjacent to the RLE Project. The SES expansion project is part of the *Metra Strategic Plan—Systemwide Cost Benefit Analysis of Major Capital Improvements*, Final Report, January 16, 2019. No formal timeline has been announced.

- NICTD is constructing the West Lake Corridor Project, an approximately nine-mile alignment that would extend the NICTD South Shore Line from Dyer, to Hammond, Indiana. The West Lake Corridor Project alignment is east of the RLE Project. A Final EIS/ROD was issued for the project by FTA in March 2018 and the Design/Build contractor was selected by NICTD in 2020. Construction is underway and completion is expected in late 2024 with passenger service starting in early 2025.

- CTA's RPM Program is a series of proposed improvements to the North Red Line (from just north of Belmont Station to the northern terminus of the Red Line at Howard Station) and the Purple Line (from just north of Belmont Station to Linden Station). The first phase of the RPM Program is currently under construction and is anticipated to be completed by 2025.

- The Crown Commercial Real Estate & Development - Roseland Plaza redevelopment is a 6-acre site zoned commercial, located at the Michigan Avenue station location (in the area bounded by the UPRR tracks, State Street, 115th Street, and Michigan Avenue). It was expected to be a strip mall. The project has not moved forward since the Draft EIS.

- The Pullman Historic District was declared a National Monument on February 19, 2015. The park is located east of the RLE Project. The designation as a National Monument under the National Park Service is expected to bring economic opportunities to the surrounding communities.

- Altgeld Gardens-Philip Murray Homes Historic District's nomination for the National Register of Historic Places by the Chicago Housing Authority (CHA) was approved April 13, 2022. The designation as a historic district may bring economic opportunities to the Altgeld Gardens neighborhood.

5.3 Environmental Consequences

5.3.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the *FFY 2019-2024 TIP* and its amendments. TIP projects consist of several road improvement projects including resurfacing and coordination of signal timing, work on Metra's MED facilities to replace electrical systems, construction of a bicycle/pedestrian multi-use trail south and east of the RLE Project, and preservation of historic facilities.

Indirect Impacts

The lack of improved transportation options and lack of new infrastructure would do little to reverse the disinvestment that has occurred over the past several decades in the communities surrounding the RLE Project.

Cumulative Impacts

The RPM Program and West Lake Corridor Project are reasonably foreseeable actions that would result in beneficial air quality impacts because they would increase ridership, which would reduce trips made by vehicles. The cumulative impacts would result in a reduction of air emissions and would be beneficial. The air quality benefits of the No Build Alternative would be smaller in scale than for the Preferred Alignment.

5.3.2 Union Pacific Railroad Alternative - Preferred Alignment

Indirect Impacts

The Draft EIS stated that the implementation of the East or West Option would have the potential for indirect benefits to the economy. This holds true for the Preferred Alignment in the Final EIS, and there would be potential for redevelopment from accessibility to new employment opportunities, attraction of new development near RLE stations, and overall livability improvements. The private sector would likely perceive the Preferred Alignment as a public-sector commitment to improve the communities adjacent to the RLE Project and regain confidence in the economic development market of the area. The station and retail improvements may contribute to

a southward expansion of the current commercial and entertainment district along Michigan Avenue between 111th and 115th Streets.

Concurrent with the Final EIS, CTA developed a Transit-Supportive Development (TSD) Plan based on the community's vision for future development on the RLE corridor. It identifies methods and resources to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment. The TSD Plan utilizes an equitable Transit Oriented Development (eTOD) planning approach. eTOD planning seeks to promote development without displacement and realize community-focused benefits such as affordable housing, local economic development, and environmental sustainability. In order to achieve this, the TSD Plan incorporates policies to preserve existing housing stock and build new affordable housing, while stimulating economic development and encouraging new construction on vacant lots. CTA is working closely with Chicago's Department of Housing, DPD, and the Cook County Land Bank Authority to identify the best policies and programs to support existing residents within the RLE community. USEPA has numerous opportunities for local partnerships that could complement transit-supportive development, promote sustainable communities, and support broader health-focused community revitalization efforts near the RLE stations. There is currently high vacancy amongst existing properties within the project area. It is anticipated that economic development would happen gradually over time and parallel with community members experiencing increased access to increased employment and home ownership.

The City of Chicago's ETOD Policy Plan also outlines a set of actions for the City of Chicago to take to advance racial equity, wealth building, public health, and climate resilience goals. This initiative also prioritizes existing residents and supports the TSD Plan goal to prevent displacement due to increased development (City of Chicago 2021).

The TSD Plan may be a driver for more vibrant, prosperous, and resilient neighborhoods that put people of color and lower- and moderate-income residents at the center. A vital part of this plan is a community engagement and ownership process that incorporates and realizes the vision of residents and stakeholders from the surrounding neighborhoods throughout the development of the plan.

Cumulative Impacts

The Draft EIS stated that the CREATE 75th Street CIP, the West Lake Corridor Project, and the Metra SES line are reasonably foreseeable actions that would result in both beneficial and adverse impacts to the community. It stated that the permanent cumulative impacts of these projects would be beneficial to the surrounding communities because they would improve access to jobs, places of interest, and residences.

The potential for an increase in crash frequencies at the UPRR at-grade rail crossings adjacent to the RLE stations would be mitigated by creating parking on the same side of the tracks so riders that use park & ride facilities would not have to cross the UPRR tracks. CTA would coordinate with the UPRR regarding fencing or other appropriate design elements, and the agreed upon design features would be included in final design of the RLE Project to deter trespassing into UPRR property. Pedestrian gates would also be included in final design to enhance at-grade crossing protections. These proposed at-grade crossing improvements are indicative of the level of

protection expected. As coordination with the railroad and Chicago Department of Transportation (CDOT) take place, details may change, but the protection level would be similar.

CTA anticipates the incremental impact from reasonably foreseeable future actions to be more efficient mobility and access to jobs, retail, and places of interest within the project corridor for Chicago residents and visitors. CTA expects that over a period of time retail establishments and places of interest would benefit from the more efficient access to their locations.

The demolition of the CHA Blocks 11, 12, and 13 within the Altgeld Gardens neighborhood has contributed cumulatively on the relocation of the 130th Street station.

A minor change from the Draft EIS is that the extension of the 130th Street station south of 130th Street would lessen the opportunity for a direct connection between a potential NICTD South Shore Line station. The 130th Street station would be located farther (approximately 370 feet) from the NICTD South Shore Line than it was at the time of the Draft EIS. If NICTD should ever plan for a station in the vicinity of the 130th Street station in the future, multimodal connections would not be precluded.

Moving the 130th Street station south of 130th Street would improve pedestrian connections to the Beaubien Woods Forest Preserve and its amenities. The closure of Old 130th Street would eliminate a connection to the access road into the Beaubien Woods Forest Preserve from Old 130th Street. Closure of this connection would not result in an adverse impact because the primary access to Beaubien Woods Forest Preserve is from Ellis Avenue to Greenwood Avenue to 132nd Street. Mitigation measures to offset the access modifications include the transfer of two City-owned parcels, which would add 7 acres to the Beaubien Woods Forest Preserve.

Beneficial cumulative impacts would occur with the increase in the number of parklands throughout the neighborhoods in the form of Chicago Park District pocket parks, increasing residents' ability to access open space and recreational areas. Improved transit near the communities along the corridor would result in improved access to parklands and community facilities beyond the immediate area.

Noise impacts would occur at locations close to the Preferred Alignment and would be less at locations farther away. Based on 30 percent design, a minimum 3.5-foot high noise barrier (above the top-of-rail elevation) would mitigate all severe noise impacts associated with the implementation of the Preferred Alignment; however, 15 moderate noise impacts would remain after mitigation. Noise impacts would be analyzed for the final design of the RLE Project to confirm impact thresholds would be met as defined in this Final EIS. If there is an increase in the number or length of freight trains on the UPRR tracks, then there would be some cumulative impacts despite mitigation of the RLE Project.

Cumulative impacts to the neighborhoods adjacent to station areas would include the visual impacts of future developments that may occur in addition to the visual impacts of the RLE Project.

The RLE Project station improvements coupled with the INVEST South/West focus along the Michigan Avenue corridor and TSD Plan for the station areas would help to activate the neighborhood. The Far South Side of Chicago, including historic resources, would benefit from the

investment within the community. In addition, the proximity of the station and improved transit access and mobility adjacent to Altgeld Gardens would result in beneficial cumulative impacts to the Altgeld Gardens-Philip Murray Homes Historic District.

The anticipated increase in freight train volumes on the UPRR tracks, pedestrian volumes, and motor vehicle volumes near the 103rd Street, 111th Street, Michigan Avenue, and 130th Street stations would have cumulative and permanent adverse impacts on safety. Mitigation measures at the UPRR at-grade rail crossings adjacent to the RLE stations would include the implementation of at-grade warning device enhancements including pedestrian gates and improvements for Americans with Disabilities Act compliance in the final design of the RLE Project in coordination with the UPRR, Illinois Commerce Commission, CDOT, and CCDoTH. CTA would coordinate with CDOT to determine additional pedestrian improvements to enhance safety for pedestrians crossing the roadways to access the four RLE stations. CTA has provided RLE Project traffic analysis to agencies of jurisdiction through ongoing coordination and recommended improvements as documented in the Final EIS through 30 percent design. CTA would coordinate intersection improvements with agencies of jurisdiction (including IDOT, CDOT, and CCDoTH) for intersections affected by the change in traffic volumes and patterns associated with the final design of the RLE Project. The mitigation measures will be based on actual (measured) traffic volumes, agency requirements, coordination within the traffic network, and any traffic demand management and/or traffic calming measures being implemented at the time of mitigation. Agency requirements may include level of service analysis under Complete Streets guidelines, examining an overall level of service for pedestrians, bicycles, transit modes, and other vehicles (rather than placing an emphasis on the movement of automobiles). There would be beneficial cumulative impacts to safety and security with an improvement in traffic control and pedestrian crossing once mitigation measures are in place.

The RPM Program and the NICTD West Lake Corridor Project would result in beneficial air quality impacts because they would increase ridership, which would reduce trips made by vehicles.

Chapter 6 Resources with Limited or No Adverse Impacts

This chapter describes the environmental resource categories for which the RLE Project would have limited or no adverse impacts.

6.1 Air Quality

Under authority of the Clean Air Act (CAA) and its amendments, the U.S. Environmental Protection Agency (USEPA) has established National Ambient Air Quality Standards (NAAQS) for criteria pollutants to protect the public health and welfare (U.S. Congress 1970, 1977, 1990). The criteria pollutants that are of greatest concern to the transportation sector include carbon monoxide (CO), nitrogen dioxide (NO_2), ozone, particulate matter with an aerodynamic diameter of 10 micrometers (µm) and less (PM_{10}), and particulate matter with an aerodynamic diameter of 2.5 micrometers and less ($PM_{2.5}$). The NAAQS are summarized in the *Air Quality Technical Memorandum* (**Appendix U**). The RLE Project would be located in an area classified as nonattainment for ozone, which is a region where recent air quality monitoring data have exceeded the ozone NAAQS. Since publication of the Draft EIS, the area has been redesignated as unclassifiable/attainment for $PM_{2.5}$.

Regional emissions of air pollutants under the Preferred Alignment are based on regional vehicle miles traveled (VMT). VMT are the total number of miles driven by all vehicles and would decrease under the RLE Project resulting from passenger diversions to the Red Line. The Draft EIS evaluated regional vehicular emissions from VMTs and predicted slightly lower emissions of greenhouse gases (GHG), $PM_{2.5}$, and mobile source air toxics (MSAT) under the UPRR Rail Alternative as compared with the No Build Alternative. The Preferred Alignment would not change the regional VMT from the VMT disclosed in the Draft EIS. The regional emissions of GHGs, $PM_{2.5}$, and MSAT under the Preferred Alignment would be the same as those evaluated in the Draft EIS. The Preferred Alignment would reduce VMTs, and, therefore, it would slightly lower regional emissions of GHGs, $PM_{2.5}$, and MSAT as compared with the No Build Alternative.

The Draft EIS predicted CO concentrations from traffic at congested intersections and determined that the modeled one-hour and eight-hour CO concentrations for the UPRR Rail Alternative would be well below the NAAQS. The environmental consequences of the Preferred Alignment on vehicular traffic are not markedly different than those of the East and West Options of the UPRR Rail Alternative in the Draft EIS. Because the modeled CO concentrations in the Draft EIS were well below the NAAQS and that vehicular traffic would not markedly change under the Preferred Alignment, CO concentrations under Preferred Alignment are not anticipated to exceed the NAAQS.

Because nearly all of the project-related air pollutant emissions would come from motor vehicles and because the project-related motor vehicles would move throughout the entire project area defined in the Draft EIS, the results of the air quality analysis apply equally to the Preferred Alignment as they would to the East and West Options in the Draft EIS. The Draft EIS concluded that it makes no difference in the air quality analysis whether the Red Line trains would be on the east side or the west side of the UPRR right-of-way, and that the air pollutant emissions would be

the same for the East and West Options. In addition, the air pollutant emissions associated with the 120th Street yard and shop would not be sizable. As the changes to traffic from the Draft EIS to the Final EIS were not markedly different, traffic-related emissions under the Preferred Alignment would be similar to the impacts discussed in the Draft EIS.

Impacts during construction would be associated with temporary and localized emissions of particulate matter and exhaust from construction vehicles and equipment. Construction air emissions and mitigation measures under the Preferred Alignment would be similar to the East or West Options in the Draft EIS. Construction mitigation measures would include best management practices (BMPs) to reduce construction dust, to provide emissions controls on construction equipment, to use low-sulfur fuels, and to limit equipment operations such as excessive idling. In addition, the contractors performing primary construction activities would develop and implement a Dust Control Plan, which would address, in detail, how dust would be controlled at the construction site, the staging areas, and the access and egress routes. CTA would require contractors to follow Chicago's Clean Diesel Construction Ordinance, which would reduce the potential for construction-related air quality impacts. No additional construction mitigation measures would be required under the Preferred Alignment. Construction impacts on air quality would not be adverse after mitigation measures.

Because the RLE Project would be in a nonattainment area for ozone, the Preferred Alignment must conform to the State Implementation Plan (SIP) for ozone. Conformity for ozone can be demonstrated by documenting that the proposed project is specifically included in the conforming Regional Transportation Plan (RTP) and TIP. In its conformity analysis, CMAP concluded that the *ON TO 2050* RTP and the *FFY 2019-2024 TIP* meet all applicable requirements for conformity for the 8-hour ozone standard and the annual $PM_{2.5}$ standard (CMAP 2018c). The Draft EIS concluded that the RLE Project would conform to the SIP because the RLE Project was included in CMAP's *GO TO 2040* and would decrease $PM_{2.5}$ emissions. The RLE Project would still conform to the SIP because it is included in CMAP's *ON TO 2050* and TIP. In 2018 the USEPA approved IEPA's request to revise the state's designation for $PM_{2.5}$ from unclassifiable to unclassifiable/attainment, and a transportation conformity project-level analysis for $PM_{2.5}$ is not required.

Consistent with the findings of the Draft EIS, there would be no adverse impacts on regional and local air quality as a result of either the No Build Alternative or Preferred Alignment.

6.2 Water Quality

The Clean Water Act (33 USC § 1251) establishes the basic structure for regulating discharges of pollutants into waters of the United States and gives USEPA the authority to implement pollution control programs and actions, such as setting wastewater standards for industries. Section 10 of the Rivers and Harbors Act of 1899 (33 USC § 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. Sole source aquifers are regulated under 40 CFR Part 149. There are no changes to the applicable state or local water quality regulations referenced in the Draft EIS.

Lake Michigan is the dominant topographic feature in the region and is approximately 4.8 miles from the RLE Project at its closest point to the Preferred Alignment. Lake Calumet is east of the

RLE Project, and south of the RLE Project is the Little Calumet River flowing westward. The Little Calumet River is on the Illinois 303(d) list (a list of waters where water quality is impaired or threatened); it is listed as impaired for mercury and polychlorinated biphenyl (IEPA 2018). No Total Maximum Daily Load has been developed for these pollutants, as described in the Draft EIS analysis.

The Illinois Coastal Management Program boundary follows 130th Street. The 130th Street station in the Draft EIS was outside this boundary. However, the relocated 130th Street station would be within the boundaries of the Illinois Coastal Management Program. **Figure 6-1** shows the boundary of the Illinois coastal zone. The 130th Street station would be located within previously developed land and would be designed to meet the policies of the Coastal Management Program.

Coordination with the Illinois Department of Natural Resources (IDNR), Illinois Coastal Management Program, occurred on November 20, 2020 and March 31, 2021 regarding the need for a federal consistency review. Per IDNR guidance, CTA submitted an initial federal consistency review request to IDNR on August 27, 2021 requesting a determination as to whether a federal consistency review would be necessary for the RLE Project. In a letter dated October 8, 2021, IDNR concurred that the relocated 130th Street station would comply with the enforceable policies of the Illinois Coastal Management Program and would be conducted in a manner consistent with the Illinois Coastal Management Program. Therefore, the relocated 130th Street station would have no permanent adverse impacts on the Illinois coastal zone; coordination with IDNR regarding the federal consistency determination has finalized. Coordination materials are included in the *Water Resources Technical Memorandum* (**Appendix S**).

Lake Michigan is the drinking water source for the City of Chicago and many of its suburbs. Groundwater is not a drinking water source and there are no sole source aquifers in proximity to the RLE Project (IEPA 2020). Due to the predominance of impervious surfaces throughout the communities adjacent to the RLE Project, minimal percolation to the underlying groundwater occurs**. Figure 6-1** shows waterbodies near the Preferred Alignment. There have been no substantive changes to the groundwater resources as described in the Draft EIS.

The Preferred Alignment would not cross any waterbody or result in any new structures or construction in a waterbody. There have been no substantive changes to the resources described in this section since the Draft EIS. There are no waterbodies present in the API, and there would be no impacts on waterbodies from the No Build Alternative or Preferred Alignment.

6.3 Floodplains

Executive Order 11988 requires the protection of floodplains. The Executive Order directs federal agencies to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. The potential for floodplains in the vicinity of the Preferred Alignment was reviewed using the Federal Emergency Management Agency Flood Insurance Rate Maps. **Figure 6-1** shows the mapped 100-year floodplains in proximity to the Preferred Alignment. The Preferred Alignment would not cross a floodplain or result in any new structures or construction in a floodplain. There have been no markedly different changes to the resources described in this

section since the Draft EIS. There are no floodplains present in the API, and there would be no impacts on floodplains from the No Build Alternative or Preferred Alignment.

6.4 Vegetation and Wildlife Habitat

Vegetation and wildlife habitats are regulated on the federal level by the Endangered Species Act (16 USC § 1531), Migratory Bird Treaty Act (MBTA) (16 USC §§ 703–712), Fish and Wildlife Coordination Act (16 USC § 661–667e), and the Bald and Golden Eagle Protection Act (16 USC § 668–668c). There have been no substantive changes to the federal or state regulations on these resources since the Draft EIS. There are no local regulations requiring analysis of threatened or endangered species impacts; however, there are local regulations regarding the removal of landscape trees without a permit. There have been no substantive changes in local regulations on this resource since the Draft EIS.

Permanent impacts on vegetation and wildlife habitat in the Preferred Alignment include removal of up to 64.1 acres of trees from the API. The tree removal is mostly from the proposed construction of the 120th Street yard and shop and the 130th Street station. Reduction in habitat would occur in an area that is fragmented and somewhat isolated by surrounding industrial and transportation uses. The loss of trees would reduce migratory bird habitat. Migratory species passing through the Chicago urban core are likely to be adapted to urban habitat and are highly mobile, able to overcome industrial and land use barriers to more natural areas.

Vegetation removal was identified in the Draft EIS as up to 70.2 acres for the East Option and 76 acres for the West Option. The nature of permanent impacts has remained the same as those described in the Draft EIS. Tree removal mitigation measures would be required, as defined in the Draft EIS, including following local tree ordinances, timing of construction, and nesting bird surveys.

After the publication of the Draft EIS, CHA demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood. The area for Blocks 11 and 13 was converted to open space dominated by mowed/maintained turf grasses with the mature trees kept in place. Other trees occur in the disturbed railroad right-of-way and along 130th Place, including early successional native and non-native species. Observed dominant species include eastern cottonwood (*Populus deltoides*) and oak species (*Quercus sp.*). Tree coverage in the area was generally comparable to that described in the Draft EIS for the 120th Street yard and shop area. Trees in the area south of 130th Street are fragmented from any nearby forested area by transportation infrastructure and urban maintenance (e.g., mowed grass).

The removal of residential buildings from the three Altgeld Gardens neighborhood blocks increased the open green space in the area by approximately 23 acres. The open green space does not provide unique habitat opportunities in comparison to the surrounding area. Habitats in this segment include open, mowed grass and two strips of trees.

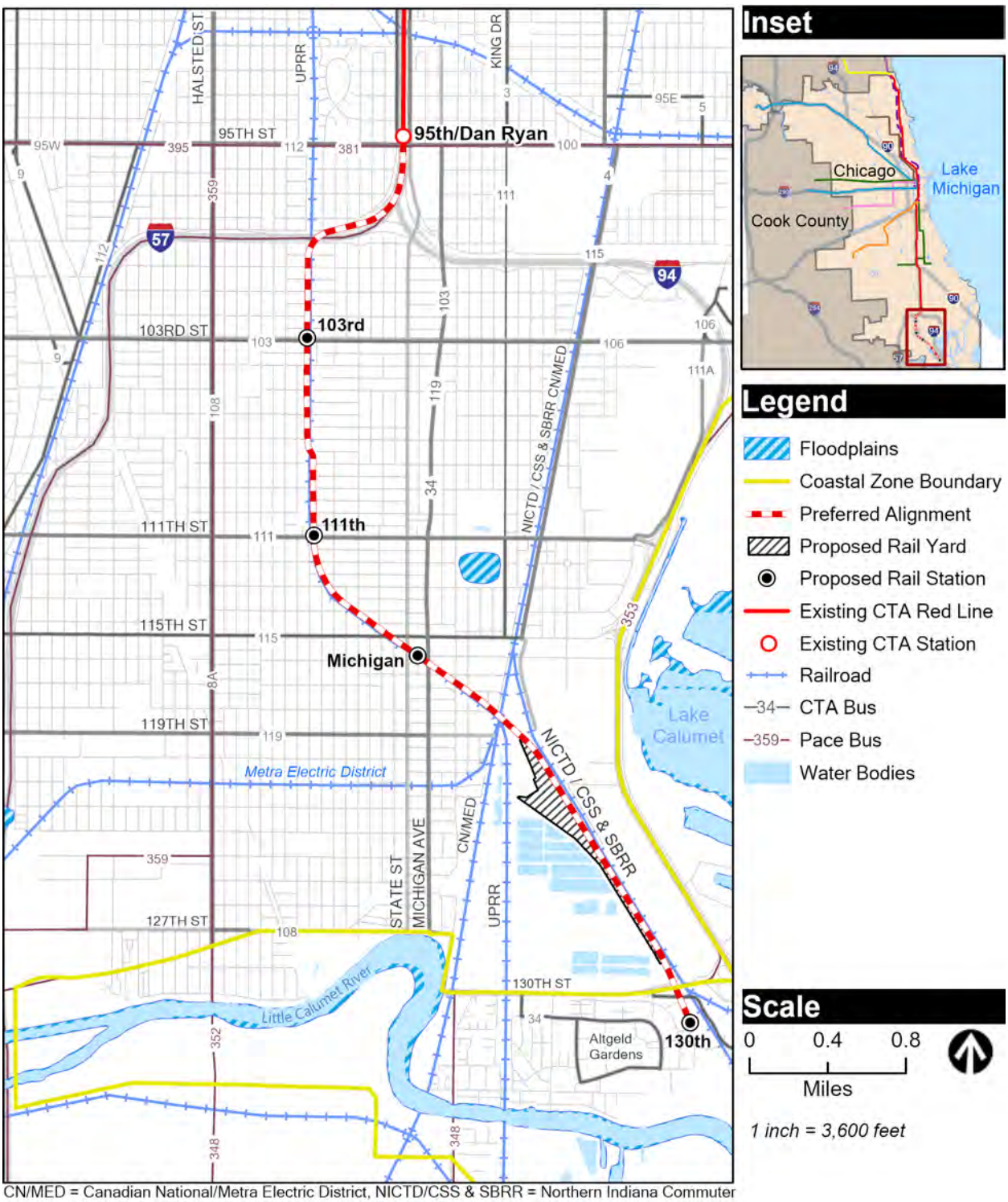

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 6-1: Waterbodies and Floodplains in the Vicinity of the Area of Potential Impact

Habitats described in the 120th yard and shop area and the 107th Place cross-over segment have not considerably changed from the description in the Draft EIS. Beaubien Woods Forest Preserve, the main part of which is located to the south and southeast of the API, has higher quality habitat opportunities in comparison to areas affected by the Preferred Alignment. Trees north of 132nd Street are separated from the forest area by only the street and may provide opportunities for wildlife to shelter in and travel through.

The Preferred Alignment would potentially have adverse impacts on vegetation and wildlife habitat during construction due to tree removal. The loss of trees would reduce migratory bird habitat. Migratory species passing through the Chicago area are likely to be adapted to urban habitats and are highly mobile, able to overcome industrial and land use barriers between the RLE Project and more natural areas. With the implementation of mitigation measures outlined in the Draft EIS and reiterated in mitigation below, potential adverse impacts would be minor.

Mitigation measures would be required for compliance with the MBTA, for consistency with local tree protection ordinances, and to reduce potential impacts on wildlife habitat. Bird species may use trees that could be removed for the RLE Project or disturbed during construction and could be affected. Mitigation measures would include the following:

- Tree removal would be timed as much as possible to occur outside the migratory bird nesting season, which occurs generally from April 1–September 15 and as early as March 1 for some species.
- If tree removal must occur during the nesting season, two biological surveys would be conducted: one 15 days before and a second 72 hours before the construction that would remove or disturb suitable nesting habitat.
- Avoidance measures would be incorporated into the final design of the RLE Project where feasible; however, if construction of the project were to require removal of a protected tree, a permit would be required in accordance with applicable codes and ordinances of the City of Chicago. Tree removal permits may require replanting of protected trees to mitigate for the removal of these trees.

Additional information on mitigation measure details can be found within the *Biological Resources Technical Memorandum* (**Appendix V**). Consistent with the findings of the Draft EIS, there would be no adverse impacts on vegetation and wildlife habitat under the No Build Alternative.

6.5 Threatened and Endangered Species

The Endangered Species Act (16 USC § 1531) and subsequent amendments provide for the conservation of threatened and endangered species and the ecosystems upon which they depend.

There are 135 state-listed species that potentially occur within Cook County (IDNR 2020). Of the 114 species identified in the Draft EIS, two were federally listed only, nine were delisted, and four underwent a scientific name change. Changes in federal- and state-listed species status are documented in **Appendix V**. The updated species list includes 30 additions to the state list.

Additionally, three federal species are newly accounted for on the species list, with some overlap on the state list.

The Draft EIS identified the peregrine falcon (*Falco peregrinus*) as the only state-listed species with potential to occur in the vicinity of the RLE Project. Due to removal from the list, this species is no longer considered a state-listed species concern. As a migratory bird, protections of the MBTA still apply to this species.

The rusty patched bumble bee (*Bombus affinis*) was added to the federal species list for Cook County since the Draft EIS analysis. The RLE Project is outside the range of this species, as identified by the U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS).

The Information for Planning and Consultation (IPaC) system review indicated the rufa red knot (*Calidris canutus rufa*), a robin sized shorebird, may occur in the RLE Project vicinity. No suitable habitat (i.e., coastal areas or large wetland complexes for migratory stopovers) for the rufa red knot was identified in the API. Therefore, the rufa red knot is unlikely to occur in the API.

Permanent and temporary construction impacts on vegetation and wildlife habitat in the Preferred Alignment include removal of up to 64.1 acres of trees from the API. Subsequent to development of the Draft EIS, USFWS listed the northern long-eared bat as a threatened species that may be present in the vicinity. Northern long-eared bats may be transient through the area, but more suitable foraging and roost habitat is likely to be present in the wooded areas and riverine corridor along the Little Calumet River. Coordination was completed with USFWS on September 28, 2021, finalizing the determination regarding potential impacts on the northern long-eared bat. Under the *Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana bat and Northern Long-Eared Bat (USFWS)* a "May Affect – Not Likely to Adversely Affect" determination was provided by USFWS. USFWS concurred with the following mitigation measures:

- For the protection of the northern long-eared bat, tree removal activities would occur outside of the northern long-eared bat active season (April 1 through October 31).

USFWS also agreed with the finding of "No Effect" for the threatened and endangered species listed in Cook County, Illinois (see the coordination letter dated September 28, 2021 in **Appendix V**).

Per correspondence dated November 24, 2021 (see **Appendix V**), IDNR has determined that impacts are unlikely, with inclusion of the following proposed mitigation measures:

- For the protection of wildlife associated with Lake Calumet, all lighting would be fully shielded fixtures that emit no light upward. Only "warm-white" or filtered light-emitting diodes [correlated colour temperature < 3,000 degrees Kelvin; scotopic/photopic ratio <1.2] would be used to minimize blue emission. Only light the exact space with the amount (lumens) needed to meet industry safety requirements.

- For protection of the osprey, the removal of vertical structures such as telephone poles, light poles, etc. would occur outside of the osprey active season (April 1 and October 31). If these dates cannot be accommodated, a nesting survey will be conducted to determine if species are utilizing structures in the project area. Survey results will be coordinated with IDNR.

Vegetation removal was identified in the Draft EIS as up to 70.2 acres for the East Option and 76 acres for the West Option, compared to 64.1 acres of tree removal for the Preferred Alignment. With the exception of the potential to impact suitable northern long-eared bat roost trees, the nature of permanent impacts has remained the same as those described in the *Biological Resources Technical Memorandum* (**Appendix V**) of the Draft EIS.

Consistent with the findings of the Draft EIS, there would be minor adverse impacts on biological resources remaining after mitigation measures as a result of the Preferred Alignment. Consistent with the Draft EIS, there would be no impacts on biological resources under the No Build Alternative.

6.6 Geology and Soils

During the Draft EIS, CTA reviewed existing data on geology, soil, and topography to understand the general geologic setting and identify the locations of geologic hazards that could result in damage to structures or infrastructure or could expose people to risk of injury and to determine potential impacts of the RLE Project. CTA reviewed soil boring and water well logs, geologic maps of Cook County and of Illinois published by the Illinois State Geological Survey, U.S. Geological Survey (USGS) topographic maps, and geologic maps and reports from U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS). To identify adverse impacts, CTA also considered the RLE Project proximity to any identified geologic hazards and the potential severity of those hazards. The potential for impacts exists because earthwork activities (such as excavation and grading that occur during construction) can cause soil erosion, affect soil stability, and create topographic disturbances. Potential adverse impacts due to ground settlement, which can occur during both construction and operation, were also considered.

Local topography is generally flat and typically varies less than 50 feet, with a minimum elevation of 590 feet and a maximum elevation of 625 feet above sea level. Bedrock underlying the API is present at variable depths, ranging from 50 to 100 feet below ground surface. The region has been subjected to tectonic movements; however, the local area does not show evidence of faults or extensive earthquakes (USGS 2002). The API is underlain by urban land complexes, which are identified as soil that has been disturbed (such as fill material) (USDA NRCS 2012).

Consistent with the findings of the Draft EIS, operation or construction of the Preferred Alignment would not have adverse impacts on geologic or soil resources, because all of the features of the Preferred Alignment would be located primarily on or within existing transportation use areas such as streets and railroad corridors. No mitigation measures would be required. The No Build Alternative also would not result in adverse impacts on geologic or soil resources.

6.7 Energy

The Energy Policy Act of 2005 (Public Law 109–58) includes transportation-related provisions that reduce reliance on foreign energy sources (mainly petroleum) and increase use of recovered mineral content in federally funded projects involving procurement of cement or concrete.

CTA evaluated potential energy impacts and benefits associated with construction and operation of the RLE Project. Changes related to the project—in travel patterns and mode choice within the regional transportation network—have the potential to result in changes in net energy demand. The energy sources for operation of the RLE Project would primarily be electricity for Red Line trains and passenger stations, and gasoline and diesel fuel for project-related vehicles.

The Draft EIS evaluated the long-term energy consumption from Red Line train propulsion and operation of four new stations. With the relocation of the 130th Street station, the Preferred Alignment length would increase from 5.3 to 5.6 miles. Extrapolating for the additional 0.3 miles of tracks to the relocated 130th Street station, energy consumption for train propulsion under the Preferred Alignment would be approximately 1 percent higher than the East and West Options of the UPRR Rail Alternative in the Draft EIS. Energy consumption at the four new stations under the Preferred Alignment would be the same as the East and West Options. The long-term energy consumption for the operation of Red Line trains and four new stations under the Preferred Alignment would increase compared with the No Build Alternative.

The Draft EIS also evaluated the long-term energy consumption from project-related vehicles, based on regional VMT. The VMT are the total number of miles driven by all vehicles and would slightly decrease under the RLE Project because of the diversion of passengers to the Red Line. The Draft EIS determined that the East and West Options of the UPRR Rail Alternative would result in lower vehicular energy consumption as compared with the No Build Alternative. The energy consumption from regional VMTs under the Preferred Alignment would be the same as those evaluated for the East and West Options of the UPRR Rail Alternative. The Preferred Alignment would reduce VMTs, and therefore it would slightly lower energy consumption from vehicles as compared with the No Build Alternative.

The Draft EIS determined the total long-term energy impacts for the RLE Project by adding the energy consumption from operation of Red Line trains and stations, and then subtracting the energy benefit from reduced VMTs resulting from passenger diversions to the Red Line. The UPRR Rail Alternative would require slightly more long-term energy than the No Build Alternative. The energy needed for operations would be far lower than the existing surplus generating capacity for the region. The additional demand for the RLE Project would be less than 0.02 percent of the surplus generating capacity in the regional transmission territory. The Draft EIS concluded that the operation of the UPRR Rail Alternative would not have an adverse impact on regional energy sources.

Under the Preferred Alignment, long-term energy consumption would be similar to the East and West Options of the UPRR Rail Alternative. The Preferred Alignment would require slightly more long-term energy use to operate Red Line trains, because the Preferred Alignment length would increase from 5.3 to 5.6 miles to the relocated 130th Street station. The additional energy demand for operation of the Preferred Alignment would be well below the available energy supply, and therefore the Preferred Alignment would not have an adverse impact on regional energy sources.

Construction of the RLE Project would use energy for the production of the guideway and station components (including steel, cement, copper, and glass), and for the operation of construction equipment. The Draft EIS determined that construction of the UPRR Rail Alternative would amount to less than 1.2 percent of the total annual of Cook County energy consumption, as detailed

in the *Energy Technical Memorandum* (**Appendix W**). Because construction energy use would be a very small fraction of energy use in the region, construction of the RLE Project would not have an adverse impact on regional energy consumption and no construction mitigation measures would be required. Under the Preferred Alignment, short-term construction energy consumption would be similar to the East and West Options of the UPRR Rail Alternative disclosed in the Draft EIS. No adverse energy impacts during construction would be anticipated under the Preferred Alignment, and no additional construction mitigation measures would be required. Construction energy use would be spread out over the duration of construction.

Consistent with the findings of the Draft EIS, the No Build Alternative and Preferred Alignment would not have an adverse impact on regional energy consumption, and no mitigation measures would be required. **Appendix W** contains additional details.

Chapter 7 Environmental Justice

Environmental justice (EJ) is "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (USEPA 2004). This chapter summarizes the EJ analysis and outreach conducted for this RLE Project. The *Environmental Justice Technical Memorandum* (**Appendix X**) provides additional details.

As was described during the Draft EIS, the communities adjacent to the RLE Project are entirely minority communities, some of which are also low-income areas. This is a community-driven project based on equity. All of the benefits and impacts of the project would occur within these minority and low-income populations (EJ populations). Few benefits would occur outside of the minority and low-income areas. As such, the Preferred Alignment would have impacts on EJ populations; however, none of the impacts would be disproportionately high and adverse. FTA and CTA have undertaken outreach and ongoing coordination with affected communities to identify EJ populations, discuss project impacts and benefits, and provide mitigation measures where relevant.

7.1 Regulatory Framework/Methods

There are no changes to the applicable federal or state regulations referenced in the Draft EIS. FTA issued its most recent guidance for meeting the requirements of Executive Order (EO) 12898 as Circular 4703.1 in August 2012, prior to the issuance of the Draft EIS.

In brief, the requirements presented in the Draft EIS note that federal agencies are required to consider the potential for disproportionately high and adverse impacts on EJ populations that could result from all programs, policies, and activities (Executive Order 12898). As described in EO 12898, a disproportionate impact is one that would negatively affect EJ populations to a greater extent than non-EJ populations.

The analysis of the impacts on EJ populations under the Preferred Alignment was performed using the same methods as were documented in the Draft EIS. Updated data from the U.S. Census Bureau 2018 5-Year American Community Survey (ACS) were used to identify EJ populations except for Limited English Proficiency (LEP) households, for which the most recent data are the 2015 5-Year ACS. Consistent with the Draft EIS, adverse impacts would be likely to occur within a ¼ mile radius of the project infrastructure, whereas beneficial impacts would accrue to a larger area of approximately a ½ mile or more around the station locations. To accurately assess the communities benefiting from the RLE Project, the API for EJ populations is defined as the area within a ½ mile of the Preferred Alignment. All block groups within a ½ mile of the Preferred Alignment right-of-way were included in the analysis with the exception of selected block groups that have no population living within a ½ mile of the Preferred Alignment right-of-way.

This methodology is consistent with the Draft EIS but focuses on the Preferred Alignment as compared to the multiple alternatives analyzed as part of the Draft EIS. Therefore, comparisons between the EJ figures presented in the Draft EIS and those presented in this Final EIS must consider both the changed parameters of this study and changing demographics in the City of Chicago.

7.2 Existing Conditions

The API consists entirely of predominantly minority populations, as shown in **Figure 7-1**. All residential portions of the API contain over 75 percent African American residents, with many areas approaching 100 percent. The API contains a higher proportion of minority residents (98 percent) than the City of Chicago as a whole (67 percent).

The 2018 annual median household income for communities in the API ranges from approximately $17,000 in Riverdale to $52,000 in Washington Heights. The API median income (approximately $39,529) is lower than the City of Chicago as a whole ($55,198). Median household income for each block group within the API is shown in **Figure 7-2** (except four block groups for which data are unavailable due to a low volume of respondents).

According to the U.S. Department of Health and Human Services 2018 Poverty Guidelines, potentially six block groups (out of 56) in the API have populations with median household income below poverty guidelines. Three of those block groups are in Riverdale and three are in Roseland. Populations below the poverty guidelines are shown in **Figure 7-2**.

LEP persons are defined as individuals for whom English is not their primary language and who have limited ability to read, write, speak, or understand English. Similar to the Draft EIS, the majority of households in the API speak English with Spanish as the second most common language spoken at home. The API around the Preferred Alignment no longer includes some of the block groups from the Draft EIS with the highest percentage of LEP populations. LEP populations are shown in **Figure 7-3**.

The general condition of the API remains similar to that described in the Draft EIS, in that EJ populations make up the entirety of the residents of the area, and that the benefits and impacts of the RLE Project would accrue primarily on these populations.

7.3 Specialized Outreach

Full and fair access to meaningful involvement by EJ populations in project planning and development is an important aspect of EJ (Executive Order 12898). Using demographic data to determine the presence of EJ populations is only the first step in a robust EJ approach. Ensuring full and fair access means actively seeking the input and participation from those typically under-represented groups throughout all project stages. Residents can provide important information on community concerns, special sites, and unusual traffic, pedestrian, or employment patterns in the corridor. This information can be used in the design and evaluation of alternatives, to avoid negative impacts on valued sites, and to support the development of safe, practical, and attractive transportation options that are responsive to the concerns of EJ populations.

CTA conducted public and community meetings in compliance with NEPA guidelines. The meetings were held at locations selected to reflect equitable geographic coverage and proximity to

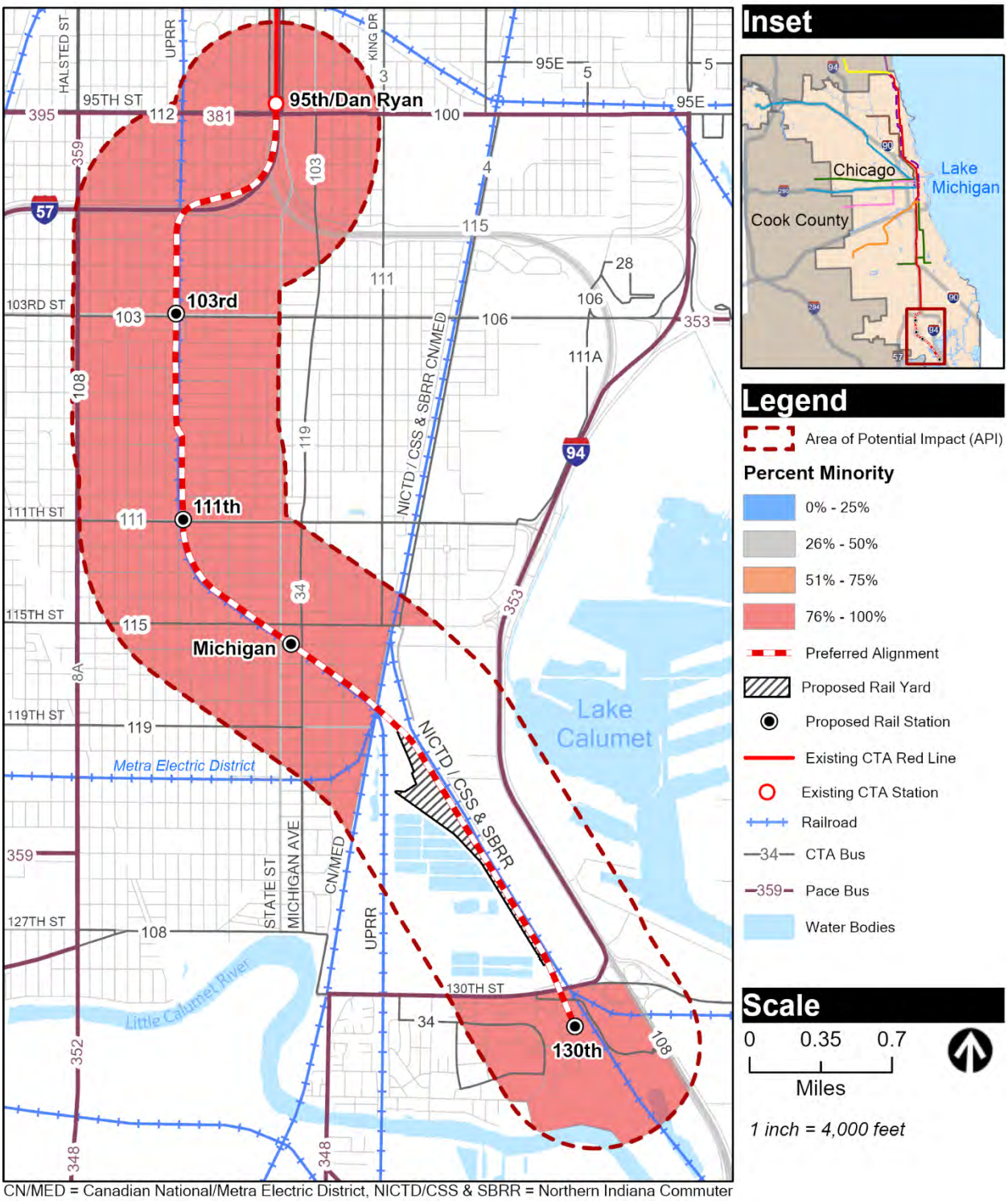

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 7-1: Minority Populations within the Area of Potential Impact

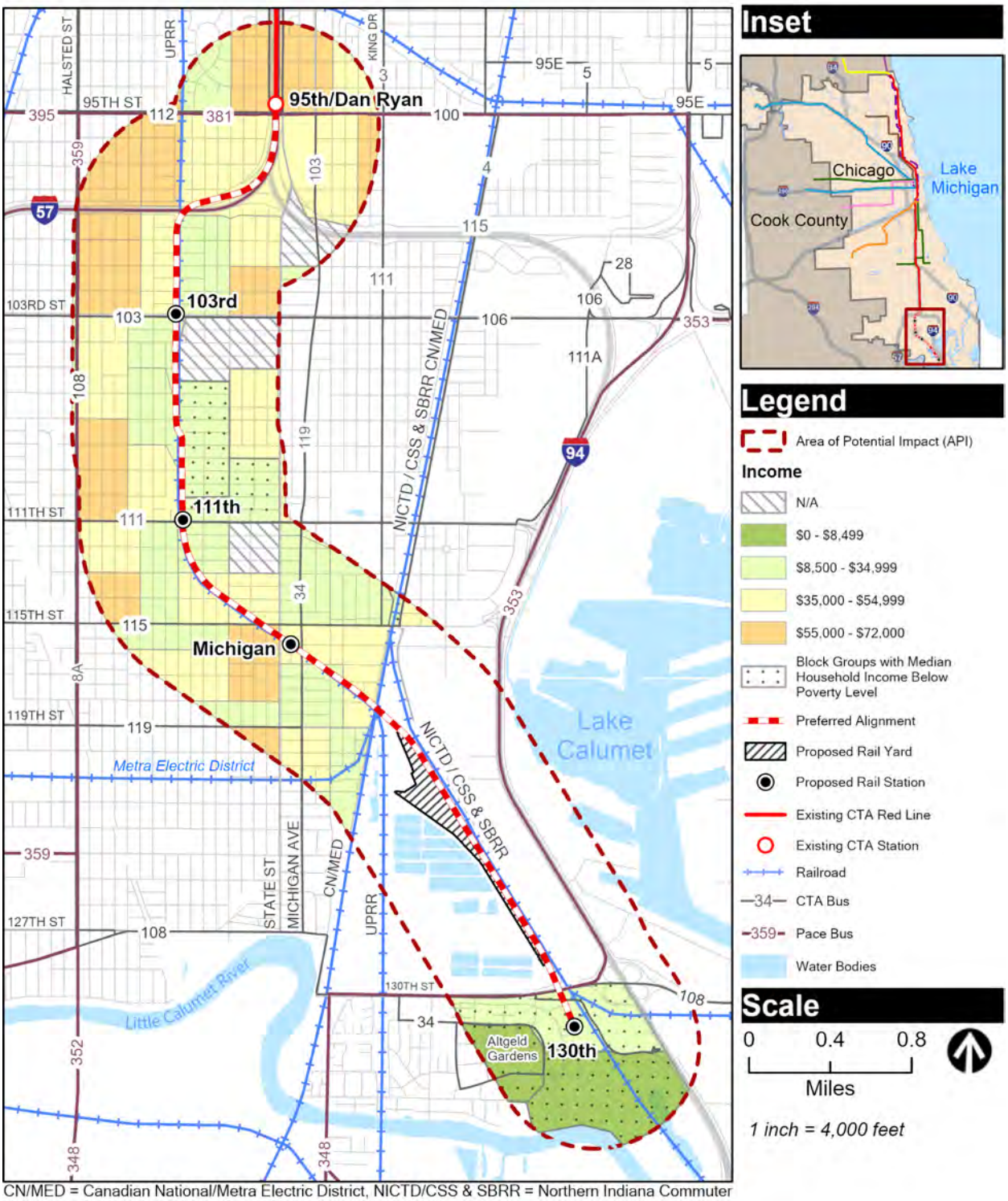

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 7-2: Low-Income Populations within the Area of Potential Impact

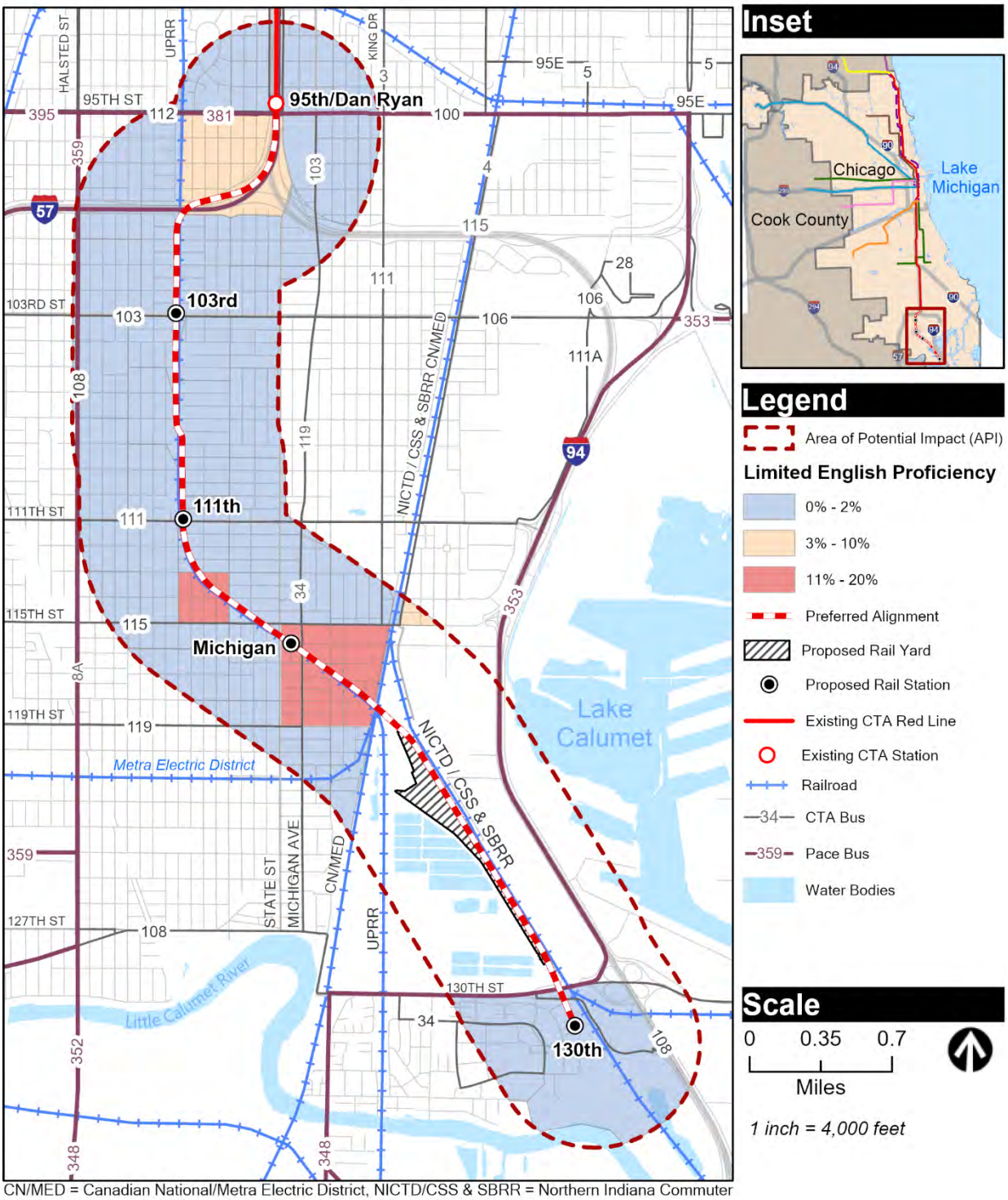

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 7-3: Limited English Proficiency Populations within the Area of Potential Impact

public transportation, and to minimize overlap with other meetings scheduled in proximity to the RLE Project. The meeting locations were within the project area defined in the Draft EIS, accessible by public transit, and ADA-compliant. Spanish translation of meeting handouts and Spanish and American Sign Language (ASL) interpreters were made available at every public meeting. CTA also offered to make translators for additional languages available upon request.

Outreach efforts related to the Supplemental EA and Final EIS built on project outreach conducted during the Draft EIS process. In the spring of 2020, the COVID-19 pandemic prompted virtual adaptations and virtual meeting accommodations instead of in-person meetings and gatherings. Virtual community organization, stakeholder, and public meetings allowed the participants to provide input, ask questions, share their comments, and discuss any concerns with CTA. The situation surrounding the COVID-19 pandemic continues to evolve, including guidelines related to holding in-person public meetings. CTA will continue to adapt the format of public meetings as necessary. The Public Participation Plan (PPP) ensures the diverse populations, including LEP and EJ populations, in the area are included in the process. The PPP includes open houses, property owner/renter coordination meetings, meetings with elected officials, email blasts, social media posts, newsletters, youth engagement events, and multiple community events. Collectively, these activities provided opportunities to provide information to the public and obtain meaningful input on the RLE Project.

CTA has implemented a robust outreach program with an emphasis on meaningful exchange with EJ populations. **Chapter 10** and **Appendix C** provide additional details on public involvement and agency coordination conducted.

7.4 Environmental Consequences

FTA Circular 4703.1 indicates that projects in areas consisting entirely of EJ populations do not necessarily eliminate the possibility of disproportionately high and adverse impact findings; however, the following characteristics are true of the API:

- The entire API is predominantly minority populations. No single block group (U.S. Census Bureau) in the API has less than 76 percent minority populations.
- All of the impacts and benefits of the Preferred Alignment would accrue to the same minority populations.
- The purpose of this community-initiated project includes connecting disadvantaged communities to the City of Chicago's major employment and activity centers in an effort to spur economic development and improve livability. The RLE Project would help remediate the geographic isolation and lack of employment and development opportunities that currently exist in the communities surrounding the RLE Project.

A multistep process was used to assess the potential for disproportionately high and adverse impacts on EJ populations as described in **Section 7.1**. Categories that had adverse impacts remaining after mitigation measures were analyzed further to determine whether any of those impacts would be disproportionately high or adverse. An impact would be disproportionately

high or adverse if the effect (1) would be predominantly borne by an EJ population, or (2) would be suffered by the EJ population and would be appreciably more severe or greater in magnitude than the adverse effect suffered by the non-EJ population (*Environmental Justice Policy Guidance for Federal Transit Administration Recipients*, 2012). Project benefits to EJ populations were also considered.

To provide a complete picture of how the RLE Project would affect EJ populations, this section summarizes the benefits and adverse impacts that would occur in EJ populations and the associated mitigation measures:

- **Beneficial Impacts of the RLE Project** - To estimate the extent of the benefits derived from the Preferred Alignment, the analysis in **Table 7-1** provides a comparison of the benefits with regard to the following criteria:
  - Reduced Transit Times
  - Increased Travel Choices
  - Increased Economic Competitiveness
  - Environmental Criteria
- **Resources with Limited or No Adverse Impacts** - The Preferred Alignment would have limited or no adverse impacts in these environmental resource categories **(Chapter 6)**. Because there would be limited or no adverse impacts, there is no potential for disproportionately high and adverse impacts and these categories will not be carried forward for further analysis.
  - Air Quality
  - Water Quality
  - Floodplains
  - Vegetation and Wildlife Habitat
  - Threatened and Endangered Species
  - Geology and Soils
  - Energy
- **Resources with No Adverse Impacts after Mitigation** - The Preferred Alignment would have adverse impacts that would not remain adverse after mitigation measures in the following categories. Because there would be no adverse impacts after mitigation measures, there is no potential for disproportionately high and adverse impacts and these categories will not be carried forward for further analysis. Further details about these impacts are provided in **Chapter 4**.
  - Land Use and Economic Development
  - Historic and Cultural Resources
  - Displacement and Relocation of Existing Uses
  - Hazardous Materials
  - Noise and Vibration
  - Wetlands
  - Safety and Security

Table 7-1: Summary of Benefits

Benefits and Resource Areas	No Build Alternative	Preferred Alignment
Reduced Transit Times	No	Yes
Travel Times Between Stations:[1] 130th to 95th 130th to Jackson	 38 minutes 69 minutes	 15 minutes 40 minutes
Increased Travel Choices	No	Yes
Increased Economic Competitiveness	No	Yes
Land Use and Economic Development	No Impacts	Economic development benefits resulting from the enhanced transit service
Neighborhoods and Communities	No Impacts	Improved mobility, access to parklands and community facilities, access to jobs, possible economic development, community revitalization, new space for community facilities and retail, and direct service to Altgeld Gardens neighborhood
Hazardous Materials	No Impacts	Cleanup and/or removal of contaminated material during construction
Transportation	No Impacts	Public transportation would benefit from expanded rail transit service and rerouted bus service. Pedestrians would benefit from upgraded intersections immediately adjacent to the stations with ADA-accessible curb ramps and replacement of deteriorated sidewalks.

1 No Build travel time is based on a Northbound trip using bus route #34 and transferring to Red Line at 95th/Dan Ryan terminal in AM peak period; it includes bus and rail running times, wait times, and transfer time at 95th terminal. Preferred Alignment travel time includes RLE running time and wait time at 130th Street station. Travel times have been updated since Draft EIS based on 2021 schedules and project engineering.

Resources with Adverse Impacts after Mitigation - As shown in **Table 7-2**, adverse impacts would remain after mitigation measures for the Preferred Alignment in two categories. These adverse effects would not be fully addressed through mitigation measures, resulting in unavoidable adverse effects. Categories with potential adverse effects after mitigation measures are considered for their potential for disproportionately high and adverse effects on EJ populations. They are discussed in more detail in **Section 7.4.2.**

- Neighborhoods and Communities – Permanent Impacts
- Visual and Aesthetic Conditions – Permanent Impacts

Table 7-2: Summary of Potential Impacts after Mitigation

Resource Area	Alternative		Analyze for Potential High and Adverse Impacts on EJ Populations
	No Build	Preferred Alignment[1]	
Transportation	--	No disproportionate adverse impacts after mitigation	No
Land Use and Economic Development	--	No disproportionate adverse impacts after mitigation	No

Resource Area	Alternative		Analyze for Potential High and Adverse Impacts on EJ Populations
	No Build	Preferred Alignment[1]	
Displacement and Relocation of Existing Uses	--	No disproportionate adverse impacts after mitigation	No
Neighborhoods and Communities	--	Permanent: Adverse impact after mitigation Construction: No disproportionate adverse impacts after mitigation	Yes
Visual and Aesthetic Conditions	--	Permanent: Adverse impact after mitigation Construction: No disproportionate adverse impacts after mitigation	Yes
Noise and Vibration	--	No disproportionate adverse impacts after mitigation	No
Safety and Security	--	No disproportionate adverse impacts after mitigation	No
Historic and Cultural Resources	--	--	No
Hazardous Materials	--	No disproportionate adverse impacts after mitigation	No
Wetlands	--	No disproportionate adverse impacts after mitigation	No
Air Quality	--	--	No
Water Quality	--	--	No
Floodplains	--	--	No
Vegetation and Wildlife Habitat	--	--	No
Threatened and Endangered Species	--	--	No
Geology and Soils	--	--	No
Energy	--	--	No
Cumulative	--	--	No

1 Unless noted separately, impacts are stated for both permanent and construction.
"--"= No disproportionate adverse effect before mitigation (no mitigation required).

7.4.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current CMAP TIP. No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

As described in in the Draft EIS, the No Build Alternative would not have any adverse impacts to EJ populations. However, the communities adjacent to the RLE Project are currently underserved by

the CTA rail system compared to many other parts of the City of Chicago, and the No Build Alternative would lack the beneficial increase in livability and economic development that the RLE Project would provide. The No Build Alternative has not had any extensive change since the Draft EIS.

7.4.2 Union Pacific Railroad Alternative - Preferred Alignment

The Preferred Alignment would involve an extension of the Red Line adjacent to existing highway rights-of-way and railroad corridors, from its current endpoint at the 95th Street/Dan Ryan terminal southward to 130th Street, adjacent to the Altgeld Gardens neighborhood. The new Red Line rail service would improve commute times to jobs, provide better transit access to geographically isolated communities, and potentially spur economic development in surrounding neighborhoods. The Preferred Alignment would have permanent adverse impacts on neighborhoods and communities as well as visual and aesthetic conditions. The adverse impacts would occur in the API, which consists entirely of EJ populations.

Neighborhoods and Community Impacts

The Preferred Alignment would have permanent adverse impacts on community character and cohesion that could not be mitigated because the addition of the elevated structure would noticeably alter the character and scale of the residential neighborhoods. Mitigation measures for impacts on community character, including planting additional landscaping (trees), would not be sufficient to offset this permanent impact. The Preferred Alignment would be constructed over two parcels of Fernwood Parkway from 99th Street to 103rd Street between the existing UPRR tracks on the east and Eggleston Avenue on the west, resulting in 4.5 acres of impacts to parks. Impacts would be mitigated through the creation of pocket park sites directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or additional areas based on future coordination at a replacement ratio of 1 to 1, for a total of 4.5 acres of replacement parks. The impacts would not be adverse after mitigation as described in **Chapter 8**. See **Section 4.3** for additional details on mitigation measures for permanent neighborhood and community impacts.

By improving travel time, operation of the Preferred Alignment would improve access to parklands and community facilities within walking distance (½ mile) of the station locations. The Preferred Alignment would greatly reduce travel times between neighborhoods in the vicinity of the RLE Project and would enhance their connection with major job and activity centers to the north. The new transit service and the subsequent increase in pedestrian traffic could attract new businesses to the area and support the growth and enhancement of these neighborhood retail and service nodes. The station would serve as a transit hub that brings additional passengers and visitors to the area, which could further boost economic development. The result would be an overall increase in community livability. The mobility and development impacts of the Preferred Alignment would be beneficial.

Visual and Aesthetic Conditions

The elevated structure would cause adverse visual impacts north of I-57, between 99th Street and the 103rd Street station area, 107th Place near the crossing over the UPRR, at 117th Street and Prairie Avenue, and at the 130th Street station as discussed in **Section 4.4**. Mitigation measures would

reduce the impacts at these locations, but due to the proximity of the elevated structure to residential areas, the impacts would remain adverse despite mitigation. Mitigation measures to reduce visual impacts would include consideration of community input into the appearance of the stations in the final design of the RLE Project. CTA would include landscaping with security prioritized in the detailed landscape design. Based on community input to date, design elements are anticipated to include:

- Replacing/restoring removed vegetation
- Addressing neighborhood plan recommendations
- Creating pedestrian friendly surroundings
- Shielding exterior lighting and/or use of "down lighting" light fixtures to prevent light pollution into nearby residences
- Providing landscaping (trees) as visual screening for the residences located on the west side of Eggleston Avenue north of 103rd Street station
- Planting trees in front of the structure, where space allows, to break sight lines of the 107th Place cross-over and the 130th Street station
- Using good urban design to reduce adverse impact

The impacts would remain adverse after mitigation.

Conclusion

Considering the impacts, mitigation measures, and benefits, the permanent impact under the Preferred Alignment on community character and permanent visual impact would not be appreciably more severe or greater in magnitude than similar effects elsewhere in CTA's rail system. The mitigation measures proposed are similar in nature to those for other CTA projects and have been proposed by CTA consistently in EJ and non-EJ populations alike. The project offers considerable benefits that would accrue to the resident EJ populations. Although the Preferred Alignment would still have adverse impacts on EJ populations, these impacts would not be disproportionately high and adverse. As such, no EJ-specific mitigation measures beyond those identified in **Chapter 4** would be required.

Chapter 8 Section 4(f) Evaluation

Section 4(f) of the USDOT Act of 1966 is a federal law that established requirements for USDOT (including FTA) consideration of publicly owned parks/recreational areas that are accessible to the general public, publicly owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects (49 USC Section 303). This law, commonly known as Section 4(f), is codified in 49 USC Section 303 and 23 USC Section 138 and is implemented by FTA through the regulation 23 CFR Part 774. Additional guidance on the implementation of Section 4(f) may be found in Federal Highway Administration's (FHWA) *Section 4(f) Policy Paper* (USDOT, FHWA 2012). FTA has formally adopted this guidance and this analysis was conducted consistent with this guidance.

Publicly owned park or recreation land would be used as a result of the Preferred Alignment and are further evaluated in this Section 4(f) chapter. Based on the evaluation in the Final EIS, no historic properties would be adversely affected or used by the Preferred Alignment and further Section 4(f) evaluation of historic properties is not required. Historic properties are described within this chapter to provide sufficient documentation that there is no Section 4(f) use of these properties. This chapter summarizes the findings of the Draft EIS and addenda to the *Parklands and Community Facilities Technical Memorandum* (**Appendix M**), the *Historic and Cultural Resources Technical Memorandum* (**Appendix Q**), and the *Section 4(f) Replacement Park Analysis Technical Memorandum* (**Appendix Y**).

8.1 Regulatory Framework

This section describes regulatory framework and requirements under Section 4(f) of the USDOT Act of 1966, as amended by 23 USC § 138 and 49 USC § 303, and its implementing regulations and guidance. It includes information on the definition of "use" under Section 4(f) (**Section 8.1.1**) and the basis of making Section 4(f) determinations (**Section 8.1.2**).

8.1.1 Section 4(f) "Use" Determinations

To determine whether Section 4(f) applies to the Preferred Alignment and as defined in 23 CFR § 774.17, the protected Section 4(f) properties must be assessed to determine whether there would be a "use" of the property as defined in the statute. Per the regulation, use of a protected Section 4(f) property occurs when any of the following conditions are met:

- Permanent Incorporation/Direct Use – A permanent incorporation or direct use of a Section 4(f) property occurs when land is permanently incorporated into a transportation facility. "Permanent incorporation" of a Section 4(f) property would include purchasing part or all of the property for use as right-of-way or for transportation facilities or purchasing a permanent easement for construction or operations. Even small partial acquisitions of Section 4(f) lands are considered permanent incorporation.

- Temporary Use – A temporary use of a Section 4(f) property occurs when there is a short-term use of the property that is considered adverse in terms of the preservation purpose of the Section 4(f) statute.

- Constructive Use – A constructive use of a Section 4(f) property occurs when a transportation project would not incorporate land from the property, but the proximity of the project would result in impacts so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) would be substantially impaired (23 CFR § 774.15).

The definitions of a "Use" under Section 4(f) have not changed since the issuance of the Draft EIS.

8.1.2 Section 4(f) Approval Options

FTA may not approve the use of a Section 4(f) property, unless it determines the following, as defined in 23 CFR § 774.17:

- There is no feasible and prudent alternative to the use of that land and the project includes all possible planning to minimize harm of using the property.

OR

- FTA determines that Section 4(f) use of the property would have a "*de minimis*" impact.

Feasible and prudent standards for evaluating avoidance alternatives to using Section 4(f) property are defined in 23 CFR § 774.17. If it is ultimately determined no feasible and prudent avoidance alternative exists, then the alternative with the least overall harm to Section 4(f) properties must be selected. Seven factors, which are established in 23 CFR § 774.3(c)(1), are used in making a determination of the alternative with least overall harm to Section 4(f) properties.

Alternatively, the requirements of Section 4(f) are satisfied with respect to a Section 4(f) property if it is determined by FTA that a transportation project would have a "*de minimis*" impact on the Section 4(f) property.

A *de minimis* impact is defined in 23 CFR § 774.17 as follows:

- For parks, recreation areas, and wildlife/waterfowl refuges, a *de minimis* impact is one that would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f), and the official with jurisdiction has concurred with this determination after there has been a chance for public review and comment.

- For historic sites, a *de minimis* impact means that FTA has determined, in accordance with 36 CFR § 800, that either no historic property would be affected by the project, or the project would have "no adverse effect" on the property in question. The official with jurisdiction must be notified that FTA intends to make a *de minimis* finding based on its concurrence with the "no adverse effect" determination under 36 CFR § 800. This is usually done in the effect determination letter sent to the official with jurisdiction for their concurrence.

If an alternative is found to use Section 4(f) properties, a *de minimis* finding can be made for direct uses or temporary uses that do not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. The provision allows avoidance, minimization, mitigation, and enhancement measures to be considered in making the *de minimis* determination.

Projects determined to have *de minimis* impacts on Section 4(f) properties may proceed without needing to make a determination that no feasible and prudent avoidance alternatives exist. The officials with jurisdiction must concur in writing with a *de minimis* finding. For parks, recreational areas, or wildlife or waterfowl refuge properties, concurrence from the officials having jurisdiction over the properties is required. For historic sites, concurrence from the State Historic Preservation Office (SHPO) on FTA's "No Adverse Effect" determination is required.

The approval options for Section 4(f) have not changed since the issuance of the Draft EIS.

8.2 Identification of Section 4(f) Properties

The identification of Section 4(f) properties and analyses of use of Section 4(f) properties are based on the findings of the historic and cultural resources analysis (**Section 4.7**, which addresses historic properties), and the neighborhood and community impacts analysis (**Section 4.3**, which addresses parks). The evaluation of properties was also informed by the *2012 Federal Highway Administration Section 4(f) Policy Paper* issued by FHWA and formally adopted by FTA. Worst-case scenario impacts were assumed throughout the environmental analysis for full disclosure of all potential impacts and identification of potential Section 4(f) uses. The identification methods used for the Preferred Alignment were consistent with those described in the Draft EIS.

8.2.1 Historic and Archaeological Resources

CTA has continued the Section 106 consultation process since the issuance of the Draft EIS. As a result of the field investigations and comments received from consulting parties on potentially eligible resources, 21 total resources within the Area of Potential Effect (APE) were identified as eligible for inclusion on the NRHP. As described in **Section 4.7**, no adverse effects on historic properties would occur because of the Preferred Alignment and no mitigation measures would be required.

For historic properties, all properties within the APE and associated with the Preferred Alignment that were found to be listed on the NRHP or eligible for listing are identified in **Section 4.7** in the Historic and Cultural Resources section. **Table 8-1** lists the historic properties identified within the APE and summarizes determinations of Section 4(f) use for the Preferred Alignment. **Figure 4-20** shows the locations of the eligible properties listed in **Table 8-1**.

Table 8-1: NRHP-Eligible Resources in the Area of Potential Effects

Map ID	Address	Description	Assessment of Effect	Section 4(f) Use
1	444 W. 100th Place	Eclectic Neo-Traditional Home	No Adverse Effect	No Use
2	324 W. 104th Street	Fire Department Engine Company 93	No Adverse Effect	No Use
3	351 W. 104th Street	Roseland Pumping Station	No Adverse Effect	No Use
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church	No Adverse Effect	No Use
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home	No Adverse Effect	No Use

Map ID	Address	Description	Assessment of Effect	Section 4(f) Use
6	133-139 E. Kensington Avenue	Former Venetian Hall	No Adverse Effect	No Use
7	11431-11433 S. Michigan Avenue	Commercial	No Adverse Effect	No Use
8	11445-11447 S. Michigan Avenue	Mixed-Use Commercial/Residential	No Adverse Effect	No Use
9	11451 S. Michigan Avenue	Commercial	No Adverse Effect	No Use
10	11452 S. Indiana Avenue	Single-Family Residence	No Adverse Effect	No Use
11	11725 S. Perry Avenue	Scanlan Elementary School	No Adverse Effect	No Use
12	11445 S. State Street	George William Curtis Public School	No Adverse Effect	No Use
13	13100 S. Doty Avenue	Carver Military Academy High School	No Adverse Effect	No Use
14	Multiple	53 Residences Contributing to Altgeld Gardens-Philip Murray Homes (AGPMH) National Register Historic District	No Adverse Effect	No Use
15	13015 S. Ellis Avenue	By The Hand Club, included in (AGPMH) Historic District	No Adverse Effect	No Use
16	13100 S. Ellis Avenue	Grocery / Retail Building, included in AGPMH Historic District	No Adverse Effect	No Use
17	940 E. 132nd Street	Administration / Maintenance Building, included in AGPMH Historic District	No Adverse Effect	No Use
18	975 E. 132nd Street	CYC - Dorothy Gautreaux Child Development Center, included in AGPMH Historic District	No Adverse Effect	No Use
19	941 E. 132nd Street	Children's Building, included in AGPMH Historic District	No Adverse Effect	No Use
20	951 E. 132nd Place	Altgeld Gardens Community Building No. 2, included in AGPMH Historic District	No Adverse Effect	No Use
21	Multiple (Public Housing)	Altgeld Gardens-Philip Murray Homes Historic District[1]	No Adverse Effect	No Use

1 Residences within the APE which contribute to the Altgeld Gardens-Philip Murray Homes Historic District include: 13022 S. Greenwood Avenue, 13030 S. Greenwood Avenue, 13072 S. Greenwood Avenue, 13200 S. Greenwood Avenue, 13240 S. Greenwood Avenue, 13088 S. Ellis Avenue, 13016 S. Ellis Avenue, 13023 S. Ellis Avenue, 13028 S. Ellis Avenue, 13047 S. Ellis Avenue, 13052 S. Ellis Avenue, 13059 S. Ellis Avenue, 13064 S. Ellis Avenue, 13083 S. Ellis Avenue, 13088 S. Ellis Avenue,

13101 S. Ellis Avenue, 13133 S. Ellis Avenue, 13201 S. Ellis Avenue, 13218 S. Ellis Avenue, 13226 S. Ellis Avenue, 13230 S. Ellis Avenue, 13262 S. Ellis Avenue, 13286 S. Ellis Avenue, 13241 S. Ellis Avenue, 13250 S. Ellis Avenue, 929 E 130th Place, 933 E 130th Place, 932 E. 131st Street, 967 E 132nd Place, 1000 E. 132nd Street, 1001 E. 132nd Street, 1008 E. 132nd Street, 1009 E. 132nd Street, 1032 E. 132nd Street, 1033 E. 132nd Street, 1044 E. 132nd Street, 1045 E. 132nd Street, 1068 E. 132nd Street, 1069 E. 132nd Street, 900 E. 133rd Street, 972 E. 133rd Street, 1000 E. 133rd Street, 1008 E. 133rd Street, 1032 E. 133rd Street, 1044 E. 133rd Street, 1068 E. 133rd Street, 901 E. 130th Place, 13029 S. Drexel Avenue, 13053 S. Drexel Avenue, 13065 S. Drexel Avenue, 900 E. 131st Street, 901 E. 131st Street, 13100 S. Ingleside Avenue. Source: JLK Architects

Consistent with the conclusions outlined in the Draft EIS, there would be no permanent incorporation, temporary use, or a constructive use of any of the historic properties under the Preferred Alignment. No historic properties or land would be acquired or used for construction or permanently. As such, the Preferred Alignment would not result in the use of any historic properties protected under Section 4(f).

There are no known archaeological sites within the project APE, as identified in **Appendix Q**. There would be no permanent incorporation, temporary use, or constructive use of any archaeological resources under the Preferred Alignment. Therefore, the Preferred Alignment would not result in the use of any archaeological resources protected under Section 4(f).

8.2.2 Parks, Recreation, and Wildlife /Waterfowl Refuge Resources

No wildlife or waterfowl refuges were identified within a ½ mile of the Preferred Alignment. There would be no permanent incorporation, temporary use, or a constructive use of any wildlife/waterfowl resources; therefore, the Preferred Alignment would not result in the use of any wildlife/waterfowl refuges protected under Section 4(f). This does not represent any change since the issuance of the Draft EIS.

All public parks and recreational properties within 500 feet of the Preferred Alignment and within a ½ mile of the proposed station locations were analyzed for further evaluation of potential Section 4(f) use. **Figure 8-1** and **Figure 8-2** show the locations of these parks. **Table 8-2** lists the parks adjacent to the Preferred Alignment and determinations of Section 4(f) use. As was disclosed in the Draft EIS, there would be no Section 4(f) use of Robert Abbot Park, Fernwood Park, Potter Palmer Park, Kensington Park, George Washington Carver Park, or Beaubien Woods Forest Preserve permanently or during construction. As part of the Supplemental EA, CTA coordinated with FPCC concerning the 130th Street station relocation adjacent to Beaubien Woods Forest Preserve, a Section 4(f) property; however, it was determined that there would be no Section 4(f) use of Beaubien Woods Forest Preserve.

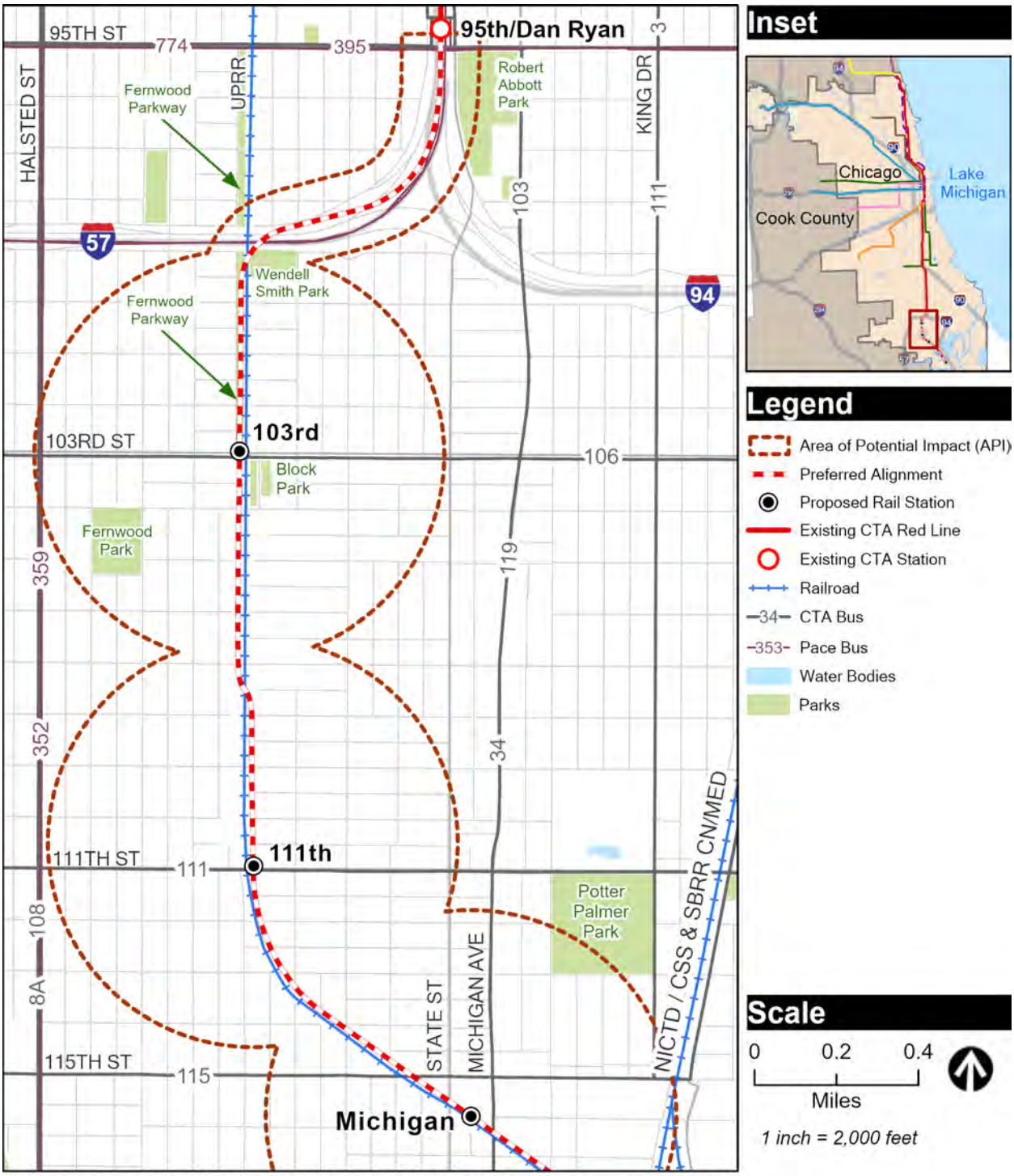

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 8-1: Publicly Owned Park and Recreational Properties Adjacent to the Preferred Alignment (1 of 2)

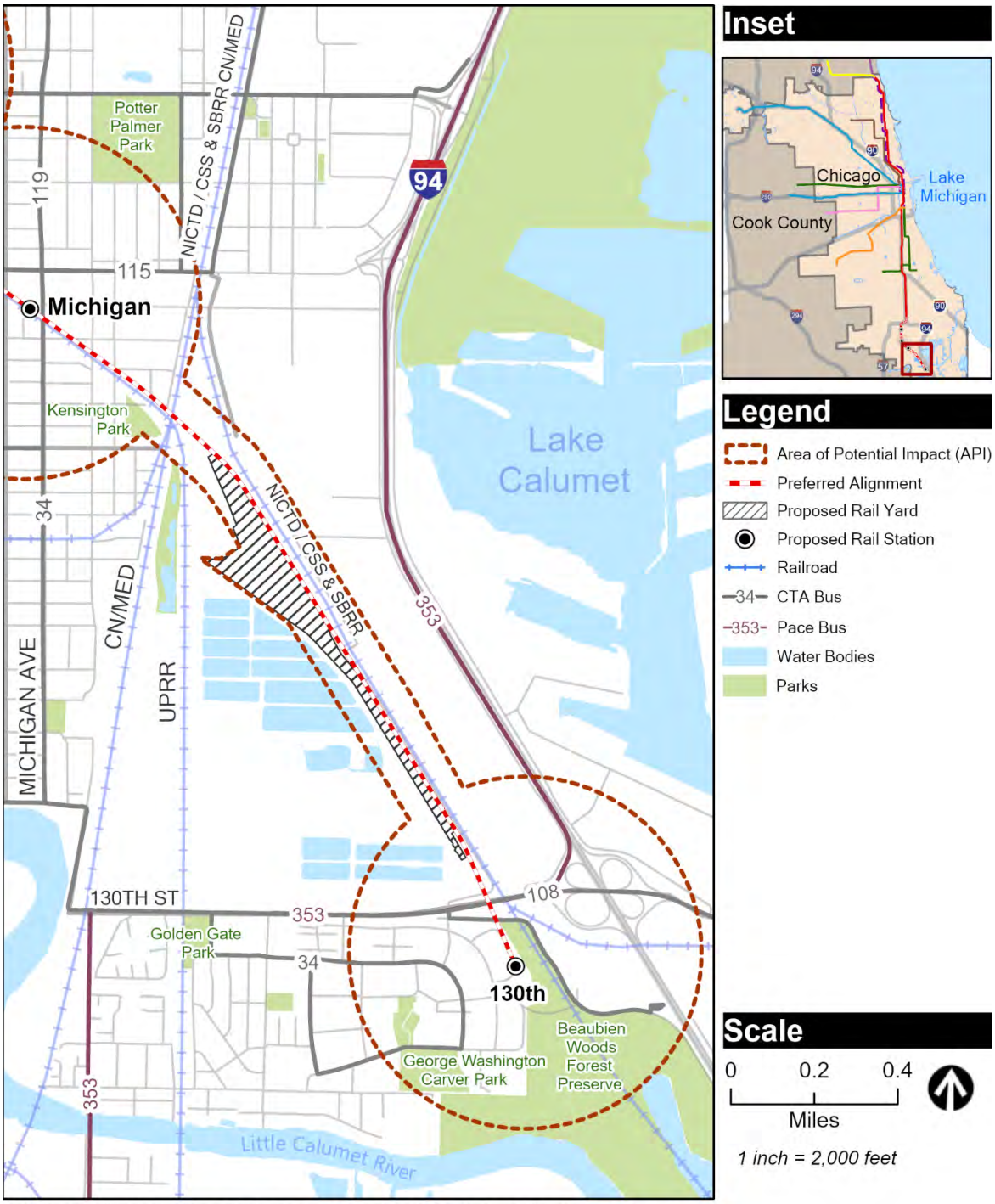

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 8-2: Publicly Owned Park and Recreational Properties Adjacent to the Preferred Alignment (2 of 2)

While the Draft EIS disclosed a Section 4(f) use of Block Park, there would no longer be a Section 4(f) use of this park with the Preferred Alignment. Parks subject to further evaluation since the Draft EIS under Section 4(f) include Wendell Smith Park and Fernwood Parkway. **Section 8-3** provides further details on the determination of Section 4(f) uses of these properties and findings.

Table 8-2: Park and Recreational Properties Evaluated for Section 4(f) Use

Park or Recreational Property Name	Address	Section 4(f) Use
Robert Abbott Park	49 E. 95th Street	No Use
Wendell Smith Park	9912 S. Princeton Avenue	No Use
Fernwood Parkway	9501 S. Eggleston Avenue	*De minimis*
Block Park	346 W. 104th Street	No Use
Fernwood Park	10436 S. Wallace Street	No Use
Potter Palmer Park	201 E. 111th Street	No Use
Kensington Park	345 E. 118th Street	No Use
George Washington Carver Park	939 E. 132nd Street	No Use
Beaubien Woods Forest Preserve	1 W. Doty Avenue	No Use

8.3 Use of Section 4(f) Properties

During construction of the Preferred Alignment, there would be temporary and minor construction activities within Wendell Smith Park for a short duration. These temporary construction activities, further described below, would not constitute a use under Section 4(f) and there would be no permanent use of the park under Section 4(f) as further described in **Section 8.3.1**.

The one Section 4(f) park property that would be used as a result of the project is Fernwood Parkway. The impacts to this 4(f) property are further evaluated in **Section 8.3.2**.

These impacts are not markedly different than those disclosed in the Draft EIS.

8.3.1 Wendell Smith Park

Description and Significance of Property

Wendell Smith Park is in Roseland and is approximately 4.7 acres (340 feet wide by 610 feet long). This park is an actively used facility with basketball courts, baseball fields, a play lot, recreation building, and 0.3 mile of walking trails. The Draft EIS provides a full description and pictures of Wendell Smith Park.

Section 4(f) Use Assessment

Figure 8-3 illustrates the proximity of the Preferred Alignment to Wendell Smith Park. The Preferred Alignment would be elevated over the northwest corner of the City-owned 99th Street right-of-way, which is currently used as Wendell Smith Park property but remains a transportation use and Section 4(f) does not apply. The Chicago Park District was granted usage of the 99th Street right-of-way to expand Wendell Smith Park through a City Ordinance dated December 20, 1989.

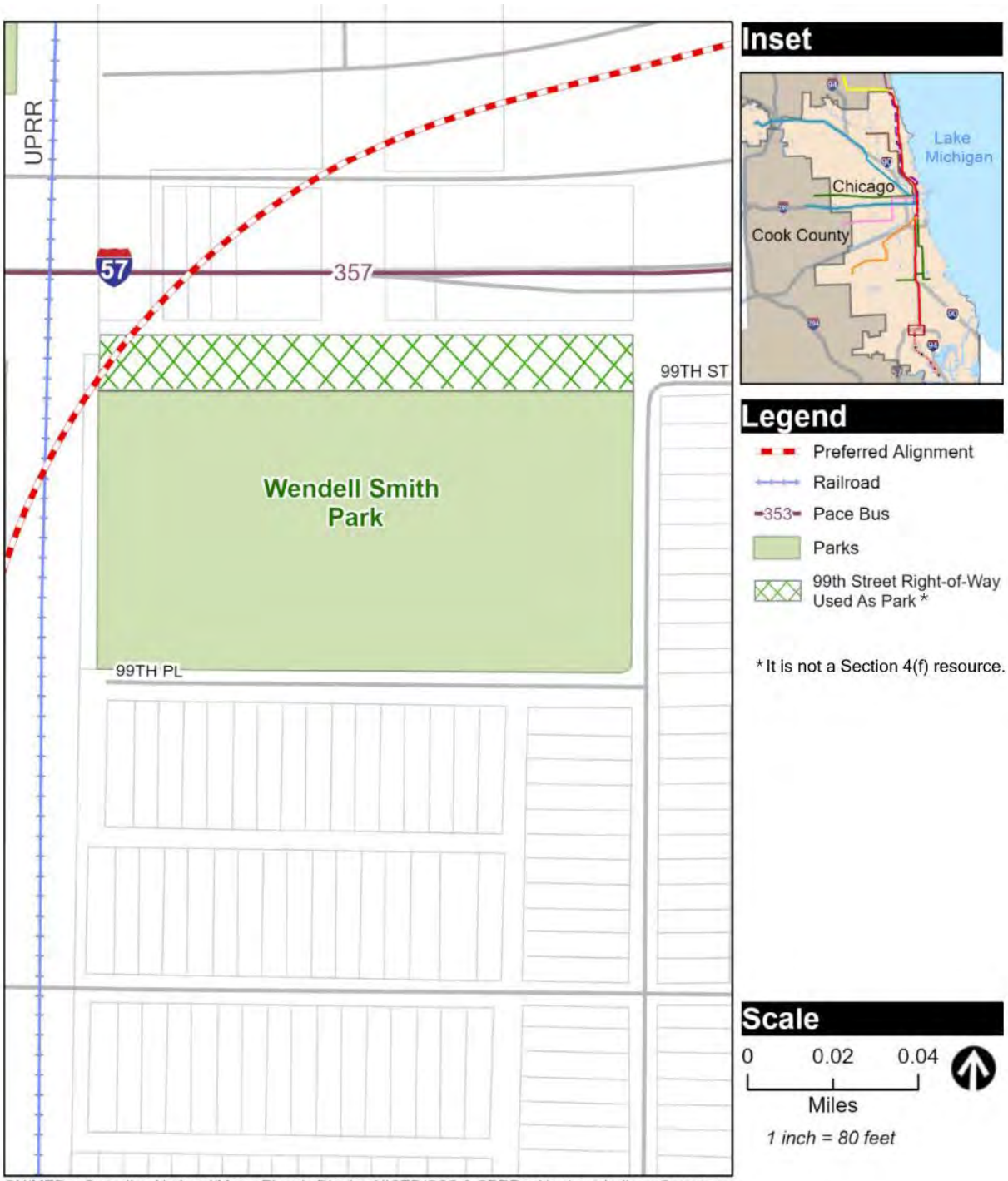

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Figure 8-3: Impacts on Wendell Smith Park

The ordinance prohibits buildings or other structures within the 99th Street right-of-way that would interfere with the use, maintenance, renewal, or reconstruction of public facilities.CTA would need to temporarily close the northwest corner of Wendell Smith Park (approximately 0.1 acre) in order to construct the RLE Project. Public use of the park would continue throughout construction of the project, and construction would not affect the attributes, features, or activities of the park. Based on the discussions between Chicago Park District and CTA about construction activities within the northwest corner of Wendell Smith Park, the Chicago Park District agrees that the construction activities would be considered a temporary occupancy under 23 CFR § 774.13 that is so minimal as to not constitute a Section 4(f) use. The Chicago Park District agrees that CTA meets the temporary occupancy conditions based on the following justification and agree that there would be no use of Wendell Smith Park: 1) The anticipated total closure time that is needed would be considerably less than the total time needed for the construction of the RLE Project. 2) There would be no change in land ownership for Wendell Smith Park. 3) The scope of work includes the placement of piers adjacent to the park right-of-way and the placement of girders for the elevated structure; however, the proximity of the park would require a construction easement for contractor access and the need to clear some trees, this work would be conducted through a required construction permit. 4) There would be no permanent adverse physical impacts, nor would there be a temporary or permanent interference with the activities, features, or attributes of the park. 5) The Chicago Park District would require a construction permit that requires full restoration, and the land would be fully restored to a condition at least as good as that which exists prior to the RLE Project. A letter dated April 19, 2022 from the Chicago Park District regarding the temporary occupancy of Wendell Smith Park for construction activities can be found within **Appendix Y**.

There would be no noise impacts related to operation of the Preferred Alignment after construction of mitigation measures (noise barrier). Trees within the park property would need to be cut to allow for construction activities, and the removal of tress for construction would be mitigated with replacement trees. Appropriate construction best management practices (BMPs) would be followed to shield construction activities, allow use of the property by the general public, and minimize any safety risks. This includes but is not limited to providing a detour for the sidewalks within Wendell Smith Park. During construction of the Preferred Alignment, there would be temporary and minor construction activities within Wendell Smith Park for a short duration. These temporary construction activities would be considered a temporary occupancy under 23 CFR § 774.13 and would not constitute a use of Wendell Smith Park under Section 4(f).

8.3.2 Fernwood Parkway

Description and Significance of Property

Fernwood Parkway is a passive green space in Washington Heights that extends from 95th Street to 103rd Street. The parkway is divided into four parcels, two of which are north of I-57 and two of which are south of I-57. The two parcels south of I-57 are separated by 101st Street. The northern parcel, from 99th Street to 101st Street, is approximately 2.3 acres (75-77 feet wide by 1,321 feet long). The southern parcel, from 101st Street to 103rd Street, is approximately 2.2 acres (75-77 feet wide by 1,293 feet long). Both the north and south parcels of Fernwood Parkway serve as open space and do not contain recreational facilities or amenities such as sidewalks or benches. Some trees are planted

within the park and a chain-link fence separates the green space from the existing at-grade UPRR tracks.

Section 4(f) Use Assessment

The Preferred Alignment track structure would run through the two parcels of Fernwood Parkway between 99th Street and 103rd Street, resulting in 4.5 acres of impacts to Fernwood Parkway. Elevated track structure supports would be placed permanently in the parkway, and the parkway south of 99th Street would be overlapped by the elevated structure and its associated clearances (see **Figure 8-4**). This would result in a permanent incorporation of the park space, which constitutes a use under Section 4(f). Mitigation measures, further discussed below, would be implemented in advance of construction to the extent possible. There would be a direct use of this Section 4(f) property. The UPRR West Option in the Draft EIS only considered the shadow effects of the elevated structure resulting in a permanent incorporation of 1.9 acres of Fernwood Parkway. For the Preferred Alignment, additional coordination with the Chicago Park District defined the impact as not just the shadow effects but the entirety of these two parcels of Fernwood Parkway. Therefore, the UPRR West Option would have also resulted in the same 4.5 acres of impacts to Fernwood Parkway.

All Possible Planning to Minimize Harm

Since the Draft EIS, the Chicago Park District has indicated their focus on fulfilling a need for smaller pocket parks within the communities instead of a single larger park. Community input identified a desire to add pocket parks along Major Taylor Bike Trail in addition to the Washington Heights community area which is directly adjacent to the affected Fernwood Parkway. The Major Taylor Bike Trail is a 35.30-acre park containing over 6 miles of bicycle and pedestrian pathway. Maintained and managed by Chicago Park District, the trail stretches through three Chicago community areas: Washington Heights, West Pullman, and Morgan Park. The Chicago Park District would transfer the two parcels of Fernwood Parkway between 99th Street and 103rd Street to CTA. CTA would, in return, mitigate impacts to Fernwood Parkway through the creation of new pocket park sites. These pocket park sites would be directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or additional areas based on future coordination with Chicago Park District. A combination of already discussed sites or newly identified sites totaling 4.5 acres of Chicago Park District property affected would serve as replacement parks. New park space created through this replacement acreage would include passive recreational space, constructed in accordance with Chicago Park District standards, and facilitate Chicago Park District master planning goals and objectives. Phase I and II environmental site assessments would be conducted on the selected sites prior to acquisition, as required. In addition, CTA would coordinate with the City of Chicago, if needed, to ensure zoning of these parcels is consistent with future park uses by rezoning or receiving appropriate zoning approvals. CTA is actively coordinating with the Chicago Park District regarding impacts to Fernwood Parkway to finalize the locations to replace impacted park lands with lands of reasonably equivalent usefulness and location. After mitigation, there would not be any remaining adverse impacts on park activities, features, or attributes from the RLE Project. **Appendix Y** provides additional information on the selection of these pocket parks and Chicago Park District coordination, including meeting minutes from the meetings with the Chicago Park District that occurred on February 18, May 26, August 25, September 14, and October 22, 2021.

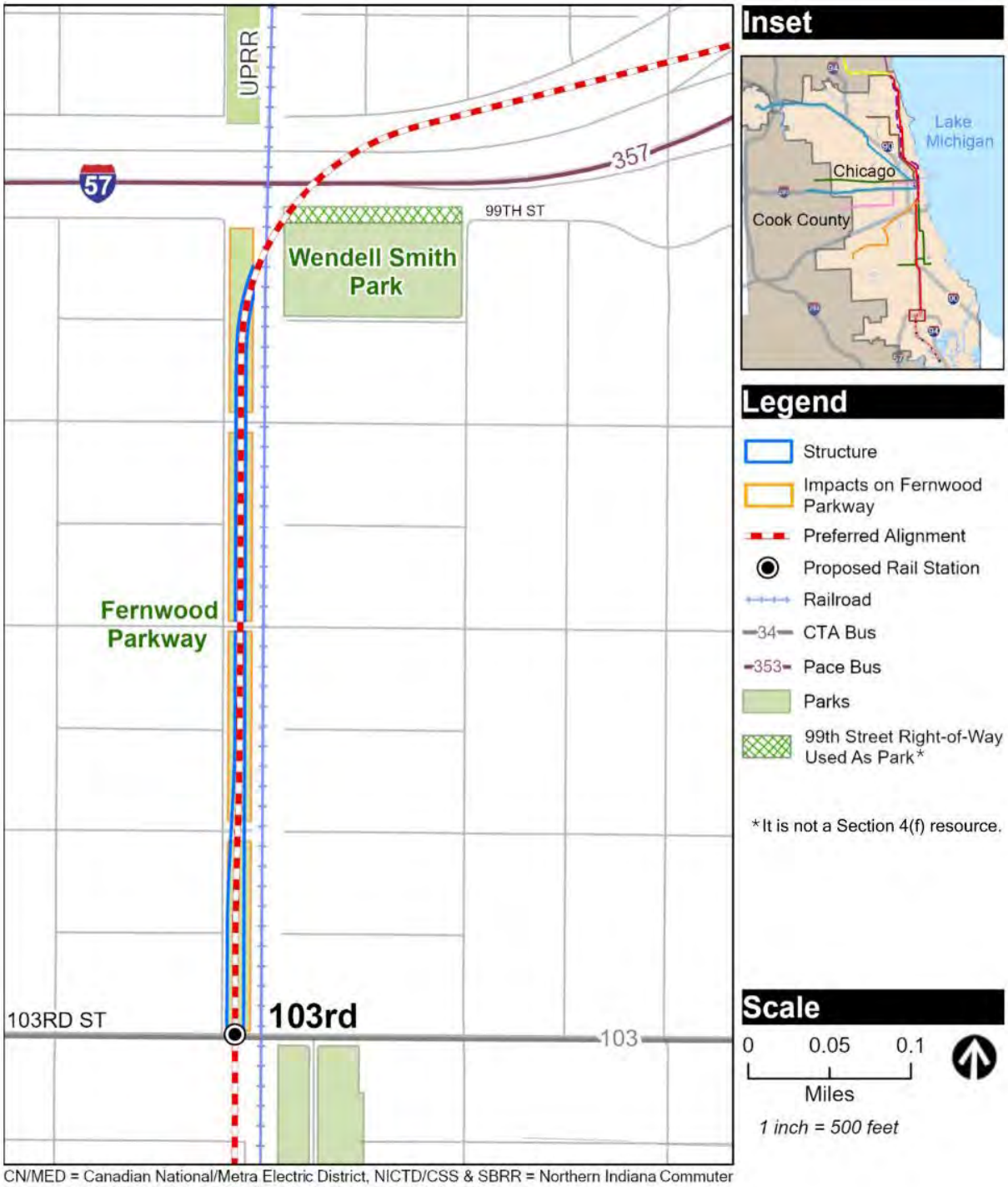

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Figure 8-4: Impacts on Fernwood Parkway

Section 4(f) Finding

Based on consideration of the proposed direct use as well as the mitigation and enhancement measures, no adverse impacts on the attributes, features, or activities would result from the Preferred Alignment; therefore, a *de minimis* finding is documented for this Section 4(f) use in the Final EIS. Landscaping would also be used to minimize visual impacts as discussed in **Section 4.4**. Replacement parkland proposed as mitigation would replace this linear open green space with pocket parks directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or at additional locations based on future coordination with the Chicago Park District. Replacement ratio would be 1 to 1, for a total of 4.5 acres of replacement parks. Replacement parkland consists of vacant parcels of property that are currently owned by the City of Chicago, Cook County Land Bank Authority, or privately owned. No displacements are anticipated for the replacement parkland.

After publication of the Draft EIS and public comments were received, FTA issued a preliminary Section 4(f) determination on August 2, 2017 to the Chicago Park District. The Chicago Park District concurred with the *de minimis* finding in a letter dated September 21, 2017. During development of the Final EIS, coordination continued with the Chicago Park District through the refinement of the Preferred Alignment and a need had been identified to develop pocket parks within communities. Additional coordination was conducted with the Chicago Park District to identify potential pocket park locations adjacent to the Major Taylor Trail or in the Washington Heights community area. CTA and the Chicago Park District coordinated on several potential locations for new pocket parks as discussed in further detail in **Appendix Y**. The Chicago Park District reaffirmed their concurrence with FTA's Section 4(f) *de minimis* finding in their letter dated September 10, 2021 (**Appendix Y**). After further coordination with the Chicago Park District, CTA updated this *de minimis* finding letter to include additional areas based on future coordination with Chicago Park District. This letter was executed by the Chicago Park District on April 19, 2022.

In coordination with the Chicago Park District, CTA would identify and acquire park space totaling 4.5 acres to be used for replacement parks. Prior to acquisition of the park space, CTA would conduct Phase I and II environmental site assessments and obtain environmental clearance on the selected sites, as required.

Chapter 9 Evaluation of Alternatives

After the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project, announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. This chapter presents estimated capital expenditures (e.g., construction costs), and operations and maintenance (O&M) costs associated with the Preferred Alignment, as well as an overview of potential financing and funding opportunities. This chapter evaluates the Preferred Alignment through a comparison to the East and West Options of the UPRR Rail Alternative presented in the Draft EIS, where feasible.

9.1 Potential Capital and Operating Funding Strategies

Capital and O&M costs included in the following analysis reflect the results of planning and engineering completed to date to support the technical analyses in the Final EIS. These costs and potential revenue sources would be refined to reflect more detailed engineering and operational planning that would be conducted as the project moves through FTA's New Starts Project Development process and to reflect changes in available funding sources and financing approaches. CTA will prepare a detailed financial plan to support CTA's request for funding through the FTA Section 5309 Capital Investment Grant (CIG) Program.

Capital costs presented in this chapter are in year of expenditure (YOE) dollars and are estimated by escalating capital costs from 2021 base year dollars. YOE dollars reflect the financial impact of funding that would need to be expended in the actual YOE and the relative effects of inflation on capital costs. Annual and compounded inflation rates and the preliminary implementation schedules are used to project base year dollars to YOE dollars.

9.1.1 Capital Cost Estimate

For the Draft EIS, the base year capital cost estimates were originally prepared in 2013 dollars and then escalated to 2015 base year dollars using the annual and compound annual construction cost growth rates. This estimate was escalated to YOE dollars from 2015 base year dollars using the ENR Construction Cost Index combined with preliminary implementation schedules. Since the publication of Draft EIS, CTA has significantly advanced design and preliminary engineering and refined the cost estimate using this updated project information and unit cost estimate process. The unit cost estimate process is based on more detailed project information such as assessment of labor costs, production rates, equipment used by crew type, and breakout of temporary and permanent materials used. It also incorporates the updated schedule (announced in December 2020), revising the cost escalation for the year of expenditure. The cost estimate takes into account the current inflationary environment. Together, the revised schedule and inflation account for the majority of the change in cost.

Based on the projected annual construction cost growth rates, the total capital cost is estimated to be $3.6 billion (YOE dollars). Between FY 2019-2024, the costs reflect design engineering, right-of-way acquisition, and utility relocation. Construction would occur between FY 2025-2029. Start-up activities, including testing, would occur in FY 2028-2029, and project close-out and remaining

professional services activities, including FTA's Before and After Study requirements, would be completed in FY 2030-2031. Additionally, for the YOE analysis, CTA escalated capital costs from 2019 base year dollars using the Producer Price and Consumer Price indices as of February 2022. The percent of construction activities expected to be completed by year was used to estimate the annual capital costs over the FY 2019-2030 period. As the Preferred Alignment moves through FTA's Project Development process, this implementation schedule will be revised to reflect future federal approvals, detailed engineering, and funding availability.

9.1.2 Potential Capital Funding Sources and Financing Options

The potential funding sources and financing mechanisms described below reflect an initial list that could support the implementation of the Preferred Alignment. At this stage of Project Development, the preliminary funding plan for the project assumes up to a 60 percent contribution from the FTA Section 5309 CIG program (New Starts) towards the total project cost, and the remainder of the funding from non-CIG sources. The funding plan would continue to evolve in 2022 in advance of the Entry into Engineering submittal to FTA.

Potential Capital Funding Sources

Below are summary descriptions of the Section 5309 CIG Program and potential traditional and innovative approaches under consideration to fund the non-New Starts share or local share of the total project cost. As the Preferred Alignment continues through the FTA Project Development phase, CTA would determine the specific sources and levels of funding to cover the non-CIG project cost share. This is consistent with CTA's traditional project implementation approach of working with the public and key stakeholders to request funds after determining and communicating the Preferred Alignment.

- FTA Section 5309 CIG Program (New Starts) - CTA intends to seek CIG funding from FTA under the federal New Starts program. The CIG program, more commonly known as the New Starts, Small Starts, and Core Capacity Program, involves a multiyear, multistep process that project sponsors must complete before a project is eligible for a grant award. The steps in the process and the basic requirements of the program can be found on FTA's website at www.fta.dot.gov.

  FTA must evaluate and rate proposed projects seeking funding from the CIG program on a set of project justification and local financial commitment criteria specified in law. The criteria evaluate the merits of the project and the ability of the project sponsor to build and operate the project as well as the existing transit system. FTA assigns ratings from low to high based on information that project sponsors submit on the project cost, benefits, requested amount of CIG funds, and overall financial plan. Projects must receive a medium or better overall rating to advance through the steps in the process and be eligible for CIG funding. As projects proceed through the steps in the process, information concerning costs, benefits, and impacts is refined and the ratings are updated to reflect new information.

  As stated above, the financial analysis that informs the Final EIS assumes that CTA would pursue CIG funding through a New Starts Full Funding Grant Agreement (FFGA) of up to approximately 60 percent of the total project cost.

- Other Federal Funding Programs - In addition to the proposed New Starts funding, CTA could pursue the use of other federal funding (non-CIG) programs to support implementation of the Preferred Alignment. The total federal funding share for the project (New Starts plus other federal funding programs) cannot exceed 80 percent. The other federal funding program under consideration include the Federal Highway Administration (FHWA) programs listed below:
    - FHWA Funding - Funding from these programs would be eligible to be "flexed" (transferred) to FTA to support implementation of transit capital investment projects. These funds are programmed by Chicago Metropolitan Agency for Planning (CMAP) and would require adoption in the Long Range Transportation Plan and TIP to be used to fund a portion of the Preferred Alignment's capital costs as described below::
        - The Congestion Mitigation and Air Quality Improvement (CMAQ) program is a federally funded program of surface transportation improvements designed to fund several types of surface transportation projects that improve air quality and mitigate congestion.
        - The Surface Transportation Block Grant (STBG) Program is a flexible federal funding stream that can be used for transit capital projects, among other eligible project types. A portion of the STBG allocated to the Chicagoland region is distributed competitively as the STP-Shared Fund, in order to support larger-scale regional projects that align with the goals and priorities of the regional long-range plan, ON TO 2050.
        - In October 2021, the CMAP Board and MPO Policy Committee approved the FFY 2022 – 2026 CMAQ program and the locally programmed Transportation Alternatives Program (TAP-L), as well as a FFY 2022-2026 STP Shared Fund program. Subsequently, FHWA and FTA found the projects included in the programs met federal eligibility requirements of the programs. The approved CMAQ program included $30,000,000 in federal funds for the CTA RLE Project.
        - CTA will work with CMAP to determine whether other federal funding could be 'flexed' to transit in support of RLE, including any new programs developed under the Bipartisan Infrastructure Law.
- State Funds - Historically, the State of Illinois has provided funding assistance for CTA's major capital improvement projects. As the Preferred Alignment moves through the Project Development phase, CTA would work with State leaders to potentially include the project in future transportation funding packages.
- Local Funds - As part of the future detailed financial plan, CTA would evaluate opportunities to leverage potential local revenue sources, including a special Transit Tax Increment Financing (TIF) district. On June 30, 2016, the Illinois General Assembly approved a modified form of TIF, known as Transit TIF, to raise local revenues to fund the following four major transit improvements in Chicago and adjacent municipalities: the RLE Project, the Red-Purple Modernization (RPM) Program, Union Station improvements, and the Blue Line Modernization Project. These new areas are referred to as Transit Facility Improvement Areas (TFIA) and

would use incremental property tax revenue to fund improvements. A TFIA as defined in the legislation is an area whose boundaries are no more than a ½ mile in any direction from the location of a mass transit facility. The TIF district for a TFIA will have a 35-year life. The designation of the RLE Transit TIF is targeted for December 2022.

Traditional and Innovative Financing

Below is an overview of traditional federal and local financing mechanisms. A source(s) of funding would be required to repay these potential financing mechanisms. CTA is working with partners to evaluate a variety of potential new revenue sources and/or expansion of existing revenue sources that would support transportation improvements throughout the region. The potential sources could include new or increased levels of State, County, and local taxes, as well as potential value capture mechanisms such as Transit TIF.

- CTA Bonds - CTA's existing debt financing is composed primarily of four different types of long-term bonds: Sales and Transfer Tax Receipts Revenue Bonds, Sales Tax Receipts Revenue Bonds, Building Revenue Bonds, and Capital Grant Receipts Revenue Bonds. As the project moves forward, CTA would determine the most appropriate bonding mechanism to provide local support for the non-CIG share of funding required for the project. The current Project Development phase is funded in part by CTA bonds.

- Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan – Through USDOT, TIFIA provides federal credit assistance (financing) for eligible projects of regional and national significance. TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar financing instruments. TIFIA can help advance qualified, large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues. Given the flexible repayment terms and favorable interest rates, TIFIA finance has become an increasingly popular financial tool for transportation agencies.

  In April 2014, CTA was successful in obtaining CTA's first TIFIA Loan of $79.2 million for the 95th/Dan Ryan terminal improvement project. In 2015, CTA entered a second $120 million TIFIA agreement to support the Your New Blue Program. In 2016, CTA entered a third TIFIA loan for $254.9 million in funding as part of the project to purchase 400 new 7000-Series railcars. CTA is seeking its fourth TIFIA loan as part of the funding the RPM Phase One Project.

9.1.3 Operating Cost Estimates

The RLE Project O&M Cost Model Methodology technical memorandum, under separate cover, documents the methodology used to develop the O&M cost model for the RLE Project to inform planning, budgeting, and FTA New Starts application efforts. An overview of the O&M cost model and the latest model results are included below.

Model Overview

The cost model uses a cost per unit of service derived from 2020 actual CTA operating expenses. The model incorporates project-specific and CTA system-wide service, and infrastructure-related "cost driver" statistics for year 2020 in alignment with CTA 2019 General Ledger operating cost data.

Incremental RLE Project Scenario

Once the O&M model is calibrated to reflect existing system-wide conditions, scenarios can be tested in which one or more cost driver units are changed to reflect the project. The Incremental RLE Project Scenario (also referred to as the "Recommended Bus+RLE" scenario in the RLE Project O&M Cost Model Methodology technical memorandum) adds RLE Project-specific cost drivers to the existing CTA system, applying the new combined total system cost drivers to the system-wide unit costs to determine the annual system-wide O&M cost, and the incremental cost specifically attributable to the project.

Project cost drivers and other quantities are subject to further refinement as the project advances through the FTA Project Development and Engineering phases. Therefore, the cost model reflects a "snapshot" of the best available data at the time of model update, including the following assumptions and project-related inputs:

In the Incremental RLE Project Scenario, rail revenue-hours, revenue-car-miles, peak trains, and peak railcars are estimated based on the assumption that all existing Red Line trips will be extended the full length of the project corridor, operating the full length of Red Line between Howard station and 130th Street station, with no "short turns" or other atypical service patterns. Detailed timetables are still to be developed and the precise service statistics are subject to change.

The Incremental RLE Project Scenario incorporates bus service statistics based on bus service recommendations developed for the RLE Project. Detailed timetables are still to be developed and the precise service statistics are subject to change.

Design and preliminary engineering are underway and will result in refinements to project-specific inputs such as track-miles, station and platform area, manned entrances, and elevators/escalators. The design could also result in slight revisions to the running time which would impact revenue-hours.

2020 Model Results

The CTA O&M model was updated in early 2022 using 2020 data. The 2020 annual incremental O&M cost of the project is estimated at $32.7 million (2020 dollars). This represents an increase of approximately 2.1 percent over the existing 2020 total System O&M cost of $1.538 billion, resulting in a new total System O&M cost of $1.571 billion.

These estimates are subject to change as service planning, design and preliminary engineering, and other decision-making evolves for the RLE Project.

9.1.4 Potential Operating Revenue Sources

CTA anticipates the use of the following system-generated and public funding sources to fund the O&M costs of the Preferred Alignment as well as system-wide rail and bus operations:

- System-Generated Revenues – Includes fares and passes; reduced fare subsidy; advertising, charters, and concessions revenues; investment income revenue; statutory required contributions from the City of Chicago and Cook County; and other revenues includes parking charges, rental revenue, third-party contractor reimbursements, and filming fees, among other income sources.

- Public Funding - The amount of public funding available for CTA operations is determined by the Regional Transportation Authority. Public funding has three sources: sales tax revenue, public transportation funds, and the real estate transfer tax. The three funding sources are authorized under Illinois statutes passed in 1983 and 2008.

9.2 Comparison of Alternatives

This section summarizes information from the other chapters of the Final EIS, including project benefits, potential to meet purpose and need goals, environmental impacts, and costs.

9.2.1 Evaluation Goals and Criteria

CTA used the following evaluation goals and criteria to compare the benefits and drawbacks of the East and West Options in the Draft EIS and has evaluated the Preferred Alignment in the same manner for the Final EIS. These goals reflect CTA's desire to provide enhanced transit service and promote economic development throughout the communities surrounding the RLE Project in a fiscally sound manner while minimizing adverse environmental impacts. For each goal, this evaluation applied the criteria listed below to determine the extent to which the Preferred Alignment would meet that goal.

These goals are based on the purpose and need (**Appendix D**), the AA process (**Appendix A**), comments received during scoping and public involvement for the Draft EIS and Supplemental EA (**Appendix C**), and the environmental analyses in **Chapters 3–8** of the Final EIS. The Draft EIS defined the greater 20 square mile project area, referenced in the goals below, and it encompasses the entirety of the areas of potential impacts (API) defined and evaluated in the Final EIS.

Goal 1 - Reduce Transit Times

Goal 1 is evaluated based on the following criteria:

- Reduce transit times for residents, from within and south of the project area to the 95th/Dan Ryan terminal and the Loop.

- Provide direct access to the CTA rail system for transit-dependent populations.
    - New stations convenient to transit-dependent communities
    - Direct service to public housing such as Altgeld Gardens

Goal 2 - Increase Travel Choices

Goal 2 is evaluated based on the following criteria:

- Provide better transit access to regional employment centers and local commercial areas.
- Allow for potential connections to other public transportation modes including regional commuter rail.
- Reduce geographic isolation of the project area and improve connections to major activity centers.
- Provide opportunities for drivers commuting on expressways to park and use transit to complete their trips.
    - Number of stations with park & ride facilities
    - Total park & ride spaces

Goal 3 - Increase Economic Competitiveness

Goal 3 is evaluated based on the following criterion:

- Foster economic development in the project area by providing stations that can encourage nearby development.

Goal 4 - Minimize Environmental Impacts

Goal 4 is evaluated based on minimizing environmental impacts:

- Displacement and Relocation Impacts
- Noise Impacts
- Park Impacts
- Community Character Impacts
- Visual and Aesthetic Impacts

Goal 5 - Provide the Best Value

Goal 5 is evaluated based on the following criteria:

- Projected ridership
- Capital costs to construct the project
- Changes in operating and maintenance costs for the system

9.2.2 Evaluation Results

Table 9-3 provides specific measurements for the goals identified in **Section 9.2.1** and compares the extent to which the No Build Alternative and the Preferred Alignment would meet the goals.

Table 9-3: Comparative Evaluation of Alternatives

Criteria	No Build Alternative	Preferred Alignment
Goal 1 - Reduce Transit Times		
Travel Times Between Stations[1] 130th Street to 95th/Dan Ryan terminal 130th Street to Jackson Station (Loop)	 38 minutes 69 minutes	 15 minutes 40 minutes
Would the proposed stations serve transit-dependent communities?	No	Yes
Would there be new direct service to Altgeld Gardens?	No	Yes
Goal 2 - Increase Travel Choices		
Would there be better access to regional employment centers and local commercial areas?	No	Yes
Would potential connections to other public transportation modes in the communities adjacent to the RLE Project be possible?	No	Yes
Would geographic isolation be reduced?	No	Yes
How many stations would have park & ride facilities?	0	4 of 4
Total park & ride spaces	0	Up to 1,340
Goal 3 - Increase Economic Competitiveness		
Could nearby development be encouraged?	No	Yes
Goal 4 - Minimize Environmental Impacts		
Displacements and Relocations Properties Buildings	 0 0	 228 97
Noise Impacts After Mitigation Receivers with Moderate Noise Impacts (before mitigation/after mitigation) Receivers with Severe Noise Impacts (before mitigation/after mitigation)	No change 0 0	Not adverse 278/15 91/0
Park Impacts (Not Adverse After Mitigation) Construction Phase Permanent Permanent (acres)	 0 parks 0 parks 0 acres	 1 park 1 park 4.5 acres
Would there be community impacts after mitigation?	No	Yes

Criteria	No Build Alternative	Preferred Alignment
Would there be visual and aesthetic impacts after mitigation?	No	Yes
Goal 5 - Provide the Best Value		
Projected Ridership (per weekday) [2]	0	41,500
Capital Costs (in Billions, YOE)	$0	$3.6
Annual Change in O&M Costs (in Millions)[3]	No Change	$32.7

1 No Build travel time is based on a Northbound trip using bus route #34 and transferring to Red Line at 95th/Dan Ryan terminal in AM peak period; it includes bus and rail running times, wait times, and transfer time at 95th terminal. Preferred Alignment travel time includes RLE running time and wait time at 130th Street station. Travel times have been updated since Draft EIS based on 2021 schedules and project engineering.
2 Ridership is based on Simplified Trips-on-Project Software (STOPS) ridership model output projecting 2040 ridership.
3 O&M = Operations and maintenance. Difference from No Build Alternative shown in 2020 dollars

Based on the criteria above, the Preferred Alignment would meet the identified goals. The sections below provide further discussion of the evaluation in the context of the East and West Options evaluated in the Draft EIS in addition to the Preferred Alignment in the Final EIS for comparison.

Goal 1 - Reduce Transit Times

Under the No Build Alterative, transit times in the vicinity of the RLE Project would remain the same. The East Option, West Option, and Preferred Alignment would reduce transit travel times between the communities surrounding the RLE Project and destinations along the existing CTA rail system because it would extend the Red Line southward from the 95th/Dan Ryan terminal, with no transfer at the 95th/Dan Ryan terminal required. The East Option, West Option, and Preferred Alignment would include new stations in transit-dependent communities, which would provide residents with more mobility and better access to jobs and services. The 130th Street station would serve the residents of Altgeld Gardens among all alternatives; however, the Preferred Alignment would provide more direct access because the 130th Street station would be within the Altgeld Gardens neighborhood rather than north of 130th Street as was the case for the East and West Options. The East Option, West Option, and Preferred Alignment would provide enhanced mobility, particularly for residents who do not have access to a car and would allow them easier access to regional employment and activity centers. The Preferred Alignment would provide 29 minutes of time savings to riders traveling from 130th Street station to the Loop.

Goal 2 - Increase Travel Choices

The No Build Alternative would not provide any transit service improvements and would therefore not increase travel choices in the vicinity of the RLE Project. The East Option, West Option, and Preferred Alignment would provide transit service to the communities adjacent to the RLE Project and would provide better transit access to regional employment centers and local commercial areas. The East Option, West Option, and Preferred Alignment would serve geographically isolated neighborhoods and improve their connections to regional job centers. The Preferred Alignment would provide closer, more direct pedestrian access from the Altgeld Gardens neighborhood to 130th Street station due to proximity. With the extension of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations. All stations would include park & ride facilities for motorists wishing to park their cars and complete their trips using transit. These facilities would potentially attract motorists from the nearby expressways and give project area residents and residents from the south suburbs of Chicago more options for accessing the enhanced

transit service. The RLE Project would result in a 46 percent increase in newly accessible jobs within an hour commute of the RLE project area. Many colleges and universities offer classes and job training programs at night.

Goal 3 - Increase Economic Competitiveness

The new stations could serve as catalysts for development and neighborhood revitalization. Concurrent with the Final EIS, CTA developed a Transit-Supportive Development (TSD) Plan based on the community's vision for future development on the RLE corridor. By providing new, high-quality transit service to communities that have experienced long-term disinvestment, the East Option, West Option, and Preferred Alignment could encourage improvement of local economic conditions for residents of those communities in the vicinity of the RLE Project. However, the Preferred Alignment would offer the greatest potential for development near the 130th Street station. In 2017, after publication of the Draft EIS, CHA demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks which would provide numerous benefits over the location proposed in the Draft EIS, namely transit-supportive development. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project.

Goal 4 - Minimize Environmental Impacts

The No Build Alternative would not have any environmental impacts, but also would not improve transit service in the communities adjacent to the RLE Project; therefore, it would not fulfill the purpose and need of the RLE Project. The East Option, West Option, and Preferred Alignment would have greater environmental impacts than the No Build Alternative but would fulfill the purpose and need of the project. Mitigation measures to address the potentially adverse impacts are included in **Chapters 3–8**.

The East Option, West Option, and Preferred Alignment would require displacements along their proposed alignments. In the Draft EIS, based on conceptual design, the East Option would require 106 building displacements, most of which would be residential, and the West Option would require 46 building displacements, which would be a mix of residential, commercial, and industrial. However, the Preferred Alignment development has advanced through 30 percent design including substantial design refinements. Based on 30 percent design, the Preferred Alignment would require 97 building displacements, which would be a mix of residential, commercial, and industrial. Noise-sensitive receivers along the East and West Option alignments and the Preferred Alignment would have moderate and severe noise impacts before mitigation. Under the East Option, 574 noise-sensitive receivers would have moderate impacts, and 83 noise-sensitive receivers would have severe impacts. Under the West Option, 738 noise-sensitive receivers would have moderate impacts, and 49 noise-sensitive receivers would have severe impacts. Under the Preferred Alignment, 278 noise-sensitive receivers would have moderate impacts, and 91 noise-sensitive receivers would have severe impacts. Under both the East and West Options, CTA would construct a noise barrier along both sides of the elevated track structure from the 95th/Dan Ryan terminal to the CN/MED tracks near 119th Street, to reduce noise to levels below FTA noise impact criteria. Impacts would not be severe after mitigation. Under the Preferred Alignment, CTA would construct a noise barrier at a minimum height of 3.5 feet above the top-of-rail elevation and has reduced the

lineal extent of the noise barriers along the corridor from approximately 40,000 feet to approximately 33,600 feet by more closely evaluating the locations of noise sensitive receivers where impacts would actually be mitigated by the placement of noise barriers. Noise walls also perform a secondary function related to worker and emergency evacuation safety.

The East and West Options and the Preferred Alignment would all affect parks in the API. The East Option would have permanent and construction impacts on Wendell Smith Park and Block Park. The West Option would have construction impacts on Wendell Smith Park and permanent impacts on Fernwood Parkway. The Preferred Alignment would have similar construction impacts on Wendell Smith Park and permanent impacts on Fernwood Parkway as estimated for the West Option. The West Option and the Preferred Alignment would require the elevated structure to be built above Fernwood Parkway between 99th and 103rd Streets. The East Option would permanently affect 1.6 acres of parkland, and the West Option and Preferred Alignment would permanently affect 4.5 acres of parkland.

The placement of new elevated structures and park & ride facilities into existing communities would result in community character impacts that would remain adverse after mitigation under the East and West Options and the Preferred Alignment. The East Option would have adverse impacts on community character and cohesion despite mitigation because the elevated structure would noticeably alter the character and scale of the residential neighborhood north of I-57 in Roseland and near 117th Street and Prairie Avenue in West Pullman. The West Option would have adverse impacts on community character and cohesion despite mitigation because the elevated structure would noticeably alter the character and scale of the residential neighborhood north of I-57 in Roseland and between 99th and 103rd Streets in Washington Heights, near the 103rd Street station in Washington Heights, and near the Michigan Avenue station park & ride facility in West Pullman. Similarly, the Preferred Alignment would have adverse impacts on community character and cohesion despite mitigation because the addition of the elevated structure would noticeably alter the character and scale of the residential neighborhoods. Similarly, the 130th Street station, particularly the four-level parking garage, would noticeably alter the character of the Altgeld Gardens neighborhood for the residences that front on Greenwood Avenue.

Both the East and West Options would have adverse visual impacts despite mitigation. Under the East Option, the elevated track structure would create an adverse visual impact north of I-57 and at the intersection of 117th Street and Prairie Avenue. As part of the West Option, the elevated track structure would create an adverse visual impact north of I-57 and between 99th and 103rd Streets, and at the 103rd Street station. The Preferred Alignment would also have adverse visual impacts despite mitigation because the elevated track structure would create an adverse visual impact north I-57 and between 99th Street and the 103rd Street station area, at the 107th Place cross-over, 117th Street and Prairie Avenue and at the 130th Street station.

Goal 5 - Provide the Best Value

The East Option, West Option, and Preferred Alignment have negligible differences between the ridership, capital costs, and O&M costs. The Preferred Alignment maximizes the benefits and reduces the impacts of the East and West Options, as previously described throughout this Final EIS. CTA developed the Preferred Alignment in this Final EIS to meet Goals 1–4 described above and to meet the goals in a cost-efficient manner.

Chapter 10 Public and Agency Coordination

This chapter and the *Agency Coordination and Public Involvement Appendix* (**Appendix C**) document outreach activities that FTA and CTA have undertaken for the RLE Project. **Chapter 10** focuses on the outreach conducted since the publication of the Draft EIS in 2016 through the development and announcement of the Preferred Alignment in 2018 and the publications of the Supplemental EA, and this Final EIS in 2022. A summary of activities is provided in the following sections.

10.1 Public Participation Plan

Extensive public outreach was conducted for the RLE Project during the Draft EIS process. CTA updated the Public Participation Plan (PPP) to build on the public outreach activities conducted during that process. The PPP outlines the goals and activities for stakeholder and public outreach during the Project Development phase, which includes the Final EIS and Preliminary Engineering. In addition, the PPP educates stakeholders and project team members on project goals and deliverables. CTA applied the framework established in the PPP to guide the engagement of stakeholders and the public. The PPP is a dynamic document that will continue to be revised and updated, as necessary, through the engineering phases of the RLE Project.

The goals of the PPP are:

- Build on project outreach conducted during the Draft EIS process.
- Inform key stakeholder groups and the public of the project's status, impacts, benefits, and progress towards completion.
- Ensure dialogue is maintained with affected parties.
- Provide project information and updates to stakeholders and the public through a range of activities.
- Provide information and updates regarding the project timeline, including construction and start-of-service estimates, as well as project funding.
- Ensure the area's diverse population, including Limited English Proficiency (LEP) and Environmental Justice (EJ) populations are included in the process.
- Encourage and inform stakeholders to become or remain supporters of the project.
- Provide information to and coordinate with displaced property owners and renters.

The PPP, originally created in August 2012 to guide public involvement and outreach process for the Draft EIS, builds upon the substantial public outreach activities conducted during the Draft EIS. It outlines outreach methods through the completion of the Supplemental EA and the Final EIS, as well as adapted approaches and guidelines for public participation during the COVID-19 pandemic when social distancing was required or in-person gatherings were not allowed. CTA

recognizes that as social distancing requirements are adjusted or lifted, individuals may still feel uncomfortable or unsafe gathering in groups. The most current version of the PPP is provided in **Appendix C**.

10.2 Agency Coordination

CTA continues to coordinate with agencies for this project. Coordination with the agencies continued since the publication of the Draft EIS, through the Supplemental EA and Final EIS processes as described throughout **Chapters 3** and **4** and documented in the appendices of the Final EIS. CTA continued to coordinate with the cooperating and participating agencies since the Draft EIS. The list of cooperating and participating agencies can be found in **Chapter 14** of this Final EIS. Outreach efforts were conducted in compliance with NEPA and other applicable regulations, including Section 106 of the NHPA, Section 4(f) of the USDOT Act of 1966, joint guidance and regulations from FTA and Federal Highway Administration, and other agency regulations and guidance. After publication of the Draft EIS, agency comments were received, and CTA provided direct responses to those comments. The agency comment response correspondence is provided in **Appendix C**.

Agency and public comments contributed to the development and evaluation of the Preferred Alignment. As described in **Chapter 2**, the Preferred Alignment is a hybrid of the UPRR East and West Options disclosed in the Draft EIS. After publication of the Draft EIS, public and agency comments were considered, and design changes were made to the RLE Project. Agency and public comments continued to influence the modification of the Preferred Alignment through design refinements as documented in the response matrix provided in **Appendix C** and discussed further in **Section 10.3**. Ongoing agency coordination and formal comments received from publication of the Supplemental EA continued to influence the modification of the Preferred Alignment through design refinements and project mitigation. Supplemental EA agency comments and response correspondence are also available in **Appendix C**. Agency coordination has been ongoing since the Draft EIS publication in 2016 and through 2022 with the development of the Final EIS. CTA has worked with agencies to obtain concurrence on resource impacts and collaborate on RLE Project mitigation measures.

10.2.1 Section 106 Coordination

The Section 106 consultation process established as part of the Draft EIS has been followed for the design changes presented in the Supplemental EA and the Final EIS. CTA and FTA sent letters to 22 consulting parties. All correspondence is provided in *the Historic and Cultural Resources Technical Memorandum* (**Appendix Q**). FTA and CTA sought information from individuals and organizations likely to have knowledge of local potential resources. Details of the consulting parties contacted can be found in **Appendix Q**. Consultation meetings focused on project design changes since the previous consultation that was conducted during the Draft EIS, which included updates to the APE, eligibility review, and effects discussions. For the Final EIS, in conjunction with the concurrent Supplemental EA coordination, the first consulting party meeting was held February 18, 2021. The second consulting party meeting was held on June 30, 2021. **Appendix Q** contains copies of correspondence and Section 106 consultation materials.

10.2.2 Tribal Coordination

Since the publication of the Draft EIS, FTA continued coordination with Native American tribes through project updates as part of the Section 106 consultation process to provide an opportunity to share potential cultural and/or religious concerns associated with the RLE Project or express support. FTA sent letters to the following tribal consulting parties on January 26, 2018 to inform them of the selection of the Preferred Alignment:

- Citizen Potawatomi Nation
- Ho-Chunk Nation
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- Potawatomi Nation Hannahville Indian Community
- Prairie Band of Potawatomi Nation
- Sac and Fox Nation of Missouri
- Sac and Fox Nation of Oklahoma

FTA sent invitation letters to the following new tribal consulting parties on November 25, 2020:

- Kickapoo Tribe of Oklahoma
- Little Traverse Bay Bands of Odawa Indians, Michigan
- Menominee Indiana Tribe of Wisconsin

Native American tribes have not expressed any concerns regarding the RLE Project. Coordination with the tribes is ongoing through the RLE Project Section 106 and NEPA process.

10.2.3 Section 4(f) Coordination

CTA coordinated with the Chicago Park District due to the impacts to Wendell Smith Park and Fernwood Parkway. Documentation for the Section 4(f) coordination can be found in *Section 4(f) Replacement Park Analysis Technical Memorandum* (**Appendix Y**). The Section 106 consulting party meetings discussed in **Section 10.2.1** also serve as part of the Section 4(f) public involvement and agency coordination process.

CTA will continue to coordinate with the Chicago Park District regarding potential impacts and mitigation measures to Wendell Smith Park and Fernwood Parkway following publication of the Final EIS.

CTA has coordinated with the Forest Preserves of Cook County (FPCC) due to the 130th Street station location adjacent to Beaubien Woods Forest Preserve, a Section 4(f) property; however, it was determined that there would be no Section 4(f) use of Beaubien Woods Forest Preserve. Coordination activities are discussed in **Section 4.3.3.2**.

10.3 Public Outreach

Community outreach for the RLE Project has continued since the publication of the Draft EIS through the development of the Supplemental EA and Final EIS. CTA will continue to involve and consult the community as the RLE Project proceeds through design.

In an effort to further engage and seek support from a comprehensive group of community members who were seen as invested stakeholders within the RLE Project footprint, the RLE Project Advisory Council (PAC) was formed by CTA in 2019. The PAC is made up of approximately 24 representatives from 20 community and governmental organizations. Detailed information about the PAC can be found in the PPP provided in **Appendix C**.

Other public outreach activities included elected official updates, stakeholder and public meetings, issuance of newsletters, mailers (U.S. Postal Service mailings and hard copy drop-offs), a digital engagement platform (Bang the Table), regular postings on a RLE Project Facebook page, eBlasts (i.e., mass emails sent to people who signed up for RLE Project notifications), and announcements regarding the RLE Project. Community in-person meetings were held at venues that were ADA-accessible for attendees. In the spring of 2020, the COVID-19 pandemic prompted virtual adaptations and virtual meeting accommodations instead of in-person meetings and gatherings. Virtual stakeholder and public meetings allowed the participants to provide input, ask questions, share their comments, and discuss any concerns with CTA. The virtual community meetings were publicized by flyer, postcard notice, newspaper advertisements, eBlasts, customer alerts, and on the project website. For individuals needing assistance, Spanish interpreters and ASL interpreters were available for all virtual community meetings. Closed captioning was also offered. **Appendix C** contains copies of public outreach materials that have been issued for the RLE Project since the publication of the Draft EIS.

As described in the PPP, stakeholders have been grouped into project level stakeholders and the PAC. Project level stakeholders are people and organizations influential in the community nearest the RLE Project. The PAC is defined above. Public refers to the general audience who may be directly affected by a project (e.g., residents, local business owners). In addition, CTA has continued to coordinate with displaced property owners and renters. Property owners and renters identified as displaced have received communications in advance of project updates and activities near their property.

CTA continues to update the project website (https://www.transitchicago.com/rle/), which serves as the most up-to-date source of information for the public. CTA also conducted individual and group briefings for elected and public officials; community, civic, business, and religious leaders; and other stakeholders, providing them the opportunity to comment and inquire about the project.

CTA held meetings with community organizations and stakeholders since the Draft EIS through 2022. **Appendix C** provides a comprehensive list of the stakeholder groups within the PPP as well

as summary matrices of the official responses to public comments received after publication of the Draft EIS, announcement of the Preferred Alignment, and publication of the Supplemental EA. **Table 10-1** is a summary of the public meetings advertised for the RLE Project.

Table 10-1: Outreach Meetings Held to Date

Meeting	Location	Date and Time	Number of Attendees
Draft Environmental Impact Statement			
Public Hearing	St. John Missionary Baptist Church 211 E. 115th Street	November 1, 2016 5:30 to 7:30 PM	280
Preferred Alignment Announcement			
Open House	Gwendolyn Brooks College Preparatory Academy - Main Gym 250 E. 111th Street	February 13, 2018 6:00 to 8:00 PM	246
Supplemental Environmental Assessment			
Community Meeting	Virtual meeting hosted by CTA using Zoom and Facebook Live platforms	December 8, 2020 6:00 to 8:30 PM	68 (Zoom) 15 (Facebook Live)
Community Meeting	Virtual meeting hosted by CTA using Zoom and Facebook Live platforms	December 9, 2020 1:30 to 3:00 PM	69 (Zoom) 21 (Facebook Live)
Stakeholder Meeting	Altgeld Public Library 955 E. 131st Street	February 16, 2022 6:00 to 8:00 PM	11
Public Hearing	Virtual meeting hosted by CTA using Zoom and Facebook Live platforms	February 15, 2022 6:00 to 8:00 PM	129
	The Salvation Army Kroc Center 1250 W. 119th Street	February 17, 2022 6:00 to 8:00 PM	10

10.3.1 Draft Environmental Impact Statement Public Hearing

The Notice of Availability of the Draft EIS was published in the Federal Register on October 14, 2016, initiating the public comment period for the Draft EIS. The notice provided information regarding the public hearing and instructions on how to make comments regarding the Draft EIS. CTA also notified the public that the Draft EIS was available for review on their website on October 6, 2016. The public hearing was held on November 1, 2016. The formal comment period ended on November 30, 2016; however, CTA accepted comments received through December 31, 2016. A summary of the public hearing is provided in **Appendix C**. CTA received a total of 284 comments from the public, public agencies, tribes, and railroads. The Comment Response Matrix can be found in **Appendix C**.

10.3.2 Union Pacific Railroad Alternative - Preferred Alignment Announcement

CTA conducted public and agency outreach efforts for the selection of the Preferred Alignment announcement, including displacement-specific outreach to property owners and residents who would potentially be displaced by the project. CTA conducted meetings for invited property owners on February 6 and 8, 2018 to discuss displacements. CTA held an open house on February 13, 2018 to announce the Preferred Alignment. **Appendix C** provides a summary of the public outreach activities that occurred for the Preferred Alignment (i.e., Preferred Alignment Announcement, Public Open House, and Displacements Outreach Summary as of November 2018).

10.3.3 130th Street Station Relocation

CTA held meetings with partner agencies and stakeholder groups including residents in and near the proposed station relocation area (see **Appendix C**). The goal was to present the opportunity to relocate the terminal station south of 130th Street and solicit feedback from the public and organizations. CTA conducted briefings for elected officials on the proposed station relocation.

10.3.4 Supplemental EA

CTA conducted the first round of community meetings for the Supplemental EA on December 8 and 9, 2020. Because of the COVID-19 pandemic, virtual adaptations and virtual meeting accommodations were met through the Zoom webinar platform with a telephone dial-in option and Facebook Live. CTA solicited input and provided two-way communication through polling questions, a chat window, and a Question-and-Answer (Q&A) window. In addition, CTA announced the TSD Plan and new RLE engagement website during these meetings (www.transitchicago.com/rle/engage). **Appendix C** presents summaries of these meetings.

Community members in attendance submitted questions through the chat and Q&A windows regarding project funding, frequency of bus service, location of parking lots and sizes, noise and vibration during construction, employment opportunities for community members, inclusion of local design/artists in project design, and potential for transit-oriented development (TOD). CTA staff provided answers to the posted questions through the chat and Q&A windows.

Station-area specific meetings were held in January and February of 2021. In addition, an Altgeld Temporary Advisory Committee (TAC) meeting was held on January 25, 2021. The Altgeld TAC meeting solicited input and provided information to its members about topics and concerns specific to 130th Street station and the Altgeld Gardens neighborhood.

The Supplemental EA served as the primary document to facilitate review by agencies and the public regarding the design changes that occurred for the RLE Project since the Draft EIS including the 130th Street station relocation, 120th Street yard and shop refinement, and the 107th Place cross-over. CTA established a 30-day comment period to take formal comments on the Supplemental EA, consistent with 23 CFR 771.119. The comment period began with the Notice of Availability (NOA) on January 31, 2022 and comments were accepted through March 1, 2022. The Supplemental EA was available on the CTA website https://www.transitchicago.com/rle/ and hard copies of the Supplemental EA were made available at the following locations during the public review period:

- FTA Region 5 Office, 200 W. Adams Street, Suite 320, Chicago, IL 60606
- CTA headquarters, 567 W. Lake Street, 1st Floor, Chicago, IL 60661
- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628
- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library, 955 E. 131st Street, Chicago IL 60827
- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628

- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center, 400 S. State Street, Chicago, IL

In addition to the locations advertised in the NOA and above, CTA placed hard-copy versions of the Supplemental EA and Section 4(f) Evaluation, the public hearing flyer, and the Community Guide at high-traffic locations within the project area: two Ward offices (9th Ward, 34th Ward), one Chicago Park District park (Palmer Park), and one neighborhood organization (Agape Community Center).

The public hearing for the Supplemental EA was held in two formats: one virtual meeting and one in-person meeting. The virtual hearing was held on February 15, 2022 from 6:00 to 8:00 PM. The in-person hearing was held at the Salvation Army Kroc Center on February 17, 2022 from 6:00 to 8:00 PM. Each public hearing solicited comments from agencies and the community about findings presented in the Supplemental EA. Court reporters were present at both meetings to record comments. The in-person hearing was conducted in an open house format and was ADA compliant. The virtual hearing was ADA accessible, including closed captioning and Spanish and American Sign Language interpreters.

Comments received during the comment period were reviewed by FTA and CTA and were entered into public record. A summary of the public hearing and responses to comments received from the Supplemental EA are included in **Appendix C** of the Final EIS.

10.4 Environmental Justice, Limited English Proficiency, and People with Disabilities

As outlined in the PPP, CTA implemented strategies targeting inclusion of minority, low-income, limited English proficiency (LEP) and people with disabilities in all outreach efforts. The efforts included sensitivity to multiple distribution channels and language needs, and in-person meetings were held in ADA-compliant facilities. Venues were located in close proximity to the RLE Project and accessible by public transit. Because of the COVID-19 pandemic, virtual adaptations and virtual meeting accommodations were used instead of in-person meetings and gatherings starting in the spring of 2020. CTA performed an LEP assessment prior to the Draft EIS outreach, which determined that public outreach materials should be prepared in both English and Spanish. Meetings were advertised in multilingual and local publications. Spanish translators and ASL interpreters were made available at every public meeting, including the virtual meetings implemented to accommodate social distancing policies established to protect the public during the COVID-19 pandemic. To address those portions of the community who lack access to technology, i.e., no access to internet, such as some EJ populations, hardcopies of project information were provided at community locations to spread the word and solicit comments. These locations included churches, community centers, alderman's local ward offices, etc. Call-in numbers were available to join virtual meetings. In addition, virtual meetings were also held through Facebook Live encouraging participation through handheld devices.

In addition to direct mail and social media notifications of meetings, CTA provided advance notice on buses and trains likely serving residents from the vicinity of the RLE Project to ensure that transit

passengers were aware of opportunities to attend the meetings. Meeting notice materials included an offer of translation services in Spanish or other languages with advance request. As noted in the PPP, federal requirements for public participation plans include a process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as minority and/or low-income groups. CTA actively worked with organized business and community groups, elected officials, and transit advocacy organizations to ensure that project information and public meetings were adequately publicized and had substantive participation by minority and low-income groups.

Chapter 11 List of Acronyms and Abbreviations

Acronym or Abbreviation	Definition
AA	Alternatives Analysis
ACM	Asbestos containing materials
ACS	American Community Survey
ADA	Americans with Disabilities Act
AGPMH	Altgeld Gardens-Philip Murray Homes
APE	Area of Potential Effect
API	Area of Potential Impact
ASL	American Sign Language
AST	Aboveground Storage Tank
BMPs	Best Management Practices
BOL	Illinois Bureau of Land
BRT	Bus Rapid Transit
BTU	British Thermal Unit
CAA	Clean Air Act
CCDD	Clean construction or demolition debris
CCDoTH	Cook County Department of Transportation and Highways
CDOT	Chicago Department of Transportation
CEQ	Council on Environmental Quality
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CHA	Chicago Housing Authority
CIG	FTA Capital Investment Grant Program
CIP	Capital Improvement Program
CMAP	Chicago Metropolitan Agency for Planning
CMAQ	Congestion Mitigation Air Quality
CN	Canadian National Railway
CN/MED	Canadian National/Metra Electric District
CO	Carbon Monoxide
Conrail	Consolidated Rail Corporation
CPD	Chicago Park District
CREATE	Chicago Region Environmental and Transportation Efficiency Program
CSX	CSX Transportation, e.g., the CSX railroad
CTA	Chicago Transit Authority
dB	Decibel
dBA	A-weighted decibel

Acronym or Abbreviation	Definition
DCP	Developing Communities Project
DPD	Chicago Department of Planning and Development
EA	Environmental Assessment
EB	Eastbound
eBlast	Mass emailing
ECOS	Environmental Conservation Online System
EcoCAT	Ecological Compliance Assessment Tool
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
EJ	Environmental Justice
EJ populations	Minority and low-income populations
EO	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Environmental Site Assessment
eTOD	equitable Transit-Oriented Development
FAST Act	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FPCC	Forest Preserves of Cook County
FTA	Federal Transit Administration
FY	Fiscal Year
FFY	Federal Fiscal Year
GHG	Greenhouse Gas
GO TO 2040	CMAP *GO TO 2040 Comprehensive Regional Plan*
HRT	Heavy Rail Transit
IC	Illinois Central Railroad
ICIS	Integrated Compliance Information System
IDNR	Illinois Department of Natural Resources
IDOT	Illinois Department of Transportation
IEPA	Illinois Environmental Protection Agency
IHB	Indiana Harbor Belt Railroad
ILCS	Illinois Compiled Statutes
IPaC	Information for Planning and Consultation
ISTHA	Illinois State Toll Highway Authority
LBP	Lead-Based Paint
L_{dn}	Day/night sound level
LEP	Limited English Proficiency
LOS	Level of Service
LQG	Large Quantity Generator

Acronym or Abbreviation	Definition
LUST	Leaking Underground Storage Tank
Lv	Root mean square velocity level
MAC	Maximum allowable concentrations
MBTA	Migratory Bird Treaty Act
MED	Metra Electric District
MSAT	Mobile Source Air Toxics
MUTCD	Manual on Uniform Traffic Control Devices
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NAAQS	National Ambient Air Quality Standards
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
NO_2	Nitrogen Dioxide
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NS	Norfolk Southern Railway
NWI	National Wetlands Inventory
NWPR	Navigable Waters Protection Rule
O&M	Operations and Maintenance
OEMC	Office of Emergency Management and Communications
ON TO 2050	CMAP *ON TO 2050 Comprehensive Regional Plan*
OSHA	Occupational Safety and Health Administration
OUC	Chicago Office of Underground Coordination
OWJ	Official with Jurisdiction
PAC	RLE Project Advisory Council
Pace	Pace suburban bus service
$PM_{2.5}$	Particulate Matter with an aerodynamic diameter of 2.5 micrometers (µm) and less
PM_{10}	Particulate Matter with an aerodynamic diameter of 10 micrometers (µm) and less
PNA	Polynuclear aromatic hydrocarbon
PPP	Public Participation Plan
Q&A	Question-and-Answer
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
RLE	Red Line Extension

Acronym or Abbreviation	Definition
RO	Remediation objectives
ROD	Record of Decision
RPM	Red and Purple Modernization
RTAMS	Regional Transportation Authority Asset Mapping and Statistics
RTP	Regional Transportation Plan
Sanborn	Historical Sanborn Fire Insurance Maps
SES	Metra Southeast Service
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SOP	Standard Operating Procedures
SPCCC	Spill Prevention, Control and Countermeasure Plan
SSU	State Sites Unit Listing
STOPS	Simplified Trips-on-Project Software
TAC	Altgeld Temporary Advisory Committee
TACO	Tiered Approach to Corrective Action Objectives
TFIA	Transit Facility Improvement Areas
TIF	Tax Increment Financing
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIP	Transportation Improvement Program
TOD	Transit-Oriented Development
TRI	Toxic Release Inventory
TSD	Transit-Supportive Development Plan
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VdB	Decibels of vibration
VMT	Vehicle Miles Traveled
WB	Westbound

Acronym or Abbreviation	Definition
WOTUS	Waters of the United States
YOE	Year of Expenditure

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Chicago Transit Authority

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Name	Qualifications	Primary Responsibilities
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Lynne Marie Whately, AICP	Vice President; M.S. Urban and Regional Planning; B.S. Urban Planning/Public Administration; AICP; 26 years' experience	NEPA Quality Control and Oversight

Name	Qualifications	Primary Responsibilities
Deanne Winkelmann, AICP	Transportation Planner, Master of Regional and Community Planning, AICP, 8 years' experience	Visual and Aesthetic Conditions Reviewer
Andrew Young	Transportation Planner; Master of Regional and Community Planning; 4 years' experience	Environmental Justice Primary Author; GIS Data Management

Wight & Company

Name	Qualifications	Primary Responsibilities
Patty King, PLA, ASLA, LEED AP	Senior Landscape Architect; Bachelor of Landscape Architecture; 25 years' experience	Parklands and Community Facilities and Section 4(f) Analysis
Robin Martel, LEED AP BD+C	Director of Environmental Planning; BS Geological Sciences; LEED AP BD+C; 25 years' experience	Senior Reviewer, Visual and Aesthetics; Indirect and Cumulative Impacts
Sara Merchan-Paniagua, CEP-IT	Project Scientist; MS Environmental Sciences; BS Environmental Biology; 13 years' experience	Safety and Security; Coastal Management Zone; Parklands and Community Facilities

TY Lin

Name	Qualifications	Primary Responsibilities
Rebecca Dahlstrom, PE	Senior Civil Engineer; BS Civil Engineering; 15 years' experience	Project Controls
Robert Gorski, PE	Associate Vice President, Rail & Transit Sector Manager; BS Civil Engineering; 28 years' experience	RLE Project Manager
Daniel Schmit, PE	Senior Civil Engineer; BS Civil Engineering; 13 years' experience	Civil Design Lead
Joe Yesbeck	Senior Vice President, National Director of Rail and Transit; BS Civil Engineering; 42 years' experience	RLE Project Manager

TranSmart

Name	Qualifications	Primary Responsibilities
Shane Misztal, PE, PTOE, PTP	Transportation Engineer; BS Civil Engineer; PE, PTOE, PTP; 8 years' experience	Traffic Analysis
Joel Turk	Transportation Specialist; BS Civil Engineer; 5 years' experience	Intersection Design Study

OSEH

Name	Qualifications	Primary Responsibilities
Muthayab Mohammad PE, PTOE, RSP1	Director of Transportation; MS Transportation and Highway Engineering; 16 years' experience	Final EIS Figures, GIS NEPA support

Muller2

Name	Qualifications	Primary Responsibilities
John Wolf	Architectural Project Manager; Master of Architecture; 8 years' experience	Visual and Aesthetic - Renderings

Johnson Lasky Kindelin Architects

Name	Qualifications	Primary Responsibilities
Carri Andrews, RA	Project Manager and Historic Preservation Architect; BA Art History and M. Arch Historic Preservation; Registered Architect; 12 years' experience	Historic and Cultural Resources
Meg Kindelin	Principal and Historic Preservation Architect; BS Anthropology, MS Architectural History, M. Arch Design; Registered Architect; 24 years' experience	Historic and Cultural Resources

Environmental Design International

Name	Qualifications	Primary Responsibilities
Jason Janssen, CHMM	Project Manager, Certified Hazardous Materials Manager (CHMM), BS Environmental Science and Natural Resources, 16 years' experience	Hazardous Materials
Felix Moran, PE	Senior Project Manager; MS Civil Engineering (Environmental Conc.), PE, 31 years' experience	Hazardous Materials

Cross-Spectrum Acoustics

Name	Qualifications	Primary Responsibilities
Scott Edwards	Senior Principal Associate; BSE Acoustical Engineering & Music; EIT; 10 years' experience	Noise and Vibration
David Towers, PE, INCE Bd Cert	Principal Associate; BS Mechanical Engineering; MS Mechanical Engineering; PE, INCE Bd Cert; 47 years' experience	Noise and Vibration

Chapter 14 List of Recipients

The following agencies, local officials, and public libraries were notified of the availability of this document. All agencies and organizations on this list received web links to download the Final EIS from the CTA website.

Agencies, organizations, and libraries that received hard copies of the Final EIS to make available to the public are identified with an asterisk (*).

Participating agencies are federal, state, or local agencies, or federally recognized Indian tribal governmental units that may have an interest in the proposed project and have accepted an invitation to be a participating agency, or in the case of a federal agency, has not declined the invitation. Participating agencies are identified in **bold** text. All federal, state, local, and regional agencies and tribes are potential participating agencies; all others on the list are not eligible to be participating agencies.

The Federal Highway Administration is a cooperating agency.

Federal Agencies

Advisory Council on Historic Preservation

National Park Service, Pullman National Monument

Transportation Security Administration

U.S. Department of Energy

U.S. Department of the Interior, Office of Environmental Policy and Compliance

U.S. Department of Health and Human Services

U.S. Department of Housing and Urban Development

U.S. Department of Transportation Federal Highway Administration

U.S. Department of Transportation Federal Railroad Administration

U.S. Environmental Protection Agency

U.S. Federal Emergency Management Agency

U.S. Fish and Wildlife Service

Tribes

Citizen Potawatomi Nation

Ho-Chunk Nation

Kickapoo Tribe of Oklahoma

Little Traverse Bay Bands of Odawa Indians

Menominee Indian Tribe of Wisconsin

Miami Tribe of Oklahoma

Peoria Tribe of Indians of Oklahoma

Pokagon Band of Potawatomi Indians

Potawatomi Nation-Hannahville Indian Community

Prairie Band of Potawatomi Nation

Sac and Fox Nation of Missouri

Sac and Fox Nation of Oklahoma

State Agencies

Illinois Commerce Commission

Illinois Department of Commerce and Economic Opportunity

Illinois Department of Employment Security

Illinois Department of Natural Resources (including State Historic Preservation Division)

Illinois Department of Revenue

Illinois Department of Transportation

Illinois Environmental Protection Agency

Illinois Secretary of State

Illinois State Archaeological Survey

Illinois State Museum

Illinois State Police

Illinois State Police District Chicago

Illinois Tollway

Local and Regional Agencies

Chicago Bureau of Convention and Tourism

Chicago Historical Society

Chicago Housing Authority

Chicago Metropolitan Agency for Planning

Chicago Park District

City of Chicago Department of Aviation

City of Chicago Department of Budget and Management

City of Chicago Department of Business Affairs and Consumer Protection

City of Chicago Department of Planning and Development

City of Chicago Department of Assets, Information, and Services

City of Chicago Department of Planning and Development Historic Preservation Division

City of Chicago Department of Streets and Sanitation Bureau of Street Operations

City of Chicago Department of Transportation

City of Chicago Office of the Mayor

City of Chicago Police Department

Cook County Board of Commissioners

Cook County Department of Revenue

Cook County Department of Transportation and Highways

Cook County Recorder of Deeds & Registrar of Titles

Cook County Sheriff's Office

Forest Preserves of Cook County

Metra

Metropolitan Planning Council

Metropolitan Water Reclamation District of Greater Chicago

Pace

Village of Calumet Park

Community Groups

Agape Community Center

By the Hand Club, Altgeld-Murray

Carver Military Academy High School

Chicago Neighborhood Initiatives

Developing Communities Project, Inc.

Far South Community Development Corporation

Friends of the Parks

Golden Gate Homeowners Association

Greater Roseland Chamber of Commerce

Landmarks Illinois

Neighborhood Housing Services of Chicago

People for Community Recovery

Preservation Chicago

Pullman Civic Organization

Red Line Extension Coalition

Ridge Historical Society

Roseland Business Development Council

Roseland Manor

Rosemoor Community Association

St. Anthony of Padua Parish

TCA Health

Local Libraries

Altgeld Public Library*

Calumet Park Public Library*

Harold Washington Library Center*

Pullman Public Library*

West Pullman Public Library*

Woodson Regional Public Library*

Other Locations Receiving Hard Copies

9th Ward Aldermanic Local Office*

34th Ward Aldermanic Local Office*

Palmer Park*

Chapter 15 Glossary

The following terms are used in the Final Environmental Impact Statement.

95th Street Terminal Improvement Project - The 95th/Dan Ryan Terminal is currently the southern terminus (end) of Chicago Transit Authority's (CTA) Red Line. CTA rehabilitated the original 95th/Dan Ryan Terminal with an expanded modern facility from 2014 through 2019.

107th Place cross-over – The location near 107th Place where the RLE Preferred Alignment crosses above the Union Pacific Railroad (UPRR) on an aerial track structure from the west side of the UPRR to the east side of the UPRR. This marks the transition point where impacts from the Preferred Alignment change from being similar to impacts of the West Option disclosed in the Draft Environmental Impact Statement (EIS) to being similar to the impacts of the East Option disclosed in the Draft EIS.

Aerial Track Structure - The location of a train track structure above the surface of the ground. Can be constructed of concrete and/or steel.

Affected Environment - The physical, biological, social, and economic setting potentially affected by one or more of the alternatives under consideration.

Alternative - One of a number of specific transportation improvement proposals or options.

Alternatives Analysis - Process of assessing the different transportation improvement proposals or options and documenting alternate concepts based on scenario and functional definitions.

Americans with Disabilities Act (ADA) - Federal regulation establishing legal requirements for accessibility for those with disabilities, including wheelchair users.

Area of Potential Effects (APE) - The geographic area or areas within which an undertaking may directly or indirectly affect the character or use of historic properties, if any such properties exist.

Area of Potential Impact (API) - The geographic area within which the project may cause adverse or beneficial impacts.

At-Grade - The location of a structure or transit guideway at the same level as the ground surface.

Block Group - A census block group is a geographical unit used by the United States Census Bureau. Census block groups fall in size between the census tract and the census block. Census blocks are the smallest geographical units for which the Census Bureau publishes sample data.

Chicago Metropolitan Agency for Planning (CMAP) - The metropolitan planning organization for the Chicago region. CMAP has prepared both the *GO TO 2040 Comprehensive Regional Plan*, referenced in the Draft EIS, and the *ON TO 2050 Comprehensive Regional Plan*, referenced in the Final EIS. These regional plans provide strategies for the regional transportation network.

Chicago Transit Authority (CTA) - The CTA is an independent governmental agency created by state legislation. It operates the nation's second-largest public transportation system and covers the

City of Chicago and 35 surrounding suburbs. CTA is the local lead agency on the Red Line Extension Project.

Community Character - An attribute of a geographic area with identifiable characteristics that make it unique.

Community Cohesion - An attribute of a geographic area, where segmentation or division of the area would reduce its desirability to current and future residents.

Community Resources - Locations that serve as focal points or provide community services. These may include landmarks, parks, or community centers.

Construction Staging - A physical location used for the storage of construction-related equipment and materials such as vehicles and stockpiles.

Cumulative Effect - The incremental environmental impact or effect of the project when added to the impacts of other separate past, present, and reasonably foreseeable future actions.

Deck - The surface of a bridge or elevated rail track section.

Closed-deck structure - Tracks that have a solid deck beneath them. Compared to open deck structures commonly seen on legacy CTA train lines, closed-deck structures allow for more effective noise mitigation but require more active snow clearance and drainage maintenance.

Displacement - An impact from a project that results in homes or businesses needing to be relocated.

- **Affected Parcel** - A partial or a full parcel that would need to be acquired because of the project.
- **Building Displacement** - A structure that would need to be removed (the land occupied by the structure would also be counted as an affected parcel).

Easement - CTA would require a use agreement with the owner; for example, aerial easements over the UPRR require a use agreement over the UPRR.

Effect (as related to historic/cultural) - Refers to alterations in the character or use of historic properties by the alternatives. Used in the Section 106 process instead of "impacts" (referred to elsewhere in the EIS) because of the unique requirements and terminology for assessing historic resource impacts.

Elevated Track Structure - The location of a structure above the surface of the ground.

Environmental Impact Statement (EIS) - An EIS is a document that evaluates the economic, social, and environmental effects of a major proposed project. The National Environmental Policy Act (NEPA) requires an EIS to be prepared when federal funds are being sought to fund all or part of a project.

Environmental Justice (EJ) - Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to transportation planning and decision-making processes, per Executive Order 12898.

Federal Transit Administration (FTA) - FTA is a division of the U.S. Department of Transportation that funds transit planning and programs. FTA is the federal lead agency on the RLE Project.

Greenhouse Gas (GHG) - A gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

Ground-borne Vibration - A technical term used to describe mostly man-made vibrations of the ground. Examples include vibrations caused by trains, buses on rough roads, and construction activities.

Ground-borne Noise - A technical term used to describe mostly man-made noise of the ground. Examples include noise caused by trains, buses on rough roads, and construction activities. Ground-borne noise often sounds like a rumbling.

Hazardous Material - Substances that could harm human health or the environment, including petroleum products, polynuclear aromatic hydrocarbons, pesticides, organic compounds, heavy metals, asbestos containing materials (ACM), lead-based paint (LBP), or other compounds.

Headway - The elapsed time between trains passing a fixed point in the same direction over the same track. Refers to train frequency, for example, a 15-minute headway means a train comes every 15 minutes.

Heavy Rail - A railway powered by electricity or diesel fuel with the capacity for a heavy volume of traffic (number of trains and passenger capacity). It is characterized by high speed and rapid-acceleration passenger railcars operating singly or in multi-car trains on fixed rails, separate rights-of-way from which some other vehicular and foot traffic are excluded, sophisticated signaling, and high-platform loading.

Historic District - A group of buildings, properties, structures, or sites that have been designated either federally or by the City as historically or architecturally significant. Districts vary greatly in size: some have hundreds of structures while others have just a few.

Impact - An impact is a change in the condition or function of an environmental resource that occurs as a result of the proposed alternative. An impact can be adverse (negative) or beneficial (positive).

- **Adverse Impact** - An adverse impact is a negative consequence of the proposed alternative (opposite of a benefit).
- **Construction Impact** - Construction impacts are related to the construction phase of the proposed alternative.

- **Cumulative Impact** - The environmental impact or effect of the project when added to the impacts of other separate past, present, and reasonably foreseeable future actions.

- ***De Minimis* Impact** - A term from Latin, meaning "about minimal things." A *de minimis* impact finding is defined in 23 Code of Federal Regulations § 774.17 for historic resources, parks, recreation areas, and wildlife/waterfowl refuges in determinations of use of such resources for environmental analysis.

- **Indirect Impact** - Also known as a secondary impact, indirect impacts are those caused by the project or plan but that are separated from direct impacts by time and/or distance.

- **Permanent Impact** - Permanent impacts are related to the operation (long-term) of the proposed alternative.

Lead Agency - The agency or agencies responsible for preparing the Environmental Impact Statement (EIS) in compliance with the National Environmental Policy Act (NEPA). FTA and CTA are the lead agencies for the RLE Project.

Level of Service (LOS) - A rating that uses a set of characteristics that indicate the quality and quantity of transportation service. LOS is often used to describe the average amount of vehicular delay at a traffic signal.

Locally Preferred Alternative - The UPRR Rail Alternative was selected by the Chicago Transit Board as the Locally Preferred Alternative on August 12, 2009, indicating that it is the alternative that best meets the purpose and need of the project while addressing potential impacts and other potential constraints.

Median Household Income - Median household income is a statistical measurement of a set of household income data. The Median household income for a set of data splits the income distribution into two equal groups, half having income above that amount and half having income below that amount. Median household income is typically presented for a defined geographic area.

Mitigation - Action or measure taken to minimize, reduce, eliminate, or rectify the adverse impacts of a project, practice, action, or activity.

Mixed-use - Refers to a mixture of different types of uses in the same structure or location, for example, a building with commercial units on the ground floor and residential units above.

Mobility - The movement of people or goods, including transportation options, travel patterns, access to jobs, and access for emergency service providers.

National Environmental Policy Act of 1969 (NEPA) – A law that requires all agencies of the U.S. federal government to examine and disclose the environmental impacts of their actions, incorporate environmental information into project decisions, and use public participation in the planning and implementation of all actions. Actions of federal agencies include the use of federal funds to construct a project that will be owned and operated by an entity other than the federal government.

National Historic Preservation Act of 1966 (NHPA) – A law that established a national framework for historic preservation, requiring the U.S. federal government to establish a national system for identifying, evaluating, protecting, and rehabilitating historic places.

National Register of Historic Places (NRHP) - The national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture. It is maintained by the Secretary of the Interior under authority of Section 101(2)(1)(a) of the National Historic Preservation Act, as amended.

NEPA Preferred Alternative - An alternative determined by FTA and the project sponsor (in this case, CTA) to best accomplish the purpose and need of a proposed action while fulfilling statutory requirements and responsibilities, with consideration to economic, environmental, technical, and other factors.

New Starts - FTA's primary grant program for funding major transit capital investments, including rapid rail, light rail, bus rapid transit, commuter rail, and ferries. New Starts funding is provided through FTA's Capital Investment Grants (CIG) Program. New Starts funds major transit capital projects across the country greater than $300 million dollars, with a maximum CIG share of 60 percent. New Starts funding would be used to help pay for the Red Line extension to 130th Street.

No Build Alternative - The No Build Alternative refers to an alternative under which no action would be taken (no infrastructure would be built, and no new management or operational practices would be instituted). The No Build Alternative includes all projects currently included in the fiscally constrained portion of the current CMAP Transportation Improvement Program (TIP). NEPA requires that all actions proposed in an EIS be compared against a No Build Alternative.

Noise Barrier - An exterior structure located next to the tracks that is designed to protect surrounding residents and community members from noise impacts related to the proposed project. Noise barriers are an effective method of mitigating roadway, railway, and industrial noise sources. Noise walls also perform a secondary function related to worker and emergency evacuation safety.

Noise-Sensitive Receiver - Noise-sensitive receivers are residences and/or other land uses that would be negatively affected by noise from the proposed project, such as tracts of land set aside for serenity and quiet, hospitals, hotels, churches, museums, parks, and cemeteries.

Nonattainment Area - Nonattainment areas are metropolitan areas that do not meet national ambient air quality standards (NAAQS), ranked by the severity of their problem as marginal, moderate, serious, severe, or extreme. In accordance with the Clean Air Act Amendments of 1990, these areas must take specific emission reduction measures.

Option - One of the several possibilities for an alternative. At the time of the Draft EIS, UPRR Alternative had two options: the East Option and the West Option, each along the same general alignment but slightly different. Subsequent to the Draft EIS, these Options were combined into a hybrid Preferred Alignment that is described in the Final EIS.

Peak/Off-Peak - Peak is the AM or PM time period when the largest volume of riders occurs. Off-Peak is the remainder of the day when travel activity is generally lower.

Photo Simulation - A computer-generated image that shows how an alternative, station, or feature could look after construction.

Platform - An area at a station used by passengers to get on or off trains.

Preferred Alignment – An alignment of the CTA RLE Project that is a hybrid of the East and West Options of the UPRR Alternative presented in the Draft EIS, which follows the general path of the West Option north of 107th Place, and the East Option south of 107th Place, crossing over the UPRR at the 107th Cross-over.

Public Participation Plan (PPP) - A Public Participation Plan includes public outreach goals, key issues, a detailed stakeholder database, communications protocols, public input tracking protocols, a proposed schedule for interfacing with the public, and recommendations for how meetings should be conducted at various stages of the study.

Purpose and Need - Identifies the reasons a proposed project is needed and reflects the project objectives discussed with the public during the scoping process.

Railroad Ties - Rectangular supports for railroad tracks. Railroad ties are traditionally made of wood.

Record of Decision (ROD) - A document prepared by FTA that presents the basis for selecting and approving a specific transportation proposal that has been evaluated through the various environmental and engineering studies. Typically, the ROD identifies the alternative selected in the Final EIS, the alternatives considered, measures to minimize harm, monitoring or enforcement programs, and an itemized list of commitments and mitigation measures. The ROD can be combined with the Final EIS and issued as a Combined Final EIS/ROD.

Red Ahead Program - A comprehensive CTA initiative for maintaining, modernizing, and expanding Chicago's most traveled rail line, the Red Line. The program includes major improvement projects on the Red and Purple Lines between Linden terminal in the north and the proposed 130th Street terminal on the south. The improvement projects include the Red and Purple Modernization project, the Red Line Extension Project, and the Red Line South Reconstruction Project. In addition, the Red Ahead Program encompasses several individual projects, including the renovation of several stations along the Red Line including Wilson Station, Clark, and Division Stations, and the 95th Street Terminal.

Red Line Extension (RLE) Project - The CTA is proposing to extend the Red Line from the existing 95th/Dan Ryan Terminal to 130th Street, subject to the availability of funding. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

Right-of-Way - In transit usage, the corridor along a railway that is controlled by a transit or transportation agency/authority.

Safety - Safety refers to freedom from harm resulting from unintentional acts or circumstances. With regard to the RLE Project, safety includes all possible incidents within CTA right-of-way (which includes areas along tracks, in yards, and at stations). Examples include collisions, derailments, fires, property damage, injuries, and fatalities.

Scoping - An early and open process for identifying the extent, variety, and significance of issues related to a proposed action in the EIS. Scoping for RLE was held in the form of public open house meetings in the fall of 2009.

Secondary Station Entrance/Exit - An auxiliary entry/exit to and from a train station in addition to the primary entry and/or exit.

Section 4(f) - Section 4(f) of the Department of Transportation Act of 1966 states that no transportation project should be approved that requires the use of land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless there is no feasible or prudent alternative to the use of such land, or the use of such land are found to be *de minimis*. See the description of a *de minimis* impact for more information on this finding.

Section 106 - Section 106 of the National Historic Preservation Act deals with project effects on historic properties. It requires consultation with parties with expertise and interest in historic resources. See the description of *effect* for more information.

Security - Security refers to freedom from harm resulting from intentional acts or circumstances. Intentional danger includes crimes and must be reported if the intentional act meets thresholds for notification as specified in FTA's State Safety Oversight Rule.

Sensitive Receiver Cluster - A group of similar noise-sensitive receivers determined to be at similar distances from the proposed track locations and where CTA operating conditions, such as train speed, would be similar.

Shoring - The process of supporting a structure in order to prevent collapse so that construction can proceed.

State Historic Preservation Officer (SHPO) - The official appointed or designated pursuant to Section 101(b)(1) of the National Historic Preservation Act to administer the State historic preservation program. The SHPO consults with state and federal agencies during the Section 106 process review. The SHPO administers the national historic preservation program at the State level, reviews National Register nominations, and maintains file data on historic properties that have been identified but not yet nominated. Agencies seek the view of the SHPO in the identification of historic properties and the assessment of the effects of a project on historic properties.

Substation - A part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions.

Transit Infrastructure - Basic physical elements of the transit system including track, structures, signals, and power.

Transportation Improvement Program (TIP) - A document prepared by metropolitan planning organizations, such as CMAP, listing projects to be funded with Federal Highway Administration and FTA funds for the next 1- to 3-year period.

Transportation System Management - A "low cost" project alternative that was previously required for FTA analyses.

Transit-Oriented Development (TOD) / Transit-Supportive Development (TSD) - TOD is development that takes advantage of the location of the site adjacent to or near a transit station. TOD includes mixed-use developments, such as residential buildings with ground-floor retail that complement and take advantage of adjacent transit stations, activate streetscapes, enhance livability, and encourage economic development. TSD is a similar but broader term, which encourages regional planning that is supportive of increased transit use and sustainable growth.

Travel Time - The time spent traveling from a place of origin to a place of destination.

Uniform Act – The short name of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. The Uniform Act is a federal law which mandates that relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced as a direct result of projects undertaken by a federal agency or with federal financial assistance.

Union Pacific Railroad (UPRR) – A freight railroad company. The UPRR owns and operates tracks and trains that run through the project corridor along Eggleston Avenue.

Viaduct - A bridge-like structure over a street that allows trains to pass over the street and vehicles to pass under the tracks.

Viewshed - An area that is visible to the human eye from a fixed vantage point.

Visual Impact - A change in the appearance of a place as a result of development. Visual impacts can be positive or negative.

Wetland - Land where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface.

Yard and Shop - An area in a rail system used for maintaining, storing, or holding trains.

RED AHEAD

Red Line Extension

RED LINE EXTENSION

RECORD OF DECISION

AUGUST 2022

Chicago, Illinois

Prepared by:
Federal Transit Administration
Chicago Transit Authority

In Cooperation with:
Federal Highway Administration

Table of Contents

1 Decision 1
2 Basis for Decision 3
2.1 Background and Evaluation 3
2.2 Purpose and Need 3
2.3 Alternatives Development Process 4
3 Project Benefits and Environmental Impacts 9
4 Commitments and Measures to Avoid, Minimize, and Mitigate Adverse Impacts 16
5 Public and Agency Coordination 16
5.1 Agency Coordination 16
5.2 Section 106 Coordination 17
5.3 Tribal Coordination 17
5.4 Section 4(f) Coordination 18
5.5 Public Outreach 18
6 Determination of Findings 19
6.1 National Environmental Policy Act 19
6.2 Section 106 of the National Historic Preservation Act 20
6.3 Clean Water Act, Executive Order 11990 on Protection of Wetlands, and Coastal Zone Management Act 21
6.4 Floodplain Management 23
6.5 Endangered Species Act 23
6.6 Migratory Bird Treaty and Bald and Golden Eagle Protection Acts 24
6.7 Clean Air Act 25
6.8 Environmental Justice 25
6.9 Section 4(f) Evaluation 27

Attachment

Attachment A: Commitment and Mitigation Summary

Figures

Figure 1-1: Preferred Alignment 2

Tables

Table 3-1: Summary of Benefits and Impacts 9
Table 5-1: Outreach Meetings Summary 19

Abbreviations

AA	Alternatives Analysis
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
API	Area of Potential Impact
BMP	Best Management Practice
CAA	Clean Air Act
CFR	Code of Federal Regulations
CHA	Chicago Housing Authority
Conrail	Consolidated Rail Corporation
CN	Canadian National Railroad
CN/MED	Canadian National/Metra Electric District
CMAP	Chicago Metropolitan Agency for Planning
CSS & SBRR	Chicago South Shore & South Bend Railroad
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESA	Environmental Site Assessment
FHWA	Federal Highway Administration
FPCC	Forest Preserves of Cook County
FAST	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
IDNR	Illinois Department of Natural Resources
IHB	Indiana Harbor Belt
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MED	Metra Electric District
MSAT	Mobile Source Air Toxics
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NICTD	Northern Indiana Commuter Transportation District
NRHP	National Register of Historic Places
NS	Norfolk Southern Railway
Pace	Pace Suburban Bus Service

PPP	Public Participation Plan
RLE	Red Line Extension
ROD	Record of Decision
SHPO	State Historic Preservation Office
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VMT	Vehicle Miles Traveled

1 Decision

The Federal Transit Administration (FTA) has determined, pursuant to 23 Code of Federal Regulations (CFR) Part 771 and 40 CFR Parts 1500–1508, that the requirements of the National Environmental Policy Act of 1969 (NEPA) have been satisfied for the Chicago Red Line Extension Project (RLE Project). This Record of Decision (ROD) applies to the RLE Project as described in this combined Final Environmental Impact Statement (EIS)/ROD and Section 4(f) Evaluation. The combined Final EIS/ROD complies with 23 USC § 139(n)(2) as amended by the Fixing America's Surface Transportation (FAST) Act (Public Law 114-94) and succeeded by the Infrastructure Investments and Jobs Act (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") in November 2021. Any reference to the Final EIS is inclusive of the ROD. FTA, as the lead federal agency, and the Chicago Transit Authority (CTA), as the project sponsor, conducted the environmental review process. The Federal Highway Administration (FHWA) is a cooperating agency.

The RLE Project is located approximately 11 miles south of the Loop (Chicago's central business district) on Chicago's Far South Side. CTA's Red Line service currently terminates at the 95th/Dan Ryan terminal, in the northern portion of the project area. From there, a network of CTA and Pace Suburban Bus Service (Pace) bus routes serves the surrounding Far South Side communities. The Red Line operates 24 hours per day, 7 days per week, as do some of the connecting bus routes. The RLE Project would extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street, as shown in **Figure 1-1**. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility at 120th Street.

This ROD summarizes FTA's decision regarding compliance with relevant environmental requirements and concludes the NEPA EIS process. This ROD is supported by and includes the following:

- Attachment A: Commitment and Mitigation Summary

Based on its consideration of the environmental review documents, FTA finds that the project has met all applicable requirements. FTA further finds that the ROD is complete and supports the determination that all NEPA requirements have been met.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-1: Preferred Alignment

2 Basis for Decision

The documents considered in making this decision include:

- CTA RLE Project Draft EIS and Section 4(f) Evaluation (October 2016)
- Chicago Metropolitan Agency for Planning (CMAP) ON TO 2050 (October 2018)
- CTA RLE Project Supplemental Environmental Assessment and Section 4(f) Evaluation (January 2022)
- CTA RLE Project Combined Final EIS/ROD and Section 4(f) Evaluation (August 2022)
- Attachment A of this ROD
- Technical memoranda, correspondence, and other documents in the project's administrative record

2.1 Background and Evaluation

CTA undertook an extensive Alternatives Analysis (AA) process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Draft EIS and the AA described the process through which a wide range of methods of extending the CTA Red Line south from its current terminus at the 95th/Dan Ryan terminal were narrowed to the Locally Preferred Alternative as summarized in **Section 2.3**.

The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two Union Pacific Railroad (UPRR) Rail Alternative options: the East and West Options. CTA continued design and outreach that resulted in the selection of the Preferred Alignment for the RLE Project on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS.

Since the publication of the Draft EIS and selection of the Preferred Alignment, refinements to the design continued. The following are the most notable: (1) the location of the 107th Place cross-over between the UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These three design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA further influenced the design refinements incorporated into the Preferred Alignment analyzed in the Final EIS.

2.2 Purpose and Need

The purpose of the RLE Project is as follows:

- Reduce commute times for residents both within and south of the project area.

- Improve mobility and accessibility for transit-dependent residents in the project area.
- Improve rapid transit rail service to isolated areas and provide viable linkages between affordable housing (e.g., the Altgeld Gardens neighborhood), jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Provide an opportunity for potential connections and linkages to other public transportation modes, including regional commuter rail in the project area.
- Foster economic development in the project area, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.
- Provide a modern, efficient railcar storage yard and shop facility to provide storage and cost-effective preventive maintenance for railcars associated with the RLE Project, railcars currently stored in the existing 98th Street Yard and Shop, and railcars supporting additional Red Line expansion of service.

The need for the RLE Project is demonstrated by the following existing conditions:

- Transit trips to jobs are longer for Far South Side residents than they are for residents in the Chicago seven-county region as a whole. The Chicago seven-county region includes the counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limits access between affordable housing (e.g., the Altgeld Gardens neighborhood) and employment centers outside of the project area.
- Existing transit markets are underserved, and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Street Yard does not have capacity to store railcars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

2.3 Alternatives Development Process

As described in **Chapter 2** of the Final EIS, CTA undertook an extensive AA process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Draft EIS and the AA described the process through which a wide range of methods of extending the CTA Red Line south from its current terminus at the 95th/Dan Ryan terminal were narrowed to the Locally Preferred Alternative.

In brief, 12 transportation modes, nine corridors, and four profiles resulted in many combinations to be analyzed. Three rounds of preliminary screening and public outreach resulted in three build alternatives, plus the No Build Alternative. The three build alternatives analyzed were:

- Halsted Rail Alternative (Elevated)
- UPRR Rail Alternative (Elevated)
- Bus Rapid Transit Alternative (At-Grade)

The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East and West Options.

The UPRR Rail Alternative East and West Options would be elevated and generally run south along I-94 Bishop Ford Freeway from 95th/Dan Ryan terminal, then curve west along the north side of I-57 Expressway (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor, either east or west of the existing UPRR tracks, to Prairie Avenue, where the RLE Project would cross over the Metra Electric District (MED) tracks near 119th Street. South of 119th Street, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway (NS) and Consolidated Rail Corporation (Conrail) right-of-way to the terminus of the RLE Project at 130th Street. Southeast of the Canadian National (CN)/MED tracks, the elevated RLE Project, as described in the Draft EIS, would descend to an at-grade profile, travel past the proposed 120th Street yard and shop, and terminate at the 130th Street station located north of 130th Street.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selection of the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts to schools, residences, and the

historic Roseland Pumping Station; preserve properties slated for future development surrounding the station areas; and would accommodate UPRR's potential tracks. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height for easier vertical access and would lower the profile of the elevated structure. Lowering the platform makes the height more typical to what is existing throughout CTA's system thus improving passenger comfort ascending/descending the stairs.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Public outreach, stakeholder input, and agency coordination have continued to influence CTA's ongoing design efforts. NS shared their plans for future potential access to the CN/MED tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to the national freight rail network and access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA then evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area, who both expressed support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood. Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental EA. The agency coordination and outreach associated with the Supplemental EA influenced the design refinements incorporated into the Preferred Alignment and is analyzed in the Final EIS.

2.3.1 No Build Alternative

The No Build Alternative represents future conditions if the Preferred Alignment were not implemented. The No Build Alternative includes all projects currently included in the fiscally constrained portion of the CMAP *Federal Fiscal Years 2019–2024 Transportation Improvement Program* (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

The No Build Alternative differs from the No Build Alternative disclosed in the Draft EIS only by the passage of time; changes include the completion of the 95th/Dan Ryan terminal renovation, and demographic and development fluctuations that are reasonably anticipated to occur in the intervening time period between the Draft EIS and Final EIS.

2.3.2 Union Pacific Railroad Alternative - Preferred Alignment

The Preferred Alignment for the Final EIS would extend the heavy rail CTA Red Line 5.6 miles from the existing 95th/Dan Ryan terminal to the Altgeld Gardens neighborhood immediately south of 130th Street. The RLE Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. The Preferred Alignment would provide travel time savings of up to 29 minutes for passengers travelling from the 130th Street station to downtown Chicago.

Alignment

The Preferred Alignment would run south along I-94 from the 95th/Dan Ryan terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) on an elevated structure for nearly a ½ mile until reaching and crossing over to the west side of the UPRR corridor in the vicinity of Eggleston Avenue, as shown on **Figure 1-1**. The alignment would turn south to follow the UPRR corridor on the elevated structure along the west side of the UPRR to 107th Place. At 107th Place the elevated structure would cross over to the east side of the UPRR corridor.

The Preferred Alignment would continue along the east side of the UPRR corridor south and southeast to near 119th Street, where it would cross over the CN/MED tracks. South of this point, the Preferred Alignment would descend to at-grade while continuing southeast parallel to the NICTD/CSS & SBRR corridor, using a portion of the NS right-of-way. The alignment would continue south, going under 130th Street to the terminus (end) of the RLE Project south of 130th Street.

This alignment is a hybrid of the East and West Options of the UPRR Rail Alternative disclosed in the Draft EIS, with the cross-over at 107th Place connecting the West Option north of the cross over location with the East Option south of the cross over location.

Stations

As part of the Preferred Alignment, four new stations would be constructed at the following locations along the alignment:

- 103rd Street (elevated station)
- 111th Street (elevated station)
- Michigan Avenue (elevated station)
- 130th Street (at-grade station)

Each station would have a center platform, approximately 26 feet wide and 520 feet long. Platforms would accommodate ten-car trains. Each station would be Americans with Disabilities Act (ADA) accessible with elevators. Each station area would include areas for bus boarding, new crosswalks where needed to accommodate pedestrian traffic, bicycle parking and access, and park & ride facilities. The 130th Street station would have offices for CTA station staff, and an additional track and alternative platform to provide flexibility in its role as a terminal station.

The fundamental designs of the 103rd, 111th, and Michigan Avenue stations have remained the same since the publication of the Draft EIS but advancing design has provided further details. The 130th Street station has undergone a change in design since the publication of the Draft EIS, moving from a location north of 130th Street adjacent to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) Calumet Water Reclamation Plant to a location south of 130th Street in the Altgeld Gardens neighborhood. The Supplemental EA determined that this design change either had no impact or no impacts after mitigation on environmental resources, while bringing benefits to pedestrian access and safety and security.

Yard and Shop

The 120th Street yard and shop would be sited on a combination of industrial and vacant land east of the CN/MED tracks and west of the NICTD/CSS & SBRR tracks near 120th Street and Cottage Grove Avenue. The yard would be entirely at-grade. This facility would provide inspections, minor repairs, and car cleaning (interior and exterior) for a portion of the Red Line railcar fleet. The shop would handle up to ten-car train sets, eliminating the need to uncouple (or cut) the railcars for the routine periodic inspections. This new and modern facility would provide CTA with an efficient maintenance facility not only serving the RLE Project but the Red Line as a whole. Parking spaces for CTA employees would be included at the yard. The yard would be capable of storing up to 330 railcars with expansion to 360. The majority of these railcars would be stored in complete train sets of 8 or 10 railcars. This new facility would improve operations on the Red Line by providing CTA with an efficient and strategically located railcar maintenance facility at the south end of the CTA system.

3 Project Benefits and Environmental Impacts

Potential environmental benefits and impacts are detailed in **Chapters 3–8** of the Final EIS as referenced and summarized in **Table 3-1**.

Table 3-1: Summary of Benefits and Impacts

No Build Alternative	Preferred Alignment
Transportation (*Chapter 3*)	
No additional rapid rail transit service would be provided. Eight intersections would operate at an undesirable level of service (LOS) of E or F in either the AM or PM peak hours or both in the 2050 design year. Traffic flow would continue to deteriorate.	Permanent *Public Transportation* ▪ CTA passengers would benefit from faster travel times by accessing rail service farther south. ▪ CTA passengers would benefit from reduced congested conditions at the 95th/Dan Ryan terminal with bus reroutes that would more directly connect passengers to new stations farther south. ▪ Permanent impacts would be beneficial. *Vehicular Traffic* ▪ Five intersections would operate at a LOS worse than the No Build condition in 2050, and five others would operate at an undesirable LOS, which is defined as a LOS of E or F. ▪ Closure of Old 130th Street would eliminate one of three access routes to Carver Military Academy High School and a connection to the access road into the Beaubien Woods Forest Preserve. Closure of this access would not result in adverse impacts because the primary access to Carver Military Academy High School and Beaubien Woods Forest Preserve amenities from 130th Street to Greenwood Avenue and 132nd Street would remain. The secondary access from Doty Avenue would remain unchanged. ▪ Permanent impacts would not be adverse after mitigation. *Pedestrian* ▪ Pedestrians would benefit from upgraded intersections immediately adjacent to stations with ADA accessible curb ramps, replacement of deteriorated sidewalks, and in-fill of sidewalk gaps. ▪ With the exception of the 130th Street station, pedestrians may need to use the UPRR at-grade crossings to access the RLE stations, depending on the direction of travel on foot, resulting in pedestrian safety impacts. ▪ Permanent impacts would not be adverse after mitigation.

No Build Alternative	Preferred Alignment
	Bicycle ▪ Bicyclists would benefit from the addition of bicycle parking at the four RLE stations and connections to nearby existing and proposed bike routes via expanded transit access from the RLE Project. ▪ Permanent impacts would be beneficial. *Freight Transportation* ▪ There would be no permanent impacts. *Parking Facilities* ▪ The 111th Street station would affect the existing parking at the Agape Community Center. This RLE station would require the use of a City-owned parcel that would affect its current use by the Agape Community Center for parking. ▪ Access to the TCA Health parking lot would be maintained and parking space impacts from the 130th Street station, if any, would be replaced at a ratio of 1 to 1. Benefits would accrue by providing additional park & ride opportunities to attract passengers to transit and potentially improve connections to regional commuter rail. ▪ Permanent impacts would not be adverse after mitigation. Construction ▪ Construction activities would temporarily affect the physical capacity of roadways, sidewalks, and intersections subject to lane closures, narrowing, and detours. This would affect bus transportation, vehicular traffic, bicycle traffic, truck freight, pedestrians, on-street parking, and potentially access to off-street parking. ▪ Increased congestion due to construction may temporarily increase travel times along roadways within the RLE project area. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Land Use and Economic Development (*Chapter 4.1*)	
No Impact	Permanent ▪ Economic development benefits would improve from new public transportation options. ▪ Incompatible zoning for stations, substations, and park & ride facilities would be rezoned. ▪ Permanent impacts would not be adverse after mitigation.

No Build Alternative	Preferred Alignment
	Construction ▪ Construction could be disruptive to businesses along the Preferred Alignment. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Displacements and Relocation of Existing Uses (*Chapter 4.2*)	
No Impact	Permanent ▪ Accommodation of tracks, stations, yard and shop, and other ancillary facilities would require acquisition of 228 parcels, of which 97 of these parcels have buildings that would be permanently displaced. These parcels with displacements are primarily residential with some commercial/industrial uses. ▪ Permanent impacts would not be adverse after mitigation. Construction ▪ Construction impacts would not occur.
Neighborhoods and Communities (*Chapter 4.3*)	
No Impact	Permanent *Community Character and Cohesion* ▪ In the Washington Heights and Roseland communities, the elevated structure between 99th Street and 103rd Street would change the neighborhood setting of the houses facing it, which represents an adverse visual impact. The adverse impact would also include the 103rd Street station and the area near the 107th Place cross-over due to the change in residential character. ▪ There would be adverse visual impacts in the West Pullman community at 117th Street and Prairie Avenue due to the elevated structure, and in the Riverdale community near the Altgeld Gardens neighborhood due to the 130th Street station park & ride facility. ▪ Permanent impacts would be adverse despite mitigation. *Mobility* ▪ All communities in the vicinity of the RLE Project would benefit from improved mobility with reduced travel times. ▪ Closure of Old 130th Street would eliminate one of three access routes to Carver Military Academy High School and a connection to the access road into the Beaubien Woods Forest Preserve. The primary access to Carver Military Academy High School and Beaubien Woods Forest Preserve amenities from 130th Street to Greenwood Avenue and 132nd Street would remain and be improved as part of the RLE Project. The secondary access from Doty Avenue would remain unchanged. ▪ Permanent impacts would not be adverse after mitigation.

No Build Alternative	Preferred Alignment
	Community Resources ▪ Permanent impacts would not occur. Construction *Community Character and Cohesion* ▪ Construction would introduce temporary, intermittent visual, noise, and dust impacts. ▪ Construction impacts are temporary and would not be adverse after mitigation. *Mobility* ▪ Construction would create truck traffic, and temporary street closures and detours would be needed. Access to businesses could be temporarily limited on an intermittent basis. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Visual and Aesthetic Conditions (*Chapter 4.4*)	
No Impact	Permanent ▪ Adverse impacts would be north of I-57, between 99th Street and the 103rd Street station, at 107th Place near the crossing over the UPRR, at 117th Street and Prairie Avenue, and at the 130th Street station. ▪ Permanent impacts would be adverse despite mitigation. Construction ▪ Construction would create temporary visual impacts due to construction activities in the work zone. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Noise and Vibration (*Chapter 4.5*)	
No Impact	Permanent *Noise* ▪ Before mitigation, 278 residences and two institutions (Agape Community Center and My Holy Rock Missionary Baptist Church) would have moderate impacts, and 91 residences and one institution (Kingdom Global Outreach Ministries) would have severe noise impacts. ▪ After mitigation with noise barriers, 15 residences would have moderate impacts. *Vibration* ▪ Permanent impacts would not occur.

No Build Alternative	Preferred Alignment
	Construction *Noise* ▪ Construction impacts are temporary and would not be adverse after mitigation. *Vibration* ▪ Construction impacts would not occur.
Safety and Security (*Chapter 4.6*)	
No Impact	Permanent *Safety* ▪ Increased pedestrian traffic crossing streets near stations without positive traffic control (such as crosswalks or traffic signals) would have an adverse impact on pedestrian safety. ▪ The closure of Old 130th Street would not adversely impact emergency access to Carver Military Academy High School. The closure would be necessary to prevent the interaction of all modes of transportation with the new at-grade crossing and enhance safety. ▪ Permanent impacts would not be adverse after mitigation. *Security* ▪ Permanent impacts would not occur. Construction ▪ Construction impacts are temporary and would not be adverse after mitigation.
Historic and Cultural Resources (*Chapter 4.7*)	
No Impact	Permanent ▪ Permanent adverse effects to historic or cultural resources would not occur. Construction ▪ Adverse construction effects to historic or cultural resources would not occur.
Hazardous Materials (*Chapter 4.8*)	
No Impact	Permanent ▪ Hazardous material spills or releases that occur along the existing railroad tracks immediately adjacent to the Preferred Alignment would have the potential to migrate and affect the properties associated with the Preferred Alignment.

No Build Alternative	Preferred Alignment
	▪ Permanent impacts would not be adverse after Best Management Practices (BMPs) and standard practices, such as following the local, state, and federal laws regarding handling of hazardous materials. Construction ▪ Based on the findings of Phase II Environmental Site Assessments (ESAs), construction activities would have the potential to encounter contaminated materials. ▪ Construction-related impacts would not be adverse after BMPs and standard practices, such as following the local, state, and federal laws regarding handling of hazardous materials.
Wetlands (*Chapter 4.9*)	
No Impact	Permanent ▪ The Preferred Alignment would affect up to 15.7 acres of wetlands. This acreage is primarily in the vicinity of the 120th Street yard and shop. ▪ The U.S. Army Corps of Engineers (USACE) documented in a letter dated January 19, 2022, that there are no waterways, wetlands, or other areas considered "waters of the United States" under USACE jurisdiction. ▪ Permanent impacts would not be adverse after mitigation. Construction ▪ Construction staging areas would be sited outside of wetlands as much as possible, but if there were any temporary impacts, those areas would be restored to wetlands after construction. There would be up to 0.19 acre of temporary wetland impacts on Kensington Marsh. This wetland would be mitigated or restored to preconstruction conditions and monitored for a period to be determined in coordination with the MWRD. The USACE would not require mitigation. ▪ Construction impacts are temporary and would not be adverse after mitigation.
Indirect and Cumulative Impacts (*Chapter 5*)	
No Impact	Indirect ▪ Implementation of the Preferred Alignment would have the potential for redevelopment from accessibility to new employment opportunities, attraction of new development near RLE stations, and overall livability improvements.

No Build Alternative	Preferred Alignment
	Cumulative ▪ The surrounding communities would benefit from the cumulative impacts of other planned and programmed projects because of improved access to jobs, places of interest, residences, and the reduction of air pollution emissions.
Resources with Limited or No Adverse Impacts (*Chapter 6*)	
No Impact	▪ The Preferred Alignment would have limited or no adverse impacts on the following resource areas: air quality, water quality, floodplains, vegetation, wildlife habitat, threatened and endangered species, geology and soils, and energy.
Environmental Justice (*Chapter 7*)	
No Impact	▪ The Preferred Alignment would have permanent adverse impacts on community character and cohesion that could not be mitigated because the elevated structure would alter the character and scale of residential neighborhoods. Due to the proximity of the elevated structure to residential areas, adverse impacts would remain despite mitigation. ▪ However, both the impacts and benefits of the project would affect primarily minority and low-income populations, as the purpose of this project is to connect the disadvantaged communities to Chicago's major employment and activity centers. Therefore, no disproportionately high and adverse impacts on minority or low-income populations would occur.
Section 4(f) (*Chapter 8*)	
No Impact	▪ No adverse impacts on the attributes, features, or activities of Wendell Smith Park or Fernwood Parkway would occur after mitigation. The 0.1-acre temporary easement needed in the northwest corner of Wendell Smith Park for construction would be a Section 4(f) temporary occupancy under 23 CFR § 774.13 and would not constitute a use under Section 4(f). A *de minimis* finding is documented in this Final EIS for the Section 4(f) use of approximately 4.5 acres of Fernwood Parkway. The Chicago Park District concurred with the temporary occupancy and *de minimis* determinations on April 19, 2022.

4 Commitments and Measures to Avoid, Minimize, and Mitigate Adverse Impacts

Attachment A lists CTA's minimization and mitigation commitments, as required by 23 CFR Part 771, that will be undertaken by FTA and CTA to implement the RLE Project. With these mitigation measures and commitments as part of the defined RLE Project as required by 40 CFR Part 1505, FTA finds that all practicable means to avoid or minimize environmental harm from the RLE Project have been adopted for the Preferred Alignment. Any changes to the RLE Project that are inconsistent with the ROD must be evaluated in accordance with 23 CFR §§ 771.129 and 771.130, and, if required therein, they must be approved by FTA in writing before CTA can proceed with the change.

Mitigation measures and commitments will be implemented in accordance with the combined Final EIS/ROD. Should there be any differences in the language of the mitigation measures and commitments from that presented in the Final EIS and its appendices, the list of mitigation measures in **Attachment A** supersedes those found in the Final EIS and its appendices. CTA will incorporate these mitigation measures and commitments into the RLE Project's design, specification, and contract documents, as appropriate. FTA will require that CTA establish a mitigation and commitment monitoring program to track progress in accomplishing the mitigation measures and maintaining the commitments during the appropriate design, construction, and/or operation action periods.

5 Public and Agency Coordination

This section and **Appendix C** of the Final EIS document outreach activities that FTA and CTA have undertaken for the RLE Project. **Chapter 10** of the Final EIS focuses on the outreach conducted since the publication of the Draft EIS in 2016 through the development and announcement of the Preferred Alignment in 2018 and the publications of the Supplemental EA and Final EIS in 2022.

The Public Participation Plan (PPP), originally created in August 2012 to guide the public involvement and outreach process for the Draft EIS, builds upon the substantial public outreach activities conducted during the Draft EIS. It outlines outreach methods through the completion of the Supplemental EA and the Final EIS, as well as adapted approaches and guidelines for public participation during the COVID-19 pandemic when social distancing was required or in-person gatherings were not allowed. CTA applied the framework established in the PPP to guide the engagement of stakeholders and the public. The PPP is a dynamic document that will continue to be revised and updated, as necessary, through the future phases of the RLE Project. The most current version of the PPP is provided in **Appendix C** of the Final EIS.

5.1 Agency Coordination

Agency coordination continued since the publication of the Draft EIS, through the Supplemental EA and Final EIS processes as described throughout **Chapters 3** and **4** of the Final EIS and documented in the appendices of the Final EIS. CTA continued to coordinate with the cooperating and participating agencies since the Draft EIS. The list of cooperating and participating agencies

can be found in **Chapter 14** of the Final EIS. Outreach efforts were conducted in compliance with NEPA and other applicable regulations, including Section 106 of the National Historic Preservation Act, Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966, joint guidance and regulations from FTA and FHWA, and other agency regulations and guidance. After publication of the Draft EIS, agency comments were received, and CTA provided direct responses to those comments. The agency comment response correspondence is provided in **Appendix C** of the Final EIS.

Agency and public comments contributed to the development and evaluation of the Preferred Alignment. As described in **Chapter 2** of the Final EIS, the Preferred Alignment is a hybrid of the UPRR East and West Options disclosed in the Draft EIS. After publication of the Draft EIS, public and agency comments were considered, and design changes were made to the RLE Project. Agency and public comments continued to influence the modification of the Preferred Alignment through design refinements as documented in the response matrix provided in **Appendix C** of the Final EIS and discussed further in **Section 10.3** of the Final EIS. Ongoing agency coordination and formal comments received from publication of the Supplemental EA continued to influence the modification of the Preferred Alignment through design refinements and project mitigation. Supplemental EA agency comments and response correspondence are also available in **Appendix C** of the Final EIS. Agency coordination has been ongoing since the Draft EIS publication in 2016 and through 2022 with the development of the Final EIS. CTA has worked with agencies to obtain concurrence on resource impacts and collaborate on RLE Project mitigation measures.

5.2 Section 106 Coordination

The Section 106 consultation process established as part of the Draft EIS has been followed for the design changes presented in the Supplemental EA and the Final EIS. CTA and FTA sent letters to 22 consulting parties. All correspondence is provided in **Appendix Q** of the Final EIS. FTA and CTA sought information from individuals and organizations likely to have knowledge of local potential resources. Details of the consulting parties contacted can be found in **Appendix Q** of the Final EIS. Consultation meetings focused on project design changes since the previous consultation was conducted during the Draft EIS, which included updates to the area of potential effect (APE), eligibility review, and effects discussions. For the Final EIS, in conjunction with the concurrent Supplemental EA coordination, the first consulting party meeting was held February 18, 2021. The second consulting party meeting was held on June 30, 2021. **Appendix Q** of the Final EIS contains copies of correspondence and Section 106 consultation materials.

5.3 Tribal Coordination

Since the publication of the Draft EIS, FTA continued coordination with Native American tribes through project updates as part of the Section 106 consultation process to provide an opportunity to share potential cultural and/or religious concerns associated with the RLE Project or express support. FTA sent letters to the following tribal consulting parties on January 26, 2018 to inform them of the selection of the Preferred Alignment: Citizen Potawatomi Nation, Ho-Chunk Nation, Miami Tribe of Oklahoma, Peoria Tribe of Indians of Oklahoma, Pokagon Band of Potawatomi Indians, Potawatomi Nation Hannahville Indian Community, Prairie Band of Potawatomi Nation, Sac and Fox Nation of Missouri, and Sac and Fox Nation of Oklahoma. FTA sent invitation letters

to the following new tribal consulting parties on November 25, 2020: Kickapoo Tribe of Oklahoma, Little Traverse Bay Bands of Odawa Indians, Michigan, and Menominee Indiana Tribe of Wisconsin.

Native American tribes have not expressed any concerns regarding the RLE Project.

5.4 Section 4(f) Coordination

CTA coordinated with the Chicago Park District due to the impacts to Wendell Smith Park and Fernwood Parkway. Documentation for the Section 4(f) coordination can be found in **Appendix Y** of the Final EIS. The Section 106 consulting party meetings discussed in **Section 10.2.1** of the Final EIS also serve as part of the Section 4(f) public involvement and agency coordination process.

CTA will continue to coordinate with the Chicago Park District regarding potential impacts and mitigation measures to Wendell Smith Park and Fernwood Parkway following publication of the Final EIS.

CTA has coordinated with the Forest Preserves of Cook County (FPCC) due to the 130th Street station location adjacent to Beaubien Woods Forest Preserve, a Section 4(f) property; however, it was determined that there would be no Section 4(f) use of Beaubien Woods Forest Preserve. Coordination activities are discussed in **Section 4.3.3.2** and **Chapter 8** of the Final EIS.

5.5 Public Outreach

Community outreach for the RLE Project has continued since the publication of the Draft EIS through the development of the Supplemental EA and Final EIS. CTA will continue to involve and consult the community through future phases of the RLE Project

In an effort to further engage and seek support from a comprehensive group of community members who were seen as invested stakeholders within the RLE Project footprint, the RLE Project Advisory Council (PAC) was formed by CTA in 2019. The PAC is made up of approximately 24 representatives from 20 community and governmental organizations. Detailed information about the PAC can be found in the PPP provided in **Appendix C** of the Final EIS.

Other public outreach activities included elected official updates, stakeholder and public meetings, issuance of newsletters, mailers (U.S. Postal Service mailings and hard copy drop-offs), a digital engagement platform (Bang the Table), regular postings on a RLE Project Facebook page, eBlasts (i.e., mass emails sent to people who signed up for RLE Project notifications), and announcements regarding the RLE Project. Community in-person meetings were held at venues that were ADA-accessible for attendees. In the spring of 2020, the COVID-19 pandemic prompted virtual adaptations and virtual meeting accommodations instead of in-person meetings and gatherings. Virtual stakeholder and public meetings allowed the participants to provide input, ask questions, share their comments, and discuss any concerns with CTA. The virtual community meetings were publicized by flyer, postcard notice, newspaper advertisements, eBlasts, customer alerts, and on the RLE Project website. For individuals needing assistance, Spanish interpreters and ASL interpreters were available for all virtual community meetings. Closed captioning was also offered. **Appendix C** of the Final EIS contains copies of public outreach materials that have been issued for the RLE Project since the publication of the Draft EIS.

CTA continues to update the project website (https://www.transitchicago.com/rle/), which serves as the most up-to-date source of information for the public. CTA also conducted individual and group briefings for elected and public officials; community, civic, business, and religious leaders; and other stakeholders, providing them the opportunity to comment and inquire about the project.

CTA held meetings with community organizations and stakeholders since the Draft EIS through 2022. **Appendix C** of the Final EIS provides a comprehensive list of the stakeholder groups within the PPP as well as summary matrices of the official responses to public comments received after publication of the Draft EIS, announcement of the Preferred Alignment, and publication of the Supplemental EA. **Table 5-1** is a summary of the public meetings advertised for the RLE Project.

Table 5-1: Outreach Meetings Summary

Meeting	Location	Date and Time	Number of Attendees
Draft Environmental Impact Statement			
Public Hearing	St. John Missionary Baptist Church 211 E. 115th Street	November 1, 2016 5:30 to 7:30 PM	280
Preferred Alignment Announcement			
Open House	Gwendolyn Brooks College Preparatory Academy - Main Gym 250 E. 111th Street	February 13, 2018 6:00 to 8:00 PM	246
Supplemental Environmental Assessment			
Community Meeting	Virtual meeting hosted by CTA using Zoom and Facebook Live platforms	December 8, 2020 6:00 to 8:30 PM	68 (Zoom) 15 (Facebook Live)
Community Meeting	Virtual meeting hosted by CTA using Zoom and Facebook Live platforms	December 9, 2020 1:30 to 3:00 PM	69 (Zoom) 21 (Facebook Live)
Stakeholder Meeting	Altgeld Public Library 955 E. 131st Street	February 16, 2022 6:00 to 8:00 PM	11
Public Hearing	Virtual meeting hosted by CTA using Zoom and Facebook Live platforms	February 15, 2022 6:00 to 8:00 PM	129
	The Salvation Army Kroc Center 1250 W. 119th Street	February 17, 2022 6:00 to 8:00 PM	10

Additional details about the public outreach for the RLE Project can be found in **Chapter 10** and **Appendix C** of the Final EIS.

6 Determination of Findings

This section describes FTA's NEPA determination for the RLE Project, as well as FTA's findings for other federal environmental requirements. The determination and findings are supported by the RLE Project's Final EIS as well as **Attachment A** of this ROD (which summarizes the commitments and mitigation measures that will be incorporated into the RLE Project).

6.1 National Environmental Policy Act

Title 42, Sections 4321 through 4347 and 4372 through 4375 of the United States Code, as well as Executive Order 11514, Protection and Enhancement of Environmental Quality, require that federal

agencies evaluate the environmental impacts of their actions, integrate such evaluations into their decision-making processes, and implement appropriate policies.

The environmental record for the RLE Project includes the Draft EIS (October 2016), Supplemental EA (January 2022), Final EIS (August 2022), and the supporting materials incorporated therein.

These documents represent the detailed statement required by NEPA describing:

- The environmental impacts of the proposed action;
- The adverse environmental effects that cannot be avoided, should the proposed action be implemented;
- Alternatives to the proposed action; and
- Potential irreversible and irretrievable commitments of resources that would be involved should the proposed action be implemented.

Having carefully considered the environmental record, the commitments and mitigation measures summarized in **Attachment A** of this ROD, public and agency comments, and the findings below, FTA has determined that:

- The environmental review documents include a record of: the environmental impacts of the proposal; adverse environmental effects that cannot be avoided; alternatives to the proposal; and irreversible and irretrievable impacts on the environment;
- The environmental process included cooperation and consultation with U.S. Environmental Protection Agency (USEPA);
- All reasonable steps have been taken to minimize adverse environmental effects of the RLE Project; and
- The project meets its purpose and need and satisfies the requirements of NEPA.

6.2 Section 106 of the National Historic Preservation Act

Section 106 regulations state that if there are historic or cultural resources in the APE that may be affected by a federal undertaking, the agency official will assess adverse effects, if any, in accordance with the Criteria of Adverse Effect described in 36 CFR § 800.5. As stated in the regulation, an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register of Historic Places (NRHP) in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR § 800.5(a)(1)). Effects can be direct, indirect, or cumulative (36 CFR § 800.5(a)(1)).

The Preferred Alignment would cause displacements and visual, noise, and other environmental effects within the APE, but none of the effects would alter the characteristics that qualify any of the identified historic properties for inclusion on the NRHP. No mitigation measures would be

required. Because none of the NRHP-eligible properties in the APE would be physically affected (they would not be displaced or altered), each resource was evaluated for potential visual effects from the aerial structure, stations, and park & ride facilities. While the historic properties in the APE would encounter direct visual impacts as a result of their proximity to the RLE Project, this impact would not compromise the integrity of the historic properties or any of their character defining features that qualify them for listing in the NRHP. To comply with the agreements with State Historic Preservation Office (SHPO), CTA would include the following anticipated conditions in the final design of the RLE Project:

- Limit the construction of a park & ride facility at the 130th Street station to 4 stories or less, and
- Locate the new entrance to the 130th Street station park & ride facility at one of the two accepted locations: (1) Existing 130th Place, which eliminates on-street parking on Greenwood Avenue for one block between Ellis Avenue and 130th Place; (2) Between 130th Place and 132nd Street in the original parking lot in Block 11, which eliminates two blocks of on-street parking along the east side of Greenwood Avenue.

Based on the results of the eligibility and effects findings for the Preferred Alignment, the assessment determined "No Adverse Effect" on the 21 historic properties within the RLE Project's APE. Additional details can be found in **Section 4.7** and **Appendix Q** of the Final EIS.

In addition, CTA found the RLE Project would result in no noise or vibration impacts due to construction, no permanent vibration impacts, and 15 permanent moderate noise impacts after mitigation, none of which effect historic properties. Mitigation would consist of construction of a noise barrier approximately 3.5 feet in height (above the top of rail) to reduce noise transmission at and below the height of the tracks. Therefore, historic properties identified within the APE north of the 130th Street station would not be affected by RLE Project noise and vibration.

Analysis for the relocation of the 130th Street station found there would be no noise impacts and no mitigation measures required. For vibration, there would be no new adverse vibration impacts from the 130th Street station relocation.

During project construction, the visual, noise, and vibration effects are not anticipated to affect the characteristics that qualify properties for inclusion on the NRHP. Construction noise and vibration levels for the Preferred Alignment with mitigation described in **Section 4.5** of the Final EIS would not exceed FTA-recommended construction impact criteria. Contractors would be required to avoid impact pile-driving methods in the vicinity of the historic Roseland Pumping Station.

FTA finds that the RLE Project has satisfied the requirements of Section 106 of the National Historic Preservation Act.

6.3 Clean Water Act, Executive Order 11990 on Protection of Wetlands, and Coastal Zone Management Act

The Clean Water Act [33 USC § 1251] establishes the basic structure for regulating discharges of pollutants into waters of the United States and gives USEPA the authority to implement pollution

control programs and actions, such as setting wastewater standards for industries. Section 10 of the Rivers and Harbors Act of 1899 (33 USC § 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. Sole source aquifers are regulated under 40 CFR § 149.

Lake Michigan is the dominant water feature in the region and is approximately 4.8 miles from the RLE Project at its closest point to the Preferred Alignment. Lake Calumet is east of the RLE Project, and south of the RLE Project is the Little Calumet River flowing westward. The Little Calumet River is on the Illinois 303(d) list (a list of waters where water quality is impaired or threatened); it is listed as impaired for mercury and polychlorinated biphenyl. No Total Maximum Daily Load has been developed for these pollutants.

Lake Michigan is the drinking water source for the City of Chicago and many of its suburbs. Groundwater is not a drinking water source and there are no sole source aquifers in proximity to the RLE Project. Due to the predominance of impervious surfaces throughout the communities adjacent to the RLE Project, minimal percolation to the underlying groundwater occurs.

The Preferred Alignment would not cross any waterbody or result in any new structures or construction in a waterbody. There would be no impacts on waterbodies from the Preferred Alignment.

Executive Order 11990 directs federal agencies to minimize the destruction, loss, or degradation of wetlands. It also assures the protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable during the planning, construction, funding, and operation of transportation facilities and projects.

The Preferred Alignment would affect up to 15.7 acres of wetlands, including a small quantity of wetland area limited to the footprint of a culvert outlet into Kensington Marsh. Fill of wetlands would be necessary due to placement of the yard and shop, mainline tracks, and supporting infrastructure. All wetlands in the area of potential impact (API) are assumed to require total fill in the absence of final grading limits. All federal, state, and local regulations regarding wetland impacts would be adhered to. The USACE will not require mitigation, based on the information documented in the Approved Jurisdictional Determination. While no mitigation measures nor commitments are applicable based on the API associated with the preliminary plans, CTA would comply with all federal, state, and local regulations regarding wetland impacts for the RLE Project.

Temporary construction access for installation of a stormwater outlet to Kensington Marsh would necessitate temporary impacts on wetlands. Temporary impacts on the marsh would not exceed 0.19 acre. USACE determined they do not object to utilization of Kensington Marsh, provided that coordinated BMPs are implemented. Mitigation measures associated with wetlands are identified in **Attachment A** of this ROD.

The Illinois Coastal Management Program boundary follows 130th Street. The 130th Street station would be within the boundaries of the Illinois Coastal Management Program. The 130th Street station would be located within previously developed land and would be designed to meet the policies of the Coastal Management Program.

Coordination with the Illinois Department of Natural Resources (IDNR), Illinois Coastal Management Program, occurred on November 20, 2020 and March 31, 2021 regarding the need for a federal consistency review. Per IDNR guidance, CTA submitted an initial federal consistency review request to IDNR on August 27, 2021 requesting a determination as to whether a federal consistency review would be necessary for the RLE Project. In a letter dated October 8, 2021, IDNR concurred that the relocated 130th Street station would comply with the enforceable policies of the Illinois Coastal Management Program and would be conducted in a manner consistent with the Illinois Coastal Management Program. Therefore, the 130th Street station would have no permanent adverse impacts on the Illinois coastal zone; coordination with IDNR regarding the federal consistency determination is complete. Coordination materials are included in **Appendix S** of the Final EIS.

Accordingly, FTA finds that, with the mitigation measures identified in **Attachment A** of this ROD, the RLE Project meets the requirements of Section 404 of the Clean Water Act and Executive Order 11990 on Protection of Wetlands and the Coastal Zone Management Act.

6.4 Floodplain Management

Executive Order 11988 requires the protection of floodplains. The Executive Order directs federal agencies to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. The potential for floodplains in the vicinity of the Preferred Alignment was reviewed using the Federal Emergency Management Agency Flood Insurance Rate Maps. The Preferred Alignment would not cross a floodplain or result in any new structures or construction in a floodplain. There are no floodplains present in the API, and there would be no impacts on floodplains from the Preferred Alignment.

FTA finds that the RLE Project meets the requirements of Executive Order 11988.

6.5 Endangered Species Act

The Endangered Species Act (16 USC § 1531) and subsequent amendments provide for the conservation of threatened and endangered species and the ecosystems upon which they depend.

There are 135 state-listed species that potentially occur within Cook County. Changes in federal- and state-listed species status are documented in **Appendix V** of the Final EIS. In summary, although the peregrine falcon (*Falco peregrinus*) is no longer considered a state-listed species of concern as a migratory bird, protections of the Migratory Bird Treaty Act (MBTA) still apply to this species. The rusty patched bumble bee (*Bombus affinis*) was added to the federal species list for Cook County; however, the RLE Project is outside the range of this species, as identified by the U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System. The Information for Planning and Consultation system review indicated the rufa red knot (*Calidris canutus rufa*), a robin sized shorebird, may occur in the RLE Project vicinity. No suitable habitat (i.e., coastal areas or large wetland complexes for migratory stopovers) for the rufa red knot was identified in the API. Therefore, the rufa red knot is unlikely to occur in the API.

Permanent and temporary construction impacts on vegetation and wildlife habitat in the Preferred Alignment include removal of up to 64.1 acres of trees from the API. USFWS listed the northern long-eared bat as a threatened species that may be present in the vicinity. Northern long-eared bats may be transient through the area, but more suitable foraging and roost habitat is likely to be present in the wooded areas and riverine corridor along the Little Calumet River. Coordination was completed with USFWS on September 28, 2021, finalizing the determination regarding potential impacts on the northern long-eared bat. Under the *Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana bat and Northern Long-Eared Bat (USFWS)* a "May Affect – Not Likely to Adversely Affect" determination with inclusion of mitigation measures was provided by USFWS. USFWS also agreed with the finding of "No Effect" for the threatened and endangered species listed in Cook County, Illinois and IDNR has determined that impacts are unlikely with inclusion of the proposed mitigation measures (see the coordination letters dated September 28, 2021 and November 24, 2021, respectively, in **Appendix V** of the Final EIS). Corresponding mitigation measure are provided in **Attachment A** of this ROD.

FTA finds that, with the mitigation measures identified in **Attachment A** of this ROD, the RLE Project meets the requirements of the Endangered Species Act.

6.6 Migratory Bird Treaty and Bald and Golden Eagle Protection Acts

Vegetation and wildlife habitats are also regulated on the federal level by the MBTA (16 USC §§ 703–712), Fish and Wildlife Coordination Act (16 USC § 661–667e), and the Bald and Golden Eagle Protection Act (16 USC § 668–668c). There are no local regulations requiring additional analysis; however, there are local regulations regarding the removal of landscape trees without a permit.

Permanent impacts on vegetation and wildlife habitat in the Preferred Alignment include removal of up to 64.1 acres of trees from the API. The Preferred Alignment would also potentially have adverse impacts on vegetation and wildlife habitat during construction due to tree removal. The loss of trees would reduce migratory bird habitat. The tree removal is mostly from the proposed construction of the 120th Street yard and shop and the 130th Street station. Reduction in habitat would occur in an area that is fragmented and somewhat isolated by surrounding industrial and transportation uses. The loss of trees would reduce migratory bird habitat. Migratory species passing through the Chicago urban core are likely to be adapted to urban habitat and are highly mobile, able to overcome industrial and land use barriers to more natural areas. With the implementation of mitigation measures outlined in **Attachment A** of this ROD, potential adverse impacts would be minor.

Mitigation measures would be required for compliance with the MBTA, for consistency with local tree protection ordinances, and to reduce potential impacts on wildlife habitat. Bird species may use trees that could be removed for the RLE Project or disturbed during construction and could be affected. Additional information on mitigation measure details can be found in **Appendix V** of the Final EIS.

FTA finds that, with the mitigation measures identified in **Attachment A** of this ROD, the RLE Project meets the requirements of the MBTA and the Bald and Golden Eagle Protection Act.

6.7 Clean Air Act

Under authority of the Clean Air Act (CAA), USEPA has established National Ambient Air Quality Standards (NAAQS) for criteria pollutants to protect the public health and welfare [42 USC 7401 et seq. (1970)]). The criteria pollutants that are of greatest concern to the transportation sector include carbon monoxide, nitrogen dioxide, ozone, particulate matter with an aerodynamic diameter of 10 micrometers (µm) and less (PM_{10}), and particulate matter with an aerodynamic diameter of 2.5 micrometers and less ($PM_{2.5}$). The NAAQS are summarized in **Appendix U** of the Final EIS. The RLE Project would be located in an area classified as nonattainment for ozone, which is a region where recent air quality monitoring data have exceeded the ozone NAAQS. However, the area has been redesignated as unclassifiable/attainment for $PM_{2.5}$.

Regional emissions of air pollutants under the Preferred Alignment are based on regional vehicle miles traveled (VMT). VMT are the total number of miles driven by all vehicles and would decrease under the RLE Project resulting from passenger diversions to the Red Line. The regional vehicular emissions were evaluated from VMTs and the analysis predicted slightly lower emissions of greenhouse gases (GHG), $PM_{2.5}$, and Mobile Source Air Toxics (MSAT) under the Preferred Alignment. The Preferred Alignment would reduce VMTs, and, therefore, it would slightly lower regional emissions of GHGs, $PM_{2.5}$, and MSAT.

Because the RLE Project would be in a nonattainment area for ozone, the Preferred Alignment must conform to the State Implementation Plan for ozone. Conformity for ozone can be demonstrated by documenting that the proposed project is specifically included in the conforming Regional Transportation Plan and TIP. In its conformity analysis, CMAP concluded that the *ON TO 2050* RTP and the *FFY 2019-2024 TIP* meet all applicable requirements for conformity for the 8-hour ozone standard and the annual $PM_{2.5}$ standard. The RLE Project would conform to the SIP because the RLE Project was included in CMAP's *GO TO 2040* and would decrease $PM_{2.5}$ emissions. The RLE Project would still conform to the SIP because it is included in CMAP's *ON TO 2050* and TIP. In 2018 the USEPA approved the Illinois Environmental Protection Agency request to revise the state's designation for $PM_{2.5}$ from unclassifiable to unclassifiable/attainment, and a transportation conformity project-level analysis for $PM_{2.5}$ is not required.

There would be no adverse impacts on regional and local air quality as a result of the Preferred Alignment. FTA finds that the RLE Project meets the requirements of the CAA.

6.8 Environmental Justice

USEPA defines environmental justice (EJ) as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (USEPA 2004). **Chapter 7** of the Final EIS summarizes the EJ analysis and outreach conducted for the RLE Project and additional details can be found in **Appendix X** of the Final EIS.

FTA issued its most recent guidance for meeting the requirements of Executive Order (EO) 12898 as Circular 4703.1 in August 2012. Federal agencies are required to consider the potential for disproportionately high and adverse impacts on EJ populations that could result from all programs,

policies, and activities (EO 12898). As described in EO 12898, a disproportionate impact is one that would negatively affect EJ populations to a greater extent than non-EJ populations. The communities adjacent to the RLE Project are entirely minority communities, some of which are also low-income areas. This is a community-driven project based on equity. All of the benefits and impacts of the project would occur within these minority and low-income populations (EJ populations). Few benefits would occur outside of the minority and low-income areas. As such, the Preferred Alignment would have impacts on EJ populations; however, none of the impacts would be disproportionately high and adverse. FTA and CTA have undertaken outreach and ongoing coordination with affected communities to identify EJ populations, discuss project impacts and benefits, and provide mitigation measures where relevant. Full and fair access to meaningful involvement by EJ populations in project planning and development is an important aspect of EJ (EO 12898). More information regarding specialized outreach can be found in **Section 7.3** and **Section 10.4** of the Final EIS.

FTA Circular 4703.1 indicates that projects in areas consisting entirely of EJ populations do not necessarily eliminate the possibility of disproportionately high and adverse impact findings; however, the following characteristics are true of the API:

- The entire API is predominantly minority populations. No single block group (U.S. Census Bureau) in the API has less than 76 percent minority populations.
- All of the impacts and benefits of the Preferred Alignment would accrue to the same minority populations.
- The purpose of this community-initiated project includes connecting disadvantaged communities to the City of Chicago's major employment and activity centers in an effort to spur economic development and improve livability. The RLE Project would help remediate the geographic isolation and lack of employment and development opportunities that currently exist in the communities surrounding the RLE Project.

A multistep process was used to assess the potential for disproportionately high and adverse impacts on EJ populations as described in **Section 7.1** of the Final EIS. Categories that had adverse impacts remaining after mitigation measures were analyzed further to determine whether any of those impacts would be disproportionately high or adverse. An impact would be disproportionately high or adverse if the effect (1) would be predominantly borne by an EJ population, or (2) would be suffered by the EJ population and would be appreciably more severe or greater in magnitude than the adverse effect suffered by the non-EJ population. Project benefits to EJ populations were also considered.

Considering the impacts, mitigation measures, and benefits, the permanent impact under the Preferred Alignment on community character and permanent visual impact would not be appreciably more severe or greater in magnitude than similar effects elsewhere in CTA's rail system. The mitigation measures proposed are similar in nature to those for other CTA projects and have been proposed by CTA consistently in EJ and non-EJ populations alike. The project offers considerable benefits that would accrue to the resident EJ populations. Although the Preferred Alignment would still have adverse impacts on EJ populations, these impacts would not be disproportionately high and adverse. As such, no EJ-specific mitigation measures beyond those

identified in **Chapter 4** of the Final EIS and carried forward into **Attachment A** of this ROD would be required.

Therefore, FTA finds that the RLE Project meets the intent of Executive Order 12898 because the RLE Project would not result in disproportionately high and adverse effects on minority or low-income populations.

6.9 Section 4(f) Evaluation

Section 4(f) of the USDOT Act of 1966 is a federal law that established requirements for USDOT (including FTA) consideration of publicly owned parks/recreational areas that are accessible to the general public, publicly owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects (49 USC Section 303). This law, commonly known as Section 4(f), is codified in 49 USC Section 303 and 23 USC Section 138 and is implemented by FTA through the regulation 23 CFR Part 774. Additional guidance on the implementation of Section 4(f) may be found in FHWA's *Section 4(f) Policy Paper* (USDOT, FHWA 2012). FTA has formally adopted this guidance and this analysis was conducted consistent with this guidance.

The Section 4(f) evaluation involved consultation and coordination with agencies and the public, as described in **Chapter 8** of the Final EIS.

There would be no permanent incorporation, temporary use, or a constructive use of any of the historic properties under the Preferred Alignment. No historic properties or land would be acquired or used for construction or permanently. As such, the Preferred Alignment would not result in the use of any historic properties protected under Section 4(f).

There are no known archaeological sites within the project APE, as identified in **Appendix Q** of the Final EIS. There would be no permanent incorporation, temporary use, or constructive use of any archaeological resources under the Preferred Alignment. Therefore, the Preferred Alignment would not result in the use of any archaeological resources protected under Section 4(f).

During construction of the Preferred Alignment, there would be temporary and minor construction activities within Wendell Smith Park for a short duration. These temporary construction activities would be considered a temporary occupancy under 23 CFR § 774.13 and would not constitute a use of Wendell Smith Park under Section 4(f). See **Chapter 8** of the Final EIS for additional details.

The Preferred Alignment track structure would run through the two parcels of Fernwood Parkway between 99th Street and 103rd Street. Elevated track structure supports would be placed permanently in the parkway, and the parkway south of 99th Street would be overlapped by the elevated structure and its associated clearances. This would result in a permanent incorporation of the park space, which constitutes a use under Section 4(f).

Based on consideration of the proposed direct use as well as the mitigation and enhancement measures, no adverse impacts on the attributes, features, or activities would result from the Preferred Alignment; therefore, a *de minimis* finding is documented for the Section 4(f) use of Fernwood Parkway in the Final EIS. Replacement parkland proposed as mitigation would replace

this linear open green space with new pocket parks directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or at additional locations based on future coordination with the Chicago Park District. Replacement ratio would be 1 to 1, for a total of 4.5 acres of replacement parks. See **Chapter 8** and **Appendix Y** of the Final EIS for additional details regarding mitigations measures and coordination with the Chicago Park District.

The measures to minimize harm to Section 4(f) resources are included in the list of mitigation measures in **Attachment A** of this ROD. Accordingly, FTA finds that the RLE Project meets the requirements of Section 4(f).

July 28, 2022

Date of Approval

Kelley Brookins
Regional Administrator
U.S. Department of Transportation
Federal Transit Administration

Attachment A: Commitment and Mitigation Summary

Resource Category	Impact Category	Commitment and Mitigation[1] Summary	Responsible Party	Timing
Transportation (Chapter 3)	**Permanent** TR-1	CTA has provided RLE Project traffic analysis to agencies of jurisdiction through ongoing coordination and recommended improvements as documented in the Final Environmental Impact Statement (EIS)/Record of Decision (ROD) through 30 percent design. CTA will coordinate intersection improvements with agencies of jurisdiction [including Illinois Department of Transportation (IDOT), Chicago Department of Transportation (CDOT)], and Cook County Department of Transportation and Highways (CCDoTH) for intersections affected by the change in traffic volumes and patterns associated with the final design of the RLE Project. The mitigation measures will be based on actual (measured) traffic volumes, agency requirements, coordination within the traffic network, and any traffic demand management and/or traffic calming measures being implemented at the time of mitigation. Agency requirements may include level of service analysis under Complete Streets guidelines, examining an overall level of service for pedestrians, bicycles, transit modes, and other vehicles (rather than placing an emphasis on the movement of automobiles).	CTA	Design Operations
	TR-2	CTA will coordinate with CDOT to include crosswalks at the existing intersection adjacent to 103rd Street station. CTA will coordinate with CDOT to determine if additional improvements are merited at this location to enhance safety for crossing pedestrians.	CTA	Design
	TR-3	At 111th Street station, where the proposed pedestrian roadway crossing is considered “mid-block,” CTA will provide enhanced crosswalk warning devices (in coordination with CDOT) in the final design of the RLE Project. This crosswalk enhancement may include a raised-table style crosswalk with the addition of rapid flash, pedestrian-activated warning lights.	CTA	Design
	TR-4	At Michigan Avenue station, CTA will coordinate with CDOT to include crosswalks at an existing intersection at Michigan Avenue and Kensington Avenue and evaluate the need for a traffic signal related to exiting buses. If the intersection is signalized, pedestrian signals with pedestrian activation will be included.	CTA	Design
	TR-5	For the 130th Street and Ellis Avenue intersection, in coordination with IDOT (having jurisdiction of 130th Street) and CDOT (having jurisdiction of Ellis Avenue), CTA will extend turn lane storage lengths and adjust the signal timing per the Intersection Design Study and the traffic analysis results. The mitigation measures will be based on actual (measured) traffic volumes, agency requirements, coordination within the traffic network, and any traffic demand management and/or traffic calming measures being implemented at the time of mitigation.	CTA	Design
	TR-6	CTA will provide bicycle parking at the four RLE stations to accommodate bicyclists.	CTA	Design
	TR-7	The existing at-grade crossings at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 113th Street (pedestrian only), Wentworth Avenue, 115th Street, and State Street will remain. At the crossings directly adjacent to stations, CTA will include the implementation of at-grade warning device enhancements including pedestrian gates and improvements for Americans with Disabilities Act (ADA) compliance in the final design of the RLE Project in coordination with the Union Pacific Railroad (UPRR). Illinois Commerce Commission, CDOT, and CCDoTH.	CTA	Design
	TR-8	At stations, CTA will provide parking on the same side of the tracks so riders that use park & ride facilities will not have to cross the Union Pacific Railroad (UPRR) tracks to access the stations. CTA will coordinate with the UPRR regarding fencing or other appropriate design elements and CTA will include the agreed upon design features in final design of the RLE Project to deter trespassing into UPRR property. CTA will include pedestrian gates in final design to enhance at-grade crossing protections.	CTA	Design
	Construction TR-9	CTA will require contractors performing primary construction activities to prepare traffic management and maintenance of traffic plans that identify traffic detours and emergency response access routes. CTA and contractors will coordinate with IDOT, CCDoTH, CDOT, and local businesses, and organizations to select the most appropriate access and traffic management for each situation. Contractors will adhere to local, state, and federal construction and temporary traffic management guidelines.	CTA Contractors	Construction

Resource Category	Impact Category	Commitment and Mitigation[1] Summary	Responsible Party	Timing
	TR-10	CTA will coordinate with the UPRR, Norfolk Southern Railway (NS), Canadian National (CN), Metra Electric District (MED), and Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) for work near, adjacent to, or on their property. CTA will require contractors performing primary construction activities to minimize freight and passenger rail impacts, such as sequencing the construction of crossings, through coordination with the affected railroads, appropriate flagging, and scheduled track outages.	CTA Contractors	Construction
	TR-11	CTA will require contractors performing primary construction activities to sequence the proposed structure construction in the vicinity of the I-94/I-57 interchange to limit effect on I-57 traffic flow to the extent practicable per IDOT traffic management requirements.	CTA Contractors	Construction
	TR-12	CTA will require contractors to adhere to local, state, and federal guidelines for maintaining pedestrian and ADA access during construction.	CTA Contractors	Construction
Land Use and Economic Development (Section 4.1)	Permanent LU-1	Where stations, substations, and park & ride facilities are inconsistent with current zoning, CTA will coordinate with City of Chicago to rezone the parcels or receive appropriate zoning approvals (e.g., special use permit, variance, etc.).	CTA	Design
	Construction LU-2	CTA will develop a Construction Outreach and Coordination Plan. CTA will coordinate with the communities, businesses, and aldermen's local ward offices, and contractors performing primary construction activities to finalize and implement a Construction Outreach and Coordination Plan.	CTA Contractors	Design Construction
Displacements and Relocation of Existing Uses (Section 4.2)	Permanent DR-1	CTA will provide compensation and relocation assistance to displaced property owners and renters per the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (42 USC § 4601, et seq.). CTA will provide informational resources, permitting support, and points of contact for displaced business owners to find suitable sites for relocation.	CTA	Design
	DR-2	CTA will continue to coordinate with the Chicago Department of Planning and Development on the Transit Supportive Development (TSD) Plan to maximize the economic development and community benefits of the RLE Project.	CTA	Design
	DR-3	CTA will obtain FHWA approval for the agreement between CTA and IDOT regarding the RLE Project proposed within the I-57/94 right-of-way.	CTA	Design
	Construction	No mitigation measures nor commitments are applicable.		
Neighborhoods and Communities (Section 4.3)	Permanent NC-1	CTA will continue to coordinate with TCA Health to maintain access to the TCA Health parking lot and replace parking space impacts, if any, at a ratio of 1 to 1 in the final design of the RLE Project.	CTA Contractors	Design
	NC-2	CTA will continue to coordinate with the Agape Community Center to include an alternative parking location for the Agape Community Center in the final design of the RLE Project. CTA will maintain truck access to the north side of the Agape Community Center building.	CTA Contractors	Design
	NC-3	At Beaubien Woods Forest Preserve, CTA will uphold their role in the mitigation measures agreed upon by the Forest Preserves of Cook County (FPCC). The mitigations are currently anticipated to include: • Transfer of two City-owned parcels to FPCC ownership. • $250,000 payment to FPCC for ecological restoration, habitat enhancement, and beautification of expanded Beaubien Boat Launch land. • New trail connection from Altgeld Gardens recreation facilities on 133rd Street to the Beaubien Woods Boat Launch • Wayfinding and information signage inside the proposed station and outdoor signage at 130th Street and Ellis Avenue and other locations. • Forest Preserve advertising to encourage CTA riders to use public transportation to visit the Forest Preserves at the 130th Street station, other Red Line stations south of Roosevelt, and inside local trains and buses. CTA will continue to coordinate with the FPCC through final design and RLE Project completion regarding ongoing mitigation activities.	CTA Contractors	Design Operations
	Construction NC-4	CTA will require contractors to provide detours to maintain access to adjacent properties during construction, and CTA will coordinate with Pace so bus transit service will detour around roadway closures. CTA will provide early notification of construction activities and provision of temporary alternative access routes for the community and advertising programs to increase the visibility of affected businesses during construction. CTA will require contractors to perform work in a manner consistent with local ordinances.	CTA Contractors	Construction

Resource Category	Impact Category	Commitment and Mitigation[1] Summary	Responsible Party	Timing
	NC-5	CTA will require contractors performing primary construction activities to provide anticipated hauling routes. CTA will work with contractors to coordinate hauling routes throughout the RLE Project to minimize the number of trucks and equipment passing through sensitive areas of the community and will utilize highways and major arterials over local roads to the extent feasible and practicable.	CTA Contractors	Construction
Visual and Aesthetic Conditions (Section 4.4)	Permanent VA-1	CTA will consider community input into the appearance of the stations in the final design of the RLE Project. CTA will include landscaping with security prioritized in the detailed landscape design. Based on community input to date, aesthetic design elements are anticipated to include: • Replacing/restoring removed vegetation • Addressing neighborhood plan recommendations • Creating pedestrian friendly surroundings • Shielding exterior lighting and/or use of "down lighting" light fixtures to prevent light pollution into nearby residences • Providing landscaping (trees) as visual screening for the residences located on the west side of Eggleston Avenue north of 103rd Street station • Planting trees in front of the structure, where space allows, to break sight lines of the 107th Place cross-over and the 130th Street station • Using good urban design to reduce adverse impacts	CTA Contractors	Design
	Construction VA-2	CTA will require contractors performing primary construction activities to maintain as much existing vegetation as practical, including shielding of tree root zones to prevent construction damage to existing trees that will remain.	CTA Contractors	Construction
	VA-3	CTA will require contractors performing primary construction activities to limit construction lighting infiltration into adjacent neighborhoods when nighttime work is required.	CTA Contractors	Construction
	VA-4	CTA will require contractors performing primary construction activities to implement BMPs and debris-free construction areas to mitigate temporary visual impacts from the construction sites.	CTA Contractors	Construction
Noise and Vibration (Section 4.5)	Permanent NV-1	Before final design will be approved, CTA will require the final design contractor to analyze noise to confirm impact thresholds will be met as defined in the Final EIS. The 30 percent design estimate of noise barriers is approximately 33,600 lineal feet (6.36 miles) of noise barriers, extending from the top surface of the concrete deck to a minimum height of 3.5 feet above top-of-rail elevation. Mitigation will be modified, if needed, to ensure impacts are the same or less than those identified in this Final EIS.	CTA Contractors	Design
	Construction NV-2	CTA will require contractors performing primary construction activities to employ noise-reducing construction best management practices (BMPs) that are anticipated to include: • Keeping all construction-equipment exhaust mufflers in a state of good repair. • As part of the construction specifications, adhering to the noise control requirements of the project. • To the maximum extent possible, avoiding idling of vehicles that are not in use on construction sites. • Limiting nighttime construction near residences to the extent practical. • Avoiding impact pile driving in the vicinity of the historic Roseland Pumping Station, and the vicinity from the I-94 ramp crossing to the east of CN/MED and south of 130th Street, as well as adjacent to sensitive noise and vibration receivers identified in the Final EIS such as residences, parks, churches, etc.	Contractor	Construction
Safety and Security (Section 4.6)	Permanent SS-1	CTA will provide lighting under the elevated structure in station, parking, and on CTA right-of-way to contribute to improved safety and security, and to improve surveillance visibility	CTA Contractors	Design
	SS-2	CTA will continue the Threat and Vulnerability Assessment (TVA) and Preliminary Hazard Analysis (PHA) through final design of the RLE Project to determine appropriate security measures in the public right-of-way, such as security surveillance cameras and/or lighting at cross-street areas in the vicinity of the four RLE Project stations. CTA will coordinate the implementation of any improvements in the City right-of-way with the City of Chicago.	CTA Contractors	Design

Resource Category	Impact Category	Commitment and Mitigation[1] Summary	Responsible Party	Timing
	Construction SS-3	CTA will require contractors performing primary construction activities to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of the CTA's Safety and Security Management Plan or CTA's other manuals and policies. Contractors will contractually commit to take prompt and decisive corrective action on safety deficiencies identified at the work sites.	CTA Contractors	Construction
	SS-4	CTA will require the applicable contractors to construct an access road for the Metropolitan Water Reclamation District of Greater Chicago (MWRD) prior to commencing operation on the new CTA tracks, if necessary, to maintain access to the MWRD facility. This roadway will also be used by emergency services.	CTA Contractors	Construction
	SS-5	CTA will require contractors performing work on, above, or adjacent to the CTA rail system to follow CTA's Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System (Construction Safety Manual) to protect themselves, their employees, sub-contractors, CTA passengers, employees, and the public.	CTA Contractors	Construction
Historic and Cultural Resources (Section 4.7)	**Permanent** HC-1	To comply with the agreements with State Historic Preservation Office (SHPO), CTA will include the following anticipated conditions in the final design of the RLE Project: • Limit the construction of a park & ride facility at the 130th Street station to 4 stories or less, and • Locate the new entrance to the 130th Street station park & ride facility at one of the two accepted locations: -Existing 130th Place, which eliminates on-street parking on Greenwood Avenue for one block between Ellis Avenue and 130th Place -Between 130th Place and 132nd Street in the original parking lot in Block 11 which eliminates two blocks of on-street parking along the east side of Greenwood Avenue	CTA Contractors	Design
	Construction HC-2	CTA will require contractors to avoid impact pile-driving methods in the vicinity of the historic Roseland Pumping Station.	CTA Contractors	Construction
Hazardous Materials (Section 4.8)	**Permanent** HM-1	CTA will adhere to all applicable federal, state, and local regulations, as well as existing system-wide hazardous material usage, storage, and disposal plans and procedures, further minimizing the potential for hazardous material impacts.	CTA	Operations
	Construction HM-2	CTA will require contractors to follow federal, state, and local laws and regulations regarding hazardous materials during construction activities. CTA and contractors will implement the following BMPs, at a minimum, to avoid and minimize the potential for impacts before and during construction: • Conduct Phase II ESAs on properties identified as RECs in the site-specific Phase I ESAs. The assessments will include characterization and evaluation of the potential for encountering hazardous materials and contaminated soil. • CTA will prepare a Soil Management Plan for the RLE Project. • CTA will manage soil by two categories, uncontaminated and contaminated soil. Uncontaminated soils meet all Tier 1 SROs and MAC levels that can be either reused on or off the RLE Project, disposed of at an approved CCDD facility, or used as fill material at an uncontaminated soil fill operation (35 IAC 1100, Subpart F). Contaminated soil exceeds the Tier 1 SROs and MAC for one or more contaminants. The soil is considered impacted, and any material removed as part of RLE Project construction is required to be disposed at a landfill permitted to accept the material. • CTA will remove and dispose of creosote railroad ties that are encountered during construction at an approved disposal facility. • CTA will require that any USTs encountered during construction or previously identified during the Phase II ESAs be removed and disposed and any UST that was determined to be leaking would go through closure through the appropriate regulatory agency. • CTA will close out any open leaking UST sites and obtain a No Further Remediation Letter from the appropriate regulatory agency. • Survey buildings or structures for Asbestos Containing Material (ACM), Lead Based Paint (LBP), and hazardous material before demolition, to identify any ACM, LBP, and hazardous materials, such as polychlorinated biphenyls (PCBs) or mercury-containing equipment. Any ACM, LBP, and hazardous materials identified will be abated and disposed of in accordance with federal, state, and local regulations. Removal, abatement, and disposal of these materials will be completed by specialists that are trained and certified to conduct such activities.	CTA Contractors	Design

Resource Category	Impact Category	Commitment and Mitigation[1] Summary	Responsible Party	Timing
	HM-3	CTA will require applicable contractors to develop the following specific and required plans before start of construction, to further minimize or avoid the potential for hazardous material impacts: • A Contaminated Material Management Plan will provide the procedures for identifying, characterizing, managing, storing, and disposing of contaminated soil and groundwater encountered during construction activities. The plan will comply with all applicable federal and state cleanup standards and will cover the entire RLE Project. • If required, a Spill Prevention, Control and Countermeasure (SPCC) Plan will address the use, storage, and disposal of materials such as asphalt, fuel, paint, solvents, and cleaning agents. The SPCC Plans will provide BMPs to limit the potential for accidental releases of potentially hazardous materials. • Construction Stormwater Pollution Prevention Plans (SWPPP) will describe methods to prevent or minimize stormwater runoff from encountering contaminated soil or other hazardous materials. • Health and Safety Plans for construction activities, will be developed by contractors and approved by CTA before starting any work. The Health and Safety Plans will identify potential contaminants of concern, required personal protective equipment and procedures, and emergency response procedures.	CTA Contractors	Construction
Wetlands (Section 4.9)	Permanent WL-1	While no mitigation measures nor commitments are applicable based on the area of potential impacts associated with the 30 percent plans, CTA will comply with all federal, state, and local regulations regarding wetland impacts for the RLE Project.	CTA Contractors	Design Construction
	Construction WL-2	CTA will require contractors to site construction staging areas outside of wetlands as much as practicable, but if there were any temporary impacts, those areas will be restored as wetlands after construction. If any staging area is proposed to be sited outside of the previously cleared area, then contractors would coordinate with CTA to review the proposed site for the presence of wetlands.	CTA Contractors	Construction
	WL-3	CTA will restore temporarily affected areas in Kensington Marsh (related to installation of a stormwater outlet) to pre-construction conditions and will monitor for a period to be determined in coordination and MWRD. In addition to restoration, BMPs would include nine proposed detention ponds per 30 percent design, which would limit runoff volumes. If modifications are made during final design regarding the outflow or use of detention ponds to limit runoff volumes, then CTA would coordinate with the U.S. Army Corps of Engineers for concurrence.	CTA	Construction
Air Quality (Section 6.1)	Permanent	No mitigation measures nor commitments are applicable.		
	Construction AQ-1	CTA will require contractors performing primary construction activities to implement best management practices (BMPs) to reduce construction dust, to provide emissions controls on construction equipment, to use low sulfur fuels, and to limit equipment operations such as excessive idling. Contractors performing primary construction activities will develop and implement a Dust Control Plan, which will address, in detail, how dust will be controlled at the construction site, the staging areas, and the access and egress routes. CTA will require contractors to follow Chicago's Clean Diesel Construction Ordinance, which will reduce the potential for construction related air quality impacts.	CTA Contractors	Construction
Water Quality (Section 6.2)	Permanent WQ-1	CTA will design the RLE Project to include properly designed and maintained biological oil and grease removal systems in new storm drain systems, to treat water before it leaves project construction areas.	CTA Contractor	Design Operations
	WQ-2	CTA will implement monitoring and cleanup program for spills and leaks of hazardous materials, as needed.	CTA	Operations
	WQ-3	CTA will develop procedures to ensure that the placement of equipment to be repaired or maintained will be done in covered areas on a pad of absorbent material to contain leaks, spills, or small discharges.	CTA	Operations
	WQ-4	CTA will perform periodic and consistent removal of landscape and construction debris throughout the RLE corridor.	CTA	Operations
	WQ-5	CTA will ensure that the removal of any significant chemical residue, if applicable, on RLE Project sites will be done through appropriate methods.	CTA	Operations
	WQ-6	CTA will use non-toxic alternatives for any necessary applications of herbicides or fertilizers to landscaping for the RLE Project, where practicable.	CTA	Operations

Resource Category	Impact Category	Commitment and Mitigation[1] Summary	Responsible Party	Timing
	WQ-7	CTA will design and install detention basins or other landscaping features in the final design of the RLE Project to remove suspended solids by settlement, where practicable.	CTA Contractor	Design
	Construction WQ-8	CTA will require contractors to conduct periodic monitoring of runoff water quality before discharge from the site and into the storm drainage system, at a frequency to be determined during Stormwater Pollution Prevention Plan (SWPPP) development.	CTA Contractors	Construction
	WQ-9	CTA will require contractors to properly store hazardous materials to prevent contact with precipitation and runoff.	CTA Contractors	Construction
	WQ-10	CTA will require contractors to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) Construction General Permit, and to abide by all terms of the permit. Permit coverage will include development and implementation of a SWPPP.	CTA Contractors	Construction
Floodplains (Section 6.3)	Permanent	No mitigation measures nor commitments are applicable.		
	Construction	No mitigation measures nor commitments are applicable.		
Vegetation Wildlife and Habitat (Section 6.4)	Permanent VW-1	CTA will require contractors performing primary construction activities to time tree removal as much as possible to occur outside the migratory bird nesting season, which occurs generally from April 1-September 15 and as early as March 1 for some species. If tree removal must occur during the nesting season, two biological surveys will be conducted: one 15 days before and a second 72 hours before the construction that will remove or disturb suitable nesting habitat.	CTA Contractors	Construction
	VW-2	CTA will incorporate tree avoidance measures into the final design of the RLE Project where feasible; however, if construction of the project were to require removal of a protected tree, a permit will be required in accordance with applicable codes and ordinances of the City of Chicago. Tree removal permits may require replanting of protected trees to mitigate for the removal of these trees. Required tree removal will be determined during the pre-construction phase in coordination with contractors performing primary construction activities.	CTA Contractors	Design Construction
	Construction	CTA will require contractors to apply tree removal timing as above in VW-1.		
Threatened and Endangered Species (Section 6.5)	Permanent TE-1	For the protection of the northern long-eared bat, the CTA will require contractors to ensure that tree removal activities occur outside of the northern long-eared bat active season (April 1 through October 31).	CTA Contractors	Construction
	Construction TE-2	For the protection of the northern long-eared bat, the CTA will require contractors to ensure that tree removal activities occur outside of the northern long-eared bat active season (April 1 through October 31).	CTA Contractors	Construction
	TE-3	For the protection of wildlife associated with Lake Calumet, the CTA will require contractors to use fully shielded lighting fixtures that emit no light upward. Only “warm-white” or filtered LEDs (CCT < 3,000 K; S/P ratio <1.2) will be used to minimize blue emission. Only light the exact space with the amount (lumens) needed to meet industry safety requirements.	CTA Contractors	Construction
	TE-4	For protection of the osprey, the CTA will require contractors to remove vertical structures, such as telephone poles, light poles, etc., outside of the osprey active season (April 1 and October 31). If these dates cannot be accommodated, a nesting survey will be conducted to determine if species are utilizing structures in the project area. Survey results will be coordinated with IDNR.	CTA Contractors	Construction
Geology and Soils (Section 6.6)	Permanent	No mitigation measures nor commitments are applicable.		
	Construction	No mitigation measures nor commitments are applicable.		
Energy (Section 6.7)	Permanent	No mitigation measures nor commitments are applicable.		

Resource Category	Impact Category	Commitment and Mitigation[1] Summary	Responsible Party	Timing
	Construction	No mitigation measures nor commitments are applicable.		
Environmental Justice (Chapter 7)	Permanent	No mitigation measures nor commitments are applicable.		
	Construction	No mitigation measures nor commitments are applicable.		
Section 4(f) (Chapter 8)	Permanent 4F-1	CTA will implement mitigation for Fernwood Parkway including: Lands (acreage) used for the project will be replaced with lands of reasonably equivalent usefulness and location and of at least comparable value. CTA will mitigate impacts to Fernwood Parkway through the creation of pocket park sites directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or additional areas based on future coordination at a replacement ratio of 1 to 1, for a total of 4.5 acres of replacement parks. The replacement pocket park sites will include passive recreational space that will facilitate Chicago Park District master planning goals and objectives. Replacement property will be constructed in accordance with Chicago Park District standards. In coordination with the Chicago Park District, CTA will identify and acquire park space totaling 4.5 acres to be used for replacement parks. Prior to acquisition of the park space, CTA will conduct Phase I and II environmental site assessments and obtain environmental clearance on the selected sites, as required. In addition, CTA will coordinate with the City of Chicago, if needed, to ensure zoning of these parcels is consistent with future park uses by rezoning or receiving appropriate zoning approvals.	CTA Contractors	Design
	Construction 4F-2	CTA will coordinate with the applicable contractor to implement mitigation for Wendell Smith Park, including replacement of removed trees. CTA will obtain a construction permit from the Chicago Park District that requires full restoration and CTA will fully restore the land to a condition at least as good as that which exists prior to the RLE Project. CTA will require the construction contractor to follow appropriate construction BMPs to shield construction activities, allow use of the property by the public, and minimize any safety risks. This includes but is not limited to providing a detour for the sidewalks within Wendell Smith Park.	CTA Contractors	Construction

Appendix A
Alternatives Analysis - Locally Preferred Alternative Report

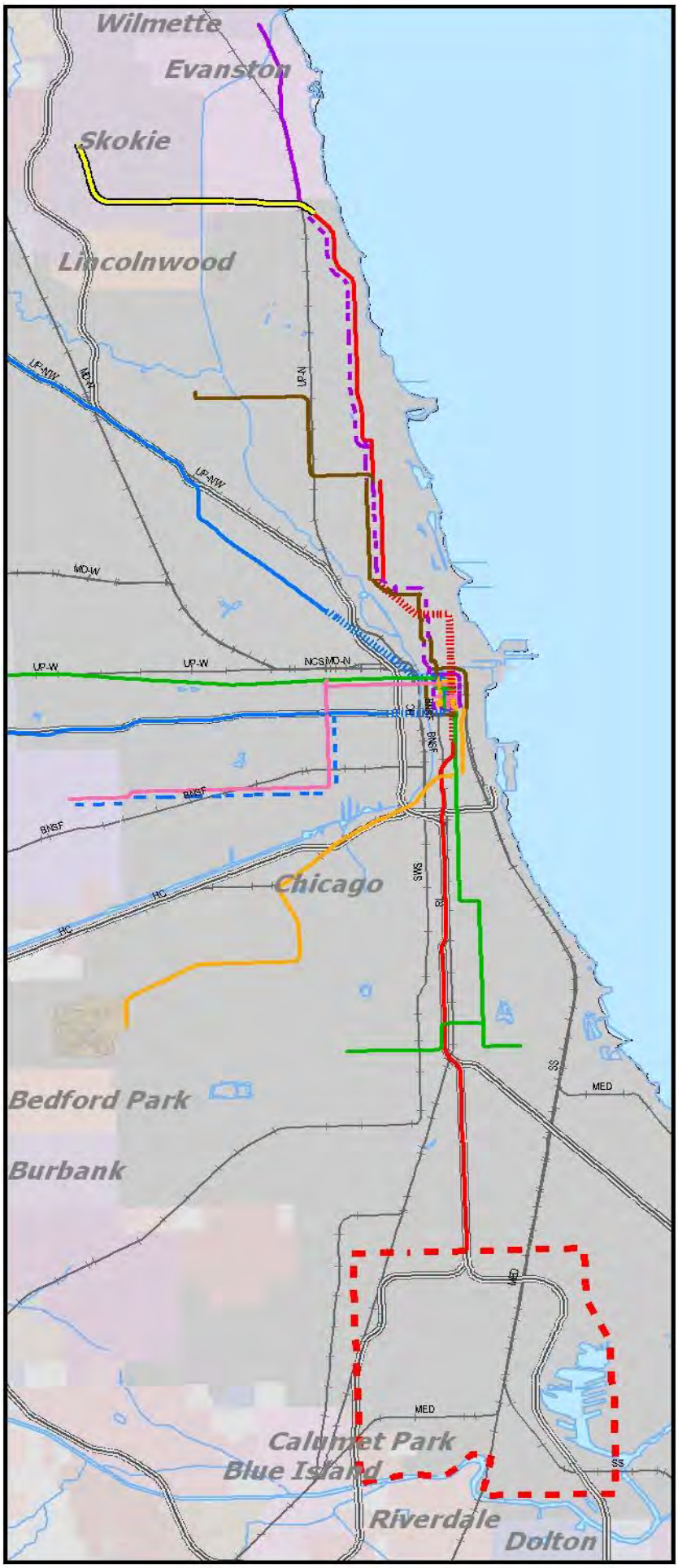

CTA Red Line Extension Alternatives Analysis

Locally Preferred Alternative Report

August 2009

Table of Contents

List of Tables ... iii
List of Figures ... iv
Acronyms Used in this Document ... v

1.0 INTRODUCTION ... 1
1.1 Context of the Alternatives Analysis ... 1
1.2 Purpose of the Alternatives Analysis Report ... 2
1.3 Organization of this Report ... 2

2.0 PURPOSE AND NEED ... 3
2.1 Description of Study Area ... 3
2.2 Transportation Facilities and Services ... 13
2.3 Performance of the Transportation System ... 18
2.4 Specific Transportation Problems ... 27
2.5 Potential Transit Markets ... 31
2.6 Project Goals and Objectives ... 32

3.0 SCREEN 1 EVALUATION ... 33
3.1 Study Area Corridors ... 33
3.2 Transit Technologies ... 40
3.3 Technology and Profile Evaluation ... 44
3.4 Screen 1 Findings ... 46

4.0 SCREEN 2 EVALUATION ... 49
4.1 Definition of Alternatives ... 49
4.2 Evaluation ... 51

5.0 SCREEN 3 EVALUATION ... 54
5.1 Definition of Alternatives ... 54
5.2 Screen 3 Evaluation ... 62
5.3 Screening Summary ... 64

6.0 LOCALLY PREFERRED ALTERNATIVE ... 66
6.1 Selection of a Locally Preferred Alternative ... 66
6.2 Description of Service Plan ... 66
6.3 LPA Transportation Characteristics ... 71
6.4 LPA Environmental Characteristics ... 75
6.5 LPA Cost and Financial Analysis ... 88
6.6 LPA Achievement of Project Goals and Objectives ... 94

7.0 PUBLIC INVOLVEMENT ... 98
7.1 Public Involvement Approach ... 98
7.2 Implementation and Execution of Public Involvement ... 100
7.3 Meeting Format ... 101
7.4 Screen 1 Public Involvement Summary ... 102
7.5 Screen 2 Public Involvement Summary ... 102
7.6 Screen 3 Public Involvement Summary ... 103
7.7 Final Reporting ... 104

8.0 NEXT STEPS ... 105

List of Tables

Table 2.1: 2000 and 2030 Population 5
Table 2.2: 2000 and 2030 Employment 9
Table 2.3: CTA Red Line Service Summary 13
Table 2.4: Metra Boardings by Station 16
Table 2.5: CTA and Pace Bus Routes Serving 95th Street Station 17
Table 2.6: CTA Fare Structure 18
Table 2.7: Speeds for Selected Bus Routes Serving 95th Street Terminal 24
Table 2.8: CTA and Pace Bus Routes Serving 95th Street Station Performance 27
Table 2.9: 95th Street Station Bus Terminal Delay (7:00-9:00 a.m.) 30
Table 2.10: Passenger Volumes at 95th Street Bus Terminal (7:00-9:00 a.m.) 30
Table 3.1: Summary Corridor Evaluation 39
Table 3.2: Summary Corridor Evaluation Conclusions 40
Table 3.3: Operating Characteristics of Technology Alternatives 43
Table 3.4: Technology Evaluation 45
Table 3.5: Summary of Technology and Profile Evaluation 47
Table 3.6: Summary of Screen 1 Evaluation of Alternatives 48
Table 4.1: Recommendations of Step 2 Evaluation 51
Table 4.2: Summary of Screen 2 Step 2 Evaluation of Alternatives 51
Table 4.3: Recommendations of Screen 2, Step 3 Evaluation 52
Table 4.4: Summary of Screen 2 Step 3 Evaluation of Alternatives 52
Table 5.1: Screen 3 Evaluation Summary and LPA Recommendation 63
Table 6.1: LPA and Existing Northbound Red Line Weekday Service Characteristics 67
Table 6.2: Estimated Northbound Running Times 68
Table 6.3: Proposed Bus Routes Changes 69
Table 6.4: Estimated Travel Times from 130th Street to Jackson Blvd. 71
Table 6.5: Parking Spaces for 2015 and 2030 72
Table 6.6: Number of Transfers between Select Origin-Destination Pairs 72
Table 6.7: Reliability and Safety 73
Table 6.8: Estimated 2030 Average Weekday Station Boardings 74
Table 6.9: Traffic Impediments 75
Table 6.10: Annual 95th Street Station Ridership (in millions) 75
Table 6.11: Poverty Status and Zero-Car Households within ½-Mile Station Areas 76
Table 6.12: Land Use and Development 81
Table 6.13: Summary of Potential Environmental Impacts 87
Table 6.14: LPA Capital Cost ($M, 2009) 88
Table 6.15: Program Capital Cost Estimates ($M) 90
Table 6.16: LPA Operating and Maintenance Costs 91

List of Figures

Figure 1.1: FTA's New Starts Process 1
Figure 2.1: Study Area and Community Area Boundaries 4
Figure 2.2: 2000 Population Density (Persons per Square Mile) 6
Figure 2.3: 2000 Study Area African American Population (Persons) 7
Figure 2.4: 2000 Study Area Low Income Population (Persons) 8
Figure 2.5: Study Area Land Use 11
Figure 2.6: 2000 Home-Based Work Trip Flows by District 12
Figure 2.7: Existing Transportation Facilities and Services 14
Figure 2.8: Existing Transit System 15
Figure 2.9: 2000 Average Commute Times 21
Figure 2.10: Estimated 2007 Morning Peak Hour Traffic Congestion 22
Figure 2.11: Estimated 2030 Morning Peak Hour Traffic Congestion 23
Figure 2.12: CTA 95th Street Station Bus Terminal 25
Figure 3.1: Red Line Extension AA Corridors 34
Figure 3.2: Transit Technologies 42
Figure 5.1: No-Build Alternative 55
Figure 5.2: TSM/BRT Halsted Street Alternative 57
Figure 5.3: HRT Halsted Street Elevated Alternative 58
Figure 5.4: TSM/BRT Michigan Avenue Alternative 60
Figure 5.5: HRT UPRR Elevated Alternatives 61
Figure 5.6: HRT UPRR South and West Station Options 62
Figure 5.7: Red Line Extension AA Screening Summary 65
Figure 6.1: LPA with Proposed Bus Route Changes 70
Figure 6.2: 2000 Age Distribution Over 65 77
Figure 6.3: 2000 Age Distribution Under 18 78
Figure 6.4: 2000 Poverty Status 79
Figure 6.5: 2000 No Vehicle Available 80
Figure 6.6: Land Use and Development 82
Figure 6.7: Example Rendering of the LPA Elevated Structure at the Proposed 103rd Street Station 84
Figure 6.8: Profile of the LPA between 95th Street and 119th Street 84
Figure 6.9: Effectiveness of Alternatives Meeting Goals and Objectives in 2030 97

Acronyms Used in this Document

AA	Alternatives Analysis
ADT	Average Daily Traffic
AGT	Automated Guideway Transit
BRT	Bus Rapid Transit
CATS	Chicago Area Transportation Study
CDOT	Chicago Department of Transportation
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National Railway
CREATE	Chicago Region Environmental and Transportation Efficiency Program
CTA	Chicago Transit Authority
dBA	Decibel Using A-Weighted Sound Level
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
FY	Fiscal Year
HRT	Heavy Rail Transit
IHB	Indiana Harbor Belt Railroad
IDOT	Illinois Department of Transportation
LOS	Level of Service
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LUST	Leaking Underground Storage Tank
MED	Metra Electric District
MOE	Measures of Effectiveness
MWRDGC	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NICTD	Northern Indiana Commuter Transportation District
O&M	Operations and Maintenance
PE	Preliminary Engineering
PRT	Personal Rapid Transit
RA	Redevelopment Area
RTA	Regional Transportation Authority
SCC	Standard Cost Categories
TIF	Tax Increment Finance
TSM	Transportation System Management
TSP	Transit Signal Priority
UPRR	Union Pacific Railroad
V/C	Volume-to-Capacity Ratio
VdB	Vibration Decibels
VHD	Vehicle Hours of Delay
YOC	Year of Construction
YOE	Year of Expenditure

1.0 INTRODUCTION

1.1 Context of the Alternatives Analysis

The Chicago Transit Authority (CTA) Red Line Dan Ryan rapid transit branch opened for service in September 1969. Proposed extensions of the CTA Red Line Dan Ryan branch to the south from its current terminus at 95th Street have been consistently included in the Chicago region's long range transportation plan developed by the Chicago Metropolitan Agency for Planning (CMAP), formerly the Chicago Area Transportation Study (CATS), since the mid-1970s.

The Chicago Department of Transportation (CDOT) also completed a draft feasibility study of transportation needs for the Far South area of the City of Chicago that concluded that despite strong transit ridership, access to CTA transit services was challenging. This draft feasibility study examined several transit corridors for their potential to improve mobility for Far South area residents and businesses. This feasibility study was also intended to lay the ground work for an Alternatives Analysis (AA) study to formally identify a Locally Preferred Alternative (LPA).

In late 2006, the CTA initiated an AA study to identify and evaluate potential major fixed guideway transit solutions in the Far South area of Chicago. This AA report documents the identification, evaluation, and selection of a LPA for the CTA, consistent with the planning and project development process defined by the Federal Transit Administration (FTA). The Alternatives Analysis is the first major step in the FTA New Starts process (shown in Figure 1.1). Transit agencies across the country seeking federal New Starts funding must follow this process. The CTA used the results of past studies as a starting point for conduct of the AA study. The AA study is completed with the selection of a LPA.

Figure 1.1: FTA's New Starts Process

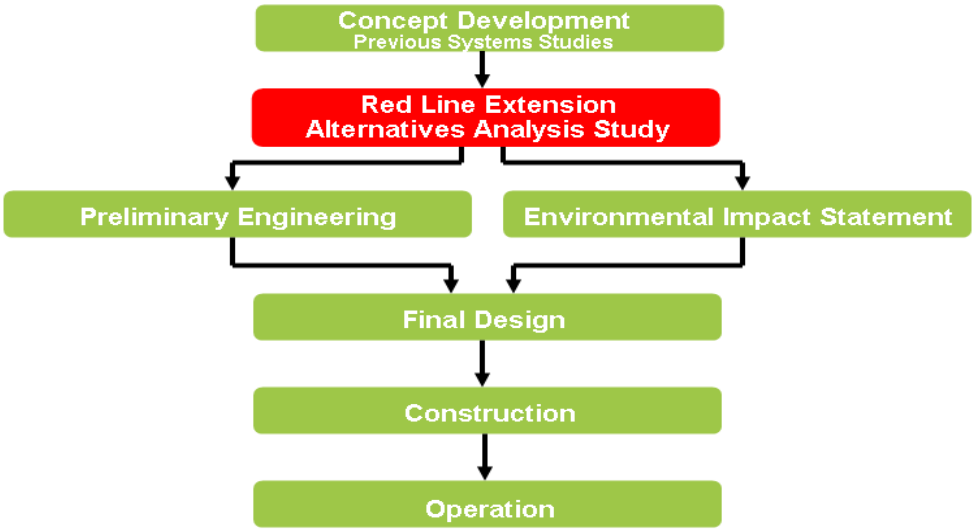

The next steps in the process are Preliminary Engineering (PE) and the preparation of an Environmental Impact Statement (EIS). The CTA must apply to FTA for entry into Preliminary Engineering. If the LPA from the AA study meets the New Starts criteria thresholds established by FTA for transit projects nationally, then permission can be granted to begin PE. PE consists of more detailed design and costing of the LPA to a much higher degree of confidence. At the

same time, an EIS is also prepared to evaluate all potential environmental impacts, as required by the National Environmental Policy Act (NEPA).

Final Design is the last phase of project development, and includes right-of-way acquisition, utility relocation, and the preparation of final construction plans for the LPA. Assuming all funding is in place, and the FTA issues a Full Funding Grant Agreement, construction can begin. After completion of construction and testing, the new transit service can begin operation.

Each of these steps in the New Starts process typically takes a minimum of two years although PE and preparation of an EIS can be completed concurrently. Public involvement is integral to each steps. For the AA study, CTA implemented a public involvement process that included a wide range of stakeholders from the study area, elected officials, agencies, and the general public.

1.2 Purpose of the Alternatives Analysis Report

The purpose of the Red Line Extension AA Study is to identify transit improvements that would provide improved mobility to residents and businesses located in the City of Chicago's Far South Side and surrounding suburbs. The report summarizes the results of an AA that followed FTA New Starts project development guidance. It provides information on the costs, benefits, and impacts of a wide range of alternatives that went through a three step screening process. The result of the Red Line Extension AA is a LPA that was adopted by the Chicago Transit Board.

1.3 Organization of this Report

This report is organized into eight sections. Section 2 describes the purpose and need of the project, including a description of the study area and the existing transportation system, planned growth and improvements in the study area, the need for an improved transit system. Section 3 describes the Screen 1 Evaluation of the Universe of Alternatives. Section 4 describes the Screen 2 Evaluation of the alternatives carried forward from Screen 1. Section 5 describes the Screen 3 Evaluation and the recommendation of a LPA. Section 6 describes the Locally Preferred Alternative (LPA) and how well the LPA achieved the project goals and objectives. Section 7 provides and overview of public involvement and Section 8 describes the next steps for the project.

2.0 PURPOSE AND NEED

2.1 Description of Study Area

The Chicago metropolitan region has the second largest transit system in the nation. The CTA bus and heavy rail system provides service to the City of Chicago and 40 suburbs. The CTA system served over 520 million trips in 2008. Coordination with Metra commuter rail, Pace suburban bus service, and private bus operations results in an integrated regional transit system. The region's transportation system -- both transit and highways -- support the economy of the region, provide access to jobs and other personal and business travel needs, and support development throughout the study area and region.

There are concentrations of established communities where accessibility to CTA rapid transit services is more challenging. The Far South area of Chicago is has high transit ridership, but access to the existing rapid transit network is challenging.

Pedestrian and bus congestion is a daily problem at the CTA's Red Line 95th Street station. Limited employment options in the Far South area require residents to travel long distances to the Chicago Central Area or other regional employment centers. The strong dependence on the Red Line to reach these opportunities, coupled with a constrained street network, result in many lengthy bus trips to access the 95th Street Station. According to the 2000 U.S. Census, commute times for the Far South area are longer than the region's average commute time.

The purpose of the Red Line Extension Alternatives Analysis (AA) Study is to identify transit improvements that would provide improved mobility to residents and businesses located in the City of Chicago's Far South Side and surrounding suburbs.

2.1.1 Study Area Boundaries

The study area (Figure 2.1) is situated 11 miles south of the Chicago Central Area (commonly referred to as the "Loop") and encompasses approximately 20 square miles. The boundaries of the study area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway traverse the western and eastern edges of the study area, respectively. Lake Calumet is located in the eastern portion of the study area.

The study area encompasses parts of nine community areas in the City of Chicago and the eastern section of the City of Calumet Park (area east of Ashland Avenue). Community areas include Washington Heights, Beverly, Morgan Park, Roseland, Pullman, West Pullman, South Deering, Hegewisch and Riverdale (Figure 2.1). The study area has significant residential (primarily single family), industrial (existing and vacant), transportation and commercial development. The study area boundaries are major, recognizable streets, used to clearly define where possible alternatives would be considered. However, travel patterns and analyses beyond the study area are integral components to the project study and included as necessary.

Figure 2.1: Study Area and Community Area Boundaries

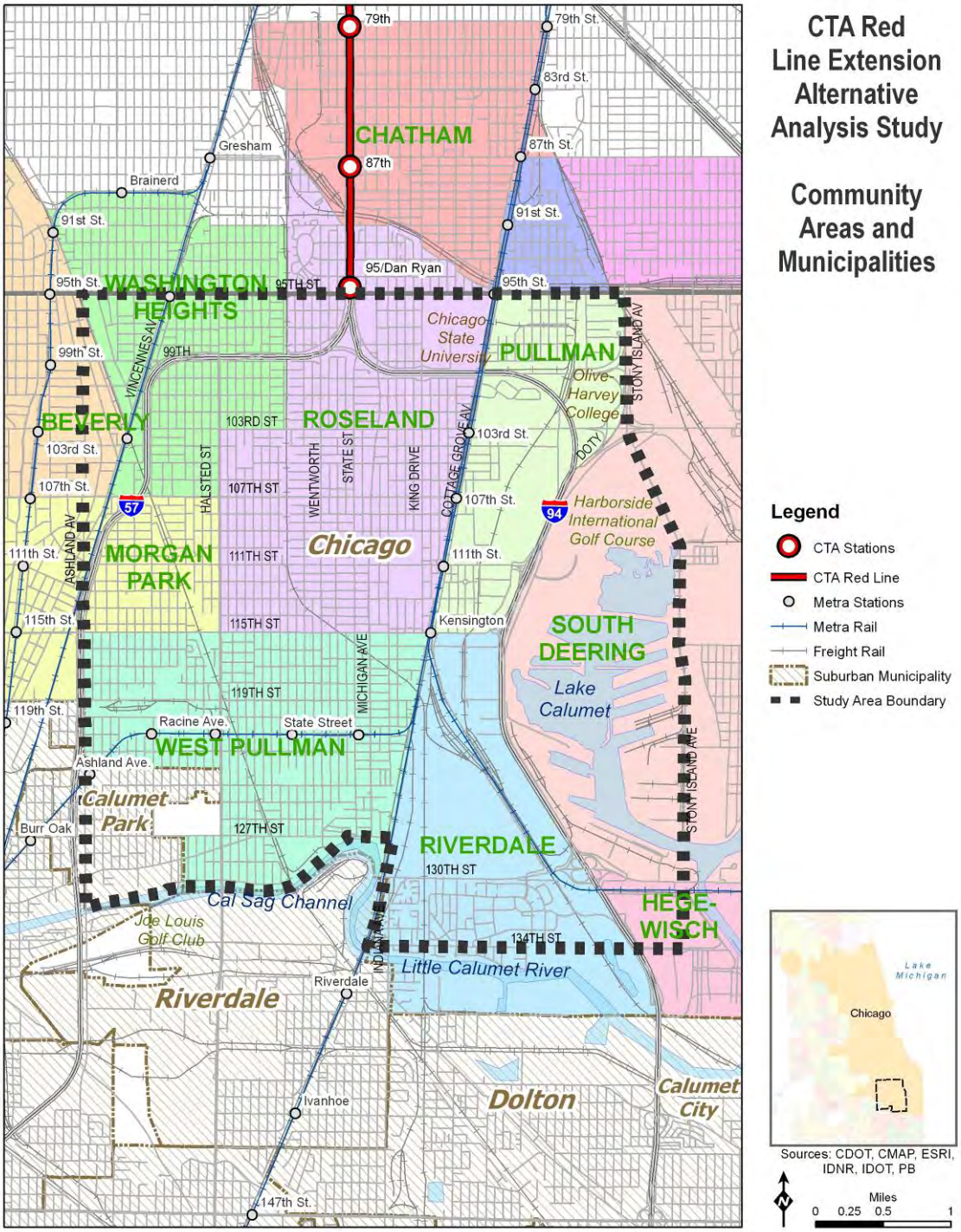

2.1.2 Demographic Characteristics

The six-county northeastern Illinois region is the third most populated metropolitan region in the nation. The City of Chicago, with 2.9 million residents, is the nation's third largest municipality. In 2000, the study area had over 133,000 residents living in nearly 42,000 households. Study area population is expected to grow by 5 percent and households by 9 percent between 2000 and 2030.

Table 2.1: 2000 and 2030 Population

Area	2000 Population	2030 Population	Growth	2000 Households	2030 Households	Growth
Six-County NE Illinois Region	8,092,145	10,050,860	+24%	2,907,201	3,636,108	+25%
City of Chicago	2,897,715	3,261,464	+13%	1,062,683	1,222,082	+15%
Red Line Ext. Study Area	133,364	139,820	+5%	41,515	45,349	+9%

Source: Northeastern Illinois Planning Commission (now CMAP) 2030 Forecasts, approved 9/27/2006.

As seen in Figure 2.2, population density in the study area generally ranges from 5,000 to 20,000 persons per square mile and is consistent with the population density around the existing CTA Red Line service.

The study area population is almost entirely minority. In 2000, 93.8 percent of the study area population was African American (see Figure 2.3), 2.7 percent Hispanic, 1.9 percent Caucasian, and 1.6 percent other minorities.

A large share of the study area population is low income, as shown in Figure 2.4. In 2000, 21 percent of the population had incomes below the poverty level – double the population of low income residents in Cook County, at 11.5 percent. Just south of 130th Street and to the west of the I-94 Bishop Ford Freeway, 3,400 residents live in the Altgeld Gardens/Murray Homes public housing development.

2.1.3 Employment and Economic Development

The Far South area of Chicago has seen many of its major employment centers close since the 1980s, with a loss of around 20,000 jobs. Despite these losses, the area has remained an active industrial center in the region. Since the late 1990s employment has been increasing. Several Far South area businesses have expanded, including the Ford Motor Company in South Deering, offsetting some of the job losses from previous years. As shown in Table 2.2, the 2000 employment in the Red Line Extension study area is approximately 17,000 jobs, with CMAP 2030 employment projections at 27,000 jobs (58 percent increase).

Figure 2.2: 2000 Population Density (Persons per Square Mile)

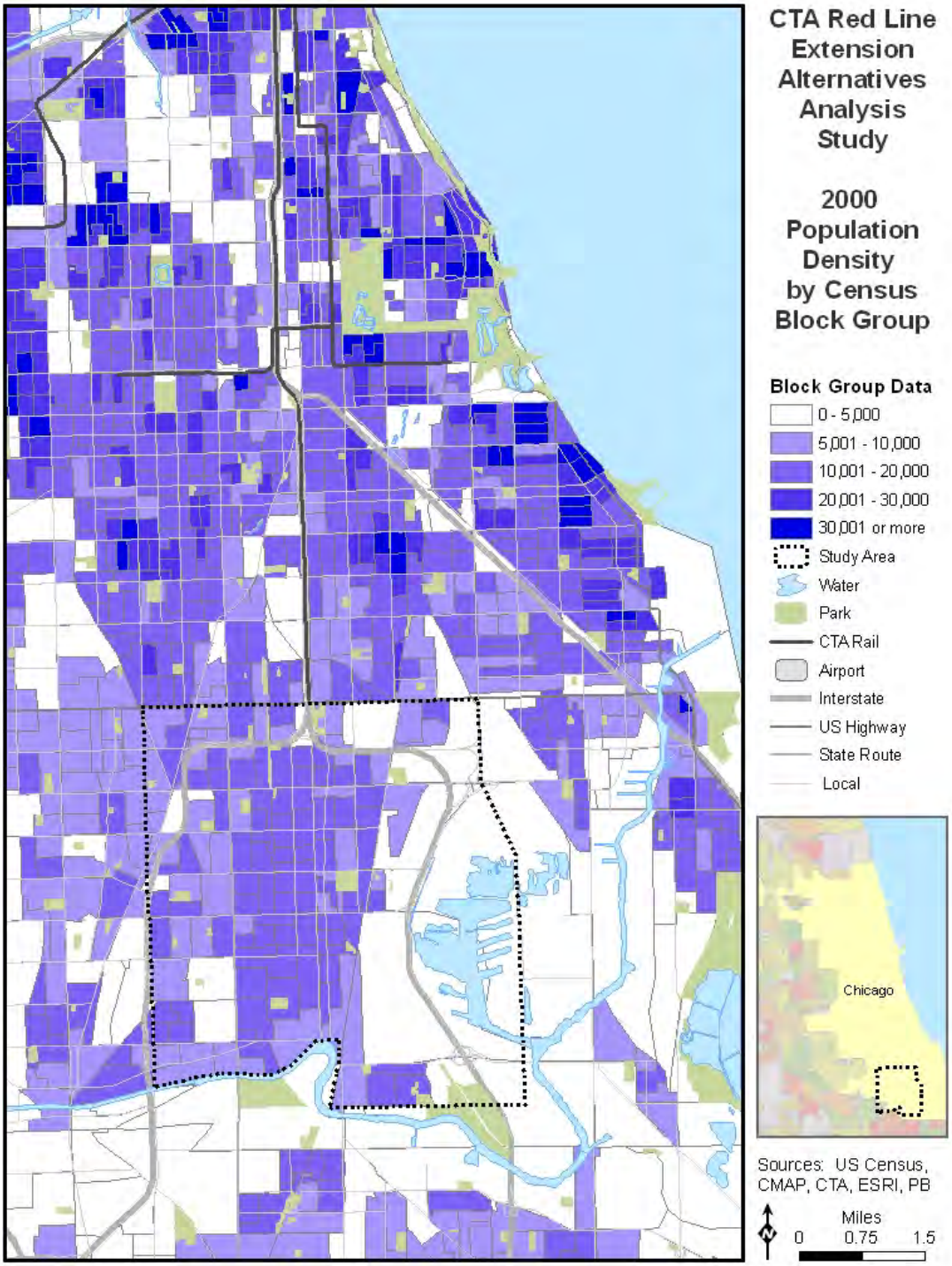

Figure 2.3: 2000 Study Area African American Population (Persons)

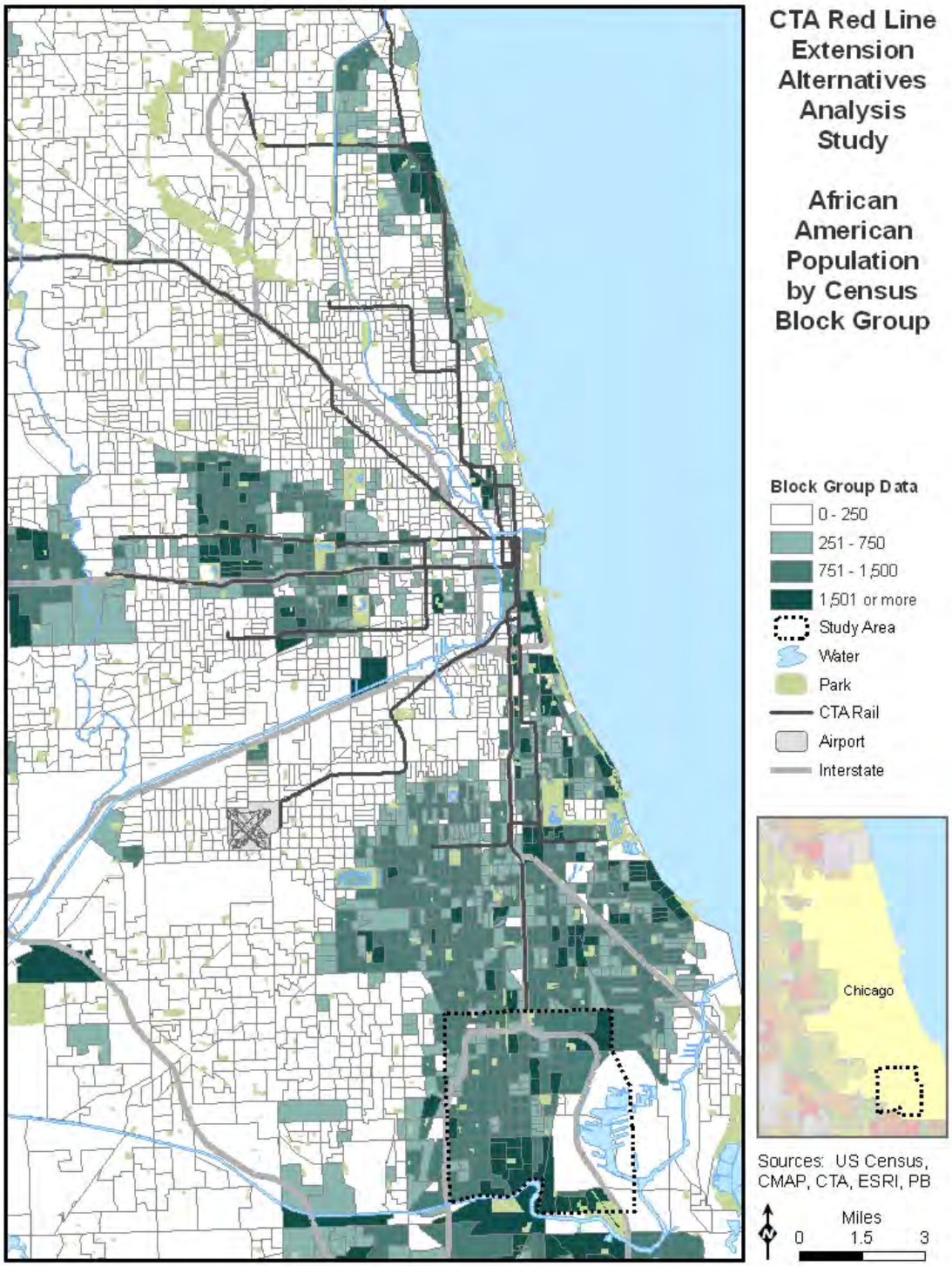

Figure 2.4: 2000 Study Area Low Income Population (Persons)

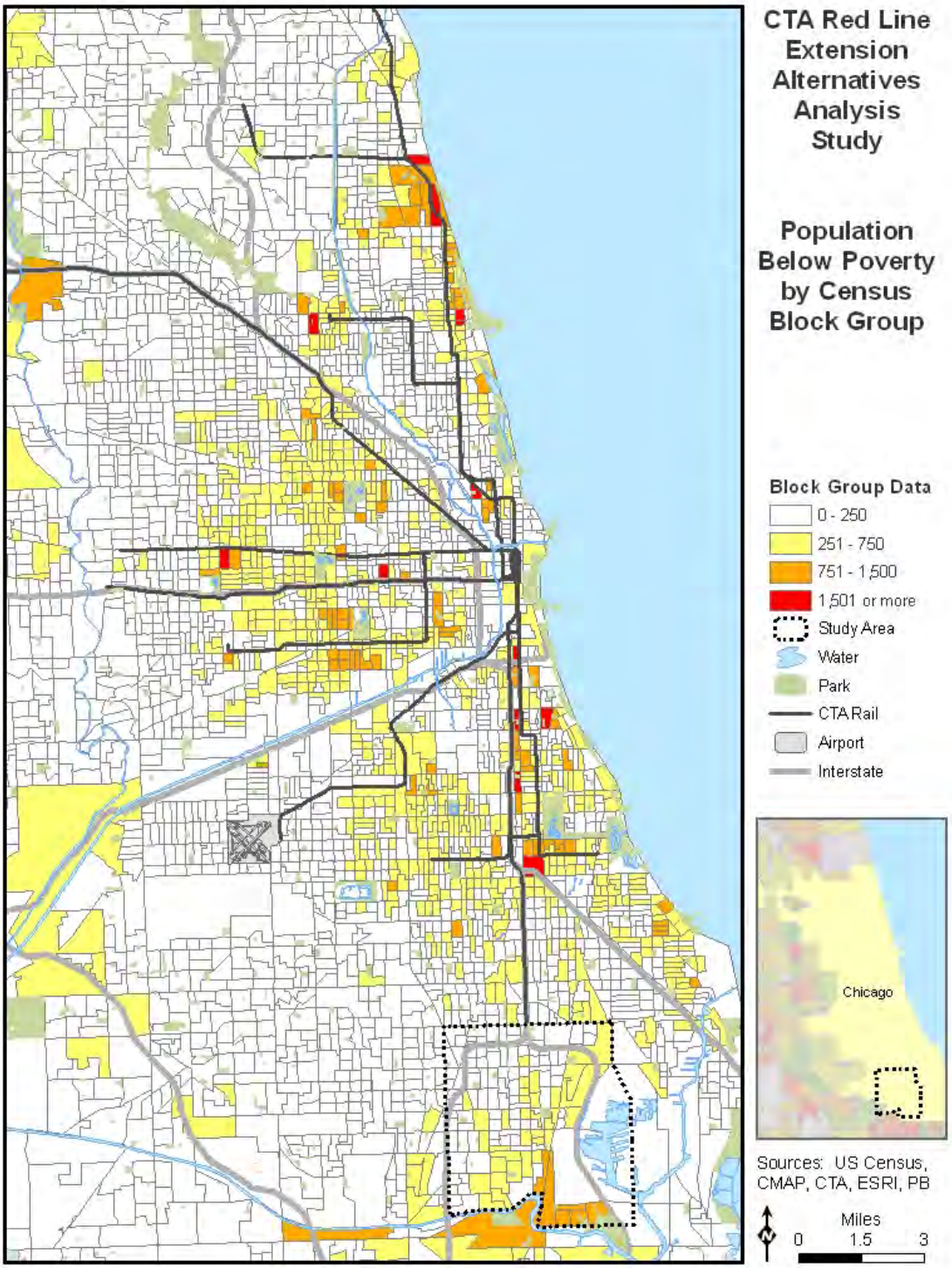

Table 2.2: 2000 and 2030 Employment

Area	2000 Employment	2030 Employment	2000-2030 Change
Six-County NE Illinois Region	4,297,686	5,535,236	+29%
City of Chicago	1,499,255	1,745,101	16%
Red Line Study Area	17,290	27,108	58%

Source: Northeastern Illinois Planning Commission (now CMAP) 2030 Forecasts, approved 9/27/2006.

In 2000, the Far South study area had one job for every eight residents. This compares to one job for every two residents for the City of Chicago and the six-county northeastern Illinois region as a whole. As a result, many residents must travel to downtown Chicago or other major employment centers for work, resulting in long commutes for many Far South residents. By 2030, the jobs to population balance is expected to improve for the study area to one job for every five residents, but will still remain far below the city and regional averages.

The City of Chicago is focusing on stabilizing, improving and redeveloping communities in the Far South area. The City has designated several Tax Increment Finance (TIF) districts, Redevelopment Areas (RA), and Industrial Corridors in the study area. TIF districts direct future tax revenue increases back to the district for development assistance, infrastructure improvements, environmental remediation, building demolition, land acquisition, and employment training. RAs allow for building acquisition and demolition, assembling lots into viable parcels, and improving community facilities, infrastructure, and transportation facilities. Industrial Corridors are designated to improve opportunities for manufacturers and other industrial users. Major incentive zone areas in the study area include the 119th/Halsted RA, the Roseland/Michigan Avenue RA, the Pullman Industrial Corridor, and several smaller TIF districts.

There have been numerous market studies[1] performed in the study area to identify economic development opportunities. These studies have recommended:

- increase the supply of sites available to retain growing companies and attract new ones,
- develop large parcels to overcome perceptions of disinvestment,
- assemble large sites near intermodal facilities and market to major regional distributors,
- provide transportation support to TIF development projects,
- create proactive programs to identify and retain companies faced with expansion,
- develop comprehensive labor force development efforts,
- increase presence of commercial services franchises,
- explore potential for back-office development, and
- address unmet retail and grocery store demand.

[1] Chicago Industrial Market and Strategic Analysis, Strategies for Business Growth in Chicago Neighborhoods, Commercial Market Assessment Michigan Avenue Corridor in Roseland, Residential Market Analysis for the 9th Ward (Draft), Moving Chicago Far South District Analysis (Draft)

2.1.4 Land Use Characteristics

The study area's land use is diverse, as depicted in Figure 2.5. Approximately 44 percent of the study area is residential and 11 percent industrial. Retail and commercial areas are located north-south along the Halsted Street and Michigan Avenue corridors. Large tracts of vacant or underutilized industrial land remain in the eastern portion of the study area in the vicinity of Lake Calumet.

The study area is rich in educational facilities, including Chicago State University (7,200 students), Olive-Harvey College (4,300 students), and several high schools including Harlan, Corliss, Fenger, Julian, Brooks and Carver.

Other activity centers in the study area include South Michigan Avenue Shopping District, Halsted Street Commercial Corridor, Roseland Hospital (162 beds), Sherwin-Williams, Ryerson, the Illinois International Port District, and Metron Steel. The Ford Motor plant, with 2,800 employees, is located at 130th Street and Torrence Avenue, just east of the study area.

2.1.5 Travel Patterns[2]

More than 282,000 total daily trips originated or were destined to the study area in 2000. By 2030, daily trips are projected to increase by over 26 percent to over 356,000 trips.

Of the total daily study area trips in 2000, approximately 17 percent of these trips were home-based work trips. By 2030, home-based work trips increase 14 percent from 2000.

As seen in Figure 2.6, compared to other districts, the study area (District 1) exhibits a strong tie to the Chicago Central Area (District 7), and other districts accessible by CTA rapid transit, for work trips. Of the 48,000 daily work trips originated or were destined to the study area in 2000, 24.4 percent of these trips were to/from the Chicago Central Area. Other 2000 major work trip flows to/from the study area include the district surrounding the study area (District 2) at 9 percent, the south lakefront (District 16) at 9 percent, the mid-south (District 15) at 7 percent, the west side (District 14) at 6 percent, the internal study area (District 5) at 5 percent, and major employer areas such as northwest Cook County (District 8) and DuPage County (District 20) at 3.4 percent and 2.5 percent respectively.

Of the total study area daily trips in 2000, approximately 71 percent of these trips were home-based other trips. By 2030, home-based other trips increase 30 percent from 2000. Major home-based other trip flows to/from the study area in 2000 include the district surrounding the study area (District 2) at 29 percent, the internal study area (District 1) at 16 percent, the south lakefront (District 16) at 12 percent, the southwest side (District 18) at 9 percent, the mid-south (District 15) at 7 percent, Will County (District 21) at 5 percent, and the Chicago Central Area (District 7) at 4 percent.

Non-home based trips are 12 percent of total trips for the study area in 2000. By 2030, non-home based trips increase 25 percent from 2000. Of the total home-based work trips in 2000 to/from the study area, 9 percent or nearly 4,500 work trips were made by households with zero-car ownership. By 2030, the number of home-based work trips by households with zero-car ownership increases 5 percent to 4,700.

[2] Travel data from 2000 and 2030 CTA ROY New Starts travel model runs (AECOM)

Figure 2.5: Study Area Land Use

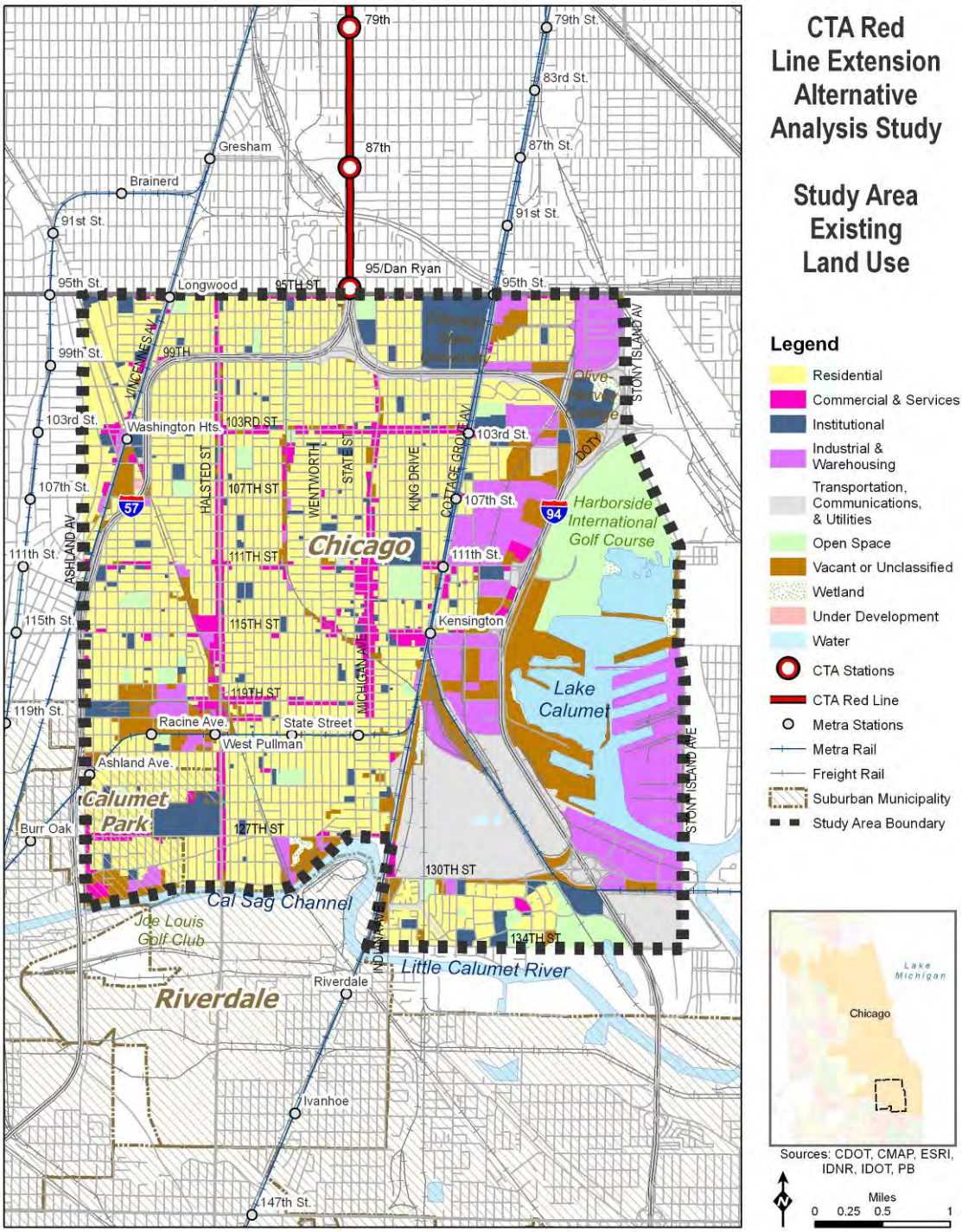

Figure 2.6: 2000 Home-Based Work Trip Flows by District

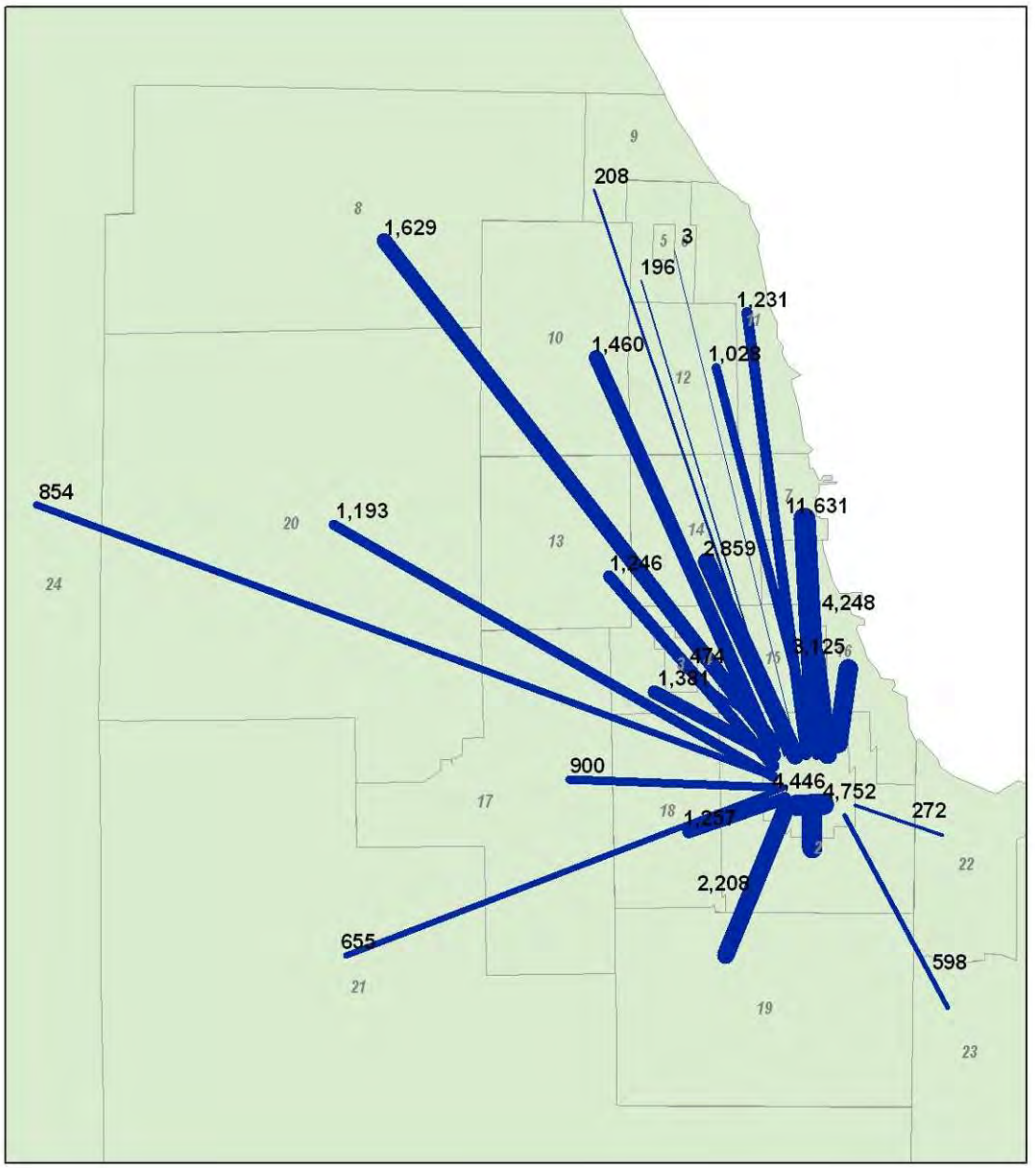

Source: 2000 ROY New Starts model run with trip tables provided by AECOM

1 inch equals 6 miles

The Far South study area had a 26 percent overall home-based work transit mode share in 2000. In particular, the study area shows very strong transit usage to the Chicago Central Area for these work trips at 57.6 percent in 2000, with the transit mode share projected to increase to 60.3 percent by 2030.

Home-based other transit mode share for the study area is 3.5 percent in 2000. Non-home based transit mode share for the study area is 3 percent in 2000.

2.2 Transportation Facilities and Services

The study area is served by roadway and transit systems, and pedestrian and bicycle facilities. Figure 2.7 depicts the roadway and rail transit systems within the study area, while Figure 2.8 provides additional details for CTA and Pace bus service within the study area.

2.2.1 Roadway System

The study area includes expressways, regional arterials, truck routes, intermodal connectors, secondary arterials and local streets. Expressways within the study area include I-57 and I-94 Dan Ryan/Bishop Ford. Average daily traffic (ADT) on I-94 Bishop Ford ranged from 129,000 west of King Drive to 156,800 north of 130th Street. The ADT on I-57 ranged from 145,900 north of 119th Street and 125,300 north of 127th Street. Leading to downtown Chicago, the I-94 Dan Ryan Expressway is one of the busiest expressways in the nation with an ADT of 300,000.[3]

Lake Calumet and the Calumet River are natural barriers resulting in no through-roads that would connect the eastern and western parts of the study area between 103rd and 130th Streets. Halsted Street is the only through north-south arterial road in the study area that crosses the Calumet-Sag Channel. ADT on Halsted Street is 26,000.

Based on CMAP 2030 traffic forecasts, projected traffic increases for Far South roads were approximately 10 percent for expressways and between 20 to 30 percent for arterials, with east-west travel demand growing slightly higher than north-south travel demand.

2.2.2 Transit System

The CTA's Red Line 95th Street terminal is at the northern boundary of the study area. Average frequency of service (headway) during the peak periods is 5 minutes, and service is provided around the clock, as seen in the Table 2.3 below. Entering weekday passengers at the 95th Street station was 14,240 in April 2008, or an estimated total of 28,500 passengers entering and exiting the station. The 95th Street station is CTA's highest entering station traffic outside of the Loop and is second overall in the system (excluding cross-platform transfers).

Table 2.3: CTA Red Line Service Summary

Service Period	Hours	Time Period	Average Frequency (minutes)	Train Length	Vehicles Required
Weekday					
Early Morning	3.0	03:00 - 06:00	13	4 or 8	
AM Peak	3.0	06:00 - 09:00	5	8	304
Base	6.0	09:00 - 15:00	7	4 or 8	184
PM Peak	3.0	15:00 - 18:00	5	8	304
Evening	4.0	18:00 - 22:00	7.5	4	
Late Evening/Owl	5.0	22:00 - 03:00	15	4 or 2	48
Weekday Total Hours	24.0				

Source: Red Line Extension Service Plan, PB and MKC Associates

[3] ADT's from IDOT website. http://www.gettingaroundillinois.com/

Figure 2.7: Existing Transportation Facilities and Services

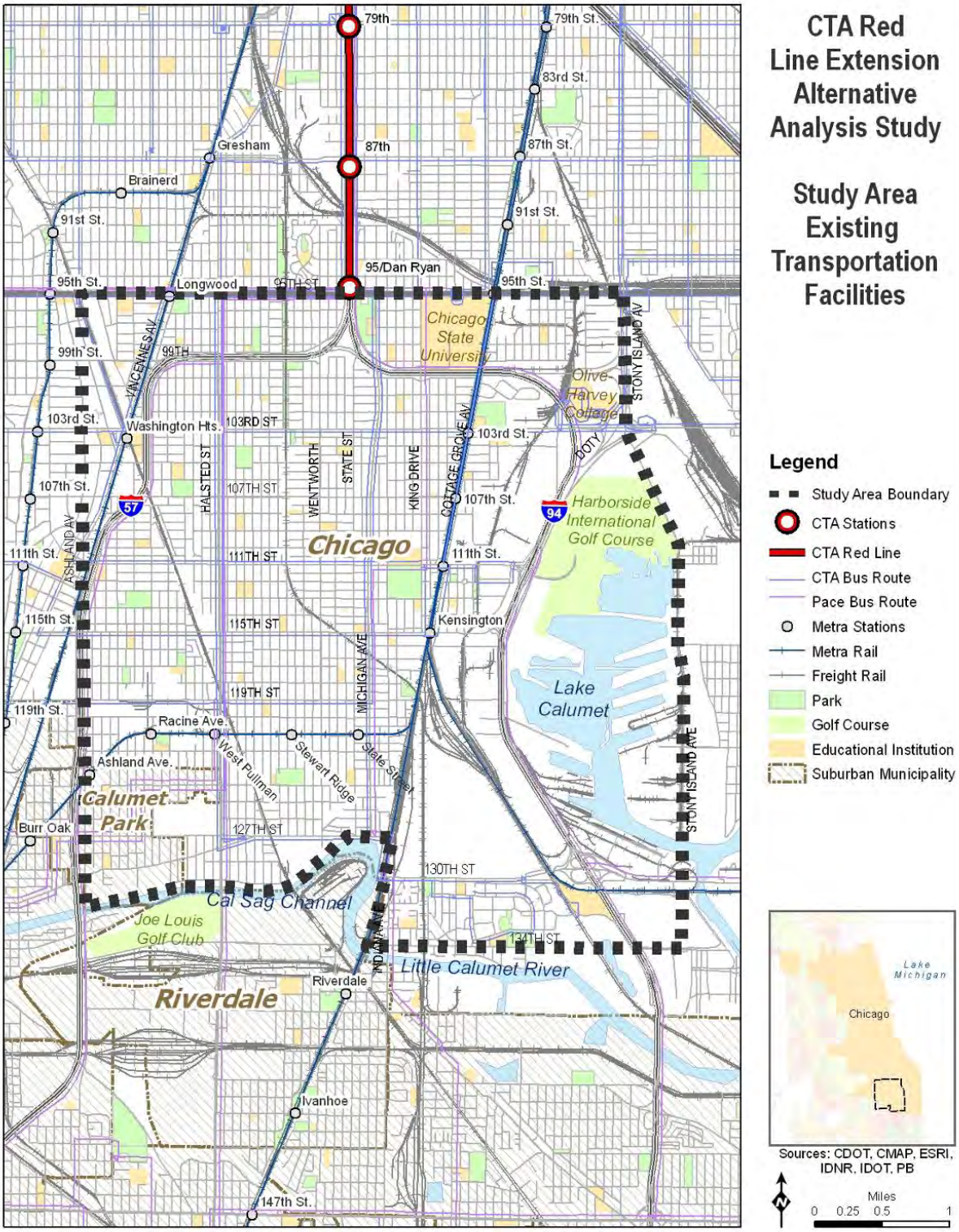

Figure 2.8: Existing Transit System

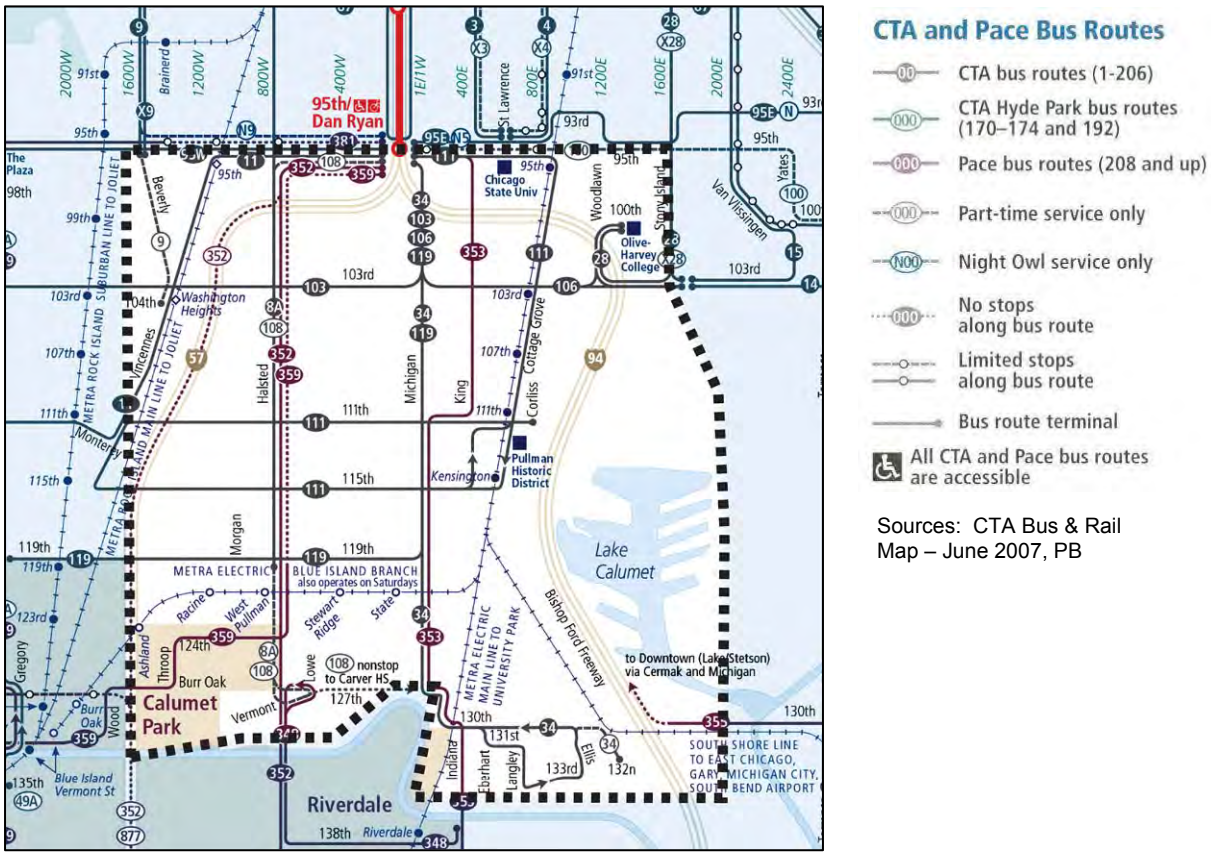

No CTA park-and-ride facilities are located on the Red Line Dan Ryan branch. The Red Line Dan Ryan branch and Lake Street branch of the Green Line are the only two rapid transit branches without park-and-ride facilities.

There are currently two yard and shop facilities located on the Red Line; Howard yard and shop at the north terminus of the Red Line, and 98th Street yard and shop at the south end of the line in the study area. Currently, all Red Line cars are operated and maintained from the Howard and 98th Street facilities. In addition, Yellow Line cars are stored and maintained at the Howard Yard and Shop, and the Purple Line cars are operated and maintained at yards and shops at both Linden and Howard. The 98th Street shop facility is now 40 years old, having been constructed in 1969 as part of the Dan Ryan Line construction project. The 98th Street shop is cumbersome for CTA operations due to its constrained location within an expressway median and access to the facility for materials delivery is difficult because of its grade separation from local streets. The CTA has long recognized the 98th Street shop as being an inadequate facility to support the current and future maintenance needs of the south end of the Red Line and have included the need for an expanded or new 98th Street shop in past capital programs although funding for replacement has not yet been identified.

Metra and the Northern Indiana Commuter Transportation District (NICTD) provide commuter rail service in the study area. Metra commuter rail service in the study area includes the Metra Electric District (MED), which has 10 commuter rail stations in the study area. Of the five MED

mainline stations, the Kensington/115th Street station is a major transfer station and is served by 19 inbound trains between 6:00 a.m. and 9:00 a.m. on a typical weekday. The Kensington/115th Street station also has park-and-ride facilities with a capacity of 408 cars that is fully utilized. The other MED stations in the study area have much less frequent service. The other four stations (111th Street, 107th Street, 103rd Street, and 95th Street) on the MED main line are served by four or five inbound trains during the morning peak period. The five stations in the study area on the Blue Island branch of the MED (Ashland Avenue, Racine Avenue, West Pullman, Stewart Ridge, and State Street) are served by six inbound trains in the morning peak period.

The Metra-Rock Island District mainline has two stations (Longwood and Washington Heights) within the far northwestern portion of the study area. The NICTD South Shore commuter rail trains serve the study area at the Kensington/115th Street station, picking up southbound only and discharging northbound only.

The Metra commuter rail ridership in the study area is shown in Table 2.4. Of these stations, 115th Street/Kensington has the highest utilization with 1,577 average weekday boardings. Metra has previously considered the consolidation of stations north of Kensington/115th Street station.

Table 2.4: Metra Boardings by Station

Line/Station	2006 Daily Boardings
Metra Electric District - Mainline	
95Th Street	49
103rd Street/Rosemoor	70
107th Street	34
111th Street/Pullman	27
Kensington/115th Street	1,577
Metra Electric District – Blue Island Branch	
State Street	85
Stewart Ridge	61
West Pullman	24
Racine Avenue	53
Ashland Avenue	165
Metra Rock Island District - Mainline	
95th Street/Longwood	147
103rd Street/Washington Heights	219

Source: Regional Transportation Asset Management System, RTA

CTA and Pace bus services are provided on north-south and east-west thoroughfares in the study area, with 22 CTA bus routes and seven Pace bus routes operating on the edge or within the study area. Of those bus routes, 19 serve the 95th Street terminal station on the Red Line.

As seen in Table 2.5, these bus routes average 12.4 miles in length, 46 minutes in travel time, and 4,989 in daily ridership.

Table 2.5: CTA and Pace Bus Routes Serving 95th Street Station

Route Number / Route Name	Route Length (miles)	Route Travel Time	Peak Period Headway	2009 Ridership
CTA #29 / State	12.8	1:10	0:12	14,589
CTA #34 / South Michigan	5.8	0:28	0:07	6,222
CTA #95E / 93rd/95th	4.9	0:25	0:10	5,140*
CTA #95W / West 95th	3.7	0:22	0:10	5,512
CTA #100 / Jeffery Manor Express	7.1	0:32	0:16	906
CTA #103 / West 103rd	6.5	0:27	0:11	3,639
CTA #106 / East 103rd	4.3	0:19	0:09	2,101
CTA #108 / Halsted/95th	5.2	0:29	0:10	2,646
CTA #111 / Pullman/111th/115th	10.5	0:50	0:10	6,843
CTA #112 / Vincennes/111th	6.6	0:28	0:12	3,266
CTA #119 / Michigan/119th	6.3	0:31	0:07	6,222
CTA #N5 / South Shore Night Bus	12.1	0:47	N/A	5,140*
CTA #N9 / Ashland Owl	16.1	1:19	N/A	20,520**
Pace #352 / Halsted Street	17.0	1:04	0:10-0:30	5,199
Pace #353 / 95th-Riverdale-Homewood	15.0	0:55	0:15-0:30	2,433
Pace #359/ Robbins-South Kedzie	18.9	1:08	0:30	1,371
Pace #381/ 95th Street	13.0	0:52	0:15-0:30	2,629
Pace #395 / 95th Station-UPS Hodgkins	15.9	0:52	Irregular	387
Pace #1012 / 95th Evergreen Pk-Prairie Stone	54.0	1:45	N/A	28
Average	**12.4**	**0:46**	**0:13**	**4,989**

Source: Regional Transportation Asset Management System, RTA
* Ridership for CTA #95E and #N5 are reported together
** Ridership for CTA #N9 includes ridership for the #9 Ashland

The current transit fare structure for CTA is shown in Table 2.6. Pace regular bus fares are $1.75 with $0.25 transfers. The Pace/CTA 7-day pass is $28.00 and the 30-day pass is $86.00. Metra fares for MED mainline and Rock Island stations in the study area are Zone C fares,

which from downtown Chicago are $3.35 (10-ride tickets are $28.50 and monthly tickets are $90.45). Fares for the MED Blue Island branch in the study area are Zone D are $3.80 (10-ride tickets are $32.30 and monthly tickets are $102.60).

Table 2.6: CTA Fare Structure

CTA Fare Types	
Full Fare Cash (Bus only)	$2.25
Full Fare Transit Card (TC) Bus	$2.00
Full Fare TC Rail	$2.25
Full Fare Chicago Card (CC) Bus	$2.00
Full Fare CC Rail	$2.25
TC or CC Transfer[1]	$0.25
1-Day Pass	$5.75
3-Day Pass	$14.00
7-Day Pass CTA only	$23.00
7-Day Pass CTA/Pace	$28.00
Full Fare 30-Day Pass	$86.00
Link-Up Pass	$39.00
Reduced Fare TC or CC	$0.85
Reduced Fare Cash (Bus only)	$1.00
Reduced Fare TC or CC Transfer	$0.15
Reduced Fare 30-Day Pass	$35.00

[1]Transfer fare allows two additional rides within two hours of the first boarding.

2.2.3 Intercity Bus Service

A Greyhound Bus Terminal also exists at the Red Line 95th Street Station. Intercity buses offer connecting services to much of North America. Buses arrive and depart several times per day including direct and/or connecting service nationwide and to nearby locations such as Chicago Union Station, Detroit, Minneapolis, St. Louis, St. Paul, Gary, Indianapolis, Champaign, Rockford, Bloomington, Springfield, Milwaukee, South Bend, and Benton Harbor.

2.3 Performance of the Transportation System

2.3.1 Agencies Involved in Transportation Planning

The Policy Committee of the Chicago Metropolitan Agency for Planning (CMAP) is the designated Metropolitan Planning Organization for the northeastern Illinois region. CMAP was formed in 2005 by combining the region's two previously separate transportation and land-use planning organizations – the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC) -- into a single agency.

The Regional Transportation Authority (RTA) is a fiscal oversight agency responsible for three operating agencies or "service boards"-- CTA, Metra, and Pace. Other agencies, such as the Chicago Department of Transportation, the Illinois Department of Transportation, and the Cook County Highway Department have transportation planning responsibilities in the study area.

2.3.2 Local Transportation Goals and Objectives

The current CMAP 2030 Regional Transportation Plan, adopted in October 2008, contains three overarching goals: maintain the integrity of the existing transportation system, improve transportation system performance, and employ transportation to sustain the region's vision and values. Relevant objectives include:

Transportation mobility and accessibility objectives

Promote transportation proposals that:

- increase access to job opportunities
- provide efficient modal alternatives for short trips
- reduce traffic congestion

Transportation system efficiency objectives

Promote transportation proposals that:

- reduce highway congestion
- increase the availability of public transit
- supports regional or local efforts to balance the location of jobs, services, and housing to reduce travel distances

Congestion management objectives

Promote transportation proposals that:

- reduce highway congestion
- improve system reliability
- increase person throughput capacity in congested corridors by increasing vehicle occupancy, providing transit options, and encouraging transit use
- increase the share of trips made by walking, bicycling, and transit
- improve coordination and connectivity between and among different modes
- support regional or local efforts to balance the location of jobs, services, and housing to reduce travel distances

Transportation and social equity objectives

Promote transportation projects that:

- provide improved transportation choices to economically disadvantaged persons
- stimulate balanced and sustainable development in communities with concentrations of disadvantaged residents
- support programs providing financial incentives to low-income persons residing in communities that provide a wider variety of transportation choices
- support links from disadvantaged communities to jobs and services

2.3.3 Roadway System Performance

Roadway system capacity deficiencies and expressway and arterial traffic congestion limit the mobility and accessibility of the residents of the study area. Traffic congestion in the metropolitan area has steadily grown over the past decades along the region's expressways and major arterials. Chicago is ranked as second in the nation for travel time ratio (peak travel times versus free flow travel time), third for travel delay, excess fuel consumed, and congestion

costs, and is ranked fourth for congestion, with 72 percent of its freeway and street lane-miles congested.[4]

The 2000 Census reported that commute times were longer for study area residents than for Chicago as a whole. In 2000, the Chicago's average commute time was 34.4 minutes, while commute times for residents on the study area averaged 41.6 minutes—21 percent higher, as shown in Figure 2.9.

Significant expressway and arterial street traffic congestion occurs throughout the study area. As seen in Figures 2.10 and 2.11, the roadway network is approaching capacity during the morning peak periods in 2000 and is expected to worsen by 2030. As seen in these figures, almost every expressway segment has a volume-capacity ratio approaching or exceeding one. Arterial street traffic shows approximately half of the street segments in the study area have volume-capacity ratios greater than one.

Arterial street reliability is further compromised by delays from at-grade freight railroad crossings in the study area. The Union Pacific Railroad (UPRR) – which operates approximately 27 trains per day through the study area – has at-grade crossings at several east-west arterials in the study area. Similarly, there are shorter delays for the Metra Electric District Blue Island Branch commuter trains that operate at-grade and cross several major arterials in the study area.

With the I-94 and I-57 expressways in the study area already congested with trips starting south of the study area already approaching or exceeding the expressway capacity. Study area generated traffic on the expressways exacerbates this situation.

[4] Texas Transportation Institute (TTI), 2003 Urban Mobility Report.

Figure 2.9: 2000 Average Commute Times

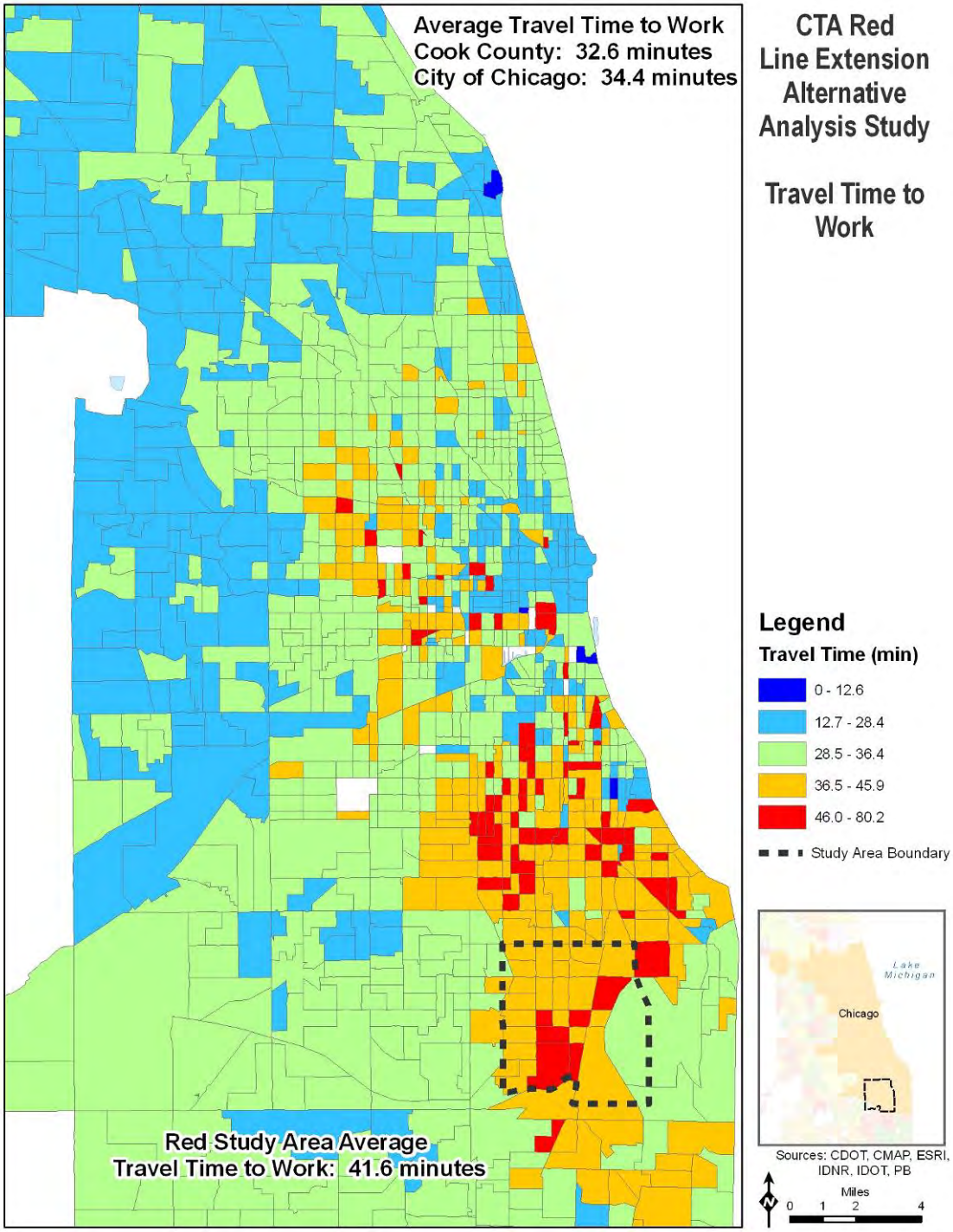

Figure 2.10: Estimated 2007 Morning Peak Hour Traffic Congestion

Figure 2.11: Estimated 2030 Morning Peak Hour Traffic Congestion

2.3.4 Transit Performance

Red Line 95th Street Station

The 95th Street bus terminal is situated over the Dan Ryan Expressway and serves the 95th Street rail station, the southern terminus of the Red Line. The area surrounding 95th Street terminal is congested due to the high number of vehicles entering and leaving the Dan Ryan Expressway. In addition, the street network in the area is characterized by a lack of through streets over the expressway and residential streets which are not appropriate for bus traffic. Buses serving the 95th Street Station must use the terminal to change direction because the existing street network is not conducive to on-street turnaround operations.

A review of current bus schedules indicates that speeds decrease dramatically within one mile of the terminal. Speeds on select bus routes are shown in Table 2.7.

Table 2.7: Speeds for Selected Bus Routes Serving 95th Street Terminal

Bus Route	Scheduled Operating Speed	
	< 1 mile from Terminal	> 1 mile from Terminal
34	9.65	12.0
95W	8.25	11.5
95E	8.6	11.25
108	8.6	12.0
106	7.1	11.3

Source: CTA Bus Supervisor Guide Weekday, effective Dec. 28, 2009
Bus routes were selected if they had a scheduled time point approximately one mile from the terminal.

These speeds indicate that transit customers destined for 95th Street bus terminal and the Red Line experience delays on a daily basis.

The bus terminal, shown in Figure 2.12, contains nine bus islands surrounding the rail station entrance. Seven bus islands can accommodate two buses at a time, while two bus islands can accommodate three buses, for a total of 20 bus bays. Four islands are located on each side of the station (east and west) while a sidewalk located on the north side of the station functions as an additional bus island. Driveways are located off of 95th Street, Lafayette Avenue and State Street. Lafayette Avenue is one-way southbound and State Street is one-way northbound. Because Lafayetts and State Streets operate in only one direction, these driveways are of limited utility and are used exclusively by bus route 29 State Street.

All buses, except route 29, enter the terminal from 95th Street. Operations in the terminal are one-way clockwise with buses entering the west driveway in a northbound direction, circling the north side of the station and traversing the east side of the terminal southbound. Buses exit the terminal onto 95th from the east driveway. Circulation within the terminal is slow due to tight turns and the frequent presence of pedestrians in the driveways.

Normal CTA terminal operation involves the use of a passenger drop off area at a sidewalk adjacent and convenient to the station entrance. The bus then proceeds to an assigned bus bay to collect boarding customers and take scheduled recovery time. CTA cannot follow normal procedures at 95th terminal because space for a drop off area is unavailable. A drop off area is approximately the size of three to five bus bays. All available bus bays at 95th terminal are assigned to one or more bus routes.

Figure 2.12: CTA 95th Street Station Bus Terminal[5]

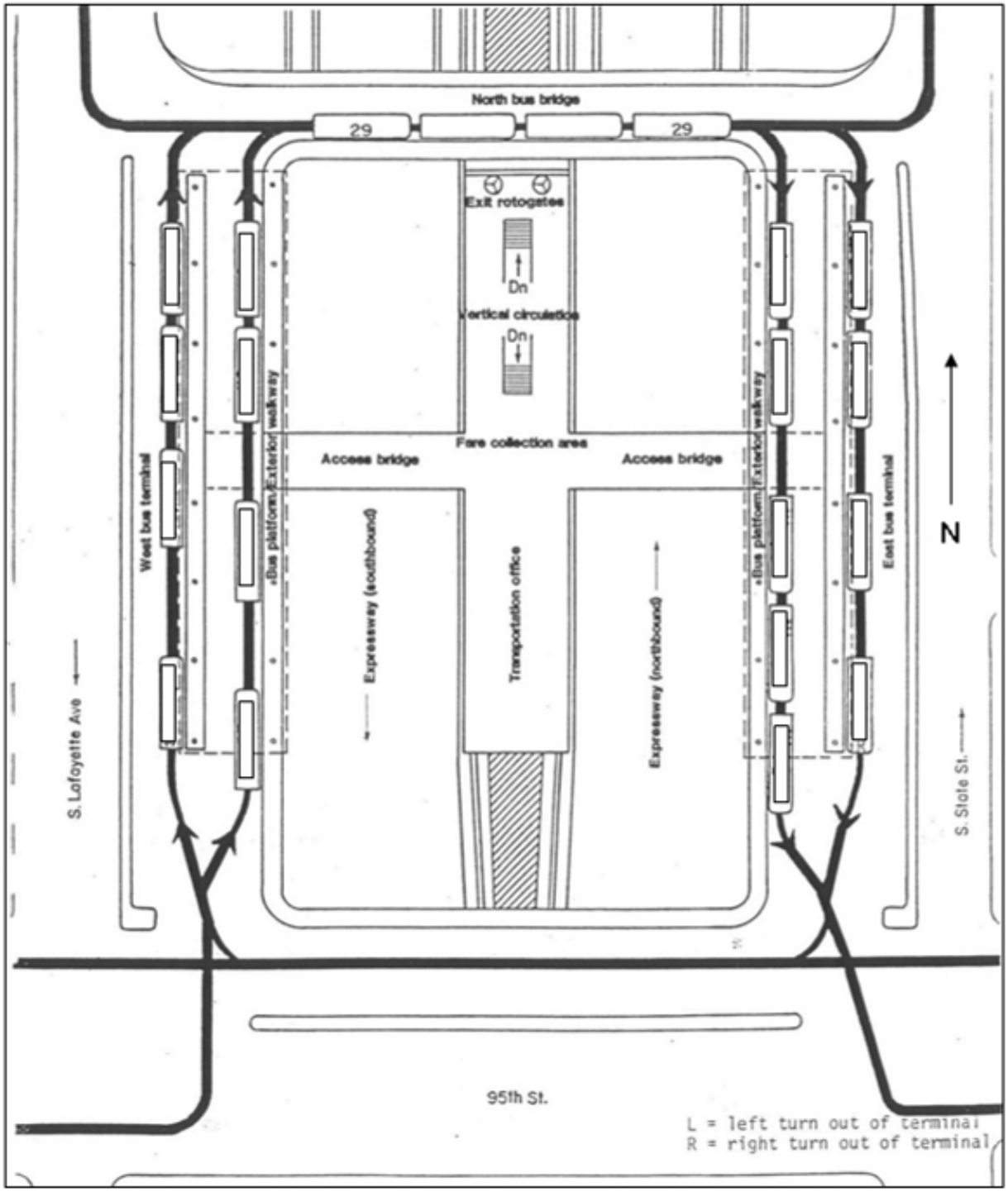

[5] CTA 95th Station Expansion Study, July 1992

Bus routes assigned to bus bays in the west and north terminals drop off and pick up customers at the same location. This creates pedestrian congestion at the bus stop as disembarking passengers conflict with waiting customers on the curb. Bus routes assigned to the east terminal currently drop off passengers in the through lane in the west terminal. Dropping off passengers in the through lane of the west terminal will occasionally prevent buses from entering the terminal and cause following buses to queue along 95th Street waiting to enter the terminal.

Current operations within the bus terminal are not ideal or desirable, but are required due to the number of bus routes that must access the terminal. Nineteen CTA and Pace bus routes utilize the 95th Street terminal. Of these, two CTA routes (N5 and N9) and two Pace routes (395 and 1012) operate infrequently or during overnight hours and do not require a bus bay in peak periods. In addition to CTA and Pace, Greyhound Bus Lines occupy a bus bay in the terminal. Thus, a total of 16 bus routes require at least one bus bay during the morning peak. Eleven of the 16 bus routes require two bus bays because two buses are scheduled in the terminal at the same time. A minimum of 27 bus bays are required to accommodate current schedules. Since the 95th Street terminal contains only 20 bus bays, the terminal is operating over capacity.

In addition to the twenty-seven bays needed to accommodate current schedules, an additional five bays would be required for a drop off area at the terminal consistent with CTA standard operation elsewhere. The lack of a drop off area slows passenger boarding and alighting, creates congestion at the bus bays, and causes buses to back up onto 95th Street. Implementing a drop off area in the terminal increases the number of additional bays required to 12 (32 total bus bays).

A need exists to expand the 95th Street bus terminal in order to accommodate current schedules and comply with standard operating procedures. A terminal expansion would improve bus travel time entering the terminal, decrease transfer time within the terminal, and improve safety.

Bus Performance

Thirteen CTA and six Pace bus routes serve the 95th/Dan Ryan Red Line station. During an average weekday, approximately 6,600 riders (44 percent of all 95th/Dan Ryan boardings) transfer from CTA buses and 2,250 riders (15 percent of all 95th/Dan Ryan boardings) transfer from Pace buses at the 95th/Dan Ryan terminal (CTA transfer data for October 2006).

The performance of these bus routes is shown in Table 2.8 below.

Table 2.8: CTA and Pace Bus Routes Serving 95th Street Station Performance

Route Number / Route Name	On-Time Arrivals
CTA #29 / State	79.7%
CTA #34 / South Michigan	55.7%
CTA #95E / 93rd/95th	51.8%
CTA #95W / West 95th	72.8%
CTA #100 / Jeffery Manor Express	49.8%
CTA #103 / West 103rd	59.6%
CTA #106 / East 103rd	83.8%
CTA #108 / Halsted/95th	69.4%
CTA #111 / Pullman/111th/115th	69.9%
CTA #112 / Vincennes/111th	74.6%
CTA #119 / Michigan/119th	51.5%
CTA #N5 / South Shore Night Bus	N/A
CTA #N9 / Ashland Owl	N/A
Pace #352 / Halsted Street	N/A
Pace #353 / 95th-Riverdale-Homewood	N/A
Pace #359/ Robbins-South Kedzie	N/A
Pace #381/ 95th Street	N/A
Pace #395 / 95th Station-UPS Hodgkins	N/A
Pace #1012 / 95th Evergreen Pk-Prairie Stone	N/A
Average	**65.3%**

Source: Spring 2009 CTA Data

2.4 Specific Transportation Problems

2.4.1 Access to Jobs

The Far South Side of Chicago, including the study area, was hard hit by the decline in manufacturing that began in the 1970s and the recession of the early 1980s. Many of the major well-paying heavy industries were closed or relocated out of the area – Wisconsin Steel closed in 1980, the last Pullman railcar was produced in 1981, International Harvester and Dutch Boy

Paints left West Pullman, Republic Steel laid off 4,000 workers in 1984, and the USX South Works, which once had 20,000 workers, employed only 600 when it closed in 1993. Overall, the study area lost 38,000 jobs between 1970 and 2000.

With the loss of jobs, the study area provides only one job for every eight residents, as compared to the northeast Illinois region and City of Chicago job/population average of one job for every two residents. As a result, many residents must travel long distances to reach major employment centers, such as downtown Chicago and northwest Cook County. This results in longer commute times for study area residents. The 2000 Census indicates that commute times were 21 percent longer for study area residents than for the City of Chicago as a whole. Chicago's average commute time was 34.4 minutes, while commute times for residents on the Far South Side averaged 41.6 minutes.

Another motivating factor for the need to improve access to jobs in the study area is that one in five residents in the study area was below the poverty level in 2000. This population needs affordable transportation options to access jobs. Also, 22 percent of households in the study area in 2000 did not own a car. These residents are dependent on other means of transportation, such as transit, for job access and general mobility.

Furthermore, improved transit service will support ongoing efforts by the City of Chicago through their tax increment finance districts, redevelopment areas, and industrial corridors to spur economic development in the study area.

2.4.2 Difficult Access to the 95th Street Station

The CTA Red Line 95th Street station is located in the median of the I-94 Dan Ryan Expressway. A total of 19 CTA and Pace bus routes serve the 95th Street station. These bus routes all operate in mixed traffic with one-way route travel times averaging 46 minutes, one-way route distances averaging 12.4 miles, and ridership averaging nearly 3,600 passengers a day. This translates to an average bus speed of 9.5 miles per hour. By 2030, bus travel times are projected to increase by 20 percent.

Almost all of the bus routes operating in the study area experience their maximum load point in the vicinity of the 95th Street station. This results in greater customer boarding and alighting delays the closer the bus is to the 95th Street station.

Other major factors contributing to the longer bus route travel speeds and times to access the 95th Street station include the level of overall traffic congestion on the arterial streets in the corridors. As seen in Figures 2.10 and 2.11, existing 2000 and projected 2030 morning peak period congestion levels are very high in the study area, with approximately half of the major arterial street segments operating at volume-capacity ratios greater than one, and the other segments operating at higher volume-capacity ratios. These high volume-capacity ratios translate to poor levels of service on the roadway system, such that the ability to maneuver is severely restricted, vehicle speeds are reduced due to the higher volumes, and minor disruptions cannot be absorbed without extensive queues forming. The majority of traffic on these major arterial streets in the study area is through-traffic that begins and/or ends outside of the study area.

Other factors contributing to the difficult access to the 95th Street station include delays from at-grade freight railroad crossings in the study area. The Union Pacific Railroad (UPRR) has at-grade crossings of 95th Street, 103rd Street, 111th Street, 115th Street, 119th Street, and 130th

Street, all of which are used for CTA bus services. Currently, the UPRR has approximately 27 trains per day operating through the study area. Similarly, there are shorter delays for the Metra Electric District Blue Island Branch commuter trains that operate at-grade and cross Ashland Avenue, Halsted Street, and Michigan Avenue, which have CTA and Pace bus services. Consequently, bus operations under these conditions are very difficult and result in poor on-time performance.

Kiss-and-ride access to the 95th Street station is also difficult. There is no formal passenger drop off facility in the vicinity of the station, the station itself is congested with pedestrian and bus traffic, 95th Street is congested, and the one-way frontage road system east and west of the station is not conducive to efficient auto access to the station.

Pedestrian access to the 95th Street station is also constrained since the adjacent commercial and residential development is separated from the station by the Dan Ryan Expressway and adjacent frontage roads. Lafayette Street on the west and State Street on the east of the terminal serve as local arterials and access/egress roads for the expressway. Therefore, pedestrians required to cross these streets to access the terminal must contend with a vehicle mix traveling at varying speeds.

2.4.3 95th Street Station Bus Capacity and Delay

Nineteen CTA and Pace bus routes utilize the 95th terminal. Of these, two CTA routes and two Pace route (N5, N9, 395, 1012) operate infrequently or during overnight hours and do not require a bus bay in the morning peak period. In addition to CTA and Pace, Greyhound Bus Line occupies a bus bay in the terminal. Thus, a total of 16 bus routes require at least one bus bay during the morning peak. Based on procedures in the Transit Capacity and Quality of Service Manual, 27-32 bus bays required in the peak 15 minute time period. Since the 95th Street station bus terminal contains only 20 bus bays, the terminal is currently over capacity.

Bus circulation within the terminal is also slow due to tight turns and the frequent presence of pedestrians in the driveways. Bus routes assigned to berths in the west and north terminals drop off and pick up customers at the same location. This creates pedestrian congestion at the bus stop as disembarking passengers conflict with waiting customers on the curb. Bus routes assigned to the east terminal currently drop off passengers in the through lane in the west terminal. This occurs because passengers are not patient and will not wait until the bus reaches its assigned bus bay. Passengers are often observed pulling the emergency back door release to exit the bus as soon as it stops. Dropping off passengers in the through lane of the west terminal will occasionally prevent buses from entering the terminal and queues to form along 95th Street as buses wait to enter the terminal.

As a result of the insufficient number of bus bays, and passenger-pedestrian-bus conflicts, delays occur. Table 2.9 depicts the estimated total delay and delay per bus from 7:00 to 9:00 a.m. at the 95th Street bus terminal that can be expected based upon the number of buses accessing the bus terminal. Currently, there are 115 buses entering the 95th Street bus terminal, each with an estimated delay of 38 seconds. The cumulative bus delay is nearly one hour and 14 minutes. With growing population and employment in the study area, and slowing travel times on the bus routes, the number of buses will need to be increased. Table 2.9 shows the resulting delay at higher bus levels.

Table 2.10 provides the number of passengers boarding and alighting on CTA bus routes at the 95th Street station bus terminal between 7:00 and 9:00 a.m. Applying the 38 second delay per

bus to the passenger volumes results in 34.4 hours of total passenger delay each weekday morning peak period.

Table 2.9: 95th Street Station Bus Terminal Delay (7:00-9:00 a.m.)

Number of Buses Entering the Terminal	Total Delay (hours)	Delay / Bus (minutes & seconds)
110	1:09:28	00:38
115*	**1:13:31**	**00:38**
120	1:17:41	00:39
130	1:25:36	00:40
140	1:49:01	00:47
150	2:23:41	00:57

*Current number of vehicles accessing 95th Street terminal during peak period today.

Table 2.10: Passenger Volumes at 95th Street Bus Terminal (7:00-9:00 a.m.)

Route	Direction	On	Off
CTA #29 / State	North	126	0
	South	0	116
CTA #34 / South Michigan	North	0	303
	South	199	0
CTA #95E / 93rd/95th	East	153	1
	West	0	164
CTA #95W / West 95th	East	0	133
	West	49	0
CTA #100 / Jeffery Manor Express	East	64	0
	West	0	77
CTA #103 / West 103rd	East	0	148
	West	148	0
CTA #106 / East 103rd	East	219	0
	West	5	106
CTA #108 / Halsted/95th	North	0	32
	South	117	0
CTA #111 / Pullman/111th/115th	North	0	111
	South	151	0
CTA #112 / Vincennes/111th	North	0	186
	South	140	0
CTA #119 / Michigan/119th	North	0	354
	South	155	0
Total		**1,526**	**1,732**

* Source: Fall 2008 CTA data

2.4.4 Improved Transportation Equity for All Travelers

Transportation equity is the fair distribution of transportation resources so that no group carries an unfair burden of the negative environmental, social, or economic impacts, or receives an unfair share of benefits. In 2000, 21 percent of study area population had incomes below the poverty level. The study area population is almost entirely minority, comprised of 93.8 percent

African Americans and 2.7 percent Hispanics. Many study area residents do not have access to an automobile and rely on transit for mobility.

In addition, daily parking costs in downtown Chicago are among the highest in the United States, further limiting the study area population's access to downtown. Improvements to study area transit will serve all transportation system users, including low-income and under-represented populations.

2.5 Potential Transit Markets

2.5.1 Drive-Access Transit Market

A potential transit travel market in the study area that is not currently well served is drive-access transit trips. There are no CTA park-and-ride facilities on the Red Line Dan Ryan branch. All of the other CTA rail rapid transit branches, with the exception of the Green Line Lake Street branch have park-and-ride facilities. CTA's newest rail rapid transit line, the Orange Line that opened in 1993, has park-and-ride at five of eight stations.

In particular, the Red Line 95th Street station area, located in the median of one of the busiest expressways in the country, is very congested with bus, pedestrian, and vehicular traffic, making even kiss-and-ride access to the station difficult. In 2000, less than 17.9 percent of study area home-based work transit trips were via drive access. This percentage is projected to decline slightly to 17.5 percent drive access in 2030. Opportunities exist to provide CTA park-and-ride facilities to residents of the study area and increase the drive-access transit travel market.

2.5.2 South Transit Market

Another potential transit travel market is the south Cook County area located south of the study area. The provision of CTA park-and-ride facilities located in the southern portions of the study area near major expressways or arterial streets would provide convenient drive access possibilities to the CTA Red Line that do not currently exist. CTA has successful examples attracting these trips to transit. The Blue Line has park-and-ride facilities at Rosemont and Cumberland that are conveniently located near the I-90 Kennedy Expressway. A previous survey[6] at these Blue Line park-and-ride stations found auto access from 93 suburbs and that 74 percent of all trips originated in the northwest suburbs or northwest Chicago. The Chicago Central Area was the ending location of 78 percent of all park-and-ride trips, followed by the University of Illinois at Chicago at 6 percent.

Similar conditions, such as crowded expressways and expensive parking in the Chicago Central Area, face travelers from south Cook County and beyond. In 2000, nearly 17,000 daily home base work trips between the south Cook County area (District 19 in Figure 2.6) and the Chicago Central Area were made with a transit mode share of 48 percent. Opportunities exist to provide improved access to CTA from south Cook County and beyond.

2.5.3 Other Transit Markets

Additional potential transit travel markets, although smaller, include reverse commute and school trips. With an increase of 10,000 jobs in the study area by 2030 to 27,000, there is potential for increased reverse commute travel to access these jobs. There are several

[6] CTA O'Hare Park & Ride Surveys: Phase II, CTA Market Research Department, April 1994.

educational facilities in the study area, including Chicago State University (7,200 students), Olive-Harvey College (4,300 students), and several high schools including Harlan, Corliss, Fenger, Julian, Brooks and Carver, that would benefit from transit improvements in the study area.

2.6 Project Goals and Objectives

The following proposed goals and objectives were developed based on the transportation needs described above as well as goals that are included in regional long-range transportation plans. The goals and objectives serve as the basis for evaluating the alternatives throughout the alternatives analysis. The goals and objectives are as follows:

- **Goal 1: Regional and Local Access and Mobility**

  Objectives:
  1. Increase connectivity between and within neighborhoods and activity centers.
  2. Improve access between city neighborhoods and regional centers, and between suburban communities and the greater central area.
  3. Increase regional transit competitiveness.
  4. Improve customer transfer connections among regional transit modes.

- **Goal 2: Community and Economic Development**

  Objectives:
  1. Support community development initiatives.
  2. Provide opportunity for transit-supportive development.
  3. Support efficient land use patterns.
  4. Respect community context and identity.
  5. Promote equitable distribution of project benefits and impacts.

- **Goal 3: Regional Transit System Performance**

  Objectives:
  1. Increase capacity and ridership.
  2. Enhance efficiency and cost effectiveness.
  3. Facilitate connections and linkages.
  4. Reduce transit travel times.
  5. Integrate existing transit infrastructure, where feasible.

- **Goal 4: Safety and Security**

  Objectives:
  1. Increase transportation reliability.
  2. Improve incident response capabilities.
  3. Incorporate design elements that enhance safety and security.

- **Goal 5: Environmental Quality**

  Objectives:
  1. Limit impacts.
  2. Support environmental benefits.
  3. Reduce reliance on automobile travel.

3.0 SCREEN 1 EVALUATION

The first step in the Red Line Extension Alternatives Analysis was to began with identifying the Universe of Alternatives, which is all the possible transit alternatives for the study area. The Universe of Alternatives included a wide range of transit modal technologies, study area corridors, and profiles (where the transit line is in relation to the ground).

3.1 Study Area Corridors

There were nine study area corridors identified, listed from west to east within the study area:

- I-57 Expressway
- Halsted Street
- Union Pacific Railroad
- Wentworth Avenue
- State Street
- Michigan Avenue
- King Drive
- Cottage Grove Avenue / MED CN Railway
- I-94 Bishop Ford Freeway

Figure 3.1 graphically depicts the nine corridors under consideration.

I-57 Expressway Corridor
The I-57 Expressway is located on the western boundary of the study area. The corridor extends west and south from I-94 and 95th Street. A complex, grade-separated junction allows traffic to interchange between I-57, I-94 Bishop Ford Freeway, and the I-94 Dan Ryan Expressway. I-57 has three lanes in each direction extending west to approximately Racine Avenue (with the highway running parallel and to the south of 98th Street) where it then turns south. By the time it crosses 127th Street (at the south end of the study area) the highway is running parallel and to the east of Paulina Street.

Major interchanges include the previously described junction with I-94, Halsted Street, 111th Street, 119th Street and 127th Street. Land use surrounding I-57 is predominantly residential from 95th Street to 112th Street (there is some industrial land to the west of the highway from 105th Street south). South of 112th Street and extending down to 119th Street, a large former industrial site is being made into a significant commercial center. Residential land use exists to the east of the highway in this section. South from 119th Street, land use to the west of the highway continues to be a mix of industrial and vacant parcels. Residential land use can be found on both sides of the highway from around 125th Street south. Commercial uses are generally located in all four quadrants of the interchanges with arterial streets.

There are also several educational and religious institutions in this corridor. Evers School is located north of I-57 on the east side of Lowe Avenue. Julian High School is to the west of the highway on the south side of 103rd Street. Morgan Park High School is located west of I-57, while Shoop Elementary School is on the east side of the highway, with both of these institutions being located north of 112th Street. The large Christ Universal Temple complex is on the east side of the highway, immediately to the south of 119th Street.

Figure 3.1: Red Line Extension AA Corridors

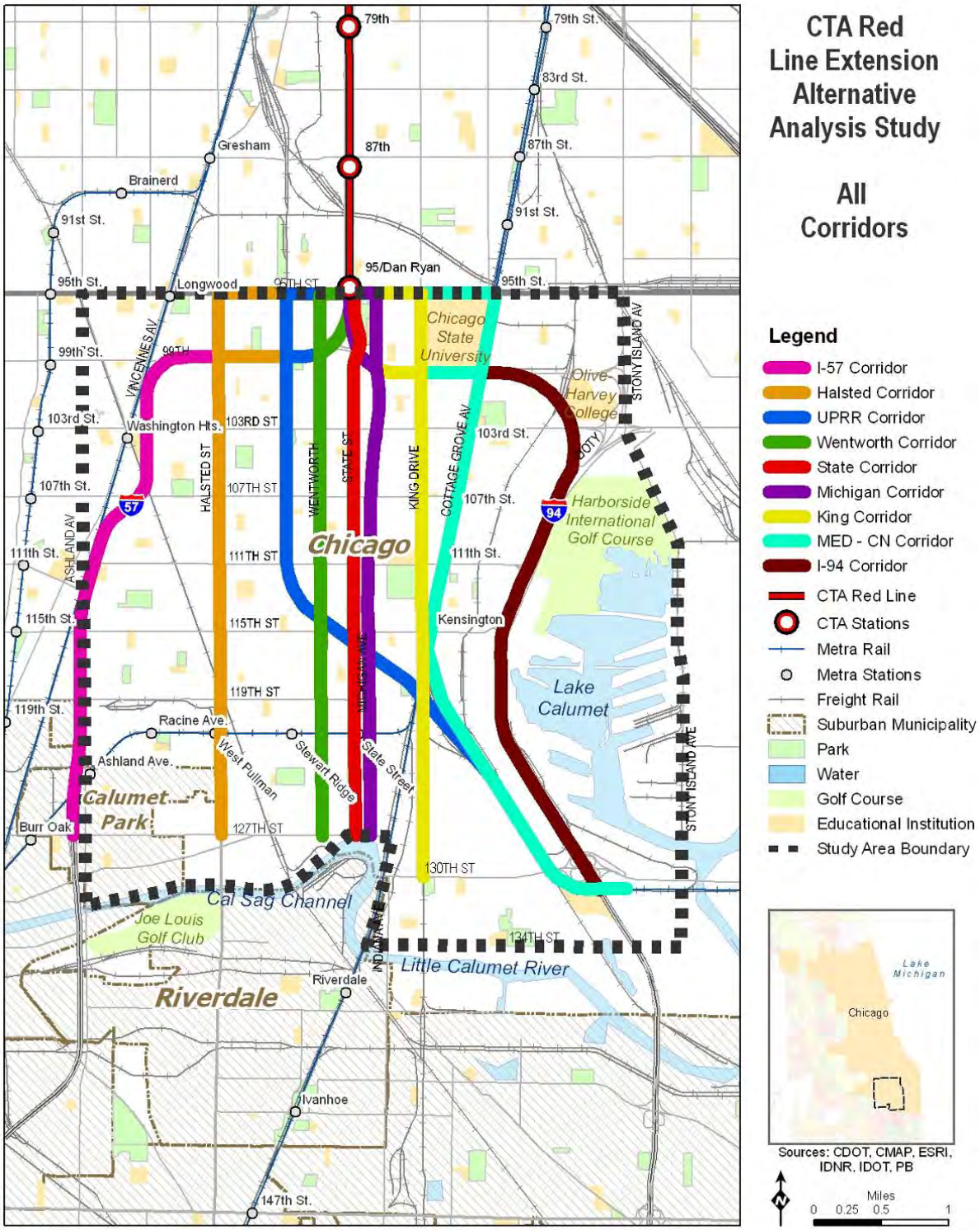

Halsted Street Corridor

Halsted Street is a major north-south arterial located at 800 West. The Halsted corridor would extend west along 95th Street or I-57 from I-94 and 95th Street to Halsted Street, about one mile to the west. At Halsted, the corridor turns south and remains in the approximate right-of-way of Halsted Street to the southern edge of the study area at approximately 127th Street, at or near the borders of Chicago, Riverdale and Calumet Park.

Halsted Street varies in width, but has a nominal width of 70 feet at most locations. The cross-section generally includes two through lanes, a parking lane in each direction, and a median. An at-grade crossing with the MED Blue Island branch occurs near 121st Street.

Land use is mixed from 95th Street to approximately 98th Street and then the properties fronting on Halsted are almost entirely commercial from 98th to around 117th Street. There are also residential structures located in this section and several churches. Strip malls front on Halsted at 104th Street (east side) and near 107th Street (west side). There is a nursing center on the east side of Halsted north of 110th Street. A large indoor mall (including a grocery store) is located on the west side of Halsted, north of 115th Street. A new, smaller mall is being built to the south of 115th Street. Mixed land use (including some light industry) is located between 117th Street and 123rd Street.

Land use tends to be mixed south of 119th Street, but there are also more vacant parcels interspersed in this area. Between 127th and 129th Street, land use is commercial on both sides of Halsted. There is a residential strip running along the north side of the Calumet River, which fronts on either side of Halsted at 129th Street.

Union Pacific Railroad (UPRR) Corridor

The UPRR Corridor extends west from the intersection of I-94 and 95th Street either along 95th Street, I-57, or south west along South Lafayette Avenue to the intersection with the UPRR right-of-way at about Eggleston Avenue and 99th Street (about one mile). The corridor then follows the UPRR alignment south from 99th Street to approximately 111th Street, where the railroad alignment begins to curve to the southeast. The alignment is at-grade as far south as 115th Street (the last grade crossing is at State Street, which is crossed to the south and east of 115th Street) and then the rail alignment transitions to a grade-separated alignment. The corridor turns due south after crossing the Metra Electric mainline/Canadian National (CN) tracks (approximately 119th/ Calumet), while the corridor would continue to head southeast-ward to terminate at approximately 130th Street and Stony Island Avenue (east of the crossing of 130th and the I-94 Bishop Ford Freeway).

A number of grade crossings have been closed along the UPRR alignment. Those that remain open are: 95th, 97th, 101st, 103rd, 107th, 109th, 111th, Princeton, Wentworth, 115th, Lafayette and State Street. The UPRR right-of-way is typically on the order of 100 feet in width, and the railroad is double-track throughout the study area. The alignment is being considered for Metra's proposed SouthEast Service.

Land uses along the UPRR are open space to the west from 95th to 103rd Street, with residential being the predominant land use to the east in this section. From 99th to 100th Street there is a dedicated park immediately east of the corridor. From 103rd to 105th Street and between 107th and 108th Street, both sides of the corridor are given over to commercial/institutional uses (a City pumping station is located on the east side of the rail line south of 104th Street, for example). Between 105th and 107th and then again from 108th to 112th Streets, commercial land use is located to the west of the UPRR, with residential being the primary use to the east.

Active industrial concerns are to the east and west of the rail line at the 107th Street crossing. Light industries surround the corridor between 111th and 115th Streets. Residential use is present on both sides of the right-of-way from 115th with, mixed land use in evidence around Michigan Avenue. From 116th Street through the end of the community (around 119th and Prairie) the primary land use is residential.

From this location, the corridor would separate from the UPRR right-of-way, continuing on a diagonal to the southeast. Land use in the area east of the UPRR is industrial in nature, along with a major Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) water treatment facility. The proposed transit line would run parallel to the NICTD line to a terminal near 130th/Stony Island.

Wentworth Avenue Corridor

The Wentworth Corridor begins at 95th Street and I-94 and extends about one-quarter mile west on 95th Street to Wentworth Avenue or southwest to South Lafayette Avenue along I-57. The corridor then heads south along Wentworth Avenue (200 west) to approximately 127th Street. The width of the Wentworth Corridor is most typically around 40 feet (one through lane and one residential parking lane in each direction), though south of 121st Street (near the at-grade crossing of the Metra Electric Blue Island Branch) the street width is never more than 30 feet. Wentworth also crosses the UPRR at-grade, just south of 114th Street.

Land use along Wentworth is almost entirely residential, except where it intersects the major east-west cross-streets (103rd, etc.) where there are some commercial enterprises. The Hughes School at 104th Street to the west of Wentworth, and the Van Vlissingen School around 109th Street and east of Wentworth are near the corridor.

State Street Corridor

The State Street corridor begins at 95th Street and I-94 and extends south along State Street (0 W) to 127th Street. State Street has some variation in overall width over the section of interest, but typically has an overall width of 42 feet. This street has at-grade crossings with the UPRR (south of 115th Street) and the Metra Electric-Blue Island Branch (around 121st Street). The branch's State Street station is located to the east of State on the north side of the single-track line.

Land use along State Street is a mix of recreational and educational to the east side between 95th and 98th (the I-90/94 expressway runs along the west side of the street). South of 99th Street, land use is residential on both sides, extending down to 110th Street. At intersections with major east-west cross streets, mixed use development exists.

From 110th to 115th the uses are mixed, and as we have seen on the other north-south streets in this area, the frequency with which one encounters vacant parcels increases in this section. There are also a few vacant buildings in this area.

Curtis Elementary School fronts on the east side of State north of 115th Street. Residential and mixed-use structures are on either side of State south of 115th Street. South of UPRR grade crossing, residential land use becomes dominant, extending down to 127th Street. Gompers Elementary School is located on the northwest corner of 124th, while the Jesse Owens Community Academy is on the west side of State south of 124th Place.

Michigan Avenue Corridor

This corridor follows 95th Street east from I-94 to Michigan Avenue and then remains along

Michigan Avenue (100 East), to the south limits of the corridor at 127th Street. Michigan's overall width varies, but is nominally around 40 feet. The UPRR is on retained fill where it crosses Michigan (around 116th Street). There is an at-grade crossing with the Metra Electric - Blue Island Branch around 121st Street. This line's State Street station is located immediately west of Michigan, but there is no entrance to the station from that street.

On the portion of this corridor along 95th Street, the land use is recreational to the south and a mix of commercial and residential on the north side of the street. Land use on Michigan is residential on the east side between 95th and 99th Street, with a mix of recreational and educational purposes to the west north of 98th Street, and then residential with some mixed-use south of 98th.

South of 100th Street, the land use along Michigan is predominantly commercial on both sides of the street, with an intermixture of residential structures. A multi-story church-supported housing structure is on the west side of the street south of 102nd Street. A variety of commercial uses can be found on the four corners at 103rd Street and Michigan Avenue.

A significant senior citizen housing complex has been constructed on the northwest corner of 105th Street and Michigan Avenue, while the southeast corner of this same intersection is occupied by a town house development. Mixed use, multi-story structures can be found at several locations along Michigan Avenue from 107th south to around 121st Street, as well as the churches. In the section from 111th Street to Kensington, the uses are predominantly commercial and the structures vary between one- and two-story, though the now-closed "Gatelys" store at 112th Street is significant for having a five-story parking structure that extends down the ridge from Michigan to Pembroke Avenue (one block to the east). A new grocery store is proposed on the southwest corner of 115th and Michigan.

Residential land use becomes dominant from 120th down to almost 127th Street, where Michigan ends. There is a significant recreational field on the east side of the street between 124th Place and 125th Street.

King Drive Corridor

The King Drive corridor follows 95th Street east from I-94 to Martin Luther King Jr. Drive (400 East, or one-half mile to the east), then turns south and follows King Drive to its end on the north side of 115th Street. King Drive's width varies, but is most typically around 40 feet. The cross-section is typically one through lane and a parking lane in each direction.

Land use on 95th Street is mixed residential and commercial. On King Drive, the land use is residential to the west side between 95th and 99th, and educational / institutional to the east between these same limits. South of 100th Street and extending down to 109th, land use is primarily residential on both sides, except at major east-west cross streets (such as 103rd Street) where it is commercial. Between 109th and 113th Street, land to the west is principally educational use (St. Martin de Porres Academy and Mendel High School), while the east side of King Drive is primarily residential. A large park is located on the west side of King Drive, south of 111th Street. The land use reverts to residential on both sides down to almost 115th, where King Drive ends in a commercial area. One of the parking lots serving the Metra Electric/NICTD Kensington station is located on the east side of King Drive to the north of 115th Street.

Cottage Grove / Metra Electric Corridor

This corridor runs east from 95th Street and I-94 approximately 1.1 miles to Cottage Grove Avenue at around 800 East, and the Metra Electric District alignment, which runs parallel and to

the west side of Cottage Grove. It follows this alignment on a slight southwest angle down to the end of Cottage Grove around 119th Street. From the end of Cottage Grove, the corridor continues to the southeast paralleling the NICTD right-of-way to terminate at approximately 130th Street and Stony Island Avenue, along the same alignment as proposed for the southern end of the UP Railroad Corridor.

The Metra Electric/Canadian National (CN) right of way lies to the west of Cottage Grove, while there are a variety of land uses on the east side of the street. Between 95th and 99th Place the land use is commercial/industrial. There is a small pocket of residential development south of 98th Place and then a major industrial site which extends down to I-94. South of 100th, (and extending down to 108th) this shifts to predominantly residential, with some recreational facilities mixed in. From 108th to 111th the site of the former Pullman-Standard car building plant is on the east side of Cottage Grove. The Pullman Historic District is located south of 111th Street to the east of Cottage Grove.

Immediately to the east of Cottage there are mixed commercial and residential uses, culminating in the commercial area at 115th. To the south of 115th Street, it runs on the east side of a parking lot for commuters using the Kensington Station. It also passes to the east of the interlocking tower that controls the Kensington junction between the NICTD, MED, and CN lines. As noted previously, Cottage extends down to 119th Street in the industrial area that lies to the south and east of the UPRR ROW discussed above. Within this corridor, Cottage Grove varies in width, but is most typically on the order of 48 feet wide.

Schools along this corridor include: Chicago State University on the south side of 95th Street between King Drive and the Metra Electric/CN right-of-way; Smith Elementary School and Corliss High School (both located south of 103rd Street); Poe School north of 106th Street; and, the Pullman Elementary School, located north of 115th Street.

I-94 Bishop Ford Freeway Corridor

This corridor extends east and south from the intersection of I-94 and 95th Street. A complex, grade-separated junction allows traffic to interchange between I-94 Bishop Ford Freeway, I-57 and the I-94 Dan Ryan Expressway. The I-94 Bishop Ford Freeway has three lanes in each direction extending east to approximately Stony Island Avenue. It then continues running south to the extremity of the study area at 130th Street (west of Stony Island).

Interchanges include the previously described junction with I-94 and I-57, Stony Island Avenue/103rd Street, 111th Street, 115th Street and 130th Street. The highway intersects the Metra Electric-Mainline/CN tracks at Cottage Grove Avenue and the NICTD South Shore Line crosses over the highway just south of the 130th Street interchange. An Indiana Harbor Belt (IHB) freight railroad line parallels the South Shore Line from around 119th Street to the south limits of the study area. This line is used infrequently.

Land use surrounding I-94 Bishop Ford Freeway is predominantly recreational and educational on the east side of the highway south from 95th Street, becoming residential on both sides after passing under Michigan Avenue. East of King Drive the use is institutional and educational to the north (Secretary of State's facility and Chicago State University) and then residential to the south, extending east to Cottage Grove. The use is industrial to the north on the east side of Cottage Grove, and continues to be residential to the south of the highway. As the I-94 Bishop Ford Freeway swings south to intersect 103rd Street, the use is industrial to the west and educational (Olive-Harvey College) to the east. Between 103rd and 111th Streets the use is

commercial to the west and recreational to the east. From 111th south to the end of the study area the land uses are industrial on both sides of the highway.

3.1.1 Corridor Evaluation

The corridor evaluation involved the analysis of the corridor alternatives based on their performance against relevant Screen 1 evaluation criteria. These criteria represent the Screen 1 measures that apply to each corridor regardless of the modal technology and profile developed within them:

- **Land Use:** Consistency and compatibility with surrounding land uses
- **Neighborhoods and Community:** Neighborhoods and residential population served with improved transit service
- **Poverty-status and Minority Access:** Poverty-status and minority populations served
- **Transit System Usage:** Service to activity centers within the study area and the region
- **Accessibility:** Directness to the existing Red Line 95th Street terminal station and the regional system

Three corridors, Halsted, UPRR, and Michigan were recommended to be carried forward as described in Tables 3.1 and 3.2.

Table 3.1: Summary Corridor Evaluation

Criteria	I-57	Hal-sted	UPRR	Went-worth	State	Michi-gan	King Dr.	Cottage Gr./MED/CN	I-94
Land Use	+	+	+	−	−	+	−	−	+
Neighborhoods/ Community	○	+	+	+	+	+	+	○	−
Poverty Status & Minority Access	○	○	+	+	+	+	+	+	−
Transit System Usage	−	+	+	○	○	+	○	+	−
Accessibility	−	○	+	+	+	+	+	○	−
Advance For Further Screening?	No	**Yes**	**Yes**	No	No	**Yes**	No	No	No

Key: **+** Better than other alternatives; ○ Same as other alternatives; **−** Worse than other alternatives

Table 3.2: Summary Corridor Evaluation Conclusions

Corridor	Advance for Further Screening?	Comments
I-57 Expressway	No	Corridor is on the western edge of study area and evaluates worse than other alternatives for accessibility and ability to improve transit service for new and existing customers.
Halsted Street	**Yes**	Corridor is highly transit supportive and could improve transit usage and accessibility to 95th Street. Halsted is a busy and active commercial corridor with the highest existing local bus usage in the study area.
UP Railroad (UPRR)	**Yes**	Corridor evaluates better than other alternatives for land use, neighborhoods served, poverty-status/minority access, transit usage, and accessibility.
Wentworth Avenue	No	Corridor is transit supportive. However, Wentworth Avenue is a local residential street and new transit infrastructure would be highly disruptive.
State Street	No	Similar to Wentworth Avenue, State Street is a residential corridor in the study area and not suitable for high capacity transit infrastructure.
Michigan Avenue	**Yes**	Corridor is highly transit supportive and could improve transit usage and accessibility to 95th Street.
King Drive	No	Corridor currently ends at 115th Street and would require high land acquisition cost to reach 130th Street.
Cottage Grove Avenue / MED CN	No	Corridor will not improve transit service or accessibility better than other alternatives.
I-94 Bishop Ford Freeway	No	Corridor is within a freeway. Transit usage, accessibility and neighborhoods and populations served worse than other alternatives.

3.2 Transit Technologies

A wide range of modal technologies were evaluated as part of the Universe of Alternatives. Eleven transit modal technologies were evaluated. They were grouped into three groups: rail, rubber tire and other modes. Together these generally encompass the entire domain of current transit technologies. These eleven technologies are:

Rail Transit: Rail is the designation for the alternatives operating as traditional rail technologies using steel wheels on steel rail. The rail guideways can be located in dedicated rights-of-way or in some cases, they can share the street with other vehicular traffic and pedestrians. Depending on mode and function, station spacing for these systems can be as close as ¼ to ½ mile in higher populated urban areas and one to five miles in areas with a lower population density. Rail propulsion power is generally from either diesel engines on board the vehicle or from electricity delivered from a distant generating location and distributed by overhead wires or a third rail that power the vehicle's electric motors. Hybrid engines, combining diesel and

electric power on board the vehicle, are emerging propulsion system technology. The various rail transit alternatives for consideration include:

- Commuter Rail
- High Speed Rail
- Heavy Rail Transit (HRT)
- Light Rail Transit (LRT)
- Streetcar

Rubber Tire Transit: Similar to the rail transit, rubber-tire alternatives can travel at higher speeds or lower speeds, operate in dedicated travelways or in mixed traffic, and can use different propulsion systems, including standard diesel, hybrid, compressed natural gas, and electric. The various alternatives for consideration are presented below.

- Commuter Bus
- Local Bus
- Bus Rapid Transit (BRT)

Other Transit: Other transit generally represents advanced technology systems recently developed that do not ride on steel or rubber wheels or have so many variations for the guideway that categorization as either a rail vehicle or a bus vehicle would be difficult. These alternatives include:

- Maglev
- Automated Guideway Transit (AGT)/Monorail
- Personal Rapid Transit (PRT)

Figure 3.2 depicts these eleven transit technologies and Table 3.3 provides a summary of the operating characteristics of the eleven transit technologies.

3.2.1 Transit Technology Evaluation

The evaluation of the transit modal technologies was based on:

- **Study Area Suitability -** The modal technology has demonstrated the capability to match basic project needs for operating speeds and station spacing.

  Measures of Effectiveness (MOE):
  - *Length of Commute:* The typical commute length of the modal technology must be consistent with study area characteristics in terms of dimensions and area.
  - *Typical Station Spacing:* The typical station spacing of a modal technology must be consistent with the purpose and need of the project.
  - *Operating Speed:* The typical modal speed is consistent with the purpose and need of the project.

To meet the study area suitability criteria, the modal technology must have demonstrated the capability to match basic project needs such as operating speeds, station/stop spacing or length of travel.

Figure 3.2: Transit Technologies

High Speed Rail

Metra Commuter Rail

CTA Heavy Rail Transit

Minneapolis Light Rail Transit

Tacoma Streetcar

CTA Local Bus

Pace Commuter Bus

Civis Bus Rapid Transit

Shanghai MagLev

Personal Rapid Transit

Clarian Automated Guideway Transit

Table 3.3: Operating Characteristics of Technology Alternatives

	Rail Modes					Rubber Tire Modes			Other Modes		
Characteristic	**Commuter Rail**	**High Speed Rail**	**Heavy Rail Rapid Transit**	**Light Rail Transit**	**Streetcar**	**Commuter Bus**	**Local Bus**	**Bus Rapid Transit**	**Magnetic Levitation**	**Automated Guideway Transit**	**Personal Rapid Transit**
Type of Vehicle	Locomotive and train of cars; DMUs, EMUs	Locomotive and train of cars; EMUs	Trains of self-propelled cars	Self-propelled car or train of cars	Self-propelled car	Stand alone vehicle	Stand alone vehicle	Stand alone vehicle	Train of self-propelled cars	Train of self-propelled cars	Single self-propelled car
Vehicle Capacity	200-1800	500-600	800-1000	100-200	50-70	40	50-70	75-150	500-600	Varies per application	4 - 10
Propulsion	Diesel locomotives; electric motors	Usually electric motors supplied from catenary wire; also turbine powered locomotives	Electric motors supplied from 3rd rail or catenary	Electric motors supplied by overhead wire	Electric motors supplied by overhead wire	Internal combustion engine (diesel, natural gas or hybrid)	Internal combustion engine (diesel, natural gas or hybrid)	Internal combustion engine (diesel, natural gas or hybrid)	Electromagnetic coils supplied by wires in guideway	Electric motors supplied by power rail	Electric motors supplied by power rail
Service Configuration	Connecting suburbs to CBD	Intercity travel	Urban network with focus on CBD	Urban trunk line service	Line service on city streets	Express service to CBD or other major destinations	Line service on city streets	Urban trunk line service in exclusive lanes or guideway	Urban applications and intercity travel	Urban network, as well as shuttle or loop service	Point to point on demand
Travel Speed	30-50 mph	125-200 mph	25-50 mph	15-25 mph	10 mph	30-50 mph	10 mph	15-25 mph	25-250 mph	15 mph	15 mph
Station Spacing	3-7 miles	20 – 50 miles	1/4 to 2 miles	1/4 to 1 mile	2 - 4 blocks	Selected stops at each end of trip	2 - 4 blocks	1/4 to 1 mile	1 to 50 miles	Varies per application	Varies per application
In Transit Revenue Service in N. America	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No

- **System Applicability -** The technology has been established as operationally feasible. Modal technologies that have not been implemented for public use in the U.S. were not recommended for further evaluation.

  Measure of Effectiveness:
  - Proven revenue service in North America.

Using these criteria, each transit modal technology was evaluated against its suitability for the study area and its applicability in the U.S. Table 3.4 summarizes this technology evaluation and show that AGT, BRT, HRT, and LRT transit technologies are recommended to be carried forward to the next step of the evaluation.

3.3 Technology and Profile Evaluation

The transit modal technologies can operate under four possible vertical profiles:

Elevated: An elevated structure is above ground, either on an embankment or on a structure. A local example of an elevated structure is the CTA rail track that forms the Chicago Loop and supports the Orange, Green, Pink, Brown and Purple lines. Other elevated structure examples include the embankment that supports the Red and Purple line tracks between Lawrence and Howard. Given that these structures only support one modal technology, service on these lines is faster than those profiles which may result in mixed traffic operation.

At-Grade: At-grade service runs at ground level. Examples of at-grade rail service are found on the CTA's Yellow and Brown lines, and throughout Metra's service network. CTA and Pace buses use the existing road network and most are therefore at-grade. At- grade services experience conflict points with other transportation networks, potentially resulting in lower operating speeds.

Trench: A trench profile is below ground, but not covered for any distance. Examples of transportation infrastructure that is in a trench can be found on significant parts of the expressway network in Chicago. A specific example of CTA rail in a trench is approaching the Orange Line Midway Airport terminal station. Riders need to ascend to ground level to access additional transportation services. Trench services are usually faster than at-grade due to the dedicated modal technology right-of-way that reduces intersections and potential conflicts with traffic.

Underground: Examples of underground or subways include the CTA Red and Blue lines in downtown Chicago. These subways are tunnels underneath ground level that minimize impacts of the transit facility on adjacent uses, and offer faster service than profiles that cross other transportation facilities at the same level.

Table 3.4: Technology Evaluation

Technology	Does mode meet the MOE?				Advance for Further Screening?	Comments
	Study Area Suitability			System Applicability		
	Length of Commute	Typical Station Spacing	Operating Speed			
Automated Guideway Transit	●	●	●	●	**Yes**	Typical station spacing and operating speeds suitable to the study area.
Bus Rapid Transit	●	●	●	●	**Yes**	Typical station spacing, operating speeds and flexible commute lengths suitable to the study area.
Commuter Bus	x	x	●	●	No	Typically serves point-to-point suburb to city travel. Trip lengths are not consistent with the study area needs.
Commuter Rail	x	x	●	●	No	Length of commuter trip and typical station spacing of 3-7 miles is not consistent with the study area needs.
Heavy Rail Rapid Transit	●	●	●	●	**Yes**	Typical station spacing and operating speeds suitable to the study area.
High-Speed Rail	x	x	x	x	No	Typically serves intercity travel. Length of commuter trip and typical station spacing of 20 miles not consistent with the study area needs.
Light Rail Transit	●	●	●	●	**Yes**	Typical station spacing, operating speeds and flexible commute lengths suitable to the study area.
*Local Bus**	●	x	x	●	No	Typical station spacing and operating speed not consistent with the study area and purpose and need.
Maglev	x	x	x	x	No	Typical station spacing of at least 20 miles required to achieve operational speeds is inconsistent with the purpose and need of the project.
Personal Rapid Transit	●	x	●	x	No	Typical station spacing, operating speeds and flexible commute lengths suitable to the study area.
Streetcar	●	x	x	●	No	Typical station spacing and operating speed not consistent with the study area and purpose and need.

Key: ●Yes, **x** No

* Local bus service, along with the CTA Rapid Transit and Metra service is analyzed as part of the "No Build" and TSM Alternatives

3.4 Screen 1 Findings

This section identifies specific issues which led to the recommendation or elimination of each alternative in Screen 1. Tables 3.5 and 3.6 summarize this evaluation.

Halsted Street Corridor At-Grade BRT

- At-grade BRT would be both compatibly with the existing system and cost effective on the Halsted Street Corridor. The street is generally an appropriate width and can support BRT bus service. This alternative is recommended for further evaluation in Screen 2.

Halsted Street Corridor Elevated HRT

- Elevated structures on the Halsted Street Corridor, though somewhat higher in cost, are feasible for elevated HRT service. This alternative is recommended for further evaluation in Screen 2.

Halsted Street Corridor Trench HRT

- A trench alignment in the Halsted Street Corridor would interfere significantly with traffic on the road both during construction and ongoing operation as a result additional right of way that would be required. This alternative is not recommended for further evaluation.

Halsted Street Corridor Underground HRT

- This alternative scores high on nearly all measures of effectiveness in this screening. Though potentially costly, an underground HRT alternative is feasible on Halsted Street. This alternative is recommended for further for further evaluation in Screen 2.

UPRR Corridor At-Grade BRT

- The existing use of this corridor for railroad operations does not have adequate right of way for at-grade BRT lanes. This alternative is not recommended for further evaluation.

UPRR Corridor Elevated and Trench HRT

- The existing use of this corridor is for railroad operations and is feasible for elevated HRT service. This alternative is recommended to advance for further evaluation in Screen 2.

UPRR Corridor Underground HRT

- Despite scoring well on some measures of effectiveness in screen 1, underground facilities are cost prohibitive in relation to the benefits provided in this corridor. This alternative is not recommended for further evaluation.

Michigan Avenue Corridor At-Grade BRT

- At-grade BRT would be both efficient and cost effective on the Michigan Avenue Corridor. Although the street has limited right-of-way, it may support an enhanced bus service and warrants further review. This alternative is recommended for further evaluation in Screen 2.

Table 3.5: Summary of Technology and Profile Evaluation

Technology	Profile	Criteria						Advance for Further Screening
		Air Quality	System Capacity	Travel Time	Compatibility	Traffic	Project Cost	
Automated Guideway Transit	Elevated	○	○	−	−	+	○	No
	Trench	○	○	−	−	○	○	No
	Underground	○	○	−	−	+	−	No
Bus Rapid Transit	Elevated	○	○	○	−	+	○	No
	At-Grade	○	○	○	+	○	+	**Yes**
	Trench	○	○	○	−	○	○	No
	Underground	○	○	○	−	+	−	No
Heavy Rail Rapid Transit	Elevated	○	+	+	+	+	○	**Yes**
	Trench	○	+	+	+	○	○	**Yes**
	Underground	○	+	+	+	+	−	**Yes**
Light Rail Transit	Elevated	○	○	○	−	+	○	No
	At-Grade	○	○	○	−	−	+	No
	Trench	○	○	○	−	○	○	No
	Underground	○	○	○	−	+	−	No

Key: **+** Better than other alternatives; ○ Same as other alternatives; **−** Worse than other alternatives

Michigan Avenue Corridor Elevated HRT

- Elevated structures on the Michigan Avenue Corridor, though somewhat higher in cost, are feasible for elevated HRT service. This alternative is recommended for further evaluation in Screen 2.

Michigan Avenue Corridor Trench HRT

- A trench alignment in the Michigan Avenue Corridor would interfere significantly with traffic on the road both during construction and ongoing operation as a result additional right of way that would be required. This alternative is not recommended for further evaluation.

Michigan Avenue Corridor Underground HRT

- This alternative scores high on nearly all measures of effectiveness in this screening. Though very costly, this underground HRT alternative is feasible Michigan Avenue. This alternative is recommended for further evaluation in Screen 2.

Table 3.6: Summary of Screen 1 Evaluation of Alternatives

Technology	Profile	Recommended to Advance to Screen 2		
		Halsted Corridor	UP Railroad Corridor	Michigan Corridor
Bus Rapid Transit	Elevated	No	No	No
	At-Grade	**Yes**	No	**Yes**
	Trench	No	No	No
	Underground	No	No	No
Heavy Rail Rapid Transit	Elevated	**Yes**	**Yes**	**Yes**
	Trench	No	**Yes**	No
	Underground	**Yes**	No	**Yes**

Based on this evaluation, two Bus Rapid Transit (BRT) alternatives along Halsted Street and Michigan Avenue, and six Heavy Rail Transit (HRT) alternatives along Halsted Street, the Union Pacific Railroad (UPRR), and Michigan Avenue, along with the No-Build and TSM alternatives were carried forward for further analysis in Screen 2.

4.0 SCREEN 2 EVALUATION

The Screen 2 evaluation begins with the alternatives that were carried forward from the Screen 1 evaluation.

4.1 Definition of Alternatives

Step 1 Evaluation
Step 1 of the Screen 2 evaluation process consists of further defining alternatives advancing from Screen 1 beyond the initial corridor and technology descriptions to also include mapping of a more defined alignment, identification of potential station locations, and sketch service plans. This definition assists in a more complete understanding of the unique elements of each alternative. It also provides a level of information about each alternative that supports more detailed evaluation. The alternatives are summarized below.

Bus Rapid Transit (BRT) Alternatives
BRT typically operates all or a portion of its route in a dedicated right-of-way. The proposed span of service for the BRT and HRT alternatives is the same as the current Red Line service hours, which operates 24 hours every day of the year. Few bus service changes are proposed for the BRT alternative due to requirement for customers to transfer between the BRT and the Red Line at 95th Street for travel to the Central Area.

The vehicles anticipated for the BRT alternative are articulated buses that would be hybrid diesel-electric powered or use alternative fuels. These 60 foot vehicles have a capacity of up to 115 passengers. A park-and-ride facility is recommended at the terminal station.

BRT Halsted Street At-Grade Alternative
This proposed BRT would operate at-grade on exclusive right-of-way between Vermont Avenue/Halsted Street and the Red Line 95th Street terminal station. For service planning purposes, station locations include Vermont Avenue, 123rd, 119th, 115th, 111th, 107th, 103rd, and 98th Streets.

BRT Michigan Avenue At-Grade Alternative
This proposed BRT would operate at-grade on exclusive right-of-way between 127th Street and the Red Line 95th Street terminal station. The alternative is planned with eight stations and it is 4.2 miles long. For service planning purposes, station locations include 127th, 123rd, 119th, 115th, 111th, 107th, 103rd and 98th Streets.

<u>Heavy Rail Transit (HRT) Alternatives</u>
HRT has been defined as operating in dedicated right of way completely separated from surface traffic on an elevated structure, underground or in a trench. Power would be provided via a third rail to match the existing CTA system. Trains would operate with 4 to 8 cars and the rolling stock would be equivalent to the existing fleet.

- **Elevated** indicates that most of the proposed new infrastructure is elevated except for portions where elevated infrastructure is not practical. Elevated HRT alternatives include the Halsted Street, UPRR and Michigan Avenue Corridors.
- **Underground** indicates that, where feasible, the majority of the proposed new infrastructure is underground, except for the portions necessary to connect to existing guideway or at the terminus rail yard where underground infrastructure is not practical.

Underground HRT alternatives include the Halsted Street and Michigan Avenue Corridors.

- **Trench** indicates that most of the proposed new infrastructure is located in a trench with limited or no permanent street closures. The single Trench HRT alternative being considered is the UPRR Corridor.

HRT Halsted Street Elevated and Underground Alternatives
Heavy rail would operate as either an elevated structure or underground. The alignment would begin at Vermont Avenue/Halsted Street to the I-57 Expressway median, following the median to existing CTA track south of 95th Street. For service planning purposes, station locations are assumed at Vermont Avenue, 119th, 111th, and 103rd Streets.

HRT Union Pacific Railroad (UPRR) Elevated and Trench Alternatives
Heavy rail would operate as an elevated structure or in a trench. The alignment would follow the I-57 Expressway until the UPRR corridor. It would then turn south along the corridor to approximately 111th Street where it would turn southeast to terminate at roughly 130th Street west of the I-94 Bishop Ford Freeway. For service planning purposes, station locations include 130th, 115th, 111th, and 103rd Streets.

HRT Michigan Avenue Elevated and Underground Alternatives
Heavy rail would operate on either an elevated structure or underground. The alignment would follow the southbound I-94 Bishop Ford Expressway median and transition to either an elevated structure or underground at Michigan Avenue. It would then head south along the Michigan Avenue Corridor to approximately 127th Street. For service planning purposes, station locations include 127th, 119th, 111th, and 103rd Streets.

No-Build Alternative
The No Build Alternative is defined as no new major construction within the study area, other than existing or committed projects in the CMAP 2030 Regional Transportation Plan. Minor spot improvements, transportation management measures, and/or signal projects may be constructed under the No Build Alternative. For additional information on planned transportation improvements in the study area see Section 5.1 – Definition of Alternatives; No Build Alternative.

TSM Alternative
The TSM Alternative represents lower cost improvements to address transportation issues in the study short of constructing a new fixed guideway. Bus service changes associated with the TSM Alternative include a new limited-stop express bus route. The proposed #X34 express bus route would operate along the current #34 South Michigan route, making stops at least half mile apart at frequencies of 7.5 minutes. The X34 South Michigan Express bus route would operate between 6:00 a.m. and 8:00 p.m. on weekdays only. Rush hour frequency on routes #34 and #X34 for the TSM Alternative are proposed at 11 minutes and 7.5 minutes respectively. Results from the ridership forecast in Screen 3 may necessitate changes to the TSM routing or these proposed frequencies if estimated demand exceeds proposed capacity.

4.2 Evaluation

Step 2 Evaluation
The evaluation criteria include a robust mix of qualitative and quantitative measures, but does not include ridership forecasting or detailed cost estimating. The Step 2 evaluation factors included:

- Physical Constraints
- Right-of-Way Requirements
- Social & Economic factors
- Demographics and Employment
- Environmental Factors
- Noise, Visual, Natural and Cultural Resources
- Transportation Factors
- Travel Time, Transit Connectivity and Traffic

During Step 2, three alternatives were eliminated, and the remaining alternatives advanced to Step 3. This Step 2 evaluation is summarized in Tables 4.1 and 4.2.

Table 4.1: Recommendations of Step 2 Evaluation

Step 2 Criteria	BRT		HRT					
	Halsted Street	Michigan Avenue	Halsted Street		UPRR		Michigan Avenue	
	At-Grade	At-Grade	Elevated	Under-ground	Elevated	Trench	Elevated	Under-ground
Physical Constraints	○	−	○	○	○	○	−	−
Social / Economic	○	○	○	○	○	○	○	○
Environmental	+	○	○	○	○	○	○	−
Transportation	−	−	+	+	+	+	+	+
Advance to Step 3	**Yes**	No	**Yes**	**Yes**	**Yes**	**Yes**	No	No

Key: **+** Better than other alternatives; ○ Same as other alternatives; **−** Worse than other alternatives

Table 4.2: Summary of Screen 2 Step 2 Evaluation of Alternatives

Technology	Profile	Recommended to Advance to Screen 2 Step 2		
		Halsted Corridor	UP Railroad Corridor	Michigan Corridor
Bus Rapid Transit	**At-Grade**	**Yes**	No	No
Heavy Rail Rapid Transit	**Elevated**	**Yes**	**Yes**	No
	Trench	No	**Yes**	No
	Underground	**Yes**	No	No

Step 3 Evaluation

Step 3 is the last and most detailed evaluation within Screen 2. Remaining alternatives are evaluated using preliminary ridership projections and preliminary capital and operating cost estimates. Step 3 concludes with the recommendation to eliminate poorer performing alternatives and to advance those that are the stronger performers. Criteria used to evaluate the alternatives included:

- Capital Cost Comparison
- Operating and Maintenance (O&M) Cost Comparison
- Ridership Potential
- Cost Effectiveness

Table 4.3: Recommendations of Screen 2, Step 3 Evaluation

Project Cost and FTA Criteria	BRT Halsted Street	HRT Halsted Street		HRT UPRR	
	At-Grade	Elevated	Under-Ground	Elevated	Trench
Capital Cost	+	○	−	○	−
Annual Operating and maintenance Costs	○	○	○	○	○
Annual Ridership	−	+	+	+	+
Cost Effectiveness	+	○	−	○	−
Preliminary FTA Criteria Summation	+	+	−	+	−
Advance to Screen 3	**Yes**	**Yes**	No	**Yes**	No

Key: + Better than other alternatives; ○ Same as other alternatives; − Worse than other alternatives

Table 4.4: Summary of Screen 2 Step 3 Evaluation of Alternatives

Technology	Profile	Recommended to Advance to Screen 3	
		Halsted Corridor	UP Railroad Corridor
Bus Rapid Transit	**At-Grade**	**Yes**	Eliminated in Step 2
Heavy Rail Rapid Transit	**Elevated**	**Yes**	**Yes**
	Trench	Eliminated in Step 2	No
	Underground	No	Eliminated in Step 2

Screen 2 Alternative-Specific Issues

This section highlights the main issues that led to the recommendation and elimination of each alternative in Screen 2.

Halsted Street Corridor BRT At-grade, HRT Elevated and Underground

- The corridor is well suited for BRT at-grade and HRT elevated alternatives. Halsted Street is the largest and busiest arterial corridor in the study area with a four lane configuration and a 75' right-of-way (ROW). These alternatives are recommended for further evaluation in Screen 3.
- The HRT Halsted Street Underground Alternative is expected to require the highest capital outlay. As result the HRT Underground Alternative was not recommended for further evaluation.

UPRR Corridor HRT Elevated and Trench

- HRT UPRR Alternative utilizes an existing freight rail right-of-way through much of the study area and is well suited for HRT Elevated alternative. The ROW width is 100 feet south of the I-57 bridge to104th Place. From there the width varies between 50 to 100 feet until 111th Street. South of 111th Street, the ROW is over 100 feet in width. The HRT UPRR Elevated Alternative is recommended for further evaluation in Screen 3.
- An open cut, or trench, profile would require placing both the UPRR and the Red Line extension within a trench. The UP line would require temporary relocation during construction. A crash wall separating the UPRR and CTA tracks may also be required if both lines were to go in a trench, which may require acquisitions in narrower segments of the ROW. This would substantially increase the construction cost compared to the elevated alternative. As result the HRT UPRR Trench Alternative was not recommended for further evaluation.

Michigan Avenue Corridor BRT At-Grade, HRT Elevated and Trench

- Michigan Avenue varies from 48 feet wide at 95th Street to 38 feet between curbs at 103rd Street. Taking 22 feet for the BRT lanes would leave 26 feet for auto lanes at 95th Street, but just 16 feet for auto lanes at 103rd Street. While it is possible to rebuild the street to increase the curb-to-curb width, this would have a negative impact on the built-up areas along Michigan Avenue. The BRT and HRT Michigan Avenue Alternatives, compared to other alternatives, would require significant right-of-way acquisitions.
- Michigan Avenue stub-ends at 127th Street within a developed residential area and there is no obvious BRT or HRT terminal location at this intersection without undertaking significant property acquisition.
- In the case of the HRT alternatives, the elevated and underground profile, while providing an alignment free from traffic interference, would be highly disruptive to the commercial and residential areas along Michigan Avenue. This would be true both during construction and subsequent operation.
- Therefore, the BRT and HRT Michigan Avenue alternatives received negative ratings in Screen 2 and were not recommended for further evaluation.

Screen 2 concluded with public involvement including meetings with elected officials and other stakeholder groups, as well as two public open houses in December 2008. As shown in Table 4.4, a BRT alternative along Halsted Street, and two HRT alternatives along Halsted Street and the UPRR, along with the No Build and the TSM alternatives were carried forward for more detailed evaluation in Screen 3.

5.0 SCREEN 3 EVALUATION

Screen 3 was comprised of a two-step evaluation process that included the further definition and refinement of alternatives and the evaluation of these alternatives. The result of the Screen 3 evaluation was a recommendation for an LPA.

5.1 Definition of Alternatives

Alternatives advancing to Screen 3 were developed and refined beyond the initial corridor and technology descriptions to include the conceptual design of the alternative, the identification of potential station locations, and preliminary service plans. This alternatives definition assists in a more complete understanding of the unique elements and requirements for each alternative. It also provides a more complete level of information about each alternative that supports increasingly detailed evaluation. The alternatives recommended from Screen 2 for further study include:

- No Build Alternative
- Transportation System Management (TSM)
- Bus Rapid Transit (BRT) via Halsted Street Corridor At-Grade
- Heavy Rail Rapid Transit (HRT) via Halsted Street Corridor Elevated
- HRT via UP Railroad (UPRR) Corridor Elevated

No Build Alternative

The No Build Alternative is defined as the existing transportation system, plus any committed transportation improvements. Committed transportation improvements include projects that are already in the Chicago Metropolitan Agency for Planning (CMAP) financially constrained Transportation Improvement Program. The Red Line Study Area has five bridge reconstructions, and several road improvements projects included in the FY 2007 – 2012 Transportation Improvement Program (TIP). These improvements are primarily on highway segments in the project study area and are not adjacent or intersecting with the proposed TSM or Fixed Guideway Alternatives.

The bridge projects include:

- Illinois 1 (Halsted Street) at the Little Calumet River, slated for completion by 2012
- I-94 (Bishop Ford Expressway) at the Stony Island ramp and at Cottage Grove Road, both scheduled for 2011
- I-57 at 103rd Street, to be completed in 2009
- I-57 at Genoa Rd, scheduled for 2011

The road projects include:

- Coordinating signal timing on Stony Island Avenue from 95th Street north, and on 95th Street from Western Avenue east to Ewing Avenue, to be completed in 2010
- Resurfacing I-94 (Bishop Ford Expressway) from ML King Drive south, scheduled for 2011
- Landscaping I-57 from I-94 south, to be done by 2012

- Landscaping and installing safety fencing and lighting along I-94 from the I-57 merge north, to be done in 2009
- Patching pavement on I-57 in various locations, with an unspecified completion date

Other miscellaneous projects include a drainage project on I-94 (Bishop Ford Freeway) at 110th Street and Doty, which is scheduled for completion in 2012, and several historic preservation projects. These include the Hotel Florence at 11111 S. Forestville and the North Pullman Historic Area, both in the Pullman neighborhood of Chicago, which are scheduled to be completed in 2011.

A multi-use trail from the existing Centennial Trail in Lemont to the Burnham Greenway in Burnham, has funding identified but does not have a completion date.

Bus transit service under the No Build Alternative would be focused on the preservation of existing services and projects. No significant changes to bus service are anticipated in the project area.

All elements of the No-Build alternative are included in each of the other alternatives. The No-Build Alternative with TIP projects in the Red Line Extension Study Area is shown in Figure 5.1.

Figure 5.1: No-Build Alternative

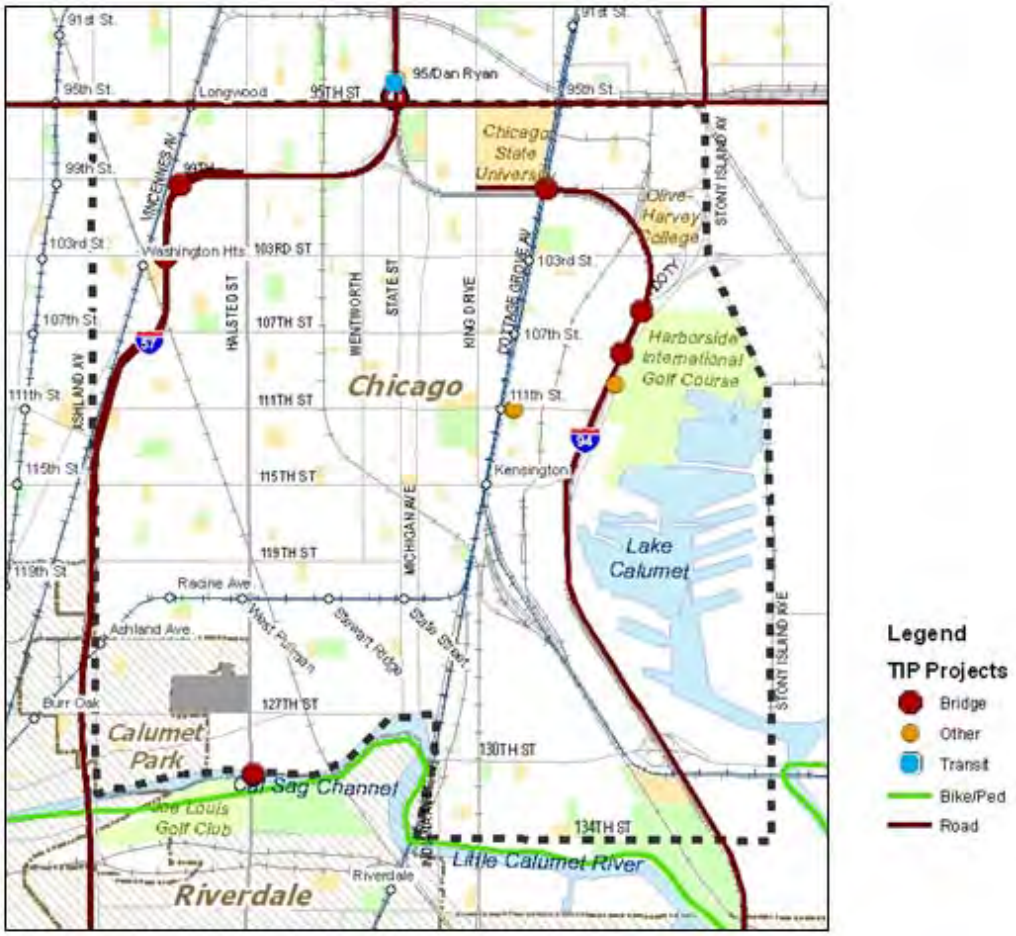

Halsted Street TSM/BRT Alternative

Based on discussions with the FTA, consolidation of the TSM and BRT Halsted Street Corridor alternatives was analyzed. The TSM and BRT alternative was initially defined to operate on a five mile alignment between the Red Line 95th Street station via Halsted Street to Vermont Avenue/127th Street.

The proposed TSM Alternative is a 5.1 mile BRT alternative that would operate between the 95th Street Station and 127th Street via Halsted Street. 95th Street is 80 feet wide with four lanes, center turn lane, landscaped median and no parking. ADT on 95th Street is 23,800. Halsted Street is the busiest north-south arterial street in the Red Line study area with nearly 37,000 vehicles ADT north of I-57 Expressway and more than 26,000 vehicles ADT to the south of the expressway. Halsted Street has a 75 foot right-of-way with four lanes, landscaped median with center turn lane, and parking.[7]

Full-scale BRT installations can provide significant travel time savings. The travel time savings for implementing BRT on the five mile route between 95th Street Station and Vermont Avenue/127th Street is 2.0 to 3.0 minutes relative to the TSM (assumes that the order of magnitude of travel time savings is between 15 and 20 percent that full-scale BRT could be expected to achieve over the TSM alternative). Given the order-of-magnitude of capital costs for implementing BRT on Halsted Street is $40 million and travel time savings are only 2.0 to 3.0 minutes over the TSM, CTA decided to merge the TSM and BRT alternatives into a single new TSM/BRT alternative. <u>This new TSM/BRT Alternative replaced the TSM and BRT Alternatives from the Screen 2 analysis and was used for the detailed evaluation in Screen 3.</u>

The TSM/BRT Alternative is an enhanced bus route from the existing Red Line 95th Street terminal to Vermont Avenue. It is proposed to operating in mixed-traffic along 95th Street and Halsted Street. The TSM/BRT Alternative is shown in Figure 5.2, and includes the following characteristics:

- The alternative is 5.1 miles long with four stations.
- Stations are assumed at 103rd, 111th, 119th Streets and Vermont Avenue.
- The average travel time from Vermont Avenue to 95th Street is 24.25 minutes. This includes a 2.25 minute wait time at Vermont Avenue.
- Traffic signal priority would be implemented along Halsted Street and 95th Street (similar to the previous TSM and BRT alternatives).
- Preliminary schedules indicate that four 60-foot articulated buses vehicles (including 1 spare) would be required.
- 95th Street terminal would be expanded to extend the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street to improve circulation and safety.
- Park and ride facilities are recommended at intermediate and terminal stations with a total capacity of 700 spaces in the year of construction.

[7] ADT's from IDOT website. http://www.gettingaroundillinois.com/
Year of Count Data - 95th Street: 2007, Halsted Street: 2007.

Figure 5.2: TSM/BRT Halsted Street Alternative

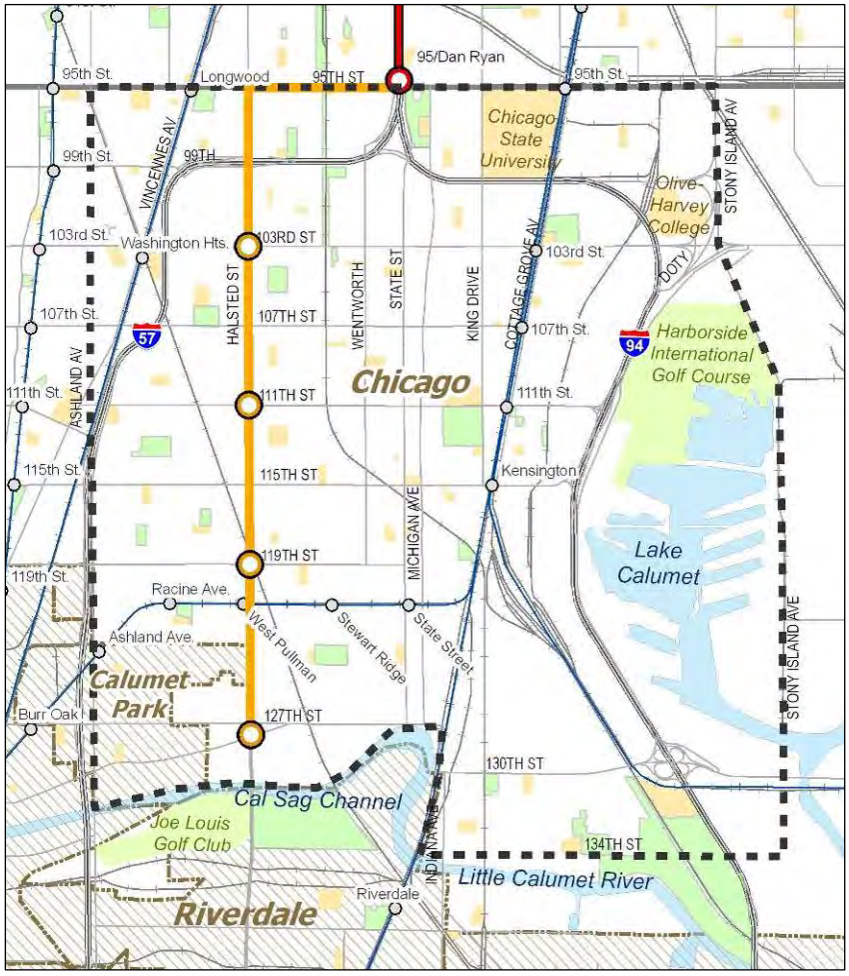

HRT Halsted Street Elevated Alternative

An extension of heavy rail transit would operate on an elevated structure between the existing Red Line 95th Street Terminal station and Halsted Street/Vermont Avenue. The alignment would follow the median of I-57 Expressway until Halsted Street. It would then turn south at Halsted Street and continue in median to Vermont Avenue.

The HRT Halsted Street Alternative is shown in Figure 5.3, and includes the following characteristics:

The alignment considered for detailed evaluation is described as follows:

- The alternative is 5.0 miles long with four stations.
- Station locations are assumed at 103rd, 111th, 119th Streets and Vermont Avenue.
- The average travel time from Vermont Avenue to 95th Street is 16.25 minutes. This includes a 2.25 minute wait time at Vermont Avenue.

- Based on the estimated running time for the Halsted Street alignments, an additional 78 cars (including 14 spares) are required for the AM rush period.
- Park and ride facilities are recommended at intermediate and terminal stations with a total capacity of 1500 spaces in the year of construction.
- CTA has previously determined that the 98th Shop is in need of replacement and has made plans separate from this project to address those needs. For that reason, the replacement of 98th Shop and a new Red Line yard and shop is not considered to be part of the HRT Halsted alternative.

Figure 5.3: HRT Halsted Street Elevated Alternative

Michigan Avenue TSM/BRT Alternative

Based on discussions with FTA, the TSM/BRT Michigan Avenue alternate was introduced as a new alternative in Screen 3 for purpose of evaluation against the HRT UPRR Corridor Elevated Alternative. The proposed TSM Alternative is a 5.5 mile BRT alternative that operates between the 95th Street Station and 130th Street via East 95th Street, Michigan Avenue, East 127th Street, South Indiana Avenue and East 130th Street. 95th Street is 80 feet wide with four lanes, center turn lane, and no parking. Michigan Avenue averages 40 feet wide with two lanes and parking. 127th Street and Indiana Avenue are 40 feet wide with four lanes and no parking. 130th Street is 60 feet wide with four lanes, a center turn lane and no parking. On 95th Street, ADT is currently 23,800, ADT on Michigan Avenue between 95th Street and 127th ranges between 10,700 (at 107th Street) and 7,100 (at 127th Street), on 127th and Indiana Avenue Street 21,100, and 130th Street, ADT is 19,600. [8]

Previously in Screen 2, both HRT and BRT alternatives for the Michigan Avenue Corridor were eliminated due to physical constraints and potential displacements from the need for additional right-of-way along Michigan Avenue to accommodate the separate guideway/roadway for HRT and BRT. This TSM/BRT Michigan Avenue alternative would consist of enhanced bus service operating in existing street right-of-way. <u>This new TSM/BRT Alternative thus introduced a separate TSM/BRT Alternative that was used for detailed evaluation in comparison to the locally preferred alternative (LPA).</u>

The TSM/BRT Alternative would include the provisions of the No Build Alternative and add a limited-stop enhanced bus route, #X34, along the existing #34 South Michigan Avenue bus route to 130th Street and I-94 Bishop Ford Freeway. The TSM/BRT Alternative is shown in Figure 5.4, and includes the following characteristics:

- The alternative is 5.5 miles long with four stations.
- Stations are located at 103rd, 111th, 115th and 130th Streets.
- The average travel time from 130th Street to 95th Street is 25.25 minutes. This includes a 2.25 minute wait time at 130th Street.
- Preliminary schedules indicate that ten 60-foot articulated buses (including two spares) would be required.
- Traffic signal priority would be implemented along 95th Street, Michigan Avenue and 130th Street (similar to the previous TSM and BRT alternatives).
- 95th Street terminal would be expanded to extend the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street to improve circulation and safety.
- Park and ride facilities are recommended at intermediate and terminal stations with a total capacity of 700 spaces in the year of construction.

[8] ADT's from IDOT website. http://www.gettingaroundillinois.com/
Year of Count Data - 95th Street: 2007, Michigan Avenue: 2006, 127th Street: 2006, Indiana Avenue: 2006, and 130th Street is 2006.

Figure 5.4: TSM/BRT Michigan Avenue Alternative

HRT Union Pacific Railroad (UPRR) Elevated Alternative

CTA was aware of concerns about shared-use transit and freight railroad corridors as a result of shared use corridor incidents that have occurred in other parts of the country. Conceptual designs and cost estimates for that portion of the Red Line extension that would be on shared-use ROW include additional safety provisions (25 foot separation, elevated grade separation, intrusion fencing with alarms to both the CTA and UPRR control centers, as well as a crash wall between the UPRR tracks and the CTA structure) in an effort to address what was understood to be concerns as directly as possible.

During Screen 3, a meeting was held with CTA, CDOT and UPRR representatives to discuss the potential Red Line Extension and the UPRR freight railroad shared use corridor. At this meeting, the UPRR indicated that they required a 50 foot separation distance between their tracks and a transit line. This separation distance was based on research investigations as to how best to ensure safety and protect the operations and physical plant of the UPRR. In addition, the UPRR desires to maintain its current ROW footprint in order to allow for future expansion. It would not be possible for the CTA structure to be located on the UPRR ROW and provide the required separation distance.

This led the CTA study team to examine options for locating the CTA rail line beyond the east and west limits of the UPRR ROW. As result, the HRT UPRR Alternative includes both an East and West alignment option for detailed evaluation in Screen 3.

The HRT UPRR Alternative is shown in Figure 5.5, and includes the following characteristics:

- The alternative is 5.3 to 5.6 miles long depending on terminal location and includes four stations.
- Station are located at 103rd, 111th, 115th and 130th Streets.
- The average travel time from 130th Street to 95th Street is 16.25 minutes. This includes a 2.25 minute wait time at 130th Street.
- Based on the estimated running time for the UPRR alignments, an additional 78 cars (including 14 spares) are assumed for the AM rush period.
- Park and ride facilities are recommended at intermediate and terminal stations with a total capacity of 1,500 spaces in the year of construction.

Figure 5.5: HRT UPRR Elevated Alternatives

A new Red Line yard and shop facility with a 276-car capacity, would be located on a combination of industrial/vacant land to the east of the CN/MED tracks and west of the IHB and NICTD tracks at approximately 120th and Cottage Grove. The CTA has previously determined that the 98th Yard and Shop is in need of replacement and has made plans separate from this project to address those needs. For that reason, the replacement of 98th Yard and Shop and a new Red Line yard and shop is not considered to be part of the HRT UPRR alternative.

Two 130th Street terminal station locations, a south and a west option, are proposed. They are differentiated primarily in environmental factors and capital cost at this stage of the analysis. The south and west terminal station options are shown in Figure 5.6.

- *UPRR ROW to 130th- South Station Option.* The alignment terminates along the former IHB railroad right-of-way immediately north of 130th Street. The station platform would extend underneath the existing 130th Street /IHB Bridge to provide access to the Altgeld Gardens development on the south side of 130th Street. Line length is 5.3 miles long.
- *UPRR ROW to 130th- West Station Option.* For this variation, around 128th Street the double track HRT line swings off the former Michigan Central/Indiana Harbor Belt ROW to the west, running along the north side of 130th Street. The location is parallel to 130th street and provides access to the residential areas and the Altgeld Gardens development on the south side of 130th Street. Line length is 0.3 miles longer than the previous alternative, for an overall length of 5.6 miles.

Figure 5.6: HRT UPRR South and West Station Options

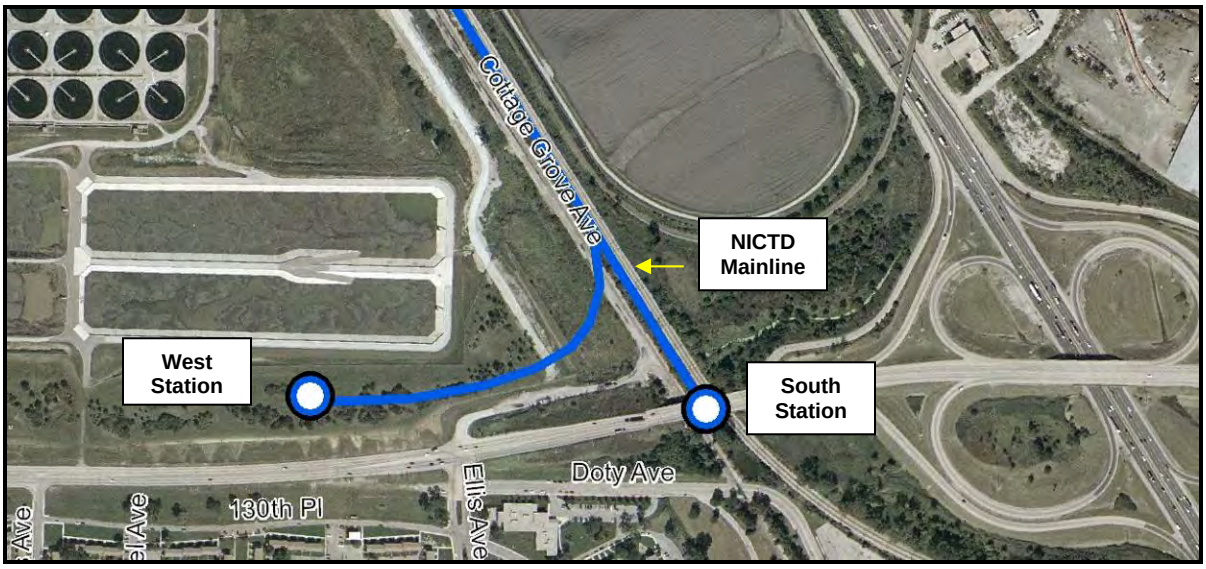

5.2 Screen 3 Evaluation

A summary Screen 3 evaluation matrix was developed. The evaluation factors used to assess the performance of the alternatives included:

- Physical Constraints
- Public Support
- Social/Economic Factors

- Environmental Factors
- Transportation Factors
- Capital Cost Comparison
- Operating and Maintenance (O&M) Cost Comparison
- Ridership Potential
- FTA Cost Effectiveness Index (CEI)

The Screen 3 analysis resulted in a preliminary recommendation for the HRT UPRR Alternative as the Locally Preferred Alternative, and is shown in Table 5.1.

Table 5.1: Screen 3 Evaluation Summary and LPA Recommendation

Screening Criteria	No-Build	TSM/BRT			
		Halsted	Michigan	Halsted	UPRR West and East Option
		At-Grade	At-Grade	Elevated	Elevated
Physical Constraints	NA	○	○	○	−
Public Support	NA	○	○	○	+
Social and Economic	NA	○	○	○	○
Environmental	NA	○	○	○	○
Transportation	−	−	−	+	+
Capital Cost	+	+	+	○	○
Operating Cost	+	+	+	○	○
Ridership	−	○	○	+	+
Cost Effectiveness Index	NA	−	−	○	○
Summary Rating	0	+1	+1	+2	+2
LPA Recommendation	No	No	No	**Yes**	**Yes***

Key: + Better than other alternatives; ○ Same as other alternatives; − Worse than other alternatives
* Subject to cost-effectiveness requirements

Specific issues that led to the recommendation or elimination of each alternative in Screen 3 are summarized below.

TSM/BRT Halsted Street and Michigan Avenue At-Grade

- Expansion of the 95th Street terminal to extend the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street to improve circulation and safety both TSM/BRT alternatives.

- Halsted Street can accommodate additional buses without modification to the right of way or traffic lanes.
- Michigan Avenue can accommodate additional buses without modification to the right of way or traffic lanes. However, the corridor has two vehicle lanes with parking and would require removal of parking lanes for some portions of the alignment.

Halsted Street Elevated

- Right-of-way is sufficiently wide to accommodate both construction and operation of a HRT system with the median of the roadway, though impacts to businesses and streetscape would occur along the corridor during construction and subsequent operation. The commercial character of the corridor and its location adjacent to residential neighborhoods is transit supportive.

UPRR Elevated

- Public support for the HRT UPRR alternative rated highly in the evaluation due the high number of public comments received for this alternative throughout Screens 1, 2 and 3. 451 public comments were received in Screens 1, 2 and 3 – 140 of those expressed a preference for a particular alternative. 85 (60.7%) of these comments were in favor of the UPRR Rail alternative and 7 (5%) were in favor of the Halsted Rail alternative. 29 (20.7%) Comments showed general support of an extension of the Red Line, and 19 (13.6%) comments specifically support extending the line to 130th Street with no particular alternative mentioned.
- In June 2009, a petition was submitted to CTA including 512 signatures supporting the CTA's locally preferred route to extend the Red Line Rail Line from the 95th Street Station to 130th Street, using the Union Pacific Rail Road (UPRR) corridor.
- In November 2004, over 38,000 residents in the 9th and 34th wards supported a public referendum for the Red Line Extension along the UPRR Corridor. A total of 38,142 'Yes' votes (93%) and 2,993 'No' votes were cast.
- The HRT UPRR alternative scores well on most criteria but scores a negative on physical constraints. Due to recent accidents, the transportation industry is adopting greater separation between freight railroad and transit operations to increase safety. Based on discussions with the UPRR, a 50-feet separation distance is desired from the UP freight railroad tracks. Extension of the Red Line immediately adjacent to west or east of the UPRR ROW will result in adjacent property acquisition.

Screen 3 concluded with public involvement including meetings with elected officials and other stakeholder groups as well as two public meetings in June 2009.

5.3 Screening Summary

Figure 5.7 presents a summary of the three screenings, beginning with the Universe of Alternatives, followed by Screens 1, 2, and 3, and the LPA recommendation for the elevated HRT adjacent to the UPRR to 130th Street.

Figure 5.7: Red Line Extension AA Screening Summary

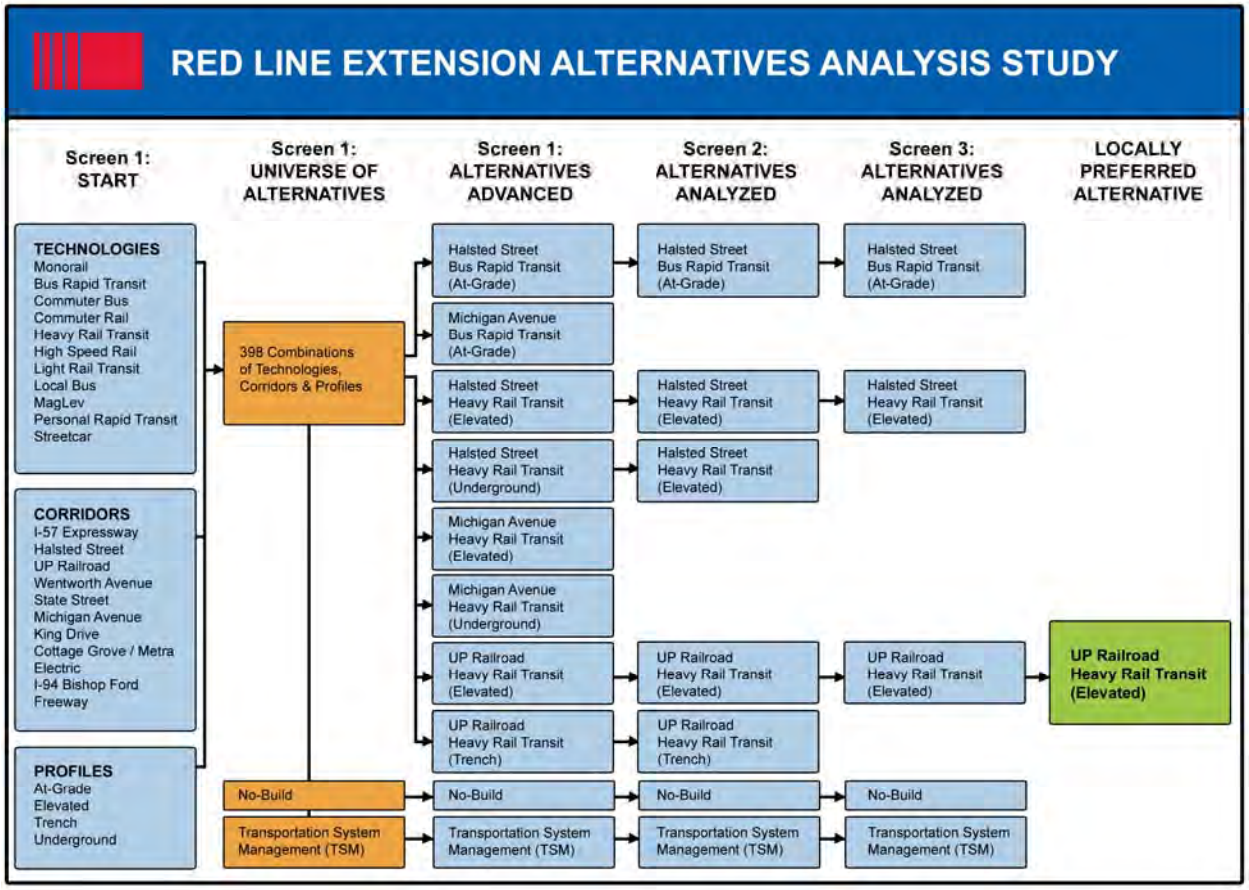

6.0 LOCALLY PREFERRED ALTERNATIVE

6.1 Selection of a Locally Preferred Alternative

On August 12, 2009, the Chicago Transit Board approved an elevated HRT extension adjacent to the UPRR to 130th Street as the LPA. This recommendation was based on the technical work described in previous sections of this report, and based on public, stakeholder, and agency input. This section further describes the LPA (and No Build and TSM alternatives, which must be carried forward) and evaluates the extent to which the LPA addresses the goals and objectives for the project compared to No Build and TSM/BRT alternatives.

6.2 Description of Service Plan

Significant characteristics of the proposed service plan for each of the No Build, TSM/BRT and LPA are summarized below.

6.2.1 Alternative Descriptions

No Build Alternative

The No-Build Alternative is defined as the existing transportation system, plus any committed transportation improvements. Committed transportation improvements include projects that are already in the Chicago Metropolitan Agency for Planning (CMAP) financially constrained Transportation Improvement Program. Bus transit service under the No Build Alternative would be focused on the preservation of existing services and projects. In the 2030 design year, the transit network within the project area would largely be the same as it is now with similar service frequencies.

The No-Build Alternative also establishes the baseline for comparison of the cost-effectiveness of the TSM/BRT and HRT UPPR alternative. All elements of the No-Build alternative are included in each of the other alternatives except where an alternative replaces services or facilities inside the study area.

TSM/BRT (Michigan Avenue to 130th Street)

The TSM/BRT Alternative is a 5.5 mile BRT alternative that operates along the existing #34 South Michigan bus route from the Red Line 95th Street terminal station to 130th Street and the I-94 Bishop Ford Freeway near Altgeld Gardens. This alternative will require a net increase of eight buses plus two spares.

Three types of service modifications have been identified for the TSM/BRT Alternative to provide the best address the project Purpose and Need in Section 1 without constructing a new fixed guideway.

- The first includes frequency adjustments during peak periods to better serve anticipated demand. The TSM/BRT alternative proposes a four minute frequency between 6:00 a.m. and 8:00 p.m. on weekdays and a 12 minute frequency on the existing route 34.
- The second modification would implement BRT operational characteristics short of a dedicated lane to improve accessibility and running times. BRT characteristics include transit signal priority, improved bus shelters and park and ride facilities at the 103rd, 111th, 115th and 130th Street stations.

- The third modification would be expansion of the 95th Street terminal to extend the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street to improve circulation and safety.

LPA (elevated HRT adjacent to UPRR to 130th Street)

The Red Line Extension would operate on an elevated structure. The alignment would follow the I-57 Expressway until the UPRR corridor. It would then turn south along the corridor to approximately 111th Street where it would turn southeast to terminate at roughly 130th Street west of the I-94 Bishop Ford Freeway. Stations would be located at 103rd, 111th, 115th and 130th Streets. Park-and-ride facilities are assumed at each station.

The LPA is anticipated to operate train sets consisting of four or eight cars. The maximum scheduled capacity of each car is 90 passengers, which provides a maximum capacity of 360 passengers for a 4-car train, and a maximum capacity of 720 passengers for an 8-car train. The current Red Line vehicle requirements during the AM peak period is 304 cars. Based on the estimated running time for the LPA to 130th Street, an additional 78 cars will be required in the AM rush period. This estimate includes 64 cars required for the schedule, plus 14 spares.

The proposed span of service for the LPA is the same as the current Red Line, which operates 24 hours every day of the year. The LPA service frequency is expected to be the same as current service, which is approximately five minutes in the northbound direction and four minutes southbound during the AM peak period.

Table 6.1: LPA and Existing Northbound Red Line Weekday Service Characteristics

Service Period	Hours	Time Period	Average NB Frequency (minutes)	Train Length	Vehicles Required
Weekday					
Early Morning	3.0	03:00 - 06:00	13	8	
AM Peak	3.0	06:00 - 09:00	5	8	304
Base	6.0	09:00 - 15:00	7	8	184
PM Peak	3.0	15:00 - 18:00	5	8	304
Evening	4.0	18:00 - 22:00	7.5	4	
Late Evening/Owl	5.0	22:00 - 03:00	15	4	48
Weekday Total Hours	24.0				

6.2.2 Running Time

Table 6.2 shows the northbound running times for the existing Red Line and the No Build, TSM/BRT, and LPA. The existing Red Line northbound running time between the 95th Street station and the downtown Jackson Station is 25 minutes in the AM rush period.[9] To travel between 130th Street and Jackson Boulevard requires 57.0 minutes in the AM peak period for the No Build and 52.0 minutes for the TSM/BRT. The LPA is projected to have most significant time savings with a running time of 39.0 minutes from 130th to Jackson.

[9] Source: CMAP New Starts model

Table 6.2: Estimated Northbound Running Times

Route Segment	Running Time (minutes)			
	Current Red Line	No Build	TSM/BRT	LPA
95th to Jackson	25.0			
95th to Clark/Division	32.5			
95th to Howard	61.5			
130th to 95th		28.00	23.0	14.0
130th to Jackson		57.0	52.0	39.0
130th to Clark/Division		64.5	59.5	46.5
130th to Howard		93.5	88.5	75.5

5.2.3 Proposed Bus Route Changes

The bus route changes outlined below are proposed service plans designed to speed passenger travel to downtown Chicago.

LPA Proposed Bus Service Changes

- CTA route #9 Ashland currently terminates peak period trips at 104th/Vincennes. These trips are proposed to terminate at 103rd Station on the new UPRR alignment.
- The current south terminal for CTA route #34 South Michigan is 131st/Ellis. It is proposed that route #34 continue to the new terminal at 130th/I94, operating via 130th Street, Eberhart, 131st, Langley, 133rd Place, Ellis and 130th Street.
- It is proposed that CTA routes #103 West 103rd and #106 East 103rd be combined into one route operating between a west terminal at Pulaski and an east terminal at Stony Island. This will reduce the number of bus routes terminating at 95th while still providing access to the Red Line at 103rd Station.
- To further reduce the number of bus routes terminating at 95th Station, it is recommended that CTA route #108 Halsted/95th be eliminated. The need for express bus service in this corridor is reduced with the implementation of new rail service.
- Routes #112 Vincennes/111th and #111 Pullman/111th/115th are recommended for restructuring to simplify the route paths and better serve the new alignment. Route #111 would operate on 111th between 111th/Pulaski and 111th/Corliss, serving the new 111th Station. A new route #115 would operate as a two-directional loop on 115th, Cottage Grove, 95th Street and Vincennes. Route #112 is recommended for elimination under this proposal.
- Route #119 Michigan/119th is proposed to terminate at 115th/Michigan Station.
- The south terminal of Route #348 is proposed to terminate at 130th/I94, extending the route from the current turnaround at 136th/Indiana. In addition, CTA route #30 South Chicago will terminate at the new terminal at 130th/I94, moving from its current terminal at 130th/Exchange.
- For directness, route #352 Halsted is proposed to terminate at 111th Station instead of 95th. The north terminal of route #359 Robbins/South Kedzie is proposed as 115th Station instead of 95th. Terminating route #353 south of 95th will remove bus service from King Drive between 111th Street and 95th Street. For this reason no changes are proposed for route #353.

TSM/BRT Proposed Bus Service Changes

- Bus service changes associated with the TSM/BRT Alternative to 130th Street include a new enhanced bus route along Michigan Avenue. The proposed X34 enhanced bus route would operate along the current 34 South Michigan route and extend to 130th Street to serve Altgeld Gardens on a 4 minute peak headway. The headway for route 34 would be reduced to 12 minutes due to the addition of the enhanced bus X34. There are no other bus routes proposed to be changed for the TSM/BRT Alternative.

Table 6.3 lists the bus routes that currently operate within the study area. Changes to current bus operations on individual routes are proposed for each of the alternatives. The proposed bus route changes for the LPA and TSM/BRT are shown in Figures 6.1.

Table 6.3: Proposed Bus Routes Changes

Bus Route	LPA	TSM/BRT
8A	None	None
9	Terminate 104th/ Vincennes trips at 103rd	None
30	Terminate at 130th	None
34	Terminate SB at 130th	New X34
103	Combine with #106	None
106	Combine with #103	None
108	Eliminate	None
111	Serve 111th between 111th/Pulaski & 111th/Corliss.	None
115	New bi-directional loop route via 115th, Cottage Grove, 95th St & Vincennes	No new route
112	Eliminate	None
119	Terminate at 115th/Michigan	None
348	Terminate SB at 130th	None
352	Terminate at 111th	None
353	None	None
359	Terminate at 115th	None

Figure 6.1: LPA with Proposed Bus Route Changes

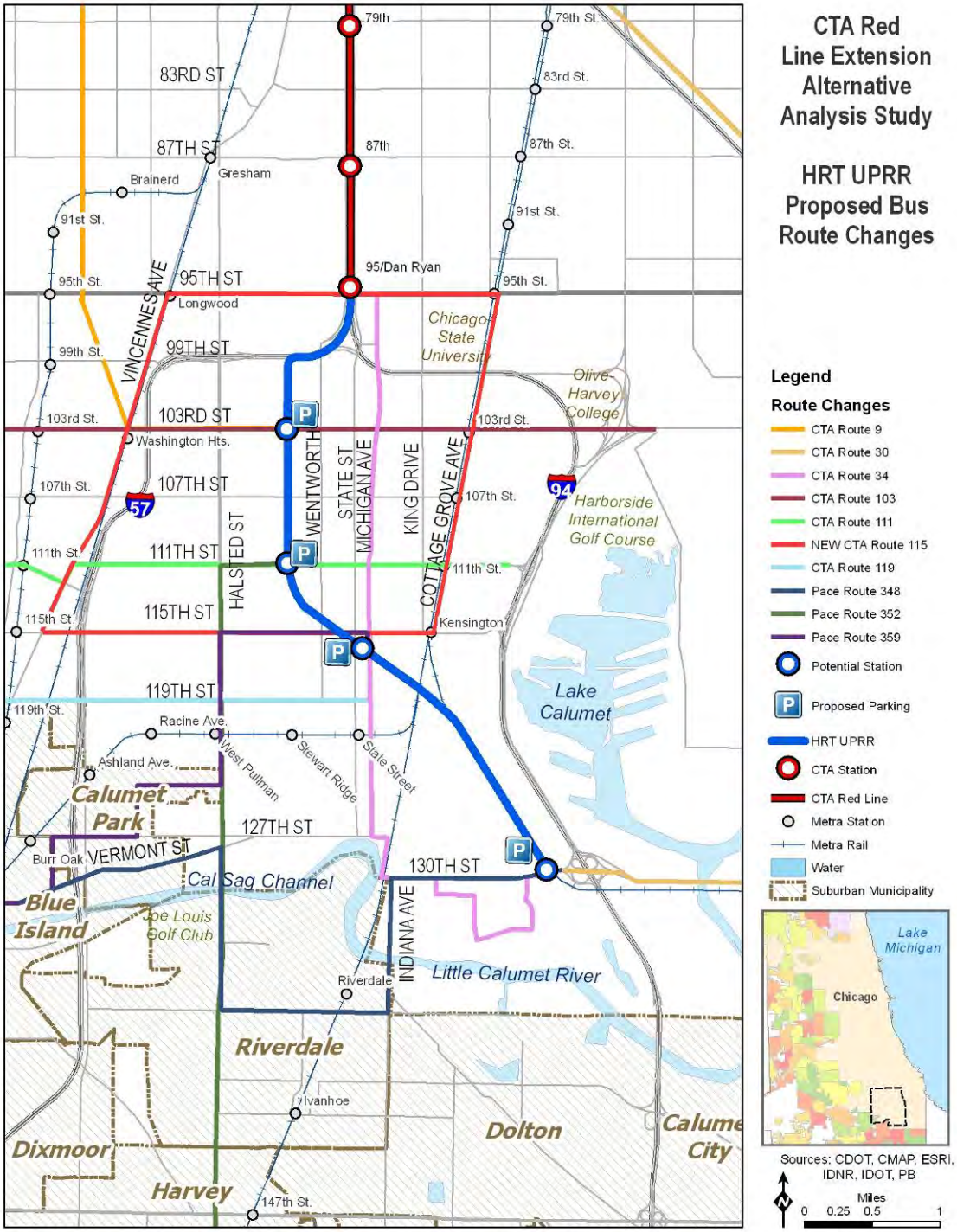

6.3 LPA Transportation Characteristics

The following transportation characteristics of the No Build, TSM/BRT and LPA are described below and include:

- Travel Time
- Access to Jobs
- Reliability and Safety
- Local Roads
- 95th Street Station Bus Capacity and Delay

6.3.1 Travel Time

Overall travel time has been calculated for the LPA, TSM/BRT, and No Build alternatives, as shown in Table 6.4. These travel time estimates include wait time, run time (in-vehicle), and walk time.

Table 6.4: Estimated Travel Times from 130th Street to Jackson Blvd.

Travel Time Elements	Time in Minutes		
	No Build	TSM/BRT	LPA
Wait time at 130th Station	3.50	2.25	2.25
Run time 130th to 95th Stations	28.00	23.00	14.00
Walk time: curb to platform	3.00	3.00	0.0
Wait time at 95th Station	2.25	2.25	0.0
Rail run time 95th to Jackson Station	25.00	25.00	25.00
Total Travel Time	61.75	55.50	41.25

As shown in Table 6.4, the travel time for the No Build Alternative is 62 minutes from 130th Street to the downtown Jackson station. This represents the existing travel time using route #34 South Michigan to 95th Street with a transfer to Red Line. Travel times for the TSM/BRT Alternative are expected to improve by five minutes or 56 minutes, but would still require a transfer to the Red Line. Overall, the LPA provides the fastest travel time at 41 minutes. Trips to Jackson would be improved by 21 and 14 minutes over the No Build and TSM/BRT, respectively.

6.3.2 Access to Jobs

The LPA would provide increased access to jobs within Chicago and 40 adjacent suburbs using the CTA transit system. Park-and-ride facilities for automobile access would be located at 103rd, 111th, 115th and 130th Streets for the TSM/BRT and LPA. The 130th Street park-and-ride facility would be near the I-94 Bishop Ford Freeway/130th Street interchange. This location is expected to draw a significant number of automobile commuters from the southern suburbs and northwest Indiana who would want to avoid congestion and travel delays further north along the Dan Ryan Expressway. Table 6.5 shows the estimated number of parking spaces for the LPA and TSM/BRT alternative for a 2015 year of construction (YOC) and 2030 forecast.

Table 6.5: Parking Spaces for 2015 and 2030

Location	TSM/BRT		LPA	
	2015	2030	2015	2030
103rd Street	100	200	200	200
111th Street	100	200	200	200
115th Street	100	1000	200	1000
130th Street	400	1400	900	2300
Total	**700**	**2800**	**1500**	**3700**

Table 6.6 shows the approximate number of transfers required for a transit trip from various origin areas in the study area to two major regional job centers: downtown Chicago and the O'Hare Airport / Rosemont area. The trips are considered during peak hour with a possible Blue Line and/or bus connection for O'Hare / Rosemont area trips. Overall, The LPA requires fewer transfers compared to No Build and TSM/BRT alternatives for these trips. Roseland Community Hospital (111th Street), Michigan commercial and retail corridor (115th Street and Michigan Avenue) and Altgeld Gardens (130th Street) would have walk to transit access to the stops/stations for the TSM/BRT and LPA. Compared to the LPA, the No Build and TSM/BRT would require a transfer from bus to rail at 95th Street to reach the Chicago Loop and additional 1-2 transfers to reach the O'Hare / Rosemont employment area.

Table 6.6: Number of Transfers between Select Origin-Destination Pairs

Number of Transfers Required	No Build	Michigan TSM/BRT	LPA HRT UPRR
Chicago Loop			
Altgeld Gardens	1	1	0
Pullman Library	1	1	1
Halsted Commercial / Retail	1	1	1
Michigan Commercial / Retail	1	1	0
Roseland Community Hospital	1	1	0
Chicago State University	1	1	1
Olive-Harvey College	1	1	1
Rosemont / O'Hare Area Employment			
Altgeld Gardens	2 - 3	2 - 3	1 - 2
Pullman Library	2 - 3	2 - 3	2 - 3
Halsted Commercial / Retail area	2 - 3	2 - 3	2 - 3
Michigan Commercial / Retail area	2 - 3	2 - 3	1 - 2
Roseland Community Hospital	2 - 3	2 - 3	1 - 2
Chicago State University	2 - 3	2 - 3	2 - 3
Olive-Harvey College	2 - 3	2 - 3	2 - 3

6.3.3 Reliability and Safety

Increased transportation reliability is evaluated by assessing impact of alternatives on operating reliability. The TSM/BRT alternative would utilize transit signal priority to improve overall travel time to 95th Street. However, the TSM/BRT alternative is expected to have a moderate operating reliability due to operation in mixed traffic along Michigan Avenue. The LPA would operate on an elevated guideway and achieve high operating reliability similar to existing Red Line service.

Table 6.7: Reliability and Safety

Criteria	No Build	TSM/BRT	LPA
Operating Reliability	N/A	Moderate	High
Potential Impact on Emergency Vehicle Incident Response Capability	N/A	Moderate/Low	Low
Enhance safety and security	N/A	Moderate	Moderate

In regards to safety, improving incident response was examined by evaluating the potential impact on emergency vehicle response capabilities. The TSM/BRT alternative could potentially have low to moderate impacts on emergency response vehicles due to signal priority conflicts which would ultimately go to emergency vehicles. TSM/BRT would operate in mixed traffic and would contribute to the normal traffic delay experienced during incident response. The LPA would be grade-separated and would not impact the ability of emergency vehicles to operate.

The LPA and TSM/BRT can incorporate design elements that enhance safety and security in preliminary engineering and final design. A wide range of safety measures will be identified, evaluated, and used in combination. These include vehicle measures (on-board closed-circuit television cameras, on-board audio and visual message communications to passengers, and emergency alarm systems), and station design (maximizing unobstructed sightlines in and surrounding stations, positioning of customer service booth for maximum presence and visibility in station, closed-circuit television cameras, public address systems, sufficient lighting, and emergency alarm systems). Traffic safety was measured using the criteria of the number potential conflict points with vehicles, pedestrians and bicycles. TSM/BRT alternative has the most number of conflict points with general traffic. Alternately, the LPA, due to the grade separation, has no conflict points with general traffic, but there are potential pedestrian conflicts with the freight railroad line for customers accessing the proposed 103rd and 111th Street stations. Mitigation measures, including pedestrian bridges, will be analyzed during Preliminary Engineering and preparation of an EIS.

6.3.4 Ridership

Ridership estimates for the year 2030 were developed using computerized travel forecasting models. The LPA exhibits strong ridership potential, while the TSM/BRT alternative is expected to only have a slight increase over the No Build alternative. By 2030, the LPA is expected to carry 13 million riders per year. For the TSM/BRT alternative, approximately one million riders are projected. Table 6.8 shows estimated weekday ridership for each station in 2030.

Table 6.8: Estimated 2030 Average Weekday Station Boardings

Station	No Build	TSM/BRT	LPA
103rd Street	N/A	500	5,100
111th Street	N/A	800	4,800
115th Street	N/A	100	6,900
130th Street	N/A	400	4,400

For consistency with other proposed rail extensions, total project ridership includes customers entering and exiting new stations as well as the volume traveling south of 95th Street Station on the extension. Year 2030 total project ridership is estimated at 42,000 per weekday or 13 million riders per year.

6.3.5 Local Roads

The impact on local roads was evaluated based on the level of traffic impediments. The LPA is proposed with full grade separation via an aerial structure and thus has a low level of potential traffic impediments. The TSM/BRT alternative operates at-grade in mixed flow traffic and has a moderate level of local roadway impacts.

The TSM/BRT Alternative would utilize traffic signal priority (TSP) at signalized intersections along 95th Street, Michigan Avenue, and 130th Street to improve running times. TSP improvements can be implemented to avoid negatively impact traffic level of service. However, the TSM/BRT alternative may require removal on street parking along Michigan Avenue in order to reduce improve level of service if warranted.

The LPA is elevated from 95th Street to the MED/CN tracks near 119th Street. The alignment then continues at -grade through an industrial area with no public through streets. Existing service drives and MWRDGC access roads would be grade separated.

The potential exists for Union Pacific freight railroad trains to affect access to the LPA at the proposed 103rd Street and 111th Street stations. At these two stations areas, the Union Pacific Railroad is at-grade, so that passing freight railroad trains would interrupt access to these Red Line Extension stations. Opportunities for pedestrian bridges will be analyzed in subsequent project steps. At the 115th Street/Michigan Avenue station, the Union Pacific Railroad is grade separated, so that access to the Red Line Extension station can be maintained by using Michigan Avenue, which passes underneath the Union Pacific Railroad.

The LPA would also require a new bus turnaround at 115th/Michigan in order to terminate CTA route #119 Michigan/119th. If an off-street turnaround is provided, it will require approximately 20,000 square feet, depending upon design.

Table 6.9: Traffic Impediments

Criteria	No Build	TSM/BRT	LPA
Potential corridor impacts	N/A	Moderate	Low
103rd, 115th and 130th Station area impacts	N/A	Low	Low-Moderate
95th Street Station area impacts	High	High	Low
Potential Displaced On-Street Parking Spaces	N/A	Moderate	Low

6.3.6 95th Street Station Bus Capacity and Delay

The LPA is expected to significantly improve bus and passenger congestion at the 95th Street station. The No Build and TSM/BRT Alternatives are expected to result in increased passenger traffic at the 95th Street station in 2030. Table 6.9 shows the current and forecasted annual ridership at the 95th Street station for the No Build, TSM/BRT and LPA. Under the No Build ridership is expected to increase by 0.4 Million in 2030.

Table 6.10: Annual 95th Street Station Ridership (in millions)

Ridership	Current Red Line (2007)	No Build (2030)	TSM/BRT (2030)	LPA (2030)
95th Street Station	9.1	9.5	9.8	4.3

Currently, nineteen CTA and Pace bus routes utilize the 95th terminal. The LPA will result in the re-routing of 11 bus routes to new Red Line Extension intermediate stations and elimination of two routes, thus relieving congestion at the 95th Street station.

The TSM/BRT alternative would include in one additional bus route and expansion of the 95th Street station bus terminal to provide additional bus bays and circulation improvements. The capital cost for this improvement is estimated at $73 M.

6.4 LPA Environmental Characteristics

The environmental characteristics of the LPA are based upon currently available information. The Environmental Impact Statement (EIS) process will be conducted for the LPA, and will assess the environmental impacts in more detail. Applicable environmental requirements and communications between the regulatory and resources agencies and the local project sponsor will be part of the EIS process.

Environmental characteristics of the No Build, TSM/BRT, and the LPA examined include:

- Social Equity / Neighborhoods
- Land Use and Development
- Displacements
- Visual and Aesthetic
- Noise and Vibration
- Air Quality

- Water and Ecosystem Resources
- Hazardous Waste Sites
- Historic, Archaeological and Cultural
- Parklands

6.4.1 Social Equity / Neighborhoods

Transit Dependent Populations

The location of transit-dependent populations is a measure of the potential for an alternative to better serve a core transit market. The following series of maps illustrates characteristics associated with transit dependent populations including: age distribution, low income households, and the number of no-vehicles households in relationship to the LPA.

Figure 6.2 illustrates the concentration of residents over the age of 65 and Figure 6.3 shows under the age of 18. The young and elderly have reduced access to personal vehicles and rely more on public transit.

Figure 6.4 shows areas where low income households are found relative to proposed station locations. Lower income households are more likely to rely on public transportation as a primary mode of transportation. See also Table 6.11.

Table 6.11: Poverty Status and Zero-Car Households within ½-Mile Station Areas

Criteria	No Build	TSM/BRT	LPA
2000 Poverty-Status Population	N/A	9,696	8,473
2000 Zero Car Households	N/A	2,991	2,336

Table 6.11 and Figure 6.5 provide data on households that report not owning a vehicle. These households are more likely to rely on public transportation as their primary mode of travel.

In general, the LPA serves the transit dependent populations in the study area, especially in the Roseland, southeast Washington Heights, and northeast West Pullman community areas and the Altgeld Gardens area.

Figure 6.2: 2000 Age Distribution Over 65

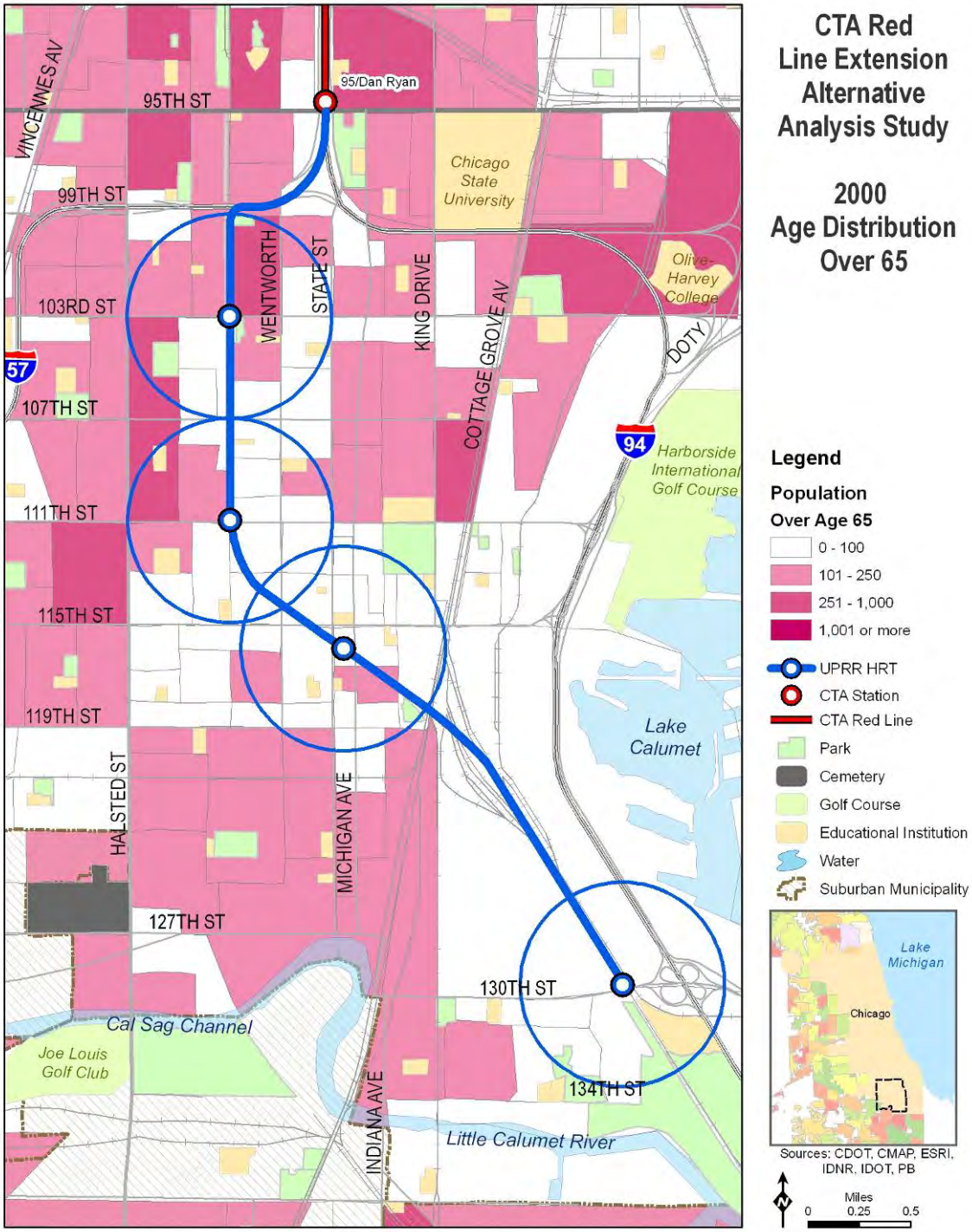

Figure 6.3: 2000 Age Distribution Under 18

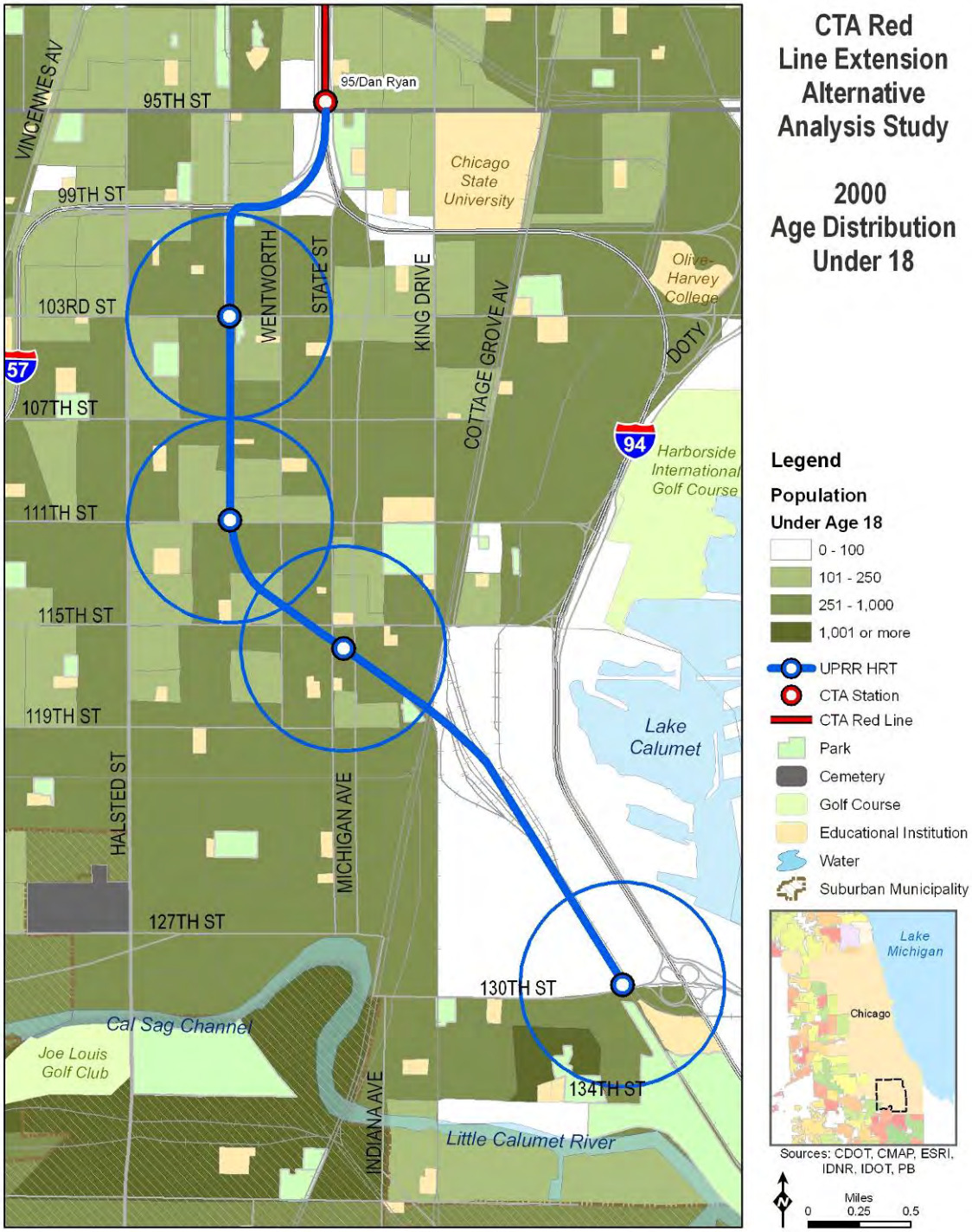

Figure 6.4: 2000 Poverty Status

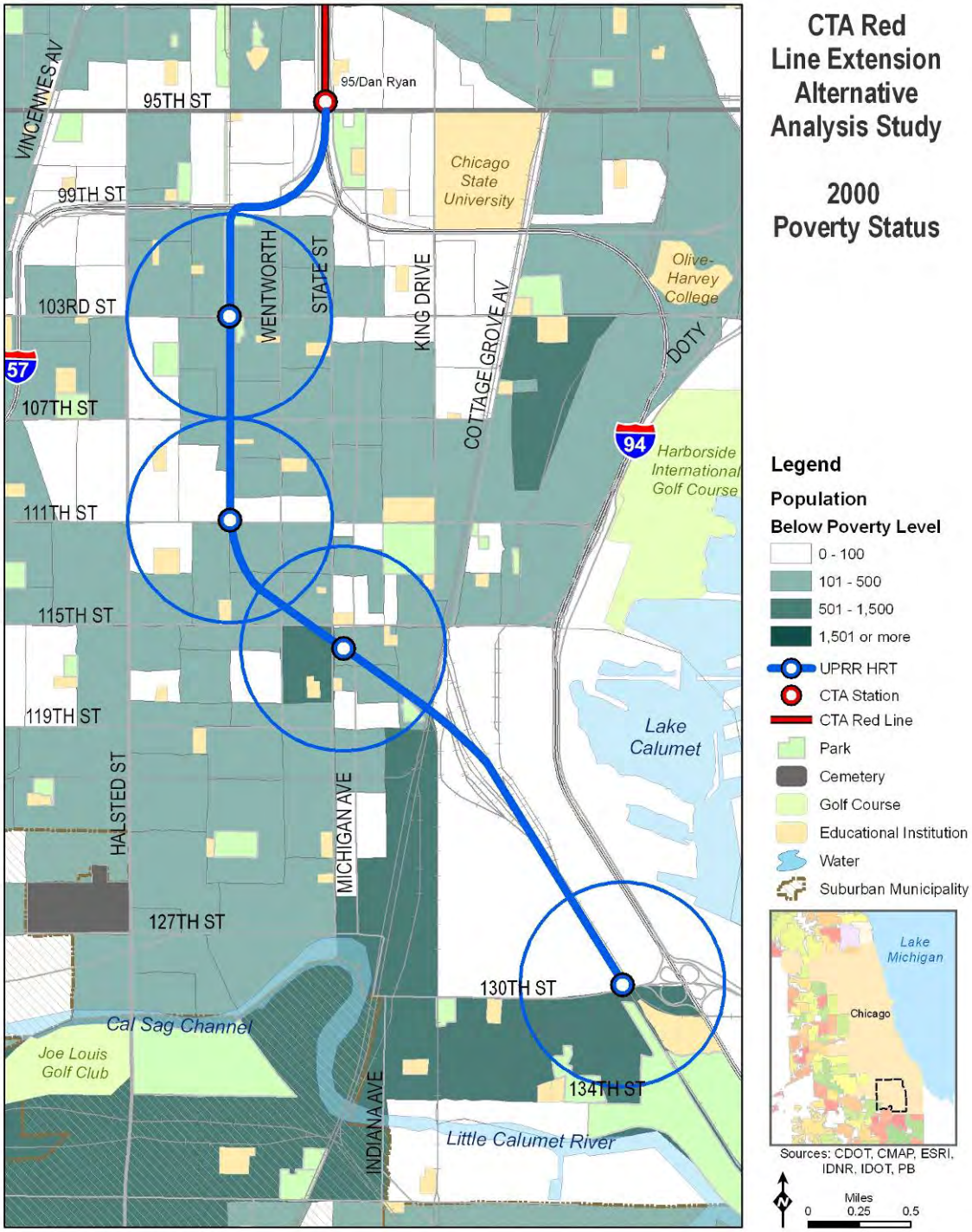

Figure 6.5: 2000 No Vehicle Available

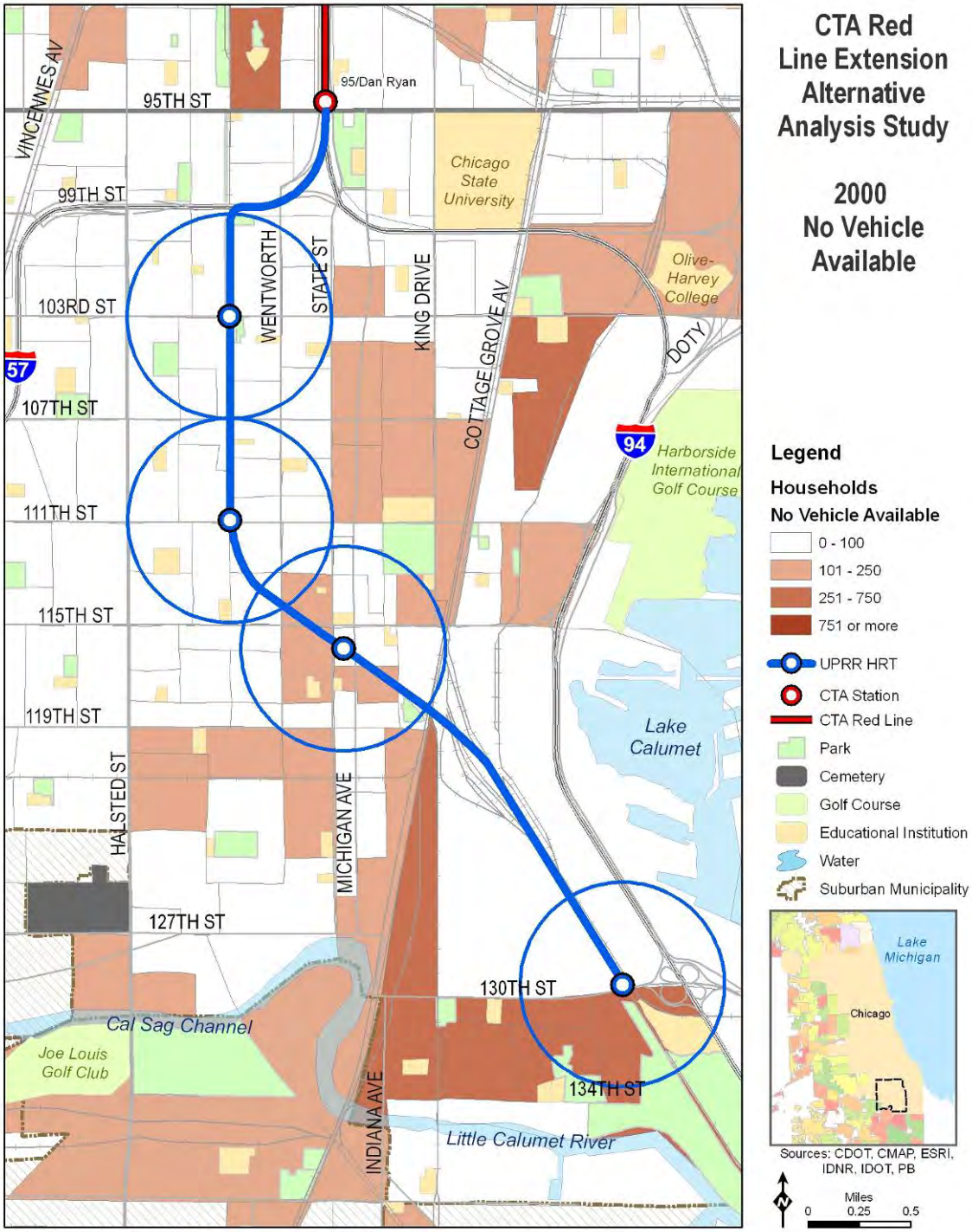

6.4.2 Land Use and Development

The LPA is expected to have the greatest potential for future economic development. This is due to enhanced accessibility of station areas to the CTA rapid transit system compared to the No-Build and TSM alternatives. Altgeld Gardens and Murray Homes are under physical rehabilitation as part of the Chicago Housing Authority's Plan for Transformation, indicating a commitment to the residents and potential for additional economic development in the area.

Other opportunities exist at the 103rd Street station and at the 115th Street/Michigan Avenue area. The 103rd Street station area has a number of vacant and underutilized lots that can be redeveloped in response to the new station. The 115th Street / Michigan Avenue area is part of the Roseland/Michigan TIF which created a potential funding source for economic development in the area, and the City owns a number of parcels near the proposed station area that are being reviewed for potential commercial or mixed-use redevelopment.

Figure 6.6 shows land use relative to the LPA and station areas within the Study Area.

Table 6.12: Land Use and Development

Criteria	No Build	TSM/BRT	LPA
Development initiatives	N/A	2	5
Long-term potential	N/A	−	+

Key: + Better than other alternatives; ○ Same as other alternatives; − Worse than other alternatives
* 0.5 mile buffer station area analysis

Figure 6.6: Land Use and Development

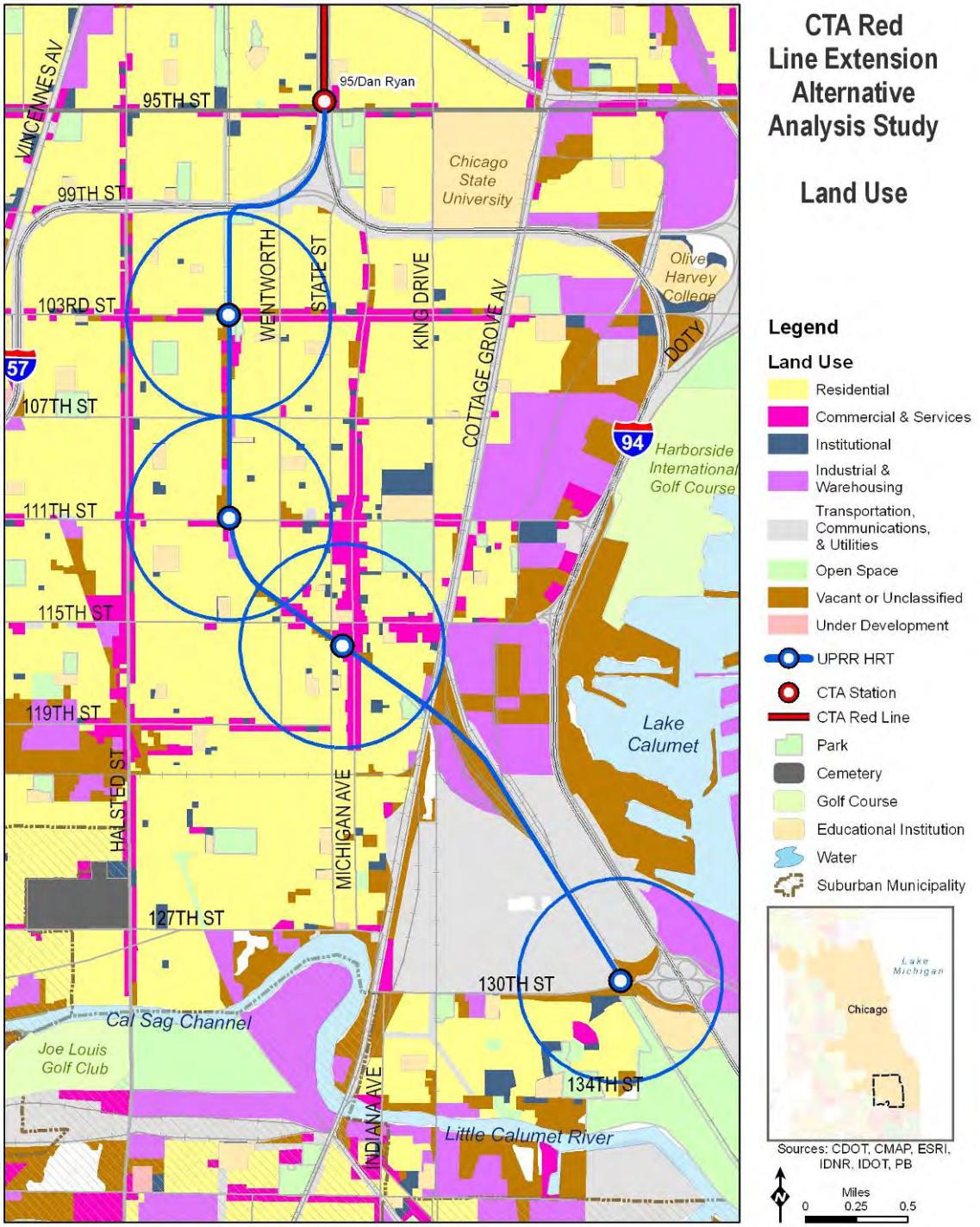

6.4.3 Displacements

The LPA would be located adjacent to the east or west edge of the UPRR right-of-way. The width of the UPRR right-of-way ranges from 65 to 135 feet. At this stage of the analysis both the east and west options suggest comparative level of impacts with no option having better or worse physical constraints. There are several key differences that characterize physical constraints for the east or west alignment of the LPA between I-57 and the Metra Electric District / Canadian National rail tracks.

- The East alignment may require taking a small portion of Wendell Smith Park when the alignment transitions from the I-57 expressway to the east side of the UPRR right-of-way. This would require a Section 4(f) evaluation during the Environmental Impact Statement analysis.
- A small portion of a yard belonging to the Roseland Christian School (314 West 108th Street) may be impacted by the east side alignment.
- On the east, between I-57 and 103rd Street there are five vacant and 17 residential parcels that would be impacted by the Red Line extension; from 103rd and 111th Street there are 18 vacant, nine residential and two commercial/industrial parcels that would be impacted; and between 111th Street and the Metra Electric District/Canadian National rail tracks there are 30 vacant, 39 residential and 16 commercial/industrial parcels that would be affected. A preliminary analysis shows a potential total of 138 lots which may be affected, with ten parcels owned by the Union Pacific Railroad.
- For the West option, Fernwood Parkway extends between 95th and 103rd Streets between Eggelston Avenue and the UPRR right-of-way. The west alignment option can be accommodated without displacement of residences or businesses in this segment if the alignment uses Fernwood Parkway. However, the parkway is owned by the Chicago Parks Department and is zoned as “Parks and Open Space” as of May 2009. Using this property for the HRT UPRR Elevated alternative would require a Section 4(f) evaluation as part of the Environmental Impact Statement review.
- On the west, between 103rd and 111th Street there are 15 vacant and 18 commercial/ industrial parcels that would be impacted by the Red Line extension; between 111th Street and the Metra Electric District /Canadian National rail tracks there are 28 vacant, 25 residential and 22 commercial/industrial parcels that would be impacted. A preliminary analysis shows a total of 112 impacted parcels of which 27 parcels are owned by the Union Pacific Railroad and four are Fernwood Parkway.

6.4.4 Visual and Aesthetic

The LPA is deemed to have a moderate potential visual and aesthetic impact. The LPA received this rating because of the elevated profile. This impact is somewhat mitigated by the lack of frontage along the UPRR corridor. Figure 6.7 is example rendering of the LPA elevated structure adjacent to the UPRR ROW at the proposed 103rd Street Station. The elevated structure would be constructed of concrete with side walls in order reduce visual and noise impacts of the HRT alignment. This is similar in design and construction to the existing Orange Line elevated structure southwest of Halsted Street. Figure 6.8 illustrates of profile view of the LPA elevated structure adjacent to the UPRR ROW.

Figure 6.7: Example Rendering of the LPA Elevated Structure at the Proposed 103rd Street Station

Figure 6.8: Profile of the LPA between 95th Street and 119th Street

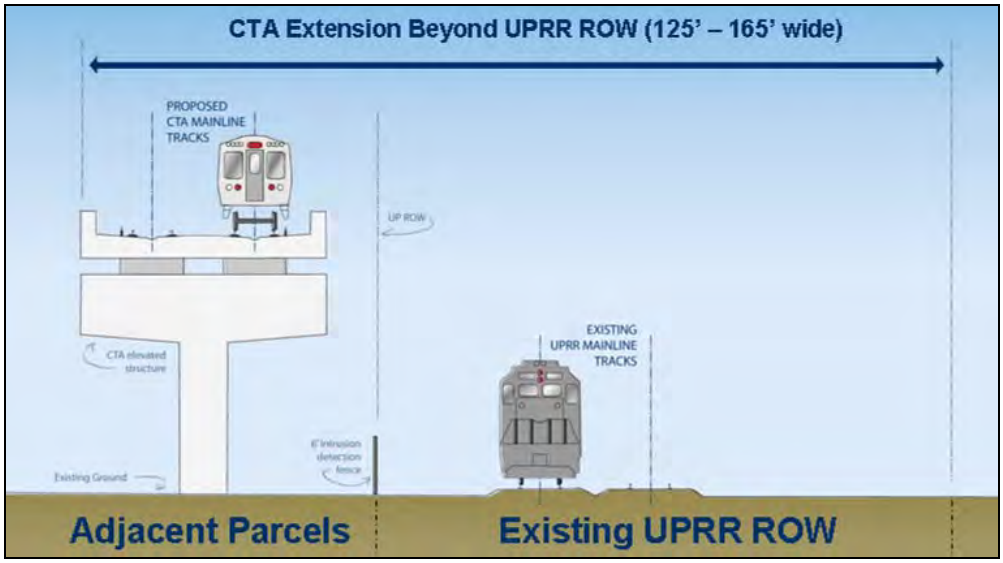

6.4.5 Noise and Vibration

A generalized noise and vibration analysis for the TSM/BRT and LPA was performed. Implementation of the proposed TSM/BRT service may add 5 decibel on the A-weighted sound level (dBA) to the noise environment experienced by residents. There is existing vehicular traffic and bus service along the proposed corridor, although the new TSM/BRT service is estimated to increase ambient noise by 5 dBA for noise receptors.

The LPA is estimated to increase ambient noise by 8 dBA, from 65 dBA to 73 dBA, for the residences closest to the right-of-way. A city bus idling is approximately at 72 dBA. It should be noted that the existing freight rail service also results in similar noise impacts. The UPRR corridor is currently an active freight rail line, with an average of 27 trains per day. Because of the existing freight rail service in the corridor, sensitive receptors along the alignment are likely

to experience a higher level of noise that residential areas without a similar transportation facility.

For the LPA, the CTA will evaluate and use a combination of noise abatement measures, as necessary. These measures could include rail vehicle measures (vehicle skirts, undercar absorption, and resilient or damped wheels), and guideway measures (sound barriers, rail lubrication on sharp curves, and ballasted track).

Vibration impacts are typically analyzed in terms of ground-borne vibration. Vibration occurs for rail transit when the train wheels rolling on the rails create vibration energy that is transmitted through the track support system into the transit structure. The amount of energy that is transmitted to the transit structure is dependent on a number of factors including the type of track support system, the vehicle suspension system, and smoothness of the wheels and rail. Screening level estimates for vibration for the LPA range from 58-62 vibration decibels (VdB). In general, 65 VdB is the approximate threshold of human perception.

For the LPA, the CTA will evaluate and use a combination of vibration abatement measures, as necessary. The type of track support system is a major determinant of ground borne vibration. The highest vibration levels are created by track that is rigidly attached to a concrete trackbed. The vibration levels are much lower when special vibration control track systems, such as ballasted mats and resilient fasteners are used.

6.4.6 Air Quality

Northeastern Illinois is classified as a moderate non-attainment area for the 8-hour ozone standard, and a non-attainment area for the annual fine particulate matter (PM2.5) standard. Air quality was assessed through the potential for micro-scale pollution.

The LPA includes heavy rail transit technology that is powered by electricity, which does not emit gases or particulate matter at the point of use. In addition, the LPA reduces the length of bus access trips, resulting in a reduction of emissions.

Buses used for the TSM/BRT service, or continued use of existing buses in the case of No-Build alternative, would have more adverse impact than the LPA, due to diesel exhaust. CTA is incorporating hybrid buses into its fleet to mitigate this impact, but the LPA would still have lower air quality impacts.

6.4.7 Water and Ecosystem Resources

The Red Line Extension study area is an urbanized area. Wetlands and critical habitat for protected species in the area were assessed for potential impacts. Waters in the area – the Cal-Sag Channel and the Little Calumet River – were not evaluated for impacts, such as non-point source pollution, and should be considered during the EIS review. Assessing potential environmental impacts to the natural environment provides information that can be used to limit or reduce the negative impacts of an alternative, if any.

During the screening analysis, the LPA was identified to have five wetlands within a 1,000 foot wide corridor around the alignment. The five wetlands are located on industrial or MWRDGC land on the southern portion of the alignment between the MED/CN tracks and 130th Street. Further review of the LPA corridor showed that most of the wetlands were on the outer edge of the corridor and would only have a slight chance of being negatively affected. The TSM/BRT was identified to have one wetland with 1,000 foot wide corridor around the alignment. The

TSM/BRT and LPA terminal station locations are situated in land areas adjacent to 130th Street that are landscaped and profiled for drainage.

Mitigation could be employed to protect or replace these wetlands. In addition, field studies during the upcoming EIS process will be completed to verify that these wetlands are still in existence and the potential impact that may occur based on the final design of the chosen alternative.

6.4.8 Hazardous Waste Sites

As part of its history, the Red Line Extension study area includes a high concentration of industrial and former industrial sites. One of the legacies of previous industrial processes is the potential for hazardous waste sites. These sites can include:

- Brownfields, which are abandoned or underutilized industrial facilities and land
- Waste handlers, which can include any facility that deals with toxic chemicals
- Superfund sites, which are deemed to be the worst brownfields, and are on a priority list for being cleaned by the U.S. Environmental Protection Agency
- Other sites, which can include active industrial sites or commercial properties, such as gas stations with leaking underground storage tanks (LUST)

Identifying these sites is important for two reasons: clean-up of a site can be costly, adding to the overall cost of an alternative, and reusing a site can have positive environmental benefits for a community.

There are 18 hazardous waste handlers and three other hazardous waste sites within 500 feet of TSM/BRT route along Michigan Avenue. However, the alternative does not require widening of Michigan Avenue, as service was anticipated to be provided in the existing street right-of-way; it is unlikely that these sites would be disturbed.

There are four hazardous waste handlers and three other hazardous waste sites within 500 feet of the LPA corridor.

6.4.9 Historic, Archaeological and Cultural

An analysis of historic, archaeological and cultural sites is important to ensure that the AA considers and respects a community's context and identity. Historic, archaeological and cultural sites within a 500 foot buffer from the centerline of each corridor were identified in Screen 2 and 3. The analysis determined that there was low potential for impacts to archeological sites with the proposed corridors. There were also no historic buildings or districts within a 500 foot buffer.

6.4.10 Parklands

There are two parklands that may be affected by the LPA. They include Fernwood Parkway, along the west side of the UPRR right-of-way and Wendall Smith Park, to the east of the UPRR right-of-way. The TSM/BRT and No-Build alternatives were determined to not have any impacts to park land.

The LPA west alignment would affect the portion of Fernwood Park that parallels the UPRR right-of-way from I-57 to 103rd Street. This linear park, about 75 to 80 feet wide and 0.5 mile long, would be impacted by the Red Line extension. Wendall Smith Park, along the east, is approximately 500 feet long and 260 to 270 feet wide. About 50 feet of the park adjacent to the

UPRR right-of-way would need to be used to accommodate the Red Line extension. Aerial photography shows trees and other vegetation in this area, separated from the other portions of the park by a sidewalk.

No natural recreational areas were found in any of the corridors during the environmental analysis.

6.4.11 Summary of Environmental Impacts

Table 6.13 below provides a summary of the potential environmental impacts for the LPA and TSM/BRT alternative. For additional detail on the preliminary environmental impacts for each alternative see the Red Line Extension Screen 3 Alternatives Evaluation Report, July 2009.

Table 6.13: Summary of Potential Environmental Impacts

Environmental Factors	TSM/BRT	LPA
Hazardous Sites: Brownfields	0	0
Hazardous Sites: Waste Handlers	18	4
Hazardous Sites: Superfund Sites	0	0
Hazardous Sites: Others	3	3
Wetlands	1	5
Historic Districts	Low	Low
Potential Micro Scale Pollution	Moderate	Low
Potential Noise Impact	+5 dBA	+8 dBA
Potential Vibration Impact	N/A	58-62 VdB
Potential Visual Impacts	Low	Moderate
Parklands Impacted	1	5
Recreation Areas Impacted	0	0
Total Parcels impacted	0	112-139
Vacant Parcels impacted	0	43-53
Critical Habitat Impacts to Protected Species	0	0
Potential for Archaeological Site Impacts within the Proposed ROW	Low	Low
Buildings Listed or Eligible for Listing in the NRHP Within 200’	0	0
Districts Listed or Eligible for Listing in the NRHP Within 200’	0	0

6.5 LPA Cost and Financial Analysis

A description of the capital and operating and maintenance cost estimates for the LPA and a preliminary financial analysis is presented in this section.

6.5.1 Capital Cost Estimates

Capital cost estimates have been developed in accordance with FTA guidelines. The guidelines call for cost estimates to be prepared and reported using the latest revision of FTA's Standard Cost Categories (SCC). In the estimates, cost components for the various alternatives are developed and summarized into the SCC. These cost categories form the basis for the format and structure that is used for the capital cost detail and summary sheets developed for this project. The FTA SCC consists of the following:

- Guideway
- Stations
- Support Facilities
- Sitework and Special Conditions
- Systems
- Right-of-Way, Land, Existing Improvements
- Vehicles
- Professional Services
- Allocated and Unallocated Contingency
- Finance Charges

Table 6.14: LPA Capital Cost ($M, 2009)

FTA Standard Cost Categories (with contingency) [10]	LPA 5.4 Miles
Guideways & Track Elements	180
Stations, Terminals, Stops	154
Yards, Shops, Administration Buildings.	-
Sitework & Special Conditions	21
Systems	128
Right-of-Way, Land Acquisition	32
Vehicles	175
Professional Services	139
Unallocated Contingency	50
Total Project Cost	**879**
Capital Cost per Route Miles	**163**

[10] An allocated contingency allowance, in the range of 12 percent to 25 percent, is included in the FTA standard cost categories.

Design alternatives exist and are described in Section 6.2. For the capital cost estimates in this section, the UPRR East Options to 130th Street with the South Terminal Station was assumed. Major capital cost elements for the LPA include the following:

- One at-grade terminal station with island and side platforms to serve three station tracks: $25 M.
- Three elevated profile intermediate, island-platform stations: $94 M.
- Construction of parking facilities at the intermediate and terminal stations with a year of construction total of all facilities at 1,500 parking spaces (Forecast for 2030 is 3700 parking spaces): $35 M.
- Construction of an aerial guide way structure from 95th Street to 119th Street: $149 M.
- Temporary facilities and protection of active lines adjacent to construction zones (includes CTA and UPRR lines): $6.0 M.
- Land acquisition for the extension, stations and amenities, terminal facilities, on-line substations: $32.0 M.
- Construction of realigned service roads and new overpass over UPRR red line extension for the south station: $4 M.
- Purchase of 78 new rapid transit cars: $175 M.

Yard and Shop Capital Cost Estimate

Completion of a new 270-car yard and shop facility is not included in the LPA project cost estimate. The CTA has long recognized 98th Shop as being an inadequate facility to support the current and future maintenance needs of the south end of the Red Line and have included the need for an expanded or new 98th Shop in past capital needs programs. With the shop reaching 40 years in age, the shop has also met the FTA criteria for replacement. The CTA has plans to utilize existing 98th Shop for non-revenue equipment repairs once a new revenue shop is constructed. The CTA has previously determined that the 98th Shop is in need of replacement and has made plans separate from this project to address those needs. For that reason, the replacement of 98th Shop is not considered to be part of the Red Line Extension project at this stage of the analysis. More detailed analysis in latter project phases should indicate that a portion of the yard and shop cost would be applicable to the LPA. A new Red Line yard/shop facility would be located on a combination of industrial/vacant land to the east of the CN/MED tracks and west of the IHB and NICTD tracks at approximately 120th Street and Cottage Grove.

Major capital cost elements for construction of new Yard and Shop include the following:

- Construction of yard and shop: $147 M.
- Purchase of real estate: $11 M.
- Professional services for design and construction: $45 M.
- Unallocated contingency: $12 M.
- Total capital cost for a new yard and shop facility is estimated at $215 M.

Total Program Capital Cost Estimate

To prepare a preliminary financial plan for the Red Line Extension project, a total program cost was developed. The program is divided into a New Starts funded and non-New Starts funded

segments. The non-New Starts funded segment consists of the yard and shop facility to be funded outside the New Starts program. The total program cost also includes estimates of inflation in construction costs and expressed in year-of-expenditure (inflated dollars). The total program cost in inflated dollars is estimated at $1.4 billion as shown in Table 6.15.

Table 6.15: Program Capital Cost Estimates ($M)

Segment	Base Year (2009) Dollars	Year-of-Expenditure (Inflated) Dollars
New Starts funded segment	$878	$1,142
Non-New Starts funded segment	$214	$287
Total	**$1,093**	**$1,430**

6.5.2 Operating and Maintenance Cost Estimates

Operating & Maintenance (O&M) costs were estimated using CTA's operating cost model, which is based on actual line item budget expenses. The cost model allocates each budget line item expense to a key service variable such as revenue hours, revenue miles, peak vehicles, route miles, etc. These variables are called "cost drivers" because the cost of service is "driven" by the magnitude of these variables. Thus, the more service hours provided or miles operated, the higher the O&M cost. Estimated annual operating cost for the LPA is $18.3 million in 2009 dollars. Table 6.16 summarizes the O&M costs for the LPA.

Table 6.16: LPA Operating and Maintenance Costs

Cost Driver	Unit Cost (2009 Dollars)	Level of Service	O&M Cost (2009 Dollars)
Rail			
Peak Trains	$131,552.79	8	$1,052,422
Peak Cars	$26,364.48	64	$1,687,327
Revenue Train Hours	$76.54	37,227	$2,849,192
Revenue Car Miles	$1.38	5,489,502	$7,570,895
Station Hours	$33.84	35,040	$1,185,819
Stations			
Elevated*	$304,556.80	4	$1,218,227
Track Miles			
Elevated	$118,840.61	10.6	$1,259,710
Substations	$62,969.30	1	$62,969
Fare Collection Equipment	$6,730.92	29	$195,197
Elevators/Escalators	$23,027.68	8	$184,221
Yard/Shop (per sq. foot)	$4.75		$0
Park & Ride (per space)	$521.46	2,800	$1,460,086
Rail Ridership	$0.05	7,708,106	$399,154
Bus			
Peak Buses	$34,587	6	$207,516
Revenue Bus Miles	$2.75	(276,451)	($759,439)
Revenue Bus Hours	$44.80	(3,991)	($178,762)
Turnarounds	$15,341	5	$76,703
Bus Stops	$14.14		$0
Bus Ridership	$0.05	(3,083,242)	($159,662)
Total O&M Cost (Base Year (2009) Dollars)			**$18,311,575**

* Station Unit Cost is an aggregated unit cost in CTA O&M cost model

6.5.3 Capital Funding Sources

CTA has identified the following preliminary capital funding sources for the LPA:

- *Federal New Starts Program (Section 5309)*: A federal match of 60 percent was assumed on the federally funded portion of the Project. Receipt of New Starts grant funds is assumed to commence in FY11 and is assumed to be subject to an annual cap of $150 million annually.
- *State Funds:* State funds are assumed to defray the remaining share of capital costs not covered by federal New Starts grants. This includes 40 percent of the cost of the federally funded portion of the project, and 100 percent of the non-federally funded portion of the project. Both portions total an estimated at $774 million. To date, however, no state funds have been identified or committed for this purpose. Therefore, there is presently a capital funding shortfall equal to the projected state funding share in the financial plan. On July 13, 2009, a $31 billion State capital bill, *Illinois Jobs Now!,* was signed into law. This bill provides $2.7 billion for the six-county northeastern Illinois region for bringing the transit system to a state of good repair. This capital bill is indicative of the State's commitment to funding public transportation investments and CTA will continue to advocate for additional funds in subsequent capital bills.

In addition, the financial plan includes federal transit formula grants that CTA is projected to receive from operating the incremental transit service associated with the project:

- Section 5309 Rail and Fixed Guideway Modernization Program, which grows as a function of fixed guideway directional route-miles and fixed guideway vehicle revenue-miles.
- Section 5307 Large Urban Cities Program, which grows as a function of demographic measures (population and population density, adjusted three years after each decennial census); level of service (vehicle revenue-miles and fixed guideway directional route-miles); and an incentive funding measure (passenger miles x passenger miles/operating cost)

These funds are applied toward future year infrastructure renewal and replacement costs associated with the LPA. These grant programs are subject to review and revision by Congress as part of surface transportation authorization legislation every six years, and could be altered in the future.

Projected future-year unit grant values are multiplied by projections of applicable transit service characteristics for the project (e.g., revenue vehicle miles, fixed guideway directional route miles, passenger miles, and operating costs). The resulting projection of incremental federal formula grants for the LPA in the design year (2030) is $6.6 million (2009 dollars).

Other federal funding program sources in the financial plan include:

- Section 9 (5307) Congestion Mitigation and Air Quality Program: Federal formula grants for transportation projects that reduce criteria air pollutants regulated from transportation-related sources in National Ambient Air Quality Standards nonattainment areas. Fixed funding of $4.0 million annually beginning in FY10, based on historic average funding levels.
- Job Access and Reverse Commute Program: A federal formula grant program to address the unique transportation challenges faced by welfare recipients and low-income persons seeking to get and keep jobs. One-time funding applied in FY09.
- Homeland Security/Department of Justice Grants: Federal formula grants for transit security improvements. Fixed funding of $6.5 million annually beginning in FY09, based on historic average funding levels.

6.5.4 O&M Funding Sources

CTA O&M funding sources include passenger revenue, public funding, system generated revenue, and additional public funding. Passenger revenue reflects the fares received from customers. Projected fare revenue for the proposed Red Line Extension LPA is a function of projected passengers and projected average fare paid per passenger. It is expected that $8.4 million (2009 dollars) in fare revenue will result in 2030 due to implementation of the Red Line Extension project.

Public funding includes sales tax and discretionary funding from the 1983 Regional Transportation Authority (RTA) Act, and new funding from the 2008 legislation.

- **Sales Tax (1983 Formula):** The RTA Sales Tax authorized in 1983 is the primary source of operating revenue for CTA. The tax is authorized by Illinois statute, imposed by the RTA in the six-county region of northeastern Illinois and collected by the State.

The sales tax is the equivalent of 1 percent on sales in Cook County and 0.25 percent on sales in the collar counties of DuPage, Kane, Lake, McHenry and Will. The 1 percent sales tax in Cook County is comprised of 1 percent on food and drugs and 0.75 percent from all other sales, with the State then providing a "replacement" amount to the RTA equivalent to 0.25 percent of all other sales. CTA receives 100 percent of the taxes collected in the City of Chicago and 30 percent of those collected in suburban Cook County, after the RTA retains its 15.0 percent share. Revenues are projected to grow beyond FY09 based on a projection of Cook County sales tax revenue developed for CTA by Moody's Economy.com.

- **Sales Tax and Public Transportation Fund (PTF):** RTA sales tax increased by the enactment of PL (P.A. 95-0708) in January 2008 equivalent to a 0.25 percent on sales in each county in the six-county region. By statute, 100 percent of the sales tax receipts and PTF funds, excluding the 25 percent PTF on Real Estate Transfer Tax (RETT) which goes to the CTA, are disbursed by formula to the Service Boards after setting aside funds for ADA paratransit service, suburban mobility, and for innovation, coordination, and enhancement (ICE). Funding for these three initiatives increase or decrease annually based on the percent change in the previous year's receipts from taxes imposed by PL (P.A. 95-0708) under Section 4.03. The RTA deposits funds each year into an ICE fund as directed by Section 4.03.3 of PL. ICE funds may be used by the RTA based on the affirmative vote of 12 RTA Directors for operating or capital grants or loans to Service Boards, transportation agencies, or units of local government that advance the goals and objectives of the RTA Strategic Plan. This funding is projected to grow on the basis of projected growth in sales and real estate transfer taxes in the six-county region.
- **RTA Discretionary:** Apportionment from RTA's 15 percent share of the sales tax (1983 Formula) and the State Public Transportation Fund (PTF) equal to 25 percent of the sales tax (1983 Formula) are the source of the RTA discretionary fund. This funding is projected to grow on the basis of projected growth in sales tax in the six-county region.
- **Real Estate Transfer Tax – RTA Formula:** As authorized by the 2008 Legislation (P.A. 95-0708), CTA receives the portion of PTF revenue earned from real estate transfer taxes. This funding is projected to grow on the basis of projected growth in Cook County real estate transfer taxes.
- **Real Estate Transfer Tax – City of Chicago:** In addition to the PTF real estate transfer tax revenue, the 2008 Legislation (P.A. 95-0708) authorized CTA to receive funds at a tax rate of 0.3 percent on real estate transfers in the City of Chicago. This funding is projected to grow on the basis of projected growth in Cook County real estate transfer taxes.

System generated revenue includes:

- **Reduced Fare Subsidy:** The reduced-fare subsidy is the State of Illinois reimbursement to CTA for discounted fares to seniors, people with disabilities and students. This revenue source is projected to grow with inflation.
- **Advertising, Charter, and Concessions:** Includes revenue from advertising, charter transit service, and concessions on CTA property. This revenue source is projected to grow with inflation.
- **Investment Income:** Interest income on CTA fund balances. Calculated annually in the financial plan on the basis projected cash balances. Applies a forecast of three-month U.S. Treasury Bills as the interest rate.

- **Statutory Required Contributions:** The Regional Transportation Authority Act requires the City of Chicago and Cook County to contribute $3.0 million and $2.0 million, respectively, towards CTA operations each year. This amount is projected to remain fixed at $5.0 million annually.
- **All Other Revenue:** Includes parking fees, sale of real estate and rentals. This revenue source is projected to grow with inflation.

6.5.5 Capital and Operating Shortfalls

Additional Revenue Sources

Additional revenue sources must be identified to address projected CTA and Red Line Extension project-specific shortfalls. A state-supplied funding source or mixture of multiple sources to address capital and operating shortfalls has not yet been identified by the State of Illinois or the RTA.

Risks and Uncertainties

As the Red Line Extension project progresses, there are several strategies that CTA could utilize to address these risks, if one or more should occur. These strategies include:

- Further staging the construction of the project;
- Controlling the growth of service;
- Raising fares at a higher annualized rate and/or more often;
- Redefining the scope of the project; and
- Introducing additional short and long term financing strategies.

Implementation

Based on the funding shortfalls identified above, CTA is developing a strategy to fund the capital and operating needs of the LPA. Overall, the strategy assumes that 60 percent of the project capital cost would be funded by FTA Section 5309 New Starts grants, with the remainder covered by state funding. CTA and the RTA are working with the Illinois Department of Transportation and relevant committees of the state legislature to identify stable and reliable sources of funding to fully fund operations and maintenance of existing services, renewal existing infrastructure, and fund the operations, maintenance, and eventual infrastructure renewal of capacity expansion projects, including the Red Line extension project.

As the Red Line Extension project progresses through the project development process, CTA will work with its funding partners to further develop and refine this funding strategy, which would ultimately form the basis of a Full Funding Grant Agreement between CTA and FTA.

6.6 LPA Achievement of Project Goals and Objectives

Five goals were identified for the Red Line Extension AA. Specific criteria and measures were developed for each goal as a means of assessing whether an alternative meets the goal. Figure 6.9 depicts how the LPA achieves these goals and objectives. These include:

Goal 1 – Regional and Local Access Mobility

The purpose of the Red Line Extension Alternatives Analysis (AA) Study is to identify transit improvements that would provide improved mobility to residents and businesses located in the City of Chicago's Far South area.

To evaluate this goal, the number of residents with access to high quality, convenient, and reliable transit service was estimated. The LPA provides access to a high number of residents. According to 2000 U.S. Census data, there are a total of 54,000 people and 19,000 households in the UPRR corridor. Nearly 59 percent (32,000) of the corridor population is within 0.25 miles of the station areas.

The Red Line Extension would provide connections with the other CTA rail rapid transit lines at transfer stations (Roosevelt, Jackson, Lake, Fullerton, and Belmont stations). The new Red Line Extension stations would include bus terminals for CTA and Pace bus transfers. The opportunity exists to construct a new transfer station to the NICTD South Shore Commuter Rail Line in the vicinity of the proposed Red Line Extension 130th Street station. This potential connection to the South Shore would depend on funding availability. The CTA will continue to coordinate with NICTD during the Red Line Extension project development. In addition, the CTA will continue to coordinate with Metra regarding their proposed South-East Service.

Goal 2 – Community and Economic Development
A major aspect of this goal is to locate transit alignments and stations in areas with existing land uses conducive to transit use or in those areas which have the greatest potential to develop transit supportive land uses.

The LPA fits well with the Purpose and Need Report for this project, providing a corridor that connects major neighborhoods and activity centers in the study area. Most of these neighborhoods have been experiencing stable growth and redevelopment in recent years. The City of Chicago Department of Community Development recently approved development plans for a new supermarket and commercial development at 115th Street and Michigan Avenue. An intermodal transit station with bus transfer and park and ride would be located adjacent to this site along the UPRR ROW at 115th Street/Michigan Avenue. The LPA also offers opportunities for development of land surrounding the terminal station at 130th Street and the enhanced potential for economic development activity in conjunction with the renewal of Altgeld Gardens. The LPA is adjacent to five TIF districts and/or enterprise zones and is consistent with local development plans.

The LPA has the highest level of past and current public support.

- In a November 2004, over 38,000 residents of the Red Line extension study area in the 9th and 34th Wards supported a public referendum for the Red Line Extension along the UPRR Corridor. A total of 38,142 'Yes' votes (93%) and 2,993 'No' votes were cast.
- 451 public comments were received in Screens 1, 2 and 3 – 140 of those expressed a preference for a particular alternative. 85 (60.7%) of these comments were in favor of the UPRR Rail alternative and 7 (5%) were in favor of the Halsted Rail alternative. 29 (20.7%) Comments showed general support of an extension of the Red Line, and 19 (13.6%) comments specifically support extending the line to 130th Street with no particular alternative mentioned.
- In June 2009, a petition was submitted to CTA including 512 signatures supporting the CTA's locally preferred route to extend the Red Line Rail Line from the 95th Street Station to 130th Street, using the Union Pacific Rail Road (UPRR) corridor.

Goal 3 – Regional Transit System Performance
This goal ensures that both the capital and operating costs of the project are commensurate with its benefits. The LPA is the most promising alternative to reduce travel times, improve trip

reliability, provide sufficient transit capacity to meet 2030 transit demand, maximize potential transit ridership, and to enhance linkages within the CTA and regional transit system.

Based on the Screen 3 analysis, the LPA provides the best opportunity to meet the cost-effectiveness thresholds currently set by FTA. The CTA is seeking approval and funding for construction from the federal government through the Federal Transit Administration's New Starts grant program. In general, projects advancing into the FTA PE phase of project development must achieve a cost-effectiveness measure of below $25 in project cost per hour of travel time savings. The cost-effectiveness of the LPA is expected to be refined during the EIS and PE phase of the project development in order to meet the FTA criteria for New Starts funding.

Goal 4 – Safety and Security

The Red Line extension would increase the safety and security by relieving congestion at the 95th Street station. Several CTA and Pace bus routes that currently serve the 95th Street station would be shortened and re-routed to terminate at 103rd, 111th, 115th and 130th Street. It is anticipated that CTA bus routes 103 – West 103rd Street, 106 – East 103rd Street, 111 – Pullman/111th/115th, 119 – Michigan/119th, and Pace bus routes 348 – Riverdale Connector, 352 – Halsted, and 359 – Robbins/S. Kedzie would be re-routed to serve Red Line Extension stations. These bus re-routings will result in the reduction of current 95th Street station bus terminal congestion, both in terms of the number of bus vehicles serving the station, a reduction in passenger-bus conflicts as passengers walk from the their bus drop-off/pick-up locations to the station house, and the total number of passengers on the station platform.

During the next steps, Preliminary Engineering and the preparation of an EIS, a wide range of safety measures will be identified, evaluated, and used in combination. They include vehicle measures (on-board closed-circuit television cameras, on-board audio and visual message communications to passengers, and emergency alarm systems), and station design (maximizing unobstructed sightlines in and surrounding stations, positioning of customer service booth for maximum presence and visibility in station, closed-circuit television cameras, public address systems, sufficient lighting, and emergency alarm systems).

Goal 5 – Environmental Quality

The fifth goal, Environmental Quality, is to develop solutions which minimize impacts to environmental resources and communities within the study area. The AA identified several potential impacts, including displacements, park lands, and noise and vibration. The next step, the preparation of an EIS will analyze these impacts, as well as the other social, economic, and environmental consequences in detail. The goal of the environmental analysis will be to avoid, minimize and mitigate potential environmental impacts. This environmental review process is required by the National Environmental Policy Act of 1969 (NEPA) and related laws.

Figure 6.9: Effectiveness of Alternatives Meeting Goals and Objectives in 2030

	Goal / Objectives	Evaluation Measures / Criteria	LPA	Notes
Goal 1: Regional and Local Access and Mobility			○	
1	Increase connectivity between and within neighborhoods and activity centers.	Population Served (2000) 31,927	High	Within 0.5 mile of station area
		Population Served (2030) 32,896	High	
		Community Facilities Served	High	
		Community Facilities Impacted	High	Within 500 feet of either side of corridor
		Degree of Potential Effect on Community Facilities	Low-Medium	UPRR West would significantly impact Fernwood Parkway. UPRR East would have low impact on Smith Park
		Employment (2000) 3,114	Medium	Within 0.5 mile of station area
		Employment (2030) 3,694	Medium	
		Service to Activity Centers Within the Study Area	High	Based on alignment and station locations
2	Improve access between city neighborhoods and regional centers, and between suburban communities and the greater central area.	Service to Activity Centers in the Region	High	How well alternatives provide service to activity centers
3	Increase regional transit competitiveness.	Enhancing Linkages and Major Trip Attractors/Generators Within the Region	High	Based on travel forecast with the best improvement in transit trips and reduction in vehicle trips
4	Improve customer transfer connections among regional transit modes.	Quality and Convenience of Trip	High	Number of transfers required and travel time
		Quality of Intermodal Connections	High	Based on quality of intermodal connections
Goal 2: Community and Economic Development			◒	
1	Support community development initiatives.	Consistent with Planned Development and Local Plans	High	Consistent with TIF district, local economic development and housing plans
		Joint Development Potential	Medium-High	
		Potential for Job Creation	Medium-High	
		Public Comments	High	Screen 1,2,3 public comments and public referendum results
2	Provide opportunity for transit-supportive development.	Property Acquisition	Medium-High	Available sites for stations, bus transfer and parking
		TOD Potential	Medium-High	Station area development and market trends
3	Support efficient land use patterns.	Complient with Zoning and Future Land Use	High	Based on City of Chicago planning and development documents
4	Respect community context and identity.	Number of Anticipated Displacements	Low-Medium	Number of displacements required
		Degree of Potential Effect on Neighborhoods	Medium-High	Based on public comments for the alternative
		Effects on Community Cohesion	Medium-High	
5	Promote equitable distribution of project benefits and impacts.	Low-Income or Minority Neighborhoods Served	High	Minority population within 0.5 mile of station area
		Low-Income or Minority Neighborhoods Impacted	Medium	Minority population negatively impacted within 0.5 mile of station area
		Potential for Displacement of Low-Income and Minority Households	Medium	Number of displacements required
		Potential for Displacement of Low-Income and Minority Businesses	Medium	
		Potential for Community Facilities Impacts in Low-Income or Minority Areas	Medium	
Goal 3: Regional Transit System Performance			◔	
1	Increase capacity and ridership.	Opening Year Preliminary Daily Ridership	High	Travel forecast results compared to other alternatives (July 2009)
		Forecast Year Preliminary Daily Ridership	High	
		Opening Year Annual Riders (System-wide)	High	
		Forecast Year Annual Riders (System-wide)	High	
		Daily Station/Stop Boardings	High	
2	Enhance efficiency and cost effectiveness.	Capital Costs per Passenger Mile (163 M)	Medium-High	Capital cost / one-way route miles (July 2009 capital cost estimate)
		Cost Effectiveness Index (potential for a medium rating)	Medium-High	FTA CEI Rating (July 2009 capital cost and ridership results)
3	Facilitate connections and linkages.	Number of Transfers between Select Origin-Destination Pairs	High	Travel forecast results
4	Reduce transit travel times.	Transit Travel Times between Representative Origin-Destination Pairs	High	130th Street terminal station to Loop
5	Integrate existing transit infrastructure, where feasible.	System Criteria Compatibility	High	Compatible with existing Red Line rail or 95th Street terminal station
		Interoperability with Existing Service	High	
		Consistency with Existing Infrastructure	High	
Goal 4: Safety and Security			○	
1	Increase transportation reliability.	Operating Reliability	High	Transit mode and service plan supports travel forecast
2	Improve incident response capabilities.	Potential Impact on Emergency Vehicle Incident Response Capability	High	Number of potential impacts to disrupt emergency vehicles (example rail grade crossings)
3	Incorporate design elements that enhance safety and security.	Extent of Vehicle/Transit/Pedestrian Conflicts that are not Fully Protected	High	Number of pedestrian/transit and vehicle/transit potential conflicts
Goal 5: Environmental Quality			◔	
1	Limit impacts.	Potential for Negative Visual Impact	Medium-High	Proximity to community facilities, residences and businesses with frontage to alignment
		Potential for Archaeological Site Impacts Within the Proposed Right-of-Way	High	Number of archaeological site impacts within the proposed right-of-way
		Buildings Listed or Eligible for Listing in the NRHP Within 200 Feet	High	Number of historic structures within 200 feet of the proposed right-of way
		Districts Listed or Eligible for Listing in the NRHP Within 200 Feet	High	Number of existing historic or eligible districts within 200 feet of the proposed right-of-way
		Parklands and Recreation Areas Impacted	Medium	Number of parkland and recreation areas impacted
		Anticipated Noise and Vibration Impact Potential for Mode (contour based on FTA guidance)	Medium-High	Noise and vibration analysis
		Wetland Impacts (5 within corridor)	Medium-High	Number of delineated or potential wetlands impacted
		Critical Habitat Impacts (0 impacted)	High	Number of critical habitats impacted
2	Support environmental benefits.	Consistency with Regional Air Quality Plans	High	CMAP conformity analysis
3	Reduce reliance on automobile travel.	Travel Forecast Modal Split	High	Based on travel forecast with the best improvement in transit trips and reduction in vehicle trips
	Performance Rating Scale:		● ◕ ◒ ◔ ○ Poor (Low) -------- Medium -------- Good (High)	

7.0 PUBLIC INVOLVEMENT

7.1 Public Involvement Approach

As part of the FTA's Alternative Analysis process the CTA conducted an array of public involvement activities. In order to achieve a high level of participation, a comprehensive public involvement plan was developed and implemented.

7.1.1 Description of Outreach Program

Over the course of the AA study, a series of three public presentations were conducted within the Red Line Extension Alternatives Analysis Study area to encourage the general public's participation at key project stages. Through presentations and displays, the public learned about the methodology of the New Starts federal planning processes and how evaluation criteria were developed and applied to the universe of alternatives for the Red Line AA. A formal question and answer process allowed the general public to make comments and ask questions on the study's findings.

Individual and group briefings for elected and public officials; community, civic, business and religious leaders; and other stakeholders were conducted along the same timeline, providing them the opportunity to comment and inquire about the project.

The public had continual access to the project's public outreach presentation materials on the Red Line Extension AA Study weblink via the CTA's website (www.transitchicago.com). In addition to presentation materials, the website provides information on how to submit comments and questions to CTA via phone, email and standard mail. At the end of each public comment period, all questions and answers were posted on the project website. In addition, a database of participants in the outreach process was developed and continually updated, and CTA's community outreach database was also used. CTA's existing database includes community groups, non-profits, community development organizations, and chambers of commerce.

Throughout the public involvement process, the CTA monitored participation from the general public, elected officials, and stakeholders to gauge public interest and opinion regarding the proposed project. To identify potential modification to the public notification process, CTA analyzed the number of attendees and the geographic representation through regularly scheduled discussions with local elected officials and through monitoring attendance at the public meetings.

7.1.2 General Public

Each affected community within the study area has had different levels of interest in the project, due to many factors including intended use; direct or indirect impacts; support for or lack of support for transit improvements; and potential or perceived degree of project impact on property and/or daily routines. This acknowledgement was integral to CTA's evaluation of whether the public education and involvement process was targeted properly or if it required adjustment to better reach and inform the public.

The study area encompasses several neighborhoods: Beverly, Altgeld Gardens, Pullman, Morgan Park, Roseland, Longwood Manor, Princeton Park, Cottage Grove Heights, Burnside, and Washington Heights. Outreach was conducted to the study area as a whole and CTA was also aware of the distinct neighborhoods and was able to identify critical local issues.

Three rounds of presentations took place over the course of the study: one for each level of alternatives screening. Because of the length of the Red Line Extension's alternative corridors, each round consisted of two meetings, for a total of six public meetings. Two identical meetings per screening phase ensured adequate stakeholder and community coverage throughout the study area. Prior to each presentation, the public was informed of the meetings through advertisements in local newspapers and car cards posted on CTA buses, trains, and in stations. During the second and third phases, previous participants were also notified by letter or email. Local stakeholders and elected officials were also recruited to help conduct outreach to generate more project and public interest in attending these meetings.

The first round of meetings outlined the Purpose and Need of the Red Line Extension Alternatives Analysis Study and presented the preliminary findings from Screen 1. The second round of public meetings reviewed the findings of Screen 1, presented the preliminary findings of Screen 2, and solicited comments and questions. The third round of meetings reviewed the findings of Screen 2, presented the preliminary findings of Screen 3, announced a recommended Locally Preferred Alternative (LPA), and solicited comments and questions particularly relating to the recommended LPA.

7.1.3 Stakeholders and Local Officials

Individual and group briefings were held to allow stakeholders and elected officials to share perspectives, interests, and potential concerns, as well as to offer their recommendations for strengthening candidate alternatives or to identify additional alternatives. Following the same schedule as the general public program, three rounds of briefings are scheduled for the Red Line Extension Alternatives Analysis Study. Stakeholders and elected officials also were invited to attend the public meetings. Stakeholder and elected official categories include the following:

Civic Organizations
Civic organizations include transportation, environmental, regional-growth or business-related groups.

Activity Generators
Members of this category include retail locations, area attractions, and parks.

Religious Organizations & Neighborhood Groups
Members of this category include ministers, local chambers of commerce, block clubs, and other community groups.

Government Facilities, Infrastructure, and Institutions
This category includes schools, operational facilities, neighborhood parks, railroads, and universities.

U.S. Representatives and U.S. Senators
Individual briefings for the Congressmen and Senators and/or their staff were conducted for the initial round of briefings. They were also invited to attend all public meetings. As the screening process proceeded and the study entered the final stages, another round of briefings were held with the Congressmen and Senators to provide the opportunity for them to comment on the recommended LPA.

Aldermen
Establishing a dialogue with aldermen inside the study area was critical for the public involvement efforts. Local aldermen served as a resource to assist CTA in expanding the list of local stakeholders, engage their residents in the process, and identify local issues pertinent to

the AA process. Aldermen were briefed regularly and were invited to participate in the public meetings and local stakeholder meetings

State and County Officials
These officials were informed of the AA study's progress. They also served as another resource to CTA to identify additional stakeholders, and to inform and explain potential local issues to CTA.

Surrounding Municipalities
A portion of the Village of Calumet Park is located within the study area, and Blue Island and Riverdale border the study area. CTA contacted these three municipalities and the South Suburban Mayors & Managers Association to identify potential stakeholders and other interest groups to be included in this public involvement process. CTA also sent alerts to other surrounding municipalities to keep them informed of the process.

7.2 Implementation and Execution of Public Involvement

The CTA Red Line Extension Alternatives Analysis Study Public Involvement included various meetings held in conjunction with each alternatives screening. Each round of meetings focused on the respective Screening phase. Each of the three rounds were conducted in a similar manner to ensure consistency.

Public Meeting Locations
The first step entailed identifying appropriate locations within the study area to hold the public presentations. Locations were identified in conjunction with the Aldermen in the study area. Locations identified changed during each round of meetings to ensure thorough study area coverage:

The locations identified met the following criteria:

- Location must be available on date of presentation;
- The facility must be able to accommodate a theater-type presentation that can hold at least 100 people and the presentation boards, technical staff, and public;
- Must be ADA accessible;
- Near public transportation; and
- Free of charge.

Meeting facilities were booked for public meetings several weeks in advance of the actual meetings to enable informative and accurate public notification. All logistical arrangements were arranged and confirmed.

Elected Official Briefings
All elected officials were informed them of scheduled public meetings. Those officials interested in a scheduled meeting were:

- Briefed using a flip board presentation
- Encouraged to identify stakeholders to be contacted in their area
- Encouraged to identify potential public meeting locations

Officials were contacted for follow-up meetings to update them regarding issues to be discussed at public meetings and to provide opportunity to comment prior to the meeting.

Public Meeting Announcements
CTA used the following methods to ensure that the stakeholders and general public were aware of the meetings:

- Meeting announcements appeared in local community papers two weeks in advance of the scheduled meetings.
- Some community papers were weeklies and required meeting notices to run twice
- Stakeholders were given information regarding upcoming meetings as a supplement to these advertisements
- Meeting announcements were posted on CTA's website
- Meeting announcement were posted at CTA stations and in CTA trains and buses via car cards
- CTA distributed and posted a press release including meeting details

Any member of the public interested in attending one or the entire series of presentations was welcome. No pre-registration was required.

7.3 Meeting Format

Each meeting included the following formats: an arcade open house, in which an area was dedicated to project maps and alternatives analysis process displays, a formal presentation including a PowerPoint presentation on Screen 1, 2, or 3 and a question and answer session.

The entire session was allotted two hours, beginning at 6:00 P.M. and ending at 8:00 P.M. This schedule allowed sufficient time to conduct the presentation, answer questions, and allow attendees to view the information on the presentation boards. The time was expanded when public involvement warranted.

Prior to each meeting, an internal client/consultant meeting and rehearsal was held to evaluate the effectiveness of the meeting and identify potential improvements for future meetings.

Arcade Open House
When attendees first arrived at the facility at 6:00 P.M., they signed in and were asked to provide contact information. They will were given a question/comment card and directed to the arcade. In the arcade, attendees had an opportunity to review project information and to familiarize themselves with the project so they can prepare questions or comments before the formal presentation and question and answer session.

The arcade was staffed by CTA and the project consultant team and included a series of poster boards (35 inches across and 47 inches tall) displaying maps, analysis results and recommendations.

Formal Presentation
The presentation consisted of a PowerPoint presentation lasting approximately 25 minutes. An interpreter for the hearing impaired and a translator for Spanish speaking individuals were available.

Question & Answer Session
At the conclusion of the presentation, the moderator explained the procedure for the question & answer session. There was a short break for participants to formulate their comments and/or questions. All questions were submitted in writing using question/comment cards provided to attendees at the sign-in table. The comment cards were collected by CTA and grouped in like

categories. The moderator read the questions/comments to the audience and the presentation panel provided answers verbally.

All questions received regarding the Red Line Extension Alternatives Analysis Study were also answered in writing and posted on the CTA website.

7.4 Screen 1 Public Involvement Summary

The CTA hosted two community meetings in the study area on April 10 & 11, 2007. These meetings presented the findings of Screen1 of the AA study.

The CTA placed advertisements to inform the community of the proposed project and upcoming meetings through local community newspapers, Chicago public libraries, local universities and colleges, aldermanic offices, customer alerts on CTA buses and stations (English & Spanish) and postings at village halls adjacent to the study area. The community newspapers included The Crusader (3/31 & 4/7), The Defender (4/4 & 4/6-10), La Raza (April 8-14), The Star Newspaper/The Daily Southtown (4/5). Additionally, the Chicagoland Chamber of Commerce, Alderman Beale and the Calumet Area Industrial Council posted information on their websites. Village hall postings included Burnham, Blue Island, Calumet, Calumet Park, Dolton, Evergreen Park, and Riverdale.

Prior to the public meetings, CTA met with community leaders, chamber of commerce executive directors, and aldermen and/or their staff. Additionally, CTA staff asked these leaders to assist them by submitting names of local groups/organizations that are active in the community and would be interested in this extension study, as well as becoming proactive participants of the public involvement process of the AA study. Recommended groups were added to the community outreach database. CTA contacted by letter 34 elected officials. Sixteen meetings were held to brief interested elected officials. There were 74 stakeholders invited to participate in a briefing on the morning of April 10, 2007. This briefing was held at Carver Military Academy. Fourteen individuals attended representing 11 organizations.

The public meetings were held at Chicago State University (April 10) and Chicago Public Library –West Pullman Branch (April 11) from 6:00-8:00 P.M. Sixty-six people attended the April 10 meeting. Eighty-one people attended the April 11 meeting. The presentation and meeting materials were made available on the website on the morning after the first public meeting.

The most common comment received was in regard to preferences for the alignments (corridors) studied – 89 comments in total. There was a strong level of support voiced for the UPRR corridor (55). The next category that received a high number of comments was in regard to economic and environmental impacts. Many people were interested in the economic benefits the study area would gain, including new access to jobs or jobs created by the project itself. Another common comment was on the project timeline with people wanting the project to move forward more rapidly.

The official comment period remained open until May 11, 2007. Two hundred and nine comments or questions were collected. These were answered by CTA staff and posted to the project website. Once posted, elected officials, stakeholders and meeting participants received either an email or letter notifying them that the comments and responses were now available on-line.

7.5 Screen 2 Public Involvement Summary

The CTA hosted two community meetings in the study area on December 3 and 4, 2008. These meetings presented the findings of Screen 2 of the AA study.

The CTA placed advertisements to inform the community of the proposed project and upcoming meetings through local community newspapers, Chicago public libraries, local universities and colleges, aldermanic offices, customer alerts on CTA buses and stations (English & Spanish) and postings at village halls adjacent to the study area. The community newspapers included The Crusader (11/20), The Defender (11/12 and 11/19), La Raza (11/23), The Southtown Star (11/20). Additionally, the Chicago 6th Ward office of Alderman Beale, Chicago Metropolitan Agency for Planning, Regional Transportation Authority, and the Active Transportation Alliance, posted information on their websites. Village hall postings included Burnham, Blue Island, Calumet, Calumet Park, Dolton, Evergreen Park, and Riverdale.

Similar to Screen 1 of the project, CTA met with community leaders, and elected officials and/or their staff prior to the public meetings. CTA staff briefed these leaders on the Screen 2 findings and also asked them to identify local groups/organizations that are active in the community and would be interested in this extension study. Recommended groups were added to the community outreach database. CTA contacted by letter 34 elected officials. Eight meetings were held to brief interested elected officials. There were 79 stakeholders invited to participate in a briefing on the morning of December 3, 2008. This briefing was held at Woodson Regional Chicago Public Library. Ten individuals attended representing 9 organizations.

The public meetings were held at Historic Pullman Visitor Center (December 3, 2008) and Woodson Regional Chicago Public Library (December 4, 2008) from 6:00-8:00 P.M. Using the data base from the prior public meetings, the CTA invited participants whom attended the Screen 1 public meetings. One hundred seventy people were invited to participate by letter or email. Forty-three people attended the December 3, 2008, meeting. Forty-one people attended the December 4, 2008 meeting. The presentation and meeting materials were made available on the website on the morning after the first public meeting.

The most common comment received expressed preferences for the alignments (corridors) studied - 50 comments in total. As in Screen 1 participants expressed a strong support for the Union Pacific Railroad (UPRR) corridor (31). The next category that received a high number of comments was in regard to the public involvement process. Participants were interested in how the screening criteria applied throughout the analysis to advance the alternatives being evaluated, if individual suggestions were considered and what information was available to the public. Another common comment was on the project timeline with people inquiring how much longer the process would take and when it would be completed.

The official comment period remained open until December 18, 2008. One hundred thirty-one comments or questions were collected. These were answered by CTA staff and posted to the project website. Once posted, elected officials, stakeholders and meeting participants received either an email or letter notifying them that the comments and responses were available online.

7.6 Screen 3 Public Involvement Summary

The CTA hosted two community meetings in the study area on June 3 and 4, 2009. These meetings presented the findings of Screen 3 and the recommendation of a LPA.

The CTA placed advertisements to inform the community of the proposed project and upcoming meetings through local community newspapers, customer alerts on CTA buses and stations (English & Spanish) and postings at village halls adjacent to the study area. The community newspapers included The Crusader (May 14 & 21), The Chicago Defender (May 13 & 30), La Raza (May 17), and The Southtown Star (May 18). Additionally, the Regional Transportation Authority, the Chicago Metropolitan Agency for Planning, Progressive Railroading, the Active Transportation Alliance, Transit Future, and the Chicago Defender, posted information on their

websites or in their e-newsletters. The Chicago Citizen newspaper also published an article regarding the meeting. Village hall postings included Burnham, Blue Island, Calumet, Calumet Park, Dolton, Evergreen Park, and Riverdale.

Similar to the earlier phases of the project, CTA met with community leaders and elected officials and/or their staff prior to the public meetings. CTA staff briefed these leaders on the Screen 3 findings and presented the recommended LPA. Additionally, CTA staff asked these leaders to identify local groups/organizations that are active in the community and would be interested in this extension study. Recommended groups were added to the community outreach database. CTA contacted by letter 34 elected officials. Eleven meetings were held to brief interested elected officials and/or their staff. Represented in the meetings were Aldermen from 6 Chicago wards, a Cook County Commissioner, a U.S. Congressman, 2 State Representatives, and a State Senator. There were 86 stakeholders invited to participate in a briefing on the morning of June 3, 2009. This briefing was held at Olive Harvey College. Fourteen individuals attended representing 13 organizations.

The public meetings were held at Olive Harvey College (June 3, 2009) and Woodson Regional Chicago Public Library (June 4, 2009) from 6:00-8:00 P.M. Using the data base from the prior public meetings, the CTA invited individuals who participated in the Screen 1 and 2 public meetings. Two hundred eighteen people were invited to participate by letter or email. Forty-four people attended the June 3, 2009 meeting. Sixty-seven attended the June 4, 2009 meeting. The presentation and meeting materials were made available on the website on the morning after the first public meeting.

A total of 111 comments were received at the stakeholder and public meetings, via e-mail, or U.S. Postal Service. The majority of the comments received were related to economic and environmental impacts. Some focused on the opportunity for business and job development whiles others questioned the impact on homes and property. In addition, many comments were in support or opposition to the project, and some questioned how their support would affect the outcome of the project. Lastly, a petition that included 512 signatures was submitted in support of the CTA's recommended LPA.

The official comment period was extended to June 25, 2009. Questions and comments were responded to by CTA staff and posted to the website (transitchicago.com).

On August 12, 2009 the Chicago Transit Board met and the adopted an LPA. A letter was sent to participants, stakeholders and agency outreach inviting them to submit comments or participate in the Board action. At the meeting comments were made by stakeholders in support of the Red Line Extension. The CTA will now move to the Environmental Impact Statement step of the FTA process. There will be additional opportunities for public involvement in subsequent steps of the FTA process.

7.7 Final Reporting

Upon the completion of all the public involvement activities CTA completed Public Involvement binders for each corresponding screen. These included all related information for public meeting announcements, elected official meetings, stakeholder meetings, public meetings, public involvement, media coverage, examples of the CTA website, any follow up activity, as well as copies of all registration cards and any comment that was submitted during each screen.

8.0 NEXT STEPS

The preparation of a Draft Environmental Impact Statement (DEIS) will be the next step following the recent selection of a LPA. After completion of scoping for the EIS, the CTA will prepare an application to the Federal Transit Administration (FTA) for advancement into Preliminary Engineering phase of the New Starts process. Issues that will be addressed in these next steps include:

- Detailed alignment analysis for the LPA
- Details of intermediate and terminal station locations
- Right-of-way requirements
- Impacts identification and proposed mitigation measures
- Costs and possible phasing
- Evaluation of the cost effectiveness of project elements

There will be opportunities for public involvement in subsequent project phases.

Appendix B
Scoping Report

Red Line Extension Project
Scoping Report

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Red Line Extension
Connecting 95th Street Station to 130th Street

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Section 1 Introduction 1

1.1 Overview 1
1.2 Project Area 2
1.3 Alternatives 2
1.3.1 No Build Alternative 2
1.3.2 Transportation System Management (TSM) Alternative 3
1.3.3 Locally Preferred Alternative (LPA): Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) Alternative 4
1.3.4 Halsted Street Heavy Rail Transit Alternative 5
1.4 Summary of Purpose and Need 5
1.5 Project Participants 6
1.6 Purpose of Report 6

Section 2 Scoping Process 7

2.1 Early Scoping Activities 7
2.2 Draft Environmental Impact Statement (DEIS) Scoping Activities 8
2.2.1 Public Participation Plan 8
2.2.2 Coordination Plan 8
2.3 Initiation of Scoping - Notice of Intent (NOI) 8
2.4 Agency Scoping 9
2.4.1 Participating Agencies 9
2.4.2 Cooperating Agencies 9
2.4.3 Agency Scoping Meeting 10
2.4.3.1 Agency Scoping Meeting Comments 10
2.5 Public Scoping 11
2.5.1 Notification Database 12
2.5.2 Public Notification Activities 12
2.5.2.1 Direct Mail Notice 13
2.5.2.2 Transit Cards 13
2.5.2.3 Email Notification 13
2.5.2.4 Newspaper Advertisements 13
2.5.2.5 Project Web Site 14
2.5.2.6 Additional Outreach During Public Scoping Period 14
2.5.3 Elected Official and Stakeholder Briefings 15
2.5.4 Public Scoping Meeting 15
2.5.4.1 Public Scoping Meeting Format 16
2.5.4.2 Public Meeting Materials 17
2.6 Comments Received 17

Section 3 Summary of Scoping Comments 18

3.1 Introduction 18
3.2 Summary of Substantive Comments 18
3.3 Comments Related to Purpose and Need 19
3.4 Comments Related to Alternatives 20
3.4.1 Locally Preferred Alternative (LPA) 20

3.4.2 Halsted Street Heavy Rail Transit (HRT) Alternative 21
3.4.3 Station Locations and Connections 21
3.4.4 Other Alignments 21
3.4.5 Design Features 21
3.5 Comments Related to Potential Impacts 22
3.5.1 Transportation Impacts 22
3.5.2 Land Acquisition, Displacement, and Relocations 23
3.5.3 Community and Neighborhood Impacts 23
3.5.4 Visual and Aesthetic Impacts 24
3.5.5 Noise and Vibration 24
3.5.6 Parklands 24
3.5.7 Economic and Fiscal Impacts 24
3.5.8 Safety and Security 25
3.5.9 Environmental Justice 25
3.5.10 Construction Impacts 25
3.6 Comments Submitted by Federal, State, and Other Agencies 26
3.6.1 Comments Submitted by State Agencies 26
3.6.2 Comments Submitted by Other Agencies 26

Section 4 Responses to Comments 28

4.1 Introduction 28
4.2 Comments Related to Purpose and Need 28
4.3 Comments Related to Alternatives 28
4.4 Comments Related to Potential Impacts 28

Table 2-1 Newspaper Display Advertisements 14
Table 3-1 Comment Summary 19

Appendix A Public Participation Plan
Appendix B Notice of Intent
Appendix C Participating Agencies
Appendix D Participating Agency Invitation Letters
Appendix E Agency Scoping Meeting
Appendix F Agencies and Organizations Notified of Scoping
Appendix G Notification Materials
Appendix H Scoping Meeting Materials
Appendix I Meeting Presentation
Appendix J Meeting Exhibit Boards
Appendix K Public Scoping Meeting Transcripts
Appendix L Public Scoping Written Comments
Appendix M Agency Scoping Comments

Section 1
Introduction

1.1 Overview

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street station to 130th Street. CTA and the Federal Transit Administration (FTA) will be preparing an Environmental Impact Statement (EIS) that will evaluate the environmental effects of constructing and operating the proposed extension. FTA is the federal lead agency and CTA is the local lead agency.

The Red Line was put into operation in 1969. Plans to extend the Red Line to the southern city limits were made shortly thereafter but have not yet been implemented. Starting in 2002, community activists began an awareness campaign and a community petition drive which resulted in an advisory referendum being placed on the November 2004 ballot. The referendum was supported by 38,000 voters in the 9th and 34th wards. In 2006, the Chicago Transit Board initiated an Alternatives Analysis (AA) study for the proposed extension.

The study area is situated 11 miles south of the Chicago Central Area (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the study area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south.
The I-57 Expressway and I-94 Bishop Ford Freeway traverse the western and eastern edges of the study area, respectively. Lake Calumet is located in the eastern portion of the study area.

The study area encompasses parts of nine community areas in the City of Chicago and the eastern section of the City of Calumet Park (area east of Ashland Avenue). Community areas include Washington Heights, Beverly, Morgan Park, Roseland, Pullman, West Pullman, South Deering, Hegewisch and Riverdale. The study area has significant residential (primarily single family) industrial (existing and vacant), transportation and commercial development. The study area boundaries are major, recognizable streets, used to clearly define where possible alternatives would be considered. However, travel patterns and analyses beyond the study area are integral components to the project study and included as necessary.

For the Red Line Extension project the CTA has completed an Alternatives Analysis (AA) and conducted early scoping on the potential range of alternatives. The results of that study may be found in the Locally Preferred Alternative Report (CTA 2009) and which is incorporated here by reference. The AA provides the reasoning for decisions regarding the identification and narrowing of the range of alternatives. The AA process identified an initial set of nine corridors and eleven transit modal technologies. The process screened these options into a set of eight conceptual alternatives that potentially met the project purpose. These alternatives were screened against criteria related to constructability, right-of-way constraints, impacts of configurations, and operational concerns. This screening step narrowed the range of alternatives to three build alternatives and a no build alternative and a transportation system management (TSM) alternative. These alternatives were screened against the goals, objectives, and evaluation criteria established for the project.

In addition, input from stakeholders, the public and agencies was solicited in the process of narrowing the range of alternatives. The AA process resulted in the identification of a locally preferred alternative (LPA) in addition to one other build alternative (the Halsted HRT Alternative), the No Build Alternative, and a TSM Alternative that will be carried forward into the DEIS. A Locally Preferred Alternative (LPA) was identified through the AA process and designated by the Chicago Transit Board in August 2009.

The EIS will evaluate the LPA along with a No Build Alternative, a Transportation System Management (TSM) Alternative, and the Halsted Alternative developed during the AA process. Subsequent to the completion of the AA process, FTA and CTA initiated the public and agency NEPA scoping to obtain input on the scope of the EIS. The Notice of Intent (NOI) identified the four alternatives carried forward from the AA for evaluation. This report summarizes the results of the NEPA scoping process.

The Draft EIS (DEIS) will build upon the AA studies and form the basis for performance of Preliminary Engineering and preparation of a subsequent Final EIS. One of the primary purposes of scoping is to identify possible environmental impacts of the project. Transit improvements in the Far South side could be financed with a mix of local, state, federal New Starts, and other federal funds. Accordingly, the project will be executed in compliance with current FTA Section 5309 New Starts guidelines, and all environmental documents will satisfy the requirements of NEPA and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

1.2 Project Area

The proposed project area is located 11 miles south of the Chicago Central Area (commonly referred to as the "Loop"). The limits of the project area are from 95th Street on the north to 130th Street on the south. The Calumet-Sag Channel/Little Calumet River extends along the southern edge of the project area and Lake Calumet is located to the east. The I-57 Expressway and I-94 Bishop Ford Freeway traverse the western and eastern edges of the project area, respectively.

The project area includes parts of eight community areas in the far south side of the City of Chicago. Community areas include Washington Heights, Morgan Park, Roseland, Pullman, West Pullman, South Deering, Hegewisch, and Riverdale. The project area encompasses significant residential (primarily single family), industrial (existing and vacant), transportation, and commercial developments.

1.3 Alternatives

The Red Line Extension EIS will include an evaluation of a No Build Alternative, a Transportation System Management Alternative, the Locally Preferred Union Pacific Railroad Heavy Rail Transit (HRT) Alternative, and the Halsted Street HRT Alternative. These alternatives are briefly described below.

1.3.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system, plus any committed transportation improvements. Committed transportation improvements include projects that are already in the Chicago Metropolitan Agency for Planning (CMAP) financially constrained

Transportation Improvement Program (TIP). The Red Line project area has five bridge reconstructions, and several road improvement projects included in the FY 2007 – 2012 TIP. These improvements are primarily on highway segments in the vicinity of the project area and generally do not lie adjacent to or intersect with the proposed TSM or HRT alternatives.

Bridge projects in the TIP include: Illinois 1 (Halsted Street) at the Little Calumet River; I-94 (Bishop Ford Expressway) at the Stony Island Avenue ramp and at Cottage Grove Road; I-57 at 103rd Street; and I-57 at Genoa Road. Road improvement projects include a variety of landscaping, safety fencing, and resurfacing projects, and coordination of signal timing on Stony Island Avenue from 95th Street north, and on 95th Street from Western Avenue east to Ewing Avenue. There is also a bicycle and pedestrian multi-use trail proposed to extend from the existing Centennial Trail in Lemont to the Burnham Greenway in Burnham.

Bus transit service under the No Build Alternative would be focused on the preservation of existing services and projects. No significant changes to bus service are anticipated in the project area. All elements of the No Build Alternative are included in each of the other alternatives.

Summary:

- Existing transportation system.
- Plus committed transportation improvements: bridge and road improvement projects.
- Bus transit service focused on the preservation of existing services and projects.

1.3.2 Transportation System Management (TSM) Alternative

The proposed TSM Alternative is a Bus Rapid Transit (BRT) alternative that operates between the 95th Street Station and 130th Street via East 95th Street, Michigan Avenue, East 127th Street, South Indiana Avenue, and East 130th Street. Proposed BRT service would operate in mixed traffic with traffic signal priority along 95th Street, Michigan Avenue, and 130th Street.
The TSM Alternative is 5.5 miles long and would include four intermediate stops at 103rd, 111th, 115th, and 130th Streets with park-and-ride facilities proposed at all of the new stops. The 95th Street terminal would be expanded to extend the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street to improve circulation and safety. The TSM alternative assumes that buses from the south would continue to serve the 95th Street Station.

Summary:

- Transportation improvements that are already in the CMAP Fiscal Year 2007-2012 TIP as described in the No Build Alternative.
- Bus Rapid Transit (BRT) that operates between the 95th Street Station and 130th Street.
- 5.5 miles long with three intermediate stops at 103rd, 111th, and 115th Streets and a new terminal station at 130th Street.
- Park-and-ride facilities proposed at all new stops.
- Operates in mixed traffic with traffic signal priority along 95th Street, Michigan Avenue, and 130th Street.
- 95th Street terminal expanded to extend the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street to improve circulation and safety.
- Existing buses from the south continue to serve the 95th Street station.

1.3.3 Locally Preferred Alternative (LPA): Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) Alternative

The proposed LPA would extend the heavy rail transit line from the existing Red Line 95th Street Station to 130th Street. The line would be on an elevated structure from the 95th Street as it heads south along the I-57 Expressway for nearly one-half mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. It would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of South Prairie Avenue, the alignment would cross over the Canadian National/Metra tracks near 119th Street where it would transition to an at-grade profile and then continue southeast along the former Michigan Central/Indiana Harbor Belt (IHB) railroad right-of-way to terminate in the vicinity of 130th Street.

The proposed LPA is 5.3 miles long and would include three new intermediate stations at 103rd, 111th, and 115th Streets and a new terminal station at 130th Street with new park-and-ride and bus terminal facilities at each station. This alternative assumes that buses from the south would be re-routed to serve the new intermediate and terminal stations to speed passenger travel toward downtown Chicago.

The new HRT tracks would be placed immediately adjacent to the UPRR right-of-way on either the west side (West Side Option) or the east side (East Side Option). Both options would require adjacent property acquisition to accommodate the CTA right-of-way and station facilities at 103rd, 111th, and 115th Streets. The West Side Option could impact Fernwood Parkway between 99th Street and 103rd Streets which could trigger a Section 4(f) of the Department of Transportation Act evaluation in the EIS. The East Side Option could impact Wendell Smith Park adjacent to the I-57 Expressway which could also trigger a Section 4(f) evaluation in the EIS.

There are two options for the 130th Street terminal station. The Red Line extension would continue south along the IHB right-of-way to either a south or west terminal station location along the north side of 130th Street, just west of the I-94 Bishop Ford Freeway.

Summary:

- Transportation improvements that are already in the CMAP Fiscal Year 2007-2012 TIP as described in the No Build Alternative.
- Heavy rail transit line extension from 95th Street Station to 130th Street.
- 5.3 mile extension with three new intermediate stops at 103rd, 111th and 115th Streets and a new terminal station at 130th Street.
- New park-and-ride and bus terminal facilities at each station.
- Buses from the south would be rerouted to serve the new intermediate and terminal stations to speed passenger travel to downtown Chicago.
- Two alignment options will be studied in the EIS: Tracks could be placed immediately adjacent to the UPRR right of-way on either the west side (West Side Option) or the east side (East Side Option).
- Two options for the 130th Street terminal station will be studied in the EIS: The line would continue south along the IHB right-of-way to either a south or west terminal station location along the north side of 130th Street, just west of the I-94 Bishop Ford

Freeway.

1.3.4 Halsted Street Heavy Rail Transit Alternative

The proposed Halsted Street HRT Alternative would be operated on an elevated structure between the existing Red Line 95th Street Station and the Halsted Street/Vermont Avenue intersection in the vicinity of 127th Street. The alignment would follow the median of I-57 Expressway until reaching Halsted Street. It would then turn south onto Halsted Street and continue in the median to Vermont Avenue.

The proposed Halsted Street HRT Alternative is 5.0 miles long and would include three new intermediate stations at 103rd, 111th, 119th Streets and a new terminal station at Vermont Avenue with new park-and-ride and bus terminal facilities at the intermediate and terminal stations. This alternative assumes that buses from the south would be re-routed to serve the new intermediate and terminal stations to speed passenger travel to downtown Chicago.

Near the proposed station areas, there may be additional impacts to adjacent land owners if land acquisition would be required for station facilities such as bus turnarounds or parking facilities. This would be most applicable at the proposed terminal station at 127th/Vermont since several properties are located close to Halsted Street in this segment and there may be higher off-street facility needs.

Summary:

- Transportation improvements that are already in the CMAP Fiscal Year 2007-2012 TIP as described in the No Build Alternative.
- Heavy rail transit line extension from 95th Street Station to Halsted Street/Vermont Avenue intersection.
- 5.0 mile extension with three new intermediate stops at 103rd, 111th, 119th Streets and a new terminal station at Vermont Avenue.
- New park-and-ride facilities at intermediate and terminal stations.
- Buses from the south would be rerouted to serve the new intermediate and terminal stations.

1.4 Summary of Purpose and Need

The purpose of the Red Line Extension project is to reduce travel times to jobs for Far South Side and South Suburban residents and improve the performance of the existing Red Line 95th Street Station terminal. The project would also provide an opportunity to support economic development initiatives. The City of Chicago has designated several Tax Increment Finance (TIF) districts, Redevelopment Areas(RA), and Industrial Corridors in the study area. Major incentive zone areas in the study area include the 119th/Halsted RA, the Roseland/Michigan Avenue RA, the Pullman Industrial Corridor, and several smaller TIF districts.

The need for the project is based on the following considerations:

- Lack of park-and-ride and passenger drop off, and poor pedestrian facilities limit access to the existing 95th Street terminal of the Red Line.
- Customers accessing the existing terminal facility by bus experience measureable delays resulting from poor performance of surrounding arterial intersections, insufficient space

for bus loading and unloading, and insufficient space for bus layovers.

- Congested bus and passenger conditions at the existing terminal station and bus facility result in safety issues and diminish the attractiveness of transit as an alternative to other travel modes.
- Roadway performance in the study area is adversely impacted by narrow arterial streets and frequent at-grade freight rail crossings.
- Study area population is highly transit dependent, minority, and low-income. Presently, this population is underserved by rail transit compared to other areas in the region.

1.5 Project Participants

The project participants include FTA, CTA, and CTA's consultants. CTA's consultants include the CWC Transit Group and CWC's subconsultants. The Federal Highway Administration (FHWA) has been identified as a cooperating agency. Other project participants include federal, state, and local participating agencies identified in accordance with the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) 6002. Participating agencies have been identified and are listed in Appendix C.

1.6 Purpose of Report

The following report summarizes the public participation process for, and the public comments resulting from, the Red Line Extension public scoping meetings and comment period. The process of determining the scope, focus, and content of an EIS is known as "scoping." Scoping meetings are a useful opportunity to obtain information from the public and governmental agencies. In particular, the scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential impacts and mitigation measures to be considered.

Section 2
Scoping Process

2.1 Early Scoping Activities

In 2006, CTA and FTA began the Alternatives Analysis (AA) process, for the proposed Red Line Extension. As part of a three step screening process, CTA held six public meetings between 2007 and 2009 in order to help define the purpose and need and identify a range of reasonable alternatives. This AA process is an early public scoping process and was conducted consistent with the Federal Transit Administration's (FTA) guidelines.

Early scoping included a series of three screening evaluations and public outreach efforts. The first step, Screen 1, included meetings with elected officials and community groups in the study area, a meeting with stakeholders, a Technical Advisory Committee (TAC) meeting, and two public meetings. The two public meetings were held on April 10 and 11, 2007. A total of 147 persons attended the two public meetings and 14 representatives of 11 community and governmental organizations attended the stakeholder session, held prior to the public meetings.

The second step, Screen 2, again included meetings with elected officials and community groups in the study area, a meeting with stakeholders, a Technical Advisory Committee (TAC) meeting, and two public meetings. The two public meetings were held on December 3 and 4, 2008. A total of 84 persons attended the two public meetings, and 10 representatives of 10 organizations attended the stakeholder session, held prior to the public meetings.

The third step of the process, Screen 3, included two public meetings held on June 3 and 4, 2009. Prior to the public meetings, CTA conducted 11 briefings of elected officials and their staff and one stakeholder meeting. Fourteen representatives of 13 organizations attended the stakeholder briefing.

Screen 1
- April 10, 2007 - public meeting
- April 11, 2007 - public meetings

Screen 2
- December 3, 2008 - public meetings
- December 4, 2008 - public meetings

Screen 3
- June 3, 2009 - public meetings
- June 4, 2009 - public meetings

During early scoping, CTA evaluated nine alternatives, and in August 2009, the Chicago Transit Board designated the Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) Alternative as the Locally Preferred Alternative (LPA) for further study in the EIS. The LPA was chosen, in part, due to agency participation and public participation through review and comments.

2.2 Draft Environmental Impact Statement (DEIS) Scoping Activities

In accordance with NEPA, CTA and FTA have initiated the environmental review process for the Red Line Extension. An EIS will be prepared to identify impacts related to project construction and operation. As part of the initial phase of the environmental process, public scoping meetings were hosted on September 22, 2009 and September 24, 2009, to receive public comments on the alternatives and issues that should be examined as part of the environmental analysis. The public meetings are also a requirement of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which requires project proponents to provide opportunities for public participation in transportation decision-making. The process of determining the scope, focus, and content of an EIS is known as "scoping." Scoping meetings are a useful opportunity to obtain information from the public and governmental agencies. In particular, the scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential impacts and mitigation measures to be considered.

2.2.1 Public Participation Plan

NEPA and SAFETEA-LU require project proponents to provide opportunities for public participation in transportation decision-making. In order to meet the requirements of these two Acts, a Public Participation Plan (Appendix A) was developed to guide CTA through a comprehensive public participation process for the Red Line Extension EIS scoping phase. The plan includes public participation goals, strategies to engage the public, key audiences to be addressed and the plan for notification and outreach for the scoping phase of the project. The Public Participation Plan that is included in Appendix A was developed specifically for the scoping process and will be updated to address outreach needs for the release of the Draft Environmental Impact Statement.

2.2.2 Coordination Plan

Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) established an environmental review process for transit projects that has now been included in Section 139 of Title 23 of the U.S. Code. Section 139 directs agencies to prepare a plan for coordinating public and agency participation in and comments on the environmental review process for a project. The coordination plan describes how the lead agencies will provide opportunities for input from both the public and other agencies. The Coordination Plan includes the Public Participation Plan described above in Section 2.2.1.

2.3 Initiation of Scoping - Notice of Intent (NOI)

FTA published the NOI in the Federal Register on September 1, 2009. The publication of the NOI is the official federal notification of the agency's intent to prepare a DEIS. The NOI included notification of the dates and locations of the agency and public scoping meetings, the public comment period, as well as a description of the project purpose and need and alternatives. The NOI initiates the NEPA scoping process. A copy of the NOI is in Appendix B. Comments were accepted by CTA from the date of publication of the NOI in the Federal Register (September 1, 2009) through October 27, 2009. This provided a public comment period of 57 days.

2.4 Agency Scoping

2.4.1 Participating Agencies

Participating agencies can be Federal, State, tribal, regional, and local government agencies that may have an interest in the project. In accordance with SAFETEA-LU Section 6002 requirements, CTA, in coordination with the FTA, prepared and mailed participating agency invitation letters to 80 agencies with a potential interest in the project in September 2009. The identification of potential participating agencies built on the list of agencies identified through the AA process.

The responsibilities of these agencies include, but are not limited, to:

- Participating in the NEPA process starting at the earliest possible time, especially with regards to the development of the purpose and need statement, range of alternatives, methodologies, and the level of detail for the analysis of alternatives.
- Identify, as early as practicable, any issues of concern regarding potential environmental or socioeconomic impacts of the project.
- Participate in the issue resolution process, described in the Coordination Plan.
- Provide meaningful and timely input on unresolved issues.
- Participate in the scoping process.

Accepting the designation as a participating agency does not indicate project support and does not provide the agency with increased oversight or approval authority beyond its statutory limits.

Participating agencies for the project are listed in Appendix C and include federal, state and local agencies with an interest in the project because of an overlap in their area of jurisdiction or some specialized knowledge of potential project effects. Invited federal agencies automatically become a participating agency unless they decline the invitation in writing, while local and state agencies much accept the invitation. The final list of participating agencies then includes federal agencies that both accepted and did not decline as well as state and local agencies that accepted the invitations.

Agencies were given 30 days from the date of the letter to respond. Agencies may also request to be added at any time during the process. Appendix D contains two sample invitation letters; one that was sent to federal agencies and tribes and one that was sent to state, regional, and local agencies.

2.4.2 Cooperating Agencies

Cooperating agencies are, by definition in 40 CFR 1508.5, federal agencies with jurisdiction, by law or special expertise, with respect to any environmental impact involved in the proposed project. A state or local agency of similar qualifications may, by agreement with the lead agency, also become a cooperating agency. The cooperating agencies are by definition participating agencies as well, and while the roles and responsibilities of both are similar, the

cooperating agencies have a slightly greater degree of authority, responsibility, and involvement in the environmental review process.

The Federal Highway Administration (FHWA) has requested to become a cooperating agency for the Red Line Extension project because of their jurisdiction over the portion of the proposed alignment that would be located in the median of Interstates 94 and 57.

2.4.3 Agency Scoping Meeting

One Agency Scoping meeting was held as follows:

Time: Thursday, September 24, 2009, 10:30 A.M.

Location: CTA Headquarters, Conference Room C
567 W. Lake Street
Chicago, IL 60661

Attendees: 19, representing the following agencies and jurisdictions (sign-in sheet included in Appendix E):

- Illinois Department of Transportation (IDOT)
- Metra
- Metropolitan Water Reclamation District
- City of Chicago, Department of Community Development
- Chicago Department of Transportation
- Pace
- City of Detroit, Department of Transportation
- Illinois Commerce Commission
- Chicago Police Department
- Illinois State Police, Chicago District
- Chicago Park District
- City of Chicago, Streets and Sanitation
- Chicago Department of Environment
- Illinois Secretary of State Office

CTA hosted and presented the meeting with FTA present to observe. The meeting included a PowerPoint presentation similar to the one shown at the public scoping meetings and described in Section 2.5.4.1 with some additional information on the AA process.

2.4.3.1 Agency Scoping Meeting Comments

The topics addressed in the question and answer session included:

- A discussion of the capital cost estimates for each alternative and proposed funding sources.
- Effects of land acquisition.
- Coordination with other service providers.
- Opportunities to connect CTA and Metra at 115th and 130th.
- Opportunities for an intermodal station at 130th.
- Effects on Pace bus routes, access, and connections.
- Need to analyze bus effects for both build alternatives.
- Effects on bike access.
- Locations of grade separations and potential effects on bus service and street access.
- Use of green technologies.
- Coordination with wastewater treatment operations.
- Design of terminal at 130th Street.
- Effects of odors from sludge processing operations at adjacent property owned by the Metropolitan Water Reclamation District of Greater Chicagoland (MWRDGC) at 130th Street station.
- Potential reconfiguration of 95th Street Station.
- Safety and Security.
- Maintenance of access to expressway on-ramp during construction.
- Need for coordination regarding ongoing patrolling of facility.
- Cost of providing security.
- Management of contaminated debris during construction.
- Effects to wetlands.
- Coordination with/potential benefits to new environmental center at 38th and Torrence.
- Discussion of potential schedule for EIS, PE, and construction, and the EIS decision process.

The agency scoping meeting minutes are included in Appendix E.

2.5 Public Scoping

Public scoping is an important element in the process of determining the focus and content of an EIS. Scoping helps to identify the range of actions, alternatives, environmental effects, and mitigation measures to be analyzed in depth, and helps eliminate from detailed study those issues that are not pertinent to the final decision on the proposed project. Scoping is an effective way to bring together and address the concerns of the public, agencies, and other interested

parties.

Notification of the public scoping meetings was completed via several forms of media as described further in this section. This outreach was in addition to the official notice published in the Federal Register. Two public scoping meetings were held as described in Section 2.5.4.

2.5.1 Notification Database

CTA maintained and updated the stakeholder database developed during the AA study to track interested individuals and groups. To the extent possible, CTA includes mailing addresses as well as e-mail contact information on the database. The database includes those who participated in the early scoping AA process by attending a meeting or providing comment during the process.

In addition to those identified through the AA process, the notification database was expanded to include residents and businesses adjacent to the proposed build alternative alignments. Addresses for businesses and residences on parcels either immediately adjacent to the proposed alignment or separated from the alignment by a street, park, vacant parcel, or one residence, were also added to the notification database. Parcels on both the east and west sides of the UPRR right-of-way were included. Parcels adjacent to both sides of the Halsted Alternative alignment were also included.

At the time of the scoping meetings, 4,265 entries were listed on the Red Line Extension project database. A list of the public agency database entries is provided in Appendix F.

2.5.2 Public Notification Activities

In order to engage the public to participate in the environmental review process and attend a scoping meeting, some basic strategies were used including: 1) make it easy to participate, 2) provide easy-to-understand information that helps people provide informed scoping comments and 3) provide multiple ways to obtain information and provide comment and ensure stakeholders are aware of the planning process and are shown how public input will be used.

Invitations were mailed directly to people on the project mailing list and e-blast invitations were sent to the e-mail distribution list. Newspaper display ads were placed in a total of 9 publications, transit cards were placed on CTA vehicles and in transit stations, and flyers were placed at strategic locations in the project area. Additionally, a project web page was developed to provide all of the project information and pertinent scoping information.

Prior to developing notification materials, an evaluation was conducted of the languages spoken within census tracts within the project area with an emphasis on identifying populations with limited English proficiency. The proposed Red Line extension LPA crosses 12 census tracts. In two of those tracts the percentages of Spanish speakers who speak English “less than very well” were 15 percent and 22 percent. In the other tracts and for other languages, the percentages were all below 3 percent for people who speak English “less than very well”. Therefore, the notification and scoping materials were provided in English and Spanish for the Red Line extension project.

2.5.2.1 Direct Mail Notice

Scoping meeting invitations were mailed on September 1, 2009 to a list of 4,265 entries that included elected officials, government agencies (including local agencies not described in Agency Scoping discussion in Section 2.4), tribes, general interested persons, businesses, organizations, neighborhood associations and property owners adjacent to both sides of the proposed build alternatives routes. The notice provided information on scoping, the alternatives, how to provide a comment, and the public scoping meeting information. The mailed invitation included information in English and Spanish. (Appendix G).

2.5.2.2 Transit Cards

In order to reach a large audience of transit riders, "transit cards" or "car cards" with the public scoping meeting information were placed in various buses and stations in the project area. (Appendix G) Approximately 691 transit cards were distributed on September 4, 2009 for posting at all Red Line stations and on bus routes originating from the 103rd Street Garage.

2.5.2.3 E-mail Notification

An invitation e-mail was created that included information on the public scoping meeting and how to provide comments. The e-mail was sent to approximately 323 addresses to people who had previously demonstrated an interest in the Red Line extension on September 5, 2009. A copy of the e-mail notification is included in Appendix G.

2.5.2.4 Newspaper Advertisements

To invite the public to the scoping meeting and notify individuals about the comment period, display advertisements for the scoping meetings were placed in nine newspapers within the project area. Newspapers were selected based on their geographic focus, language needs, and audited circulation numbers. Display ads ran during the week of September 8, 2009 through the week of September 18, 2009. Ads were placed in different papers on different days of the week throughout the notification period. Ads were placed in the two papers with the largest circulation twice, running a week apart. In addition, a legal notice was placed in the Chicago Tribune on September 8, 2009. The display ads and legal notice are included in Appendix G.

Table 2-1. Newspaper Display Advertisements

Newspaper	Ad Size	Geographic Coverage	Language	First Ad Date	Second Ad Date
Chicago Sun-Times	1/4 page	Region	English	Tues, 9/08/09	Tues, 9/15/09
Hoy	1/4 page	Citywide	Spanish	Fri, 9/11/09	--
RedEye	1/4 page	Citywide	English	Wed, 9/09/09	--
La Raza	1/4 page	Citywide	Spanish	Sun, 9/13/09	--
Chicago Tribune - City and SW Zone	1/4 page	City, SW suburbs	English	Fri, 9/11/09	Fri, 9/18/09
Southtown Star	1/4 page	S. Suburbs	English	Sun, 9/13/09	--
Chicago Crusader	1/4 page	South	English	Thu, 9/17/09	--
Chicago Defender	1/4 page	South	English	Wed, 9/16/09	--
Beverly Review	1/4 page	South	English	Tue, 9/15/09	--
Legal Notice: Tribune	N/A	Region	English	Tue, 9/08/09	

Source: CWC Transit Group

2.5.2.5 Project Web Site

A project web site, www.transitchicago.com/redEIS/, was developed for the Red Line EIS. The site includes information about the project, the environmental review process, and the scoping information. The site also included information about how to submit scoping comments and who to contact for additional information. The web site prominently featured the dates and times of the public scoping meetings, as well as links to directions using public transit to access the meeting locations. Website content included the scoping booklets, presentations made at the public scoping meetings, and other information of interest to the public from the AA process. The website will continue to be updated at key milestones. Some materials posted to the website were translated into Spanish.

2.5.2.6 Additional Outreach During Public Scoping Period

In order to maximize the coverage of the outreach effort for the scoping meetings, a media release (Appendix G) was sent to local press outlets, meeting announcements were posted on local on-line community calendars, and flyers (Appendix G) were put in key locations around the area. The meeting announcement was distributed to the following village hall and library locations:

- City of Burnham
- City of Blue Island
- City of Calumet
- Village of Calumet Park
- Village of Dolton
- Village of Evergreen Park
- Village of Riverdale
- Altgeld Branch Public Library

- Blue Island Public Library
- Brainerd Branch Public Library
- Calumet City Public Library
- Hegewisch Library Branch
- James F. Vodak/East Side Branch Public Library
- Jeffrey Manor Branch Public Library
- Pullman Public Library
- Riverdale Public Library
- South Chicago Library Branch
- Tuley Park Library Branch
- Walker Branch Public Library
- West Pullman Library Branch

2.5.3 Elected Official and Stakeholder Briefings

There were four briefings with elected officials or stakeholders held on the Red Line Extension project. Generally, briefings covered a description of the project and the scoping process. The briefings included the following:

- Office of Alderwoman Austin, 34th Ward, September 15, 2009.
- Office of Alderman Beale, 9th Ward, September 14, 2009.
- Office of U.S. Representative Jesse Jackson, Jr., September 22, 2009.
- Roseland Business Development Council, October 10, 2009.

2.5.4 Public Scoping Meeting

CTA hosted two public scoping meetings to inform the public about the project and gather input on the scope of the environmental studies, draft purpose and need, and alternatives to be evaluated. Meetings were conducted in compliance with NEPA guidelines, and locations were selected to reflect equitable geographic coverage, proximity to public transportation, and to minimize overlap with other meetings scheduled in the project area. The locations were within the project area, accessible by public transit, and ADA compliant. The scoping meetings were set approximately five weeks in advance of the end of the public comment period on October 27, 2009.

For the convenience of all attendees, bus lines to and from the meeting sites were publicized on some notices and on the website. In order to provide the greatest opportunity for community participation, meetings were scheduled in the early evening on weekdays.

A total of 173 people signed in at the two meetings. There may have been a few additional attendees at each meeting who did not sign in. Approximately 35 people provided verbal

and/or written comments at the meetings. An additional 309 comments were received via letters, e-mail, and mailed comment cards throughout the public scoping period.

Meeting 1:

Time:	Tuesday, September 22, 2009, 6:00 to 8:00 p.m.
Location:	Historic Pullman Visitor Center 11141 S. Cottage Grove Avenue Chicago, IL 60628
Attendees:	87 people signed in
Comments:	11 verbal, 2 written

Meeting 2:

Time:	Thursday, September 24, 2009 from 6:00 to 8:00 p.m.
Location:	Woodson Regional Chicago Public Library 9525 S. Halsted Street Chicago, IL 60628
Attendees:	81 people signed in
Comments:	17 verbal, 5 written

2.5.4.1 Public Scoping Meeting Format

The scoping meetings began with a 45-minute open house format. During the open house session, project team members were present at project display boards to answer questions related to the technical aspects of the project. The open house session provided attendees with an opportunity to review the project information and clarify their understanding of the project and environmental process prior to the start of the presentation and subsequent comment period. Spanish and sign language interpreters were made available at both meetings. Following the open house period, a PowerPoint presentation was made to provide attendees with information regarding the purpose of scoping and information on the project purpose and need, background, the recently completed AA process, and the alternatives being carried forward into the DEIS (Appendix I). Emphasis was placed on the importance of the community providing comments before the comment deadline, at the public meetings or via e-mail, fax, or postal mail.

Following the presentation, the meeting shifted into a formal public comment session, which was recorded by a court reporter. Members of the public provided verbal comments to CTA on the scope of the EIS and the project which were recorded in formal transcripts (Appendix K). Comments were also accepted by comment sheets at the meeting and by mail, fax, and e-mail after the meeting until the close of the comment period on October 27, 2009. The oral comment period was moderated, and speakers were asked to limit their comments to three minutes. Those requiring translation were provided with six minutes. After the public comment portion of the meeting, the project team was again available to answer technical questions at the informational display boards until the end of the meeting time.

Agenda:
6:00-6:45 pm Open House
6:45-6:55 pm Presentation

6:55-7:55 pm Public Comments
7:55-8:00 pm Next Steps/Adjournment

2.5.4.2 Public Meeting Materials

Each meeting attendee was offered the following materials: an EIS scoping information booklet, a comment sheet, and a speaker card (Appendix H). The scoping information booklet provided a project overview and included the following sections: purpose of the EIS and scoping, environmental issues to be considered in the EIS, project overview, project alternatives, project purpose and need, public participation, how to participate in the decision-making process, and next steps. This scoping information booklet was also available in Spanish and was posted on the project web site.

The comment sheet allowed attendees to submit written comments during or after the meeting. The comment sheet was designed as a self-mailer so that individuals could easily mail comments to CTA if they needed more time to develop them after the public scoping meeting (Appendix H). The speaker card was provided for attendees to fill out and turn in before or during the public comment session if they wanted to give verbal comments. The speaker cards were provided to the hearing facilitator and names were announced to allow people to approach the microphone to make a comment (Appendix H).

Project exhibit boards were developed and used during the public open house part of the meeting. The boards included: No-Build Alternative, the Transportation System Management Alternative, the Locally Preferred Alternative, the Halsted Street Heavy Rail Transit (HRT) Alternative, Project Purpose and Need, How to Submit Comments, How to Stay Involved, Welcome to the Meeting, Environmental Review Process, Issues Potentially Considered in the Environmental Impact Statement, Meeting Agenda, and the Project Timeline (Appendix J). Exhibit boards were also posted on the website.

2.6 Comments Received

The public scoping period was from September 1, 2009 to October 27, 2009 which was greater than the 45 calendar days required by FTA rules. People were provided opportunities to comment in writing or orally at the two public scoping meetings or they could comment in writing via e-mail, fax, or postal letter. The comment cards distributed at the public meetings were designed to facilitate return of written comments both at the public meeting and via postal mail later during the public comment period. E-mail comments could be sent to a project specific e-mail address found on the project website and included in all notice materials distributed. In total, approximately 344 comments were received by the close of the public comment period. All comments received are included in Appendices K, L, and M.

At the September 22nd public scoping meeting, 87 people signed-in, 11 people made formal public comments and 2 submitted written comments by the end of the meeting. At the September 24th public scoping meeting 81 people signed-in, 17 people made formal public comments and 5 submitted written comments by the end of the meeting. An additional 309 written comments were received on the Red Line Extension project by the close of the public comment period.

Section 3
Summary of Scoping Comments

3.1 Introduction

CTA accepted comments on the Red Line Extension project throughout the entire scoping period, from September 1, 2009 until October 27, 2009. Agencies, community groups, members of the public, elected officials, and other interested parties submitted 344 letters, e-mails, comment cards, and individuals' oral testimony during this period. The summary table (Table 3-1) provides a tally of the topics discussed in the comments.

It should be noted that the combined numbers of comments listed in the following subsections and the summary table will be greater than the total number of comment submissions because some people discussed multiple topics in their submission. Topics covered in the comments included the purpose and need, the alternatives to be analyzed in the DEIS, potential impacts and mitigation measures, and other substantive issues. This section contains a summary of comments received during the scoping period. The actual comments may be found in Appendices K, L and M.

3.2 Summary of Substantive Comments

All comments were reviewed and categorized in an electronic database. The database contains information documenting the name of the commenter, the agency or organization the commenter represented, the method by which the comment was received, the topic categories addressed in the comment. The full text of each comment is included in Appendices K, L, and M.

The comments were largely fit into three topic categories. The major categories of comments were the project purpose and need (approximately 7 comments), the alternatives to be studied in the DEIS (including alignment options, station location options, and potential design features; approximately 326 comments), and environmental impacts and mitigation measures (approximately 37 comments). The following sections contain summaries of the comments from each major category.

Table 3-1 provides a summary of the comments received during the scoping period. Transcripts of the spoken comments submitted at the public scoping meetings and full text of all written public comments are provided in Appendices K and L. Agency comments are provided in Appendix M.

Table 3-1 Comment Summary			
Purpose and Need	Ease congestion in the region Improve transit access to and from Far South side Reduce congestion at 95th and Dan Ryan terminal Provide connections to transit disadvantaged communities		
Proposed Alternatives	Support No-Build (0) Support TSM (0)	LPA – UPRR HRT Alternative(318) Support (317) Do Not Support (1)	Halsted Street Alternative(3) Support (3) Do Not Support (0)
Design Comments	Stations (326) Extension should connect to Altgeld Gardens at 130th Provide bike access and parking Parking facilities should be larger Parking facilities should be smaller Parking should be at church lots Station design needs to accommodate bus access	Design Features (12) Recycling stations Use alternative energy Lighting design to reduce light pollution Natural stormwater management Native landscaping Green roofs Bike access and parking	Design Features (cont) Use permeable paving Incentives for alternate fuel vehicles Adequate bus bays for Pace, CTA, Paratransit Operator facilities Passenger information Signal priority for bus access
Other Alternatives	1. One way loop 2. Leave the UPRR right-of-way at 115th Street or Kensington Avenue, travel east to the Metra Electric line, cross over the electric line and turn south onto the IHB right-of-way	3. Use the alleys to the east of South State Street or South Michigan Avenue 4. Extend electric line routes to connect with an Indiana-Illinois border parking lot	5. Use I-94 and/or I-57 for the extension 6. Use of the Green Line from Stony Island to I-94 and South to 159th Street 7. A 9.5 mile one-way loop with seven stations
Potential Impacts	Transportation Impacts (21) Land Acquisitions, Displacement and Relocations(14) Community and Neighborhood Impacts (21) Visual and Aesthetic Impacts (6) Noise and Vibration (9)	Parklands (3) Economic and Fiscal Impacts (7) Safety and Security (8) Environmental Justice (284) Construction Impacts (8) Public Services (3)	

Note: Tallies are approximate

3.3 Comments Related to Purpose and Need

Most comments regarding the purpose and need for the project cited the benefits of the rail extension. In total, approximately 7 comments related to purpose and need were received. The general topics that these comments addressed were:

- Easing congestion in the region.

- Providing more transit options.
- Reducing bus congestion at the 95th and Dan Ryan Terminal.
- Providing connections to transit disadvantaged communities.

3.4 Comments Related to Alternatives

An approximate total of 326 comments specifically discussed the alternatives. The majority of the comments, approximately 317, supported the Locally Preferred Alternative (LPA) - Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) Alternative. Most of the comments in support of the LPA also noted that the extension should reach the Altgeld Gardens/Calumet River area at 130th Street, which is already a feature of the Locally Preferred Alternative. Many comments simply indicated a preference for the Locally Preferred Alternative without indicating the reason for their choice. One comment opposed the extension citing relocation impacts, and potential effects related to property values, traffic, and noise. A few comments mentioned other alignments. There were no comments specific to the no build or the TSM alternative. Three comments expressed support for the Halsted Street HRT Alternative as an approach that would have less impact on existing residences. However, even these comments mentioned the need for the extension to reach the Altgeld Gardens area.

3.4.1 Locally Preferred Alternative (LPA)

Approximately 317 comments were received expressing a preference for the LPA. Comments on this alternative included:

- Need for the extension to reach the Altgeld Gardens area.
- Potential to enhance neighborhoods by easing congestion and providing more transit options.
- Potential impact of land acquisitions, displacements and relocations due to the new extension and the park and ride facilities.
- Potential impacts related to construction.
- Potential noise and vibration impacts.
- Potential impacts to parking, bicycle and pedestrian circulation, bus access and routes.
- Potential to increase foot and vehicle traffic around the stations.
- Potential to increase litter and crime around the stations.
- Potential to provide options to transit disadvantaged population.
- Provides the greatest potential to mitigate traffic congestion feeding in from the south.
- Concerns about neighborhood compatibility.
- Potential impacts to parklands.
- Potential energy usage effects.
- Potential for brownfields redevelopment.

- Potential lighting and shadow effects.
- Potential for economic development.

3.4.2 Halsted Street Heavy Rail Transit (HRT) Alternative

Three comments were received supporting the Halsted Street Heavy Rail Transit (HRT) Alternative. Two of those comments included the refinement that the alternative should still reach the Altgeld Gardens area.

3.4.3 Station Locations and Connections

Approximately eight comments suggested station locations and connections that the Red Line Extension could make. The comments pertaining to station locations and connections included:

- Extension should connect to the Altgeld Gardens/Calumet River area at 130th Street.
- A station at 115th or Kensington to provide an easier connection to Metra and the South Shore.
- Concerns about providing bicycle access and parking.
- A suggestion to increase the proposed parking at the large park-and-ride facilities.
- Reduce the number of large park-and-ride stations and place more reliance on PACE bus services to get to the train.
- Use church parking lots instead of constructing new park-and-rides in the vicinity of the four station stops of the extension.

3.4.4 Other Alignments

CTA received approximately eight comments suggesting alignments for the Red Line Extension other than the LPA Alternative. These suggested alignments included:

- A one-way loop alternative.
- An alignment that leaves the UPRR right-of-way at either 115th Street or Kensington Avenue traveling east to the Metra Electric line, crossing over the electric line and turning south onto the IHB right-of-way.
- An alignment that uses the alleys to the east of South State Street or South Michigan Avenue.
- Extension of the electric line routes to connect with an Indiana-Illinois border parking lot.
- Use of I-94 and I-57 for the extension.
- Use of the Green Line from Stony Island Avenue to I-94 and South to 159th Street.
- A 9.5 mile one-way loop with seven stations.

3.4.5 Design Features

Approximately twelve comments were submitted suggesting additional design features to be taken into consideration. Suggestions regarding design features were primarily related to

issues of sustainability. These features include the following:

- Recycling opportunities at stations and parking areas.
- Alternative energy options including solar, solar thermal, wind and more to provide electricity and heating/cooling.
- Solar arrays (on rooftops and large expanses) to return energy to the grid.
- Downward facing lighting to reduce light pollution.
- Bioswales and rain barrels.
- Native landscapes with little to no irrigation.
- Green roofs.
- Bicycle access and parking.
- Permeable paving for the park-and-ride areas.
- Charging stations for electric vehicles.
- Include sufficient bus bays at the stations to accommodate both Pace fixed/express routes, Regional ADA Paratransit services, and CTA bus routes.
- Include bus operator facilities and passenger information as well as bus priority access such as transit signal priority or bus-activated signals to allow buses to enter/exit the terminal with minimal congestion.

3.5 Comments Related to Potential Impacts

Approximately 37 comments received pertained to specific potential impacts of the project. Commenters discussed a wide range of potential impacts, though the majority touched upon relocations and displacements, safety, community compatibility, and transportation related issues such as traffic, parking, and bike and bus access to park and rides. The comments on each type of impact are summarized in the following subsections.

3.5.1 Transportation Impacts

Approximately 21 comments touched on potential transportation impacts including potential impacts to traffic circulation, parking, and access to park and rides by bikes, buses, and pedestrians. Comments included the following issues:

- Need for immediate relief of congestion at the 95th/Dan Ryan Terminal.
- Need for easy access for first responders such as police, fire and medical response during an emergency.
- Potential impacts related to increased foot and vehicle traffic.
- Arterial roadway access to/from the proposed station(s) served by connecting bus services need review for issues such as railroad grade crossings, street parking, and intersection improvements to accommodate bus movements.
- Suggestions for location and sizing of park and rides (both larger and smaller), and an

alternative to use church parking lots for commuter parking rather than new construction.

- Potential impacts to neighborhood parking if park and ride fills up.
- Extension will increase transit options for users.
- Need to increase bus service including night owl service.
- Reductions in travel times for bus riders.
- Use of bus services to access rail line.
- Potential effects on traffic patterns and congestion in a larger regional context.

3.5.2 Land Acquisition, Displacement, and Relocations

Fourteen comments about land acquisition, displacement, and relocations were received. The issues addressed in these comments include concern from the potential impacts to houses around the stations and extension. Comments included the following issues:

- Potential for property loss due to the construction of the stations, park and ride lots, and the extension line.
- Potential to impact homes on Eggelston Street.
- Potential to impact homes on the east side of the tracks.
- Potential to impact industry and businesses on the west side of the tracks.
- Reluctance of senior residents to relocate.

3.5.3 Community and Neighborhood Impacts

Twenty-one comments about neighborhood compatibility and potential community impacts were received. The comments focus on the potential impacts to the neighborhoods due to construction and operation of the Red Line Extension. Comments included the following issues:

- Potential to enhance neighborhoods.
- Potential for transit-oriented development.
- Issues of compatibility between commuter rail and residential neighborhoods.
- Operational impacts on residential character. Concerned that the construction and operation of the project will cause adverse impacts to the residential character of the community.
- Potential increased safety issues for residents near the extension.
- Disruption to senior citizens in the project area.
- Potential loss of residential homes.
- Potential effects of lighting around the stations and tracks.
- Potential loss of residential street parking due to transit riders parking in the

neighborhoods.

- Potential impact to residences on Eggelston Street including relocation, property values changes and increased traffic.
- Potential effects related to redevelopment of brownfield sites, such as environmental or human health risks.
- Effect of increasing transit access to transit disadvantaged communities.
- Potential to support and revitalize underserved communities.

3.5.4 Visual and Aesthetic Impacts

Six comments about visual and aesthetic impacts were received. Comments were primarily related to the potential for light impacts. One comment noted the potential for the trestle on Halsted Street to cause dark shadows and blight the area. Another comment mentioned the potential for an elevated track in back of homes to create dark areas and a visual impact.

3.5.5 Noise and Vibration

Approximately nine comments about noise and vibration were received. The issues addressed in these comments included noise and vibration from the trains moving along the tracks and potential damage to surrounding buildings due to vibration. One comment requested that the CTA do a full-scale investigation of the "best available" and "best practicable" noise mitigation technologies.

3.5.6 Parklands

Three comments about parkland and recreational facilities were received. Comments noted potential impacts to both Wendell Smith Park and Fernwood Parkway Park. In addition, one comment noted the potential opportunity to provide better access to the Ford Calumet Environmental Center.

3.5.7 Economic and Fiscal Impacts

Approximately seven comments received concerned the economic and fiscal impacts of the project. These comments included the following issues:

- Potential to increase labor productivity as a result of mitigating car congestion and reducing travel times to work for residents of the far south side of Chicago and south suburbs.
- Concerns about the project costs compared to other projects across the country.
- Potential impact to property values of the homes near the extension.
- Potential to disrupt businesses during construction.
- Potential beneficial impact of transit investment on job creation and increasing employment opportunities.
- Employment model should demonstrate benefits to working populations in project area. Concern that the project will not provide jobs to the people in project area.

- Several suggested design variations were mentioned as potentially being lower cost options.
- Opportunities for transit oriented development and/or commercial and retail services near proposed stations and park and rides.
- Concerns about funding sources and maintenance and operation costs.

3.5.8 Safety and Security

Eight comments about safety and security were received. Comments included the following issues:

- Ability of first responders to access construction areas.
- Concerns that lighting around stations and along the rail line be adequate to discourage crime. Potential for the trestle on Halsted Street to create shadows.
- Potential impact for increased crime at stations and surrounding neighborhoods.

3.5.9 Environmental Justice

Approximately 284 comments were received that focused on the benefits of the proposed project to transit disadvantaged communities (communities underserved proportionally by transit investment). One comment referred to potential air quality benefits that might accrue to the low income community at Altgeld Gardens. Several comments specifically mentioned environmental justice as a potential goal or benefit of the project. Approximately five of the comments referred to a potential for or concern about brownfields development to mitigate the effects of contamination within the project area and effects of hazardous materials on disadvantaged communities. Some specific comments included:

- EIS needs to demonstrate compliance with environmental justice principals.
- Employment model should demonstrate benefits to working populations in project area.
- Potential for environmental justice issues related to job creation and increased employment opportunities.
- Effect of increasing transit access to transit disadvantaged communities.
- Potential to support and revitalize underserved communities.
- Reluctance of senior residents to relocate.

3.5.10 Construction Impacts

Eight comments about construction effects were received. Comments included the following concerns:

- Potential for an increase in termites and rodents in neighboring homes and structures during demolition.
- First responders need access to and through construction zones.
- Potential for construction vibration to damage nearby homes.

- Potential impacts of construction noise.
- Potential disruption of neighborhood traffic patterns and parking
- Construction duration.

3.6 Comments Submitted by Federal, State, and Other Agencies

Seven agencies submitted comments during the scoping period. Most of the topics mentioned were also covered in the comments discussed in the previous sections. However, some of the agency comments presented new issues, including requests to ensure compliance with government-mandated policies and regulations, coordination among transit providers, and safety concerns. The agency comments are summarized in the following sections, and full text of the agency comments is provided in Appendix M. The concerns of all the agencies will be addressed both through the DEIS analysis and through on-going coordination with CTA.

There were no comments from federal agencies. Comment letters were received from two state agencies, one regional transit provider, and four City of Chicago agencies.

3.6.1 Comments Submitted by State Agencies

The Illinois Environmental Protection Agency did not have any objections to the proposed project and highlighted the future need to obtain construction permits for construction stormwater management and the potential need to obtain permits from the US Army Corps of Engineers if there would be any in-water work. The Illinois State Police highlighted concerns for first responders including access to construction zones and access to elevated tracks.

3.6.2 Comments Submitted by Other Agencies

The Pace suburban bus service, the City of Chicago Department of Streets and Sanitation, Chicago Department of Environment, Chicago Housing Authority, Chicago Police Bureau of Patrol, and the Metropolitan Water Reclamation District of Greater Chicago (MWRD) submitted comments covering some of the topics mentioned in previous sections, as well as:

- Evaluate opportunities for sustainability actions such as recycling stations, use of solar energy, sustainable management of stormwater, incentives for use of fuel efficient or alternative fuel vehicles, and/or reuse and recycling of construction debris.
- Consider connections to the new Ford Calumet Environmental Center.
- Consider intermodal connections and providing connections between transit systems at proposed station stops at 115th and at 130th Streets.
- Evaluate potential impacts of construction and operation on the need for services from other City departments including staffing levels and specialized rail training.
- Evaluate impacts on street lights, street lighting levels, and street trees.
- Extension to Altgeld Gardens will improve city wide accessibility for transit dependent populations.
- Ensure safety of transit users by evaluating potential security risks from less used and isolated access points to train lines.

- Arterial road access to proposed stations should be evaluated for adequate grade crossings, street parking, and intersection configurations to accommodate connecting bus movements.
- Station design should include consideration of access requirements for both Pace and CTA bus routes and Regional ADA Paratransit, operator facilities, passenger information, and bus priority access.
- Evaluation of connecting bus service to new stations should consider likely route restructuring that would occur to reduce service overlap.
- Design will need to maintain access to MWRD facilities, evaluate potential impacts to operations, and coordinate with utility locations.
- Potential use of MWRD property for proposed stations and park and ride facilities at 130th Street would require agreements with MWRD.
- Evaluate impacts to wetlands potentially located in the vicinity of the proposed 130th Street station.
- Evaluate potential effects of odors from MWRD facilities on proposed transit facilities.

Section 4
Responses to Comments

4.1 Introduction

The purpose of scoping is to provide an opportunity for agencies and the public to comment on the purpose and need, the range of alternatives proposed for analysis, and to help the project proponent identify issues that should be evaluated in the DEIS analysis. Therefore, all comments that fall within the scope of the NEPA process will be addressed in the DEIS. CTA will also continue to work closely with agencies and stakeholder groups to address issues identified through scoping.

4.2 Comments Related to Purpose and Need

There were no comments directly related to the stated purpose of the project. A number of comments did affirm many of the previously identified needs for the project. In addition, some commenters identified additional conditions or benefits that support the need for the project. The DEIS will expand and clarify the purpose and need statement in response to these comments.

4.3 Comments Related to Alternatives

Many commenters expressed a preference for the LPA because it would enhance neighborhoods, ease congestions and provide better transit options for users. Comments that included reasons for a stated preference also provide insight into potential impacts or benefits of all of the alternatives. These insights into potential impacts are helpful in guiding the impact analysis of the DEIS. Comments that provide this insight are also counted as a comment on a particular resource discipline and will be included in the analysis of potential impacts.

A few comments expressed a preference for an alternative that is not currently proposed for consideration in the DEIS. The DEIS will summarize alternatives previously considered and eliminated and the process used to do so. Alternatives that do not meet the project purpose and need will not be evaluated further.

4.4 Comments Related to Potential Impacts

Potential impacts or benefits of alternatives identified by commenters will be analyzed in the DEIS. Insights into how a particular alternative may affect traffic, neighborhoods and communities, safety, or accessibility in the project area and the region are a valuable result of the scoping process. Many comments reflected an awareness of the transit dependency of the communities in the project area and hope for potential benefits to disadvantaged populations that may result from the project. Specific comments on each potential impact will be used to guide the analysis of the alternatives.
Specific comments on potential impacts were related to traffic circulation and congestion, parking issues, property acquisitions and relocations, safety, community and neighborhood compatibility, economic development opportunities, visual and aesthetic concerns, noise and vibration, and construction activities.

Appendix A
Public Participation Plan

Chicago Transit Authority

PUBLIC PARTICIPATION PLAN

ENVIRONMENTAL IMPACT STATEMENT (EIS) PHASE 1

RED LINE EXTENSION

Submitted: July 14, 2009

TABLE OF CONTENTS

Overview 1
Goals 3
Key Issues 4
Key Audiences 5
Public Participation Activities 8
Public Participation Notification and Information Materials 10
Documentation 13

APPENDIX

A. Overview Schedule
B. Mailing/Stakeholder List
C. Media Release Distribution List

Overview

Red Line Extension

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line southwest from the 95th Street terminal station to 99th Street in the I-57 median, then turning south and southeast along or adjacent to the Union Pacific Railroad (UPRR) right-of-way until 120th Street, continuing southeast at-grade to 130th Street. CTA and the Federal Transit Administration (FTA) will be preparing an Environmental Impact Statement (EIS) that will evaluate the environmental impacts of constructing and operating the extension. The extension includes 5.3 new route miles of rapid transit to the existing Red Line, four additional stations – at 103rd, 111th, 115th and 130th Streets – with new park-and-ride and bus terminal facilities at each station, and 78 new railcars. CTA is investigating a shortened version of this LPA (to 115th Street) to evaluate potential improvements in cost-effectiveness.

The proposed project is intended to:

- Improve commute times for study area residents
- Improve access to the 95th Street station
- Alleviate congestion at the existing Red Line terminal station, where current use exceeds design capacity, resulting in delays, safety issues, and lack of transit attractiveness
- Reduce adverse impacts of projected growth to study area resident without transportation alternatives

Public Participation Plan

The National Environmental Policy Act (NEPA) requires evaluation of potential environmental impacts associated with federal projects and actions. For this project, the evaluation will be documented in an Environmental Impact Statement (EIS). An EIS will be prepared to identify impacts related to project construction and operation.

The EIS will cover a No Build Alternative, a Transportation Systems Management (TSM) Alternative and the Locally Preferred Alternative. The EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of the alternatives and mitigation measures to reduce or eliminate potential impacts.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is an act that governs United States federal surface transportation spending and requires project proponents provide opportunities for public participation in transportation decision-making. SAFETEA-LU incorporates changes aimed at improving and streamlining the environmental process for transportation projects. It provides a framework for carrying out the existing requirements under NEPA and other laws.

The process of determining the scope, focus and content of an EIS is known as “scoping.” Scoping meetings are a useful opportunity to obtain information from the public and governmental agencies. In particular, the scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential impacts and mitigation measures to be considered.

Public Participation Plan for Next Phase

This Public Participation Plan covers activities and materials for the scoping phase only. An additional plan will be provided to outline public participation activities that will be done during the development and review of the Draft EIS and Final EIS.

Goals

The public participation plan is intended to guide the CTA through a comprehensive public involvement and outreach process for the Red Line Extension EIS scoping phase. The program is flexible in order to respond appropriately to public and agency issues as they arise. It is anticipated that additional information will become available that will further guide proposed activities. The dates and activities are preliminary and may change.

Two of the major goals of the NEPA environmental analysis process are to better inform governmental decisions and to enhance citizen involvement. With these goals in mind, the public participation program will:

PUBLIC PARTICIPATION GOALS
o Build on previous outreach efforts established during the Alternatives Analysis phase o Make the complex issues associated with the proposed project and the environmental analysis understandable to stakeholders o Ensure stakeholders are aware of the planning process and the purpose and content of the proposed project o Provide a range of opportunities for the public and interested stakeholders to comment on the proposed project and environmental studies o Fulfill the public participation requirements and guidelines of NEPA and the federal transportation reauthorization bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act-A Legacy for Users (SAFETEA-LU) o Document all public and agency input.

The public participation program provides a variety of communication channels to help the public understand the current scope of the study, including its impacts and benefits. The program will solicit input and feedback from the public as to their specific needs, issues, concerns, and recommendations. In order to engage the public to participate in the environmental review process, some basic strategies will be used in the public participation program.

STRATEGIES TO ENGAGE PUBLIC	APPROACH
o Make it easy to participate o Provide easy-to-understand information that helps people provide informed scoping comments o Provide multiple ways to obtain information and provide comment o Ensure stakeholders are aware of the planning process o Show how public input will be used	o Scoping meeting within the project area; Web access to all project information; outreach materials in English and Spanish o Straightforward Scoping Booklet, Web site, exhibit boards and handouts at meetings o Web site, mailed notice, e-blasts, community calendars, comment cards, media o Careful review and augmentation of the existing project mailing list o Stakeholder and Alderman/elected official briefings to identify issues and find additional ways to engage the local community o Document all public and agency input in the Scoping Meeting Summary Report; provide final report on Web site

Key Issues

As the study progresses, key issues will evolve and the appropriate public involvement approach to address key issues will be determined. An initial list of the key issues has been developed. The list will be amended and expanded as the study moves forward.

KEY ISSUES
General Issues/Community Concerns o Public safety (schools, crime, crossings) o Providing access to underserved communities (Altgeld neighborhood) o Location/benefit of different station options o Length of the study process o Impact to Chicago Olympic bid o Impact/enhancement on residential/business/school areas surrounding the project o Effect/enhancement of quality of life o Existing negative environmental conditions o Noise/vibration for residents along corridor o Potential reduction of greenhouse gasses vs. contribution to sprawl o Accuracy of model data (ridership numbers) o Suburban residents' image of CTA service **Economic Issues/Concerns** o Jobs/improved economy o Project cost o Funding o Cost vs. benefits o Local workforce participation o Potential to take money away from other needed public projects o Public transit effects on property values o Support for local economic and land use plans and goals **Transportation Issues/Concerns** o Coordination/connectivity with other transit systems o Project amenities for bike/pedestrian and transit users o Impact of program on the other CTA services **Construction Issues/Concerns** o Length of construction o Potential traffic/detours/delays o Potential parking/relocation/displacement during construction o Potential transit access/impacts on bus or transit stops

Key Audiences

Anyone who lives, works, plays, learns and commutes through the Red Line Extension project area, or has some involvement or oversight in how the line will operate, is an important audience member. The public participation program will create a structure for gaining an understanding of the different community interests and characteristics. The project is important to many different groups, each with specific interests in the study. The outreach team will keep these groups involved and continually informed about the process and progress of the analysis. Brief discussions of some key audiences follow.

Local Community

Reduction of impacts on residential areas and maintenance of neighborhood character are important issues for neighborhood organizations and homeowners. The public participation program will include outreach to property owners and residents around and adjacent to the extension. Some of the local communities that may be interested include the following:

- Altgeld Neighborhood
- Beverly Neighborhood
- Burnham Residents
- Chatham Avalon Park Community Council
- Chesterfield Community Council
- City of Blue Island Residents
- City of Calumet Residents
- Cottage Grove Heights Neighborhood
- Gardens Neighborhood
- Longwood Manor Neighborhood
- Morgan Park Neighborhood
- Neighbors of Fuller Park
- Princeton Park Neighborhood
- Pullman Neighborhood
- Roseland Neighborhood
- United Neighborhood Organization
- Village of Calumet Park Residents
- Village of Dolton Residents
- Village of Evergreen Park Residents
- Village of Riverdale Residents
- Washington Heights Neighborhood

Business / Business Associations / Institutions

Business interests vary along the corridor. Some business stakeholders value the extension's potential enhancement of employee and customer access to the region while others are concerned about its effects on individual business sites. This overall group includes the industries, local business leaders and chambers of commerce. The outreach will solicit ideas and concerns from the business community. Some of the local business groups that may be interested include the following:

- 87th Street Stony Island Chamber of Commerce
- 95th Street Corridor
- American Brotherhood of Contractors
- Association of Asian Construction Enterprises
- Black Contractors United (BCU)
- Blue Island Chamber of Commerce
- Bronzeville Chamber of Commerce
- Business and Economic Revitalization Association
- Calumet Area Industrial Commission
- Calumet City Chamber of Commerce
- Chatham Business Association
- Chicago Area Gay & Lesbian Chamber of Commerce
- Chicago Minority Business Development Council (CMBDC)
- Chicago Southland Chamber of Commerce
- Chicagoland Chamber of Commerce
- Cosmopolitan Chamber of Commerce
- Greater Auburn -Gresham Development
- Greater Southwest Development Corp
- East Side Chamber of Commerce
- Hegewisch Chamber of Commerce
- Hispanic American Construction Industry Association (HACIA)
- Illinois Hispanic Chamber of Commerce
- Illinois Sports Authority
- Latin American Chamber of Commerce
- National Association of Women Business Owners (NAWBO-Chicago Area Chapter)
- Predestined Incorporated
- Puerto Rican Chamber of Commerce of Illinois
- Rainbow Push Coalition, International Trade Bureau
- South Chicago Chamber of Commerce
- Southwest REACH Center
- St. Bernard's Hospital and Health Care Center
- Women's Business Development Center (WBDC)

Associations / Special Interest Groups / Schools

Sensitivity to the surrounding environment is important to developing an acceptable project. The input of various local, state, and federal agencies will be obtained throughout the environmental process. In addition, associations, special interest groups and schools will be consulted. Some of the key groups that may be interested include the following:

- Alianza Leadership Institute
- Apostolic Church of God
- Carver Military Academy
- Catholic Charities - Community Affairs and Civic Affairs
- Chicago State University, Office of Public Affairs
- Chicago Urban League
- Chicagoland Bicycle Federation
- Corliss High School
- Developing Communities Projects, Inc
- Firman Community Services
- Gwendolyn Brooks College Preparatory High School
- Harlan Community Academy High School
- Historic Pullman Foundation
- Illinois Institute of Technology
- Kennedy King College
- Metro Seniors in Action
- Morgan Park High School
- NAACP, Chicago Southside Chapter
- Northeastern University Center for Inner City Students
- Northwestern University
- Olive-Harvey College
- Percy L. Julian High School
- Pullman Civic Organization
- Pullman Historic Visitor Center
- Rainbow/Push Coalition
- Riverdale Community Resource Center
- Roseland Heights Community Association
- Roseland Heights Community Organization
- Rosemoore Community Association
- Salem Baptist Church of Chicago
- Senior Service Coalition of Southeast Chicago
- Simeon Career Academy
- South Shore Cultural Center
- Southeast Environmental Task Force
- St. Sabina Church
- Strategies for Community Economic Development & Finance
- Teamwork Englewood
- University of Chicago
- University of Illinois at Chicago -College of Urban Planning and Policy
- West Chatham Improvement Association
- YWCA

Commuters

Commuters are interested in the study as it relates to their daily commute. Key issues include traffic impacts and congestion, safety, and access. Advanced, timely information is important for this group.

Public Agencies and Local Government

Coordination and cooperation among agencies and all levels of government are an important element of this study. Some of the key agencies and local government representatives that may be interested include the following:

- Alderman, Ward 3
- Alderman, Ward 6
- Alderman, Ward 7
- Alderman, Ward 8
- Alderman, Ward 9
- Alderman, Ward 17
- Alderman, Ward 34
- Beverly Area Planning Association
- Chicago Housing Authority
- Chicago Roseland Development Corporation
- City of Blue Island
- City of Burnham
- City of Calumet
- City of Chicago Department of Community Development
- City of Chicago Department of Transportation
- Congressmen
- Cook County Commissioners
- South Suburban Mayors & Managers Association
- Southeast Chicago Development Commission
- State Representatives
- State Senators
- Village of Calumet Park
- Village of Dolton
- Village of Evergreen Park
- Village of Riverdale
- Village of Riverdale, Community Development Department

Media

Media coverage offers an efficient means of communicating with the general public. Effective coordination with local and regional media contacts will be crucial to raising public awareness and explaining the study. Supplying the media with updated, factual information increases the

likelihood of balanced, informative coverage. Ethnic, multi-lingual media coverage will also be an important element of the media outreach. See Appendix C for a list of the media outlets.

Public Participation Activities

Stakeholder and Alderman/Elected Official Briefings

An initial task in the public involvement program will be to identify areas of agreement and conflict among various stakeholders. Individual meetings with key stakeholders will be informal but structured to obtain input on goals, objectives, key issues, preferred communication tools, and public policy considerations. Input obtained from the stakeholder briefings will be shared with the team and incorporated in the public participation program. The team will work with CTA to develop the list of key stakeholders that will be briefed.

Schedule:

Schedule Meetings:	End of August
Hold Stakeholders Meetings:	Between 9/9/09 and 9/29/09

Agency Scoping Meeting

An agency scoping meeting will be held to coordinate and facilitate work with the designated federal, state and local agencies. Agendas for all meetings will be prepared and discussions and agreements will be fully documented.

Location

- The meeting will be held at the CTA offices.

Schedule:

- Agency Scoping Meeting: 9/22/09

Public Scoping Meeting

The scoping meeting will first inform the public about the project process, the Locally Preferred Alternative, and the public participation plan. Then, the meeting will gather input on the scope of the environmental studies, draft purpose and need, and the alternatives to be evaluated.

Schedule:

- Public Scoping Meeting: Between9/23/09 – 10/2/09

Location

The meeting location will be within the project area and must meet FTA criteria. Locations will be identified in conjunction with the Aldermen in the project area.

The locations identified must meet the following criteria:

- The facility must have at least two large rooms – one room must be able to accommodate a theater type presentation that can hold at least 100 people and a second room must be available to comfortably accommodate the presentation boards, technical staff, and public
- Must be ADA accessible
- Near public transportation
- Free of charge

Format

The meeting will start with an open house format where members of the public and other interested parties can view exhibit boards with project information. This informal setting provides participants a chance to ask questions of project team members who understand the project objectives and alternatives.

The project team will be available to answer any questions during the open house and will encourage people to make formal comments in writing or during the comment session. A short PowerPoint presentation will follow, providing an overview of the Locally Preferred Alternative, the NEPA process, the purpose of scoping, and the potential environmental issues.

The meeting will end with a session where members of the public can provide oral comments on the scope of the EIS. Each presentation will be set up to accommodate 100 attendees. Comments may be provided at the meeting by comment cards and during the public comment session. A court reporter will take public comments and input at the meeting and document the formal comment session. In addition, material will be available with contact information for those who wish to submit written comments later during the scoping period.

Comments will not be addressed during the meeting. The purpose of the scoping meetings is to listen to people's concerns and to address them through the analysis in the EIS. CTA will not respond to comments during the open comment period. The open house portion of the meeting is intended to provide people an opportunity to ask questions and clarify their understanding of the project proposal.

Schedule:

- 6:00-6:45 pm Open House
- 6:45-7:05 pm Presentation
  - Welcome/Meeting Purpose and Format
  - Project Overview
  - Environmental Process, Scoping and Environmental Issues
- 7:05-7:55 pm Public Comments on Scope of EIS
- 7:55-8:00 pm Next Steps/Adjournment

Note: The scoping meeting will be advertised from 6:00 – 8:00 pm and the team and staff will stay until 8:00 pm, even if no members of the public are present. Also, the team and staff will not end the meeting until everyone who wishes to speak has had an opportunity to do so.

Public Participation Notification and Information Materials

Notice of Intent (NOI)

The publication of a Notice of Intent in the Federal Register is the first formal step in an EIS process. The Notice of Intent (NOI) will be sent by CTA, the lead agency, to notify agencies that it plans to prepare an Environmental Impact Statement (EIS).

Schedule:

- Publish NOI in Federal Register: 9/8/09
- Beginning of 45 day comment period: 9/9/09

Participating Agency Invitation Letters

Letters inviting agencies to be involved in the process will be prepared.

Schedule:

- Mail participating agency letters: 8/26/09

Public Scoping Invitation Notice

A one page mailer will act as an announcement for the meeting. It will include the meeting date, location and time, and will also provide basic information about the project, the environmental process, and date by which public comments must be submitted. The notice will be translated into Spanish and Polish.

Schedule:

- Mail scoping invitation notice (arrive 2 weeks in advance of meeting): 8/26/09

Other Notification (Village Hall, Libraries, Blogs, e-blasts, Transit Cards)

Notice of the scoping meetings will be posted and distributed throughout the area including at Village Halls, libraries, e-list serves and with community groups.

Schedule:

- Launch notification distribution: 8/26/09

Village Hall Announcement Posting Locations:

- City of Burnham
- City of Blue Island
- City of Calumet
- Village of Calumet Park
- Village of Dolton
- Village of Evergreen Park
- Village of Riverdale

Library Announcement Posting Locations

- Altgeld Branch Public Library
- Blue Island Public Library
- Brainerd Branch Public Library
- Calumet City Public Library

- Hegewisch Library Branch
- James F. Vodak/East Side Branch Public Library
- Jeffrey Manor Branch Public Library
- Pullman Public Library
- Riverdale Public Library
- South Chicago Library Branch
- Tuley Park Library Branch
- Walker Branch Public Library
- West Pullman Library Branch

Blogs

- Chicago Transit Board Chairman Carole Brown's "Ask Carole" blog
- Chi-Town Daily News
- CTATattler blog
- Gapers Block
- Ridge99.com
- southwestobserver.com
- thesixthward.blogspot.com

E-blasts

E-blasts will be sent to stakeholders, politicians and residents who went to the previous CTA meetings. We will obtain e-mail addresses for officials at key businesses and public buildings – such as post offices, schools, libraries, and courthouses – to make sure they receive the meeting information in a PDF format so they can print it out and post it.

Online calendars

There are many online event calendars, and most of them are run through newspapers or TV stations. Meeting notices will be sent to local chambers of commerce and to large organizations that cover a wide audience and would communicate with members in the areas served by the line, such as the Chicagoland Chamber of Commerce, Illinois Chamber of Commerce and the Association Forum of Chicagoland.

Promotion in Transit

The scoping meeting announcement will be posted at the CTA stations and in the CTA trains and buses via car cards.

Schedule:

- Send scoping announcement to CTA 8/12/09
- Post in vehicles 8/26/09

Social media

There are several opportunities for CTA to reach out via social media. We can post the meeting information on the CTA Facebook group page. Information can also be provided to movingbeyondcongestion.com. In addition, we can start a Facebook page for the Red Line Extension project, so that people can follow the progress of the project and offer their support. And, if CTA started Twitter accounts for the Red Line, followers could receive updates about what transpires at a public meeting, for example.

Web site

A new project site will be developed for the environmental phase. The Web site provides access to project updates, project background, project materials and documents and announcements. The scoping meeting dates will be posted in advance on the Web site.

Schedule:

- Develop Web site: June - August 09
- Launch Web site: 8/13/09
- Post Scoping Information 8/26/09

Scoping Display Advertisement/Legal Notice

A formal scoping display ad will be placed in local and regional newspapers. The ad will include information on the project, the environmental analysis, the scoping meeting agenda, the meeting information and where and when to submit comments. An e-mail and postal mail address will be provided for written comments. The team will coordinate with CTA as to the placement of ¼ page advertisements in local newspapers. The ad will also be prepared in Spanish. Below is a preliminary listing of the outlets.

Publication Placement:

- The Chicago Crusader
- Chicago Defender
- LaRaza
- Neighborhood Star
- Southtown Star
- Beverly Review
- The Villager

Schedule:

- Provide display ad text to CTA ten days prior to media publishing deadlines
- Place display ad: Two weeks in advance of meeting, 8/26/09

Media Release

Media outreach will be done to ensure that reporters are aware of the scoping meetings and have adequate background information with which to write about the environmental review process. The team will work with CTA to develop key messages and put together a press release and media advisory. See Appendix C for the media distribution list.

Schedule:

- Send media release to CTA two days in advance of media deadline for 9/16/09 publication
- Distribute media release: One week in advance of meeting, 9/16/09

Scoping Booklet

The scoping booklet will contain background information on the project and the NEPA process. The purpose of the scoping meeting also will be identified within the booklet. A map depicting the project location and a description of the project area will be included. The booklet will also include a section on how and where comments may be submitted. The scoping meeting date and

location will be provided in the booklet. An electronic file (.pdf file) will also be produced for posting on the CTA website.

Schedule:

- Print scoping booklet: 8/31/09

Meeting Materials

Information boards for use during the open house part of the scoping meetings and general hand-outs will be prepared.

- **Boards:** Welcome, Project Area Map, Typical Cross Sections/Station Locations, List of Environmental Issues to be Studied, Environmental Review Process, How to Stay Involved/Submit Comments
- **Hand-outs:** Agenda, comment form, copies of the boards, scoping booklet

Schedule:

- Print/finalize Meeting Materials: 9/14/09

Frequently Asked Questions/Talking Points

A Frequently Asked Questions (FAQs) and talking points will be provided for use by CTA staff and the consultants to prepare them for the stakeholder meetings and scoping meetings.

Schedule:

- FAQ/Talking Points: 9/14/09

Project Database

A comprehensive database of all stakeholders for the Red Line Extension will be established and maintained, using CTA's existing database. The database will be updated regularly and supplemented as appropriate. The database will include elected officials, special interest group representatives, and agency staff. The mailing list will also include property owners and tenants adjacent to the centerline of the proposed project.

Schedule:

- Update Project Database: June/July 09
- Finalize for Invitation Mailing: End of July 09

Documentation

Comment Tracking/Documentation/Response Management

The scoping meetings will be fully documented for the administrative record in compliance with NEPA and SAFETEA-LU. Comments will be received by mail, e-mail, and by comment card and verbally at the scoping meetings.

Scoping Meeting Summary Report

A summary meeting report from the scoping meetings will be prepared. It will include comment cards, the court-reporter record of the scoping meeting, letters, attendance sheets, notification

materials and a summary of verbal and written input, such that an evidential record of the meetings are documented. This meeting report will be incorporated into the formal scoping report.

Schedule:

- Finalize Report and Post on Web site: 10/27/09

CHICAGO TRANSIT AUTHORITY (CTA)

APPENDIX A

ENVIRONMENTAL IMPACT STATEMENT (EIS) PHASE 1

RED LINE EXTENSION

Public Participation Plan Overview Schedule 2009

Activity	June	July	August	September	October	November	December
Key Milestones/Meetings							
Project Milestones				9/8/09: Notice of Intent (NOI) in Federal Registry 9/9/09: Public Comment Period Begins (45 days)	10/27/09: Public Comment Period Ends (45 days)		
CTA Board Meetings			8/12/09: CTA Board Approval of Locally Preferred Option				
Agency Scoping Meeting				9/22/09: Agency Scoping Meeting			
Public Scoping Meeting				Between 9/23/09 – 10/2/09: Public Scoping Meetings			
Stakeholder Briefing Meetings			Finalize List & Schedule Meetings	9/9/09- 9/29/09: Stakeholder Meetings			
Communication Activities							
Public Participation Plan (PPP)	Draft	Finalize					
Mailing List/Database	Update	Finalize			Update		
Participating Agency Letters		Develop & Finalize	8/26/09: Mail Letters				
Public Scoping Invite Letter		Develop & Finalize	8/26/09: Mail Notice				
Web site	Submit Outline	Develop New Site	8/13/09: Launch New Site 8/26/09 Post Scoping Dates/Info	After Meetings: Post Presentation/Materials	Post Scoping Meeting Summary	Update	Update
Scoping Display Ad/Legal Notice		Finalize Placement Outlets & Develop Ad	8/26/09: Run display ad				
Media Outreach (releases)		Finalize Outlets	Develop Release	9/16/09: Distribute Release			
Other Notification: Libraries, Village Halls, e-blasts, blogs, community calendars, transit cards		Develop Materials	8/26/09: Distribute notification				
Scoping Info Booklet		Develop Book	8/31/09: Finalize				
Meeting Materials: BOARDS			Develop Boards	9/14/09: Finalize			
Meeting Materials: Handouts			Develop Handouts	9/14/09: Finalize			
Meeting PowerPoint Presentation			Develop Presentation	9/14/09: Finalize			
FAQ/Talking Points			Develop FAQ	9/14/09: Finalize			
Scoping Meeting Summary Report					10/27/09: Develop & Finalize		

Note: All dates are preliminary and subject to change.

APPENDIX B: Mailing/Stakeholder List

Not Public

APPENDIX C: Media Release Distribution List

Print (General)

- *Chicago Tribune*, to transportation reporters Jon Hilkevitch and Richard Wronski and calendar editors.
- *Chicago Sun-Times*, to transportation writer Mary Wisniewski (who also has a blog) and calendar editors.
- *Red Eye*, to the writers of the transit-focused Going Public column and blog.
- *Crain's Chicago Business, to reporters and its calendar section.*
- *Chicago Reader*, an alternative Chicago weekly read by many CTA riders.
- *Hoy Chicago* and *La Raza*, Spanish language newspapers.
- *Chicago Defender*, which serves the African-American community.

Print (Red Line)

- Southtown Star
- The Chicago Crusader
- Neighborhood Star
- Beverly Review
- The Villager

Television

- WBBM Channel 2 (CBS)
- WGN Channel 9 (CW)
- WMAQ Channel 5 (NBC)
- WLS Channel 7 (ABC)
- WFLD Channel 32 (FOX)
- WSNS Channel 44, Spanish
- WOCK Channel 13, Spanish
- WOCH Channel 41, Korean
- WGBO Channel 66, Spanish (Univision)
- WXFT Channel 60, Spanish (Telefutura)
- WTTW Channel 11, public television
- WYCC Channel 20, public television
- CLTV, which primarily covers suburban communities and hosts the "Commute with Kye" blog
- CANTV, Chicago public access channels

Radio

- WBBM-AM 780, Chicago's only all-news station
- WGN-AM 720, news and talk
- WLS-AM 890, talk radio
- WBEZ-FM 91.5, public radio
- WGCI-FM 107.5, urban contemporary
- WGRB-AM 1390, gospel
- WHPK-FM 88.5, community radio based at University of Chicago
- WIIT-FM 88.9, college radio from Illinois Institute of Technology
- WSBC-AM 1240, broadcasts in a variety of languages, including Spanish and Russian
- WRTO-AM 1200, Spanish – Univision Radio
- WRTE-FM 90.5, Spanish
- WKIE-FM 92.7, Spanish
- WVIX-FM 93.5, Spanish
- WVIV-FM 103.1, Spanish
- WOJO-FM 105.1, Spanish, "La Que Buena"
- WVON-AM 1690, "The Talk of Chicago"
- WRLL-AM 1450, "Radio Latino"
- WVAZ-FM 102.7, Urban Contemporary
- WNWI-AM 1080, Multiple languages
- WNUA-FM 95.5, Spanish

Wire Services

- Associated Press, for datebook
- Medill News Services

Appendix B
Notice of Intent

• Build Alternative 1; adding one general purpose lane in each direction.

• Build Alternative 2; adding two general purpose lanes in each direction.

• Build Alternative 3; adding one toll lane to the existing carpool lane in each direction that will be managed together (Federal Highway Administration tolling authority required); also adding one general purpose lane in each direction north of Euclid Street to I–605.

• Build Alternative 4; on I–405 from Euclid Street to I–605, providing additional general purpose lane at various locations and improving various interchanges.

• Transportation Systems Management (TSM)/Transportation Demand Management (TDM)/Mass Transit Alternative; making only low-cost operational improvements, rather than major capital projects, to maximize the efficiency of the present highway system and expand travelers' transportation choices.

Based on a Preliminary Environmental Analysis Report (PEAR) for the I–405 Improvement Project, it is anticipated that the project may require the following Federal permits: Section 404 Permit for filling/dredging waters of the United States and Section 401 Water Quality Certification. The environmental document will analyze factors that include, but are not limited to, the following: Aesthetics, cultural resources, biological resources, hazardous wastes and materials, public services and facilities, water quality, floodplain, noise, air quality, recreation, community impacts, and transportation/traffic. Some of these alternatives may have impacts on the above mentioned resources, as well as on water quality, cultural resources, parks/recreation facilities, and community character and cohesion; the environmental documentation process will assess for potential impacts and suggest ways to reduce or mitigate them.

This document is available at *http://www.octa.net/405improvement* and *http://www.dot.ca.gov/dist12/405/index.htm*.

Letters describing the proposed action and soliciting comments will be sent to appropriate Federal, State, Participating Agencies, various Tribal governments, and local agencies, and to private organizations and citizens who have previously expressed or are known to have interest in this proposal. The environmental review process will begin in Fall 2009. Public scoping meetings will be held in Fountain Valley, Huntington Beach, Westminster, and Rossmoor, California, on September 22, 23, 30, and October 01, respectively. In addition, a public hearing will be held. Public notice will be given of the time and place of the meeting and hearing. The draft EIS will be available for public and agency review and comment prior to the public hearing.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments, and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to Ms. Deshpande at Caltrans at the address provided above.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Research, Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: August 26, 2009.

Cindy Vigue,

Director, State Programs, Federal Highway Administration, Sacramento, California.

[FR Doc. E9–21040 Filed 8–31–09; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

Intent to Prepare an Environmental Impact Statement for Proposed Transit Improvements to the Red Line, Cook County, IL

AGENCY: Federal Transit Administration (FTA), Department of Transportation.

ACTION: Notice of intent to prepare an Environmental Impact Statement.

SUMMARY: The FTA, as the lead federal agency, and the Chicago Transit Authority (CTA) intend to prepare an Environmental Impact Statement (EIS) for the Red Line Extension Project in Cook County, Illinois. CTA operates the rapid transit system in Chicago, Cook County, Illinois. The proposed project, described more completely within, would extend the Red Line, a heavy rail transit line, to connect the 95th Street Station to 130th Street. The purpose of this Notice of Intent is to alert interested parties regarding the intent to prepare the EIS, to provide information on the nature of the proposed project and possible alternatives, to invite public participation in the EIS process.

DATES: Written comments on the scope of the EIS, including the project's purpose and need, the alternatives to be considered, the impacts to be evaluated, and the methodologies to be used in the evaluations should be sent to CTA on or before October 27, 2009. See **ADDRESSES** below for the address to which written public comments may be sent. Two public scoping meetings to accept comments on the scope of the EIS will be held on the following dates:

• Tuesday, September 22, 2009; 6 p.m. to 8 p.m.; at the Historic Pullman Visitor Center, 11141 S. Cottage Grove Avenue, Chicago, IL 60628.

• Thursday, September 24, 2009; 6 p.m. to 8 p.m.; at the Woodson Regional Chicago Public Library, 9525 S. Halsted Street, Chicago, IL 60628.

The buildings used for the scoping meetings are accessible to persons with disabilities. Any individual who requires special assistance, such as a sign language interpreter, to participate in the scoping meeting should contact Mr. Darud Akbar, Government and Community Relations Officer, at 312–681–2708 or *dakbar@transitchicago.com,* five days prior to the meeting.

Scoping materials describing the project purpose and need and the alternatives proposed for analysis will be available at the meetings and on the CTA Web site *http://www.transitchicago.com/RedEIS.* Paper copies of the scoping materials may also be obtained from Mr. Darud Akbar, Government and Community Relations Officer, at 312–681–2708 or *dakbar@transitchicago.com.* An interagency scoping meeting will be held on Thursday, September 24 at 10:30 a.m. at CTA Headquarters, in Conference Room 2C, 567 W. Lake Street, Chicago, IL 60661. Representatives of Native American tribal governments and of all federal, state, regional and local agencies that may have an interest in any aspect of the project will be invited to be participating or cooperating agencies, as appropriate.

ADDRESSES: Comments will be accepted at the public scoping meetings or they may be sent to Mr. Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P. O. Box 7602, Chicago, IL 60680–7602, or via e-mail at *RedExtension@transitchicago.com.*

FOR FURTHER INFORMATION CONTACT: Mr. David Werner, Community Planner, Federal Transit Administration, Region V, 200 West Adams Street, Suite 320, Chicago, IL 60606, phone 312–353–3879, e-mail *david.werner@dot.gov.*

SUPPLEMENTARY INFORMATION:

Scoping

The FTA and CTA invite all interested individuals and organizations, public agencies, and Native American Tribes to comment on

the scope of the EIS, including the project's purpose and need, the alternatives to be studied, the impacts to be evaluated, and the evaluation methods to be used. Comments should address (1) alternatives that may better achieve the project's need and purposes at less cost or with fewer adverse impacts, and (2) any significant environmental impacts relating to the alternatives.

National Environmental Policy Act (NEPA) ''scoping'' (40 CFR 1501.7) has specific and fairly limited objectives, one of which is to identify the significant issues associated with alternatives that will be examined in detail in the document, while simultaneously limiting consideration and development of issues that are not truly significant. It is in the NEPA scoping process that potentially significant environmental impacts—those that give rise to the need to prepare an environmental impact statement—should be identified; impacts that are deemed not to be significant need not be developed extensively in the context of the impact statement, thereby keeping the statement focused on impacts of consequence. Transit projects may also generate environmental benefits; these should be highlighted as well—the impact statement process should draw attention to positive impacts, not just negative impacts.

Once the scope of the environmental study, including significant environmental issues to be addressed, is settled, an annotated outline of the document will be prepared and shared with interested agencies and the public. The outline serves at least three worthy purposes, including (1) Documenting the results of the scoping process; (2) contributing to the transparency of the process; and (3) providing a clear roadmap for concise development of the environmental document.

Purpose and Need for the Project

The purpose of the Red Line Extension project is to reduce travel times to jobs for far South Side and South Suburban residents and improve the performance of the existing Red Line 95th Street Station terminal. The project would also provide an opportunity to support economic development initiatives.

The need for the project is based on the following considerations: lack of park-and-ride, passenger drop-off, and poor pedestrian facilities limit access to the existing 95th Street terminal of the Red Line; customers accessing the existing terminal facility by bus experience measureable delays resulting from poor performance of surrounding arterial intersections, insufficient space for bus loading and unloading, and insufficient space for bus layovers; congested bus and passenger conditions at the existing terminal station and bus facility result in safety issues and diminish the attractiveness of transit as an alternative to other travel modes; roadway performance in the project area is adversely impacted by narrow arterial streets and frequent at-grade freight rail crossings; and, the project area population is highly transit-dependent, minority and low-income.

Project Location and Environmental Setting

The proposed heavy rail transit (HRT) project area lies about 11 miles south of the Chicago Central Area (commonly referred to as the ''Loop''). The limits of the project area are from 95th Street on the north to 130th Street on the south. The Calumet-Sag Channel/Little Calumet River extends along the southern edge of the project area and Lake Calumet is located to the east.

The project area includes parts of eight community areas in the far South of the City of Chicago. Community areas include Washington Heights, Morgan Park, Roseland, Pullman, West Pullman, South Deering, Hegewisch and Riverdale. The project area encompasses significant residential (primarily single family), industrial (existing and vacant), transportation, and commercial developments.

The locally preferred alternative (LPA) for the proposed Red Line Extension project was approved by the Chicago Transit Board for further study in the EIS on August 12, 2009. The LPA would extend the heavy rail transit line from the 95th Street Station south along the I–57 Expressway to the Union Pacific Railroad (UPRR) right-of-way near Eggleston Avenue. From that point, the line extends south from I–57 along the UPRR corridor to approximately 111th Street where it turns southeast along existing railroad and industrial right-of-way to terminate in the vicinity of 130th Street. The extension would add 5.3 new route miles of rapid transit to the existing Red Line, four additional stations at approximately 103rd, 111th, 115th, and 130th Streets with new park-and-ride and bus terminal facilities at each station.

Alternatives

The Red Line Extension Final Alternatives Analysis Report (2009) prepared by CTA identified three alternatives for further consideration in the EIS. These alternatives include: A No Build Alternative, Transportation System Management (TSM) Alternative, and the UPRR HRT Alternative (the LPA). Additionally, the Halsted Street HRT Alternative from the Red Line Extension Alternatives Analysis Screen 3 Report (2009) will be considered in the EIS.

No Build Alternative: The No Build Alternative is defined as the existing transportation system, plus any committed transportation improvements. Committed transportation improvements include projects that are already in the Chicago Metropolitan Agency for Planning (CMAP) financially constrained Transportation Improvement Program (TIP). The Red Line project area has five bridge reconstructions, and several road improvement projects included in the FY 2007–2012 TIP. These improvements are primarily on highway segments in the vicinity of the project area and generally do not lie adjacent to or intersect with the proposed TSM or HRT alternatives.

Bridge projects in the TIP include: Illinois 1 (Halsted Street) at the Little Calumet River; I–94 (Bishop Ford Expressway) at the Stony Island ramp and at Cottage Grove Road; I–57 at 103rd Street; and I–57 at Genoa Road. Road improvement projects include a variety of landscaping, safety fencing, and resurfacing projects, and coordination of signal timing on Stony Island Avenue from 95th Street north, and on 95th Street from Western Avenue east to Ewing Avenue. There is also a bicycle and pedestrian multi-use trail proposed to extend from the existing Centennial Trail in Lemont to the Burnham Greenway in Burnham.

Bus transit service under the No Build Alternative would be focused on the preservation of existing services and projects. No significant changes to bus service are anticipated in the project area. All elements of the No Build Alternative are included in each of the other alternatives.

Transportation System Management (TSM) Alternative: A TSM Alternative is proposed because it is required as part of the New Starts evaluative process; in this case, it does not meet the purposes of and need for the proposed project. The TSM Alternative is Bus Rapid Transit (BRT) that would operate between the 95th Street Station and 130th Street via East 95th Street, Michigan Avenue, East 127th Street, South Indiana Avenue, and East 130th Street. Proposed BRT service would operate in mixed traffic with traffic signal priority along 95th Street, Michigan Avenue, and 130th Street.

The TSM Alternative is 5.5 miles long and would include four intermediate

stops at 103rd, 111th, 115th, and 130th Streets with park-and-ride facilities proposed at all of the new stops. The 95th Street terminal would be expanded to extend the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street to improve circulation and safety. The TSM alternative assumes that buses from the south would continue to serve the 95th Street Station.

UPRR Heavy Rail Transit (HRT) Alternative/Locally Preferred Alternative (LPA): The proposed LPA would operate between the existing Red Line 95th Street Station and 130th Street. The line would be on an elevated structure from the 95th Street as it heads south along the I–57 Expressway for nearly one-half mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. It would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of South Prairie Avenue the alignment would cross over the Canadian National/Metra tracks near 119th Street where it would transition to an at-grade profile and then continue southeast along the former Michigan Central/Indiana Harbor Belt (IHB) railroad right-of-way to terminate in the vicinity of 130th Street.

The LPA is 5.3 miles long and would include three new intermediate stations at 103rd, 111th, and 115th Streets and a new terminal station at 130th Street with new park-and-ride and bus terminal facilities at each station. This alternative assumes that buses from the south would be re-routed to serve the new intermediate and terminal stations to speed passenger travel to downtown Chicago.

The new HRT tracks would be placed immediately adjacent to the UPRR right-of-way on either the west side (West Side Option) or the east side (East Side Option). Both options would require adjacent property acquisition to accommodate the CTA right-of-way and station facilities at 103rd, 111th, and 115th Streets. Based on a preliminary analysis of the conceptual alignment plans and Cook County parcel data, the West Side Option would require up to 112 property acquisitions and/or displacements and the East Side Option would require 138. In addition, the West Side Option could impact Fernwood Parkway between 99th Street and 103rd Streets which could trigger a Section 4(f) of the Department of Transportation Act evaluation in the EIS. The East Side Option could impact Wendell Smith Park adjacent to the I–57 Expressway which could also trigger a Section 4(f) evaluation in the EIS. Kensington Playground Park near 118th Street would not be impacted by either option.

There are two options for the 130th Street terminal station. The Red Line extension would continue south along the IHB right-of-way to either a south or west terminal station location along the north side of 130th Street, just west of the I–94 Bishop Ford Freeway.

Halsted Street HRT Alternative: The proposed Halsted Street HRT Alternative would be operated on an elevated structure between the existing Red Line 95th Street Station and the Halsted Street/Vermont Avenue intersection in the vicinity of 127th Street. The alignment would follow the median of I–57 Expressway until reaching Halsted Street. It would then turn south onto Halsted Street and continue in the median to Vermont Avenue.

The Halsted Street HRT Alternative is 5.0 miles long and would include three new intermediate stations at 103rd, 111th, 119th Streets and a new terminal station at Vermont Avenue with new park-and-ride and bus terminal facilities at the intermediate and terminal stations. This alternative assumes that buses from the south would be re-routed to serve the new intermediate and terminal stations to speed passenger travel to downtown Chicago.

Near the proposed station areas, there may be additional impacts to adjacent land owners if land acquisition would be required for station facilities such as bus turnarounds or parking facilities. This would be most applicable at the proposed terminal station at 127th/Vermont since several properties are located close to Halsted Street in this segment and there may be higher off-street facility needs.

Possible Effects

The purpose of this EIS process is to study, in a public setting, the effects of the proposed project and its alternatives on the quality of the human environment. Areas of investigation for transit projects generally include, but are not limited to: Land use, development potential, land acquisition and displacements, historic resources, visual and aesthetic qualities, air quality, noise and vibration, energy use, safety and security, and ecosystems, including threatened and endangered species; investigation may reveal that the proposed project will not affect or affect substantially many of those areas. Measures to avoid, minimize, or mitigate any significant adverse impacts will be identified.

FTA Procedures

The regulations implementing NEPA, as well as provisions of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU), call for public involvement in the EIS process. Section 6002 of SAFETEA–LU requires that FTA and CTA do the following: (1) Extend an invitation to other Federal and non-Federal agencies and Native American tribes that may have an interest in the proposed project to become ''participating agencies;'' (2) provide an opportunity for involvement by participating agencies and the public to help define the purpose and need for a proposed project, as well as the range of alternatives for consideration in the EIS; and (3) establish a plan for coordinating public and agency participation in, and comment on, the environmental review process. An invitation to become a participating or cooperating agency, with scoping materials appended, will be extended to other Federal and non-Federal agencies and Native American tribes that may have an interest in the proposed project. It is possible that FTA and CTA will not be able to identify all Federal and non-Federal agencies and Native American tribes that may have such an interest. Any Federal or non-Federal agency or Native American tribe interested in the proposed project that does not receive an invitation to become a participating agency should notify at the earliest opportunity the Project Manager identified above under **ADDRESSES**.

A comprehensive public involvement program and a Coordination Plan for public and interagency involvement will be developed for the project and posted on CTA's Web site *http://www.transitchicago.com/RedEIS*. The public involvement program includes a full range of activities including maintaining the project Web page on the CTA Web site and outreach to local officials, community and civic groups, and the public. Specific activities or events for involvement will be detailed in the project's public participation plan.

The Paperwork Reduction Act seeks, in part, to minimize the cost to the taxpayer of the creation, collection, maintenance, use, dissemination, and disposition of information. Consistent with this goal and with principles of economy and efficiency in government, it is FTA policy to limit insofar as possible distribution of complete printed sets of environmental documents. Accordingly, unless a specific request for a complete printed set of environmental documents is

received (preferably in advance of printing), FTA and its grantees will distribute only the executive summary of the environmental document together with a Compact Disc of the complete environmental document. A complete printed set of the environmental document is available for review at the grantee's offices and elsewhere; an electronic copy of the complete environmental document is also available on the grantee's Web page.

CTA may seek New Starts funding for the proposed project under 49 United States Code 5309 and will, therefore, be subject to New Starts regulations (49 Code of Federal Regulations (CFR) Part 611). The New Starts regulations also require the submission of certain project-justification information to support a request to initiate preliminary engineering. This information is normally developed in conjunction with the NEPA process. Pertinent New Starts evaluation criteria will be included in the EIS.

The EIS will be prepared in accordance with NEPA and its implementing regulations issued by the Council on Environmental Quality (40 CFR Parts 1500–1508) and with the FTA/Federal Highway Administration regulations ''Environmental Impact and Related Procedures'' (23 CFR Part 771).

Issued on: August 24, 2009.

Marisol R. Simon,

Regional Administrator, FTA Region V.

[FR Doc. E9–20963 Filed 8–28–09; 8:45 am]

BILLING CODE 4910–57–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

Fiscal Year 2010 Safety Grants

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice; correction.

SUMMARY: FMCSA is correcting a notice that appeared in the **Federal Register** on August 12, 2009 (74 FR 40638), which informed the public of FMCSA's Fiscal Year (FY) 2010 safety grant opportunities and FMCSA's changes to its application and award processes for grant programs.

FOR FURTHER INFORMATION CONTACT: For further information regarding this notice please contact, Ms. Theresa Rowlett at 202.366.6406. Staff may be reached at FMCSA, 1200 New Jersey Avenue, SE., Washington, DC 20590. Office hours are from 9 a.m. to 5 p.m., EST, Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION: For FMCSA's FY 2010 Grants notice published on August 12, 2009 (74 FR 40638), the following corrections are made:

On page 40638, in the **FOR FURTHER INFORMATION CONTACT** section, the contact for the Commercial Vehicle Information Systems and Networks Grants (CVISN) is corrected from ''CVISN Grants—Julie Lane, *julie.lane@dot.gov,* 202–385–2391'' to ''CVISN Grants—Quon Kwon, *quon.kwan@dot.gov,* 202–385–2389''.

On page 40638, in the *FY 2010 Safety Grants Program* section, the schedule for the New Entrant Safety Audit Grants and the Motor Carrier Safety Assistance Program (MCSAP) High Priority Grants is corrected from ''New Entrant Safety Audit Grants—September 1, 2009, MCSAP High Priority Grants—October 15, 2009'' to ''New Entrant Safety Audit Grants—October 15, 2009, MCSAP High Priority Grants—September 15, 2009.''

Issued on August 24, 2009.

William A. Quade,

Associate Administrator for Enforcement and Program Delivery.

[FR Doc. E9–21019 Filed 8–31–09; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

4th Meeting: RTCA Special Committee 221: Aircraft Secondary Barriers and Alternative Flight Deck Security Procedures

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of RTCA Special Committee 221 meeting: Aircraft Secondary Barriers and Alternative Flight Deck Security Procedures.

SUMMARY: The FAA is issuing this notice to advise the public of a meeting of RTCA Special Committee 221: Aircraft Secondary Barriers and Alternative Flight Deck Security Procedures.

DATES: The meeting will be held September 15–16, 2009. September 15th from 12 a.m. to 5 p.m., September 16th from 9 a.m. to 5 p.m.

ADDRESSES: The meeting will be held at RTCA, Inc., MacIntosh—NBAA and Hilton—ATA Rooms, 1828 L Street, NW., Suite 805, Washington, DC 20036.

FOR FURTHER INFORMATION CONTACT: RTCA Secretariat, 1828 L Street, NW., Suite 805, Washington, DC 20036; telephone (202) 833–9339; fax (202) 833–9434; Web site *http://www.rtca.org.*

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463, 5 U.S.C., Appendix 2), notice is hereby given for a Special Committee 221: Aircraft Secondary Barriers and Alternative Flight Deck Security Procedures meeting. The agenda will include:

- Welcome/Introductions/Administrative Remarks;
- Approval of Summary of the Second Meeting held June 23–24, 2009, RTCA Paper No. 174–09/SC221–013;
- Leadership Comments;
- Review of Threat Work Group—Status Report;
- Review of Alternative Methods Work Group—Status Report;
- Review of Installed Physical Secondary Barrier (IPSB) Work Group—Status Report;
- Presentation/Discussion of SC–221 Schedule and Milestones;
- Discussion of Working Group reports: re-allocation of groups, capture learning points, discuss additional or follow-on goals;
- Approval and Tasking of Existing/Proposed Working Groups;
- Other Business—Including Proposed Agenda, Date and Place for Next Meeting.

Attendance is open to the interested public but limited to space availability. With the approval of the chairmen, members of the public may present oral statements at the meeting. Persons wishing to present statements or obtain information should contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Members of the public may present a written statement to the committee at any time.

Issued in Washington, DC, on August 24, 2009.

Francisco Estrada C.,

RTCA Advisory Committee.

[FR Doc. E9–21063 Filed 8–31–09; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Eightieth Meeting: RTCA Special Committee 159: Global Positioning System (GPS)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of RTCA Special Committee 159 meeting: Global Positioning System (GPS).

SUMMARY: The FAA is issuing this notice to advise the public of a meeting of RTCA Special Committee 159: Global Positioning System (GPS).

DATES: The meeting will be held September 29–October 2, 2009, from 9

Appendix C
Participating Agencies

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Chicago Housing Authority	Ms.	Edie	Diaz		60 E. Jackson, Suite 1200		Chicago	IL	60605
Chicago Park District	Mr.	Joseph	Bornstein	Project Manager, Planning & Development	541 N. Fairbanks		Chicago	IL	60611
City of Chicago Department of Business Affairs and Consumer Protection	Ms.	Norma I.	Reyes	Commissioner	50 W. Washington St.	Room 208	Chicago	IL	60602
City of Chicago Department of Community Development	Ms.	Christine	Raguso	Acting Commissioner	121 N. LaSalle St.	Ste. 1000	Chicago	IL	60602
City of Chicago Department of Environment	Ms.	Nicole	Kamins	Program Director	30 N. LaSalle St.	Floor 25	Chicago	IL	60602
City of Chicago Department of Transportation	Mr.	Richard	Hazlett	Coordinating Planner	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
City of Chicago Office of the Mayor	Mr.	Pat	Harney	Deputy Chief of Staff	121 N. LaSalle St.	Room 509	Chicago	IL	60602
City of Chicago Police Department	Mr.	Mark	Harmon	Commanding Officer, Patrol Division	3510 S. Michigan Ave.		Chicago	IL	60653
Metra Commuter Rail	Mr.	David	Kralik	Department Head, Long Range Planning	547 W. Jackson Blvd.	13th Floor	Chicago	IL	60661
Metropolitan Water Reclamation District of Greater Chicago	Mr.	Joseph	Schuessler	Principal Civil Engineer	100 East Erie Street		Chicago	IL	60611
Pace	Mr.	David	Tomzik	Manager, Long Range Planning	550 W. Algonquin Road		Arlington Heights	IL	60005
Illinois Commerce Commission	Ms.	Shauna	Kelley	Bureau of Transportation Chief	160 N. LaSalle St.	C800	Chicago	IL	60601
Illinois Department of Natural Resources	Mr.	Steve	Hamer	Office of Realty & Environmental Planning, Division of Ecosystems & Environment	One Natural Resources Way		Springfield	IL	62702
Illinois Department of Transportation	Ms.	Lil	Budzinski	Section Chief, CTA/ City of Chicago Section	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Illinois Environmental Protection Agency	Ms.	DiAnne	Schuerman		Deputy Director's Office/MC#1, P.O. Box 19276		Springfield	IL	62794-9276
Illinois Historic Preservation Agency	Ms.	Anne	Hacker	Deputy State Historic Preservation Officer	#1 Old State Capitol Plaza		Springfield	IL	62701
Department of Energy	Mr.	Steven	Chu	Secretary	1000 Independence Ave. SW		Washington	DC	20585
Department of Health and Human Services	Mr.	James	Galloway	Acting Regional Director - Region 5	233 N. Michigan Ave.	Ste. 1300	Chicago	IL	60601
Department of Housing and Urban Development	Ms.	Beverly	Bishop	Deputy Regional Director	77 W. Jackson Blvd.		Chicago	IL	60604
Federal Emergency Management Agency	Ms.	Janet	Odeshoo	Deputy Regional Administrator, Region V	536 S. Clark St.	6th floor	Chicago	IL	60605
Federal Highway Administration	Mr.	Matt	Fuller	Environmental Programs Engineer	3251 Executive Park Drive		Springfield	IL	
Federal Railroad Administration	Mr.	Laurence	Hasvold	Regional Administrator	200 West Adams	Suite 310	Chicago	IL	60606
Transportation Security Administration	Ms.	Gale	Rossides	Acting Administrator	601 S. 12th St.		Arlington	VA	20598
U.S. Environmental Protection Agency	Mr.	Bharat	Mathur	Acting Regional Administrator - Region 5	77 W. Jackson Blvd.		Chicago	IL	60604
U.S. Fish and Wildlife Service	Mr.	John	Rogner	Field Supervisor - Chicago Field Office	1250 S. Grove	Ste. 103	Barrington	IL	60010
Citizen Potawatomi Nation					1601 S. Gordon Cooper Drive		Shawnee	OK	74801
Ho-Chunk Nation					5744 W. Irving Park Road		Chicago	IL	60634
Peoria Tribe	Chief	John	Froman	Chief	118 S. Eight Tribes Trail	P.O. Box 1527	Miami	OK	74355
Sac and Fox Tribe - Mississippi and Iowa	Mr.	Jonathan	Buffalo		349 Meskwaki		Tama	IA	52339
Sac and Fox Tribe - Missouri and Kansas					305 N. Main Street		Reserve	KS	66434
Sac and Fox Tribe - Oklahoma					Rt. 2 Box 246		Stroud	OK	74079

Appendix D
Participating Agency Invitation Letters

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

September 1, 2009

[Insert Agency Representative]
[Insert Agency Name]
[Insert Address]
[Insert, City, State, Zip]

Re: Invitation to Participate in Environmental Review Process for the CTA Red Line Extension

Dear *[Agency Representative]*:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), is initiating the preparation of an Environmental Impact Statement for the proposed Red Line Extension project. The proposed project would extend the Red Line, a heavy rail transit line, 5.3 miles from its existing 95th Street Station to a new terminal station at 130th Street.

The purpose of the project, as currently defined, is to reduce travel times to jobs for Far South Side and South Suburban residents and improve the performance of the existing Red Line 95th Street Station terminal. The project would also provide an opportunity to support economic development initiatives. The enclosed scoping information packet provides more details including a preliminary project schedule.

An Alternatives Analysis has been completed for this project and the final report may be found at http://www.transitchicago.com/RedEIS. Through the Alternatives Analysis process and with input from the public and agencies, the project area and the range of alternatives have been refined and a locally preferred alternative has been selected. The project area and the alternatives identified in the Alternatives Analysis will be the subjects of the Draft EIS.

Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users establishes an enhanced environmental review process for certain FTA projects, increasing the transparency of the process, as well as opportunities for participation. The requirements of Section 6002 apply to the project that is the subject of this letter. As part of the environmental review process for this project, the lead agencies must identify, as early as practicable, any other

Federal and non-Federal agencies that may have an interest in the project, and invite such agencies to become participating agencies in the environmental review process.[1]

Your agency has been identified preliminarily as one that may have an interest in this project, because of the surrounding land uses which include middle and low income residential neighborhoods, rail and surface transportation facilities, industrial brownfields, parks and natural areas, and the potential for impacts to the physical and human environment from construction and operation of the project; accordingly, you are being extended this invitation to become actively involved as a participating agency in the environmental review process for the project.

As a participating agency, you will be afforded the opportunity, together with the public, to be involved in defining the purpose of and need for the project, as well as in determining the range of alternatives to be considered for the project. These opportunities will build on the early participation opportunities that were provided during the Alternatives Analysis process. In addition, you will be asked to:

- Provide input on the impact assessment methodologies and level of detail in your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and
- Review and comment on sections of the pre-draft or pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

Your agency does not have to accept this invitation. If, however, you elect not to become a participating agency, you must decline this invitation in writing, indicating that your agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, and does not intend to submit comments on the project. The declination may be transmitted electronically to Mr. David Werner of our Region V Office at david.werner@dot.gov, please include the title of the official responding. In order to give your agency adequate opportunity to weigh the relevance of your participation in this environmental review process, written response to this invitation is not due until after the agency scoping. The interagency scoping meeting will be held on the following date and location:

- Thursday, September 24 at 10:30 a.m. at CTA Headquarters, in Conference Room 2C, 567 W. Lake Street, Chicago, IL 60661.

You or your delegate is invited to represent your agency at this meeting. Please note that building security requires meeting attendees to RSVP in advance. Your agency will be treated as

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[1]Designation as a "participating agency" does not imply that the participating agency supports the proposed project or has any jurisdiction over, or special expertise concerning the proposed project or its potential impacts. A "participating agency" differs from a "cooperating agency," which is defined in regulations implementing the National Environmental Policy Act as "any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment." 40 C.F.R. § 1508.5.

participating agency unless your written response declining such designation as outlined above is transmitted to this office not later than September 30, 2009.

We are providing a copy of the Federal Register Notice of Intent and scoping information materials with this letter that include a description of the project area and proposed alternatives. Additional information will be forthcoming during the scoping process. If you have questions regarding this invitation or to RSVP your attendance at the interagency scoping meeting, please contact Mr. Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, PO Box 7602, Chicago, IL 60680-7602, via email at RedExtension@transitchicago.com, or phone at (312) 681-4240.

Sincerely,

Marisol R. Simon
Regional Administrator

Enclosures (2):

1. Scoping Information Packet/Schedule
2. Federal Register NOI

cc: Jeffrey Busby, Chicago Transit Authority

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

September 2, 2009

[Insert Agency Representative]
[Insert Agency Name]
[Insert Address]
[Insert, City, State, Zip]

Re: Invitation to Participate in Environmental Review Process for the CTA Red Line Extension

Dear *[Agency Representative]*:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), is initiating the preparation of an Environmental Impact Statement for the proposed Red Line Extension project. The proposed project would extend the Red Line, a heavy rail transit line, 5.3 miles from its existing 95th Street Station to a new terminal station at 130th Street.

The purpose of the project, as currently defined, is to reduce travel times to jobs for Far South Side and South Suburban residents and improve the performance of the existing Red Line 95th Street Station terminal. The project would also provide an opportunity to support economic development initiatives. The enclosed scoping information packet provides more details including a preliminary project schedule.

An Alternatives Analysis has been completed for this project and the final report may be found at http://www.transitchicago.com/RedEIS. Through the Alternatives Analysis process and with input from the public and agencies, the project area and the range of alternatives have been refined and a locally preferred alternative has been selected. The project area and the alternatives identified in the Alternatives Analysis will be the subjects of the Draft EIS.

Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users establishes an enhanced environmental review process for certain FTA projects, increasing the transparency of the process, as well as opportunities for participation. The requirements of Section 6002 apply to the project that is the subject of this letter. As part of the environmental review process for this project, the lead agencies must identify, as early as

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practicable, any other Federal and non-Federal agencies that may have an interest in the project, and invite such agencies to become participating agencies in the environmental review process.[1]

Your agency has been identified preliminarily as one that may have an interest in this project, because of the surrounding land uses which include middle and low income residential neighborhoods, rail and surface transportation facilities, industrial brownfields, parks and natural areas, and the potential for impacts to the physical and human environment from construction and operation of the project; accordingly, you are being extended this invitation to become actively involved as a participating agency in the environmental review process for the project.

As a participating agency, you will be afforded the opportunity, together with the public, to be involved in defining the purpose of and need for the project, as well as in determining the range of alternatives to be considered for the project. These opportunities will build on the early participation opportunities that were provided during the Alternatives Analysis process. In addition, you will be asked to:

- Provide input on the impact assessment methodologies and level of detail in your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and
- Review and comment on sections of the pre-draft or pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

If you elect to become a participating agency, you must accept this invitation in writing. The acceptance may be transmitted electronically to Mr. Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, at RedExtension@transitchicago.com; please include the title of the official responding. In order to give your agency adequate opportunity to weigh the relevance of your participation in this environmental review process, written responses to this invitation are not due until after the agency scoping meeting. The agency scoping meeting will be held on the following date and location:

- Thursday, September 24 at 10:30 a.m. at CTA Headquarters, in the Conference Room 2C, 567 W. Lake Street, Chicago, IL 60661.

You or your delegate is invited to represent your agency at this meeting. Please note that building security requires meeting attendees to RSVP in advance. Written responses accepting designation as participating agencies should be transmitted to this office not later than October 2, 2009.

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[1]Designation as a "participating agency" does not imply that the participating agency supports the proposed project or has any jurisdiction over, or special expertise concerning the proposed project or its potential impacts. A "participating agency" differs from a "cooperating agency," which is defined in regulations implementing the National Environmental Policy Act as "any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment." 40 C.F.R. § 1508.5.

We are providing a copy of the Federal Register Notice of Intent and scoping information materials with this letter that include a description of the project area and proposed alternatives. Additional information will be forthcoming during the scoping process. If you have questions regarding this invitation or to RSVP your attendance at the interagency scoping meeting, please contact Mr. Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, PO Box 7602, Chicago, IL 60680-7602, via email at RedExtension@transitchicago.com, or phone at (312) 681-4240.

Sincerely,

John Paquet
Vice President
Planning and Development

Enclosures (2):

1. Scoping Information Packet/Schedule
2. Federal Register NOI

cc: Federal Transit Administration

Appendix E
Agency Scoping Meeting
(Sign-in sheet and meeting minutes)

Red Line Extension

Connecting 95th Street Station to 130th Street

AGENCY SCOPING MEETING

September 24, 2009

10:30 AM – 12:30 PM

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL
1	Joe Schuessler	Mgr. Civil Engr / MWRD	111 E. Erie / Chicago, IL 60611	312-751-3236	joseph.schuessler@mwrd.org
2	David Kralik	Dept. Head Long Range Planning / Metra	547 W. Jackson / Chicago, IL 60661	312 322 8035	dkralik@metrarr.com
3	Wendy Williams	City of Chgo / Dept. of Cmty Dev.	121 N LaSalle KM1003	312 744 4486	wendywalker@cityofchicago.org
4	STEVE HANDS	CTA	567 W. LAKE	312 681-4169	SHANDS@TRANSITCHICAGO.com
5	RICH HAZLETT	CDOT	30 N LA SALLE	312 744-1986	
6	Tim Rogers	DETROIT DOT / STRATEGIC PLAN	1301 E WATERREN / DETROIT MI 48207	313-833-1196	timrog@detroitmi.gov
7	MARK HARMON	CHGO POLICE	3510 S. MICHIGAN	312-745-6210	MARK.HARMON@CHICAGOPO

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

AGENCY SCOPING MEETING

September 24, 2009

10:30 AM – 12:30 PM

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL
1	TONY LUPO	IL STATE POLICE DIST. CHGO	9511 W. HARRISON DESPLAINES IL 60016	847 294 4655	
2	Clare Pfotenhauer	IL STATE Police Dist Chgo	9511 W Harrison Des Plaines IL 60016	847 294 4522	pfotenc@isp.state.il.us
3	David Tomzik	manager Long Range Planning Pace	550 W Algonquin Arlington Hts IL 60005	847 228 2467	david.tomzik@pacebus.com
4	Joseph Bornstein	PLAT. MGR. CHICAGO PARK DISTRICT	541 N FAIRBANKS Chicago IL 60611	312 742 4364	
5	L Kimmelman	FTA		312-353-4060	
6	David Werner	FTA			
7	TOM RADAK	SR. PROJECT MGR PACE	550 W. Algonquin ARLINGTON HTS, ILL 60005	847-228-2478	TOM.RADAK@PACEBUS.com

Red Line Extension

Connecting 95th Street Station to 130th Street

AGENCY SCOPING MEETING

September 24, 2009

10:30 AM – 12:30 PM

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL
1	Kim Cheever	Engineering Asst. / Wight & Company	2500 N. Frontage Road / Darien, IL 60561	(630) 969-7000	kcheever@wightco.com
2	Dan Powers	Senior Railroad Safety Specialist / IL. Commerce Commission	527 E. Capitol Ave. / Springfield, IL 62701	(847) 516-0733	dpowers@icc.illinois.gov
3	Nicole Kamins	Program Director / Chicago Dept of Environment	30 N LaSalle 25th Flr / Chicago IL 60602	312 744 5959	nkamins@cityofchicago.org
4	JONATHAN ERNST	PROJECT COORD / STR + SAN	121 N. LA SALLE, 704	312 744-8312	jernst@cityofchicago.org
5	GENE MARKS	IDOT			
6	MORRISON, TERRY	ILL. STATE POLICE	9511 W HARRISON ST / DESPLAINES IL. 60016	847 294-4427	MORRIST@isp.state.il.us
7	Chuck Abraham	IDOT Mgr. of Program Support	100 W. Randolph, Suite 6-600 / Chgo. 60601	312. 793. 3510	charles.abraham@illinois.gov

Red Line Extension

Connecting 95th Street Station to 130th Street

AGENCY SCOPING MEETING

September 24, 2009

10:30 AM – 12:30 PM

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL
1	Jill Zwick	Sec. of State (Illinois)	17 N. State St. #1200 Chicago IL. 60602	312-793-8876	jzwick@ilsos.net
2					
3					
4					
5					
6					
7					

MEETING MINUTES

RE: **Red Line Extension**
Agency Scoping Meeting

MEETING NO. & DATE: **No. 1 – September 24, 2009**

CHAIRPERSON: **Jeff Busby, CTA**

LOCATION: **CTA Offices: 567 West Lake Street**

TO: **Distribution and All Attendees**

ATTENDEES:

Names	Initials	Organization / Title
Jeffrey Busby	JB	CTA Strategic Planning
Helene Kornblatt	HK	CWC Transit Group
Kate Stenberg	KS	CWC Transit Group
Chris Martel	CM	CWC Transit Group
Bob Tessiatore	BT	CWC Transit Group
Kim Cheever	KC	CWC Transit Group
John Kulpa	JK	CWC Transit Group
Joe Clemens	JC	CWC Transit Group
Kristy Ranieri	KR	CirclePoint (CWC team member firm)
Sarah Layton-Wallace	SLW	CirclePoint (CWC team member firm)
Joe Schmessler		MWRD / Princ. Civil Engineer
David Werner		Federal Transit Administration (FTA)
David Kralik		Metra / Dept. Head Long Range Planning
Wendy Williams		City of Chicago / Dept. of Community Development
Lois Kimmelman		Federal Transit Administration (FTA)
Steve Hands		Chicago Transit Authority (CTA)
Rica Mazlett		Chicago Dept. of Transportation (CDOT)
Tom Radak		Pace / Senior Project Manager
David Tomzik		Pace / Manager Long Range Planning
Tim Roseman		Detroit DOT / Strategic Plan
Dan Powers		IL Commerce Commission / Senior RR Safety Specialist
Mark Harmon		Chicago Police
Tony Lupo		IL State Police District Chicago
Clare Pfotenhauer		IL State Police District Chicago
Joseph Bornstein		Chicago Park District / Project Manager
Jonathan Ernst		City of Chicago / Streets & Sanitation
Nicole Kamins		Chicago Dept. of Environment (CDOE)/ Program Director
Gene Marks		IL Dept. of Transportation (IDOT)
Terry Morrison		IL State Police District Chicago
Chuck Abraham		IDOT / Manager of Program Support
Jill Zwick		State of Illinois / Secretary of State

PREPARED BY: Kim Cheever

ISSUE DATE: September 30, 2009

Meeting called to order at 10:35 am CDT.

Objective: Agency Scoping

Item No.	*Item Description*	*Responsibility*	*Due Date*
1.00	**Agency Participation Request** CTA presented a project overview and requested questions/comments from agencies in attendance. CTA requested written request from agencies interested in being a participating agency by October 2, 2009. Agencies do not have to be a participating agency to be involved, but it offers them a more active role in the process. Following the presentation, the meeting was opened up to questions and comments.		
1.01	CWC: Please note that the deadline to submit comments is October 27, 2009.		
1.02	CTA: The initial project concept was to route the new line within the railroad ROW, but railroad policy requires a 50' separation from the railroad to an adjacent transit line and there isn't sufficient room to accommodate the transit line within the existing ROW. The new line will need to be adjacent to the UPRR ROW on either the east or west side.		
2.00	**Land Acquisition** CDOE: How much acquisition would be involved? *CTA: We will study that in detail as part of the EIS; however, we did a preliminary analysis in the AA. The East Option would affect mostly residential properties, while the West Option would affect mostly commercial and vacant properties.*		
2.01	FTA: Does the UPRR alternative capital costs include property acquisition? *CTA: I believe that it does and takes into account the East Option that includes mostly residential properties.*		
3.00	**System Coordination** Metra: An important consideration is that there should be a joint station for Metra and CTA, as Metra is considering expansion of service and there are opportunities to connect to CTA service at 115th and 130th Streets. Intermodal station could be located at 130th for train to Indiana.		
4.00	**Project Costs** FTA: Does matrix include ROW costs? *CTA: The ROW costs are included but do not differentiate between the west or east side alternative.*		
5.00	**Bus Routes** Pace: Will bus access be evaluated at these stations and which bus routes would be affected? *CTA: Yes, bus access and impacts will be evaluated in the EIS.*		

Item No.	Item Description	Responsibility	Due Date
6.00	**Funding** Dept. of Planning: What if federal funds were not available? *CTA: Capital improvements in the CTA system are dependent on federal funds.*		
6.01	Dept. of Planning: If we don't get 2016 Olympic bid, will that impact likelihood of the project? *CTA: No, these projects are warranted without the Olympics and were not included in the Olympic bid package.*		
6.02	Detroit DOT: What is the percentage of New Starts funding that you are seeking? *CTA: Project sponsors are allowed to ask for up to 80%, but in the spirit of competitiveness the FTA desires a greater local commitment.*		
6.03	FTA: Having local and state funding in place as soon as possible is of critical importance in the New Starts process. *CTA: CTA is looking to get firm commitments in the next capital bill process.*		
7.00	**Impact of Grade Crossings** Pace: Do you look at impact of grade crossings and how buses would access the terminal? *CWC: Yes. If the project causes bus activity to be different, that's where we look at impact.*		
8.00	**Wetlands** CDOE: There are a lot of wetlands nearby, but route appears to avoid them. Excited this is on the table. Great for people trying to get to jobs. Station at 130th would be beneficial. There is a new environmental center under development at 38th and Torrence. LEED certification for that center would be helped by transit improvements. The agency is hearing that people are supportive of the project.		
9.00	**Contaminated Debris** CDOE: How do you handle contaminated debris during construction? *CTA: A pre-phase 1 analysis is done as part of the EIS to determine potential remediation methods and costs.*		
10.00	**Alternatives** CDOT: At which point will you select an East or West of right of way option? And the alternate terminal locations? How is that selection a part of this process? *CWC: The draft EIS will evaluate design options with the intent to fully inform decision makers, the FTA and stakeholders of the pros and cons of each alternative and each option.*		
11.00	**Preliminary Engineering** CDOT: When will preliminary engineering start? *CTA: Not until scoping is over. Entering into preliminary engineering requires Federal approval.* *CWC: Will need to do enough engineering to know what maximum impact could be.*		

Item No.	Item Description	Responsibility	Due Date
12.00	**Street Level Separation** IDOT: Are there any street level separations? *CTA: The entire line is elevated over street crossings. After the line crosses the ICCN tracks it comes down to grade to save money, along the Chicago's water reclamation property.*		
13.00	**Bus Operations and Coordination** Pace: What level of detail will be explored for bus needs to access this alternative? *CWC: The bus analysis will be performed in the EIS. The AA cost analysis looked at Pace bus restructuring at a high level, so it would help to get Pace feedback on this analysis.* *CTA: For costing, the AA process did make assumptions about PACE restructuring, but would be helpful to have PACE review those.* Pace: Would the bus analysis be done for both Halsted and the UPRR alignments? *CWC: Yes.*		
14.00	**Green Technology** CDOE: Do park & ride facilities include green technologies? *CTA: We will look at technological options as part of the project's mitigation methods.*		
15.00	**Public Input** Chicago Park District: What are some of the common concerns noted so far? *CTA: Noise and vibration from residents, and safety and security at stations. The public along this corridor are generally accepting of potential land acquisitions.*		
16.00	**MWRD Coordination** MWRD: Interested in a conceptual plan for terminal because it ends up on our property. *CTA: Have the conceptual profile sheets for review at this meeting.*		
17.00	**95th Street Station** Pace: Since congestion at the 95th Street station will be relieved by this project, how would you re-configure this facility? *CTA: We have not considered this yet, but it could be included within the EIS study.*		
18.00	**Bike Access** CDOE: Will there be bike access? City will accommodate bike access and consider adjacent trails. *CTA: We promote bike access and accommodate bike parking beyond fare gates. Interest in doing that.*		
19.00	**MWRD Odors** MWRD: Noted concern that there is an odor from the water treatment facility at 130th street. *CTA: EIS will need to gage magnitude of issue.*		

Item No.	Item Description	Responsibility	Due Date
20.00	**Safety and Security** IL State Police & Chicago Police: Raised potential concerns with access to expressway on-ramp during construction; need for coordination regarding ongoing patrolling of facility; was the cost of patrolling included? *CTA: These issues would be studied in more depth in the EIS.*		

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days.

cc: Attendees

Appendix F
Agencies and Organizations Notified of Scoping

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
87th Street Stony Island Chamber of Commerce	Ms.	Joyce	Ellen		8135 S. Stony Island		Chicago	IL	60617
87th Street Stony Island Chamber of Commerce	Ms.	Kimi	Ellen	President	8135 S. Stony Island		Chicago	IL	60617
95th Street Corridor	Mr.	Randy	Moore	President	349 West 93rd Street		Chicago	IL	60620
American Brotherhood of Contractors	Mr.	Danton	Fielder	President	11509 S. Elizabeth Ave.		Chicago	IL	60643
AMTRAK	Mr.	Joseph	Boarman	President	60 Massachusetts Ave.	NE	Washington	DC	20002
ATV Local 308	Mr.	Al	Martin		205 W. Wacker	Suite 700	Chicago	IL	60606
Blue Island Chamber of Commerce	Ms.	Ruth	Sheahan		2434 Vermont Street		Blue Island	IL	60406
Bridgeview Chamber of Commerce & Industry	Ms.	Roseann	Bautista	Director	7300 West 87th Street		Bridgeview	IL	60455
Bronzeville Chamber of Commerce	Mr.	Johnnie	Blair	President	4955 S. King Dr.		Chicago	IL	60615
Business and Economic Revitalization Association	Mr.	Philip	Sims		200 East 75th Street	Suite 304	Chicago	IL	60619
Business and Economic Revitalization Association	Ms.	Alicia	Spears	Director	200 East 75th Street	Suite 304	Chicago	IL	60619
Calumet Area Industrial Commission	Mr.	Ted	Stalnos	President	1000 East 111th Street	10th Floor	Chicago	IL	60628
Calumet City Chamber of Commerce	Ms.	Kay	Cooper	President	80 River Oaks Center	Arcade-6	Calumet City	IL	60409
Canadian National	Mr.	Patrick	Waldron	Public	17641 Ashland Ave		Homewood	IL	60430
Cedar Park Cemetery					12540 S. Halsted Street		Chicago	IL	60643
Centerpoint Development	Mr.	Michael	Mullen	CEO	1808 Swift Drive		Oakbrook	IL	60523
Chatam Business Association	Ms.	Melinda	Kelly	Director	8441 South Cottage Grove		Chicago	IL	60619
Chicago Roseland Development Corporation	Mr.	Willie	Lomax	Director	11015 South Michigan Avenue		Chicago	IL	60628
Chicago Southland Chamber of Commerce	Ms.	Patrice	Brooks	Executive Vi	1916 West 174th Street		East Hazel Crest	IL	60429
Chicago Transportation Coordination Office	Mr.	Dave	Grewe	Superintend	1501 S. Canal Street		Chicago	IL	60607
Chicago Transportation Coordination Office	Mr.	Phil	Oresik	Superintend	1501 S. Canal Street		Chicago	IL	60607
Chicagoland Chamber of Commerce	Mr.	Michael	Mini	Governmen	200 East Randolph Street	Suite 2200	Chicago	IL	60601
Cosmopolitan Chamber of Commerce	Ms.	Carnice	Carey	Director	203 N. Wabash Ave.	Suite 518	Chicago	IL	60601
CSX Transportation Inc.	Ms.	Ellen	Fitzsimmons	Senior Vice	500 Water Street.		Jacksonville	Florida	32202
East Side Chamber of Commerce	Ms.	Jacqueline	Herod	Director	3658 East 106th Street		Chicago	IL	60617
Greater Auburn-Gresham Development	Mr.	Carlos	Nelson	Director	1159 W. 79th Street		Chicago	IL	60620
Greater Roseland Chamber of Commerce	Ms.	Andrea	Reed	Director					
Greater Southwest Development Corp	Mr.	James	Capraro	Executive	2601 West 63rd Street		Chicago	IL	60629
Hegewisch Chamber of Commerce	Ms.	Amy	Davis		13330 South Baltimore Avenue		Chicago	IL	60633
Hegewisch Chamber of Commerce	Ms.	Bernadette	Rodriguez	Director	13330 South Baltimore Avenue		Chicago	IL	60633
Historic Pullman Foundation	Ms.	Dedee	Fabris	Staffer	614 East 113th Street		Chicago	IL	60628
Icanhelputravel.com	Ms.	Geraldine	Hill		11731 S Wallace		Chicago	IL	60628
Indiana Harbor Belt Railroad	Mr.	Dave	Nelson		2721 161st Street		Hammond	IN	46323-1099
Indiana Harbor Belt Railroad	Mr.	Jim	Roots	General Mar	2721 161st Street		Hammond	IN	46323-1099
Indiana Harbor Belt Railroad	Mr.	Phillip	Oresik		2721 161st Street		Hammond	IN	46323-1099
Inka Internet Station	Mr.	Semaj	Salinas		11320 S. Halsted St		Chicago	IL	60628
International Socialist Organization	Mr.	Nikolai	Diaz		1347 W Cullerton		Chicago	IL	60628
Laborer Local 76	Mr.	Wendell	Dixon		11612 S Austin		Chicago	IL	60643
Laborers Union Local 6	Mr.	Billy	Dorsey		11431 S Union Ave		Chicago	IL	60628
Little Company of Mary Hospital	Mr.	Dennis	Riley		2800 W. 95th St		Evergreen Park	Il	60805
Long & Associates	Dr.	John	Long		7258 S. Euclid		Chicago	IL	60649
Maple Park Home Owner	Mr.	Jacob	Harston		11519 S. Loomis		Chicago	IL	60643
Material Girlz Fabric Club - CSU	Ms.	Marian	Hayes		9501 S. King Drive		Chicago	IL	60628
McNamara Cab Co	Mr.	Frank	Lo Presti				Chicago	IL	
Midwest High-Speed Rail Assoc	Mr.	Christopher	Lacina		10211 S Prospect Ave		Chicago	IL	60643
MKC Associates	Ms.	Mary Kay	Christopher		3112 Maple		Berwyn	IL	60402

Area Chapter)	Ms.	Deborah	Chima	President	216 W. Jackson Blvd.	Suite 625	Chicago	IL	60606
P.U.S.H. / N.A.A.C.P/ AFSCME (Council 31)	Ms.	Linda	Steward		920 E. Hyde Park Blvd.		Chicago	IL	60615
Socialist Worker	Mr.	Christopher	Collins		1100 N LaSalle Blvd		Chicago	IL	60610
South Chicago Chamber of Commerce	Mr.	Neil	Bosanko	Director	2938 East 91st Street		Chicago	IL	60617
South Suburban Mayors & Managers	Mr.	Ed	Paesel	Director	1904 W. 174th Street		East Hazel Crest	IL	60429
Southeast Chicago Development Commission	Mr.	Doug	Knuth	President	9204 South Commercial Avenue		Chicago	IL	60617
St. Bernard's Hospital and Health Care Center	Mr.	Charles	Holland		326 W. 64th St.		Chicago	IL	60621
Strategies for Community Economic Development & Finance	Ms.	Heather	Parish	Consultant	Third Floor		Chicago	IL	60649
Streeterville Chamber of Commerce	Ms.	Mable	Buckner	Director	645 N. Michigan Ave. #800		Chicago	IL	60611
Streetwise	Mr.	Sean	Redmond		525 S. State Street		Chicago	IL	60605
Transit Riders Authority	Mr.	Adam	Kerman		P.O. Box 529		Chicago	IL	60690
Union Pacific Railroad	Mr.	Mike	Payette	Assistant Vi	101 North Wacker Drive, Suite 1910		Chicago	IL	60606
Union Pacific Railroad	Mr.	Joseph	Bateman, Jr.	VP Public Af	1400 Douglas St.	STOP 1560	Omaha	NE	68719
Union Pacific Railroad	Mr.	Mark	Bristol	General Dire	1400 Douglas St.	STOP 1120	Omaha	NE	68719
Women's Business Development Center (WBDC)	Ms.	Hedy	Ratner	Director	8 S. Michigan Avenue, Suite 400		Chicago	IL	60603
Altgeld Community Foundation	Ms.	Paulette	Edwards		13226 South Ellis Ave.		Chicago	IL	60827
Beverly Area Planning Association	Mr.	Matt	Walsh	Director	11107 S. Longwood Drive		Chicago	IL	60643
Beverly Area Planning Association	Ms.	Marcia	Walsh	and	11107 S. Longwood Drive		Chicago	IL	60643
Blue Island Chamber of Commerce	Mr.	Greg	Luchow	Executive D	2434 Vermont Street		Blue Island	IL	60406
Catholic Charities, Community and Civic Affairs	Mr.	John	Ryan	Director	721 North LaSalle Street		Chicago	IL	60610
Center for Neighborhood Technology	Mr.	Kyle	Smith		2150 W North Ave		Chicago	IL	60647
CFABC-Improve RDA	Mr.	Thomas	Babbington		3653 W 81st St		Chicago	IL	60652
Chatham Avalon Park Community Council	Mr.	Keith	Tate	President	8441 South Cottage Grove		Chicago	IL	60619
Chesterfield Community Council	Mr.	Nell	Howard		8737 W Wabash		Chicago	IL	60619
Chesterfield Community Council	Mr.	Lester	Smith	President	501 East 90th Place		Chicago	IL	60619
Chesterfield Community Council	Mr.	WM	Howard		8737 Wabash Ave.		Chicago	IL	60619
Chesterfield Community Council	Ms.	Cynthia	Coleman	President	501 East 90th Place		Chicago	IL	60619
Chesterfield Community Council	Ms.	Worthettia	Evans		501 East 90th Place		Chicago	IL	60619
Chesterfield Community Council	Ms.	Kristina	Patterson		501 East 90th Place		Chicago	IL	60619
Chicago South CDO	Mr.	James	Dunlap Jr.		12538 S. Halsted		Chicago	IL	60643
Chicago Urban League	Mr.	Patrick	Colbert	Relationshi	4510 South Michigan Avenue		Chicago	IL	60653
Chicago Urban League	Ms.	Cheryle	Jackson	CEO	4510 South Michigan Avenue		Chicago	IL	60653
Chicago Urban League	Ms.	Cheryl	Freeman Smith	Diversity	4510 South Michigan Avenue		Chicago	IL	60653
Chicagoland Bicycle Federation	Mr.	Keith	Holt		9 W. Hubbard	#402	Chicago	IL	60610
Citizens Taking Action	Mr.	Charley	Yale		6057 N Lincoln Ave	Apt 611	Chicago	IL	60659
Community Mental Health Council	Dr.	Lynne	Mock, Ph.D.		8704 S. Constance Ave.		Chicago	IL	60617
Community Mental Health Council	Mr.	Ade	Elegbede		8704 S. Constance		Chicago	IL	60617
Community Renewal Society-Senior Action Network	Ms.	Doris	Martin		13207 S. Rhodes Ave		Chicago	IL	60827
CTA Gray Line Project	Mr.	Mike	Payne		P.O. Box 64614		Chicago	IL	60664
Developing Communities Project	Mr.	James	Woodson		9701 S. Harvard Ave.		Chicago	IL	60628
Developing Communities Project	Mr.	Darrell	Evans		12500 S. Lowe		Chicago	IL	60628
Developing Communities Project	Mr.	John Paul	Jones	Organizer	11300 South Halsted		Chicago	IL	60626
Developing Communities Project	Mr.	Brandon	Love		11300 S Halsted		Chicago	IL	60628
Developing Communities Project	Mr.	Dennis	Lucas		11300 S Halsted		Chicago	IL	60628
Developing Communities Project	Mr.	Roderick	Montgomery		11300 South Halsted	Ste A	Chicago	IL	
Developing Communities Project	Mr.	Eugene	Rogers		10763 S. Sangamon		Chicago	IL	60643
Developing Communities Project	Mr.	Horace	Smith		10557 S King Dr		Chicago	IL	60628
Developing Communities Project	Mr.	Eugene	Taylor		586 Calhoun Ave		Calumet City	IL	60409
Developing Communities Project	Mr.	Lou	Turner		11300 S Halsted St		Chicago	IL	60628

Developing Communities Project	Mrs.	Tracie	Evans		12500 S. Lowe		Chicago	IL	60628
Developing Communities Project	Ms.	Edith	Evans		71211 S. Emerald Ave.		Chicago	IL	60628
Developing Communities Project	Ms.	Desta	Houston		212 E. 95th St.		Chicago	IL	60619
Developing Communities Project	Ms.	Sharon	Houston		12240 S. Perry		Chicago	IL	60628
Developing Communities Project	Ms.	Patricia	Peters		648 E. 101st Street		Chicago	IL	60628
Developing Communities Project	Ms.	Debra	Strickland		212 E. 95th St.		Chicago	IL	60619
Developing Communities Project	Ms.	Lisa	Dunbar		10231 S Peoria		Chicago	IL	60643
Developing Communities Project	Ms.	Michelle	Evans		12500 S. Lowe		Chicago	IL	60628
Developing Communities Project	Ms.	Patricia	Gray Smith		10557 S King Dr		Chicago	IL	60628
Developing Communities Project	Ms.	Sandra	Herrin		10956 S State		Chicago	IL	60628
Developing Communities Project	Ms.	Ernnesha	Kerr		11300 S Halsted		Chicago	IL	60628
Developing Communities Project	Ms.	Dorothy	King		1453 W. 71st Place		Chicago	IL	60636
Developing Communities Project	Ms.	Gwendolyn	Rice	Director	11300 South Halsted		Chicago	IL	60626
Developing Communities Project	Ms.	Hilda	Taylor		586 Calhoun Ave		Calumet City	IL	60409
Developing Communities Project	Pastor	Samuel	Strachan		449 W. 129th St.		Chicago	IL	60628
Developing Communities Project	Rev.	Michael	Evans		212 E. 95th St.		Chicago	IL	60619
Developing Communities Project	Rev.	Larry	Redd		11320 S Halsted		Chicago	IL	60628
Fireman Community Services	Mr.	Warner	Abrams		144 W 47th St.		Chicago	IL	60609
Gangs, Drugs, and Violence Prevention Inc.	Mr.	Jesse	Beckam Jr.		12600 S. Wallace		Chicago	IL	60628
Gangs, Drugs, and Violence Prevention Inc.	Ms.	Addie	Beckam		12600 S. Wallace		Chicago	IL	60628
Golden Gate Homeowners Association	Ms.	Mary	Jefferson		13161 S Rhodes Ave		Chicago	IL	60827
Golden Gate Homeowners Association	Ms.	Deloris	Lucas		13134 S Vernon		Chicago	IL	60827
Grand Boulevard Federation	Ms.	Andrea	Lee		4859 S. Wabash	2nd Floor	Chicago	IL	60615
Healthcare Consortium of Illinois	Ms.	Mayme	Buckley		1350 E Sibley Blvd		Dolton	IL	60419
Healthcare Consortium of Illinois	Ms.	Naomi	Coleman		1350 E Sibley Blvd		Dolton	IL	60417
Historic Pullman Foundation	Mr.	Michael	Shymanski		614 E. 113th St.		Chicago	IL	60628
Illinois Nurses Association	Ms.	Sharon	Bell		1250 W. 112th Place		Chicago	IL	60643
It Takes A Village	Ms.	Clare	Nellums		344 W. 123rd Street		Chicago	IL	60628
Justice for Children	Ms.	Debra	McLaurin	Developmer	2600 Southwest Frwy	Ste 806	Houston	TX	77098
Little Village Environmental Justice Organization	Mr.	Harry	Brooks		7818 S South Shore Drive	Apt 2A	Chicago	IL	60649
Metro Seniors in Action	Mr.	Charles	Spears		6733 S. Ridgeland Ave	Apt. 1-1y	Chicago	IL	60649
Metro Seniors in Action	Ms.	Dorothy	Sims		10834 S. Eberhart Ave.		Chicago	IL	60628
NAACP, Chicago Southside Chapter	Rev.	Phillip	O'Bannon	President	800 East 78th Street		Chicago	IL	60619
Neighbors of Fuller Park	Mr.	Kenneth	Smith		239 W. 46th St.		Chicago	IL	60609
Omnibus Society of America	Mr.	Wiliam	Reynolds		2114 W Balmoral Ave		Chicago	IL	60625
Partnership for Economic and Community Development	Mr.	Renard	Harvey		1667 W. 92nd Place		Chicago	IL	60620
Pastors United for Change	Mr.	Roosevelt	Watkins	ent	9231 S. Cottage Grove		Chicago	II	60619
People for Community Recovery	Ms.	Cheryl	Johnson		13116 S. Ellis Ave.		Chicago	IL	60827
People for Community Recovery	Ms.	Alisha	Jacobs		755 130th Place		Chicago	IL	60827
People for Community Recovery	Ms.	Imanie	Johnson		13015 S Evans Ave		Chicago	IL	60827
People for Community Recovery	Ms.	Nekeba	Johnson		13041 S Evans Ave		Chicago	IL	60827
Predestined Incorporated	Ms.	Laticia	Strachan	hief	9322 South Emerald Avenue		Chicago	IL	60620
Pullman Civic Organization	Mr.	Drew	Sexton	President	11111 S. Forrestville Ave.		Chicago	IL	60628
Pullman Civic Organization	Mr.	Andrew	Bullen		619 E 111th St		Chicago	IL	60628
Pullman Civic Organization	Ms.	Linda	Bullen		619 E 111th St		Chicago	IL	60628
Pullman Civic Organization	Mr.	Drew	Smith		11111 S. Forrestville Ave.		Chicago	IL	60628
Pullman Historic Visitor Center	Ms.	Deedee	Frabris	Director	11141 South Cottage Grove		Chicago	IL	60628
Rainbow Push Coalition, International Trade Bureau	Ms.	Marshette	Turner	Director	930 E. 50th Street		Chicago	IL	60615
Rainbow/Push Coalition	Mr.	John	Mitchell	Staff	930 East 50th Street		Chicago	IL	60615

Riverdale Community Resource Center	Ms.	Rebecca	George	Director	13725 South Wabash		Riverdale	IL	60827
Riverdale Community Resource Center	Ms.	Myrna	Watkins	Director	13725 South Wabash		Riverdale	IL	60827
Roseland Heights Community Association	Mr.	Arthur	Jones	tive	9910 South Prairie Avenue		Chicago	IL	60628
Roseland Heights Community Association	Mr.	Michael	Porche	Director	P.O. Box 198751		Chicago	IL	60619
Roseland Heights Community Association	Mr.	Clevan	Tucker Jr		P.O. Box 198751		Chicago	IL	60619
Roseland Heights Community Association	Ms.	Louise	Hutchinson		9742 S. Forest Avenue		Chicago	IL	60628
Roseland Heights Community Association	Ms.	Anne	Wilson		9719 S. Forest Ave.		Chicago	IL	60628
Rosemoor Community Association	Ms.	Hileria	Godfrey	President	10205 S. Martin Luther King Dr.		Chicago	IL	60628
Rosemoor Community Association	Ms.	Dena	McMullan		10109 S King Drive		Chicago	IL	60628
Senior Service Coalition of Southeast Chicago	Ms.	Julia	Lopez	, S. S.	3201 East 91st Street		Chicago	IL	60617
South Shore Cultural Center	Ms.	Andrea	Adams	Director	7059 South South Shore Drive		Chicago	IL	60649
Southeast Chicago Chamber	Ms.	Joyce	Ellen	Director	8135 S. Stony Island		Chicago	IL	60617
Southeast Environmental Task Force	Ms.	Peggy	Salazar	Board of	13300 South Baltimore Avenue		Chicago	IL	60633
Southeast Environmental Task Force	Mr.	Mike	Skuja	Board of	13300 South Baltimore Avenue		Chicago	IL	60633
Southsiders Organized for Unity and Liberation (SOUL)	Mr.	Prentice	Butler		5001 S Ellis		Chicago	IL	60615
Southsiders Organized for Unity and Liberation (SOUL)	Mr.	Christian	Mitchell		5001 S Ellis		Chicago	IL	60615
Southwest REACH Center	Mr.	Piotr	Korzynski	Coordinator	6155 S. Pulaski Road	2nd Floor	Chicago	IL	60629
TCA Health Inc.	Ms.	La Donna	Brown Miller		1029 East 130th St		Chicago	IL	60628
Teamwork Englewood	Rev.	R.C.	Walker	Director	815 W. 63rd St. 2nd Floor		Chicago	IL	60621
The Community Mental Health Council	Ms.	Diana	Short		333 E 55th Place	Apt 208	Chicago	IL	60637
The Little Village Environmental Justice Organization	Mr.	Mike	Pitula		2856 S. Millard Ave.		Chicago	IL	60623
United Neighborhood Organization	Mr.	Juan	Rangel	Executive	3rd Floor		Chicago	IL	60607
Village of Riverdale, Community Development Department	Mr.	Earl	Silas, Jr	Director	157 West 144th Street		Riverdale	IL	60827
Voorhees Center	Ms.	Martha	Glas		400 S Peoria St		Chicago	IL	60607
West Chatham Advisory	Minister	Silvian	Jones	President					
West Chatham Improvement Association	Ms.	Lorri	Baldwin	Vice-	8153 S. Harvard Avenue		Chicago	IL	60620
West Chesterfield Community Council	Ms.	Gwen	Coleman		9351 S. Michigan Ave.		Chicago	IL	60619
YWCA	Ms.	Cynthia	Angline	Director	6600 S. Cottage Grove		Chicago	IL	60637
American Indian Center, Inc.	Ms.	Frances	Hagemann	Board Vice P	1630 W. Wilson Ave.		Chicago	IL	60640
American Indian Center, Inc.	Ms.	Rita	Hodge	Board Secre	1630 W. Wilson Ave.		Chicago	IL	60640
American Indian Center, Inc.	Ms.	Debra	Valentino	Board Presid	1630 W. Wilson Ave.		Chicago	IL	60640
Association of Asian Construction Enterprises	Mr.	Perry	Nakachi	President	333 N. Ogden Avenue		Chicago	IL	60607
Black Contractors United (BCU)	Ms.	Florence	Cox	Director	Suite 200		Chicago	IL	60620
Chicago Area Gay & Lesbian Chamber of Commerce	Ms.	Christee	Snell	Director	1210 W. Rosedale		Chicago	IL	60660
Chicago Minority Business Development Council	Ms.	Sheila	Hill	President	1 East Wacker Drive	Suite 1200	Chicago	IL	60601
China Town Chamber of Commerce		Man-Men	Lee	Co-Executiv	2169B S. China Place		Chicago	IL	60616
China Town Chamber of Commerce		Chi Can	To	Co-Executiv	2169B S. China Place		Chicago	IL	60616
Hispanic American Construction Industry Association	Mr.	Paul	Cerpa	Director	901 W. Jackson Blvd.	Suite 205	Chicago	IL	60607
Illinois Hispanic Chamber of Commerce	Mr.	Omar	Duque	CEO	111 W. Washington	Suite 1660	Chicago	IL	60602
Latin American Chamber of Commerce	Mr.	Bennett	Santana	Chairman	3512 W. Fullerton Ave.		Chicago	IL	60647
Puerto Rican Chamber of Commerce of Illinois	Mr.	Marlo	Irizarry	Director	2622 W. Division St.		Chicago	IL	60622
2nd Congressional District	Congressn	Jesse	Jackson Jr.	Congressma	7121 S. Yates Blvd.		Chicago	IL	60649
2nd Congressional District Office	Mr.	Rick	Bryant		17926 South Halsted		Homewood	IL	60430
2nd Congressional District Office	Mr.	Ben	Lenet	District	17926 South Halsted		Homewood	IL	60430
7th Congressional District	man	Danny	Davis	an	3333 West Arthington Street	Ste. 130	Chicago	IL	60624
U.S. Senator	Senator	Roland	Burris	Senator	230 S. Dearborn	Ste. 3900	Chicago	IL	60604
U.S. Senator	Senator	Richard	Durbin	Senator	230 S. Dearborn	Ste. 3892	Chicago	IL	60604
Alderman Carrie Austin's Office	Mr.	Chester	Wilson		507 W 111th Street		Chicago	IL	60628
Alderman Howard Brookins Jr. Office	Ms.	Adrienne	Smith		9612 S Halsted		Chicago	IL	60628

Calumet City	Ms.	Michelle	Markiewicz Qualkinbush	Mayor	204 Pulaski Road		Calumet City	IL	60409
Chicago City Council 10th Ward	Ms.	Yessenia	Carreon		3522 E. 106th St.		Chicago	IL	60617
Chicago City Council 10th Ward Office	Alderman	John A.	Pope	Alderman	3552 E. 106th St.		Chicago	IL	60617
Chicago City Council 17th Ward	Alderman	Latasha	Thomas	Alderman	7811 S. Racine Avenue		Chicago	IL	60620
Chicago City Council 19th Ward	Alderman	Ginger	Rugai	Alderman	10400 South Western Avenue		Chicago	IL	60655
Chicago City Council 20th Ward	Alderman	Willie	Cochran	Alderman	6357 S. Cottage Grove		Chicago	IL	60637
Chicago City Council 21st Ward	Alderman	Howard	Brookins, Jr.	Alderman	9612 S. Halsted St		Chicago	IL	60628
Chicago City Council 34th Ward	Alderman	Carrie	Austin	Alderman	507 W. 111th St.		Chicago	IL	60628
Chicago City Council 34th Ward Office	Mr.	Lemuel	Austin		500 W. 111th St.		Chicago	IL	60628
Chicago City Council 34th Ward Office	Mr.	Alfred	Connor		1124 W. 107th Place		Chicago	IL	60643
Chicago City Council 34th Ward Office	Ms.	Leslie	Austin		507 W. 111th St.		Chicago	IL	60628
Chicago City Council 34th Ward Office	Ms.	Diane	Turner		507 W. 111th St.		Chicago	IL	60628
Chicago City Council 34th Ward Office	Ms.	Lee Angela	Lofton		12708 S. Green St.		Chicago	IL	60643
Chicago City Council 3rd Ward	Alderman	Pat	Dowell	Alderman	5046 S. State Street		Chicago	IL	60609
Chicago City Council 6th Ward	Alderman	Freddrenna	Lyle	Alderman	406 E. 75th St.		Chicago	IL	60619
Chicago City Council 6th Ward Office	Mr.	Keith	Harris		406 E 75th St		Chicago	IL	60619
Chicago City Council 7th Ward	Alderman	Sandi	Jackson	Alderman	7129 S. Yates Street		Chicago	IL	60649
Chicago City Council 8th Ward	Alderman	Michelle A.	Harris	Alderman	8539 S. Cottage Grove		Chicago	IL	60619
Chicago City Council 9th Ward	Alderman	Anthony	Beale	Alderman	34 E. 112th Place		Chicago	IL	60628
City of Blue Island	Mr.	Donald E.	Peloquin	Mayor	13051 S. Greenwood Ave.		Blue Island	IL	60406
City of Blue Island	Ms.	Mary	Poulsen	Marketing D	13051 South Greenwood Avenue		Blue Island	IL	60406
City of Calumet - Community & Economic Development	Mr.	James J.	Gigliotti	Coordinator	204 Pulaski Road		Calumet City	IL	60409
City of Chicago Office of the Mayor	Mayor	Richard	Daley	Mayor	121 N. LaSalle St.	Room 507	Chicago	IL	60602
City of Chicago Office of the Mayor	Mr.	Sean B.	Harden	Assistant to	121 N. LaSalle St.	Room 406	Chicago	IL	60602
City of Chicago Office of the Mayor	Mr.	Gene	Lee	Chief of	121 N. LaSalle St.	Room 406	Chicago	IL	60602
Village of Burnham	President	Robert	Polk	President	14450 Manistee		Burnham	IL	60633
Village of Calumet Park	Mr.	Joseph	DuPar	Mayor	12409 S. Throop St.		Calumet Park	IL	60827
Village of Calumet Park, Community Relations Commissioner	Mr.	Norm	Edwards	Director	12409 South Throop		Calumet Park	IL	60827
Village of Dolton	Mayor	Ronnie	Lewis	Mayor	14014 Park Avenue		Dolton	IL	60419
Village of Evergreen Park	Mayor	James	Sexton	Mayor	9418 S. Kedzie Ave		Evergreen Park	IL	60805
Village of Riverdale	Mr.	Deyon L.	Dean	Mayor	157 W. 144th St.		Riverdale	IL	60827
Village of Riverdale	Ms.	Deborah	Smiley	Village Clerk	157 West 144th Street		Riverdale	IL	60827
Cook County Board of Commissioners	Mr.	Todd	Stroger	President	118 N. Clark Street	Room 537	Chicago	IL	60602
Cook County Commissioner	oner	William	Beavers	ner	118 N. Clark Street		Chicago	IL	60602
Cook County Commissioner	oner	Jerry "Iceman"	Butler	ner	118 N. Clark Street		Chicago	IL	60602
Cook County Commissioner	oner	Robert	Steele	ner	118 N. Clark Street		Chicago	IL	60602
Cook County Commissioner Robert Steele's Office	Ms.	Alexis	Mims		118 N Clark St.	Room 567	Chicago	IL	60619
Cook County Recorder of Deeds & Rgistrar of Titles	Mr.	Eugene	Moore	Deeds	118 N. Clark Street	Room 120	Chicago	IL	60602
Illinois Governor	Governor	Patrick	Quinn	Governor	100 W. Randolph, 16-100		Chicago	IL	60601
Illinois House of Representative District 18	ative	Julie	Hamos	Representat	820 Davis Street	Ste. 103	Evanston	IL	60201
Illinois House of Representative District 27	ative	Monique D.	Davis	Representat	1234 West 95th Street		Chicago	IL	60643
Illinois House of Representative District 28	ative	Robert	Rita	Representat	4818 W. 137th Street		Crestwood	IL	60445
Illinois House of Representative District 29	ative	David E.	Miller	Representat	1350 East Sibley Blvd	Ste 301 A	Dolton	IL	60419
Illinois House of Representative District 30	ative	William	Davis	tive	1912 W. 174th St.		East Hazel Crest	IL	60429
Illinois House of Representative District 31	ative	Mary E.	Flowers	Representat	2525 W. 79th Street		Chicago	IL	60652
Illinois House of Representative District 32	ative	Andre M.	Thapedi	Representat	371 East 75th St		Chicago	IL	62706
Illinois House of Representative District 33	ative	Marlow H.	Colvin	Representat	8539 South Cottage Grove		Chicago	IL	60619
Illinois House of Representative District 34	ative	Constance A	Howard	Representat	8729 S. State Street		Chicago	IL	60619
Illinois House of Representative District 35	ative	Kevin	Joyce	tive	6965 W. 111th Street		Worth	IL	60482

Illinois House of Representative District 36	ative	James D.	Brosnahan	tive	5311 W. 95th St.		Oak Lawn	IL	60453
Illinois House of Representative District 5	ative	Kenneth	Dunkin	Representat	1520 N. Wells		Chicago	IL	60610
Illinois House of Representative District 6	ative	Esther	Golar	Representat	4926 South Ashland		Chicago	IL	60609
Illinois Secretary of State	Mr.	Jesse	White	of State	213 State Capitol		Springfield	IL	62756
Illinois Senator District 14	Senator	Emil	Jones III	Senator	507 West 111th Street		Chicago	IL	60628
Illinois Senator District 15	Senator	James T	Meeks	Senator	2050 E. 159th Street		Calumet City	IL	60419
Illinois Senator District 16	Senator	Jacqueline Y.	Collins	Senator	1155 West 79th Street		Chicago	IL	60620
Illinois Senator District 17	Senator	Donne E.	Trotter	Senator	8704 South Constance Avenue	Ste. 324	Chicago	IL	60617
Illinois Senator District 18	Senator	Edward D	Maloney	Senator	10400 South Western Avenue		Chicago	IL	60643
Illinois Senator District 3	Senator	Mattie	Hunter	Senator	2929 S. Wabash Avenue	Ste. 102	Chicago	IL	60616
Illinois State Police	Mr.	Jonathan	Monken	Director	801 South Seventh Street	P.O. Box 19461	Springfield	IL	62794
Illinois State Police District Chicago	Trooper	Clare	Pfotenhauer	Trooper	9511 W. Harrison St.		Des Plaines	IL	60016
Illinois State Toll Highway Authority	Mr.	John	Minolta	Chairman	2700 Ogden Ave		Downer's Grove	IL	60515
State Rep David Miller's Office	Ms.	Valerie	Davis		1350 E Sibley Blvd	Ste 301 A&B	Chicago	IL	60419
Compliance	Mr.	Michael	Chezik	Environme	200 Chestnut St.	Room 244	Philadelphia	PA	19106
Federal Highway Administration	Mr.	Norman	Stoner	Division Adn	3250 Executive Park Drive		Springfield	IL	62703
Federal Highway Administration	Mr.	Chris	DiPalma		200 West Adams, Suite 320		Chicago	IL	60606
Federal Highway Administration	Mr.	Ed	Christopher	n Planning	4749 Lincoln Mall Drive	Ste. 600	Matteson	IL	60443
Federal Highway Administration	Mr.	Michael	Rosenstiehl	ve Team	4749 Lincoln Mall Drive	Ste. 600	Matteson	IL	60443
Federal Railroad Administration	Mr.	Laurence	Hasvold	Regional Ad	200 West Adams, Suite 310		Chicago	IL	60606
Federal Railroad Administration	Mr.	Timothy	Barkley	Office of	1200 New Jersey Ave. SE		Washington	DC	20590
Federal Transit Administration	Mr.	David	Werner	Regional Ad	200 West Adams Street, Suite 320		Chicago	IL	60606
Chicago Bureau of Convention and Tourism	Mr.	Mark	Theis	Vice	2301 N. Lakeshore Drive		Chicago	IL	60616
Chicago Housing Authority	Mr.	Lewis	Jordan	CEO	60 E. Van Buren		Chicago	IL	60605
Chicago Housing Authority, Intergovernmental Affairs	Mr.	Otis	Wright	Director	60 E. Van Buren		Chicago	IL	60605
City of Chicago Department of Aviation	Mr.	Larry	Rzewski		121 N. LaSalle St.		Chicago	IL	60602
City of Chicago Department of Budget and Management	Mr.	Gene	Saffold	Financial	121 N. LaSalle St.	Room 604	Chicago	IL	60602
City of Chicago Department of Community Development	Ms.	Karen	Forte	Architect - C	121 N. LaSalle St.	Ste. 1000	Chicago	IL	60602
City of Chicago Department of Community Development	Mr.	Edward	Lewis	of	121 N. LaSalle St.	Ste. 1000	Chicago	IL	60602
Operations	Mr.	Bob	Richardson	Commissio	121 N. LaSalle St.	Room 704	Chicago	IL	60602
City of Chicago Department of Transportation, Division of Planning	Mr.	Richard	Hazlett	Coordinating	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
City of Chicago Department of Transportation, Division of Planning	Ms.	Brenda	McGruder		30 N. LaSalle Street	Suite 500	Chicago	IL	60602
City of Chicago Department of Transportation, Division of Planning	Mr.	Joe	Alonzo	CREATE Ma	30 N. LaSalle Street, Suite 500		Chicago	IL	60602
Village of Riverdale	Ms.	Deborah	Smiley	Clerk	157 West 144th Street		Riverdale	IL	60827
Chicago Metropolitan Agency for Planning	Ms.	Janet	Bright	Relations	233 S. Wacker Drive	Ste. 800	Chicago	IL	60606
Chicago Metropolitan Agency for Planning	Mr.	Jose	Rodriguez	Programmin	233 S. Wacker Drive	Ste. 800	Chicago	IL	60606
Chicago Metropolitan Agency for Planning	Ms.	Claire	Bozic	Senior Analy	233 South Wacker Drive, Suite 800		Chicago	IL	60606
Cook County Department of Revenue	Mr.	Nathan	Paige	Director	118 N. Clark St.	Room 1160	Chicago	IL	60602
Cook County Highway Department	Mr.	John	Beissel		69 West Washington	Room 2300	Chicago	IL	60602
Cook County Sheriff's Office	Chief	Louis A.	Sbarboro		5600 Old Orchard Rd.		Skokie	IL	60077
Metra Commuter Rail	Ms.	Kristen	Andersen	Transportati	547 West Jackson Boulevard	13th Floor	Chicago	IL	60661
Metra Commuter Rail	Mr.	David	Kralik	Section Man	547 West Jackson Boulevard, 13th Floor		Chicago	IL	60661
Metropolitan Water Reclamation District	Mr.	Joseph	Schuessler	Principal Civ	111 East Erie		Chicago	IL	60611-3154
Metropolitan Water Reclamation District	Mr.	Nicholas	Venuso	Assistant Ch	111 East Erie		Chicago	IL	60611-3154
Metropolitan Water Reclamation District	Mr.	A.S.	Paintal	Supervising	111 East Erie		Chicago	IL	60611-3154
Northern Indiana Commuter Transportation District	Mr.	John	Parsons		33 East U.S. Highway 12		Chesterton	IN	46304
Northern Indiana Commuter Transportation District	Mr.	Bill	O'Dea		33 East U.S. Highway 12		Chesterton	IN	46304
Pace	Mr.	David	Tomzik	Manager, Lo	550 West Algonquin Road		Arlington Heights	IL	60005
Pace	Mr.	Thomas J.	Ross	Director	550 W. Algonquin Road		Arlington Heights	IL	60005

Regional Transit Authority	Ms.	Aimee	Lee	Manager, Re	175 West Jackson Boulevard, Suite 1550		Chicago	IL	60604
Regional Transit Authority	Ms.	Diane	Palmer	Director of C	175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Regional Transit Authority	Mr.	Sid	Weseman		175 West Jackson Boulevard, Suite 1550		Chicago	IL	60604
Illinois Commerce Commission	Mr.	Charles	Box	Chairman	527 East Capitol Avenue		Springfield	IL	62701
Illinois Department of Commerce and Economic Opportunity	Ms.	Felisha	McNeal		100 W Randolph	Ste 3-400	Chicago	IL	60601
Illinois Department of Employment Security	Ms.	Maureen T.	O'Donnell	Director	33 S. State St.		Chicago	IL	60603
Illinois Department of Revenue	Mr.	Brian	Hamer	Director	100 West Randolph Street		Chicago	IL	60601
Illinois Department of Transportation	Mr.	Stanley	Moore		300 W. Adams	2nd Floor	Chicago	IL	60606
Illinois Department of Transportation	Mr.	Chuck	Abraham	Division of P	J. R. Thomson Center, Suite 6-600		Chicago	IL	60601
Illinois Department of Transportation	Ms.	Lil	Budzinski		J. R. Thomson Center, Suite 6-600		Chicago	IL	60601
Illinois Department of Transportation, Bureau of Railroads	Mr.	Michael	Garcia	Engineerin	2300 S. Dirksen Parkway	Room 339	Springfield	IL	62764
Illinois Department of Transportation, Central Bureau of Operations	Ms.	Diane	O'Keefe	Director	201 West Center Court		Schaumburg	IL	60196
Illinois Department of Transportation, District 1 Bureau of Construction	Mr.	Bill	Frey	Chief	201 West Center Court		Schaumburg	IL	60196
Illinois Department of Transportation, Division of Traffic Safety	Mr.	Robert	Hoover	Chief	2300 S. Dirksen Parkway		Springfield	Il	62764
Illinois Department of Transportation, ITS Program Office	Mr.	Chuck	Schmitt	Chief	2300 South Dirksen Parkway		Springfield	IL	62764
Altgeld Branch Public Library	Ms.	Shante	Jackson	Director	950 East 132nd Place		Chicago	IL	60827
Blue Island Public Library	Mr.	Jim	Deiters	Director	2433 York Street		Blue Island	IL	60406
Brainerd Branch Public Library	Ms.	Mary	Jones	Director	1350 West 89th Street		Chicago	IL	60620
Calumet City Public Library	Mr.	Doug	Losey	Director	660 Manistee Avenue		Calumet City	IL	60409
Calumet City Public Library	Mr.	William	Pixley	Director	660 Manistee Avenue		Calumet City	IL	60409
Hegewisch Library Branch	Ms.	Susan	Puterko	Manager	3048 East 130th Street		Chicago	IL	60633
James F. Vodak/East Side Branch Public Library	Mr.	Richard	Mclellan	Director	3710 East 110th Street		Chicago	IL	60617
Jeffrey Manor Branch Public Library	Ms.	Claudia	Brand	Director	2401 East 100th Street		Chicago	IL	60617
Jeffrey Manor Branch Public Library	Ms.	Elizabeth	Garcia	Director	2401 East 100th Street		Chicago	IL	60617
Pullman Public Library	Mr.	Jimmy	Markcom	Director	11001 South Indiana Avenue		Chicago	IL	60628
Riverdale Public Library	Ms.	Barb	Diel	tive	208 West 144th Street		Riverdale	IL	60827
South Chicago Library Branch	Ms.	Kim	Catledge	Manager	9055 South Houston Avenue		Chicago	IL	60617
Tuley Park Library Branch	Ms.	Stella	Beck	Manager	501 East 90th Place		Chicago	IL	60619
Walker Branch Public Library	Ms.	Christina	Matera	Director	11071 South Hoyne Avenue		Chicago	IL	60643
West Pullman Library Branch	Ms.	Duwana	Dorsey	Manager	830 West 119th Street		Chicago	IL	60628
Hope Fellowship Christian Center	Ms.	Carolyn	Cox		PO Box 198567		Chicago	IL	60619
Apostolic Church of God	Rev. Dr.	Arthur M.	Brazier	Pastor	6320 South Dorchester Avenue		Chicago	IL	60637
Bethel House of Prayer	Mr.	James	McFadden		10956 S State Street		Chicago	IL	60628
Bethel House of Prayer	Ms.	Vanessa	Lewis		10956 S. State Street		Chicago	IL	60628
Bethel House of Prayer	Ms.	Bernadette	Lewis		10956 S. State Street		Chicago	IL	60628
Holy Spirit Lutheran	Mr.	Roger	Mitchell		9210 S. Phillips Avenue		Chicago	IL	60617
Joy Fellowship Baptist Church	Mr.	Albert	Reece		7715 So. Throop		Chicago	IL	60620
Joy Fellowship Baptist Church	Mrs.	Sandra	White		9131 So. Claremont Ave.		Chicago	IL	60620
Joy Fellowship Baptist Church	Ms.	Carrie	Ross		11733 S. Stewart		Chicago	IL	60628
Joy Fellowship Baptist Church	Ms.	Viola	Smith		11638 S. Parnell Avenue		Chicago	IL	60628
Joy Fellowship Baptist Church	Ms.	Ruby	Stewart Mitchell		12322 S. Yale		Chicago	IL	60628
Joy Fellowship Baptist Church	Ms.	Donna	Tyson		14427 Chicago Road	Apt. A	Dolton	IL	60419
Joy Fellowship Baptist Church	Ms.	Willa Mae	Wilson		750 W. 87th Street		Chicago	IL	60620
Joy Fellowship Baptist Church	Ms.	Rosa	Young Martin		14130 Calumet		Dolton	IL	60419
Joy Fellowship Baptist Church	Ms.	Roberta	Patterson		2025 E 175th		Lansing	IL	60438
Joy Fellowship Baptist Church	Ms.	Cecile	Shannon		11740 S Longwood Drive		Chicago	IL	60643
Kenwood United Church of Christ	Pastor	Leroy	Sanders		4600-08 S. Greenwood		Chicago	IL	60653
Lilydale 1st Baptist Church	Rev.	Alvin	Love		649 W. 113th St.		Chicago	IL	60628
Lutheran Church of the Holy Spirit	Mr.	Robert	Elliott		1335 W. 115th St.		Chicago	IL	60643

Lutheran Church of the Holy Spirit	Ms.	Carolyn	Lesmeister		12157 S. Michigan Ave.	#3	Chicago	IL	60628
Lutheran Church of the Holy Spirit	Rev.	Rayford	Grady		1335 W. 115th Street		Chicago	IL	60643
New Beginnings Ministry of Faith	Br.	William	Moore		432 154th Place		Calumet City	IL	60409
New Beginnings Ministry of Faith	Ms.	Belinda	Moore		432 154th Place		Calumet City	IL	60409
Salem Baptist Church of Chicago	Rev.	James T.	Meeks	Pastor	752 East 114th Street		Chicago	IL	60628
Sheldon Heights Church of Christ	Mr.	Lionel	Harden		10353 S. Sangamon St.		Chicago	IL	60643
Sheldon Heights Church of Christ	Mr.	CJ	Harmon		5438 S Ridgewood Ct.	#3	Chicago	IL	60615
Sheldon Heights Church of Christ	Ms.	Frances	Garrett		11325 S. Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Katherine	Raglin		5044 S. St. Lawrence Ave.	1st Floor	Chicago	IL	60615
Sheldon Heights Church of Christ	Ms.	Janet	Bailey		11325 S Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Vera	Dixon		11325 S Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	LaJoyce	Eason		4929 S. St. Lawrence		Chicago	IL	60615
Sheldon Heights Church of Christ	Ms.	Rhonda	Garrett		11325 S. Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Brenda L.	Gilbert		11325-55 S Halsted St.		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Marie	Gilbert		209 W 109th Place		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Kietta	McFee		11733 S. Sangamon		Chicago	IL	60643
Sheldon Heights Church of Christ	Pastor	Leonardo	Gilbert		11355 S. Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Pastor	Charles	Smith		11355 S. Halsted		Chicago	IL	60628
St. Sabina Church	Rev.	Dr. Michael L.	Pfleger	Pastor	1210 West 78th Place		Chicago	IL	60620
UCC Churches	Rev.	Alice	Harper-Jones		P.O. Box 208491		Chicago	IL	60620
					411 W. 111th Street		Chicago	IL	60628
115-116-117 Elizabeth St. Block Club	Ms.	Marie	Ellis-Milan		11611 S. Elizabeth Street		Chicago	IL	60643
115-116-117 Elizabeth St. Block Club	Ms.	Marie	Milan		11611 S. Elizabeth Street		Chicago	IL	60643
115-116-117 Elizabeth St. Block Club	Ms.	Claudia	Davis		11531 S. Elizabeth Street		Chicago	IL	60643
Block Club 96 Wentworth	Ms.	Sylvia	Durham		9624 S Wentworth		Chicago	IL	60628
Block Club 96 Wentworth	Ms.	Mable	Echols		9622 Wentworth Ave		Chicago	iL	60628
Alianza Leadership Insitute	Mr.	Rey	Lopez-Calderon	Director	2938 E. 91st St.	Ste. 206	Chicago	IL	60617
Carver Military Academy	Mr.	John F.	Thomas	Principal	13100 South Doty Avenue		Chicago	IL	60627
Chicago State Alumni	Ms.	Marianne	Robinson		7530 S. Vernon		Chicago	IL	60619
Chicago State University	Mr.	Mark	Sudeith		8720 S. Calument Ave.		Chicago	IL	60619
Chicago State University	Ms.	Nancy	Hall-Walker		9501 S. King Drive		Chicago	IL	60628
Chicago State University, Office of Public Affaris	Ms.	Patricia	Arnold	Director	9501 South King Drive	ADM 200	Chicago	IL	60628
Corliss High School	Dr.	Anthony	Spivey	Principal	821 East 103rd Street		Chicago	IL	60628
Gwendolyn Brooks College Preparatory High School	Dr.	Dushon A.	Brown	Principal	250 East 111th Street		Chicago	IL	60628
Harlan Community Academy High School	Mr.	Reginald	Evans	Principal	9652 S. Michigan Avenue		Chicago	IL	60628
Illinois Institute of Technology	Mr.	David	Baker	External	3300 South Federal Street	PH 223	Chicago	IL	60616
Kennedy King College	Mr.	Clyde	K. El Amin	President	6800 South Wentworth Avenue		Chicago	IL	60621
Morgan Park High School	Dr.	Beryl	Shingles	Principal	1744 West Pryor Avenue		Chicago	IL	60643
Northeastern University Center for Inner City Students	Dr.	Conrad	Worrill	Educational	700 East Oakwood Avenue		Chicago	IL	60653
Northwestern University	Mr.	Patrick	Ryan	Head	633 Clark Street		Evanston	IL	60208
Olive-Harvey College	Ms.	Stephanie	Johnson	Dean of	10001 South Woodlawn Avenue		Chicago	IL	60628
Percy L. Julian High School	Dr.	Darreyl	Young-Gibson	Principal	10330 South Elizabeth Street		Chicago	IL	60643
Roseland Christian School	Mr.	James	Van Zyl		314 W. 108th Street		Chicago	IL	60628
Simeon Career Academy	Ms.	Tamara	Sterling	Principal	8147 South Vincennes Avenue		Chicago	IL	60620
Tulane University	Mr.	Roland	Solinski		21096 N Taylor Ln		Barrington	IL	
UIC Voorhees	Ms.	Janet	Smith		412 S Peoria St		Chicago	IL	60607
UIC Voorhees Center	Ms.	Katie	Bowman		400 S Peoria	Ste 2100	Chicago	IL	60607
University of Chicago	Mr.	Brian	Shaw	Transit	5555 S. Ellis Ave.	3rd Floor	Chicago	IL	60637
University of Chicago, Community & Government Affairs	Ms.	Anne Marie	Lipinski	Engageme	5801 South Ellis Avenue		Chicago	IL	60637

University of Illinois at Chicago - College of Urban Planning and Policy	Ms.	Danielle	Inendino	Assistant,	412 S Peoria St		Chicago	IL	60607

Appendix G
Notification Materials
(Direct Mailer, Transit Card, E-mail Blast, Newspaper Ads, Legal Notice, Village and Library Flyer, Media Release)

Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Chicago Transit Authority

Red Line Extension Project

Connecting 95th Street Station to 130th Street

Come Participate in the September 22 & 24, 2009 Scoping Meetings

Customer Information: 1-888-YOUR-CTA (1-888-968-7282) • CTA TTY: 1-888-CTA-TTY1 (1-888-282-8891)
Transit Information: 836-7000 from any local area code RTA TTY: 312-836-4949

Red Line Extension

PROJECT OVERVIEW

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Station to the vicinity of 130th Street. The extension includes 5.3 new route miles of rapid transit from the existing Red Line, four additional stations – at approximately 103rd, 111th, 115th and 130th Streets – with new bus terminal and parking facilities at each station.

ENVIRONMENTAL PROCESS OVERVIEW

CTA and the Federal Transit Administration (FTA) have initiated the federal environmental process pursuant to the National Environmental Policy Act (NEPA) and are preparing an Environmental Impact Statement (EIS) for the project. The EIS will build upon the Alternatives Analysis (AA) process that occurred from 2006-2009 and culminated in the designation of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009. The AA process analyzed an array of transportation alternatives and included an extensive public involvement process. The EIS will evaluate at least four alternatives: a No Build Alternative, a Transportation System Management (TSM) Alternative, the Locally Preferred Alternative that extends the Red Line to 130th Street and a rail alternative along Halsted Street. The EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of each alternative and proposed mitigation measures to reduce or eliminate potential impacts.

SCOPING MEETINGS

You are invited to attend a public scoping meeting to learn more about the project and to provide feedback on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and potential effects and mitigation measures to be included in the EIS.

WHAT IS SCOPING?

The process of determining the scope, focus and content of an EIS is known as "scoping." During the scoping process residents, as well as city, county, state and federal agencies have an opportunity to provide feedback and comments. The purpose of the scoping process is to:

- Identify public and agency concerns early in the environmental process
- Define the issues and alternatives that will be examined in the EIS
- Save time in the overall process and facilitate an efficient EIS preparation process.

SCOPING MEETING DATES AND LOCATIONS

Tuesday, September 22, 2009
Historic Pullman Visitor Center
6:00 p.m. to 8:00 p.m.
11141 S. Cottage Grove Avenue
Chicago, IL 60628
This location is accessible to people with disabilities and is served by CTA bus 111, Pace bus 353 , and the Metra Electric Main Line.

Thursday, September 24, 2009
Woodson Regional Chicago Public Library
6:00 p.m. to 8:00 p.m.
9525 S. Halsted Street
Chicago, IL 60628
This location is accessible to people with disabilities and is served by CTA bus 108, 112, 8A, 95W , Pace bus 352 and the Metra Electric Rock Island Line.

MEETING AGENDA AND FORMAT

Open House: 6:00 pm – 6:45 pm
Learn about the project and talk with project staff.
Presentation and Formal Public Comment:
6:45 pm – 8:00 pm
A brief presentation will be followed by an opportunity to enter formal comments into the public record.

SUBMIT COMMENTS

In addition to comments on the scope of the EIS received at the meeting, written scoping comments will be accepted until October 27, 2009 and may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602.
Email: RedExtension@transitchicago.com
Website: www.transitchicago.com/RedEIS
Fax: (312)-681-4297

ADA AND LANGUAGE ACCOMMODATIONS

To receive an accessible format version of this notice, or if you require an interpreter, including sign language services, or other accommodations at this meeting, please contact Darud Akbar, Government & Community Relations Officer, five days prior to the meeting at (312) 681-2708 or dakbar@transitchicago.com. Information is also available at www.transitchicago.com/RedEIS

Red Line Extension | *Locally Preferred Alternative*

Red Line Extension | *Halsted Street HRT Alternative*

Red Line Extension | *Locally Preferred Alternative*

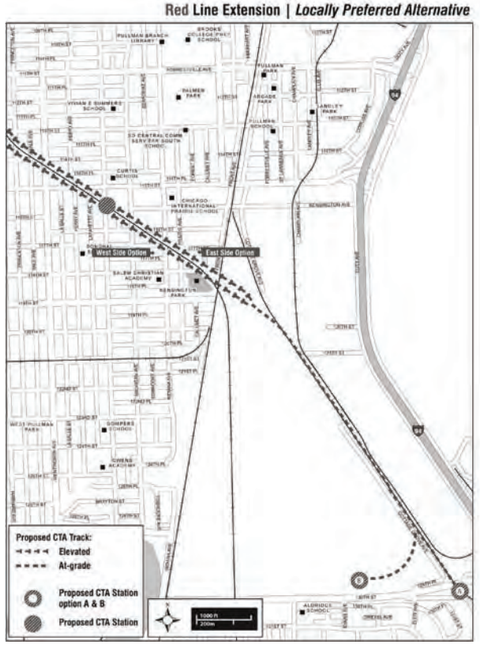

Red Line Extension | *Halsted Street HRT Alternative*

Proyecto de Extensión de la Línea Roja

Que conecta la Estación de la 95th Street a la 130th Street
Venga a participar en las Reuniones de Involucramiento al Público los días 22 y 24 de septiembre de 2009
Información al cliente: 1-888-YOUR-CTA (1-888-968-7282) • CTA (TTY): 1-888-CTA-TTY1 (1-888-282-8891)
Información sobre Tránsito: 836-7000 desde todo código telefónico local
RTA (TTY): 312-836-4949

Extensión de la Línea Roja

RESUMEN GENERAL DEL PROYECTO

La Chicago Transit Authority (CTA) se propone hacer mejoras de transporte al extender la Línea Roja desde la estación de la 95th Street a las inmediaciones de la 130th Street. La extensión incluye una ruta nueva de 5.3 millas de tránsito rápido de la Línea Roja ya existente, cuatro estaciones más – ubicadas aproximadamente en las 103rd, 111th, 115th, y 130th Streets – con una nueva terminal de autobuses e instalaciones de estacionamiento en cada estación.

RESUMEN GENERAL DEL PROCESO MEDIOAMBIENTAL

La CTA y la Administración Federal de Tránsito (conocida en inglés por sus siglas "FTA") han iniciado un proceso federal medioambiental, de acuerdo a la Ley sobre la Política Nacional Medioambiental (conocida en inglés por sus siglas "NEPA") y están en vías de elaborar una Declaración sobre el Efecto Medioambiental (conocida en inglés por sus siglas "EIS") para el proyecto. La EIS se elaborará en base al proceso de Análisis de Alternativas (conocido en inglés por sus siglas "AA") que tomó lugar desde 2006 a 2009 y culminó en una Alternativa de Preferencia Local que adoptó la Junta Directiva de Tránsito de Chicago el 12 de agosto de 2009. El Proceso de AA analizó una serie de alternativas de transporte e incluyó un amplio proceso de involucramiento al público. La EIS evaluará por lo menos cuatro alternativas: una Alternativa sin obras de construcción; una Alternativa de Administración del Sistema de Transporte (conocida en inglés por sus siglas "TSM"), una Alternativa de Preferencia Local que extiende la Línea Roja a la 130th Street, y una alternativa ferroviaria por la Halsted Street. La EIS detallará la alternativa, el contexto medioambiental existente, los efectos posibles de la construcción y la puesta en marcha de cada alternativa, y las medidas atenuadoras propuestas para disminuir o eliminar los efectos negativos posibles.

REUNIÓN PARA INVOLUCRAR AL PÚBLICO

Usted queda invitado a asistir una reunión para involucrar al público, con el fin de informarse en más detalle sobre el proyecto y para expresar sus opiniones sobre las alternativas propuestas, el propósito y la necesidad del proyecto, los temas propuestos de evaluación, los efectos negativos posibles, y las medidas atenuadoras que habrá que incluir en la EIS.

¿QUÉ ES EL INVOLUCRAMIENTO AL PÚBLICO?

Se conoce el proceso de determinar el alcance, el enfoque, y el contenido de una EIS como el "involucramiento al público". Durante este proceso de involucramiento comunitario, los residentes, así como las agencias municipales, condales, estatales, y federales, tendrán la oportunidad de expresar sus opiniones y hacer comentarios. Este proceso de involucramiento se dedica a:

- Identificar las cuestiones de preocupación del público y las agencias gubernamentales por adelantado durante el proceso de evaluación medioambiental.
- Definir las cuestiones y las alternativas que serán estudiadas en la EIS.
- Ahorrar tiempo en el proceso general y agilizar la eficacia del proceso de elaborar la EIS.

INVOLUCRAMIENTO AL PÚBLICO: Fechas y Localidades

martes, 22 de septiembre de 2009
Historic Pullman Visitor Center
6:00 p.m. to 8:00 p.m.
11141 S. Cottage Grove Avenue
Chicago, IL 60628
Esta localidad tiene acceso para las personas con incapacidades, y el autobús 111 de la CTA, el autobús 353 de Pace, y la Línea Eléctrica Principal de Metra brindan servicio de transporte hasta allá.

jueves, 24 de septiembre de 2009
Woodson Regional Chicago Public Library
6:00 p.m. to 8:00 p.m.
9525 S. Halsted Street
Chicago, IL 60628
Esta localidad tiene acceso para las personas con incapacidades, y el autobús 108, 112, 8A, y 95W de la CTA, el autobús 352, de Pace, y la Línea Eléctrica de Rock Island de Metra brindan servicio de transporte hasta allá.

ORDEN DEL DÍA Y FORMATO

Presentación al público: 6:00 pm – 6:45 pm
Informarse sobre el proyecto y hablar con el personal del proyecto.
Presentación y comentarios formales del público: 6:45 pm – 8:00 pm
Después de una breve presentación, habrá una oportunidad para hacer comentarios que constarán formalmente en el acta pública.

ENTREGA DE COMENTARIOS

Además de los comentarios sobre el alcance de la EIS que se entregarán en la reunión, se aceptarán comentarios por escrito proporcionados por el público hasta el 27 de octubre de 2009, los cuales pueden entregarse por correo postal, correo electrónica, por facsímile, o al sitio de web del proyecto, a la atención de Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602.
Correo electrónico: RedExtension@transitchicago.com
Sitio de web: www.transitchicago.com/RedEIS
Facsímile: (312)-681-4297

ADAPTACIONES PARA LAS PERSONAS CON INCAPACIDADES Y POR MOTIVOS DE IDIOMA

Para recibir una versión de formato asequible de esta notificación, o en caso de que usted tenga necesidad de un intérprete, incluso el servicio de traducción por señas, u otras adaptaciones para poder participar en esta reunión, por favor comuníquese con Darud Akbar, Government & Community Relations Officer, con cinco días de antelación de esta reunión, al (312) 681-2708, o al dakbar@transitchicago.com. La información también está disponible en el sitio de web www.transitchicago.com/RedEIS.

Red Line Extension

Connecting 95th Street Station to 130th Street

ATTEND A PUBLIC SCOPING MEETING

Tuesday, September 22, 2009
6:00 to 8:00 p.m.
Historic Pullman Visitor Center
11141 S. Cottage Grove Avenue, Chicago

Thursday, September 24, 2009
6:00 to 8:00 p.m.
Woodson Regional Chicago Public Library
9525 S. Halsted Street, Chicago

Information presented will be the same at both meetings. These facilities are accessible to persons with disabilities.

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Station to the vicinity of 130th Street.

We want to hear from you!

Attend one of the public scoping meetings to learn more about the project and provide feedback on the proposed alternatives, the purpose and need for the project and the environmental and community impacts to be evaluated. The input will help define the environmental studies to be considered in the Draft Environmental Impact Statement (EIS) scheduled for public review in late 2010.

Submit a Comment by October 27, 2009

In addition to comments received at the meeting, written comments will be accepted until October 27, 2009. Comments may be submitted by mail, e-mail or fax, with attention to:

Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority
P.O. Box 7602, Chicago, IL 60680-7602
E-mail: RedExtension@transitchicago.com
Fax: (312) 681-4297

For More Info: www.transitchicago.com/RedEIS
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Red Line Extension

PROJECT OVERVIEW

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Station to the vicinity of 130th Street. The extension includes 5.3 new route miles of rapid transit from the existing Red Line, four additional stations – at approximately 103rd, 111th, 115th and 130th Streets – with new bus terminal and parking facilities at each station.

ENVIRONMENTAL PROCESS OVERVIEW

CTA and the Federal Transit Administration (FTA) have initiated the federal environmental process pursuant to the National Environmental Policy Act (NEPA) and are preparing an Environmental Impact Statement (EIS) for the project. The EIS will build upon the Alternatives Analysis (AA) process that occurred from 2006-2009 and culminated in the designation of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009. The AA process analyzed an array of transportation alternatives and included an extensive public involvement process. The EIS will evaluate at least four alternatives: a No Build Alternative, a Transportation System Management (TSM) Alternative, the Locally Preferred Alternative that extends the Red Line to 130th Street and a rail alternative along Halsted Street. The EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of each alternative and proposed mitigation measures to reduce or eliminate potential impacts.

SCOPING MEETINGS

You are invited to attend a public scoping meeting to learn more about the project and to provide feedback on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and potential effects and mitigation measures to be included in the EIS.

WHAT IS SCOPING?

The process of determining the scope, focus and content of an EIS is known as "scoping." During the scoping process residents, as well as city, county, state and federal agencies have an opportunity to provide feedback and comments. The purpose of the scoping process is to:

- Identify public and agency concerns early in the environmental process
- Define the issues and alternatives that will be examined in the EIS
- Save time in the overall process and facilitate an efficient EIS preparation process.

SCOPING MEETING DATES AND LOCATIONS

Tuesday, September 22, 2009
Historic Pullman Visitor Center
6:00 p.m. to 8:00 p.m.
11141 S. Cottage Grove Avenue
Chicago, IL 60628
This location is accessible to people with disabilities and is served by CTA bus 111, Pace bus 353 , and the Metra Electric Main Line.

Thursday, September 24, 2009
Woodson Regional Chicago Public Library
6:00 p.m. to 8:00 p.m.
9525 S. Halsted Street
Chicago, IL 60628
This location is accessible to people with disabilities and is served by CTA bus 108, 112, 8A, 9, 95W and Pace bus 352.

MEETING AGENDA AND FORMAT

Open House: 6:00 pm – 6:45 pm
Learn about the project and talk with project staff.
Presentation and Formal Public Comment:
6:45 pm – 8:00 pm
A brief presentation will be followed by an opportunity to enter formal comments into the public record.

SUBMIT COMMENTS

In addition to comments on the scope of the EIS received at the meeting, written scoping comments will be accepted until October 27, 2009 and may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602.
Email: RedExtension@transitchicago.com
Website: www.transitchicago.com/RedEIS
Fax: (312)-681-4297

ADA AND LANGUAGE ACCOMMODATIONS

To receive an accessible format version of this notice, or if you require an interpreter, including sign language services, or other accommodations at this meeting, please contact Darud Akbar, Government & Community Relations Officer, five days prior to the meeting at (312) 681-2708 or dakbar@transitchicago.com. Information is also available at www.transitchicago.com/RedEIS

Chicago Transit Authority
Orange Line Extension NEPA Scoping Meeting Notice

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Orange Line from Midway Station at the Midway International Airport south along the Belt Railway Company right-of-way from 59th to Marquette Road, crossing the Belt Railway Company Clearing Yard and ending on Cicero Avenue. The extension includes 2.3 new route miles of rapid transit from the existing Orange Line and one additional station at approximately 7600 S. Cicero Avenue with new bus terminal and parking facilities.

CTA and the Federal Transit Administration (FTA) have initiated the federal environmental process pursuant to the National Environmental Policy Act (NEPA) and are preparing an Environmental Impact Statement (EIS) for the project. The EIS will build upon the Alternatives Analysis (AA) process that occurred from 2006 - 2009 and culminated in the designation of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009. The AA process analyzed an array of transportation alternatives and included an extensive public involvement process. The EIS will evaluate at least three alternatives: a No Build Alternative, a Transportation System Management (TSM) Alternative and the Locally Preferred Alternative that extends the Orange Line to Cicero Avenue near 76th Street. The EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of each alternative and proposed mitigation measures to reduce or eliminate potential impacts.

You are invited to attend a public scoping meeting to learn more about the project and to provide feedback on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and potential effects and mitigation measures to be considered in the EIS.

Monday, September 21, 2009; 6:00 p.m. to 8:00 p.m.; at the Hancock College Preparatory High School, 4034 W. 56th Street, Chicago, IL 60629
This location is accessible to people with disabilities and is served by CTA Bus Routes 53A and 55.

In addition to comments received at the meeting, written comments will be accepted until October 27, 2009 and may be submitted via mail, e-mail or fax to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. Email: OrangeExtension@transitchicago.com
Website: www.transitchicago.com/OrangeEIS Fax: (312)-681-4297

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600863619 Pub: September 8, 2009

Chicago Transit Authority
Red Line Extension NEPA Scoping Meeting Notice

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Station to the vicinity of 130th Street. The extension includes 5.3 new route miles of rapid transit from the existing Red Line, four additional stations - at approximately 103rd, 111th, 115th and 130th Streets - with new bus terminal and parking facilities at each station.

CTA and the Federal Transit Administration (FTA) have initiated the federal environmental process pursuant to the National Environmental Policy Act (NEPA) and are preparing an Environmental Impact Statement (EIS) for the project. The EIS will build upon the Alternatives Analysis (AA) process that occurred from 2006-2009 and culminated in the designation of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009. The AA process analyzed an array of transportation alternatives and included an extensive public involvement process. The EIS will evaluate at least four alternatives: a No Build Alternative, a Transportation System Management (TSM) Alternative, the Locally Preferred Alternative that extends the Red Line to 130th Street, and a heavy rail alternative along Halsted Street. The EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of each alternative and proposed mitigation measures to reduce or eliminate potential impacts.

You are invited to attend a public scoping meeting to learn more about the project and to provide feedback on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and potential effects and mitigation measures to be considered in the EIS.

Tuesday, September 22, 2009; 6:00 p.m. to 8:00 p.m.; at the Historic Pullman Visitor Center, 11141 S. Cottage Grove Avenue, Chicago, IL 60628
This location is accessible to people with disabilities and is served by CTA bus 111, Pace bus 353, and the Metra Electric Main Line.

Thursday, September 24, 2009; 6:00 p.m. to 8:00 p.m.; at the Woodson Regional Chicago Public Library, 9525 S. Halsted Street, Chicago, IL 60628
This location is accessible to people with disabilities and is served by CTA bus 108, 112, 8A, 9, 95W and Pace bus 352.

In addition to comments received at the meeting, written comments will be accepted until October 27, 2009 and may be submitted via mail, e-mail or fax to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. Email: RedExtension@transitchicago.com
Website: www.transitchicago.com/RedEIS Fax: (312)-681-4297

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600863743 Pub: September 8, 2009

Chicago Transit Authority
Yellow Line Extension NEPA Scoping Meeting Notice

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Yellow Line from Dempster Station to Old Orchard Road. The Yellow Line Extension includes 1.6 new route miles of rapid transit from the existing Yellow Line, reconfiguration of the existing Dempster Station and one additional station at Old Orchard Road with new bus access and parking facilities.

CTA and the Federal Transit Administration (FTA) have initiated the federal environmental process pursuant to the National Environmental Policy Act (NEPA) and are preparing an Environmental Impact Statement (EIS) for the project. The EIS will build upon the Alternatives Analysis (AA) process that occurred from 2006-2009 and culminated in the designation of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009. The AA process analyzed an array of transportation alternatives and included an extensive public involvement process. The EIS will evaluate at least three alternatives: a No Build Alternative, a Transportation System Management (TSM) Alternative and the Locally Preferred Alternative that extends the Yellow Line to Old Orchard Road. The EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of each alternative and proposed mitigation measures to reduce or eliminate potential impacts.

You are invited to attend a public scoping meeting to learn more about the project and to provide feedback on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and potential effects and mitigation measures to be considered in the EIS.

Wednesday, September 23, 2009; 6:00 p.m. to 8:00 p.m.; at the Oakton Community Center, 4701 Oakton Street, Skokie, IL 60076
This location is accessible to people with disabilities and is served by CTA bus 97.

In addition to comments received at the meeting, written comments will be accepted until October 27, 2009 and may be submitted via mail, e-mail or fax to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602.
Email: YellowExtension@transitchicago.com
Website: www.transitchicago.com/YellowEIS Fax: (312)-681-4297

To receive an accessible format version of this notice, or if you require an interpreter, including sign language services, or other accommodations at this meeting, please contact Darud Akbar, Government & Community Relations Officer, five days prior to the meeting at (312) 681-2708 or dakbar@transitchicago.com. Information is also available at www.transitchicago.com/YellowEIS.
600864482 Pub: September 8, 2009

CTA Media Relations
312-681-3090

CTA to Host Public Meeting for Proposed Orange Line Extension

The Chicago Transit Authority is hosting a public meeting to receive input on the proposed Orange Line Extension project. Attendees will have an opportunity to provide comments on the proposed alternatives, the purpose and need for the project, the potential effects and mitigation measures to be considered in the Environmental Impact Study (EIS).

The meeting is scheduled for:

Monday, September 21
6:00 p.m. - 8:00 p.m.
Hancock College Preparatory High School*
4034 W. 56th St., Chicago, IL
(*facility is accessible to people with disabilities)

Written comments also will be accepted until October 27. Scoping comments may be submitted via mail, email or fax to the attention of:

Jeffery Busby, General Manager, Strategic Planning
Chicago Transit Authority
PO Box 7602
Chicago IL 60680-7602
OrangeExtension@transitchicago.com
Fax 312-681-4297

Attendees who require an interpreter, including sign language services, or other accommodations at the meeting should contact Darud Akbar, Government and Community Relations Officer, at 312-681-2708.

CTA and the Federal Transit Administration (FTA) have initiated the federal environmental process pursuant to the National Environmental Policy Act (NEPA) and are preparing an EIS for the project. The EIS will evaluate at least three alternatives: a No Build Alternative, a Transportation System Management (TSM) Alternative and the Locally Preferred Alternative (LPA) adopted by the Chicago Transit Board that extends the Orange Line to Cicero Avenue near 76th Street.

The EIS will build upon the Alternatives Analysis process that led to the adoption of a Locally Preferred Alternative.

The Federal Transit Administration's New Starts program requires transit project proposals to proceed through a process of planning, design and construction. The FTA process consists of five formal steps: Alternatives Analysis (AA), Environmental Impact Statement, Preliminary Engineering, Final Design and Construction.

# # #

fore Griffin passed away. "He did a great job for Samford, and all the coaches loved him. That was no surprise to me."

Griffin received one of Samford's Practice Hard Work Awards following his junior

been established in Griffin's name to benefit the Marist basketball program. Donations may be sent to Coach Gene Nolan, c/o Marist High School, 4200 W. 115th St., Chicago, IL 60655.

"Marc was in the right place at the right time," said Clemens. "But that play showed that you just have to put the ball in the right spot to score."

The Caravan dominated

minute left, Enrique Voltaire was unable to get control on a breakaway, and his shot missed the left post.

It didn't take long for Andrew (2-3-1) to end the game in the extra session.

Jacobs got one past talented Caravan goalie Edson Zagal,

portunities in front of you and don't take advantage. The ball needs to get through 10 guys before it even gets to him."

An example of Mt. Carmel's domination of the game, the Caravan had six corner kicks to just one for Andrew and had five more shots on goal.

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

ATTEND A PUBLIC SCOPING MEETING

Tuesday, September 22, 2009
6:00 to 8:00 p.m.
Historic Pullman Visitor Center
11141 S. Cottage Grove Avenue, Chicago

Thursday, September 24, 2009
6:00 to 8:00 p.m.
Woodson Regional Chicago Public Library
9525 S. Halsted Street, Chicago

Information presented will be the same at both meetings. These facilities are accessible to persons with disabilities.

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Station to the vicinity of 130th Street.

We want to hear from you!

Attend one of the public scoping meetings to learn more about the project and provide feedback on the proposed alternatives, the purpose and need for the project and the environmental and community impacts to be evaluated. The input will help define the environmental studies to be considered in the Draft Environmental Impact Statement (EIS) scheduled for public review in late 2010.

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Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Softball

(Continued from page 17)

Wabash Tap, which features 10 local players among the 15-player roster, captured the title on Sept. 9.

"We have been playing together for a couple of years," said Player/Coach Matt Hilliard, a Sutherland Elementary School and St. Ignatius College Prep graduate. "It's great that a group of friends who grew up together, but now live all over the city, can still get together to play every week. We plan on continuing to dominate the Wednesday night league until we are too old and feeble to swing a bat."

Domination was the perfect word to describe the team. It went 9-0 in the regular season, scoring 108 runs and allowing just 38.

Other team members are Conor Ryan, Joe Wilson, Kerry Brackin, Liam McManus, Catherine Corr, Brendan Sheils, Bob Kriz, Pete Steadman, Kathleen Griffin, Samantha Kyme, Jen Sheridan, Colleen McNamara, Meeghan Holly and Lydia Maloney.

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cta

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Jeffrey Busby, General Manager, Strategic Planning
Chicago Transit Authority

as a nurse for five years at St. Francis and then MetroSouth, said she knew cuts were coming. Recently, her hours were cut to the point where she worked just three days in a two-week period. The 48-year-old Blue Island resident said she had noticed fewer patients coming to the hospital.

"You could drop a bomb in

bought MetroSouth from SSM Health Care, a St. Louis-based non-profit and one of the nation's largest Catholic-owned systems.

St. Francis had also struggled with patients unable to pay their medical bills and racked up tens of millions of dollars in losses under SSM ownership.

But MetroSouth executives have said a $30 million commitment from New York-based Falcon Investors is helping to finance new imaging equipment, an electronic medical records system and a conversion to all private rooms for patients. Kimmel said that all of those projects are still in the works.

MetroSouth has also applied for a tax break from the

formed a TIF district for th hospital, which will captur any new tax revenues fror the property and allow th hospital to use that money t reinvest in the facility. Th hospital is located at 12935 S Gregory St. in the heart of th city's commercial busines district.

Mayor Donald Peloqui said he's confident in th hospital's health and sai that while the layoffs wer painful, they were needed.

"The fact that they laid o people off doesn't affect th hospital's long-term goals, Peloquin said. "It does sho the effect of the econom They are trying to stay on to of things instead of gettin into a hole that they can't ge out of."

"Still Marching To The Beat Of My Own Drum!"

At Senior Star, we have built an entire company around a simple philosophy.

We listen to our residents and respond with the programs and services that will empower them to live the lives they want to live. Our new community in Romeoville offers Memory Care today; our Independent and Assisted Living communities open this Winter.

With Senior Star's progressive, coordinated services our residents live out each day with complete confidence, knowing that if their needs should change we have the ability to care for them longer.

NOW ACCEPTING RESERVATIONS!

Senior Star
at Weber Place

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

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Jeffrey Busby, General Manager, Strategic Planning

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much of the bells and whis
tles we're going to put in," h
said, adding that the reques
for proposals will seek
separate cost estimate fo
each item.

Village Clerk Pat Rea sai
restrooms will be part of th
updated station, as will fou
warming/weather shelter
on the inbound platform an
one shelter on the outbound

Although Biggert and Za
brocki put ridership at 3,00
Metra spokesman Michae
Gillis said the most recen
weekday ridership count-
done in fall 2006—puts th
80th Avenue Station at 2,45
passengers. That figur
makes it the system's fourth
busiest station, just behin
third-place Lisle, whic
showed 2,472 passengers.

"Still Marching To The Beat Of My Own Drum!"

At Senior Star, we have built an entire company around a simple philosophy.

We listen to our residents and respond with the programs and services that will empower them to live the lives they want to live. Our new community in Romeoville offers Memory Care today; our Independent and Assisted Living communities open this Winter.

With Senior Star's progressive, coordinated services our residents live out each day with complete confidence, knowing that if their needs should change we have the ability to care for them longer.

NOW ACCEPTING RESERVATIONS!

Senior Star

Michael G. Shinn, CFP

YOUR MONEY Really Matters

Winning the financial game

by Michael G. Shinn

"Winning is not a sometime thing. It's an all time thing. You don't win once in a while, you don't do things right once in a while, you do them right all the time. Winning is a habit. Unfortunately, so is losing," stated

Winning financially and achieving financial goals is not a sometime thing, it's an all time thing. The seven steps to setting and achieving financial goals are not secrets. We do it all the time on our jobs, when we set sales or production goals, cost reductions or specific project achievements. The trick is to apply the same techniques to your finances, with the same rigor and personal management. It starts with a winning attitude.

Steps to setting financial goals:

Step 1- Sit down with a clean sheet of paper and brainstorm the question, "What do I really want out of life?" Write down every possible financial goal that comes to mind – a house, early retirement, debt payoff, dren's education, new car, ove vacation, etc. Dream and write all down.

Step 2- Discuss the list with family or people who are signif in your life. With their input, ex and modify the list. In working clients, I find that many times have not discussed their fan financial goals and agreed on th ority. This lack of communic about finances can lead to se family conflicts.

Step 3- Now go over your second time. This time, refine prioritize the list, adding an ele of realism to it. Write down the that are most important on a she paper called "Key Financial Go Cross off the items you really want or need. Move anything might have mixed emotions to a arate sheet called "Future Go After you have achieved som your key goals, you may wa include some items from this lis

Step 4- Expand each of your goals, estimating the cost (in to dollars) and when you will ach the goal. It is very important tha are specific in each of these area

Step 5- Separate your Key G into short-term, intermediate long-term objectives. Short- goals can be achieved in less than year and might include; estab ment of an emergency fund, year's vacation, or minor h improvements. Intermediate goa one to five years might include; ing off credit card debt, saving house down payment or ma major home improvements. L term goals of more than five might include; college fund retirement or a vacation home chase.

Step 6- Develop a plan for ach ing each Key Goal, breaking d large goals into their main elem Using the college fund exam Research public college costs; a 529 Saving Plan account; I $328 per month using autom withdrawal from my chec account; Research investments could provide a higher return.

Step 7- Monitor your progres reviewing your financial goal least annually and revising your as necessary.

Michael G. Shinn, Registered Representative of securities and investment adv services offered through Fina Network Investment Corpora member SIPC.

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

ATTEND A PUBLIC SCOPING MEETING

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OR

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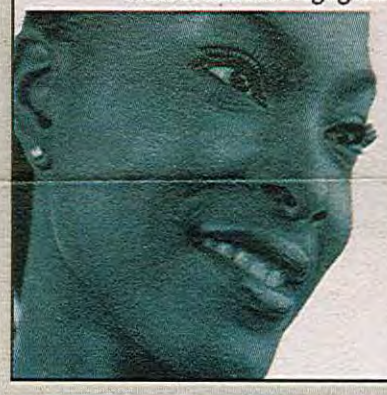

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Reverse Mortgage Specialist
773-619-8505 Phone
james.i.means@wellsfargo.com

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cutting a fool when the President spoke at the joint session of Congress. It was totally disrespectful of this dunder head to heckle the President as he gave his speech. No one, especially Black U. S. legislators ever did such a thing to President George Dubya Bush, although it was pretty darn clear he did not always tell the truth and coupled with the lyingest Vice President in the world in Dick Cheney, a heckle or two would have been in order for this pair. They lied about WMD (Weapons of Mass Destruction) as the reason to invade Iraq, lied about exposing a CIA Agent to harm, you name it, yet our Congresspersons were restrained and respectful to the office of President. But just like everything else once we get to goals such as being President of the United States, the rules change. Money I hear has been pouring in to the Congressman to further his campaign by racists everywhere. And that's exactly who (racists) poured into Washington over the weekend to demonstrate and talk about the President.

HATE SIGNS REMINISCENT OF KKK

If Ima had not been told differently she would have headed for the hills last week when the hate mongers of the world spilled over into Washington, D. C. You see Ima remembers the KKK riding ulate where this all will end up. It's scary. But it is also clear that the racists are now synonymous with the Republican Party.

OUT OF CONTROL

If it ain't enough and the real reason Ima consulted the trusty Almanac about the moon is that one of our revered sports figures and a popular music artist started acting crazy. Ima was shocked to see Serena Williams at as she did at the U.S. Open Tennis Match. Ima has been known to know how to weave the f word into sentences at the appropriate places, was speechless when one such as

Serena Williams

Serena, who has been subjected to all kinds of challenges in fighting her way to the top, let go on a line judge at the tennis competition.

Now she has apologized but it

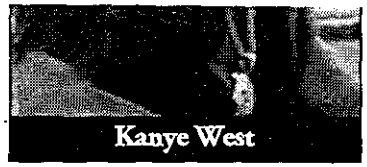
Kanye West

that his last "buffoonery" piece pulled in $24 million dollars this past weekend for "I Can Do Bad All By Myself." So Spike, et al

now suffering from.

-Ima-

(Continued on page 17)

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

ATTEND A PUBLIC SCOPING MEETING

Tuesday, September 22, 2009	Thursday, September 24, 2009
6:00 to 8:00 p.m.	**6:00 to 8:00 p.m.**
Historic Pullman Visitor Center	Woodson Regional Chicago Public Library
11141 S. Cottage Grove Avenue, Chicago	9525 S. Halsted Street, Chicago

Information presented will be the same at both meetings. These facilities are accessible to persons with disabilities.

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Station to the vicinity of 130th Street.

We want to hear from you!

Attend one of the public scoping meetings to learn more about the project and provide feedback on the proposed alternatives, the purpose and need for the project and the environmental and community impacts to be evaluated. The input will help define the environmental studies to be considered in the Draft Environmental Impact Statement (EIS) scheduled for public review in late 2010.

Submit a Comment by October 27, 2009

In addition to comments received at the meeting, written comments will be accepted until October 27, 2009.
Comments may be submitted by mail, e-mail or fax, with attention to:

Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority
P.O. Box 7602, Chicago, IL 60680-7602
E-mail: RedExtension@transitchicago.com • Fax: (312) 681-4297

For More Info: www.transitchicago.com/RedEIS
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

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11141 S. Cottage Grove Avenue, Chicago

OR

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Jeffrey Busby, General Manager, Strategic Planning

ing and math. Most community colleges offer exemptions to students who score high enough on the ACT college entrance exam, or have successful college coursework in a given subject area. Others make exceptions on a case-by-case basis.

"Sometimes students just test poorly, and there's other things—grades, other pieces of information that we have on a student—that can factor into that overall decision," said Sheryl Otto, dean of student development at Harper College, where about 37 percent of new students take remedial courses.

About a third of entering freshmen are taking remedial courses this fall at College of DuPage in Glen Ellyn. Glenda Gallisath, associate

to high school seniors so any remedial work can begin in high school; to align high school, remedial and college-level standards, and to develop a system to reward community colleges for helping students progress through remedial courses and on to full-credit classes.

Illinois is pursuing several initiatives to bridge the academic gap. Last fall, educators joined the American Diploma Project, a national effort to develop a more rigorous curriculum for high school students.

"The key to trying to improve outcomes is first improving our standards," said Mary Fergus, a spokeswoman for Illinois State Board of Education. "We're really focusing on preparing students

thing they didn't know i
fore, but to refresh as rapid
as I can, that informatio
said Marie Eibl, math/s
ence tutor coordinator
Harper.

Harper nursing stude
Stacey Wolf, 27, of Mun
lein, shed tears of relief wh
she passed the math exam
the last day of testing. Aft
cramming all night, W
paid $50 for a two-hour p
vate tutoring session befo
taking the test, narrow
avoiding a remedial algeb
course and a one-year po
ponement of nursing studi

"I didn't think I was goi
to pass it," said Wolf, wh
plans to work as an eme
gency room nurse. "Tha
why I'm so emotional, b
cause now I get to sta
nursing school."

Watch and Earn

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Red Line Extension

Connecting 95th Street Station to 130th Street

cta

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A JOURNEY FILLED *with high points.*

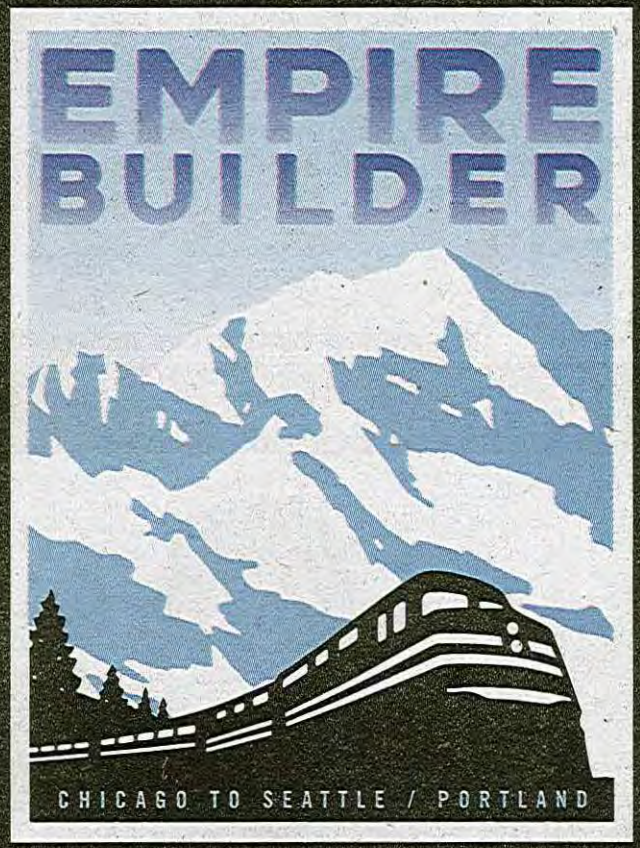

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Yellow Line Extension

Connecting Dempster Station to Old Orchard Road

cta

ATTEND A PUBLIC SCOPING MEETING

Wednesday, September 23, 2009
6:00 to 8:00 p.m.
Oakton Community Center
4701 Oakton Street, Skokie
Facility accessible to persons with disabilities.

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Yellow Line from Dempster Station to Old Orchard Road.

We want to hear from you!

Attend the public scoping meeting to learn more about the project and provide feedback on the proposed alternatives, the purpose and need for the project and the environmental and community impacts to be evaluated. The input will help define the environmental studies to be considered in the Draft Environmental Impact Statement (EIS) scheduled for public review in late 2010.

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E-mail: YellowExtension@transitchicago.com • Fax: (312) 681-4297

For More Info: www.transitchicago.com/YellowEIS
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

ATTEND A PUBLIC SCOPING MEETING

Tuesday, September 22, 2009
6:00 to 8:00 p.m.
Historic Pullman Visitor Center
11141 S. Cottage Grove Avenue, Chicago

Thursday, September 24, 2009
6:00 to 8:00 p.m.
Woodson Regional Chicago Public Library
9525 S. Halsted Street, Chicago

Information presented will be the same at both meetings. These facilities are accessible to persons with disabilities.

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Station to the vicinity of 130th Street.

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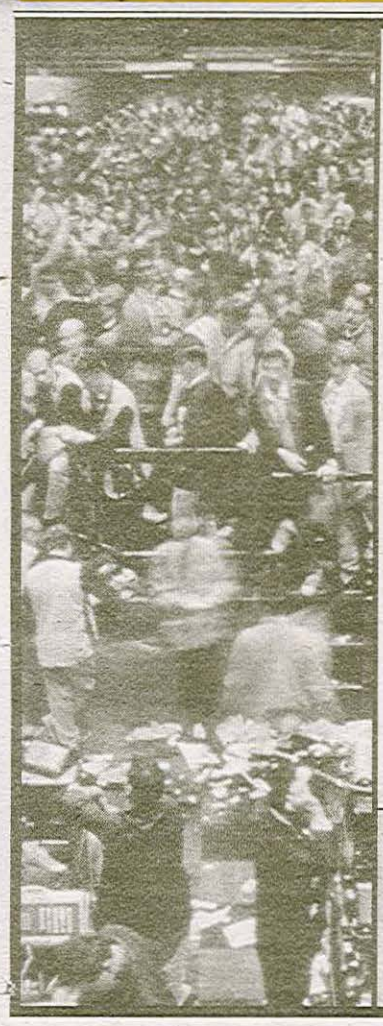

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Orange Line Extension

Connecting Midway to Ford City

cta

ATTEND A PUBLIC SCOPING MEETING

Monday, September 21, 2009
6:00 to 8:00 p.m.
Hancock College Preparatory High School
4034 W. 56th Street, Chicago
Facility accessible to persons with disabilities.

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending Orange Line rapid transit from Midway Station at the Midway International Airport to Cicero Avenue near 76th Street.

We want to hear from you!

Attend the public scoping meeting to learn more about the project and provide feedback on the proposed alternatives, the purpose and need for the project and the environmental and community impacts to be evaluated. The input will help define the environmental studies to be considered in the Draft Environmental Impact Statement (EIS) scheduled for public review in late 2010.

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Extensión de la Línea Anaranjada

Que conecta el Midway a Ford City

cta

ASISTA A UNA REUNIÓN DE INVOLUCRAMIENTO AL PÚBLICO

lunes, 21 de septiembre de 2009
6:00 to 8:00 p.m.
Hancock College Preparatory High School
4034 W. 56th Street, Chicago
Esta localidad tiene acceso para las personas con incapacidades.

La Chicago Transit Authority (CTA) se propone hacer mejoras de transporte al extender la Línea Amarilla desde la Dempster Station a la Old Orchard Road.

¡Queremos oír sus opiniones!

Asista a una reunión de involucramiento al público, para enterarse en más detalle sobre el proyecto y para expresar sus opiniones sobre las alternativas propuestas, el propósito y la necesidad del proyecto, los efectos medioambientales y comunitarios que habrá que considerarse en el borrador de la Declaración sobre el Efecto Medioambiental (conocida en inglés por sus siglas "EIS"), programada para repaso por el público a fines del 2010.

Entregue sus comentarios hasta el día 27 de octubre de 2009.

Además de los comentarios que se entregarán en la reunión, se aceptarán comentarios por escrito hasta el 27 de octubre de 2009, los cuales pueden entregarse por correo postal, correo electrónica, por facsímile, a la atención de:

Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority
P.O. Box 7602, Chicago, IL 60680-7602
E-mail: OrangeExtension@transitchicago.com • Fax: (312) 681-4297

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Extensión de la Línea Amarilla

Que conecta la estación de la Dempster a la Old Orchard Road

cta

ASISTA A UNA REUNIÓN DE INVOLUCRAMIENTO AL PÚBLICO

miércoles, 23 de septiembre de 2009
6:00 to 8:00 p.m.
Oakton Community Center
4701 Oakton Street, Skokie
Esta localidad tiene acceso para las personas con incapacidades.

La Chicago Transit Authority (CTA) se propone hacer mejoras de transporte al extender la Línea Amarilla desde la Dempster Station a la Old Orchard Road.

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Extensión de la Línea Roja

Que conecta la Estación de la 95th Street a la 130th Street

cta

ASISTA A UNA REUNIÓN DE INVOLUCRAMIENTO AL PÚBLICO

martes, 22 de septiembre de 2009
6:00 to 8:00 p.m.
Historic Pullman Visitor Center
11141 S. Cottage Grove Avenue, Chicago

jueves, 24 de septiembre de 2009
6:00 to 8:00 p.m.
Woodson Regional Chicago Public Library
9525 S. Halsted Street, Chicago

Se presentará la misma información en ambas reuniones. Esta localidad tiene acceso para las personas con incapacidades.

La Chicago Transit Authority (CTA) se propone hacer mejoras de transporte al extender la Línea Roja desde la estación de la 95th Street a las inmediaciones de la 130th Street.

¡Queremos oír sus opiniones!

Asista a una de las reuniones de involucramiento al público, para enterarse en más detalle sobre el proyecto y para expresar sus opiniones sobre las alternativas propuestas, el propósito y la necesidad del proyecto, los efectos medioambientales y comunitarios que habrá que considerarse en el borrador de la Declaración sobre el Efecto Medioambiental (conocida en inglés por sus siglas "EIS"), programada para repaso por el público a fines del 2010.

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0704-9148526

Caribe América Latina

Interceptan en alta mar a 35 indocumentados

Iban en un velero hacia Puerto Rico. Había un chino

EFE
SANTO DOMINGO

La Marina de Guerra dominicana interceptó ayer en alta mar a treinta y cinco personas, entre ellas un nacional chino, que se dirigían clandestinamente en un velero a Puerto Rico, informó la Armada local.

REPÚBLICA DOMINICANA

El grupo viajaba en el velero "Mi niña" de matrícula dominicana, que fue detenido a seis millas de Cap Cana, en la provincia La Altagracia, en el extremo oriental del país.

Los indocumentados, que se encuentran en buen estado de salud, serán traslados a la sede de la Marina de Guerra, en Santo Domingo, para ser interrogados, dijo a Efe un portavoz de la institución.

La Marina de Guerra apresó la semana pasada a 18 personas, entre ellas dos menores de edad y dos ceilandeses, que intentaban viajar a Miami (EE.UU.) también en un velero.

La Procuraduría General y la Armada local anunciaron el mes pasado que coordinan acciones para perseguir a los traficantes de personas, muchas de las cuales pierden la vida cada año en las aguas del Mar Caribe en ruta hacia la vecina isla de Puerto Rico.

Los trabajos son coordinados en cumplimiento a la Ley-137-03 que sanciona en el país el delito del tráfico ilícito de inmigrantes y trata de personas, implementando así una política de combate al crimen organizado con jurisdicción en todo el país.

Cada año miles de dominicanos tratan de llegar a Puerto Rico para sortear la precaria situación económica en la que viven.

En julio pasado, entre 20 y 25 dominicanos desaparecieron en ruta a Puerto Rico tras zarpar el día 11 de la playa de Gaspar Hernández, en la provincia Espaillat, norte del país.

Extensión de la Línea Anaranjada
Que conecta el Midway a Ford City

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¡Queremos oír sus opiniones!
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Extensión de la Línea Roja
Que conecta la Estación de la 95th Street a la 130th Street

cta

ASISTA A UNA REUNIÓN DE INVOLUCRAMIENTO AL PÚBLICO

martes, 22 de septiembre de 2009
6:00 to 8:00 p.m.
Historic Pullman Visitor Center
11141 S. Cottage Grove Avenue, Chicago

jueves, 24 de septiembre de 2009
6:00 to 8:00 p.m.
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Extensión de la Línea Amarilla
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CTA PUBLIC SCOPING MEETINGS

Red Line Extension Project – Environmental Impact Statement (EIS)

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Station to the vicinity of 130th Street. Attend the public scoping meetings to learn more about the project and provide feedback on the proposed alternatives, the purpose and need for the project and the environmental and community impacts to be evaluated. In addition to comments received at the meeting, written scoping comments will be accepted until October 27, 2009.

Attend Public Scoping Meetings:

Tuesday, September 22, 2009
Historic Pullman Visitor Center
6:00 to 8:00 p.m.
11141 S. Cottage Grove Avenue
Chicago, IL

Thursday, September 24, 2009
Woodson Regional Chicago Public Library
6:00 to 8:00 p.m.
9525 S. Halsted Street
Chicago, IL

For More Info: www.transitchicago.com/RedEIS

*Facility accessible to people with disabilities.

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Appendix H
Scoping Meeting Materials
(Comment Sheet, Speaker Card, Scoping Information Books)

Red Line Extension

Connecting 95th Street Station to 130th Street

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: _____

Organization: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ E-mail: _____

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

PLEASE
PLACE
STAMP
HERE

Jeffrey Busby, General Manager
Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

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Tape Ends Before Mailing

Red Line Extension

Connecting 95th Street Station to 130th Street

Deadline to submit comments:
October 27, 2009

Red Line Extension

Connecting 95th Street Station to 130th Street

Scoping Meeting Speaker Card

Date: ❑ September 22, 2009
❑ September 24, 2009

Complete this card if you wish to speak this evening. Your input is a vital component of this phase of the project. Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Thank you for your interest in the Red Line Expansion project.

Name: _____

Organization: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Red Line Extension

Connecting 95th Street Station to 130th Street

Scoping Meeting Speaker Card

Date: ❑ September 22, 2009
❑ September 24, 2009

Complete this card if you wish to speak this evening. Your input is a vital component of this phase of the project. Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Thank you for your interest in the Red Line Expansion project.

Name: _____

Organization: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Red Line Extension

Connecting 95th Street Station to 130th Street

Scoping Meeting Speaker Card

Date: ❑ September 22, 2009
❑ September 24, 2009

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Name: _____

Organization: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Red Line Extension

Connecting 95th Street Station to 130th Street

Scoping Meeting Speaker Card

Date: ❑ September 22, 2009
❑ September 24, 2009

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Name: _____

Organization: _____ Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Red Line Extension

Connecting 95th Street Station to 130th Street

Environmental Impact Statement Scoping Information

September 2009

INTRODUCTION

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street station to 130th Street. CTA and the Federal Transit Administration (FTA) will be preparing an Environmental Impact Statement (EIS) that will evaluate the environmental impacts of constructing and operating the extension.

PURPOSE OF THE EIS AND SCOPING PROCESSS

In accordance with the National Environmental Policy Act (NEPA), CTA and FTA have initiated the environmental review process for the Red Line Extension. An EIS will be prepared to identify impacts related to project construction and operation. As part of the initial phase of the environmental process, public scoping meetings will be hosted to receive public comments on the alternatives and issues that should be examined as part of the environmental analysis. These public meetings are also requirements of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which requires project proponents to provide opportunities for public participation in transportation decision-making.

The process of determining the scope, focus and content of an EIS is known as "scoping." Scoping meetings are a useful opportunity to obtain information from the public and governmental agencies. In particular, the scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential impacts and mitigation measures to be considered.

ENVIRONMENTAL ANALYSIS

Environmental issues to be examined in the EIS include:

- Cultural resources
- Wildlife and ecosystems
- Energy use
- Land acquisition, displacements and relocations
- Land use
- Natural resources (including air quality and water resources)
- Neighborhood compatibility and environmental justice
- Parklands/ recreational facilities
- Safety and security
- Transportation
- Visual and aesthetic impacts
- Noise and vibration
- Zoning and economic development and secondary development

PROJECT OVERVIEW

In 2006, the Chicago Transit Authority (CTA) and the Federal Transit Administration (FTA) began the Alternatives Analysis process for the proposed Red Line Extension. As part of the three step screening process, CTA has held six public meetings over the past three years in order to gather input from the public regarding alternative options. CTA evaluated nine alternatives and has adopted the Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) Alternative as the Locally Preferred Alternative(LPA) for further study in the EIS. The proposed Red Line Extension will be further refined during the conceptual design phase of the project and is being carried forward for additional study in the EIS.

PROJECT ALTERNATIVES TO BE EVALUATED IN THE EIS

The EIS will include an evaluation of the following alternatives:

No Build Alternative

The No Build Alternative is defined as the existing transportation system, plus any committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) FY 2007 – 2012 Transportation Improvement Program (TIP). TIP projects within the project area consist of five bridge reconstructions and several road improvement projects that include landscaping, fencing, resurfacing, coordination of signal timing, and a bicycle/pedestrian multi-use trail. All elements of the No Build Alternative are included in each of the other alternatives.

Summary:

- Existing transportation system
- Plus committed transportation improvements: bridge and road improvement projects
- Bus transit service focused on the preservation of existing services and projects

Transportation System Management (TSM) Alternative

The proposed TSM Alternative is a Bus Rapid Transit (BRT) alternative that operates between the 95th Street Station and 130th Street via East 95th Street, Michigan Avenue, East 127th Street, South Indiana Avenue, and East 130th Street.

Summary:

- No Build Alternative, plus:
- Bus Rapid Transit (BRT) that operates between the 95th Street Station and 130th Street
- 5.5 miles long with four intermediate stops at 103rd, 111th, 115th and 130th Streets
- Park-and-ride facilities proposed at all new stops

- Operates in mixed traffic with traffic signal priority along 95th Street, Michigan Avenue, and 130th Street
- 95th Street terminal expanded to extend the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street to improve circulation and safety
- Existing buses from the south continue to serve the 95th Street station

Locally Preferred Alternative (LPA): Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) Alternative

The proposed LPA would extend the heavy rail transit line from the existing Red Line 95th Street Station to 130th Street.

Summary:

- No Build Alternative, plus:
- Heavy rail transit line extension from 95th Street Station to 130th Street
- 5.3 mile extension with three new intermediate stops at 103rd, 111th and 115th Streets and a new terminal station at 130th Street
- New park-and-ride and bus terminal facilities at each station
- Operates on an elevated structure from 95th Street as it heads south along the I-57 Expressway for nearly one-half mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. It would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of South Prairie Avenue the alignment crosses over the CN/Metra tracks near 119th Street where it transitions to an at-grade profile and then continues southeast along the former Michigan Central/Indiana Harbor Belt (IHB) railroad right-of-way to terminate in the vicinity of130th Street.
- Buses from the south would be rerouted to serve the new intermediate and terminal stations to speed passenger travel to downtown Chicago
- Two alignment options will be studied in the EIS: Tracks could be placed immediately adjacent to the UPRR right-of-way on either the west side (West Side Option) or the east side (East Side Option)
- Two options for the 130th Street terminal station will be studied in the EIS: The line would continue south along the IHB right-of-way to either a south or west terminal station location along the north side of 130th Street, just west of the I-94 Bishop Ford Freeway

Halsted Street Heavy Rail Transit (HRT) Alternative

The proposed Halsted Street HRT Alternative would extend the rail transit line from the existing Red Line 95th Street Terminal station to terminate at the Halsted Street/Vermont Avenue intersection in the vicinity of 127th Street.

Summary:

- No Build Alternative, plus:
- Heavy rail transit line extension from 95th Street Station to Halsted Street/Vermont Avenue intersection
- 5.0 mile extension with three new intermediate stops at 103rd, 111th, 119th Streets and a new terminal station at Vermont Avenue
- New park-and-ride facilities at intermediate and terminal stations
- Operates on an elevated structure between the existing Red Line 95th Street Station and the Halsted Street/Vermont Avenue intersection in the vicinity of 127th Street. The alignment would follow the median of I-57 Expressway until reaching Halsted Street. It would then turn south onto Halsted Street and continue in the median to Vermont Avenue
- Buses from the south would be rerouted to serve the new intermediate and terminal stations

Other alternatives may also be identified in the scoping process.

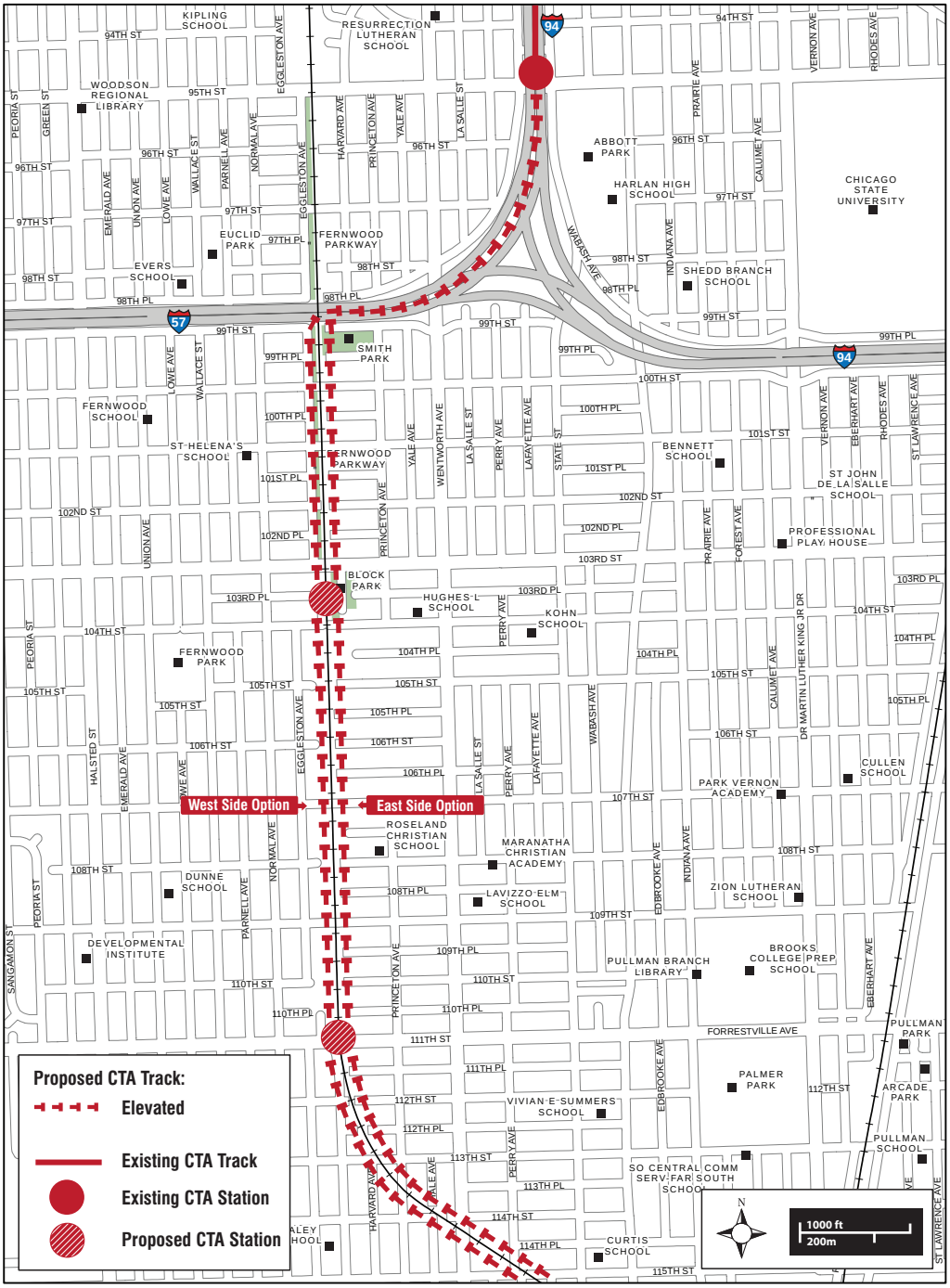
West Side Option
East Side Option
Proposed CTA Track:
Elevated
Existing CTA Track
Existing CTA Station
Proposed CTA Station
1000 ft
200m
N
KIPLING SCHOOL
RESURRECTION LUTHERAN SCHOOL
WOODSON REGIONAL LIBRARY
ABBOTT PARK
HARLAN HIGH SCHOOL
CHICAGO STATE UNIVERSITY
EUCLID PARK
FERNWOOD PARKWAY
EVERS SCHOOL
SHEDD BRANCH SCHOOL
SMITH PARK
FERNWOOD SCHOOL
ST HELENA'S SCHOOL
BENNETT SCHOOL
ST JOHN DE LA SALLE SCHOOL
PROFESSIONAL PLAY HOUSE
BLOCK PARK
HUGHES L SCHOOL
KOHN SCHOOL
FERNWOOD PARK
CULLEN SCHOOL
PARK VERNON ACADEMY
ROSELAND CHRISTIAN SCHOOL
MARANATHA CHRISTIAN ACADEMY
DUNNE SCHOOL
LAVIZZO ELM SCHOOL
ZION LUTHERAN SCHOOL
DEVELOPMENTAL INSTITUTE
PULLMAN BRANCH LIBRARY
BROOKS COLLEGE PREP SCHOOL
PULLMAN PARK
PALMER PARK
ARCADE PARK
VIVIAN E SUMMERS SCHOOL
PULLMAN SCHOOL
SO CENTRAL COMM SERV FAR SOUTH SCHOOL
CURTIS SCHOOL
PEORIA ST
GREEN ST
EGGLESTON AVE
HARVARD AVE
PRINCETON AVE
YALE AVE
LA SALLE ST
PRAIRIE AVE
VERNON AVE
RHODES AVE
CALUMET AVE
INDIANA AVE
WABASH AVE
EMERALD AVE
UNION AVE
LOWE AVE
WALLACE ST
PARNELL AVE
NORMAL AVE
WENTWORTH AVE
PERRY AVE
LAFAYETTE AVE
STATE ST
FOREST AVE
DR MARTIN LUTHER KING JR DR
EBERHART AVE
ST LAWRENCE AVE
HALSTED ST
EDBROOKE AVE
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113TH ST
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114TH ST
114TH PL
115TH ST

West Side Option
East Side Option
PULLMAN BRANCH LIBRARY
BROOKS COLLEGE PREP SCHOOL
FORRESTVILLE AVE
PALMER PARK
PULLMAN PARK
ARCADE PARK
LANGLEY PARK
VIVIAN-E-SUMMERS SCHOOL
PULLMAN SCHOOL
SO CENTRAL COMM SERV-FAR SOUTH SCHOOL
CURTIS SCHOOL
CHICAGO INTERNATIONAL-PRAIRIE SCHOOL
SONGHAI
SALEM CHRISTIAN ACADEMY
KENSINGTON PARK
WEST PULLMAN PARK
GOMPERS SCHOOL
OWENS ACADEMY
ALDRIDGE SCHOOL
KENSINGTON AVE
DOTY AVE
COTTAGE GROVE AVE
CHAMPLAIN AVE
ELLIS AVE
LANGLEY AVE
CORLISS AVE
EDBROOKE AVE
PERRY AVE
VALE AVE
PRINCETON AVE
LA SALLE ST
LAFAYETTE AVE
PRAIRIE AVE
FOREST AVE
CALUMET AVE
FRONT AVE
FORRESTVILLE AVE
ST LAWRENCE AVE
EBERHART AVE
MICHIGAN AVE
INDIANA AVE
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HARVARD AVE
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EVANS AVE
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126TH ST
126TH PL
129TH PL
130TH ST
130TH PL
131ST ST
131ST PL
Proposed CTA Track:
Elevated
At-grade
Proposed CTA Station option A & B
Proposed CTA Station
N
1000 ft
200m

Red Line Extension | *Halsted Street HRT Alternative*

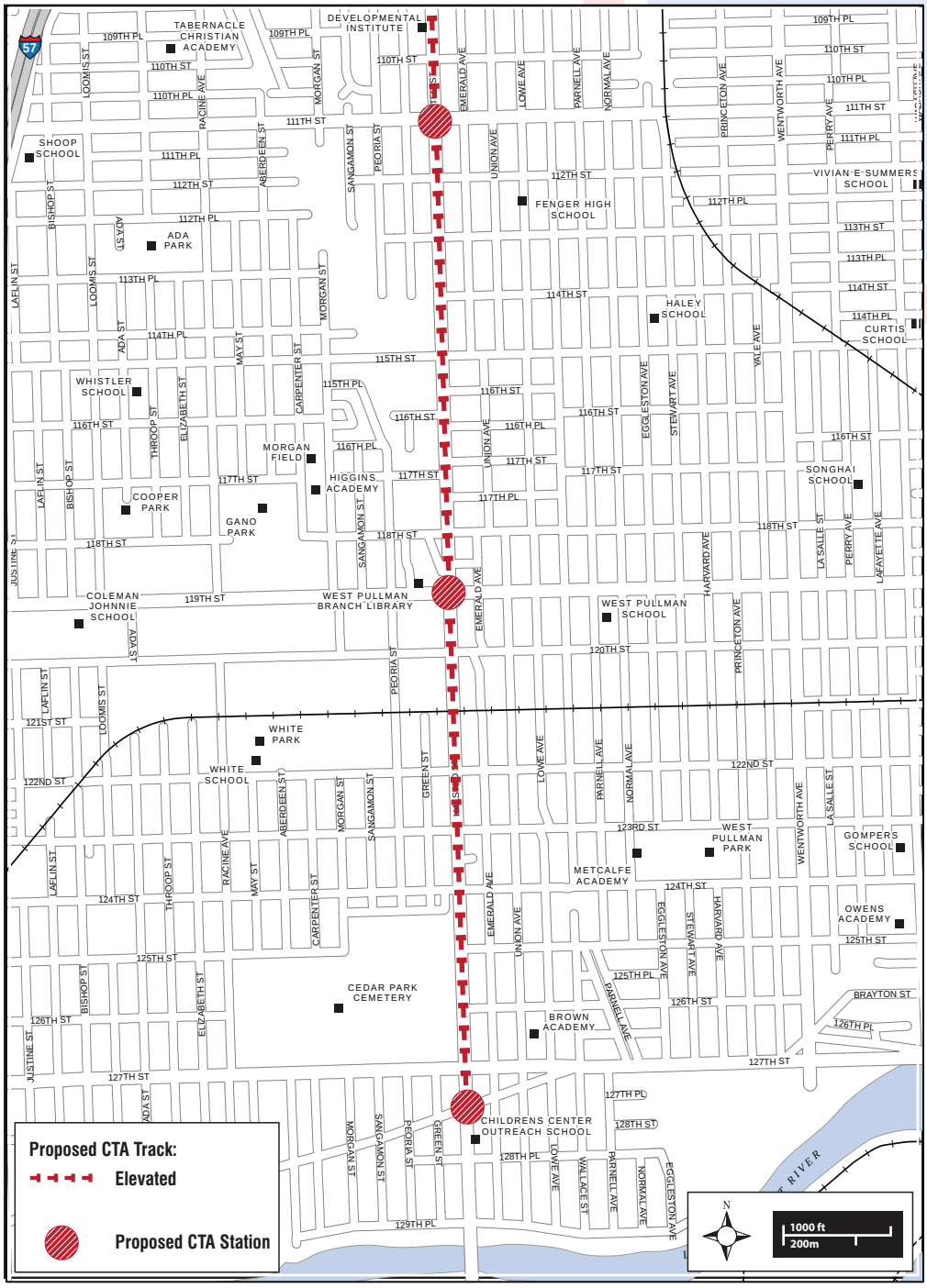
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DEVELOPMENTAL INSTITUTE
SHOOP SCHOOL
ADA PARK
FENGER HIGH SCHOOL
VIVIAN E SUMMERS SCHOOL
HALEY SCHOOL
CURTIS SCHOOL
WHISTLER SCHOOL
MORGAN FIELD
HIGGINS ACADEMY
COOPER PARK
GANO PARK
SONGHAI SCHOOL
COLEMAN JOHNNIE SCHOOL
WEST PULLMAN BRANCH LIBRARY
WEST PULLMAN SCHOOL
WHITE PARK
WHITE SCHOOL
WEST PULLMAN PARK
GOMPERS SCHOOL
METCALFE ACADEMY
OWENS ACADEMY
CEDAR PARK CEMETERY
BROWN ACADEMY
CHILDRENS CENTER OUTREACH SCHOOL
Proposed CTA Track:
Elevated
Proposed CTA Station
1000 ft
200m

PROJECT PURPOSE AND NEED

The purpose of the Red Line Extension project is to reduce travel times to jobs for Far South Side and South Suburban residents and improve the performance of the existing Red Line 95th Street Station terminal. The project would also provide an opportunity to support economic development initiatives.

The need for the project is based on the following considerations:

- Lack of park-and-ride, passenger drop off and poor pedestrian facilities limit access to the existing 95th Street terminal of the Red Line
- Customers accessing the existing terminal facility by bus experience measureable delays resulting from poor performance of surrounding arterial intersections, xinsufficient space for bus loading and unloading, and insufficient space for bus layovers
- Congested bus and passenger conditions at the existing terminal station and bus facility result in safety issues and diminish the attractiveness of transit as an alternative to other travel modes
- Roadway performance in the study area is adversely impacted by narrow arterial streets and frequent at-grade freight rail crossings
- Study area population is highly transit dependent, minority, and low-income.

PUBLIC PARTICIPATION

Throughout the EIS process, CTA will offer a number of opportunities for you to get involved in the Red Line Extension project. Whether you want to take an active role in shaping this project or just want to stay informed, CTA looks forward to your participation in the months ahead. To ensure that the issues most important to residents, public agencies, and other involved parties are addressed in this review, CTA is hosting two scoping meetings to collect public input. The input gathered from the scoping meetings will help shape the scope of the study, its design efforts and the assessment criteria used in evaluating improvement options.

Additional opportunities to participate will be provided throughout the environmental review process in order to solicit feedback regarding specific needs and concerns.

HOW TO PARTICIPATE

Attend a Meeting

Tuesday, September 22, 2009
6:00 p.m. to 8:00 p.m.
Historic Pullman Visitor Center
11141 S. Cottage Grove Ave.
Chicago, IL 60628

Thursday, September 24, 2009
6:00 p.m. to 8:00 p.m.
Woodson Regional Chicago
Public Library
9525 S. Halsted St.
Chicago, IL 60628

Oral and written comments can be made at the meeting.

Comment

Provide written comments on the proposed project alternatives and potential environmental impacts. Comments will be considered in the scoping process if received by October 27, 2009.

Mail your comments to:

Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

Or e-mail:

RedExtension@transitchicago.com

Comments can be submitted by mail or e-mail.

Stay Involved

For project information, visit: www.transitchicago.com/RedEIS

If you would like to be added to the project mailing list or e-list for future updates, please send your contact information to Darud Akbar, Government & Community Relations Officer, Chicago Transit Authority, P.O. Box 7567, Chicago, IL 60680-7567, call (312) 681-2708 or e-mail dakbar@transitchicago.com.

THE DECISION MAKING PROCESS AND NEXT STEPS

After the scoping period, CTA will start preliminary engineering and prepare a Draft EIS. The public will have an opportunity to comment on the Draft EIS during a 45-day public comment period. During the review period, CTA will host public hearings to receive comments on the Draft EIS from the public and agencies. CTA will then prepare a Final EIS that includes responses to public comments.

The Federal Transit Administration (FTA) will consider the Final EIS and prepare a Record of Decision (ROD) selecting the preferred alternative. Issuance of the ROD indicates that CTA has satisfied all of the requirements of the National Environmental Policy Act (NEPA). While CTA can advance on preliminary engineering concurrently with the environmental analysis, the issuance of the ROD will allow CTA to move forward with final design and construction of the Red Line.

TARGETED PROJECT SCHEDULE

Fall 2009	2010-2011	2011-2013	2016
Public Scoping Meetings, September 22 and 24, 2009	Preliminary Engineering and Draft EIS	Final EIS, ROD, Final Design, Start of Construction	Open for Operation

Extensión de la Línea Roja

Que conecta la Estación de la 95th Street a la 130th Street

Información sobre el Involucramiento al Público en la Declaración sobre el Efecto Medioambiental

Septiembre de 2009

INTRODUCCIÓN

La Chicago Transit Authority (CTA) se propone hacer mejoras de transporte al extender la Línea Roja desde la estación de la 95th Street a la 130th Street. La CTA y la Administración Federal de Tránsito (conocida en inglés por sus siglas "FTA") pasarán a preparar una Declaración sobre el Efecto Medioambiental (conocida en inglés por sus siglas "EIS"), la cual evaluará los efectos medioambientales de construcción y de funcionamiento de la extensión.

PROPÓSITO DE LA EIS Y EL PROCESO DE INVOLUCRAMIENTO AL PÚBLICO

De acuerdo con la Ley sobre la Política Nacional Medioambiental (conocida en inglés por sus siglas "NEPA"), la CTA y la FTA han iniciado un proceso de estudio medioambiental para la Extensión de la Línea Roja. Se elaborará una EIS para identificar los efectos relativos a las obras de construcción y el funcionamiento de la línea. Como parte de la etapa inicial del estudio medioambiental, se celebrará reuniones para involucrar al público con el fin de recibir comentarios por parte del público sobre las alternativas y las cuestiones que deben considerarse como parte del análisis medioambiental. Estas reuniones con el público también son un requisito de la Ley sobre la Equidad del Transporte Seguro, Confiable, Flexible y Eficiente: Un Legado para Usuarios (conocida en inglés por sus siglas "SAFETEA-LU"), la cual exige que los proponentes del proyecto ofrezcan oportunidades para que participe el público en la toma de decisiones sobre el transporte.

Se conoce el proceso de determinar el alcance, el enfoque, y el contenido de una EIS como el "involucramiento al público". Las reuniones de involucramiento constituyen una oportunidad idónea para obtener información de las entidades públicas y gubernamentales. En particular, el proceso de involucramiento pide a las entidades y a las personas interesadas que expresen sus opiniones sobre las alternativas propuestas, el propósito y la necesidad del proyecto, los temas propuestos de evaluación, los efectos negativos posibles, y las medidas atenuadoras que habrán que tener en cuenta.

ANÁLISIS MEDIOAMBIENTAL

Las cuestiones medioambientales que se estudiarán en la EIS son como siguen:

- Recursos culturales;
- Flora y fauna naturales y ecosistemas;
- Uso de energía;
- Adquisición de tierras, desplazamientos, y reubicaciones;
- Uso de tierras;
- Recursos naturales (incluso la calidad del aire y los recursos acuáticos);
- Compatibilidad de los vecindarios y la equidad medioambiental;
- Tierras de parque verde/ instalaciones recreativas
- Seguridad y protección;
- Transporte;
- Efectos visuales y estéticos;
- Ruidos y vibraciones;
- Planificación por zonas y el desarrollo económico y secundario.

REPASO DEL PROYECTO

En 2006, la Chicago Transit Authority (CTA) y la Administración Federal de Tránsito (FTA) iniciaron un proceso de análisis de alternativas para la extensión propuesta de la Línea Roja. Como parte de este proceso de revisión de tres etapas, la CTA ha celebrado seis reuniones públicas durante los últimos tres años, con el fin de recoger opiniones del público sobre las alternativas posibles. La CTA evaluó nueve alternativas y ha adoptado la Alternativa del Tránsito Ferroviario Pesado (conocida en inglés por sus siglas "HRT") de la Union Pacific Railroad (UPRR) como la Alternativa de Preferencia Local (conocida en inglés por sus siglas "LPA") para mayor estudio en la EIS. Se irá perfeccionando la Extensión de la Línea Roja propuesta durante la etapa del diseño conceptual del proyecto y se someterá a mayor estudio durante la etapa de la EIS.

ALTERNATIVAS DEL PROYECTO QUE SERÁN EVALUADAS EN LA EIS

La EIS incluirá una evaluación de las siguientes alternativas:

Alternativa sin Obras de Construcción

La Alternativa sin Obras de Construcción se define como el sistema de transporte ya existente, además de las otras mejoras de transporte para las cuales ya se ha contraído el compromiso de realizarlas y que ya quedan incluidas en el Programa de Mejoras de Transporte (conocida en inglés por sus siglas "TIP") para los ejercicios fiscales de 2007-2012 dentro de la Dirección Metropolitana de Chicago para la Planificación (conocida en inglés por sus siglas "CMAP"). Los proyectos de TIP dentro del área del proyecto consisten en la reconstrucción de cinco puentes y los proyectos de mejoras de algunos caminos, los cuales incluyen la jardinería, la colocación de cercos, obras de repavimento, la coordinación de sincronización de señales, y un sendero de multiuso para biciclistas y peatones. Todos los elementos de la Alternativa sin Obras de Construcción se incluyen en cada una de las otras alternativas.

Para resumir:

- Sistema de transporte ya existente;
- Además de las otras mejoras de transporte: proyectos de mejoras de puentes y caminos;
- Servicio de tránsito por autobús que se enfoca sobre la conservación de servicios y proyectos ya existentes.

Alternativa de Administración del Sistema de Transporte (conocida en inglés por sus siglas "TSM")

La Alternativa propuesta de TSM es una alternativa de tránsito rápido por autobuses (conocida en inglés por sus siglas "BRT"), que anda entre la Estación de la 95th Street y la 130th Street, por medio de la East 95th Street, la Michigan Avenue, al East 127th Street, la South Indiana Avenue, y la East 130th Street.

Para resumir:

- Alternativa sin Obras de Construcción, además de:
- El tránsito rápido por autobuses (BRT) que anda entre la Estación de la 95th Street y la 130th Street;

- Un recorrido de 5.5 millas con cuatro paradas intermedias en la 103rd, 111th, 115th, y 130th Streets;
- Estaciones con instalaciones de estacionamiento propuestas para todas las nuevas paradas
- Anda en el tránsito mixto con señales de preferencia por la 95th Street, la Michigan Avenue, y la 130th Street;
- La terminal de la 95th Street ampliada para extender las plataformas de entrada ya existentes para los autobuses por la State y Lafayette Streets, ubicados aproximadamente 250 pies al norte a la 94th Street, con el fin de mejorar la circulación y la seguridad;
- Los autobuses que andan del sur seguirán brindando servicio a la estación de la 95th Street.

Alternativa de Preferencia Local (LPA): Alternativa de Tránsito Ferroviario Pesado (HRT) de la Union Pacific Railroad (UPRR)

La propuesta LPA extenderá la línea de tránsito ferroviario pesado desde la Estación de la 95th Street ya existente de la Línea Roja a la 130th Street.

Para resumir:

- Alternativa sin Obas de Construcción, además de:
- Extensión de la línea de tránsito ferroviario pesado desde la Estación de la 95th Street a la 130th Street;
- Una extensión de 5.3 millas con tres nuevas paradas intermedias en la 103rd, 111th, 115th, y 130th Streets y una estación terminal nueva en la 130th Street;
- Estaciones nuevas con instalaciones de estacionamiento y terminales de autobuses en cada estación;
- Anda por encima de una estructura elevada desde la 95th Street, mientras que va hacia el sur por la I-57 Expressway por casi media milla hasta llegar al corredor de la UPRR en proximidad de la Eggleston Avenue. Luego se dirigiría al sur por el corredor de la UPRR hasta aproximadamente 111th Street, donde daría la vuelta al sudeste. Al este de la South Prairie Avenue, el alineamiento cruza sobre las vías de la CN/Metra cerca de la 119th Street, donde adoptaría una configuración de andar a nivel de calle, para seguir después hacia el sudeste por la servidumbre de paso de la antigua compañía de ferrocarril periférico de Michigan Central/Indiana Harbor (Michigan Central/Indiana Harbor Belt Railroad, o IHB por sus siglas en inglés), acabando en proximidad de la 130th Street;

- Las rutas de autobuses que venían del sur serán desviadas para brindar servicio a las nuevas estaciones intermedias y terminales, con el fin de agilizar el tránsito de viajeros al centro de Chicago;
- Se estudiarán dos alternativas de alineamiento en la EIS: Se podrá colocar vías inmediatamente adyacentes a la servidumbre de paso de la UPRR por el lado al oeste (Opción del Lado al Oeste) o por el lado al este (Opción del Lado al Este);
- Se estudiarán dos alternativas para la estación terminal de la 130th Street en la EIS: La línea seguiría hacia el sur por la servidumbre de paso de la IHB hasta una estación terminal que estaría ubicada en un sitio al sur o al oeste, por el lado al norte de la 130th Street, justamente al oeste de la I-94 Bishop Ford Freeway.

Alternativa de Tránsito Ferroviario Pesado (HRT) de la Halsted Street

La Alternativa propuesta de HRT de la Halsted Street extendería la línea de tránsito ferroviario desde la estación terminal de la 95th Street ya existente de la Línea Roja para acabar en el cruce de caminos entre la Halsted Street/Vermont Avenue, en proximidad a la 127th Street.

Para resumir:

- Alternativa sin Obras de Construcción, además de:
- Extensión de la línea de tránsito ferroviario pesado desde la Estación de la 95th Street al cruce de caminos entre la Halsted Street/Vermont Avenue;
- Una extensión de 5.0 millas con tres nuevas paradas intermedias en la 103rd, 111th, 119th, y una estación terminal nueva en la Vermont Avenue;
- Nuevas estaciones con instalaciones de estacionamiento en las estaciones intermedias y terminales;
- Anda por encima de una estructura elevada entre la Estación de la 95th Street ya existente de la Línea Roja y el cruce de caminos entre la Halsted Street/Vermont Avenue, en proximidad de la 127th Street. El alineamiento seguirá el camellón o zona media de la I-57 Expressway hasta que llega a la Halsted Street. Luego daría una vuelta hacia el sur, entrando en la Halsted Street, para seguir después por la zona media hasta llegar a la Vermont Avenue.
- Las rutas de autobuses que venían del sur serán desviadas para brindar servicio a las nuevas estaciones intermedias y terminales

Se podrán identificar otras alternativas en el proceso de involucrar al público..

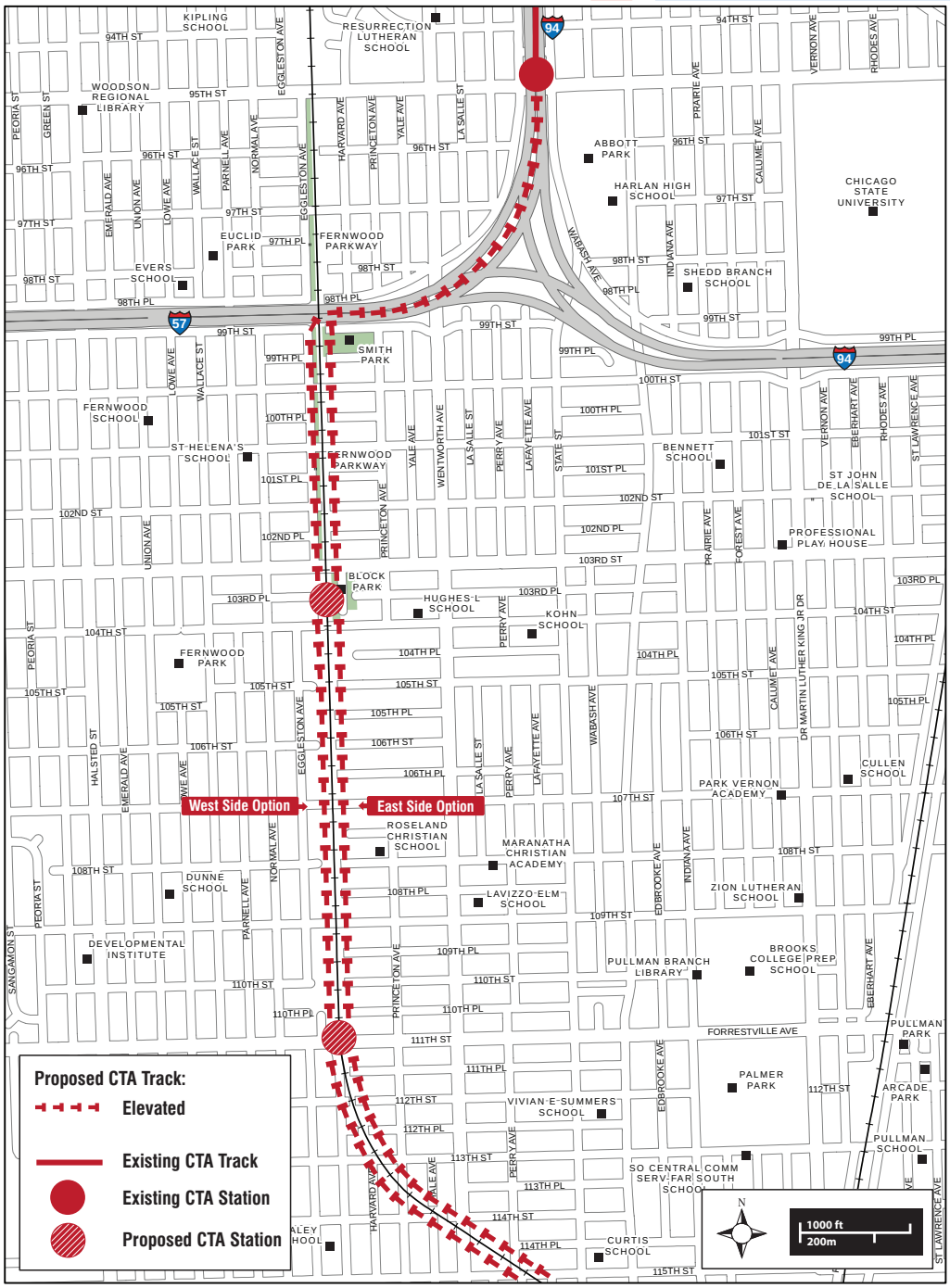
West Side Option
East Side Option
Proposed CTA Track:
Elevated
Existing CTA Track
Existing CTA Station
Proposed CTA Station
1000 ft
200m
N
KIPLING SCHOOL
RESURRECTION LUTHERAN SCHOOL
WOODSON REGIONAL LIBRARY
ABBOTT PARK
HARLAN HIGH SCHOOL
CHICAGO STATE UNIVERSITY
EUCLID PARK
FERNWOOD PARKWAY
EVERS SCHOOL
SHEDD BRANCH SCHOOL
SMITH PARK
FERNWOOD SCHOOL
ST HELENA'S SCHOOL
BENNETT SCHOOL
ST JOHN DE LA SALLE SCHOOL
PROFESSIONAL PLAY HOUSE
BLOCK PARK
HUGHES-L SCHOOL
KOHN SCHOOL
FERNWOOD PARK
CULLEN SCHOOL
PARK VERNON ACADEMY
ROSELAND CHRISTIAN SCHOOL
MARANATHA CHRISTIAN ACADEMY
DUNNE SCHOOL
LAVIZZO-ELM SCHOOL
ZION LUTHERAN SCHOOL
DEVELOPMENTAL INSTITUTE
PULLMAN BRANCH LIBRARY
BROOKS COLLEGE PREP SCHOOL
PULLMAN PARK
PALMER PARK
ARCADE PARK
VIVIAN-E-SUMMERS SCHOOL
PULLMAN SCHOOL
SO CENTRAL COMM SERV-FAR SOUTH SCHOOL
CURTIS SCHOOL

West Side Option
East Side Option
Proposed CTA Track:
Elevated
At-grade
Proposed CTA Station option A & B
Proposed CTA Station
1000 ft
200m
N
PULLMAN BRANCH LIBRARY
BROOKS COLLEGE PREP SCHOOL
PALMER PARK
VIVIAN E SUMMERS SCHOOL
SO CENTRAL COMM SERV FAR SOUTH SCHOOL
CURTIS SCHOOL
CHICAGO INTERNATIONAL-PRAIRIE SCHOOL
SONGHAI
SALEM CHRISTIAN ACADEMY
KENSINGTON PARK
PULLMAN PARK
ARCADE PARK
LANGLEY PARK
PULLMAN SCHOOL
WEST PULLMAN PARK
GOMPERS SCHOOL
OWENS ACADEMY
ALDRIDGE SCHOOL
FORRESTVILLE AVE
KENSINGTON AVE
DOTY AVE
COTTAGE GROVE AVE
BRAYTON ST
DREXEL AVE
94

Red Line Extension | *Halsted Street HRT Alternative*

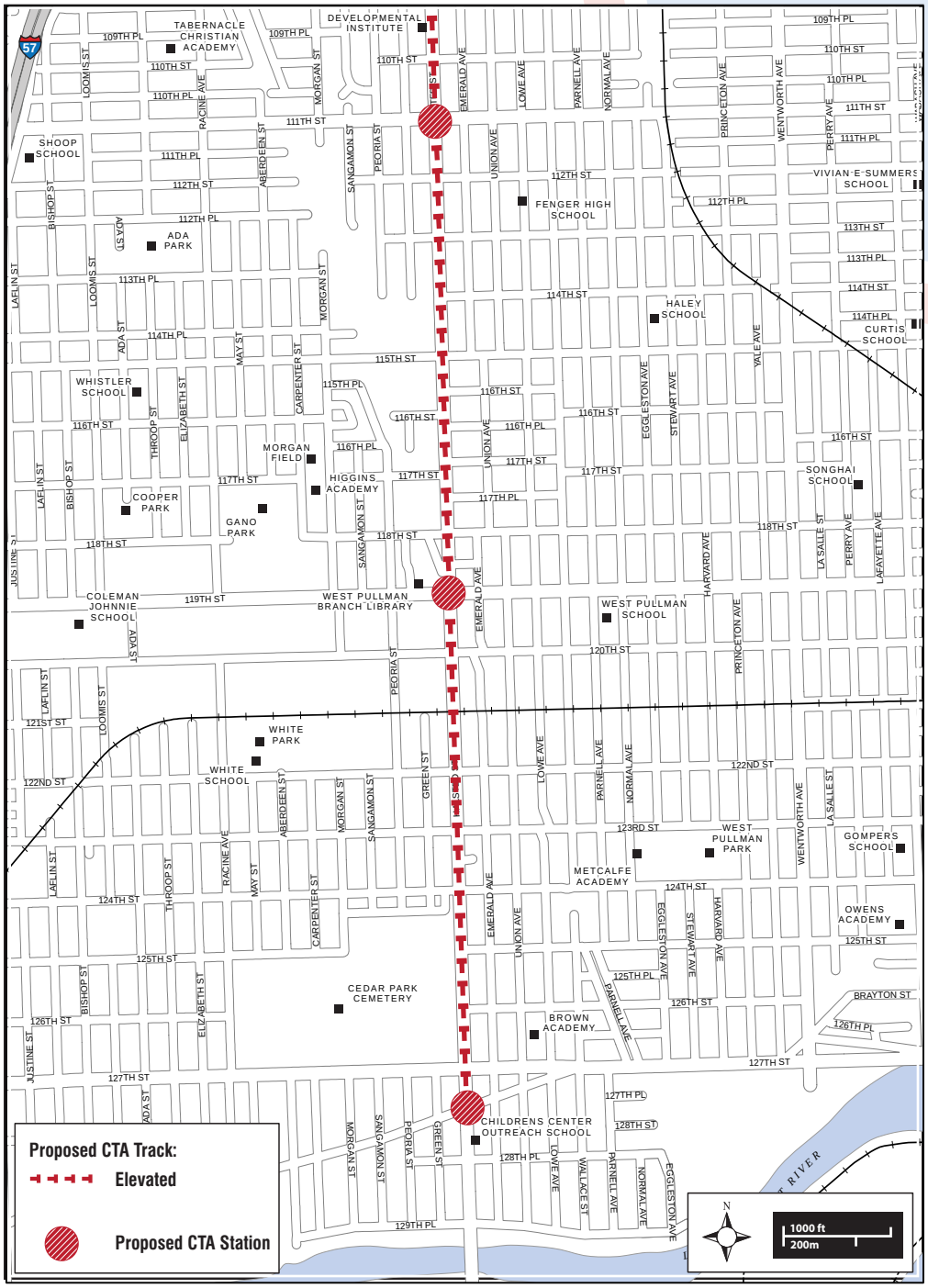
TABERNACLE CHRISTIAN ACADEMY
DEVELOPMENTAL INSTITUTE
SHOOP SCHOOL
ADA PARK
FENGER HIGH SCHOOL
VIVIAN E SUMMERS SCHOOL
HALEY SCHOOL
CURTIS SCHOOL
WHISTLER SCHOOL
MORGAN FIELD
HIGGINS ACADEMY
COOPER PARK
GANO PARK
SONGHAI SCHOOL
COLEMAN JOHNNIE SCHOOL
WEST PULLMAN BRANCH LIBRARY
WEST PULLMAN SCHOOL
WHITE PARK
WHITE SCHOOL
WEST PULLMAN PARK
GOMPERS SCHOOL
METCALFE ACADEMY
OWENS ACADEMY
CEDAR PARK CEMETERY
BROWN ACADEMY
CHILDRENS CENTER OUTREACH SCHOOL
Proposed CTA Track:
Elevated
Proposed CTA Station
N
1000 ft
200m

PROPÓSITO Y NECESIDAD DEL PROYECTO

El proyecto de Extensión de la Línea Roja tiene el propósito de reducir el tiempo de viaje al trabajo para los residentes ubicados en el lado del sur lejano y de los suburbios del sur y de mejorar el funcionamiento de la estación terminal de la 95th Street ya existente de la Línea Roja. El proyecto también daría la oportunidad para fomentar las iniciativas de desarrollo económico.

La necesidad del proyecto se basa en las siguientes consideraciones:

- La falta de estaciones con instalaciones de estacionamiento y de un lugar para dejar y recoger a pasajeros, y las instalaciones pobres para peatones limitan el acceso a la estación terminal ya existente de la 95th Street de la Línea Roja.
- Los viajeros que llegan a las instalaciones terminales ya existentes por autobús sufren de demoras numerosas que resultan del mal rendimiento de los cruces de caminos arteriales en los alrededores, del espacio insuficiente para la carga y la descarga de pasajeros en los autobuses, y del espacio insuficiente para las paradas intermedias (escalas) de autobuses.
- Las condiciones congestionadas para autobuses y pasajeros en las estaciones terminales ya existentes y en las instalaciones de autobuses resultan en los problemas de seguridad y disminuyen lo atractivo del tránsito como alternativa de otras modalidades de viaje.
- El rendimiento de las calzadas en este estudio queda perjudicado por las calles arteriales estrechas y cruces ferroviarios frecuentes de carga a nivel de calle.
- La población en el área del estudio consiste en grupos étnicos minoritarios, sumamente dependientes del tránsito, y de ingresos bajos.

PARTICIPACIÓN DEL PÚBLICO

A lo largo del proceso de la EIS, la CTA ofrecerá numerosas oportunidades para que usted quede involucrado en el proyecto de Extensión de la Línea Roja. Que usted participe activamente para dar forma a este proyecto o que simplemente prefiera estar al tanto de las últimas novedades, la CTA espera con placer su participación en los meses venideros. Para asegurar que se aborden las cuestiones que son más importantes a los residentes, a las entidades públicas, y a otras partes interesadas en este estudio, la CTA celebrará dos reuniones de involucramiento público para recoger las opiniones del público. Los comentarios que se recogen en las reuniones de involucramiento ayudarán a determinar el alcance del estudio, los esfuerzos por diseñarlo, y los criterios de valoración dedicados a evaluar las opciones para hacer mejoras.

Se ofrecerán más oportunidades para participar durante el proceso del estudio medioambiental, con el fin de pedir más opiniones sobre las necesidades y los temas específicos de preocupación.

CÓMO PARTICIPAR

Asistir a una reunión

martes, 22 de septiembre de 2009
6:00 p.m. - 8:00 p.m.
Historic Pullman Visitor Center
11141 S. Cottage Grove Avenue
Chicago, IL 60628

jueves, 24 de septiembre de 2009
6:00 p.m. - 8:00 p.m.
Woodson Regional Chicago Public Library
9525 S. Halsted Street
Chicago, IL 60628

Se pueden hacer comentarios orales y por escrito en las reuniones.

Hacer comentarios

Hacer comentarios por escrito sobre las alternativas propuestas del proyecto y los efectos medioambientales posibles. Se considerarán los comentarios en el proceso de involucramiento al público con tal de que se entreguen para el día 27 de octubre de 2009.

Enviar sus comentarios a:

Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

O enviar por correo electrónico a:

RedExtension@transitchicago.com

Se pueden entregar comentarios por correo postal o electrónico.

Quedar involucrado

Para informarse sobre el proyecto, vaya al: www.transitchicago.com/RedEIS

Si usted desea incorporarse a nuestra lista de correo postal o electrónico del proyecto para recibir noticias en el futuro, favor de enviar sus datos de contacto a Darud Akbar, Government & Community Relations Officer, Chicago Transit Authority, P.O. Box 7567, Chicago, IL 60680-7567, llame al (312) 681-2708, o enviar una nota por correo electrónico a dakbar@transitchicago.com.

EL PROCESO DE TOMAR DECISIONES Y LOS PRÓXIMOS PASOS

Después del período de involucramiento al público, la CTA comenzará la ingeniería preliminar y elaborará un borrador de la EIS. El público tendrá una oportunidad para hacer comentarios sobre el borrador de la EIS durante un plazo de 45 días dedicado a los comentarios por el público. Durante el período de estudio, la CTA celebrará reuniones públicas para recibir comentarios sobre el borrador de la EIS del público en general y de las entidades. La CTA luego elaborará una versión definitiva de la EIS que incluirá las respuestas a los comentarios que habrán hecho el público

La Administración Federal de Tránsito (FTA) estudiará la versión definitiva de la EIS y elaborará un Acta de Decisión (conocida en inglés por sus siglas "ROD"), en la cual escogerá la alternativa preferida. El acto de emitir la ROD da a entender que la CTA ha cumplido con todos los requisitos que exige la Ley sobre la Política Nacional Medioambiental (NEPA). Aunque la CTA puede seguir adelante con la ingeniería preliminar de forma simultánea con el análisis medioambiental, el acto de emitir la ROD permitirá a la CTA proceder al diseño definitivo y emprender la construcción de la Línea Roja.

CRONOGRAMA ANTICIPADO DEL PROYECTO

Otoño del 2009	2010-2011	2011-2013	2016
Reuniones de Involucramiento al Público, 22 y 24 de septiembre de 2009	Ingeniería Preliminar y Borrador de la EIS	Versión Definitiva de la EIS, Acta de Decisión (ROD), Diseño Definitivo, y Inicio de las Obras de Construcción	Entrar en funcionamiento

Appendix I
Meeting Presentation

Red Line Extension

Environmental Impact Statement (EIS)
Public Scoping Meetings
September 22 & 24, 2009

Meeting Agenda

- 6:00 – 6:45 pm Open House
- 6:45 – 6:55 pm Presentation
- 6:55 – 7:55 pm Public Comments on Scope of Environmental Impact Statement (EIS)
- 7:55 – 8:00 pm Next Steps/Adjournment

Background/History

- Alternatives Analysis process began in 2006
- Evaluated nine alternatives
- Extensive public outreach program
- Adopted Union Pacific Railroad Heavy Rail Transit Alternative as Locally Preferred Alternative (LPA)
- Environmental Impact Statement (EIS) builds on Alternatives Analysis process

Environmental Impact Statement (EIS)

- Prepared to comply with National Environmental Policy Act (NEPA)
- Identify and evaluate potential impacts related to project construction and operation
- Inform public and decision-makers of potential impacts and mitigation measures

Scoping: process of determining focus and content (scope) of EIS

TARGETED PROJECT SCHEDULE

Fall 2009	2010-2011	2011-2013	2016
Public Scoping Meetings, September 22 and 24, 2009	Preliminary Engineering and Draft EIS	Final EIS, ROD, Final Design, Start of Construction	Open for Operation

Public review of Draft EIS; relevant scoping comments addressed in Draft EIS

Project Alternatives Proposed for Study in EIS

- No Build Alternative
- Transportation System Management (TSM) Alternative
- Locally Preferred Alternative (LPA): Union Pacific Railroad Heavy Rail Transit Alternative
- Halsted Street Heavy Rail Transit Alternative

Locally Preferred Alternative

Public Comments on Scope of EIS

Stay Involved

www.transitchicago.com/RedEIS

Contact:

Darud Akbar
Government & Community Relations Office
Chicago Transit Authority
P.O. Box 7567
Chicago, IL 60680-7567
(312) 681-2708
dakbar@transitchicago.com

Scoping Comments

Focus comments on:

- Purpose and Need
- Proposed Alternatives
- Proposed Environmental Issues to be Examined
- Potential Environmental Effects and Mitigation Measures to be Considered

Speaker Guidelines

- Submit a speaker card
- Moderator will call speakers by name
- Re-state your name
- Speakers have 3 minutes to comment
  - Yellow Card- 30 seconds remaining
  - Red Card- speaking time is over
- Tonight we will not respond to your comments
- Comments will be documented in scoping report

Scoping Comments due by October 27, 2009

- Tonight verbal comments recorded by court reporter
- Write comments and place in box provided
- Mail:

  Jeffery Busby, General Manager, Strategic Planning
  Chicago Transit Authority
  P.O. Box 7602
  Chicago, IL 60680-7602
- E-mail: RedExtension@transitchicago.com
- Fax: (312) 681-4297

Appendix J
Meeting Exhibit Boards

No Build Alternative

- Existing transportation system
- Plus committed transportation improvements in Chicago Metropolitan Agency for Planning Transportation Improvement Program including select bridge and road improvement projects
- Focus on preservation of existing bus service

Transportation System Management (TSM) Alternative

Bus Rapid Transit (BRT) alternative that operates between the 95th Street Station and 130th Street via East 95th Street, Michigan Avenue, East 127th Street, South Indiana Avenue, and East 130th Street.

- 5.5 miles long with four intermediate stops at 103rd, 111th, 115th and 130th streets
- Park & Ride facilities proposed at all new stops
- Operates in mixed traffic with traffic signal priority along 95th Street, Michigan Avenue, and 130th Street
- 95th Street terminal expanded to extend the existing bus bays along State and Lafayette streets to 94th Street to improve circulation and safety
- Existing buses from the south would continue to serve the 95th Street Station

Locally Preferred Alternative (LPA):

Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) Alternative

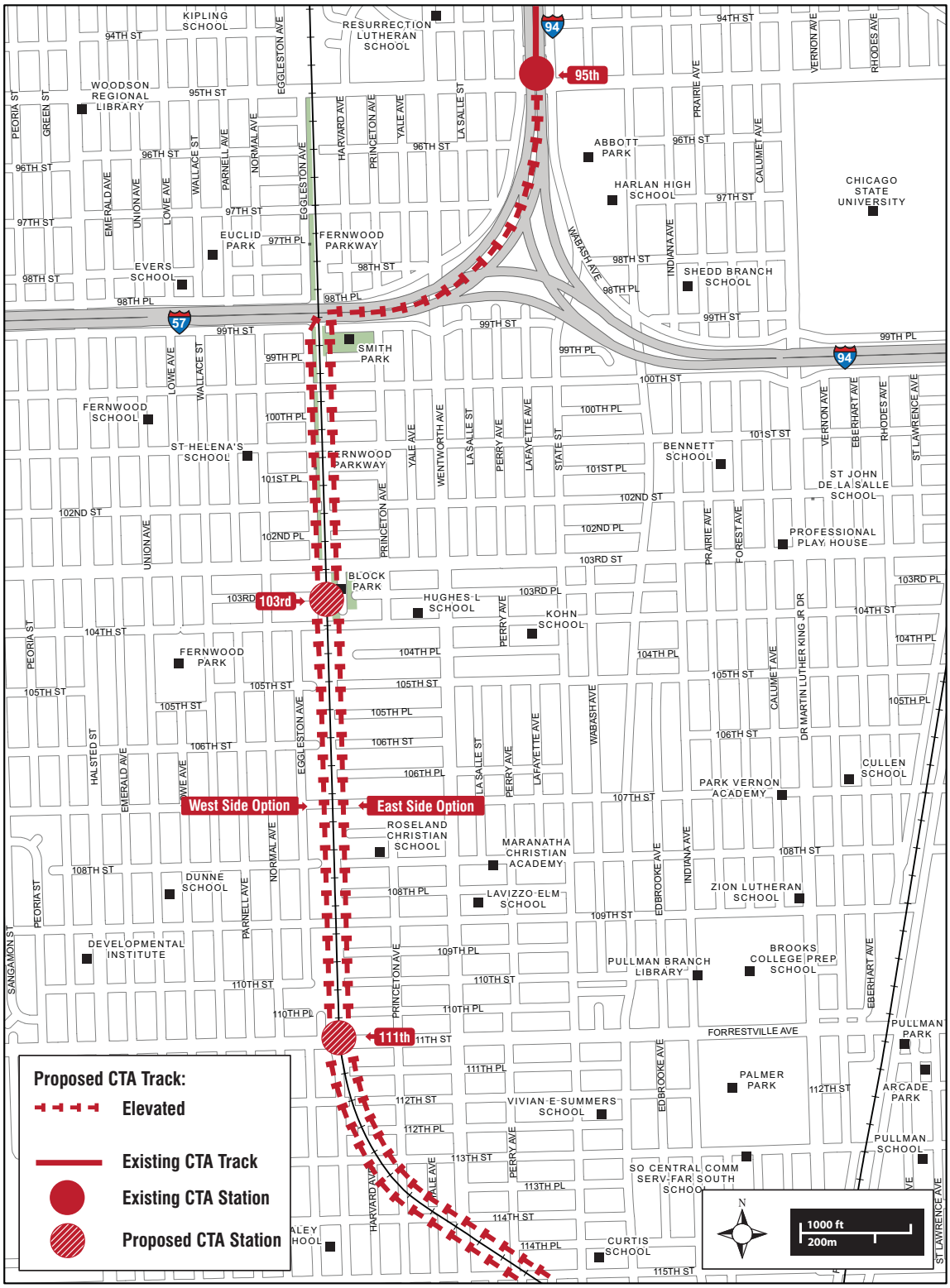

Red Line Extension

Connecting 95th Street Station to 130th Street

Locally Preferred Alternative (LPA):

Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) Alternative

Red Line Extension

Connecting 95th Street Station to 130th Street

Halsted Street Heavy Rail Transit (HRT) Alternative

Red Line Extension

Connecting 95th Street Station to 130th Street

Halsted Street Heavy Rail Transit (HRT) Alternative

Red Line Extension

Connecting 95th Street Station to 130th Street

Locally Preferred Alternative (LPA): Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT)

Extend Red Line rapid transit from the existing Red Line 95th Street Station to 130th Street.

- 5.3-mile extension with three new intermediate stops at 103rd, 111th and 115th Streets and a new terminal station at 130th Street
- New Park & Ride and bus terminal facilities at each station
- Buses from the south would be re-routed to serve the new intermediate and terminal stations to speed passenger travel to downtown Chicago

Halsted Street Heavy Rail Transit (HRT) Alternative

Extend Red Line rapid transit from the existing Red Line 95th Street station to Halsted Street/ Vermont Avenue intersection in the vicinity of 127th Street.

- 5-mile extension with three new intermediate stops at 103rd, 111th, 119th streets and a new terminal station at Vermont Avenue
- New Park & Ride facilities at intermediate and terminal stations
- Buses from the south would be re-routed to serve the new intermediate and terminal stations

Project Purpose

- Reduce travel times to jobs for Far South Side and South Suburban residents
- Improve performance of existing Red Line 95th Street Station terminal
- Provide an opportunity to support economic development initiatives

The need for the project is based on the following considerations:

- Lack of Park & Ride, passenger drop off and poor pedestrian facilities limit access to existing 95th Street Red Line terminal station
- Customers accessing existing terminal facility by bus experience measureable delays
- Congested bus and passenger conditions at existing terminal station and bus facility result in safety issues and diminish the attractiveness of transit as an alternative to other travel modes
- Roadway performance in study area is adversely impacted by narrow arterial streets and frequent at-grade freight rail crossings
- Study area population is highly transit dependent, minority and low-income

Submit Comments

Scoping comments due by: ***October 27, 2009.*** Comment on the proposed project alternatives and potential environmental effects. Submit to:

Jeffrey Busby

General Manager, Strategic Planning

Chicago Transit Authority

P.O. Box 7602

Chicago, IL 60680-7602

Fax: 312-681-4297

E-mail: RedExtension@transitchicago.com

Stay Involved

Visit: www.transitchicago.com/RedEIS

To join the mailing list or e-list, contact:

Darud Akbar

Government and Community Relations Officer

Chicago Transit Authority

567 W. Lake Street

Chicago, IL 60661

Fax: 312-681-2796

E-mail: RedExtension@transitchicago.com

Appendix K
Public Scoping Meeting Transcripts

CHICAGO TRANSIT AUTHORITY

PUBLIC HEARING

"RED LINE EXTENSION

CONNECTING 95TH STREET STATION TO 130TH STREET"

September 22, 2009

STENOGRAPHIC REPORT OF PROCEEDINGS had in the above-entitled matter held at the Historic Pullman Visitor Center, 11141 South Cottage Grove Avenue, Chicago, Illinois, commencing at 6:44 o'clock p.m.

PRESENTERS:

MR. DARUD AKBAR, Government & Community Relations Officer, Chicago Transit Authority

MR. JEFFREY BUSBY, General Manager, Strategic Planning, Chicago Transit Authority

MS. SARAH LAYTON WALLACE, Moderator

Reported by: Anna M. Morales, CSR, RMR
License No.: 084-002854

(Whereupon, the following proceedings commenced at

6:44 o'clock p.m.)

MR. AKBAR: Good evening, everyone. If we could have folks begin to take their seats, we would like to go ahead and get the presentation started.

Good evening. Once again, my name is Darud Akbar. I'm the Government & Community Relations Officer with the Chicago Transit Authority. I would like to welcome everyone to the CTA's public scoping meeting for the Red Line Extension Project. Before we begin the presentation, I would like to acknowledge Lorie Lipson. She is representing Alderman Austin's office. If you could just raise your hand, Lorie. Thank you.

I'm going to turn things over to Sarah. Sarah is going to give us a talk about the meeting agenda tonight, and then we're going to go ahead and begin the presentation shortly.

MS. WALLACE: Thank you. Before we get started, I just want to check, is there anyone that will be in need of Spanish translation this

evening? We do have that service available.

Tonight, as you see our agenda, we are just completed with the open house portion of the agenda, and now we're going to move into the presentation that's going to be about a ten-minute presentation, and Jeff Busby from CTA is going to

make that presentation to you, after which we'll move to our public comment period. And just before the public comment period, I'm going to go through some guidelines with you so that you have an understanding of how that process works and your time limitations and so forth that you have.

At the conclusion of the public comment period -- and I will just say that if it's not 8 o'clock yet and we've gotten all the comments initially, we are going to remain here to take public comment until 8 o'clock as we gave you notice, and then we'll just go over some next steps before we adjourn the meeting.

So with that, let's turn it over to Jeff for a presentation.

MR. BUSBY: Hi. Thanks, Sarah. Thanks all for coming out.

I'm Jeff Busby. I work in the Planning

4

Department at CTA. I see quite a few familiar faces from our previous work.

Just a little bit of background on the Red Line Extension Project. The idea to extend the Red Line has really been around since the 1970s; but we, at CTA, got very busy with the first and foremost stage of a federal process to begin to apply for money back in 2006 when we started an Alternatives Analysis study.

The purpose of that study was to look at a

11 whole range of transportation options to improve
12 the service in the study area to the far south side
13 and the south suburbs. We looked at different
14 transit technologies or modes, different corridors,
15 different profiles where the transit would be in
16 relationship to the street level.
17 We had three rounds of public outreach.
18 Very strong attendance at all of those. We had
19 some really nice media coverage.
20 Recently, in August, we concluded that
21 study when the Board of the CTA adopted the Union
22 Pacific Railroad Alternative as the Locally
23 Preferred Alternative. That will be one of the
24 alternatives we'll look at in the environmental

5

1 studies. I will talk a little bit about that in
2 more detail. But this environmental study which
3 we're starting right now really is a culmination --
4 it starts from the work we did in the Alternatives
5 Analysis and advances that into significantly more
6 detail.
7 Why are we doing this? Well, we would
8 like to use federal funds, at least a portion of
9 the federal funds, to help pay for an extension to
10 the Red Line. To spend large amounts of federal
11 money on really anything, you need to comply with
12 the National Environmental Policy Act which
13 requires that you identify potential impacts both
14 positive and negative to the environment from the

construction and operation of a rapid transit facility. So we're starting that process tonight.

The purpose of preparing this document is both to inform members of the public about the likely impacts, but to also help decision-makers who will pay for and be responsible for operating the line about the impacts and how we might mitigate those impacts that are adverse to the community.

Here's a schedule for you, just to give

you a sense of where the project is and where we would like to go. This is a target. It's not something that unfortunately I can guarantee for you. But we're going to start this evening receiving your comments on what you would like us to study in the environmental review. We're going to study that over the next year and share a draft of the Environmental Impact Study at the end of 2010 or perhaps early 2011.

At that stage, we need to ask the federal government for additional money and for permission to begin final design. That's the preparation of really the construction drawings. We hope for that period to last between 2011 and 2013. At that point, we need to have identified all the funds for the start of construction. If those funds were available and, again, if we got federal permission, we would like to start construction in 2013 to open

in 2016.

I think this is a realistic schedule. It is ambitious. Certainly your support is helpful in making that realized. I mentioned that we'll be studying the Locally Preferred Alternative which came out of the Alternative Analysis Study; but

there are also three alternatives that will be studied as part of the Environmental Impact Study.

The first is a No-Build Alternative. That becomes a point of comparison, so what would be the environmental impacts of not doing anything.

The second is a Transportation System Management Alternative. It's a long word, but what it really means is a lower cost alternative to building the Red Line; and, in this case, it would be express buses and some improvements at 95th Street so that those express buses could have a place to drop people off.

The Locally Preferred Alternative, there are maps in the back and we'll be talking about that in more detail. That's an extension of the Red Line from 95th Street following the Union Pacific Railway with stations at 103rd, 111th, 115th and Michigan, and a final station at 130th. It's an elevated extension, so it's above the street level but adjacent to those Union Pacific freight tracks.

And, finally, another alternative in the

Alternatives Analysis that performed very well that we thought we would include in the environmental

8

study as a point of comparison was an elevated extension along Halsted Street. It would be elevated above the median of that street. Similar, four stations at 103rd, 111th, 119th, and 127th and Vermont.

This is a map of the Locally Preferred Alternative. As I mentioned, it leaves 95th Street, travels in the median of I-57, and then is an elevated line above the street level traveling next to the Union Pacific Railroad. It ends at 130th and the Bishop Ford, very close to Altgeld Gardens.

And, similarly, the Halsted alternative which leaves 95th Street, again using the median of I-57, travels south elevated above Halsted, ending at 127th.

So we're very interested in your comments tonight. Sarah is going to help us with rules on how that's all going to work and I will turn it over to her.

MS. WALLACE: Okay. Thank you very much. So it's time for the public comment process, and I want to go over some of the guidelines.

First of all, so that you know, we would

9

like you to focus your comments on the work that we have ahead, which is the purpose and need for the project; the proposed alternatives; the proposed environmental issues to be examined; and the potential environmental effects and mitigation measures to be considered. So those should be the focus of your comments tonight.

The guidelines. If you would like to speak and if you haven't done so already, you will need to fill out one of these speaker cards. Christy will be happy to collect those and bring them to me. I will plan to call speakers up in the order that I have received them. And I will call a couple at a time so that you can go ahead and get lined up and know where you're coming.

When you come to the microphone, I'd ask you first to restate your name so we get that for the record. We have a court reporter here who's going to be documenting your comments. And we would ask you to direct your comments to CTA here at the front table.

You're going to have three minutes to comment. And the good news is you're not going to have to keep track of the three minutes. We got a

stoplight here so everyone can see that. When you begin your comments, the stoplight will be green. When you have got about 30 seconds left, the

stoplight will turn yellow; and then it will begin flashing when you have 15 seconds. So you should be able to gauge your comments and know when you need to be wrapping up. Once that turns red, that means your comment time is up.

We would ask everybody to stick with that comment period. The only exception to that is anyone who needs translation, we're going to allow six minutes because of the time that it takes to go back and forth with the translator. So be aware of that.

Tonight, we're really here to hear what you have to say. This is your chance for input on the process. CTA is here to listen to you. And so they won't be responding to your comments in any way at this time, but your comments are going to be documented in a scoping report.

So that's the process. Hope that's clear to one and all, and we're ready to get started.

Okay. We have -- the first couple are Helen Rockingham, Derrick Brownlee, and Reverend

Isaac Hayes. You want to get situated at the microphone. And, Helen, please go ahead and restate your name first.

MS. ROCKINGHAM: My name is Helen Rockingham. I would like to say good afternoon to everyone. I would also like to give my appreciation to CTA -- express my appreciation to CTA for this effort.

It's been long past due, and there are a lot of residents who are going to appreciate having this kind of facility available to them.

Myself, I'm a rider on CTA's Red Line train and buses at some point in time to work everyday. And what I find at 95th Street is that the parking is nonexistent and we're always getting traffic tickets there. So these lines and the proposed parking spaces that would be available at the different terminals would be a plus for this project to us, to the community, and we appreciate that, if the project becomes finalized.

Another thing is I'm a property owner and that Pacific line comes right past my home. As a matter of fact, I'm the second house from that line, south of that line on Princeton. And the environmental impact, I know for the benefit of the

community, if we have to be relocated, that would not be an issue to some homeowners, but CTA's obligation to us, when will we find that out or if it would be found out in the 2013 year, and how would those -- how would those homeowners be contacted and at what point, would be my question.

Okay, I'm still on green. Great. Yes, it appears that the preferred route would be the Pacific line. I have been bouncing this, brainstorming with a lot of neighbors, and we see Halsted would be the least route for the advantages

for the businesses and traffic going to the expressway. We just know we will see the benefits of it in our neighborhood, and that's the end of my comments. Thank you.

MS. WALLACE: Derrick Brownlee. Derrick Brownlee? Okay. Reverend Isaac Hayes.

REV. HAYES: Reverend Isaac Hayes, candidate for U.S. Congress in the Illinois 2nd Congressional District, and I just want to commend the CTA for taking this step. Certainly I know many residents and citizens on the south side have long wanted this, and people are happy they will have an easier commute to work or to school or wherever they may

go. And so I don't need the full three minutes. I just wanted to commend the CTA, and the residents on the south side are very happy for this step. Thank you.

MS. WALLACE: Robert Franklin and then Charlie Yale.

MR. FRANKLIN: All right. My name is Robbie Franklin. I would like to know if you're going to run the El starting at 99th and Eggelston, are you going to be on that platform on the tracks to the Pacific or are you going from the west side or the east side? And are you going to damage the little park that's in there between 99th and 103rd?

MS. WALLACE: Do you have other comments?

MR. FRANKLIN: No. That's it.

MS. WALLACE: Charlie Yale and then Eugene Taylor. Please restate your name.

MR. YALE: I'm Charlie Yale from Citizens Taking Action. I work with the unions and I got a high seniority.

It's a wonderful thing that CTA is doing right now with that extension. If the economy picks up and the recession gets better in the near future, where are you going to extend the Red Line?

How far out may I ask? How far out? The Red Line, how far out will it go out? How far in distance, north or south? May I ask, please?

MS. WALLACE: Right now we're in the public comment portion, so we're just listening to you, but that's the kind of discussion you can have as you are looking at the board.

MR. YALE: Fine. If this works out for the public and everybody else, it would be a wonderful thing. Let the economy pick up with the recession. Right now, it's pretty bad right now. If this could be done, it would be a wonderful, wonderful thing for everybody and everybody. I want to see what happens. Analyze this.

There's construction going on I heard. This I heard. But this could be done by everybody and be one good thing for the future. I want to see what happens.

MS. WALLACE: Eugene Taylor and Michael Bryant.

Eugene Taylor?

MR. TAYLOR: Yes.

MS. WALLACE: Please restate your name.

MR. TAYLOR: My name is Eugene Taylor, and I'm here to represent Developing Communities Project.

We are a faith-based community organizing agency that has served the Chicago community areas of Greater Roseland since 1986.

In 2003, DCP began organizing a transportation campaign advocating for the expansion of rapid transit on Chicago's far south side. DCP through its CTA Red Line Oversight Committee, or RLOC, comprised of community residents, churches, community leaders, and local grass root organizations initiated a referendum drive in 2004 that resulted in 38,000 votes supporting the extension of the CTA Red Line along the Union Pacific Railroad Corridor.

We have come to recognize the critical importance of mass transit to Chicago and its residents. From the increased exposure to air and noise pollution throughout the region to the increased travel time imposed upon both workers and students, addressing our mass transit service needs was and is paramount to our community's future and its quality of life. This community has paid a high price for this urban transit dilemma.

But today is a good day. This day is long

24 awaited by many and fully expected by some,

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1 expected because the public's desire for economic
2 justice and equity in capital spending
3 decision-making was reasonable. Yet, its
4 anticipation for nearly 40 years has become an
5 urban legend.
6 So, today, we thank the Federal
7 Transportation Administration for requiring this
8 public hearing, and we thank the CTA, the Chicago
9 Transit Authority, for selecting the Union Pacific
10 Rail route as the locally preferred route.
11 We here today want to register our initial
12 public comments as part of the scoping process. On
13 September 18th, 16 members of DCP's Red Line
14 Oversight Committee toured the Union Pacific
15 Railroad route to examine the physical and
16 environmental conditions along the corridor.
17 MS. WALLACE: 30 seconds.
18 MR. TAYLOR: The RLOC participants documented
19 parkways, homes, small businesses, and tracks and
20 so forth.
21 Much like the Federal Transportation
22 Agency, the DCP Red Line Oversight Committee will
23 be listening to the CTA's environmental impact
24 consultant's statement. Our committee will

17

continue our review of the locally preferred route, the environmental and engineering requirements. We'll conduct and assemble additional public comments.

MS. WALLACE: Thank you.

MR. TAYLOR: And thank you.

MS. WALLACE: We look forward to written comments for those of you who have more than you can say during your three minutes. Michael Bryant.

MR. BRYANT: (Through an interpreter). Hi. My name is Michael Bryant, and I have been dreaming of this for like a long time. It's amazing how this idea is very similar to what I dreamed about. And, of course, I prefer the UPR route. You know, I prefer that very much because at 95th Street, there's really a lot of traffic there. Like I went there and I went to the other meeting and I tried to explain, but I just want to know what they're going to do for the future. I mean, we discussed like what the plans might be.

I think it's great if the 95th Street line could be set up, you know, on 130th Street, and if they could add that, that would be perfect. But I know the choice -- the decision hasn't been made.

It's a future decision, but I know it's going to be a speedy process -- I know it's not going to be a speedy process. And there's a lot of things that

are going to have to change, but I think the environment will change rapidly with the changes that are going to be made by the CTA. Thank you.

MS. WALLACE: Okay. Ernest Williams and then Lou Turner. Ernest Williams?

MR. WILLIAMS: Coming. Good evening. My name is Ernest Williams, and I'm here on behalf of the Golden Gate Community Association.

The one question that I had was when the Orange Line was extended southwest to Midway, I'm sure that these same studies were done. I think it would be -- it would benefit us to talk to some of the leaders that helped implement that plan and live through the process to see what the line impacted and what the community concerns were at that time to give us something to compare to if you had those feasibility studies that you probably started back when that happened so that we can put it possibly together. Just a thought.

MS. WALLACE: Okay. Lou Turner and then David May. And please restate your name.

MR. TURNER: Hi. My name is Lou Turner. I'm with the Developing Communities Project. You have already heard from the president of our Red Line Oversight Committee.

I think a number of people here already know that the Developing Communities Project has been mobilizing the community and interest and

opinions in the community around this project since 2003. And we put together a historic referendum in 2004 in which 39,000 voters in the 9th and the 34th Ward voted for this very project. And that's one of the things that the CTA has included as part of the reasons for their selection for the Locally Preferred Alternative.

I have a few things and I will submit it also in a written form, but in the instructions, particularly in the introduction to the folder that you have here, it says that -- the EIS scoping info says that the CTA and the FTA will be preparing the EIS. How will the FTA participate in the preparation of the EIS?

Secondly, what weight will public comment have in the decision-making process of the EIS and the preliminary engineering?

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Thirdly, what governmental agencies will also participate? Because it says public comment and governmental agencies or agencies will participate in the scoping process. Will their comment and analysis be made public? If so, where? I assume the EPA and people like that. What weight will their input, that is, the governmental agencies, carry? And if there's a conflict between the input of the public agencies -- excuse me, the governmental agencies and the public comment, how will these conflicts be resolved?

You mentioned the proposal for topics of evaluation. One, it seems to me, especially for environmental impact that becomes important, is to identify brown fields along the route. I assume that there is some kind of map somewhere or there's some process at hand in terms of identifying -- 30 seconds -- identifying brown fields.

Secondly, if these brown fields are identified, I want to know what the process is for minority procurement opportunities for mitigating those brown fields.

And, lastly, what are the scoping -- what is the scoping analysis going to do in terms of

identifying transit-oriented development opportunities along the route?

MS. WALLACE: Thank you.

MR. TURNER: Thank you.

MS. WALLACE: David May and Harry Brooks.

MR. MAY: I'm David May. I'm here speaking as an individual. I think it's a very valuable project for underserved communities here on the south side, and I think these extension projects are great in terms of leveraging the existing facilities.

The cost estimates I have seen for the LPA seem very high compared to similar projects that have been built in other countries. CTA has a bad record in terms of managing large construction

projects, and I recommend that you look at the Army Corps of Engineers' Early Contractor Involvement Process; P3 processes being used in Alberta and Ontario; FDoT's recent I-95 procurement; and how BART is doing the Oakland Airport Connector.

In looking at this extension, I thought the design criteria that should have been used would be to maximize the number of customers living within a half mile of a station. So you need more

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stations and you need the routes running through residential neighborhoods; avoiding overlapping coverage with METRA; using existing rights-of-way; running on ground as much as possible; and serving Chicago State and Olive-Harvey.

I think a preferable way to design this thing which I think you should consider as one of your alternatives is a one-way loop, a 9 and a half mile long loop, one-way loop, instead of your 5 mile two-way design could give you seven stations, for example, at Ford and Rhodes, 103rd and Dauphin, 111th and Langley, 115th and State, 114th and Halsted, 107th and Racine, and I-57 and Halsted which would serve many more people within walking distance in your design.

It would give you 2 miles on ground in the Bishop Ford right-of-way. It would give you 2 miles on ground on the I-57 right-of-way; 1 mile on ground on the abandoned railroad right-of-way;

and 3 miles on ground in the excess railroad right-of-way, all which are great improvements compared to your mostly elevated, very expensive guideway design. Thank you.

MS. WALLACE: All right. Harry Brooks and

William James. Harry? William, you will be after.

MR. BROOKS: Good evening. One of the things that needs to be done immediately is something to relieve the bus turn-around at 95th and the Dan Ryan, because the number of buses that go in and out of there, they have outgrown that terminal.

When I was coming here this evening, I happened to get there in just one of those rare moments. I'm sure it was like a perfect storm. All the bus lines, CTA and PACE, plus a Greyhound all were in the station at the same time. And that was interesting to watch, but it caused quite a traffic jam.

So I would hope, of course, when this extension is put in that some of those lines that go up to 95th Street now would go to the new stations or that something be done somehow, even though it's kind of landlocked, to expand the terminal because you get all -- you get everybody in there at the same time and it just doesn't work.

The 111 bus that I took to get over here stops behind the Number 106 bus, for example. And the Chicago Police Department decided to park a

24 paddy wagon next to where the Number 106 takes some

24

1 recovery time. So I wasn't late or anything, but
2 we had to sit there until it was time for the 106
3 to leave, and there were a couple of other buses
4 that were trying to get out.
5 Now that particular problem could be dealt
6 with if CTA told the police that they would have to
7 park large vehicles elsewhere. But something still
8 needs to be done now and in the future for that
9 95th terminal because, as I said before, and I'm
10 repeating, I know, if everybody is in there at the
11 same time, it's not working. Fun to watch, but I'm
12 sure it's not fun for the drivers.
13 MS. WALLACE: Okay. William James.
14 MR. JAMES: Okay. My name is William James.
15 I've lived in Roseland all my life.
16 MS. WALLACE: Could you please speak into the
17 microphone?
18 MR. JAMES: Yeah. I came here as a teenager.
19 I'm very familiar with Roseland, all parts of it.
20 I have lived all over the community.
21 I have also lived near train tracks.
22 Where I'm at presently, I'm near that Union
23 Pacific. My concern is noise, vibration, property
24 damage. What happens is these trains roll past.

25

Right now, there's a group in our community trying to stop the whistle blowing of the train there. Okay. They're not very successful. They have been campaigning for years. It's not stopping. The train is still blowing the whistle. The noise goes on. I lived there 20 years. I'm now oblivious to it. Other people are not.

With a CTA train running down your mysteriously preferred location -- I don't know who prefers this -- I'm going to have constant noise. I'm telling you now, I don't want you. Go away. Go down Halsted.

I have another issue there. With these train tracks and these stations, I'm going to get dirt. I'm going to get crowds there that I don't want in my backyard. I live very close to 103rd. I don't want you in my backyard. I don't want you crawling through my yard going to the train station. It's an issue for me. Okay?

Another thing that disturbs me is that through these vibrations, they damage the foundations to your homes. Many people who live close to this train have cracked foundations. CTA is going to come, they're going to build their

little train, you're going to go ahead about your business, I'm going to be stuck with damage, more home damage. Okay? I don't want it. These are just issues that concern me.

You're only going to build on one side of the track. Many people are thinking that they're going to get money through eminent domain. You're going to come in and pay them and they're going to move off happy. But there's two sides of that track. When you build that train, elevate it, it's going to be running through some of your bedrooms. That train is up over your head. Only one side is going to get paid. The other people are going to get stuck. And I think we need to keep this in mind. This is not about money. This is about where we live and about our comfort. Thank you.

MS. WALLACE: Are there other folks who would like to comment this evening? Okay. We're going to be available until 8 o'clock to take comment if additional people come in or you decide you want to comment.

For those of you who don't, let me go over a couple of things. If you want to leave, you can leave. If you want to spend some more time at the

board, you are welcome to do that.

So, again, tonight the verbal comments were reported by our court reporter. There's other ways that you can submit your comments. So you can write comments and place it in the box over here. You're welcome also to mail your comments to the contact and contact information listed here. You can e-mail or you can fax your comments.

We also encourage you to keep updated on what's going on with the project, and a couple ways to do that, one is to regularly go to the Web site that you see here on the screen or you can join the e-mail mailing list by writing to Darud.

So thank you so much for your input this evening. We appreciate it. And, again, we'll be available for comment until 8.

(Whereupon, there were no further speakers.)

(Public Hearing adjourned at 8 o'clock p.m.)

STATE OF ILLINOIS)
) SS:
COUNTY OF C O O K)

ANNA M. MORALES, being first duly sworn, On oath says that she is a court reporter doing business in the City of Chicago; and that she reported in shorthand the proceedings of said Public Hearing, and that the foregoing is a true and correct transcript of her shorthand notes so taken as aforesaid, and contains the proceedings given at said Public Hearing.

_____

Certified Shorthand Reporter

CHICAGO TRANSIT AUTHORITY

PUBLIC HEARING

"RED LINE EXTENSION

CONNECTING 95TH STREET STATION TO 130TH STREET"

September 24, 2009

STENOGRAPHIC REPORT OF PROCEEDINGS had in the above-entitled matter held at the Woodson Regional Chicago Public Library, 9525 South Halsted Street, Chicago, Illinois, commencing at 6:48 o'clock p.m.

PRESENTERS:

MR. DARUD AKBAR, Government & Community Relations Officer, Chicago Transit Authority

MR. JEFFREY BUSBY, General Manager, Strategic Planning, Chicago Transit Authority

MS. SARAH LAYTON WALLACE, Moderator

Reported by: Anna M. Morales, CSR, RMR
License No.: 084-002854

(Whereupon, the following proceedings commenced at 6:48 o'clock p.m.)

MR. AKBAR: Good evening, everyone. My name is Darud Akbar. I'm with the Government & Community Relations Department at the Chicago Transit Authority. I want to welcome and thank everyone for coming to the Red Line -- this is actually our second public scoping meeting. So I want to thank you for coming out this evening.

I'm going to turn things over to Sarah. Sarah is going to talk to us about tonight's agenda, and then we're going to go into a brief presentation and come back to Sarah to explain what our rules and regulations are for this evening. So thank you once again.

MS. WALLACE: Great. Good evening. Before we get started, I want to check, is there anybody in need of Spanish translation? Okay. So we have that service if anyone is in need of that.

As you see from our agenda this evening, we've just completed the open house portion of the meeting. In just a moment, I'm going to turn it over to Jeff Busby, and Jeff is going to give a

brief presentation on the project, and then we're going to go into the formal public comment period of the meeting. And right before we do that, I will walk through some guidelines. We are going to be limiting comments to three minutes. So be thinking about that now as you are composing your thoughts, those of you that are speakers. I will

go over some other things to get us on track. After the public comment period, then we'll go over some next steps and adjourn the meeting.

And I do want to note that if we conclude before 8 o'clock, you will be, you know, free to leave if you want at that time, but we are going to stay here and available for anyone who arrives and still wants to comment. So we'll remain here until 8 o'clock for sure.

So with that, Jeff will provide a presentation.

MR. BUSBY: Hi. Thanks for coming out again. I'm Jeff Busby. I work in the Planning Department at CTA.

I wanted to give you a background on where we are on the Red Line Extension. Really, the idea for bringing the Red Line further south has been

around for a very long time. In the 1960s, when they were building the freeways, they left space for a Red Line Extension; and, recently -- and this is not a new problem -- but recently the CTA has started a study called an Alternatives Analysis, and that study is intended to look at a whole range of transit options to try to improve some of the transportation problems south of 95th Street.

Many of you are aware, if you take CTA, that the 95th Street station is very crowded. There's lots of buses going there and there's lots

of delays associated with getting there. So people have very long trips sometimes to get to the existing station.

So what we could accomplish with an extension of the Red Line is shorter and faster trips for people to get to CTA services as well as solving some of those congestion problems at the 95th Street station.

As I mentioned, we started this study in 2006. We looked at a whole range of options and identified a couple of options which we're going to talk about tonight which we're advancing into this next step. Part of the Alternatives Analysis

included public involvement. So we've been to Woodson Regional a couple times and actually had a series of other meetings -- three rounds of meetings with six total meetings prior to this leading up to tonight's recommendation.

The local -- I'm sorry. The Alternatives Analysis ended in August when the Chicago Transit Board adopted what's called a Locally Preferred Alternative. It's the one option that, resulting from the study, looks to be best at solving the problems we've identified, and that is an extension of the Red Line, following or running next to the Union Pacific Railroad at about 400 west. I will show you a map in a moment.

So tonight's meeting starts the

Environmental Impact Statement which very much relies on the previous work we completed in the Alternatives Analysis.

So what's an Environmental Impact Statement? The CTA is hoping to use -- to ask for federal money to pay for a portion of the extension; and any time you use federal money for a large project, you have to comply with the National Environmental Policy Act. And the National

Environmental Policy Act, or NEPA, requires that the CTA in a public setting identify and evaluate the potential impacts of both building an extension and operating an extension for the Red Line.

And the idea here is to help us make decisions about the environmental impacts and where -- and they're both positive and negative environmental impacts -- but where we identify negative environmental impacts, come up with potential ways to mitigate those, make them less adverse.

This is a schedule which gives you an idea of where we're headed. As I mentioned, we're starting the environmental process tonight with these scoping meetings. We had a meeting, very same presentation, a couple of days ago on the same subject. We're receiving input on what we should study in this environmental process.

We'll come back to you next year with the

results of the environmental process in what's called a draft EIS, a draft Environmental Impact Study, and that's your opportunity to review both the impacts we've identified and what we proposed to mitigate them.

At the same time, we're going to be asking the federal government for additional funds and permission to start more detailed engineering. That's called preliminary engineering on this map. We think that process would take about two years. And so by 2013, we would need to have identified all of the money, both the federal and the nonfederal share, to fund the extension, and we would need federal permission to begin the final design.

2013 would be the year in which we would start construction. We show a three-year construction period; and the Red Line Extension opening for operation in 2016.

It's important to point out that this is our targeted schedule. It's not something we can guarantee. There's a couple of reasons for that. As I mentioned, we rely on additional funding from Washington, D.C., to continue these studies, and we also rely on permission from the Federal Transit Administration. But we think this is an achievable target and we're going to pursue it.

We're going to study alternatives, project

24 alternatives in the Environmental Impact Study.

7

1 This is a list of them. The first alternative is a
2 No-Build Alternative. It's really important as a
3 point of comparison. What this alternative is is
4 what would be the impact to the environment of not
5 doing anything?
6 We're also going to study what's called a
7 Transportation System Management Alternative.
8 That's a very long name, but what it means is a
9 lower cost alternative to building a rail
10 extension. In this case, it would be an express
11 bus service with limited stops; some technology to
12 help speed the buses down the road through giving
13 them priority to traffic signals; and a pretty
14 significant expansion of the station at 95th Street
15 to make the buses in that corridor work better as
16 well as accommodate new buses in this alternative.
17 We also will be studying what's called the
18 Locally Preferred Alternative, an extension of the
19 Red Line following the Union Pacific rail
20 right-of-way, an elevated extension, I should point
21 out.
22 And we have identified a fourth
23 alternative which is also an extension of the
24 Red Line but follows Halsted Street.

8

Let me show you a map of the Locally Preferred Alternative. So starting with the map on the left, the Red Line would run south from 95th Street in the middle of the I-57 highway, and then it would climb up out of the highway and run elevated at about 400 West Eggelston Avenue and would travel next to the Union Pacific rail right-of-way all the way south to 130th. It would make four stops. The stops are at 103rd, 111th, 115th and Michigan, and 130th and the Bishop Ford Expressway close to Altgeld Gardens.

We're also showing two options here, the reason there's two dotted lines. We have a choice of being on the east or the west side of the freight rail tracks.

The Halsted alternative is a similar link. It runs about a half mile to the west. So, again, the train would use the median of the expressway, I-57, traveling south. When it gets to Halsted Street, it would go into the air and run down the middle of Halsted Street, above the street. It would make four stops again at 103rd, 111th, and 119th, and at Vermont which is about 127th.

This is an elevated structure. The

columns to support the elevated structure would be made of concrete most likely and be placed in the median of Halsted Street.

So those are our four alternatives. We are interested in your comments tonight. I'm going to turn things over to Sarah to give you some instructions on how we're going to receive those.

MS. WALLACE: Okay. It's time for the comment portion of our meeting; and, as promised, I want to go over a few things with you.

Because we're working on this environmental study, there are sections that we need to write and we need your input in order to do that. So we would ask you to focus your comments tonight on these areas: The purpose and need for the project; the proposed alternatives; the proposed environmental issues to be examined; and the potential environmental effects and the mitigation measures to be considered. So those are the areas we specifically need your input.

Some guidelines. If you haven't done so already, please submit a speaker card, and we can collect those and they will be brought up front. I'm going to call speakers by name. I will

probably call several at a time so that you can get lined up and prepared to speak. Here's the mic you will use, the standing mic on that side.

The first thing you will want to do is restate your name. I may not get the pronunciation right, and we want to make sure that we have that right for the record. We've got a court reporter

here that is going to be documenting your comments.

You'll have three minutes to comment. The good news is you're not going to have to try to keep track of where you are in that three minutes. We have this stoplight here that is going to assist you in that process. So once you start, we'll turn that on and the green light will turn on, and that lets you know that your three minutes are starting. Once you have 30 seconds left, the light will go yellow. And once you have 15 seconds left, the light will be flashing yellow. So that kind of helps you gauge wrapping up your comment. And once it turns red, that means your comment period is up.

So we would like everyone to keep to the three minutes so that we can keep things moving and we're hearing from everyone who wants to speak tonight.

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Because we're here tonight to hear from you -- that's the whole purpose of the meeting is to hear your comments -- CTA is not going to be responding to your comments tonight. We're going to be listening. We're going to be documenting and all your comments will be documented in the report.

So we would ask you to -- there are two folks from the CTA here. We would ask you to direct your comments to them, but do, again, keep an eye on the light.

So our first speakers up: Thomas Brown,

Senior, followed by Rob Kelsey, and I believe this is McClellan. So are those folks here?

Yes. And I do want to remind everybody, if you haven't done so already, turn off cell phones or pagers or at least change the setting to vibrate so that we don't cut into people's time that are speaking.

Could Thomas Brown, Senior, please approach the microphone? Go ahead.

MR. BROWN: Again, my name is Thomas Brown, Senior. I live directly in the area where the proposed train will be built and constructed. My comments center around myself as well as my

neighbors. I'm right on 325 West 99th Place, directly in front of Wendell Smith Park, and most of my neighbors are senior citizens.

So in the environmental study, I would like for you all to take into consideration the fact that a lot of the homeowners are senior citizens and the fact that we would want -- we don't want to be -- they don't want to be disrupted unduly, and just to take those factors into consideration in the environmental study, as well as Wendell Smith Park is a park that is utilized, and also to look at, in addition to what you're already studying, the noise impact and the safety impact of that park.

Another comment I would like to make is

the fact that the proposed plan going down Eggelston Avenue, it's very residential, and there's definitely some concern about having a commuter line directly through the residential corridor that's there. Those are my comments. Thank you.

MS. WALLACE: Thank you. Rob Kelsey, and then McClellan, and then Dorothy Boyd.

MR. KELSEY: Good evening, everyone. My name

is Robert Kelsey. I'm a Chicago Public School counselor. I work in the West Pullman area, Gompers Fine Arts Option School.

As a counselor, I fill out numerous applications, help students fill out applications for high school. And being an educator, I also recognize that a number of students don't get downtown unless it's a field trip a lot of times. So this new Red Line or -- I'm not sure exactly what this -- Red Line Extension will be helpful in a lot of aspects.

I heard the speaker before me. He had a lot of excellent concerns there, but I think there's also some advantages for some of our younger people. So that's my comment. Thank you.

MS. WALLACE: Okay. McClellan? Could you state your name and speak directly into the mic?

MS. McCLELLAN: Gina McClellan. I have three concerns. The lighting around the tracks that are

going to be made, and I was hoping that we could be able to see some kind of visual, what this was going to look like, but for security reasons, will it become dark like the El stations down by Lake Street? That was a question.

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The construction time, how long is this going to take, 2016? And then once you start, what does it do to me? Is it going to be three, four years where I'm going to be inconvenienced where I can't even get into my home since I'm right off of Halsted Street.

I'm concerned about the noise level that I will have to live with the trains going constantly. I'm concerned that the parking lot that you're going to put there, when it's filled, that I can't park on my block because I'm one block off of Halsted. So are those things being taken into consideration, too?

MS. WALLACE: Okay. Dorothy Boyd, Lou Turner, and Ben Christy.

MS. BOYD: My name is Dorothy Boyd. My concern is the families on Eggelston Street; I need to know if they're going to be relocated. We don't want to be relocated.

I want to know how the property value, how will that affect us? And I want to know about the incoming traffic that this is going to cause.

There are a lot of seniors in our area,

and we do not want to move. We already have that

train that goes down Eggelston. It keeps up a lot of noise. We need another batch of noise like we need two heads. I'm not seeing this.

MS. WALLACE: Lou Turner, Ben Christy, and John Paul Jones.

MR. TURNER: Hello. My name is Lou Turner. I'm the Public Policy Director for Developing Communities Project which is a project for the last six years.

My concern is really just singular tonight -- I spoke on Tuesday -- and that's the impact, the positive impact, the collateral benefits that this project could have for the residents in Altgeld Gardens, 130th Street, which is where the Red Line Extension would end.

Back in 2005, we did a study which showed that of all the households in this area, one out of four of these households don't have or don't own an automobile. That's the same as the 9th Ward in New Orleans; and were the same kind of catastrophe to hit, we would have the same kind of crisis of this community that we saw in New Orleans at the time of Katrina.

I think that given the history of

transportation planning, in big cities like Chicago, where very often minority communities have been more the victim than the beneficiary of transportation planning, this is an opportunity and, particularly out of Altgeld Gardens, to really provide access to one of the most isolated communities in the city. This is an opportunity to use transportation planning to provide benefit rather than victimization of a minority community.

So I would ask that the Environmental Impact Statement look at the environmental impacts that would be for the residents at Altgeld Gardens; and the fact that Altgeld Gardens is an area that has high toxicity; a lot of waste sites surround the area. It is one of the highest levels of cancers in the city amongst any group of people.

And so with the construction of this Red Line Extension, it seems to me that one of the key environmental impact factors or areas of analysis should be the impact that the construction of the Red Line Extension would have on mitigating the toxic degradation out at Altgeld Gardens and the opportunities that would provide for a very isolated community.

So, again, I urge that CTA really focus singularly on Altgeld Gardens and really push the LPA, the Locally Preferred Alternative, which is the one that would go to 130th Street. None of the

impacts that are mentioned here, a number that others can think of were mentioned, would really be mitigated by the other alternatives. Only the alternatives, the LPA going down to 130th Street near Altgeld Gardens would really impact favorably these communities in these areas. Thank you.

MS. WALLACE: Ben Christy, then John Paul Jones, then Donald Miller.

MR. CHRISTY: Yes. I'm Ben Christy. I don't live in the area. Instead, I use the Red Line to get to the area. In fact, I didn't go to the other impact study because I couldn't -- you know, I'm sure there's a bus that gets by there; but 95th, 95th station, what bus to use and everything, I just didn't do it. So that's why I'm here today instead of Tuesday.

I actually do live right next to the Red Line by Berwyn. Come on by and say hi. The noise of the train, hey, it's a train. When I grew up, I lived a block away from the train. Now I

live just across the alley from a train. Yes, it's a noise. You get used to it. So don't worry too much about that.

The thing I'm worried about is the TV reception every time a train goes by. With this new better TV? No way. Anyway, that has no effect with this group.

What I see on the alternatives here is

that there are people in the Halsted area that don't want their train down Halsted; but, if I wanted to get to Halsted there, I would use the train to get to your businesses.

The plan -- the LPA, which is not the Halsted, does have the positive that it could help bring people in from out of state if we have enough parking, park-and-ride spaces. So I would expect you to decide how many park-and-rides you want and then triple it.

Other than that, we need more trains. For years, we've needed more trains. Some people will be discomforted by the building of them, but don't let that keep us from plowing ahead. They have said for years that they expected to extend this, but they haven't.

MS. WALLACE: 30 seconds.

MR. CHRISTY: So please give us -- give us our ride, extend it as much as possible. Thank you.

MS. WALLACE: John Paul Jones, and Donald Miller, and Thomas Jundanian.

MR. JONES: I'm John Paul Jones. I'm an organizer for the far south region, also a resident in the Englewood District. For 50 years, I've been involved in organizing and urban planning, and I have seen a significant value in the Union Pacific Railroad corridor. And if you look at the far south region, they have always had a challenge of

public and private -- the investment. That Union Pacific corridor provides a venue where you can begin to introduce to the community, a very urban community, a whole new set of ideas and investment around transit and developing that and turn that corridor, provide venues so that the end of the station can add value to the property, at the same time, give greater access to the greater part of Chicago.

Also, from Englewood, we've always had challenges with getting transportation to jobs; and with the Union Pacific Railroad corridor, again,

you can begin to hire a lot more people, connect with the south suburban communities that are going to have job growth, much more than you get in Chicago during the economic downturn.

But, also, the environmental impact piece that we're concerned about and want to speak to tonight, that corridor, much like rail corridors throughout my community of Englewood, areas where there's always a decline of public investment and through the years you had accumulation of blight, if you look at that corridor, you look at a corridor that is over ran with many forestries now. There's open space that's been denied any real attention for many, many decades.

So it's an opportunity for you, the city and the community, to kind of think through how do

we use these corridors more wisely and strategically to improve our community, encourage reinvestment, and increase the travel time for us to get to work or recreation and other venues.

So it's a real plus for the region more than a negative. I would want to encourage that more -- supporting what the person said from 95th Street corridor. Certainly, we want to be

careful and considerate of the residential impacts. We want to be very careful of the impact to the brown field districts, but also opportune as possible relative to the eroding issues. We certainly want to be helping the community anticipate and remediate any particular eroding problems that may occur in some of these wooded areas that have been neglected for 30 or 40 years.

So we want to use that opportunity to work more closely with any governmental plan to figure out ways to impact the environmental impact on the roads maybe through this reconstruction strategy. Thank you.

MS. WALLACE: Donald Miller, Thomas Jundanian, and Lori Baldwin.

MR. MILLER: Thank you. My name is Donald Miller. I heard a lot of complaints -- concerns, rather, about the environment and the noise and how the train would sound coming through the communities. But this is dealing with rail. I

21 think we should take a model from some of the rails
22 that run on the north side. You know, you are
23 going to have these type of problems.
24 What we are trying to do is get a system

1 that would fit our community, that would be
2 accessible for us to get in and out of our
3 community efficiently and safely. And I would
4 think the transit people should look at the highest
5 concentration of the population, where could -- the
6 highest volume of population and let the train be
7 used in that corridor, in that area where the
8 population would be affected the most.
9 And I think it's an excellent idea because
10 the south side of Chicago needs a little bit more
11 of a public system in our community, and I'm for
12 it, and I hope that it happens very soon. Thank
13 you.
14 MS. WALLACE: Thomas Jundanian, Lori Baldwin,
15 and then Bradena Thomas.
16 MR. JUNDANIAN: Good evening. My name is
17 Thomas Keith Jundanian. I'm the third generation
18 owner/operator of an 85-year-old Roseland-based
19 business. I'm a Roseland boy, born and raised.
20 I have a different perspective on this
21 than maybe some, having grown up in this community
22 and having our family business based here all the
23 time, all those years. I'm not 85, but -- don't
24 rush me.

On the heels of Donald's comments, I too kind of feel like the south side of the city has been a very neglected location in our beautiful metropolis, and it would be -- I think either one of these plans are going to be a positive thing for us. I'm not qualified to say which one is going to be better than the other.

Initially, I was surprised to find out that the LPA was the preferred alternative with more public support because it seems that it's going to disrupt some lives, some memories, some households if it occurs on the east side of the tracks. If it's on the west side of the tracks, I know from my own childhood and playing in some of those empty lots, there's more industry over there.

My business is located on Halsted Street at 116th Street. It's the K. A. Pridjian rug store, that big old rug store there on Halsted Street. So one of the concerns that I would have as a business owner having seen long construction projects mean the demise of some businesses that have been interrupted with their traffic flow.

What have previous construction projects like this and studies that have gone on indicated

with those businesses? How are they impacted? I have got nothing to base this on. When this trestle goes up on Halsted Street, what is it going to look like? It's probably going to be concrete. Jack and I were talking outside. Would it be something that's attractive? Will the elevated tracks all the way down Halsted Street create a lot of dark shadows, a lot of shadowing areas where people can congregate and do things that are not in the best interest of the community? Will the trestle be placed where garbage and other debris and litter accumulate? Will it be a blight to Halsted Street?

As far as bringing people down Halsted Street, yeah, it will. The stations are going to be -- you know, 111th and 119th are a mile apart. So that's still quite a ways to try to get to one of the businesses. I was chatting with a lady who also has a building at 108th and Halsted. That kind of encapsulates some of my concerns. I think either one of these things are a positive thing for the south side, whichever is best for our city and our community. Thank you.

MS. WALLACE: Lori Baldwin, and then

Bradena Thomas, and JoAnne Guillemette.

MS. BALDWIN: I am Lori Baldwin, and I'm representing the West Chatham community and the Park Advisory Council of that area, but I'm also

part of the Red Line Oversight Committee.

I would just like to interject that I'm thanking the FTA for requiring this public hearing as well as CTA for selecting the Union Pacific Railroad as the locally preferred route, particularly, because this route will give the greatest need and take care of a lot of the needs of disparity that we have had in that community for a very, very long time on the south side of Chicago, to give us more transportation options; as well as we have had the opportunity on September 18th, some of the members of DCP Red Line Oversight Committee toured the entire Union Pacific Railroad, and we examined the physical and environmental conditions and the impact along the corridor, and we found that there are documented parkways, homes, small businesses, and tracks of forestry along that route.

However, most of that route, as has been stated before, is open space, and so this would be

a great asset to the community. Also, because of the need for us to have transportation in this area, and it's been such a long, long time, this is the area that I think the city should be focusing on much more than some of the other options.

We also looked at the environmental impact, and this provided greater access to a number of residents. And also this route had less

environmental impacts in terms of conditions and areas and the taking of homes.

So I, again, just want to encourage you and let you know that the community will benefit from this new development. Thank you.

MS. WALLACE: Bradena Thomas and then JoAnne Guillemette.

MS. THOMAS: My name is Bradena Thomas. I am concerned as a senior living in the area. In fact, I'm right at 97th and LaSalle which is where 94 and 57 split.

My concern is whether or not there would be an elevated track right behind me or whether it's going to be recessed?

Also I have a business, a building on Halsted at 108th. Now is this going to be an

elevated structure which would darken, you know, the area? So that is my concern for both. But I definitely wouldn't want an elevated area looking out of my backyard. That's my concern.

They do need transportation to the south because 95th is extremely congested, and I realize that; but, hopefully, I wouldn't want to have to move. Thank you.

MS. WALLACE: JoAnne Guillemette.

MS. GUILLEMETTE: Good evening. My concerns have been previously stated by several others, but to say it as succinctly as possible, my concern

would be for the increased foot and vehicle traffic; the increased debris; as well as the increased crimes that would follow a structure like this.

I have lived near the Red Line and I know that it also -- because of the activity and vibration of the ground, it increases the presence of termites and other rodents. And when you're dealing with termites, you're talking about the destruction of homes; and, to prevent it, homeowners would incur tremendous expense on a yearly basis to ward off the termites. So that's

an extreme concern for me. And I would hold that for other homeowners as well.

Further, who would bear the maintenance expense of this extension? Because the homeowners nearest the tracks, are their property taxes going to increase? Is their property value going to go down? And what mechanisms are being put in place to address these issues? Because it's my feeling that you're going to go ahead with this in spite of what we say. And especially if we should be successful with our bid for the Olympics, this is going to be a major development. It's going to be pressed forward, and the residents need to know the true impact on them in terms of dollars and cents. Thank you.

MS. WALLACE: Could you please restate your

name for the record?

MS. GUILLEMETTE: JoAnne Guillemette.

MS. WALLACE: Thank you. Are there any other speaker cards? Gwendolyn Rice and then Barry Finkel.

MS. RICE: My name is Gwendolyn Rice, and I work for Developing Communities Project which has been working with this issue for six years.

MS. WALLACE: Could you get little closer to the mic, please? Thank you.

MS. RICE: But I think I'm coming from a more personal point of view, because all the other issues have been talked about.

For the last I won't say how many years of my working life, I have worked in one way or another with residents of Altgeld Gardens as a counselor or as a recreation worker or just simply knowing children who live there or adults who live there. And I remember and I just -- my mind was refreshed on the way in when one of the workers outside mentioned that she had lived in Altgeld Gardens and she remembered having to take the PACE bus into Chicago and then taking a CTA bus and then finally getting to the Red Line.

But I remember also having to take kids home at night because the transportation was not available for the kids to take advantage of the amenities in Chicago. I remember many times having

to do that, even in the afternoon having to do that, which I didn't mind doing because I could do it. But their parents may not have always been able to do that, provide the access.

This project is going to provide access to what is a transit disadvantaged community. We are kind of in competition with other lines throughout Chicago that are going beyond the city limits. On the south side, there's nothing that goes to the city limits. And I really say that we must take that Locally Preferred Alternative through to 130th Street. I don't think there's an alternative. That's the only option.

I don't know what else to say, but I just am passionate about the fact that you're going to Altgeld Gardens, an isolated community that is not outside of Chicago. It is in the Riverdale community area of Chicago -- not in Riverdale, Illinois -- and it's important that the CTA go at least to the city limits to serve its constituents. It will also serve people who live in the suburbs who commute to Chicago who will have a chance to park and ride and ride downtown and eliminate a lot of pollution.

Again, I just want to speak on behalf of the residents of Altgeld. I don't live there, but I have been there many times. I have worked there, and it can make a big difference in providing an

opportunity for people to have access, to be able to be exposed to the larger community. As the teacher said earlier, people generally who live in transit deserts do not get out and understand what's going, and it would cut down on violence and cut down on a lot of other factors. Thank you.

MS. WALLACE: Thank you. Barry Finkel. If there is anybody else who wishes to speak, send your speaker card in.

MR. FINKEL: My name is Barry Finkel. I have been a resident of the Beverly area, 103rd and Western, since 1951, and I take the Red Line downtown at least once a week. I see at 95th Street station lots of PACE buses coming in from the south suburbs, and I think an extension of the Red Line would help in getting those buses -- to get the train and not have to come all the way to 95th Street to service those people.

We're talking here about public transportation, and I see in all the alternatives, there's talk of park-and-ride. It seems to me, and I have sort of a disagreement with some of the speakers, but it seems to me that if we have good feeder bus lines into the stations, there's no need

to have a large park-and-ride facility at each

station. Maybe at the farthest station. But I don't see really a need, for example, a big park-and-ride station at 103rd and Halsted. There's no room there for a park-and-ride, and I don't see any need for it. Thank you.

MS. WALLACE: Alice Harper-Jones.

REV. HARPER-JONES: Good afternoon. I am Reverend Alice Harper Jones. I'm the Dean of Cluster 6 of Chicago Metropolitan Association of the United Church of Christ and represent about 13 churches on the south side. And I'm also a member of the Chicago State University Alumni Board, and so I'm speaking, commenting on two things.

The first one is our churches. There are people who live on the far south side who will have better access to the church, being able to get there and to get back home again, especially those who do not have cars or sometimes you wake up and the car is not working. So I think that would be positive for those people.

Also, from Chicago State University. I'm thinking in terms of our academic program that we

have there, it would be better accessible to many, many people; and those young people that we're trying to attract to the university would certainly be able to have access to and from the university. Especially if a person is working, they can come in

the evening to attend the university and be able to go back home again without having to, you know, wait for buses and everything on 95th Street because Chicago State is very accessible to 95th Street right there.

My concern is that -- one of the proposals I looked at, the Halsted Street would still -- there's still a gap it seems like from Halsted Street all the way to the Altgeld Garden projects there. So in constructing, you know, that Halsted Street project -- and I'm kind of leaning toward Halsted because you're not destroying homes. But if you can, you know, think in terms of your construction of getting that closer to the people in the project, then they don't have to take a bus from Halsted to where their home is so that they would be able to have access to the university and to the churches.

Again, as I say, I prefer the Halsted one

because then we're not destroying homes. People have lived in this community -- I live in the community. I know the value of my home, and I don't believe that if you give me fair value that it will be -- you know, it would really come to where I think that my home should be priced at because of the improvements I have made.

So that should be a consideration especially when we think about seniors who have

been there for years and who take pride in their home and their neighborhoods and their friends around there, that to destroy that community, you know, with the train is not a preferred option. Thank you.

MS. WALLACE: William Warren. Please restate your name.

MR. WARREN: Good evening. It's William Warren, W-a-r-r-e-n. I'm here representing the Vernon Park Community Council. I'm president of the Vernon Park Community Council. We live in the area as well. I'm also a member of the Oversight Committee who had the opportunity to do a tour of the actual site last week -- actually, this week.

And, you know, we feel that by all means that the Red Line should be extended to the south side. We're in support of it. We think it would be a positive move in every respect. A lot of comments that were made earlier in reference to the rodent issues, the way the tracks are going to look, the lighting issues, the garbage and that sort of thing, of course, we're very concerned about those issues, but we feel very in support of bringing this extension to the south side. Thank you very much.

MS. WALLACE: Are there other speakers? Okay.

Again, we're going to be here until

8 o'clock if others arrive and still want to speak. I did want to mention that scoping comments are due by October 27th. So in addition to speaking tonight, you have an opportunity to write comments and place it in the box outside. You have an opportunity to mail in comments, fax or e-mail your comments. And we'll make sure this is back up for your reference.

We also encourage you to stay involved. You can visit this Web site. You can also get on an e-mail list so that you can receive updates

through e-mail and through Darud, if you'll e-mail him.

Any other comments at this time? Have you filled out a card, sir? Right now, we're taking public comment. If you want to fill out a speaker card and come to the mic --

MR. TURNER: I did.

MS. WALLACE: Well, three minutes is the rule. Are there others that want to speak?

We'll stick around. You are welcome to spend some more time out at the boards if you like or you are welcome to head on out, but we'll be here until 8 o'clock.

(Off the record at 7:34 p.m.)

(On the record at 7:46 p.m.)

MS. WALLACE: Johnnie Burke. Please restate your name and speak directly into the mic.

MS. BURKE: Johnnie Burke, and I'm a member of the 96th and Prairie Block Club. I had two questions. One, how many residences would be disturbed with the park-and-ride construction? And also, in the entire project, how many residences would be destroyed? How many people would be removed from the community? Thank you.

(Whereupon, there were no further speakers.)
(Public Hearing adjourned at 8 o'clock p.m.)

STATE OF ILLINOIS)
) SS:
COUNTY OF C O O K)

ANNA M. MORALES, being first duly sworn, On oath says that she is a court reporter doing business in the City of Chicago; and that she reported in shorthand the proceedings of said Public Hearing, and that the foregoing is a true and correct transcript of her shorthand notes so taken as aforesaid, and contains the proceedings given at said Public Hearing.

_____
Certified Shorthand Reporter

Appendix L
Public Scoping Written Comments

RS #1

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Friday, September 18, 2009 4:31 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: CTA Redline

From: Aristotle Socrates Haywood [aristotlesocrates@hotmail.com]
Sent: Wednesday, September 16, 2009 7:12 PM
To: Red Extension
Subject: CTA Redline

As a 30 year southside resident I welcome the proposed extension of the Dan Ryan branch of the Redline. The Union Pacific corridor is the best route. The extension would enhance the neighborhoods it runs through, ease traffic congestion and give better transit options to user of CTA buses, Pace, Metra, and South Shore trains.

"See the world as it really is--not as you wish it should be"

Hotmail: Free, trusted and rich email service. Get it now.

RS#2

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Monday, September 28, 2009 9:41 AM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Red Line Extension One-Way Loop Alternate
Attachments: Red Line Ext One Way Loop Proposal Table of Contents.doc; CTA Red Line Extension design criteria.doc; Red Line Loop Description.doc; red line loop map.JPG; CTA Red Line Extension map description.doc; red line statistics 7 stations.xls; Red Line loop Station Locations and features.doc; red line comparisons.xls; red line design criteria compare LPA and loop.xls

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From: May, David [dmay@walshgroup.com]
Sent: Sunday, September 27, 2009 7:38 PM
To: Red Extension
Subject: FW: Red Line Extension One-Way Loop Alternate

Mr. Jeffrey Busby,

Attached is the One-Way Loop alternate proposal that I recommended to the CTA at the public hearing on Tuesday night. Let me know if you have any questions.

David May

Disclaimer: I am not a professional transit system designer. I represent no organization, nor my employer. I prepared the proposal for the common good and to pursue my personal interest in the problem.

CTA RED LINE EXTENSION

south from 95th Street

One-Way Loop Alternate Proposal

David May - Sept 27, 2009

TABLE OF CONTENTS

1. Design Criteria
2. Description of Proposed One-Way Loop Alternate
3. Map of One-Way Loop and of CTA's LPA
4. Map Description
5. Statistics of One-Way Loop
6. Stations Locations and Features
7. Red Line Extension Proposals Comparison
8. Red Line Design Criteria Comparison

CTA Red Line

David May: 9-27-09

Extension South of 95th St.

DESIGN CRITERIA

1. Maximize number of stations within walking distance of customers homes to provide many one-seat trips. *Therefore*:
   a. Locate stations at ~1.0 mi on center
   b. Locate stations within or adjacent to residential neighborhoods

2. Provide convenient rail transit access to those without, by avoiding overlapping coverage with existing Metra stations. So focus the routing east of I-57, north of 119th St. and west of King Drive.

3. Minimize property acquisition costs, construction costs, grade separation structures and noise in quiet neighborhoods by maximizing the use existing vacant and excess transportation rights-of-way.

4. To control construction costs, run the line at grade (on ground) as much as possible.

5. Serve Chicago State University and Olive Harvey College.

Red Line Extension

David May 9-27-09

Proposed One-Way Loop Alternate

After considering several options, the CTA narrowed its study of Red Line Extension designs to 3 possibilities: two heavy rail and one BRT. All three were 2-way, north-south lines running south to 127th or 130th Streets. Both of the heavy rail line extensions had only 4 stations. The CTA selected the UPRR heavy rail extension alternative (designated the Locally Preferred Alternative = LPA).

I believe CTA made a mistake in considering only two-way linear extension options and in selecting the UPRR line. The study should have also considered one or more one-way loop extensions of the existing heavy rail system. A one-way loop at the end of an existing two-way mainline offers many advantages over a two-way linear extension. Compared to a two-way line of the same length with the same number of added stations, some one-way loop extension trips take longer; but others are quicker. The one-way loop requires half as much track as the same length two-way line, allows single side stations with no crossover structures, can use narrower (and, in this case, often existing) rights of way, requires narrower and less expensive elevated guideway structures, requires fewer train cars, fewer train operators and consumes less electric power.

Attached is proposal for a 10.0 mile long single track one-way loop Red Line Extension with 7 stations spaced about 1 mile apart. To better serve Washington Heights, Roseland and Pullman neighborhoods that lack rail transit service, the entire loop is located more than ½ mile north of the Metra Electric Line's 4 stations on 121st St. Compared to the CTA's preferred 4 station, two-way, 5.3 mile long extension(LPA), this proposed one-way loop extension is conveniently accessible by walking to 50% more local residents. The one-way loop extension has lower construction costs of elevated structures and bridges, more use of existing public rights-of-way, less track rail to purchase, much less expensive costs per station, and similar traction power distribution costs.

The proposed 10.0 mile one-way loop route will have low right-of-way acquisition costs because:

> 1.9 miles are located in the median of the Bishop Ford Expressway
> 2.5 miles are located in the median of I-57
> 1.1 miles are located on an abandoned railroad right-of-way
> 2.9 miles are located on unused railroad right-of-way next to existing freight train tracks.

Combined, these comprise 83% of the required rights-of-way.

Over three quarters of the proposed 10.0 mile one-way loop route is at grade to substantially reduce guideway and stations construction costs. Six of the seven stations are at grade. Only three of the seven stations require stairs and elevators. All seven stations are single side platform – reducing the area required, the cost of construction and the need for cross-over structures.

<u>Locations of the Seven Stations</u>

Bishop Ford Xway and Rhodes (Chicago State)
103rd and Woodlawn (Olive Harvey)
111th and Ellis
Kensington/115th and State
114th and Peoria/Halsted
107th and Racine
I-57 and Halsted

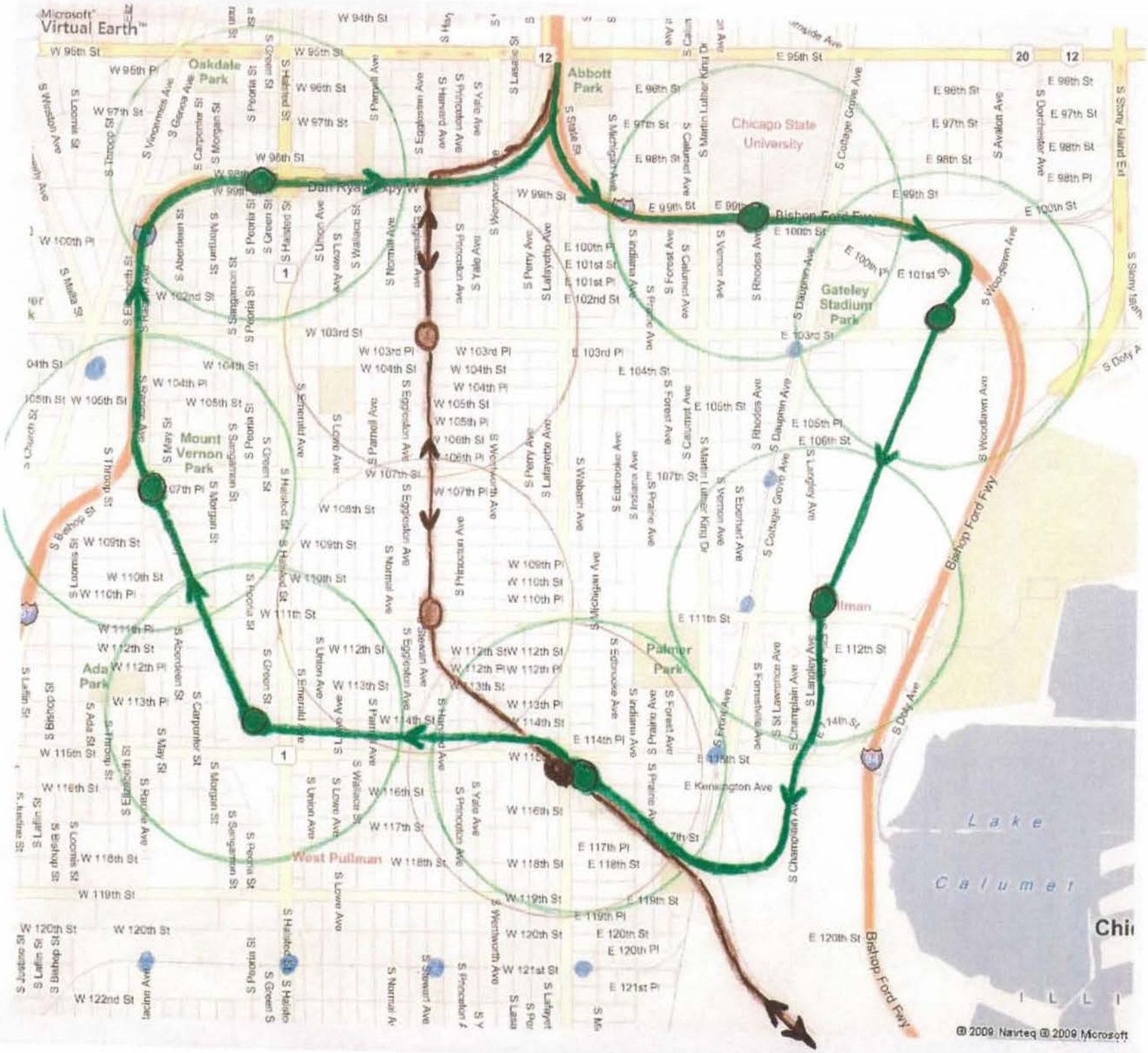
Microsoft Virtual Earth™
Oakdale Park
Abbott Park
Chicago State University
Dan Ryan Expy
Bishop Ford Fwy
Gateley Stadium Park
Mount Vernon Park
Ada Park
Palmer Park
West Pullman
Lake Calumet
© 2009 Navteq © 2009 Microsoft

CTA Red Line

David May: 9-27-09

Extension South of 95th St.

MAP DESCRIPTION

1. Proposed One-Way Loop Route is the Green line. Stations are Green ovals. Green circles are ½ mile radius from Green stations.

2. CTA UPRR Locally Preferred Alternate route is the Brown line. (South end and station at 130th Street are not shown.) Stations are Brown ovals. Brown circles are ½ mile radius from Brown stations.

3. Metra Electric line stations are Blue circles.

Red Line Extension
One-way Loop Proposal

	Station	Route	Route Distance	Direct Distance	At Grade	Elevated	Elevated Structure	ROW status	ROW notes	Station Elevated?		Station components	
	Existing 95th St		miles		miles	miles					stair	elevator	at grade crossing
		Bishop Ford median	1.0	0.9	1.0		NA	existing public					
1	**Bishop Ford & Rhodes**									no (below street)	yes	yes	no
	(south edge Chi St. U.)												
		Bishop Ford median	0.9	0.7	0.9		NA	existing public					
		West side of Railroad	0.2	0.1	0.2		NA	existing private (RR)					
2	**103rd th & Woodlawn**									no	no	no	yes
	(SW edge of Olive-Harvey)												
		Next to Railroad	1.2	1.2	1.2		NA	existing private (RR)					
3	**111th & Ellis**									no	no	no	yes
		Next to Railroad 111th to 118th	1.0	1.0	1.0		NA	existing private (RR)					
		Over Metra Elec & Cottage Grove	0.5	0.5		0.5	beam & column	various public & private					
		Next to UPRR 117th to 115th	0.5	0.5		0.5	embankment	railroad, private & public					
4	**Kensington (15500) & Michigan**									yes	yes	yes	no
		Over 115th and UPRR	0.2	0.2		0.2	beam & column	railroad, private & public					
		N. of 115th Wentworth to Peoria	0.9	0.9		0.9	beam & column	public + private	maybe buy all houses adjacent ot north side of alley for new ROW				
5	**114th & Peoria**									no	no	no	yes
		Former RR ROW (now elec & bike)	1.0	1.0	1.0		NA	open (owner?)					
6	**107th & Aberdeen**									no	no	no	yes
		to I-57 median	0.1	0.1	0.1		NA	open (owner?) & public					
		down to grade at median	0.1	0.1		0.1	beam & column	existing public	use existing abandoned rr bridge to across I-57 NB lanes to median? (need new ramp down to median level)				
		I-57 Median	1.3	1.0	1.3		NA	existing public					
7	**I-57 (9900) & Halsted**									no (below street)	yes	yes	no
		I-57 Median	0.9	0.9	0.9		NA	existing public					
		bridge expressway lanes	0.2	0.2		0.2	beam & column	existing public	need a bridge or tunnel				
	Existing 95th St												
		TOTALS »»	10.0	8.3	7.6	2.4							

Red Line Extension 1-way Loop Alternate

Stations

All 7 stations have a single platform. No crossover structures.

Station Locations	Station Features
Bishop Ford Xway and Rhodes (Chicago State)	stairs & elevator (& ramp?) up to King Drive
103rd and east of Woodlawn (Olive Harvey)	at grade (no stairs, no elevators)
111th and Ellis	at grade (no stairs, no elevators)
Kensington/115th and State	elevated (stairs & elevator down to ground)
114th and Peoria/Halsted	at grade (no stairs, no elevators)
107th and Racine	at grade (no stairs, no elevators)
I-57 and Halsted	stairs & elevator (& ramp?) up to Halsted

Red Line Extension Proposals Comparison

Item	CTA Preferred ("LPA")		One-Way Loop Alt	
ROW length (miles)	5.3		10.0	
ROW area (SF)	1,259,280	if 45 ft wide	1,584,000	if 30 ft wide
Track pair length (miles)	10.6		10.0	
Elevated guideway structure (miles)	3.9		2.4	
Elevated guideway structure area (SF)	617,760	if 30 ft wide	253,440	if 20 ft wide
Stations (number)	4		7	
Elevated stations	3		1	
Stations requiring stairs and elevator	3		3	
Area within 1/2 mile of stations (sq miles)	3.1		5.5	
Institutions served	none		Chicago State Univ Olive Harvey JC	

Red Line Extension Design Criteria Comparison

LPA vs "one-way loop"

Criteria	CTA Preferred ("LPA")	One-Way Loop	which is better:
1. Maximize number of stations within walking distance of customers homes to provide many one-seat trips. Therefore:	4 Stations	7 Stations	One-Way Loop
a. Locate stations at ~1.0 mi on center	Yes: 3 of 4	Yes: 7 of 7	One-Way Loop
b. Locate stations within or adjacent to residential neighborhoods	Yes: 3.5 of 4	Yes: 6 of 7	tie
2. Provide convenient rail transit access to those without, by avoiding overlapping coverage with existing Metra stations. So focus the routing east of I-57, north of 119th St. and west of King Drive.	Yes: 3 of 4	Yes: 5 of 7	tie
3. Minimize property acquisition costs, construction costs, grade separation structures and noise in quiet neighborhoods by maximizing the use existing vacant and excess transportation rights-of-way.	Yes	Yes	tie
4. To control construction costs, run the line at grade (on ground) as much as possible.	25% at grade	76% at grade	One-Way Loop
5. Serve Chicago State University and Olive Harvey College.	No: neither	Yes: both	One-Way Loop

0.245283019

Cheever, Kim

RS#3

From: Red Extension [redextension@transitchicago.com]
Sent: Friday, September 18, 2009 4:32 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: RED LINE EXT.

From: RonnC7@aol.com [RonnC7@aol.com]
Sent: Friday, September 18, 2009 11:08 AM
To: Red Extension
Subject: RED LINE EXT.

I BELIEVE YOU SHOULD SEND THE RED LINE DOWN THE EXPRESSWAY FROM 95TH TO 130TH. YOU WILL NOT HAVE TO DISPLACE ANYONE.

Cheever, Kim

RS#4

From: Red Extension [redextension@transitchicago.com]
Sent: Friday, September 18, 2009 4:31 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Red Line Extension Comment

From: White Oak [quercus_alba@hotmail.com]
Sent: Sunday, September 13, 2009 1:13 PM
To: Red Extension
Subject: Red Line Extension Comment

To whom it may concern:

I really like the idea of extending the Red Line South. It should greatly improve the transit options sor the far South Side. However, it seems very strange to have an alignment that crosses over the Metra Electric and South Shore lines but does not provide for convenient transfer between those lines and the Red Line.

A much better option in terms of improving overall connectivity in the transit system would be an alignment that left the UP right-of-way at either 115th St or Kensington Ave, traveling east to the Metra Electric line, crossing over the Metra Electric line and turning south onto the IHB right-of-way. A Red Line station on either Kensington or 115th could provide a relatively easy connection to Metra and the South Shore.

If such an alignment is not feasible, the CTA should work with Metra and/or the South Shore to establish a convenient transfer station somewhere for the Red Line extension.

Thank you,

Mark Ambrose

Cheever, Kim

RS #5

From:	Red Extension [redextension@transitchicago.com]
Sent:	Friday, September 18, 2009 4:30 PM
To:	Peters, Melissa
Cc:	Kornblatt, Helene B.
Subject:	FW: Meeting Announcement: Red Line Extension
Follow Up Flag:	Follow up
Flag Status:	Completed

From: Jon Evans [jkeiit963827@sbcglobal.net]
Sent: Friday, September 04, 2009 4:44 PM
To: Red Extension
Subject: Re: Meeting Announcement: Red Line Extension

Ladies & Gentlemen:

I thought that if I could sell the idea of a Boston style High Speed Electric Trolley Bus (Articulated) running parallel to the Norfolk and Western railroad tracks that the Red Line Extension could be built and operational much faster, and at a substantially lower cost than a Conventional Fixed Rail system.

I was told that modifying Eggleston Avenue to take high speed buses would've been so cost prohibitive that it would've been better to go conventional anyway. I liked South Halsted Street better, but I've learned that it too, has been passed over.

The Green Line's Kenwood Corridor uses alleys to the east of Prairie Avenue. I was therefore wondering why alleys to the east of South State Street or South Michigan Avenue were not considered.

There has to be a cheaper, faster means of putting the Red Line Extension together and making it operational.

Jon Evans
11936 South Princeton Avenue
Chicago, Illinois 60628-6014
1-773-821-8142 Home
1-773-383-2363 Cell
jkeiit963827@sbcglobal.net
JKEIIT96@hotmail.com

--- On **Fri, 9/4/09, Red Extension** ***<redextension@transitchicago.com>*** wrote:

> From: Red Extension <redextension@transitchicago.com>
> Subject: Meeting Announcement: Red Line Extension
> To:
> Date: Friday, September 4, 2009, 4:31 PM

Cheever, Kim

RS #6

From: Red Extension [redextension@transitchicago.com]
Sent: Friday, September 18, 2009 4:29 PM
To: Peters, Melissa; Kornblatt, Helene B.
Subject: FW: Red Line Extension
Follow Up Flag: Follow up
Flag Status: Completed

From: Edmund Hawkins [eghawk@sbcglobal.net]
Sent: Tuesday, September 01, 2009 8:07 AM
To: Red Extension
Subject: Red Line Extension

It's about time that the CTA is finally considering seriously an extension to the Red Line from 95th St. As you know, the far south is the **only** area is the Chicagoland area that is not served by rapid transit. The South Side of town for some reason is almost always ignored when it comes to either new service or improvements to service.

This is something that has been talked about for at least the past 25-30 years and I hope that the political hoops and ladders that have to be cleared don't get in the way of making this project happen, at least I would like to see it happen in my lifetime. The problem with the rest of the Red Line is there is no parking facilities to serve riders. I have been in other cities and many of the stations have very adequate parking. I believe that it is the key to growing ridership. I have parked at quite a few of the stations on this system and I have noticed that there is parking available after the morning rush hour. When you double the price of parking from $2.00 to $4.00, this would make an impact. People are suffering enough with loss of income and rising prices. Now, it is cheaper to drive to your destinations rather than ride your system which is at best slow.

Cheever, Kim

RS#7

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, September 30, 2009 9:13 AM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW:

From: melissa [mellaout@yahoo.com]
Sent: Tuesday, September 29, 2009 11:28 AM
To: Red Extension
Subject:

Good Morning,

I do think that the Red Line expansion is in dire need. There are many people who travel long hours to reach the city for work, etc. I do believe the Red Line expansion along the Union Pacific to be a good route. However, with the expansion will added bus services be included? I ask due to the fact that I live far East and there is no night owl services to 130th. Please take in consideration if this does take place to include night owl services along the far East side/Hegwish area. The expansion would be a positive project for all that take public transportation on the far South side of Chicago.

Thank You,
Melissa Najera

RS #8

(THURSDAY)

SEPT. 17, 2009

DEAR MR. BUSBY,

RE: RED LINE PROPOSED EXTENSION TO 130TH STREET

I AM INTERESTED IN FURTHER INFORMATION ABOUT THE CTA RED LINE PROPOSED EXTENSION.

ANY SUCH IMPROVEMENT IS LONG OVERDUE AND SHOULD CERTAINLY MEET WITH APPROVAL FROM SOUTH SUBURBAN RESIDENTS. SOUTH EASTERN RIDERS ARE MOST IN NEED OF THIS EXTENSION.

METRA RAILROAD TRAINS MANAGERS MAY NOT LIKE THIS IDEA, BUT NOT ALL REGULAR COMUTERS PURCHASE MONTHLY PASSES.

I WELCOME A WRITTEN REPLY, AS I HAVE NO HOME COMPUTER. (BUT I WOULD LIKE TO KNOW MORE ABOUT COSTS, NEED, AND WHAT PROPOSED ALTERNATIVES ARE DECIDED UPON... SUBWAY CTA COSTS ARE A MAJOR FACTOR FOR RIDERS: MANY HAVE LIMITED INCOMES AND BUDGETS. WHILE METRA IS COMPETITION, RIDERS LIKE AS MANY CHOICES POSSIBLE. SOME SUBURBS ARE NOT WELL SERVED BY METRA LOCATIONS, SO RIDERS ARE FORCED TO THE ONLY OTHER CHOICE.)

THERE MUST BE MANY OTHER FACTORS

WHICH THE STUDY WILL UNCOVER, AND THE PUBLIC NEEDS TO KNOW THEM ALL.

P.S. WHEN A THIRD AIRPORT WAS FELT NEEDED IN THE AREA, HOWLS OF PROTEST ERUPTED. MAYOR DALEY DID "MIDNIGHT-BEHIND-THE-SCENES LAKE-FRONT-INTERFERENCE" TO BLOCK SUCH A PLAN NEAR McCORMICK PLACE. IT NEVER DID GET ANY VOTE OR EVEN GET TO CHICAGO'S CITY COUNSEL MEMBERSHIP FOR THEIR INPUT. (HOW DID THAT BENEFIT "THE CITY THAT WORKS"??) SHAME ON SUCH POLITICAL MONKEY SHINES! RIDERS INPUT SHOULD NOT BE IGNORED.

YOUR REPLY IS WELCOME!

Mr. Victor Bahr
3162 W Meadow Lane Dr Apt 1
Merrionette Park, IL 60803-5856

Red Line Extension

RS#9

Connecting 95th Street Station to 130th Street

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: JOE W. BOATNER

Organization: SELL Title:

Address: 400 W. 99th (CROSS STREETS 99th & EGGLESTON

City: CHICAGO State: IL Zip: 60628

Phone: 773 233 0904 E-mail: N/A

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

THE IMPACT (REAL NOT POTENTIAL) IS THE NOISE CREATED BY THE TRAINS. MORE PRECISLEY (PRICISELY) IT MAY NOT BE THE NOISE OF THE CTA TRAIN BY ITSELF BUT WHEN ADDED TO THE NOISE THE UNION PACIFIC RAILROAD MAKES WITH THE "OVERUSE OF THEIR HORNS" WOULD MAKE THE COMBINED NOISE TOO MUCH TO TOLERATE. I UNDERSTAND TRAINS ON TRACKS MAKES NOISE BUT THE UPRR HORNS ARE TOO MUCH

ALSO, AS SOMEONE SAID TONIGHT WHAT ABOUT TERMITES & OTHER RODENTS DISPLACED AND LOOKING FOR SOME WHERE TO LIVE (MY HOUSE MAYBE!)

Joe W Boatner

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Red Line Extension

RS #10 **Connecting 95th Street Station to 130th Street**

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Hope Hill

Organization: Resident Title:

Address: 9225 S. May

City: Chicago State: IL Zip: 60620

Phone: 773 551 6103 E-mail: hope_hill@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I think extending the red Line would be an excellent idea

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA

Red Line Extension

RS #11

Connecting 95th Street Station to 130th Street

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: TOM McMAHON CAPTAIN - Chicago Police Dept.

Organization: Pullman Civic Org. Title: MEMBER

Address: 639 E. 111TH ST

City: Chicago State: Ill Zip: 60628

Phone: 264-4243 E-mail: mcmahone@sbcglobal.net

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I AM IN FAVOR OF the PROPOSAL TAKING THE Red LINE OVER THE N/R TRACKS ON EGGLESTON OUT TO ALTGELD GARDENS. ALTGELD HAS HAD A MAJOR COSTLY RENNVATION. The PEOPLE HAVE FOR YEARS FELT LEFT OUT DUE TO THEIR LOCATION. This WOULD ALLOW HIGH SCHOOL STUDENTS ACCESS TO BETTER EDUCATION AND JOBS for RESIDENTS.

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA

Red Line Extension

RS#12

Connecting 95th Street Station to 130th Street

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Harry Brooks

Organization: _____ Title: _____

Address: 7818 S South Shore Dr.

City: Chicago State: IL Zip: 60649

Phone: 773-731-0608 E-mail: harryabrooks@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

One thing that needs to be done immediately is to relieve congestion at the 95th/Dan Ryan Terminal. The number of buses and routes that use the station have outgrown the terminal.

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS#13

Date: ☐ September 22, 2009
☒ September 24, 2009

Scoping Meeting Speaker Card

Complete this card if you wish to speak this evening. Your input is a vital component of this phase of the project. Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Thank you for your interest in the Red Line Expansion project.

Name: Johnnie B Burke

Organization: Perry Block Club Title: Pres

Address: 9607 So. Perry

City: Chicago State: Il Zip: 60628

RS #13

(1) Will construction of Park + Ride sites remove residents from present locations?

(2) How many properties will be disturbed in constructing entire phases?

Red Line Extension

Connecting 95th Street Station to 130th Street

RS#14

Date: ☐ September 22, 2009
☒ September 24, 2009

Scoping Meeting Speaker Card

Complete this card if you wish to speak this evening. Your input is a vital component of this phase of the project. Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Thank you for your interest in the Red Line Expansion project.

Name: Rev. Alice Harper-Jones

Organization: United Church of Christ Association Title: Pastor

Address: PO BX 208491

City: Chgo State: IL Zip: 60620

Why Can't Halsted plan extend to the Algal Projects

RS#14

Red Line Extension

Connecting 95th Street Station to 130th Street

RS#15

Date: ☑ September 22, 2009
☐ September 24, 2009

Scoping Meeting Speaker Card

Complete this card if you wish to speak this evening. Your input is a vital component of this phase of the project. Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Thank you for your interest in the Red Line Expansion project.

Name: MICHAEL T. BRYANT (DEAF)

Organization: _____ Title: _____

Address: 7931 S. EAST END AVE

City: CHICAGO State: IL Zip: 60617

RS #15

1 GOAL TO PLAN DREAM

RED LINE ~~HOW~~ 130TH-HOWARD

1 VOTE (CHOOSE) UPRR & HRT

RS-16

Oct. 2, 09

Hi Jeffrey,

I see you are the travelers friend - you asked for our input.

I live in N.W. Indiana and have a difficult time getting to Chicago since the pace #355 Lansing to Chicago Loop was eliminated.

From the Schererville - Munster border I could ~~can~~ safely and easily drive to Ridge and Wentworth - get on #355 and arrive at the Loop - no-longer! & don't care to take the South Shore. The station has MINIMUM SAFE parking and I must drive through a questionable area where there have now gang shootings and a few murders.

With your new schedules and extensions can this 80-year old former flapper extend her comments. Please!

1. Extend one of the electric rail routes to connect with a possible Indiana Illinois border parking lot.

2. Reinstitute # 355

But on a reduced schedule to allow working people as well as shoppers and hospital patients early in the day and return late afternoon rides on a safe and easy to get to bus.

But eliminate the costly empty mid-day routes. I had ridden near empty busses and I sympathize with your low revenue. But a good schedule could be a better source of revenue to you.

Sincerely, Lorraine Smalley

219-924-1509

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-17

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Annette Spight

Organization: DNA Title: DNA

Address: mailing P.O 19592

City: Chicago State: Il Zip: 60619

Phone: optional E-mail: optional

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

First of all, I would like to apologize for sending this in late, but someone else attended the meeting for me, but did not tell me there was a date for submission on it. I recieved the materials late and the information. I decided to send the card in anyway and keep a copy of it. According to some of the speakers at the meeting this project has been on the table and introduced in the 1960's. Now they talked about the completion date and the enviromental survey impact the dates or years 2013-2016 and governmental funding and being in compliance with. I heamed of some of the major and minor concerns too, Businesses, residential and non residential. As far as an environmental impact study being done this is not a new project, that has

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No existence. This is a project that has a as you used an extension. Therefore it is already in existence. And environmental studies from the previous years should assist instead of creating new ones. As far as the 130th stop you have already environmental issues ~~sta~~ such as waste and industrial companies in that area. Those people who had concerns about their businesses that have financial statements prepared each year and according to the economy, if the construction is going to affect their ~~ask~~ to be compensated for their losses. The residents should go to their local real estate agencies to find out or to other areas to find out if their property has depreciated or appreciated. What I was looking for is some ~~tem~~ solutions that could be offered while the concerns exist. The timeframe that they are talked about is unreasonable for something that already exist. Also certain people talked about the beneficial factors and assisting young people of getting around better and for those who do not have CARS. Another comment was made about the disparity in certain communities that are minorities and the way they have been overlooked. I thank you for your time and effort in reading this comment letter. Last but not least one gentlemen said he lived by the train and the noise is not so bad and it would free up the congestion at 95th Dan Ryan.

Thank You Annette Spight

Cheever, Kim

RS-18

From: Peters, Melissa [PetersMe@cdm.com]
Sent: Tuesday, October 06, 2009 8:23 AM
To: Cheever, Kim
Subject: FW: Red Line Extension 117thStreet/Michigan Ave Station

From: Red Extension [mailto:redextension@transitchicago.com]
Sent: Monday, October 05, 2009 4:44 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Red Line Extension 117thStreet/Michigan Ave Station

From: Rico Thomas [ricot60409@yahoo.com]
Sent: Saturday, October 03, 2009 2:06 AM
To: Red Extension
Subject: Red Line Extension 117thStreet/Michigan Ave Station

The design of the 115th Street/ Michigan Ave Station is of special interest because it is at a location that can significantly develop. Development should not be hindered at this location by a bus turnaround. Furthermore, this may not be a good place for a park and ride either. This space should be used for commercial retail and/or a community focused service.

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-19

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Ronn L. Johnson

Organization: Citizen Title: —

Address: 9539 S. Dobson

City: Chicago State: IL Zip: 60628-1628

Phone: E-mail: rokk7914@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

USE Both I-94 and I-57 for the Red-line extension.

Or Green line up Stoney Island to I-94 and South to 159 or more

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

RS-20

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Monday, October 12, 2009 4:35 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Illinois State Police concerns

From: Anthony_Lupo@isp.state.il.us [Anthony_Lupo@isp.state.il.us]
Sent: Wednesday, October 07, 2009 11:14 AM
To: Red Extension; Yellow Extension; Orange Extension
Cc: mark.harmon@chicagopolice.org
Subject: Illinois State Police concerns

As we discussed in the Scoping meeting on September 23, 2009. Below is details a few concerns we had and would like them looked at during the preliminary phase:

FIRST RESPONDERS

Will the construction area be easily accessible for First Responders to respond to any type of emergency? With the tracks being elevated, will there be an easy on/off for personnel?

SECURITY

If the Contractor desires additional police officer services of Illinois State Police (ISP), District Chicago, for enforcement, traffic control, and/or security, ISP personnel will, as available, provide police services on a hireback basis. During this time, ISP officers will provide a visible State Police presence, provide general police services and take enforcement action as appropriate in and around the site of the program. We will govern all areas on the expressways or on state owned property. To secure the above, the Contractor would have to sign a binding contract detailing all the specifics with the State of Illinois.

If you should have any questions or need additional information, please do not hesitate to contact me.

Respectfully,

Lieutenant Tony Lupo
District Chicago
Administrative Command
Office 847 294 4655
Fax 847 294 4440
Cell 708 932 9347

RS-21

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Monday, October 12, 2009 4:34 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Additional Question about Red line extension

From: Alicia DeVoll [alicia.devoll@loop.colum.edu]
Sent: Monday, October 05, 2009 8:06 PM
To: Katelyn Thrall
Cc: Red Extension
Subject: Additional Question about Red line extension

Hello,

I attended the last community scoping meeting and i was wondering if there are any further updates with the Red line extension. Also has this extension been effected by the loss of the Olympic games?

--
Alicia DeVoll

Journalism Major
Columbia College Chicago
360-941-4759

RS-22

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, October 21, 2009 1:41 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Dan Ryan Extension

From: Aristotle Haywood [fitnessphase@yahoo.com]
Sent: Monday, October 19, 2009 6:45 PM
To: Red Extension
Subject: Dan Ryan Extension

As a resident of the South Side of Chicago for over 30 years the proposed extension of the Red Line is long overdue.

It will alleviate congestion, make travel faster for bus users and give better transit alternatives to people who live on the far South Side of

Chicago and Northwest Indiana. The Union Pacific route makes the most sense.

Aristotle Haywood.

RS-23

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Friday, September 18, 2009 4:30 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Red line extension

From: emailafrica@yahoo.com [emailafrica@yahoo.com]
Sent: Tuesday, September 08, 2009 10:50 AM
To: Red Extension
Subject: Red line extension

The extension of the red line is a great idea and I support the effort.
Sent from my BlackBerry® wireless device from U.S. Cellular

CHICAGO TRANSIT AUTHORITY
PUBLIC HEARING
"RED LINE EXTENSION
CONNECTING 95TH STREET STATION TO 130TH STREET"
September 22, 2009

STENOGRAPHIC REPORT OF PROCEEDINGS had in the above-entitled matter held at the Historic Pullman Visitor Center, 11141 South Cottage Grove Avenue, Chicago, Illinois, commencing at 6:44 o'clock p.m.

PRESENTERS:

MR. DARUD AKBAR, Government & Community Relations Officer, Chicago Transit Authority

MR. JEFFREY BUSBY, General Manager, Strategic Planning, Chicago Transit Authority

MS. SARAH LAYTON WALLACE, Moderator

Reported by: Anna M. Morales, CSR, RMR
License No.: 084-002854

(Whereupon, the following proceedings commenced at

6:44 o'clock p.m.)

MR. AKBAR: Good evening, everyone. If we could have folks begin to take their seats, we would like to go ahead and get the presentation started.

Good evening. Once again, my name is Darud Akbar. I'm the Government & Community Relations Officer with the Chicago Transit Authority. I would like to welcome everyone to the CTA's public scoping meeting for the Red Line Extension Project. Before we begin the presentation, I would like to acknowledge Lorie Lipson. She is representing Alderman Austin's office. If you could just raise your hand, Lorie. Thank you.

I'm going to turn things over to Sarah. Sarah is going to give us a talk about the meeting agenda tonight, and then we're going to go ahead and begin the presentation shortly.

MS. WALLACE: Thank you. Before we get started, I just want to check, is there anyone that will be in need of Spanish translation this

evening? We do have that service available.

Tonight, as you see our agenda, we are just completed with the open house portion of the agenda, and now we're going to move into the presentation that's going to be about a ten-minute presentation, and Jeff Busby from CTA is going to

make that presentation to you, after which we'll move to our public comment period. And just before the public comment period, I'm going to go through some guidelines with you so that you have an understanding of how that process works and your time limitations and so forth that you have.

At the conclusion of the public comment period -- and I will just say that if it's not 8 o'clock yet and we've gotten all the comments initially, we are going to remain here to take public comment until 8 o'clock as we gave you notice, and then we'll just go over some next steps before we adjourn the meeting.

So with that, let's turn it over to Jeff for a presentation.

MR. BUSBY: Hi. Thanks, Sarah. Thanks all for coming out.

I'm Jeff Busby. I work in the Planning

Department at CTA. I see quite a few familiar faces from our previous work.

Just a little bit of background on the Red Line Extension Project. The idea to extend the Red Line has really been around since the 1970s; but we, at CTA, got very busy with the first and foremost stage of a federal process to begin to apply for money back in 2006 when we started an Alternatives Analysis study.

The purpose of that study was to look at a

11 whole range of transportation options to improve
12 the service in the study area to the far south side
13 and the south suburbs. We looked at different
14 transit technologies or modes, different corridors,
15 different profiles where the transit would be in
16 relationship to the street level.
17 We had three rounds of public outreach.
18 Very strong attendance at all of those. We had
19 some really nice media coverage.
20 Recently, in August, we concluded that
21 study when the Board of the CTA adopted the Union
22 Pacific Railroad Alternative as the Locally
23 Preferred Alternative. That will be one of the
24 alternatives we'll look at in the environmental

1 studies. I will talk a little bit about that in
2 more detail. But this environmental study which
3 we're starting right now really is a culmination --
4 it starts from the work we did in the Alternatives
5 Analysis and advances that into significantly more
6 detail.
7 Why are we doing this? Well, we would
8 like to use federal funds, at least a portion of
9 the federal funds, to help pay for an extension to
10 the Red Line. To spend large amounts of federal
11 money on really anything, you need to comply with
12 the National Environmental Policy Act which
13 requires that you identify potential impacts both
14 positive and negative to the environment from the

15 construction and operation of a rapid transit
16 facility. So we're starting that process tonight.
17 The purpose of preparing this document is
18 both to inform members of the public about the
19 likely impacts, but to also help decision-makers
20 who will pay for and be responsible for operating
21 the line about the impacts and how we might
22 mitigate those impacts that are adverse to the
23 community.
24 Here's a schedule for you, just to give

1 you a sense of where the project is and where we
2 would like to go. This is a target. It's not
3 something that unfortunately I can guarantee for
4 you. But we're going to start this evening
5 receiving your comments on what you would like us
6 to study in the environmental review. We're going
7 to study that over the next year and share a draft
8 of the Environmental Impact Study at the end of
9 2010 or perhaps early 2011.
10 At that stage, we need to ask the federal
11 government for additional money and for permission
12 to begin final design. That's the preparation of
13 really the construction drawings. We hope for that
14 period to last between 2011 and 2013. At that
15 point, we need to have identified all the funds for
16 the start of construction. If those funds were
17 available and, again, if we got federal permission,
18 we would like to start construction in 2013 to open

in 2016.

I think this is a realistic schedule. It is ambitious. Certainly your support is helpful in making that realized. I mentioned that we'll be studying the Locally Preferred Alternative which came out of the Alternative Analysis Study; but

there are also three alternatives that will be studied as part of the Environmental Impact Study.

The first is a No-Build Alternative. That becomes a point of comparison, so what would be the environmental impacts of not doing anything.

The second is a Transportation System Management Alternative. It's a long word, but what it really means is a lower cost alternative to building the Red Line; and, in this case, it would be express buses and some improvements at 95th Street so that those express buses could have a place to drop people off.

The Locally Preferred Alternative, there are maps in the back and we'll be talking about that in more detail. That's an extension of the Red Line from 95th Street following the Union Pacific Railway with stations at 103rd, 111th, 115th and Michigan, and a final station at 130th. It's an elevated extension, so it's above the street level but adjacent to those Union Pacific freight tracks.

And, finally, another alternative in the

23 Alternatives Analysis that performed very well that
24 we thought we would include in the environmental

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1 study as a point of comparison was an elevated
2 extension along Halsted Street. It would be
3 elevated above the median of that street. Similar,
4 four stations at 103rd, 111th, 119th, and 127th and
5 Vermont.
6 This is a map of the Locally Preferred
7 Alternative. As I mentioned, it leaves
8 95th Street, travels in the median of I-57, and
9 then is an elevated line above the street level
10 traveling next to the Union Pacific Railroad. It
11 ends at 130th and the Bishop Ford, very close to
12 Altgeld Gardens.
13 And, similarly, the Halsted alternative
14 which leaves 95th Street, again using the median of
15 I-57, travels south elevated above Halsted, ending
16 at 127th.
17 So we're very interested in your comments
18 tonight. Sarah is going to help us with rules on
19 how that's all going to work and I will turn it
20 over to her.
21 MS. WALLACE: Okay. Thank you very much. So
22 it's time for the public comment process, and I
23 want to go over some of the guidelines.
24 First of all, so that you know, we would

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like you to focus your comments on the work that we have ahead, which is the purpose and need for the project; the proposed alternatives; the proposed environmental issues to be examined; and the potential environmental effects and mitigation measures to be considered. So those should be the focus of your comments tonight.

The guidelines. If you would like to speak and if you haven't done so already, you will need to fill out one of these speaker cards. Christy will be happy to collect those and bring them to me. I will plan to call speakers up in the order that I have received them. And I will call a couple at a time so that you can go ahead and get lined up and know where you're coming.

When you come to the microphone, I'd ask you first to restate your name so we get that for the record. We have a court reporter here who's going to be documenting your comments. And we would ask you to direct your comments to CTA here at the front table.

You're going to have three minutes to comment. And the good news is you're not going to have to keep track of the three minutes. We got a

stoplight here so everyone can see that. When you begin your comments, the stoplight will be green. When you have got about 30 seconds left, the

stoplight will turn yellow; and then it will begin flashing when you have 15 seconds. So you should be able to gauge your comments and know when you need to be wrapping up. Once that turns red, that means your comment time is up.

We would ask everybody to stick with that comment period. The only exception to that is anyone who needs translation, we're going to allow six minutes because of the time that it takes to go back and forth with the translator. So be aware of that.

Tonight, we're really here to hear what you have to say. This is your chance for input on the process. CTA is here to listen to you. And so they won't be responding to your comments in any way at this time, but your comments are going to be documented in a scoping report.

So that's the process. Hope that's clear to one and all, and we're ready to get started.

Okay. We have -- the first couple are Helen Rockingham, Derrick Brownlee, and Reverend

Isaac Hayes. You want to get situated at the microphone. And, Helen, please go ahead and restate your name first.

MS. ROCKINGHAM: My name is Helen Rockingham. I would like to say good afternoon to everyone. I would also like to give my appreciation to CTA -- express my appreciation to CTA for this effort.

It's been long past due, and there are a lot of residents who are going to appreciate having this kind of facility available to them.

Myself, I'm a rider on CTA's Red Line train and buses at some point in time to work everyday. And what I find at 95th Street is that the parking is nonexistent and we're always getting traffic tickets there. So these lines and the proposed parking spaces that would be available at the different terminals would be a plus for this project to us, to the community, and we appreciate that, if the project becomes finalized.

Another thing is I'm a property owner and that Pacific line comes right past my home. As a matter of fact, I'm the second house from that line, south of that line on Princeton. And the environmental impact, I know for the benefit of the

community, if we have to be relocated, that would not be an issue to some homeowners, but CTA's obligation to us, when will we find that out or if it would be found out in the 2013 year, and how would those -- how would those homeowners be contacted and at what point, would be my question.

Okay, I'm still on green. Great. Yes, it appears that the preferred route would be the Pacific line. I have been bouncing this, brainstorming with a lot of neighbors, and we see Halsted would be the least route for the advantages

for the businesses and traffic going to the expressway. We just know we will see the benefits of it in our neighborhood, and that's the end of my comments. Thank you.

MS. WALLACE: Derrick Brownlee. Derrick Brownlee? Okay. Reverend Isaac Hayes.

REV. HAYES: Reverend Isaac Hayes, candidate for U.S. Congress in the Illinois 2nd Congressional District, and I just want to commend the CTA for taking this step. Certainly I know many residents and citizens on the south side have long wanted this, and people are happy they will have an easier commute to work or to school or wherever they may

go. And so I don't need the full three minutes. I just wanted to commend the CTA, and the residents on the south side are very happy for this step. Thank you.

MS. WALLACE: Robert Franklin and then Charlie Yale.

MR. FRANKLIN: All right. My name is Robbie Franklin. I would like to know if you're going to run the El starting at 99th and Eggelston, are you going to be on that platform on the tracks to the Pacific or are you going from the west side or the east side? And are you going to damage the little park that's in there between 99th and 103rd?

MS. WALLACE: Do you have other comments?

MR. FRANKLIN: No. That's it.

MS. WALLACE: Charlie Yale and then Eugene Taylor. Please restate your name.

MR. YALE: I'm Charlie Yale from Citizens Taking Action. I work with the unions and I got a high seniority.

It's a wonderful thing that CTA is doing right now with that extension. If the economy picks up and the recession gets better in the near future, where are you going to extend the Red Line?

How far out may I ask? How far out? The Red Line, how far out will it go out? How far in distance, north or south? May I ask, please?

MS. WALLACE: Right now we're in the public comment portion, so we're just listening to you, but that's the kind of discussion you can have as you are looking at the board.

MR. YALE: Fine. If this works out for the public and everybody else, it would be a wonderful thing. Let the economy pick up with the recession. Right now, it's pretty bad right now. If this could be done, it would be a wonderful, wonderful thing for everybody and everybody. I want to see what happens. Analyze this.

There's construction going on I heard. This I heard. But this could be done by everybody and be one good thing for the future. I want to see what happens.

MS. WALLACE: Eugene Taylor and Michael Bryant.

Eugene Taylor?

MR. TAYLOR: Yes.

MS. WALLACE: Please restate your name.

MR. TAYLOR: My name is Eugene Taylor, and I'm here to represent Developing Communities Project.

We are a faith-based community organizing agency that has served the Chicago community areas of Greater Roseland since 1986.

In 2003, DCP began organizing a transportation campaign advocating for the expansion of rapid transit on Chicago's far south side. DCP through its CTA Red Line Oversight Committee, or RLOC, comprised of community residents, churches, community leaders, and local grass root organizations initiated a referendum drive in 2004 that resulted in 38,000 votes supporting the extension of the CTA Red Line along the Union Pacific Railroad Corridor.

We have come to recognize the critical importance of mass transit to Chicago and its residents. From the increased exposure to air and noise pollution throughout the region to the increased travel time imposed upon both workers and students, addressing our mass transit service needs was and is paramount to our community's future and its quality of life. This community has paid a high price for this urban transit dilemma.

But today is a good day. This day is long

24 awaited by many and fully expected by some,

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1 expected because the public's desire for economic
2 justice and equity in capital spending
3 decision-making was reasonable. Yet, its
4 anticipation for nearly 40 years has become an
5 urban legend.
6 So, today, we thank the Federal
7 Transportation Administration for requiring this
8 public hearing, and we thank the CTA, the Chicago
9 Transit Authority, for selecting the Union Pacific
10 Rail route as the locally preferred route.
11 We here today want to register our initial
12 public comments as part of the scoping process. On
13 September 18th, 16 members of DCP's Red Line
14 Oversight Committee toured the Union Pacific
15 Railroad route to examine the physical and
16 environmental conditions along the corridor.
17 MS. WALLACE: 30 seconds.
18 MR. TAYLOR: The RLOC participants documented
19 parkways, homes, small businesses, and tracks and
20 so forth.
21 Much like the Federal Transportation
22 Agency, the DCP Red Line Oversight Committee will
23 be listening to the CTA's environmental impact
24 consultant's statement. Our committee will

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continue our review of the locally preferred route, the environmental and engineering requirements. We'll conduct and assemble additional public comments.

MS. WALLACE: Thank you.

MR. TAYLOR: And thank you.

MS. WALLACE: We look forward to written comments for those of you who have more than you can say during your three minutes. Michael Bryant.

MR. BRYANT: (Through an interpreter). Hi. My name is Michael Bryant, and I have been dreaming of this for like a long time. It's amazing how this idea is very similar to what I dreamed about. And, of course, I prefer the UPR route. You know, I prefer that very much because at 95th Street, there's really a lot of traffic there. Like I went there and I went to the other meeting and I tried to explain, but I just want to know what they're going to do for the future. I mean, we discussed like what the plans might be.

I think it's great if the 95th Street line could be set up, you know, on 130th Street, and if they could add that, that would be perfect. But I know the choice -- the decision hasn't been made.

It's a future decision, but I know it's going to be a speedy process -- I know it's not going to be a speedy process. And there's a lot of things that

are going to have to change, but I think the environment will change rapidly with the changes that are going to be made by the CTA. Thank you.

MS. WALLACE: Okay. Ernest Williams and then Lou Turner. Ernest Williams?

MR. WILLIAMS: Coming. Good evening. My name is Ernest Williams, and I'm here on behalf of the Golden Gate Community Association.

The one question that I had was when the Orange Line was extended southwest to Midway, I'm sure that these same studies were done. I think it would be -- it would benefit us to talk to some of the leaders that helped implement that plan and live through the process to see what the line impacted and what the community concerns were at that time to give us something to compare to if you had those feasibility studies that you probably started back when that happened so that we can put it possibly together. Just a thought.

MS. WALLACE: Okay. Lou Turner and then David May. And please restate your name.

MR. TURNER: Hi. My name is Lou Turner. I'm with the Developing Communities Project. You have already heard from the president of our Red Line Oversight Committee.

I think a number of people here already know that the Developing Communities Project has been mobilizing the community and interest and

8 opinions in the community around this project since
9 2003. And we put together a historic referendum in
10 2004 in which 39,000 voters in the 9th and the
11 34th Ward voted for this very project. And that's
12 one of the things that the CTA has included as part
13 of the reasons for their selection for the Locally
14 Preferred Alternative.
15 I have a few things and I will submit it
16 also in a written form, but in the instructions,
17 particularly in the introduction to the folder that
18 you have here, it says that -- the EIS scoping info
19 says that the CTA and the FTA will be preparing the
20 EIS. How will the FTA participate in the
21 preparation of the EIS?
22 Secondly, what weight will public comment
23 have in the decision-making process of the EIS and
24 the preliminary engineering?

20

1 Thirdly, what governmental agencies will
2 also participate? Because it says public comment
3 and governmental agencies or agencies will
4 participate in the scoping process. Will their
5 comment and analysis be made public? If so, where?
6 I assume the EPA and people like that. What weight
7 will their input, that is, the governmental
8 agencies, carry? And if there's a conflict between
9 the input of the public agencies -- excuse me, the
10 governmental agencies and the public comment, how
11 will these conflicts be resolved?

You mentioned the proposal for topics of evaluation. One, it seems to me, especially for environmental impact that becomes important, is to identify brown fields along the route. I assume that there is some kind of map somewhere or there's some process at hand in terms of identifying -- 30 seconds -- identifying brown fields.

Secondly, if these brown fields are identified, I want to know what the process is for minority procurement opportunities for mitigating those brown fields.

And, lastly, what are the scoping -- what is the scoping analysis going to do in terms of

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identifying transit-oriented development opportunities along the route?

MS. WALLACE: Thank you.

MR. TURNER: Thank you.

MS. WALLACE: David May and Harry Brooks.

MR. MAY: I'm David May. I'm here speaking as an individual. I think it's a very valuable project for underserved communities here on the south side, and I think these extension projects are great in terms of leveraging the existing facilities.

The cost estimates I have seen for the LPA seem very high compared to similar projects that have been built in other countries. CTA has a bad record in terms of managing large construction

16 projects, and I recommend that you look at the Army
17 Corps of Engineers' Early Contractor Involvement
18 Process; P3 processes being used in Alberta and
19 Ontario; FDoT's recent I-95 procurement; and how
20 BART is doing the Oakland Airport Connector.
21 In looking at this extension, I thought
22 the design criteria that should have been used
23 would be to maximize the number of customers living
24 within a half mile of a station. So you need more

22

1 stations and you need the routes running through
2 residential neighborhoods; avoiding overlapping
3 coverage with METRA; using existing rights-of-way;
4 running on ground as much as possible; and serving
5 Chicago State and Olive-Harvey.
6 I think a preferable way to design this
7 thing which I think you should consider as one of
8 your alternatives is a one-way loop, a 9 and a half
9 mile long loop, one-way loop, instead of your
10 5 mile two-way design could give you seven
11 stations, for example, at Ford and Rhodes, 103rd
12 and Dauphin, 111th and Langley, 115th and State,
13 114th and Halsted, 107th and Racine, and I-57 and
14 Halsted which would serve many more people within
15 walking distance in your design.
16 It would give you 2 miles on ground in the
17 Bishop Ford right-of-way. It would give you
18 2 miles on ground on the I-57 right-of-way; 1 mile
19 on ground on the abandoned railroad right-of-way;

20 and 3 miles on ground in the excess railroad
21 right-of-way, all which are great improvements
22 compared to your mostly elevated, very expensive
23 guideway design. Thank you.
24 MS. WALLACE: All right. Harry Brooks and

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1 William James. Harry? William, you will be after.
2 MR. BROOKS: Good evening. One of the things
3 that needs to be done immediately is something to
4 relieve the bus turn-around at 95th and the
5 Dan Ryan, because the number of buses that go in
6 and out of there, they have outgrown that terminal.
7 When I was coming here this evening, I
8 happened to get there in just one of those rare
9 moments. I'm sure it was like a perfect storm.
10 All the bus lines, CTA and PACE, plus a Greyhound
11 all were in the station at the same time. And that
12 was interesting to watch, but it caused quite a
13 traffic jam.
14 So I would hope, of course, when this
15 extension is put in that some of those lines that
16 go up to 95th Street now would go to the new
17 stations or that something be done somehow, even
18 though it's kind of landlocked, to expand the
19 terminal because you get all -- you get everybody
20 in there at the same time and it just doesn't work.
21 The 111 bus that I took to get over here
22 stops behind the Number 106 bus, for example. And
23 the Chicago Police Department decided to park a

24 paddy wagon next to where the Number 106 takes some

24

1 recovery time. So I wasn't late or anything, but
2 we had to sit there until it was time for the 106
3 to leave, and there were a couple of other buses
4 that were trying to get out.
5 Now that particular problem could be dealt
6 with if CTA told the police that they would have to
7 park large vehicles elsewhere. But something still
8 needs to be done now and in the future for that
9 95th terminal because, as I said before, and I'm
10 repeating, I know, if everybody is in there at the
11 same time, it's not working. Fun to watch, but I'm
12 sure it's not fun for the drivers.
13 MS. WALLACE: Okay. William James.
14 MR. JAMES: Okay. My name is William James.
15 I've lived in Roseland all my life.
16 MS. WALLACE: Could you please speak into the
17 microphone?
18 MR. JAMES: Yeah. I came here as a teenager.
19 I'm very familiar with Roseland, all parts of it.
20 I have lived all over the community.
21 I have also lived near train tracks.
22 Where I'm at presently, I'm near that Union
23 Pacific. My concern is noise, vibration, property
24 damage. What happens is these trains roll past.

25

Right now, there's a group in our community trying to stop the whistle blowing of the train there. Okay. They're not very successful. They have been campaigning for years. It's not stopping. The train is still blowing the whistle. The noise goes on. I lived there 20 years. I'm now oblivious to it. Other people are not.

With a CTA train running down your mysteriously preferred location -- I don't know who prefers this -- I'm going to have constant noise. I'm telling you now, I don't want you. Go away. Go down Halsted.

I have another issue there. With these train tracks and these stations, I'm going to get dirt. I'm going to get crowds there that I don't want in my backyard. I live very close to 103rd. I don't want you in my backyard. I don't want you crawling through my yard going to the train station. It's an issue for me. Okay?

Another thing that disturbs me is that through these vibrations, they damage the foundations to your homes. Many people who live close to this train have cracked foundations. CTA is going to come, they're going to build their

little train, you're going to go ahead about your business, I'm going to be stuck with damage, more home damage. Okay? I don't want it. These are just issues that concern me.

You're only going to build on one side of the track. Many people are thinking that they're going to get money through eminent domain. You're going to come in and pay them and they're going to move off happy. But there's two sides of that track. When you build that train, elevate it, it's going to be running through some of your bedrooms. That train is up over your head. Only one side is going to get paid. The other people are going to get stuck. And I think we need to keep this in mind. This is not about money. This is about where we live and about our comfort. Thank you.

MS. WALLACE: Are there other folks who would like to comment this evening? Okay. We're going to be available until 8 o'clock to take comment if additional people come in or you decide you want to comment.

For those of you who don't, let me go over a couple of things. If you want to leave, you can leave. If you want to spend some more time at the

board, you are welcome to do that.

So, again, tonight the verbal comments were reported by our court reporter. There's other ways that you can submit your comments. So you can write comments and place it in the box over here. You're welcome also to mail your comments to the contact and contact information listed here. You can e-mail or you can fax your comments.

We also encourage you to keep updated on what's going on with the project, and a couple ways to do that, one is to regularly go to the Web site that you see here on the screen or you can join the e-mail mailing list by writing to Darud.

So thank you so much for your input this evening. We appreciate it. And, again, we'll be available for comment until 8.

(Whereupon, there were no further speakers.)

(Public Hearing adjourned at 8 o'clock p.m.)

STATE OF ILLINOIS)
) SS:
COUNTY OF C O O K)

ANNA M. MORALES, being first duly sworn, On oath says that she is a court reporter doing business in the City of Chicago; and that she reported in shorthand the proceedings of said Public Hearing, and that the foregoing is a true and correct transcript of her shorthand notes so taken as aforesaid, and contains the proceedings given at said Public Hearing.

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15 Certified Shorthand Reporter

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CHICAGO TRANSIT AUTHORITY

PUBLIC HEARING

"RED LINE EXTENSION

CONNECTING 95TH STREET STATION TO 130TH STREET"

September 24, 2009

STENOGRAPHIC REPORT OF PROCEEDINGS had in the above-entitled matter held at the Woodson Regional Chicago Public Library, 9525 South Halsted Street, Chicago, Illinois, commencing at 6:48 o'clock p.m.

PRESENTERS:

MR. DARUD AKBAR, Government & Community Relations Officer, Chicago Transit Authority

MR. JEFFREY BUSBY, General Manager, Strategic Planning, Chicago Transit Authority

MS. SARAH LAYTON WALLACE, Moderator

Reported by: Anna M. Morales, CSR, RMR
License No.: 084-002854

(Whereupon, the following proceedings commenced at 6:48 o'clock p.m.)

MR. AKBAR: Good evening, everyone. My name is Darud Akbar. I'm with the Government & Community Relations Department at the Chicago Transit Authority. I want to welcome and thank everyone for coming to the Red Line -- this is actually our second public scoping meeting. So I want to thank you for coming out this evening.

I'm going to turn things over to Sarah. Sarah is going to talk to us about tonight's agenda, and then we're going to go into a brief presentation and come back to Sarah to explain what our rules and regulations are for this evening. So thank you once again.

MS. WALLACE: Great. Good evening. Before we get started, I want to check, is there anybody in need of Spanish translation? Okay. So we have that service if anyone is in need of that.

As you see from our agenda this evening, we've just completed the open house portion of the meeting. In just a moment, I'm going to turn it over to Jeff Busby, and Jeff is going to give a

brief presentation on the project, and then we're going to go into the formal public comment period of the meeting. And right before we do that, I will walk through some guidelines. We are going to be limiting comments to three minutes. So be thinking about that now as you are composing your thoughts, those of you that are speakers. I will

go over some other things to get us on track. After the public comment period, then we'll go over some next steps and adjourn the meeting.

And I do want to note that if we conclude before 8 o'clock, you will be, you know, free to leave if you want at that time, but we are going to stay here and available for anyone who arrives and still wants to comment. So we'll remain here until 8 o'clock for sure.

So with that, Jeff will provide a presentation.

MR. BUSBY: Hi. Thanks for coming out again. I'm Jeff Busby. I work in the Planning Department at CTA.

I wanted to give you a background on where we are on the Red Line Extension. Really, the idea for bringing the Red Line further south has been

around for a very long time. In the 1960s, when they were building the freeways, they left space for a Red Line Extension; and, recently -- and this is not a new problem -- but recently the CTA has started a study called an Alternatives Analysis, and that study is intended to look at a whole range of transit options to try to improve some of the transportation problems south of 95th Street.

Many of you are aware, if you take CTA, that the 95th Street station is very crowded. There's lots of buses going there and there's lots

of delays associated with getting there. So people have very long trips sometimes to get to the existing station.

So what we could accomplish with an extension of the Red Line is shorter and faster trips for people to get to CTA services as well as solving some of those congestion problems at the 95th Street station.

As I mentioned, we started this study in 2006. We looked at a whole range of options and identified a couple of options which we're going to talk about tonight which we're advancing into this next step. Part of the Alternatives Analysis

included public involvement. So we've been to Woodson Regional a couple times and actually had a series of other meetings -- three rounds of meetings with six total meetings prior to this leading up to tonight's recommendation.

The local -- I'm sorry. The Alternatives Analysis ended in August when the Chicago Transit Board adopted what's called a Locally Preferred Alternative. It's the one option that, resulting from the study, looks to be best at solving the problems we've identified, and that is an extension of the Red Line, following or running next to the Union Pacific Railroad at about 400 west. I will show you a map in a moment.

So tonight's meeting starts the

Environmental Impact Statement which very much relies on the previous work we completed in the Alternatives Analysis.

So what's an Environmental Impact Statement? The CTA is hoping to use -- to ask for federal money to pay for a portion of the extension; and any time you use federal money for a large project, you have to comply with the National Environmental Policy Act. And the National

Environmental Policy Act, or NEPA, requires that the CTA in a public setting identify and evaluate the potential impacts of both building an extension and operating an extension for the Red Line.

And the idea here is to help us make decisions about the environmental impacts and where -- and they're both positive and negative environmental impacts -- but where we identify negative environmental impacts, come up with potential ways to mitigate those, make them less adverse.

This is a schedule which gives you an idea of where we're headed. As I mentioned, we're starting the environmental process tonight with these scoping meetings. We had a meeting, very same presentation, a couple of days ago on the same subject. We're receiving input on what we should study in this environmental process.

We'll come back to you next year with the

results of the environmental process in what's called a draft EIS, a draft Environmental Impact Study, and that's your opportunity to review both the impacts we've identified and what we proposed to mitigate them.

At the same time, we're going to be asking the federal government for additional funds and permission to start more detailed engineering. That's called preliminary engineering on this map. We think that process would take about two years. And so by 2013, we would need to have identified all of the money, both the federal and the nonfederal share, to fund the extension, and we would need federal permission to begin the final design.

2013 would be the year in which we would start construction. We show a three-year construction period; and the Red Line Extension opening for operation in 2016.

It's important to point out that this is our targeted schedule. It's not something we can guarantee. There's a couple of reasons for that. As I mentioned, we rely on additional funding from Washington, D.C., to continue these studies, and we also rely on permission from the Federal Transit Administration. But we think this is an achievable target and we're going to pursue it.

We're going to study alternatives, project

24 alternatives in the Environmental Impact Study.

7

1 This is a list of them. The first alternative is a
2 No-Build Alternative. It's really important as a
3 point of comparison. What this alternative is is
4 what would be the impact to the environment of not
5 doing anything?
6 We're also going to study what's called a
7 Transportation System Management Alternative.
8 That's a very long name, but what it means is a
9 lower cost alternative to building a rail
10 extension. In this case, it would be an express
11 bus service with limited stops; some technology to
12 help speed the buses down the road through giving
13 them priority to traffic signals; and a pretty
14 significant expansion of the station at 95th Street
15 to make the buses in that corridor work better as
16 well as accommodate new buses in this alternative.
17 We also will be studying what's called the
18 Locally Preferred Alternative, an extension of the
19 Red Line following the Union Pacific rail
20 right-of-way, an elevated extension, I should point
21 out.
22 And we have identified a fourth
23 alternative which is also an extension of the
24 Red Line but follows Halsted Street.

8

Let me show you a map of the Locally Preferred Alternative. So starting with the map on the left, the Red Line would run south from 95th Street in the middle of the I-57 highway, and then it would climb up out of the highway and run elevated at about 400 West Eggelston Avenue and would travel next to the Union Pacific rail right-of-way all the way south to 130th. It would make four stops. The stops are at 103rd, 111th, 115th and Michigan, and 130th and the Bishop Ford Expressway close to Altgeld Gardens.

We're also showing two options here, the reason there's two dotted lines. We have a choice of being on the east or the west side of the freight rail tracks.

The Halsted alternative is a similar link. It runs about a half mile to the west. So, again, the train would use the median of the expressway, I-57, traveling south. When it gets to Halsted Street, it would go into the air and run down the middle of Halsted Street, above the street. It would make four stops again at 103rd, 111th, and 119th, and at Vermont which is about 127th.

This is an elevated structure. The

columns to support the elevated structure would be made of concrete most likely and be placed in the median of Halsted Street.

So those are our four alternatives. We are interested in your comments tonight. I'm going to turn things over to Sarah to give you some instructions on how we're going to receive those.

MS. WALLACE: Okay. It's time for the comment portion of our meeting; and, as promised, I want to go over a few things with you.

Because we're working on this environmental study, there are sections that we need to write and we need your input in order to do that. So we would ask you to focus your comments tonight on these areas: The purpose and need for the project; the proposed alternatives; the proposed environmental issues to be examined; and the potential environmental effects and the mitigation measures to be considered. So those are the areas we specifically need your input.

Some guidelines. If you haven't done so already, please submit a speaker card, and we can collect those and they will be brought up front. I'm going to call speakers by name. I will

probably call several at a time so that you can get lined up and prepared to speak. Here's the mic you will use, the standing mic on that side.

The first thing you will want to do is restate your name. I may not get the pronunciation right, and we want to make sure that we have that right for the record. We've got a court reporter

here that is going to be documenting your comments.

You'll have three minutes to comment. The good news is you're not going to have to try to keep track of where you are in that three minutes. We have this stoplight here that is going to assist you in that process. So once you start, we'll turn that on and the green light will turn on, and that lets you know that your three minutes are starting. Once you have 30 seconds left, the light will go yellow. And once you have 15 seconds left, the light will be flashing yellow. So that kind of helps you gauge wrapping up your comment. And once it turns red, that means your comment period is up.

So we would like everyone to keep to the three minutes so that we can keep things moving and we're hearing from everyone who wants to speak tonight.

11

Because we're here tonight to hear from you -- that's the whole purpose of the meeting is to hear your comments -- CTA is not going to be responding to your comments tonight. We're going to be listening. We're going to be documenting and all your comments will be documented in the report.

So we would ask you to -- there are two folks from the CTA here. We would ask you to direct your comments to them, but do, again, keep an eye on the light.

So our first speakers up: Thomas Brown,

12 Senior, followed by Rob Kelsey, and I believe this
13 is McClellan. So are those folks here?
14 Yes. And I do want to remind everybody,
15 if you haven't done so already, turn off cell
16 phones or pagers or at least change the setting to
17 vibrate so that we don't cut into people's time
18 that are speaking.
19 Could Thomas Brown, Senior, please
20 approach the microphone? Go ahead.
21 MR. BROWN: Again, my name is Thomas Brown,
22 Senior. I live directly in the area where the
23 proposed train will be built and constructed. My
24 comments center around myself as well as my

1 neighbors. I'm right on 325 West 99th Place,
2 directly in front of Wendell Smith Park, and most
3 of my neighbors are senior citizens.
4 So in the environmental study, I would
5 like for you all to take into consideration the
6 fact that a lot of the homeowners are senior
7 citizens and the fact that we would want -- we
8 don't want to be -- they don't want to be disrupted
9 unduly, and just to take those factors into
10 consideration in the environmental study, as well
11 as Wendell Smith Park is a park that is utilized,
12 and also to look at, in addition to what you're
13 already studying, the noise impact and the safety
14 impact of that park.
15 Another comment I would like to make is

the fact that the proposed plan going down Eggelston Avenue, it's very residential, and there's definitely some concern about having a commuter line directly through the residential corridor that's there. Those are my comments. Thank you.

MS. WALLACE: Thank you. Rob Kelsey, and then McClellan, and then Dorothy Boyd.

MR. KELSEY: Good evening, everyone. My name

is Robert Kelsey. I'm a Chicago Public School counselor. I work in the West Pullman area, Gompers Fine Arts Option School.

As a counselor, I fill out numerous applications, help students fill out applications for high school. And being an educator, I also recognize that a number of students don't get downtown unless it's a field trip a lot of times. So this new Red Line or -- I'm not sure exactly what this -- Red Line Extension will be helpful in a lot of aspects.

I heard the speaker before me. He had a lot of excellent concerns there, but I think there's also some advantages for some of our younger people. So that's my comment. Thank you.

MS. WALLACE: Okay. McClellan? Could you state your name and speak directly into the mic?

MS. McCLELLAN: Gina McClellan. I have three concerns. The lighting around the tracks that are

20 going to be made, and I was hoping that we could be
21 able to see some kind of visual, what this was
22 going to look like, but for security reasons, will
23 it become dark like the El stations down by Lake
24 Street? That was a question.

1 The construction time, how long is this
2 going to take, 2016? And then once you start, what
3 does it do to me? Is it going to be three, four
4 years where I'm going to be inconvenienced where I
5 can't even get into my home since I'm right off of
6 Halsted Street.
7 I'm concerned about the noise level that I
8 will have to live with the trains going constantly.
9 I'm concerned that the parking lot that you're
10 going to put there, when it's filled, that I can't
11 park on my block because I'm one block off of
12 Halsted. So are those things being taken into
13 consideration, too?
14 MS. WALLACE: Okay. Dorothy Boyd, Lou Turner,
15 and Ben Christy.
16 MS. BOYD: My name is Dorothy Boyd. My concern
17 is the families on Eggelston Street; I need to know
18 if they're going to be relocated. We don't want to
19 be relocated.
20 I want to know how the property value, how
21 will that affect us? And I want to know about the
22 incoming traffic that this is going to cause.
23 There are a lot of seniors in our area,

24 and we do not want to move. We already have that

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1 train that goes down Eggelston. It keeps up a lot
2 of noise. We need another batch of noise like we
3 need two heads. I'm not seeing this.
4 MS. WALLACE: Lou Turner, Ben Christy, and
5 John Paul Jones.
6 MR. TURNER: Hello. My name is Lou Turner.
7 I'm the Public Policy Director for Developing
8 Communities Project which is a project for the last
9 six years.
10 My concern is really just singular
11 tonight -- I spoke on Tuesday -- and that's the
12 impact, the positive impact, the collateral
13 benefits that this project could have for the
14 residents in Altgeld Gardens, 130th Street, which
15 is where the Red Line Extension would end.
16 Back in 2005, we did a study which showed
17 that of all the households in this area, one out of
18 four of these households don't have or don't own an
19 automobile. That's the same as the 9th Ward in
20 New Orleans; and were the same kind of catastrophe
21 to hit, we would have the same kind of crisis of
22 this community that we saw in New Orleans at the
23 time of Katrina.
24 I think that given the history of

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transportation planning, in big cities like Chicago, where very often minority communities have been more the victim than the beneficiary of transportation planning, this is an opportunity and, particularly out of Altgeld Gardens, to really provide access to one of the most isolated communities in the city. This is an opportunity to use transportation planning to provide benefit rather than victimization of a minority community.

So I would ask that the Environmental Impact Statement look at the environmental impacts that would be for the residents at Altgeld Gardens; and the fact that Altgeld Gardens is an area that has high toxicity; a lot of waste sites surround the area. It is one of the highest levels of cancers in the city amongst any group of people.

And so with the construction of this Red Line Extension, it seems to me that one of the key environmental impact factors or areas of analysis should be the impact that the construction of the Red Line Extension would have on mitigating the toxic degradation out at Altgeld Gardens and the opportunities that would provide for a very isolated community.

So, again, I urge that CTA really focus singularly on Altgeld Gardens and really push the LPA, the Locally Preferred Alternative, which is the one that would go to 130th Street. None of the

impacts that are mentioned here, a number that others can think of were mentioned, would really be mitigated by the other alternatives. Only the alternatives, the LPA going down to 130th Street near Altgeld Gardens would really impact favorably these communities in these areas. Thank you.

MS. WALLACE: Ben Christy, then John Paul Jones, then Donald Miller.

MR. CHRISTY: Yes. I'm Ben Christy. I don't live in the area. Instead, I use the Red Line to get to the area. In fact, I didn't go to the other impact study because I couldn't -- you know, I'm sure there's a bus that gets by there; but 95th, 95th station, what bus to use and everything, I just didn't do it. So that's why I'm here today instead of Tuesday.

I actually do live right next to the Red Line by Berwyn. Come on by and say hi. The noise of the train, hey, it's a train. When I grew up, I lived a block away from the train. Now I

live just across the alley from a train. Yes, it's a noise. You get used to it. So don't worry too much about that.

The thing I'm worried about is the TV reception every time a train goes by. With this new better TV? No way. Anyway, that has no effect with this group.

What I see on the alternatives here is

that there are people in the Halsted area that don't want their train down Halsted; but, if I wanted to get to Halsted there, I would use the train to get to your businesses.

The plan -- the LPA, which is not the Halsted, does have the positive that it could help bring people in from out of state if we have enough parking, park-and-ride spaces. So I would expect you to decide how many park-and-rides you want and then triple it.

Other than that, we need more trains. For years, we've needed more trains. Some people will be discomforted by the building of them, but don't let that keep us from plowing ahead. They have said for years that they expected to extend this, but they haven't.

MS. WALLACE: 30 seconds.

MR. CHRISTY: So please give us -- give us our ride, extend it as much as possible. Thank you.

MS. WALLACE: John Paul Jones, and Donald Miller, and Thomas Jundanian.

MR. JONES: I'm John Paul Jones. I'm an organizer for the far south region, also a resident in the Englewood District. For 50 years, I've been involved in organizing and urban planning, and I have seen a significant value in the Union Pacific Railroad corridor. And if you look at the far south region, they have always had a challenge of

public and private -- the investment. That Union Pacific corridor provides a venue where you can begin to introduce to the community, a very urban community, a whole new set of ideas and investment around transit and developing that and turn that corridor, provide venues so that the end of the station can add value to the property, at the same time, give greater access to the greater part of Chicago.

Also, from Englewood, we've always had challenges with getting transportation to jobs; and with the Union Pacific Railroad corridor, again,

you can begin to hire a lot more people, connect with the south suburban communities that are going to have job growth, much more than you get in Chicago during the economic downturn.

But, also, the environmental impact piece that we're concerned about and want to speak to tonight, that corridor, much like rail corridors throughout my community of Englewood, areas where there's always a decline of public investment and through the years you had accumulation of blight, if you look at that corridor, you look at a corridor that is over ran with many forestries now. There's open space that's been denied any real attention for many, many decades.

So it's an opportunity for you, the city and the community, to kind of think through how do

we use these corridors more wisely and strategically to improve our community, encourage reinvestment, and increase the travel time for us to get to work or recreation and other venues.

So it's a real plus for the region more than a negative. I would want to encourage that more -- supporting what the person said from 95th Street corridor. Certainly, we want to be

careful and considerate of the residential impacts. We want to be very careful of the impact to the brown field districts, but also opportune as possible relative to the eroding issues. We certainly want to be helping the community anticipate and remediate any particular eroding problems that may occur in some of these wooded areas that have been neglected for 30 or 40 years.

So we want to use that opportunity to work more closely with any governmental plan to figure out ways to impact the environmental impact on the roads maybe through this reconstruction strategy. Thank you.

MS. WALLACE: Donald Miller, Thomas Jundanian, and Lori Baldwin.

MR. MILLER: Thank you. My name is Donald Miller. I heard a lot of complaints -- concerns, rather, about the environment and the noise and how the train would sound coming through the communities. But this is dealing with rail. I

21 think we should take a model from some of the rails
22 that run on the north side. You know, you are
23 going to have these type of problems.
24 What we are trying to do is get a system

1 that would fit our community, that would be
2 accessible for us to get in and out of our
3 community efficiently and safely. And I would
4 think the transit people should look at the highest
5 concentration of the population, where could -- the
6 highest volume of population and let the train be
7 used in that corridor, in that area where the
8 population would be affected the most.
9 And I think it's an excellent idea because
10 the south side of Chicago needs a little bit more
11 of a public system in our community, and I'm for
12 it, and I hope that it happens very soon. Thank
13 you.
14 MS. WALLACE: Thomas Jundanian, Lori Baldwin,
15 and then Bradena Thomas.
16 MR. JUNDANIAN: Good evening. My name is
17 Thomas Keith Jundanian. I'm the third generation
18 owner/operator of an 85-year-old Roseland-based
19 business. I'm a Roseland boy, born and raised.
20 I have a different perspective on this
21 than maybe some, having grown up in this community
22 and having our family business based here all the
23 time, all those years. I'm not 85, but -- don't
24 rush me.

On the heels of Donald's comments, I too kind of feel like the south side of the city has been a very neglected location in our beautiful metropolis, and it would be -- I think either one of these plans are going to be a positive thing for us. I'm not qualified to say which one is going to be better than the other.

Initially, I was surprised to find out that the LPA was the preferred alternative with more public support because it seems that it's going to disrupt some lives, some memories, some households if it occurs on the east side of the tracks. If it's on the west side of the tracks, I know from my own childhood and playing in some of those empty lots, there's more industry over there.

My business is located on Halsted Street at 116th Street. It's the K. A. Pridjian rug store, that big old rug store there on Halsted Street. So one of the concerns that I would have as a business owner having seen long construction projects mean the demise of some businesses that have been interrupted with their traffic flow.

What have previous construction projects like this and studies that have gone on indicated

with those businesses? How are they impacted? I have got nothing to base this on. When this trestle goes up on Halsted Street, what is it going to look like? It's probably going to be concrete. Jack and I were talking outside. Would it be something that's attractive? Will the elevated tracks all the way down Halsted Street create a lot of dark shadows, a lot of shadowing areas where people can congregate and do things that are not in the best interest of the community? Will the trestle be placed where garbage and other debris and litter accumulate? Will it be a blight to Halsted Street?

As far as bringing people down Halsted Street, yeah, it will. The stations are going to be -- you know, 111th and 119th are a mile apart. So that's still quite a ways to try to get to one of the businesses. I was chatting with a lady who also has a building at 108th and Halsted. That kind of encapsulates some of my concerns. I think either one of these things are a positive thing for the south side, whichever is best for our city and our community. Thank you.

MS. WALLACE: Lori Baldwin, and then

Bradena Thomas, and JoAnne Guillemette.

MS. BALDWIN: I am Lori Baldwin, and I'm representing the West Chatham community and the Park Advisory Council of that area, but I'm also

5 part of the Red Line Oversight Committee.
6 I would just like to interject that I'm
7 thanking the FTA for requiring this public hearing
8 as well as CTA for selecting the Union Pacific
9 Railroad as the locally preferred route,
10 particularly, because this route will give the
11 greatest need and take care of a lot of the needs
12 of disparity that we have had in that community for
13 a very, very long time on the south side of
14 Chicago, to give us more transportation options; as
15 well as we have had the opportunity on
16 September 18th, some of the members of DCP Red Line
17 Oversight Committee toured the entire Union Pacific
18 Railroad, and we examined the physical and
19 environmental conditions and the impact along the
20 corridor, and we found that there are documented
21 parkways, homes, small businesses, and tracks of
22 forestry along that route.
23 However, most of that route, as has been
24 stated before, is open space, and so this would be

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1 a great asset to the community. Also, because of
2 the need for us to have transportation in this
3 area, and it's been such a long, long time, this is
4 the area that I think the city should be focusing
5 on much more than some of the other options.
6 We also looked at the environmental
7 impact, and this provided greater access to a
8 number of residents. And also this route had less

environmental impacts in terms of conditions and areas and the taking of homes.

So I, again, just want to encourage you and let you know that the community will benefit from this new development. Thank you.

MS. WALLACE: Bradena Thomas and then JoAnne Guillemette.

MS. THOMAS: My name is Bradena Thomas. I am concerned as a senior living in the area. In fact, I'm right at 97th and LaSalle which is where 94 and 57 split.

My concern is whether or not there would be an elevated track right behind me or whether it's going to be recessed?

Also I have a business, a building on Halsted at 108th. Now is this going to be an

elevated structure which would darken, you know, the area? So that is my concern for both. But I definitely wouldn't want an elevated area looking out of my backyard. That's my concern.

They do need transportation to the south because 95th is extremely congested, and I realize that; but, hopefully, I wouldn't want to have to move. Thank you.

MS. WALLACE: JoAnne Guillemette.

MS. GUILLEMETTE: Good evening. My concerns have been previously stated by several others, but to say it as succinctly as possible, my concern

13 would be for the increased foot and vehicle
14 traffic; the increased debris; as well as the
15 increased crimes that would follow a structure like
16 this.
17 I have lived near the Red Line and I know
18 that it also -- because of the activity and
19 vibration of the ground, it increases the presence
20 of termites and other rodents. And when you're
21 dealing with termites, you're talking about the
22 destruction of homes; and, to prevent it,
23 homeowners would incur tremendous expense on a
24 yearly basis to ward off the termites. So that's

1 an extreme concern for me. And I would hold that
2 for other homeowners as well.
3 Further, who would bear the maintenance
4 expense of this extension? Because the homeowners
5 nearest the tracks, are their property taxes going
6 to increase? Is their property value going to go
7 down? And what mechanisms are being put in place
8 to address these issues? Because it's my feeling
9 that you're going to go ahead with this in spite of
10 what we say. And especially if we should be
11 successful with our bid for the Olympics, this is
12 going to be a major development. It's going to be
13 pressed forward, and the residents need to know the
14 true impact on them in terms of dollars and cents.
15 Thank you.
16 MS. WALLACE: Could you please restate your

name for the record?

MS. GUILLEMETTE: JoAnne Guillemette.

MS. WALLACE: Thank you. Are there any other speaker cards? Gwendolyn Rice and then Barry Finkel.

MS. RICE: My name is Gwendolyn Rice, and I work for Developing Communities Project which has been working with this issue for six years.

MS. WALLACE: Could you get little closer to the mic, please? Thank you.

MS. RICE: But I think I'm coming from a more personal point of view, because all the other issues have been talked about.

For the last I won't say how many years of my working life, I have worked in one way or another with residents of Altgeld Gardens as a counselor or as a recreation worker or just simply knowing children who live there or adults who live there. And I remember and I just -- my mind was refreshed on the way in when one of the workers outside mentioned that she had lived in Altgeld Gardens and she remembered having to take the PACE bus into Chicago and then taking a CTA bus and then finally getting to the Red Line.

But I remember also having to take kids home at night because the transportation was not available for the kids to take advantage of the amenities in Chicago. I remember many times having

21 to do that, even in the afternoon having to do
22 that, which I didn't mind doing because I could do
23 it. But their parents may not have always been
24 able to do that, provide the access.

1 This project is going to provide access to
2 what is a transit disadvantaged community. We are
3 kind of in competition with other lines throughout
4 Chicago that are going beyond the city limits. On
5 the south side, there's nothing that goes to the
6 city limits. And I really say that we must take
7 that Locally Preferred Alternative through to
8 130th Street. I don't think there's an
9 alternative. That's the only option.
10 I don't know what else to say, but I just
11 am passionate about the fact that you're going to
12 Altgeld Gardens, an isolated community that is not
13 outside of Chicago. It is in the Riverdale
14 community area of Chicago -- not in Riverdale,
15 Illinois -- and it's important that the CTA go at
16 least to the city limits to serve its constituents.
17 It will also serve people who live in the suburbs
18 who commute to Chicago who will have a chance to
19 park and ride and ride downtown and eliminate a lot
20 of pollution.
21 Again, I just want to speak on behalf of
22 the residents of Altgeld. I don't live there, but
23 I have been there many times. I have worked there,
24 and it can make a big difference in providing an

opportunity for people to have access, to be able to be exposed to the larger community. As the teacher said earlier, people generally who live in transit deserts do not get out and understand what's going, and it would cut down on violence and cut down on a lot of other factors. Thank you.

MS. WALLACE: Thank you. Barry Finkel. If there is anybody else who wishes to speak, send your speaker card in.

MR. FINKEL: My name is Barry Finkel. I have been a resident of the Beverly area, 103rd and Western, since 1951, and I take the Red Line downtown at least once a week. I see at 95th Street station lots of PACE buses coming in from the south suburbs, and I think an extension of the Red Line would help in getting those buses -- to get the train and not have to come all the way to 95th Street to service those people.

We're talking here about public transportation, and I see in all the alternatives, there's talk of park-and-ride. It seems to me, and I have sort of a disagreement with some of the speakers, but it seems to me that if we have good feeder bus lines into the stations, there's no need

to have a large park-and-ride facility at each

station. Maybe at the farthest station. But I don't see really a need, for example, a big park-and-ride station at 103rd and Halsted. There's no room there for a park-and-ride, and I don't see any need for it. Thank you.

MS. WALLACE: Alice Harper-Jones.

REV. HARPER-JONES: Good afternoon. I am Reverend Alice Harper Jones. I'm the Dean of Cluster 6 of Chicago Metropolitan Association of the United Church of Christ and represent about 13 churches on the south side. And I'm also a member of the Chicago State University Alumni Board, and so I'm speaking, commenting on two things.

The first one is our churches. There are people who live on the far south side who will have better access to the church, being able to get there and to get back home again, especially those who do not have cars or sometimes you wake up and the car is not working. So I think that would be positive for those people.

Also, from Chicago State University. I'm thinking in terms of our academic program that we

have there, it would be better accessible to many, many people; and those young people that we're trying to attract to the university would certainly be able to have access to and from the university. Especially if a person is working, they can come in

the evening to attend the university and be able to go back home again without having to, you know, wait for buses and everything on 95th Street because Chicago State is very accessible to 95th Street right there.

My concern is that -- one of the proposals I looked at, the Halsted Street would still -- there's still a gap it seems like from Halsted Street all the way to the Altgeld Garden projects there. So in constructing, you know, that Halsted Street project -- and I'm kind of leaning toward Halsted because you're not destroying homes. But if you can, you know, think in terms of your construction of getting that closer to the people in the project, then they don't have to take a bus from Halsted to where their home is so that they would be able to have access to the university and to the churches.

Again, as I say, I prefer the Halsted one

because then we're not destroying homes. People have lived in this community -- I live in the community. I know the value of my home, and I don't believe that if you give me fair value that it will be -- you know, it would really come to where I think that my home should be priced at because of the improvements I have made.

So that should be a consideration especially when we think about seniors who have

been there for years and who take pride in their home and their neighborhoods and their friends around there, that to destroy that community, you know, with the train is not a preferred option. Thank you.

MS. WALLACE: William Warren. Please restate your name.

MR. WARREN: Good evening. It's William Warren, W-a-r-r-e-n. I'm here representing the Vernon Park Community Council. I'm president of the Vernon Park Community Council. We live in the area as well. I'm also a member of the Oversight Committee who had the opportunity to do a tour of the actual site last week -- actually, this week.

And, you know, we feel that by all means that the Red Line should be extended to the south side. We're in support of it. We think it would be a positive move in every respect. A lot of comments that were made earlier in reference to the rodent issues, the way the tracks are going to look, the lighting issues, the garbage and that sort of thing, of course, we're very concerned about those issues, but we feel very in support of bringing this extension to the south side. Thank you very much.

MS. WALLACE: Are there other speakers? Okay.

Again, we're going to be here until

8 o'clock if others arrive and still want to speak. I did want to mention that scoping comments are due by October 27th. So in addition to speaking tonight, you have an opportunity to write comments and place it in the box outside. You have an opportunity to mail in comments, fax or e-mail your comments. And we'll make sure this is back up for your reference.

We also encourage you to stay involved. You can visit this Web site. You can also get on an e-mail list so that you can receive updates

through e-mail and through Darud, if you'll e-mail him.

Any other comments at this time? Have you filled out a card, sir? Right now, we're taking public comment. If you want to fill out a speaker card and come to the mic --

MR. TURNER: I did.

MS. WALLACE: Well, three minutes is the rule. Are there others that want to speak?

We'll stick around. You are welcome to spend some more time out at the boards if you like or you are welcome to head on out, but we'll be here until 8 o'clock.

(Off the record at 7:34 p.m.)

(On the record at 7:46 p.m.)

MS. WALLACE: Johnnie Burke. Please restate your name and speak directly into the mic.

MS. BURKE: Johnnie Burke, and I'm a member of the 96th and Prairie Block Club. I had two questions. One, how many residences would be disturbed with the park-and-ride construction? And also, in the entire project, how many residences would be destroyed? How many people would be removed from the community? Thank you.

(Whereupon, there were no further speakers.)
(Public Hearing adjourned at 8 o'clock p.m.)

22
23
24

1 STATE OF ILLINOIS)
2) SS:
3 COUNTY OF C O O K)
4
5 ANNA M. MORALES, being first duly sworn,
6 On oath says that she is a court reporter doing
7 business in the City of Chicago; and that she
8 reported in shorthand the proceedings of said
9 Public Hearing, and that the foregoing is a true
10 and correct transcript of her shorthand notes so
11 taken as aforesaid, and contains the proceedings
12 given at said Public Hearing.
13
14 _____
15 Certified Shorthand Reporter
16
17
18
19
20
21
22
23
24

RS-52

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, November 04, 2009 4:47 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Request for Comments -- Department of Streets and Sanitation - Proposed Red Line Expansion

---

From: StreetsAndSan [streetsandsan@cityofchicago.org]
Sent: Monday, November 02, 2009 2:39 PM
To: Red Extension
Cc: Ernst, Jonathan
Subject: Request for Comments -- Department of Streets and Sanitation - Proposed Red Line Expansion

Mr. Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
RedExtension@transitchicago.com
OrangeExtension@transitchicago.com

Dear Mr. Busby:

I am writing in response to your request for comments regarding the environmental reviews that will take place pertinent to the potential expansions of the Red and Orange Lines of the Chicago Transit Authority.

For both projects, the City of Chicago's Department of Streets and Sanitation (DSS) would like the review committee to consider the following comments and concerns regarding the expansions during the environmental review process:

1. The location of any street lights that will need to be removed or relocated as a result of the new lines;
2. An analysis of the affect these elevated concrete supports will have on street level lighting and any steps that will be taken to supplement street lighting in these areas, i.e. CTA-provided lighting on the underside of the elevated line;
3. The location of any public way trees that will need to be removed as a result of the new lines or the construction activity and a replacement strategy for those lost trees;
4. The level of assistance the CTA expects to request from DSS for services such as street "No Parking" postings and the towing of illegally parked vehicles during the construction phase of these projects;
5. The creation of a rodent abatement plan for the affected land which includes required sign-offs by the DSS's Bureau of Rodent Control prior to construction;
6. A plan for the proper storage, removal and recycling of all construction and demolition debris in accordance with all City of Chicago ordinances; and
7. A commitment to having platform level recycling containers and space at street level for the storage of recyclables prior to being separately collected from the garbage.

Thank you for your consideration of these issues

Sincerely,
(SIGNED)
Thomas G. Byrne

Commissioner
Department of Streets and Sanitation
TGB:je:lps

EMAIL/Busby.CTA.email.environmental review

cc: Jonathan Ernst

RS-53

City of Chicago
Richard M. Daley, Mayor

Department of Environment

Suzanne Malec-McKenna
Commissioner

Twenty-fifth Floor
30 North LaSalle Street
Chicago, Illinois 60602-2575
(312) 744-7606 (Voice)
(312) 744-6451 (FAX)
(312) 744-3586 (TTY)
http://www.cityofchicago.org

October 30, 2009

Mr. Richard L. Rodriguez, President
Mr. Jeffrey Busby, General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

Dear Messrs. Rodriguez and Busby:

The Department of Environment (DOE) appreciates the opportunity to comment on the proposed extension of the Chicago Transit Authority (CTA) Red and Orange Lines. We are supportive of both projects and the increased service to currently under-supported communities.

Three sections follow; the first is a list that applies to both projects, the second focuses on the Red Line, and the third on the Orange Line.

BOTH PROJECTS

Please evaluate:

- Recycling opportunities at stations and parking areas
- Alternative energy options including solar, solar thermal, wind and more to provide electricity and heating / cooling where needed
- Opportunities to install solar arrays (on rooftops, large expanses, etc.) to return energy to the grid
- Reduction of light pollution through the use of downward-facing lighting
- Compliance with the city's stormwater ordinance, including using bioswales, rain barrels and other methods to reduce the first flush of water into the sewer system
- Native landscapes requiring little to no irrigation
- Green roofs on any facilities
- Bicycle access and parking
- Permeable paving for the Park-N-Ride areas
- Preferred parking for fuel-efficient vehicles
- Charging stations for electric vehicles
- The City's new Soil and Rubble Reuse Intergovernmental Agreement applicability – extensive reuse of materials during demolition and construction could be possible
- Impacts to wildlife or other important natural resources

NEIGHBORHOODS Alive!
BUILDING CHICAGO TOGETHER

CHICAGO WORKS TOGETHER

RED LINE

DOE will be constructing the Ford Calumet Environmental Center, a 38,000 square foot environmental education facility near 130th and Torrence in Chicago. We are supportive of a joint Metra / CTA station at 115th Street and are very interested in the possibility of an intermodal connection between NicTD/South Shore Line and CTA at 130th Street. These joint stations would allow residents from Indiana and the suburbs to easily gain access to our Center. We would also invite discussion around a bus turnaround at the Center for the 130th and Torrence buses or other buses with similar routes.

ORANGE LINE

Of particular concern to DOE are issues relating to neighborhood compatibility and environmental justice, primarily in relation to historical and/or privately owned parcels that may need to be acquired for the project. DOE would also be interested in a detailed evaluation of noise and vibration, including additive effects associated with Midway airport operations, to determine how such issues will affect neighboring properties.

We offer our support and assistance with any of our comments as appropriate. Thank you for the opportunity to comment on these important projects.

Sincerely,

Suzanne Malec-McKenna
Commissioner

cc: Nicole Kamins
Kevin Laberge

SMM/NRWQ/nlk

KS-54

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Helen Rockingham

Organization: Home Owner Title:

Address: 11340 S. Princeton Ave.

City: Chicago State: IL Zip: 60628

Phone: 773-821-0208 E-mail: helen_rockingham@att.net

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

Even though there was one other option presented at the Septs 22nd, Scoping Meeting I can't see the purpose being fulfilled using it or the HRT Alternative route. Your goals as stated on page 11 appears to be more efficiently implimented by the Locally Preferred Alt. West and South side of the exsisting track. That being said, What is the distance from the track of property in need of occupancy removal? Where on the time-line would those individuals be contacted? How would these persons be contacted? Who (what division of Management) will be responsible for those notifications? Will the Engineers now be aware + take under consideration the ability or inability of homes that structurally could not withstand the building/construction affects (the shifting of landscape) consequently home structures upon opening the rail-traffic.

I think the age of the structures must be taken into consideration not only distance.

I commend you on your objectives - Knowing how very much this new system effort is needed and I hope an open and fair Communication Line will continue throughout the Project at

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

RS-55

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Thursday, October 29, 2009 8:35 AM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW:

From: Schneider, Alexandra [ASCHNE11@depaul.edu]
Sent: Wednesday, October 28, 2009 3:49 PM
To: Red Extension
Subject:

I support the Red Line Extension but No to the circle line!

RS-56

Little Village Environmental Justice Organization
La Organización de Justicia Ambiental de la Villita

October 27, 2009

Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, Illinois 60680-7602

Cc: Richard L. Rodriguez, CTA President; Terry Peterson, CTA Board Chairman; Stephen Schlickman, RTA Executive Director; Peter M. Rogoff, FTA Administrator; John Paul Jones, Developing Communities Project.

RE: CTA Alternatives Analysis Projects: Red Line Extension, Orange Line Extension, Yellow Line Extension.

Dear Mr. Busby:

This letter is regarding CTA's Alternatives Analysis Projects: Red Line Extension, Orange Line Extension, and Yellow Line Extension.

Red Line Extension
The Little Village Environmental Justice Organization (LVEJO) supports the CTA's Red Line Extension to 130th Street along the UPRR route. We support the efforts of the Developing Communities Project (DCP) to extend rapid transit to underserved areas in the African-American communities of the South Side. Once the CTA demonstrates sufficient progress toward bringing the existing rail and bus system into a State of Good Repair (SGR) and sufficient progress on maintaining, enhancing, and expanding the bus system, this project needs to moved forward with the utmost urgency. Originally proposed for completion in 1970, we believe that the Red Line Extension to 130th Street should be CTA's first capital expansion priority for the El. It must take priority over the CTA Circle Line and the Metra Star Line in order to remedy the systemic and institutional racial discrimination created by unequal access to rapid transit on Chicago's South Side and South Suburbs. This project would greatly reduce the travel times of transit riders traveling between Chicago's far South Side and Downtown Chicago, providing significant economic benefits to riders and the regional economy.

Orange Line Extension
LVEJO supports the CTA's Orange Line Extension Project. CTA should build the Orange Line Extension as part of the Mid-City Transitway (Cicero Beltway Railroad). Additionally, CTA should evaluate a potential station at 72nd and Cicero to provide access to Walmart and other work/shopping destinations.

Yellow Line Extension
LVEJO believes that the Yellow Line Extension should be given lower priority, under the Red and Orange Line Extension. CTA should study how this project could be integrated into the Mid-City Transitway as per previous studies commissioned by the Chicago Department of Transportation (CDOT). Given the large number of complaints from local residents, CTA needs

to modify the Locally Preferred Alternative (LPA) to accommodate the needs of those raising objections to the project. If the LPA cannot be modified to satisfy these objections, then the project should be cancelled.

Additionally, all new CTA capital construction projects should meet or exceed federal Title VI Disadvantaged Business Enterprise (DBE) requirements. They should also work to provide jobs to low income community members from the surrounding area.

Sincerely,

Michael Pitula
Community Organizer – Public Transit

LVEJO

2856 S. Millard Avenue Chicago, IL 60623-4550
Tele: (773) 762-6991 Fax: (773) 762-6993
Email: publictransit@lvejo.org – Web: www.lvejo.org

RS-57

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Thursday, October 29, 2009 8:35 AM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Red line EIS scoping comments

From: David Tomzik [David.Tomzik@Pacebus.com]
Sent: Tuesday, October 27, 2009 9:12 AM
To: Red Extension
Subject: Red line EIS scoping comments

Pace scoping comments regarding CTA Red Line Extension Environmental Impact Statement

Thank you for the opportunity to review and comment on the scoping of the Environmental Impact Statement for the Red Line extension. Below are comments regarding the proposed project alternatives and potential environmental impacts relating to the proposed extension between 95th Street Station and 130th Street.

- Pace supports the rail extension of the Red Line from the current terminus at 95th Street Station to 130th Street

- In compliance with the Illinois Auditor General's recommendation to reduce CTA & Pace overlapping service and provide greater suburban market coverage area, Pace intends to restructure various south suburban routes operating on Halsted and King Drive which now serve the Red Line 95th Street Station. Additional planning development and review would be required to determine the most optimal station(s) to serve on either alignment.

- Arterial roadway access to/from the proposed station(s) served by connecting bus services will require further review including issues such as railroad grade crossings, street parking, and intersection improvements to accommodate bus movements.

- Pace requests participation in the planning development and design of the proposed station facilities served by both fixed route and Regional ADA Paratransit services. Design should include sufficient bays to accommodate Pace and CTA bus routes, Regional ADA Paratransit, operator facilities, passenger information as well as bus priority access such as Transit Signal Priority or bus activated signals to allow buses to enter/exit the terminal with minimal congestion.

We look forward to participating in this regional planning process.

David Tomzik
Manager, Long Range Planning
Pace Suburban Bus Service
550 W. Algonquin Road
Arlington Heights, IL 60005
847 228-2463
fax 847 228-2330

david.tomzik@pacebus.com

DCP
DEVELOPING COMMUNITIES PROJECT INC

11300 South Halsted Street – Suite A
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Phone: (773) 928-2500
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E-mail:
dev_comm_project@ameritech.net
www.dcpincorp.org

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Bethel Tabernacle UHCA
Christ Temple Cathedral
Joy Fellowship Baptist Church
Lilydale First Baptist Church
Lilydale Progressive M.B. Church
Lutheran Church of the Holy Spirit
Reformation Lutheran Church
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Executive Director
Gwendolyn Mackel Rice

Keeping Greater Roseland Alive!

RS-58

To: **Jeffrey Busby, General Manager, Strategic Planning**
Chicago Transit Authority

Email: RedExtension@transitchicago.com

From: **The Red line Oversight Committee (ROC) of Developing Communities Project**

Subject: **Red Line Extension EIS Scoping Comments**

Date: **Oct. 27, 2009**

The environmental analysis for the Locally Preferred Alternative (LPA) recommended by the CTA and approved by the Chicago Transit Board represents a significant milestone in the five-year organizing and advocacy effort to make the Red Line Extension a reality. The 13 scoping issues listed in the CTA Red Line Extension "Environmental Impact Statement Scoping Information" brochure (Sept. 2009) are issues and areas of concern for the far south side Greater Roseland community.

Developing Communities Project (DCP) is proud to have spear-headed community efforts to bring this important project to the attention of public officials and regional planners. DCP sees its role and function in the current phase of planning and evaluation for the Environmental Impact Statement (EIS) and Preliminary Engineering (PE) as one of highlighting critical issues that planners and decision-makers need to seriously consider in evaluating the cost-effectiveness and equity consideration for pursuing the LPA. This is especially important in view of the fact that the CTA Red Line Extension LPA has been demonstrated by DCP to be the route, from 95th Street to 130th Street, that is overwhelmingly favored by the Greater Roseland community.

For that reason, DCP and its Red line Oversight Committee (ROC) are submitting the following EIS Scoping Comments:

1) A major concern that we have is with the environmental foot print that the proposed creation of park-and-rides at each of the four station stops will have. The RTA has reservations about making more park-and-rides for automobile traffic. There is also the issue of over-capacity in residential areas. Since there exists legislation that allows church parking lots in the vicinity of train stops to offer their facilities as park-and-rides, and Metra has been doing this for some time, CTA should consider scoping the impact of church parking lots instead of the construction of new park-and-rides in the vicinity of the four station stops of the Extension. This would have the added bonus of reducing the line item in the project budget for park-and-rides and make the Extension more cost-effective.

1) Because the environmental analysis for rail lines looks at the impact on traffic patterns and congestion years into the future, DCP believes that the LPA that extends to 130th Street has the greatest impact on mitigating traffic congestion feeding in from the south suburban and collar counties. The other alternatives to the LPA, still under consideration, do not meet this criterion in any significant way.

2) DCP would urge the CTA to evaluate and forecast the impact of the LPA on air quality levels in comparison to the other alternatives.

3) DCP urges the CTA environmental analysis to measure and forecast the LPA's impact on increasing labor productivity as a result of mitigating car congestion and reducing travel times to work for residents of the far south side of Chicago and south suburbs and collar counties.

4) According to the CTA, in its press release, "CTA Celebrates Earth Week," a fully loaded 8-car train eliminates 1,000 cars from our highways, thus mitigating congestion, reducing travel times to work, and improving air quality. How will the CTA operationalize this metric in assessing the impact of the Red Line Extension?

5) DCP urges the CTA to calculate the wait-times of riders at the proposed station stops of the Extension against the wait-times of passengers for the other alternatives under consideration, including the status quo and the "no build" option. This is important because the longer riders wait past 15 minutes the more turned off to public transportation they become. On the positive side, the calculation or forecast of wait-times can provide an estimation of potential riders who would take advantage of public transportation.

6) According to the RTA's Campaign for Better Transit, "Basic Facts about Public Transportation in the Chicago Metropolitan Area," 77% of residents with cars decide to use pubic transit. DCP urges the CTA, in its environmental analysis, to estimate the impact of the Red Line Extension on this metric for the far south side, south suburbs and collar counties.

7) Can the estimated reduction in air pollution due the impact of the Red Line Extension be made a collateral cost-effective benefit given the poor air quality on the far south side and south suburbs due to the area, especially around Altgeld Gardens, being the site of the City's toxic waste disposal site? In other words, what are the ramifications of the Red Line Extension's reduction of automobile congestion and exhausts in an area that is already identified as having the poorest air quality in the metropolitan area? [NB: This is a "superfund" type of issue that raises the question of transit impacts on major polluters in the area, i.e., what are the trade-offs presented by a major transportation project for a mixed residential and industrial landscape?]

8) DCP urges the CTA to investigate the impact on the construction of the Red Line Extension LPA on brown fields abatement, especially around the 130th Street station at Altgeld Gardens, and the proposed new train yard.

9) DCP urges the CTA to investigate thoroughly both the noise impact of the LPA and the "best available" technologies needed to significantly mitigate the possible noise problems associated with the Red Line Extension.

10) Noise is the greatest environmental disturbance caused by public transit. However, in the case of the Red Line Extension LPA, the project right-away along the UPRR is already the cause of significant noise disturbance. In support of local homeowners and their concerns about additional noise pollution, DCP urges the CTA to do a scoping analysis of the current noise levels caused by the UPRR.

11) DCP also urges the CTA to make, as part of its scoping analysis of potential noise disturbance caused by the Extension, a full-scale investigation of the "best available" and "best practicable" noise mitigation technologies for the Extension.

12) The role transportation can play in revitalizing and supporting underserved communities is recognized by the U.S. Department of Transportation (DOT) and the Federal Transit Administration (FTA) in their efforts to include environmental justice language in program and funding priorities. In addition to safety and mobility being the U.S. Department of Transportation's two top priorities, DOT describes 3 fundamental environmental justice principles to be relevant for transportation planning and to the mission of the agency. Environmental Justice Principles for transportation programs include: 1) To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations. 2) To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations. 3) Ensure full participation by all potentially affected communities. How does the CTA intend to insure that these principles are adhered to? How does the CTA intend to make the prevention of denial of, reduction in and delay in "receipt of benefits by minority and low-income populations," e.g., Altgeld Gardens, a priority criterion for the EIS of the Red Line Extension.

13) Livability Principles for transportation, housing and environmental programs include: 1) Provide more transportation choices, 2) Promote equitable affordable housing, 3) Enhance economic competitiveness, 4) Support existing communities, 5) Coordinate policies and leverage investment, 6) Value communities and neighborhoods. How does the CTA plan to make these environmental goals operational in the environmental analysis of the Red Line Extension?

14) What is the CTA's employment model for measuring the potential benefits to working populations on the far south side, south suburbs and collar counties afforded by the Red Line Extension?

15) Does the CTA intend to prioritize the impact of transit investment on job creation and increasing employment opportunities, in accordance with the environmental justice criterion of preventing the denial of, reduction in and delay in "receipt of benefits by minority and low-income populations," in its environmental impact analysis?

In conclusion, Developing Communities Project and its Red line Oversight Committee would like to express its appreciation to the Chicago Transit Authority for its serious consideration of the issues that we have brought to your attention. We look forward to your response as the process of drafting the Environmental Impact Statement for the Red Line Extension proceeds.

With sincerest regards,

Gwendolyn M. Rice
Executive Director, DCP

Elder Eugene Taylor
Chairman, ROC

Cc: Governor Pat Quinn
Congressman Jesse Jackson, Jr.
Congressman Bobby Rush
Senator James T. Meeks
State Senator Emil Jones, III
State Senator Donne Trotter

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-59

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Shirley Hill

Organization: Rosemoor Community Ass. Title: membership Chairperson

Address: 10220 S. Rhodes Ave.

City: Chicago State: IL Zip: 60628

Phone: E-mail: ShirleyHill807@hotmail.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

I think citizens near Altgeld Gardens and 130th St. Should have access to CTA red line. It will speed up their travels. They will have access to the down-town area without going thru transferring to buses and walking.

Shirley Hill

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-60

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Cosette D. Thomas

Organization: Roseland Christian Reformed Church Title: Member

Address: 305 W. 124th st

City: Chg State: IL Zip: 60628

Phone: 773-568-4387 E-mail: Cosieco@prodigy.net

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-61

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Sabrina Beecham

Organization: Roseland Chr Reform Ch. Title:

Address: 232 W 110 St

City: Chgo State: IL Zip: 60628

Phone: 773 995-8223 E-mail: None

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-62

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Rev. Anthony Van Zanten

Organization: Roseland Christian Reformed Church Title: Member

Address: 9803 S. Prospect Ave

City: Chicago State: Il. Zip: 60643

Phone: 773-881-3937 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

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RS-63

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Name: DeWitt Orlawndo Casey Jr.

Organization: Rosland Christian Reform Church Title: Member

Address: 10859 South State Street 1st Floor

City: Chicago State: IL. Zip: 60628

Phone: 773 566-3785 E-mail: dcemeanJr@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-64

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Mamie Thomas

Organization: Roseland Christian Ministries Title: Member

Address: 10858 S. Michigan Ave

City: Chicago State: IL Zip: 60628

Phone: 773-264-5665 E-mail:

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-65

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Name: Ann R. Howard

Organization: UIC Title: Patient Services Specia

Address: 840 So. Wood Street

City: Chicago State: IL Zip: 60612

Phone: 773-778-0250 E-mail: arhoward@uic.edu

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Red Line Extension

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RS-66

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Name: Henry L Reid

Organization: Roseland christian ministries Title: member

Address: 10914 S State

City: Chicago State: Ill Zip: 60628

Phone: 773-821-0482 E-mail:

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Red Line Extension

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RS-67

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Name: Tonya Braggs

Organization: HRDI Title: Member

Address: ~~[illegible]~~ 12141 S. Indiana

City: Chicago State: IL Zip: 60643

Phone: 928-0338 E-mail:

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Red Line Extension

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RS-68

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Name: Larris Fox

Organization: HBDI Title: Member

Address: 13034 S. Wood

City: Blue Island State: ILL Zip: 60406

Phone: 708-385-4671 E-mail:

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Red Line Extension

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RS-69

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Name: Kevin Zeigler

Organization: Roseland Christian Ministries Title: Staff

Address: 5439 S. Greenwood

City: Chicago State: IL. Zip: 60615

Phone: 773-573-9032 E-mail: KZeiglerc100@Hotmail.com

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Red Line Extension

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RS-70

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Name: Bernie Powell

Organization: R.C.M. Title: Staff aid

Address: 10858 S Michigan

City: Chicago State: Ill Zip: 60628

Phone: 773-746-0671 E-mail:

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RS-71

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Name: Wesley Perry

Organization: Inner Voice Title: Job Developer

Address: 1639 W. Walnut St.

City: Chicago State: IL Zip: 60612

Phone: 312 226-2730 X17 E-mail: Wperry@innervoicechicago.org

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RS-72

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Name: ERIC MYERS

Organization: IOES Title: Employment Rep.

Address: 4931 W Diversey

City: Chicago State: IL Zip: 60639

Phone: 773-889-6820 E-mail: ERIC.MYERS@illinois.GOV

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RS-73

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Name: Julia Parham

Organization: Roseland CCC Title: MEMBER

Address: 313 E. 137th

City: Chicago State: Il Zip: 60628

Phone: (773) 562-3751 E-mail: parhamjulia18@yahoo.com

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Red Line Extension

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RS-74

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Name: CURTIS FLOWERS

Organization: ROSELAND C.C.C. Title: MEMBER

Address: 10858 S. MICHIGAN

City: CHICAGO State: IL Zip: 60628

Phone: E-mail: N/A

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-75

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Name: Cordero McNeal

Organization: ROSELAND CCC Title: MEMBER

Address: 313 E 137th

City: Chicago State: Il Zip: 60628

Phone: (773) 562-6933 E-mail: Corderomcneal1dol39@yahoo.com

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Red Line Extension

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RS-76

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Name: DEBORAH RANDALL

Organization: INNER VOICE Title: SENIOR CASE MANAGER

Address: 1639 W. WALNUT

City: CHICAGO State: IL Zip: 60612

Phone: (312) 226-2730 E-mail:

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Red Line Extension

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RS-77

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Name: Jill Spooner

Organization: Inner Voice Title: Director of Targeted Outreach

Address: 1639 W Walnut

City: Chicago State: IL Zip: 60612

Phone: 312-226-2730 E-mail: jspooner@innervoicechicago.org

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Red Line Extension

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RS-78

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Name: HAROLD C COLEMAN

Organization: ROSELAND CCC Title: MEMBER

Address: 1621 W WALNUT

City: CHICAGO State: IL Zip: 60612

Phone: E-mail:

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Connecting 95th Street Station to 130th Street

RS-79

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Robby M. Robertson Sr.

Organization: THE INNER VOICE INC. Title: CASEMANAGER

Address: 1639 W. WALNUT ST.

City: CHICAGO State: IL. Zip: 60652

Phone: 1-312-226-2730x25 E-mail: RROBERSON@INNERVOICE.ORG

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-80

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Patricia A. Washington

Organization: Rosaland Cristain Min Title: member

Address: 10858 Michigain

City: Chicago State: IL Zip: 60628

Phone: 773-264-5865 E-mail:

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-81

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Name: EDDIE Floyd

Organization: Roseland Christian Title: CARPTER

Address: 10858 So Michgan

City: Chicago State: Illinois Zip: 60628

Phone: 773-221-8673 E-mail:

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Red Line Extension

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RS-82

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Name: William D. Gordon II

Organization: Roseland Christian Ministries Title: Member

Address: 131 e 103rd Pl

City: Chicago State: IL Zip: 60628

Phone: 773-264-5665 E-mail:

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Red Line Extension

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RS-83

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Name: Edward McGill

Organization: Roseland Christian Ministries Title:

Address: 10858 S. Michigan

City: Chicago State: IL Zip: 60628

Phone: E-mail:

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RS-84

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Name: DeEldridge L. Covington

Organization: Roseland Christian Ministries Title: Member

Address: 10858 S. Michigan

City: Chicago State: IL Zip: 60628

Phone: 773-264-5665 E-mail:

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RS-85

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Name: JIMMIE RELFORD

Organization: ROSELAND CHRISTIANA Title: MEMBER

Address: 130 E 132 ST

City: CHICAGO State: ILL Zip: 60628

Phone: _____ E-mail: _____

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RS-86

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Name: Evelyn Fletcher

Organization: Rosland Chrisfain Title: Member

Address: 6511 S. Eberhart

City: Chicago State: IL Zip: 60637

Phone: 1-773-301-4924 E-mail: Oneal.Evelyn Yahoo.com

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RS-87

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Name: AARON GILL

Organization: Roseland Christian Ministry Title:

Address: 10858 S Michigan

City: Ch. State: IL Zip: 60628

Phone: E-mail:

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RS-88

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Name: Carlton Youngblood

Organization: _____ Title: _____

Address: 345 W. 110 St

City: Chicago State: IL Zip: 60628

Phone: 773 528 7210 E-mail: _____

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RS-89

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Name: ANGHE LOVE

Organization: _____ Title: _____

Address: 10521 S. PERRY

City: CHICAGO State: ILL. Zip: 60628

Phone: (773) 821-1190 E-mail: _____

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

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RS-90

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10-22-09

Name: Mary Bills

Organization: Roseland Christian Title: member

Address: 10743 S Forest

City: Chicago State: Ill Zip: 60628

Phone: E-mail:

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RS-91

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Name: Mr. Cliford Anderson

Organization: _____ Title: _____

Address: 10906 So. INDIANA

City: CHICAGO State: ILL Zip: 60628

Phone: 253-2855 E-mail: _____

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RS-92

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Name: DURANE L. BELL

Organization: Roseland Christian Ministry Title: SALEMAN

Address: 10851 So. Wabash Ave

City: Chicago State: ILL Zip: 60628

Phone: (773)-660-0593 E-mail: NONE

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Durane Bell

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Name: Jonathan Tate

Organization: Reliable Steel Die Maker Title: Die Maker

Address: 10535 S. Michigan Ave

City: Chicago State: IL Zip: 60628

Phone: 773.762.1471 E-mail:

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RS-94

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Name: Bruce O'neal

Organization: Christian Miners'tqs Title:

Address: 6511 S. Eberhart

City: Chicago State: I Zip: 60637

Phone: 1-773-263-5337 E-mail:

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RS-95

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Name: Robyn Washington

Organization: Rosland Christain Ministry Title:

Address: 6511 S. Eberhart

City: Chicago State: IL Zip: 60637

Phone: E-mail:

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RS-96

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Name: DENNIS RUDOLPH

Organization: ROSLAND CHRISTEN Title: member

Address: 455W 116 ST

City: CHICAGO State: ILL Zip: 60628

Phone: 773 821-1521 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Appendix B
Scoping Report (continued)

Red Line Extension Project
Scoping Report (continued)

Prepared for:
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Federal Transit Administration
200 West Adams Street
Suite 320
Chicago, IL 60606

Red Line Extension
Connecting 95th Street Station to 130th Street

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-97

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Welton Anderson

Organization: Roseland Christian Ministries Title:

Address: 10858 S. Michigan

City: Chicago, State: IL Zip: 60628

Phone: 773-264-6556 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-98

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Gray dem artis

Organization: Rosehaal Christian Title:

Address: 10858 S Michigan

City: Chicago State: Il Zip: 60628

Phone: 264-5665 E-mail:

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-99

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Neal Blaney

Organization: Roseland Christian Ministries Title: RCM

Address: 12407 S Princeton St

City: Chicago State: ILL Zip: 60628

Phone: 773-264-5665 E-mail:

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-100

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Rachelle Brown

Organization: Roseland Christian Title: Shelter

Address: 10858 So. Michigan Ave

City: Chgo State: Ill Zip: 60628

Phone: 773/264-5665 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-101

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: RUTH BERNARD

Organization: _____ Title: _____

Address: 1013 E MAY ST

City: HAMMOND State: IN Zip: 46320

Phone: 219-554-5402 E-mail: _____

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-102

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Carol Moss

Organization: _____ Title: _____

Address: 7936 Justine

City: Chgo. State: IL Zip: 60620

Phone: 630 667 6420 E-mail: _____

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-103

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Name: Katrina Martin

Organization: RCM Title: Member

Address: 338 W. 116th Street

City: Chgo State: IL Zip: 60628

Phone: 773-821-4539 E-mail: KMartinReed@yahoo.com

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Red Line Extension

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RS-104

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Name: Pearlie Davis

Organization: Roseland Christian Ministries Title: Member

Address: 241-W-108th

City: Chicago State: Ill Zip: 60628

Phone: 773-3930200 E-mail:

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RS-105

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Name: Earnest Lee Treadwell

Organization: Ameer B Chich Title: Member

Address: 10809 S. Priaire

City: Chicago State: Il Zip: 60628

Phone: 773-678-5607 E-mail:

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RS-106

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Name: Marion Lee

Organization: Roseland Christian min- Title: member

Address: 11020 S Indiana

City: Chicago State: ILL Zip: 60628

Phone: None E-mail:

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RS-107

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Name: Nicole Mitchell

Organization: Association for the Advancement of Creative Musicians Title: Chairperson

Address: 10841 S Forest Ave

City: Chicago State: IL Zip: 60628

Phone: 773-821-7131 E-mail: blackearthmusic@gmail.com

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Nicole Mitchell

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RS-108

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Name: MASSONBURG, REGINALD

Organization: MECHANIC Title: SHOP - FOREMAN

Address: 11324 SOUTH WENTWORTH ST

City: CHICAGO State: IL. Zip: 60628

Phone: (773) 301-2999 E-mail: rmassonburg.yahoo.com

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RS-109

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Name: Elena martin

Organization: Roseland Christian Ministries Title: Member

Address: 341 W. 108 Pl.

City: Chicago 911 State: 911 Zip: 60628

Phone: 773-3830206 E-mail:

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RS-110

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Name: Jordan Connell

Organization: Roseland Christian Ministries Title: Member

Address: 49 E 102nd Place (Front)

City: Chicago State: IL Zip: 60628

Phone: 636 584-906 E-mail: connell j@ william.jewell.edu

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RS-111

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Name: Shaun Lawler

Organization: Roseland Christian Ministries Title: Member

Address: 49 E. 102nd Pl (Front)

City: Chicago State: IL Zip: 60628

Phone: 1-256-996-7215 E-mail: slawler427@yahoo.com

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Red Line Extension

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RS-112

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Name: Sara Shackelford

Organization: Roseland Christian Ministries Title: Member

Address: 49 E. 102nd Pl (Front)

City: Chicago State: IL Zip: 60628

Phone: (901) 489-8059 E-mail: sarashackelford1@gmail.com

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RS-113

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Name: ALVIS DEAN JACKSON

Organization: ROSELAND CHRISTIAN MIN Title: Member

Address: 10449 S WABASH

City: CHICAGO State: IL Zip: 60628

Phone: 1-773-264-5665 E-mail: NA

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Connecting 95th Street Station to 130th Street

RS-114

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Johnnie Jones

Organization: Roseland christian ministries Title: member

Address: 108 S. Michigan

City: Chicago State: Ill. Zip: 60625

Phone: 773 876-4695 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-115

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: JENKINS, Debbie

Organization: Roseland Christian (Church) Title: Member

Address: 13129 So. St. LAWRENCE

City: CHICAGO State: ILL Zip: 60827

Phone: 773-765-8997 E-mail: N/A

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-116

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Name: Horace L. Smith

Organization: _____ Title: _____

Address: 10557 So King Dr

City: Chicago State: IL Zip: 60628

Phone: (773) 568-9408 E-mail: smithHPKTgroup@AmeriTech.net

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-117

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Areanda Robinson

Organization: Developing Communities Project Title: Intern

Address: 11300 South Halsted Street

City: Chicago State: IL Zip: 60628

Phone: (773) 928-2500 E-mail: [redacted] N/A

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-118

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Patricia Gray Smith

Organization: Developing Communities Project Title: Prevention Specialist

Address: 11300 S. Halsted

City: Chicago State: IL Zip: 60628

Phone: (773)928-2500 E-mail:

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-119

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Martrese Gray

Organization: — Title: —

Address: 5750 Lafayette

City: Chicago State: IL Zip: 60628

Phone: — E-mail: —

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-120

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Name: Glenn R. Powell

Organization: Roseland Christian Reformed Church Title: Member

Address: 763 S. Wood

City: Chgo State: Il Zip: 60620

Phone: 708-783-7614 E-mail:

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Red Line Extension

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RS-121

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Name: Roderick Jones

Organization: RCRC Title: Musician

Address: 5E 102 PL

City: Chgo State: ILL Zip: 60620

Phone: 773 4838632 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

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RS-122

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Name: Joblyn Walker

Organization: Roseland CRC Title: Member

Address: 785 E. Calumet

City: Chgo State: Ill Zip: 60619

Phone: 224 9592 E-mail:

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RS-123

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Name: Harold Boyd

Organization: RCRE Title:

Address: 2018 W 53rd place

City: Chicago State: IL Zip: 60609

Phone: 773-318-8148 E-mail:

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RS-124

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Name: Tynisha A Jackson

Organization: Roseland Christian Reformed Church Title: Member

Address: 120 E. 103rd Place

City: Chicago State: IL Zip: 60628

Phone: (773) 264-5265 E-mail: icepriness714@hotmail.com
(773) 569-9911 (cell)

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Red Line Extension

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RS-125

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Name: Karran Smith

Organization: RCMC Title: Member

Address: 4807 S Prairie

City: Chicago State: IL Zip: 60615

Phone: 773 727-9491 E-mail: Karranmarie@Hotmail

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Red Line Extension

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RS-126

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Name: Jeri Smith

Organization: Roseland Christian Reformed Church Title: Member

Address: 4807 S. Prairie AVE

City: Chicago State: IL Zip: 60615

Phone: (773) 510-6416 E-mail: jeriSmith@tmail.com

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Red Line Extension

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RS-127

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Name: Kerry Wilkerson

Organization: Roseland Christian Ministries Title: Member

Address: 49 E. 102nd Place (Front)

City: Chicago State: IL Zip: 60628

Phone: (404)805-5803 E-mail: kwilkerson810@yahoo.com

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Red Line Extension

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RS-128

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Name: Carol Cooley Watkins

Organization: RCRC Title: member

Address: 31 W. 108 Place

City: Chicago State: IL Zip: 60628

Phone: 773-341-4113 E-mail: CarolFrances51@Yahoo.Com

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Red Line Extension

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RS-129

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Name: Pamela Fluellen

Organization: Victory Temple G.O.G.I.C. Title: Member

Address: 10209 S. St Lawrence

City: Chgo State: IL Zip: 60628

Phone: (773) 661-8762 E-mail: p_fluellen@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-130

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Name: Teresa Williams

Organization: Salem Baptise Title: Member

Address: 12129 S Carnell

City: Chicago State: IL Zip: 60628

Phone: 773-511-4487 E-mail: heyladyt@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

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RS-131

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Name: SHERRIE T. HAYES

Organization: Christ The Answer COGIC Title: Member

Address: 12129 So PARNELL

City: Chicago State: IL Zip: 60628

Phone: 773-386-8483 E-mail: sherrihayes50@yahoo.com

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Sherrie Hayes

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-132

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Andrew Bates

Organization: Pioneer Baptist Church Title: Parishioner

Address: 2104 Wallace

City: Chicago State: IL Zip: 60628

Phone: (773) 660-0368 E-mail: batesandrew09@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-133

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Name: Brenda Johnson Fisher

Organization: 1050 Salem Baptist Church Title: Member

Address: 10503 S. Corliss Ave

City: Chicago ILL State: Zip: 60628

Phone: 1773 291-9004 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-134

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Name: KIMBERLY RENEE JACKSON

Organization: NEW LIFE [illegible] Title: MEMBER

Address: 7255 S. PHILLIPS

City: Chicago State: IL Zip: 60649

Phone: (773) 430-4130 E-mail: KIM_RJACKSON@YAHOO.COM

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-135

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Name: Diesha Long

Organization: NEW life Title: Manager

Address: 7003 S Chicago

City: Chicago State: IL Zip: 60649

Phone: 773-406-7332 E-mail: neshalong@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-136

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Name: WILLIAM GILL

Organization: HOUSE OF HOPE 80 E. 115TH ST Title: CHRISTIAN

Address: 10559 S. STATE ST.

City: CHICAGO State: IL Zip: 60628

Phone: 773-821-9519 E-mail: WILLIAMGILL50593@YAHOO.COM

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-137

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Name: Calvin Cotton

Organization: Roslang Chisten Ministerse Title:

Address: 10529 S. Perry

City: Chicago State: IL Zip: 60628

Phone: 773-468-0518 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-138

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Name: CARLTON-LEWIS

Organization: Janitor Title: LEROY Cleaning Service

Address: 11037 S. EDBROOK

City: Chicago State: ILL Zip: 60628

Phone: 773-703-7379 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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RS-139

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Name: James Fulford

Organization: Church of God Title: Member

Address: 1528 Edbrooke

City: Chicago State: Il. Zip: 60623

Phone: 773-641-1804 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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RS-140

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Gregory Jefferson

Organization: Roseland Christianity Title:

Address: 128 W 104th PL

City: Chicago State: Illinois Zip: 60628

Phone: 773-568-4650 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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RS-141

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Name: Jason Clayton

Organization: Cuffes catering Title: Cook, cashier

Address: 10826. S Wabash

City: Chicago State: IL Zip: 60628

Phone: 773 494-2228 E-mail: Jasfobison@yahoo.co

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-142

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Name: Saleena Claybourne

Organization: Roseland Christen Min. Title:

Address: 819 E. 102 St.

City: Chicago State: IL Zip: 60628

Phone: E-mail:

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Red Line Extension

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RS-143

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Name: Linda Thompson

Organization: _____ Title: _____

Address: 5603 W. Iowa

City: Chicago State: IL Zip: 60651

Phone: 773-430-8025 E-mail: linda4thompson@yahoo.com

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Red Line Extension

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RS-144

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Name: Guy Pollion

Organization: _____ Title: _____

Address: 5245 S. Indiana

City: Chicago State: Ill Zip: 60615

Phone: (773) 924-2034 E-mail: _____

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Red Line Extension

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RS-145

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Name: Laura TenClay

Organization: Roseland Christian Ministries Title: Volunteer Coordinator

Address: 21 E 102nd Pl

City: Chicago State: IL Zip: 60628

Phone: 773-264-5665 E-mail: 21holmka@tiu.edu

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

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RS-146

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Name: David Ten Clay

Organization: Roseland Christian Comm. Homes Corp Title: Housing Director

Address: 21 E 102nd PL

City: Chicago State: IL Zip: 60628

Phone: 773-264-5665 E-mail: dtenclay32@hotmail.com

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Red Line Extension

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RS-147

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Name: SANDRA PEARSON

Organization: True light Baptist church Title: member

Address: 239 E 108 st 1st flr

City: Chicago State: Ill Zip: 60628

Phone: 773-766-0431 E-mail:

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Red Line Extension

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RS-148

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Name: Mia Montgomery

Organization: Roseland Christian Min. Title:

Address: 19 E 102 Pl

City: Chicago State: Il Zip: 60628

Phone: E-mail:

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RS-149

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Name: Angela Rodgers

Organization: Title: Barber Stylist

Address: 901 E. 104th

City: Chgo State: Il Zip: 60628

Phone: (773) 724-7601 E-mail: angelarodgers446@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-150

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: VINCENT GRIFFIN

Organization: N/A Title: N/A

Address: 715 E. 50th PL #Apt. 3A

City: Chicago State: IL Zip: 60615

Phone: (773) 616-0310 E-mail: N/A

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-151

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Hyland Gilder Barry

Organization: Roseland Christian Ministry Title:

Address: ~~108~~ 33-E-111th Pl

City: Chicago State: Zip: 60628

Phone: 1-773-263-0160 E-mail: None

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-152

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Steven D. Benson

Organization: —— Title: ——

Address: 248 W 112 PL

City: Chicago State: IL Zip: 60628

Phone: 773-568-9548 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-153

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Ronald Adams

Organization: Roseland THRIFT Title: LABORER

Address: 33 E. 111th.

City: Chgo State: IL Zip: 60628

Phone: 468-5686 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-154

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Betty Cheeks

Organization: Roseland Christian Ministry Title:

Address: 12420 S

City: Chgo: State: Ill. Zip: 60628

Phone: 773-928-3884 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-155

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Name: Anthony E. Whitehead Jr.

Organization: Roseland Christian Ministries Title: guess / visitor

Address: my now known address is 16349 S Windchester

City: Markham State: IL Zip: 60626

Phone: (708) 339-8740 E-mail: anthony e whitehead jr.

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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This will only assist school kid and also after work tax payer with CTA continuesous transit assistance 117 00 A

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-156

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Steven Turner

Organization: Roseland Christian Ministry Title:

Address: 10858 So Michigan

City: Chicago State: Ill Zip: 60628

Phone: (773) 414-1753 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-157

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: CHARLES BAISTEN

Organization: ROSELAND - CHRISTIAN - THRIFT STORE Title: TRUCK - DRIVER

Address: 33 - E - 111TH PL

City: CHICAGO State: ILL Zip: 60628

Phone: 468-0262 E-mail:

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-158

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Name: Tatiana J. Turner

Organization: Roseland Christian Refurbed Title: Member

Address: S. E. 102nd Place (Church) 322 E. 107th Street (Home)

City: Chicago State: IL Zip: 60628

Phone: 7739958223 E-mail: tatianaturner1@yahoo.com

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Red Line Extension

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RS-159

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Name: DORRELLO BEECHAM

Organization: ROSLAND CHRISTIAN Church Title: MEMBER

Address: 9230 SO LOWE AVE

City: Chicago State: ILL Zip: 60620

Phone: (773) 994-6523 E-mail: DORRELLOBEECHAM@GMAIL.COM

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

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RS-160

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Name: Leonard Clark

Organization: R.C. M.C. Title: Member

Address: 10903 So. State

City: Chicago State: ILL Zip: 60628

Phone: 928-1323 E-mail:

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Leonard Clark

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Red Line Extension

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RS-161

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Name: Sylvester Brown

Organization: A Gate Call Beautiful Title: member

Address: 335 W 107 PL

City: CHICAGO State: IL Zip: 60628

Phone: (773) 468-7529 E-mail:

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Red Line Extension

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RS-162

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Name: James E Green

Organization: Roseland Christian Title: Member

Address: 11210 S Normal

City: Chicago State: IL Zip: 60628

Phone: 773 660-1344 E-mail: N/A

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Red Line Extension

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RS-163

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Name: Mary Barnett

Organization: RCRC Title:

Address: 5439 Greenwood Ave 1/2

City: Chgo State: Ill Zip: 60615

Phone: 7736672668 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

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RS-164

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Name: Dashan Hudson

Organization: Roseland Chr. Ref Church Title: Deacon

Address: 45 E 102nd St.

City: Chgo State: IL Zip: 60628

Phone: _____ E-mail: _____

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Red Line Extension

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RS-165

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Name: Juan C Diaz

Organization: R.C.RC Title: Member

Address: 27 W 114th Place

City: Chicago State: Ill Zip: 60628

Phone: (773) 563-3883 E-mail: NONE

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-166

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Name: Lynn Wilson

Organization: Church - RCRC Title: Member

Address: 7318 Southworth Circle

City: Plainfield State: IL Zip: 60586

Phone: (815)577-9937 E-mail: wilson_lynn@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-167

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Jei Wilson

Organization: Church - RCRC Title: Member

Address: 7318 Southworth Circle

City: Plainfield State: IL Zip: 60586

Phone: (815) 577-9937 E-mail: wilson_jei@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-168

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Name: Robert J. Bennett

Organization: Roseland CRC Title: Elder

Address: 10831 S Indiana

City: Chicago State: IL Zip: 60628

Phone: 7732647307 E-mail:

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Connecting 95th Street Station to 130th Street

RS-169

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Name: Irene M. Hilson

Organization: Rlnd. C.R.C. Title: Deacon

Address: 5 E. 102nd Pl.

City: Chgo. Ill. State: Ill. Zip: 60628

Phone: 708-333-2797 E-mail: none

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-170

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: JAMES SALLEY

Organization: ROSELAND IRCRC Title: MEMBER

Address: 12E 102 PLACE

City: CHICAGO State: ILL Zip: 60628

Phone: 253-7519 E-mail: JSSmoth919@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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RS-171

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Name: Rev Conrad Bailey

Organization: Church Title:

Address: 27 West 114th Place

City: Chicago State: Ill Zip: 60628

Phone: 1-773-941-4362 E-mail:

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Red Line Extension

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RS-260

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Name: Kamilah Abdur-Rahman

Organization: HCI Title: Consumer Advocate

Address: 10524 S. Vernon Ave.

City: Chicago State: Ill. Zip: 60028

Phone: 773-305-7154 E-mail: Karrahman@hotmail.com

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Red Line Extension

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RS-261

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Name: Mayme Buckley

Organization: Healthcare Consortium of Illinois Title: Director External Affairs

Address: 1350 E Sibley Blvd

City: Dalton State: IL Zip: 60419

Phone: (708) 841-9515 E-mail: MBuckley@HCIOnline.org

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M Buckley

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RS-262

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Name: Pamela Glenn

Organization: _____ Title: _____

Address: 53 E 100th St

City: Chgo State: IL Zip: 60628

Phone: 773/941-4507 E-mail: paglenn1001@yahoo.com

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Pamela Glenn

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RS-263

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Name: Juan Talbert

Organization: J and J Consultants, Inc. Title: Public Relation Specialist

Address: 4724 S. Drexel Blvd. Apt 2

City: Chicago State: IL Zip: 60615

Phone: 708-574-4308 E-mail: juan_talbert@yahoo.com

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10/26/09

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RS-264

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Name: Phillip Cusic

Organization: New Life Title: Pastor

Address: 8201 S. Jeffery

City: Chicago State: IL Zip: 60628

Phone: 773 995-5315 E-mail: cusic@att.net

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Phillip Cusic

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RS-265

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Name: Ulondia Johnson

Organization: Golden Gate Day Care Title: Teacher

Address: 13027 S. Drexel ave

City: Chicago State: Il Zip: 60827

Phone: 773 264-0991 E-mail:

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RS-266

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Name: Yahya A. Karim

Organization: Roseland Comm Dev. Corp. Title: Executive Director

Address: 11409 S. Michigan

City: Chicago State: IL Zip: 60628

Phone: 773-821-5349 E-mail: roselandredc@yahoo

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RS-267

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Name: Silas Woods Jr.

Organization: Area Neighborhood Block Clubs Title: Exec Direct

Address: 9437 S. Hamilton

City: Chgo State: Il Zip: 60643

Phone: 773-550-6772 E-mail: W9219WOODY@AOL.COM

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Silas Woods Jr

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RS-268

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Name: Karlisa Rodgers

Organization: _____ Title: _____

Address: 13027 S Drexel

City: Riverdale State: IL Zip: 60827

Phone: (773)853-8902 E-mail: _____

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RS-269

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Name: Clotiel Cameron

Organization: Teach Them How Title: Ex Director

Address: 10501 S. Parnell

City: Chsa State: Il. Zip: 60628

Phone: 773 552-8497 E-mail: TeachThemHow@aol.com

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RS-270

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Name: Addie Allen

Organization: Healthcare Consortium of IL Title: CAO

Address: 1350 E Sibley Blvd

City: Dolton State: IL Zip: 60419

Phone: 708 841-9515 E-mail: acallen@hcionline.org

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RS-271

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Name: Derek Covington

Organization: Roseland Community Collaborative, NFP Title: President

Address: 258 E. 115th St.

City: Chicago State: IL Zip: 60628

Phone: 312/381-9054 E-mail: mrcovington1994@yahoo.com

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RS-272

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Name: GREGORY C. WILLIAMS

Organization: ST JOHN M.B.C Title: DEACON

Address: 211 E 115TH ST

City: CHICAGO State: IL Zip: 60619

Phone: 312-320-2760 E-mail: KEOMAN97@HOTMAIL.COM

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-273

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: *DONNA L ROACH

Organization: Roosmoor Association Title: Member

Address: 259 E. 107th Street

City: Chgo State: IL Zip: 60628

Phone: 568-895 E-mail: JMWilliamsJ1@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-274

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Name: EUNICE WILLIAMS

Organization: ROSEMOOR ASSOCIATION Title:

Address: 611 E. 103 Rd PL

City: Chicago State: IL Zip: 60628

Phone: E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-275

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Jeanette M. Williams

Organization: Roosemore Association Title: Member

Address: 259 E. 107th Street

City: Chgo State: Il Zip: 60628

Phone: 773.568-8951 E-mail: JMWilliams11@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-276

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Name: Marsha Eaglin

Organization: IMPACT Family Center Title: CEO

Address: 10835 S. Hermosa / 10956 S. State St.

City: Chicago State: IL Zip: 60643 / 28

Phone: 773 329 5086 E-mail: MSeaglin34@gmail

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-277

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Name: Cynthia Flowers

Organization: BLACK STAR COMMUNITY PTA Title: PRESIDENT

Address: 3509 S. KING DRIVE

City: Chgo State: IL Zip: 60616

Phone: (773) 285-9600 E-mail: CYNTHIA.NHMFOUNDATION@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

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RS-278

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Name: SHEILAH ROBINSON

Organization: CALUMET AREA INDUSTRIAL Title: PROJECT MANAGER

Address: 1000 E 111TH STREET

City: CHICAGO State: IL Zip: 60628

Phone: (773) 928-6000 E-mail: srobinson@calumetareaindustrial.com

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Red Line Extension

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RS-279

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Name: LaDonna Brown-Miller

Organization: Title:

Address: 1029 E 130th Street

City: Chgo State: IL Zip: 60628

Phone: 773-995-6300 E-mail: lbrownmiller@tcahealth.org

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-280

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Jarvis Price

Organization: _____ Title: _____

Address: 418 Illinois St.

City: Park Forest State: IL Zip: 60466

Phone: 708-898-2809 E-mail: jarjay4@aol.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

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RS-281

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Name: Jeanine M. Price

Organization: _____ Title: _____

Address: 418 Illinois St.

City: Park Forest State: IL Zip: 60466

Phone: 708-898-2809 E-mail: jarjay4@aol.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS-282

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Name: Percy Nesbaty

Organization: _____ Title: _____

Address: 10621 S. State St

City: Chgo State: IL Zip: 60628

Phone: 773 . 428. 1979 E-mail: _____

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Red Line Extension

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RS-283

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Name: Keenya Brown

Organization: _____ Title: _____

Address: 8411 S. Ingleside, #3, Chicago, IL

City: Chicago State: IL Zip: 60619

Phone: (773)636-2252 E-mail: Keenya_brown@yahoo.com

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Red Line Extension

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RS-284

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Name: LISA BUNBAR

Organization: L.A.T.S.O. Title: President

Address: 10231 S. PEORIA

City: Chgo State: IL Zip: 60643

Phone: 773 445 1081 E-mail: latso312@yahoo.com

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Red Line Extension

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RS-285

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Name: Rosa Young

Organization: _____ Title: _____

Address: 17658 Bernadine

City: Lansing State: IL Zip: 60438

Phone: 708-648-0114 E-mail: _____

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Red Line Extension

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RS-286

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Name: Debra Martin

Organization: _____ Title: _____

Address: 24625 Mulberry LN

City: Crete State: IL Zip: 60417

Phone: 708-704-6657 E-mail: itsdmartin@yahoo.com

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RS-287

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Name: Charlotte Evans

Organization: _____ Title: _____

Address: 4827 S. Kimbark

City: Chicago State: IL Zip: 60619

Phone: 773-551-2224 E-mail: _____

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Red Line Extension

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RS-288

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Name: Ella Grays

Organization: Healthcare Consortium of IL Title: Chief Programs Officer

Address: 1350 E. Sibley Blvd

City: Dolton State: IL Zip: 60419

Phone: 708 841 7515 E-mail: egrays@hcconline.org

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Ella Grays

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Red Line Extension

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cta

RS-289

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Name: Janet Wright

Organization: _____ Title: _____

Address: 11919 S. Indiana

City: Chgo State: IL Zip: 60628

Phone: 708-261-2953 E-mail: DAVIdgrant240@yahoo.com

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Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-290

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Teresa L. Moore

Organization: Star Project Title: Parent/Civil rights

Address: 538 N. 62ND St 2F

City: Chicago State: Ill Zip: 60621

Phone: 773. 673.8132 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-291

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: ERIC Campbell

Organization: _____ Title: _____

Address: P.O. BOX 91144

City: Chicago State: IL Zip: 60681

Phone: 312-953-1693 E-mail: bourgeoice@comcast.net

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-292

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Beverly Stewart

Organization: _____ Title: _____

Address: 6022 S. Indiana #201

City: Chicago Ill State: _____ Zip: _____

Phone: 773 324 06 70 E-mail: _____

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS-293

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Samina Brown

Organization: _____ Title: _____

Address: 4734 S. Indiana Ave

City: Chicago State: IL Zip: 60615

Phone: 773)268-0015 E-mail: _____

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-294

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Gwendolyn Woullard

Organization: _____ Title: _____

Address: 6733 So. Ridgeland Ave

City: Chgo State: Ill Zip: 60649

Phone: _____ E-mail: ggwoullard@comcast.net

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-295

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: JoAnn Burl

Organization: Jeanette's Joy Comm Service Title: Founder/CEO

Address: 10639 S. Champlain Ave

City: Chgo State: IL Zip: 60628

Phone: 773.253.7631 E-mail: jeanettsjoy@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-296

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Diane Latiker

Organization: Kids Off The Block Title: Founder/President

Address: 1621 S. Michigan

City: Chicago State: IL Zip: 60628

Phone: 773-995-9039 E-mail: diane.latiker@sbcglobal.net

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-297

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Name: Darryl Gibson

Organization: 111th Emerald Title:

Address: 11142 S. Emerald

City: Chicago State: IL Zip: 60628

Phone: 773 443-6925 E-mail: darrylgibson25@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-298

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Angela Woods

Organization: _____ Title: _____

Address: 1458 Broadway Street

City: Blue Island State: IL Zip: 60406

Phone: 312-518-1638 E-mail: angee314@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-299

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Name: Cecile Shannon

Organization: Joy Fellowship Bapt. Ch. Title: Church worker

Address: 2025 E. 175th

City: Lansing State: IL Zip: 60438

Phone: 708-418-8920 E-mail: joyfellowship@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-300

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Name: PATRICIA NESBARY

Organization: _____ Title: _____

Address: 6316 ALLEMONG DRIVE

City: MATTESON State: IL Zip: 60443

Phone: 708-720-5836 E-mail: _____

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Red Line Extension

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RS-301

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Demetrius Houston

Organization: _____ Title: _____

Address: 12240 South Perry

City: Chicago State: IL Zip: 60628

Phone: 773-226-4139 E-mail: demetrius_houston@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-302

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Desta Houston

Organization: Developing Communities Proj Title: Adm. Assistant

Address: 11310 South Halsted Street - Suite A

City: Chicago State: IL Zip: 60628-4757

Phone: 773-928-2500 E-mail: desta_houston@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-303

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Darsharlette Barron

Organization: _____ Title: _____

Address: 11519 Villa Ct Apt. # 1D

City: Alsip State: IL Zip: 60803

Phone: 708-926-9831 E-mail: dbarronsales@hotmail.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS-304

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: DR ISAAC L. FLOYD

Organization: Joy Fellowship Baptist Church Title: PASTOR

Address: 2025 E 175th

City: LANSING State: IL Zip: 60438

Phone: 708 418 8920 E-mail: DRILFLOYD@yahoo.com

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Red Line Extension

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RS-305

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Sharon Houston

Organization: P Title:

Address: 12240 South Perry Avenue

City: Chicago State: Il. Zip: 60628

Phone: (773) 550-2084 E-mail: houston-sharon@sbcglobal.net

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-306

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Janice Richardson

Organization: _____ Title: _____

Address: 12955 S. May Street

City: Calumet Park State: IL Zip: 60827

Phone: 708-209-7276 E-mail: jambenne113@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-307

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: R. C. Houston

Organization: _____ Title: _____

Address: 12240 South Perry Avenue

City: Chicago State: IL Zip: 60628-6327

Phone: (312) - 0078 E-mail: RCHOUSTON2@YAHOO.COM

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-308

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Verdia L. Jones

Organization: Joy Fellowship Title:

Address: 8623 So. Elizabeth St.

City: Chicago State: IL Zip: 60620

Phone: (773) 994-6242 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-309

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Pamela Wimberly

Organization: _____ Title: _____

Address: 61 West 125 Street

City: Chicago State: ILL Zip: 60628

Phone: 773-264-7022 E-mail: Wimberly1234@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS-310

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Christopher Bates

Organization: _____ Title: _____

Address: 2145 E 175th St.

City: Hansing State: Il Zip: 60438

Phone: 773-469-4681 E-mail: Chris.Bates

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-311

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Patricia Clark

Organization: _____ Title: _____

Address: 3623 188th Pl

City: Lansing State: Il Zip: 60438

Phone: (708) 895-5639 E-mail: _____

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-312

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Michael Richardson

Organization: _____ Title: _____

Address: 12955 South May

City: Chicago, Calumet Park State: Ill Zip: 60827

Phone: 312-420-0258 E-mail: _____

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-313

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Clinton Hall

Organization: R.C.A. Title: Board member

Address: 10536 So Rhodes

City: Chicago State: IL Zip: 60628

Phone: 773-928-1604 E-mail: hallcb@hotmail.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-314

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Lois E. Williams

Organization: _____ Title: _____

Address: 200 E. 115th Street

City: Chicago State: IL Zip: 60628

Phone: 312-747-980 E-mail: williams-lois@CDBH.org

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-315

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: KNESHA ROSE

Organization: HEALTHCARE CONSORTIUM. Title: Assistant Director

Address: 1350 E SIBLEY BLVD. SUITE #303

City: Dolton State: IL Zip: ~~[illegible]~~ 60419

Phone: 708-841-9515 E-mail: krose@hcionline.org.

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-316

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Naomi Coleman

Organization: HCI Title:

Address: 1350 E Sibley

City: Dolton State: IL Zip: 60419

Phone: 708 841-9515 E-mail: ncoleman@hcionline.org

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Naomi Coleman

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-317

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Ashley Phillips

Organization: Healthcare Consortium of Il Title:

Address: 1350 E. Sibley Blvd

City: Dolton State: Il Zip: 60419

Phone: 708 301 5405 E-mail: aphillips@hcionline.org

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Ashley Phillips

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-318

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: BARBARA HEARON

Organization: STRIVING FOR JUSTICE MIN Title: EXEC DIR.

Address: 258 E 115th

City: CHGO State: IL Zip: 60628

Phone: 773 852-0071 E-mail: hearonb@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-319

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Robert Douglas

Organization: S.D.N Foundation Title: Founder

Address: 10812 S. Forest

City: Chicago State: IL Zip: 60628

Phone: 773-653-7527 E-mail: SONfourlife@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS-320

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Yolanda Lovert

Organization: _____ Title: _____

Address: 700 W. 111th St

City: CHGO State: IL Zip: 60628

Phone: 773-882-0029 E-mail: Yolanda Lovert@sbcglobal.net

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-321

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: MARK HARRELL

Organization: 111th ST. Block CLUB Title: PRESIDENT

Address: 11121 S. Emerald

City: Chgo State: IL Zip: 60628

Phone: 708-439-2661 E-mail: mark-harrell@us.aflac.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-322

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Suwanda O. Atwater

Organization: _____ Title: _____

Address: 19 W. 112th Street

City: Chicago State: IL Zip: 60628

Phone: (708) 354-1582 E-mail: South20@Comcast.Com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-323

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Patricia Taylor

Organization: _____ Title: _____

Address: 4947 S. Calumet

City: Chicago State: IL Zip: 60617

Phone: 773-719-3216 E-mail: _____

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Red Line Extension

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RS-324

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Name: Charise R Bennett

Organization: _____ Title: _____

Address: 12955 S. May

City: Calumet Park State: IL Zip: 60827

Phone: 708-743-8811 E-mail: Chairis@hotmail.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-325

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: LAVERNE L. SIMS

Organization: _____ Title: _____

Address: 337 Oglesby

City: Calumet City State: IL Zip: 60409

Phone: 708 717-0162 E-mail: LAVSIMS@yahoo.com

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Red Line Extension

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RS-326

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Name: Bobbie Lloyd

Organization: Title:

Address: 12357 S. Perry

City: Chicago State: Ill. Zip: 60628

Phone: 773 995-1632 E-mail:

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Red Line Extension

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RS-327

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Name: Ashley Davis

Organization: _____ Title: _____

Address: 7940 S. Wood

City: Chicago State: IL Zip: 60620

Phone: 773-544-4156 E-mail: adavis2593@yahoo.com

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS-328

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Name: Edmond Lumpkin

Organization: _____ Title: _____

Address: 7940 S. Woods St Apt 1

City: Chicago State: IL Zip: 60620

Phone: 773 494 8866 E-mail: edlumpkin@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-329

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Name: DANIEL Mays

Organization: _____ Title: _____

Address: 9800 South

City: Chicago State: IL Zip: 60628

Phone: (773) 320-0521 E-mail: Carpenterdan@Yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS-330

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Name: Cassandra Allen Courtney

Organization: _____ Title: _____

Address: 20630 Crawford

City: Matteson State: IL Zip: 60443

Phone: 708-679 9596 E-mail: cassandra courtney@yahoo.com

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-331

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Name: Alvoris Rodgers

Organization: _____ Title: _____

Address: 7901 S. Paxton

City: Chicago State: IL Zip: 60617

Phone: 312.560.1375 E-mail: _____

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Red Line Extension

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cta

RS-332

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Name: Cheryl Hunnel

Organization: _____ Title: _____

Address: 3515 W. 85th Pl

City: Chicago State: IL Zip: 60652

Phone: 773-471-9405 E-mail: Lady930@prodigy.net

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Red Line Extension

Connecting 95th Street Station to 130th Street

RS-333

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Name: John Paul Jones

Organization: Sustainable Englewood Project Title: President

Address: 2113 W. 71st Street

City: Chicago State: Il Zip: 606

Phone: (773) 928-2500 E-mail: jpjones.dcp@gmail.com

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John Paul Jones

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RS-334

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Name: Brandon Lore

Organization: DEVELOPING COMMUNITIES PROJECT Title: PREVENTION SPECIALIST

Address: 11300 S. HALSTED, SUITE A

City: CHICAGO State: IL Zip: 60628

Phone: (773) 928-2500 E-mail: brangelle@aol.com

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Red Line Extension

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RS-335

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Name: Gwendolyn M. Rice

Organization: Developing Communities Project Title: Executive Director

Address: 11300 S. Halsted St - Suite A

City: Chicago State: IL Zip: 60628

Phone: 773-928-2500 E-mail: GWENRICE.DCP@AMERITECH.NET

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27. 2009.

The key measure for consideration in this matter is the transit riders: how the CTA can be more user friendly & helpful to those persons who are transit disadvantaged.

Clearly, the Red Line must be extended & available to those with low incomes, without cars or without employment because they are transit disadvantaged.

It is critical for the CTA Line to extend to 130th St to insure that young & old have access to Chicago's amenities - the Harold Washington Library, the Millenium Park, the Cultural Center - that are socially accessible to working and high wages communities.

It is important for transit to be equitable. This line will help (not completely solve) to mitigate against the glaring transit inequities on Chicago's far South Side.

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Red Line Extension

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RS-336

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Name: Tony Adams, Anhony Johnson

Organization: Sara Lee bakins Title: I work board

Address: 3351 W 21th St

City: Chicago State: Ill Zip: 60623

Phone: 1-773-522-5286 E-mail: 3351 W 21th St

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

cultural resources
Wildlife and ecosytems
Energy use
Land acquisition displacement and relocation.
Land use relocations
Natural resources including air quality
and water resources
Neighborhood compatibility and environmental
justice
Parklands/ recreational facilities
safety and security secondary development
transportation. Noise and vibration
visual and aesthetic impacts
zoning and economic development and

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RS-337

CHANGE.
CHICAGO HOUSING AUTHORITY

Martin Nesbitt
Chairperson

Board of Commissioners
Hallie Amey
Deverra Beverly
Dr. Mildred Harris
Michael Ivers
Myra King
Carlos Ponce
M. Bridget Reidy
Sandra Young

Lewis A. Jordan
Chief Executive Officer

Scott W. Ammarell
General Counsel

November 2, 2009

Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

Dear Mr. Busby:

In response to the *Environmental Impact Statement Scoping Information* regarding *Connecting 95th Street Station to 130th Street,* The Chicago Housing Authority (CHA) would like to express strong support for the Red Line Extension Locally Preferred Alternative.

This alternative extension would improve public transportation and citywide accessibility for residents and workers of the South Side. Particularly, this extension would allow greater public transportation and a Red Line stop near the Altgeld Gardens residential development which is located on the far South Side near the Riverdale community. The 190-acre Altgeld Gardens is comprised of 17 blocks of 225 two-story row houses with 1,953 family units and its full rehabilitation is scheduled to be completed in 2014. The CHA would like to add that the Red Line Extension Locally Preferred Alternative would have a tremendous positive impact for the families living at Altgeld Gardens who would certainly benefit from utilizing this proposed extension.

The CHA looks forward to this Chicago Transit Authority targeted project and hopes that we can be of support throughout the process of the Red Line Extension.

Sincerely,

Lewis A. Jordan
Chief Executive Officer

60 E. Van Buren Street · Chicago, Illinois 60605-1207 · (312) 742-8500 · www.thecha.org

Red Line Extension

Connecting 95th Street Station to 130th Street

cta

RS-338

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Name: THE REV. DR. JOSEPH M. BOCKO

Organization: REFORMATION LUTHERAN Title: SENIOR PASTOR

Address: 11310 S. FOREST AVE.

City: CHICAGO State: IL Zip: 60628

Phone: 773-785-4570 E-mail: reforchicago@yahoo.com

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RS-339

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Name: Helen Rockingham

Organization: Home Owner Title:

Address: 11340 S. Princeton Ave.

City: Chicago, State: IL Zip: 60628

Phone: 773-821-0208 E-mail: helen_rockingham@att.net

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

Even though there was one other option presented at the Sept. 22nd, Scoping Meeting I can't see the purpose being fulfilled using it or the HRT Alternative route. Your goals as stated on page 11 appears to be more efficiently implimented by the Locally Preferred Alternative West and South side of the existing track. That being said, What is the distance from the track of property in need of occupancy removal? Where on the time-line would those individuals be contacted? How would these persons be contacted? Who (what division of Management) will be responsible for those notifications? Will the Engineers now be aware + take under consideration the ability or inability of homes that structually could not withstand ① the building/Construction affects ② the shifting of landscape (Consequently home structures) upon opening the rail-traffic.

I think the age of the structures must be taken into consideration not only distance.

I commend you on your objectives - knowing how very much this new system effort is needed and I hope an open and fair Communication Line will continue throughout the Project at

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RS-340

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Name: REATHER STOCKSTELL

Organization: SALEM BAPTIST CHURCH OF CHGO Title: MEMBER ID: 10974

Address: 753 EAST 79th STREET, 4A

City: CHICAGO State: IL Zip: 60619-3133

Phone: (773) 398-4408 E-mail: rstockstell@yahoo.com

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RS-341

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Name: Rita Maryland

Organization: Title:

Address: 9230 S. Bennett Ave

City: Chicago State: IL Zip: 60617

Phone: 773-978-5625 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

FROM :MARYLAND FAX NO. :7739785625 Oct. 27 2009 10:41AM P1

Red Line Extension

Connecting 95th Street Station to 130th Street

RS-342

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: Brian Maryland

Organization: Title:

Address: 8751 S. Euclid

City: Chicago State: IL Zip: 60617

Phone: E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

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Line Extension

Connecting 95th Street Station to 130th Street

RS-343

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: DOLORES M. CHESTNUT

Organization: ROSEMOOR COMMUNITY ASSOC Title: MEMBER

Address: 10522 S. VERNON AV.

City: CHICAGO State: IL Zip 60628

Phone: (773) 928-09[illegible]1 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

I support the extension of the CTA Red Line using the Union Pacific Rail Road (UPRR) route. I support the position that the Red Line extension must reach the Altgeld Gardens/ Calumet River area at 130th Street and that every possible engineering design concept must be examined to ensure the full extension of the Red Line from 95th Street to 130th Street. This will insure mass transit access to a transit dependent population, south suburban communities and nearby industries.

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Line Extension

Connecting 95th Street Station to 130th Street

RS-344

The purpose of the scoping process is to identify public and agency concerns early in the environmental process, define the issues and alternatives that will be examined in the Environmental Impact Statement (EIS) and facilitate an efficient EIS preparation process. Please PRINT.

Name: MONICA N. CHESTNUT

Organization: ROSEMOOR COMMUNITY ASSOC Title: MEMBER

Address: 10522 S. VERNON

City: Chicago State: IL Zip: 60628

Phone: (773) 928-09?1 E-mail:

Please comment on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation and the potential impacts and mitigation measures to be considered. Comments must be submitted by the close of business on October 27, 2009.

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Scoping comments may be submitted via mail, e-mail, fax or the project website with attention to: Jeffrey Busby, General Manager, Strategic Planning, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602. **Fax:** (312)681-4297, **Email:** RedExtension@transitchicago.com, **Website:** www.transitchicago.com/RedEIS, **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), **Hearing & Speech Impaired:** 1-888-CTA-TTY1 (1-888-282-6891), **Transit Information:** 836-7000 from any local area code **RTA TTY:** 312-836-4949

Appendix M
Agency Scoping Comments

RS-53

City of Chicago
Richard M. Daley, Mayor

Department of Environment

Suzanne Malec-McKenna
Commissioner

Twenty-fifth Floor
30 North LaSalle Street
Chicago, Illinois 60602-2575
(312) 744-7606 (Voice)
(312) 744-6451 (FAX)
(312) 744-3586 (TTY)
http://www.cityofchicago.org

October 30, 2009

Mr. Richard L. Rodriguez, President
Mr. Jeffrey Busby, General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

Dear Messrs. Rodriguez and Busby:

The Department of Environment (DOE) appreciates the opportunity to comment on the proposed extension of the Chicago Transit Authority (CTA) Red and Orange Lines. We are supportive of both projects and the increased service to currently under-supported communities.

Three sections follow; the first is a list that applies to both projects, the second focuses on the Red Line, and the third on the Orange Line.

BOTH PROJECTS

Please evaluate:

- Recycling opportunities at stations and parking areas
- Alternative energy options including solar, solar thermal, wind and more to provide electricity and heating / cooling where needed
- Opportunities to install solar arrays (on rooftops, large expanses, etc.) to return energy to the grid
- Reduction of light pollution through the use of downward-facing lighting
- Compliance with the city's stormwater ordinance, including using bioswales, rain barrels and other methods to reduce the first flush of water into the sewer system
- Native landscapes requiring little to no irrigation
- Green roofs on any facilities
- Bicycle access and parking
- Permeable paving for the Park-N-Ride areas
- Preferred parking for fuel-efficient vehicles
- Charging stations for electric vehicles
- The City's new Soil and Rubble Reuse Intergovernmental Agreement applicability – extensive reuse of materials during demolition and construction could be possible
- Impacts to wildlife or other important natural resources

NEIGHBORHOODS Alive!
BUILDING CHICAGO TOGETHER

CHICAGO WORKS TOGETHER

RED LINE

DOE will be constructing the Ford Calumet Environmental Center, a 38,000 square foot environmental education facility near 130th and Torrence in Chicago. We are supportive of a joint Metra / CTA station at 115th Street and are very interested in the possibility of an intermodal connection between NicTD/South Shore Line and CTA at 130th Street. These joint stations would allow residents from Indiana and the suburbs to easily gain access to our Center. We would also invite discussion around a bus turnaround at the Center for the 130th and Torrence buses or other buses with similar routes.

ORANGE LINE

Of particular concern to DOE are issues relating to neighborhood compatibility and environmental justice, primarily in relation to historical and/or privately owned parcels that may need to be acquired for the project. DOE would also be interested in a detailed evaluation of noise and vibration, including additive effects associated with Midway airport operations, to determine how such issues will affect neighboring properties.

We offer our support and assistance with any of our comments as appropriate. Thank you for the opportunity to comment on these important projects.

Sincerely,

Suzanne Malec-McKenna
Commissioner

cc: Nicole Kamins
Kevin Laberge

SMM/NRWQ/nlk

RS-52

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, November 04, 2009 4:47 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Request for Comments -- Department of Streets and Sanitation - Proposed Red Line Expansion

---

From: StreetsAndSan [streetsandsan@cityofchicago.org]
Sent: Monday, November 02, 2009 2:39 PM
To: Red Extension
Cc: Ernst, Jonathan
Subject: Request for Comments -- Department of Streets and Sanitation - Proposed Red Line Expansion

Mr. Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
RedExtension@transitchicago.com
OrangeExtension@transitchicago.com

Dear Mr. Busby:

I am writing in response to your request for comments regarding the environmental reviews that will take place pertinent to the potential expansions of the Red and Orange Lines of the Chicago Transit Authority.

For both projects, the City of Chicago's Department of Streets and Sanitation (DSS) would like the review committee to consider the following comments and concerns regarding the expansions during the environmental review process:

1. The location of any street lights that will need to be removed or relocated as a result of the new lines;
2. An analysis of the affect these elevated concrete supports will have on street level lighting and any steps that will be taken to supplement street lighting in these areas, i.e. CTA-provided lighting on the underside of the elevated line;
3. The location of any public way trees that will need to be removed as a result of the new lines or the construction activity and a replacement strategy for those lost trees;
4. The level of assistance the CTA expects to request from DSS for services such as street "No Parking" postings and the towing of illegally parked vehicles during the construction phase of these projects;
5. The creation of a rodent abatement plan for the affected land which includes required sign-offs by the DSS's Bureau of Rodent Control prior to construction;
6. A plan for the proper storage, removal and recycling of all construction and demolition debris in accordance with all City of Chicago ordinances; and
7. A commitment to having platform level recycling containers and space at street level for the storage of recyclables prior to being separately collected from the garbage.

Thank you for your consideration of these issues

Sincerely,
(SIGNED)
Thomas G. Byrne

Commissioner
Department of Streets and Sanitation
TGB:je:lps

EMAIL/Busby.CTA.email.environmental review

cc: Jonathan Ernst

RS-337

CHANGE.
CHICAGO HOUSING AUTHORITY

Martin Nesbitt
Chairperson

Board of Commissioners
Hallie Amey
Deverra Beverly
Dr. Mildred Harris
Michael Ivers
Myra King
Carlos Ponce
M. Bridget Reidy
Sandra Young

Lewis A. Jordan
Chief Executive Officer

Scott W. Ammarell
General Counsel

November 2, 2009

Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

Dear Mr. Busby:

In response to the *Environmental Impact Statement Scoping Information* regarding *Connecting 95th Street Station to 130th Street,* The Chicago Housing Authority (CHA) would like to express strong support for the Red Line Extension Locally Preferred Alternative.

This alternative extension would improve public transportation and citywide accessibility for residents and workers of the South Side. Particularly, this extension would allow greater public transportation and a Red Line stop near the Altgeld Gardens residential development which is located on the far South Side near the Riverdale community. The 190-acre Altgeld Gardens is comprised of 17 blocks of 225 two-story row houses with 1,953 family units and its full rehabilitation is scheduled to be completed in 2014. The CHA would like to add that the Red Line Extension Locally Preferred Alternative would have a tremendous positive impact for the families living at Altgeld Gardens who would certainly benefit from utilizing this proposed extension.

The CHA looks forward to this Chicago Transit Authority targeted project and hopes that we can be of support throughout the process of the Red Line Extension.

Sincerely,

Lewis A. Jordan
Chief Executive Officer

60 E. Van Buren Street · Chicago, Illinois 60605-1207 · (312) 742-8500 · www.thecha.org

Cheever, Kim

From: Peters, Melissa [PetersMe@cdm.com]
Sent: Tuesday, October 06, 2009 8:21 AM
To: Cheever, Kim
Subject: FW: Attn ; Jeff Busby
Attachments: cta expansion.doc

Note that this is an agency comment.

From: Orange Extension [mailto:OrangeExtension@transitchicago.com]
Sent: Monday, October 05, 2009 4:45 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Attn ; Jeff Busby

From: Harmon, Mark A. [Mark.Harmon@chicagopolice.org]
Sent: Monday, October 05, 2009 9:18 AM
To: 'redextension@transitchicago.om'
Cc: Orange Extension
Subject: Attn ; Jeff Busby

Sorry for the delay

Lt Mark Harmon

BUREAU OF PATROL **1 October 2009**

TO: Jeffrey Busby
General Manager
Strategic Planning
Chicago Transit Authority

FROM: Mark Harmon
Commanding Officer
Bureau of Patrol Administration

SUBJECT: CTA Extension Projects

Bureau of Patrol is listing the following concerns/issues to be addressed in regards to the Red and Orange line extension projects:

- Federal funding for an overtime initiative similar to the Dan Ryan extension project. Overall security for the project will over burden regular patrol duties. Site and personnel security should be covered separately from day to day operations.

- Remote and somewhat concealed access points and locations pose security issues.

- Additional traffic issues need to be addressed with proposed right of way going to CTA. There will also be additional vehicles being utilized to begin the shuttle service to proposed new destinations.

- More Chicago Police Department members will need to be rail certified with the proximity of the rail system to the designated patrol areas.

- Proposed expansion of the 95th St terminal poses many traffic and security issues. Currently the terminal is one of the busiest rail locations for police service. This would be greatly affected by reduced parking and increased foot and vehicular traffic.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

217-782-0547

September 28, 2009

Mr. John Paquet
Vice President
Planning and Development
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661-1498

Dear Mr. Paquet:

We have reviewed the information concerning an Environmental Impact Statement project for the proposed Red Line Extension to serve the South Suburban residents. This project also includes improvements to the 95th Street Station terminal.

The Agency has no objections to the project; however a construction site activity stormwater NPDES permit will be required from the Division of Water Pollution Control. Also, please contact The U. S. Army Corps of Engineers for any permit requirements if there are any stream crossings that require dredge and fill activities in the waterway.

If you have need for an Environmental Review in the future, please submit your information to: Illinois Environmental Protection Agency, Deputy Director's Office/MC #1, PO Box 19276, Springfield, Illinois 62794-9276, **ATTN: DiAnne Schuerman**

Sincerely,

Lisa Bonnett

Lisa Bonnett
Acting Deputy Director

RS-20

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Monday, October 12, 2009 4:35 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Illinois State Police concerns

From: Anthony_Lupo@isp.state.il.us [Anthony_Lupo@isp.state.il.us]
Sent: Wednesday, October 07, 2009 11:14 AM
To: Red Extension; Yellow Extension; Orange Extension
Cc: mark.harmon@chicagopolice.org
Subject: Illinois State Police concerns

As we discussed in the Scoping meeting on September 23, 2009. Below is details a few concerns we had and would like them looked at during the preliminary phase:

FIRST RESPONDERS

Will the construction area be easily accessible for First Responders to respond to any type of emergency? With the tracks being elevated, will there be an easy on/off for personnel?

SECURITY

If the Contractor desires additional police officer services of Illinois State Police (ISP), District Chicago, for enforcement, traffic control, and/or security, ISP personnel will, as available, provide police services on a hireback basis. During this time, ISP officers will provide a visible State Police presence, provide general police services and take enforcement action as appropriate in and around the site of the program. We will govern all areas on the expressways or on state owned property. To secure the above, the Contractor would have to sign a binding contract detailing all the specifics with the State of Illinois.

If you should have any questions or need additional information, please do not hesitate to contact me.

Respectfully,

Lieutenant Tony Lupo
District Chicago
Administrative Command
Office 847 294 4655
Fax 847 294 4440
Cell 708 932 9347

RS-57

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Thursday, October 29, 2009 8:35 AM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Red line EIS scoping comments

From: David Tomzik [David.Tomzik@Pacebus.com]
Sent: Tuesday, October 27, 2009 9:12 AM
To: Red Extension
Subject: Red line EIS scoping comments

Pace scoping comments regarding CTA Red Line Extension Environmental Impact Statement

Thank you for the opportunity to review and comment on the scoping of the Environmental Impact Statement for the Red Line extension. Below are comments regarding the proposed project alternatives and potential environmental impacts relating to the proposed extension between 95th Street Station and 130th Street.

- Pace supports the rail extension of the Red Line from the current terminus at 95th Street Station to 130th Street

- In compliance with the Illinois Auditor General's recommendation to reduce CTA & Pace overlapping service and provide greater suburban market coverage area, Pace intends to restructure various south suburban routes operating on Halsted and King Drive which now serve the Red Line 95th Street Station. Additional planning development and review would be required to determine the most optimal station(s) to serve on either alignment.

- Arterial roadway access to/from the proposed station(s) served by connecting bus services will require further review including issues such as railroad grade crossings, street parking, and intersection improvements to accommodate bus movements.

- Pace requests participation in the planning development and design of the proposed station facilities served by both fixed route and Regional ADA Paratransit services. Design should include sufficient bays to accommodate Pace and CTA bus routes, Regional ADA Paratransit, operator facilities, passenger information as well as bus priority access such as Transit Signal Priority or bus activated signals to allow buses to enter/exit the terminal with minimal congestion.

We look forward to participating in this regional planning process.

David Tomzik
Manager, Long Range Planning
Pace Suburban Bus Service
550 W. Algonquin Road
Arlington Heights, IL 60005
847 228-2463
fax 847 228-2330

david.tomzik@pacebus.com

RS-53

City of Chicago
Richard M. Daley, Mayor

Department of Environment

Suzanne Malec-McKenna
Commissioner

Twenty-fifth Floor
30 North LaSalle Street
Chicago, Illinois 60602-2575
(312) 744-7606 (Voice)
(312) 744-6451 (FAX)
(312) 744-3586 (TTY)
http://www.cityofchicago.org

October 30, 2009

Mr. Richard L. Rodriguez, President
Mr. Jeffrey Busby, General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

Dear Messrs. Rodriguez and Busby:

The Department of Environment (DOE) appreciates the opportunity to comment on the proposed extension of the Chicago Transit Authority (CTA) Red and Orange Lines. We are supportive of both projects and the increased service to currently under-supported communities.

Three sections follow; the first is a list that applies to both projects, the second focuses on the Red Line, and the third on the Orange Line.

BOTH PROJECTS

Please evaluate:

- Recycling opportunities at stations and parking areas
- Alternative energy options including solar, solar thermal, wind and more to provide electricity and heating / cooling where needed
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- Green roofs on any facilities
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- Permeable paving for the Park-N-Ride areas
- Preferred parking for fuel-efficient vehicles
- Charging stations for electric vehicles
- The City's new Soil and Rubble Reuse Intergovernmental Agreement applicability – extensive reuse of materials during demolition and construction could be possible
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NEIGHBORHOODS Alive!
BUILDING CHICAGO TOGETHER

CHICAGO WORKS TOGETHER

RED LINE

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ORANGE LINE

Of particular concern to DOE are issues relating to neighborhood compatibility and environmental justice, primarily in relation to historical and/or privately owned parcels that may need to be acquired for the project. DOE would also be interested in a detailed evaluation of noise and vibration, including additive effects associated with Midway airport operations, to determine how such issues will affect neighboring properties.

We offer our support and assistance with any of our comments as appropriate. Thank you for the opportunity to comment on these important projects.

Sincerely,

Suzanne Malec-McKenna
Commissioner

cc: Nicole Kamins
Kevin Laberge

SMM/NRWQ/nlk

RS-52

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, November 04, 2009 4:47 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Request for Comments -- Department of Streets and Sanitation - Proposed Red Line Expansion

---

From: StreetsAndSan [streetsandsan@cityofchicago.org]
Sent: Monday, November 02, 2009 2:39 PM
To: Red Extension
Cc: Ernst, Jonathan
Subject: Request for Comments -- Department of Streets and Sanitation - Proposed Red Line Expansion

Mr. Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
RedExtension@transitchicago.com
OrangeExtension@transitchicago.com

Dear Mr. Busby:

I am writing in response to your request for comments regarding the environmental reviews that will take place pertinent to the potential expansions of the Red and Orange Lines of the Chicago Transit Authority.

For both projects, the City of Chicago's Department of Streets and Sanitation (DSS) would like the review committee to consider the following comments and concerns regarding the expansions during the environmental review process:

1. The location of any street lights that will need to be removed or relocated as a result of the new lines;
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6. A plan for the proper storage, removal and recycling of all construction and demolition debris in accordance with all City of Chicago ordinances; and
7. A commitment to having platform level recycling containers and space at street level for the storage of recyclables prior to being separately collected from the garbage.

Thank you for your consideration of these issues

Sincerely,
(SIGNED)
Thomas G. Byrne

Commissioner
Department of Streets and Sanitation
TGB:je:lps

EMAIL/Busby.CTA.email.environmental review

cc: Jonathan Ernst

RS-337

CHANGE.
CHICAGO HOUSING AUTHORITY

Martin Nesbitt
Chairperson

Board of Commissioners
Hallie Amey
Deverra Beverly
Dr. Mildred Harris
Michael Ivers
Myra King
Carlos Ponce
M. Bridget Reidy
Sandra Young

Lewis A. Jordan
Chief Executive Officer

Scott W. Ammarell
General Counsel

November 2, 2009

Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

Dear Mr. Busby:

In response to the *Environmental Impact Statement Scoping Information* regarding *Connecting 95th Street Station to 130th Street,* The Chicago Housing Authority (CHA) would like to express strong support for the Red Line Extension Locally Preferred Alternative.

This alternative extension would improve public transportation and citywide accessibility for residents and workers of the South Side. Particularly, this extension would allow greater public transportation and a Red Line stop near the Altgeld Gardens residential development which is located on the far South Side near the Riverdale community. The 190-acre Altgeld Gardens is comprised of 17 blocks of 225 two-story row houses with 1,953 family units and its full rehabilitation is scheduled to be completed in 2014. The CHA would like to add that the Red Line Extension Locally Preferred Alternative would have a tremendous positive impact for the families living at Altgeld Gardens who would certainly benefit from utilizing this proposed extension.

The CHA looks forward to this Chicago Transit Authority targeted project and hopes that we can be of support throughout the process of the Red Line Extension.

Sincerely,

Lewis A. Jordan
Chief Executive Officer

60 E. Van Buren Street · Chicago, Illinois 60605-1207 · (312) 742-8500 · www.thecha.org

Cheever, Kim

From: Peters, Melissa [PetersMe@cdm.com]
Sent: Tuesday, October 06, 2009 8:21 AM
To: Cheever, Kim
Subject: FW: Attn ; Jeff Busby
Attachments: cta expansion.doc

Note that this is an agency comment.

From: Orange Extension [mailto:OrangeExtension@transitchicago.com]
Sent: Monday, October 05, 2009 4:45 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Attn ; Jeff Busby

From: Harmon, Mark A. [Mark.Harmon@chicagopolice.org]
Sent: Monday, October 05, 2009 9:18 AM
To: 'redextension@transitchicago.om'
Cc: Orange Extension
Subject: Attn ; Jeff Busby

Sorry for the delay

Lt Mark Harmon

BUREAU OF PATROL **1 October 2009**

TO: Jeffrey Busby
General Manager
Strategic Planning
Chicago Transit Authority

FROM: Mark Harmon
Commanding Officer
Bureau of Patrol Administration

SUBJECT: CTA Extension Projects

Bureau of Patrol is listing the following concerns/issues to be addressed in regards to the Red and Orange line extension projects:

- Federal funding for an overtime initiative similar to the Dan Ryan extension project. Overall security for the project will over burden regular patrol duties. Site and personnel security should be covered separately from day to day operations.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

217-782-0547

September 28, 2009

Mr. John Paquet
Vice President
Planning and Development
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661-1498

Dear Mr. Paquet:

We have reviewed the information concerning an Environmental Impact Statement project for the proposed Red Line Extension to serve the South Suburban residents. This project also includes improvements to the 95th Street Station terminal.

The Agency has no objections to the project; however a construction site activity stormwater NPDES permit will be required from the Division of Water Pollution Control. Also, please contact The U. S. Army Corps of Engineers for any permit requirements if there are any stream crossings that require dredge and fill activities in the waterway.

If you have need for an Environmental Review in the future, please submit your information to: Illinois Environmental Protection Agency, Deputy Director's Office/MC #1, PO Box 19276, Springfield, Illinois 62794-9276, **ATTN: DiAnne Schuerman**

Sincerely,

Lisa Bonnett

Lisa Bonnett
Acting Deputy Director

RS-20

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Monday, October 12, 2009 4:35 PM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Illinois State Police concerns

From: Anthony_Lupo@isp.state.il.us [Anthony_Lupo@isp.state.il.us]
Sent: Wednesday, October 07, 2009 11:14 AM
To: Red Extension; Yellow Extension; Orange Extension
Cc: mark.harmon@chicagopolice.org
Subject: Illinois State Police concerns

As we discussed in the Scoping meeting on September 23, 2009. Below is details a few concerns we had and would like them looked at during the preliminary phase:

FIRST RESPONDERS

Will the construction area be easily accessible for First Responders to respond to any type of emergency? With the tracks being elevated, will there be an easy on/off for personnel?

SECURITY

If the Contractor desires additional police officer services of Illinois State Police (ISP), District Chicago, for enforcement, traffic control, and/or security, ISP personnel will, as available, provide police services on a hireback basis. During this time, ISP officers will provide a visible State Police presence, provide general police services and take enforcement action as appropriate in and around the site of the program. We will govern all areas on the expressways or on state owned property. To secure the above, the Contractor would have to sign a binding contract detailing all the specifics with the State of Illinois.

If you should have any questions or need additional information, please do not hesitate to contact me.

Respectfully,

Lieutenant Tony Lupo
District Chicago
Administrative Command
Office 847 294 4655
Fax 847 294 4440
Cell 708 932 9347

RS-57

Cheever, Kim

From: Red Extension [redextension@transitchicago.com]
Sent: Thursday, October 29, 2009 8:35 AM
To: Peters, Melissa
Cc: Kornblatt, Helene B.
Subject: FW: Red line EIS scoping comments

From: David Tomzik [David.Tomzik@Pacebus.com]
Sent: Tuesday, October 27, 2009 9:12 AM
To: Red Extension
Subject: Red line EIS scoping comments

Pace scoping comments regarding CTA Red Line Extension Environmental Impact Statement

Thank you for the opportunity to review and comment on the scoping of the Environmental Impact Statement for the Red Line extension. Below are comments regarding the proposed project alternatives and potential environmental impacts relating to the proposed extension between 95th Street Station and 130th Street.

- Pace supports the rail extension of the Red Line from the current terminus at 95th Street Station to 130th Street

- In compliance with the Illinois Auditor General's recommendation to reduce CTA & Pace overlapping service and provide greater suburban market coverage area, Pace intends to restructure various south suburban routes operating on Halsted and King Drive which now serve the Red Line 95th Street Station. Additional planning development and review would be required to determine the most optimal station(s) to serve on either alignment.

- Arterial roadway access to/from the proposed station(s) served by connecting bus services will require further review including issues such as railroad grade crossings, street parking, and intersection improvements to accommodate bus movements.

- Pace requests participation in the planning development and design of the proposed station facilities served by both fixed route and Regional ADA Paratransit services. Design should include sufficient bays to accommodate Pace and CTA bus routes, Regional ADA Paratransit, operator facilities, passenger information as well as bus priority access such as Transit Signal Priority or bus activated signals to allow buses to enter/exit the terminal with minimal congestion.

We look forward to participating in this regional planning process.

David Tomzik
Manager, Long Range Planning
Pace Suburban Bus Service
550 W. Algonquin Road
Arlington Heights, IL 60005
847 228-2463
fax 847 228-2330

david.tomzik@pacebus.com

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312·751·5600

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October 14, 2009

Mr. Jeffrey Busby
General Manager, Strategic Planning
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602

Dear Mr. Busby:

Subject: Environmental Impact Statement Scoping for the CTA Red Line Extension

Reference is made to your interagency scoping meeting on September 24, 2009, concerning the subject matter. The Metropolitan Water Reclamation District of Greater Chicago (District) has the following comments for the scoping process:

- Aerial photos of the Locally Preferred Alternative shown at the meeting indicate the proposed alignment running along the Union Pacific Railroad (UPRR) at grade adjacent to District property. The District requires access between the Calumet Water Reclamation Plant to the west of Cottage Grove Avenue and its facilities to the east of Cottage Grove Avenue. District access between the two facilities will have to be modified or reconstructed as part of the project.

- The proposed alternative for the station at the end of the line south of 130th Street is adjacent to District property between 130th Street and 130th Avenue and west of the station. Depending on the location of parking, etc., a request to lease or acquire District property may be required.

- The location for the proposed CTA station north of 130th Street is entirely on District property, some of which may be considered wetland. Also, it appears that the rerouted Cottage Grove Avenue utilizes the District road within the plant boundaries. The District understands that the draft plans are preliminary, but we will have to do a complete evaluation as plans are further developed to determine potential impact on the District.

- We recommend an odor study be conducted early in the environmental review process for impacts on the proposed CTA facilities. The area of greatest concern is the final CTA station along 130th Street, which is directly adjacent to the Calumet Water Reclamation Plant.

- The proposed alignment crosses the District's 17'6"x14'0" Calumet Intercepting Sewer 6 just east of Indiana Avenue. Attached are Sheets 1 and 5 of this contract. This intercepting sewer should be placed on all future Red Line Extension plans.

Questions may be referred to Joe Schuessler, 312-751-3236.

Very truly yours,

Joseph P. Sobanski
Director of Engineering

WSS:AP:JMS
Attachment

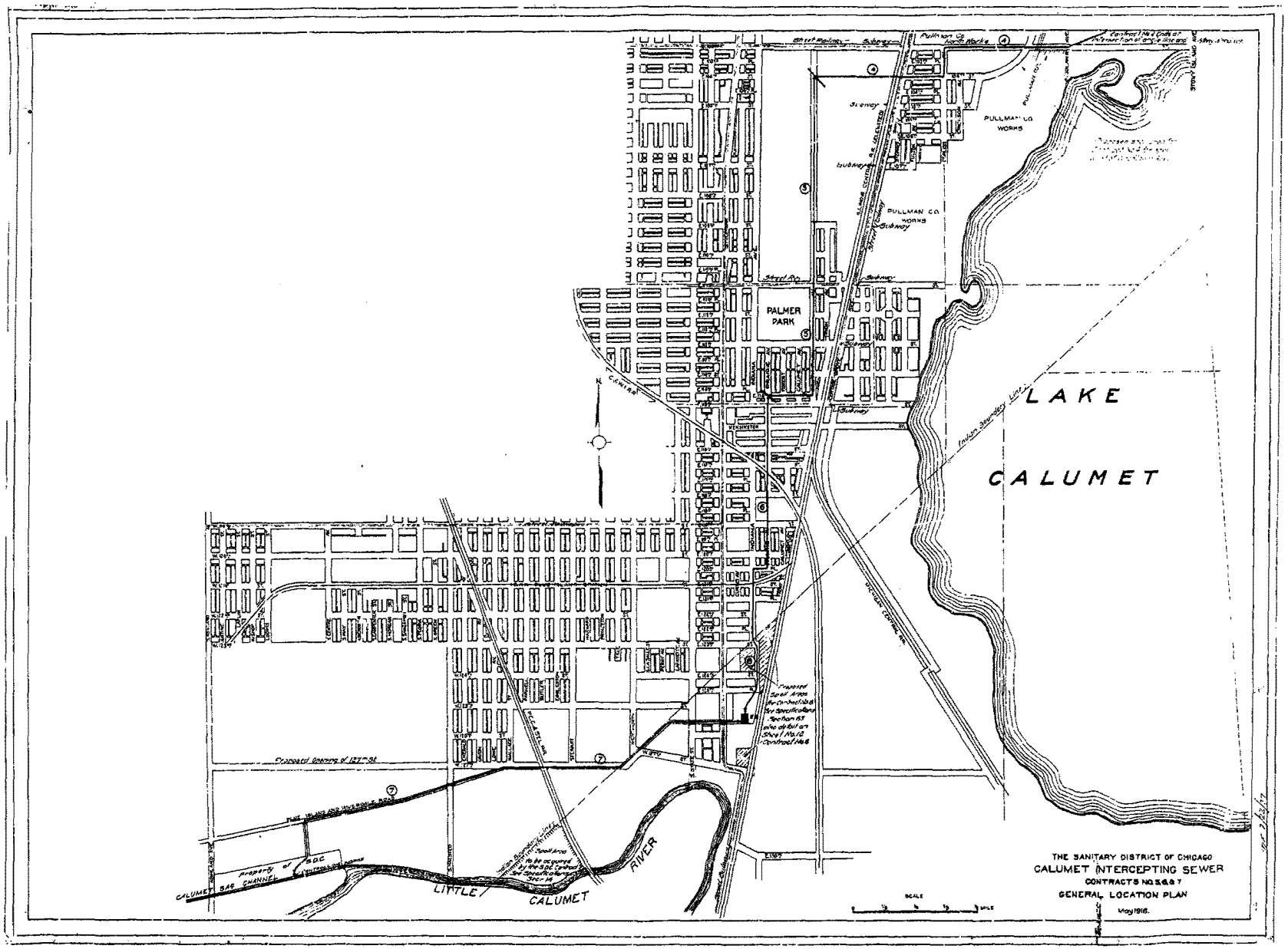
LAKE
CALUMET
PALMER PARK
PULLMAN CO. WORKS
PULLMAN CO. WORKS
Subway
Steel Rd.
Pullman Co. North Works
Proposed Opening of 127th St.
LITTLE
CALUMET
RIVER
CALUMET SAG CHANNEL
Property of S.D.C.
Indian Boundary Line
Proposed Steel Area to be Contracted for Specifications Section 13 Take effect on Shaft No. 12 Contract No. 6
Proposed Steel Area to be acquired by the S.D.C. Contract See Specifications Sec. 14
THE SANITARY DISTRICT OF CHICAGO
CALUMET INTERCEPTING SEWER
CONTRACTS NO. 5, 6 & 7
GENERAL LOCATION PLAN
May 1916.
SCALE
1 MILE

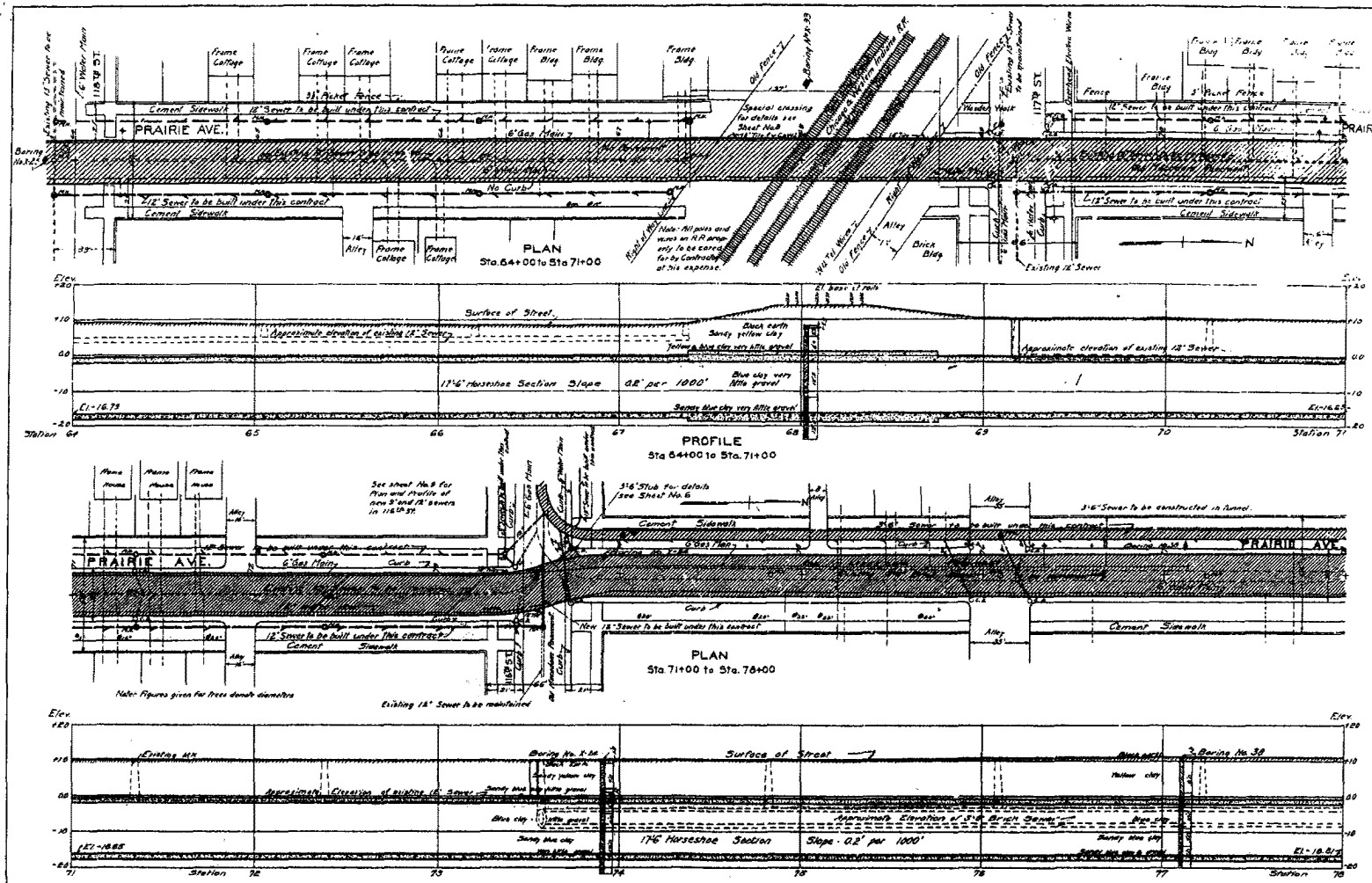

Note:-

The character of soil shown by borings made at the points indicated on the plans is supposed to be approximately correct, but the attention may reveal different soil conditions from the site of the work. Such differences in soil conditions shall not constitute a claim for damages on the part of the Contractor for extra work on account of increased cost of excavation.

The attention of the Contractor is called to section 4 of the Specifications which relates to the location of all underground structures.

All elevations are referred to Chicago City Datum.

Legend

- Electric Light, Telegraph, Telephone, and Street Railway Poles.
- Gas Lamp
- Mail Box, Fire Alarm, and Police Call
- Hydrant
- Existing sewer manhole or circular cover
- Existing manhole on Telephone, Telegraph, or Electric Conduit or Water Valve Manhole
- Manhole to be built
- Tree

Correct: Chandler Pierce
Division Engineer

Approved: Chief Engineer

THE SANITARY DISTRICT OF CHICAGO

CALUMET INTERCEPTING SEWER

CONTRACT NO. 4

PLAN AND PROFILE

PRAIRIE AVE. FROM STA. 64+00 TO STA. 78+00

Hor. Scale 1" = 20'

Vert. Scale 1" = 10'

Feb. 1916 | 10 Sheets | Sheet No. 5

Appendix C

Agency Coordination and Public Involvement

- Final Environmental Impact Statement, Agency Coordination and Public Involvement Comment Responses, July 2022 (Part 1 of 7)
    - Attachment A – Alphabetical Index of Public Commenters and Corresponding Comment IDs
    - Attachment B – Public Comment Responses Matrix and Individual Responses
    - Attachment C – Response Letters to Agencies
    - Attachment D – Response Letters to Railroads

- Public Participation Plan, May 2022 (Part 2 of 7)
- Supplemental Environmental Assessment and Section 4(f) Evaluation Publication, Public Hearing, and Displacements Outreach Summary, May 2022 (Part 2 of 7)
    - Attachment 1 – Supplemental EA and Section 4(f) Evaluation Notification
    - Attachment 2 – Media Coverage
    - Attachment 3 – Public Hearing Format and Materials
    - Attachment 4 – Outreach to Stakeholders and Agencies
    - Attachment 5 – Comments Received
    - Attachment 6 – Displacement Outreach

- 130th Street Station Relocation Outreach and Coordination (Part 2 of 7)
    - December 2020 Community Meetings Summary (January 2021)
    - Altgeld Temporary Advisory Committee Meeting Minutes (January 25, 2021)
    - 130th Street Station Virtual Meeting Minutes (January 27, 2021)
    - 111th Street Station Virtual Meeting Minutes (February 2, 2021)
    - 103rd Street Station Virtual Meeting Minutes (February 9, 2021)
    - Michigan Avenue Street Station Virtual Meeting Minutes (February 16, 2021)
    - Virtual Station Meetings Summary (April 2021)

- Preferred Alignment Announcement, Public Open House, and Displacements Outreach Summary, November 2018 (Part 3 of 7)
    - Attachment 1 – Project Noticing and Informational Materials
    - Attachment 2 – Media Articles
    - Attachment 3 – Elected Official and Community Meetings
    - Attachment 4 – Agency Involvement
    - Attachment 5 – Public Open House Materials
    - Attachment 6 – Comments Received
    - Attachment 7 – Displacements Informational Materials

- Attachment 8 – Displacements Meeting Materials

- Draft Environmental Impact Statement and Section 4(f) Statement Publication, Public Hearing, and Displacements Outreach Summary, July 2018 (Part 4 of 7)
  - Attachment 1 – Federal Register Notice of Availability
  - Attachment 2 – Project Informational Materials
  - Attachment 3 – Draft EIS Publication and Public Hearing Notification Materials
  - Attachment 4 – Media Articles
  - Attachment 5 – Elected Official and Community Meeting Notes
  - Attachment 6 – Agency Involvement
  - Attachment 7 – Public Hearing Materials
  - Attachment 8 – Comments Received
  - Attachment 9 – Displacements Informational Materials
  - Attachment 10 – Displacements Meting Materials

- Draft Environmental Impact Statement Appendix C, Agency Coordination and Public Involvement, Various Dates (Parts 5, 6, and 7 of 7)
  - Limited English Proficiency Analysis (July 2009)
  - Public Participation Plan (August 2012)
  - Coordination Plan (August 2012)
  - Coordination with Chicago Park District
  - Website (May 2015)
  - Alternatives Analysis (2006-2009)
  - Outreach to Community Groups (2012)
  - August 2, 2011 Open House Meeting Summary (October 2011)
  - August 2013 Newsletter
  - Spring 2014 Outreach Summary (October 2014)

Chicago Red Line Extension Project

Agency Coordination and Public Involvement

Comment Responses

July 2022

Prepared by:
Federal Transit Administration
Chicago Transit Authority

Table of Contents

Section 1 - Guide to the Final EIS Response to Comments **1-1**

1.1 Public Comment Periods 1-1

1.2 Responses by Topic 1-2

1.3 How to Find a Response to a Public Comment 1-4

1.4 How to Find a Response to an Agency or Railroad Comment 1-4

Section 2 - Common Responses to Public Comments **2-1**

2.1 Project Information/Purpose & Need/Alternatives Development 2-1

2.2 Transportation 2-8

2.3 Land Use/Economic Development 2-12

2.4 Displacements 2-16

2.5 Neighborhood and Community Impacts 2-19

2.6 Visual Impacts 2-21

2.7 Noise and Vibration 2-22

2.8 Safety and Security 2-24

2.9 Hazardous Materials 2-26

2.10 Wetlands 2-27

2.11 Air Quality 2-27

2.12 Section 4(f) - Parks 2-28

2.13 Public Involvement 2-30

2.14 Timeline/Costs and Funding 2-34

Attachments

Attachment A – Alphabetical Index of Public Commenters and Corresponding Comment IDs
Attachment B – Public Comment Response Matrix and Individual Responses
Attachment C – Response Letters to Agencies
Attachment D – Response Letters to Railroads

Abbreviations

AA	Alternatives Analysis
ADA	Americans with Disabilities Act
AJD	Approved Jurisdiction Determination
BRT	Bus Rapid Transit
CCLBA	Cook County Land Bank Authority
CIG	Capital Investment Grant
CMAQ	Congestion Mitigation and Air Quality
Conrail	Consolidated Rail Corporation
CREC	Controlled Recognized Environmental Condition
CTA	Chicago Transit Authority
DBE	Disadvantaged Business Enterprise
EA	Environmental Assessment
EIS	Environmental Impact Statement
eTOD	equitable Transit Oriented Development
FTA	Federal Transit Administration
HREC	Historical Recognized Environmental Condition
LPA	Locally Preferred Alternative
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Protection Act
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
NOA	Notice of Availability
REC	Recognized Environmental Condition
RLE	Red Line Extension
SPCC	Spill Prevention, Control and Countermeasures
TIF	Tax-Increment Financing
TIP	Transportation Improvement Program
TSD	Transit-Supportive Development
TFIA	Transit Facility Improvement Areas
USACE	U.S. Army Corps of Engineers

Section 1 - Guide to the Final EIS Response to Comments

This addendum contains the comments received on the Red Line Extension (RLE) Project Draft Environmental Impact Statement (EIS), Preferred Alignment announcement, and the Supplemental Environmental Assessment (EA). The Chicago Transit Authority (CTA) established formal comment periods for the Draft EIS consistent with 23 CFR 771.123 and for the Supplemental EA consistent with 23 CFR 771.119. Although a formal comment period was not provided, nor was it required, for the Preferred Alignment announcement, CTA welcomed and accepted comments from the public during the open house meeting. CTA received a total of 363 comments throughout the public comment periods associated with the Draft EIS, Preferred Alignment announcement, and the Supplemental EA. This document describes the comment periods associated with the RLE Project, summarizes the comments received for the RLE Project and provides responses by topic. The comments have been organized for ease of reference and documents the responses to each comment.

1.1 Public Comment Periods

Separate public and agency comment periods were established in development of the environmental review process for this project, as further described below. All comments received or postmarked by the end of the comment periods described below have been documented and responded to in this document of the Final EIS.

1.1.1 Draft EIS

The Notice of Availability (NOA) of the Draft EIS was published in the Federal Register on October 14, 2016, initiating the public comment period for the Draft EIS. The notice provided information regarding the public hearing and instructions on how to make comments regarding the Draft EIS. CTA also notified the public that the Draft EIS was available for review on the project website on October 6, 2016. Hard copies of the Draft EIS were made available at FTA and CTA's headquarter office and at libraries located within the RLE Project area. **Chapter 10** of the Draft EIS provided a list of where the hard copies were made available to the public. The public hearing was held on November 1, 2016. A court reporter was present at the public hearing to record comments. All comments received as part of the Draft EIS, including the transcript from the court reporter, are included in the Draft EIS and Section 4(f) Statement Publication, Public Hearing, and Displacement Outreach Summary, July 2018 (**Appendix C Part 4 of 7**) at the end of this document. The formal comment period ended on November 30, 2016; however, CTA extended the comment period through December 31, 2016 to allow for additional comments. A summary of the public hearing is

provided in **Appendix C Part 4 of 7**. CTA received a total of 284 comments. There were 273 comments from the public and 11 comments from agencies and railroads.

As part of the community outreach process for the Draft EIS, CTA invited potentially displaced property owners and tenants to attend one of three informational community meetings on October 11, 12, and 13, 2016. **Appendix C Part 4 of 7** provides details of the displacement outreach for the Draft EIS.

1.1.2 Union Pacific Railroad Alternative – Preferred Alignment Announcement

CTA conducted public and agency outreach efforts for the selection of the Preferred Alignment announcement, including displacement-specific outreach to property owners and residents who would potentially be displaced by the project. For displacements, CTA conducted community meetings on February 6 and 8, 2018. An open house meeting was held on February 13, 2018 for the public to review and comment on the Preferred Alignment. **Appendix C** Part 3 of 7 provides a summary of the public outreach activities that occurred for the selection of the Preferred Alignment announcement. CTA received a total of 42 comments from the public.

1.1.3 Supplemental EA

The Supplemental EA served as the primary document to facilitate review by agencies and the public regarding the design changes that occurred for the RLE Project since the Draft EIS was published in 2016 and the Preferred Alignment was announced in 2018. The Supplemental EA provided details regarding the 130th Street station relocation, 120th Street yard and shop refinement, and the 107th Place cross-over. The comment period began with the NOA publication on January 31, 2022 and comments were accepted through March 1, 2022. The public hearing for the Supplemental EA was held in two formats: one virtual hearing and one in-person hearing. The virtual hearing was held on February 15, 2022. The in-person hearing was held at The Salvation Army Kroc Center on February 17, 2022. Court reporters were present at both hearings to record comments. Details regarding the Supplemental EA distribution and hard copy locations can be found in the public hearing summary provided in **Appendix C** Part 2 of 7. CTA received a total of 33 comments from the public and four comments from public agencies: Metropolitan Water Reclamation District of Greater Chicago, Illinois Department of Transportation, Federal Highway Administration, and U.S. Environmental Protection Agency.

1.2 Responses by Topic

Each comment is assigned a Comment ID, generally corresponding chronologically by the order in which it was received. The Comment ID is printed on each comment submittal (e.g., e-mail, letter,

comment card, etc.). The comments received are provided in the Supplemental Environmental Assessment Outreach Summary (Part 2 of 7), Preferred Alignment Announcement, Public Open House, and Displacements Outreach Summary (Part 3 of 7) and Draft EIS and Section 4(f) Statement Publication, Public Hearing, and Displacement Outreach Summary (Part 4 of 7) in **Appendix C**. Because commenters often shared comments on a variety of topics, some comments merited multiple responses. The first task was to identify each comment area within each commenter's communication. After this was done for all commenters, comments were grouped into categories by topic (e.g., purpose and need, alternatives, noise and vibration) and reviewed. Full and comprehensive responses were then developed for each response topic. Examples of comments and associated response topics include "why is the project needed?" (response topics: project information/purpose and need/alternatives development); "will the RLE Project increase traffic and pedestrians in the area?" (response topic: transportation); or "how loud is the RLE Project?" (response topic: noise and vibration). Using this approach, all similar comments could be grouped together for a common and more comprehensive response. CTA identified the following response topic areas:

- Project Information/Purpose and Need/Alternatives Development
- Transportation
- Land Use/Economic Development
- Displacements
- Neighborhood and Community Impacts
- Visual Impacts
- Noise and Vibration
- Safety and Security
- Hazardous Materials
- Wetlands
- Air Quality
- Section 4(f) – Parks
- Public Involvement
- Timeline/Costs and Funding

1.3 How to Find a Response to a Public Comment

Comment submittals and their corresponding responses can be found in the tables attached to this Comment Response document (**Attachment B**).

The table of public comments is organized as follows:

- Comment ID Number: A unique comment identification number assigned to each comment
- Commenter's Name
- Comment Type: e-mail, online comment form, letter, handwritten, or verbal testimony recorded by the court reporter

Commenters can find their assigned Comment ID by looking up their last name in the index provided in **Attachment A**. The index was organized alphabetically by the last name of the commenter to make finding a specific individual's or group's comment(s) in the comment matrix easier. Once the commenter identifies their Comment ID number, they then would review the matrix provided in **Attachment B** to find the response to their comment. Comments would either have an individual response, which is located within the matrix, or the reader was referred to the common responses that are located in **Section 2** of this document.

Comments from organizations, stakeholders, and community groups are included as public comments in the index described above. For example, the Redline Oversight Committee submitted a letter with multiple comments. Many residents also submitted comments on behalf of Cru Inner City, which operates the Agape Community Center at 342 W. 111th Street, Chicago, IL.

1.4 How to Find a Response to an Agency or Railroad Comment

CTA received comments on the Draft EIS and Supplemental EA from agencies in the form of letters and e-mails. Agencies or the railroads did not provide comments from the Preferred Alignment announcement. Agencies and the railroads were also assigned Comment ID numbers. The number assigned to the agency or railroad is indicated in parenthesis below, followed by a summary of the key topics from each entity. Comments from agencies and their corresponding responses are grouped alphabetically, as follows and included in **Attachment C**:

- Federal Highway Administration (Comment ID 363)

  Key topics: Construction impacts to I-94 and I-57 and compliance with interstate design standards

- Illinois Department of Transportation (Comment ID 275, 278, 362)

  Key topics: Traffic analysis and impacts at intersections, Interstates 57 and 94 right-of-way, impacts at I-94 interchange at 130th Street

- Illinois Environmental Protection Agency (Comment ID 274)

  Key topics: Required permit for the RLE Project and disposal of hazardous waste

- Metra (Comment ID 282)

  Key topics: Connections to Metra Electric District, future SouthEast Service commuter rail, and ridership projections

- Metropolitan Water Reclamation District of Greater Chicago (Comment ID 279, 360)

  Key topics: Project support, property acquisition, odor study, traffic study, wetlands, stormwater outflow to Kensington Marsh, and protection of existing infrastructure

- Miami Tribe of Oklahoma (Comment ID 280)

  Key topics: Coordination and archaeological resources

- U.S. Department of the Interior (Comment ID 277)

  Key topics: Park impacts and Section 4(f) analysis

- U.S. Environmental Protection Agency (Comment ID 276, 361)

  Key topics: No objections to project, environmental justice and community engagement, noise and air quality impacts and mitigation, station area development, climate change and resiliency, wetlands and natural areas, and appreciation for CTA's dedication to public engagement

Comments from railroads and their corresponding responses are grouped alphabetically, as follows and in **Attachment D**:

- Consolidated Rail Corporation (Comment ID 284)

  Key topics: Service to existing customers, future connections, protection of right-of-way

- Norfolk Southern Corporation (Comment ID 283)

  Key topics: Use of NS right-of-way, service to existing customers, and future connections

- Union Pacific Railroad (Comment ID 281)

  Key topics: Pedestrian safety, barrier walls, engineering plan reviews, protection of right-of-way, and clearances from existing railroad tracks

Response letters addressing comments from the agencies and railroads are included in **Attachments C** and **D**, respectively.

Section 2 - Common Responses to Public Comments

Comments were submitted in the form of letters, e-mails to the project e-mail address (RedExtension@transitchicago.com), public testimony at the Draft EIS public hearing, and comment cards received at the public hearing. Comments were submitted in the form of comment cards at the Preferred Alignment announcement open house and through the project e-mail address. For the Supplemental EA, comments were submitted in the form of letters, e-mails to the project e-mail address, comment forms (electronically via the project website, in-person, and mailed), and public testimony through the court reporters available at the Supplemental EA virtual and in-person public hearings.

Many comments were very similar in nature. CTA and the Federal Transit Administration (FTA) prepared the following responses organized by the topic area below. Each response topic lists the comments to which these responses apply. If comments merited individual responses due to their size and content, then they are provided in **Attachment B**. All individual responses provided cover the same topic areas described and responded to in this document.

2.1 Project Information/Purpose & Need/Alternatives Development

2.1.1 1A - Project Information

Regarding project information, some commenters asked how far east or west the project would extend beyond the existing Union Pacific Railroad (UPRR) right-of-way.

- Comments: 146, 181, 232, 310, 315, 317, 318, 319, 320, 321, 322, 323, 326, 345

The proposed rail extension would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. The Draft Environmental Impact Statement (EIS) evaluated two options of the Red Line Extension (RLE) Project alignment along the UPRR tracks—the East and West Options. Based on public and stakeholder feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in January 2018. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. The Preferred Alignment would preserve viable businesses; minimize impacts to schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. The CTA elevated structure would run along the west side of the UPRR tracks from I-57 south to approximately 107th Place, then would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric District (MED) tracks near 119th Street. South of this point,

the tracks would run southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway (NS) and Consolidated Rail Corporation (Conrail) right-of-way to the terminus (end) of the RLE at 130th Street.

The tracks would be on a new elevated (aerial) track structure from the 95th Street Terminal through the MED track crossing near 119th Street. South of this elevated crossing, the tracks would transition to ground level tracks from 119th Street to south of 130th Street. The elevated structure would be a closed-deck, concrete, aerial track structure with direct-fixation track and continuously welded rail. With direct-fixation track, rails are mounted to small concrete and rubber supports that are fixed to the concrete deck. The bottom of the structure would vary in height from 14 feet 9 inches to 55 feet above existing grade, depending on required clearances above existing roadways and railroads. The two tracks would have a spacing of 13 feet (13 feet between the track centerlines) except where diverging to accommodate boarding platforms at stations. The elevated deck, on which the tracks would run, would vary in width from approximately 31 feet to approximately 53 feet at stations. UPRR requires that, for safety reasons, the CTA tracks be located at least 50 feet from the existing freight tracks. To maintain the required 50-foot distance, the CTA right-of-way would extend into the residential neighborhoods east or west of the UPRR right-of-way.

2.1.2 1B - Purpose and Need

Comments related to purpose and need focused on why the project is needed and most comments reaffirmed elements of the purpose and need that are discussed within the Draft Environmental Impact Statement (EIS).

- Comments: 1, 3, 19, 26, 28, 147, 148, 203, 241, 252, 303

Chapter 1 of the Draft EIS and the Final EIS addresses the project's overall purpose and need. The purpose and need reflects the project objectives discussed with the public during the Alternatives Analysis (AA) process, EIS scoping (including the public scoping meetings), and ongoing public involvement activities. The Red Line Extension (RLE) Project would reduce commute times for residents, improve mobility and accessibility, create viable linkages that enhance neighborhood vitality, and provide connections to other transportation modes. The RLE Project would foster economic development in the project area, as new stations could serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA identified project limits to meet the project purpose and need and allow for a meaningful review of environmental impacts. The purpose and need did not change in the Supplemental Environmental Assessment (EA) or in the Final EIS from that included in the Draft EIS. The project area boundaries were initially determined during the AA study and then extended farther south to

134th Street to accommodate the relocation of the 130th Street station south of 130th Street. This southern boundary of the project area was based on geographic features including the Little Calumet River and Beaubien Woods Forest Preserve. The project area boundaries encompass the areas that would benefit most directly from such transit service improvements. The terminus of the project at 130th Street station would serve the Altgeld Gardens neighborhood; this terminus was confirmed through the AA process and further public comments received as part of the National Environmental Policy Act (NEPA) scoping process. Metra and Pace transit agencies serve communities farther south of the RLE Project area.

2.1.3 1C - Alternatives Development

Some commenters asked why CTA selected the route along the Union Pacific Railroad tracks rather than having the alignment follow one of the local highways or other routes proposed by commenters. Several commenters suggested other modes and routes. Commenters on the Supplemental Environmental Assessment (EA) inquired about the number of stations and other aspects of the Preferred Alignment, including the design refinements addressed within the Supplemental EA.

- Comments: 1, 3, 11, 13, 26, 28, 147, 151, 172, 174, 189, 191, 197, 199, 200, 202, 203, 207, 211, 252, 259, 261, 297, 309, 345, 350, 354, 359

CTA undertook an extensive Alternatives Analysis (AA) process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Draft EIS and the AA described the process through which a wide range of methods of extending the CTA Red Line south from its current terminus at the 95th/Dan Ryan terminal were narrowed to the Locally Preferred Alternative (LPA).

CTA evaluated the I-57 and I-94 (Bishop Ford) corridors as part of the Screen 1 process of the AA but eliminated them from further consideration based on the analysis. These alignments, sited in the median of the expressway, are isolated from neighborhoods and activity centers and, therefore, would serve fewer riders; they would have difficult access and connections from neighborhoods; and they would not encourage transit-oriented development. Based on the results of the technical analysis completed during the AA process and considerable public support for the corridor, the UPRR Rail Alternative was recommended as the LPA by the Chicago Transit Board in 2009, indicating that it would best meet the purpose and need of the project while addressing potential impacts and constraints. FTA and CTA initiated the environmental review process with scoping in 2009 to receive comments on the alternatives and identify issues that should be examined as part of the EIS. While CTA continues to provide interim improvements to bus service, the purpose and need for this project extends beyond the benefits provided by localized bus service improvements.

CTA evaluated 12 transportation modes, nine corridors, and four profiles resulted in many combinations to be analyzed. Three rounds of preliminary screening and public outreach resulted in three build alternatives, plus the No Build Alternative. The three build alternatives analyzed were:

- Halsted Rail Alternative (Elevated)
- UPRR Rail Alternative (Elevated)
- Bus Rapid Transit Alternative (At-Grade)

Although the Chicago Transit Board designated the UPRR Rail Alternative as the LPA on August 12, 2009, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014 based on further technical analysis and public input. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of No Build Alternative and the two UPRR Rail Alternative options: the East and West Options.

The UPRR Rail Alternative East and West Options would be elevated and generally run south along I-94 Bishop Ford Freeway from 95th/Dan Ryan terminal, then curve west along the north side of I-57 Expressway (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor, either east or west of the existing UPRR tracks, to Prairie Avenue, where the RLE Project would cross over the Metra Electric District (MED) tracks near 119th Street. South of 119th Street, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway (NS) and Consolidated Rail Corporation (Conrail) right-of-way to the terminus of the RLE Project at 130th Street. Southeast of the Canadian National (CN)/MED tracks, the elevated RLE Project, as described in the Draft EIS, would descend to an at-grade profile, travel past the proposed 120th Street yard and shop, and terminate at the 130th Street station located north of 130th Street.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options. The Preferred Alignment would extend the heavy rail CTA Red Line 5.6 miles from the existing 95th/Dan Ryan terminal to the Altgeld Gardens neighborhood immediately south of 130th Street. The RLE Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. The Preferred Alignment would provide travel time

savings of up to 30 minutes for passengers travelling from the 130th Street station to downtown Chicago.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selection of the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts to schools, residences, and the historic Roseland Pumping Station; preserve properties slated for future development surrounding the station areas; and would accommodate UPRR's potential tracks. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height for easier vertical access and would lower the profile of the elevated structure. Lowering the platform makes the height more typical to what is existing throughout CTA's system thus improving passenger comfort ascending/descending the stairs.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Public outreach, stakeholder input, and agency coordination have continued to influence CTA's ongoing design efforts. NS shared their plans for future potential access to the CN/MED tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to the national freight rail network and access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area. In general, these agencies and groups expressed support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood. Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental EA. The agency coordination and outreach associated with the Supplemental EA has influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

2.1.4 1D - Modern Metra Electric, Gray Line, or Gold Line

Some commenters recommended studying or implementing the Modern Metra Electric, Gray Line, or the Gold Line.

- Comments: 147, 197, 204, 259, 333, 358

The Modern Metra Electric concept is similar to the earlier Gray Line proposal, first put forth by a former Chicago resident, in which the Metra Electric District (MED) Line would run frequent service and fares comparable to CTA. CTA did not analyze either proposal as an alternative for the RLE Project because they serve a different project area and satisfy a different purpose and need. The Gold Line concept proposed to change the service on the South Chicago Branch of the MED to a CTA-like urban transit corridor with frequent trains and CTA fare structure. The Gold Line was also not analyzed as an alternative for the RLE Project because it serves an area even further east and north of the RLE Project area than the MME or Gray Line projects.

It is important to note none of the potential MED improvements would serve exactly the same transit market as RLE and would omit several priority areas on the Far South Side. The RLE Project would provide an affordable, accessible, high-capacity transit service to the historically underserved

communities of Roseland, West Pullman, and Riverdale, as well as Washington Heights, while the MED serves communities farther east, including Pullman. An extension of the Red Line would provide a faster and more robust set of connections to the entire City of Chicago and region through the CTA bus and rail network, while the Gray or Gold Line would terminate in Millennium Park and therefore would not provide as much direct connectivity to the CTA network. CTA has observed that over 70 percent of riders who board at the 95th/Dan Ryan station today have destinations beyond the Loop or are transferring to other CTA lines to reach destinations throughout the city, emphasizing the importance of the connection to the CTA network. Another advantage is that the four new, rail stations constructed as part of the RLE Project would serve as community anchors, which can help promote economic development.

The RLE Project further addresses a need of the existing CTA system through its inclusion of a new rail yard and shop facility for the Red Line. The current rail yards for the Red Line at Howard Street and 98th Street are constrained and cannot be expanded. The new rail yard and shop facility provided by the RLE Project would accommodate long-term and continued growth on the Red Line, benefiting all Red Line riders.

The RLE Project is also distinct from the Modern Metra Electric proposal because it is pursuing inclusion in the FTA's New Starts program, which is a competitive federal program and provides funding for up to 60 percent of the project costs for eligible projects. No funding has been proposed for the Modern Metra Electric and its cost and feasibility are unknown.

CTA remains committed to extending the Red Line to the Far South Side, a project that will improve access to the entire city via the CTA network, and it is proud to be dedicated to the cause of keeping Chicago moving.

2.1.5 1E - Preferred Option Decision

Commenters presented preferences between the East and West Options. Some commenters requested additional information describing how CTA will make the decision for the preferred option.

- Comments: 9, 10, 11, 12, 15, 16, 20, 21, 22, 24, 41, 42, 44-63, 65-120, 123-130, 132-134, 136, 138-144, 149, 153-155, 158, 159, 165, 169, 170, 172, 173, 177, 178, 182, 189, 192, 203, 207, 209, 214, 216, 218-225, 226, 227, 228, 229, 230, 231, 233, 234, 237, 242, 243, 246, 247, 249, 251, 255, 256, 257, 267, 268, 311, 316, 345

FTA and CTA prepared the Draft Environmental Impact Statement (EIS) to evaluate the impacts of the East and West Options. CTA accepted public comments from October 6 to December 31, 2016 and considered the comments in the evaluation of the two options throughout 2017. Based on public feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in

January 2018. The Preferred Alignment is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. The Preferred Alignment would preserve viable businesses; minimize impacts to schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. This Final EIS presents the reasoning for the selection of the Preferred Alignment as well as its benefits and impacts. CTA remains committed to working with the community as the design continues to move forward.

2.2 Transportation

2.2.1 2A - Bus Routing

Commenters requested information about impacts to bus routes during and after construction.

- Comments: 170, 260, 270, 273, 288, 297, 298, 300, 302, 306, 309, 325, 329, 332, 346, 348

During construction, bus routes could be temporarily changed. For instance, when overhead beams are placed over 103rd Street or 111th Street during construction, pedestrian and vehicular traffic, including buses, would be temporarily detoured. CTA would notify riders ahead of the detour using notices at stops, on buses, and online. After project completion, restructuring of some bus routes to connect to new stations on the Red Line Extension (RLE) Project is likely to facilitate transfer to the Red Line. CTA would coordinate with Pace and other transportation providers in the area of potential impact (API) to adjust existing routes to serve the newly constructed RLE stations. Potential route changes have been provided in the addendum to **Appendix H** of the Final EIS. Bus routings may change before the RLE Project opens and will take into account public feedback at that time. CTA customers would be informed well ahead of any changes.

2.2.2 2B – Americans with Disabilities Act Accessibility

Commenters requested that the Red Line Extension (RLE) Project be Americans with Disabilities Act (ADA) accessible or generally requested accessibility for all residents.

- Comments: 200, 270, 300, 333

All public facilities, including stations, platforms, and trains, associated with the RLE Project would be fully ADA accessible. The railcar design, including door width, will not change with this project. Future design phases will detail accessibility for stations, parking, and all related project elements.

2.2.3 2C - Traffic

Commenters expressed concern that the Red Line Extension (RLE) Project would increase vehicular and pedestrian traffic in the project area.

- Comments: 11, 23, 38, 159, 164, 165, 168, 178, 196, 197, 204, 251, 270, 348

The project purpose includes improving access to rail transit and fostering economic development and increased vehicular and pedestrian traffic would be expected. CTA analyzed vehicular traffic flow changes associated with access to stations, as well as traffic along I-57 and I-94, and proposed mitigation measures where needed. Most proposed mitigation measures involve adjusting the traffic signal timing near proposed stations to improve traffic flow. During a future design phase, additional pedestrian control devices, such as increased lighting and gates at the sidewalk, would be considered to improve pedestrian safety at the existing rail at-grade crossings near RLE Project stations, where applicable. Implementing the Preferred Alignment would result in beneficial impacts at stations by upgrading intersections with Americans with Disabilities Act (ADA) compliant curb ramps, visible crossing pavement markings, and replacing deteriorated sidewalks adjacent to the new stations.

Construction activities would temporarily affect the physical capacity of roadways and intersections. When work is performed where city streets cross the alignment (such as 103rd Street, 107th Street, and 111th Street, for example), construction activities may require a lane closure. When work is performed above the street (including placement of beams), temporary detours will be required. Work would be phased to prevent simultaneous closure of adjacent city streets that cross the alignment. Work would be subject to the Illinois Department of Transportation, Cook County Department of Transportation and Highways, or the Chicago Department of Transportation approval. CTA will provide advance construction activity notices to communities in the RLE Project footprint about work that will be occurring. Notices will be posted to the project website, e-mailed to affected residents and businesses, and physically posted in work site areas.

2.2.4 2D - Street Closures

Commenters expressed concern about permanent street closures and changes in traffic direction. Commenters also expressed concern about street and alley closures during construction.

- Comments: 161, 167, 186

The following streets currently have at-grade crossings on the Union Pacific Railroad (UPRR) tracks: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Wentworth Avenue, 115th Street, and State Street. The proposed CTA structure is aerial from I-57 to 119th Street. No UPRR track crossing closures or permanent street closures are proposed as part of this project.

Modifications are being proposed for streets and alleys adjacent to the parking facilities near the stations. However, these modifications do not change the direction of traffic flow, nor do they limit access to residences or businesses. In final design, minor changes may be proposed to accommodate bus connections and parking access and egress. The arterial streets in the project area, such as 115th Street, will remain arterials, so shifts in traffic patterns to adjacent residential streets would not be expected.

During construction, construction activities would temporarily affect streets and alleys adjacent to the Preferred Alignment, including closing of alleys to the public to perform construction activities and protect the public. If service activities, such as garbage collection, take place through the alley, arrangements would be made for the service to continue if the alley is temporarily affected. If the permanent features of the project would displace a portion of alley or street, CTA would coordinate with the department of transportation that has jurisdiction over that roadway to include design plans that would minimize impacts to the alley or street. CTA will provide advance notice of work via Construction Activity Notices (CANs) to communities in the RLE Project footprint about work that will be occurring, including type of work, expected impacts and duration. Notices will be posted to the project website, e-mailed to the project e-mail list, and physically posted in work site areas.

2.2.5 2E - Parking Demand

Commenters expressed concern that the Red Line Extension (RLE) Project will reduce available parking. Other commenters requested that parking garages not be included in the project.

- Comments: 159, 164, 212, 213, 225, 251, 257, 285, 286, 308, 345

Travel demand analysis performed during the RLE Alternatives Analysis (AA) process showed the need for park & ride facilities. The Draft EIS included information on proposed parking at each station. In addition, CTA conducted ridership modeling in 2020 and 2022 which confirms the demand for parking facilities at each of the proposed stations. However, based on community feedback, site availability, and analysis of peer stations throughout the CTA system, the number of parking spaces presented in the Draft EIS was reduced. Sufficient parking capacity would be provided at all stations to minimize residential street parking in the station areas.

2.2.6 2F - Impacts to Parking during Construction

Commenters expressed concern regarding impacts to parking during construction.

- Comments: 165, 167, 187, 293, 303

On-street parking would be temporarily affected during construction due to both construction activities and maintenance of traffic during those construction activities. Disruption of on-street parking would primarily be along the streets which currently provide access across the Union Pacific Railroad (UPRR) tracks including 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Wentworth Avenue, 115th Street, and State Street. Near the UPRR tracks, on-street parking is either already restricted or there is a surplus of on-street parking spaces in relation to the demand for the spaces.

2.2.7 2G – Walkability and Bicycle Access

Commenters expressed concern regarding foot travel to the station areas, emphasizing the 130th Street station.

- Comments: 330, 331, 332, 333, 339, 348

Implementation of the RLE Project would result in benefits for pedestrians at stations by upgrading the intersections immediately adjacent to the stations with Americans with Disabilities Act (ADA) compliant curb ramps and replacing deteriorated sidewalks. CTA will work with City agencies to assess multimodal access to stations and identify improvements; however, sidewalks and streets are not under CTA's jurisdiction.

The Chicago Department of Transportation (CDOT) is studying bicycle and pedestrian improvements along 130th Street as part of a separate project. In addition, CDOT in conjunction with CMAP, developed the Riverdale Community Area Multimodal Transportation Plan which is a study to help improve access to destinations and transportation options within the Riverdale Community Area. This plan identifies potential improvements that would provide connectivity to the 130th Street station. CTA will continue to coordinate with CDOT regarding multimodal connection opportunities near the 130th Street station. Bike lanes along 103rd Street, 111th Street, 115th Street, and State Street have the potential to be used by bicyclists to access the RLE stations. The four proposed RLE stations would have bicycle parking to accommodate bicyclists. The Preferred Alignment would create efficient transit connections and provide, not preclude, potential future bicycle connections, to the RLE Project and the larger CTA network.

Currently, the City of Chicago provides a Divvy station within ½ mile of most CTA rail stops along the Red Line. Further coordination between CDOT, CTA, and the bike share concessionaire(s) would occur in the future to determine appropriate bicycle connections and amenities to the proposed stations for the RLE Project.

2.2.8 2H - Connectivity to Metra Electric District or South Shore Line

Commenters asked about the potential to connect the proposed Red Line Extension (RLE) Project to the Metra Electric District (MED) or South Shore Line.

- Comments: 170, 179, 248

The purpose of the RLE Project includes creation of opportunities for potential connections and linkages to other public transportation modes including regional commuter rail in the project area. One potential connection would be to the Northern Indiana Commuter Transportation District (NICTD) South Shore Line at the 130th Street station. Currently, the NICTD South Shore commuter service does not have a 130th Street station, and at this time they do not have future plans to include a 130th Street station. The CTA proposed in 2020 and evaluated in the Supplemental Environmental Assessment (EA), the RLE 130th Street station relocation to south of 130th Street within the Altgeld Gardens neighborhood. Transfer to NICTD South Shore services would be possible though an indirect connection using a bus between the RLE station and the NICTD station (if ever implemented in the future).

A direct connection between RLE and MED at Kensington/115th Street station would be possible along 115th Street. The transfer between the RLE Michigan Avenue station and Kensington/115th Street station would be possible using bus or pedestrian connections. While operating plans would be further defined as this project progresses, bus connections to this station along 115th Street and wayfinding would be provided to address connectivity between services.

Multimodal connections at the four new stations would include bus, bike, pedestrian, and park & ride facilities. The RLE Project would not preclude future regional commuter rail connections with NICTD (if ever implemented in the future) and the MED.

2.3 Land Use/Economic Development

2.3.1 3A - General Land Use Impacts

Commenters requested additional information about how the land use and economic impact analysis was conducted. One commenter requested clarification about whether the new substation at Michigan Avenue would be consistent with surrounding land uses. There were several requests for specific types of commercial development in the area and that the new commercial development provide opportunities for African American owned businesses. One commenter requested additional information about transit-oriented development. Several comments asked what CTA would do to address/develop remaining (not displaced) properties that are currently abandoned or boarded up. One commenter encouraged high-density development near the stations.

- Comments: 38, 152, 153, 159, 164, 170, 176, 264, 285, 308, 324, 330 332, 339, 350

Regional and local planning bodies govern land use and zoning regulations. CTA evaluated existing land use, zoning, and relevant land use and economic development plans for parcels directly adjacent to the Preferred Alignment, for the full length of the alignment, as well as those parcels within ½ mile of stations per FTA's 2004 Guidelines and Standards for Assessing Transit-Supportive Land Use. This ½-mile buffer around stations (generally acceptable walking distance) was chosen to assess any direct or indirect land use or economic development impacts that could result from the RLE Project in accordance with federal guidance. Section 4.1 of the Draft and Final Environmental Impact Statement (EIS) provides additional details on how these impacts were determined.

The following potentially adverse land use impacts were identified: (1) park & ride facilities at all four stations would be inconsistent with adjacent land uses, and zoning designations do not permit large, stand-alone surface parking lots or garages, and (2) the replacement park sites identified as mitigation for park impacts would be rezoned to accommodate future park use on those parcels. Based on additional engineering presented in the Final EIS, the substation locations have been revised and moved closer to the elevated structure. In addition, the introduction of an elevated track structure in Fernwood Parkway would alter the open space's function as a buffer between the Union Pacific Railroad freight tracks and the single-family neighborhood on the west side of Eggleston Avenue.

The following mitigation is proposed to offset these potentially adverse impacts: (1) land for parking facilities would be rezoned, and the facilities would include landscaping and lighting that is compatible with adjacent land uses. The parking garage at 130th Street station would have architectural design and massing (setting back the upper floors away from the edge of the property to shield them from view from the street) that would reduce incompatibilities with adjacent land uses. CTA would provide landscaping for visual screening, including planting additional trees on the west side of Eggleston Avenue to minimize visual impacts from the elevated track structure in Fernwood Parkway. Tree planting on the west side of Eggleston Avenue would meet applicable landscaping guidelines. No permanent or construction-related adverse land use or economic impacts would remain after mitigation.

CTA is developing a Transit-Supportive Development (TSD) Plan based on the community's vision for future development on the RLE corridor. The TSD Plan is anticipated to be finalized in 2022. It identifies methods and resources to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment. The TSD Plan utilizes an equitable Transit Oriented Development (eTOD) planning approach. eTOD planning seeks to promote development without displacement and realize community-focused benefits such as affordable housing, local economic development, and environmental sustainability. To achieve this, the TSD

Plan incorporates policies to preserve existing housing stock and build new housing options, while stimulating economic development and encouraging new development on vacant lots. CTA is working closely with Chicago's Department of Planning and Development, and the Cook County Land Bank Authority (CCLBA) to identify the best policies and programs to support existing residents within the RLE community.

CTA has continued to disclose property acquisitions needed to accommodate this project. Existing vacant and underused properties were considered in the assessment of land use and economic development impacts from this project; however, future development of these properties is also beyond the purview of CTA and is regulated by the City of Chicago. For vacant land owned by the City, the Department of Planning and Development has several programs that allow for the acquisition and development of those properties, including the Adjacent Neighbors Land Acquisition Program, the Negotiated Sales Program, and the Large Lots Program. The CCLBA acquires, holds, and transfers interest in vacant, abandoned, foreclosed or tax-delinquent properties to promote redevelopment and reuse and help stabilize neighborhoods in ways that are consistent with local government and community goals and priorities. Further information about CCLBA's mission and programs is available on their website (http://www.cookcountylandbank.org/).

2.3.2 3B - Economic Development

Several comments noted that the proposed project would have, or they desire the project to have, positive economic benefits to the surrounding communities and create new jobs, while other commenters noted that they did not expect economic development benefits to accrue as a result of the project.

- Comments: 3, 158, 171, 174, 176, 181, 192, 202, 240, 246, 251, 259, 292, 330, 331, 333, 351

Implementation of the project could spur economic revitalization and the development of more transit-supportive communities near the proposed stations. Increased transit access would attract customers and visitors from outside the community to local businesses, landmarks, and cultural centers, bolstering community investment. The Red Line Extension (RLE) Project supports allied economic development and heritage tourism efforts.

Construction of the RLE Project would create construction jobs, and once completed, the RLE would also increase transit access to jobs in the region. CTA is establishing partnerships with community organizations, educational institutions, and trade organizations to promote workforce opportunities on the project and in the broader construction industry. CTA is developing a Transit-Supportive Development (TSD) Plan based on the community's vision for future development on the RLE corridor. The TSD Plan also includes an economic development strategy, which identifies programs and opportunities to encourage and support businesses. There is no specific timeline for this economic development strategy. While CTA is not and will not be a land developer, it is

working with agencies and stakeholders via the TSD Plan to outline strategies for development by others, including private sector developers. The TSD Plan recommendations have been drafted based on input from community members that helped determine the needs and priorities of the project area. See the response in **Section 2.3.1** for additional information regarding the TSD Plan.

2.3.3 3C - Project Impacts on Property Values

Several comments requested additional information about how the project would affect local property values.

- Comments: 9, 21, 161, 167, 168, 184, 186, 204, 246, 251, 304, 331, 333

The Red Line Extension (RLE) Project would have the potential for indirect benefits to property values in the project area. The Regional Transportation Authority states that studies have shown that residential home prices are higher when they are close to a transit station.[1] There could be increased desirability for redevelopment from new employment accessibility, attraction of new development around RLE stations, and overall livability improvements. Public sector commitments and improvements like the RLE Project can help to improve the overall project area and serve as an incentive for the private sector investment in the area's economic development. Development near stations may also help prompt greater social activity in the neighborhood and the stations would serve as a new focal point of community activity and services. The station and retail improvements may contribute to a southward expansion of the current commercial and entertainment district along Michigan Avenue between 111th and 115th Streets. Additionally, the availability of affordable housing with easy access to transit stations and the potential for improved livability are elements that could contribute to increased property values after the project completion.

CTA is also developing a Transit Supportive Development (TSD) Plan. The TSD Plan identifies an opportunity to promote generational wealth building, particularly within Black and African-American communities, through growth in home ownership and home values, as well as in entrepreneurship particularly start-up and small businesses. The TSD Plan also calls for balanced development, recommending a variety of housing options to provide opportunities for people to stay in the neighborhood, and controls to ensure access to affordable housing. Housing choices could also mean additional senior housing options that would allow seniors to "age in place" or move to a senior housing facility in the neighborhood. Other housing options include places for

[1] Regional Transportation Authority of Northeastern Illinois. September 2011. Transit-Oriented Development: The Future of Development. Available at: https://www.rtachicago.org/sites/default/files/documents/plansandprograms/landusetod/Housing_Costs_for_Web.pdf Accessed January 4, 2022

young adults to live in the neighborhood who cannot afford, or do not want, a single-family home. See the response in **Section 2.3.1** for more information on the TSD Plan.

2.4 Displacements

2.4.1 4A – General

Commenters requested clarification regarding which properties would be displaced and the overall relocation process. Commenters expressed concern about when CTA would notify them of their intent to purchase property.

- Comments: 10, 11, 12, 15, 24, 27, 29, 150, 155, 165, 171, 173, 180, 181, 183, 185, 188, 189, 193, 194, 201, 206, 207, 246, 254, 260, 264, 270, 287, 290, 291, 294, 295, 301, 314

The Preferred Alignment would require the acquisition of 228 parcels (97 buildings). Information about the acquisition and relocation process is discussed in Section 4.2 of the Final Environmental Impact Statement (EIS). Properties would be acquired to accommodate the aerial structure, stations, and parking facilities.

CTA is committed to fair and equitable treatment for all individuals who may need to be relocated due to the RLE Project. CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (known simply as the "Uniform Act"), along with state regulations. The properties that would be affected by the Preferred Alignment are listed by address in **Appendix K** of the Final EIS. In addition, information is provided on the project website: https://www.transitchicago.com/rle/properties/.

CTA would not pursue acquisition of private property for the RLE Project until the environmental review is completed with a signed Record of Decision. Upon acquisition, a resident would typically have 90 days to move; however, CTA may allow longer occupancy after acquisition depending on the project construction timeline.

2.4.2 4B – Compensation

Commenters expressed concern about the compensation that they would receive for property sold.

- Comments: 15, 16, 18, 24, 165, 201

CTA is required by federal law to offer to purchase each property for an amount that is no less than fair market value as determined by an independent appraisal. In some circumstances, if the current appraisal is less than the original property purchase price, an owner may be eligible for compensation equal to the original purchase price.

In addition, impacted property owners as well as commercial and residential occupants who must move because of the RLE Project may be entitled to relocation benefits under the Uniform Relocation Act (URA), as required by federal laws. Further information about potential property displacements and compensation under federal requirements can be found on the project website: https://www.transitchicago.com/rle/properties/.

2.4.3 4C - Fair Price

Commenters expressed concern about receiving a fair price for property sold.

- Comments: 18, 19, 27, 156, 162, 165, 204, 224, 253, 260

CTA is required to hire an independent appraiser to inspect the property to determine fair market value. Property owners will be invited to accompany the appraiser during the inspection of their property. Property owners may provide information about improvements made to the property and any special features that could affect the value of the property to make certain that these facts are considered in the appraisal. Additional information can be found on the project website: https://www.transitchicago.com/rle/properties/.

2.4.4 4D - Relocation Assistance

Commenters expressed concern about whether CTA will provide help in relocating.

- Comments: 19, 27, 150, 165, 183, 206, 253, 260, 270, 312

A relocation agent will be assigned to each affected individual to answer questions and provide additional information about relocation assistance, advisory services, and relocation payments eligibility. Relocation agents are assigned to each affected property owner and tenant to facilitate the relocation process. Additional information can be found on the project website: https://www.transitchicago.com/rle/properties/.

2.4.5 4E - Senior Citizens

Commenters expressed concern about senior citizens would who need to be relocated.

- Comments: 153, 156, 178, 191, 303, 317

CTA is committed to fair and equitable treatment for all individuals who may need to be relocated due to the Red Line Extension Project. Affected individuals will work closely with their assigned relocation agent. No individual would be displaced unless decent, safe, and sanitary replacement housing is available within their financial means.

2.4.6 4F - Agape Community Center

Commenters expressed concern about impacts to existing parking facilities at the Agape Community Center resulting from the proposed acquisition of City-owned property west adjacent to the Agape Community Center.

- Comments: 41, 42, 44-63, 65-120, 123-130, 132-134, 136, 138, 139, 142-144, 149, 214, 216, 218-223, 227, 228, 230, 231, 233, 234, 238

In 2016, CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing on November 1, 2016 at St. John Missionary Baptist Church to obtain comments on the benefits and impacts of two options that were under consideration for the Red Line Extension (RLE) Project alignment—the East Option and the West Option. Based on public feedback and additional project planning and engineering work conducted over 2017, CTA selected a Preferred Alignment that is a hybrid of the East and West Options of the Union Pacific Railroad (UPRR) Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure. Lowering the platform makes the height more typical to what is existing throughout CTA's system thus improving passenger comfort ascending/descending the stairs. For these reasons, the alignment for the West Option was not carried forward south of 111th Street and the vicinity of the Agape Community Center.

The Preferred Alignment would require acquisition of the City-owned parcel west adjacent to the Agape Center. CTA has continued to coordinate with the Agape Community Center following the selection of the Preferred Alignment to understand the parking and loading/unloading needs. As such, the current proposed design includes replacement parking in the parcel directly east of the Agape Community Center with access to the new parking lot from 111th Street. The proposed design would also accommodate the existing loading/unloading access from the east-west alley at the rear of the building by driving through the new parking lot.

2.5 Neighborhood and Community Impacts

2.5.1 5A - General Impacts to Neighborhoods and Communities

Commenters expressed concern about how the neighborhood and community could change by implementing the Red Line Extension (RLE) Project, including gentrification. Some commenters felt the community would be improved by the project and want to be involved in positive change, and others were concerned that the community would be negatively impacted. Several commenters discussed how parts of the alignment were communities of elderly people who have lived in this community for many years. One commenter requested branded signage throughout the community to direct residents to the stations.

- Comments: 155, 165, 168, 173, 174, 176, 178, 202, 270, 301, 303, 308, 330, 331, 332, 339, 350, 351

CTA's analysis of neighborhood and community impacts, as described in Section 4.3 of the Final Environmental Impact Statement (EIS), considered impacts related to community character and cohesion, mobility, and community resources. The neighborhood and community impact analysis involved creating detailed demographic and community profiles based on existing community area boundaries through which the Preferred Alignment would pass. CTA conducted field investigations to identify physical, social, or perceived barriers within the established community. In addition, the analysis considered other potential visual, noise, and environmental impacts that could have ripple effects on the surrounding neighborhood.

The Preferred Alignment would run along the Union Pacific Railroad (UPRR) tracks. The new CTA structure would not introduce new separations between neighborhoods, because the UPRR right-of-way already has limited grade crossings and acts as a barrier for pedestrians. The increased pedestrian activity around the proposed RLE stations may help bridge the gap between communities currently separated by the freight tracks. The placement of the track structure would require acquisition of parcels along the west side of the UPRR right-of-way between 103rd Street and 107th Place and along the east side of the UPRR right-of-way between 107th Place to approximately 119th Street. These parcels, some of which are vacant or sparsely occupied, primarily contain a mix of industrial and residential uses. Because the streets in this area, with the exception of major thoroughfares, end at the UPRR right-of-way, the displaced parcels would be at the ends of blocks (adjacent to the UPRR tracks), and not in the center of the neighborhood. The CTA track structure would encroach on the edges of neighborhoods but would leave the neighborhoods otherwise intact.

As described in **Section 4.1** and **Chapter 5** of the Final EIS, CTA has reviewed several coinciding land use and economic development reports that have been developed in the project area to understand the potential for impacts on land use, zoning, and economic development from the

project. These plans promote commercial and residential development around transit stations, as well as economic development region wide. The plans are also compatible with the project goals of strengthening the linkages between transit and the surrounding neighborhoods. CTA developed a Transit-Supportive Development (TSD) Plan based on the community's vision for future development on the RLE corridor. It identifies methods and resources to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment. The TSD Plan utilizes an equitable Transit Oriented Development (eTOD) planning approach. eTOD planning seeks to promote development without displacement and realize community-focused benefits such as affordable housing, local economic development, and environmental sustainability. The City of Chicago's eTOD Policy Plan also outlines a set of actions for the City of Chicago to take to advance racial equity, wealth building, public health, and climate resilience goals. This initiative also prioritizes existing residents and supports the TSD Plan goal to prevent displacement due to increased development.

The RLE Project may result in substantial mobility benefits for Far South Side residents and may facilitate access to land uses and community resources near the station locations, as well as access to forest preserves such as Beaubien Woods Forest Preserve, especially for transit-dependent residents including the elderly and disabled, which would be beneficial overall. CTA would install corresponding wayfinding to direct residents to the new stations. Adjacent properties would benefit from this increase in mobility options and access to residential and commercial development. In addition, CTA must provide financial assistance and relocation services, as required by the Uniform Relocation Act (URA), for property owners as well as commercial and residential occupants who must move because of the RLE Project.

2.5.2 5B - Impacts to Schools and Community Groups

Commenters expressed concern about how the project would affect schools and other community groups (Kids Off the Block, Agape Community Center).

- Comments: 72, 92, 104, 110, 129, 166, 176, 218, 219, 238, 254, 305

As described in Section 4.3.2 of the Final Environmental Impact Statement, within ½ mile of the Preferred Alignment are 62 religious facilities, 12 schools, 6 community centers, 3 fire stations, 4 healthcare centers or hospitals, 1 library, 9 landmarks, and 5 government facilities. The Preferred Alignment would facilitate access to community resources near the station locations, including schools and community centers, which would be beneficial overall. No active schools would be displaced. The former Kwame Nkrumah Academy that is not currently in operation, located at 314 W. 108th Street, is located near the 107th Place cross-over for the Preferred Alignment. With the addition of the noise barrier on the elevated structure there would be no noise impacts to this school after mitigation. CTA worked with the Agape Community Center to incorporate an

alternative parking location on the east side of the Agape Community Center. The proposed design would accommodate the existing loading/unloading access from the east-west alley at the rear of the building by driving through the new parking lot.

2.6 Visual Impacts

2.6.1 6A - Visual Impacts

Commenters expressed concern about how the new track structure, stations, and substations would look as well as visual impacts during construction.

- Comments: 152, 155, 165, 168, 174, 176, 251, 315, 330, 339, 350

As described in Section 4.4 of the Draft and Final Environmental Impact Statement, the Preferred Alternative would result in adverse visual impacts despite mitigation at the following locations: north of I-57, between 99th Street and 103rd Street station area, 107th Place cross-over area, 117th and Prairie Avenue, and the 130th Street station area. These locations are near residential neighborhoods that would be impacted by the elevated structure. While not the only method, mitigation includes tree replacement and additional tree planting. CTA would plant new trees in multiple locations, including Fernwood Parkway, as required by landscaping ordinances for surface parking lots, surrounding parking structures, screening substations, and at multiple locations along the proposed aerial track structure. **Section 4.4** and **Appendix N** contain photo renderings of the new track structure.

CTA would plant additional trees on the west side of Eggleston Avenue to minimize visual impact from the elevated track structure to the residential community to the west. CTA would also plant trees as required in landscaping ordinances for surface parking lots.

Construction-related visual impacts would not be adverse and would include construction fencing, demolition of existing buildings, temporary walls, temporary street closures and related signage, temporary lighting or entrances, and/or shoring of concrete structures or existing viaducts. CTA would maintain as much existing vegetation as practical and minimize temporary construction impacts on neighborhoods by limiting the light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

2.7 Noise and Vibration

2.7.1 7A - Permanent Impacts

Commenters expressed concern about the potential for noise impacts from RLE trains operating closer to nearby residences. Commenters stated that noise from the freight trains is already an issue without the addition of more trains. Commenters expressed concern about property damage from vibration from both the freight and transit train operations. Commenters also asked if CTA would provide improvements to residences to reduce noise impacts.

- Comments: 11, 18, 21, 22, 23, 38, 155, 161, 164, 167, 168, 171, 173, 174, 174, 178, 184, 186, 189, 190, 198, 204, 206, 224, 226, 246, 251, 257, 258, 264, 270, 296, 339

CTA recognizes that property owners adjacent to the Union Pacific Railroad (UPRR) currently experience noise and vibration impacts from the UPRR freight rail that operates in the corridor, and property owners have expressed concerns about additional increases to noise and vibration from the Red Line Extension (RLE) Project. CTA conducted a detailed noise and vibration analysis as part of the Final EIS (See **Section 4.5**). It should be noted that the requirements for this type of analysis, as well as mitigation required, are based on quantitative measures that evaluate/assess the additive effect of the project. In other words, the impacts of this RLE Project and required mitigation are based on the project impact.

CTA has no way to change or mitigate existing noise from UPRR's train operations. CTA analyzed noise and vibration impacts according to the latest federal guidance, FTA's 2018 Noise and Vibration Manual. These detailed analysis procedures are more refined in the prediction of project noise and vibration and in the evaluation of mitigation than the FTA general noise and vibration analyses conducted during the Draft EIS.

In a detailed noise analysis, impact is assessed based on predictions at specific receivers, and equations are employed for computations of ground and barrier propagation effects. For vibration, a detailed analysis requires site-specific testing and complex analytical techniques to develop estimates of the frequency components of the vibration. Existing noise sources along the RLE Project include roadway traffic, freight rail operations on the UPRR tracks, and local activities whereas the only major sources of existing ground vibration along the RLE corridor are freight train operations on the UPRR tracks.

The noise analysis predicts noise or vibrational increases compared to existing noise and vibration levels within the project corridor. The project envisions CTA railcars operating on a closed deck track structure with noise barriers on both sides of the structure. The existing noise conditions include freight trains on the UPRR tracks. These freight tracks have no noise barrier.

Based on the detailed noise analysis, the Preferred Alignment would result in noise impacts at a total of 391 residences, with moderate impacts at 301 residences and severe impacts at 90 residences, without mitigation. For noise-sensitive institutional receivers along the RLE corridor, the Preferred Alignment is projected to result in two moderate impacts (Agape Community Center and My Holy Rock Missionary Baptist Church) and one severe noise impact (Kingdom Global Outreach Ministries) without mitigation. There are no noise impacts projected along the segment of the Preferred Alignment to the south of the Canadian National/Metra Electric District rail corridor, which includes the location of the 130th Street station. Based on this analysis and federal requirements to consider mitigation for all moderate impacts and include mitigation for all severe impacts, the following mitigation measure is proposed as part of this project: To reduce noise impacts below FTA noise impact criteria, CTA would construct a noise barrier anticipated to be approximately 3.5 feet in height above the top of rail, which would provide a 10-A-weighted decibels (dBA) reduction in noise along both sides of the elevated track structure from the 95th Street Terminal to the CN/MED tracks near 119th Street. Moderate noise impacts are expected to remain at 15 residences after noise barrier mitigation, primarily because of their proximity to track turnouts and crossovers. However, these residual impacts are in the lower 50 percent of the moderate noise impact zone, with projected noise increases of less than 3 dBA. Other means to mitigate the moderate noise impacts remaining after noise barrier mitigation may be examined during final design.

The elevated track structure with continuously welded rail would result in vibration levels that would be below the FTA impact criterion of 72 decibels of vibration (VdB) at the residential noise-sensitive receivers along the project corridor. The project would therefore result in no impacts from vibration and no mitigation measures would be required.

Union Pacific Railroad reported that 14 freight trains per day pass through the project area. The RLE Project would not affect the number of freight trains that pass through the project area. There are substantial differences between freight railcars and trains and the CTA railcars and trains. Loaded freight railcars can weigh 268,000 pounds or more, while CTA railcars with the maximum number of people on board weigh under 80,000 pounds—less than ⅓ the weight. The induced vibration from the CTA railcar is far less, due to the weight difference as well as other factors (For instance, freight trains are typically longer than eight-car CTA trains).

2.7.2 7B - Construction Impacts

Commenters expressed concern about noise and vibration during construction.

- Comments: 160, 165, 184, 186, 198, 293, 313, 315

Predicted construction noise levels are not expected to exceed the limits provided in the FTA guidance manual for noise-sensitive receivers, but noise would be minimized through the

implementation of best management practices by the contractor during construction. Construction specifications would require the contractor to adhere to noise control requirements of the project, including working hours.

Construction vibration is generally associated with activities such as demolition, drilling, excavation, or ground compaction near sensitive structures. The vibration impact threshold distances were calculated, and it was determined that most of the equipment can be operated without risk of damage to buildings and their foundations at distances of 15 feet or greater from non-engineered timber and masonry buildings or at distances of 8 feet or greater from reinforced concrete buildings. Construction vibration levels for the Preferred Alignment are not expected to exceed the FTA construction criteria for vibration damage. Where practicable, pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station and sensitive noise and vibration receivers.

2.8 Safety and Security

2.8.1 8A - Safety and Security Impacts

Commenters expressed concern regarding pedestrian safety and the potential for increased crime. Commenters also expressed concern about emergency access to the project area during construction and operation. One commenter was concerned about the fire station located on 103rd Street.

- Comments: 11, 34, 35, 135, 155, 159, 164, 165, 167, 170, 174, 176, 178, 181, 192, 202, 204, 206, 252, 270, 297, 300, 302, 303, 325, 327, 330, 332, 339, 341, 350

The safety and security of customers is the number one priority of CTA and the Chicago Police Department (CPD), which provides law enforcement for CTA. CTA makes extensive efforts to prevent crime and to investigate and prosecute criminals who commit crimes on or near CTA-owned properties. CTA's Security Department works closely with CPD's Public Transportation Unit, a dedicated unit to CTA, on ways to keep passengers safe each day. CPD and the suburban police departments all provide police protection on CTA buses, trains, stations, and park & ride facilities via the deployment of both uniformed and plainclothes officers, as well as surveillance missions and other policing strategies including K-9 unit patrols. While crime does occasionally occur on CTA buses and trains – as it does everywhere else in the city – overall, CTA is a safe system when compared to ridership. Currently, we carry 800,000 passengers a day – more than the entire population of Denver – and nearly 4.5 million people each week, and incidents of crime are very low. However, CPD and CTA are always working on making the CTA buses and trains even safer.

CTA has numerous systems in place to provide a safe environment for everyone, including a network of more than 33,000 security cameras – one of the largest security camera systems of any U.S. transit agency – security monitors, emergency phones and call boxes at rail stations, and a host of other elements across facilities and vehicles. The cameras, found at every rail station and on every bus and train, have been an important tool to help CPD in identifying crime suspects and in detecting crime patterns. All of CTA's buses and trains have multiple cameras. Police patrols near the proposed stations would be coordinated with CPD closer to the time of project completion.

As part of the RLE Project, CTA prepared a Threat and Vulnerability Assessment (TVA) and conducted a Preliminary Hazard Analysis (PHA). The TVA and PHA identify threats and make recommendations to mitigate for those threats in order to reduce risk. The analysis, conclusions, and mitigation measures presented in the Final EIS are consistent with the findings in the TVA and PHA. Based on data from transit stations in Chicago and across the United States, the new stations would be unlikely to have much, if any, impact on neighborhood crime; however, research indicates that some risk would remain, particularly in low-income neighborhoods.

CTA will continue to coordinate with the Chicago Department of Transportation (CDOT) during final design to determine if traffic signals are recommended by an engineering traffic study. Other pedestrian crossing treatments currently in use throughout the City, such as pedestrian flashers and crossing refuge islands, would be evaluated with CDOT during final design of the project. To mitigate adverse safety impacts at the roadway-railroad grade crossings, parking for stations would likely be provided on the same side of the tracks as proposed stations, and potential other design elements as appropriate, such as improved fencing, cantilever, and post mounted at-grade crossing warning devices (currently in place), four quadrant gates, pedestrian gates with skirts, and anti-trespass panels. CTA would install fencing at appropriate locations to deter pedestrians from crossing the freight railroad tracks in places other than the designated locations. At the park & ride facilities, CTA would install surveillance cameras and provide controlled entry and exit access.

During final design of the project and as a requirement, CTA will prepare the traffic management and maintenance of traffic plans that identify traffic detours and emergency access routes. CTA would coordinate traffic management with the Federal Highway Administration, Illinois Department of Transportation, Cook County Department of Transportation and Highways, and CDOT. During construction, emergency services would have access to construction sites at all times and would access construction sites in the same way as contractors, by using various side streets and recommended detours. Emergency services wishing to cross tracks would have to use recommended detours, just as with any roadway construction project. To mitigate risks of safety and security incidents during construction, contractors would be required to develop a Construction Safety and Security Plan, perform job safety analysis, and monitor safety and security activities. After construction is complete, emergency services, including the fire station on 103rd Street, would not experience impacts.

2.9 Hazardous Materials

2.9.1 9A - Hazardous Materials

Commenters expressed concern about the proximity of the Red Line Extension (RLE) to hazardous materials, the use of hazardous materials during construction, and how hazardous materials encountered during construction would be addressed.

- Comments: 162, 181, 270, 300

As described in Section 4.8.2 of the Final Environmental Impact Statement, CTA conducted a Corridor Level Phase I Environmental Site Assessment (ESA) for the Preferred Alignment. The Corridor Level Phase I ESA identified a total of 48 locations of potential concern, including recognized environmental conditions sites (RECs): 26 on-site RECs, 18 off-site RECs, 1 controlled REC (CREC), and 3 historical RECs (HREC) associated with the Preferred Alignment. Additionally, six *de minimis* conditions (generally does not present a threat to human health or the environment would not be the subject of an enforcement action) were identified in the Corridor Level Phase I ESA. CTA has conducted site-specific Phase I ESAs on those parcels with RECs and has conducted Phase II ESAs to characterize and evaluate the potential for encountering hazardous materials and contaminated soils.

Impacts associated from the adjacent freight lines would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 CFR § 171–180) that, among other things, specify requirements for the safe transportation of hazardous materials by rail and require rail carriers to conduct a security and safety risk analysis, to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route. Impacts associated from the adjacent freight lines are unrelated to the RLE Project.

CTA would follow federal, state, and local laws and regulations regarding handling hazardous materials before and during construction. CTA will perform Phase I ESAs of any property to be purchased as part of the Preferred Alignment. Phase II ESAs would be required for areas where RECS were identified in the Phase I ESA analysis. Before construction, CTA will develop and adhere to a Contaminated Material Management Plan that provides the procedures for identifying, characterizing, managing, storing, and disposing of contaminated soil and groundwater encountered during construction activities. The plan will comply with all applicable federal and state cleanup standards and would cover the entire project area, as it is assumed that all material has at least some level of contamination associated with it. CTA will also develop Spill Prevention, Control and Countermeasures (SPCC) Plans to address and establish requirements for the use, storage, and disposal of materials such as asphalt, fuel, paint, solvents, and cleaning agents. The

SPCC Plans would provide best management practices to limit the potential for accidental releases of potentially hazardous materials.

2.10 Wetlands

2.10.1 10A - Wetlands

Commenters expressed concern about impacts on wetlands and wildlife and wildlife habitat.

- Comments: 40, 176, 252, 270

As described in Section 4.9 of the Final Environmental Impact Statement (EIS), wetlands are areas that meet three parameters: hydric (wet) soil, hydrophytic (growing in water) vegetation, and wetland hydrology. The Preferred Alignment would affect up to 15.7 acres of wetland, including a small quantity of wetland area limited to the footprint of a culvert outlet into Kensington Marsh. On September 15, 2021, FTA and CTA requested an updated jurisdictional determination from U.S. Army Corps of Engineers (USACE) to determine whether the wetlands are jurisdictional under the Clean Water Act or are isolated wetlands of Cook County. A copy of this request, with associated attachments, is included in **Appendix S** of the Final EIS. USACE determined that the area of potential impact does not contain any waterways, wetlands or other areas considered "waters of the United States" under USACE jurisdiction in a letter dated January 19, 2022, included in **Appendix S**.

Section 6.4 of the Final EIS summarizes impacts on vegetation and wildlife habitat. The Preferred Alignment would have the potential to have adverse impacts on vegetation and wildlife habitat during construction due to tree removal; however, with the implementation of the mitigation measures outlined in Section 6.4, potential impacts would not be adverse.

2.11 Air Quality

2.11.1 11A – Air Quality

Commenters expressed concern about air quality, including dust and debris, during and after construction.

- Comments: 160, 165, 184, 186, 224, 293

As described in Section 6.1 of the Final Environmental Impact Statement (EIS), the Red Line Extension (RLE) Project would not have permanent adverse air quality impacts. Because implementation of the RLE Project would reduce vehicle miles traveled, it would slightly improve

greenhouse gas emissions, certain particulate matter, and mobile source air toxics emissions as compared to the No Build Alternative.

Air quality impacts during construction would be primarily associated with fugitive dust and emissions from on-road and non-road construction vehicles and equipment. The Illinois Environmental Protection Agency has strict guidelines for controlling fugitive dust and diesel particulate emissions. **Section 6.1** of the Final EIS lists mitigation measures that would be implemented during construction to minimize impacts, which include developing a Dust Control Plan to address in detail how dust would be controlled at the construction site, the staging areas, and the access and egress routes. Emissions impacts during construction can also be associated with vehicular traffic using temporary detours. Work would be phased to prevent simultaneous closure of adjacent city streets that cross the alignment to prevent excessive additional vehicle miles traveled and associated emissions. Contractors would also consider locations of schools, parks, and daycares when deciding where to route local traffic and construction equipment, following a traffic management plan. With the above measures, no violations of the National Ambient Air Quality Standards adopted by the State of Illinois are anticipated. Contractors would also follow best management practices and would follow Chicago's Clean Diesel Construction ordinance, which would reduce the potential for construction related air quality impacts. With appropriate mitigation, no adverse air quality impacts due to construction activities are anticipated.

2.12 Section 4(f) – Parks

2.12.1 12A - Impacts to Parks

Members of the public noted that new parks are needed and desirable near the proposed corridor and in the surrounding neighborhoods. Two comments noted that the existing Fernwood Parkway (which would be affected by the Preferred Alignment) is not used by the public, while one comment noted that the West Option would affect more green space.

- Comments: 20, 155, 161, 165, 167, 168, 170, 187, 189, 203, 237

Impacts to existing parks would occur as part of the Preferred Alignment. The new elevated Red Line Extension (RLE) structure would be constructed over a portion of Fernwood Parkway from 99th Street to 103rd Street between the existing Union Pacific Railroad (UPRR) tracks and Eggleston Avenue. Approximately 4.5 acres of Fernwood Parkway would be affected. Wendell Smith Park and Block Park would no longer be affected by the Preferred Alignment.

CTA developed preliminary mitigation measures to address park impacts, taking into account impacts on park acreage as well as the attributes, features, and amenities of each park. These mitigation measures were developed so that implementation of the RLE Project would not result in

an adverse impact on parks after mitigation. A major feature of these mitigation measures includes developing replacement parkland in or near the community areas affected as well as replacement of any of the park attributes, features, or amenities affected by the construction of the RLE Project. CTA coordinated with the Chicago Park District on the potential impacts on parks from the Preferred Alignment and in development of replacement park options as mitigation measures.

After mitigation, the RLE Project will cause no negative impacts on parks in the project area and will provide a net benefit to the community. Fernwood Parkway, which is a passive-use green space, will be replaced with smaller pocket parks located within the Washington Heights community area, directly adjacent to along the Major Taylor Trail, or additional areas based on future coordination with Chicago Park District. In addition, the RLE Project will improve access to nearby park resources by improving transit options in the project area.

2.12.2 12B - Replacement Parks and Park Amenities

Commenters suggested specific amenities to be added or included at local parks, including larger field houses, workout facilities, basketball courts, and running/walking tracks. Integrating parks into the surrounding community and providing well-lit parks with attractive planters, waste baskets, and bike racks was also requested. Overall comments on replacement park options were positive both at the Draft Environmental Impact Statement public hearing and as part of the formal comment period. Regarding replacement park options, one commenter noted concerns with replacement parks increasing the potential for pedestrian and vehicular traffic and noted that parks would require greater security. Another commenter noted that mitigation at Wendell Smith Park proposed under the East Option should not include new fencing around the track structure at the corner of the park because patrons use the openness of the existing park in this area to cross and enter the park.

- Comments: 38, 155, 158, 159, 161, 167, 176, 181, 184, 187, 270

CTA recognizes the community's desires related to additional parks and park amenities in and near the proposed project. While mitigation measures proposed are specifically related to impacts that result from this project, CTA has forwarded community request for additional parkland and park amenities to the Chicago Park District who are responsible for developing parks within the City of Chicago. As part of the Chicago Park District's long-range vision, they regularly review and plan new parks with the goal of providing park access to residents of the City and must consider land availability for this purpose. As replacement park location options were identified to mitigate impacts that would result from the RLE Project, existing park access or lack of park access was considered alongside the goal of replacing parks close to the area of impact to parks and other factors.

CTA understands concerns that the potential replacement parks could increase both pedestrian access and vehicle traffic and the desire from the community to provide adequate security for safety reasons. CTA also appreciates feedback from the public regarding proposed design characteristics such as fencing at Wendell Smith Park. The Preferred Alignment would no longer permanently impact Wendell Smith Park. Based on continued coordination with community members and further coordination with the Chicago Park District to secure available property for replacement parks, several potential replacement park sites have been identified. The replacement park sites would include passive recreational space. While ultimately the Chicago Park District will own, operate, and maintain replacement parks, additional coordination with the Chicago Park District will make sure that replacement parks proposed as part of this project address community concerns about safety and accessibility.

2.13 Public Involvement

2.13.1 13A - Public Hearing

Commenters had questions about the open house format for the Draft Environmental Impact Statement (EIS) public hearing and why it was selected over a traditional public hearing format.

- Comments: 5, 36, 165, 261

The RLE Project Draft EIS Public Hearing was held on November 1, 2016 from 5:30 to 7:30 PM at St. John Missionary Baptist Church (211 E. 115th Street, Chicago, IL 60628). The public hearing location was within the project area, Americans with Disabilities Act (ADA)-compliant, and accessible by public transit (CTA bus #34, #115, #119 and the Metra Electric Kensington Station).

The hearing followed federal regulations under the National Environmental Policy Act (NEPA) and implementing procedures for an EIS. FTA and CTA discussed public hearing format options and agreed that an open house format would be appropriate for the public hearing to obtain public input on specific areas of interest. In addition, CTA made a presentation about the project and open house format during the hearing. The open house format allows a substantially higher level of public interaction for at least two main reasons:

1. Many people dislike speaking in front of a large group. With a “podium style” hearing, many people will not ask questions or speak publicly because of this format.
2. Multiple people can interact simultaneously with CTA staff. People can ask about their specific topic of interest. In a “podium style” hearing, only one person speaks at a time and answers are typically not provided at the time of the hearing.

Exhibit boards in the public hearing room provided information about the project, and technical staff members were available to discuss specific concerns about the purpose and need for the project, alternatives considered in arriving at the Union Pacific Railroad Alternative, and the impacts and mitigation measures proposed to address environmental areas of concern. Court reporters were available to take verbal comments. CTA also provided comment cards to obtain written comments during the hearing. Sign language interpreters and Spanish translators also attended the hearing. CTA made copies of the Draft EIS available for review during the hearing to solicit feedback from the public on specific areas of concern about the document findings.

2.13.2 13B - Previous Public Outreach and Notification of Draft Environmental Impact Statement

Commenters requested additional information about previous public outreach as well as public notification of the Draft Environmental Impact Statement (EIS).

- Comments: 4, 204, 205

CTA advertised the public hearing for the Draft EIS through display ads in local and regional newspapers, an e-Blast, and through CTA press releases, flyers, and CTA customer alerts placed on CTA railcars and buses within the project corridor. The e-Blast was sent to approximately 924 e-mail addresses on the RLE Project contact list, made up of people who have attended public meetings or have submitted comments to the project e-mail address. CTA mailed postcards announcing the public hearing to 7,210 addresses, including public agencies, business groups, churches, schools, and community/neighborhood groups and associations within or near the project area, properties near the alternatives studied beginning with the Scoping process, as well as attendees of previous Red Ahead project meetings who requested information about other Red Line projects. The Draft EIS was posted to the RLE website (https://www.transitchicago.com/rle/) on October 6, 2016, and hard copies of the Draft EIS were available during the comment period at FTA Regional Office V and CTA headquarters, local elected officials' offices, and five libraries in the project area. CTA posted additional details about the public hearing and the project on the project website, including the Citizens' Guide, project overview flyer, displacements information, and accessible versions of all items. CTA met with project area aldermen and elected officials, held three meetings to provide information and answer questions from potentially displaced property owners and tenants, and met with 11 project area community groups (including the Red Line Extension Coalition) during the public comment period. CTA also conducted door-to-door outreach to potentially displaced property owners and tenants. In total, CTA received 284 comments on the Draft EIS, and these comments have influenced decision-making in developing the Preferred Alignment and evaluation in the Final EIS.

2.13.3 13C - Continued Outreach through the Final Environmental Impact Statement

Commenters requested additional community involvement as the project moves forward. Commenters also requested to be informed of project progress.

- Comments: 6, 7, 8, 25, 32, 39, 43, 121, 122, 162, 175, 176, 204, 205, 210, 215, 217, 235, 236, 250, 263, 265, 271, 272, 298, 299, 334, 345, 352

Community outreach for the RLE Project has continued since the publication of the Draft Environmental Impact Statement (EIS) through the development of the Supplemental Environmental Assessment (EA) and Final EIS.

CTA will continue to work with and obtain input from the community as the project moves forward. Following publication of the Draft EIS and receipt of comments, CTA conducted additional public and agency outreach efforts in the selection of the Preferred Alignment, including conducting displacement-specific outreach to property owners and residents who would potentially be displaced by the project. CTA conducted community meetings for invited property owners on February 6 and 8, 2018 to discuss displacements. CTA held an open house meeting on February 13, 2018 for the public to review and comment on the Preferred Alignment. In addition, CTA held community meetings in December 2020 as the project moved into the Project Development phase. The public hearing for the Supplemental EA was held in two formats - one virtual meeting and one in-person meeting. The virtual hearing was February 15, 2022 and the in-person hearing was February 17, 2022. The public hearings presented the three design refinements associated with the Preferred Alignment: the 130th Street station relocation, 120th Street yard and shop refinement, and the 107th Place cross-over. In addition, CTA hosted a stakeholder meeting on February 16, 2022 in Altgeld Gardens for neighborhood residents to discuss the Supplemental EA design refinements and the entire RLE Project with project staff. The public hearings solicited comments from agencies and the community about findings presented in the Supplemental EA and comments were accepted from January 31, 2022 to March 1, 2022. The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment that is analyzed in this Final EIS.

CTA will continue to work with elected officials, community groups, businesses, and residents as the project moves into final design to develop a Construction Outreach and Coordination Plan, and a Business Outreach Program closer to the time of procurement of construction services. CTA will also work with the community, elected officials, and stakeholders in obtaining feedback on station concepts and preferences for surrounding development as the project moves forward.

CTA maintains a project contact list. Periodic updates and information about project progress are distributed to the project contact list via e-mail or mailing address, as well as posted to the project

website (https://www.transitchicago.com/rle/). Requests to be added to the RLE contact list can be made by sending an e-mail to RedExtension@transitchicago.com or submitting a request on the RLE website. Available contact information for each comment received has been added to the list. Commenters who requested to receive project updates have been added to the project contact list.

2.13.4 13D - Hiring Local and Minority Contractors

Some commenters requested information about being contracted to do work in future phases of the project, and/or that aspects of planning and construction of the RLE Project be given to minority and/or local contractors.

- Comments: 2, 162, 226, 285, 289, 298, 302, 314, 333, 352

While comments regarding employment practices are outside of the National Environmental Policy Act review process, it should be noted that CTA is committed to diversity in its workforce and contracting opportunities. CTA's Disadvantaged Business Enterprise (DBE) Program demonstrates CTA's continued commitment to the success of minority/and women-owned businesses by promoting contracting opportunities to DBEs in the transit industry. CTA includes DBE goals on every project and has included local hiring offices or job fairs on all major projects in recent years (including the 95th Street Terminal, Red Line South Reconstruction, Red Purple Modernization Project). CTA places workforce participation goals on all major projects. The objective is to provide career opportunities in the trades and other construction-related jobs to communities that are typically under-represented in the industry. Workforce goals set a minimum standard for employment of individuals who are dislocated workers (unemployed or underemployed), individuals who live in economically disadvantaged areas, and individuals who are union apprentices. These goals require contractors to recruit, hire, and retain a diverse pool of candidates from historically disadvantaged backgrounds. CTA is establishing partnerships with community organizations, educational institutions, and trade organizations to promote workforce opportunities on the project and in the broader construction industry. Contracting and workforce opportunities will be communicated via extensive public outreach, as well as promotion via RLE's website and social media sites. Opportunities for RLE contracts will include both construction and professional services. Additional information on the DBE Program and workforce initiatives may be found on the project website athttps://www.transitchicago.com/diversity-programs/. Please visit the project website at https://www.transitchicago.com/procurement/ to learn about the procurement process and future CTA contract opportunities.

2.14 Timeline/Costs and Funding

2.14.1 14A - Project Timeline

Some commenters asked when CTA will decide between the East or West Options. Others had questions on when the project would be completed or commented that they would like the construction start date to be expedited and that the project should move forward quickly.

- Comments: 9, 131, 156, 162, 167, 179, 181, 197, 270, 296, 299, 302, 348, 349

CTA and FTA prepared the Draft Environmental Impact Statement (EIS) to evaluate the impacts of the East and West Options of the Union Pacific Railroad (UPRR) Alternative. CTA accepted public comments on the Draft EIS from October 6 to December 31, 2016 and considered the comments as the two options were further evaluated throughout 2017. Based on public feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in January 2018. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. The Final EIS presents impacts of the Preferred Alignment.

Under the current leadership, the project is now on an aggressive schedule and has made significant progress in the past few years. In December 2020, the Federal Transit Administration (FTA) approved the project's entry into the New Starts Project Development phase of the FTA Capital Investment Grant (CIG) program. Additional milestones are anticipated in 2022, including reaching 30 percent design, and the FTA's approval of this combined Final EIS and Record of Decision (ROD) document. CTA is confident in and committed to the new project timeline, which estimates the start of construction in 2025, and service beginning in 2029, all of which is dependent on securing project funding.

Pre-construction activities that would be conducted in advance of the construction would include utility relocations and demolition of buildings. Construction activities for the Preferred Alignment would occur for approximately 5 years, including construction staging and construction of the RLE Project. Construction activities are summarized in **Section 2.3** of the Final EIS.

2.14.2 14B - Project Costs and Funding

Some commenters expressed concern about the expense of the project compared to relative time benefit savings. Comments specifically related to funding included questions about how the project would be funded, the likelihood of obtaining needed federal, state, and local funds, and some concerns about operations and maintenance costs for maintaining the extended line once built. Two commenters felt funds could be better used for other regional projects, such as the West Loop Transportation Center, or believed that the project would be in part funded by gasoline taxes and could be better spent on improved toll road construction.

- Comments: 3, 64, 155, 163, 174, 176, 179, 197, 204, 270, 299, 302

The RLE Project is included in the list of fiscally constrained projects in the Fiscal Year (FY) 2019–2024 Transportation Improvement Program (TIP) of the Chicago Metropolitan Agency for Planning (CMAP) *ON TO 2050 Comprehensive Regional Plan* (*ON TO 2050*). The RLE Project is one of a number of improvements CTA has planned and programmed for future planning and expansion efforts in the city. Improvements such as the RLE Project work together with other CTA planned improvements and projects, not in competition with them, to serve the greatest number of CTA system passengers in the most efficient and cost-effective way possible.

The RLE Project would require an estimated $3.6 billion in capital costs. At this stage of Project Development, the preliminary funding plan for the project assumes a 60 percent contribution from the FTA Section 5309 Capital Investment Grant (CIG) program (New Starts) towards the total project cost, and 40 percent funding from non-New Starts CIG sources. The CIG program is a nationally competitive federal grant program. Not all other regional projects would be eligible to receive these funds. Gasoline tax dollars would not be used to fund the project. The funding plan would continue to evolve in 2022 in advance of the Entry into Engineering submittal to FTA. **Section 9.1.2** of the Final EIS provides summary descriptions of the Section 5309 CIG program and potential traditional and innovative approaches under consideration to fund the non-New Starts share or local share of the total project cost. As the Preferred Alignment continues through the FTA Project Development phase, CTA would determine the specific sources and levels of funding to cover the non-CIG project cost share. This is consistent with CTA's traditional project implementation approach of working with the public and key stakeholders to request funds after determining and communicating the Preferred Alignment.

While these federal, state, and local sources of funds would help to fund the construction costs of building the RLE Project, as with any new transit service, ongoing operating and maintenance dollars would also be required. The extension of the Red Line would provide an opportunity to optimize existing bus service in the project area, which would reduce bus operations and maintenance costs and help to defer rail operation expenses. As part of the federal New Starts program, a competitive federal program which provides funding for up to 60 percent of the project costs for eligible projects, CTA will develop a financial plan to fully describe the financial sources that will be used for both capital and operating dollars.

Attachment A – Alphabetical Index of Public Commenters and Corresponding Comment IDs

Table 2-1: Alphabetical Index of Public Commenters and Corresponding Comment IDs

Last Name	First Name	Comment ID
Draft EIS		
Alexander	Rosemary	3
Allen	JoAnn	112
Ancolin	Adrienne	161
Anderson	Annie	187
Atwater	Dois	22
Atwater	Doris	173
Banks Pincham	Sharon	176
Barnes	Andrea	17
Barnes	D.J.	221
Baunach	Carol	128
Bayley	Lindsay	212
Beecher	Dallas	199
Black	Alvin	177
Blanks	Elihu	255
Blodgett	Pete	231
Boeringa	Mindy	100
Boeyink	Chris	53
Bongiovanni	Jeff	213

Last Name	First Name	Comment ID
Botten	Laura	137
Bowden	Eric	267
Brobst	Chuck	66
Brown	Gloria	97
Brown	Allen	158
Brown	Charles	264
Brown (Charles)	Stella	198
Bruneau	Whitney	60
Burback	Lisa	266
Burris	Berlean	104
Cameron	Le Ronnie	24
Cameron	Le Ronnie	172
Campbell	Bettye	196
Carmichael	Deneteria	19
Carroll	Constance	181
Casimier	Pierre	130
Casimier	Junetta	141
Chang	Jennifer	123
Chatman	Angelique	67
Chatman	Angelique	70
Chelstrom	Kristian	133
Clinton	James	229
Coleman	Garphelia	256

Last Name	First Name	Comment ID
Coleman Sr.	Ray	201
Coombs	Lauryn	84
Corriere	Caryn	142
Crawl	Karen	31
Crebs	Karen	82
Credit	Cheena	168
Credit	Cheena	204
Crouse	Monica	74
Czarnecky	James	210
Dampeer	Lillie	178
Darnall	Sheri	35
Davis	Carolyn	59
Davis	Valeria	240
Dicker	Gayle	247
DiGiacinto	Peter	68
DiLeonardi	Emma	269
Dixon	Addie	206
Durand	Kevin	132
Eickelberger	Shanda	61
Ellison	Corey	4
Espeland	Jan	113
Evans	Jon	28
Evans	Jon	239
Farlow	Yvonne	185

Last Name	First Name	Comment ID
Fichtenberg	Barbara	118
Florine	Jane	124
Florine	Claire	134
Floyd	James	14
Foglesong	Sally	102
Ford	Veronica	150
Gage	Marsha	75
Garner	Rev. Q. Z. & Nancy	10
Garner	Rev. Q.Z. & Nancy	257
Gonzalez	Linda	93
Gordon	Jay	58
Grace	Melvina	155
Gutierrez	Cecilia	16
Gutierrez	Cecilia	235
Hale	George & Sue	81
Hamer	Joey	8
Hamilton	Terry & Cora	218
Hamilton	Marva	230
Hanna	Kevin	151
Harley	Keith	244
Harry	Brad	101
Harsy	Wade	126
Hart	Dr. John	56

Last Name	First Name	Comment ID
Hartsfield	Mary	135
Hasbrouck	Wally & Pam	110
Hayward	Dylan	259
Hedman	Sarah	83
Henkel	Sandy	44
Henkel	Marc	108
Herlihy	Jim	144
Hill	Tom & Karen	116
Hines	Tim	77
Hopkins	Erik	220
Horde	Christina	205
Horde	Christina	258
Huey	Cebell	20
Huey	Cebell	191
Huey	Cebell	203
Iyer	Srinivasan	236
Jackson	Kathy	208
Jackson	Charles	30
Jackson-Billiot	Kristeena	216
Janulis	Donald	219
Johns	Noma	99
Johnson	Joseph	12
Johnson	Elizabeth	85
Johnson	Cindy	129

Last Name	First Name	Comment ID
Johnson	Alphonse	145
Johnson	Antony	180
Johnson	Macy	189
Johnson	Macy	207
Jones	Betty	167
Jordan	Larry	195
Jordan	Larry	200
Kamara	Omar	254
Karnatz	Paul	148
King-Donelson	Bobbie	175
Klusacek	Jodi	47
Koehler	Gayle	223
Koutz	Taliaha	65
Kuok	Marissa	111
LaFargue	Michael	43
LaFargue	Michael	261
Lake	Lauren	25
Lautenbach	David	105
Lawson	Sharon	242
Leavitt	Michael	233
Leavitt	Mary	234
LeFlore	Ethel	23
LeFlore	Ethel	171

Last Name	First Name	Comment ID
Lewis	Martin	1
Lilley	Valerie	164
Lollis	Andrea	62
Lopresti	Frank	179
Love, P.E.	Duana	250
Lucas	Deloris	5
Lucas	Deloris	260
Lynch	La Risa	39
Mack	Pastor Ellis	32
Madison	Freda	159
Mammoser	Alan	64
Marshall	Pastor Tedi	136
Martin	Adrian	73
Mason	Beth	139
Massie	Zachary	87
Matsuoka	Wai-Chin	69
May	Andrea	107
May	David	197
McCarthy	Kayla	48
McGee	Patrick	225
McGill	Lavell	163
McInnis	Genevieve	138
McLauren	Elaina	160
McLennon	Paula	243

Last Name	First Name	Comment ID
McMullen	Priscilla	153
Miller	Tommy	26
Mitchell	Rogers	192
Moncure	Emma	182
Moore	William	7
Moore	Nicky	253
Morgan	Solomon	193
Morgan	Solomon	194
Moy	Luke	232
Munoz	Sandra	165
Myers	Heather	89
N/A	anonymous	34
Norman	Bethany	90
O'Laughlin	Christine	91
Olugbade	Williemae	228
Osgood	Will	143
Outlaw	Pam	78
Palmer	Carolyn or James	11
Palmer	Carmen	176
Pan	Jeffrey	52
Parlej	Peter	272
Pate	Julie	184
Paulus	Lindsay	114

Last Name	First Name	Comment ID
Pearson	Tanisha	162
Pederon	Stephen	72
Peglow	Patrick	103
Perazzolo	Scott & Maureen	186
Peterson	Phoebe	122
Phalin	Brett	140
Pickett	Anjelica	33
Pomales	Joshua	41
Ponce	Elsa	38
Popov, Ph.D.	Yuri	248
Press	Rachel	76
Pulins	Jen	42
Rayburn	Kellee	119
Reeves	Monica	149
Rials	Wanda	86
Rice	Gwendolyn	262
Ringer	Tricia	125
Rivers Jr.	Michael	154
Robinson	Kenneth	88
Rogers	Shanea	98
Rosen	Deané	6
Samuel	Jon	237
Samuels	Kenneth	166

Last Name	First Name	Comment ID
Scott	David	51
Seaberry	Narda	117
Shelby-Conley	Lori	157
Sianez	Marcelina	37
Simms	Lamar	109
Simon	Neha	215
SmilingCoyote	Jean	152
Smith	Michael	13
Smith	Monique	21
Smith	Jane & Tom	54
Smyth	Katie	46
Solorzano	Lourdes	2
Soto	Milly	80
Stephenson	David	36
Stevens	Joyce	96
Stewart	Liz	45
Stiffend	Maedell	188
Sullivan	Eric	131
Swope-Dupree	Sheryl	241
Talbert	Devontay	249
Tarver	Lou	246
Thigpen	Annie	15
Thigpen	Diane	169

Last Name	First Name	Comment ID
Thomas	Mary	174
Thomas	Ms.	202
Thomas	Patrice	263
Todd	Sara	40
Turner	Tyrome	106
Turner	Lou	245
Usher	Rita	63
VanderKolk	Valerie	121
Varan	Joe	29
Vartanoff	David	147
Walker Jr.	Gregory	170
Walker Jr.	Gregory	211
Walsh	Michael	265
Washington	Mary	227
Washington	Verrita	251
Weathers	Datrice	120
Welles	Alisha	115
White	Doris	209
White	Doris	270
White	Viva	271
Whittler	Alex	217
Williams	Diane	9
Williams	Anna	18
Williams	Lee	27

Last Name	First Name	Comment ID
Williams	Ruthie	55
Williams	Clarence	156
Williams	Anna	183
Williams	Claire	226
Williams	Emma	273
Williams, Jr. (D.D., Th.D.)	Hugh	57
Willis	Pearl	71
Woodley	Chazle'	49
Woodson	Patricia	224
Wrobel	Karen	50
Wyche	Rosemary	190
Yohe	Stan & Melodee	94
Zelek	Robin	214
Zelek	Robin	222
Zoeteman	Michelle	95
	antbebe@[e-mail hidden for privacy]	127
	Brittany	79
	bsbbrianlvr@[e-mail hidden for privacy]	252
	collyn02@[e-mail hidden for privacy]	146
	Kellee	238

Last Name	First Name	Comment ID
	tkabala@[e-mail hidden for privacy]	268
	Wesley	92
Preferred Alignment Announcement		
Adams	Tony	307
Billingslea	Alexis	286
Brown	Michael	285
Cavanagh	Coral	326
Ceccarelli	Rita	322
Conner	Angela	289
Churchill	Miles	298
Dixon	Phillip	312
Eckerty	Beth	297
Evans	Gregory	320
Fansler	Jake	292
Farlow	Yvonne	296
Ferraro	Tessa	299
Gamero	Jaime	291
Goss	Robert	295
Hinton	Jen	317
Howard	Cynthia	312
Jacob	Lois & Merle	325
Johnson	Anthony	307
Johnson	Kelly	305

Last Name	First Name	Comment ID
Johnson	Willie	294
Jones	Jade	301
Keeling	Nick	300
LaFargue	Michael	308
LaFargue	Michael	323
LaFargue	Michael	324
Langelund	Eric	319
LeFlore	Ethel	290
May	Dave	309
Meagher	Mike	318
Parsons	Patricia	314
Patterson	Cathy	303
Perazzolo	Maureen and Scott	293
Peters	Jacob	304
Quiroga	Luis	311
Rockingham	Helen	313
Rola	Marcelino	287
Samuel	Jonathan	306
Shepherd	Tom	321
Walker Jr.	Gregory	288
Waters	Rachael	316
White	Doris	302
Zaragoza	Gerardo	315

Last Name	First Name	Comment ID
	Gloria	310
Supplemental Environmental Assessment		
Al Nurridin-Harris	Fatimah	330
Bell	Mark	329
Bobo	Mr.	354
Broyls	Eugene	349
Camacho	Michael	352
Cunning	H.L.	336
Damian	Paul	343
Engram	Dora	346
Hampton	Beria	333
Jackson	B.	338
James	Derrick	339
Jones	John	337
LaFargue	Michael	353
Mammoser	Alan	358
Manning	Roderick	344
Miller	Tommy	355 & 356
N/A	anonymous	341
N/A	anonymous	342

Last Name	First Name	Comment ID
N/A	anonymous	357
N/A	anonymous	359
Osborne	A.	335
Pope	Lyteshia	327
Rafferty	Michael	340
Smit	Hunter	331
Stallworth	Kanji	351
Thorne	Hilary	350
Tucker, Jr.	Clevan	345
Turner	Andrea	328
Washington	Francine	334
Williams	Deandre	348
Yousfi	Andraya	3332
	Lois and Merle	347

Attachment B – Public Comment Response Matrix and Individual Responses

ID	Name	Comment Type	Comment	Project Info./P&N/ Alternatives	Transportation	Land Use/Economic Development	Displacements	Neighborhood and Community	Visual	Noise/Vibration	Safety & Security	Hazardous Materials	Wetlands	Air/Water/Floodplains/ Veg/Bio/Geo/Energy	Parks	Outreach Process	Timeline/Costs and Funding	Individual Response
Draft EIS																		
1	Martin Edward Lewis	e-mail	Although I will not be able to attend the public hearing, I suggest the CTA expand its plan for the Red Line Extension to include the line to extend to just north of I-80 in Lansing with a terminus, triple-decker garage parking area (Kiss n' Ride) with bicycle racks, and rail yard there for all south suburban rides to get to the Loop, with a stop at 159th Street near the River Oaks Mall in Calumet City and one stop at Sibley Boulevard.	1B, 1C														
2	Lourdes Solorzano	e-mail	My name is Lourdes "LuLu," owner of Cadillac Transportation Inc. I am certified in many areas such as my DBE, MBE and WBE. I've received an e-mail about the Red Line Extension Project and wondering how I can get involved. I have worked on the Red Line before back in May to August 2013 as a night job. So I am very familiar with the job and location. I was wondering how I can take apart in this or what I would have to do.													13D		
3	Rosemary Alexander	e-mail	I am a senior resident of Matteson. I had wanted to copy the Rich Township Transportation and WillConnects2010 .org but those are looking so far broke or so they say or so far off that I probably won't even be around then. My problem is they keep cutting transportation instead of increasing it. When I moved to the south suburbs there were so many more Pace bus routes. They constantly cut instead of increased while the population is getting older, less people drive and youth have no way to get to colleges, or jobs. South of 183rd there is barely one east west route or no north south bus routes i.e., no transportation along Cicero or Pulaski south of 183rd. Economic development cannot improve without transportation. Food deserts cannot improve without transportation. Cutting the township budgets even further eliminates even more transportation for seniors. Case in point, try to get from 21th and Pulaski to 103rd and Wood or the Beverly area. Cannot be done because there are no buses that would take you to the nearest Rock Island Train at 159th and Cicero. I can't imagine the developers of businesses and homes have not asked that you increase public transportation along Cicero. I hope you consider these updates in public transportation to the red line extension which connects the red line to 130th which is food but since federal funds are also used, why not extend other routes in south cook? Please consider spreading that money around to the south cook area and the township budgets.	1B, 1C		3B												14B	
4	Corey Ellison	e-mail	I was inquiring about receiving a printed copy of the RLE Project Overview and Citizens' Guide mailed to the address listed below.													13B		CTA responded to the commenter via e-mail with instructions on how to download the document.
5	Deloris Lucas	e-mail	Thank you so much for this very important, long awaited, news! I am representing the Golden Gate Sub Division, located at 130th & Eberhart. I will share this notice at our next Golden Gate Homeowners Association (GGHA) Meeting on 10-22-16. Our neighborhood includes many Senior Citizens and Residents that do not have transportation. To ensure maximum participation, I request that CTA provide a bus to "shuttle" area residents to and from the above mentioned Public Hearing Meeting. Thank you in advance.													13A		Thank you for your support. CTA responded to the commenter via e-mail with bus route information for public hearing location.
6	Deané Rosen	e-mail	Please add me to the contact list for the Red Line extension updates.													13C		
7	William Moore	e-mail	I would like to receive updates about the Red Line Extension.													13C		
8	Joey Hamer	e-mail	Can you please add me to the update e-mail list? I'd like to stay informed!													13C		
9	Diane Williams	handwritten	How will this affect the value of my property. When will you decide which side of the track will be used the east or west side?	1E		3C											14A	
10	Rev. Q.Z. & Nancy Garner	handwritten	Concerns my property? We prefer the West option.	1E			4A											Your parcel would not be affected by the Preferred Alignment.
11	Carolyn or James Palmer	handwritten	There are too many trains there already. We hear trains all day and some at night. Just imagine more trains. The traffic is affected trying to cross. How will fire station on 103rd adjust to this. My preference is for the West side or Halsted or extend down expressway. How far down 100th place will you evacuate?	1C, 1E	2C		4A			7A	8A							No buildings along 100th Place would be affected by the Preferred Alignment.
12	Joseph Johnson	handwritten	I have not been informed that my property will be directly involved; however if the train must come through he neighborhood, the West side would be the best option.	1E			4A											Your parcel would not be affected by the Preferred Alignment.
13	Michael Smith	handwritten	Why doesn't CTA use what is already there like the expressways (I-5 & Bishop Food)?	1C														
14	James Floyd	handwritten	*(request for in-person meeting to discuss commenter's property)*															
15	Annie Thigpen	handwritten	No, I do not want this plan to go through. I put a lot of funds in my house. I been in this area/this house for 44 years. I love my house. I need CTA to select the west side. This is terrible. I work hard, I put a lot of time in my property for many many years. No, I do not want to sell my house.	1E			4A, 4B, 4C, 4D											
16	Cecilia Gutierrez	handwritten	I, Cecilia Gutierrez does not agree with this plan. I have put over 30,000 into this property. If CTA agrees to use the East Plan this affects my family and myself. We would have to relocate and start over. I can't even imagine having to do this. Please use the West plan or neither plan at all. This is where I call home. When I moved here my intention was to upgrade the property and live here. Not to move 6 years later.	1E			4B, 4C, 4D											
17	Andrea Barnes	handwritten	To my knowledge my property is not affected by CTA's West and East plan. However, I'm willing to sale if push comes to shove.				4A											Thank you for your offer to sell your property. Your parcel would not be affected by the Preferred Alignment.

ID	Name	Comment Type	Comment	Project Info./P&N/ Alternatives	Transportation	Land Use/Economic Development	Displacements	Neighborhood and Community	Visual	Noise/Vibration	Safety & Security	Hazardous Materials	Wetlands	Air/Water/Floodplains/ Veg/Bio/Geo/Energy	Parks	Outreach Process	Timeline/Costs and Funding	Individual Response
18	Anna Williams	handwritten	1. Rebatement Fund 2. Noise Status 3. Fair Sales				4B, 4C			7A								
19	Deneteria Carmichael	handwritten	I am currently unsure of the idea of CTA acquiring my property. I agree with the expansion and allowing more people to benefit from the reduction of travel time. I am uneasy with the process of getting another home loan while recently filing bankruptcy. If that process is comfortable, then I will be willing to relocate. Another reason I am uneasy is the possibility of my home being appraised for less than expected due to neighborhood changes since the time of purchase.	1B			4C, 4D											
20	Cebell Huey	handwritten	I would highly recommend the West Side of the rail at 101st-99th and Eggleston to 103rd and beyond 103rd. There is a lot of property that's not being used like 99 and Eggeleston and 103rd is not being used like the park. No one uses that park at all. No kids play there or anything.	1E											12A			
21	Monique Smith	handwritten	I would like to suggest that the Red Line Extension be located on the West side of the railroad tracks due to the reduced number of homes and other structures that would be affected. I am also concerned about the impact on property values for the remaining homes located near the CTA tracks (related noise, parking areas, storage, etc...) I don't want the value of my home to decrease. How can I determine or find out what the financial impact would be?	1E		3C				7A								
22	Ms. Dois A Atwater	handwritten	East Option noise cancellation my house is impacted by the east or west decision due to noise property damage.	1E						7A								
23	Ethel LeFlore	handwritten	I wouldn't like the traffic or the noise I love my house but if another train came down my area I wouldn't like it because it's really hard sleeping at night so I would want to move and relocate. I'm in between a rock in a hard place what happens I guess I will be okay with it.		2C					7A								
24	Le Ronnie Cameron	handwritten	I prefer the EL to be on the West side, because there is more space. My property sits on two parcels of land but you are only showing taking one. Putting the R-Line on the other side does not affect any of the houses on the other side of the UPRR.	1E			4A, 4B											Your parcel would not be affected by the Preferred Alignment.
25	Lauren Lake	e-mail	I would like to be included in the updates on Red line extension project.													13C		
26	Tommy Miller	e-mail	To whom it may concern, I'm Pastor Tom Miller and I have read the EIS and I am in favor of the BRT and the UPRR rail alternative East or West option. This project is well needed and perhaps overdue. This project will both create jobs and give access to jobs and by default reduce crime in the city. By not being cut off at 95th, the community will finally feel apart of the entire city of Chicago. Thumbs up! Keep it moving!	1B, 1C														Thank you for your support.
27	Lee A Williams	handwritten	1. The time frame for acquiring property if needed. 2. Re-location help. 3. Fair market value for property.				4A, 4C, 4D											
28	Jon Evans	e-mail	Ladies and Gentlemen: Of course, I believe that a Red Line Extension would be beneficial, as the Far South Side remains a veritable TRANSIT DESERT! But it will take several years for the Red Line Extension to be built, and the first shovel of dirt hasn't even been turned yet! I propose an alternate in the interim that might provide Quasi-Rapid Transit service-until the real Red Line Extension is actually built, completed, and on- line: The only major arterial street between South Halsted Street and South State Street is South Wentworth Avenue from the Dan Ryan Expressway West Extension, Interstate 57 to 127th Street **Step 1** I propose making South Wentworth Avenue from Interstate 57 to 127th Street One-Way Southbound. By doing so, it would be possible to run express buses from the 95th Street Red Line Terminal to 103rd, 107th, 111th, 115th, 119th, 127th Street, 130th and Indiana, and FoMoCo. A bus route from Western Avenue to the Metra Electric Station at 107th and Cottage Grove could run during daytime rush hours only. Also, any public or faith based schools along my proposed express bus route would be included as stops during school hours-as a courtesy to the community. Automobiles would use the left lanes while the express buses and local residents, along the route, would use the right lanes. Step 2. I propose making South State Street from 127th Street to the 95th Street Red Line One-Way Northbound. By doing so, it would be possible to run express buses from FoMoCo to the 95th Street Red Line Terminal via 130th and Indiana, turning north at 127th and State, the Metra Electric Station at 121st and State, 119th and State, 115th, 111th, 107th, 103rd, and finally the 95th Street Red Line Terminal. Again: any public or faith based schools would also be included as stops during school hours as a courtesy to the community. As in Step 1, automobiles would use the left lanes while the express buses and local residents along the route, would use the right lanes. The route I propose roughly parallels the proposed Red Line Fixed Rail Extension. Again: the goal is to provide immediate relief to a transit desert by offering 24/7/365 or 366 transit service-until the fixed rail Red Line Extension is completed and on-line. I am a former resident of West Pullman. Therefore, I can personally attest to how badly this type of interim fix is needed-immediately. Any attempt to run an Express Bus down a narrow, and already congested South Michigan Avenue would, in my opinion, be disastrous. South Wentworth and South State is less congested, and could handle the traffic.	1B, 1C														Thank you for your comments and suggestions regarding interim bus improvements. Potential route changes have been provided in the addendum to **Appendix H** of the Final EIS. In addition, CTA is currently working in close coordination with Pace to develop interim bus solutions on the South Side of Chicago through the South Halsted Bus Corridor Enhancement Project. This project proposes several strategies for improving bus speed and reliability on 11 miles of South Halsted Street from 79th Street to the Pace Harvey Transportation Center and includes portions of 79th Street and 95th Street that connect Halsted to the CTA 79th Street station and 95th/Dan Ryan terminal. The project components include short stretches of dedicated bus lanes, queue jumps that prioritize buses at busy intersections, traffic signal optimization and Transit Signal Priority (TSP), and Pace Pulse service and Pulse stations south of 95th Street. These improvements would support the RLE Project by increasing travel choices and providing greater connectivity and reliability for transit riders on the South Side of Chicago.
29	Joe Varan	e-mail	I received a letter from you regarding this property. I wanted to let you know that I am the person who is the manager of the company that owns this property. Please change the address in your records															Thank you for confirming your information. We have updated our data accordingly.
30	Charles Jackson	handwritten	No comment															

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31	Karen Crawl	handwritten	No comment															
32	Ellis Mack (Pastor)	handwritten	Chicago Tribune may possibly do a story at the church concerning the possibility of the extension project. Kept updated as time progresses.													13C		
33	Anjelica Pickett	e-mail	My am Anjelica Pickett and currently a Loyola student studying journalism. I have been living in Chicago all my life and have learned about the CTA extending past the 95th stop to 103th. This is great news and certainly a stepping stone opportunity for the current established communities in that area. As a journalist in training I want to do a news story about this project for a class assignment and hopefully there is someone I can talk to who is in charge of the project for an interview that will be recorded to explain the process and develop of the project. Feel free to contact me via email of phone and I look forward to meeting with you.															CTA Communications responded directly to the commenter regarding the media inquiry.
34	anonymous	letter	As a frequent **L** rider I am opposed to extending the Red Line. My reasons are strictly based on safety and health concerns. I ride the brown and purple line frequently to and from the loop from Lakeview and locally getting around. Both are generally clean and with the exception of a random panhandler appear to mostly be legitimate riders. I less frequently take the Red line but do so at least a few times a month between downtown locations (Jackson to Chicago or Grand) and also on occasion take the Red line from Belmont to/from 31st Street. The experience as a general rule is much different with much dirtier trains and feeling of needing to keep my belongings closer and less confident of my safety. I dread having to take the Red Line even with heightened police presence in many of the stations once on the platform or on the train I feel like a target. I don't think it can be disputed that much of the crime occurring in Lakeview particularly around the Belmont Station, not to mention the shooting last summer near Oakdale between the Belmont and Fullerton Red line stops is a direct result of a negative element entering the neighborhood via the Red Line. Unless the City plans to place armed police on each and every L Red line car it is not safe to expand the red line. Security needs to be a primary objective on the current L lines and more seriously concerned for any expansion.								8A								
35	Sheri Darnall	e-mail	I am all for extension we need more places for the homeless to live and public urinals-----go CTA--the el has a lot of problems---all lines with the homeless/vandalism/intimidation if Rahm had to ride the el with the stink every day something would be done---so Rahm get out of that motorcade that runs red lights and squeeze in with all the working people who are being taxed and paying your salary----also if you really think anyone would ever see a crazy person and push the blue button to talk to the conductor ----really-- also we are defenseless as all the cameras are after the fact of being robbed/hit/intimidated/yelled out and finally the people who smoke on the red line-----thanks for a bad commute before I go to work to pay your salary-----								8A								
36	David Stephenson	e-mail	Could you tell me where is the location for the November 1st red line extension meeting?													13A		CTA responded to the commenter via e-mail with information about the public hearing location and transit access options.
37	Marcelina Sianez	handwritten	*No Comment. All Concern categories marked "yes."*															Thank you for your concern about all impact areas. The Draft and Final EIS describes the potential benefits and adverse impacts that would result from the project along with possible mitigation measures to avoid or minimize adverse impacts where feasible.
38	Elsa Ponce	handwritten	Empty Lots. Have walls to reduce the noise. Noise barrier concerns not 4 feet. I recommend 8 feet. Parks to walk. A lot of traffic. *All Concern categories marked "yes."*		2C	3A				7A					12B			
39	La Risa Lynch	e-mail	*mailing list request*													13C		
40	Sara Todd	e-mail	I saw the posting on the CTA about the red line extension project. I am greatly concerned about any destruction of wetlands or natural spaces. I am opposed to any extension project that causes even a moderate degree of wetland destruction or wildlife deaths. Please do not cause harm to our environment or the animals in it. I'm sure there is a need for an extended red line to reach more people on the south side. I strongly favor any extension that doesn't cause harm to the environment, but may cost more. I'm willing to pay a higher CTA fare if it means protecting the environment.										10A					
41	Joshua Pomales	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F												

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42	Jen Pulins	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
43	Michael LaFargue	e-mail	*mailing list request*													13C		
44	Sandy Henkel	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
45	Liz Stewart	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
46	Katie Smyth	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
47	Jodi Klusacek	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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48	Kayla McCarthy	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
49	Chazle' N. Woodley	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
50	Karen Wrobel	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
51	David Scott	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning. I trust the Red Line Extension will indeed to decide to run the extension on the WEST side of the railroad line.	1E			4F											
52	Jeffrey Pan	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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53	Chris Boeyink	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
54	Jane & Tom Smith	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
55	Ruthie Williams	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
56	Dr. John Hart	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
57	Dr. Hugh D. Williams Jr., D.D.; Th. D.	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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58	Jay Gordon	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
59	Carolyn Davis	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
60	Whitney Bruneau	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. I had the opportunity to stay there last year for a mission trip and have seen the impact they have on the community. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have over 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
61	Shanda Eickelberger	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
62	Andrea Lollis	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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63	Rita Usher	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
64	Alan P. Mammoser	e-mail	I understand your interest in this project - the extension to 130th Street - which seeks to address some valid concerns. But, at $2 billion, I think it's way too expensive. Our limited resources should be focused where they can produce the most benefit for all the region's residents. Other projects on CMAP's list, such as the West Loop Transportation Center, show more merit in this regard. Please proceed cautiously and plan carefully, thank you.														14B	
65	Taliaha Koutz	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
66	Chuck Brobst	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
67	Angelique Chatman	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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68	Peter DiGiacinto	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. As a faithful supporter of this organization for 35 years, I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
69	Wai-Chin Matsuoka	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
70	Angelique Chatman	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
71	Ms. Pearl Willis	e-mail	We are requesting that you DO NOT put a train stop next to the Agape Center. These people need this parking lot as they do many out reaches for this community. Volunteers park there, trucks unload there and children walk through there. The Agape Center has been in our community for well over 35 years. My children were mentored in this community center, they got help with their homework and encouragement. The children of this community share with the staff and volunteers of this center problems that they can't share with their parents. They find help at the Agape Center. There have been days when I couldn't feed my children and we found help at this center. This center means so much to so many people, please keep this in mind while making your decision about our community. Is there somewhere else this station can be put other than the parking lot of our center!	1E			4F	5B									
72	Stephen Pederon	e-mail	I'm sending this letter as a tutor at the Agape Center at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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73	Adrian Martin	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
74	Monica Anissa Crouse	e-mail	I'm writing to you as a resident of the Roseland/Pullman community, as a community volunteer and budding activist in the Roseland community as well as one gainfully employed in the Roseland community where I live, serve, work, and worship. I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
75	Marsha Gage	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
76	Rachel Press	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
77	Tim Hines	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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78	Pam Outlaw	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
79	Brittany	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
80	Milly Soto	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
81	George and Sue Hale	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
82	Karen Crebs	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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83	Sarah Hedman	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
84	Lauryn Coombs	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
85	Elizabeth Johnson	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. I have seen and experienced firsthand the blessing and light that the Agape Community Center is for their local community in Roseland, and though the proposed red line extension will be valuable for them, it is also imperative that their services not be diminished. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
86	Wanda Rials	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
87	Zachary Massie	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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88	Kenneth Robinson	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
89	Heather Myers	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
90	Bethany Norman	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
91	Christine O'Laughlin	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
92	Wesley	e-mail	My name Wesley and I am writing you to not tear down the parking lot of the Agape Community Center. It's great that y'all are extending the redline it's been a long time coming but it should be on the west not on the east. There is enough room for you guys to make it happen. The Agape is a big part of the community it needs its parking lot so people have somewhere to park. Please reconsider building over the Agape parking lot it would be a big mistake.	1E			4F	5B										
93	Linda Gonzalez	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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94	Stan & Melodee Yohe	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
95	Michelle Zoeteman	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
96	Joyce L. Stevens	e-mail	Cru Inner City at 342 W 11th St, Chicago, IL 60628 is a ministry that runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. My children who are now adults, participated in these programs during the 1980's and 90's and helped them stay clear of the "streets." Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. Although I no longer live in Roseland, I return every year to participate in this wonderful event. I am writing on behalf of Cru to request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. I hope you will see the wisdom in honoring this very important request. Thank you so much for hearing me out.	1E			4F											
97	Gloria Brown	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
98	Shanea Rogers	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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99	Noma Johns	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
100	Mindy Boeringa	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
101	Brad Harry	e-mail	I'm on staff with Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
102	Sally Foglesong	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. My family and I will be part of that excited event!! :) Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
103	Patrick Peglow	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
104	Berlean Miller Burris	e-mail	My request is that the Red Line Extension of the Union Pacific Railroad at 11th Street run along the west side. This request is being made so that it does not eliminate the parking space for the Agape Center located at 342 West 11th Street This Center (Cru Inner City) has provided vital services to school children and the needy in this community for 37 years. I have been a supporter of their activities for many years. Therefore, I ask that you strongly consider honoring this request. Thank you.	1E			4F	5B									

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105	David Lautenbach	e-mail	I wanted to applaud you and express my appreciation for the work that you have done to extend the Red Line further into the south side of Chicago. I believe that this will certainly be well worth the future investments into our communities. With that said, I also wanted to bring to your attention some logistical concerns regarding the proposed route. I'm writing this letter on behalf of Cru Inner City, located at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years! They have runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. They also hold events throughout the year that overwhelm at multiple times the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of Love (food). Thousands of people are served and mobilized through Cru's ministry. For these reasons (and much more), I am requesting that the CTA Red Line Extension consider using the WEST side of the Union Pacific Railroad line instead. This alternative option would provide the best opportunity for the Agape Center (Cru) to retain its existing parking area to continue its outstanding and continued success to serve our neighborhoods, such as Roseland, within the city of Chicago with excellence! I applaud Thank you for considering my earnest request and I hope that it would assist into this alternative route in the Red Line Extension's project. I would certainly appreciate any feedback to this request. I can be contacted by this email address or by cell phone at [number hidden for privacy].	1E			4F											Thank you for your support.
106	Tyrome Turner	e-mail	I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
107	Andrea May	e-mail	I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
108	Marc Henkel	e-mail	I'm on staff with Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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109	Lamar Simms	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
110	Wally & Pam Hasbrouck	e-mail	As a supporter of CRU inter city ministry Chicago, it is very important to keep the use of their parking lot.	1E			4F	5B										
111	Marissa Kuok	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
112	JoAnn M. Allen	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
113	Jan Espeland	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
114	Lindsay Paulus	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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115	Alisha Welles	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
116	Tom & Karen Hill	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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117	Narda Seaberry	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
118	Barbara Fichtenberg	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
119	Kellee S. Rayburn	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
120	Datrice Weathers	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
121	Valerie VanderKolk	e-mail	*mailing list request*													13C		
122	Phoebe Peterson	e-mail	*mailing list request*													13C		
123	Jennifer Chang	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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124	Jane Florine	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
125	Tricia Ringer	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
126	Wade N Harsy	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
127	antbebe@[e-mail hidden for privacy]	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
128	Carol Baunach	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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129	Cindy Johnson	e-mail	I am writing concerning the planning of the extension of the Red Line and the possibility of minimizing or eliminating the parking lot belonging to the Agape Center in Roseland. I have served at the Center and I know that the Cru ministry team that works and serves the neighborhood in many wonderful ways DESPERATELY NEED TO KEEP THEIR PARKING LOT!! Ministry team members need a safe location to park, throughout the year other teams come from across the nation to volunteer and need off street parking for their large vehicles, and my own teenaged daughter tutored at the center after school and needed a safe parking location. I understand the need to make the Red Line better for the city, but don't take away the essential parking from a wonderful, established ministry like the Agape Center!	1E			4F	5B										
130	Pierre Casimier	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
131	Eric Sullivan	e-mail	I just wanted to write in my support for the Red Line Extension project. As someone who lives right off the red line, I get a ton of use out of it and would definitely explore farther south neighborhoods if and when the line extends farther. I hope to see this project move forward swiftly.														14A	Thank you for your support.
132	Kevin Durand	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.	1E			4F											
133	Kristian Chelstrom	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
134	Claire Florine	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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135	Mary Hartsfield	e-mail	I am disagreeing with the extension due to safety issues. A women was killed on the red line, my purse was snatched on the red line, some of the passengers told me to ring the bell after i felt the tug on my purse. The conductor said she saw the young man when he jumped off the EL at 63Rd street. I call the the police they transferred me to 311. I waited on the police, but i talk with one of the CTA attendant name Yvonne Johnson at 55 st she really helped me by calling police, when they would not come to help me look for my purse where the man jump off EL. I went to 63Rd Street where the man dumped my purse. Before an extension safety issues need to be address.								8A							
136	Pastor Tedi H. Marshall	e-mail	I'm appealing to you on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
137	Laura Botten	e-mail	I heard about the possibility to expand the red line to 130th. Is there a CTA representative that would like to call in to the US99 public affairs radio program to discuss this? This would be a short taped interview over the phone to air at a later date.															CTA Communications responded directly to the commenter regarding the media inquiry.
138	Genevieve McInnis	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
139	Beth Mason	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
140	Brett Phalin	e-mail	I am making this request as a Chicago resident living in the Pilsen neighborhood. I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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141	Mrs. Junetta Casimier	e-mail	It is exciting to hear that you are extending train service to 130th Street. I have lived on the South Side of Chicago all my life, so I am sure that this extension will be extremely helpful to many citizens. My only request is that you would spare the Agape Community Center parking lot, which is on the East side of the railroad tracks at Eggleston. The small parking lot is vital to the functions of this community space. I know first hand how deletion of parking could cripple this vital institution. Residents would be constantly inconvenienced when staff, volunteers and program participants take their already limited parking spots. Most disturbing of all is that the safety of the children who attend the Center would be compromised. (Presently, though not ideal, it is fairly easy to escort children to and from the building because there are no gates or barriers blocking the view across the lot, for example.) I volunteer regularly at the Agape Center and attend worship services there weekly. This parking area has been carefully monitored and maintained through years of service to the people of Roseland. Please consider placing the Red Line stop on the WEST Side of the tracks, which is already vacant, un-used land. We greatly appreciate having a voice in this this matter. Thanks for informing us of your planning and progress.	1E			4F											Thank you for your support.
142	Caryn Corriere	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
143	Will Osgood	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
144	Jim Herlihy	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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145	Alphonse I. Johnson	e-mail	[to:] Editor, Chicago Tribune Sir: The 5.3 mile, 4-stations extension of the Red Line SW along Route 57 will cost $2.3 billion, according to your p.4 article this date. This will save (current?) commuters 20 minutes getting downtown. If this investment has a 50-year expected useful life and maintenance is 2% of $2.3 billion per year, annual costs for upkeep and depreciation are $92 million, 2022-2072. Total Chicago rail ridership last year was last year was 242 million. No figures were given for Red Line use – if we assume 10 million current riders now board at stations closer to home, the time saved costs $27/hour plus whatever it costs to operate and maintain the rolling stock. 10 million riders per year averaged over a 260-day workweek and a 10-hour (5 morning and evening) rush period requires about 100 eight-car trains per day departing at 6 minute intervals. Within the next decade there may be self-driving trucks and cars. The future may see Uber and fleet vehicles on call and fewer individually owned autos. Chicago lost 200,000 people during the 2000-2010 period. What will ridership numbers be in 2050? These public rail transit billions of dollars come from motorist gasoline taxes and should be used for toll road construction. A quarter of the Federal gas tax goes to grants for rail transit and bus and bike takeovers of existing roads – not exactly what motorists prefer. These transit projects are found money for big city politicians and their unions.																Transportation improvements across the region consider and leverage investments in all modes, including transit, to develop comprehensive solutions to regional mobility; these transportation improvements do not focus on just one mode in using available transportation funding. ON TO 2050 (the Plan) is the Chicago region's comprehensive regional plan that includes the long-range transportation plan developed by the Chicago Metropolitan Agency for Planning (CMAP). The Plan identifies "improving air quality, allowing travelers to avoid congested highways, and connecting people to jobs, education, entertainment, and other amenities" among the many benefits of a strong transit system. Because of this, CMAP advocates for improving public transit's competitiveness through increases to transit funding and includes in its goals "increasing the share of commuters who travel to work by a mode other than driving alone, while doubling transit ridership." The Regional Transit Authority's (RTA) regional transit strategic plan, Invest in Transit, also makes the case for increasing transit funding to allow the CTA, Metra, and Pace to provide needed services and stay competitive into the future. The purpose and need for this RLE Project has been established through a multi-year planning process and is included in ON TO 2050. The Final EIS presents updated ridership analysis using demographic projections from CMAP's ON TO 2050 plan. Based on the projections developed in Chapter 9 of the Final EIS, year 2040 total project ridership is estimated at 41,500 per weekday. This estimate considers projected changes in population over the long term. Chapter 9 of the Final EIS also discusses operating and maintenance costs for the RLE Project, estimated at $24.9 million annually. This estimate takes into consideration anticipated levels of both rail and bus service in the project area.
146	collyn02@[e-mail hidden for privacy]	e-mail	I vote to extend the train to 130th street.	1A														
147	David Vartanoff	e-mail	Agreeing with the urgent need for improved public transit in the project area (and nearby underserved areas as well), a far better and more cost effective project could be implemented much sooner by upgrading service on existing rail lines and fare integration. 1. Implement the Gray Line Project (also sometimes called the Gold Line) on both the Metra Electric and the South Shore as far as Hegewisch. This includes much more frequent "rapid transit" frequencies and greater span of service. 2. Restore stations along the South Shore between Kensington, and Hegewisch including 130th/Altgeld, also restore the former Wildwood Station at 130th & Indiana on ME. 3. Increase frequency and span of service on the Rock Island Suburban Line. The RI, brackets the proposed Red Line from the west offering riders a quicker transfer if headed north. 4. Fully integrate fares on RI, ME, and Gray(Gold) trains to Hegewisch with all CTA services. This means deploying Ventra readers on all RI, ME, CSS&SB platforms within CTA's service territory such that a rider can use the optimal combination of rail and bus for his/her trips. Comparison of travel times; In section 3.2 of the EIS, travel time from Altgeld Gardens to the Loop (given as Jackson % State) estimates 28 min to 95+25 min on the Red Line +some figure for transfer time or nearly an hour. Current CSS&SB timetables show 32 min Hegewisch to Van Buren(Jackson) and Michigan which the EIS calls an average commute time for the region. Adding as much as 8 minutes for several stops north of Hegewisch, a single seat ride would be less than 40 min from Altgeld to Van Buren. Even with the recently improved flow of buses at 95th St terminal, riders from east of the MED mainline would have a faster trip simply changing to ME at their 95th St station if the trains ran often enough. Given that all of these public transit services are taxpayer supported, the current double fare status of Metra (unless one's origin and destination are immediately adjacent a Metra route) is obsolete, and may constitute a Title VI disparate impact. Full fare integration will open up multiple new transit options greatly increasing mobility for all potential riders. Historic background; CSS&SB had several stations between Kensington and Hegewisch as late as 1960 including Altgeld and Ford City. Precedent for Metra operation dates to a period of CSS&SB railcar shortage in the 1990s when RTA ran a trainset of diesel pulled bi-level cars between Randolph (now Millennium) and Hegewisch. Metra Electric when operated by Illinois Central ran very frequent service all day with skeletal service after midnight, and included a local station at 130th and Indiana Avenue.	1B, 1C, 1D														Thank you for your comments and suggestions on implementation of the Gold/Silver Line and other improvement suggestions to Metra rail services and regional fare pass integration. A robust alternatives analysis was conducted over the course of several years prior to the proposal for the RLE Project alignment options studied in the Draft EIS and selection of a Preferred Alternative for completion of the Final EIS. Consolidated Response #1C provides additional details on this alternatives process, and Consolidated Response #1D provides additional information on the Gray/Gold Line suggestions received. With regard to the Metra station and operational improvements, while CTA appreciates these comments, Metra capital and operating improvements are not under the purview of CTA. Specific issues related to Metra fare policies as well as any Title VI issues related to their fares are also not under the purview of CTA. Planning for the RLE Project, including more detailed operating and service plans to coordinate CTA services and other regional transit connections, would be developed as this project moves forward into the Project Development phase and additional project engineering is conducted. CTA would continue to coordinate on the RLE Project with Metra and Pace.
148	Paul Karnatz	e-mail	This is an excellent idea and I hope it is able to move forward. The clear transit disadvantages the south side faces (fewer stops, distance between stops, etc) need to be fixed as well as other improvements to CTA as a whole. Congratulations on moving this project forward!	1B														Thank you for your support.

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149	Monica Reeves	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F												
150	Veronica Ford	e-mail	I am a resident of the area. I am interested to know , how many homes will be effected by this expansion? What is the plan for the residents living in the homes the city is trying to buy? What is the benefit for the residents living on 97th, 98th Lafayette? How will this project help 95th street? I cannot make the meeting. If any of these questions can be answered, it would be appreciated.				4A, 4D											Residents living along 95th Street and to the north would benefit from improved rail connectivity to the project area, reduced bus congestion along 95th Street (because some bus routes would be routed to RLE stations farther south), and overall economic development.
151	Kevin Hanna	e-mail	I wholeheartedly support the extension. I too must take a bus from 95th to get to where I need to go. Going to 130th is only the first step in an integrated public transport system that is needed, as illustrated by the following link: (Transit Future) Imagine what could be if these simple (relatively, as opposed to building new track, etc) changes were made? I hope you will consider this plan as well for future connectivity to all residents of the greater Chicagoland area. Thank you for your time and consideration.	1C														Thank you for the reference to Transit Future. The RLE Project is one component of the overall Transit Future vision. The RLE Project purpose includes improvement of rapid transit rail service to isolated areas and creation of opportunities for potential connections and linkages to other public transportation modes including regional commuter rail in the project area. Two regional transportation plans, CMAP's ON TO 2050 Comprehensive Regional Plan and Regional Transit Authority's (RTA) Regional Transit Strategic Plan (Invest in Transit), have identified the RLE Project as a priority project.
152	Jean SmilingCoyote	e-mail	I'm not going to this open house today, mostly because I live on the far north side and the logistics are daunting, to say the least. Throw in the Cubs game tonight, and it's *easy* to stay home. I'm not personally familiar with any of the locations which would be affected by this extension, so I'll leave the detailed comments to local residents and businesses. Your Preferred Alternative makes sense to me - even though I'm not personally familiar with the area, my B.A. in Geography gives me competence in reading maps, and using Google Maps if I want for more detail and photos. I'll let local residents decide between East and West Alternatives. There is one detail that puzzles me. In the early pages, you mention that substations which would be needed are "inconsistent with adjacent land uses." You did not include any artist's conception of what any new substation would look like (or sound like); also no maps showing what the adjacent land uses are and look like. I did find mention that these substations would be buildings (as opposed to a ComEd substation on Ravenswood a short walk south of my home, which is open to the elements, and not inconsistent with the neighbors, which include residential and small business). Later in the document, you mention landscaping and architectural factors which would decrease the inconsistency with adjacent land uses (latter is my way of putting it). I am puzzled by your inconsistency concern. Unless these substations emit noise which is a big problem for adjacent land uses, architecture and landscaping should be able to eliminate the inconsistency. Architects have years of experience putting various utilities inside buildings which present a perfectly acceptable faux appearance to the neighbors. Maybe someone can figure out how to design the substation exterior so it both looks like what it is and is very attractive. That would be better than faux. Feel free to ask me for brainstorming help when you reach that point. No charge.			3A			6A										Modern traction power substations are typically brick buildings either under, adjacent to, or nearby the CTA tracks. Examples of recently constructed substations include Hill Street adjacent to the Brown Line or Farwell Avenue immediately adjacent to the Purple and Red line tracks. Thank you for your comment and inquiry about substations and compatibility with adjacent land uses. As discussed in the Final EIS, incompatible zoning for substations would be rezoned and would not be adverse after mitigation.
153	Priscilla McMullen	handwritten	East Option: We are homeowners that are senior and displaced will impact our lives. I don't want to go to a senior home. Please stay on the Westside. Comments: Keep the railing on the Westside so no need or reason to come to the Eastside. Residents been in those homes since 1960's.	1E			4E											Your parcel would not be affected by the Preferred Alignment.
154	Michael Rivers Jr.	handwritten	The East option is better option.	1E														

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155	Melvina Grace	handwritten	East Option: Would be the best, but what about the properties that would surround. West Option: Looks more comfortable but what about the properties that surround the project? Comment: The park seems like a beautiful idea to bring life into a neighborhood fallen. But questions remain about properties surrounding the park due to elderly and disabled properties. Transportation: No comment because it beneficial - less walking distance to commute. Land Use and Economic Development: What will happen to properties in that area? Visual Impacts: I would love to see how it would look. Noise and Vibration: Yes, elderly leaves in area Safety & Security: Very important due to neighbor not being safe. Will this cause a problem for more? Hazardous Materials: Elderly and disable live in area. Parks: Improvement needed very well Construction Impacts: Is this going to affect all westbound properties? Project Funding: Are property taxes, other taxes going up to fund???	1E		3A	4A, 4E	5A	6A	7A	8A	9A			12A, 12B		14B	
156	Clarence D. Williams	handwritten	East Option: Black people not getting their fair share. West: The same Comments: CTA already knows what is going to do. They should be honest with the people. Property Displacements: Fair Share				4C										14A	Environmental justice (EJ) is "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (U.S. Environmental Protection Agency 2004). Chapter 7 of the Final EIS summarizes the EJ analysis and outreach conducted for this project. Considering the impacts, mitigation measures, and benefits, the RLE Project would not be appreciably more severe or greater in magnitude than similar effects elsewhere in CTA's rail system. The mitigation measures proposed are similar in nature to those for other CTA projects and have been proposed by CTA, with input from local communities, consistently in EJ and non-EJ communities alike. Although the project would still have adverse impacts on EJ communities, these impacts would not be disproportionately high or adverse. Consolidated Response #4C provides additional information on receiving a fair price for property sold.
157	Lori Shelby-Conley	handwritten	No comment															
158	Allen Brown	handwritten	East Option: I like the East option it seems more convenient and will have a better economic impact. West Option: OK not my favorite Comments: As far as parks effected. I would like to see bigger field houses with activity centers such as workout facilities, indoor basketball, etc. This will impact a lot of young community to have some thing positive. Also our parks should incorporate running and walking track. This will impact health and vitality of community residence.	1E		3B									12B			
159	Freda Madison	handwritten	East Option: East option may be better. It is close to the 95th station. West: West option want to make sure park area & parking which brings in more traffic & people. Security would be necessary for the community. Also communities need to address, as far as, housing board up and abandon building. If the area is going to developed the housing structure that will remain should be developed and addressed as well. Thank you.	1E	2C, 2E	3A					8A				12B			
160	Elaina McLauren	handwritten	East and West Option concerns: Construction, debris and noise. Comments: My property will not be taken, however I'm concerned about the pollution, debris, noise & construction affects on my home and well being. Transportation: No Land Use and Economic Development: Yes Property Displacements: Yes Neighborhood & Communities: Yes Visual Impacts: Yes Noise & Vibration: Yes, along with debris Impacts to Historic Resources: Yes Safety & Security: Yes Hazardous Materials: Yes Wetlands: Yes Parks: Yes Construction Impacts: Yes Project Funding: Yes							7B				11A				
161	Adrienne R. Ancolin	handwritten	West Option: Street closure and the direction of traffic through the neighborhood - loss of the alley at the corner by the park. Comments: The Wendell Smith Park should "NOT" have an enclosed fence that would stop the foot traffic at 99th street. That is the only opening for crossing by foot until 101st Street. Many people cross there and if its closed the walkers will find a way to make an opening. Will the street directions change? Will Eggleton still allow the crossing at 101st street? Property Displacements: Will this affect the property value or decrease it? Noise & Vibration: There is already vibrations from the RR that shake the foundation. Now there are 2 trains in same space. Parks: Park availability for neighborhood.		2D	3C				7A					12A, 12B			

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162	Tanisha E. Pearson	handwritten	I am excited to hear about the upcoming project. I would encourage moving the construction date (start date) up. I hope that the city take full advantage of making sure the displaced residents receive fair relocation funds. I hope that the community is involving in building (extending) the Red Line meaning involve local construction companies. Also involve young men & women, church, banks and seniors as much as possible. All stakeholders should have a voice. Impacts to Historic Resources: Incorporate & preserve the newest attributes of the community. Hazardous Materials: Please test the soil & other hazardous materials. Make sure everything is safe to the residents. Construction Impacts: Use Latino & Black owned companies				4C					9A				13C, 13D	14A	Thank you for your support. Section 4.7 of the Final EIS describes impacts of the project on historic resources, including the Altgeld Gardens neighborhood and the Altgeld Gardens–Philip Murray Homes National Register Historic District. The Preferred Alignment would cause displacements and visual, noise, and other environmental effects within the Area of Potential Effect, but none of these effects would alter the characteristics that qualify any of the identified historic resources for inclusion on the National Register of Historic Places. No mitigation measures would be required.
163	Lavell McGill	handwritten	*First sentence Illegible.* Property taxes going up?														14B	
164	Valerie Lilley	handwritten	East Option: Noise West Option: People walking through my neighborhood & blocks. Parking on my street and noise at all hours. Comments: Can you please put a Whole Food mini mart in the 11th Station? How about getting a Whole Foods in Roseland all together? Build a wall or fence around 11st Station. Keep our blocks safe. Noise & Vibration: Noise Safety & Security: Can you put a safety wall around our block-shield from parking lot @ 11th & Eggleston?		2C, 2E	3A				7A	8A							
165	Sandra L Munoz	handwritten	East Option: The East option would displace more people. It would also permanently affect park space. I am also concerned about the visual and noise during construction. Comments: The location for the Town Hall meeting was not well thought out. An auditorium would have been better. I could not hear the speaker or see the screen that provided the visual impact of the project. There were some chairs setup in front of the screen and tables and chair behind them. It was like a church reception rather than a public meeting people continued to talk during the presentation and continued to circulate around too much confusion. Also there was no public discussion of project. It seemed a situation were you could say you had a public forum without having people participate in an open discussion. Property Displacements: Will people receive financial assistance and help finding affordable housing? Neighborhoods & Communities: This project will displace a full block in my area. I wonder how much consider you consider the human factor (friends, family, neighbors) Safety & Security: What safety measures will be in place during construction? Construction Impacts: I am concerned about the mess it will cause, traffic, parking, construction vehicles and noise, the dust and dirt.	1E	2C, 2F		4A, 4B, 4C, 4D	5A	6A	7B	8A			11A	12A	13A		
166	Kenneth Samuels	handwritten	Concern for lack of information concerning/relating to the schools and children. As a member of the Far South Community Action Council. I am concerned that there is no information as it relates to the Hubs of our community - our schools... our children. Also is there a way to connect the activities of construction & development to utilizing our closed schools - West Pullman, Kohn... Burnham - or is there a plan of connectivity that I missed. Land Use and Economic Development: Use of closed schools Neighborhoods & Communities: Impact on children & active schools					5B										There is currently one closed school that would be impacted. One parcel of property at the Kwame Nkrumah Academy would be acquired and a construction easement would be needed on some adjacent parcels to construct the elevated structure for the 107th Place cross-over. The school property would be restored to its existing conditions after construction is complete.
167	Betty Jones	handwritten	East option: When will you know for sure? Transportation: Very concern about street closing Property Displacements: Where will you store equipments? Noise & Vibration: O Hare airport - Noise does impact Safety & Security: Always Hazardous Materials: Yes Parks: Need a new park Construction Impacts: Parking Project Funding: How much will the housing be value of?		2D, 2F	3C				7A	8A	9A			12A, 12B		14A	Construction equipment would be stored within the project footprint and on properties acquired as part of this project.
168	Cheena Credit	handwritten	East Option: Let's be honest there truly is no major difference between these two choices. West Option: Taking away of green space; homes on Eggleston directly facing the trains; increased traffic, pedestrian, car, et. Property value Comments: First, just so you know I grew up on W 102nd Place, my parent and their parents of grammar/high school friends are still there. 1. Despite studies done for noise & vibration, I still believe this will have a adverse effect on community. There is a difference between freight trains coming once a day and an elevated train running all day & night. Is it possible to provide residence with noise reduction windows or something. 2. This area cannot be compared to others, this is single family homes, not 2-4 flat apartments.		2C	3C			6A	7A				12A			
169	Diane Thigpen	handwritten	East Option: This entire situation is just wrong. People have worked hard abide by the law and now we are being pushed out. Comment: I pray this does not affect the east side. I have lived in this community and home all my life. This is just wrong!	1B, 1E			4A, 4B, 4C, 4D	5A										

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170	Gregory Walker Jr.	handwritten	East Option: I don't like the East Option because an entire park is gone. West Option: Hoping this doesn't effect the Roseland Pumping station in any way. Comments: For 103rd, 107th, 111th, 115th, State St., Michigan Avenue, I would like to propose that all businesses or residential properties that are needing to move. I propose that they have an option to rebuild next to any space being bought by CTA. I would also like to suggest that at 115th there is plenty of mixed property. At 130th, I suggest that the trucks end in a loop, rather than a stub, that way you could have a more convenient turn around of trains. Also possibly asking NICTD to form a station there to attract riders, thus making it a "super station." Overall, I'm really excited that this extension is being sought out. I believe it not only help southside residents, but also people from Indiana and south suburbs get downtown and home. Transportation: How would the 34 South Michigan run? Honestly I hope maybe the hours change; but I hope it operates from 95th to Altgeld. Impacts to Historic Resources: Hope this doesn't effect the Roseland Pumping station. Safety & Security: I would like to see all stations with a CTA worker two (2) armed security officers for at least the first 2 years.	1E	2A, 2H	3A					8A				12A			
171	Ethel LeFlore	handwritten	East Option: The noise lots of people don't mind selling. Comments: I wouldn't mind moving it's okay by me. I would love to move so people can use public transportation to and from the City. It also create job for the City.			3B	4A			7A								
172	Le Ronnie Cameron	handwritten	East Option: They should put it on Dan Ryan to I-57 or on the westside of the UPRR. Go west young man go west.	1C, 1E														
173	Doris Atwater	handwritten	I would love to relocate due to damage and noise is ruining my house. The community is not the same. Please consider the Eastside.	1E			4A	5A		7A								
174	Mary Thomas	handwritten	East Option: I reside in one of the homes on 101st Street that will be affected by the RLE Project. The disruption that will occur in the neighborhood cannot be measured. Comments: Currently, when using public transportation. I am required to walk to 103rd Street to catch the 103rd street bus. I will still have to travel to 103rd to catch the RLE. Additional buses would solve the situation, instead of disrupting neighborhoods in order to gain a few extra minutes of travel time. I have resided in my home since 1970. My neighbors; whose homes are also affected by the project, have lived there for longer periods. Funds used for this project could be used in a much better fashion. I do not believe that economic development would improve. It has not improved at the 95th street station. Express buses would serve the same purpose. Neighborhoods & Communities: Entire communities will be disrupted in order to gain 3 or 4 minutes of travel time. Visual Impacts: It would look terrible with tracks on the ground with the UP railroad and elevated tracks. Noise & Vibration: The noise and vibration of the RLE will be terrible for those remaining in area. Safety & Security: I am concerned that the neighborhood will not receive increased police protection.	1C		3B		5A	6A	7A	8A						14B	
175	Dr. Bobbie King-Donelson	handwritten	No comment. *Mailing list request.*													13C		
176	Dr. Carmen Palmer & Mrs. Sharon Banks Pincham	handwritten	West Option: 116th & Michigan's impact on Kids off the Block (KOB) Comments: The impact on the schools and the school population. Land Use and Economic Development: Need a positive draw of businesses, (non-fast foods) black owned well represented Neighborhoods & Communities: Inclusion in decision making re business choices & community benefits agreement Visual Impacts: A lot of green space and a balance out to the hard concrete - art inclusion; flowers, trees, and representative expressions of the community Noise & Vibration: at a minimum Impacts to Historic Resources: None Safety & Security: Bicycling & beat officers at the city level not SSAs Hazardous Materials: NONE! Get rid of cell phone towers Wetlands: Maintained Parks: Intermingled & well let/attractive planters, waste baskets, bike racks Project Funding: TIF Momes SBA presence from on set to the end Other: Schools protected and assessible			3A, 3B		5A, 5B	6A	7A	8A		10A		12B	13C	14B	A community benefit agreement is typically an agreement between community groups and a private developer, where the proposed development is not centered on benefits to the surrounding community. The purpose of the RLE Project is to improve mobility and foster economic development, benefiting the community and public welfare through a significant public transportation investment. In addition, mitigation measures identified as part of the Final EIS would address impacts associated with the project. The RLE Project is proposed to be partially funded by a federal grant. However, private development that is funded without federal dollars does not have to complete the federal NEPA environmental process; community benefit agreements are set up to establish some level of community partnership and public input into an otherwise relatively closed approval process. The EIS process, as adopted for the RLE Project, provides for extensive community involvement and outreach requirements, the identification and disclosure of impacts, and commitments to measures to avoid, minimize, or mitigate adverse impacts resulting from project implementation. CTA has an "Arts in Transit" program, which is expected to continue through design and construction of the project. Cell phone tower placement is outside the scope of this EIS.
177	Alvin Black	handwritten	West Option: Makes the most sense	1E														
178	Lillie Dampeer	handwritten	I'm a part of the West option which is great. I hope the West option is chosen so my home will be apart of the property acquisition. My concern is one the Red Line Ex is complete there will be more traffic/people in the area. The noise level with 2 trains. I'm a senior and handicapped with health issues. During construction will nurses, therapist and (if needed) an emergency vehicles have access to my home? That is why I hope the west option is chose. I believe this could be good for the community. I hope also that the CTA give into consideration how the economy has inspected the value of homes in my neighborhood. Thank you. Lot 283	1E	2C		4E	5A		7A	8A							

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179	Frank A. Lopresti	handwritten	1) This Red Line Ext Project needs to be completed!!! 2) "East" vs. "West" Option: No actual preference - let the neighborhood residents decide!!! 3) Here's a suggestion: Wouldn't it be nice if NICTD/Southshore R.R. built a new station at the proposed 130th street terminal (to facilitate transfers between NICTD/Southshore and the CTA) - ??? Project Funding: Can we realistically, expect that this project will, in fact, receive the necessary Federal, State and Local Funding??? (Just asking!!)		2H												14A, 14B	
180	Antony Johnson	handwritten	*(In Spanish, somewhat illegible*) That I could know my property My concern about the East Option is what it could happen to my property.				4A, 4B, 4C, 4D											Comment in Spanish regarding individual property displacement: Thank you for your comment. CTA would follow all federal legal requirements set forth in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended to assist all property owners and tenants displaced by the RLE Project. This comment specifically asks about potential impacts to a property located on West 21st Street. Please note that this is outside of the project limits, and no property would be acquired by CTA near this location as part of the RLE Project. Additional information on property displacements may be found on the CTA project website (https://www.transitchicago.com/rle/properties/) and is provided in Consolidated Response #4.
181	Constance Carroll	handwritten	East Option: How far east of the railroad? Will it go both ways (East & West) for parking etc? (How far East - West?) West Option: How far west from the railroad? Comments: Will there be parks, parking and other business' to improve the community? Will employment be available for residents? If so, how can we apply? It seems that the project is well on the way. When will it start and when is the estimated time of completion? Property Displacements: If you go West of the railway how far will you go from 11th & Eggleston south of 11th street? Safety & Security: Since there will be more people traveling through the neighborhood will there be additional policing and security? Hazardous Materials: Will we be informed of hazardous materials being used?	1A		3B	4A				8A	9A			12B		14A	
182	Emma Moncure	handwritten	I would like for it to come to West because it will be a better kind travel so far.	1E														
183	Anna Williams	handwritten	*(Parts illegible)* East Option: I will have to relocate. West Option: No problem. Comments: Relocation will someone help to relocate me. How will they --- my home all in same day? Do they have city home available? Is there a time limit to move? Do I need someone to assist my property?				4A, 4D											
184	Julie A Pate	handwritten	East Option: My concern about either side is my foundation noise control dirt and dust noise barriers who will pay for damages to my home. West Option: Concerns are the same want to be comfortable in my home Comments: I have no problem with improvement I think it's a good thing may improve property value, love the way the park will look. Visual Impacts, Noise & Vibration, Hazardous Materials, Construction Impacts - YES			3C				7A, 7B				11A	12B			
185	Yvonne Farlow	handwritten	I have an inherited house the location is good for me I'll pay taxes only with utilities and I'm comfortable were I'm at not surrounded by a lot of houses. I would like to stay until I decide to move.				4A											
186	Scott & Maureen Perazzolo	handwritten	West Option: What about possible foundation damage to our house during construction? Comments: 1) We are concerned about noise and air quality during and after construction. 2) We are concerned about the vibrations of our house during and after construction. 3) How will this project impact the value of our property? 4) Will there be any changes to our streets and alley that leads to Wentworth 5) Will our street 114th become a main street? Will it be connected to Wentworth? 6) Will be compensated for any inconvenience or given any grants for home improvements to reduce noise? Like they did for the residents living near Midway airport.		2D	3C				7A, 7B				11A				The Preferred Alignment would be along the east side of the UPRR tracks at 114th Street. There is no plan to connect 114th Street across the UPRR tracks. No changes are planned for the street network on the west side of the UPRR tracks at 114th Street, Princeton Avenue, and Yale Avenue. Regarding impacts to foundation during construction: Please refer to Consolidated Response #7B for information on construction impacts, including vibration impacts. The Preferred Alignment would be located on the east side of the UPRR tracks, across the tracks from your property, near 114th Street.
187	Annie Anderson	handwritten	Noise & Vibration: Parking near my home. Parks: Yes		2F										12A, 12B			
188	Maedell Stiffend	handwritten	East Option: How much housing will be moved? West Option: How much housing will be removed? Property Displacements: Info				4A											
189	Macy Johnson	handwritten	East Option: Wendell Smith Park and too many homes will be affected. West Option: There is a spacious parkway which is more feasible than the limited space on the East option. Comments: Has CTA considered placing more buses on Michigan Avenue. There could be several express buses extending to 130th Street. Bishop Ford is an option and also Holsted Street. Fewer homes and families will be displaced. Dan Ryan is another option. Property Displacements: A huge number of homes will be destroyed. Noise & Vibration: This is already prevalent because of the present railroad. Parks: Wendell Smith Park will be affected.	1C, 1E			4A			7A					12A			

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190	Rosemary Wyche	handwritten	East Option: The structure of my home and the vibration from other trains already affect the construction so another train will accelerate the problem.							7A								
191	Cebell D. Huey	handwritten	The Red Line would be more beneficial to start from 95 and Dan Ryan to alongside the Bishop Ford connected to 130th Street. There are Metra train at 103rd vincinne a Metra train at 103rd and Walden. So what I am saying spread out the transportation. I think Ford area would be the perfect route. Less home would have to be moved next on the west side of the rail tracks on the west 101st street. There is a park not U.P.C. in used will not have to move people homes which are owned by seniors and this is the age that we are retired and enjoying our home in our elder age. Do not make us move at this late date.	1C			4E											
192	Rogers D. Mitchell	handwritten	*(Parts illegible)* East Option: More attractive - will increase business in the area, which means less unemployment West Option: Very effective and reduce density. Also all of the above improvements Comments: I think each —-brings —— in the Roseland/Altgeld ——-. I can visualize reduced crime in Roseland area by reduced population density and increasing --- and employment. *(illegible)*	1E		3B					8A							
193	Solomon R. Morgan	handwritten	Relocation information concerning M1 zoning															CTA's property outreach specialist has been in communication with this property owner to discuss questions regarding property acquisition and relocation assistance. As noted in those discussions, once CTA is prepared to acquire the property, relocation assistance would also be provided under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. As this acquisition process moves forward, CTA would work with property owner to identify suitable replacement property and relocation to a site that is appropriate for the purpose and use of the property being acquired.
194	Solomon R. Morgan	handwritten	East building is a Pullman building lost? If you knock it down please save the bricks and limestone. I fought the City until I was broke trying to prove it. It was the milk delivery service they shoed the horses and delivered to all pullman. Save it!!! or save the bricks.				4A											CTA is committed to fair and equitable treatment for all individuals who may need to be relocated due to the RLE Project. If CTA determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. As part of the Final EIS, CTA identified historic properties within the Area of Potential Effect (APE) for the project. This included a review of all properties that would be displaced by the Preferred Alignment. Based on this analysis and subsequent review in responding to this comment, this property is not determined eligible or listed on the National Register of Historic Places. No additional historic effects would occur as a result of acquisition of this property.
195	Larry L. Jordan	handwritten	No comment													13C		
196	Bettye Campbell	court reporter	I live in the west Chesterfield neighborhood of the Roseland community area...I fully appreciate the CTA Red Line terminal at 95th Street and the Dan Ryan expressway...My parents chose to purchase land and build a home at my present location, which is two blocks from the terminal...And it is an advantage, definitely an advantage. Along with the benefits, my neighborhood is negatively impacted by harmful pollution that -- which means exhaust fumes from cars, local and interstate buses, trucks, and the commuter trains traveling on 95th Street...It is not healthy to add any facility to invite more vehicles into the neighborhood. Many studies support this...shortly after the current terminal opened, in 1969, there was a meeting downtown where CTA, business, and neighborhood residents dealt with the fact that the business community had expected and was requesting more parking at the terminal. To answer this, CTA pointed out that there were over twenty, 2-0, twenty 95th Street bus routes entering the terminal and that unrestricted parking existed along these 20 routes and allowed for easy access to the rapid transit trains at the terminal. This is still the case. Research will show the same or increased number of routes today in the year 2017. Transit Oriented Development planned for the 9400 block on State Street is where there will be businesses in that entire block. And that will require more automobiles for access. One asks that the CTA and the city of Chicago respect my neighborhood quality of life and not include parking lots or any facilities that accommodate motor vehicles within my neighborhood's boundaries. (transcript contains more detail about boundaries of area Ms. Campbell refers to.)		2C													Because of the RLE Project, customers currently traveling to 95th Street by car or bus to board the train could board farther south at 103rd Street, 111th Street, Michigan Avenue (south of 115th Street), or at 130th Street. Once the RLE is operational, some bus routes that currently approach the 95th Street Station from the south would likely be restructured to end at one of the proposed RLE stations rather than at the 95th Street Station. With a shift in demand to stations south of 95th Street, parking demand at 95th Street Station may decrease. CTA is not proposing any park & ride facilities in the West Chesterfield neighborhood related to the RLE Project. Because of the RLE Project, customers currently traveling to 95th Street by car or bus to board the train could board farther south at 103rd Street, 111th Street, Michigan Avenue (south of 115th Street), or at 130th Street. Once the RLE is operational, some bus routes that currently approach the 95th Street Station from the south would be restructured to end at one of the proposed RLE stations rather than at the 95th Street Station. With a shift in demand to stations south of 95th Street, parking demand at 95th Street Station may decrease. CTA is not proposing any park & ride facilities in the West Chesterfield neighborhood related to the RLE Project.

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197a	David May	Court Reporter	Instead of building the south leg of the CTA Red Line extension from 118th Street to 130th Street, a bus rapid transit type of service should be implemented. Buses would run a loop route in the neighborhood south of 130th Street and then run express to the CTA 95th Street station. The problems with the Red Line south leg are, One, it costs a huge amount to build; Two, its operating costs would be very high; Three, it will serve relatively few riders, maybe 1500 people; Four, the station is very inconveniently located, well beyond the northeast corner of the neighborhood served -- only thirty percent of residents live within half a mile of the 'el' station-- a circulator shuttle bus could have bus stops with shelters located within one eighth of a mile of 90 percent of residents; Number five, will not be in service for maybe five years or more or never; Number six, eliminating the cost of the south leg make the rest of the extension much easier to fund and more likely to be built; Number seven, a circulating shuttle bus running on a partially exclusive right-of-way would pick up riders near their homes and get them onto the 'el' in the same amount of time as the Red Line extension at a fraction of the capital and operating cost. *(additional details regarding suggested alternative and its potential benefits in transcript)*	1C	2C												14A, 14B	CTA evaluated several bus rapid transit (BRT) routes as part of the planning process. As discussed in the Draft EIS, the BRT Alternative was eliminated in August 2014 based on public feedback because of the following concerns: The BRT Alternative would have minimal travel time improvements. Anticipated ridership would be much lower than for the UPRR Alternative. In addition, CTA needs a yard for maintenance and storage of RLE trains, and given the developed nature of our city, the most suitable location for the yard is at 120th Street, as proposed as part of the Preferred Alignment. The Preferred Alignment would serve public housing at Altgeld Gardens, which is currently isolated.
197b	David May	Court Reporter	A transit concept that will affect the area served has developed a lot of interest in the last couple of years. All of its four versions: Gray line, gold line, Chicago cross rail, and consolidated connector proposed remodeling the Metra Electric line, which runs through Roseland to offer frequent local service similar to a CTA 'el' line or a European metro line. The Red Line extension should be evaluated in concert with the electric line services option rather than ignoring the electric line, as has been done so far...the goal in this neighborhood should be to coordinate the new Red Line and electric line services to maximize the number of riders served, their convenience and trip quality.	1C														
198	Stella Brown (Charles)	Court Reporter	I am worried about environmental impact that the vibrations and the construction will have on our property. We stay at 12 West 115th Street. And the property is is not going to be acquired by CTA. But because it's so close, especially if they do the east side option, that it's going to shake our property.							7A, 7B								
199a	Dallas Beecher	Court Reporter	I would like to propose the original concept that was going east under the viaduct of King Drive down on the ground level and then headed in the east direction, in the direction of Olive-Harvey College. And from there it would have to be a decision made of whether you're going to elevate the tracks or either undergrand the tracks to the east side of Bishop Ford expressway onto ground level along the tracks that exist now. And the frontage road could be the path of those tracks. It would take you almost directly to 130th Street without any expense of demo-ing residential and at the same time it would offer parking facilities, transportation turnaround facilities, and maintenance on the frontage road. *(additional details regarding suggested alternative and its potential benefits in transcript)*	1C														
199b	Dallas Beecher	court reporter	I think Roseland as a community ought to, should — somebody should propose demo-ing residential that been unoccupied for at least five years or more. Because investors usually look at blocks of opportunity as opposed to individual houses...I think that we have funds, State funds to do demo that's been over five years of occupancy.															Thank you for your comments and suggestions on how to address vacant buildings and support redevelopment in the Roseland community near the RLE project area. While considerations and policies related to vacant buildings not required for this project are beyond the purview of CTA or this RLE Final EIS process, there are a number of programs in place that work to address these issues in the city and county. The Cook County Land Bank Authority (CCBLA) addresses a large inventory of vacant residential, industrial, and commercial property in Cook County. CCBLA acquires, holds, and transfers interest in these properties throughout Cook County to promote redevelopment and reuse of vacant, abandoned, foreclosed, or tax-delinquent properties. They provide targeted support to stabilize neighborhoods; stimulate residential, commercial, and development; and support priorities established by local government partners and community stakeholders by acquiring properties, liens, notes, or deeds and maintain these properties to prepare them for conveyance back to the market or for other uses. In addition, to address negative impacts of improperly maintained vacant buildings on surrounding neighborhoods, the City of Chicago has adopted registration and maintenance requirements applicable to the owners of all vacant buildings. Members of the public can obtain and track information about any vacant building(s) throughout the city. The City's Department of Building's Demolition Bureau responds to complaints reported by residents, community groups, Aldermanic offices, and the Chicago Police Department and responds to complaints of vacant and open buildings. Buildings that are abandoned and scenes of criminal activity are inspected and then referred to the circuit court system. The process consists of identifying a responsible party who will secure, rehab, sell, or raze the structure. If these standards cannot be met, the Demolition Bureau continues to inspect the building throughout the court case. In some cases, the court may order the premises to be properly secured or ultimately demolished. CTA would encourage you to review online resources for these agencies and reach out to your Alderman with these suggestions and to understand what is currently being done with regard to these programs in the Roseland community. In addition, in order to fully leverage the RLE investment to benefit Far South Side communities, CTA, in partnership with the City of Chicago's Department of Planning and Development (DPD) and CCBLA created the RLE Transit-Supportive Development (TSD) Plan. This is a proactive effort to create a guide for future development in communities located in the RLE project area. The plan identifies methods and resources needed to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment.

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200	Larry L. Jordan	court reporter	My comment is on the Green Line. What they putting our right now is still, is still just putting it right close to Eggleston on all like that. It should have been coming down Halsted...The train should go there, too. I just hope they've got enough room for senior citizens and for handicapped. We need more room for handicapped and so forth on the train... And they need to make bigger doors or wider doors for wheelchairs and everything.	1C	2B													
201	Ray Coleman, Sr.	court reporter	I'm willing to relocate, if they buy my building...I got my kids living there. So they're going to have to be relocated...I'm going to make sure everybody have a place to ... stay if they buy the building, get a place big enough for my whole entire family...I would like to accommodate for disability. Because I'm disabled. I've been disabled for 15 years.				4A, 4B											
202	Ms. Thomas	court reporter	Currently, when we use public transportation, we have to walk to 103rd Street...we have to walk two blocks to catch the bus. And we would have to walk two blocks to catch the Red Line extension. And we believe that this, our area would be better served by express buses, by increasing the number of buses that not only run to 103rd Street, but those that run out to Altgeld Gardens. It would be less disruptive of the neighborhood. We don't believe that there's going to be any economic impact on the community. we could look to 95th Street to see what it's done for them. We can look at the increased crime there at 95th Street. And we do not want that in our neighborhood. We just think there are other alternatives that could be made for this project. We're also concerned about the safety of the neighborhood. It's an older neighborhood and with many senior citizens. And we don't believe that we will see increased police protection from the City with this new project.	1C		3B		5A			8A							
203a	Cebell Huey	court reporter	I live right on 101st Street at the railroad track between Princeton and Eggleston. I'm preferably not coming on the east side of the street at this point. There's a park on the west side...There's a park on the west side of the street. Nobody is living — nobody is there that whole entire park. I've been there ever since 1965. Nobody uses that park. Even people don't walk the dogs over there...Now that -- it starts at 99th and Eggleston and goes to 103rd and Eggleston. Then beyond 103rd and Eggleston all the way down the side of that tracks...it's hardly nothing that's really worth anything all down that, all down that track to 115th. Now that is a good distance that CTA can use, you know. And then whatever they have to do from 115th then on out to 130th.	1E											12A			
203b	Cebell Huey	court reporter	Look at 103rd and Vincennes. There's a Metra at 103rd and Wallace or Walton. There's another Metra close together. Then you go over across Western on 103rd, there's another train. Now with the 'el', CTA coming right there on 103rd and Eggleston, that's a whole lot of cluttered transportation -- three Metras and one CTA. And so why don't they spread this transportation out. And then if they're going to do that, go over to the Bishop Ford on go straight down from 95th and State to, all the way around to Bishop Ford, make that curve and go on to Bishop Ford can go straight down to Bishop Ford and go to 130th...to me it would, it would look really nice, you know, with the architect to build it up... and separate some of this transportation. It won't be all close together like on Eggleston, Racine, Walton and on and on, you know, going over east.	1B, 1C														
204a	Cheena Credit	court reporter	I think you should do a better job of notifying the people in the immediate community...I think for something this important. It would have been best if every person who lived within the 21st ward, 9th ward, and 34th ward got an actual letter in the mail stating this along with the proposals...Why did it take two years from the last meeting to this current meetings. What is being done to communicate these findings to the public? Because I didn't see anything in the DIS draft.	1C												13B, 13C		
204b	Cheena Credit	court reporter	I'm concerned about my property value. Are they going to go up or are they going to go down? If I choose to sell my house, do you think I'll get what it's actually worth at this time knowing that a train is going to be coming through? How does this affect my property taxes?			3C	4C										14B	
204c	Cheena Credit	court reporter	How does the noise and vibrations actually affect the foundation of my house? Has there been a long-term study done to let me know how that's going to come out, if that makes sense?...For those of us who decide to stay, the homes that are not affected, is there a way that we can soundproof the homes? Maybe the City of Chicago could buy soundproof windows or put siding on homes that don't already have siding.							7A								
204d	Cheena Credit	court reporter	If I had to choose between the east option or west option, I choose Halsted; but since that is no longer on the table, why don't you do the Gray Line?	1D														
204e	Cheena Credit	court reporter	Have studies already been done concerning increased pedestrian traffic? Will potential crime levels increase?		2C						8A							
205a	Christina Horde	court reporter	How can we be involved in the outreach program?...There needs to be more outreach to the communities that are near. That main station at 95th and State.													13B, 13C		
205b	Christina Horde	court reporter	Because I see that the overpass is going to be quite -- will rise up, will come up near 98th Street.... Along the train tracks from 95th on to 47th Street there are these boxes that the trains go under. And we're trying to figure out what are they for and why do they have them there?...We want to know why.															The "boxes" over the tracks in the median of the Dan Ryan Expressway are signal houses. Space is very restricted in the median of the Dan Ryan, so the design places the signal houses over the tracks. For the RLE Project, the signal houses would not be placed over the tracks on the aerial structure. The signal houses would be located adjacent to the RLE structure.

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206a	Addie Dixon	court reporter	I'm tired of dodging bullets. I'm tired of can't stand in front of the window. I'm tired of every time I hear a noise, I've got to jump on the floor.								8A							
206b	Addie Dixon	court reporter	I'm tired of the trains coming through, blowing their horns all night long. And I'm tired of the house shaking...Plus, I'm sick. And the noise is making my condition worse...If they buy my house, I won't have to hear the noise no more...I'm ready for the Red Line. I'm with you with your plans.							7A								
206d	Addie Dixon	court reporter	I'm ready to live my life and get out of there. And if someone lives with me, make sure they're replaced. I want to make sure that the people that live with me are taken care of.				4A, 4D											
207a	Macy Johnson	court reporter	It bothers me to have so many displacement of homes and families in the area. If it must be done, I wish they would consider the west side of the train tracks. There's more spaciousness on that side. I don't see a lot of homes would be involved if they did it on the west side.	1E			4A											
207b	Macy Johnson	court reporter	I wish there were other options. One was to put more express buses on Michigan Avenue that would go to the Gardens, 130th. And if that could not be done, what about Bishop Ford Expressway? That could be used as an option. And there's also Austin Street and possibly Dan Ryan. They have Els running through some other expressways, and those could be an option.															
208	Kathy Jackson	court reporter	What I'm concerned about is up until this year, 2016, people were able to call the CTA information and see what buses were running where. Now, as of 2016, you can only call to 7:00 o'clock. And people are out there leaving the hospital after 7:00 o'clock. People are leaving church, leaving school. People cars getting broke down...even if they raised the fare, it would be convenient for people to know if and when they can get somewhere at night...some people don't have cell phones, and some of these cell phones is not -- some people don't understand how to use that. Because you have to have some kind of phone to call and get the information where the bus is going...that's a disadvantage to people out here wondering how to get home.															Customers can get door-to-door directions on transit from CTA and many other transit agencies on the web. Customers can also find schedules, fares, and other pertinent information for the CTA, Metra, Pace, and more with the RTA Trip Planner available at rtachicago.org. CTA also provides paper copies of bus schedules. They can be downloaded directly from our website at https://www.transitchicago.com/schedules/. Customers may also request a copy to be mailed to them, free of charge, from CTA's Customer Service Department by calling 888-YOUR-CTA (888-968-7282) or by e-mailing feedback@transitchicago.com. CTA also publishes Bus & Rail Maps, which give detailed information about CTA bus and rail services, along with Pace and Metra routes in CTA's service area.
209	Doris White	court reporter	I think the best option is the east option because I go to the church that's going over eastbound, and once we get off a bus at 115th and cottage Grove, there's no bus.	1E														
210	James Czarnecky	e-mail	*mailing list request*													13C		
211	Gregory Walker Jr.	e-mail	My name is Gregory Walker and I had a couple more things that I had wanted to point out that wasn't on my sheet. One note I didn't see is the fact that the CTA could have also used the I94/Bishop Ford area of to extend the red line. With the new service on Cottage Grove that could've been a new station.... promoting ridership there for Pullman residents. At or somewhere near 103rd there could've been a station. This would be great because Olive-Harvey is there and many people attend there from across the city; especially since they are currently expanding. It could be another boost for the line. You could still have stations at 111th, 115th, and 130th respectively.... this would be the end of the line in opposed to the middle as with the current idea(s). This could be maybe a 3rd or fourth alternative. Another good point about the red line extension is the Altgeld Gardens area would finally be connected to Hegewisch neighborhood. For decades both are on the outskirts of town and have been nearly land locked; making them inaccessible. Just a few ideas...	1C														
212	Lindsay Bayley	e-mail	As a transportation planner who specializes in parking policy, I have argued for years that no public agency should spend money on parking for several reasons. First, the financial benefits to the city of having tax-generating, productive uses next to the train far outweigh the benefits of storing cars all day long. I believe that even the benefits of a public park, that does not generate revenue would outweigh the benefits of having parking next to the train. Second, the future of mobility is unknown. Demand for parking may drastically decline and garages are typically built with public funds to be paid out over 40 years. We don't know if we'll need parking next to the train in 5 years, let alone 40 years. It will be a waste of money and tax payers will be on the hook for it. Third, if there is a demand for parking, the private sector can fill it. Let the market determine it. Build a park next to the station which you can allow a private developer build a garage on in the future. And finally, no driver will pay what it actually costs to park there. So you will be subsidizing drivers at the expense of people arriving by bus, walking, and riding bicycles because of the added traffic and congestion. You will be shooting yourself in the foot. Your buses will suffer because of it. PS. In addition to authoring the "Parking Strategies to Support Livable Communities" paper, I also worked on the Red Line Extension CMAP LTA project and made most of the maps. I'm familiar with the area and the context.		2E													
213	Jeff Bongiovanni	e-mail	I am grateful for any CTA capital investment, but the Red Line Extension project should increase its cost effectiveness by eliminating its plan to build parking garages near the new stations.		2E													

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214	Robin Zelek	e-mail	I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Cru Inner City ministry at - 342 W 11th St, Chicago, IL 60628 - runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning. P.S. Go Chicago for winning the World Series!	1E			4F											
215	Neha Simon	e-mail	My name is Neha Simon and I am a student reporter from Loyola University working on a story about the CTA Red Line Extension from 95th to 130th St. Is there a CTA official I could speak with for 20 minutes on Monday to discuss the details of the project's proposed funding, tentative construction plans and the Red Ahead program? My deadline is Tuesday and a comment from CTA would be extremely valuable to my story.															CTA Communications responded directly to the commenter regarding the media inquiry.
216	Kristeena Jackson-Billiot	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
217	Alex Whittler	e-mail	*mailing list request*													13C		
218	Terry & Cora Hamilton	e-mail	We urge the CTA to choose the West Alternate for the red line extension. The west alternate would allow the Agape Center at 342 W. 11th to preserve its parking space and continue to serve families in the south Chicago community.	1E			4F	5B										
219	Donald Janulis	e-mail	As you consider t he new route I would plead for the west side in consideration of the Agape cmt.	1E			4F	5B										
220	Erik Hopkins	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											

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221	D.J. Dragon Barnes	e-mail	I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Cru Inner City ministry at - 342 W 11th St, Chicago, IL 60628 - runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning. P.S. Go Chicago for winning the World Series!	1E			4F											
222	Robin Zelek	e-mail	Hello CTA and FTA, I am happy to hear about the Red Line Extension, however, we need to save the Cru Inner City's parking lot. We need an option that will preserve Cru's existing parking spaces so it can continue to serve the neighborhood and city with excellence. Cru Inner City ministry is located at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. I request that the parking lot be saved for the following reasons... Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. For these reasons I request that the CTA Red Line Extensions provides the best opportunity for Cru to maintain it's existing parking spaces so that it can continue to serve the city and neighborhood with excellence. Thank you for considering my request.	1E			4F											
223	Gayle Koehler	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
224	Patricia Woodson	handwritten	East Option: This option would affect me most. I would have to sell my house in which I'm afraid I won't get what's worth to me. West Option: This option affect me because we have a train here already it blows all night long 3-4-5 in the morning the more people the more it will have to blow. Now we will have buses, train & Red line. NO SLEEP! Plus the bus turn around will be right behind me and I'm concerned about the fumes. With either option I would just like to sell my house. I know this will benefit a lot of people but as for me not much. Property Displacements: Not giving the value of the home. Noise & Vibration: No sleep from the noise and the vibration put wear and tear on the house. Hazardous Materials: Only the fumes from the buses. Other: Again this benefits a lot of people and it's good for the Southside, but for me it might be a nightmare! No Sleep! No Rest!	1E			4C			7A				11A				

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225	Patrick McGee	handwritten	East Option: Okay, it seems. West Option: Okay, it seems. Comment: The route seems fine so far. Other: Looks good so far. The yard layout should be forthcoming. Parking could be considered.	1E	2E													Staff parking has been and will be considered at the rail yard and maintenance facility.
226	Claire Williams	e-mail	Although I am a little outside of the impact zone and really not that far (107th and Parnell) the following are my concerns: 1. NOISE- as it stands currently the freight trains lay on their horns from 115th- 95th street thru all crossings even though the crossings do not require a horn to be blown. I have expressed my concerns in the past, however nothing has been done. Given that is the current situation ,adding in either at grade or elevated CTA tracks in my opinion would only elevate and add to the noise that we already experience. How will CTA address their own added noise as well as bring the freight companies in the fold to mitigate the noise? 2. I am in support of the UPRR East solution to the RLE project 3. I am interested in knowing more about the programs that CTA and the City will put into place to make sure that local residents and businesses have the opportunity to gain employment and or obtain training in an effort to obtain employment. These programs should begin long before construction/design begins so that the residents/businesses are prepared at the time the project begins.	1E						7A						13D		
227	Mary Washington	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F												
228	Williemae Olugbade	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F												
229	James Clinton	e-mail	I would like the red line extension to run on the west side of the union Pacific railroad.	1E														
230	Marva Hamilton	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F												

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231	Pete Blodgett	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
232	Luke Moy	e-mail	With the red line extension project would it be possible for the line to be able to reach Hyde Park. My sister lives there and it would be easier to be able to get there without having to take a bus from the train during the night where it may not be safe.	1A														The Red Line Extension would provide a direct connection to downtown Chicago but would not provide direct service to Hyde Park. Customers would still need to connect to a bus from the Red Line if they are going to Hyde Park from the project area.
233	Michael J. Leavitt	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
234	Mary Anne Leavitt	e-mail	I'm writing on behalf of Cru Inner City at 342 W 11th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence. Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.	1E			4F											
235	Cecilia Gutierrez	e-mail	*mailing list request*													13C		
236	Srinivasan Iyer	e-mail	*mailing list request*													13C		
237	Jon Samuel	e-mail	I prefer the East Option to the West Option because the West Option cuts through Fernwood Parkway Park when turning south of I-57, whereas the East Option would only take a small portion of Wendell Smith Park. I'd also like to talk about the remaining 6400 Series Nova buses because they're very old & need to be replaced. The 425 7900 Series Novas could only have replaced 425 of the 6400 Series Novas. Also, how long is the testing going to go on with the new Nova buses 8200-8249 at garages other than Forest Glen?	1E										12A			Thank you for your inquiry regarding Nova buses and replacement schedules. These comments are not related to the RLE Project Final EIS. Your request has been forwarded to CTA Operations staff for consideration.
238	Kellee	e-mail	Please consider adjusting this construction project in order to maintain the parking lot of the Agape Community Center, which is located at 342 West 11th Street. Your construction would compromise the Center's parking space. There are many programs based in the Agape Center that are beneficial to the community (children's programs, homeless care, etc) including a church. Thank you for your consideration of this matter.				4F	5B									

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239	Jon Keith Evans	e-mail	A Proposal for a Temporary Red Line Extension Bus Route 29TRX (Temporary Red Line Extension) *(additional details regarding suggested alternative and its potential benefits in full text of e-mail)*															Thank you for your comments and suggestions regarding interim bus improvements. CTA is currently working in close coordination with Pace Suburban Bus on the South Halsted Bus Corridor Enhancement Project. This project proposes several strategies for improving bus speed and reliability on 11 miles of South Halsted Street from 79th Street to the Pace Harvey Transportation Center and includes portions of 79th Street and 95th Street that connect Halsted to the CTA 79th Street station and 95th/Dan Ryan terminal. The project components include short stretches of dedicated bus lanes, queue jumps that prioritize buses at busy intersections, traffic signal optimization and Transit Signal Priority (TSP), and Pace Pulse service and Pulse stations south of 95th Street. These improvements would support the RLE Project by increasing travel choices and providing greater connectivity and reliability for transit riders on the South Side of Chicago. This study is in addition to a number of recent bus service improvements, including the installation of the Essential Pop-Up Bus Lanes on 79th Street and Chicago Avenue; the installation of Bus Priority Zones on 79th Street, Chicago Avenue, and Western Avenue; the reinstatement of Ashland and Western Express routes; the expansion of service on several South Side routes; and the permanent adoption of Route #31 and of the extension of Route #157.
240	Valeria Davis	e-mail	Does this mean the community will access to job opportunities. Thank you in advance for your reply.			3B										13D		
241	Sheryl Swope-Dupree	e-mail	I think it is great that those who live in the far side of the city are being considered in relationship to transportation. This will be a beneficial improvement and convenience to all those who live on the far south side of the city. It is nice to know that the city is trying to do something to help those in need with transportation. While on the subject of transportation, it would be great for those teenagers that are in high school, whose parent are unemployed due to the economic conditions of the United States, be considered for free transportation. Transportation is quite expensive for those who don't have any means but are trying to get their education. Thank you for listening and considering my request.	1B														Thank you for your support. High school students are eligible for reduced student fares, which are valid on school days between 5:30 am and 8:30 pm.
242	Sharon D. Lawson	e-mail	Have the red line extension on the west option.	1E														
243	Paula McLennon	e-mail	East.	1E														
244	Keith Harley, PCR	e-mail	*PCR letter's comments each entered separately. Entire text of letter available in full comments.* Please be advised that I represent People for Community Recovery ("PCR"), a not-for-profit organization based in the Chicago Housing Authority's Altgeld Gardens community. PCR is dedicated to enhancing the quality of the environment for the residents of Chicago's southeast side. PCR provides public education on environmental, health and housing issues, and organizes local residents to advocate for environmental quality, public health and community well-being .PCR's founder, Hazel M. Johnson, is regarded as the "Mother of the Environmental Justice Movement". Her many contributions to Altgeld Gardens, Chicago's southeast side and the national environmental justice movement are commemorated by Hazel Johnson EJ Way, the name given to 130th Street, the southern terminus of the proposed Red Line Extension. Hazel's daughter, Cheryl Johnson, is a lifelong resident of Altgeld Gardens and the current Director of People for Community Recovery. Cheryl also serves on U.S. EPA's National Environmental Justice Advisory Council. By way of summary, PCR enthusiastically endorses the transportation equity that will be achieved by the extension of the Red Line from 95th Street to 130th Street. The following public comments address alternatives, potential environmental consequences and mitigation measures that will ensure access to the CTA rail system further enhances the quality of life for Chicago's far south side neighborhoods and their thousands of residents. PCR formally requests that the EIS fully analyze these alternatives, consequences and mitigation measures so that this analysis is available to inform ultimate decisions about the design, construction and operation of the Red Line Extension.															Comments from People for Community Recovery (PCR) were received through e-mail from Keith Harley. CTA responded to the e-mail acknowledging receipt of the comments on the Draft EIS. Responses to the comments are provided as a separate response located in Attachment B under Response to Comment #244, Keith Harley, on behalf of PCR.
244g	Keith Harley, PCR	e-mail	*PCR comments from 11/29/16 letter entered into multiple cells.* PCR recommends a complete analysis of the green building and sustainability techniques that are available for every aspect of this major new infrastructure project…a storage system to fully capitalize on clean, regenerative braking power, maximizing the use of clean, renewable solar power and implementing innovative storm water management infrastructure….only three of several examples of superior environmental outcomes that can be achieved through green building and sustainability design elements. PCR believes the final EIS should fully analyze the full range of these superior environmental and energy opportunities to inform the ultimate decisions about the design, construction and operation of the Red Line Extension. *(Additional details regarding this recommendation and its potential benefits are in the full text of letter.)*											IND				

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244h	Keith Harley, PCR	e-mail	*PCR comments from 11/29/16 letter entered into multiple cells.* PCR commends the agencies that are conducting this process for the robust opportunities for public participation they have provided. PCR urges the agencies that will undertake this project to continue to engage the residents of the project area at regular intervals as the project progresses. That is, the public engagement in the NEPA-based process should be the beginning, not the conclusion, of the opportunities for local residents to participate in the design, construction and operation of the red Line Extension. PCR is committed to continuing to engage with the full range of agencies that will be participating in this effort. Thank you for your consideration of these comments. Please contact me if you have any questions or require additional information regarding these comments. Please also contact me if you cannot easily access the documents and resources that are cited as references in these comments. *(Additional details regarding this recommendation and its potential benefits are in the full text of letter.)*													13C		
245	Lou Turner, for ROC (Redline Oversight Committee)	e-mail	*ROC reponse letter is available after this table.*															Comments from the Redline Oversight Committee (ROC) were received through e-mail from Lou Turner. CTA responded to the e-mail acknowledging receipt of the comments on the Draft EIS. Responses to the comments are provided as a separate response located in Attachment B under Response to Comment #245, Lou Turner, on behalf of ROC.
246	Lou Tarver	e-mail	I prefer the east option. 1. Noise pollution would affect fewer homeowners. 2. Fewer homeowners would suffer property value loss. 3. Most businesses close at night, so owners would not suffer from sleep deprivation. 4. Businesses near train stations could profit from the increased pedestrian traffic.	1E		3B, 3C	4A			7A								
247	Gayle Dicker	e-mail	I vote on the Red Line extension going west. Not sure if this is what I'm supposed to be voting on. If this isn't the right issue to vote on, I vote for the extension project to take place.	1E														
248	Yuri O. Popov, Ph.D.	e-mail	I hold a doctorate degree from the University of Chicago. I also happen to be a life long transit rider, who lived in four different states (including my six years in Chicago) and rode trains and buses in dozens of cities around the country. While there is no doubt the Red line extension is needed and justified, I would like to draw your attention to a single major deficiency of the proposed preferred alternative. The biggest issue with the proposed preferred alternative is that it lacks an integrated transfer between the CTA and the Metra Electric line at the Kensington/115th St. station. This station is served by more than 100 Metra trains, both expresses and locals, each and every weekday, and it would provide an excellent transfer point between the two rail systems. New origin destination pairs would be created by a single transfer station. Many trips between southern suburbs and the city would be made possible by co-locating the two stations at Kensington/115th St. For example, a rail trip from Homewood or University Park to the Sox Stadium (U.S. Cellular Field) would become possible via the Metra Electric line and the CTA Red line with only a single transfer at Kensington/115th St. A convenient transfer between the CTA and Metra at this location would significantly increase ridership on both lines and make the proposed extension more cost efficient on the per-rider basis. The preferred alternative proposed in the Draft EIS places a Red line station about half a mile away from the Metra station (at Michigan/115th), which is just far enough to be meaningless for practical use as an interchange point. In essence, the proposed preferred alternative continues a barbarian tradition of building two separate balkanized rail systems in the Chicago area, one for the city and the other for suburbs, with very few transfer opportunities between the two. One of the Red line stations must be located within an easy walking distance of the existing Metra station to provide a convenient transfer. It seems almost criminal to invest in such a major rail extension and to ignore such an excellent transfer opportunity that would boost ridership on both rail systems so strongly.		2H													
249	Devontay Talbert	e-mail	East Opinion	1E														
250	Duana A. Love, P.E.	e-mail	*mailing list request*													13C		

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251	Verrita Washington	e-mail	Enhancing service to underserved, transit dependent residents as addressed by this project is an important community need. As a resident living near the proposed development area, the alternatives addressed in the Draft Environmental Impact Statement released for comment are very concerning. This input on the Red Line Extension (RLE) Project is, respectfully, submitted in opposition to either the East or West option of the Union Pacific Railway Alternative for the following reasons: 1. Noise and Vibration. For several years, area residents have petitioned for a "quiet zone" for the UPRR tracks based on the disruption caused by existing rail activity. Adding a commuter rail line with 24 hour service exacerbates the existing problem. Furthermore, the addition of a station at 111th and Eggleston will add audible braking with every train entering the station. 2. Visual Impacts/Property Value. The visual obstruction created by the elevated tracks will de value the remaining residential properties in view and otherwise compromise homeowners' investment. Declining property values, problems recovering equity, and the potential inability to obtain a fair price upon re sale are particularly troubling aspects. 3. Land Use and Economic Development. Both the East and West options are surrounded by mostly non commercial, residential areas. Ancillary economic development afforded by the proposed plans will convert residential space into commercial space drawing increased pedestrian and vehicular traffic into remaining residential areas. Proposed new stations such as the one at 111th and Eggleston will require permit parking and other parking enforcement will be necessary on adjacent, residential streets. For the reasons stated above, I submit these comments in opposition to the proposed Draft Environmental Impact Statement.	1E	2C, 2E	3B, 3C			6A	7A								
252	bsbbrianlvr@[e-mail hidden for privacy]	e-mail	The red line is already going extremely far South and it should not be extended further South. There are murders and stabbings on the red and blue line sometimes, they are dangerous at night. Currently the red line is seen as safer then the blue line but stabbings have occurred on the red line as well. Chicago residents, citizens, Citizens, and transit users wish to be safe, as well as to get to their destination reasonably. The red line system already also has a long time of transit, and this will add additional time. The very worst of this effect will be even worse crowding so that people literally cannot board for several hours unless they wish to be touched and pushed by strangers. How can there possibly be any worse problem with this? This extension is trying to make an even worse problem. In addition, it appears that this extension will destroy wildlife habitats and biodiversity. Residents and citizens of the area beyond 95th Street already have access to transit in the form of several buses. If a train line absolutely must be put to further South, it should be done in the form of a new color which is not considered as part of the red line so that people on the train at night are not in danger unless they already live in a dangerous area anyway... the further South is more increased danger, and sitting at the end of the train if you have missed your stop, or waiting for your train to arrive if you are boarding, will be more dangerous. This will also greatly increase the level of disgustingness on the train - the majority of the red line and stations are much cleaner then other stations except for the ones in Chicago and Evanston, but the ones in the South areas are far less clean, sometimes on par with other line's stations, and all of the ones in the South have no heat, some even have not many benches. More stations will mean more stations which are dirty, making the trains themselves dirty, and lack of appropriate facilities. It will also cost tons of money to do all of this. This is a very bad idea and should not be done. It will be a great detriment to people who live or use transit in Chicago, and if other people want it to be considered an absolutely necessity then another color of train line can be built instead, keeping the red line free from the additional dirtiness factor and keeping it's travel time no longer then it currently is. The most reasonable thing to do would be to have bus lines go through these areas if there are specific places where the buses are too slow, because this option will not destroy the wildlife or marshy areas.	1B, 1C							8A		10A					As described in Sections 6.4 and 6.5 of the Final EIS, the analysis shows that the RLE Project has the potential to have adverse impacts on vegetation and wildlife habitat during construction because of tree removal; however, with the implementation of the mitigation measures outlined in Section 6.4, potential impacts would not be adverse. As described in Sections 6.4 and 6.5 of the Final EIS, the analysis shows that the RLE Project has the potential to have adverse impacts on vegetation and wildlife habitat during construction because of tree removal; however, with the implementation of the mitigation measures outlined in Section 6.4, potential impacts would not be adverse.
253	Nicky Moore	e-mail	Hello my name is N. Moore and I do believe that the Extension will be an asset to our community; however if there will be a need to move current residents from their properties there should be Equitable payments to these residents. By this I am referring to the current Value of their homes, or business. Many residents and Business owners/operators properties may not be totally owned by them; they may still owe money to their lending institutions! Therefore each owner of real estate, rather it be their home or business will need to be fully compensated for the uprooting of their property. Please remember and take into consideration the current cost of Real Estate in Chicago, purchasing a home to replace the mortgage residents are paying currently may leave many without proper housing! Therefore every displace family will need to be given increase above their property's current value in order to relocate.				4C, 4D											

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254	Omar Alpha Kamara	letter	(submitted along with a handwritten card) I am writing in response to a letter from CTA's Chief Planning Officer regarding the Red Line Extension (RLE) project indicating that our business and community project location at 11528 S Lafayette Avenue may be sought for acquisition, should the west option of RLE be preferred. African Diaspora Foundation, Inc. (ADFI) is a Not for Profit corporation organized to promote self-reliance in our communities. In five plus year of existence, we have been managing a community garden, a honey bee apiary, and organize recreational activities, especially for children in the community. We have read through some RLE literature, and recently attended a public hearing on the draft Environmental Impact Statement (EIS). Although the project will agreeably have positive impact on the communities, for which we shall be most grateful, as a corporation we have concerns that should we be displaced from our current location, the business and community activities of ADFI may be negatively impacted if adequate assistance is not accorded to enhance smooth relocation to a nearby location. Also, please note that we currently lease two neighboring vacant lots from Union Pacific Railroad Company that have been very instrumental in enabling our activities. One of the plot is the site of our community garden, and the other provides space for the recreational activities. A move will effectively take away this opportunity, thereby again negatively impacting our activities. With full support for the proposed RLE project, this letter is simply meant to give advance notice of help that we would most definitely need should the decision be made that our current location will be acquired for the project. It is our hope that the provisions of the Uniform Relocation Assistance and Real Property Policies Act of 1970, and the good will of CTA will help us successfully navigate through those challenges, should ADFI be displaced from its current location. We welcome the opportunity for further discussion about this matter, and I could be reached on cell phone at [number hidden for privacy], and by email at [e-mail hidden for privacy]. Further comments are given on the attached completed comment card.				4A	5B											
255	Elihu Blanks	e-mail	As a Chicago resident I'd like to vote for the red line extension to run along the west side of the up train line.	1E														
256	Garphelia Coleman	e-mail	I say go for the west option	1E														
257	Rev. Q.Z & Nancy Garner	handwritten	East Option: We are in compliance with the red line to be on the east side of the UPRR Noise & Vibration: My concerns with both trains also customer parking at the 103rd Station.	1E	2E					7A								
258	Christina Horde	e-mail	The noise level at 95th Street and the Dan Ryan is at high levels 24 hours a day. What can the city due about this situation? The high noise level will affect the neighborhoods' quality of life.							7A								
259	Dylan Hayward, Midwest High Speed Rail Association	e-mail	We support the goal of providing rapid transit service to south side communities in an effort to improve access to job opportunities and spur economic development in these areas. However, the red line draft EIS does not take into consideration the very viable option of converting the Metra Electric into a rapid transit service in order to serve this need. The Metra Electric line could be modernized in order to run trains every 10 – 15 minutes and Ventra could be integrated in order to provide transfer ability between Metra, Pace and CTA. This would serve the same communities affected by the proposed red line extension and would provide the much needed access to the job rich economic center of downtown Chicago. If the Metra Electric line was turned into a rapid transit service, many of the bus lines serving the same market would no longer be needed. These buses could be redeployed by CTA and Pace to provide better service to the surrounding communities making it easier to access Metra Electric stations and downtown Chicago. This alternative option to provide rapid transit service to these underserved communities needs to be studied. We believe that taking advantage of Metra Electric's existing infrastructure is a cost effective option compared to building a brand new red line extension.	1D		3B												

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260	Deloris Lucas	e-mail	Thank you for working on the Red Line extension Project. I am concerned about the proposed displaced Homeowners in the Roseland, Washington Heights, West Pullman...and recently read about displaced homes in Riverdale. Is this correct ? Will there be some displaced homeowners in Riverdale area?? Please explain. I believe the displaced Homeowners should get more than Fair Market value + relocation expenses. These area are way below the poverty level and should get more as the Red Line gets extended. I'm also concerned about the end of the line area @ 130th and Ellis. Most neighborhoods (Golden Gate, Riverside Village, Pangea Lakes and Concordia) are now far away from the proposed end of the line location 130th & Ellis. So far that it would take them/us at least 20 minutes to get to the end of the line. THERE NEEDS TO BE A SHUTTLE BUS/EXPRESS BUS FOR THE RESIDENTS THAT LIVE NEAR THE PROPOSED END OF THE LINE. Currently there is no bus service that will get area residents to the end of the line location, under 20 minutes. If the expansion is to save time, there is no immediate time savings for local area residents to get to the end of the line.....unless a bus will get us there faster and with no additional cost. It would also be foolish to pay a fare to ride down or up the street to get to the end of the line. OR Perhaps a special transfer can be issued so that additional costs are not transferred to the rider. Please call, I would love to explain more about ideas to make the transition to better transit....better.		2A		4A, 4C, 4D											Thank you for your support. Commercial, industrial, City-owned, and railroad properties in Riverdale would be displaced; no residential properties would be displaced in Riverdale.
261	Michael LaFargue	e-mail	I thought the EIS Draft is well written. I takes into consideration community concerns as jobs, parks, wet lands, home displacement, visual impact, sound impact, safety security, cultural issues. The CTA team worked hard and well communicating the RLE Draft to many local organizations. One Suggestion/Question: To have less impact on home displacement and the Wendell Smith Park with the baseball diamond, is it possible the train operate on the West Option Side until 103rd Street, then with UPRR air rights, cross over to the East Option side? Criticisms Heard: The public hearing held at the church 211 E. 115th appeared to overwhelm and confuse some people with so much going on in one room. Thank you for your work.													13A		Thank you for your support.
262	Gwendolyn Rice	e-mail	*(submitted a copy of letter that was also submitted by Lou Turner, for ROC [Redline Oversight Committee])*															This comment appears to be a copy of comments received by the ROC - Comment ID #245. See ROC responses provided.
263	Patrice Thomas	e-mail	*mailing list request*													13C		
264	Charles Brown	e-mail	There never seems to be enough information given to persons in the community that may be affected by the expansion for example what will happen if our homes are damaged because of vibrations , what will you do with the areas that once had homes w they become vacant lots filled with gravel ? Once again there never seems to be enough information.			3A	4A			7A								
265	Michael T. Walsh	e-mail	*mailing list request*													13C		
266	Lisa Burback	e-mail	Big YAY to this!															Thank you for your support.
267	Eric Bowden	e-mail	I prefer the Western option.	1E														
268	tkabala@[e-mail hidden for privacy]	e-mail	East line extension	1E														
269	Emma DiLeonardi	e-mail	Hello, I am a journalism student writing about the red line extension and I have a few questions on the project. 1. Are there any people from the areas that are to be affected openly opposed to the project? 2. Do you think their complaints have any warrant, and will they affect the schedule of the project? 3. Will this extension affect the south side financially, both positively and negatively?															CTA Communications responded directly to the commenter regarding the media inquiry.

ID	Name	Comment Type	Comment	Project Info./P&N/ Alternatives	Transportation	Land Use/Economic Development	Displacements	Neighborhood and Community	Visual	Noise/Vibration	Safety & Security	Hazardous Materials	Wetlands	Air/Water/Floodplains/ Veg/Bio/Geo/Energy	Parks	Outreach Process	Timeline/Costs and Funding	Individual Response
270	Doris White	handwritten	East Option: Will this option affect the Bishop Ford Expressway for those who drive? West Option: Why is this option going to cause residents to have to move that live between 99th St and 119th St on this option? Comments: What if that homeowner does not want to relocate, are they going to be made to move or other alternatives to them having to move? I pray that all of this falls into place for those who use public transportation and that whoever makes decisions in regards to this project will be wise in the decisions of this project. Transportation: When buses have to be rerouted due to construction why are you not sure how long it will take. Land Use: Will this be a good area, where you are considering? Displacements: If a person is not able to be displaced, what are your options for them? Neighborhoods & Communities: Do you think they would agree, despite the displacing of homes? Visual: Will it be handicap accessible e.g. elevators and escalators in good working condition. Noise: I am sure it will not be loud, as if it was a freight train coming through. Historic: Will they have to be moved and why touch historical sites? Safety & Security: Will there be Police Officers at these new stops along with canine dogs? Hazardous Materials: Will this Redline extension project be around factories with hazardous materials? Wetlands: What do you mean by wetlands? Parks: Will it be closer to parks where we can get off and take our children to the parks? Construction Impacts: What effect will it have on those who drive through the area where you want to build? Project Funding: How will it be funded and by who? Other: Why have you waited all this time to do this particular line now, as other lines have been extended or new lines brought in?		2A, 2B, 2C		4A, 4D	5A		7A	8A	9A	10A		12B		14A, 14B	Section 4.7 of the Final EIS describes impacts of the project on to historic resources, including the Altgeld Gardens neighborhood and the Altgeld Gardens–Philip Murray Homes National Register Historic District. The Preferred Alignment would cause displacements and visual, noise, and other environmental effects within the Area of Potential Effect, but none of these effects would alter the characteristics that qualify any of the identified historic resources for inclusion on the National Register of Historic Places. No mitigation measures would be required. During the construction of the RLE Project within the interstate highway right-of-way, construction activities would require temporary lane closures on I-94 and I-57. As an example, when a bridge pier is being constructed adjacent to the Interstate shoulder, the adjacent lane would temporarily be closed for the construction activities including, but not limited to, material delivery. Increased congestion due to temporary lane closures may increase travel times on I-94 and I-57. When overhead beams are placed, temporary shutdown for all traffic would occur. These temporary shutdowns would likely occur only at nighttime and during low-traffic volume intervals. Note that these temporary shutdowns are typically very short durations, such as 15 minutes, while a beam is placed and secured overhead. All lane closures and temporary shutdowns would be subject to the approval of Federal Highway Administration and Illinois Department of Transportation.
271	Viva White	e-mail	*mailing list request*													13C		
272	Peter Parlej	e-mail	I am writing with a brief question regarding the Red Line extension project. I am trying to contact the project manager with CTA and also to find out if CTA is currently working with an engineer for the project, or if not, when CTA plans to advertise for engineering services.													13C		Please visit CTA's website at transitchicago.com/procurement/ to learn about the procurement process and future CTA contract opportunities.
273	Emma Williams	e-mail	I, personally, am very excited about the extension. I live and work on the north side and have friends and family in Beverly. Having this extension means fewer transfers to Metra when I go to visit them. I have wanted an extension such as this for a long time. Thank you so much. This is great!		2A													Thank you for your support.

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Preferred Alignment Announcement																		
285	Michael Brown	handwritten	1. Why isn't there a Park'n'Ride at 95th Street or 87th Street? People that live near the Dan Ryan are not going to drive south to a parking garage when they work downtown. 2. Please consider utilizing the old Kennedy King College land at 67th & Vincennes as a Park'n'Ride. It could help reduce traffic on the Dan Ryan Expressway. The Red Line could really use a parking lot. I would ride the Red Line more if I could park closer instead of taking 2 buses to get to the Red Line. 3. Since CTA will be using FTA funds is CTA awarding contracts to allow the Architect of Record and the Engineer of Record to be a DBE? CTA is building this project on a neighborhood that is primarily African American. Please consider making the Prime Contractor and African American design firm and most of the subcontractors DBE firms.		2E	3A										13D		The Red Line Extension Project does not include adding parking to existing stations. Multimodal connections at propsed station would include bus, bike, pedestrian, and park & ride facilities.
286	Alexis Billingslea	handwritten	1. Parking Garage at 116th Street - Will the parking garage design consider the amount of time needed to enter the garage during peak rush hour? Will there be enough entrances in order to enter the garage quickly rather than backing up the queue down the street due to limited gates? 2. How will people be able to pay for parking (Traditional ticket, Ventra card, SpotHero, ParkWhiz)? How quickly can people enter and exit the garage? 3. Will the bridge over Metra Electric be inspected? Metra Electric may have limitations that slow down the construction due to the air rights and times allowed to build or limited times available to perform bridge inspections.		2C													CTA Planning will work with the CTA Business Development department to determine how patrons would pay for parking at the park & ride facilities during final design. CTA has a structural review process that will be adhered to for the elevated structure and bridges over the existing railroad and roadways. CTA will continue to coordinate with Metra regarding work near, adjacent to, or on their property.
287	Marcelino Rola	handwritten	I desire to sell my property to CTA. I understand that CTA does not need my property, but my entire block wishes to sell.				4A											
288	Gregory Walker Jr.	handwritten	No questions, I'm actually happy with the alignment. The fact that you chose both is really great! Something to consider: Can the 30 South Chicago, 355 Wentworth (Pace), 358 Torrence, and 364 159th Street (Pace) buses, in addition to all others, be re-routed to the 130th Street station to add better reliability to Hegewisch, nearby manufacturing campus', and nearby communities?		2A													
289	Angela Conner	handwritten	1. Where is the funding coming from? 2. Will there be job opportunities for African Americans? Specifically black people, not "minorities" or "people of color". 3. The current administration announced their infrastructure plan/budget. In their plan expectation for cities and states to pay more, how will that affect the funding for the Red Line Extension?													13D	14B	
290	Ethel LeFlore	handwritten	I would like to sell my property.				4A											
291	Jaime Gamero	handwritten	I understand that my property is not impacted but wish to sell to CTA. Our entire block wishes to sell.				4A											
292	Jake Fansler	handwritten	Thanks for this great event. As an urban planning grad student at UIC I worked on a 10 year plan for the Riverdale area/130th Street station of the RLE. Throughout that process one big takeaway was the importance of strong local economic development policy/programming to make sure that residents will be in the best position to be able to leverage the RLE. Having strong local retail and better local employment opportunities in place before the RLE comes will go a long way in helping the communities along the line use the extension as a real asset and economic catalyst. What a great opportunity for Chicago's South Side. Thanks!			3B												Thank you for your support.
293	Maureen & Scott Perazzolo	handwritten	1. The distance from the train to our house. 2. The distance and dust from construction since I have asthma. 3. Cracking of our houses foundation. My house is over 130 years old. 4. Noise of the trains that come by mostly at night. 5. The shaking of the house during construction. Who will be responsible for the damages to house and cars? 6. We will probably have not place to park our vehicles during construction. Our vehicles are on the street where heavy equipment will be passing.		2F					7B		11A						
294	Willie L. Johnson	handwritten	I would like to be contacted as soon as possible for the acquisition of the property.				4A											
295	Robert Goss	handwritten	I own properties at [addresses hidden for privacy]. I am willing to sell if you need additional space.				4A											
296	Yvonne Farlow	handwritten	1. Will the service run 24/7 or will it have a timeline? 2. Will my window be replaced for the noise? 3. I know it is what it is.							7A							14A	The RLE Project would operate 24 hours a day, each day of the year. Service frequency is anticipated to be the same as with the current service at the 95th/Dan Ryan terminal—approximately 3-minute to 6-minute headways during morning and afternoon peak hours. Headways during off-peak periods during the day would be approximately 6-10 minutes. Headways at night (between 1 AM and 4 AM) would be approximately 15 minutes. Service frequency would be adjusted to accommodate demand once the RLE service is implemented.
297	Beth Eckerty	handwritten	I'm in favor of the preferred alignment and I'm glad it was selected over the bus rapid transit option. There are a large number of people living southwest of the proposed 130th station in Altgeld Gardens and also east of the station in Hegewisch. The station will not be pedestrian friendly for either group. I would like to see transit connections from the station to the existing neighborhoods to account for the "last mile" between the station and home. Potentially an extension of and east-west bus on 130th to touch Hegewisch, or, an extension or re-route of the #30 to include the new station. Anything other than needing a car to access the transit! Thank you.	1C	2A						8A							

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298	Miles Churchill	handwritten	1. Why is there no rendering of the 130th Street station? 2. Will a local workforce be required for construction? Will there be a training program for local workers? 3. Is the CTA going to engage the community during the design of the stations? Will there be public art in the stations? 4. How will the bus lines be operated after the RLE is finished? Will 115, 103, 106, 111, and 119 still all go to 95th Street?		2A											13C, 13D		
299	Tessa Ferraro	handwritten	1. Are there any plans for TIF legislations to fund the Red Line? 2. Will there be any funding set aside for workforce development with a focus on the Roseland area? 3. Any plans for TOD at any of the stops? 4. Will there be a continuation with community engagement during the process of writing the final EIS?													13C	14A, 14B	
300	Nick Keeling	handwritten	1. What will CTA do to create the best opportunities to improve access to Altgeld Gardens. Will the CTA work with members of Altgeld Gardens to update their comprehensive plan to focus more around the transit oriented development possibilities. 2. How will the CTA improve brownfield lands at 130th Street? 3. How will CTA work with the South shoreline to make a new transit hub at 130th Street? 4. Will the CTA increase bus service at 130th once the new station is completed? 5. Will the CTA prioritize pedestrian ADA accessibility over the proposed Park'n'Ride at 130th Street? It appears the Park'n'Ride structure is getting higher priority over the actual residents.		2A, 2B						8A	9A						
301	Jade Jones	handwritten	I think that what you guys are trying to do is good and all, I just have one concern/question which is what are you going to do with the people you are moving? Also, would it affect the community socially? Also, what are they getting in return for it?				4A	5A										
302	Doris H. White	handwritten	1. When will this project be finished? 2. When the extension is completed will there be more buses as far as you extend the rail service? 3. This morning there was a freight train that stopped right where the buses had to be re-routed. Will this happen with this new extension? Will most of the buses run all night once the project is completed? 4. Who provided the funding for the extension project? 5. I pray that the services that you give to the northwest side (i.e. extending the blue line to O'Hare) that those live on the southside will not have to wait so many years just to get an extension. 6. When will the buses start running in the morning and will there be an easy access for the riders to get to the buses?		2A						8A					13D	14A, 14B	
303	Cathy Patterson		1. My concerns are solely based on how would this effect my living situations. Sure, the added business helps create jobs and beautifies the area for a short while. But this type of business can lead to me and my family not being able to have peace of mind with outdoor activities like sitting on the porch. 2. Losing the privileges of being able to park outside in the front of my home due to the fact that people will park their cars while at work. 3. People loitering causing my lawn many problems. 4. Homeless people hanging out more frequently. 5. Gang members finding common ground to fight. 6. My neighborhood "103rd Place" off Princeton is full of senior citizens. We have lived here over 30 years and this change will not improve the area. 7. Will there be parking permits issued?	1B	2F		4E	5A			8A							
304	Jacob E. Peters	handwritten	Too much parking at the stations that are not highway adjacent. They will increase the cost of property acquisition and construction without providing added benefit for transit. A Park'n'Ride lot makes sense at 130th, but not at any other stations. Build housing for people, not cars.			3C												
305	Kelly E. Johnson	handwritten	1. I would recommend that the artwork in the stations reflect their prospective communities. I think that the artwork should be done fully or partially by residents in that community. Even if a professional, well-known artist is used, residents should be included in the process of creating the artwork. This would be a great opportunity for aspiring artists in our communities. Contests could be created to help select artists. If the artwork reflects and includes the community, more pride will be taken to keep the stations in good condition. Community participation is key! 2. I also recommend that empowerment zones be created in order to improve present business in the community and create new businesses. There is a great need for light industry in this community.					5B										
306	Jonathan Samuel	handwritten	Extending the Red Line from 95th to 130th would provide direct access to the neighborhoods it would serve and would eliminate the need for buses that run along 103rd and 11th Streets to serve 95th. 103rd could run directly east to the 103rd/Stony Island garage terminal. 11th could run directly east to the east terminal currently serving the 111A Pullman Shuttle.		2A													
307	Tony Adams & Anthony Jonhson	handwritten	Ex centerline, pr centerline, ex track central, pr track central, pr track structure, pr roadway right of way, pr roadway/hardscape, ex station platform, ex business outline, pr parking, and pr CTA substation															
308	Michael LaFargue	handwritten	West Chesterfield community does not want CTA related parking in its neighborhood. Neighborhood boundaries: 91st (State Street) to 95th (King Drive)		2E	3A		5A										

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309	Dave May	e-mail	Proposal: The south section should be deleted and replaced by frequent express bus service to the 95th Street station. The south section of the proposed Red Line Extension, form the 116th Street station to the 130th Street station will serve a discrete neighborhood. The cost to build this double-tracked L line, the 130th Street station, and associated traction power facilities will be very expensive. The number of neighborhood residents using the new 130th Street station is likely to be very small; a tiny fraction of the line section's capacity. Therefore, the construction and operating costs per rider using the 130th Street station will be extremely high. The location of the 130th Street station - beyond a corner of the neighborhood served - will be inconvenient for most of the neighborhood residents. Consider how long and inconvenient the walk will be from most of the neighborhood to the station. A frequent bus service that circulates through the neighborhood before expressing on the Bishop Ford (shoulder?) to 95th Street L station would be much more convenient to access and offer similar trip times compared to walking to the L station and then riding the train. If rider demand warranted, direct rail transit service from the neighborhood to Hyde Park and the Loop could be inexpensively provided by building a modest station on the South Shore line adjacent to the east side of the neighborhood. On a weekday morning between 5:00 am and 8:30 am, eight inbound South Shore trains could stop at this new station. (The South Shore currently serves Hegewisch station in Illinois). Ride time would be about 15 minutes to Hyde Park (which the Red Line does not serve) and 30 minutes to downtown Chicago at Van Buren street - less than the extended Red Line. Funding prospects for the Red Line Extension are tenuous at best. Optimistic, but realistic, scenarios suggests the new extension will not begin service for another 5 to 10 years. A Red Line Extension without the south segment to 130th Street would be substantially less expensive - and therefore more likely to achieve federal funding approval. Depending on the design, an express bus service to 95th Street could be running in 2 to 3 years. The capital cost of an express bus service would be a tiny fraction of the cost of the 116th Street to 130th street L line. The operating and maintenance costs of this express bus service would be much less than the operating and maintenance costs of the south segment of the Red Line Extension.	1B, 1C	2A													CTA responded to the comment via e-mail.
310	Gloria	handwritten	Comment provided in Spanish. Translation: "My address is [address hidden for privacy]. If my house is affected I would like to know and have more information about it."	1A														
311	Luis Quiroga	handwritten	Why not keep it on the west side? It's an open shot from 99th Street to Michigan Avenue. West side has open railroad property while you have many citizens on the east side.	1E														
312	Cynthia Howard & Phillip Dixon	handwritten	We would like to receive a copy of the relocation act. We would like to be part of the first group of negotiations. We have a special needs resident that needs to remain in the city for their services. We need to relocate to a home without a mortgage as we currently own our home without a mortgage. Also, our home is a 3 bedroom and we need to relocate to another 3 bedroom.				4D											
313	Helen Rockingham	handwritten	What is CTA's plan to stabilize the homes near/next to the construction site to assist with the construction upset that will cause building de-stabilization. Contact numbers for submitting photos when it's documented that there's a problem with the property.							7B								
314	Patricia A. Parsons	handwritten	Much needed mode of transportation for students going to school or those needing transportation to work. It will help some of the unemployment problem. My concern is the path of the Red Line. Find areas that will displace the least amount of people from their homes. There are areas where abandoned factories can be torn down or vacant land can be used for the extension.				4A									13D		
315	Gerardo Zaragoza	handwritten	My question is what material are you going to use to support the train tracks? Are they going to be on the ground (at-grade) like the Union Pacific rails? Or are they going to be suspended on cement pillars? If suspended, is it going to be open or closed (when looking up)? How are you going to compensate the rest of the community because I think this project is going to cause a lot of inconveniences during construction. It's going to cause roads to close because of heavy machinery and material. I have another two-story house in [address hidden for privacy] that is rented out. I'm worried the tenants will leave due to the construction inconveniences and for the entire time the construction will last. For now, those are all my concerns, thank you.	1A					6A	7B								
316	Rachael Waters	e-mail	I am inquiring for information on a selected alternative for the Red Line Extension. Has one been selected? Can you provide any updates to the environmental study phase of this project?	1E														CTA responded to the comment via e-mail.
317	Jen Hinton	e-mail	Can you kindly tell me the exact streets these proposed rail lines will impact? Obviously we're homeowners and worried about displacement. We've been here since 1969, with many senior citizen home owners living around us. I'm at 106th and Forest (two blocks west of Kind Drive).	1A			4E											CTA responded to the comment via e-mail.
318	Mike Meagher	e-mail	Please send any updates.	1A														CTA responded to the comment via e-mail.
319	Eric Langelund	e-mail	I would like to receive updates regarding the Red Line Extension.	1A														CTA responded to the comment via e-mail.
320	Gregory Evans	e-mail	Who is the designer or engineer of the RLE?	1A														CTA responded to the comment via e-mail.
321	Tom Shepherd	e-mail	Please add me to the email update list.	1A														CTA responded to the comment via e-mail.
322	Rita Ceccarelli	e-mail	I kindly ask you to add me to the project contact list for future updates.	1A														CTA responded to the comment via e-mail.
323	Michael LaFargue	e-mail	Please add me to the project contact list.	1A														CTA responded to the comment via e-mail.
324	Michael LaFargue	e-mail	How does the Red Line Extension preferred route decision affect Wendel Smith Play Lot Park? How many buildings does the Red Line Extension preferred route decision affect? I think it is less than originally proposed.			3A												CTA responded to the comment via e-mail.

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325	Lois & Merle Jacob	e-mail	The extension will be nice for all the folks who live far south and have to travel by bus to the 95th Street station. I, on the other hand, will not be able to fall asleep on the ride south, as I might miss my stop at 95th! Please ask CTA to provide porta potties or other restroom facilities at CTA stations. It's a long ride from 95th to the north side. CTA officials obviously do not ride the CTA trains. If they did, they would see and smell how desperate people relieve themselves in the little vestibules at the ends of CTA cars and in the elevators to and from platforms. It's very disgusting. Please run the #49 bus to the whole length of Western Avenue in the city - terminating at 119th Street and Western before changing to the 349 Pace bus. Allow drivers to change posts at 79th if you must, but do not require riders to get off and transfer buses at 79th. It's insane that from Beverly (99th and Western) one must take three buses and two transfers just to get to Midway airport at 55th and Cicero. There should be only one transfer required: when one changes direction from north/south to east/west. The Ashland bus changes drivers somewhere around 70th Street. Passengers are allowed to remain onboard and not forced off to brave the weather and local thugs.		2A						8A							CTA responded to the comment via e-mail.
326	Coral Cavanagh	e-mail	Please change my mailing address from Coral Cavanagh, [address hidden for privacy] to Coral Cavanagh, [address hidden for privacy].	1A														CTA responded to the comment via e-mail.

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Supplemental Environmental Assessment																		
327	Lyteshia Pope	court reporter	With parking accommodations, what security components will be implemented, if any? And what I mean by that is that I notice they are having a parking lot for those utilizing or coming to the Red Line extension in that area. I know that Chicago Police patrol is in that area. I know that they might have private -- well, I am not enlightened if they have private security with CHA. And then I know, additionally, Chicago has Mass Transit which is a form of their Chicago Police Department or an entity of it. But I'm wondering what other components will be geared towards that parking area, or if any will be.								8A							
328	Andrea Turner	court reporter	I wanted to find out if the extension would affect the Bishop Ford in any way. Will the extension somehow go into -- the construction interfere with the traffic or impede the traffic flow going south on the Bishop Ford.															During construction of the elevated structure extending from the 95th Street/Dan Ryan terminal, there would be temporary lane closures where southbound Bishop Ford goes into the tunnel to go underneath I-57.
329	Mark Bell	court reporter	Will the present CTA lines be routed to the new stations, or will there be new routes created that will be routed to the new stations?		2A													
330	Fatimah Al Nurridin-Harris	court reporter	Walkability is my concern. Riverdale community 54 is very secluded. And when you walk from the Pace station, the Riverdale station that's on 135th and Indiana, into the community over the bridge down 134th to the station -- I'm thinking about all the sidewalks. I see some repairs, but I'm thinking and I'm concerned about a safe route. And I'm concerned about the exchange of individuals, residents, from the Eden Gardens, Golden Gate going into the Altgeld community. I know that's an issue that we would have to deal with. But lighting and, you know, the beautification and all that landscaping stuff, I would -- is important to me. As well as sidewalk and walking access on 130th. I'm working with a group, Southside Trailblazers, I'm working with Openlands, and just a lot of us are working to restore an African American Heritage Trail. So there's a lot going on back there. The Underground Railroad Landmark. So walkability, tours and safety is my concern. Third and lastly, acknowledgement of the historical individuals, the buildings. I know that you talk about signage, but I'm hoping that CTA, RTA and the whole conglomerate is sensitive to our historical value and, you know, kind of work with us to acknowledge it. You know, the Larry Hawkins school is empty, and you have to go past that to get to 134th, to get out into the community. What you're hearing is a lot of people -- because of the access is more convenient for them; we still have to go through that community to get to it. So that is what we're having a concern about. We want to be a welcoming transition and then not to be the Altgeld station, you know. But, hey, safety is our concern. We've had a lot of -- historically, the Beaubien Woods, the wooded areas, we're working on improving it. What we want CTA and Pace to be sensitive, you know. They use 134th Street viaduct under, you know, to get out once the train that is on -- near Vernon may be blocking or whatever. We have a lot of buses coming through. So, again, I'm working to enhance and beautify and bring some other things historically to this area. But safety is our concern. A lot of overgrowth. We need that the train companies to be accountable. Landscaping, beautification, and just accountability.		2G	3A, 3B		5A	6A		8A							
331	Hunter Smit	court reporter	Seems like walkability is a big concern for both the residents who live in the area but also the commuters who are coming in nearby. And so both connections to 130th Street look like an issue as well as connections to the nearby forest preserve and some of the parks that are nearby. And there's a couple people bringing this up in the overall general meeting, but as I noticed, there is no -- there's no sidewalks really on 130th, and the distance between 130th proposed station is quite something for people who are only on foot. I guess one other comment, too, is just the transit-oriented development nature of the project and just making sure that it's not a car-centric project, but rather like multifamily housing and small business locations can be added right nearby these stations. I know a lot is being discussed about that currently with each station location, but also nearby. And I just want to make sure that that's, like, the priority and so that there will be affordable housing nearby for residents to easily access the train and to access jobs through the transportation system.		2G	3B,3C		5A										
332	Andraya Yousfi	handwritten	I love the new location proposed. It would allow us to safely walk from our after school program to the station easily. It also is set apart enough to not disturb bus routes and staff parking. With the renderings would love to see a sleeker design more reflective of the community. I know they are placeholder designs but it would be great to have a better design for the community to get a better picture. I also like adding way finding to the forest preserve. Adding lighting and signs (maybe bikes/divvy) would be great to better activate the space. At By the Hand, we would love to serve more students and are looking for opportunities to improve our facilities (so we have the space to serve more students) like we have at Cabrini in partnership with CHA and in Austin. Additionally, we are happy to host any meetings at our current site on Ellis and invite the team to also visit during our programming hours. Lastly, it would be great to have bus routes in the area that connects to the neighboring grocery stores as food access is a huge concern and issue for our children and families. Thank you for the incredible work and progress on this project.		2A, 2G	3A		5A			8A							Thank you for your support and hospitality.
333	Beria Hampton	handwritten	Section 3 employment opportunities (1) Employment opportunities (2) Underserved residents involvement (3) Programs for re-entry (4) Workforce development (5) Accessibility for all residents (design will make more of a walk to get to train) (6) Trainings and support	1D	2B, 2G	3B, 3C										13D		The RLE Project will provide an opportunity to create transportation-focused careers at family sustaining wages while meeting the union labor and professional services job requirements of the project. CTA is developing a comprehensive Workforce Development Plan to prepare for these opportunities. The Plan will identify goals and objectives for sustainable careers in the construction industry, including trades and professional services.
334	Francine Washing	handwritten	This public comment is a joke. All they want is signatures on the sign in sheets to say we met with the residents. They are yet to have a town hall community meet with the residents here at Altgeld. I didn't come here to sign in and look at poster boards. Now they want the resident to come to the Kroc Center. Really this is (illegible). No one cares about us but us. Everyone thinks that the residents is illiterate. And that they found a bird nest on the ground. We are tired of getting pissed on saying oh that's rain.													13C		Thank you for your feedback in response to the Altgeld community meeting. CTA is working closely with the Chicago Housing Authority to provide opportunities for inclusive engagement with members of the Altgeld Gardens community.
335	A. Osborne	e-mail	Please send me updates on Red Line Extension Project? How many stations are planned and when will project begin? Thank you.															CTA responded to the comment via e-mail.

ID	Name	Comment Type	Comment	Project Info./ P&N/ Alternatives	Transportation	Land Use/Economic Development	Displacements	Neighborhood and Community	Visual	Noise/Vibration	Safety & Security	Hazardous Materials	Wetlands	Air/Water/Floodplains/Veg/ Bio/Geo/Energy	Parks	Outreach Process	Timeline/Costs and Funding	Individual Response
336	HL Cunning	e-mail	Please keep me informed about the Red Line Extension Project. How many stations are proposed for the extension out to 130th Street? Thank you.															CTA responded to the comment via e-mail.
337	John Jones	e-mail	Englewood Trail on the map; Red Line Extension and 75th corridor; Hallelujah! https://www.chicagobusiness.com/crains-forum-illinois-infrastructure/how-bidens-infrastructure-bill-will-change-chicago-0															Thank you for your support.
338	B. Jackson	handwritten	Sir, send a flyer or brochure of the Red Line Extension project. Send to: [address hidden for privacy]															CTA responded via mailing the newsletter and Supplemental Environmental Assessment Community Guide to the address provided with a note acknowledging receipt of the comment.
339	Derrick James	handwritten	Please create safe, comfortable connections to the sidewalks of the community. Please stress to the city the need for supportive, high-density zoning near the stations. The transit right-of-way should have attractive greenery, trees, flowers, to beautify the area and reduce noise. Ensure there is branded signage throughout the community directing to stations, like the Washington Metro does.		2G	3A		5A	6A	7A	8A							
340	Michael Raffety	handwritten	Build the extension! People everywhere need good mass transit options!															Thank you for your support.
341		handwritten	This is a great project for the city and the neighbors in the area. Make the CTA stations an "island of safety" in the city. Please include good safety and security systems to monitor the crime. Provide for upkeep of those systems. Need security both electronic and on foot.								8A							
342		handwritten	Please build the system so it is easy to keep clean.															Maintenance and cleaning is very much a factor in what CTA designs and installs as part of any new or existing construction project. This will hold true as stations and facilities are designed as part of RLE. The general station design approach will be to minimize pockets or corners that are prone to collect debris or trash. In addition, the station will be constructed with materials that are easy to clean. In general, CTA takes cleaning seriously, and uses industry-standard practices, materials and equipment to ensure the cleanest environment possible for customers and employees.
343	Paul Damian	handwritten	Thanks for your excellent job at keeping all of the stakeholders informed.															Thank you for your support.
344	Roderick Manning	handwritten	Yes, CTA, go through the project. I think it will be very helpful for CTA and its paying customers. Thank you.															Thank you for your support.
345	Clevan Tucker Jr.	e-mail	Connecting 95th/Dan Ryan to 130th Street. 1. Will community input that includes proposals from recent RLE meetings for the station and other facilities be used with new design refinements proposals? 2. What has changed (if any) for the parking facility? 3. What is the new project's preferred alignment as it relates to recent plans? 4. How were these preferred alignments evaluated as it relates to the new project; what criteria was used for area's design refinements? 5. What changes are being made for the relocation of the 130th Street station? 6. What are changes being made for the 120th Street yard and shop? 7. What are changes being made for the 130th Street CTA station? 8. What will be done to the 107th Street cross-over? 9. Is there a publication of the new Environmental Impact Statement (EIS) that will be released to the public? 10. Will there be public input and changes made on the new design refinements proposals? Are we done? Comment: It is my hope that these new changes will not cancel community input. And that they will be an asset to what has already been [planned]. These design refinements should add value and function to [the 130th] Street Station.	1A, 1C, 1E	2E											13C		
346	Dora Engram	e-mail	1.Will there be a bus line from 127th and Union to the new Red Line Station on 130th Street? Currently the Halsted bus turns around there and there is no bus service on 127th Street. The 34 S. Michigan bus turns left at 127th and goes east, but that is the only connection west of Indiana Avenue. 2. Will the new station have elevator service? I am cripple and unable to climb the stairs.		2A, 2B													CTA responded to the comment via e-mail.
347	Lois and Merle	e-mail	CTA needs porta potties at its rail stations. The Cook County Forest Preserves provide them at trail head parking lots for hikers. Transit riders need them too!															CTA has not offered public restrooms for more than 40 years. In fact, very few older U.S. transit systems offer restrooms, and those that do have them at only a limited number of locations. Rapid transit trips, by their nature, are shorter trips covering shorter distances. Additionally, most CTA stations are located near commercial, retail, and public buildings offering public restrooms. Public restroom facilities can be found at some terminals (the end of CTA lines), such as O'Hare, and Midway, and at stations connected to public or publicly accessible buildings, such as the Thompson Center at Clark/Lake, Merchandise Mart, and multiple locations across the system.
348	Deandre Williams	online	Is CTA planning to invest in a community shuttle to transmit passengers to and from the new station? It would solely depend on whether a shuttle to the station would incur more cost after restricting 34-SM bus to the last stop being the new train station. Will there be any new bus services created to reach even more of the city? Any collaborations with Pace services? Is there a plan in place to prevent delays in project completion caused by unforeseen circumstances? Does this include the installation of sidewalks, bike lanes, etc. to make foot travel a possibility? Currently the terrain isn't wisely formed for walking or biking or running or strolling.		2A, 2C, 2G												14A	

ID	Name	Comment Type	Comment	Project Info./ P&N/ Alternatives	Transportation	Land Use/Economic Development	Displacements	Neighborhood and Community	Visual	Noise/Vibration	Safety & Security	Hazardous Materials	Wetlands	Air/Water/Floodplains/Veg/ Bio/Geo/Energy	Parks	Outreach Process	Timeline/Costs and Funding	Individual Response
349	Eugene Broyls	online	I am extremely dissatisfied with the CTA's handing of the entire Red Line extension. I have not seen such governmental boondoggling in a CTA project which has faced delay after delay. These tactics were not required to this extent on the other CTA extensions which they have already completed. I am very unhappy with these delaying tactics and millions in wasted tax dollars which would have been totally unnecessary if the CTA had properly constructed the original Red Line to the maternal point at the Southern City limits. A very unhappy CTA rider.														14A	
350	Hilary Thorne	online	Please stop this ridiculous project. Nobody is going to ride these trains until you fix the antisocial behavior and crime. We just want to get to work safely. The cheapest and best solution is to work with Metra. They already have train stations near where you want to build new ones, and they are virtually abandoned because the service isn't frequent enough to be useful. So scrap your destructive and unnecessary plan. Create a frequent service on the Metra tracks, calling all stations from Harvey to 103rd and then run express to the Loop. It really is that simple. We don't want your crime and filth, and we don't want you chopping down trees and messing up the neighborhood to build a crime ridden service that nobody wants.	1C		3A		5A	6A		8A							
351	Kanji Stallworth	online	More stores around			3B		5A										
352	Michael Camacho	online	I tried so hard to get on this project since I first heard of it. But my voice is never heard, now that is discrimination. Thank you. And not only this one but RPL Project also.													13C, 13D	14A	
353	Michael LaFargue	online	1.) I have engaged in many of CTA's virtual meeting related to 130th Street station relocation. The relocation is appropriate and pursuant community discussion and input was appropriate. 2.) 120th Street yard and shop refinement. To the best of my recollection and readings, the refinement and pursuant community discussion and input was appropriate. 3.) 107th Place cross-over. I entirely agree with the cross-over. It appears appropriate and pursuant community discussion and input was appropriate. QUESTION BACKGROUND: The new 95th CTA Terminal was opened in April of 2019. CTA shared IDOT is responsible for the regular clean up of the CTA parkway. IDOT told the community to call Streets and Sanitation regularly to clean the terminal's parkway. The West Chesterfield Community Association has cleaned the parkway. The Chicago Association of Realtors Diversity 77 has cleaned the parkway. Is of April 2022, CTA says it will have bid out the job and have a contractor clean the parkway. Taken years for the 95th Street Terminal to address cleaning. We have had a similar problem with the maintenance of the CTA 95th Street Staging Area during 2019, 2020 and 2021. QUESTION: 1.) Why has it taken so long to address cleaning the 95th Street Terminal's immediate parkways? The community expressed the importance a cleanliness and having a good business neighbor to CTA. 2.) What is the perimeter cleaning plan for the four new RLE stations?															Thank you for your support and acknowledgement of CTA's clean-up efforts. Though not all properties surrounding a station are owned by CTA —as a show of support to the community—CTA has assisted with the cleanup of areas of the public way around the 95th Street Terminal. CTA continues to work with other public entities, including IDOT and CDOT, to better address responsibility for these areas and ensure more regular maintenance in the future. For the properties CTA does own, crews are routinely dispatched to clear debris and address any other issues of concern. In general, CTA takes cleaning seriously, and uses industry-standard practices, materials and equipment to ensure the cleanest environment possible for customers and employees.
354	Mr. Bobbo	online	Can you please tell me where the 107th Place cross-over will be located?	1C														
355	Tommy Miller	online	Everyone I talk to about this project is very excited about it. Let's move forward full speed ahead!															Thank you for your support.
356	Tommy Miller	online	After review of the SEA, I'm satisfied with the progress being made. My wish is to see this community transformed.															Thank you for your support.
357		handwritten	Yes. Extend the Red Line.															Thank you for your support.
358	Alan Mammoser	handwritten	I am opposed to all parts of this project. There are better, more efficient, and less costly ways to serve the far south side with transit. To start, the CTA should join with Metra to support the Metra Electric pilot project! Please :)	1D														
359		handwritten	I don't use CTA regularly or often. Where will the 130th Street station be moved to? What's a crossover? Where on 107th Street will the new crossover go? I didn't attend the public meeting or Zoom hearing. My card was buried under some other things to do or read papers.	1C														

Response to Comment 244

Keith Harley, on behalf of People for Community Recovery

Thank you for your comments on the CTA Red Line Extension (RLE) Project Draft Environmental Impact Statement (EIS), and for your overall support of the project. Responses addressing comments are discussed in the order presented in your letter.

PCR Comment One

This comment requested that the RLE Project include an alternative that is part of a comprehensive plan to provide a full range of transportation services and options for residents in the project area. The RLE Project is, in fact, part of the comprehensive regional transportation plan and development of this project has included a comprehensive and multi-year approach to analyzing alternatives to identify the proposed project. This process has also included technical analysis of the potential for impacts to the bicycle and pedestrian environment, access to stations, and multi-year coordination with other agencies responsible for all modes of transportation services in the project area.

Comprehensive transportation planning is carried out through regional transportation long range transportation planning. The RLE Project is included in the list of fiscally constrained projects in the Fiscal Year (FY) 2019–2024 Transportation Improvement Program (TIP) of the Chicago Metropolitan Agency for Planning (CMAP) *ON TO 2050* Comprehensive Regional Plan (*ON TO 2050*). *ON TO 2050* provides strategies and priorities for the future development of the regional transportation network and all modes of transportation services.

As described in Section 2.1 of the Draft EIS (Alternatives Development Process), CTA evaluated many corridors before moving forward with the Union Pacific Railroad (UPRR) Alternative as the National Environmental Policy Act (NEPA) Preferred Alternative. As part of the Alternatives Analysis (AA) study conducted from 2006-2009, CTA evaluated 398 combinations of 11 modes, 9 corridors, and 4 profiles against the project's purpose and need. CTA evaluated the I-57 and I-94 (Bishop Ford) as part of the Screen 1 process of the AA but eliminated them from further consideration based on the analysis. These alignments, which would be in the median of the expressway, are isolated from neighborhoods and activity centers and therefore would serve fewer riders; they would have difficult access and connections from neighborhoods; and they would not encourage transit-oriented development. Based on the results of the technical analysis completed during the AA process and considerable public support for the corridor, the UPRR Rail Alternative was recommended as the Locally Preferred Alternative (LPA) by the Chicago Transit Board in 2009, indicating that it would best meet the purpose and need of the project while addressing potential impacts and other constraints. FTA and CTA initiated the environmental review process with

Scoping in 2009 to receive comments on the alternatives and identify issues that should be examined as part of the EIS.

During 2012–2014 as part of the Draft EIS, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit (BRT) Alternative, the UPRR Rail Alternative, and the Halsted Rail Alternative. As described in the Draft EIS, Section 2.4 (Alternatives Considered but Not Pursued), the BRT Alternative was eliminated because it would have minimal travel time improvements compared to the No Build Alternative, and the projected ridership was much lower than the rail alternatives. The Halsted Rail Alternative was also eliminated based on technical analysis and public feedback.

In August 2014, based on the technical analysis and public input until then, CTA announced the UPRR Rail Alternative as the NEPA Preferred Alternative. The UPRR Rail Alternative would provide access to the most densely populated portions of the project area, which are primarily residential and transit supportive. In 2018, CTA announced the Preferred Alignment which is a combination of the UPRR Rail Alternative East and West Options that were presented in the Draft EIS. A Supplemental Environmental Assessment (EA) was prepared to evaluate changes in the project design of the Preferred Alignment from those analyzed in the Draft EIS. The Final EIS evaluates the impacts and the benefits of the project's Preferred Alignment. The Preferred Alignment that was analyzed in the Final EIS includes design changes and modifications since the announcement of the Preferred Alignment was made in 2018.

As part of the Final EIS, impacts to the transportation network as a result of the Preferred Alignment were further analyzed. **Chapter 3** of the Final EIS provides details about project-related impacts to pedestrians and bicycle facilities and addresses transit-related impacts. Implementing the project would result in benefits for pedestrians at stations by upgrading the intersections immediately adjacent to the stations with ADA-accessible curb ramps and replacing deteriorated sidewalks. These improvements would provide access for all users and would increase pedestrian safety. Bicycle parking is also proposed at the new stations. CTA passengers would benefit from faster travel times by accessing rail service farther south. After project completion, restructuring of some bus routes is likely. Some buses would be routed to closer stations on the RLE for a transfer to the Red Line, rather than traveling the farther distance to the 95th Street Terminal. Although bus routes may change before the RLE opens, CTA customers would be informed well ahead of any changes. CTA will work with City agencies to assess multimodal access to stations and identify improvements; however, sidewalks and streets are not under CTA's jurisdiction.

There is a parking garage proposed as part of the RLE Project. Travel demand analysis performed during the RLE AA process showed the need for park & ride facilities. CTA also conducted recent ridership modeling in 2020 and 2022 which confirms the demand for parking facilities at each of the proposed stations. However, based on community feedback, site availability, and analysis of

peer stations throughout the CTA system the number of parking spaces presented in the Draft EIS was reduced. Sufficient parking capacity would be provided at all stations to avoid spillover parking into residential areas near the stations. The proposed station that is adjacent to the Altgeld Gardens neighborhood would have parking facilities that would accommodate future parking expansion if the parking demand increases. Future mobility trends and livable communities (including transit-supported development) are topics which will also factor into the analysis. CTA recognizes the concern raised about the proposed parking garage at 130th Street and access. The relocated 130th Street station south of 130th Street would be easily accessible from Altgeld Gardens.

PCR Comment Two

In 2017 the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, which created an opportunity to relocate the 130th Street station south of the initially proposed station location. In 2019, CTA began exploring the possibility to relocate 130th Street station closer to residents of the Altgeld Gardens neighborhood in the vacant CHA property. The relocation of the 130th Street station was evaluated in the Supplemental EA that was published on January 31, 2022. The station area plan incorporates all modes of transportation that would be accessing the station. CTA will continue to work with the community during final design to develop station area plans that reflect the community character and addressing neighborhood plan recommendations.

The RLE would result in substantial mobility benefits for Far South Side residents and would facilitate access to community resources near the station locations as well as access to recreational areas throughout the project area, especially for transit-dependent residents including the elderly and disabled, which would be beneficial overall. The analyses performed by CTA looked at not only the area where the track or station would be constructed, but also a larger area, known as the area of potential impact (API). The API for the transportation analysis, which includes impacts on pedestrians, encompasses the area south to 134th Street and therefore is not limited to the area where the 130th Street station would be constructed.

PCR Comment Three

As noted in this comment, implementation of the project could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations. More foot traffic near stations would benefit local businesses and encourage community development.

The purpose of the NEPA process is to specifically disclose the potential for impacts from a federally funded transportation program on the surrounding environment. CTA reviewed the findings from the environmental resource analyses to properly evaluate the potential for indirect impacts on land use, transportation, and economic development plans and goals, as well as to identify notable or sensitive resources such as community facilities, historic resources, and other vulnerable or unique

resources. The potential for and impacts of induced growth that could result from this project were then determined through a qualitative assessment of changes in growth and development expected as a result of the increases in transit accessibility from the project. There would be potential for redevelopment from accessibility to new employment opportunities, attraction of new development near RLE stations, and overall livability improvements. The private sector would likely perceive the Preferred Alignment as a public-sector commitment to invest in the communities adjacent to the RLE Project and promote confidence in the economic development market of the area. The station and retail improvements may contribute to a southward expansion of the current commercial and entertainment district along Michigan Avenue between 111th and 115th Streets.

CTA developed a Transit-Supportive Development (TSD) Plan based on the community's vision for future development on the RLE corridor. It identifies methods and resources to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment. The TSD Plan utilizes an equitable Transit Oriented Development (eTOD) planning approach. eTOD planning seeks to promote development without displacement and realize community-focused benefits such as affordable housing, local economic development, and environmental sustainability. In order to achieve this, the TSD Plan incorporates policies to preserve existing housing stock and build new affordable housing, while stimulating economic development and encouraging new construction on vacant lots. CTA is working closely with Chicago's Department of Planning and Development and Department of Housing, as well as the Cook County Land Bank Authority to identify the best policies and programs to support existing residents within the RLE community.

CTA will continue outreach efforts to the surrounding community through the final design and construction process and understands the importance of incorporating community input and involvement into subsequent design and construction processes.

Thank you for your suggestions to get the community more involved. CTA will keep these suggestions in mind as the project moves forward. CTA will continue to work with and obtain input from the community, as we have done through the TSD planning efforts. CTA will continue to work with the aldermen's offices and community groups as the project moves into final design to develop a Construction Outreach and Coordination Plan and Business Outreach Program closer to the time of procurement of construction services.

CTA also has programs in place to provide opportunities within the community as design and construction moves forward. CTA's Disadvantaged Business Enterprise (DBE) Program demonstrates CTA's continued commitment to the success of minority/and women-owned businesses by promoting contracting opportunities to DBEs in the transit industry. CTA includes DBE goals on every project and has included local hiring offices or job fairs on all major projects in recent years (including the 95th Street Terminal, Red Line South Reconstruction, and Red Purple

Modernization Project). CTA places workforce participation goals on all major projects. The objective is to provide career opportunities in the trades and other construction-related jobs to communities that are typically under-represented in the industry. Workforce goals set a minimum standard for employment of individuals who are dislocated workers (unemployed or underemployed), individuals who live in economically disadvantaged areas, and individuals who are union apprentices. These goals require contractors to recruit, hire, and retain a diverse pool of candidates from historically disadvantaged backgrounds. CTA is establishing partnerships with community organization, educational institutions, and trade organizations to promote workforce opportunities on the project and in the broader construction industry. Additional information on the DBE Program and workforce initiatives may be found on the project website at https://www.transitchicago.com/diversity-programs/. Please visit the project website at https://www.transitchicago.com/procurement/ to learn about the procurement process and future CTA contract opportunities.

PCR Comment Four

Thank you for your suggestions related to sustainability and green design. Such design considerations will be evaluated during later stages of project design.

PCR Comment Five

As described above in the response to Comment Three, CTA will continue to work with and obtain input from the community as the project moves forward.

Response to Comment 245

Lou Turner, on behalf of the Redline Oversight Committee

Thank you for your comments on the CTA Red Line Extension (RLE) Project Draft Environmental Impact Statement (EIS), and for your overall support of the project. Responses addressing comments are discussed in the order presented in your letter. The responses to the comments reference the page numbers identified in the comment that refer back to the Draft EIS. The responses direct the Commenter to the appropriate document whether it is the Draft or Final EIS.

Executive Summary

CTA has had a robust public outreach process throughout the life of this project, as described in Chapter 10 of the Draft EIS and in the Final EIS. A total of six public meetings were held throughout the greater project area during the Alternatives Analysis process (2007–2009) because of the range of alignments under consideration. Two public meetings were held during the Scoping process (2009), and two additional meetings were held during the preparation of the Draft EIS (2009 and 2014).

After publication of the Draft EIS, CTA held a public hearing on November 1, 2016 near the proposed project alignment, with over 280 people in attendance. Because only one alignment was under consideration, a single public hearing was deemed sufficient. CTA delivered a hard copy of the Draft EIS (with DVD), a Citizens' Guide, and a public hearing flyer to Woodson Regional Library on Thursday, October 6, 2016. CTA advertised the public hearing through display ads in local and regional newspapers, an e-Blast, and through CTA press releases, flyers, and CTA customer alerts placed on CTA railcars and buses within the project corridor. The Draft EIS was also posted to the RLE website (https://www.transitchicago.com/rle/) on October 6, 2016, and hard copies of the Draft EIS were available during the comment period at FTA Regional Office V and CTA headquarters, elected officials' offices, and five libraries in the project area. CTA posted additional details about the public hearing and project on the project website. CTA met with project area aldermen and elected officials, held three meetings to provide information and answer questions from potentially displaced property owners and tenants, and met with 11 project area community groups (including the Red Line Extension Coalition) during the public comment period. CTA also did door-to-door outreach to potentially displaced property owners and tenants. In total, CTA received 284 comments.

Additional public meetings for the project were held as part of the Preferred Alignment announcement. CTA conducted meetings for invited property owners on February 6 and 8, 2018 to discuss displacements. An open house meeting was held on February 13, 2018 for the public to announce the Preferred Alignment. Community meetings were held on December 8 and 9, 2020

for the Supplemental Environmental Assessment (EA). Public hearings were held on February 15, 2022 and February 17, 2022 for the Supplemental EA. In addition, CTA hosted a stakeholder meeting on February 16, 2022 in Altgeld Gardens to be available to the neighborhood residents to discuss the Supplemental EA design refinements and the entire RLE Project.

In an effort to further engage and seek support from a comprehensive group of community members who are seen as invested stakeholders within the RLE Project footprint, the RLE Project Advisory Council (PAC) was formed in 2019. The PAC includes representatives from multiple organizations, including governmental organizations. It has approximately 20 representatives. Other public outreach activities include elected official updates, stakeholder and public meetings, issuance of newsletters, mailers (U.S. Postal Service mailings and hard copy drop-offs), a digital engagement platform (https://engagerle.transitchicago.com/) regular postings on a RLE Project Facebook page, eBlasts (i.e., mass e-mails sent to people who signed up for RLE Project notifications), and announcements regarding the RLE Project.

Chapter 1 - Purpose and Need

1-3: Although the area north of 95th Street is not considered to be within the primary project area as shown in Figure 1-2 of the Draft EIS, we have added Lowden Homes and Trinity United Church of Christ to our contact list based on your comment. They have received project updates as the project moves forward.

1-5: Projects that have the potential to significantly affect the environment and that will involve a request for federal funds require an EIS. Given the level of analysis and coordination required to identify and address project related impacts, this is a multi-year process involving both a Draft EIS and Final EIS. The final result of the EIS is a Record of Decision (ROD) by FTA. While recent federal regulations have attempted to help streamline this timeline, the requirements of the National Environmental Policy Act (NEPA) for EIS analyses and coordination with FTA necessary to provide a full disclosure of impacts and proposed mitigation is a long process for projects of this scale. In addition, securing funding through FTA's Capital Investment Grant (CIG) program is a multiyear, multistep process that project sponsors must complete before a project is eligible for a grant award. Project Development timelines under the CIG program are also dependent on funding needs and availability. Funding for the Draft EIS was not immediately available upon completion of the NEPA Scoping process in 2009. Upon publication and completion of the Draft EIS, CTA identified funding for the Final EIS and Preliminary Engineering. CTA entered into the Project Development process of the CIG program in 2020. The Project Development is a two-year process in which all NEPA requirements, in addition to other items, need to be completed in order to move onto the next phase of the CIG program. CTA's funding plan would continue to evolve in 2022 in advance of Entry into Engineering, which is an indication of CTA's commitment to completing the steps necessary to move this important project forward.

Chapter 2 - Alternatives Considered

2-2: That is correct, 38,000 residents in the 9th and 34th Wards supported the UPRR corridor for the RLE Project in 2004. Public support, in addition to technical factors in the Alternative Analysis (AA), was a factor in recommending the UPRR Rail Alternative as the Locally Preferred Alternative (LPA) in 2009.

2-4: As described in Section 2.4.2 of the Draft EIS, coordination between local agencies and the railroads as part of the Chicago Department of Transportation (CDOT) feasibility study that looked at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project indicated that relocation of UPRR freight operations from this corridor presents considerable challenges. The results of this informal study were not published and therefore are not included as an appendix to the Draft EIS.

As noted within the Draft EIS (Section 2.1), during the AA process CTA considered multiple modes and corridor options and screened alternatives through a combination of conceptual engineering, public input, and preliminary analysis of potential impacts and costs. Based on the results of the AA and considerable public support for the UPRR corridor, including a 2004 referendum where 38,000 residents in the 9th and 34th Wards supported the UPRR corridor for the RLE Project, the UPRR Rail Alternative was recommended as the LPA.

In initiating the federal environmental process under NEPA, a public and agency scoping process was conducted. As described in 43 CFR 46.235, scoping is a process that continues throughout the planning and early stages of preparing an EIS to engage state, local, and tribal governments, and the public in early identification of concerns, potential impacts, relevant effects of past actions, and possible alternative actions. Because the AA only provided a preliminary and comparative analysis of environmental impacts of alternatives and based on input received during initial scoping activities, additional environmental analysis on the Halsted rail corridor was included as part of the early Draft EIS analysis. In addition, the NEPA process at the time of initiating Draft EIS tasks required agencies to identify and consider both No Build and a lower-cost Transportation System Management (TSM) alternative. As a result, CTA identified the No Build as well as a lower cost Bus Rapid Transit (BRT) alternative for additional study. Given these factors, four alternatives were included in early stages of Draft EIS analysis and development – a No Build Alternative, a BRT Alternative, the UPRR Alternative (which was locally preferred by the public during the AA process), and a Halsted Rail Alternative.

Two alternatives—the BRT Alternative and Halsted Alternative—were subsequently eliminated from evaluation in the Draft EIS. Details on technical reasons and public concerns that led to elimination of these alternatives are provided in Section 2.4 of the Draft EIS. During the early Draft EIS analysis, a new federal transportation bill was passed (Moving Ahead for Progress in the 21st Century, or MAP-21), which eliminated the requirement to consider a lower-cost TSM alternative.

Based on public feedback in August 2014 which raised concerns about the comparative benefits of the BRT Alternative and changes in federal requirements, CTA eliminated the BRT Alternative. Additionally, based on additional environmental and technical analysis and public input received in August 2014, the Halsted Alternative was eliminated. The published Draft EIS, therefore, considers two alignment options of the UPRR Alternative as well as the No Build Alternative. The Final EIS evaluates the impacts and the benefits of the project's Preferred Alignment in comparison with the No Build Alternative. The Preferred Alignment was announced to the public on January 26, 2018, and it is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS.

2-8: The potential for retail space and community facilities near the 130th Street station has been evaluated as part of the Transit-Supportive Development (TSD) Plan. The TSD Plan is based on the community's vision for future development near the proposed stations. The station layout proposed for the 130th Street station allows for future development.

2-10: Every project process and timeline are unique and are influenced by a variety of factors, including environmental impacts, federally required evaluations of those impacts, as well as funding availability. While the EIS documentation process does not require a full explanation or comparison of project timelines with other projects, Appendix A and B of the Draft EIS provide additional information on the Alternatives Analysis and NEPA Scoping history and process followed for the RLE Project.

In response to comments received about the timeline for Orange Line planning and construction, three important historical factors about that project may help to better describe the history and evolution of that project. First, it should be noted that plans for a subway extension in that area began in the 1940s and it was not until approximately 50 years later before a project was actually constructed. Secondly, unlike the proposed RLE Project, which proposes to use new right-of-way adjacent to existing UPRR tracks, the Orange Line predominantly follows former freight railroad rights-of-way that were previously used by the Illinois Central Railroad, Santa Fe Railway, and the Belt Railway of Chicago. This alignment availability made development of the project alignment and consideration of environmental impacts more straightforward than a new line. Finally, while formal project planning for the Orange Line were initiated in 1984, funding was secured for the project early in the process—in 1986. This funding identification and availability also allowed the project to move forward quickly through environmental and subsequent engineering and construction phases.

The RLE Project timeline has evolved through extensive efforts by both CTA and community advocates. In addition, proposed federal funding of the project through FTA's Capital Investment Grant (CIG) program (New Starts) is a multi-stage, multi-year process. As noted in the RLE Scoping Report (**Appendix B**), the Red Line was put into initial operation in 1969. Plans to extend the Red

Line to the southern city limits were made shortly thereafter but never implemented. In 2006, the Chicago Transit Board initiated an AA study for the proposed extension. This study was completed in 2009, and between 2010 and 2014, CTA initiated the Draft EIS phase which further identified and evaluated alignment alternatives and potential impacts and mitigation measures. The results of that process were shared with the public and allowed CTA and FTA to prepare the Draft EIS for the UPRR Alternative in a two-year period between 2014 and 2016. CTA published the Draft EIS, and a public hearing was held on November 1, 2016 to obtain additional public comments. After considering public comments and completing additional technical analysis and agency coordination, CTA selected and announced a Preferred Alignment in January 2018. The Final EIS presents the Preferred Alignment that includes design changes and modifications based on public comments and additional technical and agency coordination. CTA entered into the FTA's Project Development Phase in December 2020. The final timeline for the project continues to be dependent on receiving federal approvals and obtaining necessary federal, state, and local funding for construction of the project.

The construction segments, as stated on page 2-10 of the Draft EIS and **Section 2.3.1** of the Final EIS, indicate similar construction activities and are not intended to indicate any sequencing or phasing. Unless restricted by construction specifications, a contractor may choose means and methods appropriate for the design, schedule, and impact avoidance. Construction activities and phasing would be determined during final design of the RLE Project, in coordination with the design-build contractor.

The RLE will represent approximately 18 percent of the entire Red Line based on length once complete.

2-13: Thank you for your suggestions for minority contractor and employment opportunities. Comments regarding employment practices are outside of the NEPA review process. All RLE construction jobs would be under the construction contractor, who would be selected for this project per CTA's procurement process through competitive bidding. This competitive bidding would happen only after CTA has secured funding and federal approval for all the interim phases and for construction. CTA's Disadvantaged Business Enterprise (DBE) Program demonstrates CTA's continued commitment to the success of minority/and women-owned businesses by promoting contracting opportunities to DBEs in the transit industry. CTA includes DBE goals on every project and has included local hiring offices or job fairs on all major projects in recent years (including the 95th Street Terminal, Red Line South Reconstruction, and Red Purple Modernization Project). CTA places workforce participation goals on all major projects. The objective is to provide career opportunities in the trades and other construction-related jobs to communities that are typically under-represented in the industry. Workforce goals set a minimum standard for employment of individuals who are dislocated workers (unemployed or underemployed), individuals who live in economically disadvantaged areas, and individuals who are union apprentices. These goals require

contractors to recruit, hire, and retain a diverse pool of candidates from historically disadvantaged backgrounds. CTA is establishing partnerships with community organizations, educational institutions, and trade organizations to promote workforce opportunities on the project and in the broader construction industry. Additional information on the DBE Program and workforce initiatives may be found on the project website at https://www.transitchicago.com/diversity-programs/. Please visit the project website at https://www.transitchicago.com/procurement/ to learn about the procurement process and future CTA contract opportunities.

2-14: See response for page 2-13 regarding employment opportunities.

2-15: The LPA selection process is described in Section 2.1 of the Draft and Final EIS, as well as in further detail in Appendix A (Alternatives Analysis - Locally Preferred Alternative Report) and Appendix B (Scoping Report).

2-16: The location of the 130th Street station in the Draft EIS was based on local community outreach and coordination. However, in 2017 the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, which created an opportunity to relocate the 130th Street station south of the initially proposed station location. In 2019, CTA began exploring the possibility to relocate the 130th Street station closer to residents of the Altgeld Gardens neighborhood in the vacant CHA property.

Since the publication of the Draft EIS, the relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood has been evaluated in addition to other design refinements. These design refinements were evaluated in a Supplemental EA. The agency coordination and public outreach associated with the Supplemental EA has influenced the design refinements incorporated into the Preferred Alignment analyzed in this Final EIS.

2-19: FTA is the federal lead agency for the RLE Project, and CTA is the project sponsor. As lead agency, FTA is responsible for overall direction of the environmental review process, coordination with other agencies and tribes, and making sure that the delivery of the transportation project moves forward in a timely manner.

As described in great detail in 23 CFR 771, an EIS is prepared when FTA determines that a proposed action that will use federal funds is likely to cause significant impacts on the environment. FTA staffing changes or changes in leadership do not impact adherence to these federal regulations under NEPA. NEPA documents, such as the Draft EIS and Final EIS, are ultimately disclosure documents that present information on the potential for environmental impacts, outline mitigation measures for adverse impacts wherever possible, and document decision-making and public outreach processes undertaken at planning stages of the project.

CTA and FTA have completed all requirements for development, coordination, and public involvement to satisfy the Draft EIS process described in 23 CFR 771.123 and all of its implementing regulations. Following public engagement on the impacts of the Preferred Alternative for this project and two options considered in the Draft EIS as well as through additional agency outreach and coordination, CTA selected a Preferred Alignment. CTA and FTA have developed this Final EIS to confirm findings of the Draft EIS and present any new impacts related to the Preferred Alignment. FTA intends to issue a single document that consists of the Final EIS and ROD in accordance with the FAST Act and 23 United States Code (USC) § 139(n). A ROD is not an endorsement of a project and that is not the purview of FTA. Rather, the ROD provides formal documentation for the public on how decisions were made on the project and solidifies commitments to mitigation measures proposed. It formally authorizes CTA to proceed with further project design, property acquisition, and construction and represents the formal requirement necessary for CTA to seek federal funds to pay for a portion of the project.

Chapter 3 - Transportation

3-4: The traffic analysis did not include a mode shift analysis because that would represent a more conservative approach to traffic impacts. Meaning, the Draft and Final EIS present the worst-case scenario based on the projected vehicular traffic volumes at the time of analysis by not assuming any reduction in volumes due to mode shift. The traffic analysis in the Final EIS was updated to evaluate the 2050 horizon year and was based on the CMAP model for the region.

3-5: The purpose of the EIS process is to detail the potential for adverse impacts caused by the RLE Project and identify mitigation measures, where possible, for such adverse impacts. The EIS is not intended to quantify all benefits of the project as compared to the No Build Alternative. However, while this is not a federal requirement, CTA appreciates this comment and believes that improved accessibility is a significant project benefit, and that further measures of improvements to ADA conditions in the project area are desirable.

The discussion of existing conditions for pedestrians are discussed in **Section 3.2.4** of the Final EIS. Further details can be found in **Appendix H** of the Final EIS. There are wheelchair accessible curb ramps at most of the intersections within the API, but most of these curb ramps are not fully compliant under current ADA standards, which require detectable warning tiles for the visually impaired. All public facilities, including stations, platforms, and trains, associated with the RLE Project would be fully ADA accessible. Implementation of the RLE Project would result in benefits for pedestrians at stations by upgrading the intersections immediately adjacent to the stations with ADA-accessible curb ramps and replacing deteriorated sidewalks. During a future design phase, additional pedestrian control devices, such as increased lighting and gates at the sidewalk, would be considered to improve pedestrian safety at the crossings. All railroad track crossings would be ADA-compliant. These improvements would provide access for all users and would increase

pedestrian safety compared with the No Build Alternative. Future design phases will detail ADA requirements for stations, parking, sidewalks, crossings, and all related project elements.

In addition, providing new rail service as part of the RLE Project would provide enhanced ease of access to transportation options, particularly for elderly and disabled passengers. Under the No Build Alternative, passengers would continue to use existing bus services and commuter services. While these services meet ADA compliance, providing enhanced transit service availability in the RLE corridor would improve ADA accessibility for the surrounding community.

3-6: Flagging operations and scheduled track closures would occur during construction activities near or adjacent to railroads. UPRR requirements for nearby construction activities include flaggers to make sure that freight trains and on-track equipment pass safely through the work site without delays. Construction-related impacts on the freight rail facilities would not be adverse. CTA construction would not impact the UPRR freight schedule, and impacts would not be dependent on the construction timeline.

3-13: The RLE structure would be designed to resist vibration impacts from the UPRR trains.

3-18: The RLE Project would operate 24 hours a day, each day of the year. Service frequency is anticipated to be the same as with the current service at the 95th/Dan Ryan terminal—approximately 3-minute to 6-minute headways during morning and afternoon peak hours. Headways during off-peak periods during the day would be approximately 6-10 minutes. Headways at night (between 1 AM and 4 AM) would be approximately 15 minutes. Service frequency would be adjusted to accommodate demand once the RLE service is implemented. The 41,500 riders per weekday are projected across the entire day. The ridership number includes the riders who may shift from existing boardings at 95th Street to new stations south of 95th Street.

3-19: For the UPRR and the Canadian National Railway (CN), the project would be grade-separated from these railroads, causing no permanent interference. For the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad, the RLE would be entirely to the west of these tracks and would not cause interference.

3-21: A park & ride is not currently planned for the 95th Street Station because there is no direct access from I-94 and I-57 to the 95th Street Station. There would be direct access from I-94 and I-57 to the proposed stations and park & rides at 103rd Street, 111th Street, Michigan Avenue (south of 115th Street), and 130th Street.

3-22: Thank you for providing information and resources on the population with disabilities within the API. **Chapter 1** (Purpose & Need) and **Chapter 7** (Environmental Justice) contain discussions of transit-dependent populations as well as disabled and elderly populations. The Purpose and Need, in particular, provides additional information on the benefits of the project, particularly with

regard to transit-dependent population and echoes many of the findings in the Transit Equity Report referenced. **Appendix H** of the Final EIS (Transportation Technical Memorandum) also provides details on ways in which implementation of the RLE Project would result in benefits for pedestrians at stations by upgrading the intersections immediately adjacent to the stations with ADA-accessible curb ramps and replacing deteriorated sidewalks.

ADA accessibility is specific to design considerations and all new construction must be built in accordance with ADA laws. Future design phases will detail ADA requirements for stations, parking, sidewalks, crossings, and all related project elements, and all such requirements will be met as project design advances. ADA laws will require CTA to provide necessary accessibility to the stations and adjacent park & ride facilities, as noted in the comment, and are not considered to be mitigation measures since they are engineering and design standards that must be met by law for any project. **Appendix F** of the Final EIS contain the plans and profiles for the Preferred Alignment. The station area plans are provided in **Appendix F**.

Findings within the Final EIS provide the required level of detail to address the potential impacts of this project, and it should be noted that the purpose of this type of environmental evaluation is to analyze impacts and provide any potential mitigation measures to avoid, minimize, or mitigate those impacts.

Chapter 4 - Environmental Impacts and Mitigation

4-1: Feedback received on potential mitigation measures presented in the Draft EIS have been considered in design of the Preferred Alignment as presented in the Final EIS and shown in the plans and profiles in **Appendix F**. CTA has also held public hearings for the three design refinements of the Preferred Alignment that were presented in the Supplemental EA. The comments provided during the Supplemental EA development and from the public hearings have been incorporated into the Final EIS. CTA will continue to work with and get input from the community as the project moves forward into final design.

Figure 5-5 of **Appendix N** contains a recent photo simulation of the 111th Street station, which would not have an adverse visual impact on the Roseland Community Hospital.

4-2: Regional and local planning bodies govern land use and zoning regulations. CTA evaluated existing land use, zoning, and relevant land use and economic development plans for parcels directly adjacent to the Preferred Alignment, for the full length of the Preferred Alignment, as well as those parcels within ½ mile of stations per FTA's 2014 *Planning for Transit-Supportive Development: A Practioner's Guide*). This ½-mile buffer around stations (generally acceptable walking distance) was chosen to assess any direct or indirect land use or economic development impacts that could result from the project in accordance with federal guidance. Section 4.1 of the Draft EIS provides additional details on how these impacts were determined.

CTA developed a Transit Supportive Development (TSD) Plan starting in 2020 based on the community's vision for future development on the RLE corridor. It identifies methods and resources to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment. The TSD Plan utilizes an equitable Transit Oriented Development (eTOD) planning approach. eTOD planning seeks to promote development without displacement and realize community-focused benefits such as affordable housing, local economic development, and environmental sustainability. In order to achieve this, the TSD Plan incorporates policies to preserve existing housing stock and build new affordable housing, while stimulating economic development and encouraging new construction on vacant lots. CTA is working closely with Chicago's Department of Planning and Development and Department of Housing, as well as the Cook County Land Bank Authority to identify the best policies and programs to support existing residents within the RLE community.

4-3: The Draft and Final EIS references all studies that have been conducted related to the RLE Project and includes citations in **Chapter 12** (List of References). The RLE Project Public Participation Plan, included in **Appendix C** (Agency Coordination and Public Involvement) , Part 2 of 7 of the Final EIS, includes a number of community associations and special interest groups including the Developing Communities Project. CTA strives to coordinate with and take feedback from all related stakeholder groups, and to not give preferential treatment to any one individual or group. CTA will continue to work closely with the community groups identified in the Public Participation Plan as well as any others with an interest in the RLE Project and incorporate their feedback as the project moves forward.

Transit TIFs are discussed in **Section 9.1.2**. Major transportation capital investments like RLE have been shown to have positive impacts to surrounding land values over time. A Transit TIF takes advantage of this beneficial effect of transit investment and would provide an important source of local funding match required for the project to move forward. Transit TIF funds are created by growth in property value, known as increment, that occurs because of the investment in transit. While the legislation passed in June 2016, it allows for creation of Transit TIF districts to fund RLE, the district hasn't been created yet and so the exact boundaries are unknown for any analysis. However, incremental funds gained from the Transit TIF are not expected to result in impacts to existing property owners, who will benefit from increased property values should they occur as a result of the RLE project. In fact, the Transit TIF values earned incrementally from land value increases over time work to serve improvements within the Transit TIF boundary.

As mentioned in response to Comment 4-2, CTA has developed the TSD Plan for the RLE station areas using the principles of eTOD planning that would promote affordable housing and reduce the potential of negative impacts from gentrification.

Regarding characteristics of the RLE Project area, please see the land use map presented as F**igure 4-1** in **Section 4.1** of the Final EIS. The analysis evaluated land use impacts that could happen within ½ mile of project stations (see Final EIS **Appendix J**, **Figure 3-1** for more details).

4-6: The population and employment increases projected by CMAP and described in Section 4.1.3.1 of the Draft EIS are only due to development assuming that infill development occurs and do not take into account any additional infill development that may occur because of implementation of the RLE Project. There have been no considerable changes to land uses or economic development along the Preferred Alignment.

As previously mentioned in response to Comment 4-2, CTA prepared the TSD Plan that uses the principles of eTOD. eTOD planning seeks to promote development without displacement and realize community-focused benefits such as affordable housing, local economic development, and environmental sustainability. It should be noted that land use decisions are independent of the project would be at the discretion of the City of Chicago. Similarly, desirable new business development in the surrounding community is not within the purview of CTA and would be based on the City's land use and zoning regulations, including eTOD and the market forces. CTA is an advocate of eTOD and will work with other City departments through the design phases to assess eTOD potential and accordingly promote eTOD around the new stations. Existing vacant and underutilized properties were considered in the assessment of land use and economic development impacts from this project, however future development of these properties is also beyond the purview of CTA. eTOD is discussed in greater detail in **Appendix J** of the Final EIS, the Land Use and Economic Development Technical Memorandum.

See response for page 2-13 regarding project-related job opportunities.

4-7: See response for page 2-13 regarding project-related job opportunities.

CTA will continue to work with elected officials and community groups as the project moves into final design to develop a Construction Outreach and Coordination Plan and Business Outreach Program closer to the time of procurement of construction services.

Rezoning related to the RLE Project would be done in coordination with the Chicago Department of Planning and Development and the Chicago Zoning Ordinance Administration, and public participation would be part of the process.

4-8: See response for page 2-13 regarding project-related job opportunities.

4-9: Information regarding potential property displacements as part of the Final EIS for the Preferred Alignment as well as the relocation process is discussed in **Section 4.2** of the Final EIS. CTA is committed to fair and equitable treatment for all individuals who may need to be relocated due to the RLE Project. CTA is be required to follow the guidelines of the Uniform Relocation

Assistance and Real Property Acquisition Policies Act of 1970, as amended (known simply as the "Uniform Act"), along with state regulations. The potentially affected properties are listed by address in **Appendix K**, the Displacements and Relocations of Existing Uses Technical Memorandum. CTA has reached out to potentially affected property owners and tenants individually and has also held several meetings with them; while not required under NEPA, these meetings were conducted to make sure potentially affected property owners and tenants were informed. CTA will continue to coordinate with potentially affected property owners and tenants as the project moves forward. The potentially affected properties were also disclosed as part of the Supplemental EA document that was published on January 31, 2022.

Additional information about the Uniform Relocation Act is available here: fhwa.dot.gov/real_estate/uniform_act/.

CTA would not pursue acquisition of private property for the RLE Project until the environmental review is completed with a signed ROD. CTA would then notify affected property owners and tenants of their intent to purchase.

Outreach Specialists continue to provide specific outreach as a resource to potentially displaced residents and/or businesses to answer questions regarding relocation benefits, requirements, processes, and anticipated timelines.

CTA will continue to work with elected officials, community groups, businesses, and residents as the project moves into final design to develop a Construction Outreach and Coordination Plan and a Business Outreach Program closer to the time of procurement of construction services. CTA will also work with the community, elected officials, and stakeholders on station plans and the potential for surrounding development as the project moves forward.

4-10: See response for page 2-13 regarding project-related job opportunities.

Information regarding vacant structures has been updated as part of the Final EIS as of 2021; however, the vacancy status may change by the time the project moves into construction. Vacant parcels are called out separately in **Tables 4-3** in **Section 4.2** of the Final EIS to clearly present all potential impacts of the RLE Project.

4-11: The UPRR requires that, for safety reasons, the CTA tracks be located at least 50 feet from the existing freight tracks. UPRR has stated this requirement throughout coordination with CTA beginning in the Alternatives Analysis process in 2009, including meetings in 2009, 2012, and 2016, and through communication with the Chicago Department of Transportation in 2011. In response to recent freight train derailment incidents near passenger rail lines, UPRR simulated derailments and found that the 50-foot dimension represented a level of comfort where it was felt a derailed train could be contained. To maintain the required 50-foot distance, the CTA right-of-way would

extend into industrial areas and residential neighborhoods adjacent to the UPRR right-of-way. Further details can be found in Appendix A (Alternatives Analysis - Locally Preferred Alternative Report) of the Draft EIS.

Coordination with UPRR is ongoing as the Preferred Alignment crosses over the UPRR in two places, near 99th Street as the alignment heads south from the I-57 corridor and then again at 107th Place where the alignment transitions to the east side of the UPRR tracks.

See response for page 4-10 regarding vacant parcels.

4-15: See response for page 4-10 regarding vacant parcels. CTA will coordinate with the Chicago Department of Planning and Development on local economic development and community plans during future design phases. Outreach Specialists would provide specific outreach as a resource to potentially displaced residents and/or businesses to answer questions regarding relocation benefits, requirements, processes, and anticipated timelines. CTA, in coordination with the City of Chicago and the local aldermen's offices, would provide informational resources, permitting support, and points of contact for displaced business owners to find suitable sites for relocation.

CTA is required to hire an independent appraiser to inspect the property before purchase to determine fair market value. In that case, the property owner or a representative that the owner designates will be invited to accompany the appraiser when the appraiser inspects the property. The owner or owner's representative may provide information about improvements to the property and any special features that may affect the value of the property to ensure that these facts are considered in the appraisal. All appraisals must be independently reviewed for fairness and consistency by a second independent appraiser to ensure they meet all the standards specified in the regulations. CTA will use the final accepted appraisal to determine just compensation, which must equal or exceed the fair market value.

4-16: The East Option would displace 260 parcels (on which 106 buildings are located) and the West Option would displace 205 parcels (on which 46 buildings are located). Based on public feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in January 2018. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. The Preferred Alignment would affect 228 parcels (on which 97 buildings are located).

4-21: CTA and FTA prepared the Draft EIS to evaluate the impacts of the East and West Options. CTA accepted public comments from October 6 to December 31, 2016 and considered the comments as the two options were further evaluated throughout 2017. Based on public feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in January 2018. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. This Final EIS presents the reasoning for the selection of the Preferred Alignment, as well as benefits and impacts of the Preferred Alignment. CTA remains committed to working with the community

as the design continues to move forward into design phases. To implement the project, CTA would acquire all parcels necessary for construction and implementation of the RLE Project. CTA will not be responsible for rehabilitation of existing vacant parcels or easements adjacent to the corridor, nor does CTA own the vacant parcels. The project, once implemented, is expected to have positive benefits to the community and future land use and economic development.

See response for page 2-13 regarding project-related job opportunities.

See response for page 4-2 regarding gentrification.

CTA will continue to work with and get input from the community, elected officials, and stakeholders on station plans and potential for surrounding development as the project moves forward.

4-22: See response for page 4-2 regarding gentrification.

4-23: A community benefit agreement is typically an agreement between community groups and a private developer, where the proposed development is not centered on benefits to the surrounding community. The purpose of the RLE Project is to foster economic development and benefit the community and public welfare though public transportation investment. In addition, mitigation measures identified as part of the Final EIS will address impacts associated with the project. Unlike the proposed RLE Project, which is proposed to be federally funded, private development that is funded without federal dollars does not have to complete the federal NEPA environmental process and agreements such as these are set up to establish some level of community partnership and public input into an otherwise relatively closed approval process. The EIS process, as adopted for the RLE Project, provides for extensive community involvement and outreach requirements, the identification and disclosure of impacts, and commitments to mitigation measures to avoid, minimize, or mitigate adverse impacts due to project implementation.

See response for page 4-2 regarding gentrification.

4-23 to 4-27: See response for page 4-23.

4-27: See response for page 4-23.

4-28: As described in **Section 4.5** of the Final EIS, CTA would construct a noise barrier extending from the top surface of the concrete deck to a minimum height of 3.5 feet above the top of rail elevation to reduce noise transmission at and below the height of the tracks. The 3.5-foot-high noise barrier would provide up to a 15- A-weighted decibels (dBA) reduction in noise along both sides of the elevated track structure from the just east of Wentworth Avenue to the CN/MED tracks near 119th Street. All severe noise impacts would be resolved with mitigation. Moderate noise impacts are expected to remain at 15 residences after noise barrier mitigation, primarily because of their

proximity to track turnouts and crossovers. However, these residual impacts are in the lower 50 percent of the moderate noise impact zone, with projected noise increases of less than 3 dBA. Other means to mitigate the moderate noise impacts remaining after noise barrier mitigation may be examined during detailed design.

CTA would need to temporarily close the northwest corner of Wendell Smith Park in order to construct the RLE Project. Based on the discussions between Chicago Park District and CTA about construction activities within the northwest corner of Wendell Smith Park, the Chicago Park District agrees that the construction activities would be considered a temporary occupancy under 23 CFR § 774.13 that is so minimal as to not constitute a Section 4(f) use. CTA would obtain the required permit from the Chicago Park District and restoration of any disturbed areas and tree replacement would be provided after construction is complete. There would be no permanent impacts to the park.

See response for page 2-13 regarding project-related job opportunities.

4-30: See response for page 2-13 regarding project-related job opportunities.

4-31: See response for page 2-13 regarding project-related job opportunities.

4-33: The document cited in the comment (from the UIC Voorhees Center) was one of the documents referenced to assess potential community impacts. The TSD Plan and the principles of eTOD as discussed in **Chapter 5** of the Final EIS.

CTA recognizes that property owners adjacent to the UPRR currently experience noise and vibration impacts from the UPRR freight rail that operates in the corridor and property owners have expressed concerns about additional increases to noise and vibration from the RLE Project. CTA conducted a detailed noise and vibration analysis as part of the Final EIS (See **Section 4.5**). It should be noted that the requirements for this type of analysis as well as mitigation required are based on quantitative measures that measure the additive effect of the project. In other words, the impacts of this RLE Project and required mitigation are based on the project impact. CTA has no way to change or mitigate existing noise from UPRR's train operations. CTA would construct a noise barrier extending from the top surface of the concrete deck to a minimum height of 3.5 feet above the top of rail elevation to reduce noise transmission at and below the height of the tracks. The 3.5-foot-high noise barrier would provide up to a 15-dBA reduction in noise along both sides of the elevated track structure from the just east of Wentworth Avenue to the CN/MED tracks near 119th Street. All severe noise impacts would be resolved with mitigation. Moderate noise impacts are expected to remain at 15 residences after noise barrier mitigation, primarily because of their proximity to track turnouts and crossovers. However, these residual impacts are in the lower 50 percent of the moderate noise impact zone, with projected noise increases of less than 3 dBA. Other

means to mitigate the moderate noise impacts remaining after noise barrier mitigation may be examined during detailed design.

Michigan Avenue station design has been refined since the Draft EIS to locate the parking and bus facilities from the south side to the north side of the UPRR. The location of the station parking is dependent on confirmation of availability of parcels and future coordination with the City of Chicago. The park & ride facilities were also modified such that the Michigan Avenue station garage was replaced by a surface parking lot.

4-35: Community facilities and how they would be affected by the Preferred Alignment are discussed in **Section 4.3** and presented in **Figure 4-5**.

See response for page 2-13 regarding project-related job opportunities.

4-43: See response for page 2-13 regarding project-related job opportunities.

Section 2.3 of the Final EIS provides details of the construction activities. In summary, most of the alignment from 99th Street to 119th Street, construction activities include construction of a foundation and pier, followed by placement of beams between piers, and then completion of the track structure on the beams. Within a single block, these activities would take several months to complete. At the four locations with stations, the construction activities not only include the aerial track structure, but also the station itself with station house, platforms, stairs, elevators and all the other ancillary features of stations. At the station locations, the construction activities would take a few years to complete. Once the main features of the stations have been built, much of the work would take place within the station itself, such as wiring, signage, lighting, and installation of fare collection equipment.

4-45: The park & ride facility for the Michigan Avenue station has been refined from the Draft EIS and is now located on the north side of the existing UPRR track within a light industrial/commercial area. The park & ride facility is in context of the surrounding community and would not be adverse after mitigation. The park & ride facility that was in the Draft EIS was out of character and size with the surrounding neighborhood and mitigation measures would have reduced the impacts but due to the structure's size and distance to residential areas, the impacts would remain adverse despite mitigation.

4-48: CTA analyzed noise and vibration impacts according to the latest federal guidance, FTA's 2018 *FTA Transit Noise and Vibration Impact Assessment Manual*. The impact analysis methodology takes squeal noise and station noise into account.

Based on the proposed RLE operations and the existing noise in the corridor, CTA performed a detailed noise analysis that identified moderate and severe impacts based on FTA criteria, which

account for additional noise that would occur near stations. Parcel size is not a factor in developing the noise impact analysis; the analysis would not change if the adjacent parcels were large or small.

Roseland Community Hospital is more than ¼ mile from the project alignment and would not be impacted by noise or vibration based on the detailed analysis conducted for the Final EIS. The Roseland Community Hospital would experience no moderate or severe noise impacts because of the RLE Project.

See response for page 4-28 for the mitigation measures for noise impacts.

4-50: Freight rail vibration levels were measured in September 2020 and are accounted for as part of the existing background vibration in the corridor. CTA then calculated potential impacts on the vibration sensitive resources based on the change in vibration between the existing conditions and the potential for vibration due to the Preferred Alignment. No vibration impacts are projected at any of the residential or institutional receivers along the Preferred Alignment.

4-52: Vacant properties were included in the counts of affected receivers as a conservative assumption to fully disclose all potential impacts. These properties could be sold by their respective owners in the future. See response for page 4-2 regarding gentrification.

4-55: The detailed noise impact analysis takes into account existing noise in the project corridor, which includes the existing freight traffic. As described in **Section 4.5.2** of the Final EIS, CTA obtained noise measurements in September 2020 at representative noise-sensitive receiver locations along the alignment. Details are presented in **Appendix O**.

There are substantial differences between freight railcars and trains and the CTA railcars and trains. Loaded freight railcars can weigh 268,000 pounds or more, while CTA railcars with the maximum number of people on board weigh under 80,000 pounds—less than ⅓ the weight. The induced vibration is far less, due to the weight difference as well as other factors. (For instance, freight trains are typically longer than 8-car CTA trains.) With respect to noise, the CTA railcars will run on a "closed deck" with noise barriers on both sides. The freight trains have no noise barrier. The noise and vibration analysis determined that, with the noise barriers, there would be no severe impacts "receivers" (residences, schools, churches, or parks) along the corridor with 15 moderate level impacts remaining at residential houses. Additionally, CTA is not responsible for mitigating noise, vibration, or other impacts caused by freight rail or other passenger rail facilities. The potential Metra Southeast Service project has not been funded locally or committed at the federal level, so it was not included in the analysis.

The design of structures must meet various technical requirements including resisting combinations of loads which may occur during the life of the structure. Dynamic loads, including vibration, are included in the loads accessed during the design phases. More information on the

potential for vibration from freight train passage affecting the CTA structure, including passenger platforms, would be available for designers after geotechnical investigation and determination of foundation types.

4-59: CTA analyzed noise and vibration impacts according to the latest federal guidance, FTA's 2018 *FTA Transit Noise and Vibration Impact Assessment Manual*. The impact analysis methodology takes squeal noise and station noise into account. Based on the proposed RLE operations and the existing noise in the corridor, an impact was assessed based on predictions at specific receivers rather than on contours as in a general assessment, and equations were employed for computations of ground and barrier propagation effects, which account for additional noise that would occur near stations.

4-60: The CTA structure will be designed to withstand vibration impacts from the existing freight traffic.

4-61: Avoiding impact pile driving in the vicinity of the historic Roseland Pumping Station, and the vicinity from the I-94 ramp crossing to the east of MED/CN and south of 130th Street, as well as adjacent to sensitive noise and vibration receivers identified in the Final EIS/ROD such as residences, parks, churches, etc.

4-66: The regulatory framework and methods used to perform the safety and security analysis are presented in **Section 4.6.1** of the Final EIS. Studies like those referenced do not meet federal standards. In addition, CTA frequently does Customer Satisfaction Surveys, and also surveys customers about safety and security concerns.

See response for page 2-13 regarding project-related job opportunities.

4-69: Based on public feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in January 2018. The Preferred Alignment is a hybrid of the East and West Options presented in the Draft EIS. With design refinements as part of the Preferred Alignment, park & ride locations will be on the same side of the UPRR tracks at the proposed stations. Impacts on pedestrian safety would not be adverse after implementation of the mitigation measures proposed in **Section 4.6.3** of the Final EIS.

4-72: Due to the time passed between the publication of the Draft EIS and the selection of the Preferred Alignment and the relocation of the 130th Street station, CTA and FTA reviewed the previous consulting party list for potential additions. In November 2020, CTA and FTA sent invitation letters to potential consulting parties that were not included in the Section 106 consultation for the Draft EIS. New invitees included: By the Hand Club Altgeld-Murray, Carver Military Academy High School, Chicago Housing Authority, People for Community Recovery, Red Line Extension Coalition, TCA Health, Pullman Civic Organization, Kickapoo Tribe of Oklahoma,

Little Traverse Bay Bands of Odawa Indians, and Menominee Indian Tribe of Wisconsin. In February 2021, the Greater Roseland Chamber of Commerce contacted CTA with a request to participate in the Section 106 process as a consulting party. In April 2021, CTA sent an invitation letter to one additional consulting party, the National Park Service (NPS) Pullman National Monument. A total of 22 new and returning organizations accepted participation as consulting parties.

4-76: The Draft EIS identified eight archeological sites within 0.6 miles of the project vicinity. The Phase I archeological survey required for the Preferred Alignment and conducted by CTA in June 2020, identified twelve archaeological sites recorded within 1 mile of the RLE Project vicinity. The shovel probes conducted as part of the archaeological investigation did not identify any cultural material and concluded that no recorded archaeological site would be impacted during construction of the Preferred Alignment (see the addendum to **Appendix Q** for more details). The investigations followed the guidelines issued by the State of Illinois.

4-78: The track structure would be approximately 9 feet west of the Roseland Pumping Station building at its nearest point for the East Option; however, CTA is not pursuing the East Option. The Preferred Alignment would be over 120 feet from the Roseland Pumping Station building and would avoid impacts.

Alternative methods to advance piles will be used near Roseland Pumping Station.

4-80: Based on public feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in January 2018. Distance to the Roseland Pumping Station was one of the considerations that helped CTA develop the Preferred Alignment; consequently, the Preferred Alignment follows the West Option alignment near the pumping station and would be over 120 feet from the Roseland Pumping Station building and would avoid impacts. Given the historical significance of the Roseland Pumping Station, pile driving will be avoided near the pumping station.

4-81: As described in **Section 4.8.3.2** of the Final EIS, the RLE Project has the potential for additional hazardous material impacts associated with the freight railroads near the RLE alignment; the RLE track structure would be at least 50 feet from the freight railroad tracks. Due to the distance from the freight railroads to the Preferred Alignment, hazardous material spills or releases that occur along these railroads would have the potential to migrate and affect the Preferred Alignment. These materials potentially exist along the railroad currently, but the Preferred Alignment would bring transit vehicles closer to them. Spills along the freight railroads could occur from the use of chemicals for ground maintenance along the tracks. In addition, because these are freight lines, releases could occur from creosote used to preserve wood railroad ties; polynuclear aromatic compound deposition from diesel exhaust; asbestos dust from brakes; and previous releases of coal ash from engines. Freight lines might also transport hazardous material cargo, which could be released if there were a spill or accident. Releases from adjacent freight lines could affect transit

passengers, operations, or the RLE structure. If adjacent freight lines have a release of hazardous materials, transit operations may need to be stopped to avoid traveling through the release area. First responders would follow the procedures and protocols for hazardous materials incidents established by the Hazardous Materials Unit of the City of Chicago Fire Department. Impacts associated with the adjacent freight lines would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 CFR § 171–180) that among other things, specify requirements for the safe transportation of hazardous materials by rail and require rail carriers to conduct a security and safety risk analysis, to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route.

4-84: The permanent envelope of an alternative or option includes the area used for the tracks, track structure, parking structures, as well as space to provide access for maintenance and operation activities. The permanent envelope is shown on the Plans and Profiles (**Appendix F**).

4-86: See response for page 2-13 regarding project-related job opportunities.

CTA would follow federal, state, and local laws and regulations regarding hazardous materials before and during construction. CTA will follow the best management practices as described in **Section 4.8.3.2** of the Final EIS. CTA will follow similar procedures at the 120th Street yard and shop as they follow at the other yards and shops in the CTA system.

4-87: Coordination with freight railroads is ongoing. If adjacent freight lines have a release of hazardous materials, transit operations may need to be stopped to avoid traveling through the release area. First responders would follow the procedures and protocols for hazardous materials incidents established by the Hazardous Materials Unit of the City of Chicago Fire Department.

See response for page 2-13 regarding project-related job opportunities.

CTA would follow federal, state, and local laws and regulations regarding hazardous materials before and during construction. As described in **Section 4.8** of the Final EIS, Phase I and Phase II Environmental Site Assessments (ESAs) have been conducted on properties to be purchased as part of the project. Phase I ESAs identify recognized environmental conditions (RECs) for not only the property itself, but also within standard distances from the property. Phase II ESAs were conducted on properties that had identified on or off-site RECs.

4-88: See response for page 2-13 regarding project-related job opportunities.

The contractor would be required to prepare and follow a Contaminated Material Management Plan that would provide procedures for identifying, characterizing, managing, storing, and disposing of contaminated soil and groundwater encountered during construction activities.

4-90: The Calumet River is outside the area of potential impact for the hazardous materials analysis and would not affect construction or operation of the RLE.

4-91: CTA identified wetland areas totaling 15.7 acres of potentially affected wetlands at the site of the 130th Street station and the 120th Street yard and shop. On June 2, 2016, FTA and CTA requested a jurisdictional determination from USACE to determine whether the wetlands are jurisdictional under the Clean Water Act or are isolated wetlands of Cook County. CTA received USACE's response to FTA and CTA's request after publication of the Draft EIS. USACE determined that there are no waterways, wetlands, or other areas considered "water of the United States" under USACE jurisdiction on the site. Wetland delineations are generally only valid for 5 years because environmental conditions may change. The Approved Jurisdiction Determination (AJD), which is only valid for 5 years, has expired. CTA submitted a formal AJD request on September 15, 2021. USACE determined that the site does not contain any waterways, wetlands or other areas considered "waters of the United States" under USACE jurisdiction in a letter dated January 19, 2022. Based on the information documented in the AJD, USACE will not require mitigation.

4-93: See response to page 4-91 above.

Chapter 5 - Indirect and Cumulative Impacts

5-1: See response for page 4-2 regarding gentrification.

5-2: See response for page 4-2 regarding gentrification. Cumulative impacts related to the CREATE project are discussed in **Section 5.3.2** of the Final EIS.

Figure 3-4 in the Final EIS shows all freight railroads near the RLE Project.

5-4: **Figure 4-14** in the Final EIS is a photo simulation of the 130th Street station parking structure.

Based on public feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in January 2018. Impacts from full implementation of CREATE and the proposed Metra Southeast Service Project would be as described in **Section 5.3.2**.

Chapter 7 - Environmental Justice

7-7: CTA will continue to work with and get input from the community as the project moves forward. As the project moves into final design, CTA will continue to work with the elected officials and community groups to develop a Construction Outreach and Coordination Plan and Business Outreach Program closer to the time of procurement of construction services. CTA will also work with the community, elected officials, and stakeholders on station plans and the potential for surrounding development as the project moves forward. CTA maintains a project contact list. Available contact information for each comment received has been added to the list. Information

about project progress will be distributed via e-mail and mailing address to the project contact list, as well as to the project website. Additional public meetings for the project were held as part of the Preferred Alignment announcement on February 13, 2018. Community meetings were held on December 8 and 9, 2020 as well as public hearings on February 15 and 17, 2022 for the Supplemental EA.

Please see the response to comments on the Executive Summary for details regarding CTA's robust public outreach process throughout the life of the RLE Project. CTA and the FTA determined that a single public hearing was sufficient for the Draft EIS for two reasons. First, the single alignment presented in the Draft EIS covers a smaller project area than the multiple alignments considered in the Alternatives Analysis and in early EIS outreach. Second, CTA conducted several smaller meetings for interested groups during the Draft EIS public comment period intended to supplement the public hearing, including nine community group meetings and three displacements-focused meetings. CTA also performed door-to-door outreach to residents and business owners directly impacted by the RLE East and West Options. The public hearing and community meetings were well-attended with a total of 485 meeting attendees: 280 people signed in at the public hearing; at least 150 people attended one of the nine community meetings; and 55 residents, property owners, and business owners attended the displacements-focused meetings, while many more had one-on-one meetings with RLE outreach personnel. CTA received 273 comments from individuals and community groups, along with comments from six public agencies, four railroads, and one Indian tribe. The attendance at the multiple Draft EIS meetings and the number of comments received demonstrate a robust Draft EIS outreach process and plentiful opportunities for public comment.

7-9: The 2005 and 2009 studies by the University of Illinois at Chicago Voorhees Center are referenced in **Section 4.1**. The Developing Communities Project is identified in **Chapter 1** of the Final EIS.

Attachment C – Response Letters to Agencies

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
BRUCE RAUNER, GOVERNOR ALEC MESSINA, ACTING DIRECTOR

October 28, 2016

Chicago Transit Authority
Sonali Tandon, Sr. Project Manager
567 West Lake Street
Chicago, IL 60661-1498

RE: CTA Red Line Extension

Dear Sir/Madam:

The Agency has no objections to the proposed CTA Red Line Extension project, however, a construction site activity stormwater NPDES permit is required for the construction of any new rail line and stations. Also, please be advised that any solid or hazardous waste must be properly disposed of or recycled.

Sincerely,

Alec Messina
Acting Director

4302 N. Main St., Rockford, IL 61103 (815)987-7760
595 S. State, Elgin, IL 60123 (847)608-3131
2125 S. First St., Champaign, IL 61820 (217)278-5800
2009 Mall St., Collinsville, IL 62234 (618)346-5120

9511 Harrison St., Des Plaines, IL 60016 (847)294-4000
412 SW Washington St., Suite D, Peoria, IL 61602 (309)671-3022
2309 W. Main St., Suite 116, Marion, IL 62959 (618)993-7200
100 W. Randolph, Suite 10-300, Chicago, IL 60601

PLEASE PRINT ON RECYCLED PAPER

From: Tandon, Sonali <STandon@transitchicago.com>
Sent: Wednesday, November 09, 2016 10:33 AM
To: Iacullo, Joseph C.
Subject: RE: Address change

Joseph,

Thank you for sending us the new address, we will update our records and send future RLE information at this address.

Sonali Tandon
Senior Project Manager – Planning
Chicago Transit Authority
312-681-4246

Preliminary Draft - For Discussion Purposes Only: This email may contain material that is confidential and privileged for the sole use of the intended recipient. Any review, reliance or distribution by others or forwarding without express permission is strictly prohibited. If you are not the intended recipient, please contact the sender and delete all copies.

From: Iacullo, Joseph C. [mailto:Joseph.Iacullo@Illinois.gov]
Sent: Wednesday, November 09, 2016 12:20 PM
To: Tandon, Sonali
Subject: Address change

Sonali,
Please forward any future Red Line Extension information to our new address below.
Thank you.

Joseph Iacullo
Section Chief-Northeastern Illinois
Office of Intermodal Project Implementation
Illinois Department of Transportation
69 W. Washington, Suite 2100
Chicago, Illinois 60602
P:312-793-0035
C:312-519-4928
joseph.iacullo@illinois.gov
Please consider the environment before printing this e-mail.

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#276

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

NOV 29 2016

REPLY TO THE ATTENTION OF: E-19J

Mark Assam
Federal Transit Administration
200 W. Adams Street, Suite 320
Chicago, Illinois 60606

Carole Morey
Chicago Transit Authority
567 W. Lake Street
Chicago, Illinois 60661

Re: Chicago Red Line Extension Project, Draft Environmental Impact Statement, City of Chicago, Cook County, Illinois, CEQ #20160231

Dear Mr. Assam and Ms. Morey:

The U.S. Environmental Protection Agency is providing comments in response to the Draft Environmental Impact Statement (DEIS) for the above mentioned project. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. The Federal Transit Administration (FTA) is the lead agency for this project under NEPA, and the Chicago Transit Authority (CTA) is the project proponent.

The proposed project would extend the existing Red Line heavy rail transit service 5.3 miles south from the existing 95th Street Terminal to Chicago's Far South Side. The proposal includes four stations and a rail yard and shop. The project team assessed action alternatives over multiple years. With input from local residents, the team selected two action alternatives for full analysis in the DEIS. Both alternatives largely follow existing transportation corridors to minimize community disruptions. The East Alignment runs to the east of Union Pacific Railroad (UPRR) freight tracks from near Eggleston Avenue to near Prairie Avenue, and the West Alignment runs west of the UPRR tracks over the same distance. South of this point, both alignments follow the same route southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad right-of-way.

EPA recognizes the critical community, environmental, and health benefits that well-planned transit service could provide to communities along the corridor. The project area is home to minority and low-income communities, has experienced decades of disinvestment, and is underserved by public transportation connections to Chicago's major activity centers. The project would reduce commute times for residents, improve mobility and accessibility, and provide connections to other transportation modes. The project could also foster important economic development and neighborhood revitalization near the new stations.

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We have rated the DEIS as *Lack of Objections* (LO) (see enclosed "Summary of Rating Definitions"). While we do not have objections to the project, we offer recommendations in the enclosed detailed comments to help ensure protection of the environment and human health during project construction and operation.

We appreciate the opportunity to provide comments. If you have any questions or would like to discuss our recommendations, please contact Jen Blonn, the lead reviewer for this project, at 312-886-6394 or blonn.jennifer@epa.gov.

Sincerely,

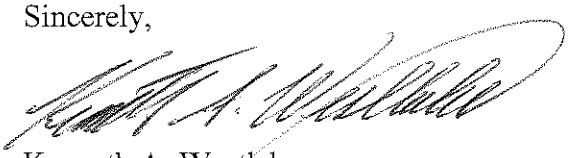

Kenneth A. Westlake
Chief, NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosure: Summary of Rating Definitions
EPA's Detailed Comments

Cc via email: Paul Leffler, U.S. Army Corps of Engineers, Chicago District

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment

Environmental Justice and Community Engagement

In order to promote environmental justice, Executive Order 12898 requires federal agencies to identify and address disproportionately high and adverse impacts of all programs, policies, and activities on low income and/or minority populations. The project area consists entirely of minority communities, and contains some low-income areas. The Chicago Transit Authority (CTA) analyzed environmental justice implications of the proposed project, and concluded that: (1) the project would offer substantial benefits to the resident minority and low-income populations, and (2) with proposed mitigation, impacts would not be disproportionately high or adverse. Further, the Draft Environmental Impact Statement (DEIS) explains that CTA has undertaken a robust outreach program to share information and gain input from minority and low-income communities in the project area.

The proposed project was initiated by communities with the goals of connecting historically disadvantaged areas to Chicago's major employment and activity centers, increasing access to employment, and spurring economic development (Appendix X, page 1-1). Nearly all communities that CTA identified as both low-income and minority, such as the Altgeld Gardens Public Housing Project, are currently geographically or physically isolated from timely, reliable transit access to Chicago's downtown and other hubs for jobs and services.

EPA recognizes that the project would disrupt communities by displacing 205 to 260 parcels, depending on the alternative selected. We also understand that residents would be offered fair compensation and relocation assistance per the Uniform Relocation Assistance and Real Property Acquisition Policies Act. The DEIS also states that vacant parcels, homes, and commercial spaces are available to allow relocation within the same neighborhoods.

The Illinois Childhood Asthma Surveillance Report, 2011-2014 was released by the Illinois Department of Public Health in November 2016. The report found that rates of childhood asthma inpatient hospitalizations and emergency room visits were highest among young Black children, and there were significantly higher rates of hospitalizations in disadvantaged geographic areas, including lower-income neighborhoods.[1] This is particularly relevant to the project because nearly all residential portions of the project area contain over 75 percent African American residents, with many areas approaching 100%. Several areas are also low-income.

Recommendations for the Final Environmental Impact Statement (FEIS):

- Continue to actively engage community groups, residents, businesses, and other stakeholders in the project area, and document coordination in the FEIS. Include a description of how local input is being used to inform project design and implementation.
- Commit to provide a single point of contact for residents to gain information and assistance related to displacements and relocations in order to minimize hardships and

[1] Illinois Childhood Asthma Surveillance Report, 2011-2014. Illinois Department of Public Health. Available at: http://www.dph.illinois.gov/sites/default/files/publications/publicationsowh2016-il-childhood-asthma-surveillance-report_0.pdf

transaction costs, and commit to provide special assistance to enable displaced households and businesses to remain in the same neighborhood, if desired.

- Consider promoting local hiring for project construction and operations.
- Consider existing childhood asthma conditions in the project area. If conditions warrant, strengthen construction air pollution mitigation measures to ensure protection of children's health, in line with Executive Order 13045 on Protection of Children from Environmental Health Risks and Safety Risks.
- In order to best protect communities throughout the construction and operational phases of the proposed project, we recommend compiling all mitigation commitments into a single list, sorted by topic. Residents would then have a single source to easily identify protective measures that should be taken. Include a phone number and email address for residents to contact if they believe appropriate measures are not being taken. This is particularly important for construction air emission mitigation measures, such as idling time for heavy duty trucks. As an example of the type of list we are recommending, see the Michigan Department of Transportation's project mitigation summary "Greet Sheets," which are available online for many projects.
- To help offset any residual impacts to local communities from project construction, including land acquisition and construction air emissions, consider promoting local hiring for project construction and operations.

Noise Impacts and Mitigation

The DEIS explains that without mitigation the East Alternative would result in 574 moderate and 83 severe noise impacts (page 4-60). Without mitigation, the West Alternative would result in 738 moderate and 40 severe noise impacts (page 4-65). For either option, the DEIS explains that CTA would construct a noise barrier approximately 4 feet in height that would provide a 10-dBA reduction in noise on both sides of the track from the 95th Street Terminal to near 119th Street, and no moderate or severe noise impacts would remain after mitigation (page 4-65).

The discussion on noise impacts in Appendix O differs from the body of the DEIS. Appendix O states, "A noise barrier approximately 4 feet in height would provide a 7 to 10-dBA reduction in noise level in the surrounding community. A noise barrier approximately 4 feet in height on an aerial structure that would provide a 10-dBA reduction could result in no impacts remaining after mitigation" (page 5-13). It's unclear whether the proposed mitigation would provide a 7 or 10-dBA reduction in noise, and whether impacts would remain if a 7-dBA reduction is achieved.

Appendix O also states that, with a noise reduction of 10-dBA, moderate noise impacts "would decrease from 280 feet without mitigation to 60 feet from the centerline of the tracks with mitigation" (page 6-61). It's unclear whether any structures would be close enough to the track to experience noise impacts after mitigation. For example, the home pictured on page 5-20 of Appendix L appears close to the tracks and potentially within 60 feet.

Recommendations for the FEIS:

- Clarify whether the proposed noise wall might result in a 7-dBA reduction in noise, as opposed to a 10-dBA reduction.
- Discuss whether any sensitive receptors would be located close enough to tracks to experience moderate impacts after mitigation.

- Quantify expected noise levels after mitigation, and include results in a table.
- If any moderate or severe noise impacts would remain after mitigation, clearly depict impacts on a map of the project area.
- Consider testing for noise after the project is operating to determine whether anticipated noise reductions were achieved, and providing a number and email for residents to contact if they have concerns.
- If any moderate or severe impacts could remain, consider offering additional mitigation, such as window treatments and insulation.

Air Quality Impacts and Mitigation

Air quality impacts and mitigation measures are discussed in DEIS Section 6.1 and Appendix U. CTA trains would run on electricity, meaning there would be no emissions in the project area from operations, which would benefit the local environment and residents' health. Construction activities would take up to five years (page 4-7) and would result in local emissions. As discussed in the DEIS, short-term exposure to diesel exhaust can adversely impact health. We appreciate the list of mitigation measures (page 6-3) that would be implemented to minimize air emissions during construction activities.

Recommendations for the FEIS and Record of Decision:

- Firmly commit to all proposed construction air quality mitigation measures in the FEIS and Record of Decision. Add specificity wherever possible, such as strict maximum time limits for heavy truck idling.
- Per Executive Order 13045 on children's health, pay particular attention to worksite proximity to places where children live, learn, and play, such as homes, schools, daycare centers, and playgrounds. Construction emission reduction measures should be strictly implemented near these locations in order to be protective of children's health.
- Assess whether any trees or shrubs that would be removed during project construction currently serve as a protective barrier against air pollution by minimizing exposure of freight emissions to nearby residents. If the removal of such trees/shrubs would increase residents' exposure to freight emissions, then commit to replant appropriate species.[2]

Station and Station Area Development

The proposed project includes four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Plans call for the northernmost two stations to have surface parking lots only, the Michigan Avenue station to have a parking structure with ground-floor retail and community facilities, and the 130th street station to have a seven-story parking structure. New rail stations offer a valuable opportunity to create new inter-modal community hubs, generate economic development, and improve walkability and bike-ability of the surrounding area.

EPA is focused on promoting health, and crime is one factor that impacts health. The DEIS discusses concerns about safety and criminal activity raised by residents during the scoping period. While Appendix P includes crime heat maps of the project area, crime in the project area is not compared to crime in other parts of the city. It is, therefore, unclear whether safety

[2] For best practices, see: Baldauf, R. Recommendations for Constructing Roadside Vegetation Barriers to Improve Near-Road Air Quality. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-16/072, 2016.

measures are needed beyond what CTA employs for typical stations. In addition, studies from other cities on the incidence of crime on and around new transit are discussed, but it is unclear how applicable those studies are to this project area.

Recommendations for the FEIS:

- Engage residents in station and station-area planning visioning activities and use information to inform station designs. Form or use existing partnerships with community groups and local and regional planning organizations to fully take advantage of station-area planning opportunities. Consider incorporating plans for multi-modal connectivity, complete streets, and creating stations as unique neighborhood destinations. Document coordination and plans in the FEIS.
- Consider opportunities for green building in station designs, such as: planning for net-zero energy use, obtaining Leadership in Energy and Environmental Design (LEED) or similar certifications, incorporating green infrastructure for stormwater management, and incorporating on-site renewable energy sources.
- Discuss whether crime rates in any of the proposed station areas warrant a higher-level of attention in upfront planning to make stations and station-areas safe for users. If warranted by existing crime rates and concerns raised by residents during scoping, then consider additional measures to maximize safety for riders. Discuss crime prevention through environmental design (CPTED) and recommendations raised by local residents. While the DEIS considers several protective measures, we recommend providing clear commitments in order to more fully disclose potential impacts and outcomes.
- We encourage CTA, the City of Chicago, and neighborhood organizations to consider EPA resources that support sustainable community development around station areas. Grant and technical opportunities are periodically available at: https://www.epa.gov/smartgrowth. For more information, contact Jen Blonn at blonn.jennifer@epa.gov

Climate Change Adaptation and Resiliency

The DEIS and Appendix U discuss the proposed project's contribution to global climate change. The project would bring a new electric train to the Far South Side of Chicago, which would provide a lower-emissions alternative to automobile travel. The analysis quantifies greenhouse gas (GHG) emissions and concludes that emissions would be lower if the project is implemented as compared to the no action alternative.

In addition to considering the potential effects of the proposed action on climate change by evaluating the GHG emissions associated with the project, which is included in the DEIS, we recommend that FTA consider the effects of climate change on the proposed action. The DEIS does not include consideration of future climate scenarios, and how they may impact the proposal and its impacts. Including future climate scenarios, such as those provided by the U.S. Global Climate Change Research Program's National Climate Assessment (NCA),[3] provides information valuable to determining how changing climate could affect the environmental impacts of a project, and how the project could be made more resilient to the impacts of climate change. The NCA's section on the Midwest provides a useful starting place for analyzing

[3] U.S. Global Change Research Program, 2014 National Climate Assessment, available at: http://nca2014.globalchange.gov/report

changing climate conditions. The report finds that, in the Midwest, extreme heat, heavy downpours, and flooding will affect infrastructure, health, air and water quality, and more.

Recommendations for the FEIS:

- Consider the effects of climate change on the proposed action.
- Determine whether the environmental impacts of the alternatives would be exacerbated by climate change. This determination should be informed by assessing future climate scenarios in the FEIS. If impacts may be exacerbated, additional mitigation measures may be warranted.
- We also recommend that the project team consider whether measures are needed to improve resiliency to climate change in the project's design, where appropriate. These changes could be informed by an assessment of future climate scenarios in the "Affected Environment" section. The FEIS's alternatives analysis should, if appropriate, consider practicable changes to the proposal to make it more resilient to anticipated climate change.

Wetlands and Natural Areas

CTA identified 15 wetland areas totaling 15.34 acres of potentially affected wetlands in the project area. We understand that the Federal Transit Administration (FTA) and CTA requested a jurisdictional determination from the U.S. Army Corps of Engineers (Corps) to determine whether the wetlands are jurisdictional under the Clean Water Act (CWA), and that coordination with the Corps is ongoing (page 4-93). If jurisdictional wetlands cannot be avoided, the DEIS explains that CTA would provide compensatory mitigation; potential nearby areas for mitigation are discussed.

Recommendations for the FEIS:

- Document subsequent coordination with the Corps on the need for a CWA Section 404 permit.
- If waters in the project area are jurisdictional, then demonstrate that all potential impacts have been avoided and minimized to the extent practicable, in line with the Clean Water Act Section 404(b)(1) Guidelines.
- If resources cannot be avoided and/or minimized, clearly demonstrate how cost, logistical, or technological constraints preclude avoidance and/or minimization of impacts.
- Discuss any proposed mitigation, including mitigation sequencing per the CWA Section 404(b)(1) Guidelines, and describe of how mitigation will comply with the 2008 Mitigation Rule.
- Consider local mitigation for tree removal for the approximately 13 acres of forested habitat in the vicinity of the 120th Street yard and shop as well as the 61 acres of habitat associated with the East Option and the 67 acres associated with the West Option, as described on pages 6-6 and 6-7 of the DEIS.

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

April 3, 2018

Jen (Blonn) Tyler
Chief, NEPA Implementation Section
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, IL 60604

Re: CTA Red Line Extension Project Update - Draft Environmental Impact Statement Response to Comments

Dear Ms. Tyler:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), continues its planning and public outreach for the Red Line Extension (RLE) Project. As our January 26, 2018 letter noted, CTA has now selected a Preferred Alignment for the project. CTA hosted an Open House on February 13th from 6-8pm at Gwendolyn Brooks Academy to provide the public as well as invited participating and cooperating agencies an update on the Preferred Alignment. The Open House had CTA staff and consultants stationed at boards and workstations to provide information on the Preferred Alignment and anticipated project benefits and impacts. 246 people attended the Open House. The Open House boards are posted on the CTA website at the following link:
http://www.transitchicago.com/assets/1/planning/RLE_Open_House_Exhibit_Boards_20180213.pdf

The Final EIS will be prepared for this selected alignment. CTA recognizes your recommendations for the Final EIS related to Environmental Justice and Community Engagement, Noise Impacts and Mitigations, Air Quality Impacts and Mitigations, Station and Station Area Development, Climate Change Adaptation and Resiliency, and Wetland and Natural Areas. We will consider these recommendations to add clarifications, conduct additional analysis, add supplemental documentation, and further develop and finalize the mitigation measures in the Final EIS. All correspondence including approved mitigation measures and commitments will be included in the Final EIS.

Additional information about the project is available at the project website:
www.transitchicago.com/RedEIS.

If you have any questions or would like to discuss the project further, please do not hesitate to contact either:

Sonali Tandon
Senior Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661
(312) 681-4246
standon@transitchicago.com

Tony Greep
Community Planner
US Department of Transportation
Federal Transit Administration – Region 5
200 W. Adams Street, Suite 320
Chicago, IL 60606
(312) 353-1646
anthony.greep@dot.gov

Thank you for your cooperation and continued participation in this project.

Sincerely,

Tony Greep
FTA Community Planner

#277

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

November 30, 2016

9043.1
ER 16/0589

Marisol Simon
Regional Administrator
Federal Transit Administration
200 West Adams Street, Suite 320
Chicago, Illinois 60606

Dear Ms. Simon:

The Department of the Interior (Department) has reviewed the Draft Individual Section 4(f) Evaluation for the Chicago Transit Authority Red Line Extension, Chicago, Illinois. The Department offers the following comments and recommendations for your consideration.

Section 4(f) Comments

This document considers effects to identified properties in the project study area eligible to be considered under Section 4(f) of the Department of Transportation Act of 1966 (codified at 49 U.S.C. 303§ 771.135) associated with the Chicago Transit Authority Red Line Extension (RLE). The project purpose is to extend the existing Red Line heavy rail transit service 5.3 miles south from the existing 95th Street Terminal to 130th Street on Chicago's Far South Side. Two options for the extension are proposed, the East and West Options.

The draft section 4(f) evaluation, prepared by the Chicago Transit Authority (CTA) and Federal Transit Administration (FTA) in cooperation with the Federal Highway Administration (FHWA), considered the impacts to three Chicago Park District properties: Wendell Smith Park, Block Park, and Fernwood Parkway.

Under the East Option, a new elevated Red Line structure would be constructed, affecting the northwest corner of Wendell Smith Park and affecting a portion of the western parcel of Block Park. Approximately 0.7 acre of Wendell Smith Park and 0.9 acre of Block Park would be affected by the East Option. Both Wendell Smith Park and Block Park would continue to provide park space to the surrounding community after implementation of the East Option, but park area would be reduced. Under the West Option, a new elevated Red Line structure would be constructed over a portion of Fernwood Parkway from 99th Street to 103rd Street between the

existing UPRR tracks and Eggleston Avenue. Approximately 1.9 acres of Fernwood Parkway would be affected by the West Option.

CTA developed preliminary mitigation measures, taking into account impacts on park acreage and the attributes, features, and amenities of each park. These mitigation measures were developed so that the result of implementation of either option would result in no adverse impact on parks after mitigation. A major feature of these mitigation measures includes developing replacement parkland in or near the community areas affected as well as replacement of the park attributes, features, or amenities affected by the construction of the RLE Project.

Based on discussions with FTA and coordination with the Chicago Park District (CPD) in 2015 on park impacts and proposed mitigation measures for this project, a Section 4(f) preliminary "*de minimis*" finding was proposed for park impacts resulting from this project after mitigation proposed. A *de minimis* impact for parks, recreation areas, or wildlife/waterfowl areas is defined in 23 CFR § 774.17 as one that is determined to not adversely affect the features, attributes, or activities qualifying a property for protection under Section 4(f).

The Department of the Interior does not comment on *de minimis* determinations. The Department concurs with the determination that all measures to minimize harm have been employed concerning the resources subject to 4(f) use.

The Department has a continuing interest in working with FTA and FHWA to ensure impacts to resources of concern to the Department are adequately addressed. For issues concerning section 4(f) resources, please contact the Acting Regional Environmental Coordinator, Midwest Regional Office, National Park Service, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1534.

We appreciate the opportunity to provide these comments.

Sincerely,

Lindy Nelson
Regional Environmental Officer

cc: NPS-Boswell

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
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April 3, 2018

Lindy Nelson
Regional Environmental Officer
United States Department of the Interior
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

Re: CTA Red Line Extension Project Update - Draft Environmental Impact Statement Response to Comments

Dear Ms. Nelson:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), continues its planning and public outreach for the Red Line Extension (RLE) Project. As our January 26, 2018 letter noted, CTA has now selected a Preferred Alignment for the project. CTA hosted an Open House on February 13th from 6-8pm at Gwendolyn Brooks Academy to provide the public as well as invited participating and cooperating agencies an update on the Preferred Alignment. The Open House had CTA staff and consultants stationed at boards and workstations to provide information on the Preferred Alignment and anticipated project benefits and impacts. 246 people attended the Open House. The Open House boards are posted on the CTA website at the following link:
http://www.transitchicago.com/assets/1/planning/RLE_Open_House_Exhibit_Boards_20180213.pdf

The Final EIS will be prepared for this selected alignment. CTA thanks you for your comment on the Draft EIS, which was published in October 2016, and your concurrence with the determination that all measures to minimize harm have been employed concerning the resources subject to Section 4(f) use. As part of the Final EIS, FTA and CTA will continue to work with the Chicago Park District to finalize mitigations.

Additional information about the project is available at the project website:
www.transitchicago.com/RedEIS.

If you have any questions or would like to discuss the project further, please do not hesitate to contact either:

Sonali Tandon
Senior Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661
(312) 681-4246
standon@transitchicago.com

Tony Greep
Community Planner
US Department of Transportation
Federal Transit Administration – Region 5
200 W. Adams Street, Suite 320
Chicago, IL 60606
(312) 353-1646
anthony.greep@dot.gov

Thank you for your cooperation and continued participation in this project.

Sincerely,

Tony Greep
FTA Community Planner

#278

FILE COPY

Illinois Department of Transportation

Office of Highways Project Implementation / Region 1 / District 1
201 West Center Court / Schaumburg, Illinois 60196-1096

November 30, 2016

An official response letter was not issued to IDOT; however, CTA has been coordinating with IDOT regarding the RLE Project that addressed IDOT's comments. CTA and IDOT have regularly scheduled meetings to discuss the RLE.

Ms. Sonali Tandon
Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Dear Ms. Tandon:

The Illinois Department of Transportation (Department) thanks the Chicago Transit Authority (CTA) for the opportunity to review the Draft Environmental Impact Statement (DEIS) for its proposed Red Line Extension (RLE) from 95th Street to 130th Street. The Department offers the following comments that should be considered as this project moves into the Final EIS phase.

Traffic Projections
The CTA previously used year 2030 traffic projections for the DEIS in order to screen a range of alternatives. Since the CTA has chosen a preferred alternative, the Department requests that all transportation impacts and mitigation be evaluated using year 2040 traffic projections for the project's Final EIS.

Interstate 57 and Interstate 94
Previously, the Department requested that all proposed piers, abutments and barrier walls necessary to carry the RLE over Interstate 57 and Interstate 94 be placed in such a way that these roadways could be widened in the future should the need arise. Appendix F shows a potential hammerhead pier within the "Envelope For Future IDOT Widening" along Interstate 57 west of Wentworth Avenue. In addition, it appears as though a column is proposed on top of the existing Interstate 94 Tunnel Structure. A column on top this existing structure would not be allowed. Please revise the proposed pier locations for the CTA's RLE.

130th Street at Indiana Avenue
A northbound right-turn lane is proposed at this intersection as mitigation for the project's traffic impacts. When this project enters into the preliminary engineering phase, an Intersection Design Study (IDS) as well as traffic signal and roadway improvement plans will need to be submitted to the Department for review and approval.

127th Street at Vermont Avenue and Wallace Street
A northeast bound right-turn lane and a westbound left-turn lane are proposed as mitigation for the project's traffic impacts at this intersection. The northeast bound to northbound movement at this intersection would also be restricted. The restriction of this movement is impractical considering the geometry of the intersection. Please consider other strategies in order to mitigate for the project's impact to this intersection. Additionally, while the pavement width on 127th Street appears to be able to accommodate the westbound left-turn channelization and the receiving throat of the dual right-turn lane, the roadway is currently striped as one lane in each direction. To further complicate the proposed design, unsignalized pedestrian crosswalks are located on both sides of the intersection. As such, careful consideration will be needed in order to properly tie into existing conditions. When this project enters into the preliminary engineering phase, an IDS as well as traffic signal and roadway improvement plans will need to be submitted to the Department for review and approval.

130th Street Station
There will be approximately 2,500 to 3,000 new vehicular trips generated at the RLE's southern terminus at the 130th Street Station. The DEIS analyzed the signalized intersection of 130th Street and Ellis Avenue with the generated vehicular trips as through movements. However, the generated vehicular trips will need to turn either right or left at the intersection in order to access the Station along the north side of 130th Street. As such, please revise the Build Traffic Volumes at this intersection to reflect the vehicular trip generated traffic volumes as turning movements at the intersection and propose strategies to mitigate for the RLE's incremental impacts. When this project enters into the preliminary engineering phase, an IDS as well as traffic signal, and roadway improvement plans for the 130th Street at Ellis Avenue intersection will need to be submitted to the Department for review and approval.

Also, the DEIS did not analyze the impacts of the 130th Street Station on the Interstate 94 interchange. Please analyze the project's impacts and propose mitigation as necessary. Any improvement plans proposed at the interchange of I-94 at 130th Street will need to be submitted to the Department for review and approval.

If you have any questions or need additional information, please contact me or John Baczek, Project and Environmental Studies Section Chief, at (847) 705-4104.

Very truly yours,

John Fortmann, P.E.
Region One Engineer

cc: Luann Hamilton – CDOT
John Yonan – CCDOTH
Jesse Elam – CMAP

bcc: John Fortmann
José Rios
Steve Travia
Lisa Heaven-Baum
Peter Harmet
File

Prepared By: Jason Salley Ext. 4085
Bureau of Programming

S:\WP\p&es\GEO\JasonS\City of Chicago\CTA's Red Line Extension\IDOT to CTA Letter 113016.docx

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

#279

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December 20, 2016

Metropolitan Water Reclamation District of Greater Chicago's Public Comments on Chicago Red Line Extension Project Draft Environmental Impact Statement

INTRODUCTION

Pursuant to 40 CFR §1503.3, the Metropolitan Water Reclamation District of Greater Chicago (MWRD) hereby submits its written public comments pertaining to the Chicago Red Line Extension Project Draft Environmental Impact Statement (Draft EIS).

SUMMARY

The MWRD commends the U.S. Department of Transportation, Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) for pursuing the CTA Red Line Extension (RLE) and for providing this opportunity to publicly comment during the Draft EIS stage. As will be more fully set forth below, the MWRD recognizes the critical need for rail transit options south of 95th Street in the City of Chicago and believes the RLE can serve as a catalyst for positive change in the areas that will be served. Specific to the MWRD's interests, the MWRD believes that synergies can be created between the CTA, MWRD and other stakeholders in the area around the proposed 130th Street Terminal that will complement what the MWRD has been doing at its Calumet Water Reclamation Plant (WRP).

There are challenges and opportunities that the MWRD encourages the FTA and CTA to examine as the RLE continues to be developed. Specifically, in these public comments, the MWRD will provide comments on odor issues that exist in the 130th Street Industrial Corridor, some coming from the MWRD Calumet WRP and others coming from nearby industry. Additionally, the MWRD will comment on how the RLE Draft EIS has identified 15 MWRD parcels that would be needed under either of the proposed alternatives and the challenges and opportunities that acquisition of these parcels entails.

BACKGROUND

The MWRD is a special district unit of local government created by the Illinois General Assembly and organized under Illinois Compiled Statute 70 ILCS 2605/1 *et seq.*, and is funded primarily through local property taxes. Among the MWRD's responsibilities are the operation of a waste water conveyance and treatment system that includes seven Water Reclamation Plants (WRPs) that serve an area of approximately 883.6 square miles, including the City of Chicago and 128 surrounding municipalities. The MWRD serves an equivalent population of 10.35 million people; 5.25 million real people, a commercial and industrial equivalent of 4.5 million people, and a combined sewer overflow equivalent of 0.6 million people.

The MWRD's mission is to protect the health and safety of the public in its service area, protect the quality of the water supply source (Lake Michigan), improve the quality of water in watercourses in its service area, protect businesses and homes from flood damages, and manage water as a vital resource for its service area. The MWRD collects wastewater from municipalities, conveys it to WRPs, provides treatment and discharges clean water to local waterways. The MWRD is also responsible for stormwater management for all of Cook County.

The Calumet WRP was placed into operation in 1922 and serves over 1 million people, in 49 different municipalities (including Chicago), within 300 square miles in southern Cook County, Illinois. The Calumet WRP receives its sewage flow from four intercepting sewers and has a Design Annual Average flow of 326 Million Gallons a Day (MGD) and a Design Maximum Day Flow of 480 MGD. The Calumet WRP also receives flow from the Calumet Tunnel System and the Thornton Reservoir, both major parts of the Tunnel and Reservoir Plan (TARP), which helps to reduce flooding and control pollution by eliminating combined sewer overflows. Water that has been cleaned by the Calumet WRP treatment processes is released into the Little Calumet River. Additionally, approximately 100 dry tons of solids are removed from wastewater every day at the Calumet WRP and are transported to anaerobic digesters for biogas production and solids reduction and then to the nearby Calumet Solids Management Area for additional treatment and drying. The resulting biosolids are a sustainable alternative as a soil amendment to chemical fertilizers and are used at golf courses, athletic fields, parks and recreational facilities, agricultural fields, forests, and for the restoration of strip mines and other disturbed lands. The MWRD also anticipates that the Calumet WRP will soon be home to an organics receiving station and a biogas cleaning utilization facility. In short, the Calumet WRP serves a vital public health and safety function to Chicago residents and those in southern Cook County.

CTA RLE DRAFT EIS IMPACT ON MWRD

Both alternatives proposed in the CTA RLE Draft EIS propose acquiring 15 parcels of MWRD from its Calumet WRP, located at 130th Street in Chicago, Illinois. The proposed 7 story parking garage would go directly on MWRD land, with the 130th Street Red Line station platform being adjacent thereto.

Adjacent to the area from 130th Street on the south and going north on current MWRD land, the MWRD operates sludge holding open air lagoons and biosolids open air drying beds. The RLE

would go on a diagonal through MWRD property and in between the sludge holding open air lagoons and the biosolids open air drying beds. While the Draft EIS appears to account for grade separated access that the MWRD will need to access its biosolids open air drying beds, the MWRD encourages the CTA to continue to engage with MWRD technical staff to determine the best location for such grade separated access. In close proximity to the RLE, the MWRD also operates, or has future plans to operate, primary settling tanks, high level influent pumping station, screen building, gravity thickening building, grit building, fermenters, and high-strength waste receiving stations. Each of these processes causes odor and consequently, may require the treatment of odorous air.

The MWRD has committed approximately $35 million to odor mitigation technologies in & around the Calumet WRP. This capital investment was done prior to analyzing the impact of the CTA RLE having a parking garage and train platform adjacent to sewage treatment processes that have a strong potential for emitting unpleasant odors. Depending on the public reaction to odor in & around the 130th Street Terminal, the costs for additional odor mitigation technologies could increase substantially. It is important to note that with a WRP the size of the Calumet WRP, it is economically and environmentally unsustainable to treat 100% of the odors produced.

In addition to being compensated for its 15 parcels that the CTA would need to acquire, the MWRD encourages the CTA to further investigate the costs of additional odor mitigation technologies that may be needed to address any concerns of its ridership.

The Draft EIS includes the construction of a substation and a 7-story parking garage directly over, or in very close proximity to, the Calumet 17A and 17D interceptor sewers. These interceptors are the main sewer service line for the south/southeast suburbs. The TARP relief shafts for these two interceptors are located approximately 3.7 miles (CDS 21) and 1.4 miles (CDS 18), respectively, away from the Calumet WRP. As such, to protect the MWRD's structures, and to provide uninterrupted service, the MWRD recommends not placing any permanent structures directly over, or in close proximity to, this MWRD infrastructure.

Assuming that the MWRD is able to reach an agreement with the CTA for acquisition of the 15 MWRD owned parcels that have been identified, any such transfer of ownership will need to include perpetual easements for the interceptor sewers and relief shafts referenced above. Additionally, there are fiber optic and communication lines that extend from the main plant to the solids facilities as well as the sludge line from the digesters to the dewatering facility. The main electrical power to the solids handling facilities comes from a separate Com Ed feeder from Cottage Grove. Any construction needs to locate and protect our existing utilities.

As part of the MWRD's efforts to develop resource recovery, the MWRD anticipates that up to 40 trucks per day of High Strength Waste and FOG (fats, oil and grease) will be entering the Calumet WRP main entrance off of 130th Street. Additionally, 60 to 70 trucks per day of wood chips and yard waste for use in biosolids composting operations are anticipated to be entering our solids

handling area to the east of the plant and a similar number of trucks leaving the area with composted biosolids, in addition to our current traffic in and out of the plant.

On January 6, 2014, the MWRD entered into a certain Consent Decree titled United States, *et al.* v. Metropolitan Water Reclamation District of Greater Chicago, Case No. 1:11-cv-08859 (N.D. Ill. 2014)(Consent Decree). Under the Consent Decree, the MWRD is under an enforceable court order to complete certain projects and conduct MWRD operations in such a manner as to comply with the terms of the Consent Decree. As the CTA RLE Draft EIS and related processes develop, the MWRD will need to insure that anything that it commits to is consistent with its obligations under the Consent Decree.

POTENTIAL SYNERGIES

The MWRD recognizes that the proposed 130th Street Terminal for the CTA RLE is in a heavy industrial corridor close to expressway access. This has the potential to draw a lot of riders from Indiana and the south suburbs who will either park and ride the RLE or take a bus to get to the 130th Street Terminal.

The MWRD is in the process of exploring opportunities wherein it will convert high-strength organic waste into compressed natural gas (CNG). This CNG can then be used as a clean burning fuel to CNG powered vehicles in the region.

PACE Suburban Bus has recently announced that it has taken delivery of its first 20 CNG buses, with an additional 71 on order that will replace the remaining diesel buses at Pace South Division, which is responsible for covering the south suburbs and the south side of Chicago. As part of the 130th Street Terminal of the CTA RLE, the MWRD encourages the CTA to analyze the potential of creating a bus turn-around and re-fueling station adjacent to the 130th Street Terminal. Given the proximity of a potential CNG facility, this would be a win-win partnership for at least three different units of local government in addition to any commercial interests in this industrial corridor that also may be interested.

POTENTIAL ALTERNATIVES

While the MWRD takes the position that the CTA RLE is possible in its current format, the MWRD also offers a proposed alternative for consideration. The CTA may wish to analyze extending the CTA RLE with the 7 story parking garage, passenger terminal and platform south of 130th Street. Currently this land appears to be either abandoned &/or part of the Cook County Forest Preserve District. Given the location of the Altgeld Gardens residential neighborhood and the Carver Military Academy High School, locating the 130th Street Terminal south of 130th Street may allow for easier pedestrian access and would appear to be safer for those residents/students rather than having to cross over 130th Street. Locating these structures south of 130th Street could also reduce the potential capital and operations and maintenance costs of odor mitigation, due to prevailing winds and increasing the distance between odorous processes and the CTA RLE passengers along with minimizing the conflict with congestion from truck traffic in and out of the Calumet WRP.

CONCLUSION

The MWRD remains committed to cooperating with the FTA and CTA as the CTA RLE Draft EIS process continues. Representatives from the CTA and MWRD recently met on December 5, 2016, at which time the MWRD Executive Director and technical staff set forth the concerns and proposed solutions in detail.

Sincerely,

David St. Pierre

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Mr. David St. Pierre
Metropolitan Water Reclamation District
100 E. Erie Street
Chicago, IL 60611-3154

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to MWRD-Owned Properties

Dear Mr. St. Pierre:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning and as detailed in the attached table, CTA has determined that portions of 15 MWRD parcels at the Calumet Water Reclamation Plant would be affected to accommodate the 120th Street yard and shop and the 130th Street station. **There would be no change in the number of MWRD-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.** The CTA structures would not affect MWRD operations at the plant. CTA met with David St. Pierre and MWRD staff on December 5, 2016 and July 31, 2017 to discuss potential impacts to MWRD property.

CTA has previously disclosed potential property impacts to you and met with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

CTA will hold an open house meeting to present the Preferred Alignment to the public and obtain additional feedback. All interested parties are invited to attend this upcoming public open house. The open house will be held at the time and location identified below and a flyer is enclosed for your information. Representatives from your agency are encouraged to attend.

Tuesday, February 13, 2018
6:00 - 8:00 PM
Gwendolyn Brooks College Preparatory Academy
Main Gym (west side of building)
250 E. 111th. Street, Chicago, IL 60628
**Please enter through Door 8. Parking available in rear of building.*
Parking lot entrance via King Drive.

Please contact Sonali Tandon, Senior Project Manager, at (312) 681-4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey

Carole Morey
Chief Planning Officer
(312) 681-4100
cmorey@transitchicago.com

cc: Mr. Joseph Schuessler

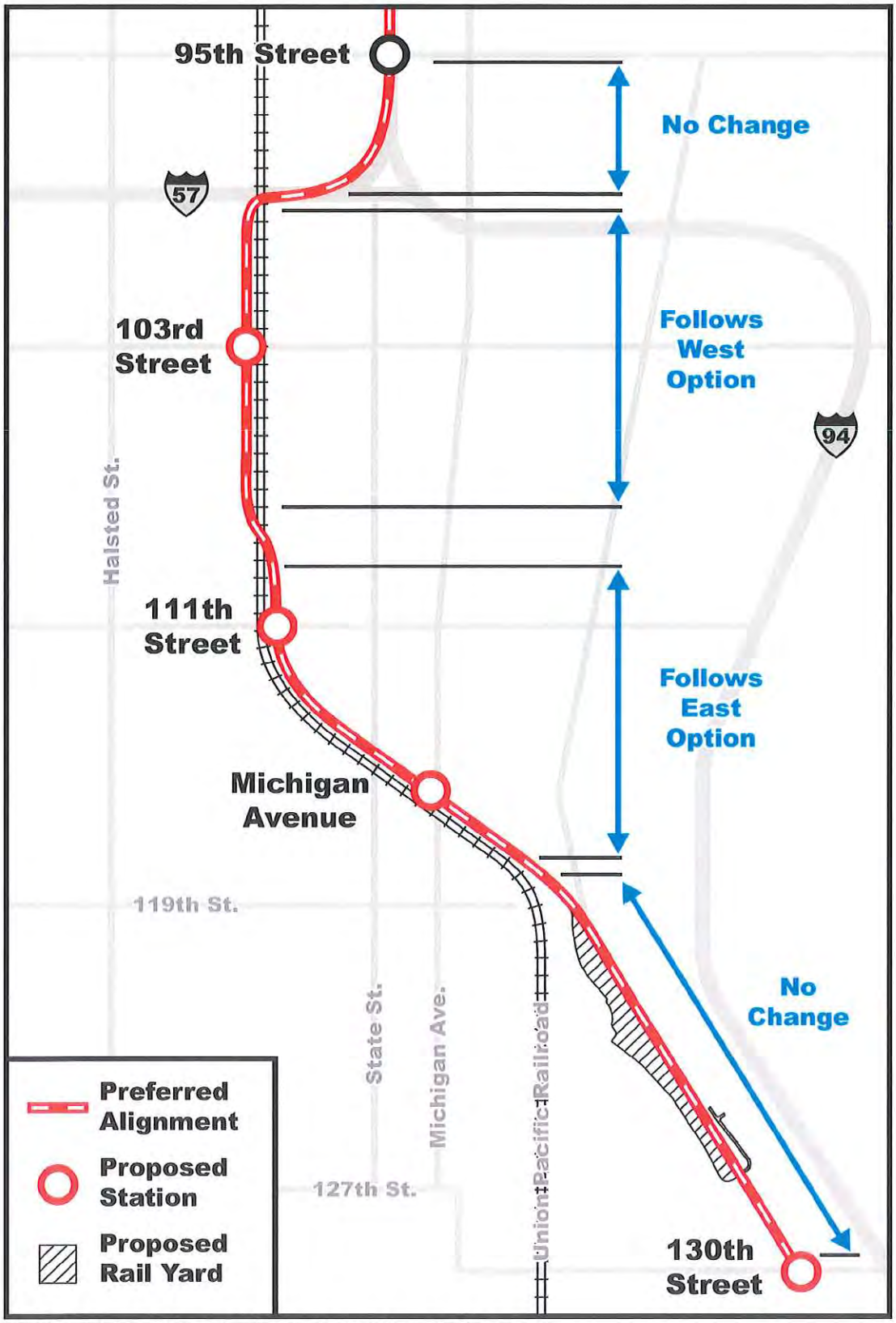

CTA Red Line Extension Project - Preferred Alignment

MWRD-Owned Parcels Affected by the Preferred Alternative

Property Identification Number	Address
25-26-300-017-0000	12807 S. Cottage Grove Avenue
25-26-300-015-0000	12813 S. Cottage Grove Avenue
25-26-300-014-0000	12817 S. Cottage Grove Avenue
25-27-301-013-0000	310 E. 130th Street
25-27-301-012-0000	325 E. 127th Street
25-27-301-011-0000	350 E. 130th Street
25-27-301-010-0000	360 E. 130th Street
25-27-200-013-0000	12546 S. Cottage Grove Avenue
25-27-200-004-0000	12500 S. Cottage Grove Avenue
25-27-400-003-0000	12606 S. Cottage Grove Avenue
25-27-400-007-0000	12614 S. Cottage Grove Avenue
25-27-400-005-0000	12608 S. Cottage Grove Avenue
25-27-400-006-0000	12610 S. Cottage Grove Avenue
25-27-301-007-0000	300 E. 127th Street
25-27-400-009-0000	12618 S. Cottage Grove Avenue

#280

From: Tandon, Sonali <STandon@transitchicago.com>
Sent: Monday, October 31, 2016 11:34 AM
To: Diane Hunter
Subject: RE: CTA Red Line Extension Project

Dear Ms. Hunter,

Thanks for your email. We will update our records with your information and keep you informed on the project and any findings of human remains or cultural objects as a result of archaeological investigations.

Regards,

Sonali Tandon
Senior Project Manager – Planning
Chicago Transit Authority
312-681-4246

Preliminary Draft - For Discussion Purposes Only: This email may contain material that is confidential and privileged for the sole use of the intended recipient. Any review, reliance or distribution by others or forwarding without express permission is strictly prohibited. If you are not the intended recipient, please contact the sender and delete all copies.

From: Diane Hunter [mailto:dhunter@miamination.com]
Sent: Saturday, October 29, 2016 9:10 AM
To: Red Extension
Subject: CTA Red Line Extension Project

Dear Ms. Tandon:

Aya, kikwehsitoole. My name is Diane Hunter, and I am the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

Thank you for the invitation to the public hearing on November 1, 2016 regarding the above-mentioned project. I am not able to attend this meeting, but the Miami Tribe would like to continue to serve as an interested party as the project goes forward. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

In any case, if human remains and/or cultural objects are discovered, regardless of initial determination as to site dating or cultural affiliation, please contact me at 918-541-8966, by email at dhunter@miamination.com, or by mail at the address listed below to initiate consultation.

Sincerely,

Diane Hunter
Tribal Historic Preservation Officer
Miami Tribe of Oklahoma
P.O. Box 1326

Miami, OK 74355

#282

Metra

547 W. Jackson Boulevard, Chicago, IL 60661 312.322.6900 metrarail.com

November 29, 2016

An official response letter was not issued to Metra; however, CTA has coordinated with Metra regarding their comments on the Draft EIS and continues to coordinate with Metra regarding the RLE Project.

Ms. Carole Morey
Chief Planning Officer
Chicago Transit Authority
567 W. Lake Street, 10th Floor
Chicago, IL 60661

Re: CTA Red Line Extension Draft EIS

Dear Ms. Morey:

We appreciate the opportunity to review the CTA's Red Line Extension Draft Environmental Impact Statement (EIS), dated October 6, 2016. Having reviewed the Draft EIS, Metra would like to provide some feedback and comments for your consideration while preparing the Final EIS.

Metra has no preference regarding the West Option or East Option. The EIS should cite that the Red Line Extension corridor will be near the existing Metra Electric District (MED) corridor. The report should highlight there is a convenient transfer opportunity between the proposed Red Line station at Michigan Avenue and 116th Street and the existing MED 115th Street/Kensington station, roughly one-half mile away. If there are opportunities to make this connection more convenient for transit riders, Metra supports these efforts.

The report should also note that the Union Pacific Railroad (UPRR) corridor which the proposed Red Line extension will run parallel to is in Metra's long-term plans to host a future SouthEast Service (SES) commuter rail line between LaSalle Street Station in downtown Chicago and Balmoral Park in Crete. A station is planned adjacent to the Red Line Extension corridor roughly at 115th Street and Michigan Avenue, near the proposed future Red Line station at 116th Street and Michigan Avenue. Plans for the Michigan Avenue Red Line station should not preclude a future Metra/CTA transfer station when the SouthEast Service begins service.

Additional information in the Final EIS should be included regarding the CTA's ridership projections. We would like to know more about how the services will impact the ridership on the Metra Electric District and Metra's competitive condition.

Once again, Metra would like to thank you for the opportunity to review the CTA's Red Line Extension Draft EIS. We look forward to working with the CTA on this project to strengthen the transit network of Chicago's South Side and of the region as a whole. If you have any questions or would like to further discuss the comments made herein, please do not hesitate to contact me.

Sincerely,

Don Orseno
Executive Director/CEO

Metra is the registered service mark for the Northeast Illinois Regional Commuter Railroad Corporation.

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

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#360

March 1, 2022

Marlise Fratinardo
Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
567 W. Lake Street
Chicago, IL 60661
Sent via email to: mfratinardo@transitchicago.com

RE: CTA Red Line Extension Project

Dear Ms. Fratinardo:

In response to the Chicago Transit Authority's ("CTA") public notice regarding the Supplemental Environmental Assessment ("EA") and the Section 4(f) evaluation for the subject project, the Metropolitan Water Reclamation District of Greater Chicago ("MWRD") provides the following comments:

- The EA includes the following statement (p. 90): "The MWRD Water Management Ordinance does not apply to isolated wetlands inside the City of Chicago limits. There is no regulatory requirement for compensation of these wetland impacts." While it is correct that the WMO does not regulate impacts to isolated wetlands inside the City of Chicago, if there are jurisdictional wetlands impacted in the project area, the U.S. Army Corps of Engineers may have mitigation requirements. Additionally, the City of Chicago may have local regulations regarding impacts to wetlands in the project area. The MWRD recommends that the CTA obtain a jurisdictional determination for the wetlands (which it appears that the CTA has requested from the Corps), and that the CTA confirm any regulatory requirements of the City of Chicago over impacts to wetlands, even if they are found to be non-jurisdictional.

- In Attachment B to the EA ("Displacements and Relocations of Existing Uses"), the CTA provides a list of impacted parcels. MWRD records indicate that several of those parcels are owned by the MWRD, and the CTA requires a combination of full acquisition and easement interests for the project. The MWRD requests that the CTA initiate coordination with the MWRD Real Estate Division as soon as possible regarding this proposed right-of-way so that the MWRD can perform a detailed review for any issues or conflicts on these parcels. Please contact Head Assistant Attorney Margaret T. Conway at ConwayM@mwrd.org or at (312) 751-6587. An aerial map showing the impacted MWRD parcels is requested to facilitate the technical review.

- Attachment F of the EA (USACE and Illinois Coastal Management Program Supporting Information) includes information regarding Kensington Marsh. Although the City of Chicago is responsible for stormwater permitting within the city, the MWRD will need to review the plans for impact to our facilities and flow to the Calumet Water Reclamation Plant. In addition, an easement will be needed for the storm sewer taking the stormwater from the 120th Street yard to Kensington Marsh, if this is the chosen route.

- In a meeting with CTA and its representatives on the Red Line Extension Project on April 23, 2020, CTA indicated that it would be conducting an odor and traffic study of the project area. MWRD requests a copy of that odor and traffic study be shared.

Thank you for considering the MWRD's comments and we look forward to further coordination with the CTA on this project. Please do not hesitate to contact me at averye@mwrd.org or at (312) 751-6570 if you have any questions.

Sincerely,

Ellen M. Avery
Deputy General Counsel

cc: RedExtension@transitchicago.com
ConwayM@mwrd.org

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

May 13, 2022

Ellen M. Avery
Deputy General Counsel
Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street
Chicago, Illinois 60611-3154

RE: CTA Red Line Extension Project

Dear Ms. Avery:

The Chicago Transit Authority (CTA) would like to thank you for your comments on the Red Line Extension (RLE) Project Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation, which was published in January 2022.

CTA received an updated Approved Jurisdictional Determination (AJD) from the U.S. Army Corps of Engineers (USACE) on January 19, 2022. The AJD confirmed that all wetlands, as identified in CTA's AJD update request to USACE, are isolated waters and not subject to USACE jurisdiction. CTA completed a review of all applicable regulations. The updated AJD will be documented in the combined Final Environmental Impact Statement/Record of Decision (Final EIS/ROD).

As mentioned in the Supplemental EA, CTA continued to conduct stakeholder and agency coordination and further developed design plans after the announcement of the Preferred Alignment in 2018. Most relevant to the Metropolitan Water Reclamation District of Greater Chicago (MWRD), CTA began exploring an opportunity to relocate the 130th Street station to a location south of 130th Street versus the location north of 130th Street that was evaluated in the Draft EIS. In addition, the refinement of the 120th Street yard and shop location in proximity to MWRD was evaluated in the Supplemental EA. These design refinements have modified the potential impacts to MWRD, which include easements and acquisitions. Although CTA is not pursuing the acquisition of any public or private properties for the RLE Project until the environmental review is completed with a signed ROD, outreach to property owners, including MWRD, has been ongoing since the Draft EIS. CTA is finalizing 30 percent plans, which will enable more informed discussions about temporary easements for access during construction as well as third party agreements for permanent easements or land acquisition. CTA will coordinate with you directly as the primary point of contact at MWRD to discuss MWRD parcel impacts in greater detail, coinciding with the ongoing preparation of the Final EIS/ROD.

In addition, CTA will continue to coordinate with MWRD regarding the location of stormwater flow into Kensington Marsh, including the review of plans through that process. As part of the ongoing coordination process, USACE has determined they do not have any concerns regarding the proposal for stormwater flow into Kensington Marsh.

8401 (rev. 09/04)

CTA appreciates MWRD's interest in the odor and traffic information associated with the relocation of the 130th Street station. A formal odor study has not been completed for the RLE Project. Preliminary analysis was completed, as discussed during a conference call with CTA and MWRD on April 23, 2020. This analysis indicated that very strong odors were very infrequent events, and it did not support a correlation between weather, wind direction, or other factors that would lead to any need for mitigations for the RLE Project. CTA will share with MWRD any additional odor information that may be collected in the area. A traffic study is not being prepared as a standalone report independent from what is provided within the NEPA documentation. The Supplemental EA included the traffic analysis at 16 locations within the 130th Street station relocation area. The Final EIS/ROD will include the traffic analysis completed for the RLE Project.

Thank you for your continued interest in the RLE Project. CTA looks forward to our continued coordination.

Sincerely,

Marlise Fratinardo
Senior Project Manager, Planning
Strategic Planning and Policy

#361

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON
BOULEVARD CHICAGO, IL
60604-3590

March 1, 2022

REPLY TO THE ATTENTION OF:
Mail Code RM-19J

Elizabeth Breiseth
Environmental Protection Specialist
U.S. Department of Transportation
Federal Transit Administration, Region 5
200 West Adams Street, Suite 320
Chicago, Illinois 60606

Re: Supplemental Draft Environmental Assessment for the Chicago Red Line Extension Project, Cook County, Illinois

Dear Ms. Breiseth:

The U.S. Environmental Protection Agency is commenting on the Draft Supplemental Environmental Assessment (SEA) referenced above pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. The Federal Transit Administration (FTA) is the lead agency under NEPA, and the Chicago Transit Authority (CTA) is the project sponsor.

The proposed project would extend the Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. EPA commented on the Draft Environmental Impact Statement (DEIS) for this project on November 29, 2016. On February 8, 2021, EPA provided CTA with a list of EPA resources and programs that may be useful for transit supportive development and/or serve the general interests of communities involved with the Red Line Extension. On January 31, 2022, FTA and CTA released this SEA to evaluate changes to the proposed project that came about after publication of the DEIS. Changes include: (1) relocation of 130th Street Station, (2) refinement of the 120th Street Yard and Shop, and (3) movement of the preferred alignment cross-over to 107th Place.

EPA appreciates CTA's dedication to public engagement; CTA offered numerous opportunities for public input, and the SEA discusses how that input informed decision-making. We also recognize content in the SEA that addresses past EPA comments, including commitments to use EPA's Construction Emission Control Checklist to protect air quality during construction. If EPA's community-focused programs and resources are of interest to CTA or impacted community groups, we continue to be available to explore opportunities for collaboration.

Thank you for the opportunity to review this project. While EPA does not have additional recommendations based on information in the SEA, we look forward to reviewing the subsequent NEPA document. Please provide an electronic copy to Jen Blonn Tyler, the lead reviewer for this project, at tyler.jennifer@epa.gov. Ms. Tyler can be reached at 312-886-6394.

Sincerely,

KENNETH WESTLAKE

Digitally signed by KENNETH WESTLAKE
Date: 2022.03.01 07:30:12 -06'00'

Kenneth A. Westlake
Deputy Director
Office of Tribal and Multi-Media Program

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

June 3, 2022

Kenneth A. Westlake
Deputy Director
Office of Tribal and Multi-Media Program
United States Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

RE: Supplemental Draft Environmental Assessment for the Chicago Red Line Extension Project, Cook County, Illinois

Dear Mr. Westlake:

The Chicago Transit Authority (CTA) would like to thank you for your comments on the Red Line Extension (RLE) Project Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation, which was published in January 2022.

CTA appreciates EPA's acknowledgement of our dedication to public engagement. CTA will continue to work with elected officials, community groups, businesses, and residents as the project moves into final design to develop a Construction Outreach and Coordination Plan as well as a Business Outreach Program closer to the time of procurement of construction services. CTA, likewise, values EPA's recognition that the content of the Supplemental EA addresses past EPA comments.

Thank you for expressing your continued availability to explore opportunities for collaboration with EPA's community-focused programs and resources. CTA will forward electronically to Ms. Jen Tyler's attention, as requested, the forthcoming Final EIS/ROD document. CTA anticipates publishing the Final EIS/ROD in late summer of this year.

Sincerely,

Marlise Fratinardo
Senior Project Manager, Planning
Strategic Planning and Policy

#362

Fratinardo, Marlise

From: Salley, Jason R <Jason.Salley@illinois.gov>
Sent: Friday, February 25, 2022 5:13 PM
To: Fratinardo, Marlise
Cc: Tandon, Sonali; Baczek, John A; Rios, Jose (DOT); Sherrill, John; Ferguson, Dwayne; Ruiz, Vanessa V; Schilke, Steven E; Gallenbach, Thomas G; Fuller, Matt; Rogers, John (FHWA); Byars, Chris
Subject: Fw: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Marlise,
Good afternoon.
Below you will find the Department's comments regarding the subject line.
Feel free to contact me if you have any questions or need any additional information.

Thank you.

Sincerely,
Jason Salley

From: Sherrill, John <John.Sherrill@Illinois.gov>
Sent: Friday, February 25, 2022 2:01 PM
To: Salley, Jason R <Jason.Salley@illinois.gov>
Cc: Schilke, Steven E <Steven.Schilke@illinois.gov>; Ruiz, Vanessa V <Vanessa.Ruiz@illinois.gov>; Ferguson, Dwayne <Dwayne.Ferguson@illinois.gov>
Subject: Re: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Jason - cc: Dwayne, Steve, Vanessa

IDOT's Bureau of Design and Environment (BDE) reviewed the *Supplemental Environmental Assessment and Section 4(f) Evaluation for the Chicago Red Line Extension*, for a determination of NEPA adequacy. The proposed action is to extend the Red Line heavy rail service 5.6 miles south from the existing 95th/ Dan Ryan terminal to 130th Street, Chicago's Far South Side. BDE found:

- Purpose and Need: Sufficient
- Alternatives Proposed and Preferred Alternative. Sufficient
- Cultural Resources and Section 106: Sufficient
- Natural Resources: Sufficient
- Wetlands: Sufficient
- Water Resources: Sufficient
- Biological Resources: Sufficient
- Public Involvement, including the project website: Sufficient
- Section 4(f): Sufficient
- Environmental Justice: Sufficient
- Noise and Vibration: Sufficient

- Land Use and Economic Development: Sufficient
- Visual and Aesthetic: Sufficient
- Hazardous Materials: Sufficient
- Air Quality: Sufficient
- Safety and Security: Sufficient
- Indirect and Cumulative Impacts: Sufficient

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#363

Fratinardo, Marlise

From: Fratinardo, Marlise
Sent: Thursday, March 03, 2022 12:31 PM
To: Byars, Chris (FHWA)
Cc: Tandon, Sonali; Baczek, John A; Rios, Jose (DOT); Sherrill, John; Ferguson, Dwayne; Ruiz, Vanessa V; Schilke, Steven E; Salley, Jason R; Gallenbach, Thomas G; Fuller, Matt (FHWA); Rogers, John (FHWA); Kyte, James (FHWA)
Subject: RE: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Hi Chris,

Thank you for your comments.

The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft EIS in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over. Since the construction in the I-57 and I-94 right-of-way did not change since the Draft EIS, this was not an area included in the Supplemental EA analysis. The Final EIS, to be released later this summer, will evaluate the entire Preferred Alignment including the CTA aerial structure within the Interstate right-of-way. As a cooperating agency, FHWA will have the opportunity to review and comment on a draft version of the Final EIS.

Regarding the Highway User Agreement, CTA regularly meets with IDOT on this project. We have reviewed the entire aerial structure following along I-57 with IDOT and are continuing to discuss the agreements required.

Please let me know if you have additional questions.

Best,
Marlise

From: Byars, Chris (FHWA) <Chris.Byars@dot.gov>
Sent: Tuesday, March 01, 2022 4:34 PM
To: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Cc: Tandon, Sonali <STandon@transitchicago.com>; Baczek, John A <John.Baczek@illinois.gov>; Rios, Jose (DOT) <Jose.Rios@illinois.gov>; Sherrill, John <John.Sherrill@Illinois.gov>; Ferguson, Dwayne <Dwayne.Ferguson@illinois.gov>; Ruiz, Vanessa V <Vanessa.Ruiz@illinois.gov>; Schilke, Steven E <Steven.Schilke@illinois.gov>; Salley, Jason R <Jason.Salley@illinois.gov>; Gallenbach, Thomas G <Thomas.Gallenbach@illinois.gov>; Fuller, Matt (FHWA) <Matt.Fuller@dot.gov>; Rogers, John (FHWA) <john.rogers@dot.gov>; Kyte, James (FHWA) <james.kyte@dot.gov>
Subject: RE: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Marlise,

The supplemental EA should include more detail of the construction impacts to I-94 and I-57 regarding the alignment footprint and describe compliance with interstate design standards.

We also recommend CTA being working with IDOT on the Highway Use Agreement required for occupying the I-57 ROW at the north end of the project.

Please feel free to contact me if you have any questions.

Chris Byars P. E.
Metropolitan Transportation Engineer
FHWA - Chicago Urban Satellite Office
200 W. Adams St. Suite 330
Chicago, IL. 60606
Phone: 312-886-1606
e-mail: chris.byars@dot.gov

From: Salley, Jason R <Jason.Salley@illinois.gov>
Sent: Friday, February 25, 2022 5:13 PM
To: mfratinardo transitchicago.com <mfratinardo@transitchicago.com>
Cc: Sonali Tandon (CTA) <standon@transitchicago.com>; Baczek, John A <John.Baczek@illinois.gov>; Rios, Jose (DOT) <Jose.Rios@illinois.gov>; Sherrill, John <John.Sherrill@Illinois.gov>; Ferguson, Dwayne <Dwayne.Ferguson@illinois.gov>; Ruiz, Vanessa V <Vanessa.Ruiz@illinois.gov>; Schilke, Steven E <Steven.Schilke@illinois.gov>; Gallenbach, Thomas G <Thomas.Gallenbach@illinois.gov>; Fuller, Matt (FHWA) <Matt.Fuller@dot.gov>; Rogers, John (FHWA) <john.rogers@dot.gov>; Byars, Chris (FHWA) <Chris.Byars@dot.gov>
Subject: Fw: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

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Marlise,
Good afternoon.
Below you will find the Department's comments regarding the subject line.
Feel free to contact me if you have any questions or need any additional information.

Thank you.

Sincerely,
Jason Salley

From: Sherrill, John <John.Sherrill@Illinois.gov>
Sent: Friday, February 25, 2022 2:01 PM
To: Salley, Jason R <Jason.Salley@illinois.gov>
Cc: Schilke, Steven E <Steven.Schilke@illinois.gov>; Ruiz, Vanessa V <Vanessa.Ruiz@illinois.gov>; Ferguson, Dwayne <Dwayne.Ferguson@illinois.gov>
Subject: Re: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Jason - cc: Dwayne, Steve, Vanessa

IDOT's Bureau of Design and Environment (BDE) reviewed the *Supplemental Environmental Assessment and Section 4(f) Evaluation for the Chicago Red Line Extension*, for a determination of NEPA adequacy. The proposed action is to extend the Red Line heavy rail service 5.6 miles south from the existing 95th/ Dan Ryan terminal to 130th Street, Chicago's Far South Side. BDE found:

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- Natural Resources: Sufficient
- Wetlands: Sufficient
- Water Resources: Sufficient
- Biological Resources: Sufficient
- Public Involvement, including the project website: Sufficient
- Section 4(f): Sufficient
- Environmental Justice: Sufficient
- Noise and Vibration: Sufficient
- Land Use and Economic Development: Sufficient
- Visual and Aesthetic: Sufficient
- Hazardous Materials: Sufficient
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Attachment D – Response Letters to Railroads

#281

From: Tandon, Sonali <STandon@transitchicago.com>
Sent: Thursday, September 22, 2016 11:44 AM
To: Lea, Claudia; Williams, Thomas (twilliams@wightco.com)
Cc: Bojan, Sharon
Subject: FW: Chicago Transit Authority Red Line Extension - UPRR Coordination

From: Mark A. Bristol [mailto:MABRISTO@up.com]
Sent: Thursday, September 22, 2016 1:39 PM
To: Tandon, Sonali
Cc: Adrian Guerrero; Chris A. Napierala; Jeffrey.Sriver@cityofchicago.org; Mooney, Leah Dawson; 'Hamilton, Luann'
Subject: Chicago Transit Authority Red Line Extension - UPRR Coordination

Sonali,

Please see below UP's comments from our engineering department.

Questions should be directed to Chris Napierala copied here in this note.

Thank you for giving us the opportunity to comment.

Mark

----- Forwarded by Mark A. Bristol/UPC on 09/22/2016 01:34 PM -----

From: Chris A. Napierala/UPC
To: Mark A. Bristol/UPC@UP
Cc: Michael J. Zucker/UPC@UP, Gary W. Bates/UPC@UP, Eric S. Keiner/UPC@UP
Date: 09/22/2016 08:26 AM
Subject: Fw: Chicago Transit Authority Red Line Extension - UPRR Coordination

---

Mark,

UPRR Project Design has reviewed the east and west alternatives provided with the draft EIS submittal for the proposed CTA Red Line extension project. Please see the following comments:

General Comments:

- Because of the increase in pedestrian traffic around UPRR tracks options to keep pedestrians off UPRR tracks will need to be evaluated.

- Barrier walls must be provided when CTA structures are within 50' of the centerline UPRRs tracks. Barrier walls must be located outside UPRR ROW.

- Plans should be submitted to UPRR for review, comment and final approval at typical project progressions (Ex. 10%, 25%, 90%, 100%)

- If UPRR track design is required plans must be prepared using the UPRR checklist and Public Project Guidelines located here: http://www.up.com/customers/ind-dev/operations/specs/public_projects/index.htm

- If utilities will be relocated on UPRR ROW, provide existing/proposed utility locations and proposed utility relocation routes. Relocated utilities must not conflict with future UPRR track construction.

- Clearances from centerline of track to nearby existing/proposed structures must be included on the plan sheets.

- If grading is proposed on UPRR ROW, provide proposed grading/drainage plan.

East Option:

- Proposed plans show parking lots on both sides of the tracks for each station with this option. UPRR is concerned with the lack of plans in the current concept for controlling trespassers onto UPRR property and overall pedestrian safety.

- Parking for this concept is split on both sides of the tracks and therefore pedestrians will need to cross UPRR to get to the proposed stations. UPRR does not condone this as it is as a major safety risk for the public & UPRR.

- Minimum clearance of 50 ft. from centerline of the future UPRR track to the nearest proposed CTA track must be maintained throughout the project.

- Plans appear to show horizontal alignment modifications to existing UPRR tracks. Details are unknown, however the changes do not appear to meet UPRR track standards. Regardless, the conceptual track alignment changes are not favored by UPRR.

- Proposed Sub Station impacts ROW access. This structure should be placed outside of our ROW no less than 25' from centerline of tracks.

- UPRR ROW access is restricted, particularly in the area of the existing pumping station. 25' of clearance is required from centerline of future track location.

- Consider raising the Red Line structure near the pump station to avoid UPRR track shifts and reduced clearances.

West Option:

UPRR Project Design recommends the west option be the preferred alternative for future project development. Please note the following comments on the current concept:

- Crossover on the North end of the project is encumbered by the overhead structure. Crossover may need to be relocated.

- Clearance to proposed piers must meet requirements outlined in the" Joint BNSF Railway and UPRR Guidelines" document Available here. If this is not possible detailed justification will be required for UPRRs review.

- Consider crossing UPRR tracks further to the South to increase the angle of the overhead crossing.

Also for your consideration please note that the future mainline track shown on the 2 options would require additional ROW. Please let me know if you have any questions regarding our comments.

Thank you,

Chris Napierala
Sr. Manager Special Projects
Union Pacific Railroad
1400 Douglas Street
Omaha, NE 68179

402.544.2407
Mail Stop 0910

BUILDING AMERICA®

From: "Tandon, Sonali" <STandon@transitchicago.com>
To: "MABRISTO@up.com" <MABRISTO@up.com>, "'Adrian Guerrero (aguerre@up.com)'" <aguerre@up.com>
Cc: "Jeffrey.Sriver@cityofchicago.org" <Jeffrey.Sriver@cityofchicago.org>, "Mooney, Leah Dawson" <LMooney@transitchicago.com>, "'Hamilton, Luann'" <Luann.Hamilton@cityofchicago.org>
Date: 08/30/2016 04:05 PM
Subject: Chicago Transit Authority Red Line Extension - UPRR Coordination

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This email originated from outside of the company. Please use discretion if opening attachments or clicking on links.

Hi Mark,

CTA met with you and others at UP along with CDOT on June 27, 2012 in Omaha to coordinate on CTA's Red Line Extension project. We incorporated the feedback received at that meeting in the project plans and are planning to publish the Draft Environmental Impact Statement (EIS) in Fall this year. It was discussed at the meeting that CTA would coordinate with UP before publishing the Draft EIS. We are including a project summary to provide you project description, an update on how the previous feedback received from UP has been incorporated in designs, and any potential impacts and mitigations related to UP that will be identified in the Draft EIS. Also included below is link to plans and profiles for the two options of the preferred alternative that are under consideration for your review.

Downloadable Link to CTA RLE Project Plans and Profiles
1. RP_CWC_CL_RLE Draft EIS Appendix F Plans and Profiles_20160825.pdf

The Draft EIS is currently going through final federal reviews and is almost ready to be published for public review. We will inform you once the Draft EIS is published. We will be seeking feedback from agencies, stakeholders, and public on the two options of the UPRR alternative that are evaluated in the Draft EIS. After public review of the Draft EIS, CTA will complete any additional analyses required and prepare the Final EIS, which will confirm whether the East or West Option is the selected option. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. Project timeline is dependent on funding availability and federal approvals.

We welcome your feedback on these materials and on the Draft EIS once it is published. Any comments received on these materials and the Draft EIS will be addressed in the Final EIS. Please let me know if you would like to get any other information at this time. We look forward to continue coordinating with you on this very important transit improvement project for Chicago's Far South Side.

Thank You,

Sonali Tandon
Senior Project Manager – Planning
Chicago Transit Authority
312-681-4246

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CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

In addition to this response letter, CTA has continued to coordinate and meet with the Union Pacific Railroad regarding the RLE Project.

January 26, 2018

Mr. Mark Bristol
Union Pacific Railroad
1400 Douglas Street
Omaha, NE 68179

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to UP-Owned Properties

Dear Mr. Bristol:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning and as detailed in the attached tables, CTA has determined that the Preferred Alignment would affect 14 UP parcels; the Preferred Alignment would affect fewer UP-owned parcels than the East Option as presented in 2016, which would have affected 18 UP-owned parcels. The West Option would have affected 35 UP-owned parcels.

The Preferred Alignment would cross over the first three UP parcels in the table below on an aerial structure, although the tracks and operations would not be affected. The Preferred Alignment would cross over the first two parcels at approximately 99th Street, and would cross over the third parcel at approximately 108th Place. An RLE substation would be located on the eighth parcel in the table below (property identification number 25-21-406-030-0000 at 11524 S. Lafayette Avenue), although the substation would be located at least 25 feet from the proposed UPRR property line and UPRR operations would not be affected. The RLE structure would be located on the remaining 10 UP parcels, although a clearance of at least 50 feet (track centerline to track centerline) from existing and potential future UPRR tracks would be maintained and UPRR tracks and operations would not be affected. CTA has met with Mark Bristol and Adrian Guerrero on May 3, 2017 and December 13, 2017.

CTA has previously disclosed potential property impacts to you and met with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

CTA will hold an open house meeting to present the Preferred Alignment to the public and obtain additional feedback. All interested parties are invited to attend this upcoming public open house. The open house will be held at the time and location identified below and a flyer is enclosed for your information. Representatives from your agency are encouraged to attend.

Tuesday, February 13, 2018
6:00 - 8:00 PM
Gwendolyn Brooks College Preparatory Academy
Main Gym (west side of building)
250 E. 111th. Street, Chicago, IL 60628
**Please enter through Door 8. Parking available in rear of building.*
Parking lot entrance via King Drive.

Please contact Sonali Tandon, Senior Project Manager, at (312) 681-4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
(312) 681-4100
cmorey@transitchicago.com

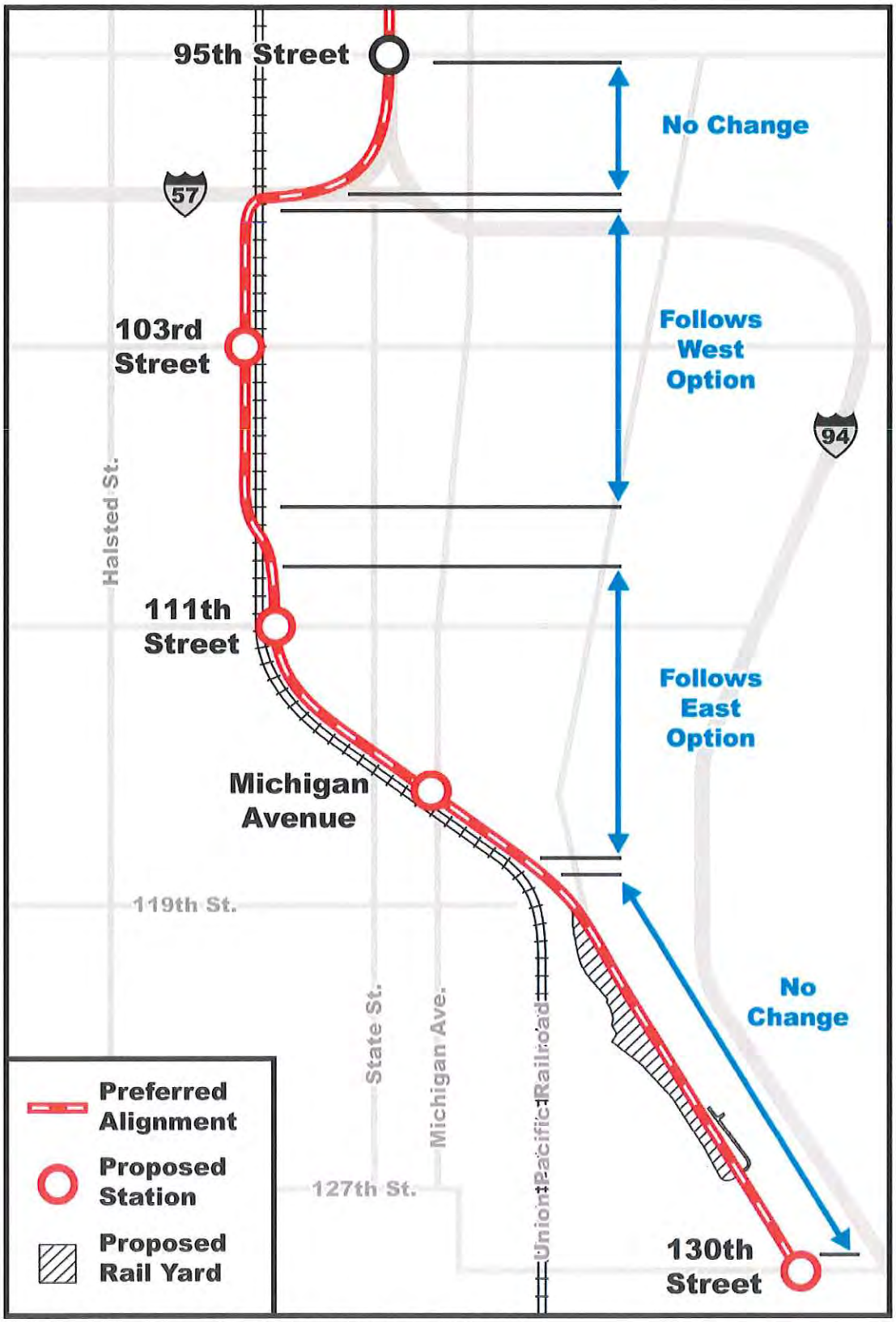

CTA Red Line Extension Project - Preferred Alignment

UP-Owned Parcels Affected by the Preferred Alternative

Property Identification Number	Address	Anticipated Impact
25-09-400-046-0000	341 W. 99th Street	Aerial Structure Crossing
25-09-500-002-0000	351 W. 99th Street	Aerial Structure Crossing
25-16-999-001-0000	No Street Address	Aerial Structure Crossing
25-16-500-017-0000	362 W. 108th Place	Aerial Structure Crossing
25-16-500-018-0000	364 W. 109th Street	Aerial Structure Crossing
25-16-500-028-0000	359 W. 109th Street	Aerial Structure Crossing
25-21-217-012-0000	11332 S. Princeton Avenue	Parcel Acquisition
25-21-230-020-0000	44 W. 115th Street	Parcel Acquisition
25-21-406-030-0000	11524 S. Lafayette Avenue	Parcel Acquisition
25-21-501-001-0000	Approximately 114th Street and Wentworth Avenue	Parcel Acquisition
25-21-501-003-0000	Approximately 111th Street and Stewart Avenue	Parcel Acquisition
25-22-300-009-0000	11549 S. State Street	Parcel Acquisition
25-22-300-010-0000	11551 S. State Street	Parcel Acquisition
25-22-300-059-0000	11582 S. Michigan Avenue	Parcel Acquisition
25-22-300-069-0000	11562 S. Wabash Avenue	Parcel Acquisition
25-22-300-070-0000	11556 S. Wabash Avenue	Parcel Acquisition
25-22-300-071-0000	11557 S. Wabash Avenue	Parcel Acquisition

UP-Owned Parcels No Longer Affected by the Red Line Extension Project

Property Identification Number	Address	Former Use
25-09-424-069-0000	350 W. 103rd Street	East Option
25-16-500-001-0000	359 W. 103rd Street	East Option
25-16-500-003-0000	361 W. 103rd Street	East Option
25-16-500-004-0000	361 W. 104th Street	East Option
25-16-500-012-0000	358 W. 106th Place	East Option
25-16-500-014-0000	A360 W. 107th Street	East Option
25-16-500-029-0000	359 W. 105th Place	East Option
25-21-107-009-0000	403 W. 111th Street	West Option
25-21-217-004-0000	11325 S. Harvard Avenue	West Option
25-21-217-027-0000	11334 S. Princeton Avenue	West Option
25-21-218-014-0000	233 W. 113th Street	West Option
25-21-227-001-0000	11411 S. Yale Avenue	West Option
25-21-227-012-0000	11420 S. Wentworth Avenue	West Option
25-21-406-001-0000	11513 S. Perry Avenue	West Option
25-21-407-008-0000	11535 S. Lafayette Avenue	West Option
25-21-407-008-0000	11535 S. Lafayette Avenue	West Option
25-21-407-008-0000	11535 S. Lafayette Avenue	West Option
25-21-407-030-0000	11512 S. State Street	West Option
25-21-501-002-0000	501 E. 112th Street	West Option
25-21-501-007-0000	500 W. 113th Street	West Option
25-21-999-001-0000	No Street Address	West Option
25-21-999-001-0000	No Street Address	West Option
25-21-999-001-0000	No Street Address	West Option
25-22-300-010-0000	11551 S. State Street	Both East and West Options
25-22-304-009-0000	11583 S. Michigan Avenue	West Option
25-22-308-029-0000	132 E. 117th Street	West Option
25-22-308-030-0000	134 E. 117th Street	West Option
25-22-310-038-0000	11700 S. Indiana Avenue	West Option
25-22-315-001-0000	11705 S. Indiana Avenue	West Option
25-22-315-003-0000	11707 S. Indiana Avenue	West Option
25-22-315-016-0000	11714 S. Prairie Avenue	West Option
25-22-315-017-0000	11716 S. Prairie Avenue	West Option
25-22-316-013-0000	11763 S. Prairie Avenue	West Option
25-22-500-001-0000	100 E. 116th Street	West Option
25-22-999-001-0000	No Street Address	West Option

NORFOLK SOUTHERN

Norfolk Southern Corporation
Three Commercial Place
Norfolk, VA 23510
Phone: 757-629-2838
Fax: 757-533-4884
Email: john.edwards@nscorp.com

John V. Edwards
General Director
Passenger Policy

Nov 30, 2016

Carole Morey
Chief Planning Officer
Chicago Transit Authority
567 W. Lake Street, 10th Floor
Chicago, IL 60661-1465

Sent electronically to RedExtension@transitchicago.com

Re: Draft Environmental Impact Statement (EIS) for the Chicago Transit Authority Red Line Extension Project

Dear Ms. Morey:

On September 30, 2016 the Federal Transit Administration (FTA), and the Chicago Transit Authority (CTA) in cooperation with the Federal Highway Administration publicly released the Draft Environmental Impact Statement (DEIS) & Section 4(f) Evaluation for the Chicago Red Line Extension (RLE). Norfolk Southern (NS) appreciates the opportunity to comment on this DEIS.

Norfolk Southern's comments regarding this project are limited to the use of NS right of way on the Kensington Branch. The Indiana Harbor Belt (IHB) operates over a portion of this rail segment to serve an active customer, All American Recycling at 11900 S. Cottage Grove Avenue. This customer is located just west of the NS Kensington Yard Parcel. We have noted the customer location by a green outline on the attached aerial map. This business appears to be shown in Chapter 4, on Table 4-20 as "US Scrap."

The conceptual alignment provided in the DEIS indicates the Common Segment of the UPRR Rail Alternative would be constructed *...at an at-grade profile (they would continue at ground level)* (Chapter 2, Structure and Tracks, p. 2-7). Additionally, the discussion on page 2-9 indicates the yard will be constructed *entirely at grade*. Consequently the RLE project main lines and rail yard would sever rail access to All American Recycling. Careful engineering design and collaboration between the parties would be required to eliminate this potential service disruption of common carrier rail service. In any event, the adverse impact noted above should be described in Section 3.2.3 Freight Transportation in the Final Environmental Impact Statement (FEIS).

Additionally, the proposal seems to eliminate any ability for the NS Kensington Branch to reconnect with the Canadian National line and the IHB. NS joins Conrail in not supporting any proposal that would eliminate potential reconnection to the national freight network.

Again, Norfolk Southern appreciates the forum for making comments on the Chicago Red Line Extension DEIS. We look forward to remaining involved in this process.

Sincerely,

John V. Edwards

Enclosure:

Map, CTA Red Line Extension, NS & Conrail Property

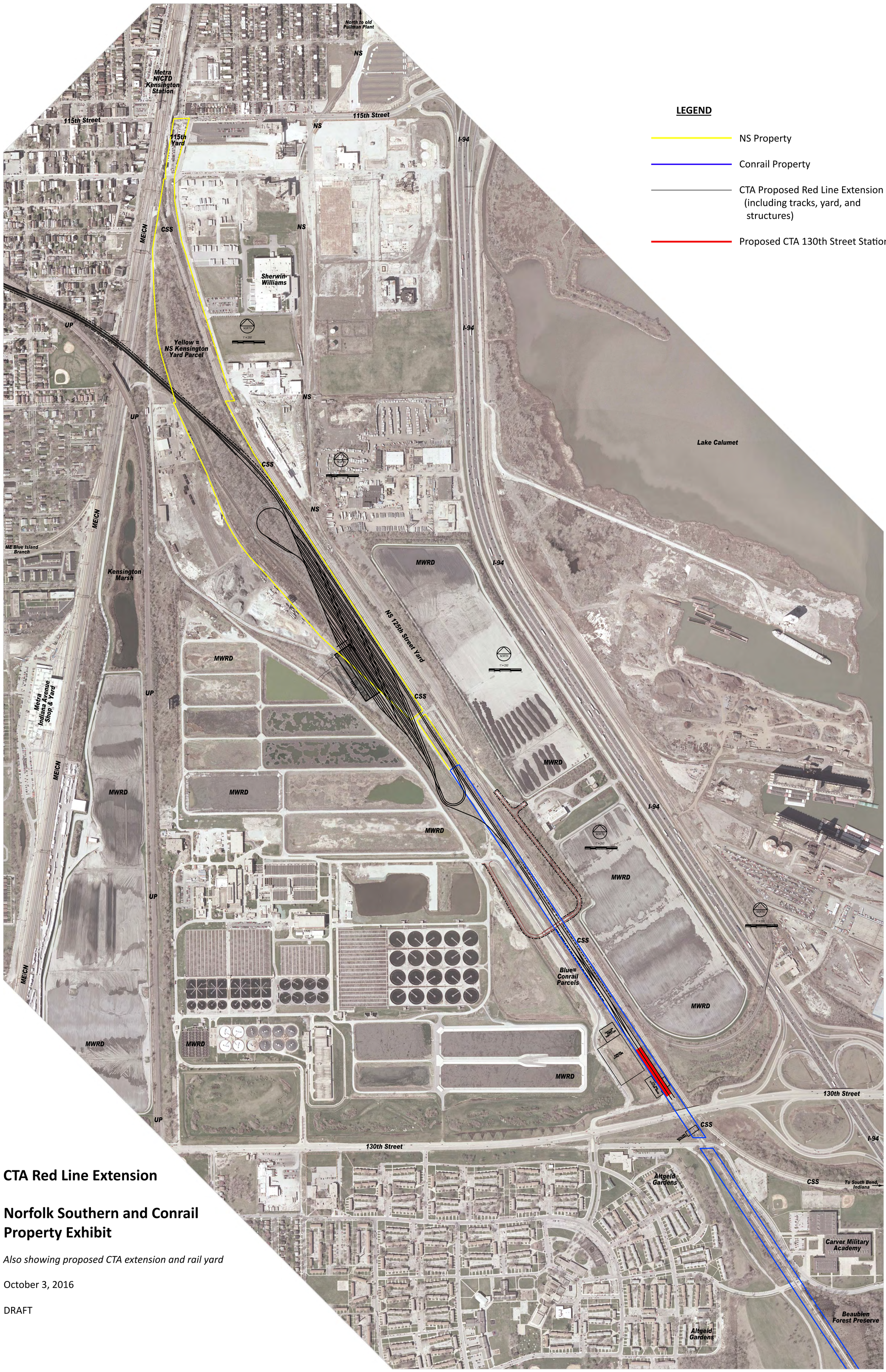

CTA Red Line Extension

Norfolk Southern and Conrail Property Exhibit

Also showing proposed CTA extension and rail yard

October 3, 2016

DRAFT

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Norfolk Southern Corporation
Mr. John V. Edwards
3 Commercial Place
Norfolk, VA 23510

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to NS-Owned Properties

Dear Mr. Edwards:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning, CTA has determined that the Preferred Alignment would affect six Norfolk Southern parcels. The RLE structure, as well as the proposed yard and shop and 130th Street station, would be located on Norfolk Southern property. Specifically, the spur track along parcel 25-22-401-034-0000, on which IHB currently operates 1–2 trains a week to serve a scrap metal/recycling facility, would need to be realigned to run parallel to RLE and Northern Indiana Commuter Transportation District (NICTD) tracks to allow for the RLE yard and shop. CTA would also need to relocate an existing at-grade Metropolitan Water Reclamation District access road across Norfolk Southern property (property identification number 25-27-400-002-0000 at 12600 S. Cottage Grove Avenue). CTA met with Norfolk Southern staff on June 13, 2017 and November 9, 2017 to discuss potential impacts to Norfolk Southern property and realignment of the spur track. An agreement between CTA and Norfolk Southern has been executed to review engineering and real estate for the RLE Project.

Parcel Identification Number	Address
25-22-400-027-0000	11600 S. Cottage Grove Avenue
25-27-108-009-0000	11900 S. Cottage Grove Avenue
25-22-401-034-0000	1355 E. 121st Street
25-27-200-009-0000	12256 S. Cottage Grove Avenue
25-27-502-001-0000	12330 S. Cottage Grove Avenue
25-27-400-002-0000	12600 S. Cottage Grove Avenue

CTA has previously disclosed potential property impacts to you and met with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

CTA will hold an open house meeting to present the Preferred Alignment to the public and obtain additional feedback. All interested parties are invited to attend this upcoming public open house. The open house will be held at the time and location identified below and a flyer is enclosed for your information. Representatives from your agency are encouraged to attend.

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6:00 - 8:00 PM
Gwendolyn Brooks College Preparatory Academy
Main Gym (west side of building)
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**Please enter through Door 8. Parking available in rear of building.*
Parking lot entrance via King Drive.

Please contact Sonali Tandon, Senior Project Manager, at (312) 681-4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
(312) 681-4100
cmorey@transitchicago.com

cc: Mr. Herbert Smith

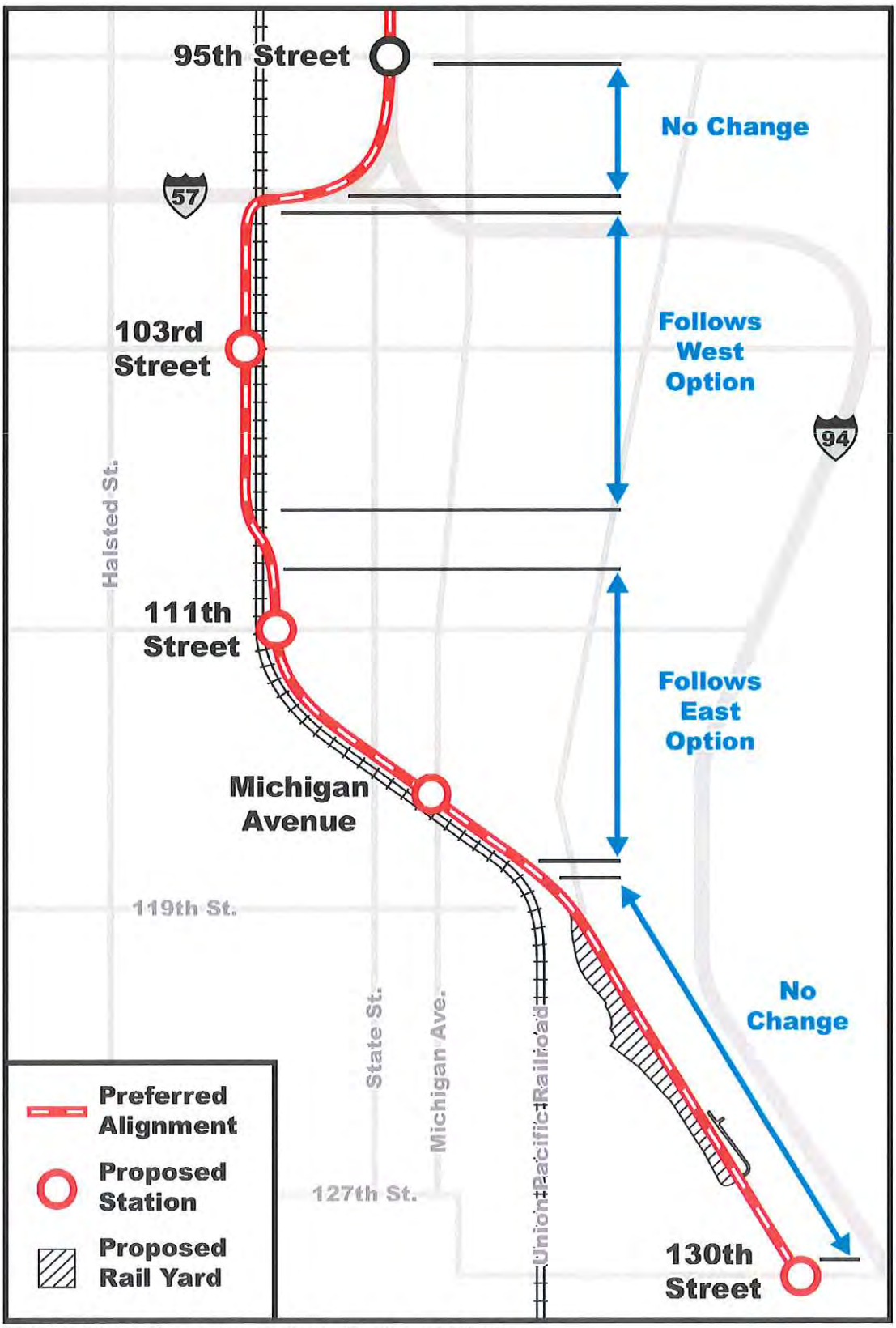

CTA Red Line Extension Project - Preferred Alignment

CONRAIL®

#284

Consolidated Rail Corporation
1717 Arch Street, Ste. 1310
Philadelphia, PA 19103

November 30, 2016

BY ELECTRONIC MAIL

Red Line Extension Project,
Attn: Carole Morey
Chicago Transit Authority,
567 W. Lake Street, 10th Floor,
Chicago, IL 60661-1465
RedExtension@transitchicago.com

Re: **Comments on CTA Redline Extension Draft Environmental Impact Statement**

Dear Ms. Morey:

Consolidated Rail Corporation ("Conrail") submits the following comments on the Draft Environmental Impact Statement ("Draft EIS") and Section 4(f) Evaluation released on September 30, 2016 by the Chicago Transit Authority ("CTA") and the Federal Transit Administration ("FTA") for the proposed Chicago Red Line Extension. Conrail is a Class III switching railroad, indirectly and jointly owned by CSX Corporation ("CSX") and Norfolk Southern Corporation ("NS"). Conrail is the majority owner of the Indiana Harbor Belt Railroad ("IHB") and the owner of a portion of one of the candidate rail lines. Conrail submits these comments as both owner of the Kensington Industrial Track and related parcels and as majority owner of IHB.

The IHB has operating rights over Conrail's Kensington Industrial Track, which it utilizes to serve All American Recycling at 11900 S. Cottage Grove Avenue. This customer is located on NS just west of the NS Kensington Yard Parcel (see attached map). It appears that the proposed 120th Street Yard and Shop would sever freight rail access to this customer. Conrail does not support any action that negatively impacts the IHB's ability to fulfill its common carrier obligation to provide freight rail service to its customers.

In addition, it appears that the "Common Segment" of the proposed "East" and "West" Options may negatively impact Conrail's Kensington Industrial Track right-of way and

related parcels, starting at the proposed 130th Street "South Station Option" and extending north to the proposed 120th Street Yard and Shop. In other words, the proposal would eliminate the Kensington Industrial Track from 130th Street northwards. Not only does the proposal eliminate IHB's ability to serve any customers located north of 130th Street, it also severs any ability to reconnect with the Canadian National rail line or any potential access to the Union Pacific rail line located adjacent to the Kensington Industrial Track. Conrail does not support any proposal that involves the use of Conrail's existing freight rail infrastructure, IHB's active right-of-way, or Conrail property. Conrail also does not support any proposal that would eliminate potential connectivity with the national freight network.

Finally, the proposed 130th Street South Station Option would utilize a portion of Conrail's active right-of-way. Again, Conrail does not support any proposal that involves the use of Conrail's existing freight rail infrastructure, IHB's active right-of-way, or Conrail property.

Conrail supports the efforts of CTA, the FTA, and others to enhance and extend the Chicago Redline. We believe it is important, however, to recognize that freight rail is as critical for economic development as passenger service. Conrail appreciates the opportunity to provide comments, and looks forward to its involvement as a stakeholder in the Chicago Redline improvement process.

Sincerely,

Jocelyn Gabrynowicz Hill
Director of Public Affairs & Assistant General Counsel

Enclosure:

Diagram depicting CTA Red Line Extension and NS & Conrail Property

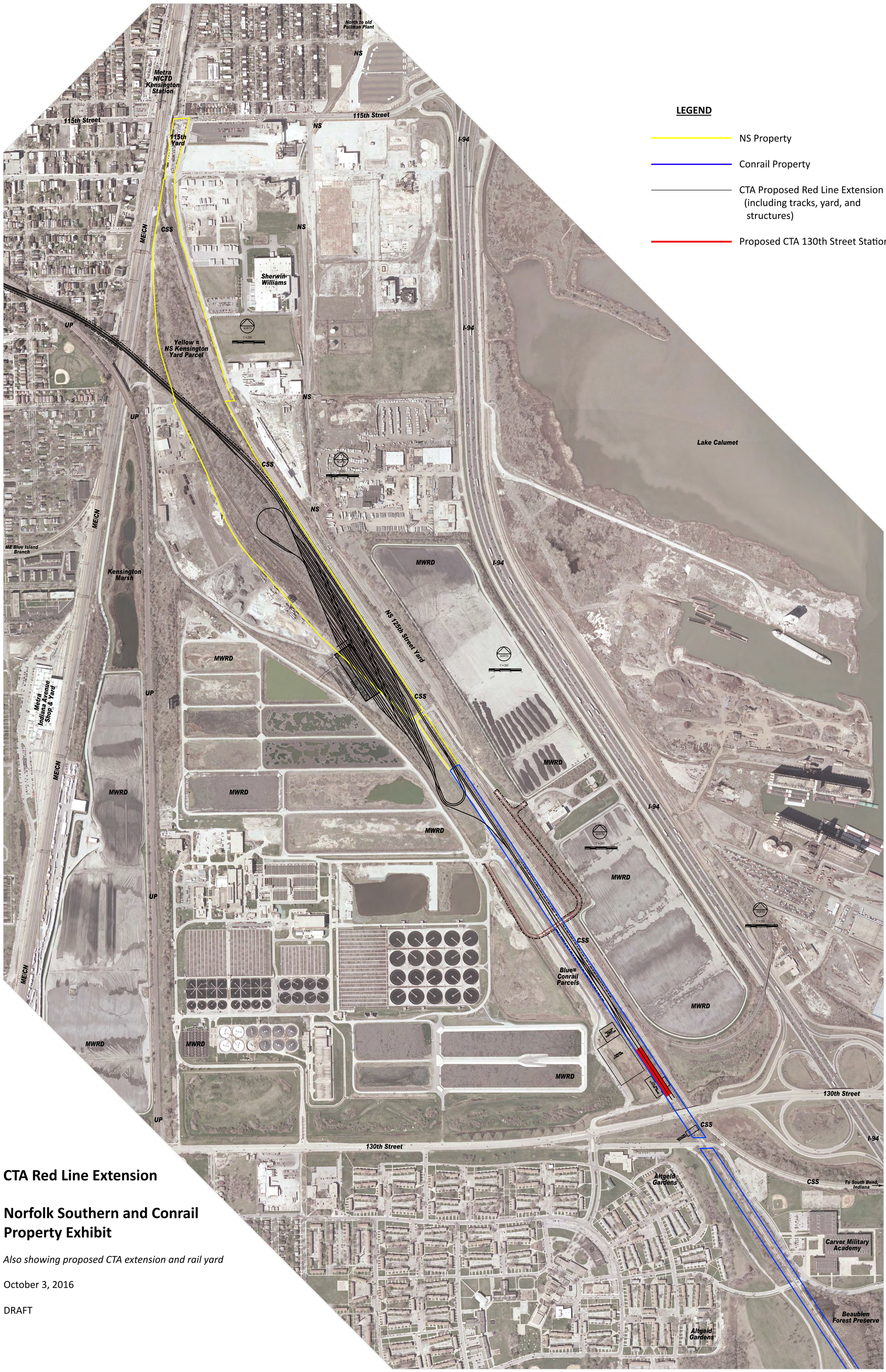

CTA Red Line Extension

Norfolk Southern and Conrail Property Exhibit

Also showing proposed CTA extension and rail yard

October 3, 2016

DRAFT

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Ms. Jocelyn Gabrynowicz Hill
Consolidated Rail Corporation
1717 Arch Street
Suite 1310
Philadelphia, PA 19103

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to Conrail-Owned Properties

Dear Ms. Hill:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

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Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning, CTA has determined that the Preferred Alignment would affect two Conrail parcels. At-grade RLE tracks would be located on those two Conrail parcels, although the Conrail tracks and operations would not be permanently affected. **There would be no change in the number of Conrail-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.**

Property Identification Number	Address
25-27-502-001-0000	12330 S. Cottage Grove Avenue
25-26-999-001-0000	No Street Address

CTA has previously disclosed potential property impacts to you and coordinated with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

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Parking lot entrance via King Drive.

Please contact Sonali Tandon, Senior Project Manager, at (312) 681-4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
(312) 681-4100
cmorey@transitchicago.com

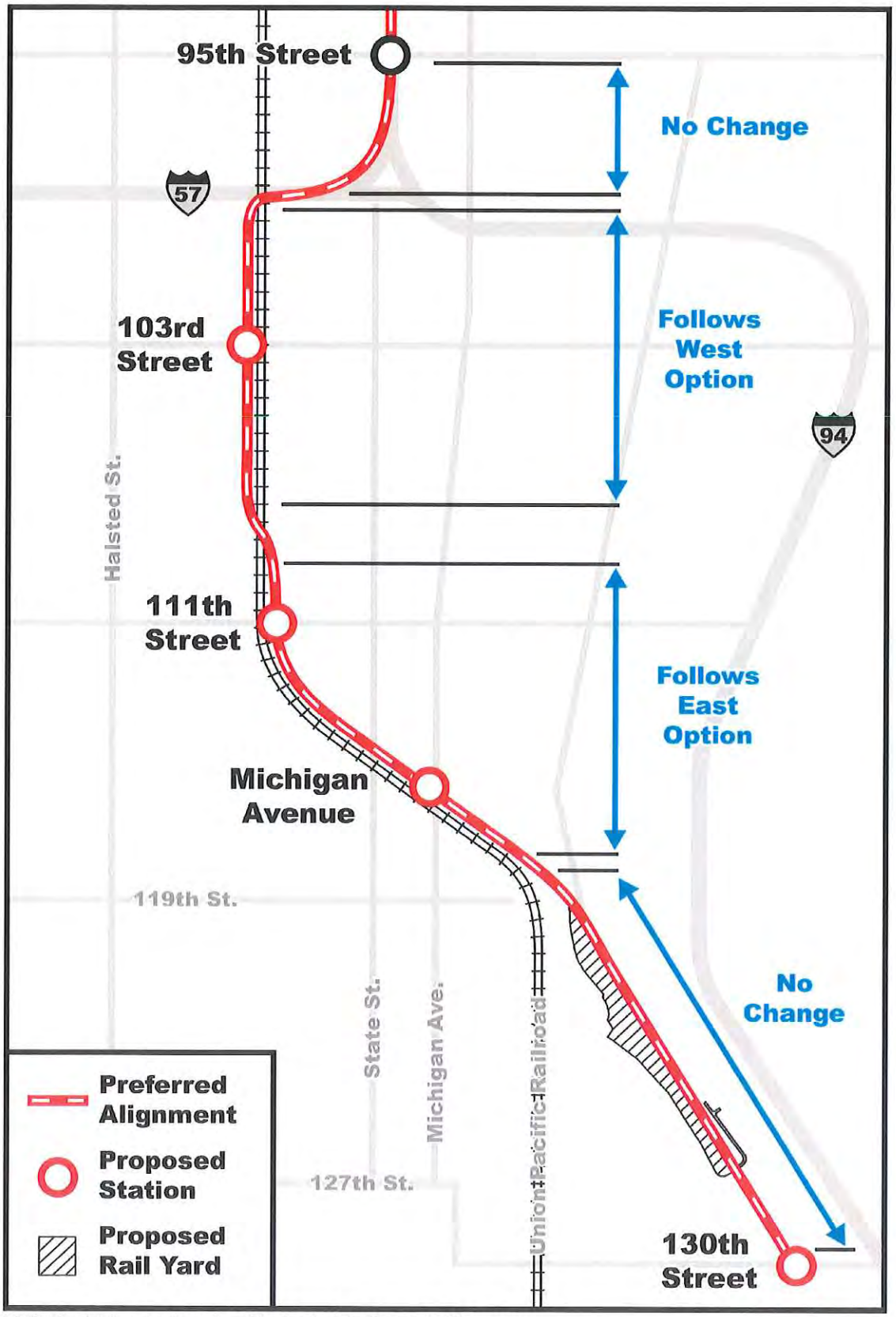

CTA Red Line Extension Project - Preferred Alignment

Red Line Extension Project

Public Participation Plan

May 2022

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Table of Contents

Section 1 - Overview **4**

1.1 Red Line Extension Project 4

1.2 Public Participation Plan 4

Section 2 - Goals **5**

Section 3 - Key Issues **7**

3.1 General Issues/Community Concerns/Opportunities 7

3.2 Economic Issues/Concerns/Opportunities 7

3.3 Transportation Issues/Concerns/Opportunities 8

3.4 Construction Issues/Concerns/Opportunities 8

Section 4 - Project Level Stakeholders **9**

4.1 Project Area Residents 9

4.2 Businesses/Business Associations/Institutions 10

4.3 Associations/Special Interest Groups/Schools 10

4.4 Commuters 12

4.5 Public Agencies and Local Government 12

4.6 Tribal Coordination 14

4.7 Project Advisory Council (PAC) 15

4.8 Property Owners and Occupants 16

4.9 Media 16

Section 5 - Environmental Justice and Limited English Proficiency Analysis **17**

Section 6 - Outreach Methods, Adapted for the Pandemic **18**

6.1 Public Information 18

6.2 Communication 19

6.3 Engagement Pathways 20

6.4 Public Meetings 22

Section 7 - Public Meetings **23**

7.1 Public Hearings 23

7.2 Community Meetings 23

7.3 Virtual Meetings 23
7.4 Office Hours 24
7.5 Open Houses 24
7.6 Workshops/Charrettes 24
7.7 Displacement Outreach Meetings 24
Section 8 - Public Meeting Notification and Materials 25
8.1 Meeting Materials 25
8.2 Public Notices 25
Section 9 - Documentation 28

Abbreviations

CTA - Chicago Transit Authority
EA – Environmental Assessment
EIS - Environmental Impact Statement
FTA - Federal Transit Administration
LEP - Limited English Proficiency
NEPA - National Environmental Policy Act
PA - Preferred Alignment
RLE - Red Line Extension

Section 1 - Overview

1.1 Red Line Extension Project

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. Each new station would be ADA accessible.

The Red Line Extension (RLE) Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. In addition, the RLE Project would provide a modern, efficient car storage yard and shop facility that would help improve service and allow for future enhancements on the entire Red Line.

This project is one part of CTA's Red Ahead Program, a comprehensive initiative for maintaining, modernizing, and expanding the Red Line. CTA proposes to cover a portion of the project funding by applying for federal funds administered by the Federal Transit Administration (FTA).

1.2 Public Participation Plan

The National Environmental Policy Act (NEPA) requires evaluation of potential environmental impacts associated with federal projects and actions. Potential impacts for this project were previously documented in the RLE Draft Environmental Impact Statement (EIS), which was published in 2016, as well as the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation, published in January 2022.

This Public Participation Plan (PPP), originally created in August 2012 to guide public involvement and outreach process for the Draft EIS, builds upon the substantial public outreach activities conducted during the Draft EIS. It outlines outreach methods through the completion of the Supplemental EA and the Final EIS, as well as adapted approaches and guidelines for public participation during the COVID-19 pandemic when social distancing is required, or in-person gatherings are not allowed. CTA recognizes that as social distancing requirements are adjusted or lifted, individuals may still feel uncomfortable or unsafe gathering in groups.

Section 2 - Goals

Building upon the information in the August 2012 PPP, this document outlines the goals and activities for stakeholder and public outreach through the publications of the Supplemental EA and the Final EIS in 2022. In addition, the PPP educates stakeholders on project goals and deliverables. CTA and the RLE project team uses the framework originally established in the 2012 PPP to guide the engagement of stakeholders and the public.

PUBLIC PARTICIPATION GOALS

- Build on project outreach conducted during the Draft EIS process.
- Inform key stakeholder groups and the public of the project's status, impacts, benefits, and progress towards completion.
- Ensure dialogue is maintained with affected parties.
- Provide project information and updates to stakeholders and the public through a range of activities.
- Provide information and updates regarding the project timeline, including construction and start-of-service estimates, as well as project funding.
- Ensure the area's diverse population, including Limited English Proficiency (LEP) and Environmental Justice (EJ) populations are included in the process.
- Encourage and inform stakeholders to become or remain supporters of the project.
- Provide information to and coordinate with displaced property owners and renters.

The PPP provides a variety of communication channels to help the public understand the RLE Project, including the project's potential impacts. The PPP describes the approach to solicit input and feedback from the public on specific needs, issues, concerns, and recommendations.

In order to engage the public to participate in the study process, basic strategies include:

STRATEGIES TO ENGAGE THE PUBLIC	APPROACH
■ Make it easy to participate ■ Provide opportunities for constructive dialogue and communication	■ Community meetings within the project area; web access to final project documents; meetings in locations accessible by public transportation and accessible to people with disabilities; virtual meetings due to COVID-19; outreach materials in English and Spanish and accessible to people with visual and hearing impairments
■ Provide timely, easy-to-understand information that helps people provide informed comments	■ Straightforward Community Guides for environmental documents, newsletters, website, digital engagement platform, exhibit boards and handouts at meetings
■ Leverage communications resources	■ Work with organizations that have established audiences and channels of communication to more widely disseminate project information
■ Provide multiple ways to obtain information and provide comments	■ Website, mailed notices, eBlasts (mass emails sent to people who signed up for RLE Project notifications), community calendars, comment cards, RLE Facebook page, media, flyers distributed via libraries and stakeholders, customer alert advertising on the CTA system
■ Ensure stakeholders are aware of the planning process and project updates	■ Regularly update existing project contact list ■ Stakeholder and Alderman/elected official briefings to identify issues and find additional ways to engage the local community ■ Outreach to community-based organizations
■ Use public input in decision making	■ Document all public and agency input in meeting summaries ■ Use input to inform project decisions and designs ■ Develop responses and provide updates to stakeholders along the way

Section 3 - Key Issues

There are four primary categories of issues that have been identified as likely issues of public and stakeholder concern to be explored and discussed during this phase. These issue categories are general, economic, transportation, and construction. As the project progresses, new key issues may develop, some existing issues will be refined and the appropriate public involvement approach to address key issues will be determined. The list of key issues will be amended as the project moves forward.

3.1 General Issues/Community Concerns/Opportunities

- Connectivity and access to the entire city
- Support for the Preferred Alignment
- Passenger access to local businesses, community, and cultural amenities (improved mobility, neighborhood revitalization)
- Effect/enhancement of quality of life
- Public safety at stations/stops and surrounding communities
- Community compatibility
- Relocation and displacement impacts/enhancement on residential/business/school areas surrounding the project corridor
- Noise and vibration impacts
- Park and open space impacts
- Station design and features
- Environmental impacts

3.2 Economic Issues/Concerns/Opportunities

- Access to jobs/improved economy
- Project funding
- Project cost
- Local workforce participation
- Property value impact
- Support for local economic and land use plans and goals
- Property values and affordable housing

3.3 Transportation Issues/Concerns/Opportunities

- Easing congestion in the region
- Improve transit access to and from Far South Side
- Reduce congestion at 95th and Dan Ryan terminal
- Sustainable transportation
- Coordination/connectivity with other transit systems and modes
- Traffic and parking
- Bike and bus access to stations

3.4 Construction Issues/Concerns/Opportunities

- Length of construction
- Potential traffic/detours/delays
- Potential customer reduction to businesses along corridor during construction
- Potential parking/relocation/displacement during construction
- Noise and vibration impacts to buildings

Section 4 - Project Level Stakeholders

Anyone who lives, works, plays, learns, and commutes through the RLE project area, or has some involvement or interest in how the RLE will operate, is a project level stakeholder. The project is important to many different groups, each with specific interests in the project. The RLE project team keeps stakeholders involved and continually informed about the process and progress of the project. Brief discussions of key stakeholder audiences follow.

4.1 Project Area Residents

The RLE Project would travel through areas of the Roseland, Washington Heights, West Pullman and Riverdale community areas. RLE stations would be located in each of these communities:

- 103rd Street station: Roseland and Washington Heights
- 111th Street station: Roseland
- Michigan Avenue station: West Pullman
- 130th Street station: Riverdale

The RLE Project would also serve residents and businesses in a wider area, including the five surrounding community areas in the City of Chicago — Beverly, Morgan Park, Pullman, Hegewisch and South Deering — as well as the Village of Calumet Park.

Important issues for project area residents include corridor impacts/enhancements such as neighborhood compatibility, economic development, station locations, and the reduction of impacts on residential areas. The PPP includes outreach to property owners and residents in the project area. These groups receive project information through a combination of channels including newspaper display ads, mailed postcards, eBlasts, transit customer alerts, flyers available at key community facilities in the project footprint, flyers delivered to residents by community organizations, CTA's website (www.transitchicago.com/rle), and the RLE Facebook page (facebook.com/CTARedExt).

The RLE project team maintains one stakeholder notification database that is continually updated and includes agency contacts, displaced property owners/occupants/businesses, stakeholders and stakeholder groups, and anyone who has indicated an interest in the project. The notification database was initially developed during the September 2009 scoping process and has continually been updated throughout the duration of the RLE Project. The list currently contains 5,628 total entries, including 4,327 mailing addresses and 2,202 email addresses.

RLE mailing address:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

4.2 Businesses/Business Associations/Institutions

Some business stakeholders value the RLE project's potential to increase traffic to local businesses, improve business districts around the corridor, and offer employees and customers greater access to the area. This overall category includes industries, institutions, individual businesses, and chambers of commerce. The public involvement effort solicits ideas and feedback from the business community. These stakeholders receive invitations to community update meetings, public hearings and updates on the project as it progresses. Stakeholder briefings are scheduled as needed. Some of the local businesses and business groups include the following:

- Calumet Area Industrial Commission
- DESI Washington Heights Workforce Center
- Far Southside Community Development Corporation
- Greater Roseland Chamber of Commerce
- Metropolitan Family Services
- Rose Cafe
- Roseland Community Hospital
- Roseland Medical District
- TCA Health
- Walkers State Farm Agency

4.3 Associations/Special Interest Groups/Schools

Sensitivity to the surrounding environment is important to the project, and therefore, associations, special interest groups, and schools are consulted as needed. The director or leader of these groups are notified of the community update meetings and the public hearings and updated as the project progresses. Some of the interested key groups include the following:

- A. Phillip Randolph Pullman Porter Museum
- Agape Community Center
- Altgeld Local Advisory Council
- By the Hand Club

- Carver Military Academy
- Center for Neighborhood Technology (CNT)
- Chicago CRED
- Chicago Neighborhood Initiatives (CNI)
- Chicago Police Department – 5th District Pastoral Council
- Chicago State University
- The Chicago Urban League
- Chicagoland Prison Outreach Ministries
- Christian Fenger Academy High School
- Elevated Chicago
- Golden Gate Homeowners Association
- Gwendolyn Brooks College Preparatory Academy
- Historic Pullman Foundation & Historic Pullman Visitor Center
- House of Hope
- Illinois International Port District (IIPD)
- Illinois Institute of Technology
- Kids Off the Block, Inc. (KOB)
- Olive-Harvey College
- People for Community Recovery
- Phalanx Family Services
- Riders for Better Transit (Active Transportation Alliance)
- RLE Coalition
- Roseland Heights Community Association
- Roseland Manor
- Rosemoor Community Association, Inc.
- Saint Anthony of Padua Parish
- The Salvation Army Kroc Center of Chicago
- The Endeleo Institute
- The Rock Enterprises and Development Corporation (T.R.E.A.D)
- University of Illinois Urbana-Champaign
- Youth Peace Center

4.4 Commuters

Key issues for commuters include access, passenger capacity and comfort, travel times, proposed station/stop locations, and station amenities. Advanced, timely information is important for this group. Commuters are notified in the same way that the general public is, through newspaper ads and social media. In addition, meeting announcements for the public hearings and community update meetings are posted at the 95th/Dan Ryan station and in CTA trains and buses via customer alert cards.

4.5 Public Agencies and Local Government

Coordination and cooperation among agencies and all levels of government is an important element of this project. The input of various local, state, and federal agencies is obtained and incorporated throughout the EIS process. Cooperating agencies are federal agencies which have jurisdiction by law or special expertise with respect to any environmental impact involved in the proposed project. Participating agencies are federal, state, or local agencies, or federally recognized Indian tribal governmental units that may have an interest in the proposed project and have accepted an invitation to be a participating agency, or in the case of a federal agency, has not declined the invitation. The following key agencies and local government representatives are kept apprised about the project:

Cooperating Agency

- Federal Highway Administration

Federal Participating Agencies

- Federal Emergency Management Agency
- Federal Railroad Administration
- U.S. Department of Energy
- U.S. Department of Health and Human Services
- U.S. Department of Housing and Urban Development
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Transportation Security Administration

State Participating Agencies

- Illinois Commerce Commission
- Illinois Department of Natural Resources
- Illinois Department of Transportation

- Illinois Environmental Protection Agency
- Illinois State Historic Preservation Office

Regional Participating Agencies

- Metra Commuter Rail
- Metropolitan Water Reclamation District of Greater Chicago
- Pace
- Regional Transportation Authority

Local Participating Agencies

- Chicago Housing Authority
- Chicago Park District
- City of Chicago Department of Assets, Information and Services
- City of Chicago Department of Business and Consumer Protection
- City of Chicago Department of Planning and Development
- City of Chicago Department of Transportation
- City of Chicago, Office of the Mayor
- City of Chicago Police Department

Other

- Chicago Metropolitan Agency for Planning
- City of Chicago, Alderman (Ward 9) Anthony Beale
- City of Chicago, Alderman (Ward 10) Susan Sadlowski Garza
- City of Chicago, Alderman (Ward 21) Howard Brookins Jr.
- City of Chicago, Alderman (Ward 34) Carrie Austin
- Cook County Board of Commissioners, Board President Toni Preckwinkle
- Cook County Board of Commissioners, Commissioner (District 4) Stanley Moore
- Cook County Board of Commissioners, Commissioner (District 5) Deborah Sims
- Cook County Board of Commissioners, Commissioner (District 6) Donna Miller
- Illinois General Assembly, State Representative (House-27) Justin Slaughter
- Illinois General Assembly, State Representative (House-28) Robert Rita
- Illinois General Assembly, State Representative (House-29) Thaddeus Jones

- Illinois General Assembly, State Representative (House-34) Nicholas K. Smith
- Illinois State Senate, Senator (Senate-14) Emil Jones, III
- Illinois State Senate, Senator (Senate-15) Napoleon Harris, III
- Illinois State Senate, Senator (Senate-17) Elgie R. Sims, Jr.
- National Park Service – Pullman National Monument
- State of Illinois, Governor Jay Robert "J.B." Pritzker
- South Suburban Mayors and Managers Association
- Southeast Chicago Development Commission
- U.S. House of Representatives, Congressman (District 1) Bobby L. Rush
- U.S. House of Representatives, Congresswoman (District 2) Robin L. Kelly
- U.S. Senate, Senator Dick Durbin
- U.S. Senate, Senator Tammy Duckworth

4.6 Tribal Coordination

CTA coordinates with Native American tribes through project updates to provide an opportunity to share potential cultural and/or religious concerns associated with the RLE Project or express support. CTA coordinates with the following tribes:

- Citizen Potawatomi Nation
- Forest County Potawatomi
- Ho-Chunk Nation
- Kickapoo Tribe of Oklahoma
- Little Traverse Bay Bands of Odawa
- Menominee Indian Tribe of Wisconsin
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- Potawatomi Nation-Hannahville Indian Community
- Prairie Band of Potawatomi Nation
- Sac and Fox Nation of Missouri
- Sac and Fox Nation of Oklahoma

4.7 Project Advisory Council (PAC)

In 2019, CTA brought together a comprehensive group of community members who are seen as invested stakeholders within the RLE Project footprint to serve as the RLE Project Advisory Council (PAC). The PAC is made up of more than 20 representatives from various communities and governmental organizations. The RLE PAC advises the RLE project team at certain decision points in an effort to further engage and continue gathering support from community members. It does this by providing input to help guide how CTA engages community members throughout the project, sharing expertise regarding project area communities and outreach techniques, and sharing project messages within specific communities and the larger Chicagoland area. The council members act as champions of the project by seeking to help CTA build additional local and regional support for the RLE Project.

Members of the PAC include representatives of the following:

- Agape Community Center
- Chicago Metropolitan Agency for Planning
- Chicago Neighborhood Initiatives
- Chicago Police Department – 5th District Pastoral Council
- City of Chicago – 34th Ward Office
- City of Chicago – 9th Ward Office
- City of Chicago Department of Planning and Development
- Elevated Chicago
- Far South Community Development Corporation
- Greater Roseland Chamber of Commerce
- Historical Pullman Foundation
- Illinois International Port District
- People for Community Recovery
- The RLE Coalition
- Roseland Community Medical District Commission – Roseland Community Hospital
- Saint Anthony of Padua Parish
- The Rock Enterprises and Development Corporation (T.R.E.A.D)
- TCA Health
- The Endeleo Institute
- The West Chesterfield Community Association
- A Youth Representative, residing in the Roseland community

4.8 Property Owners and Occupants

CTA maintains communication with property owners and occupants that would potentially be affected by the Preferred Alignment. Throughout the project, property owners and occupants receive communications in advance of project updates and activities near their property. CTA also communicates with potentially displaced property owners and occupants in advance of open houses and public hearings. CTA maintains a land acquisition database of potentially displaced property owners, occupants and businesses. Means of outreach include mailings (letters by regular and registered mail and postcards), office hours, displacement focused meetings, a dedicated property outreach liaison, and door to door outreach.

4.9 Media

Media coverage offers an efficient means of communicating with the general public. Effective coordination with local and regional media contacts is crucial to raising public awareness and explaining the RLE Project. Supplying the media with updated, factual information increases the likelihood of balanced, informative coverage. Ethnic, multi-lingual media coverage is an important element of the media outreach. Various media coverage regarding the RLE Project, such as print and digital media, online blogs, and social media, is regularly monitored. A proactive approach to media coordination is used to ensure that the media has current, relevant and accurate information to share with the public. This approach includes preparation of messages, media advisories and press releases and availability of RLE project staff for interviews by media outlets.

Section 5 - Environmental Justice and Limited English Proficiency Analysis

Outreach to environmental justice (EJ) populations (minority and low-income populations) is an important component of the RLE Project. The Final EIS includes an update of the EJ analysis conducted for the Draft EIS. The EJ analysis complies with the Federal Executive Order 12898 to address disproportionately high and adverse human health or environmental effects on minority and low-income populations resulting from federal programs, policies and activities. Populations specifically benefitted or harmed by the proposed action are identified. Effects of the RLE Project upon the elderly, disabled, non-drivers, transit-dependent, low income, minorities, and Limited English Proficiency (LEP) populations are described. The evaluation of minority and LEP impacts includes analysis of census data for the general project area regarding race, color, national origin and ability to speak English well. Census data analysis is supplemented and verified through field reconnaissance. Potential property acquisition impacts are also considered when evaluating the potential for disproportionate adverse impacts in EJ communities. Changes in minority employment opportunities, the effect of the proposed action on EJ populations and proposed mitigation measures to reduce or avoid disproportionate impacts upon EJ populations are discussed in the Final EIS.

LEP persons are defined as individuals for whom English is not their primary language and who have limited ability to read, write, speak, or understand English. Appendix X of the Draft EIS contains the limited English proficiency (LEP) analysis. CTA identified pockets of Spanish-speaking populations, indicating the need for outreach in both English and Spanish languages. Updated analysis for the Final EIS also shows that the majority of households in the project area speak English with Spanish as the second most common language spoken at home.

Similar to the Draft EIS public outreach process, RLE Project team has continued to print public materials in Spanish, and Spanish translators and interpreters have continued to be available at community meetings and public hearings. Additionally, CTA's relocation liaison, who is part of the RLE project team, is bi-lingual (English/Spanish) and coordinates with occupants and property owners to answer questions and provide additional information about land acquisition and relocation assistance advisory services.

Section 6 - Outreach Methods, Adapted for the Pandemic

The RLE project team employs a variety of strategies to conduct public outreach. During periods of city, state or federal social distancing mandates, it is expected that some public involvement activities will be conducted virtually, using a variety of strategies and tools to ensure wide community reach and participation. As of March 2020, the project team utilizes a combination of virtual and in-person engagement strategies.

The following serves as guidance for how the RLE project team maintains outreach goals during periods when social distancing is in effect and periods thereafter when, though not required or recommended, individuals may feel uncomfortable gathering at in-person group events. The project team assessed the previously planned outreach activities and categorized them by the following: a) allow remote adaptation or b) put on hold until in-person public engagement activities can resume. The following section lists the activities and the actions the RLE project team is taking with each during periods of social distancing.

In making these recommendations, the RLE project team remains cognizant of demographic factors such as transit dependency, age, and internet access that would impact how long remote activities may be needed and which remote outreach methods will be most accessible. The RLE project team considers accessibility of online outreach activities by mobile phone and analog engagement methods to ensure inclusion of households without internet subscriptions. The RLE project team reviews how local aldermen and religious leaders are communicating with their constituents to identify technologies residents may be familiar with using. Alternate outreach activities are accessible to Spanish speakers in the project area through translated materials and interpreters in meetings.

6.1 Public Information

6.1.1 Printed Materials

Printed materials include informational handouts, maps, photographs, newsletters, community guide (formerly referred to as Citizen's Guide), and other means of displaying information. Print materials such as newsletters and flyers are used to publicize outreach information and opportunities for participation. These materials are made available at public locations such as churches, schools, libraries, parks, aldermanic offices, or businesses, and are available in English and Spanish. During times of social distancing when public spaces may not be accessible, the RLE project team distributes printed materials through community partners who continue to be active in the community.

6.1.2 Project Newsletters

Newsletters are developed twice per year and published in hardcopy and electronically by the RLE project team. In addition to project facts, the newsletters provide an opportunity to widely share stories of individuals and organizations who will benefit from the RLE Project. Graphics and maps

are incorporated in the newsletters in order to make the content easy to read and understand, and newsletters are made available in English and Spanish. The newsletters are distributed to the project contact list via email notice (i.e., eblast), and at in-person events.

6.1.3 Project Website

The RLE project team maintains CTA's website (www.transitchicago.com/rle) to provide access to project updates, project background, project materials, and documents and announcements. Information on the website is uploaded in a readable format for people with vision impairments.

6.1.4 Social Media

Social media posts are used to promote project awareness through CTA's social media accounts and a dedicated RLE Facebook page is used to communicate with project community members and stakeholders on topics such as project milestone updates, providing notice about upcoming or ongoing work in the project area, and CTA events of interest. Posts remain sensitive to the current environment and adapt to any news related to public health and safety.

6.1.5 Media/Project Video

The RLE project team utilizes videos prepared by CTA to promote and explain aspects of the RLE project to various stakeholders. The RLE Project video contains remarks from CTA President Dorval R. Carter, Jr. and stakeholders of the RLE project footprint, and explains the benefits that the RLE Project provides to the Far South Side and the RLE footprint. The videos are captioned in English and Spanish.

6.2 Communication

In addition to publicly sharing project information, the RLE project team establishes direct communication channels with community members.

6.2.1 Email/eBlasts

The RLE project team promotes alternative means of communication via e-mail, or eblasts, during the period when there are reduced opportunities to contact project team members in-person. The project contact list is used on an as-needed basis to share project updates, including updated materials such as the RLE newsletter. Through meetings, events, marketing materials and social media platforms, the project's email address, RedExtension@transitchicago.com, is provided to stakeholders as a resource for inquiries related to the RLE Project and for requests to be added to the contact list for ongoing project updates. The project team responds to emails received at the project email address with the latest information available.

Requests to receive project updates can be made by contacting CTA by mail, signing up for notifications on the project website, or emailing RedExtension@transitchicago.com. Those who

provide their email when signing into project outreach events are added to the project contact list to receive public notifications about the project.

6.2.2 Letters and Postcards

The RLE project team sends letters and postcards to community members to share project updates or notifications for participation opportunities. Letters are also used to communicate with potentially impacted property owners and occupants. Letters include ways in which property owners can contact CTA, if they have questions about their property.

6.2.3 Customer Service Phone Calls

The CTA Customer Service Department accepts phone calls and is able to answer questions about the RLE Project. The project team ensures that customer support representatives are aware of any project updates and are provided with the proper information to respond to callers. Questions that require additional follow up are routed to the RLE project team to address.

6.3 Engagement Pathways

6.3.1 Community Based Engagement

The RLE project team attends community events to meet people where they are and make use of opportunities to inform the public about the RLE Project. At these meetings, project team members may host an information table or kiosk, provide materials about CTA services and the RLE Project, and answer questions. Community events can assist CTA in reaching specific demographics such as seniors, youth, families, and commuters in addition to targeting low-income, minority, or LEP populations. Regular conversations with the community also help ensure the project team maintains a strong relationship with residents and stays informed of local initiatives.

During times when social distancing is required, the RLE project team proactively communicates with event coordinators and/or undertakes online research to assess what events may be held that will not compromise the health and safety of the RLE project team, attendees, and members of the community. Events and activities that the RLE project team engages in include food giveaways, public health related activities, community festivals, and other community events. In cases that the project team is not able to attend due to capacity limits, informational materials are provided to event organizers to be shared with attendees. The project team also participates in virtual events whenever possible.

6.3.2 Listening Sessions/Stakeholder Interviews

CTA staff meet with individual or small groups of stakeholders to collect feedback or learn about particular issues related to the RLE project. Often as part of a series of interviews, standard questions may be prepared in addition to allowing time for open discussion.

6.3.3 Small Group Meetings

The RLE project team may opt to invite small groups to participate in a virtual meeting or group phone call to stay engaged while maintaining social distancing guidelines.

6.3.4 Briefings

The RLE project team gives project briefings to stakeholders, elected officials, community organizations, and advocacy and other interest groups.

6.3.5 Engagement Website

The RLE Project utilizes an interactive engagement website (www.engagerle.transitchicago.com) as of December 2020, to engage the public and obtain feedback in a public online forum. Many engagement tools are available to provide community members opportunities to share feedback and ask questions directly of the project team. Stakeholders can learn about upcoming meetings as well as engage with tools such as surveys, polls, Q&A, comment submissions, and pinned comments on maps. The platform also provides various analytics to track engagement levels and process submissions. While the engagement website has some details regarding project background, timeline, and recent progress, the CTA website remains the main repository for information on the project.

Access to the project team via this website is particularly important for RLE Project area residents as some may not have internet access at home to be able to participate in virtual meetings. Residents can participate at any time by visiting a library or other access point at their leisure. In addition to this, the engagement website also has an SMS hotline that people can use to submit comments that are displayed on the website.

6.3.6 Elected Officials

The RLE project team monitors opportunities to update and engage residents through elected official's social media channels, newsletters, and remote/virtual town halls. The project team provides information to aldermen in the project area to encourage their assistance in disseminating information to their members and constituents. The project team also coordinates with CTA Government and Community Relations (GCR) to ensure elected officials have advance notice regarding upcoming communications from CTA to stakeholders such as stakeholder outreach, newsletters, social media, or field work.

6.3.7 Door to Door Outreach

The RLE project team conducts door to door outreach to potentially impacted property owners and occupants to provide information and answer questions about the acquisition and relocation process. This form of outreach ensures that important information is accurately delivered to individuals.

6.4 Public Meetings

The RLE Project has a long history of community participation in the form of CTA hosted public meetings. Since the publication of the Draft EIS in 2016, the RLE project team continues to host public meetings in various formats. Public meetings are one of the most important tools for direct engagement with the community, and **Section 7** includes more details about this form of engagement along with the adaptation to virtual meetings during the pandemic.

Section 7 - Public Meetings

7.1 Public Hearings

Public hearings are the most formal of public meeting formats and are required for certain NEPA milestones. During these meetings, the RLE project team clearly presents the information that is undergoing the public comment process. Stakeholders are provided the opportunity to submit official comments in writing or verbal comments that are recorded by court reporters.

Spanish language interpreters are available for live interpretation if needed. In addition, American Sign Language interpreters are available for virtual public hearings. Public hearings have specific requirements for public notice and timing and are held at an ADA accessible venue within the project area that is also accessible by public transit.

7.2 Community Meetings

Community meetings are held to keep the community informed about project progress. These meetings are similar to public hearings except that public comments, although collected, do not necessarily need to be formally recorded. While often held in an open house format, these meetings can also be more structured with a presentation and question and answer session. Information on environmental analyses, results of community surveys, changes in project alternatives, identification of potential funding sources, or resolution of neighborhood issues is shared with attendees. These meetings provide opportunities for the public to provide ongoing input that helps CTA progress the RLE Project and complete the Final EIS.

The RLE project team incorporates social distancing at in-person events by hosting in larger venues than normal, extending the timeframe of meetings, and limiting the number of attendees entering spaces at one time to meet safe capacity constraints. Advanced registration is recommended in order to anticipate the number of attendees. RLE talking points and materials are also developed as appropriate to reflect current social distancing guidelines to attendees.

7.3 Virtual Meetings

The RLE project team conducts virtual community meetings and public hearings using online platforms (i.e., Zoom and Facebook) and ensures opportunities for participation by community members who lack internet access (mailers, telephone participation, surveys via text). Virtual meetings conducted using the Zoom platform provide attendees opportunities to learn about RLE project activities, ask questions, and engage with other attendees using the chat feature. The project team uses interactive polling questions during the meeting and ends each meeting with a question-and-answer session.

More direct conversations are possible in virtual meetings when needed by utilizing breakout sessions. Breakout sessions allow a small number of attendees to ask questions and discuss concerns directly with project team members. Virtual meetings are made accessible to people

with disabilities by the use of American Sign Language interpretation and closed captioning. Spanish interpretation is also available for meeting attendees throughout the entirety of the meetings. Meetings are held online with a telephone dial-in option for attendees who do not have internet access.

7.4 Office Hours

Office hours are an optional opportunity often used to provide additional opportunities for engagement following a public meeting, either for attendees who would like additional time with the project team or for people who were not able to attend the public meeting. In addition to other outreach, office hours are utilized for displacement outreach as it often requires dedicated one on one time with property owners. Office hours can also be held without an associated public meeting as a way to meet residents in various locations that are geographically more convenient.

7.5 Open Houses

Open houses allow people to attend at any time within a given timeframe and provide attendees the opportunity to receive information at their own pace. This type of meeting is structured such that attendees may visit a series of stations or booths that may include printed exhibit boards with information, maps, photographs, and visualizations that focus on one topic area. Each of these stations is staffed by project team members and technical experts who respond to questions. This format allows attendees to have one on one interaction with the project team and detailed responses to their questions from subject matter experts. Open houses may include a presentation at a designated time. Attendees are often given comment cards so they can provide written comments. Project team members also take notes and report comments from their conversations with attendees.

7.6 Workshops/Charrettes

Ideally for smaller groups of stakeholders, workshops (or charrettes) are a highly interactive way of engaging with stakeholders to gain specific feedback or solve complex challenges.

7.7 Displacement Outreach Meetings

Focused outreach to residents who may be displaced by the RLE Project is essential to ensure they understand the acquisition and relocation process and their rights to just compensation and relocation benefits. The RLE project team hosts displacement focused community meetings to answer any questions and address any concerns that impacted residents may have. Residents are provided the FTA General Acquisition & Relocation Information brochure, and roll plots are available to present the project's impact on properties in a graphical way that is easy to understand.

Section 8 - Public Meeting Notification and Materials

8.1 Meeting Materials

The RLE project team provides informational materials at public meetings, which may include the following:

8.1.1 Exhibit Boards and Presentations

Printed exhibit boards and presentations (for in-person meetings) and virtual presentations.

8.1.2 Informational Handouts

Handouts that explain what the RLE Project is, what benefits it will provide the community, and implementation details such as schedule and funding. Acquisition and relocation information brochures are also provided at most events where property owners and occupants are expected.

8.1.3 Comment Cards

Printed comment cards, or virtual comment forms, are provided to attendees to collect public input.

8.1.4 Copies of Relevant Documents

Public meetings may include copies of documents that are available for public review and comment such as the Draft EIS or Supplemental EA.

8.1.5 Community Guide

A Community Guide (formerly referred to as Citizen's Guide) is prepared as part of the release of each NEPA document (e.g., Draft EIS, Supplemental EA, and Final EIS) with pictures from the study area, colorful bold headings, and succinct descriptions of the impacts and proposed mitigation measures. The text explains the process for public review and gets to the core of technical issues in an easily understood manner.

8.2 Public Notices

Various formats are used to invite the public to attend RLE Project public meetings, which may include the following:

8.2.1 Printed Flyers

Printed flyers are used to advertise public meetings and are provided to ward offices, schools, libraries, and other public spaces. The RLE project team also partners with local community organizations to distribute flyers to homes and businesses in their communities.

8.2.2 Project Website

CTA's existing project website (www.transitchicago.com/rle) is updated regularly and provides access to project updates, project background, project materials, and documents and announcements. Public meeting dates are posted in advance on the website.

8.2.3 Display Advertisements

Display advertisements in local and regional newspapers are used to publicize public meetings, providing the time, date and location of meetings. Advertisements also include information on the project, the reason for the meeting, and how and when to submit comments. An email and postal mail address are provided for written comments. Advertisements may be displayed in printed or electronic newspapers, which may include the following:

- Beverly Review
- Chicago Crusader
- Chicago Defender
- Chicago Sun-Times
- Chicago Tribune
- Citizen Newspaper Group
- La Raza
- Lawndale News
- Red Eye
- Daily Southtown

8.2.4 Email/eBlasts

Notifications for upcoming public meetings are sent to the project contact list via email.

8.2.5 Letters and Postcards

In order to maximize participation of residents who will be most impacted by the RLE Project, postcards or letters are mailed to residences near the RLE Preferred Alignment to notify residents about upcoming public meetings.

8.2.6 Social Media

Social media posts are used to advertise public meetings on Facebook, Instagram, and Twitter. Paid advertisements, or boosted posts, are also used to target specific areas and demographics.

8.2.7 Promotion on Transit: CTA Customer Alerts

Meeting announcements via customer alerts for the public hearings are posted at the 95th/Dan Ryan station, on CTA Red Line trains, and on CTA buses with routes in the RLE project footprint.

8.2.8 Press Releases

Press releases are issued to ensure that media outlets are aware of important public meetings, such as public hearings, and have adequate background information to be able to report about the project and meeting.

Section 9 - Documentation

Comment Tracking/Documentation/Response Management

Public hearings are fully documented for the administrative record. Comments are received by mail, email, court reporters, and by comment card. Summaries from the Draft EIS, Preferred Alignment, and Supplemental EA outreach are included in the Final EIS. The summaries include comment cards, letters, attendance sheets, notification materials, and a summary of verbal and written input, such that an evidential record of the public hearings is documented. Comments received during the formal public comment periods, and the responses to those comments, will be incorporated into the Final EIS.

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project

Supplemental Environmental Assessment and Section 4(f) Evaluation Publication, Public Hearing, and Displacement Outreach Summary

May 2022

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Table of Contents

Section 1 - Introduction 5

Section 2 - Supplemental EA and Section 4(f) Evaluation Notification 7

2.1 Notice of Availability of the Supplemental EA and Section 4(f) Evaluation and Public Hearing 7
2.2 Newspaper Ads 8
2.3 Public Hearing Flyer 9
2.4 Project Website 9
2.5 Postcard Notifications 10
2.6 eBlast Notifications 10
2.7 Social Media Announcements 10
2.8 Customer Alert 11
2.9 Press Release 11
2.10 Community Guide to the Supplemental EA and Section 4(f) Evaluation 11
2.11 Newsletter 12

Section 3 - Media Coverage 13

Section 4 - Public Hearing Format and Materials 14

4.1 Virtual Public Hearing 14
4.2 In-Person Public Hearing 16
4.3 Section 4(f) Outreach 17

Section 5 - Outreach to Stakeholders and Agencies 19

5.1 Stakeholder Outreach 19
5.2 Project Advisory Council (PAC) Coordination 19
5.3 Aldermanic Coordination 19
5.4 Agency Outreach 20

Section 6 - Comments Received 22

Section 7 - Displacement Outreach 23

7.1 Informational Materials - FTA General Acquisition and Relocation Information Brochure 23
7.2 Letters Mailed to Property Owners and Occupants 23
7.3 Door-to-Door Outreach 23

7.4 Individual Consultations 23

Tables

Table 2-1: Newspaper Ads Announcing Publication of the Supplemental EA and Section 4(f) Evaluation and Public Hearings 5
Table 2-2: eBlast Notification Dates 6
Table 2-3: CTA RLE Facebook Post Dates 7
Table 3-1: Published News Articles, January 31 - March 1, 2022 9
Table 6-1: Summary of Comments Received 22

Attachments

Attachment 1 – Supplemental EA and Section 4(f) Evaluation Notification

- Supplemental EA and Section 4(f) Evaluation Notice of Availability
- Newspaper Ads
- Public Hearing Flyer (English and Spanish)
- Project Website
- Postcard/Comment Card
- eBlast Notifications
- Social Media Announcements
- Customer Alert
- Press Release
- Community Guide to the Supplemental EA and Section 4(f) Evaluation (English and Spanish)
- Winter 2021 Newsletter (English and Spanish)

Attachment 2 – Media Coverage

Attachment 3 – Public Hearing Format and Materials

- Virtual Public Hearing Presentation
- In-Person Public Hearing Exhibit Boards
- Online Comment Form
- Hard Copy Comment Form

Attachment 4 – Outreach to Stakeholder and Agencies

- In-Person Stakeholder Meeting Exhibit Boards
- Cooperating Agency Letter
- Cooperating Agency Mailing List
- Federal Participating Agency and Tribal Consulting Parties Letter
- Federal Participating Agency Mailing List
- Tribal Consulting Parties Mailing List

- Non-Federal Participating Agency Letter
- Non-Federal Participating Agency Mailing List

Attachment 5 – Comments Received

Attachment 6 – Displacement Outreach

- FTA General Acquisition and Relocation Information Brochure
- Impacted Property Letter Template
- Impacted Property (Phase I ESA Completed) Letter Template
- Impacted Property (Partial Acquisition or Easement of Property) Letter Template
- No Longer Impacted Property Letter Template

Section 1 - Introduction

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities.

The National Environmental Policy Act (NEPA) of 1969 mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined (42 United States Code § 4332). On October 6, 2016, the Federal Transit Administration (FTA) and CTA published a Draft Environmental Impact Statement (EIS) in accordance with NEPA and other applicable regulations. The Draft EIS evaluated two Union Pacific Railroad (UPRR) Rail Alternative options, the East and West Options. CTA selected a Preferred Alignment, a hybrid of the East and West Options of the UPPR Alternative and announced it to the public on January 26, 2018.

After the announcement of the Preferred Alignment in 2018, CTA continued stakeholder coordination and design efforts that led to the following three design changes:

- 130th Street station relocation
- 120th Street yard and shop refinement
- 107th Place cross-over

FTA and CTA prepared the RLE Project Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation in accordance with NEPA and other applicable regulations to evaluate the three design changes.

This document summarizes the public and agency outreach efforts conducted for the RLE Project Supplemental EA and Section 4(f) Evaluation publication and public hearings, as well as displacement-specific outreach efforts conducted for property owners and residents who would potentially be displaced by the project. Public noticing and hearing requirements were met in accordance with NEPA and other applicable regulations. Property owner, occupant, and resident notification requirements were met in accordance with NEPA and the federal regulations contained in 49 Code of Federal Regulations (CFR) § 24 and the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Uniform Act).

CTA hosted two public hearings for the Supplemental EA and Section 4(f) Evaluation. The public hearing was held in two formats: one virtual meeting and one in-person meeting. The virtual public hearing was held on Tuesday, February 15, 2022 using Zoom, and the in-person public hearing was held in an open house format at The Salvation Army Kroc Center, 1250 W. 119th Street, Chicago, IL 60643 on Thursday, February 17, 2022. The Supplemental EA was made available for public review 15 days in advance of the hearings, in accordance with regulations. In addition to the two public

hearings, on Wednesday, February 16, 2022, CTA held a meeting for 130th Street station area stakeholders at the Altgeld Public Library.

Prior to the public hearings, CTA conducted outreach to provide information to and coordinate with potentially displaced property owners and occupants. On January 31, 2022, CTA conducted door-to-door outreach to potentially displaced property owners and occupants. Between January 31 and February 7, 2022, CTA notified property owners and occupants by mail who would potentially be displaced.

Section 2 - Supplemental EA and Section 4(f) Evaluation Notification

To provide the greatest opportunity for input on the Supplemental EA and Section 4(f) Evaluation, CTA used a variety of outreach and notification methods to announce the availability of the document for public review and comment, and invite interested parties to attend and participate in the public hearings.

CTA engaged in the following notification activities beginning on January 31, 2022, as part of the release of the Supplemental EA and Section 4(f) Evaluation:

- Published the Notice of Availability (NOA) for the Supplemental EA and Section 4(f) Evaluation and four additional display ads in three local and regional newspapers.
- Updated the RLE Project website to include the information contained in the NOA, the Supplemental EA and Section 4(f) Evaluation document, public hearing flyer, and Community Guide.
- Distributed hard-copy versions of the Supplemental EA and Section 4(f) Evaluation at the eight locations identified in the NOA. In addition, CTA placed four hard-copy versions of the Supplemental EA and Section 4(f) Evaluation in high-traffic locations within the project area. Posted customer alerts on the CTA system.
- Issued a press release announcing the scheduled public hearings.
- Notified cooperating and participating agencies and conducted tribal coordination to inform about the publication of the Supplemental EA and Section 4(f) Evaluation and invited them to attend the public hearings.
- Distributed the Community Guide at the in-person public hearing and the 130th Street Station stakeholder meeting. Copies were also made available at the Altgeld Public Library, Palmer Park and the project website.
- Included information about the upcoming publication of the Supplemental EA and Section 4(f) Evaluation in the Winter 2021 RLE Project newsletter.

2.1 Notice of Availability of the Supplemental EA and Section 4(f) Evaluation and Public Hearing

CTA notified the public of the Supplemental EA and Section 4(f) Evaluation publication and public hearings through a NOA (see **Attachment 1**) published in the Chicago Sun-Times on Monday, January 31, 2022. The NOA initiated the official 30-day public comment period from January 31, 2022 through March 1, 2022 and provided information on how to submit comments during the comment

period. The notice also provided information on locations where the Supplemental EA and Section 4(f) Evaluation could be reviewed during the comment period.

The Supplemental EA and Section 4(f) Evaluation was posted to the CTA website (https://www.transitchicago.com/rle/sea/) in accessible and PDF formats on January 31, 2022. As advertised in the NOA, hard copies and DVDs were made available at the following locations:

- FTA – Region 5 Office, 200 W. Adams Street, Suite 320, Chicago, IL 60606
- CTA headquarters, 567 W. Lake Street, 1st Floor, Chicago, IL 60661
- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628
- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library, 955 E. 131st Street, Chicago, IL 60827
- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605

In addition to the locations advertised in the NOA, CTA placed hard-copy versions of the Supplemental EA and Section 4(f) Evaluation, the public hearing flyer, and the Community Guide at high-traffic locations within the project area: two Ward offices (9th Ward, 34th Ward), one Chicago Park District (CPD) park (Palmer Park), and one neighborhood organization (Agape Community Center).

2.2 Newspaper Ads

CTA prepared newspaper ads announcing the publication of the Supplemental EA and Section 4(f) Evaluation and public hearings. The newspaper ads provided information on the scheduled public hearings and opportunities public comment and input at the hearings, as well as announcing the public comment period and how official comments could be submitted during the comment period.

Newspaper ads were published in three local and regional publications (see **Table 2-1**). **Attachment 1** contains tear sheets for each publication. Publications were chosen based on coverage area and demographics to provide additional notice of the availability of the document and opportunity to attend the public hearings. CTA also advertised in Lawndale Bilingual News, a bilingual publication (English and Spanish).

Table 2-1: Newspaper Ads Announcing Publication of the Supplemental EA and Section 4(f) Evaluation and Public Hearings

Publication Date	Media Outlet
01/31/2022	Chicago Sun-Times
02/01/2022	Chicago Sun-Times
02/07/2022	Chicago Sun-Times
02/09/2022	Citizen Newspaper Group
02/10/2022	Lawndale Bilingual News

2.3 Public Hearing Flyer

The Supplemental EA and Section 4(f) Evaluation flyer in English and Spanish provided details about the public hearings and the public comment period. The following information was included on the flyer:

- Brief description of the three project changes that have occurred since the publication of the Draft EIS
- Start and end date of the 30-day public comment period and how to provide official comments
- List of locations where the Supplemental EA and Section 4(f) Evaluation was available for public review during the 30-day comment period
- Virtual and in-person public hearing registration and meeting accessibility information

The Supplemental EA and Section 4(f) Evaluation flyer was published on the RLE Project website (https://www.transitchicago.com/rle/sea/) and distributed via email (eBlast) to the RLE Project contact list. CTA partnered with a local community-based organization, The Rock Enterprises and Development Corporation (T.R.E.A.D.), to distribute the public hearing flyer to community members and businesses within the project area. **Attachment 1** contains both English and Spanish language versions of the flyer.

2.4 Project Website

CTA updated the RLE Project website on January 31, 2022 with information about the Supplemental EA and Section 4(f) Evaluation on a dedicated webpage (https://www.transitchicago.com/rle/sea/). The dedicated webpage provided a general overview of the NEPA requirements, including details about the public hearings and public comment period for the Supplemental EA and Section 4(f) Evaluation. Copies of the Supplemental EA and Section 4(f) Evaluation were posted in accessible PDF formats. Associated RLE Project materials prepared for the Supplemental EA and Section 4(f) Evaluation, including the public hearing flyer, Community Guide, virtual public hearing presentation and recordings, and the in-person public hearing exhibit boards, were posted on the website. A link to the online comment form was available on the project website for the public to

submit comments throughout the public comment period. **Attachment 1** contains a printout of the project website.

2.5 Postcard Notifications

On January 31, 2022, CTA mailed postcards in English and Spanish with information on the Supplemental EA and Section 4(f) Evaluation, the public comment period and ways to submit official comments, and invited community members to the public hearings. Mailed postcards also contained a pre-paid postage tear card for community members to mail back their comments to CTA. The postcards were mailed to 4,192 addresses, including public agencies, business groups, churches, schools, community/neighborhood groups and associations, and community members living within or near the project area. Postcards sent to community members residing in the Altgeld Gardens, Golden Gate, and Eden Green neighborhoods included an invitation to the 130th Street stakeholder meeting held on Wednesday, February 16, 2022, and an invitation to the virtual and in-person public hearings. **Attachment 1** contains a copy of the postcards.

2.6 eBlast Notifications

CTA sent emails (eBlasts) to approximately 1,800 email addresses on the RLE Project contact list for each of the eBlasts listed in **Table 2-2**. A Save-the-Date notification was sent on January 26, 2022, prior to the NOA announcement. Five (5) of the eBlasts included the public hearing flyer (English and Spanish) and information about the public comment period and ways to submit official comments, how to register and participate in the public hearings, a link to the project website, and contact information for accessibility needs. The final two eBlasts sent reminded the public about the end of the comment period and encouraged the public to submit comments. **Attachment 1** contains copies of the eight eBlasts.

Table 2-2: eBlast Notification Dates

Date	Topic
01/26/2022	Save-the-Date
01/31/2022	Initial Announcement
02/08/2022	Reminder #1
02/14/2022	Reminder #2
02/15/2022	Reminder #3
02/17/2022	Reminder #4
02/24/2022	Comment Period Follow-Up Reminder #1
02/28/2022	Comment Period Follow-Up Reminder #2

2.7 Social Media Announcements

CTA used the RLE Facebook page (https://www.facebook.com/CTARedExt) and the CTA Facebook page for social media announcements, listed in **Table 2-3**, to announce and promote the Supplemental EA and Section 4(f) Evaluation availability and the public hearings. Facebook events

listings were also created on the RLE Facebook page for both the virtual and in-person public hearing. **Attachment 1** contains copies of the Facebook posts.

Table 2-3: CTA RLE Facebook Post Dates

Date	Topic
01/26/2022	Save-the-Date
02/09/2022	Reminder #1
02/14/2022	Reminder #2
02/25/2022	Comment Period Follow-Up Reminder #1
02/28/2022	Comment Period Follow-Up Reminder #2

2.8 Customer Alert

CTA posted customer alert signs in English and Spanish on the CTA system to promote the Supplemental EA and Section 4(f) Evaluation availability and the public hearings (**Attachment 1**). The alert provided information about the public comment period and ways to submit official comments, how to register and participate in the public hearings, and contact information for accessibility needs. The customer alert appeared at the following locations:

- 95th/Dan Ryan terminal
- All Red Line railcars
- All buses operating out of the 103rd Street garage, which include routes that operate within and surrounding the project area:

o N5, 28 Stony Island, 29 State, 34 South Michigan, 95 95th, 100 Jeffery Manor Express, 103 West 103rd, 106 East 103rd, 108 Halsted/95th, 111 111th/King Drive, 111A Pullman Shuttle, 112 Vincennes/111th, 115 Pullman/115th, 119 Michigan/119th

2.9 Press Release

On Thursday, February 10, 2022, CTA issued a press release announcing the availability of the RLE Supplemental EA and Section 4(f) Evaluation and the public hearings. The press release was posted to CTA's website and the RLE Project website. The press release is included in **Attachment 1**.

2.10 Community Guide to the Supplemental EA and Section 4(f) Evaluation

The Community Guide was published on the RLE Project website (https://www.transitchicago.com/rle/sea/) as part of the notification efforts and was also distributed at the Altgeld Public Library and Palmer Park. The Community Guide was available at the 130th Street stakeholder meeting held on Wednesday, February 16, 2022, and at the in-person

public hearing held on Thursday, February 17, 2022. The Community Guide for the Supplemental EA and Section 4(f) Evaluation summarized the key information of the document in a four-page booklet. The Community Guide included the following sections:

- What is a Supplemental Environmental Assessment?
- What has Changed within the RLE Project Since the Draft EIS?
    - 130th Street Station Relocation
    - 120th Street Yard and Shop Refinement
    - 107th Place Cross-over
- Section 4(f) Evaluation: Beaubien Woods Forest Preserve
- How to Provide Comments on the Supplemental EA and Section 4(f) Evaluation

Attachment 1 contains English and Spanish language versions of the Community Guide.

2.11 Newsletter

On Friday, December 3, 2021, CTA electronically published its biannual newsletter on the RLE Project website (see **Attachment 1**), notifying the RLE Project contact list of the Supplemental EA and Section 4(f) Evaluation public hearings that were scheduled to occur in early 2022. The Winter 2021 newsletter was made available in English and Spanish.

Section 3 - Media Coverage

In response to the release of the Supplemental EA and Section 4(f) Evaluation and the public hearings, news articles about the RLE Project appeared in local media. **Table 3-1** summarizes the articles about the project that appeared between the date of the document release on January 31, 2022 and the end of the public comment period on March 1, 2022. **Attachment 2** contains a copy of each article.

Table 3-1: Published News Articles, January 31 – March 1, 2022

Date	Media Outlet	Article Title
02/16/2022	Streetsblog Chicago	Planners discussed tweaks to the Red Line Extension project at Supplemental EA hearing
03/01/2022	Chicago Business Journal	Chicago's $2.3 billion Red Line Extension could bring housing, retail to South Side

Section 4 - Public Hearing Format and Materials

CTA hosted a public hearing in two formats, one virtual meeting and one in-person meeting, to inform the public about the Supplemental EA and Section 4(f) Evaluation, and to provide the public with an opportunity to ask questions about the project.

Virtual Public Hearing

- Time: 6:00 PM to 8:00 PM
- Date: Tuesday, February 15, 2022
- Location: Virtual (via Zoom)

In-Person Public Hearing

- Time: 6:00 PM to 8:00 PM
- Date: Thursday, February 17, 2022
- Location: The Salvation Army Kroc Center, 1250 W. 119th Street, Chicago, IL 60643

The public hearings were scheduled in the early evening on a weekday to provide the greatest opportunity for community participation. Facebook events were created for both public hearing dates. A total of 139 members of the public attended the public hearings (virtual and in-person). Spanish interpreters, American Sign-Language (ASL) interpreters, closed captioning, and court reporters were available during the public hearings. Information presented in the two different formats (virtual meeting presentation and in-person meeting boards) were consistent in overall content.

4.1 Virtual Public Hearing

4.1.1 Format

The virtual public hearing held on February 15, 2022 and hosted on Zoom was available to watch simultaneously via Facebook Live. Viewers did not need to be logged into Facebook to watch the live stream on Facebook Live. A link to join the virtual public hearing was also added to the Facebook Live stream to facilitate access to Spanish and ASL interpretation and closed captioning for those who did not register for the virtual public hearing in advance. The message posted on the live stream was in both English and Spanish. Public attendees that did not have access to a computer and/or internet access were able to join the virtual public hearing via a Zoom call-in phone option.

One hundred seventeen people attended the virtual public hearing on Zoom, and an additional 12 attended the virtual hearing via Facebook Live. Three court reporters were available during the virtual public hearing to collect comments. The RLE Project team provided a formal presentation at the virtual public hearing which was followed by a question and answer (Q&A) session. The Q&A session allowed the public to submit comments and/or questions via Zoom chat or verbally to project staff.

Throughout the virtual public hearing, attendees were able to request to speak to a court reporter to submit official comments regarding the Supplemental EA and Section 4(f) Evaluation. Attendees were also able to request to speak with a member of the project team regarding land acquisition. Attendees that requested to speak with a court reporter or a project team member were placed in a Zoom breakout room and were allotted 15 minutes to speak with the court reporter or the project team member. See **Section 7.5**, Comments Received, to view total number of verbal comments received during the virtual public hearing. Spanish and ASL interpreters were available for those that required interpretation services in the breakout rooms.

4.1.2 Materials and Presentation

The RLE Project team gave a presentation at the virtual public hearing. The presentation explained the virtual public hearing format, provided background and updates on the RLE Project, and included a general overview of the Supplemental EA and Section 4(f) Evaluation.

CTA developed the following presentation slides for use during the virtual public hearing:

1. Thank You for Joining Us
2. Captioning & Interpretation
3. RLE Supplemental EA and Section 4(f) Evaluation Virtual Public Hearing Placeholder Slide
4. Purpose of this Public Hearing
5. Public Hearing Formats
6. Make Official Comments
7. Make Official Comments
8. How to Ask a Question Live
9. Agenda
10. Our Presenters
11. Project Overview
12. Purpose and Need
13. Purpose and Need
14. Project Benefits
15. What is a Supplemental EA?
16. Why is a Supplemental EA Needed?
17. Summary of Resource Analyses
18. 130th Street Station Relocation
19. 130th Street Station Relocation (Transportation Impacts and Mitigations)
20. 130th Street Station Relocation (Mitigation for Access Road into Beaubien Woods Forest Preserve)
21. 130th Street Station Relocation (Parcel Impacts)
22. 130th Street Station Relocation (Historical and Cultural Resource Analysis)
23. 130th Street Station Relocation (Visualizations)
24. 130th Street Station Relocation (Visualizations)
25. 120th Street Yard & Shop Refinement
26. 107th Place Cross-over
27. 107th Place Cross-over Visualizations
28. 107th Place Cross-over Visualizations
29. Summary of Resource Analyses
30. Participating in the Hearing
31. Participating in the Hearing
32. Section 4(f) Evaluation in Final EIS (Updates to Impacts on Fernwood Parkway)
33. Section 4(f) Evaluation in Final EIS (Mitigation for Fernwood Parkway)
34. RLE Corridor Land Acquisition
35. Transit-Supportive Development
36. Next Steps
37. Make Official Comments
38. Thank You

Attachment 3 contains the virtual public hearing presentation.

4.2 In-Person Public Hearing

4.2.1 Format

The in-person public hearing held on February 17, 2022 was in an open house format. The public hearing provided attendees an opportunity to review exhibit boards and submit official comments via the online comment form (see **Attachment 3**) or hard-copy comment form (see **Attachment 3**). The open house format also allowed the public to discuss their questions and concerns directly with project staff.

Ten people attended the in-person public hearing. Exhibit boards staffed by project team members provided information on the project purpose and need, objective of a Supplemental EA and Section 4(f) Evaluation, the three project design changes, a summary of impacts and mitigation, and information on property displacements, Section 4(f) evaluation of Fernwood Parkway, and an overview of the Transit-Supportive Development Plan.

Project team members staffed workstations to answer specific questions from the public related to property displacements and project engineering. Each workstation had supporting materials from the Supplemental EA and Section 4(f) Evaluation.

CTA played a looped video about the RLE Project throughout the hearing in the auditorium of The Salvation Army Kroc Center. The video was shown with closed captioning and ASL interpreters signed the video in real time throughout the entirety of the in-person public hearing. The video is available online at https://www.transitchicago.com/rle/transitchicago.com/rle/.

The in-person public hearing location was accessible per the Americans with Disabilities Act (ADA). The in-person public hearing was held in the project area and accessible by public transportation. For the convenience of all attendees, the bus route nearest to the in-person public hearing site was publicized on the public hearing flyer, eBlasts, and customer alert. Two court reporters were available during the in-person public hearing to collect comments.

4.2.2 Materials and Exhibit Boards

Project team members offered in-person hearing attendees hard-copy comment forms (**Attachment 3**) and Community Guides (**Attachment 1**) as they entered the hearing. CTA made copies of the Supplemental EA and Section 4(f) Evaluation available to review during the meeting. Copies of all public hearing materials were published to the project website and remain available.

The hard-copy comment forms allowed attendees to submit written comments during the in-person hearing. Attendees were also provided pre-paid postage postcards for community members to write and mail back comments to CTA.

CTA developed the following project exhibit boards for use during the in-person public hearing:

1. Welcome Sign
2. Purpose of this Public Hearing
3. RLE Project Background
4. Why is the RLE Project Important?
5. RLE Project Purpose and Need
6. What is a Supplemental EA?
7. Why is a Supplemental EA Needed?
8. Project Development Process
9. 130th Street Station Relocation
10. 130th Street Station (Transportation Impacts)
11. Section 4(f) Evaluation (Beaubien Woods Forest Preserve)
12. 130th Street Station (Parcel Impacts & Historical and Cultural)
13. 130th Street Station Visualizations
14. 130th Street Station Visualizations
15. 120th Street Yard and Shop Refinement
16. 107th Place Cross-over
17. 107th Place Cross-over Visualizations
18. 107th Place Cross-over Visualizations
19. Summary of Impacts and Mitigation
20. Property Displacements
21. Section 4(f) Evaluation (Fernwood Parkway)
22. Transit-Supportive Development (TSD) Plan Overview
23. Thank You/How to Comment on the Supplemental EA and Section 4(f) Evaluation

Attachment 3 contains the in-person public hearing exhibit boards.

CTA and project team members provided attendees with specific information related to these topics and answered questions at each exhibit board area and workstation. Copies of the exhibit boards were made available on the project website immediately after the virtual public hearing and remain available on the project website.

The workstation dedicated to potential property displacements included large-scale maps of the project area showing potential displacements to help facilitate discussion. CTA also provided FTA's "General Acquisition & Relocation Information" brochures and Relocation Specialists discussed specific displacement-related questions. Project staff also scheduled appointments for the land acquisition team to follow up after the hearing with potentially displaced property owners or occupants to help answer any further displacement-related questions.

4.3 Section 4(f) Outreach

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 is a federal law that established requirements for USDOT (including FTA) consideration of publicly owned parks/recreational areas that are accessible to the general public, publicly owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects. This law, commonly known as Section 4(f), is now codified in 49 USC § 303 and 23 USC § 138 and is implemented by FTA through the regulation 23 CFR § 774.

The Section 4(f) analysis included in the Supplemental EA determined that there would be no use of any Section 4(f) resources as a result of the three design changes. The closure of Old 130th Street would eliminate a connection to the access road into the Beaubien Woods Forest Preserve from

Old 130th Street. With implementation of mitigation measures identified in coordination with the Forest Preserves of Cook County, there would be no use of the Beaubien Woods Forest Preserve. As part of the public hearings, the public was offered the opportunity to comment on the Section 4(f) analysis and on the mitigation measures identified.

In addition, at the public hearings, CTA provided an update on the Section 4(f) use of Fernwood Parkway, and associated mitigation measures since these will be discussed in the Final EIS. Fernwood Parkway is a park managed by the Chicago Park District. The use of this park was previously evaluated in the Draft EIS.

Section 5 - Outreach to Stakeholders and Agencies

This section details additional stakeholder and agency outreach efforts conducted to reach and coordinate with stakeholders, including residents in the 130th Street station area and cooperating and participating agencies and tribal consulting parties.

5.1 Stakeholder Outreach

On Wednesday, February 16, 2022, CTA held a 130th Street station area stakeholder meeting at the Altgeld Public Library. The stakeholder meeting, conducted as an in-person open house, focused on the 130th Street station and provided an opportunity for residents of Altgeld Gardens, Golden Gate, and Eden Green communities to share input and comment. Eleven members of the public attended the stakeholder meeting.

CTA developed project exhibit boards for the Supplemental EA and Section 4(f) Evaluation public hearings, of which the following were used during the stakeholder meeting:

1. Welcome Sign
2. RLE Project Background
3. What is a Supplemental EA?
4. Why is a Supplemental EA Needed?
5. Project Development Process
6. 130th Street Station Relocation
7. 130th Street Station (Transportation Impacts)
8. 130th Street Station (Parcel Impacts & Historical and Cultural)
9. 130th Street Station Visualizations
10. 103thStreet Station Visualizations
11. Section 4(f) Evaluation (Beaubien Woods Forest Preserve)
12. Summary of Impacts and Mitigation
13. Thank You/How to Comment on the Supplemental EA and Section 4(f) Evaluation
14. Property Displacements
15. Transit-Supportive Development

Attachment 3 contains the in-person 130th Street station area stakeholder meeting exhibit boards.

5.2 Project Advisory Council (PAC) Coordination

Coordination with members of the Project Advisory Council (PAC) was conducted ahead of the public hearings. The public hearing flyer and Community Guide were shared with PAC members so they could notify their constituents and other members of the community of the Supplemental EA and Section 4(f) Evaluation public hearings.

5.3 Aldermanic Coordination

CTA offered briefings to project area Aldermen about the Supplemental EA and Section 4(f) Evaluation and two Ward offices (9th Ward, 34th Ward) placed copies of the Supplemental EA and Section 4(f) Evaluation for public review.

5.4 Agency Outreach

CTA sent letters to cooperating and participating agencies and tribal consulting parties. These letters contained information on the availability of the Supplemental EA and Section 4(f) Evaluation, the public comment period, and ways to submit comments; updates to the RLE Project; and an invitation for agency representatives to attend the public hearings. Along with letters, each agency and tribal consulting party received a public hearing flyer providing additional information about the public hearings and how to register. The agencies and tribal consulting parties that received this notice are listed below. The letter and public hearing flyer were also provided via email. **Attachment 4** contains letter templates and mailing lists.

Cooperating Agency

- Federal Highway Administration

Federal Participating Agencies

- Federal Emergency Management Agency
- Federal Railroad Administration
- U.S Department of Energy
- U.S. Department of Health and Human Services
- U.S Department of Housing and Urban Development
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Transportation Security Administration

State Participating Agencies

- Illinois Commerce Commission
- Illinois Department of Natural Resources
- Illinois Department of Transportation
- Illinois Environmental Protection Agency
- Illinois State Historic Preservation Office

Regional Participating Agencies

- Metra Commuter Rail
- Metropolitan Water Reclamation District of Greater Chicago
- Pace
- Regional Transportation Authority

Local Participating Agencies

- Chicago Housing Authority
- Chicago Park District

- City of Chicago Department of Assets, Information and Services
- City of Chicago Department of Business Affairs and Consumer Protection
- City of Chicago Department of Planning and Development
- City of Chicago Department of Transportation
- City of Chicago Office of the Mayor
- City of Chicago Police Department

Tribal Consulting Parties

- Citizen Potawatomi Nation
- Forest County Potawatomi
- Ho-Chunk Nation
- Kickapoo Tribe of Oklahoma
- Little Traverse Bay Bands of Odawa
- Menominee Indian Tribe of Wisconsin
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- Potawatomi Nation-Hannahville Indian Community
- Prairie Band of Potawatomi Nation
- Sac and Fox Nation of Missouri
- Sac and Fox Nation of Oklahoma

Section 6 - Comments Received

CTA received a total of 37 public and agency comments during the comment period. In various notification materials, the public was informed that comments could be submitted during the public comment period via the online comment form on the project website: https://www.transitchicago.com/rle/sea, project email to RedExtension@transitchicago.com, and by US mail to Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465. During the public hearings, CTA invited attendees to provide comments verbally to a court reporter or in writing.

Table 6-1 summarizes the format of comments received.

Table 6-1: Summary of Comments Received

Format	January 31 March 1
Hard copy Comment Card	2
Online Comment Form	9
Verbal	5
Email	6
U.S. Mail	11
Agency Comments	4
Total Comments Received	37

Attachment 5 contains all comments received during the comment period. A summary of public comments received and responses to public comments, as well as agency correspondence received, is included in the Final EIS.

Section 7 - Displacement Outreach

As part of the publication of the Supplemental EA and Section 4(f) Evaluation, CTA also undertook a variety of methods to notify potentially displaced property owners and occupants of the Preferred Alignment and provide them with an overview of the displacements and relocation process as described in the Uniform Act.

7.1 Informational Materials - FTA General Acquisition and Relocation Information Brochure

CTA provided FTA's "General Acquisition and Relocation Information" brochure to property owners and occupants as requested. The brochure summarizes the acquisition and relocation process (**Attachment 6**).

7.2 Letters Mailed to Property Owners and Occupants

CTA mailed 243 letters between January 31, 2022 and February 7, 2022 to property owners and occupants, representing approximately 151 private properties that would be potentially affected by the Preferred Alignment. Letters provided project details, including the need for property acquisition, overview of property owner and occupant rights, and a request to conduct an environmental site assessment. Letters were also sent to property owners and occupants whose property was no longer needed for the RLE Project. **Attachment 6** contains the letter templates sent to property owners and occupants.

7.3 Door-to-Door Outreach

In addition to delivery via regular and certified mail, CTA's Outreach Specialists went door-to-door on January 31, 2022, to hand deliver the letters to property owners and occupants. Outreach Specialists spoke with property owners and occupants and provided an explanation of the RLE Project, potential displacements, and an overview of the Uniform Act that would apply to properties acquired for the project. CTA's Outreach Specialists acted as a continual point of contact to answer specific questions regarding relocation rights, requirements, processes, and anticipated timelines.

Some potentially displaced property owners and occupants were home when the Outreach Specialists hand-delivered the letters. At properties where no one was present but the building appeared occupied, Outreach Specialists left letters at the front door. CTA followed up with all door-to-door delivery and letters left at each address by mailed letters via the US Postal Service to each residence and business between January 31 and February 7, 2022. If the Cook County Assessor's Office listed a different mailing address for the individual/entity that has paid the taxes for the property in the past, additional regular mail and certified letters were sent to that address.

7.4 Individual Consultations

In addition to mailed letters and door-to-door outreach, during the in-person public hearing potentially displaced property owners and occupants were invited to schedule one-on-one

meetings to discuss their concerns via telephone or Zoom with Outreach Specialists. Property owners and occupants that scheduled and attended individual consultations were provided with FTA's "General Acquisition and Relocation Information" brochures, if requested.

Attachment 1
Supplemental EA and Section 4(f) Evaluation Notification

Supplemental EA and Section 4(f) Evaluation Notice of Availability

Newspaper Ads

Public Hearing Flyer (English and Spanish)

Project Website

Postcard/Comment Card

eBlast Notifications

Social Media Annoucements

Customer Alert

Press Release

Community Guide to the Supplemental EA and Section 4(f) Evaluation (English and Spanish)

Winter 2021 Newsletter (English and Spanish)

CLASSIFIEDS 312.321.2345

Mechanics Liens

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Ruby West
Capital One Auto Finance
2004 Chevrolet Cavalier
VIN# 1G1JH12F347191178
Daily Storage Owed $40 per day beginning on 03/08/2021
IAA Stock# 28385462
1/31/2022 #1138336

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Kyle Burkhardt
2012 Chevrolet Silverado 1500
VIN# 1GCRKSE76CZ221489
Daily Storage Owed $40 per day beginning on 02/15/2021
IAA Stock# 29603803
1/31/2022 #1138331

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Trevor Gross
Scott Credit Union
2009 GMC Sierra 1500
VIN# 3GTEK33389G156755
Daily Storage Owed $40 per day beginning on 09/13/2021
IAA Stock# 29622281
1/31/2022 #1138335

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Stella Madison
2011 Chevrolet Equinox
VIN# 2GNALPEC1B1204263
Daily Storage Owed $40 per day beginning on 04/22/2021
IAA Stock# 29370406
1/31/2022 #1138334

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Jacob Gandlmayr & Patricia Hartley
Electro Savings CU
2004 Hyundai Santa Fe
VIN# KM8SC13D54U802204
Daily Storage Owed $40 per day beginning on 04/28/2021
IAA Stock# 29130003
1/31/2022 #1138333

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Shawn Hicks
Prestige Financial Services Inc
2015 Chevrolet Malibu
VIN# 1G11C5SL8FF104931
Daily Storage Owed $40 per day beginning on 04/22/2021
IAA Stock# 29131410
1/31/2022 #1138332

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Thomas Heitert
1999 Infiniti QX4
VIN# JNRAR05Y5XW047699
Daily Storage Owed $40 per day beginning on 03/05/2021
IAA Stock# 29257517
1/31/2022 #1138330

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Sylvia Ortega-Lucero
Complete Auto Sales
2004 Chevrolet Aveo
VIN# KL1TJ52664B248327
Daily Storage Owed $40 per day beginning on 03/21/2021
IAA Stock# 24076516
1/31/2022 #1138329

On 03/01/2022, a sale will be held at 9:30am at: IAA, Inc., 2436 Old Country Inn Dr. Caseyville, IL 62232, Ph. 618-797-0200. During which IAA, Inc. will sell the following articles to enforce a lien existing under the laws of the State of Illinois against such articles for labor, services, skills or material expended upon or storage furnished for such articles at the request of the following designated person(s), unless such articles are redeemed within the thirty (30) days of publication of this notice.
Anne & Gary Kofron
2013 Ford Edge
VIN# 2FMDK4KC3DBA03968
Daily Storage Owed $40 per day beginning on 06/11/2021
IAA Stock# 28880666
1/31/2022 #1138328

Name Change

Cook County Change of Name
State of Illinois
County of Cook
In The Circuit Court For Cook County, Illinois
In The Matter of the Petition of
Alexander John Hambrock____
Case # 2022CONC000111
For Change of Name.
Notice of Publication
Public Notice is hereby given that on May 6th, 2022, at 10:30 a.m. being one of the return days in the Circuit Court of the County of Cook, I will file my petition in said court praying for the change of my name from Alexander John Hambrock, to that of Alexander John Morse-Hambrock, pursuant to the statute in such case made and provided.
Dated at Chicago, Illinois January 21st, 2022
Signature of Petitioner
/s/ Alex Hambrock
1/24, 1/31, 2/7/2022 #1138566

Storage Legal

NOTICE OF PUBLIC SALE OF PERSONAL PROPERTY
Notice is hereby given that the undersigned will sell, to satisfy lien of the owner, at public sale by competitive bidding on [2/17/2022] at [2:00 PM] online at **www.StorageAuctions.com** at the Safeguard Storage facility located at:

Safeguard Self Storage
6014 N California Ave
Chicago, IL 60659
phone: 773-274-9080

The personal goods stored therein by the following:
Unit#1405- Gopal Katasani
Unit#2434- Robert Vasquez
Unit#2517- Richard King
Unit#3105- Noor Bahar Binti Kadir Hussein
Unit#3406- Michael Johnson
Unit#3604- Grannesha Huff
Unit#1525- Grannesha T Huff
a.k.a Grannesha Huff
Unit#4203- Steven Sanders

Purchases must be paid at the facility with Credit Card or Cash. All Purchases must be complete within 48 hours of the end of the online auction. A $100.00 cash cleaning deposit is required until all items in the unit are removed from the premises and verified by the manager on duty. Sale subject to cancellation until the purchase is completed; company reserves the right to refuse any online bids.

Auction by
StorageAuctions.com
Phone: (866) 944-8530
1/31, 2/7/2022 #1138945

NOTICE OF PUBLIC SALE OF PERSONAL PROPERTY
Notice is hereby given that the undersigned will sell, to satisfy lien of the owner, at public sale by competitive bidding on 02/18/22 at 11:15 AM online at **www.StorageAuctions.com** for the Safeguard Storage facility located at:

Safeguard Self Storage #170103
2020 S. Mannheim Road
Des Plaines, IL 60018
Phone: 847-297-1289

The personal goods stored therein by the following:

Unit #2320 - Erica Walton
Unit #2908 – Erica Walton

Purchases must be paid at the facility with Credit Card or Cash. All Purchases must be complete within 48 hours of the end of the online auction. A $100.00 cash cleaning deposit is required until all items in the unit are removed from the premises and verified by the manager on duty. Sale subject to cancellation until the purchase is completed; company reserves the right to refuse any online bids.

Auction by
StorageAuctions.com
Phone: (866) 944-8530
1/31, 2/7/2022 #1138836

Public Notices

The Metropolitan Water Reclamation District of Greater Chicago will be accepting applications for the following classification(s):

Associate Civil Engineer (Original & Promotional)

Application Filing Period: January 28, 2022 through February 11, 2022. **Examination Date:** March 5, 2022. **Location:** St. Rita High School, 7740 S. Western Avenue, Chicago, IL. **Scope of Examination:** Knowledge of associate civil engineer practices. **Nature of Position and Duties:** Under general supervision, performs ordinary civil engineering work in connection with design, construction, inspection and scheduling review, operation and maintenance of water reclamation plants and sewers, surveys, specifications and estimates, inspection of materials and workmanship, project and cost control and complex engineering computations; may supervise subordinate engineers and sub-professional personnel. **Salary:** $84,757.92 per year

Senior Process Control Engineer (Original & Promotional)

Application Filing Period: January 28, 2022 through February 11, 2022. **Examination Date:** March 18, 2022 and March 19, 2022. **Location:** MWRD Main Office Building Annex, 111 E. Erie Street, Chicago, IL. **Scope of Examination:** Knowledge of senior process control engineer practices. **Nature of Position and Duties:** Under general supervision, designs and /or prepares more complex contract documents for process instrumentation and computer control systems for water reclamation plants, pumping stations, and flood control reservoirs. **Salary:** $104,995.28 per year

Applications can be submitted online **only** at www.districtjobs.org.

Additional information may be found at www.districtjobs.org or call 312-751-5100.

Mailed, Emailed, Hand delivered or Faxed Applications Will Not Be Accepted.
Resumes Will Not Be Accepted In Place of Application Forms.
An Equal Opportunity Employer - M/F/D
1/28- 2/11/2022 #1138595

Storage Legal

NOTICE OF PUBLIC SALE OF PERSONAL PROPERTY
Notice is hereby given that the undersigned will sell, to satisfy lien of the owner, at public sale by competitive bidding on 02/18/2022 at 12:00PM online at **www.StorageAuctions.com** at the Safeguard Storage facility located

Safeguard Self Storage
8131 Lemont Road
Darien, IL 60561
Phone: 630-985-3252

The personal goods stored therein by the following:

Unit #2306 Sharon Williams
AKA Sharon N Williams

Unit #1205 Lorraine Romy
AKA Lorraine B Romy

Purchases must be paid at the facility with Credit Card or Cash. All Purchases must be complete within 48 hours of the end of the online auction. A $100.00 cash cleaning deposit is required until all items in the unit are removed from the premises and verified by the manager on duty. Sale subject to cancellation until the purchase is completed; company reserves the right to refuse any online bids.

Auction by
StorageAuctions.com
Phone: (866) 944-8530
1/31, 2/7/2022 #1138832

Public Notices

NOTICE OF AVAILABILITY
and
PUBLIC HEARING
Supplemental Environmental Assessment and Section 4(f) Evaluation
for the
Chicago Transit Authority
Red Line Extension Project

The Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) announce the availability of the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation for the Red Line Extension (RLE) Project. The Supplemental EA was issued on January 31, 2022 and is available for public review and comment for a 30-day period. You are also invited to a Public Hearing on the RLE Project to learn more about the Supplemental EA and Section 4(f) Evaluation.

The public hearing will be held in two formats: one virtual meeting and one in-person meeting. The virtual hearing will be on Tuesday, February 15, 2022 from 6:00 PM to 8:00 PM. The in-person hearing will be held in an open house format on Thursday, February 17, 2022 from 6:00 PM to 8:00 PM at The Salvation Army Kroc Center, 1250 W. 119th Street, Chicago, IL 60643.

The RLE Project would extend the CTA Red Line 5.6 miles south from the existing terminal at 95th/Dan Ryan station to 130th Street. The RLE Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street; and a new yard and shop at 120th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities.

The Supplemental EA discloses design refinements to the project's Preferred Alignment. The Supplemental EA evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

The purpose of the Section 4(f) Evaluation is to discuss mitigation and enhancement measures proposed for Beaubien Woods Forest Preserve. These mitigation and enhancement measures were developed in consultation with the Forest Preserves of Cook County.

Copies of the Supplemental EA are available during the public review period at FTA Region 5 Office, 200 W. Adams Street, Suite 320, Chicago, IL 60606; CTA Headquarters, 567 W. Lake Street, 2nd Floor, Chicago, IL 60661; Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628; West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643; Altgeld Public Library, 955 E. 131st Street, Chicago IL 60827; Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628; Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827; and Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605. Electronic copies are also available on the CTA website at **transitchicago.com/RLE/SEA**.

The 30-day public comment period will commence on January 31, 2022 and comments on the Supplemental EA and Section 4(f) Evaluation will be accepted through March 1, 2022. Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: **transitchicago.com/RLE/SEA**; project email to: **RedExtension@transitchicago.com**; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

Comments received during the 30-day public comment period, and the responses to those comments, will be incorporated into the project's Final EIS/Record of Decision (ROD).

Sign language, Spanish interpretation, and captioning will be available during the virtual public hearing via Zoom only. If you require an interpreter or other accommodations to participate, please contact CTA Customer Service at 1-888-968-7282 at least 5 days before the public hearing or **RedExtension@transitchicago.com**.
1/31/2022 #1138687

Storage Legal

NOTICE OF PUBLIC SALE OF PERSONAL PROPERTY
Notice is hereby given that the undersigned will sell, to satisfy lien of the owner, at public sale by competitive bidding on 2/18/2022 at 11:45AM online at **www.StorageAuctions.com** at the Safeguard Storage facility located at:

Safeguard Self Storage
638 E. St Charles Road
Lombard, IL 60148
phone: 630-495-0790

The personal goods stored therein by the following:

Unit 1440 – Luis Castillo

Purchases must be paid at the facility with Credit Card or Cash. All Purchases must be complete within 48 hours of the end of the online auction. A $100.00 cash cleaning deposit is required until all items in the unit are removed from the premises and verified by the manager on duty. Sale subject to cancellation until the purchase is completed; company reserves the right to refuse any online bids.

Auction by
StorageAuctions.com
Phone: (866) 944-8530
1/31, 2/7/2022 #1138830

NOTICE OF PUBLIC SALE OF PERSONAL PROPERTY
Notice is hereby given that the undersigned will sell, to satisfy lien of the owner, at public sale by competitive bidding on 2/17/2022 at 2:00PM online at **www.StorageAuctions.com** at the Safeguard Storage facility located at:

Safeguard Self Storage
1353 S. Wabash Ave
Chicago Il, 60605
Phone: 312-663-1841

The personal goods stored therein by the following:

#1140- Melissa Carter
#7312- Shanice Jones
#8309- Adrienne Meachum
#8408- Meloney Roca

Purchases must be paid at the facility with Credit Card or Cash. All Purchases must be complete within 48 hours of the end of the online auction. A $100.00 cash cleaning deposit is required until all items in the unit are removed from the premises and verified by the manager on duty. Sale subject to cancellation until the purchase is completed; company reserves the right to refuse any online bids. The Unit must be cleaned no later than 48 hours.

Auction by
StorageAuctions.com
Phone: (866) 944-8530
1/31, 2/7/2022 #1138829

NOTICE OF PUBLIC SALE OF PERSONAL PROPERTY
Notice is hereby given that the undersigned will sell, to satisfy lien of the owner, at public sale by competitive bidding on 2/17/2022 at 2:00PM online at **www.StorageAuctions.com** at the Safeguard Storage facility located at:

Safeguard Self Storage
6244 N Northwest Highway
Chicago Il, 60631
Phone: 872-999-8140

The personal goods stored therein by the following:

Unit # 3105 Ashley Olsen aka Ashley L Olsen aka Ashley Lauren Olsen

Purchases must be paid at the facility with Credit Card or Cash. All Purchases must be complete within 48 hours of the end of the online auction. A $100.00 cash cleaning deposit is required until all items in the unit are removed from the premises and verified by the manager on duty. Sale subject to cancellation until the purchase is completed; company reserves the right to refuse any online bids. The Unit must be cleaned no later than 48 hours.

Auction by
StorageAuctions.com
Phone: (866) 944-8530
1/31, 2/7/2022 #1138825

NOTICE OF PUBLIC SALE OF PERSONAL PROPERTY
Notice is hereby given that the undersigned will sell, to satisfy lien of the owner, at public sale by competitive bidding on 02/17/2022 at [2:00PM] online at **www.StorageAuctions.com** at the Safeguard Storage facility located at:

Safeguard Self Storage
1909 W. 95th St
Chicago, IL 60643
773-238-2180

The personal goods stored therein by the following:

Unit # 0127 Melanie Hogan
Unit # 0325 Doris Bryant
Unit # 0414 Desi Martin
Unit # 0711 Jeriel Holts
Unit # 0725 Ana Tate
Unit # 1233 Juanikee Harris
Unit # 1301 Marissa M. Wilkerson
Unit # 2131 Alfred Dillon
Unit # 2208 Yolanda Carter
Unit # 2401 Antoinette Knox
Unit # 2617 Tracy Springs-Hunter
Unit # 3103 Brandi Woodson
Unit # 3138 Timothy J Edwards II
Unit # 3609 Emily Pierce

Purchases must be paid at the facility with Credit Card or Cash. All Purchases must be complete within 48 hours of the end of the online auction. A $100.00 cash cleaning deposit is required until all items in the unit are removed from the premises and verified by the manager on duty. Sale subject to cancellation until the purchase is completed; company reserves the right to refuse any online bids.

Auction by
StorageAuctions.com
Phone: (866) 944-8530
1/31, 2/7/2022 #1138812

Angela Gregg, whose 4-year-old son, Mychal Moultry Jr., was killed over Labor Day weekend, speaks Monday with the Rev. Michael Pfleger of St. Sabina church. STEFANO ESPOSITO/SUN-TIMES

Fund proposed to pay for burying children killed by gun violence

BY STEFANO ESPOSITO, STAFF REPORTER
sesposito@suntimes.com | @slesposito

After her 4-year-old son, Mychal Moultry Jr., was shot in the city while visiting his father during the Labor Day weekend, Angela Gregg's family had to pay $13,000 for funeral expenses.

Gregg would have liked to have her son buried; she settled for cremation instead.

"The money was not there," Gregg said Monday, speaking at St. Sabina Church on the South Side.

Gregg said she's applied for state funding intended to help victims of gun violence but is still waiting to be reimbursed.

"Every child deserves to grow up free from gun violence, but when their innocent lives are cut short ... families are left to grieve. This is too much tragedy, too much loss for these families. They don't need the additional burden of financial distress," said state Sen. Jacqueline Collins.

Collins, D-Chicago, is sponsoring the Mychal Moultry Jr. Funeral and Burial Assistance Act, which would allow the state to pay funeral and burial service providers up to $10,000 for someone under 17 who dies of gun violence. The money would be available to families with incomes of less than $40,000.

"Families who meet the income criteria would only have to submit simple paperwork to the funeral service provider, and then they could bury their child without taking on financial hardship," said Dr. Dave Nayak, founder of the community nonprofit Strength to Love Foundation, another supporter of the bill.

The average cost of a funeral is about $9,400, according to supporters of the bill.

Collins said the current state program requires families to pay upfront and then wait to be reimbursed.

"It includes an often lengthy evaluation and review process that can take months or even years before a final determination has been made," Collins said.

Collins said conversations about her proposed legislation are ongoing with Gov. J.B. Pritzker and Illinois Attorney General Kwame Raoul.

Nayak said the bill seeks about $350,000 annually for the next three years to fund funeral expenses statewide.

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RED AHEAD
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Red Line Extension (RLE) Project Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation Public Hearing
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Virtual Public Hearing via Zoom
Tuesday, February 15, 2022 6:00 PM – 8:00 PM
In-Person Public Hearing
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The Salvation Army Kroc Center, 1250 W. 119th Street, Chicago, IL 60643
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Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to: RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.
Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing
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Corrupt politicians say prison doesn't work, so feds quote judge from 2014 who argued: 'Impose more severe penalties'

BY JON SEIDEL, FEDERAL COURTS REPORTER
jseidel@suntimes.com | @SeidelContent

The seemingly endless parade of Illinois politicians who face sentencing at Chicago's Dirksen Federal Courthouse has led over the years to a popular defense argument — that sending a corrupt politician to prison won't stop the next one.

The argument was most recently made by a lawyer for ex-state Rep. Luis Arroyo, who wrote in a court memo that Arroyo was "undeterred" by prior news reports about criminally charged politicians, and that prison "is no more effective than draining Lake Michigan with a spoon."

Luis Arroyo

Ricardo Munoz

Earlier this year, the lawyer for ex-Ald. Ricardo Munoz noted "the courts see governor after governor, legislator after legislator, alderman after alderman, county board member after board member, continuing to engage in the same behavior ... Most likely, because the universal belief or hope is, 'I won't get caught.'"

So twice Friday, federal prosecutors in Chicago found themselves quoting in court memos the same words spoken by a judge eight years ago this month, during the sentencing of former Cook County Commissioner Joseph Mario Moreno for an extortion conspiracy.

U.S. District Judge Gary Feinerman handed Moreno an 11-year prison sentence Feb. 19, 2014, noting the cost-benefit calculation for corrupt Illinois politicians "has been skewed."

"The court can't do anything about the likelihood of getting caught," Feinerman said. "That's up to the FBI and the U.S. attorney and law enforcement. But the court can do something ... about the sanction that is imposed."

"And the way to do that," Feinerman said, "is to impose more severe penalties than have been imposed in the past."

As it happened, the prosecutors' memos in the Munoz and Arroyo cases both were due Friday. They landed just days before a sitting member of the Chicago City Council — Ald. Patrick Daley Thompson — is set to go on trial at the federal courthouse Monday. On Tuesday, a long-awaited hearing is set to take place in the criminal case of Ald. Edward M. Burke.

The feds asked U.S. District Judge Steven Seeger to sentence Arroyo to roughly four or five years in prison. Arroyo pleaded guilty to wire fraud in November. The charges in his case allege he spent roughly a year as a bought-and-paid-for member of the Illinois House of Representatives for businessman James Weiss.

Weiss is the son-in-law of former Cook County Democratic Party Chairman and ex-county Assessor Joseph Berrios. Arroyo's case also revealed former state Sen. Terry Link as a government cooperator.

Assistant U.S. Attorney James Durkin addressed Arroyo's argument that prison time won't curb public corruption, calling it "a depressingly cynical perspective from a man who just a few years ago was a senior member of the Illinois House of Representatives."

Meanwhile, Assistant U.S. Attorney Morris Pasqual asked for a year in prison for Munoz, who admitted he took thousands from the Chicago Progressive Reform Caucus to pay for personal expenses like skydiving and a relative's college tuition.

Pasqual wrote in his memo that Munoz once texted an acquaintance that "a wise man" told him after he became a Council member that, "they will throw money at u they will throw trips and cars at u and they will throw very pretty young p---y at you." He said the man told him "don't take any of it" and instead "pick ur 10 friends and make them millionaires and they will take care of u legally." Munoz noted the "wise man" wound up being indicted for tax evasion.

The feds asked U.S. District Judge John Kness "to send the proper message to [Munoz], the public, and all elected officials in this district that the costs of corruption are severe and will outweigh any perceived benefit derived from abusing a position of power and breaking the law for personal gain."

Arroyo is due to be sentenced Feb. 18. Munoz's sentencing has not been scheduled.

Modern, Interoperable Data Systems Needed to Address Health Threats

ATLANTA PRNewswire -- The COVID-19 pandemic has placed a bright spotlight on the nation's public health infrastructure and underscored the need for investment in and development of comprehensive, flexible and interoperable data systems to track and address both chronic health challenges as well as future infectious disease outbreaks. Last week, organizations and individuals representing a variety of sectors gathered for the second summit in the Lights, Camera, Action: The Future of Public Health summit series to discuss the critical topic of data modernization and its link to better health outcomes for all.

"Our ultimate goal is to move from siloed and brittle public health data systems to connected, resilient, adaptable and sustainable 're-sponse-ready' systems," said Daniel B. Jernigan, MD, MPH, the Centers for Disease Control and Prevention's (CDC) deputy director for Public Health Science and Surveillance. "Having these systems in place can help us solve problems before they happen and reduce the harm caused by the problems that do happen, whether it's addressing longstanding issues like health equity or preparing our nation for the next infectious or non-infectious threat."

Jernigan noted that progress is being made in the public health community in this regard compared to before the COVID-19 pandemic, with now more than 10,300 healthcare facilities using electronic case reporting versus 187 previously. In addition, he said that data pipelines have advanced to inform action on the part of public health professionals with more than 530 million doses of COVID-19 vaccines being tracked in just over a year and clinical and environmental labs now sharing more than 1.5 million results per day with CDC.

But much work remains, ranging from improvements needed in how the public, public health, healthcare and other sectors use new technologies to creating standards and future-forward data systems that enable real-time and actionable intelligence in service to the public's health.

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Sanación Racial y Equidad...

Viene de la página 1

Fraternidad Verdad, Sanación y Equidad (T.H.E.). La fraternidad está diseñada para apoyar, educar y establecer equidad, sanación racial y capacidad para un cambio policial equitativo en la comunidad de Chicago. Carole Robertson Center for Learning, Courth Theatre, Gads Hill Center, Marwen y Metropolitan Family Services se embarcarán en una serie de ocho meses, compuesta de talleres y entrenamiento de equidad racial individual para ayudarles a desarrollar y a implementar una estrategia para "avanzar políticas y prácticas equitativas". Una de los cofrades, Maricela García, CEO de Gads Hill Center discutió que busca la organización en los próximos ocho meses y como esperan tener una profunda conexión con la comunidad a quien sirve.

Lawndale Bilingual News: Recientemente anunciaron que su organización fue seleccionada como parte del Programa de Fraternidad Truth, Healing, and Equity (T.H.E.) diseñado para atender y promover la equidad y la sanación racial en toda la ciudad. Por favor exponga lo que significa esta fraternidad para usted y ¿Qué espera al comenzar esta serie de ocho meses?

Maricela García CEO de Gads Hill Center: La Cofradía THRT significa el comienzo de un cambio para-digno entre las organizaciones con mentalidad de justicia y los individuos. Nuestra comunidad necesita desesperadamente un cambio en la narrativa, uno que aborde la historia de la opresión sistémica en este país y llame la atención sobre la forma en que las comunidades se ven privadas de acceso, infraestructura y recursos. A pesar del racismo estructural incrustado en los marcos político y legislativo, tanto de Chicago como de todo EU, nuestras comunidades se levantan. Están dedicadas a garantizar el futuro de nuestra comunidad y a apoyar el cambio sistémico. Gads Hill Center se honra en caminar en solidaridad con estas comunidades y establecer un futuro juntos. Esperamos tener un espacio con otros líderes cívicos de la Fraternidad y contextualizar la historia de Chicago dentro del movimiento progresista actual. Esperamos el efecto

Pase a la página 6

Racial Healing...

Continued from page 2

by the constituents in which you serve?

Gads Hill Center boasts a long history of social justice. When our agency was founded as a Settlement House in 1898, we provided critical resources to oppressed and often neglected immigrant populations. In providing these services, we have been privy to over a century of injustice, xenophobia, racism, and inequality. Within the past two years, the twin pandemics of COVID-19 and systemic racism have exacerbated the hyper vulnerability of the communities we serve. The global health crisis only exacerbated preexisting structural inadequacies that threaten our community. In response to these disparities, the resource-deserts in which our families reside, and an inadequate government response. While it was clear that these already struggling families were now faced with a widespread crisis, we were (and continue to be) struck by the resilience and strength of the families we work alongside. We continue to be inspired by our families as we work together to recover from decades of oppression and from the recent crises.

How do you hope this fellowship deepens the connection your organization has with the residents it serves?

It is our hope that the Truth, Healing, and Equity Fellowship will enable us to embed community voice within every level of Gads Hill Center. By changing the narrative around our community, by educating ourselves and our neighbors on our history, and by acting in solidarity with the families we serve, we can find the common ground necessary to create lasting, sustainable change. We are excited to gain the tools and knowledge necessary to deepen our connection with a community of our friends, families, and neighbors. Gads Hill Center is not some distant, charitable benefactor. As an organization built by and for communities of color, we walk alongside our families toward a bright future.

The Truth, Healing, and Equity Fellowship is made possible from contributions from the JPMorgan Chase Foundation, John D. and Catherine T. MacArthur Foundation, and The Chicago Community Trust.

Photo Credit: Ajani Akinad

RED AHEAD
Moving Ahead to a Better Red
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Audiencias pública sobre la Evaluación de Sección 4(f) y la Evaluación medioambiental suplementaria (EA) del Proyecto de la Extensión de la Línea Roja (RLE)

Chicago Transit Authority (CTA) está realizando una audiencia pública virtual y en persona para solicitar comentarios públicos acerca de la Evaluación medioambiental suplementaria (EA) y Evaluación de la Sección 4(f). La EA Suplementaria revela mejoras de diseño a la Alineación Preferida del proyecto y evalúa tres cambios del proyecto que han ocurrido desde la publicación del Borrador de la Declaración de Impacto Medioambiental (EIS) en 2016. Los cambios al Proyecto son 1) la reubicación de la estación de 130th Street, 2) el refinamiento de la yarda y taller de 120th Street y 3) el cruce de 107th Place.

Audiencia pública virtual por Zoom
Martes, 15 de febrero, 2022 6:00 PM – 8:00 PM

Audiencia pública en persona
Jueves, 17 de febrero, 2022 6:00 PM – 8:00 PM

The Salvation Army Kroc Center, 1250 W. 119th Street, Chicago, IL 60643

CTA ha establecido un periodo de comentarios acerca de Evaluación medioambiental suplementaria (EA) y Evaluación de la Sección 4(f) a partir del 31 de enero, 2022 hasta el 1 de marzo, 2022. Los comentarios pueden hacerse verbalmente a un taquígrafo judicial en el las audiencias virtuales y en persona. Los comentarios escritos serán aceptado durante la jornada de puertas abiertas de la audiencia pública en persona, y serán aceptados en cualquier momento durante el período de comentario público a través del sitio web del proyecto: transitchicago.com/RLE/SEA; el equipo del proyecto: RedExtension@transitchicago.com; y por correo de los EE. UU a: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

****Una mascarilla y comprobante de vacunación completa contra la COVID-19 son requeridas para asistir a la audiencia pública en persona****

La inscripción es recomendado para atendera todas las audiencias públicas. Favor de inscribirse en: **transitchicago.com/RLE/SEA**

Para más información visitar: transitchicago.com/RLE/SEA
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RED AHEAD

Red Line Extension

Red Line Extension (RLE) Project Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation Public Hearings

Virtual Public Hearing via Zoom

Tuesday, February 15, 2022 6:00 PM – 8:00 PM

In-Person Public Hearing

Thursday, February 17, 2022 6:00 PM – 8:00 PM

The Salvation Army Kroc Center
1250 W. 119th St., Chicago, IL 60643

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For more information about the Supplemental EA and Section 4(f) Evaluation, please visit **transitchicago.com/RLE/SEA**. For questions about the RLE Project, please contact the project team at **RedExtension@transitchicago.com**.

CTA has established a 30-day comment period to accept comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022 through March 1, 2022.

The Supplemental EA is available on the CTA website (**transitchicago.com/RLE/SEA**), and hard copies of the Supplemental EA and Section 4(f) Evaluation are available at the following locations during the 30-day comment period:

- Federal Transit Administration Region 5 Office
  200 W. Adams Street, Suite 320, Chicago, IL 60606
- CTA headquarters
  567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- Pullman Public Library
  11001 S. Indiana Avenue, Chicago, IL 60628
- West Pullman Public Library
  830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library
  955 E. 131st Street, Chicago, IL 60827
- Woodson Regional Public Library
  9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library
  1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center
  400 S. State Street, Chicago, IL 60605

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Pre-registration is encouraged to attend the public hearings.
Please register at: transitchicago.com/RLE/SEA

Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing. The Kroc Center is accessible to people with disabilities. This location is served by CTA bus #119.

*****Presentation audio available in Spanish if joining through Zoom only. Closed captioning and American Sign Language interpretation are also available on Zoom for participants who are Deaf or Hard-of-Hearing. Spanish and American Sign Language interpretation will also be available during the in-person public hearing.*****

Attendees will receive information to join via Zoom or telephone. If you require assistance to pre-register, call us at 1-888-968-7282 at least three (3) days before the meeting you plan to attend. You can also watch the virtual public hearing live on Facebook at **Facebook.com/CTARedExt**

Do you require a reasonable accommodation?
Sign language, Spanish interpretation, and captioning will be available during the virtual public hearing via Zoom only. If you require an interpreter or other accommodations to participate, please contact CTA Customer Service at 1-888-968-7282 at least 5 days before the public hearing or **RedExtension@transitchicago.com**.

RED AHEAD

Red Line Extension

Audiencias públicas sobre la Evaluación de Sección 4(f) y la Evaluación medioambiental suplementaria (EA) del Proyecto de la Extensión de la Línea Roja

Audiencia pública virtual por Zoom

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Audiencia pública en persona

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1250 W. 119th Street Chicago, IL 60643

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Para más información acerca de la EA suplementaria, favor de visitar **transitchicago.com/RLE/SEA**. For questions about the RLE Project, please contact the project team at **RedExtension@transitchicago.com**.

CTA ha establecido un periodo de comentarios de 30 días para aceptar comentarios acerca de Evaluación medioambiental suplementaria (EA) y Evaluación de la Sección 4(f) a partir del 31 de enero, 2022 hasta el 1 de marzo, 2022.

La EA suplementaria está disponible en el sitio web de CTA (**transitchicago.com/RLE/SEA**), y copias impresas de la EA suplementaria están disponibles en los siguientes sitios durante el periodo de comentarios de 30 días:

- Federal Transit Administration Region 5 Office
  200 W. Adams Street Suite 320, Chicago, IL 60606
- CTA headquarters
  567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- Pullman Public Library
  11001 S. Indiana Avenue, Chicago, IL 60628
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  830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library
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- Calumet Park Public Library
  1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center
  400 S. State Street, Chicago, IL 60605

Los comentarios pueden hacerse verbalmente a un taquígrafo judicial en el las audiencias virtuales y en persona. Los comentarios escritos serán aceptado durante la jornada de puertas abiertas de la audiencia pública en persona, y serán aceptados en cualquier momento durante el período de comentario público a través del sitio web del proyecto: **transitchicago.com/RLE/SEA**; el equipo del proyecto: **RedExtension@transitchicago.com**; y por correo de los EE. UU a: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

La inscripción es requerida para asistir a todas las audiencias públicas. Favor de inscribirse en: transitchicago.com/RLE/SEA

Se requiere una mascarilla y comprobante de vacunación completa contra COVID-19 para poder asistir a la audiencia pública en persona. Esta ubicación es servida por el autobús CTA #119. El Kroc Center es accesible para personas con discapacidades.

*****Audio de la presentación estará disponible en español si está asistiendo a la audiencia pública virtual por medio de Zoom solamente y también está disponible para la audiencia pública en persona. Habrá subtítulos e interpretación en lenguaje de señas disponibles en Zoom y durante la audiencia pública en persona para los participantes que son sordos o tienen dificultades auditivas.*****

Los asistentes recibirán información para poder asistir por Zoom o teléfono. Si requiere asistencia para inscribirse, llamarnos al 1-888-968-7282 por lo menos tres [3] días antes de la reunión que planea en asistir. También puede ver la audiencia pública en vivo por Facebook en **Facebook.com/CTARedExt**

¿Requiere una adaptación razonable?
interpretación en lenguaje de señas, interpretación en español, y subtítulos estarán disponibles durante la audiencia pública virtual solo a través de Zoom. Si tu requiere un intérprete u otras adaptaciones para participar, comuníquese con el Servicio al cliente de CTA al 1-888-968-7282 al menos 5 días antes de la audiencia pública o **RedExtension@transitchicago.com.**

RED AHEAD

Red Line Extension

Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation

- Overview
- Supplemental EA and Section 4(f) Evaluation
- Public comments
- Public hearing
- 130th Street station stakeholder meeting

Overview

The National Environmental Policy Act (NEPA) requires evaluation of potential environmental impacts associated with federal projects and actions.

In 2020, a Supplemental EA was determined to be required for the RLE project to evaluate the three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are:

- 130th Street station relocation
- 120th Street yard and shop refinement
- 107th Place cross-over

The Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) announce the availability of the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation for the Red Line Extension (RLE) Project. This document evaluates the three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The purpose of the Section 4(f) Evaluation is to discuss mitigation and enhancement measures proposed for Beaubien Woods Forest Preserve. These mitigation and enhancement measures were developed in consultation with the Forest Preserves of Cook County.

Supplemental EA and Section 4(f) Evaluation

The Supplemental EA and Section 4(f) Evaluation was available for public review and comment from **January 31 to March 1, 2022**.

- Notice of Availability and Public Hearing for the Supplemental EA (English) (Español)
- RLE Supplemental EA (Accessible version)
- RLE Supplemental EA Attachment Documents
  - Attachment A: Plans and Profiles (Accessible version)
  - Attachment B: Displacements and Relocations of Existing Uses (Accessible version)

    - Attachment B: Displacements and Relocations of Existing Uses (Accessible version)
    - Attachment C: Transportation (Accessible version)
    - Attachment D: Historic and Cultural Resources Supporting Information (Accessible version)
    - Attachment E: Final Corridor Phase I Environmental Site Assessment Report (Accessible version)
    - Attachment F: USACE and Illinois Coastal Management Program Supporting Information (Accessible version)
    - Attachment G: Biological Resources Supporting Information (Accessible version)
    - Attachment H: Section 4(f) Coordination Materials (Accessible version)
    - Attachment I: Public Outreach (Accessible version)
- RLE Supplemental EA Community Guide (English) (Español)

Copies of the Supplemental EA were available at the following locations during the 30-day comment period:

- Federal Transit Administration – Region 5 Office
    - 200 W. Adams Street, Suite 320, Chicago, IL 60606
- CTA Headquarters
    - 567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- 9th Ward Aldermanic Office
    - 34 E. 112th Place, Chicago, IL 60628
- 34th Ward Aldermanic Office
    - 507 W. 111th Street, Chicago, IL 60628
- Pullman Public Library
    - 11001 S. Indiana Avenue, Chicago, IL 60628
- Palmer Park
    - 201 E. 111th Street, Chicago, IL 60628
- Agape Community Center
    - 342 W. 111th Street, Chicago, IL 60628
- West Pullman Public Library
    - 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library
    - 955 E 131st Street, Chicago, IL 60827
- Woodson Regional Public Library
    - 9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library
    - 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center
    - 400 S. State Street, Chicago, IL 60605

Public comments

The CTA has concluded the 30-day comment period to take formal comments on the Supplemental EA and Section 4(f) Evaluation from **January 31, 2022 to March 1, 2022**. While the public comment period for the Supplemental EA is now complete, you can continue to submit comments on the project via email or U.S. mail at any time.

Public hearing

The public hearing for the Supplemental EA and the Section 4(f) Evaluation was held in two formats: one virtual meeting and one in-person meeting.

- **Virtual Public Hearing**
    - Tuesday, February 15, 2022 (6:00 PM – 8:00 PM)
    - Location: via Zoom

Public comments

The CTA has concluded the 30-day comment period to take formal comments on the Supplemental EA and Section 4(f) Evaluation from **January 31, 2022 to March 1, 2022**. While the public comment period for the Supplemental EA is now complete, you can continue to submit comments on the project via email or U.S. mail at any time.

Public hearing

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- **Virtual Public Hearing**
  - Tuesday, February 15, 2022 (6:00 PM – 8:00 PM)
  - Location: via Zoom
- **In-Person Public Hearing**
  - Thursday, February 17, 2022 (6:00 PM – 8:00 PM)
  - Location: The Salvation Army Kroc Center (1250 W 119th St, Chicago, IL 60643)
- **Meeting resources**
  - Announcement Flyer (English) (Español)
  - Virtual Public Hearing Recordings (English) (Español)
  - Virtual Public Hearing Presentation Slides
  - In-Person Public Hearing Exhibit Boards

130th Street station stakeholder meeting (Altgeld Gardens)

In addition to the public hearing, the CTA hosted a targeted stakeholder meeting for residents in the vicinity of the Altgeld Gardens and Golden Gate neighborhoods.

- **In-Person Stakeholder Meeting**
  - Wednesday, February 16, 2022 (6:00 PM – 8:00 PM)
  - Location: Altgeld Branch, Chicago Public Library (955 E 131st St, Chicago, IL 60827)

Get involved and stay informed

You can request to be added to the RLE contact list by clicking here or sending an email to RedExtension@transitchicago.com. Those added to this contact list will receive upcoming meeting notices, as well as future updates about the RLE Project.

Updates on the RLE Project will also be posted to the project Facebook page: Facebook.com/CTARedExt

If you have any questions related to the CTA's proposed RLE Project, please click here or contact us via email or U.S. mail at: RedExtension@transitchicago.com

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

Give us Your Feedback! Please print your comments below.

*Name _____ *Email _____

*Address _____

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*Optional. Tear here and return this postage paid card to any mailbox.

RED AHEAD

Red Line Extension

The Chicago Transit Authority (CTA) is hosting a virtual and in-person public hearing to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation. The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to: RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

Virtual Public Hearing via Zoom
Tuesday, February 15, 2022
6:00 PM – 8:00 PM

In-Person Public Hearing
Thursday, February 17, 2022
6:00 PM – 8:00 PM

The Salvation Army Kroc Center
1250 W. 119th Street
Chicago, IL 60643

****Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing**** To attend either public hearing, pre-registration is encouraged at **transitchicago.com/RLE/SEA**

CTA has established a 30-day comment period to accept comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022 through March 1, 2022.

For more information visit transitchicago.com/RLE/SEA

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

Chicago Transit Authority
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567 W. Lake Street
Chicago, IL 60661-1465

Give us Your Feedback! Please print your comments below.

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*Address _____

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*Optional. Tear here and return this postage paid card to any mailbox.

RED AHEAD

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Thursday, February 17, 2022
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****Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing**** To attend either public hearing, pre-registration is encouraged at **transitchicago.com/RLE/SEA**

CTA has established a 30-day comment period to accept comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022 through March 1, 2022.

For more information visit transitchicago.com/RLE/SEA

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

eblast Notification: Save-the-Date
Publication Date: 1/26/2022

RED AHEAD

Red Line Extension

SAVE-THE-DATE!

The Chicago Transit Authority (CTA) is hosting a virtual and in-person public hearing to solicit public comments on the Supplemental Environmental Assessment (EA) and section 4(f) Evaluation. The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

- Virtual Public Hearing (via Zoom)
  - **Tuesday, February 15th**
- In-Person Public Hearing
  - **Thursday, February 17th**
  - The Salvation Army Kroc Center (1250 W. 119th St., Chicago, IL 60643)

Information regarding pre-registration and availability of the Supplemental EA and Section 4(f) Evaluation, to be made available ahead of the public hearings!

For additional information about the Red Line Extension Project, please visit the project website at transitchicago.com/rle/, or please contact the project team at RedExtension@transitchicago.com.

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Publication Date: 1/31/2022

RED AHEAD

Red Line Extension

JOIN US!

Red Line Extension (RLE) Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation Public Hearings

The Chicago Transit Authority (CTA) is hosting a virtual and in-person public hearing to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation. The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

- Virtual Public Hearing (via Zoom)
  - **Tuesday, February 15, 2022 (6:00 PM - 8:00 PM)**
- In-Person Public Hearing
  - **Thursday, February 17, 2022 (6:00 PM - 8:00 PM)**
  - The Salvation Army Kroc Center (1250 W. 119th St., Chicago, IL 60643)

The Supplemental EA and Section 4(f) Evaluation is available on the CTA website (transitchicago.com/RLE/SEA) and the locations where hard copies of the Supplemental EA are available are also listed.

CTA has established a 30-day comment period to accept comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022 through March 1, 2022.

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the: project website: transitchicago.com/RLE/SEA; project e-mail to RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

Pre-registration is encouraged to attend the public hearings.
Please register at: transitchicago.com/RLE/SEA

Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing.

The Kroc Center is accessible to people with disabilities. This location is served by CTA bus #119.

If you require assistance to register, call us at 1-888-968-7282 at least three (3) days before the public hearing you plan to attend.

Attendees will receive information to join via Zoom or telephone. If you require assistance to pre-register, call us at 1-888-968-7282 at least three (3) days before the meeting you plan to attend. You can also watch the virtual public hearing live on Facebook at Facebook.com/CTARedExt.

*****Presentation audio available in Spanish if joining through Zoom only. Closed captioning and American Sign Language interpretation are also available on Zoom for participants who are Deaf or Hard-of-Hearing. Spanish and American Sign Language interpretation will also be available during the in-person public hearing.*****

Do you require a reasonable accommodation?

Sign language, Spanish interpretation, and captioning will be available during the virtual public hearing via Zoom only. If you require an interpreter or other accommodations to participate, please contact CTA Customer Service at 1-888-968-7282 at least 5 days before the public hearing or RedExtension@transitchicago.com.

If you require other reasonable accommodations to participate, please contact CTA Customer Service at 1-888-968-7282, by Thursday, February 10, 2022, or RedExtension@transitchicago.com.

For more information about the Supplemental EA and Section 4(f) Evaluation, please visit transitchicago.com/RLE/SEA. For questions about the RLE Project, please contact the project team at RedExtension@transitchicago.com.

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Publication Date: 2/08/2022

RED AHEAD

Red Line Extension

REMINDER TO JOIN US!

RLE Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation Public Hearings

Reminder that the CTA is hosting a virtual and in-person public hearing to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation. The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

- Virtual Public Hearing (via Zoom)
  - Tuesday, February 15, 2022 (6:00 PM - 8:00 PM)
- In-Person Public Hearing
  - Thursday, February 17, 2022 (6:00 PM - 8:00 PM)
  - The Salvation Army Kroc Center (1250 W. 119th St., Chicago, IL 60643)

The Supplemental EA and Section 4(f) Evaluation is available on the CTA website (transitchicago.com/RLE/SEA) and the locations where hard copies of the Supplemental EA are available are also listed.

CTA has established a 30-day comment period to accept comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022 through March 1, 2022.

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

Pre-registration is encouraged to attend the public hearings.
Please register at: tiny.cc/SEAregistration

Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing.

The Kroc Center is accessible to people with disabilities. This location is served by CTA bus #119.

Attendees will receive information to join via Zoom or telephone. If you require assistance to pre-register, call us at 1-888-968-7282 at least three (3) days before the public hearing you plan to attend. You can also watch the virtual public hearing live on Facebook at Facebook.com/CTARedExt.

*****Presentation audio available in Spanish if joining through Zoom only. Closed captioning and American Sign Language interpretation are also available on Zoom for participants who are Deaf or Hard-of-Hearing. Spanish and American Sign Language interpretation will also be available during the in-person public hearing*****

Do you require a reasonable accommodation?
If you require an interpreter or other reasonable accommodations to participate, please contact CTA Customer Service at 1-888-968-7282 at least 5 days before the public hearing or RedExtension@transitchicago.com.

For more information about the Supplemental EA and Section 4(f) Evaluation, please visit transitchicago.com/RLE/SEA. For questions about the RLE Project, please contact the project team at RedExtension@transitchicago.com.

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Publication Date: 2/14/2022

RED AHEAD

Red Line Extension

REMINDER TO JOIN US TOMORROW!

RLE Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation Public Hearings

Reminder that you are encouraged to pre-register to join us tomorrow, February 15th, for a virtual public hearing! The CTA is hosting one virtual and one in-person public hearing this week to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation.

- Virtual Public Hearing (via Zoom)
  - **Tuesday, February 15, 2022 (6:00 PM - 8:00 PM)**
  - Pre-register HERE
- In-Person Public Hearing
  - **Thursday, February 17, 2022 (6:00 PM - 8:00 PM)**
  - The Salvation Army Kroc Center (1250 W. 119th St., Chicago, IL 60643)
  - Pre-register HERE

The Supplemental EA and Section 4(f) Evaluation is available on the CTA website (transitchicago.com/RLE/SEA) and the locations where hard copies of the Supplemental EA are available are also listed.

CTA has established a 30-day comment period to accept comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022 through March 1, 2022.

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

Pre-registration is encouraged to attend the public hearings.
Please register at: tiny.cc/SEAregistration

Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing.

The Kroc Center is accessible to people with disabilities. This location is served by CTA bus #119.

Attendees will receive information to join via Zoom or telephone. If you require assistance to pre-register, call us at 1-888-968-7282. You can also watch the virtual public hearing live on Facebook at Facebook.com/CTARedExt.

*****Presentation audio available in Spanish if joining through Zoom only. Closed captioning and American Sign Language interpretation are also available on Zoom for participants who are Deaf or Hard-of-Hearing. Spanish and American Sign Language interpretation will also be available during the in-person public hearing*****

Do you require a reasonable accommodation?
If you require an interpreter or other reasonable accommodations to participate, please contact CTA Customer Service at 1-888-968-7282 or RedExtension@transitchicago.com.

For more information about the Supplemental EA and Section 4(f) Evaluation, please visit transitchicago.com/RLE/SEA. For questions about the RLE Project, please contact the project team at RedExtension@transitchicago.com.

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Publication Date: 2/15/2022

RED AHEAD

Red Line Extension

REMINDER TO JOIN US TODAY!

RLE Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation Public Hearings

Reminder that you are encouraged to PRE-REGISTER TODAY, February 15th, for a virtual public hearing! The CTA is hosting one virtual and one in-person public hearing this week to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation.

- **Virtual Public Hearing (via Zoom)**
  - **Tuesday, February 15, 2022 (6:00 PM - 8:00 PM)**
  - **Pre-register HERE**
- **In-Person Public Hearing**
  - **Thursday, February 17, 2022 (6:00 PM - 8:00 PM)**
  - **The Salvation Army Kroc Center (1250 W. 119th St., Chicago, IL 60643)**
  - **Pre-register HERE**

CTA has established a 30-day comment period to accept comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022 through March 1, 2022.

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

Pre-registration is encouraged to attend the public hearings.
Please register at: tiny.cc/SEAregistration

Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing. The Kroc Center is accessible to people with disabilities. This location is served by CTA bus #119.

Attendees will receive information to join via Zoom or telephone. If you require assistance to pre-register, call us at 1-888-968-7282. You can also watch the virtual public hearing live on Facebook at Facebook.com/CTARedExt.

*****Presentation audio available in Spanish if joining through Zoom only. Closed captioning and American Sign Language interpretation are also available on Zoom for participants who are Deaf or Hard-of-Hearing. Spanish and American Sign Language interpretation will also be available during the in-person public hearing*****

For more information about the Supplemental EA and Section 4(f) Evaluation, please visit transitchicago.com/RLE/SEA. For questions about the RLE Project, please contact the project team at RedExtension@transitchicago.com.

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Publication Date: 2/17/2022

RED AHEAD

Red Line Extension

FINAL REMINDER TO JOIN US TODAY!

RLE Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation Public Hearings

Reminder that you are encouraged to PRE-REGISTER TODAY, February 17th, for the in-person public hearing that the CTA is hosting to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation.

- In-Person Public Hearing
  - **Thursday, February 17, 2022 (6:00 PM - 8:00 PM)**
  - The Salvation Army Kroc Center (1250 W. 119th St., Chicago, IL 60643)
  - Pre-register HERE

CTA has established a 30-day comment period to accept comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022 through March 1, 2022.

Comments may be made verbally to a court reporter at the in-person hearing. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

Pre-registration is encouraged.
Please register at: tiny.cc/SEAregistration

Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing. The Kroc Center is accessible to people with disabilities. This location is served by CTA bus #119.

Spanish and American Sign Language interpretation will also be available during the in-person public hearing

For more information about the Supplemental EA and Section 4(f) Evaluation, please visit transitchicago.com/RLE/SEA. For questions about the RLE Project, please contact the project team at RedExtension@transitchicago.com.

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eblast Notification: Comment Period Follow-Up Reminder #1
Publication Date: 2/24/2022

RED AHEAD

Red Line Extension

Please provide your comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation by March 1, 2022!

On January 31, the Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) announced the availability of the **Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation for the Red Line Extension project**. The Supplemental EA and Section 4(f) Evaluation is available for public review and comment until **March 1, 2022**.

To access the **Supplemental EA and Section 4(f) Evaluation**, and the accompanying RLE **Community Guide**, visit the project website at transitchicago.com/RLE/SEA.

To provide your **official comments** on the Supplemental EA and Section 4(f) Evaluation, visit tiny.cc/SEAcomments to access the online comment card. You may also email official comments (RedExtension@transitchicago.com) or use U.S. mail to send your comments directly to CTA at:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

CTA hosted a virtual public hearing, Tuesday, February 15, 2022 and an in-person public hearing on Thursday, February 17, 2022. If you missed the virtual public hearing, you may **view the presentation** at Facebook.com/CTARedExt. In addition, copies of the virtual public hearing presentation slides and the in-person exhibit boards are available at transitchicago.com/RLE/SEA.

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cta

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eBlast Notification: Comment Period Follow-Up Reminder #2
Publication Date: 2/28/2022

RED AHEAD

Red Line Extension

Please provide your comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation by March 1, 2022!

On January 31, the Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) announced the availability of the **Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation for the Red Line Extension project**. The Supplemental EA and Section 4(f) Evaluation is available for public review and comment until **March 1, 2022**.

To access the **Supplemental EA and Section 4(f) Evaluation**, and the accompanying RLE **Community Guide**, visit the project website at transitchicago.com/RLE/SEA.

To provide your **official comments** on the Supplemental EA and Section 4(f) Evaluation, visit tiny.cc/SEAcomments to access the online comment card. You may also email official comments (RedExtension@transitchicago.com) or use U.S. mail to send your comments directly to CTA at:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

CTA hosted a virtual public hearing, Tuesday, February 15, 2022 and an in-person public hearing on Thursday, February 17, 2022. If you missed the virtual public hearing, you may **view the presentation** at Facebook.com/CTARedExt. In addition, copies of the virtual public hearing presentation slides and the in-person exhibit boards are available at transitchicago.com/RLE/SEA.

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RLE Facebook Post: Save-the-Date
Publication Date: 1/26/2022

CTA Red Line Extension
Published by Jean Paul Manzanarez · January 26 ·

Save-the-Date! The Chicago Transit Authority (CTA) is hosting a virtual and in-person public hearing to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation. The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station rel... See more

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Publication Date: 2/09/2022

CTA Red Line Extension
Published by Jean Paul Manzanarez · February 9 ·

Reminder that the Chicago Transit Authority (CTA) is hosting a virtual and in-person public hearing to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation! The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relo... See more

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Sign up for the RLE Supplemental Environmental Assessment public hearings...
Sign up

Visit the COVID-19 Information Center for vaccine resources.
Get Vaccine Info

52 4 Comments 59 Shares

Like Comment Share

RLE Facebook Post: Reminder #2
Publication Date: 2/14/2022

CTA Red Line Extension
Published by Jean Paul Manzanarez · February 14 ·

Reminder that the Chicago Transit Authority (CTA) is hosting a virtual and in-person public hearing this week to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation! The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street st...
See more

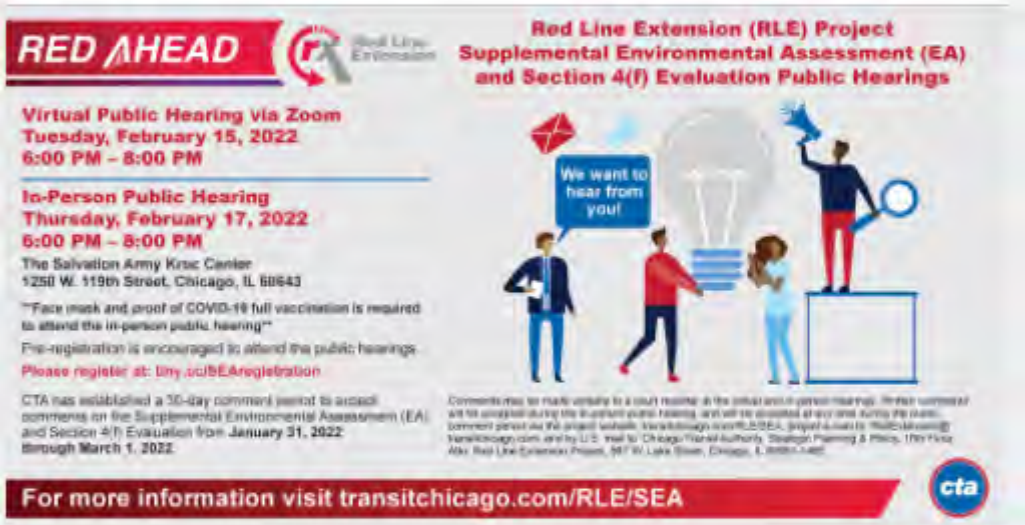

Visit the COVID-19 Information Center for vaccine resources.
Get Vaccine Info

1

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Comment as CTA Red Line Extension

RLE Facebook Post: Comment Period Follow-Up Reminder #1
Publication Date: 2/25/2022

CTA Red Line Extension
Published by Jean Paul Manzanarez · February 25 at 9:49 AM ·

Please provide your comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation by March 1, 2022!

You may use the online comment form at tiny.cc/SEAcomments. You may also email official comments (RedExtension@transitchicago.com) or use U.S. mail to send your comments directly to CTA at:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

Missed the virtual public hearing? View the full virtual public hearing presentation at **https://www.facebook.com/CTARedExt/videos/?ref=page_internal**.

If you have general questions about the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation, please email RedExtension@transitchicago.com or visit the project webpage at www.transitchicago.com/RLE/SEA.

We look forward to hearing from you!

ENGAGERLE.TRANSITCHICAGO.COM
Provide your comments on the RLE Supplemental Environmental Assessment and Section 4(f) Evaluation

174	6	–	
People reached	Engagements	Distribution score	Boost post

1 1 Share

Like Comment Share

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RLE Facebook Post: Comment Period Follow-Up Reminder #2
Publication Date: 2/28/2022

CTA Red Line Extension
Published by Jean Paul Manzanarez · February 28 at 9:59 AM ·

Please provide your comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation by March 1, 2022!

You may use the online comment form at tiny.cc/SEAcomments. You may also email official comments (RedExtension@transitchicago.com) or use U.S. mail to send your comments directly to CTA at:

Chicago Transit Authority
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Missed the virtual public hearing? View the full virtual public hearing presentation at **https://www.facebook.com/CTARedExt/videos/?ref=page_internal**.

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We look forward to hearing from you!

ENGAGERLE.TRANSITCHICAGO.COM

Provide your comments on the RLE Supplemental Environmental Assessment and Section 4(f) Evaluation

116	2	–	
People reached	Engagements	Distribution score	Boost post

1

Like Comment Share

Comment as CTA Red Line Extension

Customer Alert

Red Line Extension Supplemental EA Public Hearings

The Chicago Transit Authority (CTA) is hosting two public hearings in virtual and in-person formats to solicit public comments on the **Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation**.

The public hearings are scheduled as follows:

- **Tuesday, February 15, 2022 (6pm – 8pm):**
  Virtual Public Hearing via Zoom and Facebook/Live

- **Thursday, February 17, 2022 (6pm – 8pm):**
  *In-person public hearing at the Salvation Army Kroc Center**
  1250 W. 119th St., Chicago
  **Facility accessible to people with disabilities. The Kroc Center is served by CTA bus route #119 Michigan/119th.*

Pre-REGISTRATION IS RECOMMENDED TO ATTEND THE PUBLIC HEARINGS. To pre-register, visit: **transitchicago.com/RLE/SEA**.

Face mask and proof of COVID-19 full vaccination is required to attend the in-person public hearing

Note: *The Supplemental EA is available for online viewing at transitchicago.com/RLE/SEA and includes a list of available viewing locations with hard copies.*

Public comments on the Supplemental EA and Section 4(f) Evaluation will be accepted January 31 through March 1, 2022. Verbal comments can be made via a court reporter at the virtual and in-person hearings. Written comments accepted during the in-person public hearing, and any time during the public comment period at **transitchicago.com/RLE/SEA** or via e-mail to: **RedExtension@transitchicago.com**; and by U.S. mail to: **Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.**

Sign language, Spanish interpretation, and captioning will be available during the virtual public hearing via Zoom only. If you require an interpreter or other accommodations to participate, please contact CTA Customer Service at **1-888-968-7282** or email **RedExtension@transitchicago.com** at least 5 days before the public hearing.

transitchicago.com/RLE/SEA
Customer Information: 1-888-YOUR-CTA (1-888-968-7282); CTA TTY: 1-888-CTA-TTY1 (1-888-282-8891)
Transit Information: 312-836-7000

Remove February 18, 2022
22jq001_1h #2

Press Release

CTA Hosting Public Hearings to Solicit Input on the Red Line Extension's Supplemental Environmental Assessment

February 10, 2022

In its latest step toward advancing the transformative Red Line Extension project, the Chicago Transit Authority (CTA) is hosting two public hearings to solicit public comments on the federally required Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation.

The goal of these meetings is to allow members of the public an opportunity to provide feedback and input on the potential impacts the proposed Red Line Extension project may have on the areas surrounding the project footprint. A virtual public hearing will be held via Zoom on **Tuesday, February 15 from 6 pm - 8 pm.** An in-person public hearing will be held on **Thursday, February 17 from 6 pm – 8 pm** at the Salvation Army Kroc Center, 1250 W. 119th St., in Chicago. To attend either the virtual or in-person public hearings, pre-registration is encouraged at engagerle.transitchicago.com. Attendees of the in-person meeting are required to wear face masks and provide proof of COVID-19 full vaccination upon arrival at meeting location.

The Supplemental EA discloses design refinements to the project's Preferred Alignment. The Supplemental EA evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over. The purpose of the Section 4(f) Evaluation is to discuss mitigation and enhancement measures proposed for Beaubien Woods Forest Preserve. These mitigation and enhancement measures were developed in consultation with the Forest Preserves of Cook County.

The Supplemental EA is available during the public review period from January 31 through March 1 online at transitchicago.com/RLE/SEA. Hard copies are available for viewing at the following locations:

- FTA Region 5 Office, 200 W. Adams St., Suite 320
- CTA Headquarters, 567 W. Lake Street, 2nd floor
- Pullman Public Library, 11001 S. Indiana Ave.
- West Pullman Public Library, 830 W. 119th St.
- Altgeld Public Library, 955 E. 131st St.
- Woodson Regional Public Library, 9525 S. Halsted St.
- Harold Washington Library Center, 400 S. State St.
- Calumet Park Public Library, 1500 W. 127th St., Calumet Park, IL.

The comments received during the 30-day public comment period, and the responses to those comments, will be incorporated into the project's Final Environmental Impact Statement (EIS) / Record of Decision (ROD), which will conclude the project's environmental review process.

The Red Line Extension project will be a transformative investment for the Far South Side community. It will provide long-awaited and much needed connection to jobs, education, and commerce, while also serving as a catalyst for economic development. Under this proposed project, the CTA will extend the Red Line 5.6-miles south of the existing terminal at 95th Street to 130th Street. Four new, fully accessible stations at 103rd Street, 111th Street, Michigan Avenue and 130th Street will be added, plus a modern, efficient railcar storage yard and maintenance facility.

RLE is a community-input driven project. Members of the surrounding communities have been and will remain vital in helping shape this project and its path forward. To learn more about the Red Line Extension project visit: https://www.transitchicago.com/rle/.

# # #

Back to news

Quick links

Schedules Fares Maps Alerts Trackers Ventra

System status snapshot

Systemwide

A note about bus service (All Bus Routes)

'L' route status

Red Line	Planned Work
Blue Line	Major Delays
Brown Line	Special Note
Green Line	Special Note
Orange Line	Special Note
Pink Line	Special Note
Purple Line	Service Change
Yellow Line	Special Note

All 'L' alerts: Current or Upcoming

Bus routes w/alerts

2	4	6	9	X9
J14	49	49B	X49	54A
56	63	71	73	80
81	82	92	126	157

All bus alerts: Current or Upcoming

Elevator alerts

Brown Line	Montrose, Sedgwick
Green Line	Ashland/63, Pulaski, Morgan
Pink Line	Morgan
Purple Line Exp	Sedgwick

All elevator alerts: Current or Upcoming

See also: complete system status

cta

More Information

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Governance & admin
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Ventra app
Facts, at a glance
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Regional Transportation Authority
Metra (commuter rail)
Pace (suburban bus)

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RED AHEAD

Red Line Extension

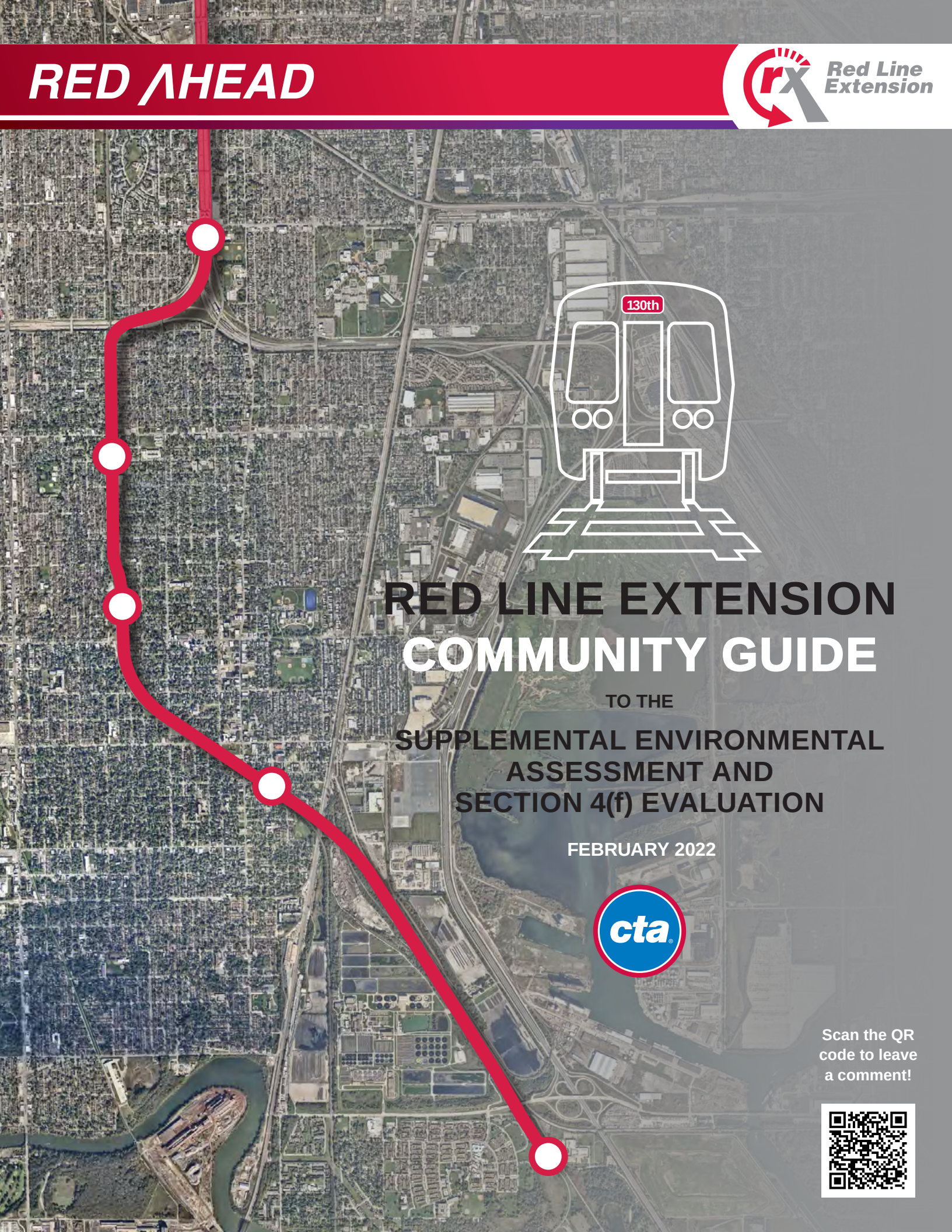

RED LINE EXTENSION COMMUNITY GUIDE

TO THE

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT AND SECTION 4(f) EVALUATION

FEBRUARY 2022

cta

Scan the QR code to leave a comment!

What is a Supplemental Environmental Assessment?

The Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) published a Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation for the Red Line Extension (RLE) Project. A Supplemental EA is a federal National Environmental Policy Act (NEPA) review document that evaluates the significance of potential impacts of proposed project changes made after the preparation of a Draft Environmental Impact Statement (EIS). This Supplemental EA evaluated the potential impacts from three project design changes to the Preferred Alignment not disclosed in the Draft EIS that was prepared for the CTA RLE Project in 2016.

What has Changed within the RLE Project since the Draft EIS?

The Supplemental EA and Section 4(f) Evaluation assessed impacts from the three project design changes made to the Preferred Alignment since the Draft EIS. The three project design changes assessed include:

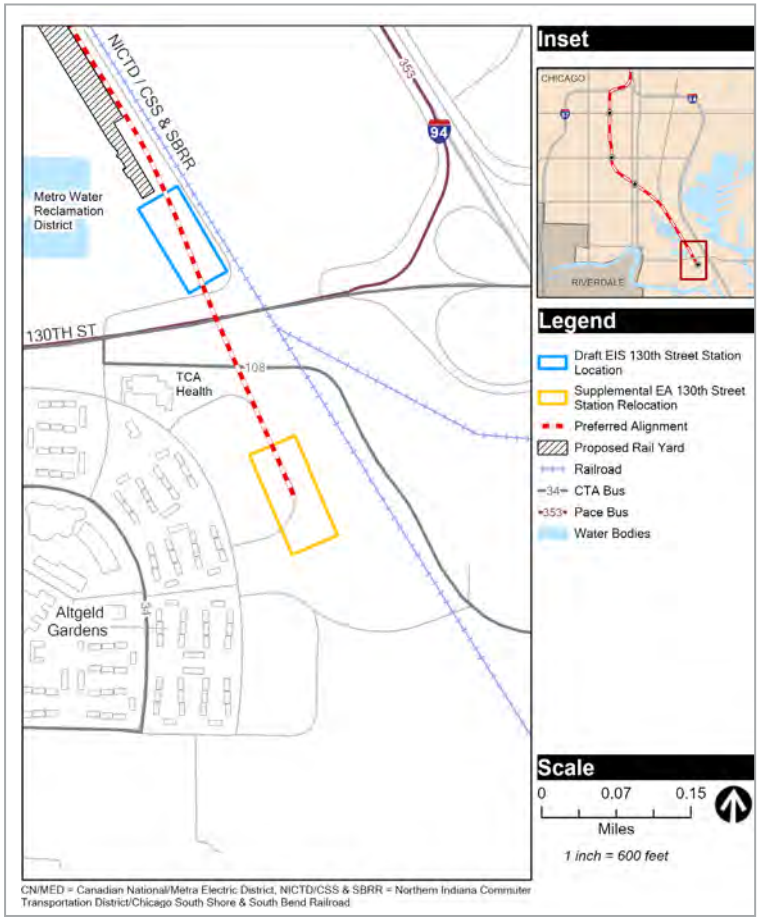

130th Street Station Relocation

The 130th Street station was relocated from north of 130th Street to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

- Creates better transit connections within the Altgeld Gardens neighborhood
- Located closer and more accessible to neighborhood residents and Carver Military Academy High School students.
- Provides safer and more secure access for transit users by avoiding the need to use a walking path under the 130th Street viaduct or cross 130th Street at-grade
- Located farther from the Metropolitan Water Reclamation District plant, avoiding truck traffic and potential odors
- Better opportunities for future development
- Supports objectives in the 2013 Altgeld Gardens-Philip Murray Homes Master Plan

There would be visual and aesthetic impacts to the Altgeld Gardens neighborhood. Mitigation would include landscaping and designing the station facility to match the fabric of the surrounding community. Impacts would remain after mitigation.

After mitigation, there are no adverse impacts to any other environmental resources from the 130th Street station relocation.

For more information, please visit the project website: transitchicago.com/RLE/SEA

120th Street Yard and Shop Refinement

Coordination with Norfolk Southern (NS) resulted in adjustments to the Preferred Alignment near the 120th Street yard and shop to accommodate NS right of way needs and current and future NS connectivity.

The refinement resulted in no new environmental impacts. Wetland impacts were analyzed and there would be no adverse impacts to wetlands after mitigation.

After mitigation, there are no adverse impacts from the 120th Street yard and shop refinement.

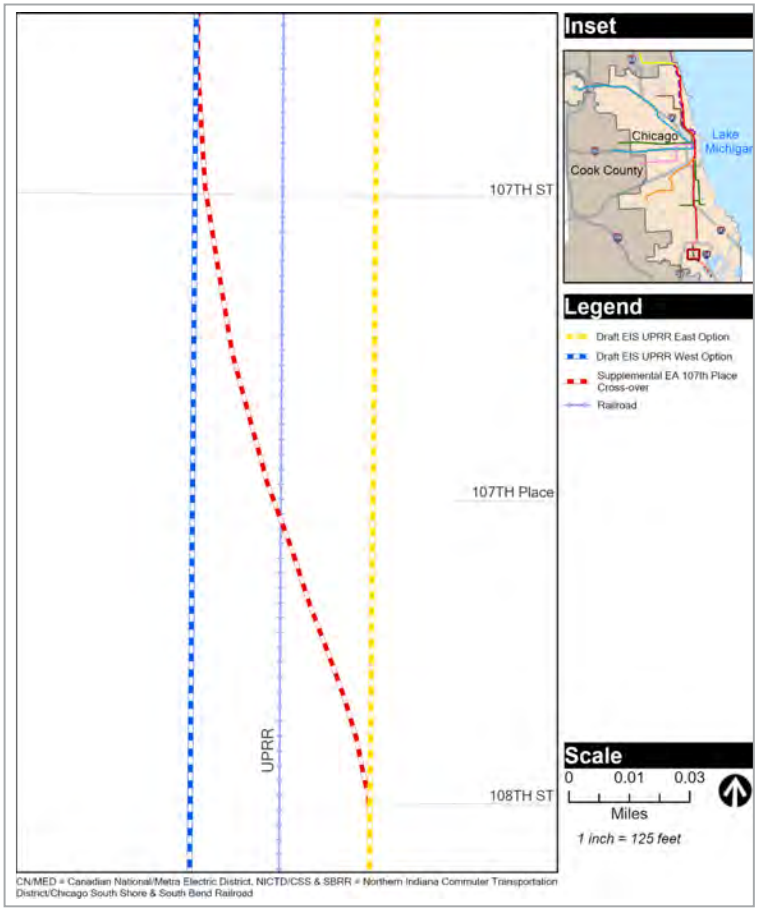

107th Place Cross-over

Provides the connection between the East and West Options of the Union Pacific Railroad Alternative from the Draft EIS to create a hybrid alignment that would:

- Preserve viable businesses.
- Minimize impacts to schools, residences, and avoids the historic Roseland Pumping Station.
- Preserve properties slated for future development surrounding the 111th Street station area.
- Accommodate Union Pacific Railroad's future ability to expand.

Ten additional properties not previously identified in the Draft EIS would need to be acquired. Environmental analysis shows that there would be visual and aesthetic impacts to the adjacent residences. Mitigation measures would include landscaping and urban design techniques to reduce the experience of the structure's mass, planting larger trees to screen the elevated structure, and smaller-scale landscaping. It is not possible to completely mitigate these impacts, however, and some visual and aesthetic impacts would remain even after mitigation. After all mitigation measures, there are no adverse impacts to any other environmental resources from the 107th Place cross-over.

Section 4(f) Evaluation

Beaubien Woods Forest Preserve

Section 4(f) of the United States Department of Transportation Act of 1966 is a federal law that sets requirements for FTA consideration of publicly owned parks/recreational areas that are accessible to the general public, publicly owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects.

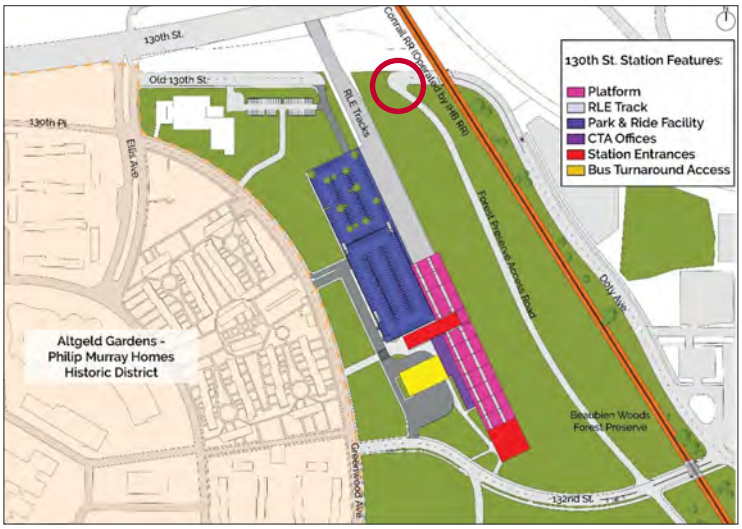

- Construction of the 130th Street station would close Old 130th Street and eliminate a connection to the access road into Beaubien Woods Forest Preserve from Old 130th Street. (See circle on figure to the right.)
- Even though there was no Section 4(f) use determined at Beaubien Woods, mitigation measures were identified in coordination with the Forest Preserves of Cook County (FPCC) and include the following:
  - Transfer of two-City owned parcels into FPCC ownership
  - Funding for FPCC for ecological restoration, habitat enhancement, and beautification of expanded Beaubien Boat Launch land
  - New trail connection from Altgeld Gardens recreation facilities on 133rd Street to the Beaubien Woods Boat Launch
  - Wayfinding and information signage inside the proposed station and outdoor signage at 130th Street and Ellis Avenue and other locations
  - Forest Preserves advertising to encourage CTA riders to use public transportation to visit the Forest Preserves at the 130th Street station, other Red Line stations south of Roosevelt, and inside local trains and buses

How to Provide Comments on the Supplemental EA and Section 4(f) Evaluation

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period from **January 31, 2022 through March 1, 2022** via the following:

Project website: transitchicago.com/RLE/SEA

Project Email: RedExtension@transitchicago.com

U.S. mail to:
Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street, Chicago, IL 60661-1465

Comments received during the 30-day public comment period, and the responses to those comments, will be incorporated into the project's Final EIS/ Record of Decision (ROD).

For more information visit: transitchicago.com/RLE/SEA

RED AHEAD

Red Line Extension

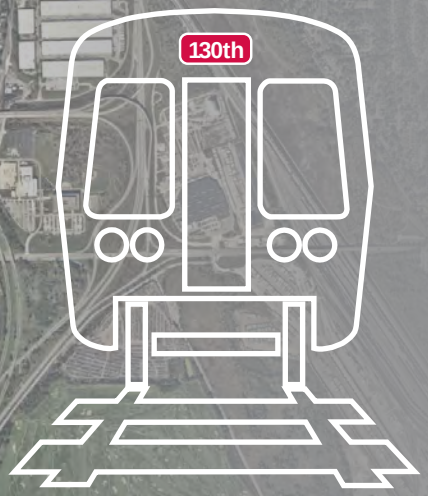

GUÍA COMUNITARIA DE LA EXPANSIÓN DE LA LÍNEA ROJA

SOBRE LA

EVALUACIÓN MEDIOAMBIENTAL SUPLEMENTARIA Y LA EVALUACIÓN DE LA SECCIÓN 4(f)

FEBRERO 2022

cta

¡Escanear el código QR para dejar un comentario!

¿Qué es una evaluación medioambiental suplementaria?

Federal Transit Administration (FTA) y Chicago Transit Authority (CTA) publicaron un Evaluación medioambiental suplementaria (EA) y la Evaluación de la Sección 4(f) para el Proyecto de la Expansión de la Línea Roja (RLE). La EA suplementaria es una revisión federal de la ley National Environmental Policy Act (NEPA), que evalúa la significancia y los impactos potenciales de los cambios propuestos al proyecto, hechos después de la preparación del borrador de la Declaración de impacto medioambiental (EIS). Esta EA suplementaria evaluó los impactos potenciales de tres cambios al diseño del proyecto con la Alineación preferida no divulgada en el borrador de la EIS que fue preparado para el Proyecto RLE de CTA en 2016.

¿Qué ha cambiado dentro del Proyecto RLE desde el borrador de la EIS?

La EA suplementaria y la Evaluación de la Sección 4(f) revisaron los impactos de tres cambios al diseño del Proyecto hechos a la Alineación preferida desde el borrador de la EIS. Los tres cambios al diseño del proyecto que fueron evaluados incluyen:

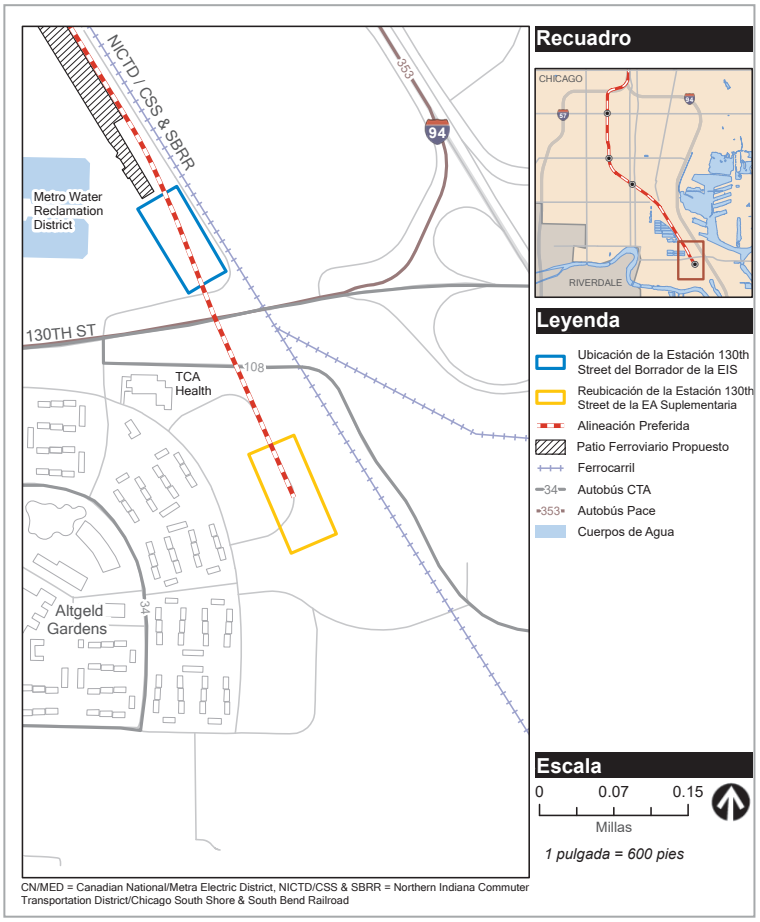

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Reubicación de la estación 130th Street

La estación 130th Street fue reubicada desde el norte de 130th Street al sur de 130th Street, adyacente al vecindario de Altgeld Gardens.

- Crea mejores conexiones de tránsito dentro del vecindario de Altgeld Gardens
- Ubicada más cerca y con mayor accesibilidad para los vecindario residentes y los estudiantes de Carver Military Academy High School.
- Provee acceso más seguro para los usuarios del tránsito evitando la necesidad de utilizar un camino peatonal bajo el viaducto de 130th Street o cruzar 130th Street al nivel de la calle
- Ubicada más lejos de la planta del Distrito metropolitano de reclamación de aguas, evitando el tráfico de los camiones y los olores potenciales
- Mejores oportunidades para futuros desarrollos
- Apoya los objetivos en el plan maestro de 2013 de Altgeld Gardens- Philip Murray Homes

Habría impactos visuales y estéticas al vecindario de Altgeld Gardens. La mitigación incluiría paisajismo y diseñando la instalación de la estación para combinar el tejido de la comunidad circunvecina. Los impactos permanecerían aun después de la mitigación.

Después de la mitigación, no existen impactos adversos a ningún otro recurso medioambiental debido a la reubicación de la estación de 130th Street.

Para más información, favor de visitar el sitio web del proyecto: transitchicago.com/RLE/SEA

Refinamiento del patio y taller de 120th Street

Coordinación con Norfolk Southern (NS) resultó en ajustes a la Alineación preferida cerca del patio y taller de 120th Street para acomodar el derecho de paso de NS necesidades y conectividad SN actual y futura.

El refinamiento resultó en ninguna nueva ambiental impactos Se analizaron los impactos en los humedales y no habrá impactos adversos en los humedales después de la mitigación.

Después de la mitigación, no existen ningunos impactos adversos del refinamiento del patio y taller de 120th Street.

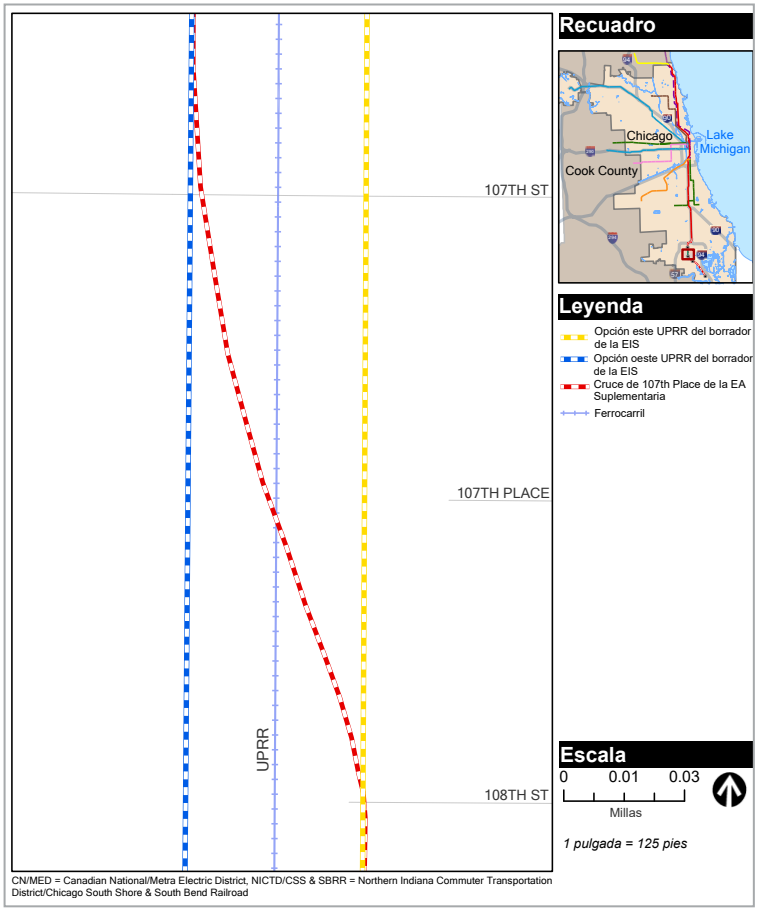

Cruce de 107th Place

Provee la conexión entre las opciones este y oeste de la alternativa de Union Pacific Railroad del borrador de la EIS para crear una alineación híbrida que:

- Preservaría a los negocios viables
- Minimizaría los impactos a las escuelas y residencias y evitaría la estación histórica de bombeo de Roseland
- Preservaría las propiedades designadas para futuros desarrollos alrededor del área de la estación de 111th Street
- Acomoda el espacio solicitado por Union Pacific Railroad

Diez propiedades adicionales no identificadas previamente en el borrador de la EIS se necesitaría adquirir. Ambiental análisis muestra que abría impactos visuales y estéticos a las residencies adyacentes. La mitigación incluiría el paisajismo y técnicas de diseño urbano para reducir la concentración, como plantar árboles más grandes cerca de la estructura elevada e incluir paisajismo de menor escala cerca de las calles. Después de la mitigación, no existen impactos adversos a ningún otro recurso medioambiental del cruce de 107th Place.

Evaluación de la Sección 4(f)

Beaubien Woods Forest Preserve

La sección 4(f) de la ley United States Department of Transportation Act of 1966 es una ley federal que establece los requisitos para la consideración de FTA de parques/áreas recreacionales de propiedad pública que son accesibles al público en general, refugios de vida silvestre/aves acuáticas de propiedad pública y sitios históricos de significancia federal, estatal o local de propiedad pública en proyectos de desarrollo para el transporte.

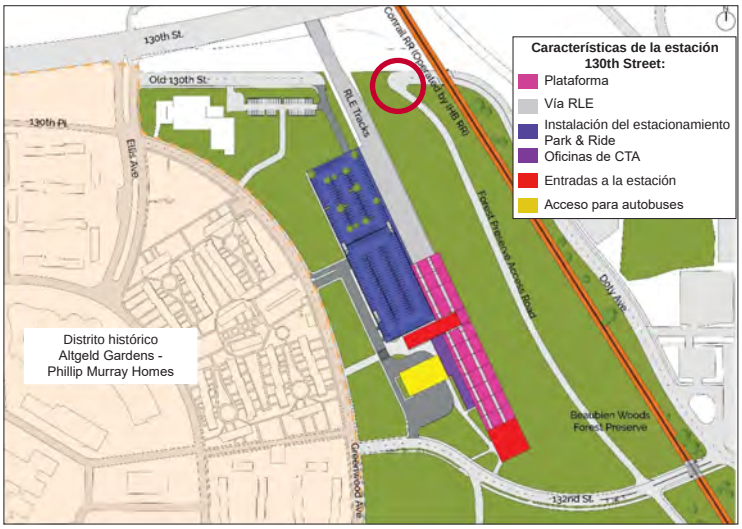

- La construcción de la estación 130th Street cerraría a Old 130th Street y eliminaría una conexión a la carretera de acceso entrando por Beaubien Woods Forest Preserve desde Old 130th Street. (Ver el círculo en la figura a la derecha.)
- Aunque no hubo un uso de Sección 4(f) determinado en Beaubien Woods, medidas de mitigación fueron identificadas en coordinación con Forest Preserves of Cook County (FPCC) e incluyen lo siguiente:
  - La transferencia de dos parcelas de propiedad de la ciudad a la propiedad de FPCC
  - Financiamiento para FPCC para la restauración ecológica, mejoramiento de hábitat y embellecimiento del terreno expandido del lanzamiento de botes de Beaubien
  - Una nueva conexión al sendero de las instalaciones recreacionales de Altgeld Gardens en 133rd Street al lanzamiento de botes de Beaubien Woods
  - Señalización direccional e informativo dentro de la estación propuesta y señalización exterior en 130th Street y Ellis Avenue y otros sitios
  - Promoción de la reserva forestal para invitar a los pasajeros de CTA a utilizar el transporte público para visitar las reservas forestales en la estación de 130th Street, otras estaciones de la Línea Roja al sur de la Roosevelt y adentro de los trenes y autobuses locales

Cómo proporcionar comentarios sobre la EA suplementaria y la Evaluación de la Sección 4(f)

Los comentarios pueden ser hechos verbalmente a un escribano del tribunal en las audiencias virtuales y en persona. Los comentarios escritos serán aceptados durante la audiencia pública en persona y serán aceptados en cualquier momento durante el periodo de comentarios públicos desde el 31 de enero, 2022 hasta el 1 de marzo, 2022 por medio de:

Sitio web del proyecto: transitchicago.com/RLE/SEA

Correo electrónico del proyecto:
RedExtension@transitchicago.com

Correo EE.UU. a:
Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street, Chicago, IL 60661-1465

Los comentarios recibidos durante el periodo de comentarios públicos de 30 días y las respuestas a esos comentarios, serán incorporados al Registro de Decisión (ROD)/EIS Final del proyecto.

Para más información visitar: transitchicago.com/RLE/SEA

Winter 2021 Newsletter

RED AHEAD

Red Line Extension

RLE seeks final input on Red Line Extension Transit Supportive Development (TSD) Plan

The CTA is seeking community input on proposed TSD strategies and concepts near each of the four proposed RLE station areas. Final meetings to gain input from the community will be held in a virtual format on: **Tuesday, December 7, 2021 (103rd St. Station and 130th St. Station)** and **Wednesday, December 8 (111th St. Station and Michigan Ave. St. Station) from 6:00 PM – 7:30 PM**. Community members are encouraged to attend both meetings! Registration is required to attend. Register at **engagerle.transitchicago.com**.

Red Line Extension Project Supplemental Environmental Assessment (EA) public comment period and public hearing

In response to project refinements, including the change in the proposed station location at 130th Street since the Draft Environmental Impact Statement was prepared in 2016, a Supplemental EA for the project is near completion. The Supplemental EA evaluates the potential impacts of the project on the natural and built environment and discusses how the project avoids, minimizes or mitigates those impacts. Mitigation measures and environmental commitments that are included in the Supplemental EA would be carried forward into the RLE project's design plans.

In early 2022, the Supplemental EA will be publicly available for a 30-day public comment period and a public hearing. Stay tuned for future updates about this important milestone for the RLE project!

Save the Date!

Federal infrastructure bill signed in November

The Red Line Extension is a transformative project that will benefit Chicago's Far South Side for generations to come and is a top priority for CTA. The recent signing of the bipartisan infrastructure bill is expected to provide federal funding necessary to support this much-needed investment in CTA's public transit system. CTA looks forward to working with Senators Durbin and Duckworth, and the entire Illinois delegation to make this long-awaited project a reality.

The Red Line Extension will provide many benefits, including:

- **Equity**
- **Frequent rail service**
- **Connectivity and access**
- **Economic opportunity**
- **Sustainable transportation**

About the Red Line Extension Project

The CTA is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multi-modal connections at each new station include bus, bike, pedestrian, and Park & Ride facilities. In 2020, the project received approval from the Federal Transit Administration to enter the Project Development phase of the Capital Investment Grants Program as a New Starts project.

Over the past year

40+ STAKEHOLDER MEETINGS AND LISTENING SESSIONS CONDUCTED

3 RLE PROJECT ADVISORY COUNCIL MEETINGS

580 ATTENDEES ACROSS **8** COMMUNITY MEETINGS

256+ VISITORS REACHED AT **6** LOCAL COMMUNITY EVENTS IN THE RLE AREA

4,357 RLE TSD WEBSITE VISITS

150 RESPONSES THROUGH WEBSITE ENGAGEMENT TOOLS

Questions?

Would you like to be added to our list for future Red Line Extension updates?

Contact us at RedExtension@transitchicago.com, visit our engagement website engagerle.transitchicago.com, call customer service at 1-888-968-7282, or write us at

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

www.facebook.com/CTARedExt

Red Line Extension Video and Facebook Page!

Check out the CTA's video about the Red Line Extension Project and our commitment to improve mobility and access to transit by visiting tiny.cc/RLEvid! Remember to share your thoughts and follow the project's Facebook page at facebook.com/CTARedExt for timely updates and announcements. We are #RLEReady!

Red Line Extension Preferred Alignment

Noticiero de invierno 2021

RED AHEAD

Red Line Extension

RLE busca aporte final en el desarrollo futuro por la expansión de la Línea Roja por medio del Desarrollo en apoyo del tránsito (TSD)

CTA quiere sus opiniones y comentarios sobre las estrategias a las ideas propuestas cerca de cada una de las cuatro áreas propuestas para estaciones RLE. Las reuniones finales para obtener aportes de la comunidad se llevarán a cabo en un formato virtual. Martes, 7 de diciembre (estaciones 103rd Street & Michigan Avenue Station) y Miercoles, 8 de diciembre (estaciones 111th Street & 130th Street) de 6:00 p.m. – 7:30 p.m. ¡Todos los miembros de la comunidad son invitados a participar en ambas reuniones! Se requiere su inscripción para attender. Inscribirse en **engagerle.transitchicago.com**.

Período de comentarios públicos y audiencia pública de la Evaluación Ambiental (EA) Suplementaria de la expansión de la Línea Roja

En respuesta a las mejoras del proyecto, incluido el cambio de la estación propuesta en 130th Street desde que se preparó el Borrador de la Declaración de Impacto Ambiental en 2016, una EA complementaria para el proyecto está casi terminada. La EA complementaria evalúa los impactos potenciales del proyecto en el entorno natural y construido y analiza cómo el proyecto evita, minimiza o mitiga esos impactos. Las medidas de mitigación y los compromisos ambientales que se incluyen en la EA complementaria se trasladarían a los planes de diseño del proyecto RLE.

A principios de 2022, el EA Suplementaria estará disponible públicamente durante un período de comentarios públicos de 30 días y una audiencia pública. ¡Estén atentos para futuras actualizaciones sobre este importante hito para el proyecto RLE!

Salva el ¡Fecha!

Factura infraestructura de ley federal firmado en noviembre

La expansión de la Línea Roja es un proyecto transformador que beneficiará al extremo sur de Chicago para las generaciones venideras y es una de las principales prioridades de CTA. Se espera que la reciente firma del proyecto de ley de infraestructura bipartidista proporcione los fondos federales necesarios para respaldar esta inversión tan necesaria en el sistema de transporte público de la CTA. CTA espera trabajar con los senadores Durbin y Duckworth, y toda la delegación de Illinois para hacer realidad este proyecto tan esperado.

Beneficios de la expansión de la Línea Roja

- **Equidad**
- **El servicio tren frecuente**
- **Conectividad y acceso**
- **Oportunidad económica**
- **Transporte sostenible**

Acerca de la expansión de la Línea Roja

CTA está proponiendo extender la Línea Roja desde la terminal existente en 95th/Dan Ryan a 130th Street, sujeto a la disponibilidad de fondos. La extensión propuesta de 5.6 millas incluiría cuatro estaciones nuevas cerca de 103rd Street, 111th Street, Michigan Avenue y 130th Street. Las conexiones multimodales en cada nueva estación incluyen autobuses, bicicletas, peatones e instalaciones de Park & Ride. En 2020, el proyecto recibió la aprobación de la Administración Federal de Tránsito para ingresar a la fase de Desarrollo de Proyectos del Programa de Subvenciones de Inversión de Capital como un proyecto de Nuevos Comienzos.

Durante el año pasado

40+ REUNIONES DE PARTES INTERESADAS Y SESIONES DE ESCUCHA REALIZADAS

3 REUNIONES DEL CONSEJO ASESOR DEL PROYECTO RLE

580 PARTICIPANTES DE LOS REUNIONES DE COMUNIDAD

8

285+ VISITANTES ALCANZADOS EN

6 EVENTOS COMUNITARIOS LOCALES EN EL ÁREA DE RLE

4,357 VISITAS AL SITIO WEB DE RLE TSD

150 RESPUESTAS A TRAVÉS DE HERRAMIENTAS DE PARTICIPACIÓN EN EL SITIO WEB

¿Preguntas? Quisiera ser agregado/a a nuestra lista para futuras actualizaciones de la expansión de la Línea Roja?

Contáctenos en: RedExtension@transitchicago.com, visita nuestra sitio web de participación engagerle.transitchicago.com, llame al servicio al cliente al 1-888-968-7282, o escríbanos al:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

facebook.com/CTARedExt

¡Página de Facebook y video de la expansión de la Línea Roja!

¡Vea el video de CTA acerca del Proyecto de Expansión de la Línea Roja y nuestro compromiso a mejorar la movilidad y acceso al tránsito visitando tiny.cc/RLEvid! Recuerde de compartir sus opiniones y seguir la página de Facebook del proyecto en facebook.com/CTARedExt para actualizaciones del proyecto y anuncios. ¡Estamos listos para RLE!

Mapa de alineación preferida

transitchicago.com/RLE

Attachment 2
Media Coverage

Planners discussed tweaks to the Red Line Extension project at Supplemental EA hearing

By James Porter | Feb 16, 2022 | 5 COMMENTS

Rendering of the 107th Place Crossover.

Get information on other upcoming Red Line hearings, as well as opportunities to review the the Supplemental EA and Section 4(f) Evaluation and provide feedback, here.

With Illinois projected to get $17 billion in federal infrastructure funding, the longtime dream of extending the CTA Red Line south to nearly the city limits is looking likely to become a reality.

On January 31, the Supplemental Environmental Assessment, a federal National Environmental Policy Act review document, for the $2.3 billion Red Line project was published. This Supplemental EA discloses potential impacts from three project design changes that weren't identified in the 2016 Draft Environmental Impact Statement.

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Program Manager (Communications), NACTO, New York
3 months ago

Manager, ULI San Francisco
4 months ago

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MOST RECENT

Representatives of the CTA and NEPA are holding hearings this month to summarize the results of the Supplemental EA andSection 4(f) evaluation, and to gather feedback from residents on the benefits, impacts, and proposed mitigation measures of the design changes.

A virtual hearing on Tuesday hearing was moderated by Barbara Stubblefield, who's coordinating outreach on the project for the CTA. It featured presentations by CTA planners Marlise Fratinardo and Amnar Elmajoub, as well as Grace Dysico and Robin Martel from NEPA.

The presenters.

Fratinardo explained that the new tracks will head south the 95th/Dan Ryan Red and turn west towards I-57. The 5.6-mile route will be elevated until 119th Street, at which point it will descend to ground level, where it will remain until the southern terminal at 130th Street in the Altgeld Gardens housing project. There will be four stations: 103rd Street (near Eggleston), 111th Street (near Eggleston)M, ichigan Avenue (near 116th Street), and 130th Street.

Red Line Extension (RLE)

Here's where CDOT could pilot real protected intersections to keep cyclists safe

Study: Megacar Drivers Up to 4x More Likely to Hit Walkers While Turning

Hit-and-run driver fatally struck Miriam Grande, 70, at Grand/Austin in Belmont Central

Today's Headlines for Friday, March 18

Justice is blind: Lawsuit to force Chicago to retrofit all stoplights with audible signals advances

- 5.6-mile extension
- Four new stations:
  - 103rd Street (near Eggleston)
  - 111th Street (near Eggleston)
  - Michigan Avenue (near 116th Street)
  - 130th Street (near Altgeld Gardens)
- Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities
- Elevated tracks from 95th Street to 119th Street, ground level tracks from 119th Street to 130th Street

The route.

The project is intended reducing commute times, cutting the trip from Algeld Gardens to the Loop by 30 minutes, and improving access to education, jobs, retail, and healthcare. The CTA identified five benefits of the project: equity, frequent rail service, connectivity, economic opportunity, and sustainability.

The three design changes include relocating the planned site of the 130th Street station St; 120th Street yard and shop refinement (this refers to the facilities for storing additional 'L' cars for the extension); and the 107th Place Crossover, where the elevated structure would cross over the Union Pacific railroad tracks, from west to east.

107th Place Cross-over

RED AHEAD

Visualizations*

- Impacts on visual and aesthetic conditions would remain high and adverse after mitigation.

Existing Conditions

Photo Simulation of the 107th Place Cross-over, Facing West from 108th Street

Rendering of the 107th Street crossover.

Grace Dysico discussed the 130th Street station relocation from the north side of the highway-like street to within Altgeld Gardens. This coincides of the demolition of three blocks of buildings in the housing project. That was done by the Chicago Housing Authority, independent of the RLE project. However, the demolition opened up space for the Red Line station. Dysico mentioned better connectivity and accessibility and safety, as well as the desire to move the stop farther from a local water treatment plant, as reasons for relocating the station south of 130th.

130th Street Station Relocation

RED AHEAD

- Better transit connections
- Better accessibility
- Safer and more secure access
- Located farther from MWRD plant
- Better opportunities for future development
- Supports objectives in the 2013

The old and new locations of the 130th Street station.

Robin Martel discussed the changes to the plan for the 107th Place Crossover. Some of the refinements include preserving businesses and properties slated for future development, minimizing impacts to adjacent land, avoiding the historic Roseland station, and accommodating Union Pacific Railroad's future ability to expand.

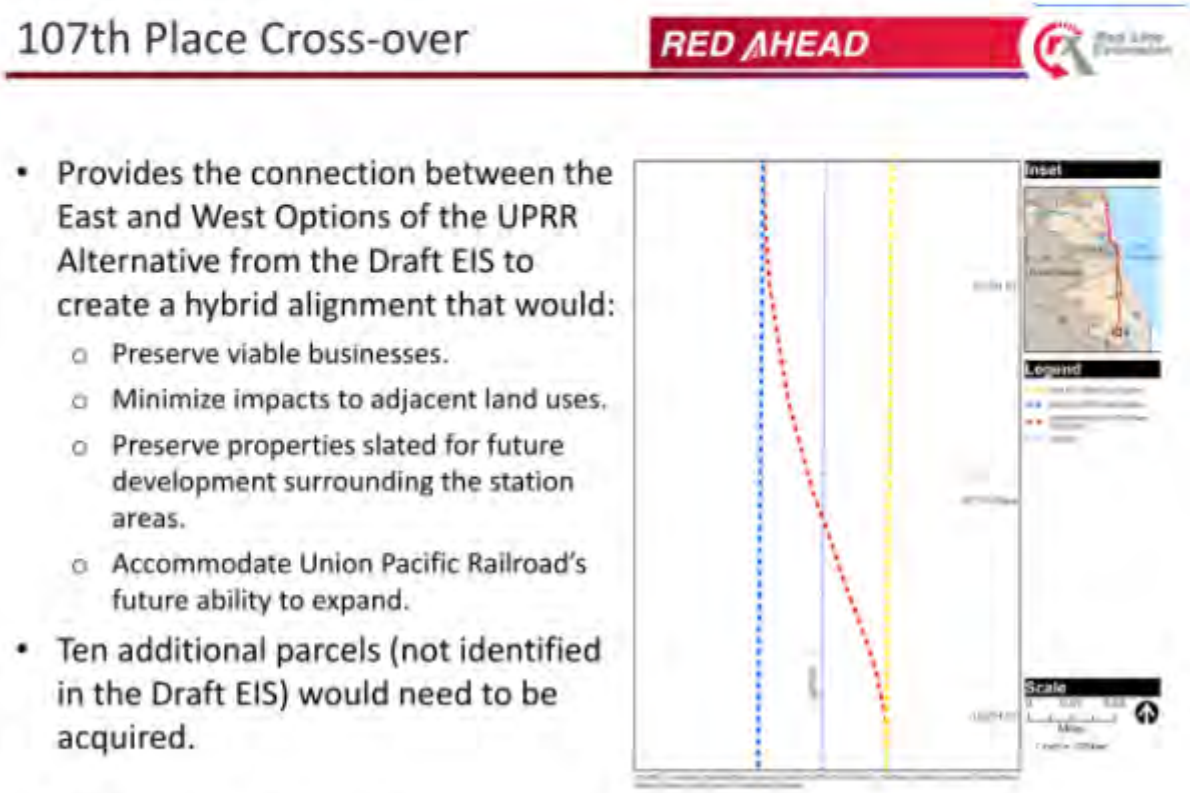

Details on the 107th Place Crossover.

Ammar Elmajdoub described the RLE corridor land acquisition plan. "Of the 228 needed properties, 105 are unimproved, 66 are residential, 36 are commercial or industrial, nine are railroad, and 12 are a combination of public,

community or institutional uses." The surplus of vacant properties and buildings, Elbajoub continued, will allow for business and residents to relocate within the property.

Watch a recording of Tuesday's meeting here.

Check out the meeting presentation here.

Filed Under: Chicago Policy, Design, Events, Federal Policy, Funding & Finance, Infrastructure, Neighborhoods, News, Rail Transit, Walking, Altgeld Gardens, Promoted, Public Hearing, Red Line extension, Supplemental Environmental Assessment

5 Comments Streetsblog Chicago Disqus' Privacy Policy Login

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Transportation

Chicago's $2.3 billion Red Line Extension could bring housing, retail to South Side

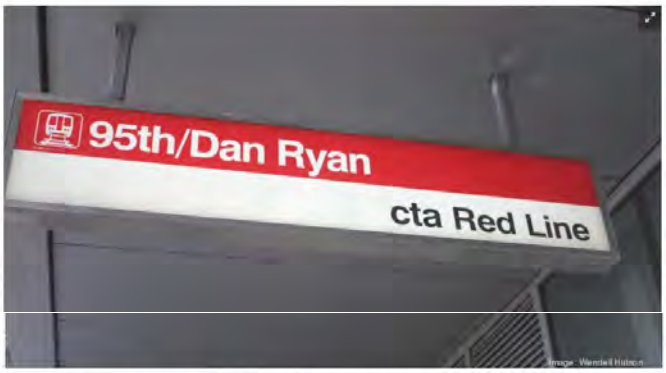

Chicago's Red Line Extension would extend the Red Line train route to 130th Street and add four new stations.
PHOTO BY WENDELL HUTSON

By Wendell Hutson – Staff Reporter, Chicago Business Journal
Mar 1, 2022

IN THIS ARTICLE

Commercial Real Estate
Industry

Local Transit
Topic

Karen Freeman-Wilson
Person

Felicia Matthews
Person

Eileen Rhodes
Person

An upcoming $2.3 billion infrastructure project by the Chicago Transit Authority could create a need for more housing and retail businesses on the city's Far South Side.

Construction on the Red Line Extension could begin in three years based on funding availability and once the transit agency responds to public comments it received during the Supplemental Environmental Assessment review period, which ended on Tuesday.

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"The current estimated start date of construction is 2025," Felicia Matthews, a spokesperson for the CTA, told the Chicago Business Journal. "Funding for the RLE project is expected to come from multiple sources and includes the New Starts program from the Federal Transit Authority, (federal) infrastructure bill and CTA bonds."

The RLE will be one of the largest economic-development projects developed on the Far South Side in years, according to Eileen Rhodes, president of Chicago-based East Lake Management and Development Corp., which manages commercial properties and affordable housing apartment buildings.

"Affordable housing is a much needed necessity in Chicago and on the South Side, and any projects that generate more affordable housing is a win-win for everyone," she said.

The last big economic development project on the Far South Side was the $35 million Visitors Center at the Pullman National Monument, which opened in September.

The RLE would extend the Red Line train route 5.6 miles to 130th Street. It would also add four new stations at 103rd Street, 111th Street, Michigan Avenue and 130th Street. Each new station would include bus and parking facilities.

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Economic impact

New train stations mean more foot traffic flowing through South Side neighborhoods like Roseland, Pullman and Riverdale where retail businesses like restaurants, bars and grocery stores are already needed, said Karen Freeman-Wilson, president and CEO of the Chicago Urban League.

"We're talking about communities currently without these types of businesses and without a lot of people visiting the area because of limited public transportation," she said. "But just as equally important to strengthening the economy on the Far South Side is more housing built. Research shows that retail follows housing, so the more housing created, the greater chance more businesses will want a presence along this new train route."

She added that strip malls with a diverse core of businesses should be the norm for train riders to choose from once the project is complete.

"Right now, when you get off the Red Line going to the South Side, you don't have a lot of choices when it comes to retail businesses, especially sit-down restaurants," she said. "But when you take the Red Line to the North Side or downtown, you don't have that problem."

Matthews of the CTA said she is confident the local economy in neighborhoods along the extended train route will be boosted by the RLE project.

"The RLE Project would foster economic development in the project area, as new stations could serve as catalysts for neighborhood revitalization," she said. "The foundation of the RLE project is equity. This project will be a transformative investment for the Far South Side of Chicago and will be one of the single biggest investments in the history of the community and the CTA."

FOOD & LIFESTYLE
Bern's Steak House parts ways with longtime executive chef

FOOD & LIFESTYLE
Liquor board puts Little Italy restaurant on notice after community complaints

TECHNOLOGY
These tech CEOs were paid the most in Mass. in 2021

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Attachment 3
Public Hearing Format and Materials

Virtual Public Hearing Presentation

In-Person Public Hearing Exhibit Boards

Online Comment Form

Hard Copy Comment Form

RED AHEAD

Red Line Extension

Red Line Extension
Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation
Virtual Public Hearing
February 15, 2022

Virtual Public Hearing Presentation

Thank you for joining us! The public hearing will begin shortly.

This virtual public hearing will be recorded and available online after the hearing at transitchicago.com/RLE/SEA and Facebook.com/CTARedExt

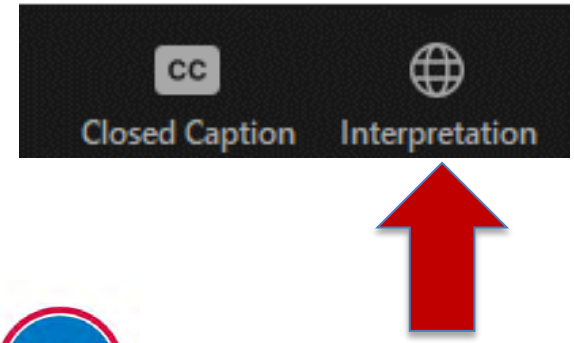

To switch to Spanish Audio, you must join the meeting through Zoom. Look for the interpretation icon in the toolbar.

Audio de la presentación disponible en español solamente con asistencia por Zoom. Busque el icono de interpretación.

Captioning & Interpretation

To turn on captioning, click the icon in the Zoom toolbar:

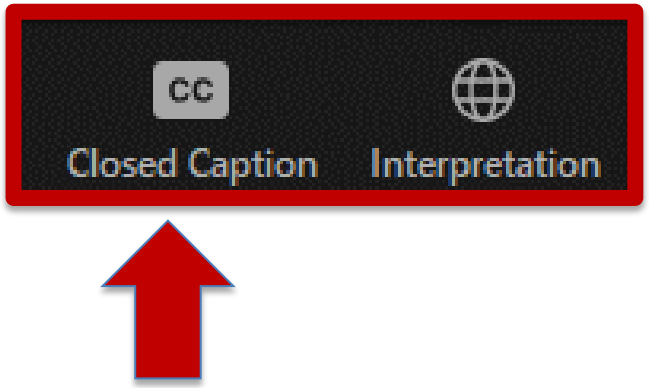

Audio de la presentación disponible en español

1. Busque el icono de interpretación en la barra de webinar de Zoom. Le mostramos el icono en esta diapositiva para ayudar a reconocerlo.
2. Haga clic en el icono y seleccione “Spanish” para escuchar al intérprete en la reunión.

Para escuchar al intérprete en español usted debe ingresar a la reunión a través del webinar de Zoom, no a través de Facebook o por teléfono.

RED AHEAD

Red Line Extension

Red Line Extension

Supplemental EA and Section 4(f) Evaluation Virtual Public Hearing

February 15, 2022

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

cta

Purpose of this Public Hearing

RED AHEAD

Red Line Extension

- Summarize results of the recently completed Supplemental EA and Section 4(f) Evaluation.
- **Obtain your input** on the benefits, impacts, and proposed mitigation measures.
- Evaluates the potential impacts from the three project design changes to the Preferred Alignment

Public Hearing Formats

- Virtual Public Hearing Today

  6:00 PM – 8:00 PM Session Includes:

  - Live Presentation
  - Court Reporter Availability
  - Q&A chat via Zoom
  - Virtual Breakout Rooms for Land Acquisition Questions

- In-Person Public Hearing
  - February 17th 6:00 PM – 8:00 PM
  - Location: The Salvation Army Kroc Center
    - Pre-registration is encouraged. Please register at: **tiny.cc/SEAregistration**

This meeting will be recorded and available online after the meeting at transitchicago.com/RLE/SEA and Facebook.com/CTARedExt

Make Official Comments

RED AHEAD

Red Line Extension

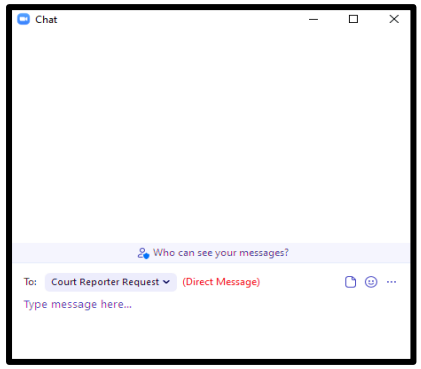

- Submit a comment by **requesting a court reporter through the chat**
- **Email** RedExtension@transitchicago.com
- **Online comment form** tiny.cc/SEAcomments
- **Mail**

  Chicago Transit Authority
  Strategic Planning & Policy, 10th Floor
  Attn: Red Line Extension Project
  567 W. Lake Street
  Chicago, IL 60661-1465

This meeting will be recorded and available online after the meeting at transitchicago.com/RLE/SEA and Facebook.com/CTARedExt

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Make Official Comments

- **Online Form** tiny.cc/SEAcomments

- **Written comments** accepted during the public comment period **January 31, 2022, through March 1, 2022**

  Comments received during the 30-day public comment period and the responses to those comments will be incorporated into the project's Final EIS/Record of Decision (ROD).

- Supplemental EA and Section 4(f) Evaluation document and information boards to be displayed at the in-person public hearing may be found on the RLE Project Website.

www.transitchicago.com/RLE/SEA

This meeting will be recorded and available online after the meeting at transitchicago.com/RLE/SEA and Facebook.com/CTARedExt

How to Ask a Question Live

- If joining by Zoom, use the chat to ask a question live.

- For questions about property acquisition, type "Land Acquisition Request" into the chat box to speak to a member of the land acquisition team.

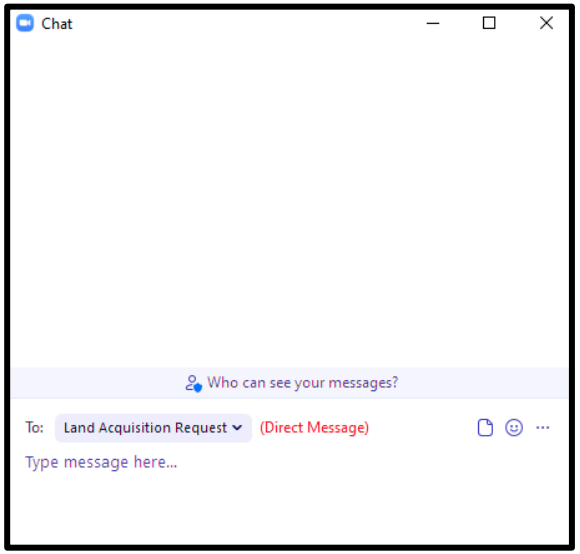

This meeting will be recorded and available online after the meeting at transitchicago.com/RLE/SEA and Facebook.com/CTARedExt

Agenda

- How to Provide Official Comments for this Hearing
- Brief Red Line Extension Project Overview and Benefits
- What is the Supplemental EA?
  - Overview of the Three Project Changes
  - Overview of the Section 4(f) Evaluation
  - Summary of Impacts
- Additional RLE Project Information for the Full Corridor
  - Updates to Impacts on Fernwood Parkway
  - Land Acquisition
  - Transit-Supportive Development Plan
- Closing Statements & Wrap Up

This meeting will be recorded and available online after the meeting at transitchicago.com/RLE/SEA and Facebook.com/CTARedExt

Our Presenters

Barbara Stubblefield
Red Line Outreach
(she/her)

Marlise Fratinardo
CTA Planning
(she/her)

Grace Dysico
NEPA
(she/her)

Robin Martel
NEPA
(she/her)

Ammar Elmajdoub
CTA Planning
(he/him)

This meeting will be recorded and available online after the meeting at
transitchicago.com/RLE/SEA and Facebook.com/CTARedExt

RED AHEAD

Red Line Extension

Red Line Extension (RLE)

- 5.6-mile extension
- Four new stations:
  - 103rd Street (near Eggleston)
  - 111th Street (near Eggleston)
  - Michigan Avenue (near 116th Street)
  - 130th Street (near Altgeld Gardens)
- Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities
- Elevated tracks from 95th Street to 119th Street, ground level tracks from 119th Street to 130th Street

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

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Purpose and Need

RED AHEAD

Red Line Extension

The Purpose and Need has not changed since the Draft EIS

Purpose Statement

- Reduce commute time for residents both within and south of the project area
- Improve mobility and accessibility for transit-dependent residents
- Improve rapid transit rail service to isolated areas and provide viable linkages between affordable housing, jobs, services, and educational opportunities thereby enhancing livability and neighborhood vitality
- Provide an opportunity for potential connections and linkages to public transportation modes
- Foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts
- Provide a modern efficient railcar storage yard and shop facility

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Needs to be Addressed

- Transit trips to jobs are longer for Far South Side residents than they are for residents in the Chicago seven-county region as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limits access between affordable housing (e.g., the Altgeld Gardens neighborhood) and employment centers outside of the project area.
- Existing transit markets are underserved, and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Street Yard does not have capacity to store railcars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

Project Benefits

RED AHEAD

Red Line Extension

Equity

24% of RLE Project Area residents live below the poverty level, compared to the City average of 18%

Frequent Rail Service

Nearly 30 minutes of time savings to riders traveling from the 130th St station to the Loop

By 2040, RLE will carry approx. 40,000 trips per day

Connectivity

Fewer than 30% of riders traveling on the Red Line from the 95th St Terminal end their trips in the Loop; connections to the broader CTA system is critical

Economic Opportunity

46% increase in newly accessible jobs within an hour commute of the RLE Project Area

Sustainability

RLE will improve air quality, reduce greenhouse gas emissions, and save energy

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What is a Supplemental EA?

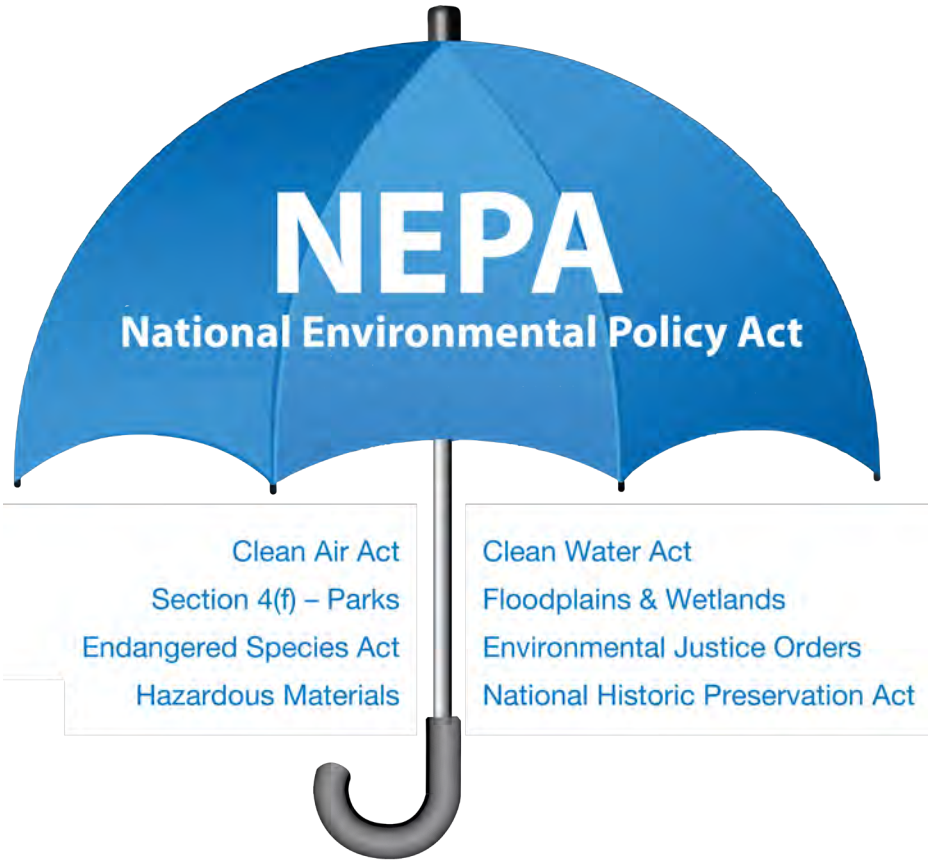

- A Supplemental EA is a Federal National Environmental Policy Act (NEPA) review document.
- This Supplemental EA discloses potential impacts from three project design changes not identified in the 2016 Draft EIS.
- The Supplemental EA was published on January 31, 2022.

Why is a Supplemental EA Needed?

RED AHEAD

Red Line Extension

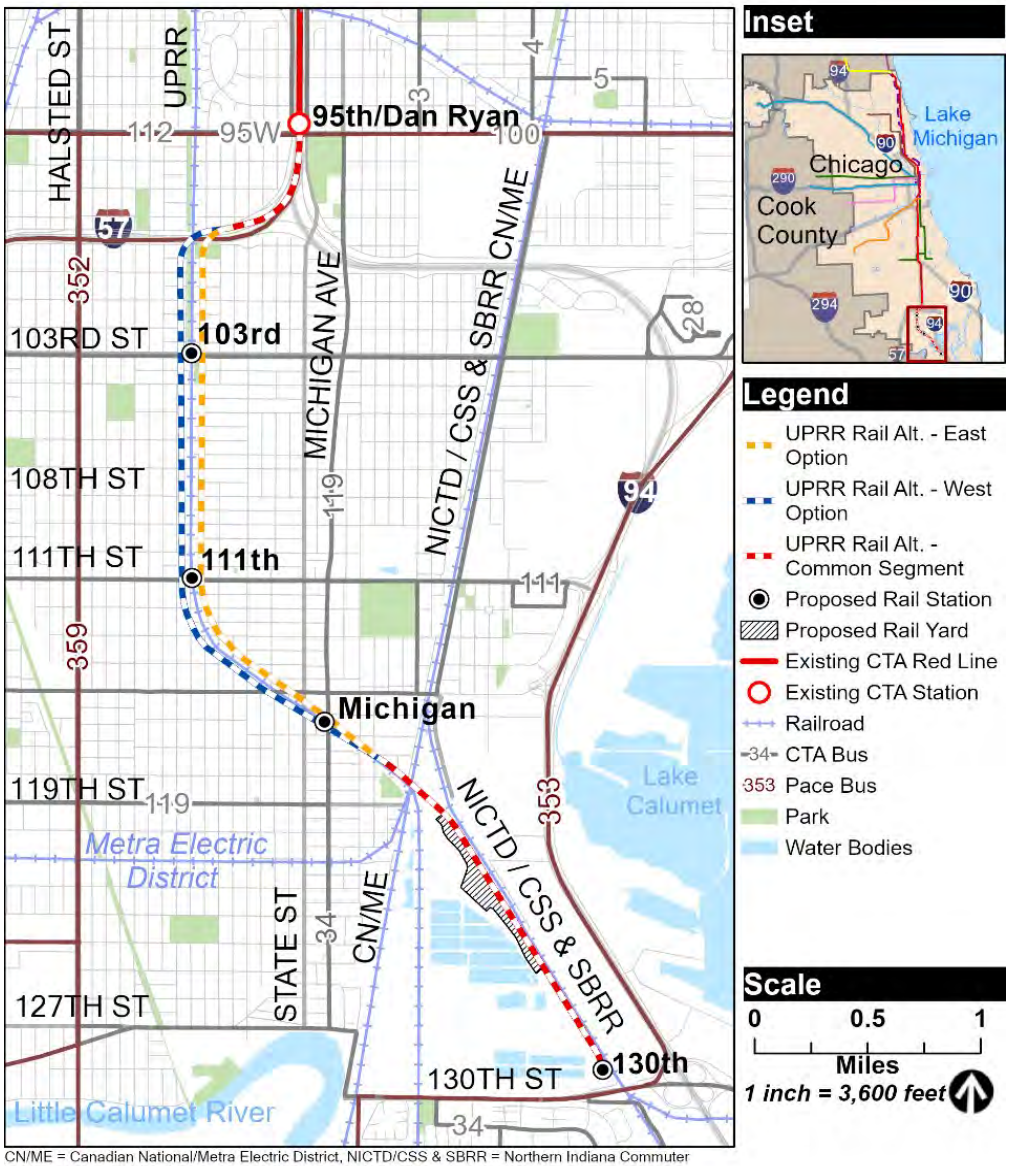

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Draft EIS Alignment Options

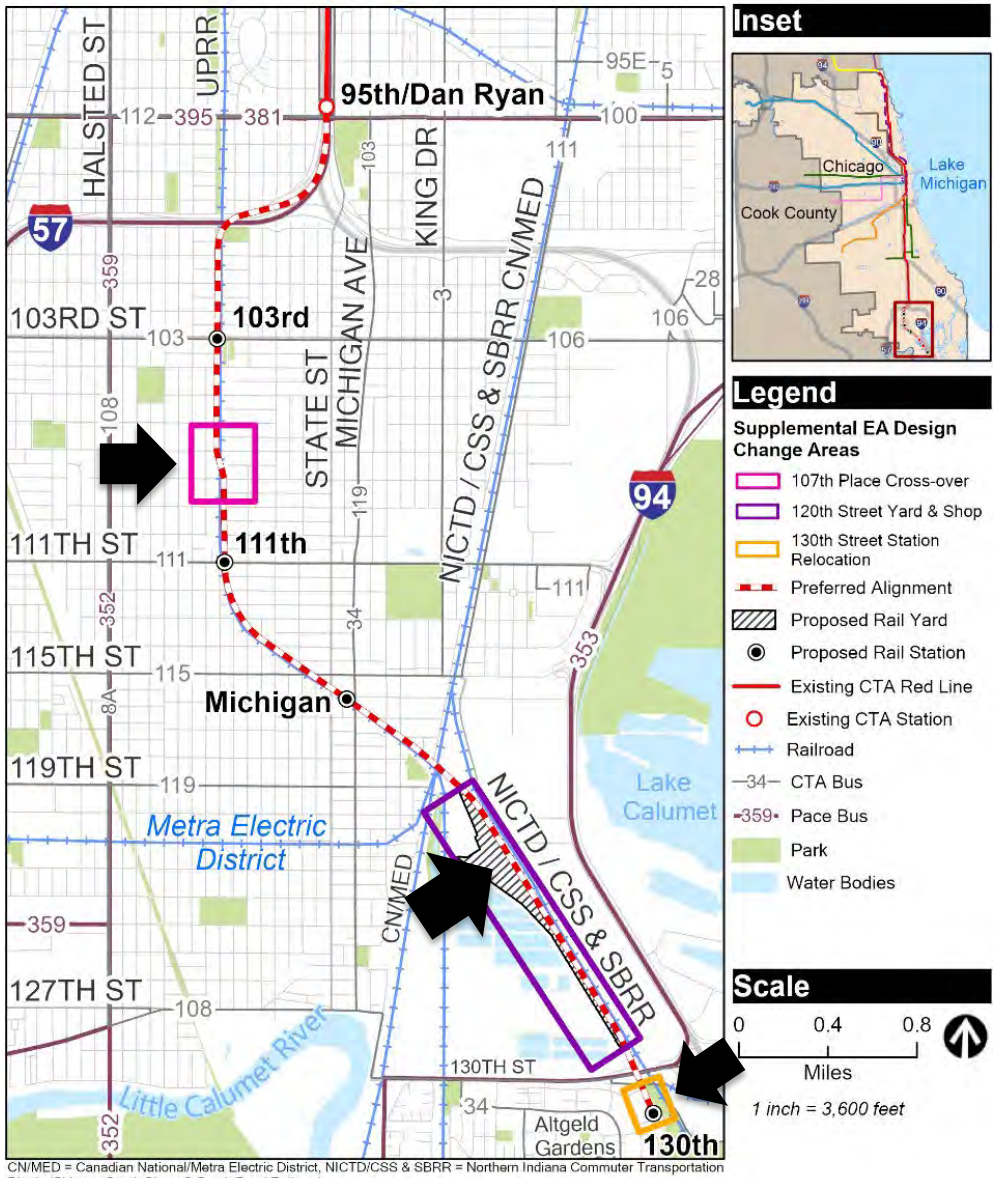

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Preferred Alignment

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Summary of Resource Analyses

RED AHEAD

Red Line Extension

Environmental Resources	Three Project Design Changes		
	130th Street Station Relocation	120th Street Yard and Shop Refinement	107th Place Cross-over
Transportation	✔		
Land Use and Economic Development	✔		
Displacements and Relocations of Existing Uses	✔		✔
Neighborhoods and Communities	✔		✔
Visual and Aesthetic Conditions	✔		✔
Noise and Vibration	✔		
Historic and Cultural Resources	✔		
Hazardous Materials	✔		
Wetlands	✔	✔	
Environmental Justice	✔		
Safety and Security	✔		
Air Quality	✔		
Water Resources	✔		
Biological Resources	✔	✔	
Indirect and Cumulative Impacts	✔		
Section 4(f)	✔		

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130th Street Station Relocation

- Better transit connections
- Better accessibility
- Safer and more secure access
- Located farther from MWRD plant
- Better opportunities for future development
- Supports objectives in the 2013 Altgeld Gardens – Philip Murray Homes Master Plan

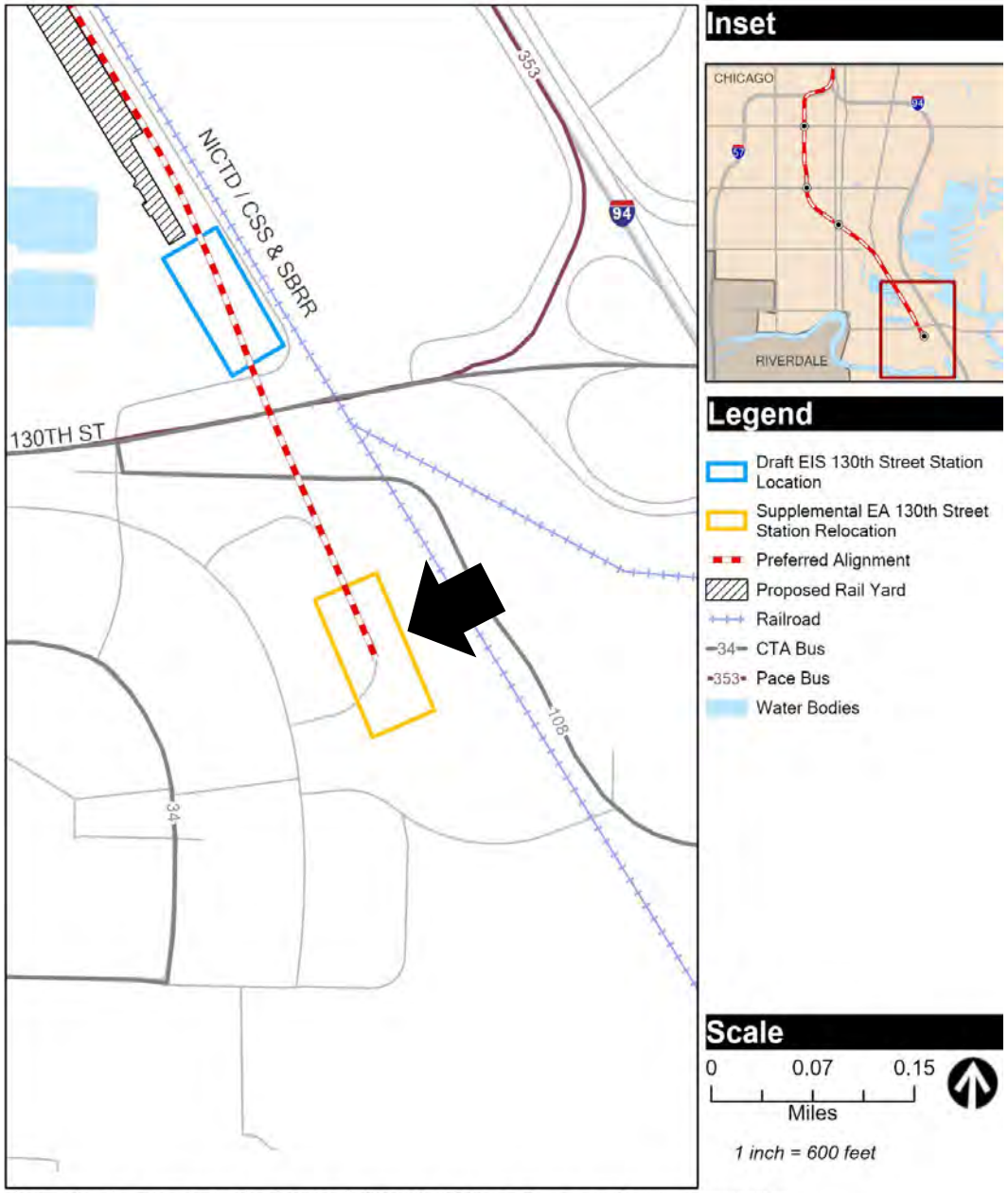

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Transportation Impacts and Mitigations

- Old 130th Street closure across new RLE tracks
- Removal of on-street parking along east side of Greenwood

- TCA Health parking mitigation
- Improvements to intersection of 130th Street and Ellis Avenue
- No adverse impact after mitigation

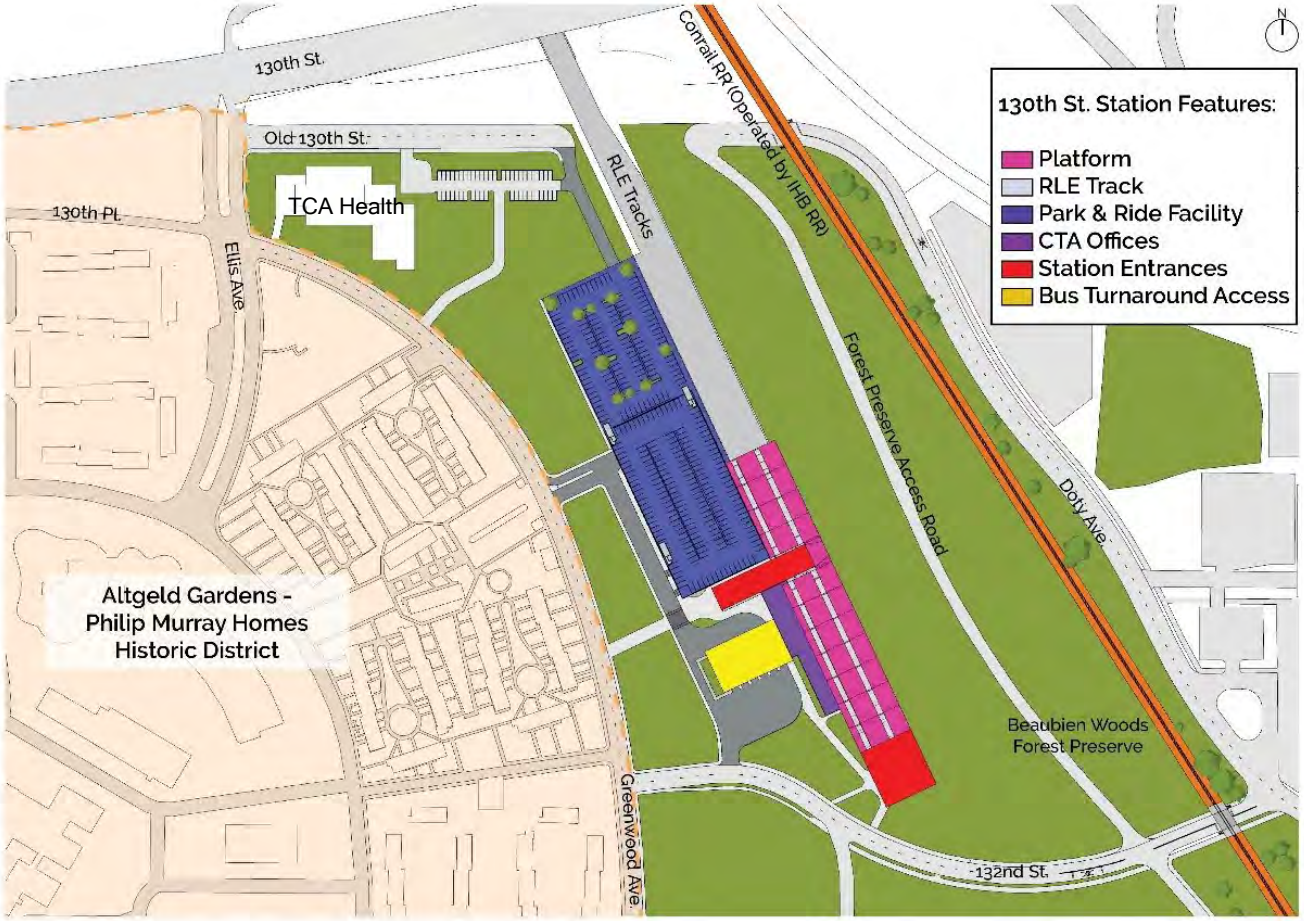

Provides entrance to the new station from Greenwood Avenue and exit from park & ride to Old 130th Street

Mitigation for Access Road into Beaubien Woods Forest Preserve

- Transfer of two City-owned parcels into FPCC ownership
- Funding for ecological restoration, habitat enhancement and beautification of expanded Beaubien Boat Launch
- New trail connection from Altgeld Gardens
- Wayfinding and information signage
- Forest Preserve advertising to encourage CTA riders to visit the Forest Preserves

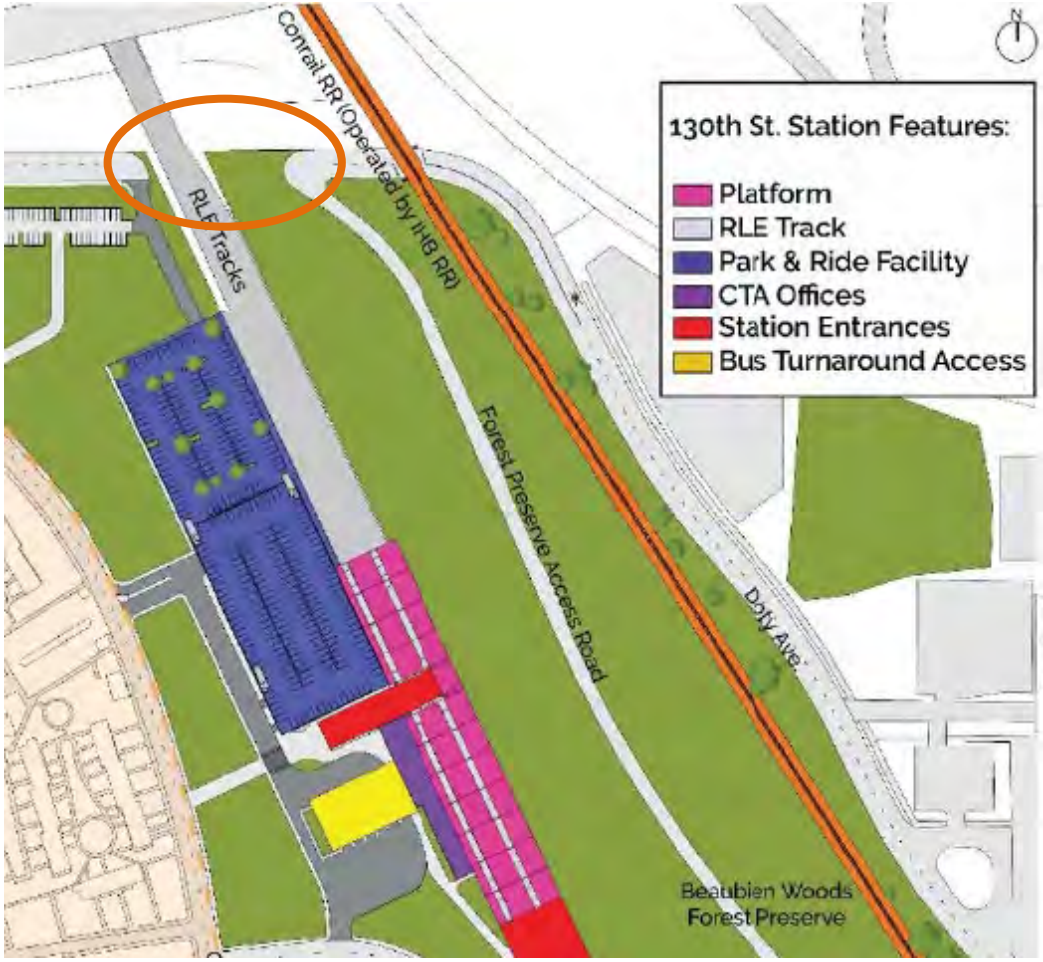

Parcel Impacts

- Parcels 1 and 2 in the figure would be directly impacted by construction of the station.
- Two additional parcels (not shown) would be acquired as mitigation for removal of a connection to Beaubien Woods Forest Preserve.

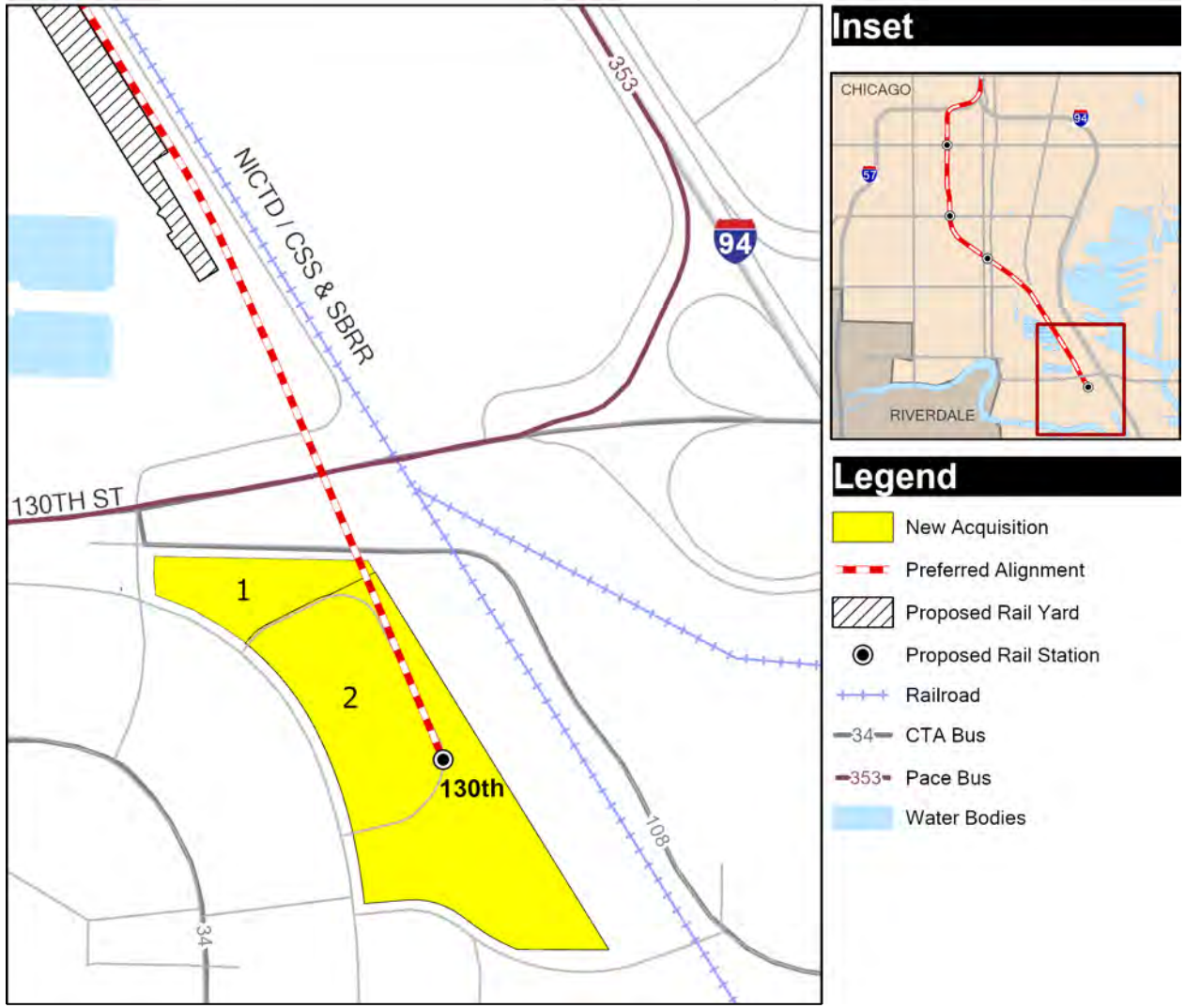

Historical and Cultural Resource Analysis

- Two Consulting Party meetings were held in 2021.
- Because there were no adverse effects to historic properties from the 130th Street station relocation, mitigation would not be required.

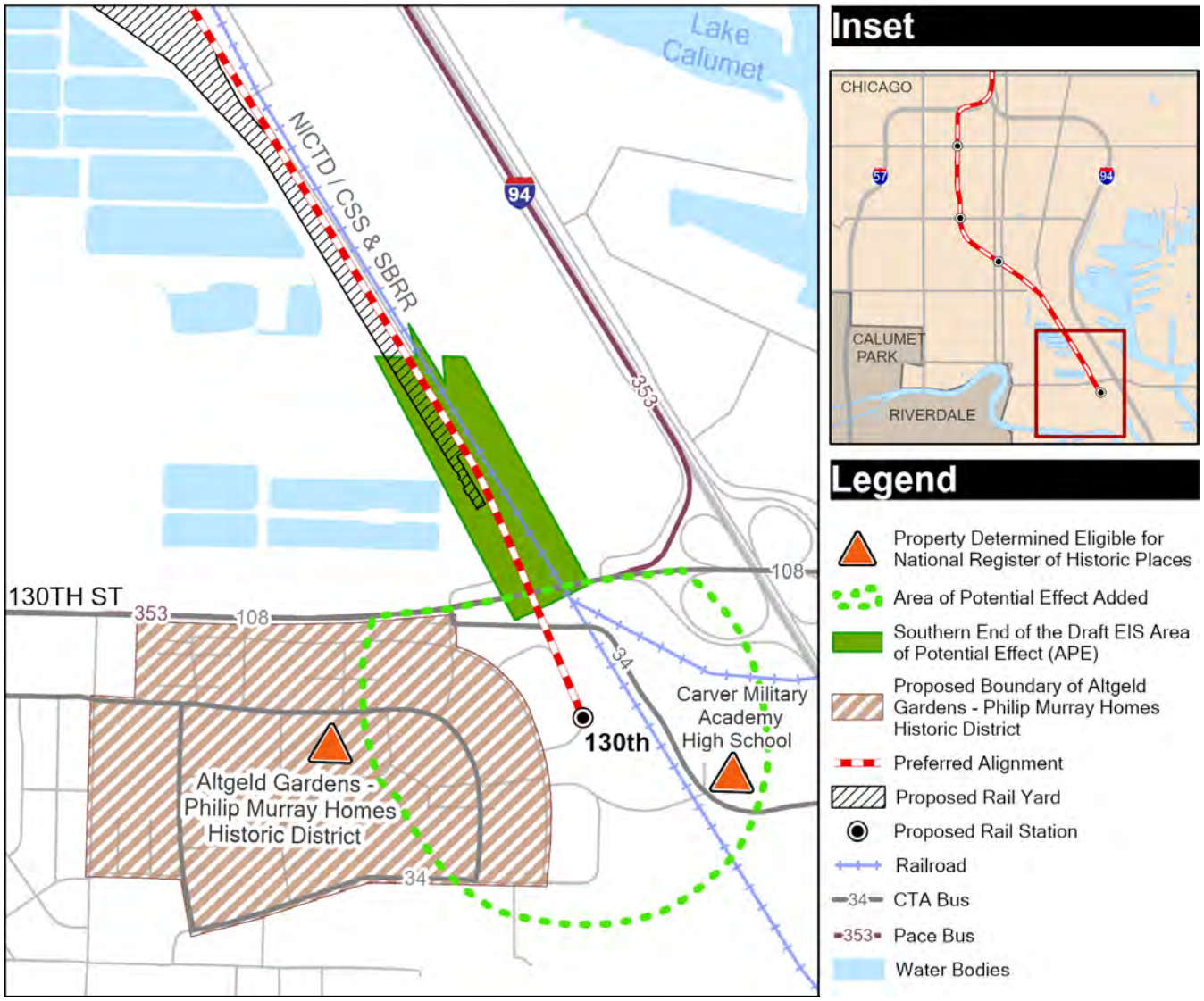

Visualizations*

- Impacts on visual and aesthetic conditions would remain high and adverse after mitigation.

Existing Conditions

Photo Simulation of the 130th Street Station Facing Southwest from Beaubien Woods Forest Preserve

*Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

Visualizations*

- Impacts on visual and aesthetic conditions would remain high and adverse after mitigation.

Existing Conditions

Photo Simulation of the 130th Street Station, Facing East from the Eastern Edge of the Altgeld Gardens Neighborhood

*Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

120th Street Yard & Shop Refinement

RED AHEAD

Red Line Extension

- Coordination with Norfolk Southern (NS) resulted in adjustments to the Preferred Alignment.
- The refinement resulted in no new environmental impacts. Wetland impacts were analyzed and there would be no adverse impacts to wetlands after mitigation.

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

107th Place Cross-over

- Provides the connection between the East and West Options of the UPRR Alternative from the Draft EIS to create a hybrid alignment that would:
  - Preserve viable businesses.
  - Minimize impacts to adjacent land uses.
  - Preserve properties slated for future development surrounding the station areas.
  - Accommodate Union Pacific Railroad's future ability to expand.
- Ten additional parcels (not identified in the Draft EIS) would need to be acquired.

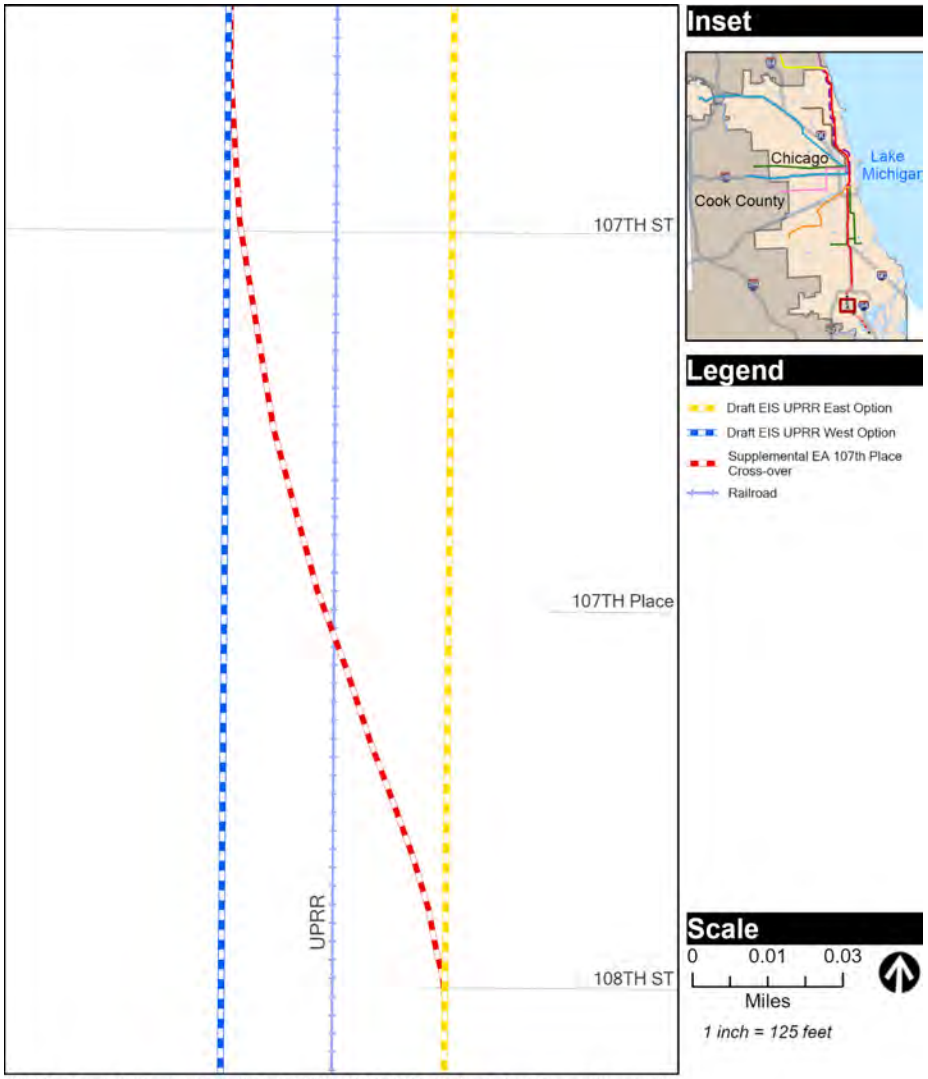

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Visualizations*

- Impacts on visual and aesthetic conditions would remain high and adverse after mitigation.

Existing Conditions

Photo Simulation of the 107th Place Cross-over, Facing Northwest from 108th Place

*Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

Visualizations*

- Impacts on visual and aesthetic conditions would remain high and adverse after mitigation.

Existing Conditions

Photo Simulation of the 107th Place Cross-over, Facing West from 108th Street

*Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

Summary of Resource Analyses

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Red Line Extension

Environmental Resources	Three Project Design Changes		
	130th Street Station Relocation	120th Street Yard and Shop Refinement	107th Place Cross-over
Transportation	✔		
Land Use and Economic Development	✔		
Displacements and Relocations of Existing Uses	✔		✔
Neighborhoods and Communities	✔		✔
Visual and Aesthetic Conditions	✔		✔
Noise and Vibration	✔		
Historic and Cultural Resources	✔		
Hazardous Materials	✔		
Wetlands	✔	✔	
Environmental Justice	✔		
Safety and Security	✔		
Air Quality	✔		
Water Resources	✔		
Biological Resources	✔	✔	
Indirect and Cumulative Impacts	✔		
Section 4(f)	✔		

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Participating in the Hearing

- Submit a comment by **requesting a court reporter through the chat**
- **Email RedExtension@transitchicago.com**
- **Scan the QR Code**

SCAN HERE

- **Online comment form: tiny.cc/SEAcomments**

Participating in the Hearing

- **Mail**
  Chicago Transit Authority
  Strategic Planning & Policy, 10th Floor
  Attn: Red Line Extension Project
  567 W. Lake Street
  Chicago, IL 60661-1465

- **Written comments** will be accepted during the public comment period from

  January 31, 2022 through March 1, 2022.

Updates to Impacts on Fernwood Parkway

- **Draft EIS**
  1.9 acres of potential impacts from the "shadow" of the elevated guideway

- **Final EIS Update**
  4.5 acres for the full area between 99th and 103rd Streets

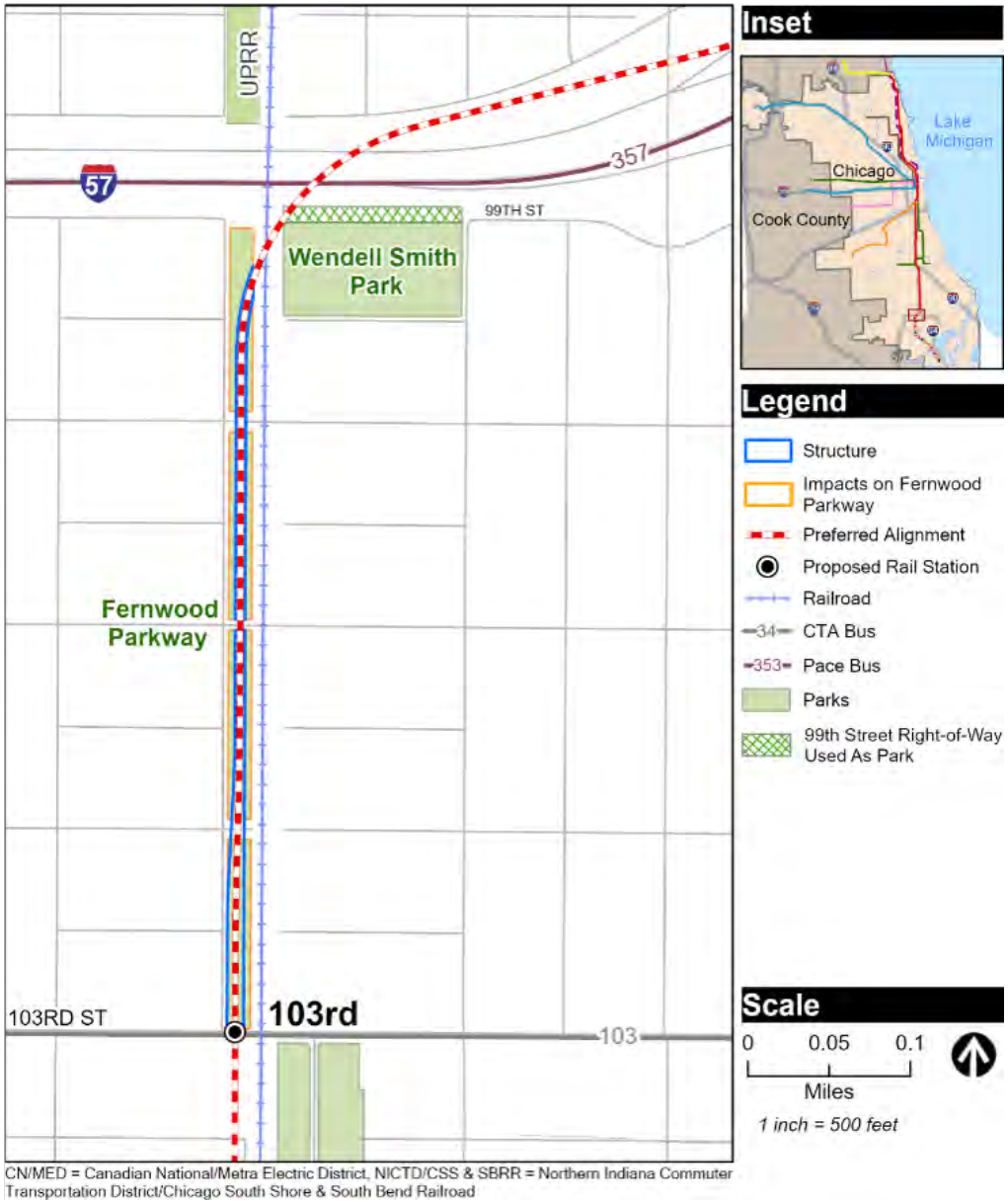

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Mitigation for Fernwood Parkway

- In coordination with Chicago Park District, **4.5 acres of new pocket parks** would be located within Washington Heights community and along Major Taylor Trail.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

RLE Corridor Land Acquisition

Parcels	Preferred Alignment
Affected Parcels without Building Displacements	130
Affected Parcels with Building Displacements *(Residential and Commercial Building Displacements)*	98
Total Affected Parcels	**228**

- Impacts are based on preliminary engineering represent maximum impacts of the Preferred Alignment.
- Displaced residents and businesses would be relocated in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

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Red Line Extension

Plan Overview

- Promotes economic development
- Encourages private sector investment
- Enhances multimodal connectivity and bicycle/pedestrian access
- Supports application for federal funding for the transit project

For more information, visit transitchicago.com/RLE/TSD

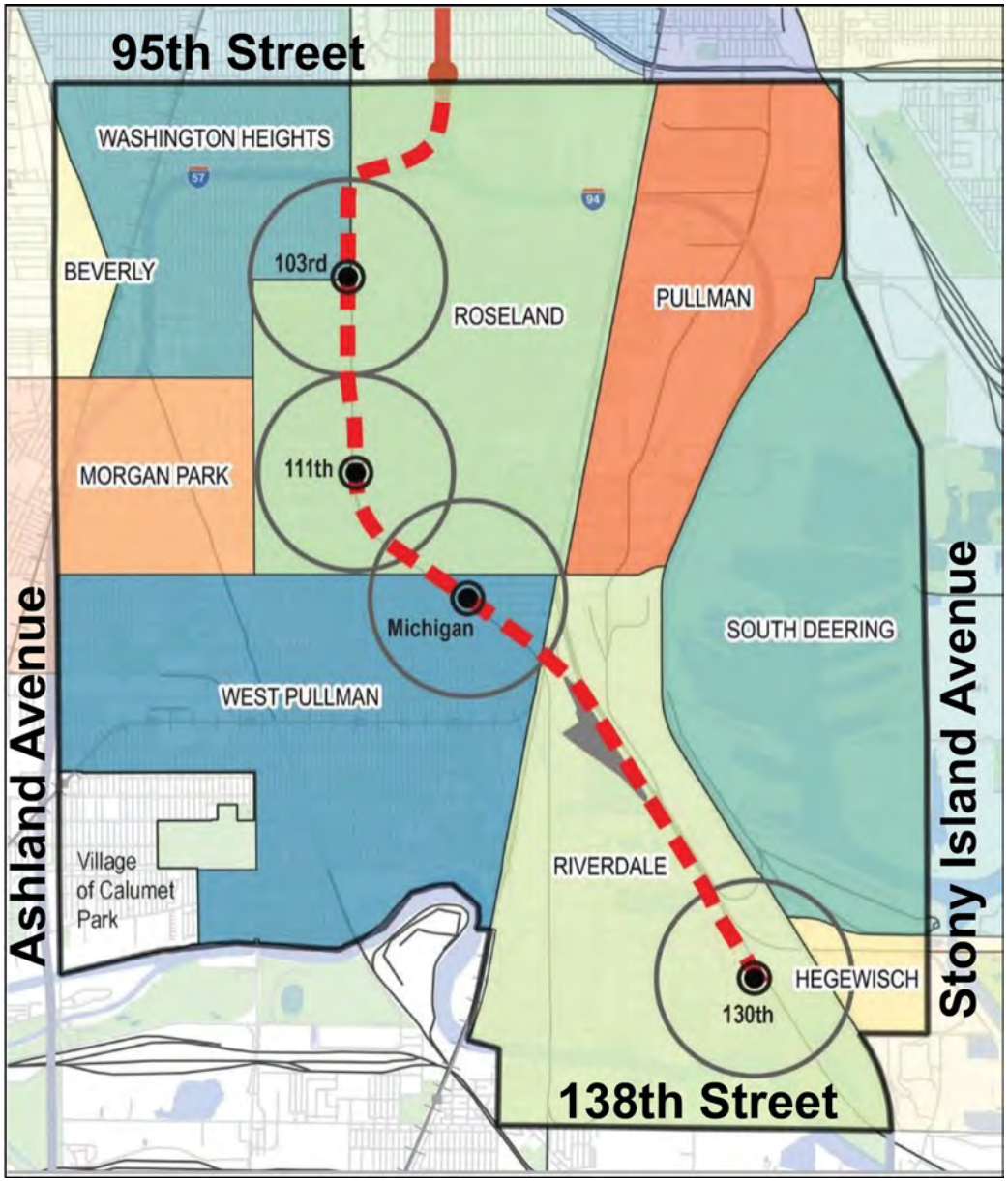

Next Steps

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Red Line Extension

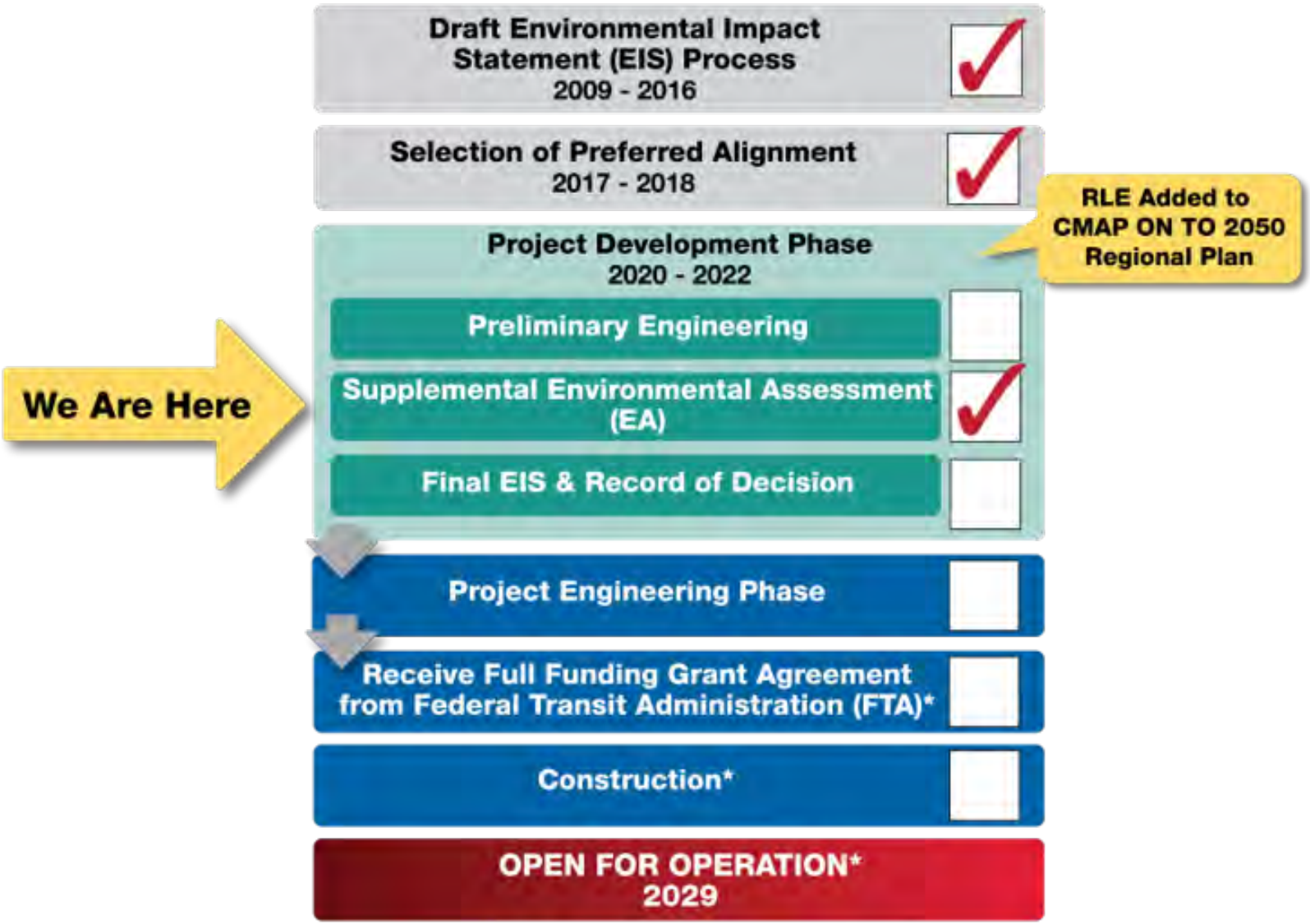

*Dependent on funding and approvals

FTA Project Evaluation and Rating

Make Official Comments

- **Online Form** tiny.cc/SEAcomments

- **Written comments** accepted during the public comment period **January 31, 2022, through March 1, 2022**

  Comments received during the 30-day public comment period and the responses to those comments will be incorporated into the project's Final EIS/Record of Decision (ROD).

- Supplemental EA and Section 4(f) Evaluation document and information boards to be displayed at the in-person public hearing may be found on the RLE Project Website.

www.transitchicago.com/RLE/SEA

This meeting will be recorded and available online after the meeting at transitchicago.com/RLE/SEA and Facebook.com/CTARedExt

Thank you

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Red Line Extension

- If you have missed all or a portion of the presentation it can be viewed at Facebook.com/CTARedExt
- To speak to a Court Reporter, you can make a request via the chat to **Court Reporter Request**
- To speak to someone regarding Property Acquisition, you can make a request via the chat to **Land Acquisition Request**
- **Written comments** accepted during the public comment period **January 31, 2022, through March 1, 2022**
- Online Comment Form: **tiny.cc/SEAcomments**
- In-Person Public Hearing
  - February 17th (6:00 PM – 8:00 PM)
  - Location: The Salvation Army Kroc Center (1250 W. 119th St., Chicago, IL 60643)

Send an email to
RedExtension@transitchicago.com or
Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

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In-Person Public
Hearing Exhibit Boards

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Red Line Extension

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Welcome to the Red Line Extension Project Supplemental EA and Section 4(f) Evaluation Public Hearing

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Red Line Extension

Purpose of this Public Hearing

- Share information on the Red Line Extension (RLE) Project
- Summarize results of the recently completed Supplemental Environmental Assessment and Section 4(f) Evaluation.
- Outline the National Environmental Policy Act (NEPA) Process
- Obtain your input on the benefits, impacts, and proposed mitigation measures

If you have questions, feel free to ask the representatives stationed around the boards. There will be no formal presentation.

Comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation can be made in the following ways during the meeting:

- Provide written comments on comment cards
- Provide comments on the online comment card found on the website: transitchicago.com/RLE/SEA
- Provide verbal comments to the court reporter

Written comments will be accepted through March 1st, 2022:

By Email:

RedExtension@transitchicago.com

By mail:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street,
Chicago, IL 60661-1465

Scan the QR code to leave us a comment!

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Red Line Extension

RLE Project Background

The Chicago Transit Authority (CTA) and the Federal Transit Administration (FTA) published a Draft Environmental Impact Statement (EIS) on October 6, 2016 that evaluated the environmental impacts of constructing and operating the Red Line Extension (RLE) Project.

Red Line Extension Preferred Alignment

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

The RLE Project would extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street.

- 5.6-mile extension
- Four new stations:
  - 103rd Street (near Eggleston)
  - 111th Street (near Eggleston)
  - Michigan Avenue (near 116th Street)
  - 130th Street (at Altgeld Gardens)
- Elevated tracks from 95th Street to 119th Street, then tracks run along the ground from 119th Street to 130th Street
- Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities

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Red Line Extension

Why is the RLE Project Important?

The Red Line Extension will provide many benefits, including:

Equity by providing affordable rapid transit to historically underserved communities and improving mobility for transit-dependent residents and people with disabilities

Connectivity and access to the entire city via the CTA network

Economic opportunity through connections to jobs, educational opportunities, housing and other services, as well as economic development on the City's Far South Side

Frequent rail service will reduce commute times

Sustainable transportation that helps contribute to improved air quality, reduces greenhouse gas emissions, and saves energy

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Red Line Extension

RLE Project Purpose and Need

The Purpose and Need has not changed since the Draft EIS.

The Purpose of the RLE Project

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

Needs to be Addressed

- Transit trips to jobs are longer for Far South Side residents than they are for residents in the Chicago seven-county region as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limits access between affordable housing (e.g., the Altgeld Gardens neighborhood) and employment centers outside of the project area.
- Existing transit markets are underserved, and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Yard does not have capacity to store railcars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

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Red Line Extension

What is a Supplemental EA?

The Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) published a Supplemental Environmental Assessment (EA) on January 31, 2022. A Supplemental EA is a federal National Environmental Policy Act (NEPA) review document that evaluates the signifcance of potential impacts of proposed project changes made after the preparation of a Draft Environmental Impact Statement (EIS). This Supplemental EA evaluated the potential impacts from three project design changes to the Preferred Alignment not disclosed in the Draft EIS that was prepared for the CTA RLE Project in 2016.

This Supplemental EA evaluates the potential impacts from the three project design changes to the Preferred Alignment.

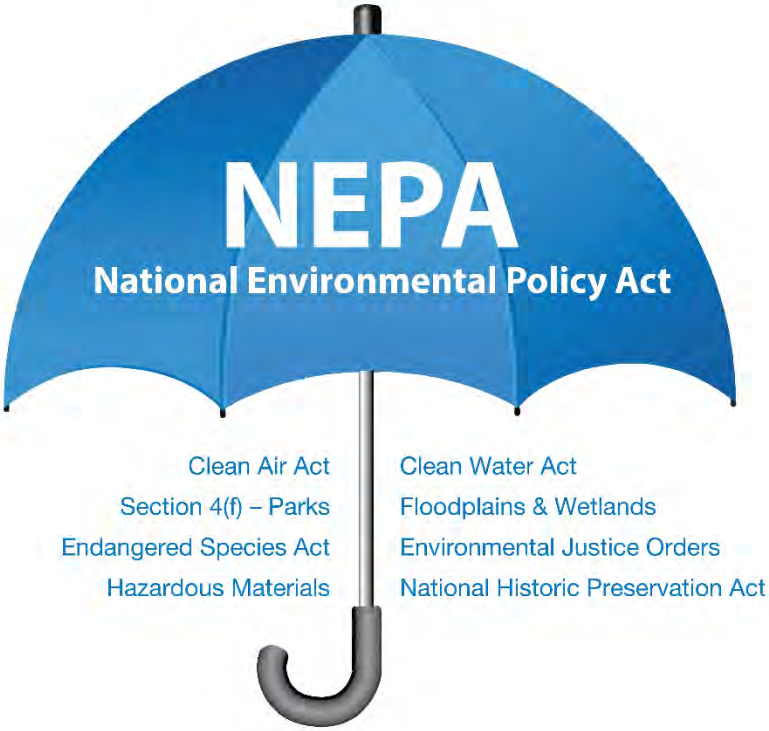

CTA published the Supplemental EA on Monday, January 31, and is accepting public comments until Tuesday, March 1.

Comments received during the 30-day public comment period and the responses to those comments will be incorporated into the project's Final EIS/Record of Decision (ROD).

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Red Line Extension

Why is a Supplemental EA Needed?

- Evaluates the potential impacts from the three project design changes to the Preferred Alignment

Draft EIS Alignment Options

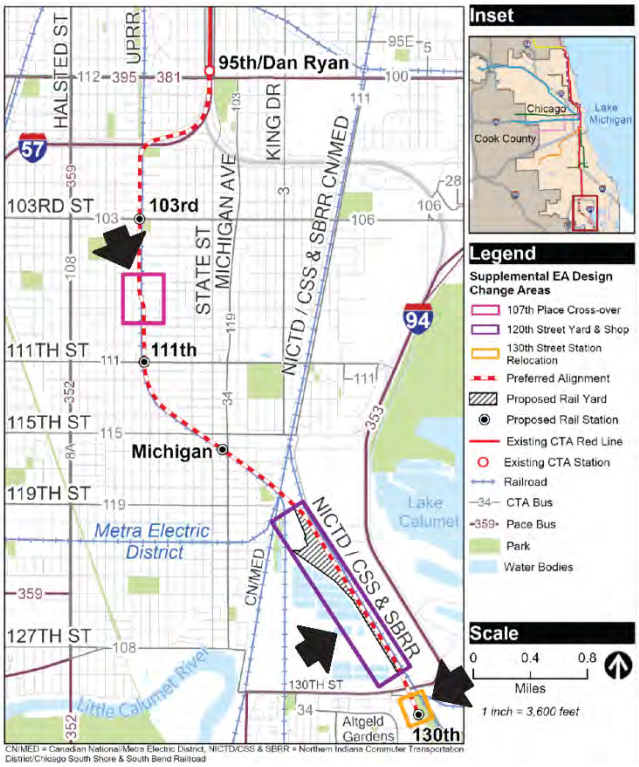

Preferred Alignment

- There are three project design changes evaluated in the Supplemental EA. The design changes are:
  - 130th Street station relocation
  - 120th Street yard and shop refinement
  - 107th Place cross-over

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Red Line Extension

Project Development Process

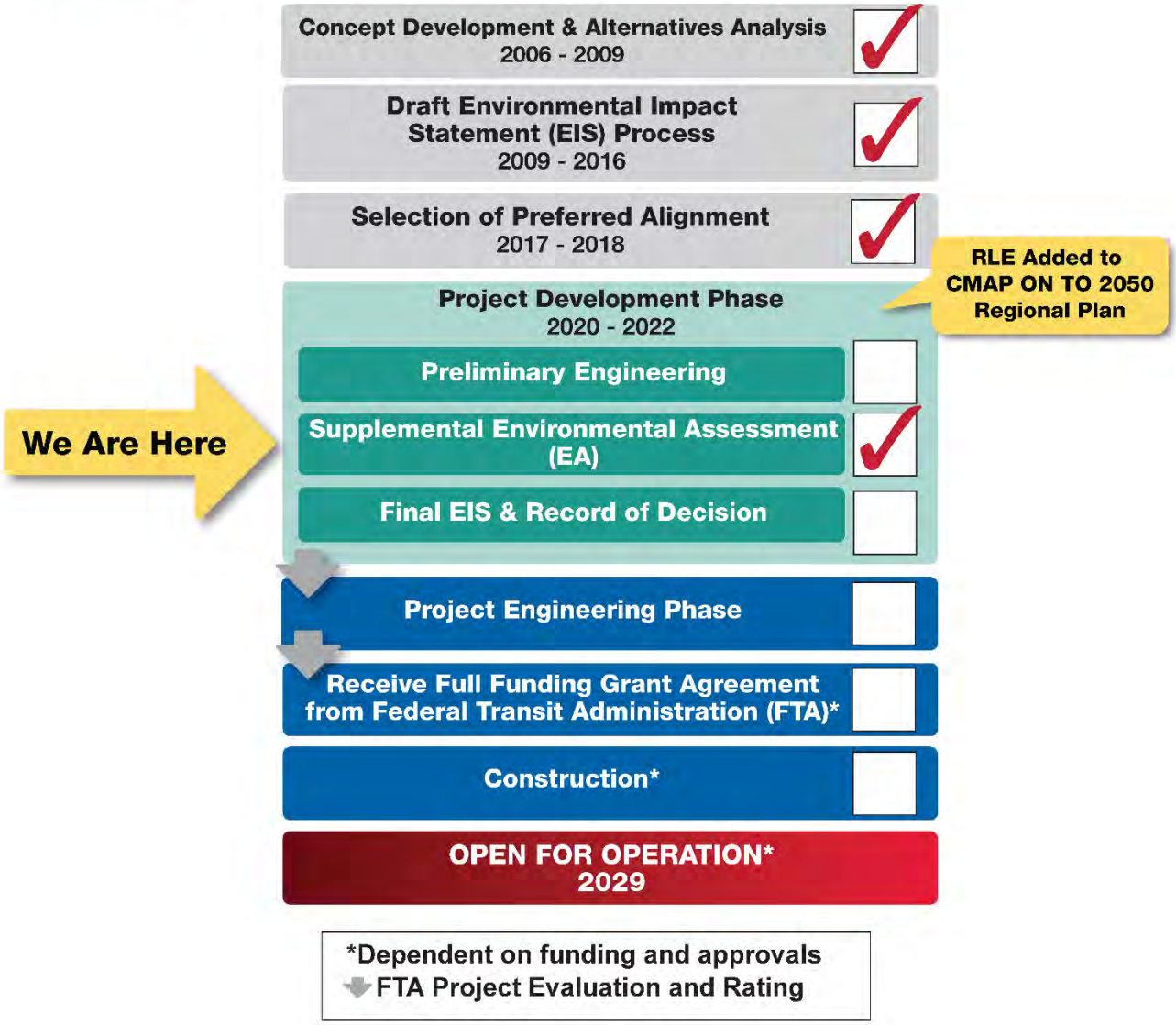

Project Funding

The CTA has made significant recent progress towards the Red Line Extension, including taking the steps necessary to make the project eligible for federal funding. In December 2020, the CTA entered the Project Development phase of the Federal Transit Administration's (FTA) New Starts program. This is a necessary step to pursue federal funding for the project.

RED AHEAD

Red Line Extension

130th Street Station Relocation

The 130th Street station, relocated from north of 130th Street, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Benefits of the relocation:

- Creates better transit connections within the Altgeld Gardens neighborhood
- Located closer and more accessible to neighborhood residents and Carver Military Academy High School students.
- Provides safer and more secure access for transit users by avoiding the need to use a walking path under the 130th Street viaduct or cross 130th Street at-grade
- Located farther from the MWRD plant, avoiding truck traffic and potential odors
- Better opportunities for future development
- Supports objectives in the 2013 Altgeld Gardens – Philip Murray Homes Master Plan

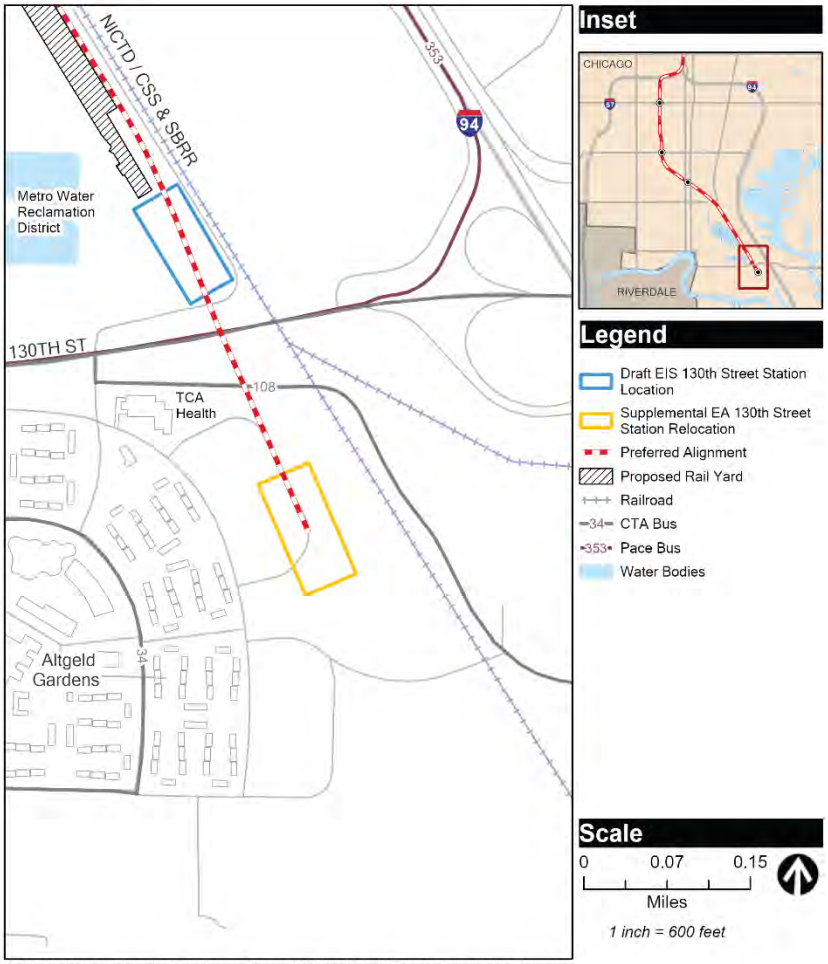

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RED AHEAD

Red Line Extension

130th Street Station

Transportation Impacts

- Closure of Old 130th Street to through traffic across new RLE tracks
- Removal of on-street parking along the east side of Greenwood Avenue from Ellis Avenue to the new station entrance
- Mitigation to maintain TCA Health access and parking spaces
- Improvements to the intersection of 130th Street and Ellis Avenue
- No adverse impact after mitigation

Provides entrance to the new station from Greenwood Avenue and exit from park & ride to Old 130th Street.

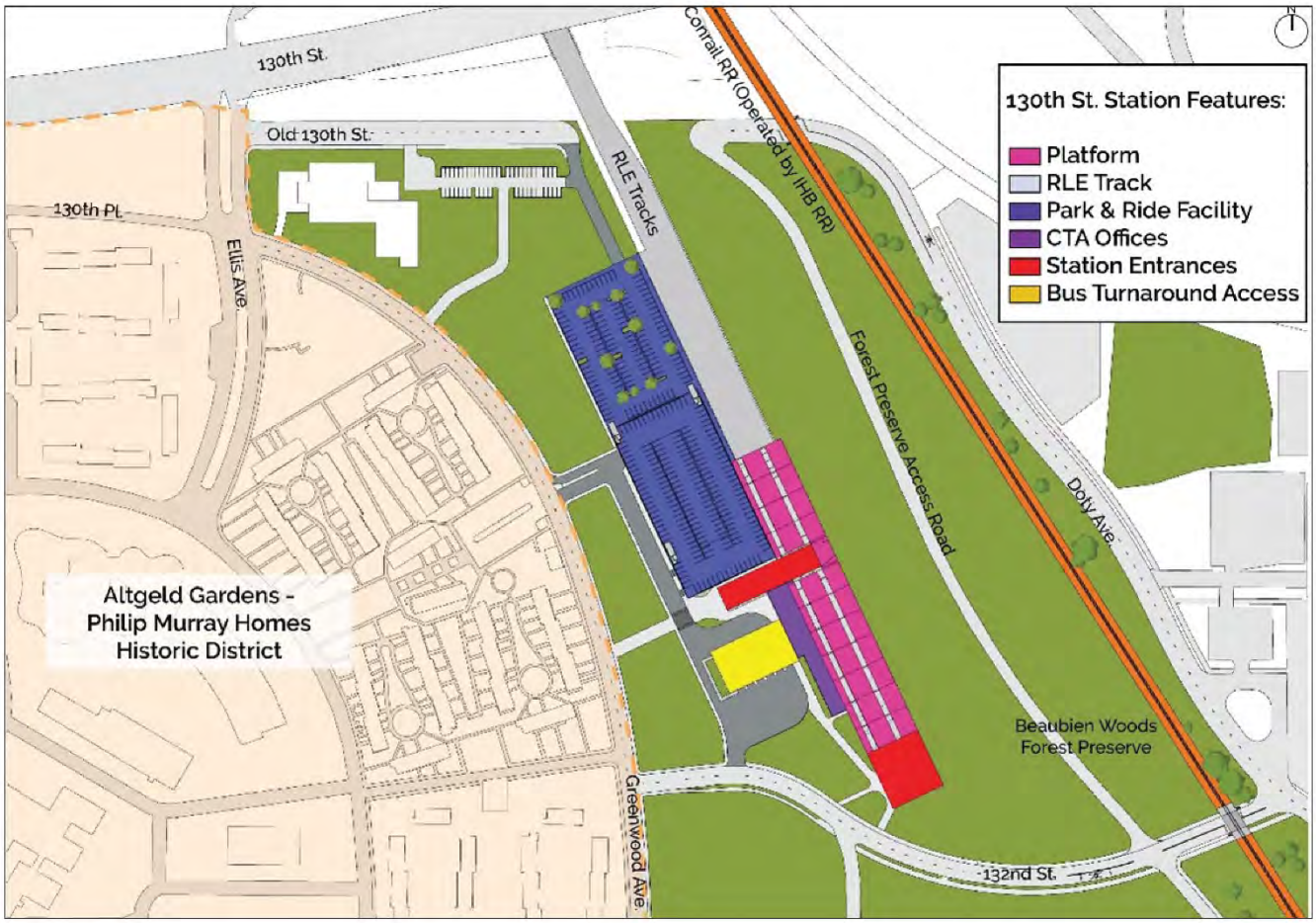

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Red Line Extension

Section 4(f) Evaluation

Beaubien Woods Forest Preserve

Section 4(f) of the United States Department of Transportation Act of 1966 is a federal law that sets requirements for FTA consideration of publicly owned parks/ recreational areas that are accessible to the general public, publicly owned wildlife/ waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects.

- Construction of the 130th Street station would close Old 130th Street and eliminate a connection to the access road into Beaubien Woods Forest Preserve from Old 130th Street. (See circle on figure to the right.)
- Even though there was no Section 4(f) use determined at Beaubien Woods, mitigation measures were identified in coordination with the Forest Preserves of Cook County (FPCC) and include the following:

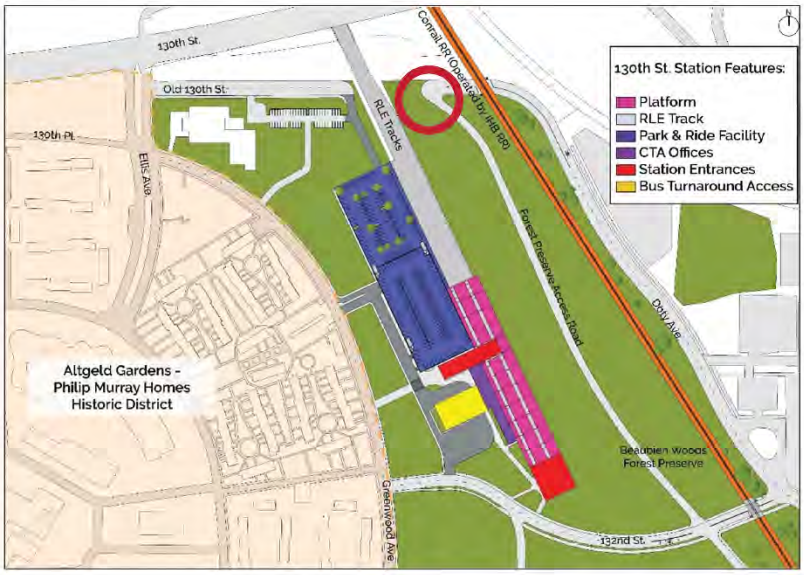

  - Transfer of two City-owned parcels into FPCC ownership
  - Funding for FPCC for ecological restoration, habitat enhancement, and beautification of expanded Beaubien Boat Launch land
  - New trail connection from Altgeld Gardens recreation facilities on 133rd Street to the Beaubien Woods Boat Launch
  - Wayfinding and information signage inside the proposed station and outdoor signage at 130th Street and Ellis Avenue and other locations
  - Forest Preserves advertising to encourage CTA riders to use public transportation to visit the Forest Preserves at the 130th Street station, other Red Line stations south of Roosevelt, and inside local trains and buses

RED AHEAD

Red Line Extension

130th Street Station

Parcel Impacts

- Two parcels (#1 and #2 in the figure) would be directly impacted by construction of the station.
- Two additional parcels (not shown) would be acquired as mitigation for removal of a connection to Beaubien Woods Forest Preserve.

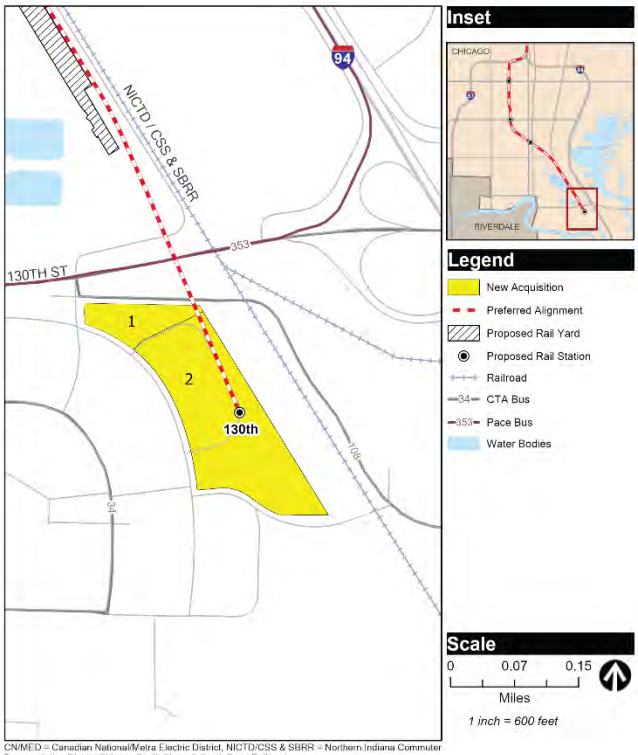

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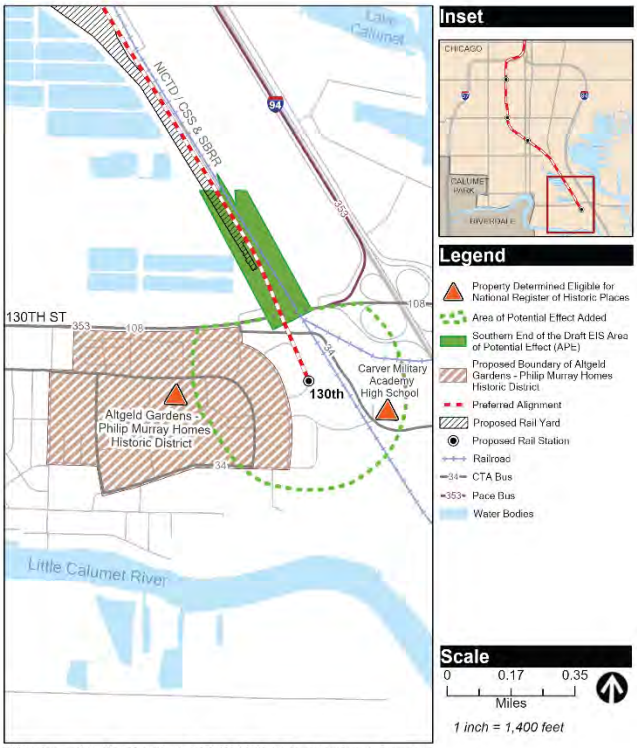

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation

Historical and Cultural

- Two Consulting Party meetings were held in 2021.
- Because there are no adverse effects to historic properties from the 130th Street station relocation, mitigation would not be required.

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RED AHEAD

Red Line Extension

130th Street Station Visualizations

Impacts on visual and aesthetic conditions would remain high and adverse after mitigation

Existing Conditions

Photo Simulation of the 130th Street Station Facing Southwest from Beaubien Woods Forest Preserve

**Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.*

cta

RED AHEAD

Red Line Extension

130th Street Station Visualizations

Impacts on visual and aesthetic conditions would remain high and adverse after mitigation

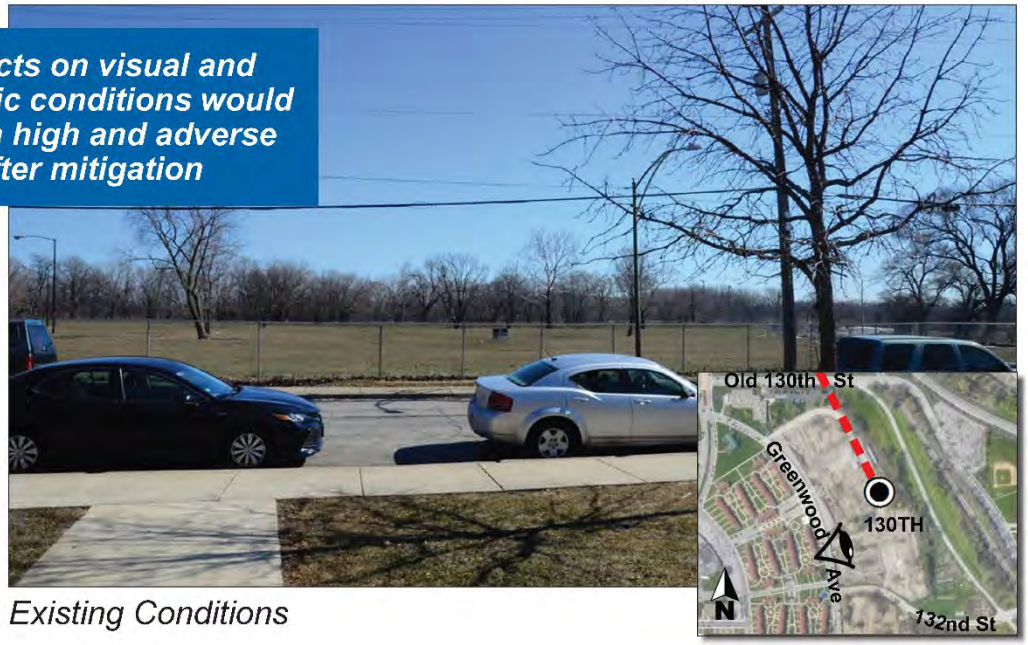

Existing Conditions

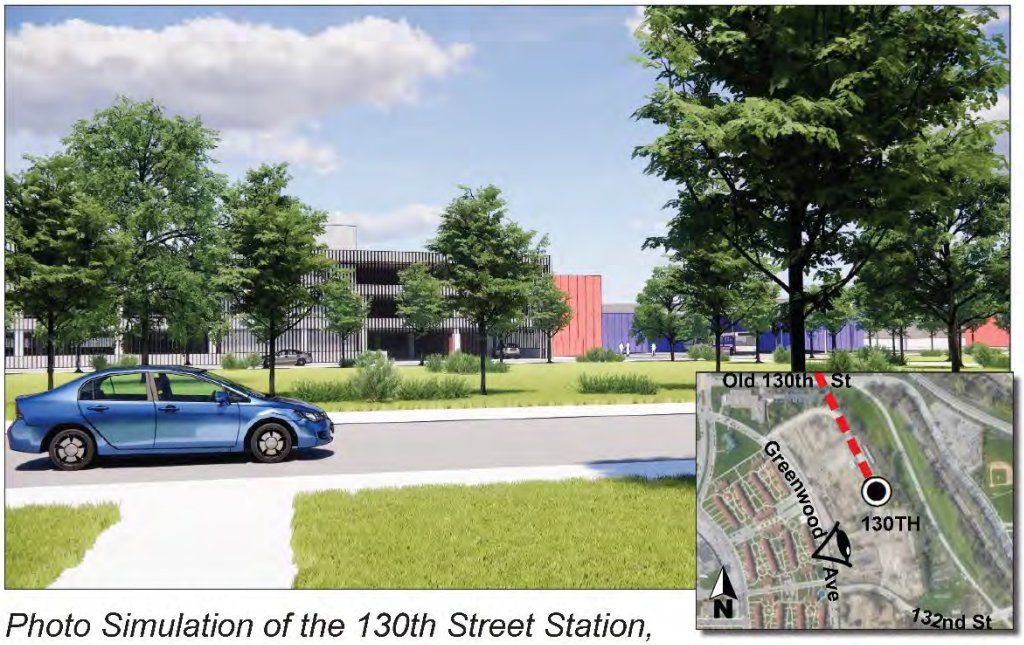

Photo Simulation of the 130th Street Station, Facing East from the Eastern Edge of the Altgeld Gardens Neighborhood

**Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.*

cta

RED AHEAD

Red Line Extension

120th Street Yard and Shop Refinement

Coordination with Norfolk Southern (NS) resulted in adjustments to the Preferred Alignment near the 120th Street yard and shop to accommodate NS right of way needs and current and future NS connectivity.

The refinement resulted in no new environmental impacts. Wetland impacts were analyzed and there would be no adverse impacts to wetlands after mitigation.

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

RED AHEAD

Red Line Extension

107th Place Cross-over

Provides the connection between the East and West Options of the Union Pacific Railroad Alternative from the Draft EIS to create a hybrid alignment that would:

- Preserve viable businesses.
- Minimize impacts to schools, residences, and the historic Roseland Pumping Station.
- Preserve properties slated for future development surrounding the station area.
- Accommodate Union Pacific Railroad's future ability to expand.

Displacement Impacts:

- 10 additional properties not previously identified in the Draft EIS would need to be acquired
- Follows the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act)

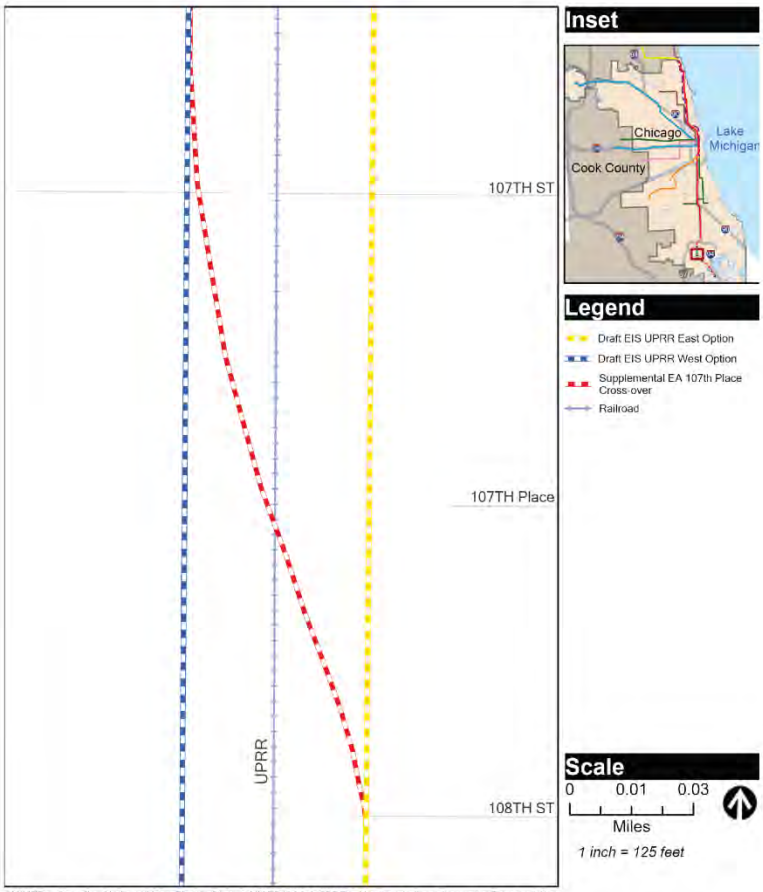

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Change from Preferred Alignment:

- Preferred Alignment announced in 2018 showed cross-over near 108th Place.
- Design refinements led to shift north to near 107th Place for the Supplemental EA.
- Modification would allow structure and station platforms to be lower at 111th Street station.

RED AHEAD

Red Line Extension

107th Place Cross-over Visualizations

Impacts on visual and aesthetic conditions would remain high and adverse after mitigation

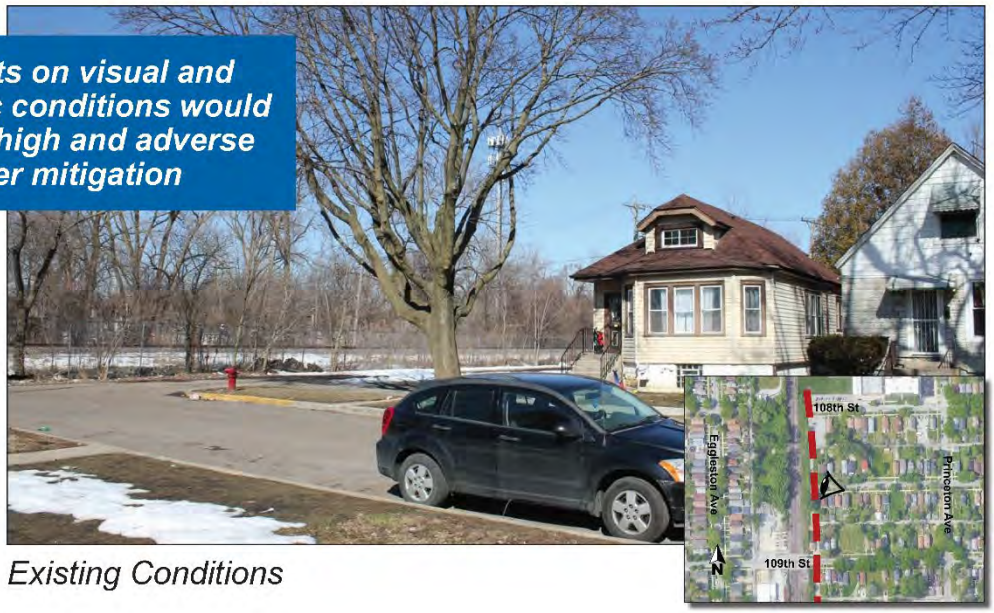

Existing Conditions

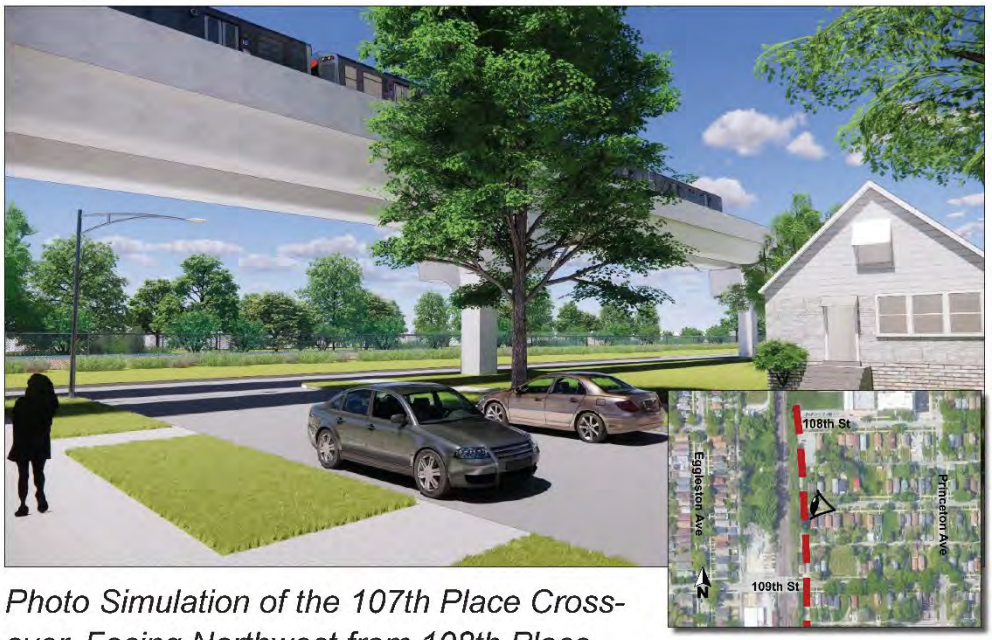

Photo Simulation of the 107th Place Cross-over, Facing Northwest from 108th Place

**Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.*

cta

RED AHEAD

Red Line Extension

107th Place Cross-over Visualizations

Impacts on visual and aesthetic conditions would remain high and adverse after mitigation

Existing Conditions

Photo Simulation of the 107th Place Cross-over, Facing West from 108th Street

**Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.*

cta

Summary of Impacts and Mitigation

The table below shows environmental resources that would experience new or different impacts from those identified in the Draft EIS as a result of one of the three project design changes.

Environmental Resources	Three Project Design Changes		
	130th Street Station Relocation	120th Street Yard and Shop Refinement	107th Place Cross-over
Transportation	No adverse impact after mitigation		
Land Use and Economic Development	No adverse impact after mitigation		
Displacements and Relocations of Existing Uses	No adverse impact after mitigation		No adverse impact after mitigation
Neighborhoods and Communities	No impact with the exception of Visual & Aesthetic		No impact with the exception of Visual & Aesthetic
Visual and Aesthetic Conditions	Impacts would remain high and adverse after mitigation		Impacts would remain high and adverse after mitigation
Noise and Vibration	No impact		
Historic and Cultural Resources	No Adverse Effect finding		
Hazardous Materials	No impact		
Wetlands	No adverse impact after mitigation	No adverse impact after mitigation	
Environmental Justice	No adverse impact after mitigation		
Safety and Security	No adverse impact after mitigation		
Air Quality	No adverse impact after mitigation		
Water Resources	No adverse impact after mitigation		
Biological Resources	No adverse impact after mitigation	No adverse impact after mitigation	
Indirect and Cumulative Impacts	No impact		
Section 4(f)	No use of Section 4(f) resources after mitigation		

Gray = These environmental resources are not documented in the Supplemental EA because they did not experience new or different impacts from those identified in the Draft EIS.

Property Displacements

Construction of the project would require the acquisition of private property.

Parcels	Preferred Alignment
Affected Parcels without Building Displacements	130
Affected Parcels with Building Displacements *(Residential and Commercial Building Displacements)*	98
Total Affected Parcels	**228**

- Impacts are based on preliminary engineering and represent the maximum impacts of the Preferred Alignment.
- Of the 228 parcels, 105 are vacant, 66 are residential, 36 are commercial/industrial, 9 are railroads, and 12 are a combination of public/community/institutional uses.
- Availability of vacant parcels and buildings near the affected properties will likely allow for affected businesses and residents to relocate within the project area.
- Displaced residents and businesses would be relocated in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
- The CTA has been in regular contact with impacted property owners and tenants since 2016, providing them updates as the project designs are refined (such as the selection of the preferred alignment). As a result of the design changes in the Supplemental EA, the RLE property needs have been updated to provide a more accurate determination of property impacts.

RED AHEAD

Red Line Extension

Section 4(f) Evaluation Fernwood Parkway

Section 4(f) of the USDOT Act of 1966 is a federal law that sets requirements for Federal Transit Administration (FTA) consideration of publicly owned park or recreation land and historic sites. Fernwood Parkway would be affected by the Preferred Alignment.

Updates to Impacts on Fernwood Parkway

- Draft EIS disclosed 1.9 acres of potential impacts to Fernwood Parkway from the "shadow" of the elevated guideway.
- Impacts were updated to 4.5 acres for the full area of Fernwood Parkway between 99th Street and 103rd Street.

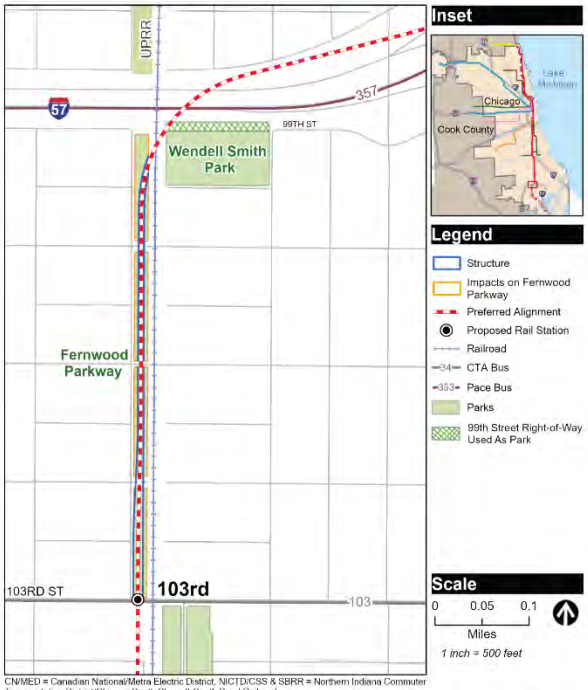

Mitigation Measures for Fernwood Parkway Impacts

- Mitigation measures are being developed with the Chicago Park District including a total of 4.5 acres of new replacement pocket parks within the Washington Heights community and along Major Taylor Trail.

These mitigation measures are different than those discussed in the Draft EIS. Mitigation was proposed for larger replacement parks; however, Chicago Park District identified a need for smaller pocket parks within the communities.

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RED AHEAD

Red Line Extension

Transit-Supportive Development (TSD) Plan Overview

Identifies opportunities to:

- Promote economic development
- Support continued affordability
- Encourage private sector investment
- Enhance multimodal connectivity and bicycle/pedestrian access
- Support application for federal funding for the transit project
- Prepared in collaboration with the community, City of Chicago, and the Cook County Land Bank
- For more information, visit transitchicago.com/RLE/TSD

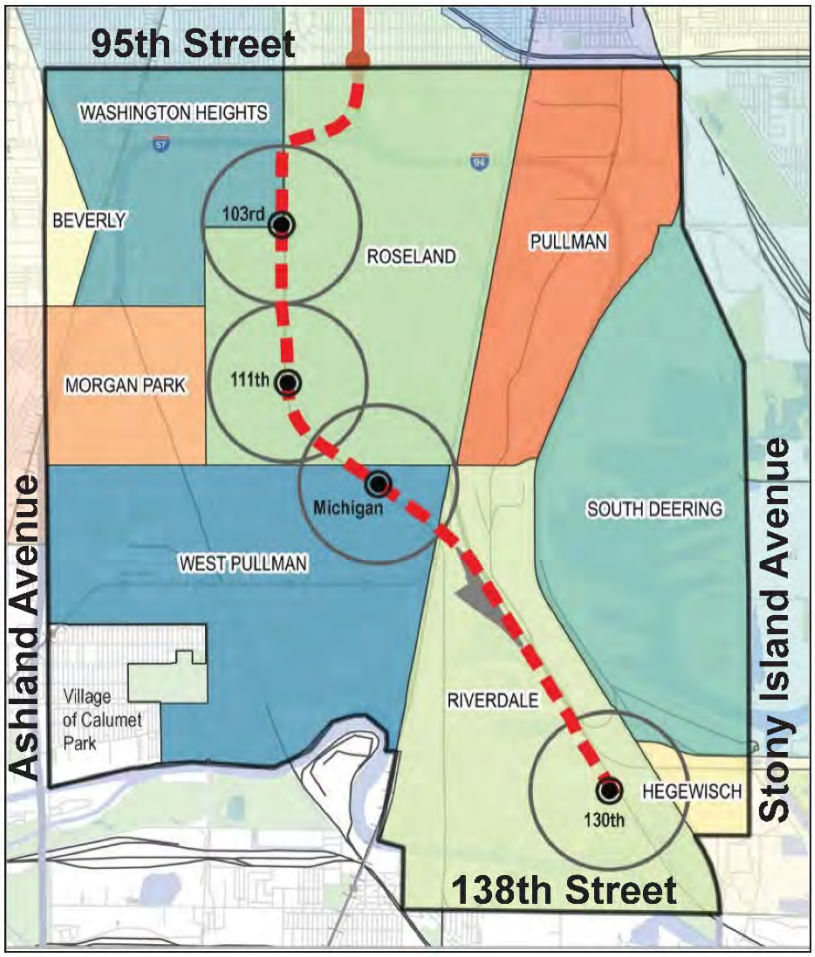

RED AHEAD

Red Line Extension

Thank You!

Comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation can be made in the following ways during the meeting:

- Provide written comments on comment cards
- Provide comments on the online comment card found on the website: transitchicago.com/RLE/SEA
- Provide verbal comments to the court reporter

Written comments will be accepted through March 1st, 2022:

By Email:

RedExtension@transitchicago.com

By mail:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street,
Chicago, IL 60661-1465

Scan the QR code to leave us a comment!

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Online Comment Form

Translate this page

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Home » Sign up for the RLE Supplemental Environmental Assessment public hearings here! »
Provide your comments on the RLE Supplemental Environmental Assessment and Section 4(f) Evaluation

Provide your comments on the RLE Supplemental Environmental Assessment and Section 4(f) Evaluation

The Chicago Transit Authority (CTA) hosted a virtual and in-person public hearing to solicit public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation. The Supplemental EA evaluates the impacts and mitigation of three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016.

The project changes are

1. 130th Street station relocation
2. 120th Street yard and shop refinement
3. 107th Place cross-over.

For more information and to review the Supplemental EA and Section 4(f) Evaluation, visit the CTA's **dedicated webpage**. The CTA has established a 30-day comment period to take formal comments on the Supplemental EA and Section 4(f) Evaluation from **January 31, 2022 to March 1, 2022**. Please use the form below to provide your comments.

Comments may be made verbally to a court reporter at the virtual and in-person public hearings. Written comments will be accepted during the in-person public hearing and at any time during the public comment period via this online form, the project email, and by U.S. mail.

Looking for other ways to reach us?

Comments may be made verbally to a court reporter at the virtual and in-person public hearings. Written comments will be accepted during the in-person public hearing open house, and will be accepted at any time during the public comment period via this form; project e mail to: RedExtension@transitchicago.com; and by U.S. mail to:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street

Chicago, IL 60661-1465

For additional information call: (888) YOUR-CTA (888 968-7282) Para más información en Español, llame al (312) 681-2828

Survey starts Finish

All fields marked with an asterisk (*) are required.

1. Name

Please add your comment here...

0/255

2. Street Address

Please add your comment here...

0/255

3. City

Please add your comment here...

0/255

4. State

Please add your comment here...

0/2

5. Zip Code

6. Email

7. Please describe your questions or concerns.

Please add your comment here...

Submit

RED AHEAD

Red Line Extension

Hard Copy Comment Form

WE WANT YOUR INPUT

The Chicago Transit Authority (CTA) is soliciting public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation. The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

Comments received during the comment period, and the responses to those comments, will be incorporated into the project's Final EIS/Record of Decision (ROD). Please PRINT.

Name* _____

Address* _____

City* _____ State* _____ Zip* _____

Email* _____

**Optional*

Please describe your questions or concerns.

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Over →

Additional comments:

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to: RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

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Para más información en Español, llame al **(312) 681-2828**

RedExtension@transitchicago.com

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Attachment 4
Outreach to Stakeholders and Agencies

In-Person Stakeholder Meeting Exhibit Boards

Cooperating Agency Letter

Cooperating Agency Mailing List

Federal Participating Agency and Tribal Consulting Parties Letter

Federal Participating Agency Mailing List

Tribal Consulting Parties Mailing List

Non-Federal Participating Agency Letter

Non-Federal Participating Agency Mailing List

In-Person Stakeholder Meeting Exhibit Boards

RED AHEAD

Red Line Extension

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Welcome to the Red Line Extension Project 130th Street Stakeholder Meeting

RED AHEAD

Red Line Extension

RLE Project Background

The Chicago Transit Authority (CTA) and the Federal Transit Administration (FTA) published a Draft Environmental Impact Statement (EIS) on October 6, 2016 that evaluated the environmental impacts of constructing and operating the Red Line Extension (RLE) Project.

Red Line Extension Preferred Alignment

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

The RLE Project would extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street.

- 5.6-mile extension
- Four new stations:
  - 103rd Street (near Eggleston)
  - 111th Street (near Eggleston)
  - Michigan Avenue (near 116th Street)
  - 130th Street (at Altgeld Gardens)
- Elevated tracks from 95th Street to 119th Street, then tracks run along the ground from 119th Street to 130th Street
- Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities

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Red Line Extension

What is a Supplemental EA?

The Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) published a Supplemental Environmental Assessment (EA) on January 31, 2022. A Supplemental EA is a federal National Environmental Policy Act (NEPA) review document that evaluates the signifcance of potential impacts of proposed project changes made after the preparation of a Draft Environmental Impact Statement (EIS). This Supplemental EA evaluated the potential impacts from three project design changes to the Preferred Alignment not disclosed in the Draft EIS that was prepared for the CTA RLE Project in 2016.

This Supplemental EA evaluates the potential impacts from the three project design changes to the Preferred Alignment.

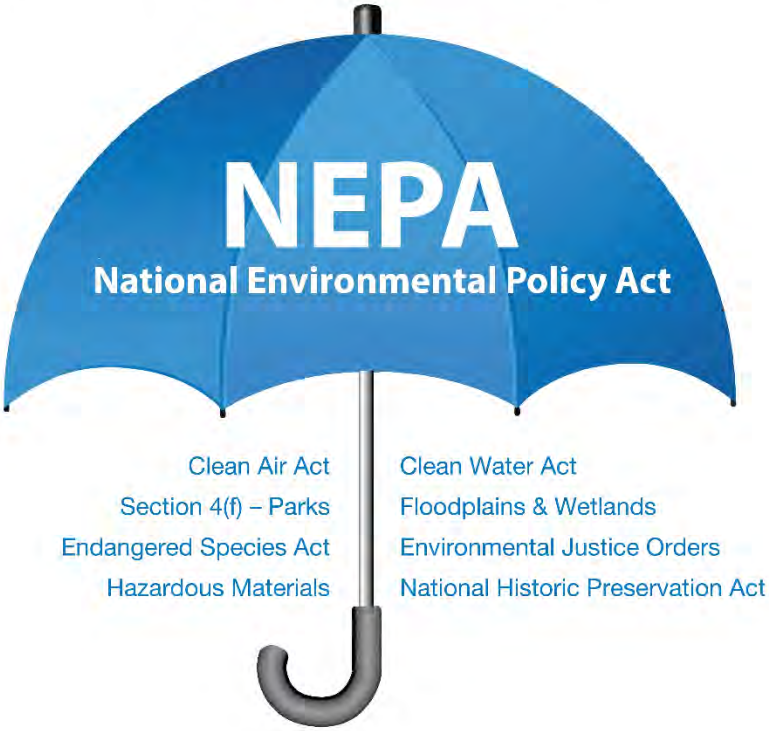

CTA published the Supplemental EA on Monday, January 31, and is accepting public comments until Tuesday, March 1.

Comments received during the 30-day public comment period and the responses to those comments will be incorporated into the project's Final EIS/Record of Decision (ROD).

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Red Line Extension

Why is a Supplemental EA Needed?

- Evaluates the potential impacts from the three project design changes to the Preferred Alignment

Draft EIS Alignment Options

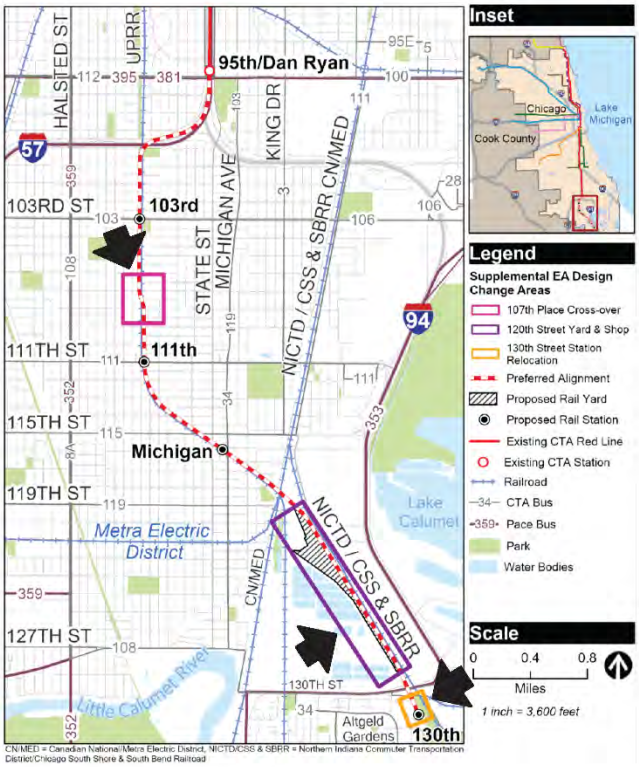

Preferred Alignment

- There are three project design changes evaluated in the Supplemental EA. The design changes are:
  - 130th Street station relocation
  - 120th Street yard and shop refinement
  - 107th Place cross-over

RED AHEAD

Red Line Extension

Project Development Process

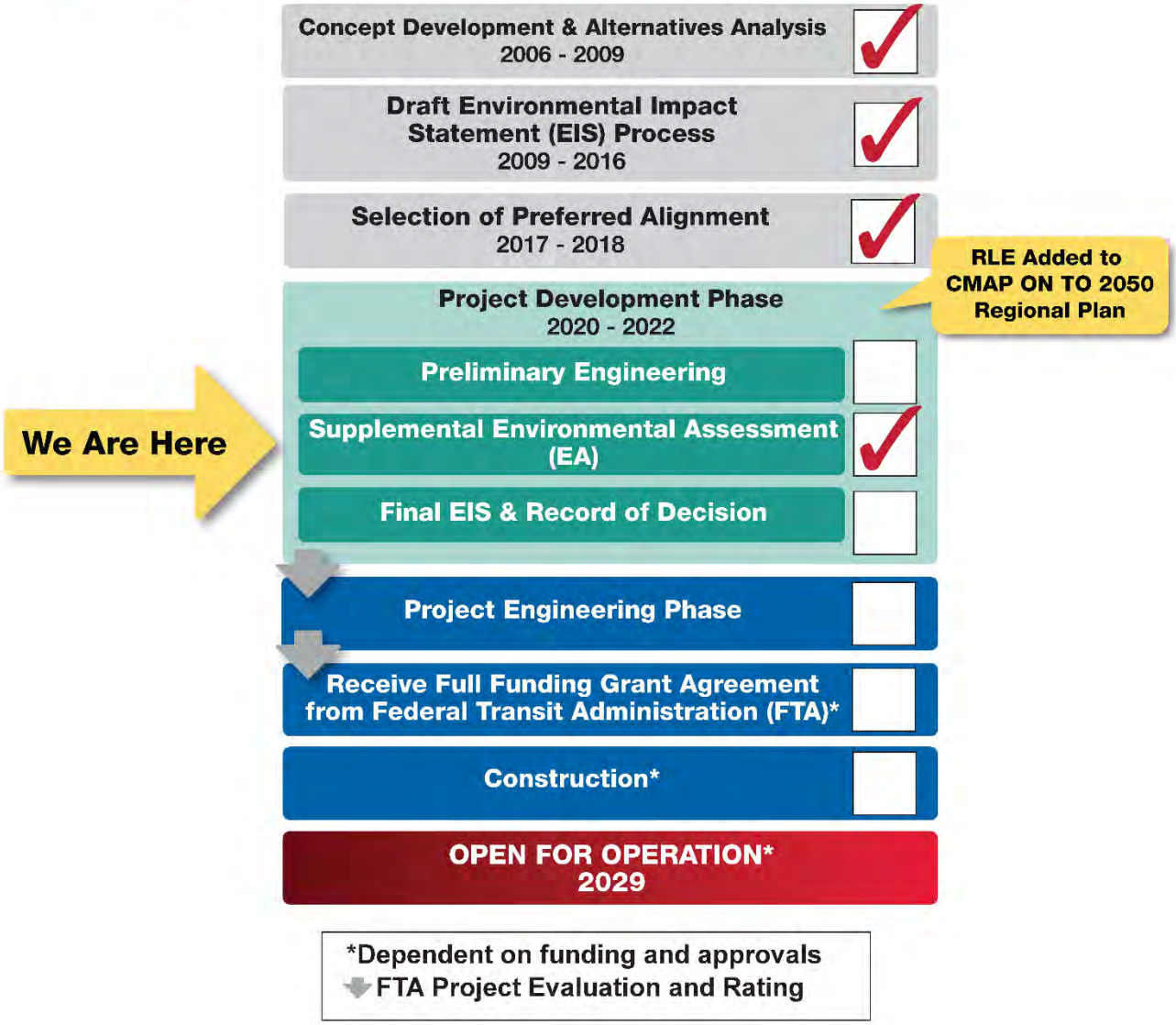

Project Funding

The CTA has made significant recent progress towards the Red Line Extension, including taking the steps necessary to make the project eligible for federal funding. In December 2020, the CTA entered the Project Development phase of the Federal Transit Administration's (FTA) New Starts program. This is a necessary step to pursue federal funding for the project.

RED AHEAD

Red Line Extension

130th Street Station Relocation

The 130th Street station, relocated from north of 130th Street, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Benefits of the relocation:

- Creates better transit connections within the Altgeld Gardens neighborhood
- Located closer and more accessible to neighborhood residents and Carver Military Academy High School students.
- Provides safer and more secure access for transit users by avoiding the need to use a walking path under the 130th Street viaduct or cross 130th Street at-grade
- Located farther from the MWRD plant, avoiding truck traffic and potential odors
- Better opportunities for future development
- Supports objectives in the 2013 Altgeld Gardens – Philip Murray Homes Master Plan

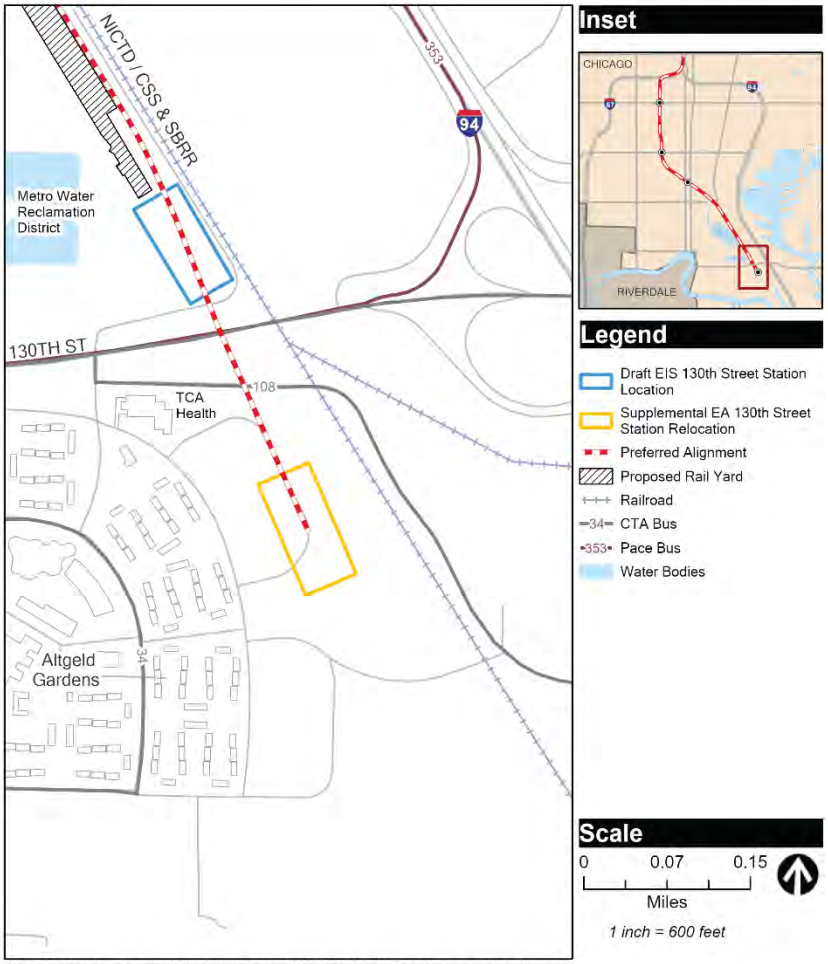

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

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RED AHEAD

Red Line Extension

130th Street Station

Transportation Impacts

- Closure of Old 130th Street to through traffic across new RLE tracks
- Removal of on-street parking along the east side of Greenwood Avenue from Ellis Avenue to the new station entrance
- Mitigation to maintain TCA Health access and parking spaces
- Improvements to the intersection of 130th Street and Ellis Avenue
- No adverse impact after mitigation

Provides entrance to the new station from Greenwood Avenue and exit from park & ride to Old 130th Street.

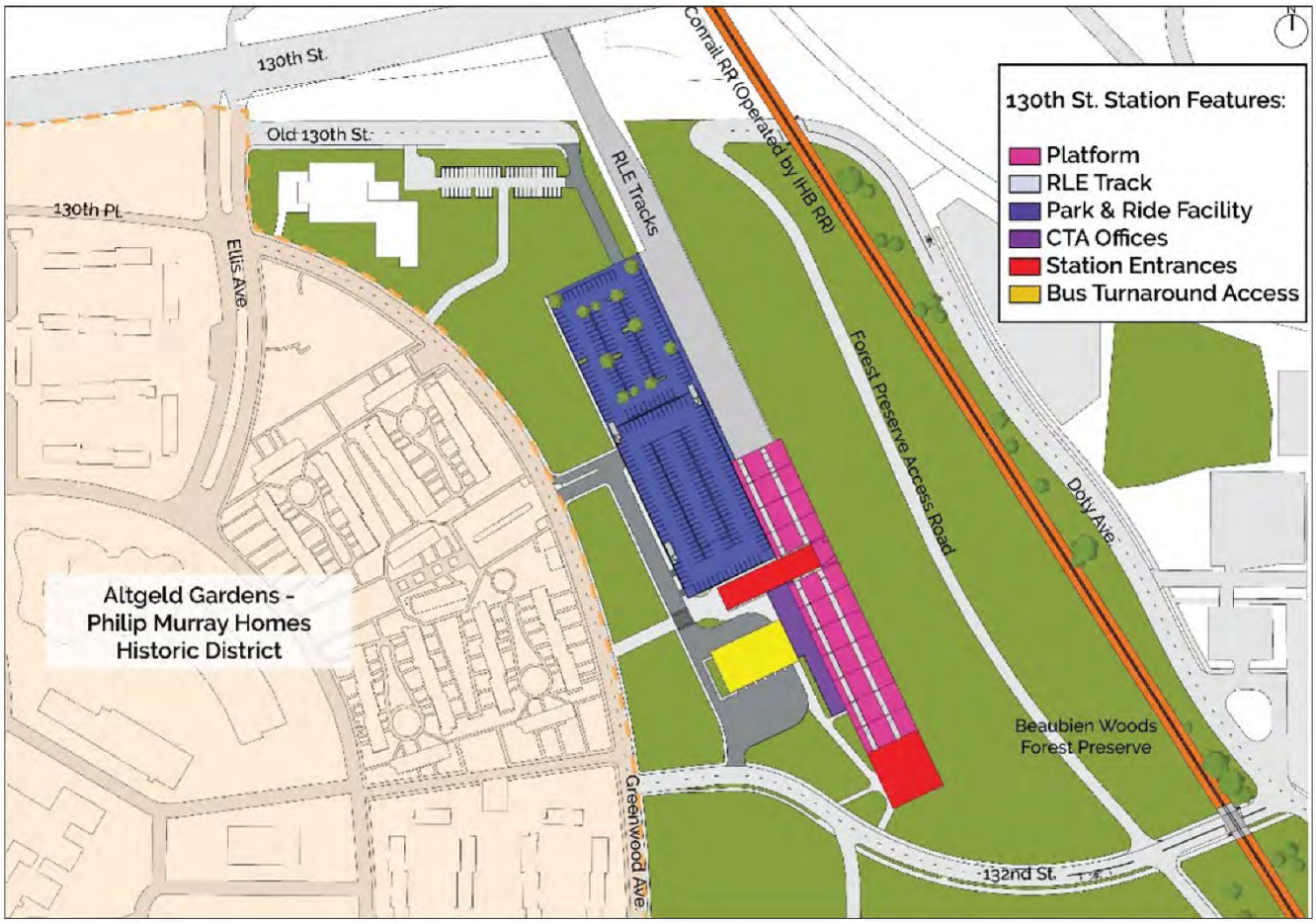

RED AHEAD

Red Line Extension

130th Street Station

Parcel Impacts

- Two parcels (#1 and #2 in the figure) would be directly impacted by construction of the station.
- Two additional parcels (not shown) would be acquired as mitigation for removal of a connection to Beaubien Woods Forest Preserve.

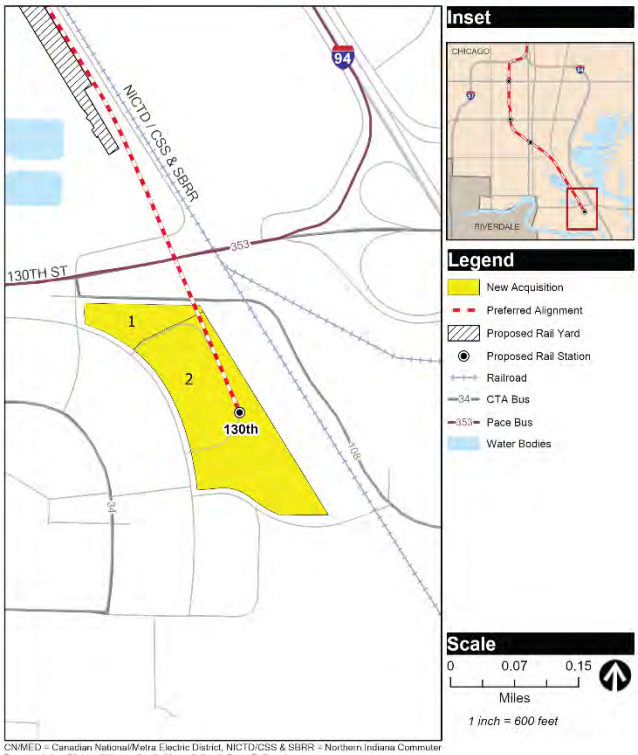

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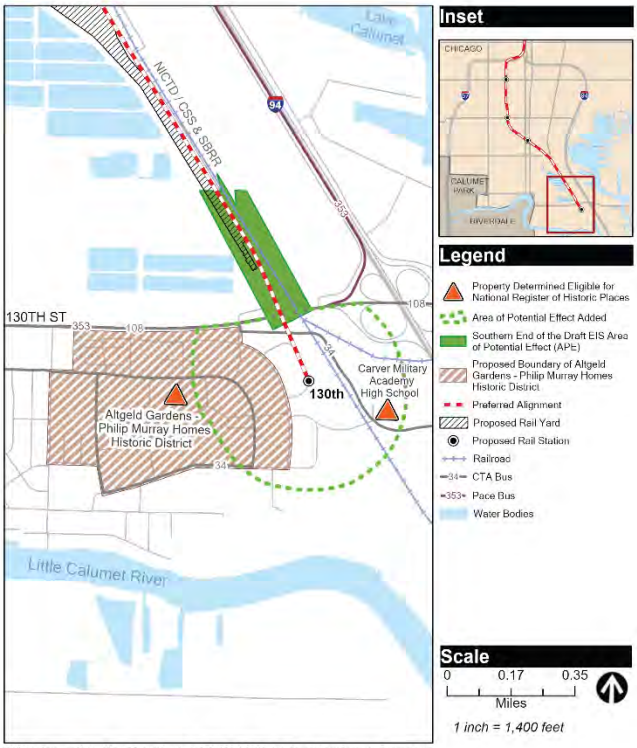

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation

Historical and Cultural

- Two Consulting Party meetings were held in 2021.
- Because there are no adverse effects to historic properties from the 130th Street station relocation, mitigation would not be required.

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RED AHEAD

Red Line Extension

130th Street Station Visualizations

Impacts on visual and aesthetic conditions would remain high and adverse after mitigation

Existing Conditions

Photo Simulation of the 130th Street Station Facing Southwest from Beaubien Woods Forest Preserve

**Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.*

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RED AHEAD

Red Line Extension

130th Street Station Visualizations

Impacts on visual and aesthetic conditions would remain high and adverse after mitigation

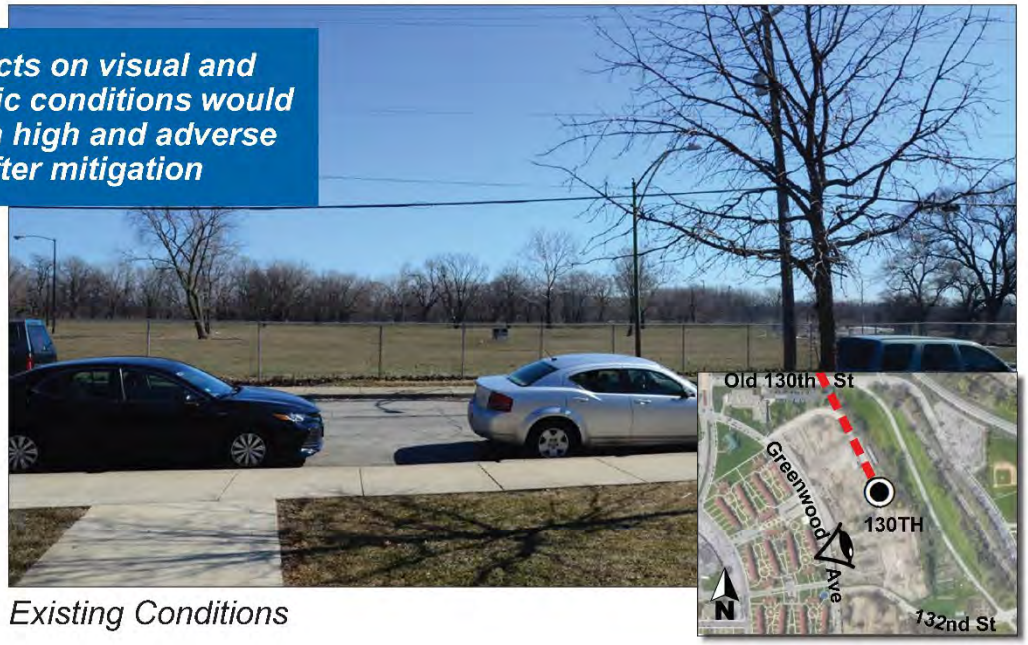

Existing Conditions

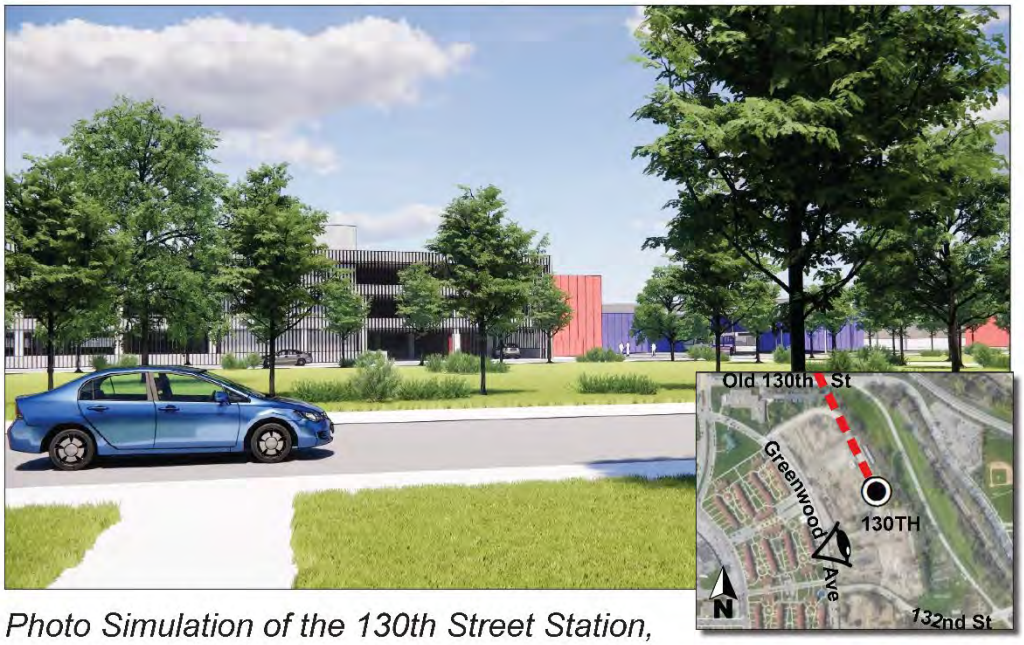

Photo Simulation of the 130th Street Station, Facing East from the Eastern Edge of the Altgeld Gardens Neighborhood

**Note that appearance of project elements and residences in visualizations is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.*

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RED AHEAD

Red Line Extension

Section 4(f) Evaluation

Beaubien Woods Forest Preserve

Section 4(f) of the United States Department of Transportation Act of 1966 is a federal law that sets requirements for FTA consideration of publicly owned parks/ recreational areas that are accessible to the general public, publicly owned wildlife/ waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects.

- Construction of the 130th Street station would close Old 130th Street and eliminate a connection to the access road into Beaubien Woods Forest Preserve from Old 130th Street. (See circle on figure to the right.)
- Even though there was no Section 4(f) use determined at Beaubien Woods, mitigation measures were identified in coordination with the Forest Preserves of Cook County (FPCC) and include the following:

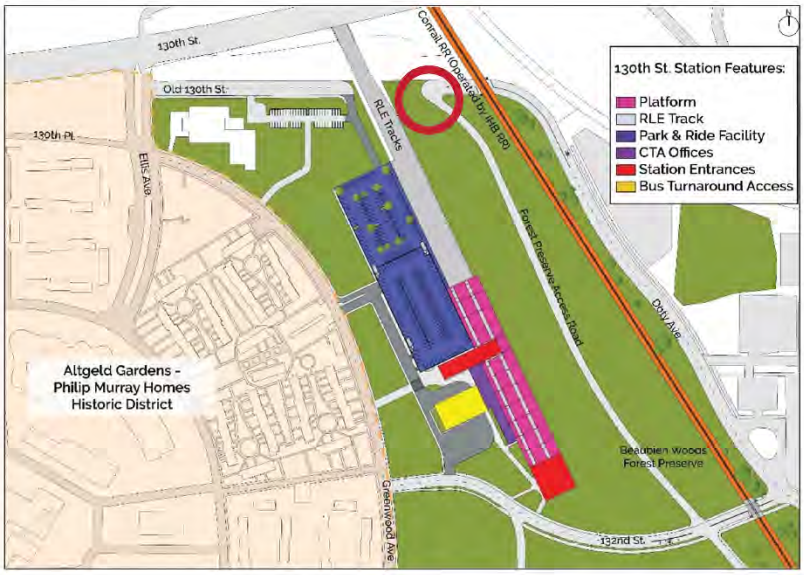

  - Transfer of two City-owned parcels into FPCC ownership
  - Funding for FPCC for ecological restoration, habitat enhancement, and beautification of expanded Beaubien Boat Launch land
  - New trail connection from Altgeld Gardens recreation facilities on 133rd Street to the Beaubien Woods Boat Launch
  - Wayfinding and information signage inside the proposed station and outdoor signage at 130th Street and Ellis Avenue and other locations
  - Forest Preserves advertising to encourage CTA riders to use public transportation to visit the Forest Preserves at the 130th Street station, other Red Line stations south of Roosevelt, and inside local trains and buses

Summary of Impacts and Mitigation

The table below shows environmental resources that would experience new or different impacts from those identified in the Draft EIS as a result of one of the three project design changes.

Environmental Resources	Three Project Design Changes		
	130th Street Station Relocation	120th Street Yard and Shop Refinement	107th Place Cross-over
Transportation	No adverse impact after mitigation		
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Hazardous Materials	No impact		
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Indirect and Cumulative Impacts	No impact		
Section 4(f)	No use of Section 4(f) resources after mitigation		

Gray = These environmental resources are not documented in the Supplemental EA because they did not experience new or different impacts from those identified in the Draft EIS.

RED AHEAD

Red Line Extension

Thank You!

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RedExtension@transitchicago.com

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Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street,
Chicago, IL 60661-1465

Scan the QR code to leave us a comment!

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Cooperating Agency Letter

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 31, 2022

[Insert Name]
[Agency]
[Insert Address]
[Insert City, State, Zip]

Re: CTA Red Line Extension Project
Supplemental Environmental Assessment Available for Agency Review

Dear XXXXXX:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line 5.6 miles south from the existing 95th/Dan Ryan terminal to 130th Street. The Red Line Extension (RLE) Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities.

In October 2016, CTA and FTA published a Draft Environmental Impact Statement (EIS) that evaluated the impacts of the No Build Alternative and two Union Pacific Railroad (UPRR) Rail Alternative options: East and West Options. In January 2018, based upon public and agency feedback received on the Draft EIS as well as subsequent project planning and engineering work, CTA announced the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS.

In 2020, a Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation was determined to be required for the RLE Project to evaluate three project changes that have occurred since the publication of the Draft EIS in 2016. The project changes are: 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

The purpose of the Section 4(f) Evaluation is to discuss mitigation and enhancement measures proposed for Beaubien Woods Forest Preserve. These mitigation and enhancement measures were developed in consultation with the Forest Preserves of Cook County.

CTA will host a public hearing in both virtual and in-person formats. The virtual hearing will be held on **Tuesday, February 15, 2022 from 6:00 PM – 8:00 PM via Zoom** and an in-person hearing will be held on **Thursday, February 17, 2022 from 6:00 PM – 8:00 PM at The Salvation Army Kroc Center, 1250 W. 119th Street, Chicago, IL 60643**. The enclosed flyer provides additional information about the public hearings and how to register.

8401 (rev. 09/04)

Your agency has previously accepted to be a cooperating agency for this project. Representatives from your agency are cordially invited to attend the public hearings. CTA has established a 30-day comment period to take formal comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022, to March 1, 2022. FTA and CTA will review the comments received during the comment period and the responses to those comments will be incorporated into the project's Final EIS/Record of Decision (ROD).

The opportunity to comment will be provided at the public hearings. Written comments will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project email to: RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

The Supplemental EA and Section 4(f) Evaluation is available on the project website at transitchicago.com/RLE/SEA.

If you have questions regarding this process, please do not hesitate to contact either:

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661-1465
Phone: (312) 681-4124
Email: mfratinardo@transitchicago.com

Anthony Greep
Community Planner
Federal Transit Administration, Region 5
200 West Adams Street, Suite 320
Chicago, IL 60606
Phone: (312) 353-1646
Email: anthony.greep@dot.gov

Thank you for your continued participation in this project.

Sincerely,

Marlise Fratinardo
Senior Project Manager, Planning
Strategic Planning and Policy

cc: Jay Ciavarella, FTA
Elizabeth Breiseth, FTA
Anthony Greep, FTA

Red Line Extension Project
Cooperating Agency Mailing List

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Federal	Federal Highway Administration	To	Ms.	Arlene	Kocher	Division Administrator, Illinois Division Office	3250 Executive Park Drive		Springfield	IL	62703
Federal	Federal Highway Administration	cc	Mr.	Chris	Byars	Metropolitan Transportation Engineer	200 West Adams	Suite 330	Chicago	IL	60606
Federal	Federal Highway Administration	cc	Mr.	Matt	Fuller	Environmental Programs Engineer	3250 Executive Park Drive		Springfield	IL	62703
Federal	Federal Highway Administration	cc	Mr.	Mike	Staggs	Engineering Team Leader	3250 Executive Park Drive		Springfield	IL	62703

Federal Participating Agency and Tribal Consulting PartiesLetter

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

February 1, 2022

[Insert Name]
[Agency]
[Insert Address]
[Insert City, State, Zip]

Re: CTA Red Line Extension Project
Supplemental Environmental Assessment Available for Agency Review

Dear XXXXXX:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line 5.6 miles south from the existing 95th/Dan Ryan terminal to 130th Street. The Red Line Extension (RLE) Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities.

In October 2016, CTA and FTA published a Draft Environmental Impact Statement (EIS) that evaluated the impacts of the No Build Alternative and two Union Pacific Railroad (UPRR) Rail Alternative options: East and West Options. In January 2018, based upon public and agency feedback received on the Draft EIS as well as subsequent project planning and engineering work, CTA announced the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS.

In 2020, a Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation was determined to be required for the RLE Project to evaluate three project changes that have occurred since the publication of the Draft EIS in 2016. The project changes are: 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

The purpose of the Section 4(f) Evaluation is to discuss mitigation and enhancement measures proposed for Beaubien Woods Forest Preserve. These mitigation and enhancement measures were developed in consultation with the Forest Preserves of Cook County.

CTA will host a public hearing in both virtual and in-person formats. The virtual hearing will be held on **Tuesday, February 15, 2022 from 6:00 PM – 8:00 PM via Zoom** and an in-person hearing will be held on **Thursday, February 17, 2022 from 6:00 PM – 8:00 PM at The Salvation Army Kroc Center, 1250 W. 119th Street, Chicago, IL 60643**. The enclosed flyer provides additional information about the public hearings and how to register.

8401 (rev. 09/04)

Your agency has previously accepted to be a participating agency for this project. Representatives from your agency are cordially invited to attend the public hearings. CTA has established a 30-day comment period to take formal comments on the Supplemental EA and Section 4(f) Evaluation from January 31, 2022, to March 1, 2022. FTA and CTA will review the comments received during the comment period and the responses to those comments will be incorporated into the project's Final EIS/Record of Decision (ROD).

The opportunity to comment will be provided at the public hearings. Written comments will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project email to: RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

The Supplemental EA and Section 4(f) Evaluation is available on the project website at transitchicago.com/RLE/SEA.

If you have questions regarding this process, please do not hesitate to contact either:

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661-1465
Phone: (312) 681-4124
Email: mfratinardo@transitchicago.com

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Community Planner
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Marlise Fratinardo
Senior Project Manager, Planning
Strategic Planning and Policy

cc: Jay Ciavarella, FTA
Elizabeth Breiseth, FTA
Anthony Greep, FTA

Red Line Extension Project

Federal Participating Agency Mailing List

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Federal	Federal Emergency Management Agency	To	Mr.	Moises	Dugan	Regional Administrator, Region V (Acting)	536 S. Clark Street	6th Floor	Chicago	IL	60605
Federal	Federal Railroad Administration	To	Mr.	Michael	Bodah	Regional Administrator	200 West Adams	Suite 310	Chicago	IL	60606
Federal	U.S. Department of Energy	To	Ms.	Jennifer	Granholm	Secretary	1000 Independence Avenue SW		Washington	DC	20585
Federal	U.S. Department of Health and Human Services	To	Capt.	Joshua	Devine	Regional Director - Region 5	233 N. Michigan Avenue	Suite 1300	Chicago	IL	60601
Federal	U.S. Department of Housing and Urban Development	To	Ms.	Diane	Shelley	Deputy Regional Director	77 W. Jackson Boulevard		Chicago	IL	60604
Federal	U.S. Department of Housing and Urban Development	cc	Ms.	Erik	Sandstedt	Field Environmental Officer	77 W. Jackson Boulevard	Room 2420	Chicago	IL	60604
Federal	U.S. Department of Housing and Urban Development	cc	Mr.	Melanie	Castillo	Region 5 Environmental Officer	77 W. Jackson Boulevard	Room 2420	Chicago	IL	60604
Federal	U.S. Environmental Protection Agency	To	Ms.	Debra	Shore	Regional Administrator - Region 5	77 W. Jackson Boulevard		Chicago	IL	60604
Federal	U.S. Environmental Protection Agency	cc	Ms.	Virginia	Laszewski	NEPA Review	77 W. Jackson Boulevard		Chicago	IL	60604
Federal	U.S. Fish and Wildlife Service	To	Ms.	Louise	Clemency	Field Supervisor - Chicago Field Office	230 S. Dearborn Street	Suite 2938	Chicago	IL	60604
Federal	U.S. Transportation Security Administration	To	Mr.	Christopher	McKay	Industry Engagement Manager; Mass Transit and Passenger Rail	601 S. 12th Street		Arlington	VA	20598

Red Line Extension Project

Tribal Consulting Parties Mailing List

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Tribe	Citizen Potawatomi Nation	To	Mr.	John	Barrett	Tribal Chair	1601 S. Gordon Cooper		Shawnee	OK	74801
Tribe	Forest County Potawatomi	To	Mr.	Ned	Daniels, Jr.	Chairperson	5416 Everybody's Road	Box 340	Crandon	WI	54520
Tribe	Ho-Chunk Nation	To	Mr.	Bill	Quackenbush	Tribal Historic Preservation, Division Manager	P.O. Box 667		Black River	WI	54815
Tribe	Kickapoo Tribe of Oklahoma	To	Mr.	Darwin	Kaskaske	Chairman	105365 S. HWY 102		McCloud	OK	74851
Tribe	Little Traverse Bay Bands of Odawa Indians, Michigan	To	Mr.	Wesley	Andrews	THPO	7500 Odawa Circle		Harbor Springs	MI	49740
Tribe	Menominee Indian Tribe of Wisconsin	To	Mr.	Ronald J.	Corn	Chairman	W2908 Tribal Office Loop Road		Keshena	WI	54135
Tribe	Miami Tribe of Oklahoma	To	Ms.	Diana	Hunter	Tribal Historic Preservation Officer (Acting)	3410 P Street		Miami	OK	74354
Tribe	Peoria Tribe of Indians of Oklahoma	To	Mr.	Craig	Harper	Chief	118 S. Eight Tribes Trail		Miami	OK	74354
Tribe	Pokagon Band of Potawatomi Indians	To	Mr.	Matt	Bussler	Tribal Historic Preservation Officer	58620 Sink Road	Box 180	Dowagiac	MI	49047
Tribe	Potawatomi Nation-Hannahville Indian Community	To	Mr.	Kenneth	Meshigaud	Tribal Chairperson	N14911 Hannahville Boulevard		Wilson	MI	49896
Tribe	Prairie Band of Potawatomi Nation	To	Mr.	Joseph	Rupnick	Chief	16281 Q Road		Mayetta	KS	66509
Tribe	Sac and Fox Nation of Missouri	To	Ms.	Tiauna	Carnes	Chairperson	305 N. Main Street		Reserve	KS	66434
Tribe	Sac and Fox Nation of Oklahoma	To	Ms.	Sandra	Massey	Tribal Historic Preservation Officer	920963 S. Hwy 99		Stroud	OK	74079

Non-Federal Participating Agency Letter

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

February 1, 2022

[Insert Name]
[Agency]
[Insert Address]
[Insert City, State, Zip]

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Supplemental Environmental Assessment Available for Agency Review

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The opportunity to comment will be provided at the public hearings. Written comments will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project email to: RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

The Supplemental EA and Section 4(f) Evaluation is available on the project website at transitchicago.com/RLE/SEA.

If you have questions, please do not hesitate to contact me at mfratinardo@transitchicago.com. Thank you for your continued participation in this project.

Sincerely,

Marlise Fratinardo
Senior Project Manager, Planning
Strategic Planning and Policy

Red Line Extension Project

Non-Federal Participating Agency Mailing List

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Local	Chicago Housing Authority	cc	Ms.	Ann	McKenzie	Chief Development Officer	60 E. Van Buren Street	12th Floor	Chicago	IL	60605
Local	Chicago Housing Authority	To	Ms.	Tracey	Scott	Chief Executive Officer	60 E. Van Buren Street	12th Floor	Chicago	IL	60605
Local	Chicago Park District	cc	Ms.	Doreen	O'Donnell	Research and Planning Manager; Department of Planning and Development	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Local	Chicago Park District	To	Ms.	Heather	Gleason	Director of Planning and Construction	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Local	Chicago Park District	cc	Mr.	London	Walther	Project Manager	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Local	City of Chicago Department of Assets, Information and Services	cc:	Ms.	Yasmine	Miranda	Assistant to the Commissioner	30 N. LaSalle Street	Suite 300	Chicago	IL	60602
Local	City of Chicago Department of Business Affairs and Consumer Protection	To	Mr.	Kenneth	Meyer	Commissioner	121 N. LaSalle Street		Chicago	IL	60602
Local	City of Chicago Department of Planning and Development	cc	Ms.	Erika	Sellke	Coordinating Planner	121 N. LaSalle Street	Room 1101	Chicago	IL	60602
Local	City of Chicago Department of Planning and Development	To	Mr.	Maurice	Cox	Commissioner	121 N. LaSalle Street	Room 1101	Chicago	IL	60602

Red Line Extension Project

Non-Federal Participating Agency Mailing List

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Local	City of Chicago Department of Transportation	To	Ms.	Gia	Biagi	Commissioner	30 N. LaSalle Street	Suite 1100	Chicago	IL	60602
Local	City of Chicago Department of Transportation	cc	Mr.	Jeffrey	Sriver	Director of Transportation Planning and Programming	30 N. LaSalle Street	Suite 1100	Chicago	IL	60602
Local	City of Chicago Department of Transportation	cc	Mr.	Kevin	O'Malley	Managing Deputy Commissioner	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
Local	City of Chicago Office of the Mayor	cc:	Ms.	Alyssa	Fisher	Deputy Director of Intergovernmental Affairs for Federal Affairs	1001 Connecticut Ave, NW	#425	Washington	DC	20036
Local	City of Chicago Office of the Mayor	cc	Mr.	Paul	Goodrich	Chief Operating Officer	121 N. LaSalle Street	Room 509	Chicago	IL	60602
Local	City of Chicago Office of the Mayor	To	Dr.	Sybil	Madison	Chief of Staff	121 N. LaSalle Street	Room 509	Chicago	IL	60602
Local	City of Chicago Police Department	cc	Chief	Brian	McDermott	Chief of Patrol	3510 S. Michigan Avenue	5th Floor	Chicago	IL	60653
Local	City of Chicago Police Department	To	Superintendent	David	Brown	Superintendent of the Chicago Police Department	3510 S. Michigan Avenue	5th Floor	Chicago	IL	60653
Local	City of Chicago Police Department	cc	Commander	Matthew	Cline	Public Transportation Section	1718 S. State Street	Annex Building	Chicago	IL	60616
State	Illinois Commerce Commission	To	Ms.	Shauna	Kelley	Bureau of Transportation Chief	160 N. LaSalle Street	C800	Chicago	IL	60601

Red Line Extension Project

Non-Federal Participating Agency Mailing List

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
State	Illinois Department of Natural Resources	To	Ms.	Colleen	Callahan	Director	One Natural Resources Way		Springfield	IL	62702
State	Illinois Department of Natural Resources	cc	Mr.	John	Rogner	Assistant Director	One Natural Resources Way		Springfield	IL	62702
State	Illinois Department of Transportation	To	Mr.	Jason	Osborn	Director, Department of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
State	Illinois Department of Transportation	To	Mr.	Jason	Salley	Geometric Studies Unit Head	201 W. Center Court		Schaumburg	IL	60196
State	Illinois Department of Transportation	To	Mr.	Jose	Rios	Region 1 Engineer	201 W. Center Court		Schaumburg	IL	60196
State	Illinois Department of Transportation	cc	Mr.	Steve	Schilke	Project and Environmental Studies Section Chief	201 W. Center Court		Schaumburg	IL	60196
State	Illinois Environmental Protection Agency	cc	Ms.	Deirdre	McQuillen	Asst. to Bureau Chief	MC#1, P.O. Box 19276		Springfield	IL	62794-9276
State	Illinois Environmental Protection Agency	To	Mr.	John	Kim	Director	500 Stratton Office Building		Springfield	IL	62076
State	Illinois State Historic Preservation Office	To	Ms.	Carey	Mayer	Division Manager	#1 Old State Capitol Plaza		Springfield	IL	62701
State	Illinois State Historic Preservation Office	cc	Ms.	CJ	Wallace	Cultural Resources Coordinator	#1 Old State Capitol Plaza		Springfield	IL	62701
State	Illinois State Historic Preservation Office	cc	Ms	Rita	Baker	Cultural Resources Manager	#1 Old State Capitol Plaza		Springfield	IL	62701
Regional	Metra Commuter Rail	cc	Mr.	David	Kralik	Department Head, Long Range Planning	547 W. Jackson Boulevard	13th Floor	Chicago	IL	60661

Red Line Extension Project

Non-Federal Participating Agency Mailing List

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Regional	Metra Commuter Rail	To	Ms.	Lynnette	Ciavarella	Sr. Director, Strategic Capital Planning	547 W. Jackson Boulevard	13th Floor	Chicago	IL	60661
Regional	Metropolitan Water Reclamation District of Greater Chicago	To	Mr.	Brian	Perkovich	Executive Director	100 E. Erie Street		Chicago	IL	60611
Regional	Metropolitan Water Reclamation District of Greater Chicago	cc	Dr.	Catherine	O'Connor	Director of Engineering	100 E. Erie Street		Chicago	IL	60611
Regional	Pace	To	Mr.	David	Tomzik	Manager, Strategic and Capitol Planning	550 W. Algonquin Road		Arlington Heights	IL	60005
Regional	Pace	cc	Mr.	Erik	Llewellyn	Chief Planning Officer	550 W. Algonquin Road		Arlington Heights	IL	60005
Regional	Pace	To	Ms.	Melinda J.	Metzker	Executive Director	550 W. Algonquin Road		Arlington Heights	IL	60005
Regional	Regional Transportation Authority	cc	Ms.	Jessica	Hector-Hsu	Director, Planning and Market Development	175 W. Jackson Boulevard	Suite 1650	Chicago	IL	60604
Regional	Regional Transportation Authority	To	Ms.	Leanne	Redden	Executive Director	175 W. Jackson Boulevard	Suite 1650	Chicago	IL	60604

Attachment 5
Comments Received

Public Comments

Agency Comments

CHICAGO TRANSIT AUTHORITY

February 15, 2022, 6:00 p.m.

Red Line Extension Project Supplemental Environmental Assessment (SEA) and Section 4f Evaluation. Breakout Room No. 1. Held via videoconference.

MR. THIGPEN: Hi. My name is Antoine Thigpen, 11150 South Eggleston.

THE COURT REPORTER: Okay. Go ahead and ask your question or make your comment.

MR. THIGPEN: Sure. I was wondering about the land acquisition, just like how far would it go, and I heard there were 68 residents that would be affected. Did I hear that correctly?

MS. BARNISH: Actually, that's -- you'll need to speak to someone in Land Acquisition on that. This room that you're in is just for if you have a comment.

MR. THIGPEN: Okay. Okay. Well, I guess it was basically just those two questions that I had, then.

MS. BARNISH: Okay. So if you put those in the chat, at the bottom of your screen there's a button where you can -- you click the "chat" button, then you can type in your question and someone can help answer and/or read and you can request to be placed in the Land Acquisition room.

MR. THIGPEN: Okay. Yes, I did request for Land Acquisition as well. So I guess I can wait around for that?

MS. BARNISH: Yeah, there's kind of a line so they'll get to you as soon as they can.

MR. THIGPEN: Okay. Thanks.

MS. BARNISH: So I'm going to move you back to the main room, and you can go ahead and type in your question and request to be placed in the Land Acquisition room. Okay?

MR. THIGPEN: Okay. Gotcha.

MS. BARNISH: Thank you so much. I'm going to move you.

MR. THIGPEN: All right. Bye-bye.

* * * * *

MS. POPE: My name is Lyteshia Pope. L-y-t-e-s-h-i-a, last name Pope, P-o-p-e. Address, 10759 South Eberhart Avenue, of course Chicago, Illinois 60628.

THE COURT REPORTER: Go ahead with your question or comment.

MS. POPE: So my question was with parking accommodations, what security components will be implemented, if any. And what I mean by that is that I notice they are having a parking lot for those utilizing or coming to the Red Line extension in that area. I know that Chicago Police patrol in

that area. I know that they might have private -- well, I'm not enlightened if they have private security with CHA. And then I know, additionally, Chicago has Mass Transit which is a form of their Chicago Police Department or an entity of it. But I'm wondering what other components will be geared towards that parking area, or if any will be. So that's my question.

MS. BARNISH: Thank you. Anything else?

MS. POPE: Not at this time.

MS. BARNISH: Thank you so much. I'm going to move you to the main room now. Okay?

MS. POPE: Thank you.

* * * * *

MS. TURNER: My name is Andrea Turner, A-n-d-r-e-a, T-u-r-n-e-r. 9919 South Emerald Avenue.

THE COURT REPORTER: Go ahead with your comment.

MS. TURNER: Actually, I had a question. I wanted to find out if the extension would affect the Bishop Ford in any way. Will the extension somehow go into -- the construction interfere with the traffic or impede the traffic flow going south

on the Bishop Ford.

MS. BARNISH: Do you have any other questions?

MS. TURNER: No, ma'am.

MS. BARNISH: Okay. So those will get recorded, those will be part of the official record, and those will be addressed by the project team.

MS. TURNER: Okay.

MS. BARNISH: So I can move you back to the main room if you wish.

MS. TURNER: Okay. Thank you.

(Whereupon the proceedings concluded at 8:10 p.m.)

STATE OF ILLINOIS)
) SS:
COUNTY OF COOK)

Valerie Calabria, CSR, RPR, being first duly sworn, on oath says that she is a court reporter doing business in the State of Illinois; and that she reported in shorthand the proceedings of said Red Line Extension Project Supplemental Environmental Assessment (SEA) meeting; and that the foregoing is a true and correct transcript of her shorthand notes so taken as aforesaid, and contains the proceedings given at said meeting.

Valerie Calabria

VALERIE CALABRIA, CSR, RPR
License No. 84-003928

CHICAGO TRANSIT AUTHORITY

February 15, 2022, 6:00 p.m.

Red Line Extension Project Supplemental Environmental Assessment (SEA) and Section 4f Evaluation. Breakout Room No. 2. Held via videoconference.

MR. DUFF: Mark, how are you doing?

(No verbal response.)

MR. DUFF: So I'm Kyle Duff. And so I'm just going to kind of go over the rules here and then Mike will follow up.

And so, yeah, you will have 15 minutes in the room with the court reporter, and I will time you while you are in the room and provide you with a three-minute warning when you are close. If you have any questions, you can load them into the chat and they will be addressed.

And when you are done, please let me know, and I will reinsert you into the main room if you wish. And when you are prompted to, please click the "Join" button to go back into the main room.

THE COURT REPORTER: Hi Mark, my name is Mike. I'm the court reporter. How are you today?

(No verbal response.)

THE COURT REPORTER: You're on mute, so I can't hear you if you are speaking.

MR. BELL: Hello.

MR. DUFF: Hi Mark. Do you need a Spanish interpreter?

MR. BELL: No, I don't.

MR. DUFF: Okay. Anna you don't have to interpret this. I think when you -- if we have a Spanish speaker, you'll be brought in.

THE INTERPRETER: Okay.

MR. DUFF: But thank you. We appreciate it. And we'll definitely let you know if, you know -- I think we're going to be having members of the public assigned to all breakout rooms, but if we do have a Spanish speaker, they'll be assigned specifically to this room. So we'll give you the thumbs up, and I'll start off by asking if they need an interpreter for the next person.

THE INTERPRETER: Okay. Thank you. So I don't interrupt, that's nice.

MR. DUFF: No. No. No. Thank you, we appreciate it.

And Mark that's not going to play into your time. So I'm going to start with the 15 minutes starting now.

MR. BELL: I have a question --

THE COURT REPORTER: Mark before we get started, could you please state and spell your first and last name for me, please?

MR. BELL: Oh, Mark, M-A-R-K; Bell, B-E-L-L.

THE COURT REPORTER: Thank you. Go ahead.

MR. BELL: Okay. I typed my question into the chat because I thought I was supposed to type in court reporter and then type it in.

So basically, my question was, will the present CTA lines be routed to the new stations, or will there be new routes created that will be routed to the new stations?

That was it. That was the only question I had. Hello.

MR. DUFF: Hi Mark.

MR. BELL: Yeah. Did you -- that was my question. That was the only question I had.

MR. DUFF: Okay. So yeah, so we're taking down the questions for the court -- the court reporter will be taking down the questions, and the project team will be answering the questions after the meeting. So this is going to be our way of taking down the question officially.

THE COURT REPORTER: Mark. I'm supposed to also get your address.

MR. BELL: I am at 12454 South Wentworth.

THE COURT REPORTER: And that might help them with the answer.

MR. BELL: Okay.

MR. DUFF: Great. Thank you, Mark. So I'm going to move you back into the main room now, and so that will -- you'll have to press "Join" in order to join back into the main session. Okay?

MR. BELL: Okay.

MR. DUFF: Thank you, Mark.

MR. BELL: All right. Thank you.

(Kyle briefs the questioner.)

MS. AL NURRIDIN: Thank you, Kyle. Wait a minute. All this technology is great and everything. I think I'm going to write my comment down and get prepared in due form. Yeah, that's what I'm going to do. Okay?

MR. DUFF: So Mike -- you can also say it out loud and Mike will record it as well, and it will be addressed after the meeting.

MS. AL NURRIDIN: What I just said before?

MR. DUFF: Any questions that you might have. Any questions or comments that you might have.

MS. AL NURRIDIN: Okay. My comment was just --

THE COURT REPORTER: Excuse me. One more thing before we get started. Your name is Fatimah?

MS. AL NURRIDIN: Yes, Fatimah Al Nurridin-Harris.

THE COURT REPORTER: Okay. And --

MS. AL NURRIDIN: That's my whole name, Al Nurridin, Fatimah Al Nurridin.

THE COURT REPORTER: Thank you. And the address -- your current address, please.

MS. AL NURRIDIN: 2232 West 158th Street.

THE COURT REPORTER: Okay. Please go ahead.

MS. AL NURRIDIN: Why do you need my address?

THE COURT REPORTER: Because they asked me to get your name and address.

MS. AL NURRIDIN: Okay. All right. I am in the Markham community, but I'm native born and raised and work and advocate for the community. So for the record.

I have several questions and concerns. Am I ready, Mike? Should I just go through it?

THE COURT REPORTER: Go for it.

MS. AL NURRIDIN: Okay. Walkability is my concern. Riverdale community 54 is very secluded. And when you walk from the PACE station, the Riverdale station that's on 135th and Indiana, into the community over the bridge down 134th to the station -- I'm thinking about all the sidewalks. I see some repairs, but I'm thinking and I'm concerned about a safe route.

And I'm concerned about the exchange of individuals, residents, from the Eden Greens, Golden Gate going into the Altgeld community. I know that's an issue that we would have to deal with.

But lighting and, you know, the beautification and all that landscaping stuff, I would -- is important to me. As well as sidewalk and walking access on 130th. I'm working with a group, Southside Trailblazers, I'm working with Openlands, and just a lot of us are working to restore an African American Heritage Trail. So there's a lot going on back there. The Underground Railroad Landmark. So walkability, tours and safety is my concern.

Third and lastly, acknowledgment of the historical individuals, the buildings. I know that you talk about signage, but I'm hoping that CTA, RTA and the whole conglomerate is sensitive to our historical value and, you know, kind of work with us to acknowledge it. You know, the Larry Hawkins School is empty, and you have to go past that to get to 134th, to get out into the community. So that's the little bit that I had to say.

THE COURT REPORTER: Fatimah, can I get one spelling from you? You mentioned that -- I believe you

said the Altgeld community.

MS. AL NURRIDIN: The Altgeld community that's with the gardens, they call it -- that's the -- actually the location of where the place will be, Altgeld. The public housing facility.

THE COURT REPORTER: Thank you.

MS. AL NURRIDIN: It's right next door.

So that's -- I mean, what you're hearing is a lot of people -- because of the access is more convenient for them; we still have to go through that community to get to it. So that is what we're having a concern about. We want to be a welcoming transition and then not to be the Altgeld station, you know. But, hey, safety is our concern.

We've had a lot of -- historically, the Beaubien Woods, the wooded areas, we're working on improving it. What we want CTA and PACE to be sensitive, you know. They use 134th Street viaduct under, you know, to get out once the train that is on -- near Vernon may be blocking or whatever. We have a lot of buses coming through.

So, again, I'm working to enhance and beautify and bring some other things historically to this area. But safety is our concern. A lot of

overgrowth. We need that the train companies to be accountable. Landscaping, beautification, and just accountability. That's my concern or my comment. Thank you.

MR. DUFF: Thank you, Fatimah. Appreciate it.

MS. AL NURRIDIN: Thank you. Come out and visit us, because we do ride -- we're preparing for a legacy bike ride. We do a lot of fun things out there. So come and visit us.

MR. DUFF: That sounds like a good time. I have been down by Altgeld Garden, so...

MS. AL NURRIDIN: Oh, okay. Good. All right. Great. So yeah, that's it. Thank you, Mr. Kyle and Michael.

MR. DUFF: I'm going to move you back to the main room. Is that okay?

MS. AL NURRIDIN: Okay. Don't -- I don't want to get a whoopin' after this one. So don't --

MR. DUFF: You will not get a whoopin'. I promise you that.

MS. AL NURRIDIN: I know they can tell who it is. So I know I'm going to get it. But it's okay.

MR. DUFF: It's always good to get more comments than no comments at all.

MS. AL NURRIDIN: Thank you. Thank you, Kyle. Have a great night.

MR. DUFF: Thank you.

MS. AL NURRIDIN: You too, Michael.

THE COURT REPORTER: Thank you.

(Which were all the proceedings had at this time, date and place.)

STATE OF ILLINOIS)
) SS.
COUNTY OF DUPAGE)

Michael Duffy, being first duly sworn on oath, says that he is a Certified Electronic Reporter doing business in the City of Wheaton, County of DuPage and State of Illinois.

That he reported the proceedings had in Breakout Room No. 2 at the foregoing Red Line Extension Project Supplemental Environmental Assessment (SEA) and Section 4f Evaluation.

And that the foregoing is a true and correct transcript of the reported proceedings so taken aforesaid and contains all the proceedings had at said meeting.

Michael J. Duffy
Certified Electronic Reporter
Notary Public

CHICAGO TRANSIT AUTHORITY

February 15, 2022, 6:00 p.m.

Red Line Extension Project Supplemental Environmental Assessment (SEA) and Section 4f Evaluation. Breakout Room No. 3. Held via videoconference.

MR. CLARK: Mr. Smit, you can go ahead.

HUNTER SMIT: Okay. Hi, Jennifer.

THE COURT REPORTER: Hello.

HUNTER SMIT: Hey. So I just wanted -- there were some concerns that were being brought up, and I wanted to make sure they made them over to here, to the official court reporter section.

Seems like walkability is a big concern for both the residents who live in the area but also the commuters who are coming in nearby. And so both connections to 130th Street look like an issue as well as connections to the nearby forest preserve and some of the parks that are nearby. And there's a couple people bringing this up in the in the overall general meeting, but as I noticed, there is no -- there's no sidewalks really on 130th, and the distance between 130th to the 130th proposed station is quite something for people who are only on foot.

THE COURT REPORTER: Okay. Got it. Any other comments?

HUNTER SMIT: I guess one other comment, too, is just the transit-oriented development nature of the project and just making sure that it's not a

car-centric project, but rather like multifamily housing and small business locations can be added right nearby these stations. I know a lot is being discussed about that currently with each station location, but also nearby. And I just want to make sure that that's, like, the priority and so that there will be affordable housing nearby for residents to easily access the train and to access jobs through the transportation system. That's all I got.

THE COURT REPORTER: Okay. Thank you.

I'm not sure if I'm supposed to get your address or not -- Jim, do you know?

HUNTER SMIT: Yeah, I can. It's 306 South Halsted Street.

THE COURT REPORTER: Okay. Thank you.

HUNTER SMIT: Thank you.

MR. CLARK: One second, Hunter. I'll move you into the main room.

HUNTER SMIT: Okay.

(Whereupon, the proceedings concluded at 8:02 p.m.)

STATE OF ILLINOIS)
) SS.
COUNTY OF DUPAGE)

Jennifer Orozco, being first duly sworn, on oath says that she is an Electronic Reporter doing business in the City of Chicago, County of Cook, State of Illinois.

That she reported the proceedings had at the foregoing Red Line Extension Project Supplemental Environmental Assessment (SEA) meeting.

And that the foregoing is a true and correct transcript of the reported proceedings so taken as aforesaid and contains all the proceedings had at the said meeting.

Jennifer Orozco,
Notary Public

#332

RED AHEAD

Red Line Extension

WE WANT YOUR INPUT

The Chicago Transit Authority (CTA) is soliciting public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation. The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

Comments received during the comment period, and the responses to those comments, will be incorporated into the project's Final EIS/Record of Decision (ROD). Please PRINT.

Name* Andraya Yousf

Address* 13015 S Ellis

City* Chicago State* IL Zip* 60827

Email* andraya.yousf@bythehand.org

*Optional

Please describe your questions or concerns.

I love the new location proposed, it would allow us to safely walk from our after school program to the station easily. It also is set apart enough to not disturb bus routes and staff parking. With the renderings would love to see a sleeker design more reflective of the community. I know they are placeholder designs but it would be great to have a better design for the community to get a better picture. I also like adding way finding to the forest preserve. Adding lighting and signs (maybe bikes/divvy) would be great to better activate the space. At By the Hand we would love to serve more students and are looking for opportunities to improve our facilities (so we have the space to serve more students) like we have at Cabrini in partnership w/ CHA and in Austin.

Over →

Additional comments:

Additionally, we are happy to host any meetings at our ~~Ac~~ current site on Ellis and invite the team to also visit during our programming hours. Lastly, it would be great to have bus routes in the area that connect to the neighboring grocery stores as food access is a huge concern and issue for our children and families.

Thank you for the incredible work and progress on this project.

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to: RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

For additional information call: **(888) YOUR-CTA (888 968-7282)**

Para más información en Español, llame al **(312) 681-2828**

RedExtension@transitchicago.com

transitchicago.com/RLE/SEA

facebook.com/CTARedExt

@cta

#333

Give us Your Feedback! Please print your comments below.

*Name Beria Hampton *Email beria@pcrchi.org

*Address 13146 S. Codiss Ave
Chicago, IL 60827

Section 3 employment opportunities
(1) Employment Opportunities
(2) Underserved Residents involvement
(3) Programs for Pre-Entry
(4) Workforce Development
(5) Accessibility for all residents (Design will make more of a walk to get to train)
(6) Trainings & Support

*Optional. Tear here and return this postage paid card to any mailbox.

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

#334

RED AHEAD

Red Line Extension

WE WANT YOUR INPUT

The Chicago Transit Authority (CTA) is soliciting public comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation. The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft Environmental Impact Statement (EIS) in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over.

Comments received during the comment period, and the responses to those comments, will be incorporated into the project's Final EIS/Record of Decision (ROD). Please PRINT.

Name* FRANCINE WASHINGTON

Address* 243 E. 32nd ST

City* CHICAGO State* IL Zip* 60616

Email* FWASHINGTON@lac.THECHA.org

*Optional

Please describe your questions or concerns.

THIS Public Comment is a Joke. All they WANT IS SIGNATURES ON the SIGN IN Sheets. TO say we met with the Residents. They ARE yet to have a town hall community Meet with the Resident here AT ALTGeld. I didn't come here to SIGN IN and look AT poster ~~boards~~ boards.

Now they want the Resident to come to the Rock Center. Really

THIS IS AN EXhibit

NO One CARE ABOUT US BUT US.

Everyone thinks that the Residents is Illiterate and that the found A Bird Nest on the Ground. we are tried of getting pissed on saying Oh that's rain

Over →

Additional comments:

Comments may be made verbally to a court reporter at the virtual and in-person hearings. Written comments will be accepted during the in-person public hearing, and will be accepted at any time during the public comment period via the project website: transitchicago.com/RLE/SEA; project e-mail to: RedExtension@transitchicago.com; and by U.S. mail to: Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

For additional information call: **(888) YOUR-CTA (888 968-7282)**

Para más información en Español, llame al **(312) 681-2828**

RedExtension@transitchicago.com

transitchicago.com/RLE/SEA

facebook.com/CTARedExt

@cta

#335

Red Line Extension

A Osborne <alo2086@outlook.com>

Tue 2/15/2022 5:19 PM

To: Red Extension <redextension@transitchicago.com>

You don't often get email from alo2086@outlook.com. Learn why this is important

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Please send me updates on Red Line Extension Project?

How many stations are planned and when will project begin? Thank You

Get Outlook for Android

#336

Red Line Extension Updates

HL Cunning <hl_cunning@outlook.com>

Tue 2/15/2022 5:16 PM

To: Red Extension <redextension@transitchicago.com>

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Please keep me informed about the Red Line Extension Project.

How many stations are proposed for the extension out to 130th Street? Thank you

Get Outlook for Android

#337

Englewood Trail on the Map; Redline Extension and 75th Corridor; Hallelujah!

John Jones <sustainableenglewood@gmail.com>

Sat 2/26/2022 7:02 AM

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https://www.chicagobusiness.com/crains-forum-illinois-infrastructure/how-bidens-infrastructure-bill-will-change-chicago-0

ATT: RED LINE Extension Project
c/o Strategic Planning & policy Office

Sir
SEND A flyer or brochure
on the Red line Extension project
Send to

Chicago, Illinois ~~60610~~
60690
B. JACKSON
Box 2918

#339

Give us Your Feedback! Please print your comments below.

*Name Derrick James *Email demcklamont@yahoo.com

*Address 1743 E. 83rd Place, Chicago, IL 60617

Dear Sir/Madam, Please create safe, comfortable connections to the sidewalks of the community. Please stress to the city the need for supportive, high density zoning near the stations. The transit right-of-way should have attractive greenery, trees, flowers, to beautify the area and reduce noise. Insure there is branded signage throughout the community directing to stations, like the Washington Metro does.

*Optional. Tear here and return this postage paid card to any mailbox.

#340

Give us Your Feedback! Please print your comments below.

*Name Michael Raffety *Email mikeraffety@earthlink.net

*Address Build the extension! People everywhere need good mass transit options!

*Optional. Tear here and return this postage paid card to any mailbox.

#341

Give us Your Feedback! Please print your comments below.

*Name RED AHEAD *Email

~~*Address~~ THIS IS A GREAT PROJECT FOR THE CITY AND THE NEIGHBORHOODS IN THE AREA. MAKE THE CTA STATIONS AN "ISLAND OF SAFETY" IN THE CITY. PLEASE INCLUDE GOOD SAFETY & SECURITY SYSTEMS TO MONITOR THE CRIME. PROVIDE FOR UPKEEP OF THOSE SYSTEMS. NEED SECURITY BOTH ELECTRONIC AND ON FOOT.

THANKS

*Optional. Tear here and return this postage paid card to any mailbox.

#342

Give us Your Feedback! Please print your comments below.

*Name _____ *Email _____

*Address _____

PLEASE BUILD THIS SYSTEM SO IT IS EAST TO KEEP CLEAN.

*Optional. Tear here and return this postage paid card to any mailbox.

#343

Give us Your Feedback! Please print your comments below.

*Name Paul Damian *Email paul1349@comcast.net

*Address

Thanks for your excellent job at keeping all of the stakeholders informed.

*Optional. Tear here and return this postage paid card to any mailbox.

#344

RODERICK MANNING
12119 S EMERALD AVE
CHICAGO IL 60628

Give us Your Feedback! Please print your comments below.

*Name Roderick Manning *Email roderickmanning@gmail.com

*Address 12119 S. Emerald - Chgo. IL. 60628

Yes, C.T.A. go through the project I think it will be very help ful, For C.T.A. and it paying customers.

Thank You...

R. Manning

Roderick Manning
12119 S. Emerald Ave.
Chicago, IL 60628

Stamp here

*Optional. Tear here and return this postage paid card to any mailbox.

Elmajdoub, Ammar

From: Mailchimp Account Services <accountservices@mailchimp.com>
Sent: Friday, February 4, 2022 6:18 PM
To: Red Extension
Subject: There's a new survey response in your inbox

Follow Up Flag: Follow up
Flag Status: Flagged

EXTERNAL EMAIL This email originated outside of CTA. **NEVER CLICK or OPEN** unexpected links or attachments. **NEVER** provide User ID or Password. CTA IT Support will NEVER ask you for such information. If this email seems suspicious, contact CTA Help Desk at x12345.

You have a new survey response from a contact in your audience, "January 2020".

clevantuckerjr@gmail.com wrote:

> Let us know if you have any questions or comments about the RLE Project!
> Connecting 95th/Dan Ryan to 130th Street
> 1. Will community input that includes proposals from recent RLE meetings for the station and other facilities be used with new design refinements proposals?
> 2. What has changed (if any) for the parking facility?
> 3. What is the new project's preferred alignment as it relates to recent plans?
> 4. How were these preferred alignments evaluated as it relates to the new project; what criteria was used for area's design refinements?
> 5. What changes are being made for the relocation of the 130th Street station?
> 6. What are changes being made for the 120th Street yard and shop?
> 7. What are changes being made for the 130th Street CTA Station?

8. What will be done to the 107th Street cross-over?
9. Is there a publication of the new Environmental Impact Statement (EIS) that will be released to the public?
10. Will there be public input and changes made on the new design refinements proposals? Are we done?
Comment:
It is my hope that these new changes will not cancel community input. And that they will be an asses to what has already been planed. These design refinements should add value and function to the13th Street Station.

> Please tell us your name (optional).
Clevan /tucker/jr.

> If you'd like us to respond to your question, please enter your email address below.
clevantuckerjr@gmail.com

> Would you like your email to be added to the RLE Project update list?
Yes

View Message

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675 Ponce De Leon Ave NE • Suite 5000 • Atlanta, GA 30308 USA

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Elmajdoub, Ammar

From: Dora Engram <d.engram@sbcglobal.net>
Sent: Thursday, February 24, 2022 9:37 PM
To: Red Extension
Subject: Questions Regarding the Red Line Extension Project

You don't often get email from d.engram@sbcglobal.net. Learn why this is important

EXTERNAL EMAIL This email originated outside of CTA. **NEVER CLICK or OPEN** unexpected links or attachments. **NEVER** provide User ID or Password. CTA IT Support will NEVER ask you for such information. If this email seems suspicious, contact CTA Help Desk at x12345.

1. Will there be a bus line from 127th and Union to the new Red Line Station on 130th Street? Currently the Halsted bus turns around there and there is no bus service on 127th Street. The 34 S. Michigan bus turns left at 127th and goes east, but that is the only connection west of Indiana Ave.

2. Will the new station have elevator service? I am cripple and unable to climb the stairs.

Dora Engram
d.engram@sbcglobal.net

Elmajdoub, Ammar

From: Lois and Merle <svinterlude@yahoo.com>
Sent: Thursday, February 24, 2022 11:17 AM
To: Red Extension
Subject: Re: Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation Comments Due by March 1, 2022!

EXTERNAL EMAIL This email originated outside of CTA. **NEVER CLICK or OPEN** unexpected links or attachments. **NEVER** provide User ID or Password. CTA IT Support will NEVER ask you for such information. If this email seems suspicious, contact CTA Help Desk at x12345.

CTA needs porta potties st its rail stations. The Cook County Forest Preserves provide them at trail head parking lots for hikers. Transit riders need them too!

Sent from Yahoo Mail on Android

On Thu, Feb 24, 2022 at 9:21 AM, CTA Red Line Extension Project <RedExtension@transitchicago.com> wrote:

View this email in your browser

Please provide your comments on the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation by March 1, 2022!

On January 31, the Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) announced the availability of the Supplemental Environmental Assessment (EA) and Section 4(f) Evaluation for the Red Line Extension project. The Supplemental EA and Section 4(f) Evaluation is available for public review and comment until March 1, 2022.

To access the Supplemental EA and Section 4(f) Evaluation, and the accompanying RLE Community Guide, visit the project website at transitchicago.com/RLE/SEA.

To provide your official comments on the Supplemental EA and Section 4(f) Evaluation, visit tiny.cc/SEAcomments to access the online comment card. You may also email official comments (RedExtension@transitchicago.com) or use U.S. mail to send your comments directly to

CTA at:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

CTA hosted a virtual public hearing, Tuesday, February 15, 2022 and an in-person public hearing on Thursday, February 17, 2022. If you missed the virtual public hearing, you may view the presentation at Facebook.com/CTARedExt. In addition, copies of the virtual public hearing presentation slides and the in-person exhibit boards are available at transitchicago.com/RLE/SEA.

###

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You are receiving this e-mail because you signed up to receive updates on the RLE Project as they are available.
Our mailing address is:
Chicago Transit Authority
567 West Lake Street, 10th Floor
Attention: Red Line Extension Project
Chicago, IL 60661

Add us to your address book

update your preferences unsubscribe from this list.

Respondent No: 9
Login: Anonymous
Email: n/a

Responded At: Mar 01, 2022 11:05:44 am
Last Seen: Mar 01, 2022 11:05:44 am
IP Address: n/a

Q1.	**Name**	Deandre Williams
Q2.	**Street Address**	13278 S Ellis Ave.
Q3.	**City**	Chicago
Q4.	**State**	Il
Q5.	**Zip Code**	not answered
Q6.	**Email**	dlwai088@icloud.com

Q7. **Please describe your questions or concerns.**

Is CTA planning to invest in a community shuttle to transmit passengers to and from the new station? It would solely depend on whether a shuttle to the station would incur more cost after restricting 34-SM bus to the last stop being the new train station. Will there be any new bus services created to reach even more of the city? Any collaborations with Pace services? Is there a plan in place to prevent delays in project completion caused by unforeseen circumstances? Does this include the installation of sidewalks, bike lanes, etc. to make foot travel a possibility? Currently the terrain isn't wisely formed for walking or biking or running or strolling.

Respondent No: 6
Login: Anonymous
Email: n/a

Responded At: Feb 24, 2022 13:24:16 pm
Last Seen: Feb 24, 2022 13:24:16 pm
IP Address: n/a

Q1.	**Name**	Eugene Broyls
Q2.	**Street Address**	not answered
Q3.	**City**	Olympia Fields,
Q4.	**State**	Il
Q5.	**Zip Code**	Olympia Fields, IL 60461
Q6.	**Email**	iegood@aol.com

Q7. **Please describe your questions or concerns.**

I am extremely dissatisfied with the CTA's handing of the entire Red Line extension. I have not seen such governmental boondoggling in a CTA project which has faced delay after delay. These tactics were not required to this extent on the other CTA extensions which they have already completed. I am very unhappy with these delaying tactics and millions in wasted tax dollars which would have been totally unnecessary if the CTA had properly constructed the original Red Line to the maternal point at the Southern City limits. A very unhappy CTA rider

Respondent No: 10
Login: Anonymous
Email: n/a

Responded At: Mar 01, 2022 20:08:39 pm
Last Seen: Mar 01, 2022 20:08:39 pm
IP Address: n/a

Q1.	**Name**	Hilary Thorne
Q2.	**Street Address**	333 W 100th Pl
Q3.	**City**	Chicago
Q4.	**State**	IL
Q5.	**Zip Code**	Roseland, IL 60628
Q6.	**Email**	hilarythorne1965@gmail.com

Q7. **Please describe your questions or concerns.**

Please stop this ridiculous project. Nobody is going to ride these trains until you fix the antisocial behavior and crime. We just want to get to work safely. The cheapest and best solution is to work with Metra. They already have train stations near where you want to build new ones, and they are virtually abandoned because the service isn't frequent enough to be useful. So scrap your destructive and unnecessary plan. Create a frequent service on the Metra tracks, calling all stations from Harvey to 103rd and then run express to the Loop. It really is that simple. We don't want your crime and filth, and we don't want you chopping down trees and messing up the neighborhood to build a crimeridden service that nobody wants.

Respondent No: 4
Login: Anonymous
Email: n/a

Responded At: Feb 18, 2022 18:35:00 pm
Last Seen: Feb 18, 2022 18:35:00 pm
IP Address: n/a

Q1.	**Name**	Kanji Stallworth
Q2.	**Street Address**	13233 s king dr
Q3.	**City**	Chicago
Q4.	**State**	IL
Q5.	**Zip Code**	Riverdale, IL 60827
Q6.	**Email**	kanji.stallworth@yahoo.com

Q7. **Please describe your questions or concerns.**

more stores around

#352

Respondent No: 5
Login: Anonymous
Email: n/a

Responded At: Feb 24, 2022 07:29:52 am
Last Seen: Feb 24, 2022 07:29:52 am
IP Address: n/a

Q1.	**Name**	Michael Camacho
Q2.	**Street Address**	8419 S Kedvale Ave
Q3.	**City**	Chicago
Q4.	**State**	Il
Q5.	**Zip Code**	Chicago, IL 60652
Q6.	**Email**	blackhawks127@yahoo.com

Q7. **Please describe your questions or concerns.**

I tried so hard to get on this project since I first heard of it. But my voice is never heard, now that is discrimination thank you. And not only this one but RPL Project also.

Respondent No: 8
Login: Michael LaFargue
Email: michael.lafargue@cbexchange.com

Responded At: Feb 28, 2022 19:06:05 pm
Last Seen: Mar 01, 2022 02:22:28 am
IP Address: 99.145.48.100

Q1.	**Name**	Michael LaFargue
Q2.	**Street Address**	9327 S. Michigan Avenue
Q3.	**City**	Chicago
Q4.	**State**	IL
Q5.	**Zip Code**	Chicago, IL 60619
Q6.	**Email**	Michael.LaFargue@cbexchange.com

Q7. **Please describe your questions or concerns.**

1.) I have engaged in many of CTA's virtual meeting related to 130th Street station relocation. The relocation is appropriate and pursuant community discussion and input was appropriate. 2.) 120th Street yard and shop refinement. To the best of my recollection and readings the refinement and pursuant community discussion and input was appropriate. 3.) 107th Place cross-over. I entirely agree with the cross over. it appears appropriate and pursuant community discussion and input was appropriate. QUESTION BACKGROUND: The new 95th CTA Terminal was opened in April of 2019. CTA shared IDOT is responsible for the regular clean up of the CTA parkway. IDOT told the community to call Streets and Sanitation regularly to clean the terminal's parkway. The West Chesterfield Community Association has cleaned the parkway. The Chicago Association of Realtors Diversity 77 has cleaned the parkway. Is of April 2022 CTA says it will have bid out the job and have a contractor clean the parkway. taken years for the 95th Street Terminal to address cleaning. We have had a similar problem with the maintenance of the CTA 95th Street Staging Area during 2019, 2020 and 2021. QUESTION: 1.) Why has it taken so long to address cleaning the 95th Street Terminal's immediate parkways? The community expressed the importance a cleanliness and having a good business neighbor to CTA. 2.) What is the perimeter cleaning plan for the four new RLE stations?

#354

Respondent No: 1
Login: Anonymous
Email: n/a

Responded At: Feb 03, 2022 16:12:23 pm
Last Seen: Feb 03, 2022 16:12:23 pm
IP Address: n/a

Q1.	**Name**	Mr Bobbo
Q2.	**Street Address**	1211 W 107th Pl
Q3.	**City**	Chicago
Q4.	**State**	IL
Q5.	**Zip Code**	Morgan Park, IL 60643
Q6.	**Email**	bobbob1965@aol.com

Q7. **Please describe your questions or concerns.**

Can you please tell me where the 107th Pl CrossOver will be located?

#355

Respondent No: 3
Login: Anonymous
Email: n/a

Responded At: Feb 15, 2022 19:40:47 pm
Last Seen: Feb 15, 2022 19:40:47 pm
IP Address: n/a

Q1.	**Name**	TOMMY MILLER
Q2.	**Street Address**	5120 190th St
Q3.	**City**	CNTRY CLB HLS IL
Q4.	**State**	IL
Q5.	**Zip Code**	not answered
Q6.	**Email**	t.miller5050@yahoo.com

Q7. **Please describe your questions or concerns.**

Everyone I talk to about this project is very excited about it. Let's move forward full speed ahead!

#356

Respondent No: 7
Login: Anonymous
Email: n/a

Responded At: Feb 28, 2022 07:08:36 am
Last Seen: Feb 28, 2022 07:08:36 am
IP Address: n/a

Q1.	**Name**	TOMMY MILLER
Q2.	**Street Address**	11608 s Michigan
Q3.	**City**	Chicago
Q4.	**State**	IL
Q5.	**Zip Code**	Chicago, IL 60628
Q6.	**Email**	t.miller5050@yahoo.com

Q7. **Please describe your questions or concerns.**

After review of the SEA, I'm satisfied with the progress being made. My wish is to see this community transformed.

#357

Give us Your Feedback! Please print your comments below.

*Name _____ *Email _____

*Address _____

YES

Get it the Red Line

*Optional. Tear here and return this postage paid card to any mailbox.

#358

Give us Your Feedback! Please print your comments below.

*Name ALAN MAUMOSER *Email alanm240@yahoo.com

*Address 3501 W. EVERGREEN AVE CHGO 60651

I am opposed to all parts of this project. There are better, more efficient, and less costly ways to serve the far south side with transit. To start → The CTA should join with Metra to support the METRA ELECTRIC pilot project! Please :)

*Optional. Tear here and return this postage paid card to any mailbox.

#359

Give us Your Feedback! Please print your comments below.

*Name _____ *Email _____

*Address _____

I don't use CTA regularly or often. Where will the 130 st station be moved to? What's a crossover? Where on 107th St will the new crossover go?

I didn't attend the public meeting or ~~Z~~ Zoom hearing. My card was buried under some other things to do or read papers.

*Optional. Tear here and return this postage paid card to any mailbox.

#360

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago
100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

BOARD OF COMMISSIONERS
Kari K. Steele
President
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Eira L. Corral Sepúlveda
Mariyana T. Spyropoulos

March 1, 2022

Marlise Fratinardo
Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
567 W. Lake Street
Chicago, IL 60661
Sent via email to: mfratinardo@transitchicago.com

RE: CTA Red Line Extension Project

Dear Ms. Fratinardo:

In response to the Chicago Transit Authority's ("CTA") public notice regarding the Supplemental Environmental Assessment ("EA") and the Section 4(f) evaluation for the subject project, the Metropolitan Water Reclamation District of Greater Chicago ("MWRD") provides the following comments:

- The EA includes the following statement (p. 90): "The MWRD Water Management Ordinance does not apply to isolated wetlands inside the City of Chicago limits. There is no regulatory requirement for compensation of these wetland impacts." While it is correct that the WMO does not regulate impacts to isolated wetlands inside the City of Chicago, if there are jurisdictional wetlands impacted in the project area, the U.S. Army Corps of Engineers may have mitigation requirements. Additionally, the City of Chicago may have local regulations regarding impacts to wetlands in the project area. The MWRD recommends that the CTA obtain a jurisdictional determination for the wetlands (which it appears that the CTA has requested from the Corps), and that the CTA confirm any regulatory requirements of the City of Chicago over impacts to wetlands, even if they are found to be non-jurisdictional.

- In Attachment B to the EA ("Displacements and Relocations of Existing Uses"), the CTA provides a list of impacted parcels. MWRD records indicate that several of those parcels are owned by the MWRD, and the CTA requires a combination of full acquisition and easement interests for the project. The MWRD requests that the CTA initiate coordination with the MWRD Real Estate Division as soon as possible regarding this proposed right-of-way so that the MWRD can perform a detailed review for any issues or conflicts on these parcels. Please contact Head Assistant Attorney Margaret T. Conway at ConwayM@mwrd.org or at (312) 751-6587. An aerial map showing the impacted MWRD parcels is requested to facilitate the technical review.

- Attachment F of the EA (USACE and Illinois Coastal Management Program Supporting Information) includes information regarding Kensington Marsh. Although the City of Chicago is responsible for stormwater permitting within the city, the MWRD will need to review the plans for impact to our facilities and flow to the Calumet Water Reclamation Plant. In addition, an easement will be needed for the storm sewer taking the stormwater from the 120th Street yard to Kensington Marsh, if this is the chosen route.

- In a meeting with CTA and its representatives on the Red Line Extension Project on April 23, 2020, CTA indicated that it would be conducting an odor and traffic study of the project area. MWRD requests a copy of that odor and traffic study be shared.

Thank you for considering the MWRD's comments and we look forward to further coordination with the CTA on this project. Please do not hesitate to contact me at averye@mwrd.org or at (312) 751-6570 if you have any questions.

Sincerely,

Ellen M. Avery
Deputy General Counsel

cc: RedExtension@transitchicago.com
ConwayM@mwrd.org

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON
BOULEVARD CHICAGO, IL
60604-3590

March 1, 2022

REPLY TO THE ATTENTION OF:
Mail Code RM-19J

Elizabeth Breiseth
Environmental Protection Specialist
U.S. Department of Transportation
Federal Transit Administration, Region 5
200 West Adams Street, Suite 320
Chicago, Illinois 60606

Re: Supplemental Draft Environmental Assessment for the Chicago Red Line Extension Project, Cook County, Illinois

Dear Ms. Breiseth:

The U.S. Environmental Protection Agency is commenting on the Draft Supplemental Environmental Assessment (SEA) referenced above pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. The Federal Transit Administration (FTA) is the lead agency under NEPA, and the Chicago Transit Authority (CTA) is the project sponsor.

The proposed project would extend the Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. EPA commented on the Draft Environmental Impact Statement (DEIS) for this project on November 29, 2016. On February 8, 2021, EPA provided CTA with a list of EPA resources and programs that may be useful for transit supportive development and/or serve the general interests of communities involved with the Red Line Extension. On January 31, 2022, FTA and CTA released this SEA to evaluate changes to the proposed project that came about after publication of the DEIS. Changes include: (1) relocation of 130th Street Station, (2) refinement of the 120th Street Yard and Shop, and (3) movement of the preferred alignment cross-over to 107th Place.

EPA appreciates CTA's dedication to public engagement; CTA offered numerous opportunities for public input, and the SEA discusses how that input informed decision-making. We also recognize content in the SEA that addresses past EPA comments, including commitments to use EPA's Construction Emission Control Checklist to protect air quality during construction. If EPA's community-focused programs and resources are of interest to CTA or impacted community groups, we continue to be available to explore opportunities for collaboration.

Thank you for the opportunity to review this project. While EPA does not have additional recommendations based on information in the SEA, we look forward to reviewing the subsequent NEPA document. Please provide an electronic copy to Jen Blonn Tyler, the lead reviewer for this project, at tyler.jennifer@epa.gov. Ms. Tyler can be reached at 312-886-6394.

Sincerely,

Kenneth A. Westlake
Deputy Director
Office of Tribal and Multi-Media Program

#362

Fratinardo, Marlise

From: Salley, Jason R <Jason.Salley@illinois.gov>
Sent: Friday, February 25, 2022 5:13 PM
To: Fratinardo, Marlise
Cc: Tandon, Sonali; Baczek, John A; Rios, Jose (DOT); Sherrill, John; Ferguson, Dwayne; Ruiz, Vanessa V; Schilke, Steven E; Gallenbach, Thomas G; Fuller, Matt; Rogers, John (FHWA); Byars, Chris
Subject: Fw: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Marlise,
Good afternoon.
Below you will find the Department's comments regarding the subject line.
Feel free to contact me if you have any questions or need any additional information.

Thank you.

Sincerely,
Jason Salley

From: Sherrill, John <John.Sherrill@Illinois.gov>
Sent: Friday, February 25, 2022 2:01 PM
To: Salley, Jason R <Jason.Salley@illinois.gov>
Cc: Schilke, Steven E <Steven.Schilke@illinois.gov>; Ruiz, Vanessa V <Vanessa.Ruiz@illinois.gov>; Ferguson, Dwayne <Dwayne.Ferguson@illinois.gov>
Subject: Re: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Jason - cc: Dwayne, Steve, Vanessa

IDOT's Bureau of Design and Environment (BDE) reviewed the *Supplemental Environmental Assessment and Section 4(f) Evaluation for the Chicago Red Line Extension*, for a determination of NEPA adequacy. The proposed action is to extend the Red Line heavy rail service 5.6 miles south from the existing 95th/ Dan Ryan terminal to 130th Street, Chicago's Far South Side. BDE found:

- Purpose and Need: Sufficient
- Alternatives Proposed and Preferred Alternative. Sufficient
- Cultural Resources and Section 106: Sufficient
- Natural Resources: Sufficient
- Wetlands: Sufficient
- Water Resources: Sufficient
- Biological Resources: Sufficient
- Public Involvement, including the project website: Sufficient
- Section 4(f): Sufficient
- Environmental Justice: Sufficient
- Noise and Vibration: Sufficient

- Land Use and Economic Development: Sufficient
- Visual and Aesthetic: Sufficient
- Hazardous Materials: Sufficient
- Air Quality: Sufficient
- Safety and Security: Sufficient
- Indirect and Cumulative Impacts: Sufficient

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#363

Fratinardo, Marlise

From: Fratinardo, Marlise
Sent: Thursday, March 03, 2022 12:31 PM
To: Byars, Chris (FHWA)
Cc: Tandon, Sonali; Baczek, John A; Rios, Jose (DOT); Sherrill, John; Ferguson, Dwayne; Ruiz, Vanessa V; Schilke, Steven E; Salley, Jason R; Gallenbach, Thomas G; Fuller, Matt (FHWA); Rogers, John (FHWA); Kyte, James (FHWA)
Subject: RE: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Hi Chris,

Thank you for your comments.

The Supplemental EA discloses design refinements to the project's Preferred Alignment and evaluates three project changes that have occurred since the publication of the Draft EIS in 2016. The project changes are 1) 130th Street station relocation, 2) 120th Street yard and shop refinement, and 3) 107th Place cross-over. Since the construction in the I-57 and I-94 right-of-way did not change since the Draft EIS, this was not an area included in the Supplemental EA analysis. The Final EIS, to be released later this summer, will evaluate the entire Preferred Alignment including the CTA aerial structure within the Interstate right-of-way. As a cooperating agency, FHWA will have the opportunity to review and comment on a draft version of the Final EIS.

Regarding the Highway User Agreement, CTA regularly meets with IDOT on this project. We have reviewed the entire aerial structure following along I-57 with IDOT and are continuing to discuss the agreements required.

Please let me know if you have additional questions.

Best,
Marlise

From: Byars, Chris (FHWA) <Chris.Byars@dot.gov>
Sent: Tuesday, March 01, 2022 4:34 PM
To: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Cc: Tandon, Sonali <STandon@transitchicago.com>; Baczek, John A <John.Baczek@illinois.gov>; Rios, Jose (DOT) <Jose.Rios@illinois.gov>; Sherrill, John <John.Sherrill@Illinois.gov>; Ferguson, Dwayne <Dwayne.Ferguson@illinois.gov>; Ruiz, Vanessa V <Vanessa.Ruiz@illinois.gov>; Schilke, Steven E <Steven.Schilke@illinois.gov>; Salley, Jason R <Jason.Salley@illinois.gov>; Gallenbach, Thomas G <Thomas.Gallenbach@illinois.gov>; Fuller, Matt (FHWA) <Matt.Fuller@dot.gov>; Rogers, John (FHWA) <john.rogers@dot.gov>; Kyte, James (FHWA) <james.kyte@dot.gov>
Subject: RE: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Marlise,

The supplemental EA should include more detail of the construction impacts to I-94 and I-57 regarding the alignment footprint and describe compliance with interstate design standards.

We also recommend CTA being working with IDOT on the Highway Use Agreement required for occupying the I-57 ROW at the north end of the project.

Please feel free to contact me if you have any questions.

Chris Byars P. E.
Metropolitan Transportation Engineer
FHWA - Chicago Urban Satellite Office
200 W. Adams St. Suite 330
Chicago, IL. 60606
Phone: 312-886-1606
e-mail: chris.byars@dot.gov

From: Salley, Jason R <Jason.Salley@illinois.gov>
Sent: Friday, February 25, 2022 5:13 PM
To: mfratinardo transitchicago.com <mfratinardo@transitchicago.com>
Cc: Sonali Tandon (CTA) <standon@transitchicago.com>; Baczek, John A <John.Baczek@illinois.gov>; Rios, Jose (DOT) <Jose.Rios@illinois.gov>; Sherrill, John <John.Sherrill@Illinois.gov>; Ferguson, Dwayne <Dwayne.Ferguson@illinois.gov>; Ruiz, Vanessa V <Vanessa.Ruiz@illinois.gov>; Schilke, Steven E <Steven.Schilke@illinois.gov>; Gallenbach, Thomas G <Thomas.Gallenbach@illinois.gov>; Fuller, Matt (FHWA) <Matt.Fuller@dot.gov>; Rogers, John (FHWA) <john.rogers@dot.gov>; Byars, Chris (FHWA) <Chris.Byars@dot.gov>
Subject: Fw: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

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From: Sherrill, John <John.Sherrill@Illinois.gov>
Sent: Friday, February 25, 2022 2:01 PM
To: Salley, Jason R <Jason.Salley@illinois.gov>
Cc: Schilke, Steven E <Steven.Schilke@illinois.gov>; Ruiz, Vanessa V <Vanessa.Ruiz@illinois.gov>; Ferguson, Dwayne <Dwayne.Ferguson@illinois.gov>
Subject: Re: CTA Red Line Extension: Supplemental EA and Section 4(f) Evaluation Availability

Jason - cc: Dwayne, Steve, Vanessa

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- Visual and Aesthetic: Sufficient
- Hazardous Materials: Sufficient
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- Safety and Security: Sufficient
- Indirect and Cumulative Impacts: Sufficient

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Attachment 6
Displacement Outreach

FTA General Acquisition and Relocation Information Brochure

Impacted Property Letter Template

Impacted Property (Phase I ESA Completed) Letter Template

Impacted Property (Partial Acquisition or Easement of Property) Letter Template

No Longer Impacted Property Letter Template

More Relocation Information

Business/Farm or Nonprofit Organization (NPO)

A business, farm or NPO that is displaced as a result of the project may be entitled to benefits such as:

1. *Moving and Related Costs*
2. *Reestablishment Costs*
3. *Fixed Payment*

Statements applicable to all categories and benefits listed:

Please keep in mind that there are specific benefit requirements that must be met to receive any of the funds mentioned above. Your assigned relocation agent will assist you to fully understand the payments and requirements.

No residential occupant may be displaced until adequate housing has been made available to them.

All persons required to move personal property, their home, or business will be provided a 90-day written notice to vacate.

Your local transit agency will establish an appeal process should you be aggrieved by a denial of benefits, or if you feel the benefits are inadequate.

A Message from the FTA, and Your Local Transit Agency.

It is sometimes necessary to acquire private property and displace persons and businesses in order to build a transit facility that will benefit the entire community. However, we will work with you to minimize the inevitable disruption that this causes. Please feel free to contact the agency and person listed below should you have any further questions.

All Federal, State and local government agencies, as well as others receiving Federal financial assistance for public programs and projects that require the acquisition of real property must comply with the policies and provisions set forth in the Uniform Act and regulation at 49 CFR Part 24.

For further information, please contact the FTA Regional office in your area. You can find a list of these offices at www.transit.dot.gov/about/regional-offices.

You can also find additional FTA real estate information in FTA Circular 5010 at www.transit.dot.gov by typing “Circular 5010” in the search bar.

Federal Transit Administration

General Acquisition & Relocation Information

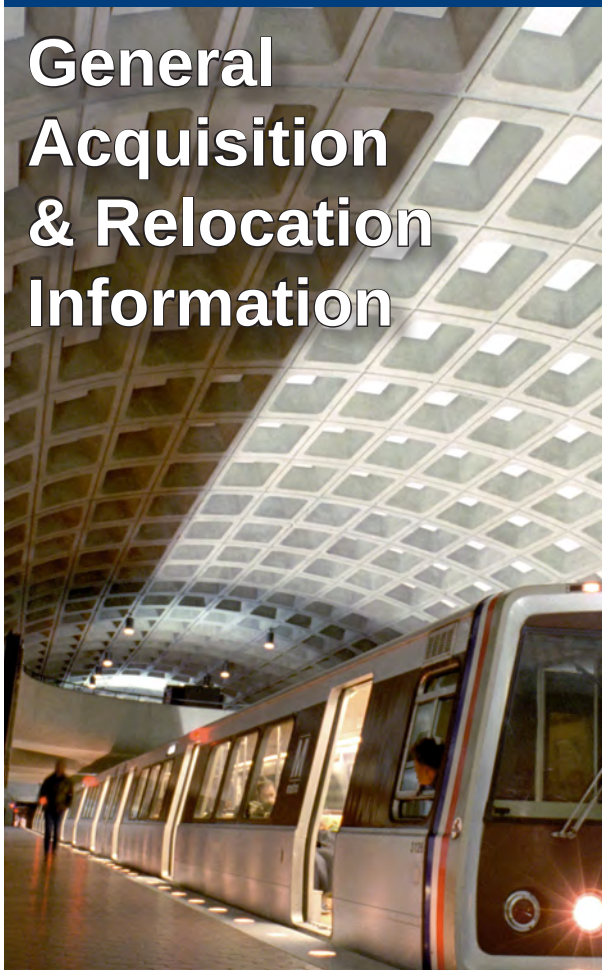

U.S. Department of Transportation

Federal Transit Administration

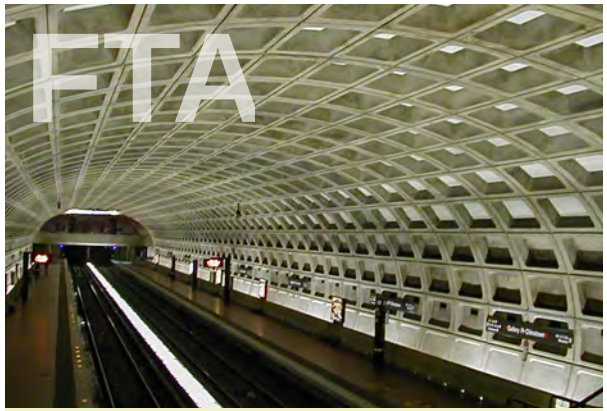

GENERAL INFORMATION

Your local transit agency may need to purchase property from you with funding from the Federal Transit Administration (FTA) in order to benefit the general public. To assure fair and consistent treatment of all persons, the FTA will require your local transit agency to follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). Congress passed this law to promote uniformity and fairness when an agency must acquire property or displace persons. There are two main parts of this process:

1. *Acquisition, which is the purchase of your real estate.*
2. *Relocation, which offers additional benefits should your residence or business be displaced.*

Acquisition of Real Property

The purchase of real estate by a transit agency begins with the appraisal of your property. An appraiser will inspect your property to determine the value. The property owner should accompany the appraiser while making this inspection. A second appraiser will then review and approve the work of the first appraiser, and will recommend a value to the local transit agency.

You will then receive a written offer to purchase your property. You will have a sufficient time to consider the offer or make any counter offers that you believe are fair.

If you elect to sell your property to the local transit agency, you will be paid the full amount less any encumbrances (mortgages, liens, etc.) owed on that property. The local transit agency may take possession of vacant property on the day of closing; possession of occupied property will be at an agreed future date.

Relocation

Advisory Assistance will be offered to every displaced person. A relocation agent will visit you to explain all of the benefits and services that you may be eligible to receive.

Below is a very brief outline of the various types of financial benefits available if you are required to move your residence or business.

Residential Homeowner Occupants are those that have owned and occupied their home for at least 90 days. Typical benefits include:

1. *Moving Costs*
2. *Price Differential Payment*
3. *Increased Mortgage Interest - provided the mortgage has been in place for 180 days*
4. *Incidental Closing Costs*

Tenants who have occupied their home prior to purchase by the transit agency may be entitled to the following benefits:

1. *Moving Costs*
2. *Rental Assistance Payment/Down Payment*

Impacted Property Letter Template

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

[Date]

Via [Mail, Certified Mail, and/or Email]

[Addressee]
[Address]
[City, State, Zip]

Dear [Property Owner],

The Chicago Transit Authority (CTA) is writing to share updated information with you about the Red Line Extension (RLE) Project.

In December 2020, CTA received approval from the Federal Transit Administration (FTA) for the RLE Project to enter the Project Development phase of the FTA's Capital Investment Grants Program as a New Starts project. Entering this phase is a major step in the CTA's continued commitment to move forward with the construction of the RLE Project. CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete, and acquisition will be subject to the availability of project funding. As you may already know, **CTA will require acquisition of the property referenced below for the RLE Project:**

Owner of Record: [Owner of Record]
Property Address(es): [Address]
Property Identification Number(s) (PIN): [Address]
CTA Parcel ID(s): [CTA ID]

Property owners and tenants who would be affected by acquisition and relocation will be protected under, and compensated in compliance with, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. CTA will treat property owners and tenants fairly and will seek property acquisitions cooperatively. In addition, CTA will provide relocation advisory services for commercial and residential property owners and tenants, as applicable.

Please note this letter is not a formal action to acquire the property. We will reach out to you at the appropriate time with a formal notice and provide information on next steps.

Environmental Site Assessment:

Over the next few weeks, several teams of environmental specialists will be in the community conducting work on behalf of the CTA RLE project. With your permission, this work would consist of property photos

and an approximately 2 to 4-hour site visit of the interior and exterior portions of your property to determine any future environmental concerns for CTA. This work, termed an Environmental Site Assessment, is a necessary step prior to acquisition. Work would be done with no impact to your property and at no cost to you. At your request, the CTA Real Estate Coordinator, Melody Carvajal, would accompany the environmental teams during the inspection, should you have any questions or concerns.

If you wish to grant CTA and their environmental team the right-of-entry onto your property, please follow these steps to complete and return to the Real Estate Coordinator **within fifteen days of the date of this letter**.

- Sign and date the enclosed Limited Access Agreement
- Add comments and conditions for the right-of entry at the bottom of the Limited Access Agreement for CTA's consideration
- Once your document has been signed, please contact Melody Carvajal at (312) 780-7746 or carvajalma@cdmsmith.com
- An appointment will be coordinated in advance of work commencing, so you may accompany the environmental team during their inspection, if you choose
- CTA will return copies of the signed documents for your records

Please note that you are not required to grant CTA right-of-entry at this time; however, we appreciate your consideration of this request. Please be assured this work will be done in a professional manner with as little inconvenience to you as possible. CTA is implementing COVID-19 guidelines to prevent and reduce transmission of the virus. Our environmental specialists will be required to show their vaccination card before they enter your property, and they will implement other protective measures such as social distancing and mask wearing. We do ask that if anyone at your property has symptoms of COVID-19 or there has been a confirmed diagnosis that you kindly reach out to Melody Carvajal to reschedule your appointment.

Meet with CTA's Outreach Specialist:

In the coming weeks, CTA would also like to schedule a one-on-one meeting for you with CTA's Outreach Specialist. The meeting will focus on property-specific acquisition and relocation to better understand the needs of the individual(s) who will be relocated due to the project. We encourage you to reach out to Melody Carvajal at (312) 780-7746 to schedule your meeting. The one-on-one meeting can be held virtually or in person at the local library.

CTA is committed to working with the community, elected officials, affected property owners and tenants, and keeping you informed. CTA will continue to communicate with affected property owners and tenants to answer questions and update them as timelines for property acquisition become known. Once environmental reviews are complete and, subject to the availability of funding for the RLE Project, CTA will notify the property owners and tenants of their intent to purchase property. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete, subject to the availability of funding.

CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago. Please contact the Outreach Specialist, Melody Carvajal (312) 780-7746, CTA Customer Service at 1-888-YOUR-CTA (888) 968-7282 or by email at RedExtension@transitchicago.com should you have any questions or would like to discuss this project further. Additional information about the project can be found at www.transitchicago.com/RLE.

Sincerely,

Michael Connelly
Chief Planning Officer
Chicago Transit Authority

Suggested Inserts (FTA Relocation brochure, ROE Phase I Agreement)

Impacted Property (Phase I ESA Completed) Letter Template

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

[Date]

Via [Mail, Certified Mail, and/or Email]

[Addressee]
[Address]
[City, State, Zip]

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Sincerely,

Michael Connelly
Chief Planning Officer
Chicago Transit Authority

Suggested Inserts (FTA Relocation brochure, ROE Phase I Agreement)

Impacted Property (Partial Acquisition or Easement of Property) Letter Template

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

[Date]

Via [Mail, Certified Mail, and/or Email]

[Addressee]
[Address]
[City, State, Zip]

Dear [Property Owner],

The Chicago Transit Authority (CTA) is writing to share updated information with you about the Red Line Extension (RLE) Project.

In December 2020, CTA received approval from the Federal Transit Administration (FTA) for the RLE Project to enter the Project Development phase of the FTA's Capital Investment Grants Program as a New Starts project. Entering this phase is a major step in the CTA's continued commitment to move forward with the construction of the RLE Project. CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete, and acquisition will be subject to the availability of project funding. As you may already know, **CTA will require a partial acquisition or easement of the property referenced below for the RLE Project:**

Owner of Record: [Owner of Record]
Property Address(es): [Address]
Property Identification Number(s) (PIN): [Address]
CTA Parcel ID(s): [CTA ID]

Please note this letter is not a formal action to acquire the property. We will reach out to you at the appropriate time with a formal notice and provide information on next steps.

Environmental Site Assessment:

Over the next few weeks, several teams of environmental specialists will be in the community conducting work on behalf of the CTA RLE project. With your permission, this work would consist of property photos and an approximately 2 to 4-hour site visit of the interior and exterior portions of your property to determine any future environmental concerns for CTA. This work, termed an Environmental Site Assessment, is a necessary step prior to acquisition. Work would be done with no impact to your property and at no cost to you. At your request, the CTA Real Estate Coordinator, Melody Carvajal, would accompany the environmental teams during the inspection, should you have any questions or concerns.

If you wish to grant CTA and their environmental team the right-of-entry onto your property, please follow these steps to complete and return to the Real Estate Coordinator **within fifteen days of the date of this letter**.

- Sign and date the enclosed Limited Access Agreement
- Add comments and conditions for the right-of entry at the bottom of the Limited Access Agreement for CTA's consideration
- Once your document has been signed, please contact Melody Carvajal at (312) 780-7746 or carvajalma@cdmsmith.com
- An appointment will be coordinated in advance of work commencing, so you may accompany the environmental team during their inspection, if you choose
- CTA will return copies of the signed documents for your records

Please note that you are not required to grant CTA right-of-entry at this time; however, we appreciate your consideration of this request. Please be assured this work will be done in a professional manner with as little inconvenience to you as possible. CTA is implementing COVID-19 guidelines to prevent and reduce transmission of the virus. Our environmental specialists will be required to show their vaccination card before they enter your property, and they will implement other protective measures such as social distancing and mask wearing. We do ask that if anyone at your property has symptoms of COVID-19 or there has been a confirmed diagnosis that you kindly reach out to Melody Carvajal to reschedule your appointment.

Meet with CTA's Outreach Specialist:

In the coming weeks, CTA would also like to schedule a one-on-one meeting for you with CTA's Outreach Specialist. The meeting will focus on property-specific acquisition and relocation to better understand the needs of the individual(s) who will be relocated due to the project. We encourage you to reach out to Melody Carvajal at (312) 780-7746 to schedule your meeting. The one-on-one meeting can be held virtually or in person at the local library.

CTA is committed to working with the community, elected officials, affected property owners and tenants, and keeping you informed. CTA will continue to communicate with affected property owners and tenants to answer questions and update them as timelines for property acquisition become known. Once environmental reviews are complete and, subject to the availability of funding for the RLE Project, CTA will notify the property owners and tenants of their intent to purchase property. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete, subject to the availability of funding.

CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago. Please contact the Outreach Specialist, Melody Carvajal (312) 780-7746, CTA Customer Service at 1-888-YOUR-CTA (888) 968-7282 or by email at RedExtension@transitchicago.com should you have any questions or would like to discuss this project further. Additional information about the project can be found at www.transitchicago.com/RLE.

Sincerely,

Michael Connelly
Chief Planning Officer
Chicago Transit Authority

Suggested Inserts (FTA Relocation brochure, ROE Phase I Agreement)

No Longer Impacted Property Letter Template

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

[Date]

Via [Mail, Certified Mail, and/or Email]

[Addressee]
[Address]
[City, State, Zip]

Dear [Property Owner],

In January 2018, the Chicago Transit Authority (CTA) sent a letter about the Red Line Extension (RLE) Project and the possibility of CTA needing to acquire the property referenced below for the construction of the RLE Project. Based on additional project planning and engineering work conducted over the last year, **this property is no longer needed to build the RLE Project:**

Owner of Record: [Owner of Record]
Property Address(es): [Address]
Property Identification Number(s) (PIN): [Address]
CTA Parcel ID(s): [CTA ID]

In December 2020, CTA received approval from the Federal Transit Administration (FTA) for the RLE Project to enter the Project Development phase of the FTA's Capital Investment Grants Program as a New Starts project. Entering this phase is a major step in the CTA's continued commitment to move forward with the construction of the RLE Project. CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete, and acquisition will be subject to the availability of project funding.

CTA is committed to working with the community, elected officials, affected property owners and tenants, and keeping you informed. CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago. Please contact the Outreach Specialist, Melody Carvajal (312) 780-7746, CTA Customer Service at 1-888-YOUR-CTA (888) 968-7282 or by email at RedExtension@transitchicago.com should you have any questions or would like to discuss this project further. Additional information about the project can be found at www.transitchicago.com/RLE.

Sincerely,

Michael Connelly
Chief Planning Officer
Chicago Transit Authority

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Red Line Extension

Red Line Extension Project

December 2020 Community Meetings Summary

January 2021

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

cta

Table of Contents

Section 1 Introduction 2

Section 2 Virtual Community Meetings 3

2.1 Virtual Community Meetings Format 3
2.2 Virtual Community Meetings Materials 4
2.3 Input Received 4
2.4 Virtual Community Meeting Attendees 5

Section 3 Virtual Community Meeting Notifications 5

3.1 Informational Materials and Newsletter 6
3.2 Newspaper Ads 6
3.3 Project Website 7
3.4 Postcard Notifications 7
3.5 eBlast Notifications 7
3.6 Customer Alerts 7
3.7 Direct and Delivery Mailing 7
3.8 Social Media Announcements 7
3.9 Media Coverage 8

Section 1
Introduction

The CTA is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include Park & Ride facilities and bus connections.

After announcing the project's Preferred Alignment, an opportunity presented itself to potentially relocate the proposed 130th station from the north side of the street – near the Metropolitan Water Reclamation District (MWRD) – to the south side of 130th Street adjacent to Altgeld Gardens. As a result, a Supplemental Environmental Assessment (EA) was needed to investigate the impacts of this potential change to the project. The CTA had discussed this change with several groups representing residents in the immediate area by early 2020 and had received positive feedback as the new station location would position Red Line riders closer to homes, schools, and recreational opportunities and farther away from the industrial land uses, truck traffic, and the MWRD treatment. The CTA sought additional feedback from communities as part of the Supplemental EA process.

CTA also received a grant through the Federal Transit Administration (FTA) pilot program to prepare a Transit-Supportive Development Comprehensive Plan. The grant is being used to incorporate the community's vision for future development along the RLE corridor. It will also identify methods and resources needed to enable mixed-use development and enhance economic vitality, multimodal connectivity and the pedestrian environment. Community engagement and ownership by residents and stakeholders from the surrounding neighborhoods were anticipated to be vital to the development of the plan.

In December 2020, the CTA hosted two identical virtual community meetings to share updates on the Red Line Extension (RLE) project, including the new opportunity for the site of 130th station, and to introduce the RLE Transit-Supportive Development (TSD) Plan. Additionally, the CTA introduced its new RLE engagement website (www.transitchicago.com/rle/engage) during these meetings.

Section 2
Virtual Community Meetings

CTA hosted two identical virtual community meetings to provide an update on project progress, including the proposed change in location of the 130th station, and to present the Transit-Supportive Development (TSD) Plan. The virtual community meetings provided the public with an opportunity to ask questions about the TSD Plan and other project details utilizing the Zoom webinar platform. The two meetings were also broadcasted on Facebook Live. The team solicited input and provided two-way communication through polling questions, a chat window, and a Question-and-Answer window. The virtual community meetings were held:

Date: Tuesday, December 8, 2020
Time: 6:00 p.m. – 7:30 p.m.
Location: Zoom & Facebook Live

Date: Wednesday, December 9, 2020
Time: 1:30 p.m. – 3:00 p.m.
Location: Zoom & Facebook Live

The community meetings were made accessible to people with disabilities by the use of American Sign Language interpretation and closed captioning. The community meetings were held online with a telephone dial-in option due to COVID-19 public health guidance. The virtual community meetings were publicized by flyer, postcard notice, eBlasts (mass emails), customer alerts, and on the project website (see Section 3 for more details about promotion). To provide the greatest opportunity for community participation, the virtual community meetings were scheduled on a weekday evening and an afternoon. Spanish interpretation was available for meeting attendees throughout the entirety of the meetings.

2.1 Virtual Community Meetings Format

The virtual community meetings provided attendees opportunities to learn about the overview and benefits of the Red Line Extension project, introduced the Transit-Supportive Development (TSD) Plan, reviewed potential environmental and property impacts as well as previous and upcoming community touchpoints. The community touchpoints discussed included outreach to potentially impacted tenants and property owners, newsletters, in-person outreach at events, the project's Facebook page, new informational video, workforce development planning efforts, and the engagement website. Near the end of each meeting, a project team member completed a demonstration of how to access the engagement website and use the tools to provide input. The virtual community meetings' format also included polling questions, chat, and Q&A allowing the public to provide feedback, ask questions, and discuss concerns directly with project staff. Digital methods for the public to ask questions included the RLE Facebook page and project team email. Non-digital methods included the CTA's customer service phone number.

2.2 Virtual Community Meetings Materials

The CTA prepared PowerPoints to supplement the project team's verbal presentation during the meetings. The virtual community meetings' presentation slides and recordings were made available via the project website after the meetings concluded. The recordings were available in both English and Spanish.

2.3 Input Received

CTA invited virtual community meeting attendees to submit comments to CTA during and after the meetings. CTA staff provided live responses to selected comments received through the Zoom meeting platform during the meeting and subsequently provided written responses on the CTA website to all comments received through the Zoom meeting platform as well as questions received as of December 10, 2020 in the comments section of the Facebook Live broadcasts. Comments could also be submitted via email or U.S. mail. Emailed comments could be sent to a project-specific email address (RedExtension@transitchicago.com). This email address was available on the project website, within the community meeting presentation, and on all meeting notification materials.

Main themes from the questions included:

- Project funding questions
- Alternate transit options for the area in substitution or in addition to the Red Line extension
- Frequency of bus service following project completion
- Requests for more information about displacement and property acquisition
- Concerns about parking lot locations, spaces and need
- Concerns about noise and vibration and other potential inconveniences to the community resulting from construction and revenue service
- Requests for the project to employ community members
- Incorporating community designs/artistic expression opportunities into the project
- Potential for transit-oriented development

Input was also solicited during virtual station meetings through Zoom polls and instruction by the speaker to answer specific questions in the Zoom chat. Additional input received was received through the engagement website.

2.4 Virtual Community Meeting Attendees

The public was offered a variety of methods to participate in the virtual station meetings. Each meeting had people listening by phone, joining online through the Zoom meeting platform, and others watching on Facebook Live (**Table 1**). The number of participants watching on Facebook Live fluctuated throughout each meeting and the number of unique participants for Facebook Live could not be determined. The December 8, 2020 community meeting garnered attendance of eighty-three, sixty-eight of whom were community members (who shared that they live in the community areas around the project) and other interested stakeholders (who indicated they lived outside of the project area). Of these eighty-three attendees, approximately fifteen participated in the meeting via Facebook Live. The December 9, 2020 community meeting garnered attendance of ninety community members and stakeholders, including approximately twenty-one via Facebook Live. Seventeen members of the project team led both virtual meetings and nine of these team members served as speakers sharing information about the project with the public. Six additional people comprised the external support team providing interpretation and captioning support. Project team members operated the meeting platform and polling, and assisted in preparing responses to questions. Several other project team members and CTA staff attended as observers.

Table 1: Meeting Attendance

Meeting	Community Member Attendance
December 8, 2020	68 (Zoom) 15 (Facebook Live)
December 9, 2020	69 (Zoom) 21 (Facebook Live)

Section 3
Virtual Community Meeting Notifications

CTA used a variety of outreach and notification methods to announce the RLE Transit-Supportive Development (TSD) Plan and invite interested parties to participate in the December 2020 public virtual community meetings.

CTA performed the following as part of the announcement of the RLE Transit-Supportive Development (TSD) Plan and public virtual community meetings:

- Released Fall 2020 newsletter

- Published advertisements in five regional and local newspapers, including two digital placements for online news publications
- Updated the project website's main page and created a dedicated landing page to include TSD plan details
- Sent postcards to all mailing addresses for impacted properties
- Sent eBlasts to all email addresses on the project contact list
- Posted a customer alert at all Red Line stations
- Delivered hard copy flyers to community locations
- Utilized social media to send announcements
- Media briefing

3.1 Informational Materials and Newsletter

CTA produced a variety of materials to inform the public about the RLE Project announcement of the Transit-Supportive Development (TSD) Plan and public virtual community meetings. The Fall 2020 newsletter was published on November 30, 2020 with information regarding the TSD plan in relation to future development along the Red Line Extension. The newsletter also provided a brief overview of the December public virtual community meetings, dates and times and how to attend the meetings.

3.2 Newspaper Ads

CTA prepared newspaper ads announcing the Transit-Supportive Development (TSD) Plan and the public virtual community meetings. Newspaper ads were published in several local and regional publications (see **Table 2**). The publications include traditional and digital news outlets, local community publications, and a Spanish language publication.

Table 2: Newspaper Ads Announcing Virtual Community Meetings

Publication Date	Media Outlet
November 24, 2020	Chicago Sun-Times (print and digital)
November 28, 2020	Chicago Crusader (print)
December 1, 2020	Chicago Defender (digital only)
December 2, 2020	Citizen Chatham, Chicago Weekend, Hyde Park and South End (print)
December 3, 2020	Lawndale Bilingual News (print)

3.3 Project Website

CTA updated the RLE Project website in advance of the meetings. The website provides general information about the RLE Project, archived materials from public hearings, and updated information on the Transit-Supportive Development (TSD) Plan. A dedicated landing page for the TSD plan (www.transitchicago.com/redext/tsd/) was created and includes an overview and timeline. The website's Frequently Asked Questions were also updated along with images and documents with relevant plan information.

3.4 Postcard Notifications

CTA mailed postcards with information on the upcoming community meeting Transit-Supportive Development (TSD) Plan and invited community members to the public virtual community meetings. The postcards were mailed to approximately 201 addresses of property owners that CTA had contacted in the past in regard to land acquisition. The postcard provided details about the public virtual community meetings, including how to virtually attend meetings and contact information to request assistance at the virtual community meetings. The postcard also included an offer of additional interpretation services in Spanish or sign language with advance notice.

3.5 eBlast Notifications

CTA sent an email (eBlast) to the approximately 1,200 email addresses on the RLE Project contact list on November 23, 2020. The eBlast included information on the project, TSD Plan overview and information about the virtual community meetings with appropriate links to the project website. CTA sent a second eBlast was sent on December 1, 2020 reminding recipients of the upcoming virtual community meetings. CTA sent a third eblast on December 9, 2020 reminding recipients of the second virtual meeting occurrence.

3.6 Customer Alerts

CTA created customer alerts promoting the public virtual community meetings and included information regarding when the meetings would be held, the importance of community engagement and how to attend the meetings. The customer alerts were posted at all Red Line stations.

3.7 Direct and Delivery Mailing

CTA sent hard copies of the meeting announcement and newsletter to aldermen's offices and libraries. These locations were contacted in advance to confirm that they were open, receiving foot traffic, and would accept the handouts. Fifty newsletters as well as 150 meeting announcements were distributed in this manner. Spanish copies of the newsletter and meeting announcement were included in these deliveries.

3.8 Social Media Announcements

CTA utilized the Red Line Extension Facebook page to announce the December virtual community meetings in feed posts as well as through the creation of Facebook events for the two meeting occurrences. On November 23, 2020 CTA Red Line Extension Facebook page published a

save the date post with meeting information including dates, times and reasons the public should attend. On December 3, 2020 CTA Red Line Extension Facebook page published individual event pages for the December 8 and December 9, 2020 meetings. Both meetings were also hosted on Facebook Live and posts were published on each meeting date to announce that the meetings were live and available for public attendance.

Additionally, notice of the meetings were posted on CTA's main Facebook page (Facebook.com/thecta), Twitter page, and Instagram story.

3.9 Media Briefing

CTA held a media briefing on December 8, 2020 to answer media questions prior to the public virtual community meetings. WTTW attended the briefing; the article "CTA Awaiting Federal Approval for Next Phase of Red Line Extension" by Nick Blumberg was published to wttw.com on December 8, 2020 at 12:20 pm.

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Fall 2020 Newsletter

Guiding Future Development Along the Red Line Extension Through the Transit-Supportive Development Plan

The CTA is beginning development of a Transit-Supportive Development (TSD) Plan, in partnership with the Department of Planning & Development (DPD). The TSD Plan will incorporate the community's vision for future development along the RLE corridor. It will also identify methods and resources needed to enable mixed-use development and enhance economic vitality, multimodal connectivity and the pedestrian environment. The TSD plan will utilize an equitable Transit-Oriented Development (eTOD) planning approach. eTOD planning seeks to promote development without the displacement of existing residents and achieve community-focused fordable housing, local economic development, and environmental sustainability. It can be a driver for more vibrant, prosperous, and resilient neighborhoods that put people of color and lower- and moderate-income residents at the center. A vital part of this plan will be a community engagement and ownership process that incorporates and appreciates the vision of residents and stakeholders from the surrounding neighborhoods throughout the development of the plan.

plan, and they have brought together a strong and diverse team, including experienced planning and

December Public Virtual Community Meetings

Join us for a virtual community meeting on
Tuesday, December 8 (6-7:30 p.m.) or
Wednesday, December 9 (1:30-3 p.m.)
We'll be sharing updates on the project and discussing ways you can get involved in 2021, including future community meetings that discuss the TSD Plan.

Find out more about this meeting and how to join by visiting **Transitchicago.com/RLE/whats-new**

To learn more about the TSD plan, visit **Transitchicago.com/RLE/TSD**

RLE Progresses on Environmental Studies and Preliminary Engineering

The CTA continues to advance environmental studies and prepare preliminary engineering documents to complete the Final Environmental Impact Statement (EIS). Since announcing the project's Preferred Alignment, an opportunity has presented itself to potentially relocate the proposed 130th station from the north side of the street – near the Metropolitan Water Reclamation District (MWRD) – to the south side of 130th Street adjacent to Altgeld Gardens.

As a result, a Supplemental Environmental Assessment is underway that will focus on investigating the impacts

access, and other topics. The CTA has already discussed this change with several groups representing residents in the immediate area and has received positive feedback as the new station location would position Red Line riders closer to homes, schools and recreational opportunities and farther away from the industrial land uses, A welcomes additional input on the 130th station location change in upcoming community meetings.

The Red Line Extension will provide many benefits, including:

- **Equity**
- **Connectivity and access**
- **Economic opportunity**
- **Frequent rail service**
- **Sustainable transportation**

Red Line Extension Video and Facebook Page!

Check out the CTA's video about the Red Line Extension Project and our commitment to improve mobility and access to transit by visiting **tiny.cc/RLEvid**! Remember to share your thoughts and follow the project's Facebook page at **facebook.com/CTARedExt** for timely updates and announcements. We are #RLEReady!

About the Red Line Extension Project

The CTA is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street. Each new station would include Park & Ride facilities and bus connections. In 2018, CTA selected the Preferred Alignment as shown in the map.

Red Line Extension Preferred Alignment

Questions? Would you like to be added to our list for future Red Line Extension updates? Contact us at RedExtension@transitchicago.com or at

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

www.facebook.com/CTARedExt

Transitchicago.com/RLE/

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Noticiero de otoño 2020

Guiando el desarrollo futuro por la expansión de la Línea Roja por medio del Plan de Desarrollo de Apoyo al Tránsito

CTA está comenzando el desarrollo de un Plan de Apoyo al Tránsito (TSD), en asociación con el Departamento de Planeamiento y Desarrollo (DPD). El propósito del Plan TSD es incorporar la visión de la comunidad de desarrollo futuro en el corredor RLE. T para permitir el desarrollo de uso mixto y aumentar la vitalidad económica, conectividad multimodal y el ambiente peatonal. El plan TSD utilizará una estrategia de planeamiento TOD equitativa (eTOD). Planeamiento eTOD busca promover el desarrollo sin desplazar a los residentes existentes y lograr

vivienda económica, desarrollo económico local y sostenibilidad ambiental. Puede ser un impulso para vecindarios más vibrantes, prósperos y resistentes que colocan a las personas de color y residentes de ingresos bajos y moderados en el centro. Una parte vital de este plan será un proceso de participación comunitaria que incorpora y aprecia la visión de los residentes y miembros de los vecindarios adyacentes durante el desarrollo del plan.

La empresa Solomon Cordwell Buenz está dirigiendo el plan y han formado un equipo fuerte y diverso, incluyendo empresas experimentadas de planeamiento y arquitectura y varias Empresas en Desventaja (DBEs).

¡Reunión comunitaria pública virtual en diciembre!

¡Acompáñenos para una reunión comunitaria virtual el martes, 8 de diciembre (6-7:30 p.m.) y miércoles, 9 de diciembre (1:30-3 p.m.)! Estaremos compartiendo actualizaciones sobre el proyecto y discutiendo maneras en las que se puede involucrar en 2021, incluyendo futuras reuniones comunitarias que discutirán el Plan TSD.

Lea más acerca de esta reunión y cómo unirse visitando a **Transitchicago.com/RLE/whats-new**

Para aprender más acerca del plan TSD, visite: **Transitchicago.com/RLE/TSD**

RLE avanza en los estudios ambientales e ingeniería preliminar

CTA sigue avanzando en los estudios ambientales y preparando los documentos preliminares de ingeniería para completar la Última Declaración de Impacto Ambiental (EIS). Desde anunciar la Alineación Preferida del proyecto, se ha presentado una oportunidad para potencialmente mover la estación propuesta en 130th Street desde el lado norte de 130th Street – cerca de Metropolitan Water Reclamation District (MWRD) – al lado sur de 130th Street adyacente a Altgeld Gardens.

Como resultado, una Evaluación Ambiental Suplementaria está siendo realizada que se enfocará en investigar los impactos de este potencial cambio al proyecto. Estudios están siendo completados sobre el ruido y la A ya ha discutido este cambio con varios grupos representando a los residentes en el área inmediata y han recibido comentarios positivos porque el nuevo sitio de la estación posicionaría a los viajeros de la Línea Roja más cerca de los hogares, escuelas y oportunidades

MWRD. CTA aprecia las opiniones adicionales sobre el cambio de la ubicación de la estación 130th durante las próximas reuniones comunitarias.

Beneficios de la expansión de la Línea Roja

Equidad

Conectividad y acceso

Oportunidad económica

Servicio ferroviario frecuente

Transporte sostenible

¡Página de Facebook y video de la expansión de la Línea Roja!
¡Vea el video de CTA acerca del Proyecto de Expansión de la Línea Roja y nuestro compromiso a mejorar la movilidad y acceso al tránsito visitando **tiny.cc/RLEvid**! Recuerde de compartir sus opiniones y seguir la página de Facebook del proyecto en **facebook.com/CTARedExt** para actualizaciones del proyecto y anuncios. ¡Estamos listos para RLE!

Resumen del proyecto de expansión de la Línea Roja

CTA está proponiendo extender la Línea Roja desde la terminal existente en 95th/Dan Ryan a 130th Street, sujeto a la disponibilidad de fondos. La extensión propuesta de 5.6 millas incluiría cuatro estaciones nuevas cerca de 103rd Street, 111th Street, Michigan Avenue y 130th Street. Cada estación nueva incluiría instalaciones de estacionamiento y autobús. En 2018, CTA eligió la Alineación Preferida ilustrada en el mapa.

Gráfica de alineación preferida de la expansión de la Línea Roja

Información de contacto

¿Preguntas? Quisiera ser agregado/a a nuestra lista para futuras actualizaciones de la expansión de la Línea Roja? Contáctenos en: **RedExtension@transitchicago.com** o en

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

www.facebook.com/CTARedExt

Transitchicago.com/RLE/

Lowest COVID-19 positivity rate in weeks, but Pritzker and Ezike worry about holiday 'super-spreader events'

BY RACHEL HINTON, POLITICAL REPORTER
rhinton@suntimes.com | @rrhinton

State public health officials reported 8,322 new confirmed and probable cases of COVID-19 Monday as well as 47 additional deaths.

As of Sunday night, 6,171 people with the virus were reported to be in the hospital, 1,206 patients were in intensive care units, and 635 patients with COVID-19 were on ventilators.

The 8,322-daily caseload, while still higher than in previous months, was the lowest since Nov. 4 and only the seventh time this month that the daily figure was below 10,000.

And the latest cases were detected among almost 91,562 tests, lowering the statewide average testing positivity rate to 10.9%, the lowest it's been since Nov. 8.

As part of the state's tier three resurgence mitigations, Gov. J.B. Pritzker asked people who work in office settings to work from home if possible, and he followed his own guidance Monday, allowing his employees to work from home and appearing virtually for his daily briefing on the virus.

Pritzker said he is "concerned" people aren't following the mitigations he put in place last week and worried that could lead to an uptick in coronavirus cases after the Thanksgiving holiday in Illinois, which is already seeing rising numbers of infections, people in intensive care units and on ventilators.

Dr. Ngozi Ezike said it wasn't too late for state residents to change their minds about their plans.

"Thanksgiving hasn't happened yet, people can still change their plans and change the outcome," Ezike, the head of the state's public health department, said. "We don't have to have super-spreader events at homes. ... Please reconsider your plans and see if we can be part of the solution to decrease infections, instead of part of the plan to increase them."

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Red Line Extension Virtual Community Meetings:
Tuesday, December 8 (6:00 p.m. - 7:30 p.m.) and
Wednesday, December 9 (1:30 p.m. - 3:00 p.m.)

The CTA is hosting virtual community meetings to share updates on the Red Line Extension (RLE) project and to introduce the RLE Transit-Supportive Development (TSD) Plan. The TSD Plan will incorporate the community's vision for future development along the RLE corridor. It will also identify methods and resources needed to enable mixed-use development and enhance economic vitality, multimodal connectivity and the pedestrian environment. For more information about the TSD Plan, please visit **www.transitchicago.com/RLE/TSD.**

A vital part of this plan will be a community engagement and ownership process that incorporates and appreciates the vision of residents and stakeholders from the surrounding neighborhoods throughout the development of the plan.

Join us to learn more about the RLE project and the TSD Plan. Community members are invited to ask questions and provide their feedback to CTA, while also learning about ongoing opportunities to stay involved. Due to COVID-19 restrictions, this community meeting will be conducted virtually on Zoom.

To join online, visit: tiny.cc/CTARLEMeeting
To join by phone, dial: 1-312-626-6799; Webinar ID: 856 0888 2260
You can also watch live on Facebook at **www.Facebook.com/CTARedExt.**

Presentation audio available in Spanish if joining through Zoom. Closed captioning and sign language interpretation also available for the hearing impaired. *

The same information will be presented at both meetings, so please attend the meeting that works best for your schedule! Afterwards, the meeting will be recorded and posted online at **www.transitchicago.com/RLE/whats-new**.

For questions about the RLE project and/or the TSD Plan, please contact the project team at **RedExtension@transitchicago.com**.

Do you require assistance?
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Granderson and Mariano's Give Away One Thousand Bags of Food

By J. Coyden Palmer

If you were out shopping last Sunday at the Mariano's in Bronzeville, your eyes were not deceiving you. That was former Major League Baseball player and Chicago native Curtis Granderson handing out free food.

Granderson was at Mariano's as part of "Grand Giving," a partnership between the grocery store chain and Granderson's charity, "Grand Kids." Granderson said his organization and Mariano's handed out more than a thousand bags of food. He explained during these chaotic times, we must all remember those who are in the greatest need of basic necessities in life, like food.

"As everything continues to shut down, get closed, you still stay hungry," Granderson said. "That's something that doesn't go away."

According to Feeding America's Map the Meal Gap Study, one in seven people in Cook County will experience food insecurity this year. Food insecurity varies greatly across the county. In some communities, more than half of all residents are food insecure. Food insecurity is usually episodic and often cyclical.

Many food insecure households do not qualify for federal nutrition assistance programs. Making tradeoff decisions between paying for food and other basic needs such as medical bills and housing is also common, according to those who feed the hungry,

Granderson said we can all do something to help fight hunger in Chicago. He spoke of a program people can donate to that leads to actually putting food on people's tables.

"Come to any Mariano's location when you're getting a chance to checkout. They say, 'Hey, would you like to donate a $1, $5, $10, or any amount?' Those proceeds are going to Grand Giving which is then going to help the Chicago Greater Food Depository," Granderson said.

During the pandemic, officials say food requests from families are surging, just as the virus is in Chicago. Kelli O'Connell, CEO of the Lakeview Food Pantry, said there has been a 45 percent increase from this time last year on food requests. She noted that amounts to roughly 2,000 people a week her food pantry is feeding. She said there are a wide-range of people using the pantry but one demographic that is really concerning is that of those seeking her service for the first time.

"We have a lot of people who have lost their jobs and have never been in this situation before," O'Connell said. "They are understandably scared and uncertain about the future. Knowing they will have access to food helps to take away some of the anxiety."

And it's not just those who are unemployed who are struggling. Many people who are employed are also struggling, according to Lee Hodges Jr., who was at the event at Mariano's on Sunday.

"At my job they are cutting back hours big time," he began. "That is putting a dent in my wallet. And the reality is you have to keep a roof over your head, clothes on your back and food on your table. So, this giveaway for me is providing me with a lifeline."

CHICAGO NATIVE AND former MLB player Curtis Granderson teamed up with Mariano's on Nov. 15 to give away 1000 bags of food at the Mariano's store in Bronzeville. (photo courtesy of Mariano's)

DISTORTIONS, DISTRACTIONS AND . . .

(Continued from page 6)

Joe Biden is about as moderate as they come. He has not yet said that he supports "Medicare for all," but he supports protections for those with pre-existing conditions, just like 70 percent of all Americans do.

VP-elect Harris has been so frequently mischaracterized that refuting baseless claims is futile. Here is what we know – she is a savvy attorney who has increasing responsibility in the Democratic Party. She brings enthusiasm and energy (not to mention diversity) to the ticket. The attempts to disparage her are at best mean-spirited and anti-Black (attack her on the issues, don't call her a "monster").

Warnock has described Loeffler's attacks on him as "division and distraction." I might add "delusional" to the alliteration. Extracting a passage from a sermon in which Warnock reminded us that God comes first, Loeffler attempted to spin his sermon into an attack on the military. The Bible verse Warnock was quoting, Matthew 6:24, reminds us that God comes first and should gain our allegiance above money or the military. This is basic Christian doctrine. Many of us believe in the omnipotence of God. Warnock did not attack the military; he asserted that our primary obligation is to God.

But words like "socialist" and "left-wing radical" are inflammatory terms, even if those who use them don't know quite what they mean. If feeding the hungry is socialist, then so was Jesus. If clothing the naked is socialist, so is our Lord. If healing the ill is a socialist initiative, then, of course, Raphael Warnock seems like a socialist to the woman who is worth at least $520 million and can afford all the health care she needs. Warnock advocates for expanding the Affordable Care Act, a move anathema to conservatives who want to maximize the profit they can extract from sick people.

Reverend Raphael Warnock, like Dr. Martin Luther King, Jr., is a Morehouse man. There is an adage – you can always tell a Morehouse man, but you can't tell him much. Warnock would like us to tell him that we have his back in a pivotal race that may determine how effective President-elect Biden can be. Ignore the racist rhetoric and check out this powerful preacher and civic leader.

Dr. Julianne Malveaux is an economist and author.

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During an unusual school year, new avenues of support and funding are emerging. Leveraging these resources can help educators continue their mission of preparing young people to confront the challenges of a rapidly changing world.

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HIV...

Continued from page 2

new approaches that will address health disparities in priority populations – Black, Latinx, and low-income Chicagoans – including HIV and sexually transmitted infections (STI). Among all people in Chicago living with HIV in 2019, 66 percent accessed care and 42 percent were retained in medical care. Forty-nine percent of people living with HIV in Chicago achieved viral suppression in 2019, a slight decrease when compared to 2018 data (52%). HIV new diagnosis data has been calculated using a methodology that aligns with the National HIV/AIDS Strategy (NHAS).

This year proved quite a challenge under the COVID-19 pandemic, as such the CDPH increased funding to support the HIV Resource Coordination Hub, which is a one-of-a-kind program that is a single source of information, referrals, and linkages for persons living with HIV and vulnerable to HIV who are in need; expanded emergency financial assistance, providing more than $600,000 to people living with and vulnerable to HIV, which included funds to support food/basic needs, utilities, internet/cell phone, medical expenses, and rent/mortgage; launched a new housing project – Hotel to Home – for people living with HIV who are experiencing homelessness.

SIDA...

Viene de la página 3

de Chicago que vivió con VIH en el 2019, 66 por ciento tuvieron acceso a cuidado y 42 por ciento fueron retenidos en cuidado médico. Cuarenta y nueve por ciento de la gente que vive con VIH en Chicago logró la supresión viral en el 2019, una ligera disminución comparada con los datos del 2018 (52%) Los datos de nuevos diagnósticos del VIH han sido calculados utilizando una metodología alineada con la Estrategia Nacional de VIH/SIDA (NHAS).

Este año resultó un verdadero reto bajo la pandemia del COVID-19 y como tal, el CDPH aumentó los fondos para apoyar el Centro de Coordinación de Recursos sobre el VIH, que es un programa único en su clase, y fuente única de información, referencias y enlaces para personas que viven con el VIH y son vulnerables a él y que lo necesitan; se amplió la asistencia financiera de emergencias, brindando más de $600,000 a personas que viven y son vulnerables al VIH, lo que incluye fondos para apoyar las necesidades básicas/de alimentos, utilidades, internet/teléfonos celulares, gastos médicos y renta/hipoteca y lanzaron un nuevo proyecto de vivienda – Hotel to Home – para personas que viven con el VIH y experimentan desamparo.

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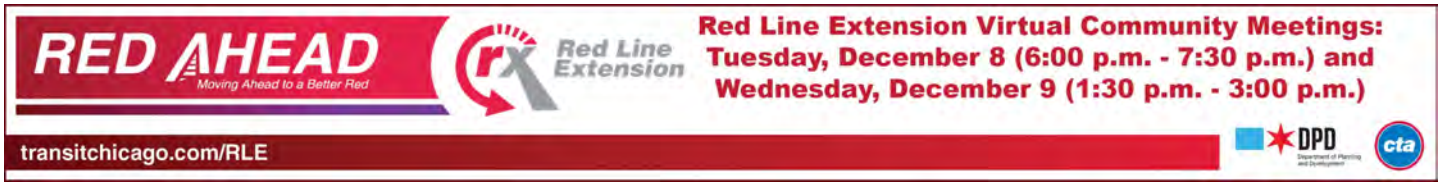

Digital Leaderboard Ad

Digital Sideboard Ad

RED AHEAD

Red Line Extension

Hello Stakeholder,

You are receiving this email because CTA has contacted you in the past about your property near the proposed Red Line Extension (RLE) project area. The CTA will be hosting a virtual community meeting to share general updates about the RLE project and to introduce the new RLE Transit-Supportive Development (TSD) plan. Community members are invited to ask questions and provide their feedback to CTA, while also learning about ongoing opportunities to stay involved.

The virtual community meeting will have limited time to address land acquisition topics and questions about individual properties will not be addressed at the community meeting for privacy reasons. If you have questions about your property, please email us (**redextension@transitchicago.com**) with your address, name and contact information and a property specialist will . You may also contact CTA's Customer Service hotline at: 1-888-968-7282, Hearing Impaired/TTY 1-888-282-8891, or 711 (relay).

Thank you,

Red Line Extension Project Team

Hola Interesado,

Usted está recibiendo este correo electrónico porque CTA le ha contactado en el pasado acerca de su propiedad cerca de la Extensión propuesta de la Línea Roja (RLE). La CTA estará patrocinando una reunión comunitaria virtual para compartir actualizaciones generales acerca del proyecto RLE y presentar el plan de Desarrollo de Apoyo al Tránsito RLE (TSD). Los miembros de la comunidad son invitados a hacer preguntas y proporcionar sus opiniones a CTA, mientras también aprenden de oportunidades en curso para mantenerse involucrado.

La reunión comunitaria virtual tendrá tiempo limitado para discutir temas temas de adquisición de terreno y preguntas acerca de propiedades individuales no serán discutidas en la reunión comunitaria por razones de privacidad. Si tiene preguntas acerca de su propiedad, favor de mandar un correo electrónico a **redextension@transitchicago.com** con su dirección, nombre e información de contacto y un especialista de propiedad le contactará individualmente para hablar de También puede llamar Servicio a Clientes de la CTA: 1-888-YOUR-CTA (1-888-968-7282) TTY: 1-888-CTA-TTY1.

Gracias,

El Equipo del Proyecto de la Expansión de la Línea Roja

Find out more about this meeting by visiting transitchicago.com/RLE

RED AHEAD

Red Line Extension

December Public Virtual Community Meeting!

Tuesday, December 8 (6 p.m. - 7:30 p.m.)
and Wednesday, December 9 (1:30 p.m. - 3 p.m.)

To join online, visit tiny.cc/CTARLEMeeting
To join by phone, dial: 1-312-626-6799;
Webinar ID: 856 0888 2260

You may also contact CTA's customer Service hotline at: 1-888-968-7282, hearing Impaired/TTY 1-888-282-8891, or 711 (relay)

Presentation audio available in Spanish if joining online through Zoom.

¡Reunión comunitaria pública virtual en diciembre!

El martes, 8 de diciembre (6 p.m. - 7:30 p.m.) y
el miércoles, 9 de diciembre (1:30 p.m. - 3 p.m.)

Para asistir en línea, visite: tiny.cc/CTARLEMeeting
Para asistir por teléfono, marque: 1-312-626-6799;
Webinar ID: 856 0888 2260

Audio de la presentación disponible en español solamente con asistencia por Zoom.

cta

DPD
Department of Planning and Development

17 N. State St
Suite 850
Chicago, IL 60602

Red Line Extension Virtual Community Meetings

The CTA is hosting **virtual community meetings** to share updates **on the Red Line Extension (RLE)** project and to introduce the RLE Transit-Supportive Development (TSD) Plan on:

Tuesday, December 8, 2020 (6pm - 7:30pm) and **Wednesday, December 9 (1:30 pm - 3pm)**.

A vital part of the TSD Plan will will be a community engagement and ownership process that incorporates and appreciates the vision of residents and stakeholders from the surrounding neighborhoods along the RLE corridor throughout the development of the plan. It will also identify methods and resources needed to enable mixed-use development and enhance economic vitality, multimodal connectivity and the pedestrian environment. For more information about the TSD Plan, please visit **transitchicago.com/RLE/TSD**.

Join us to learn more about the RLE project and the TSD Plan. Community members are invited to ask questions and provide their feedback to CTA, while also learning about ongoing opportunities to stay involved. Due to COVID-19 restrictions, this community meeting will be conducted virtually on Zoom.

- **TO JOIN ONLINE, VISIT: tiny.cc/CTARLEMeeting**

Note: *This will provide a direct link to the Zoom meetings. Presentation audio will be available in Spanish if joining through Zoom. Closed captioning and sign language interpretation will also be available for the hearing impaired.*

- **TO JOIN BY PHONE, DIAL: 1-312-626-6799; Webinar ID: 856 0888 2260**
- **TO WATCH ON FACEBOOK LIVE, VISIT: Facebook.com/CTARedExt**

The same information will be presented at both meetings, so please attend the meeting that works best for your schedule! Afterwards, the meeting will be recorded and posted online at **transitchicago.com/RLE/whats-new**.

For questions about the RLE project and/or the TSD Plan, please contact the project team at RedExtension@transitchicago.com.

DO YOU REQUIRE ASSISTANCE?
Sign language interpretation and captioning will be available during the virtual presentation. If you require other reasonable accommodations to participate, please contact **Amy Serpe, ADA Compliance Programs Manager, by December 2 at 312-350-2301 or aserpe@transitchicago.com.**

transitchicago.com
Customer Information: 1-888-YOUR-CTA (1-888-968-7282); CTA TTY: 1-888-CTA-TTY1 (1-888-282-8891)
Transit Information: 312-836-7000

Remove December 10, 2020
20jq001_1h #78

About the Transit-Supportive Development Plan

Overview

The RLE Transit-Supportive Development (TSD) Plan is a Chicago Transit Authority (CTA) led project in partnership with the City of Chicago's Department of Planning and Development and the Cook County Land Bank Authority. The Plan will act as a guide for future development in communities located near the RLE project area. Your participation and feedback as a community member are important to ensure that the voices of the community are heard and included in the plan.

We encourage you to **register for the community station-area meetings** in January & February 2021 and explore the website to provide feedback on the plan's development. The website will be updated throughout the plan's development over the next year, so be sure to visit again! Better yet, **create an account** to get updates about future engagement opportunities.

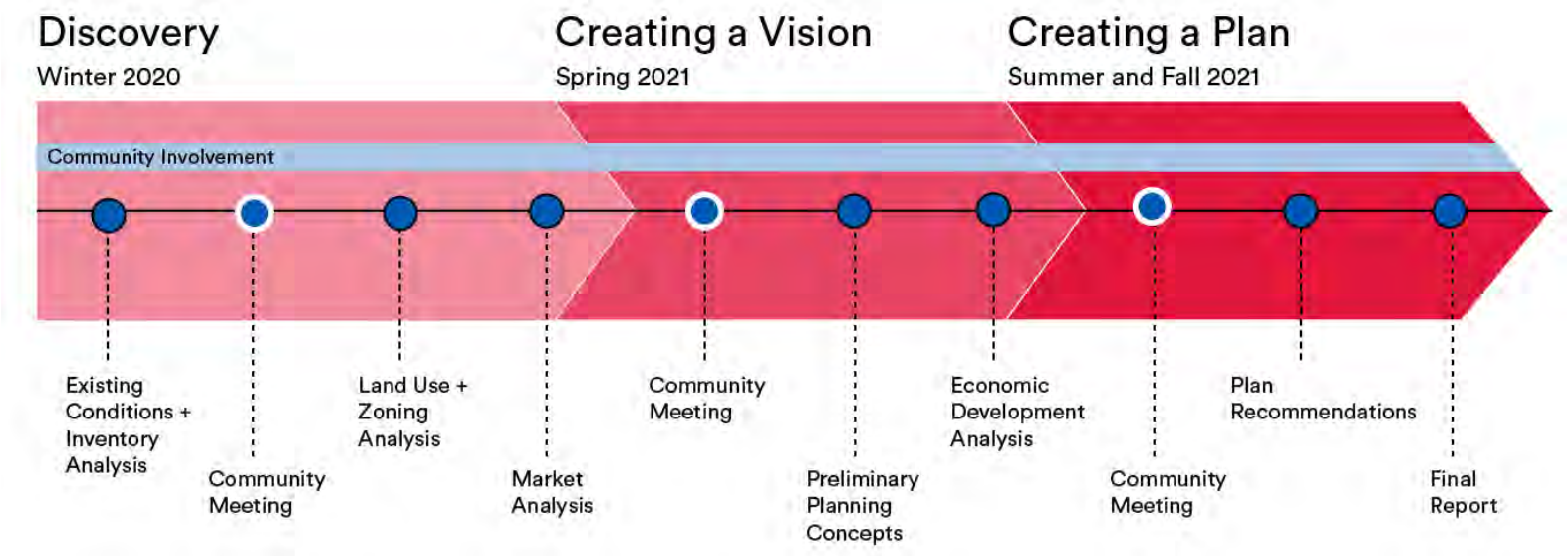

TSD Plan Timeline

At the heart of the TSD plan will be the community's vision for future development along the RLE corridor. The plan will identify the approach and resources needed to increase economic development and mobility in the project area. The project team is committed to a collaborative community engagement process that focuses on positive local development and does not result in displacement.

Information collected during the TSD plan will help the CTA secure funding for the RLE project through the federal New Starts program, which will help move the project forward into the next phase closer to implementation. More specifically, the plan will be used to provide information on future plans for the use of land and economic development

following the completion of project work to extend the Red Line.

Please visit **www.transitchicago.com/RLE/TSD** to learn more!

+

Create an account to stay involved! REGISTER

Frequently Asked Questions

- Why is a Transit-Supportive Development (TSD) plan being created for the Red Line Extension Project?
- How is Transit-Supportive Development (TSD) different than Transit-Oriented Development (TOD)?
- Will the Red Line Extension Project include economic development near the stations?
- How can the community contribute to the Red Line Extension TSD plan?
- What is Equitable Transit Oriented Development (eTOD) planning?

Quick Poll

What do you think of this website?

- I like it!
- It's okay, but it could use some work.
- It's not my favorite.

View Results

Submit

Transit-Supportive Development Plan

Conceptual rendering of area redevelopment near 103rd Street station.

Transit-Supportive Development Plan Overview

The Red Line Extension is about much more than providing new access to transit – it's also about promoting opportunity and development for communities and residents along the extension.

The RLE Transit-Supportive Development (TSD) Plan is a proactive effort to create a guide for future development in communities located near the RLE project area. The TSD Plan is being led by the CTA and in partnership with the City of Chicago's Department of Planning and Development and the Cook County Land Bank Authority. Funding for this initiative comes from a grant the CTA received from the

Federal Transit Administration's (FTA) Pilot Program for Transit-Oriented Development (TOD) Planning. This program provides funding to FTA grantees to integrate land use and transportation planning with a new transit capital investment.

At the heart of the TSD Plan will be the community's vision for future development along the RLE corridor. This Plan will identify methods and resources needed to enable mixed-use development and enhance economic vitality, multimodal connectivity and the pedestrian environment.

Importantly, the TSD Plan will utilize an equitable Transit Oriented Development (eTOD) planning approach. In short, eTOD planning seeks to promote development without the displacement of existing residents and achieve community-focused benefits, such as affordable housing, local economic development and environmental sustainability. It can be a driver for more vibrant, prosperous, and resilient neighborhoods that put people of color and lower- and moderate-income residents at the center. In order to achieve this, a vital part of this plan will be a community engagement and ownership process that incorporates and appreciates the vision of residents and stakeholders from the surrounding neighborhoods throughout the development of the plan.

Information collected during the TSD Plan will help the CTA secure funding for the RLE project through the federal New Starts program. More specifically, the plan will be used to provide information on future plans for the use of land and economic development criteria following the completion of project work to extend the Red Line.

What will the Transit-Supportive Development Plan entail?

Creation of the TSD Plan will be a one year project that includes the following components: an Existing Conditions Report; an Inventory, Market Analysis, Land Use and Zoning Analysis; an Economic Development Plan; and a Final Report. Community outreach will occur throughout the project.

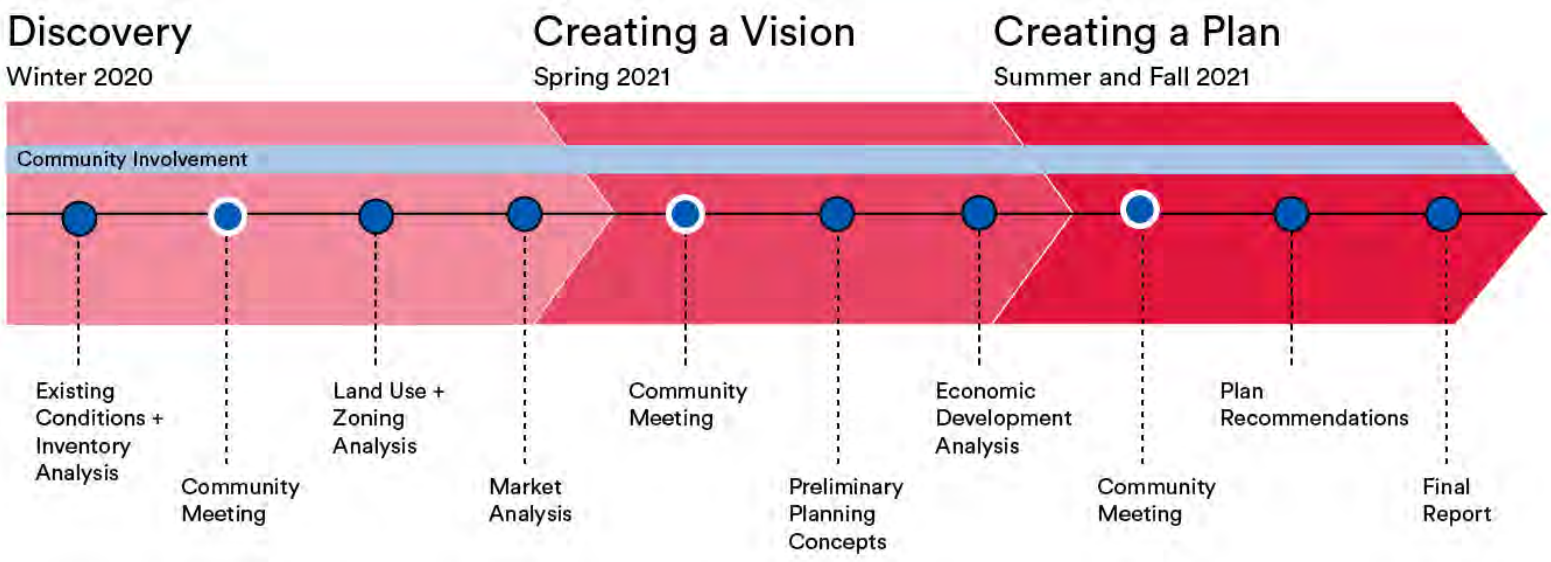

Transit-Supportive Development Plan Frequently Asked Questions

For frequently asked questions about the TSD plan and RLE, visit our FAQ page here.

Community Involvement

The CTA is involving local communities, elected officials and regional stakeholders to share information on the project and gather feedback and input for the plan. Visit this section in the future to learn more about past and upcoming meetings.

RLE Virtual Station Meetings

The CTA is hosting a series of virtual public meetings to discuss project progress and YOUR VISION for the
area around the four proposed stations for the Red Line Extension (RLE) project. Your input as a community
member will help determine the needs and priorities for future development around each station area.

130th Street | Wednesday, January 27 (6:00 p.m. – 7:30 p.m.)
111th Street | Tuesday, February 2 (6:00 p.m. – 7:30 p.m.)
103rd Street | Tuesday, February 9 (6:00 p.m. – 7:30 p.m.)
Michigan Avenue | Tuesday, February 16 (6:00 p.m. – 7:30 p.m.)

Due to COVID-19 restrictions, these meetings will be conducted
virtually via Zoom and broadcasted on Facebook Live.

Registration is required to attend these meetings
Please register at: transitchicago.com/RLE/engage
Attendees will receive information to join via Zoom or telephone

If you require assistance to register, call us at 1-888-968-7282
at least three [3] days before the meeting you plan to attend

Each meeting will be broadcasted simultaneously on Facebook Live at facebook.com/CTARedExt

*** Presentation audio in Spanish, American Sign Language interpretation and captioning will be available at each meeting for those joining online through Zoom only ***

After each meeting, a recording and meeting materials will be posted on this page.

Meeting resources

- View the announcement flyer (.pdf)
- Ver anuncio (.pdf)
- 130th station meeting presentation slides (.pdf)

Meeting 1: Goals, Objectives, and Vision - Winter 2020

The CTA hosted virtual community meetings on Tuesday, December 8, 2020, and Wednesday, December 9, 2020 for updates on the Red Line Extension (RLE) project and an introduction to the new TSD plan. Community members were able to participate in polling activities, provide comments, and ask questions.

New! RLE community engagement website

The CTA also announced its new RLE community engagement website, which can be accessed at transitchicago.com/RLE/engage. Using this new platform, community members can provide feedback, ask questions, and collaborate with others to help shape the TSD plan. A variety of interactive and easy to use activities are provided, such as the ideas wall, the mapping tool, and a short survey.

December 2020 meeting resources

- Meeting recordings
  - 12/8/2020 (English)
  - 12/8/2020 (Español)
  - 12/9/2020 (English)
- Presentation slides (.pdf)

- Announcement flyer (.pdf)
- Anuncio (.pdf)

Who is leading the transit-supportive development plan effort?

The CTA is leading this effort in partnership with the City of Chicago's Department of Planning and Development and the Cook County Land Bank Authority. Solomon Cordwell Buenz was selected as the prime consultant for the TSD Plan. The TSD consultant team also includes six disadvantaged business enterprises (DBEs), comprising 40.11% of the overall contract value.

To receive updates on the Red Line Extension Project and the TSD Plan, please contact us at:

RedExtension@transitchicago.com

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, Illinois 60661-1465

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CTA Red Line Extension Facebook Page Promotion

December 8, 2020 – Virtual Community Meeting Facebook Event

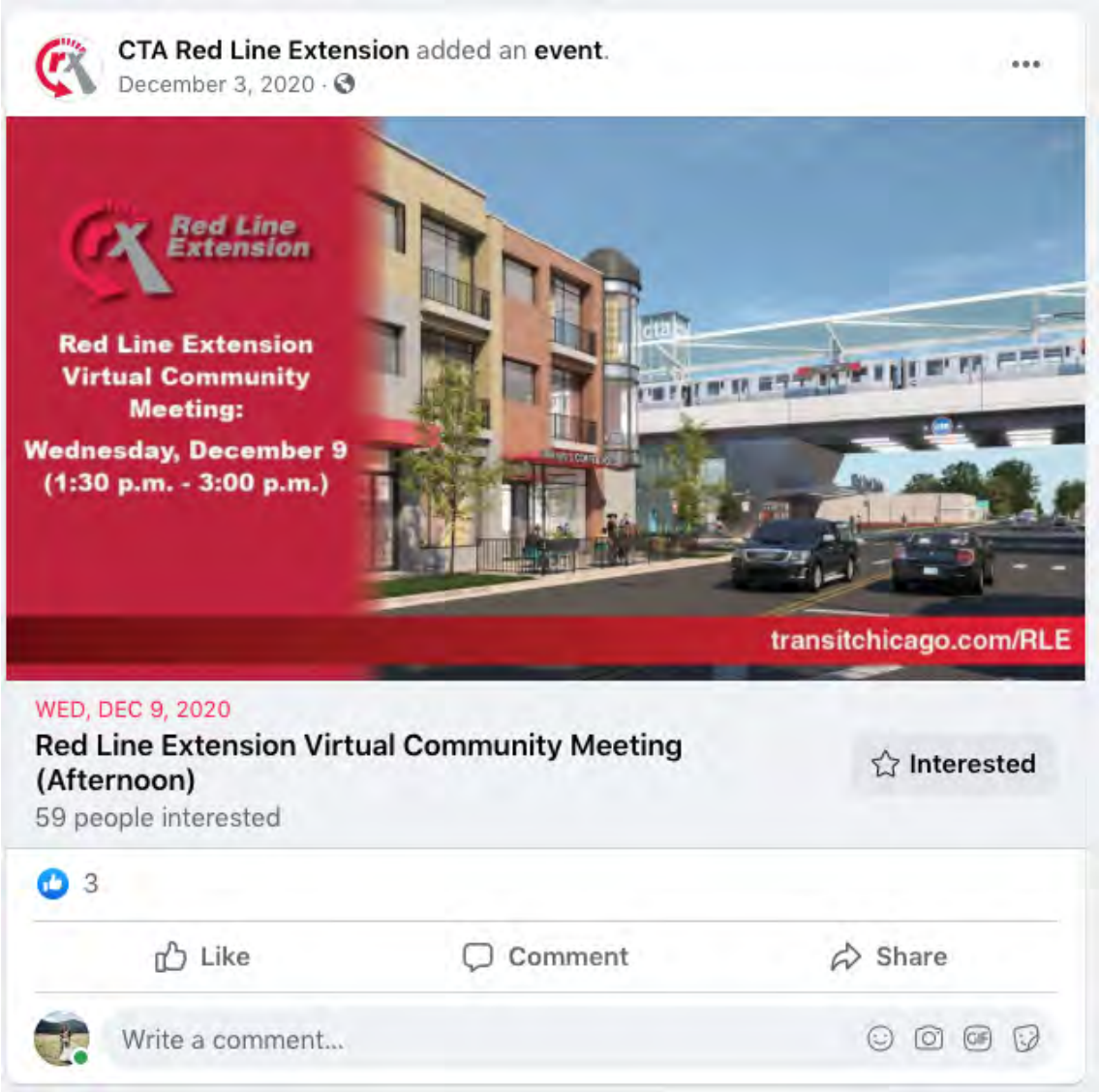

December 9, 2020 – Virtual Community Meeting Facebook Event

CTA Red Line Extension was live.
December 8, 2020 ·

The CTA is hosting virtual community meetings to share updates on the Red Line Extension (RLE) project and to introduce the RLE Transit Supportive Development (TSD) Plan. A vital part of this plan will be a community engagement and ownership process that incorporates and appreciates the vision of residents and stakeholders from the surrounding neighborhoods throughout the development of the plan.
Join us to learn more about the RLE project and the TSD Plan!

12 4 Comments 3 Shares

Like Comment Share

December 8, 2020 – Facebook Live Virtual Community Meeting

CTA Red Line Extension was live.
December 9, 2020

The CTA is hosting virtual community meetings to share updates on the Red Line Extension (RLE) project and to introduce the RLE Transit Supportive Development (TSD) Plan. A vital part of this plan will be a community engagement and ownership process that incorporates and appreciates the vision of residents and stakeholders from the surrounding neighborhoods throughout the development of the plan.
Join us to learn more about the RLE project and the TSD Plan!

6 1 Comment 5 Shares

Like Comment Share

December 9, 2020 – Facebook Live Virtual Community Meeting

RED AHEAD

Red Line Extension

Red Line Extension Virtual Community Meeting
December 2020

Thank you for joining us! The meeting will begin promptly at 6 pm.

This meeting will be recorded and available online after the meeting at www.transitchicago.com/RLE and www.Facebook.com/CTARedExt

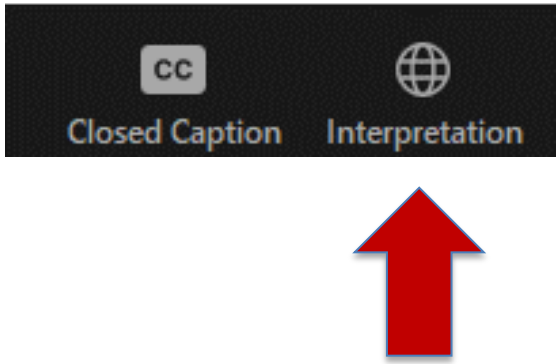

To switch to Spanish Audio, you must join the webinar through Zoom. Look for the interpretation icon in the toolbar.

Audio de la presentación disponible en español solamente con asistencia por Zoom. Busque el icono de interpretación.

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RED AHEAD

Red Line Extension

Red Line Extension

Community Meeting
December 2020

To turn on captioning, click the icon in the Zoom toolbar

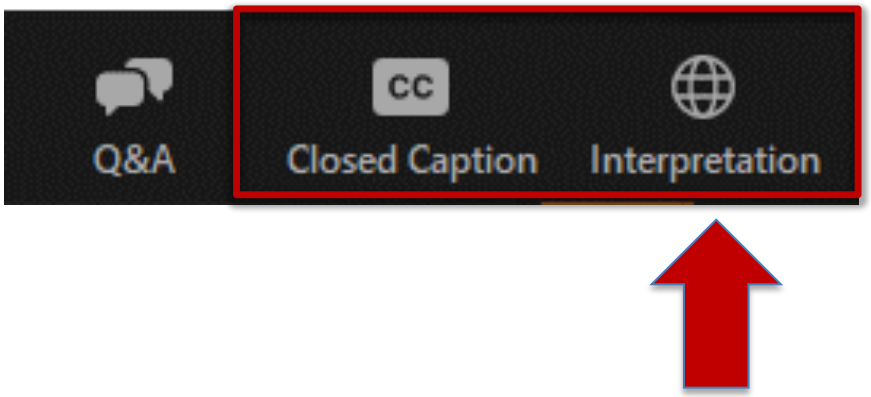

Audio de la presentación disponible en español

1. Busque el icono de interpretación en la barra de webinar de Zoom. Le mostramos el icono en esta diapositiva para ayudar a reconocerlo.
2. Haga clic en el icono y seleccione “Spanish” para escuchar al intérprete en la reunión.

Para escuchar al intérprete en español usted debe ingresar a la reunión a través del webinar de Zoom, no a través de Facebook o por teléfono.

Our Presenters

RED AHEAD

Red Line Extension

Barbara Stubblefield
Red Line Outreach

Lilliane Webb
Red Line Outreach

Marlise Fratinardo
CTA Planning

Sonali Tandon
CTA Planning

Melody Carvajal
Red Line Outreach

Ammar Elmajdoub
CTA Planning

Jasmine Gunn
Department of Planning and Development

Teresa Fourcher
Transit Supportive Development Plan

Mark Payne
Transit Supportive Development Plan

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Agenda

- **Virtual Meeting Format**
- Project Overview and Benefits
- Recent Progress
- Federal Environmental Process
- Community Touchpoints
- Transit Supportive Development (TSD) Plan
- Engagement Website
- Questions & Answers

This meeting will be recorded and available online after the meeting at www.transitchicago.com/RLE and www.Facebook.com/CTARedExt

Michigan & 116th Station Conceptual Rendering

How to Ask a Question

Over Email:

- RedExtension@transitchicago.com

If Joining by Zoom, use Q&A:

- At the bottom of the window, click **Q&A.**
- When you click on Q&A, a window will appear where you can type a question and see others' questions. A response will also be provided in the Q&A.

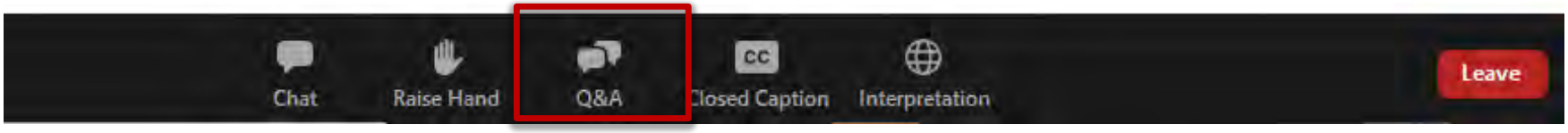

Questions left on Facebook or in the Zoom chat will **NOT** be responded to directly. CTA will view them but if you want an official response, **please use the project email or Q&A function.**

Answers will be posted to www.transitchicago.com/RLE/whats-new by the end of next week.

Agenda

- Virtual Meeting Format
- **Project Overview and Benefits**
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Michigan & 116th Station Conceptual Rendering

Project Overview

RED AHEAD

Red Line Extension

Red Line Extension

- 5.6-mile extension
- Four new stations :
  - 103rd Street (near Eggleston)
  - 111th Street (near Eggleston)
  - Michigan Avenue (near 116th Street), and
  - 130th Street
- Park & Ride and bus connections at each new station
- Elevated tracks from 95th Street to 119th Street, then tracks run along the ground from 119th Street to 130th Street

Red Line Extension Preferred Alignment

Project Benefits

Equity by providing affordable rapid transit to historically underserved communities and improving mobility for transit-dependent residents and people with disabilities.

Connectivity and access to the entire city via the CTA network.

Conceptual rendering of what a Red Line Extension elevated station could look like.

Graphic of CTA's existing rail network along with four new proposed stations

Project Benefits

Conceptual renderings of what the new elevated station could look like.

Economic opportunity through connections to jobs, educational opportunities, housing and other services, as well as economic development on the City's Far South Side.

Frequent rail service will reduce commute times.

Sustainable transportation that helps contribute to improved air quality, reduces greenhouse gas emissions, and saves energy.

Agenda

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Michigan & 116th Station Conceptual Rendering

Recent Progress

RED AHEAD

Red Line Extension

President Dorval R. Carter, Jr. Appointed to lead CTA in 2015

CTA commits $75M for RLE engineering and design work

Consultant team hired to help expand CTA's ability to advance the project

Request Entry into Project Development, a critical step to secure federal funding

2016 2017 2018 2019 2020

Draft Environmental Impact Statement published

Preferred Alignment selected & Public Open House

CTA commits $310M for RLE Preliminary Engineering and Design

Additional Environmental Analysis begins (Supplemental Environmental Assessment)

Design & Engineering Activities

RED AHEAD

Red Line Extension

- Initiated project design and continued inter-agency and railroad coordination.
- Field survey work began along the proposed alignment in the fall of 2019 and will continue through late fall of 2020.
- Includes traffic counts, boundary surveys, noise/vibration measurements, archeological and historical surveying, and traffic observations.

Pictured: Field survey work near the Historic Roseland Pumping Station.

Agenda

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This meeting will be recorded and available online after the meeting at www.transitchicago.com/RLE and www.Facebook.com/CTARedExt

Michigan & 116th Station Conceptual Rendering

130th Station Update

- 130th station proposed for north of 130th Street in 2016
- In 2017, a Chicago Housing Authority (CHA) demolition resulted in a new opportunity to locate the station south of 130th Street

130th Station Feedback

- Prior to pursing the south location, CTA met with several partner agencies and community and resident stakeholder groups for input
- All were supportive of studying the location south of 130th Street

Forest Preserves of Cook County Beaubien Woods

Altgeld Gardens

Carver Military Academy

Environmental Review Process

RED AHEAD

Red Line Extension

Supplemental Environmental Assessment (EA)

- Began in April 2020 to study new south location of the 130th station
- Completing additional data collection and environmental analysis
- Designing concepts and preliminary plans
- Assessing potential impacts and required mitigation measures

Public Hearing to present Supplemental EA

- Anticipated Fall 2021
- 30-day comment period

Final Environmental Impact Statement (EIS) and Record of Decision (ROD)

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130th Station South Location

Traffic and Access Analysis

- 130th Street and Ellis Avenue intersection study
- Internal Altgeld Gardens roadways

Historic and Cultural Resources

- Altgeld Gardens Historic District
- Archaeological Reconnaissance Survey

Public Parks and Recreational Areas

- Beaubien Woods (Forest Preserves of Cook County)

Noise and Vibration

- Detailed analysis with field measurements

Environmental studies will determine the potential impacts and facilitate consideration of measures to mitigate those impacts

Agenda

- Virtual Meeting Format
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- Engagement Website
- Questions & Answers

Michigan & 116th Station Conceptual Rendering

Potential Property Impacts

- Potentially impacted renters and property owners have already been contacted
  - Impacted people can email RedExtension@transitchicago.com with name, address and phone number for individual follow up
  - CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured
  - Information and resources at www.transitchicago.com/RLE/potential-property-displacements/
  - Customer service hotline: 1-888-YOUR-CTA Hearing Impaired/TTY: 1-888-CTATTY1 or 711 (relay)

Brochure for General Acquisition and Relocation Information

Sharing Project Updates

CTA staff sharing information at INVEST South/West kickoff event

An image from the Red Line Extension Project video released in August

An RLE Newsletter

The Red Line Extension Project Facebook page

New Engagement Site

RED AHEAD

Red Line Extension

Home About Engage Contact us

Sign In | Register

Red Line Extension

RLE will bring ***access, equity,*** *and* ***economic opportunity*** *to the Far South Side by* ***connecting*** *people to direct and* ***sustainable*** *rail transit.*

Welcome to CTA's Red Line Extension (RLE) community engagement site!

We're glad you're here. Please use this page to provide feedback, ask questions, and interact with your fellow community members about the ongoing RLE project initiatives!

If you're new to the RLE Project, we encourage you to **click here** to learn more.

At this time, we're currently your seeking input on the following two RLE initiatives:

Transit-Supportive Development Plan

Now through summer 2021, we're developing a Comprehensive Plan to help guide future development around the four new RLE rail stations. The Plan's development will rely on **YOUR** input as a community member to help determine the needs and priorities of the project area.

Not familiar with the plan? **Click here** to learn more. Share your thoughts and ideas on the TSD Plan using any of the feedback options listed below.

Environmental Analysis

At the same time, we're also completing the next phase of the RLE environmental review process, a Supplemental Environmental Assessment (EA). To learn more about the environmental review process and Supplemental EA, **click here**.

You can learn about both of these initiatives during our upcoming **station area meetings in January & February 2021**. Be sure to sign up by clicking on the meeting date links on this page! If you have a comment or question regarding the Supplemental EA, please submit using *only* the **Send Us A Message** or **Ask Us A Question** options below.

Your voice is important, and we look forward to hearing from you!

REGISTER Create an account to stay involved!

Sign up for upcoming meetings!

Jan 27	130th Station Meeting
Feb xx	111th Station Meeting
Feb xx	103rd Station Meeting
Feb xx	Michigan Station Meeting

TSD Plan Timeline

Winter 2020 CURRENT

Discovery

- 1st Community Meeting

Planning for Jobs & Training

- CTA is proactively engaging in how the project will support training and career opportunities

- Currently reviewing a comprehensive written workforce plan

- Planning future workforce outreach events:
  - career readiness
  - trades workshops
  - career information

Pictured: Workers in hard hats

Pictured: Workers preparing drawings

Agenda

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- Engagement Website
- Questions & Answers

This meeting will be recorded and available online after the meeting at www.transitchicago.com/RLE and www.Facebook.com/CTARedExt

Michigan & 116th Station Conceptual Rendering

Transit-Supportive Development

- CTA working collaboratively with:

DPD
Department of Planning and Development

cclba
Cook County Land Bank Authority

- With funding from the Federal Transit Administration (FTA)

Transit-Supportive Development

Transit-Oriented Development

- TOD places housing, businesses, and amenities, close to transit to create walkable communities and reduce reliance on cars.

What is *equitable* Transit-Oriented Development

- Ensures that a more vibrant, prosperous, healthy, and resilient community may be enjoyed by all residents, and in particular, those in disinvested communities.

Transit-Supportive Development

- Broader in scope and geographic area than TOD. Includes developing a vision for the whole project area to encourage development as part of a transit investment.

City of Chicago eTOD Plan

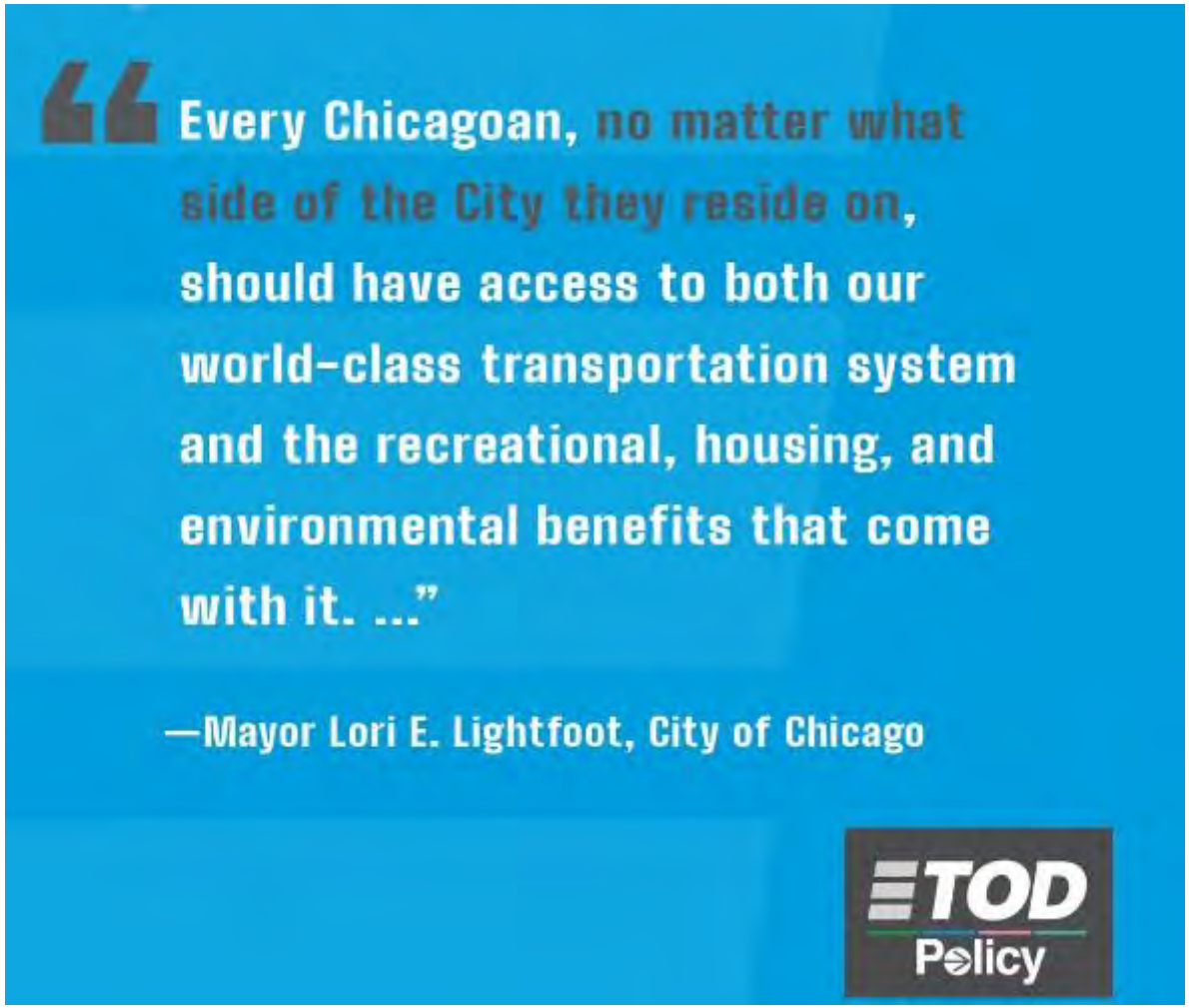

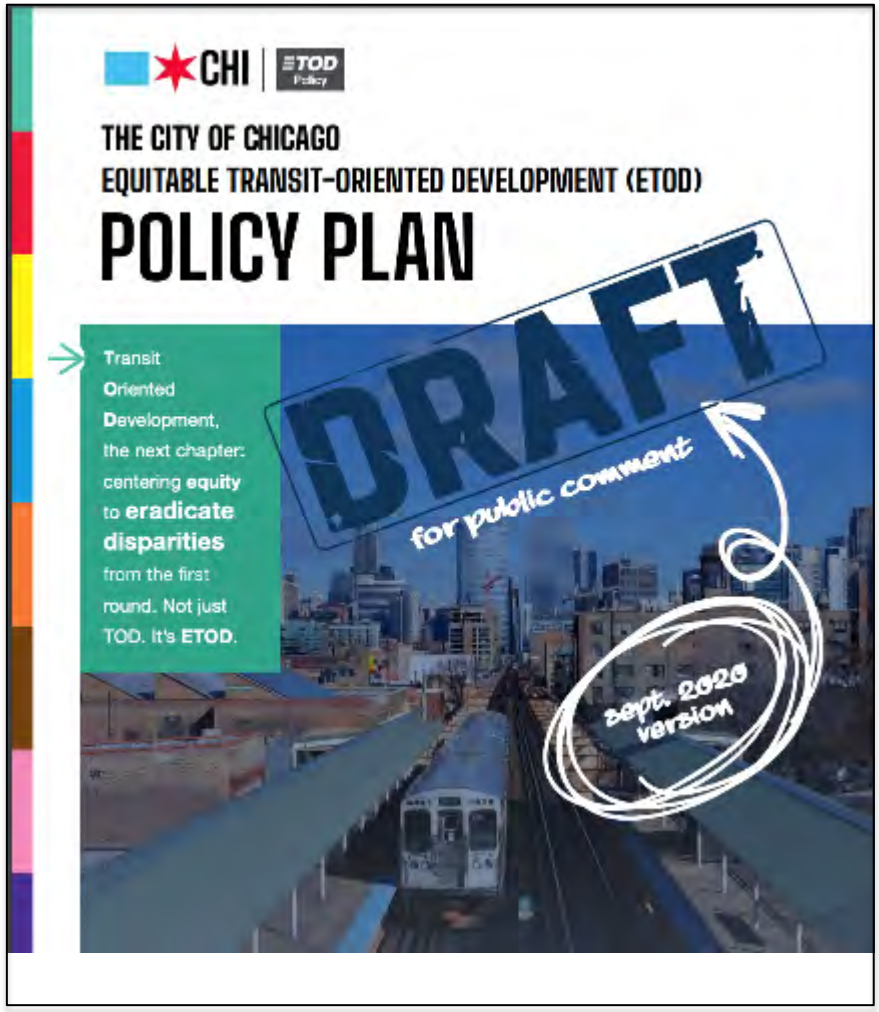

Plan can be found at: chi.gov/etod.

INVEST South/West

RED AHEAD

Red Line Extension

$750 million in public funding over three years, seeking to leverage funding for new investment

Focus on **12 key commercial corridors** in 10 communities on the South and West Sides including the Greater Roseland and Pullman Neighborhoods

ISW supports infrastructure development, improved programming for residents and businesses, and policies that impact each of the community areas surrounding these corridors to create **lasting impact**.

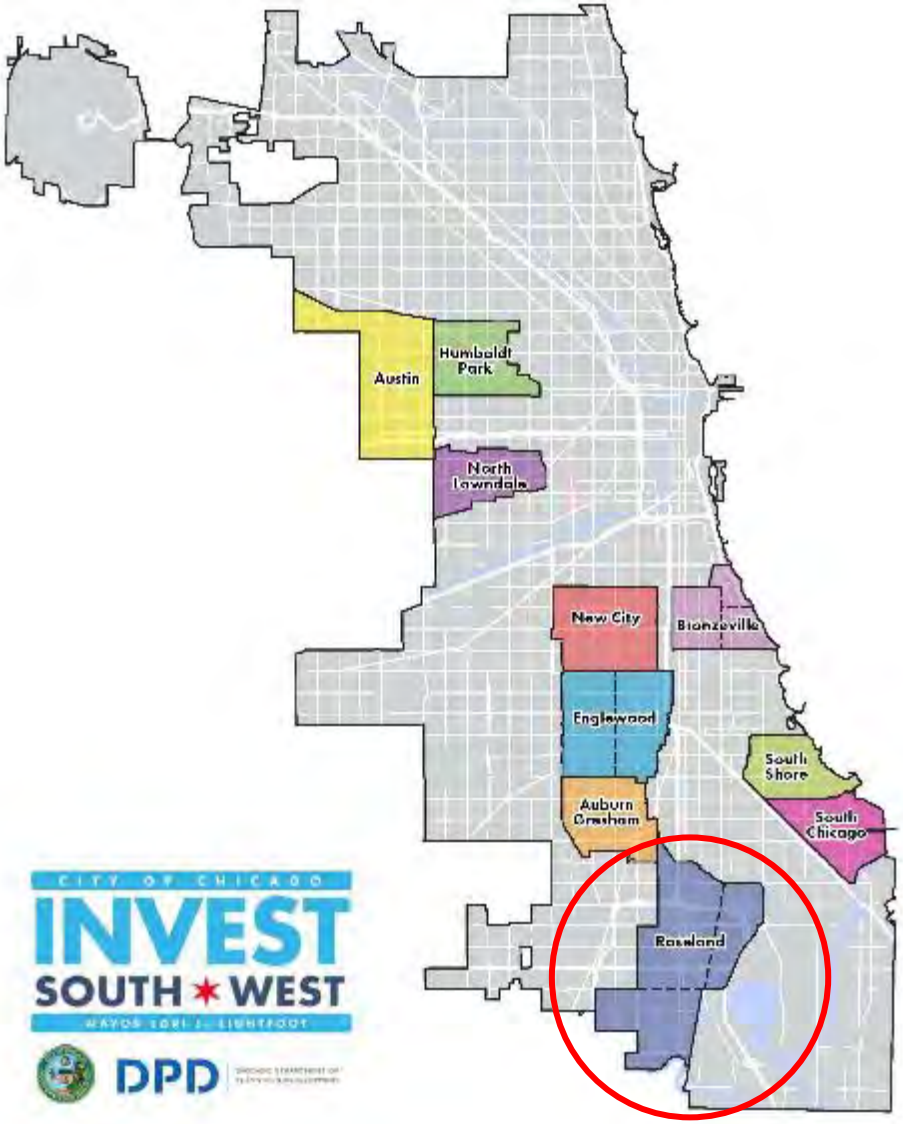

CITY OF CHICAGO
INVEST SOUTH ★ WEST
MAYOR LORI E. LIGHTFOOT

DPD

cta

Current & Upcoming Regional Plans

RED AHEAD

Red Line Extension

RLE Transit-Supportive Development Plan**

INVEST South/West **

Riverdale CA Multimodal Transportation

Roseland LISC Quality-of-Life Planning

Roseland Medical District Planning**

Historic Preservation Study (Michigan Ave)**

Illinois Port District Master Plan

Metra Electric Station Upgrades

South Halsted Bus Corridor Enhancement Project

** **Department of Planning & Development Involvement**

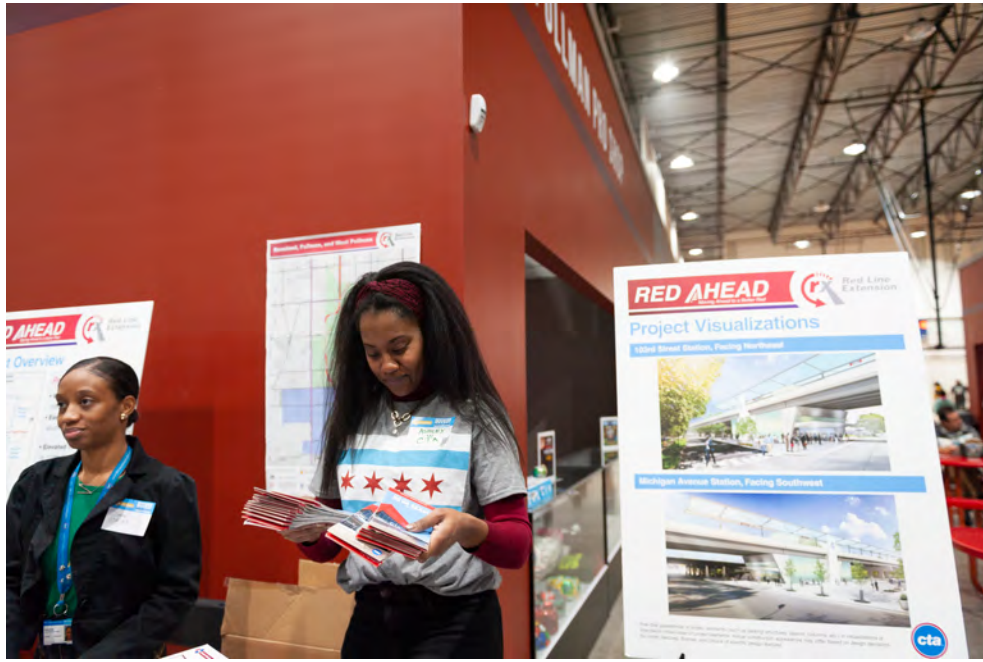

Transit-Supportive Development Plan Mini-Agenda

- Plan's goals and objectives
- Interactive polling questions.
- Four question on strengths, weakness, opportunities and constraints.
- Four questions on housing, commercial, retail, and jobs.
- Introduce the four "station areas"

Transit-Supportive Development

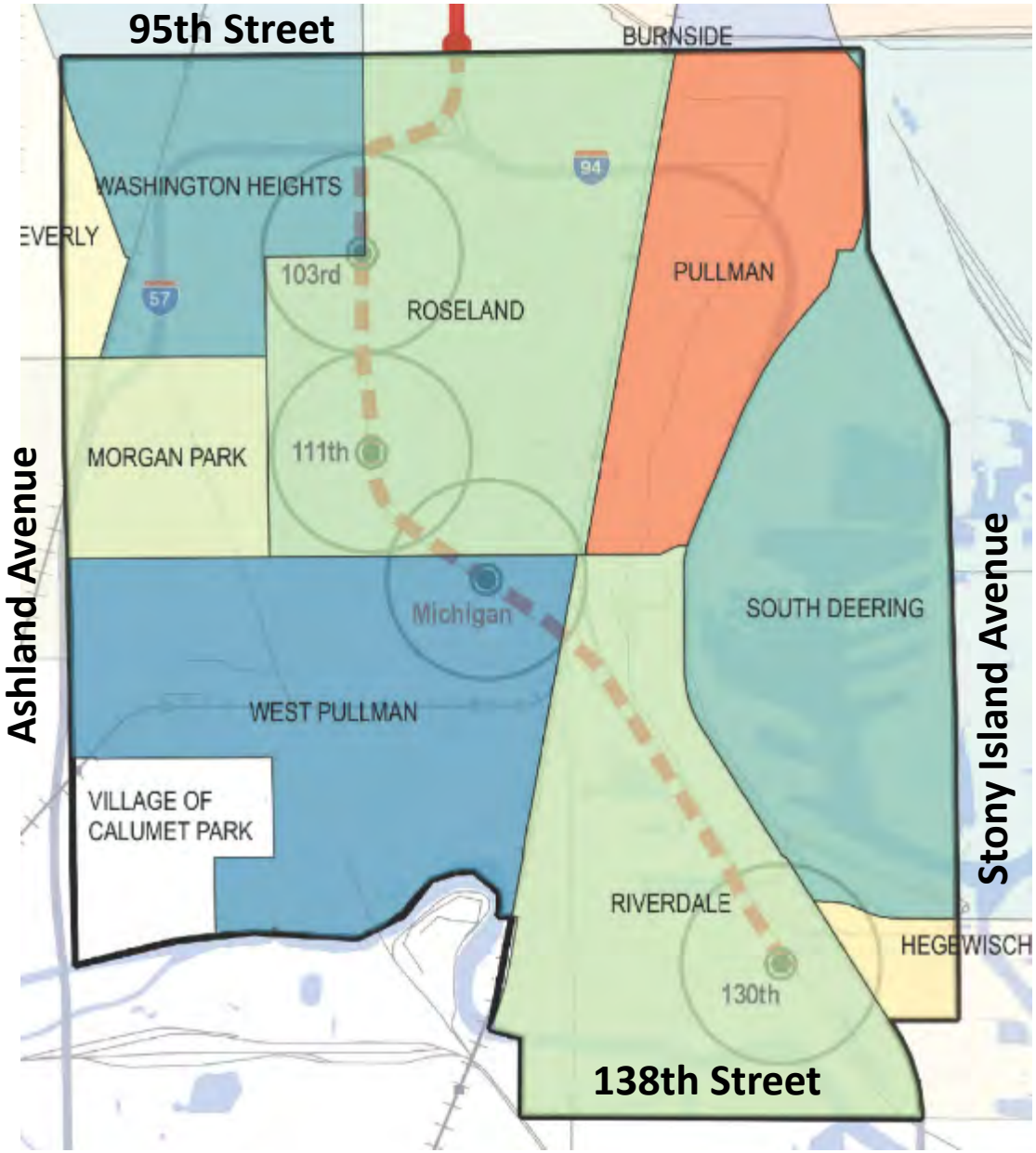

The Plan will identify opportunities to:

- Encourage economic development
- Ensure continued affordability
- Engage private sector investment
- Foster multimodal connectivity and bike/pedestrian access

Transit-Supportive Development

Outcomes of the Plan

- Create a community vision for redevelopment
- Identify potential funding sources and tools for future development
- Develop policy recommendations in collaboration with City of Chicago agencies (Planning and Development, Housing, Transportation, and others)
- Support a stronger ask for federal funding for the transit project

Transit-Supportive Development

The planning process will include significant and continuous stakeholder engagement and public outreach in partnership with Department of Planning and Development

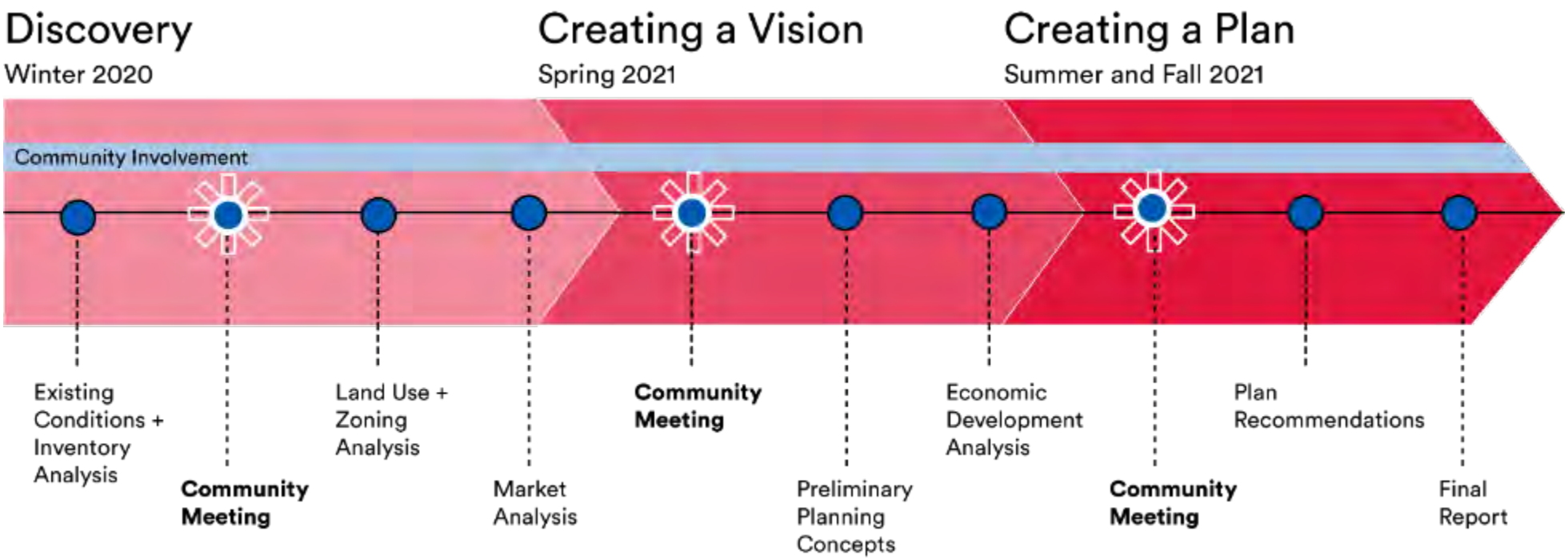

NOW: We want to hear from you.

What are the community's greatest strengths / mayores fortalezas from a development perspective?

Pick up to 3.

Altgeld Family Resource Center and Public Library

What are the community's greatest needs / mayores necesidades from a development perspective?

Pick up to 3.

RED AHEAD

Red Line Extension

What discourages development/ desanima el desarrollo in your community?

Pick up to 3.

What can help attract new investment / atraer nuevas inversiones and encourage development?

Pick up to 3.

Storefronts on South Michigan Avenue.

Tell us more!

The next four questions will ask about the types of housing, commercial, retail, jobs, you would like to see in your community?

Transit-Supportive Development

Housing

43,700 housing units

- **89%** Single family homes and small multi-family buildings (up to 4 units)
- **11%** Buildings with 5+ units

Ownership

- **48%** Owner Occupied
- **35%** Renter Occupied
- **17%** Vacant

What type of housing / vivienda is most needed?

Pick up to 3.

Roseland Place Senior Living

What scale of housing / tamaño de la vivienda is desired?

Pick up to 3.

Transit-Supportive Development

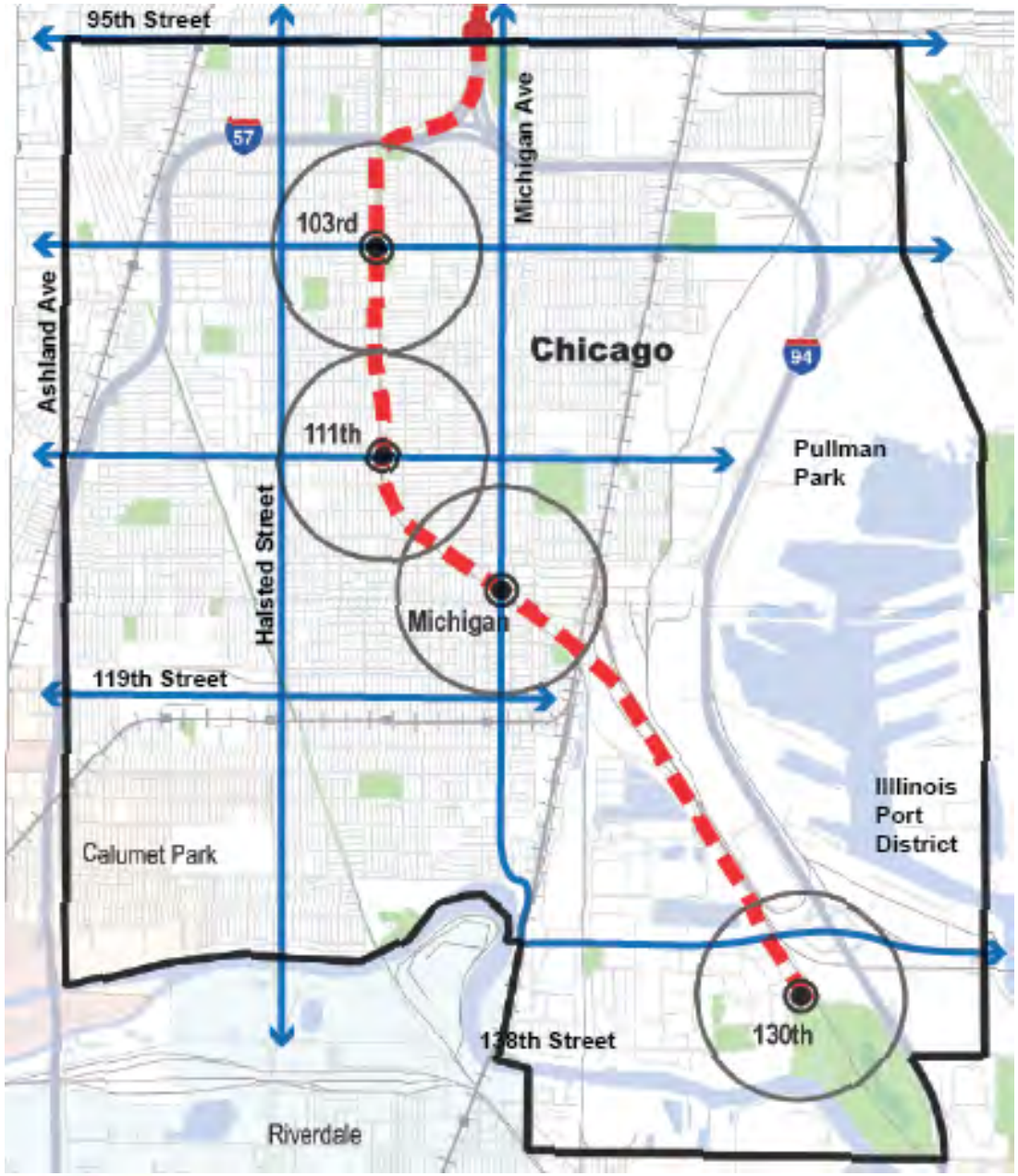

Commercial Corridors

- 95th Street
- 103rd Street
- 111th Street
- 119th Street
- Michigan Avenue
- Halsted Street

Job Centers

- Manufacturing/Pullman Park
- Illinois International Port District

What types of businesses / negocios would you like to see?

Pick up to 3.

What types of **jobs / tabajos** are needed?

Pick up to 3.

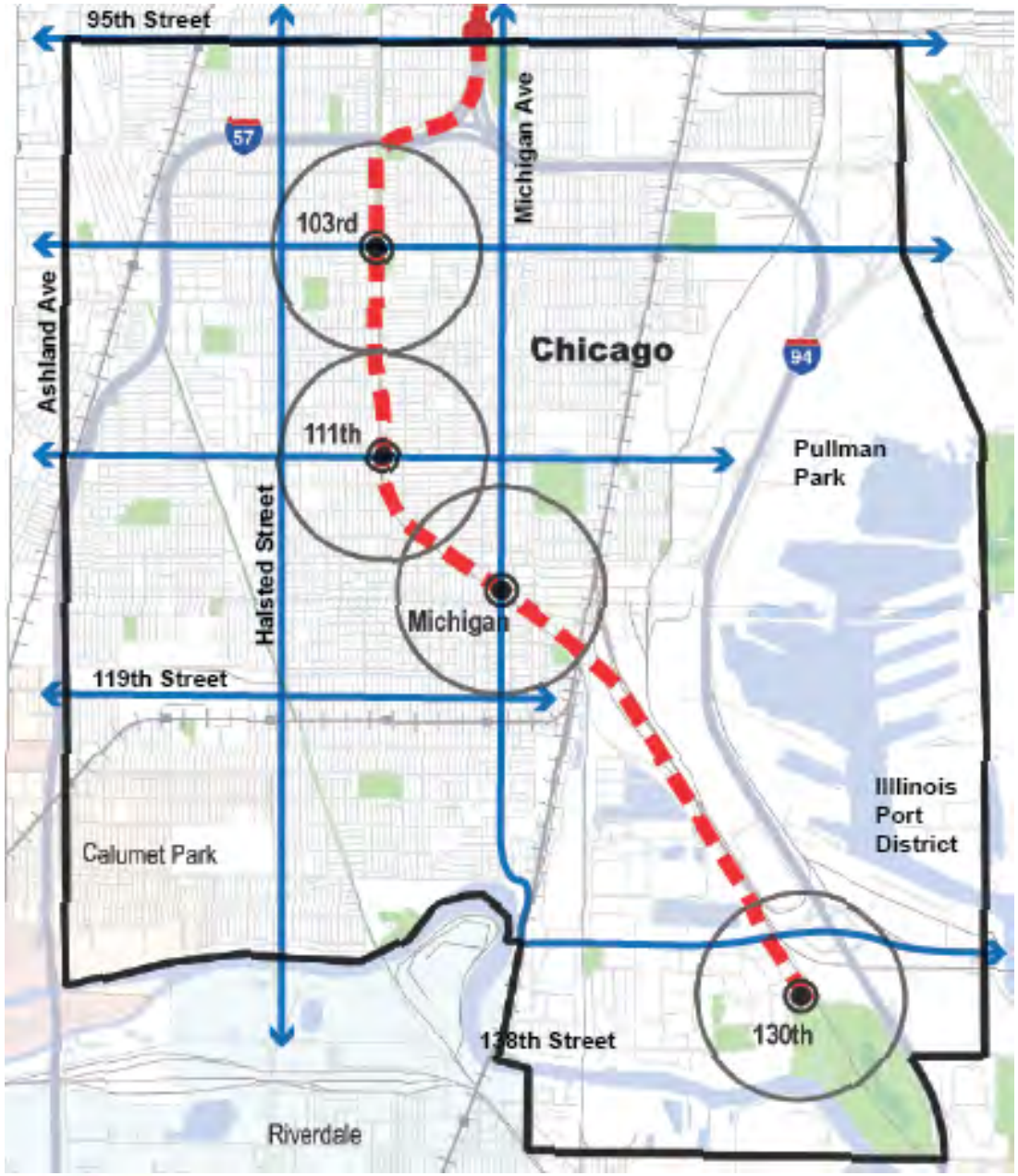

Station Areas

In mid to late January the CTA will host individual public meetings for each station area. These meetings will be open to the public. Individuals with vested interest in the areas will be strongly encouraged to attend and agenda for each meeting will be clear, that topics will focus on the specific station are.

Transit-Supportive Development

103rd Street Station Area

- Commercial Corridors
  - Halsted Avenue
  - Michigan Avenue
  - 103rd Street
- Land Uses
  - Mostly Single-Family Homes
- Amenities
  - Langston Hughes Elementary School
  - Fernwood Park

Transit-Supportive Development

Transit-Supportive Development

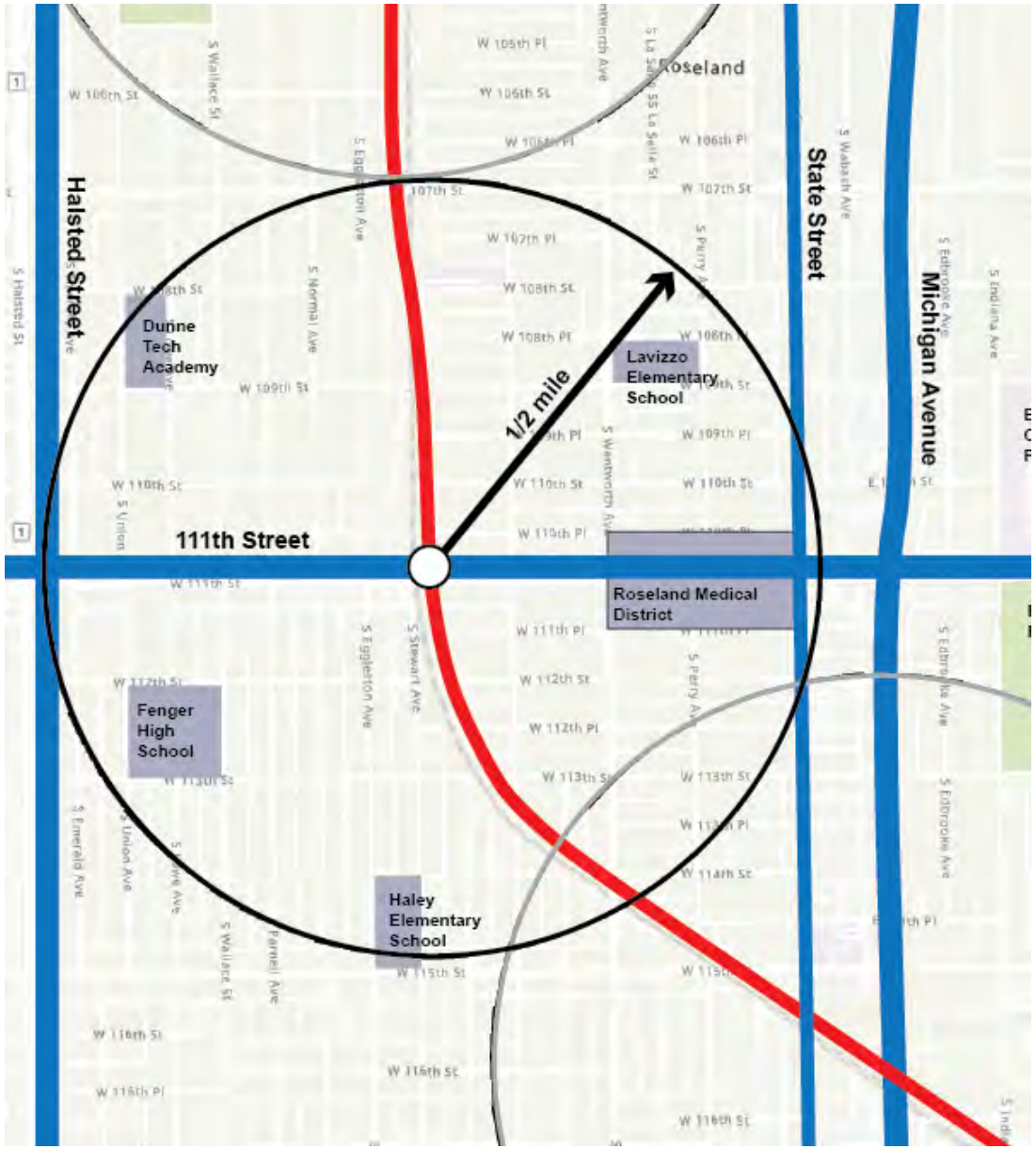

111th Street Station Area

- Commercial Corridors
  - Halsted Avenue
  - Michigan Avenue
  - 111th Street
  - Connections to Pullman Park and Pullman National Monument
- Land Uses
  - Mostly Single-Family Homes with a mix of light industrial and institutional
- Amenities
  - Roseland Medical District
  - Fenger High School
  - Several elementary schools

Transit-Supportive Development

Transit-Supportive Development

Michigan Avenue Station Area

- Commercial Corridors
  - Michigan Avenue
  - 115th Street
  - 119th Street
- Land Uses
  - Commercial and civic corridors and nodes
- Amenities
  - Palmer Park
  - Roseland Health Center
  - Curtis Elementary School
  - Senior Housing

Transit-Supportive Development

Michigan Avenue

Transit-Supportive Development

130th Street Station Area

- Land Uses
  - Multi-family Housing
  - Forest Preserve
  - Industrial and Metropolitan Water Reclamation District
- Amenities
  - Beaubien Woods
  - Washington Carver Park
  - Carver Military Academy
  - Altgeld Gardens and new Family Resource Center
  - TCA Health Clinic

Transit-Supportive Development

What is your vision for Transit-Supportive Development in your community?

Please type your response in the chat box.

¿Cuál es su visión para el desarrollo de apoyo al tránsito en su comunidad?

Escriba su respuesta en la sección de comentarios.

Agenda

- Virtual Meeting Format
- Project Overview and Benefits
- Recent Progress
- Federal Environmental Process
- Community Touchpoints
- Transit Supportive Development (TSD) Plan
- **Engagement Website**
- Questions & Answers

This meeting will be recorded and available online after the meeting at www.transitchicago.com/RLE and www.Facebook.com/CTARedExt

Michigan & 116th Station Conceptual Rendering

New Engagement Site

RED AHEAD

Red Line Extension

Home About Engage Contact us

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Red Line Extension

*RLE will bring **access, equity,** and **economic opportunity** to the Far South Side by **connecting** people to direct and **sustainable** rail transit.*

Welcome to CTA's Red Line Extension (RLE) community engagement site!

We're glad you're here. Please use this page to provide feedback, ask questions, and interact with your fellow community members about the ongoing RLE project initiatives!

If you're new to the RLE Project, we encourage you to **click here** to learn more.

At this time, we're currently your seeking input on the following two RLE initiatives:

Transit-Supportive Development Plan

Now through summer 2021, we're developing a Comprehensive Plan to help guide future development around the four new RLE rail stations. The Plan's development will rely on **YOUR** input as a community member to help determine the needs and priorities of the project area.

Not familiar with the plan? **Click here** to learn more. Share your thoughts and ideas on the TSD Plan using any of the feedback options listed below.

Environmental Analysis

At the same time, we're also completing the next phase of the RLE environmental review process, a Supplemental Environmental Assessment (EA). To learn more about the environmental review process and Supplemental EA, **click here**.

You can learn about both of these initiatives during our upcoming **station area meetings in January & February 2021**. Be sure to sign up by clicking on the meeting date links on this page! If you have a comment or question regarding the Supplemental EA, please submit using *only* the **Send Us A Message** or **Ask Us A Question** options below.

Your voice is important, and we look forward to hearing from you!

REGISTER Create an account to stay involved!

Sign up for upcoming meetings!

Jan 27	130th Station Meeting
Feb xx	111th Station Meeting
Feb xx	103rd Station Meeting
Feb xx	Michigan Station Meeting

TSD Plan Timeline

Winter 2020 CURRENT

Discovery

- 1st Community Meeting

New Engagement Website

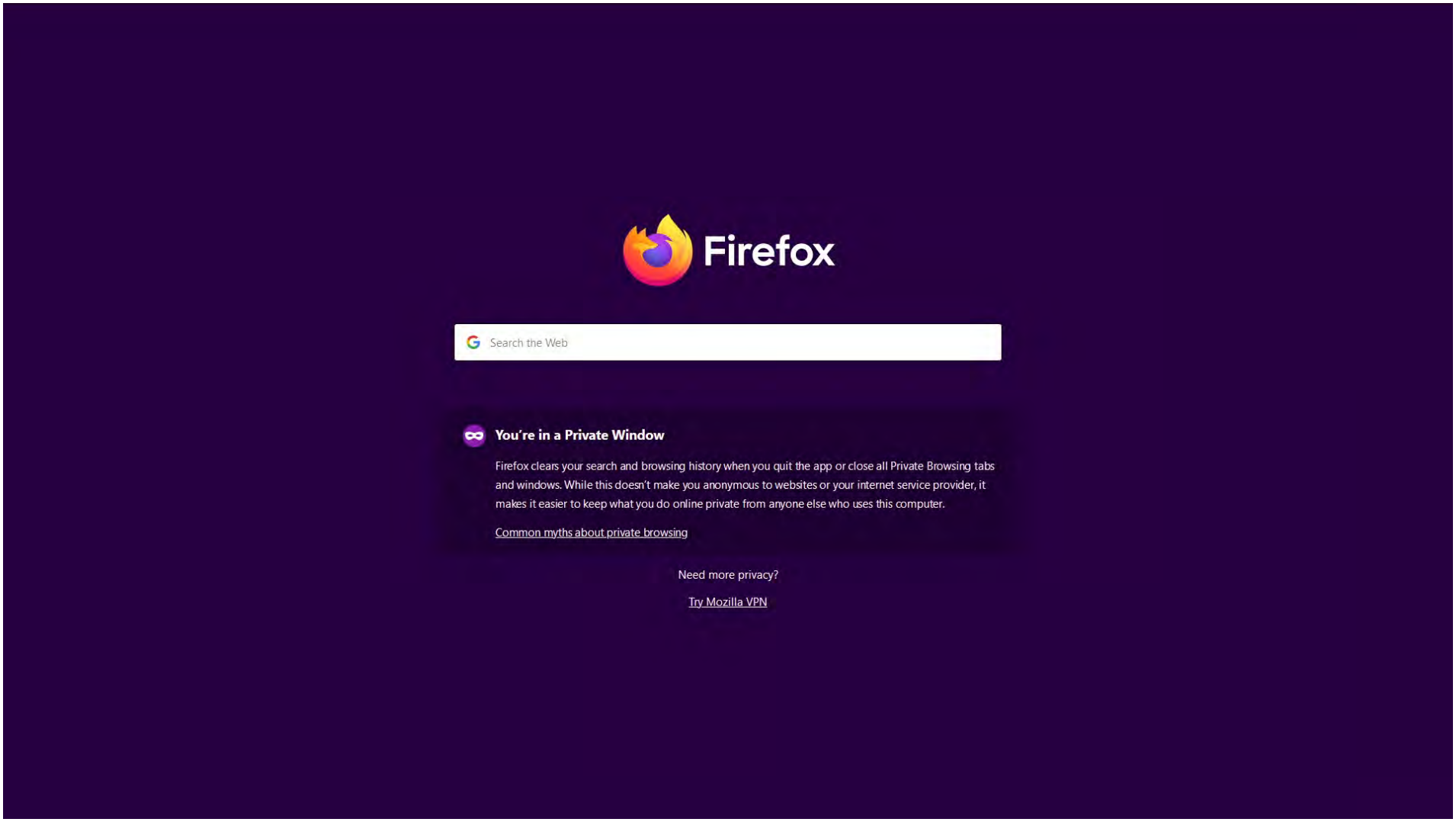

New Engagement Site

New Engagement Site

How to access:

- RLE webpage on CTA website: transitchicago.com/RLE

- Directly: transitchicago.com/RLE/engage

Contact us:
RedExtension@transitchicago.com

Upcoming Station Meetings

- 130th Station: January 27, 2021
- 111th Station: February 2, 2021
- 103rd Station: February 8, 2021
- Michigan Avenue Station: February 16, 2021

*All meetings will be held from 6:00 pm – 7:30 pm

Agenda

- Virtual Meeting Format
- Project Overview and Benefits
- Recent Progress
- Federal Environmental Process
- Community Touchpoints
- Transit Supportive Development (TSD) Plan
- Engagement Website
- **Questions & Answers**

This meeting will be recorded and available online after the meeting at www.transitchicago.com/RLE and www.Facebook.com/CTARedExt

Michigan & 116th Station Conceptual Rendering

RED AHEAD

Red Line Extension

Thank you!

#RLEReady

Facebook.com/CTARedExt

transitchicago.com/RLE/engage

RedExtension@transitchicago.com

Customer service hotline: 1-888-YOUR-CTA

Hearing Impaired/TTY: 1-888-CTATTY1 or 711 (relay)

cta

BUSINESS (/BUSINESS)

CTA Awaiting Federal Approval for Next Phase of Red Line Extension

Nick Blumberg (/stories-by-author/Nick Blumberg) | December 8, 2020 12:20 pm

(WTTW News)

The Chicago Transit Authority hopes to learn in the coming weeks whether it's received federal approval to move into the next phase of its massive Red Line Extension project (https://www.transitchicago.com/rle/), which would extend the city's busiest train line to Chicago's southern border.

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The $2.3 billion project would be the largest in the agency's history (https://news.wttw.com/2020/11/09/cta-hopes-start-next-phase-red-line-extension-planning-very-soon). The CTA hopes to secure about 50% of the funding from a Federal Transit Administration grant program (https://www.transit.dot.gov/CIG). In order to get that money, transit agencies must go through a two-year project development phase as part of the grant process. CTA requested entry into that phase in November, and anticipates learning this month or next whether it can move forward.

By the end of the two-year project development phase, the CTA has to identify the local funding sources that will make up the other half of the cost. Project development is followed by an engineering process the CTA says could take one to two years, meaning the Red Line Extension is still several years from federal funding approval and construction. But CTA leaders and staff say the project is one of the agency's top priorities and are excited about the significant progress made to date.

The CTA is hosting virtual community meetings Tuesday evening and Wednesday afternoon (https://www.transitchicago.com/rle/whats-new/) to give an update on the project and to kick off community engagement for its Transit-Supportive Development (https://www.transitchicago.com/redext/tsd/) (TSD) plan tied to the extension. It's a broader effort than Transit-Oriented Development, which encourages homes and businesses near transit. The CTA says its TSD plan will cover a broad swath of the Far South Side rather than just the immediate area around the four proposed stations that make up the Red Line Extension – from 95th Street to 138th Street, and from Ashland Avenue to Stony Island Avenue.

The effort is meant to boost economic development, keep the area affordable, attract private sector money, and make it easier for people to get around using many forms of transportation, including walking and biking.

Community engagement is critical to the plan, the CTA says. In addition to this week's meetings, the agency is planning to hold a series of public meetings early next year focused on the areas near each of the four proposed stations. And it's launching a new engagement website for people to stay up to date on the project and offer their feedback.

The development plan is being created with the help of a $1.48 million federal grant. The goal is to have a final report on the Transit-Supportive Development plan by late 2021. In addition to benefiting the Far South Side, the CTA also hopes the development plan will boost its odds of securing federal money.

Find out how you can join the virtual public meetings here. (https://www.transitchicago.com/rle/whats-new/)

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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Altgeld Temporary Advisory Committee
Meeting Minutes

Monday, January 25, 2021
10:00 AM – 11:30 AM
via Teams Meeting

Summary

The Chicago Housing Authority (CHA) convened its Altgeld Temporary Advisory Committee (TAC), which typically meets on a monthly basis, to discuss a variety of topics on January 25, 2021. Following introductions and a short CHA update, the Chicago Transit Authority's (CTA) presented information to the TAC relative to the 130th Street station and solicited their input.

Ms. Stubblefield started off the presentation by covering the agenda and presenters. Ms. Fratinardo led the group through the project overview, benefits, progress in 2020, and recent public outreach efforts, including the availability of the interactive project website transitchicago.com/RLE/engage, specifically for engaging the community. Ms. Tandon presented Environmental Review process updates and shared details regarding the Supplemental Environmental Assessment (EA). Ms. Tandon described some of the resource analyses underway for the Supplemental EA (traffic and access, historic and cultural resources, noise and vibration, visual and aesthetics, and public parks and recreation area) for which impacts may be of particular interest in relation to the 130th Street station.

Next, Ms. Fourcher presented on the Red Line Extension (RLE) Transit-Supportive Development (TSD) Plan, covering the definition of the TSD Plan, timeline, and recent planning efforts. Ms. Fourcher led a series of interactive polling questions to gauge participants' ideas and recommendations for future development along the RLE corridor (polling questions and results are documented on pages 3-5 of this summary). Finally, Ms. Stubblefield concluded the presentation by opening up the meeting for discussion; discussion talking points are documented on pages 5-6. Ms. Mooney and Ms. Littrell addressed participants' comments and questions to wrap up the meeting.

TAC Attendance

1. Kevin Hall, *CHA*
2. Carlos Campos, *CHA*
3. Julie Brown, *BPI*
4. Bryan Bradley, *Chicago Park District*
5. Synetta Brown, *Altgeld Gardens*
6. Carrie Pullie, *Metropolitan Family Services*
7. Cheryl Johnson, *People for Community Recovery*
8. Nichelle Glover, *CHA*
9. Lakisha Hanson, *Altgeld Gardens*
10. Ryan Ross, *CHA*
11. Tracy Sanchez, *CHA*
12. Elizabeth Silas, *CHA*
13. Veronica Clarke, *CEO TCA Health Center*
14. Samantha Mitchell, TCA
15. Crystal Palmer, *CHA*
16. Bernadette Williams, *LAC for CHA*
17. Eric Garrett, *CHA*
18. Betty Laws
19. Brenda Gibson, *CHA*
20. Denise Saunders, *LAC for CHA*
21. Nekisha Battie, *CHA*
22. Deloris Lucas, *Golden Gate*

Project Team Attendance

1. Marlise Fratinardo, *CTA*
2. Ammar Elmajdoub, *CTA*
3. Sonali Tandon, *CTA*
4. Leah Mooney, *CTA*
5. Jasmine Gunn, *Department of Planning and Development*
6. Teresa Fourcher, *TSD Plan*
7. Jenn Pisano, *TSD Plan*
8. Mark Payne, *TSD Plan*
9. Christine Carlyle, *TSD Plan*
10. Grace Dysico, *NEPA/PEC*
11. Barbara Frost, *NEPA/PEC*
12. John Wolf, *NEPA/PEC*
13. Jay Peters, *TSD Plan*
14. Barbara Stubblefield, *RLE Program Management Team*
15. Joanna Littrell, *RLE Program Management Team*
16. Patrick Dunn, *RLE Program Management Team*
17. Mandi Jennings, *RLE Program Management Team*
18. Keith Spencer, *RLE Program Management Team*
19. Lilliane Webb, *RLE Program Management Team*
20. Kristen Robinson, *RLE Program Management Team*

TAC Members' Questions & Comments – Teams Chat Feedback

Unless otherwise noted, the following questions, comments, and responses reflect the meeting chat transcription with minor grammatical and spelling corrections. Verbal responses are paraphrased by the meeting note taker. Responses were provided in the chat by the RLE Project team for all attendees who joined the meeting via Zoom to see. Attendees who joined via phone did not have visibility of the Teams chat questions, comments, and responses.

Development Near 130th Station

- Cheryl Johnson: We are a completely deserted area on 130th. What transit-supportive development outside the new station construction, will be developed in this area? Is CTA creating space within this development area for sustainable business opportunities?
    - Leah Mooney (verbal response): From a high-level perspective, the TSD Plan is that analysis – really to gauge public temperature on initiatives and begin to incorporate them into plan. Putting the station in this area does create development for new markets which is part of the thinking here.

Environmental Review Process

- Cheryl Johnson: How much construction costs were reduced from the 1st development and now what is the new costs for the 2nd development in Altgeld?
    - Leah Mooney: Ms. Johnson, can you please clarify what you mean by the question above, "How much construction costs were reduced from the 1st development and now what is the new costs for the 2nd development in Altgeld Gardens. Which developments do you mean? Or are you talking about change in construction costs from the new station location?
    - Leah Mooney: Regarding change in cost from moving station location, we are still analyzing. Additional track footage increases costs, but marginally. The scope is generally consistent with the earlier concept. The parking garage will be smaller than what was forecast in the Draft Environmental Impact Statement (EIS).
- Cheryl Johnson: Will buses be electrified and if not, how are you going to manage diesel fuels and emissions?

- Leah Mooney (verbal response): CTA is currently conducting an electric bus study. Both CTA and Pace buses are included, but we are not sure which routes will overlap and will require additional analysis. Newer fleets for CTA do have regenerative breaking. Sustainable design concepts are on the table and we will address renewable options once further into the design process.
- Cheryl Johnson: If federal funds are supported for this project, is CTA required to conduct an Environmental Justice Impact Statement under USEPA policy?
    - Patrick Dunn (verbal response): The NEPA environmental umbrella will be included in that process.
- Cheryl Johnson: Is this report published? *(in reference to Environmental Review Process)*
- Cheryl Johnson: Has CTA taken into consideration the deep tunnel mining that is constant further east on 130th by the Metropolitan Water Reclamation District (MWRD)?

Description of Favorite CTA Station

- Ann McKenzie: Wilson. It is large and modern.
- Tracy Sanchez: State of IL Boulevard; underground and warm in the winter.
- Julie Brown: I like the indoor lobby at Western on the Brown Line that allows people to wait indoors for buses and trains in bad weather.

Polling Questions & Responses

Responses in italics are additional comments beyond the direct responses to the polling choices.

1. **What kinds of open spaces or public spaces would you like more of?**

   Total Attendees Responding to Questions: 6

   Top Results: Farmers market/local kiosk (6 votes), Walking/biking trails (3 votes), Plazas and other gathering spaces (2 votes)

   - Synetta Brown: Farmers market/local food kiosk
   - Bryan Bradley: Farmers market/local food kiosk and walking/biking trails
   - Tracy Sanchez: Farmers market/local food kiosk
   - Veronica Clarke: Farmers market/local food kiosk, plazas and other gathering spaces, walking/biking trails
   - Carrie Pullie: Farmers market/local food kiosk, plazas and other gathering spaces, walking/biking trails
   - Denise Saunders: Local food kiosk, performance/public art, fishing

2. **What are the community's greatest strengths from a development perspective?**

   Total Attendees Responding to Questions: 4

   Top Results: Affordable housing (3 votes), Schools (2 votes), Parks and open space (2 votes)

   - Synetta Brown: Parks and open space, schools, affordable housing
   - Cheryl Johnson: Affordable housing, shopping, transit
   - Veronica Clarke: Schools – the rest are aspirational
   - Denise Saunders: Affordable housing, parks and open space, historic buildings

3. **What are the community's greatest needs from a development perspective?**

Total Attendees Responding to Questions: 7

Top Results: Shopping (5 votes), Transit (3 votes), Affordable housing (2 votes)

- Synetta Brown: Shopping
- Ann McKenzie: Shopping
- Carrie Pullie: High school, shopping, transit
- Tracy Sanchez: Shopping, transit
- Denise Saunders: High school, shopping, senior housing
- Bryan Bradley: Affordable housing
- Cheryl Johnson: Affordable housing, shopping, transit
- Cheryl Johnson: *Having jobs on here should not be an item, any developments in this area are going to create jobs and access to jobs.*

4. **What types of businesses would you like to see?**

Total Attendees Responding to Questions: 8

Top Results: Grocery stores (6 votes), Locally owned boutique (3 votes), Locally owned café/professional services/ pharmacy (2 votes)

- Ann McKenzie: Grocery store
- Cheryl Johnson: Locally owned café, locally owned boutique, professional services
- Denise Saunders: Grocery store
- Tracy Sanchez: Grocery store, pharmacy
- Synetta Brown: National chain restaurants, grocery store, personal services
- Carrie Pullie: Grocery store, locally owned boutique, pharmacy
- Veronica Clarke: Locally owned café, locally owned boutique, professional services
- Nichelle Glover: Grocery store

5. **What types of jobs are needed nearby?**

Total Attendees Responding to Questions: 4

Top Results: Office and administrative support/ Retail and restaurants (3 votes) Healthcare works (2 votes)

- Cheryl Johnson: Maintenance and utilities, office and administrative support, professional
- Tracy Sanchez: Retail and restaurants, transportation and warehousing
- Veronica Clarke: Healthcare workers, office and administrative support, retail and restaurants
- Carrie Pullie: Healthcare workers, office and administrative support, retail and restaurants
- Synetta Brown: *That's a tough one as I would like to see all the choices offered to the residents.*

6. **What type of housing is most needed?**

Total Attendees Responding to Questions: 7

Top Results: Senior housing (4 votes), All the above (3 votes), Home ownership (2 votes)

- Carrie Pullie: Senior housing
- Denise Saunders: All the above
- Tracy Sanchez: Home ownership, senior housing

- Veronica Clarke: All the above
- Synetta Brown: Home ownership, senior housing
- Julie Brown: Senior housing, mixed income
- Cheryl Johnson: *Affordable housing can be all the above.*

7. **What scale of housing is desired?**

Total Attendees Responding to Questions: 5

Top Results: Single-family (5 votes), Townhomes/Multi-family housing with ground floor commercial (3 votes)

- Cheryl Johnson: Single-family, townhomes, two-flats and three-flats
- Synetta Brown: Single-family, townhomes, multi-family housing with ground floor commercial
- Denise Saunders: Single-family, multi-housing with ground floor commercial
- Veronica Clarke: Single-family, townhomes, small four-to-six-unit buildings
- Carrie Pullie: Single-family, multi-housing with ground floor commercial
- Julie Brown: *Why are these housing questions part of this, given the context?*

Additional Discussion

The following documents a combination of attendees' responses verbatim and paraphrased responses provided by the meeting note taker.

- Cheryl Johnson: It would be great if CTA can use Jamboard as it is interactive.
- Cheryl Johnson: We need to do presentations with the schools. They need some sort of buy in.
    - Leah Mooney: We agree and are looking into initiatives for youth engagement.
- Tracy Sanchez: Can you put up a site plan during the discussion?
    - *The project team returned the presentation to slide 34, the draft station concept for the duration of the discussion following this request.*
- Veronica Clarke: I agree with Cheryl about having more community residents participate in these discussions.
- Julie Brown: Will Pace stop at the terminal? Will there be bicycle parking at the terminal?
    - Sonali Tandon: We are looking at an updated bus service plan for RLE so proposed stations feed into them. It is very likely that some of the Pace bus routes will be routed to the 130th terminal.
    - Sonali Tandon: Bicycle parking will likely be part of the station design; we are considering multi-modal options.
- Tracy Sanchez: Will the station be open 24 hours a day and will security be on site 24 hours a day?
    - Sonali Tandon: We are looking at safety and security measures for all stations which will be further defined as we move forward with preliminary engineering. Stations will be open 24 hours.

Presentation Chat Box Accessibility

Some participants had issues accessing the Zoom chat feature throughout the presentation – the project team included an email address for participants who could not access the feature to send questions directly to project team following the meeting. Barbara Stubblefield added comments

to the chat with the RLE email address, redextension@transitchicago.com, project Facebook page, Facebook.com/CTARedExt, and project engagement website, transitchicago.com/RLE/engage.

Committee members were instructed to reach out to Ms. Stubblefield or Ms. Mooney if they had further inquiries. The CTA RLE Project team left the meeting around 11:30 AM as the committee proceeded to other business on their agenda.

Red Line Extension 130th Street Station Virtual Meeting Minutes

Wednesday, January 27, 2021
6:00 PM – 7:30 PM
via Zoom & Facebook Live

Meeting Presenters

Marlise Fratinardo, *Chicago Transit Authority (CTA) Planning*
Ammar Elmajdoub, *Chicago Transit Authority (CTA) Planning*
Sonali Tandon, *Chicago Transit Authority (CTA) Planning*
Barbara Stubblefield, *Red Line Extension Program Management Team*
Teresa Fourcher, *Transit-Supportive Development (TSD) Plan*
Mark Payne, *Transit-Supportive Development (TSD) Plan*

Attendees

Public via Zoom: 68
CTA staff, support and consultants via Zoom: 52
Facebook Live: 12 (20 at peak viewing time)
Total public: ~80

Meeting Materials

Presentation is attached.

Summary

CTA hosted the 130th Street Station virtual community meeting on Wednesday, January 27, 2021. The 130th Street Station meeting was the first of a series of meetings for the four proposed station areas along the Red Line Extension corridor. The meeting was held through Zoom and also broadcast simultaneously on the project's Facebook page. Captioning as well as American Sign Language and Spanish interpretation were available for meeting attendees, including during breakout rooms. Attendees were asked to register in advance and were provided with the link and meeting ID to join via Zoom. Registration was available on the project's interactive engagement website, transitchicago.com/RLE/engage, which is hosted on the Bang the Table (BTT) platform. The engagement website provides general information about the RLE Project and Transit-Supportive Development (TSD) Plan plus interactive tools such as an Ideas Wall, project survey, and project map to engage the public and solicit their feedback regarding the project.

Ms. Stubblefield started off the presentation by covering the agenda and presenters. Ms. Stubblefield also covered how attendees can ask questions throughout the meeting. Questions and comments submitted during the meeting are documented on page 3. Ms. Fratinardo led the group through the RLE Project overview, benefits, and recent progress. Mr. Elmajdoub then presented engagement opportunities, including the engagement website transitchicago.com/RLE/engage and recent public outreach efforts. Ms. Tandon

presented Environmental Review process updates and shared details regarding the Supplemental Environmental Assessment (EA). Ms. Tandon explained that the project team is studying the implications of locating the station south of 130th Street and working through potential plan development for station layout, parking, and bus facilities. Ms. Tandon described some of the resource analyses underway for the Supplemental EA (traffic and access, historic and cultural resources, noise and vibration, visual and aesthetics, and public parks and recreation area) for which impacts may be of particular interest in relation to the 130th Street station. These presenters asked attendees to respond to two direct questions via chat; responses to these questions are documented on page 4.

Next, Ms. Fourcher presented on the TSD Plan, covering the overview, timeline, and current, as well as past aligned planning efforts. After, Mr. Payne led a series of interactive polling questions to gauge participants' ideas and recommendations for future development along the Red Line Extension corridor (questions and polling results are documented on pages 5-6 of this summary). Mr. Payne read the polling questions and answers out loud and they were also displayed on individual presentation slides for attendees who had joined online to see. Following the interactive polling questions, attendees were separated into small groups for a breakout session led by a moderator and one to two other project team members. On average, there were five to six attendees in each breakout group. A set of general questions were displayed on a presentation slide to solicit input and encourage discussions. Community members were offered the opportunity to share their ideas on the vision for the community to inform the TSD effort. Breakout summaries were compiled for each group and the compilations of comments received are documented on pages 7-13.

After approximately 25 minutes, the breakout session concluded and attendees were brought back from individual breakout groups into one large group to finish the meeting. Each breakout group moderator presented a brief summary of their group's discussion and common ideas that were shared among group participants. Mr. Elmajdoub then presented information regarding the RLE engagement website transitchicago.com/RLE/engage, opportunities to stay involved/receive project updates, ways to contact the project team and details regarding how to be entered into the engagement site Visa gift card sweepstakes. The sweepstakes was implemented to encourage community members to provide feedback and promoted by the project team separate from the station meetings. Ms. Stubblefield then concluded the meeting by thanking all attendees for their participation, providing dates for the upcoming three station virtual meetings and methods, both digital and non-digital, to contact the project team with questions.

<u>Attendee Questions & Comments – Zoom Chat Feedback</u>

Unless otherwise noted, the following questions, comments, and responses documents the direct meeting chat transcription. Responses were provided in the chat by the RLE

Project team for all attendees who joined the meeting via Zoom to see. Attendees who joined via Facebook Live or phone did not have visibility of the Zoom chat questions, comments, and responses.

- **Question 1: Did she say that 30 percent of the CTA riders board the system at 95th?**
    - **Response 1:** Hi Robert – Marlise [Fratinardo] pointed out that fewer than 30 percent of riders who board at the 95th/Dan Ryan station end their trips in the Loop. Most riders (more than 70 percent) are going other places throughout the city, including other South Side destinations.
- **Q2: This has been very engaging so far, thanks so much for the questions!**
    - **R2:** Thanks for your input, Louie!
- **Q3: In a short, timed survey, respondents might feel pressured and might be more inclined to select options in the order they appear. You might consider leaving the surveys for after the meeting to allow adequate time for consideration without the few second response time as a restraint.**
    - **R3:** Thank you for this suggestion, Mr. Garner! If anyone wants to provide this input with a little more time to think, they can go to transitchicago.com/RLE/engage. Click on, Take Our Survey and you'll find all of these questions (and more).
- **Q4: Got to check out for another meeting. I would love to be considered to join the team.** afgarner@theblackinkgroup.com.
- **Q5: How can the 19-year-olds to 30 of age join the landscape?**
    - **R5:** Hi Ms. Jacobs - We recognize the importance of youth and young adults from the RLE footprint. CTA will be looking at ways to engage and inform this population through targeted outreach such as hosting construction careers seminars, creating an internship program, and the possibility of creating a youth advisory committee. We are open to any suggestions you may have!
- **Q6: How is the feedback given in the survey?**
    - **R6:** Hi Ms. Deloris - The survey asks a variety of questions, including the ones you saw today. Most are multiple choice; some are open ended.
- **Q7: While this is going on, PLEASE let the community join the jobs.**
    - **R7:** Thanks Ms. Jacobs - As a part of the RLE Project, the CTA is seeking to address barriers to sustainable employment for residents within the project area and people from economically disadvantaged zip codes. The CTA is establishing partnerships with community organizations, educational institutions and trade organizations to promote workforce opportunities on the project and in the broader construction industry. As always, we're open to your suggestions!
- **Q8:** Do not forgot the Riverdale Multimodal Transportation Plan through CDOT & CMAP

<u>Presentation Engagement Questions – Zoom Chat Feedback</u>

These questions were posed by the presenters during the large group presentation. The following documents the attendee responses that were typed in the Zoom chat.

- **Question 1: How will the Red Line Extension benefit you and your neighborhood?**
    - **Responses 1:**
        - Hopeful
        - Love the idea
        - Benefit Hegewisch more with a bus connection
        - Better transit options
        - Long overdue
        - Jobs
        - Number of Divvys increasing
        - Faster access to communities far south
        - Economic development opportunities
        - Economic/neighborhood vitality
        - TOD
        - Better chance for seating
        - Less travel time to train
        - Uplifting the community while redevelopment of the neighborhood
        - The road repairs

- **Q2: What is your favorite CTA Station and what about that station do you like most?**
    - **R2:**
        - A Pink Line stop near Pilsen. Plenty of artwork along the walls.
        - 95th Street
        - Windows/glass to make less dark (Morgan Street) OR the historic ones like Quincy
        - Vendor opportunities at all stops is good
        - 95th Street – is outside of neighborhood and therefore does not impact residents negatively
        - The Amazon boxes on 95th Street
        - Cameras
        - The electronic charging stations
        - The retail at Roosevelt (e.g., Dunkin Donuts)
        - High visibility, clean, art, landscape vegetation, lighting, seating, safety measures, some business life… in stations with a specific touch of creative design to the surrounding neighborhood

Presentation Polling Results

Attendees joining the meeting through Zoom could answer the poll in real time. Polling was not available to attendees who joined the meeting through Facebook Live or by phone. Those attendees were informed that polling questions were available on the RLE engagement website as an alternate way to participate and provide their responses. Polling questions were typically open for more than 45 seconds.

Response Options	Votes Received
1. What neighborhood do you reside in? *Total Attendees Responding to Question: 33*	
Other	**22**
Altgeld Gardens	**3**
Pullman	**3**
Hegewisch	2
Roseland	2
Riverdale	1
2. How will you likely travel to the proposed 130th Street station? *Total Attendees Responding to Question: 28*	
Drive	**9**
Bus	**7**
Walk	**6**
Train	3
Bike	2
Other	1
3. What kinds of open space or public places would you like more of? (Pick up to 3) *Total Attendees Responding to Question: 32*	
Farmers market or local food kiosk	**21**
Walking and biking trails	**15**
Plazas and other gathering spaces	**14**
Increased access and recreational opportunities along the Little Calumet River	12
Spaces dedicated to nature and ecological restoration	11
Performance or public art spaces	8
Places for exercise	7
Sports and active recreation	1
4. What are the community's greatest strengths from a development perspective? (Pick up to 3) *Total Attendees Responding to Question: 22*	
Parks	**10**
Affordable housing	**8**
Schools	**8**
Single-family housing	**8**
Civic and religious institutions	7
Transit	6
Shopping	4
Historic buildings	2
Jobs	2
Senior housing	1

5. What are the community's greatest needs from a development perspective? (Pick up to 3) *Total Attendees Responding to Question: 28*	
Jobs	**21**
Shopping	**18**
Transit	**15**
Affordable housing	6
Historic preservation	6
Single-family housing	5
Parks	3
Schools	3
Senior housing	3
Civic and religious institutions	1
6. What types of businesses would you like to see? (Pick up to 3) *Total Attendees Responding to Question: 30*	
Grocery stores	**24**
Locally owned cafés	**18**
Medical, health & wellness services	**10**
Pharmacy	9
National chain restaurants	7
Locally owned boutiques	6
Professional services	5
Personal services	4
Home improvement stores	3
National brand clothing stores	2
7. What types of jobs are needed nearby? (Pick up to 3) *Total Attendees Responding to Question: 24*	
Healthcare workers	**12**
Retail and restaurants	**11**
Transportation or warehousing	**10**
Construction	8
Maintenance and utilities	7
Professional services	7
Manufacturing	6
Office and administrative support	5
Public Sector	5
8. What type of housing is most needed? (Pick up to 3) *Total Attendees Responding to Question: 27*	
Home ownership	**20**
Affordable housing	**19**
Senior housing	**15**
Mixed-income	14
Veterans housing	6
Rental	5
9. What scale of housing is desired? (Pick up to 3) *Total Attendees Responding to Question: 23*	
Single-family	**19**
Townhomes	**14**
Two-flats and three-flats	**12**
Multi-family housing with ground floor commercial	6
Small four-to-six-unit building	5
Mid-rise multi-family (up to 8 stories)	3

Breakout Session Groups

Group 1
Moderator: Erin Cabonargi *(TSD Plan)*
RLE Project Members: Marlise Fratinardo *(CTA Planning)* & Mandi Jennings *(RLE Program Management Team)*

Group 2
Moderator: Mark Payne *(TSD Plan)*
RLE Project Members: Sonali Tandon *(CTA Planning)* & Michael Schuch *(RLE Program Management Team)*

Group 3
Moderator: Teresa Fourcher *(TSD Plan)*
RLE Project Members: Ammar Elmajdoub *(CTA Planning)* & David Warren *(RLE Program Management Team)*

Group 4
Moderator: Christine Carlyle *(TSD Plan)*
RLE Project Members: Jasmine Gunn *(Chicago Department of Planning and Development)* & Lilliane Webb *(RLE Program Management Team)*

Group 5
Moderator: Sarah Ware *(TSD Plan)*
RLE Project Members: Barbara Stubblefield *(RLE Program Management Team)* & Kristen Robinson *(RLE Program Management Team)*

Group 6 – Non-RLE Consultants
Moderator: Cindy Fish *(TSD Plan)*
RLE Project Members: Keith Spencer *(RLE Program Management Team)* & Joanna Littrell *(CTA Planning)*

Breakout Session Questions & Group Responses

The following section documents a combination of attendees' verbatim and paraphrased responses provided by the breakout group moderators. Individual breakout groups may not have responses listed for each question due to groups spending more time discussing other questions or moderators not receiving any feedback from attendees on those prompts. Moderators for Group 6 had an alternate prompt for Question 3 because the participants in this group were mainly industry professionals rather than community stakeholders; the alternate question is noted as such.

Question 1: What do you imagine for the future of your neighborhood?

- **Group 1 Responses:**
  - Transportation will be a wonderful link for individuals by creating new and more accessible modes of travel to get to jobs and visit family using the CTA network
  - I admire the 95th station at the end of the line because it has its own energy. Things that work there that could be applied to 130th are art from Theater Gates and live music (pre-COVID-19).
  - More horticulture and lush greenery with a two-year maintenance plan for upkeep would help address all the psychological effects/air quality issues.
  - Continuing design efforts of stations' uniqueness to the neighborhood they are located in. Whether using a local artist or muralist to incorporate some of those touches into the design.
  - Transition from elderly population to retaining new young families for the future of Altgeld by having amenities that make Altgeld a desirable Chicago Housing Authority (CHA) destination despite distance from downtown.
  - Station as a garden to buffer from surrounding industrial uses to north and east
- **Group 2 Response:**
  - It's important for community to feel safe. Hopefully, this project does not turn back on the community. Hopeful for opportunities like boutique stores. Access to the Red Line and to other parts of community will be available. Really assessing true needs of the community. Would like to see everything coming into the community that is walkable (e.g., big box grocery stores, financial institutions like a bank or credit union).
- **Group 3 Response:**
  - Highly visible notification boards are key! Next train/bus departures and system updates/outages. Having these outside of the station would be great.
- **Group 4 Responses:**
  - One of the things I really want to see is the revitalization of the area. It has been so forgotten for so many decades that the only way that the community can go now is up. What I imagine the future to be is totally revitalized with a lot of new amenities and structures to sustain itself. I'd like to see new businesses created in the area. We have a lot of open space and land. I want to one day be able to dock my boat off of Beaubien Woods. That's what I look forward to.
  - The most important thing is transportation in this area and I want it to be safe. I don't want any new entity to come into the area and continue to pollute and degrade the area. I'd like to see green technology and development in this area because we've borne the burden for so long and we need to shift the paradigm when it comes to that now.

  - I agree we don't need anything else toxic out here. Hopefully there will be better schools for the kids and a grocery store. We need a grocery store badly. We need transportation, as well.
  - I'm as far from Altgeld Gardens as one can get, living in Evanston so, I will defer to other people to talk about this.
  - In addition to new development that is needed, a grocery store is clearly a need. I'd like to see aesthetics, flowers, shrubbery, a nice environment to drive down and view. Will improve morale of neighborhood and new development would be a big plus.
  - Not from the area but, if you ask everyone, needing a grocery store as number one is very telling. If you are going to develop the area and not provide that, that's unacceptable. Adding to what was previously said, landscaping and there are lots of spaces throughout that are open and there's an opportunity to bring nature in and improve the overall feel of the area.
- **Group 5 Responses:**
  - More than anything, transportation is a make or break for the opportunities available to people. From a personal experience I've been riding the CTA bus as a kid and my mom and grandma took the bus from Roseland to downtown. My vision around Altgeld is to provide access opportunities for Black Chicago – the same experiences that are available to the suburbs and other areas of the city should be extended the same to communities everywhere in the city.
  - I hope it's not a setback but an opportunity for our community. Will the people in Altgeld Gardens be in jeopardy of losing some of the housing?
- **Group 6 Responses:**
  - Accessibility for those in the community to the greater Chicagoland area through the CTA lines is monumental. To be able to extend the lines further south into the South Side communities is long overdue.
  - I am very interested in mega developments by CTA. For example, how these projects are looking at the overall impact on the community and the people that live there now and in the next decade to ensure they're accounting for their needs and making sure they can take advantage of the robust construction developments to hopefully improve their lives and attract others to allow the community to continue to thrive and thrive even more.

Q2: Based on what you heard today, what else do you think is important for CTA to understand this station location?

- **Group 1 Responses:**
  - The current issue at 130th Street with the smell of garbage from the water plant.

  - It's great that along the Red Line there are educational institutions where people can actually go all the way from kindergarten to PhD, like I did. This will only help that.
  - It needs more landscaping along the drive to provide views. This would help morale in the community.
  - There are concerns about diesel bus fumes.
  - I live by the 95th Street station and worked at Carver High School for some time in the past and I worked on projects throughout the city. So, this is a long time coming and an interesting and exciting opportunity.
- **Group 2 Response:**
  - The community has majority of seniors and those that are less able to get around. Make sure everything is easily accessible (for those with wheelchairs, etc.).
- **Group 3 Responses:**
  - Lots of concerns. One is that impact statement has very little commercial development in the plan.
- **Group 4 Responses:**
  - I'm not from Altgeld and live in the east side neighborhood. I know about a group member and the EJ movement. I agree with other group members that there should not be more pollution. Also like the question earlier in the meeting that noted better access to the river and ecological restoration. I would like to see more of that in this part of the city. We can't get enough of that.
  - I'm from the 9th ward service office and live in Pullman area, so I've spoken to a lot of people in this breakout room when answering the phones at the service office. I want to piggyback off what was said already of neighbors knowing each other. It's nice to come out and say hello, not being afraid of your neighbors. People come together, seniors, and youth. Most of the complaints I hear are referencing the grocery store, so this will help with that development coming to that area. As well as pride with the community, cleaning up, and other group efforts. Bring more access to that area.
  - It would be great to see a larger uptick of people from the area participating in these sessions but understand it's difficult due to COVID-19 restrictions.
- **Group 6 Response:**
  - Maintaining the integrity and strength of diversity within the community and having the project benefit the community as a whole. Bring in more opportunities like jobs, healthcare/wellness services to surrounding communities with the prospect of bringing 130th Street station to the area.
  - The project needs to be a "boots on the ground," approach and conducting more of these meetings would be helpful. I like the Visa gift card incentive for participating. Those things ultimately do help, in addition to painting the picture for the public. At the end of the day, you're trying to figure out

what's the best approach, what to incorporate in the design, and what's ultimately going to help members in the community by finding out exactly what the community needs.

Q3: What are your community's greatest assets? What is missing?

- **Group 1 Response:**
  - Envision 130th Street station as a new future hub along that corridor like the INVEST South/West project.

- **Group 2 Response:**
  - Assets are the community schools (elementary). What is missing is concentration to GED and special trainings. Opportunity for adult education is needed. Altgeld Gardens has a large population of children. Engaging the youth is key. What is also missing is service opportunities for teens in that area (as well as job opportunity for teens). Also, more job training and internships for teens.
- **Group 4 Response:**
  - Our greatest asset, and I think a lot of people don't talk about it, is the people in the community – to be comfortable and able to walk out the door and say, "how are you doing," to my neighbor. I would like to see better housing and safer houses.

Alternate Q3: Are there any programs or initiatives that you are working on in the area that the TSD team should be aware of?

- **Group 6 Response:**
  - In relation to this station area, not so much. In the past, I've been involved with INVEST South/West. As the project comes together, it's important to consider how everything synergizes together. How are we looking at it holistically from quality-of-life perspective, from an education perspective, a health perspective? Black Chicago should be at the forefront like I mentioned earlier and promote job opportunities. Lakeside Alliance from the Obama Foundation is an initiative that should be considered for this project or initiatives to encourage people to get into the trades.

Q4: How do you see the new station being integrated into the community?

- **Group 2 Response:**
  - Integration of this station will be unique. To be part of this community is hard to grasp. How can CTA welcome the community? Does CTA have anything special for the community? How will the community feel a part of this project? Economic development will help to a certain extent. Good to know that community will be directly affected by this project. Having this station could act as a hub that will bring better access to busing, better roads for walking and biking. How do we make people from all walks of life

feel a part of this process? How do we get the neighborhoods to get to the station (i.e., those at Indiana Avenue)?

Q5: Do you have any specific thoughts or ideas about economic development in the area?

- **Group 1 Responses:**
  - Food access is of the highest priority, higher than jobs once RLE is finished because the nearest Red Line adjacent grocery store is at 87th Street.
  - A grocery store is the number one priority and agree that more nature should be brought in.
  - There's a need for more trades jobs and career path opportunities.
  - Desire for a local coffee shop and jobs incubator
  - Incorporation of some amenities like coffee shops or restaurants or some type of life that can activate this space and give a sense of safety and security too. Also respite. Something people need to refresh themselves on the journey and now this being an end of the trip, if you will with the Red Line on that end.
  - Connecting to the bike trails. One of my colleagues works with the Metropolitan Development Corporation and worked on that prong and others in the community too have done so. Those things will be nice and be able to be highlighted and look at healthy modes of transportation, even though that's still challenging in the city to stress bikes and cars together. I'm still adjusting to that.
- **Group 3 Responses:**
  - Needs commercial development, especially for food. What plans are there for 130th?
  - No Ventra machines in Altgeld Gardens and have to visit another stop for Ventra card. Maybe something at the library.
  - Areas for green and sustainable development
- **Group 4 Responses:**
  - I'm part of RLE Coalition Board (RLEC) and moved into the Roseland area in 1972. In terms of having investment in the community, I've seen the transition. When I moved here, it was the beginning of the integration of Roseland. So, I've seen the community transition and being a part of RLEC we are advocates for RLE Project and for TOD for the Greater Roseland community, which includes the 130th Street terminal. My position is for the entire project because I've seen the change and disinvestment that has occurred throughout the years. Whereas it once was thriving and now there is blight. Basically, neighborhood vitality, economic vitality and TOD around all the development.
  - Everyone is not college bound. One concern is that I saw construction as an employment category but not trades. In the future, I plan to recruit and expose people in the community to trades and alternatives to college.

- **Group 5 Response:**
  - The food/grocery/medical desert is a top priority. I would love to see a shopping center or family center with amenities like food, medical services, and educational opportunities. For education opportunities, not necessarily a college but a trade school or offering trainings to community members such as home remodeling or how to start a business—things of that nature. The 'triangle around the airport,' for example, it would be great if some of that development came out to the South Side of Chicago.
- **Group 6 Responses:**
  - Integrate the historical aspects of the community into the station design
  - Incorporating nature, more trails, and promoting healthy lifestyles in the community whether it's integrating some type of park or recreational space, in addition to enhancing the nature already in the area.
  - For the area to feel like a step away or escape from the city hub, more local businesses and open areas would draw me into the area. Not big chain businesses, similar to the polling answers, a lot of preference towards local entities and programs available to families.

Red Line Extension 111th Street Station Virtual Meeting Minutes

Tuesday, February 2, 2021
6:00 PM – 7:30 PM
via Zoom & Facebook Live

Meeting Presenters

Marlise Fratinardo, *Chicago Transit Authority (CTA) Planning*
Ammar Elmajdoub, *Chicago Transit Authority (CTA) Planning*
Sonali Tandon, *Chicago Transit Authority (CTA) Planning*
Barbara Stubblefield, *Red Line Extension Program Management Team*
Melody Carvajal, *Red Line Extension Program Management Team*
Teresa Fourcher, *Transit-Supportive Development (TSD) Plan*
Mark Payne, *Transit-Supportive Development (TSD) Plan*

Attendees

Public via Zoom: 65
CTA staff, support and consultants via Zoom: 48
Facebook Live: 14
Total public: ~78

Meeting Materials

Presentation is attached.

Summary

CTA hosted the 111th Street Station virtual community meeting on Tuesday, February 2, 2021. The 111th Street Station meeting was the second of a series of meetings for the four proposed station areas along the Red Line Extension corridor. The meeting was held through Zoom and also broadcast on the project's Facebook page. Captioning as well as American Sign Language (ASL) and Spanish interpretation were available for meeting attendees, including during breakout rooms. A comment with the Zoom meeting information was also posted on the Facebook Live stream so individuals could join to participate in the interactive presentation portions and receive any required accommodations. Attendees were asked to register in advance and were provided with the link and meeting ID to join via Zoom. Registration was available on the project's interactive engagement website, transitchicago.com/RLE/engage, which is hosted on the Bang the Table (BTT) platform. The engagement website provides general information about the RLE Project and Transit-Supportive Development (TSD) Plan plus interactive tools such as an Ideas Wall, project survey, and project map to engage the public and solicit their feedback regarding the project.

Ms. Stubblefield started off the presentation by covering the agenda and presenters. Ms. Stubblefield also covered how attendees can ask questions throughout the meeting. Questions and comments submitted during the meeting are documented on pages 3-6.

Ms. Fratinardo led the group through the RLE Project overview, benefits, and recent progress. Ms. Stubblefield and Ms. Fratinardo asked attendees to respond to three direct questions via chat; responses to these questions are documented on pages 6-7. Next, Ms. Carvajal shared information regarding potential property impacts and provided a variety of contact methods and resources for additional information and follow up. Mr. Elmajdoub then presented engagement opportunities, including the website transitchicago.com/RLE/engage and recent public outreach efforts. Ms. Tandon then presented Environmental Review process updates and described some of the resource analyses being undertaken (traffic and access, noise and vibration, visual and aesthetics, and community resources) for which impacts may be of particular interest in relation to the 111th Street station. Ms. Tandon also shared specific details regarding the Supplemental Environmental Assessment (EA), including the cross-over located at approximately 108th Place which was not disclosed in the Draft Environmental Impact Statement (EIS). The 108th Place cross-over is where the Preferred Alignment crosses-over from the west side to the east side of the Union Pacific Railroad (UPRR).

Next, Ms. Fourcher presented on the TSD Plan, covering the overview, timeline, and current as well as past aligned planning efforts. Ms. Fourcher also shared information regarding community assets/resources and the 111th Street station corridor existing land use in relation to the TSD Plan. After, Mr. Payne led a series of interactive polling questions to gauge participants' ideas and recommendations for future development along the Red Line Extension corridor (questions and polling results are documented on pages 7-9 of this summary). Mr. Payne read the polling questions and answers out loud and they were also displayed on individual presentation slides for attendees to see. Following the interactive polling questions, attendees were separated into small groups for a breakout session led by a moderator and one to two other project team members. On average, there were five to six attendees in each breakout group. A set of general questions were displayed on a presentation slide to solicit input and encourage discussions. Community members were offered the opportunity to share their ideas on the vision for the community to inform the TSD effort. Breakout summaries were compiled for each group and the compilations of comments received are documented on pages 10-16.

After approximately 25 minutes, the breakout session concluded and attendees were brought back from individual breakout groups into one large group to finish the meeting. Each breakout group moderator presented a brief summary of their group's discussion and common ideas that were shared among group participants. Next, Mr. Elmajdoub presented information regarding the RLE interactive engagement website, opportunities to stay involved, how to receive project updates, ways to contact the project team and details regarding entry for the engagement site Visa gift card sweepstakes. Ms. Stubblefield then concluded the meeting by thanking all attendees for their participation, providing dates for the two upcoming station virtual meetings and methods, both digital and non-digital, to contact the project team with questions.

<u>Attendee Questions & Comments – Zoom Chat Feedback</u>

Unless otherwise noted, the following questions, comments, and responses documents the direct meeting chat transcription. Responses were provided in the chat by the RLE project team for all attendees who joined the meeting via Zoom to see. Attendees who joined via Facebook Live or phone did not have visibility of the Zoom chat questions, comments, and responses.

- **Question 1: Elevated trains in our neighborhood is a horrible idea and it will hurt our property values.**
    - **Response 1:** Thanks for your question, Mosea. You may want to check out *"Transit Means Business"*, a study by the Metropolitan Planning Council: chi.streetsblog.org/2018/11/12/mpc-study-highlights-importance-of-transit-for-attracting-businesses-employees/.
- **Q2: Why isn't the 111th Street station--named or called the Medical District station/stop? This would bring more value to the station & what the community can best recognize.**
    - **R2:** Thank you for your suggestion on the station name, Ms. Deloris! CTA has not selected names for the RLE stations, but we would love to hear your ideas! The best way to do that would be to head to our engagement website at transitchicago.com/RLE/engage.
- **Q3: Will there be space for parking at the stations?**
    - **R3:** Thanks for your question, Monique! Yes, park & ride facilities are planned at each of the four RLE stations. Using travel demand modeling, the CTA has estimates of the parking demand needed along the Preferred Alignment. The CTA is currently conducting additional analysis and review of parking needs near stations and as part of the ongoing project development and engineering studies.
- **Q4: I [am] happy to see it coming into being I hope very soon. What is the timeline?**
    - **R4**: Thank you for your question regarding the timeline, Pat. With the RLE Project's acceptance into the Federal Transit Administration's (FTA) Project Development phase in December 2020, CTA now estimates the start of construction in 2025 and service beginning in 2029. However, the timing of construction and start of service is dependent on federal approvals and securing project funding.
- **Q5: Is it possible that the start of construction can start much earlier than 2025?**
    - Thanks for your question, Jocilyn. The anticipated construction date is dependent on a number of factors, including federal funding and approvals, further engineering and design, completion of environmental review, and

procurement of construction contracts. We believe that 2025 is a realistic timeline based on the steps involved with delivering a mega-project like the Red Line Extension. We know the community is anxious to see this project happen - we are too and we're working hard to make sure it does!

- **Q6: 2025? We have been waiting to make it happen for years.**
- **Q7: Closed deck structure works best.**
- **Q8: How will you maintain safety within the residential area and how can residents maintain parking near their homes? I.e., how will the traffic be controlled around our houses?**
    - **R8:** Thank you, Reverend Calloway. A project-specific safety and security plan for the Red Line Extension is being developed during Preliminary Engineering and security measures will be consistent with that of the entire CTA system. A number of steps have been taken to improve your safety and security while on CTA. To learn more about these steps, please visit: transitchicago.com/security. Park & ride facilities are planned at each of the four RLE stations. Using travel demand modeling, the CTA has estimates of the parking demand needed along the Preferred Alignment. The CTA is currently conducting additional analysis and review of parking needs near stations and as part of the ongoing project development and engineering studies. Rev. Calloway, we are also studying traffic impacts as part of the environmental analysis.
- **Q9: Regarding Workforce and Economic Development Potential – What are the opportunities for potential employment during the planning and construction phases? How can local candidates access training that will prepare them for potential employment in all phases of this project? Will there be a jobs pipeline for those from the impacted community to access employment?**
    - **R9:** Good questions, Dallas! As a part of the RLE Project, the CTA is seeking to address barriers to sustainable employment for residents within the project area and people from economically disadvantaged zip codes. The CTA is establishing partnerships with community organizations, educational institutions, and trade organizations to promote workforce opportunities on the project and in the broader construction industry.
- **Q10: Will a portion of the cost of RLE be absorbed by increasing property taxes?**
    - **R10:** Hi Cynthia - The CTA is pursuing a wide range of federal, state, and local funding sources, including the FTA's Capital Investment Grant (CIG) Program. A category of CIG funds known as, New Starts, is available for projects that expand rail service into an area that is not within the current transit footprint and therefore entail a relatively longer environmental and

planning process. The CTA must compete with other New Starts projects across the country that are also seeking funding from the program. Once the Project Development phase is complete, CTA will have a more precise understanding of the overall timeline of receiving federal New Starts funding. Local funds are also needed to "match" the federal New Starts funds and local funds demonstrate the commitment to the project. The CTA is considering a number of options at this time for this that include a special transit-only tax-increment financing district, authorized by the General Assembly in June 2016, which could provide a portion of the local funding needed for the RLE Project.

- **Q11: Stop blocking the terp**
  - *This comment was made with regard to ASL interpretation. Project team members checked that interpreters remained visible and no technical issues were found.*
- **Q12: The proposed station will eliminate all parking for the Agape Center.**
  - **R12:** Thank you for your comment, Brad. CTA would like to continue the conversations we have had with the Agape Center about how to minimize impacts to your organization.
  - **Brad** – We would appreciate that direct, intentional conversation from the RLE.
- **Q13: Roseland LISC is inclusive of the Far South Chicago Coalition. Please allow more input from the Coalition which has a Workforce Development Committee and Economic Development Committee.**
  - **R13:** Thank you for the suggestion, Rev. Calloway!
- **Q14: Had RLE work with various disabilities especially deaf and hard of hearing seeking feedback? organization?**
  - **Participant Response (R14):** Mr. Woodson, you can learn more about the Agape Center at chicago.cru.org/innercity.
- **Q15: The problem is most the single-family housing needs to be seriously remodeled or replaced.**
  - **R15:** Thanks for that point, Brad. We are also looking into the condition of housing stock as part of the TSD Plan.
- **Q16: No Little Calumet near 111th**
  - *Comment in reference to an error on one of the polling questions carried over from the 130th meeting.*
- **Q17: When we say shopping, more for daily necessities not leisure/grocery stores.**
  - *In reference to polling question 4.*
- **Q18: Speak for yourself… no one knows what one desires in terms of shopping…**

- *In reference to above comment on polling question 4.*

- **Q19: Keep in mind, Greater Roseland represents the Chicago city limits. It offers the opportunity to represent the City of Chicago as a city that works for every community from the Far South Side to the Far North Side; from I-57 on the west to Bishop Ford on the east!**
  - **Participant Response (R19):** Yes, it does Pat. It is also the area that the Far South Chicago Coalition (FSCC) is working in for the Quality-of-Life Plan with Local Initiatives Support Corporation (LISC)!
- **Q20: As president of Chicagoland Black Deaf Advocates, I would love to work with many people in community.**

<u>Presentation Engagement Questions – Zoom Chat Feedback</u>

These questions were posed by the presenters during the large group presentation. The following documents the attendee responses that were typed in the Zoom chat.

- **Question 1: What neighborhood do you reside in?** *(Responses listed in order of most common to least)*
  - **Responses 1:**
    - Roseland
    - Roseland Heights
    - Washington Heights
    - Cal City
    - Chatham
    - West Chesterfield
    - Riverdale/Golden Gate
    - West Pullman
    - Pullman
    - Hyde Park
    - Hazel Crest

- **Q2: What is your favorite CTA Station and what about that station do you like most?**
  - **R2:**
    - Art in the stations
    - Updated technology
    - Glad you mentioned medical district/111th Street
    - It will bring economic growth for small businesses
    - I like the 95th Street station. Also, art and info screens should be included.
    - 35th Street because the tunnel keeps the noise down. Also 95th because it does not impede the residents.
    - Safety when you get on and off

- Security, please
- Access to elevators
- Staffing plans to ensure quality station and grounds' cleanliness
- Transit turnaround with shuttle to and from Roseland Hospital

- **Q3: How will the Red Line Extension benefit you and your neighborhood?**
  - **R3:**
    - Hoping it will give our neighbors access to downtown
    - Jobs
    - Hoping it will lead to economic development in our community
    - Benefits
    - Creates TOD, economic and neighborhood vitality
    - Access to employment opportunities in other areas
    - Potential opportunities immediately in the area for local community
    - Construction jobs for the same!
    - It definitely will put ease to mobility for those who rely solely on public (train) transportation.
    - Concerned about the extra unwanted traffic it will bring to my neighborhood
    - I agree with person that is happy to see the service coming to our area
    - Chicago's public transportation system is a benchmark. It is inevitable that routes will come to or near your neighborhood.

<u>Presentation Polling Results</u>

Attendees joining the meeting through Zoom could answer the poll in real time. Polling was not available to attendees who joined the meeting through Facebook Live or by phone. Those attendees were informed that polling questions were available on the RLE engagement website as an alternate way to participate and provide their responses. Polling questions were typically open for more than 45 seconds.

Response Options	Votes Received
1. What would be your mode of transportation to the 111th Street station? *Total Attendees Responding to Question: 30*	
Drive	12
Walk	8
Bus	7
Other	2
Bike	1
2. What kinds of open space or public places would you like more of? (Pick up to 3) *Total Attendees Responding to Question: 32*	
Farmers market or local food kiosk	19
Walking and biking trails	14
Plazas and other gathering spaces	13
Performance or public art spaces	12

Spaces dedicated to nature and ecological restoration	11
Places for exercise	7
Sports and active recreation	6
3. What are the community's greatest strengths from a development perspective? (Pick up to 3) *Total Attendees Responding to Question: 34*	
Single-family housing	**17**
Transit	**12**
Civic and religious institutions	**11**
Historic preservation	**11**
Schools	10
Affordable housing	9
Senior housing	8
Jobs	6
Parks	6
Shopping	6
4. What are the community's greatest needs from a development perspective? (Pick up to 3) *Total Attendees Responding to Question: 33*	
Shopping	**23**
Jobs	**20**
Transit	**15**
Affordable housing	12
Single-family housing	8
Schools	7
Senior housing	6
Historic preservation	3
Parks	3
Civic and religious institutions	2
5. What types of businesses would you like to see? (Pick up to 3) *Total Attendees Responding to Question: 33*	
Grocery stores	**24**
Locally owned cafés	**21**
Medical, health & wellness services	**12**
Professional services	11
Home improvement stores	10
National chain restaurants	9
National brand clothing stores	6
Pharmacy	6
Locally owned boutiques	4
Personal services	2
6. What types of jobs are needed nearby? (Pick up to 3) *Total Attendees Responding to Question: 30*	
Construction	**14**
Public sector	**13**
Manufacturing	**13**
Retail and restaurants	12
Healthcare workers	10
Transportation and warehousing	9
Maintenance and utilities	8
Professional services	8
Office and administrative support	3

7. What type of housing is most needed? (Pick up to 3) *Total Attendees Responding to Question: 30*	
Home ownership	**23**
Affordable housing	**17**
Mixed-income	**17**
Senior housing	15
Veterans housing	11
Rental	3
8. What scale of housing is desired? (Pick up to 3) *Total Attendees Responding to Question: 32*	
Single-family	**30**
Two-flats and three-flats	**24**
Townhomes	**21**
Small four-to-six-unit building	7
Multi-family housing with ground floor commercial	4

<u>Breakout Session Groups</u>

Group 1
Moderator: Erin Cabonargi *(TSD Plan)*
RLE Project Members: Marlise Fratinardo *(CTA Planning)*, Leah Mooney *(CTA Planning),* & Mandi Jennings *(RLE Program Management Team)*

Group 2
Moderator: Mark Payne *(TSD Plan)*
RLE Project Members: Sonali Tandon *(CTA Planning)* & Michael Schuch *(RLE Program Management Team)*

Group 3
Moderator: Teresa Fourcher *(TSD Plan)*
RLE Project Members: Ammar Elmajdoub *(CTA Planning)* & Jenn Pisano *(TSD Plan)*

Group 4
Moderator: Christine Carlyle *(TSD Plan)*
RLE Project Members: Jasmine Gunn *(Chicago Department of Planning and Development)* & Jackie Davis *(TSD Plan)*

Group 5
Moderator: Barbara Stubblefield *(RLE Program Management Team)*
RLE Project Members: Drew Williams-Clark *(TSD Plan)* & Kristen Robinson *(RLE Program Management Team)*

Group 6
Moderator: Jacob Peters *(TSD Plan)*
RLE Project Members: Patrick Dunn *(RLE Program Management Team)* & Elbert Whitfield *(TSD Plan)*

Breakout Session Questions & Group Responses

The following documents a combination of attendees' verbatim and paraphrased responses provided by the breakout group moderators. Individual breakout groups may not have responses listed for each question due to groups spending more time discussing other questions or moderators not receiving any feedback from attendees on those prompts.

Question 1: What are three words you would use to describe your vision for the neighborhood?

- **Group 1 Responses:**
  - Access to jobs
  - Positive economic impact
  - Positive identity for the neighborhood
- **Group 2 Responses:**
  - Comparable to north side
  - Economic vitality
  - Revitalization of greater Roseland community
  - Vibrancy
  - Community feeling
  - Families
- **Group 4 Responses:**
  - Vibrant, community, family
  - Aesthetically pleasing and economically productive
  - Layered, hidden, connected
  - Safe, family-oriented, vibrant
- **Group 5 Responses:**
  - Food desert, greater access to quality food, grocery shopping, and safe/quality recreational activities for children
  - Quality education, bike trails, senior housing—we have a lot of seniors in the community
  - Lively, growth-oriented, diverse
  - Safe, vibrant, walkable
- **Group 6 Reponses:**
  - Need employment opportunities
  - Growth, restoration, access
  - Healthy, safe, prosperous

Q2: What is important for us to understand about your community?

- **Group 1 Response:**
  - The new stop may bring safety and security concerns to the neighborhood. I would like to have more intentional conversations with CTA about Agape

parking concerns. Agape Center would be happy to be involved and to be a resource within the community.

- **Group 2 Responses:**
  - Greater Roseland was once a thriving community. Hopefully, TSD will bring the community beyond where it was.
  - A lot of seniors in this community
  - A lot of younger people living here due to the lack of affordable rentals.
- **Group 3 Responses:**
  - Safety is a major concern, especially around the medical district.
  - Safety concerns, due to vacant buildings, is a deterrent.
  - There are too many vacant lots and vacant houses which can be used as an opportunity for redevelopment.
  - New development and renovations should not meet code minimums but should be developed to a higher standard.
  - The community is supportive of development and there needs to be more community vision integrated into the plans. As a matter of fact, the 2001 TIF was a result of a community led initiative that started in 1997.
  - The goal is to bring people back to the community and provide them with the amenities they need so they don't have to go outside of it to access basic services and shopping.
  - Property lots are larger than average and provide an opportunity for developing larger homes.
  - The community does not need any more standalone subsidized housing; however mixed-income development would be welcomed.
  - 103rd and 111th Streets used to be strong commercial corridors
- **Group 4 Responses:**
  - Lots of seniors in the neighborhood and young families with nothing for them to do
  - They have good educational institutions that need to be promoted by the city to attract more students.
  - 111th Street is a major corridor that can link to Pullman Monument.
  - Has seen the deterioration of the neighborhood over time
  - Lots of seniors – need outreach for programming given that they don't have all the technology and resources for information if they don't have young people in their lives to show them (especially since they are scared to come out of their houses).
  - Nothing to do in the community
  - Roseland had its own theater 20-30 years ago.
- **Group 5 Responses:**
  - It's important for the team to understand we need jobs and economic development. There are businesses here, but only fast food and we need healthier food options, to that point. We have a lot of young people who

aren't working due to the lack of jobs. Safety is also a big concern; I don't feel safe walking in my community.
    - A lot of the small businesses are owned by foreigners who don't have an investment in our community so there's no economic responsibility within our community.
    - There has been historic disparity that's continuous and is common to other inner-city communities. There's also historic pride for those families who purchased their first homes in this community. Roseland means a community of hope for those to come back. People need to understand we've been overlooked and cast in a negative shadow.
    - Safety is a concern, there are a lot of people who hang around the corners and it's not safe for seniors to walk alone or kids going to school. We're not able to enjoy the community because of this concern and need more protective services.
- **Group 6 Responses:**
    - A lot of returning citizens (formerly incarcerated individuals), single parents, homeless, and others that are looking for employment opportunities.
    - Residents are worried about not being able to park right outside their homes due to concerns about walking home at night.
    - This area has some of the highest rates of unemployment and returning citizens of any zip code. Workforce development and job growth have to go hand in hand.
    - Safety improvements have to precede the start of RLE service, otherwise ridership will be depressed by those who don't feel comfortable walking to the station. Safety improvements are tied to economic opportunities for young residents.

Q3: What are your community's greatest assets? What is missing?

- **Group 1 Responses:**
    - Missing workforce plans – the community could get training to qualify our residents for the jobs (Union training)
    - The neighborhood is unique and those raised in the area claim their elementary school not their high schools as their geography.
    - Generational ownership in the area ("lifers") and the unique history of a formerly Dutch neighborhood.
    - CTA should consider making the stations more accessible for the deaf/hard of hearing. If there is a re-route or a train is delayed, they often do not hear the messages that are being broadcast over the intercom. CTA should consider having visuals available for re-route maps and any announcements.

- **Group 2 Responses:**
    - Missing is that young people do not know what resources to utilize to establish income or what resources are available to them. The opportunities are so spread out, and transportation costs have gone up so much it may be hard to access all of those opportunities.
    - The people are the greatest assets. Responsibility and sense of community is not translated to the next generation.
    - What is missing is the community's involvement. People hope that during this transition that there is a way to educate young people on how to participate economically in this transition. There may be a level of dissatisfaction without this.
- **Group 3 Responses:**
    - The medical district is an asset.
    - There is a desire for more commercial development on Michigan Avenue.
    - Small clinics could be moved off Michigan Avenue and into the medical district.
    - New restaurants and grocery stores are needed.
    - Schools need the newer technology and resources that are missing in Roseland but are in other communities.
    - New construction is welcome
    - Multi-unit building development and single-family homes are both needed.
    - There is enough senior housing
    - Pullman and Halsted have national retailers, Michigan Avenue retail development is different – desire to retain the existing small businesses and to bring more local business, such as men's clothing stores and restaurants.
- **Group 4 Responses:**
    - Need a Boys & Girls Club
    - Would love activities like arts & crafts and provide transit to those activities
    - Need a Department of Aging for the community
    - Need affordable activities for young people like the Kroc Center in Morgan Park on 115th Street which is hard to get to from Roseland.
    - Desire for mom-and-pop stores, grocery stores, affordable housing, and single-family homes
    - Only positive assets are the Major Taylor Bike Trail and Monument Park
    - Want walkable mom-and-pop stores
    - An asset is we have lots of riders
    - Missing reliable, efficient, and quick transportation to cut commute time
    - Assets are people and potential for growth
- **Group 5 Responses:**
    - Our individual homeowners take a lot of pride in the neighborhood. We're missing block clubs; some areas have them but not all. They act as a resource to be able to come together and help residents in need.

- We have lots of homes in the community as opposed to multi-residential buildings. We're missing recreational opportunities and walking trails. I see trails on the north side but not the south. There are a lot of health issues such as obesity due to the lack of resources. Economic development is also missing.
- Diversity of people within the neighborhood, ranging in ages. Different demographics of people allow for us to come together and develop great ideas. To echo other's thoughts, we need economic development and jobs that are sustainable for all class/community groups, with or without degrees, such as jobs in the trades because a lot of people aren't working.
- An asset is our civic and religious institutions. People should have institution options in the neighborhood where they live and serve. Concerned there's been trades missing for some time in our community. Not everyone is cut out to be behind a desk. There are a lot of businesses in the neighborhood that don't last long. People need plumbers, electricians, etc. and I shouldn't have to go outside of my community to hire those services.

- **Group 6 Responses:**
  - Need permit parking as part of station implementation
  - Safe street design and safety personnel on main streets for pedestrians traveling to/from transit
  - Jobs pipeline is needed for non-union jobs as well as integration into the US Employment Plan and existing regional workforce development initiatives. Like those that Rev. Calloway and Dallas Gordon are involved with for T.R.E.A.D., Washington Heights Workforce Center, and Members of Far South Chicago Coalition. As well as the asset of the Rock Enterprises Development Corporation.
  - Food, transit, and jobs desert. The other two deserts need to be addressed for this to be as successful as possible.
  - Greatest asset are the people in the community, especially unlocked potential of the youth.
  - Need the reduce commute times this project will bring but also need to start work before the service starts so that community is prepared for and engaged in change rather than displaced by it. Especially related to safety and employment.
  - Missing greater access to education and entertainment that exists in other communities, as well as increased spending within Roseland by visitors from other communities that could restore retail corridors.
  - Biggest assets are young people and young leaders in additional to the rich spiritual heritage and one of the highest concentrations of houses of worship in the city.
  - The Rock Enterprises and Development (T.R.E.A.D) Corporation is an asset.

Q4: How do you see the new station benefitting your community?

- **Group 1 Responses:**
  - Bringing more positive identity for the neighborhood because today it is not all positive as there are issues like rioting and looting
  - Having better access will help those without a car
  - Would the 111th bus become a 24-hour bus?
    - *Project team response:* CTA is looking at bus service plans but not at that level of detail yet
- **Group 2 Responses:**
  - It will give people better opportunities.
  - Development. National brand developers will note this is a major transit spot and will likely open up a business here. Entire corridor can attest national brand stores again, which used to be on Michigan Avenue. The whole project (all 5.6 miles) will transform greater Roseland area and help revitalize other areas.
  - It will get people back into the community via home ownership. This will also enable people to buy property and eventually increase property values.
  - Would like to see the neighborhood voted dry and get rid of liquor stores and have landlords maintain quality of tenets.
- **Group 3 Responses:**
  - New job development
  - Increased safety
  - Opportunity for access to jobs outside of the community to earn a living wage
  - Access to transportation, the hospital, and shopping
  - The community can look to the changes made in Bronzeville as an example for the Far South Side community – bringing new homes and education opportunities within their own neighborhoods.
  - Goal to save this district because it is the only commercial/shopping district in the community from 111th to 115th Streets, as well as on 111th Street.
- **Group 4 Responses:**
  - Ultimately want to walk in freedom
  - Halsted (from 110th – 199th) is a major corridor with lots of economic resources and we need to connect it to the station.
  - Adding this station will allow for other stops along people's commutes as well as shopping.
  - Not sure, concerned about safety and believe adding more jobs and education could help with that.
  - New station will bring new people to the neighborhood and more home ownership.
  - Desire it to be a safe space, like a village

- **Group 5 Responses:**
    - All analysis that has been said about transit station – I've lived in the neighborhood for 40 years and we've been waiting for this to happen. Eminent domain is going to affect people which scares me, and some people will miss out so to speak.
    - Aesthetically. Allowing job training and opportunities for people to be trained and things that they're going to be utilizing in the new station. I would love to see those jobs made available with priority to community residents.
    - Young urban professionals will want to move out this way because it's easy access to city jobs which would allow the community to become mixed-income and businesses would want to develop/be established in our community. Almost a Soho economic development if you will, because our area has been so overlooked (between Halsted and Michigan).
    - Save money for peoples' commutes, won't have to take cars to 95th and then the subway. It would be more convenient.
    - Strong emphasis on economic development. More diverse and options for economic development. That the project will produce what they're saying it will.
- **Group 6 Responses:**
    - Greater connection to jobs not just downtown but throughout the city.
    - Each station can be the economic engine and cultural node expressing the soul of the neighborhood through jobs, as well as art.
    - If the 111 & 111A buses were merged then 111th could be a healthcare node along a corridor between the Blue Cross Blue Shield locations at Pullman & Marshfield Plaza, as well as the Roseland Medical District.
    - Provide greater access to the east/west bus routes on main streets in the area
    - This project can create a healthier community if it means growth in food access, a safer neighborhood through more eyes on the street, and a more prosperous community not only through increased access to jobs but also jobs here that can be accessed from other neighborhoods.
    - Greater access to educational services and entertainment amenities. It can also increase visitation to Roseland from other Chicago community areas that currently don't have easy access. Improvements in crime mitigation will also hopefully precede the start of RLE service.

Red Line Extension 103rd Street Station Virtual Meeting Minutes

Tuesday, February 9, 2021
6:00 PM – 7:30 PM
via Zoom & Facebook Live

Meeting Presenters

Marlise Fratinardo, *Chicago Transit Authority (CTA) Planning*
Ammar Elmajdoub, *Chicago Transit Authority (CTA) Planning*
Sonali Tandon, *Chicago Transit Authority (CTA) Planning*
Barbara Stubblefield, *Red Line Extension Program Management Team*
Melody Carvajal, *Red Line Extension Program Management Team*
Teresa Fourcher, *Transit-Supportive Development (TSD) Plan*
Mark Payne, *Transit-Supportive Development (TSD) Plan*

Attendees

Public via Zoom: 68
CTA staff, support and consultants via Zoom: 44
Facebook Live: 8
Total public: ~76

Meeting Materials

Presentation is attached.

Summary

CTA hosted the 103rd Street Station virtual community meeting on Tuesday, February 9, 2021. The 103rd Street Station meeting was the third of a series of meetings for the four proposed station areas along the Red Line Extension corridor. The meeting was held through Zoom and also broadcast on the project's Facebook page. Captioning as well as American Sign Language and Spanish interpretation were available for meeting attendees, including during breakout rooms. A comment with the Zoom meeting information was also posted on the Facebook Live stream so individuals could join to participate in the interactive presentation portions and receive any required accommodations. Attendees were asked to register in advance and were provided with the link and meeting ID to join via Zoom. Registration was available on the project's interactive engagement website, transitchicago.com/RLE/engage, which is hosted on the Bang the Table (BTT) platform. The engagement website provides general information about the RLE Project and Transit-Supportive Development (TSD) Plan plus interactive tools such as an Ideas Wall, project survey, and project map to engage the public and solicit their feedback regarding the project.

Ms. Stubblefield started off the presentation by covering the agenda and presenters. Ms. Stubblefield also covered how attendees can ask questions throughout the meeting. Questions and comments submitted during the meeting are documented on pages 3-6.

Ms. Fratinardo led the group through the RLE Project overview, benefits, and recent progress. Ms. Stubblefield and Ms. Fratinardo asked attendees to respond to three direct questions via chat; responses to these questions are documented on pages 6-7. Next, Mr. Elmajdoub presented engagement opportunities, including the engagement website, transitchicago.com/RLE/engage and recent public outreach efforts. Ms. Carvajal then shared information regarding potential property impacts and provided a variety of contact methods and resources for additional information and follow up. Ms. Tandon explained that there have been no major changes to the 103rd Street station since the Draft Environmental Impact Statement (EIS). Ms. Tandon described some of the resource analyses underway for the Supplemental Environmental Assessment (EA) (traffic and access, historic and cultural resources, noise and vibration, visual and aesthetics, and public parks and recreation area) for which impacts may be of particular interest in relation to the 103rd Street station.

Next, Ms. Fourcher presented on the TSD Plan, covering the overview, timeline, and current as well as past aligned planning efforts. Ms. Fourcher also shared information regarding community assets/resources and the 103rd Street station corridor existing land use areas in relation to the TSD Plan. After, Mr. Payne led a series of interactive polling questions to gauge participants' ideas and recommendations for future development along the Red Line Extension corridor (questions and polling results are documented on pages 7-9 of this summary). Mr. Payne read the polling questions and answers out loud and they were also displayed on individual presentation slides for attendees to see. Following the interactive polling questions, attendees were separated into small groups for a breakout session led by one to two other project team members. On average, there were five to six attendees in each breakout group. A set of general questions were displayed on a presentation slide to solicit input and encourage discussions. Community members were offered the opportunity to share their ideas on the vision for the community to inform the TSD effort. Breakout summaries were compiled for each group and the compilations of comments received are documented on pages 10-17.

After approximately 20 minutes, the breakout session concluded and attendees were brought back from individual breakout groups into one large group to finish the meeting. Each breakout group moderator presented a brief summary of their group's discussion and common ideas that were shared among group participants. Next, Mr. Elmajdoub presented information regarding the RLE interactive engagement website, opportunities to stay involved, how to receive project updates, ways to contact the project team, and details regarding entry for the engagement site Visa gift card sweepstakes. Ms. Stubblefield then concluded the meeting by thanking all attendees for their participation, providing information for the final upcoming station virtual meeting and methods, both digital and non-digital, to contact the project team with questions.

<u>Attendee Questions & Comments – Zoom Chat Feedback</u>

Unless otherwise noted, the following questions, comments, and responses documents the direct meeting chat transcription. Responses were provided in the chat by the RLE Project team for all attendees who joined the meeting via Zoom to see. Attendees who joined via Facebook Live or phone did not have visibility of the Zoom chat questions, comments, and responses.

- **Question 1: Will all the new stations be able to handle 10 car trains?**
    - **Response 1:** Thank you for your question, Allan! Yes, all four proposed RLE stations will be designed to accommodate 10-car trains.
- **Q2: Will the 103rd Street bus still terminate at 95th Street after the new station opens?**
    - **R2:** Thanks for the question, Michael! Since the CTA is building stations and tracks that have never existed previously, CTA will need to determine how different bus routes and transportation details would be coordinated and enhanced to meet the needs that would arise with the new station locations. CTA is in the process of developing a service plan for the RLE Project, which may include adjustments to existing bus routes to complement the new high-capacity transit service.
- **Q3: Related to Michael's question, it would be great if the 103rd Street bus was one continuous route after 103rd Street station is open.**
    - **R3:** Thanks for your suggestion, Anne! We will consider that when developing the service plan.
- **Q4**: **So, the track is going to cross above the Wentworth bridge at 99th? How high up is that?**
    - **R4:** Hi Hillary - Yes, the RLE track would cross over Wentworth Avenue north of 99th Street. The project is currently being designed and we do not have an exact structure height defined quite yet.
- **Q5: Will the project be built in phases?**
    - Thanks for the question, Allan. CTA is planning to build the RLE as one project.
- **Q6: What will happen to the trees and park area along Eggleston, between the road and the current freight tracks? Are you going to tear it all out?**
    - **R6:** Thanks for your question, Hillary! CTA does anticipate needing to remove some trees to make room for the RLE Project. A tree survey is being conducted that will give us a better idea of the impacts to trees along Eggleston Avenue, as well as other areas of the project.
        - **Follow up comment from same attendee**: But it will not be "some" trees, you will take out the entire historical avenue of trees.
- **Q7: Will construction of the extension begin on 95th? Are there any plans to improve conditions at the 95th station and its surroundings?** *(Question 7 and*

responses were communicated in Spanish during the meeting; this description is an English translation of that exchange)

- **R7a:** Thank you for your question, Roberto. Please accept our apologies but we are unable to answer questions in Spanish during this live meeting, however, please email us at RedExtension@transitchicago.com and we will respond to you as soon as possible.
    - **Follow up comment from same attendee**: Thanks for answering. I will use the email. I invite you to continue working so that Spanish speakers can fully participate and interact in real time.
- **R7b:** Roberto, thanks for the invitation! We continue to make efforts to better serve all communities. For the 95th station area, CTA is currently involved in several preliminary discussions about how to best support development in that area.

- **Q8: Will there be permit parking in the area?**
    - **R8:** Thank you for your question, Cheena. Per Chicago Municipal Code, residential parking zones are introduced by Aldermen and established by City Council. To be eligible, the proposed parking zone must meet certain requirements including demonstration of need as determined by a parking study, among other things. CTA will be coordinating with the Chicago Department of Transportation (CDOT) on issues related to parking availability.
- **Q9: How much will the project cost and what will be the federal share?**
    - **R9:** Hi Allan - CTA estimates that the RLE Project will cost approximately $2.3 billion. We anticipate a Federal share of approximately 49 percent.
- **Q10: How does permit parking work for our family members? There are a lot of seniors whose children visit regularly to check on parents.**
    - **R10:** Park & ride facilities are planned at each of the four RLE stations. Using travel demand modeling, the CTA has estimates of the parking demand needed along the Preferred Alignment. The CTA is currently conducting additional analysis and review of parking needs near stations and as part of the ongoing project development and engineering studies.
- **Q11: Awesome! Transportation should be affordable, accessible, equitable and seamless. Rapid transit provides an opportunity for people to get to work and return home in a timely fashion allowing families to have more time to spend with their children/family.**
- **Q12: Can this be done in tangent with the project or will we have to wait?**
    - *No response provided during the meeting.*
- **Q13: Will the extension lead to more frequent train service south of the loop? It was a common joke with my peers as we watched a ratio of almost 3:1 trains from the north to the loop in the morning and the reverse in the evenings at Lawrence and Wilson stations. In other words, we waited three times as long as commuters travelling in the opposite direction from us.**

The lack of equity was very apparent, especially when we looked at the racial demographic difference seen with the service.

- **R13:** Thanks for your comment, Dallas. The RLE service plan is still under development. CTA is committed to promoting equity and environmental justice throughout our service area and the RLE Project is a major component of CTA's efforts to improve transit service on the South Side of Chicago.

- **Q14: Will the trains be cleaner and safer than they are now? I am a shift worker, commuting at 5:30am, and I honestly cannot remember the last time I rode a train that was not dirty and full of people smoking. It has gotten a lot worse since the pandemic, nobody seems to care.**
  - **R14:** Thank you for your comment, Hillary. The project-specific safety and security plan for the Red Line Extension is being developed during Preliminary Engineering, and security measures will be consistent with that of the entire CTA system. A number of steps have been taken to improve your safety and security while on CTA. To learn more about these steps, please visit: transitchicago.com/security.
- **Q15: I understand about direct property impact, what about surrounding area... within a one or two block radius?**
- **Q16: Agree with Cheena about the property impact. Instead of a park full of trees. Eggleston residents will have noise and vibration every 10 minutes or so, and the trees will be replaced by a metal structure.**
  - **R15 & 16:** Thanks for your questions and comments, Cheena and Hillary. You may want to check out "Transit Means Business", a study by the Metropolitan Planning Council about the impacts of transit on properties in the surrounding areas: chi.streetsblog.org/2018/11/12/mpc-study-highlights-importance-of-transit-for-attracting-businesses-employees.
- **Q17: What are the right now economic and employment opportunities for those that live in the impacted areas?**
  - **R17:** Hi Dallas - The RLE workforce development plan is under development and will be coordinated with CTA-wide plans to increase workforce and career opportunities. In the meantime, please check out CTA's Workforce Opportunities page to see what's available now: transitchicago.com/rpm/workforce-opportunities/.
    - **Follow up comment from same attendee**: Thank you for your response. I am pleased to see the Workforce Innovation and Opportunity Act (WIOA) reference. We are one of the local WIOA locations in the community. Even with all of our partners, there is a tremendous need to be able to provide our services. Hopefully, this will lead to increased capacity to serve.
- **Q18: Top was local food source** *(in reference to an accidental omission in reporting the top polling results for polling question 3)*

- **Q19: By a lot! Makes me think of possible food deserts in the area** *(in reference to above correction regarding the top polling results for polling question 3)*
- **Q20: Agreed, the food kiosk and farmers market were 82 percent. Why did they ignore that?***(in reference to an accidental omission in reporting the top polling results for polling question 3)*
    - **R18-20:** Thank you for catching that, Rev. Calloway. We caught that as well! Mark [Payne] must have forgotten to scroll all the way through the options as he was reading. The actual response rates will be reflected in our summary of the meeting.
- **Q21: I did not see STEM or tech on that list** *(in reference to response options for question polling question 7)*
- **Q22: Re: Ask Sign Language Interpreter [to] remove label -- the interpreter's hands are blocked. I have sign language skills. Thank you. D. L. Truss. Red Line Extension Coalition.**
    - **R22:** Thanks, D.L.! We will work on that for our next meetings!
- **Q23: On 100th Street [where] is the train tracks? Will [it] be in the park?**
    - *Question identified after the meeting (without question marks) upon review of the transcript. Question was asked and addressed verbally in a breakout group and commenter planned to send email to RedExtension@transitchicago.com to ensure it was received.*

<u>Presentation Engagement Questions – Zoom Chat Feedback</u>

These questions were posed by the presenters during the large group presentation. The following documents the attendee responses that were typed in the Zoom chat.

- **Question 1: What neighborhood do you reside in?** *(Responses listed in order of most common to least)*
    - **Responses 1:**
        - Roseland
        - Rosemoor
        - Washington Heights
        - Fernwood
        - West Pullman
        - Beverly
        - West Chesterfield

- **Q2: What is your favorite CTA Station and what about that station do you like most?**
    - **R2:**
        - Cermak to 22nd Street is well lit
        - It is a tie between Morgan (Pink and Green lines) and Cermak (Green Line). I appreciate the accessibility and views.
        - No real favorite. The Wilson station redesign was done nicely.

- I am near 95th station, it is convenient
- I like area by IIT, the covered dome
- Easy accessibility, protection from the weather, good wayfinding at Washington/Wabash
- Jackson Red Line because there are always musicians (*This comment is an English translation of a response that was communicated in Spanish)*
- The new Belmont Blue Line, cool design
- Lake, very airy and big
- I do not have a favorite as I only use the Red Line from Roosevelt to 95th and they are not nice. I think there are some nicer stations on the other lines, but these are all dirty and lacking security.

- **Q3: How will the Red Line Extension benefit you and your neighborhood?**
  - **R3:**
    - Easier access for bike/train combo trips
    - More access to jobs
    - Equity and connection with the whole city (*This comment is an English translation of a response that was communicated in Spanish)*
    - Building a wonderful workforce from the communities
    - Jobs
    - Faster to get downtown and other connecting CTA services
    - Quicker access than going to 95th via bus
    - Honestly, not seeing it as a benefit. Property value and safety concerns
    - I live at 102nd, so it would be super easy to go north to south for baseball games and downtown using one train
    - Access to jobs and the loop. I used to work on the northside but live in the south suburbs. I had to take both Metra and CTA to get to work. Extending to 130th would change that commute.
    - I live right by the 103rd site, so it would reduce the need to get to 95th.

<u>Presentation Polling Results</u>

Attendees joining the meeting through Zoom could answer the poll in real time. Polling was not available to attendees who joined the meeting through Facebook Live or by phone. Those attendees were informed that polling questions were available on the RLE engagement website as an alternate way to participate and provide their responses. Polling questions were typically open for more than 45 seconds.

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Response Options	Votes Received
1. How did you learn about tonight's meeting? *Total Attendees Responding to Question: 23*	
Email from CTA	**14**
Facebook, Twitter or Instagram	**3**
Postcard in the mail	**3**
Word of mouth	2
Flyer	1
2. What would be your mode of transportation to the 103rd Street station? *Total Attendees Responding to Question: 26*	
Drive	**11**
Walk	**8**
Bike	**3**
Bus	2
Other	2
3. What kinds of open space or public places would you like more of? (Pick up to 3) *Total Attendees Responding to Question: 28*	
Farmers market or local food kiosk	**23**
Walking and biking trails	**13**
Performance or public art spaces	**11**
Increased access and recreational opportunities	**11**
Plazas and other gathering spaces	10
Spaces dedicated to nature and ecological restoration	10
Places for exercise	5
Sports and active recreation	4
4. What are the community's greatest strengths from a development perspective? (Pick up to 3) *Total Attendees Responding to Question: 27*	
Single-family housing	**17**
Affordable housing	**12**
Parks	**10**
Schools	7
Shopping	7
Civic and religious institutions	6
Historic preservation	6
Senior housing	6
Jobs	4
Transit	2
5. What are the community's greatest needs from a development perspective? (Pick up to 3) *Total Attendees Responding to Question: 29*	
Jobs	**22**
Shopping	**18**
Affordable housing	**13**
Transit	11
Single-family housing	8
Senior housing	6
Historic preservation	3
Schools	3
Parks	2

Civic and religious institutions	1
6. What types of businesses would you like to see? (Pick up to 3) *Total Attendees Responding to Question: 28*	
Grocery stores	**22**
Locally owned cafés	**16**
Medical, health & wellness services	**14**
Pharmacy	8
Locally owned boutiques	7
National chain restaurants	6
Professional services	4
Clothing	2
Home improvement stores	2
Personal services	1
7. What types of jobs are needed nearby? (Pick up to 3) *Total Attendees Responding to Question: 28*	
Healthcare	**14**
Manufacturing	**12**
Construction	**11**
Office and administrative support	9
Professional services	9
Maintenance and utilities	9
Retail and restaurants	9
Public sector	7
Transportation and warehousing	4
8. What type of housing is most needed? (Pick up to 3) *Total Attendees Responding to Question: 29*	
Affordable housing	**22**
Home ownership	**20**
Mixed-Income	**18**
Senior housing	12
Rental	8
Veterans housing	7
9. What scale of housing is desired? (Pick up to 3) *Total Attendees Responding to Question: 28*	
Single-family	**20**
Two-flats and three-flats	**20**
Townhomes	**17**
Small four-to-six-unit building	11
Multi-family housing with ground floor commercial	11
Mid-rise multi-family (up to 8 stories)	4

Breakout Session Groups

Group 1
Moderator: Teresa Fourcher *(TSD Plan)*
RLE Project Members: Marlise Fratinardo *(CTA Planning)* & Sarah Wilson *(TSD Plan)*

Group 2
Moderator: Mark Payne *(TSD Plan)*

RLE Project Members: Sonali Tandon *(CTA Planning)* & Michael Schuch *(RLE Program Management Team)*

Group 3
Moderator: Erin Cabonargi *(TSD Plan)*
RLE Project Members: Ammar Elmajdoub *(CTA Planning)*, Jenn Pisano *(TSD Plan),* & Leah Mooney *(CTA Planning)*

Group 4
Moderator: Christine Carlyle *(TSD Plan)*
RLE Project Members: Jasmine Gunn *(Chicago Department of Planning and Development)* & Christen Hayes *(TSD Plan)*

Group 5
Moderator: Sarah Ware *(TSD Plan)*
RLE Project Members: Barbara Stubblefield *(RLE Program Management Team)* & Kristen Robinson *(RLE Program Management Team)*

Group 6
Moderator: Jacob Peters *(TSD Plan)*
RLE Project Members: Patrick Dunn *(RLE Program Management Team)* & Elbert Whitfield *(TSD Plan)*

Breakout Session Questions & Group Responses

The following documents a combination of attendees' responses verbatim and paraphrased responses provided by the breakout group moderators. Individual breakout groups may not have responses listed for each question due to groups spending more time discussing other questions or moderators not receiving any feedback from attendees on those prompts.

Question 1: What are three words you would use to describe your vision for the neighborhood?

- **Group 1 Responses:**
    - Robust, vibrant, transformed
    - Transformed is a good word. Beauty. Excitement. Envision it with stores, jobs, right now everything looks ugly and closed. There's lots of vacant lots and want to see more development, more beautiful and aesthetically pleasing amenities.
    - Roseland was considered a jewel at one time, everyone wanted to be in Roseland. It can be that again. Just need to clean up a little bit. A group member highlighted a new campaign/effort, Roses for Roseland. Conversations with an artist sparked an idea about transforming vacant lots and creating an environment that would

create positive loitering for the community. Imagine a rose garden where people could sit and have a smoothie, a pop-up kiosk, fresh produce, sip-and-savor type of environment. Just enjoy the ambiance of the rose garden.

- **Group 2 Responses:**
  - Progressive
  - Energized
  - Engaging
  - Maintained
  - Growth
  - Universal (development without displacement)
  - Job opportunities
  - Renewal of greatness of Greater Roseland area
- **Group 3 Responses:**
  - Energetic, active, cohesive
  - Placemaking by way of activities - having a central place, like a plaza for example that everyone knows exists and it fosters community interaction and connections.
- **Group 4 Responses:**
  - Family-friendly community, used to have lots of activities for families and children, with decent schools and parent participation. I would like to see those things come back!
  - 103rd Street corridor, especially in Eggleston area, is mostly private single-family homes. When envisioning what to go around 103rd Street, not sure what considered enhancements would include besides being more accessible to nearby residents to get around in the city.
- **Group 5 Responses:**
  - Safe, beautiful, friendly
  - Safety is a top concern. 103rd needs a lot of regeneration. Riots took out local businesses, many of which haven't recovered. The area needs confidence, investment, support, and jobs.
- **Group 6 Responses:**
  - Developed, safe, nurturing
  - Better transportation, easier access
  - True community input (on development). It would be great if through the TSD Study engagement process we can reach an agreement between community stakeholders and their municipal representatives/aldermen.
  - Economic development, new business (especially along 103rd Street).

Q2: What is important for us to understand about your community?

- **Group 1 Responses:**
  - I do know that the center would be closer to 111th street and would be nice to have some jobs closer to the area. We need a lot to make 103rd and 111th Streets better.

  - In relation to the density of the residential area, the preference is to keep it small, two to three flats. I don't want to see any real large buildings, unless they're more senior-oriented. I'm more comfortable with smaller size properties since it is already residential.
- **Group 2 Responses:**
  - A lot of strong hard-working people in this community. With new amenities coming into the area, would like to take advantage for those in this area (prop up the areas) with those already in the community (maintaining).
  - A lot of mixed generations in this area. Remember the economic development in the community will be something that keeps people engaged, but make sure seniors' lives are still relevant/engaging. Engage the entire community.
  - So much has been taken out of the community in regard to economic development. Instead, look to have locally owned business drive economy rather than outside (keep the flow of money in the community).
  - This project is a lot about the City of Chicago, not just the surrounding neighborhoods.
- **Group 3 Responses:**
  - COVID-19 has brought to light the disparities of the South Side neighborhoods. It has interrupted our lives forever. CTA stations can be used as leverage to help the South Side neighborhoods rebound from COVID-19.
  - Desires for growth and investments. This community has been denied resources to grow historically, such as economic and education resources. The community needs to see the changes coming so they can adapt properly and prepare for the development.
- **Group 4 Responses:**
  - Family-friendly! Long term residents now are older with children that have grown up and not returned. There are not many young families with children and would like to see more children and young families. Looking to bring the next generation of families to the area. Can raise a family here.
  - Roses for Roseland: I talked to an artist about a project which she put together a video for video to turn some of the vacant lots in Roseland into a rose and flower garden. The project aims to create community spaces with benches and pop-up kiosks with fresh food, produce and sip-and-savor amenities to enjoy the ambience of a rose garden in empty lot and strengthen the community.
  - Concerned about the location of the track and that parking space will be taken away and not be replaced.
  - Concerns about displacement from construction at the station

- **Group 5 Responses:**
    - Safety. I want to know the stations are safe. I'm a shift worker who regularly commutes at 5:30am and I wouldn't walk alone along that area right now (top end of 103rd Street). Will the stations be staffed? Will there be better lighting? It's a desert. There's a dollar store on one corner and a Hines on the other and then it's a desert.
    - I see the station bringing new jobs, but the area lacks guidance and a sense of security. We want to feel safe. The area has a lot of potential, but the lack of security and bad reputation scares people away.
- **Group 6 Responses:**
    - There is a lot of development needed on 103rd, particularly places for seniors, among others, to buy medical supplies along the corridor. There are very few lucrative businesses along the 103rd Street corridor.
    - Few communities of color have necessary and desired commercial establishments or cultural institutions within walking distance.
    - This is a food desert. There is no full-service grocery store in the area.

Q3: What are your community's greatest assets? What is missing?

- **Group 1 Responses:**
    - Greatest assets would be Gwendolyn Brooks [College Prep Academy] along 111th Street corridor and Palmer Park, which is a beautiful park. There are lots of historic buildings along Michigan Avenue. Preservation Chicago did a study and identified over 100 buildings that have historical significance. Placing historical markers that speak to the history of the properties. For example, even though Gately's department store is no longer there, a marker could be placed to detail its' story. We should draw tourists from Pullman who would find Michigan Avenue as a destination place.
    - We need more stores that you can go shopping at when you get off at the station. If you were to get off on 103rd right now, you'd have to go quite far to get to another store.
- **Group 2 Responses:**
    - The people are the greatest asset. There are a lot of skilled and talented individuals who are marginalized because of things that have happened in past.
    - What's missing is challenging employers to give these people a greater opportunity.
    - Faith-based churches are a great asset. Create comfort in community. I would like to see more economic development. Current options for businesses are not meeting people's needs. Establishments (like coffee shops) for people in the community to meet and converse.
- **Group 3 Responses:**
    - Public resources need to be deployed, such as INVEST South/West, to jumpstart the process of development. Overall, the community is not

prepared for growth due to lack of existing resources for the community and small business owners.
    - Education system needs to be strengthened on the South Side.
    - Job creation for working class people in this community is needed. Services and jobs for the CTA stations themselves are desired. This is an opportunity for business development and individuals re-entering to the workforce. Livable wages are necessary. Long term careers are desired.
    - Spread the wealth and spread the risk within the community. RFP programs from CTA should break down the work into smaller workloads so that many community residents can participate in the work. For example, diverse prime consultants to help grow their businesses.
    - Education needs to be brought up to par. Eliminate disparities that exist; community kids on the South Side do not have the same quality of education as there are in other communities.
- **Group 4 Responses:**
    - Many of the storefronts near 103rd are churches now, not much retail, shops, or cafés.
    - Main issue in Roseland is the vacant lots. The greatest asset is the people.
    - Strong block clubs in greater Roseland area and strong communities are an asset. Another asset is great educational opportunities, students can go from kindergarten to Ph.D. due to the good schools in the area.
    - Not as friendly to retail or shopping centers due to it being a mostly residential area. The parking at station is a great asset.
    - Gwendolyn Brooks [College Prep Academy] at 111th Street corridor and Palmer Park and many historic properties on Michigan Avenue corridor are assets.
- **Group 5 Responses:**
    - There's nothing here. No grocery store or retail. I have to go to 115th to get groceries. It comes down to confidence and investment in our community. If there was a grocery store or maybe a library for kids, entities like that would help bring people to the area.
    - Our community area lacks places for children to be kids. It's also missing something as simple as neighborly bonds and knowing who belongs where. An asset is quick access to the major highways going in all different directions.
- **Group 6 Responses:**
    - The people are the greatest asset. Also, Langston Hughes Elementary School and the accessible park/field that allows for special needs programming. There are lots of unused or underused buildings along the corridor like the CVS near Halsted Street that could be assets. Metropolitan Family Services is also a great community asset, though it is not within walking distance of the proposed station.

- There are a few good small businesses located east of Michigan Avenue that are assets, but there is almost nothing in the way of successful commercial development west of the Michigan Avenue corridor. Prior to the COVID-19 pandemic, there had been mention of some progress in the way of economic development at aldermanic meetings. That needs to continue and resume.

Q4: How do you see the new station benefitting your community?

- **Group 1 Responses:**
  - It'll be a faster commute with faster transit time and that's really important. Also, better connection to services. It takes such a long time to get to 95th Street.
  - Right on 103rd Street is a great opportunity for more mixed-use buildings, retail on the bottom level with affordable dwellings on the top level. Something where people, especially families, can get off the bus or train and go right into their buildings. A group member discussed the importance of people having access to fresh produce. For example, to potentially stop in the lobby of their building and get fresh produce and meat without having to go to a large grocery store or even a coffee shop. To have that amenity in the building where residents could sit and read the paper or meet with members of the community would be invaluable. Right now, the older men in the community sit at McDonald's, "kicking the breeze." The community needs a place where you can engage in conversation with your neighbor.
  - Importance of job readiness. People in the community need to know what types of jobs and skillsets CTA is going to require for this project. Programs that address this will transform the community.
- **Group 2 Responses:**
  - People getting off the train and using local parking spaces. Will locals feel as safe as they do now with larger influx of people coming through the community?
  - How will this affect local property value?
  - How will this impact individuals in the community?
- **Group 3 Responses:**
  - How can we leverage the real estate at these stations to educate and promote technology and learning? For example, at each new station, create a smaller scale 1871 type of space with technology training to promote STEM education. Younger community members can come to this staffed hub to learn programming and real skills. It could be a satellite of the City Colleges or Chicago State University. Virtual STEM learning could be used in parallel with this also.
  - Similar to Amazon Future Engineers Program (referenced commercial).
  - Ignite Technologies are doing a similar program.

  - Google' has a similar program as well.
  - Challenge to think differently about what the stations can be. These stations should not be a repeat of the 95th/Dan Ryan station. They need to be using their real estate differently so it can have an impact over the next 20 years.
- **Group 4 Responses:**
  - Close proximity to where I live and travel to Wrigley. Would love to cut travel time in half and take one train instead of a bus. The conduct of people at the station and on trains is concerning, sometimes I will walk home instead of riding the bus.
  - Too far west for frequent use but believe it will improve the neighborhood and provide options for folks living further out to get back and forth to the city.
  - The new station should feel like a safe haven. It needs good business neighbors that participate in the community by keeping properties and windows clean, sufficient lighting, community-oriented surveillance system (that keeps whole street safe), safety kiosks, and security guards.
  - Beautification or utilization of vacant lots would be beneficial.
  - Pushing for historic landmarking of the corridor and to put plaques on historic buildings. Preservation Chicago completed a study on Michigan Avenue corridor and over 106 buildings had historic presence.
  - More than 300,000 tourists come to the area to see Pullman and I want them to be able to find Michigan Avenue to enjoy the rich history there, as well.
  - One important thing for each new station is how would you "brand" each station, for example around the 95th Street people want to call it "University Village /95th." It would be beneficial if perception was strengthened by each station based on their assets and decided by the community how they want them to be branded, for example: 103rd – not sure yet what this station area would be; 111th – Roseland Medical District; Michigan Avenue – Magnificent Mile South; 130th Street – Culturally rich area, underground railroad, Beaubien Woods, port.
- **Group 5 Responses:**
  - Hard to picture. If there's no jobs, no one will live here. It would be nice to have a basic Aldi. Somewhere to buy fruits and vegetables. We only have a Walgreens, which lacks variety of fresh produce. A grocery store would work in favor of attracting new people to the area.
  - With jobs and shorter commutes. A small local grocery store would be great as long as it offers reasonable prices and a variety.
- **Group 6 Responses:**

- Anything that would provide financial impact to the community, especially in the form of development. This would aid longtime homeowners. Creating a farmers market (as a regular recurring activity or getting a quality grocery store as a permanent fixture) would be helpful. You could use Block Park for this function or for cultural activities every weekend. Having this in proximity to the station could draw people from other parts of the city.
- A benefit would be providing the neighborhood with a "shot in the arm," as far as economic development is concerned. We want to see the kind of development you see around stations in further north neighborhoods (e.g., grocery stores, pharmacies, restaurants).
- A farmers market would be a great start.

Red Line Extension Michigan Avenue Station Virtual Meeting Minutes

Tuesday, February 16, 2021
6:00 PM – 7:30 PM
via Zoom & Facebook Live

Meeting Presenters

Marlise Fratinardo, *Chicago Transit Authority (CTA) Planning*
Ammar Elmajdoub, *Chicago Transit Authority (CTA) Planning*
Sonali Tandon, *Chicago Transit Authority (CTA) Planning*
Barbara Stubblefield, *Red Line Extension Program Management Team*
Melody Carvajal, *Red Line Extension Program Management Team*
Teresa Fourcher, *Transit-Supportive Development (TSD) Plan*
Mark Payne, *Transit-Supportive Development (TSD) Plan*

Attendees

Public via Zoom: 69
CTA staff, support and consultants via Zoom: 46
Facebook Live: 12
Total: ~81

Meeting Materials

Presentation is attached.

Summary

CTA hosted the Michigan Avenue Station virtual community meeting on Tuesday, February 16, 2021. The Michigan Avenue Station meeting was the final of a series of meetings for the four proposed station areas along the Red Line Extension corridor The meeting was held through Zoom and also broadcast on the project's Facebook page. Captioning as well as American Sign Language and Spanish interpretation were available for meeting attendees, including during breakout out rooms. A comment with the Zoom meeting information was also posted on the Facebook Live stream so individuals could join to participate in the interactive presentation portions and receive any required accommodations. Attendees were asked to register in advance and were provided with the link and meeting ID to join via Zoom. Registration was available on the project's interactive engagement website, transitchicago.com/RLE/engage, which is hosted on the Bang the Table (BTT) platform. The engagement website provides general information about the RLE Project and Transit-Supportive Development (TSD) Plan plus interactive tools such as an Ideas Wall, project survey, and project map to engage the public and solicit their feedback regarding the project.

Ms. Stubblefield started off the presentation by covering the agenda and presenters. Ms. Stubblefield also covered how attendees can ask questions throughout the meeting. Questions and comments submitted during the meeting are documented on pages 3-5.

Ms. Fratinardo led the group through the RLE Project overview, benefits, and recent progress. Ms. Fratinardo described the Michigan Avenue station concept plan. She explained that the development project that was planned for the vacant site north of Union Pacific tracks and Michigan Avenue station had not moved forward. Therefore, CTA has an opportunity to potentially locate the parking and bus facilities needed for the station to this northern site, which could attract more development in the future. Ms. Fratinardo stressed that CTA has not yet determined the final station layout and the location of parking and bus facilities. Ms. Stubblefield and Ms. Fratinardo asked attendees to respond to three direct questions via chat; responses to these questions are documented on pages 5-7.

Mr. Elmajdoub then presented engagement opportunities, including the engagement website transitchicago.com/RLE/engage and recent public outreach efforts. Next, Ms. Carvajal shared information regarding potential property impacts and provided a variety of contact methods and resources for additional information and follow up. Ms. Tandon then presented Environmental Review process updates and described some of the resource analyses being undertaken (traffic and access, noise and vibration, visual and aesthetics, and historic and cultural resources) for which impacts may be of particular interest in relation to the Michigan Avenue station. Ms. Tandon also reiterated CTA has not finalized the location of the parking structure as options are being considered for the north and the south side of the station. She also stated that there had been no other major changes to the Michigan Avenue station since the Draft Environmental Impact Statement (EIS).

Next, Ms. Fourcher presented on the TSD Plan, covering the overview, timeline, and current as well as past aligned planning efforts. Ms. Fourcher also shared information regarding community assets/resources and the Michigan Avenue corridor existing land use in relation to the TSD Plan. After, Mr. Payne led a series of interactive polling questions to gauge participants' ideas and recommendations for future development along the Red Line Extension corridor (questions and polling results are documented on pages 7-9 of this summary). Mr. Payne read the polling questions and answers out loud and they were also displayed on individual presentation slides for attendees to see. Following the interactive polling questions, attendees were separated into small groups for a breakout out session led by a moderator and one to two other project team members. On average, there were five to six attendees in each breakout group. A set of general questions were displayed on a presentation slide to solicit input and encourage discussions. Community members were offered the opportunity to share their ideas on the vision for the community to inform the TSD effort. Breakout summaries were compiled for each group and the compilations of comments received are documented on pages 10-17.

After approximately 20 minutes, the breakout session concluded and attendees were brought back from individual breakout groups into one large group to finish the meeting.

Each breakout group moderator presented a brief summary of their group's discussion and common ideas that were shared among group participants. Next, Mr. Elmajdoub presented information regarding the RLE interactive engagement website, opportunities to stay involved, including the upcoming INVEST South/West visioning meeting scheduled for February 23, 2021, how to receive project updates, and details regarding entry for the engagement website Visa gift card sweepstakes. Ms. Stubblefield then concluded the meeting by thanking all attendees for their participation and providing methods, both digital and non-digital, to contact the project team with questions.

<u>Attendee Questions & Comments – Zoom Chat Feedback</u>

Unless otherwise noted, the following questions, comments, and responses documents the direct meeting chat transcription. Responses were provided in the chat by the RLE Project team for all attendees who joined the meeting via Zoom to see. Attendees who joined via Facebook Live or phone did not have visibility of the Zoom chat questions, comments, and responses.

- **Question 1: What is the unemployment rate east and west?**
    - **Response 1:** Hi Robert - thank you for your question about unemployment rates in the project area. CTA is including demographic analysis, including employment, in our environmental review process. The unemployment rate in Roseland, for example, is 22.4 percent as of the most recent Chicago Metropolitan Agency for Planning (CMAP) Community Area Planning Data Snapshots. Other communities and community areas are available on their website: cmap.illinois.gov/data/community-snapshots.
- **Q2: Will there be a new TIF like the RPM project?**
    - **R2:** Thanks for your question, Allan. The CTA is pursuing a wide range of federal, state and local funding sources, including the Federal Transit Administration's (FTA) New Starts Capital Investment Grant (CIG) program. Local funds are also needed to "match" the federal New Starts funds as local funds demonstrate the commitment to the project. The CTA is considering a number of options at this time for this that include a special transit-only tax-increment financing district, authorized by the General Assembly in June 2016, which could provide a portion of the local funding needed for the RLE Project.
- **Q3: Was the 4-story parking building on the north or south side of the station?**
    - **R3:** Hi Rev. Calloway, thank you for your question. CTA has not yet determined the final location of the parking and bus facilities, whether north or south of the station. The identification of the preferred location for parking and bus facilities at Michigan Avenue station will depend on results from the environmental review process, as well as the Department of Planning and Development's (DPD) process of reacquiring property on the northern site.

- **Q4: How many properties will have to be purchased and demolished for the extension? Are there any properties of historical value that could be saved/relocated?**
    - **R4**: Hi Butler, thanks for the question! Property impacts are based on conceptual engineering and represent the maximum impacts. As of Summer 2020, there may be up to 61 residential building displacements, 11 of which are unoccupied, and six businesses may be affected. 158 private parcels of land and 226 total parcels of land may be affected. Property impacts will be confirmed in the Final Environmental Impact Statement (EIS) after more detailed conceptual design.
    - And as Sonali is mentioning now, the Historic and Cultural Resources analysis is ongoing as part of our environmental review.
- **Q5: Intergovernmental collaborations sound good and community sound like an add on. #TransitEquity**
    - *In reference to slide 10, Project Overview.*
- **Q6: First floor of parking garages should be retail**
    - *In reference to slide 12, Michigan Avenue Station Concept Plan.*
- **Q7: New stations should have a WOW factor and be a unique architecturally interesting station**
    - *In reference to chat question 3, Favorite CTA Station.*
- **Q8: What about fuel emissions?**
- **Q9: Also consider policing and parking permits for residents within a 3-4 block radius**
    - **R8 & R9:** Thanks for your question and comments, Rev. Calloway. Air Quality is one of the environmental resource categories being assessed as part of the Final EIS. Regarding policing and parking permits, CTA will be coordinating with the Chicago Department of Transportation (CDOT) on issues related to parking availability and with the Chicago Police Department on issues related to public safety.
- **Q10: Please consider a mall connected with grocery store, small business, medical facilities, dental and eye care. As for all stations, security should be a big part of the facilities. This would add to the business district that Roseland was famous for.**
    - *In reference to polling question 6.*
- **Q11: I want you to remember diversity when evaluating these institutions as social vendors. We need to eat off the beginning as well: ipce.uic.edu/wp-content/uploads/sites/Roseland-Civic-Engagement-Study.pdf**
    - **R11**: Thank you for providing your study, Robert!
        - **Participant Response:** Thanks, Mr. Douglas for that link to the study.
- **Q12: Plaza Hardware/True Value moved to 118th Street and Michigan Avenue.**
    - *In response to polling question 6.*

- **Q13: We also need the types of jobs that are far west of the city in our community. We transport to those other areas, because of the opportunity those communities have for us. Retail and restaurant jobs are great, but we also need more professional careers/jobs to be attracted to the area.**
    - **R13:** Thank you for your comment, Marcus. Are there any particular types of jobs you have in mind that you find in the far west side?
        - **Follow up comment from same attendee:** Professional services, medical (which the medical district will be able to help), hospitality careers
- **Q14: Live work and play and LEARN how to craft each and every one's future**
- **Q15: Happy to contribute years of commitment to communities focused on redevelopment**
    - **R14 & R15:** Thank you for your input, Diane!
- **Q16: These stations will become the hubs of the community just as schools were. This understanding needs to be incorporated... growth, community connectivity, in addition to education expansion.**
    - **R16:** Good point, Kenneth, thank you!
- **Q17: As we clean up and restore our business community with better choices, crime will decrease. People are a product of their environment, when you change the environment, the riff raff will leave because it will no longer be attractive to them.**
- **Q18: At some point we need a percentage probability that the RLE will occur.**
    - **R18:** Hi Kenneth - we understand the community wants assurance that the RLE Project will be built. While we can't put a percentage on it, the project entered the Project Development phase in December 2020. This commits CTA to completing 30 percent design and finalizing the environmental analysis within two years. This phase is a key step in securing federal funding, which is one of the major milestones needed to make the RLE Project a reality.
- **Q19: How do we get involved in some of the other initiatives that were presented?**
    - **R19:** Hi Marcus - check out tinyurl.com/RoselandRFP for the INVEST South/West Visioning Meeting. You can email us at redextension@transitchicago.com to ask about any specific initiatives!

<u>Presentation Engagement Questions – Zoom Chat Feedback</u>

These questions were posed by the presenters during the large group presentation. The following documents the attendee responses that were typed in the Zoom chat.

- **Question 1: What neighborhood do you reside in?** *(Responses listed in order of most common to least)*
    - **Responses 1:**

- Roseland
- Golden Gate
- Washington Heights
- West Pullman
- Pullman
- Morgan Park
- South Shore
- West Chesterfield
- Scottsdale
- Roseland Heights

- **Q2: How will the Red Line Extension benefit you and your neighborhood?**
  - **R2:**
    - Opportunities
    - Collaborative economics
    - Currently on Kensington there are a couple of family stores, we really hope that it will bring in more economy so other families can open more stores and boost economies.
    - Transportation brings more people to purchase housing, schools and need for more stores.
    - Economic/neighborhood vitality
    - Equitable TOD
    - Economic development, time savings in travel access to Chicago
    - Accessibility for all
    - Benefits/opportunities/upgrading the neighborhood
    - Employment and transportation
    - Chances to explore areas of Chicago without driving
    - It would allow everyone access to transportation and an investment in the community.
    - It will help develop Michigan Avenue retail.
    - Accessible jobs and central business districts and opportunities for economic development.
    - Rapid transit to resources
    - Transit access to downtown
    - Revitalization of Roseland
    - TOD possibilities
    - Renewal of Michigan Avenue
    - Amen! Renewal of south Michigan Avenue in Roseland! Let us reinvest in the historic buildings as part of these concepts and development!
    - More development in the NEAR future

- **Q3: What is your favorite CTA Station and what about that station do you like most?**
  - **R3:**
    - IIT station - unimposing, noise reducing tunnel
    - Morgan station - colors, non-concrete style, very modern
    - IIT station and 22nd Street station
    - Harold Washington Library
    - Garfield Park station
    - Merchandise Mart
    - Central Park on Pink Line
    - O'Hare- safety, warmth, ease, proximity
    - Ashland/Lake because of architecture
    - IIT station - great design and sound control
    - Logan Square station - so much to do once you emerge from the underground station! Parks, housing, retail and people!
    - I agree Merchandise Mart
    - Quincy through Wells, for its scale and historic qualities. Could some of the historic buildings be integrated into these plans?
    - O'Hare Terminal
    - Harold Washington. What I appreciate most is the accessibility and its' central location.
    - 35th and State Street station with the stores connected
    - My favorite station has been Fullerton for the helpful staff as well as having tier offices and people available for any assistance.

<u>Presentation Polling Results</u>

Attendees joining the meeting through Zoom could answer the poll in real time. Polling was not available to attendees who joined the meeting through Facebook Live or by phone. Those attendees were informed that polling questions were available on the RLE engagement website as an alternate way to participate and provide their responses. Polling questions were typically open for more than 45 seconds.

Response Options	Votes Received
1. How did you learn about tonight's meeting? *Total Attendees Responding to Question: 36*	
Email from CTA	21
Other	5 (1 stated "St. Anthony's Church pamphlet" in the chat)
Word of mouth	3
INVEST South/West roundtable	2
Facebook, Twitter or Instagram	1
Postcard in the mail	1 (plus two mail responses via chat)

2. What would be your mode of transportation to the Michigan Avenue station? *Total Attendees Responding to Question: 32*	
Drive	**15**
Walk	**8**
Bus	**4**
Train	3
Bike	2
3. What kinds of open space or public places would you like more of? (Pick up to 3) *Total Attendees Responding to Question: 35*	
Farmers market or local food kiosk	**26**
Plazas and other gathering spaces	**20**
Walking and biking trails	**17**
Performance or public art spaces	15
Spaces dedicated to nature and ecological restoration	12
Sports and active recreation	7
Places for exercise	5
Increased access and recreational opportunities	4
4. What are the community's greatest strengths from a development perspective? (Pick up to 3) *Total Attendees Responding to Question: 38*	
Single-family housing	**19**
Historic preservation	**14**
Shopping	**12**
Civic and religious institutions	10
Parks	10
Affordable housing	9
Jobs	9
Senior housing	8
Schools	7
Transit	4
5. What are the community's greatest needs from a development perspective? (Pick up to 3) *Total Attendees Responding to Question: 38*	
Jobs	**25**
Shopping	**23**
Affordable housing	**15**
Transit	**15**
Single-family housing	10
Historic preservation	6
Parks	5
Schools	5
Senior housing	2
Civic and religious institutions	1
6. What types of businesses would you like to see? (Pick up to 3) *Total Attendees Responding to Question: 37*	
Grocery stores	**30**
Locally owned cafés	**27**
Medical, health & wellness services	**12**
Locally owned boutiques	9

Home improvement stores	7
National chain restaurants	6
National brand clothing stores	5
Pharmacy	5
Professional services	5
Personal services	4
7. What types of jobs are needed nearby? (Pick up to 3) *Total Attendees Responding to Question: 37*	
Construction	**19**
Manufacturing	**16**
Retail and restaurants	**15**
Professional	13
Healthcare workers	12
Office and administrative support	11
Transportation and warehousing	11
Public sector	10
Maintenance and utilities	8
8. What type of housing is most needed? (Pick up to 3) *Total Attendees Responding to Question: 34*	
Home ownership	**29**
Affordable housing	**17**
Mixed-income	**17**
Senior housing	**17**
Veterans housing	13
Rental	6
9. What scale of housing is desired? (Pick up to 3) *Total Attendees Responding to Question: 34*	
Single-family	**26**
Townhomes	**24**
Two-flats and three-flats	**20**
Multi-family housing with ground floor commercial	12
Small four-to-six-unit building	10
Mid-rise multi-family (up to 8 stories)	4

<u>Breakout Session Groups</u>

Group 1
Moderator: Erin Cabonargi *(TSD Plan)*
RLE Project Members: Marlise Fratinardo *(CTA Planning)*, Leah Mooney *(CTA Planning),* & Sarah Wilson *(TSD Plan)*

Group 2
Moderator: Mark Payne *(TSD Plan)*
RLE Project Members: Sonali Tandon *(CTA Planning)* & Michael Schuch *(RLE Program Management Team)*

Group 3
Moderator: Christine Carlyle *(TSD Plan)*
RLE Project Members: Ammar Elmajdoub *(CTA Planning)* & Jenn Pisano *(TSD Plan)*

Group 4
Moderator: Teresa Fourcher *(TSD Plan)*
RLE Project Members: Jasmine Gunn *(Chicago Department of Planning and Development)* & Christen Hayes *(TSD Plan)*

Group 5
Moderator: Sarah Ware *(TSD Plan)*
RLE Project Members: Barbara Stubblefield *(RLE Program Management Team)* & Kristen Robinson *(RLE Program Management Team)*

Group 6
Moderator: Jacob Peters *(TSD Plan)*
RLE Project Members: Patrick Dunn *(RLE Program Management Team)* & Jackie Davis *(TSD Plan)*

Breakout Session Questions & Group Responses

The following documents a combination of attendees' verbatim and paraphrased responses provided by the breakout group moderators. Individual breakout groups may not have responses listed for each question due to groups spending more time discussing other questions or moderators not receiving any feedback from attendees on those prompts.

Question 1: What are three words you would use to describe your vision for the neighborhood?

- **Group 2 Responses:**
  - Scenic
  - Resourceful
  - Thriving
  - Economically friendly
  - Jobs
  - Educational
  - Food opportunities
  - Community help and hope for youth
  - Education
- **Group 3 Responses:**
  - Ambience, security, helpful businesses (e.g., grocery, eye doctor, dentist)
  - Investment, beauty
  - Community, safety, innovation
- **Group 4 Responses:**
  - Economic equity, diversity, jobs, opportunities for all community members
- **Group 5 Responses:**

  - Quiet, peaceful, clean
  - Safe, settled, upcoming
  - Progressive, economically sound, peaceful
- **Group 6 Reponses:**
  - Access, empowerment, investment
  - "Point of destination," rebranded as "Magnificent Mile – South," safety
  - Multi-generational

Q2: What is important for us to understand about your community?

- **Group 1 Responses:**
  - The area east of the proposed station is primarily Hispanic/Spanish speaking with locally, family-owned grocery stores and restaurants but people are leaving the neighborhood. I'm worried that people wouldn't want to explore around the side streets.
  - The Pullman area north of Kensington is primarily home ownership and we want to see more of that.
  - Michigan Avenue was listed as one of Chicago's most endangered areas in 2020.
  - The importance of the current architecture of the Roseland Theater further down Michigan Avenue. "Historic buildings are fabulous and need a shot in the arm."
  - It's important to not forget about Kensington to St. Anthony's.
  - Roseland was once called the "Jewel of the South Side."
  - Language is a potential barrier to making inroads with the businesses in the Kensington area.
  - A lot of the businesses around are family owned.
- **Group 2 Responses:**
  - Knowing the needs of the members in the community
  - To remember or know the history of Pullman area
- **Group 3 Responses:**
  - In its current state, Roseland is overlooked and underserved.
  - Michigan Avenue was a booming shopping corridor for South Side Chicago; clothes and food were available in Roseland, but it has declined over the past 30 years and stores have been destroyed in Roseland.
  - As a resident of the neighborhood since the 1970s, I want to bring back the "old" Roseland that had shopping, community services and energy.
  - The area around 115th/State to 115th/Kensington to Michigan Avenue used to be a mall with a grocery store, dry cleaners, drug store, ACE Hardware, Family Dollar, Church's Chicken, a restaurant (called the Coffee Pot), and it was a one-stop shop. People came there and did all their errands and socialization without having to leave Roseland.
  - There used to be a movie theater in Roseland, bringing this back could bring back people.

- There needs to be initiatives to ensure the sustainability of the neighborhood.

- **Group 4 Responses:**
  - CTA needs to assure that there will be equity in this process that the community is involved and that economic development will occur in an equitable way. Possibly with a community benefits agreement, if not already in place.
  - Community members have been a part of this project since 2002 and want to be a part of continued development actions. Like being able to advise on best practices for design, development, and engagement.
  - Safety issues arise from the high unemployment rates so, there's a need to focus on job creation near the stations. CTA needs to be a more inclusive community partner that focuses on economic development and job creation.
  - Development activities should start now to prepare for the new stations and to set the foundation for future transit amenities. Many opportunities in the area, for example, the vacant school at 117th and Perry. Is a large building, no one so far has been able to utilize it since its closing, but see it as an opportunity with the RLE Project. I envision a workforce development center with a child day care or community center.
  - I'm skeptical that this project will become a reality.
  - Perhaps CTA should consider the model of the INVEST South/West in bringing forward more equitable development scenario.
  - Have a lot of work to do! Kudos to CTA and neighborhood participants to tackle issues important to the community.
- **Group 5 Responses:**
  - We are a historical community and I'd like that to be highlighted for people to understand we value our history and want to protect it.
  - It's a tale of two cities. It's about time we have the platform to enhance it from an equitable lens, one of which is long overdue. The talk of the RLE extends my life. So, with all the positivity and our hopes – the Captain Obvious are the disadvantages that we're stuck with and yet still overcome. Hardworking folks that contribute to the pot have not been recipients. It's long overdue.
  - Opportunities such as this and leadership. People can speak best if we have platforms that enable us to not only tell our stories but to fight for things that we desperately want, especially direct recipients to direct the economic impacts.
  - Some people like myself have lived in this community for 50+ years and have kept it maintained. People have planted themselves here. We want to be heard and understood. I never thought that we'd have a transit system. I came out to Roseland because it was open, it was like my suburban area, and is peaceful/pretty and now I'm going to be listening to trains going by

my house every 20 minutes. Older people on my block are scared because all types of people are going to be walking in our community and I won't be able to allow my grandkids to play outside. It's frightening for those who have lived here a long time.
    - I've lived in Roseland since 1972 so I have seen the transformation of Roseland from when it was a little past the integration of the community. Roseland was a segregated community and desegregated about 1968-1969. When I moved there, I had white neighbors. Palmer Park used to have flowers and as the community transformed, they stopped putting flowers. We hold services to a standard. My mother would call and ask where the flowers are. Over the years they eventually disappeared. The community as a whole was a thriving community. King Drive had a reputation and it still does, but I think this project with the INVEST South/West collaboration and CTA will help the community to not only be restored to where it was, but to pass where it was to a greater extent. Property values are underwater and will help to restore property values and will also attract people to not be absent homeowners or landlords but to be occupied owners and landlords again. They will also attract better tenants who can just breathe. This entire project, being with the RLE and our entire mission is surrounding all of these stations that are involved.
- **<u>Group 6 Responses:</u>**
    - Used to be a historic corridor with a variety of retail (e.g., JC Penny, Gately's, suits, cigars, and hobbies)
    - Great housing stock (and a variety of housing types) to be admired.
    - Bring back character, filling in the voids left by anchors.
    - Urban, historic, and neighborhood feel, like the rebirth of Milwaukee Avenue.
    - It's important to be good business neighbors by hiring from within the community, keeping streets clean, bright visible storefronts, preventing loitering outside on streets, and living within and giving back or investing in the community.
    - Current issues relating to the maintenance and cleanliness of stations inside, out/land nearby (ex: at 95th Street station), especially concerning Illinois Department of Transportation (IDOT)/Chicago Department of Transportation (CDOT)/CTA jurisdiction disagreements. Same potential concerns with the adjacent rail corridor.

Q3: What are your community's greatest assets? What is missing?

- **<u>Group 1 Responses:</u>**
    - Something that's missing is support and incentives for those businesses and families that want to run their own business to get people to go beyond Michigan Avenue. A lot of the families in that area own their homes. More family ownership of the properties is a goal.

  - More locally owned restaurants, convenience stores, family-type establishments that people could visit are needed.
  - We need more bookstores and technology in the community.
  - What's missing is the need to support legacy businesses so they can be passed down in the family. "Give them all the tools they need to make it happen, make a sustainable business."
  - There should be support to help small family-owned businesses adapt when the new station comes. Like providing technical assistance to connect small family-owned businesses with someone to assist in business ownership transfers.
- **Group 2 Responses:**
  - Public transportation that is available (i.e., Metra Electric and bus line) is the greatest asset.
  - Sit down restaurants (i.e., café kind) are missing.
  - Amtrak transfer; this location is currently a transit desert.
- **Group 3 Responses:**
  - Job training is missing and desired in the community.
  - Access to healthy food or a farmers market is a big need.
  - Security is needed 24 hours a day. People are 'hanging out' and the community is afraid to walk down the street sometimes. A police presence is needed as well as cameras near the stores. People are even crawling on top of buildings and breaking into stores. The police need to gain control over the neighborhood again.
  - Job opportunities are missing, especially in the construction industry. Inclusion is an issue; we need to diversify jobs.
  - Roseland needs revitalization of the Michigan Avenue corridor with development of retail and restaurants.
  - Neighborhood used to be safer. There was a police station that is no longer there. Security is missing and needed desperately.
  - Safety is needed. There is no enforcement by police on Michigan Avenue. Ordinances are not being followed currently. For example, Michigan Avenue trash receptacles were taken away because businesses were using them as their dumpsters.
  - Community and local businesses need to clean up the corridor/street and bring back planters, benches, awnings, and facade updates through City programs.
- **Group 4 Responses:**
  - Missing measures that address extreme personal safety and security near the station, as well as cleanliness.
  - Safety is missing as a priority and needs to be made a priority near the station areas, especially near the Michigan Avenue station. It's very dark due to the Union Pacific rail line and needs implementable safety measures from street lighting to increased patrols.

  - We need the types of jobs that are far west of the City in our community. We transport to those other areas, because of the opportunity those communities have for us.
  - Retail and restaurant jobs are great, but we need more professional careers and jobs to be attracted to the area such as professional services, medical, and hospitality.
  - The greatest benefit for the area is the Michigan Avenue corridor. This area should be given landmark status because it is such a great asset that can benefit the whole area, including neighboring Pullman.
- **Group 5 Response:**
  - The community's greatest asset is the retail district, which is also our worst asset if that makes sense. We have this huge, massive space that once used to have vegetable markets, stores, bakeries, mom-and-pop shops, and pharmacies and we no longer have any of that.
- **Group 6 Responses:**
  - The great highway access is an asset.
  - People and block clubs are great assets.
  - There's lots of people who need help and resources.
  - Missing safety and ability to feel safe enough for our grandmothers to shop alone.
  - Need things to develop young people at different levels like arts and music, as well as non-academic avenues for growth and exploration.
  - Missing engagement opportunities for youth, like dance and music programs.
  - Need to develop workforce and places to work
  - Need entrepreneurs to restart economic engine and fill vacant spaces

Q4: How do you see the new station benefitting your community?

- **Group 1 Responses:**
  - The ability to live and work in the community – "live, work, play," idea.
  - Bringing more career opportunities to allow more professionals who live in the community to be able to work in the community.
  - Encouragement of reinvestment and a potential landmark district
  - The opportunity to really build on the connection to Pullman.
  - To increase the focus on local businesses and how to develop them. The Chamber is strengthening its workshops and increasing focus on improving financial literacy of business owners.
- **Group 2 Responses:**
  - The addition of accessibility
  - The newly built youth facility does not have good bus transportation and this project would help the problem.

- **Group 3 Responses:**
    - There is a lot of land near the station and it would be beneficial to the community if it was developed into grocery stores, shopping, and job development.
    - By offering jobs and transportation security
    - As more people use the new stations, this will bring more development to the area, but the development should be community-based businesses and locally owned.
    - A new development near 115th would be beneficial for senior citizens who live at 117th/State.
- **Group 4 Responses:**
    - Economic development will increase safety elements by adding jobs and these stations will become the hubs in each community just as schools were. This understanding needs to be incorporated … growth, community, connectivity, in addition to education expansion.
    - To bring about historic revitalization on Michigan Avenue to rebuild the corridor.
    - Creating a "work, live, play," community and learn how to craft each and everyone's future within the community.
    - Upgrading Michigan Avenue to see more resources near the station and an elevated station design that is better than some of the other stations along the Red Line. Envision this to be a nice and safe place to get on and off the train.
    - Would like to see this area partner with the Pullman National Monument and bring more people towards Michigan Avenue to enjoy the history of Michigan Avenue, including events and community gathering stations.
- **Group 5 Responses:**
    - We can't go onto Michigan Avenue and enjoy coffee with a friend. If we extend the Red Line, why not bring some of those amenities back to the community? Get rid of terrible store owners who don't care about or live in the community and put back in business owners who live in the community. Give them loans to survive and thrive in the community. I saw a news report about the donut store today and it was terrible. Where's the money going to rebuild what our community should look like or used to look like? Now, I don't want to go anywhere near Michigan Avenue. If you're going to extend the line, bring everything that should go with it like bookstores, coffee shops, etc. by people who live in the community, believe in the community and strive to build up the community.
    - How can we bring back businesses for community members who want to open business but are scared to open businesses in the area? What can be done to stop the crime that goes on in Roseland? Why can't people who actually live in the community be given opportunities to open businesses on Michigan Avenue/ in the area as opposed to those who don't? Why aren't

we giving the opportunities and funding to those in the community as opposed to someone else?

- Residents from this area should have special preferential selection to INVEST South/West – I strongly encourage we pay into this SSA component that's supposed to provide these services. In addition to everything that another group member mentioned, we want community members that are applying to have preferential selections. People from the outside should not get preference over our community members. Everyone falls victim to the crime but there are initiatives to work at that because there is money available and we pay into it. However, it only works if we actually invest into those that live here to become providers in our own community.
- Underline SSA and policing. We only see police when crime happens.

- **Group 6 Responses:**
  - The creation of an accelerator or incubator with a retail and food focus, but still a relation to distribution and logistics.
  - Transit access to get people to the Loop and to jobs.
  - Access from transit to "Magnificent Mile South"
  - Transit-oriented development
  - Reduced travel times
  - Opportunities for growth and empowerment
  - Historic, revitalized, and centralized corridors
  - Access to opportunities for all ages (safety for all ages is part of access)

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project

Virtual Station Meetings Summary

April 2021

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

cta

Table of Contents

Section 1 Introduction **3**

Section 2 Virtual Station Meetings **4**

2.1 Virtual Station Meetings Format 4
2.2 Virtual Station Meetings Materials 5
2.3 Input Received 5
2.4 Virtual Station Meeting Attendees 6

Section 3 Virtual Station Meetings Notifications **7**

3.1 Project Website 7
3.2 Postcard Notifications 7
3.3 eBlast Notifications 8
3.4 Customer Alert 8
3.5 Direct and Delivery Mailing 8
3.6 Social Media Announcements 9
3.7 Impacted Property Owners and Tenants 9
3.8 Visa Giveaway 10

Section 1
Introduction

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include park & ride facilities and bus connections.

Following two identical virtual community meetings held in early December 2020 to introduce the Supplemental Environmental Assessment (EA) and Transit-Supportive Development Comprehensive (TSD) Plan, the CTA received Federal Transit Administration (FTA) approval to enter the New Starts Project Development (PD) phase of the Capital Investment Grants (CIG) Program for the Red Line Extension (RLE) Project. The CIG Program requires the CTA to complete the RLE Project's Final Environmental Impact Statement (EIS) and preliminary engineering documents during the two-year PD phase to successfully meet the federal requirements. As a result, the project timeline was revised and now estimates the start of construction in 2025 and service beginning in 2029, all of which is dependent on securing project funding.

In January and February 2021, the CTA hosted a series of four virtual community meetings that focused on each of the proposed station areas to discuss details of the Supplemental EA, share the new project timeline, and gather input from community members on the needs and priorities for future development around each station for the TSD Plan. This Virtual Station Area Meetings Summary outlines the format, timing, attendance, topics covered, and outreach methods for all four meetings. Detailed summaries of topics and feedback from each individual meeting were also prepared.

Section 2
Virtual Station Meetings

The CTA hosted a series of four virtual community meetings specific to each proposed station area along the Red Line Extension corridor to discuss details in relation to each station, provide updates on RLE Project progress, and cover the TSD Plan overview, timeline, and planning efforts. The virtual station meetings provided the public with opportunities to ask questions about the station areas, provide input regarding the development they would like to see near the stations, and discuss other project details utilizing the Zoom meeting platform. The four meetings were also broadcasted simultaneously via Facebook Live on the RLE Project Facebook page. The project team solicited input and provided two-way communication opportunities through a series of polling and chat prompts, breakout sessions, and a message functionality via Zoom throughout the presentations' duration for questions and comments. Table 1 displays the subject, timing, and format for the virtual station meetings.

Table 1: Virtual Station Meetings Information

Station Meeting	Date and Time	Meeting Location
130th Street	January 27, 2021 6:00 - 7:30 PM	Zoom: online & telephone Facebook Live
111th Street	February 2, 2021 6:00 - 7:30 PM	Zoom: online & telephone Facebook Live
103rd Street	February 9, 2021 6:00 - 7:30 PM	Zoom: online & telephone Facebook Live
Michigan Avenue	February 16, 2021 6:00 - 7:30 PM	Zoom: online & telephone Facebook Live

The virtual community meetings were made accessible to people with disabilities by the use of American Sign Language interpretation and closed captioning. The virtual station meetings were held online with a telephone dial-in option due to COVID-19 public health guidelines. The virtual station meetings were publicized by flyer, postcard notices, eBlasts (mass emails), social media, and on the project website (see Section 3 for more details about promotion). Registration was promoted through the project engagement website, which is hosted on the Bang the Table platform. Community members who needed assistance registering were directed to contact the CTA's customer service phone number for help; four people were registered for the meeting by phone. The virtual station community meetings were scheduled on weekday evenings. Spanish interpretation was available for meeting attendees throughout the entirety of the meetings.

2.1 Virtual Station Meetings Format

The virtual station meetings provided attendees opportunities to learn about the RLE Project overview, benefits, and recent progress. The meeting presenters also reviewed station concept

plans and potential environmental and property impacts of particular interest in relation to each station area. In addition, the Transit-Supportive Development (TSD) Plan overview and timeline were covered.

The format included two to three engaging chat questions (the project team added an additional question during later meetings), interactive polling questions related to the station areas, and a message functionality via the Zoom platform during the entirety of meetings to receive questions. The breakout out sessions allowed the public to provide feedback, ask questions, and discuss concerns directly with project team members. Following the breakout out sessions, breakout out group moderators presented a brief summary of their group's discussion and common ideas shared among group participants. Each virtual station meeting was concluded with information presented regarding the RLE Project's interactive engagement website, transitchicago.com/RLE/engage, opportunities to stay involved, details on how to sign up for project updates, and digital and non-digital methods to contact the project team with questions. Digital methods for the public to ask questions included the RLE Facebook page and project team email. Non-digital methods included the CTA's customer service phone number.

2.2 Virtual Station Meetings Materials

The CTA prepared PowerPoints to supplement the project team's verbal presentation during the meetings. Each virtual station meeting presentation slides and recordings were made available via the project website and RLE Facebook page after the meetings concluded. The recordings were available in both English and Spanish. An online survey was added to the engagement website, hosted by the Bang the Table platform, that matched the polling questions asked during the meetings so that people who were not able to participate live could still provide their input.

2.3 Input Received

The CTA invited virtual station meeting attendees to submit comments to CTA during and after the meetings. CTA staff provided responses via the Zoom chat functionality to selected comments received through the Zoom meeting platform during the meeting and subsequently provided written responses on the CTA website to all comments received through the Zoom meeting platform as well as questions received as of February 16, 2021 in the comments section of the Facebook Live broadcasts. After the meetings, comments could also be submitted via email or U.S. mail. Emailed comments could be sent to a project-specific email address (RedExtension@transitchicago.com). This email address was available on the interactive project website, within the station meeting presentations, and on all meeting notification materials.

Main themes from the questions and comments included:

- Station design, features, and access
- Alternate transit options for the area in substitution or in addition to the Red Line Extension
- Frequency of bus service following project completion

- Requests for more information about displacement and property acquisition
- Concerns about parking lot locations, spaces, parking need, and impacts to surrounding residents
- Concerns about environmental impacts, safety/security, and other potential inconveniences to the community resulting from construction and revenue service
- Requests for the project to employ community members
- Opportunities to incorporate community attributes, designs, and artistic expression into the project design
- Potential for transit-oriented development

Input was also solicited during virtual station meetings through Zoom polls and instruction by the speaker to answer specific questions in the Zoom chat. Polling and chat responses from each individual meeting can be found in their respective summaries. Additional input was received through the engagement website.

2.4 Virtual Station Meeting Attendees

The public was offered a variety of methods to participate in the virtual station meetings. Each meeting had people listening by phone, joining online through the Zoom meeting platform, and others watching on Facebook Live. Phone participants' numbers and Zoom participants' emails were captured by the virtual meeting software and used to determine approximate attendance. The number of participants watching on Facebook Live fluctuated throughout each meeting and the number of unique participants for Facebook Live could not be determined. Table 2 displays meeting attendance by community members and stakeholders. The stakeholder counts include RLE and TSD Project consultants, CTA staff, and interpretation and captioning support staff for each meeting. Six to seven project team members served as presenters, sharing information about the project with the meetings' attendees. Additional project team members operated the meeting platform and polling, responded to questions in real time, and supported note taking during the breakout out rooms.

Table 2: Meeting Attendance

Station Meeting	Community Member Attendance	Other Project Team and Stakeholder Attendance
130th Street	80	52
111th Street	78	48
103rd Street	76	44
Michigan Avenue	81	46

Section 3
Virtual Station Meetings Notifications

The CTA used a variety of outreach and notification methods to announce and promote participation in RLE's virtual station meetings in January and February 2021 to interested parties. The CTA performed the following actions:

- Updated the project website's main page and engagement website to include meeting information and registration details
- Sent postcards to all mailing addresses within ½ mile radius around each station
- Sent eBlasts to all email addresses on the project contact list
- Posted a customer alert on selected South Side bus routes and at 95th Street/Dan Ryan station serving the project area
- Contracted a community organization to deliver hard copy flyers to surrounding homes
- Utilized CTA's social media platforms and the RLE Facebook page to send announcements
- Delivered leaflets to impacted property owners and tenants for Michigan Avenue station
- Offered entry to $50 Visa gift card sweepstakes

3.1 Project Website

The CTA updated the RLE Project website and engagement website in advance of the meetings to include information on how to register and join. Additionally, the project website provides general information about the RLE Project, archived materials from public hearings, and information on the TSD Plan. Attendees were directed to register through a form on the engagement website. People could register for more than one meeting. The engagement website also included an opportunity to respond to the same polling questions as during the meeting. This enabled individuals who listened to the meeting by phone, those who wanted more time to respond, and people who listened to the recording to provide input to the project at a time that was convenient for them.

3.2 Postcard Notifications

The CTA mailed postcards in advance with information regarding the virtual station meetings to residential and business addresses within a 1/2 mile radius of each proposed station. The postcards were customized to highlight approximately 201 addresses. The postcards provided details about the public virtual community meetings, including how to virtually attend meetings, and contact information to request assistance at the virtual community meetings. The postcard

also included information regarding the availability of additional interpretation services in Spanish or sign language with advance notice.

Table 3: Postcard Mailing Recipients and Dates

Station	Approximate Residences	Approximate Businesses
130th Street	2,200	57
111th Street	3108	103
103rd Street	1931	106
Michigan Avenue	2476	132

3.3 eBlast Notifications

The CTA sent emails (eBlasts) to the approximately 1,200 email addresses on the RLE Project contact list to notify interested parties about the virtual station meetings. The eBlasts included information on the purpose of the virtual station meetings, dates, how to register, accessibility information, and details about the Visa gift card sweepstakes. Instructions in Spanish were provided for recipients to access the meeting information in Spanish.

Table 4: eBlast Notification Dates

Topic	eBlast Date
Station Meetings Announcement	January 14, 2021
130th Street Meeting Reminder	January 25, 2021
111th Street Meeting Reminder	February 1, 2021
103rd Street Meeting Reminder	February 8, 2021
Michigan Avenue Meeting Reminder	February 15, 2021

3.4 Customer Alert

The CTA created a customer alert promoting the four virtual station meetings and included information regarding when the meetings would be held, the importance of community engagement, and how to register for and attend the meetings. The customer alerts were posted at the 95th/Dan Ryan station and all buses out of 103rd garage to heighten awareness among local residents using transit within the project area.

3.5 Direct and Delivery Mailing

The CTA contracted a local community-based organization to pass out meeting announcements to community members within the project area. The community organization, Chicago CRED, was provided 1,000 flyers with meetings information to pass out to houses nearby 103rd, 111th, and

Michigan Avenue proposed station areas. The team canvassed up to four blocks, approximately 20 homes per block, in all directions around the three proposed station areas.

An additional 100 copies of the meetings announcement were mailed to TCA Health, a local healthcare provider, to handout at in-person events they hosted.

3.6 Social Media Announcements

The CTA used the Red Line Extension Facebook page to announce and promote the virtual station meetings. Facebook events were created for all four station meetings. All station meetings were also available to watch via Facebook Live and posts were published on each meeting date at the meetings' start time to announce that the meetings were streaming for public viewing. People did not need to be logged in to watch the stream on Facebook. For the later three station meetings, a link to join the Zoom meeting was also added to the Facebook stream in order to facilitate access to interpretation, polling, and captioning for those who did not register for the meeting in advance. Part of the message posted on the stream was in Spanish.

Table 5: CTA RLE Facebook post dates

Topic	Date
Facebook events created for each meeting	January 8, 2021
Visa Sweepstakes Announcement	January 13, 2021
130th Station Meeting Reminder	January 15, 2021
111th Station Meeting Reminder	January 26, 2021
Live stream of 130th Station Meeting	January 27, 2021
Live stream of 111th Street Station Meeting	February 2, 2021
103rd Street Station Meeting Reminder	February 3, 2021
Michigan Avenue Meeting Reminder	February 9, 2021
Live stream of 103rd Street Station Meeting	February 9, 2021
Live stream of Michigan Avenue Station Meeting	February 16, 2021

Posts related to each virtual station meeting were also shared on the CTA's main social media pages including Facebook, Twitter, and Instagram. These pages aren't specific to the RLE Project and generally have a larger audience.

3.7 Impacted Property Owners and Tenants

In advance of the Michigan Avenue meeting, the CTA delivered notification leaflets to 30-35 properties (approximately 18-20 were thought to be inhabited) near the proposed Michigan Avenue station. In addition to information about how to participate in the Michigan Avenue virtual station meeting, this leaflet asked impacted property owners and tenants to get in touch with the CTA's property relocation liaison in advance of the meeting. The CTA desired to share new information about potential property impacts with property owners and tenants in the south location prior to the meeting. The leaflet was provided in English and Spanish.

3.8 Visa Sweepstakes

In advance of the virtual station meetings, the CTA offered and advertised the opportunity to win a $50 Visa gift card. To enter, community members were encouraged to share their project-related ideas on the Red Line Extension engagement website. Multiple prizes were available for those who participated. The sweepstakes was mentioned at each virtual station meeting, noted on the mailed postcards and meeting announcements, as well as advertised through dedicated Facebook posts. Up to three entries could be accrued after creating an account on transitchicago.com/RLE/engage, by filling out the survey (one entry), placing a pin on the map (one entry) and, adding a post to the ideas wall (one entry). 106 people participated by the deadline of February 19, 2021, and five winners were selected to each receive a $50 Visa gift card.

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Preferred Alignment Announcement, Public Open House, and Displacements Outreach Summary

November 2018

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Table of Contents

Section 1 Introduction 1

Section 2 Project Informational Materials and Open House Notification 3

2.1 Informational Materials 3
2.2 Press Release 4
2.3 Display Ads 4
2.4 Project Website 4
2.5 Postcard Notifications 4
2.6 eBlast Notifications 5
2.7 Transit Alert Cards 5
2.8 Media Coverage 5

Section 3 Public and Agency Outreach 7

3.1 Elected Officials Briefings 7
3.2 Community Groups Outreach 7
3.3 Agency Outreach 8

Section 4 Public Open House 11

4.1 Public Open House Format 11
4.2 Public Open House Materials 12
4.3 Exhibit Boards 12
4.4 Comments Received 13

Section 5 Displacement Outreach 14

5.1 Informational Materials 14
5.2 Letters Mailed to Property Owners and Tenants 15
5.3 Door-to-Door Outreach 15
5.4 Displacements Community Meetings 15
5.5 Customer Service Hotline 17
5.6 Individual Consultations 17

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Tables

Table 1: Display Ads Announcing Public Open House 4
Table 2: Published News Articles, January 26, 2018 – February 28, 2018 5
Table 3: Federal, State, and Local Official Briefings 7
Table 4: Community Group Meetings 8
Table 5: Agency Meetings 9
Table 6: Summary of Comments Received 13
Table 7: Displacements Community Meeting Information 16

Attachments

Attachment 1 – Project Noticing and Informational Materials

- Press Release
- Project Handout (English and Spanish)
- Open House Flyer (English and Spanish)
- Display Ad Tear Sheets
- Website
- Postcard
- eBlasts
- Transit Alert Card

Attachment 2 – Media Articles

Attachment 3 – Elected Official and Community Meetings

- Elected Official Briefing Sign-In Sheets
- Community Group Meeting Sign-In Sheets and Meeting Minutes

Attachment 4 – Agency Involvement

- Cooperating & Participating Federal Agency Letter
- Cooperating & Participating Federal Agency and Tribal Mailing List
- Letters to Agencies that Provided Comments on the Draft EIS
- Participating Nonfederal Agency Letter
- Participating Nonfederal Agency Mailing List
- Agency Sign-In Sheets and Meeting Minutes

Attachment 5 – Public Open House Materials

- Photos
- Sign-In Sheets
- Comment Card (English and Spanish)

- Exhibit Boards

Attachment 6 – Comments Received

Attachment 7 – Displacements Informational Materials

- Website Informational Packet (including FAQs in English)
- FAQs (Spanish)
- FTA General Acquisition & Relocation Information Brochure
- Property Owner Letter - Potentially Displaced and No Longer Potentially Displaced
- Resident/Lessee Letter - Potentially Displaced and No Longer Potentially Displaced
- Affected Railroad Letters
- Affected Agency Letters

Attachment 8 – Displacements Meeting Materials

- Photos
- Sign-In Sheets
- Exhibit Boards

Section 1
Introduction

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The proposed Red Line Extension (RLE) Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. In addition, the RLE Project would provide a modern, efficient car storage yard and shop facility that would help improve service and allow for future enhancements on the entire Red Line. The project is part of CTA's Red Ahead Program, a comprehensive initiative for maintaining, modernizing, and expanding the Red Line. CTA proposes to cover a portion of the project funding by applying for federal funds administered by FTA.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

Based on public feedback and additional project planning and engineering work conducted in 2017, CTA selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly one-half mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place, the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

This technical memorandum summarizes the public and agency outreach efforts conducted for the selection of the Preferred Alignment. This includes general outreach related to the announcement of the Preferred Alignment, as well as displacement-specific outreach efforts conducted to property owners and residents who would be potentially displaced by the project. Outreach to property owners in 2018 served to follow up with the more comprehensive notices and outreach conducted in 2016 to notify property owners affected by either the UPRR East or West Options. Based on selection of the Preferred Alignment, outreach efforts in early 2018 provided information to owners

of 258 private properties on whether their property would be impacted or whether it was no longer impacted by the Preferred Alignment. Four private properties and three property owners impacted by the Preferred Alignment were not identified as impacted with both the UPRR East and West Options in 2016. These properties were identified as impacted during additional study of the geometry of crossing over UPRR at 108th Place and modifications to the alignment east of Union Pacific Railroad right-of-way in 2017.

Details of public outreach conducted before, and as part of the development of the RLE Project Draft EIS, are provided as part of the Draft EIS.

Section 2
Project Informational Materials and Open House Notification

CTA used a variety of outreach and notification methods to announce the Preferred Alignment, notify potentially-displaced property owners and residents, and invite interested parties to attend and participate in the public open house meeting.

CTA issued a press release on Friday, January 26, 2018 announcing the Preferred Alignment and the upcoming public open house meeting. In addition, CTA performed the following as part of the announcement of the Preferred Alignment and open house:

- Updated the project website to include the open house flyer
- Published display advertisements in six regional and local newspapers
- Posted transit alert cards, or "car cards" at the 95th Street Terminal, on Red Line trains, and on buses that serve the project area
- Sent letters to all cooperating and participating agencies with information on the Preferred Alignment and the open house
- Sent an eBlast to all email addresses on the project contact list
- Sent postcards to all mailing addresses on the project contact list

2.1 Informational Materials

CTA produced a variety of materials to inform the public about the RLE Project and announcement of a Preferred Alignment and open house.

2.1.1 Project Handout

The RLE Project Handout provided details about the project in a compact, one-page, front and back format. The following information was included on the flyer:

- Description of the Preferred Alignment and how it compares to the East and West Options
- Information about comments received during 2016 public outreach and comment period
- Property displacement and noise and vibration impacts
- Expected next steps and timeline for the project

The Project Handout was available at all community meetings, displacement meetings, and the public open house. **Attachment 1** contains both English and Spanish language versions of the Project Handout.

2.2 Press Release

On January 26, 2018, the City of Chicago Mayor's Office and CTA Media Relations issued a press release announcing the Preferred Alignment and the public open house meeting. The press release was accompanied by a verbal announcement from Mayor Rahm Emanuel on the same day at Block Park, 346 W. 104th Street, located in the project area. At the press event, Mayor Emanuel provided context on the implications of the RLE Project for the City and for residents. The press release was posted to the Office of the Mayor's website and the CTA's website on January 26, 2018. The press release is included in **Attachment 1**.

2.3 Display Ads

CTA prepared display ads announcing the Preferred Alignment and the public open house meeting. Display ads were published in several local and regional publications (see **Table 1**). **Attachment 1** contains tear sheets for each publication. The publications include traditional news outlets, local community publications, and a Spanish language publication.

Table 1: Display Ads Announcing Public Open House

Publication Date	Media Outlet
1/27/2018	Chicago Sun-Times
1/31/2018	Chicago Defender
1/31/2018	Beverly Review
1/31/2018	Chicago Citizen
2/2/2018	Hoy (Spanish Newspaper)
2/3/2018	Chicago Crusader

2.4 Project Website

CTA updated the RLE Project website on January 26, 2018 (the date of announcement). The website provides general information about the RLE Project, archived materials about the public hearing and public comment period for the Draft EIS, and updated information on the Preferred Alignment. The website's Frequently Asked Questions were also updated along with images and documents that show the alignment. The project website also contains historical project information from 2009-2014. Copies of the exhibit boards from the open house were posted to the website following the open house on February 13, 2018. **Attachment 1** contains a PDF of the project website.

2.5 Postcard Notifications

On January 26, 2018, CTA mailed postcards with information on the selection of a Preferred Alignment and invited community members to the public open house. The postcards were mailed

to approximately 4,268 addresses, including public agencies, business groups, churches, schools, community/neighborhood groups and associations within or near the project area, which were initially identified in the Alternatives Analysis in 2007-2009 and added to in later project phases. In addition, postcards were mailed to all residents and businesses near the Preferred Alternative and previous alternative alignments, including those on parcels either immediately adjacent to the alignment or separated from the alignment by a street, park, vacant parcel, or one residence. Attendees of previous Red Ahead project meetings who requested information about other Red Line projects were also included in the postcard mailing. The postcard provided details about the public open house, including how to utilize transit for meeting location access and contact information to request assistance at the open house. The postcard also included an offer of additional interpretation services in Spanish or sign language with advance notice. **Attachment 1** contains a copy of the postcard.

2.6 eBlast Notifications

CTA sent an email (eBlast) to approximately 1,200 email addresses on the RLE Project contact list on January 26, 2018. The eBlast included information on the project, selection of a Preferred Alignment and information about the public open house with appropriate links to the project website. CTA sent a second eBlast to 1,186 email addresses on February 7, 2018, reminding recipients of the upcoming public open house. In both instances, more than 300 people opened the email. **Attachment 1** contains copies of the two eBlasts.

2.7 Transit Alert Cards

CTA developed a transit alert card, or "car card," to provide information about the selection of the Preferred Alignment and public open house. CTA posted copies of the transit alert cards at the 95th Street Terminal, on all Red Line rail cars, and on all buses operating out of the 103rd Street garage, which serves many of the routes that operate within the project limits.

Attachment 1 contains a copy of the transit alert card.

2.8 Media Coverage

In response to the CTA announcement on January 26, 2018, news articles about the RLE Project appeared in local media. **Table 2** summarizes the articles about the project that appeared within one month of the announcement. **Attachment 2** contains a copy of each article.

Table 2: Published News Articles, January 26, 2018 – February 28, 2018

Date	Media Outlet	Article Title
January 26, 2018	Chicago Tribune	CTA determines path for proposed Red Line south extension to 130th Street
January 26, 2018	ABC7 Eyewitness News	CTA announces proposed path for Red Line extension to 130th Street, adding 4 new stations
January 26, 2018	Curbed Chicago	CTA reveals route, four new stations for Far South Side Red Line extension
January 26, 2018	Chicago Tribune	Five takeaways after CTA announces route for Red Line 'L' extension

Date	Media Outlet	Article Title
January 26, 2018	Chicago Sun-Times	Route defined, where will city find $2.3B to fund CTA Red Line extension?
January 26, 2018	Chicago Tribune	As officials plan Red Line extension, there's still no green to fund it
January 26, 2018	WGN-TV	CTA unveils proposed Red Line extension to 130th Street
January 26, 2018	CBS Chicago	CTA Announces Path For Red Line Extension
January 26, 2018	Mild Sauce News (blog)	News Catch Up • Steve Bannon to Speak at U Chicago, Red Line Extension & More
January 29, 2018	Chicago Magazine	Chicago Plans a Red Line Extension–But Could It Be Done Faster and Cheaper?
January 29, 2018	Patch Chicago	Mayor, CTA Announce 'Preferred Alignment' For Red Line Extension
January 29, 2018	Progressive Railroading	CTA unveils Preferred Alignment for Red Line extension
January 30, 2018	Railway Track & Structures	Preferred Alignment for CTA Red Line extension selected
January 30, 2018	Construction Dive	Chicago Transit Authority unveils details for $2.3B rail extension
January 31, 2018	The Chicago Reporter	New Red Line extension plan would uproot fewer Far South Side homes
February 2, 2018	WLS AM	Community Spotlight Segment
February 5, 2018	The Columbia Chronicle	CTA proposes route for transportation desert
February 5, 2018	The Architect's Newspaper	CTA announces route of proposed Red Line expansion
February 7, 2018	Chicago Reader	Can the CTA and Metra play nice?
February 12, 2018	Chicago Tribune	Public invited to weigh in on CTA's planned Red Line extension on South Side
February 14, 2018	Streetsblog Chicago (blog)	South Siders Share Their Thoughts on the Red Line Extension Project
February 21, 2018	The Chicago Citizen	Minority Contractor will Contribute to Red Line Extension
February 26, 2018	In These Times	Chicago's Far South Side Is Finally Getting a Train–And It's Thanks to Decades of Organizing
February 28, 2018	Chicago Reader	Would far-south-siders be willing to swap the long-awaited Red Line extension for a cheaper, quicker solution?

Section 3
Public and Agency Outreach

CTA has maintained active, ongoing public and agency outreach since the Alternatives Analysis in 2006. This section details additional public and agency outreach efforts conducted as part of the early 2018 outreach efforts to reach and coordinate with the public, including elected officials and community groups, as well as federal, state, and local agencies.

3.1 Elected Officials Briefings

CTA contacted federal, state, and local elected officials to inform them of the Draft EIS, the scheduled public open house, and to provide additional project information about the RLE Project. On January 24 and 25, 2018, CTA met with elected officials to brief them on the project and the selection of the Preferred Alignment. **Table 3** summarizes the elected official offices that were briefed. **Attachment 3** contains sign-in sheets from these meetings.

Table 3: Federal, State, and Local Official Briefings

Representing	Date of Briefing
Chicago 6th Aldermanic Ward	1/24/2018
Chicago 8th Aldermanic Ward	1/24/2018
Chicago 9th Aldermanic Ward	1/24/2018
Chicago 10th Aldermanic Ward	1/24/2018
Chicago 17th Aldermanic Ward	1/24/2018
Chicago 21st Aldermanic Ward	1/24/2018
Chicago 34th Aldermanic Ward	1/24/2018
U.S. Senator Tammy Duckworth	1/25/2018
U.S. Representative Bobby L. Rush, Illinois 1st District	1/25/2018
U.S. Representative Robin Kelly, Illinois 2nd District	1/25/2018
State Senator Jacqueline Y. Collins, Illinois 16th District	1/25/2018
State Senator Donne Trotter, Illinois 17th District	1/25/2018
State Representative Marcus Evans, Illinois 33rd District	1/25/2018
State Representative Thaddeus Jones, Illinois 29th District	1/25/2018
Cook County 4th District	1/25/2018
Cook County 5th District	1/25/2018

3.2 Community Groups Outreach

CTA Government and Community Relations staff conducted focused outreach to interested groups about the project and to inform them about the selection of the Preferred Alignment. During this outreach, CTA Government and Community Relations staff offered to meet with each group to

discuss the project and its impacts. **Table 4** lists the community groups that met with CTA in 2018. **Attachment 3** contains meeting sign-in sheets and meeting notes.

Table 4: Community Group Meetings

Organization	Date	Attendees
Agape Community Center	3/08/2018	5
People for Community Recovery (Altgeld Gardens)	4/16/2018	7
Chicagoland Prison Outreach	5/18/2018	3
Greater Roseland Chamber of Commerce	6/27/2018	9
Southeast Jobs Collaborative	9/20/2018	16

CTA Government and Community Relations staff will continue to reach out to these groups as the project moves forward and leverage existing relationships to ensure meaningful engagement.

3.3 Agency Outreach

CTA sent letters to federal, state, and local cooperating and participating agencies as well as tribal organizations. These letters contained information on the Preferred Alignment, updates to the RLE Project, and invited representatives to attend the public open house. The agencies and organizations that received this notice are listed below. **Attachment 4** contains letter templates and mailing lists.

Cooperating Agency

- Federal Highway Administration

Federal Participating Agencies

- Department of Energy
- Department of Health and Human Services
- Department of Housing and Urban Development
- Federal Emergency Management Agency
- Federal Railroad Administration
- Transportation Security Administration
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

Regional Participating Agencies

- Metra Commuter Rail
- Metropolitan Water Reclamation District of Greater Chicago
- Pace Suburban Bus Service
- Regional Transportation Authority

State Participating Agencies

- Illinois Commerce Commission
- Illinois Department of Natural Resources
- Illinois Department of Transportation
- Illinois Environmental Protection Agency
- Illinois Historic Preservation Agency

Local Participating Agencies

- City of Chicago, Office of the Mayor
- Chicago Department of Business Affairs and Consumer Protection
- Chicago Department of Fleet and Facility Management
- Chicago Department of Planning and Development
- Chicago Department of Transportation
- Chicago Housing Authority
- Chicago Park District
- Chicago Police Department

Tribal Organizations

- Citizen Potawatomi Nation
- Forest Country Potawatomi
- Ho-Chunk Nation
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- Potawatomi Nation-Hannahville Indian Community
- Prairie Band of Potawatomi Nation
- Sac and Fox Nation of Mississippi in Iowa
- Sac and Fox Nation of Missouri
- Sac and Fox Nation of Oklahoma

In addition to sending letters, CTA Government and Community Relations and RLE Project staff met with state, regional and local participating agencies to update them on project status, inform them of the selection of the Preferred Alignment and discuss future coordination opportunities and needs. **Table 5** lists the agencies that met with CTA in 2018. **Attachment 4** contains meeting sign-in sheets and meeting notes.

Table 5: Agency Meetings

Agency	Date	Attendees
Regional Transportation Authority (RTA)	2/27/2018	2
Metra Commuter Rail	2/27/2018	1
Pace Suburban Bus Service	2/27/2018	4
Chicago Department of Transportation (CDOT)	3/8/2018	1

Agency	Date	Attendees
Chicago Department of Planning and Development (DPD)	3/8/2018	1
Chicago Park District (CPD)	3/8/2018	3
Illinois Department of Transportation (IDOT) District One	3/12/2018	7
Metropolitan Water Reclamation District of Greater Chicago (MWRD)	3/16/2018	7
Cook County Department of Transportation and Highways (DoTH)	4/3/2018	2
Cook County Land Bank Authority	4/3/2018	1

Section 4
Public Open House

CTA hosted a public open house to provide an update on project progress and present the Preferred Alignment. The open house provided the public with an opportunity to ask questions about the Preferred Alignment and other project details in an open, conversational setting. The public open house was held:

Date:	Tuesday, February 13, 2018
Time:	6:00 to 8:00 p.m.
Location:	Gwendolyn Brooks College Preparatory Academy 250 E. 111th Street Chicago, IL 60628

The open house location was accessible per the Americans with Disabilities Act (ADA). The open house was held in the project area and accessible by public transportation (CTA's Red Line 95th Street Terminal and CTA buses #115 Pullman/115th Street, #34 South Michigan Avenue, and #119 Michigan/119th Street). For the convenience of all attendees, the rail station and bus routes nearest to the public open house site were publicized on the public open house flyer, postcard notice, eBlasts, and on the project website. To provide the greatest opportunity for community participation, the public open house was scheduled on a weekday evening. Spanish translators and an interpreter for deaf and hard of hearing individuals were available during the public open house. A total of 246 people signed in at the public open house. **Attachment 5** contains photos from the public open house as well as the sign-in sheets and other meeting materials.

4.1 Public Open House Format

The public open house provided attendees an opportunity to review the proposed project, the Preferred Alignment, potential environmental and property impacts as well as mitigation measures proposed. The open house format also allowed the public to provide feedback, ask questions and discuss concerns directly with project staff.

Exhibit boards staffed by project team members provided information on the project purpose and need; the process for determining the Preferred Alignment and alternatives considered in the Draft EIS; environmental impacts of the project and proposed mitigation measures; and information on the process to be followed for property acquisition and relocation.

Project team members staffed workstations to answer specific questions from the public related to property acquisition and relocation and project engineering.

CTA played a video about the project called "Improving Access, Increasing Livability: The CTA Red Line South Extension." The video re-played continually throughout the meeting in a corner of the room. The video was prepared by the Chicago Metropolitan Agency for Planning (CMAP) in

partnership with CTA. The video is available online: www.cmap.illinois.gov/mobility/transit/red-line.

4.2 Public Open House Materials

Project team members offered open house attendees comment cards and Project Handouts as they entered the open house. Both the comment card and Project Handout were available in both English and Spanish. A Spanish language interpreter and an interpreter for deaf and hard of hearing individuals were available to assist attendees. Copies of the public open house exhibits were made available on the project website and remain available as part of the project website.

The comment cards allowed attendees to submit written comments during or after the public open house. Space was provided on the front and back sides of comment cards for commenters to provide feedback. Directions were included on how to submit feedback after the meeting. **Attachment 5** contains both English and Spanish language public open house comment cards.

4.3 Exhibit Boards

CTA developed project exhibit boards for use during the public open house. The boards included the following:

1. Welcome (Open House Purpose and Ways to Provide Comments)
2. Project Purpose and Need
3. Preferred Alignment (Narrative Explanation)
4. Preferred Alignment (Maps)
5. Project Visualizations (Stations)
6. We Heard You (Summary of Comments Received on Draft EIS)
7. Property Displacements
8. Noise and Vibration Impacts
9. Section 4(f) – Impacts to Parks
10. Park Concept Visualizations
11. Quick Facts about Acquisition and Relocation
12. Next Steps and Timeline

Attachment 5 contains the exhibit boards.

CTA and project team members, including professional planners and engineers, provided attendees with specific information related to these topics and answered questions at each exhibit board area and workstation. Copies of the exhibit boards were made available on the project website directly after the public open house and remain available on the project website.

The workstation dedicated to potential property displacements resulting from the project included large-scale maps of the project area showing potential property displacements, as well as addresses and photos to facilitate discussion. CTA also provided FTA's "General Acquisition & Relocation Information" brochures, which summarize property owners' and tenants' rights under the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 ("Uniform Act"). Relocation outreach specialists staffed the workstation to discuss specific displacement-related questions with meeting attendees. CTA also posted the property displacement maps and address listings on the project website (see **Section 5**).

4.4 Comments Received

CTA invited open house attendees to submit comments during the public open house. Comments could also be submitted via email or U.S. mail. Email comments could be sent to a project-specific email address (RedExtension@transitchicago.com) found on the comment cards, project website, and on all notification materials. The comment cards, project website, and all other noticing materials also provided the mailing address for submitting written comments via U.S. mail. CTA received a total of 42 comments between January 26, 2018 and April 26, 2018; **Table 5** summarizes the number of written public comments received. No additional written comments were received from public agencies, tribes, or railroads.

Main themes from the comments included:

- Project funding questions
- Alternate transit options for the area in substitution or in addition to the Red Line extension
- Frequency of bus service following project completion
- Requests for more information about displacement and property acquisition
- Concerns about parking lot locations, spaces and need
- Concerns about noise and vibration and other potential inconveniences to the community resulting from train service and construction
- Requests for the project to employ community members
- Incorporating community designs/artistic expression opportunities
- Potential for transit-oriented development

Table 6: Summary of Comments Received

Format Returned	Number of comments
Public Open House	27
Displacements Meetings	2
Community Group Meetings	2
Email	11
Total	**42**

Attachment 6 contains all comments received between January 26, 2018 and April 16, 2018.

Section 5
Displacement Outreach

CTA undertook an extensive outreach process to notify property owners and lessees affected by the displacements required for the Preferred Alignment. CTA took similar measures to communicate with properties owners and lessees who would no longer experience displacement as a result of the selection of the Preferred Alignment. To provide the greatest opportunity for stakeholder questions and input, CTA employed a variety of methods to notify property owners and lessees of displacements and educate them about the displacement and relocation process as described in the Uniform Act.

5.1 Informational Materials

5.1.1 Frequently Asked Questions

CTA produced a Frequently Asked Questions (FAQs) document to help answer the most common questions potentially-impacted property owners and tenants might have about the property acquisition and relocation process. The document answered the following questions:

- Which alignment option did CTA select?
- How would I know if my property is affected?
- What are my rights as a property owner?
- What type of compensation will I receive?
- How will CTA determine the purchase price for my property?
- What if I don't own this property but rent an apartment, or lease space for my business?
- If CTA acquires my property, will you provide me help in relocating?
- What will happen next with the RLE Project?
- If I have additional questions about potential property acquisitions, who should I call?
- How can I learn more about the RLE Project?

The FAQs handout was included in all mailings to potentially-displaced property owners and tenants and the public open house. **Attachment 7** contains a packet of information about displacements that was posted on the RLE Project website; the packet includes a brief overview of the displacement process and the displacements FAQs handout. Both the English and Spanish language versions of the FAQs are provided in **Attachment 7**.

5.1.2 FTA General Acquisition & Relocation Information Brochure

CTA provided FTA's "General Acquisition & Relocation Information" brochure to property owners and lessees as requested. It was also made available at the public open house. The brochure summarizes the acquisition and relocation process. **Attachment 7** contains the brochure.

5.2 Letters Mailed to Property Owners and Tenants

CTA mailed letters to 231 property owners and tenants at approximately 150 private properties that would be affected by the Preferred Alignment. The letters detailed updated project information, including how the Preferred Alignment impacts the property, and information about the property acquisition and relocation process. Another 127 letters were sent to property owners and tenants at private properties that are not affected by the Preferred Alignment, but who were previously notified about potential displacement during the 2016 Draft EIS process. Letters to property owners and tenants were sent via both regular and certified mail on January 25, 2018 to arrive on January 26, 2018. FAQs were included in these letters. Letters and FAQs in Spanish were sent to property owners and tenants identified as Spanish-speaking through previous outreach efforts.

In addition, CTA reached out separately to the public agencies and railroads that would be affected by the project by mailing each agency/railroad a letter with agency/railroad-specific information. Letters to public agencies and railroads were mailed on January 26, 2018.

Attachment 7 contains copies of the letters sent to private property owners, tenants, public agencies, and railroads.

5.3 Door-to-Door Outreach

In addition to delivery via regular and certified mail, CTA's relocation outreach specialists went door-to-door to hand deliver the letters and materials from January 26, 2018 to February 6, 2018. The outreach specialists visited potentially-displaced properties and properties that would no longer be displaced. Outreach specialists spoke with property owners and tenants and provided an explanation of the RLE Project, displacements, and provisions under the Uniform Act that would apply to properties acquired for the project. CTA's relocation outreach specialists acted as a single point-of-contact to answer specific questions regarding relocation rights, requirements, processes and anticipated timelines.

Many potentially-displaced property owners and tenants were home when the relocation outreach specialists hand-delivered the letters. At properties where no one was present and the building did not appear vacant, outreach specialists left the letters and materials at the front door.

5.4 Displacements Community Meetings

CTA invited potentially-displaced property owners and tenants to attend one of two informational community meetings on February 6, 2018 and February 8, 2018 in the project area to learn more about the project and the acquisition and relocation process. All who received a letter were welcome to attend either of the meetings. During the meetings, attendees could review exhibit boards that described the project and the acquisition and relocation process.

Each meeting had three workstations where attendees could speak with relocation outreach specialists and CTA staff and one workstation where attendees could have a conversation with project engineers. These stations allowed one-on-one conversations about the reasons for displacement specific to their property, the project timeline, their rights under the Uniform Act, and the benefits that would be provided to them. A total of 27 people signed in at the two meetings. **Table 6** shows the locations, dates and times, and attendee counts of each meeting. **Attachment 8** contains photos, sign-in sheets, and exhibit boards from the displacements meetings.

Table 7: Displacements Community Meeting Information

Meeting Location	Date and Time	Attendees
Fenger Academy High School 11220 S. Wallace Street Chicago, IL 60628	February 6, 2018 5:30 - 7:30 PM	12
Palmer Park Gymnasium 201 E. 111th Street Chicago, IL 60628	February 8, 2018 5:30 - 7:30 PM	15

5.4.1 Displacements Meetings Materials

Project team members offered meeting attendees comment cards, displacement FAQs documents, RLE Project Handouts, and the FTA's "General Acquisition & Relocation Information" brochure. Attendees were also invited to provide their contact information and check a box at sign-in to indicate that they would like to be contacted to set up an in-person meeting to discuss their property. A Spanish language interpreter and an interpreter for deaf and hard of hearing individuals were available at both displacements meetings. A copy of the displacement FAQs were made available on the project website and remain available as part of the project website.

The comment cards allowed attendees to submit written comments during or after the displacements meetings.

Large-scale maps of the project area with displaced properties clearly marked and labeled were provided to allow meeting attendees and CTA representatives to easily identify attendees' properties. These maps facilitated discussion about reasons for potential displacement specific to each property. Individual property information sheets with addresses and photos further facilitated discussion. **Attachments 7 and 8** contain the materials made available at the displacements meetings.

5.4.2 Exhibit Boards

Four exhibit boards were on display during the displacements meetings. The boards included the following topics:

1. Welcome (Meeting Purpose, Ways to Provide Comments and Schedule Individual Meetings)

2. Preferred Alignment (Description)

3. Preferred Alignment (Map)

4. Quick Facts About Acquisition and Relocation

5. Next Steps and Timeline

CTA and project team members, including professional planners and engineers, provided attendees with specific information related to these topics and answered questions at each exhibit board area and workstation. Copies of the exhibit boards were made available on the project website after the public open house and remain available on the project website.

5.4.3 Comments Received

Attendees were invited to provide comments in writing during the displacements meetings. Meeting attendees were advised that they could also submit their comments via email or U.S. mail. Email comments could be sent to a project-specific email address (RedExtension@transitchicago.com) found on the comment cards, project website, and on all notification materials. The comment cards, project website, and all other noticing materials also provided the mailing address for submitting written comments via U.S. mail.

A total of 2 written comment cards were submitted during the displacements meetings. Those comment cards are included in **Attachment 6**.

5.5 Customer Service Hotline

In an effort to quickly provide reliable communication regarding displacements and the property acquisition and relocation process, CTA's Customer Service Department fielded calls from potentially-displaced property owners and residents.

Customer service representatives answered general inquiries. Questions and concerns requiring additional expertise, such as those regarding specific properties or details about the property acquisition and relocation process, were forwarded to the RLE Project Uniform Act experts to be answered within 24 hours of the initial request.

5.6 Individual Consultations

RLE Project Uniform Act experts, building on relationships developed from initial property outreach in 2016, have continued to provide property owners and tenants with the opportunity to discuss the project and its impacts through individual consultations by phone or in person. These efforts, while more informal in nature, have provided property owners with additional assistance and ability to answer questions about the project and process/timeline for acquisition during 2018 outreach efforts in particular.

Attachment 1
Project Noticing and Informational Materials

Press Release

Project Handout - English

Project Handout - Spanish

Open House Flyer - English

Open House Flyer - Spanish

Display Ad Tear Sheets

Website

Postcard

e-Blast #1: January 26, 2018

e-Blast #2: February 7, 2018

Transit Alert Card

Press Release

Chicago Transit Authority

search

Mayor Emanuel and CTA Announce Preferred Alignment for Red Line Extension to 130th Street

1/26/2018

Expanded rail service to the Far South Side of Chicago will improve access to jobs and opportunity, promote economic development

Mayor Rahm Emanuel and the Chicago Transit Authority (CTA) today announced that the agency has selected a preferred alignment for the Red Line Extension (RLE)—a project that will extend the Red Line to 130th Street from 95th Street. The RLE project will provide new access to rail service for Far South Side residents, connecting them to affordable housing, jobs, services and educational opportunities.

“Today we are taking a major step towards extending the Red Line to 130th Street and delivering the jobs and economic opportunities that go with it,” Mayor Emanuel said. “By extending the Red Line south we are strengthening Chicagoans’ connections to each other, to opportunity and to the world.”

The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street. Each of the new stations would include bus and parking facilities. The project is expected to create an estimated 6,200 jobs.

After taking into consideration extensive public feedback, technical analysis and other factors, the CTA selected a route for the RLE project that would:

- Begin the extension at 95th Street and run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 109th Street;
- Cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street; and
- Continue south to 130th Street.

“We are happy to introduce our preferred alignment for the Red Line Extension, a transformational project that will expand rail service to Chicago’s southernmost communities and create better access to jobs, education and opportunities,” CTA President Dorval R. Carter, Jr. said. “We made this selection based on feedback from the community, and look forward to moving forward on this project.”

The preferred RLE alignment would provide all the benefits of new rail service for the area while minimizing the impact on local businesses and homes. The alignment is a hybrid of two previously considered alignments—the East and West Options, named for where they were located next to existing freight railroad tracks—and offers the best of each while limiting the number of properties CTA must purchase to build the rail extension. The selected alignment also takes advantage of several large parcels of land that are currently vacant and will allow for economic development opportunities.

The project is a key part of Mayor Emanuel and CTA's "Red Ahead" investment in its busiest rail line that includes the $425 million Red Line South Reconstruction that was completed in 2013 and the ongoing $280 million construction of a new 95th Street Terminal, which will be completed in 2018.

What's next?
CTA will host a public open house on February 13, 2018 from 6 p.m. until 8 p.m. at the Gwendolyn Brooks College Preparatory Academy gymnasium (250 East 111th Street, Chicago, Illinois) to present the alignment to the community.

CTA will produce a final Environmental Impact Study (EIS) that will include further preliminary engineering work and will analyze impacts of the proposed alignment. This engineering work is required before CTA can apply for more than $1 billion in federal funds to support the RLE project, estimated to cost $2.3 billion.

CTA expects to apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase of this project, a necessary step to pursue federal funding for the project under the competitive federal "New Starts" program. For more information on the Red Line Extension project, visit transitchicago.com/redeis.

###

RED AHEAD

Moving Ahead to a Better Red

Red Line Extension

The proposed **Red Line Extension (RLE) Project** is one part of CTA's **Red Ahead Program**, a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line.

Preferred Alignment Selected

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities.

Based on public feedback, technical analysis, and agency coordination, CTA has selected a route that would run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 108th Place, then would cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street.

How the Preferred Alignment Compares

The Preferred Alignment is a combination of the previously presented East and West Options. It would capture the benefits and minimize the impacts of either option and incorporates the feedback received on the Draft Environmental Impact Statement (EIS).

Project Benefits/Impacts	East Option	West Option	Preferred Alignment
Minimizes Affected Parcels	✗	✓	✓
Minimizes Affected Residences	✗	✓	✓
Minimizes Affected Businesses	✓	✗	✓
Avoids Impact to Historic Roseland Pumping Station	✗	✓	✓
Maximizes Economic Development Opportunities	✓	✗	✓

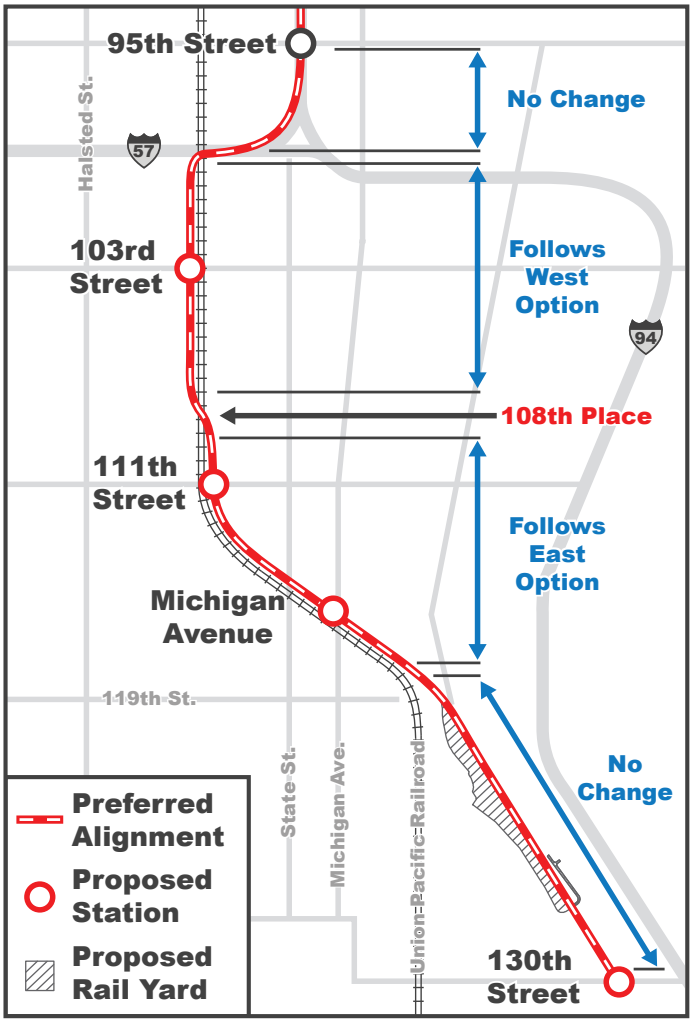

2016 PUBLIC OUTREACH
WE HEARD YOU!

CTA received 284 comments during the comment period. Many comments expressed concern about property displacements and potential noise and vibration impacts. The Preferred Alignment would have ***fewer impacts*** than either the East or West Option.

Property Displacement Impacts

The Preferred Alignment would affect ***fewer residences*** than the East Option, and ***fewer businesses and jobs*** than the West Option.

Noise and Vibration Impacts

CTA would construct an approximately 4-foot high noise barrier along the tracks and implement other mitigation strategies to ***resolve all potential severe and moderate noise impacts*** due to the project. Based on the analysis, the project would result in ***no impacts from vibration***.

Next Steps and Timeline

Now that CTA has selected the Preferred Alignment, a Final Environmental Impact Statement will be prepared and preliminary engineering will be conducted. On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next 5 years for the RLE Project, which will allow for completion of these next steps.

CTA will apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase to pursue federal funding for construction of this project under the competitive federal "New Starts" program. Project Development and securing full funding for the RLE Project under this program is a multiyear, multistep process. CTA will continue to work with the community to complete this important project.

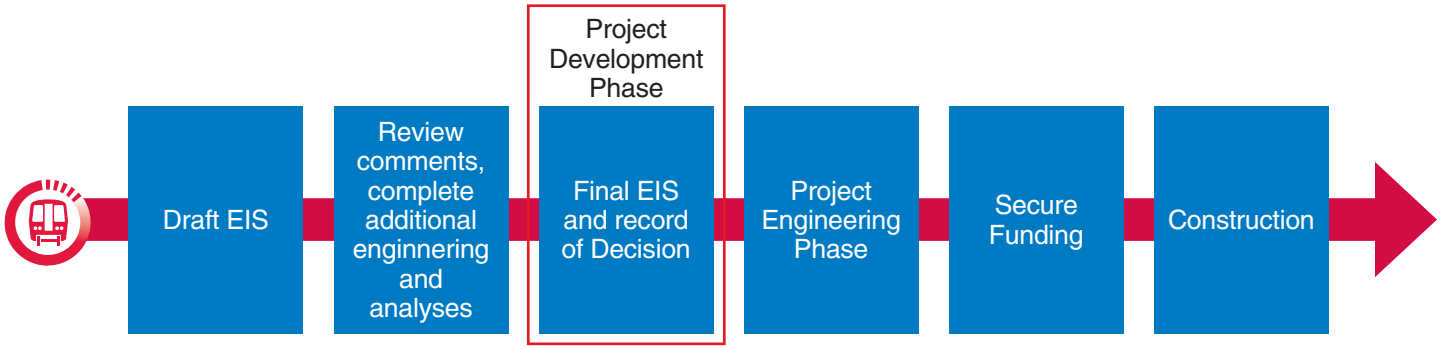

RED AHEAD
Avanzando a un rojo mejor

Red Line Extension

El **Proyecto de expansión de la línea roja (RLE)** propuesto es parte del **programa Red Ahead** (Rojo a la vista) de CTA, una iniciativa amplia para mantener, modernizar y expandir la línea de tren más transitada de Chicago.

Alineamiento preferido elegido

Chicago Transit Authority (CTA) propone expandir la Línea Roja desde la terminal existente desde 95th/ Dan Ryan hasta 130th Street, sujeto a la disponibilidad de fondos. La expansión propuesta de 5.3 millas incluiría cuatro estaciones nuevas cerca de 103rd Street, 111th Street, Michigan Avenue y 130th Street. Cada estación nueva incluiría instalaciones para autobuses y estacionamiento.

Basándose en los comentarios del público, análisis técnico y coordinación de las agencias, CTA ha elegido una ruta que correría al oeste de los rieles de Union Pacific Railroad (UPRR) desde I-57 sur hasta aproximadamente 108th Place, luego cruzaría los rieles de UPRR y correría al este de los rieles hasta cruzar los rieles de Metra Electric cerca de 119th Street, y continuaría en dirección sur hacia 130th Street.

Cómo se compara el alineamiento preferido

El alineamiento preferido es una combinación de las opciones este y oeste de UPRR presentadas anteriormente. Capturaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios recibidos sobre el borrador de la Declaración de Impacto Ambiental.

Beneficios/ impactos del proyecto	Opción este	Opción oeste	Alinea miento preferido
Minimiza parcelas afectadas	✗	✓	✓
Minimiza residencias afectadas	✗	✓	✓
Minimiza negocios afectados	✓	✗	✓
Evita impacto sobre la estación histórica: Roseland Pumping Station	✗	✓	✓
Maximiza las oportunidades de desarrollo económico	✓	✗	✓

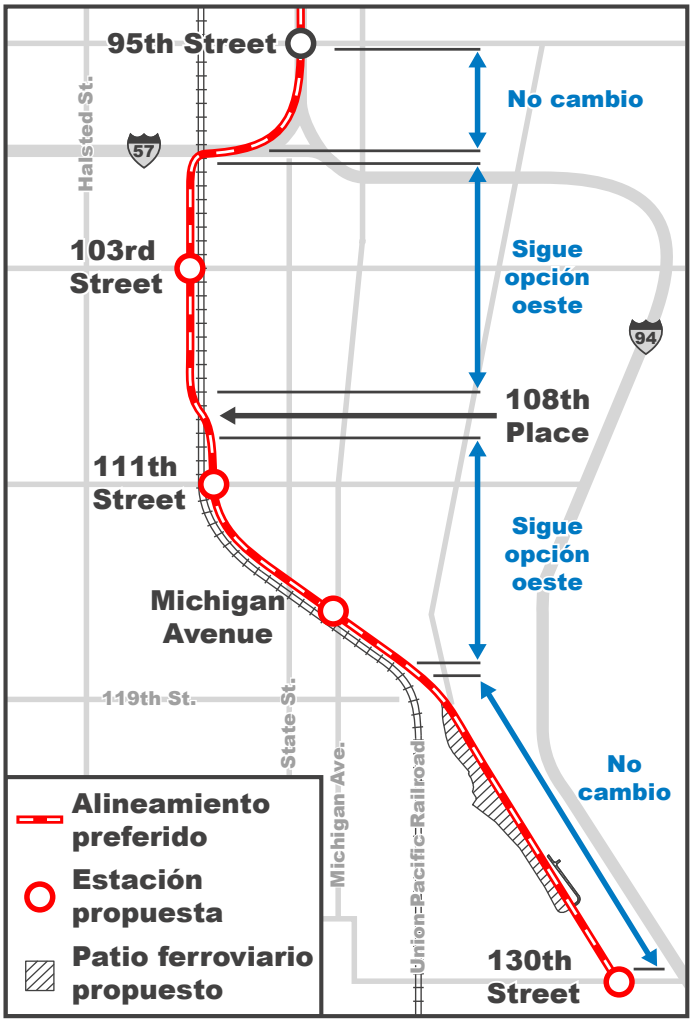

DIFUSIÓN AL PÚBLICO 2016
LO ESCUCHAMOS!

CTA recibió 284 comentarios durante el periodo de comentarios. Muchos comentarios expresaron preocupación sobre los desplazamientos de las propiedades y los posibles impactos de ruido y vibración. El alineamiento preferido tendría ***menos impacto*** que con las opciones este u oeste.

Impacto de desplazamientos de propiedades

El alineamiento preferido afectaría ***menos residencias*** que con la opción este, y ***menos negocios y empleos*** que con la opción oeste.

Impacto del ruido y vibración

CTA construiría una barrera de ruido de aproximadamente 4 pies de altura a lo largo de los rieles e implementaría otras estrategias de mitigación para ***resolver todos los posibles impactos de ruido graves y moderados*** debido al proyecto. Basándose en el análisis, el proyecto ***no tendría impacto de vibración.***

Próximos pasos y plazos

Ahora que CTA ha elegido un alineamiento preferido, se preparará una declaración de impacto ambiental final y se llevarán a cabo estudios preliminares de ingeniería. El 27 de noviembre de 2016, el alcalde Emanuel y CTA anunciaron la aprobación de fondos por la cantidad de $75 millones durante los próximos 5 años para el proyecto de RLE, los cuales permitirán que se completen los próximos pasos.

CTA solicitará a la Federal Transit Administration (FTA) el ingreso a la fase de desarrollo del proyecto para obtener fondos federales para la construcción del proyecto conforme al programa federal competitivo “New Starts”. El desarrollo del proyecto y la obtención de todos los fondos para el proyecto de RLE conforme a este programa es un proceso de varias etapas que tomará varios años. CTA continuará trabajando con la comunidad para completar este proyecto importante.

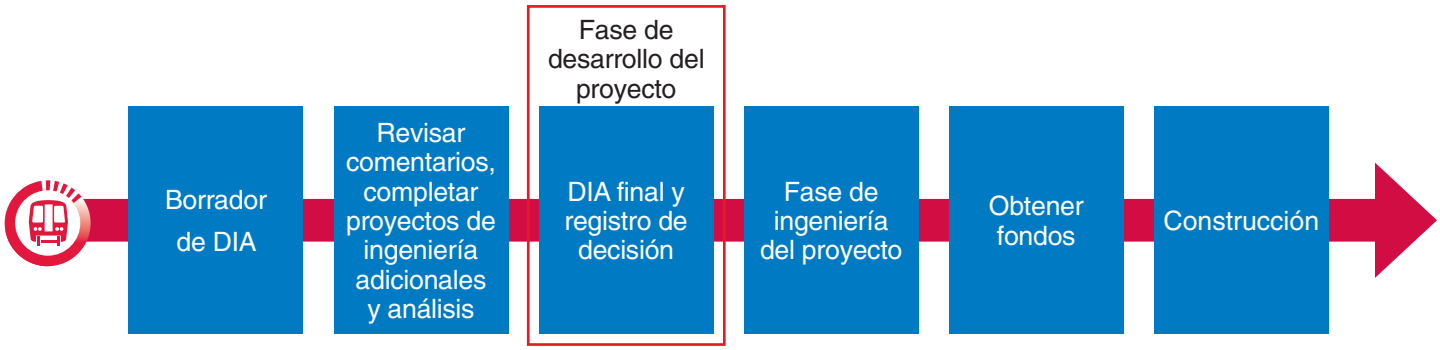

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

You are invited to an Open House on the

Red Line Extension Project

When and Where?

Tuesday, February 13, 2018 – 6:00 - 8:00 p.m.

Gwendolyn Brooks College Preparatory Academy
Main Gym (West Side of Building)
250 E. 111th Street, Chicago, IL 60628

**Please enter through Door 8. Parking available in rear of the building. Parking lot entrance via King Drive.*

This location served by CTA Bus #111, 4, 34, 111A, 115, and 119; and Metra Electric 111th Street (Pullman) Station.

This facility is accessible to people with disabilities.

At the open house, you will learn more about the Preferred Alignment and anticipated project benefits and impacts. You will also have the opportunity to provide feedback.

CTA has developed additional details for the proposed RLE route

CTA is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. This project is one part of CTA's Red Ahead Program, a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line.

Based on public feedback, technical analysis, and agency coordination, CTA has selected a Preferred Alignment that would run along the west side of the Union Pacific Railroad (UPRR) tracks from I-57 south to approximately 108th Place, then would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. It would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement.

CTA welcomes your comments and feedback about the Preferred Alignment and potential impacts.

Do you require assistance?

If you require an interpreter, including sign language services, or other accommodations at this open house, contact **Gerald Nichols, CTA Vice President, Community Relations,** at least 5 days before the open house at **(312) 681-3700** or GNichols@transitchicago.com.

Para más información en Español, llame al **(312) 681-2828.**

RED AHEAD
Avanzando a un rojo mejor

Red Line Extension

Está invitado a una audiencia pública sobre el

Proyecto de expansión de la Línea Roja

Fecha y lugar

Martes 13 de febrero de 2018 – 6:00 - 8:00 p.m.

Gimnasio Principal de Gwendolyn Brooks College, Preparatory Academy (al lado oeste del edificio)
250 E. 111th Street, Chicago, IL 60628

**Por favor entre por la puerta 8. Hay estacionamiento disponible detrás del edificio. La entrada del lote de estacionamiento se encuentra en King Drive.*

Esta ubicación dispone del servicio de autobuses de CTA #111, 4, 34, 111A, 115 y 119; y la estación 111th Street (Pullman) de Metra Electric.

Las instalaciones son accesibles a las personas con discapacidades.

En la casa abierta, aprenderá más sobre el alineamiento preferido y los beneficios e impactos previstos del proyecto. También tendrá la oportunidad de ofrecer sus comentarios.

CTA ha elaborado detalles adicionales para la ruta de RLE propuesta

CTA propone expandir la Línea Roja desde la terminal existente desde 95th/Dan Ryan hasta 130th Street, sujeto a la disponibilidad de fondos. Este proyecto es parte del programa Red Ahead (Rojo a la vista) de CTA, una iniciativa amplia para mantener, modernizar y expandir la línea de tren más transitada de Chicago.

Basándose en los comentarios del público, análisis técnico y coordinación de las agencias, CTA ha elegido un alineamiento preferido que correría al oeste de los rieles de Union Pacific Railroad (UPRR) desde I-57 sur hasta aproximadamente 108th Place, luego cruzaría los rieles de UPRR y correría al este de los rieles hasta cruzar los rieles de Metra Electric cerca de119th Street y continuaría en dirección sur hacia 130th Street. El alineamiento preferido es una combinación de las opciones este y oeste de UPRR presentadas anteriormente. Este alineamiento capturaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios recibidos sobre el borrador de la Declaración de Impacto Ambiental.

CTA agradece sus comentarios y opiniones sobre el alineamiento preferido y sus posibles impactos.

¿Necesita ayuda?

Si necesita un intérprete, incluidos los servicios de lenguaje de señas u otras adaptaciones durante esta casa abierta, comuníquese con **Gerald Nichols, Vicepresidente de CTA, Relaciones con la Comunidad,** por lo menos 5 días antes de la casa abierta al **(312) 681-3700** o GNichols@transitchicago.com.

Para más información en español, llame al **(312) 681-2828.**

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WILD BEASTS-Midnight

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She the People: Girlfriends' Guide to Sisters Doing it for Themselves

"She the People" ensemble members Alexis J. Roston and Kimberly Michelle Vaughn.

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By Rick and Brenda McCain
Let's Play

"She The People: Girlfriends' Guide to Sisters Doing it for Themselves" is directed by Carly Heffernan and is written by Carisa Barreca, Marla Caceres, Carly Heffernan, Tien Tran and Lauren Walker. This power team has led the way of women taking the lead by shedding some light on an invasion of women taking center stage and reclaiming comedy through liberty and the pursuit of hilariousness.

Brenda and Rick McCain

The women of The Second City are taking us back to move us forward in time with considerable laughter while roasting the patriarchy (the government) who has tried to keep women living in their place in society in "The Middle Ages!"

"I Am Woman Hear Me Roar" is the mission of this all woman play, with its serious topics from the smorgasbord of some funny issues that women are dealing with today.

This form of entertainment is relevant now more than ever because it reflects upon real situations with relatable characters. "She The People" allows the audience to connect to great storytelling while delivering political and social messages through comedy.

Women can share their perspective on a largescale of issues from reproductive rights to under-representation in most major industries to everyday attack on small issues; from unrealistic beauty expectations and outdated ideals on femininity to mansplaining in the media.

To witness this up close and to be able to see these very intuitive encounters come to life on the stage and find humor in them is ingenious, liberating, encouraging and necessary for all women.

This two-act sketch gives a great mix of smart, silly and straight up sexy comedy with six very talented actresses. "Girlfriends' Guide to Sisters Doing it for Themselves" will have you literally laughing out loud as they tackle women's concerns with wit and unstoppable humor. The all woman cast in this side-splitting show takes us on a journey of how far we have progressed over the years as we have come to a standstill unleashing the power of merriment.

"She The People" is delightfully amusing and facetiously witty from women shown in television commercials advertising everything from deodorant to medicine to fibromyalgia. Let's hear it for American women trying to balance family, career and cocktails amid today's politically-challenged climate.

Let's Play recommends this play because sometimes girls just want to have fun. So, grab your mothers, sisters, friends, aunts, nieces, cousins and co-workers to come out and celebrate freedom to laugh out loud where it's safe to take off your pants! And yes men, you are allowed to join in on the fun.

The cast includes:
Carisa Barreca
Alex Bellisle
Katie Caussin
Maria Randazzo
Aexis J. Roston
Kimberly Michelle Vaughn

Br. Rice senior forward Susmarski, a team captain, works his way around a St. Ignatius defender in the first game of the Kennedy Cup series. The Crusaders did not score against St. Ignatius goalie Charles Doherty during two games. Br. Rice looks to be a threat in the Chicago Catholic League again next year. (Review photo)

Young Crusaders look to state

by Tim O'Brien

With the team struggling in mid-December and landing near the bottom of the Chicago Catholic League (CCL) hockey standings, a berth in the Kennedy Cup playoffs was no sure thing.

However, the Crusaders closed strong, catching fire at the right time to earn a playoff berth.

The eight-seed against top-seeded St. Ignatius, Br. Rice pushed the Wolfpack in both games but were ultimately swept, falling 1-0 on Jan. 25 and 4-0 on Jan. 27 at Southwest Ice Arena in the best-of-three series.

"We started the season off really rough where we couldn't win a game, but near the end of the season we got in a groove and really took off," said Br. Rice junior Billy Jeffers. "It was a cool push to the playoffs. We played well against Ignatius, but our offense couldn't generate many opportunities."

Br. Rice, a 21-seed, will square off against 12-seed York in the upcoming state playoffs with a date and time to be announced.

With the Crusaders struggling to knock in a goal in the St. Ignatius series, senior goalkeeper Josh Moro did his best to keep the team afloat.

He finished with 53 saves over two games and limited the Wolfpack to 2 goals through the third period of game two. St. Ignatius finally broke through, piling up 3 goals in 6 minutes late in the third.

Moro said positives will come despite the series sweep.

"As a defense, it was a strong series. We kept the slot cleared," Moro said. "That's what we need to build off of for state. It's definitely frustrating. We thought we could go further and beat Ignatius, but we've got a lot of positives going in."

Br. Rice junior defender Billy Jeffers, a Beverly resident and St. Barnabas graduate, takes a shot in game one against St. Ignatius. Jeffers and senior goalkeeper Josh Moro led a defense that slowed down the Wolfpack offense that scored 10 goals in two games against the Crusaders in the regular season. (Review photo)

Moro has been the defensive backbone for a young Crusaders squad that this year typically plays four freshmen and waves of underclassmen overall.

"Josh has always been the pillar for the team, and he came up so big for us at the end of the season," said Br. Rice Coach Paul Manning. "We just couldn't bury the puck. We ended up losing to a better team; that's it."

Fighting its way into the Kennedy Cup playoffs, Br. Rice posted some key wins late, including a 1-0 shutout over St. Rita and a playoff-clinching 1-0 win over Benet on the last day of the regular season.

Even when things looked bleak, Moro knew the effort would be there.

"This team has so much heart," Moro said. "Winning 1-0 and dominating or losing 1-0, they're going all out every second. That's what I love about the team."

With so many young players expected back, Jeffers, a Beverly resident and St. Barnabas graduate, knows the Crusaders will be a threat in the CCL next year.

"I think we can be a really good hockey team next year," Jeffers said. "We've got to work hard in the offseason and get prepared."

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Consider alternatives to opioids to manage pain after surgery

(BPT) - If you're having surgery, you can expect to be sore and uncomfortable for a few days, whether you're recovering at home or in the hospital. But it's best to limit opioids or avoid them altogether, opting for alternatives to manage pain and discomfort, recommends the American Society of Anesthesiologists (ASA).

Unfortunately, many patients leave the hospital following surgery with a prescription for 30 or more highly addictive opioid pills (e.g., Vicodin, hydrocodone and oxycodone), and about 6 percent are still using them three months or longer after the procedure.

"Nobody needs a prescription for 30 or 50 opioids, and even those who are in major pain should only take them for a day or two," said ASA President James D. Grant, M.D., M.B.A., FASA. "There are effective alternatives. Many people don't need opioids at all or at least should drastically reduce the amount they take."

Addiction can start after taking only a few opioids. More than 2 million Americans abuse these medications, which can create a feeling of euphoria and make the body believe the drug is necessary for survival. Since 2000, opioid overdose deaths in the U.S. have increased 200 percent.

Don't take that chance. During Physician Anesthesiologists Week (Jan. 28 to Feb. 3), ASA offers advice for coping with pain and discomfort as you recover from surgery.

* Ask about alternatives - Only take opioids when you are in extreme pain. Medications such as ibuprofen (Motrin), naproxen (Aleve) and acetaminophen (Tylenol) can help with pain and soreness. While it's never a good idea to rely on any type of pain pills for too long, these medications are not addictive and are far less risky than opioids.

* Manage your expectations - Everyone feels pain differently, but soreness and discomfort after surgery are normal and will improve within a day or two. These sensations are less severe than pain, which is usually sharp or intense. You usually don't treat muscle soreness after a hard workout with an opioid, so if you are sore, and not in severe pain, try ibuprofen or naproxen.

* Be an active participant in your own care - While you are in recovery, the nurse will ask you if you are in pain and if so, how much. Be descriptive in explaining how you feel. If you are in major pain, ask that the opioid prescription be written for a small amount, and only take them for a day or two, three at most. Unused pills can fall into the wrong hands. In fact, more than half of people who misuse prescription painkillers get them from a friend or relative. Your pain will improve significantly within a few days whether or not you take opioids.

* Be aware of other downsides to opioids - Opioids cause severe constipation and often don't manage pain as well as people expect. Additionally, they can cause hyperalgesia, or an increased sensitivity to pain.

"The opioid crisis is huge and affects everyone, rich and poor, male and female. It's got to stop, and reducing opioid use during recovery after surgery is a big part of the solution," said Dr. Grant. "Those who are in continued severe pain after surgery should ask a physician anesthesiologist or other pain specialist about alternative strategies to manage pain, including exercise, nerve blocks and non-opioid medications."

ASA is committed to ending opioid abuse and has launched several initiatives to combat the epidemic. For more information, review ASA's National Pain Strategy.

To learn more about the critical role physician anesthesiologists play before, during and after surgery, visit asahq.org/WhenSecondsCount.

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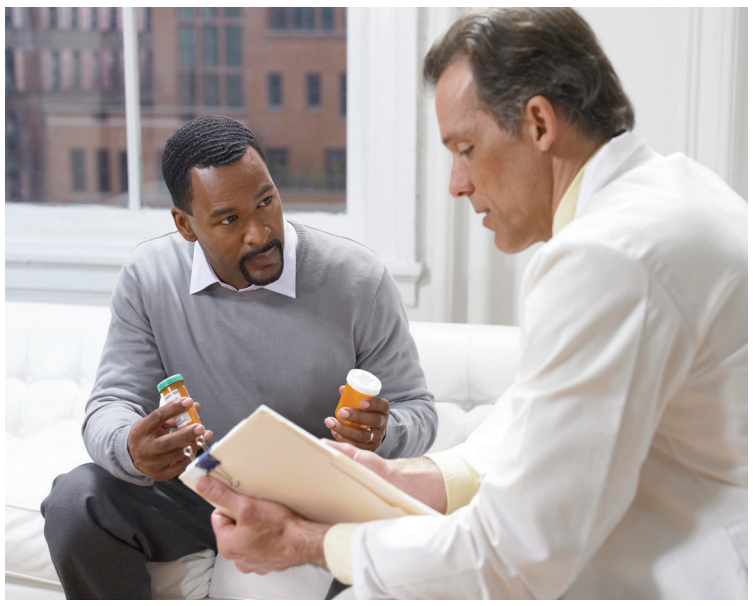

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(BPT) - If you're having surgery, you can expect to be sore and uncomfortable for a few days, whether you're recovering at home or in the hospital. But it's best to limit opioids or avoid them altogether, opting for alternatives to manage pain and discomfort, recommends the American Society of Anesthesiologists (ASA).

Unfortunately, many patients leave the hospital following surgery with a prescription for 30 or more highly addictive opioid pills (e.g., Vicodin, hydrocodone and oxycodone), and about 6 percent are still using them three months or longer after the procedure.

"Nobody needs a prescription for 30 or 50 opioids, and even those who are in major pain should only take them for a day or two," said ASA President James D. Grant, M.D., M.B.A., FASA. "There are effective alternatives. Many people don't need opioids at all or at least should drastically reduce the amount they take."

Addiction can start after taking only a few opioids. More than 2 million Americans abuse these medications, which can create a feeling of euphoria and make the body believe the drug is necessary for survival. Since 2000, opioid overdose deaths in the U.S. have increased 200 percent.

Don't take that chance. During Physician Anesthesiologists Week (Jan. 28 to Feb. 3), ASA offers advice for coping with pain and discomfort as you recover from surgery.

* Ask about alternatives - Only take opioids when you are in extreme pain. Medications such as ibuprofen (Motrin), naproxen (Aleve) and acetaminophen (Tylenol) can help with pain and soreness. While it's never a good idea to rely on any type of pain pills for too long, these medications are not addictive and are far less risky than opioids.

* Manage your expectations - Everyone feels pain differently, but soreness and discomfort after surgery are normal and will improve

within a day or two. These sensations are less severe than pain, which is usually sharp or intense. You usually don't treat muscle soreness after a hard workout with an opioid, so if you are sore, and not in severe pain, try ibuprofen or naproxen.

* Be an active participant in your own care - While you are in recovery, the nurse will ask you if you are in pain and if so, how much. Be descriptive in explaining how you feel. If you are in major pain, ask that the opioid prescription be written for a small amount, and only take them for a day or two, three at most. Unused pills can fall into the wrong hands. In fact, more than half of people who misuse prescription painkillers get them from a friend or relative. Your pain will improve significantly within a few days whether or not you take opioids.

* Be aware of other downsides to opioids - Opioids cause severe constipation and often don't manage pain as well as people expect. Additionally, they can cause hyperalgesia, or an increased sensitivity to pain.

"The opioid crisis is huge and affects everyone, rich and poor, male and female. It's got to stop, and reducing opioid use during recovery after surgery is a big part of the solution," said Dr. Grant. "Those who are in continued severe pain after surgery should ask a physician anesthesiologist or other pain specialist about alternative strategies to manage pain, including exercise, nerve blocks and non-opioid medications."

ASA is committed to ending opioid abuse and has launched several initiatives to combat the epidemic. For more information, review ASA's National Pain Strategy.

To learn more about the critical role physician anesthesiologists play before, during and after surgery, visit asahq.org/WhenSecondsCount.

RED AHEAD
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Red Line Extension

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The Preferred Alignment is a combination of the previously presented UPRR East and West Options. It would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement.

cta

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6:00 - 8:00 p.m.

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Chicago, IL 60628

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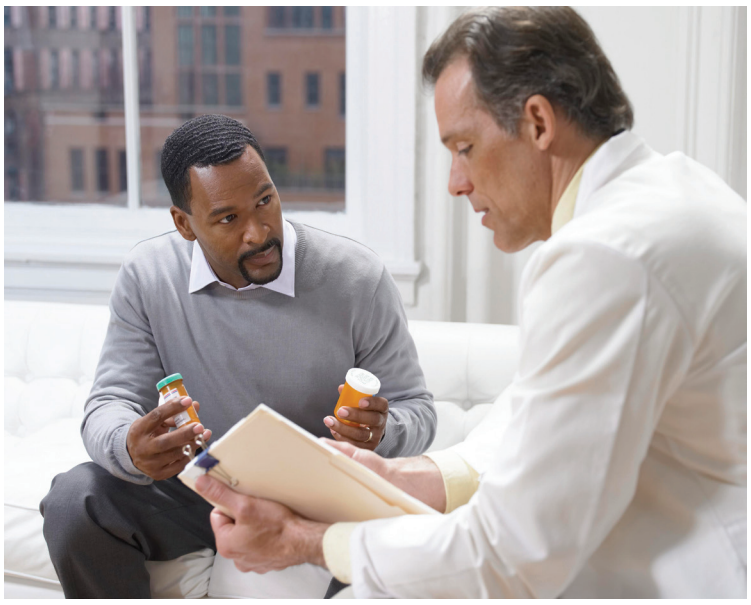

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cta

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Empowering Lives, Enriching Neighborhoods

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- Acerca de clases de ingles gratis
- Servicios legales disponibles
- Gratuitos y/o con bajo costo

Para más información contacte a:
Aga Kusmierz
(773) 338-7722 ext. 720
aga@northsidecr.org

Marvin Gutierrez
(773) 338-7722 ext. 723
marvin@northsidecr.org

New Americans Initiative | ICIRR | DHS

northsidecommunityresources.com
o visítenos en
1530 W. Morse Ave
Chicago, IL 60626

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Hoy

RED AHEAD
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rx Red Line Extension

Está invitado a una audiencia pública sobre el

Proyecto de expansión de la Línea Roja

CTA propone expandir la Línea Roja 5.3 millas desde 95th Street hasta 130th Street.

Basándose en las opiniones del público, planificación de proyecto y trabajo de ingeniería adicional realizado en el pasado año, CTA ha elegido un alineamiento preferido, el cual correría al oeste de los rieles de Union Pacific Railroad desde I-57 sur hasta aproximadamente 108th Place, luego cruzaría los rieles de Union Pacific Railroad y correría al este de los rieles hasta cruzar los rieles de Metra Electric cerca de 119th Street y continuaría en dirección sur hacia 130th Street.

El alineamiento preferido es una combinación de las opciones este y oeste de UPRR presentadas anteriormente. Capturaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios recibidos sobre el borrador de la Declaración de Impacto Ambiental (DIA).

Fecha y lugar?
Martes 13 de febrero de 2018
6:00 - 8:00 p.m.

Gimnasio principal de Gwendolyn Brooks College Preparatory Academy (al lado oeste del edificio)

250 E. 111th St, Chicago, IL 60628

Por favor entre por la puerta 8. Hay estacionamiento disponible detrás del edificio. La entrada del lote de estacionamiento se encuentra en King Drive.

Esta ubicación es dispone del servicio de autobuses de CTA #111, 4, 34, 111A, 115 y 119; y la estación 111th Street (Pullman) de Metra Electric.

Las instalaciones son accesibles a las personas con discapacidades.

La reunión se llevará a cabo en un formato abierto al público.

(888) YOUR-CTA (888-968-7282).

Para más información en español, llame al **(312) 681-2828**

cta

LITERATURA

'Fin de guardia'
(Plaza Janés)

Es el último volumen de la trilogía basada en la historia del detective Bill Hodges, que dio inicio con la novela 'Mr. Mercedes' en 2014

Fin de guardia

Por Stephen King

La hora más oscura es la que precede al alba.

A Rob Martin le vino esta máxima a la cabeza al volante de la ambulancia, mientras avanzaba lentamente por Upper Marlborough Street camino de la base, el Cuartel de Bomberos número 3.

Se dijo que quienquiera que la formulara desde luego había dado en el clavo, porque estaba más oscuro que el culo de una marmota y no faltaba mucho para que amaneciera.

Aunque el día, cuando por fin despuntase, no iba a ser gran cosa; amanecería con resaca, por así decirlo. Se había levantado una niebla densa, cargada con el olor del cercano Gran Lago, en realidad no tan grande.

Y para hacerlo todavía más divertido caía una llovizna tenue y fría. Rob cambió el limpiaparabrisas de intermitente a lento. No mucho más adelante surgieron de la negrura dos arcos amarillos inconfundibles.

—¡Las tetas doradas de América! —exclamó Jason Rapsis en el asiento del copiloto. Rob había trabajado con muchos sanitarios durante los quince años que llevaba en Urgencias, y Jace Rapsis era el mejor: de trato fácil cuando no pasaba nada, inalterable y concienzudo cuando ocurría todo al mismo tiempo—. ¡Nos darán de comer! ¡Alabado sea el capitalismo! ¡Para, para!

—¿Seguro? —preguntó Rob—. ¿Después de la demostración práctica de lo que puede hacerte esa mierda que acabamos de ver?

Volvían de un servicio en una de las McMansiones de Sugar Heights, donde un tal Harvey Galen había telefoneado a Urgencias quejándose de unos dolores atroces en el pecho. Lo encontraron tumbado en el sofá de lo que los ricos sin duda llamaban «el gran salón», como una ballena varada con pijama de seda azul. Su mujer daba vueltas en torno a él, convencida de que estiraría la pata de un momento a otro.

—¡McDonald's, McDonald's! —entonó Jason brincando en su asiento. El profesional serio y competente que acababa de tomar las constantes vitales al señor Galen (mientras Rob, justo a su lado, sostenía el maletín de primeros auxilios con el equipo para las maniobras de respiración y los fármacos para el corazón) había desaparecido. Con el flequillo rubio delante de los ojos, Jason parecía un crío de catorce años demasiado grande para su edad—. ¡Te digo que pares!

Rob paró. A él tampoco le vendría mal plantarse ante un McMuffin de salchicha, acompañado quizá de una de aquellas cosas de patata y cebolla que parecían lenguas de búfalo al horno.

Había varios coches en el carril de la ventanilla de autoservicio. Rob se situó al final de la cola.

National A. Philip Randolph Pullman Porter Museum announces

Gentle Warrior Awards Gala Recipients

Outstanding local women in business, technology, education and labor, an iHeart Radio executive, and a longtime elected state official are among the honorees to be recognized at the National A. Philip Randolph Pullman Porter Museum Gentle Warrior Awards gala on Feb. 24 from 5 to 9 p.m. in the Parkway Ballroom, 4455 S. King Drive.

Educator Beulah McLloyd, principal of Walter H. Dyett School for the Arts, and Illinois State Rep. LaShawn K. Ford will receive the Gentle Warrior Award, along with nationally recognized figures including U.S. Rep. Maxine Waters (D-California; to be accepted by her designee) and actor-producer-director Robert Townsend ("Hollywood Shuffle").

Jaquie Algee, vice president and director of external relations for SEIU Healthcare and one of the organizers of the Women's March on Chicago, is joined by Derrick Brown, director of urban programming for iHeart Radio, as this year's Change Agent Award recipients.

And JinJa Birkenbeuel, CEO of Birk Creative and a Google technology coach, will be the inaugural recipient of the Descendants of Distinction Award, created to honor descendants of the Pullman Porters, the group of distinguished railroad workers who formed the first Black labor union in the U.S., chartered under the American Federation of Labor. Birkenbeuel joins a long list of renowned descendants that include former first lady Michelle Obama, actress Taraji P. Henson ("Hidden Figures," "Empire"), actor Andre Braugher and Tom Joyner, host of the Tom Joyner Morning Show.

Beulah McLloyd

JinJa Birkenbeuel

Jaquie Algee

"The Pullman porters introduced class, culture and education to the African American community and framed it in a way that made it important to us as a people," said Dr. Lyn Hughes, museum founder. "They planted seeds in our ancestry that made us want to do more, be more, strive for more. They were education stalwarts who gained middle class status in the service/-hospitality sector with dignity and conviction."

A. Philip Randolph founded the Brotherhood of Sleeping Car Porters. He was one of America's foremost labor and civil rights leaders, who became known as the "Gentle Warrior."

In 2000, in his honor, the NAPRPP museum created the Gentle Warrior Awards Gala to recognize individuals who exhibit a similar commitment, focus and tenacity that Randolph displayed.

For ticket information visit Eventbrite or go to https://aprpullmanportermuseum.org/special-events/. Entertainment to be provided by R&B, house music duo The Pullman Porters.

Derrick Brown

Rod Doss honored with NNPA Publisher Lifetime Achievement Award

By Stacy M. Brown (NNPA Newswire Contributor)

For 50 years, Rod Doss has remained dedicated to the **New Pittsburgh Courier** and his success has been among the more celebrated of Black Press publishers.

Doss received the National Newspaper Publishers Association's 2018 NNPA Publisher Lifetime Achievement Award at a ceremony in Las Vegas last week.

(Left-right) Dorothy Leavell, the chairman of the NNPA; Rod Doss, the publisher of the New Pittsburgh Courier; Marilyn Harvey, Rod Doss' sister; Dr. Benjamin F. Chavis, Jr., the president and CEO of the NNPA; and Hiram Jackson, the CEO of Real Times Media, celebrate Doss' career achievements, during the 2018 NNPA Mid-Winter Conference in Las Vegas, Nevada. (Freddie Allen/AMG/NNPA)

"There is no greater honor than to be recognized by your peers," said Doss.

NNPA Chairman Dorothy Leavell, NNPA President and CEO Dr. Benjamin F. Chavis Jr., and Real Times Media CEO Hiram Jackson were on hand to present Doss the award.

Doss was joined on the podium at the ceremony by his sister, Marilyn Harvey, who he called his biggest booster and biggest fan.

"His integrity as a journalist is impeccable," said Leavell. "He's contributed a lot and he's really deserving of this honor. [Rod Doss] put the 'I' in the word 'integrity.'"

Chavis said that Doss not only continues to manifest a distinguished career as a publisher of a Black-owned newspaper in America, but also that his work ethic embodies the high standards of journalism; Chavis added that Doss is committed to freedom, justice and equality for all humanity.

Robert W. Bogle, the chairman, president and CEO of **The Philadelphia Tribune,** agreed.

"He worked his way up and made a real difference," Bogle said. "He's provided leadership to the **New Pittsburgh Courier** that's led to the success of the newspaper."

Doss joined the **Courier** in 1967 as

(Continued on page 15)

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cta

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Website

RED AHEAD

Red Line Extension

Red Line Extension Project

Connecting the 95th/Dan Ryan Terminal to 130th Street

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line .

What's new?

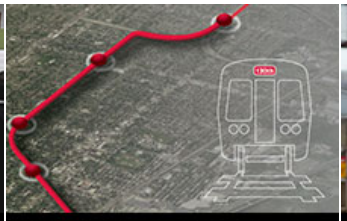

Draft EIS

Frequently asked questions

Project documents archive

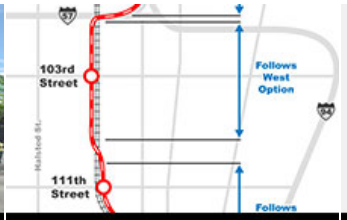

Preferred Alignment

Potential property displacements

View the project map.

Project benefits

- Reduces commute times for residents both within and south of the project area.
- Improves mobility and accessibility for transit-dependent residents in the project area.
- Improves rapid transit rail service to isolated areas and provide viable linkages between affordable housing, jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Provides an opportunity for potential connections and linkages to other public transportation modes including regional commuter rail in the project area.
- Fosters economic development in the project area, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.
- Provides a modern, efficient rail car storage yard and shop facility to provide storage and cost-effective preventive maintenance for rail cars associated with the Red Line Extension (RLE) Project, rail cars currently stored in the existing 98th Street Yard and Shop, and rail cars supporting additional Red Line expansion of service.

Get involved and stay informed

Public and agency input is important. This website will keep you informed about the proposed project, the planning process, and opportunities for public input and participation.

If you have any questions related to the Chicago Transit Authority's proposed Red Line Extension, or would like to be added to the project contact list for future updates, please contact us at:

RedExtension@transitchicago.com

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

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Red Line Extension

RED AHEAD

Red Line Extension

Quick Links

- Home
- What s New
- Draft EIS
- Frequently Asked Questions
- Documents Archive
- Preferred Alternative
- Potential Property Displacements

What's New?

CTA Selects a Preferred Alignment for Red Line Extension

In fall 2016, CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing on Tuesday, November 1, 2016 at St. John Missionary Baptist Church to obtain comments on the benefits and impacts of two options that were under consideration for the Red Line Extension (RLE) Project alignment—the East Option and the West Option. Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options and would run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 108th Place, then would cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. See the project map.

This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option. See full press release.

Public Open House Scheduled for the Red Line Extension Preferred Alignment

CTA hosted a public open house on Tuesday, February 13, 2018 at Gwendolyn Brooks College Preparatory Academy to provide information on the Preferred Alignment for the RLE Project. The meeting location was ADA compliant and accessible by public transit.

This meeting was conducted in an open house format. CTA welcomed comments and feedback about the Preferred Alignment and potential impacts.

View the exhibit boards

September 2017 Newsletter

- September 2017 Newsletter
- Boletín Informativo septiembre 2017

Mayor Emanuel and CTA announce $75 million investment in Red Line extension

On November 27, 2016, Mayor Emanuel and CTA announced that the CTA Board approved an amendment to its FY2016-FY2020 Capital Improvement Plan to include $75 million in funding for the Red Line Extension (RLE) Project, a plan to extend Red Line rail service to 130th Street from 95th Street

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About trip planners (and more options)..

System Status

Trains:

Red Line	Normal Service
Blue Line	Normal Service
Brown Line	Normal Service
Green Line	Normal Service
Orange Line	Normal Service
Purple Line	Normal Service
Pink Line	Normal Service
Yellow Line	Normal Service

Buses:

Routes with Current Alerts (View All):

4 6 22 53 59 65 71 76 79 103 126 157

More:

See all Alerts Accessibility

that includes four new rail stations on Chicago's Far South Side. (See the full press release)

Draft EIS

CTA and the Federal Transit Administration (FTA) prepared a Draft EIS based on the technical analysis of impacts of the alternatives. The Draft EIS documents the benefits and impacts of the alternatives under consideration, which includes impacts to parks and wetlands.

The Draft EIS is available here.

Draft EIS public hearing and comments

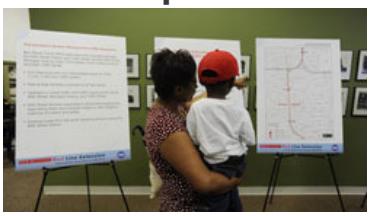

CTA hosted a public hearing on Tuesday, November 1, 2016 at St. John Missionary Baptist Church to provide information about the Draft EIS and solicit comments from the public. The meeting location was ADA compliant and accessible by public transit.

This meeting was conducted in an open house format. The public was invited to provide comments on the Draft EIS either verbally to a court reporter or in writing during the public hearing.

Comments on the Draft EIS were accepted from October 6 to November 30, 2016, and CTA thanks everyone who submitted a comment. The Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

View the **exhibit boards**

Related

- Press Release: Mayor Emanuel and CTA Announce Preferred Alignment for Red Line Extension to 130th Street
- Press Release: CTA Publishes the Draft Environmental Impact Statement for the Red Line Extension Project
- Notice of Availability for the Draft EIS (English) (Spanish)
- RLE Citizens' Guide (English, English smaller download size) (Spanish)
- RLE Project Overview (English) (Spanish)

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Draft Environmental Impact Statement (EIS)

Overview

The National Environmental Policy Act (NEPA) requires evaluation of potential environmental impacts associated with federal projects and actions. In accordance with the NEPA process, the Chicago Transit Authority (CTA) and the Federal Transit Administration (FTA) published a Draft Environmental Impact Statement (EIS) in 2016 that evaluated the environmental impacts of constructing and operating the proposed project. Two Union Pacific Railroad (UPRR) Alternative options were evaluated as part of the Draft EIS. Based on public feedback on the Draft EIS as well as additional project planning and engineering work conducted, CTA has selected a Preferred Alignment. Now that CTA has selected the Preferred Alignment, a Final EIS will be prepared and preliminary engineering will be conducted.

Draft Environmental Impact Statement

The Draft EIS was available for public review and comment from October 6 to November 30, 2016. The Draft EIS includes an evaluation of the No Build Alternative and the two UPRR Alternative options: the East Option and the West Option. The Draft EIS describes the alternatives, the existing environmental setting, the potential impacts from construction and operation of the alternatives, and proposed mitigation measures to reduce or eliminate potential impacts.

The purpose of the EIS is to study, in a public setting, the effects of the proposed project and its alternatives on the quality of the physical, human and natural environment. The evaluation provides details on the extent to which the proposed project affects these areas. Measures to avoid, minimize, and mitigate potential adverse impacts are also identified.

- Notice of Availability and Public Hearing for the Draft EIS (English) (Spanish)
- RLE Draft EIS (Full pdf) (Accessible version)
- RLE Draft EIS Appendix Documents
  - Appendix A: Alternatives Analysis - Locally Preferred Alternative Report (Accessible version)
  - Appendix B: Scoping Report (Part 1 and 2) (Accessible version parts 1 and 2)
  - Appendix C: Agency Coordination and Public Involvement (Part 1, 2 and 3) (Accessible version parts 1, 2 and 3)

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- Appendix D: Purpose and Need Report (Accessible version)
- Appendix E: Description of Alternatives (Accessible version)
- Appendix F: Plans and Profiles (Accessible version)
- Appendix G: Description of Construction and Phasing for Build Alternatives (Accessible version)
- Appendix H: Transportation Technical Memorandum (Accessible version)
- Appendix I: Construction Impacts Technical Memorandum (Accessible version)
- Appendix J: Land Use and Economic Development Technical Memorandum (Accessible version)
- Appendix K: Displacements and Relocation of Existing Uses Technical Memorandum (Accessible version)
- Appendix L: Neighborhoods and Community Impacts Technical Memorandum (Accessible version)
- Appendix M: Parklands and Community Facilities Technical Memorandum (Accessible version)
- Appendix N: Visual and Aesthetic Conditions Technical Memorandum (Accessible version)
- Appendix O: Noise and Vibration Technical Memorandum (Accessible version)
- Appendix P: Safety and Security Technical Memorandum (Accessible version)
- Appendix Q: Historic and Cultural Resources Technical Memorandum (Accessible version parts 1 and 2)
- Appendix R: Hazardous Materials Technical Memorandum (Accessible version)
- Appendix S: Water Resources Technical Memorandum (Accessible version)
- Appendix T: Cumulative Impacts Technical Memorandum (Accessible version)
- Appendix U: Air Quality Technical Memorandum (Accessible version)
- Appendix V: Biological Resources Technical Memorandum (Accessible version)
- Appendix W: Energy Technical Memorandum (Accessible version)
- Appendix X: Environmental Justice Technical Memorandum (Accessible version)
- Appendix Y: Section 4(f) Replacement Park Analysis Technical Memorandum (Accessible version)

- RLE Citizens' Guide (English, English smaller download size) (Spanish)
- November 2016 Public Hearing Exhibit Boards

Public comments

CTA accepted comments on the Draft EIS from October 6 to November 30, 2016. CTA received 284 comments during this comment period, which helped to inform selection of a Preferred Alignment for the project. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

While the public comment period for the Draft EIS is now complete, you can continue to submit comments on the project via email or US mail at any time.

RedExtension@transitchicago.com

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

Public hearing

CTA hosted a public hearing on Tuesday, November 1, 2016 at St. John Missionary Baptist Church to provide information about the Draft EIS and solicit comments from the public. The location of the public hearing was ADA-compliant and accessible by public transit.

This meeting was conducted in an open house format. The public was invited to provide comments on the Draft EIS either verbally to a court reporter or in writing during the public hearing.

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Red Line Extension

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- Documents Archive
- Preferred Alternative
- Potential Property Displacements

Frequently Asked Questions

- Alternatives
- The Preferred Alignment and Proposed Service
- The NEPA Process
- The Draft EIS: Benefits and Impacts of the RLE Project
- Next Steps

Alternatives

Q: Which alignment option did CTA select?
A: Based on additional project planning and engineering work conducted over the last year, CTA selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options and would run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 108th Place, then would cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. See the project map.

The Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

Q: Is CTA still considering alternatives for rail service along Halsted Avenue or other Bus Rapid Transit improvements?
A: No. These alternatives were considered early in the environmental review process as potential alternatives. These alternatives have been eliminated based on additional technical analysis and public input received. In August 2014, CTA announced that the Union Pacific Railroad (UPRR) Alternative is the NEPA Preferred Alternative. CTA prepared a Draft Environmental Impact Statement (EIS), which analyzed the benefits and impacts of locating the line either to the east or west of the UPRR tracks. Based on public input and further planning and engineering conducted, a UPRR Preferred Alignment has now been selected. The Preferred Alignment is a combination of the previously presented East and West Options. See the project map.

Q: Previously, CTA was considering using the existing Union Pacific Railroad (UPRR) right-of-way to construct RLE. Is that still under

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consideration?
A: No. CTA had previously considered an option that would have used the existing UPRR right-of-way for the elevated CTA track structure. This option was added in 2012 in response to the Chicago Department of Transportation feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible. Estimated travel times and ridership were the same for the Right-of-Way Option as for the East and West Options.

Q: For the Preferred Alignment near the Union Pacific Railroad (UPRR) tracks, has CTA talked with Union Pacific Railroad representatives?
A: CTA has had preliminary conversations with UPRR and will continue to coordinate with the railroad as the project moves forward. UPRR requires that the CTA tracks be located at least 50 feet from the existing freight tracks because of safety considerations.

The Preferred Alignment and Proposed Service

Q: When would the extended Red Line be open for use?
A: Depending on funding availability and federal approvals, the earliest that the Red Line Extension is expected to begin construction would be in 2022 and service is anticipated to start in 2026.

Q: What are the proposed operating hours for the Red Line Extension?
A: The operating hours for the proposed extension are anticipated to be the same as for the current Red Line, which operates 24 hours every day of the year.

Q: What portion of the extension would be elevated?
A: The Red Line Extension would operate on an elevated structure from approximately 95th Street to 118th Street, where it would transition to an at-grade profile and then continue at grade before terminating near 130th Street. The 103rd Street, 111th Street, and Michigan Avenue stations would be elevated, and the 130th Street station would be at-grade.

Q: Will there be places to park near the new stations?
A: Yes, to accommodate passengers arriving at the Red Line Extension by car, park & ride facilities would be constructed near each station. A total of 3,700 parking spaces would be available along the corridor.

Q: Why is so much parking needed near the new stations?
A: CTA estimated parking demand based on travel demand modeling performed in 2009. CTA will conduct additional analysis and review of parking needs near stations and as part of next phases of project development and engineering.

Q: Would this extension connect to existing Metra Electric or South Shore services?
A: There is potential for connection of the proposed Red Line Extension to the Northern Indiana Commuter Transportation District (NICTD) South Shore Commuter Rail Line near 130th Street, where the two lines would be adjacent to each other. Currently, the NICTD South Shore commuter service does not have a 130th Street station and at this time future plans do not include a 130th Street station. This potential connection will be explored in further detail during the engineering phase. A connection between the Red Line Extension and Metra Electric District at Kensington/115th Street station is not possible because the proposed Red Line Extension routing crosses the Metra Electric District Line approximately ½ mile south of the Kensington/115th Street station.

Q: Is CTA coordinating with Metra on the Red Line Extension Project?
A: Yes, CTA is coordinating with Metra on our progress with the Red Line Extension Project. Metra is a participating agency in the environmental review process for the Red Line Extension Project.

The NEPA Process

Q: What is NEPA?
A: The National Environmental Policy Act of 1969 (NEPA) is a federal law that mandates the consideration of environmental impacts that may have significant impacts on the environment before a project is approved to receive federal funding. The NEPA process provides a decision-making framework to

consider the purpose and need for a proposed action, potential design solutions, project costs, and relative benefits of a proposed project.

Q: What is a Draft Environmental Impact Statement, or Draft EIS?
A: A Draft Environmental Impact Statement, or Draft EIS, summarizes potential impacts to the natural environment and community. The Draft EIS describes the potential environmental benefits and impacts of a proposed project, and identifies measures to avoid, minimize, and mitigate adverse impacts. A copy of the Draft EIS is available here.

Typically, environmental reviews for proposed transit projects address the following resource areas:

- Transportation
- Land use and economic development
- Displacement and relocation of existing uses
- Neighborhoods and communities
- Visual and aesthetic
- Noise and vibration
- Safety and security
- Historic and cultural resources
- Hazardous materials
- Air quality
- Wetlands
- Water quality
- Floodplains
- Vegetation and wildlife habitat
- Threatened and endangered species
- Geology and soils
- Energy
- Environmental Justice

The Draft EIS: Benefits and Impacts of the RLE Project

Q: Would CTA need to purchase private property because of the location of the proposed extension?
A: Yes, CTA would need to purchase private property to construct the Red Line Extension. For more information and additional FAQs related to displacements, please see the Potential Displacements page.

Q: How would the proposed extension affect noise and vibration in the community?
A: Section 4.5 of the Draft Environmental Impact Statement (EIS) evaluates the potential for noise impacts to the surrounding community. The analysis shows that all potential severe and moderate noise impacts due to the project would be mitigated by including welded rail, closed deck structures, and noise barriers as part of the final design of the project. Based on the analysis, the project would result in no impacts from vibration. The Preferred Alignment would have similar noise and vibration impacts and mitigations to those for the Union Pacific Railroad (UPRR) East or West Options discussed in the Draft EIS.

Q: What are the potential economic benefits or impacts of the proposed extension?
A: Section 4.1 of the Draft Environmental Impact Statement (EIS) evaluates the economic benefits and potential impacts of the proposed extension. As part of the public review of the Draft EIS, the public had the opportunity to review and comment on the analysis. The proposed project could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations. The Chicago Metropolitan Agency for Planning states that the RLE Project would increase access to jobs; access to jobs within 1 hour of the proposed 111th Street station would increase by 56 percent. Additional jobs would be created with investment in the Red Line Extension Project.

Q: How would the proposed Red Line Extension affect current CTA services, both during construction of the new service and during operation of the new service?
A: Once the proposed extension is complete, existing bus routes may be changed to complement the new high-capacity transit service. Depending on the specific route of the service, the number of routes feeding into the 95th

Street Terminal may be reduced, which would also reduce congestion in and around this facility. More detailed construction schedules will be developed as additional engineering is completed for the project, after the environmental review. CTA's general guidelines minimize the effects of construction on existing transit services; however, bus reroutes are possible.

Q: How does work on the other Red Ahead projects affect progress on the Red Line Extension?
A: The Red Line Extension Project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Ahead Program consists of separate projects with their own separate sources of potential funding and timelines. These projects are mutually beneficial and are combined into the Red Ahead Program such that they are coordinated efficiently.

Q: CTA is renovating the 95th Street Terminal. Would the Red Line Extension be possible after the 95th Street Terminal improvements are complete?
A: Yes, the 95th Street Terminal improvements and the Red Line Extension Project would function together seamlessly to provide improved transit service throughout Chicago's Far South Side. More information about the 95th Street Terminal Improvement Project is available here.

Next Steps

Q: What are the next steps for the project now that the Draft EIS has been published?
A: The next steps are completing additional engineering and analyses required and preparing the Final EIS on the Preferred Alignment. The Final EIS will include and address all comments received during the public review period. The Final EIS will document the results of the Draft EIS process, confirm the Preferred Alignment, and include a list of committed final mitigation measures.

Concurrently with preparation of the Final EIS, CTA will also request entry into the FTA New Starts Project Development phase, which is the proposed federal funding source for this project. The FTA New Starts Program is highly competitive federal funding program, and the RLE Project will be evaluated by the federal government for potential selection into the program.

After completion of the Final EIS and FTA New Starts Project Development phase, CTA intends to apply to the Project Engineering phase, which will include design and engineering. Upon receiving a full funding grant agreement from FTA, the project will move into construction, which is expected to last about 5 years.

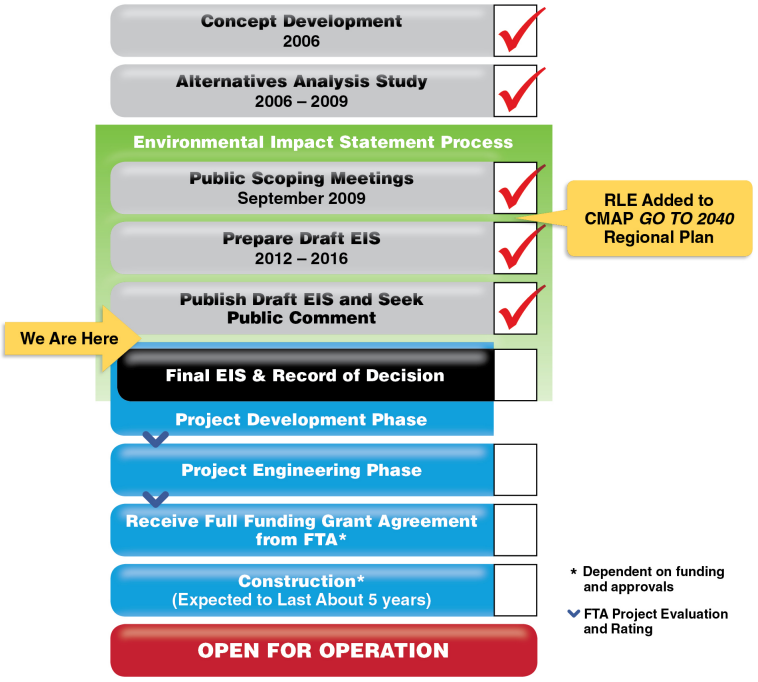

Q: How would CTA fund the Red Line Extension Project?
A: The Red Line Extension Project would require an estimated $2.3 billion in capital costs. CTA is pursuing a wide range of federal, state, and local funding

sources with the help and support of the community. CTA intends to pursue federal New Starts funds for the RLE Project. Local matching funds would be required to secure federal funding. CTA is considering a number of options at this time. Options include the recent creation of a special transit-only tax-increment financing district, authorized by the General Assembly in June 2016, which could provide a portion of the local funding for the Red Line Extension Project.

Q: What is the federal New Starts program and why does CTA have to go through such a lengthy process?
A: FTA's New Starts Program is a discretionary funding source that helps fund major transit capital investment projects. New Starts funds are available for projects that expand rail service into an area that is not within the current transit footprint, and therefore entail a relatively longer environmental and planning process. CTA must compete with other New Starts projects from across the country that are already in line for funding.

Q: How can I receive updates and stay involved throughout the entire process?
A: Anyone can request to be added to the RLE contact list by sending an email to RedExtension@transitchicago.com. Members of the contact list will receive upcoming meeting notices, as well as future updates about the RLE Project. Updated information about the RLE Project will continue to be available on this project website.

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Red Line Extension

RED AHEAD

Red Line Extension

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- Home
- What s New
- Draft EIS
- Frequently Asked Questions
- Documents Archive
- Preferred Alternative
- Potential Property Displacements

Project Documents Archive

Environmental analysis (2009–2014)

Public outreach has continued to be an integral part of the planning for this project during the environmental review planning phase for this project. As part of the Draft Environmental Impact Statement (EIS), a number of open houses, community newsletters, and a formal scoping process were conducted with the public, stakeholders, and other governmental agencies. Documents related to these activities are provided below. CTA will continue to involve and consult with the community as the project proceeds.

Open House - 2014

CTA conducted outreach in April and May of 2014 to update the public on the status of the project; inform them of proposed alternatives, anticipated project benefits, and impacts; and gather feedback. Outreach included meetings with elected officials, interested community groups, and a public open house. The open house was held May 13, 2014 at the Palmer Park Gymnasium, 201 E. 111th Street in Chicago from 5:30 PM to 7:30 PM.

May 2014 Open House Exhibit Boards
May 2014 Project Summary

Newsletter - 2013

CTA sent a newsletter with a general project update to the approximately 3,200 addresses on the stakeholder database on August 27, 2013.

August 2013 Newsletter

Open House - 2011

CTA held an open house meeting on August 2, 2011 to update the community regarding the RLE Project. The meeting was held at St. John Missionary Baptist Church, 211 E. 115th Street in Chicago from 6:00 PM to 8:30 PM.

August 2011 Open House Exhibit Boards

Scoping and Scoping Meetings - 2009

The process of determining the scope, focus, and content of an EIS is known as “scoping.” Scoping meetings are an opportunity to obtain information from the public and governmental agencies. The scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential effects and mitigation measures to be considered.

The official public comment period for scoping concluded on October 27, 2009. The comments received are summarized in the Scoping Report. Input received during scoping is used to refine the project purpose and need and alternatives, and to direct the analysis of environmental impacts. Public input is also used to help planners avoid potential impacts, and to identify potential mitigation measures.

Red Line Extension Scoping Report (.pdf)
Scoping report - revised June, 2010. Appendices are available as separate files.

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71 76 79 103 126 157

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Red Line Extension Scoping Report Appendices A-G (.pdf)
Public Participation Plan, Notice of Intent, Participating Agencies, Participating Agency Invitation Letters, Agency Scoping Meeting, Agencies and Organizations Notified of Scoping, Notification Materials

Red Line Extension Scoping Report Appendices H-K (.pdf)
Scoping Meeting Materials, Meeting Presentation, Meeting Exhibit Boards, Public Scoping Meeting Transcripts

Red Line Extension Scoping Report Plain Text Supplement for Appendices H-J (.txt)
This text-only supplement describes Scoping Meeting Materials, Meeting Presentation, Meeting Exhibit Boards

Red Line Extension Scoping Report Appendix L Public Comments 1-95 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 96-171 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 172-259 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 260-344 (.pdf)

Red Line Extension Scoping Report Appendix M (.pdf)
Agency Comments - revised June, 2010

Alternatives Analysis (2006–2009)

The purpose of the Alternatives Analysis (AA) Study, which ended in August 2009, was to examine a wide range of potential transportation options. In the AA process, the project's purpose and need were identified, alternatives that meet the purpose and need were developed and evaluated, and comprehensive and ongoing public involvement was initiated. Many different transportation alternatives were identified in the AA process. Based on public comment and an evaluation of those options against criteria that included cost, environmental factors, and feasibility considerations, the number of options was narrowed. There were three screening stages and the results of each screening stage were presented at public meetings. At each stage, there was an opportunity for the public to review and comment on the results. The end result of the AA process was the selection of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009.

Screen 1 Analysis

The CTA held public open houses to receive input on preliminary findings from Screen 1 of the Alternatives Analysis Study for the proposed Red Line Extension.

Tuesday, April 10, 2007, 6-8 p.m.
Chicago State University, New Academic Library, 4th Floor Auditorium
9501 S. King Drive, Chicago, IL 60628

Wednesday, April 11, 2007, 6-8 p.m.
West Pullman Branch, Chicago Public Library
830 W. 119th St., Chicago, IL 60628

Presentations delivered at the Screen 1 meetings are available at the links below:

Public Meeting Presentation Part 1 - April 2007 (3 MB PDF)
Public Meeting Presentation Part 2 - April 2007 (2 MB PDF)
Public Meeting Presentation - April 2007 (Text version)

Public Meeting Display Boards - April 2007 (3 MB PDF)
Public Meeting Display Boards - April 2007 (Text version)

Public Meeting Comment Card - April 2007 (0.4 MB PDF)

The official public comment period for the study's Screen 1 preliminary findings meeting concluded on May 11, 2007. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 1 Public Comment Database (0.1 MB PDF)
Screen 1 Responses to Public Comments (0.1 MB PDF)

Screen 2 Analysis

The CTA held public open houses to present possible transit technologies and alignments in a study area bordered by 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Cal-Sag Channel/Little Calumet River and 134th Street on the south.

Wednesday, December 3, 2008, 6-8 p.m.
Historic Pullman Visitor Center
11141 South Cottage Grove, Chicago, IL 60628

Thursday, December 4, 2008, 6-8 p.m.
Woodson Regional Chicago Public Library
9525 South Halsted Street, Chicago, IL 60628

Presentations delivered at the Screen 2 meetings are available at the links below:

Public Meeting Presentation Part 1 – December 2008 (2.8 MB PDF)
Public Meeting Presentation Part 2 - December 2008 (3.8 MB PDF)
Public Meeting Presentation - December 2008 (Text version)

Public Meeting Display Boards Part 1 - December 2008 (2 MB PDF)
Public Meeting Display Boards Part 2 - December 2008 (2.4 MB PDF)
Public Meeting Display Boards - December 2008 (Text version)

Public Meeting Comment Card - December 2008 (0.4 MB PDF)

The official public comment period for the study's Screen 2 preliminary findings meeting concluded on December 18, 2008. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 2 Public Comment Database (0.1 MB PDF)
Screen 2 Responses to Public Comments (0.1 MB PDF)

Screen 3 Analysis

The CTA invited the public to open houses to present preliminary Screen 3 findings and a recommendation of a locally preferred alternative, which concluded the Alternatives Analysis study for the Red Line Extension.

Wednesday, June 3, 2009, 6-8 p.m.
Olive-Harvey College, Cafeteria
10001 South Woodlawn Avenue, Chicago, IL 60628

Thursday, June 4, 2009, 6-8 p.m.
Woodson Regional Chicago Public Library
9525 South Halsted Street, Chicago, IL 60628

Presentations delivered at the Screen 3 meetings are available at the following links:

Public Meeting Presentation Part 1 – June 2009 (1.4 MB PDF)
Public Meeting Presentation Part 2 – June 2009 (2.9 MB PDF)
Public Meeting Presentation - June 2009 (Text version)

Display Boards Part 1 - June 2009 (2.4 MB PDF)
Display Boards Part 2 - June 2009 (3.4 MB PDF)
Display Boards - June 2009 (Text version)

Display Maps – HRT UPRR Alternative (1.2 MB PDF)
Display Maps – HRT Halsted Alternative (0.9 MB PDF)
Public Meeting Comment Card (0.4 MB PDF)

The official public comment period for the study's Screen 3 findings and preliminary recommendation for a locally preferred alternative concluded on June 25, 2009. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 3 Public Comment Database (0.1 MB PDF)
Screen 3 Responses to Public Comments (0.1 MB PDF)

Locally Preferred Alternative Report

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Red Line Extension

RED AHEAD

Red Line Extension

Preferred Alignment

The RLE Project would extend the heavy rail Red Line from the existing 95th Street Terminal to 130th Street. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place, the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street.

The RLE Project would include the following features:

- 5.3-mile heavy rail transit line extension from 95th Street Terminal to 130th Street
- Four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street
- New park & ride and bus facilities at each station with a total of 3,700 parking spaces along the corridor
- New yard and shop at 120th Street

The following figures are photo simulations of the proposed project:

	East Option *103rd Street Station (facing northeast)*
103rd Street Station (facing south)	
	111th Street Station (facing west)

CTA Red Line Extension Project Preferred Alignment

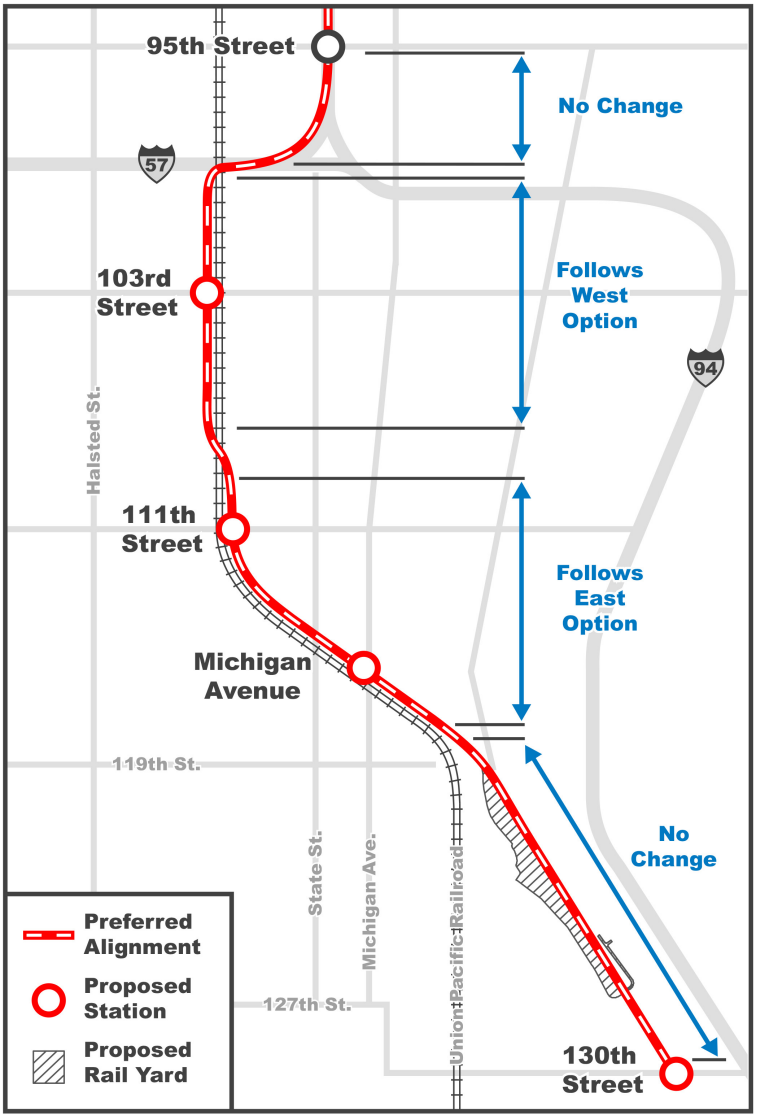

Alternatives development history

CTA undertook an extensive Alternatives Analysis process from 2006–2009 that considered multiple modes and corridor options for the RLE Project.

Starting with multiple modes and corridor options, CTA developed and screened alternatives through a combination of conceptual engineering, public input (open houses and stakeholder meetings), and preliminary analysis of potential impacts and costs.

The Chicago Transit Board designated the UPRR Alternative as the Locally Preferred Alternative on August 12, 2009.
In preparation for the Draft EIS and based on the outcomes of the Alternatives Analysis, CTA evaluated the following alternatives and options from 2012–2014:

- No Build Alternative
- Bus Rapid Transit Alternative
- Union Pacific Railroad Rail (UPRR) Rail Alternative
  - Right-of-Way Option
  - East Option
  - West Option
- Halsted Rail Alternative

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. Because the Right-of-Way Option is not feasible, the Draft EIS evaluated only the East and West Options for the UPRR Alternative. The Draft EIS summarizes the environmental benefits and impacts of the No Build Alternative and the two UPRR Alternative options.

Based on public feedback, technical analysis, and agency coordination, CTA selected a Preferred Alignment in January 2018. The Preferred Alignment is a combination of the previously presented East and West Options, which would capture the benefits and minimizes the impacts of either option and incorporates the feedback received on the Draft EIS.

2006-2009

ALTERNATIVES ANALYSIS

- *Evaluated Universe of Alternatives, including 11 modes of transportation (including Bus Rapid Transit), 9 corridors (including Halsted Street), and 4 profiles (elevated, at-grade, trench, and underground)*

2009

SCOPING

- *UPRR Rail Alternative*
- *Halsted Rail Alternative*
- *Bus Rapid Transit Alternative*
- *No Build Alternative*

2012-2014

ENVIRONMENTAL ANALYSIS

- *UPRR Rail Alternative (Right-of-Way, East, & West Options)*
- *Halsted Rail Alternative*
- *Bus Rapid Transit Alternative*
- *No Build Alternative*

2014-2016

DRAFT EIS

- *UPRR Rail Alternative (East & West Options)*
- *No Build Alternative*

2016-2017

SELECTION OF PREFERRED ALIGNMENT

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Languages [En] [Pl] [Zh] [Es]

Phone:
1-888-YOUR-CTA

Deaf/hard-of-hearing:
1-888-CTA-TTY1 or 711 (relay)

E-mail:
feedback@transitchicago.com

Red Line Extension

RED AHEAD

Red Line Extension

Potential Property Displacements

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. Based on additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment and conducted outreach to property owners that would be displaced because of the project.

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured. This is expected to be a multiyear process, and it may also be possible to further minimize property impacts with additional future engineering. Property owners and tenants who would be affected by acquisition and relocation will be protected under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (known simply as the "Uniform Act"), along with state regulations. CTA will treat property owners and tenants fairly and will seek cooperative settlements of property acquisitions. In addition, CTA will provide financial assistance and relocation services for property owners as well as commercial and residential occupants who must move because of the RLE Project.

You can read more about your rights as a property owner under applicable federal laws here:

- http://www.fhwa.dot.gov/real_estate/uniform_act/acquisition/real_property.cfm
- http://www.fhwa.dot.gov/real_estate/publications/your_rights/rights2014.pdf

Additional information about potentially displaced properties is available here.

FTA's brochure on property acquisition and relocation assistance is available here.

Contact CTA's customer service department by telephone at 1-888-YOUR-CTA (1-888-968-7282), or by e-mail at RedExtension@transitchicago.com if you have questions about potential displacement of your property.

Frequently asked questions about property displacements

Which alignment option did CTA select?

Based on additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. This Preferred Alignment would capture the benefits and minimize the impacts of either Option and incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

How would I know if my property is affected?

The owners and tenants whose property would be affected by the Preferred Alignment were notified during the CTA door-to-door outreach, which started January 26, 2018. Letters informing owners and tenants of the selected alignment were also mailed out to all properties that were contacted in 2016—both those whose property would be affected by the Preferred Alignment, and those whose property would not be affected. CTA encourages community participation and property owner involvement. CTA will be conducting community meetings with property owners and tenants affected by the Preferred Alignment on Tuesday, February 6 from 5:30-7:30 at Fenger Academy High School (11220 S. Wallace Avenue, Chicago), and on Thursday, February 8 from 5:30-7:30 at Palmer Park (201 E. 111th Street, Chicago). Additionally, a public open house is scheduled for Tuesday, February 13, 2018 from 6-8pm at Gwendolyn Brooks College Preparatory Academy in the Main Gym (250 W. 111th Street, Chicago).

What are my rights as a property owner?

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. CTA will treat property owners fairly and will seek cooperative settlements of property acquisitions.

You can read more about your rights under applicable federal laws here:

http://www.fhwa.dot.gov/real_estate/uniform_act/acquisition/real_property.cfm
http://www.fhwa.dot.gov/real_estate/publications/your_rights/rights2014.pdf

What type of compensation will I receive?

CTA is required by federal law to offer to purchase each property for an amount that is no less than fair market value as determined by an independent appraisal. In some circumstances, if current appraisals are less than the original property purchase price, an owner may be eligible for compensation equal to the original purchase price.
In addition, CTA must provide financial assistance and relocation services, as required by federal regulations for property owners as well as commercial and residential occupants who must move because of the RLE Project.

How will CTA determine the purchase price for my property?

If CTA determines it is necessary to purchase your property for the RLE Project, it is required to hire an independent appraiser to inspect the property to determine fair market value. In that case, you, or a representative that you designate, will be invited to accompany the appraiser when the appraiser inspects your property. You or your representative may provide information about improvements to the property and any special features that may affect the value of the property such that these facts are considered in the appraisal.

What if I don't own this property but rent an apartment, or lease space for my business?

Non-owners who are leasing housing or commercial property that must be relocated because of the RLE Project are also protected by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. If needed, CTA will provide financial assistance and relocation services to assist these residents and business owners in finding a new housing or business location.

If CTA acquires my property, will you provide me help in relocating?

If you are required to move, a relocation agent will contact you, answer your questions, and provide additional information about relocation assistance advisory services and relocation payments eligibility. The goal of the relocation agent is to facilitate a smooth transition to the replacement housing or business location.

What will happen next with the RLE Project?

On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next five years for the RLE Project. This investment will allow CTA to complete the Final EIS and preliminary engineering over the next few years. CTA plans to apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase to pursue federal funding for construction of this project under the competitive federal "New Starts" program. Project development and securing full funding for the RLE Project

under this program is a multiyear, multistep process. Depending on funding availability and federal approvals, the earliest that the RLE Project is expected to begin construction would be in 2022, with service anticipated to start in 2026. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

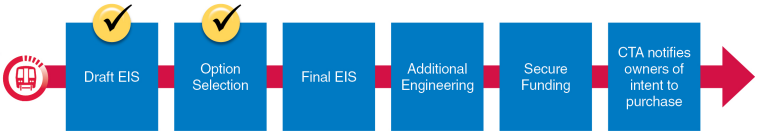

If I have additional questions about potential property acquisitions, who should I call?

Contact CTA's customer service department by telephone at 1-888-YOUR-CTA (1-888-968-7282), or by e-mail at RedExtension@transitchicago.com.

How can I learn more about the RLE Project?

You can learn more about the RLE Project and find updates on the status of the process on our webpage: www.transitchicago.com/RedEIS. To join the project contact list and get updates about the RLE Project, public meetings, and the status of environmental reviews, email RedExtension@transitchicago.com.

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Languages [En] [Pl] [Zh] [Es]

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E-mail: feedback@transitchicago.com

Red Line Extension

Chicago Transit Authority
Strategic Planning, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661

Do you require assistance?
If you require an interpreter, including sign language services, or other accommodations at this open house, contact **Gerald Nichols, CTA Vice President, Community Relations,** at least 5 days before the open house at **(312) 681-3700** or GNichols@transitchicago.com.

Postcard

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Red Line Extension

You are invited to an Open House on the

Red Line Extension Project

CTA is proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment, which would run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 108th Place, then would cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options. It would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement.

RedExtension@transitchicago.com transitchicago.com/RedEIS facebook/thecta @cta

When and Where?

Tuesday, February 13, 2018 – 6:00 - 8:00 p.m.

Gwendolyn Brooks College Preparatory Academy
Main Gym (West Side of Building)
250 E. 111th Street, Chicago, IL 60628

**Please enter through Door 8. Parking available in rear of the building. Parking lot entrance via King Drive.*

This location served by CTA Bus #111, 4, 34, 111A, 115, and 119; and Metra Electric 111th Street (Pullman) Station.

Facility accessible to people with disabilities.

This meeting will be conducted in an open house format.

(888) YOUR-CTA (888-968-7282).

Para más información en Español, llame al **(312) 681-2828**.

CTA has selected a Preferred Alignment for the

Red Line Extension Project

You are invited to a Public Open House to learn more

CTA is proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street.
Click here to learn more about the project.

When and Where?

Tuesday, February 13, 2018
6:00 - 8:00 p.m.
Gwendolyn Brooks College Preparatory Academy
Main Gym (West Side of Building)
250 E. 111th Street, Chicago, IL 60628

**Please enter through Door 8. Parking available in rear of the building. Parking lot entrance via King Drive.*

This location served by CTA Bus #111, 4, 34, 111A, 115, and 119; and Metra Electric 111th Street (Pullman) Station.

The facility is accessible to people with disabilities.

In November 2016, CTA held a public hearing to obtain comments on the Red Line Extension (RLE) Draft Environmental Impact Statement (EIS), which documents the benefits and impacts of the two options of the project alignment under consideration.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment would run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 108th Place, then would cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th

Street and continuing south to 130th Street. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. It would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement.

Click here to learn more about the Preferred Alignment and see a map.

CTA is hosting a public open house to provide information on the Preferred Alignment for the RLE Project. At the open house, you will learn more about the Preferred Alignment and anticipated project benefits and impacts. You will also have the opportunity to provide feedback. CTA welcomes your comments and feedback about the Preferred Alignment and potential impacts.

Do you require assistance?
If you require an interpreter, including sign language services, or other accommodations at this public hearing, contact Gerald Nichols, CTA Vice President, Community Relations, at least 5 days before the public hearing at (312) 681-3700 or GNichols@transitchicago.com.

Para más informacion en Español, llame al (312) 681-2828
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Thank you for your continued interest.

RLE Project Team
Chicago Transit Authority

e-blast #2: February 7, 2018

CTA has selected a Preferred Alignment for the

Red Line Extension Project

You are invited to a Public Open House to learn more

CTA is proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street.
Click here to learn more about the project.

When and Where?

Tuesday, February 13, 2018
6:00 - 8:00 p.m.
Gwendolyn Brooks College Preparatory Academy
Main Gym (West Side of Building)
250 E. 111th Street, Chicago, IL 60628

**Please enter through Door 8. Parking available in rear of the building. Parking lot entrance via King Drive.*

This location served by CTA Bus #111, 4, 34, 111A, 115, and 119; and Metra Electric 111th Street (Pullman) Station.

The facility is accessible to people with disabilities.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment would run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 108th Place, then would cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. It would capture the benefits and minimize the impacts of either option and it also incorporates the feedback

received on the Draft Environmental Impact Statement.

Click here to learn more about the Preferred Alignment and see a map.

CTA is hosting a public open house to provide information on the Preferred Alignment for the RLE Project. At the open house, you will learn more about the Preferred Alignment and anticipated project benefits and impacts. You will also have the opportunity to provide feedback. CTA welcomes your comments and feedback about the Preferred Alignment and potential impacts.

Do you require assistance?
If you require an interpreter, including sign language services, or other accommodations at this public hearing, contact Gerald Nichols, CTA Vice President, Community Relations, at least 5 days before the public hearing at (312) 681-3700 or GNichols@transitchicago.com.

Para más informacion en Español, llame al (312) 681-2828
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Thank you for your continued interest.

RLE Project Team
Chicago Transit Authority

CTA Open House

Red Line Extension Project – Preferred Alignment

At the Red Line Extension (RLE) Project open house, you will learn more about the Preferred Alignment for extending the Red Line 5.3 miles from 95th Street to 130th Street and anticipated project benefits and impacts. You will also have the opportunity to provide feedback.

What's the Preferred Alignment?
Based on public feedback, technical analysis, and agency coordination, CTA has selected a Preferred Alignment that would run along the west side of the Union Pacific Railroad (UPRR) tracks from I-57 south to approximately 108th Place, then would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. It would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement.

CTA welcomes your comments and feedback about the Preferred Alignment and potential impacts.

Tuesday, February 13, 2018
6pm to 8pm
Gwendolyn Brooks College Preparatory Academy*
Main Gym (West Side of Building – Please enter through Door 8)
250 E 111th St, Chicago, IL 60628

Note: This location is served by #4 Cottage Grove, #34 South Michigan, #111A Pullman Shuttle, #115 Pullman/115th, and #119 Michigan/119th buses and by the Metra Electric 111th St. (Pullman) station. Parking is available at the rear of the building, enter the lot via King Drive.

Learn more about the project at transitchicago.com/redeis.

*Facility accessible to people with disabilities

transitchicago.com
Customer Information: 1-888-YOUR-CTA (1-888-968-7282); CTA TTY: 1-888-CTA-TTY1 (1-888-282-8891)
Transit Information: 312-836-7000

Attachment 2
Media Articles

Date	Media Outlet	Article Title
January 26, 2018	Chicago Tribune	CTA determines path for proposed Red Line south extension to 130th Street
January 26, 2018	ABC7 Eyewitness News	CTA announces proposed path for Red Line extension to 130th Street, adding 4 new stations
January 26, 2018	Curbed Chicago	CTA reveals route, four new stations for Far South Side Red Line extension
January 26, 2018	Chicago Tribune	Five takeaways after CTA announces route for Red Line 'L' extension
January 26, 2018	Chicago Sun-Times	Route defined, where will city find $2.3B to fund CTA Red Line extension?
January 26, 2018	Chicago Tribune	As officials plan Red Line extension, there's still no green to fund it
January 26, 2018	WGN-TV	CTA unveils proposed Red Line extension to 130th Street
January 26, 2018	CBS Chicago	CTA Announces Path For Red Line Extension
January 26, 2018	Mild Sauce News (blog)	News Catch Up • Steve Bannon to Speak at U Chicago, Red Line Extension & More
January 29, 2018	Chicago Magazine	Chicago Plans a Red Line Extension–But Could It Be Done Faster and Cheaper?
January 29, 2018	Patch Chicago	Mayor, CTA Announce 'Preferred Alignment' For Red Line Extension
January 29, 2018	Progressive Railroading	CTA unveils Preferred Alignment for Red Line extension
January 30, 2018	Railway Track & Structures	Preferred Alignment for CTA Red Line extension selected
January 30, 2018	Construction Dive	Chicago Transit Authority unveils details for $2.3B rail extension
January 31, 2018	The Chicago Reporter	New Red Line extension plan would uproot fewer Far South Side homes
February 2, 2018	WLS AM	Community Spotlight Segment
February 5, 2018	The Columbia Chronicle	CTA proposes route for transportation desert
February 5, 2018	The Architect's Newspaper	CTA announces route of proposed Red Line expansion
February 7, 2018	Chicago Reader	Can the CTA and Metra play nice?
February 12, 2018	Chicago Tribune	Public invited to weigh in on CTA's planned Red Line extension on South Side
February 14, 2018	Streetsblog Chicago (blog)	South Siders Share Their Thoughts on the Red Line Extension Project
February 21, 2018	The Chicago Citizen	Minority Contractor will Contribute to Red Line Extension
February 26, 2018	In These Times	Chicago's Far South Side Is Finally Getting a Train–And It's Thanks to Decades of Organizing
February 28, 2018	Chicago Reader	Would far-south-siders be willing to swap the long-awaited Red Line extension for a cheaper, quicker solution?

Chicago Tribune
http://www.chicagotribune.com/news/local/breaking/ct-met-cta-extension-20180125-story.html

CTA determines path for proposed Red Line south extension to 130th Street

An artists' rendering of the proposed 103rd Street Station of the CTA Red Line. (Chicago Transit Authority)

Mary Wisniewski Contact Reporter Chicago Tribune

The CTA has decided on a path for its proposed extension of the Red Line's south branch, bringing the long-discussed project one step closer to getting done.

The proposed route, which will be announced Friday, starts at 95th Street and would run along the west side of the Union Pacific Railroad tracks from I-57 south to about 109th Street. There it would cross the UP tracks and continue along the east side of the tracks until crossing Metra Electric tracks near 119th Street, and then continue south to 130th Street, the CTA said.

ADVERTISING

The 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue near 115th Street, and 130th Street with parking and bus connections.

The $2.3 billion project, if it gets funding, would fill in what activists have called a "transit desert" on the city's Far South Side as well as south suburban Riverdale. The city has not created an extension of an "L" line since the Orange Line opened in 1993.

The alignment was based on community feedback on both options the agency received in late 2016, CTA officials said. The chosen path limits the number of properties the agency may need to acquire to up to 154 privately owned parcels, with 79 buildings and the rest vacant lots, CTA officials said.

The CTA will hold an open house on Feb. 13 from 6 to 8 p.m. at the Gwendolyn Brooks College Preparatory Academy gymnasium to present the alignment to residents. The agency then must publish a final environmental impact study to include further analysis of the path and some preliminary engineering work.

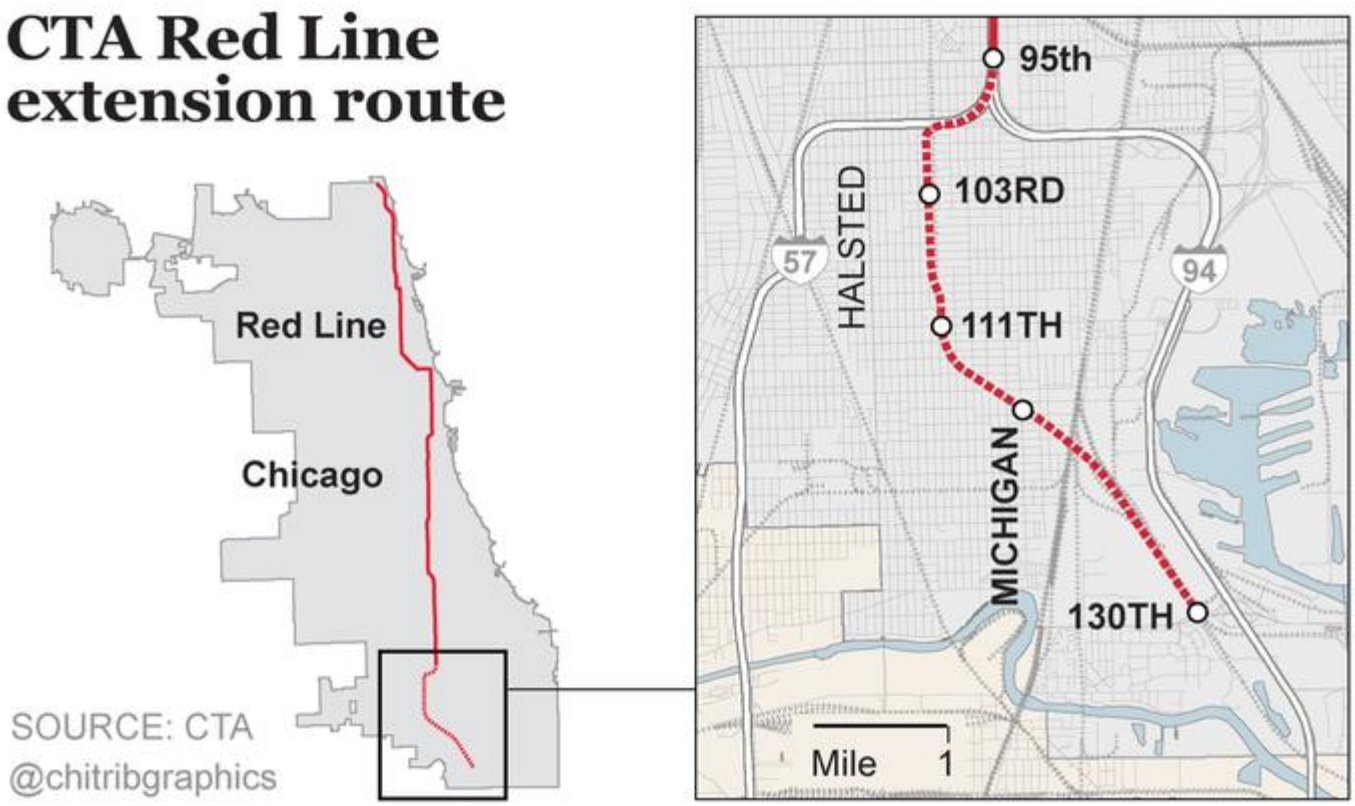

CTA officials noted that the timing of the project is dependent on funding — the earliest construction would begin is 2022, and the project would take about four years.

The CTA would have to pursue federal and local funds for the project, which are tight, particularly since the Trump administration's stated budget priorities do not favor transit. A state law gave the city the authority to establish tax increment financing districts to fund four transit projects, including the Red Line extension, but no decision has been made to pursue TIF for the project, CTA officials said.

Tribune interviews with residents and business owners around the Union Pacific tracks south of 95th Street found wide support for the project, even if it results in displacement and noisy construction, because the communities need transit. The CTA said the line would save 20 minutes on a trip from 130th Street to the Loop.

mwisniewski@chicagotribune.com

Twitter @marywizchicago

http://abc7chicago.com/traffic/cta-announces-proposal-extending-red-line-to-130th-street/2991561/

TRAFFIC

CTA announces proposed path for Red Line extension to 130th Street, adding 4 new stations

Major changes planned for the CTA Red Line would make it a lot easier for thousands of people to get to work.

By Diane Pathieu and Evelyn Holmes

Friday, January 26, 2018

CHICAGO (WLS) --

Major changes planned for the CTA Red Line would make it a lot easier for thousands of people to get to work.

The Red Line is one of the busiest CTA lines, carrying 30 percent of all riders, and now it's expanding.

In a new proposal, the Red Line extension project would extend the Red Line, creating four new stations to the south near 103rd Street, 111th Street, Michigan Avenue, and 130th Street.

The extension's proposed route would start at 95th Street and would run along the west side of the Union Pacific Railroad tracks from I-57 south to about 109th Street. It would then cross up the UP tracks and continue along the east side of the tracks until crossing Metra Electric tracks near 119th Street before continuing south to 130th Street.

This new proposal, called "the preferred alignment" will limit the number of properties the CTA must purchase to build the rail extension.

The extension project will reduce commute times and provide easier access to the Red Line for Far South Side residents.

"I really appreciate the fact that they're extending it because for a lot of South Side people, it's a pain in the butt to get anywhere north using the Red Line," said CTA rider Kevin Hanna.

"I think it's going to be a great thing for Chicago. I am hoping that it would be better because I'm on the CTA every day, the CTA and Pace," said Red Line rider Christine Simmons.

City transit officials add that the project that could end up costing more than $2 billion. It would take about four years to complete.

The city hasn't extended an "L" line since the Orange Line opened in 1993.

For more information, visit www.transitchicago.com/redeis/.

https://chicago.curbed.com/2018/1/26/16935930/cta-red-line-extension-130th-street

SOUTH SIDE

CHICAGO TRANSPORTATION

CTA reveals route, four new stations for Far South Side Red Line extension

The news brings the long-discussed project one step closer to reality

By Jay Koziarz Jan 26, 2018, 1:13pm CST

A rendering of new station at 103rd Street. *City of Chicago*

The planned extension of the Chicago Transit Authority's Red Line from 95th Street south to 130th Street took a big step forward Friday as officials announced the proposed path for the long-overdue transit improvement project.

Departing from the soon-to-be-revamped 95th Street terminal, the "preferred alignment"—or route—would run along the west side of the Union Pacific Railroad line to about 109th Street. From there, it would move to the east side of the U.P. tracks and continue south, cross the Metra Electric tracks near 119th street, and finally terminate at 130th Street.

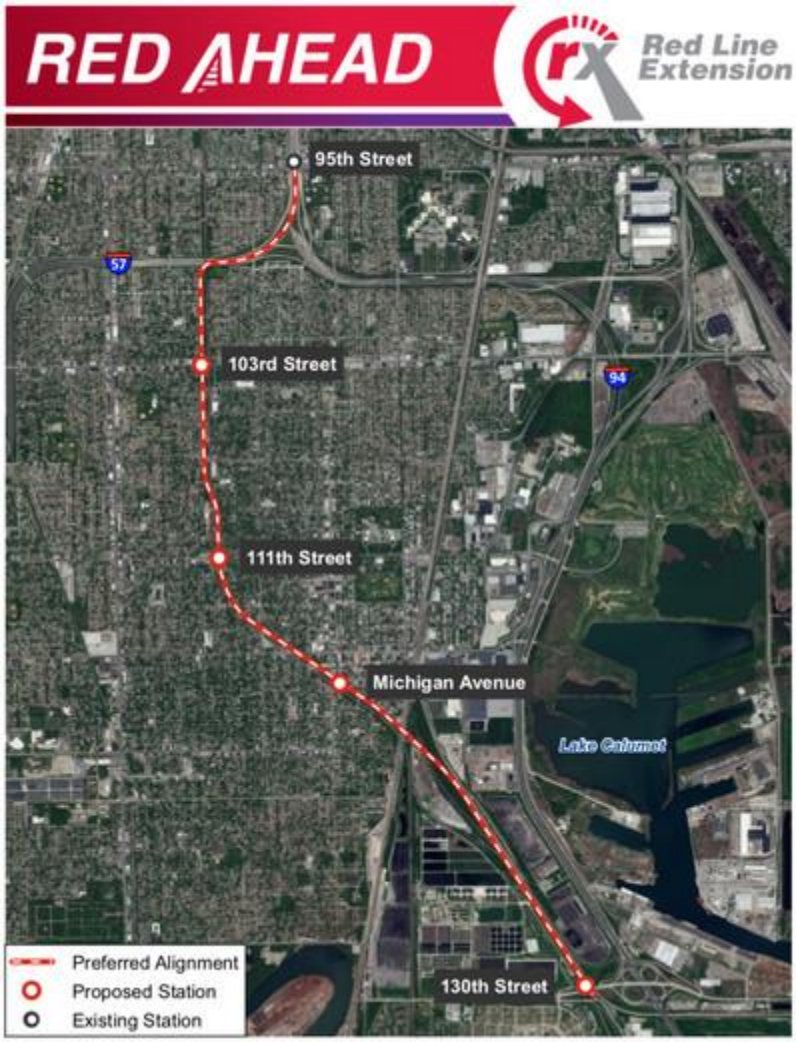

A map showing newly announced track alignment for Chicago's southern Red Line extension. *City of Chicago*

According to the CTA, the final alignment was reached based on feedback from the community and a desire to acquire as few private properties as possible. While earlier iterations of the extension could have consumed as many as 259 parcels, the current plan limits acquisitions to 154 privately owned lots, reports the *Chicago Tribune*.

In addition to 5.3 miles of new track, the extension calls for the creation of four new stations at 103rd Street, 111th Street, Michigan Avenue near 115th Street, and—of course—a 130th Street terminal in the Far South Side community of Riverdale.

The news is a key milestone for an infrastructure project that will bring vital rail service to residents of Chicago's Far South Side as well as "the jobs and economic opportunities that go with it," said Mayor Emanuel in a statement.

Construction on the $2.3 billion undertaking is dependent on funding and will require the CTA to seek financing from both local and federal governmental sources. The creation of a transit-specific Tax Increment Financing district for the project is a possibly, but so far no decision regarding TIF has been made.

If the city can secure funding, construction could begin in 2022. Once underway, the project will take an estimated four years to complete. In the meantime, the CTA will complete an environmental impact study required to apply for more than $1 billion in federal money.

An open house to present details of the alignment plan to local residents has been set for Feb. 13 at 6 p.m. at the Gwendolyn Brooks College Preparatory Academy gymnasium at 250 E. 111th Street.

View image on Twitter

Mayor Rahm Emanuel

Today we are taking a major step towards extending the @cta Red Line from 95th Street to 130th Street to improve access to jobs and promote economic development.

11:12 AM - Jan 26, 2018

Chicago Tribune

Five takeaways after CTA announces route for Red Line 'L' extension

CTA Red Line trains at the 95th Street CTA station in Chicago on Jan. 26, 2018. (Antonio Perez / Chicago Tribune)

Mary Wisniewski and Lisa Donovan Contact Reporter Chicago Tribune

The Chicago Transit Authority announced Friday where exactly they'll carve a path to extend the Red Line from 95th Street to 130th Street in Chicago.

That doesn't mean they're ready to break ground on the project, which city officials have talked about for more than 40 years. There's the issue of money

(the city hasn't secured any) and bureaucracy (there's plenty) when any major public project is launched. Extending the Red Line south of the current 95th Street terminus — in the middle of the Dan Ryan Expressway — will likely be no different. Some takeaways:

ADVERTISING

1. It's a $2.3-billion project and city officials haven't secured the bulk of that. It's doubtful that President Donald Trump's infrastructure plan, expected to be rolled out in coming days, will offer much relief. His spending priorities suggest he's not high on public transportation. State and city coffers aren't exactly flush. And while there's much talk of involving the private sector, investors would be unlikely to see the CTA as something that offers a big return.
2. It doesn't hurt Mayor Emanuel, who was at a Friday news conference announcing the route, to make a big splash even as planning inches along. It's re-election time and he's trying to court the African-American vote.
3. If the CTA secured the money tomorrow, groundbreaking wouldn't begin until 2022 at the earliest because the city will need to do an environmental analysis and engineering work. The agency also must buy, and in some cases demolish, residential and retail buildings to make way for the 5.3 mile-elevated train extension.
4. Speaking of real estate, there's the looming question of whether neighborhoods along the route will draw speculators and drive up real estate prices. Will this mirror what's happening along The 606? Only time will tell.
5. With four new train stops along the extended route, planners expect 42,000 new passengers a day. Trains may be even more crowded than they are now, but the CTA says that commuters traveling from 130th Street to downtown will save about 20 minutes. Now, it takes about 58 minutes to ride the bus to the 95th Street stop and take the train downtown.

The story has been corrected to reflect the planned Red Line extension would run from 95th Street to 130th Street.

https://chicago.suntimes.com/chicago-politics/analysis-route-defined-where-will-city-find-2-3b-to-fund-red-line-extension/

CHICAGO SUN-TIMES

Route defined, where will city find $2.3B to fund CTA Red Line extension?

CHICAGO 01/26/2018, 04:47pm

Mayor Rahm Emanuel looks on as CTA President Dorval Carter discusses a plan to extend the Red Line''s south branch from 95th Street to 130th Street during a press conference near 103rd and Harvard, Friday, Jan. 26, 2018. The 5.3-mile extension would add four new stations near 103rd Street, 111th Street, Michigan Avenue near 115th Street and 130th Street, and is estimated to cost $2.3 billion. | Ashlee Rezin/Sun-Times

Fran Spielman
@fspielman | email

Mayor Rahm Emanuel says the idea of extending the CTA's Red Line from its south terminus at 95th Street all the way to 130th has been "talked about ad nauseam" and it's time to stop talking and start delivering.

But what the mayor delivered Friday was more talk.

Sure, he's further along than any of his predecessors, having chosen a specific route for the 5.3-mile extension and secured $85 million for engineering and environmental studies.

The route would run along the west side of the Union Pacific Railroad tracks from I-57 south to about 109th Street, then cross over to the east side of the UP tracks until it crosses the Metra Electric tracks near 119th Street before continuing south to 130th Street.

ANALYSIS

Four new stations would be built – near 103rd Street, 111th Street, Michigan Avenue near 115th Street and 130th Street. Displacement would be limited to 154 privately owned parcels that include 79 buildings.

But what good is a route if you don't have the $2.3 billion needed to build a project that would open in 2026 at the earliest?

"We're gonna talk about making sure that the federal and state partners are a part of this. We're looking at… multiple different ways of funding it. I'm not gonna tell you yet because this is the first step," Emanuel said Friday.

Earlier this week, Emanuel described President Donald Trump's proposed infrastructure program as "fairy dust."

Can "fairy dust" from a president with whom Emanuel has been engaged in a year-long war of words help pay for a $2.3 billion project?

"I'm confident we will have the resources and secure the resources because of the significance of the project and the investment the city is willing to make," the mayor said.

"I'm not relying on everybody else. But they have to do their part — like they have in every other project we have done."

This is the proposed route of the South Side Red Line expansion.

Fourteen months ago, the City Council set a go-it-alone precedent that lets the state and federal governments off the hook when it comes to mass transit projects.

Aldermen hastily authorized a transit tax-increment-financing (TIF) district in a race to nail down $1.1 billion in federal funds to modernize the CTA's Red Line before then-President Barack Obama left office.

CTA President Dorval Carter Jr. said it's too early to talk about using a transit TIF, Emanuel's slow-starting Infrastructure Trust, an increased ride-sharing fee or "any another other innovative funding stream" to bankroll the Red Line extension.

"The TIF legislation was really a stop-gap measure because I didn't have a state capital plan and I was going to lose hundreds of millions of dollars in federal funding if I didn't get that commitment. It was never intended to be the foundation to meet all of our capital needs," Carter said.

Emanuel was elected in 2011 on the strength of the African-American vote and re-elected in 2015 with help from black voters who forgave him for closing a record 50 public schools.

He has spent the last two years trying to rehabilitate an image with black voters that took a beating after his handling of the Laquan McDonald shooting video.

As he prepares to ask Chicago voters to give him a third chance, Emanuel desperately needs to show some kind of progress toward delivering on his 2011 promise to extend the Red Line South to 130th.

The handful of African-American aldermen who joined Emanuel in Roseland's Block Park at 103rd and Harvard were asked whether Friday's route announcement would be enough of a political boost.

"Anything you can show you're doing to keep your promises and bring development into under-served areas is a great thing. The 95th Street station will also help," said Ald. Howard Brookins (21st).

"Even though there was some controversy with respect to the Englewood high school, that situation helps because it shows he's willing to put money into African-American communities, which is a criticism he gets from a lot of people in the community."

Ald. Carrie Austin (34th) flatly predicted that the project long promised and desperately needed to give Far South Side residents the mass transit parity and quick access to jobs they have long deserved "is going to happen in my time" in the City Council.

"I believe in the mayor's tenacity. He stays on it. He never lets it linger and linger…He can shake some trees"—even under Trump, Austin said.

Ald. Anthony Beale (9th) added, “This is a promise made over 40 years ago…This is another victory, another step closer to where we need to be to get this thing under construction.”

See RAHM EMANUEL’s full statement on the CTA Red Line extension: https://youtu.be/ZT8CueDjejo

Chicago Tribune

As officials plan Red Line extension, there's still no green to fund it

The 5.3-mile $2.3 billion Red Line extension, in a CTA proposal announced Jan. 26, 2018, would fill in what community activists have called a “transit desert” on the South Side. (Antonio Perez / Chicago Tribune)

Mary Wisniewski, William Lee Chicago Tribune

For Yolanda Christian, news that the CTA has chosen a path for its extension of the Red Line from 95th to 130th streets was music to her ears.

“They’ve been talking about this since I was a child,” said Christian, 45, who lives in the Altgeld Gardens complex on the city’s Far South Side. She said she and her neighbors must endure long bus rides just to get to the train to get to downtown jobs. “I think we really need this.”

ADVERTISING

The 5.3-mile, $2.3 billion Red Line extension would be built on both the west and east sides of the Union Pacific Railroad tracks — a long stretch of it west of Wentworth Avenue in Chicago and end in the city’s Riverdale neighborhood, the CTA announced on Friday. The extended line would fill in what community activists have called a “transit desert” on the South Side.

But now that the CTA has an idea about where to put the elevated train extension, the big question is how to pay for it.

The CTA was able to fund half the $2.1 billion Red and Purple Line modernization project through a federal grant in the last days of the administration of President Barack Obama, a Chicagoan and transit supporter. The rest of the project is being funded by tax increment financing in growing, populous and affluent North Side communities.

But the CTA will be seeking Red Line extension funding in a totally different environment — President Donald Trump had expressed hostility toward Chicago, and his stated budget priorities show little interest in transit. The cash-strapped state has cut back on transit operating funds and has not had a capital bill since 2009. And a transit TIF in the poorer and less populous far South Side is unlikely to be as lucrative as it would be up north.

Despite these prospects, both Mayor Rahm Emanuel and CTA President Dorval Carter were upbeat about upcoming efforts to secure a mix of federal, state and local funding for the project at a news conference on Friday near the site of a proposed new 103rd Street train station, one of four planned stops on the extension.

Carter noted that after decades of talk about the Red Line extension, the CTA is now putting real money into it — it has secured $85 million in federal, state and local funding for preliminary work, including engineering and an environmental analysis, which it needs to complete to get money for the project.

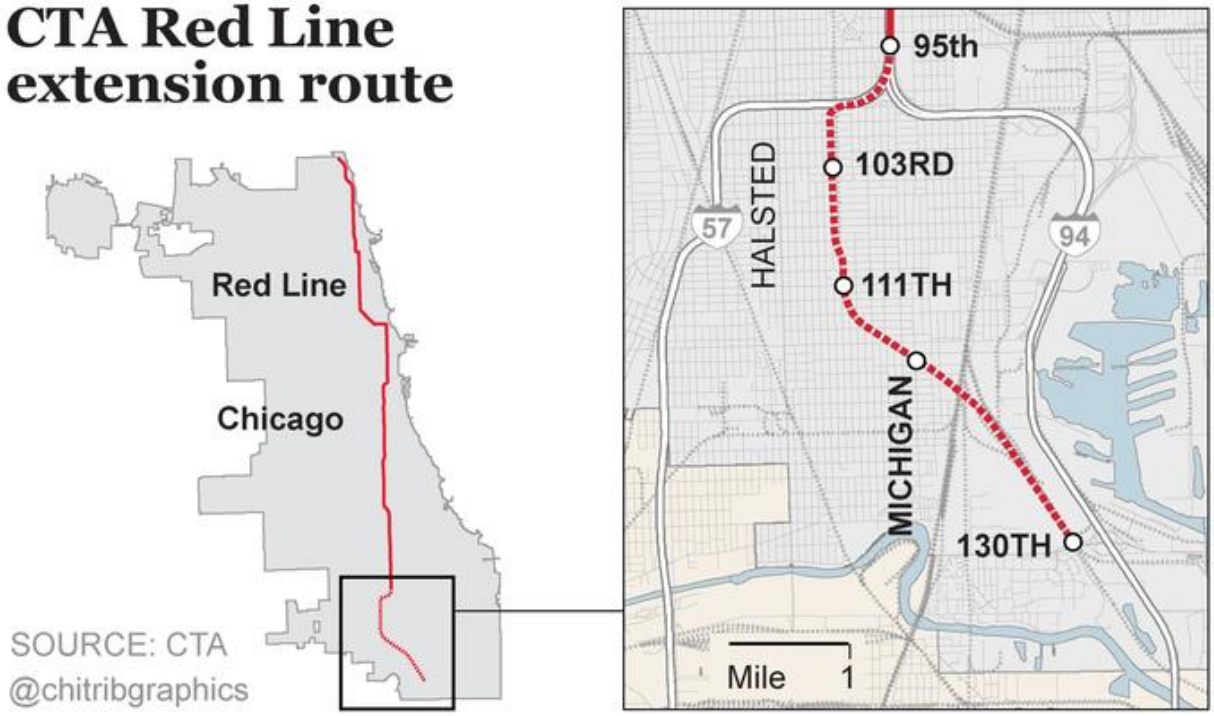

"There is a federal process we have to go through to get the federal funding," Carter told reporters. "I intend to pursue that process. The timeline is going to be driven much more by our ability to get the state capital funding that we need to make the project happen than by whether or not there are federal resources to support it."

Emanuel said the project has economic merit and is just the type the state and the U.S. Department of Transportation want to see, though it is too early to talk about it with Transportation Secretary Elaine Chao.

"That would be premature at this point — what we just announced is the planning," Emanuel said. He said now is the time to proceed with the

extension plans, since the CTA finished the $425 million Red Line South reconstruction in 2013 and is now completing a massive $280 million building of the 95th Street station.

Ald. Anthony Beale, whose 9th ward will be served by the extension, told the Tribune he'll be excited when he sees shovels in the ground. He noted that the extension had originally been promised by Mayor Richard J. Daley more than 40 years ago.

CTA Chairman Terry Peterson said he would not underestimate Emanuel's "creativity" in finding the money.

The newly proposed path would start at 95th Street and run along the west side of the Union Pacific Railroad tracks from I-57 south to about 109th Street. It would then cross the UP tracks and continue along the east side of the tracks until crossing Metra Electric tracks near 119th Street, and then continue south to 130th Street, the CTA said.

Rendering of the planned 103rd Street CTA station, all part of the proposed Red Line extension on the South Side (CTA)

In addition to a stop near 103rd Street, the CTA plans new stations near 111th Street, Michigan Avenue near 115th Street and 130th Street.

The route could require acquisition of up to 154 privately owned parcels, including 79 buildings. The CTA would be able to acquire the parcels through eminent domain, which allows a government entity to take properties for public use, after paying the owners. The price for the acquisitions is not yet known, CTA spokeswoman Tammy Chase said.

The CTA will hold an open house on Feb. 13 from 6 to 8 p.m. at the Gwendolyn Brooks College Preparatory Academy gymnasium to present the alignment to residents.

The earliest construction would begin is 2022, and the project would take about four years.

The Chicago Metropolitan Agency for Planning, the region's planning organization, identified the Red Line extension in its GO TO 2040 plan as a capital project of "regional significance." CMAP Executive Director Joe Szabo said in a statement that the next regional plan, ON TO 2050, coming out in June, will include strategies for securing money for high-priority projects in light of declining state and federal resources.

Elizabeth Williams, a 56-year-resident of the area near the 95th Street terminal, said she is hopeful that now is the right time for the extension, though she did express some concerns that the project would displace numerous businesses and longtime homeowners.

"I'd hate to see people who lose their homes, especially older folks that own their homes," Williams said.

Carter acknowledged that there would be disruptions from the project, but said there would also be great benefits to the community, including transit-oriented development opportunities and other economic development. The project also is expected to create about 6,200 jobs, the CTA said.

Emanuel said there is disruption now, caused by people having to waste time taking buses to the train. “If you don’t have to take a bus to a train, that means you have more time with your children,” he said.

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http://wgntv.com/2018/01/26/cta-to-unveil-proposed-red-line-extension-to-130th-street/

CTA unveils proposed Red Line extension to 130th Street

POSTED 7:06 AM, JANUARY 26, 2018, BY WGN WEB DESK, NANCY LOO AND JULIAN CREWS, *UPDATED AT 05:29PM, JANUARY 26, 2018*

CHICAGO -- The CTA and Mayor Rahm Emanuel have unveiled a plan today to extend the Red Line on the city's South Side.

Right now, the last stop on the south end of the Red Line is 95th Street.

But a new proposal will extend the line to 130th Street.

The five-mile extension would include four new stations: 103rd Street, 111th Street, Michigan Avenue, near 115th Street and 130th Street.

View image on Twitter

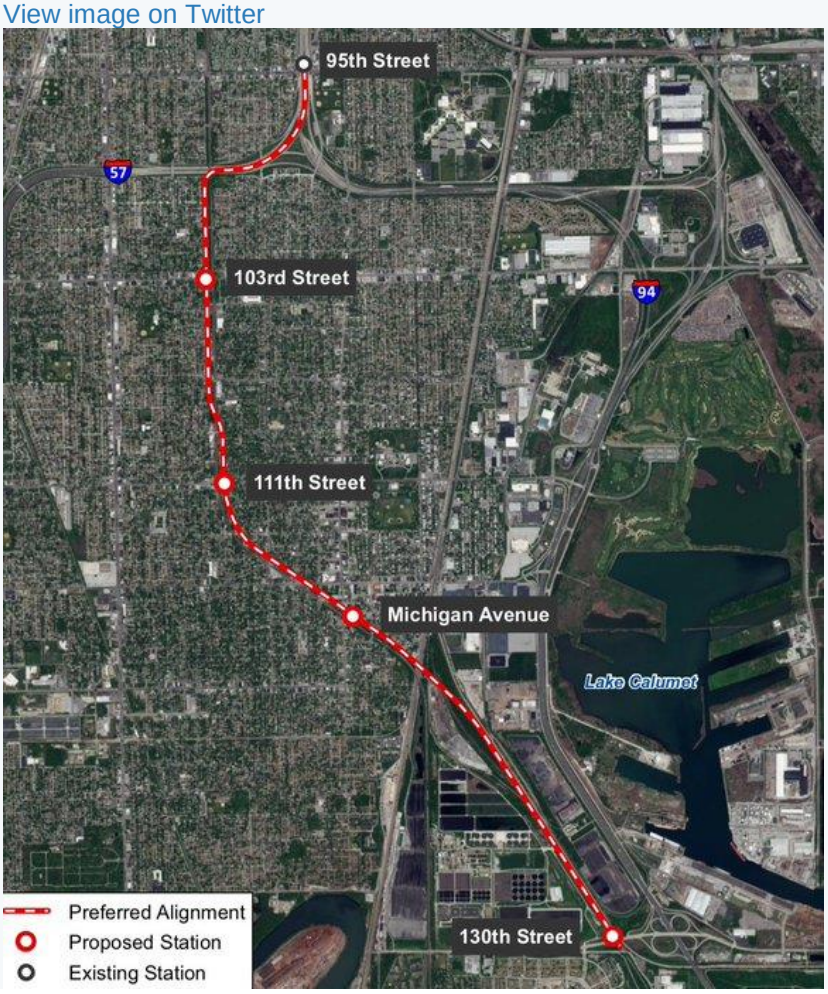

Nancy Loo
The @cta and @ChicagosMayor set to announce this proposed extension of the #RedLine. You like? Details coming up @WGNMorningNews.
4:33 AM - Jan 26, 2018 · CTA - 95th/Dan Ryan

Construction could begin in 2022 and it's expected to cost $2.3 billion.

http://chicago.cbslocal.com/video/3799408-cta-announces-path-for-red-line-extension/Latest Videos

CTA Announces Path For Red Line Extension

City officials have released their plan for extending the Red Line about 5 miles further south, one of the largest capital improvement projects in CTA history. CBS 2's Mike Puccinelli reports.

MILD SAUCE
IT'S KINDA HOT

https://mildsauce.co/news/2018/01/26/news-catch-%E2%80%A2-steve-bannon-speak-csu/

NEWS CATCH UP • STEVE BANNON TO SPEAK AT U CHICAGO, RED LINE EXTENSION & MORE

JAKE KREZJANUARY 26, 2018
0 COMMENTS 0

It's been a long week with highs and lows as disparate as January temperatures around Chicago and Mild Sauce is here to round up some of the headlines that matter to you with some added context. In this edition of the News Catch Up, we take a look at a proposed talk with Steve Bannon at the University of Chicago, new developments going up in the West Loop and a proposed extension to the Red Line. Check it all out below and be sure to catch our morning show, The Three Piece on Mild Sauce Radio for more news and commentary, Saturday mornings at 11 AM CST.

Steve Bannon to Speak at University of Chicago

Over the last couple of years conversations revolving around who can and cannot speak on college campuses has once again made it's way into the national audience. Following students at the University of California-Berkeley protesting the likes of controversial speakers like Milos Yiannopoulos, the University of Chicago has decided to allow former Breitbart News Editor and White House Chief Strategist under Trump.

The decision, announced this week, is an important one that puts U of Chicago on the right side of history in the new-age of "designer news" where folks can pick and choose what to believe and expose themselves to. The decision however did not come without opposition. protests popped up on campus Thursday and several professors signed a letter to President Robert Zimmer. U of C, though, appears to be standing strong amidst a climate that has seen even DePaul wilt in the face of over-eager censorship based on feelings rather than rationale.

In an Editorial, the Chicago Tribune summed it up perfectly: "If this involved practically any other college in America, we'd be concerned the administration might buckle under the protests, and concoct some reason to disinvite Bannon to preserve harmony. There's a pattern in place, from Berkeley to DePaul and beyond, of universities squelching controversial speaker events, especially those involving people on the political right. It's part of the larger cultural movement of trigger warnings and safe spaces that believes kids on campus have a right to be protected from ideas that offend them.

Thankfully, the U. of C. thinks differently."

Indeed. While there's little doubt that a man that first associated himself with, and the was summarily fired by Donald Trump will say anything substantive, he does deserve the right to speak if given the opportunity. While colleges across the country participate in the undermining of the first amendment and journalism ethics in general, University of Chicago is standing as a beacon of how to handle these situations in a mature manner.

More High-Rises Slated for West Loop

The boom in the West Loop doesn't seem to be stopping any time soon. This week, plans were announced for yet another set of high-rises in the quickly-developing area just left of the Loop. Developer Sterling Bay showed off plans for four new buildings that will essentially look to gut whatever sense of the neighborhood still exists and lean full-heartedly into Rahm Emanuel's Tech hard-on, glossing the area in more glass and quick-pour concrete as local developers tug at the pants-leg of Amazon.

The plans are expansive to say the least. Extending north along Green Street from Randolph. Included in the plans are 19 and 20-story buildings on either side of Green St. where Coyne College currently stands. It and the parking lot across the street were purchased for $25 million last year. Included as well are proposals for a seven-story mixed-use building at 345 N. Morgan and a 21-story office building at 360 N Green, the latter the first new development north of the Metra tracks.

It's apparent that the deep-pocketed developers that have long dictated the migration of Chicagoans are once again hedging their bets, this time for the possibility of Amazon choosing the Fulton Market corridor for it's HQ2 headquarters. Despite the fact that may be a long-shot and the other persistent reality of Chicago losing more population than

the rest of the country every year, lets keep our fingers crossed these get done before the bubble pops. Head over to Curbed for a more in-depth look at the project and our recurring feature, Cranes In The Sky.

CTA OK's First L Extension Since 1993

An area of the city long-considered a "transit-desert" by activists may be getting some relief, as the Chicago Transit Authority announced plans for a $2.3 billion extension of the Red Line south to 130th St. The project, if approved for funding, would be the first extension of any 'L' since opening the Orange Line in 1993.

The extension follows a redevelopment of much of the south side Red Line stations which took place in 2012 and will bring transportation options to a large swath of neighborhoods that are largely without any. The 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue near 115thStreet, and 130th Street with parking and bus connections that would extend as far south as suburban Riverdale.

According to the *Tribune*, "The CTA will hold an open house on Feb. 13 from 6 to 8 p.m. at the Gwendolyn Brooks College Preparatory Academy gymnasium to present the alignment to residents. The agency then must publish a final environmental impact study to include further analysis of the path and some preliminary engineering work."

If all goes according to plan, the earliest date to break ground is 2020 with at least four years needed to finish the construction.

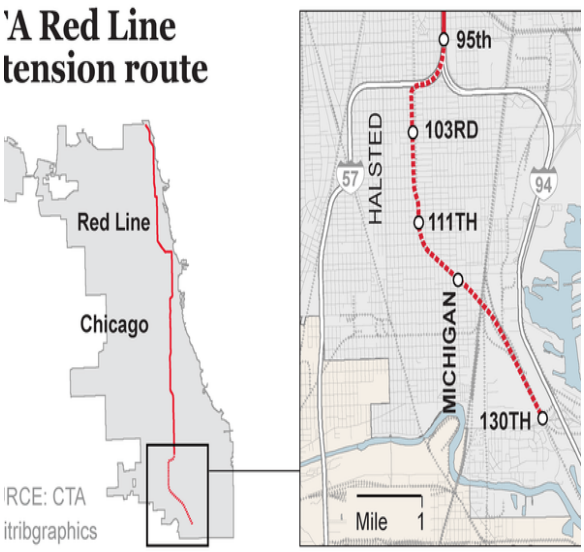

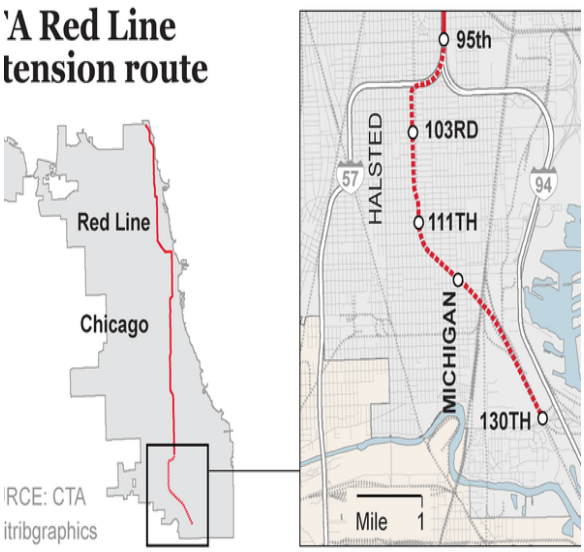

http://www.chicagomag.com/city-life/January-2018/Chicago-Plans-a-Red-Line-ExtensionBut-Could-It-Be-Done-Faster-and-Cheaper/

CHICAGO MAGAZINE

Chicago Plans a Red Line Extension—But Could It Be Done Faster and Cheaper?

The city has finally announced its preferred route from 95th Street to 130th Street. But with the Trump infrastructure plan looking unfavorable, will the Metra Electric option get a hearing?

BY WHET MOSER

PUBLISHED JAN. 29, 2018

What the (proposed) 103rd Street station on the (proposed) Red Line extension could look like by 2026 (at the earliest). PHOTO: CITY OF CHICAGO

The city announced its planned route for the long-discussed extension of the Red Line, which would be extended from its current South Side terminus at 95th Street down to 130th Street in between Lake Calumet and the Little Calumet River. Here's where they want to run it.

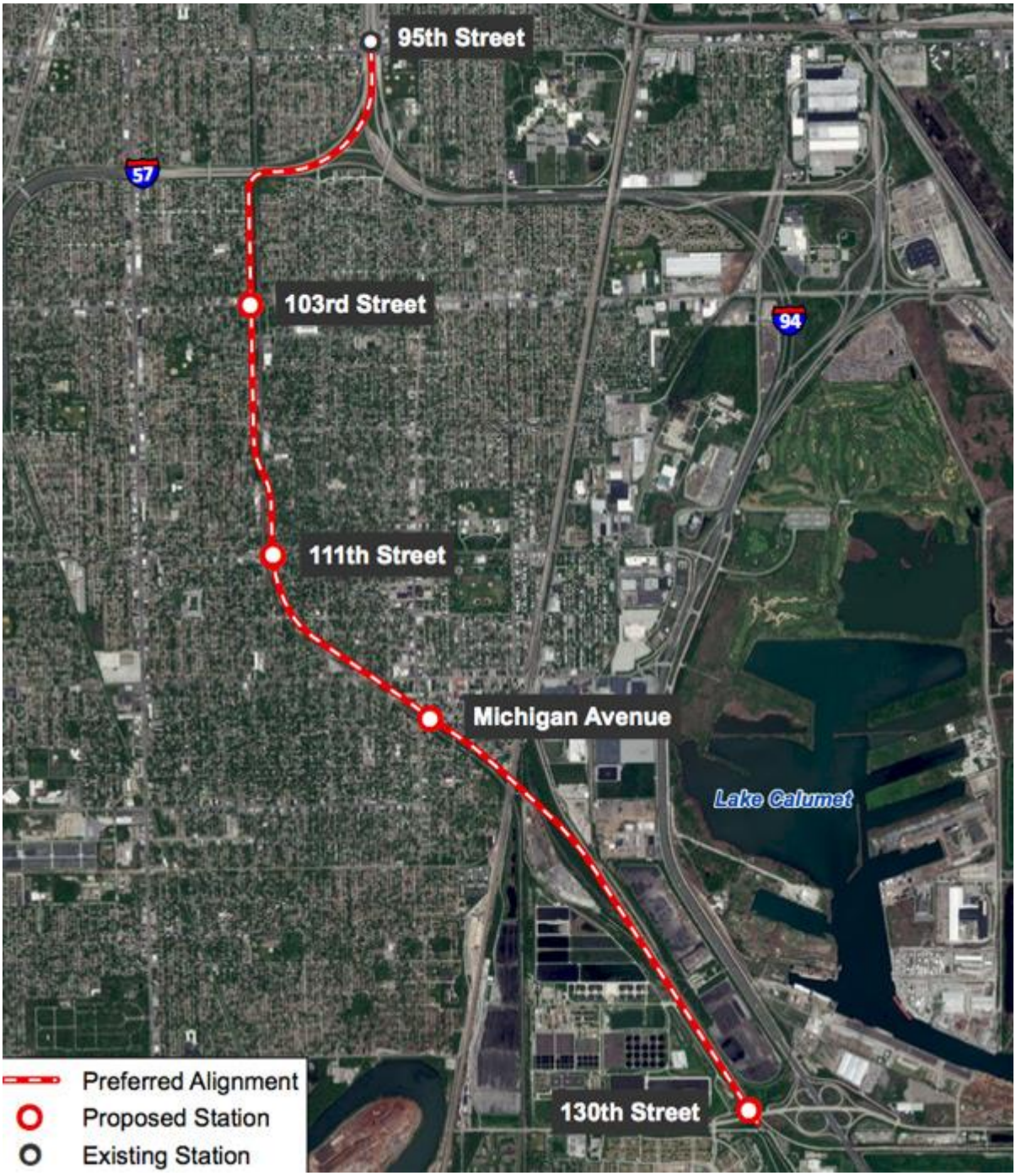

The city says it would be a 5.3-mile extension costing $2.3 billion dollars, $1 billion of which would come from the federal government.

The *Tribune* reports that it will shave off about 20 minutes from a commute from 130th Street to the Loop. That sounds about right: According to Google Maps, it's 28 minutes from the 95th Street Red Line Station to State & Lake. Currently to get from the approximate location of the proposed 130th Street station, it's a short walk and then a half-hour, 49-stop bus ride from Ellis Avenue and 131st Street to get to the 95th Street terminus.

One map gives a sense of how that could affect commuters. It's from a UIC-Great Cities Institute report on jobs and unemployment for youth, and it shows the number of jobs available within a half-hour commute of anywhere in the city. The 130th Street station would border the two community areas with the fewest number of jobs (as of 2014) available within a half-hour commute: 2,701. I've annotated it with the location of the 95th Street station and the proposed 130th Street station.

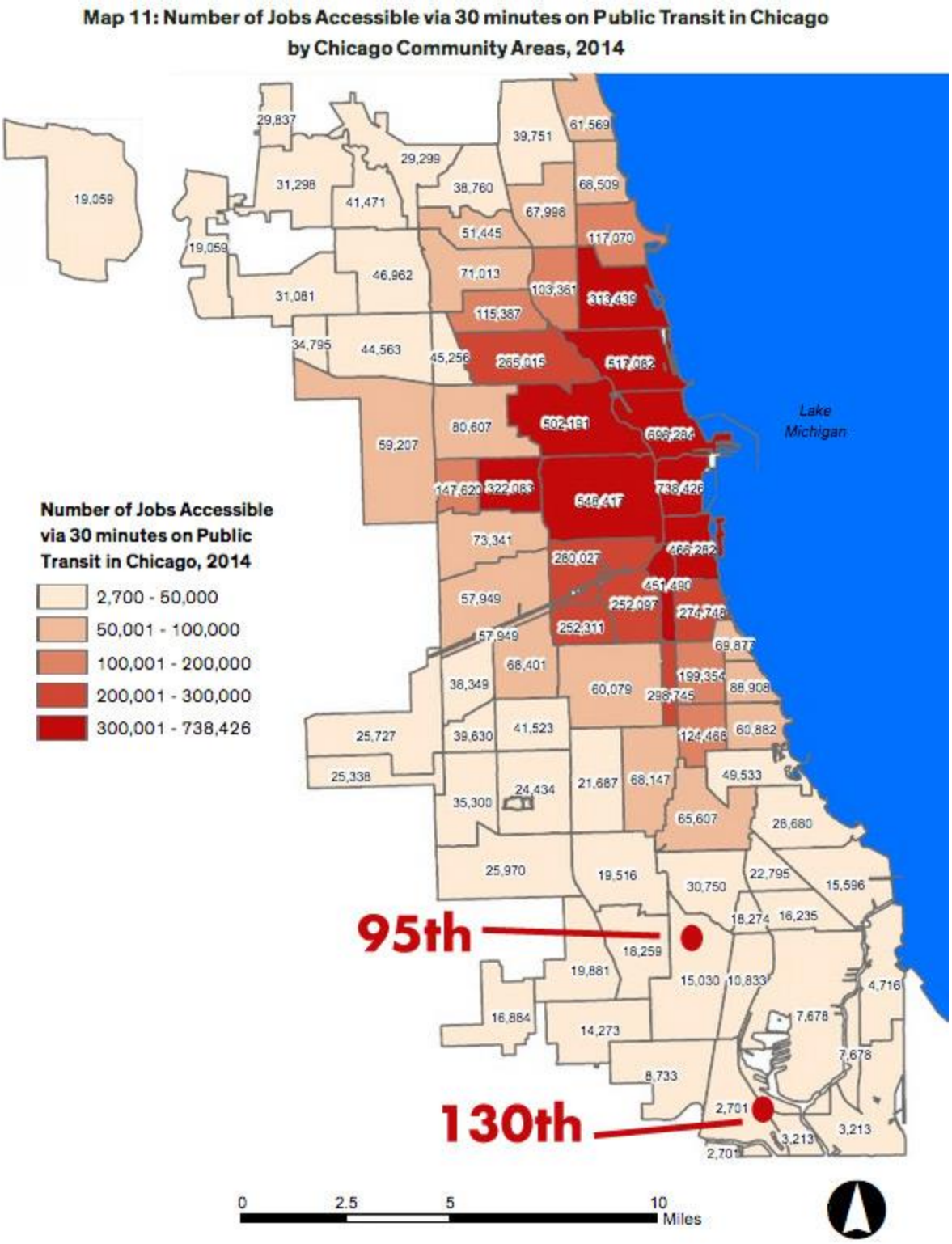

The 130th Street station would be on the border of Riverdale, which, the *Tribune*'s Alexia Elejalde-Ruiz reported in 2016, has the most economic hardship of any Chicago community area: a per-capita income below $7,500 and

unemployment of 40 percent. Faster and more reliable public transit could be a considerable benefit for the far South Side neighborhood.

But there's likely to be some pushback. The proposed route would cost the city over a billion dollars, and the additional federal money is up in the air: The White House's infrastructure adviser said Trump's infrastructure plan "will not include any new revenue to pay for $200 billion of new federal spending," and apparently focus more on bringing non-federal money to the table. So, a near-50-percent match may not be realistic in the near future, and the situation could change again between now and 2022, the earliest time the city says it could begin.

Meanwhile, transit advocates have been pushing a proposal for many years that would convert the Metra Electric lines into something that functions more like the L, with greater frequency and a longer operating day, than the infrequent commuter rail pattern it runs on now.

The Metra Electric is highlighted in light yellow, the proposed Red Line extension in red. They cover similar territory.

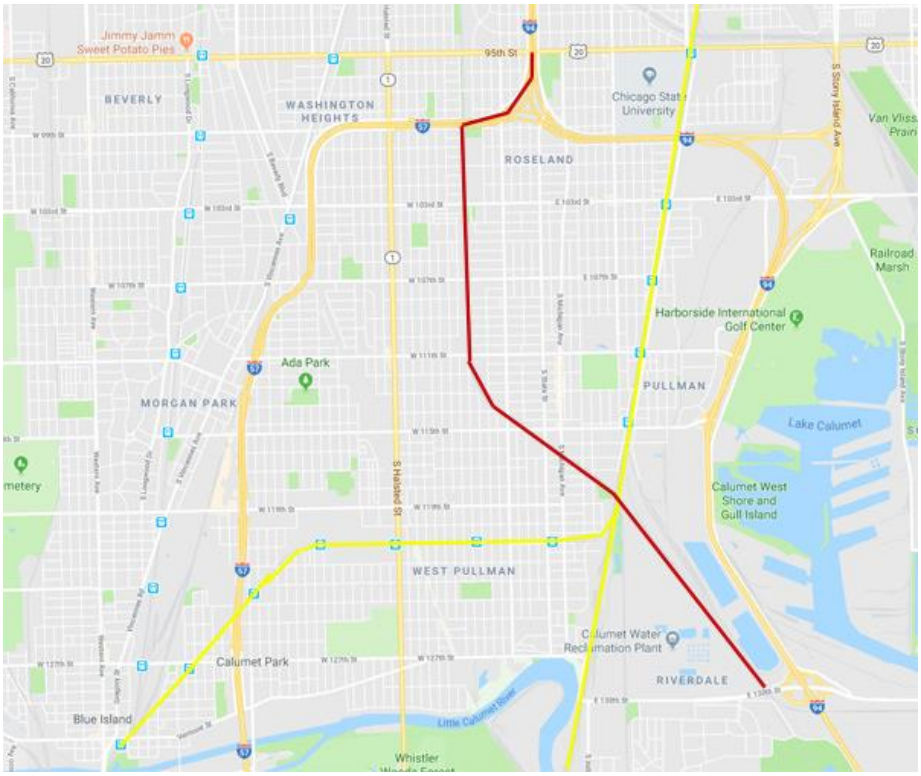

If you wanted to take the Metra from Blue Island to Millennium Station on a Monday morning, the train leaves at 6:15, 6:40, 6:58, 7:20, 7:35, and 8 a.m. The last one will get you downtown by 8:56. After the 8 a.m. train, there's not another one for two hours and 18 minutes. The next trains are 12:18, 2:18, 4:18, 5:38, 6:38, and 7:41 p.m. And that's it for the rest of the day.

Going from downtown to Blue Island? The last train arrives in the latter at 8:23 p.m. It's a rush-hour train that mostly benefits 9-to-5 workers and doesn't really serve the night shift at all.

This case has been made many times. Sandy Johnston wrote a thorough piece about it for *South Side Weekly* last year. Steven Vance considered the idea for Streetsblog in 2016. As Johnston points out, and as you can see from the map, there are a *lot* of stations for the Metra Electric running through the Red Line extension area, far more than your typical Metra line—because it used to have L-level frequency and serve a rapid-transit-like purpose before it was absorbed by the RTA and run on a commuter-rail schedule.

Daniel Kay Hertz wrote that such a conversion would cost about $27 million per mile, compared to about $434 million per mile (including federal funding) for a Red Line extension. As Alon Levy writes in *CityLab*, the latter number is pretty average for American subway/elevated rail projects, which is far more expensive than European ones. If the $27 million-per-mile estimate is correct, that's less than half the cheapest new American construction Levy cites, a $65 million per mile light-rail project in Phoenix.

The *Tribune*'s Mary Wisniewski reported that the idea "has drawn the interest of Mayor Rahm Emanuel, who has asked the head of the Regional Transportation Authority to facilitate discussion on the issue." It hasn't gotten far enough along to serve as a replacement to the Red Line extension, apparently. At Streetsblog, John Greenfield thinks the reason is that "they believe that it will be easier to prize a federal grant out of the Trump administration than get CTA and Metra to play nice."

If the Red Line extension does happen, it wouldn't necessarily obviate the Metra Electric conversion; the North Side has comparable north-south L density and it's a good tie-in with the Obama Library. But much as CTA and the Metra have had trouble integrating their services, transit funding is likely to run into a headwind under the Trump administration's infrastructure plan. Yonah Freemark noted that it requires value capture financing for transit funds, such as property value increases that would pay for its cost through a tax-increment finance mechanism; as Greenfield points out, that might not be a realistic goal for a Red Line extension. In this quite realistic scenario, the city might have to wait for a different administration, or do some heavy relationship counseling for the metro's two public-rail agencies.

https://patch.com/illinois/chicago/mayor-cta-announce-preferred-alignment-red-line-extension

Mayor, CTA Announce 'Preferred Alignment' For Red Line Extension

Expanded rail service to the far South Side will improve access to jobs and opportunities, city officials say.

By Carrie Frillman, Patch Staff | Jan 29, 2018 1:16 am ET

CHICAGO -- Mayor Rahm Emanuel and the Chicago Transit Authority (CTA) last week announced that the agency has selected a preferred alignment for

the Red Line Extension (RLE) — a project that will extend the Red Line to 130th Street from 95th Street.

The RLE project will provide new access to rail service for Far South Side residents, connecting them to affordable housing, jobs, services and educational opportunities.

"Today we are taking a major step towards extending the Red Line to 130th Street and delivering the jobs and economic opportunities that go with it," Mayor Emanuel said. "By extending the Red Line south we are strengthening Chicagoans' connections to each other, to opportunity and to the world."

The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street. Each of the new stations would include bus and parking facilities. The project is expected to create an estimated 6,200 jobs.

After taking into consideration extensive public feedback, technical analysis and other factors, the CTA selected a route for the RLE project that would:

Subscribe

- Begin the extension at 95th Street and run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 109th Street;
- Cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street; and
- Continue south to 130th Street.

"We are happy to introduce our preferred alignment for the Red Line Extension, a transformational project that will expand rail service to Chicago's southernmost communities and create better access to jobs, education and opportunities," CTA President Dorval R. Carter, Jr. said. "We made this

selection based on feedback from the community, and look forward to moving forward on this project."

The preferred RLE alignment would provide all the benefits of new rail service for the area while minimizing the impact on local businesses and homes. The alignment is a hybrid of two previously considered alignments—the East and West Options, named for where they were located next to existing freight railroad tracks—and offers the best of each while limiting the number of properties CTA must purchase to build the rail extension. The selected alignment also takes advantage of several large parcels of land that are currently vacant and will allow for economic development opportunities.

The project is a key part of Mayor Emanuel and CTA's "Red Ahead" investment in its busiest rail line that includes the $425 million Red Line South Reconstruction that was completed in 2013 and the ongoing $280 million construction of a new 95th Street Terminal, which will be completed in 2018.

What's next?

The CTA will host a public open house on February 13, 2018 from 6 p.m. until 8 p.m. at the Gwendolyn Brooks College Preparatory Academy gymnasium (250 East 111th Street, Chicago, Illinois) to present the alignment to the community.

CTA officials will produce a final Environmental Impact Study (EIS) that will include further preliminary engineering work and will analyze impacts of the proposed alignment. This engineering work is required before CTA can apply for more than $1 billion in federal funds to support the RLE project, estimated to cost $2.3 billion.

CTA officials expects to apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase of this project, a necessary step to pursue federal funding for the project under the competitive federal "New Starts" program. For more information on the Red Line Extension project, visit transitchicago.com/redeis.

https://www.progressiverailroading.com/passenger_rail/news.aspx?id=53785

Progressive RAILROADING

Rail News: Passenger Rail

CTA unveils preferred alignment for Red Line extension

Rendering of the 103rd Street Station on the extension
Photo – Chicago Transit Authority

The Chicago Transit Authority (CTA) last week announced its preferred alignment for the proposed Red Line rail extension, which calls for extending the route from 95th Street to 130th Street.

The chosen route would begin at 95th Street and run along the west side of Union Pacific Railroad tracks from Interstate 57 to 109th Street. Then, the route would cross UP tracks and run along their east side until crossing the Metra Electric tracks near 119th Street.

From there, the route would continue south to 130th Street.

The preferred alignment is a hybrid of two previously considered alignments.
Source – Chicago Transit Authority

The 5.3-mile Red Line extension would include four stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street. Each new station would include bus and parking facilities.

The CTA chose the preferred alignment after taking into account public feedback, technical analysis and several other factors, agency officials said in a press release.

The alignment is expected to provide the benefits of a new rail service while minimizing the impact on local homes and businesses. Agency officials will host an open house Feb. 13 to present the route to the community.

The CTA will produce a final environmental impact study that will include additional preliminary engineering work, which is required before the agency can apply for more than $1 billion in federal funding. The extension would cost an estimated $2.3 billion.

CTA officials also expect to apply to the Federal Transit Administration for entry into the project development phase — a necessary step to pursue federal funding under the competitive "New Starts" program.

In October 2016, the agency published the draft environmental impact statement for the Red Line extension.

http://www.rtands.com/index.php/passenger/commuter-regional/preferred-alignment-for-cta-red-line-extension-selected.html?channel=281Preferred alignment for CTA Red Line extension selected

Written by Kyra Senese, Managing Editor

CTA

The Chicago Transit Authority (CTA) has selected a preferred alignment for the Red Line Extension (RLE) project, which is set to extend the Red Line to 130th Street from 95th Street.

The RLE project is intended to provide new access to rail service for the city's Far South Side residents, CTA said.

"Today, we are taking a major step towards extending the Red Line to 130th Street and delivering the jobs and economic opportunities that go with it," Chicago Mayor Rahm Emanuel said. "By extending the Red Line south we are strengthening Chicagoans' connections to each other, to opportunity and to the world."

The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street. Each new station would feature bus and parking facilities, as well.

The CTA said it received extensive public feedback and technical analysis regarding the RLE project.

The transit authority selected a route for the project that would:

- Begin the extension at 95th Street and run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 109th Street

- Cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street
- Continue south to 130th Street

"We are happy to introduce our preferred alignment for the Red Line Extension, a transformational project that will expand rail service to Chicago's southernmost communities and create better access to jobs, education and opportunities," CTA President Dorval R. Carter, Jr. said. "We made this selection based on feedback from the community, and look forward to moving forward on this project."

The CTA said the preferred RLE alignment would minimize the effects on local businesses and homes and takes advantage of several large, vacant sections of land that will enable economic development opportunities.

The RLE project is part of Mayor Emanuel and CTA's "Red Ahead" plan for the Red Line that includes the ongoing $280 million construction of a new 95th Street Terminal, which is set for completion in 2018.

The CTA also said the project is expected to facilitate more than 6,000 jobs.

CTA will host a public open house on Feb. 13 to present the alignment to the community. The transit authority is set to produce a final Environmental Impact Study (EIS) that will include further preliminary engineering work and analyze impacts of the proposed alignment.

The engineering work must be completed before CTA can apply for more than $1 billion in federal funds to support the project, which has an estimated cost of $2.3 billion.

CTA said it intends to apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase of this project, which would allow the transit authority to pursue federal funding for the project under the competitive federal "New Starts" program.

https://www.constructiondive.com/news/chicago-transit-authority-unveils-details-for-23b-rail-extension/515829/

BRIEF

Chicago Transit Authority unveils details for $2.3B rail extension

AUTHOR
Kim Slowey@kimslowey

PUBLISHED
Jan. 30, 2018

Dive Brief:

- The Chicago Transit Authority (CTA) announced new milestones in its planned 5.3-mile, $2.3 billion Red Line rail extension project, according to Curbed Chicago.
- The CTA made one of the most critical decisions — that is, the route the new line will follow — a choice that officials said would necessitate the fewest private property purchases. The authority also announced the location of four new stops.
- The CTA is expected to apply for federal and local funding, but it might create a transit-specific Tax Increment Financing (TIF) district as well. If the city can come up with the money and meet other requirements, construction could start in 2022.

Story continues below

Dive Insight:

Even though officials admitted the project faced some obstacles, Dorval Carter, CTA president, said in 2016 that the project could be life changing for those in need of educational and employment opportunities.

Chicago has a few other transportation projects in the works as well, including the $2.1 billion Red and Purple Modernization (RPM) rail initiative. That project entails

station improvements, new tracks and other upgrades. The CTA secured a $1 billion Federal Transit Administration (FTA) grant for this project but only after the city approved a TIF. Before President Donald Trump took office, the Chicago City Council sped up approval of the project so that the FTA under former President Barack Obama would make the decision.

In December, the CTA chose three companies to bid on the project with the intention of starting construction in 2019.

Another project in the planning stages is an express transportation systembetween downtown Chicago and the city's O'Hare International Airport. One of the bidders on the project is Elon Musk's Boring Company. Musk has not offered specifics on what his plan will look like, but the project guidelines call for a public-private partnership-type relationship where the winning bidder will finance, operate and maintain the system.

The specifications also require a system design that can move commuters between Chicago and the airport in no more than 20 minutes. Musk told his Twitter followers that a Hyperloop system and the accompanying vacuum wouldn't be necessary for such a short trip, which has left onlookers wondering if the Boring Company will present a proposal for a skate system like it has in mind for a high-speed transportation tunnel system under Los Angeles.

Recommended Reading:

- Curbed ChicagoCTA reveals route, four new stations for Far South Side Red Line extension

http://www.chicagoreporter.com/new-red-line-extension-plan-would-uproot-fewer-far-south-side-homes/

THE CHICAGO REPORTER

New Red Line extension plan would uproot fewer Far South Side homes

By La Risa Lynch | January 31, 2018

Photo by Yingxu Jane Hao

Shari Henry's 101st Street home, which her parents bought in 1970, will no longer need to be acquired and demolished under the CTA's new proposal to extend the Red Line.

Shari Henry breathed a sigh of relief at the news.

The home she shares with her mother will not be taken to make way for the planned Red Line extension to the city's southern limits. She and her mother had been in a holding pattern since they received a letter in 2016 from the Chicago Transit Authority stating that their home was among 248 that could be acquired for the project. The Henry family home was among 94 privately owned properties that ended up being spared in CTA's final plan, announced late last week. Only 154 properties will have to be acquired.

"Just so much has been on hold because we've haven't known," said Henry, whose parents bought their house in the Fernwood neighborhood in 1970 after leaving the Dearborn Homes housing development. She had been putting off installing a new roof. "There was no need to do a roof if the house was going to be taken, if it was going to be torn down."

CTA Public Hearing
Tuesday, Feb. 13, 2018
6 – 8 p.m.
Gwendolyn Brooks College Preparatory Academy gymnasium
250 East 111th St.
Chicago, IL 60628

The preferred alignment to extend the Red Line will be presented to the community. Comments can be submitted at: RedExtension@transitchicago.com.

CTA's initial proposal included options for building the extension on either the east or west side of the Union Pacific Railroad tracks that stretch through the Far South Side. But the agency decided to use a hybrid of the two options: The elevated transit line will run west of the Union Pacific tracks from I-57, running partly on a grassy parkway, to 109th Street. There, it will cross over to the east side and continue south to the last of four new stops, at 130th Street in the Riverdale community.

The Henry's home was spared by the use of that 4-block stretch of green space. The majority of line will run along the east side, which is mostly residential but has more vacant properties that could be used for economic development.

But other residents will still be uprooted from their homes or businesses. Mims Donald will have to uproot the family-owned business that is in the extension's path. He has operated Donald's Auto Repair at the corner of West 115th Street and South Lafayette Avenue since his family first bought the business in 1976. CTA has proposed to build one of the four new stations in the area.

Still, Donald believes the extension is a good thing. "I'll be glad to see something coming in that improves the neighborhood," said Donald. "I am all for anything in this neighborhood that is going to help it."

Donald lived in the community for more than 30 years before moving to Calumet City. He said Roseland is not the same great neighborhood he once grew up in.

“Things just steady been going down because people can’t get any jobs,” he said. “Anything that is going to improve for people to get better jobs and have better transportation to get downtown … I am all for it. I can establish another business some other place. I am not gonna stand in the way.”

Donald is optimistic about the development as well as getting a fair price for his property. But other residents have been skeptical about the potential impact of the project on home value and the prospects for economic development. The area has long suffered from a lack of jobs, poor transit options to employment, and disinvestment as blacks moved in and whites fled to the suburbs during the 1950s and 60s.

RELATED

Far South Side homeowners question Red Line extension’s impact on property values

The city’s history of residential segregation has kept home values down. Coupled with the recent housing crisis, experts say homeowners may not get their original purchase price for their homes once the city begins acquiring properties. Home prices in Roseland, Riverdale and other Far South Side communities fell further during the housing crisis and recovered more slowly compared to the rest of Chicago.

Ald. Anthony Beale, whose 9th Ward encompass the majority of the Red Line extension, recognizes the residents’ concerns about getting a fair price for their property but says residents will get a fair shake.

“Nobody is coming out of this short-handed, and I am gonna make sure of that,” said Beale. He called the hybrid alignment a win-win for the community that minimizes displacement.

Beale is optimistic about the project, which has been more than 40 years in the making, but says he cannot get excited until the funding is secure. City and CTA officials expressed confidence about securing additional federal and state funding and have already secured $85 million for engineering and environmental work. The earliest construction would begin is 2022. The project would take four years to complete.

The 5.3-mile extension will include four new stations with park 'n ride lots and bus connections, on 103rd Street, 111th Street, 115th and Michigan Avenue, and 130th Street. Studies have shown that on average property values near transit tend to increase. But areas suffering from low home values for a long time may not see an immediate increase. Instead, home values may rise steadily many years down the road.

Henry doesn't see that happening where she lives. Her home is two blocks from the proposed station at 103rd Street. CTA's 95th Street station, which now serves as the end of the line, is all the proof she needs. Though it is CTA's busiest station, 95th Street itself has struggled economically. The station is currently undergoing a $280 million renovation.

"There has not been an increase in businesses around that area, and it's been there for years," Henry said. "So we can only hope that we fair a little better with an L station on 103rd."

http://www.wlsam.com/2018/02/02/connected-to-chicago-2-4-2018/

Connected to C c o 2-4-2018)

Feb 2, 2018 | tbravo

Bill Cameron sits down with former Governor, and current candidate for Attorney General, Pat Quinn. They discuss the current situations with “the dreamers,” and why Quinn wants to be Attorney General. Quinn shares his thoughts on Donald Trump, and Bruce Rauner thus far. He also talks about health care, recreational marijuana use, criminal justice reform, sexual harassment in Springfield, and the current Gubernatorial race.

In this week’s round table segment, Bill Cameron is joined by Ray Long of the Chicago Tribune, Greg Hinz of Crain’s, and Lynn Sweet of the Chicago Sun Times. The round table reacts, and shares their thoughts on the current Gubernatorial race. Other topics include DACA, and “the dreamers,” and the round table’s reaction to Donald Trump’s State of the Union Address.

This week’s community spotlight segment with John Dempsey is on the extension of the CTA Red line south to 130th street.

columbiachronicle.com/metro/article_60c9cc46-0880-11e8-aab1-3374093a588a.html

THE COLUMBIA CHRONICLE

CTA proposes route for transportation desert

- Savannah Eadens, Metro Reporter
- Feb 5, 2018

+2

A proposed extension route to the CTA red line will extend the southbound ending from 95th/Dan Ryan to 130th.
Erin Dickson | CHRONICLE

The anticipated Red Line Extension project route proposed by the Chicago Transit Authority promises minimal community damage during construction and thousands of new jobs. But questions about how it will be funded still linger.

The project proposal, announced Jan. 26, is designed to provide new access to rail service for far South Siders. The 5.3-mile extension from its southern tip, 95th Street, would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street, according to a Jan. 31 email interview with Jon Kaplan, a CTA spokesman.

“[The extension will] connect far South Side residents to affordable housing, jobs, services and educational opportunities,” Kaplan said. “The four new stations can help foster economic development in the area and serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.”

CTA chose the route after public feedback from the community, and construction’s scheduling still depends on funding. The earliest construction would begin in 2022, and the project would take about four years and cost about $2.3 billion, according to Kaplan.

Kyle Whitehead, government relations director at Active Transportation Alliance, said the extension is a long-overdue project that has been discussed for decades.

The timeline of the project is typical for a major transportation construction, Whitehead said, but the challenge will be securing funds from state and federal administrations that are trying to spend less on transportation.

“We’re advocating for public dollars to be spent because it is important to have direct spending at every level of government on public transit,” Whitehead said. “That pays dividends for our communities towards economic development, public health and the environmental benefits that come with major transit projects like this one.”

The extension at 95th Street will run along the west side of the Union Pacific Railroad tracks from I-57 south to about 109th Street, then cross the railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street, where it will continue to 130th Street.

“From [ATA’s] perspective as advocates, the service will be similar regardless of which routes they chose,” Whitehead said. “The most important thing is that a route has been chosen and the project is entering the next stage.”

The South Side has long been considered a transportation desert, and the lack of public transit has hindered its communities, Whitehead said.

“While this investment would not completely solve the problem, it could dramatically change the situation for people, businesses and organizations,” Whitehead said. “But it’s important that people living there are benefiting from it and a part of the process of determining how their community is going to be changed and affected by this project.”

CTA will host a public open house at 6 p.m. on Feb. 13 at the Gwendolyn Brooks College Preparatory Academy gymnasium, 250 E. 111th St., to present the plan and get feedback from residents and business owners, Kaplan said.

+2

Erin Dickson | CHRONICLE

P.S. Sriraj, director of the Urban Transportation Center at the University of Illinois at Chicago, said the city needs to look carefully into how the project may change the “flavor” of the neighborhoods. Railways have historically had a positive economic impact on communities, but gentrification cannot be predicted, Sriraj said.

“The only negative with improvement and accessibility [to the Red Line] is that some people may be bought out or forced to move, and it may end up happening in a manner that we might not recognize it,” Sriraj said. “With improvements in accessibility we have to question: Who will be the beneficiaries of those?”

https://archpaper.com/2018/02/cta-announces-route-of-proposed-red-line-expansion/

THE ARCHITECTS NEWSPAPER

CTA announces route of proposed Red Line expansion

By MATTHEW MARANI • February 5, 2018

Midwest Transportation

A rendering of the proposed Red Line expansion is pictured here. (Courtesy CTA)

On January 26, the Chicago Transit Authority announced its ideal path for the proposed expansion of the city's Red Line south branch. The expansion, the system's first since 1993, is a major aspect of Mayor Rahm Emanuel's "Red Ahead" initiative to modernize and lengthen

Chicago's busiest train line. Over 240,000 Chicagoans ride the city's Red Line on an average weekday, representing over 40 percent of "L" ridership.

Map of the proposed Red Line expansion. (Courtesy CTA)

The "Red Ahead" initiative has already delivered tangible improvements to the second largest transport system in the country. Currently, a transit terminal designed by Chicago-based Exp. is rising on 95th Street, the current southern terminus of the Red Line. The $280 million project entails the renovation of the existing North Terminal and the construction of an entirely new South Terminal, with the intended goal of increasing passenger capacity for existing and future commuter demand. The renovated and expanded station will also include two new public artworks by Chicago-based artist Theaster Gates, and is expected to open in 2018.

The Chicago Tribune reports that the proposed route runs from 95th Street, along the preexisting Union Pacific freight tracks, to 130th Street. This route will expand the Red Line by 5.3 miles, add four new stations, and is estimated to cost $2.3 billion. State and local funding for the project is not yet fully realized, and considering the budget priorities laid out by the Trump administration's recently-leaked infrastructure plan, crucial federal funding remains precarious at best. The earliest the project will break ground is 2020, with an approximate four-year construction timeline.

The new stations, located on 103rd Street, 111th Street, Michigan Avenue, and 130th Street, will feature bus and parking facilities as a measure to decrease vehicular congestion within the greater Chicago area. As noted by *NBC Chicago*, the 5.3-mile extension primarily serves Chicago's Far South Side, an area currently designated as a "transit desert" due to its lack of public transport.

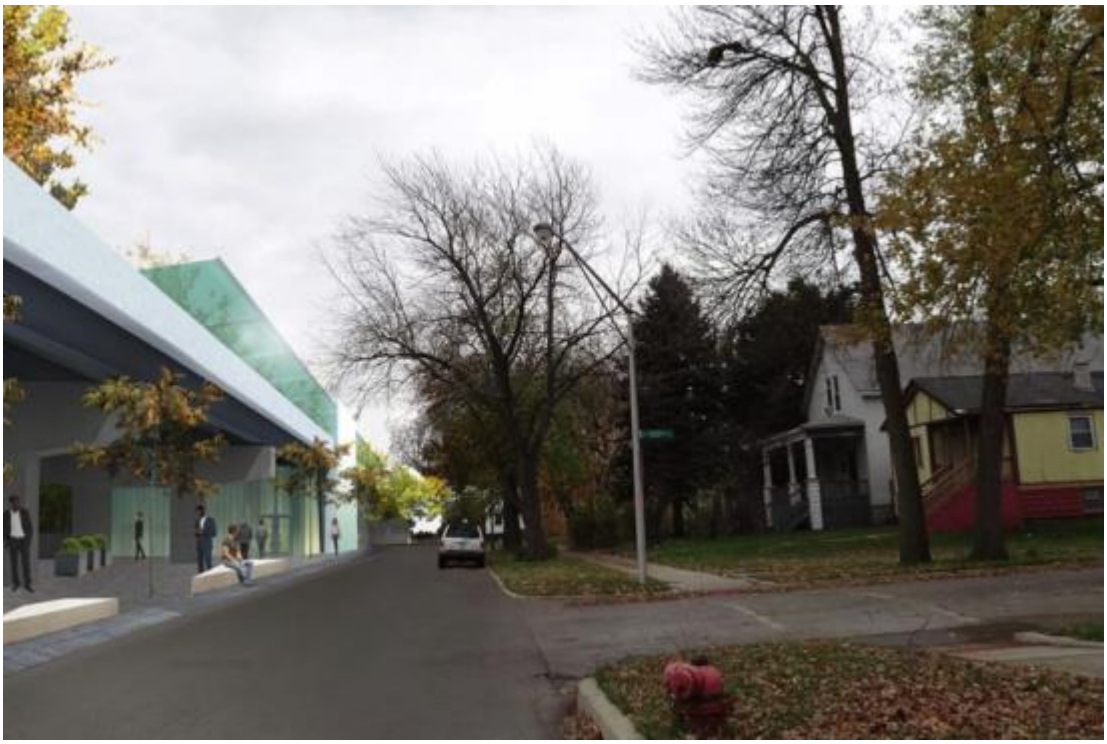

A proposed station within the South Side context. (CTC)

Expanding transportation opportunities in Chicago's South Side could dramatically impact the area's residents. According to *CBS Chicago*, the extension of the Red Line could shave 20 minutes off the commute from the Far South Side to Downtown Chicago, boosting the accessibility of affordable housing in the area. Although transportation projects tend to draw the ire of community groups, interviews conducted by the *Chicago Tribune* with residents and businesses across the proposed Red Line expansion reveal widespread support for the transit initiative.

According to *Progressive Railroading*, a final environmental impact study for the project will be released following a February 13 open house with the surrounding community. Following the study, the CTA can apply for over $1 billion in federal funding.

If funding is secured for the extension of the Red Line, the CTA will still have to contend with the approximately 150 private parcels along the proposed route. The financial and logistical hurdles are great, but the large-scale expansion of Chicago's "L" could prove a boon to residents and city alike.

https://www.chicagoreader.com/chicago/cta-red-line-extension-metra-electric-line/Content?oid=42058971

READER

Can the CTA and Metra play nice?

Benefits of increased cooperation could include fare integration and an alternative to the costly Red Line expansion.

By John Greenfield @greenfieldjohn

- BOBBY SIMS

On January 26, when Mayor Rahm Emanuel and the CTA unveiled the route for the $2.3 billion extension of the Red Line from 95th Street to 130th Street, the big question was where the heck the CTA would get the money from. City officials said they planned to apply for more than $1 billion in federal grants for the project. Trouble is, White House infrastructure adviser DJ Gribbin says that Donald Trump's forthcoming $200 billion infrastructure bill won't include any new revenue and will cut existing transportation funding—specifically, Amtrak and public transit.

For decades transit experts and advocates have pushed for a much cheaper, quicker solution to bring rapid transit to the far south side. The Metra Electric District route, aka the Electric Line, runs more or less parallel to the Red Line and makes eight stops within Roseland, Pullman, and other neighborhoods that would be served by the four extension stations, which are planned near 103rd, 111th, Michigan at 115th, and 130th Streets. Currently the Electric Line runs sporadically during nonrush periods. Running it more frequently, offering, say, 24-hour service at 15-minute intervals, and integrating its fare system with the CTA could likely be done at a fraction of the cost of the extension.

It could also be done a lot more quickly. The proposed project involves acquiring about 150 properties and building elevated tracks and stations. According to the CTA, it won't be fully operational until 2026 at the earliest, and work won't begin until 2022. The Electric Line conversion, which would only require retrofitting existing infrastructure, could almost certainly be completed sooner.

It's too bad the CTA and Metra don't play well together. It's not just that the CTA primarily serves the city, Metra the suburbs. Like the RTA and Pace, each of these transit agencies has its own board of directors—Emanuel appoints the majority of CTA board members, while most of the Metra directors are chosen by politicians from Republican-controlled suburban county boards. On top of that, the CTA and Metra compete with each other for funding and ridership.

The agencies insist that they get along just fine. "We see a cooperative relationship," said spokeswoman Susan Massel of the overseeing Regional Transit Authority, noting that the CTA, Metra, and Pace collaborated on the regional transit strategic plan the RTA approved in January. It calls for $30 billion in funding for transit infrastructure projects in the region, and Massel says all four agencies have committed to lobbying together for a steady annual revenue stream of $2 to $3 billion for capital investments.

But transit advocates argue that this cooperation is the exception that proves the rule.

"There are well-documented and systemic governance and financing problems that make the lack of cooperation between transit agencies predictable," said Active

Transportation Alliance executive director Ron Burke. "From the slow journey to a universal fare card, to funding decisions not tied to a strategic transit vision for the region, to the inability to convert the Metra Electric into a CTA-style service in Chicago, these shortcomings are a function of systemic problems."

Center for Neighborhood Technology executive director Scott Bernstein noted that the CTA and Metra still vie with each other for infrastructure grants from the Federal Transit Administration. "They don't lobby together and they don't put in joint applications, so in what way could you say that they aren't competing in that regard?"

Bernstein said he'd also like to see the RTA, the CTA, and Metra, which each have separate programs for promoting transit-oriented development, work together on this front, something that could not only save money but potentially attract more private-sector investments.

CTA spokeswoman Catherine Hosinski and Metra spokesman Michael Gillis point to the new Loop Link bus rapid transit corridor and the new Union Station Transit Center, which make it easier to transfer from Metra trains to CTA buses, as one example of the agencies' cooperation. And they maintain that the region already has an integrated fare payment system of sorts—the Ventra smartphone app lets CTA and Metra riders add value to their cards and permits Metra passengers to purchase tickets onboard without a surcharge.

Metropolitan Planning Council director Audrey Wennink noted that in some parts of the region the CTA and Metra vie for a larger cut of local sales tax revenue. Of course, they also compete for revenue from customers, and Wennink said it's understandable the agencies are dragging their feet about really integrating fares as opposed to merely sharing the Ventra app. "If a rider who transfers from Metra to CTA only has to pay a small transfer fee and not the full CTA fare, as is the case now, who absorbs that loss in revenue?" she asked.

One thing the agencies and the advocates can agree on is that much of the competition between the CTA and Metra is due to a factor beyond the agencies' control: there isn't sufficient investment in transit. "The funding pie needs to be bigger so we are both adequately funded," Gillis said. Instead, Illinois's budget deal last summer included cuts to state funding for the CTA, Metra, and Pace. As a result, all three systems raised fares this year. Metra also reduced service on some lines, including the Electric Line's Blue Island and South Chicago branches.

Wennink offered a few suggestions for increasing transit funding, including boosting the state gasoline tax—which has been stuck at 19 cents since 1990—and possibly

switching to a distance-based driving tax in the future, so that revenue doesn’t decrease as more people switch from conventional cars to hybrid electric vehicles.

"Ultimately, if the transit agencies weren't so underfunded and not fighting for their lives, they might have more capacity to think creatively," Wennink said. v

John Greenfield edits the transportation news website Streetsblog Chicago.

http://www.chicagotribune.com/news/ct-met-cta-hearing-red-extension-20180212-story.html

Chicago Tribune

Public invited to weigh in on CTA's planned Red Line extension on South Side

The 5.3-mile $2.3 billion Red Line extension, in a CTA proposal announced Jan. 26, 2018, would fill in what community activists have called a “transit desert” on the South Side. (Antonio Perez / Chicago Tribune)

Elvia Malagon Chicago Tribune

The public will get a chance to check out plans, ask questions and even offer their own two cents about plans to extend the Red Line south of 95th Street at a Tuesday night open house hosted by the CTA.

The event will not include a formal presentation, but CTA staff will be on hand to answer questions from 6 p.m. to 8 p.m. Tuesday at the Gwendolyn Brooks College Preparatory Academy gymnasium at 250 E. 111th Street.

ADVERTISING

Last month, the CTA announced the planned route for a 5.3-mile Red Line extension through the Far South Side in an area some activists have deemed a "transit desert." But questions loom about how to pay for such a huge project.

The proposed path starts at 95th Street and would run along the west side of the Union Pacific Railroad tracks from Interstate 57 south to about 109th Street, according to the CTA. From there the line would cross the Union Pacific Railroad tracks and continue along the east side of the tracks until crossing Metra Electric tracks near 119th Street, the CTA says. Then trains would continue south to 130th Street in Chicago's Riverdale neighborhood.

The proposed plan includes four new stations: 103rd Street, 111th Street, Michigan Avenue and 130th Street.

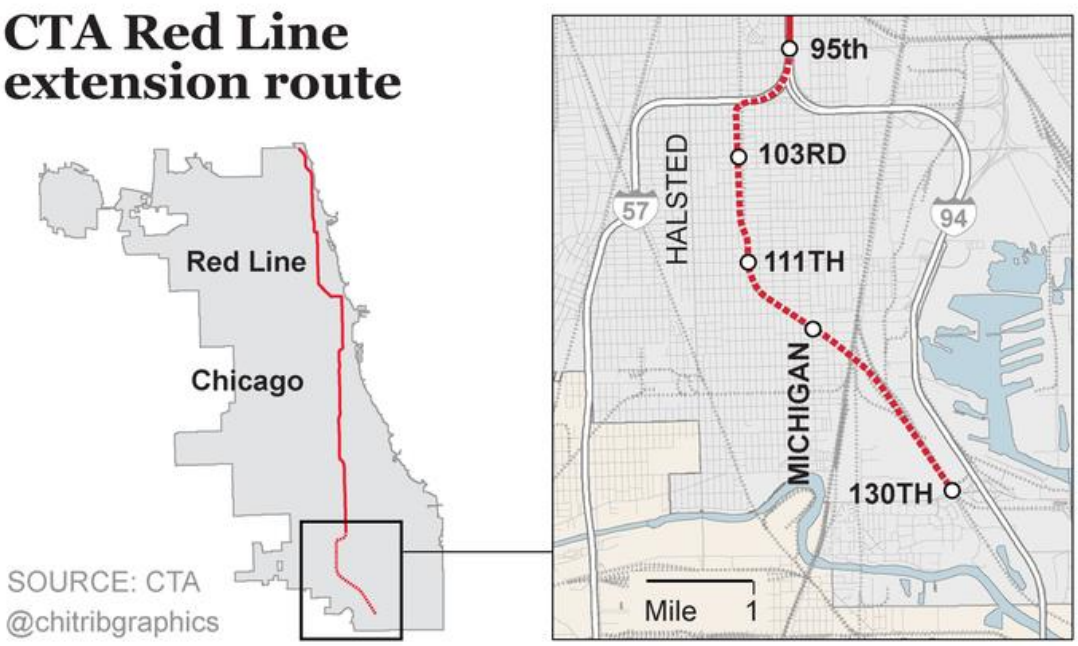

In the past, community activists have called the area the line would extend to a "transit desert" because residents often have to take long bus rides to access trains headed to the Loop.

At Tuesday's event, the focus of discussion will be on the preferred path and how the project may affect residents, the CTA said in an email. Residents can give the CTA written and oral feedback on the extension.

Funding for the project remains uncertain; the transit agency has secured federal, state and local funding to do preliminary work such as an engineering and an environmental analysis. Construction likely would not begin before 2022, and the entire project could take about four years to complete.

Those who cannot attend the open house can visit www.transitchicago.com/redeis for more information, including details about properties the CTA could acquire to move the project forward.

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Twitter @ElviaMalagon

https://chi.streetsblog.org/2018/02/14/south-siders-share-their-thoughts-on-the-red-line-extension/

South Siders Share Their Thoughts on the Red Line Extension Project

- By James Porter
- Feb 14, 2018

THIS POST IS SUPPORTED BY GOGO charters

Attendees look over plans for the Red Line extension. Photo: James Porter

On February 13, a good-sized crowd of Chicago's South Side residents gathered at Gwendolyn Brooks College Prep in Roseland for a CTA open house. The subject under discussion was the extension of the Red Line past its current 95th Street terminal all the way to 130th Street. While this project has been discussed since the Richard J. Daley Era, this time around it may actually happen. In November 2016, Mayor Rahm Emanuel announced $75 million in funding for preliminary engineering for the extension, and last month the city announced the planned route for the new tracks.

The Preferred Alignment for the Red Line extension. Image: CTA

"The CTA has been working on this since 2006," said Sonali Tandon, senior project manager in strategic planning with for the agency, at yesterday's hearing. "We conducted an analysis which was looking at all the possible alternatives for extending the Red Line. That study was finished in 2009. After that, the CTA started working on the draft for the Environmental Impact Statement." That document was published in October 2016. "At that time we had two options that we presented to the public: the east

option and west option of the Preferred Alignment. We had said that we would be coming out back to the public to announce the Select Alignment, which is what this meeting's about."

There has been concern from residents that the construction of new tracks might negatively impact local parks. "The East Option would have impacted two parks, Wendell Smith and Rock Park," Tandon said. "The West Option would have impacted Fernwood Parkway. The preferred alignment would only impact Fernwood Parkway. It is an inactive park; there are are no facilities over there. People could potentially be using it to play, but there is no play equipment over there. We have been working with the Chicago Park District for the past few years, in order to discuss those impacts and to identify mitigations to resolve those impacts. We have identified a replacement park so there would be parks elsewhere that would be used to mitigate the impact to Fernwood Parkway."

Tandon added that there is not enough room in the CTA's existing 98th Street rail yard to accommodate additional service. "The existing rail yard is in the median of the [I-94 / Bishop Ford] expressway," Tandon said. "It is severely constrained, so an extension cannot be accommodated in the same rail yard. We are proposing a new rail yard as part of the project at 120th Street. That would replace the existing yard."

Alderman Anthony Beale talks with residents at the hearing. Photo: James Porter

9th Ward alderman Anthony Beale told me he considers the movement on the Red Line extension be a positive development. “When Mayor Rahm Emanuel first took office in 2011, this was the number one item on the agenda, to make sure that this promise was kept from over forty years ago,” Beale said. “I expressed to him that this is the one item. [Local aldermen] Carrie Austin and Howard Brookins [and I] met with the mayor to make sure this was a priority for the city of Chicago… We’re really excited about how we’re moving forward with this.”

However, local residents seem to have more mixed feelings about the project. “I think it’s a great thing, the Red Line being extended to the Far South Side,” said Deloris Lucas, the leader of the bike group We Keep You Rollin’, who lives in the Golden Gate community. “It should have been incorporated a long, long time ago so that everyone would feel like we were the same type of citizen or resident of Chicago… Right now, the bus ride from 130th to 95th takes almost thirty minutes. That’s ridiculous. Transit should be much faster.”

Attendees Deloris Lucas, James Marshall Jr., and Fatimah Al-Nurridin. Photo: James Porter

Local resident Elaina McLauren would be glad to see the Far South Side get better transit access, but she's concerned about additional train noise. "I think the train should pass 95th street," she said. "But the way that it's being extended is what I have a problem with. It's being extended down the freight train line. I *live* near the freight train line – half a block away. When I chose to move to the Far South Side, it was because the Dan Ryan train was supposed to go down the expressway to 130th street… That was a good route! It didn't bother anybody's property. Now, it's going to bother my *sleep*!"

"The freight train and that CTA train are going to be running at the same time," McLauren added. "They thought it through, but they did not ask the neighborhood. When CTA comes through, the value of my house [will go] *down*. Who wants to live near a train?" She also expressed concern that the construction of the new tracks would damage her home's foundation.

Her companion Tommy McLauren questioned the location of the 130th Street station, which will serve the Altgeld Gardens housing project, but not much else. "When you get out there, there's nothing out there."

South Sider Ronald Jackson questioned Emanuel's motives in pushing for the Red Line extension at this point in the election cycle. "Why now, all of a sudden?" he asked. This is about an election. This is not about us. And if this project does get off the ground, what's the percentage of minorities having contracts?"

Jackson argued that since few Chicago pubic schools teach skills like carpentry, drafting, and welding nowadays, young people on the Far South Side won't be able to compete for jobs building the extension. "How is this gonna benefit us? This is going to benefit Rahm's people, and some of these – I hate to say – Uncle Tom aldermen who sit up here talking about they're for us."

Work on the Red Line wouldn't begin until 2022, and service wouldn't launch until 2026 at the earliest. That's if — and this is a big if — Chicago can secure funding for the $2.3 billion project. Things aren't looking good though, because Donald Trump's recently released infrastructure plan calls for cutting federal funding for transit. Some local transportation experts and advocates have proposed converting the Metra Electric District commuter line to rapid transit service as a quicker, cheaper alternative to building the Red Line Extension.

http://thechicagocitizen.com/news/2018/feb/21/minority-contractor-will-contribute-red-line-exten/

weekly Citizen

Minority Contractor will Contribute to Red Line Extension

Black History Focus

2/21/2018, 1:31 p.m. | Updated on 2/21/2018, 1:31 p.m.

Steven Garth, Sr.

Minority Contractor will Contribute to Red Line Extension
By Christopher Shuttlesworth

Skidmore, Owings & Merrill, under the direction of Contractor Myron Goldsmith, completed the Chicago Dan Ryan Line in 1969. But due to current track conditions, Red Line riders are now experiencing longer travel times, more-crowded trains and less-reliable service, which has led the city to begin plans of reconstructing and extending the red line, according to the Chicago Transit Authority (CTA).

“It was 43 years ago that the CTA unveiled the newest line the (Dan Ryan),” said Terry Peterson, CTA chairman. “A lot has happened in Chicago since then and the South Red Line has become one of the busiest (L)

systems carrying more than 80,000 people on a week day.”

While Black contractors didn’t participate in building the Dan Ryan (Red) Line during the Civil Rights Movement, today, more Black Contractors like Garth Construction Services Corp., are Helping with the $2.3 billion dollar expansion of the Red Line.

Steven A. Garth Sr., chief executive officer (CEO) of Garth Construction Services Corp., a minority (MBE) family-owned operating company, and co-founder of Black Contractors United, said he is excited to be contributing to the work on the Red Line extension.

“I’m more than enthused due to the fact that we’ve worked on the Blue line, Green line and Brown line,” Garth Sr., said. “The Red Line is in our neighborhood and I’m happy.”

Garth Sr., graduated from Olive Harvey College in 1981 with two associate degrees in Construction Management and Architectural and Design. He also minored in Building design, Blueprint Reading, Estimating Business Law and Accounting.

In the last 40 years, Garth Sr., has contributed to the Skyline of Chicago, “Brick by Brick,” including the Comiskey Park, McCormick Place II, III and IV, The Harold Washington Library, the Leo Burnett Building, AT&T Corporate Building, O’Hare International Airport, Millennium Park and many Chicago Public Schools.

As the winner of 2016 Outstanding Minority Contractor of the Year, Garth Sr., advises all young contractors to attend a college to obtain trade training.

“They need to go to school to learn how to read blue print, estimate and learn the overall trade,” he said.

The proposed 5.3-mile Red line extension includes four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street, according to a city of chicago press release. The project is expected to create an estimated 6,200 jobs including bus and parking facilities at the new stations.

http://inthesetimes.com/article/20942/chicago-south-side-cta-train-red-line-jobs-rosemont-rent-control

IN THESE TIMES

Chicago's Red Line train will be extended by 35 blocks. (Daniel Schwen / Wikimedia Commons)

WEB ONLY / FEATURES » FEBRUARY 26, 2018

Chicago's Far South Side Is Finally Getting a Train—And It's Thanks to Decades of Organizing

Residents hope the transit extension will shorten commutes and bring much-needed jobs.

BY PATRICK CORLEY

There's a "balancing act," LaFargue admits, between improving a community and gentrifying it. He cites rent control as a potential solution.

On Chicago's North Side, Michigan Avenue, is home to the Magnificent Mile, a super-dense corridor of gleaming skyscrapers and luxury shopping. But just a few miles south, in the predominantly Black neighborhood of Roseland, the same street serves as a reminder of the great disparities plaguing the city—swathes of vacant land, bricked and boarded windows, seemingly more parking lots than buildings.

Not helping this divide is the fact that Roseland and adjacent neighborhoods Pullman, West Pullman and Riverdale have been cut off from the city's rail system (the "L"), and the attendant jobs and investment that tend to accompany transit. But at a January 26 press event, Mayor Rahm Emanuel and Chicago Transit Authority (CTA) officials unveiled their plan to finally extend the L's Red Line by more than five miles, to the southern limits of the city. On February 13, the CTA presented the plan to Roseland at an open house in a school gymnasium, where city officials fielded questions and concerns from residents, many of whom seemed excited—though skeptical in light of the city's track record of unfulfilled promises.

The four new stations, placed about a mile apart, will drastically reduce commute times for Far South Side residents, who are now forced to take buses as many as 35 blocks before even getting on the train. They may also, residents hope, attract businesses and end food deserts.

This is a victory that Roseland and adjacent communities have spent generations fighting for.

Michael LaFargue is the president of the Red Line Extension Coalition (RLEC), the grassroots collection of organizers driving this massive infrastructure project. There is hope in his voice as he envisions Roseland's future, imagining a "Magnificent Mile South," an urban mecca of shopping, parks, theatres and Black-owned business. While gentrification is a fear, LaFargue anticipates that this new connection to the rest of the city will attract businesses and transit-oriented development that can restore Roseland to its former relative glory and beyond.

The RLEC continues the work done by the Developing Communities Project, a nonprofit first led by Barack Obama in the 1980s. But the mission for equal transit began long before that.

Seventeen years after the L first opened, the 1909 Plan of Chicago, co-authored by master architect Daniel Burnham, envisioned beautiful parks and mass public transportation reaching all across the city. As the network evolved throughout the century, this vision came true for the North and West Sides. But the South Side, as LaFargue says, “has been left out.”

In the 1960s, Mayor Richard J. Daley promised to extend the trains beyond 95th Street, but this aim sat on the back burner as the city prioritized other infrastructure ventures. Jacky Grimshaw at the Center for Neighborhood Technology explains that the “supposedly objective” metrics used in deciding what to focus on, such as cost per mile and population density, “were skewed against communities on the Far South Side.”

The Far South Side is more than 90 percent African-American and in the 1970s formed a core of Chicago’s Black middle class. But as manufacturing declined and the city prioritized downtown development, the region saw massive job loss and now has among the city’s lowest median household incomes. Ledall Edwards, owner of Edwards Fashions, laments the “dramatic transition” that Roseland has undergone since his family opened the business in 1974. He says that over the years the city has been unresponsive to local efforts toward re-development, and he worries that the community is “not at the table” for future planning.

LaFargue acknowledges that, when it comes to the Red Line, the CTA has been mostly receptive to the community’s concerns about the path of the extension and the residents that could be displaced.

But he shares many of Edwards’ broader concerns: “Where the private sector fails,” he says, “the government’s supposed to come in and do better. … And it doesn’t seem like they’re doing that.”

The region has been among the hardest hit by recent austerity measures by both city and state government. In 2013, Emanuel’s administration closed dozens of schools on the South and West Sides, including four in Roseland and West Pullman. Roseland Community Hospital, where nearly two-thirds of patients are on Medicaid, is still reeling from devastating cuts caused by a

two-year deadlock of the Illinois state budget. Roseland and its neighbors, with the highest percentage of public pension holders in the city, continue to suffer disproportionately from the $130 billion pension crisis, which threatens to slash monthly retirement payouts by as much as 20 percent.

In light of all this, says LaFargue, the extension is a welcome “step forward.”

But advocates recognize that the L extension is a double-edged sword. Alongside the benefits, better transit can lead to increased land values and higher rents that tend to push residents out. There’s a “balancing act,” LaFargue admits, between improving a community and gentrifying it. He cites rent control as a potential solution. Although it’s been outlawed in the state for two decades, rent control has recently been proposed by local lawmakers such as state Rep. Will Guzzardi (D) and Alderman Carlos Ramirez-Rosa.

LaFargue sees worker-owned cooperative businesses as another way to stave off gentrification, and stresses the importance of union jobs. He wants to make sure the wealth generated by Roseland’s new investments stays in Roseland.

The extension is set to open around 2026. Until then, there are some hurdles to clear as the project enters the funding phase. Lawmakers must negotiate concessions from state and local coffers; LaFargue sees a progressive income tax and a financial transaction tax as answers to the project’s $2.1 billion price tag.

But the real need is federal funding, which the city will apply for as it submits an environmental impact study to the Federal Transit Administration. Since the creation of the national highway system, cities have relied on a near-50 percent match in federal funds for this type of infrastructure project. But the current administration is likely to dole out closer to 20 percent, according to Kyle Whitehead at the Active Transportation Alliance, leaving underserved communities like Roseland in limbo.

In the meantime, LaFargue and the coalition will open dialogues for residents to have as much input as possible in deciding which developments will arrive at each station. The people of Roseland, LaFargue says, are “not just sitting there waiting. … We’re working.”

https://www.chicagoreader.com/chicago/cta-red-line-extension-metra-electric-line/Content?oid=42058971

READER

Would far-south-siders be willing to swap the long-awaited Red Line extension for a cheaper, quicker solution?

Residents of Roseland, Pullman, and other neighborhoods south of 95th weigh in on the Electric Line conversion.

By John Greenfield @greenfieldjohn

click to enlarge

Lelea Herring near the planned location of the 103rd Street Red Line stop

JOHN GREENFIELD

Thanks to Donald Trump, the funding outlook for the long-awaited $2.3 billion Red Line extension—proposed and postponed since the Nixon administration—looks pretty bleak right now.

In late January, Mayor Rahm Emanuel announced the planned route south from the current stopping point of 95th, winding 5.3 miles across Roseland and Pullman to Altgeld Gardens, with stations proposed near 103rd, 111th, Michigan at 116th, and 130th Streets. At the time the CTA was hoping to apply to the Federal Transit Administration for upward of $1 billion from its New Starts grant program, the main source of federal funding for public transportation expansion projects. But Trump's much-ballyhooed $1.5 trillion infrastructure bill, released February 11, contains no new revenue and, to make matters worse, his 2019 budget proposal calls for slashing $3.7 billion from New Starts. It looks like it might be impossible to fund the extension until a Chicago-friendly Democrat is in the White House again. Even in a best-case scenario, construction wouldn't begin until 2022, and service wouldn't start until 2026.

But for decades transit experts and advocates have pointed to a much cheaper alternative for bringing rapid transit to the far south side. The Metra Electric District line runs more or less parallel to the Red Line and makes eight stops in the neighborhoods that would be served by the extension. It would be relatively easy to convert it to el-style frequent service and integrate its fare system with the CTA. And while the Red Line project breaks down to $434 million per mile, local policy analyst Daniel Kay Hertz has estimated that converting Metra for the purpose would cost only $27 million a mile.

So far, however, discussion of this alternative possibility has been missing some important voices: those of the residents who'd stand to gain the most from the service extension. Would they be willing to trade a longer Red Line for cheap, frequent Metra service if it meant getting the improvements sooner than later?

To find out, I rode the train to 95th and traced the path of the proposed extension, buttonholing neighbors near the planned station locations.

From 95th the new tracks would run south along the Dan Ryan, then bend west along the north side of I-57 for about half a mile. Near Eggleston Avenue the Red Line would head south along the west side of the Union Pacific Railroad corridor.

At 103rd and Eggleston I met Lelea Herring, a retired surgical technician who lives nearby. She regularly takes the 103rd Street bus to the Red Line, rides north to Roosevelt, and then takes another bus west to Damen to see her doctor on the Illinois Medical Campus.

Herring was somewhat familiar with the Red Line extension plan. "It's convenient for me because it brings the train closer," she said. When I told her that it wouldn't be ready to ride until 2026 she wondered, "Oh Lord, will I even be here?" But she noted

that rapid transit service on the Electric Line wouldn't do her much good either—the 103rd Street/Rosemoor Metra station is about the same distance from her home as the 95th Street terminal.

Around 108th Street the proposed Red Line route would cross to the east side of the Union Pacific tracks and continue south. Near the planned 111th station location I encountered Bruce Huskin, 58, who lives just south and works as a handyman. While he's enthusiastic about the possibility of having an el stop right by his house, he said inexpensive, frequent service on the Electric Line would also be useful for getting downtown, since he could ride a bus about a mile east to the 111th/Pullman Metra stop. "Whichever comes first, I'd be really excited for," he said.

After 111th, the Red Line would continue to hug the Union Pacific line as the railroad turns southeast and climbs an embankment to an overpass near 116th and Michigan. There I met Anthony Brown, 34, who lives near 115th and State and serves as a Safe Passage worker for Curtis Elementary, which is right by his home. On February 13 the CTA held an open house about the extension at nearby Gwendolyn Brooks College Prep. He said his neighbors and coworkers are looking forward to getting a Red Line stop nearby.

"We'd kind of given up because we hadn't heard anything for a while, but now the city is buying properties and asking questions," Brown said. "That's something a lot of us are really happy to see."

On the other hand, Brown said, if the Red Line extension wouldn't open for another eight years or more, the Electric Line conversion might be a good consolation prize. It would still be convenient for him—the 115th/Kensington station is about a ten-minute walk east from his house. And because the current Metra fare to the Loop is $5.50, paying the $2.50 CTA fare instead would be a significant savings.

After Michigan, the Red Line extension would continue southeast, cross the Electric Line, and join the South Shore Line corridor on its way to the future 130th Street station, located just northeast of Altgeld Gardens. Residents of that community would benefit greatly from the new el stop, since it would cut an estimated 20 minutes from their downtown commutes. The nearest Chicago Metra stop is at 121st and Michigan, about a ten-minute ride from the middle of the housing project via the #34 South Michigan bus.

At the point where the South Shore tracks pass under 130th Street, the thoroughfare is a high-speed four-lane road with no sidewalks and little foot traffic, so I headed west a few blocks to Rosebud Farms grocery store to talk with locals. There I spoke with

Sam McCarthy, a construction worker who lives three miles northwest at 122nd and Elizabeth, right by the Electric Line's Racine station.

Although the Metra solution would give him inexpensive, frequent train access, he favors the Red Line extension. "[The Electric conversion] would be a good idea too, but it wouldn't create as many construction jobs," he said.

Obviously the pros and cons of the Red Line project and the Metra Electric conversion depend on where you live and where you need to go. But the latter definitely deserves further consideration. Far-south-siders have already been put off since the 70s. They shouldn't have to wait until the Trump administration is just a bad memory before they get rapid transit service.

Attachment 3
Elected Official and Community Meeting Sign-In Sheets

Elected Official Sign-In Sheets

Community Group Sign-In Sheets

PROJECT: CTA Red Line Extension Project
MEETING: Elected Officials Coordination
DATE: January 24, 2018 at 11:00am
LOCATION: City Hall, 121 N. La Salle Drive, Room 200-B

Name	Organization	Email Address	Present at Meeting (Initial)	Present via Phone (circle "Yes")
Carole Morey	CTA	cmorey@transitchicago.com		Yes
Sonali Tandon	CTA	standon@transitchicago.com		Yes
Leah Mooney	CTA	lmooney@transitchicago.com		Yes
Gerald Nichols	CTA	gnichols@transitchicago.com		Yes
Sukmeke Watkins	CTA	swatkins@transitchicago.com		Yes
Leslie Boucrée	CTA	lboucree@transitchicago.com		Yes
Alderman Anthony A. Beale	9th Ward			Yes
Alderman Carrie M. Austin	34th Ward			Yes
Chester Wilson	34th Ward			Yes
				Yes
				Yes

PROJECT: CTA Red Line Extension Project
MEETING: Elected Officials Coordination
DATE: January 24, 2018 at 1:00pm
LOCATION: City Hall, 121 N. La Salle Drive, Room 200-B

Name	Organization	Email Address	Present at Meeting (Initial)	Present via Phone (circle "Yes")
Carole Morey	CTA	cmorey@transitchicago.com		Yes
Sonali Tandon	CTA	standon@transitchicago.com	ST	Yes
Leah Mooney	CTA	lmooney@transitchicago.com		Yes
Gerald Nichols	CTA	gnichols@transitchicago.com	✓	Yes
Sukmeke Watkins	CTA	swatkins@transitchicago.com		Yes
Leslie Boucrée	CTA	lboucree@transitchicago.com		Yes
Alderman Michelle A. Harris	8th Ward			Yes
Alderman Roderick Sawyer Winston McGill	6th Ward	Winston.mcgill@6ward.com	WM	Yes
Alderman Howard B. Brookins	21st Ward			Yes
James Ramos	21st Ward			Yes
Alderman Joe Moore	49th Ward			Yes

Name	Organization	Email Address	Present at Meeting (Initial)	Present via Phone (circle "Yes")
Alderman Greg Mitchell	7th Ward			Yes
Monique Batteast	7th Ward			Yes
Alderman Susan Sadlowski Garza	10th Ward	Susan Sadlowski Garza	SA	Yes
Osvaldo Carabullo Jr	17th Ward	Osvaldo.Carabullo@cityofchicago.org	O.C	Yes
Jerome Wade II	17th ward	Jerome.Wade@cityofchicago.org		Yes
Margaret Dever	8th Ward	margaret.dever@cityofchicago.org	md	Yes
JAMES RAMOS	21ST WARD	jramos@cityofchicago.org		Yes
Daniel Moore	17TH Ward	david.moore@cityofchicago.org.		Yes
				Yes
				Yes
				Yes

PROJECT: CTA Red Line Extension Project
MEETING: Elected Officials Coordination
DATE: January 25, 2018 at 10:00am
LOCATION: Rep. Slaughter's Office, 1234 W. Racine Ave.

Name	Organization	Email Address	Present at Meeting (Initial)	Present via Phone (circle "Yes")
Carole Morey	CTA	cmorey@transitchicago.com		Yes
Sonali Tandon	CTA	standon@transitchicago.com	SA	Yes
Leah Mooney	CTA	lmooney@transitchicago.com		Yes
Gerald Nichols	CTA	gnichols@transitchicago.com		Yes
Sukmeke Watkins	CTA	swatkins@transitchicago.com		Yes
Leslie Boucrée	CTA	lboucree@transitchicago.com		Yes
Cong. Bobby L. Rush	1st District			Yes
Robyn Grange-Wheeler	1st District	robyn.wheelergrange@mail.house.gov		
Cong. Danny K. Davis	7th District			Yes
Sen. Donne E. Trotter	17th District			Yes
Sen. Jacqueline Y. Collins	16th District			Yes

Name	Organization	Email Address	Present at Meeting (Initial)	Present via Phone (circle "Yes")
Kathryn Welch	16th District	KATHRYN.WELCH@SBCGLOBAL.NET		Yes
Rep. Thaddeus Jones	29th District			Yes
Saprina Martin	29th District			Yes
Myeshah Hollis	29th District			Yes
Rep. Mary Flowers	31st District			Yes
Comsr. Stanley Moore	4th District	Stanley.moore@yahoo	SM	Yes
Cong. Robin Kelly	2nd District			Yes
Vaughn Roland	2nd District	vaughn.roland@mail.house.gov		Yes
Rick Bryant	2nd District	rick.bryant@mail.house.gov	RB	Yes
Sen. Tammy Duckworth	8th District			Yes
Loren Harris	8th District	loren_harris@duckworth.senate.gov		Yes
Sen. Emil Jones	14th District			Yes

PROJECT: CTA Red Line Extension Project
MEETING: Elected Officials Coordination
DATE: January 25, 2018 at 10:00am
LOCATION: Rep. Slaughter's Office, 1234 W. Racine Ave.

Name	Organization	Email Address	Present at Meeting (Initial)	Present via Phone (circle "Yes")
Rep. Marcus Evans	33rd District		M.E.	Yes
Micaela Smith	33rd District			Yes
Rep. Elgie R. Sims	34th District			Yes
Rep. Justin Slaughter	27th District			Yes
Rep. Robert Rita	28th District			Yes
Comsr. Deborah Sims Paulette Corner	5th District	Paulette.Corner@cookcountyil.gov	PC	Yes
Paulette Corner	5th District	Kim Jones Thompson ~~FO~~ Kim.Jones@cookcountyil.gov	KJT	Yes
Rep. Thaddeus Jones Saprina Martin Jones Myeshah Hollis	29th District		MH. S.M.	
				Yes
Earl Bell	17th Dist.			Yes
				Yes

Red Line Extension

Organization: Agape Community Center

cta

Date: Thursday, March 8, 2018 **Time:** 9:30 AM **Meeting Location:** Agape Community Center, 342 W. 111th St., Chicago, IL

Name	Address	Zip Code	Email Address
Marc Henkel	Agape Center 342 W. 111th St. CHICAGO, IL	60628	Marc.henkel@cru.org
Milton Massie	Agape Center 342 W. 111th St CHICAGO	60628	Milton.Massie@cru.org
Ken Lautenbach	Hope Dev. Corp. 18410 S. 115th Ave. Orland Park, IL	60467	
Brad Harry	342 W 111th St, Chicago, IL	60628	brad.harry@cru.org
Cynthia Massie	342 W 111th Chicago	60628	cynthia.massie@cru.org
Sandy Henkel	342 W 111th St ~~[illegible]~~	60628	sandy.henkel@cru.org
Leah Mooney	CTA 567 W. Lake	60661	lmooney@transitchicago.com
Gerald Nichols	CTA	60661	gnichols@transitchicago.com
Sonali Tandon	CTA	60661	standon@transitchicago.com
Lilliane Webb	CWC Transit Group	60602	lpwebb@metrostrategiesinc.com

RED AHEAD Moving Ahead to a Better Red

Red Line Extension

Date: Monday, April 16, 2018
Time: 2:00 PM
Meeting Location: 13330 S. Corliss, Chicago, IL

cta

PLEASE SIGN IN. (PLEASE PRINT)

NAME	ADDRESS	ZIP CODE	E-MAIL
[illegible]	13202 S. Corliss	60827	
Marguerite F. Jacobs	755 E 130th Place	60827	jacobsmarguerite@yahoo.com
Franklin Sharpe	6158 131st	60827	FrankSharpe56@gmail.com
Cheryl Johnson	13330 So. Corliss	60827	CherylJohnsonPCR@gmail.com
Lamar Herron Jr	435 E. 109th St.	60628	
Gwenda Hoskins	12842 S. Union Ave	60628	gwendahoskins@yahoo.com
[illegible]	13224 S. Corliss	60827	- Herring -
Gerald Nichols	567 W. Lake St	60661	gnichols@transitchicago.com

Attachment 4
Agency Involvement

Cooperating & Participating Federal Agency Letter

Cooperating & Participating Federal Agency and Tribal Mailing List

Letters to Agencies that Provided Comments on the Draft EIS

Participating Nonfederal Agency Letter

Participating Nonfederal Agency Mailing List

Cooperating and Participating Federal Agency Letter

January 26, 2018

[Insert Name]
[Agency]
[Insert Address]
[Insert, City, State, Zip]

Re: CTA Red Line Extension Project
Update - Preferred Alignment Selected

Dear XXXXXX:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

Your agency has previously accepted to be a participating agency for this project. All interested parties are invited to attend the upcoming public open house, during which CTA will present information about the Preferred Alignment and anticipated project benefits and impacts. The open house will be held at the time and location described below. Representatives from your agency are encouraged to attend.

Tuesday, February 13, 2018
6:00 - 8:00 PM
Gwendolyn Brooks College Preparatory Academy
Main Gym (west side of building)
250 E. 111th. Street, Chicago, IL 60628
Please enter through Door 8. Parking available in rear of building.
Parking lot entrance via King Drive.

Additional information about the project is available at the project website: transitchicago.com/RedEIS.

If you have any questions or would like to discuss the project further, please do not hesitate to contact either:

Sonali Tandon
Senior Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661
(312) 681-4246
standon@transitchicago.com

Tony Greep
Community Planner
US Department of Transportation
Federal Transit Administration – Region 5
200 W. Adams Street, Suite 320
Chicago, IL 60606
(312) 353-1646
anthony.greep@dot.gov

Thank you for your cooperation and continued participation in this project.

Sincerely,

Tony Greep
Community Planner

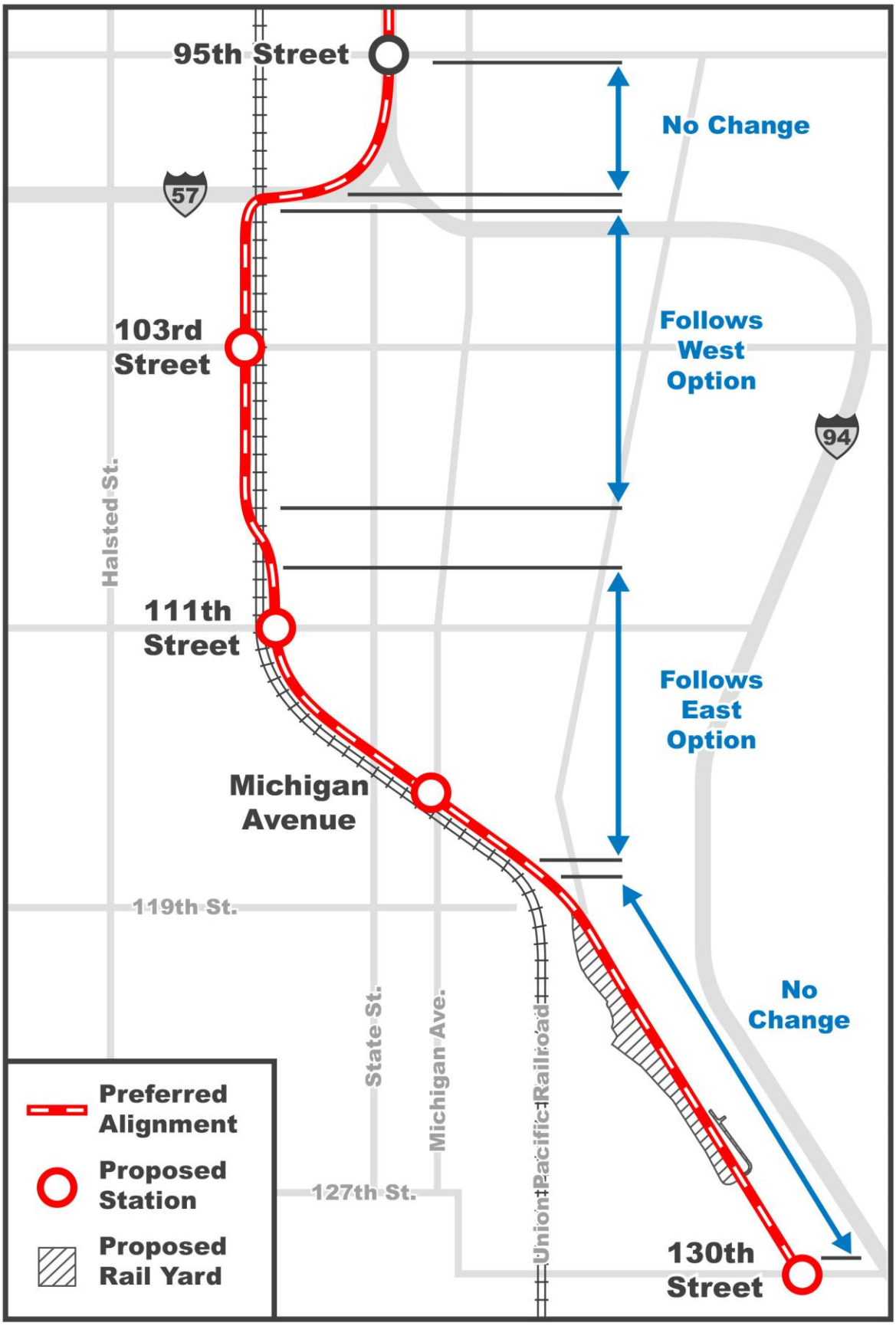

CTA Red Line Extension Project
Preferred Alignment

Cooperating and Participating Federal Agency and Tribal Mailing List

Red Line Extension Project
List of Cooperating and Participating Agencies

RLE Project Involvement	Category	Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Participating Agency	Government Agency; Participating Agency	Federal	Department of Energy	To	Dr.	Ernest	Moniz	Secretary	1000 Independence Avenue SW		Washington	DC	20585
Participating Agency	Government Agency; Participating Agency	Federal	Department of Health and Human Services	To	Ms.	Kathleen	Falk	Regional Director - Region 5	233 N. Michigan Avenue	Suite 1300	Chicago	IL	60601
Participating Agency	Government Agency; Participating Agency	Federal	Department of Housing and Urban Development	To	Ms.	Beverly	Bishop	Deputy Regional Director	77 W. Jackson Boulevard		Chicago	IL	60604
Participating Agency	Government Agency; Participating Agency	Federal	Department of Housing and Urban Development	cc	Ms.	Melanie	Haywood	Field Environmental Officer	77 W. Jackson Boulevard	Room 2420	Chicago	IL	60604
Participating Agency	Government Agency; Participating Agency	Federal	Department of Housing and Urban Development	cc	Mr.	Steve	Vahl	Region 5 Environmental Officer	77 W. Jackson Boulevard	Room 2420	Chicago	IL	60604
Participating Agency	Government Agency; Participating Agency	Federal	Federal Emergency Management Agency	To	Ms.	Janet	Odeshoo	Deputy Regional Administrator, Region V	536 S. Clark Street	6th Floor	Chicago	IL	60605
Participating Agency	Government Agency; Participating Agency	Federal	Federal Emergency Management Agency	cc	Mr.	Nicholas	Mueller	Regional Environmental Officer	536 S. Clark Street	6th Floor	Chicago	IL	60605
Participating Agency	Government Agency; Participating Agency	Federal	Federal Railroad Administration	To	Mr.	Laurence	Hasvold	Regional Administrator	200 West Adams	Suite 310	Chicago	IL	60606
Participating Agency	Government Agency; Participating Agency	Federal	Transportation Security Administration	To	Mr.	Christopher	McKay	Industry Engagement Manager; Mass Transit and Passenger Rail	601 S. 12th Street		Arlington	VA	20598
Participating Agency	Government Agency; Participating Agency	Federal	U.S. Fish and Wildlife Service	To	Ms.	Kathy	Pollack	Field Supervisor - Chicago Field Office	1250 South Grove	103	Barrington	IL	60010
Participating Agency	Tribe; Participating Agency	Tribe	Citizen Potawatomi Nation	To	Mr.	John	Barrett	Chairperson	1601 S. Gordon Cooper		Shawnee	OK	74801
Participating Agency	Tribe; Participating Agency	Tribe	Forest Country Potawatomi	To	Mr.	Harold	Frank	Chairperson	5416 Everybody's Road P.O. Box 340		Crandon	WI	54520
Participating Agency	Tribe; Participating Agency	Tribe	Ho-Chunk Nation	To	Mr.	Bill	Quackenbush	Tribal Historic Preservation Officer	P.O. Box 667P		Black River	WI	54815
Participating Agency	Tribe; Participating Agency	Tribe	Peoria Tribe of Indians of Oklahoma	To	Mr.	John F.	Froman	Chief	118 S. Eight Tribes Trail		Miami	OK	74354
Participating Agency	Tribe; Participating Agency	Tribe	Pokagon Band of Potawatomi Indians	To	Mr.	Michael	Zimmerman	Tribal Historic Preservation Officer	58620 Sink Road		Dowagiac	MI	49047
Participating Agency	Tribe; Participating Agency	Tribe	Potawatomi Nation-Hannahville Indian Community	To	Mr.	Kenneth	Meshigaud	Tribal Chairperson	N14911 Hannahville Boulevard		Wilson	MI	49896
Participating Agency	Tribe; Participating Agency	Tribe	Prairie Band of Potawatomi Nation	To	Mr.	Steve	Ortiz	Chief	16281 Q Road		Mayetta	KS	66509
Participating Agency	Tribe; Participating Agency	Tribe	Sac and Fox Nation of Mississippi in Iowa	To	Mr.	Troy	Wanatee	Chairman	349 Meskwaki Road		Tama	IA	52339
Participating Agency	Tribe; Participating Agency	Tribe	Sac and Fox Nation of Missouri	To	Mr.	Edmore	Green	Chairperson	305 N. Main Street		Reserve	KS	66434
Participating Agency	Tribe; Participating Agency	Tribe	Sac and Fox Nation of Oklahoma	To	Ms.	Sandra	Massey	Tribal Historic Preservation Officer	Rt. 2 Box 246		Stroud	OK	74079
THESE AGENCIES WILL RECEIVE INDIVIDUAL LETTERS BECAUSE THEY PROVIDED COMMENTS ON THE DRAFT EIS													
Participating Agency	Government Agency; Participating Agency	Federal	U.S. Environmental Protection Agency	To	Mr.	Kenneth	Westlake	Chief, NEPA Implementation Section	77 W. Jackson Boulevard		Chicago	IL	60604
Participating Agency	Government Agency; Participating Agency	Federal	U.S. Environmental Protection Agency	cc	Mr.	Robert	Kaplan	Acting Regional Administrator - Region 5	77 W. Jackson Boulevard		Chicago	IL	60604
Participating Agency	Government Agency; Participating Agency	Federal	U.S. Environmental Protection Agency	cc	Ms.	Virginia	Laszewski	NEPA Review	77 W. Jackson Boulevard		Chicago	IL	60604
Participating Agency	Government Agency; Participating Agency	Federal	Department of Interior	To	Ms.	Lindy	Nelson	Regional Environmental Officer, Office of Environmental Policy and	200 Chestnut Street	Custom House,	Philadelphia	PA	19106-2904
Participating Agency	Tribe; Participating Agency	Tribe	Miami Tribe of Oklahoma	To	Ms.	Diane	Hunter	Tribal Historic Preservation Officer	PO Box 1326		Miami	OK	74355

Red Line Extension Project
List of Cooperating and Participating Agencies

RLE Project Involvement	Category	Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Cooperating Agency	Government Agency; Cooperating Agency	Federal	Federal Highway Administration	To	Mr.	Norman	Stoner	Division Administrator, Illinois Division Office	3250 Executive Park Drive		Springfield	IL	62703
Cooperating Agency	Government Agency; Cooperating Agency	Federal	Federal Highway Administration	cc	Mr.	Chris	Byars	Metropolitan Transportation Engineer	200 W. Adams Street	Suite 330	Chicago	IL	60606
Cooperating Agency	Government Agency; Cooperating Agency	Federal	Federal Highway Administration	cc	Mr.	Matt	Fuller	Environmental Programs Engineer	3250 Executive Park Drive		Springfield	IL	62703
Cooperating Agency	Government Agency; Cooperating Agency	Federal	Federal Highway Administration	cc	Mr.	Mike	Hine	Engineering Team Leader	3250 Executive Park Drive		Springfield	IL	62703

Letters to Agencies that Provided
Comments on the Draft EIS

January 26, 2018

Kenneth A. Westlake
Chief, NEPA Implementation Section
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, IL 60604

Re: CTA Red Line Extension Project Update - Preferred Alignment Selected
Draft Environmental Impact Statement

Dear Mr. Westlake:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line–CTA's busiest rail line–south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options. FTA and CTA received letter dated November 29, 2016 from USEPA, which rated the RLE Draft EIS as Lack of Objections and provided recommendations for the Final EIS. We would like to thank you for your review of the Draft EIS and recommendations for the Final EIS.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or

West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

The Final EIS will be prepared on this single selected option. CTA recognizes your recommendations for the Final EIS related to Environmental Justice and Community Engagement, Noise Impacts and Mitigations, Air Quality Impacts and Mitigations, Station and Station Area Development, Climate Change Adaptation and Resiliency, and Wetland and Natural Areas. We will consider these recommendations to add clarifications, conduct additional analysis, add supplemental documentation, and further develop and finalize the mitigation measures in the Final EIS. All correspondence including approved mitigation measures and commitments will be included in the Final EIS.

All interested parties are invited to attend the upcoming public open house, during which CTA will present information about the Preferred Alignment and anticipated project benefits and impacts. The open house will be held at the time and location described below. Representatives from your agency are encouraged to attend.

Tuesday, February 13, 2018
6:00 - 8:00 PM
Gwendolyn Brooks College Preparatory Academy
Main Gym (west side of building)
250 E. 111th. Street, Chicago, IL 60628
Please enter through Door 8. Parking available in rear of building.
Parking lot entrance via King Drive.

Additional information about the project is available at the project website: transitchicago.com/RedEIS.

If you have any questions or would like to discuss the project further, please do not hesitate to contact either:

Sonali Tandon
Senior Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661
(312) 681-4246
standon@transitchicago.com

Tony Greep
Community Planner
US Department of Transportation
Federal Transit Administration – Region 5
200 W. Adams Street, Suite 320
Chicago, IL 60606
(312) 353-1646
anthony.greep@dot.gov

Thank you for your cooperation and continued participation in this project.

Sincerely,

Tony Greep
Community Planner

cc: Mr. Robert Kaplan, Acting Regional Administrator Region 5
Ms. Virginia Laszewski, NEPA Review

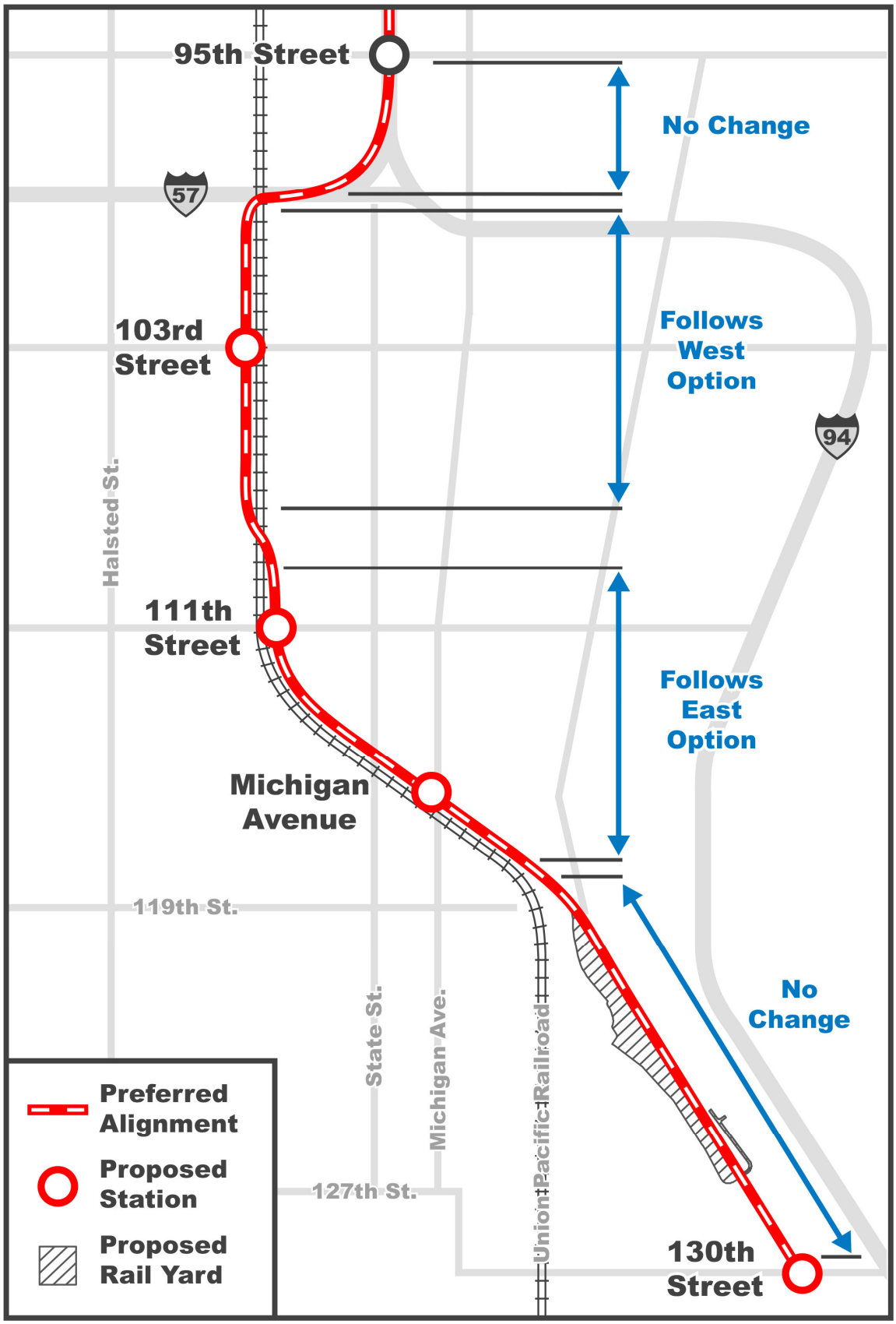

CTA Red Line Extension Project
Preferred Alignment

January 26, 2018

Diane Hunter
Tribal Historic Preservation Officer
Miami Tribe of Oklahoma
PO Box 1326
Miami, OK 74355

RE: CTA Red Line Extension Project Update - Preferred Alignment Selected
Draft Environmental Impact Statement

Dear Ms. Hunter:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options. FTA and CTA received letter dated November 29, 2016 from USEPA, which rated the RLE Draft EIS as Lack of Objections and provided recommendations for the Final EIS. We would like to thank you for your review of the Draft EIS and recommendations for the Final EIS.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

The Final EIS will be prepared on this single selected option. CTA thanks you for your comment on the Draft EIS, which was published in October 2016. We will contact you if human remains and/or cultural objects are discovered, regardless of initial determination as to site dating or cultural affiliation, to initiate consultation.

All interested parties are invited to attend the upcoming public open house, during which CTA will present information about the Preferred Alignment and anticipated project benefits and impacts. The open house will be held at the time and location described below. Representatives from your agency are encouraged to attend.

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Additional information about the project is available at the project website: transitchicago.com/RedEIS.

If you have any questions or would like to discuss the project further, please do not hesitate to contact either:

Sonali Tandon
Senior Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661
(312) 681-4246
standon@transitchicago.com

Tony Greep
Community Planner
US Department of Transportation
Federal Transit Administration – Region 5
200 W. Adams Street, Suite 320
Chicago, IL 60606
(312) 353-1646
anthony.greep@dot.gov

Thank you for your cooperation and continued participation in this project.

Sincerely,

Tony Greep
Community Planner

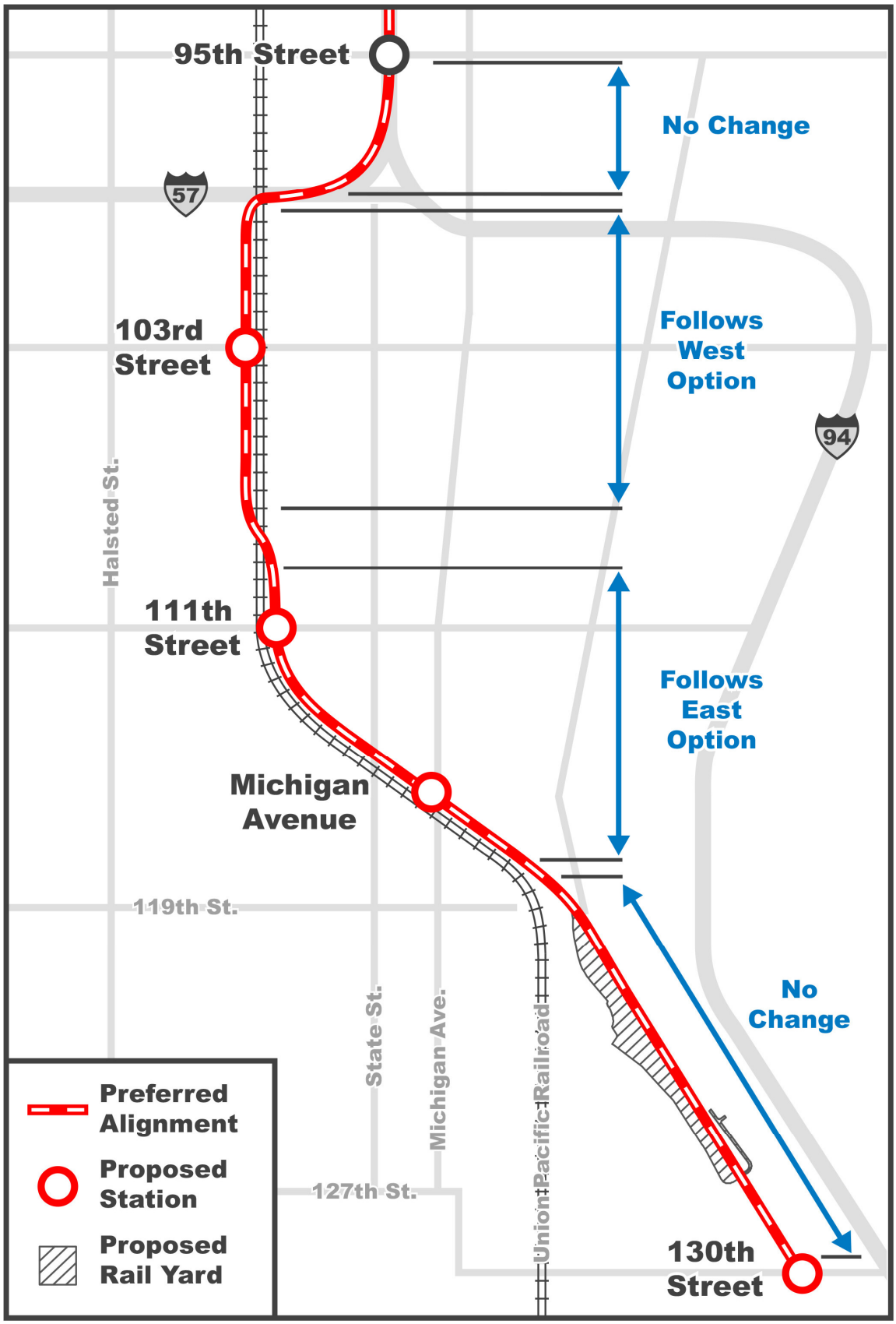

CTA Red Line Extension Project
Preferred Alignment

January 26, 2018

Lindy Nelson
Regional Environmental Officer
United States Department of the Interior
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

Re: CTA Red Line Extension Project Update - Preferred Alignment Selected
Draft Environmental Impact Statement

Dear Ms. Nelson:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options. FTA and CTA received letter dated November 29, 2016 from USEPA, which rated the RLE Draft EIS as Lack of Objections and provided recommendations for the Final EIS. We would like to thank you for your review of the Draft EIS and recommendations for the Final EIS.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received

on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

The Final EIS will be prepared on this single selected option. CTA thanks you for your comment on the Draft EIS, which was published in October 2016, and your concurrence with the determination that all measures to minimize harm have been employed concerning the resources subject to Section 4(f) use. As part of the Final EIS, FTA and CTA will continue to work with the Chicago Park District to finalize mitigations.

All interested parties are invited to attend the upcoming public open house, during which CTA will present information about the Preferred Alignment and anticipated project benefits and impacts. The open house will be held at the time and location described below. Representatives from your agency are encouraged to attend.

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If you have any questions or would like to discuss the project further, please do not hesitate to contact either:

Sonali Tandon
Senior Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661
(312) 681-4246
standon@transitchicago.com

Tony Greep
Community Planner
US Department of Transportation
Federal Transit Administration – Region 5
200 W. Adams Street, Suite 320
Chicago, IL 60606
(312) 353-1646
anthony.greep@dot.gov

Thank you for your cooperation and continued participation in this project.

Sincerely,

Tony Greep
Community Planner

cc: Mr. Robert Kaplan, Acting Regional Administrator Region 5
Ms. Virginia Laszewski, NEPA Review

Acting Regional Environmental Coordinator, Midwest Regional Office, National Park Service, 601 Riverfront Drive, Omaha, Nebraska 68102

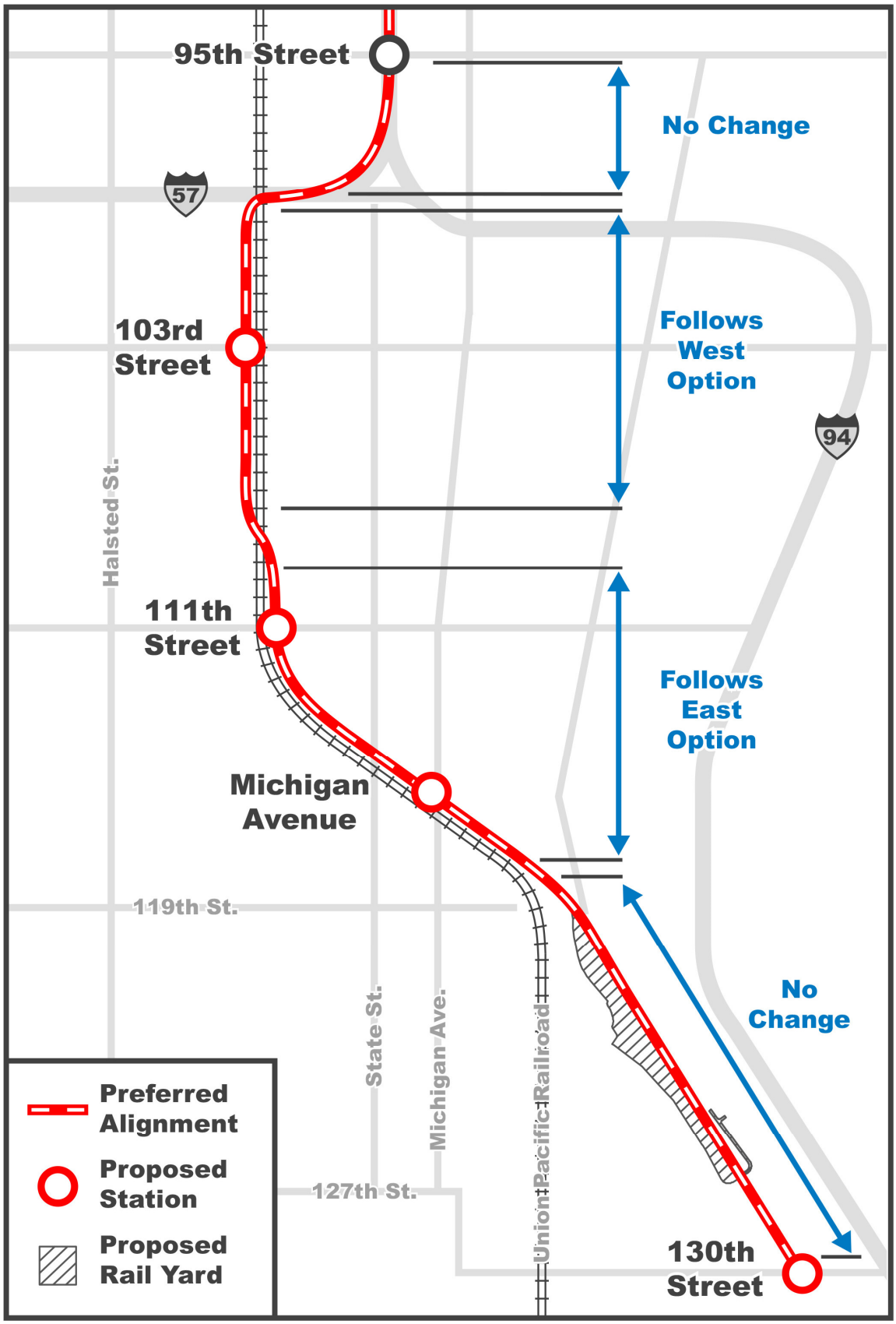

CTA Red Line Extension Project
Preferred Alignment

Participating Nonfederal Agency
Letter

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

[Insert Name]
[Agency]
[Insert Address]
[Insert, City, State, Zip]

Re: CTA Red Line Extension Project
Update - Preferred Alignment Selected

Dear XXXXXX:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

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Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

Your agency has previously accepted to be a participating agency for this project. All interested parties are invited to attend the upcoming public open house, during which CTA will present information about the Preferred Alignment and anticipated project benefits and impacts. The open house will be held at the time and location described below. Representatives from your agency are encouraged to attend.

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Parking lot entrance via King Drive.

Additional information about the project is available at the project website: transitchicago.com/RedEIS.

If you have any questions or would like to discuss the project further, please do not hesitate to contact me. Thank you for your cooperation and continued participation in this project.

Sincerely,

Sonali Tandon
Senior Project Manager
Strategic Planning and Policy
(312) 681.4246
standon@transitchicago.com

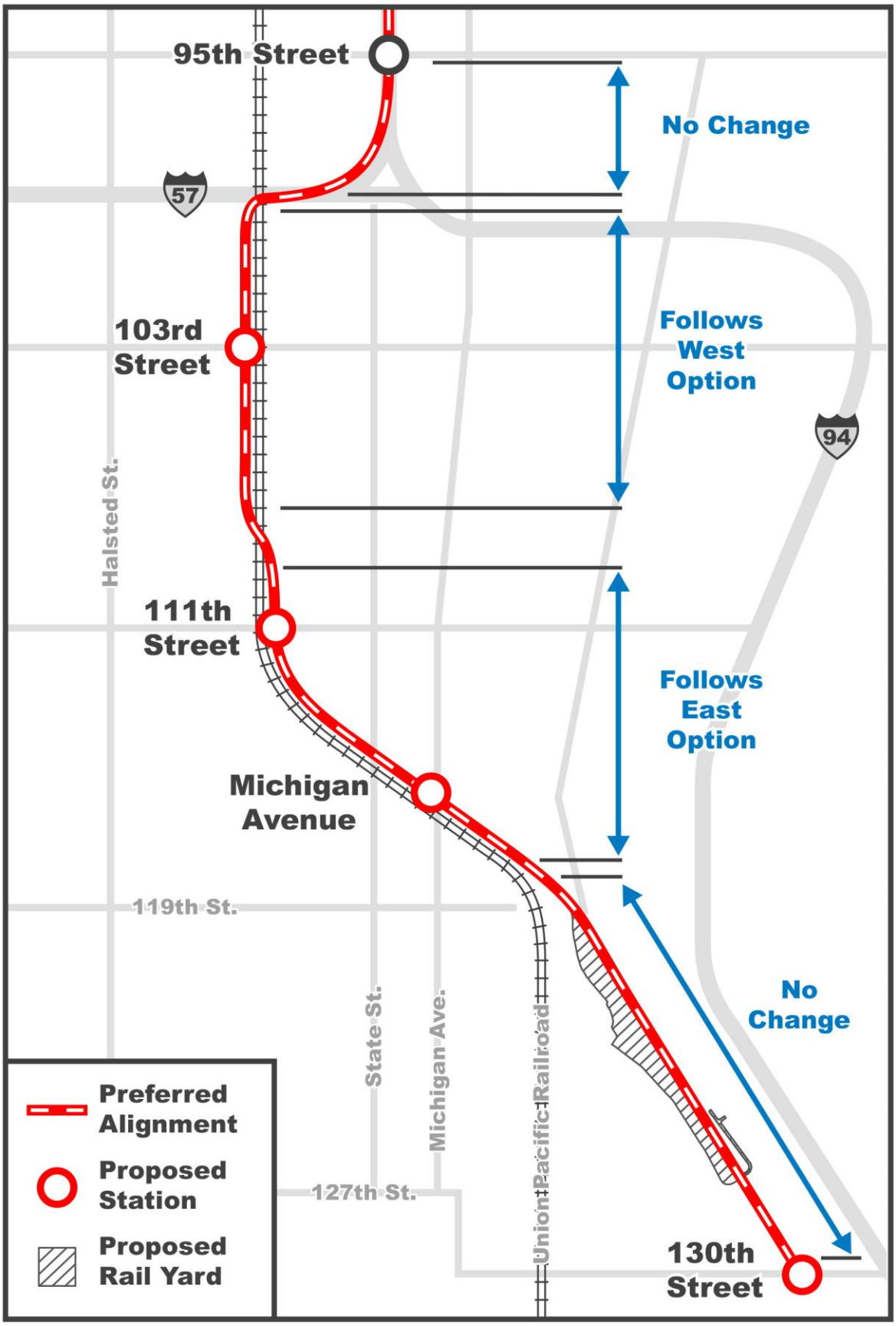

CTA Red Line Extension Project
Preferred Alignment

Red Line Extension Project
List of Cooperating and Participating Agencies

Participating Nonfederal
Agency Mailing List

RLE Project Involvement	Category	Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Participating Agency	Government Agency; Participating Agency	Local	Chicago Housing Authority	To	Mr.	Eugene	Jones, Jr.	Chief Executive Officer	60 E. Van Buren Street	12th Floor	Chicago	IL	60605
Participating Agency	Government Agency; Participating Agency	Local	Chicago Housing Authority	cc	Ms.	Angela	Brooks	Development Manager, Office of Development Management	60 E. Van Buren Street	12th Floor	Chicago	IL	60605
Participating Agency	Government Agency; Participating Agency	Local	Chicago Park District	To	Ms.	Heather	Gleason	Director of Planning and Construction	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Local	Chicago Park District	cc	Mr.	Michael	Lange		541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Local	Chicago Park District	cc	Ms.	Sarah	White		541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Local	Chicago Park District	cc	Ms.	Doreen	O'Donnell	Research and Planning Manager; Department of Planning and	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Business Affairs and Consumer	To	Ms.	Maria Guerra	Lapacek	Commissioner	121 N. LaSalle Street	8th Floor	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Fleet and Facility Management	To	Mr.	Kevin	Laberge	Bureau of Environmental, Health & Safety Management	30 N. LaSalle Street	Suite 300	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Planning and Development	To	Ms.	Eleanor	Esser Gorski	Deputy Commissioner; Planning, Design, and Historic Preservation	121 N. LaSalle Street	Room 1101	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Planning and Development	cc	Ms.	Erika	Sellke	Historic Preservation, Planning + Design Division	121 N. LaSalle Street	Room 1101	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Transportation	To	Ms.	Rebekah	Scheinfeld	Commissioner	30 N. LaSalle Street	Suite 1100	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Transportation	cc	Ms.	Luann	Hamilton	Director, Transportation Planning	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Transportation	cc	Mr.	Jeffrey	Sriver	Director of Transportation Planning and Programming	30 N. LaSalle Street	Suite 1100	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Office of the Mayor	To	Mr.	Joe	Deal	Chief of Staff	121 N. LaSalle Street	Room 509	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Office of the Mayor	cc	Ms.	Lindy	McGuire	Deputy Chief of Staff	121 N. LaSalle Street	Room 509	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Office of the Mayor	cc	Ms.	Claudia	Chavez		121 N. LaSalle Street	Room 509	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Police Department	To	Mr.	Eddie	Johnson	Superintendent	3510 S. Michigan Avenue		Chicago	IL	60653
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Police Department	cc	Deputy Chief	Steve	Georgas	Bureau of Patrol; Special Functions	3510 S. Michigan Avenue		Chicago	IL	60653
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Police Department	cc	Commander	Cindy	Sam	Public Transportation Section	1718 S. State Street	Annex Building	Chicago	IL	60616
Participating Agency	Government Agency; Participating Agency	Regional	Metra Commuter Rail	To	Ms.	Lynette	Ciavarella	Director, Planning and Analysis	547 W. Jackson Boulevard	13th Floor	Chicago	IL	60661
Participating Agency	Government Agency; Participating Agency	Regional	Metra Commuter Rail	cc	Mr.	David	Kralik	Department Head, Long Range Planning	547 W. Jackson Boulevard	13th Floor	Chicago	IL	60661
Participating Agency	Government Agency; Participating Agency	Regional	Metropolitan Water Reclamation District of Greater Chicago	To	Mr.	David	St. Pierre	Executive Director	100 E. Erie Street		Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Regional	Metropolitan Water Reclamation District of Greater Chicago	cc	Mr.	Joseph	Schuessler	Principal Civil Engineer	100 E. Erie Street		Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Regional	Pace	To	Mr.	David	Tomzik	Manager, Long Range Planning	550 W. Algonquin Road		Arlington Heights	IL	60005
Participating Agency	Government Agency; Participating Agency	Regional	Pace	cc	Ms.	Lorraine	Snorden	Manager, Department of Planning Services	550 W. Algonquin Road		Arlington Heights	IL	60005
Participating Agency	Government Agency; Participating Agency	Regional	Regional Transportation Authority	To	Ms.	Leanne	Redden	Executive Director	175 W. Jackson Boulevard	Suite 1650	Chicago	IL	60604
Participating Agency	Government Agency; Participating Agency	Regional	Regional Transportation Authority	cc	Ms.	Jessica	Hector-Hsu	Director, Planning and Market Development	175 W. Jackson Boulevard	Suite 1650	Chicago	IL	60604

Participating Agency	Government Agency; Participating Agency	State	Illinois Commerce Commission	To	Mr.	Steve	Mastisch	Bureau of Transportation Chief	527 E. Capitol Avenue		Springfield	IL	62701
Participating Agency	Government Agency; Participating Agency	State	Illinois Commerce Commission	cc	Mr.	Brian	Vercruysse	Senior Rail Safety Specialist	527 E. Capitol Avenue		Springfield	IL	62701
Participating Agency	Government Agency; Participating Agency	State	Illinois Commerce Commission	cc	Mr.	Michael	Stead	Rail Safety Program Administrator	527 E. Capitol Avenue		Springfield	IL	62701
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Natural Resources	To	Mr.	Wayne	Rosenthal	Director	One Natural Resources Way		Springfield	IL	62702
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Natural Resources	cc	Mr.	Steve	Hamer	Office of Realty & Environmental Planning, Division of Ecosystems &	One Natural Resources Way		Springfield	IL	62702
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Transportation	To	Mr.	Anthony	Quigley	Deputy Director, Region 1 Engineer	69 W. Washington	Suite 2100	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Transportation	To	Ms.	Beth	McCluskey	Director, Department of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Transportation	cc	Mr.	Charles	Abraham	Division of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Transportation	cc	Mr.	John	Baczek	Environmental Studies Section Chief	201 W. Center Court		Schaumburg	IL	60196
Participating Agency	Government Agency; Participating Agency	State	Illinois Environmental Protection Agency	To	Mr.	Alec	Messina	Director	500 Stratton Office Building		Springfield	IL	62076
Participating Agency	Government Agency; Participating Agency	State	Illinois Environmental Protection Agency	cc	Ms.	Deirdre	McQuillen	Outreach/Sponsorship Coordinator	MC#1, P.O. Box 19276		Springfield	IL	62794-9276
Participating Agency	Government Agency; Participating Agency	State	Illinois Historic Preservation Agency	To	Ms.	Rachel	Leibowitz	Preservation Services Manager	#1 Old State Capitol Plaza		Springfield	IL	62701

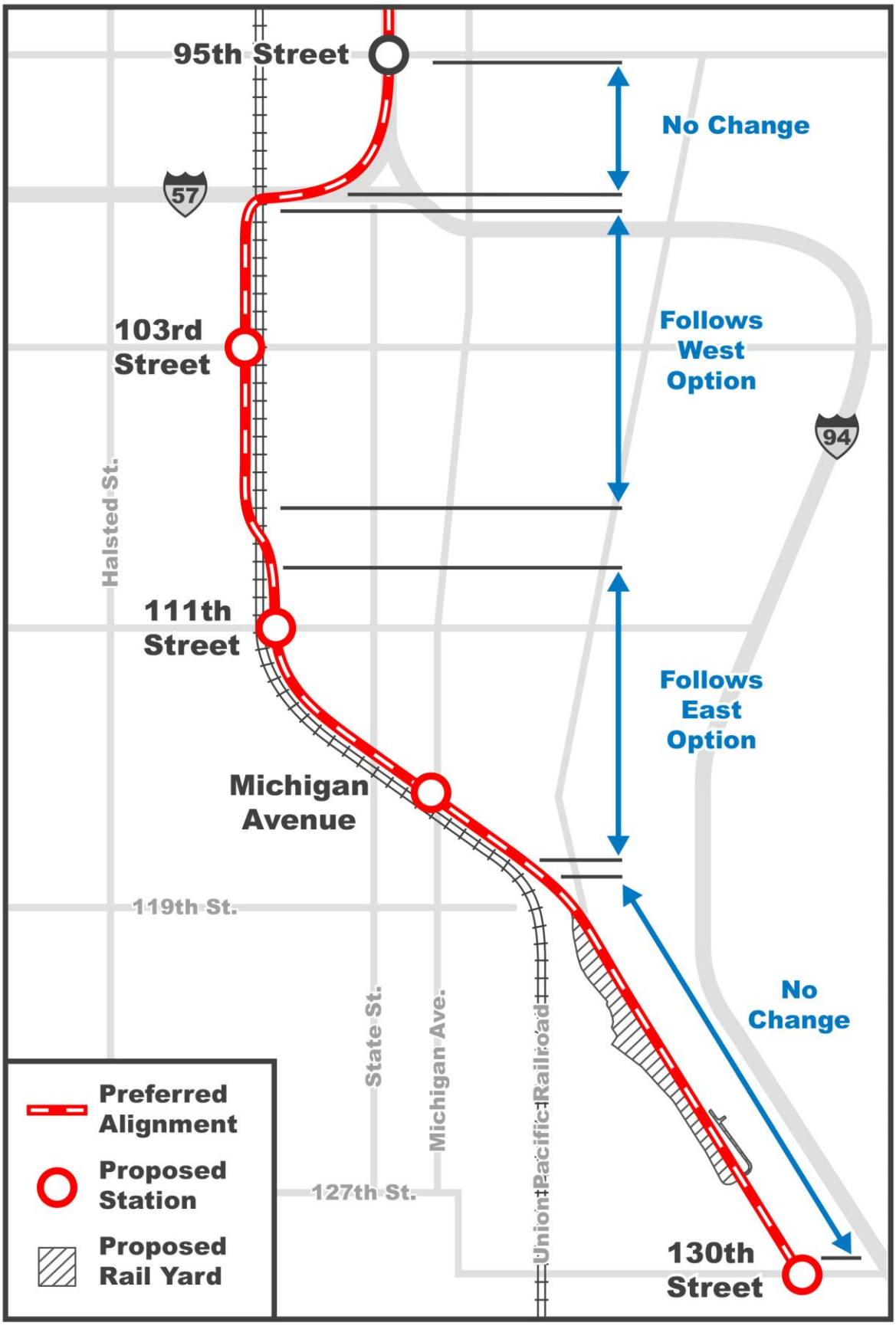

CTA Red Line Extension Project
Preferred Alignment

Red Line Extension Project
List of Cooperating and Participating Agencies

Participating Nonfederal Agency
Mailing List

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Participating Agency	Government Agency; Participating Agency	Local	Chicago Housing Authority	cc	Ms.	Angela	Brooks	Development Manager, Office of Development Management	60 E. Van Buren Street	12th Floor	Chicago	IL	60605
Participating Agency	Government Agency; Participating Agency	Local	Chicago Park District	To	Ms.	Heather	Gleason	Director of Planning and Construction	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Local	Chicago Park District	cc	Mr.	Michael	Lange		541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Local	Chicago Park District	cc	Ms.	Sarah	White		541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Local	Chicago Park District	cc	Ms.	Doreen	O'Donnell	Research and Planning Manager; Department of Planning and	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Business Affairs and Consumer	To	Ms.	Maria Guerra	Lapacek	Commissioner	121 N. LaSalle Street	8th Floor	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Fleet and Facility Management	To	Mr.	Kevin	Laberge	Bureau of Environmental, Health & Safety Management	30 N. LaSalle Street	Suite 300	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Planning and Development	To	Ms.	Eleanor	Esser Gorski	Deputy Commissioner; Planning, Design, and Historic Preservation	121 N. LaSalle Street	Room 1101	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Planning and Development	cc	Ms.	Erika	Sellke	Historic Preservation, Planning + Design Division	121 N. LaSalle Street	Room 1101	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Transportation	To	Ms.	Rebekah	Scheinfeld	Commissioner	30 N. LaSalle Street	Suite 1100	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Transportation	cc	Ms.	Luann	Hamilton	Director, Transportation Planning	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Department of Transportation	cc	Mr.	Jeffrey	Sriver	Director of Transportation Planning and Programming	30 N. LaSalle Street	Suite 1100	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Office of the Mayor	To	Mr.	Joe	Deal	Chief of Staff	121 N. LaSalle Street	Room 509	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Office of the Mayor	cc	Ms.	Lindy	McGuire	Deputy Chief of Staff	121 N. LaSalle Street	Room 509	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Office of the Mayor	cc	Ms.	Claudia	Chavez		121 N. LaSalle Street	Room 509	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Police Department	To	Mr.	Eddie	Johnson	Superintendent	3510 S. Michigan Avenue		Chicago	IL	60653
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Police Department	cc	Deputy Chief	Steve	Georgas	Bureau of Patrol; Special Functions	3510 S. Michigan Avenue		Chicago	IL	60653
Participating Agency	Government Agency; Participating Agency	Local	City of Chicago Police Department	cc	Commander	Cindy	Sam	Public Transportation Section	1718 S. State Street	Annex Building	Chicago	IL	60616
Participating Agency	Government Agency; Participating Agency	Regional	Metra Commuter Rail	To	Ms.	Lynette	Ciavarella	Director, Planning and Analysis	547 W. Jackson Boulevard	13th Floor	Chicago	IL	60661
Participating Agency	Government Agency; Participating Agency	Regional	Metra Commuter Rail	cc	Mr.	David	Kralik	Department Head, Long Range Planning	547 W. Jackson Boulevard	13th Floor	Chicago	IL	60661
Participating Agency	Government Agency; Participating Agency	Regional	Metropolitan Water Reclamation District of Greater Chicago	To	Mr.	David	St. Pierre	Executive Director	100 E. Erie Street		Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Regional	Metropolitan Water Reclamation District of Greater Chicago	cc	Mr.	Joseph	Schuessler	Principal Civil Engineer	100 E. Erie Street		Chicago	IL	60611
Participating Agency	Government Agency; Participating Agency	Regional	Pace	To	Mr.	David	Tomzik	Manager, Long Range Planning	550 W. Algonquin Road		Arlington Heights	IL	60005
Participating Agency	Government Agency; Participating Agency	Regional	Pace	cc	Ms.	Lorraine	Snorden	Manager, Department of Planning Services	550 W. Algonquin Road		Arlington Heights	IL	60005
Participating Agency	Government Agency; Participating Agency	Regional	Regional Transportation Authority	To	Ms.	Leanne	Redden	Executive Director	175 W. Jackson Boulevard	Suite 1650	Chicago	IL	60604
Participating Agency	Government Agency; Participating Agency	Regional	Regional Transportation Authority	cc	Ms.	Jessica	Hector-Hsu	Director, Planning and Market Development	175 W. Jackson Boulevard	Suite 1650	Chicago	IL	60604

Participating Agency	Government Agency; Participating Agency	State	Illinois Commerce Commission	To	Mr.	Steve	Mastisch	Bureau of Transportation Chief	527 E. Capitol Avenue		Springfield	IL	62701
Participating Agency	Government Agency; Participating Agency	State	Illinois Commerce Commission	cc	Mr.	Brian	Vercruysse	Senior Rail Safety Specialist	527 E. Capitol Avenue		Springfield	IL	62701
Participating Agency	Government Agency; Participating Agency	State	Illinois Commerce Commission	cc	Mr.	Michael	Stead	Rail Safety Program Administrator	527 E. Capitol Avenue		Springfield	IL	62701
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Natural Resources	To	Mr.	Wayne	Rosenthal	Director	One Natural Resources Way		Springfield	IL	62702
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Natural Resources	cc	Mr.	Steve	Hamer	Office of Realty & Environmental Planning, Division of Ecosystems &	One Natural Resources Way		Springfield	IL	62702
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Transportation	To	Mr.	Anthony	Quigley	Deputy Director, Region 1 Engineer	69 W. Washington	Suite 2100	Chicago	IL	60602
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Transportation	To	Ms.	Beth	McCluskey	Director, Department of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Transportation	cc	Mr.	Charles	Abraham	Division of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Participating Agency	Government Agency; Participating Agency	State	Illinois Department of Transportation	cc	Mr.	John	Baczek	Environmental Studies Section Chief	201 W. Center Court		Schaumburg	IL	60196
Participating Agency	Government Agency; Participating Agency	State	Illinois Environmental Protection Agency	To	Mr.	Alec	Messina	Director	500 Stratton Office Building		Springfield	IL	62076
Participating Agency	Government Agency; Participating Agency	State	Illinois Environmental Protection Agency	cc	Ms.	Deirdre	McQuillen	Outreach/Sponsorship Coordinator	MC#1, P.O. Box 19276		Springfield	IL	62794-9276
Participating Agency	Government Agency; Participating Agency	State	Illinois Historic Preservation Agency	To	Ms.	Rachel	Leibowitz	Preservation Services Manager	#1 Old State Capitol Plaza		Springfield	IL	62701

Attachment 5
Public Open House Materials

Photos

Sign-In Sheets

Comment Card - English

Comment Card - Spanish

Exhibit Boards

RESPECT THE GAME
HONOR YOUR CITY
RED AHEAD
SELECT
ELITE

RESPECT THE GAME
HONOR YOUR CITY
RED AHEAD
SELECT
ELITE

Photos

GATORADE

GATORADE

BROOKS

HOME
PERIOD
GUEST
FOULS
PLAYER FOUL
FOULS
SCORE
MATCH
SCORE

RESPECT THE GAME
HONOR YOUR CITY

Sign-In Sheets

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6:00 - 8:00 PM

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PLEASE SIGN IN FOR THE PUBLIC OPEN HOUSE (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Marlene Harper	441 W. 110th St	(773) 264-1690	yatta-mama@sbcglobal.net
2	Casey Smith	352 W 102 street	(773) 759-0967	Caseylarel@gmail.com
3	Cynthia Jubiter	11620 S. State Street	7739420031	Cynthia.Jubiter@IEANOA.org
4	George Jubiter	11620 S. State Street	7739420031	GJubiteR1@yahoo.com
5	Ronald Corbin	B 241 S. State Street	708-800-5249	rcorbin@hawk.iit.edu
6	Dr William Boggs Jr	9406 S. Parnell	708.953.4379	drwalzeyoung@gmail.com
7	Mr & Mrs Mckinley Robertson, Constance	11406 S. Parnell Ave	773 995-5143	Constance Coleman@SBCGLOBAL.NET
8	Lou Turner	3201 Wynstone Dr.	217/972-2447	lbturner@illinois.edu
9	Lisa Bourné	337 W. 117th St.	(312) 926-4447	europeangate@aol.com
10	Elizabeth Breiseth	200 W. Adams IA. Ste 320	312-353-4315	elizabeth.breiseth@dot.gov
11	Ilene Moore	10000 S. Princeton Ave	773-425-8335	Ichugghis@gmail.com

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	WILLIAM SCOTT	CHICAGO IL 60628	773-988-1446	—
2	Earl CAVER	351 W 109th CHG IL 60620	773-718-0277	BROEarlCaver@gmail.com
3	GERARDO ZARAGOZA	11722 S CALUMET AVE CHICAGO IL 60628	773 418-5138	
4	Jose Perez	11626 S PRAIRIE AV CHICAGO IL	773-443-7581	
5	~~Natalie Moore~~	WBE 2		
6	Evelyn Mack	10731 S. Indiana Ave 60628		ebedme@Ameritech.net
7	Tom McMahon	639 E 111th	(773) 401-4243	TMAC639@SBCGLOBAL.NET
8	Elimo Ocvan	1906 W. Pratt BLVD	773 916 1540	eocvan@hawk.iit.edu
9	Herbert Smith	111 W. Washington St., Suite 1920 Chicago, IL 60602	330-936-2189	herbert.smith@nscorp.com
10	Chris Hoogland		312-520-5542	choogland@nntb.com
11	Ethel LeFlore	352 W. 102nd St	(773) 490 2595	

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Ronald Kerby	Chicago IL 60627 233 W 105th Pl	1-312-487-6868	
2	Geraldine/Christopher Thomas	10537 S. Eggleston 60628	773-995-1768	
3	Tim Selover	228 Southcote, Riverside IL 60546		tim.selover@gmail.com
4	Robin Hill Johnson	10939 S. Eggleston Chicago 60628	773 6837980	RHILLJOHNSON22@gmail.com
5	Jaylin D. McClinton	11317 S. Normal Avenue Chicago, IL 60628		jaylinmcclinton2012@gmail.com
6	Arnold Pugh	12257 S. Perry Ave	773-670-3633	Appugh@Ameritech.net
7	Aubrey Grant Jr.	11438 S. Calumet Ave.	(773) 707-4677	AubreyGrant55Ag@gmail.com
8	M K Harris Jr	9th Ward	773	—
9	Anthony A Beale	Alderman Office	—	
10	Rosel Stewart	9938 S. Perry	773 —	Rosel Stewart@yahoo.com
11	Steve Wiley	1737 S. Michigan Ave	312 825 0325	swiley@mcnuggetconstruction.com

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Jonathan Samuel	7915 S. Perry Ave, #1F Chicago, IL 60628	(312) 248-5915	jonsamuel32@yahoo.com
2	JACK ROSSI	151 E. 116 ST		
3	Claire Williams	10716 S. Parnell Chgo 60628	312 446 2837	sag19@sbcglobal.net
4	K. Price	410 W. 100 st	773 593 2089	Karencprice57@yahoo.com
5	Jelani Poston	410 W 100 Street Chgo Ill 60628		
6	Jeanine Valentine	221 E. 121st Pl. Apt 312	708-491-3534	
7	Lillian Yan	877 E Writer Ct VH, IL 60061	847 784 2318	Lillianyan@comcast.net
8	Antony Johnson	3351 W 71 th St	1-774-541-0508	
9	Malinda Tony Little	11583 S. State, Chg 60628	312.953.6337	mfl.little8393@yahoo.com
10	Elizabeth Gallagher	6636 N Chicora Chgo 60646	312 565 0450	
11	Angela Scott	137 W 104 Str	773 919-5727	

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Kareem Musawwir	139 East 115th St. 60628	773-732-5189	Kareemmusawwir@gmail.com
2	Nathaniel Durant	608 S. Livermore ave, CA, 94550	925-202-9027	Nathaniel.B.Durant@gmail.com
3	Rebecca Bowns	337 W. 113th St.	(205) 201-1652	
4	Maria R Mendia	11412 S Yale Av.	312 709-3407	
5	TONY GREEP	200 W ADAMS, SUITE 330, CHICAGO, IL 60606	312-353-1686	
6	SARAH WHITE CHICAGO PARK DISTRICT	541 N. FAIRBANKS CHICAGO	312 224 3434 122	sarah.white@chicagoparkdistrict.com
7	JACOB E. PETERS	2156 N. KEDZIE BLVD	773 870 1937	jacob.e.peters@gmail.com
8	Martha A. Palacios	121 E 117 ST Chicago IL 60628	(773) 319-6345	
9	Fatimah Al-Nurriddin	13929 S. Atlantic Ave. Riverdale, IL 60827	(312) 350-1557	alnur67@gmail.com fatimah@fotfp.org
10	Ahmed Yusuf	5616 S. Prairie ave Chicago IL, 60637	312-457-8778	ahmo56@yahoo.com
11	Maryann Watson	11737 So. Stewart Ill 60628	773-253-2391	

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	C.J. Blair	3400 N. Lake Shore Dr. Chicago, IL 60613	(847) 956-6755	charlesnblairjr@gmail.com
2	Theatis Evans	9358 S Indiana Chgo IL 60619		
3	TONY PAKELTIS	10 S. RIVERSIDE, SUITE 400 CHICAGO, IL 60606	312.930.5268	anthony.pakeltis@parsons.com
4	Grace Herndon	10521 S. Halo Ave Apt 2D Chicago, IL 60643	812-272-6756	grace.herndon@cru.org
5	BEVERLY MARTIN	10605 S. PEORIA ST. CHGO, IL 60643-3027	(773) 881-3120	
6	Donald J Gibson	9958 S. Princeton Ave Chgo IL 60628	773-491.9908	dgibson762@gmail.com
7	Ernest Sawyer	100 N. LaSalle St. #1515	312-364-9292	esawyer@ersenterprises.net
8	Jade Jones	10012 S. Wallace / CHICAGO, IL / 60628		
9	RASHAWN KELLEY	10414 S EGGLESTON AVE CHICAGO 60628	312 672-2116	RASHAWN.K@LIVE.COM
10	Michelle R. Yoriel	7741 So. Dobson Chgo IL 60619	708-688-7286	michellerhnea6222@gmail.
11	Dorothy Lott	11139 S Edbrooke	312 375 1027	

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	EVAN GROSS	3127 Kenmore Ave Apt G Chicago, IL 60657	—	evan.michigan1st@gmail.com
2	Gloria Cruz	116 E117 st. th. 60628		
3	Gerardo Cruz	116 E117 ST th. 60628		
4	MICHAEL SUTTON	943 E 130TH PLACE	312 405 9560	msutton@infrastructure-eng.com
5	Gregory J Brown	11709 S, Indiana	773 679-9854	
6	Emily Miller	10521 S Hale Ave Chicago, IL 60643	888-337-4968	
7	PHIL PASTERAK	30 N LASALLE #4200 CHICAGO IL 60602		PHIL.PASTERAK@WSP.COM
8	HILARY THORNE	333 W 100th Place 60628		hilarythorne1965@gmail.com
9	MARCIA SHANNON JONES	10415 S. Ridgeway Ave 60643	(773) 203-1103	mshannonjones@earthlink.net
10	CHEENA CREDIT	1022 W 108th St	773.253.7088	Cheenagc@aol.com
11	Kerry M Hetell	515 W Eugene	773 407-3046	KerryMHc@aol.com

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Wilhelmina Lightfoot	10014 So Eggleston	773-239-3348	
2	Cleopatra Watson	10729 S Champlain Ave 60628		Unitedpullman@gmail.com
3	Angela Ellis			
4	Irene Whitaker	10410 So. Wentworth 60628		
5	Turner Marshall R			
6	Deborah L. Truss	Red Line Extension Coalition Board P.O. Box 2886444 Chicago 60628-8644	(773)326-5582	DETHOMENTUM@AOL.COM
7	Yvonne Farlow	352 W 107th		
8	John Trotta	30 N. LaSalle - Suite 4300 Chicago Ill 60602	312-218-8973	John.Trotta@wsp.com
9	Lillie Dampeer / Tommie Dampeer	11546 S. State St.		tomdampeer@yahoo.com
10	Robert Ryan	10 S. Riverside Plaza, Ch. 60606	312-825-5756	robertryan@parsons.com
11	Doris A. Atwater	355 W. 101st Pl Chicago, Ill 60628	773)821-5995	

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	G Grayson	10819 S Wallace		
2	LOURDES SOLORZANO	8236 HIGHGATE Ct. ORLAND PARK IL	(773) 447-5559	Cadillactie@gmail.com
3	Beth Dybala	CAFC 1000 E. 111th St. Chicago, IL	(773) 928-6000 x224	Beth@calumetareaindustrial.com
4	D. Cortez	251 W. 105th Pl. Chgo IL 60628	773.995.9560	sunshine_114@sbcglobal.net
5	SEAN SCOTT	55 E MONROE CHICAGO IL	312 859 4179	SSCOTT@PATRICKCO.COM
6	JAMES H. CHRISTIAN	10240 S PRINCETON	773.568.2762	
7	James E. Christian	10240 S PRINCETON	708-280-2073	jecT@comcast.net
8	Sylvia Y. Jones			elotimine@sbcglobal.net
9	Monique Clatm	8020 Woods Chicago IL		
10	PATRICIA McCAIN	11806 So. LA SALLE Chgo 60628		
11	Gerardo Lopez			

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Monde Ai Funches, Jr	11321 So Stewart Ave	773. 603. 4818 (cell) 773 468. 5466 (HM)	grandexAi8@gmail.com
2	Robert Goss	10835 S. Eberhart St	773-317-8246	NGosssmith@AOL.Com
3	Ronald Jackson		773-313-6190	ronaldJackson6269@yahoo
4	Michael McMahon	11326 S. Langley	773 547-4243	mcmahonag@gmail.com
5	Defrius Drakes	11431 S. Normal Ave.	773-876-9366	deedrakes66@yahoo.com
6	Hattie Wash	219 W 109 Place	(312)613-2846	washhattie@gmail.com
7	Terence V. Johnson	337 W. 113th St	312 6289107	tvanwade@Yahoo.com
8	Sheila Clements	562 S. 4th Ave	847-530-7858	Sclements11@LIVE.com
9	Intisar Muhammad		773-398-0077	imuhamm2@hawk.iit.edu
10	Sarai Jubis	35340 S michigan Ave	3025369319	ajubis@hawk.iit.edu
11	Elizabeth Bourné	337 W. 113th St.	(708) 203-6051	msebournetr@gmail.com

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Clevan Tucker	9706 S. Prairie 60628		Clevan[illegible]kerJr@gmail.com
2	Kenneth L. Johnson	3115 S. Michigan Ave. #702 60616	312-225-7462	N/A
3	Michelle Flagg	1857 E. 93RD Chicago IL 60617	312-504-8241	michelledflagg@gmail.com
4	Yvette Ramirez	5225 W. Fletcher Chicago, ell 60641		yramirez8907@yahoo.com
5	Reatta C Nelms	11135 S. KING DR Chgo IL 60628	—	retmonkie@gmail.com
6	Andrea D. Reed	12117 S. Indiana Ave. Chgo 60628	(708)259-9240	treboradreed@yahoo.com
7	CARLOS NELSON	7901 S. Racine Chgo IL 60620	773.858.2338	CNELSON@GAGDC.ORG
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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Grady Davis	349 W. 111th St.	312-307-4396	None
2				
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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Vanessa Adams	200 W. Adams St., Chgo 60606	847 954-2728	Vanessa.adams@dot.gov
2	Jake Fansler	4317 N Kostner ave, Chi. 60641	773-603-5306	jakefansler@gmail.com
3	Julio Diego	115 E 117 ST Chicago IL 60628	773-710 3263	~~ameena harris 25 @ gmail.com~~
4	Ameena Harris	13929 S Atlantic Riverdale IL		ameenaharris25@gmail.com
5	Raymon Weshley	9630 S LASALLE ST	312-459-9019	R WESHLEY07@outlook.com
6	Peter Taylor	9600 S. Prairie Ave	773.568.8842	pbtaylor54@gmail.com
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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	BETH ECKERTY	13208 S EXCHANGE AVE	773.627.9378	betheckerty@hotmail.com
2	~~T. Colbert~~			
3				
4				
5				
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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Maynell Thomas	10120 S Eggleston Ave Chicago 60628	312-404-2206	maynell.thomas@gmail.com
2	Carrie Cooper	10120 S Eggleston Chicago 60628	779-4120 60628	
3	Jelani Conly	35 W. 55th St	781-226-7152	jelani.conly@gmail.com
4	Maureen + Scott Perazzolo	245 W. 114 Street	773-785-5496	moep245@gmail.com scottgp@ymail.com
5	Irene Youngblood	435 W. 110th Street		IreneYB14@Gmail.com.
6	Ron Shimizu	WSP, 30 N. LaSalle, Suite 4200, Chicago	312-803-6638	ron.shimizu@wsp.com
7	Humberto Salazar	121 E 117st – 128 E 117 st – 149E 117 st	773-491-5485	humbertosalazar9@gmail.com
8	Deloris Lucas	13134 S. Vernon Av. Chgo 60637	773-468-7941	deelucas2002@yahoo.com
9	MICHAEL A. SHYMANSKI	531 E. 112th ST 60628		MIKE@SHYMANSKI.NET
10	DORIS H. WHITE	3744 W. Cullom AV 2ND Fl 60618	312-972-9652	
11	Thelma Jenkins	10605 S Eggleston 60628	773 821 8308	

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	Cheryl Littleton	123 W 114th st Chicago 60628	773-259-3627	clittleton550 gmail.com
2	Ken Samuels	11121 S. Loomis	773-457-1224	Ksam212067@Comcast.net
3	Willie Johnson	352 W 106 Pl	773-387-4166	
4	Damone Taylor	11007 S Union	312 773 678-8957	
5	Eleanor Scott	10823 S. Eggleston Ave	773-821-4199	
6	William J Taylor	437 W 110TH St	(773)264-3692	billetaylor2taylor4@sprintmail.com
7	Tommy L. McLaurin	244 W 112TH Pl	773-936-4900	
8	Elaina McLaurin	^	773 936 4800	dmacklady@aol.com
9	MARY HORDE JOHN HORDE	9628 S. PERRY AVE	773 928 2889	COMPUTER SAFARI aol.com
10	TIFFANY GRIFFITH	125 WENTWORTH	773 995 7466	
11	Lori Johnson	337 W 113th St	773-456-9129	msjohnson521@yahoo.com

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	PATRICK McGEE	9433 S. INDIANA AVE CHI., IL. 60619	(773) 264-1176	
2	LeRONNIE CAMERON	348 W 162ND ST	773 5685134	
3	Chris Ferguson	30 North LaSalle 192 Chicago, IL 60602	312 613 5823	
4	CARLOS NELSON	7901 S. RACINE CHGO IL 60620	773 858 2338	CNELSON@GAGDC.ORG
5	Cathy Patterson	326 W. 103RD PL.	773-928-0967	—
6	Kelly Johnson	15W. 113th Street #1 60628	(773) 370-9099	kelly6459@att.net
7	Cynthia Hicton	406 W. 100th St, Chgo IL 60628	773.239-1346	
8	Nicholette Moore	12233 So. Wentworth 60628	(773) 216-7149	Faith Fulmoore 1@yahoo
9	Torrance Smith	10928 S. Parnell 60628	(773) 454-4524	Thirdman33@yahoo.com
10	Antoinette Williams	10841 S Eggleston 60628	(708) 646-7629	antoinettewilliams1976@gmail.com
11	DAVID MAY	400 S 8th, LaGrange IL 60525	708-579-3107	davemay4008@gmail.com

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1	LaTanya & Henry Young	10455 S. Racine Chgo. Il. 60643	708-926-4161	latonyayoung49@yahoo.com
2	Jibril & Kori Clemons	312 W. 113th St. 60628	773.557.3184	Kori.clemons67@gmail.com
3	Gwen King	RE: 11014 S. Lowe 3115 S. Michigan Ave #702 Chgo 60616	312 225-7462	
4	Andre Scherding	2425 N. Sheffield Ave 60614		
5	EDWARD DRAKES	10421 S. EGGLESTON AVE 60628	773-779-2334	edrakes24@gmail.com
6	KAY WARE	237 W. 105th PL. 60628	773-468-2112	
7	MONIQUE LENOIR	11544 S. PERRY Ave 60628	773-447-2198	mlenoir2294@gmail.com
8	DAN DREW	2111 Keeney Evanston IL 60202	312 952 5340	daniel.drew@tylin.com
9	Chris Churchill	55 E Monroe Chicago IL	224-339-1980	cchurchill@PatrickCo.com
10	Tiana E. Blakely	11221 S. Emerald	(773)614-3816	tianaellis@ymail.com
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1	ANN QUARLES	60 West 114th PLACE CHICAGO 60628	773-419-6000	AnnQuarles1@yahoo.com
2	Constance Wilson	11232 So. Eggleston 28	773-785-5195	
3	Lindsay Holbrook	2401 E 100th	312-747-6479	
4	Igor Studenkov	Cook County Chronicle	847-624-1244	igorST3@hotmail.com
5	Katrina Gardner	11541 S. State St	312 208-6012	Katrinalove123@msn.com
6	Dorothy Watson	9814 S Sangamon		dotdj98@wowway.com
7	Laurence McKinney	10058 So EGGLSTON	1773 4454101	
8	TEENA CHRISTMAS	7037 S. YALE	773-474-8634	
9	Lavy Holden	10742 S Wabash	773 821 6011	
10	PAULA PIENTON	3833 N HAMILTON	312 7772848	paulapienton@tylin.com
11	Willie Sprwill	20 West 115th street	773-909-5011	

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2	Miles Churchill	207 N Gregory St Urbana IL	630-251-7595	MilesChurchill@Gmail.com
3	Art & Audrey Chclupa	10809 s. Prairie ave	773 307-1409	Art A Ventures@Outlook.com
4	Dwight D Cray	8638 S. Michigan Ave Chgo IL		
5	Verince Rucker	60 W. 114th Place chgo, Il.	773-791-5852	VRucker_214@yahoo.com
6	Tom P Lagadinos	11222 S SAINT LAWRENCE		LAGADINOS@ATT.NET
7	Jerial Mikell	10614 So. Perry	312-361-4654	Jerial.mikell2@Yahoo.com
8	Tom Alton	1737 S. MICHIGAN AVE	847 561 0369	talton@MCHUGHCONSTRUCTION.COM
9	Sherrie & Carl Sanderson	10148 S. Eggleston	773-398-3074	CSAN17@govst.edu
10	Robert Lester	10052 S. Prairie Ave	773 7594472	
11	Jerline Johnson	11134 So Edbrooke	773 928-2358	CozyCarla51@Gmail.com

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2	CLIFTON Holliday	11036 S. PARNELL	773-264-3512	
3	ASHANKH JAISHANKAR	58 E JOHN, ST, CHAMPAIGN	217-9049054	
4	Jerome Skinner	11412 S. Forest chgo IL 60628	(708) 238-0397	JEROME5SKINNER gmail
5	Charles Brown	12 W. 115th Street	(773)972-6853	Jhuh1951 6 yahoo.com
6	Paige Hampton	11573 S. State St. Chicago, IL 60628	N/A	paigehampton12@gmail.com
7	JAMES PORTER	N/A	N/A	N/A
8	Antonio Reed	6035 S. Aberdeen	312.599.5080	antonioreed55@yahoo.com
9	Elmer Smith	352 W. 118th St.	773-821-0589	
10	Emma Moncrue	11227 S. Eggleston St	773-785-1465	
11	TOD FRAUND	10936 S. WABASH		

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL
1	GREGORY WALKER JR	6952 S. JEFFERY BLVD CHICAGO IL 60619	773 317 2382	GREGORYITCHICAGO@GMAIL.COM
2	ZEFFIE BLOUNT	9938 S. WENTWORTH Chgo, IL. 60628	773-785-3061	ZBLOUNT9938@ATT.NET
3	Tyfania Holliman	8632 South University	773-798-9415	tyfania holliman@gmail.com
4	Diane Williams	9900 S. Yale AV	773 568-7551	dylynnx@Yahoo.
5	Saundra Brown	10805 S Eggleston Ave	312 874-0283	saundrab4@gmail.com
6	Malcolm Brown	10805 S Eggleston Ave	773-984-7153	mmalcolmbrown@gmail.com
7	Marcelino En Gudelia	333. E 117 STH Chicago IL 60628		
8	Betty Gamero	331 E 117th St.	312-618-1618	
9	George Lemon	10024 S. Eggleston	(312) 881-0389	
10	BERNADINE MORRIS	409 WEST 99th STREET Chg, IL 60628	773-239-7549	berng240SBCGLOBAL.NET
11	Brenda Glover	10835 S Eggleston 60628	773 568 4493	Brenda-Glover60628@yahoo.com

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1	Betty Jones	9921 S. Yale	773-468-5019	JosieSmith79@yahoo.com
2	Doris Martin	13207 S. Rhodes Ave.	773 264-0434	dorismartin7276@gmail.com
3	Annette L. Osborne	PO Box 10217, Chicago IL 60610	(312) 404-3588	alo2888@outlook.com
4	[illegible]			
5	Carrie Curtis	507 W. 103rd Place	773-239-3037	—
6	Joyce Harvey	12734 S. Union	773.456.0038	LuLA127@yahoo.com
7	WILLIAMS, SUSAN	12336 S. INDIANA	773 568-1620	—
8	Rosie Barber	730 W. 106th St	773-368-7009	R876814@gmail.com
9	William Barber			
10	Sarah R. McMillian	12024 S. LA SALLE St. 60628	773-593-4841	
11	Clementine Stiff	10621 S. Eggleston ave	773 821-4410	Stiffvivian@comcast.net

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2	ANGELA CONNER	10016 S EBERHART, CHICAGO, IL 60628		AYCONNER@SBCGLOBAL.NET
3	MIA McKEE	11331 S. COTTAGE GR. CHICAGO 60628	773/821-5110	
4	MELDA BARKER	11535 S. NORMAL Chgo 60628		MELDAB1156JUNO.com
5	Mae Henley	233 W. 105TH Pl. 60628		
6	Beverly Williford	TranSmart	630-726-7992	bwilliford@transmartinc.com.
7	MARILYN BROWN	11959 S. LASALLE ST 60628		MARILYNBROWN8420@ATT.NET
8	LEE & Carrie Williams	11310 S. Emerald 60628	773 928 5530	carlaHse@AOL.COM
9	Linda Potts Eddie Hampton	10020 S. Eggleston AVE. 60628	708-4399211	lindapottsc@yahoo.com
10	Althea Edmondson	401 W 99th Street	312-962-9579	
11	Lorraine Blair	11618 S. State St. Chgo 60628	773-568-0162	lorraine.blair@YMAIL.COM

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2	Michael LaFargue	9327 S. Michigan Ave 60619	773-251-0760	MLAFARGUE1@GMAIL.COM
3	Walter Blair Loretta Blair	11550 S. LAFAYETTE AVE 60628	773-785-6303	loretta.blair@yahoo.com
4	Jeffery Massey	10012 S. Forest Ave 60628	312-259-4298	JPMASSEY@SBCGlobal.Net
5	Janis Golden	10528 S. Eggleston Ave	773 704-3770	JMG448444@Yahoo.com
6	Gloria Lofton	10523 S Eggleston Ave	773 837-5069	GJlofton74@gmail.com
7	Jeff Putala			JAPutala@LaneCorp.net.com
8	Tessa Ferraro	817 W Hill St Urbana, IL 61801	814-823-1361	tferraro88@gmail.com
9	Nick Keeling	607 W High St Urbana IL 61801	317-726-6967	nkeeling2@illinois.edu
10	Charlesd Stella Brown	12 W 115th St	773213-6185	creolestubbie brown@hotmail.com
11	Gretchen Bailey	12756 S. Union St.	312/399-3642	gbailey2@netzero.net

Comment card English

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WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

Based on public feedback, technical analysis, and agency coordination, CTA has selected a Preferred Alignment for the RLE Project that is a combination of the previously presented East and West Options. The Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement (EIS). CTA is interested in your feedback about the project. Please **PRINT**.

Name _____

Address _____

City _____ **State** _____ **Zip** _____

Email Address _____

Please describe your questions or concerns. _____

Over →

Additional Comments:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

For additional information call: **(888) YOUR-CTA (888 968-7282)**

Para más información en Español, llame al **(312) 681-2828**

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Avanzando a un rojo mejor

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QUEREMOS SABER SU OPINIÓN

sobre el Proyecto de Expansión de Línea Roja (RLE)

Basándose en los comentarios del público, análisis técnico y coordinación de las agencias, CTA eligió el alineamiento preferido para el proyecto de RLE, el cual es una combinación de las opciones este y oeste presentadas anteriormente. El alineamiento preferido captaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios recibidos sobre el borrador de Declaración de Impacto Ambiental (DIA). A CTA le interesan sus comentarios sobre el proyecto. Por favor **ESCRIBA EN LETRA DE IMPRENTA.**

Nombre _____

Dirección _____

Ciudad _____ **Estado** _____ **Código postal** _____

Correo electrónico _____

Por favor describa sus preguntas o inquietudes. _____

Continúa al reverso →

Comentarios adicionales: _____

Puede dejar su tarjeta de comentarios completada con CTA durante la reunión o puede enviar sus comentarios a la siguiente dirección: ***Chicago Transit Authority, Attention: Red Line Extension Project, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465***

O enviar un correo electrónico a: **RedExtension@transitchicago.com**

Para más información, llame al **(888) YOUR-CTA (888 968-7282)**

Para más información en español, llame al **(312) 681-2828**

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Welcome to the
Red Line Extension Project
Open House

The purpose of this open house is to:

- Share information about the Preferred Alignment of the Red Line Extension (RLE) Project
- Share information about anticipated project benefits and impacts

If you have questions, feel free to ask the representatives stationed around the boards and at workstations. There will be no formal presentation.

You may leave your comments with us today, or send a comment card to this address:

Chicago Transit Authority
Strategic Planning, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street, Chicago, IL 60661

Or send us an email: **RedExtension@transitchicago.com**

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RLE Project Purpose and Need

Project Purpose

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

Needs to be Addressed

- Transit trips to jobs are longer for Far South Side residents then they are for passengers in the Chicago seven-county region as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limits access between affordable housing and employment centers outside the project area.
- Existing transit markets are underserved and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Street Yard does not have capacity to store rail cars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

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Preferred Alignment

Based on public feedback, technical analysis, and agency coordination, CTA has selected a route that would run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 108th Place, then would cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street.

Project Benefits	East Option	West Option	Preferred Alignment
Minimizes Affected Parcels	✗	✓	✓
Minimizes Affected Residences	✗	✓	✓
Minimizes Affected Businesses	✓	✗	✓
Avoids Impact to Historic Roseland Pumping Station	✗	✓	✓
Maximizes Economic Development Opportunities	✓	✗	✓

The Preferred Alignment is a combination of the previously presented East and West Options. It would capture the benefits and minimize the impacts of either option, and it also incorporates feedback received on the Draft Environmental Impact Statement.

Tracks would be elevated from 95th Street to 119th Street

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Preferred Alignment

- Same as the ***WEST OPTION*** north of ***108th Place***
- Same as the ***EAST OPTION*** south of ***108th Place***
- Same as the ***COMMON ALIGNMENT*** north of ***99th Street*** and south of ***119th Street***

Previously Considered Options:

East *OR* ***West***

Combination of Options Selected:

Preferred Alignment

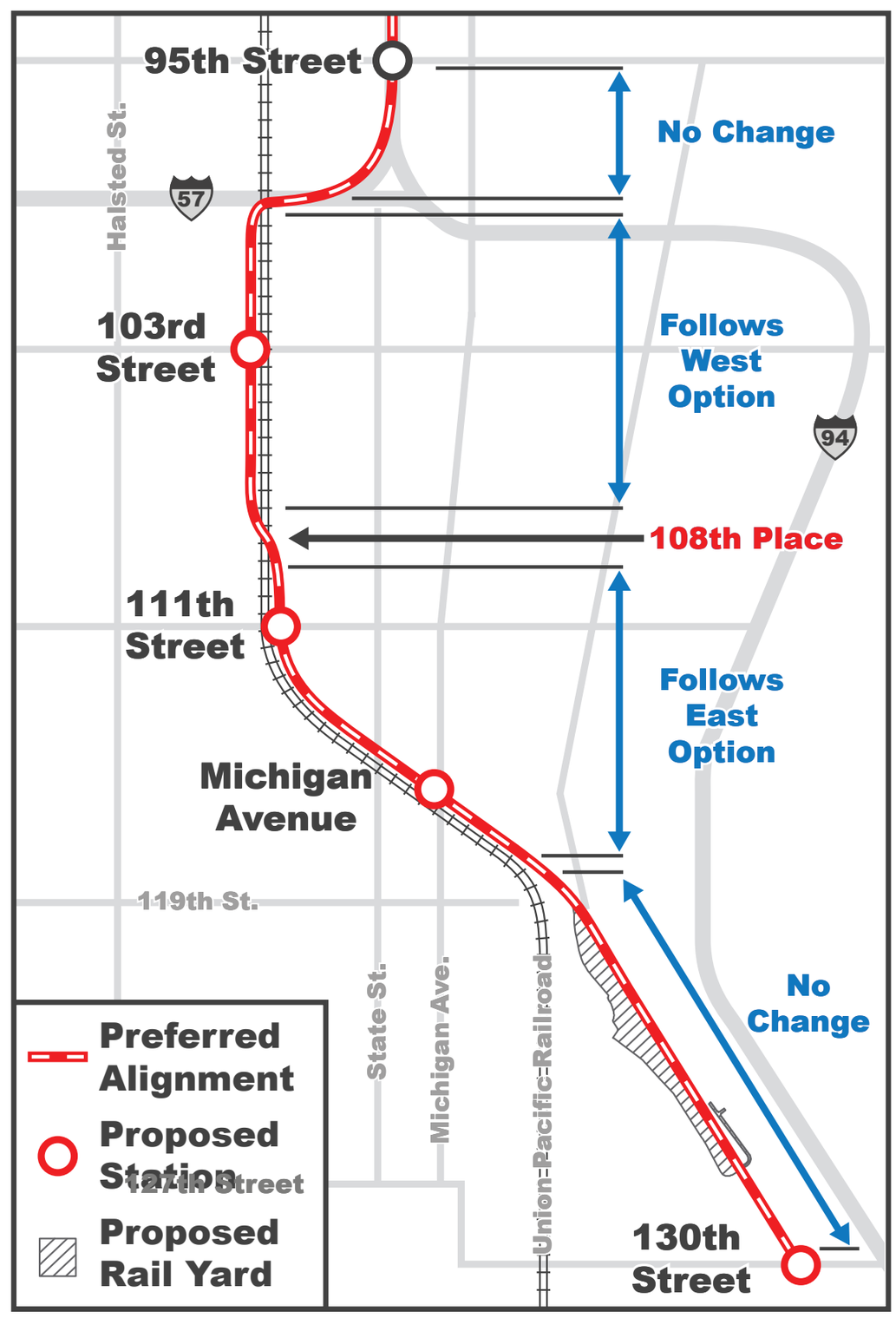

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Project Visualizations

103rd Street Station, Facing Northeast

Michigan Avenue Station, Facing Southwest

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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We Heard You!

CTA received 284 comments during the comment period for the Draft Environmental Impact Statement.

By the numbers

- **155** commenters provided input on whether they prefer the East or West Option
- **52** commenters asked about the public outreach process, and how to stay involved
- **45** commenters expressed concern about property displacements
- **44** commenters expressed concern about noise and vibration
- **39** commenters remarked about how the RLE Project would affect transportation in the project area, including parking
- **34** commenters had questions about the project timeline
- **33** comments asked about the alternatives considered

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Property Displacements

Construction of the project would require the acquisition of private property.

The Preferred Alignment would affect *fewer residences* than the East Option, and *fewer businesses and jobs* than the West Option.

Parcels	Preferred Alignment
Affected Parcels without Building Displacements	**157**
Affected Parcels with Building Displacements *(Residential Building Displacements)*	**79** *(59)*
Total Affected Parcels *(Affected Private Parcels)*	**236** *(154)*
Affected Businesses *(Full-Time Jobs)*	**5** *(6)*

- Impacts are based on conceptual engineering and represent the maximum impacts.
- Impacts will be confirmed in the Final EIS after more detailed conceptual design.
- Availability of vacant parcels and buildings near the affected properties will likely allow for affected businesses and residents to relocate within the project area.

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Noise and Vibration Impacts

What would CTA do to reduce, or mitigate, noise from the elevated track structure?

- Install noise barriers, which absorb and reduce noise from the tracks by 10 decibels.
- Use a closed-deck structure, which limits transmission of noise beneath the tracks.
- Use continuous welded rail, which has fewer joints and means a smoother and quieter ride.

Noise Barriers

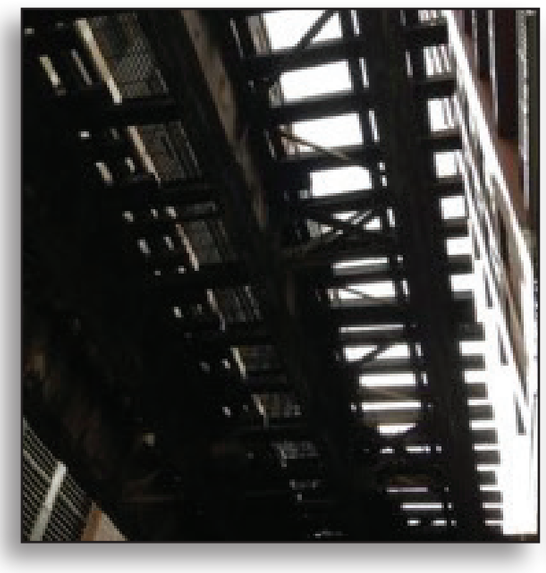

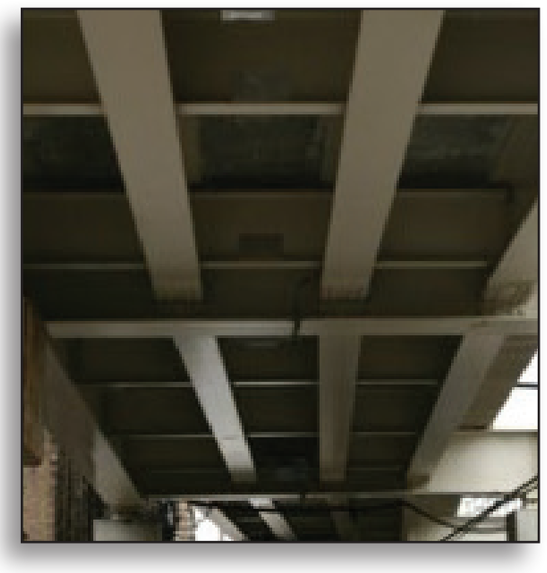

Open versus Closed Deck

These mitigation strategies would resolve all potential severe and moderate noise impacts due to the project.

What about vibration?

Based on the analysis, the project would result in no impacts from vibration.

Because the CTA train cars are lighter and carry less weight (freight) than the freight trains that pass through the project area, vibration levels would not exceed FTA thresholds and no mitigation measures would be required. Elevated track structures also transmit less vibration through the ground than at-grade tracks.

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Section 4(f) - Impacts to Parks

Section 4(f) of the USDOT Act of 1966 is a federal law that establishes special considerations and requirements when publicly owned parks or recreational areas are proposed to be used by a transportation project.

Fernwood Parkway

A portion of Fernwood Parkway would be affected Temporary closure of the overlapped section of Fernwood Parkway would be necessary during construction. There would also be a short-term closure of Wendell Smith Park during construction, but no permanent impacts.

Addressing Impacts to Fernwood Parkway

CTA has worked with the Chicago Park District to identify ways to minimize this park impact and, where possible, enhance community access to parks.

Mitigation Measures for Fernwood Parkway

- Provide a new replacement park in or near affected community area
- Restore or landscape any disturbed areas on affected parkland
- Incorporate context-sensitive design features at affected parks
- Potentially install a new bike path beneath the elevated structure

Potential Replacement Park Concepts

CTA worked with the Chicago Park District to develop replacement park options in the surrounding community. These are two locations currently under consideration. CTA will work with the Chicago Park District during the Final EIS to confirm a preferred location for park replacement and conduct additional analysis and outreach.

Michigan Avenue between 101st and 102nd Streets

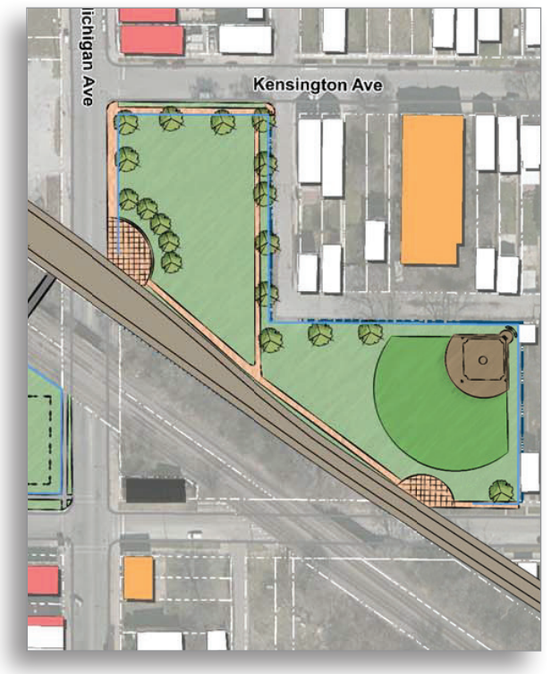

Michigan Avenue near the UPRR tracks and Kensington Avenue

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Park Concept Visualizations

Replacement Park Concept at 101st and Michigan Avenue

Aerial overview (left) and street view (top) visualization of replacement park concept at Michigan Avenue between 101st and 102nd Streets.

Replacement Park Concept at Michigan Avenue near Kensington Avenue

Aerial overview (left) and street view (top) visualization of replacement park concept at Michigan Avenue near the UPRR tracks and Kensington Avenue.

Replacement park sites would be contingent on voluntary acquisition of vacant and/or active parcels from willing sellers.

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Quick Facts about Acquisition and Relocation

The property acquisition and relocation process is governed by the federal Uniform Relocation Assistance and Real Property Policies Act of 1970 (also known as the "Uniform Act"), which outlines the rights of owners and tenants of business and residential properties.

The process includes two main parts:

Acquisition – The purchase of your real estate. Property owners would not be paid less than fair market value for their land and buildings. In some circumstances, if current appraisals are less than the original purchase price, an owner may be eligible for compensation equal to the original purchase price.

Relocation – Additional benefits offered should you or your business be displaced. CTA will provide a relocation agent to every displaced person to help navigate the benefits that are available. Residential homeowner financial benefits may include:

1. Moving and Related Expenses
2. Replacement Housing Payments
3. Incidental Closing Costs

CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

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Next Steps and Timeline

Now that CTA has selected the Preferred Alignment, a Final Environmental Impact Statement will be prepared and preliminary engineering will be conducted. CTA and FTA will complete any additional analyses and respond to public comments on the Draft EIS as part of the Final EIS.

On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next 5 years for the RLE Project, which will allow for completion of these next steps.

CTA will apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase of this project to pursue federal funding for construction of the project under the competitive federal “New Starts” program.

Project Development and full funding for the RLE Project under this program is a multiyear, multistep process.

CTA will continue to work with the community to complete this important project.

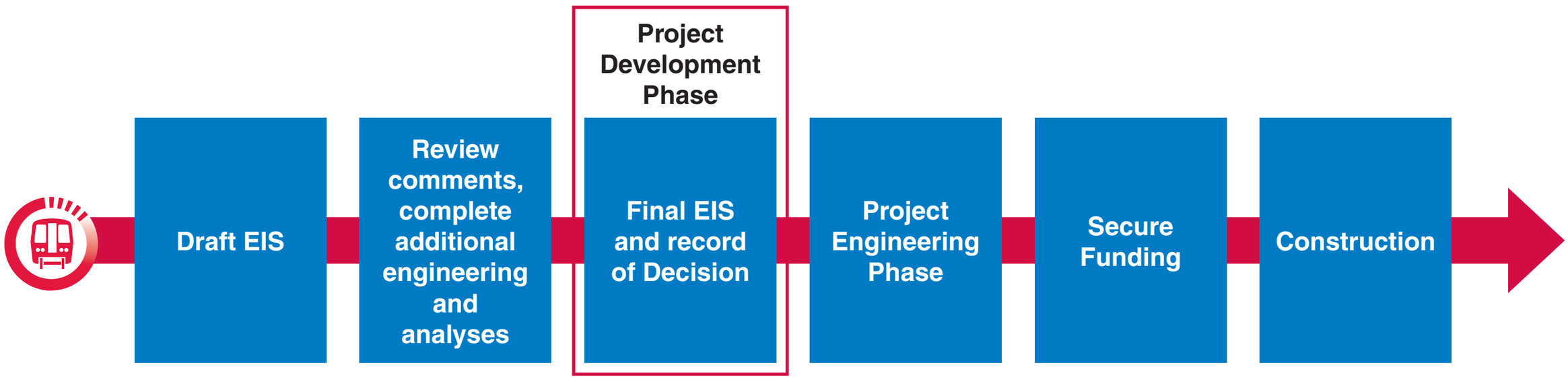

Attachment 6
Comments Received

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

Based on public feedback, technical analysis, and agency coordination, CTA has selected a Preferred Alignment for the RLE Project that is a combination of the previously presented East and West Options. The Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement (EIS). CTA is interested in your feedback about the project. Please **PRINT**.

Name MICHAEL BROWN

Address 1522 E. 85TH STREET

City CHICAGO **State** IL **Zip** 60619

Email Address mbro92@gmail.com

Please describe your questions or concerns.

I am excited about the Redline Extension, but I live North of 95th Street.

1. Why isn't there a Park N Ride at 95th St or 87th Street? People that live near the Dan Ryan are not going to drive South to a parking garage when they work downtown.

2. Please consider utilizing the old Kennedy King College land at 67th + Vincennes as a Park N Ride. It could help reduce traffic on the Dan Ryan Exwy. The Redline could really use a Parking Lot, I would ride the Redline more if I could park closer instead of taking 2 buses to get to the Redline.

3. Since CTA will be using FTA funds, is CTA awarding contracts to allow the Architect of Record and the Engineer of Record to be a DBE? CTA is building this project in a neighborhood that is primarily African-American. Please consider making the Prime Contractor an African-American Design Firm and most of the Subcontractor's DBE firms.

Over →

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Name ALEXIS BILLINGSLEA

Address 69 W. WASHINGTON, STE 2100

City CHICAGO **State** IL **Zip** 60602

Email Address alexis.billingslea@illinois.gov

Please describe your questions or concerns.

1. PARKING GARAGE @ 111th ST. - Will the parking GARAGE DESIGN CONSIDER THE AMOUNT OF TIME NEEDED TO ENTER THE GARAGE DURING PEAK RUSH HOUR? WILL THERE BE ENOUGH ENTRANCES IN ORDER TO ENTER THE GARAGE QUICKLY RATHER THAN BACKING UP THE QUEUE DOWN THE STREET DUE TO LIMITED ENTRANCE GATES?

2. HOW WILL PEOPLE BE ABLE TO PAY FOR PARKING? TRADITIONAL TICKET? PAY BY VENTRA? SPOTHERO? PARK WHIZ. HOW QUICKLY CAN PEOPLE ENTER/EXIT THE GARAGE.

3. WILL THE BRIDGE OVER THE METRA ELECTRIC ~~BE INSPECTED~~ BE INSPECTED? METRA ELECTRIC MAY HAVE LIMITATIONS THAT SLOW DOWN CONSTRUCTION DUE TO THE AIR RIGHTS AND ~~AREA~~ TIMES ALLOWED TO BUILD, OR LIMITED TIMES AVAILABLE TO PERFORM BRIDGE INSPECTIONS.

Over →

RED AHEAD
Avanzando a un rojo mejor

Red Line Extension

QUEREMOS SABER SU OPINIÓN

sobre el Proyecto de Expansión de Línea Roja (RLE)

Basándose en los comentarios del público, análisis técnico y coordinación de las agencias, CTA eligió el alineamiento preferido para el proyecto de RLE, el cual es una combinación de las opciones este y oeste presentadas anteriormente. El alineamiento preferido captaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios recibidos sobre el borrador de Declaración de Impacto Ambiental (DIA). A CTA le interesan sus comentarios sobre el proyecto. Por favor **ESCRIBA EN LETRA DE IMPRENTA.**

Nombre Marcelino Rocha

Dirección 333 E 117 ST Chicago IL 60628

Ciudad Chicago **Estado** IL **Código postal** 60628

Correo electrónico

Por favor describa sus preguntas o inquietudes. I desire to sell my property to CTA. I understand that CTA does not need my property but my entire block wishes to sell.

Continúa al reverso →

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name GREGORY WALKER JR

Address 6952 S. JEFFERY BLVD UNIT 2B

City CHICAGO **State** IL **Zip** 60649

Email Address ~~GREGOR~~ GREGOFIITCHICAGO@GMAIL.COM

Please describe your questions or concerns. No questions, I'm ~~actually~~ Actually happy with the alignment. The fact that you chose both is really great!

Something to consider:
30 South Chicago, 355 Wentworth (Pace), 358 Torrence, and 364 159th st (Pace) can these buses (in addition to all others) be re-routed to 130th st station to add better reliability to Hegewisch, Nearby Manufacturing Campus, and nearby Communities

Over →

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Moving Ahead to a Better Red

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Name ANGELA CONNER
Address 10018 S EBERHART
City CHICAGO **State** IL **Zip** 60628
Email Address AYCONNER@SBCGLOBAL.NET

Please describe your questions or concerns.

WHERE IS THE FUNDING COMING FROM?

WILL THERE BE JOB OPPORTUNITIES FOR AFRICAN-AMERICANS? SPECIFICALLY BLACK PEOPLE, NOT "MINORITIES" OR "PEOPLE OF COLOR."

THE CURRENT ADMINISTRATION ANNOUNCED THEIR INFRASTRUCTOR PLAN/BUDGET. TO THEIR PLAN EXPECTATION FOR CITIES & STATES TO PAY MORE. HOW WILL THAT AFFECT THE FUNDING FOR THE RED LINE EXTENSION?

Over →

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Name Ethel LeFiore

Address 352 W. 102nd St

City Chicago **State** IL **Zip** 60628

Email Address

Please describe your questions or concerns. I would like to sell my property.

Over →

RED AHEAD
Avanzando a un rojo mejor

Red Line Extension

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sobre el Proyecto de Expansión de Línea Roja (RLE)

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Nombre Jaime Gamero

Dirección 331 E 117th St. Chicago, IL.

Ciudad Chicago **Estado** IL. **Código postal** 60628

Correo electrónico betty gamero 24 @ gmail.com

Por favor describa sus preguntas o inquietudes. I understand that my property is not impacted but wish to sell to CTA. Our entire block wishes to sell.

Continúa al reverso →

RED AHEAD
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Name Jake Fansler

Address 4317 N Kostner ave.

City Chicago **State** IL **Zip** 60641

Email Address jakefansler@gmail.com

Please describe your questions or concerns.

Thanks for this great event. As an urban planning grad student at UIC, I worked on a 10-year plan for the Riverdale area / 130th st. station of the RLE. Throughout that process, one big takeaway was the importance of strong local economic development policy/programming to make sure that residents will be in the best position to be able to leverage the RLE. Having strong local retail and better local employment opportunities in place before the RLE comes will go a long way in helping the communities along the line use the extension as a real asset + economic catalyst. What a great opportunity for Chicago's South side. Thanks!

Over →

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Name Maureen + Scott Perazzolo

Address 245 W. 114 Street

City Chicago **State** IL **Zip** 60628

Email Address moep245@gmail.com

Please describe your questions or concerns. ① The distance from the train to our house.
② The dirt and dust from construction since I have asthma.
③ Cracking of our houses foundation. My house is over 130 years old.
④ Noise of the trains that come by mostly at night.
⑤ The shaking of the house during construction. Who will be responsible for the damages to house and cars.
⑥ We will probably have no place to park our vehicles during construction. Our vehicles are on the street where heavy equipment will be passing.

Over →

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Name Willie L. Johnson Parcel 107

Address 352 W 106 Pl.

City Chicago **State** Il **Zip** 60628

Email Address 1-773-487-4166

Please describe your questions or concerns.

Would like contacted as soon as possible re. acquisition of the property

Over →

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Name ROBERT GOSS

Address 10835 S. EBERHART ST.

City CHICAGO **State** IL **Zip** 60628

Email Address NGOSSSMITH@AOL.COM

Please describe your questions or concerns. I OWN PROPERTIES AT
10608 S. INDIANA
10612 S. INDIANA
311 W. 106TH ST.
I AM WILLING TO SELL IF YOU NEED ADDITIONAL SPACE!

Over →

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Name Yvonne Farlow

Address 352 W 107th St.

City Chicago **State** Il **Zip** 60628

Email Address farlyvon@yahoo.com

Please describe your questions or concerns.

Will the service run 24 + 7 or will it have time line

Will my window be replace for the noise

I Know it is what it is

Over →

RED AHEAD
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Red Line Extension

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Name BETH ECKERTY
Address 13208 S EXCHANGE
City CHICAGO **State** IL **Zip** 60633
Email Address betheckerty@hotmail.com

Please describe your questions or concerns.

I'm in favor of the preffered alignment and I'm glad it was selected over the bus rapid transit option.

There are a large number of people living s/w of the proposed 130th station in Altgeld Gardens, and also E of the station in Hegewish. The station will not be pedestrian friendly for either group. I would like to see transit connections from the station to the existing neighborhoods to account for the "last mile" between the station + home. Potentially an extension of an E-W bus on 130th to touch Hegewisch, or, an extension or reroute of the #30 to include the new station. Anything other than needing a car to access the transit! Thank you.

Over →

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Name Miles Churchill

Address 1170 N Milwaukee Ave

City Chicago **State** IL **Zip** 60642

Email Address MilesChurchill@gmail.com

Please describe your questions or concerns. Why is there no rendering of 136th Street Station?

Will a local workforce be required for the construction? Will there be a training program for local workers?

Is the CTA going to engage the community during the design of the stations? Will there be public art in the stations?

How will the bus lines be operated after the RLE is finished? Will 115, 103, 106, 111, 119 still all go to 95th St?

Over →

#299

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Moving Ahead to a Better Red

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Name Tessa Ferraro

Address

City **State** **Zip**

Email Address tferraro88@gmail.com

Please describe your questions or concerns.

Are there any plans for TIF legislation to fund the redline? Will there be any ~~funded~~ funding set aside for workforce development with a focus on the Roseland area? Any plans for TOD at any of the stops? Will there be a continuation with community engagement during the process of writing the final EIS?

Over →

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Name Nick Keeling

Address

City **State** **Zip**

Email Address nkeeling@illinois.edu

Please describe your questions or concerns.

What will CTA do to create the best opportunities to improve access to Altgeld Gardens. Will the CTA work with members of Altgeld Gardens to update their comprehensive plan to focus more around the transit oriented development possibilities.

How will the CTA improve brownfield lands at 130th street.

How will CTA work with the South Shore line to making a transit hub at 130th.

Will the CTA increase bus service at 130th once the new station is completed.

Will the CTA prioritize pedestrian, ADA accessible over the proposed park n ride at 130th street, it appears the park n' ride structure is getting higher priority over the actual residents.

Over →

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Name Jade Jones

Address

City Chicago **State** IL **Zip** 60628

Email Address jljones21@hotmail.com

Please describe your questions or concerns. I think what you guys are trying to do is good and all; I just have one concern / question which is what are you gonna do with the people you are moving. Also how would it affect the community socially. Also what are they getting in return for it.

Over →

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Name DORIS H. White

Address 3744 West Cullom Avenue 2ND Floor

City Chicago **State** IL **Zip** 60618

Email Address

Please describe your questions or concerns.

When will this project be finished?
When the extension is completed, will there be more buses as far as you extend the rail service?
This morning there was a freight train that stopped right there where buses had to be rerouted, will this happen with this new extension?
Will most of the buses run all night once the project is completed?
Who provided the funding for this extension project?
I pray that the services that you give to the Northwest side, e.g. extending the blue line to O'Hara that those live on the Southside will not have to wait so many years just to get an extension.
When will these buses start running in the morning and will there be an easy access for the riders to get to those buses?

Over →

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Name Cathy Patterson
Address 3216 W 103rd Pl
City Chicago **State** IL **Zip** 60628
Email Address pattersonbonnie@yahoo.com

Please describe your questions or concerns.

My concerns are solely based on how would this affect my living situations, sure the added business helps create jobs & income cases beautifies the area for a short while. But this type of business can lead to me and my family not being able to have a place of mind with outdoor activities like sitting on the porch.

- Losing the privileges of being able to park outside in front of my home ~~due~~ due to the fact that people will park their cars while at work.
- People loitering
- People littering causes my lawn many of problems
- Homeless people hanging out more frequently
- Gang members finding common grounds to fight
- My neighborhood "103rd place" off Princeton is full of senior citizens we have lived here over 30 + years this change will not improve the area
- Will there be parking permits issued

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Name JACOB E. PETERS

Address 2156 N. KEDZIE BLVD

City CHICAGO **State** IL **Zip** 60647

Email Address jacob.e.peters@gmail.com

Please describe your questions or concerns. TOO MUCH PARKING AT THE STATIONS THAT ARE NOT HIGHWAY ADJACENT. THEY WILL INCREASE COST OF PROPERTY AQUISITION & CONSTRUCTION, WITHOUT PROVIDING ADDED BENEFIT FOR TRANSIT. A PARK & RIDE LOT MAKES SENSE AT 130TH, BUT NOT AT ANY OTHER STATIONS.

BUILD HOUSING FOR PEOPLE, NOT CARS.

Over →

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Name Kelly E. Johnson
Address 15 W. 113th Street, Unit 1
City Chicago **State** IL **Zip** 60628
Email Address kelly6459@att.net

Please describe your questions or concerns.

I would recommend that the artwork in the Stations reflects their prospective communities. I think that the artwork should be done fully or partially by residents in that community. Even if a professional, well-known artist is used, residents should be included in the process of creating the artwork. This would be a great opportunity for aspiring artists in our communities.

Contests could be created to help select artists.

If the artwork reflects and includes the community, more pride will be taken to keep the stations in good condition.

Community participation is key!

Thank you.

Over

Additional Comments: I also recommend that empowerment zones be created in order to improve present businesses in the community and create new businesses.

there is a great need for light industry in this community.

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

For additional information call: **(888) YOUR-CTA (888 968-7282)**

Para más información en Español, llame al **(312) 681-2828**

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Name Jonathan Samuel
Address 7915 S. Perry Ave, #1F
City Chicago **State** Illinois **Zip** 60620
Email Address jonsamuel32@yahoo.com

Please describe your questions or concerns.

Extending The Red Line From 95th to 130th would provide direct access to the neighborhoods it would serve & would eliminate the need for buses that run along 103rd & 111th Streets to serve 95th. 103 103rd could run directly east to the 103rd/Stony Island Orange Terminal. 111 111th could run directly east to the east terminal currently served by 111A Pullman Shuttle.

Over →

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Name Tony Adams Anthony Johnson

Address 3351 W 71 th st

City Chicago **State** Illinois **Zip** 60629

Email Address 3351 W 71 th st

Please describe your questions or concerns. Ele project

Ex centerline
pr centerline
Ex track central
pr track central
pr track structure
pr roadway right-of-way
pr roadway/hardscape
Ex station platform
Pr buildings outline
pr parking
Pr Cta substation

Over →

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Name MICHAEL LAFARGUE
Address 9327 S. MICHIGAN
City CHICAGO **State** IL **Zip** 60619
Email Address MLAFARGUE1@GMAIL.COM

Please describe your questions or concerns.

WEST CHESTERFIELD COMMUNITY DOES NOT WANT CTA RELATED PARKING IN ITS NEIGHBORHOOD.

~~COMMUNITY~~ NEIGHBORHOOD BOUNDARIES

91ST TO 95TH
STATE STREET TO KING DRIVE

Over →

CTA RED LINE EXTENSION TO 130TH STREET

Proposal: The south section should be deleted and replaced by frequent express bus service to the 95th Street station.

The south section of the proposed Red Line Extension, from the 116th Street station to the 130th Street station will serve a discrete neighborhood.
The cost to build this double-tracked L line, the 130th St station, and associated traction power facilities will be very expensive.
The number of neighborhood residents using the new 130th St Station is likely to be very small: a tiny fraction of the line section's capacity.
Therefore, the construction and operating costs per rider using the 130th St station will be extremely high.

The location of the 130th St station –beyond a corner of the neighborhood served- will be inconvenient for most of the neighborhood's residents. Consider how long and inconvenient the walk will be from most of the neighborhood to the station.
A frequent bus service that circulates through the neighborhood before expressing on the Bishop Ford (*shoulder?*) to the 95th Street L station would be much more convenient to access and offer similar trip times compared to walking to the L station and then riding the train.
If rider demand warranted, direct rail transit service from the neighborhood to Hyde Park and the Loop could be inexpensively provided by building a modest station on the South Shore Line adjacent to the east side of the neighborhood. On a weekday morning between 5:00 am and 8:30 am, eight inbound South Shore trains could stop at this new station. {The South Shore currently serves the Hegewisch station in Illinois.} Ride time would be about 15 minutes to Hyde Park (which the Red Line does not serve) and 30 minutes to downtown Chicago at Van Buren Street – less than the extended Red Line.

Funding prospects for the Red Line Extension are tenuous at best. Optimistic, but realistic, scenarios suggests the new Extension will not begin service for 5 to 10 years. A Red Line Extension without the south segment to 130th Street would be substantially ($500 million?) less expensive – and therefore more likely to achieve funding approval.

Depending on the design, an express bus service to 95th Street could be running in 2 to 3 years.
The capital cost of an express bus service would be a tiny fraction of the cost of the 116th St to 130th Street L line.
The operating and maintenance costs of this express bus service would be much less than the operating and maintenance costs of the south segment of the Red Line Extension.

-- Dave May
davemay4008@gmail.com

RED AHEAD
Avanzando a un rojo mejor

Red Line Extension

QUEREMOS SABER SU OPINIÓN

sobre el Proyecto de Expansión de Línea Roja (RLE)

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Nombre Gloria Amalia

Dirección 116 E117 th. st.

Ciudad Chicago **Estado** Il. **Código postal** 6028

Correo electrónico

Por favor describa sus preguntas o inquietudes.

Si mi dirección es 116 E117 th. afectaría mi Casa me gustaría saber y tener mas Información sobre esto.

Continúa al reverso →

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

Based on public feedback, technical analysis, and agency coordination, CTA has selected a Preferred Alignment for the RLE Project that is a combination of the previously presented East and West Options. The Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement (EIS). CTA is interested in your feedback about the project. Please **PRINT**.

Name Luis Quiroga

Address 9 West 115th St.

City Chi-Rag **State** Illinois **Zip** 60628

Email Address

Please describe your questions or concerns.

Why Not Keep It-On The West Side.
It's an Open Shot from 99th St to 0 Michigan Ave. West Side.
Open RailRoad Property.
While U Have

Over →

Additional Comments: Many Citizens. (on the Eastside)
Please Take Ur Medicine
& ReThink..

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

For additional information call: **(888) YOUR-CTA (888 968-7282)**

Para más información en Español, llame al **(312) 681-2828**

#312

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

Based on public feedback, technical analysis, and agency coordination, CTA has selected a Preferred Alignment for the RLE Project that is a combination of the previously presented East and West Options. The Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement (EIS). CTA is interested in your feedback about the project. Please **PRINT**.

Name Cynthia Howard + Phillip Dixon (grandson)

Address 325 w. 112th Pl Parcel: 192

City Chicago **State** IL **Zip** 60628

Email Address phill@phillthecrealtor.com

Please describe your questions or concerns. We would like to receive a copy of the relocation act.

We would like to be part of the first group of negotiations.

We have a special needs resident that needs to remain in the city for their services.

We need to relocate to a home without a mortgage as we currently own our home without a mortgage. Also, our home is a 3 bedroom and we need to relocate to another 3 bedroom.

Over →

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

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Name Rockingham, Helen

Address 11340 S. Princeton Ave.

City Chicago **State** IL **Zip** 60628

Email Address helen-rockingham@att.net

Please describe your questions or concerns. What is CTA's Plan to Stabalize the homes near/next to Construction site to assist with the construction upset that will cause building de stablization. (Foundation, Structure)

Contact Mr Lon submitting Photo's etc. when its noticeable that there's a problem with the property.

Over →

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

Based on public feedback, technical analysis, and agency coordination, CTA has selected a Preferred Alignment for the RLE Project that is a combination of the previously presented East and West Options. The Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement (EIS). CTA is interested in your feedback about the project. Please **PRINT**.

Name Patricia A. Parsons
Address 10500 S. Walden Parkway
City Chicago **State** IL **Zip** 60643
Email Address bioladyparsons1@yahoo.com

Please describe your questions or concerns. Much needed mode of transportation for students going to school or those needing transportation to work. It will help some of the unemployment problem.

My concern is the path of the redline line, find areas that will displace the least amount of people from their homes. There are areas where abandon factories etc. can be torn down or vacant land that can be used for the extension.

Over →

RED AHEAD
Avanzando a un rojo mejor

Red Line Extension

QUEREMOS SABER SU OPINIÓN

sobre el Proyecto de Expansión de Línea Roja (RLE)

Basándose en los comentarios del público, análisis técnico y coordinación de las agencias, CTA eligió el alineamiento preferido para el proyecto de RLE, el cual es una combinación de las opciones este y oeste presentadas anteriormente. El alineamiento preferido captaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios recibidos sobre el borrador de Declaración de Impacto Ambiental (DIA). A CTA le interesan sus comentarios sobre el proyecto. Por favor **ESCRIBA EN LETRA DE IMPRENTA.**

2/14/2018

Nombre GERARDO ZARAGOZA

Dirección 11722 S CALUMET AVE

Ciudad CHICAGO **Estado** IL **Código postal** 60628

Correo electrónico ZARAGOZA SUNRESE CONSTRUCTION @ GMAIL.COM

Por favor describa sus preguntas o inquietudes. MI PREGUNTA ES QUE MATERIALES BAN A USAR PARA SOSTENER LOS RIELES DEL TREN BAN A ESTAR EN LA TIERRA COMO LOS DEL UNION PACIFIC O BAN A ESTAR SUSPENDIDOS EN PILARES DE CEMENTO BAN A PONER CERCA O BAN A ESTAR ABIERTOS COMO SE BA A COMPENSAR AL RESTO DE LA COMUNIDA PORQUE ESTE PROYECTO CREO QUE BA A CAUSAR MUCHOS INCONBENIENTES DURANTE LA CONSTRUCCION BAN A CERRAR CALLES MAQUINARIA PESADA MATERIALES TENGO OTRA CASA EN EL 11715 S CALUMET DE 2 PISOS LA TENGO RENTADA ME PREOCUPA QUE LOS INQUILINOS SE BA//AN A IR POR LAS INCONBENIENCIAS DE LA CONSTRUCCION POR EL TIEMPO QUE DURE LA CONSTRUCCION POR EL MOMENTO ESTAS SON TODAS MAS INQUIETUDES GRACIAS POR SU CONTESTACION

Continúa al reverso →

Translation of comment from:
Gerardo Zaragoza
11722 S Calumet Ave
Chicago, IL 60628

My question is what material are you going to use to support the train tracks? Are they going to be on the ground (at-grade) like the Union Pacific rails? Or are they going to be suspended on cement pillars? If suspended, is it going to be open or closed (when looking up)?

How are you going to compensate the rest of the community because I think this project is going to cause a lot of inconveniences during construction. It's going to cause roads to close because of heavy machinery and material.

I have another two-story house at 11715 South Calumet that is rented out. I'm worried the tenants will leave due to the construction inconveniences and for the entire time the construction will last.

For now, those are all my concerns. Thank you.

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, February 5, 2018 10:14 AM
To: Rachael Waters
Subject: RE: Inquiry

Hi Rachael,

Thank you for your interest in the Red Line Extension Project and contacting CTA. CTA announced selection of a Preferred Alignment for the Red Line Extension project on January 26th, 2018. The CTA Press Release can be viewed here.

The Preferred Alignment is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. It would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). Additional information about the Preferred Alignment is available here.

CTA will produce a final Environmental Impact Study (EIS) that will include further preliminary engineering work and will analyze impacts of the Preferred Alignment. The Final EIS will document the results of the Draft EIS process, confirm the Preferred Alignment, and include a list of committed final mitigation measures. It will also include and address all comments received during the public review period of the Draft EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Rachael Waters [mailto:rwaters0424@gmail.com]
Sent: Friday, January 26, 2018 9:47 AM
To: Red Extension
Subject: Inquiry

Good morning,
I am inquiring for information on a selected alternative for the Red Line Extension. Has one been selected?

Can you provide any updates to the environmental study phase of this project?

Thanks!
Rachael Waters

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, January 26, 2018 12:40 PM
To: Jen Hinton
Subject: RE: PROPERTY ACQUISITIONS along "RED LINE EXTENSION" DISPLACEMENT PROJECT

Jen,

Thank you for your interest in the Red Line Extension Project and contacting CTA.

Property at East 106th Street and South Forest Avenue **would not be** displaced by the Red Line Extension project. The alignment information and map is available here.

CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured. CTA would then notify owners of affected properties of their intent to purchase.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jen Hinton [mailto:jenahinton847@hotmail.com]
Sent: Friday, January 26, 2018 12:15 PM
To: Red Extension
Subject: PROPERTY ACQUISITIONS along "RED LINE EXTENSION" DISPLACEMENT PROJECT

Can you **kindly** tell me the **exact streets** these proposed rail lines will impact? Obviously we're home owners and worried about displacement. We've been here since 1969, with many senior citizen home owners living around us. I'm at 106th and Forest (two blocks west of King Drive).

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, February 5, 2018 9:49 AM
To: Meagher, Mike
Subject: RE: please send any updates

Thank you for your interest in the Red Line Extension (RLE) Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Meagher, Mike [mailto:MMEAGHER@mchughconstruction.com]
Sent: Monday, January 29, 2018 3:44 PM
To: Red Extension
Subject: please send any updates

MICHAEL J. MEAGHER| Senior Vice President
James McHugh Construction Co.
1737 S. Michigan Avenue | Chicago, IL 60616
P 312.821.0336 | F 312 431 0939
mmeagher@mchughconstruction.com
www.mchughconstruction.com
Follow us on **FACEBOOK** and **TWITTER**

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, January 29, 2018 2:25 PM
To: Eric Langelund; Red Extension
Cc: Thomas Mollica, III; Tom Mehalick; Tom Mollica, Jr
Subject: RE: additional information

Thank you for your interest in the Red Line Extension (RLE) Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Eric Langelund [mailto:EricL@pipingandcorrosion.com]
Sent: Monday, January 29, 2018 2:24 PM
To: Red Extension
Cc: Thomas Mollica, III; Tom Mehalick; Tom Mollica, Jr
Subject: additional information

Hello,

I would like to receive updates regarding the Red Line Extension.

Thanks.

Sincerely,

Eric S. Langelund
Project Engineer
Piping & Corrosion Specialties, Inc.
8371 Jumpers Hole Road
Millersville, MD 21108
(410) 544-3232 Office
(312) 661-2994 Cell
Website: www.pipingandcorrosion.com

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, March 6, 2018 10:28 AM
To: Gregory Evans
Subject: RE: Who is the designer or engineer for the RLE ?

Greg,

Thank you for your interest in the Red Line Extension (RLE) Project. We will add you to our contact list and make sure you receive all future communications.

The consultant who has assisted CTA with the Draft Environmental Impact Statement (EIS) for the RLE project is CWC, which is a consortium of CDM Smith, Jacobs, and Wight & Co. Consulting services for future phases of the project have not been procured yet. Future phases of the project include Project Development (Final EIS and Preliminary Engineering), Engineering, and Construction.

Visit https://urldefense.proofpoint.com/v2/url?u=http-3A__www.transitchicago.com_RedEIS&d=DwIFAg&c=NpiPIT1KNSO0vXgGk6ogJQ&r=SXIQAQ8CHM3d2AGS4a8wAbZFEerqPIAei8gfgsAX238&m=1t7qVjZ-PXsh-Po3I71XuT4q1UHDYtWNkvEaIgDYXAg&s=bwRu2nenfOLm7LEiwI9c7nQuP-LAX16vUX1JqgXbxJ4&e= to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

-----Original Message-----
From: Gregory Evans [mailto:gregevans1969@icloud.com]
Sent: Thursday, February 01, 2018 3:30 PM
To: Red Extension
Subject: Who is the designer or engineer for the RLE ?

EXTERNAL EMAIL This email originated outside of CTA. **NEVER CLICK or OPEN** unexpected links or attachments. **NEVER** provide User ID or Password. CTA IT Support will NEVER ask you for such information. If this email seems suspicious, contact CTA Help Desk at x12345.

Sent from my iPhone
Greg Evans

Lilliane Webb

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, February 5, 2018 9:50 AM
To: Tom Shepherd
Subject: RE: Please add me to the email update list

Thank you for your interest in the Red Line Extension (RLE) Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Tom Shepherd [mailto:tomshepherd2001@yahoo.com]
Sent: Thursday, February 01, 2018 10:13 AM
To: Red Extension
Subject: Please add me to the email update list

My Contact information is below:

Tom Shepherd
tomshepherd2001@yahoo.com

Thank you.

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, February 1, 2018 8:17 AM
To: Ceccarelli Rita
Subject: RE: Future updates

Thank you for your interest in the Red Line Extension (RLE) Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Ceccarelli Rita [mailto:Rita.Ceccarelli@hitachirail.com]
Sent: Thursday, February 01, 2018 4:59 AM
To: Red Extension
Subject: Future updates

DearSir,

I kindly ask you to be added to the project contact list for future updates.

Thank you very much
Rita Ceccarelli

Business Development & Sales Americas
Strategies, Sales & Program Management

Hitachi Rail Italy

t: +39 0573 370288 | f: +39 0573 506471
via Ciliegiole 110/B, 51100 Pistoia - Italy
email: rita.ceccarelli@hitachirail.com
web: www.hitachirail.com
social: Hitachi Rail Italy

****
E-mail Confidentiality Notice and Disclaimer.
****

Il presente messaggio ed ogni suo allegato sono da intendersi inviati esclusivamente agli effettivi destinatari e potrebbero essere soggetti a restrizioni legali. Se avete ricevuto questo messaggio per errore Vi invitiamo a darne immediata notifica al mittente e cancellarlo dal Vostro sistema. Qualsiasi altro uso di questo messaggio da parte Vostra e' strettamente proibito. Grazie per la Vostra collaborazione.
****
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****
Hitachi Rail Italy SpA - Codice Fiscale e Partita IVA: 13264171003
Sede Legale: via Argine 425, 80147 Napoli – Italy

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, February 5, 2018 4:15 PM
To: Michael LaFargue
Subject: RE: Please Add Me To the Project Contact List.

Thank you for your interest in the Red Line Extension (RLE) Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Michael LaFargue [mailto:mlafargue@cbzhomes.com]
Sent: Saturday, February 03, 2018 6:29 AM
To: Red Extension
Subject: Please Add Me To the Project Contact List.

Your Real Estate Resource,

Michael LaFargue, RPA, MBA, MPA
Coldwell Banker Residential
Associate Managing Broker
michael.lafargue@cbzhomes.com
Cell: 773.251.0760
Fax: 866.399.6996

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, February 5, 2018 4:15 PM
To: Michael LaFargue
Cc: Nichols, Gerald
Subject: RE: How does the Red Line Extension preferred route decision affect Wendel Smith Play Lot Park?

Michael,

Thank you for your interest in the Red Line Extension (RLE) Project and contacting CTA. The RLE Preferred Alignment would not have permanent impacts on Wendell Smith Park. It is however expected that there would be short-term closure of the park during construction.

The Preferred Alignment is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. It would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). The Preferred Alignment would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Additional information about the Preferred Alignment is available here. CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured. CTA would then notify owners of affected properties of their intent to purchase.

Note that all impacts and mitigations would be confirmed in the Final EIS, which is the next step in the project development process.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Michael LaFargue [mailto:mlafargue@cbzhomes.com]
Sent: Saturday, February 03, 2018 7:06 AM
To: Red Extension
Cc: Nichols, Gerald
Subject: How does the Red Line Extension preferred route decision affect Wendel Smith Play Lot Park?
Importance: High

How does the Red Line Extension preferred route decision affect Wendel Smith Play Lot Park?

How many buildings does the Red Line Extension preferred route decision affect? I think it is less than originally proposed/

Your Real Estate Resource,

Michael LaFargue, RPA, MBA, MPA
Coldwell Banker Residential
Associate Managing Broker
michael.lafargue@cbzhomes.com
Cell: 773.251.0760
Fax: 866.399.6996

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, February 12, 2018 10:41 AM
To: svinterlude@yahoo.com
Subject: RE: Comments on Red Line Extension

Lois,

Thank you for your interest in the Red Line Extension (RLE) Project and contacting CTA.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

If you have additional comments on the existing CTA service and facilities, please provide them at http://www.transitchicago.com/feedback/

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Lois and Merle [mailto:svinterlude@yahoo.com]
Sent: Monday, February 05, 2018 8:39 PM
To: Red Extension
Subject: Comments on Red Line Extension

The extension will be nice for all the folks who live far south and have to travel by bus to the 95th street station.

I, on the other hand, will not be able to fall asleep on the ride south, as I might miss my stop at 95th! :-(

PLEASE ask CTA to provide porta potties or other restroom facilities at CTA stations. Its a LONG ride from 95th to the North side. CTA officials obviously do not ride the CTA trains. If they did, they would see/and SMELL how desperate people relieve themselves in the little vestibules at the ends of CTA cars AND in the elevators to and from platforms. Its very disgusting.

On another CTA TOPIC - the 79th and Western bus terminal.....

Please run the #49 Bus the whole length of Western Ave IN THE CITY - terminating at 119th street and western before changing to the 349 PACE bus. Allow drivers to change posts at 79th if you must, BUT DO NOT REQUIRE RIDERS TO GET OFF AND TRANSFER BUSES AT 79TH. Its insane that from Beverly

(99th and Western) one must take THREE buses and two transfers just to get to Midway airport at 55th and Cicero. There should be only one transfer required: when one changes direction from north/south to east/west. The Ashland bus changes drivers somewhere around 70th street. Passengers are allowed to remain onboard and not forced off to brave the weather elements and local thugs.

Thanks for listening.

Lois Jacob
Sent from Yahoo Mail on Android

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, February 15, 2018 1:36 PM
To: Coral Cavanagh
Subject: RE: Mailing Address Change

Coral,

Thanks for letting us know. We will update the mailing address.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Coral Cavanagh [mailto:curalium@gmail.com]
Sent: Thursday, February 15, 2018 12:13 PM
To: Red Extension
Subject: Mailing Address Change

Hi,
Please change my mailing address

from

Coral Cavanagh
PO Box 177
Fair Oaks, CA 95628

to

Coral Cavanagh
PO Box 1234
Truckee CA 96160

Thank you,

Coral Cavanagh, AICP

coral@curalium.com
916.863.0822 phone
curalium.com

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Attachment 7
Displacements Informational Materials

Website Informational Packet (including FAQs in English)

Frequently Asked Questions – Spanish

FTA General Acquisition & Relocation Information Brochure

Property Owner Letter - Potentially Displaced

Resident/Lessee Letter - Potentially Displaced

Property Owner Letter – No Longer Potentially Displaced

Resident/Lessee Letter - No Longer Potentially Displaced

Affected Railroad Letters

Affected Agency Letters

Potential Property Impacts
Red Line Extension (RLE) Project

To provide new Red Line rail transit service to residents in Chicago's Far South Side, the agency has determined that it may be necessary to acquire certain properties to implement the Red Line Extension Project. Based on public feedback, technical analysis, and agency coordination, CTA has selected a Preferred Alignment that would run along the west side of the Union Pacific Railroad (UPRR) tracks from I-57 south to approximately 108th Place, then would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. The Preferred Alignment is a combination of the previously presented UPRR East and West Options. It would capture the benefits and minimize the impacts of either option and it also incorporates the feedback received on the Draft Environmental Impact Statement.

Potential property impacts of the Preferred Alignment estimated at this time is summarized in the attached figures and tables.

The CTA is working with a dedicated team of relocation and community liaisons who have been contacting property owners, business owners, and renters to inform them about potential property displacements and answer questions. Over the next few years, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project. At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured. CTA would then notify owners of affected properties of their intent to purchase.

The CTA's goal is to make this as easy as possible on owners and renters. For the time being, there is no need for any owner or renter to relocate.

CTA is required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations, to assure full protection of the rights of each property owner.

Among other requirements, these guidelines state that CTA must offer fair market value for any property it seeks to acquire. In some cases, property owners may be eligible for compensation at their original purchase price, if higher than the fair market value.

Additionally, CTA must provide financial assistance and relocation services for property owners as well as commercial and residential tenants who must move because of the RLE Project. Owners and renters were mailed information via regular and certified postal mail. In addition, relocation consultants have made in-person visits to the locations listed to provide additional information and collect feedback.

Owners and renters are encouraged to contact CTA's customer service department by telephone at 1-888-YOUR-CTA (1-888-968-7282), or by e-mail at RedExtension@transitchicago.com.

Red Line Extension (RLE) Project
Frequently Asked Questions

Which alignment option did CTA select?

Based on additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. The Preferred Alignment is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. This Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

How would I know if my property is affected?

The owners and tenants whose property would be affected by the Preferred Alignment were notified during the CTA door-to-door outreach, which started January 26, 2018. Letters informing owners and tenants of the selected alignment were also mailed out to all properties that were contacted in 2016—both those whose property would be affected by the Preferred Alignment, and those whose property would not be affected. CTA encourages community participation and property owner involvement. CTA will be conducting community meetings with property owners and tenants affected by the Preferred Alignment on Tuesday, February 6 from 5:30-7:30 at Fenger Academy High School (11220 S. Wallace Avenue, Chicago), and on Thursday, February 8 from 5:30-7:30 at Palmer Park (201 E. 111th Street, Chicago). Additionally, a public open house is scheduled for Tuesday, February 13, 2018 from 6-8pm at Gwendolyn Brooks College Preparatory Academy in the Main Gym (250 W. 111th Street, Chicago).

What are my rights as a property owner?

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. CTA will treat property owners fairly and will seek cooperative settlements of property acquisitions.

You can read more about your rights under applicable federal laws here:
http://www.fhwa.dot.gov/real_estate/uniform_act/acquisition/real_property.cfm
http://www.fhwa.dot.gov/real_estate/publications/your_rights/rights2014.pdf

What type of compensation will I receive?

CTA is required by federal law to offer to purchase each property for an amount that is no less than fair market value as determined by an independent appraisal. In some circumstances, if current appraisals are less than the original property purchase price, an owner may be eligible for compensation equal to the original purchase price.

In addition, CTA must provide financial assistance and relocation services, as required by federal regulations for property owners as well as commercial and residential occupants who must move because of the RLE Project.

How will CTA determine the purchase price for my property?

If CTA determines it is necessary to purchase your property for the RLE Project, it is required to hire an independent appraiser to inspect the property to determine fair market value. In that case, you, or a representative that you designate, will be invited to accompany the appraiser when the appraiser inspects your property. You or your representative may provide information about improvements to the property and any special features that may affect the value of the property such that these facts are considered in the appraisal.

What if I don't own this property but rent an apartment, or lease space for my business?

Non-owners who are leasing housing or commercial property that must be relocated because of the RLE Project are also protected by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. If needed, CTA will provide financial assistance and relocation services to assist these residents and business owners in finding a new housing or business location.

If CTA acquires my property, will you provide me help in relocating?

If you are required to move, a relocation agent will contact you, answer your questions, and provide additional information about relocation assistance advisory services and relocation payments eligibility. The goal of the relocation agent is to facilitate a smooth transition to the replacement housing or business location.

What will happen next with the RLE Project?

On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next five years for the RLE Project. This investment will allow CTA to complete the Final EIS and preliminary engineering over the next few years. CTA plans to apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase to pursue federal funding for construction of this project under the competitive federal "New Starts" program. Project development and securing full funding for the RLE Project under this program is a multiyear, multistep process. Depending on funding availability and federal approvals, the earliest that the RLE Project is expected to begin construction would be in 2022, with service anticipated to start in 2026. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

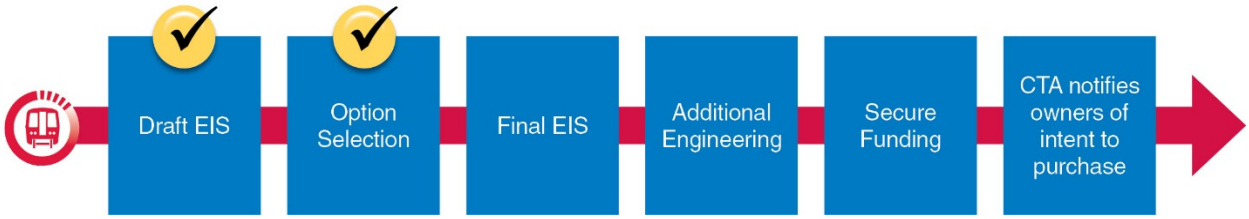

If I have additional questions about potential property acquisitions, who should I call?

Contact CTA's customer service department by telephone at 1-888-YOUR-CTA (1-888-968-7282), or by e-mail at RedExtension@transitchicago.com.

How can I learn more about the RLE Project?

You can learn more about the RLE Project and find updates on the status of the process on our webpage: www.transitchicago.com/RedEIS. To join the project contact list and get updates about the RLE Project, public meetings, and the status of environmental reviews, email RedExtension@transitchicago.com.

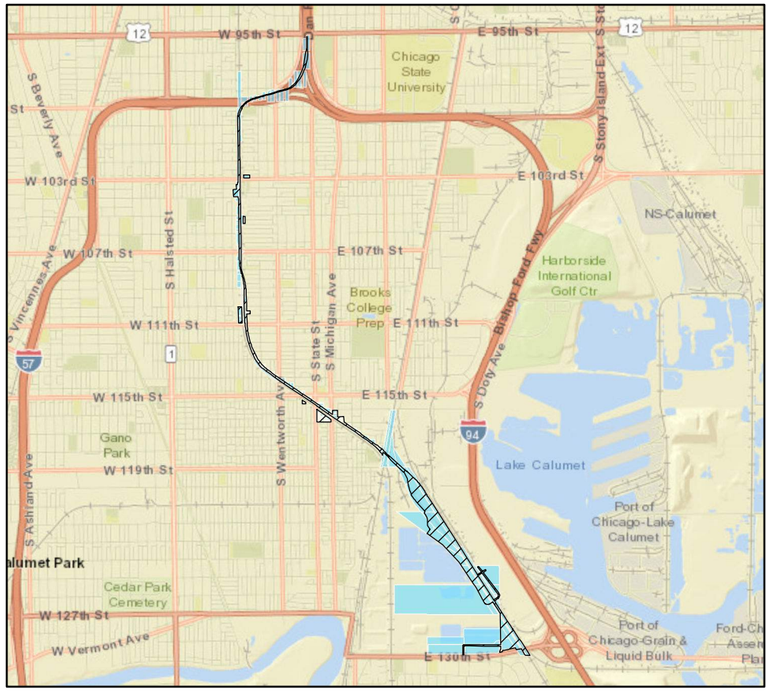

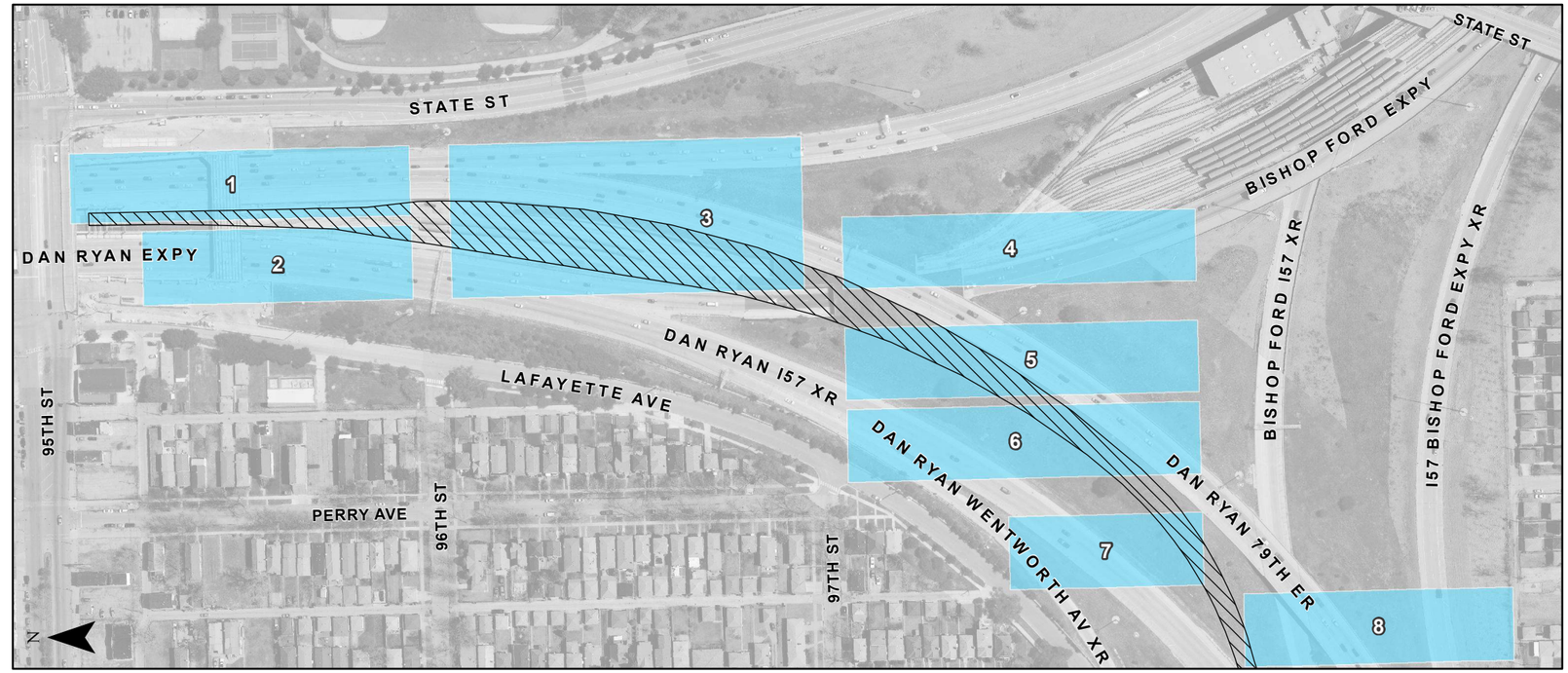

95th Street Station to the Dan Ryan/Bishop Ford Interchange

Dan Ryan/Bishop Ford Interchange to 99th Street

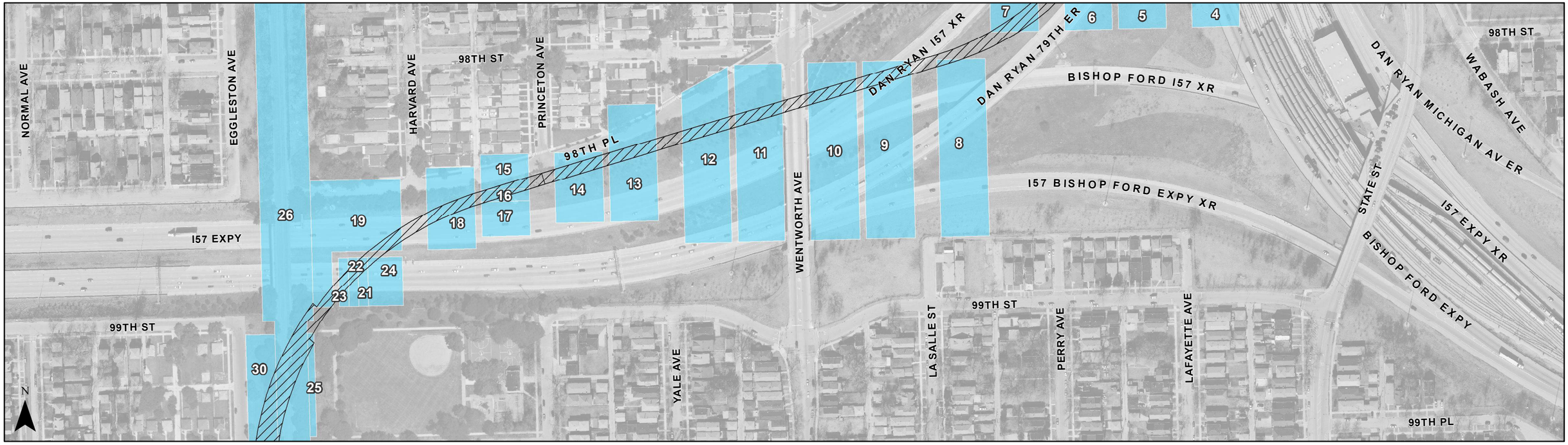

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

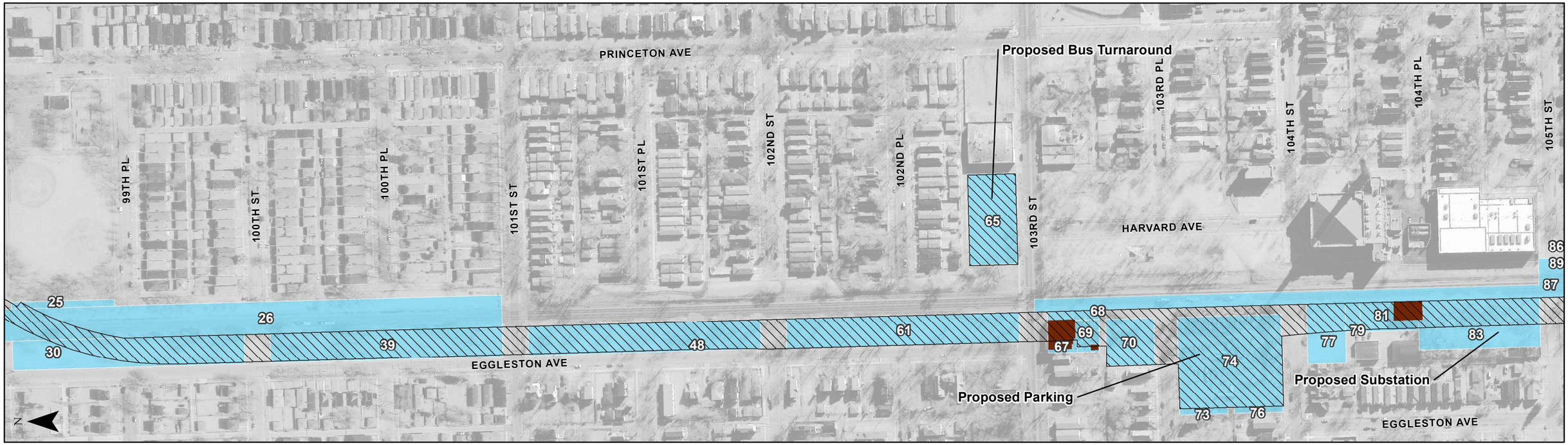

99th Place to 105th Street

105th Street to 110th Place

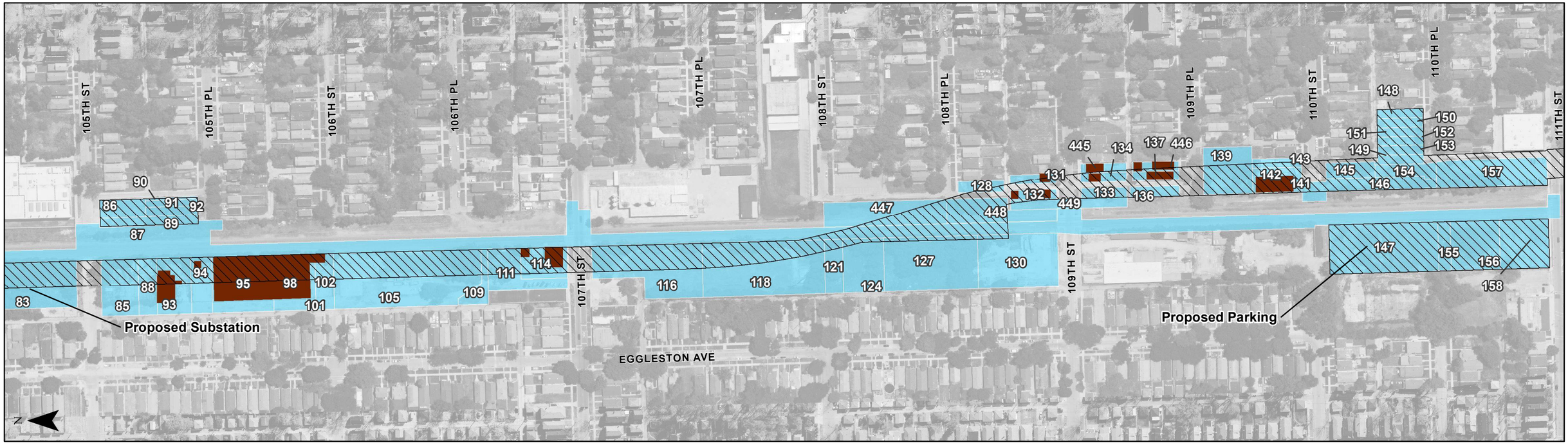

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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110th Place to Perry Avenue

Perry Avenue to Calumet Avenue

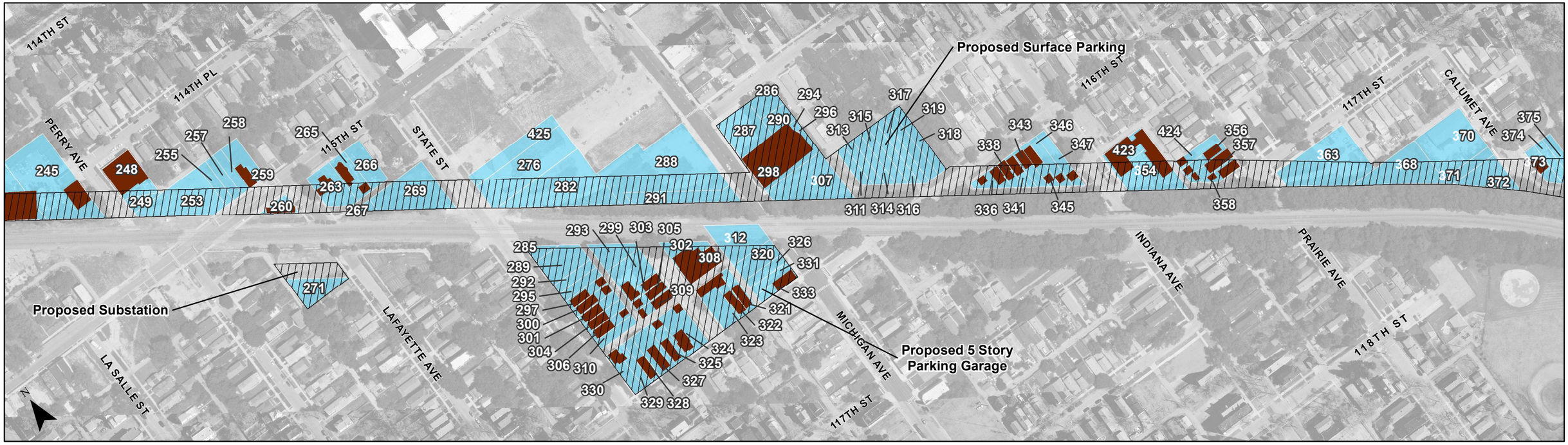

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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Red Line Extension

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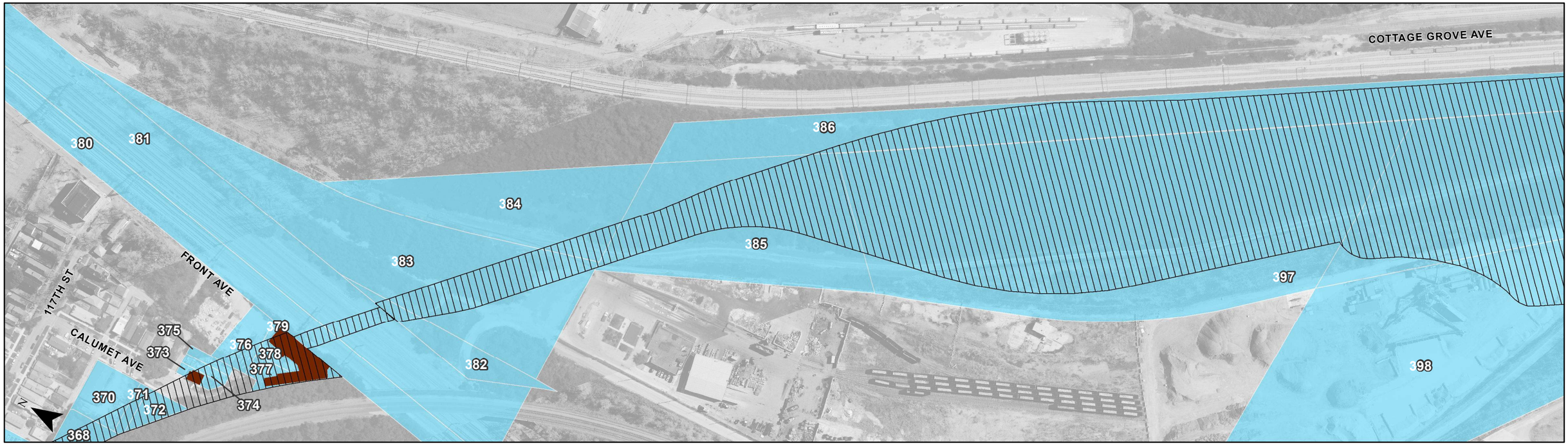

Calumet Avenue to 130th St Station

130th Street Station

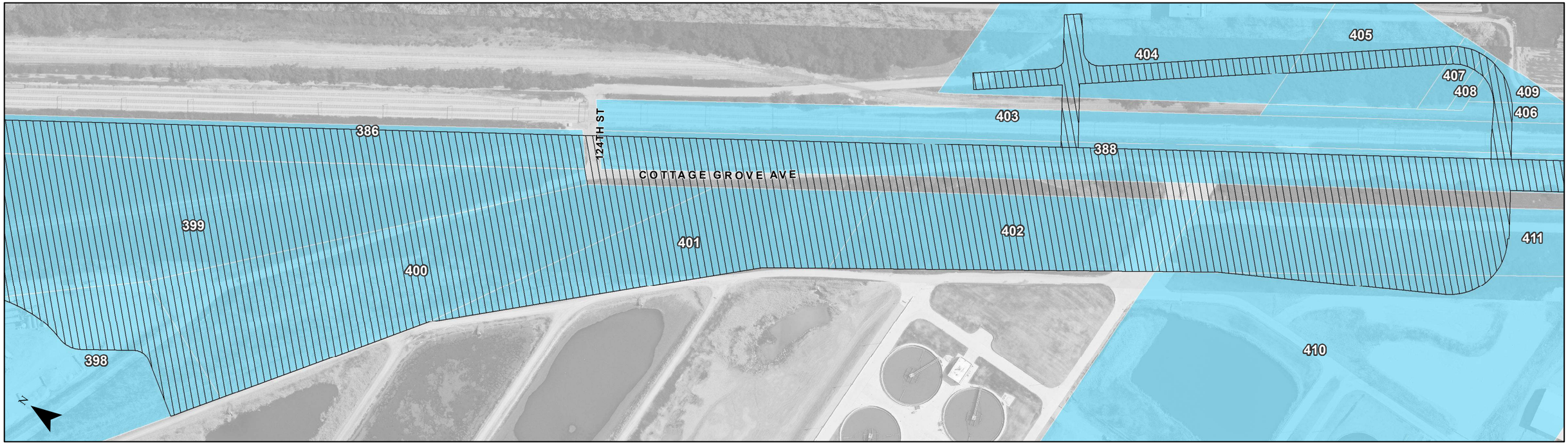

Red Line Extension Project Footprint

Displaced Building

Affected Parcel

RED AHEAD
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Red Line Extension

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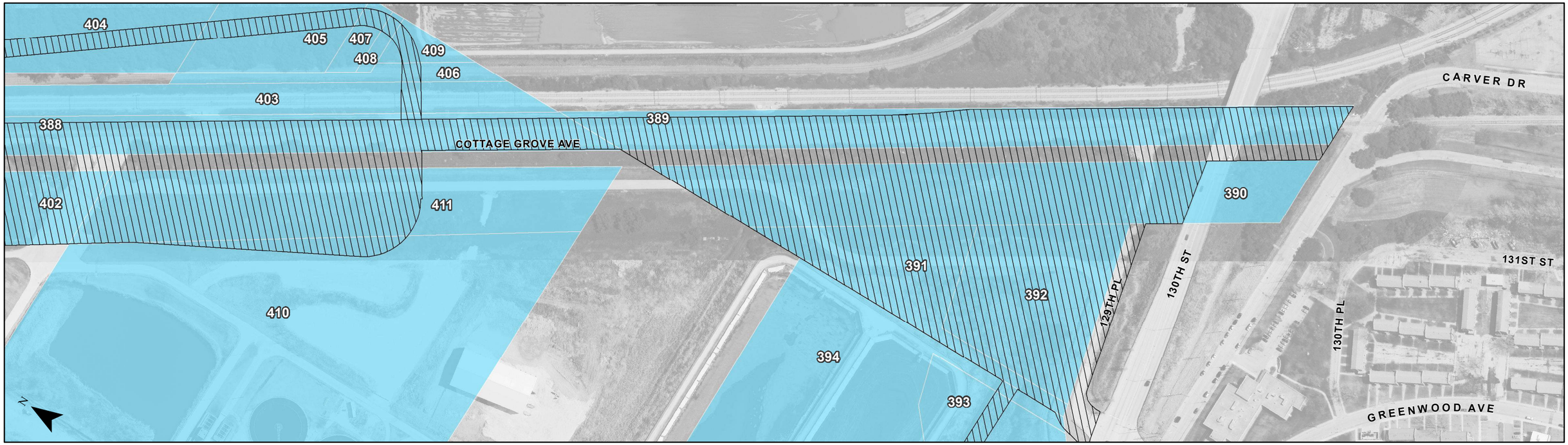

130th Street Station

130th Street Station

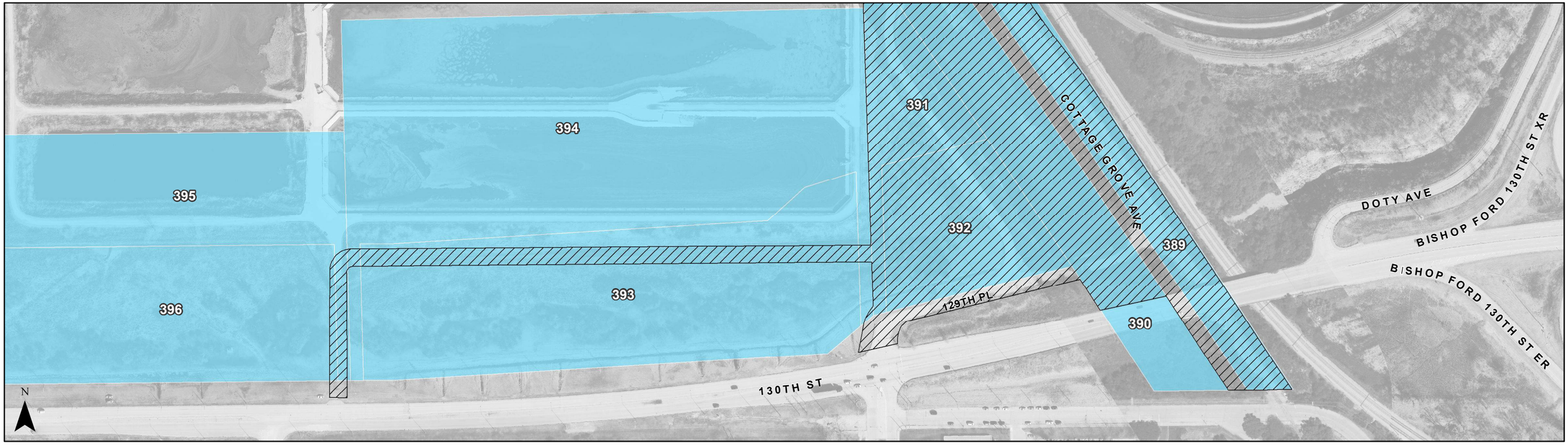

RED AHEAD
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Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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Preferred Alignment
Parcels Affected by Land Acquisition

Count	Map ID	Parcel ID	Address	Land Use Field (2017)	Displacement Type	Displacement Use
1	25	25-09-400-046-0000	341 W. 99TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
2	26	25-09-500-002-0000	351 W. 99TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
3	30	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
4	39	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
5	48	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
6	61	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
7	65	25-09-424-060-0000	340 W. 103RD STREET	Vacant	Affected Parcel	Bus Turnaround for 103rd Street Station
8	67	25-16-105-034-0000	405 W. 103RD STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
9	69	25-16-105-035-0000	403 W. 103RD STREET	Commercial	Parcel with Building Displacement	Right-of-way
10	70	25-16-105-033-0000	400 W. 103RD PLACE	Vacant	Affected Parcel	Right-of-way
11	73	25-16-107-030-0000	429 W. 103RD PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
12	74	25-16-107-010-0000	401 W. 103RD PLACE	Vacant	Affected Parcel	Parking for 103rd Street Station
13	76	25-16-107-031-0000	428 W. 104TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
14	77	25-16-113-024-0000	401 W. 104TH STREET	Commercial	Affected Parcel	Right-of-way
15	79	25-16-113-028-0000	10413 S. EGGLESTON AVENUE	Commercial	Affected Parcel	Right-of-way
16	81	25-16-113-029-0000	405 W. 104TH STREET	Commercial	Parcel with Building Displacement	Right-of-way
17	83	25-16-113-031-0000	400 W. 105TH STREET	Vacant	Affected Parcel	Right-of-way
18	85	25-16-121-024-0000	411 W. 105TH STREET	Commercial	Affected Parcel	Right-of-way
19	86	25-16-210-001-0000	317 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
20	87	25-16-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
21	88	25-16-121-025-0000	10514 S. STEWART AVENUE	Commercial	Affected Parcel	Right-of-way
22	89	25-16-500-007-0000	360 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
23	90	25-16-210-040-0000	232 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
24	91	25-16-210-039-0000	232 W 105TH PLACE	Public (City of Chicago)	Affected Parcel	Substation
25	92	25-16-210-038-0000	230 W. 105TH PLACE	Public (City of Chicago)	Affected Parcel	Substation
26	93	25-16-121-031-0000	10520 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
27	94	25-16-121-032-0000	10528 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
28	95	25-16-121-022-0000	10530 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
29	98	25-16-121-027-0000	10548 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
30	101	25-16-121-028-0000	10552 S. STEWART AVENUE	Industrial	Affected Parcel	Right-of-way
31	102	25-16-121-029-0000	10558 S. STEWART AVENUE	Industrial	Affected Parcel	Right-of-way
32	105	25-16-129-030-0000	10638 S. STEWART AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
33	109	25-16-129-031-0000	10632 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
34	111	25-16-129-029-0000	410 W. 107TH STREET	Industrial	Affected Parcel	Right-of-way
35	114	25-16-129-028-0000	400 W. 107TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
36	116	25-16-307-025-0000	405 W. 107TH STREET	Vacant	Affected Parcel	Right-of-way
37	118	25-16-307-022-0000	400 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
38	121	25-16-315-025-0000	405 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
39	124	25-16-315-026-0000	405 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
40	127	25-16-315-027-0000	410 W. 109TH STREET	Vacant	Affected Parcel	Right-of-way
41	128	25-16-411-001-0000	351 W. 108TH PLACE	Vacant	Affected Parcel	Right-of-way
42	130	25-16-315-024-0000	410 W. 109TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
43	131	25-16-411-020-0000	350 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
44	132	25-16-411-019-0000	354 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
45	133	25-16-415-001-0000	355 W. 109TH STREET	Vacant	Affected Parcel	Right-of-way
46	134	25-16-415-002-0000	351 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way

Preferred Alignment
Parcels Affected by Land Acquisition

Count	Map ID	Parcel ID	Address	Land Use Field (2017)	Displacement Type	Displacement Use
47	136	25-16-415-021-0000	354 W. 109TH PLACE	Vacant	Affected Parcel	Right-of-way
48	137	25-16-415-022-0000	350 W. 109TH PLACE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
49	139	25-16-419-032-0000	355 W. 109TH PLACE	Vacant	Affected Parcel	Right-of-way
50	141	25-16-419-036-0000	356 W. 110TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
51	142	25-16-419-014-0000	352 W. 110TH STREET	Industrial	Affected Parcel	Right-of-way
52	143	25-16-419-015-0000	350 W. 110TH STREET	Commercial	Affected Parcel	Right-of-way
53	145	25-16-423-036-0000	349 W. 110TH STREET	Vacant	Affected Parcel	Right-of-way
54	146	25-16-423-037-0000	353 W. 110TH STREET	Vacant	Affected Parcel	Right-of-way
55	147	25-16-329-007-0000	11026 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
56	148	25-16-423-024-0000	336 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
57	149	25-16-423-019-0000	348 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
58	150	25-16-423-023-0000	338 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
59	151	25-16-423-022-0000	340 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
60	152	25-16-423-021-0000	342 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
61	153	25-16-423-020-0000	346 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
62	154	25-16-423-018-0000	352 W. 110TH PLACE	Vacant	Affected Parcel	Right-of-way
63	155	25-16-329-009-0000	11037 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
64	156	25-16-329-008-0000	11041 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
65	157	25-16-427-001-0000	356 W. 111TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
66	158	25-16-329-005-0000	402 W. 111TH STREET	Vacant	Affected Parcel	Parking for 111th Street Station
67	160	25-21-501-003-0000	501 E. 112TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
68	161	25-21-200-001-0000	349 W. 111TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
69	166	25-21-200-014-0000	348 W. 111TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
70	169	25-21-200-015-0000	344 W. 111TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
71	173	25-21-204-001-0000	345 W. 111TH PLACE	Vacant	Affected Parcel	Right-of-way
72	174	25-21-204-002-0000	341 W. 111TH PLACE	Vacant	Affected Parcel	Right-of-way
73	179	25-21-204-015-0000	340 W. 112TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
74	181	25-21-204-016-0000	336 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
75	182	25-21-208-003-0000	339 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
76	183	25-21-208-004-0000	335 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
77	184	25-21-208-005-0000	333 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
78	186	25-21-208-016-0000	330 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
79	187	25-21-208-017-0000	330 W. 112TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
80	189	25-21-208-018-0000	328 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
81	192	25-21-212-010-0000	325 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
82	194	25-21-212-011-0000	319 W. 112TH PLACE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
83	195	25-21-212-012-0000	317 W. 112TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
84	196	25-21-212-019-0000	320 W. 113TH STREET	Single-family Residential	Affected Parcel	Right-of-way
85	198	25-21-212-020-0000	320 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
86	199	25-21-212-021-0000	316 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
87	201	25-21-212-022-0000	312 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
88	202	25-21-212-023-0000	310 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
89	204	25-21-217-001-0000	309 W. 113TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
90	205	25-21-217-002-0000	307 W. 113TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
91	206	25-21-217-003-0000	303 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
92	207	25-21-217-012-0000	11332 S. PRINCETON AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way

Preferred Alignment
Parcels Affected by Land Acquisition

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93	209	25-21-218-024-0000	11315 S. PRINCETON AVENUE	Vacant	Affected Parcel	Right-of-way
94	210	25-21-218-025-0000	11319 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
95	211	25-21-218-026-0000	11321 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
96	212	25-21-218-027-0000	11325 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
97	214	25-21-218-028-0000	11327 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
98	216	25-21-218-020-0000	11330 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
99	218	25-21-218-021-0000	11334 S. YALE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
100	219	25-21-218-022-0000	11336 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
101	221	25-21-218-023-0000	11342 S. YALE AVENUE	Vacant	Affected Parcel	Right-of-way
102	222	25-21-219-014-0000	11343 S. YALE AVENUE	Single-family Residential	Affected Parcel	Right-of-way
103	223	25-21-219-015-0000	11345 S. YALE AVENUE	Vacant	Affected Parcel	Right-of-way
104	224	25-21-219-016-0000	11347 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
105	225	25-21-219-017-0000	11351 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
106	227	25-21-219-018-0000	11355 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
107	228	25-21-219-036-0000	11352 S. WENTWORTH AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
108	229	25-21-219-037-0000	11358 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
109	230	25-21-501-001-0000	401 W. 111TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
110	233	25-21-228-001-0000	149 W. 114TH STREET	Vacant	Affected Parcel	Right-of-way
111	236	25-21-228-002-0000	135 W. 114TH STREET	Institution (Place of Worship)	Parcel with Building Displacement	Right-of-way
112	238	25-21-228-003-0000	131 W. 114TH STREET	Single-family Residential	Affected Parcel	Right-of-way
113	240	25-21-228-046-0000	11424 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
114	242	25-21-228-047-0000	11424 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
115	245	25-21-228-023-0000	11426 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
116	248	25-21-230-035-0000	11439 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
117	249	25-21-230-034-0000	52 W. 115TH STREET	Industrial	Affected Parcel	Right-of-way
118	253	25-21-230-036-0000	52 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
119	255	25-21-230-019-0000	46 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
120	257	25-21-230-020-0000	44 W. 115TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
121	258	25-21-230-021-0000	42 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
122	259	25-21-230-022-0000	40 W. 115TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
123	260	25-21-406-029-0000	35 W. 115TH STREET	Commercial	Parcel with Building Displacement	Right-of-way
124	263	25-21-407-001-0000	23 W. 115TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
125	265	25-21-407-002-0000	17 W. 115TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
126	266	25-21-407-003-0000	11 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
127	267	25-21-407-007-0000	11516 S. STATE STREET	Vacant	Affected Parcel	Right-of-way
128	269	25-21-407-029-0000	11514 S. STATE STREET	Vacant	Affected Parcel	Right-of-way
129	271	25-21-406-030-0000	11524 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Substation
130	285	25-22-300-009-0000	11549 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
131	286	25-22-304-047-0000	113 E. KENSINGTON AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
132	287	25-22-304-050-0000	11555 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
133	289	25-22-300-010-0000	11551 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
134	290	25-22-304-049-0000	11557 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
135	292	25-22-300-011-0000	11561 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
136	293	25-22-300-070-0000	11556 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
137	294	25-22-304-005-0000	11563 S. MICHIGAN AVENUE	Industrial	Affected Parcel	Parking for Michigan Avenue Station
138	295	25-22-300-012-0000	11563 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station

Preferred Alignment
Parcels Affected by Land Acquisition

Count	Map ID	Parcel ID	Address	Land Use Field (2017)	Displacement Type	Displacement Use
139	296	25-22-304-006-0000	11565 S. MICHIGAN AVENUE	Industrial	Affected Parcel	Parking for Michigan Avenue Station
140	297	25-22-300-013-0000	11567 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
141	298	25-22-304-007-0000	11567 S. MICHIGAN AVENUE	Industrial	Parcel with Building Displacement	Parking for Michigan Avenue Station
142	299	25-22-300-069-0000	11562 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
143	300	25-22-300-014-0000	11569 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
144	301	25-22-300-015-0000	11571 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
145	302	25-22-300-071-0000	11557 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
146	303	25-22-300-021-0000	11572 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
147	304	25-22-300-016-0000	11573 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
148	305	25-22-300-022-0000	11574 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
149	306	25-22-300-017-0000	11575 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
150	307	25-22-304-008-0000	11579 S. MICHIGAN AVENUE	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
151	308	25-22-300-049-0000	11573 S. WABASH AVENUE	Commercial	Parcel with Building Displacement	Parking for Michigan Avenue Station
152	309	25-22-300-023-0000	11578 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
153	310	25-22-300-018-0000	11579 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
154	311	25-22-304-027-0000	120 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
155	313	25-22-304-028-0000	122 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
156	314	25-22-304-029-0000	124 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
157	315	25-22-304-030-0000	128 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
158	316	25-22-304-031-0000	130 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
159	317	25-22-304-032-0000	132 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
160	318	25-22-304-034-0000	136 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
161	319	25-22-304-033-0000	134 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
162	320	25-22-300-059-0000	11582 S. MICHIGAN AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
163	321	25-22-300-052-0000	38 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
164	322	25-22-300-051-0000	34 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
165	323	25-22-300-050-0000	32 E. 116TH STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
166	324	25-22-300-029-0000	20 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
167	325	25-22-300-028-0000	16 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
168	326	25-22-300-060-0000	11586 S. MICHIGAN AVENUE	Mixed-Use Commercial/Residential	Affected Parcel	Parking for Michigan Avenue Station
169	327	25-22-300-027-0000	12 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
170	328	25-22-300-026-0000	8 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
171	329	25-22-300-025-0000	11583 S. STATE STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
172	330	25-22-300-024-0000	11583 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
173	331	25-22-300-061-0000	11588 S. MICHIGAN AVENUE	Mixed-Use Commercial/Residential	Affected Parcel	Parking for Michigan Avenue Station
174	333	25-22-300-062-0000	11592 S. MICHIGAN AVENUE	Mixed-Use Commercial/Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
175	336	25-22-308-014-0000	151 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
176	338	25-22-308-015-0000	153 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
177	341	25-22-308-016-0000	155 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
178	343	25-22-308-017-0000	157 E. 116TH STREET	Multifamily Residential	Affected Parcel	Right-of-way
179	345	25-22-308-018-0000	159 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
180	346	25-22-308-019-0000	163 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
181	347	25-22-308-020-0000	165 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
182	354	25-22-311-013-0000	11631 S. INDIANA AVENUE	Public (City of Chicago)	Parcel with Building Displacement	Right-of-way
183	356	25-22-311-021-0000	11630 S. PRAIRIE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
184	357	25-22-311-024-0000	11632 S. PRAIRIE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way

Preferred Alignment
Parcels Affected by Land Acquisition

Count	Map ID	Parcel ID	Address	Land Use Field (2017)	Displacement Type	Displacement Use
185	358	25-22-311-025-0000	11634 S. PRAIRIE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
186	363	25-22-316-001-0000	319 E. 117TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
187	368	25-22-316-035-0000	11712 S. Calumet Avenue	Vacant	Affected Parcel	Right-of-way
188	370	25-22-316-034-0000	11722 S. CALUMET AVENUE	Commercial	Affected Parcel	Right-of-way
189	371	25-22-316-030-0000	11726 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
190	372	25-22-316-031-0000	11728 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
191	373	25-22-317-013-0000	354 E. 118TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
192	374	25-22-317-014-0000	356 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
193	375	25-22-317-015-0000	358 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
194	376	25-22-317-030-0000	11742 S. FRONT AVENUE	Industrial	Affected Parcel	Right-of-way
195	377	25-22-317-031-0000	11810 S. CALUMET AVENUE	Industrial	Affected Parcel	Right-of-way
196	378	25-22-317-032-0000	11810 S. CALUMET AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
197	379	25-22-317-033-0000	375 E. 118TH STREET	Industrial	Affected Parcel	Right-of-way
198	380	25-22-317-035-0000	11800 S. FRONT AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
199	381	25-22-501-005-0000	360 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
200	382	25-22-325-001-0000	370 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
201	383	25-22-400-026-0000	11600 S. COTTAGE GROVE AVENUE	Industrial	Affected Parcel	Right-of-way
202	384	25-22-400-027-0000	11600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
203	385	25-27-108-009-0000	11900 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
204	386	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
205	388	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
206	389	25-26-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
207	390	25-26-300-017-0000	12807 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
208	391	25-26-300-015-0000	12813 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
209	392	25-26-300-014-0000	12817 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
210	393	25-27-301-013-0000	310 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
211	394	25-27-301-012-0000	325 E. 127TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
212	395	25-27-301-011-0000	350 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
213	396	25-27-301-010-0000	360 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
214	397	25-22-401-034-0000	1355 E. 121ST STREET	Transportation (railroad)	Affected Parcel	120th Street Yard
215	398	25-27-200-007-0000	12256 S. COTTAGE GROVE AVENUE	Industrial	Parcel with Building Displacement	120th Street Yard
216	399	25-27-200-009-0000	12256 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
217	400	25-27-200-010-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
218	401	25-27-200-012-0000	12534 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
219	402	25-27-200-013-0000	12546 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
220	403	25-27-503-001-0000	12320 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
221	404	25-27-200-004-0000	12500 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
222	405	25-27-400-003-0000	12606 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
223	406	25-27-400-002-0000	12600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
224	407	25-27-400-007-0000	12614 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
225	408	25-27-400-005-0000	12608 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
226	409	25-27-400-006-0000	12610 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
227	410	25-27-301-007-0000	300 E. 127TH STREET	Utility (MWRD)	Affected Parcel	120th Street Yard
228	411	25-27-400-009-0000	12618 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
229	412	25-21-200-002-0000	347 W. 111TH STREET	Single-family Residential	Affected Parcel	Right-of-way
230	423	25-22-311-012-0000	11633 S. INDIANA AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way

Preferred Alignment
Parcels Affected by Land Acquisition

Count	Map ID	Parcel ID	Address	Land Use Field (2017)	Displacement Type	Displacement Use
231	424	25-22-311-020-0000	11626 S. PRAIRIE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
232	445	25-16-415-003-0000	349 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
233	446	25-16-415-023-0000	348 W. 109TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
234	447	25-16-500-017-0000	362 W. 108TH PLACE	Transportation (railroad)	Affected Parcel	Right-of-way
235	448	25-16-500-018-0000	364 W. 109TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
236	449	25-16-500-028-0000	359 W. 109TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way

Note - The following parcels are defined as easements and are not included in the table: Map ID 1-24, 276, 282, 288, 291, 312, and 425. Publicly owned parcels that include a roadway are classified as "easements" for this analysis because CTA would require a use agreement with the public entity.

Proyecto de Expansión de la Línea Roja (RLE)
Preguntas frecuentes

¿Cuál opción de alineamiento eligió CTA?
Basándose en la planificación de proyecto y trabajo de ingeniería adicional realizado en el pasado año, CTA ha elegido un alineamiento preferido. El alineamiento preferido es una combinación de las opciones este y oeste de Union Pacific Railroad (UPRR) presentadas anteriormente. Este alineamiento preferido capturaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios del público y de la agencia sobre el borrador de la Declaración de Impacto Ambiental (DIA). El alineamiento preferido tendría menos impactos que con las opciones este u oeste. Afectaría menos residencias que con la opción este y menos negocios y empleos que con la opción oeste. Los impactos de ruido y vibración no serían mayores que los anticipados con la opción este u oeste.

¿Cómo sabré si mi propiedad será afectada?
Los dueños e inquilinos cuyas propiedades serán afectadas por el alineamiento preferido fueron notificados durante las labores de divulgación a domicilio, las cuales comenzaron el 26 de enero de 2018. También se enviaron cartas que informan a los dueños e inquilinos sobre el alineamiento elegido a todas las propiedades que fueron contactadas en el 2016, tanto las propiedades que serían afectadas por el alineamiento preferido, como aquellas que no serían afectadas. CTA alienta la participación de la comunidad y de los dueños de propiedades. CTA llevará a cabo reuniones comunitarias con los dueños e inquilinos de propiedades afectados por el alineamiento preferido el martes 6 de febrero de 5:30 a 7:30 p.m. en Fenger Academy High School (11220 S. Wallace Avenue, Chicago), y el jueves 8 de febrero de 5:30 a 7:30 p.m. en Palmer Park (201 E. 111th Street, Chicago). Además, se programó una casa abierta pública el martes 13 de febrero de 2018 de 6:00 a 8:00 p.m. en el gimnasio principal de Gwendolyn Brooks College Preparatory Academy (250 W. 111th Street, Chicago).

¿Cuáles son mis derechos como dueño de una propiedad?
Si CTA determina en última instancia que es necesario comprar propiedades privadas para el proyecto de RLE, CTA estaría obligada a seguir las guías establecidas en la Ley Uniforme de Asistencia para la Reubicación y Políticas de Adquisición de Propiedad Inmueble de 1970, según enmendada, y los reglamentos del estado. CTA tratará a los dueños de propiedades de manera justa e intentará llegar a acuerdos conjuntos para la adquisición de las propiedades.

Puede leer más sobre sus derechos conforme a las leyes federales correspondientes aquí:
http://www.fhwa.dot.gov/real_estate/uniform_act/acquisition/real_property.cfm
http://www.fhwa.dot.gov/real_estate/publications/your_rights/rights2014.pdf

¿Qué tipo de remuneración recibiré?
Las leyes federales exigen que CTA ofrezca comprar cada propiedad por una cantidad que no sea menor que el valor justo del mercado, según lo determine una tasación independiente. En algunas circunstancias, si las tasaciones actuales son por una cantidad menor que el precio de compra original de la propiedad, puede que el dueño califique para una remuneración equivalente al precio de compra original.

Además, CTA tiene que proporcionar asistencia financiera y servicios de reubicación, según lo exigen las normas federales, para los dueños de propiedades, así como los inquilinos comerciales y residenciales que tengan que mudarse debido al proyecto de RLE.

¿Cómo determinará CTA el precio de compra de mi propiedad?
Si CTA determina que es necesario comprar su propiedad para el proyecto de RLE, está obligada a contratar a un tasador independiente para inspeccionar la propiedad y determinar el valor justo del mercado. En ese caso, usted, o el representante que usted designe, será invitado a acompañar al tasador cuando éste inspeccione su propiedad. Usted o su representante podría proporcionar información sobre las mejoras a la propiedad y cualquier característica especial que podría afectar el valor de la propiedad para asegurarse de que esta información se considere en la tasación.

¿Qué sucedería si no soy dueño de la propiedad, pero alquilo un apartamento o arriendo un espacio para mi negocio?
Los que no sean dueños y estén arrendando una vivienda o propiedad comercial y tengan que mudarse por motivo del proyecto de RLE también están protegidos por la Ley Uniforme de Asistencia para la Reubicación y Políticas de Adquisición de Propiedad Inmueble de 1970, según enmendada. De ser necesario, CTA proporcionará asistencia financiera y servicios de reubicación para ayudar a estos residentes y dueños de negocios a encontrar una nueva vivienda o ubicación para su negocio.

Si CTA adquiere mi propiedad, ¿me ayudará con la mudanza?
Si tiene que mudarse, un agente de reubicación se comunicará con usted, contestará sus preguntas y le proporcionará información adicional sobre los servicios de asesoramiento de ayuda para la reubicación y si califica para pagos de reubicación. La meta del agente de reubicación es facilitar una transición sin problemas a la nueva vivienda o ubicación para el negocio.

¿Qué es lo próximo que sucederá con el proyecto de RLE?
El 27 de noviembre de 2016, el alcalde Emanuel y CTA anunciaron la aprobación de fondos por la cantidad de $75 millones durante los próximos cinco años para el proyecto de RLE. Esta inversión le permitirá a CTA terminar el DIA final y los estudios de ingeniería preliminares durante los próximos años. CTA tiene previsto solicitar a Federal Transit Administration (FTA) el ingreso a la fase de desarrollo del proyecto para obtener fondos federales para la construcción del proyecto conforme al programa federal competitivo "New Starts." El desarrollo del proyecto y la obtención de todos los fondos para el proyecto de RLE conforme a este programa es un proceso de varias etapas que tomará varios años. Dependiendo de la disponibilidad de fondos y las aprobaciones federales, lo más temprano que se anticipa que comience la construcción del proyecto de RLE es en el 2022. Se anticipa que el servicio comenzará en el 2026. Nuevamente, CTA no tiene previsto hacer gestiones para adquirir propiedades privadas para el proyecto de RLE hasta que termine la revisión ambiental y se obtengan los fondos para el proyecto.

¿A quién debo llamar si tengo más preguntas sobre la posible adquisición de propiedades?
Comuníquese con el departamento de servicio al cliente de CTA por teléfono al 1-888-YOUR-CTA (1-888-968-7282) o por correo electrónico a RedExtension@transitchicago.com.

¿Cómo puedo obtener más información sobre el proyecto de RLE?
Puede obtener más información sobre el proyecto de RLE y encontrar actualizaciones sobre la situación del proceso en nuestra página web: www.transitchicago.com/RedEIS. Para unirse a la lista de contactos del proyecto y recibir actualizaciones sobre el proyecto de RLE, audiencias públicas y la situación de las revisiones ambientales, envíe un correo electrónico a RedExtension@transitchicago.com.

More Relocation Information

Business

A business that is relocated as a result of the project may be entitled to benefits such as:

1. *Moving and Related Costs*
2. *Reestablishment Costs*
3. *Fixed Payment*

Statements applicable to all categories and benefits listed

Please keep in mind that there are specific benefit requirements that must be met to receive any of the funds mentioned above. Your assigned relocation agent will assist you to fully understand the payments and requirements.

No one may be displaced until adequate housing has been made available to them.

All persons required to move personal property, their home, or business must be given at least 90 days to vacate.

Your Local Transit Agency will establish an appeal process should you be aggrieved by a denial of benefits or if you feel the benefits are inadequate.

A message from the FTA and your local transit agency

It is sometimes necessary to acquire private property and displace persons and businesses in order to build a transit facility that will benefit the entire community. However, we will work with you to minimize the inevitable disruption that this causes. Please feel free to contact the agency and person listed below should you have any further questions.

Revised rules for the Uniform Act were published in the Federal Register on January 4, 2005. The rules are reprinted each year in the Code of Federal Regulations, Title 49, Part 24. All Federal, State and local government agencies, as well as others receiving Federal financial assistance for public programs and projects, that require the acquisition of real property, must comply with the policies and provisions set forth in the Uniform Act and the regulation.

For further information, please contact:

CTA Customer Service
1-888-YOUR-CTA
(1-888-968-7282)

RedExtension@transitchicago.com

FEDERAL TRANSIT ADMINISTRATION

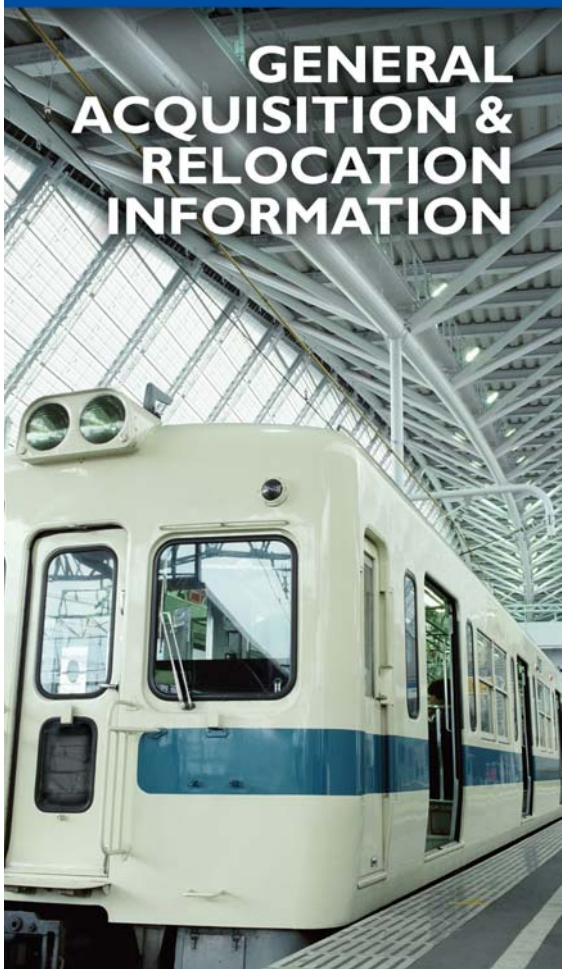

GENERAL ACQUISITION & RELOCATION INFORMATION

FTA | U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL TRANSIT ADMINISTRATION

SEE THE BACK PANEL OF THIS BROCHURE FOR INFORMATION ON CONTACTING YOUR LOCAL AGENCY.

GENERAL INFORMATION

Your local transit agency may need to purchase property from you with funding from the Federal Transit Administration (FTA) in order to benefit the general public. To assure fair and consistent treatment of all persons, the FTA will require your local transit agency to follow the Uniform Relocation Assistance and Real Property Policies Act of 1970, as amended. The Uniform Act is a law passed by Congress to promote uniformity and fairness when a local transit agency must acquire property or displace persons. There are two main parts of this process:

1. *Acquisition, which is the purchase of your real estate.*
2. *Relocation which offers additional benefits should you or your business be displaced.*

Acquisition of Real Property

The purchase of real estate by a transit agency begins with the appraisal of your property. An appraiser will inspect your property to determine the value. The property owner should accompany the appraiser while making this inspection. A second appraiser will then review and approve the work of the first appraiser and will recommend a value to the local transit agency.

You should then receive a written offer to purchase your property. You will have sufficient time to consider the offer or make any counter offers that you believe is fair.

If you elect to sell your property to the local transit agency, you will be paid the full amount less any encumbrances (mortgage, lien, etc.) owed on that property. Possession of vacant property may be taken the day of closing by the local transit agency; possession of occupied property will be at an agreed future date.

Relocation

Advisory Assistance will be offered to every displaced person. A Relocation Agent will visit you to explain all of the benefits and services that you may be eligible to receive.

Below is a very brief outline of the various types of financial benefits available if you or your business are required to move.

Residential Homeowner Occupants, are those that have owned and occupied their home for at least 180 days. Typical benefits include:

1. *Moving Costs*
2. *Price Differential Payment*
3. *Increased Mortgage Interest*
4. *Incidental Closing Costs*

90 day Occupant or Tenant, is either a tenant or a homeowner that has occupied their home for less than 180 days but at least 90 days. Relocation benefits include:

1. *Moving Costs*
2. *Rental Assistance Payment/Down Payment*

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 24, 2018

Via Certified Mail, Regular Mail, and Hand Delivery

[MAILING NAME]
[MAILING ADDRESS]
[MAILING CITY], [MAILING STATE] [MAILING ZIP]

Dear Property Owner:

In October 2016 we sent you a letter about the Chicago Transit Authority (CTA) project known as the Red Line Extension (RLE) Project and the possibility of CTA needing to acquire the property referenced below for the construction of the RLE Project. Based on additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment that **would likely require the acquisition of the property referenced below for the RLE Project**:

Owner of Record: [OWNER NAME]
Property Address: [PARCEL ADDRESS]
Property Identification Number (PIN): [PIN]
CTA Parcel ID: [NEW ID]

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until all environmental reviews are complete and project funding is secured. This is expected to be a multiyear process, and it may also be possible to further minimize property impacts with additional future engineering.

This letter is not a formal action to acquire your property, nor a letter of intent or offer to purchase your property. The information in this letter is not intended to affect your present ownership, management, or control of your property in any way.

Property owners and tenants who would be affected by acquisition and relocation will be protected under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. CTA will treat property owners and tenants fairly and will seek cooperative settlements of property acquisitions. In addition, CTA will provide financial assistance and relocation services for property owners as well as commercial and residential occupants who must move because of the RLE Project.

The Preferred Alignment selected by CTA is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. This Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next 5 years for RLE Project. This investment will allow CTA to complete the Final EIS and preliminary engineering over the next few years. Depending on funding availability and federal approvals, the earliest that the RLE Project is expected to begin construction would be in 2022, and service is anticipated to start in 2026. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

CTA is committed to working with the community, elected officials, affected property owners and tenants, and keeping you informed. CTA will continue to communicate with affected property owners and tenants to answer questions and update them as timelines for property acquisition become known. Once environmental reviews are complete and funding is secured for the project, CTA will notify property owners and tenants of their intent to purchase property.

The relocation liaison for CTA will be in your neighborhood visiting potentially affected properties to discuss the relocation process and answer questions starting January 24, 2018. CTA will be conducting community meetings with property owners and tenants affected by the Preferred Alignment on Tuesday, February 6 from 5:30-7:30 at Fenger Academy High School (11220 S. Wallace Avenue, Chicago), and on Thursday, February 8 from 5:30-7:30 at Palmer Park (201 E. 111th Street, Chicago). You are invited to attend either one of the community meetings to discuss the RLE Project and what it could mean for your property. Additionally, a public open house is scheduled for Tuesday, February 13, 2018 from 6-8pm at Gwendolyn Brooks College Preparatory Academy in the Main Gym (250 W. 111th Street, Chicago). You will receive additional information about the open house in a separate mailing.

CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago. Please contact CTA customer service at 1-888-YOUR-CTA (888) 968-7282 or RedExtension@transitchicago.com if you have any questions or would like to discuss this project further.

Sincerely,

Carole Morey
Chief Planning Officer
Chicago Transit Authority

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

24 de enero de 2018

Vía correo certificado, correo regular y entrega personal

[MAILING NAME]
[MAILING ADDRESS]
[MAILING CITY], [MAILING STATE] [MAILING ZIP]

Estimado dueño de propiedad:

En octubre de 2016 le enviamos una carta sobre el proyecto de Chicago Transit Authority (CTA), conocido como el proyecto de expansión de la Línea Roja (RLE), y la posibilidad de que CTA tenga que adquirir la propiedad que se describe a continuación para construir el proyecto de RLE. Basándose en la planificación de proyecto y trabajo de ingeniería adicional realizado en el pasado año, CTA ha elegido un alineamiento preferido que **probablemente requerirá la adquisición de la propiedad que actualmente usted ocupa en la dirección a continuación:**

Dueño según el registro: [OWNER NAME]
Dirección de la propiedad: [PARCEL ADDRESS]
Número de identificación de la propiedad (PIN): [PIN]
Código de parcela de CTA: [NEW ID]

En este momento, CTA no tiene previsto hacer gestiones para adquirir propiedades privadas para el proyecto de RLE hasta que termine todas las revisiones ambientales y se obtengan los fondos para el proyecto. Se espera que sea un proceso de varios años. También es posible que se minimicen los impactos sobre la propiedad con trabajos de ingeniería adicionales.

Esta carta no constituye una medida formal para adquirir su propiedad ni una carta de intención u oferta para comprar su propiedad. El propósito de la información en esta carta no es afectar la titularidad, administración o control actual de su propiedad de ninguna manera.

Los dueños de propiedades e inquilinos que serían afectados por la adquisición y reubicación estarán protegidos por la Ley Uniforme de Asistencia para la Reubicación y Políticas de Adquisición de Propiedad Inmueble de 1970, según enmendada, y los reglamentos del estado. CTA tratará a los dueños de propiedades e inquilinos de manera justa e intentará llegar a acuerdos conjuntos para la adquisición de las propiedades. Además, CTA tiene que proporcionar asistencia financiera y servicios de reubicación a los dueños de propiedades, así como los inquilinos comerciales y residenciales que tengan que mudarse debido al proyecto de RLE.

El alineamiento preferido elegido por CTA es una combinación de las opciones este y oeste de Union Pacific Railroad (Union Pacific Railroad, UPRR) presentadas anteriormente. Este alineamiento preferido capturaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios del público y de la agencia sobre el borrador de la Declaración de Impacto Ambiental (DIA). El alineamiento preferido tendría menos impactos que con las opciones este u oeste. Afectaría menos residencias que con la opción este y menos negocios y empleos que con la opción oeste. Los impactos de ruido y vibración no serían mayores que los anticipados con la opción este u oeste.

El 27 de noviembre de 2016, el alcalde Emanuel y CTA anunciaron la aprobación de fondos por la cantidad de $75 millones durante los próximos 5 años para el proyecto de RLE. Esta inversión le permitirá a CTA terminar el DIA final y los estudios de ingeniería preliminares durante los próximos años. Dependiendo de la disponibilidad de fondos y las aprobaciones federales, lo más temprano que se anticipa que comience la construcción del proyecto de RLE es en el 2022. Se anticipa que el servicio comenzará en el 2026. Puede obtener más información sobre el proyecto de RLE y encontrar actualizaciones sobre la situación del proceso aquí: transitchicago.com/RedEIS. Nuevamente, CTA no tiene previsto hacer gestiones para adquirir propiedades privadas para el proyecto de RLE hasta que termine la revisión ambiental y se obtengan los fondos para el proyecto.

CTA está comprometida en trabajar con la comunidad, funcionarios electos y dueños de propiedades e inquilinos afectados, así como con mantenerlo informado. CTA seguirá comunicándose con los dueños de propiedades e inquilinos afectados para responder a sus preguntas y proporcionar información actualizada, a medida que se conozcan los plazos para la adquisición de las propiedades. Cuando se terminen todas las revisiones ambientales y se obtengan los fondos para el proyecto, CTA notificará a los dueños de las propiedades y sus inquilinos sobre su intención de comprar la propiedad.

El enlace de reubicación de CTA estará en su comunidad visitando las propiedades que posiblemente se verán afectadas para hablar sobre el proceso de reubicación y responder a sus preguntas, a partir del 24 de enero de 2018. CTA llevará a cabo reuniones comunitarias con los dueños e inquilinos de propiedades afectados por el alineamiento preferido el martes 6 de febrero de 5:30 a 7:30 p.m. en Fenger Academy High School (11220 S. Wallace Avenue, Chicago), y el jueves 8 de febrero de 5:30 a 7:30 p.m. en Palmer Park (201 E. 111th Street, Chicago). Usted está invitado a asistir a cualquiera de las reuniones de la comunidad para discutir el proyecto RLE y lo que podría significar para su propiedad. Además, se programó una casa abierta pública el martes 13 de febrero de 2018 de 6:00 a 8:00 p.m. en el gimnasio principal de Gwendolyn Brooks College Preparatory Academy (250 W. 111th Street, Chicago). Usted recibirá información adicional sobre la casa abierta en un correo por separado.

CTA espera trabajar con usted en este proyecto emocionante, el cual beneficiará grandemente a la comunidad, vecindarios cercanos y la ciudad de Chicago. Por favor comuníquese con servicio al cliente de CTA al 1-888-YOUR-CTA (888) 968-7282 o por correo electrónico a RedExtension@transitchicago.com si tiene alguna pregunta o le gustaría hablar más sobre este proyecto.

Atentamente,

Carole Morey
Directora Ejecutiva de Planificación
Chicago Transit Authority

Resident/Lessee Letter -
Potentially Displaced

CHICAGO TRANSIT AUTHORITY

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Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 24, 2018

Via Certified Mail, Regular Mail, and Hand Delivery

[MAILING NAME]
[MAILING ADDRESS]
[MAILING CITY], [MAILING STATE] [MAILING ZIP]

Dear Current [MAILING CATEGORY]:

In October 2016 we sent you a letter about the Chicago Transit Authority (CTA) project known as the Red Line Extension (RLE) Project and the possibility of CTA needing to acquire the property referenced below for the construction of the RLE Project. Based on additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment that **would likely require the acquisition of the property you currently occupy at the following address:**

Owner of Record: [OWNER NAME]

Property Address: [PARCEL ADDRESS]

Property Identification Number (PIN): [PIN]

CTA Parcel ID: [NEW ID]

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until all environmental reviews are complete and project funding is secured. This is expected to be a multiyear process, and it may also be possible to further minimize property impacts with additional future engineering.

This letter is not a formal action to acquire the property. The information in this letter is not intended to affect your present occupancy in any way.

Property owners and tenants who would be affected by acquisition and relocation will be protected under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. CTA will treat property owners and tenants fairly and will seek cooperative settlements of property acquisitions. In addition, CTA will provide financial assistance and relocation services for property owners as well as commercial and residential occupants who must move because of the RLE Project.

The Preferred Alignment selected by CTA is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. This Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next 5 years for RLE Project. This investment will allow CTA to complete the Final EIS and preliminary engineering over the next few years. Depending on funding availability and federal approvals, the earliest that the RLE Project is expected to begin construction would be in 2022, and service is anticipated to start in 2026. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

CTA is committed to working with the community, elected officials, affected property owners and tenants, and keeping you informed. CTA will continue to communicate with affected property owners and tenants to answer questions and update them as timelines for property acquisition become known. Once environmental reviews are complete and funding is secured for the project, CTA will notify the property owners and tenants of their intent to purchase property.

The relocation liaison for CTA will be in your neighborhood visiting potentially affected properties to discuss the relocation process and answer questions starting January 24, 2018. CTA will be conducting community meetings with property owners and tenants affected by the Preferred Alignment on Tuesday, February 6 from 5:30-7:30 at Fenger Academy High School (11220 S. Wallace Avenue, Chicago), and on Thursday, February 8 from 5:30-7:30 at Palmer Park (201 E. 111th Street, Chicago). You are invited to attend either one of the community meetings to discuss the RLE Project and what it could mean for your property. Additionally, a public open house is scheduled for Tuesday, February 13, 2018 from 6-8pm at Gwendolyn Brooks College Preparatory Academy in the Main Gym (250 W. 111th Street, Chicago). You will receive additional information about the open house in a separate mailing.

CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago. Please contact CTA customer service at 1-888-YOUR-CTA (888) 968-7282 or RedExtension@transitchicago.com if you have any questions or would like to discuss this project further.

Sincerely,

Carole Morey
Chief Planning Officer
Chicago Transit Authority

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24 de enero de 2018

Vía correo certificado, correo regular y entrega personal

[MAILING NAME]
[MAILING ADDRESS]
[MAILING CITY], [MAILING STATE] [MAILING ZIP]

Estimado [MAILING CATEGORY]:

En octubre de 2016 le enviamos una carta sobre el proyecto de Chicago Transit Authority (CTA), conocido como el proyecto de expansión de la Línea Roja (RLE), y la posibilidad de que CTA tenga que adquirir la propiedad que se describe a continuación para construir el proyecto de RLE. Basándose en la planificación de proyecto y trabajo de ingeniería adicional realizado en el pasado año, CTA ha elegido un alineamiento preferido que **probablemente requerirá la adquisición de la propiedad que actualmente usted ocupa en la dirección a continuación:**

Dueño según el registro: [OWNER NAME]
Dirección de la propiedad: [PARCEL ADDRESS]
Número de identificación de la propiedad (PIN): [PIN]
Código de parcela de CTA: [NEW ID]

En este momento, CTA no tiene previsto hacer gestiones para adquirir propiedades privadas para el proyecto de RLE hasta que termine todas las revisiones ambientales y se obtengan los fondos para el proyecto. Se espera que sea un proceso de varios años. También es posible que se minimicen los impactos sobre la propiedad con trabajos de ingeniería adicionales.

Esta carta no es una medida formal para adquirir la propiedad. El propósito de la información en esta carta no es afectar su posesión actual de ninguna manera.

Los dueños de propiedades e inquilinos que serían afectados por la adquisición y reubicación estarán protegidos por la Ley Uniforme de Asistencia para la Reubicación y Políticas de Adquisición de Propiedad Inmueble de 1970, según enmendada, y los reglamentos del estado. CTA tratará a los dueños de propiedades e inquilinos de manera justa e intentará llegar a acuerdos conjuntos para la adquisición de las propiedades. Además, CTA tiene que proporcionar asistencia financiera y servicios de reubicación a los dueños de propiedades, así como los inquilinos comerciales y residenciales que tengan que mudarse debido al proyecto de RLE.

El alineamiento preferido elegido por CTA es una combinación de las opciones este y oeste de Union Pacific Railroad (Union Pacific Railroad, UPRR) presentadas anteriormente. Este alineamiento preferido capturaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios del público y de la agencia sobre el borrador de la Declaración de Impacto Ambiental (DIA). El alineamiento preferido tendría menos impactos que con las opciones este u oeste. Afectaría menos residencias que con la opción este y menos negocios y empleos que con la opción oeste. Los impactos de ruido y vibración no serían mayores que los anticipados con la opción este u oeste.

El 27 de noviembre de 2016, el alcalde Emanuel y CTA anunciaron la aprobación de fondos por la cantidad de $75 millones durante los próximos 5 años para el proyecto de RLE. Esta inversión le permitirá a CTA terminar el DIA final y los estudios de ingeniería preliminares durante los próximos años. Dependiendo de la disponibilidad de fondos y las aprobaciones federales, lo más temprano que se anticipa que comience la construcción del proyecto de RLE es en el 2022. Se anticipa que el servicio comenzará en el 2026. Puede obtener más información sobre el proyecto de RLE y encontrar actualizaciones sobre la situación del proceso aquí: transitchicago.com/RedEIS. Nuevamente, CTA no tiene previsto hacer gestiones para adquirir propiedades privadas para el proyecto de RLE hasta que termine la revisión ambiental y se obtengan los fondos para el proyecto.

CTA está comprometida en trabajar con la comunidad, funcionarios electos y dueños de propiedades e inquilinos afectados, así como con mantenerlo informado. CTA seguirá comunicándose con los dueños de propiedades e inquilinos afectados para responder a sus preguntas y proporcionar información actualizada, a medida que se conozcan los plazos para la adquisición de las propiedades. Cuando se terminen todas las revisiones ambientales y se obtengan los fondos para el proyecto, CTA notificará a los dueños de las propiedades y sus inquilinos sobre su intención de comprar la propiedad.

El enlace de reubicación de CTA estará en su comunidad visitando las propiedades que posiblemente se verán afectadas para hablar sobre el proceso de reubicación y responder a sus preguntas, a partir del 24 de enero de 2018. CTA llevará a cabo reuniones comunitarias con los dueños e inquilinos de propiedades afectados por el alineamiento preferido el martes 6 de febrero de 5:30 a 7:30 p.m. en Fenger Academy High School (11220 S. Wallace Avenue, Chicago), y el jueves 8 de febrero de 5:30 a 7:30 p.m. en Palmer Park (201 E. 111th Street, Chicago). Usted está invitado a asistir a cualquiera de las reuniones de la comunidad para discutir el proyecto RLE y lo que podría significar para su propiedad. Además, se programó una casa abierta pública el martes 13 de febrero de 2018 de 6:00 a 8:00 p.m. en el gimnasio principal de Gwendolyn Brooks College Preparatory Academy (250 W. 111th Street, Chicago). Usted recibirá información adicional sobre la casa abierta en un correo por separado.

CTA espera trabajar con usted en este proyecto emocionante, el cual beneficiará grandemente a la comunidad, vecindarios cercanos y la ciudad de Chicago. Por favor comuníquese con servicio al cliente de CTA al 1-888-YOUR-CTA (888) 968-7282 o por correo electrónico a RedExtension@transitchicago.com si tiene alguna pregunta o le gustaría hablar más sobre este proyecto.

Atentamente,

Carole Morey
Directora Ejecutiva de Planificación
Chicago Transit Authority

Resident/Lessee
Letter - No Longer
Potentially Displaced

CHICAGO TRANSIT AUTHORITY

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January 24, 2018

Via Certified Mail, Regular Mail, and Hand Delivery

[MAILING NAME]
[MAILING ADDRESS]
[MAILING CITY], [MAILING STATE] [MAILING ZIP]

Dear Property Owner:

In October 2016 we sent you a letter about the Chicago Transit Authority (CTA) project known as the Red Line Extension (RLE) Project and the possibility of CTA needing to acquire the property referenced below for the construction of the RLE Project. Based on additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment and **will not need to acquire the property referenced below for the RLE Project**.

Owner of Record: [OWNER NAME]
Property Address: [PARCEL ADDRESS]
Property Identification Number (PIN): [PIN]
CTA Parcel ID: [NEW ID]

The Preferred Alignment selected by CTA is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. This Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next 5 years for RLE Project. This investment will allow CTA to complete the Final EIS and preliminary engineering over the next few years. Depending on funding availability and federal approvals, the earliest that the RLE Project is expected to begin construction would be in 2022, and service is anticipated to start in 2026. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA is committed to working with the community, elected officials, affected property owners and tenants, and keeping you informed. The CTA relocation liaison will be in your neighborhood starting January 24, 2018 visiting all properties that were contacted in October 2016 to answer questions. CTA will host a public open house on Tuesday, February 13, 2018 from 6-8pm at Gwendolyn Brooks College Preparatory Academy in the Main Gym (250 W. 111th Street, Chicago) to provide additional information about the Preferred Alignment. You will receive additional information about the open house in a separate mailing.

CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago. Please contact CTA customer service at 1-888-YOUR-CTA (888) 968-7282 or via email at RedExtension@transitchicago.com if you have any questions or would like to discuss this project further.

Sincerely,

Carole Morey
Chief Planning Officer
Chicago Transit Authority

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24 de enero de 2018

Vía correo certificado, correo regular y entrega personal

[MAILING NAME]
[MAILING ADDRESS]
[MAILING CITY], [MAILING STATE] [MAILING ZIP]

Estimado dueño de propiedad:

En octubre de 2016 le enviamos una carta sobre el proyecto de Chicago Transit Authority (CTA), conocido como el proyecto de expansión de la Línea Roja (RLE), y la posibilidad de que CTA tenga que adquirir la propiedad que se describe a continuación para construir el proyecto de RLE. Basándose en la planificación de proyecto y trabajo de ingeniería adicional realizado en el pasado año, CTA ha elegido un alineamiento preferido y **no tendrá que adquirir la propiedad que actualmente usted ocupa en la dirección a continuación:**

Dueño según el registro: [OWNER NAME]
Dirección de la propiedad: [PARCEL ADDRESS]
Número de identificación de la propiedad (PIN): [PIN]
Código de parcela de CTA: [NEW ID]

El alineamiento preferido elegido por CTA es una combinación de las opciones este y oeste de Union Pacific Railroad (Union Pacific Railroad, UPRR) presentadas anteriormente. Este alineamiento preferido capturaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios del público y de la agencia sobre el borrador de la Declaración de Impacto Ambiental (DIA). El alineamiento preferido tendría menos impactos que con las opciones este u oeste. Afectaría menos residencias que con la opción este y menos negocios y empleos que con la opción oeste. Los impactos de ruido y vibración no serían mayores que los anticipados con la opción este u oeste.

El 27 de noviembre de 2016, el alcalde Emanuel y CTA anunciaron la aprobación de fondos por la cantidad de $75 millones durante los próximos 5 años para el proyecto de RLE. Esta inversión le permitirá a CTA terminar el DIA final y los estudios de ingeniería preliminares durante los próximos años. Dependiendo de la disponibilidad de fondos y las aprobaciones federales, lo más temprano que se anticipa que comience la construcción del proyecto de RLE es en el 2022. Se anticipa que el servicio comenzará en el 2026. Puede obtener más información sobre el proyecto de RLE y encontrar actualizaciones sobre la situación del proceso aquí: transitchicago.com/RedEIS.

CTA está comprometida en trabajar con la comunidad, funcionarios electos y dueños de propiedades e inquilinos afectados, así como con mantenerlo informado. El enlace de reubicación de CTA estará en su vecindario a partir del 24 de enero del 2018, visitando todas las propiedades que fueron contactadas en octubre del 2016 para responder preguntas que puedan existir. CTA auspiciará una casa abierta pública el martes 13 de febrero de 2018 de 6:00 a 8:00 p.m. en el gimnasio principal de Gwendolyn Brooks College Preparatory Academy (250 W. 111th Street, Chicago) para proporcionar información adicional sobre el alineamiento preferido. Recibirá información adicional sobre la casa abierta en un envío por separado.

CTA espera trabajar con usted en este proyecto emocionante, el cual beneficiará grandemente a la comunidad, vecindarios cercanos y la ciudad de Chicago. Por favor comuníquese con servicio al cliente de CTA al 1-888-YOUR-CTA (888) 968-7282 o por correo electrónico a RedExtension@transitchicago.com si tiene alguna pregunta o le gustaría hablar más sobre este proyecto.

Atentamente,

Carole Morey
Directora Ejecutiva de Planificación
Chicago Transit Authority

Property Owner Letter - No Longer Potentially Displaced

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January 24, 2018

Via Certified Mail, Regular Mail, and Hand Delivery

[MAILING NAME]
[MAILING ADDRESS]
[MAILING CITY], [MAILING STATE] [MAILING ZIP]

Dear Property Owner:

In October 2016 we sent you a letter about the Chicago Transit Authority (CTA) project known as the Red Line Extension (RLE) Project and the possibility of CTA needing to acquire the property referenced below for the construction of the RLE Project. Based on additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment and **will not need to acquire the property referenced below for the RLE Project**.

Owner of Record: [OWNER NAME]
Property Address: [PARCEL ADDRESS]
Property Identification Number (PIN): [PIN]
CTA Parcel ID: [NEW ID]

The Preferred Alignment selected by CTA is a combination of the previously presented Union Pacific Railroad (UPRR) East and West Options. This Preferred Alignment would capture the benefits and minimize the impacts of either option and it also incorporates the public and agency feedback received on the Draft Environmental Impact Statement (EIS). The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next 5 years for RLE Project. This investment will allow CTA to complete the Final EIS and preliminary engineering over the next few years. Depending on funding availability and federal approvals, the earliest that the RLE Project is expected to begin construction would be in 2022, and service is anticipated to start in 2026. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA is committed to working with the community, elected officials, affected property owners and tenants, and keeping you informed. The CTA relocation liaison will be in your neighborhood starting January 24, 2018 visiting all properties that were contacted in October 2016 to answer questions. CTA will host a public open house on Tuesday, February 13, 2018 from 6-8pm at Gwendolyn Brooks College Preparatory Academy in the Main Gym (250 W. 111th Street, Chicago) to provide additional information about the Preferred Alignment. You will receive additional information about the open house in a separate mailing.

CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago. Please contact CTA customer service at 1-888-YOUR-CTA (888) 968-7282 or via email at RedExtension@transitchicago.com if you have any questions or would like to discuss this project further.

Sincerely,

Carole Morey
Chief Planning Officer
Chicago Transit Authority

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

24 de enero de 2018

Vía correo certificado, correo regular y entrega personal

[MAILING NAME]
[MAILING ADDRESS]
[MAILING CITY], [MAILING STATE] [MAILING ZIP]

Estimado [MAILING CATEGORY]:

En octubre de 2016 le enviamos una carta sobre el proyecto de Chicago Transit Authority (CTA), conocido como el proyecto de expansión de la Línea Roja (RLE), y la posibilidad de que CTA tenga que adquirir la propiedad que se describe a continuación para construir el proyecto de RLE. Basándose en la planificación de proyecto y trabajo de ingeniería adicional realizado en el pasado año, CTA ha elegido un alineamiento preferido y **no tendrá que adquirir la propiedad que actualmente usted ocupa en la dirección a continuación:**

Dueño según el registro: [OWNER NAME]
Dirección de la propiedad: [PARCEL ADDRESS]
Número de identificación de la propiedad (PIN): [PIN]
Código de parcela de CTA: [NEW ID]

El alineamiento preferido elegido por CTA es una combinación de las opciones este y oeste de Union Pacific Railroad (Union Pacific Railroad, UPRR) presentadas anteriormente. Este alineamiento preferido capturaría los beneficios y minimizaría los impactos de cualquiera de las opciones. Además, incorpora los comentarios del público y de la agencia sobre el borrador de la Declaración de Impacto Ambiental (DIA). El alineamiento preferido tendría menos impactos que con las opciones este u oeste. Afectaría menos residencias que con la opción este y menos negocios y empleos que con la opción oeste. Los impactos de ruido y vibración no serían mayores que los anticipados con la opción este u oeste.

El 27 de noviembre de 2016, el alcalde Emanuel y CTA anunciaron la aprobación de fondos por la cantidad de $75 millones durante los próximos 5 años para el proyecto de RLE. Esta inversión le permitirá a CTA terminar el DIA final y los estudios de ingeniería preliminares durante los próximos años. Dependiendo de la disponibilidad de fondos y las aprobaciones federales, lo más temprano que se anticipa que comience la construcción del proyecto de RLE es en el 2022. Se anticipa que el servicio comenzará en el 2026. Puede obtener más información sobre el proyecto de RLE y encontrar actualizaciones sobre la situación del proceso aquí: transitchicago.com/RedEIS.

CTA está comprometida en trabajar con la comunidad, funcionarios electos y dueños de propiedades e inquilinos afectados, así como con mantenerlo informado. El enlace de reubicación de CTA estará en su vecindario a partir del 24 de enero del 2018, visitando todas las propiedades que fueron contactadas en octubre del 2016 para responder preguntas que puedan existir. CTA auspiciará una casa abierta pública el martes 13 de febrero de 2018 de 6:00 a 8:00 p.m. en el gimnasio principal de Gwendolyn Brooks College Preparatory Academy (250 W. 111th Street, Chicago) para proporcionar información adicional sobre el alineamiento preferido. Recibirá información adicional sobre la casa abierta en un envío por separado.

CTA espera trabajar con usted en este proyecto emocionante, el cual beneficiará grandemente a la comunidad, vecindarios cercanos y la ciudad de Chicago. Por favor comuníquese con servicio al cliente de CTA al 1-888-YOUR-CTA (888) 968-7282 o por correo electrónico a RedExtension@transitchicago.com si tiene alguna pregunta o le gustaría hablar más sobre este proyecto.

Atentamente,

Carole Morey
Directora Ejecutiva de Planificación
Chicago Transit Authority

CHICAGO TRANSIT AUTHORITY
567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Mr. Mark Bristol
Union Pacific Railroad
1400 Douglas Street
Omaha, NE 68179

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to UP-Owned Properties

Dear Mr. Bristol:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning and as detailed in the attached tables, CTA has determined that the Preferred Alignment would affect 14 UP parcels; the Preferred Alignment would affect fewer UP-owned parcels than the East Option as presented in 2016, which would have affected 18 UP-owned parcels. The West Option would have affected 35 UP-owned parcels.

The Preferred Alignment would cross over the first three UP parcels in the table below on an aerial structure, although the tracks and operations would not be affected. The Preferred Alignment would cross over the first two parcels at approximately 99th Street, and would cross over the third parcel at approximately 108th Place. An RLE substation would be located on the eighth parcel in the table below (property identification number 25-21-406-030-0000 at 11524 S. Lafayette Avenue), although the substation would be located at least 25 feet from the proposed UPRR property line and UPRR operations would not be affected. The RLE structure would be located on the remaining 10 UP parcels, although a clearance of at least 50 feet (track centerline to track centerline) from existing and potential future UPRR tracks would be maintained and UPRR tracks and operations would not be affected. CTA has met with Mark Bristol and Adrian Guerrero on May 3, 2017 and December 13, 2017.

CTA has previously disclosed potential property impacts to you and met with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

CTA will hold an open house meeting to present the Preferred Alignment to the public and obtain additional feedback. All interested parties are invited to attend this upcoming public open house. The open house will be held at the time and location identified below and a flyer is enclosed for your information. Representatives from your agency are encouraged to attend.

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6:00 - 8:00 PM
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**Please enter through Door 8. Parking available in rear of building.*
Parking lot entrance via King Drive.

Please contact Sonali Tandon, Senior Project Manager, at (312) 681-4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
(312) 681-4100
cmorey@transitchicago.com

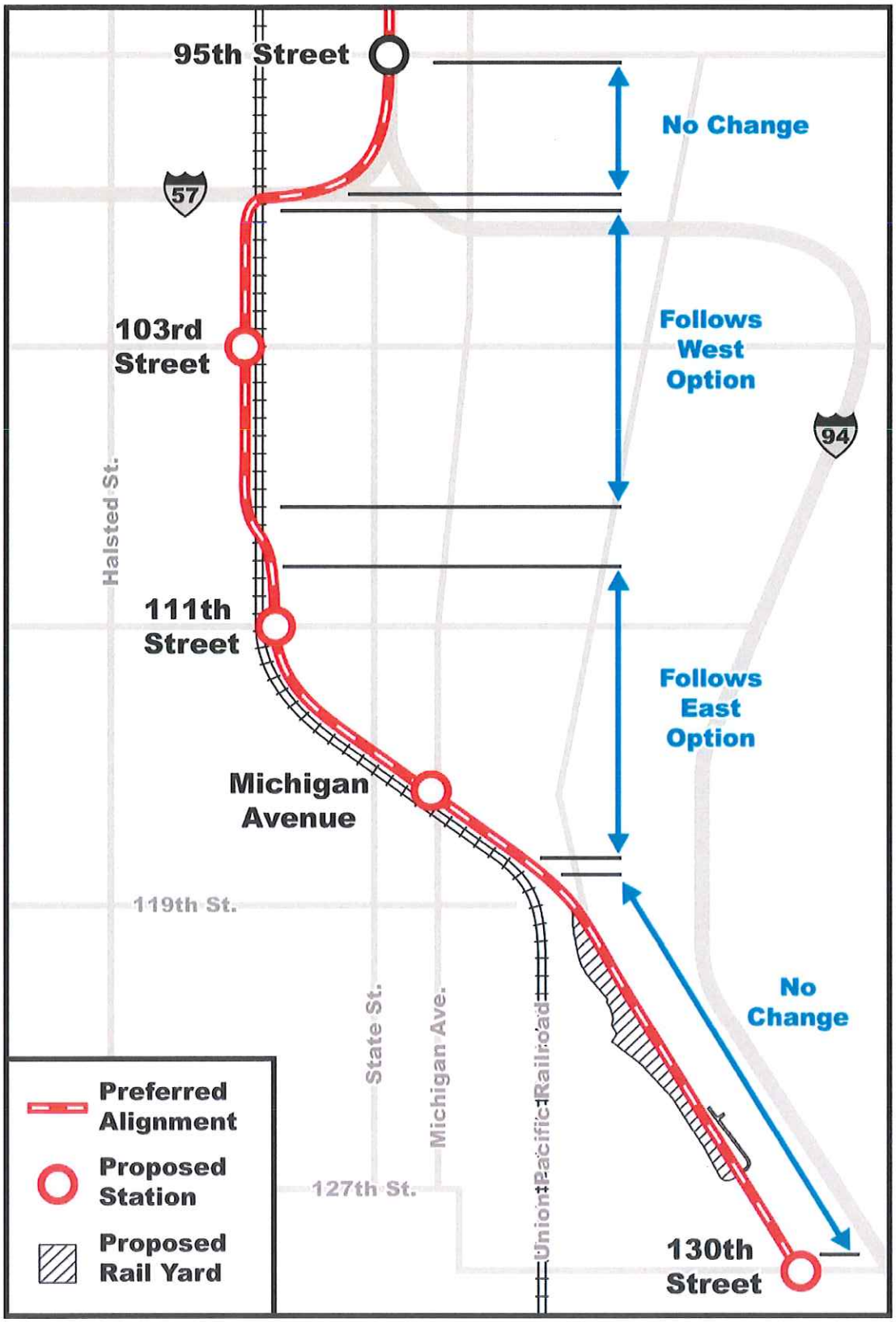

CTA Red Line Extension Project - Preferred Alignment

UP-Owned Parcels Affected by the Preferred Alternative

Property Identification Number	Address	Anticipated Impact
25-09-400-046-0000	341 W. 99th Street	Aerial Structure Crossing
25-09-500-002-0000	351 W. 99th Street	Aerial Structure Crossing
25-16-999-001-0000	No Street Address	Aerial Structure Crossing
25-16-500-017-0000	362 W. 108th Place	Aerial Structure Crossing
25-16-500-018-0000	364 W. 109th Street	Aerial Structure Crossing
25-16-500-028-0000	359 W. 109th Street	Aerial Structure Crossing
25-21-217-012-0000	11332 S. Princeton Avenue	Parcel Acquisition
25-21-230-020-0000	44 W. 115th Street	Parcel Acquisition
25-21-406-030-0000	11524 S. Lafayette Avenue	Parcel Acquisition
25-21-501-001-0000	Approximately 114th Street and Wentworth Avenue	Parcel Acquisition
25-21-501-003-0000	Approximately 111th Street and Stewart Avenue	Parcel Acquisition
25-22-300-009-0000	11549 S. State Street	Parcel Acquisition
25-22-300-010-0000	11551 S. State Street	Parcel Acquisition
25-22-300-059-0000	11582 S. Michigan Avenue	Parcel Acquisition
25-22-300-069-0000	11562 S. Wabash Avenue	Parcel Acquisition
25-22-300-070-0000	11556 S. Wabash Avenue	Parcel Acquisition
25-22-300-071-0000	11557 S. Wabash Avenue	Parcel Acquisition

UP-Owned Parcels No Longer Affected by the Red Line Extension Project

Property Identification Number	Address	Former Use
25-09-424-069-0000	350 W. 103rd Street	East Option
25-16-500-001-0000	359 W. 103rd Street	East Option
25-16-500-003-0000	361 W. 103rd Street	East Option
25-16-500-004-0000	361 W. 104th Street	East Option
25-16-500-012-0000	358 W. 106th Place	East Option
25-16-500-014-0000	A360 W. 107th Street	East Option
25-16-500-029-0000	359 W. 105th Place	East Option
25-21-107-009-0000	403 W. 111th Street	West Option
25-21-217-004-0000	11325 S. Harvard Avenue	West Option
25-21-217-027-0000	11334 S. Princeton Avenue	West Option
25-21-218-014-0000	233 W. 113th Street	West Option
25-21-227-001-0000	11411 S. Yale Avenue	West Option
25-21-227-012-0000	11420 S. Wentworth Avenue	West Option
25-21-406-001-0000	11513 S. Perry Avenue	West Option
25-21-407-008-0000	11535 S. Lafayette Avenue	West Option
25-21-407-008-0000	11535 S. Lafayette Avenue	West Option
25-21-407-008-0000	11535 S. Lafayette Avenue	West Option
25-21-407-030-0000	11512 S. State Street	West Option
25-21-501-002-0000	501 E. 112th Street	West Option
25-21-501-007-0000	500 W. 113th Street	West Option
25-21-999-001-0000	No Street Address	West Option
25-21-999-001-0000	No Street Address	West Option
25-21-999-001-0000	No Street Address	West Option
25-22-300-010-0000	11551 S. State Street	Both East and West Options
25-22-304-009-0000	11583 S. Michigan Avenue	West Option
25-22-308-029-0000	132 E. 117th Street	West Option
25-22-308-030-0000	134 E. 117th Street	West Option
25-22-310-038-0000	11700 S. Indiana Avenue	West Option
25-22-315-001-0000	11705 S. Indiana Avenue	West Option
25-22-315-003-0000	11707 S. Indiana Avenue	West Option
25-22-315-016-0000	11714 S. Prairie Avenue	West Option
25-22-315-017-0000	11716 S. Prairie Avenue	West Option
25-22-316-013-0000	11763 S. Prairie Avenue	West Option
25-22-500-001-0000	100 E. 116th Street	West Option
25-22-999-001-0000	No Street Address	West Option

CHICAGO TRANSIT AUTHORITY

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January 26, 2018

Ms. Kim Williams
Omega Rail Management
4721 Trousdale Drive
Suite 206
Nashville, TN 37220

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cc: Mr. John Parson, Northern Indiana Commuter Transportation District
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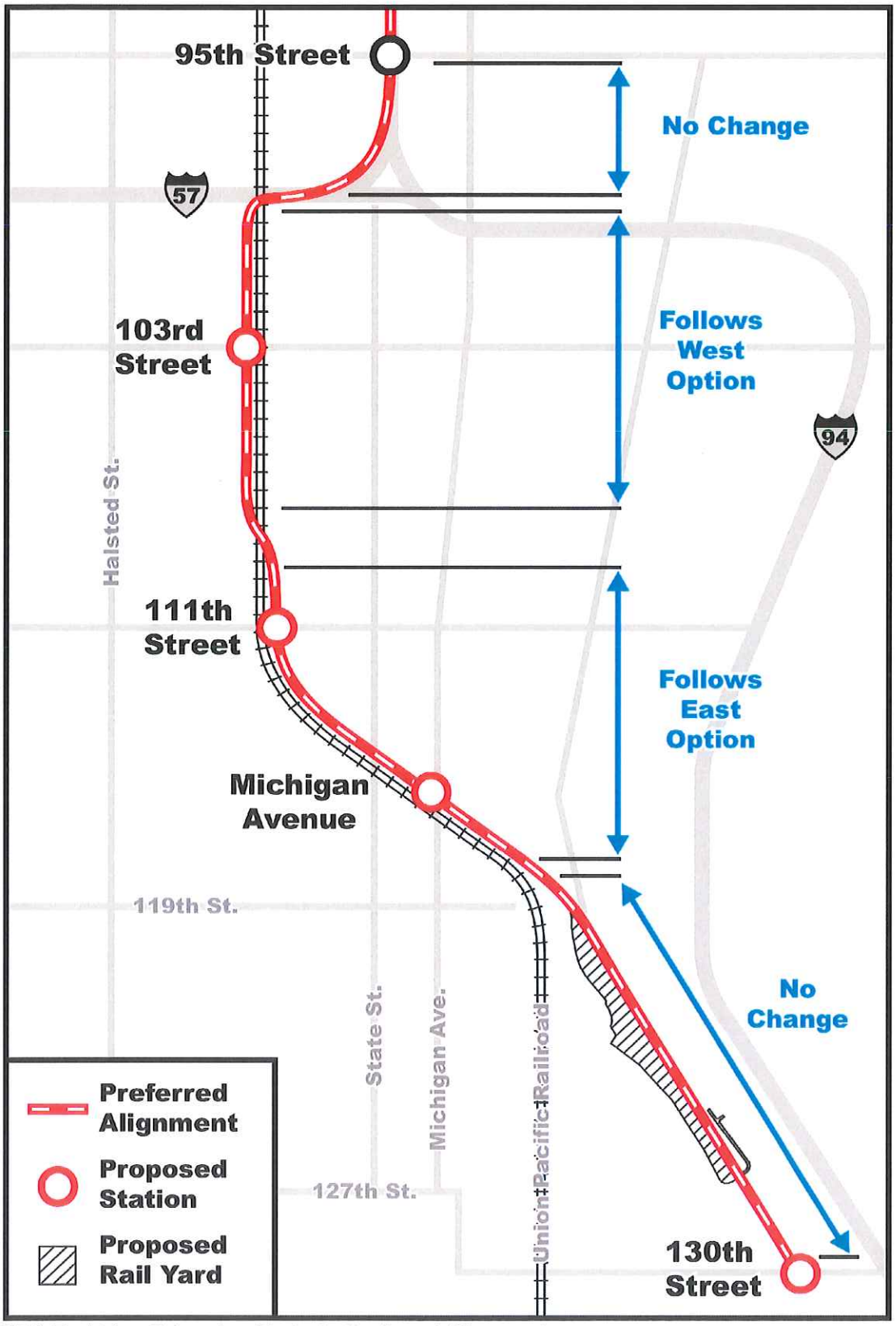

CTA Red Line Extension Project - Preferred Alignment

CHICAGO TRANSIT AUTHORITY

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January 26, 2018

Ms. Kim Williams
Omega Rail Management
4721 Trousdale Drive
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Nashville, TN 37220

Re: CTA Red Line Extension Project
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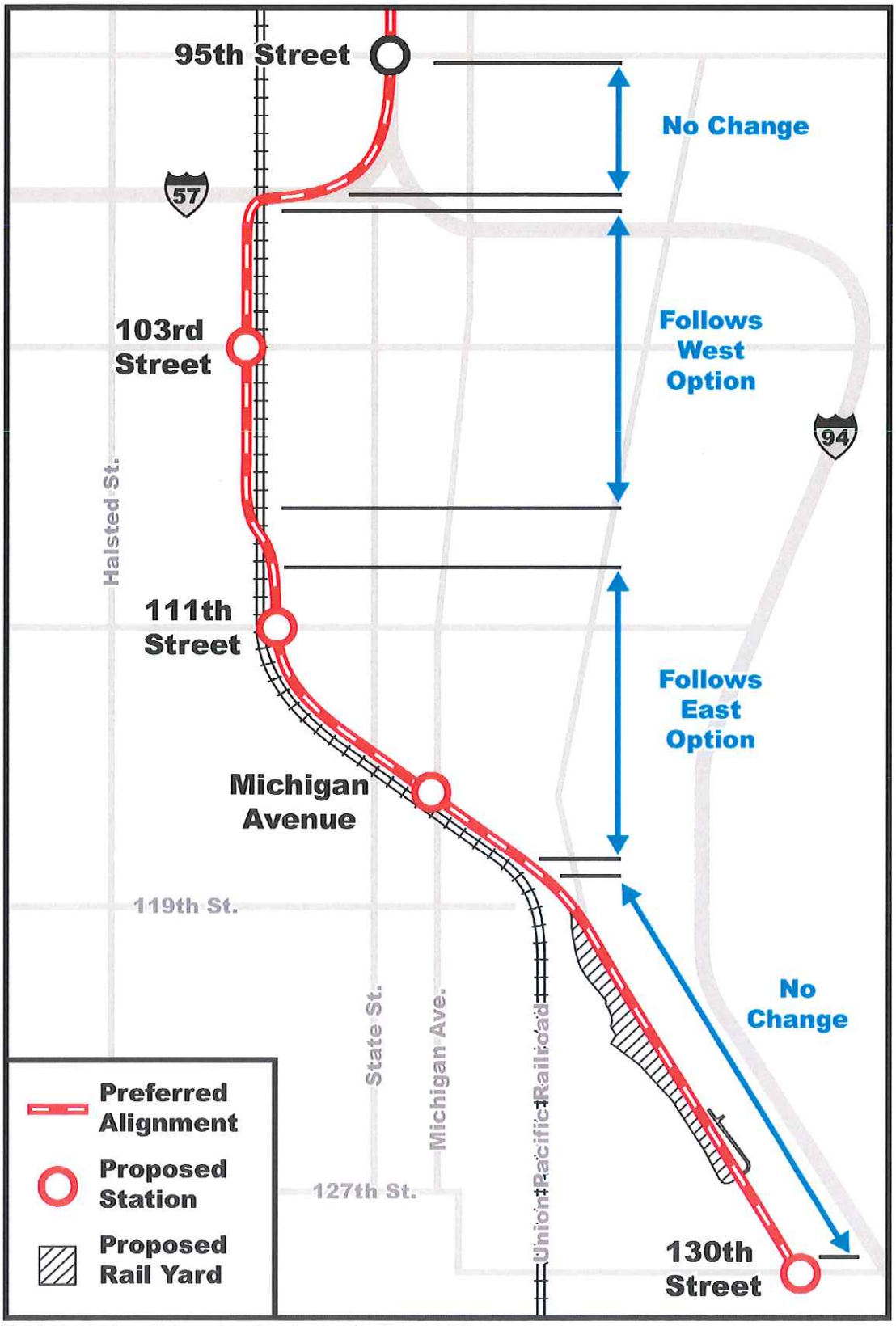

CTA Red Line Extension Project - Preferred Alignment

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Sincerely,

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(312) 681-4100
cmorey@transitchicago.com

cc: Mr. John Parson, Northern Indiana Commuter Transportation District
Ms. Nicole Barker, Northern Indiana Commuter Transportation District
Mr. Todd Bjornstad, Chicago South Shore & South Bend Railroad

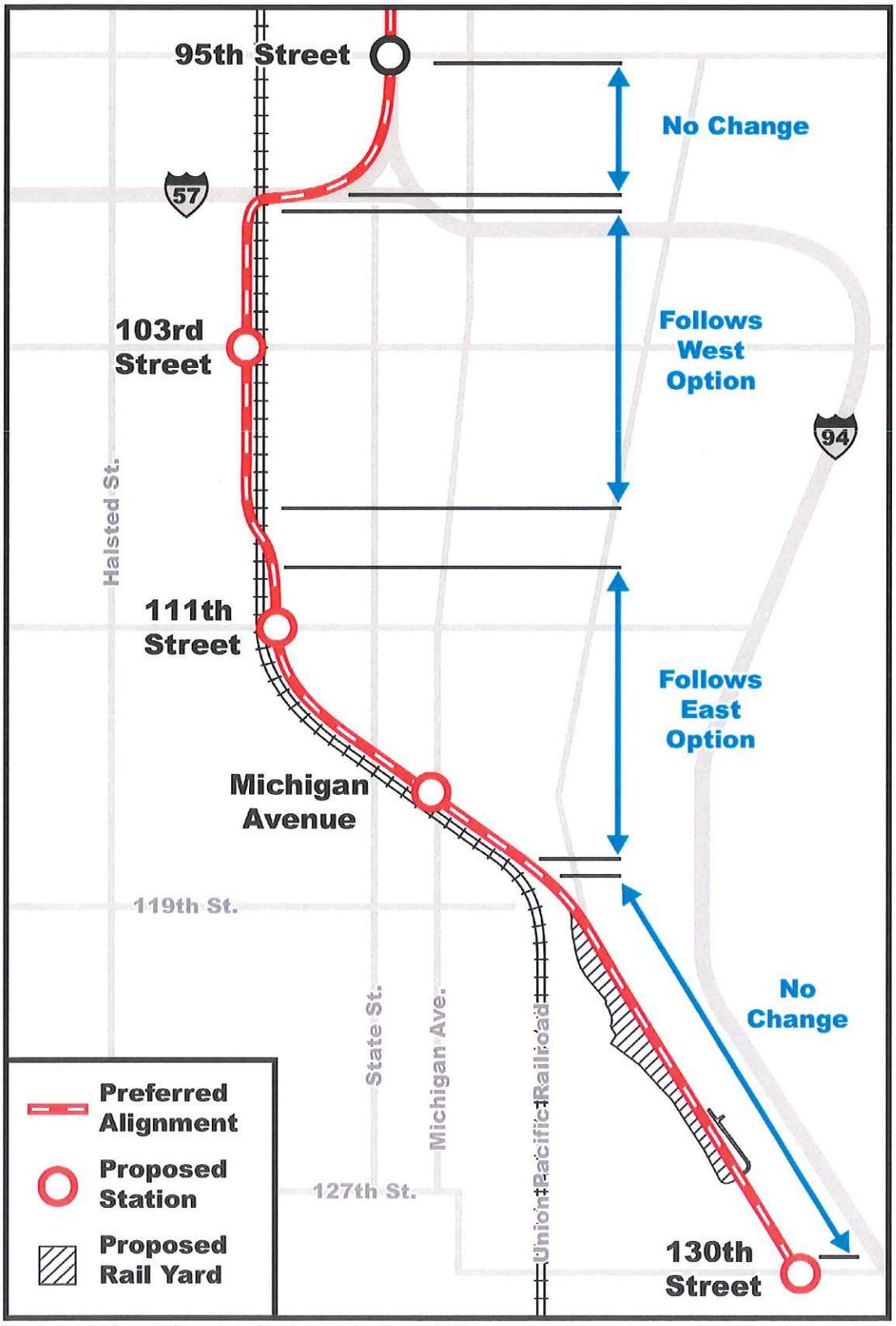

CTA Red Line Extension Project - Preferred Alignment

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Ms. Kim Williams
Omega Rail Management
4721 Trousdale Drive
Suite 206
Nashville, TN 37220

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to Omega-Owned Properties

Dear Ms. Williams:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning, CTA has determined that the Preferred Alignment would affect one parcel that is owned by the Illinois Indiana Development Company, managed by Omega Rail Management, and operated on by the Northern Indiana Commuter Transportation District (NICTD) Chicago South Shore & South Bend Railroad (property identification number 25-27-503-001-0000 at 12320 S. Cottage Grove Avenue), although the NICTD tracks and operations would not be permanently affected. The impact to NICTD tracks is because CTA would need to relocate an existing at-grade Metropolitan Water Reclamation District access road across NICTD property. CTA is proposing to provide a grade-separated road to minimize impacts on both NICTD and MWRD operations. **There would be no change in the number of parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.**

CTA has previously disclosed potential property impacts to you and coordinated with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

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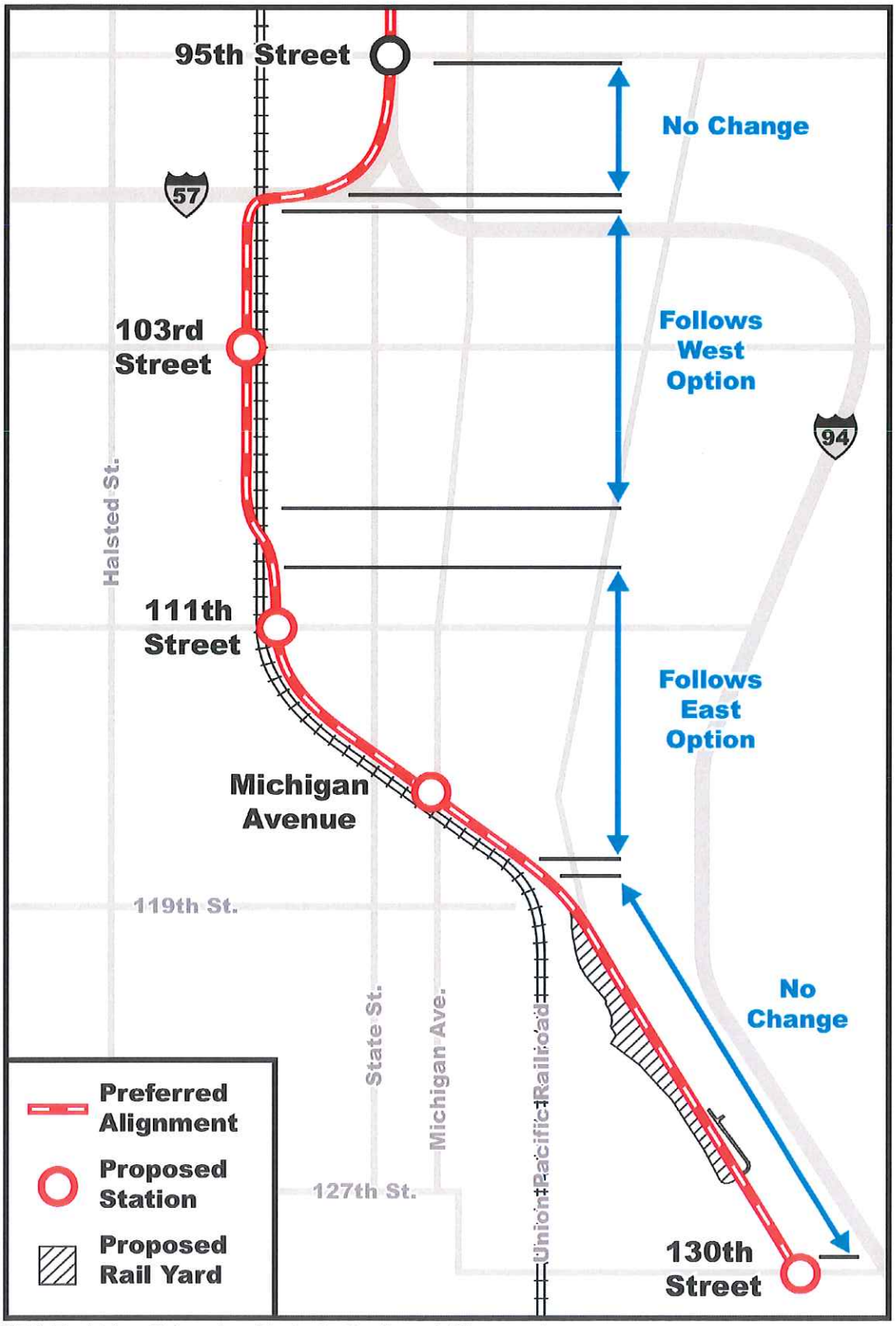

CTA Red Line Extension Project - Preferred Alignment

CHICAGO TRANSIT AUTHORITY

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January 26, 2018

Norfolk Southern Corporation
Mr. John V. Edwards
3 Commercial Place
Norfolk, VA 23510

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to NS-Owned Properties

Dear Mr. Edwards:

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CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning, CTA has determined that the Preferred Alignment would affect six Norfolk Southern parcels. The RLE structure, as well as the proposed yard and shop and 130th Street station, would be located on Norfolk Southern property. Specifically, the spur track along parcel 25-22-401-034-0000, on which IHB currently operates 1–2 trains a week to serve a scrap metal/recycling facility, would need to be realigned to run parallel to RLE and Northern Indiana Commuter Transportation District (NICTD) tracks to allow for the RLE yard and shop. CTA would also need to relocate an existing at-grade Metropolitan Water Reclamation District access road across Norfolk Southern property (property identification number 25-27-400-002-0000 at 12600 S. Cottage Grove Avenue). CTA met with Norfolk Southern staff on June 13, 2017 and November 9, 2017 to discuss potential impacts to Norfolk Southern property and realignment of the spur track. An agreement between CTA and Norfolk Southern has been executed to review engineering and real estate for the RLE Project.

Parcel Identification Number	Address
25-22-400-027-0000	11600 S. Cottage Grove Avenue
25-27-108-009-0000	11900 S. Cottage Grove Avenue
25-22-401-034-0000	1355 E. 121st Street
25-27-200-009-0000	12256 S. Cottage Grove Avenue
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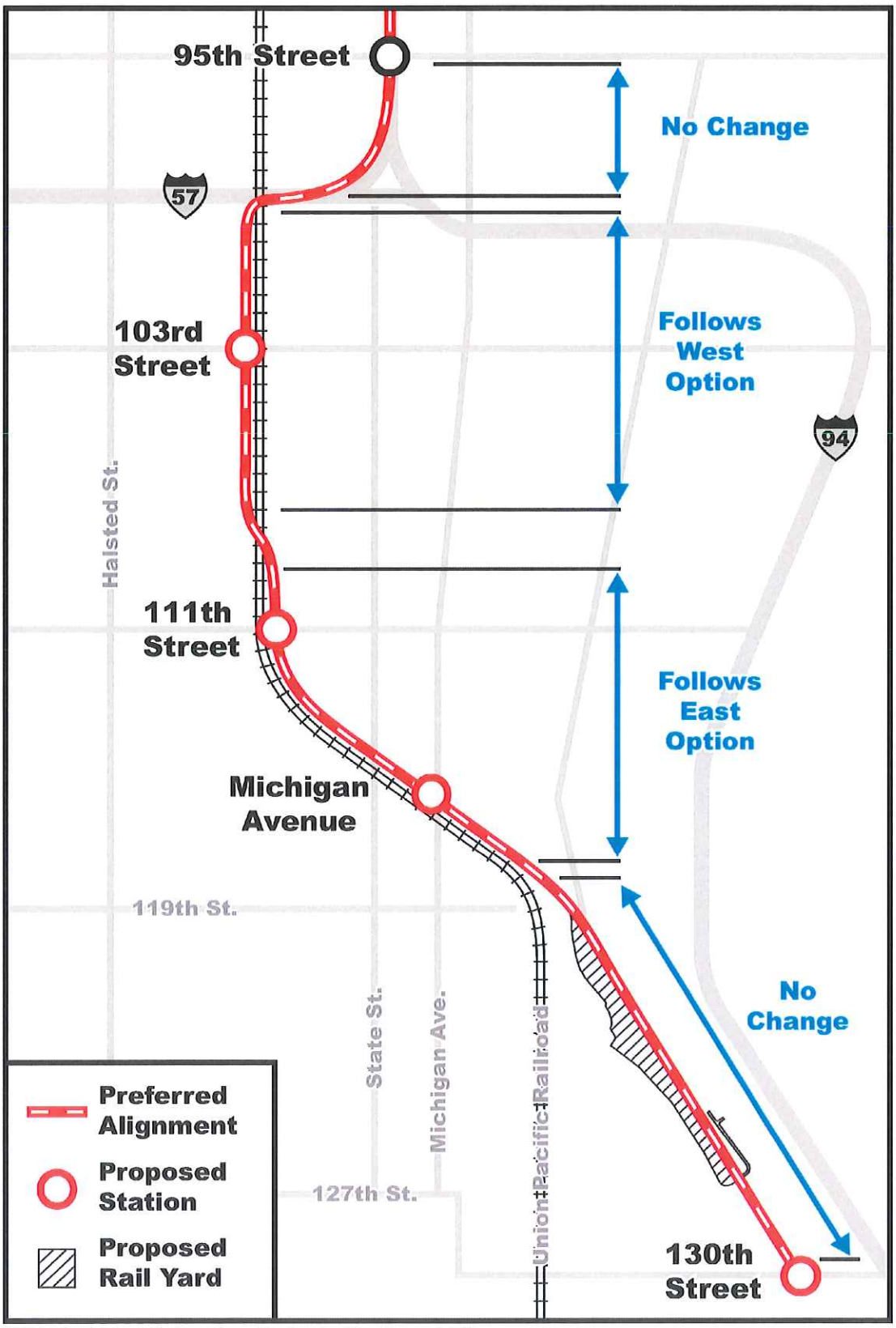

CTA Red Line Extension Project - Preferred Alignment

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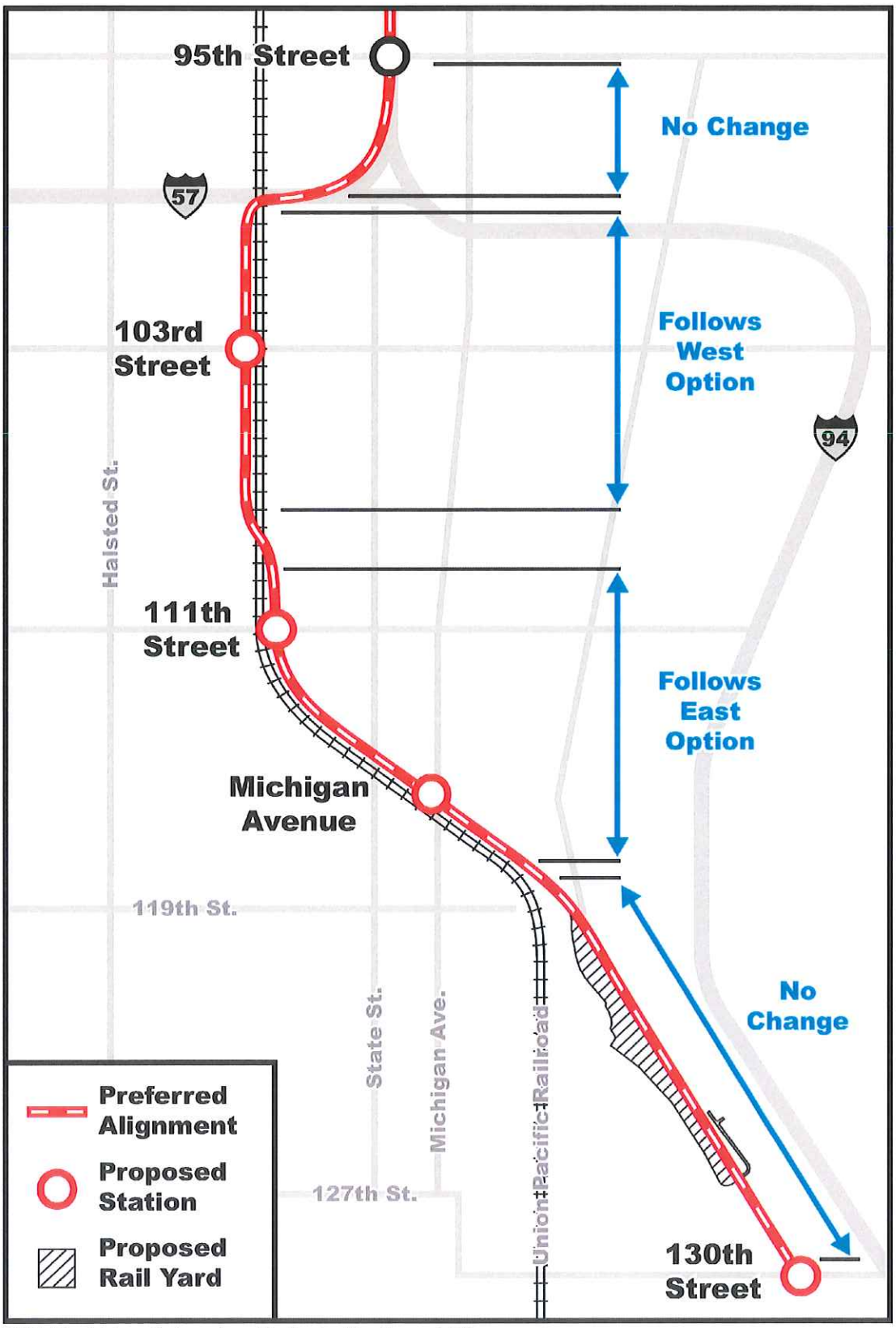

CTA Red Line Extension Project - Preferred Alignment

CHICAGO TRANSIT AUTHORITY

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January 26, 2018

Mr. James M. Derwinski
Metra
547 W. Jackson Boulevard
Chicago, IL 60661

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to Metra-Owned Properties

Dear Mr. Derwinski:

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At this stage of project planning, CTA has determined that the Preferred Alignment would cross over one Metra parcel (property identification number 25-22-317-035-0000 at 11800 S. Front Avenue) on an aerial structure, although the Metra tracks and operations would not be affected. The RLE piers may be located on the parcel in the table below. The proposed minimum vertical clearance will be developed in future coordination with Metra to take into account the overhead contact system. The vertical clearance would not be less than the adjacent clearance over CN tracks. **There would be no change in the number of Metra-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.** CTA met with Lynnette Ciavarella, Scott Presslak, and David Kralik on October 13, 2017 to discuss potential impacts to Metra property.

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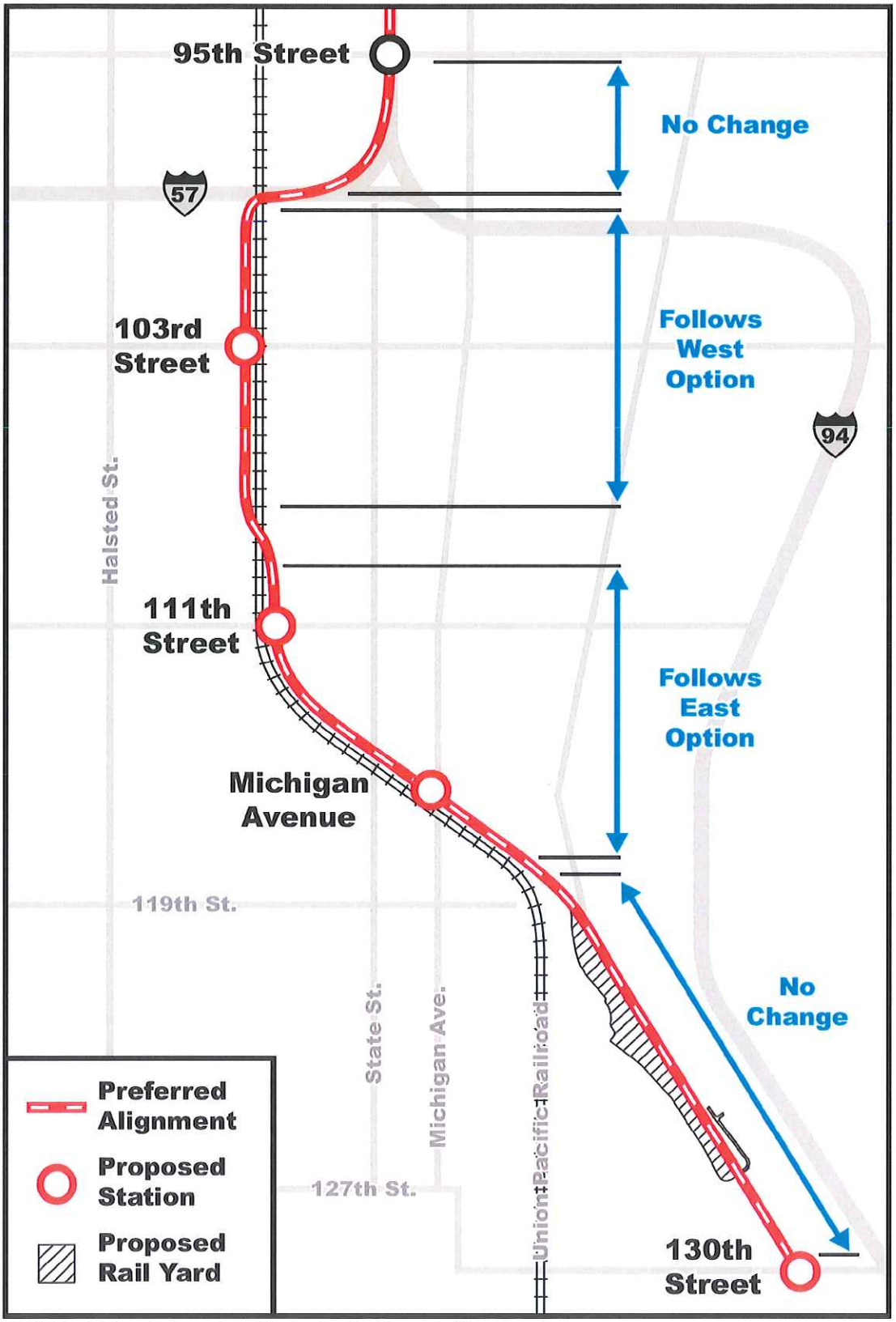

CTA Red Line Extension Project - Preferred Alignment

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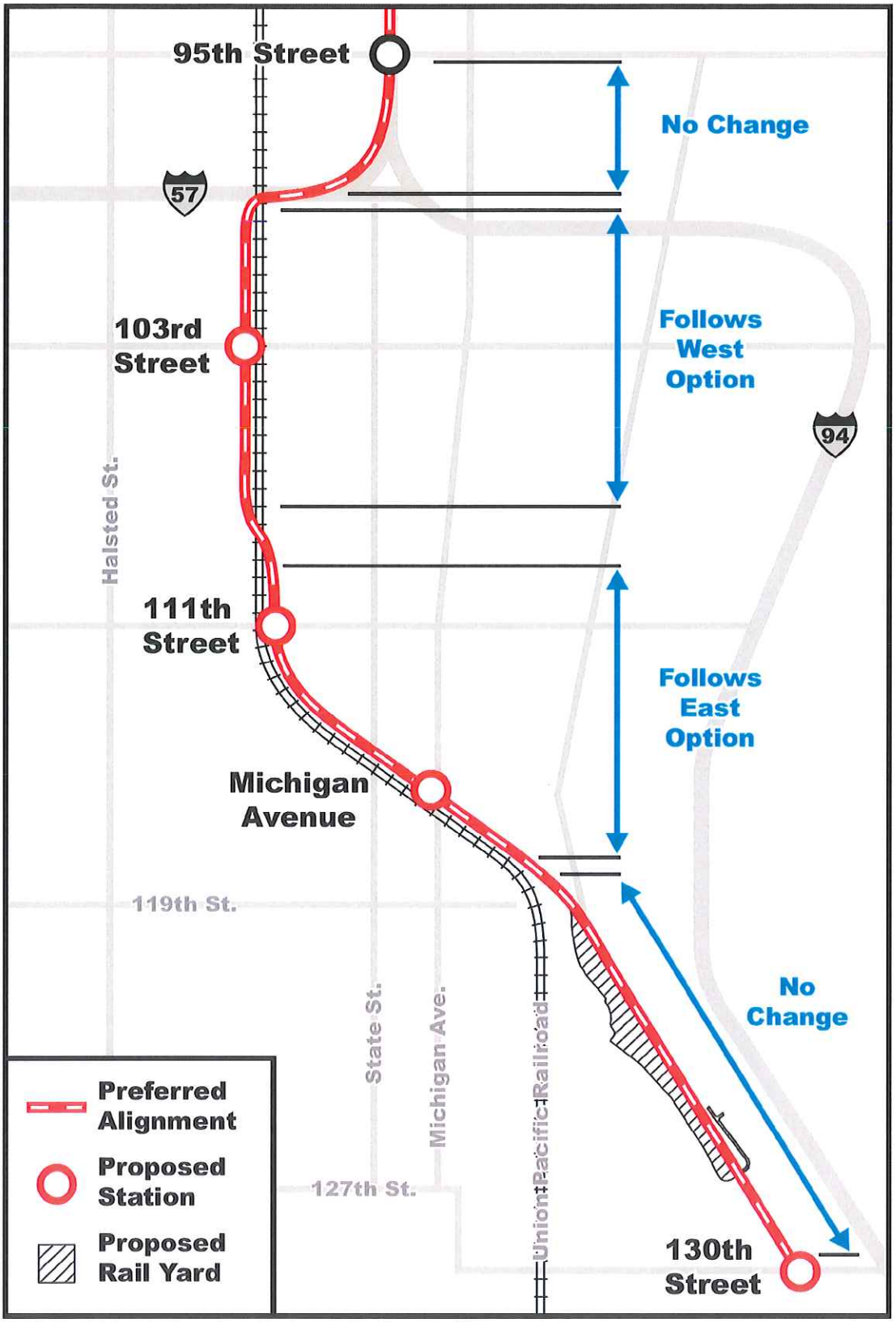

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CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning, CTA has determined that the Preferred Alignment would cross over one Metra parcel (property identification number 25-22-317-035-0000 at 11800 S. Front Avenue) on an aerial structure, although the Metra tracks and operations would not be affected. The RLE piers may be located on the parcel in the table below. The proposed minimum vertical clearance will be developed in future coordination with Metra to take into account the overhead contact system. The vertical clearance would not be less than the adjacent clearance over CN tracks. **There would be no change in the number of Metra-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.** CTA met with Lynnette Ciavarella, Scott Presslak, and David Kralik on October 13, 2017 to discuss potential impacts to Metra property.

CTA has previously disclosed potential property impacts to you and met with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

CTA will hold an open house meeting to present the Preferred Alignment to the public and obtain additional feedback. All interested parties are invited to attend this upcoming public open house. The open house will be held at the time and location identified below and a flyer is enclosed for your information. Representatives from your agency are encouraged to attend.

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Parking lot entrance via King Drive.

Please contact Sonali Tandon, Senior Project Manager, at (312) 681-4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey

Carole Morey
Chief Planning Officer
(312) 681-4100
cmorey@transitchicago.com

cc: Ms. Lynette Ciavarella
Mr. David Kralik

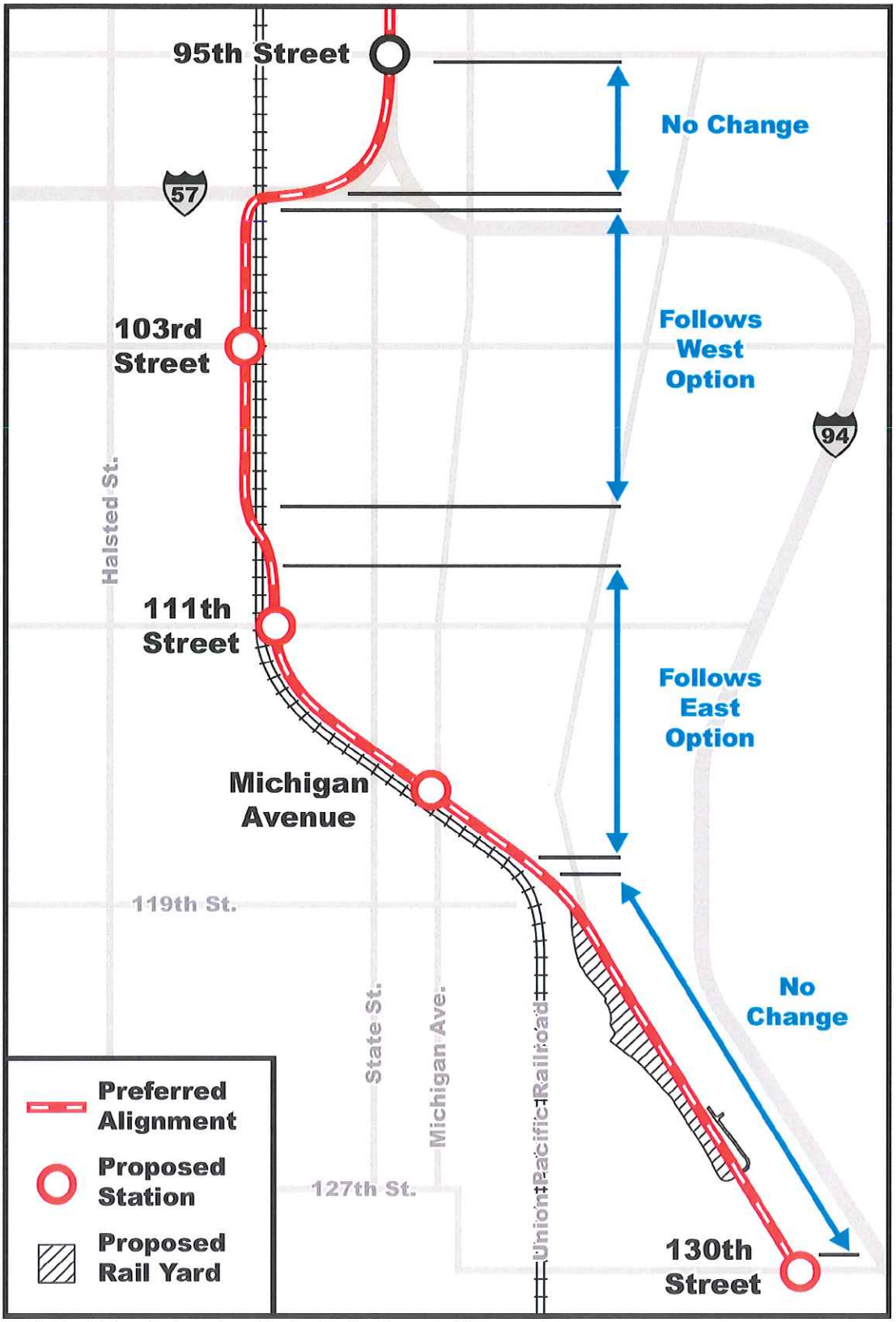

CTA Red Line Extension Project - Preferred Alignment

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Ms. Jocelyn Gabrynowicz Hill
Consolidated Rail Corporation
1717 Arch Street
Suite 1310
Philadelphia, PA 19103

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to Conrail-Owned Properties

Dear Ms. Hill:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning, CTA has determined that the Preferred Alignment would affect two Conrail parcels. At-grade RLE tracks would be located on those two Conrail parcels, although the Conrail tracks and operations would not be permanently affected. **There would be no change in the number of Conrail-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.**

Property Identification Number	Address
25-27-502-001-0000	12330 S. Cottage Grove Avenue
25-26-999-001-0000	No Street Address

CTA has previously disclosed potential property impacts to you and coordinated with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

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Sincerely,

Carole Morey

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Chief Planning Officer
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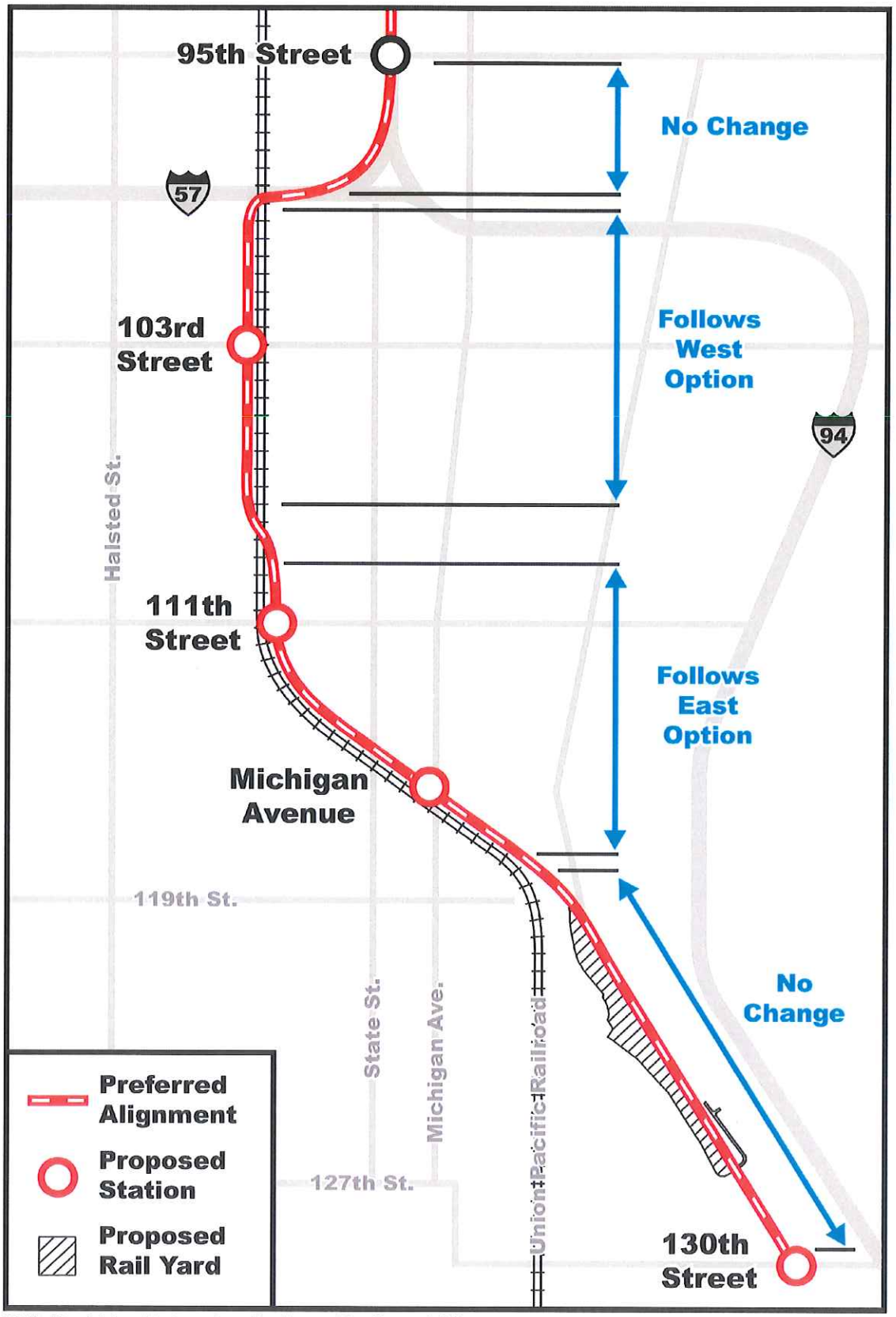

CTA Red Line Extension Project - Preferred Alignment

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Mr. Jim Kvedaras
CN Railway
17641 S. Ashland Avenue
Homewood, IL 60430

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to CN-Owned Properties

Dear Mr. Kvedaras:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

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CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning, CTA has determined that the Preferred Alignment would cross over two CN parcels on an aerial structure, although the tracks and operations would not be affected. The RLE piers could be located on the first parcel in the table below. **There would be no change in the number of CN-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.** The proposed minimum vertical clearance would meet CN standards. CTA met with Jim Kvedaras, Deanna McCollian, Art Spiros, and Paul Chojenski on June 27, 2017 to discuss potential impacts to CN property.

Property Identification Number	Address
25-22-501-005-0000	360 E. 119th Street
25-22-325-001-0000	370 E. 119th Street

CTA has previously disclosed potential property impacts to you and met with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

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cmorey@transitchicago.com

cc: Mr. Arthur Spiros

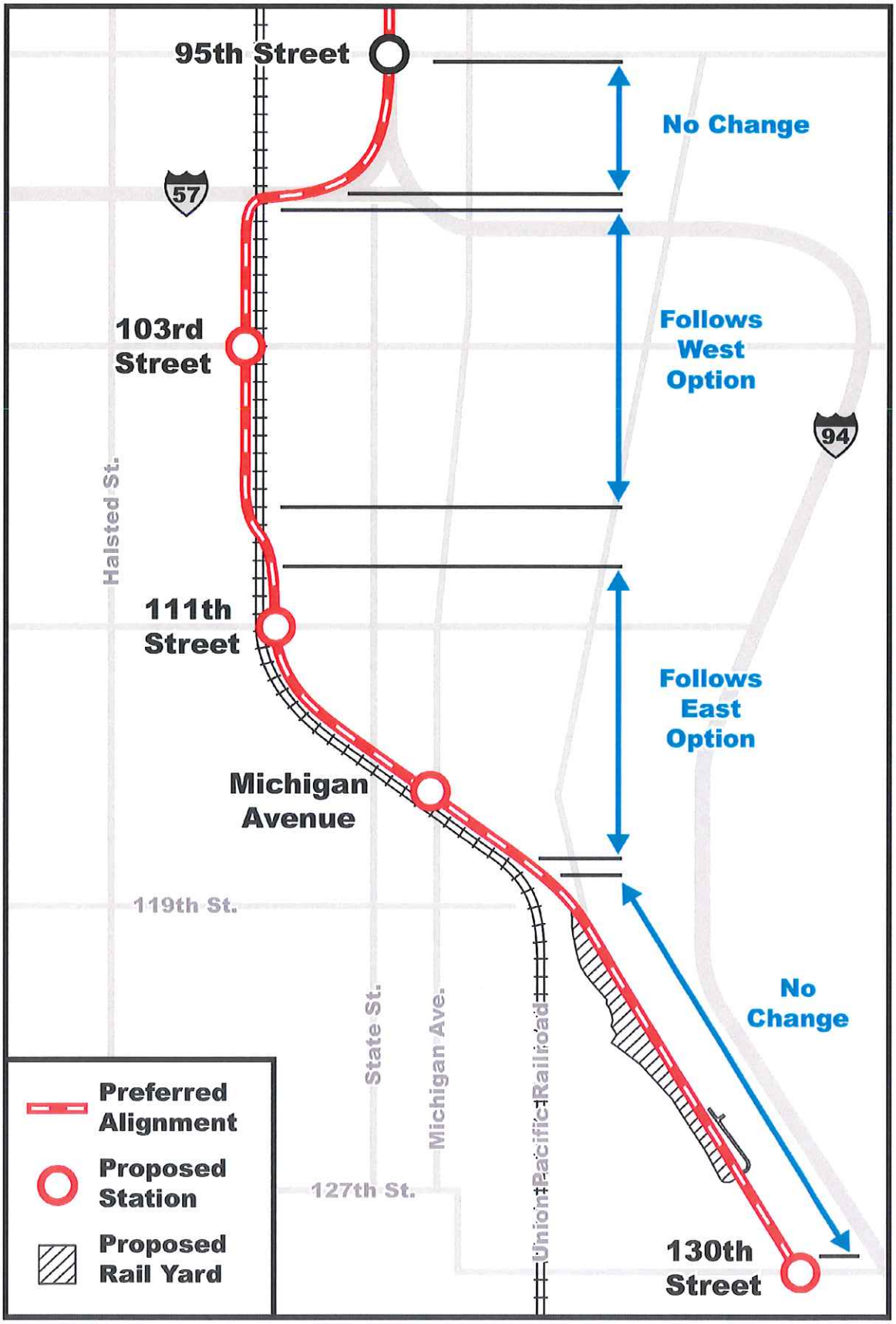

CTA Red Line Extension Project - Preferred Alignment

CHICAGO TRANSIT AUTHORITY

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January 26, 2018

Mr. Jim Kvedaras
CN Railway
17641 S. Ashland Avenue
Homewood, IL 60430

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to CN-Owned Properties

Dear Mr. Kvedaras:

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Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

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At this stage of project planning, CTA has determined that the Preferred Alignment would cross over two CN parcels on an aerial structure, although the tracks and operations would not be affected. The RLE piers could be located on the first parcel in the table below. **There would be no change in the number of CN-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.** The proposed minimum vertical clearance would meet CN standards. CTA met with Jim Kvedaras, Deanna McCollian, Art Spiros, and Paul Chojenski on June 27, 2017 to discuss potential impacts to CN property.

Property Identification Number	Address
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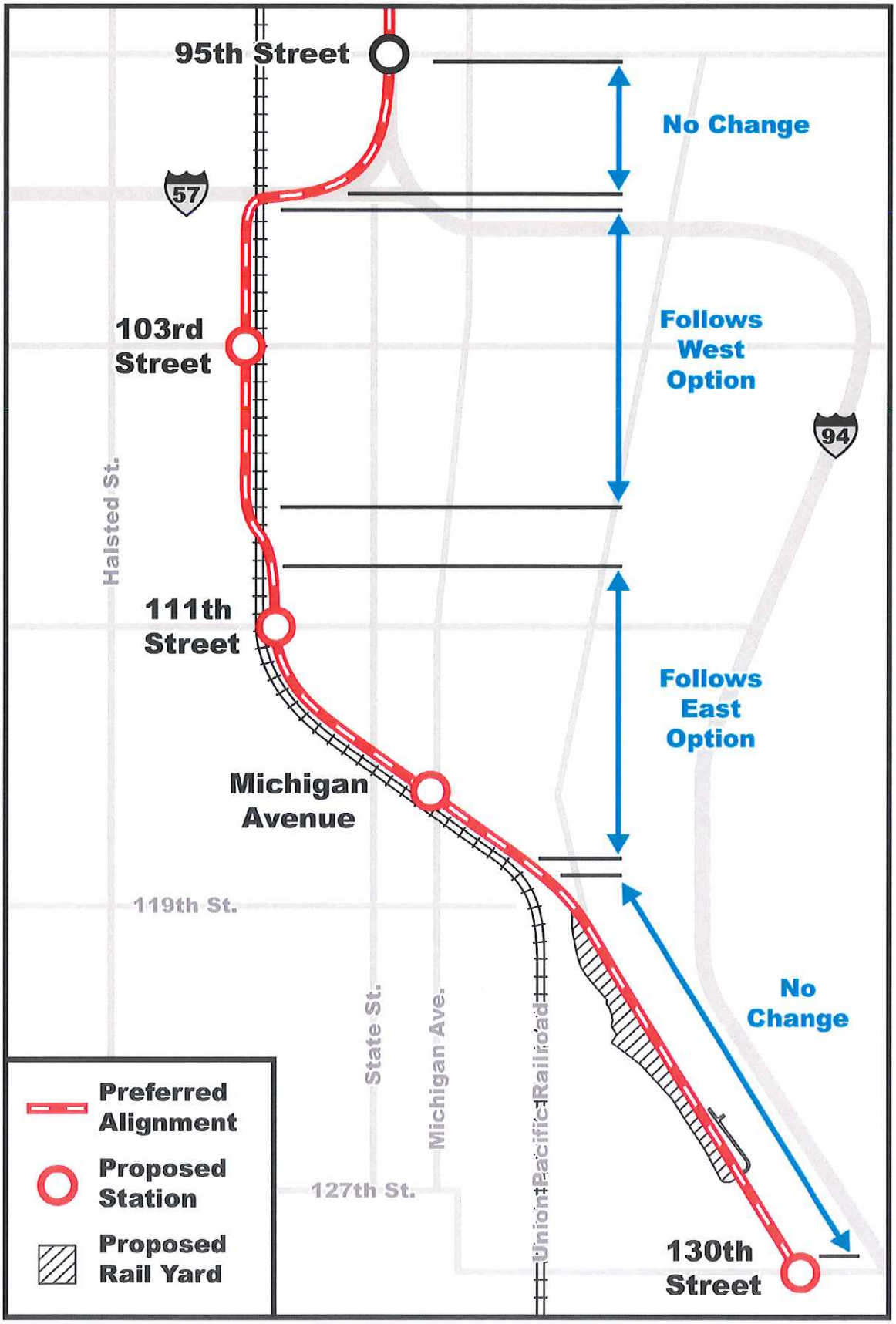

CTA Red Line Extension Project - Preferred Alignment

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Mr. David St. Pierre
Metropolitan Water Reclamation District
100 E. Erie Street
Chicago, IL 60611-3154

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to MWRD-Owned Properties

Dear Mr. St. Pierre:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In fall 2016, in accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA published a Draft Environmental Impact Statement (EIS) and held a public hearing to obtain comments on the benefits and impacts of the two options under consideration for RLE Project alignment: the Union Pacific Railroad (UPRR) East and West Options.

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CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of project planning and as detailed in the attached table, CTA has determined that portions of 15 MWRD parcels at the Calumet Water Reclamation Plant would be affected to accommodate the 120th Street yard and shop and the 130th Street station. **There would be no change in the number of MWRD-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.** The CTA structures would not affect MWRD operations at the plant. CTA met with David St. Pierre and MWRD staff on December 5, 2016 and July 31, 2017 to discuss potential impacts to MWRD property.

CTA has previously disclosed potential property impacts to you and met with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

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Sincerely,

Carole Morey

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cc: Mr. Joseph Schuessler

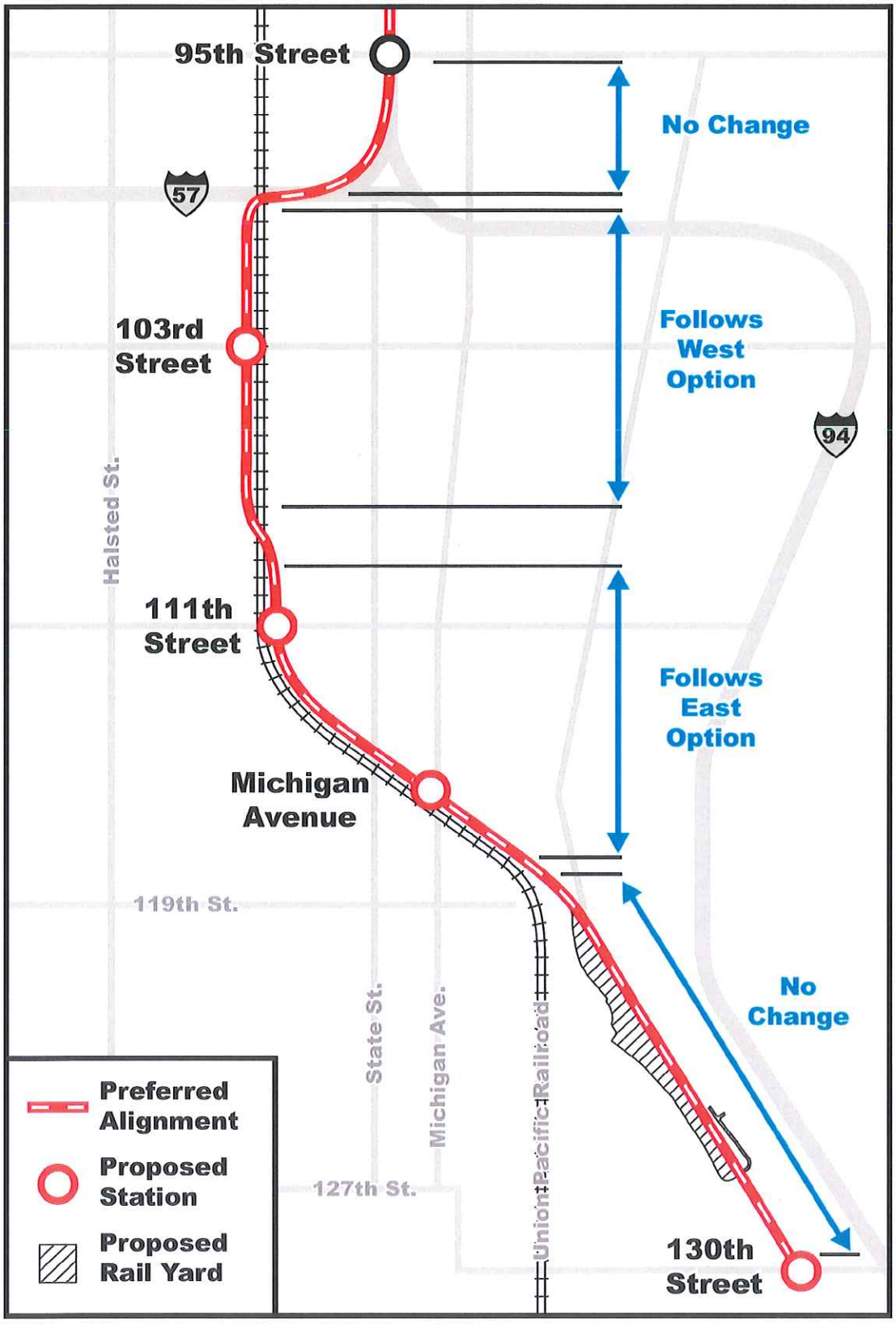

CTA Red Line Extension Project - Preferred Alignment

MWRD-Owned Parcels Affected by the Preferred Alternative

Property Identification Number	Address
25-26-300-017-0000	12807 S. Cottage Grove Avenue
25-26-300-015-0000	12813 S. Cottage Grove Avenue
25-26-300-014-0000	12817 S. Cottage Grove Avenue
25-27-301-013-0000	310 E. 130th Street
25-27-301-012-0000	325 E. 127th Street
25-27-301-011-0000	350 E. 130th Street
25-27-301-010-0000	360 E. 130th Street
25-27-200-013-0000	12546 S. Cottage Grove Avenue
25-27-200-004-0000	12500 S. Cottage Grove Avenue
25-27-400-003-0000	12606 S. Cottage Grove Avenue
25-27-400-007-0000	12614 S. Cottage Grove Avenue
25-27-400-005-0000	12608 S. Cottage Grove Avenue
25-27-400-006-0000	12610 S. Cottage Grove Avenue
25-27-301-007-0000	300 E. 127th Street
25-27-400-009-0000	12618 S. Cottage Grove Avenue

CHICAGO TRANSIT AUTHORITY

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January 26, 2018

Mr. David St. Pierre
Metropolitan Water Reclamation District
100 E. Erie Street
Chicago, IL 60611-3154

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to MWRD-Owned Properties

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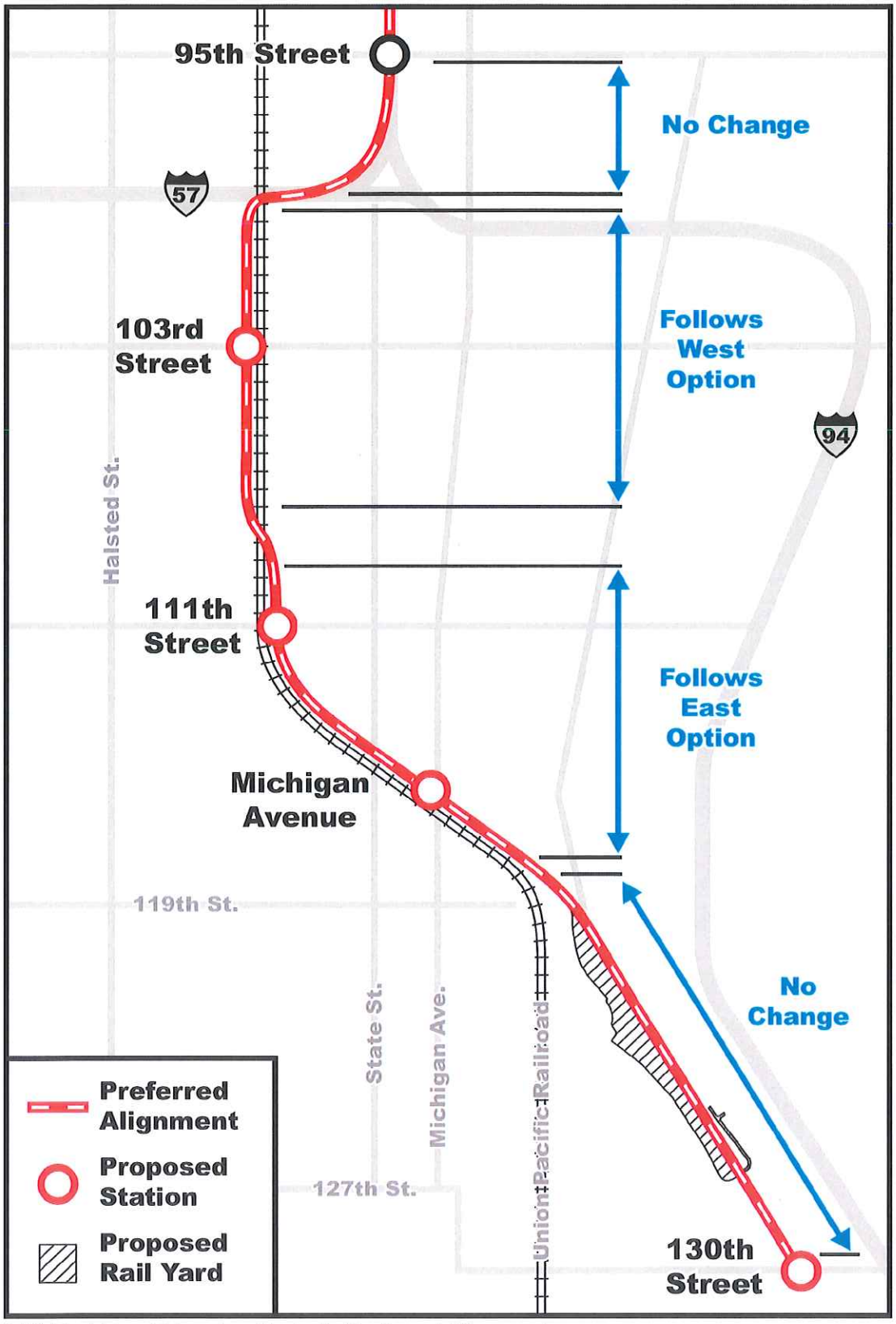

CTA Red Line Extension Project - Preferred Alignment

MWRD-Owned Parcels Affected by the Preferred Alternative

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25-27-301-011-0000	350 E. 130th Street
25-27-301-010-0000	360 E. 130th Street
25-27-200-013-0000	12546 S. Cottage Grove Avenue
25-27-200-004-0000	12500 S. Cottage Grove Avenue
25-27-400-003-0000	12606 S. Cottage Grove Avenue
25-27-400-007-0000	12614 S. Cottage Grove Avenue
25-27-400-005-0000	12608 S. Cottage Grove Avenue
25-27-400-006-0000	12610 S. Cottage Grove Avenue
25-27-301-007-0000	300 E. 127th Street
25-27-400-009-0000	12618 S. Cottage Grove Avenue

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
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January 26, 2018

Ms. Eleanor Esser Gorski
City of Chicago Department of Planning and Development
121 N. LaSalle Street
Room 1101
Chicago, IL 60602

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to City-Owned Properties

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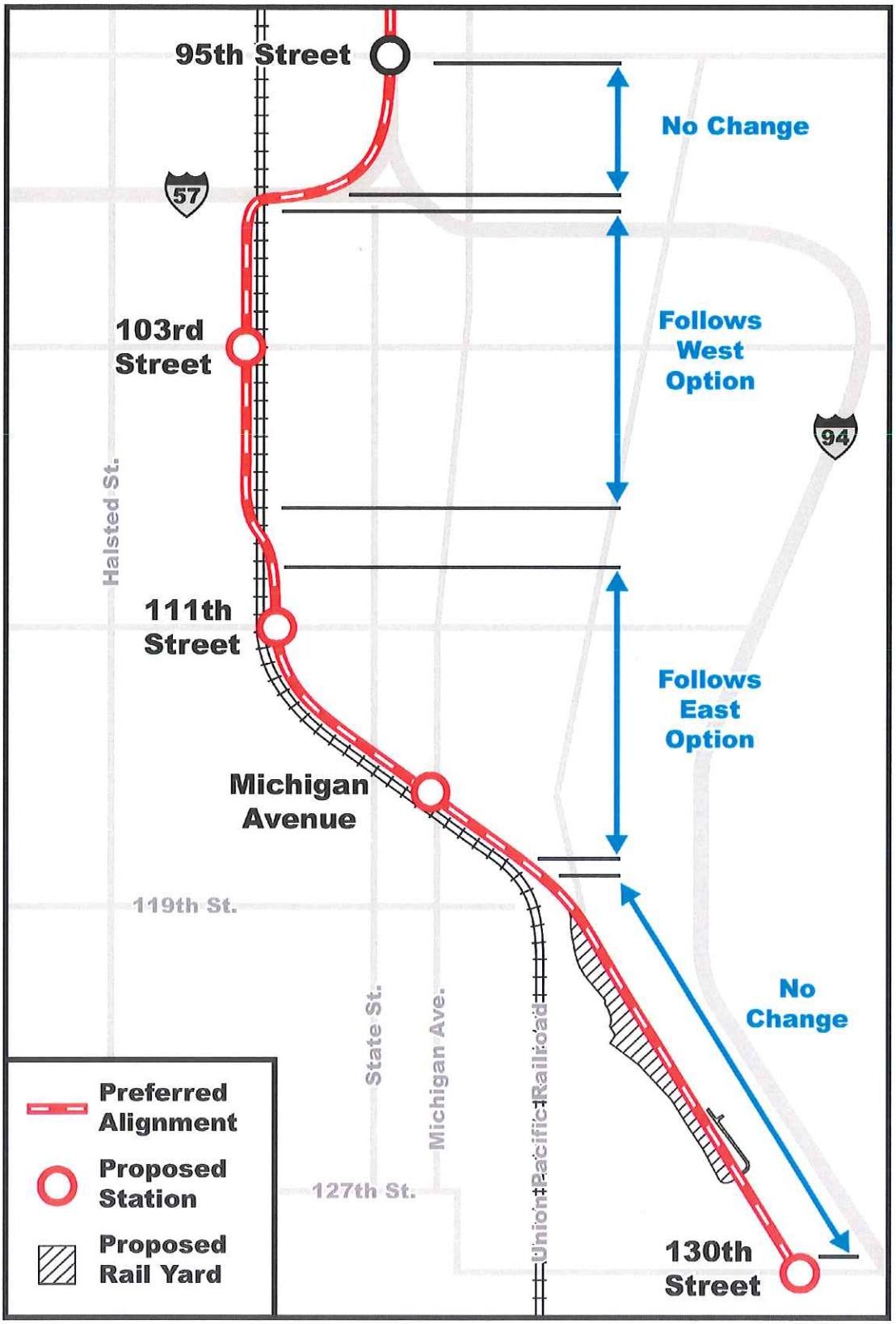

CTA Red Line Extension Project - Preferred Alignment

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January 26, 2018

Ms. Eleanor Esser Gorski
City of Chicago Department of Planning and Development
121 N. LaSalle Street
Room 1101
Chicago, IL 60602

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to City-Owned Properties

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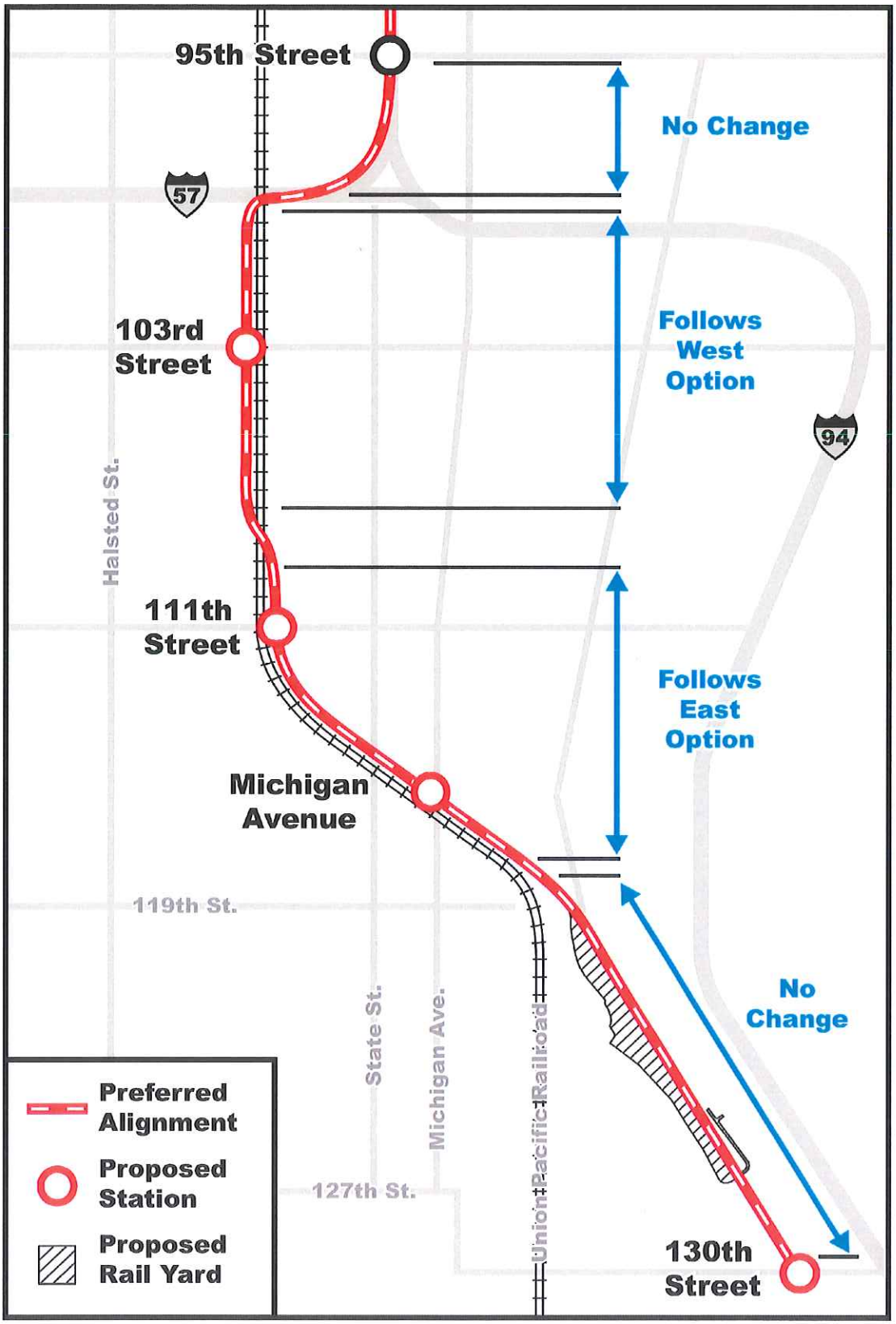

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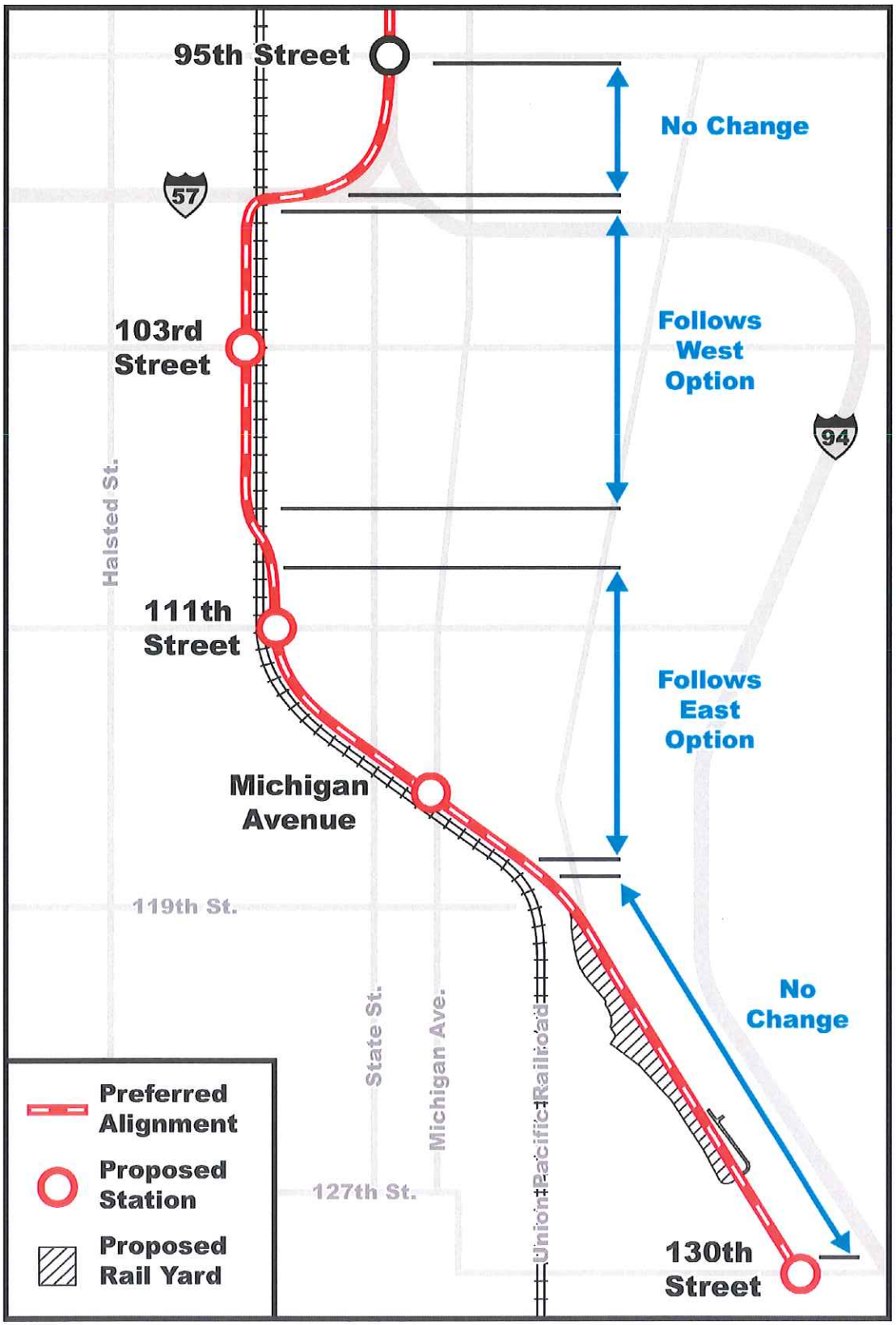

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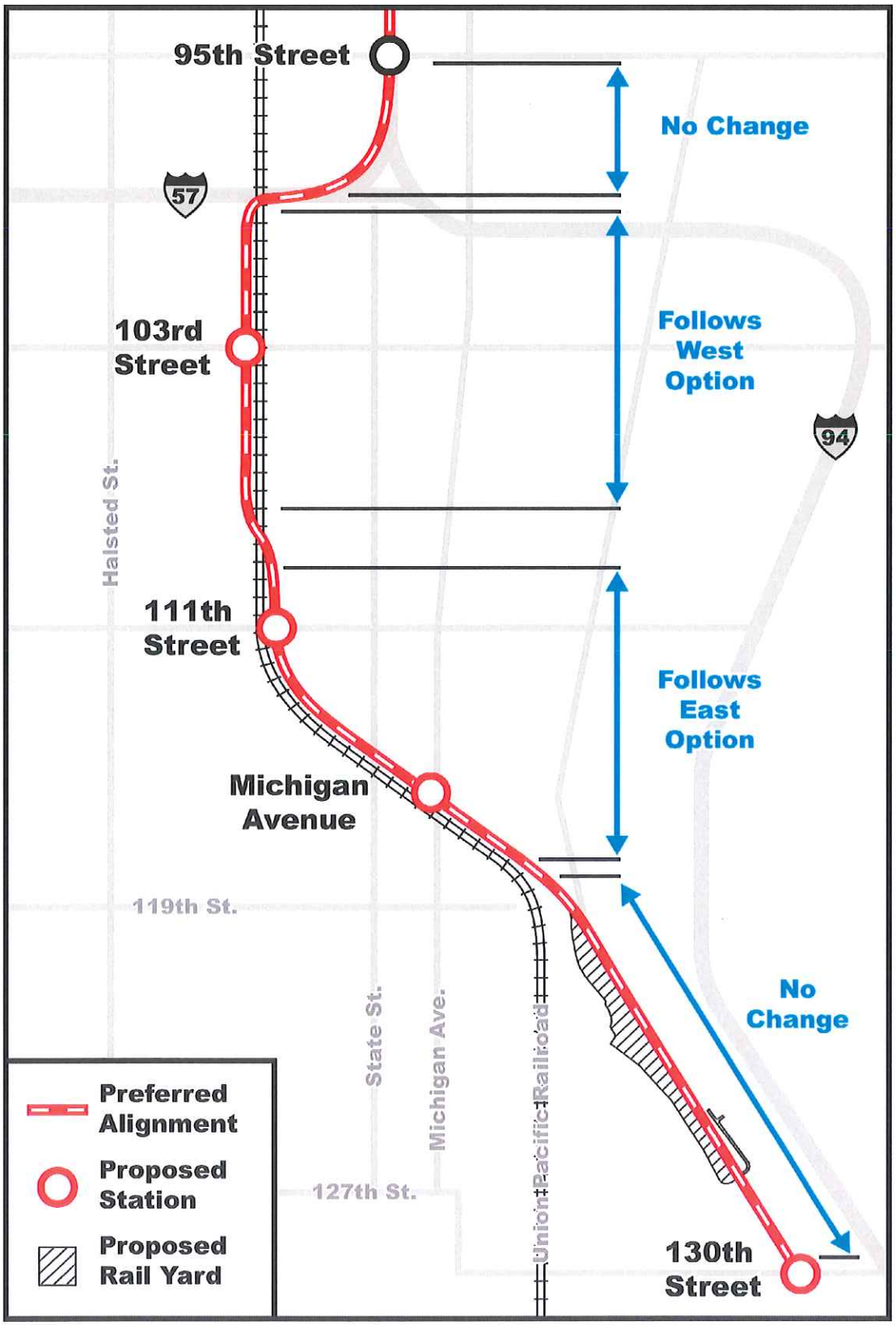

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Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to County-Owned Properties

Dear Mr. Yonan:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

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Based on public feedback and additional project planning and engineering work conducted over the last year, CTA has selected a Preferred Alignment. A map of the alignment is provided for your reference.

The Preferred Alignment is a combination of the previously presented UPRR East and West Options, as shown on the map at the end of this letter. The alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor. From I-57 south to approximately 108th Place the route would run along the west side of the UPRR tracks, and then the route would cross the UPRR tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street. This Preferred Alignment would capture the benefits and minimize the impacts of either option and incorporates the public and agency feedback received on the Draft EIS. The Preferred Alignment would have fewer impacts than either the East or West Options. It would affect fewer residences than the East Option, and fewer businesses and jobs than the West Option. Noise and vibration impacts would not be greater than those anticipated under either the East or West Option.

CTA has determined that properties owned by your agency would be affected by implementation of the Preferred Alignment. The table included with this letter provides information about the potentially affected properties.

At this stage of planning and as detailed in the attached table, CTA has determined that the Preferred Alignment would affect 22 Cook County parcels within the I-94 and I-57 right-of-way. **There would be no change in the number of County-owned parcels that would be affected by the Preferred Alignment as compared to the impacts for the East and West Options as identified by CTA in 2016.** The RLE aerial structure would be in the median of I-94 immediately south of 95th Street Terminal, then would run along the north side of I-57 until Eggleston Avenue. Piers would be placed within Cook County parcels. CTA has been coordinating with the Illinois Department of Transportation and the Federal Highway Administration regarding the project alignment and traffic impacts, including horizontal and vertical clearances from IDOT's right-of-way.

CTA has previously disclosed potential property impacts to you and coordinated with your agency over the last year to further discuss these impacts and next steps. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs.

As the project moves forward, CTA will conduct additional engineering, which will allow CTA to further refine property needs and identify ways to minimize impacts to properties. CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses.

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6:00 - 8:00 PM
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Main Gym (west side of building)
250 E. 111th. Street, Chicago, IL 60628
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Parking lot entrance via King Drive.

Please contact Sonali Tandon, Senior Project Manager, at (312) 681-4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey

Carole Morey
Chief Planning Officer
(312) 681-4100
cmorey@transitchicago.com

cc: Ms. Susan Campbell, Cook County
Mr. Rob Rose, Cook County Land Bank Authority

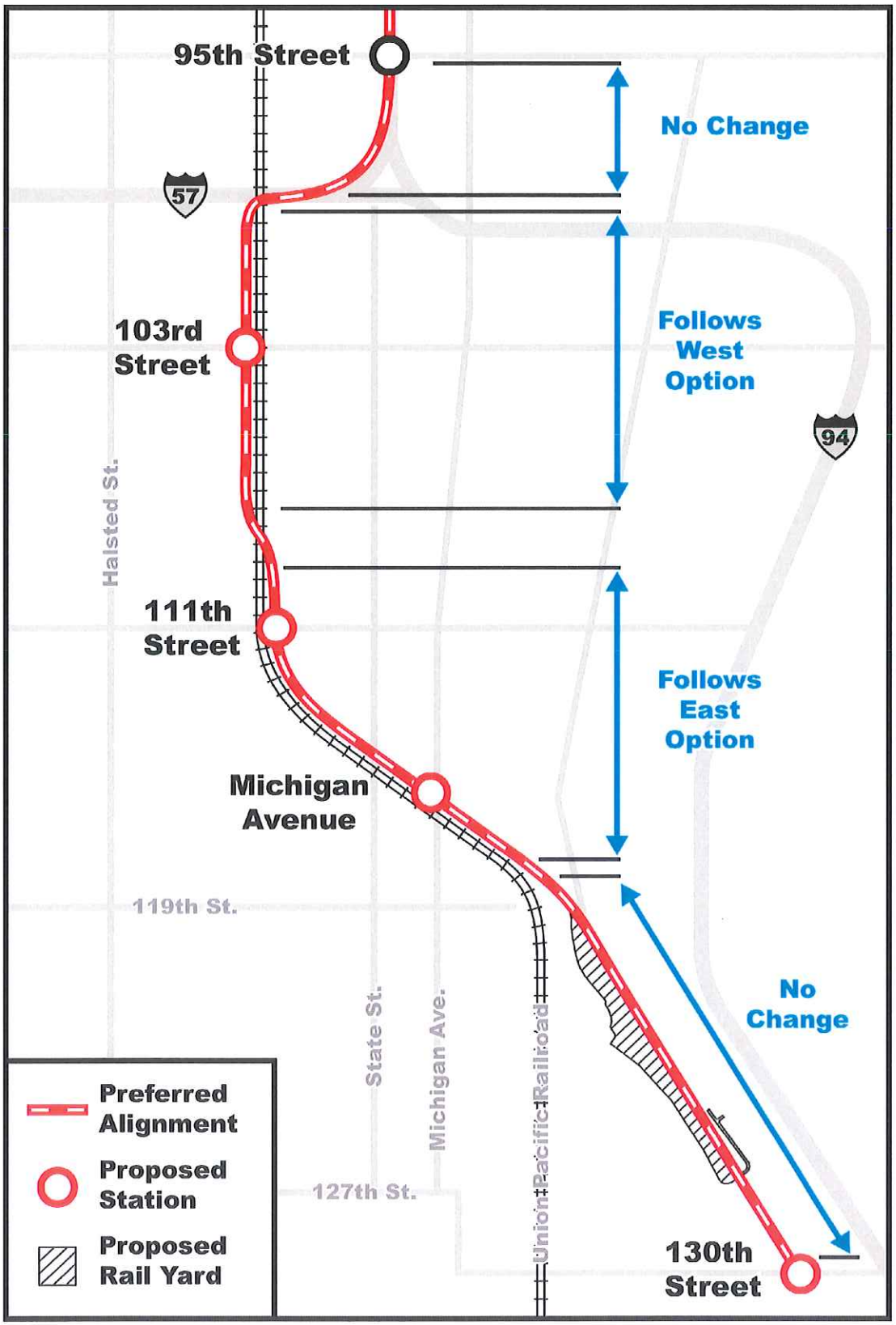

CTA Red Line Extension Project - Preferred Alignment

County-Owned Parcels Affected by the Preferred Alternative

Property Identification Number	Address
25-09-207-050-0000	9512 S. State Street
25-09-207-049-0000	9511 W. 95th Street
25-09-215-001-0000	9600 S. Lafayette Avenue
25-09-223-043-0000	9721 S. Lafayette Avenue
25-09-222-042-0000	9720 S. Lafayette Avenue
25-09-222-041-0000	9701 S. Princeton Avenue
25-09-221-042-0000	9710 S. Perry Avenue
25-09-229-041-0000	9801 S. LaSalle Street
25-09-228-042-0000	9800 S. LaSalle Street
25-09-228-041-0000	9801 S. Wentworth Avenue
25-09-227-041-0000	9807 S. Yale Avenue
25-09-226-045-0000	9808 S. Yale Avenue
25-09-226-041-0000	9817 S. Princeton Avenue
25-09-225-047-0000	9820 S. Princeton Avenue
25-09-225-026-0000	9822 S. Princeton Avenue
25-09-225-043-0000	9824 S. Princeton Avenue
25-09-225-044-0000	9825 S. Harvard Avenue
25-09-224-019-0000	9822 S. Harvard Avenue
25-09-224-011-0000	354 W. 99th Street
25-09-224-010-0000	352 W. 99th Street
25-09-224-009-0000	350 W. 99th Street
25-09-224-020-0000	356 W. 99th Street

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

January 26, 2018

Ms. Sarah White
Chicago Park District
541 N. Fairbanks Court
5th Floor
Chicago, IL 60611

Re: CTA Red Line Extension Project
Selection of Preferred Alignment and Project-Related Impacts to Chicago Park District Owned Properties

Dear Ms. White:

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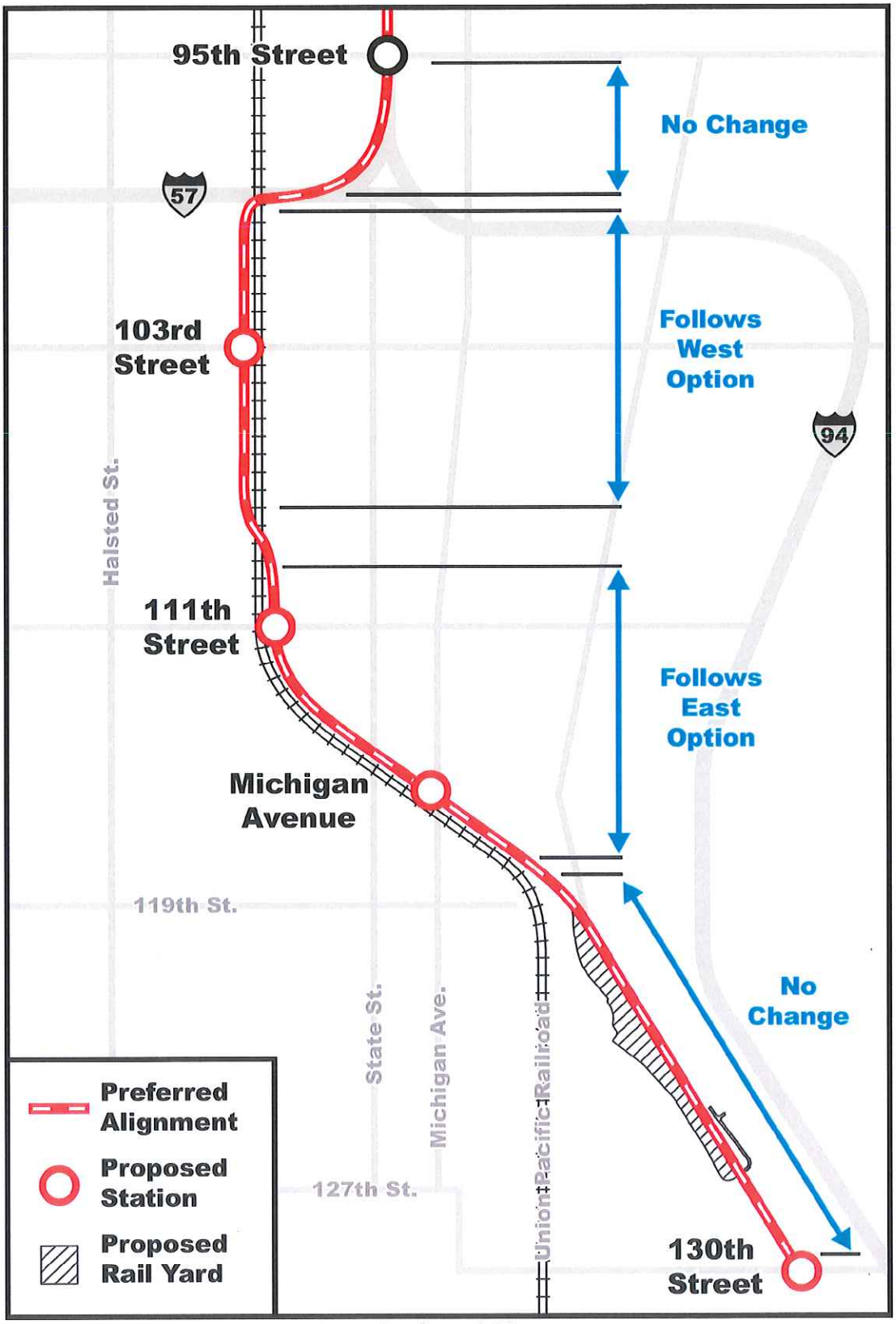

CTA Red Line Extension Project - Preferred Alignment

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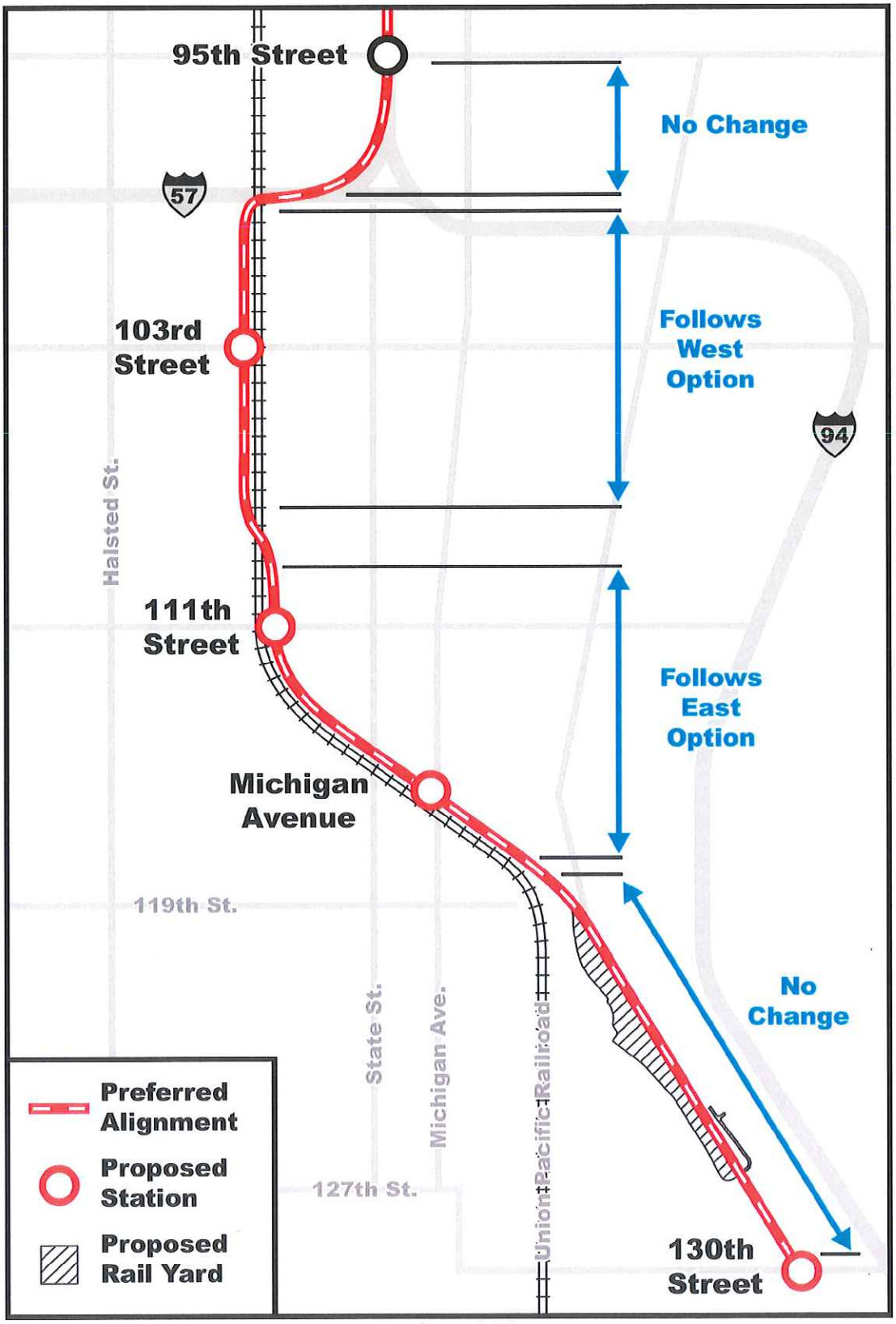

CTA Red Line Extension Project - Preferred Alignment

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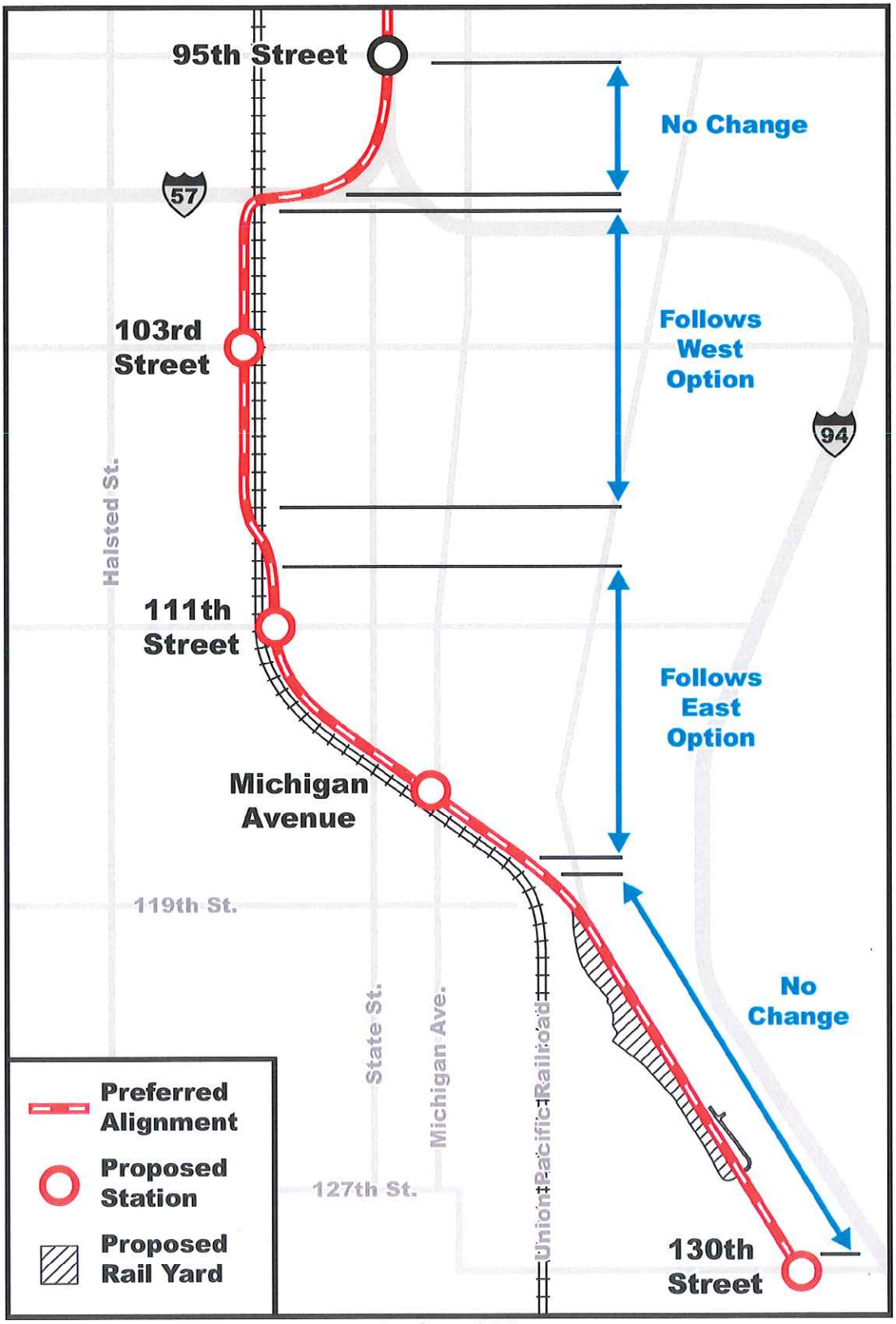

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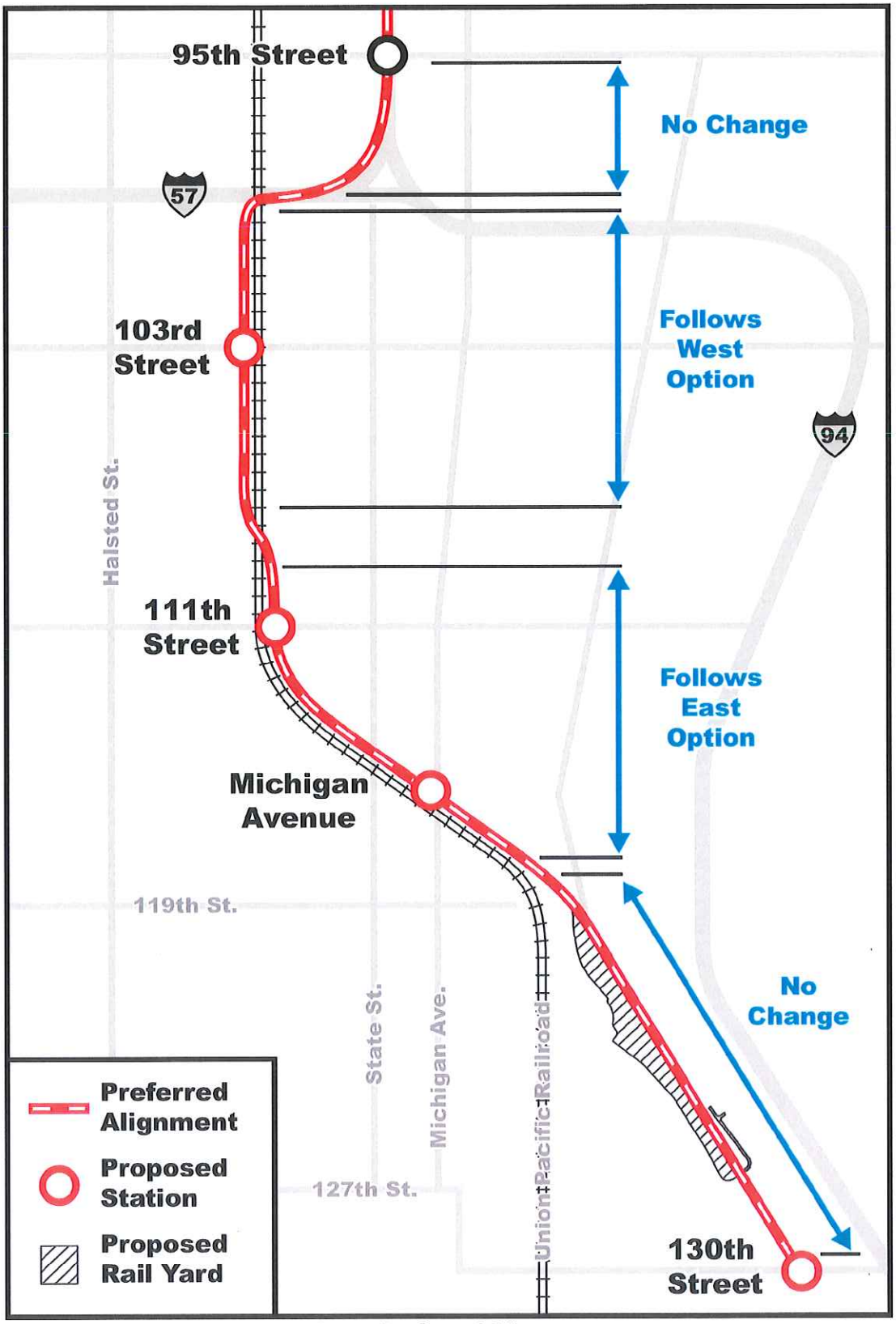

CTA Red Line Extension Project - Preferred Alignment

Attachment 8
Displacements Meeting Materials

Photos

Sign-In Sheets

Exhibit Boards

Photos

RED AHEAD
Welcome to the
Red Line Extension Project
Property Acquisition and
Relocation Community Meeting
RED AHEAD
Preferred Alignment
RED AHEAD
RED AHEAD
RED AHEAD

RED AHEAD
Red Line Extension
Quick Facts about Acquisition and Relocation
RED AHEAD
Red Line Extension
Preferred Alignment
RED AHEAD
Red Line Extension
Preferred Alignment

GYM RULES
good sportsmanship
appropriate language
appropriate behavior
have fun
EXIT

Sign-In Sheets

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Fenger Academy High School
Tuesday, February 6, 2018
5:30 - 7:30 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY	PARCEL ID NUMBER
1	JERRY GRAHAM	19 ILIAD DR. T.N. PR. IL 60477	773-732-2366			295
2	B. ([redacted]) Everette	410 W. 109th St. 60628		Please notify via mail (for further info RE: The REL Project)		130
3	GARY DAVIS	349 W. 111 th St.	312 307-4396	NONE	✓	161
4	Michael McNabb	11934 S. Yale	708 359-7150	mikegay196@gmail.com		218
5	Walter Johnson	310 W 113st	773 3674799			202
6	ELISA GARCIA ESTEBAN GARC	165 E 116 St	1-219-448-3902			347
7	Phillip Dixon (grandson) Cynthia Howard Belinda Dixon	325 W 112th Place	Belinda Dixon (daughter) 1-815 690 3636	bd1895@yahoo.com phillthereactor@gmail.com		192
8	Corey Buchanan	401 W. 104th St.	1-708-268-5708	coreycpo@yahoo.com		~~230~~ 77
9	Chester Wilson Jr	Alderman Austin	773-928-6961	[illegible]		
10						
11						
12						

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Palmer Park
Thursday, February 8, 2018
5:30 - 7:30 PM

cta

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY	PARCEL ID NUMBER
1	ANNA Williams	349 W 99th Pl	568-2087			28
2	Juan Rafael Calderon	38 E 116th st.	773-203-0920			321
3	MICHAEL SHERLEY	347 W 99TH PL	(773)-418-2545			
4	James T. Floyd	355 W. 99th PL	872 600-4287			29
5	Elizabeth Calderon	38 E 116th St	773-203-0920			321
6	Tom Miller	830 W. 51st Chicago IL 60609	312-929-6539	T.Miller5050@yahoo.		287
7	BOGUSLAW SZAFLARSKI	400 W 107 st.	708-369-5029.	BOGUSLAW OCC@YAHOO.COM		111
8	Vincent THOMAS	128 W 114th St	773-793-6001			
9	Blanford & Chakel Hannah	344 W. 111th Pl	773 386-1165	Mijiras.49@gmail.com	✓	169
10	Sukyia Blankenship	11039 S. Edbrooke Ave	(773) 587-6846			
11	Aaron Mallory	350 W 109th Place	618-203-4368	amallory87@gmail.com		137
12	P Stewart	~~8413~~ PO Box Park Forest		NA.		224

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Palmer Park
Thursday, February 8, 2018
5:30 - 7:30 PM

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1	Porrhita Moore	10747 S. King Drive	(312)607 2053	Porrhitathomas@gmail.com		
2	Rockingham, Helen	11340 S. Princeton Ave	773-350-3954	helen_rockingham@att		217
3						
4						
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7						
8						
9						
10						
11						
12						

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Welcome to the
Red Line Extension Project
Property Acquisition and Relocation Community Meeting

The purpose of this open house is to:

- Provide information about potential property displacements and what it means for your property
- Facilitate information about the property acquisition and relocation process
- Offer resources outlining the rights of property owners and tenants
- Share information on the Red Line Extension (RLE) Project

Please participate by discussing your questions or concerns with the representatives stationed around the boards and at the workstations. There will be no formal presentation.

If you would like to schedule a one-on-one meeting with CTA's relocation liaison, please let us know by noting it on the sign-in sheet or on a comment card.

You may leave your comments with us today, or send a comment card to this address:

Chicago Transit Authority
Strategic Planning, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street, Chicago, IL 60661

Or send us an email: RedExtension@transitchicago.com

Or call us: **1-888-YOUR-CTA (1-888-968-7282)**

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RED AHEAD
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Red Line Extension

Preferred Alignment

Based on public feedback, technical analysis, and agency coordination, CTA has selected a route that would run along the west side of the Union Pacific Railroad tracks from I-57 south to approximately 108th Place, then would cross the Union Pacific Railroad tracks and run along the east side of the tracks until crossing the Metra Electric tracks near 119th Street and continuing south to 130th Street.

Project Benefits	East Option	West Option	Preferred Alignment
Minimizes Affected Parcels	✗	✓	✓
Minimizes Affected Residences	✗	✓	✓
Minimizes Affected Businesses	✓	✗	✓
Avoids Impact to Historic Roseland Pumping Station	✗	✓	✓
Maximizes Economic Development Opportunities	✓	✗	✓

The Preferred Alignment is a combination of the previously presented East and West Options. It would capture the benefits and minimize the impacts of either option, and it also incorporates feedback received on the Draft Environmental Impact Statement.

Tracks would be elevated from 95th Street to 119th Street

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Red Line Extension

Preferred Alignment

- Same as the ***WEST OPTION*** north of ***108th Place***
- Same as the ***EAST OPTION*** south of ***108th Place***
- Same as the ***COMMON ALIGNMENT*** north of ***99th Street*** and south of ***119th Street***

Previously Considered Options:

East *OR* ***West***

Combination of Options Selected:

Preferred Alignment

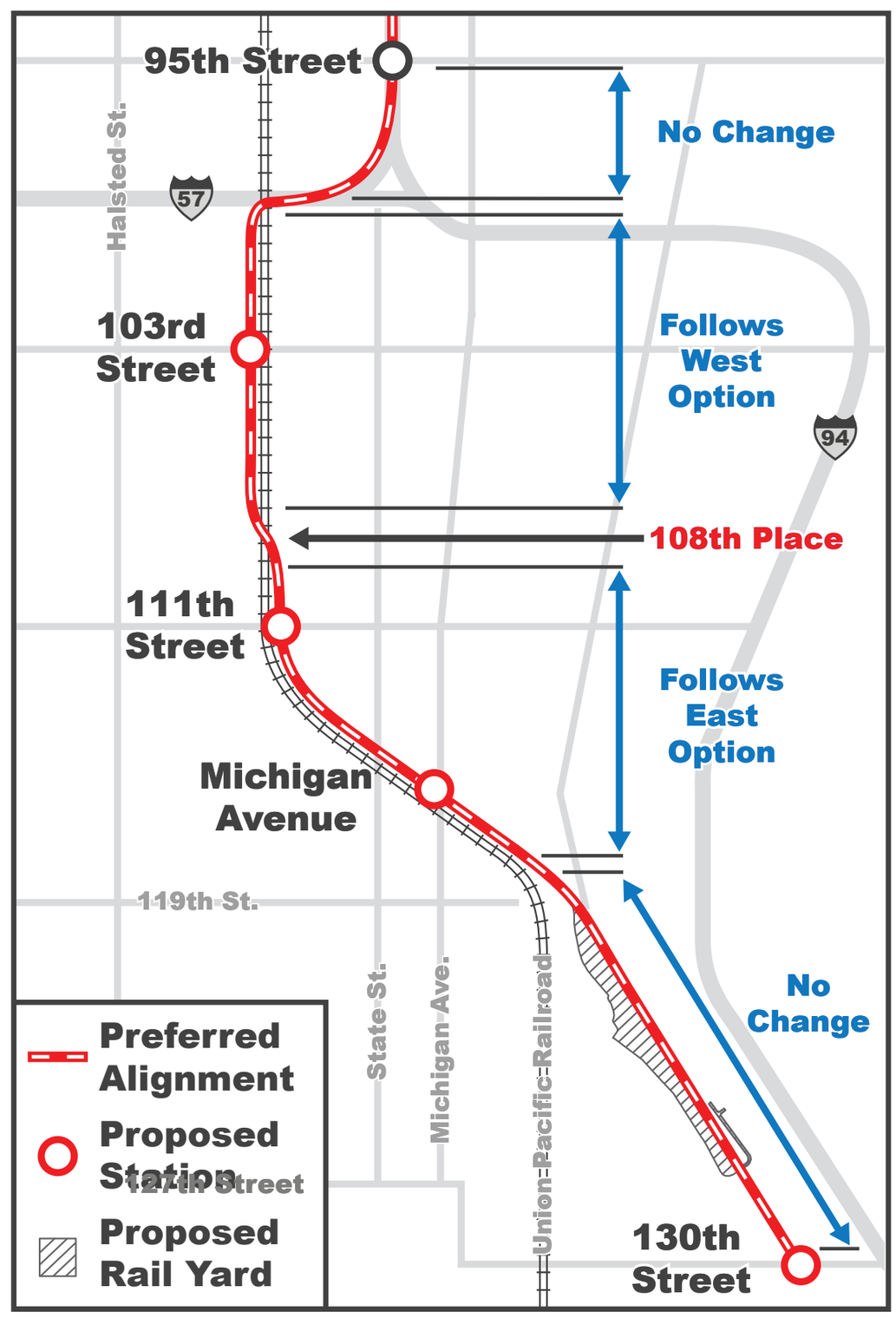

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Red Line Extension

Quick Facts about Acquisition and Relocation

The property acquisition and relocation process is governed by the federal Uniform Relocation Assistance and Real Property Policies Act of 1970 (also known as the "Uniform Act"), which outlines the rights of owners and tenants of business and residential properties.

The process includes two main parts:

Acquisition – The purchase of your real estate. Property owners would not be paid less than fair market value for their land and buildings. In some circumstances, if current appraisals are less than the original purchase price, an owner may be eligible for compensation equal to the original purchase price.

Relocation – Additional benefits offered should you or your business be displaced. CTA will provide a relocation agent to every displaced person to help navigate the benefits that are available. Residential homeowner financial benefits may include:

1. Moving and Related Expenses
2. Replacement Housing Payments
3. Incidental Closing Costs

CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

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Red Line Extension

Next Steps and Timeline

Now that CTA has selected the Preferred Alignment, a Final Environmental Impact Statement will be prepared and preliminary engineering will be conducted. CTA and FTA will complete any additional analyses and respond to public comments on the Draft EIS as part of the Final EIS.

On November 27, 2016, Mayor Emanuel and CTA announced approval of $75 million in funding over the next 5 years for the RLE Project, which will allow for completion of these next steps.

CTA will apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase of this project to pursue federal funding for construction of the project under the competitive federal “New Starts” program.

Project Development and full funding for the RLE Project under this program is a multiyear, multistep process.

CTA will continue to work with the community to complete this important project.

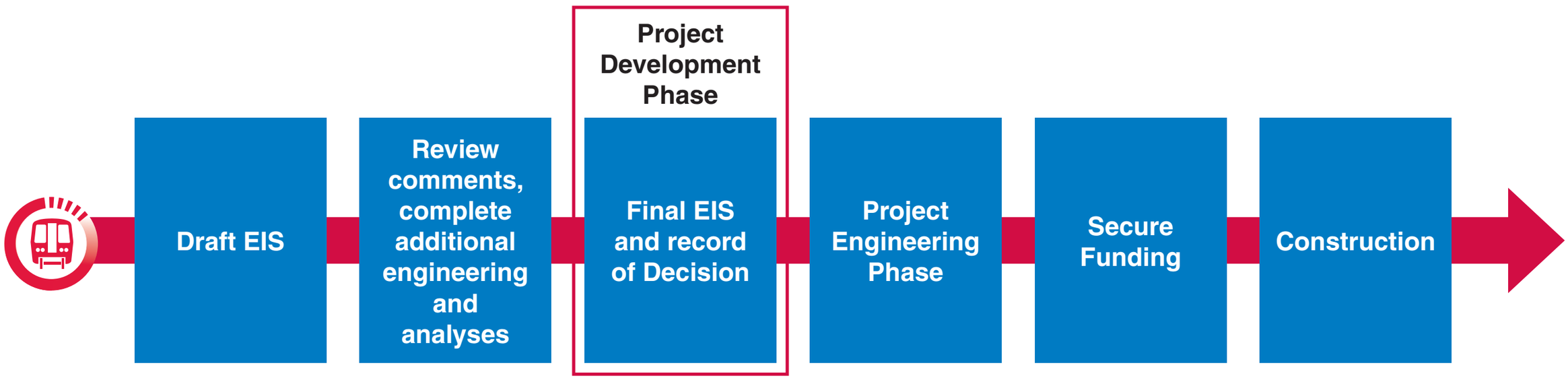

RED AHEAD
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Red Line Extension

Red Line Extension Project

Draft Environmental Impact Statement and Section 4(f) Statement Publication, Public Hearing, and Displacements Outreach Summary

July 2018

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
GWC Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Introduction 1

Section 2 RLE Project Informational Materials 3

2.1 Project Overview Flyer 3
2.2 Citizens' Guide to the Draft EIS 3

Section 3 Draft EIS Publication and Public Hearing Notification 5

3.1 Press Release 5
3.2 Notice of Availability of the Draft EIS and Public Hearing 5
3.3 Display Ads 6
3.4 Project Website 6
3.5 Postcard Notifications 7
3.6 eBlast Notifications 7
3.7 Transit Alert Cards 7

Section 4 Availability of the Draft Environmental Impact Statement for Public Review 8

Section 5 Media Coverage 9

Section 6 Outreach to Elected Officials, Stakeholders, and Agencies 11

6.1 Elected Officials Briefings 11
6.2 Community and Environmental Justice Outreach 11
6.3 Agency Outreach 12

Section 7 Public Hearing 15

7.1 Public Hearing Format 15
7.2 Public Hearing Materials 16
7.3 Exhibit Boards 17
7.4 Section 4(f) Outreach 17
7.5 Comments Received 18

Section 8 Displacements Outreach 20

8.1 Informational Materials 20
8.2 Letters Mailed to Property Owners and Tenants 21
8.3 Door-to-Door Outreach 21
8.4 Displacements Community Meetings 21
8.5 Customer Service Hotline 23

8.6 Individual Consultations 24
8.7 Open Office Hours 24

Tables

Table 1: Display Ads Announcing Availability of the Draft EIS and Public Hearing..... 6
Table 2: Published News Articles, September 29-November 30, 2016 9
Table 3: Federal, State, and Local Official Briefings 11
Table 4: Community Group Meetings 12
Table 5: Summary of Comments Received 19
Table 6: Displacements Community Meeting Information 22
Table 7: Locations of Open Office Hours 24

Attachments

Attachment 1 – Federal Register Notice of Availability

Attachment 2 – Project Informational Materials

- Project Overview Flyer (English and Spanish)
- Citizens' Guide to the Draft EIS (English and Spanish)

Attachment 3 – Draft EIS Publication and Public Hearing Notification Materials

- Press Release
- Public Hearing Noticing Flyer (English and Spanish)
- Display Ad Tear Sheets
- Website
- Postcard
- eBlasts
- Transit Alert Card

Attachment 4 – Media Articles

Attachment 5 – Elected Official and Community Meeting Notes

- Elected Official Briefing Notes
- Community Group Meeting Sign-In Sheets and Meeting Notes

Attachment 6 – Agency Involvement

- Cooperating Agency Letter
- Cooperating Agency Mailing List
- Participating Agency Letter
- Participating Agency Mailing List
- Tribal Mailing List

Attachment 7 – Public Hearing Materials

- Photos
- Sign-In Sheets
- Presentation (English and Spanish)
- Comment Card (English and Spanish)
- Exhibit Boards

Attachment 8 – Comments Received

Attachment 9 – Displacements Informational Materials

- Website Informational Packet (including FAQs in English)
- FAQs (Spanish)
- FTA General Acquisition & Relocation Information Brochure
- Property Owner Letter
- Resident/Lessee Letter
- Affected Agency Letters
- Affected Railroad Letters

Attachment 10 – Displacements Meeting Materials

- Photos
- Sign-In Sheets
- Comment Card
- Exhibit Boards

Section 1
Introduction

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.3 miles south from the existing 95th Street Terminal to 130th Street on Chicago's Far South Side. The proposed Red Line Extension (RLE) Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. In addition, the RLE Project would provide a modern, efficient car storage yard and shop facility that would help improve service and allow for future enhancements on the entire Red Line. The project is part of CTA's Red Ahead Program, a comprehensive initiative for maintaining, modernizing, and expanding the Red Line. CTA proposes to cover a portion of the project funding by applying for federal funds administered by FTA.

The National Environmental Policy Act of 1969 (NEPA) mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined (42 United States Code § 4332). FTA and CTA prepared a Draft Environmental Impact Statement (EIS) in accordance with NEPA and other applicable regulations. The Draft EIS looks at the benefits and impacts of implementing the NEPA Preferred Alternative—the Union Pacific Railroad Rail Alternative—on the physical, human, and natural environments along the corridor and near stations.

This technical memorandum summarizes the public and agency outreach efforts conducted for the RLE Project Draft EIS publication, including general outreach related to the Draft EIS publication and public hearing, as well as displacement-specific outreach efforts conducted to property owners and residents who would potentially be displaced by the project. Public noticing and hearing requirements were met in accordance with NEPA and the federal regulations contained in 40 Code of Federal Regulations (CFR) § 5. Property owner and resident noticing requirements were met in accordance with NEPA and the federal regulations contained in 49 CFR § 24 and the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Uniform Act).

CTA notified the public of the availability of the Draft EIS on Tuesday, October 6, 2016. The Draft EIS was available for public comment from October 6, 2016 through November 30, 2016. The U.S. Environmental Protection Agency (EPA) published the Notice of Availability of the Draft EIS in the Federal Register on Friday, October 14, 2016 (see **Attachment 1**), initiating the official public comment period. The official public comment period was 48 days, which was greater than the 45-day requirement per 23 CFR § 771.123.

CTA held a public hearing on Tuesday, November 1, 2016. The document was made available for public review more than 15 days in advance of the hearing, in accordance with 40 CFR § 1506.6. CTA began notifying potentially displaced property owners and residents on October 3, 2016.

Details of public outreach conducted before and as part of the development of the RLE Project Draft EIS are provided as part of the Draft EIS.

Section 2
RLE Project Informational Materials

CTA produced a variety of materials to inform the public about the RLE Project and publication of the Draft EIS. A project overview flyer and Citizens' Guide to the Draft EIS provided summary information about the project and Draft EIS.

Project staff conducted a Limited English Proficiency (LEP) analysis to determine if language support was needed during the public outreach process. The Draft EIS contains additional details about the LEP analysis. The project area consists of predominantly minority populations, with some concentrations of low-income groups. CTA also identified pockets of Spanish-speaking populations, indicating the need for outreach in both English and Spanish languages.

2.1 Project Overview Flyer

The RLE Project Overview Flyer provided details about the project in a compact, one-page format. The following information is included on the flyer:

- Description of the Union Pacific Railroad Alternative—the Locally Preferred Alternative—and the East and West Options
- The primary benefits expected to result from the project, including expanded access and service improvements, reduced commute times, a catalyst for economic growth, and enhanced livability
- Updates to the project since the last major outreach effort in 2014 and a timeline of future steps
- A brief overview of CTA's Red Ahead program, which includes the RLE Project

The Project Overview Flyer was included in all mailings to potentially displaced property owners and tenants, was published on the RLE Project website, and was available at all community meetings and the public hearing. **Attachment 2** contains both English and Spanish language versions of the Project Overview Flyer.

2.2 Citizens' Guide to the Draft EIS

CTA prepared a Citizens' Guide to the Draft EIS (Citizens' Guide) to summarize the Draft EIS, and condense the roughly 270-page document into a 16-page booklet that is easier to understand. The Citizens' Guide included the following sections:

- How to Provide Comments on the Draft EIS
- Introduction and Project Overview
- Project Purpose and Need

- The Environmental Impact Statement Process
- Alternatives Development Process
- Locally Preferred Alternative
- Summary of Benefits and Impacts
- Public Involvement
- Project Costs and Funding
- Next Steps

The Citizens' Guide was delivered along with the Draft EIS to libraries in the project area, as well as to Aldermen's offices and area parks. The Citizens' Guide was also published on the RLE Project website and made available at all community meetings and at the Public Hearing. **Attachment 2** contains both English and Spanish language versions of the Citizens' Guide.

Section 3
Draft EIS Publication and Public Hearing Notification

To provide the greatest opportunity for input on the Draft EIS findings, CTA used a variety of outreach and notification methods to announce the availability of the Draft EIS document for public review and comment and invite interested parties to attend and participate in the public hearing.

CTA issued a press release on Thursday, September 29, 2016 announcing the upcoming availability of the RLE Project Draft EIS and scheduled public hearing. In addition, CTA performed the following on October 6, 2016, as part of the release of the Draft EIS:

- Updated the project website to include the Notice of Availability flyer and Draft EIS document
- Made hard-copy versions of the Draft EIS and Citizens' Guide available at CTA's headquarters, at four elected official's offices, and at six libraries in the project area
- Made copies of the Citizens' Guide and flyers available at six parks in the project area
- Published 11 display ads in 9 regional and local newspapers
- Posted transit alert cards, or "car cards" at the 95th Street Terminal, on Red Line trains, and on buses that serve the project area
- Sent letters to all participating agencies with electronic copies of the Draft EIS
- Sent an eBlast to all email addresses on the project contact list
- Sent postcards to all mailing addresses on the project contact list

3.1 Press Release

On September 29, 2016, CTA Media Relations issued a press release announcing the upcoming availability of the RLE Project Draft EIS and scheduled public hearing. The press release was posted to CTA's website and the RLE Project website on September 29, 2016. The press release is included in **Attachment 3**.

3.2 Notice of Availability of the Draft EIS and Public Hearing

The U.S. EPA published the Notice of Availability of the Draft EIS in the Federal Register on Friday, October 14, 2016 (see **Attachment 3**), initiating the official public comment period.

CTA prepared a notice of availability flyer announcing the availability of the Draft EIS and the public hearing. The one-page flyer was posted on the website on October 6, 2016, provided to aldermen, stakeholders, and participating agencies, and was made available at all community and public meetings related to the project during the comment period. In addition to providing

information on the scheduled public hearing and opportunity for providing public comment and input at that hearing, the notice announced the public comment period and how to submit written comments during the comment period. Written comments were accepted via e-mail to RedExtension@transitchicago.com or by U.S. mail to Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661. The notice also provided information on locations where the Draft EIS could be obtained or reviewed during the comment period. **Attachment 3** contains both English and Spanish language versions of the flyer.

3.3 Display Ads

CTA prepared display ads announcing the publication of the Draft EIS and public hearing. Similar to the flyer, the display ads provided information on the scheduled public hearing and opportunity for providing public comment and input at that hearing, as well as announcing the public comment period and how comments could be accepted during the comment period.

Display ads were published in several local and regional publications (see **Table 1**). **Attachment 3** contains tear sheets for each publication. Publications were chosen based on coverage area and demographics to provide additional notice of the availability of the document and opportunity to attend the public hearing. CTA also advertised in two Spanish publications.

Table 1: Display Ads Announcing Availability of the Draft EIS and Public Hearing

Publication Date	Media Outlet
10/6/2016	Chicago Sun-Times
10/6/2016	Chicago Tribune
10/6/2016	Red Eye
10/6/2016	Southtown Star
10/7/2016	Hoy (Spanish Newspaper)
10/8/2016	Chicago Crusader
10/9/2016	La Raza (Spanish Newspaper)
10/12/2016	Chicago Defender
10/12/2016	Beverly Review
10/27/2016	Chicago Sun-Times
10/27/2016	Chicago Tribune

3.4 Project Website

CTA updated the RLE Project website on October 6, 2016 with up-to-date project information. The webpage provides general information about the RLE Project, including details about the public hearing and public comment period for the Draft EIS. Copies of the Draft EIS and all appendices were posted to the website in both accessible and pdf formats. The website also provided additional project information, including information on project funding and timelines, and frequently asked questions. Project materials, including project summaries and brochures, the Citizens' Guide, and flyers announcing the Notice of Availability of the Draft EIS and public hearing, were posted in

English and Spanish. The project website also contains historical project information. **Attachment 3** contains a printout of the project website.

3.5 Postcard Notifications

On October 6, 2016, CTA mailed postcards with information on the availability of the Draft EIS, the public comment period and ways to submit comments, and inviting community members to the public hearing. The postcards were mailed to 7,210 addresses, including public agencies, business groups, churches, schools, and community/neighborhood groups and associations within or near the project area, properties near the alternatives studied beginning with the Scoping process, as well as attendees of previous Red Ahead project meetings who requested information about other Red Line projects. The postcard provided details about the public hearing, including the closest transit access and contact information to request assistance at the hearing. The postcard also included an offer of additional interpretation services in Spanish with advance notice. **Attachment 3** contains a copy of the postcard.

3.6 eBlast Notifications

On October 6, 2015, CTA sent an email (eBlast) to approximately 924 email addresses on the RLE Project contact list. The eBlast included information on the project, availability of the Draft EIS including locations where the document could be obtained and reviewed, and information about the public hearing with appropriate links to the project website. CTA sent a second eBlast to 923 email addresses on October 27, 2016, reminding recipients of the upcoming public hearing. CTA sent a third and final eBlast to 1,179 email addresses on November 28, 2016, to remind recipients of the end of the public comment period on November 30. The eBlasts included an offer of additional information in Spanish. **Attachment 3** contains copies of the three eBlasts.

3.7 Transit Alert Cards

CTA developed a transit alert card, or "car card," to provide information about the publication of the Draft EIS and public hearing. CTA posted 775 copies of the transit alert cards at the following locations:

- 95th Street Terminal (25 copies)
- On all Red Line rail cars (450 copies)
- On all buses operating out of the 103rd Street garage (300 copies), which serves many of the routes that operate within the project limits

Attachment 3 contains a copy of the transit alert card.

Section 4
Availability of the Draft Environmental Impact Statement for Public Review

The Draft EIS was posted to the CTA website (www.transitchicago.com/RedEIS) in accessible and pdf formats on October 6, 2016. Hard copies were available at CTA headquarters (567 W. Lake Street, 2nd Floor, Chicago, IL 60661) in regular and large print format and on DVD. Hard copies and DVDs were made available at the following local aldermen's offices:

- Alderman Beale, 9th Ward Office, 34 East 112th Place, Chicago IL 60628
- Alderman Austin, 34th Ward Office, 507 W. 111th Street, Chicago, IL 60628
- Alderman Brookins, 21st Ward Office, 9011 S. Ashland Avenue, Unit B, Chicago, IL 60620
- Alderman Harris, 8th Ward Office, 8539 S. Cottage Grove Avenue, Chicago, IL 60619

Hard copies and DVDs of the Draft EIS were also provided to the following libraries during the public comment period:

- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605
- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628
- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library, 13281 S. Corliss Avenue, Chicago, IL 60827
- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827

In addition to the Draft EIS itself, CTA provided the aldermen's offices in the project area and the libraries listed above with a copy of the Citizens' Guide and flyers announcing the scheduled public hearing for posting in public noticing areas. Public hearing noticing flyers and approximately 15 copies of the Citizens' Guide were also distributed to six parks in the project area: Fernwood, Palmer, West Pullman, Wendell Smith, Jackie Robinson, and Ada Park.

Section 5
Media Coverage

In response to the CTA announcement on September 29, 2016, news articles about the RLE Project appeared in local media. **Table 2** summarizes the articles about the project that appeared between the date of the press release through the end of the public comment period (November 30, 2015). **Attachment 4** contains a copy of each article.

Table 2: Published News Articles, September 29-November 30, 2016

Date	Media Outlet	Article Title
9/29/2016	Associated Press	Chicago announces new steps in possible Red Line expansion
9/29/2016	Chicago Sun Times	CTA announces proposed routes for South Side Red Line extension
9/29/2016	Chicago Tribune	CTA moves forward on planned Red Line extension to Far South Side
9/29/2016	Chicagoist	CTA Shares Details For Major Red Line Extension To Far South Side
9/29/2016	Crain's	CTA crawls toward longer Red Line
9/29/2016	CTA	Red Line Extension Project to 130th Street Moves Forward
9/29/2016	Curbed	CTA confirms Red Line extension south to 130th Street
9/29/2016	Mass Transit Magazine	CTA Red Line Extension Project to 130th Street Moves Forward
9/29/2016	TimeOut Chicago	The CTA has proposed routes for a Red Line extension to 130th Street
9/30/2016	Construction Dive	Chicago facing major hurdles in proposed $2.3B rail project
9/30/2016	International Railway Journal	CTA consults on plans for Chicago Red Line extension
9/30/2016	Railway Age	CTA Red Line extension moves forward
10/4/2016	Railway-Technology.com	CTA to advance $2.3bn Red Line Extension project
10/5/2016	DNAInfo.com	As Red Line Expansion Is Pondered, CTA Fails Lists 'L' Line's Epic Fails
10/6/2016	NWI Times	CTA to extend Red Line south to 130th Street
10/6/2016	Progressive Railroading	CTA releases environmental study for Red Line extension
10/6/2016	RT&S	CTA publishes Red Line Extension Draft EIS
10/6/2016	Streets Blog Chicago	Is $2 Billion Red Line Extension Best Way to Provide Transit in Far South Side?
10/18/2016	Beverly Review	CTA to host events to promote Red Line extension
10/24/2016	TimeOut Chicago	CTA fares won't be getting any more expensive in 2017
10/25/2016	Chicago Reporter	For Riverdale, Red Line extension may be path to employment
10/25/2016	Crain's	The $100 million dream: MacArthur may fund better Loop, Obama library transit
10/29/2016	The Sixth Ward	Event: Red Line Extension Hearing

Date	Media Outlet	Article Title
10/31/2016	Chicago Reporter	Red Line extension aims to improve transit and development on the Far South Side
10/31/2016	Chicago Tribune	South Side residents look forward to Red Line extension
11/1/2016	Fox 32 Chicago	Public hearing planned for Red Line expansion
11/1/2016	NBC Chicago	Chicago to Hold Public Hearing for Planned CTA Expansion
11/1/2016	Railway-Technology.com	Red Line Extension (RLE) Project, Chicago, United States of America
11/1/2016	Washington Times	Public hearing planned for Chicago's planned train expansion
11/2/2016	Chicago Tribune	With movement on CTA Red Line extension, gentrification questions arise
11/2/2016	DNAInfo.com	Dozens of Homes Would Need To Be Demolished Under Red Line Extension
11/2/2016	Streets Blog Chicago	CTA to Spend Millions on Building Parking Garages for Red Line Extension
11/2/2016	WBEZ	Breaking Down CTA's Only Public Hearing On Red Line Expansion
11/6/2016	US 99	Weekend Journal: Red Line Extension Project, Blackhawks Pose With Adoptable Pooches In New Calendar
11/7/2016	The Columbia Chronicle	Residents, commuters talk Red Line extension
11/8/2016	DNAInfo.com	Red Line Extension Could Run Through Parks Along Route
11/10/2016	Medill Reports	The Far South Side is one step closer to a Red Line extension
11/27/2016	Fox 32 Chicago	CTA approves plan to expand Red Line from 95th Street to 130th Street
11/28/2016	Chicago Business Journal	CTA amends budget to pave way for major south side rail extension
11/28/2016	Chicago Tribune	CTA approves funds for engineering study in Red Line extension project
11/28/2016	Streets Blog Chicago	As CTA Pushes to Pass TIF for RPM, $75M Earmarked for South Red Extension
11/28/2016	The Chicagoist	CTA Approves $75M For Red Line Expansion To Far South Side
11/28/2016	TimeOut Chicago	CTA announces next stops for Red, Blue Line projects
11/28/2016	WGNTV	CTA moving forward with plans to extend Red Line south, completes Blue Line upgrades
11/29/2016	CBS Chicago	Chicago Finishes Upgrades To 5 Blue Line Stops; Oks Funds For Red Line Expansion
11/29/2016	RT&S	CTA amends capital plan for Red Line investment; completes five Blue Line station renovations
11/30/2016	Chicago Reporter	Far South Side homeowners question Red Line extension's impact on property values
11/30/2016	Chicago Sun Times	Red Line transit TIF sets off debate on transportation funding
11/30/2016	Progressive Railroading	CTA OKs extra funds for Red Line extension
11/30/2016	Railway Age	CTA to invest $75 million in Red Line extension

Section 6
Outreach to Elected Officials, Stakeholders, and Agencies

CTA has maintained active, ongoing public and agency outreach since the Alternatives Analysis in 2006. This section details additional public and agency outreach efforts conducted to reach and coordinate with the public, including elected officials and community groups, as well as federal, state, and local agencies.

6.1 Elected Officials Briefings

CTA contacted federal, state, and local elected officials to inform them of the Draft EIS, the scheduled public hearing, and to provide additional project information about the RLE Project. On September 29, 2016, CTA met with elected officials to brief them on the project and the anticipated benefits and impacts to their constituencies. CTA met with additional elected officials and/or their representatives on October 4, 2016. **Table 3** summarizes the elected official offices that were briefed. **Attachment 4** contains meeting notes.

Table 3: Federal, State, and Local Official Briefings

Representing	Date of Briefing
Chicago 8th Ward	9/29/2016
Chicago 9th Ward	9/29/2016
Chicago 21st Ward	9/29/2016
Chicago 34th Ward	9/29/2016
Illinois 17th District	10/4/2016
Illinois 34th District	10/4/2016
Office of Illinois State Representative Marcus C. Evans, Jr., 33rd District	10/4/2016
Office of US Senator Dick Durbin	10/4/2016
Office of US Congresswoman Robin Kelly, Illinois 2nd District	10/4/2016
Office of US Congressman Bobby L. Rush, Illinois 1st District	10/4/2016
Cook County 4th District	10/4/2016
Illinois Department of Transportation	10/4/2016

6.2 Community and Environmental Justice Outreach

CTA Government and Community Relations leveraged ongoing relationships with a number of local community groups in the project area to conduct focused outreach to interested groups about the project and to obtain input. These groups included environmental justice groups within the project area. As part of the development of the Draft EIS, project technical staff conducted an

environmental justice (EJ) analysis to identify low-income and minority populations that may be affected by the project. The Draft EIS contains additional details about the EJ analysis and the special outreach process, which satisfies full and fair participation by all potentially affected communities (per USDOT Order 5610.2).

CTA Government and Community Relations staff reached out to community and EJ groups starting October 10, 2016 and offered to meet with each group to discuss the project and its impacts. **Table 4** lists the community and EJ groups that met with CTA. **Attachment 5** contains meeting sign-in sheets and meeting notes.

Table 4: Community Group Meetings

Organization	Date	Attendees
Agape Community Center	10/18/16	5
Rosemoor Community Association	10/18/16	23
St. Anthony of Padua Parish	10/19/16	63
People for Community Recovery	10/20/16	9
Ald. Beale Town Hall	10/25/16	17+
Red Line Extension Coalition	10/26/16	5
Ald. Sawyer's Community Meeting	11/15/16	15
Greater Roseland Chamber of Commerce	11/17/16	5
Friends of the Parks	12/8/16	8

CTA Government and Community Relations staff will continue to reach out to these groups as the project moves forward and leverage existing relationships to ensure meaningful engagement.

6.3 Agency Outreach

CTA sent letters to contacts at federal, state, and local cooperating and participating agencies. These letters contained information on the availability of the Draft EIS, the public comment period and ways to submit comments, and updates to the RLE project, and invited representatives to attend the public hearing. Along with letters, each participating agency received a notice of availability flyer and a DVD containing the Draft EIS. The agencies that received this notice are listed below. **Attachment 6** contains letter templates and mailing lists.

Cooperating Agency

- Federal Highway Administration

Federal Participating Agencies

- Department of Energy
- Department of Health and Human Services
- Department of Housing and Urban Development
- Federal Emergency Management Agency
- Federal Highway Administration
- Federal Railroad Administration
- Transportation Security Administration
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

Regional Participating Agencies

- Metra Commuter Rail
- Metropolitan Water Reclamation District of Greater Chicago
- Pace Suburban Bus Service
- Regional Transportation Authority

State Participating Agencies

- Illinois Commerce Commission
- Illinois Department of Natural Resources
- Illinois Department of Transportation
- Illinois Environmental Protection Agency
- Illinois Historic Preservation Agency

Local Participating Agencies

- Chicago Department of Business Affairs and Consumer Protection
- Chicago Department of Fleet and Facility Management
- Chicago Department of Planning and Development
- Chicago Department of Transportation
- Chicago Housing Authority
- Chicago Office of the Mayor
- Chicago Park District
- Chicago Police Department

In addition, CTA sent similar letters, notice of availability flyers, and digital copies of the Draft EIS to the following tribal organizations:

Tribal Organizations

- Citizen Potawatomi Nation
- Forest Country Potawatomi
- Ho-Chunk Nation
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- Potawatomi Nation-Hannahville Indian Community
- Prairie Band of Potawatomi Nation
- Sac and Fox Nation of Mississippi in Iowa
- Sac and Fox Nation of Missouri
- Sac and Fox Nation of Oklahoma

Section 7
Public Hearing

CTA hosted a public hearing to inform the public about the RLE Project and Draft EIS, and to provide the public with an opportunity to ask questions about the project in an open, conversational setting. The following were the details of the public hearing:

Time:	5:30 to 7:30 p.m.
Date:	Tuesday, November 1, 2016
Location:	St. John Missionary Baptist Church 211 E. 115th Street Chicago, IL 60628

The hearing location was accessible per the Americans with Disabilities Act (ADA). The hearing was held in the project area and accessible by public transportation (CTA's Red Line 95th Street Terminal and CTA buses #115 Pullman/115th Street, #34 South Michigan Avenue, and #119 Michigan/119th Street). For the convenience of all attendees, the rail station and bus route nearest to the public hearing site were publicized on the public hearing flyer, postcard notice, eBlasts, and on the project website. To provide the greatest opportunity for community participation, the public hearing was scheduled in the early evening on a weekday. Spanish translators, sign language interpreters, and two court reporters were available during the public hearing. A total of 280 people signed in at the public hearing. **Attachment 7** contains photos from the public hearing as well as the sign-in sheets and other meeting materials.

7.1 Public Hearing Format

The public hearing was held in an open house format. The public hearing provided attendees an opportunity to review the proposed project, environmental impacts and mitigation measures proposed, and provide feedback. The open house format also allowed the public to discuss their questions and concerns directly with project staff.

Exhibit boards staffed by project team members provided information on the project purpose and need; the alternatives development process and alternatives considered in the Draft EIS; environmental impacts of the project and proposed mitigation measures; and information on the process of property acquisition and relocation.

Project team members staffed workstations to answer specific questions from the public related to property acquisition and relocation, Section 4(f) (impacts to parks), and project engineering. Each workstation had supporting materials from the Draft EIS.

CTA played a video about the RLE Project on repeat throughout the meeting in a corner of the room. The video was prepared by the Chicago Metropolitan Agency for Planning along with CTA.

Printed video transcripts were provided to attendees as needed. The video is available online: http://www.cmap.illinois.gov/mobility/transit/red-line.

CTA staff gave a brief presentation at two points during the public hearing to explain the public hearing format and provide background about the RLE Project. The presentation was given in both English and Spanish. **Attachment 7** contains both the English and Spanish versions of the presentation.

7.2 Public Hearing Materials

Project team members offered hearing attendees comment cards, Citizens' Guides, and project overview flyers as they entered the hearing. CTA made multiple copies of the Draft EIS itself, including a large-print accessible copy, and all appendices available to attendees to review during the meeting. Based on the LEP analysis (see **Section 2**), a Spanish language interpreter was available at the public hearing. The comment card, Citizens' Guide, and project overview flyer were available in both English and Spanish. Copies of all public hearing materials were made available on the project website and remain available as part of the project website.

The comment cards allowed attendees to submit written comments during or after the public hearing by mailing or emailing them. Two specific questions were posed on the comment card:

- What are your concerns about the **East Option**?
- What are your concerns about the **West Option**?

Commenters also were asked to share concerns about RLE Project impacts related to the following specific resource areas:

- Transportation
- Land Use and Economic Development
- Property Displacements
- Neighborhoods and Communities
- Visual Impacts
- Noise and Vibration
- Impacts to Historic Resources
- Safety and Security
- Hazardous Materials
- Wetlands
- Parks
- Construction Impacts
- Project Funding

Space was provided on the front and back sides of comment cards for commenters to provide feedback on topics other than those specifically listed.

Attachment 7 contains both English and Spanish language public hearing comment cards.

7.3 Exhibit Boards

CTA developed project exhibit boards for use during the public hearing. The boards included the following:

1. Welcome (Hearing Purpose and Ways to Provide Comments)
2. Red Ahead Program
3. Why is the RLE Project Important?
4. Project Purpose and Need
5. What is an Environmental Impact Statement?
6. Alternatives Development Process
7. Project Alternatives Evaluated
8. Station Visualizations
9. Section 4(f) – Impacts to Parks
10. Mitigations for Impacts to Parks
11. Park Concept Visualizations
12. Property Displacements
13. Quick Facts About Acquisition and Relocation
14. Noise and Vibration Impacts
15. Visual Impacts
16. Temporary Construction Impacts and Minimal Impact Areas
17. Impacts to Wetlands
18. Project Development Process
19. Stay Involved (Included Next Steps)

Attachment 7 contains the exhibit boards.

CTA and project team members, including professional planners and engineers, provided attendees with specific information related to these topics and answered questions at each exhibit board area and workstation. Copies of the exhibit boards were made available on the project website directly after the public hearing and remain available on the project website.

The workstation dedicated to potential property displacements resulting from the project included large-scale maps of the project area showing potential property displacements, as well as addresses and photos to facilitate discussion. CTA also provided FTA's "General Acquisition & Relocation Information" brochures and Uniform Act experts discussed specific displacement-related questions. CTA also posted the property displacement maps and address listings on the project website (see **Section 8**).

7.4 Section 4(f) Outreach

Section 4(f) of the USDOT Act of 1966 is a federal law that established requirements for USDOT (including FTA) consideration of publicly owned parks/recreational areas that are accessible to the general public, publicly owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects. This law, commonly known as Section 4(f), is now codified in 49 USC § 303 and 23 USC § 138, and is implemented by FTA through the regulation 23 CFR § 774.

Three parks in the project area would be affected by either the East or West Option: Wendell Smith Park, Block Park, and Fernwood Parkway. These parks were evaluated under Section 4(f), as described in the Draft EIS, and *de minimis* impact findings were proposed for each park.

As part of the public hearing for this Draft EIS, the public was offered the opportunity to comment on FTA's preliminary determinations of the Section 4(f) analysis and on the mitigation measures identified, including potential replacement park options. During the public hearing, the two exhibit boards related to Section 4(f) were placed next to a workstation where attendees could speak to representatives to learn more about the Section 4(f) process and review proposed park replacement options.

In future phases of this project, FTA will make a final Section 4(f) determination based on information in the Draft EIS, further coordination with the Chicago Park District, and public comments received. FTA's Section 4(f) determination will either (1) confirm the preliminary findings within this Draft EIS for inclusion in the Final EIS and ROD for the project, or (2) require additional Section 4(f) analysis, which will be prepared as part of the Final EIS.

As part of the Final EIS, CTA and FTA will confirm a preferred alignment option, and identify a preferred replacement park site. During the Final EIS and based on public feedback on park replacement sites, CTA will conduct outreach to property owners to determine availability of proposed replacement park land and ability to acquire property. As part of the Final EIS, additional coordination with the Chicago Park District will occur as well. The Final EIS will lay out the process to be conducted between CTA and the Chicago Park District to further identify replacement park locations should any of the identified replacement park options not be available at the time of property acquisition. The final park replacement park site will be acquired in coordination with the Chicago Park District after completion of the environmental phase of this project (i.e., after FTA issue a Record of Decision for the Final EIS).

7.5 Comments Received

CTA invited attendees to provide comments verbally to a court reporter or in writing during the public hearing. Meeting attendees were informed that they could also submit their comments after the public hearing until the public comment deadline via email or U.S. mail. Email comments could be sent to a project-specific email address (RedExtension@transitchicago.com) found on the comment cards, project website, and on all notification materials. The comment cards, project website, and all other noticing materials also provided the mailing address for submitting written comments via U.S. mail. While the comment period ended on November 30, CTA accepted comments received through December 31, 2016. CTA received a total of 284 comments between the beginning of the comment period on October 6, 2016 and December 31, 2016; **Table 5** summarizes comments received, including comments received from public agencies, tribes, and railroads.

Table 5: Summary of Comments Received

Format	October 6 - November 30	December 1 - December 31	Total
Public Hearing Comment Card	43	1	44
Displacements-Specific Comment Card	26		26
Verbal	14		14
Email	180	8	188
US Mail	1		1
Agency	5	1	6
Tribe	1		1
Railroad	4		4
Total	274	10	**284**

Attachment 8 contains all comments received during the comment period, including the transcript from the November 1, 2016 public hearing. A summary of public comments received and responses to public comments, as well as agency correspondence received will be included in the Final EIS.

Section 8
Displacements Outreach

CTA undertook an extensive outreach process to property owners and lessees potentially affected by the displacements required for the RLE Project Draft EIS. To provide the greatest opportunity for stakeholder questions and input, CTA employed a variety of methods to notify property owners and lessees of potential displacements and educate them about the displacements and relocation process as described in the Uniform Act. CTA reached out to potentially displaced property owners and lessees of both the East and West Options; the Final EIS will document the results of the Draft EIS process and confirm whether the East or West Option is the selected option.

8.1 Informational Materials

8.1.1 Frequently Asked Questions

CTA produced a Frequently Asked Questions (FAQs) document to help answer the most common questions potentially impacted property owners and tenants might have about the property acquisition and relocation process. The document answered the following questions:

- What could happen to my property?
- What are my rights as a property owner?
- What type of compensation will I receive?
- How will CTA determine the purchase price for my property?
- What if I don't own this property but rent an apartment, or lease space for my business?
- If CTA acquires my property, will you provide me help in relocating?
- What will happen next with the RLE Project and when will CTA notify me of their intent to purchase my property?
- If I have additional questions about potential property acquisitions, who should I call?
- How can I learn more about the RLE Project?

The FAQs handout was included in all mailings to potentially displaced property owners and tenants, and was available at all community meetings and the Public Hearing. **Attachment 9** contains a packet of information about displacements that was posted on the RLE Project website; the packet includes a brief overview of the displacements process, the FAQs handout, and maps and tables of affected properties. **Attachment 9** contains both the English and Spanish language versions of the FAQs.

8.1.2 FTA General Acquisition & Relocation Information Brochure

CTA provided FTA's "General Acquisition & Relocation Information" brochure to property owners and lessees as requested. The brochure summarizes the acquisition and relocation process. **Attachment 9** contains the brochure.

8.2 Letters Mailed to Property Owners and Tenants

CTA mailed letters to 344 property owners and tenants at approximately 250 private properties that would be affected by the East Option, West Option, or either option. Letters provided project details, including which option or options would impact the property, and the FAQs. In addition, CTA reached out separately to the public agencies and railroads that would be affected by the project by mailing each agency/railroad a letter with agency/railroad-specific information. Letters were sent via both regular and certified mail on October 3, 2016. **Attachment 9** contains copies of the letters sent to private property owners, tenants, public agencies, and railroads.

8.3 Door-to-Door Outreach

In addition to delivery via regular and certified mail, CTA's relocation outreach specialists went door-to-door to hand deliver the letters to active residential and business properties from October 3 to October 7, 2016. Outreach specialists spoke with property owners and tenants and provided an explanation of the RLE Project, potential displacements, and provisions under the Uniform Act that would apply to properties acquired for the project. CTA's relocation outreach specialists acted as a continual single point of contact to answer specific questions regarding relocation rights, requirements, and processes and anticipated timelines during development of the Draft EIS and the public comment period.

Many potentially displaced property owners and tenants were home when the relocation outreach specialists hand-delivered the letters. At properties where no one was present and the building did not appear vacant, outreach specialists left letters at the front door.

8.4 Displacements Community Meetings

CTA invited potentially displaced property owners and tenants to attend one of three informational community meetings on October 11, 12, and 13, 2016 in the project area to learn more about the project and the acquisition and relocation process. Each of the three meetings was targeted to approximately 1/3 of potentially displaced stakeholders, divided geographically, but all who received a letter were welcome to attend any of the meetings. During the meetings, attendees could review exhibit boards that described the project and the acquisition and relocation process.

Each meeting was set up with five workstations where attendees could have a one-on-one conversation with CTA staff and representatives, including relocation outreach specialists and project engineers, in which they learned more about the reasons for potential displacement specific to their property (to accommodate the track structure or a parking facility, for example), the project timeline, their rights under the Uniform Act, and the benefits that would be provided to them. A total of 55 people signed in at the three meetings. **Table 6** shows the ADA-accessible locations,

dates and times, and attendee counts of each meeting. **Attachment 10** contains photos, sign-in sheets, comment cards, and exhibit boards from the displacements meetings.

Table 6: Displacements Community Meeting Information

Meeting Location	Date and Time	Attendees
Palmer Park Gymnasium 201 E. 111th Street Chicago, IL 60628	October 11, 2016 6:00 - 8:00 PM	33
Fenger Academy High School 11220 S. Wallace Street Chicago, IL 60628	October 12, 2016 5:30 - 7:30 PM	11
Pullman Public Library 11001 S. Indiana Avenue Chicago, IL 60628	October 13, 2016 5:30 - 7:30 PM	11

8.4.1 Displacements Meetings Materials

Project team members offered meeting attendees comment cards, Citizens' Guides, displacements FAQs documents, RLE Project overview flyers, and FTA's "General Acquisition & Relocation Information" brochures. CTA had multiple copies of the Draft EIS available, including an accessible copy, for attendees to review during the meetings. Based on the LEP analysis (see **Section 2**), a Spanish language interpreter was available at the displacements meetings. Copies of all meeting materials were made available on the project website and remain available as part of the project website.

The comment cards allowed attendees to submit written comments during or after the displacements meetings. The comment cards contained a brief overview of the property acquisition and relocation process and the reason for the meetings, and asked commenters to describe their questions or concerns. Attendees were also invited to provide their contact information and check a box to indicate that they would like to be contacted to set up an in-person meeting with a Uniform Act specialist to discuss their property and concerns.

Large-scale maps of the project area with potentially displaced properties clearly marked and labeled were provided to allow meeting attendees and CTA representatives to easily identify attendees' properties. These maps facilitated discussion about reasons for potential displacement specific to each property. Individual property information sheets with addresses and photos further facilitated discussion. **Attachments 9 and 10** contain the materials made available at the displacements meetings.

8.4.2 Exhibit Boards

Four exhibit boards were on display during the displacements meetings. The boards included the following topics:

1. Welcome (Meeting Purpose, Ways to Provide Comments, and Schedule Individual Meetings)
2. Project Alternatives Evaluated (Overview of East and West Options)
3. Project Visualizations
4. Quick Facts About Acquisition and Relocation (Including Project Timeline)

CTA and project team members, including professional planners and engineers, provided attendees with specific information related to these topics and answered questions at each exhibit board area and workstation. Copies of the exhibit boards were made available on the project website directly after the public hearing and remain available on the project website.

8.4.3 Comments Received

Attendees were invited to provide comments in writing during the displacements meetings. Meeting attendees were advised that they could also submit their comments until the public comment deadline via email or U.S. mail. Email comments could be sent to a project-specific email address (RedExtension@transitchicago.com) found on the comment cards, project website, and on all notification materials. The comment cards, project website, and all other noticing materials also provided the mailing address for submitting written comments via U.S. mail.

A total of 24 written displacement-specific comment cards were submitted during the three displacements meetings. The displacement-specific comment cards are included in **Attachment 8**.

A summary of public comments received and responses to public comments, as well as agency correspondence received will be included in the Final EIS.

8.5 Customer Service Hotline

In an effort to quickly provide reliable communication regarding displacements and the property acquisition and relocation process, CTA's Customer Service Department was trained to field calls from potentially displaced property owners and residents. CTA extended customer service hours for the week after the publication of the Draft EIS.

Customer service representatives answered general inquiries. Questions and concerns requiring additional expertise, such as those regarding specific properties or details about the property acquisition and relocation process, were forwarded to the RLE Project Uniform Act experts. The customer service hotline received 19 calls related to the project during the public comment period.

8.6 Individual Consultations

In materials and letters, door-to-door outreach, and displacements meetings, potentially displaced property owners and tenants were invited to schedule one-on-one meetings, attend open office hours (see **Section 8.7**), or discuss their concerns via telephone with property acquisition and relocation experts. Stakeholders that scheduled and attended individual consultations were provided with comment cards, Citizens' Guides, displacements FAQs, RLE Project overview flyers, and FTA's "General Acquisition & Relocation Information" brochures, as requested.

8.7 Open Office Hours

Property acquisition and relocation experts also held open office hours at libraries in the project area during the public comment period. Potentially displaced property owners and residents were invited to schedule meetings during these times or to simply drop in to speak one-on-one with acquisition and relocation experts. Attendees were provided with comment cards, Citizens' Guides, displacements FAQs, RLE Project overview flyers, and FTA's "General Acquisition & Relocation Information" brochures, as requested. Large-scale maps of the project area with potentially displaced properties clearly marked and labeled were provided to allow meeting attendees and CTA representatives to easily identify attendees' properties and facilitate discussion about reasons for potential displacement specific to each property. Individual property information sheets with addresses and photos further facilitated discussion. **Table 7** shows the locations, dates, and times of each open office hours session.

Table 7: Locations of Open Office Hours

Office Hours Location	Date and Time
Pullman Public Library 11001 S. Indiana Avenue, Chicago, IL 60628	October 18, 2016 12:30 - 7:30 PM
Woodson Regional Library 9525 S. Halsted Street, Chicago, IL 60628	October 12, 2016 9:30 AM - 5:00 PM

Attachment 1
Federal Register Notice of Availability

sediments, environmental releases of oils and fuels, and sustainable materials management. Proposed agenda items for the meeting include, but are not limited to, the following: Program and Regional Office Overviews of Research Needs, Successful Partnerships, SHC Overviews, Poster Sessions and Partner Panel Discussions for each of three areas under SHC Topic 3. Each individual making an oral presentation at the meeting will be limited to a total of three minutes, and should consider providing written comments to expand upon the points presented orally. For security purposes at the meeting site, all attendees must go through a metal detector, sign in with the security desk, and show REAL ID Act-compliant government-issued photo identification to enter the building. Attendees are encouraged to arrive at least 15 minutes prior to the start of the meeting to allow sufficient time for security screening.

Instructions for Comments: Submit your comments using one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *Email:* Send comments by electronic mail (email) to: *ORD.Docket@epa.gov,* Attention Docket ID No. EPA–HQ–ORD–2015–0611.
- *Fax:* Fax comments to: (202) 566–0224, Attention Docket ID No. EPA–HQ–ORD–2015–0611.
- *Mail:* Send comments by mail to: Board of Scientific Counselors (BOSC) Sustainable and Healthy Communities Subcommittee Docket, Mail Code: 2822T, 1301 Constitution Ave. NW., Washington, DC 20004, Attention Docket ID No. EPA–HQ–ORD–2015–0611.
- *Hand Delivery or Courier:* Deliver comments to: EPA Docket Center (EPA/DC), Room 3334, William Jefferson Clinton West Building, 1301 Constitution Ave. NW., Washington, DC, Attention Docket ID No. EPA–HQ–ORD–2015–0611. Note: This is not a mailing address. Deliveries are only accepted during the docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or email. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through *www.regulations.gov,* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about the EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/dockets/.*

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the Board of Scientific Counselors (BOSC) Sustainable and Healthy Communities Subcommittee Docket, EPA/DC, William Jefferson Clinton West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the ORD Docket is (202) 566–1752.

Information on Services for Individuals With Disabilities: For information on access or services for individuals with disabilities, please contact Jace Cujé at (202) 564–1795 or *cuje.jace@epa.gov.* To request accommodation of a disability, please contact Jace Cujé, preferably at least ten days prior to the meeting, to give the EPA as much time as possible to process your request.

Dated: October 6, 2016.

Fred S. Hauchman,

Director, Office of Science Policy.

[FR Doc. 2016–24913 Filed 10–13–16; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[ER–FRL–9029–6]

Environmental Impact Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564–7146 or *http://www.epa.gov/nepa.*

Weekly receipt of Environmental Impact Statements (EISs)

Filed 10/03/2016 Through 10/07/2016

Pursuant to 40 CFR 1506.9.

Notice

Section 309(a) of the Clean Air Act requires that EPA make public its comments on EISs issued by other Federal agencies. EPA's comment letters on EISs are available at: *http://www.epa.gov/compliance/nepa/eisdata.html.*

EIS No. 20160231, Draft, FTA, IL, Chicago Red Line Extension, *Comment Period Ends:* 11/30/2016, *Contact:* Mark Assam 312–353–4070.

EIS No. 20160232, Final, NPS, BR, AZ, Long-Term Experimental and Management Plan (LTEMP) for the Operation of Glen Canyon Dam, *Review Period Ends:* 11/14/2016, *Contact:* Katrina Grantz 801–524–3635.

The U.S. Department of the Interior's Bureau of Reclamation and the Department of the Interior's National Park Service are joint lead agencies for the above project.

EIS No. 20160233, Final, USMC, CA, Santa Margarita River Conjunctive Use Project, *Review Period Ends:* 11/14/2016, *Contact:* Kristin Thomas 760–725–9741.

The U.S. Marine Corps and the U.S. Department of the Interior's Bureau of Reclamation are joint lead agencies of the above project.

EIS No. 20160234, Draft, DOC, PRO, Programmatic—South Region of the Nationwide Public Safety Broadband Network, *Comment Period Ends:* 12/12/2016, *Contact:* Genevieve Walker 571–665–6134.

EIS No. 20160235, Final, NMFS, MA, Amendment 18 to the Northeast Multispecies Fishery Management Plan, *Review Period Ends:* 11/14/2016, *Contact:* John Bullard 978–281–9343.

Amended Notices

EIS No. 20160236, Final, FAA, OR, ADOPTION—Military Readiness Activities at Naval Weapons System Training Facility Boardman, *Contact:* Paula Miller 202–267–7378.

The U.S. Department of Transportation's Federal Aviation Administration (FAA) has adopted the U.S. Navy's FEIS # 20150355, filed with the USEPA 12/28/2015. FAA was a cooperating agency on the project. Recirculation of the document is not necessary under Section 1506.3 of the CEQ Regulations.

Dated: October 11, 2016.

Karin Leff,

Acting Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. 2016–24902 Filed 10–13–16; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL ELECTION COMMISSION

Sunshine Act Meeting

AGENCY: Federal Election Commission.

DATE & TIME: *Tuesday, October 18, 2016 at 10:00 a.m.*

PLACE: 999 E Street NW., Washington, DC.

STATUS: This meeting will be closed to the public.

ITEMS TO BE DISCUSSED: Compliance matters pursuant to 52 U.S.C. 30109. Matters concerning participation in civil actions or proceeding, or arbitration. Information the premature disclosure of which would be likely to have a considerable adverse effect on the implementation of a proposed Commission action.

* * * * *

PERSON TO CONTACT FOR INFORMATION: Judith Ingram, Press Officer, Telephone: (202) 694–1220.

Shawn Woodhead Werth,

Commission Secretary and Clerk.

[FR Doc. 2016–24969 Filed 10–12–16; 11:15 am]

BILLING CODE 6715–01–P

FEDERAL MARITIME COMMISSION

Sunshine Act Meeting

AGENCY HOLDING THE MEETING: Federal Maritime Commission.

TIME AND DATE: October 19, 2016; 10:00 a.m.

PLACE: 800 N. Capitol Street NW., First Floor Hearing Room, Washington, DC.

STATUS: The first portion of the meeting will be held in Open Session; the second in Closed Session.

MATTERS TO BE CONSIDERED:

Open Session

1. Briefing by Chairman Cordero on TOC 2016 Conference.
2. Briefing on Consultative Shipping Group Meetings.
3. Briefing by Commissioner Maffei on International Maritime Organization and European Maritime Law Organisation.

Closed Session

1. Staff Briefing on Hanjin Shipping Bankruptcy and Shipping Disruptions.
2. Staff Briefing on Pending Third-Party Audit of PIERPass under the West Coast MTO Discussion Agreement (FMC Agreement 201143).

CONTACT PERSON FOR MORE INFORMATION: Rachel E. Dickon, Assistant Secretary, (202) 523–5725.

Rachel E. Dickon,

Assistant Secretary.

[FR Doc. 2016–24975 Filed 10–12–16; 11:15 am]

BILLING CODE 6731–AA–P

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

Sunshine Act Notice

October 11, 2016.

TIME AND DATE: 10:00 a.m., Friday, October 21, 2016.

PLACE: The Richard V. Backley Hearing Room, Room 511N, 1331 Pennsylvania Avenue NW., Washington, DC 20004 (enter from F Street entrance).

STATUS: Open.

MATTERS TO BE CONSIDERED: The Commission will consider and act upon the following in open session: *Secretary of Labor* v. *Northshore Mining Company,* Docket No. LAKE 2014–219–M (Issues include whether the Judge erred in interpreting a regulation that addresses the reporting of eye injuries.)

Any person attending this meeting who requires special accessibility features and/or auxiliary aids, such as sign language interpreters, must inform the Commission in advance of those needs. Subject to 29 CFR 2706.150(a)(3) and 2706.160(d).

CONTACT PERSON FOR MORE INFO: Emogene Johnson (202) 434–9935/(202) 708–9300 for TDD Relay/1–800–877–8339 for toll free.

Sarah L. Stewart,

Deputy General Counsel.

[FR Doc. 2016–24946 Filed 10–12–16; 11:15 am]

BILLING CODE 6735–01–P

FEDERAL TRADE COMMISSION

[File No. 161 0096]

CentraCare Health System; Analysis To Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed consent agreement.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the complaint and the terms of the consent orders—embodied in the consent agreement—that would settle these allegations.

DATES: Comments must be received on or before November 7, 2016.

ADDRESSES: Interested parties may file a comment at *https://ftcpublic.commentworks.com/ftc/centracareconsent* online or on paper, by following the instructions in the Request for Comment part of the **SUPPLEMENTARY INFORMATION** section below. Write ''St. Cloud Medical Group/CentraCare Health, File No. 1610096—Consent Agreement'' on your comment and file your comment online at *https://ftcpublic.commentworks.com/ftc/centracareconsent* by following the instructions on the Web-based form. If you prefer to file your comment on paper, write ''St. Cloud Medical Group/CentraCare Health, File No. 1610096—Consent Agreement'' on your comment and on the envelope, and mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW., Suite CC–5610 (Annex D), Washington, DC 20580, or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Constitution Center, 400 7th Street SW., 5th Floor, Suite 5610 (Annex D), Washington, DC 20024.

FOR FURTHER INFORMATION CONTACT: Robert Canterman (202–326–2107), Bureau of Competition, 600 Pennsylvania Avenue NW., Washington, DC 20580.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 15 U.S.C. 46(f), and FTC Rule 2.34, 16 CFR 2.34, notice is hereby given that the above-captioned consent agreement containing consent orders to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the

Attachment 2
Project Informational Materials

Project Overview Flyer (English and Spanish)

Citizens' Guide to the Draft EIS (English and Spanish)

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension: Expanding Transit Access on Chicago's Far South Side

The RLE Project is a major CTA initiative that would add new transit service to Chicago's Far South Side by extending its busiest rail line, the Red Line, south from 95th Street to 130th Street. The 5.3-mile extension would include four new accessible rail stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street.

CTA is currently considering two options of the UPRR Alternative: the East Option and the West Option. The East Option would run to the east of the Union Pacific Railroad (UPRR) tracks between 99th Street and 118th Street, and the West Option would run to the west of the UPRR tracks in that segment. The alignment would be the same for the two options from 95th Street to 99th Street and from 118th Street to 130th Street.

Red Line Extension Preferred Alternative

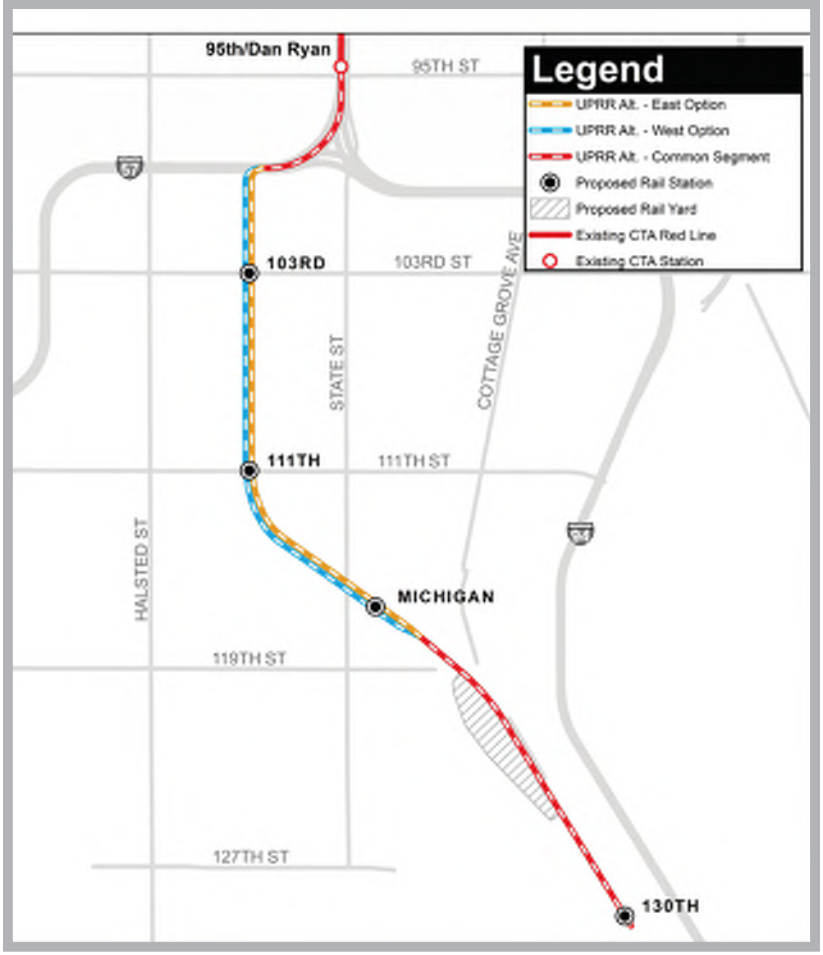

Why is the Red Line Extension Project Important?

- ***Expanded access and service improvements*** – The Red Line Extension would improve service and transit accessibility for Far South Side neighborhoods where transit-dependent residents currently lack direct access to rail service.
- ***Reduced commute times*** – Between 2005 and 2010, commute times were, on average, 20 percent longer for those that currently live in the area that would be served by the Red Line Extension, than for other commuters in the Chicago region. The Red Line Extension would save the average commuter in the communities affected by this project 87 hours per year.
- ***Catalyst for economic growth*** – CTA estimates that 29,900 direct, indirect, and induced jobs would be created with investment in the Red Line Extension Project. In addition, new stations could serve as catalysts for neighborhood revitalization.
- ***Enhanced livability*** – The improvements would also provide better transit access to affordable housing, jobs, services, and educational opportunities – enhancing livability and neighborhood vitality.

RED AHEAD

Moving Ahead to a Better Red

Red Line Extension

Red Line Extension: Project Update

CTA is progressing on a multistep federal process to secure project approval and funding. CTA has prepared a Draft Environmental Impact Statement (EIS) that evaluates the environmental impacts of the two options of the Union Pacific Railroad (UPRR) Alternative as well as the No Build Alternative. CTA is seeking public feedback on the two options under consideration.

After publishing the Draft EIS, CTA will review and address public comments to the Draft EIS, and based on public feedback and the environmental review, CTA will announce the selected option (either the East Option or the West Option). CTA will formalize the selected option, its impacts, and mitigation measures in the Final EIS. During preparation of the Final EIS, CTA plans to apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase of this project to pursue federal funding for construction of the project under the competitive federal "New Starts" program. There will be future opportunities for public input as this process progresses.

Red Ahead

The Red Line Extension is part of the CTA's Red Ahead program, a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. The Red Ahead program also includes the Red Line South Reconstruction Project (completed 2013), the 95th Street Terminal Project (in construction), the Wilson Station Reconstruction Project (in construction), and the Red and Purple Modernization Program (currently in engineering and design).

Estimated Travel Time Savings

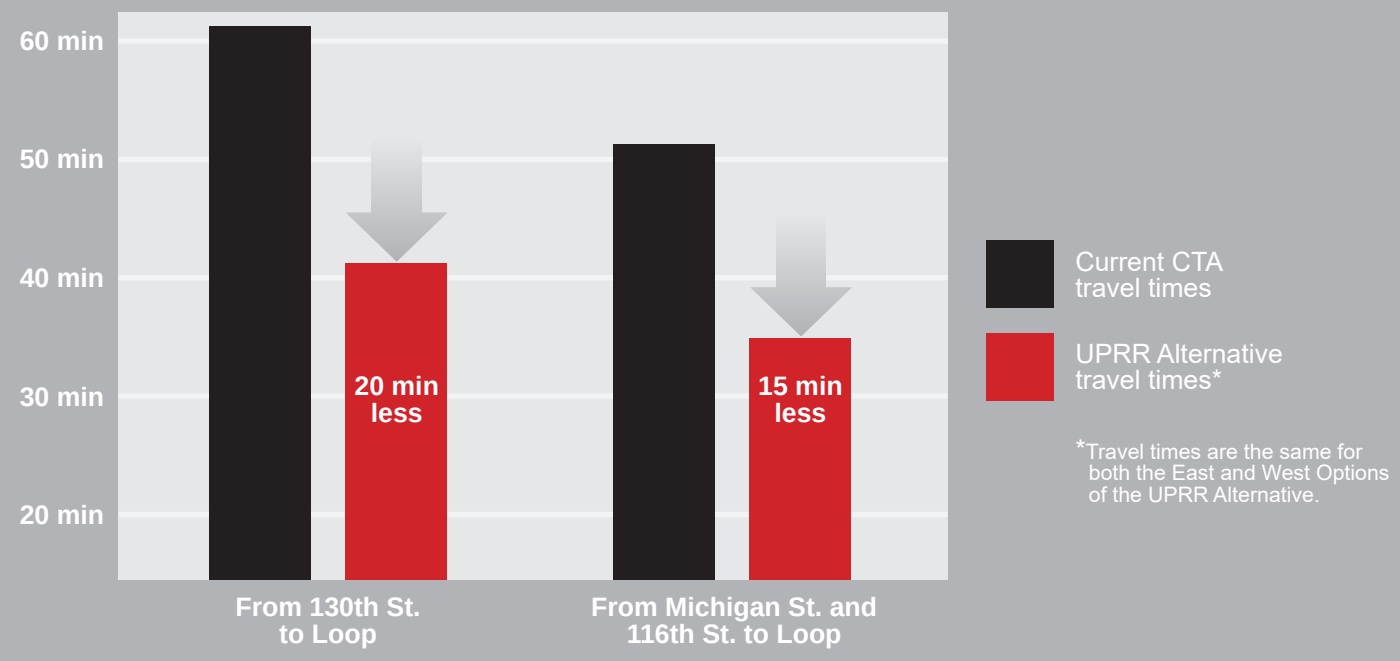

RED AHEAD
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Red Line Extension

Expansión de la línea roja [RLE]: Expansión del acceso al transporte en el extremo sur de Chicago

El proyecto de RLE es una iniciativa importante de CTA que añadiría un nuevo servicio de transporte al extremo sur de Chicago mediante la extensión de la línea de tren más activa, la Línea Roja, al sur de 95th Street hasta 130th Street. La expansión de 5.3 millas incluiría cuatro nuevas estaciones de tren accesibles cerca de 103rd Street, 111th Street, Michigan Avenue y 130th Street.

CTA actualmente está considerando dos opciones de la Alternativa de UPRR: la opción del este y la opción del oeste. La opción del este correría al este de los rieles de Union Pacific Railroad (UPRR) entre 99th Street y 118th Street, y la opción del oeste correría al oeste de los rieles de UPRR en dicho segmento. El alineamiento sería el mismo para las dos opciones desde 95th Street a 99th Street y desde 118th Street a 130th Street.

Alternativa preferida para la expansión de la Línea Roja

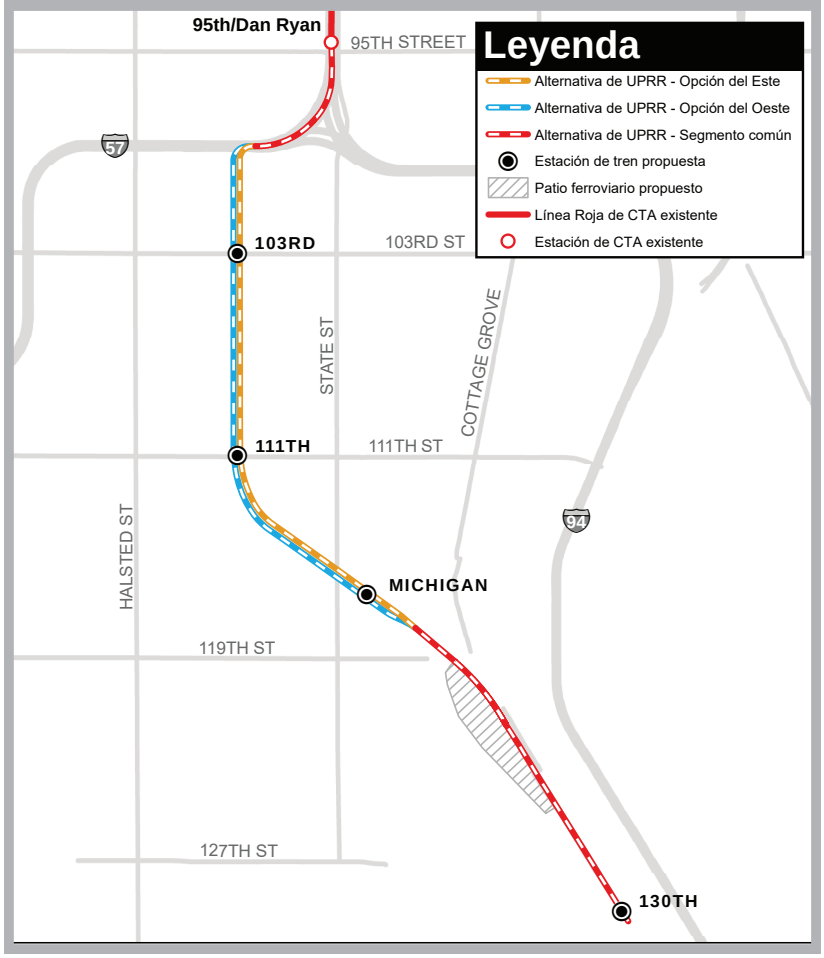

¿Por qué es el proyecto de expansión de la línea roja importante?

- ***Expansión de acceso y mejoras al servicio*** – La expansión de la línea roja mejoraría el servicio y el acceso al transporte en los vecindarios en el extremo sur donde los residentes que dependen del transporte público actualmente no tienen acceso directo al servicio de tren.
- ***Reducción en el tiempo que tarda ir y venir del trabajo*** – Entre el 2005 y el 2010, el tiempo que tarda ir y venir del trabajo era, en promedio, 20 porciento más largo para aquellas personas que viven actualmente en el área donde la expansión de la línea roja prestaría el servicio, en comparación con otras personas que van y vienen del trabajo en la región de Chicago. La expansión de la línea roja ahorraría a una persona que va y viene del trabajo promedio en las comunidades afectadas por este proyecto 87 horas anuales.
- ***Catalizador de crecimiento económico*** – CTA estima que se crearían 29,900 trabajos directos, indirectos e inducidos mediante la inversión en el proyecto de expansión de la línea roja. Además, las estaciones nuevas podrían desempeñar una función catalizadora para la revitalización del vecindario.
- ***Habitabilidad mejorada*** – Las mejoras también proporcionarán mejor acceso del transporte público a vivienda económica, trabajos, servicios y oportunidades educativas. Esto mejora la habitabilidad y la vitalidad del vecindario.

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Expansión de la línea roja: Información actualizada sobre el proyecto

CTA está progresando en un proceso federal de varias etapas para obtener la aprobación y los fondos para el proyecto. CTA preparó un borrador de declaración de impacto ambiental (DIA) que evalúa el impacto ambiental de las dos opciones de la alternativa de Union Pacific Railroad (UPRR), así como la alternativa de no construcción (No Build). CTA está solicitando las opiniones del público sobre las dos opciones objeto de consideración.

Después de publicar el borrador de DIA, CTA examinará y atenderá los comentarios del público sobre el borrador de DIA, y anunciará la opción seleccionada (opción este u opción oeste) con base en las opiniones del público y la evaluación ambiental. CTA formalizará la opción seleccionada, su impacto y las medidas de mitigación en la DIA final. Durante la fase de preparación de la DIA final, CTA tiene previsto solicitar a la Administración Federal de Transporte (FTA) la entrada a la fase de desarrollo de este proyecto para obtener fondos federales para la construcción del proyecto conforme al programa federal competitivo “New Starts.” Habrá oportunidades en el futuro para recibir aportaciones del público a medida que avanza este proceso.

Red Ahead

La expansión de la línea roja es parte del programa Red Ahead (Rojo a la vista) de CTA, una iniciativa amplia para mantener, modernizar y expandir la línea de tren más transitada de Chicago. El programa Red Ahead también incluye el proyecto de reconstrucción de la línea roja al sur (completado en el 2013), el proyecto de terminal de 95th Street (construcción en curso), el proyecto de reconstrucción de estación Wilson (construcción en curso) y el programa de modernización de la línea roja y púrpura (actualmente en la etapa de ingeniería y diseño).

Ahorros estimados en el tiempo que tarda el viaje

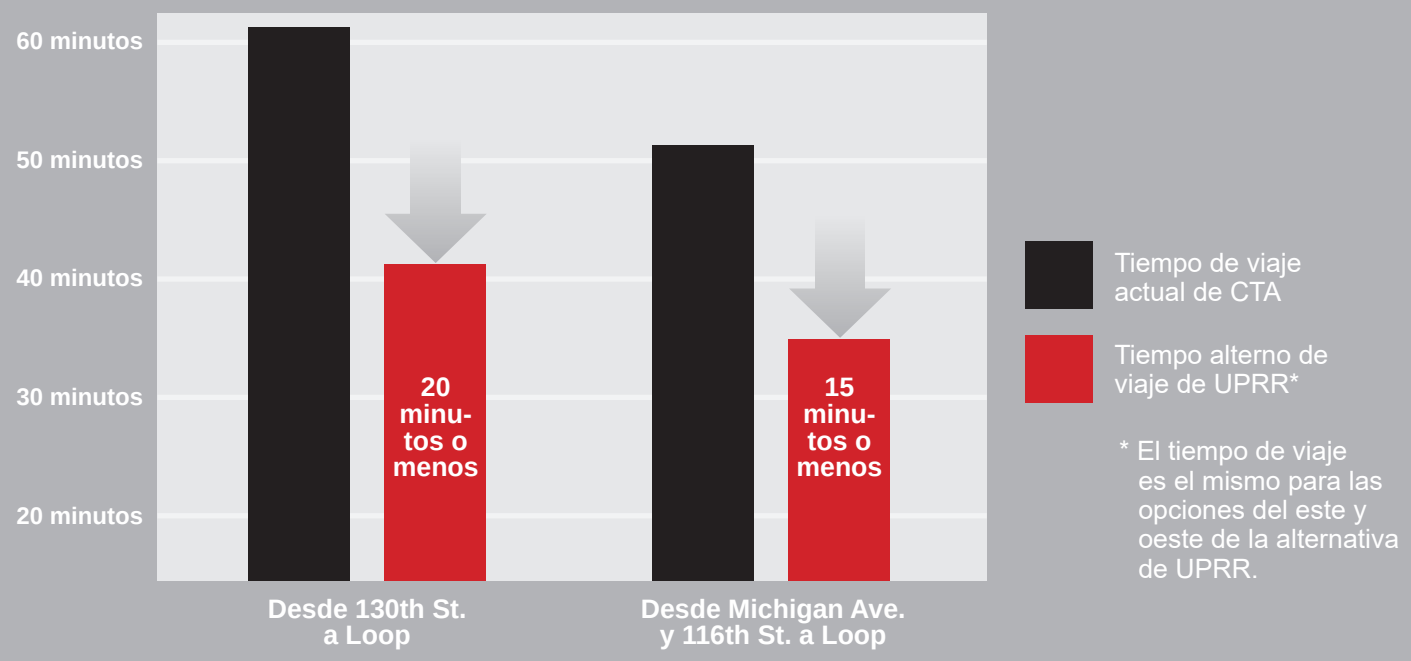

RED AHEAD

Red Line Extension

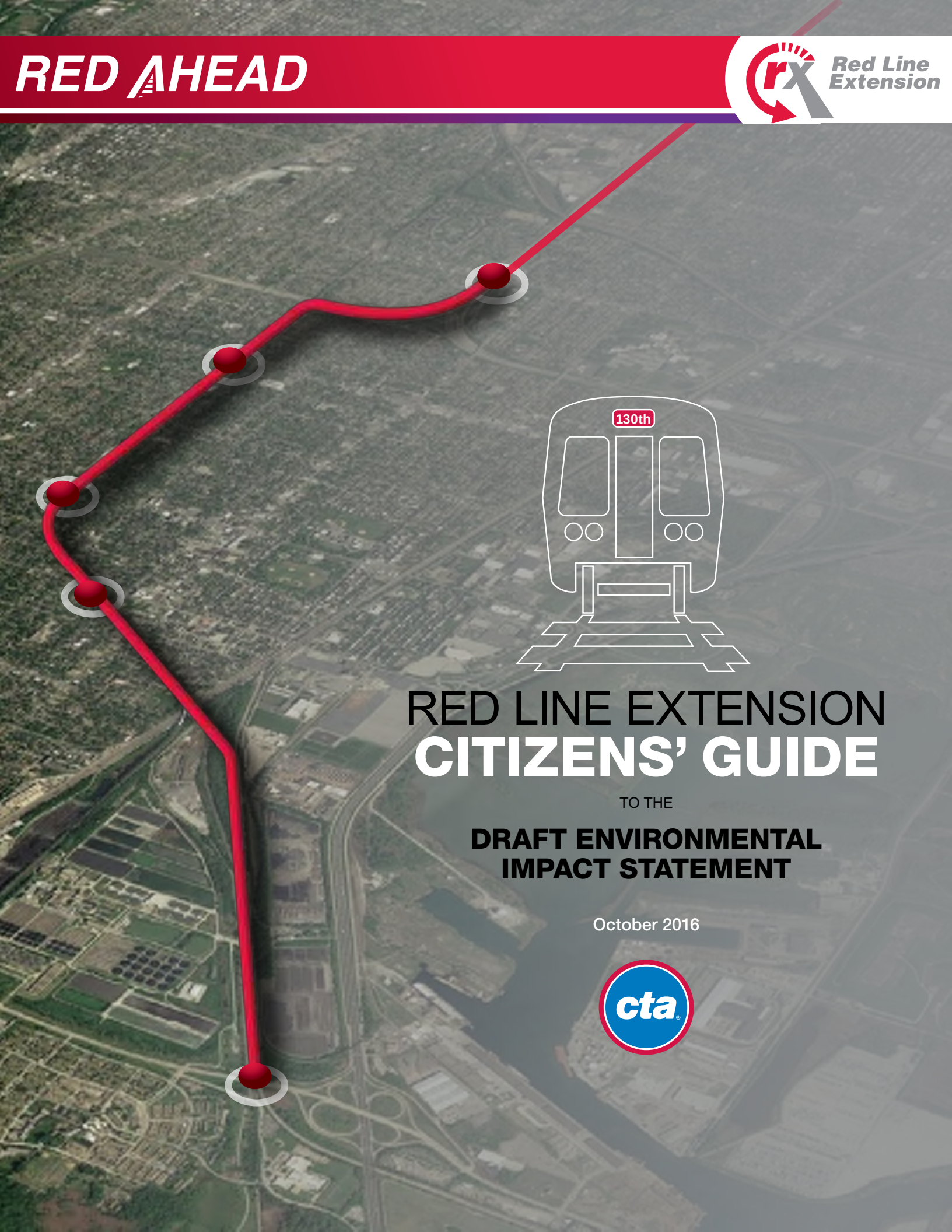

RED LINE EXTENSION
CITIZENS' GUIDE

TO THE

DRAFT ENVIRONMENTAL IMPACT STATEMENT

October 2016

cta

Contents

The Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) have prepared a Draft Environmental Impact Statement (EIS) for the Red Line Extension (RLE) Project. The Draft EIS is a federally mandated document that evaluates impacts of a proposed transportation project and allows CTA to pursue federal funding. This Citizens' Guide provides an overview of the content and process used to prepare the Draft EIS. Contents of this guide include the following:

- Introduction and Project Overview 1
- Project Purpose and Need 2
- Alternatives Development Process 3
- Locally Preferred Alternative 4-5
- Summary of Benefits and Impacts 6-11
- Public Involvement 12
- Project Costs and Funding 13
- Next Steps 13

How to Provide Comments on the Draft EIS

The Draft EIS serves as the primary document to facilitate public and agency review of the proposed project. Comments on the Draft EIS will be accepted from October 6 to November 30, 2016. The Draft EIS is available on the CTA website (transitchicago.com/RedEIS), and hard copies of the Draft EIS are available at the following locations during the public review period:

- CTA Headquarters
  567 W. Lake Street, 2nd Floor,
  Chicago, IL 60661
- Pullman Public Library
  11001 S. Indiana Avenue,
  Chicago, IL 60628
- West Pullman Public Library
  830 W. 119th Street,
  Chicago, IL 60643
- Altgeld Public Library
  13281 S. Corliss Avenue,
  Chicago, IL 60827
- Woodson Regional Public Library
  9525 S. Halsted Street, Chicago,
  IL 60628
- Calumet Park Public Library
  1500 W. 127th Street,
  Calumet Park, IL 60827
- Harold Washington Library Center
  400 S. State Street,
  Chicago, IL 60605

CTA will hold a public hearing on November 1, 2016 from 5:30 to 7:30 PM at St. John Missionary Baptist Church (211 E. 111th Street, Chicago, IL 60628) to solicit comments from the community about findings presented in the Draft EIS. Comments received during the public comment period will be entered into the public record and addressed by CTA and FTA in the Final EIS. Public comments must address the contents of the Draft EIS and not the contents of this guide.

Written comments will also be accepted at any time during the public comment period via e-mail to: RedExtension@transitchicago.com and U.S. mail to: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.

Introduction and Project Overview

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to 130th Street, subject to the availability of funding. The proposed 5.3-mile extension would include new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connections to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in the project area. The RLE Project would also provide a modern, efficient rail car storage yard and shop facility.

By 2030,

42,000 riders

are expected to take the Red Line Extension every weekday.

Between 2005 and 2010, commute times were, on average, 20 percent longer for those that currently live in the area that would be served by the Red Line Extension, than for other commuters in the Chicago region.

The Red Line Extension would save the average commuter in the communities affected by this project

87 hours per year.

Project Purpose and Need

The purpose of the RLE Project is as follows:

- Reduce commute times for residents both within and south of the project area.
- Improve mobility and accessibility for transit-dependent residents in the project area.
- Improve rapid transit rail service to isolated areas and provide viable linkages between affordable housing (e.g., the Altgeld Gardens public housing project), jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Provide an opportunity for potential connections and linkages to other public transportation modes including regional commuter rail in the project area.
- Foster economic development in the project area, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.
- Provide a modern, efficient rail car storage yard and shop facility to provide storage and cost-effective preventive maintenance for rail cars associated with the RLE Project, rail cars currently stored in the existing 98th Street Yard and Shop, and rail cars supporting additional Red Line expansion of service.

The need for the RLE Project is demonstrated by the following existing conditions:

- Transit trips to jobs are longer for Far South Side residents than they are for passengers in the Chicago seven-county region as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limits access between affordable housing (e.g., the Altgeld Gardens public housing project) and employment centers outside of the project area.
- Existing transit markets are underserved and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Street Yard does not have capacity to store rail cars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

The Environmental Impact Statement (EIS) Process

The National Environmental Policy Act of 1969 (NEPA) is a federal law that mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined.

The purpose of the Draft EIS is to study, in a public setting, the effects of the proposed project and its alternatives on the quality of the physical, human, and natural environment. The analysis evaluates the extent to which the proposed project would affect these resource areas. Measures to avoid, minimize, and mitigate potential adverse impacts are also identified.

After public review of the Draft EIS, CTA and FTA will complete additional engineering and analyses, and will prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS and Record of Decision will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures.

Alternatives Development Process

<TA began developing the alternatives that are being studied in Draft EIS during the Alternatives Analysis which took place from 2006–2009. Starting with multiple modes and corridor options, CTA developed and screened alternatives through a combination of conceptual engineering, public input (open houses and stakeholder meetings), and preliminary analysis of potential impacts and costs. The Chicago Transit Board designated the UPRR Alternative as the Locally Preferred Alternative on August 12, 2009.

In preparation for the Draft EIS and based on the outcomes of the Alternatives Analysis, CTA evaluated the following alternatives and options between 2012 and 2014:

- No Build Alternative
- Bus Rapid Transit Alternative
- Union Pacific Railroad Rail (UPRR) Alternative
  - Right-of-Way Option
  - East Option
  - West Option
- Halsted Rail Alternative

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Alternative. The Draft EIS summarizes the environmental benefits and impacts of the No Build Alternative and the two UPRR Alternative options.

No Build Alternative

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the UPRR Alternative. The No Build Alternative represents future conditions if the UPRR Alternative were not implemented. No new infrastructure would be built as part of the RLE Project.

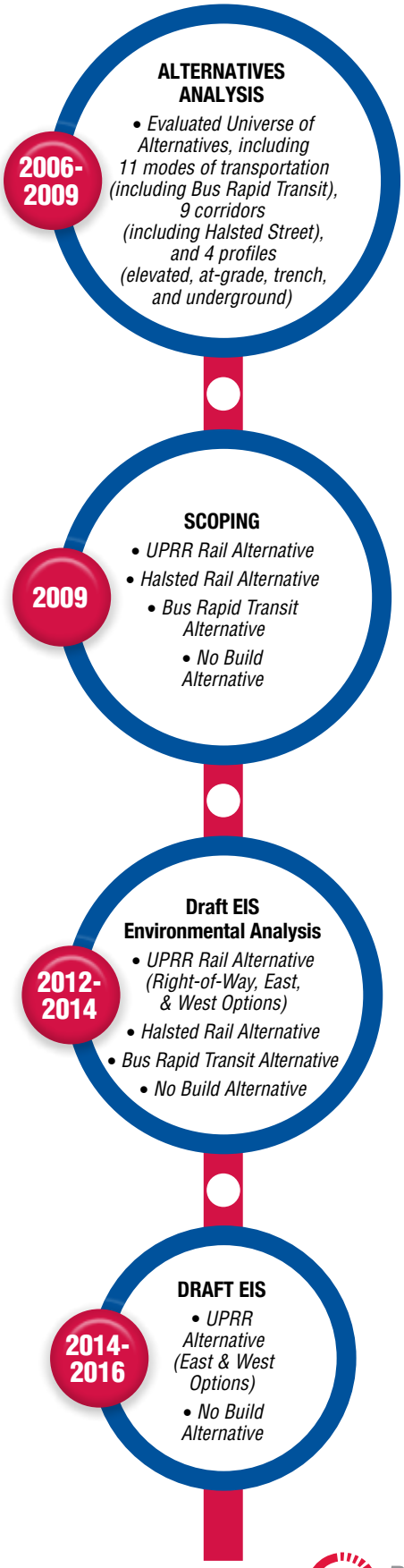

Locally Preferred Alternative
Union Pacific Railroad Alternative

The proposed UPRR Alternative would extend the heavy rail transit line from the existing Red Line 95th Street Terminal to 130th Street. The UPRR Alternative would operate on an elevated structure heading south from 95th Street along the I-57 Expressway for nearly one-half mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of South Prairie Avenue, the alignment would cross over the Canadian National/Metra Electric tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation rights-of-way to terminate at 130th Street.

The Locally Preferred Alternative would include the following features:

- 5.3-mile heavy rail transit line extension from 95th Street Terminal to 130th Street
- Four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street
- New park & ride and bus terminal facilities at each station
- Bus transit service to the new stations for faster travel to downtown Chicago
- New yard and shop at 120th Street

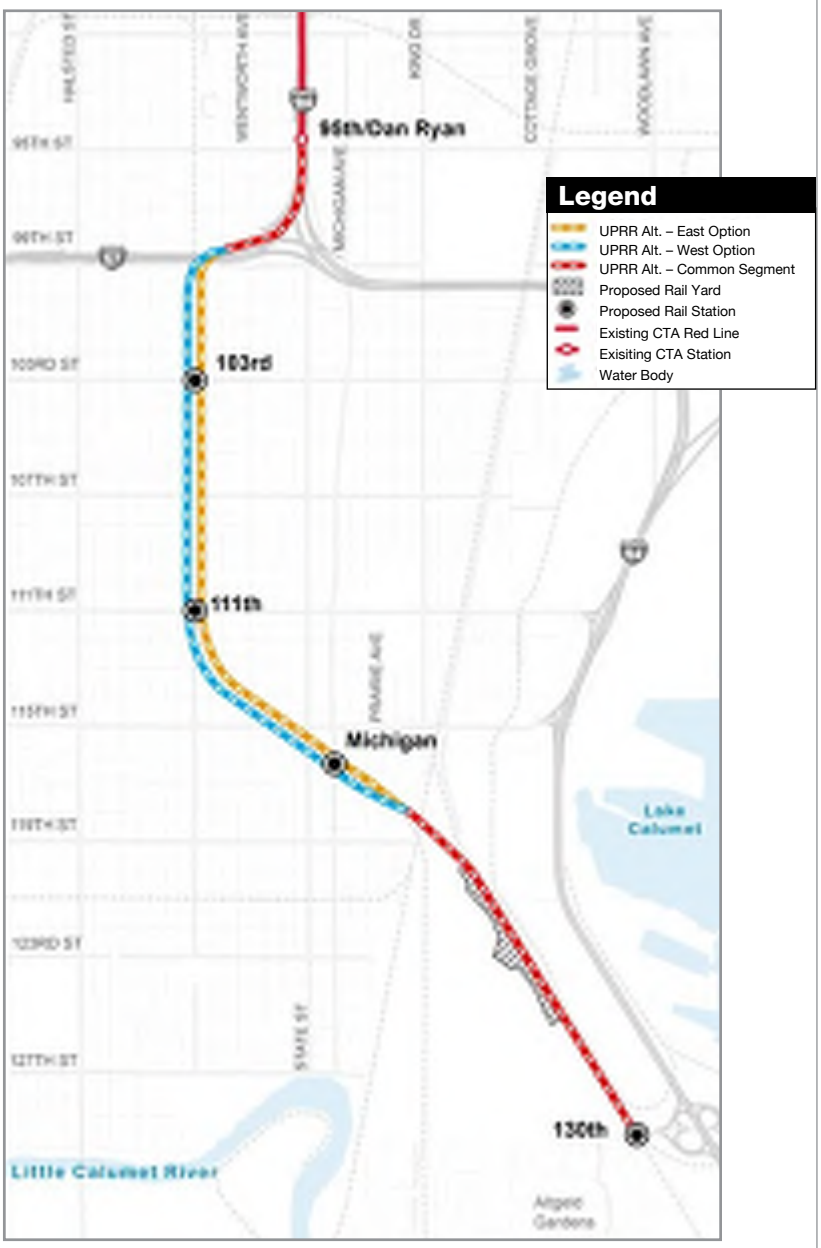

Two alignment options are being studied in the Draft EIS:

East Option

Under this option, the CTA elevated structure would be placed immediately east of the Union Pacific Railroad right-of-way from 99th Street to 118th Street.

West Option

Under this option, the CTA elevated structure would be placed immediately west of Union Pacific Railroad right-of-way from 99th Street to north of 118th Street.

The proposed alignment of the rapid transit line would be the same for the two East and West options from 95th Street to 99th Street and from 118th Street to 130th Street.

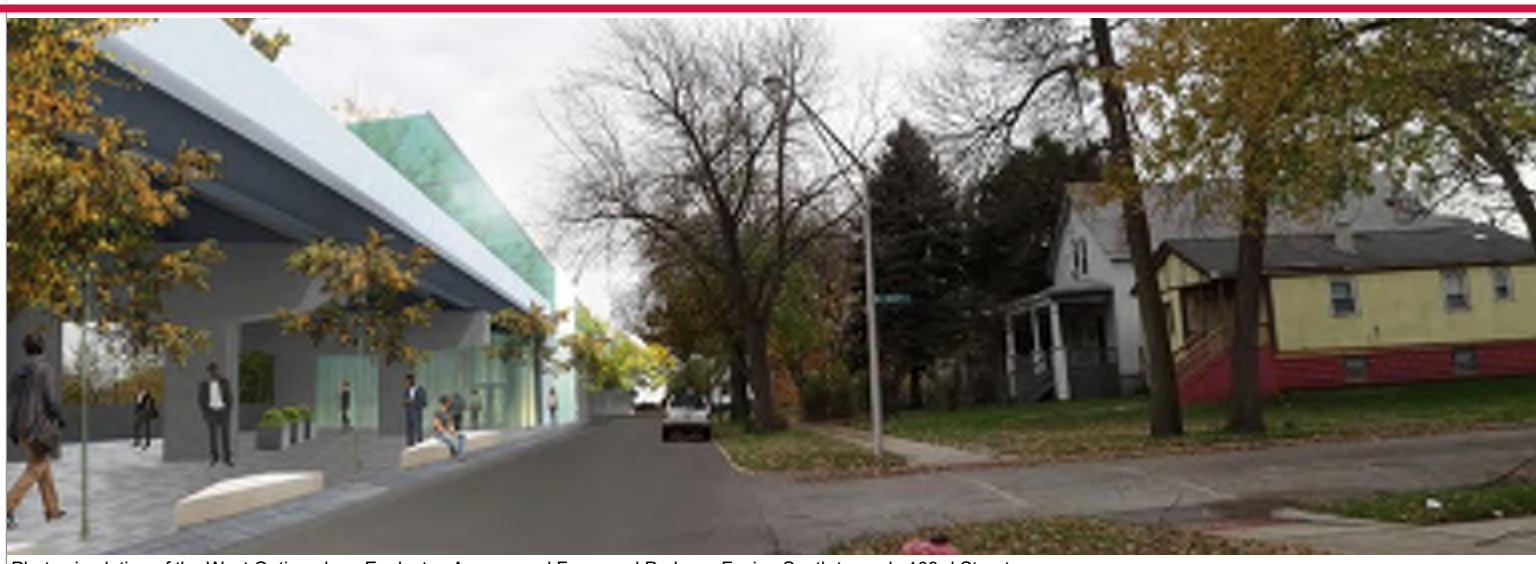

Photo simulation of the West Option along Eggleston Avenue and Fernwood Parkway Facing South towards 103rd Street

Photo simulation of East Option at 103rd Street Facing Northwest

Photo simulation of East Option at 111th Street Facing West

Summary of Benefits and Impacts

Potential environmental benefits and impacts are detailed in Chapters 3–8 of the Draft EIS and are summarized below.

Transportation (Chapter 3)

Both the East and West Options would have no adverse impacts on transportation after mitigation. Transit passengers would benefit from increased access to transit, faster travel times, reduced congestion at 95th Street Terminal, direct rail service, and potential connections to regional commuter rail. Under both the East and West Options, adverse vehicular traffic impacts would occur at fifteen intersections in the project area before mitigation. Potential mitigation measures include adjusting traffic signal timing and installation of traffic detection technology to provide green signal phases in responses to traffic presence and volume. Impacts would not be adverse after mitigation. Pedestrians would benefit from upgraded intersections adjacent to stations with ADA-accessible curb ramps and

replacement of deteriorated sidewalks. The East Option would result in pedestrian safety impacts at the 103rd Street, 111th Street, and Michigan Avenue stations because passengers would need to cross active UPRR tracks to access the station's parking facility. Potential mitigation measure include traffic signals (if warranted), surveillance cameras, alarms notification (flashing blue lights), sidewalk lighting in the immediate vicinity, pedestrian crossing treatments (refuge medians with appropriate signage), and police patrols.

In 2014 and 2015, CTA refined the project alignment along I-57 by shifting a portion of the alignment to the shoulder of the expressway, which would reduce impacts to traffic; however, construction within the I-94 and I-57 right-of-way would require temporary lane closures. Because UPRR freight operations would still be active in the UPRR right-of-way during construction of either option, CTA would need to move signal devices or install temporary signals to replace existing signals during construction of viaducts. Because the West Option would cross the freight tracks in two locations, construction at crossing would be phased to minimize impacts to freight operations.

Land Use and Economic Development (Section 4.1)

The proposed park & ride facilities at the 103rd Street, 111th Street, and Michigan Avenue stations, as well as the substation just north of Michigan Avenue for both the East and West Options would be inconsistent with adjacent land uses, but would not create an adverse impact after mitigation. The proposed Michigan Avenue station parking structure would have ground-floor retail and community facility space, which could help offset the land use and economic impacts of displacements. The East and West Options could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations.The Chicago Metropolitan Agency for Planning states that the RLE Project would increase access to jobs; access to jobs within 1 hour of the proposed 111th Street station would increase by 56 percent.

Displacements (Section 4.2)

The East Option would affect 260 parcels (106 buildings) and the West Option would affect 205 parcels (46 buildings). The East Option would displace primarily single-family residences. The West Option would displace more commercial and industrial properties but overall fewer properties than the East Option.

The Red Line Extension Project would provide

better transit access

to affordable housing, jobs, services, and educational opportunities enhancing livability and neighborhood vitality.

Summary of Benefits and Impacts

Because all construction activities would occur within the street right-of-way or on land acquired for the permanent right-of-way, yard and shop, and park & ride facilities, there would be no temporary construction-related displacement or relocation impacts for either option. Permanently displaced owners and tenants would be compensated and relocated per the Uniform Act and FTA guidelines. The Uniform Act mandates that relocation services and payments be made available to eligible residents, businesses, and non-profit organizations displaced as a direct result of any project undertaken by a federal agency or with federal financial assistance.

Neighborhoods and Communities (Section 4.3)

Both the East and West Options would have permanent adverse impacts on community character and cohesion in Roseland and West Pullman because of the adverse visual impacts created by the track structure and stations. Passengers would benefit from improved mobility with reduced travel times and from increased access to community resources in the project area. The new rail extension would facilitate access to community resources near the station locations. The East Option would affect three community resources, and the West Option would also affect three community resources; impacts to these community resources would not be adverse after mitigation. Construction would introduce temporary, intermittent visual, noise, and dust impacts; would cause increased truck traffic; and would require temporary street closures and detours. Access to businesses could be temporarily limited on an intermittent basis. Construction impacts would not be adverse after mitigation.

Visual Impacts (Section 4.4)

Both the East and West Options would introduce permanent adverse visual impacts and new visual elements to areas within view of the track structure and stations. The East Option would create an adverse visual impact north of I-57 and at the intersection of 117th Street and Prairie Avenue because of the change in the visual setting due to the height of the elevated track structure. The West Option would create an adverse visual impact north of I-57, between 99th Street and 103rd Street, near the 103rd Street Station, and at the Michigan Avenue station park & ride facility because of the change in the visual setting due to the height of the elevated track structure, stations, and park & ride. These impacts would remain adverse despite mitigation. Mitigation measures would include landscaping (such as planting larger trees near structures to break the sight lines, with smaller scale landscaping near the streets to mimic landscaping on the opposite side of the streets), and creating pedestrian-friendly surroundings. Construction would create temporary adverse impacts due to the construction work zone.

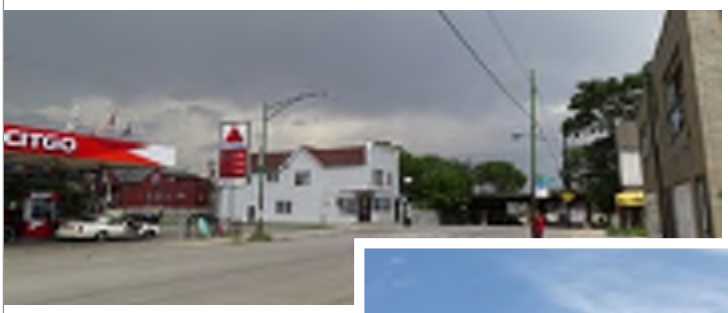

Existing Conditions

West Option Michigan Avenue Station and Parking Structure Facing Northwest along Michigan Avenue

Photo Simulation

Summary of Benefits and Impacts

Noise and Vibration (Section 4.5)

	Noise-sensitive receivers within moderate impact contour	Noise-sensitive receivers within severe impact contour
East Option	574	82
West Option	738	48

The noise analysis established impact boundaries, within which sensitive receivers (such as residences) would be affected by the noise created by the proposed project. To reduce noise impacts below FTA noise impact criteria, CTA would construct a noise barrier approximately 4 feet in height, which would provide a 10-dBA reduction in noise along both sides of the elevated track structure from the 95th Street Terminal to 119th Street. No moderate or severe noise impacts would remain after mitigation. Construction noise levels are not expected to exceed the FTA-recommended construction noise limits. The construction contractor would employ noise-reducing construction best management practices.

Noise Barriers

The elevated track structures would result in vibration levels that would be below the FTA impact criterion and no mitigation measures would be required.

Safety and Security (Section 4.6)

Safety refers to freedom from harm resulting from unintentional acts or circumstances. Unintentional acts or circumstances include all incidents within the CTA right-of-way, such as collisions, derailments, fires, property damage, injuries, and fatalities. A large number of pedestrians would likely cross the major streets near the 103rd and 111th Street stations without positive traffic control (marked crosswalks or signalized intersections with pedestrian countdowns) to reach the proposed stations, which would be an adverse impact on pedestrian safety. Permanent safety impacts would not be adverse after mitigation. Mitigation measures would include installing traffic signals (if warranted), surveillance cameras, alarm notifications (flashing blue lights), pedestrian crossing treatments, or installing additional passive or active safety devices to enhance the safety devices already in place at existing grade crossings.

Security refers to freedom from harm resulting from intentional acts or circumstances, including crime. Based on data from transit stations in Chicago and across the United States, the new stations would be unlikely to have much, if any, impact on neighborhood crime; however, research indicates that some risk would remain, particularly in low-income neighborhoods. There would be no permanent security impacts. There would be no

Existing Conditions

East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue

Photo Simulation

Summary of Benefits and Impacts

construction-related safety or security impacts after the implementation of safety and construction best management practices.

Historic and Cultural Resources (Section 4.7)

An adverse effect on a historic resource is found when a project would alter (directly or indirectly) any of the characteristics of a historic property that qualify the property for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. The East Option would have "no adverse effects" on one resource (the Roseland Pumping Station), and "no effects" on other resources. The East Option would have "no adverse effects" (and not "no effect") on Roseland Pumping Station because the new aerial track structure would be located within 9 feet of the Roseland Pumping Station at its nearest point; the building would not have to be removed. The West Option would have no effect on any historic resources.

Since 2012, FTA and CTA have coordinated with the State Historic Preservation Office and consulting parties to discuss properties and districts in the area of potential effect that were eligible for listing on the National Register of Historic Places as well as potential project effects.

Hazardous Materials (Section 4.8)

CTA identified six High Concern sites within the permanent envelope of the East Option and six High Concern sites within the permanent envelope of the West Option. Implementation of the UPRR Alternative could result in benefits through the cleanup and/or removal of contaminated material during construction. Daily operations or maintenance activities that require earthmoving in contaminated areas would have the potential to result in permanent hazardous material impacts from accidental spills or hazardous material releases. Permanent and construction-related impacts would not be adverse after the implementation of standard practices and best management practices.

Wetlands (Section 4.9)

CTA identified 15 wetland areas totaling 15.34 acres of potentially affected wetlands at the site of the 130th Street station and the 120th Street yard and shop. The precise quantity of wetlands affected would be confirmed based on the actual footprint to be determined in final design. If there are jurisdictional wetlands (wetlands that are regulated by the U.S. Army Corps of Engineers) and they cannot be avoided, CTA would provide compensatory mitigation. Impacts on wetlands would be mitigated through compensatory mitigation, if required. Construction staging areas would be sited outside of wetlands as much as possible, but if there were any temporary impacts, those wetlands would be restored after construction.

Indirect and Cumulative Impacts (Chapter 5)

The RLE Project takes into account and is being coordinated with other projects being conducted in the past, present, and reasonably foreseeable future in the project area. Implementation of the East or West Option could result in potential redevelopment because of increased accessibility to jobs, attraction of new development near RLE stations, and overall livability improvements. The surrounding communities would benefit from the cumulative impacts of other planned and programmed projects in the project area because they would improve access to jobs, places of interest, and residences, and would result in a reduction of air emissions.

Resources with Limited or No Adverse Impacts (Chapter 6)

The No Build Alternative and the UPRR Alternative East and West Options would have limited or no impacts on the following resource areas: air quality, water quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, geology and soils, and energy. Based on the nature of these resource areas, impacts would be similar for both the East and West Options.

Environmental Justice (Chapter 7)

Environmental Justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income. CTA and FTA considered the potential for disproportionately high and adverse impacts on low-income and minority populations that could result from the UPRR Alternative. The project area consists entirely of predominantly minority populations, some of which are also low-income. All of the benefits and impacts of the project would occur within these minority and

Summary of Benefits and Impacts

low-income areas (EJ populations). Few benefits would occur outside of the minority and low-income areas. As such, both the East and West Options would have impacts on EJ populations; however, none of the impacts would be disproportionately high and adverse. FTA and CTA have undertaken outreach and ongoing coordination with affected communities to identify EJ populations, discussed project impacts and benefits, and mitigation measures where relevant.

Parks – Section 4(f) (Chapter 8)

East Option

Under the East Option, the northwest corner of Wendell Smith Park and the western parcel of Block Park would be permanently affected. Both Wendell Smith Park and Block Park would continue to provide park space after implementation of the RLE Project, but park space would be reduced. Both parks would remain active during construction with the exception of the overlapped portion of the parks.

West Option

Under the West Option, a portion of Fernwood Parkway from 99th Street to 103rd Street between the existing UPRR tracks and Eggleston Avenue would be affected. Temporary closure of the overlapped section of Fernway Parkway would be necessary during construction. There would be a short-term closure of Wendell Smith Park during construction, but no permanent impacts.

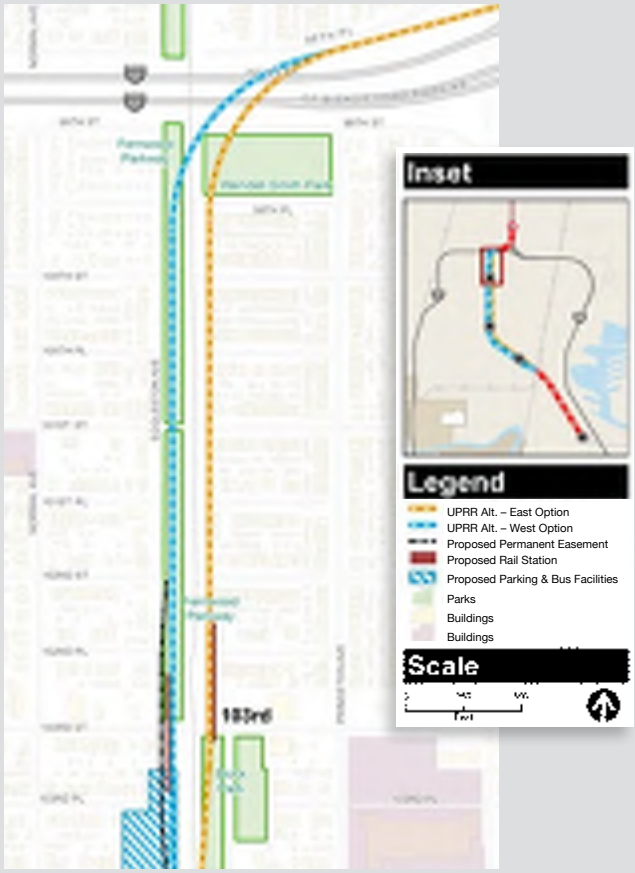

Parks affected by the East and West Options

Addressing Impacts to Parks

CTA has worked with the Chicago Park District to identify a number of ways to minimize park impacts and, where possible, enhance community access to parks.

Mitigation Measures for both the East and West Options

- Provide new replacement parks in or near affected community areas
- Restore/landscape any disturbed areas on impacted parkland
- Incorporate context sensitive design features at impacted parks

Additional Mitigation Measures for the East Option at Wendell Smith Park

- Provide one larger baseball field in Wendell Smith Park
- Relocate junior-sized baseball field in replacement park
- Relocate walking path and replace benches and other amenities in Wendell Smith Park

Additional Mitigation Measures for the West Option at Fernwood Parkway

- Potential to install new bike path beneath elevated structure in unused greenspace in Fernwood Parkway

Summary of Benefits and Impacts

Criteria	No Build Alternative	Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
Goal 1 - Reduce Transit Times			
Travel Times Between Stations[1,2]			
130th Street to 95th Street Terminal	28 minutes	14 minutes	14 minutes
130th Street to Jackson Station (Loop)	58 minutes	39 minutes	39 minutes
Would the proposed stations serve transit-dependent communities?	No	Yes	Yes
Would there be new direct service to Altgeld Gardens?	No	Yes	Yes
Goal 2 - Increase Travel Choices			
Would there be better access to regional employment centers and local commercial areas?	No	Yes	Yes
Would potential connections to other public transportation modes within the project area be possible?	No	Yes	Yes
Would geographic isolation be reduced?	No	Yes	Yes
How many stations would have Park & Ride Facilities?	0	4 of 4	4 of 4
Total Park & Ride Spaces	0	3,700	3,700
Goal 3 - Increase Economic Competitiveness			
Would nearby development be encouraged?	No	Yes	Yes
Goal 4 - Minimize Environmental Impacts			
Displacements and Relocations			
Properties	0	260	205
Buildings	0	106	46
Noise Impacts After Mitigation	No change	Not adverse	Not adverse
Receivers with Moderate Impacts (before mitigation/after mitigation)	0	574 / 0	738 / 0
Receivers with Severe Impacts (before mitigation/after mitigation)	0	83 / 0	49 / 0
Park Impacts (Not Adverse After Mitigation)[3]			
Construction Phase	0 parks	2 parks	2 parks
Permanent	0 parks	2 parks	1 park
Permanent (acres)	0 acres	1.6 acres	1.9 acres
Would there be community character impacts after mitigation?	No	Yes	Yes
Would there be visual and aesthetic impacts after mitigation?	No	Yes	Yes
Goal 5 - Provide the Best Value			
Projected Ridership (per weekday)	0	42,000	42,000
Capital Costs[4]	$0	$2.26 Billion	$2.30 Billion
Annual Change in O&M Costs[5]	No Change	+$17.4 Million	+$17.4 Million

N/A = Not Applicable
1 Source: CTA 2009
2 Travel time between stations does not include wait time at 130th Street.
3 Based on the Section 4(f) analysis. Findings contingent on continued coordination process.
4 Year of expenditure dollars
5 O&M = Operations and maintenance. Difference from No Build Alternativeshown in year 2015 dollars

Public Involvement

Community outreach for the RLE Project started with the Alternatives Analysis in 2006, continued with NEPA scoping in 2009, and will continue through the Draft EIS and Final EIS phases of the project.

To date, CTA has held 10 public meetings for this project with more than 800 community members in attendance. CTA has met with many community organizations and public agencies as part of the planning process, including coordination related to historic resources (Section 106). Additional details about the public outreach process is described in Chapter 10 of the Draft EIS. CTA will continue to involve and consult with the community as the project proceeds through design and into construction.

CTA will host a public hearing to solicit comments from the community about findings presented in the Draft EIS. Comments received during the public comment period, including the public hearing, will be reviewed by FTA and CTA, and will be entered into public record. Written comments will also be accepted at any time during the public comment period via e-mail to: RedExtension@transitchicago.com and U.S. mail to: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661. A summary of the public hearing and responses to comments received will be included in the Final EIS.

Project Costs and Funding

CTA is pursuing a wide range of local, state, and federal funding sources, including federal New Starts funds, with the help and support of the community. New Starts projects expand rail service into an area that is not within the current transit footprint, and therefore entail a relatively longer environmental and planning process. The New Starts process is very competitive; CTA must compete with other New Starts projects from across the country that are already in line for funding.

	No Build	East Option	West Option
Capital Costs[1]	$0	$2.26 Billion	$2.30 Billion
Annual Change in O&M Costs[2]	No Change	+$17.4 Million	+$17.4 Million

1 Year of expenditure dollars
2 O&M = Operations and maintenance. Difference from No Build Alternative shown in year 2015 dollars.

Next Steps

FTA and CTA will review the comments received during the public comment period, complete additional engineering and analyses required, and prepare the Final EIS. Concurrently, CTA will also request entry into the FTA New Starts Project Development phase. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. FTA intends to issue a single document that consists of the Final EIS and Record of Decision, unless it is determined that circumstances, such as changes to the proposed action, anticipated impacts, or other new information, preclude issuance of such a combined document.

After completion of the Final EIS and FTA New Starts Project Development phase, CTA intends to apply to the Project Engineering phase, which will include design and engineering. Upon receiving a full funding grant agreement from FTA, the project will move into construction, which is expected to last about 5 years.

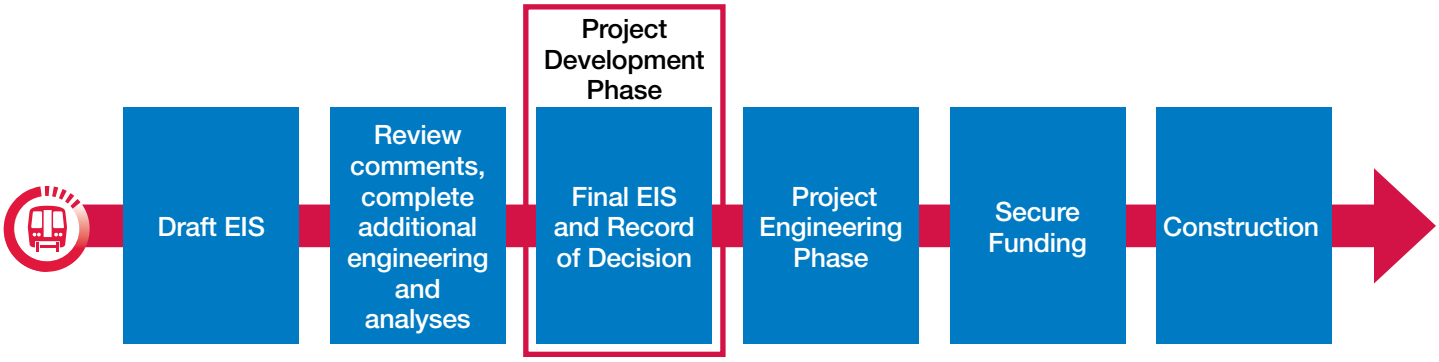

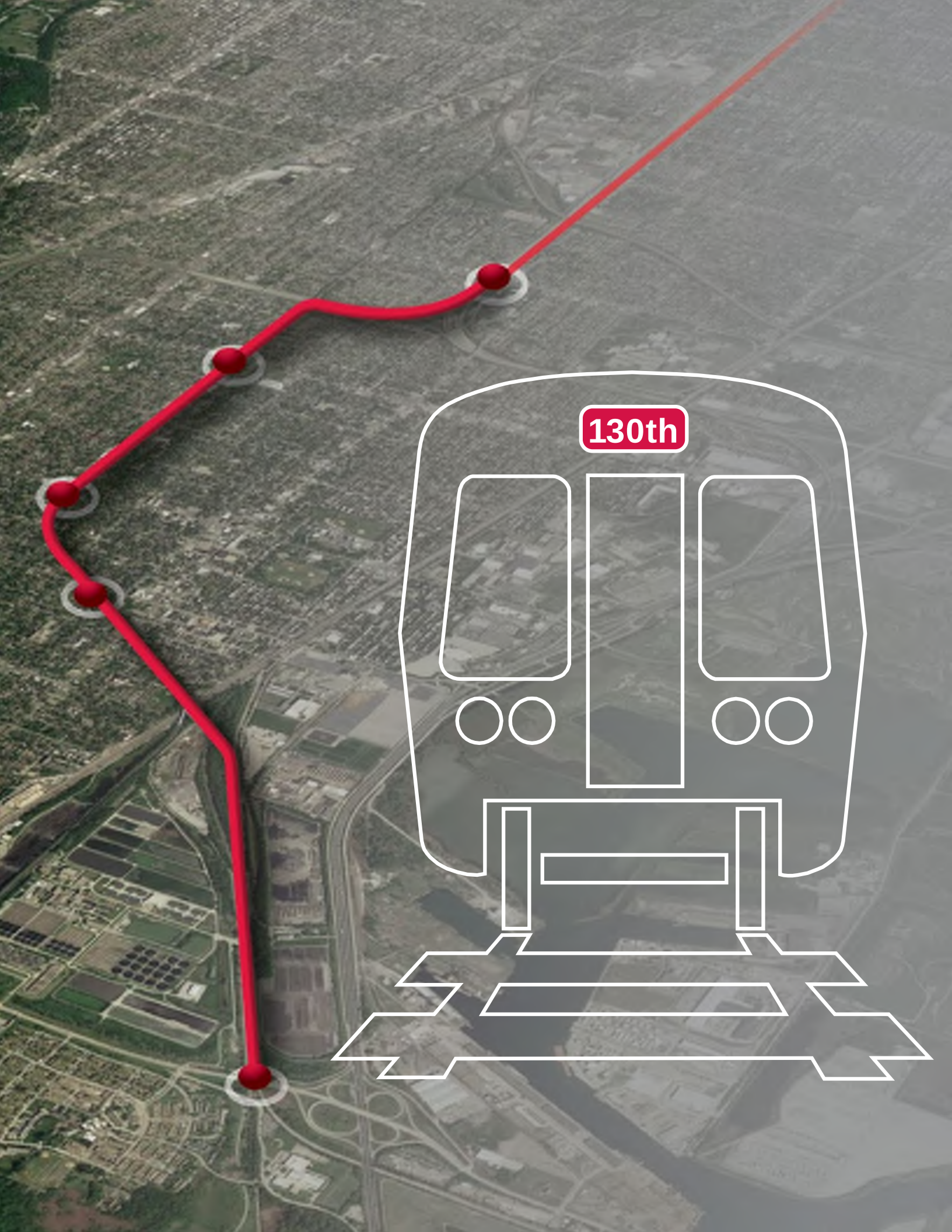
130th

RED AHEAD

Red Line Extension

GUÍA DE LOS CIUDADANOS

DE LA EXPANSIÓN DE LA LÍNEA ROJA

AL

BORRADOR DE DECLARACIÓN DE IMPACTO AMBIENTAL

Octubre 2016

cta

Contenidos

Federal Transit Administration (FTA) y Chicago Transit Authority (CTA) han preparado un borrador de Declaración de Impacto Ambiental (DIA) para el proyecto de expansión de la Línea Roja (RLE). El borrador de la DIA es un documento que el gobierno federal exige para evaluar el impacto del proyecto de transporte propuesto y permite a CTA buscar fondos federales. Esta Guía de los Ciudadanos proporciona una visión general del contenido y proceso usado para preparar el borrador de la DIA. El contenido de esta guía incluye lo siguiente:

- **Introducción y visión general del proyecto** 1
- **Propósito y necesidad del proyecto** 2
- **Proceso de desarrollo de alternativas** 3
- **Alternativa preferida local** 4-5
- **Resumen de beneficios e impacto** 6-11
- **Participación del público** 12
- **Costos y fondos del proyecto** 13
- **Pasos siguientes** 13

Comentarios sobre el borrador de la DIA

El borrador de la DIA es el documento principal para facilitar la revisión por el público y la agencia del proyecto propuesto. Los comentarios sobre el borrador de la DIA serán aceptados desde el 6 de octubre hasta el 30 de noviembre de 2016. El borrador de la DIA está disponible en el sitio web de CTA (transitchicago.com/RedEIS), y copias impresas del borrador de la DIA están disponibles en las siguientes ubicaciones durante el plazo de revisión pública:

- Sede de la CTA
  567 W. Lake Street, 2nd Floor,
  Chicago, IL 60661
- Pullman Public Library
  11001 S. Indiana Avenue,
  Chicago, IL 60628
- West Pullman Public Library
  830 W. 119th Street,
  Chicago, IL 60643
- Altgeld Public Library
  13281 S. Corliss Avenue,
  Chicago, IL 60827
- Woodson Regional Public Library
  9525 S. Halsted Street, Chicago,
  IL 60628
- Calumet Park Public Library
  1500 W. 127th Street,
  Calumet Park, IL 60827
- Harold Washington Library Center
  400 S. State Street,
  Chicago, IL 60605

CTA llevará a cabo una audiencia pública el 1 de noviembre de 2016 de 5:30 a 7:30 p.m. en St. John Missionary Baptist Church (211 E. 111th Street, Chicago, IL 60628) para solicitar comentarios de la comunidad sobre los hallazgos presentados en el borrador de la DIA. Los comentarios que se reciban durante el plazo de comentarios públicos serán ingresados al registro público y serán atendidos por CTA y FTA en la DIA final. Los comentarios públicos tienen que atender el contenido del borrador de la DIA y no el contenido de esta guía.

También se aceptarán comentarios por escrito en cualquier momento durante el plazo de comentarios públicos por correo electrónico: RedExtension@transitchicago.com y correo de EE. UU. a: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.

Introducción y visión general del proyecto

Chicago Transit Authority (CTA) está proponiendo expandir la Línea Roja desde la terminal de 95th Street hasta 130th Street, sujeto a la disponibilidad de fondos. La expansión de 5.3 millas propuesta incluiría nuevas estaciones cerca de 103rd Street, 111th Street, Michigan Avenue y 130th Street. Cada estación nueva incluiría instalaciones de autobuses y estacionamiento. Este proyecto es parte del Programa Rojo a la Vista para expandir y mejorar la Línea Roja completa.

El proyecto de RLE reduciría el tiempo que tarda ir y venir del trabajo para los residentes, mejoraría la movilidad y accesibilidad y proporcionaría conexiones a otros métodos de transporte. El proyecto de RLE también podría fomentar el desarrollo económico. Además, las estaciones nuevas podrían desempeñar una función catalizadora para la revitalización del vecindario y ayudar a revertir décadas de falta de inversión en el área del proyecto. El proyecto de RLE también proporcionaría un patio moderno eficiente para el almacenamiento de trenes y taller de reparaciones.

Para el año 2030,

se espera que 42,000 viajeros

tomen la expansión de la Línea Roja todos los días de semana.

Entre el 2005 y el 2010, el tiempo que tarda ir y venir del trabajo era, en promedio, 20 porciento más largo para aquellas personas que viven actualmente en el área donde la expansión de la Línea Roja prestaría el servicio, en comparación con otras personas que van y vienen del trabajo en la región de Chicago.

La expansión de la Línea Roja

ahorraría a la persona promedio que va y viene del trabajo en las comunidades afectadas por este proyecto

87 horas por año.

Propósito y necesidad del proyecto

El propósito del proyecto de RLE es el siguiente:

- Reducir el tiempo que tarda ir y venir del trabajo para los residentes en el área del proyecto y al sur del proyecto.
- Mejorar la movilidad y la accesibilidad para los residentes que dependen del transporte público en el área del proyecto.
- Mejorar el servicio de transporte en tren rápido a áreas aisladas y proporcionar enlaces viables entre viviendas económicas (por ejemplo, el proyecto de vivienda pública Altgeld Gardens), empleos, servicios y oportunidades educativas, todo lo cual mejora la habitabilidad y la vitalidad del vecindario.
- Proporcionar una oportunidad para conexiones potenciales y enlaces con otros métodos de transporte público, entre otros, el servicio de tren regional para ir y venir del trabajo en el área del proyecto.
- Fomentar el desarrollo económico en el área del proyecto donde estaciones nuevas podrían desempeñar una función catalizadora para revitalizar el vecindario y ayudar a revertir décadas de falta de inversión en los distritos de negocios locales.
- Proporcionar un patio de almacenamiento moderno y eficiente y un taller de reparación de trenes que proporcionen almacenamiento y prevención y mantenimiento costo-efectivo para los trenes relacionados con el proyecto de RLE, los trenes que actualmente están almacenados en el patio y taller de reparaciones de 98th Street existentes y los trenes que apoyan el servicio adicional de la expansión de la Línea Roja.

Las condiciones existentes a continuación demuestran la necesidad del proyecto de RLE:

- Los viajes en transporte público a los lugares de empleo son más largos para los residentes del área del extremo sur que aquellos para los pasajeros en la región de siete condados de Chicago en su conjunto.
- Las poblaciones que dependen del transporte público en el área del proyecto tienen acceso directo limitado al servicio de tren rápido.
- El área del proyecto está aislada geográficamente de los centros principales de actividad y proporciona a los residentes opciones de transporte viables limitadas, lo cual limita el acceso entre las viviendas económicas (por ejemplo, el proyecto de vivienda pública de Altgeld Gardens) y centros de empleo fuera del área del proyecto.
- Los mercados de transporte público existentes están marginados y la conectividad con el transporte público es un desafío en el área del proyecto.
- La falta de inversión y el desarrollo económico limitado en el área del proyecto han afectado negativamente las comunidades en el área del extremo sur.
- El patio de 98th Street existente no tiene la capacidad para almacenar trenes para ningún aumento sustancial en la capacidad de la Línea Roja que acompañe la expansión de la Línea Roja en el futuro.

Proceso de Declaración de Impacto Ambiental (DIA)

La Ley de Política Ambiental Nacional de 1969 (National Environmental Policy Act, NEPA) es una ley federal que exige que se considere el impacto ambiental antes de aprobar cualquier proyecto financiado con fondos federales que pueda tener un impacto significativo sobre el ambiente o donde todavía no se haya determinado el impacto.

El propósito del borrador de la DIA es estudiar, en un entorno público, el efecto del proyecto propuesto y sus alternativas de calidad del ambiente físico, humano y del ambiente natural. El análisis evalúa la medida en que el proyecto propuesto afectaría estas áreas de recursos. También se identificarán las medidas que deben evitarse, minimizarse y mitigarse, y el impacto adverso potencial.

Después de la revisión pública del borrador de la DIA, CTA y FTA realizarán actividades de ingeniería y análisis adicionales, y prepararán la DIA final. La DIA final incluirá y atenderá todos los comentarios recibidos durante el periodo de comentarios del público sobre el borrador de la DIA. La DIA final y el registro de la decisión documentarán los resultados del proceso de borrador de la DIA, confirmarán si se seleccionará la opción del este o del oeste e incluirán una lista de las medidas de mitigación finales comprometidas.

Proceso de desarrollo de alternativas

CTA comenzó a desarrollar las alternativas que se están estudiando en el borrador de la DIA durante el análisis alterno que se llevó a cabo del 2006 al 2009. Comenzando con múltiples métodos y opciones de corredores, CTA desarrolló y evaluó alternativas mediante una combinación de ingeniería conceptual, insumo público (casas abiertas y reuniones con las partes interesadas) y el análisis preliminar de impactos y costos potenciales. La Junta de Transporte Público de Chicago designó la alternativa UPRR como la alternativa preferida local el 12 de agosto de 2009.

Como parte de los preparativos para el borrador de la DIA y según los resultados del análisis de alternativas, CTA evaluó las alternativas y opciones a continuación entre el 2012 y el 2014:

- Alternativa de no construcción
- Alternativa de transporte rápido en autobús
- Alternativa de transporte en tren de Union Pacific Railroad Rail (UPRR)
  - Opción de derecho de paso
  - Opción del este
  - Opción del oeste
- Alternativa de tren Halsted

En agosto de 2014, con base en el análisis técnico y el insumo del público hasta ese momento, CTA anunció la alternativa preferida de NEPA, es decir, la alternativa de UPRR. Debido a que la opción de derecho de paso no es viable, el borrador de la DIA evalúa solo las opciones del este y del oeste para la alternativa de UPRR. El borrador de la DIA resume los beneficios ambientales e impacto de la alternativa de no construcción y las otras dos opciones de alternativas de UPRR.

Alternativa de no construcción

La alternativa de no construcción es una alternativa requerida como parte del análisis ambiental de NEPA y se usa con fines de comparación para evaluar los beneficios relativos e impacto de la implementación de la alternativa de UPRR. La alternativa de no construcción representa las condiciones futuras si no se implementa la alternativa de UPRR. No se construiría ninguna infraestructura nueva como parte del proyecto de RLE.

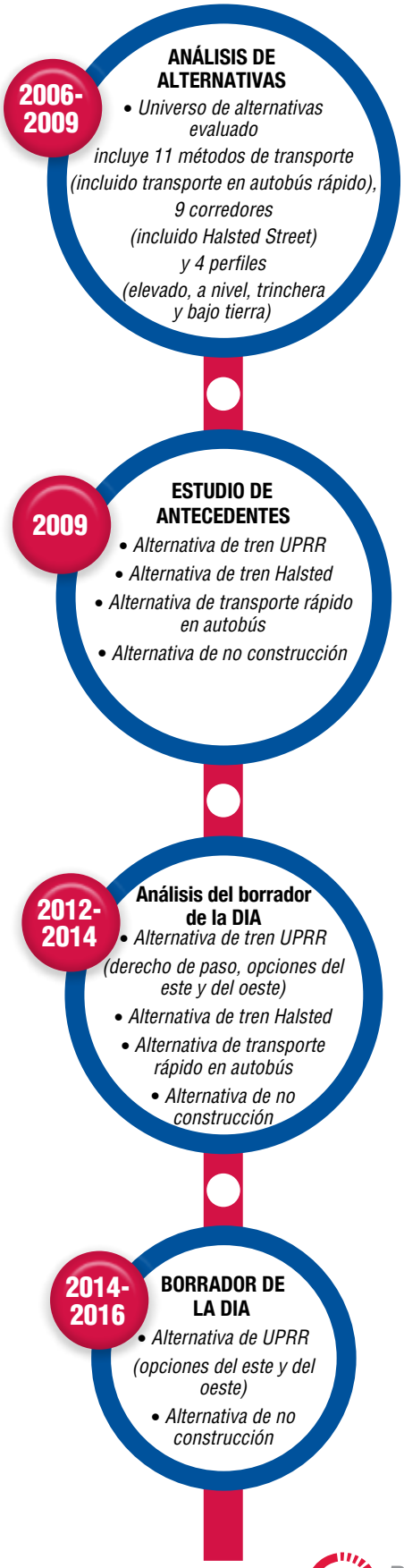

Alternativa preferida local
Alternativa de Union Pacific Railroad

La alternativa de UPRR propuesta expandiría la línea pesada de transporte en tren desde la terminal existente en la Línea Roja en 95th Street hasta 130th Street. La alternativa de UPRR operaría en una estructura elevada en dirección sur desde 95th Street a lo largo del expreso I-57 por casi media milla hasta llegar al corredor de UPRR cerca de Eggleston Avenue. La alineación luego viraría hacia el sur a lo largo del corredor de UPRR hasta aproximadamente 111th Street donde viraría hacia el sudeste. Al este del sur de Prairie Avenue, la alineación cruzaría sobre los rieles de Canadian National/Metra Electric cerca de 119th Street, donde haría una transición a un perfil a nivel y luego continuaría hacia el sudeste a lo largo del derecho de paso de Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) usando parte de la red ferroviaria de Norfolk Southern y los derechos al paso de Consolidated Rail Corporation terminan en 130th Street.

La alternativa preferida local incluiría las siguientes características:

- Expansión de la línea de transporte pesado de 5.3 millas desde la terminal en 95th Street hasta 130th Street.
- Cuatro estaciones nuevas en 103rd Street, 111th Street, Michigan Avenue y 130th Street.
- Nuevas instalaciones de estacionamiento (park & ride) y terminal de autobuses en cada estación.
- El servicio de transporte en autobús a las estaciones nuevas para viajes más rápidos al centro de la ciudad Chicago.
- Nuevo patio y taller de reparaciones en 120th Street.

El borrador de la DIA estudiará dos opciones de alineación:

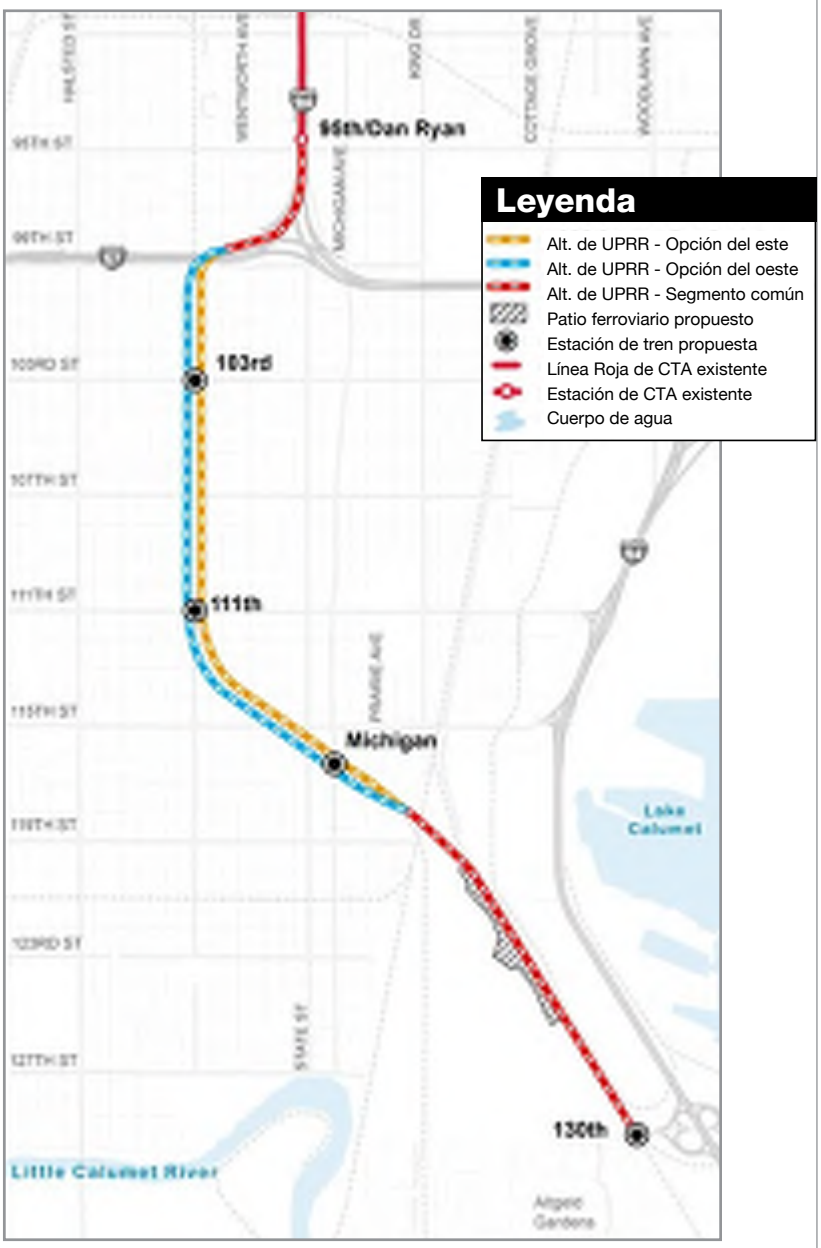

Opción este

Conforme a esta opción, la estructura elevada de CTA se colocaría justo al este del derecho de paso de la vía ferroviaria de Union Pacific desde 99th Street hasta 118th Street.

Opción oeste

Conforme a esta opción, la estructura elevada de CTA se colocaría justo al oeste del derecho de paso de la vía ferroviaria de Union Pacific desde 99th Street hasta el norte de 118th Street.

El alineamiento propuesto de la línea de transporte rápido sería el mismo para las dos opciones, este y oeste, desde 95th Street a 99th Street y desde 118th Street a 130th Street.

Simulación en fotografía de la opción del oeste a lo largo de Eggleston Avenue y Fernwood Parkway en dirección sur hacia 103rd Street

Simulación en fotografía de la opción del este en 103rd Street en dirección noroeste

Simulación en fotografía de la opción del este en 111th Street en dirección oeste

Resumen de beneficios e impacto

Los posibles beneficios e impactos ambientales se describen en los Capítulos 3 - 8 del borrador de la DIA y se resumen a continuación.

Transporte (Capítulo 3)

Tanto las opciones del este y del oeste no tendrían impactos adversos sobre el transporte después de la mitigación. Los pasajeros del transporte público se beneficiarían del acceso mayor al transporte público, tiempos de viajes más rápidos, menor congestión en la terminal de 95th Street y el servicio de tren directo, y las posibles conexiones con el tren interurbano regional. De acuerdo con las opciones del este y del oeste, el impacto adverso sobre el tráfico sería en quince intersecciones en el área del proyecto antes de la mitigación. Las posibles medidas de mitigación incluyen ajustar el momento en que cambie la señal de tránsito y la instalación de tecnología de detección de tránsito para proporcionar fases de señales verdes en las respuestas a la presencia y volumen del tránsito. Los impactos no serían adversos después de la mitigación. Los peatones se beneficiarían de

intersecciones mejoradas adyacentes a las estaciones con rampas accesibles en cumplimiento con la ADA y el reemplazo de aceras deterioradas. La opción del este resultaría en impactos de seguridad sobre los peatones en las estaciones de 103rd Street, 111th Street y Michigan Avenue porque los pasajeros necesitarían cruzar los rieles activos de UPRR para obtener acceso a las instalaciones de estacionamiento en la estación. Las posibles medidas de mitigación incluyen señales de tránsito (de ameritarse), cámaras de vigilancia, notificación de alarmas (luces azules parpadeantes), iluminación de aceras en las áreas aledañas, tratamientos para el cruce de peatones (divisiones de refugio con señales adecuadas) y patrullaje de la policía.

En el 2014 y el 2015, CTA refinó la alineación del proyecto a lo largo de I-57 al mover una porción de la alineación al paseo del expreso, lo cual reduciría los impactos al tránsito. Sin embargo, la construcción en el derecho de paso de I-94 e I-57 requeriría el cierre temporal de carriles. Debido a que las operaciones de carga de UPRR todavía estarían activas en el derecho de paso de UPRR durante la construcción de cualquiera de las operaciones, CTA necesitaría mover los dispositivos de señales o instalar señales temporales para reemplazar las señales existentes durante la construcción de los viaductos. Debido a que la opción del oeste cruzaría los rieles de carga en dos lugares, la construcción en el cruce se haría por etapas para minimizar el impacto sobre las operaciones de carga.

Uso de terreno y desarrollo económico (Sección 4.1)

Las instalaciones de estacionamiento y viaje propuestas en las estaciones de 103rd Street, 111th Street y Michigan Avenue, así como la subestación justo al norte de Michigan Avenue, tanto para la opción del este como la del oeste, no serían constantes con el uso de los terrenos adyacentes, pero no crearía un impacto adverso después de la mitigación. La estructura de estacionamiento propuesta en la estación Michigan Avenue tendría tiendas en el primer nivel y espacio para instalaciones comunitarias, lo cual ayudaría a compensar el uso del terreno y el impacto económico de los desplazamientos. Las opciones del este y del oeste podrían impulsar la revitalización económica y el desarrollo de comunidades más habitables que apoyen el transporte público cerca de las estaciones propuestas. La Agencia Metropolitana de Planificación de Chicago declara que el proyecto de RLE aumentaría el acceso a empleos; el acceso a empleos a 1 hora o menos de la estación 111th Street propuesta aumentaría en un 56%.

El proyecto de expansión de la Línea Roja proporcionaría

mejor acceso del transporte público

a viviendas económicas, trabajos, servicios y oportunidades educativas.

Esto mejora la habitabilidad y la vitalidad del vecindario.

Resumen de beneficios e impacto

Desplazamientos (Sección 4.2)

La opción del este afectaría 260 parcelas (106 edificios) y la opción del oeste afectaría 205 parcelas (46 edificios). La opción del este desplazaría principalmente residencias unifamiliares (no apartamentos). La opción del oeste desplazaría más propiedades comerciales e industriales, pero, en general, menos opciones que la opción del este.

Como todas las actividades de construcción ocurrirían dentro del derecho de paso de la carretera o en terrenos adquiridos para el derecho de paso permanente, taller de reparaciones en el patio e instalaciones de estacionamiento (park & ride), no habría ningún desplazamiento o impacto de reubicación temporal relacionado con la construcción para ninguna de las opciones. Los dueños y arrendatarios desplazados permanentemente serían compensados y reubicados conforme a la Ley Uniforme y las guías de FTA. La Ley Uniforme exige que los servicios de reubicación y los pagos estén disponibles para residentes, negocios y organizaciones sin fines de lucro desplazados como resultado directo de cualquier proyecto administrado por una agencia federal o con ayuda financiera federal que califiquen.

Vecindarios y comunidades (Sección 4.3)

Tanto las opciones del este como las del oeste tendrían impactos adversos permanentes sobre el carácter y cohesión de la comunidad en Roseland y West Pullman debido a los impactos visuales adversos creados por la estructura de los rieles y las estaciones. Los pasajeros se beneficiarían de la movilidad mejorada con tiempos de viaje más cortos y acceso mayor a los recursos de la comunidad en el área del proyecto. La nueva expansión de rieles facilitaría el acceso a los recursos de la comunidad cerca de las ubicaciones de las estaciones. La opción del este afectaría tres recursos de la comunidad y la opción del oeste también afectaría tres recursos de la comunidad. Los impactos sobre estos recursos de la comunidad no serían adversos después de la mitigación. La construcción introduciría los impactos visuales, de ruido y polvo temporales e intermitentes, los cuales causarían mayor tránsito de camiones y requerirían cierres y desvíos temporales en las calles. El acceso a los negocios podría limitarse temporalmente de manera intermitente. Los impactos de la construcción no serían adversos después de la mitigación.

Impactos visuales (Sección 4.4)

Tanto las opciones del este como las del oeste introducirían impactos visuales adversos permanentes y nuevos elementos visuales a áreas a la vista de la estructura de los rieles y de las estaciones. La opción del este crearía un impacto visual adverso al norte de I-57 y en la intersección de 117th Street y Prairie Avenue debido al cambio en el entorno visual como resultado de la altura de la estructura de rieles elevada. La opción del oeste crearía un impacto visual adverso al norte de la I-57, entre 99th Street y 103rd Street, cerca de la estación de 103rd Street, y en las instalaciones de estacionamiento (park &

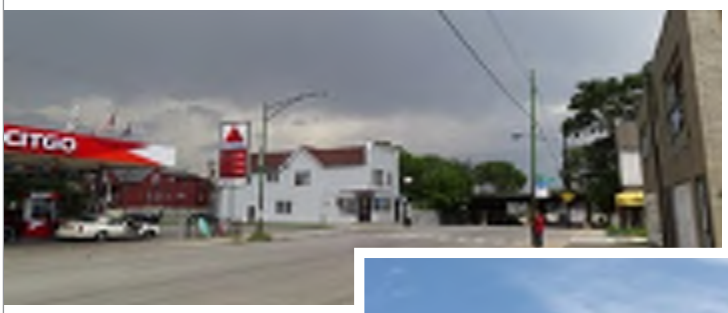

Condiciones existentes

Opción del oeste Estación y estructura de estacionamiento de Michigan Avenue mirando hacia el noroeste a lo largo de Michigan Avenue

Simulación en fotografía

Resumen de beneficios e impacto

ride) de la estación de Michigan Avenue debido al cambio en el entorno visual como resultado de la altura de la estructura de rieles elevada, estaciones y estacionamiento. Estos impactos seguirían siendo adversos aun después de la mitigación. Las medidas de mitigación podrían incluir el diseño de jardines (por ejemplo, sembrar árboles más grandes cerca de las estructuras para interrumpir la línea de visión, diseño de jardines de menor escala cerca de las calles para imitar el diseño de los jardines al lado opuesto de la calle) y crear alrededores respetuosos con los peatones. La construcción crearía impactos adversos temporales debido a la zona de trabajo de la construcción.

Ruido y vibraciones (Sección 4.5)

	Receptores sensibles al ruido dentro de un contorno de impacto moderado	Receptores sensibles al ruido dentro de un contorno de impacto severo
Opción del este	574	82
Opción del oeste	738	48

El análisis de ruido estableció fronteras de impacto dentro de las cuales los receptores sensibles (como las residencias) serían afectados por el ruido creado por el proyecto propuesto. Para reducir los impactos de ruido a niveles por debajo de los criterios de impacto del ruido de FTA, CTA construiría una barrera de ruido de aproximadamente 4 pies de altura que proporcionaría una reducción de 10-dBA en el ruido en ambos lados de la estructura de rieles elevada desde la terminal de 95th Street hasta 119th Street. Ningún impacto de ruido moderado o severo se mantendría después de

Barreras de sonido

la mitigación. No se espera que los niveles de ruido de la construcción superen los límites de ruido de construcción recomendados por FTA. El contratista de la construcción usaría las mejores prácticas de gestión de reducción del ruido en la construcción.

Las estructuras de rieles elevadas resultarían en niveles de vibración que estarían por debajo de los criterios de impacto de FTA y no se requeriría ninguna medida de mitigación.

Seguridad (Sección 4.6)

La seguridad se refiere a no sufrir daños que podrían resultar de actos o circunstancias no intencionales. Los actos o circunstancias no intencionales incluirían todos los incidentes dentro del derecho de paso de CTA, como los choques, descarrilamientos, incendios, daños a la propiedad, lesiones y muertes. Un gran número de peatones probablemente cruzará las calles principales cerca de las estaciones de 103rd y 111th Street sin control de tránsito positivo (cruces peatonales marcados o intersecciones señalizadas con conteo para peatones) para llegar a las estaciones propuestas. Esto representaría un impacto adverso sobre la seguridad de los peatones. Los impactos de seguridad permanentes no serían adversos después de la mitigación. Las medidas de mitigación incluirían la instalación de señales de tránsito (si se amerita), cámaras de vigilancia, notificaciones de alarma

Condiciones existentes

Opción del este Estructura de rieles elevada adyacente a la estación de bombeo de Roseland, mirando hacia el sur en Harvard Avenue

Simulación en fotografía

Resumen de beneficios e impacto

(luces azules parpadeantes), tratamientos en los cruces peatonales o la instalación de dispositivos de seguridad pasivos o activos adicionales para mejorar los dispositivos de seguridad existentes en los cruces de grado.

La seguridad también se refiere a no sufrir daños que podrían resultar de actos o circunstancias intencionales, como la criminalidad. Según los datos de las estaciones de tránsito en Chicago y en todo Estados Unidos, con muy poca probabilidad, si alguna, las estaciones nuevas tendrían un impacto sobre la criminalidad en el vecindario. Sin embargo, los estudios de investigación indican que permanecería algún riesgo, particularmente en los vecindarios de bajos ingresos. No habría impactos sobre la seguridad permanentes. No habría impactos sobre la seguridad relacionados con la construcción después de la implementación de las mejores prácticas de gestión de seguridad y construcción.

Recursos históricos y culturales (Sección 4.7)

Se identificaría un efecto adverso sobre un recurso histórico cuando un proyecto alteraría (directa o indirectamente) cualquiera de las características de una propiedad histórica que cumpla con los requisitos para incluirse en el Registro Nacional de Lugares Históricos de una manera que disminuiría la integridad de la ubicación, diseño, entorno, materiales, mano de obra, sentimiento o asociación del recurso. La opción del este tendría “ningún efecto adverso” sobre un recurso (la estación de bombeo de Roseland) y “ningún efecto” sobre otros recursos. La opción del este tendría “ningún efecto adverso” (y no “ningún efecto”) sobre la estación de bombeo de Roseland porque la nueva estructura de rieles aérea estaría ubicada a una distancia de 9 pies de la estación de bombeo de Roseland en el punto más cercano. No sería necesario eliminar el edificio. La opción del oeste no tendría ningún efecto sobre ningún recurso histórico.

Desde el 2012, FTA y CTA han coordinado con la Oficina Estatal de Preservación Histórica y partes consultivas para hablar sobre las propiedades y distritos en el área de efecto potencial que cumplían con los requisitos para añadirse al Registro Nacional de Lugares Históricos, así como posibles efectos del proyecto.

Materiales peligrosos (Sección 4.8)

CTA identificó seis lugares de Gran Preocupación en el envoltorio permanente de la opción del este y seis lugares de Gran Preocupación en el envoltorio permanente de la opción del oeste. La implementación de la alternativa de UPRR podría redundar en beneficios a través de la limpieza o eliminación de materiales contaminados durante la construcción. Las operaciones diarias o actividades de mantenimiento que requieren la remoción de tierra en las áreas contaminadas tendrían el potencial de impacto de materiales peligrosos permanente de derrames accidentales o descargas de materiales peligrosos. Los impactos permanentes y relacionados con la construcción no serían adversos después de la implementación de prácticas estándar y mejores prácticas de gestión.

Humedales (Sección 4.9)

CTA identificó 15 áreas de humedales que suman 15.34 acres de humedales potencialmente afectados en la ubicación de la estación de 130th Street y el patio y taller de reparaciones de 120th Street. La cantidad precisa de humedales afectados se confirmará según el impacto real que se determinará en el diseño final. Si existen humedales jurisdiccionales (humedales reglamentados por el Cuerpo de Ingenieros del Ejército de los Estados Unidos) y no pueden evitarse, CTA proporcionaría mitigación compensatoria. Los impactos en los humedales serían mitigados a través de mitigación compensatoria, de ser necesario. Las áreas de construcción estarían ubicadas fuera de los humedales en la mayor medida posible, pero si hubiera algún impacto temporal, esos humedales serían restaurados después de la construcción.

Impactos indirectos y acumulados (Capítulo 5)

El proyecto de RLE toma en consideración otros proyectos realizados en el pasado, presente y el futuro razonablemente previsible, y será coordinado junto a estos, en el área del proyecto. La implementación de la opción del este o del oeste podría tener como resultado una rehabilitación potencial debido al acceso mayor a empleos, la atracción de nuevos desarrollos cerca de las estaciones de RLE y mejoras generales a la habitabilidad. Las comunidades adyacentes se beneficiarían de los impactos acumulados de otros proyectos planificados y programados en el área del proyecto porque mejorarían el acceso a empleos, lugares de interés y residencias y tendrían como resultado la reducción en las emisiones al aire.

Recursos con impactos limitados o no adversos (Capítulo 6)

La Alternativa de No Construcción y la Alternativa de UPRR, opciones del este y del oeste, tendrían impactos limitados, o ninguno, sobre las siguientes áreas de recursos: calidad del aire, calidad del agua, llanuras inundables, vegetación y hábitat de la vida silvestre, especies amenazadas o en peligro de

Resumen de beneficios e impacto

extinción, geología, suelos y energía. Con base en la naturaleza de estas áreas de recursos, los impactos serían similares para las opciones del este y del oeste.

Justicia ambiental (Capitulo 7)

Justicia ambiental (JA) es el trato justo y la participación significativa de todas las personas independientemente de su raza, color, origen nacional o ingresos. CTA y FTA consideraron el potencial de impactos desproporcionadamente altos y adversos sobre las poblaciones de bajos ingresos y minorías que podrían ser causados por la alternativa de UPRR. El área del proyecto consta en su totalidad de poblaciones predominantemente minoritarias, algunas de las cuales también son de bajo ingresos. Todos los beneficios e impactos del proyecto ocurrirían en estas áreas de minorías y bajos ingresos (poblaciones de JA). Pocos beneficios ocurrirían fuera de las áreas de minorías y bajos ingresos. Por ende, las opciones del este y del oeste tendrían impactos sobre las poblaciones de JA. Sin embargo, ninguno de los impactos sería desproporcionadamente alto y adverso. FTA y CTA han llevado a cabo actividades de difusión y coordinación continua con las comunidades afectadas para identificar las poblaciones de JA, hablar sobre los impactos y beneficios del proyecto y las medidas de mitigación, cuando correspondan.

Parques – Sección 4(f) (Capítulo 8)

Opción del este

Conforme a la opción del este, la esquina noroeste del Parque Wendell Smith y la parcela occidental del Parque Block serían afectados permanentemente. Tanto el Parque Wendell Smith como el Parque Block seguirían ofreciendo espacio del parque después de la implementación del proyecto de RLE, pero el espacio del parque sería reducido. Ambos parques se mantendrían activos durante la construcción con la excepción de la parte superpuesta de los parques.

Opción del oeste

Conforme a la opción el oeste, parte de Fernwood Parkway, desde 99th Street hasta 103rd Street, entre los rieles existentes de UPRR y Eggleston Avenue, sería afectada. Sería necesario cerrar temporalmente la sección superpuesta de Fernway Parkway durante la construcción. Se cerraría a corto plazo el Parque Wendell Smith durante la construcción, pero no habría ningún impacto permanente.

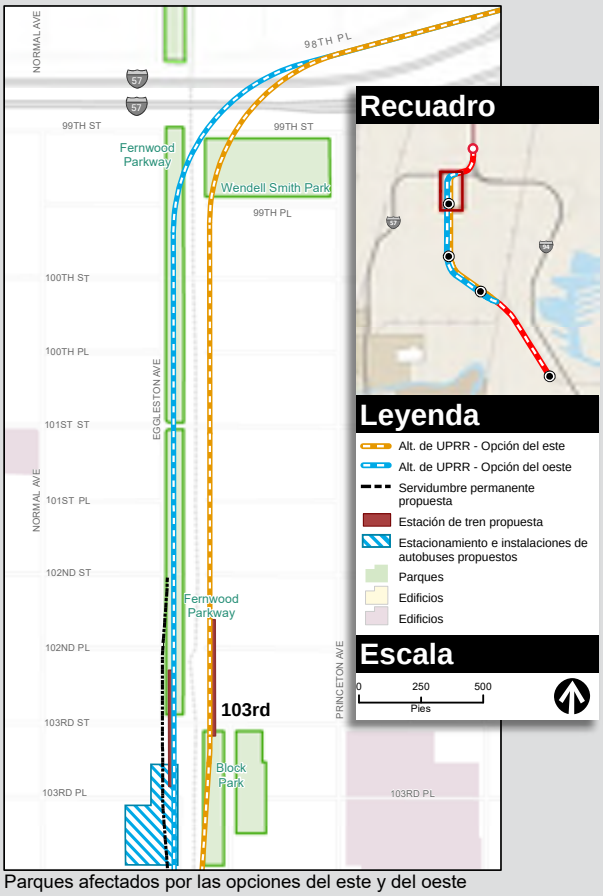

Parques afectados por las opciones del este y del oeste

Cómo atender el impacto sobre los parques

CTA ha trabajado con el Distrito de Parques de Chicago para identificar maneras para minimizar los impactos sobre los parques y, donde sea posible, mejorar el acceso de la comunidad a los parques.

Medidas de mitigación para las opciones del este y del oeste

- Proporcionar nuevos parques de reemplazo en las áreas de la comunidad afectadas o cerca de estas
- Restaurar/diseñar áreas perturbadas en los terrenos de parques afectados
- Incorporar características de diseño que sean consonantes con el contexto en los parques afectados

Medidas de mitigación adicionales para la opción del este en el Parque Wendell Smith

- Proporcionar un campo de béisbol más grande en el Parque Wendell Smith
- Reubicar el campo de béisbol de tamaño menor en el parque de reemplazo
- Reubicar vereda y reemplazar bancos y otros servicios en el Parque Wendell Smith

Medidas de mitigación adicionales para la opción del oeste en el Parque Fernwood Parkway

- Potencial para instalar un nuevo camino para bicicletas debajo de la estructura elevada en los espacios verdes sin usar en Fernwood Parkway

Resumen de beneficios e impacto

Criterios	Alternativa de no construcción	Ferrocarril Union Pacific Opción de alternativa del este	Ferrocarril Union Pacific Opción de alternativa del oeste
Meta 1 - Reducir el tiempo de los viajes			
Duración de viajes entre estaciones[1,2]			
Terminal de 130th Street a 95th Street	28 minutos	14 minutos	14 minutos
130th Street hacia la Estación Jackson (Loop)	58 minutos	39 minutos	39 minutos
¿Servirán las estaciones propuestas comunidades que dependen del transporte público?	No	Sí	Sí
¿Habrá un servicio directo nuevo a Altgeld Gardens?	No	Sí	Sí
Meta 2 - Aumentar las opciones de viajes			
¿Habrá mejor acceso a los centros regionales de empleo y áreas comerciales locales?	No	Sí	Sí
¿Será posible tener conexiones potenciales con otros métodos de transporte público en el área del proyecto?	No	Sí	Sí
¿Se reducirá el aislamiento geográfico?	No	Sí	Sí
¿Cuántas estaciones tendrán instalaciones de estacionamiento (Park & Ride)?	0	4 de 4	4 de 4
Total de espacios de estacionamiento (Park & Ride)	0	3,700	3,700
Meta 3 - Aumentar la competitividad económica			
¿Se alentará el desarrollo en áreas aledañas?	No	Sí	Sí
Meta 4 - Minimizar los impactos ambientales			
Desplazamientos y reubicaciones			
Propiedades	0	260	205
Edificios	0	106	46
Impactos sobre el ruido después de la mitigación	Sin cambio	No adverso	No adverso
Receptores con impactos moderados (antes de la mitigación/después de la mitigación)	0	574 / 0	738 / 0
Receptores con impactos severos (antes de la mitigación/después de la mitigación)	0	83 / 0	49 / 0
Impactos sobre los parques (no adversos después de la mitigación)[3]			
Fase de construcción	0 parques	2 parques	2 parque
Permanente	0 parques	2 parques	1 parque
Permanente (acres)	0 acres	1.6 acres	1.9 acres
¿Habrá impactos sobre el carácter de la comunidad después de la mitigación?	No	Sí	Sí
¿Habrá impactos visuales y estéticos después de la mitigación?	No	Sí	Sí
Meta 5 - Proporcionar el mejor valor			
Viajeros previstos (por cada día de semana)	0	42,000	42,000
Costos capitales[4]	$0	$2.26 mil millones	$2.30 mil millones
Cambio anual en costos de O&M[5]	Sin cambio	+$17.4 millones	+$17.4 millones

N/A = No aplica
1 Fuente: CTA 2009
2 El tiempo que toma viajar entre las estaciones no incluye el tiempo de espera en 130th Street.
3 Basado en el análisis de la Sección 4(f). Los hallazgos están supeditados a un proceso continuo de coordinación.
4 Año de gastos en dólares
5 O&M = Operaciones y mantenimiento. La diferencia de la Alternativa de No Construcción se muestra en dólares para el año 2015.

Participación del público

Las actividades de difusión a la comunidad para el proyecto de RLE comenzaron con el Análisis de Alternativas de 2006, continuaron con el estudio de antecedentes de NEPA en el 2009, y continuarán por medio del borrador de la DIA y las fases finales de la DIA del proyecto. **A la fecha, CTA ha llevado a cabo 10 reuniones públicas para este proyecto. Más de 800 miembros de la comunidad han asistido.** CTA se ha reunido con muchas organizaciones comunitarias y agencias públicas como parte del proceso de planificación, incluida la coordinación relacionada con los recursos históricos (Sección 106). Se proporcionan más detalles sobre el proceso de difusión al público en el Capítulo 10 del borrador de la DIA. CTA seguirá haciendo partícipe y consultando con la comunidad a medida que el proyecto continúe con el diseño y la construcción.

CTA auspiciará una audiencia pública para solicitar comentarios de la comunidad sobre los hallazgos presentados en el borrador de la DIA. Los comentarios recibidos durante el periodo de comentarios del público, incluida la audiencia pública, serán revisados por FTA y CTA, y serán ingresados al registro público. También se aceptarán comentarios escritos en cualquier momento durante el periodo de comentarios públicos mediante correo electrónico a: RedExtension@transitchicago.com y correo de EE. UU. a: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661. Se incluirá en la DIA final un resumen de la audiencia pública y las respuestas a los comentarios recibidos.

Costos y fondos del proyecto

CTA está buscando fondos de una amplia gama de fuentes locales, estatales y federales, incluidos los fondos federales de New Starts, con la ayuda y el apoyo de la comunidad. Los proyectos de New Starts amplían el servicio de tren a áreas que no se encuentran en el radio actual del transporte público y, por ende, conllevan un proceso relativamente más largo de ambiente y planificación. El proceso de New Starts es muy competitivo. CTA tiene que competir contra otros proyectos de New Starts de todo el país que ya están en espera para recibir fondos.

	No construcción	Opción del este	Opción del oeste
Costos capitales[1]	$0	$2.26 mil millones	$2.30 mil millones
Cambio anual en costos de O&M[2]	Sin cambio	+$17.4 millones	+$17.4 millones

1 Año de gastos en dólares
2 O&M = Operaciones y mantenimiento. La diferencia de la Alternativa de No Construcción se muestra en dólares para el año 2015

Pasos siguientes

FTA y CTA revisarán los comentarios recibidos durante el periodo de comentarios del público, realizarán las actividades de ingeniería y análisis requeridos y prepararán la DIA final. A la vez, CTA también solicitará el ingreso a la fase de desarrollo del proyecto de New Starts de FTA. La DIA final incluirá y atenderá todos los comentarios recibidos durante el periodo de comentarios del público sobre el borrador de la DIA. La DIA final documentará los resultados del proceso de borrador de la DIA, confirmará si se seleccionará la opción del este o del oeste e incluirá una lista de las medidas de mitigación finales comprometidas. FTA tiene previsto emitir un solo documento que consistirá de la DIA Final y el Registro de la Decisión, a menos que se determine que las circunstancias, como cambios a la acción propuesta, impactos previstos u otra información nueva, impiden que se emita un documento conjunto.

Luego de terminar la DIA Final y la fase de desarrollo del proyecto de New Starts de FTA, CTA tiene previsto solicitar la fase de ingeniería del proyecto, la cual incluirá el diseño y la ingeniería. Cuando reciba un acuerdo de financiación completa de FTA, el proyecto pasará a la fase de construcción, la cual se espera que dure unos 5 años.

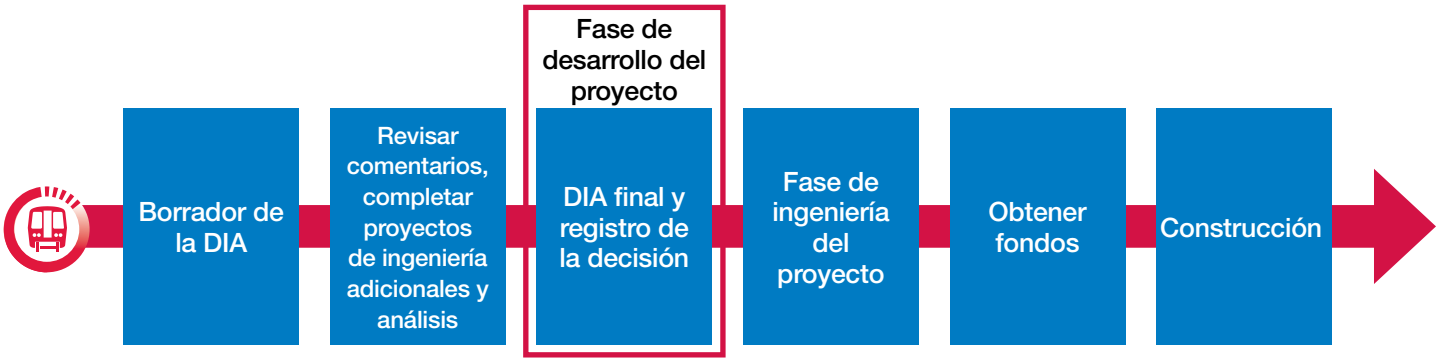

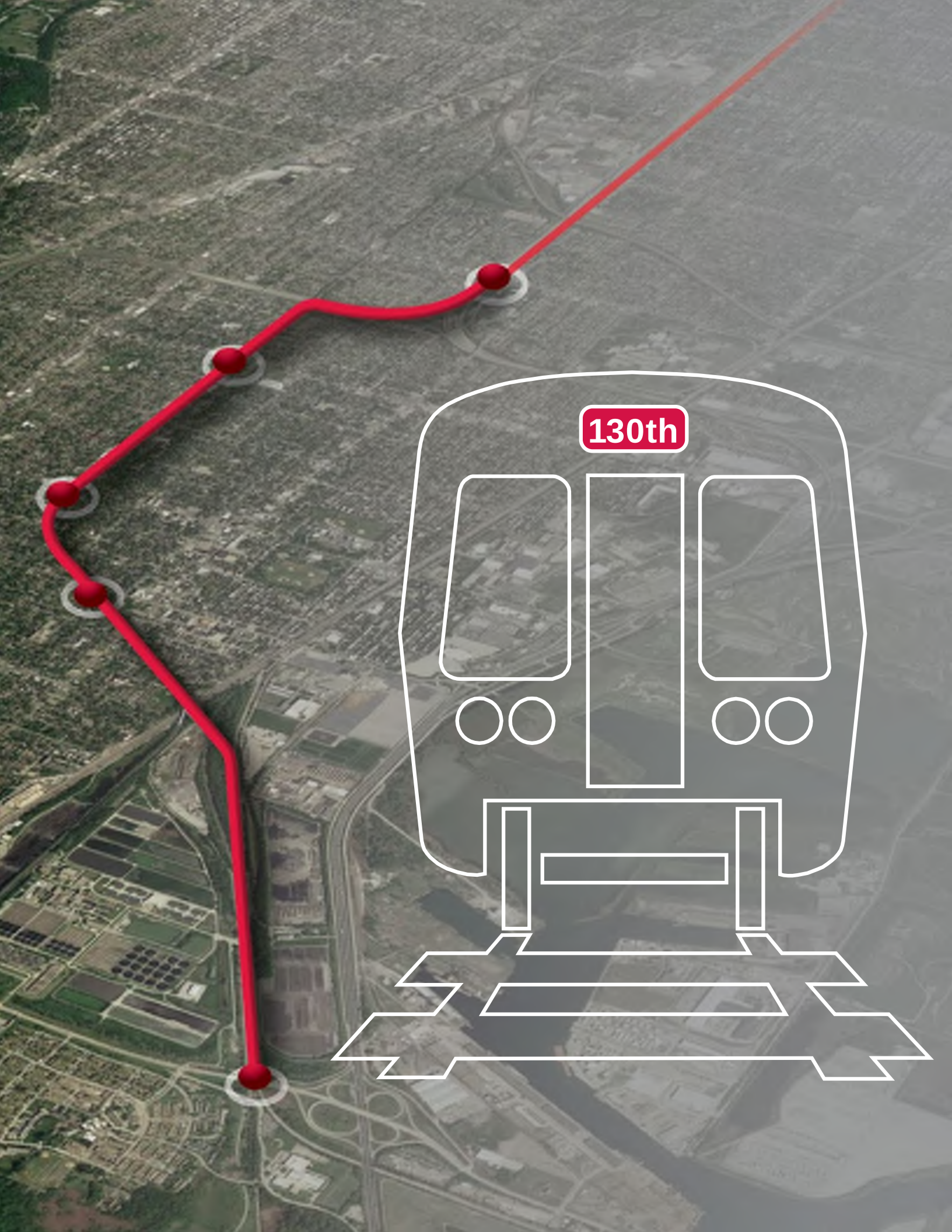
130th

Attachment 3
Draft EIS Publication and Public Hearing Notification Materials

Press Release

Public Hearing Noticing Flyer (English and Spanish)

Display Ad Tear Sheets

Website

Postcard

eBlasts

Transit Alert Card

Search News

- Anti-Harassment Campaign
- Charter a Train
- Courtesy
- Developer Center
- Going Green
- Heritage Fleet
- Open Data
- Performance
- Planning & Expansion
- Press Releases
- Public Art
- Reports & Notices
- System Improvement Projects
- Videos
- Winter Preparedness

Red Line Extension Project to 130th Street Moves Forward; CTA Announces Next Steps in Historic Project as Part of Mayor Emanuel's 'Red Ahead' Transit Investment

9/29/2016

CTA to seek public comment on comprehensive plan to extend rail service to 130th Street and improve transit service on the Far South Side

The Chicago Transit Authority today announced a series of upcoming events that will advance the Red Line Extension Project, a plan to extend Red Line rail service to 130th Street from 95th Street including building four new rail stations that will provide rail access to the Far South Side.

The Red Line Extension Project is a key part of Mayor Emanuel and CTA's "Red Ahead" investment in its busiest rail line. Other projects improving the Red Line on the South Side include the $425 million reconstruction of the Red Line South in 2013 and the ongoing $280 million construction of a new 95th Street Terminal, which will be completed in 2018. The project is expected to create 29,000 new direct, indirect and induced jobs.

"We are pleased to make progress on this transformational Red Line project, which will expand transit for the Far South Side and create faster access to jobs, education and opportunity," said CTA President Dorval R. Carter, Jr. "As we move forward in the comprehensive federally required planning process for this project, we continue to make significant investment in the South Side that include the new 95th Terminal, improved Red and Green Line service and expanded bus service on multiple routes to better serve our customers."

The CTA two years ago narrowed the potential Red Line Extension Project alternatives to one "preferred alternative" with two possible options – one east and one west of the Union Pacific Railroad tracks on the South Side -- and announced $5 million of funding to continue planning work for the project.

Today, the CTA announced the following developments related to the Red Line Extension Project:

- The CTA will publish a comprehensive Draft Environmental Impact Study (EIS), a requirement for obtaining federal funding for this historic project, on October 6, 2016. The Draft EIS is an extensive document that details the potential benefits and impacts of both proposed options for the project.
- The CTA will accept formal comments from the public as part of the federal Draft EIS between October 6 and November 30 (more than 45 days), encouraging feedback from the community about any aspect of the project. The feedback will be used to assist the CTA in future planning decisions, including selecting one of the two alignment options for the project.
- The CTA will also hold a public hearing on Tuesday, Nov. 1 at a location to be determined, inviting the public to learn more about the project, including asking questions and providing comments to CTA staff.
- The CTA will also begin to notify property owners whose property may be necessary to acquire for the project. The CTA is not yet acquiring properties for the Red Line Extension Project because it has not yet selected a final alignment, nor has it secured federal funding for the project.

Quick Links

Schedules | Maps | Alerts | Transit Tracker | Ventra | Fare Info

System Status

Trains:

Red Line	Normal Service
Blue Line	Normal Service
Brown Line	Normal Service
Green Line	Normal Service
Orange Line	Normal Service
Purple Line	Normal Service
Pink Line	Normal Service
Yellow Line	Normal Service

Buses:

Routes with Current Alerts (View All):

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See all Alerts Accessibility

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The RLE project is Mayor Rahm Emanuel and CTA President Dorval Carter's plan to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. The 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street, each of which would include bus and parking facilities. The current estimated cost of the project is $2.3 billion.

Proposed alignment options for Red Line extension

In August 2014, the CTA narrowed the list of extension alternatives to one "preferred alternative" with two variations:

- Union Pacific Railroad Rail (UPRR) Alternative, East Option - Under this option, the CTA elevated structure would be placed immediately east of the Union Pacific Railroad right-of-way from 99th Street to 118th Street.
- Union Pacific Railroad Rail (UPRR) Alternative, West Option - Under this option, CTA elevated structure would be placed immediately west of Union Pacific Railroad right-of-way from 99th Street to north of 118th Street.

The proposed alignment of the rapid transit line would be the same for the two East and West options from 95th Street to 99th Street and from 118th Street to 130th Street. The Red Line Extension would run along elevated track from 95th Street to approximately 119th Street, where it would transition to at-grade tracks.

The CTA arrived at these options based on environmental analysis and comments received at the public open house meeting and public comments submitted in 2014.

Draft EIS and public comment

The public can review the Draft EIS online at transitchicago.com/redeis starting October 6th. Hard copies will be available at local libraries and CTA headquarters. The Draft EIS provides information about the project, its impacts and mitigations. The public is invited to provide feedback and ask questions.

Hard copies of the Draft EIS will be available at the following locations:

- CTA headquarters, 567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628
- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library, 13281 S. Corliss Avenue, Chicago, IL 60827
- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605

Once the formal review period is complete on November 30, 2016, CTA will review and respond to all the comments received.

Responses to comments will be provided in the Final EIS, which will include the CTA's analysis of the final proposed project alignment.

Outreach to property owners

The CTA will communicate with all potentially impacted property owners via a number of channels:

- Letters will be mailed to every property owner that could be potentially displaced by the project (either the East or West Option). Those letters will also communicate that the CTA is not yet able to make a final determination on which properties will be required to be acquired for the project.
- CTA staff will visit every potentially displaced building.
- Property owners can submit project feedback on the Draft EIS, which will provide addresses of potentially displaced properties, via email, regular mail and at the public hearing.
- CTA will attend meetings as requested by community members and elected officials to share information.
- CTA's web site, transitchicago.com/redeis, will continue to provide project information and updates. The public can also sign up for project update emails by contacting us at RedExtension@transitchicago.com.

Red Line Extension Project: Next steps

- Based on public feedback, environmental review and funding availability to conduct additional engineering work, CTA anticipates announcing the preferred option for the location of the extension of the project in 2017.
- Depending on funding availability and federal regulatory approvals, CTA anticipates publishing a Final EIS by the end of 2018, which will provide a comprehensive analysis of the project's impacts.
- Once CTA has completed the Final EIS process, as required by the federal government before it would provide federal funding for the project, CTA could then begin the process of securing funding, which is expected to include a mix of federal and local funds. That could include the creation of a special transit-only tax-increment financing district, authorized by the General Assembly in June 2016, which could provide local funding for the Red Line Extension Project.

###

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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

You are invited to a Public Hearing on the

Red Line Extension Project

Draft Environmental Impact Statement (EIS) and Section 4(f) Evaluation

CTA and Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street.

When and Where?

Tuesday, November 1, 2016
5:30 – 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street
Chicago, IL 60628

This location served by CTA Bus #34, #115, #119, and Metra Electric Kensington Station.

This facility is accessible to people with disabilities.

This meeting will be conducted in an open house format. Comments on the Draft EIS may be made verbally to a court reporter or in writing during the public hearing.

Draft EIS Available for Public Review

CTA and FTA have prepared a Draft EIS based on the technical analysis of impacts of the proposed project. The Draft EIS documents the benefits and impacts of the alternatives being considered, which include impacts to parks and wetlands.

The Draft EIS is available for public review and comment from **October 6 to November 30, 2016**. The Draft EIS is available on the RLE Project website **(transitchicago.com/RedEIS)**. Hard copies of the Draft EIS are available at the following locations during the public review period:

- **CTA Headquarters**
  567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- **Pullman Public Library**
  11001 S. Indiana Avenue, Chicago, IL 60628
- **West Pullman Public Library**
  830 W. 119th Street, Chicago, IL 60643
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- **Calumet Park Public Library**
  1500 W. 127th Street, Calumet Park, IL 60827
- **Harold Washington Library Center**
  400 S. State Street, Chicago, IL 60605

Comments on the Draft EIS are being accepted from October 6 to November 30, 2016.

Comments on the Draft EIS may be made verbally to a court reporter or in writing during the public hearing. You can also submit comments via email to RedExtension@transitchicago.com or by mail to **Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.**

Do you require assistance?

If you require an interpreter, including sign language services, or other accommodations at this public hearing, contact **Gerald Nichols**, **CTA Government and Community Relations**, at least 5 days before the pubic hearing at **312-681-2710** or GNichols@transitchicago.com. Para más información en Español, llame al **312-681-2710**.

RedExtension@transitchicago.com
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RED AHEAD
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Red Line Extension

Está invitado a una audiencia pública sobre el

Proyecto de expansión de la Línea Roja

Borrador de Declaración de Impacto Ambiental (DIA) y Evaluación de la Sección 4(f)

CTA y Federal Transit Administration (FTA) proponen expandir la Línea Roja 5.3 millas de 95th Street a 130th Street.

Fecha y lugar

Martes, 1 de noviembre de 2016
5:30 – 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street
Chicago, IL 60628

Este local dispone del servicio de autobuses de CTA #34, #115, #119 y Metra Electric Kensington.

El local es accesible a las personas con discapacidades.

Esta reunión se llevará a cabo en un formato abierto al público. Los comentarios sobre el borrador de la Declaración de Impacto Ambiental (DIA) pueden hacerse verbalmente a un taquígrafo del tribunal o por escrito durante la audiencia pública.

El borrador de la DIA estará disponible para revisión pública

CTA y FTA prepararon un borrador de declaración de impacto ambiental (DIA) con base en un análisis técnico del impacto del proyecto propuesto. El borrador de DIA documenta los beneficios y el impacto de las alternativas objeto de consideración. Esto incluye el impacto a los parques y humedales.

El borrador de la DIA estará disponible para revisión y comentarios públicos del **6 de octubre al 30 de noviembre de 2016.** El borrador de la DIA estará disponible en el sitio web del Proyecto de Expansión de la Línea Roja **(transitchicago.com/RedEIS)**. Copias impresas del borrador de la DIA estarán disponibles en los siguientes lugares durante el plazo de revisión pública:

- **Sede de la CTA**
  567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- **Pullman Public Library**
  11001 S. Indiana Avenue, Chicago, IL 60628
- **West Pullman Public Library**
  830 W. 119th Street, Chicago, IL 60643
- **Altgeld Public Library**
  13281 S. Corliss Avenue, Chicago, IL 60827
- **Woodson Regional Public Library**
  9525 S. Halsted Street, Chicago, IL 60628
- **Calumet Park Public Library**
  1500 W. 127th Street, Calumet Park, IL 60827
- **Harold Washington Library Center**
  400 S. State Street, Chicago, IL 60605

Se aceptarán comentarios sobre el borrador de la DIA desde el 6 de octubre hasta el 30 de noviembre de 2016.

Los comentarios sobre el borrador de la Declaración de Impacto Ambiental (DIA) pueden hacerse verbalmente a un taquígrafo del tribunal o por escrito durante la audiencia pública. También puede enviar comentarios por correo electrónico a RedExtension@transitchicago.com o por correo postal a **Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.**

¿Necesita ayuda?

Si necesita un intérprete, incluidos los servicios de lenguaje de señas, u otras adaptaciones durante esta audiencia pública, comuníquese con **Gerald Nichols, Relaciones entre el Gobierno y la Comunidad de CTA,** por lo menos 5 días antes de la audiencia pública al 312-681-2710 o GNichols@transitchicago.com. Para más información en español, llame al 312-681-2710.

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RED AHEAD

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Red Line Extension

You are invited to a Public Hearing on the

Red Line Extension Project

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cta

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- Via US mail: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661

All comments must be submitted by 4:30 p.m. on Wednesday, November 30, 2016.

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ANTHONY SOUFFLE/CHICAGO TRIBUNE

An individual called 911 after seeing a boy in a diaper running near this South Side high-rise.

Charges: Mom locked up son, repeatedly beat him

Boy, 7, found with multiple injuries, prosecutors say

By Steve Schmadeke
Chicago Tribune

The mother of a 7-year-old boy often kept him locked in a closet, beat him repeatedly over a two-year period and fed him only sporadically, Cook County prosecutors allege.

Prosecutors said a good Samaritan called police after spotting the boy wearing a soiled diaper as he ran Sunday morning outside his family's home in a high-rise condominium near South Lake Shore Drive. The boy was bleeding from a cut over his left eye, authorities said.

A doctor who examined the boy said the child had more physical injuries on his body than the doctor had ever seen on one person, prosecutors said.

The boy's mother, Caroline Woods, 24, was ordered held without bail during a hearing Tuesday at the Leighton Criminal Court Building. The aggravated battery charges alleged she had beaten the boy numerous times over two years with an extension cord, baseball bat and pole.

The state Department of Children and Family Services has launched an investigation into allegations of abuse and neglect involving the mother and boyfriend, according to a DCFS spokeswoman. The child welfare agency did not have prior contact with the family, she said.

Woods

DCFS took protective custody of the 7-year-old boy and his 2-year-old sister on Sunday, the spokeswoman said.

The boy told police he was kept in a closet for prolonged periods, left alone at the residence and "not let out" of the family apartment in the 4800 block of South Chicago Beach Drive, according to court records.

He also reported being held down atop a hot stove and his genitals being burned with a curling iron.

The boy had marks and injuries of varied ages, prosecutors said.

An officer who talked to the boy reported the child appeared malnourished.

He told police he wasn't fed every day and missed many meals. Prosecutors said the boy was fed only protein shakes and cans of okra.

His parents used video cameras installed in the apartment to monitor the boy's movements on their cellphones, the child told police.

Prosecutors said Woods was arrested when she returned home looking for her son after officers were already at the condominium complex.

Attempts to reach Woods' family and neighbors Wednesday were unsuccessful.

When Woods was a teen, her mother died at 46 of natural causes in 2007, court records show, and her maternal grandmother in Country Club Hills was appointed the teen's guardian.

Chicago Tribune's Duaa Eldeib contributed.

sschmadeke@chicagotribune.com

RED AHEAD
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All comments must be submitted by 4:30 p.m. on Wednesday, November 30, 2016.

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Swift & Sons

Leña Brava

Classy commodes

2 Chicago restaurants named Best Restroom finalists

By Morgan Olsen | REDEYE

What makes a trip to the bathroom memorable? Perhaps it's the expensive candles or linen hand towels. Or maybe it's that selfie-approved lighting and patterned-wallpaper backdrop. Regardless of what does it for you in the lavatory department, rest assured that you're not the only one paying attention. Cintas Corp. just announced the 10 finalists for its 15th annual (yes, this is very real and very legit) America's Best Bathroom contest.

Chicago newbies Leña Brava and Swift & Sons, both located in the West Loop, made the list of 10 potty finalists from across the country. Other contenders include Safe House restaurant in Milwaukee, Coca-Cola Park in Allentown, Penn., and Minneapolis-St. Paul International Airport in Minnesota. The finalists were evaluated on cleanliness, visual appeal, innovation, functionality and unique design elements.

Rick Bayless' lauded Leña Brava offers guests a washroom draped in colorful agave-printed wallpaper, while Swift & Sons' restroom channels retro vibes with vault-like brass doors and fixtures, marble sinks and sophisticated tiling.

The winner will receive $2,500 in Cintas products and services to keep their bathroom is tip-top shape, and the public can vote for their favorite restroom at **www.bestrestroom.com/us/** through Nov. 1. Until then, you too can worship at these Chicago ivory thrones.

@MORGANCOLSEN | MCOLSEN@REDEYECHICAGO.COM

MANDEL NGAN/GETTY-AFP

The justices on the Supreme Court is weighing the exact scope of U.S. insider trading laws.

Court seems wary on insider-trade case

Justices appear unlikely to reverse man's conviction

By Sam Hananel
Associated Press

WASHINGTON — The Supreme Court on Wednesday seemed likely to preserve the government's broad power to crack down on insider trading.

Most of the justices suggested during arguments in a closely watched case that insider trading violates the law even if the person supplying corporate secrets to a friend or relative doesn't receive anything of value in return.

The high court is expected to resolve a conflict among lower courts that has raised doubts about the scope of insider trading laws. A 2014 ruling from the federal appeals court in Manhattan threw out the conviction of two hedge fund managers and forced prosecutors to drop charges against several others.

In the current case, the high court is deciding whether to overturn the conviction of Bassam Yacoub Salman, an Illinois man convicted of making investments based on inside information he received from a member of his extended family.

Officials say the free sharing of corporate secrets with friends or relatives is just as damaging to the nation's securities markets as trading inside information for a cash benefit.

Critics say the government has been overzealous and that prosecutions should be limited to insiders who make secret profits from revealing confidential data. But nearly all the justices asking questions Wednesday appeared to agree with the government that passing inside information as a gift to a family member still gives benefits to the person giving the tip.

"You certainly benefit from giving to your family," said Justice Anthony Kennedy. "It ennobles you and, in a sense, it helps you financially because you make them more secure."

Salman earned more than $1.5 million in profits from trading on nonpublic information he received about future health care deals. The source was Maher Kara, Salman's brother-in-law and an investment banker at Citigroup Global Markets.

Kara did not share the information directly with Salman. Rather, he offered it to his own brother, Michael, who then gave it to Salman. But Salman was aware that Kara was the source. Kara pleaded guilty to conspiracy and securities fraud charges.

At issue is how to interpret a 1983 Supreme Court case that said insider trading violates the law when the insider "personally will benefit" from sharing the information. The benefit can be financial — such as a cash reward — but it also applies when an insider offers secrets for free to a relative or friend.

That would seem to apply directly to Salman's case. But the landscape of insider trading law changed two years ago, when the federal appeals court in Manhattan overturned the conviction of hedge fund managers Todd Newman and Anthony Chiasson after finding they were too far removed from inside information to be prosecuted.

The Manhattan court said Newman and Chiasson got their information through a chain of people who didn't have a close personal relationship with them.

The Supreme Court last year declined to take up the government's appeal of the New York case. But Justice Stephen Breyer on Wednesday expressed doubts about the ruling, saying it "is really more likely to change the law that people have come to rely upon."

BUSINESS BRIEFING

From news services

Survey: Jobs report shows fewer hires

U.S. businesses added 154,000 jobs in September, the slowest pace of hiring since April, a private survey found.

Payroll processor ADP said Wednesday that manufacturers cut jobs for the eighth straight month and professional and business services, which includes high-paying jobs such as accountants and engineers, added the fewest jobs in five months.

The modest job gain adds to other recent evidence that hiring is slowing after several years of strong increases. Businesses added 175,000 jobs in August, ADP's report said, and 196,000 in July.

Recent economic data have painted a mixed picture of the economy. Consumer spending slipped in August to its lowest level since March, yet consumer confidence has jumped to a nine-year high.

U.S. manufacturing expanded in September, after contracting in August, according to a survey by the Institute for Supply Management, a trade group. New orders and production jumped, but that survey also found that manufacturers are still cutting jobs.

The ADP data cover only private businesses and often diverge from the official figures. Economists forecast that the government's jobs report, to be released Friday, will show a gain.

ANTONIO PEREZ/CHICAGO TRIBUNE

In its latest menu move, McDonald's plans to buy all of its coffee from sustainable sources by 2020.

McD's to serve sustainable coffee

McDonald's plans to buy all of its coffee from sustainable sources by 2020, the latest salvo in a restaurant-industry battle for consumers who are increasingly concerned about the origins of their food.

The world's largest restaurant company is partnering with Conservation International, joining the environmental group's challenge to transform the coffee industry, which has recently been threatened by climate change and fungal disease.

Last year, just 37 percent of McDonald's coffee was purchased from certified sustainable sources.

Switching its coffee sourcing is part of the burger giant's attempt to spruce up its menu with better ingredients.

Yahoo calls story 'misleading'

Yahoo responded again Wednesday to a report that it scanned incoming email to hundreds of millions of accounts for the U.S. government.

In a carefully worded statement that stops short of a denial, the company said that a Tuesday report by Reuters is "misleading," saying that "the mail scanning described in the article does not exist on our systems."

Reuters reported that Yahoo built custom software for the scans.

Yahoo's latest statement does not say whether it has conducted such email scans in the past, or whether that software might exist outside its systems.

THE BOTTOM LINE

112.58 That's the number of points the Dow Jones industrial average climbed, reaching 18,281.03, Wednesday, on a day when the stock market broke two days of losses. Stocks jumped from the start on a rise in the price of crude oil, with banks joining the rally after a report on the service sector suggested the Federal Reserve may raise interest rates soon. The Standard & Poor's 500 index gained 9.24 points; the Nasdaq composite rose 26.36 points.

AMAZING DIABETES STUDY

Encouraging Study on TYPE II DIABETES Shows the disease CAN BEGIN TO BE REVERSED in as little as 1 WEEK!

A free guide has just been made available to Type II Diabetics detailing an approach that appears to be more powerful than any drug known to modern science. The free diabetic guide explains in plain English how many diabetics have been able to reduce and eliminate their drugs and insulin injections, lose weight without exercise, reduce and eliminate the risk for diabetic complications, restore pancreatic function, and even become non-diabetic. The free guide also reveals rarely used diagnostic testing that is helping doctors understand potential causes of diabetes beyond weight gain, genetics and lack of exercise.

To receive your free report (available while supplies last) call toll free 1-800-775-9467 or go to wwwFoxValleyDiabetes.com

Dr.Joshua Bletzinger, D.C.

RED AHEAD Moving Ahead to a Better Red

Red Line Extension

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cta

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CTA y FTA prepararon un borrador de declaración de impacto ambiental (DIA) con base en un análisis técnico del impacto del proyecto propuesto. El borrador de DIA documenta los beneficios y el impacto de las alternativas objeto de consideración. Esto incluye el impacto a los parques y humedales.

La reunión se llevará a cabo en un formato abierto al público. Los comentarios sobre el borrador de DIA pueden hacerse verbalmente a un taquígrafo del tribunal o por escrito durante la audiencia pública.

cta

Fecha y lugar

Martes, 1 de noviembre de 2016
5:30 – 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street, Chicago, IL 60628

Esta ubicación dispone del servicio de autobuses de CTA #34, #111, #115, #119 y Metra Electric 111th Street (Pullman).

Las instalaciones son accesibles a las personas con discapacidades.

¿Cómo puedo aportar comentarios sobre el borrador de DIA?

Puede aportar comentarios sobre el borrador de DIA en la audiencia pública o enviarlos a más tardar el 30 de noviembre de 2016:

- Por correo electrónico: RedExtension@transitchicago.com
- Por correo postal de EE. UU.: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661

Todos los comentarios tienen que recibirse a más tardar el miércoles, 30 de noviembre de 2016 a las 4:30 p.m.

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CHICAGO CRUSADER 10-08-2016.qxp_Sheriff 9/8/07 2007 10/6/16 6:48 AM Page 2

Boykin says solution to end violence lies in our hands

State police warns of 'killing cycle'

By Chinta Strausberg

Cook County Comm. Richard Boykin said the key to ending this violence in Chicago literally lies in our hands but that government must step up to the plate and provide the resources needed to save these "endangered communities" where violence erupts almost on a daily basis.

"If you put two lions in a cage, eventually one will eat the other," Boykin said. Poverty is the root cause of this violence. He held his fourth "Endangered Communities listening tour" Tuesday at the Cosmopolitan Community Church, 5249 S. Wabash St., in the Washington Park area.

At Boykin's last Tuesday's listening tour held at the Hope Church, 1354 W. 61st St., headed by Rev. Leslie Sanders, Illinois State Police Captain David Byrd, a district commander, warned about Chicago's "killing cycle."

"You have rival gangs or if one kills another and in retaliation they kill somebody, the cycle goes back and forth until somebody decides to not do it again. You need a break in the cycle. It takes somebody to say, 'I'm not going to do that' then let the police do their job," said Byrd.

"That is our job to make those arrests, but if you don't let us do our job, then the cycle goes back and forth between the killings. That is how that number starts to escalate…

Raised in Chicago, Byrd said he has been a police officer since 1989. "I started when I was 21-years-old. I have seen a lot of things go on in this time period, but I've never seen it to this point where you have this retaliation going back and forth between rival gangs, killing from block-to-block…. It's gotten to a point where it is utterly ridiculous."

Byrd said this violence "is not just gangs" pointing to high unemployment, parenting issues. "There are so many things we have to tackle…. It's going to have to be a team effort. We won't be able to do this alone…. We cannot arrest our way out of this situation nor should we want to."

The forum's Masters of Ceremonies were Sonya Blakey, program director and morning show host for Inspiration 1390, and Darryl Dennard, news anchor/producer for WVAZ/-WGCI/WGRB iHeart Media.

Others on the panel were: Rev. Janette Wilson, national senior advisor to Rev. Jesse L. Jackson, Sr., Cook County Comm. Robert Steele, Byrd, Attorney Sodiqa R. Williams, associate vice president, Policy & Strategy for Safer Foundation, Mark Dietzen, outreach coordinator for Senator Mark Kirk, Cherita Logan, district manager for Rep. Danny K. Davis (D-7th), and others.

Saturday, while speaking at the Rainbow PUSH Coalition, Boykin referred to his first listening tour in West Garfield Park. Boykin said over the weekend "a bus carrying a group of 32 kids…a bus driver was caught in gang violence crossfire. He got shot in the face. The bullets grazed his face, but he was successful in pulling the bus over and not allowing any of the children to be injured.

"That is what happens in these communities that are endangered," Boykin said. West Garfield Park he said, has a per capital income rate of less than $12,000 a year, a poverty rate of 40 percent, an unemployment rate of 25.2 percent. "That must not continue. We must lift these communities up."

"When we embarked upon this tour, 2800 people had been shot in the city. Right now the numbers are 3,245 people have been shot in Chicago, 540 people killed already this year alone. That is unacceptable," Boykin said.

When you are traveling on our expressways, you are at risk of being shot in many instances and that is not right."

DR. JANETTE WILSON of Rainbow/PUSH was one of the participants at the third listening tour on September 27th in Englewood.

He said this year alone there have been more than 41 shootings on expressways. "We must make our communities safe. The government has an affirmative obligation to make sure the people are safe in their neighborhoods and safe on the streets… that children can walk down the streets …play in the parks without fear of being shot."

Referring to the upcoming November 8th election, Boykin said, "We've got an important choice in this election. We got one candidate who offers up an urban agenda. We have another candidate who says stop and frisk is a way to get us out of this violence."

Boykin objects to the latter solution that is being pushed by Republican presidential candidate Donald Trump. Without mentioning Trump's name, Boykin said, "That's the wrong choice. The ACLU says that is the wrong choice.

"We have to make sure that we invest in these neighborhoods…in these schools…and our young people. We can no longer afford to disinvest in certain communities and that is how we've gotten to the point where we are today," he said.

"Nobody's going to save us but us. We've got to stop this gun violence. Down with the violence. Nobody can stop this but us. Let's do it," bellowed Boykin.

He also urged the public to attend his next listening tour being held on Thursday, October 13th, 6 p.m. to 8 p.m., at Saint Sabina Church, 1210 W. 78th Place, in the Auburn Gresham community.

COOK COUNTY COMMISSIONER Richard Boykin makes a point at the listening tour.

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CTA and Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street.

CTA and FTA have prepared a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the proposed project. The Draft EIS documents the benefits and impacts of the alternatives being considered, which include impacts to parks and wetlands.

The meeting will be conducted in an open house format. Comments on the Draft EIS may be made verbally to a court reporter or in writing during the public hearing.

cta

When and where?

Tuesday, November 1, 2016
5:30 – 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street
Chicago, IL 60628

This location served by CTA Bus #34, #115, #119, and Metra Electric Kensington Station.

Facility accessible to people with disabilities.

How can I provide comments on the Draft EIS?

Comments on the Draft EIS may be made at the public hearing or submitted through November 30, 2016:

- Via email: RedExtension@transitchicago.com
- Via US mail: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661

All comments must be submitted by 4:30 p.m. on Wednesday, November 30, 2016.

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Proyecto de expansión de la Línea Roja

CTA y Federal Transit Administration (FTA) proponen expandir la Línea Roja 5.3 millas de 95th Street a 130th Street.

CTA y FTA prepararon un borrador de declaración de impacto ambiental (DIA) con base en un análisis técnico del impacto del proyecto propuesto. El borrador de DIA documenta los beneficios y el impacto de las alternativas objeto de consideración. Esto incluye el impacto a los parques y humedales.

La reunión se llevará a cabo en un formato abierto al público. Los comentarios sobre el borrador de DIA pueden hacerse verbalmente a un taquígrafo del tribunal o por escrito durante la audiencia pública.

Fecha y lugar

Martes, 1 de noviembre de 2016
5:30 – 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street, Chicago, IL 60628

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Las instalaciones son accesibles a las personas con discapacidades.

¿Cómo puedo aportar comentarios sobre el borrador de DIA?

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- Por correo electrónico: RedExtension@transitchicago.com
- Por correo postal de EE. UU.: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661

Todos los comentarios tienen que recibirse a más tardar el miércoles, 30 de noviembre de 2016 a las 4:30 p.m.

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AUTORIDAD REGIONAL DE TRANSPORTE
INVITACIÓN PARA LICITACIÓN
NO. 3720R
COMPRA SIN INVENTARIO DE SUMINISTROS DE OFICINA

La Autoridad Regional de Transporte (RTA, por sus siglas en inglés) le invita a presentar una licitación para suministros de oficina. Este contrato será otorgado al licitador receptivo y responsable más bajo.

La RTA ha establecido un Programa de Empresas de Negocios en Desventaja ("DBE", por sus siglas en inglés) de conformidad con las regulaciones del Título 49 de CFR Parte 26 del Departamento de Transporte de los EE. UU., aplicable a todos sus contratos, independientemente de la fuente de financiamiento. La RTA alienta encarecidamente a los proveedores para hacer esfuerzos de buena fe para utilizar DBEs como sub-consultores, subcontratistas, proveedores o socios de empresas conjuntas en este proyecto. Un listado de DBEs certificados que proporcionan servicios o mercancía pertinente puede ser accedido en el sitio web del Departamento de Transporte de Illinois www.dot.state.il.us/ucp/html.

Las preguntas deben presentarse al 7 de octubre de 2016, antes de las 5:00 p.m., y pueden ser enviadas por correo electrónico a Maria Biszewski al correo electrónico biszewskim@rtachicago.org.

Una (1) copia original de su licitación debe ser presentada a la RTA antes de las 11:00 a.m. hora local del 17 de octubre de 2016. Las propuestas presentadas después de la hora y fecha designada serán rechazadas.

La Invitación para licitación está disponible en las oficinas de RTA, ubicadas en 175 W. Jackson Blvd., Suite 1650, Chicago, Illinois 60604-2705, o puede ser descargada en el sitio web de RTA en www.rtachicago.com.

AUTORIDAD REGIONAL DE TRANSPORTE
INVITACIÓN PARA LICITACIÓN
No. 3832
PORTAL DE TRANSPARENCIA CHI-TAP

La Autoridad Regional de Transporte (RTA, por sus siglas en inglés) le invita a presentar una licitación para el Portal de Transparencia Chi-Tap. Este contrato será otorgado al licitador receptivo y responsable más bajo.

La RTA ha establecido un Programa de Empresas de Negocios en Desventaja ("DBE", por sus siglas en inglés) de conformidad con las regulaciones del Título 49 de CFR Parte 26 del Departamento de Transporte de los EE. UU., aplicable a todos sus contratos, independientemente de la fuente de financiamiento. La RTA alienta encarecidamente a los proveedores para hacer esfuerzos de buena fe para utilizar DBEs como sub-consultores, subcontratistas, proveedores o socios de empresas conjuntas en este proyecto. Un listado de DBEs certificados que proporcionan servicios o mercancía pertinente puede ser accedido en el sitio web del Departamento de Transporte de Illinois www.dot.state.il.us/ucp/html.

Las preguntas deben presentarse antes del 14 de Octubre de 2016 antes de las 5:00 p.m., y pueden ser enviadas por correo electrónico a Karen Y. Thurmon a thurmonk@rtachicago.org.

Una copia original de su licitación debe ser presentada a la RTA antes de las 11:00 a.m. hora local del 24 de octubre de 2016. Las propuestas presentadas después de la hora y fecha designada serán rechazadas.

La Invitación para Licitación está disponible en las oficinas de RTA, ubicadas en 175 W. Jackson Blvd., Suite 1650, Chicago, Illinois 60604-2705, o pueden ser descargadas del sitio web de RTA en www.rtachicago.com.

Rafferty

(Continued from page 1)

"I never saw Bob get mad. He was too even-keeled," said close friend Carl Matzelle, of Naperville, who worked with Rafferty for 35 years at 3M, which is most known for products such as Post-It notes and Scotch tape. "I think before he would react to things, he would step back for a moment and just think about what he was going to say or what he was going to do. I've never seen him mad."

Matzelle and Rafferty's wife, Peg, described him as someone who "flew under the radar." However, his community involvement made it difficult for him to not be noticed, and he earned public praise for his efforts.

In the fledgling years of the South Side Irish St. Patrick's Day Parade, Rafferty joined the parade committee, his wife said, and helped organize the event's grand marshals and later served as chairman.

The "high point" of parade day, Peg said, was celebrating Mass at St. Cajetan Roman Catholic Church, the parish where he grew up and remained a member while he and Peg raised four children.

"He loved the parade day," Peg said. "It was a day for our whole family to celebrate the pride in our heritage and the community. It was very, very important to all of us."

As a customer service manager for 3M, Rafferty managed several employees, Matzelle said, and provided valuable advice for Matzelle during tense moments at the office. According to Matzelle, Rafferty saved his job twice by providing a calming influence when Matzelle had reached a boiling point with issues at the company.

The two were great friends, fishing and playing cards together, Matzelle said, and admiration for Rafferty was prevalent throughout 3M, where Rafferty spent his entire professional career before retiring 10 years ago.

"His employees loved him," Matzelle said. "He always tried to do things to benefit his employees. He did things that the company wanted, but he also thought about his employees all the time."

While Rafferty "worked inside for 40 years," his wife said, he developed hobbies that took him outside—and he fell in love with gardening 45 years ago.

He started with flowers and tomatoes, Peg said, and his passion "just blossomed." Beautiful landscaping surrounds the house, with flowers arranged on the family's front porch.

Peg recalled that once, when a new neighbor moved in, the neighbor remarked to a family member that she loved her new home because it provided such a nice view of Rafferty's landscaping.

Peg said such skills made her husband many new friends.

"Walkers from the neighborhood were like regulars," Peg said, "and they would talk gardening as they came through. … He had this little community of gardeners that talked on a daily basis."

Rafferty's home decorating was on display year round, his wife said. Besides summer flowers, in the fall, he arranged hay and corn stalks, and around Christmas, the front of the house became a winter wonderland, with lights and decorations adorning the home, from the second-floor windows to the front yard.

Bob Rafferty's passion for gardening turned the front yard of his Morgan Park home into a gem that earned praise from neighbors and passers-by. An active member of the community, Rafferty was known for his giving spirit and wise, composed personality. He died Sept. 27 at age 71. (photo courtesy of Peg Rafferty)

Last winter, Peg said, a passer-by walked by the home, noticed the Christmas display, then returned with a camera to snap professional photos.

Rafferty's skills were evident throughout the year.

"He was like a man of all seasons," Peg said.

Peg said she met her husband met in 1964 at Red's, a popular Morgan Park restaurant that is now the site of the Beverly Arts Center, when their two groups of friends first met. They remain close today. Many of Rafferty's fellow St. Cajetan Class of 1959 members served as his pallbearers, and many of those friends from that meeting at Red's married each other.

"It was just uncanny," said Peg, who married her husband in 1967. "Everybody is still together."

Rafferty, who was a Br. Rice High School and Loyola University-Chicago alum, also assisted Peg when she worked for former 19th Ward Ald. Ginger Rugai. He became known as the "sign man," Peg recalled, because he was always hammering campaign signs into front yards, no matter if it was so cold that he had to quickly defrost frozen grass to put in the signage.

Rafferty also coached his sons' Little League teams at Kennedy Park, Peg said, and served as a league official.

If there were a need in the community, Peg said, it went to the top of her husband's priority list.

"Anything that he could do, anything that he was asked," Peg said, "he would just be there in a heartbeat."

Funeral services were held Oct. 3 from Donnellan Funeral Home to St. Cajetan Roman Catholic Church. Interment followed at Holy Sepulchre Cemetery.

Rafferty is survived by his wife, Margaret "Peg" (nee Murphy); his children, Colleen (Tim) Nitsche, Matt (Jenny), Bob and Patrick Rafferty; his grandchildren, Kaitlin, PJ, Maggie, Cara, Ryan and Molly; his sister, Joyce, and many nieces and nephews.

The Rafferty Family expressed their appreciation to the ICU staff of Little Company of Mary Hospital.

In lieu of flowers, memorials may be made to Misericordia Heart of Mercy, 6300 N. Ridge Ave., Chicago, IL 60660.

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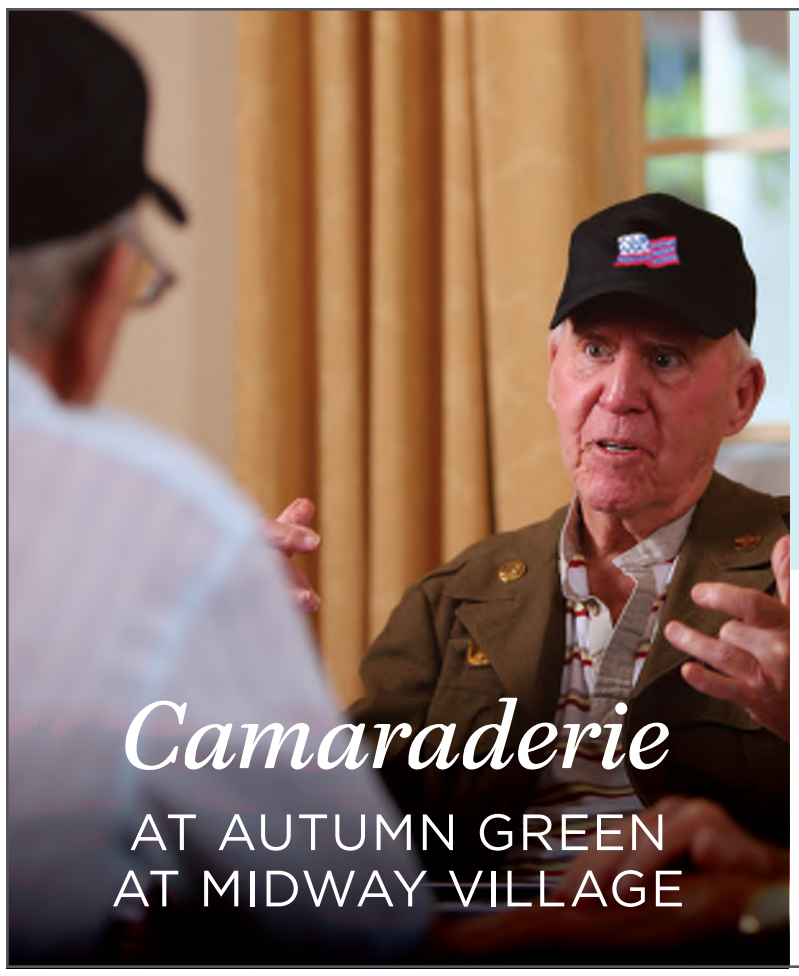

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COMMENTARY

Republicans Willing to Dance with the Devil to Win the White House

Julianne Malveaux

> "The attack on Obamacare is especially problematic. While the president's Affordable Care Act is clearly flawed, it expanded health insurance for more than 20 million people."

By Julianne Malveaux

NNPA Newswire Columnist

House Speaker Paul Ryan (R-Wis.) is anticipating a Trump win in November. Or at least, he is preparing for it. He says that if Republicans hold sway in the White House, the House and the Senate, he plans to use budget reconciliation to repeal the Patient Protection and Affordable Care Act (also known as Obamacare) and give tax cuts to the wealthy. Ryan says he will not even attempt any bipartisanship, as he shoves his regressive agenda down the throats of our people. Instead, he says that he can make it work, especially if he has a Trump White House.

This is, perhaps, why Republicans who appear to have at least a little bit of good sense are going for Trump's nonsense. They know that Trump, with his head in the clouds and his rhetoric in the gutter, will let them get away with anything they want. He will agree to their tax cuts, because they coincide with his agenda to reward the wealthy. Trump will go along with cuts to Obamacare, because he wasn't loving it in the first place. He will let conservative Republicans hold sway, especially if they reward him with their votes in November.

Paul Ryan calls his plan a "Better Way" policy agenda. It is an aggressive move that assumes that Republicans will control both the House and the Senate. They might not – if people vote, and vote down ballot, there is a real chance that Democrats can control the Senate. The House is a much bigger challenge, and it is likely that Republicans will continue to hold sway in the House. But there are too many folks who say they won't vote, and their votes could make a real difference. In Ohio, Wisconsin, Michigan and Florida (among other states), those who choose to refrain from voting are really voting for a Trump-Ryan agenda.

The attack on Obamacare is especially problematic. While the president's Affordable Care Act is clearly flawed, it expanded health insurance for more than 20 million people. It isn't the desired single-payer care, but it provides opportunity and takes the first step in expanding the social contract since the Roosevelt years. The Affordable Care Act can be used as a foundation to expand health insurance coverage and, in my mind, get us closer to the ultimate goal of a single-payer system. But legislators rejected the single-payer plan that Sen. Edward Kennedy (D-Mass.) proposed for decades. The Affordable Care Act is a compromise. We need to move forward in improving the ACA, not backward in repealing it. Trump and Ryan would restrict access to health care instead of expanding it.

Embracing a Racist

According to Politico, Paul Ryan thinks that a divided government contributes to gridlock. He'd be happy if the presidency, the House of Representatives and the United States Senate were all controlled by Republicans. What about the rest of us? Does he see our voice in this? Not according to Ryan. He tells Politico, "I'm tired of divided government. It doesn't work very well." He seems to ignore the fact that there are legitimate differences among legislators and that these differences need to be worked out. He is uninterested in compromise. Instead, he wants to shove his position down the throats of other people.

Paul Ryan has explicitly called Donald Trump a racist. He has eschewed many of his policies. Other Republicans have been openly repulsed by their bellicose standard-bearer and disturbed by his racist bluster and his wacky rhetoric, but they have thrown their discernment to the wind, embracing the man they have described as a rabid racist, because they prefer him to an embrace of integrity.

As we count down to the Nov. 8 election, people are coming forward to say they are either undecided, conflicted, or would rather vote for a third-party candidate, because they can't tolerate Clinton or Trump. The bottom line is that either Clinton or Trump will win the presidency. Really. Those Republicans who support Trump are openly supporting evil. They will dance with the devil to their detriment.

African-Americans, especially, need to look at what Trump has promised. He has promised discrimination. He has described our lives as hell. He has been a bully and a documented discriminator. He has been too much. He should be enough to repel us. Paul Ryan has called Trump a racist, but he is willing to dance with the devil because it serves his purposes. What about you?

Julianne Malveaux is an author and economist. Her latest book "Are We Better Off? Race, Obama and Public Policy" is available via www.amazon.com for booking, wholesale inquiries or for more info visitwww.juliannemalveaux.com

RED AHEAD
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Red Line Extension

You are invited to a Public Hearing on the

Red Line Extension Project

CTA and Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street.

CTA and FTA have prepared a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the proposed project. The Draft EIS documents the benefits and impacts of the alternatives being considered, which include impacts to parks and wetlands.

The meeting will be conducted in an open house format. Comments on the Draft EIS may be made verbally to a court reporter or in writing during the public hearing.

When and where?

Tuesday, November 1, 2016 | 5:30 – 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street, Chicago, IL 60628

This location served by CTA Bus #34, #115, #119, and Metra Electric Kensington Station.

Facility accessible to people with disabilities.

How can I provide comments on the Draft EIS?

Comments on the Draft EIS may be made at the public hearing or submitted through November 30, 2016:

- Via email: RedExtension@transitchicago.com
- Via US mail: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661

All comments must be submitted by 4:30 p.m. on Wednesday, November 30, 2016.

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$13 minimum wage puts $15 within sight

MARK BROWN

I have a very clear recollection of scoffing at a local community organizer a few years ago soon after she'd helped launch a campaign to increase the minimum wage to $15 an hour.

"Never gonna happen," I told her, or something to that effect, failing to appreciate that the audacity of the demand was actually its strength.

That episode has haunted me several times in the years since, as it did again Wednesday when the Cook County Board voted to increase the county's minimum wage to $13 an hour by 2020.

The ordinance will gradually bring suburban Cook County's minimum wage in line with the city of Chicago, which moved two years ago to get to $13 an hour.

That $15 minimum wage no longer seems so far out of reach, not even for those workers still stuck at the Illinois state minimum of $8.25 an hour.

At some point in the not-so-distant future, it will happen.

That will be thanks to a confluence of many factors, but most of all, because of ordinary people who got organized and forced oftentimes reluctant public officials to face the issue of jobs that don't pay enough to live on.

Some of those grass-roots types came from The People's Lobby, which took the bows Wednesday for the county wage hike.

The People's Lobby, which used to be known as IIRON, is a small organization with a mailing list of 5,500 supporters and maybe 500 dues-paying members.

Yet this group spent the past year pressuring county commissioners to approve a far more ambitious proposal called the Responsible Business Act.

The Responsible Business Act would have required any employer or franchisor with more than 750 workers to either pay a minimum wage of $15 or pony up a hefty fee to Cook County, in theory as compensation for the social services that their underpaid workers require from county government.

In other words, it was some real lefty stuff, too far out even for me.

To put its proposal on the county political radar, The People's Lobby became a constant presence at County Board meetings.

Low-paid private sector workers from around the county testified in public and met with individual commissioners in private to enlist their support.

To put pressure on holdout commissioners, the organization arranged for volunteer phone banks to call voters in their district, in turn asking them to contact their commissioners.

Commissioner Robert Steele agreed to sponsor the Responsible Business Act.

But it wasn't getting anywhere until finally somebody proposed a compromise — a minimum wage increase patterned after the city's without any other complications.

Commissioner Lawrence Suffredin sponsored the minimum wage proposal, explaining he couldn't justify why constituents in the southern end of his district in Chicago were making $10.50 an hour while those north of the city border were still at $8.25.

Suffredin nodded to the grass-roots groups such as The People's Lobby and One Northside for putting the issue in front of the County Board and making it happen.

> *Ordinary people got organized and forced oftentimes reluctant public officials to face the issue of jobs that don't pay enough to live on.*

"Settling for $13 is still a large win," said Jessica Cummins, 26, a divinity school graduate student in Evanston. Cummins got involved with The People's Lobby campaign after struggling to pay the bills with a pair of $9-an-hour part-time jobs.

I don't want to oversimplify this. After putting the $15 minimum wage in their national party platform this year, Democrats are under pressure to follow through.

In some ways, the biggest surprise is why it took the county so long to follow suit behind the city.

But the county's higher minimum wage also has echoes of the Occupy movement and the Fight for $15 for fast food workers and all the others who reopened the important conversation about income inequality in America.

It's nothing to scoff at.

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Area firm to partner with Matteson on mall remake

By Mike Nolan
Daily Southtown

A Tinley Park real estate developer will work with the village of Matteson on a plan to redevelop the shuttered Lincoln Mall in that suburb.

The village, in a news release, said Mack Developers Inc. will work with the village to develop a master plan for redevelopment of the property, southeast of the intersection of Cicero Avenue and U.S. 30.

Mack Developers is part of Mack Cos., a residential and commercial real estate firm.

Opened in 1973, the mall closed in January 2015. Its remaining anchor, Carson Pirie Scott, owns its store and remains open for business.

Mack Developers will have up to six months to prepare a redevelopment plan, which would be subject to approval by Matteson's Village Board, said Village Administrator Brian Mitchell.

Ownership of the mall is still in the hands of New York real estate developer Michael Kohan, who bought it for $150,000 at a property tax auction in 2012, Mitchell said. Matteson is still involved in a lawsuit against Kohan regarding the mall's upkeep.

Should Mack Developers' proposal be approved, ownership of the 48-acre site would be transferred from Kohan to the village, which in turn would hand it over to the new developer, Mitchell said.

Matteson would pay Kohan for giving up ownership of the mall, but a dollar amount for the transfer has not yet been set, Mitchell said.

Also, he said the village recently completed the purchase, for $525,000, of Sears Holdings' property at the mall, which includes the retailer's vacant anchor store space and adjacent parking areas. That is southeast of Carson's property.

Not having ownership of Sears' 10-acre piece would create "a pretty big hurdle for a developer" tackling a redevelopment of the overall site, Mitchell said.

In July, a Chicago firm, Hunden Strategic Partners, prepared a market analysis of the property for Matteson. Potential uses suggested in the study include multifamily housing, specifically apartments, and town homes, along with other components, such as a water park or youth sports complex, restaurants, retail and office space.

The village said that any master plan for the property will incorporate the recommendations made in that report, but the percentage of space occupied by any particular use will be refined based on the findings of Mack Developers.

In its study, Hunden estimated the total development budget for the project would be $79 million, and public incentives to induce redevelopment of the property would be about $20 million.

Mitchell said a combination of residential and retail uses would likely be part of any plan ultimately approved by village officials.

How much space is set aside for residential uses and what percentage will be occupied by retail will be determined by what the market can support, he said.

The Hunden analysis noted a dearth of available apartment space in Matteson, which, in part, is keeping millennials from returning to live in the village after college. The firm suggested the site could support up to 125 apartment units and 50 town homes.

Any apartments that would be built "would be market-rate rentals" and a "good product for the community," Mitchell said, adding it was "way too early to say what those price points (rental rates) would be."

Before any redevelopment plan for the property is approved by the Village Board, it will get a full vetting before village residents and other stakeholders in what will be an "inclusive process" to map out the mall's next chapter, Mitchell said.

"We're going to be transparent," he said.

While Mack Developers will have as long as six months to come back with a proposal, Mitchell said it might happen sooner than that. He said a number of developers were interested in partnering with Matteson on the redevelopment project but Mack's local expertise in commercial real estate was a deciding factor.

In an April 2015 news release, Jim McClelland, Mack Cos.' CEO, cited Lincoln Mall as an example of how a mixed-use development could be tailored to fit a community's demographics in redeveloping a moribund mall.

Rather than simply "trying to replace a failed model with more of the same," meaning relying on a retail-heavy reuse of the site, a "community within a community" could be built, noting how other towns have incorporated things such as senior care facilities and youth activity centers in redeveloping failed enclosed malls.

A redevelopment of Lincoln Mall will involve demolishing, with the exception of the Carson store, the remaining empty space of the nearly 1-million-square-foot property. How that happens and who'll pay for it will be questions answered once Matteson settles on a redevelopment plan, Mitchell said.

The mall property is in a tax increment financing district, and TIF funds can be used for things such as demolition and infrastructure work.

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RED AHEAD

Red Line Extension

Red Line Extension Project

Connecting the 95th/Dan Ryan Terminal to 130th Street

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street, subject to the availability of funding. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line .

View the project map.

Project benefits

- Reduces commute times for residents both within and south of the project area.
- Improves mobility and accessibility for transit-dependent residents in the project area.
- Improves rapid transit rail service to isolated areas and provide viable linkages between affordable housing, jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Provides an opportunity for potential connections and linkages to other public transportation modes including regional commuter rail in the project area.
- Fosters economic development in the project area, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.
- Provides a modern, efficient rail car storage yard and shop facility to provide storage and cost-effective preventive maintenance for rail cars associated with the RLE Project, rail cars currently stored in the existing 98th Street Yard and Shop, and rail cars supporting additional Red Line expansion of service.

Get involved and stay informed

Public and agency input is important. This website will keep you informed about the proposed project, the planning process, and opportunities for public input and participation.

System Status

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Blue Line	Normal Service
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Green Line	Normal Service
Orange Line	Normal Service
Purple Line	Normal Service
Pink Line	Normal Service
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If you have any questions related to the Chicago Transit Authority's proposed Red Line Extension, or would like to be added to the project contact list for future updates, please contact us at:

RedExtension@transitchicago.com

Chicago Transit Authority
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Attn: Red Line Extension Project
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Quick Links

- Home
- What's New
- Draft EIS
- Frequently Asked Questions
- Documents Archive
- Preferred Alternative
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What's New?

Mayor Emanuel and CTA announce $75 million investment in Red Line extension

On November 27, 2016, Mayor Emanuel and CTA announced that the CTA Board approved an amendment to its FY2016-FY2020 Capital Improvement Plan to include $75 million in funding for the Red Line Extension (RLE) Project, a plan to extend Red Line rail service to 130th Street from 95th Street that includes four new rail stations on Chicago's Far South Side. (See the full press release)

Draft EIS

CTA and FTA have prepared a Draft EIS based on the technical analysis of impacts of the alternatives. The Draft EIS documents the benefits and impacts of the alternatives being considered, which includes impacts to parks and wetlands.

The Draft EIS is available here. Comments on the Draft EIS were accepted from October 6 to November 30, 2016. Hard copies of the Draft EIS were available at the following locations during the public comment period:

- CTA Headquarters, 567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628
- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library, 13281 S. Corliss Avenue, Chicago, IL 60827
- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605

Draft EIS public hearing and comments

CTA hosted a public hearing to provide information about the Draft EIS and solicit comments from the public at the following time and location:

Tuesday, November 1, 2016
5:30 - 7:30 PM
St. John Missionary Baptist Church
211 E. 115th Street
Chicago, IL 60628

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This meeting was conducted in an open house format. The meeting location was ADA compliant and accessible by public transit. Spanish and sign language interpreters were available during the public hearing.

Comments on the Draft EIS were accepted from October 6 to November 30, 2016, and CTA thanks everyone who submitted a comment. Comments on the Draft EIS could be made verbally to a court reporter or submitted in writing during the public hearing. Comments on the Draft EIS could also be submitted to CTA via email or US mail at any time during the public comment period. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Related

- Press Release: CTA Publishes the Draft Environmental Impact Statement for the Red Line Extension Project
- Notice of Availability for the Draft EIS (English) (Spanish)
- RLE Citizens' Guide (English, English smaller download size) (Spanish)
- RLE Project Overview (English) (Spanish)

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Quick Links

- Home
- What's New
- Draft EIS
- Frequently Asked Questions
- Documents Archive
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Draft Environmental Impact Statement (EIS)

Overview

The National Environmental Policy Act (NEPA) requires evaluation of potential environmental impacts associated with federal projects and actions. In accordance with the NEPA process, the Chicago Transit Authority (CTA) and the Federal Transit Administration (FTA) have prepared a Draft Environmental Impact Statement (EIS) that evaluates the environmental impacts of constructing and operating the proposed project.

Draft Environmental Impact Statement

The Draft EIS was available for public review and comment from October 6 to November 30, 2016. The Draft EIS includes an evaluation of the No Build Alternative and two UPRR Alternative options: the East Option and the West Option. The Draft EIS describes the alternatives, the existing environmental setting, the potential impacts from construction and operation of the alternatives, and proposed mitigation measures to reduce or eliminate potential impacts.

The purpose of the EIS is to study, in a public setting, the effects of the proposed project and its alternatives on the quality of the physical, human and natural environment. The evaluation provides details on the extent to which the proposed project affects these areas. Measures to avoid, minimize, and mitigate potential adverse impacts are also identified.

- Notice of Availability and Public Hearing for the Draft EIS (English) (Spanish)
- RLE Draft EIS (Full pdf) (Accessible version)
- RLE Draft EIS Appendix Documents
  - Appendix A: Alternatives Analysis - Locally Preferred Alternative Report (Accessible version)
  - Appendix B: Scoping Report (Part 1 and 2) (Accessible version parts 1 and 2)
  - Appendix C: Agency Coordination and Public Involvement (Part 1, 2 and 3) (Accessible version parts 1, 2 and 3)
  - Appendix D: Purpose and Need Report (Accessible version)
  - Appendix E: Description of Alternatives (Accessible version)
  - Appendix F: Plans and Profiles (Accessible version)

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- Appendix G: Description of Construction and Phasing for Build Alternatives (Accessible version)
- Appendix H: Transportation Technical Memorandum (Accessible version)
- Appendix I: Construction Impacts Technical Memorandum (Accessible version)
- Appendix J: Land Use and Economic Development Technical Memorandum (Accessible version)
- Appendix K: Displacements and Relocation of Existing Uses Technical Memorandum (Accessible version)
- Appendix L: Neighborhoods and Community Impacts Technical Memorandum (Accessible version)
- Appendix M: Parklands and Community Facilities Technical Memorandum (Accessible version)
- Appendix N: Visual and Aesthetic Conditions Technical Memorandum (Accessible version)
- Appendix O: Noise and Vibration Technical Memorandum (Accessible version)
- Appendix P: Safety and Security Technical Memorandum (Accessible version)
- Appendix Q: Historic and Cultural Resources Technical Memorandum (Accessible version parts 1 and 2)
- Appendix R: Hazardous Materials Technical Memorandum (Accessible version)
- Appendix S: Water Resources Technical Memorandum (Accessible version)
- Appendix T: Cumulative Impacts Technical Memorandum (Accessible version)
- Appendix U: Air Quality Technical Memorandum (Accessible version)
- Appendix V: Biological Resources Technical Memorandum (Accessible version)
- Appendix W: Energy Technical Memorandum (Accessible version)
- Appendix X: Environmental Justice Technical Memorandum (Accessible version)
- Appendix Y: Section 4(f) Replacement Park Analysis Technical Memorandum (Accessible version)

- RLE Citizens' Guide (English, English smaller download size) (Spanish)
- November 2016 Public Hearing Exhibit Boards

How to provide public comments

Comments on the Draft EIS are being accepted from October 6 to November 30, 2016. Comments on the Draft EIS may be made verbally to a court reporter or in writing during the public hearing. You can also submit comments on the Draft EIS via email or US mail at any time during the public comment period.

RedExtension@transitchicago.com

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

Public hearing

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Exhibit boards

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The location of the public hearing is ADA-compliant and accessible by public transit.

If you require an interpreter, including sign language services, or other accommodations at this public hearing, contact Gerald Nichols, CTA Government and Community Relations, at least 5 days prior to the public hearing at 312-681-2710 or GNichols@transitchicago.com. Para más información en Español, llame al 312-681-2710.

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Quick Links

- Home
- What's New
- Draft EIS
- Frequently Asked Questions
- Documents Archive
- Preferred Alternative
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Frequently Asked Questions

- Alternatives
- The UPRR Alternative and Proposed Service
- The NEPA Process
- The Draft EIS: Benefits and Impacts of the RLE Project
- Next Steps

Alternatives

Q: Is CTA still considering alternatives for rail service along Halsted Avenue or other Bus Rapid Transit improvements?
A: No. These alternatives were considered early on in the environmental review process as potential alternatives. These alternatives have been eliminated based on additional technical analysis and public input received. In August 2014, CTA announced that the Union Pacific Railroad (UPRR) Alternative is the NEPA Preferred Alternative.

Q: Previously, CTA was considering using the existing Union Pacific Railroad (UPRR) right-of-way to construct RLE. Is that still under consideration?
A: No. CTA had previously considered an option that would have used the existing UPRR right-of-way for the elevated CTA track structure. This option was added in 2012 in response to the Chicago Department of Transportation feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible. Estimated travel times and ridership were the same for the Right-of-Way Option as for the East and West Options.

Q: For the Locally Preferred Alternative near the Union Pacific Railroad (UPRR) tracks, has CTA talked with Union Pacific Railroad representatives?
A: CTA has had preliminary conversations with UPRR and will continue to coordinate with the railroad as the project moves forward. UPRR requires that the CTA tracks be located at least 50 feet from the existing freight tracks because of safety considerations.

Q: When will CTA make a decision about the UPRR Alternative East or West Option?
A: CTA and FTA prepared a Draft EIS that evaluates the impacts of the East

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System Status

Trains:

Red Line	Normal Service*
Blue Line	Normal Service
Brown Line	Normal Service
Green Line	Normal Service
Orange Line	Normal Service
Purple Line	Normal Service
Pink Line	Normal Service
Yellow Line	Normal Service

Buses:

Routes with Current Alerts (View All):

1 2 3 4 6 7
12 28 36 37 43 49
X49 49B 52 70 73 76
78 85 91 121 126 151
156 157 192

More:

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and West Options as well as the No Build Alterative. CTA accepted public comments from October 6 to November 30, 2016, which will be considered as each option is further evaluated. Based on public feedback, environmental review, and funding availability to conduct additional engineering, CTA expects to announce the selected option (either the East Option or the West Option) in 2017. The Final EIS will be prepared on this single selected option. Depending on funding availability and federal approvals, FTA and CTA expect to publish the Final EIS and Record of Decision by the end of 2018.

The UPRR Alternative and Proposed Service

Q: When would the extended Red Line be open for use?
A: Depending on funding availability and federal approvals, the earliest that the RLE Project is expected to begin construction would be in 2022 and service is anticipated to start in 2026.

Q: What are the proposed operating hours for the Red Line Extension?
A: The operating hours for the proposed extension are anticipated to be the same as for the current Red Line, which operates 24 hours every day of the year.

Q: What portion of the extension would be elevated?
A: The UPRR Alternative would operate on an elevated structure from approximately 95th Street to 118th Street, where it would transition to an at-grade profile and then continue at grade before terminating near 130th Street. The 103rd Street, 111th Street, and Michigan Avenue stations would be elevated, and the 130th Street station would be at-grade.

Q: Will there be places to park near the new stations?
A: Yes, to accommodate passengers arriving at either the East or West Option stations by car, park & ride facilities would be constructed near each station. A total of 3,700 parking spaces would be available along the corridor. The Draft EIS summarizes the proposed park & ride facilities by station and includes potential impacts and mitigations for both the Options.

Q: Why is so much parking needed near the new stations?
A: CTA estimated parking demand based on travel demand modeling performed in 2009. CTA will conduct additional analysis and review of parking needs near stations after public input on the Draft EIS and as part of next phases of project development and engineering.

Q: Would this extension connect to existing Metra Electric or South Shore services?
A: There is potential for connection of the proposed Red Line Extension to the Northern Indiana Commuter Transportation District (NICTD) South Shore Commuter Rail Line in the vicinity of 130th Street, where the two lines would be adjacent to each other. Currently, the NICTD South Shore commuter service does not have a 130th Street station and at this time future plans do not include a 130th Street station. This potential connection will be explored in further detail during the engineering phase. A connection between the Red Line Extension and Metra Electric District at Kensington/115th Street station is not possible because the proposed Red Line Extension routing crosses the Metra Electric District Line approximately ½ mile south of the Kensington/115th Street station.

Q: Is CTA coordinating with Metra on the Red Line Extension Project?
A: Yes, CTA is coordinating with Metra on our progress with the Red Line Extension Project. Metra is a participating agency in the environmental review process for the Red Line Extension Project.

The NEPA Process

Q: What is NEPA?
A: The National Environmental Policy Act of 1969 (NEPA) is a federal law that mandates the consideration of environmental impacts that may have significant impacts on the environment before a project is approved to receive federal funding. The NEPA process provides a decision-making framework to consider the purpose and need for a proposed action, potential design solutions, project costs, and relative benefits of a proposed project.

Q: What is a Draft Environmental Impact Statement, or Draft EIS?
A: A Draft Environmental Impact Statement, or Draft EIS, summarizes potential impacts to the natural environment and community. The Draft EIS describes the potential environmental benefits and impacts of a proposed project, and identifies measures to avoid, minimize, and mitigate adverse impacts. A copy of the Draft EIS is available here.

Typically, environmental reviews for proposed transit projects address the following resource areas:

- Transportation
- Land use and economic development
- Displacement and relocation of existing uses
- Neighborhoods and communities
- Visual and aesthetic
- Noise and vibration
- Safety and security
- Historic and cultural resources
- Hazardous materials
- Air quality
- Wetlands
- Water quality
- Floodplains
- Vegetation and wildlife habitat
- Threatened and endangered species
- Geology and soils
- Energy
- Environmental Justice

The Draft EIS: Benefits and Impacts of the RLE Project

Q: Would CTA need to purchase private property because of the location of the proposed extension?
A: Yes, CTA would need to purchase private property to construct the Red Line Extension. For more information and additional FAQs related to displacements, please see the Potential Displacements page.

Q: How would the proposed extension affect noise in the community?
A: Section 4.5 of the Draft Environmental Impact Statement (EIS) evaluates the potential for noise impacts to the surrounding community. The analysis shows that noise impacts would be mitigated by including welded rail, closed deck structures, and noise barriers as part of the final design of the project.

Q: What are the potential economic benefits or impacts of the proposed extension?
A: Section 4.1 of the Draft Environmental Impact Statement (EIS) evaluates the economic benefits and potential impacts of the proposed extension. As part of the public review of the Draft EIS, the public had the opportunity to review and comment on the analysis. The East and West Options could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations. The Chicago Metropolitan Agency for Planning states that the RLE Project would increase access to jobs; access to jobs within 1 hour of the proposed 111th Street station would increase by 56 percent. CTA estimates that 29,900 direct, indirect, and induced jobs would be created with investment in the Red Line Extension Project.

Q: How would the proposed Red Line Extension affect current CTA services, both during construction of the new service and during operation of the new service?
A: Once the proposed extension is complete, existing bus routes may be changed to complement the new high-capacity transit service. Depending on the specific route of the service, the number of routes feeding into the 95th Street Terminal may be reduced, which would also reduce congestion in and around this facility. More detailed construction schedules will be developed as additional engineering is completed for the project, after the environmental review. CTA's general guidelines minimize the effects of construction on existing transit services; however, bus reroutes are possible.

Q: How does work on the other Red Ahead projects affect progress on the Red Line Extension?
A: The Red Line Extension Project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Ahead Program consists of separate projects with their own separate sources of potential funding and timelines. These projects are mutually beneficial and are combined into the Red Ahead Program to ensure that they are coordinated efficiently.

Q: CTA is renovating the 95th Street Terminal. Would the Red Line Extension be possible after the 95th Street Terminal improvements are complete?
A: Yes, the 95th Street Terminal improvements and the Red Line Extension Project would function together seamlessly to provide improved transit service throughout Chicago's Far South Side. More information: 95th Street Terminal Improvement Project

Next Steps

Q: What are the next steps for the project now that the Draft EIS has been published?
A: FTA and CTA will review the comments received during the public review period for the Draft EIS, complete additional engineering and analyses required, and prepare the Final EIS. The Final EIS will include and address all of the comments received during the public review period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures.

Concurrently with preparation of the Final EIS, CTA will also request entry into the FTA New Starts Project Development phase, which is the proposed federal funding source for this project. The FTA New Starts Program is highly competitive federal funding program, and the RLE Project will be evaluated by the federal government for potential selection into the program.

After completion of the Final EIS and FTA New Starts Project Development phase, CTA intends to apply to the Project Engineering phase, which will include design and engineering. Upon receiving a full funding grant agreement from FTA, the project will move into construction, which is expected to last about 5 years.

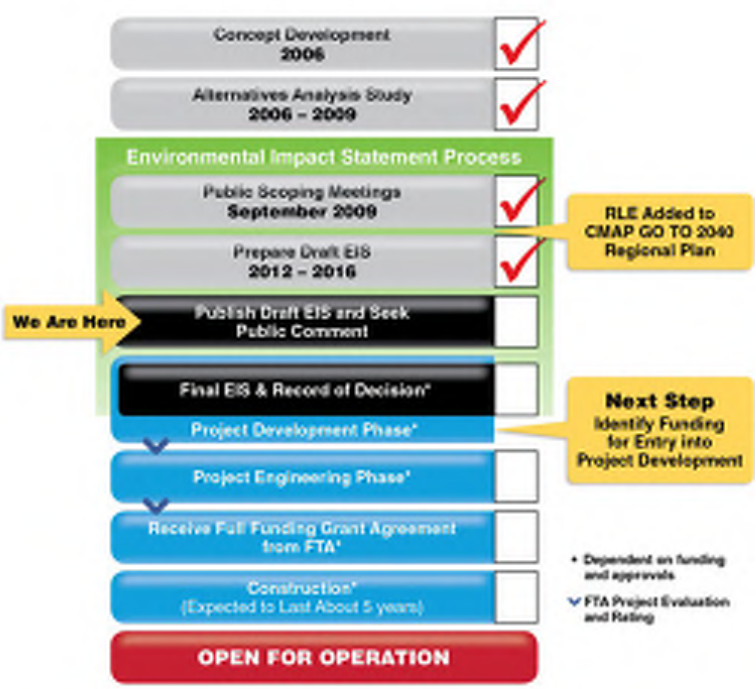

Q: How would CTA fund the Red Line Extension Project?
A: The Red Line Extension Project would require an estimated $2.3 billion in capital costs. CTA is pursuing a wide range of federal, state, and local funding sources with the help and support of the community. CTA intends to pursue federal New Starts funds for the RLE Project. Local matching funds would be required to secure federal funding. CTA is considering a number of options at this time. Options include the recent creation of a special transit-only tax-increment financing district, authorized by the General Assembly in June 2016, which could provide local funding for the Red Line Extension Project.

Q: What is the federal New Starts program and why does CTA have to go through such a lengthy process?
A: FTA's New Starts Program is a discretionary funding source which helps to fund major transit capital investment projects. CTA must compete with other New Starts projects from across the country that are already in line for

funding. New Starts funds are available for projects that expand rail service into an area that is not within the current transit footprint, and therefore entail a relatively longer environmental and planning process.

Q: How can I receive updates and stay involved throughout the entire process?
A: Anyone can request to be added to the RLE contact list by sending an email to RedExtension@transitchicago.com. Members of the contact list will receive upcoming meeting notices, as well as future updates about the RLE Project. Information about the RLE Project is also available on this project website.

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- Home
- What's New
- Draft EIS
- Frequently Asked Questions
- Documents Archive
- Preferred Alternative
- Potential Property Displacements

Project Documents Archive

Environmental analysis (2009-2014)

Public outreach has continued to be an integral part of the planning for this project during the environmental review planning phase for this project. As part of the Draft Environmental Impact Statement (EIS), a number of open houses, community newsletters, and a formal scoping process were conducted with the public, stakeholders, and other governmental agencies. Documents related to these activities are provided below. CTA will continue to involve and consult with the community as the project proceeds.

Open House - 2014

CTA conducted outreach in April and May of 2014 to update the public on the status of the project; inform them of proposed alternatives, anticipated project benefits, and impacts; and gather feedback. Outreach included meetings with elected officials, interested community groups, and a public open house. The open house was held May 13, 2014 at the Palmer Park Gymnasium, 201 E. 111th Street in Chicago from 5:30 PM to 7:30 PM.

May 2014 Open House Exhibit Boards
May 2014 Project Summary

Newsletter - 2013

CTA sent a newsletter with a general project update to the approximately 3,200 addresses on the stakeholder database on August 27, 2013.

August 2013 Newsletter

Open House - 2011

CTA held an open house meeting on August 2, 2011 to update the community regarding the RLE Project. The meeting was held at St. John Missionary Baptist Church, 211 E. 115th Street in Chicago from 6:00 PM to 8:30 PM.

August 2011 Open House Exhibit Boards

Scoping and Scoping Meetings - 2009

The process of determining the scope, focus, and content of an EIS is known as “scoping.” Scoping meetings are an opportunity to obtain information from the public and governmental agencies. The scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential effects and mitigation measures to be considered.

The official public comment period for scoping concluded on October 27, 2009. The comments received are summarized in the Scoping Report. Input received during scoping is used to refine the project purpose and need and alternatives, and to direct the analysis of environmental impacts. Public input is also used to help planners avoid potential impacts, and to identify potential mitigation measures.

Red Line Extension Scoping Report (.pdf)
Scoping report - revised June, 2010. Appendices are available as separate files.

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System Status

Trains:

Red Line	Normal Service*
Blue Line	Normal Service
Brown Line	Normal Service
Green Line	Normal Service
Orange Line	Normal Service
Purple Line	Normal Service
Pink Line	Normal Service
Yellow Line	Normal Service

Buses:

Routes with Current Alerts (View All):

1 2 3 4 6 7
12 28 36 37 43 49
X49 49B 52 70 73 76
78 85 91 121 126 151
156 157 192

More:

See all Alerts Accessibility

Red Line Extension Scoping Report Appendices A-G (.pdf)
Public Participation Plan, Notice of Intent, Participating Agencies, Participating Agency Invitation Letters, Agency Scoping Meeting, Agencies and Organizations Notified of Scoping, Notification Materials

Red Line Extension Scoping Report Appendices H-K (.pdf)
Scoping Meeting Materials, Meeting Presentation, Meeting Exhibit Boards, Public Scoping Meeting Transcripts

Red Line Extension Scoping Report Plain Text Supplement for Appendices H-J (.txt)
This text-only supplement describes Scoping Meeting Materials, Meeting Presentation, Meeting Exhibit Boards

Red Line Extension Scoping Report Appendix L Public Comments 1-95 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 96-171 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 172-259 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 260-344 (.pdf)

Red Line Extension Scoping Report Appendix M (.pdf)
Agency Comments - revised June, 2010

Alternatives Analysis (2006–2009)

The purpose of the Alternatives Analysis (AA) Study, which ended in August 2009, was to examine a wide range of potential transportation options. In the AA process, the project's purpose and need were identified, alternatives that meet the purpose and need were developed and evaluated, and comprehensive and ongoing public involvement was initiated. Many different transportation alternatives were identified in the AA process. Based on public comment and an evaluation of those options against criteria that included cost, environmental factors, and feasibility considerations, the number of options was narrowed. There were three screening stages and the results of each screening stage were presented at public meetings. At each stage, there was an opportunity for the public to review and comment on the results. The end result of the AA process was the selection of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009.

Screen 1 Analysis

The CTA held public open houses to receive input on preliminary findings from Screen 1 of the Alternatives Analysis Study for the proposed Red Line Extension.

Tuesday, April 10, 2007, 6-8 p.m.
Chicago State University, New Academic Library, 4th Floor Auditorium
9501 S. King Drive, Chicago, IL 60628

Wednesday, April 11, 2007, 6-8 p.m.
West Pullman Branch, Chicago Public Library
830 W. 119th St., Chicago, IL 60628

Presentations delivered at the Screen 1 meetings are available at the links below:

Public Meeting Presentation Part 1 - April 2007 (3 MB PDF)
Public Meeting Presentation Part 2 - April 2007 (2 MB PDF)
Public Meeting Presentation - April 2007 (Text version)

Public Meeting Display Boards - April 2007 (3 MB PDF)
Public Meeting Display Boards - April 2007 (Text version)

Public Meeting Comment Card - April 2007 (0.4 MB PDF)

The official public comment period for the study's Screen 1 preliminary findings meeting concluded on May 11, 2007. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 1 Public Comment Database (0.1 MB PDF)
Screen 1 Responses to Public Comments (0.1 MB PDF)

Screen 2 Analysis

The CTA held public open houses to present possible transit technologies and alignments in a study area bordered by 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Cal-Sag Channel/Little Calumet River and 134th Street on the south.

Wednesday, December 3, 2008, 6-8 p.m.
Historic Pullman Visitor Center
11141 South Cottage Grove, Chicago, IL 60628

Thursday, December 4, 2008, 6-8 p.m.
Woodson Regional Chicago Public Library
9525 South Halsted Street, Chicago, IL 60628

Presentations delivered at the Screen 2 meetings are available at the links below:

Public Meeting Presentation Part 1 – December 2008 (2.8 MB PDF)
Public Meeting Presentation Part 2 - December 2008 (3.8 MB PDF)
Public Meeting Presentation - December 2008 (Text version)

Public Meeting Display Boards Part 1 - December 2008 (2 MB PDF)
Public Meeting Display Boards Part 2 - December 2008 (2.4 MB PDF)
Public Meeting Display Boards - December 2008 (Text version)

Public Meeting Comment Card - December 2008 (0.4 MB PDF)

The official public comment period for the study's Screen 2 preliminary findings meeting concluded on December 18, 2008. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 2 Public Comment Database (0.1 MB PDF)
Screen 2 Responses to Public Comments (0.1 MB PDF)

Screen 3 Analysis

The CTA invited the public to open houses to present preliminary Screen 3 findings and a recommendation of a locally preferred alternative, which concluded the Alternatives Analysis study for the Red Line Extension.

Wednesday, June 3, 2009, 6-8 p.m.
Olive-Harvey College, Cafeteria
10001 South Woodlawn Avenue, Chicago, IL 60628

Thursday, June 4, 2009, 6-8 p.m.
Woodson Regional Chicago Public Library
9525 South Halsted Street, Chicago, IL 60628

Presentations delivered at the Screen 3 meetings are available at the following links:

Public Meeting Presentation Part 1 – June 2009 (1.4 MB PDF)
Public Meeting Presentation Part 2 – June 2009 (2.9 MB PDF)
Public Meeting Presentation - June 2009 (Text version)

Display Boards Part 1 - June 2009 (2.4 MB PDF)
Display Boards Part 2 - June 2009 (3.4 MB PDF)
Display Boards - June 2009 (Text version)

Display Maps – HRT UPRR Alternative (1.2 MB PDF)
Display Maps – HRT Halsted Alternative (0.9 MB PDF)
Public Meeting Comment Card (0.4 MB PDF)

The official public comment period for the study's Screen 3 findings and preliminary recommendation for a locally preferred alternative concluded on June 25, 2009. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 3 Public Comment Database (0.1 MB PDF)
Screen 3 Responses to Public Comments (0.1 MB PDF)

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RED AHEAD

Red Line Extension

Preferred Alternative

Locally Preferred Alternative - Union Pacific Railroad (UPRR) Alternative

The proposed UPRR Alternative would extend the heavy rail Red Line from the existing 95th Street Terminal to 130th Street. The UPRR Alternative alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would turn south to follow the UPRR corridor.

Two options are being considered for the alignment along the UPRR corridor: the East Option and West Option. The CTA elevated structure would be located either east or west of the existing UPRR corridor. The alignment would follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street.

South of this point, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation rights-of-way to the terminus (end) of the RLE at 130th Street.

The UPRR Alternative would include the following features:

- 5.3-mile heavy rail transit line extension from 95th Street Terminal to 130th Street
- Four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street
- New park & ride and bus facilities at each station with a total of 3,700 parking spaces along the corridor
- New yard and shop at 120th Street

The following figures are photo simulations of the proposed project, for both the East and West Options:

	East Option 103rd Street Station (facing northwest)
West Option 103rd Street Station (facing south)	

	East Option 111th Street Station (facing west)
West Option Michigan Avenue Station (facing northwest)	

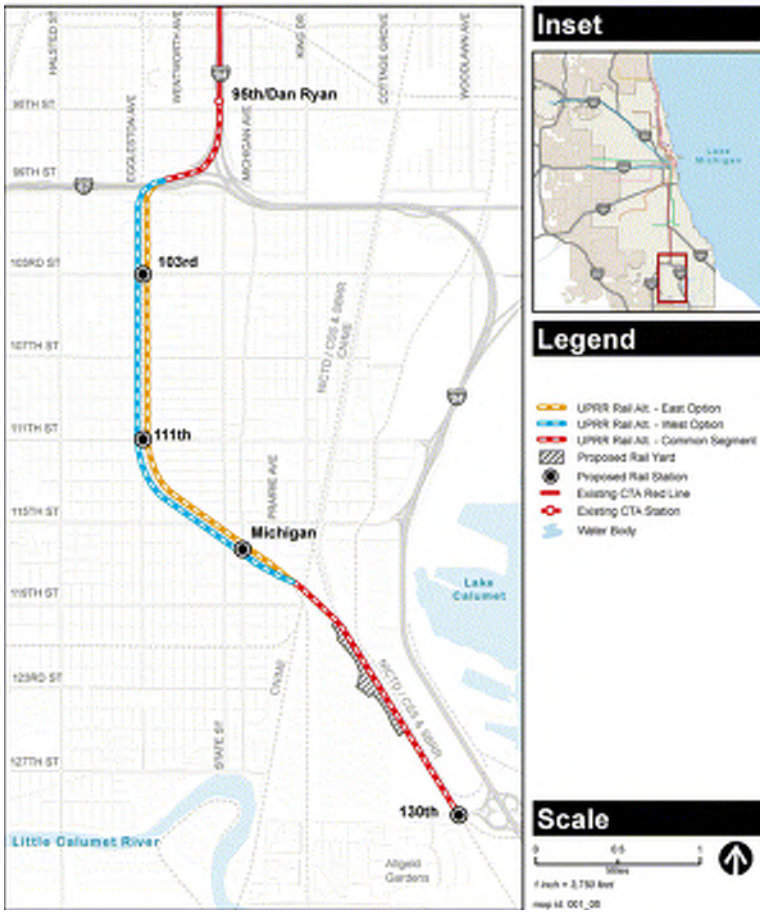

Alternatives development history

CTA undertook an extensive Alternatives Analysis process from 2006–2009 that considered multiple modes and corridor options for the RLE Project.

Starting with multiple modes and corridor options, CTA developed and screened alternatives through a combination of conceptual engineering, public input (open houses and stakeholder meetings), and preliminary analysis of potential impacts and costs.

The Chicago Transit Board designated the UPRR Alternative as the Locally Preferred Alternative on August 12, 2009.
In preparation for the Draft EIS and based on the outcomes of the Alternatives Analysis, CTA evaluated the following alternatives and options from 2012–2014:

- No Build Alternative
- Bus Rapid Transit Alternative
- Union Pacific Railroad Rail (UPRR) Rail Alternative
  - Right-of-Way Option
  - East Option
  - West Option
- Halsted Rail Alternative

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Alternative. The Draft EIS summarizes the environmental benefits and impacts of the No Build Alternative and the two UPRR Alternative options.

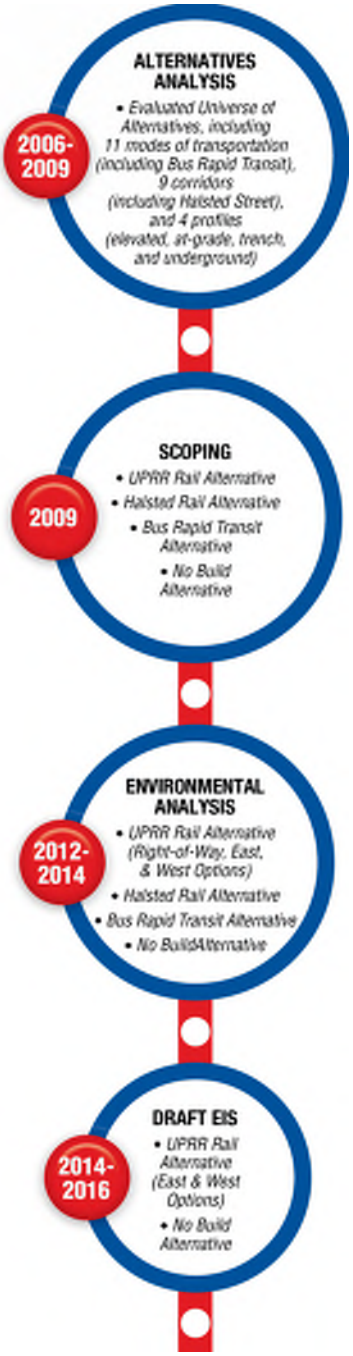

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RED AHEAD

Red Line Extension

Potential Property Displacements

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured. In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (known simply as the "Uniform Act"), along with state regulations.

Additional information about potentially displaced properties is available here.

FTA's brochure on property acquisition and relocation assistance is available here.

Contact CTA's customer service department by telephone at 1-888-YOUR-CTA (1-888-968-7282), or by e-mail at RedExtension@transitchicago.com if you have questions about potential displacement of your property.

Frequently asked questions about property displacements

What could happen to my property?

As part of its extensive planning for the RLE Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. Because the project is still in the planning stage and CTA is still evaluating both the East and West Options, it is not known at this time whether acquisition of your property may be required. In some cases, your property may need to be acquired whether the East or West Option is selected. CTA will provide additional communication when the preferred option has been decided. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project. If your property is needed for the project, it could be redeveloped and used for tracks, stations, parking, or ancillary facilities.

What are my rights as a property owner?

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. What this means is that CTA will treat property owners fairly and will seek cooperative settlements of property acquisitions.

You can read more about your rights as a property owner under applicable federal laws here:

- http://www.fhwa.dot.gov/real_estate/uniform_act/acquisition/real_property.cfı
- http://www.fhwa.dot.gov/real_estate/publications/your_rights/rights2014.pdf

What type of compensation will I receive?

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, it is required by federal law to offer to purchase each property for an amount that is no less than fair market value as determined by an independent appraisal. In some circumstances, if current appraisals are less than the original property purchase price, an owner may be eligible for compensation equal to the original purchase price.

In addition, CTA must provide financial assistance and relocation services, as required by federal rules, for property owners as well as commercial and residential occupants who must move because of the RLE Project.

How will CTA determine the purchase price for my property?

If CTA determines it is necessary to purchase your property for the RLE Project, it is required to hire an independent appraiser to inspect the property to determine fair market value. In that case, you, or a representative that you designate, will be invited to accompany the appraiser when the appraiser inspects your property. You or your representative may provide information about improvements to the property and any special features that may affect the value of the property to ensure that these facts are considered in the appraisal.

What if I don't own this property but rent an apartment, or lease space for my business?

Non-owners who are leasing housing or commercial property that must be relocated because of the RLE Project are also protected by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. If needed, CTA will provide financial assistance and relocation services to assist these residents and business owners in finding a new housing or business location.

If CTA acquires my property, will you provide me help in relocating?

If you are required to move, a relocation agent will contact you, answer your questions, and provide additional information about relocation assistance advisory services and relocation payments eligibility. The goal of the relocation agents is to facilitate a smooth transition to the replacement housing or business location.

What will happen next with the RLE Project? How will the decision be made between the East and West Option?

CTA published the environmental study, called the Draft Environmental Impact Statement (EIS), on October 6, 2016. CTA then held a public hearing in the project area on November 1 to provide more information and collect feedback about the project, its impacts, and potential mitigation measures. Based on public feedback, environmental review, and funding availability to conduct additional engineering, CTA expects to announce the selected option (either the East Option or the West Option) in 2017. CTA will address public comments to the Draft EIS in the Final EIS, which will also formalize the selected option, its impacts, and mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. During preparation of the Final EIS, CTA plans to apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase of this project to pursue federal funding for construction of the project under the competitive federal "New Starts" program.

When will CTA notify me of their intent to purchase my property?

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete (expected to be complete by the end of 2018) and project funding is secured. CTA would then notify owners of affected properties of their intent to purchase.

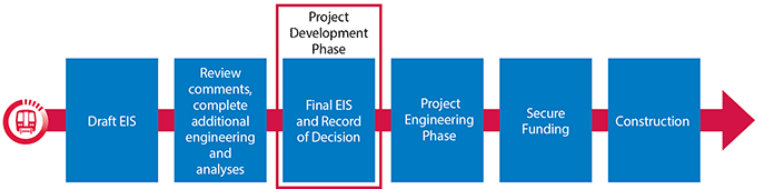

If I have additional questions about potential property acquisitions, who should I call?

Contact CTA's customer service department by telephone at 1-888-YOUR-CTA (1-888-968-7282), or by e-mail at RedExtension@transitchicago.com.

How can I learn more about the RLE Project?

You can learn more about the RLE Project and find updates on the status of the process here. To join the project contact list and get updates about the RLE Project, public hearings, and the status of environmental reviews, email RedExtension@transitchicago.com.

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Languages [En] [Pl] [Zh] [Es]

Phone: 1-888-YOUR-CTA

TTY: 1-888-CTA-TTY1

E-mail: feedback@transitchicago.com

Red Line Extension

You are invited to a Public Hearing on the

Red Line Extension Project

CTA and Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street.

CTA and FTA have prepared a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the proposed project. The Draft EIS documents the benefits and impacts of the alternatives being considered, which include impacts to parks and wetlands.

This meeting will be conducted in an open house format. Comments on the Draft EIS may be made verbally to a court reporter or in writing during the public hearing.

RedExtension@transitchicago.com transitchicago.com/RedEIS facebook/thecta @cta

When and Where?

Tuesday, November 1, 2016 – 5:30 - 7:30PM

St. John Missionary Baptist Church
211 E. 115th Street
Chicago, IL 60628

This location served by CTA Bus #34, #115, #119, and Metra Electric Kensington Station.
Facility accessible to people with disabilities.

How can I provide comments on the Draft EIS?

Comments may be made at the public hearing or submitted directly to CTA:

- Via email: RedExtension@transitchicago.com
- Via US mail: Chicago Transit Authority
  Strategic Planning, 10th Floor
  Attn: Red Line Extension Project
  567 W. Lake Street
  Chicago, IL 60661

All comments must be submitted by 4:30PM on Wednesday, November 30, 2016.

(888) YOUR-CTA (888-968-7282). Para más información en Español, llame al **312-681-2710**.

Chicago Transit Authority
Strategic Planning, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661

The Draft EIS is available on the CTA website at transitchicago.com/RedEIS. Hard copies are available at libraries in the project area; locations are listed on the project website.

Do you require assistance?
If you require an interpreter, including sign language services, or other accommodations at this public hearing contact **Gerald Nichols**, **CTA Government and Community Relations**, at least 5 days before the public hearing at **312-681-2710** or GNichols@transitchicago.com.

From: CTA Red Line Extension Project <RedExtension=transitchicago.com@mail157.atl171.mcdlv.net> on behalf of CTA Red Line Extension Project <RedExtension@transitchicago.com>
Sent: Thursday, October 06, 2016 9:55 AM
To:
Subject: CTA Red Line Extension Draft Environmental Document and Public Hearing

You're invited to a Public Hearing on the

Red Line Extension Project

Draft Environmental Impact Statement and Section 4(f) Evaluation Available for Public Review

CTA and Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street. **Click here to learn more about the project.**

Tuesday, November 1, 2016

5:30 to 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street, Chicago, IL 60628
This location is served by:
CTA Bus #34, #115, #119, and Metra Electric Kensington Station

This facility is accessible to people with disabilities.
This meeting will be conducted in an open house format.

CTA and FTA have prepared a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the proposed project. The Draft EIS documents the benefits and impacts of the alternatives being considered, which include impacts to parks and wetlands. **Click here to review the Draft EIS** on the RLE Project website. Hard copies of the Draft EIS also are available for review through November 30, 2016. **Click here to learn more about reviewing the Draft EIS.**

Comments on the Draft EIS are being accepted until November 30, 2016 at 4:30 PM.

Comments on the Draft EIS may be made verbally to a court reporter or in writing during the hearing. You also can submit comments via e-mail to RedExtension@transitchicago.com or by mail to Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.

Do you require assistance?
If you require an interpreter, including sign language services, or other accommodations at this public hearing, contact Gerald Nichols, CTA Government and Community Relations, at least 5 days before the public hearing at 312-681-2710 or GNichols@transitchicago.com.

Para más informacion en Español, llame al 312-681-2710
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Thank you for your continued interest.

RLE Project Team
Chicago Transit Authority

This email was sent to leack@cdmsmith.com

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Chicago Transit Authority · Strategic Planning, 10th Floor · 567 W. Lake Street · Chicago, IL 60661 · USA

From: CTA Red Line Extension Project <RedExtension=transitchicago.com@mail119.atl111.rsgsv.net> on behalf of CTA Red Line Extension Project <RedExtension@transitchicago.com>
Sent: Thursday, October 27, 2016 9:25 AM
To:
Subject: CTA Red Line Extension Public Hearing Reminder

You're invited to a Public Hearing on the

Red Line Extension Project

Draft Environmental Impact Statement and Section 4(f) Evaluation Available for Public Review

CTA and Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street. **Click here to learn more about the project.**

Tuesday, November 1, 2016

5:30 to 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street, Chicago, IL 60628
This location is served by:
CTA Bus #34, #115, #119, and Metra Electric Kensington Station

This facility is accessible to people with disabilities.
This meeting will be conducted in an open house format.

CTA and FTA have prepared a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the proposed project. The Draft EIS documents the benefits and impacts of the alternatives being considered, which include impacts to parks and wetlands. **Click here to review the Draft EIS** on the RLE Project website. Hard copies of the Draft EIS also are available for review through November 30, 2016. **Click here to learn more about reviewing the Draft EIS.**

Comments on the Draft EIS are being accepted until November 30, 2016 at 4:30 PM.

Comments on the Draft EIS may be made verbally to a court reporter or in writing during the hearing. You also can submit comments via e-mail to RedExtension@transitchicago.com or by mail to Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.

Do you require assistance?
If you require an interpreter, including sign language services, or other accommodations at this public hearing, contact Gerald Nichols, CTA Government and Community Relations, at least 5 days before the public hearing at 312-681-2710 or GNichols@transitchicago.com.

Para más informacion en Español, llame al 312-681-2710
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Thank you for your continued interest.

RLE Project Team
Chicago Transit Authority

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From: CTA Red Line Extension Project <RedExtension=transitchicago.com@mail37.suw13.rsgsv.net> on behalf of CTA Red Line Extension Project <RedExtension@transitchicago.com>
Sent: Monday, November 28, 2016 9:02 AM
To:
Subject: CTA Red Line Extension Public Comment Period Ending

Public Comment Period Ends

November 30

Red Line Extension Project

Draft Environmental Impact Statement and Section 4(f) Evaluation

CTA and Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street. **Click here to learn more about the project.**

CTA and FTA have prepared a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the proposed project. The Draft EIS documents the benefits and impacts of the alternatives being considered, which include impacts to parks and wetlands. **Click here to review the Draft EIS** on the RLE Project website. Hard copies of the Draft EIS also are available for review through November 30, 2016. **Click here to learn more about reviewing the Draft EIS.**

Comments on the Draft EIS are being accepted until November 30, 2016 at 4:30 PM. You may submit comments via e-mail to RedExtension@transitchicago.com or by mail to Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.

Do you require assistance?
If you have questions or need assistance, contact Gerald Nichols, CTA Government and Community Relations at 312-681-2710 or GNichols@transitchicago.com.

Para más informacion en Español, llame al 312-681-2710
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Thank you for your continued interest.

RLE Project Team
Chicago Transit Authority

This email was sent to leack@cdmsmith.com

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Notice of Public Hearing

Red Line Extension Project – Draft Environmental Impact Statement

CTA is hosting a public hearing to obtain public comment on the Red Line Extension Project Draft Environmental Impact Statement (EIS). CTA and the Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street. The Draft EIS documents the benefits and impacts of the alternatives being considered for the project, which include impacts to parks and wetlands.

Tuesday, November 1, 2016
5:30pm to 7:30pm
St. John Missionary Baptist Church*
211 E. 115th Street, Chicago

The Draft EIS is available on the CTA website at transitchicago.com/RedEIS. Hard copies are available at libraries in the project area; locations are listed on the project website.

Comments on the Draft EIS may be made verbally to a court reporter at the public hearing and may also be submitted via email to RedExtension@transitchicago.com, or via U.S. mail to: CTA, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661. All comments must be submitted by 4:30pm, Wednesday, November 30, 2016.

If you require an interpreter or other accommodations at this public hearing, please contact Gerald Nichols, CTA Government and Community Relations, at least five days prior to the public hearing at 312-681-2710 or GNichols@transitchicago.com.

*Facility accessible to people with disabilities

transitchicago.com
Customer Information: 1-888-YOUR-CTA (1-888-968-7282); CTA TTY: 1-888-CTA-TTY1 (1-888-282-8891)
Transit Information: 312-836-7000

Remove November 2, 2016
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Attachment 4
Media Articles

BDN Connection
The online edition of the Beloit Daily News
http://www.beloitdailynews.com/illinois----chicago-announces-new-steps-in-possible/article_5841a7ba-8703-11e6-8332-ebadcb096878.html

ILLINOIS -- Chicago announces new steps in possible Red Line expansion

Posted: Friday, September 30, 2016 6:45 am

CHICAGO (AP) — Chicago is announcing new steps toward a possible major expansion of the rail transit system's Red Line to the city's southernmost neighborhoods.

The Chicago Transit Authority said Thursday it will release a draft environmental impact study on Oct. 6. It's a requirement for obtaining federal funding.

The estimated $2.3 billion project would extend the Red Line from 95th Street to 130th Street, an area with few public transportation options.

An extension has been talked about for decades. The city has yet to secure federal funding or decide on a precise route for this latest plan.

The transit agency also announced it will begin accepting formal comments from the public next month. It will also start notifying owners whose property might have to be acquired.

Associated Press news release also published in:

9/29/2016	*97.1 FM News Talk*	http://www.971talk.com/news/illinois/latest-illinois-news-sports-business-and-entertainment-1220-am-cdt
9/29/2016	*The Clay Center Dispatch*	http://www.ccenterdispatch.com/news/state/article_33d3351b-56e6-5c0a-94e7-7ebd49888fed.html
9/29/2016	*Daily Herald*	http://www.dailyherald.com/article/20160929/news/309299705/
9/29/2016	*Fox 28*	http://www.fox28.com/story/33284667/chicago-announces-new-steps-in-possible-red-line-expansion
9/29/2016	*KWQC*	http://kwqc.com/ap/chicago-announces-new-steps-in-possible-red-line-expansion/
9/29/2016	*SF Gate*	http://www.sfgate.com/news/article/Chicago-announces-new-steps-in-possible-Red-Line-9468668.php
9/29/2016	*St-Louis Post Dispatch*	http://www.stltoday.com/news/state-and-regional/chicago-announces-new-steps-in-possible-red-line-expansion/article_82cf60c8-9932-5912-a842-988e77b19973.html
9/29/2016	*The Washington Times*	http://www.washingtontimes.com/news/2016/sep/29/chicago-announces-new-steps-in-possible-red-line-e/
9/30/2016	*NBC Chicago*	http://www.nbcchicago.com/news/local/Chicago-Announces-New-Steps-in-Possible-Red-Line-Expansion-395428691.html

10/1/2016	*Daily-Journal*	http://www.daily-journal.com/news/illinois/new-steps-in-possible-red-line-expansion/article_7ed40c5f-147b-520e-864c-77f7afd9f464.html
10/4/2016	*The News-Gazette*	http://www.news-gazette.com/news/state/2016-09-30/chicago-announces-steps-possible-red-line-expansion.html

CHICAGO SUN-TIMES
http://chicago.suntimes.com/chicago/cta-announces-proposed-routes-for-south-side-red-line-extension/

CHICAGO 09/29/2016, 01:30pm

CTA announces proposed routes for South Side Red Line extension

The CTA released this rendering of a proposed 103rd Street station on an extended Red Line. The line currently ends at 95th Street. | Chicago Transit Authority

Andy Grimm

@agrimm34 | email

Transit officials Thursday released the latest details of a $2.3 billion plans to extend CTA's Red Line south from 95th Street to 130th Street, fixing on two route options near existing railroad tracks.

The extended Red Line would veer west from the Dan Ryan Expressway at the current southernmost stop at 95th Street, following the right-of-way of Union Pacific tracks threading through West Pullman and Roseland, according to maps released Thursday. The transit agency plans to settle on one route or the other by next year.

CTA officials are seeking input from residents on two proposed courses, one following along the west side of the railroad tracks, the other, to the east. CTA officials in 2014 ditched another route that would have run elevated tracks along South Halsted.

Both options call for elevated tracks to be built from 99th Street to 118th Street, either just east or just west of the Union Pacific right-of-way. The routes are the same from the 95th Street stop to 99th Street, and both also call for the extended Red Line to run on at-grade tracks from 119th to 135th Street.

The east option would require the CTA to acquire 175 homes and businesses along the route, while the west course would impact 113 privately-owned properties, spokesman Jeffrey Tolman said Thursday.

The 5.3-mile extension would add four stations to the Red Line South spur — near 103rd Street, 111th Street, Michigan Avenue and 130th Street.

CTA next week will release a draft of an environmental impact report listing the costs and benefits of each proposed route, and CTA staffers will begin going door-to-door in neighborhoods in the path of the extension,

Tolman said. Copies of the report will be posted online at http://www.transitchicago.com/redeis, and hard copies are available at a half-dozen city library branches and CTA headquarters, 567 W. Lake Street.

Transportation activists and South Side leaders have called for extending the Red Line's southern spur roughly from the time construction of the 95th Street terminal was completed in 1969, though a proposed route along Halsted unveiled in 2014 was met with criticism.

Whatever the route, the first tracks won't be laid this decade, Tolman said. It will take until 2018 to submit final plans and studies to federal transportation agencies, and assembling the land in the footprint of the new tracks will take more years still. The earliest construction might begin is 2022, Tolman said.

At least some funding for the extension will likely come from federal grants for new mass transit construction, and the city also might consider a tax-increment financing district, or TIF, to pay for the construction, CTA spokeswoman Tammy Chase said.

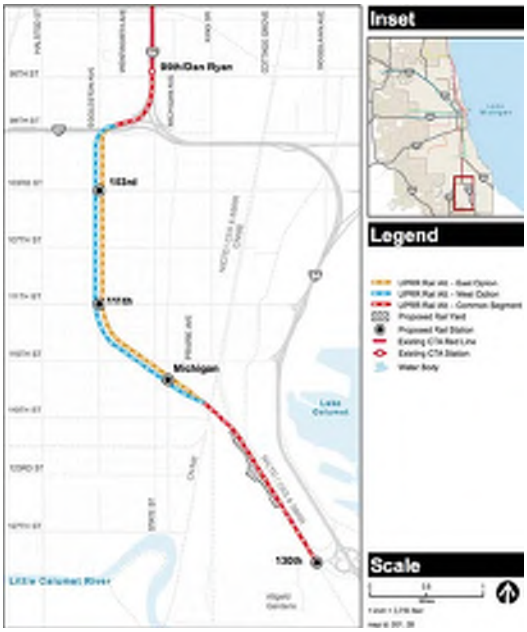

The CTA on Thursday released two possible routes for an extended Red Line. | Chicago Transit Authority

Chicago Tribune

http://www.chicagotribune.com/news/local/breaking/ct-cta-red-line-extension-20160929-story.html

CTA moves forward on planned Red Line extension to Far South Side

A rendering shows the proposed 103rd Street Station of the CTA Red Line. (Chicago Transit Authority)

By Mary Wisniewski - Contact Reporter- Chicago Tribune

September 29, 2016 1:48 pm

The CTA is moving forward on plans for the long-discussed extension of the Red Line to 130th Street, which will include a two-month period of public comment.

The next steps are part of a series of requirements before funding can be sought for the project and construction could begin.

But if all goes as the transit agency hopes, the Red Line could run from Howard to 130th as early as 2026, with construction beginning in 2022, according to CTA spokeswoman Tammy Chase. The $2.3 billion project would fill in what activists have called a "transit desert" on the city's Far South Side, as well as suburban Riverdale.

"This is a great opportunity that should have happened 50 years ago, but I'm glad to see it's going to happen now," said Cheryl Johnson, executive director of People for Community Recovery, a nonprofit environmental organization. "Transportation is a major hurdle for people who have to go far north to work and school."

The city has not extended an "L" line since the Orange Line opened in 1993. The proposed 5.3-mile Red Line extension would have four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street, and would include bus and parking facilities.

"This will be a transformational project," Chase said.

The CTA plans to publish a draft environmental impact study next Thursday, and then begin a period of public comments through Nov. 30, including a public hearing Nov. 1 at a yet-to-be determined location. The agency also is notifying owners of 248 properties, with 101 residential and 28 commercial buildings, which the CTA may need to acquire for the project, Chase said.

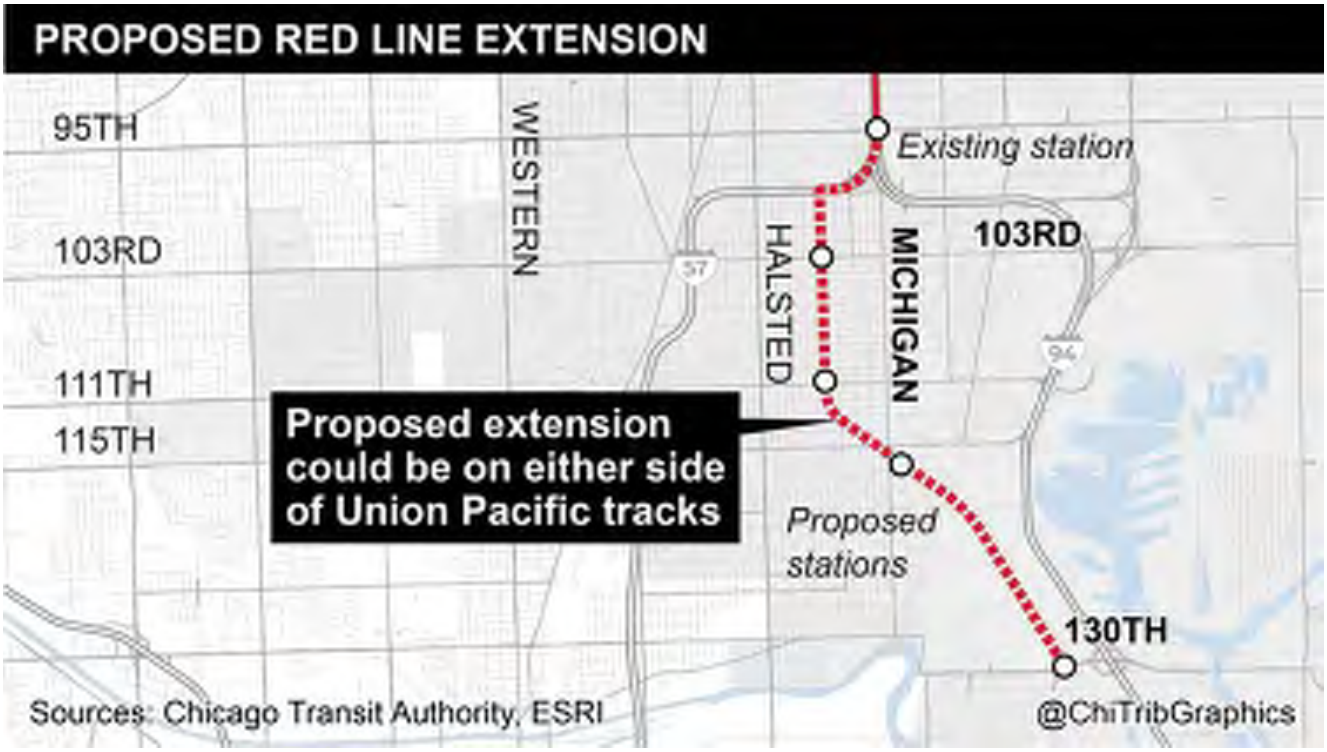

Chicago Tribune

The actual number of properties needed depends on where the CTA will lay the rails. Two years ago, the CTA narrowed the potential Red Line alternatives to one. This proposal would continue the line along I-57 to 99th Street, then run either to the east or

the west of the Union Pacific rail tracks to about 118th Street, and then to 130th west of the South Shore line.

The extension is part of the CTA's "Red Ahead" planning for the system's busiest line, which has included the $425 million reconstruction of the Red Line South in 2013, the ongoing construction of the new 95th Street terminal and the Wilson Station renovation.

Based on public feedback, environmental review and funding availability for additional engineering, the CTA plans to announce the preferred option for the extension next year and publish a final environmental impact study in 2018.

The agency could then go after federal and local funds. New legislation passed this summer allows a special taxing district to be created to help pay for the extension, as well as for other major transit projects such as the Red-Purple Line modernization project on the North Side.

The South Side extension was part of the "Go to 2040" plan released in 2010 by the Chicago Metropolitan Agency for Planning, which is responsible for land-use and transportation planning in the seven-county Chicago area.

Kyle Whitehead of the Active Transportation Alliance, which supports safe walking, biking and transit, said that the extension could save Far South Side residents more than 20 minutes going downtown.

"Altgeld Gardens and the Riverdale area are really isolated in terms of public transportation," said Whitehead, the alliance's government relations director. "It boosts job access and access to things around the city for a community that desperately needs access, and there's also great economic development potential around these stations."

Chase said that the option for the Red Line extension that runs on the east side of the Union Pacific tracks would affect more residential buildings, while the west side option would affect commercial buildings. "You have to look at what the community wants," Chase said.

Johnson said she realizes there will be some "mixed feelings" about the project because of the loss of buildings along the route. But she said the development is "greatly needed," and she hopes the displacement will be fair and equitable.

"We have to look forward to the future, for economic opportunity," Johnson said.

Andrea Reed of the Greater Roseland Chamber of Commerce said she is "glad and forlorn at the same time" at hearing that the project was proceeding — but may not be finished for another 10 years.

"We had hoped for 2016 back when we started talking about this in 2009," said Reed, whose organization also favors turning the Metra Electric District Line into a rapid - transit line, with more frequent stops.

mwisniewski@chicagotribune.com

Twitter @marywizchicago

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http://chicagoist.com/2016/09/29/far_south_side_extension.php

CTA Shares Details For Major Red Line Extension To Far South Side

BY STEPHEN GOSSETT IN NEWS ON SEP 29, 2016 3:44 PM

103rd Street Station rendering / CTA

he CTA has unveiled new details about a major project to extend the Red Line from 95th Street to the Far South Side, at 130th Street.

The proposal calls for four new stations along the future track: near 103rd Street (rendering pictured above), 111th Street, Michigan Avenue, and 130th Street. (Map pictured below.)

The agency further outlined the project's remaining key question—whether the extension would run east or west of the Union Pacific Railroad between 99th St. and 118th St.—and offered up several dates on which the public can offer feedback, about either directional option and on the project as a whole.

The CTA said it will publish details about potential impacts of both options on Oct. 6 (the report to be available here), at which time public could express “formal comments” through Nov. 30. A public hearing will also be held (location TBD) at which residents will be able to ask questions and offer thoughts. The agency also said in a press release that the CTA has not yet begun obtaining properties necessary for the extension (since the exact pathway is not finalized) but some property acquisition “may be necessary.”

“We are pleased to make progress on this transformational Red Line project, which will expand transit for the Far South Side and create faster access to jobs, education and opportunity,” CTA President Dorval R. Carter, Jr. said in a press release. “As we move forward in the comprehensive federally required planning process for this project, we continue to make significant investment in the South Side that include the new 95th Terminal, improved Red and Green Line service and expanded bus service on multiple routes to better serve our customers.”

Regardless of which side of the Union Pacific the final alignment takes, the extension look to be big improvement for Far South Side commuters, as far south as Altgeld Gardens and Riverdale.

The $2.3 billion dollar extension is part of Mayor Rahm Emanuel's "Red Ahead" initiative, which also includes a much-needed (and pretty cool-looking) upgrade of the 95th St. Station. The CTA hopes to have the extension completed by 2026, CTA spokesperson Tammy Chase said.

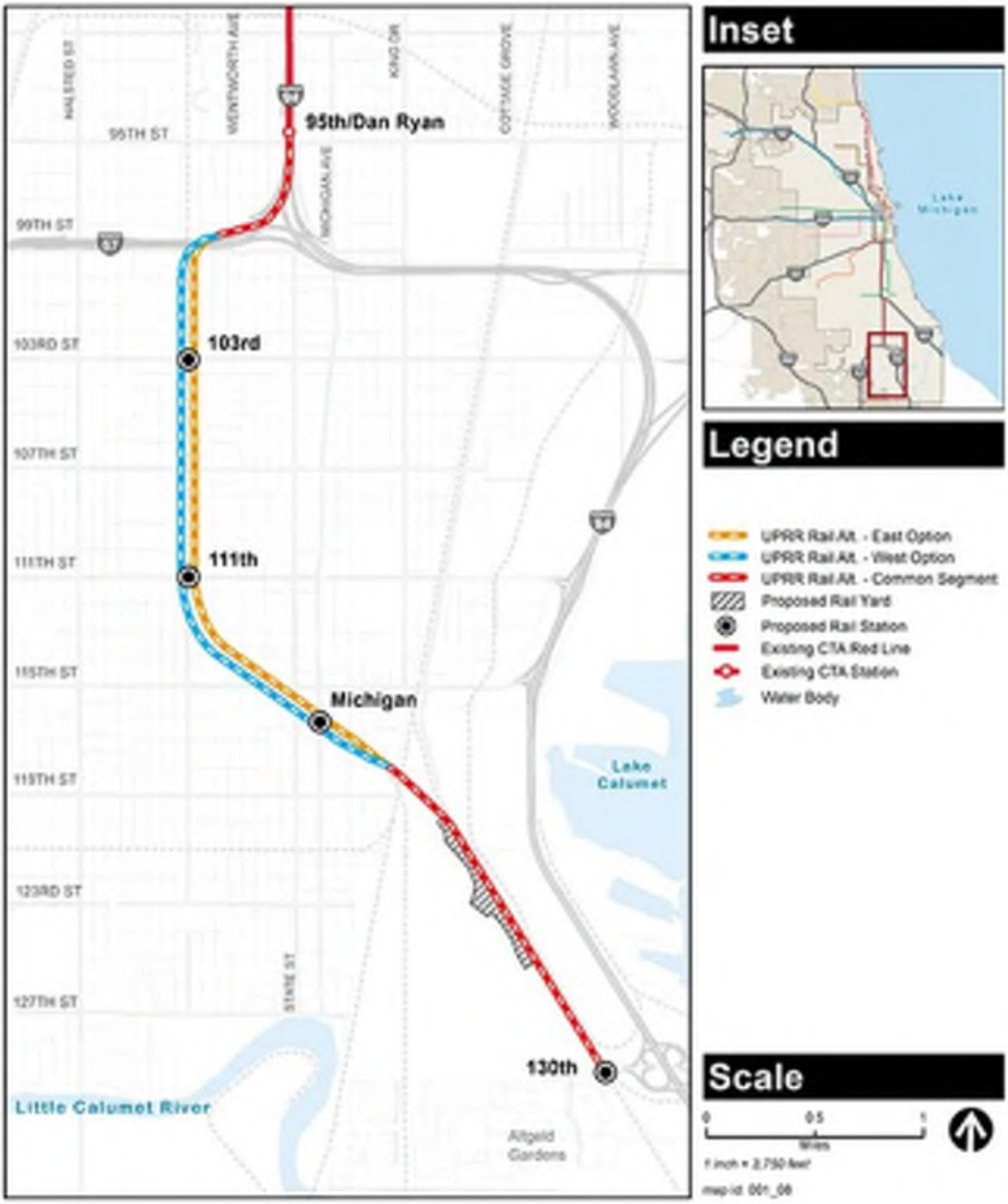
95th/Dan Ryan
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115TH ST
Michigan
119TH ST
123RD ST
127TH ST
130th
Lake Calumet
Little Calumet River
Altgeld Gardens
Inset
Legend
UPRR Rail Alt. - East Option
UPRR Rail Alt. - West Option
UPRR Rail Alt. - Common Segment
Proposed Rail Yard
Proposed Rail Station
Existing CTA Red Line
Existing CTA Station
Water Body
Scale
0
0.5
1
Miles
1 inch = 2,750 feet
map id: 001_06

CTA

CTA crawls toward longer Red Line

By Greg Hinz September 29, 2016

Chicago Transit Authority officials today announced the next steps going forward in the long-proposed extension of the Red Line south to the city limits, saying they're about to file a needed federal environmental study and release a list of property the agency would have to acquire.

But while it's moving forward, the agency's pace makes a bus in rush hour look fast.

The CTA has not identified a source for the estimated $2.3 billion it needs, and concedes that the 5.3-mile line from 95th Street to 130th Street will not open until 2026 at "the earliest."

Here's the news:

The **CTA a while back announced** its line will follow Union Pacific Railroad tracks from the existing 95th Street terminal, either on the west or east side of the freight tracks. Also planned are four stations: at 103rd; 111th; Michigan and 116th, and 130th. None of that has changed.

What is new is that the agency on Oct. 6 will release a draft Environmental Impact Statement, a crucial step if the project is ever going to get the big infusion of federal cash likely needed.

According to CTA spokeswoman Tammy Chase, the EIS also will identify 248 pieces of property that it may need to acquire. More land would be needed for the west-side-of-the-tracks option, 215 vs. 153.

Included are 101 houses, 28 commercial properties and 79 vacant lots. Several dozen properties held by the Chicago Park District and other public agencies also may be needed, the CTA said.

The public will have 45 days to file written comments, or people can testify at a Nov. 1 hearing at a location yet to be determined.

'TRANSFORMATIONAL' PROJECT

In a statement, CTA President Dorval Carter termed the project "transformational" and said it will "create faster access to jobs (and) education." He noted that, since Rahm Emanuel became mayor, the city found money for a $425 million reconstruction of the current Red Line and a $280 million new 95th Street terminal.

But, so far, there's just been talk about the money for the extension—though Chase mentioned the possibility of federal "new start" funding, a state capital bill and/or a transit tax increment financing district like the TIF being used to rebuild the Red Line north.

I understand why the CTA has chosen to focus on rebuilding its existing system rather than this project, which amounts to adding a new train line—the first since the Orange Line opened a quarter-century ago. But if there's a section of the metropolitan area that desperately needs better access to transit and jobs it's the Far South Side and suburbs, where people without cars effectively have had no options since most of the factories went away.

The Orange Line was built largely because of the influence of then-U.S. Rep. Bill Lipinski, D-Chicago. It could have had a champion in former Rep. Jesse Jackson Jr., but he chose to focus on the proposed third airport at Peotone before he was forced out of office and jailed amid a financial scandal.

Anyhow, for the CTA, this is progress. But very, very, very, very slow progress.

http://www.transitchicago.com/news/default.aspx?Month=&Year=&Category=2&about=1&ArticleId=3588

Red Line Extension Project to 130th Street Moves Forward; CTA Announces Next Steps in Historic Project as Part of Mayor Emanuel's 'Red Ahead' Transit Investment

9/29/2016

CTA to seek public comment on comprehensive plan to extend rail service to 130th Street and improve transit service on the Far South Side

The Chicago Transit Authority today announced a series of upcoming events that will advance the Red Line Extension Project, a plan to extend Red Line rail service to 130th Street from 95th Street including building four new rail stations that will provide rail access to the Far South Side.

The Red Line Extension Project is a key part of Mayor Emanuel and CTA's "Red Ahead" investment in its busiest rail line. Other projects improving the Red Line on the South Side include the $425 million reconstruction of the Red Line South in 2013 and the ongoing $280 million construction of a new 95th Street Terminal, which will be completed in 2018. The project is expected to create 29,000 new direct, indirect and induced jobs.

"We are pleased to make progress on this transformational Red Line project, which will expand transit for the Far South Side and create faster access to jobs, education and opportunity," said CTA President Dorval R. Carter, Jr. "As we move forward in the comprehensive federally required planning process for this project, we continue to make significant investment in the South Side that include the new 95th Terminal, improved Red and Green Line service and expanded bus service on multiple routes to better serve our customers."

The CTA two years ago narrowed the potential Red Line Extension Project alternatives to one "preferred alternative" with two possible options – one east and one west of the Union Pacific Railroad tracks on the South Side -- and announced $5 million of funding to continue planning work for the project.

Today, the CTA announced the following developments related to the Red Line Extension Project:

- The CTA will publish a comprehensive Draft Environmental Impact Study (EIS), a requirement for obtaining federal funding for this historic project, on October 6, 2016. The Draft EIS is an extensive document that details the potential benefits and impacts of both proposed options for the project.

- The CTA will accept formal comments from the public as part of the federal Draft EIS between October 6 and November 30 (more than 45 days), encouraging feedback from the community about any aspect of the project. The feedback will be used to assist the CTA in future planning decisions, including selecting one of the two alignment options for the project.

- The CTA will also hold a public hearing on Tuesday, Nov. 1 at a location to be determined, inviting the public to learn more about the project, including asking questions and providing comments to CTA staff.

- The CTA will also begin to notify property owners whose property may be necessary to acquire for the project. The CTA is not yet acquiring properties for the Red Line Extension Project because it has not yet selected a final alignment, nor has it secured federal funding for the project.

The RLE project is Mayor Rahm Emanuel and CTA President Dorval Carter's plan to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. The 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street, each of which would include bus and parking facilities. The current estimated cost of the project is $2.3 billion.

Proposed alignment options for Red Line extension

In August 2014, the CTA narrowed the list of extension alternatives to one "preferred alternative" with two variations:

- Union Pacific Railroad Rail (UPRR) Alternative, East Option - Under this option, the CTA elevated structure would be placed immediately east of the Union Pacific Railroad right-of-way from 99th Street to 118th Street.

- Union Pacific Railroad Rail (UPRR) Alternative, West Option - Under this option, CTA elevated structure would be placed immediately west of Union Pacific Railroad right-of-way from 99th Street to north of 118th Street.

The proposed alignment of the rapid transit line would be the same for the two East and West options from 95th Street to 99th Street and from 118th Street to 130th Street. The Red Line Extension would run along elevated track from 95th Street to approximately 119th Street, where it would transition to at-grade tracks.

The CTA arrived at these options based on environmental analysis and comments received at the public open house meeting and public comments submitted in 2014.

Draft EIS and public comment

The public can review the Draft EIS online at transitchicago.com/redeis starting October 6th. Hard copies will be available at local libraries and CTA headquarters. The Draft EIS provides information about the project, its impacts and mitigations. The public is invited to provide feedback and ask questions.

Hard copies of the Draft EIS will be available at the following locations:

- CTA headquarters, 567 W. Lake Street, 2nd Floor, Chicago, IL 60661

- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628

- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643

- Altgeld Public Library, 13281 S. Corliss Avenue, Chicago, IL 60827

- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628

- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605

Once the formal review period is complete on November 30, 2016, CTA will review and respond to all the comments received.

Responses to comments will be provided in the Final EIS, which will include the CTA's analysis of the final proposed project alignment.

Outreach to property owners

The CTA will communicate with all potentially impacted property owners via a number of channels:

- Letters will be mailed to every property owner that could be potentially displaced by the project (either the East or West Option). Those letters will also communicate that the CTA is not yet able to make a final determination on which properties will be required to be acquired for the project.
- CTA staff will visit every potentially displaced building.
- Property owners can submit project feedback on the Draft EIS, which will provide addresses of potentially displaced properties, via email, regular mail and at the public hearing.
- CTA will attend meetings as requested by community members and elected officials to share information.
- CTA's web site, transitchicago.com/redeis, will continue to provide project information and updates. The public can also sign up for project update emails by contacting us at RedExtension@transitchicago.com.

Red Line Extension Project: Next steps

- Based on public feedback, environmental review and funding availability to conduct additional engineering work, CTA anticipates announcing the preferred option for the location of the extension of the project in 2017.
- Depending on funding availability and federal regulatory approvals, CTA anticipates publishing a Final EIS by the end of 2018, which will provide a comprehensive analysis of the project's impacts.
- Once CTA has completed the Final EIS process, as required by the federal government before it would provide federal funding for the project, CTA could then begin the process of securing funding, which is expected to include a mix of federal and local funds. That could include the creation of a special transit-only tax-increment financing district, authorized by the General Assembly in June 2016, which could provide local funding for the Red Line Extension Project.

CURBED CHICAGO

http://chicago.curbed.com/2016/9/29/13111692/red-line-extension-cta-chicago-south-side

CTA confirms Red Line extension south to 130th Street

The project will create four new stations on the city's Far South Side

BY AJ LATRACE @AJLATRACE SEP 29, 2016, 2:32P

A rendering of the future 103rd Street station *CTA*

Today the CTA presented some good news for residents on the city's Far South Side: the Red Line extension project to 130th Street is moving forward. The plan, which the CTA says will help to create 29,000 new "direct, indirect and induced jobs," will add four new stations to the Red Line. Those stations will

be at 103rd Street and Eggleston Avenue, 111th Street and Eggleston Avenue, Michigan Avenue and 116th Street, and finally one at 130th near the Bishop Ford Freeway interchange.

According to the CTA, there are two different ways this extension can be one. One is building light rail on the west side of the existing Union Pacific Railroad line, and the other is to construct the rail on the east side of the tracks. And to help make the final decision, the CTA is asking for feedback from residents. The public transit agency will accept comments from the public from October 6 to November 30, and then on Tuesday, November 1, the CTA will host a public meeting (location and exact time to be announced).

The CTA says that it will be notifying any property owners that may be affected by the extension, but also suggests that they will not start acquiring properties until a decision has been made regarding the two options for the final track alignment. The preferred alignment is not expected to be announced until sometime early next year.

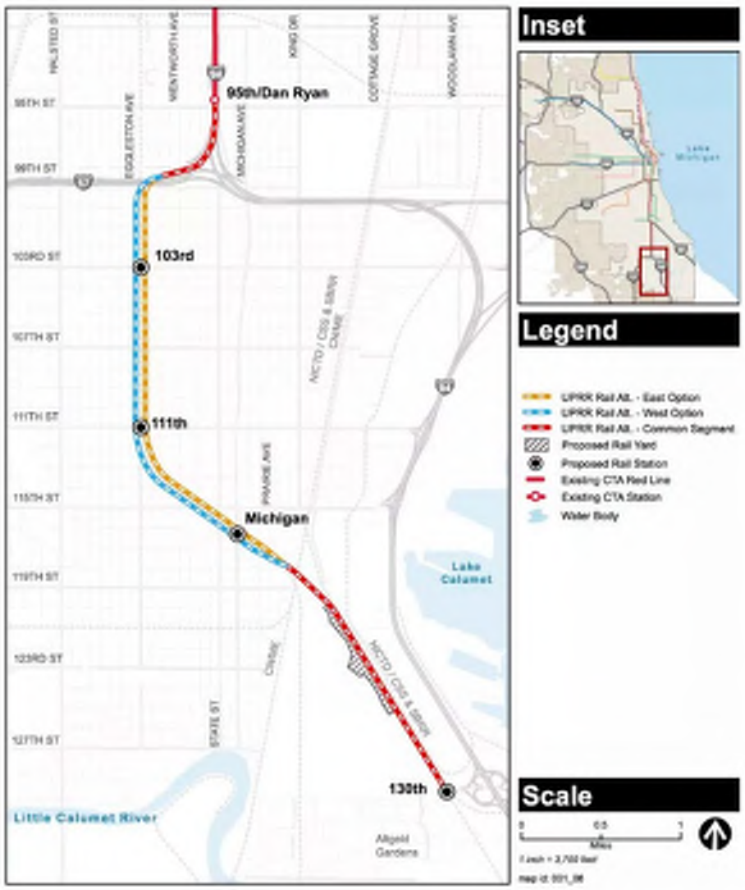

- Red Line Extension [CTA]
- Chicago Transit Authority Shows Latest Design for New 95th Street Station [Curbed Chicago]

MASS TRANSIT

http://www.masstransitmag.com/press_release/12263874/red-line-extension-project-to-130th-street-moves-forward-cta-announces-next-steps-in-historic-project-as-part-of-mayor-emanuels-red-ahead-transit-investment

CTA Red Line Extension Project to 130th Street Moves Forward

SOURCE: CHICAGO TRANSIT AUTHORITY (CTA) SEP 29, 2016

The Chicago Transit Authority recently announced a series of upcoming events that will advance the Red Line Extension Project, a plan to extend Red Line rail service to 130th Street from 95th Street including building four new rail stations that will provide rail access to the Far South Side.

The Red Line Extension Project is a key part of Mayor Emanuel and CTA's "Red Ahead" investment in its busiest rail line. Other projects improving the Red Line on the South Side include the $425 million reconstruction of the Red Line South in 2013 and the ongoing $280 million construction of a new 95th Street Terminal, which will be completed in 2018. The project is expected to create 29,000 new direct, indirect and induced jobs.

"We are pleased to make progress on this transformational Red Line project, which will expand transit for the Far South Side and create faster access to jobs, education and opportunity," said CTA President Dorval R. Carter, Jr. "As we move forward in the comprehensive federally required planning process for this project, we continue to make significant investment in the South Side that include the new 95th Terminal, improved Red and Green Line service and expanded bus service on multiple routes to better serve our customers."

The CTA two years ago narrowed the potential Red Line Extension Project alternatives to one "preferred alternative" with two possible options – one east and one west of the Union Pacific Railroad tracks on the South Side -- and announced $5 million of funding to continue planning work for the project.

The CTA announced the following developments related to the Red Line Extension Project:

- The CTA will publish a comprehensive Draft Environmental Impact Study (EIS), a requirement for obtaining federal funding for this historic project, on October 6, 2016. The Draft EIS is an extensive document that details the potential benefits and impacts of both proposed options for the project.
- The CTA will accept formal comments from the public as part of the federal Draft EIS between October 6 and November 30 (more than 45 days), encouraging feedback from the community about any aspect of the project. The feedback will be used to assist the CTA in future planning decisions, including selecting one of the two alignment options for the project.
- The CTA will also hold a public hearing on Tuesday, Nov. 1 at a location to be determined, inviting the public to learn more about the project, including asking questions and providing comments to CTA staff.
- The CTA will also begin to notify property owners whose property may be necessary to acquire for the project. The CTA is not yet acquiring properties for the Red Line Extension Project

because it has not yet selected a final alignment, nor has it secured federal funding for the project.

The RLE project is Mayor Rahm Emanuel and CTA President Dorval Carter's plan to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. The 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street, each of which would include bus and parking facilities. The current estimated cost of the project is $2.3 billion.

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The proposed alignment of the rapid transit line would be the same for the two East and West options from 95th Street to 99th Street and from 118th Street to 130th Street. The Red Line Extension would run along elevated track from 95th Street to approximately 119th Street, where it would transition to at-grade tracks.

The CTA arrived at these options based on environmental analysis and comments received at the public open house meeting and public comments submitted in 2014.

Draft EIS and public comment

The public can review the Draft EIS online at transitchicago.com/redeisstarting October 6th. Hard copies will be available at local libraries and CTA headquarters. The Draft EIS provides information about the project, its impacts and mitigations. The public is invited to provide feedback and ask questions.

Hard copies of the Draft EIS will be available at the following locations:

- CTA headquarters, 567 W. Lake Street, 2nd Floor, Chicago, IL 60661

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- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827

- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605

Once the formal review period is complete on November 30, 2016, CTA will review and respond to all the comments received.

Responses to comments will be provided in the Final EIS, which will include the CTA's analysis of the final proposed project alignment.

Outreach to property owners

The CTA will communicate with all potentially impacted property owners via a number of channels:

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- CTA staff will visit every potentially displaced building.
- Property owners can submit project feedback on the Draft EIS, which will provide addresses of potentially displaced properties, via email, regular mail and at the public hearing.
- CTA will attend meetings as requested by community members and elected officials to share information.
- CTA's web site, transitchicago.com/redeis, will continue to provide project information and updates. The public can also sign up for project update emails by contacting CTA at RedExtension@transitchicago.com.

Red Line Extension Project: Next steps

- Based on public feedback, environmental review and funding availability to conduct additional engineering work, CTA anticipates announcing the preferred option for the location of the extension of the project in 2017.
- Depending on funding availability and federal regulatory approvals, CTA anticipates publishing a Final EIS by the end of 2018, which will provide a comprehensive analysis of the project's impacts.
- Once CTA has completed the Final EIS process, as required by the federal government before it would provide federal funding for the project, CTA could then begin the process of securing funding, which is expected to include a mix of federal and local funds. That could include the creation of a special transit-only tax-increment financing district, authorized by the General Assembly in June 2016, which could provide local funding for the Red Line Extension Project.

Time Out CHICAGO

https://www.timeout.com/chicago/blog/the-cta-has-proposed-routes-for-a-red-line-extension-to-130th-street-092916

The CTA has proposed routes for a Red Line extension to 130th Street

By Zach Long
Posted: Thursday September 29 2016, 3:25pm

First proposed as part of the Red Ahead program in 2014, the Chicago Transit Authority is moving forward with its plan to extend the Red Line south from 95th Street, building four new rail stations that will provide service as far south as 130th Street. Today, the CTA revealed proposed routes for the extension, which will follow Eggleston Avenue before veering southeast at 111th Street, terminating near the Altgeld Gardens public housing project. The four new stations will be located at 103rd Street and Eggleston Avenue, 111th Street and Eggleston Avenue, Michigan Avenue and 116th Street and 130th Street and the Bishop Ford Freeway interchange.

The CTA will also hold a public hearing on Tuesday, November 1 at a location to be determined, where the public will be able to learn more about the project. No property has been acquired for the project yet, but the CTA will begin contacting owners of property that may be necessary to complete the extension. The final alignment of the route is expected to be announced sometime next year, with construction beginning once the necessary property has been acquired.

The Red Line extension will cost an estimated $2.3 billion, providing rail access to communities that have previously had to rely on buses. The project will join the ongoing $280 million construction of a new 95th Street CTA station and is expected to "create 29,000 new direct,

indirect and induced jobs," according to a press release. The construction of the extension probably won't begin until several years from now, but it marks another ambitious project for the CTA that should increase ridership and could help justify extensions to other existing lines.

Construction DIVE

http://www.constructiondive.com/news/chicago-facing-major-hurdles-in-proposed-23b-rail-project/427383/

Chicago facing major hurdles in proposed $2.3B rail project

By Kim Slowey | September 30, 2016

Dive Brief:

- The Chicago Transit Authority gave an update Thursday on its plans for a $2.3 billion Red Line rail extension, but said the project still faces significant hurdles, including a funding source, according to Crain's Chicago Business.
- The CTA still needs to file the required environmental impact studies and finalize a lengthy list of private and public-land purchases needed for the project. An environmental study is necessary if the CTA plans on requesting federal dollars to help finance the extension. In the best-case scenario, the CTA estimated that the extension would not be complete until 2026.
- CTA President Dorval Carter called the extension "transformational," citing the potential for increased access to employment and educational opportunities. He also suggested that state funding or an incremental-tax scheme could help finance the project, according to Crain's.

Dive Insight:

The CTA, however, is not the only transportation authority facing significant challenges when it comes to rail projects. The scramble for enough money to achieve even a small percentage of the necessary

repairs and upgrades needed to fix crumbling roads and bridges can sometimes lead to serious controversy among officials. Last month, Minneapolis transit officials, denied state funding for the $1.86 billion light rail extension, did an "end run" around those opposed to financing the project by moving forward with its own plan to make up their $145 million shortfall.

In addition, Maryland's Bethesda-area $5.6 billion Purple Line project ground to a halt recently when a U.S. District judge ordered additional environmental reviews on the project in response to a lawsuit filed by an environmental group and nearby residents. The ruling came right before officials expected a $900 million government check toward construction and development. Opponents cited safety issues and reduced ridership as reasons to not go forward with the project. The Purple Line team said continued delays could threaten the project from going forward, as there are time factors associated with its financing arrangements.

In addition, the Boston Green Line rail extension is still on hold after schedule delays and $1 billion in cost overruns nearly derailed the project altogether. In December 2015, the Massachusetts Bay Transportation Authority fired all of its lead contractors and blamed the contract type and procurement process on what was considered the most expensive MBTA project ever — at $642 million per mile. In the run up to restart construction, the MBTA has scaled down the scope of work significantly but is still waiting on the Federal Transit Administration to approve a $1 billion spend. The FTA said in August that it is encouraged by the changes that the MBTA has made to its Green Line plans but is waiting for "clarifying information" before it can make its final decision to fund the project.

Recommended Reading

Crain's Chicago Business: CTA crawls toward longer Red Line

http://www.railjournal.com/index.php/metros/cta-consults-on-plans-for-chicago-red-line-extension.html?channel=525

Friday, September 30, 2016

CTA consults on plans for Chicago Red Line extension

Written by Keith Barrow

CHICAGO Transit Authority (CTA) announced on September 9 that it will publish a draft environmental impact study (EIS) on October 6 for the proposed southern extension of the Red Line from 95th Street to 130th Street on the city's Far South Side.

The 8.5km extension will significantly improve access to the rail network in the south of Chicago, with new stations at 103rd street, 111th Street, Michigan Avenue, and 130th Street. All four stations will include bus and car parking facilities.

In 2014 CTA narrowed down the route for the extension to one "preferred alternative," with two alignment options east and west of the Union Pacific line through the South Side, and allocated $US 5m to continue planning work on

the project, which has an estimated capital cost of $US 2.3bn.

CTA will seek public feedback on the draft EIS between October 6 and November 30. This will feed into the selection of a final alignment, which is due to be announced next year. Subject to funding and federal regulatory approval, CTA is aiming to publish a final EIS for the project by the end of 2018, which would enable the authority to begin the process of securing funding. Construction could begin in 2022 and is expected to take around four years to complete.

The extension is part of the Red Ahead programme to modernise Chicago's busiest rail corridor. CTA invested $US 425m in the reconstruction of the southern section of the Red Line in 2013 and a construction is underway on a $US 280m project to rebuild 95th Street station, which is due to be completed in 2018.

RailwayAge

Friday, September 30, 2016

CTA Red Line extension moves forward

The Chicago Transit Authority announced on Sept. 29 a series of upcoming events that will advance the Red Line Extension Project, a plan to extend Red Line rail service to 130th Street from 95th Street including building four new rail stations that will provide rail access to the Far South Side.

The Red Line Extension Project is a key part of CTA's "Red Ahead" investment in its busiest rail line. Other projects improving the Red Line on the South Side include the $425 million reconstruction of the Red Line South in 2013 and the ongoing $280 million construction of a new 95th Street Terminal, which will be completed in 2018. CTA says the project is expected to create 29,000 new direct, indirect and induced jobs.

"We are pleased to make progress on this transformational Red Line project, which will expand transit for the Far South Side and create faster access to jobs, education and opportunity," said CTA President Dorval R. Carter, Jr. "As we move forward in the comprehensive federally required planning process for this project, we continue to make significant investment in the South Side that include the new 95th Terminal, improved Red and Green Line service and expanded bus service on multiple routes to better serve our customers."

The CTA two years ago narrowed the potential Red Line Extension Project alternatives to one "preferred alternative" with two possible options – one east and one west of the Union Pacific Railroad tracks on the South Side -- and announced $5 million of funding to continue planning work for the project.

railway-technology.com

http://www.railway-technology.com/news/newschicago-transit-authority-to-advance-23bn-red-line-extension-project-5022147

Chicago Transit Authority to advance $2.3bn Red Line Extension project

4 October 2016

The Chicago Transit Authority (CTA) in the US is set to publish a draft environmental impact study (EIS) to obtain federal funding to advance the $2.3bn Red Line Extension (RLE) Project.

The project involves a 5.3-mile extension for the Red Line rail service to stretch from 130th Street to 95th Street, as well as the building of four new rail stations. These new stops are intended for near 103rd Street, 111th Street, Michigan Avenue, and 130th Street.

The EIS gives detail on potential benefits and impacts of both proposed options for the project.

"We continue to make significant investment in the South Side."

Later on, the CTA will seek public comments as part of the federal Draft EIS between 6 October and 30 November, using feedback to assist with future planning decisions.

The authority has not yet acquired properties for the Red Line Extension Project as a final alignment has not been selected so far, nor has federal funding been secured.

RLE is a vital part of Chicago Mayor Rahm Emanuel's and CTA's 'Red Ahead' investment plan, and is expected to create 29,000 new jobs.

Other projects improving Red Line on the South Side include the $425m reconstruction of Red Line South in 2013, as well as the $280m ongoing construction of a new 95th Street Terminal due for completion in 2018.

CTA president Dorval Carter Jr said: "We are pleased to make progress on this transformational Red Line Project, which will expand transit for the Far South Side and create faster access to jobs, education and opportunity.

"As we move forward in the comprehensive federally required planning process for this project, we continue to make significant investment in the South Side that include the new 95th Terminal, improved Red and Green Line service and expanded bus service on multiple routes to better serve our customers."

THE BLOCK CLUB
a blog about Chicago neighborhoods
(https://www.dnainfo.com/chicago/features/block-club-blog)

DOWNTOWN, SOUTH LOOP & RIVER NORTH (//WWW.DNAINFO.COM/CHICAGO/DOWNTOWN-SOUTH-LOOP-RIVER-NORTH)

Transportation (//www.dnainfo.com/chicago/topics/transportation)

As Red Line Expansion Is Pondered, CTA Fails Lists 'L' Line's Epic Fails

By Justin Breen (//www.dnainfo.com/chicago/about-us/our-team/editorial-team/justin-breen) | October 5, 2016 5:47am
@dnainfo_breen (http://twitter.com/dnainfo_breen)

CHICAGO — With the Red Line potentially expanding (https://www.dnainfo.com/chicago/20160929/loop/red-line-expanding-130th-street) as far south as 130th Street, DNAinfo decided to round up some of the shenanigans on the current Red Line.

The city's busiest train line, running from Howard Street south to 95th Street, is known for its characters and unpleasant smells.

In honor of the possible Red Line expansion, DNAinfo asked Ryan Smith (https://www.dnainfo.com/chicago/20151109/north-center/ctafails-where-cta-riders-vent-on-twitter-adds-instagram-account), founder of the popular social media account CTA Fails, to round up a few of his favorite tweets and Instagram posts from Red Line incidents in the last year.

As you can see, there's already been lots of questionable activity on the Red Line in 2016.

RELATED: CTA Fails, Where CTA Riders Vent on Twitter, Adds Instagram Account (https://www.dnainfo.com/chicago/20151109/north-center/ctafails-where-cta-riders-vent-on-twitter-adds-instagram-account)

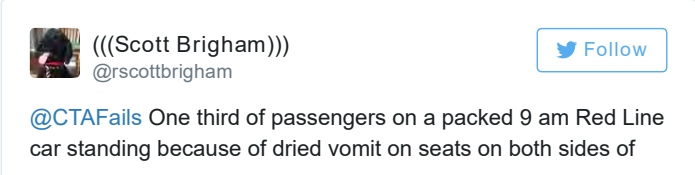

train.

9:01 AM - 25 Aug 2016 · Chicago, IL, United States

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Yes, too much to ask. #CTAFail twitter.com/thatsamesong/s…

7:09 AM - 25 Apr 2016

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RT @jmarquar: This red line car smells like someone peed in a dirty gym bag and then microwaved it. @CTAFails

4:13 PM - 19 Feb 2016

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twitter.com/rskybetter/sta…

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#Repost @bonjourjamie • • • The absolute last thing I would ever want to do would be to bring home any part of the CTA. #ctafail @ctafail

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5:33 PM - 21 Mar 2016

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RT @davychuck: Dude singing and getting wasted on the Red Line car 5210 @CTAFails @cta

8:01 AM - 17 Aug 2016

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twitter.com/jbontrager78/s…

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Erin Robertson
@erob213

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How long till the Sheridan red line platform just collapses? @CTAFails

8:05 AM - 27 Jul 2016

1 5

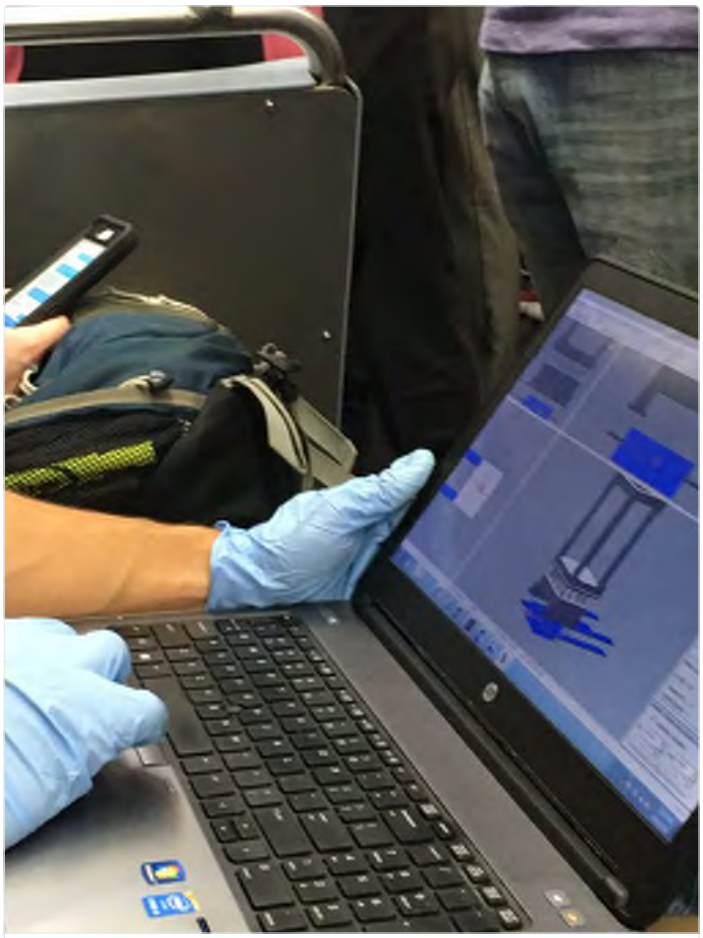

CTA Fails
@CTAFails

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RT @CIGS41: Is this guy worried about leaving fingerprints? Scary evening on the Red Line.@CTAFails

6:01 PM - 19 Sep 2016

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ctafail • 5 months ago

+ Follow

#Repost @thelaurenoneil • • • A thick coat of urine to start your morning... #pungent #ctafail

53 likes 5 comments Instagram

Justin Breen · DNAinfo Reporter

What was your worst CTA experience?

44

VOICE YOUR OPINION ON NHSQ →

+24

(https://neighborhoodsquare.com/n/item/4fLM?utm_campaign=North+Center&utm_medium=integration_partner&utm_source=dnainfo&utm_content=jbreen%40dnainfo.com&prompt=top)

For more neighborhood news, listen to DNAinfo Radio here (https://www.mixcloud.com/DNAinfo/old-town-jewel-cleans-up-quickly-after-dna-comes-calling/).

http://www.nwitimes.com/business/transportation/cta-to-extend-red-line-south-to-th-street/article_4a6874c0-7cbe-5465-a5b9-f1761a6ee0ae.html

CTA to extend Red Line south to 130th Street

Andrew Steele andrew.steele@nwi.com, (219) 933-3241

M. Spencer Green

In this June 18, 2013, photo, construction workers head home at the end of the day after reconstruction project on Chicago's South Side.

The Chicago Transit Authority is moving forward with a $2.3 billion project to extend Red Line rail service south to 130th Street.

The project would take the Red Line from its current terminus at 95th Street near the Dan Ryan Expressway south along the Union Pacific freight rail, curving southeast to a new terminus at 130th Street, near that road's interchange with the Bishop Ford Expressway.

The extended Red Line would run parallel to the South Shore Line for a short stretch as it approaches 130th Street, terminating about three miles from the South Shore's Hegewisch station.

The Chicago Transit Authority intends to extend its Red Line more than 5 miles south to 130th Street. The new line will parallel the Union Pacific Railroad for much of its path. The CTA has yet to decide whether it will run along the west or east side of those tracks.

The CTA published a draft Environmental Impact Statement detailing the project Thursday. Publication of the EIS opened a public comment period that will last through Nov. 30.

The Red Line is the CTA's main north-south line, running through the Loop to the city's northern edge. The extension project is part of the city's Red Ahead program that has included reconstruction of the southern part of the Red Line and construction of a new terminal at 95th Street.

Red Ahead is intended to increase access to jobs for south side residents, and encourage development along transit lines. Chicago Transit Authority President Dorval Carter said the Red Line project "will expand transit for the Far South Side and create faster access to jobs, education and opportunity."

The 5.3 mile Red Line extension would include four new stations, with parking facilities, including one at 130th Street.

The earliest the CTA expects to begin construction is 2022, in which case the rail line would begin operations in 2025.

The draft EIS is available at the project website atwww.transitchicago.com/redeis/.

Progressive RAILROADING

http://www.progressiverailroading.com/passenger_rail/news/CTA-releases-environmental-study-for-Red-Line-extension--49696

CTA releases environmental study for Red Line extension

10/6/10

Rendering of the 103rd Street StationPhoto – CTA

The Chicago Transit Authority (CTA) today published a draft environmental impact statement for its proposed 5.3-mile Red Line extension project.

The agency will accept public comment on the document through Nov. 30. CTA will use the feedback in deciding one of the two alignments for the project, agency officials said in a press release.

The $2.3 billion project would extend the route south of the line's terminus at the 95th Street/Dan Ryan Station. Four new stations would be installed on the city's far south side near 103rd street, 111th Street, Michigan Avenue and 130th Street.

The CTA is mulling two options: one calls for building elevated track east of Union Pacific Railroad's right-of-way from 99th Street to 118th; the other involves constructing elevated track west of the same UP segment.

The proposed alignment would be the same for the two options from 95th Street to 99th Street and from 118th Street to 130th Street. The Red Line would run along elevated track from 95th Street to 119th Street, where it would transition to at-grade tracks, according to CTA.

The agency has scheduled a Nov. 1 public hearing on the plan.

The Red Line extension is a key part of CTA's "Red Ahead" investment on the agency's busiest line. Other projects include the $425 million reconstruction of the Red Line South in 2013 and the ongoing $280 million construction of a new 95th Street Terminal, which is scheduled for completion in 2018.

A map depicts the two options for the Red Line Extension
(Click to view larger.)
Source: CTA

http://www.rtands.com/index.php/passenger/rapid-transit-light-rail/cta-publishes-red-line-extension-draft-eis.html

Thursday, October 06, 2016

CTA publishes Red Line extension Draft EIS

Written by Mischa Wanek-Libman, editor

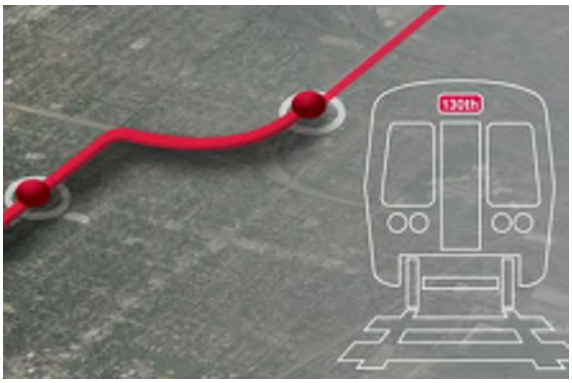

The Chicago Transit Authority published the Draft Environmental Impact Statement (EIS) for its proposed Red Line Extension (RLE) to 130th Street.

The RLE project is Chicago Mayor Rahm Emanuel and CTA President Dorval Carter's plan to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. The 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street, each of which would include bus and parking facilities. The current estimated cost of the project is $2.3 billion.

There are two options being considered for the extension. The Union Pacific Railroad Rail Alternative, East Option, would build an elevated structure immediately east of the UP right-of-way from 99th Street to 118th Street. The capital costs for this option are estimated to be $2.26 billion. This variation would require 106 displacements, the majority of them (90) being residential.

The second option, Union Pacific Railroad Rail Alternative, West Option, would build an elevated structure immediately west of UP's right-of-way from 99th Street to north of 118th Street. The capital costs for this option are estimated to be $2.3 billion. This variation would require 46 displacements made up of a mix of residential (26), commercial and industrial properties.

The proposed alignment of the rapid transit line would be the same for the two East and West options from 95th Street to 99th Street and from 118th Street to 130th Street. The Red Line Extension would run along elevated tracks from 95th Street to approximately 119th Street, where it would transition to at-grade tracks.

CTA will accept comments on the Draft EIS between Oct. 6 and Nov 30. The transit agency will also hold a public hearing on Nov. 1 and has begun to notify property owners who may be affected by acquisition along both route variations.

Based on public feedback, environmental review and funding availability to conduct additional engineering work, CTA anticipates announcing the preferred option for the location of the extension of the project in 2017 and publication of the Final EIS by the end of 2018.

STREETSBLOG CHICAGO

http://chi.streetsblog.org/2016/10/06/is-2-billion-red-line-extension-best-way-to-provide-transit-in-far-south-side/

Thursday, October 6, 2016

Is $2 Billion Red Line Extension Best Way to Provide Transit in Far South Side?

by Steven Vance

Architect's rendering of a proposed CTA Red Line station at 103rd Street and Eggleston Avenue. The Union Pacific railroad tracks are left of the station.

The Chicago Transit Authority released a major study today, the next step in the developing project to extend the Red Line southward from the 95th Street terminal to 130th Street in the Altgeld Gardens neighborhood. The Environmental Impact Study is required by the federal government before the CTA can ask for funding from the U.S. Department of Transportation.

The CTA has been studying the Red Line extension for decades. Former mayor Richard J. Daley promised it to residents of Roseland and Pullman when the Red Line's Dan Ryan branch opened in 1969. In 2009 the CTA finished a required "Alternatives Analysis" wherein they studied different routes and modes to provide transit service in the area that the extension would serve.

The CTA determined it would be in their and residents' best interest to extend the Red Line, using the same kinds of tracks and vehicles as the existing rail service, from 95th Street, west to Eggleston Avenue (400 West), and then south along an existing Union Pacific-owned freight railroad right of way.

Four new stations would be built at 103rd Street, 111th Street, Michigan Ave at 116th Street, and on 130th Street, at approximately 950 East.

The CTA said the project would cost about $2.3 billion. The Chicago Tribune reported last week that the extension could be up and running in ten years, with construction starting in 2022. That's an optimistic timeline, and it presumes that funding can be secured from many sources, primarily the federal government. Required matching local funds could be provided by an existing TIF district and, in theory, the state of Illinois, although it's been a long time since state lawmakers have been able to pass a budget.

The Chicago City Council is currently debating whether or not to approve "transit TIF" districts. A new state law would allow the city to draw a transit TIF district around the Red Line starting at Madison Street and going all the way to 130th Street along the existing and proposed tracks. The transit TIF would allow the city to take out a federal loan to help pay for the extension.

Transit increases property values, and a portion of the increase in property tax revenues after establishing the district would pay off the loan. After the Chicago Public Schools a portion of the new money that's proportionate to its share without a TIF district, 20 percent of the remaining funds would go to other taxing bodies, and the other 80 percent would be used to pay back the loan.

For the first time, the CTA also released a citizens' guide to the Environmental Impact Statement that summarizes and describes the content of the full document, and is a welcome addition to the discussion about the need for rapid transit service in Roseland, Pullman, and Altgeld Gardens.

Since the Red Line extension would cost $2.3 billion, it's necessary to consider whether this would be the smartest way to provide rapid transit service to Roseland, Pullman, and Altgeld Gardens. A recent article in The Chicago Dispatch points out there's existing rail transit infrastructure in those neighborhoods in the form of Metra's Electric District lines.

A map shows the proposed Red Line extension in yellow, and nearby existing Metra Electric lines in blue.

The Metra Electric already has stations on 103rd, 107th, 111th, 115th, and 121st and State Streets, all within one to one-and-a-half miles of the proposed CTA stations. Both the Metra Electric (solid blue line) and the South Shore Line to Indiana (dashed blue line) currently run close to the Altgeld Gardens housing project, but neither line stops there.

Planners at the Chicago Department of Transportation, CTA, Metra, and the Regional Transportation Authority, haven't shown interested in restoring rapid transit service to Metra Electric stations. Sandy Johnston, who studies railroads and rail transit in Chicagoland told The Chicago Dispatch that CDOT's South Lakeshore transit study in 2012 "totally sandbagged the option of restoring frequent service on the Metra Electric."

But the Coalition for a Modern Metra Electric, a collaboration between transportation organizations and South Side community groups, as well as citizen advocate Mike Payne, who has long proposed turning the Electric line into a rapid "Gray Line," have pushed strongly for this service restoration.

On the other hand, it's likely that many residents of the areas that would be directly served by the Red Line extension wouldn't be satisfied solely by the creation of rapid transit service on the Electric line. They've been waiting for decades for the Red Line to be extended further south. Moreover the fact that the backbone of the 'L' system runs all the way to the city's northern border but stops several miles short of the southern border has long been a symbol of transit inequality in Chicago.

The relevant problem with CTA's Environmental Impact Study, and the Alternatives Analysis that preceded it, is that the CTA isn't required to coordinate with other agencies. The fundamental issue is that the studies didn't figure out the best way to provide transit service in the underserved neighborhoods – provided by any and all transit operators. The studies are instead a recommendation on how *the CTA* can provide transit service.

The CTA will host an open house and public hearing in West Pullman on Tuesday, November 1, 2016, from 5:30 to 7:30 p.m. at St. John Missionary Baptist Church, 211 E. 115th St. You can submit a comment for the record at the event, or via email.

CTA to host events to promote Red Line extension

Posted: Tuesday**, October 18, 2016 11:22 am**

CTA Red Line extension

An artist's rendering of the proposed new 103rd Street CTA station.

The Chicago Transit Authority (CTA) recently announced a series of events that will advance the Red Line Extension Project, a plan to extend rail service to 130th Street from 95th Street including four new rail stations to provide rail access to the far south side.

The Red Line Extension Project is a key part of Mayor Emanuel and CTA's "Red Ahead" investment in its busiest rail line.

The CTA two years ago narrowed the potential Red Line Extension Project alternatives to one "preferred alternative" with two possible options and announced $5 million of funding to continue planning work for the project.

The CTA announced, on Sept. 29, the following developments related to the Red Line Extension Project:

•The CTA published a comprehensive Draft Environmental Impact Study (EIS), a requirement for obtaining federal funding for this historic project, on Oct. 6. The Draft EIS details the potential benefits and impacts of both proposed options.

•The CTA will accept formal comments from the public as part of the federal Draft EIS through Nov. 30. The feedback will be used to assist the CTA in future planning decisions.

•The CTA will also hold a public hearing on Tuesday, Nov. 1, at a location to be determined.

•The CTA will also begin to notify property owners whose property may be necessary to acquire for the project. The CTA is not yet acquiring properties because it has not yet selected a final alignment, nor has it secured federal funding.

The 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street. The estimated cost is $2.3 billion.

In August 2014, the CTA narrowed the list of extension alternatives to one "preferred alternative" with two variations:

•Union Pacific Railroad (UPRR) Alternative, East Option:

The CTA elevated structure would be placed east of the Union Pacific Railroad right-of-way from 99th Street to 118th Street.

•Union Pacific Railroad Rail (UPPR) Alternative, West Option:

CTA elevated structure would be placed west of Union Pacific Railroad right-of-way from 99th Street to north of 118th St.

The proposed alignment of the rapid transit line would be the same for the East and West options from 95th Street to 99th Street and from 118th Street to 130th Street. The Red Line Extension would run along elevated track from 95th Street to approximately 119th Street, where it would transition to at-grade tracks.

The public can review the Draft EIS online at transitchicago.com/redeis. Hard copies will be available at local libraries, including Woodson Regional Library, 9525 S. Halsted St., and CTA headquarters, 567 W. Lake Street. The public is invited to provide feedback and ask questions.

Once the formal review period is completed on Nov. 30, CTA will review and respond to all the comments received.

Responses to comments will be provided in the Final EIS, which will include the CTA's analysis of the final proposed project alignment.

The CTA will communicate with all potentially impacted property owners via a number of channels:

•Letters will be mailed to every property owner that could be potentially displaced by the project.

•Property owners can submit project feedback on the Draft EIS via e-mail, regular mail and at the public hearing.

•CTA will attend meetings as requested to share information.

•CTA's Web site, transitchicago.com/redeis, will continue to provide project information and updates. The public can also sign up for project update e-mails by contacting redextension@transitchicago.com.

The next steps on the Red Line Extension Project:

•Based on public feedback, environmental review and funding availability to conduct additional engineering work, CTA anticipates announcing the preferred option for the location of the extension of the project in 2017.

•Depending on funding availability and federal regulatory approvals, CTA anticipates publishing a Final EIS by the end of 2018.

•Once CTA has completed the Final EIS process, as required by the federal government before it would provide federal funding for the project, CTA could then begin the process of securing funding, which is expected to include a mix of federal and local funds. That could include the

creation of a special transit-only tax-increment financing district, authorized by the General Assembly in June 2016, which could provide local funding for the Red Line Extension Project.

Time Out CHICAGO

CTA fares won't be getting any more expensive in 2017

By Zach Long Posted: Monday October 24 2016, 11:10am

https://www.timeout.com/chicago/blog/cta-fares-wont-be-getting-any-more-expensive-in-2017-102416

Photograph: CC/Flickr/H. Michael Miley

When you tap your Ventra card in 2017, you'll be charged the same train and bus fares you've grown accustomed to over the past seven years. This morning, the Chicago Transit Authority presented its proposed budget for 2017 and it's keeping bus fares at $2 and train fares at $2.25. Prices for daily, monthly and weekly passes—all of which were raised in 2013—will also remain the same.

The CTA's proposed 2017 budget totals $1.524 billion, up from $1.475 billion in 2016. According to the CTA's report, the organization was able to balance its budget through operational cost savings, including pre-purchasing fuel and electricity. Even though proposed spending is on the rise, overall CTA ridership is expected to drop again in 2017. Projections show that CTA bus ridership will continue to drop while CTA train ridership will rise, likely buoyed by the recent spate of transit-oriented development projects along the Blue and Red Lines.

The CTA also announced a five-year, $3.5 billion capital improvement plan which will fund a variety of ongoing improvements to the system's facilities. This includes the completion of Washington-Wabash station in 2017, reconstruction of the Red Line's 95th Street Terminal, continued work on the "Belmont Flyover," continued planning of the Red Line extension from 95th Street to 130th Street and new stations at the Belmont Blue Line and Garfield Green Line stops.

By Zach Long 461 Posts Zach is the deputy editor of *Time Out Chicago*. He can write faster than George R.R. Martin. Follow him on Twitter @z_lon

For Riverdale, Red Line extension may be path to employment

By Kevin Stark | October 25, 2016

Photo by Kerri Pang

Cheryl Johnson's family has been advocating for improvements in the Riverdale community for decades. Her mother, Hazel, worked with a young Barack Obama on an asbestos removal campaign at the Altgeld Gardens housing project in the 1980s.

Cheryl Johnson ticks off a few scenarios for how long it might take to get from her neighborhood to a nearby assembling facility for Ford Motor Co. If she drives, it's five minutes to the plant on South Torrence Avenue near the Calumet River. If she bikes, it's 22 minutes. If she walks, it's a half hour.

"But if I have to use public transportation, I'll have to catch three buses and walk six blocks just to get to the plant," said Johnson, who lives in Riverdale, one of Chicago's poorest and most isolated communities – and still haunted by its industrial legacy.

Cut off from major transit lines, Riverdale is 16 miles south and east of the Loop. It's bound by the Illinois Central Railroad on the west, the city limits on the south, the Bishop Ford Expressway on the east and 115th street on the north.

Only a few bus lines go near Riverdale — the Number 34 South Michigan being the most direct**.**

In the geography of opportunity – a term that seeks to capture the impact of housing segregation and sprawling development on racial and class mobility – commute time is a significant factor for residents trying to escape poverty. The longer the average travel time for an area, the harder it is for people to escape poverty.

Riverdale has the highest unemployment rate in the city at 41 percent – nearly five times the citywide average, according to 2014 statistics. Of Riverdale's working population, 37 percent spend more than an hour commuting to work, the second-highest percentage of any neighborhood in Chicago (surpassed only by the nearby Burnside neighborhood).

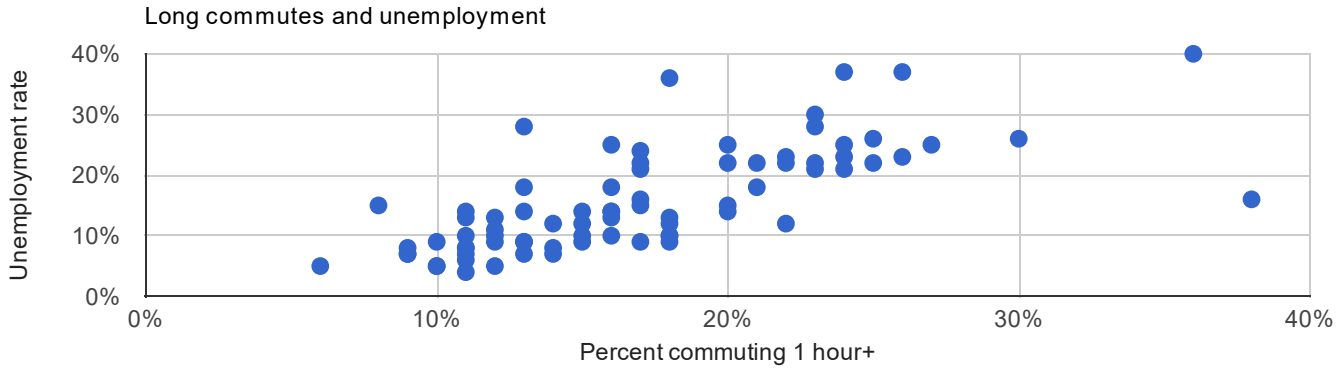

A correlation exists between high unemployment and long commute times, according to a Reporter analysis of Chicago community areas.
Source: U.S. Census Bureau

In this remote city pocket where President Barack Obama cut his teeth as a young organizer in the 1980s, the proposed extension of the Chicago Transit Authority's Red Line from 95th Street to 130th Street in Riverdale could change fortunes. The $2.3 billion transit project could bring thousands of construction jobs, and when it's constructed, train service could make it easier for residents to get to work.

This month, the CTA released its preliminary environmental impact study, a major step toward securing federal funding for the project.

"If the city moves on the Red Line extension, what a great benefit it would be for this area," Johnson said earlier this year. "We could go all the way from the Riverdale community area all the way to Loyola, to Howard, to Rogers Park. One stop. Straight.
How convenient would that be? For opportunities and accessibility to other opportunities. That's a huge issue for this area."

Riverdale's changing fortunes

Riverdale's population reached its peak population of 15,018 in 1970 after the construction of Eden Green, one of the nation's first majority black-owned and -operated townhouse and apartment developments in 1968.

Since then, Riverdale has lost residents and jobs, and many of these homes are now vacant, according to the 2010 Census (http://chicagoreporter.com/not-just-gary-vacant-houses-plague-some-chicago-neighborhoods-too/). Riverdale had the highest vacancy rate—45 percent of any Chicago community.

Today, Riverdale has a population of 7,190 residents and a median income of $14,000. Almost 70 percent of residents report living in poverty — which is defined by the federal government as below $24,000 for a family with two adults and two children.

Forty-six percent of the 201 local businesses that remain in the neighborhood are retail, food or other service companies. Manufacturing businesses make up just 6 percent of local companies and construction less than 5 percent.

Historically, Riverdale has been supported by industrial manufacturing, where products are produced and shipped to other places. Over the years, the economy has shifted to the service and technology sectors, hurting the community and others like it.

University of Chicago's Carmelo Barbaro said access to transportation is a "critical factor" for low-income workers who are trying to adapt to a new economic landscape absent stable manufacturing jobs. It is very easy to end up in a situation where you lose your job through the course of several instances where you failed to balance your childcare needs, transportation needs and your work schedule, said Barbaro, the executive director of the Poverty Lab, a local research institute.

Attracting new companies to an area like Riverdale is difficult. Businesses locate in thriving markets, and the high poverty rate in Riverdale is a deterrent, exacerbating efforts to bring jobs the community.

Then there is the legacy of bygone industries, which have left the land contaminated. Riverdale is home to six active Superfund sites, areas where local pollution poses a health risk, according to the federal government. Any new business would likely have to spend money to clean up lead and other heavy metals in the soil.

In 1945, Chicago and the federal government built Altgeld Gardens — a housing development where Johnson's family has lived for decades. The development rapidly transformed Riverdale into a residential area.

Altgeld, a maze of red brick homes along the nearby Little Calumet River, a forest preserve and a water treatment plant, is surrounded by many former factories, landfills, dumps and polluted rivers and creeks. The area has been plagued by a range of pollutants — lead, PCBs, DDT, DDE, DDD.

In the 1980s a young Barack Obama worked with Johnson's mother, Hazel, on a campaign to exorcise asbestos insulation from the development. The elder Johnson helped pressure President Bill Clinton to sign an executive order in the early 1990s requiring that the U.S. Environmental Protection Agency consider the impact of pollution on low-income and minority communities – a key moment in the environmental justice movement.

Cheryl Johnson has continued her mother's legacy of fighting for equality in Riverdale. Johnson, who runs the social justice advocacy organization People for Community Recovery, looks around her neighborhood and sees people who want to work – and available land.

(http://chicagoreporter.wpengine.netdna-cdn.com/files/2016/10/web_Landfill_4.jpg)

File Photo by Tyler Stabile

River Bend Prairie Landfill sits across the river from Altgeld Gardens on the border between Chicago and Dolton.

But, she said, it is challenging to get Chicago's leadership to see the value in Riverdale.

"Both sides have to compromise," she said. "Industry may have to spend more, and we might have to give something up, but damn, let's have these conversations."

Breaking the cycle of poverty and unemployment

"When you look at Lincoln Park, Wrigleyville and other neighborhoods, there is a quality of life that exists there that does not exist in our area," said Andrea Reed, executive director of the Greater Roseland Chamber of Commerce in the nearby Roseland neighborhood. "People have nice stores and boutiques and coffee shops and people are getting out on the weekend to the businesses in the area. We want to be able to improve the area so that we have that, so people want to live, work and play in that area."

Some experts envision a similar future for Riverdale. Margaret Simms, director of the Low-Income Working Families initiative at the Urban Institute think tank in Washington, D.C., said Chicago can undertake an assessment of the workforce within the area to identify what businesses would generate jobs there. That would be "part of a strategy that promotes businesses that people are qualified for," she said.

Chicago must be "more aggressive" with its vocational training and redevelopment policies, she said, adding that too often politicians are trapped in short term thinking, looking for results within an election cycle. She said a true solution would take longer. "This is an issue for public policy. This is not easy and quick — it requires a sustained strategy over time and it may not be in sync with political strategy and leadership," Simms said.

For Reed, creating jobs in a community goes a long way to solving other problems that plague areas like Roseland and Riverdale — problems like violence and drugs.

"When you have a job, it changes the trajectory of your life," Reed said. "When you have your own keys to your own apartment, to your own car, it changes the perspective of your life. The more people that are in that position, it creates change. The one way we know of to do this is through economic development."

Johnson said the Red Line could do that for Riverdale.

"Whenever there is transit, there are businesses," she said. "We have the most developable land in the city of Chicago, so why not?"

This post has been updated since publishing.

This story is part of a series about how the proposed Red Line extension will affect residents on Chicago's Far South Side. Sign up to get these stories in your inbox (http://salsa3.salsalabs.com/o/50480/p/salsa/web/common/public/signup?signup_page_KEY=8841) .

The $100 million dream: MacArthur may fund better Loop, Obama library transit

By Greg Hinz October 25, 2016

Lured by a $100 million carrot, a Chicago civic group is ramping up its effort to revive plans for expanded transit service in the bustling and increasingly congested Loop area with a new element: better transit to the Barack Obama library site, too, combined with new investment in housing and jobs on the South Side.

The new proposal comes from the Chicago Central Area Committee, a 60-year-old organization focused on growing and making downtown work better. It's being disclosed now because CCAC is bidding for **an innovative $100 million grant** that Chicago-based MacArthur Foundation is offering for the best big idea worldwide. Those applications were due early this month, and the foundation is expected to release its short list of finalists soon.

Though CCAC's plan is expansive, even wild in its ambition, it puts together in one spot two obvious concerns: downtown's need for added capacity on Chicago Transit Authority lines from the north and west, which now are near capacity in peak hours, and the South Side's need for both new service and massive redevelopment help.

The catalyst is the Obama library, which would be at the east end of the Hyde Park neighborhood in Jackson Park, roughly between 60th and 63rd streets. Right now, the location has only occasional service nearby on Metra's lakefront Electric Line.

"Chicago today is two cities," says **a CCAC video** submitted as part of the MacArthur application. "One buzzing with life and attracting the world's best and brightest. . . .The other is in need of investment."

A narrator in the video is Jacky Grimshaw, a major figure in the city's African-American political establishment who served as Mayor Harold Washington's intergovernmental relations chief and, until recently, was Obama's next-door neighbor in Kenwood. She's now vice president of policy at the Center for Neighborhood Technology.

"We need to expand our transit system. And we need to bring in people who have been left out," Grimshaw said in an interview. "It's a vision. I can't put a guarantee on it. But (Obama) could help get us where we need to go."

***READ THE REPORT:** A PDF of the CCAC's proposal*

Much of the idea comes from Ed Zotti, a transit consultant and researcher. **I wrote a couple of years ago**about how he was working with CCAC to try to revive the old Central Area Circulator or

connector plan, starting with a transit line from Union Station to Streeterville, mostly using existing right-of-way under the Merchandise Mart, Trump Tower and Tribune Tower on the north bank of the river.

The new element calls for the creation of a Chicago Transit Redevelopment Trust.

The trust would help generate support, planning and some funding for both the riverbank line and new service along Metra right-of-way as far as 79th Street, either a new line run by the CTA or much more frequent Metra service.

The trust also would be authorized to buy and invest in property near transit lines. As development and land values grow, the property would be sold and proceeds invested in South Side developments, CCAC says.

"The idea is to deal with both problems and do something for everybody," Zotti told me. "We don't want to get in an adversarial role with anyone, but we want to ask: How do we make the best use of limited federal money" available for new transit projects?

The trust, which would be organized as an independent 501(c)(3) nonprofit, likely would need billions for the transit work itself. That could come from federal grants, creation of a special service area that would levy a small property tax downtown, or perhaps a transit tax-increment financing district like the one being formed to rehab the CTA's Red Line north.

But once the transit work is underway, the trust would focus on leveraging its real estate holdings to promote South Side development.

CCAC Chairman Greg Hummel said he's had preliminary conversations with Obama library officials and aides to Mayor Rahm Emanuel. "What I've heard back is they're interested."

Though CCAC was involved in the development of the **Dearborn Park project** in the 1970s, which was the spark that led to a rebirth of the Near South Side as a residential neighborhood, it has only begun to vet its plans with the many local groups that would be affected.

Beyond that, CCAC could end up competing for some of the same pots of money that the CTA is eyeing to extend the Red Line south from 95th to the city limits.

But the group's idea surely fits Daniel Burnham's "make no little plans" mold. And, frankly, it gets into a level of big-think city planning that has almost disappeared in the past couple of decades.

So it's trial balloon time. We'll see how far it floats. There certainly is a problem out there in need of a good innovative solution.

THE MACARTHUR GRANT APPLICATION

MacArthur 100 Application

MACARTHUR "100&CHANGE" APPLICATION

Chicago Central Area Committee – Alliance for Regional Development

Submitted 10/3/2016

A. EXECUTIVE SUMMARY (150 words)

Provide a brief summary description of the problem that you are committed to solving and the solution that you are proposing. Your Executive Summary should be contained in a single paragraph. Focus on delivering a compelling overview so that the Evaluation Panel members assigned to score your application will want to read more. Your Executive Summary, along with other portions of your application, may be extracted and revealed to the public. Therefore, the paragraph should not require any other context to explain clearly the problem and your proposed solution. This is your opportunity to make a strong first impression.

The information economy has become increasingly concentrated in dense, vibrant urban centers attracting the best and brightest from the surrounding region – in Chicago's case, the Great Lakes and upper Midwest. An essential ingredient in building and sustaining these centers is efficient rail transportation carrying workers to, from and within the urban core. Upgrading Chicago's overburdened rail system is urgent and offers a chance to improve the lives of all. Lines serving the revitalizing parts of the city are crowded and need relief; meanwhile, low-income neighborhoods with underutilized rail infrastructure require new investment. We propose to create a Chicago Transit Redevelopment Trust that will leverage new and existing rail assets to revive neglected communities while promoting city and regional growth. We believe this trust will be a model for cities seeking an effective way to adapt to the new economy, rebuild their centers, and improve access to opportunities.

B. YOUR TEAM: WHO ARE YOU?

The following information is required to capture a basic understanding of the structure, leadership, and capabilities of your team.

TEAM PURPOSE (150 words)

Please explain how the problem and your proposed solution align with the primary purpose of your organization or collaboration of two or more organizations. If there is a loose or indirect alignment, please explain why you've decided to solve this problem.

The Chicago Central Area Committee (CCAC), the lead partner, is a coalition of leading businesses, institutions and not-for-profits that advocates strategic planning and development to strengthen the city's competitiveness and improve its quality of life. CCAC has been involved with all major planning efforts in Chicago's core since its founding in 1955. Among other efforts, CCAC sponsored the Dearborn

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Scribd. 1 of 14

http://www.chicagobusiness.com/article/20161025/BLOGS02/161029932/macarthur-foundation-may-fund-better-loop-obama-library-transit

SATURDAY, OCTOBER 29, 2016

EVENT: Red line extension hearing

A public hearing for the red line extension project's draft environmental impact statement (EIS) to take place at the St. John MB Church at 211 E. 115th Street on Tuesday, Nov. 1, 2016 from 5:30 - 7:30 PM. For more information please refer to the flyer below.

As an aside at the 9th Ward meeting this past Tuesday, there was a nice presentation to update us on this project which is moving along at this time. We saw a presention on how this project would affect the parks along the right of way. Also we learned that through a state supreme court ruling, the CTA can't use eminent domain to purchase the right of way from the Union Pacific Railroad. Also there were handouts available including the flyer you see above and a citizen's guide pamphlet for the extension project. It would interesting to see what will be said at this hearing this coming Tuesday.

ALSO, click this link for other documents that are downloadable and printable for this project.

Like 5 Share Tweet Share

Posted by Levois at 12:24 PM G+1 Recommend this on Google

Labels: 9th ward, chicago transit authority, events, flyers, hearings, neighborhoods, policy, projects, public transportation, red line, south side

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QUESTIONS, TIPS, PICS, ETC!

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This is NOT the e-mail to the Alderman, but rather for this blog. E-mails are subject to publication unless sender requests message not be published

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EVENT: Red line extension hearing

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Red Line extension aims to improve transit and development on the Far South Side

By La Risa Lynch | October 31, 2016

For years, talk of extending the Red Line to Chicago's southern-most limits was an urban legend. Longtime African-American residents of the South Side discussed it, but nothing has happened since the public train line, which runs along the city's north-south racial divide, began operating in 1969.

Until now.

This month, the Chicago Transit Authority took a major step toward securing federal funds for the Red Line extension when it completed a preliminary environmental impact study proposing two options for placement of the line and identifying the properties that may have to be acquired for the project.

On Nov. 1, the public will comment on the study for one of the most costly and potentially transformative public infrastructure projects in decades on the predominantly black South Side. At an estimated $2.3 billion and affecting 128,000 people, from middle-class homeowners to public housing residents, the extension could mitigate the effect of transportation policies that experts say historically have supported racial segregation and economic disenfranchisement.

The project could create more than 6,000 construction jobs and dozens of businesses at four new proposed train stations along the extended route from 95th Street to 130th Street by the time it is completed in 2026, according to the transit authority. And it promises easy access to public transportation for residents of the isolated and impoverished pockets (/for-riverdale-red-line-extension-may-be-path-to-employment/) on Chicago's southern border.

> ***CTA Public Hearing***
> *Tuesday, Nov. 1, 2016*
> *5:30-7:30 p.m.*
> *St. John Missionary Baptist Church*
> *211 E. 115th St.*
> *Chicago, IL 60628If you can't attend the hearing, comments can be made online at: RedExtension@transitchicago.com (mailto:RedExtension@transitchicago.com) or mailed to:*
> *Chicago Transit Authority*
> *Strategic Planning & Policy, 10th Floor*
> *Attn: Red Line Extension Project*
> *567 W. Lake Street*
> *Chicago, IL 60661-1465*
>
> *Public comments are accepted through Nov. 30, 2016.You can read a hard copy of the environmental impact study at local libraries.*
>
> *Click here (http://www.transitchicago.com/news_initiatives/planning/rlx/whatsnew.aspx) for a list of libraries.*

"If the City of Chicago and the region are serious about equity, equity for all of its citizens, then the Red Line extension is the major project to bring that about," says Lou Turner, who helped lead a grass-roots effort years ago to revive a dormant plan to extend the Red Line, the city's busiest "L" with 79 million riders in 2015.

The Red Line was born of transportation policies that enforced the color lines between black and white neighborhoods, says Turner, who worked with the defunct Developing Communities Project, where President Barack Obama got his start as a community organizer in the 1980s.

The line ends abruptly five miles from the city's southern limits, choking off thousands of poor black Chicagoans on the Far South Side from jobs in the city by limiting their access to steady public transportation.

When the Red Line was launched nearly 50 years ago, the story was different. The opening of the Dan Ryan Expressway (http://www.encyclopedia.chicagohistory.org/pages/440.html) in 1961 expedited white flight from the South Side, Turner said. The train stopped at 95th Street to keep blacks in their place, literally. "[It] wasn't going to be some means for black people to follow white people out of

the city," he said.

This unofficial role of the Red Line has changed over time.

"Initially it was to protect and secure white flight," said Turner, now a professor of African-American studies at the University of Illinois Urbana-Champaign. "But over the years the demographics [of the Far South Side] changed and now you have black suburbs."

The history of the Red Line

When longtime South Siders talk about the extension of the Red Line, they share the same story. Nearly 50 years ago, they say, then-Mayor Richard J. Daley told residents of the far South Side neighborhood of Roseland that he would extend the train line past 95th Street. But he didn't. News reports at the time say it was because of a lack of money.

The Chicago Transit Authority's 1958 master plan, New Horizons for Chicago Metropolitan Area (https://archive.org/stream/newhorizonsforch00chic#page/n0/mode/2up), outlined the extension of the South Side Rapid Transit, now the Red Line, well past 95th Street.

In 1976, there was more talk of extending the line. Instead, transit officials prioritized the extension of what is now the Blue Line north to O'Hare International Airport.

In 2002, Turner worked for the Roseland-based Developing Communities Project, which sought to extend the Red Line. In 2004, the group helped pass a non-binding ballot referendum in favor of the extension.

Jacky Grimshaw, a former member of the city's transit board, says money may have impeded the extension.

"When building major projects you have to get federal money, and you can only go as far as federal money will take you," said Grimshaw, who is vice president of the Center for Neighborhood Technology, a public policy advocacy group.

Other new lines and expansions have occurred over the years. The Orange Line opened in 1993. The Pink Line became a separate branch from the Blue Line in 2006. (The southwest bound Blue Line diverged to Park Forest or Cicero.) And the Blue Line was extended to O'Hare in 1984.

Today, transit officials say the Red Line extension is a priority for Mayor Rahm Emanuel's administration, which has already funded some improvements to the line.

"What's important is that we are moving forward now," said Tammy Chase, a spokesperson for the Chicago Transit Authority. "It is really important to the whole Red Line vision that the mayor and [authority president] Dorval Carter Jr. have. Now this administration is taking the project very seriously, along with a number of Red Line projects, and we are moving forward."

A long escape route

Noni Arnold starts her day well before dawn. She operates a licensed day care for residents of Altgeld Gardens, a public housing development in Riverdale, where the Red Line extension will end at 130th Street.

She started the business because residents were having a hard time getting to work on time. Many of her clients could lose their housing if they lose their jobs.

Arnold said it takes about 40 minutes on the bus to get from Altgeld to 95th Street, the nearest rapid-transit hub. On a good day, the wait for the lone bus serving Riverdale is 15 to 20 minutes.

"The parents I do child care for, most of them don't have cars," said Arnold, a block representative on the Chicago Housing Authority's Local Advisory Council. "The commute is very hectic out here."

For residents of Riverdale, the extension has few down sides. The neighborhood has the city's highest unemployment rate at 41 percent – five times the citywide average, according to the 2014 Census.

"In places – particularly communities of color – that are disinvested still to this day, transit is literally a lifeline to get to the grocery store," said Anita Cozart, senior director of PolicyLink (http://www.policylink.org/), a national economic development research institute. "They need transit to get out of their communities until reinvestment comes to those communities."

Cozart cites Oakland, Calif., as an example of how transit improvements can aid poor communities. The city is building a nine-mile bus rapid transit line through several low-income minority communities to better connect them to jobs and grocery stores in the city's central business district.

Like most major cities, Chicago's transit history is shaped in part by changes in federal transportation policies. The construction of the nation's highway system diverted spending from public transit, a main mode of mobility in black communities, to highways, Cozart said.

Poor communities of color were designated as blighted to justify razing them and replacing them with highways and expressways, she said. Meanwhile, the disinvestment in public transit, she said, left many minority communities isolated and cut off from economic development and jobs.

"That is part of the transportation system's legacy."

Progress could have pitfalls

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For Riverdale, Red Line extension may be path to employment (http://chicagoreporter.com/for-riverdale-red-line-extension-may-be-path-to-employment/)

(http://chicagoreporter.wpengine.netdna-cdn.com/files/2016/10/web_Deloris-Lucas-5_KP.jpg)

Photo by Kerri Pang

Community organizer Deloris Lucas doesn't own a car and says taking public transit anywhere from her home in the Riverdale neighborhood takes forever.

In Riverdale, faster and efficient transit is not the only thing residents seek. They also want business development along the Red Line, said Deloris Lucas, president of the Golden Gate Homeowners Association, one of four subdivisions, including Altgeld, that make up Riverdale.

"There has been no development in this area, period, and the Red Line [extension] would really spark development," said Lucas, who wants a full-line grocery store, a pharmacy, currency exchange, a library, a dry cleaner and a community center.

Advocates, however, caution that any investment in transit must be intentional and comprehensive, especially in communities like Riverdale that are the product of generations of disinvestment.

“When you disinvest in a lot of different areas, you’ve got to reinvest in all of those areas,” said Cozart, including preserving affordable housing so people living near the extension are not priced out of the area.

Turner and others recognize that the extension of the train line could also trigger displacement of residents with deep roots in the community; 248 properties could be affected based on the line’s placement.

While benefiting the community, he warns that the project runs the risk of “unleashing gentrification forces.”

“The Greater Roseland area has the largest stock of affordable housing in the city of Chicago,” Turner said. “The three most important things in real estate are location, location, location. You put a transportation system through there, suddenly that housing stock becomes very, very valuable [to outsiders] because of its location near accessible transportation.”

Taking land for highways historically has had a negative effect on property values and communities, says Kate Lowe, assistant professor of urban planning and policy at the University of Illinois Chicago, but that could be the opposite with transit.

“Obviously the legacy of eminent domain for highways has been really detrimental to the black community, but there is potentially some difference with the Red Line, as the Red Line will deliver a lot more benefit for the predominantly black communities on the South Side,” Lowe said. “Highways, on the other hand, facilitated cars moving right through the neighborhoods, not doing anything for the neighborhood.”

Lowe said the extension could provide benefits like economic activity, redevelopment and access to jobs.

“It’s a little tricky because planned transit investment is associated with property increases, and property value increases can come with the risk of displacement,” she added. “Anticipation of taking [land] historically hurt communities, but that was for highways. It is unclear if it will do the same for transit.”

Giving local residents a voice is crucial

Community organizing is key to ensuring transparency and accountability, including monitoring hiring practices and the project’s progression, for the transit agency and elected officials, said Cozart, who encourages residents to develop a community benefits agreement.

With 6,000 jobs on the line, local residents should have first-hire priority, and they should be given apprenticeship opportunities in the transportation industry, where African Americans are vastly underrepresented, she said. And local entrepreneurs should have dibs on retail spaces at train stations so they can take advantage of transit-oriented development.

Ald. Anthony Beale (9th), one of three aldermen whose ward will be directly affected by the extension, says there’s no need for a community benefits agreement. He said the project has advanced because he and his colleagues pressured the Chicago Transit Authority to make it “a priority for the entire system.”

The extension also runs through the wards of aldermen Howard Brookins Jr. (21st) and Carrie Austin (34th), who chairs the city’s budget committee.

Beale, who chairs the city’s transportation committee, said CTA spent billions of dollars on other projects while the Red Line sat on the back burner.

“I think between the two of us,” Beale said, referring to Austin, “we have enough leeway that we will make sure [the transit authority] does the right thing by the community.”

This story is part of a series examining how the proposed Red Line extension will affect residents on Chicago’s Far South Side. Sign up to get these stories in your inbox (http://salsa3.salsalabs.com/o/50480/p/salsa/web/common/public/signup?signup_page_KEY=8841) .

South Side residents look forward to Red Line extension

Elsie McBride, resident of the Altgeld Gardens Homes, is hoping that the Chicago Transit Authority will extend the Red Line train to her Far South Side community.

By Mary Wisniewski
Chicago Tribune

OCTOBER 31, 2016, 5:09 AM

Sylvester Benson, who owns a construction company in the Roseland neighborhood, received a notice this month from the CTA that his building may need to come down to make way for a proposed south extension of the Red Line.

Benson doesn't care — he will gladly move to make way for the $2.3 billion project that would fill in what activists have called a "transit desert" on the city's Far South Side.

"I've already looked at another place," Benson said. "There's no doubt it will be good for the neighborhood. Anything except murder and robbery is good for Roseland."

Benson's views reflect those of many interviewed up and down the Union Pacific tracks in the Roseland and West Pullman neighborhoods, where the Red Line extension could run. Most residents interviewed say the "L" is badly needed in the economically troubled area, even if it means displacement and years of noisy construction.

"It will be convenient for people who take the bus to take the 'L' instead," said Michelle Mooty-Redding, who was not sure how her home on Wentworth Avenue near the west side of the UP tracks would be affected.

Late last month, the CTA announced it was moving forward on plans for the long-discussed extension of the Red Line from 95th to 130th streets, and was collecting public comments. The only public meeting on the plan will be held at 5:30 p.m. Tuesday at St. John Missionary Baptist Church, 211 E. 115th St.

Public response will be included in the final version of the agency's environmental impact statement, which needs to be completed before the CTA can apply for funding. If all goes as the transit agency hopes, the Red Line could run from Howard Street to 130th as early as 2026, with construction beginning in 2022.

"I'm just sad it's going to take another 10 years," said Andrea Reed, of the Greater Roseland Chamber of Commerce. However, Reed knows the project will take time, and "it is much needed."

The city has not extended an "L" line since the Orange Line opened in 1993. The proposed 5.3-mile Red Line extension would have four new stations near 103rd Street, 111th Street, Michigan Avenue and 116th Street, and 130th Street. Each station would include bus and parking facilities, allowing south suburban commuters at the end of the line to park their cars and ride downtown.

The area has a mix of properties — well-kept homes with flowers in the front sit alongside run-down, vacant buildings with boarded-up windows. Many of the properties are vacant lots, overgrown with weeds.

The agency sent notices to owners of 248 properties that the CTA may need to acquire for the project, including 101 residential and 28 commercial buildings.

The actual number of properties needed depends on where the CTA will lay the rails. It proposes to continue the line along I-57 to 99th Street, then run either east or west of the Union Pacific rail tracks to about 118th Street, and then to 130th west of the South Shore line.

The CTA will announce the preferred option for the extension next year and publish a final environmental impact study in 2018. The agency could then go after federal and local funds, which are tight, noted Jesse Elam, programming director for the Chicago Metropolitan Agency for Planning, which has made the Red Line extension a top regional priority.

New legislation passed this summer allows a special taxing district to be created to help pay for the extension. Other possibilities to fund the project are a yet-to-be-passed state capital plan and federal New Starts money, Elam said.

Benson is sure that the CTA will choose the west side of the UP tracks, since most of the homes are on the east side. "I should think it's a no-brainer," said Benson, whose building is on the west side.

Benson's neighbor on the west side of the UP tracks is SouthSide Auto Services on 111th Street. Ginger Potter, who owns the business with her husband, Richard, said she was not sure what to think, since no decision had been made yet by the CTA.

"I have no opinion now, until we find out more," Potter said. "We'd like to stay here, if possible. ... It's difficult to worry about something that's not here yet."

Another building owner who received a letter warning of possible displacement is Ellis Mack, pastor of Now Faith Church of God Holiness on West 114th Street, on the east side of the tracks.

Mack said he would like to take his approximately 100-member church, situated in a converted garage, to a better part of the neighborhood. If he has to move, he wants the CTA to give him a good price because he has worked hard to care for his property.

Mack said crime had grown worse over the past 10 years; most of his parishioners are from the suburbs, he said, and fear coming into the area. "Anything positive would help the neighborhood," said Mack, regarding the "L" extension. "Most people here don't have jobs."

Under federal law, the agency must offer at least fair market value for a property displaced by construction, and pay relocation expenses for owners and renters, said CTA spokeswoman Tammy Chase.

The most striking structure near the proposed "L" extension is the Roseland Pumping Station, built in 1911, which delivers water to nearby neighborhoods and suburbs. The CTA said the station would not be affected — the "L" would run about 9 feet west of the station at its nearest point. The Romanesque Revival-style Mary Magdalene Missionary Baptist Church, built in 1916, on Princeton Avenue also would be spared.

Not everyone supports the extension. Prentiss Smith, 72, a Roseland homeowner, is not close enough to the tracks be displaced. But Smith fears the "L" will bring more crime and will crack building foundations.

"It's bad for the neighborhood," he said.

Walter Leverett, a deacon at My Holy Rock Missionary Baptist Church at 114th and Wentworth, disagreed. His church did not get a notice of displacement, though it is near the tracks, and Leverett welcomes the expansion.

"If the city wants to make investments, it can only help the community as a whole," Leverett said. "This community needs help."

Among those with the most to gain from the project are residents of the Altgeld Gardens public housing project at the south end of the city, who complain of long waits for buses to carry them to 95th Street and then downtown. An "L" is expected to save residents in the area 20 minutes on the trip to downtown.

Altgeld resident Elsie McBride, 61, said that if Mayor Rahm Emanuel wants to get elected a third time, the "L" extension would help him win over South Side voters, who have been disillusioned by high crime and school closings.

"It would make me feel better about him," McBride said. "He's not doing nothing for us on the South Side. ... Throw us a little bit."

Reed said that the Greater Roseland Chamber of Commerce and other South Side and south suburban groups still want Metra to look into the costs of turning the Metra Electric District line into a rapid-transit line, with more frequent stops, which would add another transit option for the area. That option could be cheaper than a Red Line extension — a 2009 proposal estimated the cost at $159 million, including new cars and tracks.

Metra fare hike hearings

The Regional Transportation Authority and Metra will hold eight joint public hearings in November to hear from customers about their budgets, which for Metra includes a proposed average 5.8 percent fare hike.

All hearings will be from 4 to 7 p.m., with the exception of the final Nov. 30 hearing at RTA headquarters at 175 W. Jackson Blvd. in Chicago, which will be from 4 to 6 p.m.

The first set of hearings are on Wednesday at Homewood Village Hall; Arlington Heights Village Hall; Metra headquarters at 547 W. Jackson Blvd. in Chicago; Clarendon Hills Village Hall; and Mundelein Village Hall.

The second set are on Thursday at the Kane County Government Center in Geneva; the Will County Office Building in Joliet; and the Crystal Lake City Hall.

Iconic Santa Fe sign re-lights

Remember the illuminated 70-foot-long Santa Fe sign that used to sit on top of the Railway Exchange Building at 224 S. Michigan Ave?

Once an iconic part of the Michigan Avenue landscape, the sign was removed in 2012 and acquired by the Illinois Railway Museum in Union, Ill., about 65 miles northwest of Chicago. The museum restored the sign and lit it up again this past weekend.

Other artifacts at the museum include steam and diesel locomotives, electric streetcars and elevated cars and historic passenger and freight cars.

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This article is related to: Chicago Transit Authority, Metra, Regional Transportation Authority

FOX 32 Sections

Public hearing planned for Red Line expansion

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CHICAGO (AP) - Chicago residents will get a chance to weigh in on plans to move ahead with the first city train expansion in over 20 years.

The Chicago Transit Authority recently announced it's moving forward with a $2.3 billion expansion of the Red Line. The train line runs north and south in the city with stops downtown and near ballparks for the Cubs and White Sox.

The city plans to extend the line further south. Construction could begin in 2022.

A public hearing is planned for Tuesday at St. John Missionary Baptist Church.

Andrea Reed with the Greater Roseland Chamber of Commerce on the South Side tells the **Chicago Tribune** the extension is "much needed." But homeowner Prentiss Smith says the train could crack building foundations and possible bring more crime.

http://www.fox32chicago.com/news/local/214831289-story

Chicago to Hold Public Hearing for Planned CTA Expansion

Choose Chicago

Chicago residents will get a chance to weigh in on plans to move ahead with the first city train expansion in over 20 years.

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Published at 8:02 AM CDT on Nov 1, 2016

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Red Line Extension (RLE) Project, Chicago, United States of America

http://www.railway-technology.com/projects/red-line-extension-rle-project-chicago

The Red Line Extension (RLE) is a proposed 5.3 mile (8.5km) extension to Chicago's Red Line, which runs along 23 miles (37km) of track and is operated by the Chicago Transit Authority (CTA).

The extension project is part of the Red Ahead Programme, a comprehensive project initiated by CTA to expand Chicago's Red and Purple Lines.

The RLE will extend the Red Line from the 95th Street Terminal to 130th Street in Chicago, providing rapid transit rail access to the low-income, transit-dependent Far South Side area. It will therefore enables faster access to jobs, education and other public transportation.

Construction is scheduled to begin in 2022, and operations are expected to start in 2026.

Estimated to cost $2.3bn, the project aims to create 29,000 jobs in the region.

Red Line extension project details

The preferred plan for the project is named the Union Pacific Railroad Rail (UPRR) expansion.

Under the UPRR, the Red Line will be extended from 95th Street Terminal to 130th Street. It will run south along an elevated structure for approximately 2.4km, along the I-57 Expressway to Eggleston Avenue.

The line will travel southwards along the same corridor until 111th Street, where it will turn southeast and cross over the Canadian National / Metra Electric tracks towards the east of the South Prairie Avenue, near 119th Street.

It will continue southeast along the Northern Indiana Commuter Transportation District Chicago South Shore & South Ben Railroad, using a portion of the Indiana Harbor Belt (IHB) alignment, before terminating at 130th Street.

CTA's elevated structure will be placed east or west of the Union Pacific Railroad from 99th Street to 118th Street, depending on the option chosen.

The extension will also include the construction of new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The stations will include bus transfer options and a total of 3,700 parking spaces. A new yard and shop will be constructed at 120th Street.

Project planning and execution

CTA shortlisted one preferred alternative out of multiple options considered for the Red Line extension in 2014. The preferred alternative has two possible options (the east extension and the west extension), one of which will be finalised based on public consultation, environmental review and federal financing.

A draft environmental impact statement (EIS) for the project was prepared by CTA and the Federal Transit Administration (FTA), and made available for public consultation in October 2016.

Based on the statement, CTA will prepare a final EIS selecting either the east or west extension as the final option by late 2018.

CTA will then begin a project development phase, followed by a final engineering phase. It will move into the five-year construction phase once it receives funding from the FTA.

Benefits of the Red Line extension project

"The extension project is expected to reduce commute times, and improve mobility and accessibility by connecting isolated areas."

The extension project is expected to reduce commute times, and improve mobility and accessibility by connecting isolated areas. It will also provide links between affordable housing, jobs, educational opportunities and other public transportation.

New stations along the RLE will attract investment for businesses in the neighbourhood.

The new yard will be a modern, cost-effective storage facility offering preventive railcar maintenance for the extension project.

Financing

Estimated investment for the project is $2.3bn, which will be secured through a mix of government and local funds. The CTA had already announced $5m of funding in 2014 for planning works.

It also plans to establish a transit-only, tax-increment financing district authorised by the General Assembly to provide local funding for the project.

Public hearing planned for Chicago’s planned train expansion

By - *Associated Press - Tuesday, November 1, 2016*

CHICAGO (AP) - Chicago residents will get a chance to weigh in on plans to move ahead with the first city train expansion in over 20 years.

The Chicago Transit Authority recently announced it’s moving forward with a $2.3 billion expansion of the Red Line. The train line runs north and south in the city with stops downtown and near ballparks for the Cubs and White Sox.

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Andrea Reed with the Greater Roseland Chamber of Commerce on the South Side tells the Chicago Tribune (http://trib.in/2f9ihXN) the extension is “much needed.” But homeowner Prentiss Smith says the train could crack building foundations and possible bring more crime.

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Information from: Chicago Tribune, http://www.chicagotribune.com

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With movement on CTA Red Line extension, gentrification questions arise

A rendering shows the proposed 103rd Street Station of the CTA Red Line. (Chicago Transit Authority)

By Mary Wisniewski
Chicago Tribune

NOVEMBER 2, 2016, 3:55 PM

More than 250 people crowded a South Side church basement Tuesday evening to ask CTA officials questions about the proposed CTA Red Line extension to 130th Street — with many happy about the project but wondering why it has taken so long to happen.

"It should have been built 50 years ago, with the Dan Ryan (Expressway)," said Sylvia Jones, among those attending the open house Tuesday at St. John Missionary Baptist Church. A community activist and Baptist minister, Jones has advocated for the extension for years. "It's very much needed."

Activist Lou Turner, though pleased the project is going forward after decades of discussion, said he also wished it hadn't taken so long and had concerns that some residents may get pushed out by gentrification once the L goes through.

"There could be unintended consequences," said Turner, director of undergraduate and graduate studies in the African-American Studies department at the University of Illinois at Urbana-Champaign. "This area has the largest stock of affordable housing in the city."

Turner said the CTA's draft environmental impact statement on the proposed $2.3 billion project does not address the issue of gentrification, which has driven up property prices by as much as 48 percent in some areas along The 606 trail on the city's Northwest Side. A final environmental impact study is needed to secure federal funding.

"It's a concern, but at the same time I am very happy," said Turner, who like Jones had pushed for the extension with the Developing Communities Project, a group that once included President Barack Obama.

The open house Tuesday allowed residents to ask questions of multiple CTA officials, who were standing next to white boards showing where the line would run and what it might look like. Questions ranged from how construction would affect parks to how the project would be paid for. Some residents also wanted to know how much time the extension could save commuters — the CTA estimates that the extension would shave about 20 minutes off a trip to the Loop — compared to taking a bus from 130th Street to the 95th Street station.

Turner thinks there should be at least two more public meetings before the comment period closes Nov. 30 and the CTA prepares its final environmental impact statement.

CTA spokeswoman Tammy Chase said the agency already had a half-dozen meetings and expects to have at least four more with communities in the project's footprint. As for the gentrification concern, Chase said the CTA will coordinate with the city, community and elected officials as the project progresses and more detailed plans are developed to preserve neighborhood characteristics.

The plan to extend the Red Line 5.3 miles from 95th to 130th streets, with four new stations, would fill in what activists have called a "transit desert" on the city's Far South Side, as well as in the suburb of Riverdale.

The city has not extended an L line since the Orange Line opened in 1993. If all goes as the transit agency hopes, the Red Line could run from Howard Street to 130th Street as early as 2026, with construction beginning in 2022.

"It'll be good for jobs, good for students — it will hopefully take traffic off the Dan Ryan," said Bobbi Jo King-Donelson, 79, a retired educator who lives in Roseland. "It will be advantageous for people getting downtown. We have got to expand."

The agency sent notices to owners of 248 properties that the CTA may need to acquire for the project.

The actual number of properties needed depends on where the CTA will lay the rails. It proposes to continue the line along Interstate 57 to 99th Street, then run either east or west of the Union Pacific rail tracks to about 118th Street and then to 130th west of the South Shore Line.

The CTA will announce the preferred option for the extension next year and publish a final environmental impact statement in 2018. The agency could then go after federal and local funds, which could include money from a special taxing district.

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This article is related to: Chicago Transit Authority, South Shore Line

DNA Info

Dozens of Homes Would Need To Be Demolished Under Red Line Extension

By Andrea V. Watson | November 2, 2016 10:59am | *Updated November 4, 2016 11:38am* @andreavwatson12

East option at the 103rd Street station CTA

ROSELAND — Dozens of buildings, including homes, would need to be demolished under a proposed extension of the Red Line, officials said at a community meeting Tuesday night.

The meeting, held by the CTA and the Federal Transit Administration to discuss a plan to stretch the line 5.3 miles from its current 95th Street stop to 130th Street, drew more than 250 people to St. John Missionary Baptist Church, 211 E. 111th St.

Officials are considering two routes, an east option and a west option.

The Union Pacific railroad alternative has two options, an east and west option. [CTA]

Under the east option, the CTA elevated structure would be built east of the Union Pacific Railroad right-of-way from 99th street to 118th street. This option would affect 260 parcels, including 106 buildings, 90 of which are residential, officials said. Under this route, more single-family residences would be affected, officials said.

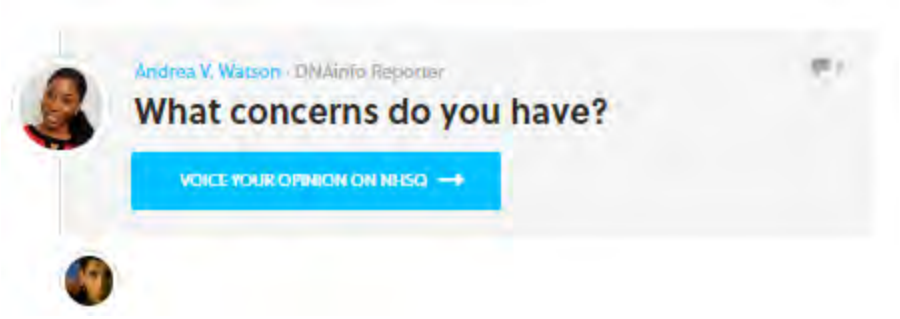

Under the west option, the line would run west of the Union Pacific Railroad from 99th street to 118th street. This option would affect more commercial and industrial properties, some 205 of them, officials said. About 46 would require building demolitions; 26 are residential.

West option at the Michigan Avenue Station (facing northwest) [CTA]

Those homes and business owners would be compensated, including for moving costs, under federal regulations.

Roseland resident Aaron Mallory discovered his four-unit building could be demolished under the extension.

“It’s an investment property, so I have mixed feelings,” he said.

Mallory said he doesn't want to lose the building, but he also supports an extension of mass transit.

“I see the value of what can done here, so I don’t want to stifle or hinder,” Mallory said. “I need to take my feelings out of it, but if I lived there it would be different.”

CTA spokeswoman Tammy Chase said that although a final decision hasn't been made on the project, property owners have been notified it's possible they will lose their homes or businesses.

“We’re letting them know ahead of time that we may need to purchase their property to build the rail extension,” she said.

A lot of people have asked CTA what happens if their property is needed for the extension, Chase said.

“The answer is we would follow all the federal laws requiring property owner relocation,” she said. “It’s fair market value or more for homes, and sometimes it’s original purchase price.”

Either the east or west option could be selected as early as next year if the proposal is approved, she said, with construction beginning in 2022.

The east option would cost $2.26 billion in capital costs; the west option, $2.30 billion.

Chase said CTA would apply get up to half the cost covered by the federal government, and the rest would come from local sources.

The full route can be found online here.

A extension would create four new stations, at 103rd Street, 111th Street, Michigan Avenue and 130th Street. New park-and-ride and bus terminal facilities also will be built at each station. A new yard and shop at 120th Street is part of the plan as well.

Roseland homeowner Valerie Lilley, who has lived at 111th Street and Eggleston Avenue, for three years, learned that her home is safe.

“The Red Line expansion is the IV for the Far South Side,” she said. “It will bring access without bleeding a bulldozer through our neighborhood.”

Lilley welcomes the project because not only will it cut her commute time to under an hour, it could bring more businesses and increase the property values.

The project would open the door to gentrification, she said, because more people will move closer to the city from the suburbs.

Her only concern is that renters might be priced out of the market.

“That’s where we need our politicians, such as our aldermen, to build in affordable housing policies as the extension makes its way through my neighborhood,” she said.

Veteran Larry Jordan has lived in his Washington Heights home for 44 years and uses the CTA frequently.

Having the Red Line extend farther south would keep him from taking so many buses, he said.

“This is long overdue,” he said.

Besides displacements, noise and vibration impact were discussed. The CTA would address noise from the "L" tracks by installing noise barriers, which absorb and reduce noise from the tracks by 10 decibels, officials said.

A closed-deck structure designed to limit noise and a continuous welded rail, which has fewer joints and means a smoother and quieter ride, also would be used.

Written comments are accepted until Nov. 30 via RedExtension@transitchicago.com or can be mailed.

https://www.dnainfo.com/chicago/20161102/roseland/dozens-of-properties-would-need-be-demolished-under-red-line-extention

STREETSBLOG CHICAGO
Chicago Policy | Design | Neighborhoods

http://chi.streetsblog.org/2016/11/02/cta-intends-to-spend-millions-on-building-parking-garages-for-red-line-extension/

Wednesday, November 2, 2016

CTA to Spend Millions on Building Parking Garages for Red Line Extension

by Steven Vance

The CTA doesn't want you to see the 7-story parking garage it would build, so it published this rendering showing the view from hundreds of feet away. (This is the "after" view. It takes a second to realize the difference between this and the EIS's "before" view.)

The Chicago Transit Authority published its Environmental Impact Statement for the proposed Red Line extension from 95th St. to 130th St. in the Riverdale community area last month, and it includes a couple of good and bad surprises. An EIS is a study that federal law requires before the United States Department of Transportation fund any highway or transit infrastructure.

A map of Metra Electric district lines and the proposed Red Line extension. Map: The Chicago Dispatch

Scattered within it, the CTA describes how it intends to operate service on the extension, on which it's proposed four new stops, at 130th, in Roseland, Pullman, West Pullman, and Riverdale.

The EIS outlines the CTA's intention to build thousands of expensive new car parking spaces next to each of the stations, an atrocious use of public funds. The CTA's parking study for this project was conducted in 2009 and concluded that the Red Line extension could attract drivers affects by heavy expressway congestion getting to work or pay high costs to park downtown.

The CTA intends to build 3,700 car parking spaces across all four stations, with 3,300 of them at two stations.

Transit agency-built parking facilities have negative affects: they waste transit agency – public – money and aren't a significant draw of riders.
The CTA would spend tens of millions on a 7-story car parking garage with 2,300 spaces at the 130th St. terminal station. The EIS doesn't project the cost of these garages, but if the median cost per space in Chicago is $22,425, according to a review of actual construction costs, this structure would cost over $51 million.

At the Michigan Ave. and 116th St. station, the CTA would build a 3- or 5-story garage for 1,000 cars, at a cost of over $22 million. Some existing buildings would be acquired or condemned and then demolished in order to build the garages.

Other parking studies show higher per-space costs.

Building publicly-owned and indebted car parking garages are not good public investments. Deloris Lucas, a Riverdale resident who's asked the city to build a simple sidewalk so people can walk to a grocery store, said she also wants "a full-line grocery store, a pharmacy, currency exchange, a library, a dry cleaner and a community center."

One of CTA's parking structures could pay for all of those venues to open, and fund many public services in the area for years.

The CTA is hosting a public hearing tonight at St. John Missionary Baptist Church, at 211 E. 115th St., from 5:30-7:30 p.m. Comments can also be made online at: RedExtension@transitchicago.com. Public comments are accepted through Nov. 30, 2016. You can also your comments to Chicago Transit Authority, Strategic Planning & Policy, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661-1465.

I'll discuss one of the positive surprises in a separate post.

Morning Shift (/shows/morning-shift/22669fdb-ffef-42fa-910b-98490b8925da)

Breaking Down CTA's Only Public Hearing On Red Line Expansion

November 2, 2016

PLAY 13 MIN

CTA finalizes design for new signature 95th Street Terminal now under construction; Agency prepares for launch of expanded South Side bus service.

The Chicago Transportation Authority announced this fall that it will expand the Red Line from 95th Street to 130th Street, a move that will bring train transit to tens of thousands of Chicago residents for the first time. The build-out is estimated to take 10 years to complete and cost $2.3 billion.

More content below this sponsor message

Morning Shift talks to LaRisa Lynch, a journalist covering transportation, jobs and the economy for the *Chicago Reporter*, about Tuesday night's public hearing on the project, which was held in Roseland on the far South Side.

#ROSELAND (/TAGS/ROSELAND) #CTA (/TAGS/CTA) #TRANSPORTATION (/TAGS/TRANSPORTATION) #SOUTH SIDE (/TAGS/SOUTH%20SIDE)

http://us995.cbslocal.com/2016/11/06/weekend-journal-red-line-extension-project-blackhawks-pose-with-adoptable-pooches-in-new-calendar/

Weekend Journal: Red Line Extension Project, Blackhawks Pose With Adoptable Pooches In New Calendar

November 6, 2016 7:00 AM **By Laura Taylor**

CHICAGO - APRIL 3: Near the Boeing Building, center, a Chicago Transit Authority (CTA) elevated train moves on the Lake Street double-decked, double-leaf trunnion bascule bridge over the Chicago River April 3, 2006 in Chicago, Illinois. (Photo by Tim Boyle/Getty Images)

The Red Line is the most traveled on line of all the CTA routes hitting major landmarks such as Wrigley Field, US Cellular Field, and Soldier Field. It cuts through the Mag Mile and the Loop. From Chinatown to Uptown and the popular neighborhoods of Lincoln Park, the Red Line can take you just about anywhere in the wonderful City of Chicago. And in a few years, it could take you to even more places in the city.

The Chicago Transit Authority is currently in the planning stages of a **proposed extension** to the ever popular Red Line rail system. Under the proposal, an additional 5.3 miles of railroad will extend the Red Line to 130th Street with four additional train stops at 103rd, 111th, Michigan, and 130th. **Click here** to see a map of the proposed route.

Under Mayor Emanuel, $5 billion have been invested to modernizing the public transit system, which was first built in the late 1800's. To say parts of the system need be upgraded is an understatement.

“This is an unprecedented investment,” says Ferradaz. Not only would the rail system be improved, but the CTA is predicting a spike in job creation as well.

This extension project set to begin in 2022 would create jobs in construction, train operations, and traffic control. And with an expected increase of 40,000 more people riding the Red Line after it’s extended, these new train stations will also likely create a greater need for services increasing business and revenue in those communities.

“The CTA does have a huge committment to creating jobs and spurring economic development around train and bus stations,” Ferradaz says.

Members of the community are encouraged to provide feedback by mid-December via email (redextension@transitchicago.com) or via snail mail (567 W. Lake St., Suite 500, Chicago, IL, 60661).

“We’re looking for this [extension project] to benefit future generations of transit riders, and the future of the city of Chicago.”

THE COLUMBIA CHRONICLE

Residents, commuters talk Red Line extension

http://www.columbiachronicle.com/metro/article_31bb38f8-a2f2-11e6-9749-67b35fc270a8.html

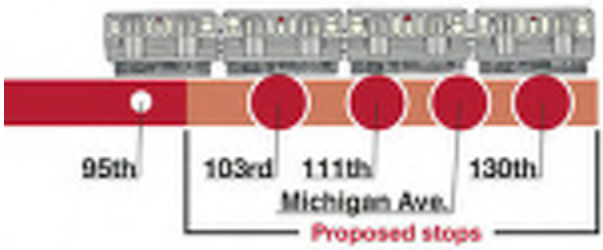

James Tsitridis|Chronicle

Residents, commuters talk Red Line extension

Posted: Monday, November 7, 2016 6:30 am
Frita Beauchamp | 0 comments

- Posted on Nov 7, 2016
by **Contributing Writer**

South Side residents have expressed concerns about how the Chicago Transit Authority's Red Line expansion will affect their homes and businesses, as the multi-billion-dollar project extends the line several miles further south.

Residents and Red Line users both attended a Nov. 1 public hearing to discuss the expansion at St. John Missionary Baptist Church, 211 E. 115th Street, which was advertised widely on Red Line train cars. It focused on the required Environmental Impact Statement currently in draft that describes how the project will affect the area around potential project zones.

The RLE Project is expected to cost approximately $2.3 billion and will extend 5.3 miles from its current terminus at 95th Street and the Dan Ryan Expressway to 130th Street, according to the CTA website. Four new stations will be built on 103rd Street, 111th Street, Michigan Avenue, and 130th Street.

In 2017, the CTA will begin the final stage of the Environmental Impact Statement process by conducting initial engineering and analysis of the area as well as additional outreach, which could take another two years. Once that is finished, the CTA will ask the Federal Transit Administration for an expected 49 percent contribution to the RLE project and will investigate other options to pay for the remaining 51 percent.

Leah Mooney, CTA's Director of Strategic Planning and Policy, said she hopes the state will provide the needed funding.

The [RLE] project will start "as early as 2022, and [will be] finally completed in 2026," said CTA spokeswoman Tammy Chase, "That is the goal."

Doris White, a North Side resident and hearing attendee who commutes to the South Side for church and babysitting, said the extension is long overdue.

"It would've been nice if they had this project implemented a long time ago," White said. "Why do we have to be the last on the totem pole to get this project?"

According to multiple CTA officials at the public hearing, the two current options for the RLE's alignment is on either the east or west side of the city's Union Pacific Railroad.

The east option is primarily residential and estimated to cost $2.26 billion. The west area is mostly businesses, and is estimated to cost $2.3 billion, according to the EIS draft on the Transit Chicago website.

In the United States, any level of government is allowed to take private property for public purposes through a legal concept called eminent domain. The constitution requires property owners to be fairly compensated.

Aaron Mallory, a South Side resident who recently purchased property on the east side of the UPRR, said he is concerned that CTA officials have already made the route decision—one he is not particularly pleased with.

"It seems that they may pick the east side because you look at the number, [and] there's a lot more businesses on the west side," Mallory said.

Mooney said each option has its pros and cons, and she has not heard a final decision.

"The west side has more commercial displacements," Mooney said. "But there are issues to consider as well in terms of access to different neighborhoods."

Mooney said she heard a lot of positive feedback and that people are looking forward to the extension despite some complications choosing its alignment.

"There will be some pain, but generally people are really positive about it," Mooney continued.

Although Mallory is nervous for his property to be taken away if the east option is approved, he said he still sees multiple benefits of the RLE Project.

"I don't want to stagnate it because I do see the benefits economically, what it will have for the area," Mallory said, "I don't want to be a barrier for it to be successful."

DNAinfo.com

Red Line Extension Could Run Through Parks Along Route

https://www.dnainfo.com/chicago/20161108/roseland/cta-red-line-l-extension-south-roselan-pullman-wendell-smith-block-park

By Andrea V. Watson | November 8, 2016 5:04am
@andreavwatson12

Wendell Smith Park's two junior-sized baseball fields could be replaced with one larger new baseball field.
DNAinfo/Andrea V. Watson

ROSELAND — A few Far South Side parks could lose land — but possibly get improvements — under a proposed extension of the Red Line, officials said.

CTA officials are considering two routes, an east option and a west option, to extend the Red Line 5.3 miles from 95th Street to 130th Street.

Under the east option, the northwest corner of Wendell Smith Park, 9912 S. Princeton Ave., and the western part of Block Park, 346 W. 104th St., would be permanently affected.

Wendell Smith Park, 9912 S. Princeton Ave., and Block Park, 346 W. 104th St. would be permanently affected under a proposed extension of the Red Line. [CTA]

Of the 4.7 acres of Wendell Park, approximately 0.7 acres would be overlapped by the elevated structure. Piers would be located in the park, and the bottom of the elevated structure would be approximately 15 feet above ground level.

In Block Park, the east option would run through the western part of the park. The elevated structure would overlap 0.9 acres of park space. The elevated track structure supports would be placed permanently in the west part of the park. An auxiliary station entrance would also be located in the park, along the western edge of the park.

Both of the parks affected by the east option would still offer park space, but the size would be reduced.

Under the west option, approximately 1.9 acres of Fernwood Parkway from 99th Street to 103rd Street between the existing Union Pacific Railroad tracks and Eggleston Avenue would be affected.

CTA said it's working with the Chicago Park District to identify ways to minimize park impacts. CTA is looking at possible new replacement parks in or near the affected community areas.

They're also looking at ways to enhance the parks. For example, proposed measures for Fernwood would include the potential installation of a new bicycle path beneath the elevated track structure.

Under the east option, Wendell Smith Park's two junior-sized baseball fields would be replaced with one larger new baseball field. One of the smaller baseball fields would be replaced at another nearby park. Sidewalks, paths, benches and trees at Wendell Park would be replaced.

Rico Johnson lives near Wendell Park and brings his two daughters there.

Johnson's daughters come to this park at least every two weeks. [DNAinfo/Andrea V. Watson]

He said he supports the Red Line Extension project.

"I think it'll be nice," he said, adding that his girls and other children probably won't like their playtime being disrupted while the park is being worked on.

"I think the kids won't be too fond of it because this is the closest one with the swings, that's why we come over here," Johnson said. "There are plenty of parks out here. It won't be such a big deal."

CTA spokeswoman Tammy Chase said that the rail extension would only affect a very small portion of the northwest corner of the park.

“We would seek to keep as much of the park open as possible and would only close off the portion of the park that was absolutely needed for construction,” Chase said. “It’s too soon to know at this point in time how long a portion of the park would need to be closed off.”

Chicago Park District spokeswoman Jessica Maxey-Faulkner said it's working closely with CTA.

“Any parkland lost in the extension will be replaced and could receive additional enhancements,” she said.

The park district released this statement:

“The Chicago Park District collaborates across city agencies to ensure that public spaces are maintained or enhanced for all Chicagoans to enjoy. We fully support efforts by Chicago Transit Authority on this critical infrastructure improvement that will improve transportation options for South Side residents.”

CTA also identified 15 wetland areas totaling 15.34 acres of potentially affected wetlands at the site of 130th Street station and the 120th Street yard and shop. They’re working with the U.S. Army Corps of Engineers.

For more neighborhood news, listen to DNAinfo Radio here.

Medill Reports Chicago

THE FAR SOUTH SIDE IS ONE STEP CLOSER TO A RED LINE EXTENSION

NOVEMBER 10, 2016

By David Jordan

Jerry Brown is frustrated after years of broken promises.

The West Pullman resident is one of many eager to hear the latest plans to bring Chicago Transit Authority train stations to the largely black communities on the city's far South Side.

The long-promised project has recently gotten a Örmer timeline from the city, but Brown wonders why the communities went unserved for so long.

“The question I have is, Why has it taken 15 to 18 years to get this plan? There have been a lot of different plans. I think this is the third environmental impact study, the second engineering study,” said Brown.

The plan to extend the Red Line past 95th Street is a nearly Öve-decade old promise, dating from when then-mayor Richard J. Daley promised the residents of deindustrialized communities located closer to the Indiana border than the Loop that they would receive a connection to downtown Chicago.

Beginning in the 1950s, when the railroads began restructuring and manufacturing started to leave the city, residents of the far South Side found themselves with less economic opportunity. Over the years, community members have lobbied for the Red Line extension but the project never came to be, even as extensions appeared along other lines.

Last month the city took a major step toward securing federal funds for the extension with the completion of an extensive environmental impact studies. The report nailed down two possible routes the track could take, along the east or west side of the existing Union PaciÖc Railroad right-of-way.

Regardless of which plan is chosen, the $2.3 billion extension will add 5.3 miles to the Red Line, with four new stations, park-and-ride facilities and a new shop yard for CTA trains. The terminus of the Red Line will shift 35 blocks south, from its current end at 95th Street in Roseland to 130th Street in Riverdale, just north of the Altgeld Gardens public housing project. Construction would not begin until 2022, with an estimated completion date of 2026.

The proposed routes for the CTA extension to 130th Street, ending just north of the city's southern border. Image courtesy CTA.

These details were reviewed for residents, who crowded into the basement of St. John Missionary Baptist Church on 115th Street recently for a public hearing, a federal requirement to receive funding. The CTA began taking public comment after the report was published on October 6 and will continue through the end of November.

The immediate concern for many was whether or not their homes would be affected by the extension. Along either route there will be displacements and properties will need to be demolished. The east route would affect 106 buildings, mainly single-family homes, while the west route would affect 46 buildings in a more industrial area.

"We have narrowed it down to the properties that would be affected, and they have been notiÖed by mail," said CTA spokesperson Irene Ferradaz.

Cecilia Gutierrez was one of the many residents hoping to speak to CTA ofÖcials for clariÖcation on the implications of project. She had already received notiÖcation in the mail that her home would be directly in the path of the train if the city chooses to construct along the east route.

"I'm waiting to see if the will choose the east route," said Gutierrez. "But if they choose to build west it will be really great for getting places," she added with a laugh.

Jillian Campbell came to the meeting with her mother Marthann out of a similar concern for her home. On the maps she saw, it was unclear whether or not the train would go through her living room. Although her home will be spared, she is now going to be sandwiched between a bridge over I-57 and the new Red Line.

Before the meeting she was anxious about whether or not the home her grandfather built would be in jeopardy, but afterwards she worried about the effects of construction. She feels that the CTA could have done a better job of communicating with her family.

“I understand why we need the extension, but I did not know a lot of this until just a couple moments ago,” said Campbell.

Transportation planner Emily Ritzler, hired to consult on the project, was on hand to explain the construction process and how the CTA plans to use best practices to ensure that residents like Campbell are as minimally affected as possible.

The city will add noise buffers along the bottom of the tracks and work with contractors to ensure that they can disturb as few residents as possible, said Ritzler.

In all, the city estimates that noise and vibration from the train would not be any greater that what the neighborhoods already experience on a daily basis. “It’s your home, you have every reason to be concerned, but we have demonstrated with analysis that this would not be an issue,” said Ritzler.

It is estimated that as a result of the extension about 128,000 Chicagoans would be affected and 6,000 construction jobs would be brought to the neighborhood.

Economic opportunity was a large part of the CTA messaging during the public hearing. As residents discussed the implications of the project, a short video touted the beneÖts they will see with a shorter commute from the center of the city.

Sylvia Jones, however, was unconvinced.

She has worked with the Developing Communities Project and worries that organizations like hers, which advocate for residents on the far South Side, are no longer being listened to.

“Since this mayor has gotten into ofÖce there is no communication, it’s like we don’t exist,” said Jones. “Say what you will about [Richard M.] Daley, but at least there was inclusion,” she added.

She worries that gentriÖcation will soon come to Pullman if the project does not properly address the underlying issues that have made Önding long term jobs difÖcult for many residents. While the CTA touts the potential to get to jobs in other parts of the city, Jones asks “What jobs? Burger King? White Castle? Union jobs are closed off.”

With the extension, the Red Line will run the entire length of the city, going just a few blocks from the southern border in Riverdale to the northern border in Rogers Park. The 95th Street station currently sees about 11,000 weekday riders, making it one of the busiest stations in the entire train system. And while many residents are excited about access, they question what else the new stations will bring.

Far South Side residents line up to discuss whether their home is situated along one of the two routes proposed for the Red Line extension to 130th Street Nov. 9, 2016. (David Jordan/MEDILL)

CTA approves plan to expand Red Line from 95th Street to 130th Street

POSTED:NOV 27 2016 08:00PM CST

UPDATED:NOV 27 2016 08:00PM CST

CHICAGO (AP) - Chicago Transit Authority officials have approved a capital plan that includes $75 million in funding for an extension of major train line.

It's the next step in the $2.3 billion expansion of the Red Line. City officials want to expand the line that includes stops in Chinatown and the home of the White Sox from 95th Street to 130th Street, including four new rail stations.

The $75 million investment means the city can move forward with initial engineering and analysis needed to apply for $1 billion in federal funds. City officials say the money will be funded by CTA bonds.

Mayor Rahm Emanuel announced the plans Sunday.

The city is seeking public input on plans until Wednesday. Construction on the 5.3-mile extension isn't expected to begin until 2022.

CHICAGO BUSINESS JOURNAL

CTA amends budget to pave way for major south side rail extension

Nov 28, 2016, 12:53pm CST

Mayor Rahm Emanuel has focused considerable attention on Chicago's African-American community in the wake of the release of the Laquan McDonald video a year ago and the fury that video unleashed among an important constituency for Emanuel. The video showed McDonald walking away from police as they opened fire on and shot dead the young man.

Efforts to improve the transit infrastructure on the south side where many in that constituency reside has been one way Emanuel has tried to make amends.

A new 95th Street Terminal on the Chicago Transit Authority's Red Line is one of several... more

Toward that end, the mayor announced today that he and the Chicago Transit Authority have amended the budget for the public transportation system to include $75 million in funding for a proposed Red Line Extension (RLE) project to extend Red Line rail service on the city's south side to 130th Street from 95th Street, where the line now ends. The extension would encompass four new rail stations on the far south side as well.

The $75 million investment will allow the CTA to move forward with preliminary engineering and analysis and to complete an environmental impact study. The engineering work is essential to allow the CTA to apply for more than $1 billion in federal funding needed to pay for the expected $2.3 billion total cost for the project.

The RLE is a major part of Emanuel's and the CTA's "Red Ahead" investment in its busiest rail line which connects the south side to the city center. The Red Ahead project also includes a $425 million Red Line reconstruction effort completed in 2013, and the ongoing $280 million construction of a new 95th Street terminal, expected to be finished in 2018.

CTA president Dorval Carter said of the RLE project: "The Red Line Extension project is a transformational project to expand transit to Chicago's southern border and create faster access to jobs, education and opportunity."

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CTA approves funds for engineering study in Red Line extension project

The CTA has completed major upgrades to several stops on the Blue Line, as the agency presses ahead with a long-awaited expansion of the Red Line. Nov. 28, 2016. (CBS Chicago)

By Tony Briscoe
Chicago Tribune

NOVEMBER 28, 2016, 6:59 AM

The Chicago Transit Authority and Mayor Rahm Emanuel announced Sunday that the agency will dedicate $75 million toward a plan to extend the southern branch of the Red Line more than 5 miles.

The CTA board approved an amendment to the capital improvement plan for fiscal years 2016 to 2020, designating the funds to conduct preliminary engineering and finalize an environmental assessment for the Red Line extension project, according to a CTA statement released Sunday.

The $75 million investment, which will be funded by CTA bonds, seeks to fulfill requirements that will allow the CTA to apply for more than $1 billion in federal funds for the $2.3 billion venture, which would extend train service 5.3 miles from 95th Street to 130th Street and add four new train stations at 103rd Street, 111th Street, Michigan Avenue and 130th Street.

"The Red Line extension project is a transformational project to expand transit to Chicago's southern border and create faster access to jobs, education and opportunity," CTA President Dorval Carter said in the statement. "This investment will allow CTA to move forward with preliminary engineering and planning work necessary to seek federal funding to make this vision a reality for Chicago's Far South Side."

If all goes as planned, construction for the Red Line extension could begin as soon as 2022 and be completed as early as 2026.

Though the agency has sent notices to the owners of 248 properties that it may need to acquire for the project, the new extension hasn't been mapped out yet.

As it currently stands, the CTA proposes to continue the line along Interstate 57 to 99th Street. The train line could run either east or west of the Union Pacific Railroad tracks to about 118th Street before it nears the end of the line around 130th Street, west of the South Shore Line.

Last month, the CTA began collecting public feedback on a preferred route, among other facets of the project. The environmental planning and engineering work is expected to occur in 2017.

tbriscoe@chicagotribune.com

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This article is related to: Chicago Transit Authority, Rahm Emanuel

STREETSBLOG CHICAGO

Monday, November 28, 2016

As CTA Pushes to Pass TIF for RPM, $75M Earmarked for South Red Extension

by John Greenfield

Rendering of the 103rd Street station for the Red Line extension, if the eastern route is selected. Image: CTA

As we've covered the CTA's efforts to get a transit TIF (tax-increment financing) district passed to help fund the Red and Purple Modernization project, some readers have commented that the $2.1 billion initiative would be a case of the city lavishing money on North Side transit while neglecting the South Side. Surely other Chicagoans feel the same way. But yesterday the CTA announced a new $75 million investment towards the $2.3 billion Red Line Extension on the South Side transit, which may help blunt those criticisms.

The transit agency spent $425 million on the successful South Red Line reconstruction project in 2013, is currently working on the $280 million 95th Street station renovation, and has recently completed or started several other projects in historically underserved neighborhoods. But South Siders have had a legitimate grievance that the long-awaited Red Line Extension project, which would continue the line from 95th to 130th Street, has crept along at a snail's pace for many years.

There was finally some significant movement on RLE in October. At that time the CTA released the draft environmental impact statement for the project in order to seek feedback from the public on the two potential routes being considered for the extension, either east or west of the Union Pacific Railroad tracks. The agency held a public hearing on November 1 and will continue receive feedback on the project until this Wednesday, November 30. Feedback received during this review period will be included in CTA's analysis of the final proposed route.

The proposed routes for the Red Line extension. Image: CTA

November 30 also happens to be the deadline for the CTA to submit an application for $1 billion in federal Core Capacity funding for the RPM project, which would pay for its first phase, in order to line up the money before the anti-transit Trump administration takes over. The transit TIF for the RPM project would be used to pay back a federal loan to cover the required local matching funds for the Core Capacity grant.

Since the CTA is rushing to get aldermen to approve the new North Side TIF this week, perhaps it's not coincidental that yesterday Mayor Emanuel and the CTA announced a new milestone in the Red Line Extension project. It's possible that they hoped this news would help counter criticisms that they're overly focused on improving North Side transit.

Here's the news on RLE. The CTA board has approved an amendment to its FY2016-FY2020 Capital Improvement Plan to include $75 million for preliminary engineering and analysis necessary to make the final determination on the route and to complete the final environmental impact statement. The engineering work is also required for CTA to apply for another $1 billion-plus in federal funds to help pay for the $2.3 billion project.

The transit agency expects that procurement for further environmental planning and engineering work will happen in 2017. The $75 million amendment will be funded by CTA bonds.

City Council will vote on the RPM TIF at a special meeting that takes place this Wednesday at 10 a.m. at City Hall.

CTA Approves $75M For Red Line Expansion To Far South Side

BY STEPHEN GOSSETT IN NEWS ON NOV 28, 2016 10:00 AM

103rd Street Station rendering / CTA

The City of Chicago has given its ambitious plan to extend the Red Line to the Far South Side a pricy shot in the arm. The CTA and Mayor Rahm Emanuel announced on Sunday evening that the CTA Board has approved $75 million in funds for the expansion.

An amendment to the CTA's Capital Improvement Plan will assign the funds toward preliminary engineering and a study of environmental impact. The CTA is seeking in excess of $1 billion in federal funds to help back the $2.3 billion plan, but the engineering phase must be completed as prerequisite for the federal request. The $75 million will be funded by CTA bonds, according to a release from the transit authority.

"The Red Line Extension project is a transformational project to expand transit to Chicago's southern border and create faster access to jobs, education and opportunity," CTA President Dorval R. Carter, Jr said in a statement. "This investment will allow CTA to move forward with preliminary engineering and planning work necessary to seek federal funding to make this vision a reality for Chicago's Far South Side."

The expansion proposal calls for four new stations along the future track: near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Hopes are high that the added transportation option might alleviate unemployment in some of Chicago's hardest hit communities. The CTA will continue to take resident feedback until Wednesday.

The CTA has been scrambling to secure federal funds ahead of the inauguration of Donald Trump, who pledged to support infrastructure projects, but appears poised to prioritize highway development ahead of mass transit.

BLOG TRANSPORT & TRAVEL

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CTA announces next stops for Red, Blue Line projects

By **Jonathan Samples**
Posted: Monday November 28 2016, 1:56pm

Photograph: Courtesy CTA

The Chicago Transit Authority is moving forward with several projects along the city's Red and Blue lines, including a new $75 million investment in an ongoing plan to extend the southern branch of the Red Line more than 5 miles.

Red Line Extension
On Sunday, Chicago's public transit system announced that the CTA Board has approved an amendment to its 2016–2020 capital improvement plan which allocates millions of dollars in additional funding toward the Red Line Extension project (https://www.timeout.com/chicago/blog/the-cta-has-proposed-routes-for-a-red-line-extension-to-130th-street-092916). The $2.3 billion plan will extend the Red Line from 95th Street to 130th Street and also calls for the construction of four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street.

"The Red Line Extension project is a transformational project to expand transit to Chicago's southern border and create faster access to jobs, education and opportunity," CTA President Dorval Carter said in a statement. The funds will be used for preliminary engineering and analysis necessary to complete a final environmental impact statement and finish project alignment. The CTA added that the engineering work will also allow the agency to apply for more than $1 billion in federal funding.

Blue Line Modernization
The CTA also announced today that it has completed renovation work on five rail stations along the Blue Line's O'Hare branch. Upgrades to the Addison, Irving Park, Montrose, Harlem and Cumberland stations are part of the $492 million "Your New Blue" modernization project, which will rehab 14 Blue Line stations in all and includes completed track improvements between the Damen and Logan Square stops.

"There are now new tracks, signals and power between the Loop and the northwest side—all of which will make the ride smooth, safe and speedy," Mayor Rahm Emanuel said in a statement.

The modernized stations include a variety of new infrastructure and upgrades.

Cumberland: Upgrades to the station house and platforms, including new lighting and painting; replacement of station house curtain walls; new lighting and painting on platforms, walkways and at station houses; and improvements to platform, platform canopies and walkways.

Harlem: Repairs to station house curtain walls, rehabilitation of platform furniture, new lighting and painting, and improvements to platform, platform canopies floors and walkways.

Montrose/Irving Park: Renovated platform furniture, new lighting, improvements to platform and platform canopies, repainted station houses and platforms, and replaced walkway railings.

Addison: Extended station house and new enclosed stairway, a new elevator, platform improvements and platform canopies for enhanced weather protection, refurbished platform furniture, repainted station and platform and new lighting.

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Staff Writer

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Also From the Web

CTA moving forward with plans to extend Red Line south, completes Blue Line upgrades

POSTED 8:36 PM, NOVEMBER 28, 2016, BY SARAH JINDRA

CHICAGO — Renovations are now complete at five CTA Blue Line stations as part of the CTA's "Your New Blue" project. The plan to upgrade 14 stations along the Blue Line's north branch started in 2014 . It promises track work that will cut 10 minutes off a commute from downtown to O'Hare in two years. Officials say that branch of the Blue Line is used by 80,000 people daily, and experienced a 5-year ridership increase of 25% that outpaces the growth of the rail system as a whole.

The city announced Monday morning that renovation work is now done at five stations: Addison, Irving Park, Montrose, Harlem and Cumberland.

In addition to these five stations, the Damen, Western, and California stations have already been upgraded as part of the project. Still to come: upgrades at Jefferson Park, Belmont, Logan Square, Division, Chicago and Grand. Most of the schedules are still pending for that work, but we do know that the Belmont station is set to get a new canopy and will be done in 2018.

The CTA is also moving forward with plans to extend the Red Line south. The Red Line currently ends at 95th street, but the CTA would like to extend it down to 130th to better serve Chicago's Far South Side. The CTA board has approved $75 million for engineering and environmental impact work on the project.

There are two proposed routes: one running east and one west of the current Union Pacific Railroad tracks. Both would extend the red line just over five miles and include four new stations: 103rd, 111th, Michigan, and 130th. Trains would stay on elevated tracks until 119th, and then transition to street level.

The CTA is taking comments from the public on the extension for the next few days.

Here’s a look at some of the proposed Red Line stations:

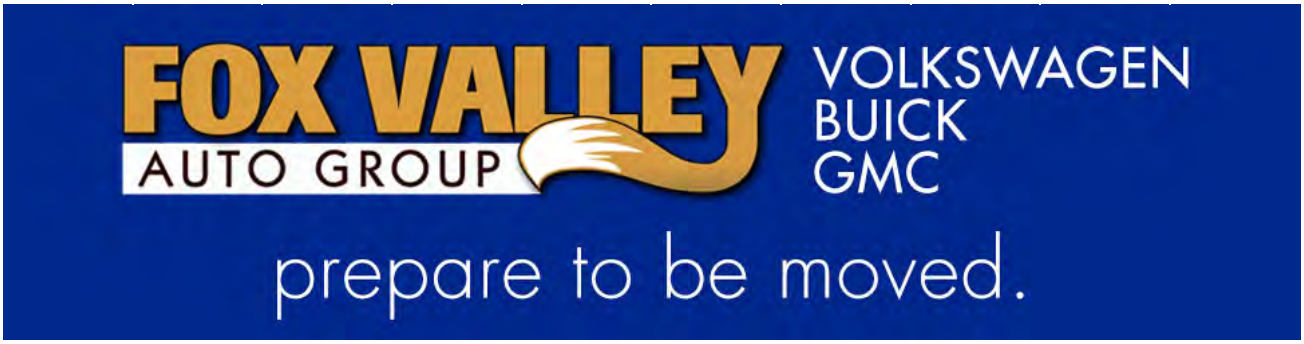

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CTA Finishes Upgrades To 5 Blue Line Stops; OKs Funds For Red Line Expansion

November 28, 2016 6:52 AM

Filed Under: Blue Line, CTA, Red Line, Susanna Song

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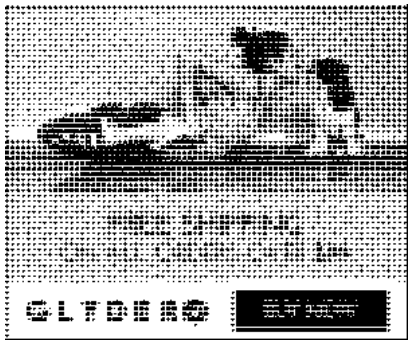

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CHICAGO (CBS) — The CTA has completed major upgrades to several stops on the Blue Line, as the agency presses ahead with a long-awaited expansion of the Red Line.

The Addison, Irving Park, Montrose, Harlem, and Cumberland stations on the Blue Line all received significant makeovers; including improved platforms and canopies, repaired benches and windbreakers, new lighting and security cameras, and deep cleaning. The Addison station also got a new stairway and elevator.

The upgrades were part of the $492 million Your New Blue project, the largest investment in the O'Hare branch since the Blue Line was extended to O'Hare International Airport in 1986.

When completed in 2018, the project is expected to reduce travel times between downtown and O'Hare by up to 10 minutes.

Meantime, the CTA has announced it is pushing forward with plans to extend the Red Line south to 130th Street.

The CTA has approved $75 million in funding for preliminary engineering on the project, as well as a finalized environmental assessment. The money, to be funded by CTA bonds, would allow the CTA to apply for more than $1 billion in federal funding for the $2.3 billion project.

The Red Line expansion would add four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street.

If all goes as planned, construction would begin in 2022, and be completed by 2026.

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Tuesday, November 29, 2016

CTA amends capital plan for Red Line investment; completes five Blue Line station renovations

Written by Kyra Senese, assistant editor

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CTA

The Chicago Transit Authority (CTA) has announced that its board approved an amendment to its Capital Improvement Plan for FY2016–FY2020 to include $75 million in funds for the transit authority's Red Line Extension (RLE) project.

The plan will extend the Red Line's service to 130th Street from 95th Street and will add four new stations on the city's Far South Side.

Representatives say the amended funding will enable the CTA to continue progress on preliminary engineering and analysis work needed to finalize the project alignment and complete a final environmental impact statement. The engineering work is mandatory in order for the CTA to apply for more than $1 billion in federal funding the transit authority is pursuing to back the $2.3 billion project. The amendment will be funded by CTA bonds, officials say.

"The Red Line Extension project is a transformational project to expand transit to Chicago's southern border and create faster access to jobs, education and opportunity," said CTA President Dorval R. Carter, Jr. "This investment will allow CTA to move forward with preliminary engineering and planning work necessary to seek federal funding to make this vision a reality for Chicago's Far South Side."

The 5.3-mile rail extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street. Each of the new stations are expected to provide bus and parking facilities.

The transit authority says it intends for the procurement for further environmental planning and engineering work to take place in 2017.

The CTA has also completed renovations to five O'Hare branch Blue Line stations as part of the transit authority's $492 million Your New Blue modernization plan.

Representatives say $43 million in station modernization work has been completed as part of the second phase of the Your New Blue program, which entailed the rehabilitation of the Addison, Irving Park, Montrose, Harlem and Cumberland stations. The station upgrades included the installation of an elevator at the Addison station to improve customer accessibility, as well.

"Today is an important milestone in our efforts to modernize transit infrastructure in Chicago, and we will continue making these much needed investments across the city to ensure we are providing the safest, most reliable service for commuters," said Mayor Rahm Emanuel. "There are now new tracks, signals and power between the Loop and the northwest side—all of which will make the ride smooth, safe and speedy."

Additional Blue Line improvements include:

- Addison Station: New elevator; extended stationhouse and new enclosed stairway; improvements to the platform and platform canopies for better weather protection; refurbished platform furniture, new lighting; and painting of station and platform.
- Irving Park and Montrose stations: Improvements to platform and platform canopies; renovated platform furniture; replaced walkway railings; new lighting and repainted stationhouses and platforms.

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- Harlem Station: Improvements to platform, platform canopies floors and walkways; repairs to stationhouse curtain walls; rehabilitation of platform furniture; and new lighting and painting.
- Cumberland Station: Improvements to platform, platform canopies and walkways; replacement of stationhouse curtain walls and other improvements, including new lighting and painting at the stationhouses, platforms, and walkways; and upgrades to stationhouse and platforms, new lighting and painting.

More information on the RLE project and the Draft EIS is available here.

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Far South Side homeowners question Red Line extension's impact on property values

By La Risa Lynch | November 30, 2016

Photo by Yingxu Jane Hao

The proposed Red Line extension would be built on either side of the Union Pacific railroad tracks, meaning nearby houses would have to be acquired and demolished before construction.

Monique Banks-McGee had been trying to sell her family home for months before she received a letter stating that the property could be acquired for the extension of the Chicago Transit Authority's Red Line. The frame house she currently rents out in the Roseland neighborhood is along a proposed path of the massive transit project.

"We have not done an appraisal on the home, but the asking price is $35,000. If you look at the market in that area that's what they are worth and less," said Banks-McGee, whose parents bought the house 50 years ago.

The original purchase price has long faded from memory.

"It is a blow to our family because we didn't expect the market to shift. The house that we grew up in, lived in … is worth nothing," she said. "And we're constantly being asked to reduce the price to sell it."

The house is among more than 200 properties in Roseland, Washington Heights, West Pullman and Riverdale that could be acquired by the CTA to make way for the $2.3 billion project to expand the train line to the city's southern limit (/red-line-extension-aims-to-improve-transit-and-development-on-the-far-south-side/) .

Today is the last day for public comments on the two proposed paths for the Red Line extension. The transit agency and Mayor Rahm Emanuel announced on Sunday that it will invest $75 million to determine the placement of the line, part of a requirement to apply for $1 billion in federal funds to help pay for the project.

Some residents in the predominantly black communities affected by the extension support the project because it could increase access to public transit and bring jobs and economic development to an area that needs all three. But for homeowners like Banks-McGee the economic benefit is uncertain. The city's history of residential segregation means that houses purchased decades ago have appreciated little in value. Coupled with the recent housing crisis, experts say homeowners may gain little if their homes are taken to make way for the Red Line extension.

Banks-McGee and most of her family moved to Atlanta years ago, but her former neighbors could be affected.

Under federal law, government agencies that acquire land for public use must at least pay fair market value for the property. But fair market value means little in communities where property values never really picked up after the housing crash. Despite a modest recovery from the darkest days of the real estate market, homes in Roseland, Auburn Gresham and neighboring communities are selling today for mid-2001 prices, according to historical index data from the Institute for Housing Studies at DePaul University.

Citywide, Chicago homes are worth about three-quarters their bubble-era peak – and steadily closing that gap. But Far South Side homes are recovering far more slowly, selling for only half what they would have fetched a decade ago.

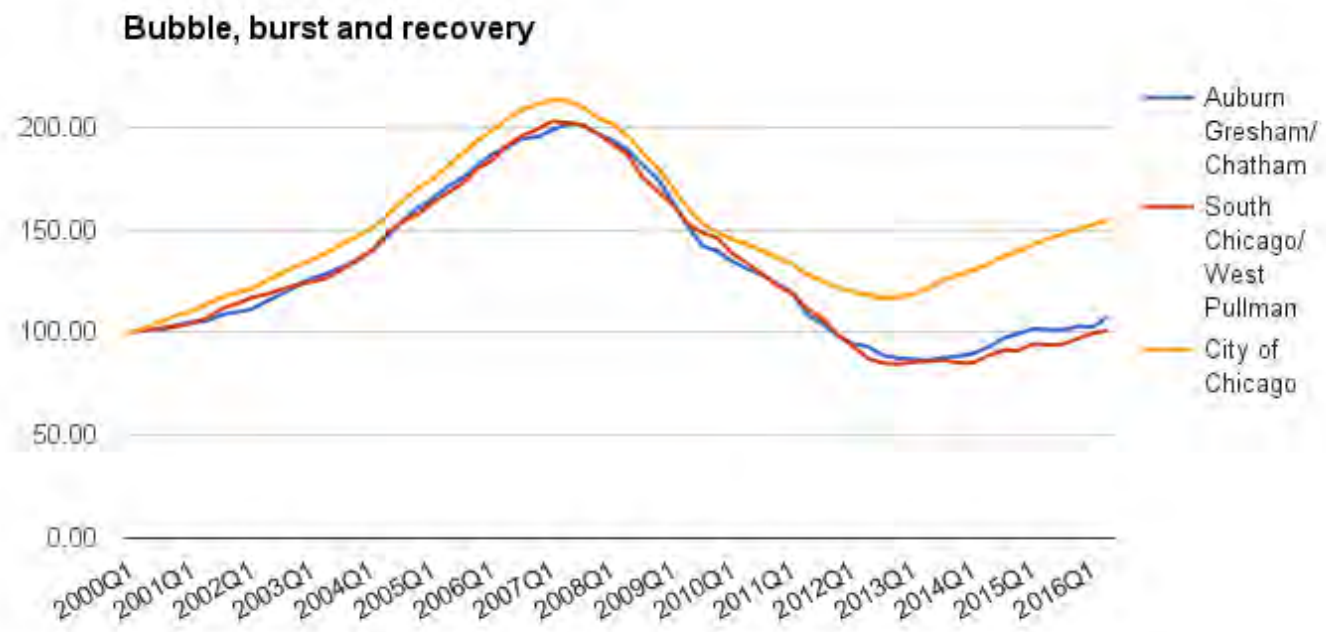

Home prices in Roseland, Riverdale and other Far South Side communities fell further during the housing crisis and recovered more slowly compared to the rest of Chicago. This line chart shows the relative change in home prices since the year 2000, indicating that the city stands to pay historically low prices for properties in the way of the Red Line extension. (Roseland is included in the Auburn Gresham/Chatham group.)
Source: Institute for Housing Studies at DePaul University (https://www.housingstudies.org/)

The situation may benefit the CTA, but not homeowners, who will see little for their investment– and have little to leave their children.

"One of the ways we can share wealth is to leave a legacy for our children and that legacy would be in ownership of a home," said Margaret Wooten, the Chicago Urban League's senior director of housing and financial empowerment. "The value of the home is part of the legacy you are leaving for the generation behind you."

Fair market value in a neighborhood that is depreciating

Shari Henry's parent's bought their family home in 1970 after leaving the Dearborn Homes housing development.

"It was my parents' first home," said Henry, who moved back to Chicago nine months ago after her husband died. "It was a major accomplishment for them to move. It was at a time where many families were moving farther south into their own homes after living in public housing, and my parents were one of those families."

The home Henry and a younger sister grew up in is on the east side of the Union Pacific railroad tracks; the Red Line could be built on either side of the tracks. The east side has more residential property; the west side has more commercial property.

Henry received CTA's letter about the property, but she wonders if building the line is the right decision. The area, she said, has lost population, with schools sitting half empty and few businesses needed to support the line's extension. Bus rapid transit, she said, could be a more cost-effective option.

"It is not an area that is thriving, that is in desperate need for transportation," Henry said. "So to have a house destroyed for something that is not needed is what is bothersome to me."

Photo by Yingxu Jane Hao

Shari Henry lives with her mother in their longtime family home, which would be acquired and demolished under one proposal for the Red Line extension.

She's unsure how the project will affect her property value. That's not a concern for her or her mother right now since CTA has not made a final decision on the line's placement. But Henry knows the homes in this area have depreciated, a situation she blames on blight and a slew of abandoned homes.

"My mom's taxes are less than $10. She is a senior, but that just really shows how much property values have dropped in this area," Henry said.

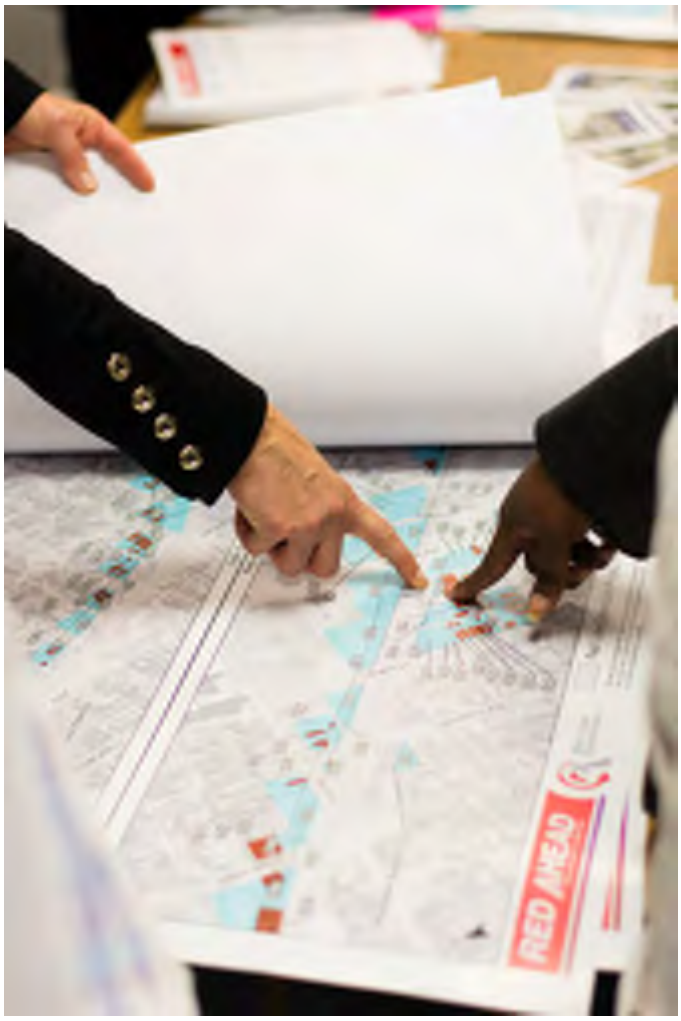

Photo by Sebastián Hidalgo

Just across the tracks, Bonnie Cannon breathed a sigh of relief. Her home was spared thanks to a grassy parkway that could be the site for the line's west side option. Still Cannon is concerned for her neighbors, many of whom are retired seniors and have owned their homes for decades. Eleven years ago, Cannon brought her brick bungalow for $159,000, but she said the market value now is $20,000 less than what she paid for the house.

"They are not going to get what they paid for the house," Cannon said of longtime neighbors whose houses may be purchased for the Red Line extension. "Some might get the value of the house because they didn't pay that much back then. Those who are buying now are not going to get that back. I know if we sell our house today or tomorrow we would not get the value of what we paid for."

The transit agency is a long way from acquiring property, but officials said they hope to negotiate with residents to purchase property. Federal law requires fair market value at the time of purchase, and in some cases, the original purchase price, transit officials said. The law also requires relocation expenses for any displaced homeowner, renter or business owner.

"If there are properties whose market value is significantly lower than what the original purchase price was, there are ways to make up the difference in the property acquisition, but that, again, is on a case-by-case basis," said Brian Steele, a spokesperson for the Chicago Transit Authority. "We are so far from that actual point it is difficult to say what impact would come to play on those types of negotiations."

Transit's effect on property values

A CTA employee and resident point at a map highlighting properties marked as "displaced buildings" during a public hearing on the Red Line extension project held on Nov. 1, 2016 at St. John Missionary Baptist Church.

Studies

(http://www.cnt.org/sites/default/files/publications/CNT_TheNewRealEstateMantra.pdf) have shown that on average property values near transit tend to increase, but that depends on different market forces, said Dena Belzer, president of Strategic Economics Inc. (https://strategiceconomics.com/), a California-based urban economics consulting firm specializing in transit-oriented development.

Her group conducted a 2008 study (http://www.reconnectingamerica.org/assets/Uploads/ctodvalcapture110508v2.pdf) that showed that property values of single-family homes near transit increased between 2 to 32 percent.

"I don't think there is an average," she said. "I think it's more realistic to say that transit in general does have a positive impact on property values, but the amount of that increase is quite variable."

Areas suffering from low home values for a long time may not see an immediate bump. Instead, home values may increase steadily many years down the road.

That happened when a light rail line was placed in a mixed-income, multiracial community in Los Angeles. The rail was built in the 1980s, but the area is just now seeing an increase in property values, Belzer said.

Transit alone doesn't increase property values. There must be coordinated planning and policies that complement transit, she said. Cities must have good zoning policies that allow higher-density residential development to spur transit-oriented development. To maximize public transit, the stations must be safe, clean, walkable and bikeable, and they should offer easy passenger drop-offs. Belzer said train frequency that links riders to their destinations is a no-brainer.

For Far South Side communities like Riverdale that are cut off from frequent public transit (/for-riverdale-red-line-extension-may-be-path-to-employment/), extending the Red Line could improve residents' access to jobs. On the other hand, the extension has the potential to spark gentrification that could displace long-term residents. That happened in Portland, Oregon.

Portland built a transit line through an economically depressed black community that resulted in an "uptick in housing prices or upscaling." Black families were pushed out and "white hipsters started moving in," said Janet L. Smith, co-director and associate professor of the Nathalie P. Voorhees Center, which advocates for comprehensive community development.

Whether this could happen to Roseland is hard to say, Smith noted.

"You should anticipate that [property values] might go up such that families will be impacted," she said. "Positively, because they can sell their house and make some money. Negatively, they don't have the income to cover the higher taxes."

But there are ways residents can preserve affordable housing—tax relief for homeowners, caps on property taxes, especially for fixed-income individuals, and rent subsidies.

Banks-McGee said she doesn't want her neighbors to be taken advantage of by the Red Line extension. "There are still people living there, whether they don't want to or can't afford to move," she said. "For them to be able to pick up and move somewhere, they would have to get fair market value for their home."

This story is part of a series examining how the proposed Red Line extension will affect residents on Chicago's South Side. Sign up to get these stories in your inbox (http://salsa3.salsalabs.com/o/50480/p/salsa/web/common/public/signup?signup_page_KEY=8841).

CHICAGO SUN TIMES

Red Line transit TIF sets off debate on transportation funding

CHICAGO 11/30/2016, 06:12pm

Did the City Council set a go-it-alone precedent that lets the state off the hook with Wednesday's unanimous vote to authorize a tax-increment financing district in hopes of nailing down $1.1 billion in federal funds to modernize the CTA's Red Line before President Barack Obama leaves office?

Civic Federation President Laurence Msall is concerned about that.

Msall acknowledged that the City Council had little choice but to fill the void created by the absence of a state capital bill that, for years, has provided the local match for transportation projects across the state.

But he warned that the 6-mile-long transit TIF that will rebuild four stations and more than a mile of tracks and create a Red-Purple bypass to alleviate congestion "changes the direction of how we fund public transit" in Illinois.

“We’re going to basically start using property taxes’ incremental growth in order to back up loans that we’re taking from the federal government,” Msall told the City Club of Chicago this week. “That is a creative solution to a problem that we have in terms of match for the CTA. But, it’s also pushing into more property taxes to fund areas of the government that have historically been subject of the gas tax, the sales tax and the state funds. . . .

“They can talk in Springfield that they’re against property taxes. But they’re driving the local governments into property taxes.”

Lincoln Park Ald. Michele Smith (43rd) is equally concerned about what she called the “open-ended nature” of the transit TIF that will stretch from North Avenue to Devon and include one-half mile on either side.

“It’s creating a precedent for how things get funded that shouldn’t be funded through TIF,” Smith said. “The Brown Line, the Red Line [South] and almost every transit project in the past has been funded by a combination of federal and state funding. Those are our tax dollars as well.

“This creates an economic burden for decades that limits our ability to raise money for other things.”

Mayor Rahm Emanuel denied that the transit TIF sets a dangerous precedent.

In fact, he argued just the opposite after signing the legislation and calling outgoing U.S. Transportation Secretary Anthony Foxx to let him know that Chicago had honored its commitment to provide the local match without a day to spare.

“I don’t think this lets Springfield off the hook,” the mayor said. “Washington is gonna be north of 50 percent of the resources. We’re gonna tap those. But in every other piece of our work, the state’s been part of it and they’re not gonna get off the hook on that.

“If anything, I think it will be a driver for them finally getting a transportation bill done that Chicago will benefit from.”

The mayor said he campaigned on a promise to modernize the CTA’s Red Line from Howard all the way to 95th Street and that Wednesday’s vote was “another down payment on that.”

Finance Committee Chairman Edward Burke (14th) argued that the “very future of public transit in Chicago was at stake” with Wednesday’s unanimous vote.

CTA President Dorval Carter Jr. acknowledged that a transit TIF is also a possibility for bankrolling the Red Line extension from 95th Street all the way south to 130th.

That long-awaited project carries a $2.3 billion price tag. The CTA has set aside $75 million for planning and engineering to start the ball rolling.

But, that does not relieve the pressure for a capital bill in Springfield.

“I’ve got over $13 billion worth of unmet capital needs to get to a state of good repair,” Carter said. “There is no TIF in the world that is going to address all of my capital needs. And the need for a state program is going to exist, no matter what.”

Wednesday was the deadline for Chicago to demonstrate its commitment to provide the $622 million in local matching funds needed to access that so-called “core capacity grant.”

The mayor’s intention was always to try to seal the deal before the Jan. 20 inauguration because of the normal slowdown that takes place whenever there is a changing of the guard in Washington.

But City Council approval took on a bit more urgency after Donald Trump defeated Democrat Hillary Clinton, the mayor’s candidate for president.

http://chicago.suntimes.com/news/red-line-transit-tif-sets-off-debate-on-transportation-funding/

Progressive RAILROADING

Rail News: Passenger Rail

CTA OKs extra funds for Red Line extension

11/30/2016

http://www.progressiverailroading.com/passenger_rail/news/CTA-OKs-extra-funds-for-Red-Line-extension--50168

Rendering of the 103rd Street Station on the Red Line extensionPhoto – CTA

The Chicago Transit Authority's (CTA) board has amended its five-year capital budget to include an additional $75 million for Red Line extension project.

The additional dollars will allow the agency to advance the preliminary engineering and analysis needed to finalize the project alignment and complete a final environmental impact statement, CTA officials said in a press release.

The engineering work also is required for the agency to apply for more than $1 billion in federal funds to support the $2.3 billion project.

The $75 million amendment will be funded by CTA bonds, agency officials said.

The 5.3-mile rail extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue and 130th Street on Chicago's south side. Each station would include bus and parking facilities.

"The Red Line Extension project is a transformational project to expand transit to Chicago's southern border and create faster access to jobs, education and opportunity," said CTA President Dorval Carter Jr.

In 2017, the CTA expects to begin procurement for further environmental planning and engineering work. The agency last month released a draft environmental impact statement for the Red Line extension.

Meanwhile, the agency earlier this week announced it finished renovating five O'Hare branch Blue Line stations.

The $43 million station modernization effort is the second phase of the $492 million "Your New Blue" project, which calls for upgrading track and stations on the O'Hare branch.

The agency has now renovated the Addison, Irving Park, Montrose, Harlem and Cumberland stations. The upgrades include installing an elevator at the Addison Station, as well as improving the platform and canopies at the Irving Park and Montrose stations.

Wednesday, November 30, 2016

CTA to invest $75 million in Red Line extension

CMAP

Chicago Transit Authority (CTA) announced that the CTA Board has approved an amendment to its FY2016-FY2020 Capital Improvement Plan to include $75 million in funding for the Red Line Extension (RLE) project, a plan to extend Red Line rail service to 130th Street from 95th Street that includes four new rail stations on Chicago's Far South Side.

The investment will allow CTA to continue to move forward with preliminary engineering and analysis necessary to finalize the project alignment and to complete a final environmental impact statement. The engineering work is also required for CTA to apply for more than $1 billion in federal funds that CTA is seeking to support the $2.3 billion project.

"The Red Line Extension project is a transformational project to expand transit to Chicago's southern border and create faster access to jobs, education and opportunity," said CTA President Dorval R. Carter, Jr. "This investment will allow CTA to move forward with preliminary engineering and planning work necessary to seek federal funding to make this vision a reality for Chicago's Far South Side."

The 5.3-mile rail extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street, each of which would include bus and parking facilities.

CTA anticipates procurement for further environmental planning and engineering work will occur in 2017. The amendment will be funded by CTA bonds.

More information is available on the CMAP website.

Attachment 5
Elected Official and Community Meeting Notes

Elected Official Briefing Notes

Community Group Meeting Sign-In Sheets and Meeting Notes

Meeting Notes

Date: Thursday, September 29, 2016

Meeting: Aldermen Briefing – Morning Session

Meeting Purpose: CTA to share RLE Project updates with elected officials

Present:

- Rodney Brown - Alderman Michelle Harris, 8th Ward
- James Ramos - Alderman Howard B. Brookins Jr., 21st Ward
- Chester Wilson - Alderman Carrie Austin, 34th Ward
- Carole Morey – Chicago Transit Authority
- Sonali Tandon – Chicago Transit Authority
- Jeffrey Wilson – Chicago Transit Authority
- Gerald Nichols – Chicago Transit Authority
- Leslie Boucree – Chicago Transit Authority
- Sukmeke Watkins – Chicago Transit Authority
- Melissa Williams – Trinal, Inc.

Time: 10:00 am to 12:00 pm

Location: Chicago City Hall-Room 200B, 121 N. LaSalle St., Chicago, IL 60602

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

- **Preferred Alternative**
  The proposed project would extend the Red Line by 5.3-miles from 95th Street to 130th Street, and would include four new stations with bus and parking facilities, as well as a new rail yard. Based on earlier planning efforts, the Union Pacific Railroad (UPRR) Alternative was selected as the NEPA Preferred Alignment for the project. Based on coordination with UPRR, the

existing railroad right-of-way is not available for purchase; therefore, CTA is considering two potential options – locating the RLE alignment either east or west of the existing UPRR line. Under either option, the RLE Project would provide significant time savings by providing a one-seat ride to downtown and would provide transit alternatives for commuters in the corridor. Based on ridership estimates, the new segment would serve 41,500 weekday trips by 2030.

- Funding and Schedule
  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources. CTA is considering several options for these local matching dollars, including the potential of creating a transit-only tax-increment financing district.

  In addition to costs for constructing the project, CTA is working to acquire additional funding by early 2017 to complete the environmental work and begin preliminary engineering. These near-term steps are needed so that the project can enter the federal Project Development Phase and be eligible to apply for New Starts Program grants funds.

- CTA has prepared a Draft Environmental Impact Statement (EIS)
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminate these potential negative impacts.

- Review of RLE Project Potential Impacts
  Major areas of impact identified in the Draft EIS include potential impacts to parks, properties, the visual environment, community character, noise, and wetlands. CTA reviewed each major area of potential impact and mitigation proposed, noting that impacts differ somewhat depending upon the alignment option ultimately selected.

  Park impacts would occur under either alignment option. Replacement parkland in or near the communities impacted are proposed to offset impacts to parks. CTA has undertaken an extensive coordination process with the Chicago Park District to identify potential replacement park locations.

  Property impacts would occur under either alignment option, although the affected number and types of parcels differs depending on the option selected. These impacts have been identified based on conceptual engineering to date and represent maximum property impacts possible; impacts may be further reduced as additional engineering and design is conducted. All impacted property owners would be protected under the federal Uniform Relocation Act, which requires paying property owners at least the fair market value for their properties and providing relocation assistance. CTA will be conducting extensive early outreach to these

potentially impacted property owners, including providing regular mail and certified mail letters, door-to-door outreach, conducting community meetings, and providing one-on-one assistance on select days at the public library. In addition, property owners with questions may call CTA's customer service line or email the project email account to receive further assistance from a CTA relocation liaison.

CTA provided conceptual visualizations of the proposed rail line and stations to review potential visual and community character impacts of the project. These concepts provide insights into the scale of the project; however the exact physical appearance may differ depending on more specific design decisions that will be made as the project moves forward. Mitigation proposed includes provision of landscaping or other urban design amenities, context-sensitive design of structures, careful consideration of external lighting, and using best management practices to maintain vegetation and a debris-free construction area.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with local businesses to provide advertising assistance where they may be impacted by construction activities.

Questions and Comments from Meeting Participants

- Chester Wilson: Which Option (East or West) is the least expensive? For the record, Alderman Carrie Austin is in favor of the East Option.
  Sonali Tandon: The West Option is slightly more expensive than the East Option.

- Chester Wilson: Will there be a bike trail along the path?
  Carole Morey: Yes, there is a potential to install a bike path beneath the elevated track structure near Eggleston and 103rd Street where Fernwood Parkway is currently located. CTA will have to conduct further coordination with the Chicago Department of Transportation to determine whether this is feasible.

- **Chester Wilson: When will property acquisition begin? It is better to start sooner rather than later.**
  Carole Morey: Acquisition cannot start until an option has been selected formally and there is a Record of Decision on the environmental document.

- **James Ramos: It would be nice to identify which properties on the displacement list are abandoned or vacant.**

- **Chester Wilson: There may be a listing of abandoned or vacant properties on file for demolition at the Building Department. In addition, the Cook County Land Bank Authority may have these types of properties on a list of back taxes. The contact person is Robert Rose.**

- **Chester Wilson: Will a copy of the presentation be available?**
  Gerald Nichols: At this time the presentation cannot be distributed. The presentation will be made available soon, once the Draft EIS is published.

- **Chester Wilson: Why was Fenger Academy High School selected for the public outreach meetings?**
  Sonali Tandon: This location was selected because of availability, accessibility, parking, and access of public transportation.

- **Rodney Brown: What will be the format of the community displacement meetings? Will it be informational or more of an open discussion?**
  Carole Morey: Relocation specialists will be available at the meetings so that individuals will be able to ask specific questions at these displacement meetings.

- **Rodney Brown: It would be great to have a direct hotline for those people with affected property.**
  Carole Morey: The CTA is looking to extend the hours of the Customer Service hotline. Operators will be given a script that will aide in answering general questions. If there are specific questions, those will be forwarded to a relocation specialist to follow up.

- **Chester Wilson: For those tracks that are elevated, what will the space below the tracks be used for?**
  Carole Morey: It can be used for parking but it will vary depending on what the community wants.

- **Chester Wilson: Are there pictures of the stations available?**
  Carole Morey: CTA has developed some conceptual visualizations. CTA has limited renderings because the stations have not been designed at this point.

Meeting Notes

Date: Thursday, September 29, 2016

Meeting: Aldermen Briefing – Afternoon Session

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts with elected officials

Present:

- Anthony A. Beale – 9th Ward Alderman
- Felicia Wesley – 9th Ward Representative
- Carole Morey – Chicago Transit Authority
- Sonali Tandon – Chicago Transit Authority
- Gerald Nichols – Chicago Transit Authority
- Jeffrey Wilson – Chicago Transit Authority
- Leslie Boucree – Chicago Transit Authority
- Sukmeke Watkins – Chicago Transit Authority
- Melissa Williams – CWC Transit Group

Time: 1:00 pm

Location: Chicago City Hall-Room 200B, 121 N. LaSalle St., Chicago, IL 60602

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

- **Preferred Alternative**
  The proposed project would extend the Red Line by 5.3-miles from 95th Street to 130th Street, and would include four new stations with bus and parking facilities, as well as a new rail yard. Based on earlier planning efforts, the Union Pacific Railroad (UPRR) Alternative was selected as the NEPA Preferred Alignment for the project. Based on coordination with UPRR, the existing railroad right-of-way is not available for purchase; therefore, CTA is considering two potential options – locating the RLE alignment either east or west of the existing UPRR line. Under either option, the RLE Project would provide significant time savings by providing a one-seat ride to downtown and would provide transit alternatives for commuters in the corridor. Based on ridership estimates, the new segment would serve 41,500 weekday trips by 2030.

- **Funding and Schedule**
  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources. CTA is considering several options for these local matching dollars, including the potential of creating a transit-only tax-increment financing district.

  In addition to costs for constructing the project, CTA is working to acquire additional funding by early 2017 to complete the environmental work and begin preliminary engineering. These near-term steps are needed so that the project can enter the federal Project Development Phase and be eligible to apply for New Starts Program grants funds.

- **CTA has prepared a Draft Environmental Impact Statement (EIS)**
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminate these potential negative impacts.

- **Review of RLE Project Potential Impacts**
  Major areas of impact identified in the Draft EIS include potential impacts to parks, properties, the visual environment, community character, noise, and wetlands. CTA reviewed each major area of potential impact and mitigation proposed, noting that impacts differ somewhat depending upon the alignment option ultimately selected.

  Park impacts would occur under either alignment option. Replacement parkland in or near the communities impacted are proposed to offset impacts to parks. CTA has undertaken an extensive coordination process with the Chicago Park District to identify potential replacement park locations.

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maximum property impacts possible; impacts may be further reduced as additional engineering and design is conducted. All impacted property owners would be protected under the federal Uniform Relocation Act, which requires paying property owners at least the fair market value for their properties and providing relocation assistance. CTA will be conducting extensive early outreach to these potentially impacted property owners, including providing regular mail and certified mail letters, door-to-door outreach, conducting community meetings, and providing one-on-one assistance on select days at the public library. In addition, property owners with questions may call CTA's customer service line or email the project email account to receive further assistance from a CTA relocation liaison.

CTA provided conceptual visualizations of the proposed rail line and stations to review potential visual and community character impacts of the project. These concepts provide insights into the scale of the project; however the exact physical appearance may differ depending on more specific design decisions that will be made as the project moves forward. Mitigation proposed includes provision of landscaping or other urban design amenities, context-sensitive design of structures, careful consideration of external lighting, and using best management practices to maintain vegetation and a debris-free construction area.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with local businesses to provide advertising assistance where they may be impacted by construction activities.

Questions and Comments from Meeting Participants

- **Anthony A. Beale: Since UPRR does not want to sell their existing tracks, will there be an easement built?**

  Carole Morey: CTA will buy the right-of-way either to the east or west of the existing UPRR tracks. Then CTA will build its own tracks.

- **Anthony A. Beale: Will there be two tracks built to accommodate inbound and outbound rides?**

  Carole Morey: To provide the same level of service as the existing CTA service, there will be northbound and southbound tracks built.

- **Anthony A. Beale: When will construction start?**
  Sonali Tandon: Construction is contingent upon completion of environmental and engineering work as well as funding availability but is expected to begin in 2022, and the line is proposed to be operational in 2026 at the earliest.

- **Anthony A. Beale: When constructing replacement parks, will there be grass or turf field?**
  Sonali Tandon: Grass is proposed.
  Carole Morey: The preferences on park replacement concepts are open for discussion and will be shared with the public for input as well.

- **Anthony A. Beale: Will the basketball court be removed?**
  Sonali Tandon: The basketball court will not be affected.

- **Anthony A. Beale: Will the outreach letters be sent to those impacted by either of the UPRR options being considered?**
  Carole Morey: Yes.

- **Anthony A. Beale: Will the letters include community meeting dates?**
  Carole Morey: Yes, information on all three meetings planned will be provided.

- **Anthony A. Beale: On which street will the line terminate at near 130th Street?**
  Sonali Tandon: The line will terminate at 130th Street near Altgeld Gardens around Ellis Avenue. A park & ride to the north of 130th Street is also proposed for this station location.

- **Anthony A. Beale: What would happen to the existing rail yard facility near 98th Street?**
  Sonali Tandon: The facility could be used for maintenance of non-revenue vehicles.

- **Anthony A. Beale: Comment – The project is great overall. I am disappointed with the timeline because I would have liked it to be completed within my tenure. I have fought so hard for this project. It is not guaranteed that I will be in office when construction starts.**

- **Anthony A. Beale: How will CTA secure the $75M required to complete environmental work and begin preliminary engineering?**
  Carole Morey: CTA is working with state representatives and hopes that this funding will be included in the upcoming state capital bill.

- **Anthony A. Beale: Is the governor in support of the project?**
  Carole Morey: It is undetermined if CTA has had conversations with the governor.

- **Anthony A. Beale: Who is the representative in Springfield supporting this project?**
  Gerald Nichols: Senator Martin Sandoval. There will be a meeting with state representatives next week.

- **Anthony A. Beale: Can this presentation be provided at my next town hall meeting? It will be held on Tuesday, October 25th at 6:30 pm at the Pullman Presbyterian Church located at 550 E. 103rd Street.**
  Carole Morey: Yes, the CTA team will be in attendance.

- **Felicia Wesley: Can the presentation be emailed?**
  Gerald Nichols: Yes.

Meeting Notes

Date: Tuesday, October 4, 2016

Meeting: Elected Officials Briefing – Morning Session

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts with elected officials

Present:

- Dorval R. Carter, Jr. – President, Chicago Transit Authority
- Leah Mooney – Chicago Transit Authority
- Sonali Tandon – Chicago Transit Authority
- Gerald Nichols – Chicago Transit Authority
- Sukmeke Watkins – Chicago Transit Authority
- Leslie Boucree – Chicago Transit Authority
- Bart Ellefritz – Chicago Transit Authority
- Dante S Sawyer – District Representative – Congresswoman Robin Kelly – Illinois District 2
- Eugene Davis – Illinois Department of Transportation
- Robyn Wheeler Grange – Congressional District Director – U.S. Congressman Bobby L. Rush – 1st District of Illinois
- Elgie R. Sims, Jr. – State Representative Illinois District 34
- Victor Hernandez – Chief of Staff - Office of the 4th District Cook County Commissioner Stanley Moore
- Earl Bell – Chief of Staff – Office of Senator Donne E. Trotter 17th District
- Donne E. Trotter – Senator 17th District
- Stanley Moore – 4th District Cook County Commissioner
- Joseph Tennial – Office of Senator Dick Durbin
- Melissa Williams – CWC Transit Group

Time: 10:00 am

Location: CTA – Conference Room C, 567 W Lake St, Chicago, IL 60661

Presentation Highlights

CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

- **Preferred Alternative**
  The proposed project would extend the Red Line by 5.3-miles from 95th Street to 130th Street, and would include four new stations with bus and parking facilities, as well as a new rail yard. Based on earlier planning efforts, the Union Pacific Railroad (UPRR) Alternative was selected as the NEPA Preferred Alignment for the project. Based on coordination with UPRR, the existing railroad right-of-way is not available for purchase; therefore, CTA is considering two potential options – locating the RLE alignment either east or west of the existing UPRR line. Under either option, the RLE Project would provide significant time savings by providing a one-seat ride to downtown and would provide transit alternatives for commuters in the corridor. Based on ridership estimates, the new segment would serve 41,500 weekday trips by 2030.

- **Funding and Schedule**
  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources. CTA is considering several options for these local matching dollars, including the potential of creating a transit-only tax-increment financing district.

  In addition to costs for constructing the project, CTA is working to acquire additional funding by early 2017 to complete the environmental work and begin preliminary engineering. These near-term steps are needed so that the project can enter the federal Project Development Phase and be eligible to apply for New Starts Program grants funds.

- **CTA has prepared a Draft Environmental Impact Statement (EIS)**
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminate these potential negative impacts.

- **Review of RLE Project Potential Impacts**
  Major areas of impact identified in the Draft EIS include potential impacts to parks, properties, the visual environment, community character, noise, and wetlands. CTA reviewed each major area of potential impact and mitigation proposed, noting that impacts differ somewhat depending upon the alignment option ultimately selected.

Park impacts would occur under either alignment option. Replacement parkland in or near the communities impacted are proposed to offset impacts to parks. CTA has undertaken an extensive coordination process with the Chicago Park District to identify potential replacement park locations.

Property impacts would occur under either alignment option, although the affected number and types of parcels differs depending on the option selected. These impacts have been identified based on conceptual engineering to date and represent maximum property impacts possible; impacts may be further reduced as additional engineering and design is conducted. All impacted property owners would be protected under the federal Uniform Relocation Act, which requires paying property owners at least the fair market value for their properties and providing relocation assistance. CTA will be conducting extensive early outreach to these potentially impacted property owners, including providing regular mail and certified mail letters, door-to-door outreach, conducting community meetings, and providing one-on-one assistance on select days at the public library. In addition, property owners with questions may call CTA's customer service line or email the project email account to receive further assistance from a CTA relocation liaison.

CTA provided conceptual visualizations of the proposed rail line and stations to review potential visual and community character impacts of the project. These concepts provide insights into the scale of the project; however the exact physical appearance may differ depending on more specific design decisions that will be made as the project moves forward. Mitigation proposed includes provision of landscaping or other urban design amenities, context-sensitive design of structures, careful consideration of external lighting, and using best management practices to maintain vegetation and a debris-free construction area.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with local businesses to provide advertising assistance where they may be impacted by construction activities.

Questions and Comments from Meeting Participants

- **Elgie R. Sims, Jr.: Can access to this presentation be provided?**
  Gerald Nichols: Yes.

- **Stanley Moore: Would the Major Taylor Trail be affected by the project?**
  Leah Mooney: No.

- **Elgie R. Sims, Jr.: With the northwest corner of Wendell Smith Park being affected, will the two baseball diamonds and basketball court be affected?**
  Sonali Tandon: A portion of Wendell Smith Park would only be affected under the East Option. Under this option, one of the two baseball fields would be affected. There would be no impact to the basketball court. CTA coordinated with the Chicago Park District on the impact to the baseball field and are proposing to improve this amenity by providing one larger baseball field instead of the existing two smaller fields. The public will be invited to provide additional thoughts on this mitigation measure.

- **Elgie R. Sims, Jr.: There are plans to build an indoor track facility in the northeast section of Wendell Smith Park. Will this be affected?**
  Sonali Tandon: The Chicago Park District has not shared those plans, so there is no determination on any impact to this planned facility. CTA's current goal is to provide more amenities than currently available.
  Leah Mooney: Any comments on concepts will be helpful to CTA and FTA.

- **Stanley Moore: Will the existing bike paths be connected to the new proposed paths in Fernwood Parkway?**
  Sonali Tandon: Currently, there are no existing bike paths in Fernwood Parkway. Fernwood Park is an active use park in the surrounding community, but it is not affected by this project. Fernwood Parkway is a passive green area adjacent to the proposed track, and there are no park or bike amenities in that area.

- **Elgie R. Sims, Jr.: The Pullman National Monument will be located along this proposed extension line. Will there be any direct stops at the Monument?**
  Gerald Nichols: **Pullman National** Monument is further east of the proposed alignment. There will be bus connections available to the Monument.

- **Earl Bell: There will be major issues with residents receiving fair market value for properties.**
  Leah Mooney: With current rules in place, at least fair market value must be provided to the displaced property owners and owners may be eligible for compensation equal to the original purchase price of the property. CTA's goal is to make the displaced residents whole.

- **Elgie R. Sims, Jr.: Are there any plans to use eminent domain to acquire properties?**
  Leah Mooney: CTA prefers to work in a collaborative effort in acquiring properties. Eminent domain will only be considered if agreement with property owners cannot be obtained.

- **Elgie R. Sims, Jr.: How many people will be affected by the displacements?**
  Leah Mooney: Household size data is not known, just the addresses of the affected properties. The purpose of the door-to-door outreach is to collect as much data and comments as possible from potentially affected property owners.

- **Elgie R. Sims, Jr.: What is the timeline for having this outreach completed?**
  Leah Mooney: Letters to potentially affected property owners and residents on file with the Cook County Assessor were mailed out on October 3, 2016. Door-to-door outreach began on October 3, 2016 and will continue through the end of the week. There will be community meetings held for those who received letters on October 11th, 12th, and 13th.

- **Elgie R. Sims, Jr.: Will these meetings provide information regarding the value of the homes?**
  Leah Mooney: No. The community meetings will provide general information about the project and allow attendees to express concerns and ask questions about property required for the project and their rights under the federal Uniform Relocation Act. It is too early in the process to have discussions about home values and more detailed information on the potential for impacts to property owners will require additional environmental and preliminary engineering work. CTA does not currently have funds to compensate owners for their homes and this would not be done until after federally mandated environmental processes and more detailed engineering plans are available.

- **Eugene Davis: Suggestion – Polling sheets from the election process can be utilized to identify affected residents/property owners.**

- **Donne E. Trotter: How many multifamily households will be affected from each option?**
  Sonali Tandon: There are very few multifamily households that would be affected under each alignment option.

- **Robyn Wheeler Grange: What has the feedback been from the outreach efforts?**
  Leah Mooney: So far it has been a positive feedback.
  Sonali Tandon: People are generally excited about the project and are open to selling their property.

- **Earl Bell: Will the listing of affected properties be made available?**
  Gerald Nichols: The list of potentially affected properties will be provided to each District.
  Sonali Tandon: The listing will also be available on CTA's website.

- **Dante S. Sawyer: Will any relocation assistance be made available to renters and those who are less mobile?**
  Leah Mooney: Yes, impacted renters are also protected under the federal Uniform Relocation Act. A relocation specialist will assist in helping renters and

others find something comparable in value and commensurate with the cost to relocate. CTA's goal is to make those affected by the project whole.

- **Elgie R. Sims, Jr.: As much information regarding outreach efforts that can be shared via email/electronically will be helpful for dissemination and can be included in newsletters.**

- **Donne E. Trotter: Why aren't the aldermen at this meeting? It would be great to have the local, federal and state representatives meet together so there is an assurance that the same conversations are had and that everyone is made aware of each other's comments and concerns.**
  Gerald Nichols: Due to time constraints, there were two sets of meetings scheduled. The aldermen were briefed last week at City Hall and today's meetings are with federal and state elected representatives.

- **Donne E. Trotter: At this time, what is required of the General Assembly?**
  Gerald Nichols: At this time, the role of the General Assembly is uncertain. State and/or local funds will be needed to construct the project; however the exact share amount and funding sources are subject to ongoing analysis and discussions.
  Leah Mooney: The total project estimated cost is $2.3B and $75M must be locally funded to move forward to the next phase, which is Project Development. One option for obtaining this local match is to establish a transit-only Tax Increment Financing (TIF) district.

- **Eugene Davis: Will ridership increase as a result of the project?**
  Leah Mooney: Ridership is expected to increase.

- **Donne E. Trotter: How many actual jobs will be created due to this project? The numbers presented can be misleading.**
  Leah Mooney: The number provided in this presentation was determined based on U.S. Department of Transportation calculations. This calculation takes into consideration direct construction jobs and indirect jobs that may be created because of the project. The true number of jobs to be created is not known at this time.

- **Elgie R. Sims, Jr.: Comment – Will construction jobs be available to residents in the community.**
  Gerald Nichols: We will work with the residents and the contractors to afford job opportunities for those in the community. We plan to use the most recent southern Red Line improvements as a model for this. This model proved to be successful in the past.

- **Eugene Davis: As taxpayers, we have to inform the community on access to some of the jobs that will be created from this project. Suggestion - Chicago State University should offer programs in preparing people for jobs.**

- Joseph Tennial: Olive-Harvey College should be consulted as well on programs to prepare people in the community for jobs.

- Earl Bell: Because the community should be provided with and will want opportunities to access jobs created by the project, it is important that the number of jobs that are anticipated are not overstated.

- Robyn Wheeler Grange: The message should also be clear that the jobs that will be available are temporary (i.e., construction-related jobs).

- Robyn Wheeler Grange: Regarding economic impacts, are there funds available to small businesses to help create permanent jobs?
  Leah Mooney: Transit TIFs do not allow money to be invested for other improvements outside of transit.

- Elgie R. Sims, Jr.: Comment – It is my understanding that the Transit TIF can be used for transit-oriented development. Those opportunities could be emphasized. The economic benefits overall outweigh how many jobs will become available alone.

- Stanley Moore: Are the current tracks in use on the UPRR?
  Sonali Tandon: Yes, they are in use by UPRR and Amtrak.

- Stanley Moore: How will noise affect nearby houses?
  Leah Mooney: While there would be some potential for noise increases resulting from the new alignment, CTA proposes to mitigate noise impacts through installation of noise barriers, the closed-deck type of deck used, and considering track options that may further reduce noise.

- Donne E. Trotter: Will this project appear in the capital budget this year or next year?
  Gerald Nichols: CTA hopes that a capital bill will be put into place very soon, but a timeline is not known.

- Stanley Moore: Will 95th Street be closed at any time during construction?
  Leah Mooney: CTA does not expect that 95th Street will be closed; however, other surrounding streets may be affected during construction.

- Donne E. Trotter: What is the timeline for this project?
  Leah Mooney: The timeline is contingent on funding availability and obtaining necessary approvals. The final environmental work (Final EIS) is expected to be completed in 2018. Construction is currently expected to begin in 2022, and service would become available in 2026.

Meeting Notes

Date: Tuesday, October 4, 2016

Meeting: Elected Officials Briefing – Afternoon Session

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts with elected officials

Present:

- Bart Ellefritz – Chicago Transit Authority
- Carole Morey – Chicago Transit Authority
- Sonali Tandon – Chicago Transit Authority
- Gerald Nichols – Chicago Transit Authority
- Sukmeke Watkins – Chicago Transit Authority
- Marquez Courtland – Office of Illinois State Representative Marcus C. Evans , Jr.– Legislative District 33
- Micaela Smith – Chief of Staff to Illinois State Representative Marcus C. Evans , Jr.– Legislative District 33
- Melissa Williams – CWC Transit Group

Time: 1:00 pm
Location: CTA – Conference Room C, 567 W Lake St, Chicago, IL 60661

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

- **Preferred Alternative**
  The proposed project would extend the Red Line by 5.3-miles from 95th Street to 130th Street, and would include four new stations with bus and parking facilities, as well as a new rail yard. Based on earlier planning efforts, the Union Pacific Railroad (UPRR) Alternative was selected as the NEPA Preferred Alignment for the project. Based on coordination with UPRR, the existing railroad right-of-way is not available for purchase; therefore, CTA is considering two potential options – locating the RLE alignment either east or west of the existing UPRR line. Under either option, the RLE Project would provide significant time savings by providing a one-seat ride to downtown and would provide transit alternatives for commuters in the corridor. Based on ridership estimates, the new segment would serve 41,500 weekday trips by 2030.

- **Funding and Schedule**
  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources. CTA is considering several options for these local matching dollars, including the potential of creating a transit-only tax-increment financing district.

  In addition to costs for constructing the project, CTA is working to acquire additional funding by early 2017 to complete the environmental work and begin preliminary engineering. These near-term steps are needed so that the project can enter the federal Project Development Phase and be eligible to apply for New Starts Program grants funds.

- **CTA has prepared a Draft Environmental Impact Statement (EIS)**
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminate these potential negative impacts.

- **Review of RLE Project Potential Impacts**
  Major areas of impact identified in the Draft EIS include potential impacts to parks, properties, the visual environment, community character, noise, and wetlands. CTA reviewed each major area of potential impact and mitigation proposed, noting that impacts differ somewhat depending upon the alignment option ultimately selected.

  Park impacts would occur under either alignment option. Replacement parkland in or near the communities impacted are proposed to offset impacts to parks. CTA has undertaken an extensive coordination process with the Chicago Park District to identify potential replacement park locations.

  Property impacts would occur under either alignment option, although the affected number and types of parcels differs depending on the option selected. These impacts have been identified based on conceptual engineering to date and represent

maximum property impacts possible; impacts may be further reduced as additional engineering and design is conducted. All impacted property owners would be protected under the federal Uniform Relocation Act, which requires paying property owners at least the fair market value for their properties and providing relocation assistance. CTA will be conducting extensive early outreach to these potentially impacted property owners, including providing regular mail and certified mail letters, door-to-door outreach, conducting community meetings, and providing one-on-one assistance on select days at the public library. In addition, property owners with questions may call CTA's customer service line or email the project email account to receive further assistance from a CTA relocation liaison.

CTA provided conceptual visualizations of the proposed rail line and stations to review potential visual and community character impacts of the project. These concepts provide insights into the scale of the project; however the exact physical appearance may differ depending on more specific design decisions that will be made as the project moves forward. Mitigation proposed includes provision of landscaping or other urban design amenities, context-sensitive design of structures, careful consideration of external lighting, and using best management practices to maintain vegetation and a debris-free construction area.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with businesses to provide advertising assistance where they may be impacted by construction activities.

Questions and Comments from Meeting Participants

- **Micaela Smith: Who will be responsible for the removal of graffiti on the elevated structure beams, CTA or the City?**
  Sonali Tandon: It is CTA's responsibility to remove graffiti.

Meeting Notes

Date: Tuesday, October 18, 2016

Meeting: Agape Community Center Meeting

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts

Time: 10:00 am

Location: 342 W 111th St, Chicago, IL 60628

Presentation Highlights

CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

- **Preferred Alternative**
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  In addition to costs for constructing the project, CTA is working to acquire additional funding by early 2017 to complete the environmental work and begin preliminary engineering. These near-term steps are needed so that the project can enter the federal Project Development Phase and be eligible to apply for New Starts Program grants funds.

- **CTA has prepared a Draft Environmental Impact Statement (EIS)**
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminate these potential negative impacts.

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concepts provide insights into the scale of the project, however the exact physical appearance may differ depending on more specific design decisions that will be made as the project moves forward. Mitigation proposed includes provision of landscaping or other urban design amenities, context-sensitive design of structures, careful consideration of external lighting, and using best management practices to maintain vegetation and a debris-free construction area.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with local businesses to provide advertising assistance where they may be impacted by construction activities.

- Public Hearing on the Draft EIS
  CTA will be holding a public hearing on November 1, 2016 at the St. John Missionary Baptist Church to share the impacts of the project and to obtain public comments. A court reporter and comment cards will be available to take public comments verbally or in writing during the hearing. In addition, the public may provide comments via email to the project email account. Information on the location of the hearing and ways to comment were presented to all attendees. CTA also noted that comment cards are provided at this meeting as well for those interested in providing comments now.

Questions and Comments from Meeting Participants

- It does not seem like commute times would be reduced very much.
  CTA: The travel time savings noted are for the 5.3-mile extension only. Travel times from 95th Street station and continuing along the existing rail line would be the same.

- What other engineering work needs to be completed?
  CTA: The renderings provided today are only conceptual and show the scale and general layout of the project. Plans will become more detailed over time as more detailed design decisions are made. CTA will conduct detailed surveys as part of preliminary engineering, which will provide additional information. The Final EIS and additional engineering will also provide a more refined cost estimate.

- **Would this building (Agape Community Center) be displaced?**
  CTA: The building would not be displaced, but the parking lot would be used. According to publicly available records, the City of Chicago owns this land.

- **Who owns the property on the west side of the proposed 111th station?**
  CTA: The property on the west side of the UPRR tracks consists of vacant land. Some of this land is owned by the City of Chicago while other parcels are privately owned.

- **Agape has many events, including a huge annual event. Where would trucks unload, attendees park, etc.?**
  CTA: The current plans represent the maximum footprint of the project and include a 14-foot emergency access road next to the station. There will potentially be space underneath the elevated structure which could provide parking and parking may also be available at the proposed 111th Street station park and ride.

- **Will houses be displaced as part of the project?**
  CTA: Yes, there would be impacts to some residential properties. There are several vacant properties as well. Mitigation strategies will be implemented in accordance with the federal Uniform Act and include relocation assistance and compensation to impacted property owners.

- **Will there be any impact on noise related to the Union Pacific railroads?**
  CTA: CTA will continue to coordinate with UPRR as the project progresses. CTA analyzed noise impacts of the RLE based on FTA criteria and mitigation is being proposed to minimize noise impacts, including noise barriers, welded rail and a closed deck structure. Noise concerns related to the existing UPRR and Metra services should be communicated to UPRR and Metra, as CTA cannot enforce anything on them.

- **Construction crews treat this area with less respect than other parts of the city. This is a justice issue.**
  CTA: As projects move into construction, CTA assigns a project manager to each project. The project manager will be a direct point of contact if any issues arise. CTA also uses all possible best management practices to minimize impacts from construction.

- **Where can we send comments?**
  CTA: Comments can be provided via e-mail to the project email address, verbally to the court reporter at public hearing, by submitting or mailing in comment cards to CTA, or by calling CTA customer service.

- **Are there any services for displaced persons?**
  CTA: Displaced property owners and renters would be compensated in accordance with the federal Uniform Relocation Act., which requires providing relocation assistance and compensation for at least the fair market value of property.

RED LINE EXTENSION

AGAPE COMMUNITY CENTER

10/18/16 — 10 AM

S. No.	NAME	ORGANIZATION/ RESIDENT	PHONE/ EMAIL
1.	SONALI TANDON	CTA	Redextension@transitchicago.com
2.	Leslie Bouchée	CTA	
3.	Samantha Wolf	CTA (KSA)	swolf@ksapr.com
4.	Brad Harry	Resident	brad.harry@cm.org
5.	Ben Sutton	Resident	BenSutton73@yahoo.com
6.	Linda Cotton	Resident	linda.cotton@cru.org
7.	Aaron Crouse	Resident	acrog14@gmail.com
8.	Milton Massie	Resident	Milton-massie@cru.org

Meeting Notes

Date: Tuesday, October 18, 2016

Meeting: Rosemoor Community Association Meeting

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts

Time: 6:30 pm

Location: 10205 S. King Drive, Chicago, IL 60628

Presentation Highlights

CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

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- **Funding and Schedule**
  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources. CTA is considering several options for these local matching dollars, including the potential of creating a transit-only tax-increment financing district.

  In addition to costs for constructing the project, CTA is working to acquire additional funding by early 2017 to complete the environmental work and begin preliminary engineering. These near-term steps are needed so that the project can enter the federal Project Development Phase and be eligible to apply for New Starts Program grants funds.

- **CTA has prepared a Draft Environmental Impact Statement (EIS)**
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminated these potential negative impacts.

- **Review of RLE Project Potential Impacts**
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There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with local businesses to provide advertising assistance where they may be impacted by construction activities.

- Public Hearing on the Draft EIS
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Questions and Comments from Meeting Participants

- Can you provide clarification on where tracks would be located?
  CTA: The RLE tracks would be approximately 50 feet from current UPRR tracks, and would be located either east or west of the existing UPRR tracks.

- Will people need to move due to property impacts? If so, when are you going to let them know?
  CTA: There will be property displacements required for construction of the project. CTA has already started outreach to property owners and renters. CTA sent letters and has also conducted door-to-door outreach. CTA has also held three community meetings to help answer questions and offer assistance and guidance.

- **We are concerned that people may only find out about property displacements at the last minute.**
  CTA: While acquisition is still a number of years away, CTA has taken an early, proactive, transparent approach to making people aware of potential displacement impacts from the project. People that may be potentially impacted depending on the alignment option selected have already been contacted and outreach has already started. Maps of the two potential routes are posted on the project website. CTA representatives have also established hours at local libraries to answer individual questions.

- **Do you have brochures that show the proposed route?**
  CTA: We do not have brochures, but the Draft EIS provides this information and is available in a number of locations. It can be found online on the CTA project website, and at a number of local libraries.

- **Will any parking be available at stations?**
  CTA: Park and rides are part of the project and are proposed at each of the proposed new station areas. The number and scale of parking available at each proposed station area differs, but all would provide parking.

- **Will tracks be located on the ground (at-grade)?**
  CTA: The alignment proposed is an elevated structure for much of the alignment, and remains elevated until 119th Street. After that, the structure would be at-grade (on the ground).

- **If the project comes to fruition, how will CTA determine that jobs are equally divided in the City of Chicago?**
  CTA: CTA follows federal guidelines as well as CTA's own guidelines on processes to hire contractors and ensure equal opportunities. CTA has successfully worked with the community previously on the Red Line South Extension Project and on the 95th Terminal Project and will use these projects as models for the RLE Project.

- **Federal guidelines are very weak in ensuring diversity in construction crews.**
  CTA: CTA goes above and beyond the requirements of federal guidelines. A certain percentage of all construction crews will be minority. In addition, a certain percentage of subcontractors will have to be minority and women owned businesses.

- **What's going on at the 95th Street Station?**
  CTA: CTA is rebuilding the terminal. When complete, there will be two north/south terminals with a bridge over the 95th Street connecting them.

- **Do you have a drawn-out plan for the project?**
  CTA: Yes, further details on the project alignment are provided in the Draft EIS and available online. In addition, a Citizens' Guide has been developed that contains a map of the project.

- **What are the alternative routes?**
  CTA: The proposed alignment will either be located east or west of the existing UPRR tracks. The alignment would turn south from the 95th Street Station, following I-57, and then follow the UPRR corridor from 99th Street to near 119th Street. South of 119th Street, the East and West Options would follow the same alignment southeast along the South Shore tracks to 130th Street.

- **How many community meetings have been held or are planned and where will they be?**
  CTA: Since 2006, there have been 12 to13 community meetings held as part of the Alternatives Analysis and Draft EIS planning processes. CTA has also met with Rosemoor Community Association in past and provided project updates. A public hearing on the findings of the Draft EIS is scheduled for November 1, 2016 at St. John's Missionary Baptist Church. These details are also provided on the CTA project website.

- **Will east and west routes have the same number of stops?**
  CTA: Yes.

- **Regardless of which alignment option is chosen, will the rail yard and location be the same?**
  CTA: Yes.

Red Line Extension

Rosemoor Community Association
October 18, 2016 6:30-7:30PM
10205 S. King Drive, Chicago, IL 60628

cta

Name	Address	Email Address
Sonali Tandon	CTA 567 W Lake St.	Redextension@transitchicago.com
Leslie Bowree	"	"
Varnetta Rucker	10228 S. Calumet	
Myrtis Taylor	6453 S. Wipachester	MYRTIS.TAYLOR@SCI-US.com
JOYCE A. DUNMORE	10321 SO. CALUMET AVE	Jdunmore@wowway.com
Arnold Pugh	12257 S. Perry Ave 60628	Appugh@ameritech.net
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Julia Cartwright	10221 S. Eberhart Ave 60628	JuliaCartwright@outlook.com
Rosalett Gibson	10453 So. Prairie Ave 60628	
Gloria Green	10143 S. Calumet 60628	Samgegreen@aol.com
RALPH LOCKE	547 E. 105TH PL 60628	
Doris Fields	10430 S Prairie Av 60628	DoliPray@SBCglobal.net
Ruthie Marshall	10105 S. King Dr 60628	
Rosemery Kinney	645 E 101 Place 60628	

Red Line Extension

Rosemoor Community Association
October 18, 2016 6:30-7:30PM
10205 S. King Drive, Chicago, IL 60628

cta

Name	Address	Email Address
GODFREY LAWSON	10019 EBERHART	lawson411@aol.com
Alfreda Palm	10147 S. Rhodes	alfredapalm@hotmail.com
Art & Audrey Chalupa	10114 S Prairie	ANAVENTURES@OUTLOOK.COM
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GLADYS Woolfolk	10330 S. KING DR	
Lee Bertha Richardson	10153 So St Lawrence	
Robert Lester	10052 S. Prairie Ave.	
Pearlie Spells	10527 S. King Dr	
DOLORES CHESTNUT	10522 So. VERNON AVE.	
Gwen McCRARY	532 E 104 St	
Jeanine L Jones	10214 S. Forest	virtuousnean@gmail.com

Meeting Notes

Date: Tuesday, October 19, 2016

Meeting: St. Anthony of Padua Parish

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts

Time: 6 pm

Location: 11533 S. Prairie Avenue, Chicago, IL 60628

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. The presentation was translated into Spanish. Representatives from CTA discussed the following:

- **Project Overview and Benefits**
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  Major areas of impact identified in the Draft EIS include potential impacts to parks, properties, the visual environment, community character, noise, and wetlands. CTA reviewed each major area of potential impact and mitigation proposed, noting that impacts differ somewhat depending upon the alignment option to be selected.

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  Property impacts would occur under either alignment option, although the affected number and types of parcels differs depending on the option selected. These impacts have been identified based on conceptual engineering to date and represent maximum property impacts possible; impacts may be further reduced as additional engineering and design is conducted. All impacted property owners would be protected under the federal Uniform Relocation Act, which requires paying property owners at least the fair market value for their properties and providing relocation assistance. CTA is conducting extensive early outreach to these potentially impacted property owners, including providing regular mail and certified mail letters, door-to-door outreach, conducting community meetings, and providing one-on-one assistance on select days at the public library. In addition, property owners with questions may call CTA's customer service line or email the project email account to receive further assistance from a CTA relocation liaison.

  CTA provided conceptual visualizations of the proposed rail line and stations to review potential visual and community character impacts of the project. These

concepts provide insights into the scale of the project; however the exact physical appearance may differ depending on more specific design decisions that will be made as the project moves forward. Mitigation proposed includes provision of landscaping or other urban design amenities, context-sensitive design of structures, careful consideration of external lighting, and using best management practices to maintain vegetation and a debris-free construction area.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with local businesses to provide advertising assistance where they may be impacted by construction activities.

- Public Hearing on the Draft EIS
  CTA will be holding a public hearing on November 1, 2016 at the St. John Missionary Baptist Church to share the impacts of the project and to obtain public comments. A court reporter and comment cards will be available to take public comments verbally or in writing during the hearing. In addition, the public may provide comments via email to the project email account. Information on the location of the hearing and ways to comment were presented to all attendees. CTA also noted that comment cards are provided at this meeting as well for those interested in providing comments now.

Questions and Comments from Meeting Participants

- Please explain what "UP" is.
  CTA: The "UP" is the Union Pacific Railroad, which already exists in the community. Mooney showed the audience the map and where the railroad tracks are located.

- Would the East and West Options come together at 118th Street?
  CTA: Yes.

- Do you have renderings of the station that will be at 116th Street?
  CTA: Yes, the renderings of Michigan Avenue station are in the Citizens' Guide. CTA will have large photos of the renderings at the public hearing on November 1st and we will have boards with information in Spanish, as well.

- **So there is no funding for the project yet?**
  CTA: That is correct. While CTA would pursue federal funding for the project, there would still need to be state or local funding match for at least 50 percent of the project costs and that will need to be identified as the project moves forward. We will need to work to identify the remaining local capital investment dollars. One source might be from a TIF transit district. The Illinois Legislature has just set up a method for several transit projects to do this. Following the public hearing and comment period on the Draft EIS, the next step in the process will be to secure the $75 million needed to do the Final Environmental Impact Statement and the Preliminary Engineering work.

- **When will the construction start?**
  CTA: The project timeline is contingent on funding availability and approvals. If funding and approvals are obtained in the timeframe anticipated, CTA will be able to start construction as early as 2022 and construction would take approximately four years to complete.

- **What are "mitigation measures"?**
  CTA: Mitigation measures are the things that CTA will need to do to reduce or eliminate the negative environmental impacts of the project. As examples, actions would need to be taken to reduce noise from tracks of the new Red Line. Noise impacts would be mitigated by closed-deck construction. Such measures would reduce the noise compared to what one hears when standing under the elevated tracks downtown, which were built in the 1880s. Noise barriers would be built alongside the tracks. Additional information is provided in the Citizens' Guide.

- **Where on 103rd Street is the park (in relation to the tracks)?**
  CTA: Wendell Smith Park and Block Park are located on the east side of the tracks. Fernwood Parkway is located on the west side of the tracks.

- **Will this project affect Kensington Park?**
  CTA: No.

- **Where would the Michigan station be located?**
  CTA: The Michigan station would be located approximately at 116th Street.

- **So, where would the replacement park option be located near this station?**
  CTA: One potential location for replacement parkland is near the proposed Michigan station. It would be located adjacent to the station along Kensington Avenue. A map was provided to indicate where this replacement park option would be located.

- **One of your renderings shows my house. Is that how the proposed project is going to look?**
  CTA: These depictions are conceptual renderings only. While they provide an indication of the types of features that will be incorporated, additional engineering and design still needs to be conducted. CTA will need to provide space between

tracks and homes. We encourage you to include your input into the public record by attending the public hearing on November 1st or by filling out a comment card.

- **Those walls look small (the noise barrier walls provided as an example on an existing CTA track).**
  CTA: The noise barriers are built and engineered according to how noise is generated and are designed to reduce noise impacts.

- **Will there be vibration impacts as a result of the project?**
  CTA: The project will be designed to minimize vibration. The older tracks downtown vibrate and rumble along, but newer designs don't cause these same types of vibrations. If one stood near the old and newer tracks, one would be able to tell the difference between the new and old tracks.

- **If you could record the noise under the old tracks downtown, and then record the noise with the new barriers, and let us listen to both, that would help us understand the difference – could you do that?**
  CTA: That is an interesting idea. We can investigate that in greater detail. We cannot exactly replicate what the noise from the new tracks would be because they have not been built yet.

- **Most people in the community already experience vibration impacts from the existing train tracks. Would there be more vibration impacts as a result of this project?**
  CTA: Based on the initial analyses conducted for the Draft EIS, the project would use continuously welded rail and there would be no additional vibration impact due to the RLE Project. Vibration impacts that might exist now are from the UPRR tracks. We encourage you to provide comments on your concerns about vibration and attend the upcoming public hearing.

- **I think that existing vibration levels are a good point of reference in understanding community concerns about vibration.**
  CTA: There are existing train tracks that are operated by UPRR in the corridor today. Where there is existing rail, CTA cannot add more tracks without proper setbacks. At the November 1st public hearing, we will have engineering specialists there who can answer your questions and provide more technical information on analyses conducted to date.

- **How far away from the UP railroad tracks will the Red Line be located?**
  CTA: The Red Line tracks would be located at least 50 feet away from the UP tracks.

Red Line Extension

St. Anthony of Padua Parish
October 19, 2016 6-7PM
11533 S. Prairie Avenue, Chicago, IL 60628

cta

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Erica Perez	11630 S Prairie av	
Onecima Lechuga	11727 S Calumet	
Columba Cruz	330 E 116 th st Chicago	
GERARDO ZARAGOZA	11714 S CALUMET AVE CHGO	
Guillermo Ponce	11615 S. Prairie Ave Chgo	
MARGARITA CANAS		
Antonia Navarez	156 E Kensington	

Red Line Extension

St. Anthony of Padua Parish
October 19, 2016 6-7PM
11533 S. Prairie Avenue, Chicago, IL 60628

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Martha Palacios	121 E 117 ST	
Humberto Salazar	128 and 149 E 117 St	
M Jorge Arcelo	116 E 117 ST chicago	
Gerardo Arcelo	116 E 117 ST	

Red Line Extension

St. Anthony of Padua Parish
October 19, 2016 6-7PM
11533 S. Prairie Avenue, Chicago, IL 60628

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Juliana Carrasco	133 E117th st Chicaso IL	—
Maria Meero	342 E117th St Chicago IL	—
Maria Carrera	122 E Kensington ave Chicago.	
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DELIA GARCIA	160 E Kensington Ave	—
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Marcelina Sierra	11572 S. WABASH. AV.	
JULIA M. MUNOZ	206 E. 116 St.	
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Red Line Extension

St. Anthony of Padua Parish
October 19, 2016 6-7PM
11533 S. Prairie Avenue, Chicago, IL 60628

cta

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DAVID SILVA	11592 N. FROM VE	
Juan Carlos Gomez	11619 S prairie	
Gabriela Galvan	11619 S prairie	
Cecilia Morales	161 E 115 st chicago IL	
Bernardo Rodriguez	160 E Kensington av.	
Josel carrasco	133 E 117 st	
Cecilia Escobedo	11624 S prairie AV. Chicago IL	
Carmen Cano	152 E Kensington	

Red Line Extension

St. Anthony of Padua Parish
October 19, 2016 6-7PM
11533 S. Prairie Avenue, Chicago, IL 60628

cta

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Teresa Caldron	324 E. 16 St	
Angelita Ortiz	150 E Kensington	
Raul Ortiz	304 E 116th St	
Elia Magaña	342 E116TH ST	
MAURILIO TOVALIN	139 E 117	
Yolanda Cerrato	318 E. 116 ST.	
Luis Saluzor	345 E 117 St	
/		

Meeting Notes

Date: Thursday, October 20, 2016

Meeting: People for Community Recovery Meeting

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts

Time: 6:00 pm

Location: Chicago Youth Center - 951 E. 132nd Street, Chicago, IL 60827

Presentation Highlights

CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

- **Preferred Alternative**
  The proposed project would extend the Red Line by 5.3-miles from 95th Street to 130th Street, and would include four new stations with bus and parking facilities, as well as a new rail yard. Based on earlier planning efforts, the Union Pacific Railroad (UPRR) Alternative was selected as the NEPA Preferred Alignment for the project. Based on coordination with UPRR, the existing railroad right-of-way is not available for purchase; therefore, CTA is considering two potential options – locating the RLE alignment either east or west of the existing UPRR line. Under either option, the RLE Project would provide significant time savings by providing a one-seat ride to downtown and would provide transit alternatives for commuters in the corridor. Based on ridership estimates, the new segment would serve 41,500 weekday trips by 2030.

- **Funding and Schedule**
  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources. CTA is considering several options for these local matching dollars, including the potential of creating a transit-only tax-increment financing district.

  In addition to costs for constructing the project, CTA is working to acquire additional funding by early 2017 to complete the environmental work and begin preliminary engineering. These near-term steps are needed so that the project can enter the federal Project Development Phase and be eligible to apply for New Starts Program grants funds.

- **CTA has prepared a Draft Environmental Impact Statement (EIS)**
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminate these potential negative impacts.

- **Review of RLE Project Potential Impacts**
  Major areas of impact identified in the Draft EIS include potential impacts to parks, properties, the visual environment, community character, noise, and wetlands. CTA reviewed each major area of potential impact and mitigation proposed, noting that impacts differ somewhat depending upon the alignment option ultimately selected.

  Park impacts would occur under either alignment option. Replacement parkland in or near the communities impacted are proposed to offset impacts to parks. CTA has undertaken an extensive coordination process with the Chicago Park District to identify potential replacement park locations.

  Property impacts would occur under either alignment option, although the affected number and types of parcels differs depending on the option selected. These impacts have been identified based on conceptual engineering to date and represent maximum property impacts possible; impacts may be further reduced as additional engineering and design is conducted. All impacted property owners would be protected under the federal Uniform Relocation Act, which requires paying property owners at least the fair market value for their properties and providing relocation assistance. CTA will be conducting extensive early outreach to these potentially impacted property owners, including providing regular mail and certified mail letters, door-to-door outreach, conducting community meetings, and providing one-on-one assistance on select days at the public library. In addition, property owners with questions may call CTA's customer service line or email the project email account to receive further assistance from a CTA relocation liaison.

  CTA provided conceptual visualizations of the proposed rail line and stations to review potential visual and community character impacts of the project. These

concepts provide insights into the scale of the project, however the exact physical appearance may differ depending on more specific design decisions that will be made as the project moves forward. Mitigation proposed includes provision of landscaping or other urban design amenities, context-sensitive design of structures, careful consideration of external lighting, and using best management practices to maintain vegetation and a debris-free construction area.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with local businesses to provide advertising assistance where they may be impacted by construction activities.

- Public Hearing on the Draft EIS
  CTA will be holding a public hearing on November 1, 2016 at the St. John Missionary Baptist Church to share the impacts of the project and to obtain public comments. A court reporter and comment cards will be available to take public comments verbally or in writing during the hearing. In addition, the public may provide comments via email to the project email account. Information on the location of the hearing and ways to comment were presented to all attendees. CTA also noted that comment cards are provided at this meeting as well for those interested in providing comments now.

Questions and Comments from Meeting Participants

- Will both of the two alternative routes being considered terminate at 130th Street?
  CTA: Yes, both the East and West Options would terminate at 130th Street.

- What is the projection of jobs?
  CTA: Projection of jobs can be difficult to measure, but it is estimated that 29,900 direct, indirect, and induced jobs would be created as a result of the project.

- Where will the stations be located?
  CTA: The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street.

- **Will the 103rd Street station be by Olive-Harvey Community College?**
  CTA: The 103rd Street station will be closer to Eggleston, adjacent to the existing UPRR track.

- **What entity will clear the project to move forward?** Is the Environmental Protection Agency (EPA) involved?
  CTA: CTA is working with the Federal Transit Administration (FTA) on environmental clearances and eventual funding for the project. EPA is also involved as a participating agency and Draft and Final EISs need to be filed with them.

- **With the governor approving the project, does this mean the funds have been appropriated?**
  CTA: Currently, there is neither a state bill nor state funding for the project. Federal funding will be pursued through FTA's nationally competitive Capital Investment Grant (New Starts) funding program, which may pay for up to 50 percent of project costs. State and local funding will need to be identified to match federal dollars.

- **If the project doesn't move forward in two years will it have to start all over?**
  CTA: In developing the Draft EIS, CTA developed planning level timeframes for construction and assumed construction of the RLE would occur from 2022 through 2025. Actual project construction and timelines for project implementation are dependent on the availability of project funding and approvals. There is a two-year timeframe for completion of the Project Development Phase with FTA, which will require completion of environmental work and additional engineering work. An Engineering Phase would follow and there is no set timeframe for that phase of work. CTA has not yet applied for entry into Project Development but expects to complete the work necessary for this phase within a two-year timeframe, as stipulated by FTA.

- **Is there a link where you can provide comments directly to CTA?**
  CTA: There are a number of ways to provide comments. You can submit comments electronically via email at RedExtension@transitchicago.com.

- **What libraries have copies of the Draft EIS?**
  CTA: The Draft EIS is available for public review and comment from October 6 to November 30, 2016. The Draft EIS is available on the RLE Project website (transitchicago.com/RedEIS). Hard copies of the Draft EIS are available during the public review period at CTA Headquarters, Pullman Public Library, West Pullman Public Library, Altgeld Public Library, Woodson Regional Public Library, Calumet Park Public Library, and Harold Washington Library Center.

- **When monies have been secured for the project, will that information be made public?**
  CTA: Yes.

- **Is private funding being sought?**
  CTA: CTA is pursuing a wide range of local, state, and federal funding sources, including federal New Starts funds.

- **What Red Line improvements are being made on the North Side of Chicago?**
  CTA: CTA has initiated an overall Red Ahead Program, which is a comprehensive plan for maintaining, modernizing, and expanding the Red Line. While RLE project planning is focused on extending the Red Line on the far South Side of Chicago, the Red and Purple Modernization (RPM) Program is a major initiative that will completely rebuild the nearly century old North Red Line from Belmont to Howard and the Purple Line from Belmont to Linden in Wilmette.

- **This project will enhance economic growth for this area. We hope the people within the community will have fair opportunities as this occurs.**
  CTA: CTA has continued to work with several community and business groups, the Alderman's offices, and conducted a number of public meetings at every stage of project planning and decision-making to ensure active involvement from the community.

- **How will economic benefits accrue due to the proposed stations? Even if there is just one anchor store that comes in as a result of the project; others are more likely to come.**
  CTA: The proposed park & ride near Michigan station would provide opportunities for ground-floor retail or community facilities. While CTA is not directly responsible for land use and development activities, the project would support TOD development. CTA will continue to work with the City's Department of Planning and Development to integrate this transportation investment with land use and development planning. As the project advances further, there may also be opportunities for the City to pursue Regional Transit Authority (RTA) TOD funds to further assist in development near the station.

- **Are there any intentions to name stations to reflect the surrounding community character, such as Hazel Johnson Environmental Justice Way?**
  CTA: CTA has not yet considered this level of detailed station planning. Following the public comment period on the Draft EIS, FTA and CTA will review comments received and CTA will also be conducting additional technical analysis and agency coordination to determine the final Preferred Alignment to allow CTA to move forward in completing environmental clearances.

Red Line Extension

People for Community Recovery
October 20, 2016 6PM
CYC - 951 E. 132nd Place, Chicago, IL 60827

cta

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Meeting Notes

Date: Tuesday, October 25, 2016

Meeting: Alderman Beale's Town Hall Meeting

Meeting Purpose: This meeting was an aldermanic town hall meeting to discuss issues of local issues within the ward. The agenda included an item that allowed CTA to briefly share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts. Meeting notes included herein represent the CTA portion of the meeting only.

Time: 6:30 pm

Location: Pullman Presbyterian Church, 550 E. 103rd Street, Chicago, IL 60628

Presentation Highlights
Carole Morey (CTA) thanked the Alderman and staff for providing CTA with an opportunity to provide an updated on the Red Line Extension (RLE) Project. Ms. Morey delivered a brief presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. She noted that CTA published the Draft Environmental Impact Statement (EIS) on October 6, 2016, and that this process is required to make the project eligible for highly competitive federal New Starts program funding. Representatives from CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would reduce commute times for residents in Chicago's far South Side. A study conducted during the 2005-2010 time period found that commute times were 24 percent longer for project area residents than for the seven-county region as a whole. The project would also stimulate economic development in the area and provide a new rail yard and shop facility for the Red Line. The project will also create jobs and increase transit access to jobs throughout the region. For example, according to the regional planning organization, CMAP, jobs accessible within an hour commute of the proposed 111th Street station would increase by 50 percent.

- **Preferred Alternative**
  Based on earlier planning efforts, the Union Pacific Railroad (UPRR) Alternative was selected as the NEPA Preferred Alignment for the project. Based on coordination with UPRR, the existing right-of-way is not available for purchase and railroads cannot be obtained through eminent domain; therefore, CTA is considering two

potential options – locating the RLE alignment either east or west of the existing UPRR line.

- **Funding and Schedule**
  The estimated cost of the extension is approximately $2.3 Billion. Ms. Morey provided a rendering of a proposed station to indicate the types of features that would be incorporated for this project. She noted that the right-of-way would be elevated for a significant portion of the project to avoid conflicts with other vehicles. In addition, stations would be designed to be modern and spacious with canopies to protect waiting passengers from the weather.

  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources, such as a newly authorized transit-only tax-increment financing (TIF) district or through a state capital program. A timeline graphic for moving through the federal process and beginning construction was presented to attendees.

- **CTA has prepared a Draft Environmental Impact Statement (EIS)**
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each UPRR alignment option. CTA will be holding an open house style public hearing on November 1, 2016 to share impacts of the project and to obtain public comments. The public comment period will extend through November 30, 2016. A final EIS will be prepared following review of comments and selection of a final Preferred Alignment. This process may take an additional two years or more. While this is a long process, it is this federal process which makes the project eligible for federal New Starts funding. This process allows the public to comment on all the expected impacts from the project and to hold the CTA accountable to mitigate those impacts.

- **Review of RLE Project Potential Impacts**
  Major areas of impact identified in the Draft EIS include potential impacts to parks, properties due to the need to purchase the right-of-way, the visual environment, community character, noise, and wetlands. CTA reviewed each major area of potential impact, noting that impacts differ somewhat depending upon the alignment option to be selected.

  CTA has been coordinating with the Chicago Park District on impact to parks. Park impacts would occur under either alignment option. The East option would impact Wendell Smith Park and Block Park. The West option would impact Fernwood Parkway. Replacement parkland in or near the communities impacted, at least 2 acres in size, are proposed to offset impacts to parks. CTA would also re-landscape any impacted areas. Ms. Morey provided some preliminary replacement park concepts.

  Property impacts would occur under either alignment option as well, although the affected number and types of parcels differs depending on the option selected. All

impacted property owners would be protected under the federal Uniform Act, which would pay property owners at least the fair market value for their properties and provide relocation assistance. CTA has been making every effort to reach out to potentially affected residents to explain their rights. Please let CTA or the Alderman know if you would like to speak with someone about displacements, and someone will reach out personally to you to discuss it with you.

CTA provided conceptual visualizations of the proposed rail line and stations to review potential visual and community character impacts of the project. Mitigation proposed includes provision of landscaping or other urban design amenities and careful consideration of external lighting.
CTA would also employ strategies to reduce the noise impacts from the project. A closed deck structure with noise walls is proposed to reduce noise and welded rail instead of jointed rail is proposed, which makes for a smoother and quieter ride.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. CTA is currently coordinating with Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA will make every effort to mitigate the impact of the project on the community and work closely with the Alderman and his office to ensure that road closures are well planned and announced well in advance, and that residents are advised of work that could otherwise impact them.

- Public Hearing on the Draft EIS
  CTA will be holding a public hearing on November 1, 2016 at the St. John Missionary Baptist Church on 115th Street. The public may provide comments on the project tonight, at the hearing on November 1, or by mail, email or phone to CTA. CTA also noted that comment cards are provided at this meeting for those interested in providing comments now.

There were no questions and comments from meeting participants.

Red Line Extension

9th Ward Town Hall Meeting
October 25, 2016 6:30-7:30PM
Pullman Presbyterian Church
550 E. 103rd Street, Chicago, IL 60628

cta

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Earl Carter	557 W 126th Place	disco88@sbcglobal.net
Betty Johnson	10413 So Ellerhart	
Jerome Fleming	122 E 104th pl	
Wanda Newman	10001 S FOREST	Rytenow7@gmail.com

Red Line Extension

9th Ward Town Hall Meeting
October 25, 2016 6:30-7:30PM
Pullman Presbyterian Church
550 E. 103rd Street, Chicago, IL 60628

cta

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Beverly Martin	10420 S. Prairie Ave 60628	773-468-7022
GWENDOLYN LEE	440 E. 88th PLACE 60619	773-952-6434
Mrs. Green	P.O. Box 289303	
DORIS MARTIN	13207 S. RHODES	(773) 264-0290
TINA LENTON	10156 S. YALE	773 568-2052
DORA Engram	12230 S. PERRY Ave	773 928-1823
Irene Chaney	10512 S. Calumet Ave	(773) 568-4074
Debbie Newman	615 E 112th St	dnewman68@yahoo.com
L. Jenkins	9741 S. Michigan	lolonjen@att.net.

Meeting Notes

Date: Wednesday, October 26, 2016

Meeting: Red Line Extension Coalition Meeting

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts

Time: 9:00 am

Location: Dr. Elzie Young Community Center - 9400 S. Perry Ave, Chicago, IL 60620

Presentation Highlights

CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

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  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminate these potential negative impacts.

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There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

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  CTA will be holding a public hearing on November 1, 2016 at the St. John Missionary Baptist Church to share the impacts of the project and to obtain public comments. A court reporter and comment cards will be available to take public comments verbally or in writing during the hearing. In addition, the public may provide comments via email to the project email account. Information on the location of the hearing and ways to comment were presented to all attendees. CTA also noted that comment cards are provided at this meeting as well for those interested in providing comments now.

Questions and Comments from Meeting Participants

- What wetlands will be impacted?
  CTA: Potential wetlands would be affected near the proposed 120th Street yard and shop and near the 130th Street station. CTA is coordinating with the US Army Corps of Engineers to determine if these potential wetlands would be under their jurisdiction.

- What are the three parks that will be impacted?
  CTA: The parklands that would be affected under the East Option are Wendell Smith Park and Block Park. Fernwood Parkway would be affected with the West Option.

- How much park area will be affected?
  CTA: Approximately 1.6 acres of parkland would be affected under the East Option and approximately 1.9 acres of parkland would be affected under the West Option.

- **Based off of information gathered, what option is preferred?**
  CTA: There are benefits and impacts to both options. CTA is carefully considering these differing impacts and obtaining community input in order to select a final Preferred Alignment for this project. There will be additional engineering based on comments received and additional agency coordination to determine the Preferred Alignment.

- **Will the area underneath the raised tracks in the parkland area be used? In other cities the area has been used as a park. It looks aesthetically pleasing to keep the land open.**
  CTA: Based on coordination to date, the Chicago Park District requested that CTA property be separated so that there are clear boundaries. The Chicago Park District has noted a preference for the land to be fenced.

- **A park should not be relocated to Kensington and Michigan because the area is busy and will be too dangerous for kids.**
  CTA: This area is busy because it is located in a commercial area. These replacement park options are just concepts at this point. All feedback is being taken into consideration. Given the project timeframe, specific parcels that have been identified for replacement parks may change. We have identified specific sites to demonstrate what potential mitigation measures would look like and provided the public an opportunity to comment.

- **The community will be contacting the Red Line Extension Coalition for information regarding the project. Can you share a copy of the letter that was distributed to the potential displaced residents?**
  CTA: Yes, a copy of all documents that were distributed can be provided to the Coalition.

- **Are renters covered under the Relocation Act?**
  CTA: Yes, renters are also provided assistance under the federal Uniform Relocation Act.

- **Would mostly single-family or would there be more multifamily homes affected by the project?**
  CTA: Mostly single-family homes would be affected. There are approximately fifteen multifamily homes that would be affected under the East Option and four multifamily homes that would be affected under the West Option.

- **How far away will a house be located from the tracks?**
  CTA: The distance from homes differs depending on location along the alignment and surrounding land uses. Homes would be at least 14 feet away from the future tracks. Distance between homes and tracks is more constrained for the East Option since there is not much of a buffer between tracks and surrounding development, whereas Eggelston Street would act as an additional buffer under the West Option between 99th and 103rd Street.

- **A 14-foot clearance between homes and tracks are not enough distance. It appears that the West Option is the best.**
  CTA: The homes will be at least 14 feet away from the future tracks. This is the minimum distance anticipated and additional environmental and engineering work will be conducted as the project moves forward.

- **There is a possibility that there would be a problem with fully compensating people for their homes. Homes may be worth less now than when they were purchased. It is great that the federal Uniform Relocation Act is in place. There is also a concern that most of the properties in the Roseland area are upside down. Lastly there is a concern with residents 50 years and older; they do not want to start over.**
  CTA: We have a relocation specialist that is working closely with the affected residents. The CTA will make every effort to make residents whole and has begun this outreach early in the process to understand resident and business needs. It will be a multi-year, intensive effort to acquire property and provide relocation assistance. CTA is aware that this will disrupt lives and want to make every effort possible to ensure they are compensated fairly.

- **The Coalition is interested in developing TOD around the 95th and Dan Ryan Station. How can we work directly with CTA regarding this?**
  CTA: Property would need to be acquired first before any additional coordination on TOD could occur.

- **The Coalition's major concern about TOD for this project is the economic development opportunity around stations to 130th Street.**
  CTA: The proposed project represents a major transportation investment in the community and would be expected to have a positive impact on infill and new development around the stations and close to the rail line. CTA will continue to work with the community organizations and the City's Department of Planning and Development to coordinate this project with land use and development plans.

- **Will a list be made available of those community groups the CTA is working with so that there are no overlapping efforts? Chicago's Alternative Policing Strategy (CAPS) has a listing of community groups and you might want to provide emails to those groups regarding project updates.**
  CTA: A list of community groups that currently receive notices can be made available.

- **Will there be job postings in the community to make them aware of job opportunities?**
  CTA: We are still early in the planning process, but a process will ultimately be established to make residents aware of any job opportunities. The Red Line Reconstruction Project was very successful with its process and best practices from that project will be utilized for this project..

- **Who will be the prime contractor for this project?**
  CTA: This project is in the Draft EIS phase. Funding has not yet been secured for construction. The federal New Starts process is a multi-year, multi-phased process. State and local funding match will also be required to fund this project. Once environmental and engineering work is completed and funding is secured, the bidding process for obtaining a general contractor for construction will take place.

- **Will there be a different prime contractor for each station that is being built or will there be one prime contractor for the entire project?**
  CTA: At this time, that has not been determined. CTA has the flexibility to develop project construction in a number of ways. In the past, there has been one prime contractor for the entire project.

- **Are there any job descriptions available for those construction jobs that will be available?**
  CTA: This project is currently in the Draft EIS phase. It is too early on to know what jobs will be available or to provide detailed construction job descriptions. We can, however, forward information on those categories of jobs that have been used on other similar projects in past.

- **Is there a standardized request for proposals (RFP) with requirements of what types of businesses and requirements are needed for concessions?**
  CTA: That information can be shared.

- **This project will be a great endeavor. Please have better announcements for construction regarding delays, detours, and closures. Also, please extend your communication to gospel radio stations.**

Red Line Extension

Red Line Extension Coalition
October 26, 2016 9AM
Dr. Elzie Young Community Center
9400 S. Perry Avenue, Chicago, IL 60620

cta

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Rev. Reuben E. Coleman Jr.	9314 S. Cottage GV	RCole1947@AOL.com
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Deborah L. Truss	P.O. Box 288644 CHICAGO, IL 60628-8644	DLTMOMENTUM@AOL.COM
Dr. William T. Biggers	16049 Woodlawn East Ave	drelzieyoungcc@gmail.com

Meeting Notes

Date: Thursday, November 17, 2016

Meeting: Greater Roseland Chamber of Commerce Meeting

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts

Time: 10am

Location: 11001 S. Michigan Avenue, Chicago, IL 60628

Presentation Highlights

CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed the following:

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  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

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  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources. CTA is considering several options for these local matching dollars, including the potential of creating a transit-only tax-increment financing district.

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Questions and Comments from Meeting Participants

- I live on Eggleston Street and have attended community meetings. There is already one railroad and there are concerns that adding another track and operating additional train service will impact the community.
  CTA: The current project timeline anticipates that the project would begin operations in 2026 at the earliest. As the project progresses, additional environmental analysis and engineering work would be conducted to further detail potential impacts and mitigation measures. CTA has conducted an initial noise and vibration analysis for each alignment option, which considers the existing noise and vibration in the corridor and rail operations. To minimize noise and vibration impacts, CTA proposes to use a closed deck track structure and incorporate noise walls. In addition, welded rail is proposed to further minimize impacts and provide a smoother ride for

passengers. Additional noise and vibration analysis will be conducted during the Final EIS to further identify potential impacts and mitigation measures needed. In addition, there are a number of benefits of the project, including opportunities for furthering economic development initiatives (such as transit-oriented development) in the corridor through this proposed investment. While CTA would not construct or implement TODs, we are coordinating with the City on the integration of this project with land use planning.

- **I am on the Transportation Committee for Pullman and attend Metropolitan Planning Council meetings. In our community, it is really important to provide transportation options. It is s currently a huge barrier to community vitality, and there needs to be development that coincides with these types of transportation improvements.**
  CTA: This project would provide enhanced mobility in and around the community and this major infrastructure investment could serve as a springboard to transform the community and bring additional investment. Major transit investments like this have been shown to bring with them additional land use development around new rail stations. Retail multiuse buildings are an example of the TOD type of development that often happens around transit stations, and can provide opportunities for people to live and work and shop all in one complex.

- **You used to have to push and shove people to get on the bus. Now you do not. I'm concerned there are not enough people to make this project investment worth it.**
  CTA: As with any major transit investment like this, population and development would be anticipated to increase in the area. Currently, there are a number of transit dependent customers in the corridor that use buses to access CTA's 95th Street station and make connecting trips further north. Provision of stations as part of this project would provide greater mobility options in the surrounding community. In addition, CTA anticipates that people will also come over from other communities to use transportation, boosting vitality in the surrounding neighborhood.

- **95th Street used to be a middle class community. It used to be a clean block. Now there is a ton of trash. How will you mitigate that?**
  CTA: Transit investment is expected to help with crime and the overall vitality of community.

- **I'm happy to see transportation expansion and welcome improved transportation, but other things have to be considered.**

- **Question from CTA: What would you want to see to improve the community?**
  Attendee: Improved lighting and a regained general feeling of comfort.

- **We want to bring businesses into the community. We do not own business in our community. There is currently no incentive to invest in the community.**
  CTA: We encourage you to provide comments in written form. Those comments will become part of the dialogue. RLE is expected to spur economic development in the community, as well as adjacent communities. CTA is continuing to coordinate with the City to integrate this project with land use and development plans.

- Will the train run 24 hours?
  CTA: Specific operating plans will be further developed as this project advances. Service frequency is anticipated to be the same as with the current service at 95th Street. Service frequency would be adjusted to accommodate demand once the RLE service has been implemented. Train frequencies would vary throughout the day, like existing Red Line service, and less frequently at night.

- I feel that while this project would bring jobs, but we also need to increase security. We need those emergency buttons, like the ones in Hyde Park.

- We need a change in the mindset of the people in the community. There are a greater number of people living well, and a small number of people creating problems for the community. Mentoring and intervention from other organizations would help to facilitate wellness in living. These are quality of life issues.

- Related to this point, we need to start having a conversation in the community: Why is respect important? Little things lead to greater prosperity of the community. It takes everybody.

- More than trains and houses, we need to look at every part of the impact on the community.

- Litter, especially on Wentworth, is a major issue. In the places where nobody lives, litter has a big impact on the greater community.

- In schools, throughout neighborhood, we need to think of slogans to combat litter. "Greater Roseland, where great things are happening," similar to "Don't mess with Texas." People need to know they need to take care of their neighborhood.

- Beautification is incredibly important, but we should also be investing in job training. CTA can help facilitate this. We want to take better care of community and make room for retailers.
  CTA: As we develop plans, we will have more discussions with community regarding workforce development and training.

- Community service that involves young people so that they understand the impact of their actions is important. We need to talk to people, and look out for kids.

- Do you have a plan to incentivize businesses to invest in the area?
  CTA: The proposed project represents a major transportation investment in the community and would be expected to have a positive impact on infill and new development around the stations and close to the rail line. CTA will continue to work with the community and business organizations and the City's Department of Planning and Development to coordinate this project with land use and development plans.

- **The Chamber could be involved with business development. We want to continue along the path of business development initiatives. Some of the ground floor areas of proposed parking structures might work for retail spaces.**

- **Do you expect negative impacts on the project due to changes from a Democrat to Republican administration?**
  CTA: The Capital Investment Grant (CIG) program itself, which is the federal funding source for this project, has not changed. The completion of Environmental Impact Statement and receiving a Record of Decision from FTA is the next step in the CIG process. Through the two-year Project Development phase, we will determine design and cost certainty. Once that is done, CTA will enter the Engineering Phase, which may be a shorter phase. After that, CTA will apply for funding.

- **For construction, how will you incorporate minority or disadvantaged businesses?**
  CTA: CTA works with disadvantaged business enterprises (DBEs) and has an overall program in place as well as project level goals to ensure active participation from DBEs. CTA will be focusing on local businesses and making jobs available to people in the community. CTA will model the project on the Red Line South Reconstruction Project, which involved coordination with the Chicago Urban League and other organizations. As far as coordination on local jobs, CTA expects to exceed federal requirements. Working within the Workforce and Investment Act, we work to connect people in the communities where projects are proposed. Additional outreach and coordination will be conducted as the project moves forward.

- **It would be a great opportunity to host a workshop to prepare people to qualify for jobs related to the project.**
  CTA: This is something that was done for the 95th Street Terminal. We will consider a variety of strategies as we further develop this project. We hold many outreach events and will continue to do so as the project moves forward, and there are opportunities to work with local organizations whose mission is to provide these types of job training activities.

- **How will you ensure minority or disadvantaged businesses are big enough to tackle the size of the project?**
  CTA: CTA actively encourages contractors to subcontract to smaller companies and connect subcontractors to contractors.

Red Line Extension

Greater Roseland Chamber of Commerce
November 17, 2016 10AM - 12PM
11001 S. Michigan Avenue, Chicago, IL 60628

cta

Name	Address	Email Address
Beatrice J. Johnson	10033 S. Hoxie Ave Chicago, IL 60617	BecoaBeeRe AOL.COM
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Donnell Hughes	10727 S Indiana	SLoppys103@gmail.com
Shauntell Lee	12839 S. Lowe	ShauntellLee@gmail.com

Meeting Notes

Date: Tuesday, November 25, 2016

Meeting: Alderman Sawyer Community Meeting

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts

Time: 11:00 am

Location: 706 E. 79th Street, Chicago, IL 60619

Presentation Highlights

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Questions and Comments from Meeting Participants

- Where will the Michigan stop be?
  CTA: The proposed Michigan Avenue station will be at 116th Street and Michigan Avenue.

- What is the height of the structure?
  CTA: The height of the structure varies at different locations. Near the UPRR tracks it will be approximately 15 feet. South of 118th Street near the proposed yard, the structure will be at grade level.

- Will there be a bridge to cross the Calumet River?
  CTA: The proposed alignment would not cross the Calumet River.

- **Whose tax-increment financing (TIF) will be used?**
  CTA: The legislation that passed in June by Illinois General Assembly allows for four transit projects to be funded by transit TIF and this project is included. The City will have to establish an appropriate transit TIF district for this project.

- **What is CTA's vision on permanent, full-time, and part-time jobs? What is the community opportunity?**
  CTA: An estimated 6,000 construction jobs will be created with the project. CTA had success on the Red Line South Reconstruction Project in partnering with local community organizations and creating job opportunities for Disadvantaged Business Enterprises. A similar model could be used for this project.

- **Will the Alderman be abreast of all updates?**
  Yes. The public and alderman will be continually updated.

- **How will you partner with community groups organizations?**
  CTA: A similar template that was used for the Red Line South Reconstruction Project could be used. We will work with the Alderman, local community groups, and others to make sure it is a success.

- **What is CTA's current Disadvantaged Business Enterprise (DBE) goal?**
  CTA: CTA is committed to meaningful involvement by DBE firms. CTA has an overall DBE program and goals. In addition, there are also DBE goals that are project-specific.

- **Those stations that are south need development in those areas. It is clear that the North Side has a different level of service and amenities than in the south.**

- **There is a need to have more minorities in the real trade areas.**
  CTA: We have worked closely with communities to hire those that are in and interested in the trades. We are the only governmental agency that has a program, Second Chance, which works with ex-offenders to get them reoriented back into the workforce.

- **There are major problems at the 79th Street and Yale stop. The sidewalk is too congested with the train and it's not handicap friendly. It is only a matter of time that there is going to be a major disaster.**

- **If the funding is not secured, what will happen to this project? We would like to see the project will move forward.**
  CTA: CTA will be seeking federal funds through New Starts Program, which is a nationally competitive funding program. FTA rates projects based on set evaluation criteria and as long as benchmarks for those criteria are met and local funding match is secured, there should not be a challenge in securing federal funds. The project has public support and we also hope that it moves forward.

- **There are six sites for remediation listed in the EIS. What are those six sites? What will the environmental impact be?**
  CTA: The Draft EIS provides exact location of the high concern sites, where hazardous materials are known or suspected to exist. Some of those sites are south of 119th Street close to the rail yard. As the project progresses, there will be more environmental engineering and detailed studies of those sites.

Meeting Notes

Date: Thursday, December 8, 2016

Meeting: Friends of the Parks Meeting

Meeting Purpose: CTA to share RLE Project updates, findings of the Draft Environmental Impact Statement, and status of public outreach efforts

Time: 12pm

Location: 17 N. State Street, Suite 1450, Chicago, IL 60602

Presentation Highlights

CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project, which would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed the following:

- **Project Overview and Benefits**
  The RLE Project would provide enhanced transit service to Chicago's far South Side by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by creating construction jobs and increasing access to jobs outside of the project area.

- **Preferred Alternative**
  The proposed project would extend the Red Line by 5.3-miles from 95th Street to 130th Street, and would include four new stations with bus and parking facilities, as well as a new rail yard. Based on earlier planning efforts, the Union Pacific Railroad (UPRR) Alternative was selected as the NEPA Preferred Alignment for the project. Based on coordination with UPRR, the existing railroad right-of-way is not available for purchase; therefore, CTA is considering two potential options – locating the RLE alignment either east or west of the existing UPRR line. Under either option, the RLE Project would provide significant time savings by providing a one-seat ride to downtown and would provide transit alternatives for commuters in the corridor. Based on ridership estimates, the new segment would serve 41,500 weekday trips by 2030.

- **Funding and Schedule**
  CTA intends to pursue federal New Starts Program grant funding for the project, which would fund almost half of the project construction costs. The remaining costs would need to be funded through local and state sources. CTA is considering several options for these local matching dollars, including the potential of creating a transit-only tax-increment financing district.

  In addition to costs for constructing the project, CTA is working to acquire additional funding by early 2017 to complete the environmental work and begin preliminary engineering. These near-term steps are needed so that the project can enter the federal Project Development Phase and be eligible to apply for New Starts Program grants funds.

- **CTA has prepared a Draft Environmental Impact Statement (EIS)**
  CTA has prepared a Draft EIS which analyzes the potential positive and negative environmental impacts of construction and operation of each option of the UPRR alignment. Where potential negative impacts have been identified, the Draft EIS proposes mitigation measures to reduce or eliminate these potential negative impacts.

- **Review of RLE Project Potential Impacts**
  Major areas of impact identified in the Draft EIS include potential impacts to parks, properties, the visual environment, community character, noise, and wetlands. CTA reviewed each major area of potential impact and mitigation proposed, noting that impacts differ somewhat depending upon the alignment option ultimately selected.

  Park impacts would occur under either alignment option. Replacement parkland in or near the communities impacted are proposed to offset impacts to parks. CTA has undertaken an extensive coordination process with the Chicago Park District to identify potential replacement park locations.

  Property impacts would occur under either alignment option as well, although the affected number and types of parcels differs depending on the option selected. These impacts have been identified based on conceptual engineering to date and represent maximum property impacts possible; impacts may be further reduced as additional engineering and design is conducted. All impacted property owners would be protected under the federal Uniform Relocation Act, which requires paying property owners at least the fair market value for their properties and providing relocation assistance. CTA will be conducting extensive early outreach to these potentially impacted property owners, including providing regular mail and certified mail letters, door-to-door outreach, conducting community meetings, and providing one-on-one assistance on select days at the public library. In addition, property owners with questions may call CTA's customer service line or email the project email account to receive further assistance from a CTA relocation liaison.

  CTA provided conceptual visualizations of the proposed rail line and stations to review potential visual and community character impacts of the project. These

concepts provide insights into the scale of the project; however the exact physical appearance may differ depending on more specific design decisions that will be made as the project moves forward. Mitigation proposed includes provision of landscaping or other urban design amenities, context-sensitive design of structures, careful consideration of external lighting, and using best management practices to maintain vegetation and a debris-free construction area.

There are also potential impacts to wetlands at the proposed rail yard and terminal station at 130th Street. Replacement of any lost wetlands will be required under the federal Clean Water Act, and would take place near the areas impacted. CTA is currently coordinating with the Army Corps of Engineers on these impacts and next steps.

As with any project, impacts during construction must be considered. During construction, CTA is committed to minimizing impacts to construction as much as possible. Best management practices will be followed to limit construction-related impacts. All construction-related impacts, such as noise-generating activities or potential road closures, will be announced in advance. In addition, where parking may be temporarily impacted, alternative parking will be provided. CTA will also work with the surrounding community business to provide advertising assistance where businesses may be impacted by construction activities.

- Public Hearing on the Draft EIS
  CTA held a public hearing on November 1, 2016 at the St. John Missionary Baptist Church to share the impacts of the project and to take public comments. A public comment period was established from October 6 through November 30, 2016 to obtain comments on the Draft EIS. A court reporter and comment cards were available to take public comments verbally or in writing during the hearing. In addition, the public was able to provide comments via email to the project email account. Information on the location of the hearing and ways to comment were provided in all advertisements and noticing to the public and was also provided on CTA's project website. CTA is currently reviewing comments received during the comment period. Based on public comments and additional technical analysis, CTA will determine the final Preferred Alignment. This final alignment will be analyzed in the Final EIS.

Questions and Comments from Meeting Participants

- I live on Eggleston Street and have attended public meetings on the project. There is already one railroad operating in the corridor and I have concerns about the impacts of adding another track and operating additional rail in the corridor.
  CTA: The currently project timeline anticipates that the project would begin operations in 2026. As the project progresses, additional environmental analysis and engineering work would be conducted to further detail potential impacts and mitigation measures. CTA has conducted an initial noise and vibration analysis for each alignment option, which considers the existing noise and vibration in the corridor and rail operations. To minimize noise and vibration impacts, CTA proposes

to use a closed deck track structure and incorporate noise walls. In addition, welded rail is proposed to further minimize impacts and provide a smoother ride for passengers. Additional noise and vibration analysis will be conducted during the Final EIS to further identify potential impacts and mitigation measures needed. In addition, there are a number of benefits of the project, including opportunities for furthering economic development initiatives (such as transit-oriented development) in the corridor through this proposed investment. While CTA would not construct or implement TODs, we are coordinating with the City on the integration of this project with land use planning.

- **What is the fundamental reason for considering these two options?**
  CTA: Both of the options would have different impacts. In particular, there are different property displacement impacts with each option such as number of homes that would be affected or impacts to businesses. CTA is carefully considering these differing impacts and obtaining community input in selecting a final Preferred Alignment for this project.

- **Please clarify impacts to the two baseball diamonds at Wendell Smith Park?**
  CTA: One baseball field would be replaced somewhere else. There are two baseball fields within Wendell Smith Park. The sand-filled baseball field on the northeast portion of the park is a junior-size baseball diamond. Under the East Option, a small portion of the existing outfield/open space would be within the overlap area, but the overlap would not affect the ability to use the baseball field. The second baseball field is a smaller, junior-sized baseball field in the southwest corner of the park. This junior baseball field contains a backstop and bench. Due to the proposed overlap area, the bench and space behind this backstop would be used. Based on coordination with the Chicago Park District, it was determined that replacing these two smaller junior-sized baseball fields to provide one larger baseball field would be a preferred mitigation measure for the East Option impact to Wendell Smith Park since it would enhance baseball facilities and activities within the park. In addition, should the East Option be selected, relocation and replacement of the smaller, junior-sized baseball field on replacement parkland is proposed.

- **Would the baseball diamond at Wendell Smith be closed during construction?**
  CTA: Detailed construction plans have not yet been developed at this stage of the project and therefore we cannot yet provide more specific information on the potential closure of the baseball diamond. There will be short-term closure of a portion of the park during construction depending upon the option selected.

- **You did an environmental suitability analysis because of noise, but CTA is still proposing to build a track which will significantly impact the environment.**
  CTA: The track would be either next to the expressway or directly adjacent to existing UPRR tracks, so the proposed project is located in an area where transportation infrastructure already exists. CTA would employ a number of noise mitigation strategies into the proposed design itself to minimize additional noise impacts from this project.

- **Several years ago, people submitted petitions for the East Option because it has less of an impact.**
  CTA: CTA is proposing the alignment adjacent to the existing railroad tracks. There would actually be more residential displacement with the East Option.

- **But there would be fewer other impacts on the east side because of housing.**

- **Roseland has the largest area of low-income housing in the City of Chicago. We don't want that disrupted (west of 115th and Michigan). I strongly feel that the East Option is the better option for this reason.**
  CTA: CTA has received similar comments before on this topic. The west side, in general, is a more stable community. The east side has more vacancy. However, the area by Wendell Smith Park, which is along the East Option, is stable. The purpose of the Draft EIS was to evaluate the relative impacts and benefits of each option and to provide an opportunity for the public and community organizations to weigh in on comparative impacts of each option.

- **Would you need to acquire homes at 101st Street and Michigan Avenue?**
  CTA: No.

- **How many people on the east versus west side are willing to sell property?**
  CTA: We have only done outreach to inform residents about the project and potential impacts. We have not collected information on property owners' willingness to sell.

- **For the people who want to remain in their homes, what considerations will CTA consider?**
  CTA: Anyone who is displaced will receive compensation for their property and relocation assistance. The federal Uniform Relocation Act requires payment of at least fair market value of the property. This is the minimum, not the maximum amount that can be compensated and coordination as well as appraisals will ultimately determine property compensation. In addition, relocation assistance will be provided for those wishing to remain within the community. The Uniform Relocation Act provides a combination of property compensation and relocation assistance.

- **Which option would you consider best from park perspective?**
  CTA: There are tradeoffs in terms of park impacts for both alignment options. There isn't a clear-cut answer. Public comments will be a part of CTA's considerations in making a final recommendation on the alignment. From a parks-only perspective, both options would impact parks. Fernwood Parkway, which would be impacted by the West Option, is a somewhat bigger parcel, but is a passive park space without any park amenities on it. Wendell Smith and Block Park would be impacted by the East Option. While the total acreage of parkland acquired for the East Option would be less than the West Option, Wendell Smith Park is an active use park with a number of park amenities currently provided. Block Park is another passive use park with limited park amenities, and the East Option would require use of a substantial portion of a half of this park since the park is already divided by a street.

- **On the east side, you have to really look at the housing stock. That area really needs to be developed. There may be more housing, but it's not worth much.**

- **Can you clarify the community outreach process? How will you be engaging community members in the decision process?**
  CTA: The Draft EIS public comment period is now complete. CTA has conducted a lot of outreach to date to get to this point in the planning process. CTA met with 10 community groups and had a public hearing following publication of the Draft EIS. The last public hearing was heavily attended. CTA started working on the project in 2006 and there has been continuous public outreach on the south side of Chicago since then to understand community concerns and refine alternatives to this point. In addition, the Red Line Extension Coalition has been involved in this project over several years.

- **Are there park advisory groups for the parks that could be impacted by the project?**
  CTA: We will check and have been working with the Chicago Park District heavily throughout the last year to understand park needs. Block Park has limited function and amenities, and may not have an advisory group. Wendell Smith or Fernwood Parkway may have advisory groups.

- **On any further discussion, someone from policy at Friends of the Parks should be at the table.**
  CTA: These replacement park options are just concepts at this point. All feedback is being taken into consideration. Given the project timeframe, specific parcels that have been identified for replacement parks may change. We have identified specific sites to demonstrate what potential mitigation measures would look like and provided the public an opportunity to comment.

- **There has been a change in administration on the federal level. How will that affect this project?**
  CTA: The Capital Investment Grant program itself, which is the federal funding source for this project, has not changed. In addition to federal funding to be pursued, a local funding match of up to 50 percent of the total project costs must be identified as CTA enters the federal Project Development Phase. CTA intends to apply for entry into the Project Development Phase following selection of the alignment option and in finalizing environmental work necessary for the project to advance. Project Development must be completed within two years of entering into this phase. After Project Development, the project will enter into an Engineering Phase for which there is no time limit. There are a few years of technical work that needs to be done before CTA will request a Full Funding Grant Agreement from the federal government.

- **Is the project information on CTA's website and in the Citizens Guide?**
  CTA: All information on project impacts is posted on CTA's website, including the Draft EIS and Citizens Guide. Today we were focused mostly on sharing park impacts and proposed mitigation measures.

- **CTA has been wrestling with this for years and weighing all impacts. CTA must be starting to form opinions. Do you have preferences in options? Or even in some other option?**
  CTA: CTA has selected the UPRR Alternative as the NEPA Preferred Alternative. We have heard arguments for and against both of these options. The decision will be made based on community feedback and other technical factors. Engineering will play a huge role in the decision. CTA would still need to acquire some parcels from UPRR and CTA will need to incorporate their feedback as well in final decision making on the alignment.

- **There is a distinction between voluntary acquisition and eminent domain. In major city projects, people who said they would voluntarily sell property lawyer up and change their minds, likely 30-40 percent of the time. How will CTA address those legal battles?**
  CTA: CTA will adhere to the process outlined in the federal Uniform Relocation Act. Regardless of whether someone has an attorney or not, CTA will negotiate settlements. Ultimately, CTA has taken a very proactive, early approach in talking about displacements. We want them to hear about these impacts from CTA. Not everyone we have notified to date will be displaced. CTA sent letters and conducted door-to-door outreach. We also held specific displacement outreach meetings for potentially affected property owners. Experts were there to talk about the timeline and answer questions about the process. There are concerns, from emotional attachment to personal investment. We have heard several comments, some in favor of acquiring property and others who do not wish to have their property acquired. . CTA has tried to take an open approach with people and allow for as much community input into the project as possible. CTA hopes that this proactive approach will provide a way to work with property owners in the process.

- **But there have been similar situations where legal battles do happen.**
  CTA: Public process does make a difference, and therefore CTA has disclosed all potential impacts at this early stage of the project.

- **You have already noted impact to parks, but will there be any other impacts, like noise?**
  CTA: CTA has provided information on noise impacts and design strategies that will be used. This includes design of a closed deck structure with noise barriers and use of welded rail. With the implementation of these mitigation measures, we do not anticipate adverse noise impacts.

- **Will any schools be impacted?**
  CTA: At Roseland Christian School, a portion of the field would be impacted with the East Option.

- **It is hard to imagine trains being quiet if you live near a train.**
  CTA: We have reviewed the proposed noise mitigation strategies that are to be incorporated into the design and do not anticipate adverse noise impacts. The Draft

EIS discloses impacts related to noise, and follows the Federal Transit Administration's (FTA's) *Noise and Vibration Manual* guidance and methods for quantifying noise and vibration impacts.

- **Will there be any park & rides developed other than the one at 130th?**
  CTA: Currently all stations are proposed to have park & rides.

- **There was a proposed three-tier park & ride at 130th Street. There was concern about the three tiers because the structure would take aesthetics away from neighborhood.**

- **Will there be a park & ride at 95th Street and Lafayette?**
  CTA: That is being handled as part of the 95th Street Terminal Project, which is separate from this project.

- **How many parking spaces would there be at each station?**
  CTA: As proposed, there would be 200 spots at 103th Street station, 200 spots at 111th Street station, 1000 spots at Michigan Avenue station, and 2300 spots at 130th Street station. Final park & ride footprints will be developed as the project advances but will not be more than these amounts.

- **What is the cost at park & rides?**
  CTA: It varies by location but is approximately five dollars per day. There are no monthly options.

- **Do you anticipate adding additional stations in between gaps?**
  CTA: Spacing is comparable with distances on the existing south Red Line. There is a process for evaluating in-fill stations. If it was warranted, we would evaluate it at that time. CTA does not want to create gaps, but we're not far enough in the engineering process to determine that yet.

- **Are any stations entrance only? Like some existing stations.**
  CTA: We are not far enough along in the engineering process to know specifics about station design elements like this yet.

- **What will be under the track at Wendell Smith Park?**
  CTA: With the East Option, the space under the tracks at Wendell Smith will likely be fenced off. CTA coordinates with CPD on those decisions since the parkland is under their jurisdiction. The buffer between UP and CTA tracks is part of the required separation. People will still be able to access the park.

- **Fencing off an area like that would displace far more people and create a troublesome park situation. Barriers created increases amount of unusable space. It creates spaces for homeless people to congregate; it's isolated, and creates spaces that the neighborhood doesn't interact with. A barrier fence under the track would create a number of problems. See the problems the Red Line station at Belmont has had.**

- **How many comments did you receive during the comment period?**
  CTA: About 300 comments were received, in a variety of formats.

- **You mentioned that there would be 41,500 daily trips expected to use the extension. Can you elaborate? It seems like a lower level of trips than expected.**
  CTA: Ridership was projected at a high level at early phases of project planning. CTA will update ridership numbers in the next phase of project planning and provide more information.

- **In building the extension, what about bus routes? Especially at 130th Street. Are there any proposals on changes to routes?**
  CTA: Bus routes will be restructured to feed into the new stations, instead of all of them connecting to 95th Street Terminal. CTA will continue to evaluate operations as project planning and engineering advance.

- **Looking at customer use, there would need to be a lot of development along those routes.**
  CTA: As with any major transit investment like this, population and development would be anticipated to increase in the area. Currently, there are a number of transit-reliant customers in the corridor that use buses to access CTA's 95th Street station and make connecting trips further north. Provision of stations as part of this project would provide greater mobility options in the surrounding community.

- **You cannot redevelop the corridor without changing the culture in the area.**
  CTA: Currently, a lot of surrounding property is vacant land. CTA is continuing to coordinate with community leaders and the City to align this project with other desired land use and development plans.

- **We are concerned about development of the project near low-income housing. How will you work with those residents?**
  CTA: We have not gotten to those specific details yet but have conducted extensive public outreach efforts to date to understand community needs. This project would improve mobility options, particularly for transit-reliant customers in the surrounding community.

- **The 130th Street industrial area is a challenge. Further south, the viaduct is an industrial complex with many industrial uses.**

- **Several activists on the South Side are concerned about this project. How will you work with them?**
  CTA: Public and agency engagement has been an essential element throughout project planning and decision-making to date. CTA will continue to coordinate with the community planning groups, elected officials, and the City's Department of Planning and Development as the project moves forward.

- **A train would dramatically impact the community. The area has been isolated for so long. I do not think the train can attract new residents, but it may affect the quality of life.**

Red Line Extension

Friends of the Parks
December 8, 2016 12-1PM
17 N. State Street, Suite 1450, Chicago, IL 60602

cta

Name	Address	Email Address
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Frederick N. Bates	3512 N. Southport, Apt PH, 60657	Fbatesitw@aol.com
Victor M. Bernhard MD	130 E Oak St Apt 41D 60611	vmbernhard@gmail.com

Attachment 6
Agency Involvement

Cooperating Agency Letter

Cooperating Agency Mailing List

Participating Agency Letter

Participating Agency Mailing List

Tribal Mailing List

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 6, 2016

[Insert Name]
[Agency]
[Insert Address]
[Insert, City, State, Zip]

Re: CTA Red Line Extension Project
Draft Environmental Impact Statement Available for Agency Review

Dear XXXXXX:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA has recently published a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. The Draft EIS is available on CTA's website, and we have included a copy on the enclosed CD.

The Draft EIS evaluates the impacts of the Union Pacific Railroad (UPRR) Alternative and the No Build Alternative. CTA is evaluating two potential options for the preferred alignment: the East Option and the West Option. The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street.

Your agency has previously agreed to be a cooperating agency for this project. All interested parties are invited to review the Draft EIS and attend the public hearing. The public hearing will be held at the time and location identified below and a flyer is enclosed for your information. Representatives from your agency are encouraged to attend.

Tuesday, November 1, 2016
5:30 - 7:30 PM
St. John Missionary Baptist Church
211 E. 115th Street, Chicago, IL 60628

CTA will be accepting comments on the Draft EIS between October 6 and November 30, 2016. All comments received during this period, as well as responses to those comments, will be incorporated into the Final EIS.

Written comments may be submitted at the public hearing or anytime during the comment period in one of two ways:

- **Via email:** RedExtension@transitchicago.com
- **Via US mail:** Chicago Transit Authority
  Strategic Planning, 10th Floor
  Attn: Red Line Extension Project
  567 W. Lake Street
  Chicago, IL 60661

Additional information about the project is available at the project website: transitchicago.com/RedEIS.

If you have any questions or would like to discuss the project further, please do not hesitate to contact either:

Sonali Tandon
Senior Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661
(312) 681-4246
standon@transitchicago.com

Mark Assam
Environmental Protection Specialist
US Department of Transportation
Federal Transit Administration
200 W. Adams Street, Suite 320
Chicago, IL 60606
(312) 353-4070
mark.assam@dot.gov

Thank you for your continued participation in this project.

Sincerely,

Sonali Tandon
Senior Project Manager

Red Line Extension Project
List of Cooperating Agencies

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Federal	Federal Highway Administration	To	Mr.	Norman	Stoner	Division Administrator, Illinois Division Office	3250 Executive Park Drive		Springfield	IL	62703
Federal	Federal Highway Administration	cc	Mr.	Chris	Byars	Metropolitan Transportation Engineer	200 West Adams	Suite 330	Chicago	IL	60606
Federal	Federal Highway Administration	cc	Mr.	Matt	Fuller	Environmental Programs Engineer	3250 Executive Park Drive		Springfield	IL	62703
Federal	Federal Highway Administration	cc	Mr.	Mike	Hine	Engineering Team Leader	3250 Executive Park Drive		Springfield	IL	62703

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Thank you for your continued participation in this project.

Sincerely,

Sonali Tandon
Senior Project Manager

Red Line Extension Project
List of Participating Agencies

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Federal	Department of Energy	To	Dr.	Ernest	Moniz	Secretary	1000 Independence Avenue SW		Washington	DC	20585
Federal	Department of Health and Human Services	To	Ms.	Kathleen	Falk	Regional Director - Region 5	233 N. Michigan Avenue	Suite 1300	Chicago	IL	60601
Federal	Department of Housing and Urban Development	To	Ms.	Beverly	Bishop	Deputy Regional Director	77 W. Jackson Boulevard		Chicago	IL	60604
Federal	Department of Housing and Urban Development	cc	Ms.	Melanie	Haywood	Field Environmental Officer	77 W. Jackson Boulevard	Room 2420	Chicago	IL	60604
Federal	Department of Housing and Urban Development	cc	Mr.	Steve	Vahl	Region 5 Environmental Officer	77 W. Jackson Boulevard	Room 2420	Chicago	IL	60604
Federal	Federal Emergency Management Agency	To	Ms.	Janet	Odeshoo	Deputy Regional Administrator, Region V	536 S. Clark Street	6th Floor	Chicago	IL	60605
Federal	Federal Emergency Management Agency	cc	Mr.	Nicholas	Mueller	Regional Environmental Officer	536 S. Clark Street	6th Floor	Chicago	IL	60605
Federal	Federal Railroad Administration	To	Mr.	Laurence	Hasvold	Regional Administrator	200 West Adams	Suite 310	Chicago	IL	60606
Federal	Transportation Security Administration	To	Mr.	Christopher	McKay	Industry Engagement Manager; Mass Transit and Passenger Rail	601 S. 12th Street		Arlington	VA	20598
Federal	U.S. Environmental Protection Agency	To	Mr.	Robert	Kaplan	Acting Regional Administrator - Region 5	77 W. Jackson Boulevard		Chicago	IL	60604
Federal	U.S. Environmental Protection Agency	cc	Ms.	Virginia	Laszewski	NEPA Review	77 W. Jackson Boulevard		Chicago	IL	60604
Federal	U.S. Fish and Wildlife Service	To	Ms.	Kathy	Pollack	Field Supervisor - Chicago Field Office	1250 South Grove	103	Barrington	IL	60010
Local	Chicago Housing Authority	To	Mr.	Eugene	Jones, Jr.	Chief Executive Officer	60 E. Van Buren Street	12th Floor	Chicago	IL	60605
Local	Chicago Housing Authority	cc	Mr.	Jose Anthony	Alvarez	Development Manager, Office of Development Management	60 E. Van Buren Street	12th Floor	Chicago	IL	60605
Local	Chicago Park District	To	Ms.	Heather	Gleason	Director of Planning and Construction	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Local	Chicago Park District	cc	Mr.	Michael	Lange		541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Local	Chicago Park District	cc	Ms.	Doreen	O'Donnell	Research and Planning Manager; Department of Planning and	541 N. Fairbanks Court	5th Floor	Chicago	IL	60611
Local	City of Chicago Department of Business Affairs and Consumer Protection	To	Ms.	Maria Guerra	Lapacek	Commissioner	121 N. LaSalle Street	8th Floor	Chicago	IL	60602
Local	City of Chicago Department of Fleet and Facility Management	To	Mr.	Kevin	Laberge	Bureau of Environmental, Health & Safety Management	30 N. LaSalle Street	Suite 300	Chicago	IL	60602
Local	City of Chicago Department of Planning and Development	To	Ms.	Eleanor	Esser Gorski	Deputy Commissioner; Planning, Design, and Historic Preservation	121 N. LaSalle Street	Room 1101	Chicago	IL	60602
Local	City of Chicago Department of Planning and Development	cc	Ms.	Erika	Sellke	Historic Preservation, Planning + Design Division	121 N. LaSalle Street	Room 1101	Chicago	IL	60602
Local	City of Chicago Department of Transportation	To	Ms.	Rebekah	Scheinfeld	Commissioner	30 N. LaSalle Street	Suite 1100	Chicago	IL	60602
Local	City of Chicago Department of Transportation	cc	Ms.	Luann	Hamilton	Director, Transportation Planning	30 N. LaSalle Street	Suite 500	Chicago	IL	60602

Red Line Extension Project
List of Participating Agencies

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Local	City of Chicago Department of Transportation	cc	Mr.	Jeffrey	Sriver	Director of Transportation Planning and Programming	30 N. LaSalle Street	Suite 1100	Chicago	IL	60602
Local	City of Chicago Office of the Mayor	To	Ms.	Lindy	McGuire	Deputy Chief of Staff	121 N. LaSalle Street	Room 509	Chicago	IL	60602
Local	City of Chicago Office of the Mayor	cc	Mr.	Joe	Deal	Chief Operating Officer	121 N. LaSalle Street	Room 509	Chicago	IL	60602
Local	City of Chicago Office of the Mayor	cc	Ms.	Claudia	Chavez		121 N. LaSalle Street	Room 509	Chicago	IL	60602
Local	City of Chicago Police Department	To	Mr.	Eddie	Johnson	Superintendent	3510 S. Michigan Avenue		Chicago	IL	60653
Local	City of Chicago Police Department	cc	Deputy Chief	Steve	Georgas	Bureau of Patrol; Special Functions	3510 S. Michigan Avenue		Chicago	IL	60653
Local	City of Chicago Police Department	cc	Commander	Cindy	Sam	Public Transportation Section	1718 S. State Street	Annex Building	Chicago	IL	60616
Regional	Metra Commuter Rail	To	Ms.	Lynette	Ciavarella	Director, Planning and Analysis	547 W. Jackson Boulevard	13th Floor	Chicago	IL	60661
Regional	Metra Commuter Rail	cc	Mr.	David	Kralik	Department Head, Long Range Planning	547 W. Jackson Boulevard	13th Floor	Chicago	IL	60661
Regional	Metropolitan Water Reclamation District of Greater Chicago	To	Mr.	David	St. Pierre	Executive Director	100 E. Erie Street		Chicago	IL	60611
Regional	Metropolitan Water Reclamation District of Greater Chicago	cc	Mr.	Joseph	Schuessler	Principal Civil Engineer	100 E. Erie Street		Chicago	IL	60611
Regional	Pace	To	Mr.	David	Tomzik	Manager, Long Range Planning	550 W. Algonquin Road		Arlington Heights	IL	60005
Regional	Pace	cc	Ms.	Lorraine	Snorden	Manager, Department of Planning Services	550 W. Algonquin Road		Arlington Heights	IL	60005
Regional	Regional Transportation Authority	To	Ms.	Leanne	Redden	Executive Director	175 W. Jackson Boulevard	Suite 1650	Chicago	IL	60604
Regional	Regional Transportation Authority	cc	Ms.	Jessica	Hector-Hsu	Director, Planning and Market Development	175 W. Jackson Boulevard	Suite 1650	Chicago	IL	60604
State	Illinois Commerce Commission	To	Ms.	Shauna	Kelley	Bureau of Transportation Chief	160 N. LaSalle Street	C800	Chicago	IL	60601
State	Illinois Commerce Commission	cc	Mr.	Dan	Powers	Senior Rail Safety Specialist	527 East Capitol Avenue		Springfield	IL	62701
State	Illinois Department of Natural Resources	To	Mr.	Wayne	Rosenthal	Director	One Natural Resources Way		Springfield	IL	62702
State	Illinois Department of Natural Resources	cc	Mr.	Steve	Hamer	Office of Realty & Environmental Planning, Division of Ecosystems & Environment	One Natural Resources Way		Springfield	IL	62702
State	Illinois Department of Transportation	To	Mr.	John	Fortman	Deputy Director, Region 1 Engineer	201 W. Center Court		Schaumburg	IL	60196
State	Illinois Department of Transportation	To	Ms.	Beth	McCluskey	Director, Department of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
State	Illinois Department of Transportation	cc	Mr.	Charles	Abraham	Division of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601

Red Line Extension Project
List of Participating Agencies

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
State	Illinois Department of Transportation	cc	Mr.	John	Baczek	Environmental Studies Section Chief	201 W. Center Court		Schaumburg	IL	60196
State	Illinois Environmental Protection Agency	To	Mr.	Alec	Messina	Director	500 Stratton Office Building		Springfield	IL	62076
State	Illinois Environmental Protection Agency	cc	Ms.	Deirdre	McQuillen	Outreach/Sponsorship Coordinator	MC#1, P.O. Box 19276		Springfield	IL	62794-9276
State	Illinois Historic Preservation Agency	To	Ms.	Rachel	Leibowitz	Preservation Services Manager	#1 Old State Capitol Plaza		Springfield	IL	62701
State	Illinois Historic Preservation Agency	cc	Mr.	David	Halpin	Cultural Resources Manager	#1 Old State Capitol Plaza		Springfield	IL	62701

Red Line Extension Project
List of Participating Tribal Organizations

Sub-Category	Organization	Primary Contact	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Tribe	Citizen Potawatomi Nation	To	Mr.	John	Barrett	Chairperson	1601 S. Gordon Cooper		Shawnee	OK	74801
Tribe	Forest Country Potawatomi	To	Mr.	Harold	Frank	Chairperson	5416 Everybody's Road P.O. Box 340		Crandon	WI	54520
Tribe	Ho-Chunk Nation	To	Mr.	Bill	Quackenbush	Tribal Historic Preservation Officer	P.O. Box 667P		Black River	WI	54815
Tribe	Miami Tribe of Oklahoma	To	Mr.	George	Strack	Tribal Historic Preservation Officer	202 S. Eight Tribes Trail		Miami	OK	74354
Tribe	Peoria Tribe of Indians of Oklahoma	To	Mr.	John F.	Froman	Chief	118 S. Eight Tribes Trail		Miami	OK	74354
Tribe	Pokagon Band of Potawatomi Indians	To	Mr.	Michael	Zimmerman	Tribal Historic Preservation Officer	58620 Sink Road		Dowagiac	MI	49047
Tribe	Potawatomi Nation-Hannahville Indian Community	To	Mr.	Kenneth	Meshigaud	Tribal Chairperson	N14911 Hannahville Boulevard		Wilson	MI	49896
Tribe	Prairie Band of Potawatomi Nation	To	Mr.	Steve	Ortiz	Chief	16281 Q Road		Mayetta	KS	66509
Tribe	Sac and Fox Nation of Mississippi in Iowa	To	Mr.	Troy	Wanatee	Chairman	349 Meskwaki Road		Tama	IA	52339
Tribe	Sac and Fox Nation of Missouri	To	Mr.	Edmore	Green	Chairperson	305 N. Main Street		Reserve	KS	66434
Tribe	Sac and Fox Nation of Oklahoma	To	Ms.	Sandra	Massey	Tribal Historic Preservation Officer	Rt. 2 Box 246		Stroud	OK	74079

Attachment 7
Public Hearing Materials

Photos

Sign-In Sheets

Presentation (English and Spanish)

Comment Card (English and Spanish)

Exhibit Boards

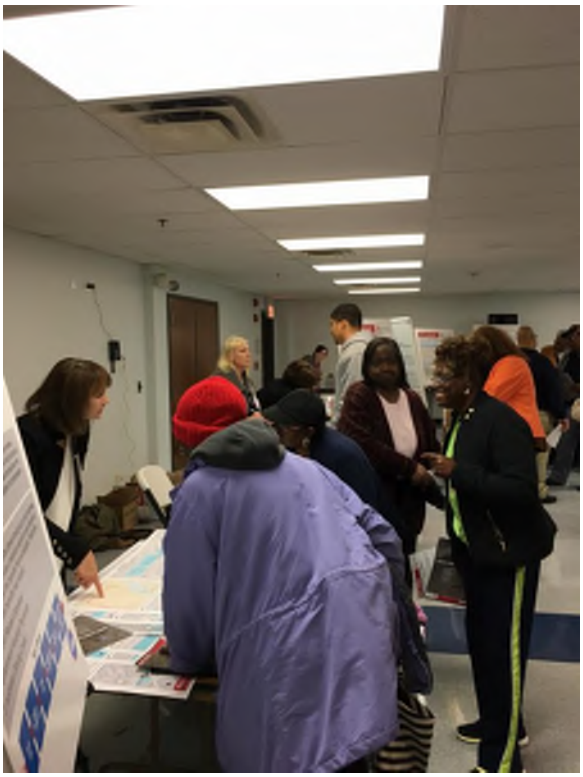

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1	Robert M. Ballard	10535 S. LaSalle, Chgo, IL 60628	312 315-8874		
2	Tammy Collins	13121 S. Vernon Chgo 60827	773-707-8032	tammy.collins@gsa.gov	✓
3	Deloris Lucas	13134 S. Vernon Chgo 60827	773-468-7941	deelucas2002@yahoo.com	✓
4	Frank D. Roberts	626 Woodlawn Park 60616	312-772-7254	Knarf_Roberts@yahoo.com	✓
5	Jesus Quiroga	9 West 115th St Chic. Il 60628	773 640 2363	None	
6	Eric Rouse	30 N. LaSalle, Chicago	720-837-0371	Eric.Rouse@HDRINC.com	✓
7	Mike Di Gregorio	30 N LaSalle, Chicago	(801) 214-5002	michael.digregorio@hdrinc.com	✓
8	L. MINTER		(312) 459-9222		
9	D. SMITH	10928 S. Parnell	(773) 840-4615	dsmith10928@gmail.com	✓
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1	Daniel Ferguson	12404 S. Throop st, Calumet Park 60827	(773) 932-4260		
2	DAVID VOZZOLO	663 Avenida Del Norte, Sarasota Fl. 34242	708 869-3479		
3	Steve Gransson	30 N. La Salle Chicago, IL 60602	312.315.7100	Steven.gransson@hdrinc.com	✓
4	Sharon Greene	" "	714.743.0118	sharon.greene@hdrinc.com	✓
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1	AMANDA VANDEGRIFT	100 M STREET SE, SUITE 301 WASHINGTON, DC 20003	678-314-4821	amanda.vandegrift@hdrinc.com	✓
2	Joseph Watkins	1060 E 41st	312-286-6985	SAVING OUR SEEDS@AOL.com	
3	Antony Johnson	3351 W 21 th St	1-773-521-0586		
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1	Ronald Ulme	10827 S STATE	773-371-6112	wynnenw3ad.com	
2	BILL KEYES	10 S. RIVERSIDE PLAZA CHICAGO 60606	312-930-5151	BILL.KEYES@PARSONS.COM	✓
3	Charlotte Thomas	660 Clyde Ave. Calumet City IL 60409	773-392-8499	thomascharlotte76@gmail.com	
4	Renewable Energy Concepts	4655 S. King Drive	312/391-9054	mrcovington@renewableenergyconcepts llc.com	
5	Dr. Carmen Palmer	10552 S. Vernon, Ave	773-785-8332	cpplid94@gmail.com	
6	Greg Severson	11529 S. Michigan	773 995-4826.		
7	[illegible]				
8	Derrick Riley	108 W 117 St	7737320596	derrick4u2b@yahoo.com	
9	Cynthia Hudson	9 W. Hubbard	312 895 9053	Cynthia@activetrans.org	✓
10	GEO KERBY	2331 W. 105TH PL	773-614-8288		
11	Kim Slaughter	30 N. La Salle, Ste. 3220 60602	312-391-3918	Kimberly.Slaughter@hdrinc.com	
12	Carolyn Washington	9406 So WABASH 60619	773-568-2280		

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1	GRACINE S. SUTTON	10038 So PERRY AVE CHGO IL 60628	773 621 3017	SAY GRACE5@GMAIL.COM	
2	LARRY L JORDAN	857 W 107TH CHIC: IL 60643	312 401 7022	MOSQUITO7022@GMAIL.COM	
3	Aaron Malley	11130 S. Vernon Chicago IL 60628	618-203-4368	amalley87@gmail.com	
4	Claire Williams	10716 S Parnell Ave Chgo 60628	3124462837	sag19@sbcglobal.net	
5	Rockingham, Helen	11340 S. Princeton Ave Chicago, IL 60628	312-350-3954	helen_rockingham@att.net	
6	EARMON DAVIS	11610 So. ADA St	773980-1519		
7	JANET SMITH	720 S DEARBORN ST	773-209-2918	JANETS@UIC.EDU	✓
8	JERRY L. JOHNSON	11329 S. INDIANA AVE. CHGO, IL. 60628-4905	773-660-0289	jlj1118@ameritech.Net	✓
9	Jabari Clemons	11413 S Yale ave chicago IL 60628		jabari.clemons@gmail.com	✓
10	Mr & Mrs Hart	406 W 100th St Chgo	773 239 1346		
11	Melvina Grace	10042 So. PERRY AVE	708 477 5739	gracemelvina@rocketmail.com	✓
12	Jamie Kyle	229 W 101 PL	312-342 9556		

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1	Shaharra Lewis	10724 S. Eberhart Ave Chicago, Il 60628	773-995-1827	msredd4@aol.com	✓
2	Rosetta Pleasant	10926 S Edbrooke Chgo 60628	773 355-8857		
3	Robert S Moore	11649 So. Peoria	312 818-8680	robertlmoore74.rm@gmail	
4	Roosevelt Grant	10910 Wallace	773-468-8629		
5	Reginald L Rooks		312-384-9024	RROOKS570@gmail.com	✓
6	Kay Jackson	9372 So. Vanderpoel Chgo 60643	773 653 8021		
7	John A. Turner Sr	10333 S. Indiana Ave	773 821-5706		
8	Christina Horde	1520 W. 99th St	7736336807	cmhorde@aol.com	✓
9	Malinda Little	11583 S. State, Chgo, 60628	312.953.6337	mslittle8393@yahoo.com	
10	Michal Kranz	5787 S University Ave 60637	4083484214		
11	Quinn Rallins			quinn.rallins@gmail.com	✓
12	Adam Kerman TRA	PO Box 529 Chicago IL 60690	312 725-0872	akk@transit.chicago.il.us	✓

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1	ZEFFIE BLOUNT	9938 S. WENTWORTH AVE	773-785-3061	ZBLOUNT9938@ATT.NET	
2	Sharon Banks-Pincham	9313 S. Wabash	(312)972-8239	sharonpincham@gmail.com	
3	Joanne Grant	10749 S. Calumet Ave.	(773) 821-4250	Cardongrant@comcast.net	
4	Tony Little	11583 S. State	773-341-4376		
5	Andre Kellum	4659 S. Cottage Grove Ste 211	773-952-8054	ED@74partners.org	
6	Solomon R. Morgan	11426 S Perry 11439 S Perry	773 750-9599	SRM11439p@gmail.com	
7	Andrea Watson			Awatson@chainfo.com	
8	LILLIE DAMPER	11546 S STATE ST.	Cell 773-454-8234 Hm 773-264-3165	tomdamper67@yahoo.com	
9	Muedell Stiffend	12635 S. Yale Ave	773344-4976	mstiffend@gmail.com	
10	Annie Anderson	10958 So Eggleston	773-984-8609	keeanneanderson@live.com	
11	Kane Bart	5500 S. University Ave	248-633-6056	kbart@uchicago.edu	
12	CECILIA HORDE	1514 W. 99TH ST	773/238 6966	DESTA2059@AOL.COM	

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1	Walter Brown			@serendipity.inc@gmail.com	X
2	Robert S. Ballard	10535 S. LaSalle	312-618-3117	Bob1s2b3@aol.com	✓
3	Lori Guidry	347 W. 100th Pl, Chgo, IL 60628	773-983-3943	LORIGUIDRY1130@GMAIL.COM	✓
4	Art Chalupa	10809 S. Prairie Ave	773 307 1409	ANAVENTURE@outlook.com	
5	Audrey Edwards-Chalupa	✓	✓	✓	
6	Elaine Jefferson	705 West 107st	312-206-8166	EJefferson1922@yahoo.com	✓
7	Ken Samuels	11425 S. Forest	773-445-0645	Ksam212067@comcast.net	
8	Dan Black	3417 North Seeley	630 660 2600	DanLawBlack@gmail.com	✓
9	Sara Hage	1 S. Wacker Dr. #900, Chgo IL 60606	312-798-0347	shage@huth.com	✓
10	Marvin Slater	751 W. 77st Chicago IL 60620	872-205-2053		
11	Rosie Batler	250 W. 106th St	773-368-2009	RB76814@gmail.com	
12	Marcus D. Jefferson	Pinpoint Mortgage Bank	708-663-0218		

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1	Diane Williams	9900 S. Yale Av Chgo 60628	773 568-7551	dylynnx@Yahoo.com	✓
2	Jeremy Henley	10012 S. Calumet Ave	773 701-6266	EGoDwn Twn34@gmail.com	
3	CHEENA CREDIT	1022 W 108th St	773.253.7088	Cheenagc@aol.com	✓
4	MARC DATAN	14843 DOBSON AV DALTON, IL 60419	773.330.8741	marcedjones@HOTMAIL.com	✓
5	Clarence D. Williams	346 W. 115st Chgo, IL 60628	773-621-1350	Clarence666@WWWay.com	
6	EUGENE ROGERS	10763 S. SANGAMON	773-568-8324		
7	Charlean Preston	11201 So. Sangamon	773 991-093	raspberrywater647@yahoo.com	✓
8	TRICIA Walsh	PARSONS 10 S. Riverside Suite 460 Chicago IL 60606	773-908-7349	TRICIA.Walsh@Parsons.com	✓
9	Deborah L. Truss	P.O. Box 288644 Chgo, IL 60628	773-326-5582	DLTMOMENTUM@AOL.COM	✓
10	Wanda Wright	10001 S FOREST CHGO IL 60628	773-995-2079	wwright@csu.edu	✓
11	James Morgan	8158 So. Chappel Chgo. IL 60617	773-916-0044	Jdmorganjr@hotmail.com	✓
12	ERICA HOUSER	10008 S. Indiana Chgo IL 60628	773-503-5898	ehouser@yahoo.com	✓

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1	Lorri Boldwin	8217 S. Perry Ave	773-873-3698	lebaldwin@sbcglobal	—
2	Lori Shelby Conley	234 E. 107th St	773-816-6437	LShelbyconley@gmail.com	✓
3	Avis Johnson	60 E VAN BUREN CHICAGO IL 60605	312-913-7285		
4	Nicky Moore	12233 S. Wentworth		Faithfulmoore1@yahoo	✓
5	Horace Brey	9548 So Perry	312 6228565	Apostolic Church of God	✓
6	LILLIAN BRAGGS	9635 S. YALE AVE	773-821-1095	lillianbraggs@SBCGLOBAL.NET	✓
7	MOSE BRAGGS	" " "	" " "		
8	MICHAEL LAFARGUE	9327 S. MICHIGAN	773-251-0760	MLAFARGUE1@GMAIL.COM	✓
9	AJ BURSE	8658 S. Cottage Grove	(773) 783-8800	ajburse@gmail.com	✓
10	P. VIVERETTE	9957 So. Wentworth	(773) 574-4621	springhill@ameritech.net	✓
11	William Baxter	250 W 106th St	773-354-6821		
12	Gwendolyn Rice	8600 S. PRAIRIE 60619	773-488-0540	gwendolynmin@gmail.com	✓

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1	Ethel LeFlore	357 W 109 Pl Chicago IL 60628	(773) 490-2585		
2	LeRonnie Cameron	348 W 102ND ST CHGO, IL 60628	(773)-568-5136		
3	Mary Thomas	355 W. 109th St	773 568 6768		
4	Dr. William Briggs Jr	16049 Woodlawn East Ave	708 953-4379	wbriggs@lt.edu	
5	Robert E Woodlan	4659 S Cottage	312-371-6203	rwoodnate@ameritech.net	
6	Michael Rivers, Jr.	8738 S Michigan Ave	(773)873-4011	michaelrivers619@yahoo.com	
7	Steven & Barbara Randall	1240 S State St	773-821-5929		
8	Samirie L McCoy	165 - E 121st St. Ill 60628			
9	Allen Brown	10108 S. Wentworth Chicago IL	773 827 2566	bargainhomespecialist@yahoo.com	✓
10	Yvonne Farlow	352 W 107th St	847 293 1120		
11	Lillian Yan	811 E Writer Ct Vernon Hills IL	847 984 2318	Lyan@hntb.com	✓
12	Christopher Curry	7736 S Aberdeen	708 238-6976	christophercurry902@yahoo.com	

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1	Charles Preston	11426 S Emerald, Chicago, IL 60628	773-719-2295	thecharlesalexander@gmail	✓
2	Arnold Pugh	10257 S Perry 60628	773-568-1518	Appugh@RangerTech.net	✓
3	Pastor Samuel Strachan	449 W. 129th St. 60628	773 928-7026	sstrachan449@sbcglobal.net	
4	Denise Mathus	529 E 89th Street 60619	773-873-5331	dmathus@transitchicago.com	✓
5	Lorelei Anderson	11026 S. Emerald 60628	773-648-3576		
6	Anita L. Bridge	10418 S. Eggleston Chg., IL 60628	773 580-1121	abridge1121@gmail.com	✓
7	Cynthia Jubiter	11620 S. State St. Chicago 60628	7739420031	Cynthia.Jubiter@IEANEA.org	✓
8	James E. Christian	10240 S Princeton	708-280 2073	jec7@comcast.net	
9	Katrina Paxton	310 W 105th Place	312-404-9262		
10	Dr. Lyndia Donelson	9804 So. Yale Ave	(773) 928-7112		✓
11	JOHN & MARY HORDE	9628 S. PERRY AVE	773 928 2889	COMPUTER SAFARI @aol.com	✓
12	Mike Granzow	2201 S Halsted St.	312-563-0296 x18	mike.granzow@habitatchicago.org	✓

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	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	GERALD DOLES	WESTBROOK CAPITAL INC P.O. BOX 654 LAGRANGE IL.	708 642-1893	G DOLES @ WESTBROOK CAPITAL.COM	
2	Edward A. Smith	State & 119th	708 385-0401	—	
3	John Large	9216 S Wabash	773-874-5498	Jaxmensinc2002@yahoo	
4	OMAR KAMARA	11528 S. LAFAYETTE AVE	815-348-0941	O_kamara@yahoo.com	✓
5	Ty THREATT	611 W 129th PL CHG 60628	708 823 0042	ty@tythreatt.com	
6	Priscilla McMullen	345 W 101 St Chgo Il 60628	312 576-5237	Priscillamcmullen55@gmail	✓
7	LARRY ANDERSON	11026 S EMERALD	773-821-7767		
8	BILL MASON	32 W 110th PL, Chicago IL 60628	773-562-4985	Willie.Mason59@comcast.net	✓
9	Joelle Isidore	Cook County Commissioner Moore		Joelleisidore countyo4@gmail.com	
10	Angela Williams	601 W. 123RD ST. 60628	612.469.0059	ywiigi@outlook.com	✓
11	Tanisha Pearson	1027 W. 109th St 60643	773.615.8058	notanordinarycliche@gmail	
12	DALLAS BEECHER	10146 S. KING DR. 60628	773 425-5732	dallas8481@sbcglobal.net	

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1	Sandra L. Muñoz	206 E. 116th St Chgo, IL 60628	(773) 264-7115		
2	Lavell McGill	11149 S. Eggleston 60628			
3	Valerie Lilley	11143 S. Eggleston 60628	309-360-6095	ValericLilley@yahoo.com	✓
4	DAVID MAY	400 8th Ave LaGrange 60525	708-579-3107	davemay4008@gmail.com	✓
5	Robert Ballard	10535 S. LaSalle st 60628	312-699-1225	fran1rn2@aol.com	✓
6	Ms. DORIS ANN ATWATER	355 W. 101ST PLACE CHGO ILL 60628	773-821-5995	mseatwater65@gmail.com	
7	Vinetta McCoy	165 E 121 PL 60628	773 9284968		
8	Christine Dungey	9750 S. Eggleston 60628	773 239-5283	—	✓
9	Nancy Wimberly			9137psnw@sbcglobal.net	
10	Younus Suleman	OFFICE OF CONGRESSMAN RUSH 11750 S. WESTERN AVE CHGO 60643	773.779.2400	younus.suleman@mail.house.gov	
11	Robyn Grange	"	"	robyn.wheelergrange@mail.house.gov	
12	Carlos Nelson	7901 S. Racine Chgo	773 858 2338	CNelson@GAGDC.org	

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1	Betty Jones	9921 S. Yale	773 468-4019		
2	Jerline Johnson	11134 S. Edbrooke Chgo	773 928-2358		
3	Shelton Flowers	8543 S Christiana Ave 60652			
4	DENNIS TALISON	CHA			
5	MATT MOSHER	CHA			
6	DIANA LIU	CHA			
7	Cyndi Stewart	11603 S. Throop Chicago IL 60643	773 837-5948	Cyndi@SOUL-PROGRAM.com	
8	Melvin Meeks	578 W 117th St	773 677 5771		
9	Debra Threatt	611 W 129th Place	773.'		
10	ANGELA CONNER	10018 S. EBERHART CHICAGO, IL 60628	773.568.8218	ANCONNER@SBCGLOBAL.NET	
11	Freda Madison	9907 S. Parnell Ave Chgo 60628	773 ~~28~~ 516-3782	dutarno@AMERITECH.net	
12	Kirk Stephens	9102 S. HARVARD Ave	773 568-0321	kjstepl@neiu.edu	

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1	Aaron J Burch	524 W 117 St 60628	773821-6477		
2	Ray Coleman Sr	355 W. 105	995-4695		
3	Scott Presslak	547 W. Jackson, Chicago, IL 60661	312-322-8021	SPRESSLAK@METRARR.COM	✓
4	Gregory Walker, Jr	6705 S. Merrill Ave, 2B Chicago IL 60649	773 317 2382	GREGOFIITCHICAGO@gmail.com ~~Gregfit~~	✓
5	Clifton Holliday	11038 S. Parnell	773 264-3512		
6	Dolores Cortez	251 W. 105th Pl 60628	773.995.9560	Sunshine_714@sbcglobal.net	✓
7	Cecilia Gutierrez	11327 S Princeton Ave	773.329 8115	Gcecili968@live.com	
8	Rev. Stanley Watkins	1525 E. 53rd St. Ste. 419	312-871-7100	Stanley@thomaswindomgroup.com	✓
9	CARL P JOSSELL	10744 WALLACE 60628	7737855784	CARLJOSSELL@YAHOO	✓
10	Jane Beckett	1178 Clinton OP 60304	708-383-7048	jane_beckett@sbcglobal.net	✓
11	Beth Dybala	CAIC 1000 E. 111th Street 60628	773-928-6020 x224	BethCalumetAreaIndustrial.com	✓
12	Nathaniel Parker	837 W 119th St 60643	773-391-1086	NPARKER@PhalanxRPservices.org	

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1	TARA MIXON	8UE 101ST ST CHGO IL 60628	7736983107	taramixon31@gmail.com	✓
2	Gloria & Willie Morris	329 W. 111th St Chicago, IL 60628	7732642413		
3	Addie Dixon	354 W 106 ST Chicago IL 60628	773 468-1052	N/A	
4	Gail & John Turner	10333 S Indiana Ave Chicago IL 60628	7738215766	johnturneragency@yahoo.com	✓
5	Lawrence Moore	307 W. 108th Place	773-398-1392	✓	✓
6	Joe Schuessler	111 E. ERIE MWRDGC CHICAGO, IL 60611	312-751-3236	joseph.schuessler@mwrd.org	
7	DORISH. White	3744W. Cullom Av. 2ND Fl Chgo, IL 60618	312-972-9652	DHWHITE9@GMAIL.COM	✓
8	GODFREY LAWSON	10019 EBERHART 60628	773 785-0431	lawsong411@	
9	Chris Cummings	72 E 101st place Chicago IL 60628	773-468-8027	ChrisCummings81@yahoo.com	
10	Lawrence Clemons	11413 S Yale 60628	773 710 3852		✓
11	Dolores Villalvazo	11623 So. Prairie 60628	773/719-3182	dvillalvaz@aol.com	✓
12	Julia Murray	206 E. 116 St. 60628	773 264-7115		

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1	Roger C. [illegible]	9301 S. Phillips	773-768-8825		
2	Howard Anthony Sr.	10732 So Eggleston ave	1-773 972-6221		
3	Chris Kopp	1330 W Birchwood Ave	1.773.764.6302		
4	Martha Compton	1330 W Birchwood Ave	773 764 6302		
5	Angela Brooks	Chicago Housing Authority 60 E. Van Buren 60605	312 786.3246		
6	KAY WARE	237 W. 105th St. 60628	773-468-2112		
7	DIANE THIGPEN	11321 S Princeton 60628	773 495 6296	Mzdee369@gmail.com	
8	Monique THIGPEN	11321 S Princeton 60628	773 495 6296		
9	CHLOE MUHAMMAD	10213 S. WENTWORTH 60628	773-995-6921		
10	Alfonso Robinson	72 E. 101st Place 60628	773) 4304872	Alfonso_Robinson@Ymail.Com	
11	Prentiss Smiegg	257 W 114 60628	773) 995-5959	N/A	
12	PATRICK McGEE	9433 S. INDIANA AVE. 60619	(773) 264-1176		

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1	Beatrice mae Kennedy	10859 So Eggleston Ave	1773-468-7036		
2	Brenda Glover	10835 S. Eggleston	773-568-4493	Brenda_Glover66628@Yahoo	✓
3	Rev Rev Ben E Coleman Jr	9314 S. Cottage Grove	773-248-3774	RCole1947@AOL.com	
4	L Hampton	11573 S State	773 573-9614	NONE	
5	P. Hampton	11573 S. State St.	(773) 573-9614	paiggehampton19@gmail.com	✓
6	Taylor Robinson	10020 So. Green St.	773) 320 7154	None	
7	Antonio Reed	6035 S. Aberdeen	(312) 964. 2047	Antonioreed53@yahoo.com	✓
8	Charles & Stella Brown	12 W 115th ST Chgo IL 60628	773 928-6950	creolestubbie@yahoo.com	✓
9	Frita Beauchamp	6330 N. Winthrop	513-485-3468	Frita10395@gmail	
10	Harold Wilson	1ST E 121 PL	773-521-5170	N/A	
11	Jim Czarnecki	Chicago - 211 N. Clinton	630.849.9928	JCZARNECKI@WIGHTCO.COM	✓
12	SAM & DARLENE PARKER	257 W. 113th ST	773-401-8167	DARLENE.PARKER@combined.com	✓

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1	JACK ROSSI	151 E. 116 ST	773 785-8479	N/A	
2	Betty Campbell	9428 S. Michigan Ave.	—	—	
3	Sharon Johnson	349 w. 101st Street	773-928-4221	NA	
4	Robert Franklin	10152 So. Eggleston	1-773-239-816		
5	MATTHEW BROWNLEE	10025 SO. GREEN	773-239-5160		
6	WILLIAMS, SUSAN	12336 S. INDIANA AVE	773 568-1620	—	
7	Joshua Falk	5740 Stony Island Ave	650-704-7579	falk1729@gmail.com	✓
8	Claressa Harmon	134 W 114th ST	708-603-5898	N/A	
9	John S. Davis	740 E. 43rd St.	312-637-0740	KOKO	
10	Kim Gooden	9941 S. PRINCETON	(773) 468-1289	Kimberly Gooden@sbc.yahoo.com	
11	Jalanda Taylor	249 W. 114th St	773 603-0810	jalandataylor@yahoo.com	
12	Ruth Scott	80 E. 101st Street	773-264-9357		

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1	Jerry Brown	11631 S. Normal		DD76@ATT.NET	
2	Delphine Dennis	121 E 117th Place			
3	Eleanor Scott	10823 S. Eggleston	773821499		
4	Elaina McLaurin	244 W. 112th Pl	773-936-4800	dmacklady@aol.com	✓
5	Philip A. Brooks	11441 S. Yale 60628	7735685713	Brooks.p11441@gmail.com	
6	Buster Coleman	10029 So Green St	773 2790292		
7	Bettie Lewis	9752 S. Eggleston Chgo Ill. 60628	773-238-5051	Carolynlewis33@yahoo.com	
8	Corey McEachern	5061 N. Clark Chicago Ill	3129725640	—	
9	A. Chanrell	110th Pl	—	—	—
10	Cheryl Littleton	123 W 114th st	773 821-5502	Clittleton55@gmail.com	—
11	Janet Bell	21221 Georgetown Rd Frankfort 60423	708 261-8545	Janet8175@sbcglobal.net	✓
12	Reverend Nancy Garner	347 W. 102nd St city 60628	7736601056		✓

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1	FRANK LO PRESTI	7244 W. ARCHER SUMMIT, IL 60501	(773)474-0897	FRANKALOPRESTI @ YAHOO.COM	✓
2	CONSTANCE WILSON	11232 So. Eggleston Chgo 60628	773 785-5185		
3	Ruth Harris	19 E. 121st Place 60628	773 928-2737		
4	Mary Jackson	141 E 121st Place 60628		mjackson55@hotmail.com	
5	Julie A Pate	345 W99 RP.	773-568-3760		
6	David Holmberg	117 E 144th St #3D Riverdale, IL 60827	773-928-4000	dholmberg@calumetareaindustrial.com	✓
7	Adrienne Anglin	331 W. 99th Place 60628	773-344-0520	LASTREASNU ~~Anglin~~ @yahoo.com	✓
8	GRADY DAVIS	349 W. 111th STREET	312-307-4396	NONE	
9	DONALD Miller	733 E 84 PL 2-S	773 425 7654	[illegible]	
10	Robert Booker	7350 S. Clyde Ave	773 363 4025	rbooker7765@yahoo.com	✓
11	PATRICIA McCAIN	11806 So. LA SALLE ST	—	—	
12	Tommy L. McLavain	244 W 112 PL	773-936-4900	—	

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1	LAWRENCE McKINNEY	60628 EGGLSTON	13129412923		
2	MARCIA NEITA	10020 S. PERRY Ave	1-708-653-8219	MARCIANEITA@Yahoo.com	✓
3	Martha Tate Guyton	430 W. 110 pl.	773-568-0836	mmguyton@sbcglobal.net	
4	Roberta Edwards	10352 S EMERALDS AVE	1-773 779 1458		✓
5	Ruth M Brown	10913 S Wallace St.	773-821-0212	gruthey1@gmail.com	✓
6	Kelly Leffler	4322 N Kenmore Ave apt 2s	502 377 0438	June.Leffler@gmail.com	✓
7	Maureen + Scott Perazzolo	245 W. 114 Street	630-638-5496	Scottap@ymail.com	✓
8	PATRICIA WOODSON	347 W. 102ND PLACE	773 629 6556	Precious222Pat@Yahoo.Com	✓
9	BESSIE FOSTER	11438 S. NORMAL AVE	773-568-9606	fosterbef@sbcglobal.NET	
10	Katherine Warzynski	835 N. Wood Street 206	847-351-1251		
11	TONY GREEP	200 W ADAMS, 60606	312-353-1646	anthony.greep@dot.gov	
12	Angela D. Tyler	6002 S. Halsted St. Apt 217	312-391-8258	adt764@yahoo.com	

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1	Mr&Mrs James Palmer	319 W 100th Chgo IL 60628	(773)5688798	Palmer Carolyn@Att.net	✓
2	ROSALIND BARNES	10020 S. Perry Chg. Ill. 60628	708) 818-8899	Rosalindbarnes629@yahoo.com	✓
3	Rosemary Wyche	322 W 101st Chgo, 60628	773 2457782	RWYCHE@ameritech.net	✓
4	Ernestine Alexander	10845 S. Parnell ave 60628	773 995-5771		
5	Diane Edwards	10352 S Emerald Ave 60628	773-779-1456	dianeedwards4846@yahoo.com	✓
6	Dora Engram	12230 S. Perry Ave 60628	773-928-1823	dengram@sbcglobal.net	✓
7	David Jordan	1420 W. Edgewater Ave Apt 2 60660	703 919 8941	davpjor@gmail.com	✓
8	Emma Moncure	11227 S. Eggleston	773-785-1465		
9	Minister Sylvia Y Jones	DCP.			
10	Anna Williams	349 W 99th Pl 60628	773-568-2087		✓
11	CRYSTAL BLACK	9559 S. PERRY AVE. 60628	773-419-0351	brownblackc@gmail.com	✓
12	Mark Assam	200 W. Adams St. Suite 320 Chicago 60606	312-353-4070	mark.assam@dot.gov	✓

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1	Tequnda West	7337 S Shore Drive	312-339-1384	wwconsultants2016@gmail.com	
2	Lori Turner	3201 Wyntone Drive Champaign, IL 61822	217/972-2447	loturner@illinois.edu	
3	Jilliana & Marthann Campbell	222 W 98th Pl Chicago IL 60628	773-660-6111	Jillianac1983@yahoo.com	✓
4	Mary Ann Gordon	11943 So HARVARD AVE 60628	773 928-4496		✓
5	Carrell D. Huey	352 W. 101st Street 60628	(773) 568-0531		✓
6	Joseph J. Johnson	346 W. 101st Street 60628	(773) 264-5984		✓
7	Macy Johnson	346 W. 101st Street 60628	(773) 264-5984	grandmay'@sbcglobal.net	✓
8	Rev. Alice Harper-Jones	P.O. Box 208491 Chicago 60620	773 568 0195	alicehj19@gmail.com	✓
9	Florency Hill	140 E 121st Place Ch 60628	773 568-2351		✓
10	Doris Martin	13207 S. Rhodes Ave	(773) 264-0290		
11	Sue Eleby	9529 S. Wallace St	773 568 7589	eleby_sue@aol.com	✓
12	Donnetta Norfleet	10111 S. Princeton Ave	773 241 2459	donnetta72@yahoo.com	

Red Line Extension Project

Public Hearing

November 1, 2016

The purpose of this public hearing:

- Share information on the Red Line Extension (RLE) Project
- Summarize results of the recently completed Draft Environmental Impact Statement (EIS)
- Obtain your input on the benefits, impacts, and proposed mitigation measures

Comments can be made in two ways during this meeting:

- Provide written comments on comment cards
- Provide verbal comments to the court reporter

Written comments will be accepted via mail and email through November 30, 2016.

If you have questions, feel free to ask the representatives stationed around the boards.

Why is the RLE Project Important?

The RLE Project would accomplish the following:

- Improve service and transit accessibility for Far South Side neighborhoods where transit-dependent residents currently lack direct access to rail service.
- Save the average commuter in the communities affected by this project 87 hours per year.
- Provide better transit access to affordable housing, jobs, services, and educational opportunities.
- Increase accessible jobs within an hour commute of the proposed 111th Street by 56%, according to the Chicago Metropolitan Agency for Planning.

What is an Environmental Impact Statement?

To acquire future federal funding, the National Environmental Policy Act (NEPA) requires an EIS for any project that may have significant impacts on the environment or where impacts have not yet been determined.

An EIS allows the public to fully understand the potential environmental impacts of a project and provide input before final decisions are made.

The EIS includes the following:

- A description and comparison of alternatives
- An explanation of the existing environmental setting
- An analysis of potential positive and negative environmental impacts of construction and operation of each alternative
- Proposed mitigation measures to reduce or eliminate potential negative impacts

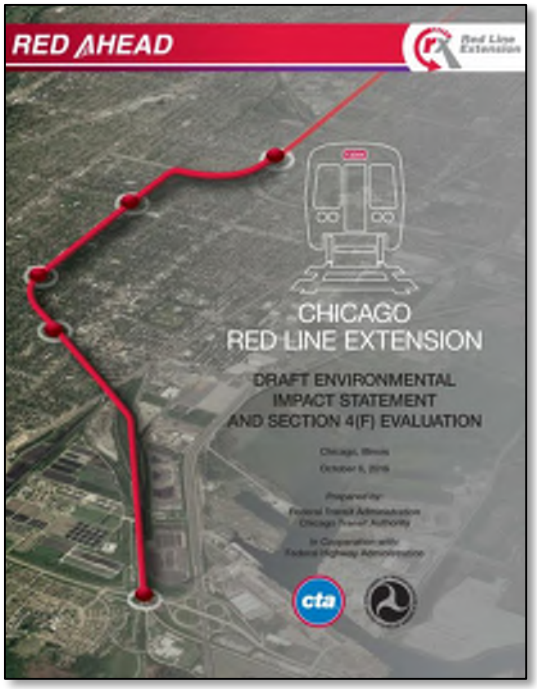

Project Alternatives Evaluated

UPRR Alternative

5.3-mile extension from 95th to 130th Street

Four new stations

Bus and parking facilities at all stations

New rail yard

Two options of the UPRR Alternative are under consideration: East Option & West Option

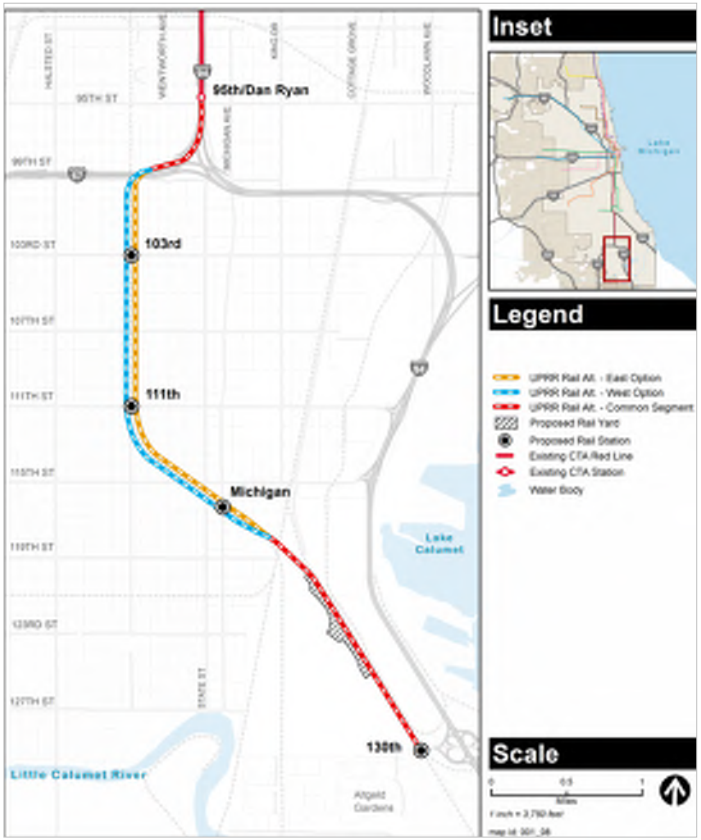

No Build Alternative

Future conditions if the UPRR Alternative were not implemented

Visualizations

West Option

103rd Street Station *(facing south)*

Michigan Avenue Station *(facing northwest)*

East Option

103rd Street Station *(facing northwest)*

111th Street Station *(facing west)*

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

Resource Areas Evaluated in the Draft EIS

Information about impacts related to these topics are on the boards placed around the room.

- Transportation
- Land Use and Economic Development
- Displacements
- Neighborhoods and Communities
- Visual Impacts
- Noise and Vibration
- Safety and Security
- Historic and Cultural Resources
- Hazardous Materials
- Wetlands
- Indirect and Cumulative Impacts
- Environmental Justice
- Parks
- Air Quality
- Water Quality
- Floodplains
- Vegetation and Wildlife Habitat
- Threatened and Endangered Species
- Geology and Soils
- Energy

Thank You for Participating!

Next Steps for the RLE Project:

- CTA and FTA will respond to the public comments on the Draft EIS as part of the Final EIS
- CTA and FTA will complete any additional analyses required and prepare the Final EIS
- The Final EIS will confirm whether the East or West Option is selected.
- FTA intends to issue a single document that consists of the Final EIS and Record of Decision
- CTA intends to request entry into the FTA New Starts Project Development phase.

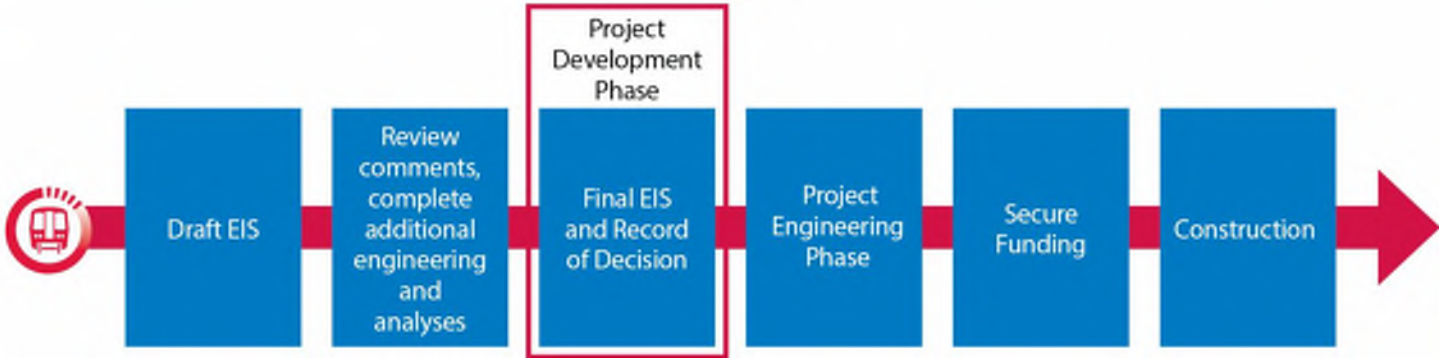

RED AHEAD

Red Line Extension

Proyecto de Expansión de la Línea Roja

Audiencia Pública

1 de noviembre de 2016

El propósito de esta audiencia pública es:

- Compartir información sobre el Proyecto de Expansión de la Línea Roja (RLE)
- Resumir los resultados del borrador de Declaración de Impacto Ambiental (DIA) recién terminado
- Obtener sus comentarios sobre los beneficios, impactos y medidas de mitigación propuestas

Los comentarios pueden hacerse de dos maneras durante esta reunión:

- Proporcionar comentarios escritos en las tarjetas de comentarios
- Proporcionar comentarios verbales al taquígrafo del tribunal

Se aceptarán comentarios escritos por correo postal y correo electrónico hasta el 30 de noviembre de 2016.

Si tiene alguna pregunta, siéntase en la libertad de preguntar a los representantes alrededor de los tablones.

¿Por qué es importante el proyecto de RLE?

El proyecto de RLE lograría lo siguiente:

- Mejorar el servicio y el acceso al transporte a los vecindarios en el extremo sur donde los residentes que dependen del transporte público actualmente carecen de acceso directo al servicio de tren.
- Ahorrar al viajero promedio en las comunidades afectadas por este proyecto 87 horas al año.
- Proporcionar mejor acceso al transporte público para viviendas asequibles, trabajos, servicios y oportunidades educativas.
- Aumentar los trabajos accesibles a una hora de viaje del 111th Street propuesto en un 56%, de acuerdo con la Agencia Metropolitana de Planificación de Chicago.

Alternativas de proyecto evaluadas

Alternativa de UPRR

Expansión de 5.3 millas desde 95th hasta 130th Street

Cuatro estaciones nuevas

Instalaciones de autobuses y estacionamiento en todas las estaciones

Nuevo patio para trenes

Se están considerando dos opciones de la alternativa de UPRR: Opción Este y Opción Oeste

Alternativa de no construcción

Condiciones futuras si no se implementara la alternativa de UPRR

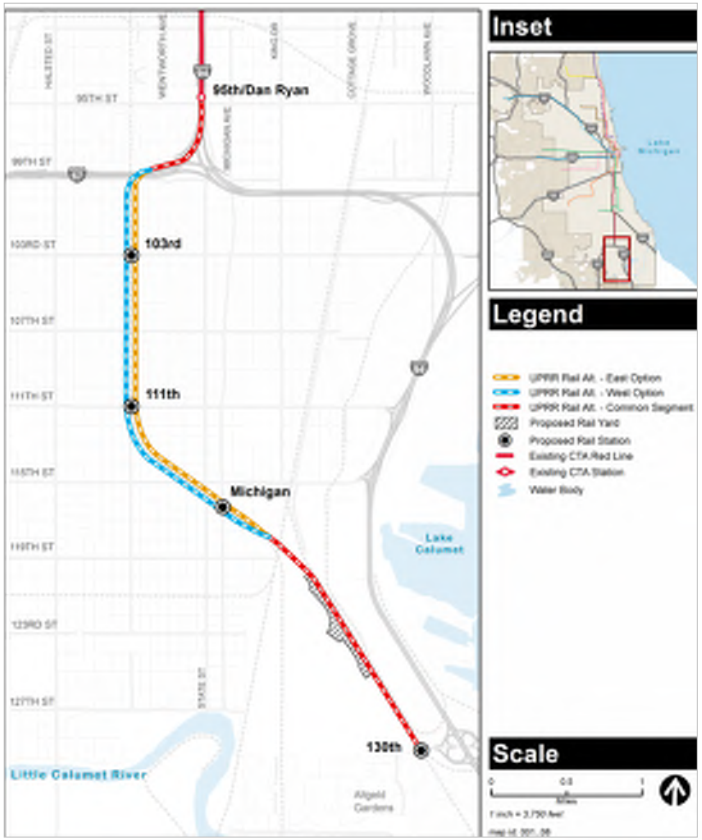

Visualizaciones

West Option
Opción Oeste

103rd Street Station *(facing south)*

Estación 103rd Street (*orientada al sur*)

East Option
Opción Este

103rd Street Station *(facing northwest)*

Estación 103rd Street (*orientada al noroeste*)

Michigan Avenue Station *(facing northwest)*

Estación Michigan Avenue (*orientada al noroeste*)

111th Street Station *(facing west)*

Estación 111th Street (*orientada al oeste*)

Tenga presente que el propósito de la apariencia de los elementos del proyecto (como las estructuras de estacionamiento, vigas, columnas, etc.) en las visualizaciones es mostrar la escala de los elementos del proyecto. La apariencia real de la construcción podría variar según las decisiones del proyecto para los colores, texturas, acabados y elección de funciones específicas de diseño.

¿Qué es una Declaración de Impacto Ambiental?

Para obtener fondos federales en el futuro, la Ley de Política Ambiental Nacional (NEPA) exige una DIA para cualquier proyecto que pueda tener un impacto significativo en el ambiente o para el que no se han determinado los impactos.

Una DIA permite al público entender plenamente los posibles impactos ambientales de un proyecto y ofrecer comentarios antes de que se tomen las decisiones finales.

La DIA incluye lo siguiente:

- Una descripción y comparación de las alternativas
- Una explicación del ambiente existente
- Un análisis de los posibles impactos ambientales positivos y negativos de la construcción y la operación de cada alternativa
- Medidas de mitigación propuestas para reducir o eliminar los posibles impactos negativos

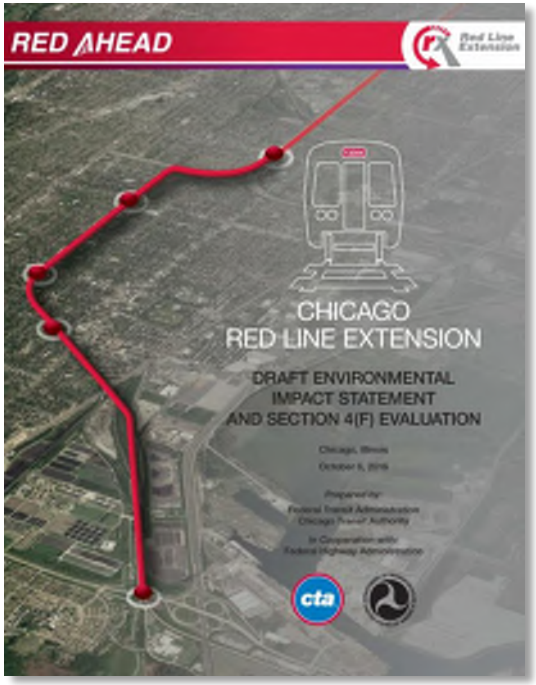

Áreas de recursos evaluadas en el borrador de DIA

La información sobre los impactos relacionados con estos temas se encuentra en los tablones que se colocaron en la sala.

- Transporte
- Uso de terrenos y desarrollo económico
- Desplazamientos
- Vecindarios y comunidades
- Impactos visuales
- Ruido y vibraciones
- Seguridad y protección
- Recursos históricos y culturales
- Materiales peligrosos
- Humedales
- Impactos indirectos y acumulados
- Justicia ambiental
- Parques
- Calidad del aire
- Calidad del agua
- Llanuras inundables
- Vegetación y hábitat de la vida silvestre
- Especies amenazadas y en peligro de extinción
- Geología y suelos
- Energía

Gracias por participar.

Próximos pasos para el proyecto de RLE:

- CTA y FTA responderán a los comentarios públicos en el borrador de la DIA como parte de la DIA final.
- CTA y FTA realizarán los análisis adicionales necesarios y prepararán la DIA final.
- La DIA final confirmará si se seleccionó la Opción Este u Oeste.
- FTA tiene previsto emitir un documento único que consista de la DIA final y un registro de la decisión.

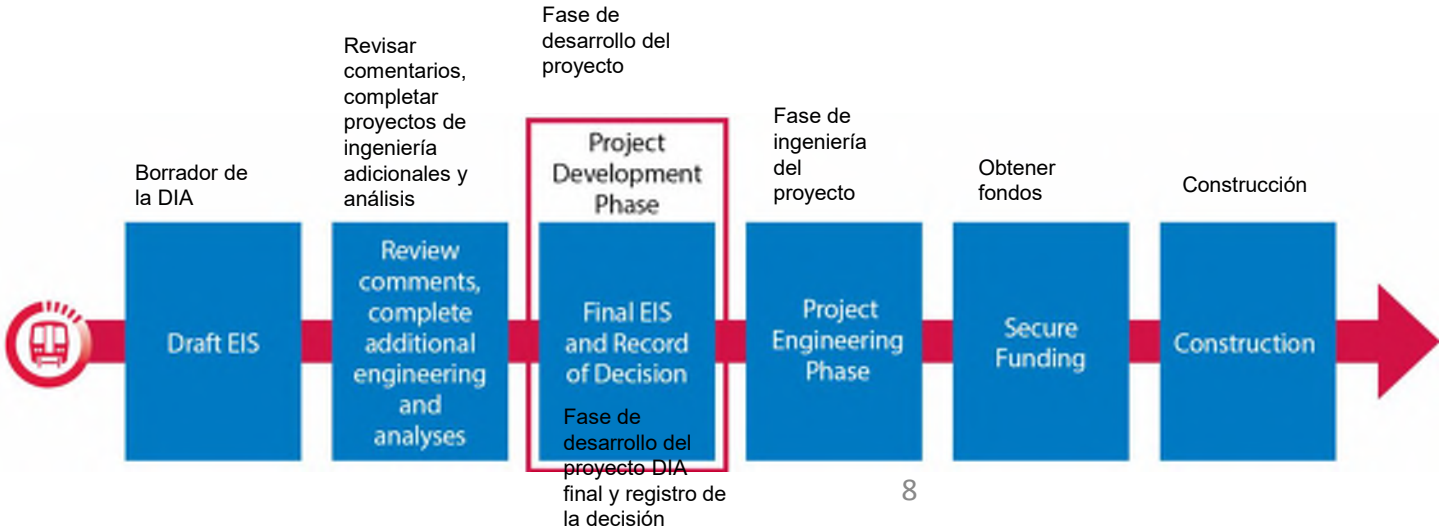

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Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name _____

Address _____

City _____ **State** _____ **Zip** _____

Email Address _____

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** _____

What are your concerns about the **West Option?** _____

Comments: _____

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

_____

Land Use and Economic Development: _____

_____

Property Displacements: _____

_____

Neighborhoods & Communities: _____

_____

Visual Impacts (how it would look): _____

_____

Noise & Vibration: _____

_____

Impacts to Historic Resources: _____

_____

Safety & Security: _____

_____

Hazardous Materials: _____

_____

Wetlands: _____

_____

Parks: _____

_____

Construction Impacts: _____

_____

Project Funding: _____

_____

Other: _____

_____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

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QUEREMOS SABER SU OPINIÓN

sobre el proyecto Expansión de la Línea Roja (RLE)

CTA, como auspiciador del proyecto de Federal Transit Administration (FTA), está aceptando comentarios sobre el impacto y medidas de mitigación identificados en el borrador de la Declaración de Impacto Ambiental (DIA) del proyecto RLE. CTA está aceptando comentarios sobre el borrador de la DIA hasta el 30 de noviembre de 2016. Todos los comentarios que se reciban durante este plazo y las respuestas a esos comentarios se incorporarán en la DIA final. Por favor **escriba en letra de imprenta**.

Nombre _____

Dirección _____

Ciudad _____ **Estado** _____ **Código postal** _____

Correo electrónico _____

☐ **Marque la casilla aquí** para recibir también información actualizada sobre otros proyectos en la Línea Roja.

¿Cuáles son sus preocupaciones sobre la **Opción del Este?** _____

¿Cuáles son sus preocupaciones sobre la **Opción del Oeste?** _____

Comentarios: _____

También puede enviar preguntas o comentarios por correo electrónico a RedExtension@transitchicago.com.

Reverso →

¿Tiene alguna preocupación sobre el impacto del proyecto RLE relacionado con las siguientes áreas de recursos? Si contesta sí, por favor explique.

Transporte: _____

Uso de terreno y desarrollo económico: _____

Desplazamientos de propiedades: _____

Vecindarios y comunidades: _____

Impactos visuales (qué aspecto tendría): _____

Ruido y vibraciones: _____

Impactos a recursos históricos: _____

Protección y seguridad: _____

Materiales peligrosos: _____

Humedales: _____

Parques: _____

Impactos de la construcción: _____

Fondos para el proyecto: _____

Otra: _____

Puede entregar la tarjeta de comentarios cumplimentada a CTA durante la reunión o puede enviar sus comentarios a la siguiente dirección: Puede entregar la tarjeta de comentarios cumplimentada a CTA durante la reunión o puede enviar sus comentarios a la siguiente dirección: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

También puede enviar un correo electrónico a: **RedExtension@transitchicago.com**

Información al cliente: (888) YOUR-CTA (888 968-7282)
Para más información en español, llame al (312) 681-2710
Todos los comentarios escritos tienen que enviarse a más tardar el 30 de noviembre de 2016 a las 4:30 p.m.

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Red Line Extension

Welcome to the
Red Line Extension Project
Public Hearing

The purpose of this public hearing:

- Share information on the Red Line Extension (RLE) Project
- Summarize results of the recently completed Draft Environmental Impact Statement (EIS)
- Obtain your input on the benefits, impacts, and proposed mitigation measures

If you have questions, feel free to ask the representatives stationed around the boards. There will be no formal presentation.

Comments can be made in two ways during this meeting:

- Provide written comments on comment cards
- Provide verbal comments to the court reporter

Written comments will be accepted through November 30, 2016:

By email: **RedExtension@transitchicago.com**

By mail: **Chicago Transit Authority**
Strategic Planning, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street,
Chicago, IL 60661

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The Red Ahead Program

Red Ahead is a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most traveled rail line.

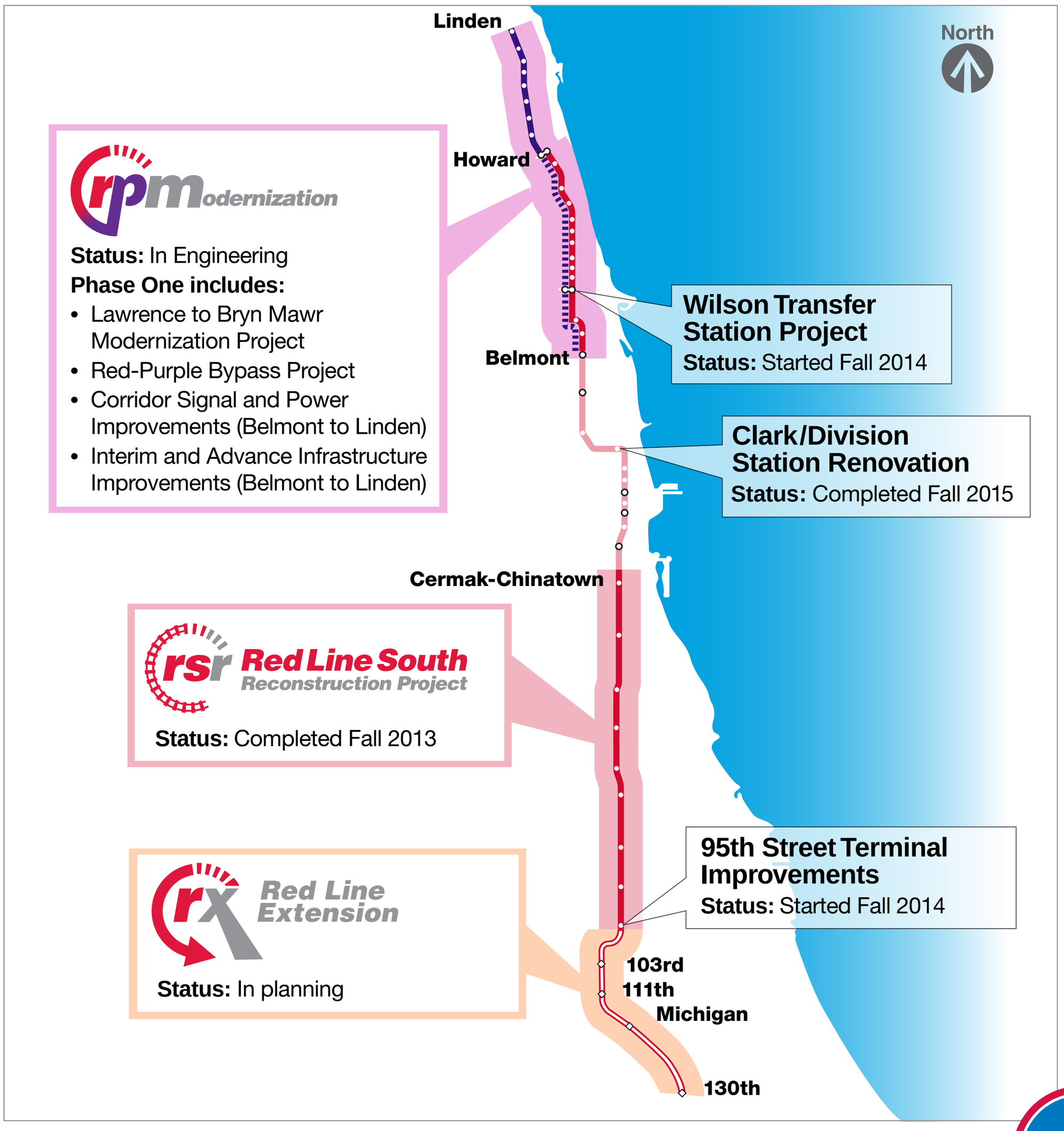

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Why is the RLE Project Important?

The RLE Project would accomplish the following:

- Improve service and transit accessibility for Far South Side neighborhoods where transit-dependent residents currently lack direct access to rail service.
- Save the average commuter in the communities affected by this project 87 hours per year.
- Provide better transit access to affordable housing, jobs, services, and educational opportunities.
- Increase accessible jobs within an hour commute of the proposed 111th Street station by 56%, according to Chicago Metropolitan Agency for Planning.

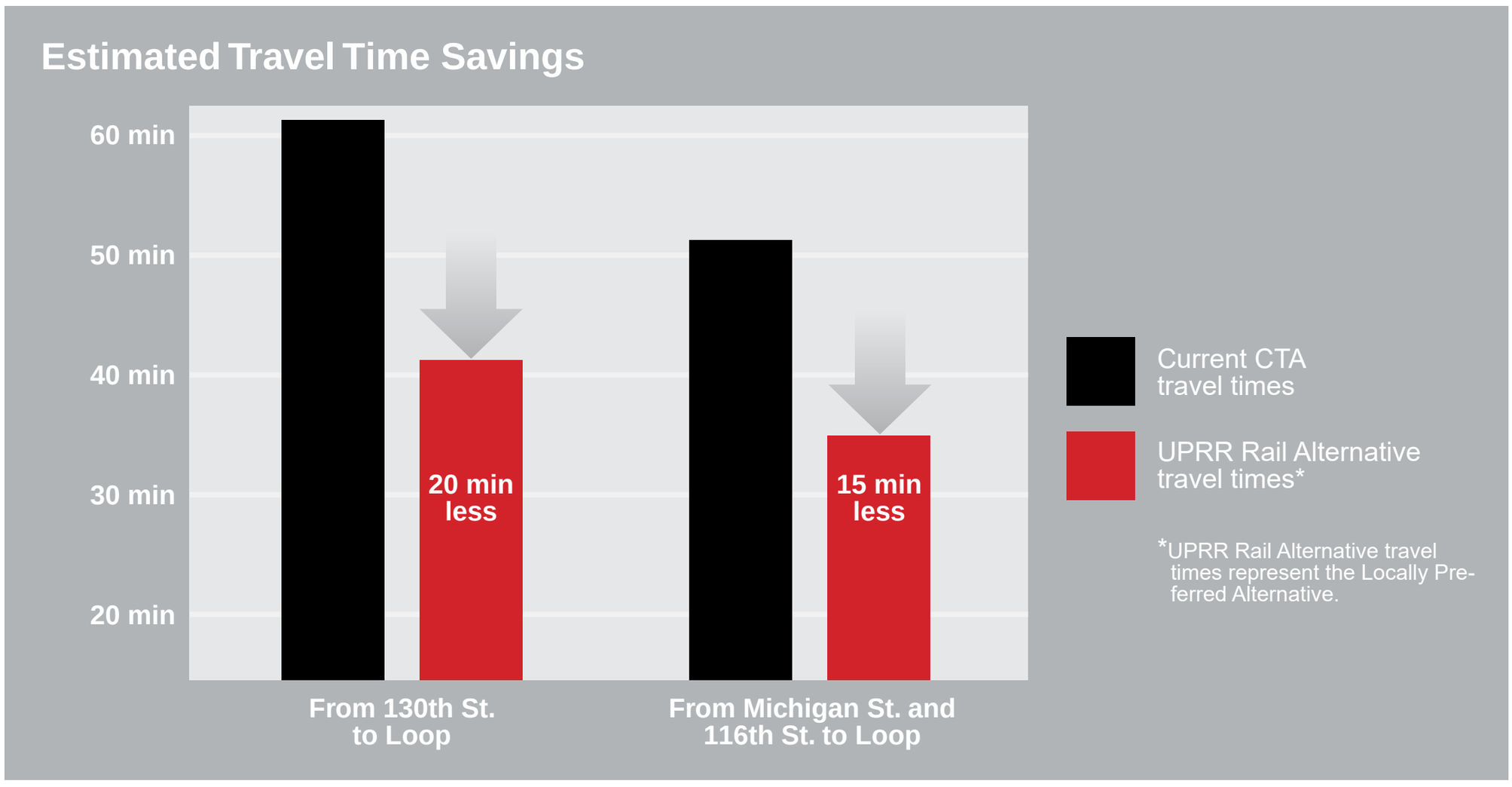

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RLE Project Purpose and Need

Project Purpose

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

Needs to be Addressed

- Transit trips to jobs are longer for Far South Side residents than they are for passengers in the Chicago seven-county region as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limits access between affordable housing and employment centers outside of the project area.
- Existing transit markets are underserved and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Street Yard does not have capacity to store rail cars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

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What is an Environmental Impact Statement (EIS)?

To acquire future federal funding, the National Environmental Policy Act (NEPA) requires an EIS for any project that may have significant impacts on the environment or where impacts have not yet been determined.

An EIS allows the public to fully understand the potential environmental impacts of a project and provide input before final decisions are made.

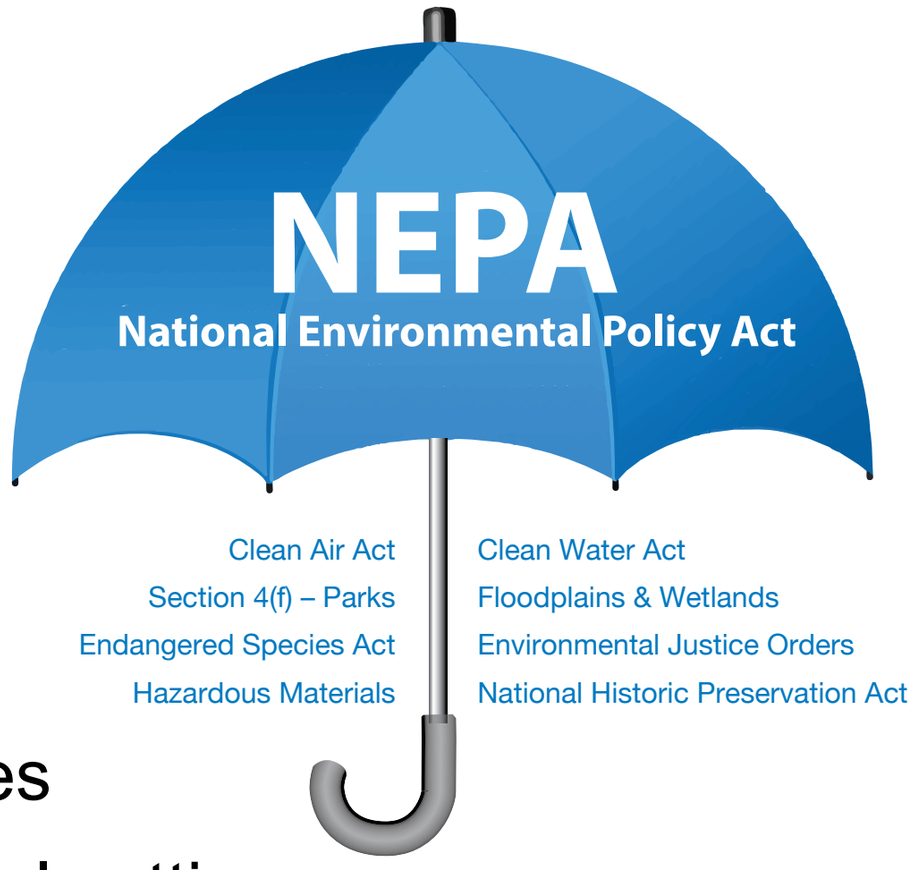

The EIS includes the following:

- A description and comparison of alternatives
- An explanation of the existing environmental setting
- An analysis of potential positive and negative environmental impacts of construction and operation of each alternative
- Proposed mitigation measures to reduce or eliminate potential negative impacts

CTA published the Draft EIS on Thursday, October 6, and is taking public comments until Wednesday, November 30.

Comments and responses will be incorporated into the Final EIS.

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Red Line Extension

Alternatives Development Process

Locally Preferred Alternative

In August 2009, the Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative.

NEPA Preferred Alternative

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative.

ALTERNATIVES ANALYSIS

Evaluated Universe of Alternatives, including **11 modes of transportation** (including Bus Rapid Transit), **9 corridors** (including I-57, I-94, Halsted Street, Michigan Avenue, and State Street), and **4 profiles** (elevated, at-grade, trench, and underground)

SCOPING

UPRR Rail Alternative
Halsted Rail Alternative
Bus Rapid Transit Alternative
No Build Alternative

ENVIRONMENTAL ANALYSIS

UPRR Rail Alternative
(Right-of-Way, East, & West Options)
Halsted Rail Alternative
Bus Rapid Transit Alternative
No Build Alternative

DRAFT EIS

UPRR Alternative
(East & West Options)
No Build Alternative

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Project Alternatives Evaluated

UPRR Alternative

The extension would run along elevated tracks south from the 95th Street Terminal, and follow I-57 until reaching the Union Pacific Railroad (UPRR) corridor near Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the freight rail tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street.

The Draft Environmental Impact Statement (EIS) evaluates two options for this alternative:

East Option

(east of UPRR tracks)

West Option

(west of UPRR tracks)

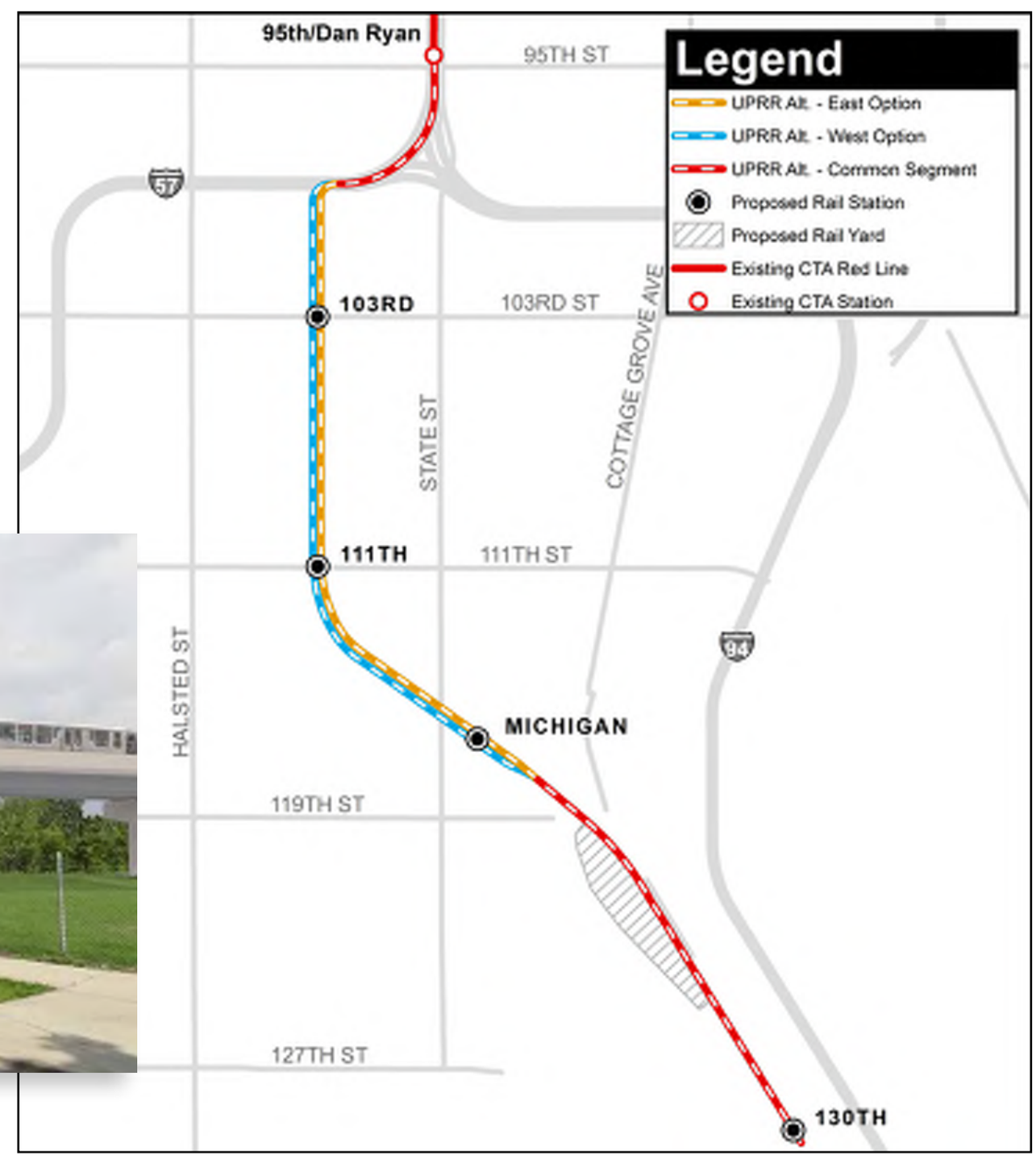

Tracks would be elevated from 95th Street to 119th Street

No Build Alternative

The No Build Alternative represents future conditions if the UPRR Alternative were not implemented. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the UPRR Alternative. No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

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Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Visualizations

West Option

103rd Street Station *(facing south)*

Michigan Avenue Station *(facing northwest)*

East Option

103rd Street Station *(facing northwest)*

111th Street *(facing west)*

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Section 4(f) - Impacts to Parks

Section 4(f) of the USDOT Act of 1966 is a federal law that establishes special considerations and requirements when publicly owned parks or recreational areas are proposed to be used by a transportation project. Parks would be affected whether the East or West Option is selected.

East Option

Wendell Smith Park

Block Park

Portions of Wendell Smith Park and Block Park would be permanently affected. Both parks would continue to provide park space after implementation of the RLE Project, but park space would be reduced. Both parks would remain active during construction with the exception of the overlapped portion of the parks.

West Option

Fernwood Parkway

A portion of Fernwood Parkway would be affected. Temporary closure of the overlapped section of Fernwood Parkway would be necessary during construction. There would also be a short-term closure of Wendell Smith Park during construction, but no permanent impacts.

Park	West Option	East Option
Wendell Smith Park	—	0.7 acre
Fernwood Parkway	1.9 acres	—
Block Park	—	0.9 acre
Total	**1.9 acres**	**1.6 acres**

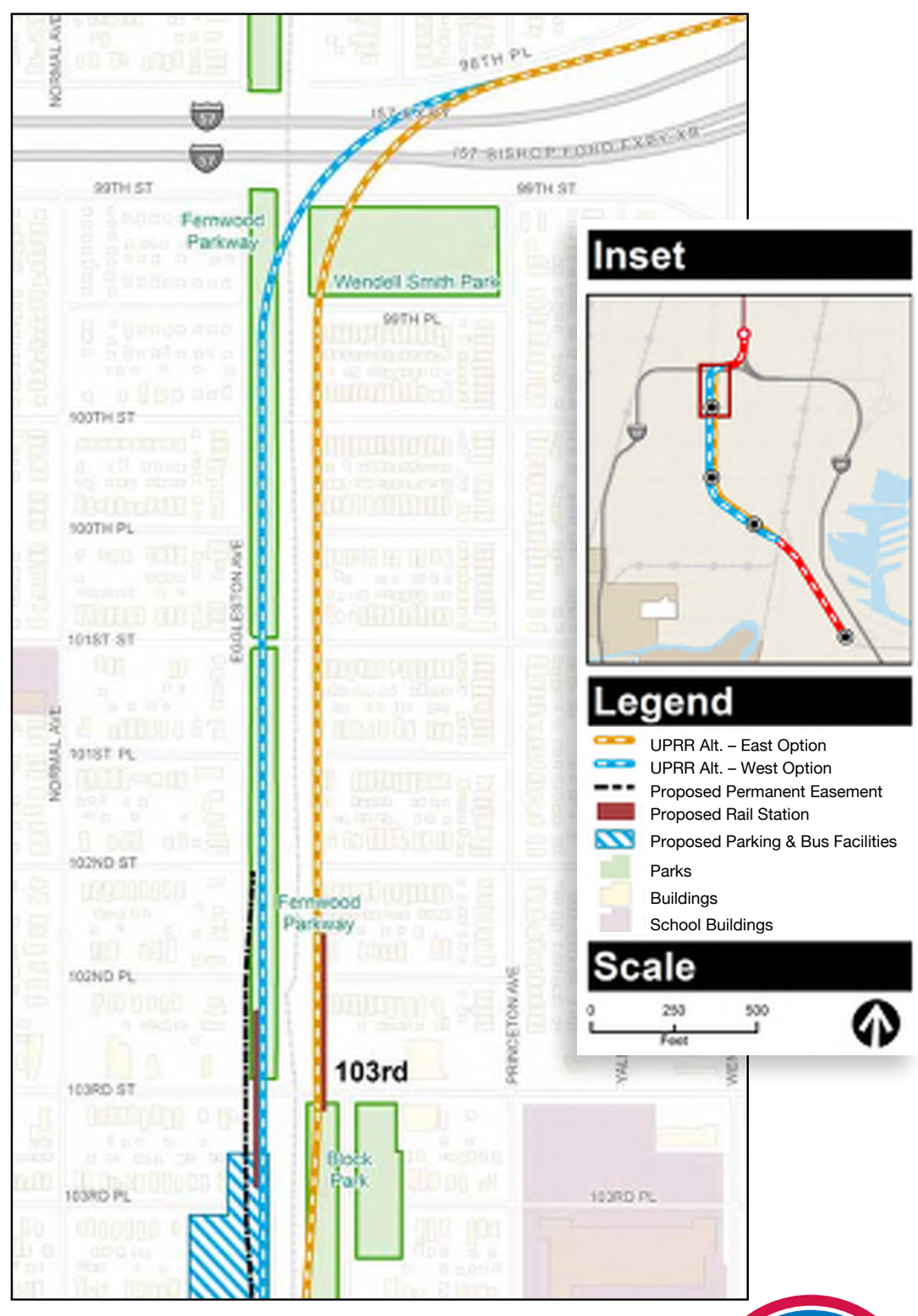

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Section 4(f) – Mitigation for Impacts to Parks

Addressing Impacts to Parks

Mitigation Measures for both the East and West Options

- Provide new replacement parks in or near affected community areas
- Restore or landscape any disturbed areas on impacted parkland
- Incorporate context-sensitive design features at impacted parks

Additional Mitigation Measures for the East Option at Wendell Smith Park

- Provide one larger baseball field in Wendell Smith Park
- Relocate junior-sized baseball field in replacement park
- Relocate walking path and replace benches and other amenities in Wendell Smith Park

Additional Improvements for the West Option at Fernwood Parkway

- Potential to install a new bike path beneath the elevated structure

Wendell Smith Park – Proposed Park Concept

Potential Replacement Park Concepts

CTA worked with the Chicago Park District to develop replacement park options in the surrounding community.

Michigan Avenue between 101st and 102nd Streets

(East or West Option)

111th Street near the UPRR tracks and Eggleston Street

(East Option only)

Michigan Avenue near the UPRR tracks and Kensington Avenue

(East or West Option; concept shown is for the East Option)

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Park Concept Visualizations

Wendell Smith Park (East Option)

Visualization of Wendell Smith Park as part of the East Option.

Includes newer, larger ballfield and rerouted walking path to restore affected features of the park.

There would be no permanent impact on Wendell Smith Park as a result of the West Option.

Replacement Park Concept - 101st and Michigan Avenue (East or West Option)

Aerial overview (left) and street view (top) visualization of replacement park concept at Michigan Avenue between 101st and 102nd Streets.

Replacement park sites would be contingent on voluntary acquisition of vacant and/or active parcels from willing sellers.

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Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Park Concept Visualizations

Replacement Park Concept - 111th Street and Eggleston Avenue (East Option)

Visualization of replacement park concept, showing a new ballfield and integrated park & ride at the proposed 111th Street station.

Replacement Park Concept - Michigan Avenue near Kensington Avenue (East or West Option – concept shown for East Option)

Aerial overview (left) and street view (top) visualization of replacement park concept at Michigan Avenue near the UPRR tracks and Kensington Avenue.

Replacement park sites would be contingent on voluntary acquisition of vacant and/or active parcels from willing sellers.

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Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Property Displacements

Construction of the project would require the acquisition of private property.

Parcels	West Option	East Option
Affected Parcels without Building Displacements	159	154
Affected Parcels with Building Displacements *(Residential Building Displacements)*	46 *(26)*	106 *(90)*
Total Affected Parcels	**205**	**260**

- Impacts are based on conceptual engineering and represent the maximum impacts on all alternatives.
- Impacts are for the purposes of comparing alternatives and will be confirmed in the Final EIS following more detailed conceptual design
- Availability of vacant parcels and buildings near the affected properties will likely allow for affected businesses and residents to relocate within the project area.
- The total number of properties identified for both the East and West Options is 381, because some properties have been identified as possibly needed for both options. Of the 381 properties, 248 properties are privately owned and 133 properties are publicly or railroad-owned.

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Noise and Vibration Impacts

What would CTA do to reduce, or mitigate, noise from the elevated track structure?

- Install noise barriers, which absorb and reduce noise from the tracks by 10 decibels.
- Use a closed-deck structure, which limit transmission of noise beneath the tracks.
- Use continuous welded rail, which has fewer joints and means a smoother and quieter ride.

Noise Barriers

Open versus Closed Deck

What about construction noise?

- CTA would limit nighttime construction as much as possible.
- CTA would keep the community informed about construction schedules.
- CTA would use construction best management practices to reduce noise.

What about vibration?

Because the CTA train cars are lighter and carry less weight (freight) than the freight trains that pass through the project area, vibration levels would not exceed FTA thresholds and no mitigation measures would be required. Elevated track structures also transmit less vibration through the ground than at-grade tracks.

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Noise and Vibration Impacts

CTA performed general noise and vibration assessments to identify and estimate the severity of noise and vibration impacts that could occur on noise-sensitive receivers (such as residences) with implementation of the project.

- Because existing noise levels are already high in the project corridor from freight trains, the allowable noise increase (using FTA noise impact criteria) is very small (about 2 dB).
- To minimize noise impacts, CTA will implement specific mitigation strategies (see next board), which would make the Red Line tracks in this area quieter than other parts of the CTA system.
- Because of the mitigation strategies, **the RLE Project would not worsen noise conditions.**

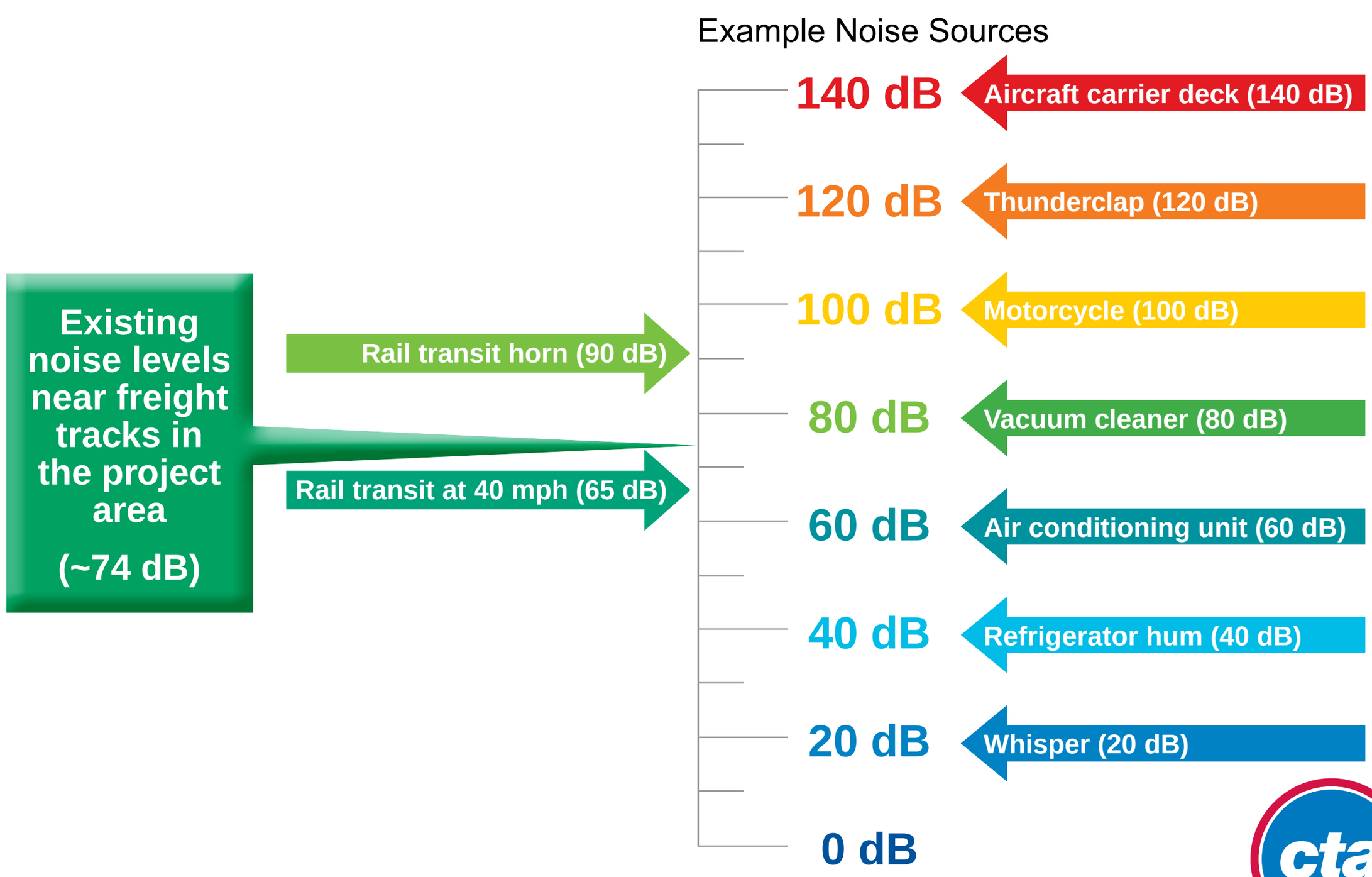

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Visual Impacts

The analysis of visual impacts evaluates whether the project would affect scenic vistas, scenic resources, and visual character, or create new adverse sources of light emissions or glare. The RLE Project would have adverse visual impacts at some locations, despite mitigation.

Adverse Visual Impacts	
West Options	**East Options**
• North of I-57 • Between 99th and 103rd Streets • Near the 103rd Street station • Michigan Avenue station	• North of I-57 • 117th Street and Prairie Avenue

I-57 Right-of-Way from 98th Place and Princeton Avenue (facing east)

103rd Street Station (facing south)

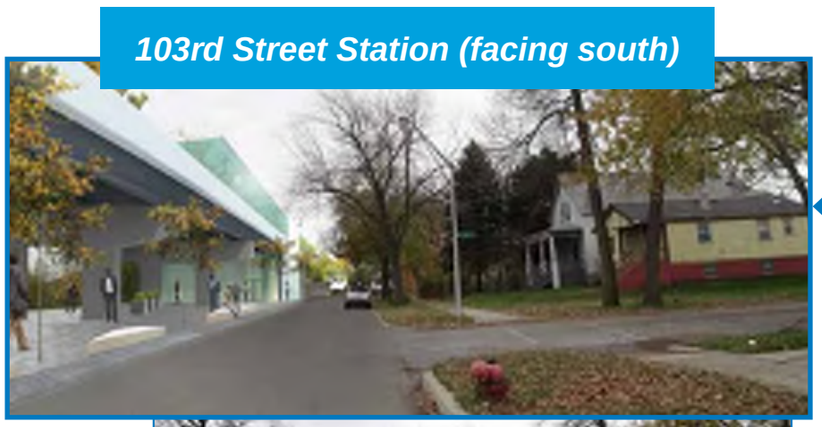

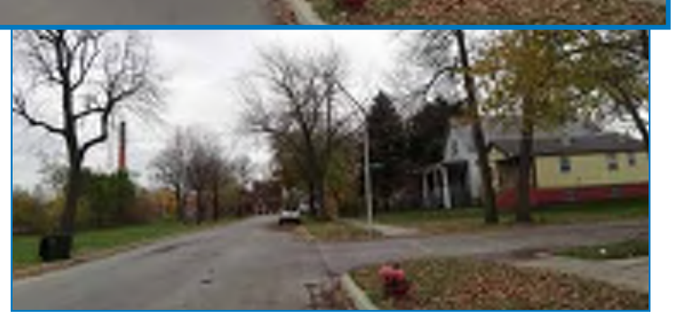

117th Street and Prairie Avenue (facing west)

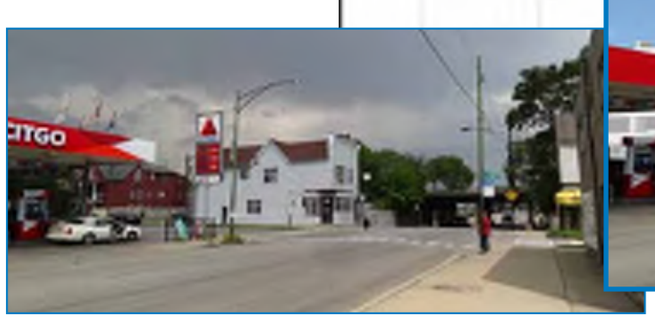

Michigan Avenue Station (facing northwest)

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Temporary Construction Impacts and Minimal Impact Areas

What would CTA do to minimize construction impacts?

- Post notices of noise-generating activities
- Announce road closures
- Conduct special advertising for affected businesses
- Limit idling of construction vehicles
- Provide for alternative parking

Based on CTA's analysis, the following impact areas would have minimal or no impacts after mitigation:

- Transportation
- Land Use & Economic Development
- Noise & Vibration
- Safety & Security
- Historic Resources
- Hazardous Materials
- Environmental Justice

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Impacts to Wetlands

Up to 15.34 acres of wetlands at the proposed rail yard and 130th Street station site could be affected by the RLE Project.

Compensatory Mitigation is required under the Clean Water Act:

- Replaces lost wetlands with the goal of “no net loss” of wetlands
- Takes place adjacent to or generally within the same watershed

CTA is coordinating with the Army Corps of Engineers regarding impacts to wetlands

Existing wetlands in the RLE Project Area

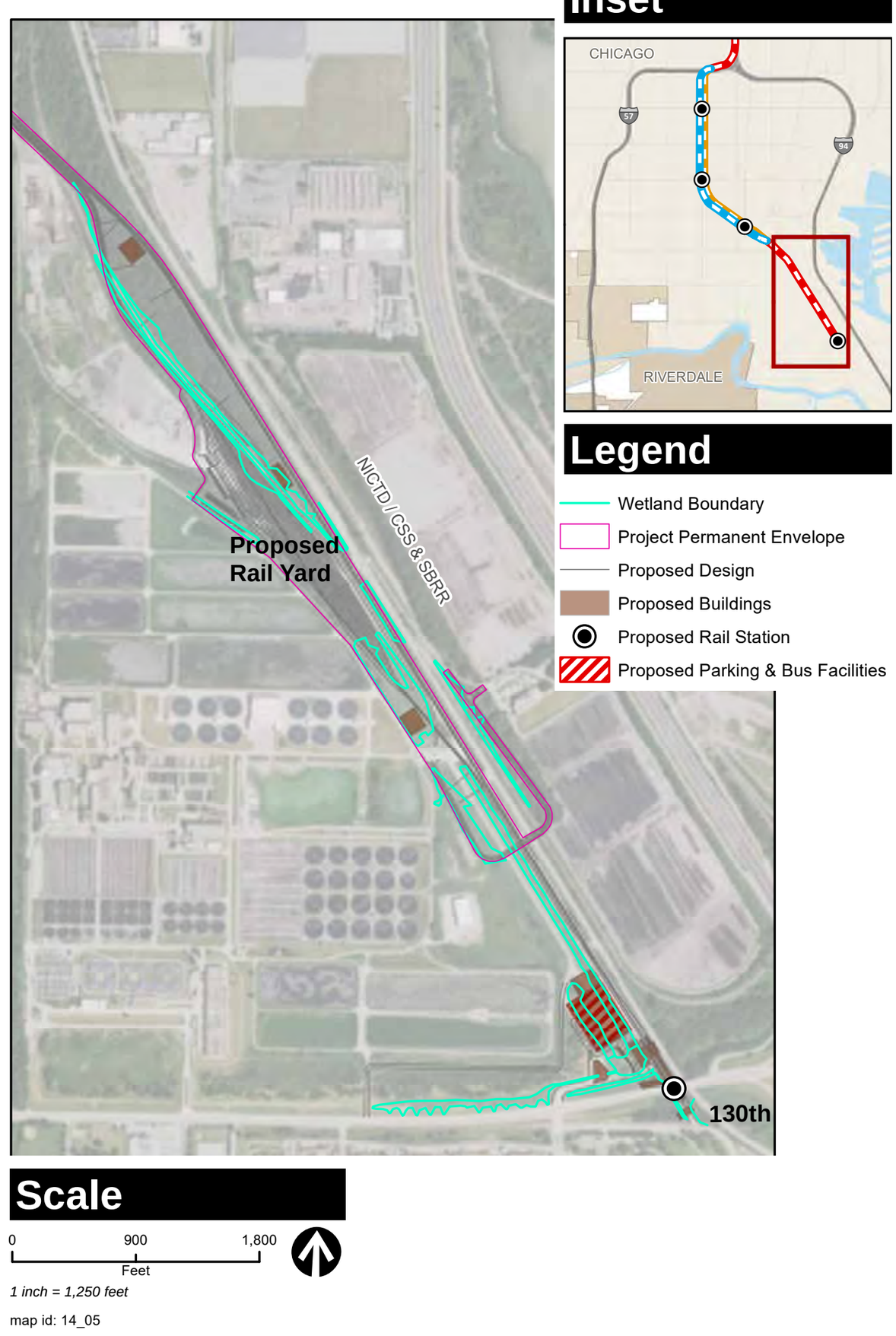

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Project Development Process

Concept Development
2006 ✓

Alternatives Analysis Study
2006 – 2009 ✓

Environmental Impact Statement Process

Public Scoping Meetings
September 2009 ✓

Prepare Draft EIS
2012 – 2016 ✓

RLE Added to CMAP *GO TO 2040* Regional Plan

We Are Here

Publish Draft EIS and Seek Public Comment

Final EIS & Record of Decision*

Project Development Phase*

Next Step
Identify Funding for Entry into Project Development

Project Engineering Phase*

Receive Full Funding Grant Agreement from FTA*

Construction*
(Expected to Last About 5 years)

OPEN FOR OPERATION

* Dependent on funding and approvals

✓ FTA Project Evaluation and Rating

Project Funding

- FTA's New Starts Program would likely fund up to 49% of the project cost
  - — The New Starts Program is competitive – the Red Line Extension Project would compete with projects across the country for these funds
- The remaining costs for construction would need to be funded through local and non-federal funds

Project Costs

- The East Option is estimated to cost $2.26 billion
- The West Option is estimated to cost $2.30 billion

cta

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Red Line Extension

Thank You for Participating!

Stay Involved

Next Steps

- CTA and FTA will respond to public comments on the Draft EIS as part of the Final EIS.
- CTA and FTA will complete any additional analyses required and prepare the Final EIS.
- The Final EIS will confirm whether the East or West Option is selected.
- FTA intends to issue a single document that consists of the Final EIS and Record of Decision in 2018.

Attachment 8
Comments Received

#1

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, October 07, 2016 6:18 AM
To: ifiworld2 .
Subject: RE: CTA Red Line Extension Public Hearing

Martin,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: ifiworld2 . [mailto:ifiworld@gmail.com]
Sent: Thursday, October 06, 2016 10:57 AM
To: Red Extension
Subject: CTA Red Line Extension Public Hearing

Sirs:

Although I will not be able to attend the public hearing, I suggest the CTA expand its plan for the Red Line Extension to include the line to extend to just north of I-80 in Lansing with a terminus, triple-decker garage parking area (Kiss n' Ride) with bicycle racks, and rail yard there for all south suburban rides to get to the Loop, with a stop at 159th Street near the River Oaks Mall in Calumet City and one stop at Sibley Boulevard.

Sincerely,

Martin Edward Lewis
ifiworld@gmail.com

#2

From: Lourdes Solorzano <cadillacti@gmail.com>
Sent: Thursday, October 06, 2016 11:13 AM
To: Red Extension
Subject: Red Line Extension Project

To Whom This May Concern,

My name is Lourdes “LuLu,” owner of Cadillac Transportation Inc. I am certified in many areas such as my DBE, MBE and WBE.

I’ve received an e-mail about the Red Line Extension Project and wondering how I can get involved.

I have worked on the Red Line before back in May to August 2013 as a night job. So I am very familiar with the job and location.

I was wondering how I can take apart in this or what I would have to do.

I look forward to your response. Thanks,

Lourdes "LuLu" Solorzano
Cadillac Transportation Inc.

cadillacti@gmail.com | Phone: 773-447-5559 | Fax: 708-333-1980
8236 Highgate Court, Orland Park, IL, 60462

#3

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, October 07, 2016 6:20 AM
To: Rosemary Alexander
Subject: RE: Red Line Extension Project

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Rosemary Alexander [mailto:rosemaryalexander48@gmail.com]
Sent: Thursday, October 06, 2016 2:34 PM
To: Red Extension
Subject: Red Line Extension Project

I am a senior resident of Matteson. I had wanted to copy the Rich Township Transportation and WillConnects2010 .org but those are looking so far broke or so they say or so far off that I probably won't even be around then.

My problem is they keep cutting transportation instead of increasing it. When I moved to the south suburbs there were so many more Pace bus routes. They constantly cut instead of increased while the population is getting older, less people drive and youth have no way to get to colleges, or jobs.

South of 183rd there is barely one east west route or no north south bus routes i.e., no transportation along Cicero or Pulaski south of 183rd. Economic development cannot improve without transportation. Food deserts cannot improve without transportation. Cutting the township budgets even further eliminates even more transportation for seniors. Case in point, try to get from 211th and Pulaski to 103rd and Wood or the Beverly area. Cannot be done because there are no buses that would take you to the nearest Rock Island Train at 159th and Cicero. I can't imagine the developers of businesses and homes have not asked that you increase public transportation along Cicero.

I hope you consider these updates in public transportation to the red line extension which connects the red line to 130th which is food but since federal funds are also used, why not extend other routes in south cook? Please consider spreading that money around to the south cook area and the township budgets.

#4

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, October 07, 2016 6:28 AM
To: Corey Ellison
Subject: RE: RLE Information Request

Corey,

Thank you for your interest in the Red Line Extension Project.

The Draft Environmental Impact Statement (EIS) for the project is now available on the CTA website here for public review. Citizens' Guide is available here and Project Overview flyer is available here. We are not mailing printed copies since these can be downloaded from our website.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Corey Ellison [mailto:coreyk.ellison@gmail.com]
Sent: Thursday, October 06, 2016 11:21 AM
To: Red Extension
Subject: RLE Information Request

I was inquiring about receiving a printed copy of the RLE Project Overview and Citizens' Guide mailed to the address listed below

Corey Ellison
3518 N. 60th St
Milwaukee, WI 53216

Kind Regards,

Corey Ellison

#5

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, October 07, 2016 6:58 AM
To: Deloris Lucas
Subject: RE: CTA Red Line Extension Draft Environmental Document and Public Hearing

Deloris,

Thank you for your interest in the Red Line Extension Project and sharing the notice at the next GGHA meeting.

The public hearing is scheduled on November 1, 2016 from 5:30 to 7:30 pm at St. John Missionary Baptist Church (211 E. 115th Street, Chicago, IL 60628). CTA bus route #34 provides direct service from 131st & Eberhart to the meeting location and runs every 12 minutes. We hope that neighborhood residents are able to utilize the #34 bus service and attend the meeting. Note that the hearing will be in open house format so people can drop in any time between 5:30 to 7:30 pm.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Deloris Lucas [mailto:deelucas2002@yahoo.com]
Sent: Thursday, October 06, 2016 12:18 PM
To: Red Extension
Subject: Re: CTA Red Line Extension Draft Environmental Document and Public Hearing

Thank you so much for this very important, long awaited, news!

I am representing the Golden Gate Sub Division, located at 130th & Eberhart.

I will share this notice at our next Golden Gate Homeowners Association (GGHA) Meeting on 10-22-16.

Our neighborhood includes many Senior Citizens and Residents that do not have transportation.

To ensure maximum participation, I request that CTA provide a bus to "shuttle" area residents to and from the above mentioned Public Hearing Meeting.

Thank you in advance.

Best Regards,

Deloris Lucas
President, GGHA
773-468-7941 home #

224-203-7429 cell #

On Thursday, October 6, 2016 9:54 AM, CTA Red Line Extension Project <RedExtension@transitchicago.com> wrote:

You're invited to a Public Hearing on the

Red Line Extension Project

Draft Environmental Impact Statement and Section 4(f) Evaluation Available for Public Review

CTA and Federal Transit Administration (FTA) are proposing to extend the Red Line 5.3 miles from 95th Street to 130th Street. Click here to learn more about the project.

Tuesday, November 1, 2016

5:30 to 7:30 PM

St. John Missionary Baptist Church
211 E. 115th Street, Chicago, IL 60628
This location is served by:
CTA Bus #34, #115, #119, and Metra Electric Kensington Station

This facility is accessible to people with disabilities.
This meeting will be conducted in an open house format.

CTA and FTA have prepared a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the proposed project. The Draft EIS documents the benefits and impacts of the alternatives being considered, which include impacts to parks and wetlands. **Click here to review the Draft EIS** on the RLE Project website. Hard copies of the Draft EIS also are available for review through November 30, 2016. **Click here to learn more about reviewing the Draft EIS.**

Comments on the Draft EIS are being accepted until November 30, 2016 at 4:30 PM. Comments on the Draft EIS may be made verbally to a court reporter or in writing during the hearing. You also can submit comments via e-mail to RedExtension@transitchicago.com or by mail to Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.

Do you require assistance?
If you require an interpreter, including sign language services, or other accommodations at this public hearing, contact Gerald Nichols, CTA Government and Community Relations, at least 5 days before the public hearing at 312-681-2710 or GNichols@transitchicago.com.

Para más informacion en Español, llame al 312-681-2710
Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

Thank you for your continued interest.

RLE Project Team
Chicago Transit Authority

This email was sent to deelucas2002@yahoo.com

why did I get this? unsubscribe from this list update subscription preferences

Chicago Transit Authority · Strategic Planning, 10th Floor · 567 W. Lake Street · Chicago, IL 60661 · USA

#6

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 10, 2016 7:00 AM
To: Rosen, Deane
Subject: RE: Please Add to Contact List

Deane,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Rosen, Deane [mailto:RosenD@RTACHICAGO.ORG]
Sent: Friday, October 07, 2016 2:14 PM
To: Red Extension
Subject: Please Add to Contact List

Hello,

Please add me to the contact list for the Red Line extension updates.

Thank you,

DEANÉ ROSEN
Manager, Mobility Education
Regional Transportation Authority · 175 W. Jackson Blvd # 1650, Chicago, IL 60604
Phone: 312.913.3197 · Cell: 312.613.1469 · RTAChicago.org

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#7

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, October 11, 2016 8:11 AM
To: William Moore
Subject: RE: Updates for Red Line Extension

William,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

-----Original Message-----
From: William Moore [mailto:outlook_45C400D4C94EFCDF@outlook.com] On Behalf Of William Moore
Sent: Monday, October 10, 2016 7:56 PM
To: Red Extension
Subject: Updates for Red Line Extension

I would like to receive updates about the Red Line Extension.

William E. Moore
CEO/Founder
EME Rail Solutions

#8

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, October 11, 2016 8:12 AM
To: Joey Hamer
Subject: RE: Updates

Joey,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Joey Hamer [mailto:joey.hamer@gmail.com]
Sent: Tuesday, October 11, 2016 9:02 AM
To: Red Extension
Subject: Updates

Hello!

Can you please add me to the update e-mail list? I'd like to stay informed!

Thanks,
Joey

#9

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected. **At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.** In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, along with state regulations. CTA is holding this meeting to allow potentially impacted property owners and lessees the opportunity to learn more about the project and what it could mean for your property.

Name Diane Williams

Address 9900 S. Yale Av

City Chgo **State** Il. **Zip** 60628

Email Address dylynnx@yahoo.com.

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☑ Email

Please describe your questions or concerns. How will this effect the value of ~~my~~ my property. When will you decide which side of the track will be used the east or west ~~d~~ side

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#10

56

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Name Rev. R.J. + Nancy Garner

Address 347 W. 102nd St

City Chgo **State** Il **Zip** 60628

Email Address

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☑ Phone ☐ Email 773 6601056

Please describe your questions or concerns. Concerns my property?
We prefer the west option

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#11

RED AHEAD
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Red Line Extension

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Name Carolyn or James Palmer

Address 319 W 100 PLACE

City CHICAGO **State** IL **Zip** 60628

Email Address PALMERCAROLYN@ATT.NET

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☐ Email

Please describe your questions or concerns.

THERE ARE TOO MANY TRAINS THERE ALREADY. WE HEAR TRAINS ALL D AND SOME AT NIGHT. JUST IMAGINE MORE TRAINS. THE TRAFFIC IS Affected TRYING TO cross. HOW WILL FIRE STATION on 103rd Adjust to this. My preference is for the West side, or Halsted or extend down Expressway.
How far down 100th PLACE will you Elacuate?

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#12

RED AHEAD
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Red Line Extension

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Property Acquisition and Relocation Community Meeting

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Name Joseph Johnson

Address 346 W. 101st Street

City Chicago **State** IL **Zip** 60628

Email Address grandmay1@sbcglobal.net

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☑ Phone ☐ Email (773) 264-5984

Please describe your questions or concerns.

I have not been informed that my property will be directly involved; however if the train must come through the neighborhood, the West side would be the best option.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#13

RED AHEAD
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Property Acquisition and Relocation Community Meeting

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Name Smith, Michael W.

Address 336 W. 102nd Street

City Chicago **State** Ill. **Zip** 60628

Email Address JTown1906@SBCglobal.net

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☐ Email

Please describe your questions or concerns. Why doesn't CTA use what is already there, like the express way (I-57) + Bishop Ford)?

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#14

29

RED AHEAD
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Property Acquisition and Relocation Community Meeting

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Name James Floyd

Address 355 W 99th Pl.

City Chicago **State** ILL **Zip** 60628

Email Address

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☑ Phone ☐ Email
MAIL

Please describe your questions or concerns.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#15

211

RED AHEAD
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Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

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Name Annie Illigpen

Address 11321 S. Princeton

City Chgo. **State** Il. **Zip** 60628

Email Address

☒ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☐ Email

Please describe your questions or concerns. No, I donot want this plan to go thru. I put a lot of funds in my house. I been in this area / this house for 44 years. I love my house. I need CTA to select the west side. This is terrible. I work hard, I put a lot of time in my property for many, many years. No I donot want to sell my house.

Annie Illigpen

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#16

214

RED AHEAD
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Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected. **At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.** In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, along with state regulations. CTA is holding this meeting to allow potentially impacted property owners and lessees the opportunity to learn more about the project and what it could mean for your property.

Name Cecilia Gutierrez

Address 11327 S princeton Ave

City Chicago **State** IL **Zip** 60628

Email Address GCecilia68@live.com

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☑ Phone ☑ Email 773-329-8115

Please describe your questions or concerns. I, Cecilia Gutierrez does not agree with this plan. I have put over 30,000 into this property. If CTA agrees to use the east Plan this affects my family and myself. We would have to relocate and start over. I can't even imagine having to do this. Please use the west plan or neither plan at all. This is where I call home. When I moved here my Intention was to upgrade the property and live here. Not to move 6 years later.

Cecilia Gutierrez

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#17

RED AHEAD
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Red Line Extension

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Property Acquisition and Relocation Community Meeting

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected. **At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.** In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, along with state regulations. CTA is holding this meeting to allow potentially impacted property owners and lessees the opportunity to learn more about the project and what it could mean for your property.

Name Andrea Barnes

Address 11322 S. Yale ave

City Chicago IL. 60628 **State** IL **Zip** 60628

Email Address

☒ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☒ Phone ☐ Email (773) 704-5412

Please describe your questions or concerns. To my knowledge my property is not affected by CTA's west to east plan. However, Im willing to sale if push comes to shove.

Andrea Barnes

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#18

28

RED AHEAD
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Red Line Extension

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Property Acquisition and Relocation Community Meeting

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Name ANNA Williams

Address 349 W 99TH PL

City Chgo **State** IL **Zip** 60628

Email Address N/A

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☑ Phone ☐ Email 773-568-2087

Please describe your questions or concerns.

1. Relocatment Fund.
2. Noise abatement.
3. Fair sales.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#19

57

RED AHEAD
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Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

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Name Deneteria Carmichael

Address 348 West 102nd Place

City Chicago **State** IL **Zip** 60628

Email Address dcarmich@hotmail.com

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☑ Phone ☐ Email 773-559-7037

Please describe your questions or concerns. I am currently unsure of the idea of CTA aquiring my property. I agree with the expansion and allowing more people to benefit from the reduction of travel time. I am uneasy with the process of getting another home loan while recently filing bankruptcy. If that process is comfortable, then I will be willing to relocate.

Another reason I am uneasy is the possibility of my home being appraised for less than

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

Additional Comments:

expected due to neighborhood changes since the time of purchase.

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

For additional information call: **(888) YOUR-CTA (888 968-7282)**

Para más información en Español, llame al **(312) 681-2710**

#20

42

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected. **At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.** In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, along with state regulations. CTA is holding this meeting to allow potentially impacted property owners and lessees the opportunity to learn more about the project and what it could mean for your property.

Name Cebell Huey

Address 352 W. 101st Street

City Chicago **State** Il **Zip** 60628

Email Address

☒ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☒ Phone ☐ Email 773-568-0531

Please describe your questions or concerns. I would highly recomend the West side of the rail at 101st - 99th and Eggleston to 103rd and beyond 103rd there is a lot of propertly that is not being used like 99th Eggeleston, and 103rd is not being used like the park. No one uses that park at all - no kids play there or anything.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#21

RED AHEAD
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Property Acquisition and Relocation Community Meeting

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Name Monique Smith

Address 336 W. 102nd St.

City Chicago **State** IL. **Zip** 60628

Email Address queenmo1913@sbcglobal.net

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☒ Email

Please describe your questions or concerns. I would like to suggest that the Red line extension be located on the westside of the railroad tracks due to the reduced number of homes and other structures that would be affected. I am also concerned about the impact on property values for the remaining homes located near the CTA tracks (related noise, parking areas, storage, etc...). I don't want the value of my home to decrease. How can I determine or find out what the financial impact would be?

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#22

50

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Name MS. DOIS A. ATWATER HOME 773-821-5995

Address 355 W. 101ST PLACE

City CHICAGO **State** ILLINOIS **Zip** 60628

Email Address msatwater65@gmail.com

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☒ Phone ☐ Email 773-821-5995

Please describe your questions or concerns. EAST OPTION NOISE CANCELLATION MY HOUSE IS IMPACTED BY THE EAST OR WEST DECISION DUE TO NOISE PROPERTY DAMAGE

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#23

52

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Name Ethe LeFlore

Address 352 W. 102nd st

City Chicago **State** Illinois **Zip** 60628

Email Address

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☒ Phone ☐ Email (773) 490-2585

Please describe your questions or concerns. I wouldn't like the traffic or the noise I love my house but if another train came down my area I wouldn't like it because it's really hard sleeping at night so I would want to move and relocate, I'm in between a rock in a hard place what happens I guess I will be ok with it.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#24

53

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Name LE RONNIE CAMERON

Address 348 W. 102nd ST.

City CHICAGO **State** IL **Zip** 60628

~~**Email Address**~~ PHONE (773) 568-5136 Caseylarel@gmail.com

☒ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☒ Phone ☐ Email 773-568-5136

Please describe your questions or concerns. I PREFER THE EL TO BE ON THE WEST SIDE, BECAUSE THERE IS MORE SPACE. MY PROPERTY SITS ON TWO PARCELS OF LAND BUT YOU ARE ONLY SHOWING TAKING ONE.

PUTTING THE R-LINE ON THE OTHER DOES NOT AFFECT ANY OF THE HOUSES ON THE OTHER SIDE OF THE UPRR.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#25

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, October 14, 2016 5:46 AM
To: laurenlake@rocketmail.com
Subject: RE: Informed

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Lauren Lake [mailto:laurenlake@rocketmail.com]
Sent: Wednesday, October 12, 2016 4:21 PM
To: Red Extension
Subject: Informed

I would like to be included in the updates on Red line extension project

Sent from Yahoo Mail on Android

#26

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, October 14, 2016 6:10 AM
To: tommy miller
Subject: RE: Comment

Pastor Tom,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: tommy miller [mailto:t.miller5050@yahoo.com]
Sent: Wednesday, October 12, 2016 5:50 PM
To: Red Extension
Subject: Comment

To whom it may concern,

I'm Pastor Tom Miller and I have read the EIS and I am in favor of the BRT and the UPRR rail alternative East or West option.

This project is well needed and perhaps overdue. This project will both create jobs and give access to jobs and by default reduce crime in the city. By not being cut off at 95th, the community will finally feel apart of the entire city of Chicago.

Thumbs up! Keep it moving!

Tommy L. Miller Realty
Cell (312)929-6539
Fax (708)360-3198
"No Regrets" *by Tom Miller*
"Get the book and get inspired!"
Amazon.com or local book store

#27

309

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Red Line Extension

Red Line Extension Project

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Name LEE A. Williams

Address 11310 S. Emerald

City Chgo **State** IL **Zip** 60628

Email Address CARLAHSE@aol.com

☒ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☒ Phone ☐ Email 773 928 5530

Please describe your questions or concerns. ① The Time frame for acquiring property if needed ② Re-location help ③ Fair market value for property?

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#28

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, October 14, 2016 6:14 AM
To: Jon Evans
Subject: RE: TEMPORARY RED LINE EXTENSION

Jon,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jon Evans [mailto:jkeiit963827@sbcglobal.net]
Sent: Thursday, October 13, 2016 6:14 AM
To: Red Extension
Subject: TEMPORARY RED LINE EXTENSION

Ladies and Gentlemen:

Of course, I believe that a Red Line Extension would be beneficial, as the Far South Side remains a veritable TRANSIT DESERT!

But it will take several years for the Red Line Extension to be built, and the first shovel of dirt hasn't even been turned yet!

I propose an alternate in the interim that might provide Quasi-Rapid Transit service-until the real Red Line Extension is actually built, completed, and on-line:

The only major arterial street between South Halsted Street and South State Street is South Wentworth Avenue from the Dan Ryan Expressway West Extension, Interstate 57 to 127th Street

Step 1

I propose making South Wentworth Avenue from Interstate 57 to 127th Street One-Way Southbound. By doing so, it would be possible to run express buses from

the 95th Street Red Line Terminal to 103rd, 107th, 111th, 115th, 119th, 127th Street, 130th and Indiana, and FoMoCo. A bus route from Western Avenue to the Metra Electric Station at 107th and Cottage Grove could run during daytime rush hours only. Also, any public or faith based schools along my proposed express bus route would be included as stops during school hours-as a courtesy to the community.

Automobiles would use the left lanes while the express buses and local residents, along the route, would use the right lanes.

Step 2.

I propose making South State Street from 127th Street to the 95th Street Red Line One-Way Northbound. By doing so, it would be possible to run express buses from FoMoCo to the 95th Street Red Line Terminal via 130th and Indiana, turning north at 127th and State, the Metra Electric Station at 121st and State, 119th and State, 115th, 111th, 107th, 103rd, and finally the 95th Street Red Line Terminal. Again: any public or faith based schools would also be included as stops during school hours as a courtesy to the community.

As in Step 1, automobiles would use the left lanes while the express buses and local residents along the route, would use the right lanes.

The route I propose roughly parallels the proposed Red Line Fixed Rail Extension. Again: the goal is to provide immediate relief to a transit desert by offering 24/7/365 or 366 transit service-until the fixed rail Red Line Extension is completed and on-line.

I am a former resident of West Pullman. Therefore, I can personally attest to how badly this type of interim fix is needed-immediately.

Any attempt to run an Express Bus down a narrow, and already congested South Michigan Avenue would, in my opinion, be disastrous. South Wentworth and South State is less congested, and could handle the traffic.

Sincerely,

Jon K. Evans
1633 West Madison Street
Apartment 1603 South
Chicago, Illinois
60612-4606
1-312-631-3919 Home
1-773-844-0568 Cell
jkeiit963827@sbcglobal.net
JKEIIT96@hotmail.com

#29

From: Red Extension <redextension@transitchicago.com>
Sent: Friday, October 14, 2016 5:45 AM
To: Joseph Varan
Subject: RE: letter regarding red line

Joe,

Thank you for providing us an updated address. We will make sure that you receive all future communications at this updated address.

Please let us know if you have any questions related to the letter that you received.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Joseph Varan [mailto:jvaran@gmail.com]
Sent: Thursday, October 13, 2016 3:29 PM
To: Red Extension
Subject: letter regarding red line

CTA Parcel ID: 255
PIN: 25-21-230-019-0000

I recieved a letter from you regarding this property. I wanted to let you know that I am the person who is the manager of the company that owns this property.

Please change the address in your records to:

2004 Tax & Scavenger
c/o Joseph Varan
PO BOX 382
Hinsdale, IL 60522

thanks

Joe Varan
312-970-0055

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Via Certified Mail, Regular Mail, and Hand Delivery
Mail ID: 255

2004 Tax & Scavenger
20 N. Clark Street #2450
Chicago, IL 60602

Dear Property Owner:

We are writing to share information about a proposed Chicago Transit Authority (CTA) project known as the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south from the 95th Street Terminal to 130th Street.

Federal law requires that all major projects seeking federal funding identify, disclose, and mitigate for any adverse environmental impacts of a proposed project. In compliance with these requirements and to become eligible for federal funding, the Federal Transit Administration and CTA will be publishing a Draft Environmental Impact Statement (EIS) in early October. The Draft EIS provides a comprehensive identification of potential environmental impacts that could result from this project, including potential property impacts.

Through this extensive planning, CTA has determined that it ***may*** be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured. The purpose of this letter is to let you know of the proposed RLE Project, its timeline and next steps, and to provide contact information to answer any preliminary questions you may have.

This letter is not a formal action to acquire your property, nor a letter of intent or offer to purchase your property. The information in this letter is not intended to affect your present ownership, management or control of your property in any way.

The property referenced below has been identified by CTA as one that **may** be necessary for the construction of the RLE Project if the CTA moves forward with **the East Option.** ***Because the CTA is still evaluating the two options, it is not known at this time whether***

acquisition of your property may be required. CTA will provide additional communication when the selected option has been decided.

The public records indicate that you are the owner of, or have an interest in, this property.

Owner of Record: 2004 Tax & Scavenger
Property Address: 46 W. 115th Street
Property Identification Number (PIN): 25-21-230-019-0000
Potential Impact: East Option]
CTA Parcel ID: 255

Preferred Alignment Description: The preferred alignment of the proposed rail extension would run along elevated tracks south along I-94 from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street.

CTA is currently considering two options of this alignment: the East Option and the West Option. The East Option would run to the east of the UPRR tracks between 99th Street and 118th Street, and the West Option would run to the west of the UPRR tracks in that segment. The alignment would be the same for the two options from 95th Street to 99th Street and from 118th Street to 130th Street. As noted above, CTA has not yet chosen one of the two options of the preferred alignment.

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. What this means is that CTA will treat property owners fairly and will seek cooperative settlements of property acquisitions.

Based on public feedback, environmental review, and funding availability, CTA expects to announce the selected option (either the East Option or the West Option) in 2017. After that and over the next few years, CTA will move forward with additional engineering work, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018, the earliest that the RLE Project is expected to begin construction would be in 2022, and service is anticipated to start in 2026. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

Properties that **may** be affected by the East or West Option between 111th Street and 115th Street are invited to attend an informational open house meeting on Wednesday, October 12 at 5:30 to 7:30 PM at Fenger Academy High School, 11220 S. Wallace Avenue, Chicago to discuss the RLE Project and what it could mean for your property. If you are unable to attend that meeting, you are welcome to join us at any one of the three meetings that will be held:

- **Tuesday, October 11** from 6:00 to 8:00 PM at Palmer Park, 201 E. 111th Street, Chicago (95th Street to 111th Street)

- **Wednesday, October 12** from 5:30 to 7:30 PM at Fenger Academy High School, 11220 S. Wallace Avenue, Chicago (111th Street to 115th Street)
- **Thursday, October 13** from 5:30 to 7:30 PM at Pullman Public Library, 11001 S. Indiana Avenue, Chicago (115th Street to 130th Street)

CTA will also be holding a public hearing on the Draft EIS in the coming weeks. During that meeting you will be able to learn more about the Draft EIS and findings from the environmental analysis, including impacts to properties. You will receive additional information about the public hearing in a separate mailing.

CTA's relocation liaison will be in your neighborhood visiting potentially displaced properties to discuss the relocation process and answer questions during the week of October 3, 2016.

Please contact CTA customer service at 1-888-YOUR-CTA (888) 968-7282 or redextension@transitchicago.com if you have any questions or would like to discuss this project further. If you are not the current property owner, please contact CTA customer service at the information above.

We welcome the opportunity to answer any questions you may have regarding the RLE Project. The CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago.

Sincerely,

Carole Morey
Chief Planning Officer
Chicago Transit Authority

#30

236

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Red Line Extension

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Name Charles Jackson

Address 125 W. 114th street

City Chicago **State** IL **Zip** 60628

Email Address C.Jackson.online@yahoo.com

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☐ Email

Please describe your questions or concerns.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#31

236

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Name Karen Crawl

Address 135 West 114th Street

City Chicago **State** IL **Zip** 60628

Email Address karen.crawl@gmail.com

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☐ Email

Please describe your questions or concerns.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#32

236

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Name Ellis Mack (Pastor)

Address 135 West 114th Street

City Chicago **State** IL **Zip** 60628

Email Address NowFaithC@att.net

☒ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☒ Phone ☐ Email 773-731-5249

Please describe your questions or concerns.

Chicago Tribune may possibly do a story at the church concerning the possibility of the extension project.

Kept updated as time progresses

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#33

From: Anjelica Pickett <anjelicapickett21@gmail.com>
Sent: Saturday, October 15, 2016 9:58 AM
To: Red Extension
Subject: CTA RedLine Extending Past the 95th Stop

Hello,

My am Anjelica Pickett and currently a Loyola student studying journalism. I have been living in Chicago all my life and have learned about the CTA extending past the 95th stop to 103th. This is great news and certainly a stepping stone opportunity for the current established communities in that area. As a journalist in training I want to do a news story about this project for a class assignment and hopefully there is someone I can talk to who is in charge of the project for an interview that will be recorded to explain the process and develop of the project. Feel free to contact me via email of phone and I look forward to meeting with you.

Anjelica Pickett
(773) 575-9002
anjelicapickett21@gmail.com

letter received 10/17/16

#34

October 6, 2016

Chicago Transit Authority
Strategic Planning, 10th Floor
Attn Red Line Extension Project
567 W Lake Street
Chicago, IL 60661

To Whom it May Concern:

As a frequent L rider I am opposed to extending the Red Line. My reasons are strictly based on safety and health concerns.

I ride the brown and purple line frequently to and from the loop from Lakeview and locally getting around. Both are generally clean and with the exception of a random panhandler appear to mostly be legitimate riders. I less frequently take the Red line but do so at least a few times a month between downtown locations (Jackson to Chicago or Grand) and also on occasion take the Red line from Belmont to/from 31st Street. The experience as a general rule is much different with much dirtier trains and feeling of needing to keep my belongings closer and less confident of my safety. I dread having to take the Red Line even with heightened police presence in many of the stations once on the platform or on the train I feel like a target.

I don't think it can be disputed that much of the crime occurring in Lakeview particularly around the Belmont Station, not to mention the shooting last summer near Oakdale between the Belmont and Fullerton Red line stops is a direct result of a negative element entering the neighborhood via the Red Line. Unless the City plans to place armed police on each and every L Red line car it is not safe to expand the red line. Security needs to be a primary objective on the current L lines and more seriously concerned for any expansion.

Thank you for your consideration,

A concerned citizen and L rider

#35

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, October 19, 2016 7:37 AM
To: sheri darnall
Subject: RE: protection

Sheri,

We appreciate your input and thank you for taking the time to provide comment. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: sheri darnall [mailto:sldarnall@hotmail.com]
Sent: Monday, October 17, 2016 7:11 AM
To: Red Extension
Subject: protection

I am all for extension we need more places for the homeless to live and public urinals-----go CTA--the el has a lot of problems---all lines with the homeless/vandalism/intimidation if Rahm had to ride the el with the stink every day something would be done---so Rahm get out of that motorcade that runs red lights and squeeze in with all the working people who are being taxed and paying your salary----also if you really think anyone would ever see a crazy person and push the blue button to talk to the conductor ----really-- also we are defenseless as all the cameras are after the fact of being robbed/hit/intimidated/yelled out and finally the people who smoke on the red line-----thanks for a bad commute before I go to work to pay your salary-----

#36

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, October 19, 2016 7:45 AM
To: stephensondw@yahoo.com
Subject: RE: Meeting

David,

Thank you for your interest in the Red Line Extension Project.

CTA is hosting a public hearing at the following location to provide information about the Draft EIS and solicit comments from the public.

Tuesday, November 1, 2016
5:30 - 7:30 PM
St. John Missionary Baptist Church
211 E. 115th Street
Chicago, IL 60628

The location of the public hearing is ADA-compliant and accessible by public transit. This location is served by CTA Buses #34, #115 and #119, and the Metra Electric District Kensington Station.

This meeting will be conducted in an open house format. Comments on the Draft EIS may be made verbally to a court reporter or in writing during the public hearing.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: David Stephenson [mailto:stephensondw@yahoo.com]
Sent: Monday, October 17, 2016 7:16 PM
To: Red Extension
Subject: Meeting

Could you tell me where is the location for the November 1st red line extension meeting?

Sent from Yahoo Mail on Android

#37

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

QUEREMOS SABER SU OPINIÓN

sobre el proyecto Expansión de la Línea Roja (RLE)

CTA, como auspiciador del proyecto de Federal Transit Administration (FTA), está aceptando comentarios sobre el impacto y medidas de mitigación identificados en el borrador de la Declaración de Impacto Ambiental (DIA) del proyecto RLE. CTA está aceptando comentarios sobre el borrador de la DIA hasta el 30 de noviembre de 2016. Todos los comentarios que se reciban durante este plazo y las respuestas a esos comentarios se incorporarán en la DIA final. Por favor **escriba en letra de imprenta**.

Nombre MARCELINA SIANEZ

Dirección 11572 - S. WABASH AV.

Ciudad Chicago IL 60628 **Estado** _____ **Código postal** _____

Correo electrónico _____

☒ **Marque la casilla aquí** para recibir también información actualizada sobre otros proyectos en la Línea Roja.

¿Cuáles son sus preocupaciones sobre la **Opción del Este?** _____

¿Cuáles son sus preocupaciones sobre la **Opción del Oeste?** _____

Comentarios: _____

También puede enviar preguntas o comentarios por correo electrónico a RedExtension@transitchicago.com.

Reverso ⟶

¿Tiene alguna preocupación sobre el impacto del proyecto RLE relacionado con las siguientes áreas de recursos? Si contesta sí, por favor explique.

Transporte: SI

Uso de terreno y desarrollo económico: SI

Desplazamientos de propiedades: SI

Vecindarios y comunidades: SI

Impactos visuales (qué aspecto tendría): SI

Ruido y vibraciones: SI

Impactos a recursos históricos: SI

Protección y seguridad: SI

Materiales peligrosos: SI

Humedales: SI

Parques: SI

Impactos de la construcción: SI

Fondos para el proyecto: SI

Otra:

Puede entregar la tarjeta de comentarios cumplimentada a CTA durante la reunión o puede enviar sus comentarios a la siguiente dirección: Puede entregar la tarjeta de comentarios cumplimentada a CTA durante la reunión o puede enviar sus comentarios a la siguiente dirección: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

También puede enviar un correo electrónico a: **RedExtension@transitchicago.com**

Información al cliente: (888) YOUR-CTA (888 968-7282)
Para más información en español, llame al (312) 681-2710
Todos los comentarios escritos tienen que enviarse a más tardar el 30 de noviembre de 2016 a las 4:30 p.m.

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name *Marcelina Sianez*

Address *11572 S. Wabash Ave.*

City *Chicago* **State** *IL* **Zip** *60628*

Email Address _____

[X] **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** _____

What are your concerns about the **West Option?** _____

Comments: _____

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: *Yes*

Land Use and Economic Development: *Yes*

Property Displacements: *Yes*

Neighborhoods & Communities: *Yes*

Visual Impacts (how it would look): *Yes*

Noise & Vibration: *Yes*

Impacts to Historic Resources: *Yes*

Safety & Security: *Yes*

Hazardous Materials: *Yes*

Wetlands: *Yes*

Parks: *Yes*

Construction Impacts: *Yes*

Project Funding: *Yes*

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#38

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

QUEREMOS SABER SU OPINIÓN

sobre el proyecto Expansión de la Línea Roja (RLE)

CTA, como auspiciador del proyecto de Federal Transit Administration (FTA), está aceptando comentarios sobre el impacto y medidas de mitigación identificados en el borrador de la Declaración de Impacto Ambiental (DIA) del proyecto RLE. CTA está aceptando comentarios sobre el borrador de la DIA hasta el 30 de noviembre de 2016. Todos los comentarios que se reciban durante este plazo y las respuestas a esos comentarios se incorporarán en la DIA final. Por favor **escriba en letra de imprenta**.

Nombre Elsa Ponce

Dirección 11615 S. Prairie Av

Ciudad Chicago, **Estado** Ill **Código postal** 60628

Correo electrónico

☑ **Marque la casilla aquí** para recibir también información actualizada sobre otros proyectos en la Línea Roja.

¿Cuáles son sus preocupaciones sobre la **Opción del Este?** El Ruido especialmente y mucho trafico de personas y carros y jardines, caminos para cortinar cada tien

¿Cuáles son sus preocupaciones sobre la **Opción del Oeste?**

Comentarios: Lotes vacios

detener paredes para disminuir el ruido

Noise Barriers compare Not 4 feet

Recomended 8 feets

También puede enviar preguntas o comentarios por correo electrónico a RedExtension@transitchicago.com.

Reverso →

¿Tiene alguna preocupación sobre el impacto del proyecto RLE relacionado con las siguientes áreas de recursos? Si contesta sí, por favor explique.

Transporte: Si

Uso de terreno y desarrollo económico: Si

Desplazamientos de propiedades: Si

Vecindarios y comunidades: Si

Impactos visuales (qué aspecto tendría): Si

Ruido y vibraciones: Si

Impactos a recursos históricos: Si

Protección y seguridad: Si

Materiales peligrosos: Si

Humedales: Si

Parques: Si patrsto Walk

Impactos de la construcción: Si

Fondos para el proyecto: Si

Otra: Mucho trafico

Puede entregar la tarjeta de comentarios cumplimentada a CTA durante la reunión o puede enviar sus comentarios a la siguiente dirección: Puede entregar la tarjeta de comentarios cumplimentada a CTA durante la reunión o puede enviar sus comentarios a la siguiente dirección: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

También puede enviar un correo electrónico a: **RedExtension@transitchicago.com**

Información al cliente: (888) YOUR-CTA (888 968-7282)
Para más información en español, llame al (312) 681-2710
Todos los comentarios escritos tienen que enviarse a más tardar el 30 de noviembre de 2016 a las 4:30 p.m.

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name *Elsa Ponce*

Address *11615 S. Praire Ave.*

City *Chicago* **State** *IL* **Zip** *60628*

Email Address

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

The noise, particularly, and a lot of pedestrians and car traffic. Gardens, paths for walking every day.

What are your concerns about the **West Option?**

Comments: *Empty lots*

Have walls to reduce the noise.

Noise barrier concerns not 4 feet.

I recommend 8 feet.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: *Yes*

Land Use and Economic Development: *Yes*

Property Displacements: *Yes*

Neighborhoods & Communities: *Yes*

Visual Impacts (how it would look): *Yes*

Noise & Vibration: *Yes*

Impacts to Historic Resources: *Yes*

Safety & Security: *Yes*

Hazardous Materials: *Yes*

Wetlands: *Yes*

Parks: *Yes. Parks to walk.*

Construction Impacts: *Yes*

Project Funding: *Yes*

Other: *A lot of traffic.*

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#39

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, October 25, 2016 7:55 AM
To: La Risa Lynch
Subject: RE: add to contact list for RLE

La Risa,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: La Risa Lynch [mailto:larisalynch@yahoo.com]
Sent: Tuesday, October 25, 2016 9:48 AM
To: Red Extension
Subject: add to contact list for RLE

thank you

La Risa Lynch
Freelance writer
NeighborhoodScribe.com
ChicagoNewsBlog.org
My Pinterest Portfolio

#40

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, October 25, 2016 12:41 PM
To: Sara Todd
Subject: RE: concern

Sara,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Sara Todd [mailto:sstodd@gmail.com]
Sent: Tuesday, October 25, 2016 2:32 PM
To: Red Extension
Subject: concern

I saw the posting on the CTA about the red line extension project. I am greatly concerned about any destruction of wetlands or natural spaces. I am opposed to any extension project that causes even a moderate degree of wetland destruction or wildlife deaths. Please do not cause harm to our environment or the animals in it. I'm sure there is a need for an extended red line to reach more people on the south side. I strongly favor any extension that doesn't cause harm to the environment, but may cost more. I'm willing to pay a higher CTA fare if it means protecting the environment.
Thank you,
Sara Todd

#41

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, October 25, 2016 1:55 PM
To: Joshua Pomales
Subject: RE: Red line extension

Joshua,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Joshua Pomales [mailto:jpom82@gmail.com]
Sent: Tuesday, October 25, 2016 3:52 PM
To: Red Extension
Subject: Red line extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,
Joshua Pomales

#42

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, October 25, 2016 2:18 PM
To: Jen Pulins
Subject: RE: Request For Red Line Extension to run on the WEST side of Union Pacific Railroad

Jen,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jen Pulins [mailto:jsellers55@hotmail.com]
Sent: Tuesday, October 25, 2016 4:14 PM
To: Red Extension
Subject: Request For Red Line Extension to run on the WEST side of Union Pacific Railroad

I'm writing as a supporter of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.
For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.
Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.
Yours Truly,
Jen Pulins

#43

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:09 PM
To: West Chesterfield
Subject: RE: RLE Project contact list

Michael,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: West Chesterfield [mailto:wcca1956@gmail.com]
Sent: Wednesday, October 26, 2016 12:50 AM
To: Red Extension
Subject: RLE Project contact list

Please add me to the RLE contact list.

--
Michael LaFargue, President
West Chesterfield Community Association (WCCA) Inc.
Email: wcca1956@gmail.com

Visit our official website at http://wccalive.org/
Follow us on Facebook at: https://www.facebook.com/WCCAInc1956/
Follow us on Twitter at: https://twitter.com/WCCAInc1956 or @WCCAInc1956
Make a one-time or recurring donation to WCCA inc.: http://bit.ly/WCCAdonations

#44

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:12 PM
To: Sandy Henkel
Subject: RE: Red Line Extension

Sandy,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Sandy Henkel [mailto:sandy.henkel@cru.org]
Sent: Wednesday, October 26, 2016 8:04 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th Street. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Sandy

Sandy Henkel
Equipping Urban Leaders
CRU - Inner City - Chicago
773-821-7060 x311
sandy.henkel@cru.org
www.HLICchicago.org

#45

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:12 PM
To: Liz Stewart
Subject: RE: Red Line Extension

Elizabeth,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Liz Stewart [mailto:ejcooper03@gmail.com]
Sent: Wednesday, October 26, 2016 8:08 AM
To: Red Extension
Subject: Red Line Extension

CTA,
I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.
For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.
Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.
Yours Truly,
Elizabeth Stewart -CRU Sponsor

#46

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:13 PM
To: Katie Smyth
Subject: RE: Red Line Extension

Katie,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Katie Smyth [mailto:katiejsmyth@gmail.com]
Sent: Wednesday, October 26, 2016 8:11 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Katie Smyth

#47

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:13 PM
To: Jodi KLUSACEK
Subject: RE: Plea for the West side

Jodi,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jodi KLUSACEK [mailto:jodiklus@sbcglobal.net]
Sent: Wednesday, October 26, 2016 8:16 AM
To: Red Extension
Subject: Plea for the West side

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Jodi Klusacek

#48

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:13 PM
To: Kayla McCarthy
Subject: RE: Red line extension request

Kayla,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Kayla McCarthy [mailto:kd.mccarthy@comcast.net]
Sent: Wednesday, October 26, 2016 8:16 AM
To: Red Extension
Subject: Red line extension request

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Kayla McCarthy

#49

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:14 PM
To: Chazle' Woodley
Subject: RE: Red Line Extension

Chazle',

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Chazle' Woodley [mailto:chazlewoodley@gmail.com]
Sent: Wednesday, October 26, 2016 8:19 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Chazle' N. Woodley
919-428-4571
www.chazlewoodleyministries.com
"Learn to do right; seek justice. Defend the oppressed. Take up the cause of the fatherless; plead the case of the widow." Isaiah 1:17

#50

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:15 PM
To: Karen Wrobel
Subject: RE: Proposed red line extension

Karen,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Karen Wrobel [mailto:mnkwrobes@gmail.com]
Sent: Wednesday, October 26, 2016 8:19 AM
To: Red Extension
Subject: Proposed red line extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Karen Wrobel

312-543-3602

Sent from my iPhone

#51

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:15 PM
To: meritadlsmb@gmail.com
Subject: RE: Save the parking lot at 342 W 111th St!

David,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: meritadlsmb@gmail.com [mailto:meritadlsmb@gmail.com]
Sent: Wednesday, October 26, 2016 8:30 AM
To: Red Extension
Subject: Save the parking lot at 342 W 111th St!

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. It partners with over 200 churches/ministries throughout Chicagoland to serve the poor. The Center holds events throughout the year that overwhelm the current parking in the area (which is on the east side of the proposed extension). For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute over 2500 boxes of food. Thousands of people are served in multiple ways thru this dedicated, active ministry year around.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering this request. I trust the Red Line Extension will indeed to decide to run the extension on the WEST side of the railroad line.

Sincerely yours,
David Scott

#52

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:15 PM
To: Jeff Pan
Subject: RE: Red Line Extension

Jeffrey,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jeff Pan [mailto:jeffreypan78@gmail.com]
Sent: Wednesday, October 26, 2016 8:39 AM
To: Red Extension
Subject: Red Line Extension

Hello,

I am writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Jeffrey Pan

#53

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:16 PM
To: Chris Boeyink
Subject: RE: Which side?

Chris,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Chris Boeyink [mailto:chrisboeyink@gmail.com]
Sent: Wednesday, October 26, 2016 8:43 AM
To: Red Extension
Subject: Which side?

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Chris Boeyink

#54

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:16 PM
To: Tom & Jane Smith
Subject: RE: extending the Red line-AND saving the parking PLEASE

Jane and Tom,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Tom & Jane Smith [mailto:twhsmith@frontier.com]
Sent: Wednesday, October 26, 2016 8:47 AM
To: Red Extension
Subject: extending the Red line-AND saving the parking PLEASE

We give to help support Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

We were very happy to learn about the proposed extension as it will help many. BUT parking is needed especially for all the volunteers who come in to help with the projects. It is hard now, and if you take any away it will be terrible!! Please run your extension along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering our request. We hope it will be brought to bear upon the Red Line Extension's positioning. God bless you all. Jane & Tom Smith

#55

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:16 PM
To: Ruthie Williams
Subject: RE: Red Line Extension

Ruthie,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Ruthie Williams [mailto:ruwillia@comcast.net]
Sent: Wednesday, October 26, 2016 8:48 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Ruthie Williams

Sent from my iPhone

#56

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:17 PM
To: Dr. John Hart
Subject: RE: Red Line Extension Proposal

Dr. Hart,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Dr. John Hart [mailto:john.hart@moody.edu]
Sent: Wednesday, October 26, 2016 8:50 AM
To: Red Extension
Subject: Red Line Extension Proposal

Dear CTA Personnel,

Like several others, I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years! Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. They holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Thanks,

John

Dr. John F. Hart
Professor of Bible/New Testament

MOODY BIBLE INSTITUTE
820 N. LaSalle Blvd., Chicago, IL 60610
moody.edu

From the Word to Life

Gary Chapman is "arguably the country's most successful marriage therapist" (*Time* ® Magazine, June 13, 2016)—his book *The 5 Love Languages* (Moody Publishers) "has been on some version of the New York *Times* best-seller list for eight straight years."

My books:
• *50 Things You Need to Know About Heaven*, can be found at http://www.amazon.com/Things-Need-Know-About-Heaven/dp/0764211668.
• *Answers to the Most Important Questions about the End Times*, found at http://www.amazon.com/gp/product/0764217852
• *Evidence for the Rapture: A Biblical Case for Pretribulationism*, can be found at http://www.amazon.com/Evidence-Rapture-Biblical-Case-Pretribulationism-ebook/dp/B00PI111M2/ref=dp_kinw_strp_1

#57

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:18 PM
To: Hugh Williams
Subject: RE: Red Line Extension

Dr. Williams,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Hugh Williams [mailto:huwillia@icloud.com]
Sent: Wednesday, October 26, 2016 9:01 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Dr. Hugh D. Williams Jr., D.D.; Th. D.

#58

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:18 PM
To: Jason Gordon
Subject: RE: Agape Center parking lot

Jay,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jason Gordon [mailto:jayb05@aol.com]
Sent: Wednesday, October 26, 2016 9:03 AM
To: Red Extension
Subject: Agape Center parking lot

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Jay Gordon

#59

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:18 PM
To: Carolyn Davis
Subject: RE: Save the Parking Lot of Cru Inner City

Carolyn,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Carolyn Davis [mailto:Daviscdkind@aol.com]
Sent: Wednesday, October 26, 2016 9:05 AM
To: Red Extension
Subject: Save the Parking Lot of Cru Inner City

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Carolyn Davis

Sent from my iPad

#60

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:19 PM
To: Bruneau, Whitney
Subject: RE: Red Line Extension

Whitney,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Bruneau, Whitney [mailto:wbrunea@ostatemail.okstate.edu]
Sent: Wednesday, October 26, 2016 9:13 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. I had the opportunity to stay there last year for a mission trip and have seen the impact they have on the community. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have over 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the **WEST** side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain its existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Respectfully,

Whitney Bruneau

#61

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:19 PM
To: Shanda Eickelberger
Subject: RE: Red Line Extension - Go WEST young man

Shanda,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Shanda Eickelberger [mailto:shanda.eickelberger@gmail.com]
Sent: Wednesday, October 26, 2016 9:30 AM
To: Red Extension
Subject: Red Line Extension - Go WEST young man

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Shanda Eickelberger

#62

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:19 PM
To: Andrea Lollis
Subject: RE: Red Line Extension to 130th St.

Andrea,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Andrea Lollis [mailto:lollisa@anderson3.k12.sc.us]
Sent: Wednesday, October 26, 2016 9:34 AM
To: Red Extension
Subject: Red Line Extension to 130th St.

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Andrea Lollis

"Love God. Love People. Do what you love." --Lecrae

All communications are the property of Anderson County SD #3 and are subject to monitoring.

#63

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:19 PM
To: Rita Usher
Subject: RE: HELLO

Rita,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Rita Usher [mailto:wanab1@yahoo.com]
Sent: Wednesday, October 26, 2016 9:37 AM
To: Red Extension
Subject: HELLO

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Rita Usher

#64

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:22 PM
To: ALAN M
Subject: RE: Red Line extension comment

Alan,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: ALAN M [mailto:alanm240@yahoo.com]
Sent: Wednesday, October 26, 2016 9:45 AM
To: Red Extension
Subject: Red Line extension comment

Dear CTA,

I understand your interest in this project - the extension to 130th Street - which seeks to address some valid concerns. But, at $2 billion, I think it's way too expensive. Our limited resources should be focused where they can produce the most benefit for all the region's residents. Other projects on CMAP's list, such as the West Loop Transportation Center, show more merit in this regard. Please proceed cautiously and plan carefully, thank you,

ALAN

Alan P. Mammoser
3501 W. Evergreen Avenue
Chicago, IL 60651 USA
tel 773.276.2470

#65

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:23 PM
To: Taliaha Koutz
Subject: RE: Please save our access

Taliaha,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Taliaha Koutz [mailto:taliaha@comcast.net]
Sent: Wednesday, October 26, 2016 9:52 AM
To: Red Extension
Subject: Please save our access

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best

opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Taliaha Koutz

#66

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:23 PM
To: Charles Brobst
Subject: RE: Our plea

Chuck,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Charles Brobst [mailto:chuck.brobst@icloud.com]
Sent: Wednesday, October 26, 2016 9:55 AM
To: Red Extension
Subject: Our plea

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Chuck Brobst

Sent from my iPhone

#67

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:24 PM
To: Angelique Chatman
Subject: RE: Red Line Extension

Angelique,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Angelique Chatman [mailto:achatmanbccc@ymail.com]
Sent: Wednesday, October 26, 2016 10:01 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Angelique Chatman

#68

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:26 PM
To: Peter DiGiacinto
Subject: RE: Red Line Extension

Peter,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Peter DiGiacinto [mailto:peter.digiacinto@ineos.com]
Sent: Wednesday, October 26, 2016 10:02 AM
To: Red Extension
Subject: Red Line Extension

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

As a faithful supporter of this organization for 35 years, I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Best Regards,

Peter DiGiacinto

#69

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:26 PM
To: Wai-Chin Matsuoka
Subject: RE: Request to run CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line.

Wai-Chin,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Wai-Chin Matsuoka [mailto:johnchin@dls.net]
Sent: Wednesday, October 26, 2016 10:06 AM
To: Red Extension
Subject: Request to run CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line.

CTA,

I'm writing **on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628.** This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Wai-Chin

Wai-Chin Matsuoka
johnchin@dls.net

#70

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:27 PM
To: Angelique Chatman
Subject: RE: Red Line Extension

Angelique,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Angelique Chatman [mailto:an_joli1@yahoo.com]
Sent: Wednesday, October 26, 2016 10:05 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Angelique

#71

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:28 PM
To: Pearl Willis
Subject: RE: PLEASE HELP US SAVE THE AGAPE CENTER PARKING LOT

Ms. Pearl,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Pearl Willis [mailto:mspearlwillis3@yahoo.com]
Sent: Wednesday, October 26, 2016 10:19 AM
To: Red Extension
Subject: PLEASE HELP US SAVE THE AGAPE CENTER PARKING LOT

Dear CTA,

We are requesting that you DO NOT put a train stop next to the Agape Center. These people need this parking lot as they do many out reaches for this community. Volunteers park there, trunks unload there and children walk through there. The Agape Center has been in our community for well over 35 years. My children were mentored in this community center, they got help with their homework and encouragement. The children of this community share with the staff and volunteers of this center problems that they can't share with their parents. They find help at the Agape Center. There have been days when I couldn't feed my children and we found help at this center. This center means so much to so many people, please keep this in mind while making your decision about our community. Is there somewhere else this station can be put other than the parking lot of our center!

By HIS Grace
Ms. Pearl

#72

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:28 PM
To: s-peder@netscape.com
Subject: RE: Concerning the Redline extention on far south side...

Stephen,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: s-peder@netscape.com [mailto:s-peder@netscape.com]
Sent: Wednesday, October 26, 2016 10:21 AM
To: Red Extension
Subject: Concerning the Redline extention on far south side...

10-26-2016
CTA,

I'm sending this letter as a tutor at the Agape Center at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

- Stephen Pederson

Yours Truly,

#73

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:29 PM
To: amartin_1968@yahoo.com
Subject: RE: save our parking lot

Adrian,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Adrian Martin [mailto:amartin_1968@yahoo.com]
Sent: Wednesday, October 26, 2016 10:38 AM
To: Red Extension
Subject: save our parking lot

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Adrian Martin

773-294-0797

Sent from Yahoo Mail on Android

#74

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:29 PM
To: Monica Crouse
Subject: RE: Red Line Extension Request

Monica,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Monica Crouse [mailto:monica.crouse@cru.org]
Sent: Wednesday, October 26, 2016 10:39 AM
To: Red Extension
Subject: Red Line Extension Request

To the Red Extension Committee at CTA:

I'm writing to you as a resident of the Roseland/Pullman community, as a community volunteer and budding activist in the Roseland community as well as one gainfully employed in the Roseland community where I live, serve, work, and worship. **I am writing to you on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628.** This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve those who are poor and/or fatherless. Cru holds events throughout the year that overwhelm the current parking in the area. **For example, this Thanksgiving 2016 Cru will have 500 volunteers working to pack and distribute 2650 boxes of food, which is an increase from last 2015's 2400 boxes of food that were distributed.** Thousands of people are served and mobilized through Cru's ministry.

For these reasons, I request that the CTA Red Line Extensions run along the **WEST** side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Monica Anissa Crouse

#75

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:30 PM
To: David and Marsha Gage
Subject: RE: Request

Marsha,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: David and Marsha Gage [mailto:mddgage@comcast.net]
Sent: Wednesday, October 26, 2016 10:51 AM
To: Red Extension
Subject: Request

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the

year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Marsha Gage

#76

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:31 PM
To: Rachel Press
Subject: RE: Extension Route and Stop

Rachel,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Rachel Press [mailto:rachel.press11@gmail.com]
Sent: Wednesday, October 26, 2016 10:57 AM
To: Red Extension
Subject: Extension Route and Stop

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Rachel Press

Rachel Press
rachel.press11@gmail.com
513-520-5195

#77

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:31 PM
To: Hines, Timothy C - BLOOMINGTO IL
Subject: RE: Request

Timothy,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Hines, Timothy C - BLOOMINGTO IL [mailto:timothy_hines@ml.com]
Sent: Wednesday, October 26, 2016 11:03 AM
To: Red Extension
Cc: Brad Harry
Subject: Request

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain its existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,
Tim Hines

Timothy C. Hines, CIMA®
Senior Vice President – Wealth Management
Wealth Management Advisor
NMLS #560416

Hines Kellem Group
Merrill Lynch, Pierce, Fenner & Smith
2205 East Empire Street, Suite C
Bloomington, IL 61704
T (309) 664.8608
Toll Free (800) 810.8889
Timothy_hines@ml.com
www.fa.ml.com/hineskellemgroup

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#78

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:31 PM
To: pam outlaw
Subject: RE: Red Line Extension

Pam,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: pam outlaw [mailto:outlawpam@yahoo.com]
Sent: Wednesday, October 26, 2016 11:05 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Pam Outlaw

#79

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:31 PM
To: B
Subject: RE: Red Line Extension - Please Run WEST of UP Railroad line!

Brittany,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: B [mailto:bcookf2@gmail.com]
Sent: Wednesday, October 26, 2016 11:30 AM
To: Red Extension
Subject: Red Line Extension - Please Run WEST of UP Railroad line!

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Brittany

#80

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:32 PM
To: Milly Soto
Subject: RE: Red Line Extension

Milly,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Milly Soto [mailto:millysoto17@yahoo.com]
Sent: Wednesday, October 26, 2016 11:30 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Milly Soto

#81

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:32 PM
To: Sue Hale
Subject: RE: Save our parking lot!

Sue,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Sue Hale [mailto:suehale@earthlink.net]
Sent: Wednesday, October 26, 2016 11:51 AM
To: Red Extension
Subject: Save our parking lot!

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly, George and Sue Hale

#82

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:32 PM
To: Karen Hibberd Crebs
Subject: RE: Red line extension

Karen,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Karen Hibberd Crebs [mailto:kahibberd@yahoo.com]
Sent: Wednesday, October 26, 2016 12:01 PM
To: Red Extension
Subject: Red line extension

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th Street, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th Street. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving, Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain its existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Karen Crebs

#83

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:33 PM
To: Sarah Hedman
Subject: RE: Agape center

Sarah,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Sarah Hedman [mailto:ssh2578@gmail.com]
Sent: Wednesday, October 26, 2016 12:02 PM
To: Red Extension
Subject: Agape center

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Sarah Hedman

#84

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:33 PM
To: Lauryn Coombs
Subject: RE: Save the Parking Lot!

Lauryn,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Lauryn Coombs [mailto:lncoombs@ncsu.edu]
Sent: Wednesday, October 26, 2016 12:13 PM
To: Red Extension
Subject: Save the Parking Lot!

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Lauryn

#85

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:33 PM
To: Elizabeth M. Johnson
Subject: RE: Red Line Extension

Elizabeth,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Elizabeth M. Johnson [mailto:horsegal316@gmail.com]
Sent: Wednesday, October 26, 2016 12:20 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

I have seen and experienced firsthand the blessing and light that the Agape Community Center is for their local community in Roseland, and though the proposed red line extension will be valuable for them, it is also imperative that their services not be diminished.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Elizabeth Johnson

#86

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:34 PM
To: wandarials@sbcglobal.net
Subject: RE: Please save our parking lot

Wanda,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: wandarials@sbcglobal.net [mailto:wandarials@sbcglobal.net]
Sent: Wednesday, October 26, 2016 12:24 PM
To: Red Extension
Subject: Please save our parking lot

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Wanda Rials

#87

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:34 PM
To: zachary massie
Subject: RE: Red Line Extension

Zach,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: zachary massie [mailto:zjmassie@gmail.com]
Sent: Wednesday, October 26, 2016 12:34 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Zach M.

--
Sent from Gmail Mobile

#88

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:34 PM
To: Kenneth Robinson
Subject: RE: Cru Inner City

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Kenneth Robinson [mailto:ophie@msn.com]
Sent: Wednesday, October 26, 2016 12:36 PM
To: Red Extension
Subject: Cru Inner City

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Sent from my Verizon 4G LTE smartphone

#89

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:34 PM
To: Heather Myers
Subject: RE: Red Extension Roseland

Heather,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Heather Myers [mailto:hnmyers@gmail.com]
Sent: Wednesday, October 26, 2016 1:41 PM
To: Red Extension
Subject: Red Extension Roseland

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Heather Myers
hnmyers@gmail.com
(919) 308-9771

#90

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:35 PM
To: Bethany Norman
Subject: RE: Red Line Extension Request

Bethany,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Bethany Norman [mailto:bethany.norman@cru.org]
Sent: Wednesday, October 26, 2016 1:57 PM
To: Red Extension
Subject: Red Line Extension Request

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Bethany

--

Bethany Norman
Cru Inner City Chicago
773-821-7060 x305
bethany.norman@cru.org
www.hlicchicago.org

#91

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:35 PM
To: Christine OLaughlin
Subject: RE: Red Line Extension

Christine,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Christine OLaughlin [mailto:c.olaughlin@sbcglobal.net]
Sent: Wednesday, October 26, 2016 2:03 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Christine O'Laughlin

2322 W 107th St

Chicago IL 60643

#92

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:35 PM
To: wconnonwesley@gmail.com
Subject: RE: Red line extension

Wesley,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: wconnonwesley@gmail.com [mailto:wconnonwesley@gmail.com]
Sent: Wednesday, October 26, 2016 12:54 PM
To: Red Extension
Subject: Red line extension

Dear CTA
My name Wesley and I am writing you to not tear down the parking lot of the Agape Community Center. It's great that y'all are extending the redline it's been a long time coming but it should be on the west not on the east. There is enough room for you guys to make it happen. The Agape is a big part of the community it needs its parking lot so people have somewhere to park. Please reconsider building over the Agape parking lot it would be a big mistake.
Sent from my iPhone

#93

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:36 PM
To: gozlin@reagan.com
Subject: RE: Agape Parking Lot

Linda,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: gozlin@reagan.com [mailto:gozlin@reagan.com]
Sent: Wednesday, October 26, 2016 2:10 PM
To: Red Extension
Subject: Agape Parking Lot

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Linda Gonzalez

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#94

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:36 PM
To: S. Yohe
Subject: RE: don't mess with the Agape Center!

Stan & Melodee,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: S. Yohe [mailto:syohe@aol.com]
Sent: Wednesday, October 26, 2016 2:14 PM
To: Red Extension
Subject: don't mess with the Agape Center!

CTA:

I'm writing on behalf of Cru Inner City, at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving, Cru will have 500 volunteers working to pack and distribute 2,650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons, I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain its existing parking spaces so that it can continue to serve the neighborhood and the city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours truly,

Stan & Melodee Yohe

#95

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:36 PM
To: Tim Zoeteman
Subject: RE: Red line extension

Michelle,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Tim Zoeteman [mailto:tm.zoot@me.com]
Sent: Wednesday, October 26, 2016 2:44 PM
To: Red Extension
Subject: Red line extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Michelle Zoeteman

Sent from my iPhone

#96

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:37 PM
To: Joyce Stevens
Subject: RE: Red Line Extension

Joyce,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Joyce Stevens [mailto:joyce.stevens799@gmail.com]
Sent: Wednesday, October 26, 2016 3:07 PM
To: Red Extension
Subject: Red Line Extension

CTA,

Cru Inner City at 342 W 111th St, Chicago, IL 60628 is a ministry that runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. My children who are now adults, participated in these programs during the 1980's and 90's and helped them stay clear of the "streets."

Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry. Although I no longer live in Roseland, I return every year to participate in this wonderful event.

I am writing on behalf of Cru to request that the CTA Red Line Extensions run along the **WEST** side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

I hope you will see the wisdom in honoring this very important request. Thank you so much for hearing me out.

Sincerely,

Joyce L. Stevens

#97

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:37 PM
To: Gloria Brown
Subject: RE: Cru Inner City Parking lot

Gloria,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Gloria Brown [mailto:glbrown@ameritech.net]
Sent: Wednesday, October 26, 2016 3:17 PM
To: Red Extension
Subject: Cru Inner City Parking lot

Dear CTA:

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Gloria Brown

#98

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:37 PM
To: smyoung629
Subject: RE: Red Line Extension

Shanea,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: smyoung629 [mailto:smyoung629@yahoo.com]
Sent: Wednesday, October 26, 2016 3:20 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Shanea Rogers

#99

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:38 PM
To: Noma Johns
Subject: RE: Cru Inner City

Norma,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Noma Johns [mailto:johnsnoma@gmail.com]
Sent: Wednesday, October 26, 2016 3:23 PM
To: Red Extension
Subject: Re: Cru Inner City

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Noma Johns

#100

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:38 PM
To: Stephen and Mindy Boeringa
Subject: RE: Position of Red Line Extension

Mindy,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Stephen and Mindy Boeringa [mailto:theboeringafamily@gmail.com]
Sent: Wednesday, October 26, 2016 3:46 PM
To: Red Extension
Subject: Position of Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Mindy Boeringa

#101

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:38 PM
To: Brad Harry
Subject: RE: Red Line Extension

Brad,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Brad Harry [mailto:brad.harry@cru.org]
Sent: Wednesday, October 26, 2016 3:46 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm on staff with Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Brad Harry

Brad Harry
City Co-Director
Inner City, Chicago
773-821-7060 x.304
brad.harry@cru.org
chicago.cru.org/innercity

#102

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:39 PM
To: Sally Foglesong
Subject: RE: Red Line Extension

Sally,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Sally Foglesong [mailto:jandsfog@gmail.com]
Sent: Wednesday, October 26, 2016 3:51 PM
To: Red Extension
Subject: Red Line Extension

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. My family and I will be part of that excited event!! :) Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Sally Foglesong :)

#103

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:44 PM
To: Pat Peglow
Subject: RE: Cru Inner City and Red Line

Patrick,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Pat Peglow [mailto:patpeglow@comcast.net]
Sent: Wednesday, October 26, 2016 4:09 PM
To: Red Extension
Subject: Cru Inner City and Red Line

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Patrick Peglow

#104

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:44 PM
To: Berlean Burris
Subject: RE: Red Line Extension--Cru Inner City Parking Lot

Berlean,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Berlean Burris [mailto:rbb124@att.net]
Sent: Wednesday, October 26, 2016 4:16 PM
To: Red Extension
Subject: Red Line Extension--Cru Inner City Parking Lot

My request is that the Red Line Extension of the Union Pacific Railroad at 111th Street run along the west side, This request is being made so that it does not eliminate the parking space for the Agape Center located at 342 West 111th Street This Center (Cru Inner City) has provided vital services to school children and the needy in this community for 37 years. I have been a supporter of their activities for many years. Therefore, I ask that you strongly consider honoring this request.

Thank you.

Berlean Miller Burris

October 26, 2016

#105

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:44 PM
To: lautie
Subject: RE: Red Line Extension Proposal Request

David,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: lautie [mailto:lautie@comcast.net]
Sent: Wednesday, October 26, 2016 4:15 PM
To: Red Extension
Subject: Red Line Extension Proposal Request
Importance: High

Dear Chicago Transit Authority:

I wanted to applaud you and express my appreciation for the work that you have done to extend the Red Line further into the south side of Chicago. I believe that this will certainly be well worth the future investments into our communities. With that said, I also wanted to bring to your attention some logistical concerns regarding the proposed route.

I'm writing this letter on behalf of Cru Inner City, located at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the proposed route of the Red Line Extension. The Agape Center, as it has been know in the community of Roseland, has served its community as well as the city of Chicago for over 37 years!

They have runs after-school programming for kids throughout the year and have also partners with over 200 churches/ministries throughout the Chicagoland to serve the marginalize and poor. They also hold events throughout the year that overwhelm at multiple times the current parking area. For example, this Thanksgiving they will have over 500 volunteers working to pack and distribute 2650 Thanksgiving boxes of Love (food) for many across our communities. Thousands of people are served and mobilized throughout this entire ministry.

For these reasons (and much more), I am requesting that the CTA Red Line Extension consider using the WEST side of the Union Pacific Railroad line instead. This alternative option would provide the best opportunity for the Agape Center (Cru) to retain its existing parking area to continue its outstanding and continued success to serve our neighborhoods, such as Roseland, within the city of Chicago with excellence! I applaud

Thank you for considering my earnest request and I hope that it would assist into this alternative route in the Red Line Extension's project. I would certainly appreciate any feedback to this request. I can be contacted by this email address or by cell phone at (708) 533-5052.

Serving Together,

David Lautenbach
"Invested in Community to Grow"

#106

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:45 PM
To: Tyrome Turner
Subject: RE: Agape Center Parking Lot

Tyrome,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Tyrome Turner [mailto:tyrome.d.turner@gmail.com]
Sent: Wednesday, October 26, 2016 4:51 PM
To: Red Extension
Subject: Agape Center Parking Lot

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Tyrome Turner

#107

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:45 PM
To: aemtrebleclef@aol.com
Subject: RE: Red line extension

Andrea,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: aemtrebleclef@aol.com [mailto:aemtrebleclef@aol.com]
Sent: Wednesday, October 26, 2016 4:51 PM
To: Red Extension
Subject: Red line extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,
Andrea May

#108

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:46 PM
To: Marc Henkel
Subject: RE: Red Line Extension

Marc,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Marc Henkel [mailto:marc.henkel@cru.org]
Sent: Wednesday, October 26, 2016 5:40 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm on staff with Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

In the Grace of Jesus,

Marc Henkel
City Co-Director - Chicago
CRU Inner City, formerly Here's Life Inner City
773-821-7060 x315

marc.henkel@cru.org

#109

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:46 PM
To: Lamar Simms
Subject: RE: Red Line Extension:

Lamar,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Lamar Simms [mailto:mr.lamarsimms@gmail.com]
Sent: Wednesday, October 26, 2016 5:55 PM
To: Red Extension
Subject: Red Line Extension:

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

- Lamar

#110

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:46 PM
To: Wallace Hasbrouck
Subject: RE: Save CRU parking lot

Wally & Pam,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Wallace Hasbrouck [mailto:whasbro@hotmail.com]
Sent: Wednesday, October 26, 2016 6:02 PM
To: Red Extension
Subject: Save CRU parking lot

As a supporter of CRU inter city ministry Chicago, it is very important to keep the use of their parking lot. Wally & Pam Hasbrouck

#111

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:46 PM
To: Marissa Kuok
Subject: RE: Red line extension

Marissa,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Marissa Kuok [mailto:marissakuok@gmail.com]
Sent: Wednesday, October 26, 2016 6:09 PM
To: Red Extension
Subject: Red line extension

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Thanks for your consideration, Marissa Kuok

Sent from my iPhone

#112

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:47 PM
To: Jo Ann Allen
Subject: RE: Red Line Extension

JoAnn,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Jo Ann Allen [mailto:jodymallen75@gmail.com]
Sent: Wednesday, October 26, 2016 6:10 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St., Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St.. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,
JoAnn M. Allen

#113

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:47 PM
To: Jan Espeland
Subject: RE: Red Line Extensions along the WEST side of the Union Pacific

Jan,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jan Espeland [mailto:espelandjan@gmail.com]
Sent: Wednesday, October 26, 2016 6:26 PM
To: Red Extension
Subject: Red Line Extensions along the WEST side of the Union Pacific

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I've worked with this great ministry. I hope this message will be considered when looking at the Red Line Extension's positioning.

Sincerely,

Jan Espeland

#114

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:47 PM
To: Lindsay
Subject: RE: Agape center parking lot

Lindsay,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Lindsay [mailto:lindsaypaulus@comcast.net]
Sent: Wednesday, October 26, 2016 6:46 PM
To: Red Extension
Subject: Agape center parking lot

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. I know first hand all of the amazing ways Cru has served the community, families, individuals, and very importantly, children. I volunteer there regularly and see the huge difference they make for so many Chicagoans of all ages. They can't function without us volunteers, and I know we need the parking lot, as many of us are traveling from far to serve in the Roseland community; for instance, I drive from Wheaton, IL. Driving is the only way for me to get there, and I feel safe parking next to the building. Also, we volunteer especially in the cold months when families are really in need for Thanksgiving events and creating winter care packages for homeless individuals. It is so wonderful to have a place to park in the cold and snow.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Lindsay Paulus

Lindsaypaulus@comcast.net

Sent from my iPhone

#115

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:48 PM
To: Alisha Welles
Subject: RE: Proposed Red Line Extension to 130th St.

Alisha,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Alisha Welles [mailto:alishawelles07@yahoo.com]
Sent: Wednesday, October 26, 2016 6:51 PM
To: Red Extension
Subject: Proposed Red Line Extension to 130th St.

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Alisha Welles

#116

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:48 PM
To: Tom Hill
Subject: RE: Red Line extension

Tom & Karen,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Tom Hill [mailto:tkhill81@gmail.com]
Sent: Wednesday, October 26, 2016 6:56 PM
To: Red Extension
Subject: Red Line extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

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Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Tom & Karen Hill

#117

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:48 PM
To: nseaberry@aol.com
Subject: RE: Red Line Extension

Narda,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: nseaberry@aol.com [mailto:nseaberry@aol.com]
Sent: Wednesday, October 26, 2016 8:17 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

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Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Narda Seaberry

#118

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:48 PM
To: Barbara Fichtenberg
Subject: RE: Red Line Extension

Barbara,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Barbara Fichtenberg [mailto:bfichtenberg@hotmail.com]
Sent: Wednesday, October 26, 2016 8:37 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain its existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Barbara Fichtenberg

#119

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:49 PM
To: Kellee
Subject: RE: CTA Red Line Extension

Kellee,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Kellee [mailto:singergirl1024@comcast.net]
Sent: Wednesday, October 26, 2016 9:18 PM
To: Red Extension
Subject: CTA Red Line Extension

TTo Whom it May Concerrn - CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Kellee S. Rayburn

The Lord is my strength and my shield: my heart trusts in Him and He helps me.

The Lord is my strength and my shield: my heart trusts in Him and He helps me.

#120

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:49 PM
To: Datrice Weathers
Subject: RE: Redline Extension

Datrice

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Datrice Weathers [mailto:photographerdjw@gmail.com]
Sent: Wednesday, October 26, 2016 9:40 PM
To: Red Extension
Subject: Redline Extension

Greetings CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Warm Regards,

Mrs Datrice Weathers

#121

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:53 PM
To: Valerie Lynn Vanderkolk
Subject: RE: Updates on Red Line Extension

Valerie,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Valerie Lynn Vanderkolk [mailto:valerie.lynnvanderkolk@gmail.com]
Sent: Wednesday, October 26, 2016 1:56 PM
To: Red Extension
Subject: Updates on Red Line Extension

Hello,
Is it possible for me to subscribe to an updates mailing list for this project?
Thank you!
Valerie VanderKolk

#122

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:10 PM
To: Peterson, Phoebe
Subject: RE: Add me to your email list

Phoebe,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Peterson, Phoebe [mailto:Phoebe.Peterson@arcadis.com]
Sent: Thursday, October 27, 2016 10:38 AM
To: Red Extension
Subject: Add me to your email list

Please add me to your email list.

Thanks!

Phoebe Peterson, MBA | Pursuit Specialist - Infrastructure | Phoebe.Peterson@arcadis.com
Arcadis | Arcadis U.S., Inc.
120 South LaSalle, Suite 1350 | Chicago, IL 60603 | USA
Phone: 312 499-0213
Cell: 312 203-9286

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ARCADIS

Be green, leave it on the screen.

This e-mail and any files transmitted with it are the property of Arcadis. All rights, including without limitation copyright, are reserved. This e-mail contains information which may be confidential and may also be privileged. It is for the exclusive use of the intended recipient(s). If you are not the intended recipient(s) please note that any form of distribution, copying or use of this communication or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error please return it to the sender and then delete the e-mail and destroy any copies of it. Whilst reasonable precautions have been taken to ensure no software viruses are present in our emails we cannot guarantee that this e-mail or any attachment is virus-free or has not been intercepted or changed. Any opinions or other information in this e-mail that do not relate to the official business of Arcadis are neither given nor endorsed by it.

#123

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:50 PM
To: jennyc
Subject: RE: please run the extended red line on the West side of the Railroad

Jennifer,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: jennyc [mailto:jennyc@morethansat.com]
Sent: Thursday, October 27, 2016 12:36 AM
To: Red Extension
Subject: please run the extended red line on the West side of the Railroad

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Jennifer Chang in Chicago

#124

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:50 PM
To: Jane Florine
Subject: RE: Red Line Extension

Jane,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jane Florine [mailto:janeefh@gmail.com]
Sent: Thursday, October 27, 2016 6:02 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

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Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Jane Florine

#125

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:50 PM
To: ringerfamily@embarqmail.com
Subject: RE: Red Line Extension

Tricia,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: ringerfamily@embarqmail.com [mailto:ringerfamily@embarqmail.com]
Sent: Thursday, October 27, 2016 6:20 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity

for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Tricia Ringer

#126

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:51 PM
To: wade.n.harsy@ipact.com
Subject: RE: request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line

Wade,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Wade N. Harsy [mailto:harsy@ipact.com]
Sent: Thursday, October 27, 2016 7:29 AM
To: Red Extension
Subject: request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

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Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Wade N Harsy

#127

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:51 PM
To: antbebe@sbcglobal.net
Subject: RE: Help Save Our Parking Lot!

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: antbebe@sbcglobal.net [mailto:antbebe@sbcglobal.net]
Sent: Thursday, October 27, 2016 8:34 AM
To: Red Extension
Subject: Fwd: Help Save Our Parking Lot!

Sent from my T-Mobile 4G LTE device

------ Original message------
From: Cru Inner City
Date: Wed, Oct 26, 2016 8:03 AM
To: antbebe@sbcglobal.net;
Subject: Help Save Our Parking Lot!

Would you email the Chicago Transit Authority on our behalf? View this email in your browser

cru
INNER CITY

We need your help to save our parking lot!

The CTA is planning to extend the Red Line from 95th Street down to 130th Street, which is GREAT! There will even be a stop right outside the Agape Community Center. Wow!**Here's how you can help:** Please email the CTA to let them know you want the Red Line Extension to run on the WEST side of Union Pacific Railroad. That route provides the best chance of us preserving our parking lot. You can use the sample email below. Please do it today!

Thanks so much!

Sample Email:

RedExtension@transitchicago.com

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

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Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Copyright © 2016 Cru Inner City, All rights reserved.
You are receiving this email because you are a financial and/or prayer partner of Cru Inner City.

Our mailing address is:
Cru Inner City
342 W 111th St
Chicago, Il 60643

Add us to your address book

Want to change how you receive these emails?
You can update your preferences or unsubscribe from this list

#128

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:51 PM
To: David-Carol
Subject: RE: Red Line Extension

Carol,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: David-Carol [mailto:dcbaun@hotmail.com]
Sent: Thursday, October 27, 2016 10:11 AM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

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Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Carol Baunach

#129

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, October 27, 2016 12:52 PM
To: Cindy Johnson
Subject: RE: Agape Center Parking lot, Roseland

Cindy,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Cindy Johnson [mailto:dcjohnson723@yahoo.com]
Sent: Thursday, October 27, 2016 2:11 PM
To: Red Extension
Subject: Agape Center Parking lot, Roseland

I am writing concerning the planning of the extension of the Red Line and the possibility of minimizing or eliminating the parking lot belonging to the Agape Center in Roseland. I have served at the Center and I know that the Cru ministry team that works and serves the neighborhood in many wonderful ways DESPERATELY NEED TO KEEP THEIR PARKING LOT!! Ministry team members need a safe location to park, throughout the year other teams come from across the nation to volunteer and need off-street parking for their large vehicles, and my own teenaged daughter tutored at the center after school and needed a safe parking location.

I understand the need to make the Red Line better for the city, but don't take away the essential parking from a wonderful, established ministry like the Agape Center!

Thank you,
Cindy Johnson

Sent from my iPad

#130

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:37 AM
To: Pierre Casimier
Subject: RE: Petition

Pierre,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Pierre Casimier [mailto:pierrecasimier@yahoo.com]
Sent: Thursday, October 27, 2016 3:06 PM
To: Red Extension
Subject: Petition

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thanks for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Pierre Casimier

#131

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:38 AM
To: Eric Sullivan
Subject: RE: Red Line Extension project.

Eric,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Eric Sullivan [mailto:esullivan28@uchicago.edu]
Sent: Thursday, October 27, 2016 3:24 PM
To: Red Extension
Subject: Red Line Extension project.

Hello,

I just wanted to write in my support for the Red Line Extension project. As someone who lives right off the red line, I get a ton of use out of it and would definitely explore farther south neighborhoods if and when the line extends farther. I hope to see this project move forward swiftly.

Thank you,
Eric Sullivan

#132

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:38 AM
To: Kevin Durand
Subject: RE: Save CRU Parking Lot.

Kevin,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

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Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Kevin Durand [mailto:kgdnchrist88@gmail.com]
Sent: Thursday, October 27, 2016 3:29 PM
To: Red Extension
Subject: Save CRU Parking Lot.

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years.

Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area.

For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.
For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Sincerely,

Keviπ

#133

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:39 AM
To: K Chelstrom
Subject: RE: Red Line Extension to 130th St-Route Considerations

Kristian,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: K Chelstrom [mailto:kchelstrom@hotmail.com]
Sent: Thursday, October 27, 2016 4:45 PM
To: Red Extension
Subject: Red Line Extension to 130th St-Route Considerations

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Kristian Chelstrom

#134

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:39 AM
To: Claire Florine
Subject: RE: Red Line Extension Request

Claire,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Claire Florine [mailto:claireflorine@gmail.com]
Sent: Thursday, October 27, 2016 6:39 PM
To: Red Extension
Subject: Red Line Extension Request

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

~Claire Florine

"Life is not about comfort; it's about calling."
- TheWannabeMinimalist.com

#135

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:40 AM
To: Mary Hartsfield
Subject: RE: The red line being extended

Mary,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Mary Hartsfield [mailto:maryhartsfield93@yahoo.com]
Sent: Thursday, October 27, 2016 11:49 PM
To: Red Extension
Subject: The red line being extended

I am diagreeing with the extention due to safety issues. A women was killed on the red line, my purse was snatched on the red line, some of the passengers told me to ring the bell after i felt the tug on my purse. The conductor said she saw the young man when he jumped off the EL at 63Rd street. I call the the police they transfered me to 311. I waited on the police, but i talk with one of the CTA attendent name Yvonne Johnson at 55 st she really helped me by calling police, when they would not come to help me look for my purse where the man jump off EL. I went to 63Rd Street where the man dumped my purse. Before an extention saftey issues need to be address. Sincerely,

Mary Hartsfield
Maryhartsfield1010@gmail.com
(708) 731-6711

#136

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:40 AM
To: Tedi Marshall
Subject: RE: CTA Red Line extension plans and Cru Inner City parking lot

Pastor Marshall,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Tedi Marshall [mailto:wordfellowshipministries@yahoo.com]
Sent: Friday, October 28, 2016 2:30 PM
To: Red Extension
Cc: Tedi Marshall
Subject: CTA Red Line extension plans and Cru Inner City parking lot

To Whom It May Concern,

I am appealing to you on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout the Chicagoland to serve the poor.

Cru holds events throughout the year that already overwhelm current parking in the area. An example is the annual Thanksgiving event in which my ministry has joyfully participated and witnessed its success. This year Cru will have 500 volunteers working to pack and distribute 2,650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain its existing parking spaces so it can continue to serve the neighborhood and city in excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Respectfully,

Pastor Tedi H. Marshall

WORD Fellowship Ministries

#137

From: Feedback
Sent: Monday, October 31, 2016 6:58 AM
To: Red Extension
Subject: FW: Transit Chicago Contact Us - Red Line Expansion

FYI – This has been referred to Media. Thank you!

CTA FEEDBACK TEAM

From: Laura Botten [mailto:lbotten@us99.com]
Sent: Friday, October 28, 2016 4:56 PM
To: Feedback
Subject: Transit Chicago Contact Us - Red Line Expansion

Address:
Address2:
Address3:
City:
State:
Country: United States
Zip: 60601
Phone:
Comment: Hello!

I heard about the possibility to expand the red line to 130th. Is there a CTA representative that would like to call in to the US99 public affairs radio program to discuss this? This would be a short taped interview over the phone to air at a later date.

Please email me at lbotten@us99.com if this is something you'd be interested in.

Thank you, and have a great weekend!

Laura Botten
Host of Weekend Journal on US99, Chicago's Hottest Country

#138

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:41 AM
To: GMcin98355@aol.com
Subject: RE: SAVE OUR PARKING LOT

Genevieve,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: GMcin98355@aol.com [mailto:GMcin98355@aol.com]
Sent: Friday, October 28, 2016 5:31 PM
To: Red Extension
Subject: SAVE OUR PARKING LOT

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Genevieve McInnis

#139

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:41 AM
To: Beth Mason
Subject: RE: Red Line Placement

Beth,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Beth Mason [mailto:beth.mason@cru.org]
Sent: Friday, October 28, 2016 5:57 PM
To: Red Extension
Subject: Red Line Placement

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. I've been apart of the ministry the last 10 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Beth Mason

#140

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:41 AM
To: Brett Phalin
Subject: RE: Request on behalf of cru inner city

Brett,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Brett Phalin [mailto:brett.phalin@gmail.com]
Sent: Friday, October 28, 2016 7:16 PM
To: Red Extension
Subject: Request on behalf of cru inner city

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Brett Phalin

#140 (continued)

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:42 AM
To:
Subject: FW: Request on behalf of cru inner city

From: Brett Phalin [mailto:brett.phalin@gmail.com]
Sent: Friday, October 28, 2016 7:17 PM
To: Red Extension
Subject: Re: Request on behalf of cru inner city

I am making this request as a Chicago resident living in the Pilsen neighborhood

On Friday, October 28, 2016, Brett Phalin <brett.phalin@gmail.com> wrote:

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Brett Phalin

#141

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:43 AM
To: Junetta Casimier
Subject: RE: New 111th Street Red line Stop

Mrs. Casimier,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Junetta Casimier [mailto:mrsjuneetta@gmail.com]
Sent: Saturday, October 29, 2016 8:52 AM
To: Red Extension
Subject: New 111th Street Red line Stop

Hello CTA,
It is exciting to hear that you are extending train service to 130th Street. I have lived on the South Side of Chicago all my life, so I am sure that this extension will be extremely helpful to many citizens.

My only request is that you would spare the Agape Community Center parking lot, which is on the East side of the railroad tracks at Eggleston. The small parking lot is vital to the functions of this community space. I know first hand how deletion of parking could cripple this vital institution. Residents would be constantly inconvenienced when staff, volunteers and program participants take their already limited parking spots.

Most disturbing of all is that the safety of the children who attend the Center would be compromised. (Presently, though not ideal, it is fairly easy to escort children to and from the building because there are no gates or barriers blocking the view across the lot, for example.)

I volunteer regularly at the Agape Center and attend worship services there weekly. This parking area has been carefully monitored and maintained through years of service to the people of Roseland.

Please consider placing the Red Line stop on the WEST Side of the tracks, which is already vacant, un-used land.

We greatly appreciate having a voice in this this matter. Thanks for informing us of your planning and progress.

Sincerely,
Mrs. Junetta Casimier

#142

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:43 AM
To: Caryn Corriere
Subject: RE: Red Line extension request

Caryn,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Caryn Corriere [mailto:corrierecl@gmail.com]
Sent: Saturday, October 29, 2016 11:07 AM
To: Red Extension
Subject: Red Line extension request

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain its existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Caryn Corriere

We worry about what a child will be tomorrow, yet we forget he is someone today.
Stacia Tauscher

Speak to the earth, and let it teach you. Job 12:8

Too often we give children answers to remember rather than problems to solve.
Roger Lewin

#143

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:43 AM
To: Will Osgood
Subject: RE: Save the Parking Lot

Will,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Will Osgood [mailto:rmhswill@yahoo.com]
Sent: Saturday, October 29, 2016 3:37 PM
To: Red Extension
Subject: Save the Parking Lot

Dear CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Will Osgood

#144

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:44 AM
To: Jim and Kim Herlihy
Subject: RE: Red line Extension

Jim,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jim and Kim Herlihy [mailto:jkktrl@wowway.com]
Sent: Saturday, October 29, 2016 5:39 PM
To: Red Extension
Subject: Red line Extension

CTA,
I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.
For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.
Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.
Yours Truly,

Friend of Agape Center
Jim Herlihy

#145

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:45 AM
To: Christy Steffens
Subject: RE: Letter to the Editor

Alphonse,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Christy Steffens [mailto:christy.steffens@gmail.com]
Sent: Sunday, October 30, 2016 6:26 PM
To: ctc-TribLetter@tribune.com
Cc: Red Extension
Subject: Letter to the Editor

9/30/2016

Editor

Chicago Tribune

CC:Red Extension@transitchicago.com

Sir:

The 5.3 mile, 4-stations extension of the Red Line SW along Route 57 will cost $2.3 billion, according to your p.4 article this date. This will save (current?) commuters 20 minutes getting downtown.

If this investment has a 50-year expected useful life and maintenance is 2% of $2.3 billion per year, annual costs for upkeep and depreciation are $92 million, 2022-2072.

Total Chicago rail ridership last year was last year was 242 million. No figures were given for Red Line use – if we assume 10 million current riders now board at stations closer to home, the time saved costs $27/hour plus whatever it costs to operate and maintain the rolling stock.

10 million riders per year averaged over a 260-day workweek and a 10-hour (5 morning and evening) rush period requires about 100 eight-car trains per day departing at 6 minute intervals.

Within the next decade there may be self-driving trucks and cars. The future may see Uber and fleet vehicles on call and fewer individually owned autos. Chicago lost 200,000 people during the 2000-2010 period. What will ridership numbers be in 2050?

These public rail transit billions of dollars come from motorist gasoline taxes and should be used for toll road construction. A quarter of the Federal gas tax goes to grants for rail transit and bus and bike takeovers of existing roads – not exactly what motorists prefer. These transit projects are found money for big city politicians and their unions.

Truly yours,

Alphonse I. Johnson

Lisbon, Illinois

(815) 736-6009

#146

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:46 AM
To: collyn02@yahoo.com
Subject: RE:

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: collyn02@yahoo.com [mailto:collyn02@yahoo.com]
Sent: Monday, October 31, 2016 12:29 PM
To: Red Extension
Subject:

I vote to extend the train to 130th street.

Sent from my Boost Mobile Phone.

#147

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, October 31, 2016 11:47 AM
To: David Vartanoff
Subject: RE: Comment on EIS

David,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: David Vartanoff [mailto:david@vartanoff.com]
Sent: Monday, October 31, 2016 1:26 PM
To: Red Extension
Subject: Comment on EIS

Agreeing with the urgent need for improved public transit in the project area (and nearby underserved areas as well), a far better and more cost effective project could be implemented much sooner by upgrading service on existing rail lines and fare integration.

1. Implement the Gray Line Project (also sometimes called the Gold Line) on both the Metra Electric and the South Shore as far as Hegewisch. This includes much more frequent "rapid transit" frequencies and greater span of service.
2. Restore stations along the South Shore between Kensington, and Hegewisch including 130th/Altgeld, also restore the former Wildwood Station at 130th & Indiana on ME.
3. Increase frequency and span of service on the Rock Island Suburban Line. The RI, brackets the proposed Red Line from the west offering riders a quicker transfer if headed north.
4. Fully integrate fares on RI, ME, and Gray(Gold) trains to Hegewisch with all CTA services. This means deploying Ventra readers on all RI, ME, CSS&SB platforms within CTA's service territory such that a rider can use the optimal combination of rail and bus for his/her trips.

Comparison of travel times;

In section 3.2 of the EIS, travel time from Altgeld Gardens to the Loop (given as Jackson % State) estimates 28 min to 95+25 min on the Red Line +some figure for transfer time or nearly an hour. Current CSS&SB

timetables show 32 min Hegewisch to Van Buren(Jackson) and Michigan which the EIS calls an average commute time for the region. Adding as much as 8 minutes for several stops north of Hegewisch, a single seat ride would be less than 40 min from Altgeld to Van Buren.

Even with the recently improved flow of buses at 95th St terminal, riders from east of the MED mainline would have a faster trip simply changing to ME at their 95th St station if the trains ran often enough.

Given that all of these public transit services are taxpayer supported, the current double fare status of Metra (unless one's origin and destination are immediately adjacent a Metra route) is obsolete, and may constitute a Title VI disparate impact. Full fare integration will open up multiple new transit options greatly increasing mobility for all potential riders.

Historic background;
CSS&SB had several stations between Kensington and Hegewisch as late as 1960 including Altgeld and Ford City.
Precedent for Metra operation dates to a period of CSS&SB railcar shortage in the 1990s when RTA ran a trainset of diesel pulled bi-level cars between Randolph (now Millennium) and Hegewisch.

Metra Electric when operated by Illinois Central ran very frequent service all day with skeletal service after midnight, and included a local station at 130th and Indiana Avenue.

David Vartanoff
1434 W Addison
Chicago 60613

#148

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 03, 2016 8:02 AM
To: paulwkarnatz@gmail.com
Subject: RE: Red Extension

Paul,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: paulwkarnatz@gmail.com [mailto:paulwkarnatz@gmail.com]
Sent: Monday, October 31, 2016 4:13 PM
To: Red Extension
Subject: Red Extension

This is an excellent idea and I hope it is able to move forward. The clear transit disadvantages the south side faces (fewer stops, distance between stops, etc) need to be fixed as well as other improvements to CTA as a whole. Congratulations on moving this project forward!

Paul Karnatz

#149

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 03, 2016 8:03 AM
To: Monica Reeves
Subject: RE: Please place Red Line Extensions along the WEST side of the Union Pacific Line

Monica,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Monica Reeves [mailto:mlschaef@me.com]
Sent: Monday, October 31, 2016 9:11 PM
To: Red Extension
Subject: Please place Red Line Extensions along the WEST side of the Union Pacific Line

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Monica Reeves

#150

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 03, 2016 7:59 AM
To: v Ford
Subject: RE: Homes

Veronica,

Thank you for your interest in the Red Line Extension Project.

CTA has published the Draft Environmental Impact Statement (EIS), which is available for public review and comment on the project website. The Draft EIS reviews potential impacts that could result from implementation of the project. Currently, CTA is considering two alignment options on either side of the existing Union Pacific Railroad, known as the East and West Options. In addition to the information provided in the Draft EIS related to displacements, a summary, Frequently Asked Questions, and other information related to displacements is available on the project website here. With the East Option, 91 residential buildings would be displaced and with the West Option, 28 residential buildings would be displaced.

Government programs designed to benefit the public as a whole can result in acquisition of private property and, sometimes, in the displacement of people from their residences or businesses. State and federal constitutions recognize the need for public agencies to purchase private property for public use and assure full protection of the rights of each property owner. To mitigate the impact of any acquisitions required, property owners are protected by the federal Uniform Act on Relocation Assistance and Property Acquisition. Property owners would be paid not less than fair market value for their land and buildings. In some circumstances, if current appraisals are less than the original property purchase price, an owner may be eligible for compensation equal to the original purchase price. In addition, CTA must provide financial assistance and relocation services for property owners as well as commercial and residential tenants who must move because of the RLE Project.

CTA has been conducting outreach to all potentially affected property owners and outreach will continue as a final alignment option is selected and the project moves into next stages of planning and development. CTA does not anticipate acquiring any property for this project until after completion of the environmental phase and timelines are dependent upon federal reviews and approvals of the project.

Project area residents will benefit from improved transit connectivity to south of 95th street and reduced congestion at 95th Street Terminal as some bus routes would directly connect to proposed stations far south. Additional impacts and benefits are listed in the Draft EIS that is available here.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: v Ford [mailto:veronicaford3@gmail.com]
Sent: Tuesday, November 01, 2016 7:01 AM
To: Red Extension
Subject: Homes

Morning,
I am a resident of the area. I am interested to know , how many homes will be effected by this expansion? What is the plan for the residents living in the homes the city is trying to buy? What is the benefit for the residents living on 97th, 98th Lafayette? How will this project help 95th street?
I can not make the meeting. If any of these questions can be answered, it would be appreciated.

Respectfully,
Veronica Ford

#151

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 03, 2016 9:46 AM
To: kevinmhanna@yahoo.com
Subject: RE: Comment from a red line user

Kevin,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: kevinmhanna@yahoo.com [mailto:kevinmhanna@yahoo.com]
Sent: Tuesday, November 01, 2016 11:30 AM
To: Red Extension
Subject: Comment from a red line user

I wholeheartedly support the extension. I too must take a bus from 95th to get to where I need to go.

Going to 130th is only the first step in an integrated public transport system that is needed, as illustrated by the following link:
TransitFuture

TransitFuture

Check out this awesome interactive map of a new transit system for Chicagoland.

Imagine what could be if these simple (relatively, as opposed to building new track, etc) changes were made?

I hope you will consider this plan as well for future connectivity to all residents of the greater Chicagoland area.

Thank you for your time and consideration.

Best,

Kevin Hanna Director of Film and Theater kevinmhanna@yahoo.com 773-334-1744

#152

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 03, 2016 9:46 AM
To: Jean SmilingCoyote
Subject: RE: comments on Draft EIS

Jean,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jean SmilingCoyote [mailto:maiinganikan@yahoo.com]
Sent: Tuesday, November 01, 2016 12:14 PM
To: Red Extension
Subject: comments on Draft EIS

I'm not going to this open house today, mostly because I live on the far north side and the logistics are daunting, to say the least. Throw in the Cubs game tonight, and it's *easy* to stay home. I'm not personally familiar with any of the locations which would be affected by this extension, so I'll leave the detailed comments to local residents and businesses.
Your Preferred Alternative makes sense to me - even though I'm not personally familiar with the area, my B.A. in Geography gives me competence in reading maps, and using Google Maps if I want for more detail and photos.
I'll let local residents decide between East and West Alternatives.
There is one detail that puzzles me. In the early pages, you mention that substations which would be needed are "inconsistent with adjacent land uses." You did not include any artist's conception of what any new substation would look like (or sound like); also no maps showing what the adjacent land uses are and look like. I did find mention that these substations would be buildings (as opposed to a ComEd substation on Ravenswood a short walk south of my home, which is open to the elements, and not inconsistent with the neighbors, which include residential and small business). Later in the document, you mention landscaping and architectural factors which would decrease the inconsistency with adjacent land uses (latter is my way of putting it). I am puzzled by your inconsistency concern. Unless these substations emit noise which is a *big* problem for adjacent land uses, architecture and landscaping should be able to eliminate the inconsistency. Architects have years of experience putting various utilities inside buildings which present a perfectly acceptable *faux* appearance to the neighbors. Maybe someone can figure out how to design the substation exterior so

it both looks like what it is *and* is very attractive. That would be better than faux. Feel free to ask me for brainstorming help when you reach that point. No charge.

Jean SmilingCoyote
1823 W. Granville Ave.
Chicago IL 60660
773-743-8918

#153

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name Priscilla McMullen

Address 345 W. 101 St

City Chgo Ill. **State** Ill. **Zip** 60628

Email Address Priscillamcmullen55@Gmail

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** We are homeowners that are seniors and displaced will impact our lives. ~~it~~ don't want to go to a senior home, Please stay on the west side

What are your concerns about the **West Option?**

Comments: ~~Stay~~ Keep the railing on the Westside. See no need or reason to come to the Eastside. Residents been in their homes since 1960's.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#154

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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on the Red Line Extension (RLE) Project

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Name Michael Rivers Jr.

Address 8738 S Michigan Ave

City Chicago **State** Illinois **Zip** 60619

Email Address michaelrivers619@yahoo.com

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** none

What are your concerns about the **West Option?** none

Comments: The East option is the better option

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: None

Land Use and Economic Development: None

Property Displacements: None

Neighborhoods & Communities: None

Visual Impacts (how it would look): None

Noise & Vibration: None

Impacts to Historic Resources: None

Safety & Security: None

Hazardous Materials: None

Wetlands: None

Parks: None

Construction Impacts: None

Project Funding: None

Other: None

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#155

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name Melvina Grace

Address 10042 So. Perry Ave

City Chicago **State** IL **Zip** 60628

Email Address gracemelvina@rocketmail.com

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** Would be the best but what about the properties that would surround the around

What are your concerns about the **West Option?** Looks more comfortable but what about the properties that surround the project?

Comments:
The park seems like a beautiful idea to bring life into a neighborhood fallen. But question remains about properties surrounding the park due to elderly and disabled properties

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: No comment because it's benefical less walking distance to commute.

Land Use and Economic Development: What will happen to properties in the that area.

Property Displacements:

Neighborhoods & Communities:

Visual Impacts (how it would look): I would love to see how it would look

Noise & Vibration: Yes. Elderly leaves in area

Impacts to Historic Resources: N/A

Safety & Security: Very important due to neighbor not being safe, will this cause a problem for more di

Hazardous Materials: Elderly and disable live in area

Wetlands:

Parks: Improvement needed very well

Construction Impacts: Is this going to affect all westbound properties

Project Funding: Are property taxes, other taxes going up to fund. → ??

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#156

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name CLARENCE D. WILLIAMS

Address 34 W. 115 ST.

City Chicago **State** IL **Zip** 60628

Email Address CLARENCE D. WILLIAMS

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** Black People NOT getting Their Fair Share

What are your concerns about the **West Option?** The Same

Comments: CTA already KNOWS what it is going to do. they should be honest with the people.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: Fair share

Neighborhoods & Communities: _____

Visual Impacts (how it would look): _____

Noise & Vibration: _____

Impacts to Historic Resources: _____

Safety & Security: _____

Hazardous Materials: _____

Wetlands: _____

Parks: _____

Construction Impacts: _____

Project Funding: _____

Other: _____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

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#157

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

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Name Lori Shelby-conley

Address 234 E. 107th St

City Chi **State** IL **Zip** 60628

Email Address LShelbyconley@gmail.com

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over ⟶

#158

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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on the Red Line Extension (RLE) Project

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Name Allen Brown

Address 10108 S. Wentworth

City Chicago IL **State** IL **Zip** 60628

Email Address

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** I Like the East option It seems more convient and E will have a better economic impact.

What are your concerns about the **West Option?** OK not my favorite

Comments: As far as parks effected. I would like to see bigger field houses with activity centers. Such as workout facilities indoor basket ball etc. This will impact alot of the young community to have some thing positive. Also out parks should incorporate running and walking track. This will impact Health and vitality of community residence.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#159

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

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Name Freda Madison

Address 9907 S. Parnell Ave

City Chicago **State** IL **Zip** 60628

Email Address doctarno@ameritech.net

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** East option may be better. It is closer to the 95th station

What are your concerns about the **West Option?** West option want to make sure park area + parking which brings in more traffic + people. Security would be necessary for the community. Also ~~communities~~ communities need to address, as far as, housing, board up and abandon building. If the area is going to developed the housing structure that will remain should be developed and addressed as well.

Comments: Thank you.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#160

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

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Name Elaina McLaurin

Address 241 W. 112th Pl

City Chicago **State** IL **Zip** 60628

Email Address

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** Construction, debris, and noise.

What are your concerns about the **West Option?** Construction, debris, and noise.

Comments: My property will not be taken, however I'm concerned about the polution, debris, noise + construction effects on my home and well being.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: NO

Land Use and Economic Development: Yes

Property Displacements: Yes

Neighborhoods & Communities: Yes

Visual Impacts (how it would look): Yes

Noise & Vibration: Yes, along with debris

Impacts to Historic Resources: Yes

Safety & Security: Yes

Hazardous Materials: Yes

Wetlands: Yes

Parks: Yes

Construction Impacts: Yes

Project Funding: Yes

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#161

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

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Name Adrienne R. Anglin

Address 331 West 99th Place

City Chicago **State** IL **Zip** 60628

Email Address AAnglin331@Gmail.com

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?** Street closures and redirection of traffic through the neighborhood. – Loss of the alley at the corner by the park

Comments: The Wendell Smith Park should "Not" have an enclosed fence that would stop the foot traffic at 99th Street. That is the only opening for crossing by foot until 101st Street. Many people cross there and if its closed, the walkers will find a way to make an opening! Will the street directions change? Will ~~Why~~ Eggleston still allow the crossing at 101st St?

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation:

Land Use and Economic Development:

Property Displacements: Will This affect The property value or decrease it?

Neighborhoods & Communities:

Visual Impacts (how it would look):

Noise & Vibration: There is already vibrations from The RR That Shake The foundation. Now there are 2 Trains in same space.

Impacts to Historic Resources:

Safety & Security:

Hazardous Materials:

Wetlands:

Parks: Park availability for neighborhood

Construction Impacts: Will 99th Place loose The ally and Become a dead end street Not allowing you To turn around.

Project Funding:

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#162

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

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Name TANISHA E. PEARSON

Address 1027 W. 109th Street

City CHGO **State** IL **Zip** 60643

Email Address notanordinarycliche@gmail.com

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?**

Comments: I am excited to hear about the upcoming project. I would encourage moving the construction date (start date) up.

I hope that the city take full advantage of making sure the displaced residents recieve fair relocation funds.

I hope that the community is involving in building (extending) the Red Line! Meaning involve local construction companies.

Also, involve young men & women, churches, banks & seniors as much as possible.

All stakeholders should have a voice.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: _____

Neighborhoods & Communities: _____

Visual Impacts (how it would look): _____

Noise & Vibration: _____

Impacts to Historic Resources: Incorporate + preserve the names + attributes of the community.

Safety & Security: _____

Hazardous Materials: Please test the soil + other harardous materials. Make sure everything is safe to the residents.

Wetlands: _____

Parks: _____

Construction Impacts: Use Latino + Black owned Companies

Project Funding: _____

Other: _____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

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All written comments must be submitted by 4:30 PM on November 30, 2016.

#163

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

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Name Lavell McGill Lavell McGill

Address 11149 S Eggleston 11149 S Eggelston

City Chicago **State** **Zip**

Email Address lmcg568@gmail.com lmcg568@gmail.com
lmcg568@gmail.com

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** [illegible]

What are your concerns about the **West Option?** Parking with [illegible] the [illegible] not [illegible] [illegible]
Property taxes going up?

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#164

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name Valerie Lilley

Address 11143 S. Eggelston Ave

City Chicago **State** IL **Zip** 60628

Email Address Valerie Lilley@yahoo.com

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** Noise

What are your concerns about the **West Option?** People walking through my neighborhood + blocks. Parking on my street and noise ~~from~~ @ all hours.

Comments:

Can you please put a Whole Foods Mini-Mart in the 111th Station?

How about getting a Whole Foods in Roseland all together?

Build a wall or fence around 111th St Station; Keep our blocks safe.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: _____

Neighborhoods & Communities: _____

Visual Impacts (how it would look): _____

Noise & Vibration: Noise

Impacts to Historic Resources: _____

Safety & Security: Can you put a safety wall around our block - shield from parking lot @ 111th + Eggleston

Hazardous Materials: _____

Wetlands: _____

Parks: _____

Construction Impacts: _____

Project Funding: _____

Other: _____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#165

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

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Name SANDRA L. MUÑOZ

Address 206 E. 116th ST.

City CHICAGO **State** IL **Zip** 60628

Email Address

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** THE EAST OPTION WOULD DISPLACE MORE PEOPLE, IT WOULD ALSO PERMANENTLY AFFECT PARK SPACE. I AM ALSO CONCERNED ABOUT THE VISUAL AND NOISE DURING CONSTRUCTION.

What are your concerns about the **West Option?**

Comments: THE LOCATION FOR THE TOWN HALL MEETING WAS NOT WELL THOUGHT OUT. AN AUDITORIUM WOULD HAVE BEEN BETTER. I COULD NOT HEAR THE SPEAKER OR SEE THE SCREEN THAT PROVIDED THE VISUAL IMPACT OF PROJECT. THERE WERE SOME CHAIRS SET UP IN FRONT OF THE SCREEN AND TABLES AND CHAIR BEHIND THEM. IT WAS LIKE A CHURCH RECEPTION RATHER THAN A PUBLIC MEETING. PEOPLE CONTINUED TO TALK DURING THE PRESENTATION AND CONTINUED TO CIRCULATE AROUND, TOO MUCH CONFUSION. ALSO, THERE WAS NO PUBLIC DISCUSSION OF PROJECT. IT SEEMED A SITUATION WERE YOU COULD SAY YOU HAD A PUBLIC FORUM WITHOUT HAVING PEOPLE PARTICIPATE IN A OPEN DISCUSSION.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation:

Land Use and Economic Development:

Property Displacements: WILL PEOPLE RECEIVE FINANCIAL ASSISTANCE AND HELP FINDING AFFORDABLE HOUSING.

Neighborhoods & Communities: THIS PROJECT WILL DISPLACE A FULL BLOCK IN MY AREA. I WONDER HOW MUCH YOU CONSIDER THE HUMAN FACTOR (FRIENDS, FAMILY, NEIGHBORS)

Visual Impacts (how it would look):

Noise & Vibration:

Impacts to Historic Resources:

Safety & Security: WHAT SAFETY MEASURES WILL BE IN PLACE DURING CONSTRUCTION

Hazardous Materials:

Wetlands:

Parks:

Construction Impacts: I AM CONCERNED ABOUT THE MESS IT WILL CAUSE, TRAFFIC, PARKING, CONSTRUCTION VEHICLES AND NOISE, THE DUST + DIRT.

Project Funding:

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#166

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Red Line Extension

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Name Kenneth Samuels

Address

City **State** **Zip**

Email Address ksam212067@comcast.net

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?**

Comments: Concern for lack of information concerning/relating to the schools and children.

As A member of the Far South Community Action Council I am concerned that there is no information as it relates to the Hubs of our community - our schools ... our children.

Also, is there a way to connect the activities of Construction & Development to utilizing our closed schools - West Pullman, Kohn, ... Burnham

~ or is there a plan of Connectivity that I missed.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: Use of Closed Schools

Property Displacements: _____

Neighborhoods & Communities: Impact on Children & Active schools

Visual Impacts (how it would look): _____

Noise & Vibration: _____

Impacts to Historic Resources: _____

Safety & Security: _____

Hazardous Materials: _____

Wetlands: _____

Parks: _____

Construction Impacts: _____

Project Funding: _____

Other: _____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#167

RED AHEAD
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Red Line Extension

WE WANT YOUR INPUT

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Name Betty Jones

Address 9921 S. Yale

City Chg **State** Ill. **Zip** 60628

Email Address

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** When will you know for sure

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over ⟶

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: Very concern about street closing

Land Use and Economic Development:

Property Displacements: where will you store equipments

Neighborhoods & Communities:

Visual Impacts (how it would look):

Noise & Vibration: O Hare airport — noise does impact

Impacts to Historic Resources:

Safety & Security: always

Hazardous Materials: ✓

Wetlands:

Parks: ✓ need a new park

Construction Impacts: ✓ parking

Project Funding: How much will the housing be value at.

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#168

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Red Line Extension

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Name CHEENA CREDIT

Address 1022 W 108th St

City Chicago **State** IL **Zip** 60643

Email Address Cheenaqc@aol.com

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** LETS BE HONEST THERE TRULY IS NO MAJOR ~~DIFFERENCE~~ DIFERENCE BETWEEN THESE TWO CHOICES.

What are your concerns about the **West Option?** TAKING AWAY of GREEN SPACE; HOMES ON EGGLESTON DIRECTLY FACING THE TRAINS; INCREASED TRAFFIC, PEDESTRIAN, CAR, etc. PROPERTY VALUE

Comments: FIRST, JUST SO YOU KNOW I GREW UP ON W 102ND PL, MY PARENT AND THE PARENTS of GRAMMAR\HIGH SCHOOL FRIENDS ARE STILL THERE.

(1) Despite STUDIES DONE FOR NOISE & VIBRATION, I STILL BELIEVE THIS will HAVE A ADVERSE EFFECT ON COMMUNITY. THERE IS A DIFFERENCE BETWEEN FREIGHT TRAINS COMING ONCE A DAY AND AN ELEVATED TRAIN RUNNING ALL DAY & NIGHT. IS IT POSSIBLE TO PROVIDE RESIDENCE W\ NOISE REDUCTION WINDOWS OR SOMETHING.

(2) THIS AREA CANNOT BE COMPARED TO OTHERS, THIS IS SINGLE FAMILY HOMES, NOT 2-4 FLAT APARTMENTS.

(3)

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#169

RED AHEAD
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Red Line Extension

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Name DIANE THIBPEN

Address 11321 S. PRINCETON

City CHGO **State** IL **Zip** 60628

Email Address Mzdee369@gmail.com

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** This entire situation is just wrong. People have worked hard, abide by the law. And now we are being pushed out.

What are your concerns about the **West Option?**

Comments: I pray this does not affect the east side. I have lived in this community and have all of my life.

This is Just Wrong!

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#170

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Moving Ahead to a Better Red

Red Line Extension

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Name GREGORY WALKER JR

Address 6705 S. MERRILL AVE ~~2D~~ 2B

City CHICAGO **State** ILLINOIS **Zip** 60649

Email Address GREGORYIITCHICAGO@GMAIL.COM

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** I don't like the East Option because an entire Park is gone.

What are your concerns about the **West Option?** Hoping this doesnt effect the Roseland Pumping Station in any Way

Comments: For 103rd, 107th, 111th, 115th, State, Michigan Ave, I would like to propose that all businesses or residential properties that are needing to move. I propose that they have an option to rebuild next to any space being bought by CTA. I would also like to suggest that at 115th there is plenty of mixed property. At 130th, I suggest that the tracks end in a loop, rather than a stub. That way you could have a more convient turn around of trains. Also possibly asking NICTD to form a station there to attract riders, thus making it a "super station". Overall, I'm really excited that this extension is ~~beg~~ being sought out. I believe it not only helps south side residents, but also people from Indiana and south suburbs get downtown and home

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: ~~Lab~~ How would the 34 South Michigan Run? Honestly I hope maybe the Hours change; but I hope it operates from 95th to Altgeld.

Land Use and Economic Development:

Property Displacements:

Neighborhoods & Communities:

Visual Impacts (how it would look):

Noise & Vibration:

Impacts to Historic Resources: Hope this doesn't effect the Roseland Pumping Station.

Safety & Security: I would like to see all stations with a CTA worker plus two (2) armed security officers for at least the first 2 years

Hazardous Materials:

Wetlands:

Parks:

Construction Impacts:

Project Funding:

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#171

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Red Line Extension

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Name Ethel LeFlore

Address 352 W. 102nd St

City Chicago **State** IL **Zip** 60628

Email Address

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** The noise lots of people dont mind selling.

What are your concerns about the **West Option?**

Comments: I wouldn't mind moving its ok by me. I would love to move so people can use public transportation to and from the city. ~~to the sub~~ It also create jobs for the city.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#172

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name LeRonnie Cameron

Address 348 W 102ND ST

City Chicago, IL **State** IL **Zip** 60628

Email Address ~

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** They should put it on Dan Ryan to I-57 or on the westside of the UPR. Go West young man Go West

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#173

RED AHEAD
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Red Line Extension

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Name Doris Atwater

Address 355 W. 101st Pl.

City Chicago **State** IL **Zip** 60628

Email Address

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** No concerns.

What are your concerns about the **West Option?**

Comments: I would love to relocate due to damage and noise is ruining my house. The community is not the same. Please consider the EAST side.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#174

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name Mary Thomas

Address 3551 W. 101st STREET

City CHICAGO **State** IL. **Zip** 60628

Email Address Sharimannery@yahoo.com

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** I reside in one of the homes on 101st Street that will be affected by the RLE Project. The disruption that will occur in the neighborhood cannot be measured.

What are your concerns about the **West Option?**

Comments: Currently, when using public transportation I am required to walk to 103rd Street to catch the 103rd St. bus. I will still have to travel to 103rd to catch the RLE. Additional buses would solve the situation, instead of disrupting neighborhoods in order to gain a few extra minutes of travel time. I have resided in my home since 1970. My neighbors, whose homes are also affected by the project, have lived there for longer periods. Funds used for this project ~~can~~ could be used in a much better fashion. I do not believe that economic development would improve. It has not improved at the 95th Street station. Express buses would serve the same purpose.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation:

Land Use and Economic Development:

Property Displacements:

Neighborhoods & Communities: Entire Communities will be disrupted in order to gain 3 or 4 minutes of travel time.

Visual Impacts (how it would look): It would look terrible with tracks on the ground with the UP Railroad and elevated tracks.

Noise & Vibration: The noise and vibration of the RLE will be terrible for those remaining in area.

Impacts to Historic Resources:

Safety & Security: I am concerned that the neighborhood will not receive increased police protection.

Hazardous Materials:

Wetlands:

Parks:

Construction Impacts:

Project Funding:

Other:

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#175

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Red Line Extension

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Name Dr. Robin King-Donelson

Address 9804 South Prairie Ave

City Chicago **State** IL **Zip** 60628

Email Address bjk8107@gmail.com

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#176

RED AHEAD
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Name Dr. Carmen Palmer & Mrs. Sharon Banks Pinchain

Address 10552 S. Vernon Ave

City Chicago **State** IL **Zip** 60628

Email Address cpph194@gmail.com

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?** 116th & Michigan's impact on Kids off the Block (KOB)

Comments: The impact on the schools & the school population -

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation:

Land Use and Economic Development: Need a positive draw of businesses, (Non-fast foods) Black owned well represented

Property Displacements:

Neighborhoods & Communities: Inclusion in decisionmaking re business choices & Community benefits agreement

Visual Impacts (how it would look): A lot of green space and a balance out to the hard concrete - Art inclusion; Flowers Trees & representative expressions of the community

Noise & Vibration: AT A MINIMUM

Impacts to Historic Resources: None

Safety & Security: Bicycling & beat officers at the city level NOT SSAs

Hazardous Materials: NONE! GET RID OF CELL PHONE TOWERS

Wetlands: Maintained

Parks: Intermingled & well lit/Attractive planters, waste baskets, bike racks

Construction Impacts: P

Project Funding: TIF Monies; SBA Presence from on set to the end

Other: Schools Protected and assessible

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#177

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Red Line Extension

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Name ALVIN BLACK

Address 9559 S. PERRY AVE.

City CHICAGO, **State** IL **Zip** 60628

Email Address brownblackc@gmail.com

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?** MAKES THE MOST SENSE

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#178

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected. **At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.** In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, along with state regulations. CTA is holding this meeting to allow potentially impacted property owners and lessees the opportunity to learn more about the project and what it could mean for your property.

Name LILLIE DAMPEER — AKA LOT 283

Address 11546 S. State St.

City Chicago **State** IL **Zip** 60628

Email Address tomdampeer67@yahoo.com

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☑ Phone ☑ Email

Please describe your questions or concerns. I'M apart of The West Option which is great. I hope the West option is Choosen so my home will be apart of THE Property Acquistion. My Conern is one The RED LINE Ex is Complete there will be more traffic/people in the AREA, The NOISE Level with 2 Trains.

I'M A ~~Senior~~/ Senior AND HANDYcap with health ISSUES During Construction will Nurses, Therapist AND (IF THE NEEDED) AN EMERgency vehicles have Acces to my home?

THAT IS why I HOPE THE WEST OPTION IS Chose.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

Additional Comments: I believe this could be good for the Community

I hope also that the CTA give into consideration how the economy has impacted the value of Homes in my Neighborhood.

[redacted] Thank You.
Lot 283

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#179

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Name FRANK A. LOPRESTI

Address 7244 W. ARCHER, UNIT 2-S

City SUMMIT **State** IL **Zip** 60501

Email Address FRANKALOPRESTI@YAHOO.COM

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?**

Comments:

1) THIS RED LINE EXT. PROJECT NEEDS TO BE COMPLETED !!!

2) "EAST" VS. "WEST" OPTION: NO ACTUAL PREFERENCE – LET THE NEIGHBORHOOD RESIDENTS DECIDE !!

3) HERE'S A SUGGESTION: WOULDN'T IT BE NICE IF NICTD/SOUTH SHORE R.R. BUILT A NEW STATION AT THE PROPOSED 130TH STREET TERMINAL (TO FACILITATE TRANSFERS BETWEEN NICTD/SOUTH SHORE AND THE CDA) – ???

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: _____

Neighborhoods & Communities: _____

Visual Impacts (how it would look): _____

Noise & Vibration: _____

Impacts to Historic Resources: _____

Safety & Security: _____

Hazardous Materials: _____

Wetlands: _____

Parks: _____

Construction Impacts: _____

Project Funding: CAN WE, REALISTICALLY, EXPECT THAT THIS PROJECT WILL, IN FACT, RECIEVE THE NECESSARY FEDERAL, STATE, AND LOCAL FUNDING —???

Other: _____

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(JUST ASKING !!)

RedExtension@transitchicago.com transitchicago.com/RedEIS facebook/thecta @cta

BUILDING A NEW CHICAGO

cta

#180

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

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Name Antony Johnson

Address 3351 W 21 th st

City Chicago **State** Illinois **Zip** 60623

Email Address 3351 W 21 th st st

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

que podria suceder mi propiedad

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#181

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project -

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name CONSTANCE CARROLL

Address 11232 So. Eggleston

City Chicago **State** IL **Zip** 60628

Email Address CONSTANCECARROLL@SBCGlobal.Net

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** How far east of the Railroad? Will it go both ways. (East + West) for parking etc? (How far East - West?

What are your concerns about the **West Option?** How far west from the railroad?

Comments: Will there be parks, parking and other business' to improve the community? Will employment be available for residents? If so how can we apply? It seems that the project is well on the way. When will it start and when is the estimated time of completion?

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation:

Land Use and Economic Development:

Property Displacements: If you go west at the railway how far will you go from 111th & Eggleston south of 111th street?

Neighborhoods & Communities:

Visual Impacts (how it would look):

Noise & Vibration:

Impacts to Historic Resources:

Safety & Security: Since there will be more people traveling through the neighborhood will there be additional policing on security.

Hazardous Materials: Will we be informed of hazardous Materials being used.

Wetlands:

Parks:

Construction Impacts:

Project Funding:

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#182

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

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Name Emma Moncure

Address 11227 S. Eggleston

City Chicago **State** Ill. **Zip** 60628

Email Address

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** ~~I would like for it to come~~

What are your concerns about the **West Option?** I would like for it to come to west because it be a better kind travel so far.

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#183

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

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Name ANNA Williams

Address 349 W 99TH Pl

City Chgo **State** IL **Zip** 60628

Email Address N/A

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** I Will have to relocate,

What are your concerns about the **West Option?** No problem,

Comments: Relocation Will Someone help to
relocate me,
How will they discuss my home
all on some day.
Do they have city home available.
Is there a time limit to moved.
Do I need some to assist my property.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#184

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

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Name Julie A Pate

Address 345 W 99th

City Chicago **State** IL **Zip** 60628

Email Address Ladyjuliehnl@yahoo.com

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** My concern about either side is my foundation noise control dirt and dust. Noise barriers who will pay for damages to my home

What are your concerns about the **West Option?** Concerns are the same want to be comfortable in my Home

Comments: I have no problem with improvement I think it's a good thing, may improve propley value, love the way the park will look

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: _____

Neighborhoods & Communities: _____

Visual Impacts (how it would look): ✓ _____

Noise & Vibration: ✓ _____

Impacts to Historic Resources: _____

Safety & Security: _____

Hazardous Materials: ✓ _____

Wetlands: _____

Parks: _____

Construction Impacts: ✓ _____

Project Funding: _____

Other: _____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
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#185

113

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected. **At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.** In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, along with state regulations. CTA is holding this meeting to allow potentially impacted property owners and lessees the opportunity to learn more about the project and what it could mean for your property.

Name YVONNE FARLOW

Address 352 W 107th St.

City Chicago **State** Il **Zip** 60628

Email Address farlyvon@yahoo.com

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☑ Phone ☐ Email

Please describe your questions or concerns. I have an inherited house the location is good for me I'll pay taxes only with utilities and I'm comfortable were I'm at not surrounded by a lot of houses I would like to stay until I decide to move

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#186

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

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Name Scott + Maureen Perazzolo

Address 245 W. 114 Street

City Chicago **State** IL **Zip** 60628

Email Address scottap@ymail.com /or moep245@gmail.com

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?** What about possible foundation damage to our houses during Construction

Comments: ① We are concerned about noise and air quality during and after construction.

② We are concerned about the vibrations of our houses during and after construction.

③ How will this project impact the value of our property.

④ Will there be any changes to our streets and alley that leads to Wentworth

⑤ Will our Street 114th become a main Street. Will it be connected to Wentworth.

⑥ Will we be compisated for any inconvenences or given any grants for home improvements to reduce noise. Like they did for the residences living near midway air port.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#187

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name Annie Anderson

Address 10958 So Eggleston ~~Chicago~~

City Chicago **State** IL **Zip** 60620

Email Address leeanneanne@live.com.

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: _____

Neighborhoods & Communities: _____

Visual Impacts (how it would look): _____

Noise & Vibration: Parking Near my Home

Impacts to Historic Resources: _____

Safety & Security: _____

Hazardous Materials: _____

Wetlands: _____

Parks: _____

Construction Impacts: _____

Project Funding: _____

Other: _____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#188

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name Maedell Stiffend

Address 12635 S. Yale Ave

City Chicago **State** Il **Zip** 60628

Email Address

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** How much housing will be moved

What are your concerns about the **West Option?** How much housing will be removed

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: info

Neighborhoods & Communities: _____

Visual Impacts (how it would look): _____

Noise & Vibration: _____

Impacts to Historic Resources: _____

Safety & Security: _____

Hazardous Materials: _____

Wetlands: _____

Parks: _____

Construction Impacts: _____

Project Funding: _____

Other: _____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

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#189

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Red Line Extension

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Name MACY JOHNSON

Address 346 W. 101st STREET

City CHICAGO **State** IL **Zip** 60628

Email Address grandmay1@sbcglobal.net

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** Wendell Smith Park and too many homes will be affected.

What are your concerns about the **West Option?** There is a spacious parkway which is more feasible than the limited space on the East Option.

Comments: Has CTA considered placing more buses on Michigan Avenue. There could be several express buses extending to 130th Street.

Bishop Ford is an option and also Halsted Street. Fewer homes and families will be displaced. Dan Ryan is another option.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation:

Land Use and Economic Development:

Property Displacements: A huge number of homes will be destroyed.

Neighborhoods & Communities:

Visual Impacts (how it would look):

Noise & Vibration: This is already prevelant because of the present railroad.

Impacts to Historic Resources:

Safety & Security:

Hazardous Materials:

Wetlands:

Parks: Wendell Smith Park will be affected.

Construction Impacts:

Project Funding:

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

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#190

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name ROSEMARY WYCHE

Address 322 W 101st St.

City CHICAGO **State** IL **Zip** 60628

Email Address RWYCHE@AMERITECH.net

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** The structure of my home. The vibration from ~~earlier~~ trains already affected the ~~earlier construction~~ construction so another train will accelerate ~~its~~ the problems.

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#191

RED AHEAD
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Red Line Extension

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Name Gebell D. Huey

Address 352 W. 101st Street

City Chgo **State** Ill. **Zip** 60628

Email Address

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?**

Comments: The Red Line would be more beneficial to start from 95and Dan Ryne to along side the Bishop Ford Connected to 130th Street there are metra train at 103rd Vincine a metra train at 103rd and Walden, so what I am saying spread out the transportation
I think ford area would be the perfect route.
less home would have to be moved
not on the West side of the rail tracks on the west 101st Street - There is a park not utilized will not have to move people home, which are owned by Seniors and this is the age that we are Retired and enjoying our home in our elder age - Do not make us move at this late date.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#192

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name Rogers C. McFebe V

Address 9710 S. Phillips Ave

City Chicago **State** IL **Zip** 60617

Email Address

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** More attractive - will increase business in the area, which means less unemployment

What are your concerns about the **West Option?** Very effective (Reduce Population density).
Also, all of the above improvements.

Comments:
I think either option brings a major improvement to the Roseland/Pullman communities.
I can visualize retail growth in Roseland and by reducing population density & increasing business and employment

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

#193

248 + 245

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

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Name Solomon R. Morgan

Address 11426 S Perry

City Chicago **State** Illinois **Zip** 60628

Email Address SRM11439p@gmail.com

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☐ Email

Please describe your questions or concerns. Relocation information concerning M1 Zoning

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#194

245 Red Building

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project

Property Acquisition and Relocation Community Meeting

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Name Solomon R. Morgan

Address 11439 S. Perry AVE.

City Chicago ILL **State** **Zip** 60628

Email Address SRM11439p@gmail.com

☑ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☐ Email

Please describe your questions or concerns. East Building is a Pullman building last? If you knock it down PLEASE SAVE the bricks an limestone. I fought the city until I wns broke trying to prove it.

it wns the milk delivery service they shoed the horses an delivered to all pullman.

SAVE it !!! or SAVE the bricks.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

#195

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

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Name LARRY L JORDAN

Address 857 W 107TH ST

City CHICAGO **State** IL **Zip** 60643

Email Address

☐ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

ORIGINAL

STATE OF ILLINOIS)
) SS:
COUNTY OF COOK)

PUBLIC COMMENTS AT THE
CTA OPEN HOUSE
RED LINE EXPANSION PROJECT

PUBLIC COMMENTS MADE)
BEFORE THE COURT REPORTER)

PUBLIC COMMENTS MADE at the hearing of the above-entitled matter before Shelly White, Certified Shorthand Reporter, and notary public in and for the County of Cook, on November 1, 2016, at 211 East 115th Street, Chicago, Illinois, beginning at 5:30 p.m. and ending at 7:30 p.m.

Reported by: Shelly White, C.S.R.
License No.: 0084-002196

TESTIMONY OF: PAGE

Ms. Bettye Campbell	3
Mr. David May	7
Ms. Stella Brown (Charles)	11
Mr. Dallas Beecher	12
Mr. Larry L. Jordan	14
Mr. Ray Coleman, Sr.	15
Ms. Thomas	16
Ms. Cebell Huey	18
Ms. Cheena Credit	20
Ms. Christina Horde	21

#196

1 MS. CAMPBELL: I live in the
2 West Chesterfield neighborhood of the Roseland
3 community area. It is a neighborhood bordered by
4 two major highways.
5 Number one, on the west, State
6 Street; this runs along and provides access to the
7 Dan Ryan Expressway, which is Interstate 94 or
8 I-94.
9 Number two, on the south is
10 95th Street, which is US Highway 12 and 20.
11 In addition, there is the east
12 boundary in my neighborhood, which is Martin Luther
13 King, Jr., Drive. It is a major street, heavily
14 traveled.
15 And then number four on the north the
16 boundary is 87th Street. Previously it was 91st
17 Street prior to the extension beyond the Baltimore
18 and Ohio Railroad, which remains within
19 West Chesterfield, that part of the neighborhood.
20 Chapter one page three of the Draft
21 Environmental Impact Statement reads: CTAs Red
22 Line HRT service currently terminates at the
23 95th Street terminal. The 95th Street terminal is
24 among CTAs busiest stations.

The Red Line operates 24 hours per day, seven days per week as do some of the connecting bus routes.

In addition, the glossary within that same Draft Environmental Impact Statement reads that the station, the 95th Street station serves thousands of customers each day and is a vital part of the south side.

With that background, I will share my memo of February 21, 2012. And the subject is environmental issues.

As a resident of West Chesterfield since 1938, I fully appreciate the CTA Red Line terminal at 95th Street and the Dan Ryan expressway.

My parents chose to purchase land and build a home at my present location, which is two blocks from the terminal because of the 119th and Morgan Street car route, which at that time traveled north through Roseland on Michigan Avenue, stopped and turned west at 95th Street and proceeded on State Street to downtown Chicago, where they were employed.

Today, as in 1938, the terminal

1 serves neighbors as well as suburbanites in the
2 same manner. And it is an advantage, definitely an
3 advantage.
4 Along with the benefits, my
5 neighborhood is negatively impacted by harmful
6 pollution that -- which means exhaust fumes from
7 cars, local and interstate buses, trucks, and the
8 commuter trains traveling on 95th Street, which, as
9 I said before, is Highway 12 and 20, the Dan Ryan
10 Expressway, I-94, and State Street.
11 It is not healthy to add any facility
12 to invite more vehicles into the neighborhood.
13 Many studies support this. Most recently, Tusk
14 University found car and exhaust to be harmful to
15 brain function and factors increasing stroke risks.
16 Shortly after the current terminal
17 opened, in 1969, there was a meeting downtown where
18 CTA, business, and neighborhood residents dealt
19 with the fact that the business community had
20 expected and was requesting more parking at the
21 terminal.
22 To answer this, CTA pointed out that
23 there were over twenty, 2-0, twenty 95th Street bus
24 routes entering the terminal and that unrestricted

parking existed along these 20 routes and allowed for easy access to the rapid transit trains at the terminal.

This is still the case. Research will show the same or increased number of routes today in the year 2017.

I repeat. Research will show the same or increased number of routes today, especially for the future, considering that the 95th Street terminal is to be served by two terminals instead of one. And will have major drop-off points on the bridge over the Dan Ryan Expressway at 95th Street.

Plus, TOD, that's capital T-O-D, Transit-Oriented Development planned for the 9400 block on State Street is where there will be businesses in that entire block. And that will require more automobiles for access.

One asks that the CTA and the City of Chicago respect my neighborhood quality of life and not include parking lots or any facilities that accommodate motor vehicles within my neighborhood's boundaries as outlined at the beginning. Our health and other factors depend on it.

#197

MR. MAY: I have comments that address two concerns.

One is the need to coordinate Red Line routing and station locations in consideration of proposed electric line service upgrades.

The second is to study whether the south leg of the Red Line extension to 130th Street should be replaced by an express bus circulator and shuttle to the nearest 'el' station.

A transit concept that will affect the area served has developed a lot of interest in the last couple of years. All of its four versions: Gray line, gold line, Chicago cross rail, and consolidated connector proposed remodeling the Metra Electric line, which runs through Roseland to offer frequent local service similar to a CTA 'el' line or a European metro line.

These proposals suggest that the Red Line extension should be evaluated in concert with the electric line services option rather than ignoring the electric line, as has been done so far.

If an electric line proposal is

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Chicago, Illinois (312) 263-0052

1 advanced, the goal in this neighborhood should be
2 to coordinate the new Red Line and electric line
3 services to maximize the number of riders served,
4 their convenience and trip quality.
5 The second concern is the many
6 problems of the south leg of the extension. It
7 seems to me that instead of building the south leg
8 of the CTA Red Line extension from 118th Street to
9 130th Street, a bus rapid transit type of service
10 should be implemented. Buses would run a loop
11 route in the neighborhood south of 130th Street and
12 then run express to the CTA 95th Street station.
13 The problems with the Red Line south
14 leg are, one, it costs a huge amount to build;
15 Two, its operating costs would be
16 very high;
17 Three, it will serve relatively few
18 riders, maybe 1500 people;
19 Four, the station is very
20 inconveniently located, well beyond the northeast
21 corner of the neighborhood served -- only thirty
22 percent of residents live within half a mile of the
23 'el' station -- a circulator shuttle bus could have
24 bus stops with shelters located within one eighth

McCorkle Litigation Services, Inc.
Chicago, Illinois (312) 263-0052

of a mile of 90 percent of residents;

Number five, will not be in service for maybe five years or more or never;

Number six, eliminating the cost of the south leg make the rest of the extension much easier to fund and more likely to be built;

Number seven, a circulating shuttle bus running on a partially exclusive right-of-way would pick up riders near their homes and get them onto the 'el' in the same amount of time as the Red Line extension at a fraction of the capital and operating cost.

As to cost, note that the capital cost of the south leg may be $400,000. The area serves 6300 residents. If 1500 of them regularly ride the new extension, the capital cost per rider would be $266,000. That's the construction and design cost for each rider. $266,000.

Likewise, the operating costs of the south leg would be much higher than a bus circulator shuttle express service. It is much cheaper to operate, maintain, and replace PRT service than to operate, maintain, and replace the Red Line transit station.

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1 And one train of 'el' as far as
2 transit service quality, trip times from the
3 neighborhood traveling to the Red Line will be
4 shorter for the new bus rapid transit plus the Red
5 Line without the south leg and for no transit
6 service to the 130th Street -- and for no transit
7 service at the 130th Street station than riding on
8 the 'el', on the Red Line.
9 The convenience and comfort of using
10 the proposed bus service with shelters at bus stops
11 and transfer to the 'el' will be better than trips
12 between home and the 130th Street station plus the
13 one-seat travel on the 'el'.
14 Timing. The proposed Red Line
15 extension will not be in service for many, at least
16 five years. It may never be built. A bus rapid
17 transit service from the neighborhood to the
18 95th Street station using improved shoulders of the
19 Bishop Ford and a couple new exclusive ramps could
20 be implemented in less than two years.
21 Once the extension is underway, if
22 PRT service via Cottage Grove plus a new road plus
23 Kensington to the new 118th Street station is
24 better than the Bishop Ford shoulder to

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95th Street, that service change could be made as soon as trains run on the extension.

Replacing the south leg of the 'el' extension with PRT service will significantly reduce total costs. This improves the possibilities of receiving funding for the project from 95th Street to 118th Street and bus service from the neighborhood.

Related effects on the CTA. Without the south leg of the extension, building a railcar and car shop at 123 -- 120th Street is less economical.

Also, if - service is provided on the Bishop Ford, perhaps PACE could use the improved shoulders to provide new computer bus routes from some south suburbs.

In addition to providing PRT service to the Red Line, perhaps a new stop could be built on the South Shore line at 130th Street to serve the neighborhood and to offer park-and-ride service for Bishop Ford riders heading to the Loop.

#198 MS. BROWN: I am worried about environmental impact that the vibrations and the construction will have on our property.

We stay at 12 West 115th Street. And the property is not going to be acquired by CTA. But because it's so close, especially if they do the east side option, that it's going to shake our property.

I've already had to have the ceiling fixed in the living room. I've had to have the front part of my house propped up because of the vibrations at the end of that block because of the railroad.

Because we live on a main street, 115th Street, so the shaking has caused damage inside my house, the foundation and to the ceiling in the front part of my house.

I'd like to know what CTA intends to do to protect our property, properties.

#199 MR. BEECHER: My name is Dallas Beecher. I am a retired general contractor that was self-employed for 40 years in Chicago. And I have experience working with various municipalities here in Chicago, including CHA, CTA, and others.

I would like to propose the original concept that was going east under the viaduct of King Drive down on the ground level and then headed

in the east direction, in the direction of Olive-Harvey College. And from there it would have to be a decision made of whether you're going to elevate the tracks or either underground the tracks to the east side of Bishop Ford expressway onto ground level along the tracks that exist now.

And the frontage road could be the path of those tracks. It would take you almost directly to 130th Street without any expense of demo-ing residential and at the same time it would offer parking facilities, transportation turnaround facilities, and maintenance on the frontage road.

And on the east side of Bishop Ford expressway, because at the, at this proposal that I'm presenting, you already have bridges that goes from east to west on 115th, 111th, and 103rd. You have a 103rd expressway that goes on ground level going east that's already there.

So you could have those stations that you have on the proposed route now. All you do is bring in the stations out to the east instead of to the west. And it's not interfering with residential.

The other part of the proposal, I

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1 think Roseland as a community ought to, should --
2 somebody should propose demo-ing residential that
3 been unoccupied for at least five years or more.
4 Because investors usually look at blocks of
5 opportunity as opposed to individual houses. And
6 when they see a large sum of residential buildings,
7 they can't visualize or don't want to go through
8 the aspect of demo. Because I think that we have
9 funds, State funds to do demo that's been over five
10 years of occupancy.
11 Thank you.
12 Dallas Beecher, again, and he wants
13 to finish proposal by saying that my proposal to be
14 looked at will offer better opportunities for
15 expansion for parking and out-of-state business,
16 personnel, and job opportunities coming from
17 Indiana for parking facilities. Transportation
18 would be outside of town that you would have your
19 railroad track expansion would be better utilized
20 by the state of Indiana.
21 Thank you. That's it.
22 #200 MR. JORDAN: My comment is on the Green
23 Line.
24 What they putting out right now is

still, is still just putting it right close to Eggleston on all like that. It should have been coming down Halsted. But I really got a little understanding of why. Because you got the buses going there. The train should go there, too.

And at the same time, how far is the train going to go? Is it about to 130th?

I just hope they've got enough room for senior citizens and for handicapped. We need more room for handicapped and so forth on the train. Because I'm one of the handicapped. And they need to make bigger doors or wider doors for wheelchairs and everything. Because my wife, she was scared of them riding the train. She got on the train, the buses and all like that. And the way people were treating them was really bad.

That was my comment for the day.

#201 MR. RAY COLEMAN, SR.: Yeah. I live at 355. I'm willing to relocate, if they buy my building.

I got my kids living there. So they're going to have to be relocated, I imagine. Because my son and he got two kids and a wife. And me and my wife is there.

So I'm going to make sure everybody have a place to stay if they buy the building, get a place big enough for my whole entire family.

So that consist of me, my wife, the grandkids, my son, his wife, and the kids, grandkids.

And we need somewhere -- if we could relocate in the neighborhood, it would be fine; but if not, I would like to accommodate for disability. Because I'm disabled. I've been disabled for 15 years. So I have to have, like, disable equipment in the house, you know -- rails and for the bathrooms, special pull up rails on the side and stuff to help me around there.

And I want them to relocate somewhere, if they have to -- hopefully, they can get out on their own. But if not, I want a place big enough for them to stay there with me, too. I don't want nobody in the streets in my family.

That's about it.

And I'm willing to go if they're going to pay me right.

#202 MS. THOMAS: Currently, when we use public transportation, we have to walk to 103rd Street.

1 My home will be affected by this project. It will
2 be. And we've received a letter that it would be
3 affected if they select the east option.
4 We have to walk two blocks to catch
5 the bus. And we would have to walk two blocks to
6 catch the Red Line extension. And we believe that
7 this, our area would be better served by express
8 buses, by increasing the number of buses that not
9 only run to 103rd Street, but those that run out to
10 Altgeld Gardens.
11 It would be less disruptive of the
12 neighborhood. We don't believe that there's going
13 to be any economic impact on the community. We
14 could look to 95th Street to see what it's done for
15 them. We can look at the increased crime there at
16 95th Street. And we do not want that in our
17 neighborhood.
18 We just think there are other
19 alternatives that could be made for this project.
20 We're also concerned about the safety
21 of the neighborhood. It's an older neighborhood
22 and with many senior citizens. And we don't
23 believe that we will see increased police
24 protection from the City with this new project.

#203 MS. HUEY: My comment is, I live right on 101st Street at the railroad track between Princeton and Eggleston. There's a park on the west side. I'm preferably not coming on the east side of the street at this point.

This is one of the decisions, you know, I want to put in.

There's a park on the west side of the street. Nobody is living -- nobody is there that whole entire park. I've been there ever since 1965. Nobody uses that park. Even people don't walk the dogs over there. It's just a park that's just there. And the City cuts the grass when needed. And people just dump trash.

Now that -- it starts at 99th and Eggleston and goes to 103rd and Eggleston. Then beyond 103rd and Eggleston all the way down the side of that tracks, the south -- you know, the Pacific tacks, it's hardly nothing that's really worth anything all down that, all down that track to 115th.

Now that is a good distance that CTA can use, you know. And then whatever they have to do from 115th then on out to 130th, you know, where

1 they're going to.
2 Then my other, my other decision that
3 I thought would be really, you know, beneficial is
4 I look at 103rd and Vincennes.
5 There's a Metra at 103rd and Wallace
6 or Walton. There's another Metra close together.
7 Then you go over across Western on 103rd, there's
8 another train.
9 Now with the 'el', CTA coming right
10 there on 103rd and Eggleston, that's a whole lot of
11 cluttered transportation -- three Metras and one
12 CTA.
13 And so why don't they spread this
14 transportation out. And then if they're going to
15 do that, go over to the Bishop Ford on go straight
16 down from 95th and State to, all the way around to
17 Bishop Ford, make that curve and go on to Bishop
18 Ford can go straight down to Bishop Ford and go to
19 130th.
20 That's the second thing, you know, I
21 wanted them to look at it. And to me it would, it
22 would look really nice, you know, with the
23 architect to build it up and, you know, make it,
24 you know -- and that way they would, you know,

separate some of this transportation. It won't be all close together like it would be like on Eggleston, Racine, Walton and on and on, you know, going over east.

That's my comment.

#204 MS. CREDIT: I think you should do a better job of notifying the people in the immediate community.

I saw the listing on the back of the proposal that lists all the agencies that they sent this information out to. But I think for something this important in the older clientele in the community. It would have been best if every person who lived within the 21st Ward, 9th Ward, and 34th Ward got an actual letter in the mail stating this along with the proposals.

I'm concerned about my property value. Are they going to go up or are they going to go down? If I choose to sell my house, do you think I'll get what it's actually worth at this time knowing that a train is going to be coming through? Residential areas that are single family homes are totally different than residential areas that have two- and three-flats on them.

How does this affect my property taxes?

How does the noise and vibrations actually affect the foundation of my home? Has there been a long-term study done to let me know how that's going to come out, if that makes sense?

Why did it take two years from the last meeting to this current meeting?

If I had to choose between the east option or west option, I choose Halsted; but since that is no longer on the table, why don't you do the Gray Line?

Have studies already been done concerning increased pedestrian traffic? Will potential crime levels increase?

What is being done to communicate these findings to the public? Because I didn't see anything in the DIS draft.

For those of us who decide to stay, the homes that are not affected, is there a way that we can soundproof the homes? Maybe the City of Chicago could buy soundproof windows or put siding on homes that don't already have siding. Just a thought.

I think I'm done.

#205 MS. HORDE: The question is, how can we be involved in the outreach program?

In 2012 they reached out to groups. But there needs to be more outreach to the communities that are near 95th, I guess where the, where the main station is, that main station at 95th and State.

There needs to be more outreach there. Because I see that the overpass is going to be quite -- will rise up, will come up near 98th Street.

So there needs to be more outreach to the people in that area as far as to find out what's going on and how the changes are going to affect community in the northern part of Roseland.

And then there's a second one just a general question.

There, along the train tracks from 95th on to 47th Street there are these boxes that the trains go under. And we're trying to figure out what are they for and why do they have them there? Within the last ten years they've built them, but we don't know why they have the boxes

1 over the trains. Just one question, we want to
2 know why.
3 That's it.
4 (Whereupon the above-entitled
5 matter was concluded at
6 7:31 p.m.)
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STATE OF ILLINOIS)
)
COUNTY OF COOK)

SHELLY WHITE, being first duly sworn, on oath says that she is a Certified Shorthand Reporter, that she reported in shorthand the proceedings given at the taking of said hearing, and that the foregoing is a true and correct transcript of her shorthand notes so taken as aforesaid, and contains all the proceedings given at said hearing.

_____,
License No. 084-002196

1

101st 18:2
103rd 13:16,17 16:24 17:9 18:16,17 19:4,5,7,10
111th 13:16
115th 12:1,12 13:16 18:21, 24
12 12:1
130th 13:9 15:7 18:24 19:19
15 16:10
1965 18:11

2

2012 22:4
21st 20:14

3

34th 20:15
355 15:19

4

40 12:19
47th 22:20

7

7:31 23:6

9

95th 17:14,16 19:16 22:6, 8,20
98th 22:11
99th 18:15
9th 20:14

A

above-entitled 23:4
accommodate 16:9
acquired 12:2
actual 20:15
affect 21:1,4 22:16
affected 17:1,3 21:20
agencies 20:10
alternatives 17:19
Altgeld 17:10
architect 19:23
area 17:7 22:14
areas 20:22,23
aspect 14:8

B

back 20:9
bad 15:16
bathrooms 16:13
Beecher 12:17 14:12
beneficial 19:3
big 16:3,18
bigger 15:12
Bishop 13:5,13 19:15,17,18
block 12:9
blocks 14:4 17:4,5
boxes 22:20,24
bridges 13:15
bring 13:21
build 19:23
building 15:20 16:2
buildings 14:6
built 22:23
bus 17:5
buses 15:4,15 17:8
business 14:15
buy 15:19 16:2 21:22

C

catch 17:4,6
caused 12:12
ceiling 12:6,13
CHA 12:21
Chicago 12:19,21 21:22
choose 20:19 21:9,10
citizens 15:9 17:22
City 17:24 18:13 21:21
clientele 20:12
close 12:3 15:1 19:6 20:2
cluttered 19:11
COLEMAN 15:18
College 13:2
comment 14:22 15:17 18:1 20:5
communicate 21:16
communities 22:6
community 14:1 17:13 20:8,13 22:16
concept 12:23
concerned 17:20 20:17
concluded 23:5
consist 16:4
contractor 12:18
CREDIT 20:6
crime 17:15 21:15
CTA 12:2,15,21 18:22 19:9,12
current 21:8
curve 19:17
cuts 18:13

D

Dallas 12:17 14:12
damage 12:12
day 15:17
decide 21:19
decision 13:3 19:2
decisions 18:6
demo 14:8,9
demo-ing 13:10 14:2
direction 13:1
directly 13:9
DIS 21:18
disability 16:9
disable 16:11
disabled 16:10
disruptive 17:11
distance 18:22
dogs 18:12
doors 15:12
draft 21:18
Drive 12:24
dump 18:14

E

east 12:4,23 13:1,5,13, 16,18,21 17:3 18:4 20:4 21:9
economic 17:13
Eggleston 15:2 18:3,16,17 19:10 20:3
el' 19:9
elevate 13:4
end 12:9
entire 16:3 18:10
equipment 16:11
exist 13:6
expansion 14:15,19
expense 13:9
experience 12:20
express 17:7
expressway 13:5,14,17
extension 17:6

F

facilities 13:11,12 14:17
family 16:3,19 20:22
figure 22:21
find 22:14
findings 21:17
fine 16:8
finish 14:13
fixed 12:7
Ford 13:5,13 19:15,17,18
foundation 12:13 21:4
front 12:8,14
frontage 13:7,12
funds 14:9

G

Gardens 17:10
general 12:18 22:18
good 18:22
grandkids 16:5,6
grass 18:13
Gray 21:12
Green 14:22
ground 12:24 13:6,17
groups 22:4
guess 22:6

H

Halsted 15:3 21:10
handicapped 15:9,10,11
headed 12:24
home 17:1 21:4
homes 20:23 21:20,21,23
hope 15:8
HORDE 22:2
house 12:8,13,14 16:12 20:19
houses 14:5
HUEY 18:1

I

imagine 15:22
impact 17:13
important 20:12
including 12:21
increase 21:15
increased 17:15,23 21:14
increasing 17:8
Indiana 14:17,20
individual 14:5
information 20:11
inside 12:13
intends 12:15
interfering 13:22
investors 14:4
involved 22:3

J

job 14:16 20:7
JORDAN 14:22

K

kids 15:21,23 16:5
King 12:24
knowing 20:21

L

large 14:6
letter 17:2 20:15
level 12:24 13:6,17
levels 21:15
listing 20:9
lists 20:10
live 12:11 15:18 18:1
lived 20:14
living 12:7 15:21 18:9
long-term 21:5
longer 21:11
looked 14:14
lot 19:10

M

made 13:3 17:19
mail 20:15
main 12:11 22:7
maintenance 13:12
make 15:12 16:1 19:17,23
makes 21:6
matter 23:5
meeting 21:8
Metra 19:5,6
Metras 19:11
municipalities 12:20

N

needed 18:14
neighborhood 16:8 17:12,17,21
nice 19:22
noise 21:3
northern 22:16
notifying 20:7
number 17:8

O

occupancy
14:10
offer
13:11 14:14
older
17:21 20:12
Olive-harvey
13:2
opportunities
14:14,16
opportunity
14:5
opposed
14:5
option
12:4 17:3 21:10
original
12:22
out-of-state
14:15
outreach
22:3,5,9,13
overpass
22:10

P

p.m.
23:6
Pacific
18:19
park
18:3,8,10,11,12
parking
13:11 14:15,17
part
12:8,14 13:24 22:16
path
13:8
pay
16:22
pedestrian
21:14
people
15:16 18:11,14 20:7
22:14
person
20:13
personnel
14:16
place
16:2,3,17
point
18:5
police
17:23
potential
21:15
preferably
18:4
presenting
13:15
Princeton
18:3
program
22:3
project
17:1,19,24
properties
12:16
property
12:2,5,16 20:17 21:1
proposal
13:14,24 14:13
20:10
proposals
20:16
propose
12:22 14:2
proposed
13:20
propped
12:8
protect
12:16
protection
17:24
public
16:23 21:17
pull
16:13
put
18:7 21:22
putting
14:24 15:1

Q

question
22:2,18 23:1

R

Racine
20:3
railroad
12:10 14:19 18:2
rails
16:12,13
RAY
15:18
reached
22:4
received
17:2
Red
17:6
relocate
15:19 16:8,15
relocated
15:22
residential
13:10,23 14:2,6
20:22,23
retired
12:18
riding
15:14
rise
22:11
road
13:7,12
room
12:7 15:8,10
Roseland
14:1 22:16
route
13:20
run
17:9

S

safety
17:20
scared
15:14
select
17:3
self-employed
12:19
sell
20:19
senior
15:9 17:22
sense
21:6
separate
20:1
served
17:7
shake
12:4
shaking
12:12
side
12:4 13:5,13 16:13
18:4,5,8,18
siding
21:23
single
20:22
son
15:23 16:5
soundproof
21:21,22
south
18:18
special
16:13
spread
19:13
SR
15:18
starts
18:15
state
14:9,20 19:16 22:8
stating
20:15
station
22:7
stations
13:19,21
stay
12:1 16:2,18 21:19
straight
19:15,18
street
12:1,11,12 13:9
16:24 17:9,14,16
18:2,5,9 22:12,20
streets
16:19
studies
21:13
study
21:5
stuff
16:14
sum
14:6

T

table
21:11
tacks
18:19
taxes
21:2
ten
22:23
thing
19:20
THOMAS
16:23
thought
19:3 21:24
three-flats
20:24
time
13:10 15:6 20:21
totally
20:23
town
14:18
track
14:19 18:2,20
tracks
13:4,6,8 18:18 22:19
traffic
21:14
train
15:5,7,11,14,15 19:8
20:21 22:19
trains
22:21 23:1
transportation
13:11 14:17 16:24
19:11,14 20:1
trash
18:14
treating
15:16
turnaround
13:11
two-
20:24

U

underground
13:4
understanding
15:4
unoccupied
14:3
utilized
14:19

V

viaduct
12:23
vibrations
12:9 21:3
Vincennes
19:4
visualize
14:7

W

walk
16:24 17:4,5 18:12
Wallace
19:5
Walton
19:6 20:3
wanted
19:21
Ward
20:14,15
west
12:1 13:16,22 18:4,8
21:10
Western
19:7
wheelchairs
15:13
wider
15:12
wife
15:13,23,24 16:4,5
windows
21:22
working
12:20
worth
18:20 20:20

Y

years
12:19 14:3,10 16:11
21:7 22:23

ORIGINAL

STATE OF ILLINOIS)
)SS:
COUNTY OF COOK)

PUBLIC COMMENTS AT THE
CTA MEETING
RED LINE EXPANSION PROJECT

PUBLIC COMMENTS MADE)
BEFORE THE COURT REPORTER)

PUBLIC COMMENTS MADE at the hearing of the above-entitled matter before Tracy Jones, Certified Shorthand Reporter and notary public in and for the County of Cook on November 1, 2016, at 211 East 115th Street, Chicago Illinois, commencing at 5:30 p.m. and concluding at 7:30 p.m.

Reported by: Tracy Jones, CSR, RPR, CLR
Illinois CSR No.: 084-004553

APPEARANCES:

Ms. Addie Dixon

Ms. Macy Johnson

Ms. Kathy Jackson

Ms. Doris White

#206 MS. DIXON: I want to say right now, I'm tired of dodging bullets. I'm tired of can't stand in front of the window. I'm tired of every time I hear a noise, I've got to jump on the floor. I'm tired of the trains coming through, blowing their horns all night long. And I'm tired of the house shaking. So I'm ready to live my life and get out of there.

And if someone lives with me, make sure they're replaced. I want to make sure that the people that live with me are taken care of.

My name is Addie Dixon, 354 West 106th Street.

Plus, I'm sick. And the noise is making my condition worse. The noise is making my condition worse. I've got lymphedema, congestive heart failure, arthritis. And I'm tired of all that noise. I can't sleep. If they buy my house, I won't have to hear the noise no more. I'm tired of it.

I'm ready for the Red Line. I'm with you with your plans. I'm with you with your plans.

#207 MS. JOHNSON: Macy Johnson, 346 West 101st Street.

Number one, it bothers me to have so many displacements of homes and families in the area. If it must be done, I wish they would consider the west side of the train tracks. There's more spaciousness on that side. I don't see a lot of homes would be involved if they did it on the west side.

I wish there were other options. One was to put more express buses on Michigan Avenue that would go to the Gardens, 130th. And if that could not be done, what about Bishop Ford Expressway? That could be used as an option. And there's also Austin Street and possibly Dan Ryan. They have Els running through some other expressways, and those could be an option.

I guess I've said it.

#208 MS. JACKSON: Kathy Jackson, 9372 South Vanderpoel.

Maybe you can listen to me. What I'm concerned about is up until this year, 2016, people were able to call the CTA information and see what buses were running where. Now, as of 2016, you can only -- Before, you could call up to 12:00 or 1:00 o'clock at night. Now you can

1 only call to 7:00 o'clock. And people are out
2 there leaving the hospital after 7:00 o'clock.
3 People are leaving church, leaving school.
4 People cars getting broke down. And they want
5 to know what buses are where, where, where.
6 Because, you know, some buses stop
7 running at a certain time. And some buses, you
8 just don't know if and when they are running.
9 And you want to have the thing going
10 out to 130th Street. But if people can't get
11 information on it, it makes it very terrible.
12 Like I said, when people getting out of church,
13 getting cars broke down, people leaving school.
14 I was in Provident Hospital myself a
15 few weeks ago, and they let me out of there
16 after 11:00 at night. I was in the emergency.
17 And if I didn't have no way of knowing what bus
18 goes where, what can I do? What do you suggest
19 I do?
20 And even if they raised the fare, it
21 would be convenient for people to know if and
22 when they can get somewhere at night.
23 I mean, a lot of people drive, but the
24 people that don't drive are the ones that ride

the bus. So people need to be able to call in and find out what bus is where, when, and if so that if the buses stop running at certain times -- Like, I didn't know until recently that there was not even a bus on Michigan Avenue around the 30s and 40s and 50s. And so I'm standing out there, and wouldn't nothing come.

So maybe that's something that people might be able to consider. I would be in favor of getting a petition with a couple of thousand names on it for people who were in favor of it because the people who ride the buses are in favor of it. The people with cars, they doing all right until the car breaks down. Even if they raise the fare, people need to know when they can get it.

That's my comment.

They got this business about if you have a cell phone, you can look on the thing. Some people don't have cell phones, and some of these cell phones is not -- some people don't understand how to use that. Because you have to have some kind of phone to call and get the information where the bus is going. But anyhow,

that's a disadvantage to people out here wondering how to get home. And even if they raise the fare, like I said, it would be to the people's advantage.

#209 MS. WHITE: Doris White.

I think the best option is the east option because I go to the church that's going over eastbound, and once we get off a bus at 115th and Cottage Grove, there's no bus. So I would choose the east option over the west option because I feel it would work better for those that don't have a car and don't drive to church. And they have to take the bus. So having it going eastbound would benefit a lot of us, especially when it gets cold outside and we're having to walk. That makes a big difference.

And our pastor do provide yellow bus service on Sundays. But on Wednesdays, we have to somewhat get there on our own. So I would definitely go for the east option. That's all I have to say.

(Whereupon, these were all the proceedings had at this time.)

STATE OF ILLINOIS)
) SS:
COUNTY OF C O O K)

I, TRACY JONES, being first duly sworn, on oath state that I am a court reporter doing business in the City of Chicago; that I reported in shorthand the proceedings of said Public Comments; that the foregoing is a true and correct transcript of my shorthand notes so taken as aforesaid and contains the proceedings given during said Public Comments.

Tracy Jones

TRACY JONES, CSR, RPR, CLR
LIC. NO. 084-004553

1

101st 3:23
106th 3:12
115th 7:9
11:00 5:16
12:00 4:24
130th 4:10 5:10
1:00 4:24

2

2016 4:20,23

3

30s 6:6
346 3:23
354 3:12

4

40s 6:6

5

50s 6:6

7

7:00 5:1,2

9

9372 4:17

A

Addie 3:12
advantage 7:4
area 4:3
arthritis 3:17
Austin 4:13
Avenue 4:9 6:5

B

benefit 7:14
big 7:16
Bishop 4:11
blowing 3:6
bothers 4:1
breaks 6:14
broke 5:4,13
bullets 3:2
bus 5:17 6:1,2,5,24 7:8, 9,13,17
buses 4:9,22 5:5,6,7 6:3,12
business 6:18
buy 3:19

C

call 4:21,23 5:1 6:1,23
car 6:14 7:12
care 3:11
cars 5:4,13 6:13
cell 6:19,20,21
choose 7:10
church 5:3,12 7:7,13
cold 7:15
comment 6:17
concerned 4:20
condition 3:15,16
congestive 3:17
convenient 5:21
Cottage 7:9
couple 6:10
CTA 4:21

D

Dan 4:13
difference 7:16
disadvantage 7:1
displacements 4:2
Dixon 3:1,12
dodging 3:2
Doris 7:5
drive 5:23,24 7:12

E

east 7:6,10,20
eastbound 7:8,14
Els 4:14
emergency 5:16
express 4:9
Expressway 4:12
expressways 4:15

F

failure 3:17
families 4:2
fare 5:20 6:15 7:3
favor 6:9,11,13
feel 7:11
find 6:2
floor 3:5
Ford 4:11
front 3:3

G

Gardens 4:10
Grove 7:9
guess 4:16

H

hear 3:4,19
heart 3:17
home 7:2
homes 4:2,6
horns 3:6
hospital 5:2,14
house 3:7,19

I

information 4:21 5:11 6:24
involved 4:6

J

Jackson 4:17
Johnson 3:23
jump 3:4

K

Kathy 4:17
kind 6:23
knowing 5:17

L

leaving 5:2,3,13
life 3:8
listen 4:19
live 3:8,11
lives 3:9
long 3:6
lot 4:6 5:23 7:14
lymphedema 3:16

M

Macy 3:23
make 3:9,10
makes 5:11 7:16
making 3:15
Michigan 4:9 6:5

N

names 6:11
night 3:6 4:24 5:16,22
noise 3:4,14,15,18,20
Number 4:1

O

option 4:12,15 7:6,7,10,11, 20
options 4:8

P

pastor 7:17
people 3:11 4:21 5:1,3,4,10, 12,13,21,23,24 6:1, 8,11,12,13,15,20,21 7:1
people's 7:4
petition 6:10
phone 6:19,23
phones 6:20,21
plans 3:22
possibly 4:13
proceedings 7:23
provide 7:17
Provident 5:14
put 4:9

R

raise 6:15 7:3
raised 5:20
ready 3:8,21
recently 6:4
Red 3:21
replaced 3:10
ride 5:24 6:12
running 4:14,22 5:7,8 6:3
Ryan 4:14

S

school 5:3,13
service 7:18
shaking 3:7
sick 3:14
side 4:4,5,7
sleep 3:18
South 4:17
spaciousness 4:5
stand 3:3
standing 6:7
stop 5:6 6:3
Street 3:13,24 4:13 5:10
suggest 5:18
Sundays 7:18

T

terrible 5:11
thing 5:9 6:19
thousand 6:10
time 3:4 5:7 7:23
times 6:4
tired 3:2,3,5,7,18,20
tracks 4:4
train 4:4
trains 3:5

U

understand 6:22

V

Vanderpoel 4:18

W

walk 7:16
Wednesdays 7:18
weeks 5:15
west 3:12,23 4:4,7 7:10
White 7:5
window 3:3
wondering 7:2
work 7:11
worse 3:15,16

Y

year 4:20
yellow 7:17

#210

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, December 07, 2016 10:29 AM
To: Czarnecky, James
Subject: RE: Project Contact List

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Czarnecky, James [mailto:jczarnecky@wightco.com]
Sent: Tuesday, November 01, 2016 11:54 AM
To: Red Extension
Subject: Project Contact List

Please add me to the project contact list for future updates.

Thank you,
Jim

James T. Czarnecky, AICP
Vice President, Director of Transportation Planning
Wight & Company
211 North Clinton Street, Suite 300N
Chicago, IL 60661
312.261.5700 | d 312.261.5737 | m 630.849.9928
www.wightco.com

#211

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 03, 2016 9:55 AM
To: Main Email
Subject: RE: Red Line Extension

Gregory,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Main Email [mailto:gregofiitchicago@gmail.com]
Sent: Thursday, November 03, 2016 6:20 AM
To: Red Extension
Subject: Red Line Extension

Hello Red Line Team

My name is Gregory Walker and I had a couple more things that I had wanted to point out that wasn't on my sheet.
One note I didn't see is the fact that the CTA could have also used the I94/Bishop Ford area of to extend the red line. With the new service on Cottage Grove that could've been a new station.... promoting ridership there for Pullman residents. At or somewhere near 103rd there could've been a station. This would be great because Olive-Harvey is there and many people attend there from across the city; especially since they are currently expanding. It could be another boost for the line. You could still have stations at 111th, 115th, and 130th respectively.... this would be the end of the line in opposed to the middle as with the current idea(s). This could be maybe a 3rd or fourth alternative.
Another good point about the red line extension is the Altgeld Gardens areawould finally be connected to Hegewisch neighborhood. For decades both are on the outskirts of town and have been nearly land locked; making them inaccessible.

Just a few ideas...

Gregory Walker, Jr.
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his affiliates and subsidiaries. If you are not the intended recipient, you are hereby notified that any use of the information contained in or transmitted with the communication or dissemination, distribution, or copying of this communication is strictly prohibited by law. If you have received this communication in error, please immediately return this communication to the sender and delete the original message and any copy of it in your possession.

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#212

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 03, 2016 9:56 AM
To: Lindsay Bayley
Subject: RE: No public agency should spend money on parking garages

Lindsay,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Lindsay Bayley [mailto:lindsaybanks@gmail.com]
Sent: Thursday, November 03, 2016 9:22 AM
To: Red Extension
Subject: No public agency should spend money on parking garages

As a transportation planner who specializes in parking policy, I have argued for years that no public agency should spend money on parking for several reasons.

First, the financial benefits to the city of having tax-generating, productive uses next to the train far outweigh the benefits of storing cars all day long. I believe that even the benefits of a public park, that does not generate revenue would outweigh the benefits of having parking next to the train.

Second, the future of mobility is unknown. Demand for parking may drastically decline and garages are typically built with public funds to be paid out over 40 years. We don't know if we'll need parking next to the train in 5 years, let alone 40 years. It will be a waste of money and tax payers will be on the hook for it.

Third, if there is a demand for parking, the private sector can fill it. Let the market determine it. Build a park next to the station which you can allow a private developer build a garage on in the future.

And finally, no driver will pay what it actually costs to park there. So you will be subsidizing drivers at the expense of people arriving by bus, walking, and riding bicycles because of the added traffic and congestion. You will be shooting yourself in the foot. Your buses will suffer because of it.

Lindsay Bayley
Senior Planner, CMAP

312-386-8826

PS. In addition to authoring the "Parking Strategies to Support Livable Communities" paper, I also worked on the Red Line Extension CMAP LTA project and made most of the maps. I'm familiar with the area and the context.

#213

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 03, 2016 9:57 AM
To: Jeff Bongiovanni
Subject: RE: Criticisms of Red Line Extension

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jeff Bongiovanni [mailto:jeffbongi@gmail.com]
Sent: Thursday, November 03, 2016 9:58 AM
To: Red Extension
Subject: Criticisms of Red Line Extension

I am grateful for any CTA capital investment, but the Red Line Extension project should increase its cost effectiveness by eliminating its plan to build parking garages near the new stations.

#214

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 09, 2016 9:31 AM
To: Robin Zelek
Subject: RE: Request from Zelek, Robin

Robin,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Robin Zelek [mailto:zealouszelek@gmail.com]
Sent: Friday, November 04, 2016 11:36 AM
To: Red Extension
Subject: Request from Zelek, Robin

Hello CTA,

I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Cru Inner City minstry at - 342 W 111th St, Chicago, IL 60628 - runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St.

Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

P.S. Go Chicago for winning the World Series!

Best regards,

Robin Zelek

#215

From: Simon, Neha <nsimon2@luc.edu>
Sent: Saturday, November 05, 2016 9:35 AM
To: Red Extension
Subject: Red Line Extension Interview Request

Hello,

My name is Neha Simon and I am a student reporter from Loyola University working on a story about the CTA Red Line Extension from 95th to 130th St.

Is there a CTA official I could speak with for 20 minutes on Monday to discuss the details of the project's proposed funding, tentative construction plans and the Red Ahead program?

My deadline is Tuesday and a comment from CTA would be extremely valuable to my story.

Best,
Neha Simon

#216

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 09, 2016 9:32 AM
To: Kristee J
Subject: RE: CTA Red Line extension

Kristeena,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Kristee J [mailto:kristeej@hotmail.com]
Sent: Sunday, November 06, 2016 7:26 AM
To: Red Extension
Subject: CTA Red Line extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Sincerly,

Kristeena Jackson-Billiot

Sincerely,

Kristeena Jackson-Billiot

#217

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, November 07, 2016 11:52 AM
To: Alexandria Whittler
Cc: Ferradaz, Irene
Subject: RE: Student reporter added onto email list?

Alexandria,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the Red Line Extension Project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Alexandria Whittler [mailto:awhittler77@gmail.com]
Sent: Monday, November 07, 2016 12:05 PM
To: Red Extension
Subject: Student reporter added onto email list?

Hello,

Ms. Ferradaz was kind enough to inform me about this email address to get information about upcoming redline expansion meetings. May I please add the below address to the list as well?

Thanks so much,

Alex Whittler
awhittler77@gmail.com

#218

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 09, 2016 9:33 AM
To: terry hamilton
Subject: RE: Red Line Alternate Route

Terry & Cora,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: terry hamilton [mailto:terryandcora@gmail.com]
Sent: Monday, November 07, 2016 5:18 AM
To: Red Extension
Subject: Red Line Alternate Route

Dear CTA,

We urge the CTA to choose the West Alternate for the red line extension.
The west alternate would allow the Agape Center at 342 W. 111th to preserve its parking space and continue to serve families in the south Chicago community.

Sincerely,

Terry & Cora Hamilton

#219

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 09, 2016 9:33 AM
To: Donald Janulis
Subject: RE: Red line extension

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Donald Janulis [mailto:donjanulis@gmail.com]
Sent: Monday, November 07, 2016 5:47 PM
To: Red Extension
Subject: Red line extension

As you consider t he new route I would plead for the west side in consideration of the Agape cnt.

#220

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 09, 2016 9:34 AM
To: Mr. Hopkins E hopkins
Subject: RE: Parking Lot at 111th Street

Erik,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Mr. Hopkins E hopkins [mailto:ehopkins216@yahoo.com]
Sent: Tuesday, November 08, 2016 10:04 AM
To: Red Extension
Subject: Parking Lot at 111th Street

CTA,
I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.
For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.
Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Erik Hopkins

#221

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 10, 2016 1:33 PM
To: D.J. Dragon Barnes
Subject: RE: Save the lot

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: D.J. Dragon Barnes [mailto:djmusicfox9@gmail.com]
Sent: Wednesday, November 09, 2016 4:14 PM
To: Red Extension
Subject: Save the lot

Hello CTA,

I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Cru Inner City minstry at - 342 W 111th St, Chicago, IL 60628 - runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St.

Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

#222

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 10, 2016 1:33 PM
To: Robin Zelek
Subject: RE: SAVE THE PARKING LOT - 111th Street

Robin,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Robin Zelek [mailto:rszelek@gmail.com]
Sent: Wednesday, November 09, 2016 4:24 PM
To: Red Extension
Subject: SAVE THE PARKING LOT - 111th Street

Hello CTA and FTA, I am happy to hear about the Red Line Extension, however, we need to save the Cru Inner City's parking lot. We need an option that will preserve Cru's existing parking spaces so it can continue to serve the neighborhood and city with excellence. Cru Inner City ministry is located at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. I request that the parking lot be saved for the following reasons...

- Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food.
- Thousands of people are served and mobilized through Cru's ministry.
- Cru has served the community and the city for 37 years.
- Cru runs after-school programming for kids throughout the year.
- Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor.

For these reasons I request that the CTA Red Line Extensions provides the best opportunity for Cru to maintain it's existing parking spaces so that it can continue to serve the city and neighborhood with excellence. Thank you for considering my request.

Robin Zelek

"You can't get a cup of tea big enough or a book long enough to suit me."
-C.S. Lewis

#223

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 10, 2016 1:34 PM
To: Gayle Koehler
Subject: RE: FEEDBACK

Gayle,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Gayle Koehler [mailto:gayle.koehler@wheaton.edu]
Sent: Thursday, November 10, 2016 11:51 AM
To: Red Extension
Subject: FEEDBACK

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain its existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Sincerely
Gayle

Gayle Koehler
Central Stores Manager
Wheaton College
630-752-5439 ph.
gayle.koehler@wheaton.edu

#224

Received 11/10/16

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name PATRICIA WOODSON
Address 347 West 102ND PLACE
City Chicago **State** Illinois **Zip** 60628
Email Address precious222pat@yahoo.com

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** This Option would affect me most. I would have to sell my house in which I'm Afraid I won't get what it's worth to me.

What are your concerns about the **West Option?** This option affect me because we have a train here Already it blows a nite long 3-4-5 in the morining the more people the more it will have to blow. Now we will have Buses, train + Red line. No sleep! Plus the Bus turn around will be right behind me + I'm Concerned About ~~the~~ the fumes.

Comments: With Either Option I would Just like to sell my house. I Know this will benefit a lot of People but as for me Not much.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation:

Land Use and Economic Development:

Property Displacements: Not giving the value of the Home.

Neighborhoods & Communities:

Visual Impacts (how it would look):

Noise & Vibration: No Sleep from the Noise & The Vibration put wear & tear on the House.

Impacts to Historic Resources:

Safety & Security:

Hazardous Materials: Only the fumes from the buses.

Wetlands:

Parks:

Construction Impacts:

Project Funding:

Other: Again, this benefits a lot of people and it's good for the Southside, But for me it might be a Nightmare! No Sleep! No Rest!

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#225

MAILED 11-4-2016

received 11/10/16

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name PATRICK MCGEE

Address 9433 S. INDIANA AVE.

City CHICAGO **State** ILLINOIS **Zip** 60619-7213

Email Address

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** OKAY, IT SEEMS.

What are your concerns about the **West Option?** OKAY, IT SEEMS.

Comments: THE ROUTE SEEMS FINE SO FAR.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: _____

Neighborhoods & Communities: _____

Visual Impacts (how it would look): _____

Noise & Vibration: _____

Impacts to Historic Resources: _____

Safety & Security: _____

Hazardous Materials: _____

Wetlands: _____

Parks: _____

Construction Impacts: _____

Project Funding: _____

Other: LOOKS GOOD SO FAR - THE YARD LAYOUT SHOULD BE FORTHCOMING. PARKING COULD BE CONSIDERED.

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#226

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, November 22, 2016 12:19 PM
To: Claire Williams
Subject: RE: Comments -RLE project

Claire,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Chapter 4.5 of the Draft EIS summarizes the noise and vibration impacts of the proposed extension along with mitigations. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Claire Williams [mailto:sag19@sbcglobal.net]
Sent: Monday, November 14, 2016 11:15 AM
To: Red Extension
Cc: Claire Williams
Subject: Comments -RLE project

Although I am a little outside of the impact zone and really not that far (107th and Parnell) the following are my concerns:

1. NOISE- as it stands currently the freight trains lay on their horns from 115th- 95th street thru all crossings even though the crossings do not require a horn to be blown. I have expressed my concerns in the past, however nothing has been done. Given that is the current situation ,adding in either at grade or elevated CTA tracks in my opinion would only elevate and add to the noise that we already experience. How will CTA address their own added noise as well as bring the freight companies in the fold to mitigate the noise?

2. I am in support of the UPRR East solution to the RLE project

3. I am interested in knowing more about the programs that CTA and the City will put into place to make sure that local residents and businesses have the opportunity to gain employment and or obtain training in an effort to obtain employment. These programs should begin long before construction/design begins so that the residents/businesses are prepared at the time the project begins.

If there are any questions feel free to contact me:

Claire Williams, President, Environmental Design International inc.
312-446-2837

#227

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 17, 2016 1:06 PM
To: Mary E Washington
Subject: RE:

Mary,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Mary E Washington [mailto:emwashington7@gmail.com]
Sent: Wednesday, November 16, 2016 1:29 PM
To: Red Extension
Subject:

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Mary Washington

#228

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, November 17, 2016 1:05 PM
To: Willingham Olugbade
Subject: RE: Red Line Extension

Williemae,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Willingham Olugbade [mailto:wwolugbade@gmail.com]
Sent: Wednesday, November 16, 2016 1:21 PM
To: Red Extension
Subject: Red Line Extension

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Williemae Olugbade

#229

From: James Clinton <jamesclinton616624@gmail.com>
Sent: Saturday, November 19, 2016 7:59 AM
To: Red Extension
Subject: Red line

I would like the red line extension to run on the west side of the union Pacific railroad.

#230

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, November 22, 2016 11:51 AM
To: Simply Marvalous
Subject: RE: Save Cru Inner City Parking Lot!

Marva,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Simply Marvalous [mailto:marvalous@live.com]
Sent: Saturday, November 19, 2016 9:45 AM
To: Red Extension
Subject: Save Cru Inner City Parking Lot!

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Marva Hamilton

#231

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, November 22, 2016 11:52 AM
To: Pete Blodgett
Subject: RE: Red Line Extension Concern

Pete,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Pete Blodgett [mailto:pete@sunshinegospel.org]
Sent: Monday, November 21, 2016 9:30 AM
To: Red Extension
Subject: Red Line Extension Concern

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Grace & Peace,

Pete Blodgett
Pastor/Discipleship Coordinator
Woodlawn Community Church/Sunshine Gospel Ministries
w: 773.904.9800 ext. 14
c: 773.501.1321
f: 773.752.7370
www.woodlawncommunity.org
www.sunshinegospel.org

#232

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, November 22, 2016 12:03 PM
To: Luke Moy
Subject: RE: Question

Thank you for your interest in the Red Line Extension Project.

The proposed alignment would extend the heavy rail Red Line from the existing 95th Street Terminal to 130th Street. The extension would not serve Hyde Park.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Luke Moy [mailto:moyluke71@gmail.com]
Sent: Monday, November 21, 2016 7:40 PM
To: Red Extension
Subject: Question

With the red line extension project would it be possible for the line to be able to reach Hyde Park. My sister lives there and it would be easier to be able to get there without having to take a bus from the train during the night where it may not be safe.

Thank You

#233

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 7:50 AM
To: Michael Leavitt
Subject: RE: Red Line Extension WEST Side of Union Pacific Tracks

Michael,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Michael Leavitt [mailto:mjjleavitt@gmail.com]
Sent: Wednesday, November 23, 2016 10:18 AM
To: Red Extension
Subject: Red Line Extension WEST Side of Union Pacific Tracks

CTA,

I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.

For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.

Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.

Yours Truly,

Michael J. Leavitt

#234

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 7:50 AM
To: Mary Anne Leavitt
Subject: RE: Red Line Extension WEST Side of Union Pacific Tracks

Mary Anne,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Mary Anne Leavitt [mailto:mamleavitt@gmail.com]
Sent: Wednesday, November 23, 2016 10:23 AM
To: Red Extension
Subject: Red Line Extension WEST Side of Union Pacific Tracks

CTA,
I'm writing on behalf of Cru Inner City at 342 W 111th St, Chicago, IL 60628. This ministry runs the Agape Community Center along the route of the proposed Red Line Extension to 130th St. Cru has served the community and the city for 37 years. Cru runs after-school programming for kids throughout the year. Cru also partners with over 200 churches/ministries throughout Chicagoland to serve the poor. Cru holds events throughout the year that overwhelm the current parking in the area. For example, this Thanksgiving Cru will have 500 volunteers working to pack and distribute 2650 boxes of food. Thousands of people are served and mobilized through Cru's ministry.
For these reasons I request that the CTA Red Line Extensions run along the WEST side of the Union Pacific Railroad line. This option provides the best opportunity for Cru to retain it's existing parking spaces so that it can continue to serve the neighborhood and city with excellence.
Thank you for considering my request. I hope it will be brought to bear upon the Red Line Extension's positioning.
Yours Truly,

Mary Anne Leavitt

#235

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 9:01 AM
To: cecilia gutierrez
Subject: RE: East side or west side

Cecilia,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: cecilia gutierrez [mailto:gcecilia68@live.com]
Sent: Wednesday, November 23, 2016 9:47 AM
To: Red Extension
Subject: East side or west side

Keep me up with the 'red ahead" project,thank you,,cecilia gutierrez

Sent from my MetroPCS 4G LTE Android device

#236

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 9:00 AM
To: Srinivasan Iyer
Subject: RE: Request to add to email list

Srinivasan,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Srinivasan Iyer [mailto:srinikiyer@gmail.com]
Sent: Thursday, November 24, 2016 9:09 PM
To: Red Extension
Subject: Request to add to email list

Hello,

I would like to be added to the contact list for the Red Line Extension ("Red Ahead") email list.

Thank you,

Srinivasan

#237

From: Jon Samuel <jonsamuel32@yahoo.com>
Sent: Friday, November 25, 2016 8:52 PM
To: Red Extension
Subject: East Option vs. West Option

I prefer the East Option to the West Option because the West Option cuts through Fernwood Parkway Park when turning south of I-57, whereas the East Option would only take a small portion of Wendell Smith Park.

I'd also like to talk about the remaining 6400 Series Nova buses because they're very old & need to be replaced. The 425 7900 Series Novas could only have replaced 425 of the 6400 Series Novas.

Also, how long is the testing going to go on with the new Nova buses 8200-8249 at garages other than Forest Glen?

#238

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:43 AM
To: Kellee
Subject: RE: The Agape Community Center

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Kellee [mailto:singergirl1024@comcast.net]
Sent: Monday, November 28, 2016 1:46 PM
To: Red Extension
Subject: The Agape Community Center

Please consider adjusting this construction project in order to maintain the parking lot of the Agape Community Center, which is located at 342 West 111th Street. Your construction would compromise the Center's parking space. There are many programs based in the Agape Center that are beneficial to the community (children's programs, homeless care, etc) including a church. Thank you for your consideration of this matter.

The Lord is my strength and my shield: my heart trusts in Him and He helps me.

#239

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:49 AM
To: Jon-Keith Evans
Subject: RE: Temporary Red Line Extension

Jon,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Jon-Keith Evans [mailto:jkeiit96@hotmail.com]
Sent: Monday, November 28, 2016 10:41 PM
To: Red Extension
Subject: Temporary Red Line Extension

A Proposal for a Temporary Red Line Extension

Bus Route 29TRX (Temporary Red Line Extension)

By Jon Keith Evans

Purpose: To provide a TEMPORARY solution to the transit desert that exists between 95th and 130th Streets on the North and South, and Halsted Street and the Bishop Ford Freeway to the West and East-until the Red Line Extension is completed by the use of Express, limited access buses along major arterial streets in the affected area. These buses would have limited stops at major East-West bus routes along the bus route.

Method:

There are only two major arterial streets between South Michigan Avenue and South Halsted Street. The first street is South Wentworth Avenue from 98th Place and Yale Avenue to 127th Street. The second major arterial street between Michigan and Halsted is South State Street from the Red Line Terminal to 127th Street.

These two streets are close to, and parallel the proposed route of the PERMANENT Red Line Extension, which runs along South Eggleston Avenue These two streets would be used in the Temporary Red Line Extension.

Modifications:

It will be necessary to make South Wentworth Avenue ONE WAY SOUTHBOUND from 98th Place and Yale Avenue to 127th Street, and to make South State Street ONE WAY NORTHBOUND from 127th and South State Street to 95th Street in order to accommodate residential traffic, thru traffic, and the proposed express buses.

Route:

Southbound from the 95th/State Red Line Terminal:

Southbound Lafayette and Yale to 98th Place and South Wentworth Avenue;

Southbound via South Wentworth Avenue to 127th Street; Eastbound to South Indiana Avenue, and Eastbound on 130th Street to FoMoCo

Northbound from FoMoCo:

130th Street Westbound to South Indiana Avenue to 127th Street; Westbound to South State Street; Northbound on South State Street to the 95th/State Red Line Terminal

Stops:

Southbound: 103rd/Wentworth; 107th and Wentworth; 111th and Wentworth; 115th and Wentworth; 119th and Wentworth; 121st and Wentworth to a shuttle to allow transfers to the Metra Electric *; 127th and Wentworth; the Metropolitan Water Reclamation Plant at 130th and Indiana; and FoMoCo

Northbound: From FoMoCo: Metropolitan Water Reclamation Plant at 130th and Indiana; 127th and State; 121st and State Street Metra Electric Station; 119th and State; 115th and State; 111th and State; 107th and State; 103rd and State; and the 95th/State Red Line Terminal

<u>AND:</u>

All Public Elementary Schools along either Wentworth Avenue or State Street as a safety measure.

It would be bad if an express bus were to strike a child. Making schools along the route bus stops would lessen the possibility of accidents involving children.

Hours of Operation

24 Hours daily with the following equipment:

0600-2000 Hours: Articulated buses such as the ones used on the J14 Bus Route
2000-2359 Hours: Conventional buses
0000-0600 Hours: Miniature, narrow, short wheelbase buses

Additional Features:

A bus route should run westbound and eastbound on 107th Street from South Western Avenue and 107th Street to 107th Street and Cottage Grove Avenue. This route would serve to assist riders that live between 103rd and 111th Street in the affected area. Any transit dependent rider in this area is presently deprived of transit.

A minibus shuttle that would run solely from the 121st and State Street Metra Electric Station and 121st and Wentworth Southbound in order to assist transferring passengers from the CTA to the Metra Electric should be included. This shuttle might be considered to connect the Stewart Ridge Metra Electric Station at 121st Street and Harvard Avenue.

Jon K. Evans
1633 West Madison Street
Apt. 1603 South
Chicago, Illinois 60607
312-631-3919 Home
773-844-0568 Cell
jkeiit963827@sbcglobal.net

JKEIIT96@hotmail.com

Sent from Mail for Windows 10

#240

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, December 07, 2016 9:51 AM
To: Valeria Davis
Subject: RE: Job opportunities

Valeria,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Transit access for project area residents would increase to existing jobs in the region. The Chicago Metropolitan Agency for Planning estimates that the RLE Project would increase access to jobs; access to jobs within 1 hour of the proposed 111th Street station would increase by 56 percent. New jobs would also be created with the $2.3B investment.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Valeria Davis [mailto:vdavis9@ccc.edu]
Sent: Monday, November 28, 2016 5:34 PM
To: Red Extension
Subject: Job opportunities

Does this mean the community will access to job opportunities.

Thank you in advance for your reply.

Valeria Davis

#241

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:50 AM
To: Sheryl Swope-Dupree
Subject: RE: Red Line Extension

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Sheryl Swope-Dupree [mailto:sswope-dupree@ccc.edu]
Sent: Tuesday, November 29, 2016 7:50 AM
To: Red Extension
Subject: Red Line Extension

To Whom It May Concern:
I think it is great that those who live in the far side of the city are being considered in relationship to transportation. This will be a beneficial improvement and convenience to all those who live on the far south side of the city. It is nice to know that the city is trying to do something to help those in need with transportation. While on the subject of transportation, it would be great for those teenagers that are in high school, whose parent are unemployed due to the economic conditions of the United States, be considered for free transportation. Transportation is quite expensive for those who don't have any means but are trying to get their education.
Thank you for listening and considering my request.
A Concerned Citizen

#242

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:50 AM
To: Sharon D. Lawson
Subject: RE: West - Option

Sharon,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Sharon D. Lawson [mailto:shad1boyz@gmail.com]
Sent: Tuesday, November 29, 2016 9:18 AM
To: Red Extension
Subject: West - Option

Have the red line extension on the west option.

Sharon

#243

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:50 AM
To: Paula McLennon
Subject: RE: Direction.

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Paula McLennon [mailto:threepaula@gmail.com]
Sent: Tuesday, November 29, 2016 10:55 AM
To: Red Extension
Subject: Direction.

East.

#244

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:51 AM
To: Harley, Keith
Subject: RE: Public Comments – CTA Draft Environmental Impact Statement for the Red Line Extension Project

Keith,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Harley, Keith [mailto:kharley@kentlaw.iit.edu]
Sent: Tuesday, November 29, 2016 12:15 PM
To: Red Extension
Subject: Public Comments – CTA Draft Environmental Impact Statement for the Red Line Extension Project

Please be advised that I represent People For Community Recovery (PCR). Please accept the attached document as PCR's comments on the Draft Environmental Impact Statement for the Red Line Extension Project.

PCR would welcome the opportunity to discuss these comments.

Keith Harley, Attorney at Law
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211 W. Wacker, Suite 750
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CHICAGO LEGAL CLINIC, INC.
Carrie Kiger Huff, President · Edward Grossman, Executive Director · Marta C. Bukata, Deputy Director

Downtown Office | 211 W. Wacker Dr. Suite 750 Chicago, IL 60606 | Phone: 312-726-2938 Fax: 312-726-5206 TDD: 773-731-3477 | Keith I. Harley Greta M. Doumanian | Avani K. Kamdar Jeff Whitehead

November 29, 2016

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street
Chicago, IL 60661-1465

Via E-Mail: RedExtension@transitchicago.com

Re: Public Comments – CTA Draft Environmental Impact Statement for the Red Line Extension Project

To Whom It May Concern:

Please be advised that I represent People for Community Recovery ("PCR"), a not-for-profit organization based in the Chicago Housing Authority's Altgeld Gardens community.[1] PCR is dedicated to enhancing the quality of the environment for the residents of Chicago's southeast side. PCR provides public education on environmental, health and housing issues, and organizes local residents to advocate for environmental quality, public health and community well-being. PCR's founder, Hazel M. Johnson, is regarded as the "Mother of the Environmental Justice Movement". Her many contributions to Altgeld Gardens, Chicago's southeast side and the national environmental justice movement are commemorated by Hazel Johnson EJ Way, the name given to 130th Street, the southern terminus of the proposed Red Line Extension. Hazel's daughter, Cheryl Johnson, is a lifelong resident of Altgeld Gardens and the current Director of People for Community Recovery. Cheryl also serves on U.S. EPA's National Environmental Justice Advisory Council.

By way of summary, PCR enthusiastically endorses the transportation equity that will be achieved by the extension of the Red Line from 95th Street to 130th Street. The following public comments address alternatives, potential environmental consequences and mitigation measures that will ensure access to the CTA rail system further enhances the quality of life for Chicago's far south side neighborhoods and their thousands of residents. PCR formally requests that the EIS fully analyze these alternatives, consequences and mitigation measures so that this analysis is available to inform ultimate decisions about the design, construction and operation of the Red Line Extension.

PCR Comment One

Existing alternatives include no-build and route location alternatives. PCR asserts the Red Line Extension alternatives should include an alternative that incorporates the Red Line Extension

[1] http://www.peopleforcommunityrecovery.org/; 13330 S. Corliss, Chicago, IL 60827; (773) 840-4618.

into a comprehensive plan to provide a full range of transportation services and options for residents of the project area. This alternative is fully consistent with the purpose and need for the Red Line Extension. It is also reasonable because it is largely within the jurisdiction of the agencies that are promoting the Red Line Extension.[2]

PCR asserts that the Red Line Extension should be viewed as one part of a comprehensive plan to create enhanced public transportation access throughout the far south side. The purpose and need for the Red Line extension cannot be achieved unless there is also robust bus, pedestrian and bicycle access connecting the new stations – whatever their specific locations - to the interiors of the neighborhoods they are intended to serve. In the absence of a comprehensive analysis about how to connect the new stations to the interior of the neighborhoods they are intended to serve, there is a risk the stations will become an amenity for people who can utilize passenger vehicles to gain access to the stations, but practically exclude people who will need to access the stations by public bus, as pedestrians or as cyclists.

This risk is evident in one significant design element for the 130th Street station – the inclusion of large parking structure for passenger vehicles. This and other stations are also located immediately adjacent to the Bishop Ford Expressway and existing Expressway exits. In the absence of a comprehensive transportation access plan for the project area, the new Red Line Extension could be more accessible to a car owner living in Will County than a resident who lives in Hegewisch, Roseland, Vet's Park, South Deering, West Pullman or the western portion of Altgeld Gardens. The risk of the lack of access is especially true for children, seniors and disabled individuals living in the project area. PCR also notes that developing a comprehensive plan for bus, pedestrian and bicycle access also serves to mitigate the congestion and air pollution that will result from the widespread use of passenger cars, particularly in the communities which will be hosting the stations.[3]

For these reasons, PCR asserts the EIS should include an analysis of the Red Line Extension as one part of a comprehensive plan to provide a full range of transportation services and options to all residents of Chicago's far south neighborhoods. The FEIS should include an analysis of an enhanced, comprehensive, integrated transportation system because it is the only alternative that fully realizes the public purpose and need that generated the Red Line Extension proposal, within the project area itself.

PCR Comment Two

PCR asserts that the proposed 130th Street station must be integrated into a comprehensive site plan that enables safe public access to-and-from Altgeld Gardens and nearby resources like

[2] 40 CFR 1502.14 requires the EIS to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on what is reasonable rather than on whether the proponent or applicant likes or is itself capable of carrying out. Reasonable alternatives are those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.

[3] Pursuant to 40 CFR 1502.14(f), mitigation is legally relevant to the analysis of the alternatives. If not addressed as part of the analysis of alternatives, mitigation is also relevant in the context of the EIS pursuant to 40 CFR 1502.16(h).

Beaubien Woods. [4] A comprehensive site plan to facilitate public use is necessary to enable Altgeld Gardens' residents to have access to the station. It is also essential to enable broader public access to the historic and cultural resources of the Altgeld Gardens historic district[5] and adjacent natural resources like the 279-acre Beaubien Woods Forest Preserve property[6], the Calumet River system and the southern portions of Millenium Reserve.[7]

PCR agrees with the proposal for the "south" alternative for the 130th Street station. However, this location is not without potential risks. In absence of a comprehensive approach to site planning, 130th Street could become a "de facto" southern wall separating the Red Line station from areas south of the station. This is because 130th Street is not designed to be pedestrian-friendly, but rather, functions as a major thoroughfare for commercial trucks serving local industries and for cars moving past – not to – communities like Altgeld Gardens. Consequently, it is not possible for pedestrians to walk safely from 130th and Ellis (the main entrance from 130th Street into Altgeld Gardens) to the proposed site of the 130th Street Station, or to cross 130th Street at any other street level location. Similarly, significant site planning is necessary to enable access via the underpass located near the intersection of 130th Street and the I-94 expressway. This underpass was not designed to provide north-south access under 130th Street. There was no reason to plan for this purpose because the underpass currently leads to an industrial property that is unsuitable for public access and use.

PCR stresses that enabling safe pedestrian access to the proposed 130th Street station is essential for local residents to benefit from the Red Line Extension. This dictates that the EIS as it relates to this Station cannot be limited to the four corners of the site (Station, bus center and parking garage), but must also include a comprehensive site plan than incorporates and integrates pedestrian access to and from the station to the south of 130th Street. PCR further asserts that only an alternative that incorporates a comprehensive, pedestrian-friendly site plan into the EIS is consistent with the goal of public access to the historic Altgeld Gardens district, to the public Beaubien Woods Forest Preserve District property and to the public Calumet waterways.

PCR Comment Three

Viewed properly, the Red Line Extension is not only a transit line that connects residents of the far south side to educational and employment opportunities in other parts of the city. Viewed properly, the Red Line Extension is not only a catalyst to off-site economic development in the project area. Rather, the design, construction and operation of the Extension itself provide a rich source of educational and economic opportunities for local residents. PCR asserts the EIS should analyze how educational and employment opportunities - directly within the control of federal, state and local agencies as they participate in the design, construction and operation of the Extension - can be used for to benefit residents of the far south side, now and in the future. This analysis would identify how the design, construction and operation of the Extension can be a

[4] This analysis is consistent with the requirements of 40 CFR 1502.16(g), which requires the EIS to incorporate the following considerations: urban quality, historic and cultural resources, and the design of the built environment.
[5] https://www.illinois.gov/ihpa/Preserve/Places/Documents/MOA-PA/Chicago%20Housing%20Authority%20PA.pdf
[6] http://fpdcc.com/beaubien-woods/
[7] http://www.millenniumreserve.org/

direct force multiplier in terms of its positive economic impacts on the region that will host the stations. This type of analysis is critical in order to understand how to mitigate the potentially gentrifying effects of the Red Line Extension in the project area. PCR believes this type of analysis is necessary to mitigate the possibility that the Red Line Extension will displace local residents rather than help to secure their futures.[8]

PCR asserts the EIS should include an analysis of an alternative approach that includes a proactive plan with the following kinds of elements, all of which are designed to enhance the economic and educational benefits that can be achieved in the project area:

1. create job training partnerships with local high schools, community colleges and universities that build practical skills related to the design, construction and operation of this and other major transit projects;

2. perform outreach to businesses and residents in the region that will host the Extension to encourage qualified businesses and workers to participate in the workforce that will design, construct and operate the Extension, and, to direct workers without the required skills and local businesses without the requisite qualifications into appropriate training programs to become prepared for jobs on this and other similar projects;

3. develop a curriculum for local teachers of children and young adults to enable them to teach and learn about the design, engineering, planning, economic, environmental and other aspects of implementing a major transit project in a complex urban setting, thus enhancing career development;

4. conduct outreach to local businesses and entrepreneurs about predictable commercial opportunities that will occur on and near station locations, along with a description of the federal, state and local government resources that are available to them to take advantage of these opportunities.

PCR Comment Four

The Red Line Extension will be a permanent addition to the project area. Consequently, the design choices for the physical infrastructure – the rail line, stations, station sites and related structures – must be made in light of the multi-decade, multi-generational impacts of these choices. For this reason, PCR asserts the physical infrastructure should incorporate state-of-the-art green building and sustainability techniques.

Green building and sustainability techniques are constantly evolving, and the common options used today may be superseded by the time final design choices are made for the Red Line Extension. Having said this, PCR asserts there are several existing alternatives that should be proactively incorporated into the design of the physical infrastructure. These alternatives address energy, water and aesthetic components of the project that entirely within the scope of an EIS.[9]

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[8] 40 CFR 1502.16(a)and(b); 40 CFR 1508.8.; http://www.chicagotribune.com/news/ct-red-line-cta-extension-meeting-20161102-story.html

[9] 40 CFR 1502.6.

Incorporating these green building techniques will mitigate the potential negative consequences of this important transportation equity project.[10]

CTA has the existing capacity to incorporate state-of-the-art green building and sustainability elements into the Red Line Extension. In 2011, CTA was awarded an Illinois state grant to fund a Sustainable Facility Design and Construction training program. Nearly 20 CTA engineers earned their LEED credentials through this program.[11] In 2012, the CTA headquarters building was awarded Leadership in Energy and Environmental Design (LEED) Platinum certification, an upgrade from the LEED Gold certification received in 2007.[12]

PCR recommends a complete analysis of the green building and sustainability techniques that are available for every aspect of this major new infrastructure project.[13] PCR highlights three alternatives that are particularly valuable. These three alternatives illustrate the environmental and energy benefits that can be achieved by proactively incorporating green building and sustainability design elements into the Red Line Extension.

Regenerative Braking: Regenerative braking is a technology already used by CTA; however, it is not being used to its full capacity. The regenerative breaking technology employed by the CTA sends the energy generated in the braking process back to the third rail, which can only be utilized by another nearby train.[14] This power is lost if there is no train nearby to consume the power. The Red Line Extension provides a remarkable opportunity to take full advantage of the energy-related benefits of coupling regenerative braking with a system to store and utilize this power source.

Regenerative breaking technology with grid-ready energy storage techniques are already being utilized by transportation systems in the U.S., including in Philadelphia, Los Angeles, and Portland.[15] Coupling regenerative braking with storage capability allows the energy generated to be stored for later use by the transit system itself, or to be sold into the grid for a profit. The SEPTA system in southeastern Pennsylvania couples regenerative braking with a lithium ion battery system. A single substation utilizing this system (the Letterly substation) is saving SEPTA up to $60,000 per year in electricity bills and generating about $200,000 in revenue via the frequency regulation market. The Westlake-MacArthur Park Station in Los Angeles County

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[10] 40 CFR 1502.14; 1502.16.

[11] http://www.transitchicago.com/goinggreen/facilities.aspx

[12] Id.

[13] Other common techniques to achieve green building and sustainability goals are bicycle facilities, facilities for electric vehicle recharging, enhanced protections for sensitive lands including the use of conservation easements, providing for public open space, construction activity management and pollution prevention (beyond Chicago's construction and demolition waste recycling requirements), light pollution reduction, reducing indoor water use, energy benchmarking (beyond existing Chicago requirements); enhanced refrigerant management, storage and collection of recyclables, ensuring indoor air quality, employing low-emitting materials, enhancing natural light and energy efficient indoor and outdoor lighting systems. These techniques are common to LEED standards across a variety of building types, and are described in substantially greater detail at the U.S. Green Building Council website: http://www.usgbc.org/leed

[14] http://www.transitchicago.com/news_initiatives/5000s.aspx

[15] The information and case studies described in this section are taken from this public source material: https://www.scientificamerican.com/article/braking-trains-coupling-with-energy-storage-for-big-electricity-savings/ Additional technical information is available from this public source: http://www.sciencedirect.com/science/article/pii/S0196890413003518

Metro System utilizes a traditional flywheel system. Large amounts of regenerated electrical energy from trains can be turned to kinetic energy for storage in the flywheel in a short period of time. The flywheels can provide hundreds of thousands of cycles, without loss of energy-storage performance, making them ideal for this application. Supercapacitors are another technology to store the energy from regenerative braking systems. Supercapacitors have a much higher energy density than batteries, meaning they can charge and discharge extremely quickly; this is useful to meet quick spikes in electricity demand on the rail system. They also can cycle millions of times without degrading whereas batteries have shelf lives on the order of tens of thousands of cycles.

The Red Line Extension allows CTA to utilize the most modern design elements in a new transit segment (versus trying to retrofit these state-of-the-art techniques into existing infrastructure). Coupling regenerative braking with feasible storage systems maximizes the use the clean, existing energy that is generated from trains, conserving this energy for future use in the CTA system and/or distributing it as a clean energy source.

Solar Energy: The most feasible way to utilize clean, renewable power as part of the Red Line Extension is to incorporate solar power as part of the design of stations, rail line properties and other structures. CTA retrofitted a modest 12.8 kilowatt solar panel installation at 95th/Dan Ryan Red Line station in 2010.[16] These panels are used as a supplemental power source for station lighting and fare equipment.[17] Eight existing rail lubrication machines are powered by solar energy.[18]

The Red Line Extension offers a remarkable opportunity to incorporate clean solar energy on a much more ambitious scale. The potential environmental and energy benefits are substantial. Electric trains are so efficient that a single 300-watt solar panel (about 4x6 feet) can provide up to 7,000 miles of an individual's commuting miles per year, or 5 to 20 miles per day.[19] The national average, based on National Transportation Database data on the efficiency of the various U.S. electric train systems, is about 4,000 miles per year for each 300-watt solar panel.[20] Solar energy can also be utilized to help power the stations and structures that are part of the Red Line Extension.

Permeable Pavement: Permeable pavements infiltrate, treat, and/or store rainwater where it falls. They can be made of pervious concrete, porous asphalt, or permeable interlocking pavers.[21] This practice is particularly cost effective where land values are high and flooding or icing is a problem.[22] Permeable pavement minimizes runoff, recharges groundwater, traps suspended solids and pollutants, reduces surface temperatures (and the resulting heat island effect) and minimizes the need for retention basins and water collection areas.

There are also substantial financial benefits – minimizing the costs for retention basins, curbs, gutters, and other water collection installations; in winter conditions, permeable pavement

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[16] http://www.transitchicago.com/goinggreen/facilities.aspx
[17] Id.
[18] Id.
[19] https://www.greentechmedia.com/articles/read/railway-solar-may-be-a-sweet-spot-for-green-transportation
[20] Id.
[21] https://www.epa.gov/green-infrastructure/what-green-infrastructure
[22] Id.

systems typically require much less salt or other de-icing products than traditional pavements.[23] Permeable pavement systems can also have lower installation costs (reducing the need for underground piping, storm drains, and/or extensive sloping/grading needed) and lower life-cycle costs with an equal life expectancy to that of regular concrete.[24]

These three examples – developing a storage system to fully capitalize on clean, regenerative braking power, maximizing the use of clean, renewable solar power and implementing innovative storm water management infrastructure – are only three of several examples of superior environmental outcomes that can be achieved through green building and sustainability design elements. PCR believes the final EIS should fully analyze the full range of these superior environmental and energy opportunities to inform the ultimate decisions about the design, construction and operation of the Red Line Extension.

PCR Comment Five

PCR commends the agencies that are conducting this process for the robust opportunities for public participation they have provided. PCR urges the agencies that will undertake this project to continue to engage the residents of the project area at regular intervals as the project progresses. That is, the public engagement in the NEPA-based process should be the beginning, not the conclusion, of the opportunities for local residents to participate in the design, construction and operation of the red Line Extension. PCR is committed to continuing to engage with the full range of agencies that will be participating in this effort.

Thank you for your consideration of these comments. Please contact me if you have any questions or require additional information regarding these comments. Please also contact me if you cannot easily access the documents and resources that are cited as references in these comments.

Sincerely,

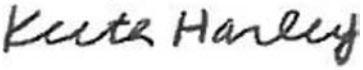

Keith Harley
Attorney for People for Community Recovery

[23] https://www.go-gba.org/resources/green-building-methods/permeable-pavements/
[24] Id.

#245

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:53 AM
To: Russell, Tyran
Subject: RE: Comments on the RLE Draft EIS, submitted by the ROC (Redline Oversight Committee)

Lou,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Russell, Tyran [mailto:loturner@illinois.edu]
Sent: Tuesday, November 29, 2016 6:39 PM
To: Red Extension
Subject: Comments on the RLE Draft EIS, submitted by the ROC (Redline Oversight Committee)

CTA
Please find attached comments on the Draft Environment Impact Statement (EIS) for the CTA Red Line Extension made in the name of the Redline Oversight Committee (ROC). For any follow-up questions, please contact Lou Turner: loturner@illinois.edu.
Sincerely,
Lou Turner

Comments on Draft Environmental Impact Statement for the Red Line Extension

By Lou Turner, for ROC (Redline Oversight Committee),[1] submitted November 29, 2016

Executive Summary

Public Input Requested

The CTA public relations department should be advised that the RLE Draft Environmental Statement (EIS) was not available at the Woodson Regional Library as referenced the Executive Summary (ES-11). The CTA's public outreach process to elicit public feedback has been severely limited, not only in terms of the availability of the Draft EIS, but in terms of the very limited number of public meetings (1) to engage far South Side residents. The Redline Oversight Committee (ROC) never got requests for meetings returned from CTA Board Secretary Greg Longhini (11/4; 11/15) or from Gerald Nichols of the CTA Government and Community Relations department (11/7).

Chapter 1 – Purpose and Need

1-3 – Why isn't Lowden Homes and Trinity United Church of Christ at 95th Street included in the impact area? The residents and parishioners are important stakeholders for the 95th Street terminal renovation and the RLE.

1-5 – Some explanation should be given as why it took 7 years from the completion of Alternatives Analysis to the Draft EIS. Dating the RLE from its inclusion in the 2005 SAFETEA-LU transportation bill to the CTA/FTA issuance of the Draft EIS, it has so far taken 11 years, and with the Final EIS not slated to be done until 2018, it will have taken 13 years for the RLE to pass its first two planning phases, namely Alternatives Analysis and Environmental Impact Statement (EIS). The CTA should provide an explanation for the delay. If the far South Side communities in the impact zone of the RLE can expect this pattern of delays, then the RLE will leave residents who will have to move in a state of insecurity. The CTA should be more sensitive to its timing of this process if it expects buy-in from the community.

Chapter 2 – Alternatives Considered

2-2 – The Draft EIS cites DCP's 2004 RLE referendum in the 9th and 34th Wards and the 38,000 votes the referendum received as one of the key inputs leading to making the current UPRR options the locally preferred alternative (LPA).

2-4 – CDOT looked at moving the UPRR freight operations from its current corridor in 2012 before deciding that it wasn't feasible. The Draft EIS should include as an appendix the CDOT study of this "Right-of-Way Option" and the rationale for its non-feasibility.

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[1] ROC is made up former leaders and staff members of Developing Communities Project (DCP), many of whom having worked on the RLE from the time it was first considered in the CATS (Chicago Area Transportation Study) northeast Illinois regional transportation plan, in 2002-2003.

Why did the CTA investigate four alternatives between 2012 and 2014 after it had chosen the UPRR option as the LPA?

2-8 – Draft EIS states that the park & ride at Michigan will have retail space and community facilities. Why no retail and community space planned for the larger 130th Street station?

2-10 – The planning and construction schedule of the RLE (2005-2026) is twice the time it took for planning and construction of the Orange Line (1984-1993), which is more than twice the length of the RLE and, like the RLE, uses existing rail right-of-ways. The EIS should explain why the RLE has a two decades long planning and construction schedule.

The EIS should state whether the 7 construction segments of the RLE will be sequential or simultaneous, or indicate that those questions will be detailed in the Preliminary Engineering and/or Final Design phases. This is particularly important for segments U-7 (the train yard) and U-5 (the segment contiguous with the train yard).

Indicate the percentage of the Red Line that the RLE will constitute (e.g., 20 percent).

2-13 – [2.3.2 Construction Staging and 2.3.3 Pre-Construction Activities constitute minority contractor and employment opportunities.][2]

2-14 – [2.3.5 Demolition constitutes minority contractor and employment opportunities. Excavation activities on the project also represent minority contractor and employment opportunities.]

[Brown field remediation, e.g., soil removal, represents minority contractor and employment opportunities.]

2-15 – The public input and feedback that led to the choice of the UPRR locally preferred alternative should be cited.

2-16 – Explain the public input that led to the choice of the South Station Option at Altgeld Gardens.

2-19 – What legal obligation is the FTA under to issue the Final EIS and Record of Decision (ROD) once the EIS process has begun in spite of leadership and staffing changes at the FTA following the 2016 presidential election?

Chapter 3 – Transportation

3-4 – Explain why the transportation analysis did not account for a mode shift from vehicles to transit. What is the mode shift from bus to fixed rail transit, since 25 percent of the households in the impact area are without automobiles and are dependent on a bus mode of transportation? This should be calculated in measuring the LOS (level of service) in the area.

3-5 – ADA benefits of the RLE should be measured against the current negative ADA conditions of public transit, in the area (i.e., the No Build option).

[2] Bracketed passages are marked for possible minority contractor and workforce development opportunities.

3-6 – While there may be no severe impacts for freight rail with the RLE past 2026, any impacts during construction is reason to speed up construction of the RLE.

3-13 – With UPRR freight frequency averaging 27 trains per day within the API (i.e., more than an average of one train per hour), two Amtrak passenger trains per day, and a projected increase of freight rail traffic in the API (area of potential impact) suggests that vibration impacts on RLE pylons should be evaluated.

3-18 – The EIS does not calculate the added passenger volume produced by the RLE. The 2030 average weekday projected passenger volume on account of the UPRR Alternative is 42,000. What should the increased train car capacity be? The EIS only indicates an 8 to 10 car RLE station capacity. Is that sufficient for the increased passenger volume of 42,000?

3-19 – Is there a logistical problem between transit and freight rail traffic (NICTD/CSS & SBRR) when the RLE proceeds at-grade level around 119th Street?

3-21 – Wouldn't a park & ride at the 95th Street station mitigate the increased traffic volume impacts at the RLE stations.

3-22 – ADA accessibility should be more finely analyzed than currently done in the EIS. See the 2005 and 2009 Voorhees/DCP studies for data on the disability population. The very large disability population in the API (30,600) requires a more detailed evaluation of the impacts and benefits of the RLE. For example, the East Option will require mitigation for disabled passengers who will have to cross freight rail tracks to access stations, including from park & ride facilities.

Chapter 4 – Environmental Impacts and Mitigation

4-1 – That only "potential [mitigation] measures...are provided for public review and comment" in the Draft EIS and that the actual mitigation measures will be confirmed in the Final EIS with no opportunity for public response to the decisions made raises serious questions of public accountability. There needs to be public oversight post-Draft EIS for the rest of the planning process and ultimately for the construction process.

Why no rendering of the 111th Street station stop near Roseland Community Hospital, especially as it would be only the second hospital station stop in the CTA system, in Chicago, and represents a fundamental benefit of the RLE.

4-2 – Since there has been no community economic or land use plan conducted by the Chicago Department of Planning and Development for the communities in the API for decades, how is adverse land use and economic development to be determined?

4-3 – Since DCP is responsible 4 of the 12 studies used in the Draft EIS to "determine consistency of the project with the goals and policies presented in the local and regional land use plans," i.e., one-third of the studies used and the only studies specific to the project area of the RLE, DCP stakeholders and staff

should be included as members of the Project Management Team. The following are studies for which DCP was responsible or participated in:

- University of Illinois at Chicago Voorhees Center and Developing Communities Project, *The Case for Transit-Oriented Development in the Greater Roseland Area* (2005);
- University of Illinois at Chicago Voorhees Center and Developing Communities Project, *Transit Equity Matters: A Regional Analysis of the Red Line and Two Other Proposed CTA Transit Line Extensions* (2009);
- Developing Communities Project, Metropolitan Planning Council, CMAP, and Center for Neighborhood Technology, *What Will Your Station Look Like?* (2010);
- CMAP, Developing Communities Project, and CTA, *Improving Access, Increasing Livability: The CTA Red Line South Extension* (2012).

The goals and objectives delineated in "4.1.1 Regulatory Framework/Methods" were developed in the DCP studies.

The area characteristics of the RLE are predominantly single-family residential properties for which two key observations must be made: 1) any future "transit TIF" designation in the area will fall on low to moderate single-family homeowners, and 2) gentrification which is likely to occur will adversely impact low to moderate single-family homeowners. There is nothing in the Draft EIS that addresses these concerns.

The impact area of the RLE has major five characteristics: 1) single-family residential, 2) vacant lots, 3) commercial retail sites at Michigan, 4) industrial, freight rail, and public utilities south of 119th Street in the area of the proposed train yard, and 5) Altgeld Gardens public housing at 130th Street.

4-6 – The No Build Alternative at 4.1.3.1 is confusing because it mixes CMAP's GO TO 2040 development plan projections with a discussion of the RLE. Are the population and employment increases of 14 and 39 percent, respectively, projected in the CMAP plan due only to development infill, exclusive of the RLE, or do those projections reflect population and employment increases on account of the RLE?

There are no references to transit-oriented development (TOD) principles or criteria in analyzing the potential development impacts and benefits of the East and West options.

[Mitigation: Landscaping for the parking facilities and architectural design represent potential minority contracts and jobs.]

4-7 – [Construction impacts represent opportunities for short-term minority contracts and jobs.]

The Construction Outreach and Coordination Plan, and the Business Outreach Plan need to be made into an appendix of the EIS.

There needs to be a detailed zoning analysis of the impact areas around the stations if land is to be rezoned for stand-alone surface parking lots or garages. This should be done in concert with community stakeholders.

4-8 – [4.6 Displacements and Relocation of Existing Uses represent opportunities for minority contracts and jobs.]

4-9 – There should be an appendix devoted to spelling out 1) Illinois Eminent Domain provisions and where they may or may not apply in the impact area of the RLE, and 2) where the Uniform Act and Uniform Real Property Acquisition Policy will apply in determining fair-market value for displaced occupants. Moreover, there should be stakeholder charrettes for displaced occupants to go over the policy, the process and the intended outcomes.

The EIS should state at what phase of the planning process property acquisition occurs, and what the subsequent schedule is for property acquisition.

The revisions of mitigation activities from conceptual engineering to future engineering phases require monitoring and oversight, which is why it is important to know what public outreach the CTA intends to pursue for the remaining phases of the RLE project.

4-10 – [Demolition and building displacement represent minority contracts and employment opportunities.]

Vacant structures should not be identified as "displacements," which lowers the number of actual occupancy displacements for the East and West options.

4-11 – Either here or in an appendix, the discussions with UPRR over the distance of the RLE is to be located from UPRR freight tracks should be presented and the reason UPRR wanted a distance greater than 50 feet.

Because 50 of the 260 buildings marked for displacement are vacant, the actual occupancy displacement for the East Option is 210. Moreover, 21 of those are easements, i.e., parcels owned the City, which brings the total displacements is 189 for the East Option.

4-15 – However, according to the data used on 4-15 there are 50 privately owned vacant buildings and 30 city-owned vacant building identified for displacement on East Option, which brings the actual number of occupancy displacements to 177. So, while the most concentrated displacements are at 116th & Michigan (30 properties), the most vacant buildings to be displaced are between 105th and 115th Street.

Mitigation of displacement impacts calls for public oversight and monitoring. Not all commercial displacement will be mitigated by commercial space in the Michigan Ave. station or parking structure, especially as the RLE will attract new development to the area which will likely have a competitive advantage over local businesses.

Mitigation of impacts of single-family and other displacements through compensation and relocation will become a problem of what constitutes "fair-market value."

4-16 – Explain the difference between the number of displacements and the number of parcel and building acquisitions.

4-21 – Given the fewer number of occupancy displacements on the West Option, as well as other logistical advantages, such reducing pedestrian traffic to stations and park & rides, the West Option is the more advantageous alternative. The question is: how does this square with the cost effectiveness of the West Option. However, if the West Option is selected as the preferred alternative, does that mean that the CTA will rehab its vacant parcels and easements on the East Option? [If so, such rehabilitative development represents opportunities for minority contractors and jobs.]

The potential attraction of development to the area, again, raises the issue of gentrification, which the EIS does not address.

The community should be involved in the future design phases of the RLE. See Developing Communities Project, Metropolitan Planning Council, CMAP, and Center for Neighborhood Technology, *What Will Your Station Look Like?* (2010).

4-22 – The EIS does not account for potential gentrification of the area in terms of changes to the community character.

4-23 – The impacts on community character and cohesion, as well as on community resources, calls for the use of community benefit agreements (CBA) to protect the integrity of the community from gentrification and other forms of displacement.

4-23-27 – The profile of the existing conditions of the community in the impact area of the RLE highlights the need for a CBA to protect the community character and cohesion, as well as to insure that the community enjoys the benefits of the RLE.

4-27 – Because the new transit stops will become the focal points of the surrounding communities, attracting new development, CBAs with a transit-oriented development focus are essential for those communities impacted by the RLE project.

4-28 – Noise represents a serious impact on the communities along the impact zone of the RLE. However, the potential noise and vibration impacts of the RLE are significantly less than the noise and vibration that residents currently experience due the 27 UPRR freight trains passing through the area each day. Noise mitigation technologies used for the RLE should alleviate much of the noise impact.

[Rehabilitating Wendell Smith Park calls both for a CBA and minority contractors and workers.]

4-30 – [Storage of construction equipment as well as dust control at work sites represents opportunities for minority contracts and jobs.]

4-31 – [Excavation and hauling work represents minority contracts and jobs.]

[Liaison work for a Construction Outreach and Coordination Plan represents opportunities for minority contracts and jobs.]

[The advertising program for the RLE represents opportunities for minority contracts and jobs.]

4-33 – Without a TOD orientation the increased pedestrian activity around transit stations may become problematic. See University of Illinois at Chicago Voorhees Center and Developing Communities Project, *The Case for Transit-Oriented Development in the Greater Roseland Area* (2005).

It is likely that the occupants in the end-of-block parcels contiguous with the UPRR would have little trouble in moving due to the noise and vibration impacts of daily freight rail traffic.

Specify how the local community character would be changed by the proposed 5-story parking structure at the Michigan Ave. station stop.

4-35 – That the West Option runs through Washington Heights from I-57 to the 103rd Street station, but runs through Roseland on the East Option means that different community resources are at stake. A comparison of community resources for the two segments should be conducted, looking at the TOD benefits of each.

[Mitigation of visual impacts of the elevated RLE with tree planting and landscaping represents opportunities for minority contracts and jobs.]

4-43 – [Landscaping to mitigate the visual and aesthetic impacts of the RLE in residential neighborhoods represents opportunities for minority contracts and jobs.]

The statement that construction could take from "several months to a few years depending on the alignment location" is confusing and requires explanation, inasmuch as the construction schedule is stated to be 2022 to 2026.

[Construction fencing, demolition, construction of temporary walls, etc. represent opportunities for minority contracts and jobs.]

[Michigan station parking facility excavation and construction represents opportunities for minority contracts and jobs.]

4-45 – It is not clear how the mitigation measures for the Michigan station and parking facility leave adverse impacts.

4-48 – There several noise issues not covered in the Draft EIS. The EIS accounts for normal rolling noise, but not for noise produced by sharp turns of the rail line which produces squeal noise, e.g., between the 95th Street and the 103rd Street stations. See the FTA, *Wheel Rail Noise Control Manual* (1997).

Another noise issue not addressed in the EIS is transit station noise, and the use of sound absorption materials in transit stations to mitigate noise volumes.

The potential for noise in the vicinity of Roseland Community Hospital, near the 111th Street station, needs to be cited and analyzed in the EIS as a particular case.

Given the elevation of the RLE and the low level and small size of individual parcels in the impact area, what are the noise impacts specific to those conditions?

4-50 – The vibration impact analysis should distinguish between the existing freight rail vibration levels and the transit rail vibrations of an elevated Red Line Extension. The EIS doesn't make that distinction.

4-52 – As stated in the Draft EIS, the reason why vacant buildings are included in the count of noise-sensitive receivers is due to the likelihood that these vacant properties will be resold for residential development. This implies that the RLE will attract new residential development that could spearhead gentrification in the area.

It is also a fair assumption that the Preliminary Engineering and Final Design of the RLE will more than adequately mitigate any noise and vibration impacts of the RLE. For purposes of identification, the fact that the majority of the houses counted as noise and vibration sensitive receivers are between 105th and 115th Street means that a comprehensive plan for that area needs to be developed to mitigate potential gentrification. A CBA would be a critical part of such a plan.

4-55 – The description of the rail structure and service frequency of the RLE in conjunction with the current 27 trains per day of the UPRR suggests that combined noise and vibration impacts of the two train lines should be analyzed in the EIS. The offset that the RLE potential noise and vibration impacts are less than the current impacts of the UPRR freight rail traffic does not apply when both rail lines are running simultaneously. And given the projected increase in freight and passenger rail traffic on the UPRR tracks due to CREATE and Metra SES, the frequency of simultaneous traffic will exponentially increase.

4-59 – The EIS doesn't state that the most adverse and permanent noise impact will be the squealing noise made at the RLE turn at 99th and Eggleston. This should be made an explicit finding of the EIS.

4-60 – Although the expected vibration level of the RLE is below the FTA criteria and below UPRR levels, the EIS should consider the impact of the UPRR vibration impacts on the RLE pylons and elevated structure.

4-61 – Either in the Final EIS, or the Preliminary Engineering, the pile-driving areas during the RLE construction project should be identified.

4-66 – 4.6 Safety and Security section is inadequate and could benefit by conducting surveys of community residents' and transit riders' safety and security concerns. (For an example of such a survey, see Ryan Kaufman, *Roseland Transit Station: A Study of neighborhood and transit systems*, Masters of Architecture Thesis, Judson University, Elgin, Illinois, 2007.)

[Safety and security issues represent opportunities for minority contracts and jobs.]

4-69 – The fact that the West Option would have the park & ride on the same side as the station, reducing pedestrians crossing the UPRR tracks, is another advantage of the West Option over the East Option.

4-72 – What is meant by the statement that "At present, 11 groups are participating in the [Section 106 consultation] process," since the process took place several years ago?

4-76 – Pursuing further archaeological investigations on "the selected option" before the Final EIS is published could be a potential problem if an archaeological site is discovered. Archaeological sites may also be discovered during construction activities.

4-78 – Does the 9 foot distance of the RLE track structure from the Roseland Pumping Station of the East Option mean from the property line or from the building structure?

From the photo simulation in Figure 4-25 it doesn't look like pile-driving will be avoided "in the vicinity of the pumping station."

4-80 – The West Option summary is inadequate because the West Option is further removed from the Roseland Pumping Station than the East Option and is preferable for its diminished effects on the pumping station, including in terms of the effects of pile-driving. If the East Option is 9 feet from the pumping station, the West Option is more than twice that distance from it.

4-81 – The section analyzing the impact of hazardous materials in the API is tricky in that UPRR freight traffic moves hazardous materials through the area regularly. How does the EIS analyze the impact of UPRR and other freight rail transportation of hazardous materials on a major transit structure like the RLE?

4-84 – Define the "permanent envelope for an alternative."

4-86 – [Remediation of hazardous materials represents opportunities for minority contracts and jobs.]

The area of the proposed train yard requires an enhanced hazardous material analysis due to 1) extensive construction activities, and 2) ongoing equipment and grounds maintenance which could trigger OSHA and EPA violations of transit workers' health and safety.

If there are potential hazardous material impacts from the NICTD/CSS & SBRR, why not from UPRR traffic? What is the difference in the materials and products transported by the different rail lines?

4-87 – What coordination is proposed between the CTA and the freight rail lines to develop joint security and safety rail plans to respond to accidental spill scenarios?

[Excavation of contaminated materials represents opportunities for minority contracts and jobs.]

[Demolition of structures that house hazardous materials represents opportunities for minority contracts and jobs.]

Both sides of the right-of-way should be assessed regardless of which option is selected and both sides should be remediated. Then a scale or spectrum of mitigation measures should be created prioritizing immediate to intermediate term mitigation, e.g., before, during and after construction.

4-88 – [Abatement and disposal training represents opportunities for minority contracts and jobs.]

Specify in which phase of the planning process hazardous material mitigation plans would be developed, before and after construction.

4-90 – Was there any reconnaissance of the petcoke piles on the Calumet River? The EIS should assess their potential impacts on the API.

4-91 – With wetlands designations only valid for 5 years, what is the CTA's strategy for reconfirming wetland delineation over the duration of the RLE project, 2016-2026?

Again, with no public oversight of the Final EIS, Preliminary Engineering, and Final Design, there is no public accountability of CTA compliance with wetlands regulations.

4-93 – What is the official determination of the USACE regarding siting jurisdictional wetlands in the project area of the RLE?

Chapter 5 – Indirect and Cumulative Impacts

5-1 – Chapter 5 on "Indirect and Cumulative Impacts" does not account for the impact of gentrification which is very likely to occur due to the RLE. Gentrification would be covered under criteria for "changes to land use patterns, population density or growth rates."

Gentrification would also be covered be evaluation of "potential for indirect impacts on...economic development plans and goals." There is a discrepancy between "surrounding growth, trends, and goals" and the absence of an up-to-date development plan for the project area.

5-2 – The EIS does not explain why none of the TIP projects would have cumulative impacts in the project area of the RLE. The potential for gentrification due to the conjunction of TIP projects and the RLE is undeniable but unaccounted for by the CTA.

The increased frequency of freight rail traffic due to CREATE projects, added to the 27 trains per day of UPRR traffic, and in conjunction with the frequency of RLE transit traffic must be addressed in the EIS.

This section needs a map or several maps delineating the concurrent rail projects in the area which will run contiguous to the RLE alignment.

5-4 – The EIS should have renderings of the Michigan and 130th Street multi-level parking facilities given the structural footprint of these buildings on the project area.

The adverse impact of CREATE and Metra SES traffic on the East Option makes the West Option the rational choice.

Chapter 7 – Environmental Justice

7-7 – What are the public outreach and public meetings scheduled for the remaining stages of the project?

The single Draft EIS public meeting does not reflect robust or equitable outreach by the CTA.

7-9 – When the EIS states that the RLE was a “community-initiated project,” it should forthrightly cite Developing Communities Project (DCP) as the community organization that initiated the project.

The Voorhees/DCP study on transit equity compares Environmental Justice to non-Environmental Justice populations. This should be referenced in the EIS.

#246

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:53 AM
To: lou tarver
Subject: RE: RLE Comment

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: lou tarver [mailto:loutarver@hotmail.com]
Sent: Tuesday, November 29, 2016 4:53 PM
To: Red Extension
Subject: RLE Comment

I prefer the east option.

1. Noise pollution would affect fewer homeowners.

2. Fewer homeowners would suffer property value loss.

3. Most businesses close at night, so owners would not suffer from sleep deprivation.

4. Businesses near train stations could profit from the increased pedestrian traffic.

#247

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:52 AM
To: Gayle D.
Subject: RE: I vote on the Red Line extension going west

Gayle,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Gayle D. [mailto:gayled627@msn.com]
Sent: Tuesday, November 29, 2016 4:43 PM
To: Red Extension
Subject: I vote on the Red Line extension going west

Not sure if this is what I'm supposed to be voting on.

If this isn't the right issue to vote on, I vote for the extension project to take place.

Sincerely,
Gayle Dicker

#248

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:52 AM
To: Yuri Popov
Subject: RE: Red line extension Draft EIS comment

Yuri,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Yuri Popov [mailto:yopopov@gmail.com]
Sent: Tuesday, November 29, 2016 1:08 PM
To: Red Extension
Subject: Red line extension Draft EIS comment

I hold a doctorate degree from the University of Chicago. I also happen to be a life-long transit rider, who lived in four different states (including my six years in Chicago) and rode trains and buses in dozens of cities around the country. While there is no doubt the Red line extension is needed and justified, I would like to draw your attention to a single major deficiency of the proposed preferred alternative.

The biggest issue with the proposed preferred alternative is that it lacks an integrated transfer between the CTA and the Metra Electric line at the Kensington/115th St. station. This station is served by more than 100 Metra trains, both expresses and locals, each and every weekday, and it would provide an excellent transfer point between the two rail systems. New origin-destination pairs would be created by a single transfer station. Many trips between southern suburbs and the city would be made possible by co-locating the two stations at Kensington/115th St. For example, a rail trip from Homewood or University Park to the Sox Stadium (U.S. Cellular Field) would become possible via the Metra Electric line and the CTA Red line with only a single transfer at Kensington/115th St. A convenient transfer between the CTA and Metra at this location would significantly increase ridership on both lines and make the proposed extension more cost efficient on the per-rider basis.

The preferred alternative proposed in the Draft EIS places a Red line station about half a mile away from the Metra station (at Michigan/115th), which is just far enough to be meaningless for practical use as an interchange point. In essence, the proposed preferred alternative continues a barbarian tradition of building two separate balkanized rail systems in the Chicago area, one for the city and the other for suburbs, with very few transfer opportunities between the two. One of the Red line stations must be located within an easy walking distance of the existing Metra station to

provide a convenient transfer. It seems almost criminal to invest in such a major rail extension and to ignore such an excellent transfer opportunity that would boost ridership on both rail systems so strongly.

Sincerely yours,
Yuri O. Popov, Ph.D.

#249

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:51 AM
To: Devontay Talbert
Subject: RE:

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Devontay Talbert [mailto:dtalbert2468@gmail.com]
Sent: Tuesday, November 29, 2016 12:39 PM
To: Red Extension
Subject:

East Opinion

#250

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:58 AM
To: Duana Love
Subject: RE: CTA Red Ahead Program

Duana,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Duana Love [mailto:DLove@transmartinc.com]
Sent: Tuesday, November 29, 2016 10:27 AM
To: Red Extension
Subject: CTA Red Ahead Program

Good morning,

Please add me to the contact list for the CTA rail program.

Thank you.

Regards,

Duana A. Love, P.E.
Senior Program Director
TranSmart Technologies, Inc.
1431 Opus Place, Suite 110
Downers Grove, Illinois 60515
P: 630.796.3993 | M: 312.802.5620
DLove@transmartinc.com | www.transmartinc.com

#251

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:55 AM
To: Verrita Washington
Subject: RE: Input on the Red Line Extension Project

Verrita,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Verrita Washington [mailto:vwsh@msn.com]
Sent: Tuesday, November 29, 2016 11:18 PM
To: Red Extension
Subject: Input on the Red Line Extension Project

Enhancing service to underserved, transit-dependent residents as addressed by this project is an important community need. As a resident living near the proposed development area, the alternatives addressed in the Draft Environmental Impact Statement released for comment are very concerning. This input on the Red Line Extension (RLE) Project is, respectfully, submitted in opposition to either the East or West option of the Union Pacific Railway Alternative for the following reasons:

1. Noise and Vibration. For several years, area residents have petitioned for a "quiet zone" for the UPRR tracks based on the disruption caused by existing rail activity. Adding a commuter rail line with 24-hour service exacerbates the existing problem. Furthermore, the addition of a station at 111th and Eggleston will **add** audible braking with every train entering the station.

2. Visual Impacts/Property Value. The visual obstruction created by the elevated tracks will de-value the remaining residential properties in view and otherwise compromise homeowners' investment. Declining property values, problems recovering equity, and the potential inability to obtain a fair price upon re-sale are particularly troubling aspects.

3. Land Use and Economic Development. Both the East and West options are surrounded by mostly non-commercial, residential areas. Ancillary economic development afforded by the proposed plans will convert residential space into commercial space drawing increased pedestrian and vehicular traffic into remaining residential areas. Proposed new stations such as the one at 111th and Eggleston will require permit parking and other parking enforcement will be necessary on adjacent, residential streets.

For the reasons stated above, I submit these comments in opposition to the proposed Draft Environmental Impact Statement.

Sincerely,

Verrita Washington

#252

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:55 AM
To: Someone
Subject: RE: Opposition

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Someone [mailto:bsbbrianlvr@aol.com]
Sent: Tuesday, November 29, 2016 8:34 PM
To: Red Extension
Subject: Opposition

The red line is already going extremely far South and it should not be extended further South. There are murders and stabbings on the red and blue line sometimes, they are dangerous at night. Currently the red line is seen as safer then the blue ;line but stabbings have occurred on the red line as well. Chicago residents, citizens, Citizens, and transit users wish to be safe, as well as to get to their destination reasonably. The red line system already also has a long time of transit, and this will add additional time. The very worst of this effect will be even worse crowding so that people literally cannot board for several hours unless they wish to be touched and pushed by strangers. How can there possibly be any worse problem with this? This extension is trying to make an even worse problem. In addition, it appears that this extension will destroy wildlife habitats and biodiversity. Residents and citizens of the area beyond 95th Street already have access to transit in the form of several buses. If a train line absolutely must be put to further South, it should be done in the form of a new color which is not considered as part of the red line so that people on the train at night are not in danger unless they already live in a dangerous area anyway... the further South is more increased danger, and sitting at the end of the train if you have missed your stop, or waiting for your train to arrive if you are boarding, will be more dangerous. This will also greatly increase the level of disgustingness on the train - the majority of the red line and stations are much cleaner then other stations except for the ones in Chicago and Evanston, but the ones in the South areas are far less clean, sometimes on par with other line's stations, and all of the ones in the South have no heat, some even have not many benches. More stations will mean more stations which are dirty, making the trains themselves dirty, and lack of appropriate facilities. It will also cost tons of money to do all of this. This is a very bad idea and should not be done. It will be a great detriment to people who live or use transit in Chicago, and if other people want it to be considered an absolutely necessity then another color of train line can be built instead, keeping the red line free from the additional dirtiness factor and keeping it's travel time no longer then it currently is. The most reasonable thing to do would be to have bus lines go through these areas if there are specific places where the buses are too slow, because this option will not destroy the wildlife or marshy areas.

#253

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:54 AM
To: Nicky Moore
Subject: RE: RED-Line Extension

Nicholette,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Nicky Moore [mailto:faithfulmoore1@yahoo.com]
Sent: Tuesday, November 29, 2016 6:43 PM
To: Red Extension
Subject: RED-Line Extension

Hello my name is N. Moore and I do believe that the Extension will be an asset to our community; however if there will be a need to move current residents from their properties there should be Equitable payments to these residents. By this I am referring to the current Value of their homes, or business. Many residents and Business owners/operators properties may not be totally owned by them; they may still owe money to their lending institutions! Therefore each owner of real estate, rather it be their home or business will need to be fully compensated for the uprooting of their property. Please remember and take into consideration the current cost of Real Estate in Chicago, purchasing a home to replace the mortgage residents are paying currently may leave many without proper housing! Therefore every displace family will need to be given increase above their property's current value in order to relocate.
Thank you,.
Nicholette Moore
Current Resident

#254

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name OMAR ALPHA KAMARA

Address 11528 S. LAFAYETTE AVENUE

City CHICAGO **State** IL **Zip** 60628

Email Address O_kamara@yahoo.com

☑ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** NOT SURE BUT GENERALLY THE NOISE LEVEL, ESPECIALLY BECAUSE THE CURRE FREIGHT TRAINS RUN 24/7 NIGHT AND DAY ALIKE

What are your concerns about the **West Option?** SHOULD THIS LEAD TO THE ACQUISI OF MY PROPERTY AROUND WE CREATE A COMMUNITY PROJECT, I WILL BE CONCERNED ABOUT DISPLACEME

Comments: AND HOW MUCH SUPPORT WILL BE ACCORDED T ENHANCE SUCH A MOVE. AS INDICATED IN A SEPARATE LETTER APART THE PROPERTY THAT I OWN, OUR NOT FO PROFIT CORPORATIONS ALSO LEASE VACANT LOTS FOR THE COMMUNITY PROJECT, SO WE HAVE CONCERNS ABOUT BEING RELOCATED TO A SPOT THAT WILL ACCORD US SIMILAR OPPORTUNITIES, ESPECIALLY AS RELATES TO COSTS AND SUITABILITY FOR OUR PROJECTS ACTIVITIES.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: NO, I THINK THIS PROJECT WILL ENHANCE TRANSPORTATION AS HIGHLIGHTED IN THE DRAFT EIS.

Land Use and Economic Development: NO IF THE IMPACT ON PARKS IS ADDRESSED AS PROPOSED.

Property Displacements: YES, ESPECIALLY FOR PROJECTS AND BUSINESSES IN THE COMMUNITY

Neighborhoods & Communities: NOT SURE, BUT CONCERNED.

Visual Impacts (how it would look): NO CONCERNED.

Noise & Vibration: YES, THERE IS ALREADY HIGH LEVEL NOISE CAUSED BY THE FREIGHT TRAINS

Impacts to Historic Resources: NOT SURE, BUT WITH PULMAN ESTATES BEEN REVITALIZED, TRANSPORTATION WILL HELP THE COMMUNITIES.

Safety & Security: NOT SURE

Hazardous Materials: YES POLLUTION MAY INCREASE AND WHAT IS ACCEPTABLE BY FEDERAL REGULATIONS DO NOT USUALLY ASS

Wetlands: A QUITE HEALTHY ENVIRONMENT FOR RESIDENTS.

Parks: YES, BUT PLANS SEEM TO HAVE ADDRESSED THAT

Construction Impacts: YES, NOISE AND TRAFFIC INCONVENIENCES

Project Funding: NO.

Other:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

This comment goes with the previous comment card.

African Diaspora Foundation, Inc. (ADFI)

11528 S Lafayette Avenue

Chicago, IL 60628

November 13, 2016

Chicago Transit Authority

567 West Lake Street

Chicago, IL 60661-1498

RE: Red Line Extension (RLE) Project

Dear sir/madam,

I am writing in response to a letter from CTA's Chief Planning Officer regarding the Red Line Extension (RLE) project indicating that our business and community project location at 11528 S Lafayette Avenue may be sought for acquisition, should the west option of RLE be preferred. African Diaspora Foundation, Inc. (ADFI) is a Not for Profit corporation organized to promote self-reliance in our communities. In five plus year of existence, we have been managing a community garden, a honey bee apiary, and organize recreational activities, especially for children in the community.

We have read through some RLE literature, and recently attended a public hearing on the draft Environmental Impact Statement (EIS). Although the project will agreeably have positive impact on the communities, for which we shall be most grateful, as a corporation we have concerns that should we be displaced from our current location, the business and community activities of ADFI may be negatively impacted if adequate assistance is not accorded to enhance smooth relocation to a nearby location.

Also, please note that we currently lease two neighboring vacant lots from Union Pacific Railroad Company that have been very instrumental in enabling our activities. One of the plot is the site of our community garden, and the other provides space for the recreational activities. A move will effectively take away this opportunity, thereby again negatively impacting our activities.

With full support for the proposed RLE project, this letter is simply meant to give advance notice of help that we would most definitely need should the decision be made that our current location will be acquired for the project. It is our hope that the provisions of the Uniform Relocation Assistance and Real Property Policies Act of 1970, and the good will of CTA will help us successfully navigate through those challenges, should ADFI be displaced from its current location.

We welcome the opportunity for further discussion about this matter, and I could be reached on cell phone at (815)348-0941, and by email at o_kamara@yahoo.com. Further comments are given on the attached completed comment card.

Sincerely,

Omar Alpha Kamara

President – ADFI

Property Owner of 11528 S Lafayette Avenue

PIN – 25-21-406-031-0000

CTA Parcel ID - 273

#255

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:56 AM
To: Elihu Blanks
Subject: RE: Red line extension

Elihu,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Elihu Blanks [mailto:eblanks@hotmail.com]
Sent: Wednesday, November 30, 2016 7:27 AM
To: Red Extension
Subject: Red line extension

Good Morning,

As a Chicago resident I'd like to vote for the red line extension to run along the west side of the up train line

Thank You,

Elihu Blanks

Sent From My Sprint Phone.

#256

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 8:56 AM
To: Garphelia Coleman
Subject: RE: East or west option

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

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RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Garphelia Coleman [mailto:cna6423@gmail.com]
Sent: Wednesday, November 30, 2016 1:00 AM
To: Red Extension
Subject: East or west option

I say go for the west option

#257

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name Rev. Q.Z. + Nancy Garner

Address 347 W. 102nd St.

City Chicago **State** Illinois **Zip** 60628

Email Address

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?**

We are in Complance With the Red line to be on the east side of the UPRR

What are your concerns about the **West Option?**

Comments:

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: _____

Land Use and Economic Development: _____

Property Displacements: _____

Neighborhoods & Communities: _____

Visual Impacts (how it would look): _____

Noise & Vibration: My Concerns with Both trains. also customer Parking at the 103rd Station

Impacts to Historic Resources: _____

Safety & Security: _____

Hazardous Materials: _____

Wetlands: _____

Parks: _____

Construction Impacts: _____

Project Funding: _____

Other: _____

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#258

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, December 01, 2016 8:04 AM
To: Cmhorde
Subject: RE: Noise level at 95th Street and the Dan Ryan

Christina,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Cmhorde [mailto:cmhorde@aol.com]
Sent: Wednesday, November 30, 2016 10:18 PM
To: Red Extension
Subject: Noise level at 95th Street and the Dan Ryan

To whom it concerns:

The noise level at 95th Street and the Dan Ryan is at high levels 24 hours a day. What can the city due about this situation? The high noise level will affect the neighborhoods' quality of life.

Thank you.

Christina Horde

#259

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, December 01, 2016 8:03 AM
To: Dylan's Email
Subject: RE: Comments On Red Line Extension

Dylan,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Dylan's Email [mailto:Dylan@midwesthsr.org]
Sent: Wednesday, November 30, 2016 7:39 PM
To: Red Extension
Subject: Comments On Red Line Extension

The Midwest High Speed Rail Association would like to submit the attached comments.

Best,

Dylan Hayward
Program Manager
Midwest High Speed Rail Association
4765 N. Lincoln Ave Chicago IL 60625 | 773-334-6758

Red Line Extension Draft EIS:

We support the goal of providing rapid transit service to south side communities in an effort to improve access to job opportunities and spur economic development in these areas. However, the red line draft EIS does not take into consideration the very viable option of converting the Metra Electric into a rapid transit service in order to serve this need.

The Metra Electric line could be modernized in order to run trains every 10 – 15 minutes and Ventra could be integrated in order to provide transfer ability between Metra, Pace and CTA. This would serve the same communities affected by the proposed red line extension and would provide the much needed access to the job rich economic center of downtown Chicago.

If the Metra Electric line was turned into a rapid transit service, many of the bus lines serving the same market would no longer be needed. These buses could be redeployed by CTA and Pace to provide better service to the surrounding communities making it easier to access Metra Electric stations and downtown Chicago.

This alternative option to provide rapid transit service to these underserved communities needs to be studied. We believe that taking advantage of Metra Electric's existing infrastructure is a cost effective option compared to building a brand new red line extension.

#260

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, December 01, 2016 8:01 AM
To: Deloris Lucas
Subject: RE: public comments

Deloris,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Residential displacements due to Red Line Extension project are not anticipated in Riverdale community area.

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, it is required by federal law to offer to purchase each property for an amount that is no less than fair market value as determined by an independent appraisal. In some circumstances, if current appraisals are less than the original property purchase price, an owner may be eligible for compensation equal to the original purchase price. In addition, CTA must provide financial assistance and relocation services, as required by federal rules, for property owners as well as commercial and residential occupants who must move because of the RLE Project. Additional information about potential displacements is available at link below - http://www.transitchicago.com/news_initiatives/planning/rlx/ppd.aspx

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Deloris Lucas [mailto:deelucas2002@yahoo.com]
Sent: Wednesday, November 30, 2016 4:30 PM
To: Red Extension
Subject: public comments

Thank you for working on the Red Line extension Project.

I am concerned about the proposed displaced Homeowners in the Roseland, Washington Heights, West Pullman...and recently read about

displaced homes in Riverdale.

Is this correct ? Will there be some displaced homeowners in Riverdale area?? Please explain.

I believe the displaced Homeowners should get more than Fair Market value + relocation expenses. These area are way below the poverty level and should get more as the Red Line gets extended.

I'm also concerend about the end of the line area @ 130th and Ellis. Most neighborhoods (Golden Gate, Riverside Village, Pangea Lakes and Concordia) are now far away from the propsed end of the line location 130th & Ellis. So far that it would take them/us at least 20 minuties to get to the end of the line.

THERE NEEDS TO BE A SHUTTLE BUS/EXPRESS BUS FOR THE RESIDENTS THAT LIVE NEAR THE PROPOSED END OF THE LINE.

Currently there is no bus service that will get area residents to the end of the lin location, under 20 minutes. If the expansion is to save time, there is no immediate time savings for local area rresidents to get to the end of the line.....unless a bus will get us there faster and with no additional cost.

It would also be foolish to pay a fare to ride down or up the street to get to the end of the line. OR Perhaps a special transfer can be issued so that additional costs are not transfered to the rider.

Please call, I would love to explain more about ideas to make the transition to better transit....better.

Sincerely

Deloris Lucas
President
Golden Gate Homeowners Association
13134 S. Vernon, Chicago, IL 60827

773-468-7941

#261

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 1:32 PM
To: Michael LaFargue
Subject: RE: EIS Draft

Michael,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Michael LaFargue [mailto:mlafargue1@gmail.com]
Sent: Wednesday, November 30, 2016 3:23 PM
To: Red Extension
Subject: EIS Draft

I thought the EIS Draft is well written. I takes into consideration community concerns as jobs, parks, wet lands, home displacement, visual impact, sound impact, safety security, cultural issues.

The CTA team worked hard and well communicating the RLE Draft to many local organizations.

One Suggestion/Question:

To have less impact on home displacement and the Wendell Smith Park with the baseball diamond, is it possible the train operate on the West Option Side until 103rd Street, then with UPRR air rights, cross over to the East Option side?

Criticisms Heard:

The public hearing held at the church 211 E. 115th appeared to overwhelm and confuse some people with so much going on in one room.

Thank you for your work.

Michael LaFargue

#262

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 12:07 PM
To: Gwendolyn Rice
Subject: RE: Comments on the CTA Red Line Extension

Gwendolyn,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Gwendolyn Rice [mailto:gwendolynmrice@gmail.com]
Sent: Wednesday, November 30, 2016 1:40 PM
To: Red Extension
Subject: Comments on the CTA Red Line Extension

Please see my attached comments. The document that I am submitting covers all the areas of concerns listed on the comment card distributed at public meeting the November 1, 2016 meeting at St. John Baptist Church on 115th Street

Thank you,

Gwendolyn Mackel Rice
8600 South Prairie Avenue
Chicago, IL 60619

773-488-0590
gwendolynmrice@gmail.com

Comments on Draft Environmental Impact Statement for the Red Line Extension

By Lou Turner, for ROC (Redline Oversight Committee),[1] submitted November 29, 2016

and affirmed and submitted by Gwendolyn M. Rice on November 30, 2016

Executive Summary

Public Input Requested

The CTA public relations department should be advised that the RLE Draft Environmental Statement (EIS) was not available at the Woodson Regional Library as referenced the Executive Summary (ES-11). The CTA's public outreach process to elicit public feedback has been severely limited, not only in terms of the availability of the Draft EIS, but in terms of the very limited number of public meetings (1) to engage far South Side residents. The Redline Oversight Committee (ROC) never got requests for meetings returned from CTA Board Secretary Greg Longhini (11/4; 11/15) or from Gerald Nichols of the CTA Government and Community Relations department (11/7).

Chapter 1 – Purpose and Need

1-3 – Why isn't Lowden Homes and Trinity United Church of Christ at 95th Street included in the impact area? The residents and parishioners are important stakeholders for the 95th Street terminal renovation and the RLE.

1-5 – Some explanation should be given as why it took 7 years from the completion of Alternatives Analysis to the Draft EIS. Dating the RLE from its inclusion in the 2005 SAFETEA-LU transportation bill to the CTA/FTA issuance of the Draft EIS, it has so far taken 11 years, and with the Final EIS not slated to be done until 2018, it will have taken 13 years for the RLE to pass its first two planning phases, namely Alternatives Analysis and Environmental Impact Statement (EIS). The CTA should provide an explanation for the delay. If the far South Side communities in the impact zone of the RLE can expect this pattern of delays, then the RLE will leave residents who will have to move in a state of insecurity. The CTA should be more sensitive to its timing of this process if it expects buy-in from the community.

Chapter 2 – Alternatives Considered

2-2 – The Draft EIS cites DCP's 2004 RLE referendum in the 9th and 34th Wards and the 38,000 votes the referendum received as one of the key inputs leading to making the current UPRR options the locally preferred alternative (LPA).

[1] ROC is made up former leaders and staff members of Developing Communities Project (DCP), many of whom having worked on the RLE from the time it was first considered in the CATS (Chicago Area Transportation Study) northeast Illinois regional transportation plan, in 2002-2003.

2-4 – CDOT looked at moving the UPRR freight operations from its current corridor in 2012 before deciding that it wasn't feasible. The Draft EIS should include as an appendix the CDOT study of this "Right-of-Way Option" and the rationale for its non-feasibility.

Why did the CTA investigate four alternatives between 2012 and 2014 after it had chosen the UPRR option as the LPA?

2-8 – Draft EIS states that the park & ride at Michigan will have retail space and community facilities. Why no retail and community space planned for the larger 130th Street station?

2-10 – The planning and construction schedule of the RLE (2005-2026) is twice the time it took for planning and construction of the Orange Line (1984-1993), which is more than twice the length of the RLE and, like the RLE, uses existing rail right-of-ways. The EIS should explain why the RLE has a two decades long planning and construction schedule.

The EIS should state whether the 7 construction segments of the RLE will be sequential or simultaneous, or indicate that those questions will be detailed in the Preliminary Engineering and/or Final Design phases. This is particularly important for segments U-7 (the train yard) and U-5 (the segment contiguous with the train yard).

Indicate the percentage of the Red Line that the RLE will constitute (e.g., 20 percent).

2-13 – [2.3.2 Construction Staging and 2.3.3 Pre-Construction Activities constitute minority contractor and employment opportunities.][2]

2-14 – [2.3.5 Demolition constitutes minority contractor and employment opportunities. Excavation activities on the project also represent minority contractor and employment opportunities.]

[Brown field remediation, e.g., soil removal, represents minority contractor and employment opportunities.]

2-15 – The public input and feedback that led to the choice of the UPRR locally preferred alternative should be cited.

2-16 – Explain the public input that led to the choice of the South Station Option at Altgeld Gardens.

2-19 – What legal obligation is the FTA under to issue the Final EIS and Record of Decision (ROD) once the EIS process has begun in spite of leadership and staffing changes at the FTA following the 2016 presidential election?

Chapter 3 – Transportation

3-4 – Explain why the transportation analysis did not account for a mode shift from vehicles to transit. What is the mode shift from bus to fixed rail transit, since 25 percent of the households in the impact

[2] Bracketed passages are marked for possible minority contractor and workforce development opportunities.

area are without automobiles and are dependent on a bus mode of transportation? This should be calculated in measuring the LOS (level of service) in the area.

3-5 – ADA benefits of the RLE should be measured against the current negative ADA conditions of public transit, in the area (i.e., the No Build option).

3-6 – While there may be no severe impacts for freight rail with the RLE past 2026, any impacts during construction is reason to speed up construction of the RLE.

3-13 – With UPRR freight frequency averaging 27 trains per day within the API (i.e., more than an average of one train per hour), two Amtrak passenger trains per day, and a projected increase of freight rail traffic in the API (area of potential impact) suggests that vibration impacts on RLE pylons should be evaluated.

3-18 – The EIS does not calculate the added passenger volume produced by the RLE. The 2030 average weekday projected passenger volume on account of the UPRR Alternative is 42,000. What should the increased train car capacity be? The EIS only indicates an 8 to 10 car RLE station capacity. Is that sufficient for the increased passenger volume of 42,000?

3-19 – Is there a logistical problem between transit and freight rail traffic (NICTD/CSS & SBRR) when the RLE proceeds at-grade level around 119th Street?

3-21 – Wouldn't a park & ride at the 95th Street station mitigate the increased traffic volume impacts at the RLE stations.

3-22 – ADA accessibility should be more finely analyzed than currently done in the EIS. See the 2005 and 2009 Voorhees/DCP studies for data on the disability population. The very large disability population in the API (30,600) requires a more detailed evaluation of the impacts and benefits of the RLE. For example, the East Option will require mitigation for disabled passengers who will have to cross freight rail tracks to access stations, including from park & ride facilities.

Chapter 4 – Environmental Impacts and Mitigation

4-1 – That only "potential [mitigation] measures...are provided for public review and comment" in the Draft EIS and that the actual mitigation measures will be confirmed in the Final EIS with no opportunity for public response to the decisions made raises serious questions of public accountability. There needs to be public oversight post-Draft EIS for the rest of the planning process and ultimately for the construction process.

Why no rendering of the 111th Street station stop near Roseland Community Hospital, especially as it would be only the second hospital station stop in the CTA system, in Chicago, and represents a fundamental benefit of the RLE.

4-2 – Since there has been no community economic or land use plan conducted by the Chicago Department of Planning and Development for the communities in the API for decades, how is adverse land use and economic development to be determined?

4-3 – Since DCP is responsible 4 of the 12 studies used in the Draft EIS to "determine consistency of the project with the goals and policies presented in the local and regional land use plans," i.e., one-third of the studies used and the only studies specific to the project area of the RLE, DCP stakeholders and staff should be included as members of the Project Management Team. The following are studies for which DCP was responsible or participated in:

- University of Illinois at Chicago Voorhees Center and Developing Communities Project, *The Case for Transit-Oriented Development in the Greater Roseland Area* (2005);
- University of Illinois at Chicago Voorhees Center and Developing Communities Project, *Transit Equity Matters: A Regional Analysis of the Red Line and Two Other Proposed CTA Transit Line Extensions* (2009);
- Developing Communities Project, Metropolitan Planning Council, CMAP, and Center for Neighborhood Technology, *What Will Your Station Look Like?* (2010);
- CMAP, Developing Communities Project, and CTA, *Improving Access, Increasing Livability: The CTA Red Line South Extension* (2012).

The goals and objectives delineated in "4.1.1 Regulatory Framework/Methods" were developed in the DCP studies.

The area characteristics of the RLE are predominantly single-family residential properties for which two key observations must be made: 1) any future "transit TIF" designation in the area will fall on low to moderate single-family homeowners, and 2) gentrification which is likely to occur will adversely impact low to moderate single-family homeowners. There is nothing in the Draft EIS that addresses these concerns.

The impact area of the RLE has major five characteristics: 1) single-family residential, 2) vacant lots, 3) commercial retail sites at Michigan, 4) industrial, freight rail, and public utilities south of 119th Street in the area of the proposed train yard, and 5) Altgeld Gardens public housing at 130th Street.

4-6 – The No Build Alternative at 4.1.3.1 is confusing because it mixes CMAP's GO TO 2040 development plan projections with a discussion of the RLE. Are the population and employment increases of 14 and 39 percent, respectively, projected in the CMAP plan due only to development infill, exclusive of the RLE, or do those projections reflect population and employment increases on account of the RLE?

There are no references to transit-oriented development (TOD) principles or criteria in analyzing the potential development impacts and benefits of the East and West options.

[Mitigation: Landscaping for the parking facilities and architectural design represent potential minority contracts and jobs.]

4-7 – [Construction impacts represent opportunities for short-term minority contracts and jobs.]

The Construction Outreach and Coordination Plan, and the Business Outreach Plan need to be made into an appendix of the EIS.

There needs to be a detailed zoning analysis of the impact areas around the stations if land is to be rezoned for stand-alone surface parking lots or garages. This should be done in concert with community stakeholders.

4-8 – [4.6 Displacements and Relocation of Existing Uses represent opportunities for minority contracts and jobs.]

4-9 – There should be an appendix devoted to spelling out 1) Illinois Eminent Domain provisions and where they may or may not apply in the impact area of the RLE, and 2) where the Uniform Act and Uniform Real Property Acquisition Policy will apply in determining fair-market value for displaced occupants. Moreover, there should be stakeholder charrettes for displaced occupants to go over the policy, the process and the intended outcomes.

The EIS should state at what phase of the planning process property acquisition occurs, and what the subsequent schedule is for property acquisition.

The revisions of mitigation activities from conceptual engineering to future engineering phases require monitoring and oversight, which is why it is important to know what public outreach the CTA intends to pursue for the remaining phases of the RLE project.

4-10 – [Demolition and building displacement represent minority contracts and employment opportunities.]

Vacant structures should not be identified as “displacements,” which lowers the number of actual occupancy displacements for the East and West options.

4-11 – Either here or in an appendix, the discussions with UPRR over the distance of the RLE is to be located from UPRR freight tracks should be presented and the reason UPRR wanted a distance greater than 50 feet.

Because 50 of the 260 buildings marked for displacement are vacant, the actual occupancy displacement for the East Option is 210. Moreover, 21 of those are easements, i.e., parcels owned the City, which brings the total displacements is 189 for the East Option.

4-15 – However, according to the data used on 4-15 there are 50 privately owned vacant buildings and 30 city-owned vacant building identified for displacement on East Option, which brings the actual number of occupancy displacements to 177. So, while the most concentrated displacements are at 116th & Michigan (30 properties), the most vacant buildings to be displaced are between 105th and 115th Street.

Mitigation of displacement impacts calls for public oversight and monitoring. Not all commercial displacement will be mitigated by commercial space in the Michigan Ave. station or parking structure,

especially as the RLE will attract new development to the area which will likely have a competitive advantage over local businesses.

Mitigation of impacts of single-family and other displacements through compensation and relocation will become a problem of what constitutes "fair-market value."

4-16 – Explain the difference between the number of displacements and the number of parcel and building acquisitions.

4-21 – Given the fewer number of occupancy displacements on the West Option, as well as other logistical advantages, such reducing pedestrian traffic to stations and park & rides, the West Option is the more advantageous alternative. The question is: how does this square with the cost effectiveness of the West Option. However, if the West Option is selected as the preferred alternative, does that mean that the CTA will rehab its vacant parcels and easements on the East Option? [If so, such rehabilitative development represents opportunities for minority contractors and jobs.]

The potential attraction of development to the area, again, raises the issue of gentrification, which the EIS does not address.

The community should be involved in the future design phases of the RLE. See Developing Communities Project, Metropolitan Planning Council, CMAP, and Center for Neighborhood Technology, *What Will Your Station Look Like?* (2010).

4-22 – The EIS does not account for potential gentrification of the area in terms of changes to the community character.

4-23 – The impacts on community character and cohesion, as well as on community resources, calls for the use of community benefit agreements (CBA) to protect the integrity of the community from gentrification and other forms of displacement.

4-23-27 – The profile of the existing conditions of the community in the impact area of the RLE highlights the need for a CBA to protect the community character and cohesion, as well as to insure that the community enjoys the benefits of the RLE.

4-27 – Because the new transit stops will become the focal points of the surrounding communities, attracting new development, CBAs with a transit-oriented development focus are essential for those communities impacted by the RLE project.

4-28 – Noise represents a serious impact on the communities along the impact zone of the RLE. However, the potential noise and vibration impacts of the RLE are significantly less than the noise and vibration that residents currently experience due the 27 UPRR freight trains passing through the area each day. Noise mitigation technologies used for the RLE should alleviate much of the noise impact.

[Rehabilitating Wendell Smith Park calls both for a CBA and minority contractors and workers.]

4-30 – [Storage of construction equipment as well as dust control at work sites represents opportunities for minority contracts and jobs.]

4-31 – [Excavation and hauling work represents minority contracts and jobs.]

[Liaison work for a Construction Outreach and Coordination Plan represents opportunities for minority contracts and jobs.]

[The advertising program for the RLE represents opportunities for minority contracts and jobs.]

4-33 – Without a TOD orientation the increased pedestrian activity around transit stations may become problematic. See University of Illinois at Chicago Voorhees Center and Developing Communities Project, *The Case for Transit-Oriented Development in the Greater Roseland Area* (2005).

It is likely that the occupants in the end-of-block parcels contiguous with the UPRR would have little trouble in moving due to the noise and vibration impacts of daily freight rail traffic.

Specify how the local community character would be changed by the proposed 5-story parking structure at the Michigan Ave. station stop.

4-35 – That the West Option runs through Washington Heights from I-57 to the 103rd Street station, but runs through Roseland on the East Option means that different community resources are at stake. A comparison of community resources for the two segments should be conducted, looking at the TOD benefits of each.

[Mitigation of visual impacts of the elevated RLE with tree planting and landscaping represents opportunities for minority contracts and jobs.]

4-43 – [Landscaping to mitigate the visual and aesthetic impacts of the RLE in residential neighborhoods represents opportunities for minority contracts and jobs.]

The statement that construction could take from “several months to a few years depending on the alignment location” is confusing and requires explanation, inasmuch as the construction schedule is stated to be 2022 to 2026.

[Construction fencing, demolition, construction of temporary walls, etc. represent opportunities for minority contracts and jobs.]

[Michigan station parking facility excavation and construction represents opportunities for minority contracts and jobs.]

4-45 – It is not clear how the mitigation measures for the Michigan station and parking facility leave adverse impacts.

4-48 – There several noise issues not covered in the Draft EIS. The EIS accounts for normal rolling noise, but not for noise produced by sharp turns of the rail line which produces squeal noise, e.g., between the 95th Street and the 103rd Street stations. See the FTA, *Wheel Rail Noise Control Manual* (1997).

Another noise issue not addressed in the EIS is transit station noise, and the use of sound absorption materials in transit stations to mitigate noise volumes.

The potential for noise in the vicinity of Roseland Community Hospital, near the 111th Street station, needs to be cited and analyzed in the EIS as a particular case.

Given the elevation of the RLE and the low level and small size of individual parcels in the impact area, what are the noise impacts specific to those conditions?

4-50 – The vibration impact analysis should distinguish between the existing freight rail vibration levels and the transit rail vibrations of an elevated Red Line Extension. The EIS doesn't make that distinction.

4-52 – As stated in the Draft EIS, the reason why vacant buildings are included in the count of noise-sensitive receivers is due to the likelihood that these vacant properties will be resold for residential development. This implies that the RLE will attract new residential development that could spearhead gentrification in the area.

It is also a fair assumption that the Preliminary Engineering and Final Design of the RLE will more than adequately mitigate any noise and vibration impacts of the RLE. For purposes of identification, the fact that the majority of the houses counted as noise and vibration sensitive receivers are between 105th and 115th Street means that a comprehensive plan for that area needs to be developed to mitigate potential gentrification. A CBA would be a critical part of such a plan.

4-55 – The description of the rail structure and service frequency of the RLE in conjunction with the current 27 trains per day of the UPRR suggests that combined noise and vibration impacts of the two train lines should be analyzed in the EIS. The offset that the RLE potential noise and vibration impacts are less than the current impacts of the UPRR freight rail traffic does not apply when both rail lines are running simultaneously. And given the projected increase in freight and passenger rail traffic on the UPRR tracks due to CREATE and Metra SES, the frequency of simultaneous traffic will exponentially increase.

4-59 – The EIS doesn't state that the most adverse and permanent noise impact will be the squealing noise made at the RLE turn at 99th and Eggleston. This should be made an explicit finding of the EIS.

4-60 – Although the expected vibration level of the RLE is below the FTA criteria and below UPRR levels, the EIS should consider the impact of the UPRR vibration impacts on the RLE pylons and elevated structure.

4-61 – Either in the Final EIS, or the Preliminary Engineering, the pile-driving areas during the RLE construction project should be identified.

4-66 – 4.6 Safety and Security section is inadequate and could benefit by conducting surveys of community residents' and transit riders' safety and security concerns. (For an example of such a survey, see Ryan Kaufman, *Roseland Transit Station: A Study of neighborhood and transit systems*, Masters of Architecture Thesis, Judson University, Elgin, Illinois, 2007.)

[Safety and security issues represent opportunities for minority contracts and jobs.]

4-69 – The fact that the West Option would have the park & ride on the same side as the station, reducing pedestrians crossing the UPRR tracks, is another advantage of the West Option over the East Option.

4-72 – What is meant by the statement that "At present, 11 groups are participating in the [Section 106 consultation] process," since the process took place several years ago?

4-76 – Pursuing further archaeological investigations on "the selected option" before the Final EIS is published could be a potential problem if an archaeological site is discovered. Archaeological sites may also be discovered during construction activities.

4-78 – Does the 9 foot distance of the RLE track structure from the Roseland Pumping Station of the East Option mean from the property line or from the building structure?

From the photo simulation in Figure 4-25 it doesn't look like pile-driving will be avoided "in the vicinity of the pumping station."

4-80 – The West Option summary is inadequate because the West Option is further removed from the Roseland Pumping Station than the East Option and is preferable for its diminished effects on the pumping station, including in terms of the effects of pile-driving. If the East Option is 9 feet from the pumping station, the West Option is more than twice that distance from it.

4-81 – The section analyzing the impact of hazardous materials in the API is tricky in that UPRR freight traffic moves hazardous materials through the area regularly. How does the EIS analyze the impact of UPRR and other freight rail transportation of hazardous materials on a major transit structure like the RLE?

4-84 – Define the "permanent envelope for an alternative."

4-86 – [Remediation of hazardous materials represents opportunities for minority contracts and jobs.]

The area of the proposed train yard requires an enhanced hazardous material analysis due to 1) extensive construction activities, and 2) ongoing equipment and grounds maintenance which could trigger OSHA and EPA violations of transit workers' health and safety.

If there are potential hazardous material impacts from the NICTD/CSS & SBRR, why not from UPRR traffic? What is the difference in the materials and products transported by the different rail lines?

4-87 – What coordination is proposed between the CTA and the freight rail lines to develop joint security and safety rail plans to respond to accidental spill scenarios?

[Excavation of contaminated materials represents opportunities for minority contracts and jobs.]

[Demolition of structures that house hazardous materials represents opportunities for minority contracts and jobs.]

Both sides of the right-of-way should be assessed regardless of which option is selected and both sides should be remediated. Then a scale or spectrum of mitigation measures should be created prioritizing immediate to intermediate term mitigation, e.g., before, during and after construction.

4-88 – [Abatement and disposal training represents opportunities for minority contracts and jobs.]

Specify in which phase of the planning process hazardous material mitigation plans would be developed, before and after construction.

4-90 – Was there any reconnaissance of the petcoke piles on the Calumet River? The EIS should assess their potential impacts on the API.

4-91 – With wetlands designations only valid for 5 years, what is the CTA's strategy for reconfirming wetland delineation over the duration of the RLE project, 2016-2026?

Again, with no public oversight of the Final EIS, Preliminary Engineering, and Final Design, there is no public accountability of CTA compliance with wetlands regulations.

4-93 – What is the official determination of the USACE regarding siting jurisdictional wetlands in the project area of the RLE?

Chapter 5 – Indirect and Cumulative Impacts

5-1 – Chapter 5 on "Indirect and Cumulative Impacts" does not account for the impact of gentrification which is very likely to occur due to the RLE. Gentrification would be covered under criteria for "changes to land use patterns, population density or growth rates."

Gentrification would also be covered be evaluation of "potential for indirect impacts on...economic development plans and goals." There is a discrepancy between "surrounding growth, trends, and goals" and the absence of an up-to-date development plan for the project area.

5-2 – The EIS does not explain why none of the TIP projects would have cumulative impacts in the project area of the RLE. The potential for gentrification due to the conjunction of TIP projects and the RLE is undeniable but unaccounted for by the CTA.

The increased frequency of freight rail traffic due to CREATE projects, added to the 27 trains per day of UPRR traffic, and in conjunction with the frequency of RLE transit traffic must be addressed in the EIS.

This section needs a map or several maps delineating the concurrent rail projects in the area which will run contiguous to the RLE alignment.

5-4 – The EIS should have renderings of the Michigan and 130th Street multi-level parking facilities given the structural footprint of these buildings on the project area.

The adverse impact of CREATE and Metra SES traffic on the East Option makes the West Option the rational choice.

Chapter 7 – Environmental Justice

7-7 – What are the public outreach and public meetings scheduled for the remaining stages of the project?

The single Draft EIS public meeting does not reflect robust or equitable outreach by the CTA.

7-9 – When the EIS states that the RLE was a "community-initiated project," it should forthrightly cite Developing Communities Project (DCP) as the community organization that initiated the project.

The Voorhees/DCP study on transit equity compares Environmental Justice to non-Environmental Justice populations. This should be referenced in the EIS.

#263

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, November 30, 2016 9:46 AM
To: Patrice Thomas
Subject: RE: Red Line Extension Project

Patrice,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Patrice Thomas [mailto:p27recious@att.net]
Sent: Wednesday, November 30, 2016 11:44 AM
To: Red Extension
Subject: Red Line Extension Project

Morning.

I would like to be added to the project contact list for future updates.
Thank you in advance.

Patrice Thomas
p27recious@att.net

Don't let past hurt drive
present relationships.....

#264

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, December 07, 2016 9:43 AM
To: Charles Brown
Subject: RE: redline extension project

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Section 4.5 of the Draft Environmental Impact Statement (EIS) evaluates the potential for noise and vibration impacts to the surrounding community. Because the CTA train cars are lighter and carry less weight (freight) than the freight trains that pass through the project area, vibration levels would not exceed FTA thresholds and no mitigation measures would be required. Elevated track structures (as proposed) also transmit less vibration through the ground than at-grade tracks.

We expect that the project could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Charles Brown [mailto:jhvh1951@yahoo.com]
Sent: Wednesday, November 30, 2016 9:18 AM
To: Red Extension
Subject: redline extension project

There never seems to be enough information given to persons in the community that may be affected by the expansion for example what wll happen if our homes are damaged because of vibrations , what will you do with the areas that once had homes w they become vacant lots filled with gravel ? Once again there never seems to be enough information

#265

From: Red Extension <redextension@transitchicago.com>
Sent: Thursday, December 01, 2016 8:05 AM
To: Michael T. Walsh
Subject: RE: Red Ahead Project Contact List

Michael,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Michael T. Walsh [mailto:mwalsh@dearborncos.com]
Sent: Thursday, December 01, 2016 9:19 AM
To: Red Extension
Subject: Red Ahead Project Contact List

Kindly add me to the "Project Contact List" for Red Ahead…

Thank you!

Best regards,

Mike Walsh

Michael T. Walsh
President

Dearborn Engineers & Constructors, Inc.
a member of the Dearborn Companies

REALITY CAPTURED℠

7471 West 93rd Street
Bridgeview, IL 60455-2131
708.430.7600 x224 (T)
708.430.5094 (F)
708.921.6251 (M)
www.DearbornCos.com

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#266

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, December 05, 2016 11:19 AM
To: Lisa Burback
Subject: RE: Writing in Support of the Extension

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Lisa Burback [mailto:lisa.burback@gmail.com]
Sent: Friday, December 02, 2016 12:35 PM
To: Red Extension
Subject: Writing in Support of the Extension

Big YAY to this!

#267

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, December 05, 2016 11:20 AM
To: Eric Bowden
Subject: RE: Red line expansion - WEST

Eric,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

-----Original Message-----
From: Eric Bowden [mailto:ebowden@accuradio.com]
Sent: Friday, December 02, 2016 2:45 PM
To: Red Extension
Subject: Red line expansion - WEST

I prefer the Western option.

--
Eric Bowden
ebowden@accuradio.com

#268

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, December 07, 2016 10:22 AM
To: tkabala@gmail.com
Subject: RE: East line extension

Thank you for your interest in the Red Line Extension Project. It is not clear from your email if you have a comment on this project or if you would like to be added to our contact list – please clarify.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: tkabala@gmail.com [mailto:tkabala@gmail.com]
Sent: Friday, December 02, 2016 7:22 PM
To: Red Extension
Subject: East line extension

Sent from Mail for Windows 10

This email has been checked for viruses by Avast antivirus software.
www.avast.com

#269

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, December 06, 2016 7:56 AM
To:
Subject: FW: Questions about Red Line

Media will be handling these questions.

From: Dileonardi, Emma [mailto:edileonardi@luc.edu]
Sent: Sunday, December 04, 2016 6:14 PM
To: Red Extension
Subject: Questions about Red Line

Hello, I am a journalism student writing about the red line extension and I have a few questions on the project.
1. Are there any people from the areas that are to be effected openly opposed to the project?
2. Do you think their complaints have any warrant, and will they affect the schedule of the project?
3. Will this extension affect the south side financially, both positively and negatively?

Thanks for the help,
Emma DiLeonardi

#270

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension (RLE) Project

CTA, as project sponsor to the Federal Transit Administration (FTA), is accepting comments on the impacts and mitigation measures identified in the RLE Project Draft Environmental Impact Statement (EIS). CTA is accepting comments on the Draft EIS until November 30, 2016. All comments received during this period and the responses to those comments will be incorporated into the Final EIS. Please **PRINT**.

Name Doris H White

Address 3744 West Cullom Avenue 2ND Floor

City Chicago **State** IL **Zip** 60618

Email Address DHWHITE91@gmail.com

☒ **Check here** to also receive updates about other projects along the Red Line.

What are your concerns about the **East Option?** Will this option affect the Bishop Ford Expressway for those who drive?

What are your concerns about the **West Option?** Why is this option going to cause Residents to have to move that live between 99th St and 118th St on this option?

Comments: What if that homeowner does not want to Relocate, are they going to be made to move or other alternatives to them having to move?
I pray that all of this falls into place for those who use public transportation and that whoever makes decisions in Regards to this project will be wise in the decisions of this project.

Questions or comments can also be submitted via email to RedExtension@transitchicago.com.

Over →

Do you have concerns about RLE Project impacts related to the following resource areas? If yes, please explain.

Transportation: When buses have to be Rerouted due to Construction why are you not sure how long it will take

Land Use and Economic Development: Will this be a good area, where you are considering?

Property Displacements: If a person is not able to be displaced, what are your options for them?

Neighborhoods & Communities: Do you think they would agree, despite the displacing of homes?

Visual Impacts (how it would look): Will it be handicap accessible e.g. elevators and escalators in good working condition.

Noise & Vibration: I am sure it will not be loud as if it was a freight train coming through

Impacts to Historic Resources: Will they have to be moved and why touch historical sites?

Safety & Security: Will there be Police Officers at these new Stops along with canine dogs?

Hazardous Materials: Will this Redline extension project be around factories with hazardous materials?

Wetlands: What do you mean by wetlands?

Parks: Will it be closer to parks where we can get off and take our children to the parks?

Construction Impacts: What effect will it have on those who drive through the area where you want to build?

Project Funding: How will it be funded and by who?

Other: Why have you waited all this time to do this particular line now as other lines have been extended or new lines brought in?

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project. 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

Customer Information: (888) YOUR-CTA (888 968-7282)
Para más información en Español, llame al (312) 681-2710
All written comments must be submitted by 4:30 PM on November 30, 2016.

#271

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, December 07, 2016 10:26 AM
To: viva carbins
Subject: RE: Updates

Viva,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: viva carbins [mailto:divaviva1@yahoo.com]
Sent: Tuesday, December 06, 2016 10:13 AM
To: Red Extension
Subject: Updates

To whom it may concern, I would like to be updated regarding the red line extension project. Thank you in advance.

Viva White
Viva La Diva

#272

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, December 20, 2016 10:46 AM
To: Piotr Parlej
Subject: RE: Red Line extension project

Peter,

Thank you for your interest in the Red Line Extension Project.

CTA published the Draft Environmental Impact Statement in October this year. Future phases of the project, which include the Final Environmental Impact Statement, Engineering, and Construction are dependent on federal reviews and approvals and funding availability. Please continue to visit CTA website at http://www.transitchicago.com/procurement/ to learn about the procurement process and future CTA contract opportunities.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Piotr Parlej [mailto:piotrparlej@hotmail.com]
Sent: Wednesday, December 07, 2016 3:34 PM
To: Red Extension
Subject: Red Line extension project

I am writing with a brief question regarding the Red Line extension project.

I am trying to contact the project manager with CTA and also to find out if CTA is currently working with an engineer for the project, or if not, when CTA plans to advertise for engineering services.

Sincerely,

Peter Parlej

Research Analyst
Parking Market Research Company (R)
1311 Dolley Madison Blvd.
McLean, VA 22101
Phone: (703) 761-1681
Fax: (703) 761-1683

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#273

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, December 20, 2016 10:48 AM
To: Emma Williams
Subject: RE: Red Line Extension feedback

Emma,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Federal Transit Administration (FTA) and CTA will review the comments received during the public comment period and will address all comments in the Final EIS.

Visit www.transitchicago.com/RedEIS to learn more about the project and to follow the progress of the project.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

From: Emma Williams [mailto:emma117494@gmail.com]
Sent: Monday, December 12, 2016 9:04 AM
To: Red Extension
Subject: Red Line Extension feedback

Hello.

I, personally, am very excited about the extension. I live and work on the north side and have friends and family in Beverly. Having this extension means fewer transfers to Metra when I go to visit them. I have wanted an extension such as this for a long time. Thank you so much. This is great!

Emma Williams.

Agency Comments

#274

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
BRUCE RAUNER, GOVERNOR ALEC MESSINA, ACTING DIRECTOR

October 28, 2016

Chicago Transit Authority
Sonali Tandon, Sr. Project Manager
567 West Lake Street
Chicago, IL 60661-1498

RE: CTA Red Line Extension

Dear Sir/Madam:

The Agency has no objections to the proposed CTA Red Line Extension project, however, a construction site activity stormwater NPDES permit is required for the construction of any new rail line and stations. Also, please be advised that any solid or hazardous waste must be properly disposed of or recycled.

Sincerely,

Alec Messina

Alec Messina
Acting Director

4302 N. Main St., Rockford, IL 61103 (815)987-7760
595 S. State, Elgin, IL 60123 (847)608-3131
2125 S. First St., Champaign, IL 61820 (217)278-5800
2009 Mall St., Collinsville, IL 62234 (618)346-5120

9511 Harrison St., Des Plaines, IL 60016 (847)294-4000
412 SW Washington St., Suite D, Peoria, IL 61602 (309)671-3022
2309 W. Main St., Suite 116, Marion, IL 62959 (618)993-7200
100 W. Randolph, Suite 10-300, Chicago, IL 60601

PLEASE PRINT ON RECYCLED PAPER

#275

From: Tandon, Sonali <STandon@transitchicago.com>
Sent: Wednesday, November 09, 2016 10:33 AM
To: Iacullo, Joseph C.
Subject: RE: Address change

Joseph,

Thank you for sending us the new address, we will update our records and send future RLE information at this address.

Sonali Tandon
Senior Project Manager – Planning
Chicago Transit Authority
312-681-4246

Preliminary Draft - For Discussion Purposes Only: This email may contain material that is confidential and privileged for the sole use of the intended recipient. Any review, reliance or distribution by others or forwarding without express permission is strictly prohibited. If you are not the intended recipient, please contact the sender and delete all copies.

From: Iacullo, Joseph C. [mailto:Joseph.Iacullo@Illinois.gov]
Sent: Wednesday, November 09, 2016 12:20 PM
To: Tandon, Sonali
Subject: Address change

Sonali,
Please forward any future Red Line Extension information to our new address below.
Thank you.

Joseph Iacullo
Section Chief-Northeastern Illinois
Office of Intermodal Project Implementation
Illinois Department of Transportation
69 W. Washington, Suite 2100
Chicago, Illinois 60602
P:312-793-0035
C:312-519-4928
joseph.iacullo@illinois.gov
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#276

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

NOV 29 2016

REPLY TO THE ATTENTION OF: E-19J

Mark Assam
Federal Transit Administration
200 W. Adams Street, Suite 320
Chicago, Illinois 60606

Carole Morey
Chicago Transit Authority
567 W. Lake Street
Chicago, Illinois 60661

Re: Chicago Red Line Extension Project, Draft Environmental Impact Statement, City of Chicago, Cook County, Illinois, CEQ #20160231

Dear Mr. Assam and Ms. Morey:

The U.S. Environmental Protection Agency is providing comments in response to the Draft Environmental Impact Statement (DEIS) for the above mentioned project. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. The Federal Transit Administration (FTA) is the lead agency for this project under NEPA, and the Chicago Transit Authority (CTA) is the project proponent.

The proposed project would extend the existing Red Line heavy rail transit service 5.3 miles south from the existing 95th Street Terminal to Chicago's Far South Side. The proposal includes four stations and a rail yard and shop. The project team assessed action alternatives over multiple years. With input from local residents, the team selected two action alternatives for full analysis in the DEIS. Both alternatives largely follow existing transportation corridors to minimize community disruptions. The East Alignment runs to the east of Union Pacific Railroad (UPRR) freight tracks from near Eggleston Avenue to near Prairie Avenue, and the West Alignment runs west of the UPRR tracks over the same distance. South of this point, both alignments follow the same route southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad right-of-way.

EPA recognizes the critical community, environmental, and health benefits that well-planned transit service could provide to communities along the corridor. The project area is home to minority and low-income communities, has experienced decades of disinvestment, and is underserved by public transportation connections to Chicago's major activity centers. The project would reduce commute times for residents, improve mobility and accessibility, and provide connections to other transportation modes. The project could also foster important economic development and neighborhood revitalization near the new stations.

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We have rated the DEIS as *Lack of Objections* (LO) (see enclosed "Summary of Rating Definitions"). While we do not have objections to the project, we offer recommendations in the enclosed detailed comments to help ensure protection of the environment and human health during project construction and operation.

We appreciate the opportunity to provide comments. If you have any questions or would like to discuss our recommendations, please contact Jen Blonn, the lead reviewer for this project, at 312-886-6394 or blonn.jennifer@epa.gov.

Sincerely,

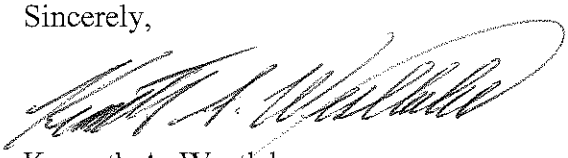

Kenneth A. Westlake
Chief, NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosure: Summary of Rating Definitions
EPA's Detailed Comments

Cc via email: Paul Leffler, U.S. Army Corps of Engineers, Chicago District

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment

Environmental Justice and Community Engagement

In order to promote environmental justice, Executive Order 12898 requires federal agencies to identify and address disproportionately high and adverse impacts of all programs, policies, and activities on low income and/or minority populations. The project area consists entirely of minority communities, and contains some low-income areas. The Chicago Transit Authority (CTA) analyzed environmental justice implications of the proposed project, and concluded that: (1) the project would offer substantial benefits to the resident minority and low-income populations, and (2) with proposed mitigation, impacts would not be disproportionately high or adverse. Further, the Draft Environmental Impact Statement (DEIS) explains that CTA has undertaken a robust outreach program to share information and gain input from minority and low-income communities in the project area.

The proposed project was initiated by communities with the goals of connecting historically disadvantaged areas to Chicago's major employment and activity centers, increasing access to employment, and spurring economic development (Appendix X, page 1-1). Nearly all communities that CTA identified as both low-income and minority, such as the Altgeld Gardens Public Housing Project, are currently geographically or physically isolated from timely, reliable transit access to Chicago's downtown and other hubs for jobs and services.

EPA recognizes that the project would disrupt communities by displacing 205 to 260 parcels, depending on the alternative selected. We also understand that residents would be offered fair compensation and relocation assistance per the Uniform Relocation Assistance and Real Property Acquisition Policies Act. The DEIS also states that vacant parcels, homes, and commercial spaces are available to allow relocation within the same neighborhoods.

The Illinois Childhood Asthma Surveillance Report, 2011-2014 was released by the Illinois Department of Public Health in November 2016. The report found that rates of childhood asthma inpatient hospitalizations and emergency room visits were highest among young Black children, and there were significantly higher rates of hospitalizations in disadvantaged geographic areas, including lower-income neighborhoods.[1] This is particularly relevant to the project because nearly all residential portions of the project area contain over 75 percent African American residents, with many areas approaching 100%. Several areas are also low-income.

Recommendations for the Final Environmental Impact Statement (FEIS):

- Continue to actively engage community groups, residents, businesses, and other stakeholders in the project area, and document coordination in the FEIS. Include a description of how local input is being used to inform project design and implementation.
- Commit to provide a single point of contact for residents to gain information and assistance related to displacements and relocations in order to minimize hardships and

[1] Illinois Childhood Asthma Surveillance Report, 2011-2014. Illinois Department of Public Health. Available at: http://www.dph.illinois.gov/sites/default/files/publications/publicationsowh2016-il-childhood-asthma-surveillance-report_0.pdf

transaction costs, and commit to provide special assistance to enable displaced households and businesses to remain in the same neighborhood, if desired.

- Consider promoting local hiring for project construction and operations.
- Consider existing childhood asthma conditions in the project area. If conditions warrant, strengthen construction air pollution mitigation measures to ensure protection of children's health, in line with Executive Order 13045 on Protection of Children from Environmental Health Risks and Safety Risks.
- In order to best protect communities throughout the construction and operational phases of the proposed project, we recommend compiling all mitigation commitments into a single list, sorted by topic. Residents would then have a single source to easily identify protective measures that should be taken. Include a phone number and email address for residents to contact if they believe appropriate measures are not being taken. This is particularly important for construction air emission mitigation measures, such as idling time for heavy duty trucks. As an example of the type of list we are recommending, see the Michigan Department of Transportation's project mitigation summary "Greet Sheets," which are available online for many projects.
- To help offset any residual impacts to local communities from project construction, including land acquisition and construction air emissions, consider promoting local hiring for project construction and operations.

Noise Impacts and Mitigation

The DEIS explains that without mitigation the East Alternative would result in 574 moderate and 83 severe noise impacts (page 4-60). Without mitigation, the West Alternative would result in 738 moderate and 40 severe noise impacts (page 4-65). For either option, the DEIS explains that CTA would construct a noise barrier approximately 4 feet in height that would provide a 10-dBA reduction in noise on both sides of the track from the 95th Street Terminal to near 119th Street, and no moderate or severe noise impacts would remain after mitigation (page 4-65).

The discussion on noise impacts in Appendix O differs from the body of the DEIS. Appendix O states, "A noise barrier approximately 4 feet in height would provide a 7 to 10-dBA reduction in noise level in the surrounding community. A noise barrier approximately 4 feet in height on an aerial structure that would provide a 10-dBA reduction could result in no impacts remaining after mitigation" (page 5-13). It's unclear whether the proposed mitigation would provide a 7 or 10-dBA reduction in noise, and whether impacts would remain if a 7-dBA reduction is achieved.

Appendix O also states that, with a noise reduction of 10-dBA, moderate noise impacts "would decrease from 280 feet without mitigation to 60 feet from the centerline of the tracks with mitigation" (page 6-61). It's unclear whether any structures would be close enough to the track to experience noise impacts after mitigation. For example, the home pictured on page 5-20 of Appendix L appears close to the tracks and potentially within 60 feet.

Recommendations for the FEIS:

- Clarify whether the proposed noise wall might result in a 7-dBA reduction in noise, as opposed to a 10-dBA reduction.
- Discuss whether any sensitive receptors would be located close enough to tracks to experience moderate impacts after mitigation.

- Quantify expected noise levels after mitigation, and include results in a table.
- If any moderate or severe noise impacts would remain after mitigation, clearly depict impacts on a map of the project area.
- Consider testing for noise after the project is operating to determine whether anticipated noise reductions were achieved, and providing a number and email for residents to contact if they have concerns.
- If any moderate or severe impacts could remain, consider offering additional mitigation, such as window treatments and insulation.

Air Quality Impacts and Mitigation

Air quality impacts and mitigation measures are discussed in DEIS Section 6.1 and Appendix U. CTA trains would run on electricity, meaning there would be no emissions in the project area from operations, which would benefit the local environment and residents' health. Construction activities would take up to five years (page 4-7) and would result in local emissions. As discussed in the DEIS, short-term exposure to diesel exhaust can adversely impact health. We appreciate the list of mitigation measures (page 6-3) that would be implemented to minimize air emissions during construction activities.

Recommendations for the FEIS and Record of Decision:

- Firmly commit to all proposed construction air quality mitigation measures in the FEIS and Record of Decision. Add specificity wherever possible, such as strict maximum time limits for heavy truck idling.
- Per Executive Order 13045 on children's health, pay particular attention to worksite proximity to places where children live, learn, and play, such as homes, schools, daycare centers, and playgrounds. Construction emission reduction measures should be strictly implemented near these locations in order to be protective of children's health.
- Assess whether any trees or shrubs that would be removed during project construction currently serve as a protective barrier against air pollution by minimizing exposure of freight emissions to nearby residents. If the removal of such trees/shrubs would increase residents' exposure to freight emissions, then commit to replant appropriate species.[2]

Station and Station Area Development

The proposed project includes four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Plans call for the northernmost two stations to have surface parking lots only, the Michigan Avenue station to have a parking structure with ground-floor retail and community facilities, and the 130th street station to have a seven-story parking structure. New rail stations offer a valuable opportunity to create new inter-modal community hubs, generate economic development, and improve walkability and bike-ability of the surrounding area.

EPA is focused on promoting health, and crime is one factor that impacts health. The DEIS discusses concerns about safety and criminal activity raised by residents during the scoping period. While Appendix P includes crime heat maps of the project area, crime in the project area is not compared to crime in other parts of the city. It is, therefore, unclear whether safety

[2] For best practices, see: Baldauf, R. Recommendations for Constructing Roadside Vegetation Barriers to Improve Near-Road Air Quality. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-16/072, 2016.

measures are needed beyond what CTA employs for typical stations. In addition, studies from other cities on the incidence of crime on and around new transit are discussed, but it is unclear how applicable those studies are to this project area.

Recommendations for the FEIS:

- Engage residents in station and station-area planning visioning activities and use information to inform station designs. Form or use existing partnerships with community groups and local and regional planning organizations to fully take advantage of station-area planning opportunities. Consider incorporating plans for multi-modal connectivity, complete streets, and creating stations as unique neighborhood destinations. Document coordination and plans in the FEIS.
- Consider opportunities for green building in station designs, such as: planning for net-zero energy use, obtaining Leadership in Energy and Environmental Design (LEED) or similar certifications, incorporating green infrastructure for stormwater management, and incorporating on-site renewable energy sources.
- Discuss whether crime rates in any of the proposed station areas warrant a higher-level of attention in upfront planning to make stations and station-areas safe for users. If warranted by existing crime rates and concerns raised by residents during scoping, then consider additional measures to maximize safety for riders. Discuss crime prevention through environmental design (CPTED) and recommendations raised by local residents. While the DEIS considers several protective measures, we recommend providing clear commitments in order to more fully disclose potential impacts and outcomes.
- We encourage CTA, the City of Chicago, and neighborhood organizations to consider EPA resources that support sustainable community development around station areas. Grant and technical opportunities are periodically available at: https://www.epa.gov/smartgrowth. For more information, contact Jen Blonn at blonn.jennifer@epa.gov

Climate Change Adaptation and Resiliency

The DEIS and Appendix U discuss the proposed project's contribution to global climate change. The project would bring a new electric train to the Far South Side of Chicago, which would provide a lower-emissions alternative to automobile travel. The analysis quantifies greenhouse gas (GHG) emissions and concludes that emissions would be lower if the project is implemented as compared to the no action alternative.

In addition to considering the potential effects of the proposed action on climate change by evaluating the GHG emissions associated with the project, which is included in the DEIS, we recommend that FTA consider the effects of climate change on the proposed action. The DEIS does not include consideration of future climate scenarios, and how they may impact the proposal and its impacts. Including future climate scenarios, such as those provided by the U.S. Global Climate Change Research Program's National Climate Assessment (NCA),[3] provides information valuable to determining how changing climate could affect the environmental impacts of a project, and how the project could be made more resilient to the impacts of climate change. The NCA's section on the Midwest provides a useful starting place for analyzing

[3] U.S. Global Change Research Program, 2014 National Climate Assessment, available at: http://nca2014.globalchange.gov/report

changing climate conditions. The report finds that, in the Midwest, extreme heat, heavy downpours, and flooding will affect infrastructure, health, air and water quality, and more.

Recommendations for the FEIS:

- Consider the effects of climate change on the proposed action.
- Determine whether the environmental impacts of the alternatives would be exacerbated by climate change. This determination should be informed by assessing future climate scenarios in the FEIS. If impacts may be exacerbated, additional mitigation measures may be warranted.
- We also recommend that the project team consider whether measures are needed to improve resiliency to climate change in the project's design, where appropriate. These changes could be informed by an assessment of future climate scenarios in the "Affected Environment" section. The FEIS's alternatives analysis should, if appropriate, consider practicable changes to the proposal to make it more resilient to anticipated climate change.

Wetlands and Natural Areas

CTA identified 15 wetland areas totaling 15.34 acres of potentially affected wetlands in the project area. We understand that the Federal Transit Administration (FTA) and CTA requested a jurisdictional determination from the U.S. Army Corps of Engineers (Corps) to determine whether the wetlands are jurisdictional under the Clean Water Act (CWA), and that coordination with the Corps is ongoing (page 4-93). If jurisdictional wetlands cannot be avoided, the DEIS explains that CTA would provide compensatory mitigation; potential nearby areas for mitigation are discussed.

Recommendations for the FEIS:

- Document subsequent coordination with the Corps on the need for a CWA Section 404 permit.
- If waters in the project area are jurisdictional, then demonstrate that all potential impacts have been avoided and minimized to the extent practicable, in line with the Clean Water Act Section 404(b)(1) Guidelines.
- If resources cannot be avoided and/or minimized, clearly demonstrate how cost, logistical, or technological constraints preclude avoidance and/or minimization of impacts.
- Discuss any proposed mitigation, including mitigation sequencing per the CWA Section 404(b)(1) Guidelines, and describe of how mitigation will comply with the 2008 Mitigation Rule.
- Consider local mitigation for tree removal for the approximately 13 acres of forested habitat in the vicinity of the 120th Street yard and shop as well as the 61 acres of habitat associated with the East Option and the 67 acres associated with the West Option, as described on pages 6-6 and 6-7 of the DEIS.

#277

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

November 30, 2016

9043.1
ER 16/0589

Marisol Simon
Regional Administrator
Federal Transit Administration
200 West Adams Street, Suite 320
Chicago, Illinois 60606

Dear Ms. Simon:

The Department of the Interior (Department) has reviewed the Draft Individual Section 4(f) Evaluation for the Chicago Transit Authority Red Line Extension, Chicago, Illinois. The Department offers the following comments and recommendations for your consideration.

Section 4(f) Comments

This document considers effects to identified properties in the project study area eligible to be considered under Section 4(f) of the Department of Transportation Act of 1966 (codified at 49 U.S.C. 303§ 771.135) associated with the Chicago Transit Authority Red Line Extension (RLE). The project purpose is to extend the existing Red Line heavy rail transit service 5.3 miles south from the existing 95th Street Terminal to 130th Street on Chicago's Far South Side. Two options for the extension are proposed, the East and West Options.

The draft section 4(f) evaluation, prepared by the Chicago Transit Authority (CTA) and Federal Transit Administration (FTA) in cooperation with the Federal Highway Administration (FHWA), considered the impacts to three Chicago Park District properties: Wendell Smith Park, Block Park, and Fernwood Parkway.

Under the East Option, a new elevated Red Line structure would be constructed, affecting the northwest corner of Wendell Smith Park and affecting a portion of the western parcel of Block Park. Approximately 0.7 acre of Wendell Smith Park and 0.9 acre of Block Park would be affected by the East Option. Both Wendell Smith Park and Block Park would continue to provide park space to the surrounding community after implementation of the East Option, but park area would be reduced. Under the West Option, a new elevated Red Line structure would be constructed over a portion of Fernwood Parkway from 99th Street to 103rd Street between the

existing UPRR tracks and Eggleston Avenue. Approximately 1.9 acres of Fernwood Parkway would be affected by the West Option.

CTA developed preliminary mitigation measures, taking into account impacts on park acreage and the attributes, features, and amenities of each park. These mitigation measures were developed so that the result of implementation of either option would result in no adverse impact on parks after mitigation. A major feature of these mitigation measures includes developing replacement parkland in or near the community areas affected as well as replacement of the park attributes, features, or amenities affected by the construction of the RLE Project.

Based on discussions with FTA and coordination with the Chicago Park District (CPD) in 2015 on park impacts and proposed mitigation measures for this project, a Section 4(f) preliminary "*de minimis*" finding was proposed for park impacts resulting from this project after mitigation proposed. A *de minimis* impact for parks, recreation areas, or wildlife/waterfowl areas is defined in 23 CFR § 774.17 as one that is determined to not adversely affect the features, attributes, or activities qualifying a property for protection under Section 4(f).

The Department of the Interior does not comment on *de minimis* determinations. The Department concurs with the determination that all measures to minimize harm have been employed concerning the resources subject to 4(f) use.

The Department has a continuing interest in working with FTA and FHWA to ensure impacts to resources of concern to the Department are adequately addressed. For issues concerning section 4(f) resources, please contact the Acting Regional Environmental Coordinator, Midwest Regional Office, National Park Service, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1534.

We appreciate the opportunity to provide these comments.

Sincerely,

Lindy Nelson
Regional Environmental Officer

cc: NPS-Boswell

#278

FILE COPY

Illinois Department of Transportation

Office of Highways Project Implementation / Region 1 / District 1
201 West Center Court / Schaumburg, Illinois 60196-1096

November 30, 2016

Ms. Sonali Tandon
Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Dear Ms. Tandon:

The Illinois Department of Transportation (Department) thanks the Chicago Transit Authority (CTA) for the opportunity to review the Draft Environmental Impact Statement (DEIS) for its proposed Red Line Extension (RLE) from 95th Street to 130th Street. The Department offers the following comments that should be considered as this project moves into the Final EIS phase.

Traffic Projections
The CTA previously used year 2030 traffic projections for the DEIS in order to screen a range of alternatives. Since the CTA has chosen a preferred alternative, the Department requests that all transportation impacts and mitigation be evaluated using year 2040 traffic projections for the project's Final EIS.

Interstate 57 and Interstate 94
Previously, the Department requested that all proposed piers, abutments and barrier walls necessary to carry the RLE over Interstate 57 and Interstate 94 be placed in such a way that these roadways could be widened in the future should the need arise. Appendix F shows a potential hammerhead pier within the "Envelope For Future IDOT Widening" along Interstate 57 west of Wentworth Avenue. In addition, it appears as though a column is proposed on top of the existing Interstate 94 Tunnel Structure. A column on top this existing structure would not be allowed. Please revise the proposed pier locations for the CTA's RLE.

130th Street at Indiana Avenue
A northbound right-turn lane is proposed at this intersection as mitigation for the project's traffic impacts. When this project enters into the preliminary engineering phase, an Intersection Design Study (IDS) as well as traffic signal and roadway improvement plans will need to be submitted to the Department for review and approval.

127th Street at Vermont Avenue and Wallace Street
A northeast bound right-turn lane and a westbound left-turn lane are proposed as mitigation for the project's traffic impacts at this intersection. The northeast bound to northbound movement at this intersection would also be restricted. The restriction of this movement is impractical considering the geometry of the intersection. Please consider other strategies in order to mitigate for the project's impact to this intersection. Additionally, while the pavement width on 127th Street appears to be able to accommodate the westbound left-turn channelization and the receiving throat of the dual right-turn lane, the roadway is currently striped as one lane in each direction. To further complicate the proposed design, unsignalized pedestrian crosswalks are located on both sides of the intersection. As such, careful consideration will be needed in order to properly tie into existing conditions. When this project enters into the preliminary engineering phase, an IDS as well as traffic signal and roadway improvement plans will need to be submitted to the Department for review and approval.

130th Street Station
There will be approximately 2,500 to 3,000 new vehicular trips generated at the RLE's southern terminus at the 130th Street Station. The DEIS analyzed the signalized intersection of 130th Street and Ellis Avenue with the generated vehicular trips as through movements. However, the generated vehicular trips will need to turn either right or left at the intersection in order to access the Station along the north side of 130th Street. As such, please revise the Build Traffic Volumes at this intersection to reflect the vehicular trip generated traffic volumes as turning movements at the intersection and propose strategies to mitigate for the RLE's incremental impacts. When this project enters into the preliminary engineering phase, an IDS as well as traffic signal, and roadway improvement plans for the 130th Street at Ellis Avenue intersection will need to be submitted to the Department for review and approval.

Also, the DEIS did not analyze the impacts of the 130th Street Station on the Interstate 94 interchange. Please analyze the project's impacts and propose mitigation as necessary. Any improvement plans proposed at the interchange of I-94 at 130th Street will need to be submitted to the Department for review and approval.

If you have any questions or need additional information, please contact me or John Baczek, Project and Environmental Studies Section Chief, at (847) 705-4104.

Very truly yours,

John Fortmann, P.E.
Region One Engineer

cc: Luann Hamilton – CDOT
John Yonan – CCDOTH
Jesse Elam – CMAP

bcc: John Fortmann
José Rios
Steve Travia
Lisa Heaven-Baum
Peter Harmet
File

Prepared By: Jason Salley Ext. 4085
Bureau of Programming

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Protecting Our Water Environment

#279

Metropolitan Water Reclamation District of Greater Chicago

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December 20, 2016

Metropolitan Water Reclamation District of Greater Chicago's Public Comments on Chicago Red Line Extension Project Draft Environmental Impact Statement

INTRODUCTION

Pursuant to 40 CFR §1503.3, the Metropolitan Water Reclamation District of Greater Chicago (MWRD) hereby submits its written public comments pertaining to the Chicago Red Line Extension Project Draft Environmental Impact Statement (Draft EIS).

SUMMARY

The MWRD commends the U.S. Department of Transportation, Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) for pursuing the CTA Red Line Extension (RLE) and for providing this opportunity to publicly comment during the Draft EIS stage. As will be more fully set forth below, the MWRD recognizes the critical need for rail transit options south of 95th Street in the City of Chicago and believes the RLE can serve as a catalyst for positive change in the areas that will be served. Specific to the MWRD's interests, the MWRD believes that synergies can be created between the CTA, MWRD and other stakeholders in the area around the proposed 130th Street Terminal that will complement what the MWRD has been doing at its Calumet Water Reclamation Plant (WRP).

There are challenges and opportunities that the MWRD encourages the FTA and CTA to examine as the RLE continues to be developed. Specifically, in these public comments, the MWRD will provide comments on odor issues that exist in the 130th Street Industrial Corridor, some coming from the MWRD Calumet WRP and others coming from nearby industry. Additionally, the MWRD will comment on how the RLE Draft EIS has identified 15 MWRD parcels that would be needed under either of the proposed alternatives and the challenges and opportunities that acquisition of these parcels entails.

BACKGROUND

The MWRD is a special district unit of local government created by the Illinois General Assembly and organized under Illinois Compiled Statute 70 ILCS 2605/1 *et seq.*, and is funded primarily through local property taxes. Among the MWRD's responsibilities are the operation of a waste water conveyance and treatment system that includes seven Water Reclamation Plants (WRPs) that serve an area of approximately 883.6 square miles, including the City of Chicago and 128 surrounding municipalities. The MWRD serves an equivalent population of 10.35 million people; 5.25 million real people, a commercial and industrial equivalent of 4.5 million people, and a combined sewer overflow equivalent of 0.6 million people.

The MWRD's mission is to protect the health and safety of the public in its service area, protect the quality of the water supply source (Lake Michigan), improve the quality of water in watercourses in its service area, protect businesses and homes from flood damages, and manage water as a vital resource for its service area. The MWRD collects wastewater from municipalities, conveys it to WRPs, provides treatment and discharges clean water to local waterways. The MWRD is also responsible for stormwater management for all of Cook County.

The Calumet WRP was placed into operation in 1922 and serves over 1 million people, in 49 different municipalities (including Chicago), within 300 square miles in southern Cook County, Illinois. The Calumet WRP receives its sewage flow from four intercepting sewers and has a Design Annual Average flow of 326 Million Gallons a Day (MGD) and a Design Maximum Day Flow of 480 MGD. The Calumet WRP also receives flow from the Calumet Tunnel System and the Thornton Reservoir, both major parts of the Tunnel and Reservoir Plan (TARP), which helps to reduce flooding and control pollution by eliminating combined sewer overflows. Water that has been cleaned by the Calumet WRP treatment processes is released into the Little Calumet River. Additionally, approximately 100 dry tons of solids are removed from wastewater every day at the Calumet WRP and are transported to anaerobic digesters for biogas production and solids reduction and then to the nearby Calumet Solids Management Area for additional treatment and drying. The resulting biosolids are a sustainable alternative as a soil amendment to chemical fertilizers and are used at golf courses, athletic fields, parks and recreational facilities, agricultural fields, forests, and for the restoration of strip mines and other disturbed lands. The MWRD also anticipates that the Calumet WRP will soon be home to an organics receiving station and a biogas cleaning utilization facility. In short, the Calumet WRP serves a vital public health and safety function to Chicago residents and those in southern Cook County.

CTA RLE DRAFT EIS IMPACT ON MWRD

Both alternatives proposed in the CTA RLE Draft EIS propose acquiring 15 parcels of MWRD from its Calumet WRP, located at 130th Street in Chicago, Illinois. The proposed 7 story parking garage would go directly on MWRD land, with the 130th Street Red Line station platform being adjacent thereto.

Adjacent to the area from 130th Street on the south and going north on current MWRD land, the MWRD operates sludge holding open air lagoons and biosolids open air drying beds. The RLE

would go on a diagonal through MWRD property and in between the sludge holding open air lagoons and the biosolids open air drying beds. While the Draft EIS appears to account for grade separated access that the MWRD will need to access its biosolids open air drying beds, the MWRD encourages the CTA to continue to engage with MWRD technical staff to determine the best location for such grade separated access. In close proximity to the RLE, the MWRD also operates, or has future plans to operate, primary settling tanks, high level influent pumping station, screen building, gravity thickening building, grit building, fermenters, and high-strength waste receiving stations. Each of these processes causes odor and consequently, may require the treatment of odorous air.

The MWRD has committed approximately $35 million to odor mitigation technologies in & around the Calumet WRP. This capital investment was done prior to analyzing the impact of the CTA RLE having a parking garage and train platform adjacent to sewage treatment processes that have a strong potential for emitting unpleasant odors. Depending on the public reaction to odor in & around the 130th Street Terminal, the costs for additional odor mitigation technologies could increase substantially. It is important to note that with a WRP the size of the Calumet WRP, it is economically and environmentally unsustainable to treat 100% of the odors produced.

In addition to being compensated for its 15 parcels that the CTA would need to acquire, the MWRD encourages the CTA to further investigate the costs of additional odor mitigation technologies that may be needed to address any concerns of its ridership.

The Draft EIS includes the construction of a substation and a 7-story parking garage directly over, or in very close proximity to, the Calumet 17A and 17D interceptor sewers. These interceptors are the main sewer service line for the south/southeast suburbs. The TARP relief shafts for these two interceptors are located approximately 3.7 miles (CDS 21) and 1.4 miles (CDS 18), respectively, away from the Calumet WRP. As such, to protect the MWRD's structures, and to provide uninterrupted service, the MWRD recommends not placing any permanent structures directly over, or in close proximity to, this MWRD infrastructure.

Assuming that the MWRD is able to reach an agreement with the CTA for acquisition of the 15 MWRD owned parcels that have been identified, any such transfer of ownership will need to include perpetual easements for the interceptor sewers and relief shafts referenced above. Additionally, there are fiber optic and communication lines that extend from the main plant to the solids facilities as well as the sludge line from the digesters to the dewatering facility. The main electrical power to the solids handling facilities comes from a separate Com Ed feeder from Cottage Grove. Any construction needs to locate and protect our existing utilities.

As part of the MWRD's efforts to develop resource recovery, the MWRD anticipates that up to 40 trucks per day of High Strength Waste and FOG (fats, oil and grease) will be entering the Calumet WRP main entrance off of 130th Street. Additionally, 60 to 70 trucks per day of wood chips and yard waste for use in biosolids composting operations are anticipated to be entering our solids

handling area to the east of the plant and a similar number of trucks leaving the area with composted biosolids, in addition to our current traffic in and out of the plant.

On January 6, 2014, the MWRD entered into a certain Consent Decree titled United States, *et al.* v. Metropolitan Water Reclamation District of Greater Chicago, Case No. 1:11-cv-08859 (N.D. Ill. 2014)(Consent Decree). Under the Consent Decree, the MWRD is under an enforceable court order to complete certain projects and conduct MWRD operations in such a manner as to comply with the terms of the Consent Decree. As the CTA RLE Draft EIS and related processes develop, the MWRD will need to insure that anything that it commits to is consistent with its obligations under the Consent Decree.

POTENTIAL SYNERGIES

The MWRD recognizes that the proposed 130th Street Terminal for the CTA RLE is in a heavy industrial corridor close to expressway access. This has the potential to draw a lot of riders from Indiana and the south suburbs who will either park and ride the RLE or take a bus to get to the 130th Street Terminal.

The MWRD is in the process of exploring opportunities wherein it will convert high-strength organic waste into compressed natural gas (CNG). This CNG can then be used as a clean burning fuel to CNG powered vehicles in the region.

PACE Suburban Bus has recently announced that it has taken delivery of its first 20 CNG buses, with an additional 71 on order that will replace the remaining diesel buses at Pace South Division, which is responsible for covering the south suburbs and the south side of Chicago. As part of the 130th Street Terminal of the CTA RLE, the MWRD encourages the CTA to analyze the potential of creating a bus turn-around and re-fueling station adjacent to the 130th Street Terminal. Given the proximity of a potential CNG facility, this would be a win-win partnership for at least three different units of local government in addition to any commercial interests in this industrial corridor that also may be interested.

POTENTIAL ALTERNATIVES

While the MWRD takes the position that the CTA RLE is possible in its current format, the MWRD also offers a proposed alternative for consideration. The CTA may wish to analyze extending the CTA RLE with the 7 story parking garage, passenger terminal and platform south of 130th Street. Currently this land appears to be either abandoned &/or part of the Cook County Forest Preserve District. Given the location of the Altgeld Gardens residential neighborhood and the Carver Military Academy High School, locating the 130th Street Terminal south of 130th Street may allow for easier pedestrian access and would appear to be safer for those residents/students rather than having to cross over 130th Street. Locating these structures south of 130th Street could also reduce the potential capital and operations and maintenance costs of odor mitigation, due to prevailing winds and increasing the distance between odorous processes and the CTA RLE passengers along with minimizing the conflict with congestion from truck traffic in and out of the Calumet WRP.

CONCLUSION

The MWRD remains committed to cooperating with the FTA and CTA as the CTA RLE Draft EIS process continues. Representatives from the CTA and MWRD recently met on December 5, 2016, at which time the MWRD Executive Director and technical staff set forth the concerns and proposed solutions in detail.

Sincerely,

David St. Pierre

Tribal Comments

#280

From: Tandon, Sonali <STandon@transitchicago.com>
Sent: Monday, October 31, 2016 11:34 AM
To: Diane Hunter
Subject: RE: CTA Red Line Extension Project

Dear Ms. Hunter,

Thanks for your email. We will update our records with your information and keep you informed on the project and any findings of human remains or cultural objects as a result of archaeological investigations.

Regards,

Sonali Tandon
Senior Project Manager – Planning
Chicago Transit Authority
312-681-4246

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From: Diane Hunter [mailto:dhunter@miamination.com]
Sent: Saturday, October 29, 2016 9:10 AM
To: Red Extension
Subject: CTA Red Line Extension Project

Dear Ms. Tandon:

Aya, kikwehsitoole. My name is Diane Hunter, and I am the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

Thank you for the invitation to the public hearing on November 1, 2016 regarding the above-mentioned project. I am not able to attend this meeting, but the Miami Tribe would like to continue to serve as an interested party as the project goes forward. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

In any case, if human remains and/or cultural objects are discovered, regardless of initial determination as to site dating or cultural affiliation, please contact me at 918-541-8966, by email at dhunter@miamination.com, or by mail at the address listed below to initiate consultation.

Sincerely,

Diane Hunter
Tribal Historic Preservation Officer
Miami Tribe of Oklahoma
P.O. Box 1326

Miami, OK 74355

Railroad Comments

#281

From: Tandon, Sonali <STandon@transitchicago.com>
Sent: Thursday, September 22, 2016 11:44 AM
To:
Cc:
Subject: FW: Chicago Transit Authority Red Line Extension - UPRR Coordination

From: Mark A. Bristol [mailto:MABRISTO@up.com]
Sent: Thursday, September 22, 2016 1:39 PM
To: Tandon, Sonali
Cc: Adrian Guerrero; Chris A. Napierala; Jeffrey.Sriver@cityofchicago.org; Mooney, Leah Dawson; 'Hamilton, Luann'
Subject: Chicago Transit Authority Red Line Extension - UPRR Coordination

Sonali,

Please see below UP's comments from our engineering department.

Questions should be directed to Chris Napierala copied here in this note.

Thank you for giving us the opportunity to comment.

Mark

----- Forwarded by Mark A. Bristol/UPC on 09/22/2016 01:34 PM -----

From: Chris A. Napierala/UPC
To: Mark A. Bristol/UPC@UP
Cc: Michael J. Zucker/UPC@UP, Gary W. Bates/UPC@UP, Eric S. Keiner/UPC@UP
Date: 09/22/2016 08:26 AM
Subject: Fw: Chicago Transit Authority Red Line Extension - UPRR Coordination

---

Mark,

UPRR Project Design has reviewed the east and west alternatives provided with the draft EIS submittal for the proposed CTA Red Line extension project. Please see the following comments:

General Comments:

- Because of the increase in pedestrian traffic around UPRR tracks options to keep pedestrians off UPRR tracks will need to be evaluated.

- Barrier walls must be provided when CTA structures are within 50' of the centerline UPRRs tracks. Barrier walls must be located outside UPRR ROW.

- Plans should be submitted to UPRR for review, comment and final approval at typical project progressions (Ex. 10%, 25%, 90%, 100%)

- If UPRR track design is required plans must be prepared using the UPRR checklist and Public Project Guidelines located here: http://www.up.com/customers/ind-dev/operations/specs/public_projects/index.htm

- If utilities will be relocated on UPRR ROW, provide existing/proposed utility locations and proposed utility relocation routes. Relocated utilities must not conflict with future UPRR track construction.

- Clearances from centerline of track to nearby existing/proposed structures must be included on the plan sheets.

- If grading is proposed on UPRR ROW, provide proposed grading/drainage plan.

East Option:

- Proposed plans show parking lots on both sides of the tracks for each station with this option. UPRR is concerned with the lack of plans in the current concept for controlling trespassers onto UPRR property and overall pedestrian safety.

- Parking for this concept is split on both sides of the tracks and therefore pedestrians will need to cross UPRR to get to the proposed stations. UPRR does not condone this as it is as a major safety risk for the public & UPRR.

- Minimum clearance of 50 ft. from centerline of the future UPRR track to the nearest proposed CTA track must be maintained throughout the project.

- Plans appear to show horizontal alignment modifications to existing UPRR tracks. Details are unknown, however the changes do not appear to meet UPRR track standards. Regardless, the conceptual track alignment changes are not favored by UPRR.

- Proposed Sub Station impacts ROW access. This structure should be placed outside of our ROW no less than 25' from centerline of tracks.

- UPRR ROW access is restricted, particularly in the area of the existing pumping station. 25' of clearance is required from centerline of future track location.

- Consider raising the Red Line structure near the pump station to avoid UPRR track shifts and reduced clearances.

West Option:

UPRR Project Design recommends the west option be the preferred alternative for future project development. Please note the following comments on the current concept:

- Crossover on the North end of the project is encumbered by the overhead structure. Crossover may need to be relocated.

- Clearance to proposed piers must meet requirements outlined in the" Joint BNSF Railway and UPRR Guidelines" document Available here. If this is not possible detailed justification will be required for UPRRs review.

- Consider crossing UPRR tracks further to the South to increase the angle of the overhead crossing.

Also for your consideration please note that the future mainline track shown on the 2 options would require additional ROW. Please let me know if you have any questions regarding our comments.

Thank you,

Chris Napierala
Sr. Manager Special Projects
Union Pacific Railroad
1400 Douglas Street
Omaha, NE 68179

402.544.2407
Mail Stop 0910

BUILDING AMERICA®

From: "Tandon, Sonali" <STandon@transitchicago.com>
To: "MABRISTO@up.com" <MABRISTO@up.com>, "'Adrian Guerrero (aguerre@up.com)'" <aguerre@up.com>
Cc: "Jeffrey.Sriver@cityofchicago.org" <Jeffrey.Sriver@cityofchicago.org>, "Mooney, Leah Dawson" <LMooney@transitchicago.com>, "'Hamilton, Luann'" <Luann.Hamilton@cityofchicago.org>
Date: 08/30/2016 04:05 PM
Subject: Chicago Transit Authority Red Line Extension - UPRR Coordination

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This email originated from outside of the company. Please use discretion if opening attachments or clicking on links.

Hi Mark,

CTA met with you and others at UP along with CDOT on June 27, 2012 in Omaha to coordinate on CTA's Red Line Extension project. We incorporated the feedback received at that meeting in the project plans and are planning to publish the Draft Environmental Impact Statement (EIS) in Fall this year. It was discussed at the meeting that CTA would coordinate with UP before publishing the Draft EIS. We are including a project summary to provide you project description, an update on how the previous feedback received from UP has been incorporated in designs, and any potential impacts and mitigations related to UP that will be identified in the Draft EIS. Also included below is link to plans and profiles for the two options of the preferred alternative that are under consideration for your review.

Downloadable Link to CTA RLE Project Plans and Profiles
1. RP_CWC_CL_RLE Draft EIS Appendix F Plans and Profiles_20160825.pdf

The Draft EIS is currently going through final federal reviews and is almost ready to be published for public review. We will inform you once the Draft EIS is published. We will be seeking feedback from agencies, stakeholders, and public on the two options of the UPRR alternative that are evaluated in the Draft EIS. After public review of the Draft EIS, CTA will complete any additional analyses required and prepare the Final EIS, which will confirm whether the East or West Option is the selected option. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. Project timeline is dependent on funding availability and federal approvals.

We welcome your feedback on these materials and on the Draft EIS once it is published. Any comments received on these materials and the Draft EIS will be addressed in the Final EIS. Please let me know if you would like to get any other information at this time. We look forward to continue coordinating with you on this very important transit improvement project for Chicago's Far South Side.

Thank You,

Sonali Tandon
Senior Project Manager – Planning
Chicago Transit Authority
312-681-4246

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#282

Metra

547 W. Jackson Boulevard, Chicago, IL 60661 312.322.6900 metrarail.com

November 29, 2016

Ms. Carole Morey
Chief Planning Officer
Chicago Transit Authority
567 W. Lake Street, 10th Floor
Chicago, IL 60661

Re: CTA Red Line Extension Draft EIS

Dear Ms. Morey:

We appreciate the opportunity to review the CTA's Red Line Extension Draft Environmental Impact Statement (EIS), dated October 6, 2016. Having reviewed the Draft EIS, Metra would like to provide some feedback and comments for your consideration while preparing the Final EIS.

Metra has no preference regarding the West Option or East Option. The EIS should cite that the Red Line Extension corridor will be near the existing Metra Electric District (MED) corridor. The report should highlight there is a convenient transfer opportunity between the proposed Red Line station at Michigan Avenue and 116th Street and the existing MED 115th Street/Kensington station, roughly one-half mile away. If there are opportunities to make this connection more convenient for transit riders, Metra supports these efforts.

The report should also note that the Union Pacific Railroad (UPRR) corridor which the proposed Red Line extension will run parallel to is in Metra's long-term plans to host a future SouthEast Service (SES) commuter rail line between LaSalle Street Station in downtown Chicago and Balmoral Park in Crete. A station is planned adjacent to the Red Line Extension corridor roughly at 115th Street and Michigan Avenue, near the proposed future Red Line station at 116th Street and Michigan Avenue. Plans for the Michigan Avenue Red Line station should not preclude a future Metra/CTA transfer station when the SouthEast Service begins service.

Additional information in the Final EIS should be included regarding the CTA's ridership projections. We would like to know more about how the services will impact the ridership on the Metra Electric District and Metra's competitive condition.

Once again, Metra would like to thank you for the opportunity to review the CTA's Red Line Extension Draft EIS. We look forward to working with the CTA on this project to strengthen the transit network of Chicago's South Side and of the region as a whole. If you have any questions or would like to further discuss the comments made herein, please do not hesitate to contact me.

Sincerely,

Don Orseno
Executive Director/CEO

Metra is the registered service mark for the Northeast Illinois Regional Commuter Railroad Corporation.

#283

NORFOLK SOUTHERN

Norfolk Southern Corporation
Three Commercial Place
Norfolk, VA 23510
Phone: 757-629-2838
Fax: 757-533-4884
Email: john.edwards@nscorp.com

John V. Edwards
General Director
Passenger Policy

Nov 30, 2016

Carole Morey
Chief Planning Officer
Chicago Transit Authority
567 W. Lake Street, 10th Floor
Chicago, IL 60661-1465

Sent electronically to RedExtension@transitchicago.com

Re: Draft Environmental Impact Statement (EIS) for the Chicago Transit Authority Red Line Extension Project

Dear Ms. Morey:

On September 30, 2016 the Federal Transit Administration (FTA), and the Chicago Transit Authority (CTA) in cooperation with the Federal Highway Administration publicly released the Draft Environmental Impact Statement (DEIS) & Section 4(f) Evaluation for the Chicago Red Line Extension (RLE). Norfolk Southern (NS) appreciates the opportunity to comment on this DEIS.

Norfolk Southern's comments regarding this project are limited to the use of NS right of way on the Kensington Branch. The Indiana Harbor Belt (IHB) operates over a portion of this rail segment to serve an active customer, All American Recycling at 11900 S. Cottage Grove Avenue. This customer is located just west of the NS Kensington Yard Parcel. We have noted the customer location by a green outline on the attached aerial map. This business appears to be shown in Chapter 4, on Table 4-20 as "US Scrap."

The conceptual alignment provided in the DEIS indicates the Common Segment of the UPRR Rail Alternative would be constructed *...at an at-grade profile (they would continue at ground level)* (Chapter 2, Structure and Tracks, p. 2-7). Additionally, the discussion on page 2-9 indicates the yard will be constructed *entirely at grade*. Consequently the RLE project main lines and rail yard would sever rail access to All American Recycling. Careful engineering design and collaboration between the parties would be required to eliminate this potential service disruption of common carrier rail service. In any event, the adverse impact noted above should be described in Section 3.2.3 Freight Transportation in the Final Environmental Impact Statement (FEIS).

Additionally, the proposal seems to eliminate any ability for the NS Kensington Branch to reconnect with the Canadian National line and the IHB. NS joins Conrail in not supporting any proposal that would eliminate potential reconnection to the national freight network.

Again, Norfolk Southern appreciates the forum for making comments on the Chicago Red Line Extension DEIS. We look forward to remaining involved in this process.

Sincerely,

John V. Edwards

Enclosure:

Map, CTA Red Line Extension, NS & Conrail Property

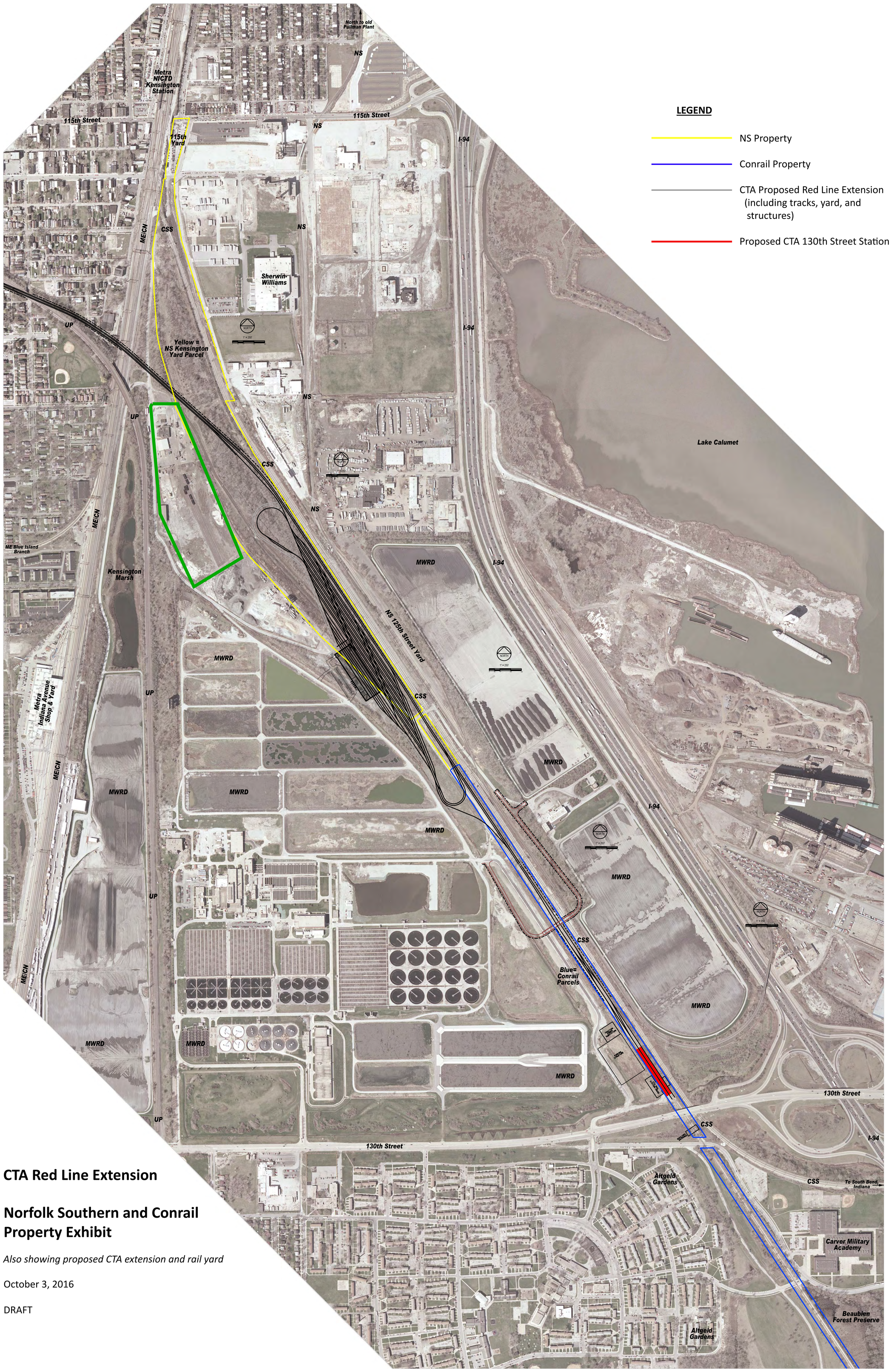

CTA Red Line Extension

Norfolk Southern and Conrail Property Exhibit

Also showing proposed CTA extension and rail yard

October 3, 2016

DRAFT

CONRAIL®

#284

Consolidated Rail Corporation
1717 Arch Street, Ste. 1310
Philadelphia, PA 19103

November 30, 2016

BY ELECTRONIC MAIL

Red Line Extension Project,
Attn: Carole Morey
Chicago Transit Authority,
567 W. Lake Street, 10th Floor,
Chicago, IL 60661-1465
RedExtension@transitchicago.com

Re: **Comments on CTA Redline Extension Draft Environmental Impact Statement**

Dear Ms. Morey:

Consolidated Rail Corporation ("Conrail") submits the following comments on the Draft Environmental Impact Statement ("Draft EIS") and Section 4(f) Evaluation released on September 30, 2016 by the Chicago Transit Authority ("CTA") and the Federal Transit Administration ("FTA") for the proposed Chicago Red Line Extension. Conrail is a Class III switching railroad, indirectly and jointly owned by CSX Corporation ("CSX") and Norfolk Southern Corporation ("NS"). Conrail is the majority owner of the Indiana Harbor Belt Railroad ("IHB") and the owner of a portion of one of the candidate rail lines. Conrail submits these comments as both owner of the Kensington Industrial Track and related parcels and as majority owner of IHB.

The IHB has operating rights over Conrail's Kensington Industrial Track, which it utilizes to serve All American Recycling at 11900 S. Cottage Grove Avenue. This customer is located on NS just west of the NS Kensington Yard Parcel (see attached map). It appears that the proposed 120th Street Yard and Shop would sever freight rail access to this customer. Conrail does not support any action that negatively impacts the IHB's ability to fulfill its common carrier obligation to provide freight rail service to its customers.

In addition, it appears that the "Common Segment" of the proposed "East" and "West" Options may negatively impact Conrail's Kensington Industrial Track right-of way and

related parcels, starting at the proposed 130th Street "South Station Option" and extending north to the proposed 120th Street Yard and Shop. In other words, the proposal would eliminate the Kensington Industrial Track from 130th Street northwards. Not only does the proposal eliminate IHB's ability to serve any customers located north of 130th Street, it also severs any ability to reconnect with the Canadian National rail line or any potential access to the Union Pacific rail line located adjacent to the Kensington Industrial Track. Conrail does not support any proposal that involves the use of Conrail's existing freight rail infrastructure, IHB's active right-of-way, or Conrail property. Conrail also does not support any proposal that would eliminate potential connectivity with the national freight network.

Finally, the proposed 130th Street South Station Option would utilize a portion of Conrail's active right-of-way. Again, Conrail does not support any proposal that involves the use of Conrail's existing freight rail infrastructure, IHB's active right-of-way, or Conrail property.

Conrail supports the efforts of CTA, the FTA, and others to enhance and extend the Chicago Redline. We believe it is important, however, to recognize that freight rail is as critical for economic development as passenger service. Conrail appreciates the opportunity to provide comments, and looks forward to its involvement as a stakeholder in the Chicago Redline improvement process.

Sincerely,

Jocelyn Gabrynowicz Hill
Director of Public Affairs & Assistant General Counsel

Enclosure:

Diagram depicting CTA Red Line Extension and NS & Conrail Property

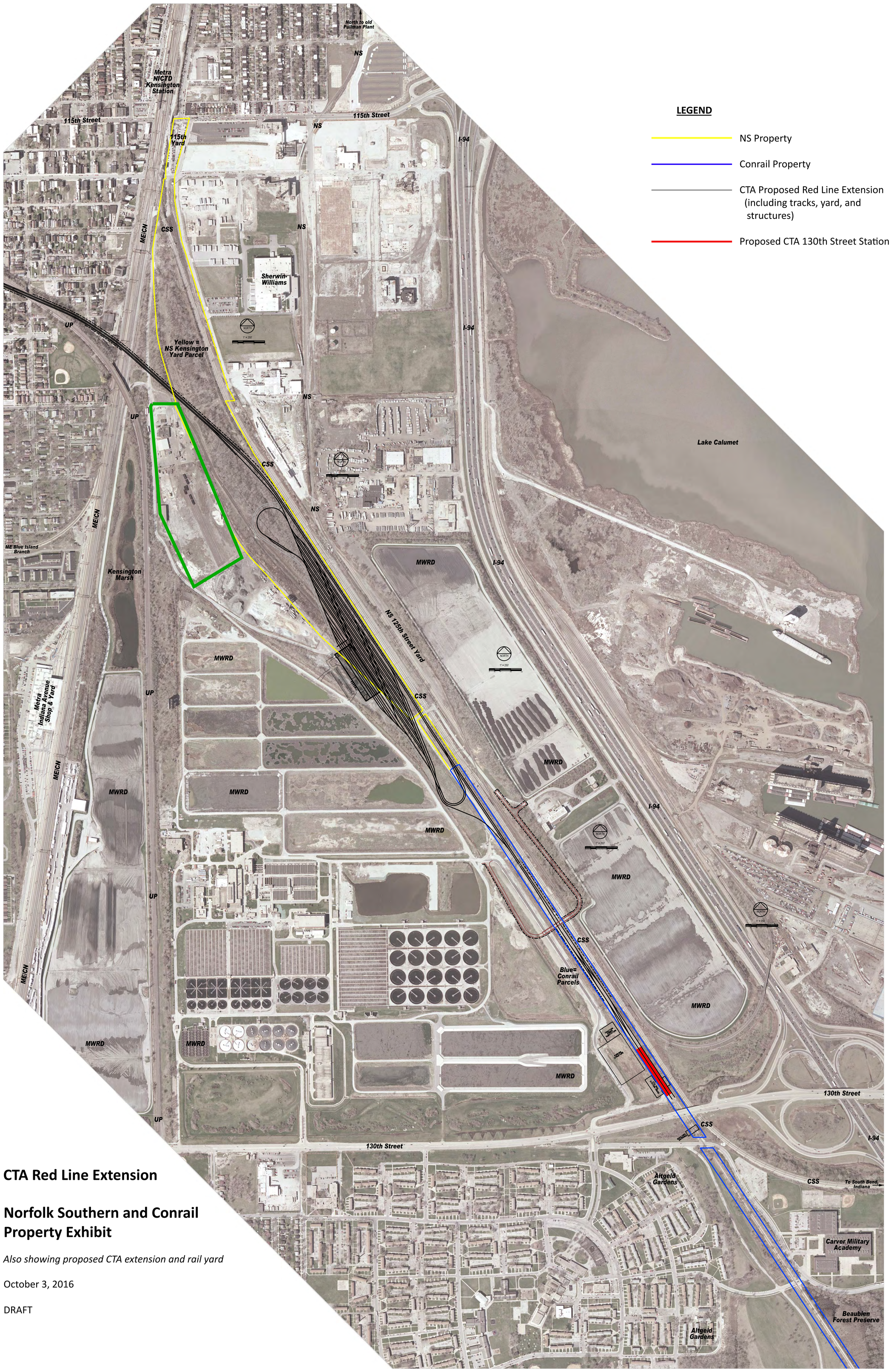

CTA Red Line Extension

Norfolk Southern and Conrail Property Exhibit

Also showing proposed CTA extension and rail yard

October 3, 2016

DRAFT

Attachment 9
Displacements Informational Materials

Website Informational Packet (including FAQs in English)

FAQs (Spanish)

FTA General Acquisition & Relocation Information Brochure

Property Owner Letter

Resident/Lessee Letter

Affected Agency Letters

Affected Railroad Letters

Potential Property Impacts
Red Line Extension (RLE) Project

To provide new Red Line rail transit service to residents in Chicago's Far South Side, the agency has determined that it may be necessary to acquire certain properties to implement the Red Line Extension Project. CTA is currently considering two options of this alignment: the East Option and the West Option. The East Option would run to the east of the Union Pacific Railroad (UPRR) tracks between 99th Street and 118th Street, and the West Option would run to the west of the UPRR tracks in that segment. The alignment would be the same for the two options from 95th Street to 99th Street and from 118th Street to 130th Street.

Property impacts would be different depending upon which option is selected, and it is not known at this time whether acquisition of any specific property may be required. CTA will provide additional communication when the preferred option has been decided. The number of potential property impacts estimated at this time is summarized in the attached tables.

The CTA is working with a dedicated team of relocation and community liaisons who have been contacting property owners, business owners, and renters to inform them about potential property displacements and answer questions. Over the next few years, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project. At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete (expected to be complete by the end of 2018) and project funding is secured. CTA would then notify owners of affected properties of their intent to purchase.

The CTA's goal is to make this as easy as possible on owners and renters. For the time being, there is no need for any owner or renter to relocate.

CTA is required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations, to assure full protection of the rights of each property owner.

Among other requirements, these guidelines state that CTA must offer fair market value for any property it seeks to acquire. In some cases property owners may be eligible for compensation at their original purchase price, if higher than the fair market value.

Additionally, CTA must provide financial assistance and relocation services for property owners as well as commercial and residential tenants who must move because of the RPM Project. Owners and renters were mailed information via regular and certified postal mail. In addition, relocation consultants have made in-person visits to the locations listed to provide additional information and collect feedback.

Owners and renters are encouraged to contact CTA's customer service department by telephone at 1-888-YOUR-CTA (1-888-968-7282), or by e-mail at RedExtension@transitchicago.com.

Red Line Extension (RLE) Project
Frequently Asked Questions

What could happen to my property?

As part of its extensive planning for the RLE Project, CTA has determined that it ***may*** be necessary to acquire certain properties to implement the project. ***Because the project is still in the planning stage and CTA is still evaluating both the East and West Options, it is not known at this time whether acquisition of your property may be required.*** In some cases, your property may need to be acquired whether the East or West Option is selected. CTA will provide additional communication when the preferred option has been decided. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project. If your property is needed for the project, it could be redeveloped and used for tracks, stations, parking, or ancillary facilities.

What are my rights as a property owner?

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. What this means is that CTA will treat property owners fairly and will seek cooperative settlements of property acquisitions.

You can read more about your rights under applicable federal laws here:
http://www.fhwa.dot.gov/real_estate/uniform_act/acquisition/real_property.cfm
http://www.fhwa.dot.gov/real_estate/publications/your_rights/rights2014.pdf

What type of compensation will I receive?

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, it is required by federal law to offer to purchase each property for an amount that is no less than fair market value as determined by an independent appraisal. In some circumstances, if current appraisals are less than the original property purchase price, an owner may be eligible for compensation equal to the original purchase price.

In addition, CTA must provide financial assistance and relocation services, as required by federal rules, for property owners as well as commercial and residential occupants who must move because of the RLE Project.

How will CTA determine the purchase price for my property?

If CTA determines it is necessary to purchase your property for the RLE Project, it is required to hire an independent appraiser to inspect the property to determine fair market value. In that case, you, or a representative that you designate, will be invited to accompany the appraiser when the appraiser inspects your property. You or your representative may provide information about improvements to the property and any special features that may affect the value of the property to ensure that these facts are considered in the appraisal.

What if I don't own this property but rent an apartment, or lease space for my business?

Non-owners who are leasing housing or commercial property that must be relocated because of the RLE Project are also protected by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. If needed, CTA will provide financial assistance and relocation services to assist these residents and business owners in finding a new housing or business location.

If CTA acquires my property, will you provide me help in relocating?

If you are required to move, a relocation agent will contact you, answer your questions, and provide additional information about relocation assistance advisory services and relocation payments eligibility. The goal of the relocation agents is to facilitate a smooth transition to the replacement housing or business location.

What will happen next with the RLE Project? How will the decision be made between the East and West Option?

CTA will publish the environmental study, called the Draft Environmental Impact Statement (EIS), in early October. CTA will then hold a public hearing in the project area to provide more information and collect feedback about the project, its impacts, and potential mitigation measures. Based on public feedback, environmental review, and funding availability to conduct additional engineering, CTA expects to announce the selected option (either the East Option or the West Option) in 2017. CTA will address public comments to the Draft EIS in the Final EIS, which will also formalize the selected option, its impacts, and mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. During preparation of the Final EIS, CTA plans to apply to the Federal Transit Administration (FTA) for entry into the Project Development Phase of this project to pursue federal funding for construction of the project under the competitive federal "New Starts" program.

When will CTA notify me of their intent to purchase my property?

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete (expected to be complete by the end of 2018) and project funding is secured. CTA would then notify owners of affected properties of their intent to purchase.

If I have additional questions about potential property acquisitions, who should I call?

Contact CTA's customer service department by telephone at 1-888-YOUR-CTA (1-888-968-7282), or by e-mail at RedExtension@transitchicago.com.

How can I learn more about the RLE Project?

You can learn more about the RLE Project and find updates on the status of the process on our webpage: www.transitchicago.com/RedEIS. To join the project contact list and get updates about the RLE Project, public hearings, and the status of environmental reviews, email RedExtension@transitchicago.com.

East Option

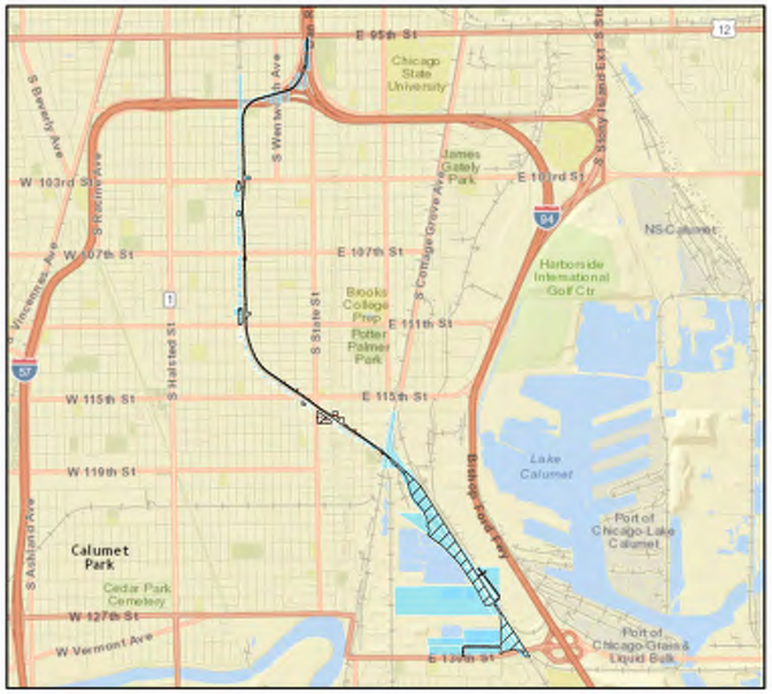

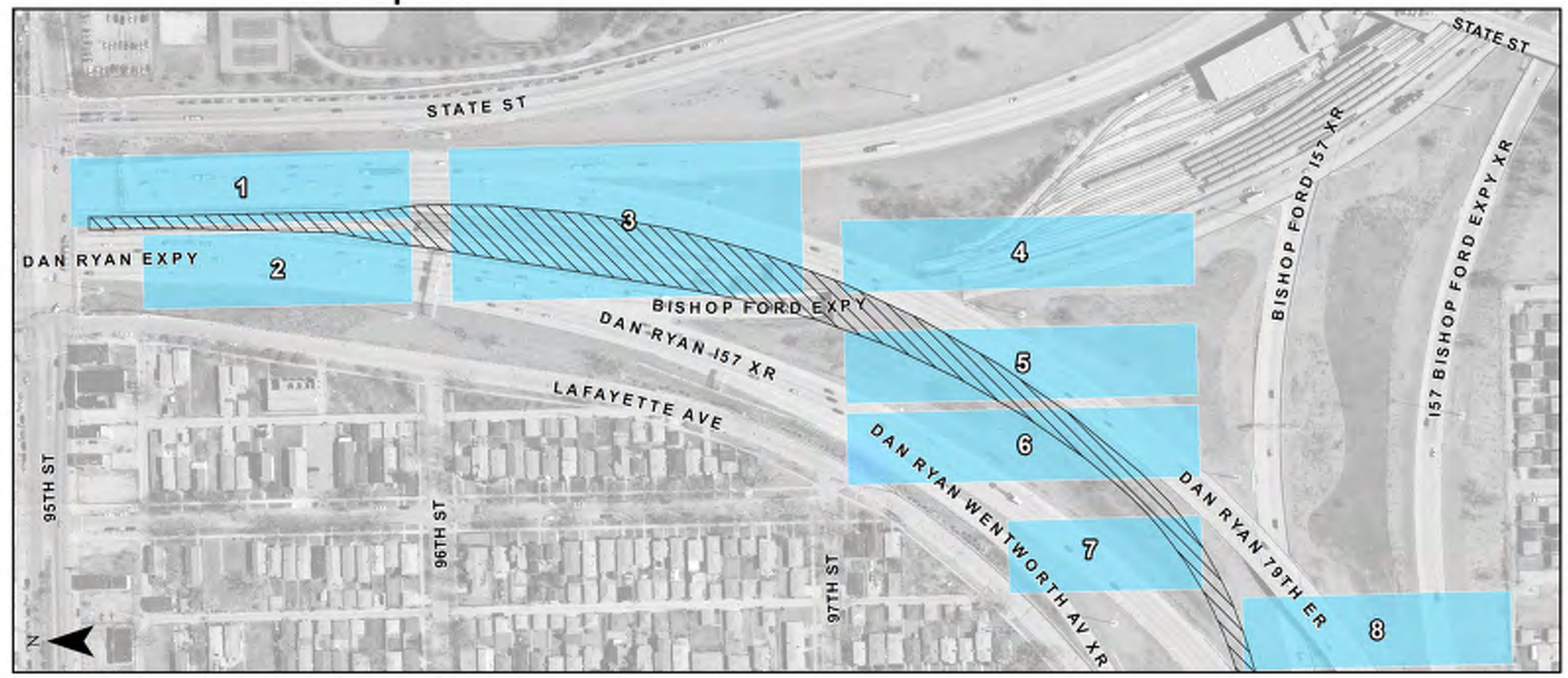

95th Street Station to the Dan Ryan/Bishop Ford Interchange

Dan Ryan/Bishop Ford Interchange to 99th Street

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

RED AHEAD — Moving Ahead to a Better Red

Red Line Extension

East Option

99th Place to 105th Street

105th Street to 110th Place

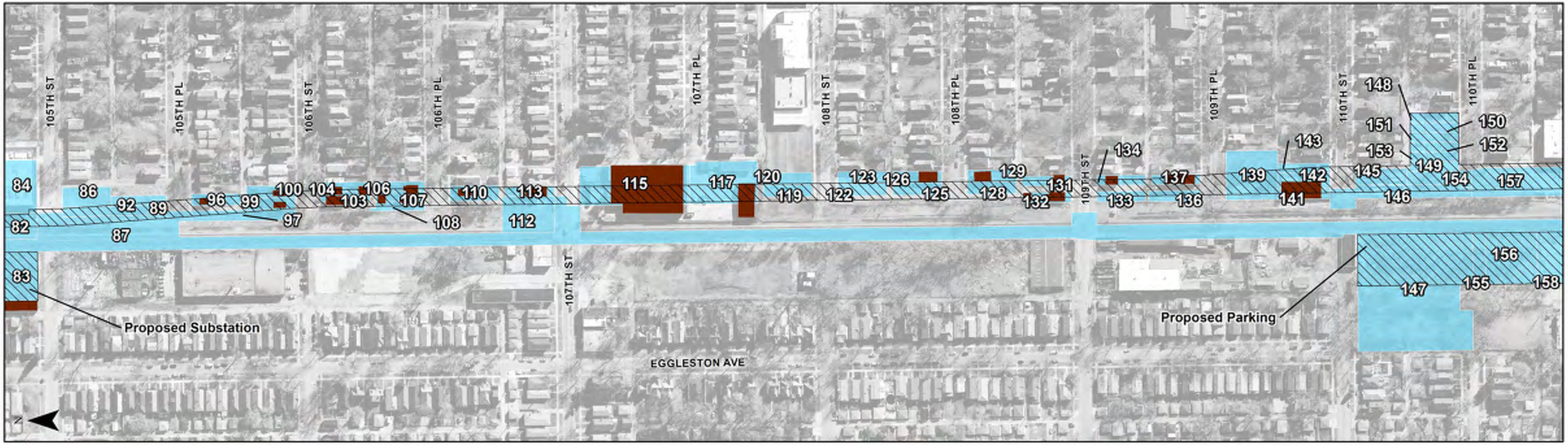

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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East Option

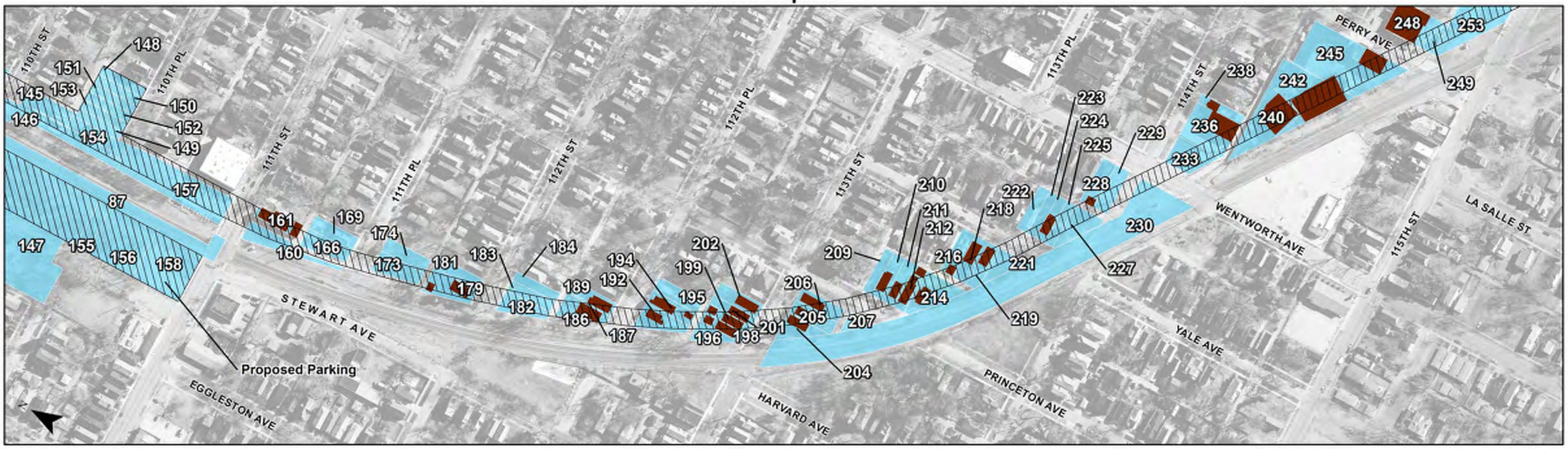

110th Place to Perry Avenue

Perry Avenue to Calumet Avenue

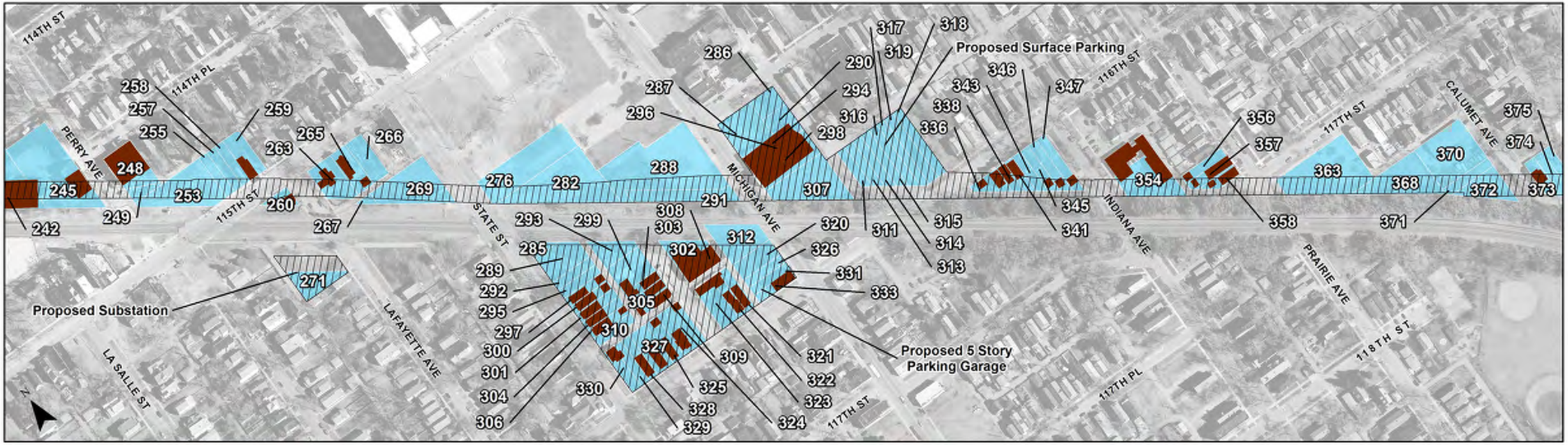

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

East Option

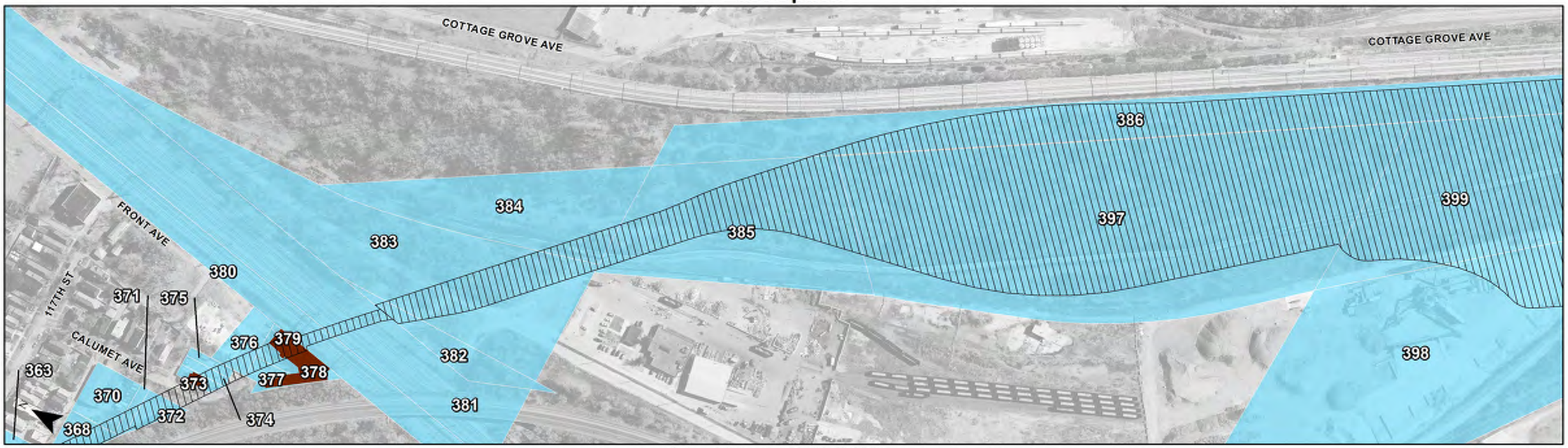

Calumet Avenue to 130th St Station

130th Street Station

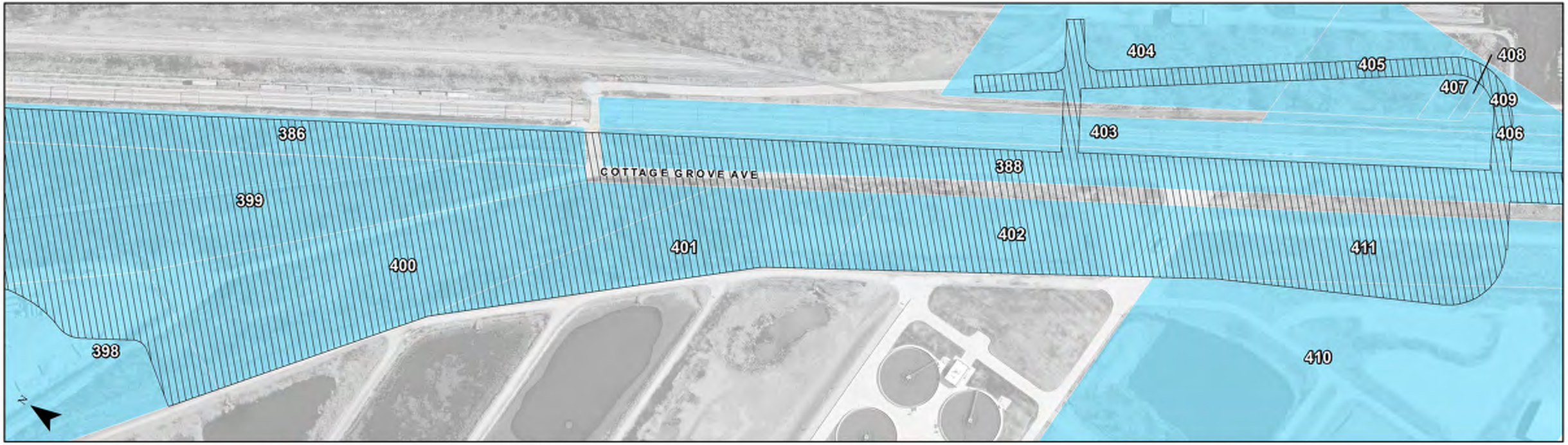

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

East Option

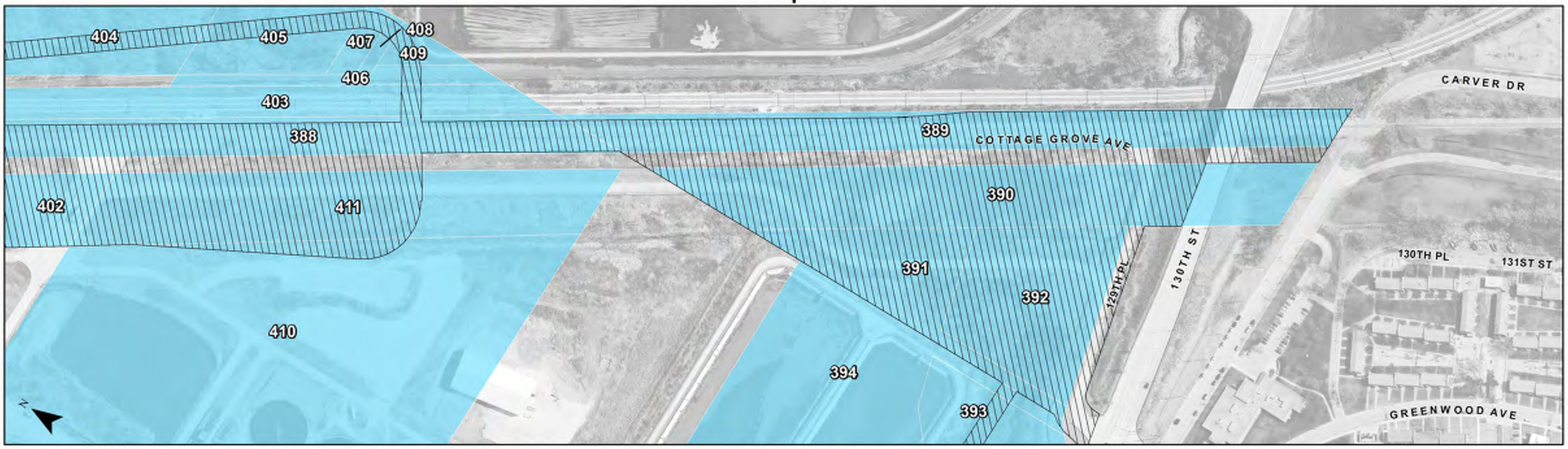

130th Street Station

130th Street Station

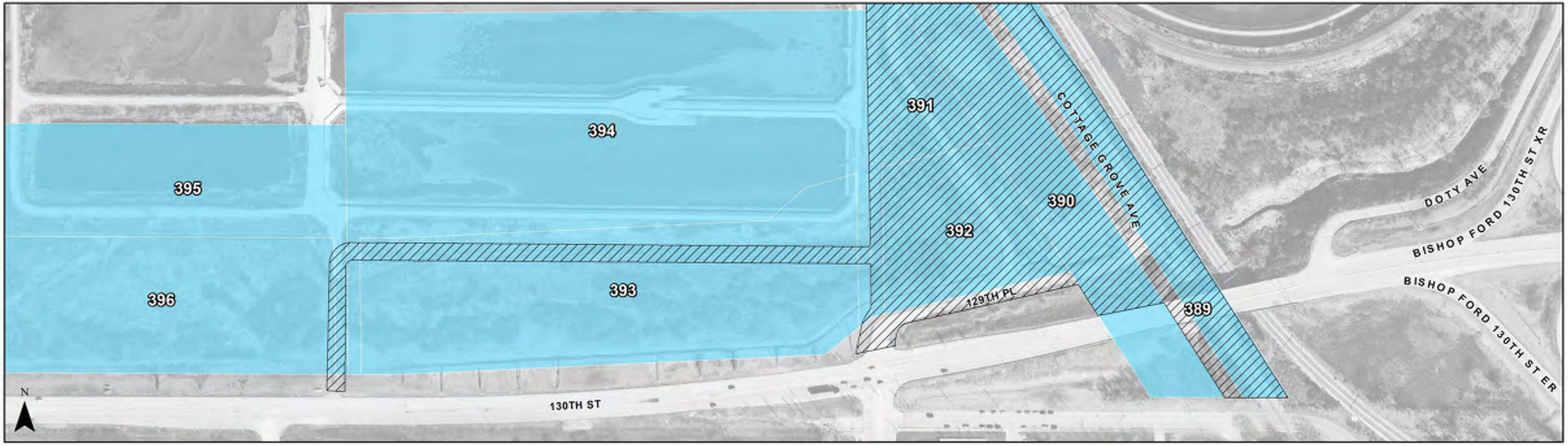

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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West Option

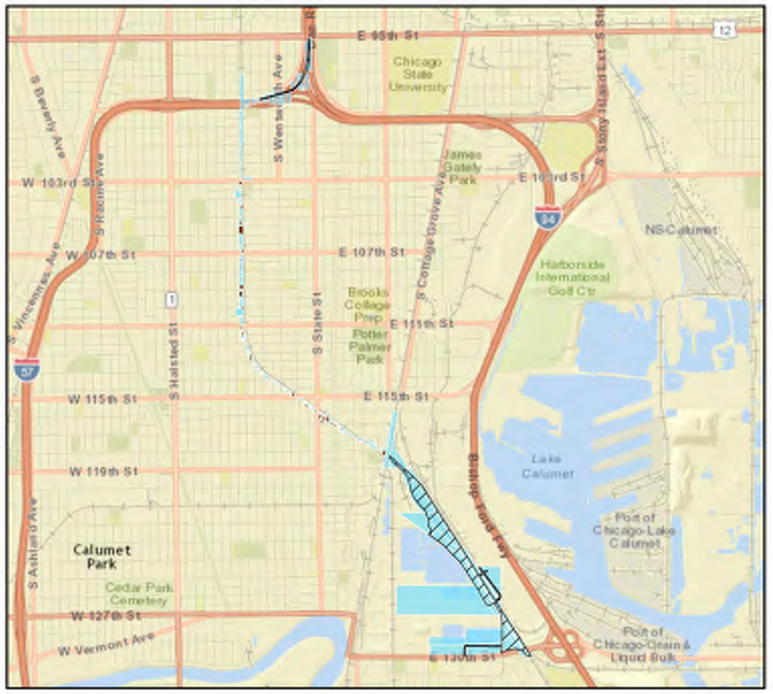

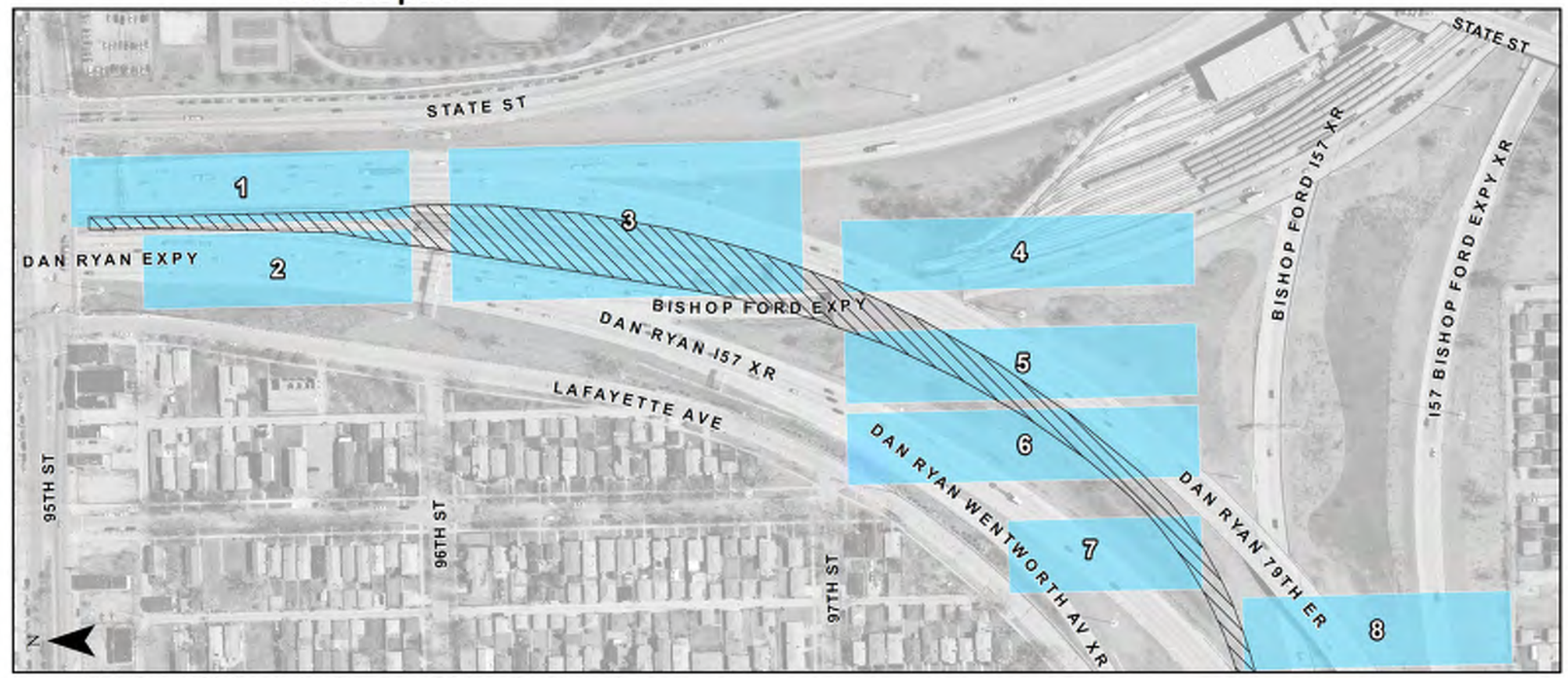

95th Street Station to the Dan Ryan/Bishop Ford Interchange

Dan Ryan/Bishop Ford Interchange to 99th Street

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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West Option

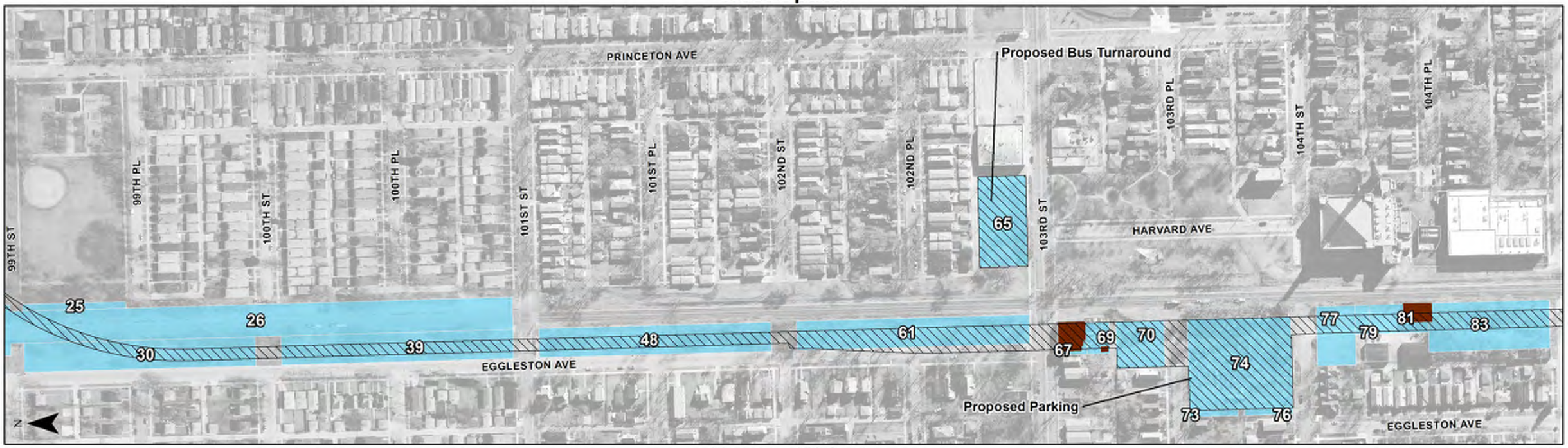

99th Place to 105th Street

105th Street to 110th Place

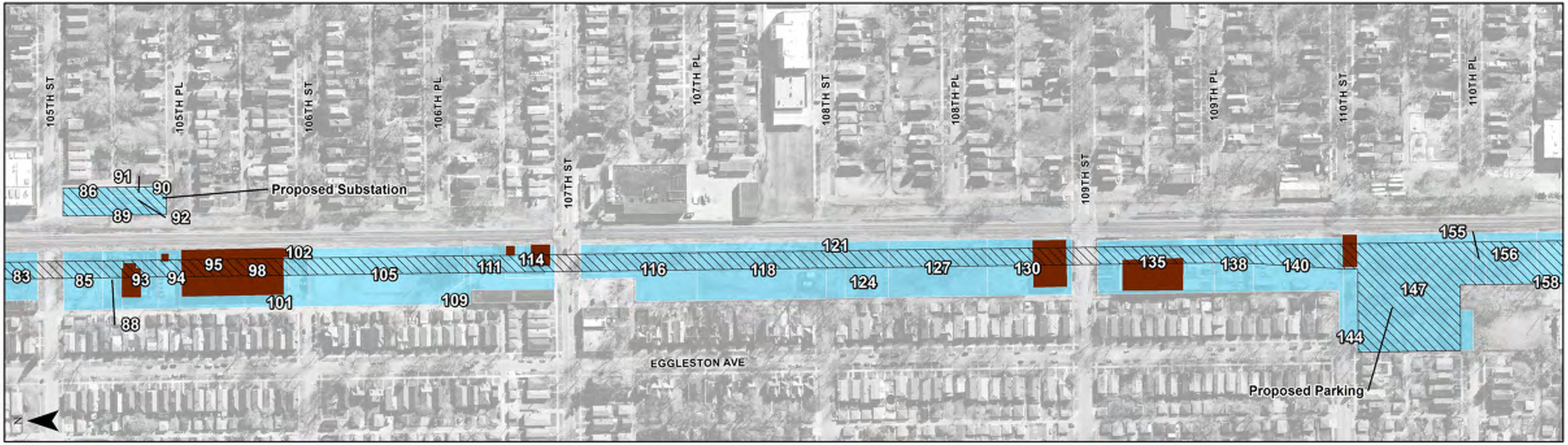

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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West Option

110th Place to Perry Avenue

Perry Avenue to Calumet Avenue

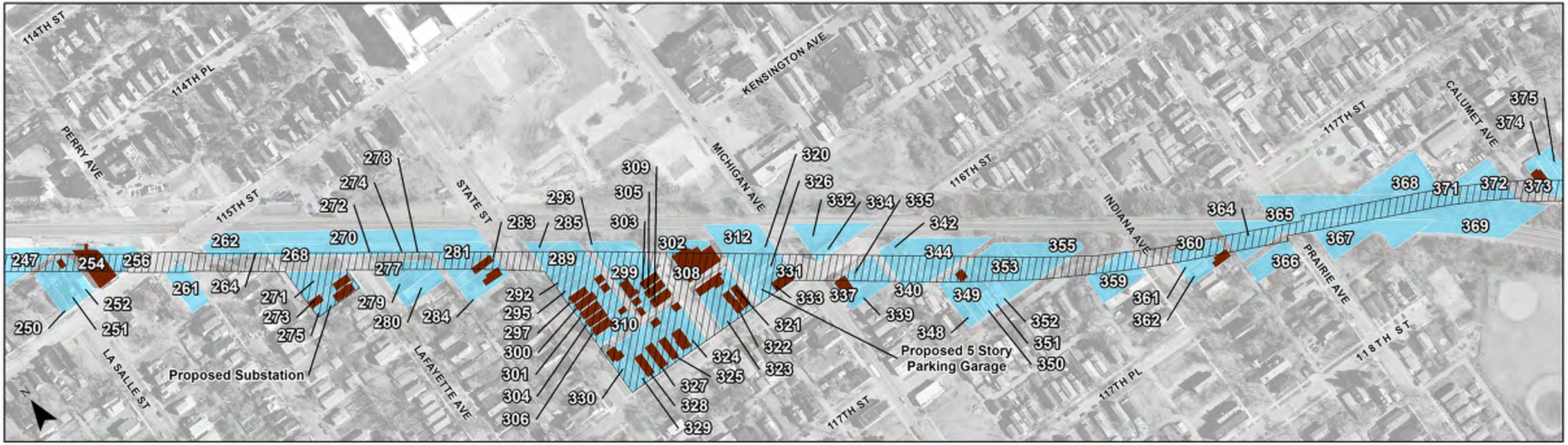

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

RED AHEAD Moving Ahead to a Better Red

Red Line Extension

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West Option

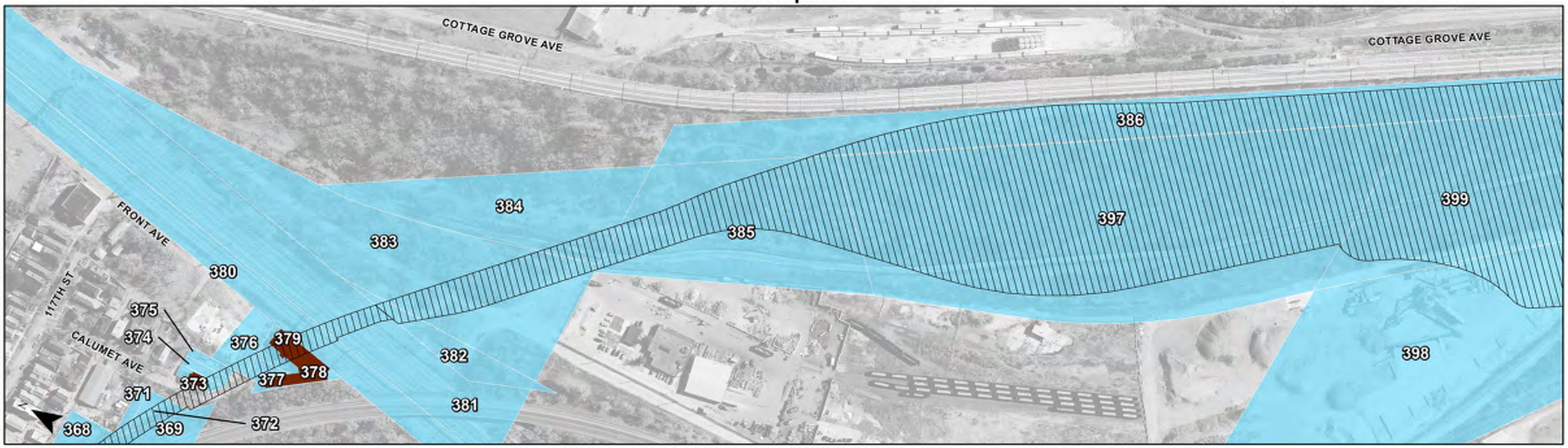

Calumet Avenue to 130th St Station

130th Street Station

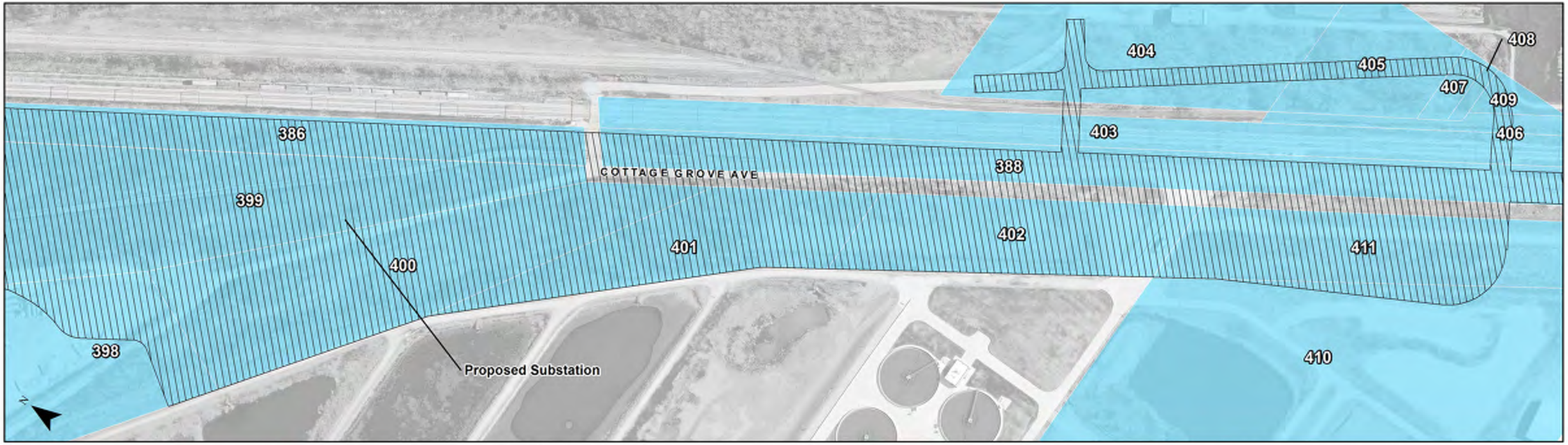

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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West Option

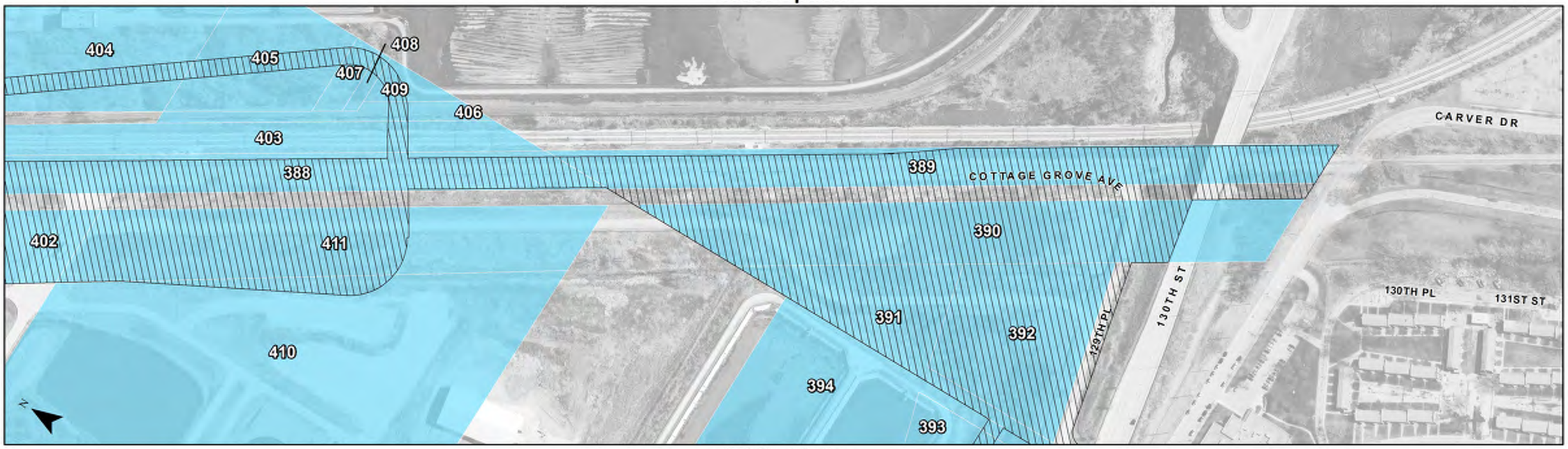

130th Street Station

130th Street Station

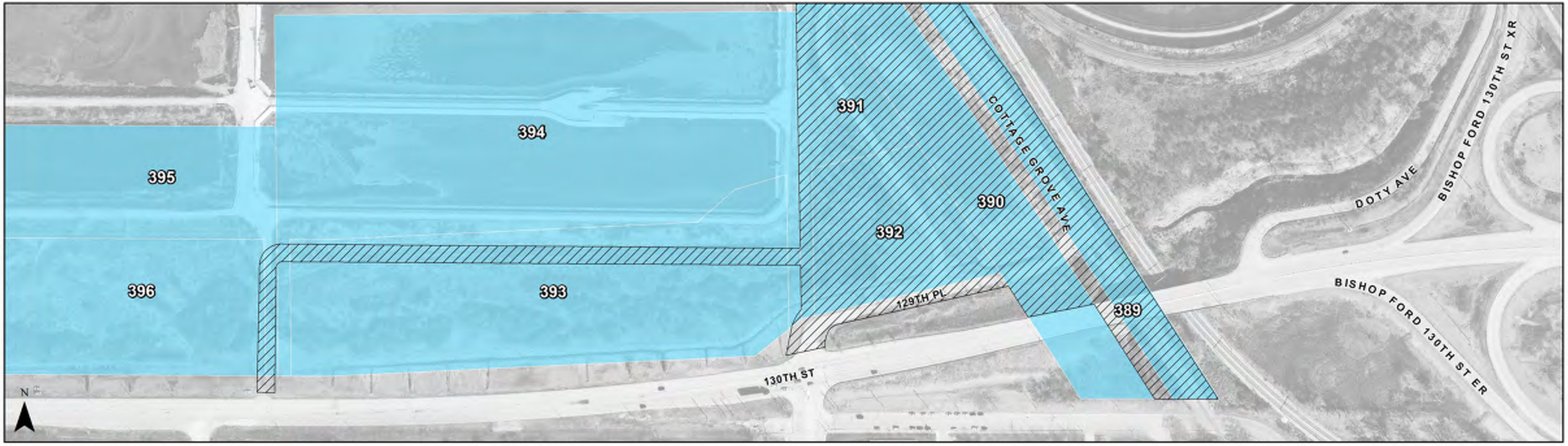

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

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Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
1	27	25-09-400-047-0000	312 W. 99TH PLACE	Parkland	Affected Parcel	Right-of-way
2	28	25-09-401-002-0000	349 W. 99TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
3	29	25-09-401-001-0000	355 W. 99TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
4	31	25-09-401-019-0000	348 W. 100TH STREET	Single-family Residential	Affected Parcel	Right-of-way
5	32	25-09-401-018-0000	350 W. 100TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
6	33	25-09-401-017-0000	354 W. 100TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
7	34	25-09-408-003-0000	349 W. 100TH STREET	Single-family Residential	Affected Parcel	Right-of-way
8	35	25-09-408-002-0000	351 W. 100TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
9	36	25-09-408-001-0000	355 W. 100TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
10	37	25-09-408-018-0000	348 W. 100TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
11	38	25-09-408-017-0000	352 W. 100TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
12	40	25-09-409-001-0000	353 W. 100TH PLACE	Vacant	Affected Parcel	Right-of-way
13	41	25-09-409-002-0000	349 W. 100TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
14	42	25-09-409-047-0000	352 W. 101ST STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
15	43	25-09-409-018-0000	348 W. 101ST STREET	Single-family Residential	Affected Parcel	Right-of-way
16	44	25-09-416-002-0000	351 W. 101ST STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
17	45	25-09-416-001-0000	355 W. 101ST STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
18	46	25-09-416-018-0000	348 W. 101ST PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
19	47	25-09-416-017-0000	352 W. 101ST PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
20	49	25-09-417-002-0000	353 W. 101ST PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
21	50	25-09-417-001-0000	355 W. 101ST PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
22	51	25-09-417-003-0000	349 W. 101ST PLACE	Single-family Residential	Affected Parcel	Right-of-way
23	52	25-09-417-017-0000	352 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
24	53	25-09-417-018-0000	348 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
25	54	25-09-424-002-0000	351 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
26	55	25-09-424-001-0000	353 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
27	56	25-09-424-003-0000	347 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
28	57	25-09-424-018-0000	348 W. 102ND PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
29	58	25-09-424-017-0000	350 W. 102ND PLACE	Vacant	Affected Parcel	Right-of-way
30	59	25-09-424-016-0000	354 W. 102ND PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
31	60	25-09-424-068-0000	10228 S. PRINCETON AVENUE	Industrial	Affected Parcel	Right-of-way
32	62	25-09-424-043-0000	347 W. 102ND PLACE	Single-family Residential	Affected Parcel	Right-of-way
33	63	25-09-424-042-0000	351 W. 102ND PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
34	64	25-09-424-041-0000	353 W. 102ND PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
35	65	25-09-424-060-0000	340 W. 103RD STREET	Vacant	Affected Parcel	Parking for 103rd Street Station
36	66	25-09-424-069-0000	350 W. 103RD STREET	Transportation (railroad)	Affected Parcel	Right-of-way
37	67	25-16-105-034-0000	405 W. 103RD STREET	Multifamily Residential	Parcel with Building Displacement	Parking for 103rd Street Station
38	68	25-16-105-036-0000	401 W. 103RD STREET	Public (City of Chicago)	Affected Parcel	Parking for 103rd Street Station
39	69	25-16-105-035-0000	403 W. 103RD STREET	Commercial	Parcel with Building Displacement	Parking for 103rd Street Station
40	70	25-16-105-033-0000	400 W. 103RD PLACE	Vacant	Affected Parcel	Parking for 103rd Street Station
41	71	25-16-200-001-0000	329 W. 103RD STREET	Parkland	Affected Parcel	Right-of-way
42	72	25-16-500-001-0000	359 W. 103RD STREET	Transportation (railroad)	Affected Parcel	Right-of-way
43	75	25-16-500-003-0000	361 W. 103RD STREET	Transportation (railroad)	Affected Parcel	Right-of-way
44	78	25-16-500-004-0000	361 W. 104TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
45	80	25-16-500-005-0000	360 W. 104TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
46	82	25-16-500-006-0000	360 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
47	83	25-16-113-031-0000	400 W. 105TH STREET	Vacant	Affected Parcel	Substation
48	84	25-16-206-095-0000	346 W. 104TH PLACE	Commercial	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
49	86	25-16-210-001-0000	317 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
50	87	25-16-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
51	89	25-16-500-007-0000	360 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
52	92	25-16-210-038-0000	230 W. 105TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
53	96	25-16-211-077-0000	355 W. 105TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
54	97	25-16-500-029-0000	359 W. 105TH PLACE	Transportation (railroad)	Affected Parcel	Right-of-way
55	99	25-16-211-084-0000	354 W. 106TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
56	100	25-16-211-083-0000	352 W. 106TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
57	103	25-16-212-001-0000	355 W. 106TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
58	104	25-16-212-002-0000	351 W. 106TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
59	106	25-16-212-043-0000	350 W. 106TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
60	107	25-16-212-042-0000	352 W. 106TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
61	108	25-16-500-012-0000	358 W. 106TH PLACE	Transportation (railroad)	Affected Parcel	Right-of-way
62	110	25-16-217-001-0000	353 W. 106TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
63	112	25-16-500-014-0000	360 W. 107TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
64	113	25-16-217-039-0000	354 W. 107TH STREET	Single-Family Residential	Parcel with Building Displacement	Right-of-way
65	115	25-16-400-001-0000	346 W. 107TH PLACE	Industrial	Parcel with Building Displacement	Right-of-way
66	117	25-16-401-001-0000	347 W. 107TH PLACE	Industrial	Parcel with Building Displacement	Right-of-way
67	119	25-16-401-016-0000	252 W. 108TH STREET	Institution (School)	Affected Parcel	Right-of-way
68	120	25-16-401-017-0000	252 W. 108TH STREET	Institution (School)	Affected Parcel	Right-of-way
69	122	25-16-407-001-0000	351 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
70	123	25-16-407-002-0000	349 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
71	125	25-16-407-019-0000	352 W. 108TH PLACE	Vacant	Affected Parcel	Right-of-way
72	126	25-16-407-020-0000	348 W. 108TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
73	128	25-16-411-001-0000	351 W. 108TH PLACE	Vacant	Affected Parcel	Right-of-way
74	129	25-16-411-002-0000	351 W. 108TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
75	131	25-16-411-020-0000	350 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
76	132	25-16-411-019-0000	354 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
77	133	25-16-415-001-0000	355 W. 109TH STREET	Vacant	Affected Parcel	Right-of-way
78	134	25-16-415-002-0000	351 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
79	136	25-16-415-021-0000	354 W. 109TH PLACE	Vacant	Affected Parcel	Right-of-way
80	137	25-16-415-022-0000	350 W. 109TH PLACE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
81	139	25-16-419-032-0000	355 W. 109TH PLACE	Vacant	Affected Parcel	Right-of-way
82	141	25-16-419-036-0000	356 W. 110TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
83	142	25-16-419-014-0000	352 W. 110TH STREET	Industrial	Affected Parcel	Right-of-way
84	143	25-16-419-015-0000	350 W. 110TH STREET	Vacant	Affected Parcel	Right-of-way
85	145	25-16-423-036-0000	349 W. 110TH STREET	Vacant	Affected Parcel	Right-of-way
86	146	25-16-423-037-0000	353 W. 110TH STREET	Vacant	Affected Parcel	Right-of-way
87	147	25-16-329-007-0000	11026 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
88	148	25-16-423-024-0000	336 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
89	149	25-16-423-019-0000	348 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
90	150	25-16-423-023-0000	338 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
91	151	25-16-423-022-0000	340 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
92	152	25-16-423-021-0000	342 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
93	153	25-16-423-020-0000	346 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
94	154	25-16-423-018-0000	352 W. 110TH PLACE	Vacant	Affected Parcel	Right-of-way
95	155	25-16-329-009-0000	11037 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
96	156	25-16-329-008-0000	11041 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
97	157	25-16-427-001-0000	356 W. 111TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-Way
98	158	25-16-329-005-0000	402 W. 111TH STREET	Vacant	Affected Parcel	Parking for 111th Street Station
99	160	25-21-501-003-0000	501 E. 112TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
100	161	25-21-200-001-0000	349 W. 111TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
101	166	25-21-200-014-0000	348 W. 111TH PLACE	Vacant	Affected Parcel	Right-of-way
102	169	25-21-200-015-0000	344 W. 111TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
103	173	25-21-204-001-0000	345 W. 111TH PLACE	Vacant	Affected Parcel	Right-of-way
104	174	25-21-204-002-0000	341 W. 111TH PLACE	Vacant	Affected Parcel	Right-of-way
105	179	25-21-204-015-0000	340 W. 112TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
106	181	25-21-204-016-0000	336 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
107	182	25-21-208-003-0000	339 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
108	183	25-21-208-004-0000	335 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
109	184	25-21-208-005-0000	333 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
110	186	25-21-208-016-0000	330 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
111	187	25-21-208-017-0000	330 W. 112TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
112	189	25-21-208-018-0000	328 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
113	192	25-21-212-010-0000	325 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
114	194	25-21-212-011-0000	319 W. 112TH PLACE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
115	195	25-21-212-012-0000	317 W. 112TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
116	196	25-21-212-019-0000	320 W. 113TH STREET	Vacant	Affected Parcel	Right-of-way
117	198	25-21-212-020-0000	320 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
118	199	25-21-212-021-0000	316 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
119	201	25-21-212-022-0000	312 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
120	202	25-21-212-023-0000	310 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
121	204	25-21-217-001-0000	309 W. 113TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
122	205	25-21-217-002-0000	307 W. 113TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
123	206	25-21-217-003-0000	303 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
124	207	25-21-217-012-0000	11332 S. PRINCETON AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
125	209	25-21-218-024-0000	11315 S. PRINCETON AVENUE	Vacant	Affected Parcel	Right-of-way
126	210	25-21-218-025-0000	11319 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
127	211	25-21-218-026-0000	11321 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
128	212	25-21-218-027-0000	11325 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
129	214	25-21-218-028-0000	11327 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
130	216	25-21-218-020-0000	11330 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
131	218	25-21-218-021-0000	11334 S. YALE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
132	219	25-21-218-022-0000	11336 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
133	221	25-21-218-023-0000	11342 S. YALE AVENUE	Vacant	Affected Parcel	Right-of-way
134	222	25-21-219-014-0000	11343 S. YALE AVENUE	Single-family Residential	Affected Parcel	Right-of-way
135	223	25-21-219-015-0000	11345 S. YALE AVENUE	Vacant	Affected Parcel	Right-of-way
136	224	25-21-219-016-0000	11347 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
137	225	25-21-219-017-0000	11351 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
138	227	25-21-219-018-0000	11355 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
139	228	25-21-219-036-0000	11352 S. WENTWORTH AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
140	229	25-21-219-037-0000	11358 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
141	230	25-21-501-001-0000	401 W. 111TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
142	233	25-21-228-001-0000	149 W. 114TH STREET	Vacant	Affected Parcel	Right-of-way
143	236	25-21-228-002-0000	135 W. 114TH STREET	Institution (Place of Worship)	Parcel with Building Displacement	Right-of-way
144	238	25-21-228-003-0000	131 W. 114TH STREET	Single-family Residential	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
145	240	25-21-228-046-0000	11424 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
146	242	25-21-228-047-0000	11424 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
147	245	25-21-228-023-0000	11426 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
148	248	25-21-230-035-0000	11439 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
149	249	25-21-230-034-0000	52 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
150	253	25-21-230-036-0000	52 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
151	255	25-21-230-019-0000	46 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
152	257	25-21-230-020-0000	44 W. 115TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
153	258	25-21-230-021-0000	42 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
154	259	25-21-230-022-0000	40 W. 115TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
155	260	25-21-406-029-0000	11502 S. LAFAYETTE AVENUE	Commercial	Parcel with Building Displacement	Right-of-way
156	263	25-21-407-001-0000	23 W. 115TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
157	265	25-21-407-002-0000	17 W. 115TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
158	266	25-21-407-003-0000	11 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
159	267	25-21-407-007-0000	11516 S. STATE STREET	Vacant	Affected Parcel	Right-of-way
160	269	25-21-407-029-0000	11514 S. STATE STREET	Vacant	Affected Parcel	Right-of-way
161	271	25-21-406-030-0000	11524 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Substation
162	285	25-22-300-009-0000	11549 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
163	286	25-22-304-047-0000	113 E. KENSINGTON AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
164	287	25-22-304-050-0000	11555 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
165	289	25-22-300-010-0000	11551 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
166	290	25-22-304-049-0000	11557 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
167	292	25-22-300-011-0000	11561 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
168	293	25-22-300-070-0000	11556 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
169	294	25-22-304-005-0000	11563 S. MICHIGAN AVENUE	Industrial	Affected Parcel	Parking for Michigan Avenue Station
170	295	25-22-300-012-0000	11563 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
171	296	25-22-304-006-0000	11565 S. MICHIGAN AVENUE	Industrial	Affected Parcel	Parking for Michigan Avenue Station
172	297	25-22-300-013-0000	11567 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
173	298	25-22-304-007-0000	11567 S. MICHIGAN AVENUE	Industrial	Parcel with Building Displacement	Parking for Michigan Avenue Station
174	299	25-22-300-069-0000	11562 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
175	300	25-22-300-014-0000	11569 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
176	301	25-22-300-015-0000	11571 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
177	302	25-22-300-071-0000	11557 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
178	303	25-22-300-021-0000	11572 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
179	304	25-22-300-016-0000	11573 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
180	305	25-22-300-022-0000	11574 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
181	306	25-22-300-017-0000	11575 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
182	307	25-22-304-008-0000	11579 S. MICHIGAN AVENUE	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
183	308	25-22-300-049-0000	11573 S. WABASH AVENUE	Commercial	Parcel with Building Displacement	Parking for Michigan Avenue Station
184	309	25-22-300-023-0000	11578 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
185	310	25-22-300-018-0000	11579 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
186	311	25-22-304-027-0000	120 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
187	313	25-22-304-028-0000	122 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
188	314	25-22-304-029-0000	124 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
189	315	25-22-304-030-0000	128 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
190	316	25-22-304-031-0000	130 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
191	317	25-22-304-032-0000	132 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
192	318	25-22-304-034-0000	136 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
193	319	25-22-304-033-0000	134 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
194	320	25-22-300-059-0000	11582 S. MICHIGAN AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
195	321	25-22-300-052-0000	38 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
196	322	25-22-300-051-0000	34 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
197	323	25-22-300-050-0000	32 E. 116TH STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
198	324	25-22-300-029-0000	20 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
199	325	25-22-300-028-0000	16 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
200	326	25-22-300-060-0000	11586 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
201	327	25-22-300-027-0000	12 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
202	328	25-22-300-026-0000	8 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
203	329	25-22-300-025-0000	11583 S. STATE STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
204	330	25-22-300-024-0000	11583 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
205	331	25-22-300-061-0000	11588 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
206	333	25-22-300-062-0000	11592 S. MICHIGAN AVENUE	Mixed-Use Commercial/Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
207	336	25-22-308-014-0000	151 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
208	338	25-22-308-015-0000	153 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
209	341	25-22-308-016-0000	155 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
210	343	25-22-308-017-0000	157 E. 116TH STREET	Multifamily Residential	Affected Parcel	Right-of-way
211	345	25-22-308-018-0000	159 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
212	346	25-22-308-019-0000	163 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
213	347	25-22-308-020-0000	165 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
214	354	25-22-311-013-0000	11631 S. INDIANA AVENUE	Public (City of Chicago)	Parcel with Building Displacement	Right-of-way
215	356	25-22-311-021-0000	11630 S. PRAIRIE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
216	357	25-22-311-024-0000	11632 S. PRAIRIE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
217	358	25-22-311-025-0000	11634 S. PRAIRIE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
218	363	25-22-316-001-0000	319 E. 117TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
219	368	25-22-316-035-0000	11712 S. Calumet Avenue	Commercial	Affected Parcel	Right-of-way
220	370	25-22-316-034-0000	11722 S. CALUMET AVENUE	Commercial	Affected Parcel	Right-of-way
221	371	25-22-316-030-0000	11726 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
222	372	25-22-316-031-0000	11728 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
223	373	25-22-317-013-0000	354 E. 118TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
224	374	25-22-317-014-0000	356 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
225	375	25-22-317-015-0000	358 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
226	376	25-22-317-030-0000	11742 S. FRONT AVENUE	Vacant	Affected Parcel	Right-of-way
227	377	25-22-317-031-0000	11810 S. CALUMET AVENUE	Industrial	Affected Parcel	Right-of-way
228	378	25-22-317-032-0000	11810 S. CALUMET AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
229	379	25-22-317-033-0000	375 E. 118TH STREET	Industrial	Affected Parcel	Right-of-way
230	380	25-22-317-035-0000	11800 S. FRONT AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
231	381	25-22-501-005-0000	360 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
232	382	25-22-325-001-0000	370 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
233	383	25-22-400-026-0000	11600 S. COTTAGE GROVE AVENUE	Industrial	Affected Parcel	Right-of-way
234	384	25-22-400-027-0000	11600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
235	385	25-27-108-009-0000	11900 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
236	386	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
237	388	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
238	389	25-26-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
239	390	25-26-300-017-0000	12807 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
240	391	25-26-300-015-0000	12813 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
241	392	25-26-300-014-0000	12817 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
242	393	25-27-301-013-0000	310 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
243	394	25-27-301-012-0000	325 E. 127TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
244	395	25-27-301-011-0000	350 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
245	396	25-27-301-010-0000	360 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
246	397	25-22-401-034-0000	1355 E. 121ST STREET	Transportation (railroad)	Affected Parcel	120th Street Yard
247	398	25-27-200-007-0000	12256 S. COTTAGE GROVE AVENUE	Industrial	Parcel with Building Displacement	120th Street Yard
248	399	25-27-200-009-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
249	400	25-27-200-010-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
250	401	25-27-200-012-0000	12534 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
251	402	25-27-200-013-0000	12546 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
252	403	25-27-503-001-0000	12320 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
253	404	25-27-200-004-0000	12500 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
254	405	25-27-400-003-0000	12606 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
255	406	25-27-400-002-0000	12600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
256	407	25-27-400-007-0000	12614 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
257	408	25-27-400-005-0000	12608 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
258	409	25-27-400-006-0000	12610 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
259	410	25-27-301-007-0000	300 E. 127TH STREET	Utility (MWRD)	Affected Parcel	120th Street Yard
260	411	25-27-400-009-0000	12618 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard

Note - The following parcels are defined as easements and are not included in the table: Map ID 1-21, 24, 276, 282, 288, 291, 312. Publicly owned parcels that include a roadway are classified as “easements” for this analysis because CTA would require a use agreement with the public entity.

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
1	25	25-09-400-046-0000	341 W. 99TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
2	26	25-09-500-002-0000	351 W. 99TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
3	30	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
4	39	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
5	48	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
6	61	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
7	65	25-09-424-060-0000	340 W. 103RD STREET	Vacant	Affected Parcel	Bus Turnaround for 103rd Street Station
8	67	25-16-105-034-0000	405 W. 103RD STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
9	69	25-16-105-035-0000	403 W. 103RD STREET	Commercial	Parcel with Building Displacement	Right-of-way
10	70	25-16-105-033-0000	400 W. 103RD PLACE	Vacant	Affected Parcel	Right-of-way
11	73	25-16-107-030-0000	429 W. 103RD PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
12	74	25-16-107-010-0000	401 W. 103RD PLACE	Vacant	Affected Parcel	Parking for 103rd Street Station
13	76	25-16-107-031-0000	428 W. 104TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
14	77	25-16-113-024-0000	401 W. 104TH STREET	Commercial	Affected Parcel	Right-of-way
15	79	25-16-113-028-0000	10413 S. EGGLESTON AVENUE	Commercial	Affected Parcel	Right-of-way
16	81	25-16-113-029-0000	405 W. 104TH STREET	Commercial	Parcel with Building Displacement	Right-of-way
17	83	25-16-113-031-0000	400 W. 105TH STREET	Vacant	Affected Parcel	Right-of-way
18	85	25-16-121-024-0000	411 W. 105TH STREET	Commercial	Affected Parcel	Right-of-way
19	86	25-16-210-001-0000	317 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
20	88	25-16-121-025-0000	10514 S. STEWART AVENUE	Commercial	Affected Parcel	Right-of-way
21	89	25-16-500-007-0000	360 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
22	90	25-16-210-040-0000	232 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
23	91	25-16-210-039-0000	232 W 105TH PLACE	Public (City of Chicago)	Affected Parcel	Substation
24	92	25-16-210-038-0000	230 W. 105TH PLACE	Public (City of Chicago)	Affected Parcel	Substation
25	93	25-16-121-031-0000	10520 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
26	94	25-16-121-032-0000	10528 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
27	95	25-16-121-022-0000	10530 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
28	98	25-16-121-027-0000	10548 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
29	101	25-16-121-028-0000	10552 S. STEWART AVENUE	Industrial	Affected Parcel	Right-of-way
30	102	25-16-121-029-0000	10558 S. STEWART AVENUE	Industrial	Affected Parcel	Right-of-way
31	105	25-16-129-030-0000	10638 S. STEWART AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
32	109	25-16-129-031-0000	10632 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
33	111	25-16-129-029-0000	410 W. 107TH STREET	Vacant	Affected Parcel	Right-of-way
34	114	25-16-129-028-0000	400 W. 107TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
35	116	25-16-307-025-0000	405 W. 107TH STREET	Vacant	Affected Parcel	Right-of-way
36	118	25-16-307-022-0000	400 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
37	121	25-16-315-025-0000	405 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
38	124	25-16-315-026-0000	405 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
39	127	25-16-315-027-0000	410 W. 109TH STREET	Vacant	Affected Parcel	Right-of-way
40	130	25-16-315-024-0000	410 W. 109TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
41	135	25-16-320-011-0000	409 W. 109TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
42	138	25-16-320-022-0000	410 W. 109TH STREET	Industrial	Affected Parcel	Right-of-way
43	140	25-16-320-023-0000	412 W. 109TH STREET	Industrial	Affected Parcel	Right-of-way
44	144	25-16-329-006-0000	401 W. 110TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
45	147	25-16-329-007-0000	11026 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
46	155	25-16-329-009-0000	11037 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
47	156	25-16-329-008-0000	11041 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
48	158	25-16-329-005-0000	402 W. 111TH STREET	Vacant	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
49	159	25-21-107-009-0000	403 W. 111TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
50	162	25-21-107-007-0000	405 W. 111TH STREET	Commercial	Parcel with Building Displacement	Right-of-way
51	163	25-21-107-008-0000	401 W. 111TH STREET	Commercial	Affected Parcel	Right-of-way
52	164	25-21-107-025-0000	11114 S. STEWART AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
53	165	25-21-107-026-0000	11116 S. STEWART AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
54	167	25-21-107-027-0000	11118 S. STEWART AVENUE	Commercial	Parcel with Building Displacement	Right-of-way
55	168	25-21-107-028-0000	11124 S. STEWART AVENUE	Commercial	Parcel with Building Displacement	Right-of-way
56	170	25-21-107-029-0000	11128 S. STEWART AVENUE	Commercial	Affected Parcel	Right-of-way
57	171	25-21-107-030-0000	11130 S. STEWART AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
58	172	25-21-107-031-0000	11140 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
59	175	25-21-107-032-0000	11144 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
60	176	25-21-107-033-0000	11148 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
61	177	25-21-107-034-0000	11150 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
62	178	25-21-107-037-0000	406 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
63	180	25-21-501-002-0000	501 E. 112TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
64	185	25-21-208-001-0000	11201 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
65	188	25-21-208-002-0000	11225 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
66	190	25-21-212-001-0000	11229 S. STEWART AVENUE	Single-family Residential	Affected Parcel	Right-of-way
67	191	25-21-212-002-0000	11231 S. STEWART AVENUE	Single-family Residential	Affected Parcel	Right-of-way
68	193	25-21-212-009-0000	341 W. 112TH PLACE	Industrial	Parcel with Building Displacement	Right-of-way
69	197	25-21-212-017-0000	340 W. 113TH STREET	Mixed-Use Commercial/Residential	Parcel with Building Displacement	Right-of-way
70	200	25-21-212-018-0000	338 W. 113TH STREET	Vacant	Affected Parcel	Right-of-way
71	203	25-21-216-022-0000	335 W. 113TH STREET	Vacant	Affected Parcel	Right-of-way
72	208	25-21-217-004-0000	11325 S. HARVARD AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
73	213	25-21-217-005-0000	11327 S. HARVARD AVENUE	Single-family Residential	Affected Parcel	Right-of-way
74	215	25-21-217-027-0000	11334 S. PRINCETON AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
75	217	25-21-217-028-0000	11336 S. PRINCETON AVENUE	Single-family Residential	Affected Parcel	Right-of-way
76	220	25-21-217-029-0000	11340 S. PRINCETON AVENUE	Single-family Residential	Affected Parcel	Right-of-way
77	226	25-21-218-014-0000	233 W. 113TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
78	231	25-21-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
79	232	25-21-226-008-0000	235 W. 114TH STREET	Single-family Residential	Affected Parcel	Right-of-way
80	234	25-21-227-001-0000	11411 S. YALE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
81	235	25-21-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
82	237	25-21-227-002-0000	11413 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
83	239	25-21-227-012-0000	11420 S. WENTWORTH AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
84	241	25-21-227-013-0000	11422 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
85	243	25-21-228-042-0000	11423 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
86	244	25-21-228-015-0000	11433 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
87	246	25-21-228-016-0000	11437 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
88	247	25-21-228-043-0000	11437 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
89	250	25-21-228-044-0000	124 W. 115TH STREET	Single-family Residential	Affected Parcel	Right-of-way
90	251	25-21-228-045-0000	120 W. 115TH STREET	Single-family Residential	Affected Parcel	Right-of-way
91	252	25-21-228-034-0000	116 W. 115TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
92	254	25-21-228-037-0000	112 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
93	256	25-21-228-038-0000	106 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
94	261	25-21-405-008-0000	103 W. 115TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
95	262	25-21-406-001-0000	11513 S. PERRY AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
96	264	25-21-406-055-0000	11515 S. PERRY AVENUE	Vacant	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
97	268	25-21-406-030-0000	11524 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Substation
98	270	25-21-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
99	271	25-21-406-030-0000	11524 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Substation
100	272	25-21-407-008-0000	11535 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
101	273	25-21-406-031-0000	11528 S. LAFAYETTE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
102	274	25-21-501-007-0000	500 W. 113TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
103	275	25-21-406-058-0000	11530 S. LAFAYETTE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
104	277	25-21-407-008-0000	11535 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
105	278	25-21-407-008-0000	11535 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
106	279	25-21-407-009-0000	11537 S. LAFAYETTE AVENUE	Vacant	Affected Parcel	Right-of-way
107	280	25-21-407-010-0000	11541 S. LAFAYETTE AVENUE	Single-family Residential	Affected Parcel	Right-of-way
108	281	25-21-407-030-0000	11512 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
109	283	25-21-407-031-0000	11546 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
110	284	25-21-407-032-0000	11548 S. STATE STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
111	285	25-22-300-009-0000	11549 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
112	289	25-22-300-010-0000	11551 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
113	292	25-22-300-011-0000	11561 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
114	293	25-22-300-070-0000	11556 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
115	295	25-22-300-012-0000	11563 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
116	297	25-22-300-013-0000	11567 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
117	299	25-22-300-069-0000	11562 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
118	300	25-22-300-014-0000	11569 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
119	301	25-22-300-015-0000	11571 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
120	302	25-22-300-071-0000	11557 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
121	303	25-22-300-021-0000	11572 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
122	304	25-22-300-016-0000	11573 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
123	305	25-22-300-022-0000	11574 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
124	306	25-22-300-017-0000	11575 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
125	308	25-22-300-049-0000	11573 S. WABASH AVENUE	Commercial	Parcel with Building Displacement	Parking for Michigan Avenue Station
126	309	25-22-300-023-0000	11578 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
127	310	25-22-300-018-0000	11579 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
128	320	25-22-300-059-0000	11582 S. MICHIGAN AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
129	321	25-22-300-052-0000	38 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
130	322	25-22-300-051-0000	34 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
131	323	25-22-300-050-0000	32 E. 116TH STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
132	324	25-22-300-029-0000	20 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
133	325	25-22-300-028-0000	16 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
134	326	25-22-300-060-0000	11586 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
135	327	25-22-300-027-0000	12 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
136	328	25-22-300-026-0000	8 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
137	329	25-22-300-025-0000	11583 S. STATE STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
138	330	25-22-300-024-0000	11583 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
139	331	25-22-300-061-0000	11588 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
140	332	25-22-304-009-0000	11583 S. MICHIGAN AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
141	333	25-22-300-062-0000	11592 S. MICHIGAN AVENUE	Mixed-Use Commercial/Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
142	334	25-22-304-010-0000	11589 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Right-of-way
143	335	25-22-308-001-0000	11601 S. MICHIGAN AVENUE	Institution (Place of Worship)	Parcel with Building Displacement	Right-of-way
144	337	25-22-308-002-0000	11603 S. MICHIGAN AVENUE	Institution (Place of Worship)	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
145	339	25-22-308-003-0000	11607 S. MICHIGAN AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
146	340	25-22-308-010-0000	115 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
147	342	25-22-308-011-0000	117 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
148	344	25-22-308-012-0000	119 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
149	348	25-22-308-024-0000	120 E. 117TH STREET	Vacant	Affected Parcel	Right-of-way
150	349	25-22-308-025-0000	124 E. 117TH STREET	Vacant	Affected Parcel	Right-of-way
151	350	25-22-308-026-0000	126 E. 117TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
152	351	25-22-308-027-0000	128 E. 117TH STREET	Single-family Residential	Affected Parcel	Right-of-way
153	352	25-22-308-028-0000	132 E. 117TH STREET	Single-family Residential	Affected Parcel	Right-of-way
154	353	25-22-308-029-0000	132 E. 117TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
155	355	25-22-308-030-0000	134 E. 117TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
156	359	25-22-310-038-0000	11700 S. INDIANA AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
157	360	25-22-315-001-0000	11705 S. INDIANA AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
158	361	25-22-315-003-0000	11707 S. INDIANA AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
159	362	25-22-315-004-0000	11709 S. INDIANA AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
160	364	25-22-315-016-0000	11714 S. PRAIRIE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
161	365	25-22-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
162	366	25-22-315-017-0000	11716 S. PRAIRIE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
163	367	25-22-316-013-0000	11763 S. PRAIRIE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
164	368	25-22-316-035-0000	11712 S. Calumet Avenue	Commercial	Affected Parcel	Right-of-way
165	369	25-22-500-001-0000	100 E. 116TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
166	371	25-22-316-030-0000	11726 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
167	372	25-22-316-031-0000	11728 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
168	373	25-22-317-013-0000	354 E. 118TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
169	374	25-22-317-014-0000	356 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
170	375	25-22-317-015-0000	358 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
171	376	25-22-317-030-0000	11742 S. FRONT AVENUE	Vacant	Affected Parcel	Right-of-way
172	377	25-22-317-031-0000	11810 S. CALUMET AVENUE	Industrial	Affected Parcel	Right-of-way
173	378	25-22-317-032-0000	11810 S. CALUMET AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
174	379	25-22-317-033-0000	375 E. 118TH STREET	Industrial	Affected Parcel	Right-of-way
175	380	25-22-317-035-0000	11800 S. FRONT AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
176	381	25-22-501-005-0000	360 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
177	382	25-22-325-001-0000	370 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
178	383	25-22-400-026-0000	11600 S. COTTAGE GROVE AVENUE	Industrial	Affected Parcel	Right-of-way
179	384	25-22-400-027-0000	11600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
180	385	25-27-108-009-0000	11900 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
181	386	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
182	388	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
183	389	25-26-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
184	390	25-26-300-017-0000	12807 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
185	391	25-26-300-015-0000	12813 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
186	392	25-26-300-014-0000	12817 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
187	393	25-27-301-013-0000	310 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
188	394	25-27-301-012-0000	325 E. 127TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
189	395	25-27-301-011-0000	350 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
190	396	25-27-301-010-0000	360 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
191	397	25-22-401-034-0000	1355 E. 121ST STREET	Transportation (railroad)	Affected Parcel	120th Street Yard
192	398	25-27-200-007-0000	12256 S. COTTAGE GROVE AVENUE	Industrial	Parcel with Building Displacement	120th Street Yard

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
193	399	25-27-200-009-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
194	400	25-27-200-010-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
195	401	25-27-200-012-0000	12534 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
196	402	25-27-200-013-0000	12546 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
197	403	25-27-503-001-0000	12320 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
198	404	25-27-200-004-0000	12500 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
199	405	25-27-400-003-0000	12606 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
200	406	25-27-400-002-0000	12600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
201	407	25-27-400-007-0000	12614 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
202	408	25-27-400-005-0000	12608 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
203	409	25-27-400-006-0000	12610 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
204	410	25-27-301-007-0000	300 E. 127TH STREET	Utility (MWRD)	Affected Parcel	120th Street Yard
205	411	25-27-400-009-0000	12618 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard

Note - The following parcels are defined as easements and are not included in the table: Map ID 1-19, 21-24, 312. Publicly owned parcels that include a roadway are classified as “easements” for this analysis because CTA would require a use agreement with the public entity.

Proyecto de Expansión de la Línea Roja (RLE)
Preguntas frecuentes

¿Qué podría sucederle a mi propiedad?
Como parte de la planificación considerable para el proyecto de RLE, CTA determinó que ***podría*** ser necesario adquirir ciertas propiedades para implementar el proyecto. ***Debido a que el proyecto todavía se encuentra en la etapa de planificación y CTA todavía está evaluando las opciones este y oeste, no se conoce en este momento si será necesario adquirir su propiedad.*** En algunos casos, podría ser necesario adquirir su propiedad independientemente de si se selecciona la opción este u oeste. CTA ofrecerá más información cuando se seleccione la opción preferida. A medida que avanza el proyecto, CTA realizará análisis adicionales de ingeniería, los cuales permitirán que se perfeccionen aun más las necesidades de las propiedades e identificará maneras para minimizar los impactos sobre las propiedades y concluir cuáles propiedades tienen que adquirirse para el proyecto de RLE. Si su propiedad es necesaria para el proyecto, podría ser rehabilitada y usada para rieles, estaciones, estacionamiento o instalaciones complementarias.

¿Cuáles son mis derechos como dueño de una propiedad?
Si CTA determina en última instancia que es necesario comprar propiedades privadas para el proyecto de RLE, CTA estaría obligada a seguir las guías establecidas en la Ley Uniforme de Asistencia para la Reubicación y Políticas de Adquisición de Propiedad Inmueble de 1970, según enmendada, y los reglamentos del estado. Lo que esto significa es que CTA tratará a los dueños de propiedades de manera justa e intentará llegar a acuerdos conjuntos para la adquisición de las propiedades.

Puede leer más sobre sus derechos conforme a las leyes federales correspondientes aquí:
http://www.fhwa.dot.gov/real_estate/uniform_act/acquisition/real_property.cfm
http://www.fhwa.dot.gov/real_estate/publications/your_rights/rights2014.pdf

¿Qué tipo de remuneración recibiré?
Si CTA determina en última instancia que es necesario comprar propiedades privadas para el proyecto de RLE, las leyes federales exigen que se ofrezca comprar cada propiedad por una cantidad que no sea menor que el valor justo del mercado, según lo determine una tasación independiente. En algunas circunstancias, si las tasaciones actuales son por una cantidad menor que el precio de compra original de la propiedad, puede que el dueño califique para una remuneración equivalente al precio de compra original.

Además, CTA tiene que proporcionar asistencia financiera y servicios de reubicación, según lo exigen las normas federales, para los dueños de propiedades, así como los inquilinos comerciales y residenciales que tengan que mudarse debido al proyecto de RLE.

¿Cómo determinará CTA el precio de compra de mi propiedad?
Si CTA determina que es necesario comprar su propiedad para el proyecto de RLE, está obligada a contratar a un tasador independiente para inspeccionar la propiedad y determinar el valor justo del mercado. En ese caso, usted, o el representante que usted designe, será invitado a acompañar al tasador cuando este inspeccione su propiedad. Usted o su representante podría proporcionar información sobre las mejoras a la propiedad y cualquier característica especial que podría afectar el valor de la propiedad para asegurarse de que esta información se considere en la tasación.

¿Qué sucedería si no soy dueño de la propiedad, pero alquilo un apartamento o arriendo un espacio para mi negocio?
Los que no sean dueños y estén arrendando una vivienda o propiedad comercial y tengan que mudarse por motivo del proyecto de RLE también están protegidos por la Ley Uniforme de Asistencia para la Reubicación y Políticas de Adquisición de Propiedad Inmueble de 1970, según enmendada. De ser necesario, CTA proporcionará asistencia financiera y servicios de reubicación para ayudar a estos residentes y dueños de negocios a encontrar una nueva vivienda o ubicación para su negocio.

Si CTA adquiere mi propiedad, ¿me ayudará con la mudanza?
Si tiene que mudarse, un agente de reubicación se comunicará con usted, contestará sus preguntas y le proporcionará información adicional sobre los servicios de asesoramiento de ayuda para la reubicación y si califica para pagos de reubicación. La meta de los agentes de reubicación es facilitar una transición sin problemas a la nueva vivienda o ubicación para el negocio.

¿Qué es lo próximo que sucederá con el proyecto de RLE? ¿Cómo se tomará la decisión entre la opción este y oeste?
CTA publicará un estudio ambiental, conocido como el borrador de Declaración de Impacto Ambiental (DIA), a principios de octubre. Luego CTA llevará a cabo una audiencia pública en el área del proyecto para proporcionar más información y recabar opiniones sobre el proyecto, sus impactos y posibles medidas de mitigación. Con base en las opiniones del público, la revisión ambiental y la disponibilidad de fondos para llevar a cabo más análisis de ingeniería, CTA espera anunciar la opción seleccionada (la opción este u oeste) en el 2017. CTA atenderá los comentarios públicos sobre el borrador de la DIA en la DIA final, la cual también formalizará la opción seleccionada, sus impactos y medidas de mitigación. Según la disponibilidad de fondos y aprobaciones federales, se espera que se publique la DIA final a finales del 2018. Durante el proceso de redacción de la DIA final, CTA tiene previsto solicitar a Federal Transit Administration (FTA) el ingreso a la fase de desarrollo del proyecto para obtener fondos federales para la construcción del proyecto conforme al programa federal competitivo "New Starts."

¿Cuándo me notificará CTA sobre su intención de comprar mi propiedad?
En este momento, CTA no tiene previsto hacer gestiones para adquirir propiedades privadas para el proyecto de RLE hasta que termine la revisión ambiental (se espera que termine a finales del 2018) y se obtengan los fondos para el proyecto. Entonces CTA notificaría a los dueños de las propiedades afectadas sobre su intención de compra.

¿A quién debo llamar si tengo más preguntas sobre la posible adquisición de propiedades?
Comuníquese con el departamento de servicio al cliente de CTA por teléfono al 1-888-YOUR-CTA (1-888-968-7282) o correo electrónico a RedExtension@transitchicago.com.

¿Cómo puedo obtener más información sobre el proyecto de RLE?
Puede obtener más información sobre el proyecto de RLE y encontrar actualizaciones sobre la situación del proceso en nuestra página web: www.transitchicago.com/RedEIS. Para unirse a la lista de contactos del proyecto y recibir actualizaciones sobre el proyecto de RLE, audiencias públicas y la situación de las revisiones ambientales, envíe un correo electrónico a RedExtension@transitchicago.com.

More Relocation Information

Business

A business that is relocated as a result of the project may be entitled to benefits such as:

1. *Moving and Related Costs*
2. *Reestablishment Costs*
3. *Fixed Payment*

Statements applicable to all categories and benefits listed

Please keep in mind that there are specific benefit requirements that must be met to receive any of the funds mentioned above. Your assigned relocation agent will assist you to fully understand the payments and requirements.

No one may be displaced until adequate housing has been made available to them.

All persons required to move personal property, their home, or business must be given at least 90 days to vacate.

Your Local Transit Agency will establish an appeal process should you be aggrieved by a denial of benefits or if you feel the benefits are inadequate.

A message from the FTA and your local transit agency

It is sometimes necessary to acquire private property and displace persons and businesses in order to build a transit facility that will benefit the entire community. However, we will work with you to minimize the inevitable disruption that this causes. Please feel free to contact the agency and person listed below should you have any further questions.

Revised rules for the Uniform Act were published in the Federal Register on January 4, 2005. The rules are reprinted each year in the Code of Federal Regulations, Title 49, Part 24. All Federal, State and local government agencies, as well as others receiving Federal financial assistance for public programs and projects, that require the acquisition of real property, must comply with the policies and provisions set forth in the Uniform Act and the regulation.

For further information, please contact:

CTA Customer Service
1-888-YOUR-CTA
(1-888-968-7282)

RedExtension@transitchicago.com

FEDERAL TRANSIT ADMINISTRATION

FTA U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL TRANSIT ADMINISTRATION

SEE THE BACK PANEL OF THIS BROCHURE FOR INFORMATION ON CONTACTING YOUR LOCAL AGENCY.

GENERAL INFORMATION

Your local transit agency may need to purchase property from you with funding from the Federal Transit Administration (FTA) in order to benefit the general public. To assure fair and consistent treatment of all persons, the FTA will require your local transit agency to follow the Uniform Relocation Assistance and Real Property Policies Act of 1970, as amended. The Uniform Act is a law passed by Congress to promote uniformity and fairness when a local transit agency must acquire property or displace persons. There are two main parts of this process:

1. *Acquisition, which is the purchase of your real estate.*
2. *Relocation which offers additional benefits should you or your business be displaced.*

Acquisition of Real Property

The purchase of real estate by a transit agency begins with the appraisal of your property. An appraiser will inspect your property to determine the value. The property owner should accompany the appraiser while making this inspection. A second appraiser will then review and approve the work of the first appraiser and will recommend a value to the local transit agency.

You should then receive a written offer to purchase your property. You will have sufficient time to consider the offer or make any counter offers that you believe is fair.

If you elect to sell your property to the local transit agency, you will be paid the full amount less any encumbrances (mortgage, lien, etc.) owed on that property. Possession of vacant property may be taken the day of closing by the local transit agency; possession of occupied property will be at an agreed future date.

Relocation

Advisory Assistance will be offered to every displaced person. A Relocation Agent will visit you to explain all of the benefits and services that you may be eligible to receive.

Below is a very brief outline of the various types of financial benefits available if you or your business are required to move.

Residential Homeowner Occupants, are those that have owned and occupied their home for at least 180 days. Typical benefits include:

1. *Moving Costs*
2. *Price Differential Payment*
3. *Increased Mortgage Interest*
4. *Incidental Closing Costs*

90 day Occupant or Tenant, is either a tenant or a homeowner that has occupied their home for less than 180 days but at least 90 days. Relocation benefits include:

1. *Moving Costs*
2. *Rental Assistance Payment/Down Payment*

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Via Certified Mail, Regular Mail, and Hand Delivery
Certified Mail ID: XXXXXXXXX

[Insert Name]
[Insert Address]
[Insert, City, State, Zip]

Dear Property Owner:

We are writing to share information about a proposed Chicago Transit Authority (CTA) project known as the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south from the 95th Street Terminal to 130th Street.

Federal law requires that all major projects seeking federal funding identify, disclose, and mitigate for any adverse environmental impacts of a proposed project. In compliance with these requirements and to become eligible for federal funding, the Federal Transit Administration and CTA will be publishing a Draft Environmental Impact Statement (EIS) in early October. The Draft EIS provides a comprehensive identification of potential environmental impacts that could result from this project, including potential property impacts.

Through this extensive planning, CTA has determined that it ***may*** be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured. The purpose of this letter is to let you know of the proposed RLE Project, its timeline and next steps, and to provide contact information to answer any preliminary questions you may have.

This letter is not a formal action to acquire your property, nor a letter of intent or offer to purchase your property. The information in this letter is not intended to affect your present ownership, management or control of your property in any way.

The property referenced below has been identified by CTA as one that **may** be necessary for the construction of the RLE Project if the CTA moves forward with **[the East Option, the West Option, either the East or West Option]**. ***Because the CTA is still evaluating the two options, it is not known at this time whether acquisition of your property may be***

required. CTA will provide additional communication when the selected option has been decided.

The public records indicate that you are the owner of, or have an interest in, this property.

Owner of Record: XXXXXX
Property Address: XXXXXXXX
Property Identification Number (PIN): XXXXXXX
Potential Impact: [East Option, West Option, Both East and West Options]
CTA Parcel ID: XXX

Preferred Alignment Description: The preferred alignment of the proposed rail extension would run along elevated tracks south along I-94 from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street.

CTA is currently considering two options of this alignment: the East Option and the West Option. The East Option would run to the east of the UPRR tracks between 99th Street and 118th Street, and the West Option would run to the west of the UPRR tracks in that segment. The alignment would be the same for the two options from 95th Street to 99th Street and from 118th Street to 130th Street. As noted above, CTA has not yet chosen one of the two options of the preferred alignment.

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. What this means is that CTA will treat property owners fairly and will seek cooperative settlements of property acquisitions.

Based on public feedback, environmental review, and funding availability, CTA expects to announce the selected option (either the East Option or the West Option) in 2017. After that and over the next few years, CTA will move forward with additional engineering work, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018, the earliest that the RLE Project is expected to begin construction would be in 2022, and service is anticipated to start in 2026. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

Properties that **may** be affected by the East or West Option between XXX Street and XXX Street are invited to attend an informational open house meeting on DATE at TIME at LOCATION to discuss the RLE Project and what it could mean for your property. If you are unable to attend that meeting, you are welcome to join us at any one of the three meetings that will be held:

- **Tuesday, October 11** from 6:00 to 8:00 PM at Palmer Park, 201 E. 111th Street, Chicago (95th Street to 111th Street)

- **Wednesday, October 12** from 5:30 to 7:30 PM at Fenger Academy High School, 11220 S. Wallace Avenue, Chicago (111th Street to 115th Street)
- **Thursday, October 13** from 5:30 to 7:30 PM at Pullman Public Library, 11001 S. Indiana Avenue, Chicago (115th Street to 130th Street)

CTA will also be holding a public hearing on the Draft EIS in the coming weeks. During that meeting you will be able to learn more about the Draft EIS and findings from the environmental analysis, including impacts to properties. You will receive additional information about the public hearing in a separate mailing.

CTA's relocation liaison will be in your neighborhood visiting potentially displaced properties to discuss the relocation process and answer questions during the week of October 3, 2016.

Please contact CTA customer service at 1-888-YOUR-CTA (888) 968-7282 or redextension@transitchicago.com if you have any questions or would like to discuss this project further. If you are not the current property owner, please contact CTA customer service at the information above.

We welcome the opportunity to answer any questions you may have regarding the RLE Project. The CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago.

Sincerely,

Carole Morey
Chief Planning Officer
Chicago Transit Authority

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Via Certified Mail, Regular Mail, and Hand Delivery
Certified Mail ID: XXXXXXXXX

Current Resident/Lessee
[Insert Address]
[Insert, City, State, Zip]

Dear Current Resident/Lessee:

We are writing to share information about a proposed Chicago Transit Authority (CTA) project known as the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south from the 95th Street Terminal to 130th Street.

Federal law requires that all major projects seeking federal funding identify, disclose, and mitigate for any adverse environmental impacts of a proposed project. In compliance with these requirements and to become eligible for federal funding, the Federal Transit Administration and CTA will be publishing a Draft Environmental Impact Statement (EIS) in early October. The Draft EIS provides a comprehensive identification of potential environmental impacts that could result from this project, including potential property impacts.

Through this extensive planning, CTA has determined that it ***may*** be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured. The purpose of this letter is to let you know of the proposed RLE Project, its timeline and next steps, and to provide contact information to answer any preliminary questions you may have. The information in this letter is not intended to affect your present occupancy in any way.

The property referenced below has been identified by CTA as one that **may** be necessary for the construction of the RLE Project if the CTA moves forward with **[the East Option, the West Option, either the East or West Option]**. ***Because CTA is still evaluating the two options, it is not known at this time whether acquisition of this property may be required.*** CTA will provide additional communication when the selected option has been decided.

The public records indicate that you occupy this property.

Owner of Record: XXXXXX
Property Address: XXXXXXXX
Property Identification Number (PIN): XXXXXXX
Potential Impact: [East Option, West Option, Both East and West Options]
CTA Parcel ID: XXX

Preferred Alignment Description: The preferred alignment of the proposed rail extension would run along elevated tracks south along I-94 from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street.

CTA is currently considering two options of this alignment: the East Option and the West Option. The East Option would run to the east of the UPRR tracks between 99th Street and 118th Street, and the West Option would run to the west of the UPRR tracks in that segment. The alignment would be the same for the two options from 95th Street to 99th Street and from 118th Street to 130th Street. As noted above, CTA has not yet chosen one of the two options of the preferred alignment.

In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, along with state regulations. What this means is that CTA will treat property owners fairly and will seek cooperative settlements of property acquisitions.

Based on public feedback, environmental review, and funding availability to conduct additional engineering, CTA expects to announce the selected option (either the East Option or the West Option) in 2017. After that and over the next few years, CTA will move forward with additional engineering work, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018, the earliest that the RLE Project is expected to begin construction would be in 2022, and service is anticipated to start in 2026. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS. Again, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.

Properties that **may** be affected by the East or West Option between XXX Street and XXX Street are invited to attend an informational open house meeting on DATE at TIME at LOCATION to discuss the RLE Project and what it could mean for you. If you are unable to attend that meeting, you are welcome to join us at any one of the three meetings that will be held:

- **Tuesday, October 11** from 6:00 to 8:00 PM at Palmer Park, 201 E. 111th Street, Chicago (95th Street to 111th Street)
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- **Thursday, October 13** from 5:30 to 7:30 PM at Pullman Public Library, 11001 S. Indiana Avenue, Chicago (115th Street to 130th Street)

CTA will also be holding a public hearing on the Draft EIS in the coming weeks. During that meeting you will be able to learn more about the Draft EIS and findings from the environmental analysis, including impacts to properties. You will receive additional information about the public hearing in a separate mailing.

CTA's relocation liaison will be in your neighborhood visiting potentially displaced properties to discuss the relocation process and answer questions during the week of October 3, 2016.

Please contact CTA customer service at 1-888-YOUR-CTA (888) 968-7282 or redextension@transitchicago.com if you have any questions or would like to discuss this project further.

We welcome the opportunity to answer any questions you may have regarding the RLE Project. The CTA looks forward to working with you on this exciting project, which will be a great benefit to the community, surrounding neighborhoods, and the City of Chicago.

Sincerely,

Carole Morey
Chief Planning Officer
Chicago Transit Authority

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Eleanor Esser Gorski
City of Chicago
Department of Planning and Development
121 N. LaSalle Street
Room 1101
Chicago, IL 60602

Re: CTA Red Line Extension Project
Project-Related Impacts to City-Owned Properties

Dear Ms. Gorski:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency under a separate cover.

CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

CTA has determined that City-owned properties would be affected by implementation of either the East or West Option. The table included with this letter provides information about the potentially affected properties, including whether they would be affected by either the East or West Option, or, in some cases, both options. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project. After additional engineering has been completed and CTA has selected a single option, CTA will work with the City regarding use of these parcels.

At this stage of project planning and as detailed in the attached table, CTA has determined that 41 parcels would be affected by the East Option, and 25 parcels would be affected by the West Option; 13 of these parcels would be affected whether the East or West Option is selected. The Streets and Sanitation building at 11631 S. Indiana Avenue would be displaced if the East Option is selected to accommodate the aerial structure and piers.

The East Option would impact Wendell Smith Park and Block Park and the West Option would impact Fernwood Parkway south of I-57. The East Option track structure would run through the northwestern corner of Wendell Smith Park and the western parcel of Block Park. The West Option track structure would run through Fernwood Parkway south of I-57. CTA has been coordinating with the Chicago Park District regarding impacts to these parks; analysis and coordination will be summarized in the Draft EIS. Block Park is owned by the City; CTA has been coordinating with OEMC regarding impacts to the communications tower located within the park.

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

cc: Erika Sellke

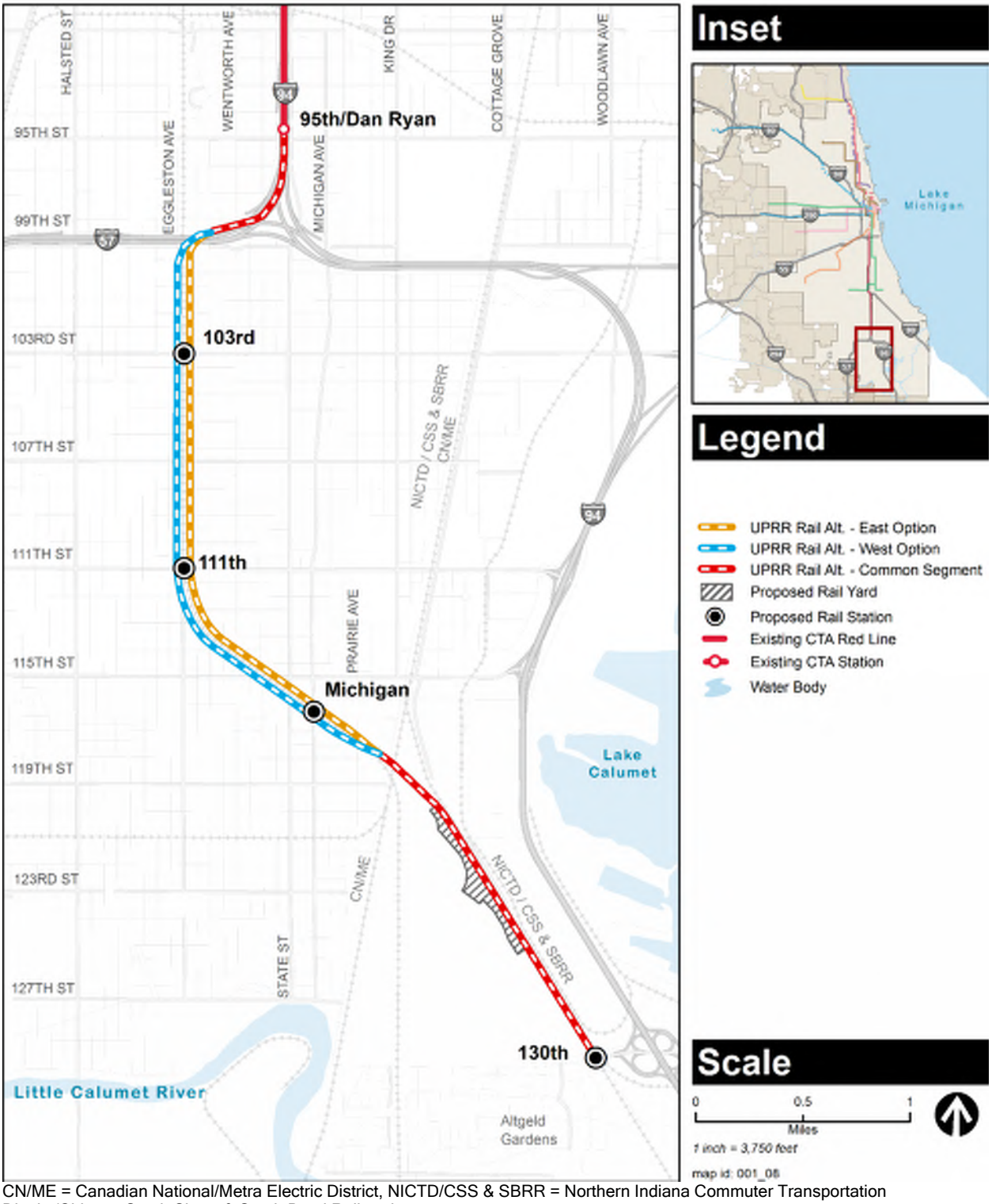

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Red Line Extension Project - Union Pacific Railroad Alternative Options

The following City-owned parcels would be affected by either the East or West Option of the Red Line Extension Project.

Displaced Parcel Address	Parcel Identification Number	Option	Notes
348 W. 101ST PLACE	25-09-416-018-0000	East Option	Vacant parcel
401 W. 103RD STREET	25-16-105-036-0000	East Option	Vacant parcel
329 W. 103RD STREET	25-16-200-001-0000	East Option	Western parcel of Block Park. CTA has been coordinating with the Chicago Park District regarding impacts to this parcel. CTA has also been coordinating with OEMC regarding impacts to the communications tower located within the park.
429 W. 103RD PLACE	25-16-107-030-0000	West Option	Vacant parcel
428 W. 104TH STREET	25-16-107-031-0000	West Option	Vacant parcel
360 W. 104TH PLACE	25-16-500-005-0000	East Option	Vacant parcel
360 W. 105TH STREET	25-16-500-006-0000	East Option	Vacant parcel
346 W. 104TH PLACE	25-16-206-095-0000	East Option	The building on this parcel would not be affected; the CTA aerial structure would pass over the southeast portion of this parcel.
317 W. 105TH STREET	25-16-210-001-0000	Both East and West Options	Vacant parcel
360 W. 105TH STREET	25-16-500-007-0000	Both East and West Options	Vacant parcel
232 W. 105TH STREET	25-16-210-040-0000	West Option	Vacant parcel
232 W 105TH PLACE	25-16-210-039-0000	West Option	Vacant parcel
230 W. 105TH PLACE	25-16-210-038-0000	Both East and West Options	Vacant parcel
10638 S. STEWART AVENUE	25-16-129-030-0000	West Option	Vacant parcel
11026 S. EGGLESTON AVENUE	25-16-329-007-0000	Both East and West Options	Vacant parcel
336 W. 110TH PLACE	25-16-423-024-0000	East Option	Vacant parcel
348 W. 110TH PLACE	25-16-423-019-0000	East Option	Vacant parcel
338 W. 110TH PLACE	25-16-423-023-0000	East Option	Vacant parcel
340 W. 110TH PLACE	25-16-423-022-0000	East Option	Vacant parcel
342 W. 110TH PLACE	25-16-423-021-0000	East Option	Vacant parcel
346 W. 110TH PLACE	25-16-423-020-0000	East Option	Vacant parcel
11037 S. EGGLESTON AVENUE	25-16-329-009-0000	Both East and West Options	Vacant parcel

Displaced Parcel Address	Parcel Identification Number	Option	Notes
11041 S. EGGLESTON AVENUE	25-16-329-008-0000	Both East and West Options	Vacant parcel
356 W. 111TH STREET	25-16-427-001-0000	East Option	Vacant parcel
11114 S. STEWART AVENUE	25-21-107-025-0000	West Option	Vacant parcel
11116 S. STEWART AVENUE	25-21-107-026-0000	West Option	Vacant parcel
103 W. 115TH STREET	25-21-405-008-0000	West Option	Vacant parcel
11527 S. STATE STREET	25-22-300-007-0000	East Option	Vacant parcel
11562 S. WABASH AVENUE	25-22-300-019-0000	East Option	Vacant parcel
11552 S. MICHIGAN AVENUE	25-22-300-068-0000	East Option	Vacant parcel
11578 S. MICHIGAN AVENUE	25-22-300-058-0000	East Option	Vacant parcel
11579 S. MICHIGAN AVENUE	25-22-304-008-0000	East Option	Vacant parcel
120 E. 116TH STREET	25-22-304-027-0000	East Option	Vacant parcel
11578 S. MICHIGAN AVENUE	25-22-300-058-0000	Both East and West Options	Vacant parcel
122 E. 116TH STREET	25-22-304-028-0000	East Option	Vacant parcel
124 E. 116TH STREET	25-22-304-029-0000	East Option	Vacant parcel
128 E. 116TH STREET	25-22-304-030-0000	East Option	Vacant parcel
130 E. 116TH STREET	25-22-304-031-0000	East Option	Vacant parcel
132 E. 116TH STREET	25-22-304-032-0000	East Option	Vacant parcel
136 E. 116TH STREET	25-22-304-034-0000	East Option	Vacant parcel
134 E. 116TH STREET	25-22-304-033-0000	East Option	Vacant parcel
11607 S. MICHIGAN AVENUE	25-22-308-003-0000	West Option	Vacant parcel
115 E. 116TH STREET	25-22-308-010-0000	West Option	Vacant parcel
117 E. 116TH STREET	25-22-308-011-0000	West Option	Vacant parcel
119 E. 116TH STREET	25-22-308-012-0000	West Option	Vacant parcel
11631 S. INDIANA AVENUE	25-22-311-013-0000	East Option	This Department of Streets and Sanitation Building would be displaced.
319 E. 117TH STREET	25-22-316-001-0000	East Option	Vacant parcel
356 E. 118TH STREET	25-22-317-014-0000	Both East and West Options	Vacant parcel
358 E. 118TH STREET	25-22-317-015-0000	Both East and West Options	Vacant parcel
11900 S. COTTAGE GROVE AVENUE	25-27-108-009-0000	Both East and West Options	Vacant parcel

Displaced Parcel Address	Parcel Identification Number	Option	Notes
12256 S. COTTAGE GROVE AVENUE	25-27-200-009-0000	Both East and West Options	Vacant parcel
12256 S. COTTAGE GROVE AVENUE	25-27-200-010-0000	Both East and West Options	Vacant parcel
12534 S. COTTAGE GROVE AVENUE	25-27-200-012-0000	Both East and West Options	Vacant parcel

41 total parcels would be affected by the East Option.
25 total parcels would be affected by the West Option.
13 parcels would be affected whether the East or West Option is selected.

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Michael Lange
Chicago Park District
541 N. Fairbanks Court
5th Floor
Chicago, IL 60611

Re: CTA Red Line Extension Project
Project-Related Impacts to Agency-Owned Properties

Dear Mr. Lange:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency under a separate cover.

CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

CTA has determined that Agency-owned properties would be affected by implementation of either the East or West Option. The table included with this letter provides information about the potentially affected properties, including whether they would be affected by either the East or West Option, or, in some cases, both options. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

At this stage of project planning, CTA has determined that the East Option would impact Wendell Smith Park and Block Park and the West Option would impact Fernwood Parkway south of I-57. The East Option track structure would run through the northwestern corner of Wendell Smith Park and the western parcel of Block Park. The West Option track structure would run through Fernwood Parkway south of I-57. Block Park is owned by the City of Chicago; CTA is also coordinating with the City regarding property impacts to this parcel. CTA has been coordinating with Chicago Park District staff including Heather Gleason, Doreen O'Donnell, and Michael Lange, regarding impacts to parks in the project area through the Section 4(f) process and proposed mitigations.

Park	Address	Property Identification Number
Wendell Smith Park	312 W. 99th Place	25-09-400-047-0000
Block Park	329 W. 103rd Street	25-16-200-001-0000
Fernwood Parkway	No Street Address	25-09-999-001-0000

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

cc: Heather Gleason

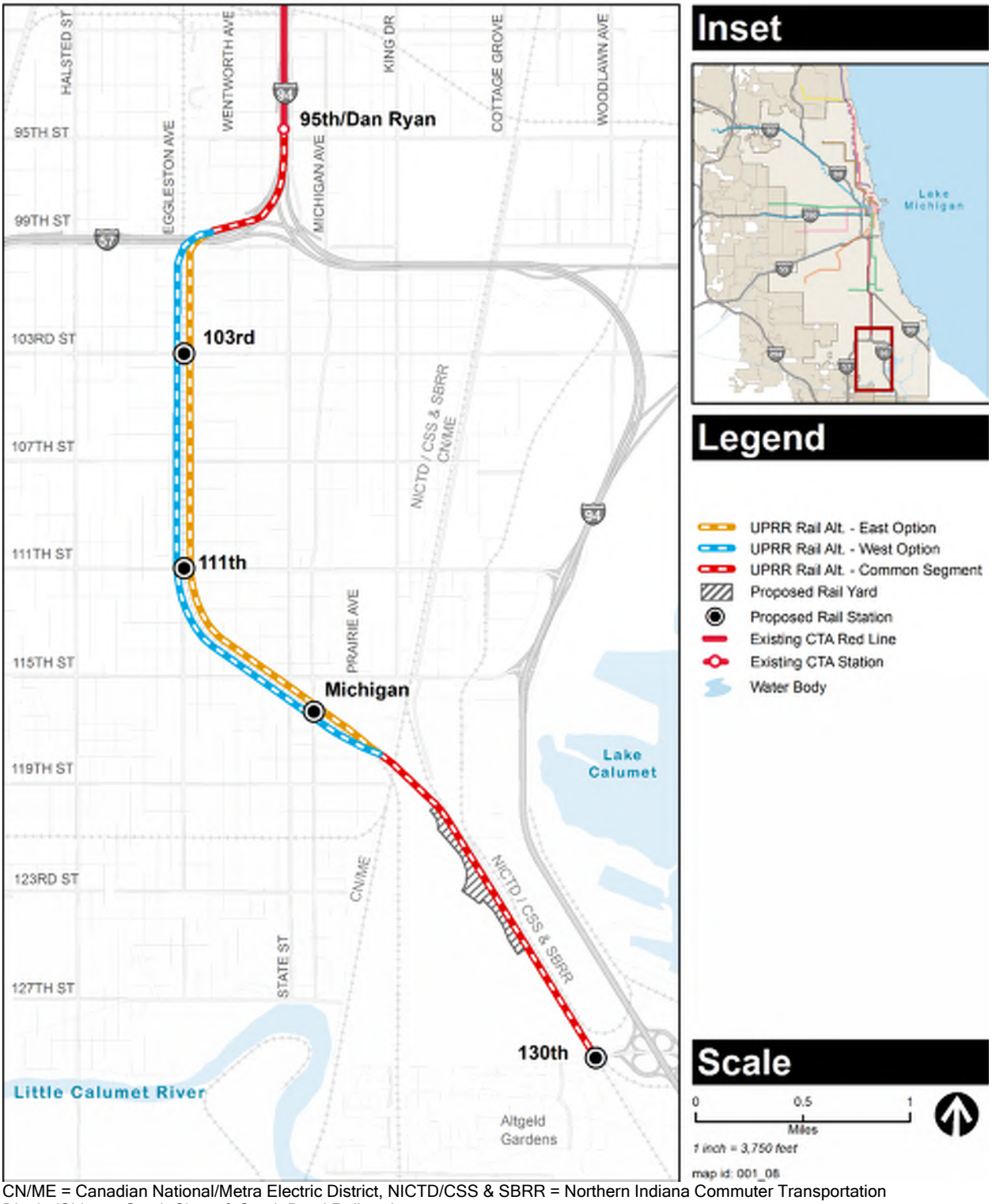

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Red Line Extension Project - Union Pacific Railroad Alternative Options

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

John Yonan
Cook County
69 W. Washington Street
Chicago, IL 60602

Re: CTA Red Line Extension Project
Project-Related Impacts to County-Owned Properties

Dear Mr. Yonan:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency under a separate cover.

CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

CTA has determined that County-owned properties would be affected by implementation of either the East or West Option. The table included with this letter provides information about the potentially affected properties, including whether they would be affected by either the East or West Option, or, in some cases, both options. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project. After additional engineering has been completed and CTA has selected a single option, CTA will work with the County regarding use of these parcels.

At this stage of planning, CTA has determined that both the East and West Options would affect Cook County parcels within the I-94 and I-57 right-of-way. The East Option would affect 21 parcels and the West Option would affect 23 parcels; 20 of these parcels would be affected whether the East or West Option is selected. Most parcels would be affected whether the East or West Option is selected. The RLE aerial structure would be located in the median of I-94 immediately south of 95th Street Terminal, then would run along the north side of I-57 until the vicinity of Eggleston Avenue. Piers would be placed within Cook County parcels. CTA has been coordinating with the Illinois Department of Transportation and the Federal Highway Administration regarding the project alignment and traffic impacts, including horizontal and vertical clearances from IDOT's right-of-way.

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

cc: Susan Campbell

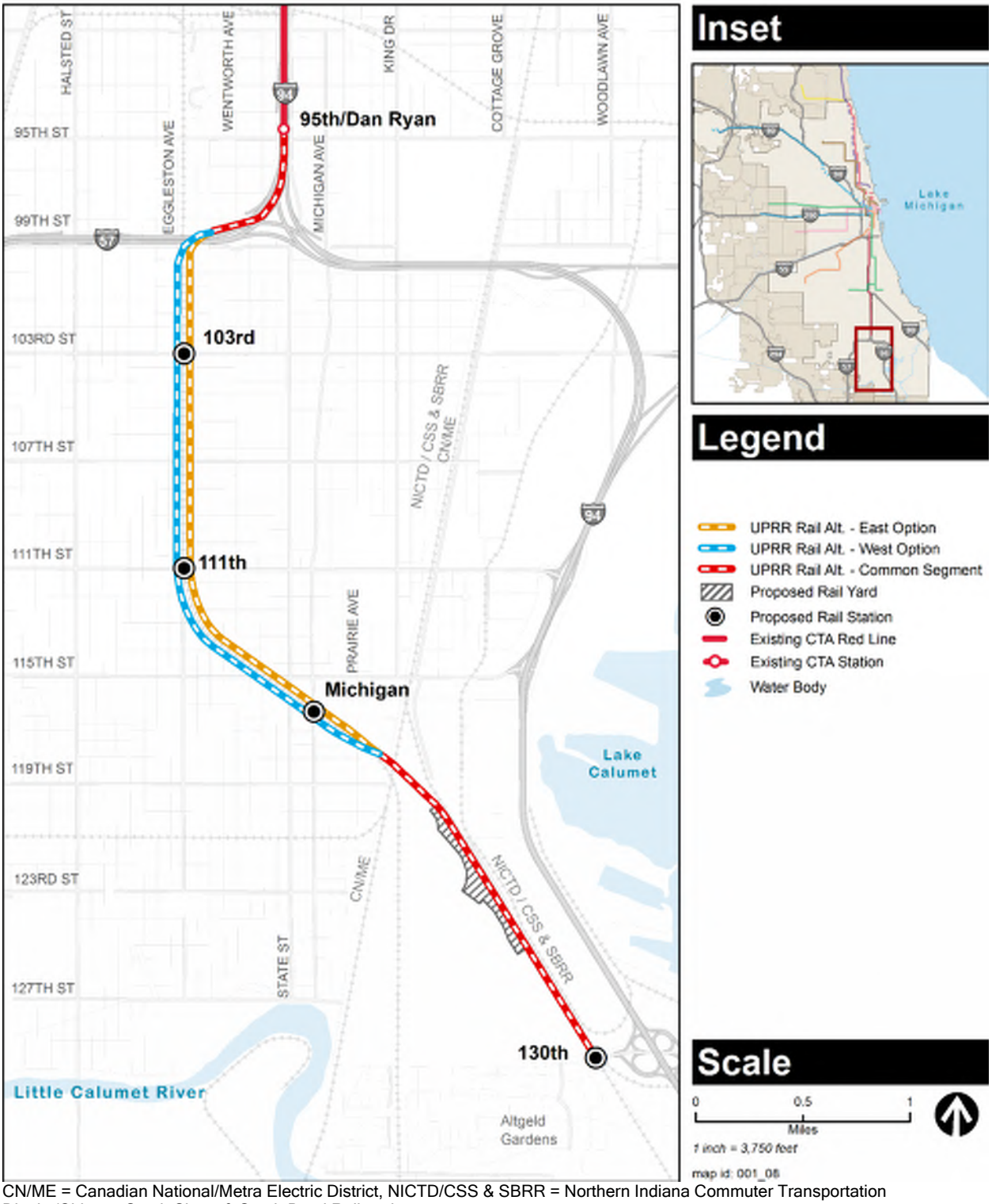

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Red Line Extension Project - Union Pacific Railroad Alternative Options

The following County-owned parcels would be affected by either the East or West Option of the Red Line Extension Project.

Displaced Parcel Address	Parcel ID	Option
9512 S. State Street	25-09-207-050-0000	Both East and West Options
9511 W. 95th Street	25-09-207-049-0000	Both East and West Options
9600 S. Lafayette Avenue	25-09-215-001-0000	Both East and West Options
9721 S. Lafayette Avenue	25-09-223-043-0000	Both East and West Options
9720 S. Lafayette Avenue	25-09-222-042-0000	Both East and West Options
9701 S. Princeton Avenue	25-09-222-041-0000	Both East and West Options
9710 S. Perry Avenue	25-09-221-042-0000	Both East and West Options
9801 S. LaSalle Street	25-09-229-041-0000	Both East and West Options
9800 S. LaSalle Street	25-09-228-042-0000	Both East and West Options
9801 S. Wentworth Avenue	25-09-228-041-0000	Both East and West Options
9807 S. Yale Avenue	25-09-227-041-0000	Both East and West Options
9807 S. Yale Avenue	25-09-227-041-0000	Both East and West Options
9808 S. Yale Avenue	25-09-226-045-0000	Both East and West Options
9817 S. Princeton Avenue	25-09-226-041-0000	Both East and West Options
9820 S. Princeton Avenue	25-09-225-047-0000	Both East and West Options
9822 S. Princeton Avenue	25-09-225-026-0000	Both East and West Options
9824 S. Princeton Avenue	25-09-225-043-0000	Both East and West Options
9825 S. Harvard Avenue	25-09-225-044-0000	Both East and West Options
9822 S. Harvard Avenue	25-09-224-019-0000	West Option
350 W. 99th Street	25-09-225-048-0000	East Option
350 W. 99th Street	25-09-224-009-0000	West Option
354 W. 99th Street	25-09-224-011-0000	Both East and West Options
352 W. 99th Street	25-09-224-010-0000	West Option
356 W. 99th Street	25-09-224-020-0000	Both East and West Options

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Catherine O'Connor
Metropolitan Reclamation Water District of Greater Chicago
100 E. Erie Street
Chicago, IL 60611-3154

Re: CTA Red Line Extension Project
Project-Related Impacts to MWRD-Owned Properties

Dear Ms. O'Connor:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency under a separate cover.

CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

CTA has determined that MWRD-owned properties would be affected by implementation of either the East or West Option. The table included with this letter provides information about the potentially affected properties. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

At this stage of project planning, CTA has determined that portions of 15 MWRD parcels at the Calumet Water Reclamation Plant would be affected to accommodate the 120th Street yard and shop and the 130th Street station. These parcels would be affected whether the East or West Option is selected. The CTA structures would not affect MWRD operations at the plant. CTA met with Joe Schuessler on September 16, 2013 to discuss potential impacts to MWRD property.

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

cc: Joseph Schuessler

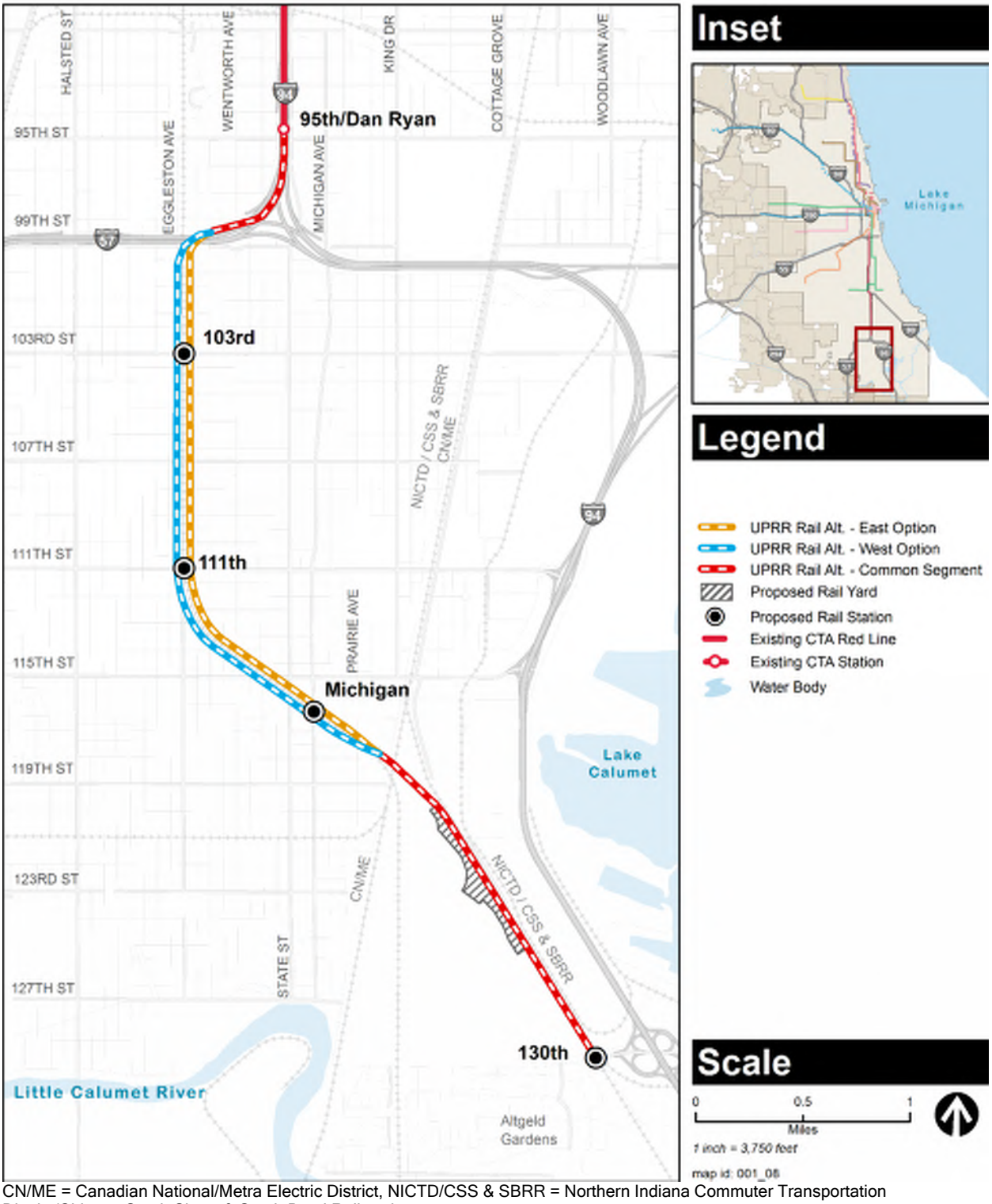

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Red Line Extension Project - Union Pacific Railroad Alternative Options

The following MWRD-owned parcels would be affected by whether the East or West Option of the Red Line Extension Project is selected.

Parcel ID	Parcel Address
25-26-300-017-0000	12807 S. Cottage Grove Avenue
25-26-300-015-0000	12813 S. Cottage Grove Avenue
25-26-300-014-0000	12817 S. Cottage Grove Avenue
25-27-301-013-0000	310 E. 130th Street
25-27-301-012-0000	325 E. 127th Street
25-27-301-011-0000	350 E. 130th Street
25-27-301-010-0000	360 E. 130th Street
25-27-200-013-0000	12546 S. Cottage Grove Avenue
25-27-200-004-0000	12500 S. Cottage Grove Avenue
25-27-400-003-0000	12606 S. Cottage Grove Avenue
25-27-400-007-0000	12614 S. Cottage Grove Avenue
25-27-400-005-0000	12608 S. Cottage Grove Avenue
25-27-400-006-0000	12610 S. Cottage Grove Avenue
25-27-301-007-0000	300 E. 127th Street
25-27-400-009-0000	12618 S. Cottage Grove Avenue

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

John Parsons
Northern Indiana Commuter Transportation District
33 E. US Highway 12
Chesterton, IN 46304

Re: CTA Red Line Extension Project
Project-Related Impacts to NICTD-Owned Properties

Dear Mr. Parsons:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency under a separate cover.

CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

CTA has determined that NICTD-owned properties would be affected by implementation of either the East or West Option. The table included in this letter provides information about the potentially affected properties. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

At this stage of project planning, CTA has determined that both the East and West Options would impact two NICTD parcels, although the NICTD tracks and operations would not be permanently affected. The impact to NICTD tracks is because CTA would need to relocate an existing at-grade Metropolitan Water Reclamation District access road across NICTD property. CTA is proposing to provide a grade-separated road to minimize impacts on both NICTD and MWRD operations.

Property Identification Number	Address
25-27-503-001-0000	12320 S. Cottage Grove Avenue
25-27-400-002-0000	12600 S. Cottage Grove Avenue

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

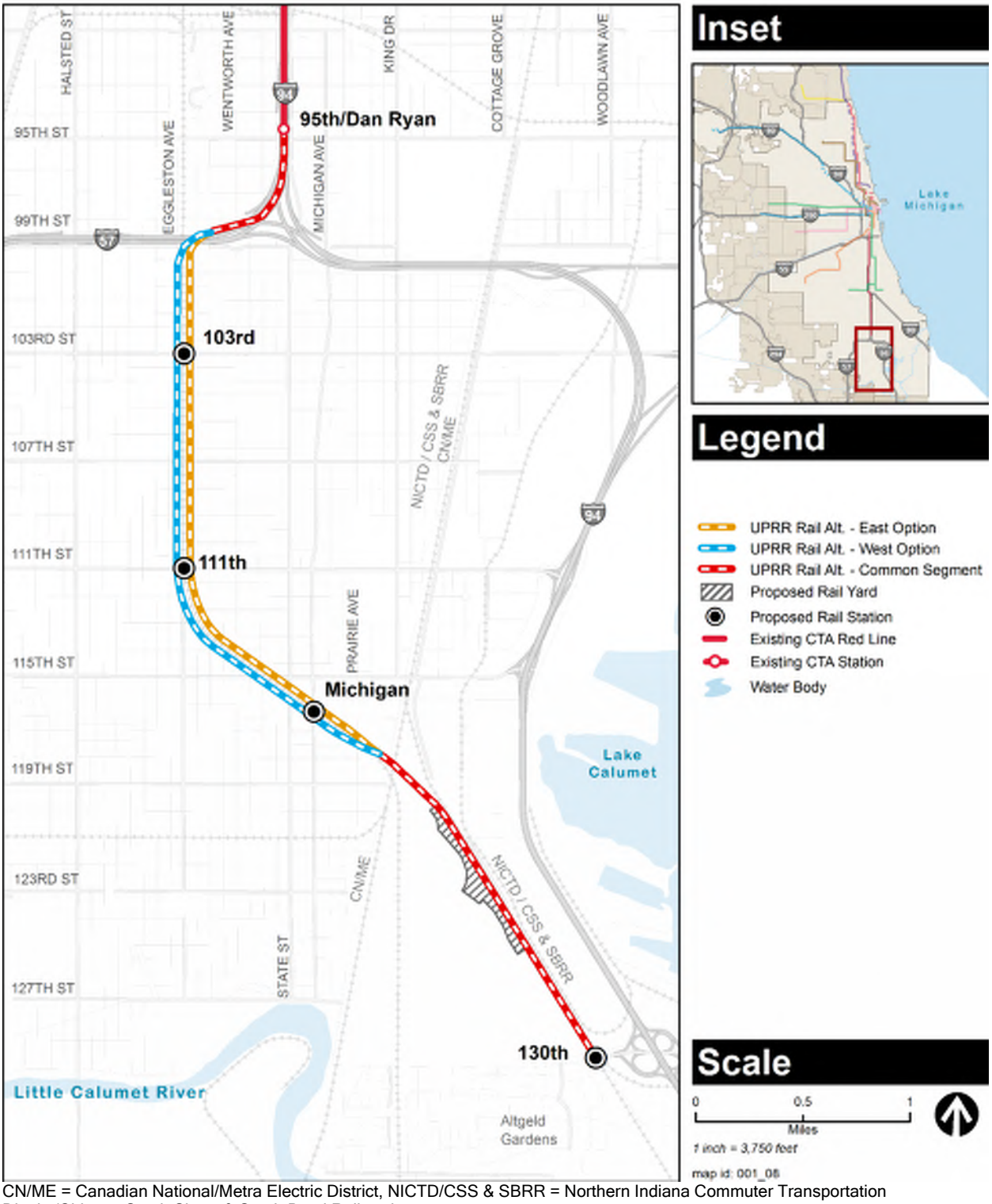

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Red Line Extension Project - Union Pacific Railroad Alternative Options

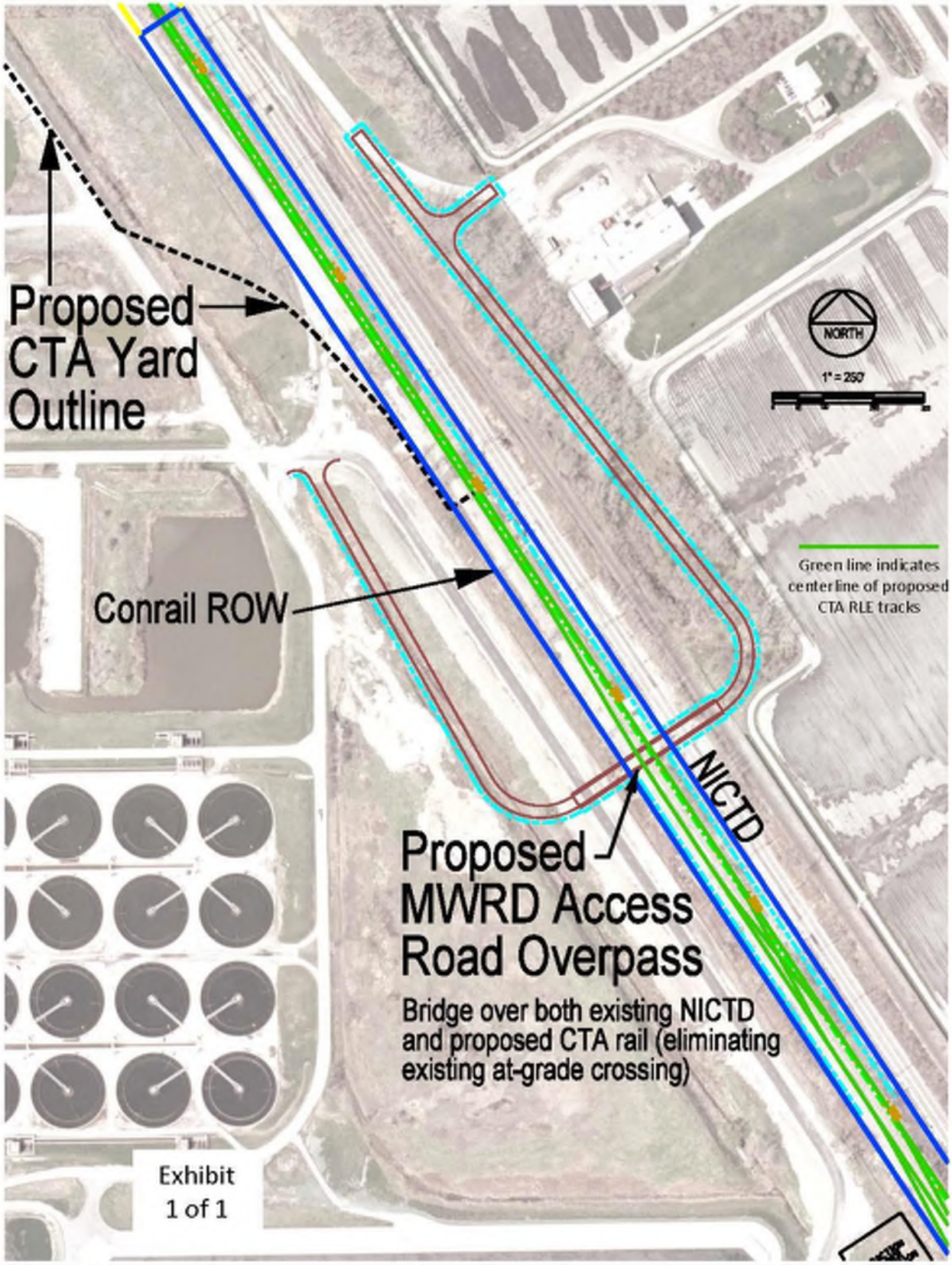

CTA Red Line Extension NICTD Exhibit DRAFT September 30, 2016

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Lynette Ciavarella
Metra
547 W. Jackson Boulevard
13th Floor
Chicago, IL 60661

Re: CTA Red Line Extension Project
Project-Related Impacts to Metra-Owned Properties

Dear Ms. Ciavarella:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency under a separate cover.

CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

CTA has determined that Metra-owned properties would be affected by implementation of either the East or West Option. The table included in this letter provides information about the potentially affected properties. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

At this stage of project planning, CTA has determined that both the East and West Options would cross over three Metra parcels on an aerial structure, although the tracks and operations would not be affected. The RLE piers would be located on the first two parcels in the table below. The proposed vertical clearance is 23'0" (per Illinois DOT design manuals).

Property Identification Number	Address
25-22-317-035-0000	11800 S. Front Avenue
25-22-501-005-0000	360 E. 119th Street
25-22-325-001-0000	370 E. 119th Street

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

cc: David Kralik

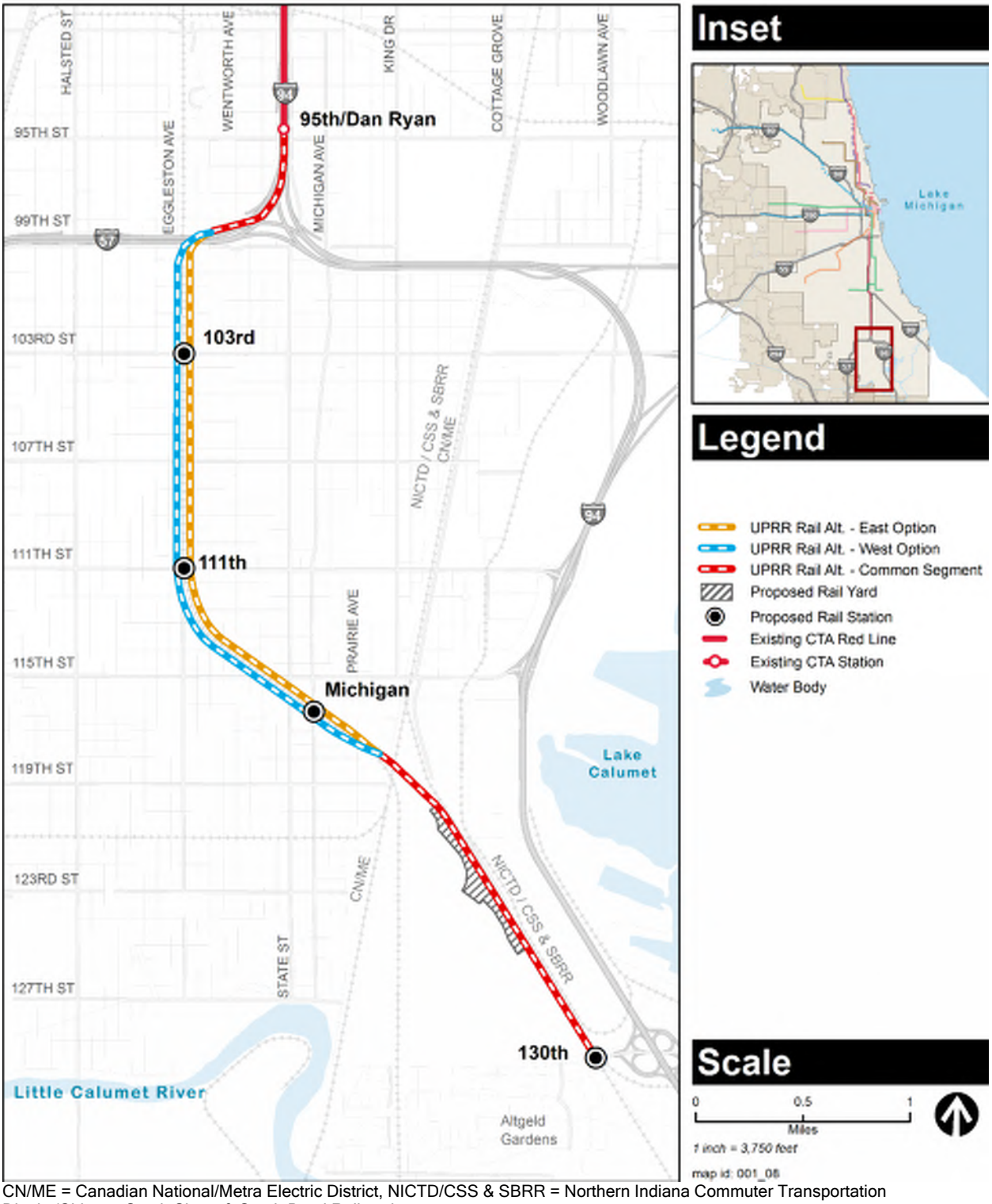

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Red Line Extension Project - Union Pacific Railroad Alternative Options

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Jim Kvedaras
CN Railway
Government Affairs, Southern Region
17641 S. Ashland Avenue
Homewood, IL 60430

Re: CTA Red Line Extension Project
Project-Related Impacts to CN-Owned Properties

Dear Mr. Kvedaras:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency under a separate cover.

CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

CTA has determined that CN-owned properties would be affected by implementation of either the East or West Option. The table included in this letter provides information about the potentially affected properties. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

At this stage of project planning, CTA has determined that both the East and West Options would cross over three CN parcels on an aerial structure, although the tracks and operations would not be affected. The RLE piers would be located on the first two parcels in the table below. The proposed vertical clearance is 23'0" (per Illinois DOT design manuals).

Property Identification Number	Address
25-22-317-035-0000	11800 S. Front Avenue
25-22-501-005-0000	360 E. 119th Street
25-22-325-001-0000	370 E. 119th Street

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

cc: Arthur Spiros

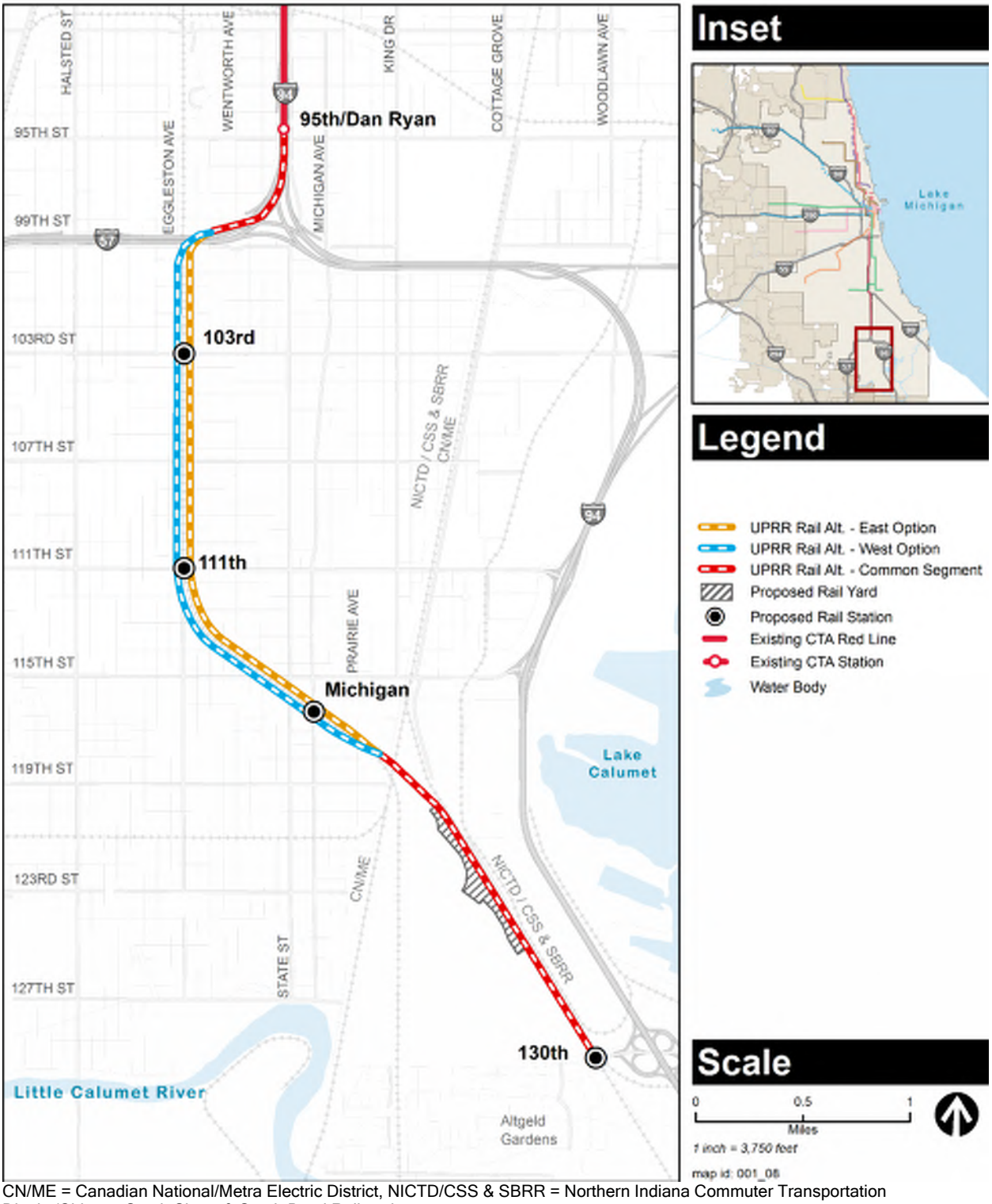

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Red Line Extension Project - Union Pacific Railroad Alternative Options

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Mark Bristol
Union Pacific Railroad
1400 Douglas Street
Omaha, NE 68179

Re: CTA Red Line Extension Project
Project-Related Impacts to UPRR-Owned Properties

Dear Mr. Bristol:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency separate from this letter.

CTA has determined that UP-owned properties would be affected by implementation of either the East or West Option. The property impacts will be different depending upon which option is selected. The table included with this letter provides information about the potentially affected properties, including whether they would be affected by either the East or West Option, or, in

some cases, both options. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project. After additional engineering has been completed and CTA has selected a single option, CTA will work with UP regarding use of these parcels.

At this stage of project planning, CTA has determined that the East Option would affect 18 UP parcels, and the West Option would affect 35 UP parcels; 6 of these parcels would be affected whether the East or West Option is selected. In addition, it is CTA's understanding that one vacant parcel that was formerly owned by the Chicago and Western Indiana Railroad (and is still shown as owned by that railroad by the Cook County Assessor) is also owned by UP.

CTA has been in coordination with Mark Bristol and has provided UPRR with additional, detailed information about the RLE Project and its impacts on UP property and operations on August 30, 2016. Mark Bristol sent comments on this information on September 22, 2016. CTA will address those comments as the project progresses and will continue to coordinate with UP.

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

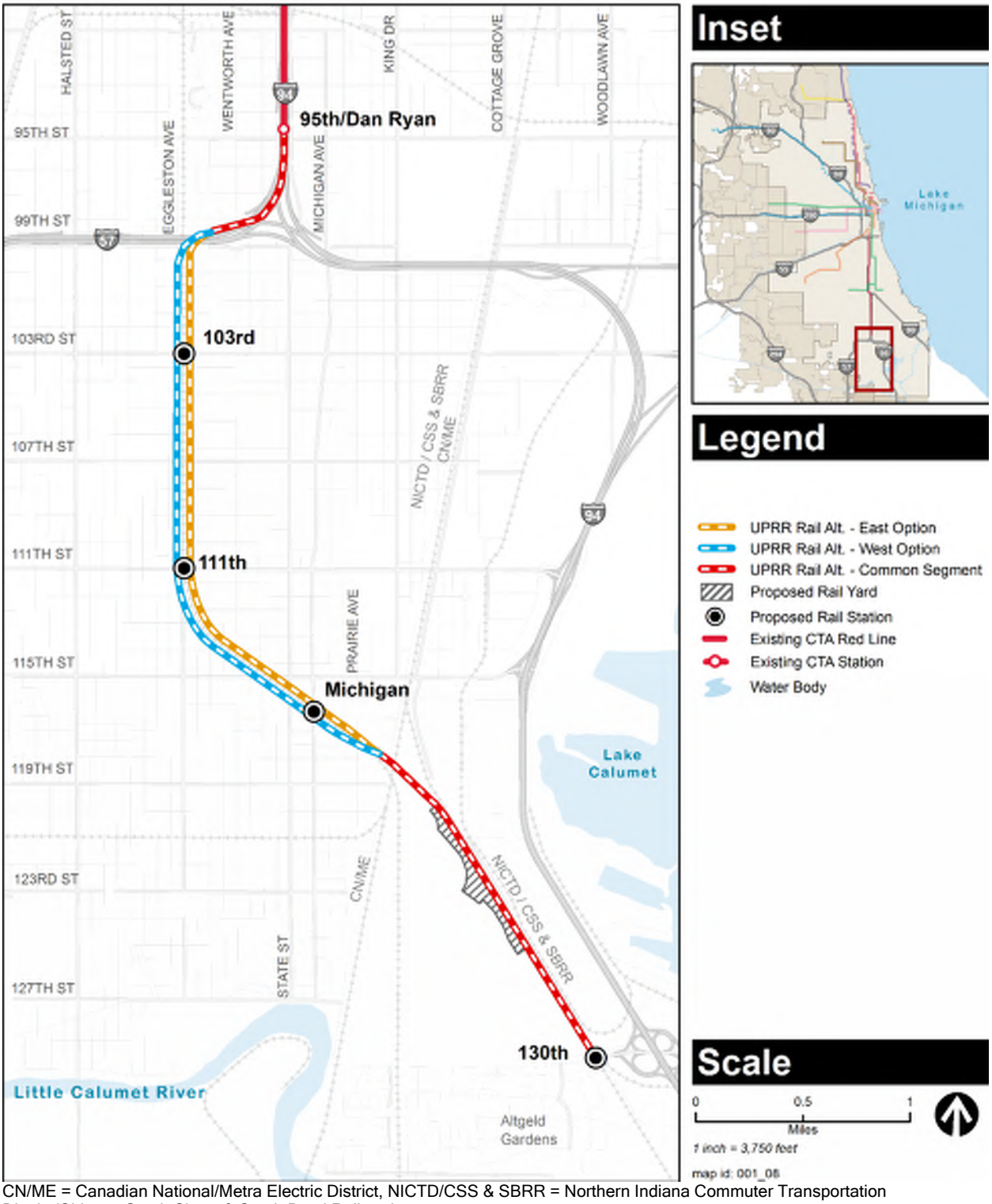

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Red Line Extension Project - Union Pacific Railroad Alternative Options

The following UP-owned parcels would be affected by either the East or West Option of the Red Line Extension Project.

Parcel Address	Property Identification Number	Option
341 W. 99TH STREET	25-09-400-046-0000	West Option
351 W. 99TH STREET	25-09-500-002-0000	West Option
350 W. 103RD STREET	25-09-424-069-0000	East Option
359 W. 103RD STREET	25-16-500-001-0000	East Option
361 W. 103RD STREET	25-16-500-003-0000	East Option
361 W. 104TH STREET	25-16-500-004-0000	East Option
No Street Address	25-16-999-001-0000	East Option
359 W. 105TH PLACE	25-16-500-029-0000	East Option
358 W. 106TH PLACE	25-16-500-012-0000	East Option
A360 W. 107TH STREET	25-16-500-014-0000	East Option
403 W. 111TH STREET	25-21-107-009-0000	West Option
501 E. 112TH STREET	25-21-501-003-0000	East Option
501 E. 112TH STREET	25-21-501-002-0000	West Option
11332 S. PRINCETON AVENUE	25-21-217-012-0000	East Option
11325 S. HARVARD AVENUE	25-21-217-004-0000	West Option
11334 S. PRINCETON AVENUE	25-21-217-027-0000	West Option
233 W. 113TH STREET	25-21-218-014-0000	West Option
401 W. 111TH STREET	25-21-501-001-0000	East Option
No Street Address	25-21-999-001-0000	West Option
11411 S. YALE AVENUE	25-21-227-001-0000	West Option
No Street Address	25-21-999-001-0000	West Option
11420 S. WENTWORTH AVENUE	25-21-227-012-0000	West Option
44 W. 115TH STREET	25-21-230-020-0000	East Option
11513 S. PERRY AVENUE	25-21-406-001-0000	West Option
11524 S. LAFAYETTE AVENUE	25-21-406-030-0000	West Option
No Street Address	25-21-999-001-0000	West Option
11524 S. LAFAYETTE AVENUE	25-21-406-030-0000	Both East and West Options
11535 S. LAFAYETTE AVENUE	25-21-407-008-0000	West Option
500 W. 113TH STREET	25-21-501-007-0000	West Option
11535 S. LAFAYETTE AVENUE	25-21-407-008-0000	West Option
11535 S. LAFAYETTE AVENUE	25-21-407-008-0000	West Option
11512 S. STATE STREET	25-21-407-030-0000	West Option
11549 S. STATE STREET	25-22-300-009-0000	Both East and West Options
11551 S. STATE STREET	25-22-300-010-0000	Both East and West Options
11556 S. WABASH AVENUE	25-22-300-070-0000	Both East and West Options
11562 S. WABASH AVENUE	25-22-300-069-0000	Both East and West Options
11557 S. WABASH AVENUE	25-22-300-071-0000	Both East and West Options
11582 S. MICHIGAN AVENUE	25-22-300-059-0000	Both East and West Options
11583 S. MICHIGAN AVENUE	25-22-304-009-0000	West Option
132 E. 117TH STREET	25-22-308-029-0000	West Option

Parcel Address	Property Identification Number	Option
134 E. 117TH STREET	25-22-308-030-0000	West Option
11705 S. INDIANA AVENUE	25-22-315-001-0000	West Option
11707 S. INDIANA AVENUE	25-22-315-003-0000	West Option
11714 S. PRAIRIE AVENUE	25-22-315-016-0000	West Option
No Street Address	25-22-999-001-0000	West Option
11716 S. PRAIRIE AVENUE	25-22-315-017-0000	West Option
11763 S. PRAIRIE AVENUE	25-22-316-013-0000	West Option
100 E. 116TH STREET	25-22-500-001-0000	West Option
* 11700 S. INDIANA AVENUE	25-22-310-038-0000	West Option

* Former Chicago and Indiana Western Railroad parcel

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

October 3, 2016

Herbert Smith
Norfolk Southern Corporation
111 W. Washington Street
Suite 1920
Chicago, IL 60602

Re: CTA Red Line Extension Project
Project-Related Impacts to NS-Owned Properties

Dear Mr. Smith:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project. This project is a major initiative that would add new transit service on Chicago's Far South Side by extending the Red Line—CTA's busiest rail line—south by 5.3 miles from the 95th Street Terminal to 130th Street. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

The extension would run along elevated tracks south from the 95th Street Terminal, then curve west along I-57 until reaching the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street. The attached figure shows the project alignment.

In accordance with the federal requirements of the National Environmental Policy Act of 1969 (NEPA), CTA will be publishing a Draft Environmental Impact Statement (EIS), which analyzes the effects of implementing the project on the physical, human, and natural environments. Additional information about the Draft EIS will be provided to your agency under a separate cover.

CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected.

CTA has determined that NS-owned properties would be affected by implementation of either the East or West Option. The table included in this letter provides information about the potentially affected properties. Property owner information is based on information from the Cook County Assessor's Office; if you believe this information is incorrect based on your records, please let us know. As the project moves forward, CTA will conduct additional engineering, which will allow property needs to be further refined and to identify ways to minimize impacts to properties and conclude which properties would need to be acquired for the RLE Project.

At this stage of project planning, CTA has determined that both the East and West Options would affect five NS and Conrail parcels. The RLE structure, as well as the proposed yard and shop and 130th Street station, would be located on NS property. Specifically, the spur track along parcel 25-22-401-034-0000, on which IHB currently operates 1-2 trains a week to serve the a scrap metal/recycling facility, would need to be taken out of use to allow for the RLE yard and shop. Both the industrial facilities along the spur track are also proposed for right-of-way acquisition with CTA's proposed project. CTA had initial conversations with NS and met with Herbert Smith on December 7, 2015 to discuss potential impacts to Norfolk Southern property. An additional follow-up email with the alignment justification and a roll plot map was sent to NS on October 3, 2016.

Parcel Identification Number	Address
25-22-400-027-0000	11600 S. Cottage Grove Avenue
25-22-401-034-0000	1355 E. 121st Street
25-27-502-001-0000	12330 S. Cottage Grove Avenue
25-27-502-001-0000	12330 S. Cottage Grove Avenue
25-26-999-001-0000	No Street Address

CTA intends to publish the Draft EIS in October 2016. After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures. Depending on funding availability and federal approvals, the Final EIS is expected to be published by the end of 2018. The project is currently not funded and CTA will be pursuing federal New Starts funding for a portion of the project costs. You can learn more about the RLE Project and find updates on the status of the process here: transitchicago.com/RedEIS.

CTA will continue to update and coordinate with your organization regarding potential project and property impacts and provide any additional information as the project progresses. Please contact Sonali Tandon, Senior Project Manager, at 312.681.4246 or standon@transitchicago.com or myself if you have any questions or would like to meet to discuss further.

Sincerely,

Carole Morey
Chief Planning Officer
312.681.4100
cmorey@transitchicago.com

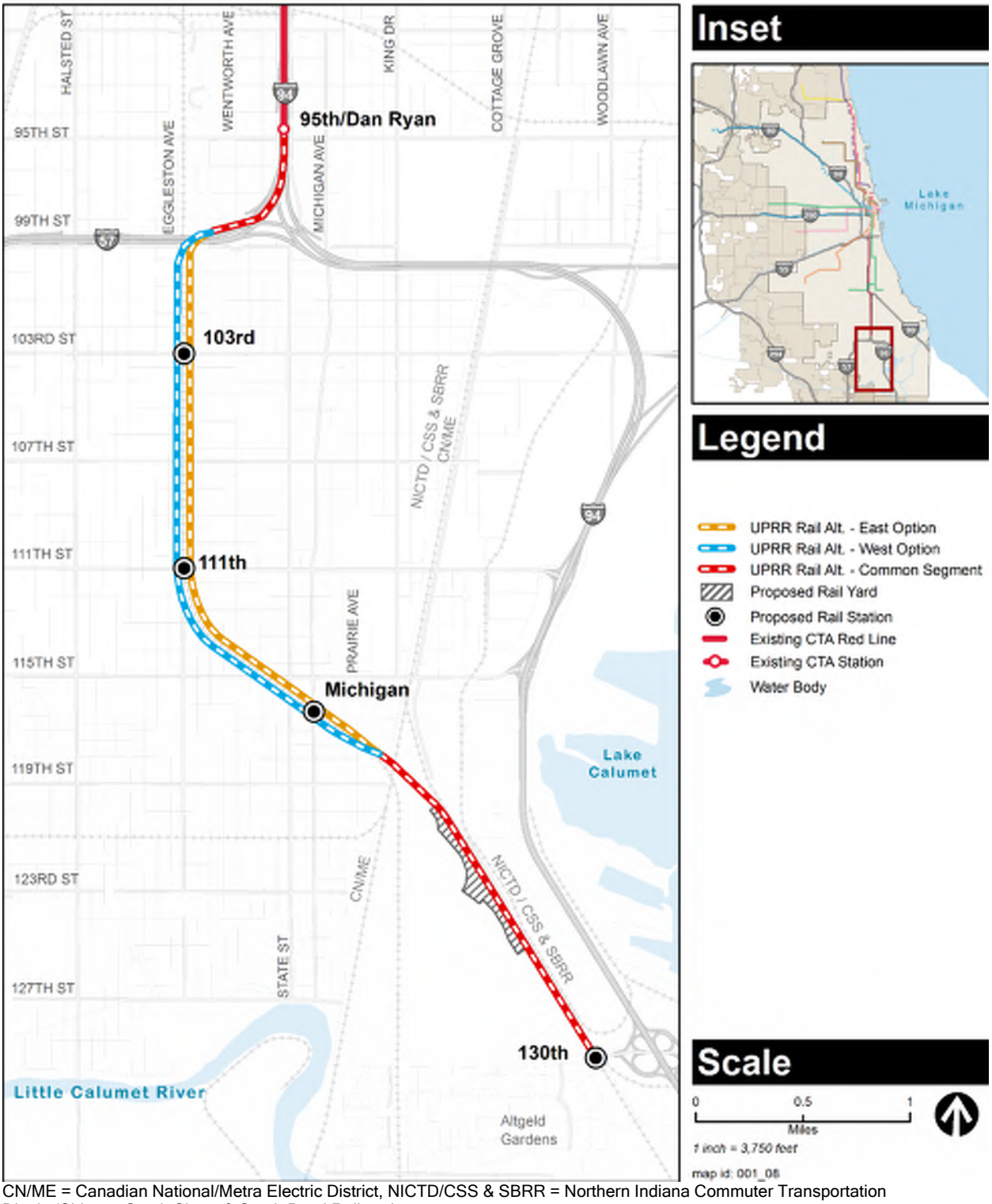

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Red Line Extension Project - Union Pacific Railroad Alternative Options

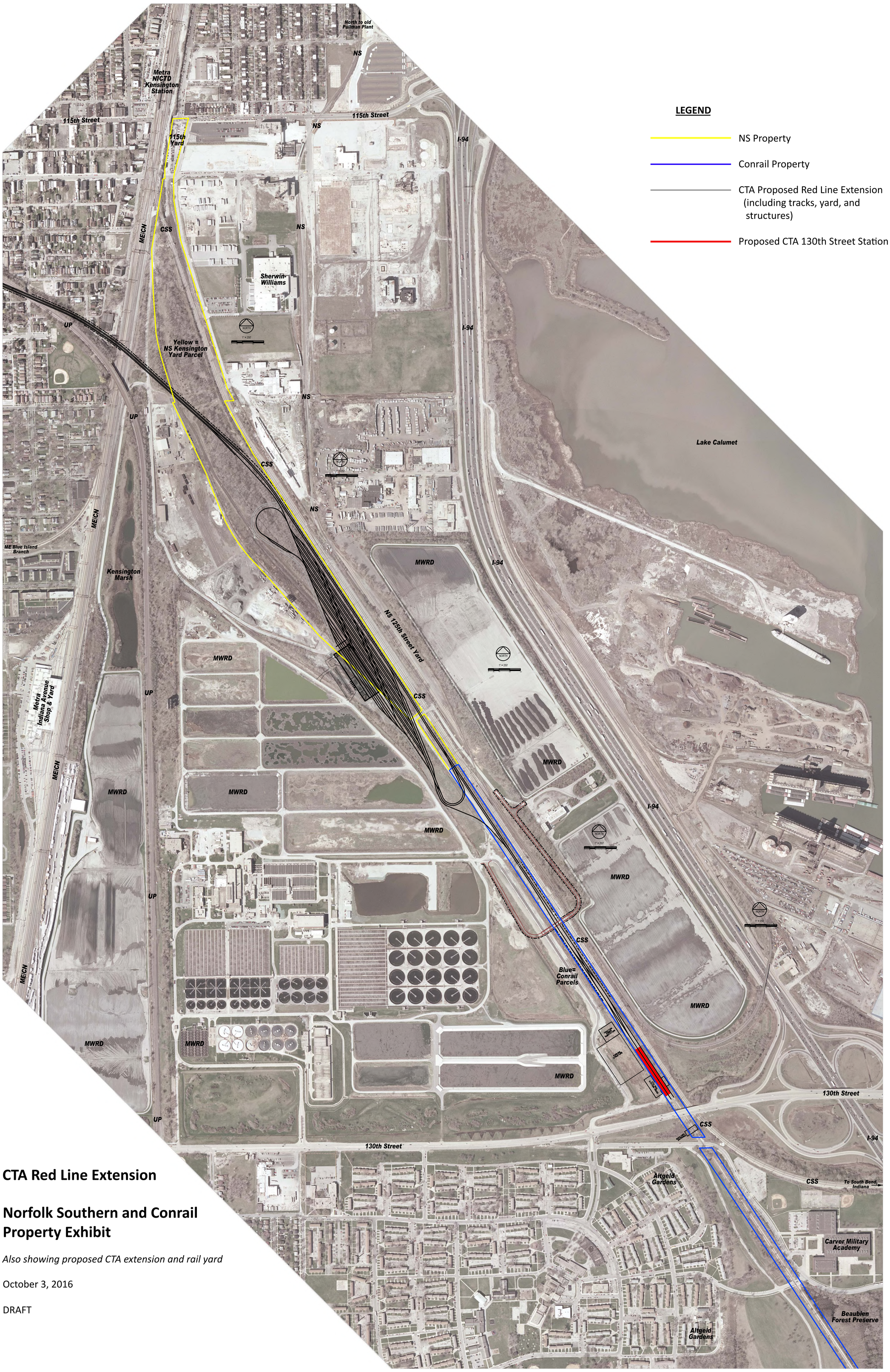

CTA Red Line Extension

Norfolk Southern and Conrail Property Exhibit

Also showing proposed CTA extension and rail yard

October 3, 2016

DRAFT

Attachment 10
Displacements Meeting Materials

Photos

Sign-In Sheets

Comment Card

Exhibit Boards

Palmer Park – 10/11/2016

Fenger High School – 10/12/2016

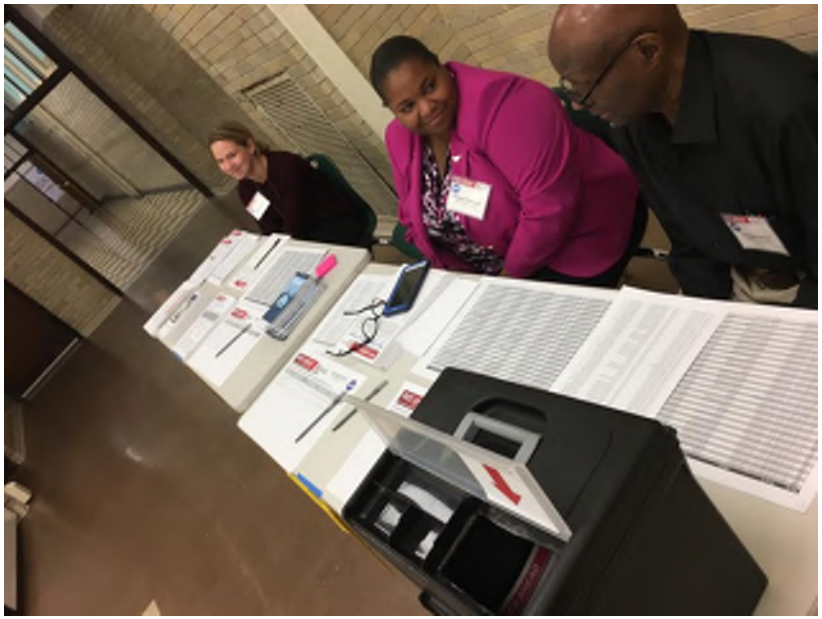

Pullman Library – 10/13/2016

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Palmer Park Gymnasium
Tuesday, October 11, 2016
6:00 - 8:00 PM

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	ANNA WILLIAMS	349 W 99th Pl	773-568-2087	N/A	✓
2	James T. Floyd	355 W. 99th Pl	773-468-2932	N/A	✓
3	Hillian Brown	9920 S. Wentworth	773 968-9209	hillian.brown5k@yahoo	✓
4	Betty Jones	9921 S. Yale	773-468-4019		✓
5	Andrea Barnes	11322 S. Yale	(773) 704-5412		✓
6	MS. DORIS A. ATWATER	355 W. 101ST PLACE	773-821-5995	msatwater65@gmail.com	✓
7	Ed & Lou TARVER	350 W. 109th STREET	773-764-5096	edtarver@hotmail.com lou tarver@hotmail.com	✓
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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Palmer Park Gymnasium
Tuesday, October 11, 2016
6:00 - 8:00 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	Earnestine Shell	9927 S. Yale Ave.	(773) 568-2102	eshell@sbcglobal.net	✓
2	Diane Willams	9900 S. Yale Av	773 568-1551	dylynnx@yahoo.	✓
3	Rosemary Wyche	322 W 101 Street	773 245 7782	RWYCHE@ameritech.net	✓
4	Ethel LeFlore	352 W. 102nd st	(773) 490-2585		
5	LeRonnie Cameron	348 W 102ND ST	773-568-5136	msatwater65@gmail.com	
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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Palmer Park Gymnasium
Tuesday, October 11, 2016
6:00 - 8:00 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	Julie A Pate	345 W 99 Pl	773-568-3760	Lady Sulieann@yahoo.co	
2	Joseph J. Johnson	346 W. 10bt Street	773-264-5984	grandmay'@sbcglobal.net	
3	Reu Q Z. + Nanci Garner	347 W. 102nd St	773 660 1056		
4	Elizabeth Calderon	38 E 116 St.	773-203-0920	eli33@sbcglobal.net	-
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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Palmer Park Gymnasium
Tuesday, October 11, 2016
6:00 - 8:00 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	GRADY DAVIS	349 W. 111TH STREET	312-307-4396	NONE	YES
2	Cebell Huey	352 W. 101ST Street	773-568-0531	NA	YES
3	Monique Smith	336 W. 102nd st.	773 568-5484	queenmo19136@sbcglobal.net	No
4	Smith, Michael W.	"	"	JTown1906@sbcglobal.net	Yes
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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Palmer Park Gymnasium
Tuesday, October 11, 2016
6:00 - 8:00 PM

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	DANIEL E PATE	345 W. 99 PL. CHICAGO ILL 60628	773-568-3760		✓
2	JAMES PALMER	319 W 100TH PLACE	773 568 0190		
3	WILLIAM MADISON	9904 S YALE	773-297-4493		
4	Bertha MADISON	9924 S. YALE			
5	Ruby Oatis	353 W. 105nd Place	(773) 821-6034		
6	Annie Tigg	11321 S. Princeton			
7	Deneteria Carmichael	348 W. 102nd PL	773-559-7037	dcarmich@hotmail.com	
8	Alesia Hushaw	349 W. 99th Place	773-568-2087		
9	MICHAEL SHERLEY	347 W 99TH PLACE	(773) 418-2545	MS_MASONRY@YAHOO.COM	✓
10	Cecilia Gutierrez	11327 S princeton Ave	773 329 8115		
11	Marcelina Sianz	11572 S. WABASH AV.	773-715-8558		
12	Nela James	347 West 100 St	773-468-7533		

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Fenger Academy High School
Wednesday, October 12, 2016
5:30 - 7:30 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	Laurence Clemens	11413 S. Yale Chicago Il 60628	773 710 3852		✓
2	Rodney Jones	352 W. 100TH place	773-971-4769		✓
3	Debra Tate	11515 South Perry Ave	773-468-9663		
4	Robert Tate	11515 South Perry Ave	" "		
5	Barbara Owens	124 W. 115th St	773-820-2023		
6	Charles Merrith	124 W. 115th St	773-412-5205		
7	Solomon Morgan	11426 S Perry 11439 S Prairie	773-750-9599		
8	Chester Wilson Jr	Alderman Austin D Rice	773-908-6961		
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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Fenger Academy High School
Wednesday, October 12, 2016
5:30 - 7:30 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	[illegible]	11310 S. Emerald	773 928 5530	carlahsc@aol.com	✓
2	Carrie Wilkins	" "	"	Carrie Wilkins	✓
3	Jeffery & Patricia Cobb	404 406 W. 112th St	773-468-5622	JCRS55@Ameritech.net	✓
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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Pullman Public Library
Thursday, October 13, 2016
5:30 - 7:30 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	Charles Jackson	135 W. 114th Street	708) 596-1034	C. Jacksononline@yahoo.com	
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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Pullman Public Library
Thursday, October 13, 2016
5:30 - 7:30 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	Malinda Little	11583 S. State, Chgo, 60628	312.953.6337	mflittle8393@yahoo.com	✓
2	Karen Crawl	~~11~~ 135 W 114th st Chgo 60628	773 731-5249	NewFaithC@att.net	✓
3	Ellis Mack	135 W 114th st Chgo 60628	773 731-5249	Karen.Crawl@gmail.com	✓
4	YVONNE FARLOW	352 W 107th st 60628	847 293 1120	Farlyvon@yahoo.com	✓
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RED AHEAD
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Red Line Extension

Pullman Public Library
Thursday, October 13, 2016
5:30 - 7:30 PM

cta

PLEASE SIGN IN FOR THE PROPERTY ACQUISITION AND RELOCATION COMMUNITY MEETING (PLEASE PRINT)

	NAME	ADDRESS CITY, STATE, ZIP	PHONE	E-MAIL	CHECK HERE TO BE CONTACTED TO DISCUSS YOUR PROPERTY
1	MARY Thomas	355 W. 101st St. Chgo IL 60628	773 568-6768	Sharimanner@yahoo.com	✓
2	Gloria MAYES	11583 So State	773 264-0136	glaia8442@yahoo.com	
3	LILLIE DAMPEER	11546 S. STATE ST.	773-264-3165 H 773-454-2234 cell	tomdampeer67@yahoo.com tomdampeer67@yahoo.com	✓
4	Maria yesenia olivas	155 E 116 st	312-852-06-47		
5	Willie + Lula Sprville	20 W. 115th street	773-995-1403	SNOOK8607@sbcglobal.net	✓
6	Tony Little	11583 S. State	773-341-4376		
7					
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10					
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Red Line Extension Project

Property Acquisition and Relocation Community Meeting

Through extensive planning for the Red Line Extension (RLE) Project, CTA has determined that it may be necessary to acquire certain properties to implement the project. CTA is still evaluating two potential options for the preferred alignment: the East Option and the West Option. The property impacts will be different depending upon which option is selected. **At this time, CTA does not plan to pursue acquisition of private property for the RLE Project until the environmental review is complete and project funding is secured.** In the event that CTA ultimately determines it is necessary to purchase private property for the RLE Project, CTA would be required to follow the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, along with state regulations. CTA is holding this meeting to allow potentially impacted property owners and lessees the opportunity to learn more about the project and what it could mean for your property.

Name _____

Address _____

City _____ **State** _____ **Zip** _____

Email Address _____

☐ **Check here** if you would like to be contacted to set up an in-person meeting to discuss your property.

Do you prefer to be contacted via phone or email? ☐ Phone ☐ Email

Please describe your questions or concerns. _____

Questions or comments can also be submitted via email to RedExtension@transitchicago.com

Over →

Additional Comments:

You may leave your completed comment card with CTA during the meeting, or you can send your comments to this address: **Chicago Transit Authority, Attention: Red Line Extension Project, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465**

Or send an email: **RedExtension@transitchicago.com**

For additional information call: **(888) YOUR-CTA (888 968-7282)**

Para más información en Español, llame al **(312) 681-2710**

RedExtension@transitchicago.com

transitchicago.com/RedEIS

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Red Line Extension

Welcome to the
Red Line Extension Project
Property Acquisition and Relocation Community Meeting

The purpose of this open house is to:

- Provide information about potential property displacements and what it means for your property
- Facilitate information about the property acquisition and relocation process
- Offer resources outlining the rights of property owners and tenants
- Share information on the Red Line Extension (RLE) Project

Please participate by discussing your questions or concerns with the representatives stationed around the boards and at the workstations. There will be no formal presentation.

If you would like to schedule a one-on-one meeting with CTA's relocation liaisons, please let us know by noting it on the sign-in sheet or on a comment card.

You may leave your comments with us today, provide them verbally to a court reporter during the public hearing on November 1, or send a comment card to this address:

Chicago Transit Authority
Strategic Planning, 10th Floor
Attn: Red Line Extension Project
567 W. Lake Street, Chicago, IL 60661

Or send us an email: RedExtension@transitchicago.com

Or call us: **1-888-YOUR-CTA (1-888-968-7282)**

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UPRR Alternative

The extension would run along elevated tracks south from the 95th Street Terminal, and follow I-57 until reaching the Union Pacific Railroad (UPRR) corridor near Eggleston Avenue. The alignment would then turn south and follow the UPRR corridor to Prairie Avenue, where it would cross over the freight rail tracks near 119th Street. South of this point, the alignment would follow the existing freight rail tracks and end with a station at 130th Street.

The Draft Environmental Impact Statement (EIS) evaluates two options for this alternative:

East Option

(east of UPRR tracks)

West Option

(west of UPRR tracks)

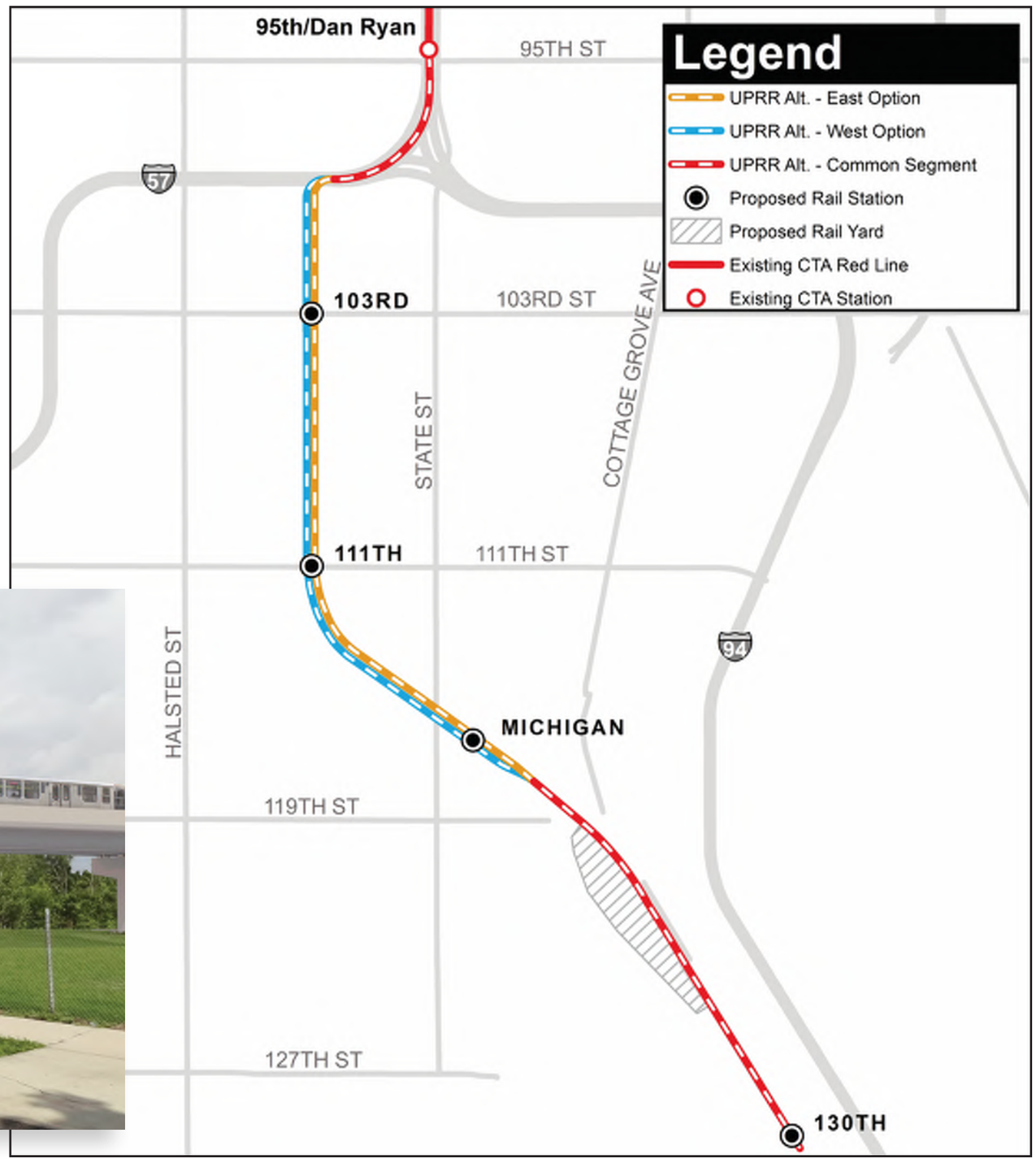

Property impacts would be different depending on which option is selected.

Because CTA is still evaluating both options, it is not known at this time whether acquisition of your property may be required.

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Visualizations

East Option

103rd Street Station *(facing northwest)*

West Option

103rd Street Station *(facing south)*

East Option

111th Street Station *(facing west)*

West Option

Michigan Avenue Station *(facing northwest)*

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Quick Facts About Acquisition and Relocation

The property acquisition and relocation process is governed by the federal Uniform Relocation Assistance and Real Property Policies Act of 1970 (also known as the "Uniform Act"), which outlines the rights of owners and tenants of business and residential properties.

The process includes two main parts:

Acquisition – The purchase of your real estate. Property owners would not be paid less than fair market value for their land and buildings. In some circumstances, if current appraisals are less than the original purchase price, an owner may be eligible for compensation equal to the original purchase price.

Relocation – Additional benefits offered should you or your business be displaced. CTA will provide a relocation agent to every displaced person to help navigate the benefits that are available. Residential homeowner financial benefits may include:

1. *Moving and Related Expenses*
2. *Replacement Housing Payments*
3. *Incidental Closing Costs*

Next Steps

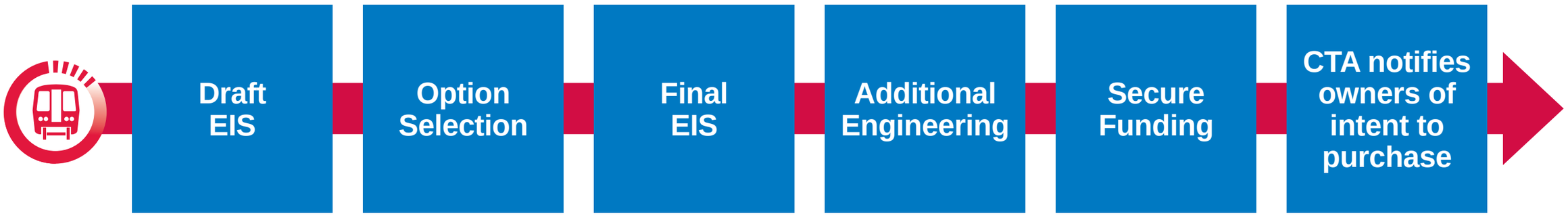

Appendix C
Agency Coordination and Public Involvement

Contents:

Limited English Proficiency Analysis (July 2009)
Public Participation Plan (August 2012)
Coordination Plan (August 2012)
Coordination with Chicago Park District
Website (May 2015)
Alternatives Analysis (2006-2009)
Outreach to Community Groups (2012)
August 2011 Open House Meeting Summary
August 2013 Newsletter
Spring 2014 Outreach Summary

Appendix C
Agency Coordination and Public Involvement

Limited English Proficiency Analysis (July 2009)

Memorandum

To: *CTA*

From: *CWC Transit Group*

Date: *July 13, 2009*

Subject: *Red Line Extension Limited English Proficiency Assessment*

Upon further analysis of the Limited English Proficiency (LEP) needs of the CTA Red Line Extension Project Area, we have determined that public outreach materials should be prepared in both English and Spanish.

Looking at census data within each tract adjacent to the Locally Preferred Alternative (LPA) we see that there are several tracts where over 35% of the citizens speak Spanish/Spanish Creole. Construction of the Red Line Extension Project can have large impacts on the community, even more so on the properties adjacent to the LPA. The CTA needs to ensure that every citizen potentially affected by this project is made aware of possible impacts on their neighborhood.

Analysis was conducted at the tract level by specifically selecting those tracts adjacent to the LPA Right of Way (ROW). Refer to the attached LEP Baseline Report (Enclosure 1) and the corresponding Census Tract map (Enclosure 2) for detailed data on the specific tracts and languages used within each.

Enclosures:

1. ***LEP Baseline Report***
2. ***Map of Census Tracts along LPA ROW***

cc: ***Melissa Peters***

Limited English Proficiency (LEP) Baseline Report

CTA Red Line

Executive Order 13166 "Improving Access to Services for Persons with Limited English Proficiency" requires all recipients of federal funds to provide meaningful access to persons who are limited in their English proficiency (LEP). The United States (U.S.) Department of Justice defines LEP individuals as those "who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English" (67 FR 41459). Data about LEP populations was gathered in the U.S. Census 2000. For data analysis purposes, the Census divides the states of the United States into counties and divides counties into tracts.

Within area tracts, Census data record the presence of persons who describe their ability to speak English as less than "Very Well." The table below shows the percentages of adults who speak English less than "Very Well" by language category. Additionally, 175 households or 1.0% of households within area tracts reported to the Census that their household was linguistically isolated, meaning that all household members over the age of fourteen had at least some difficulty with English. Thus, Census data indicate the presence of LEP populations.

Table. Census Data: Percent of Adult Speakers Who Speak English Less than Very Well*

Census Geographies	Total Adult Population	Percent of Adult Speakers Who Speak English Less than Very Well			
		Spanish Language Speakers	Other Indo European Language Speakers	Asian and Pacific Island Language Speakers	Other Language Speakers
Tracts					
Tract 4906.00 Cook County	1,331	0.6%	0.0%	0.5%	0.0%
Tract 4907.00 Cook County	2,709	0.6%	0.3%	0.0%	0.2%
Tract 4910.00 Cook County	4,356	0.7%	0.4%	0.4%	0.0%
Tract 4911.00 Cook County	3,986	0.7%	0.0%	0.0%	0.0%
Tract 4912.00 Cook County	1,949	0.3%	0.3%	0.0%	0.0%
Tract 4913.00 Cook County	2,470	1.5%	0.3%	0.0%	0.0%
Tract 5104.00 Cook County	33	15.2%	0.0%	0.0%	0.0%
Tract 5301.00 Cook County	1,993	21.9%	0.0%	0.0%	0.0%
Tract 5302.00 Cook County	4,577	1.0%	0.0%	0.7%	0.0%

Tract 5305.00 Cook County	10,336	0.6%	0.7%	0.0%	0.3%
Tract 5306.00 Cook County	2,699	0.7%	1.2%	0.0%	0.0%
Tract 5401.00 Cook County	5,305	2.8%	0.0%	0.0%	0.0%

Data Source: United States Census 2000 (Table P19) as of February 9, 2008 for persons age 18 and older.
* The data on ability to speak English represent the Census respondent's own perception about his ability to speak English (United States Census 2000 Metadata).

Since LEP is partially defined as a limited ability to read and write English, literacy data were also consulted. Indirect literacy estimates for adults were calculated by the National Center for Education Statistics based on 2003 survey data for states and counties. None of the geographies in study area meet the requirements to be included in the National Institute for Literacy study; thus, literacy data is not available. In conclusion, the data indicate the likelihood of LEP populations in the area.

To determine the languages of the LEP populations, Census data were consulted for project area tracts. The table below details the top five languages spoken by the total adult population (LEP and non-LEP) for each tract.

Table. Census Data: Top Five Languages Spoken by the Adult Population

Census Geographies	Language 1	Language 2	Language 3	Language 4	Language 5
Tracts					
Tract 4906.00 Cook County	English 93.2%	Spanish/Spanish Creole 2.3%	Tagalog 2.3%	French (Patois, Cajun) 1.8%	Korean 0.4%
Tract 4907.00 Cook County	English 96.4%	Spanish/Spanish Creole 2.1%	German 0.6%	Hebrew 0.5%	Korean 0.4%
Tract 4910.00 Cook County	English 96.9%	Spanish/Spanish Creole 2.2%	Tagalog 0.4%	French (Patois, Cajun) 0.4%	Korean 0.2%
Tract 4911.00 Cook County	English 97.7%	Spanish/Spanish Creole 1.3%	Japanese 0.4%	German 0.3%	Italian 0.2%
Tract 4912.00 Cook County	English 96.8%	French (Patois, Cajun) 1.0%	Spanish/Spanish Creole 0.9%	Tagalog 0.8%	German 0.3%
Tract 4913.00 Cook County	English 96.8%	Spanish/Spanish Creole 2.1%	French Creole 0.9%	French (Patois, Cajun) 0.3%	-
Tract 5104.00 Cook County	English 60.6%	Spanish/Spanish Creole 39.4%	-	-	-
Tract 5301.00 Cook County	English 59.5%	Spanish/Spanish Creole	Other Slavic languages	German 0.6%	Italian 0.4%

		38.9%	0.7%		
Tract 5302.00 Cook County	English 96.2%	Spanish/Spanish Creole 2.6%	Tagalog 0.7%	German 0.2%	Other Pacific Island languages 0.2%
Tract 5305.00 Cook County	English 94.3%	Spanish/Spanish Creole 2.1%	French (Patois, Cajun) 1.1%	Arabic 0.8%	German 0.6%
Tract 5306.00 Cook County	English 96.6%	Spanish/Spanish Creole 1.7%	Polish 1.0%	Russian 0.3%	French (Patois, Cajun) 0.3%
Tract 5401.00 Cook County	English 95.1%	Spanish/Spanish Creole 4.8%	Italian 0.1%	-	-
Data Source: United States Census 2000 (Table PCT10) as of February 9, 2008.					

Therefore, the tracts data does not indicate the presence of LEP language groups that exceed the Department of Justice's Safe Harbor threshold of 5% or 1,000 persons. [However, the following measures will be taken to ensure LEP persons meaningful access: enter any measures to be taken to ensure meaningful access if applicable]. Thus, the requirements of Executive Order 13166 appear to be satisfied.

Citations

- "Improving Access to Services for Persons with Limited English Proficiency," 3 Code of Federal Regulations 13166. 2001 ed.
- "Guidance to Federal Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons," 67 Federal Register 117 (18 June 2002), pp. 41459.
- U.S. Bureau of the Census. Census 2000: Summary File 3. Washington: The Bureau, 2008.
- National Center for Education Statistics. "State & County Estimates of Low Literacy." National Assessment of Adult Literacy. 2009. http://nces.ed.gov/naal/estimates/Index.aspx.
- National Center for Education Statistics. Common Core of Data. Washington: NCES.

Legend

- Census Tract Boundary
- Block Group Boundary
- Block Boundary
- Major Road
- Street
- Stream/Waterbody

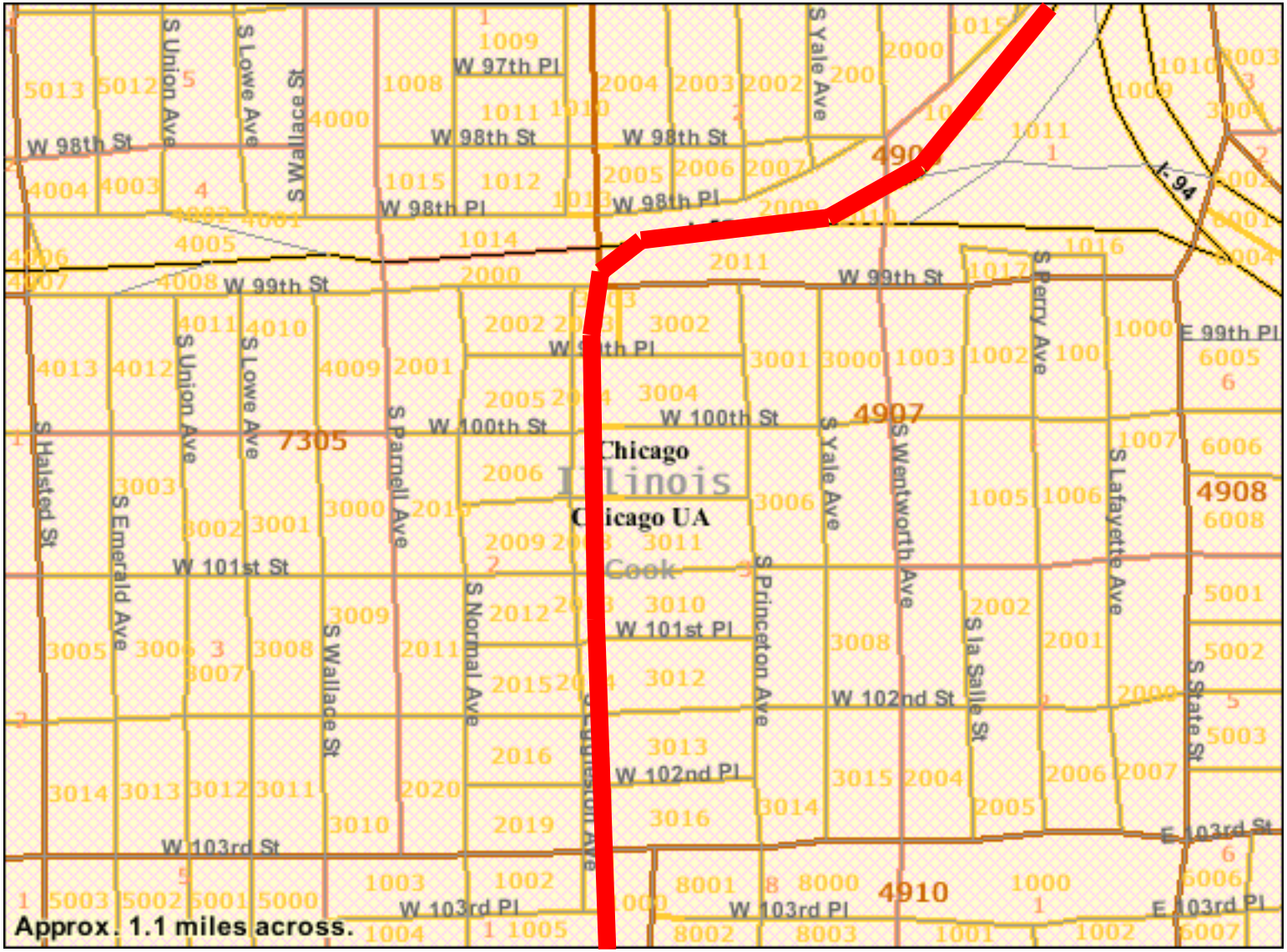

Census Tract, Block Group, and Block Location Map

Legend

- Census Tract Boundary
- Block Group Boundary
- Block Boundary
- Major Road
- Street
- Stream/Waterbody

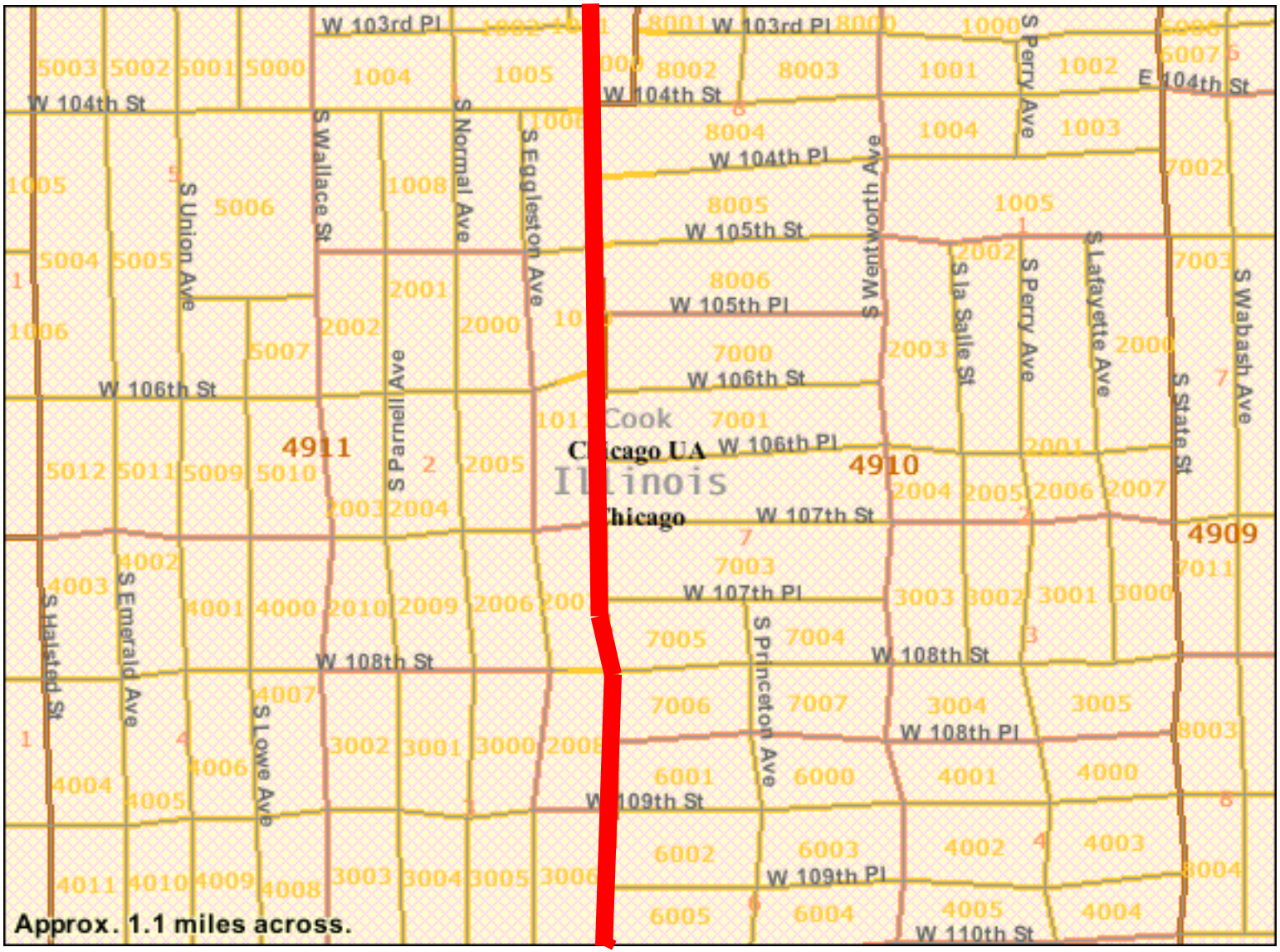

Census Tract, Block Group, and Block Location Map

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Census Tract, Block Group, and Block Location Map

Legend

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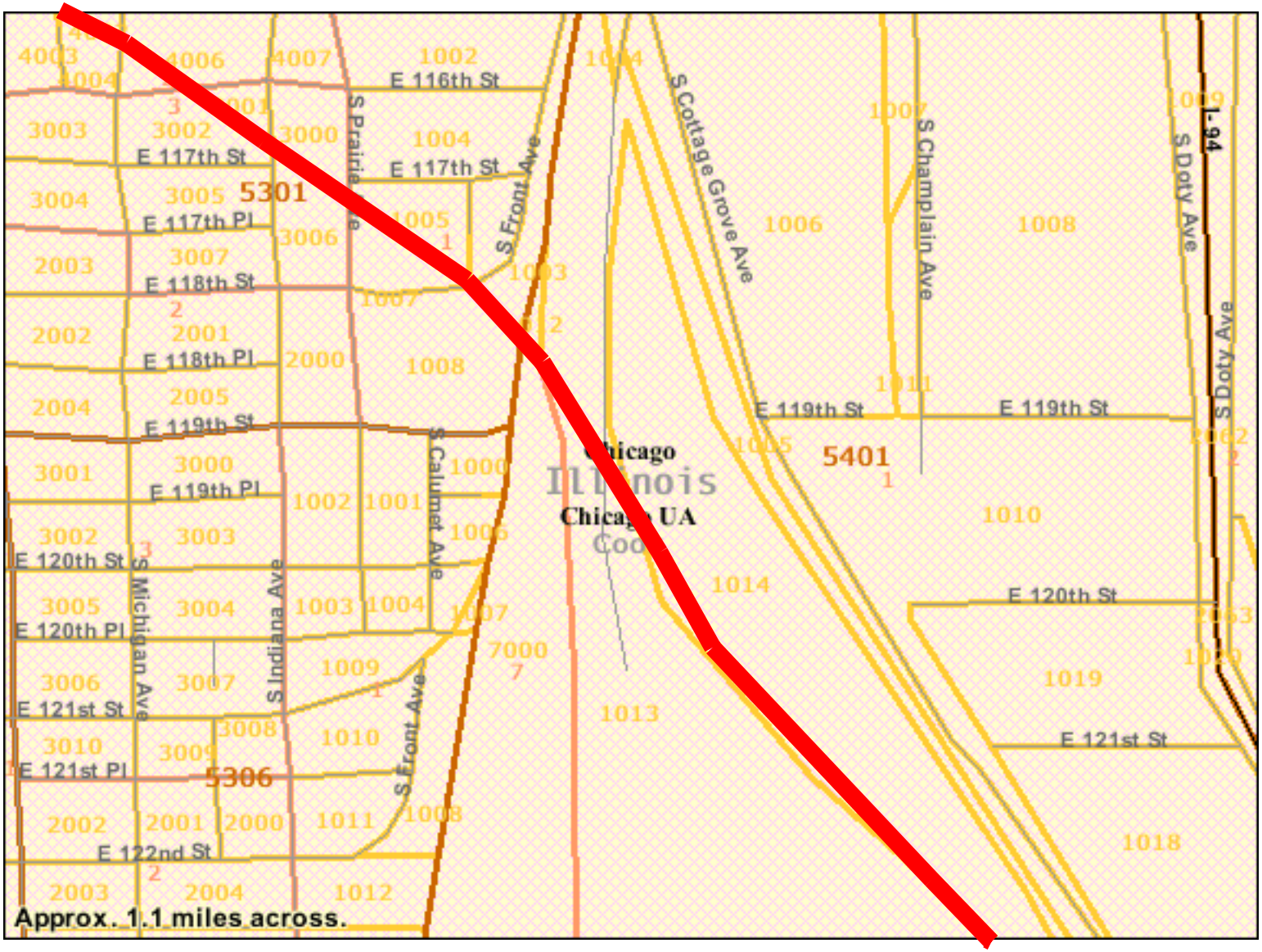

Census Tract, Block Group, and Block Location Map

Legend

- Census Tract Boundary
- Block Group Boundary
- Block Boundary
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- Stream/Waterbody

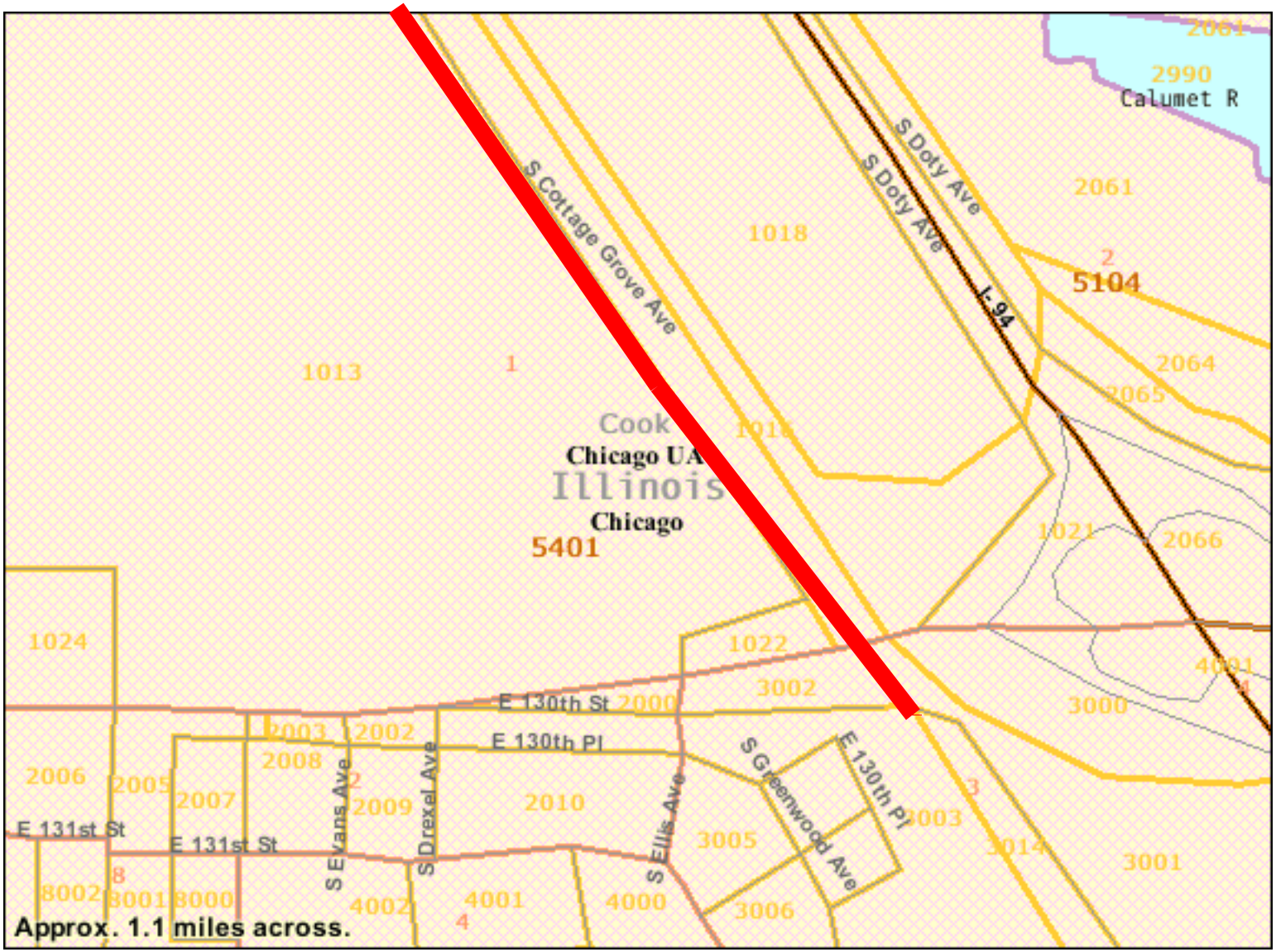

Census Tract, Block Group, and Block Location Map

Appendix C
Agency Coordination and Public Involvement

Public Participation Plan (August 2012)

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Red Line Extension Project

Public Participation Plan

August 23, 2012

Prepared for:
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Prepared by:
CWC Transit Group
125 South Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Overview **1-1**
Red Line Extension Project 1-1
Public Participation Plan 1-1

Section 2 Goals **2-1**

Section 3 Key Issues **3-1**
General Issues/Community Concerns/Opportunities 3-1
Economic Issues/Concerns/Opportunities 3-1
Transportation Issues/Concerns/Opportunities 3-2
Construction Issues/Concerns/Opportunities 3-2

Section 4 Key Audiences **4-1**
Project Area Residents and Neighborhood Associations 4-1
Business/Business Associations/Institutions 4-2
Associations/Special Interest Groups/Schools 4-3
Commuters 4-6
Public Agencies and Local Government 4-6
Media 4-8

Section 5 Limited English Proficiency Analysis **5-1**

Section 6 Environmental Justice Analysis **6-1**

Section 7 Public Participation Activities **7-1**
Resolution of Community Concerns 7-1
Community Update Meetings 7-1
Community Update Schedule 7-2
Stakeholder and Alderman/Elected Official Briefings 7-2
Stakeholder Briefing Schedule 7-2
Public Hearings on the Draft EIS 7-3
Public Hearing Schedule 7-3
Media Relations 7-3

Section 8 Public Participation Notification and Information Materials 8-1
Project Newsletters 8-1
Website 8-1
Citizens Guide to the Draft EIS 8-1
Public Notices 8-1
Other Notification (Village Hall, Libraries, Blogs, e-blasts, Transit Alert Cards) 8-2
City Hall, Village Hall, or Community Center Announcement Posting Locations 8-2
Library Announcement Posting Locations 8-2
Blogs/Websites/List servs 8-3
E-mail Notice 8-3
Online Calendars 8-3
Promotion in Transit: Transit Alert Cards 8-4
Social Media 8-4
Display Advertisement for Community Update Meetings and Public Hearings 8-4
Publication Placement 8-4
Media Release 8-4
Meeting Materials 8-5
Project Database 8-5

Section 9 Documentation 9-1
Comment Tracking/Documentation/Response Management 9-1

Appendices

Appendix A Overview Schedule
Appendix B Stakeholder Interview Summary

Abbreviations

AA - Alternatives Analysis
CTA - Chicago Transit Authority
EIS - Environmental Impact Statement
FTA - Federal Transit Administration
HRT - Heavy Rail Transit
LEP - Limited English Proficiency
LPA - Locally Preferred Alternative
NEPA - National Environmental Policy Act
RLE - Red Line Extension
TSM - Transportation Systems Management
UPRR - Union Pacific Railroad

SECTION 1
OVERVIEW

Red Line Extension Project

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street terminal station to 130th Street, the Red Line Extension (RLE) Project. CTA and the Federal Transit Administration (FTA) are preparing a Draft Environmental Impact Statement (EIS) that will evaluate the environmental impacts of constructing and operating the extension.

Public Participation Plan

The National Environmental Policy Act (NEPA) requires evaluation of potential environmental impacts associated with federal projects and actions. For this project, the evaluation will be documented in an EIS.

The EIS will focus on the alternatives that emerged from the Alternatives Analysis (AA) and the NEPA scoping process including: a No Action Alternative, a Transportation Systems Management (TSM) Alternative, a Locally Preferred Alternative (LPA): Union Pacific Railroad (UPRR) Heavy Rail Transit (HRT) including a Right-of-Way Option, an East Option, and a West Option, and a Halsted Street HRT Alternative. The EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of the alternatives, and mitigation measures to reduce or eliminate potential impacts.

The public participation will build on the public and agency input received in the AA, as well as the input received during scoping. The AA process started in 2006 and was completed in 2009 with a recommendation of a range of alternatives to be studied in the EIS. As part of the three-step screening process, CTA hosted six public meetings over three years in order to gather input from the public regarding alternative options.

SECTION 2
GOALS

The public participation plan will guide CTA through a focused public involvement and outreach process for the RLE Draft EIS. The plan is flexible in order to respond appropriately to public and agency issues as they arise. It is anticipated that additional information will become available that will further guide proposed activities. The dates and activities are preliminary and may change. See Appendix A for a preliminary overview of the public participation schedule.

PUBLIC PARTICIPATION GOALS

- Build on previous outreach efforts of the Alternatives Analysis process and scoping
- Make the complex issues associated with the RLE Project and the environmental study process understandable to customers and those using other modes of transportation
- Ensure stakeholders are aware of the planning process and the purpose and content of the proposed project
- Ensure that the project is clearly defined to the public within the umbrella of CTA's other planning projects
- Identify any needs, issues, or concerns of stakeholders
- Provide a range of opportunities for the public and interested stakeholders to comment on the proposed project
- Ensure that the area's diverse population, including tracts adjacent to the project alignment where more than 15% of the population has limited English proficiency as well as Environmental Justice populations (minorities and low income), are included in the process
- Ensure the public understands the project timeline and the financial and right-of-way constraints
- Fulfill the public participation requirements of FTA's New Starts Criteria
- Document all public and agency input
- Provide context for why other projects are currently underway such as Loop Track Renewal, and the Red Line Dan Ryan Track Renewal project

The public participation program provides a variety of communication channels to help the public understand the RLE Project, including its potential negative and beneficial impacts. The program will solicit input and feedback from the public as to their specific needs, issues, concerns, and recommendations.

In order to engage the public to participate in the study process, some basic strategies will include:

STRATEGIES TO ENGAGE THE PUBLIC	APPROACH
■ Make it easy to participate ■ Provide opportunities for constructive dialogue and communication	■ Community meetings within the project area; web access to final project documents; meetings in locations accessible by public transportation and accessible to people with disabilities; outreach materials in English and Spanish and accessible to people with visual impairments
■ Provide timely, easy-to-understand information that helps people provide informed comments	■ Straightforward Citizens Guide to the Environmental Document, newsletters, website, exhibit boards and handouts at meetings
■ Leverage communications resources	■ Work with organizations that have established audiences and channels of communication to more widely disseminate project information
■ Provide multiple ways to obtain information and provide comments	■ Website, mailed notice, e-blasts, community calendars, comment cards, Facebook, Twitter, media, flyers in libraries, CTA System
■ Ensure stakeholders are aware of the planning process	■ Careful review and augmentation of the existing project contact list ■ Stakeholder and Alderman/elected official briefings to identify issues and find additional ways to engage the local community ■ Outreach to community-based organizations representing environmental justice communities
■ Show how public input will be used	■ Document all public and agency input in the Meeting Summaries

SECTION 3
KEY ISSUES

There are four primary issues that have been identified as likely issues of public and stakeholder concern to be explored and discussed during this phase: alignment options, station location options, the benefits of the proposed project to transit disadvantaged communities (communities underserved proportionally by transit investment) and the impacts of construction. A host of other issues also were identified through public input during the Alternative Analysis and EIS scoping phases as listed below. As the study progresses, new key issues may develop, some existing issues will be refined and the appropriate public involvement approach to address key issues will be determined. The list will be amended as the study moves forward.

General Issues/Community Concerns/Opportunities

- Access/benefits for disadvantaged and underserved communities (Altgeld Gardens neighborhood)
- Alignment options and station/stop locations
- Support for the LPA – UPRR HRT Alternative
- Public safety at stations/stops and surrounding communities
- Community compatibility
- Relocation and displacement impacts/enhancement on residential/business/school areas surrounding the project corridor
- Passenger access to local businesses, community, and cultural amenities (improved mobility, neighborhood revitalization)
- Effect/enhancement of quality of life
- Noise and vibration impacts along corridor
- Proximity to Wendell Smith Park and Fernwood Parkway Park

Economic Issues/Concerns/Opportunities

- Jobs/improved economy
- Funding
- Project cost
- Local workforce participation
- Property value impact
- Support for local economic and land use plans and goals

- Transit fare changes

Transportation Issues/Concerns/Opportunities

- Easing congestion in the region
- Coordination/connectivity with other transit systems and modes (Metra, buses, bicycle/pedestrian access, I-Go and Zip Cars)
- Traffic and parking
- Bike and bus access to park and rides
- Improve transit access to and from Far South side
- Reduce congestion at 95th and Dan Ryan terminal

Construction Issues/Concerns/Opportunities

- Length of construction
- Potential traffic/detours/delays
- Potential customer reduction to businesses along corridor during construction
- Potential parking/relocation/displacement during construction
- Noise, impacts to buildings

SECTION 4
KEY AUDIENCES

Anyone who lives, works, plays, learns, and commutes through the RLE project area, or has some involvement or oversight in how the line will operate, is an important audience member. The public participation program creates a structure for learning about the different community interests and characteristics. The project is important to many different groups, each with specific interests in the study. The outreach team will keep these groups involved and continually informed about the process and progress of the analysis. Brief discussions of key audiences follow.

Project Area Residents and Neighborhood Associations

Important issues for neighborhood associations and project area residents include: corridor impacts/enhancements such as neighborhood compatibility, economic development, station locations, and the reduction of impacts on residential areas. The public participation program includes outreach to property owners and residents in the project area. These groups will receive project information through a combination of channels including newspaper display ads, invitation postcards, email notices, transit alert cards, community hall and library flyers, and CTA's Facebook, Twitter, and website. Some of the local communities that may be interested include the following:

- Chatham Avalon Park Community Council
- Chesterfield Community Council
- Residents of Altgeld Neighborhood
- Residents of Beverly Neighborhood
- Residents of Burnham Neighborhood
- Residents of City of Blue Island
- Residents of Cottage Grove Heights Neighborhood
- Residents of Dolton Neighborhood
- Residents of Evergreen Park Neighborhood
- Residents of Fuller Park Neighborhood
- Residents of Gardens Neighborhood
- Residents of Longwood Manor Neighborhood
- Residents of Morgan Park Neighborhood
- Residents of Princeton Park Neighborhood
- Residents of Pullman Neighborhood
- Residents of Riverdale Neighborhood
- Residents of Roseland Neighborhood
- Residents of the City of Calumet
- Residents of Village of Calumet Park
- Residents of Washington Heights Neighborhood
- United Neighborhood Organization

Business/Business Associations/Institutions

Some business stakeholders value the extension's potential to increase customers to local businesses and improve business districts around the corridor line, as well as employees and customers having greater access to the area. This overall category includes the industries, individual businesses, local business leaders, and chambers of commerce. The public involvement effort will solicit ideas and concerns from the business community. These stakeholders will receive invitations to community update meetings and the public hearings and updates on the project as it progresses. A stakeholder briefing may be scheduled to get input. Some of the local business groups that may be interested include the following:

- 87th Street Stony Island Chamber of Commerce
- American Brotherhood of Contractors
- Association of Asian Construction Enterprises
- Black Contractors United (BCU)
- Blue Island Chamber of Commerce
- Bronzeville Chamber of Commerce
- Business and Economic Revitalization Association
- Calumet Area Industrial Commission
- Calumet City Chamber of Commerce
- Canadian National Railway Company
- Chatham Business Association
- Chicago Area Gay & Lesbian Chamber of Commerce
- Chicago Minority Supplier Development Council (CMSDC)
- Chicago Southland Chamber of Commerce
- Chicago Women in the Trades (CWIT)
- Chicagoland Chamber of Commerce
- Cosmopolitan Chamber of Commerce
- Federation of Women Contractors (FWC)
- Greater Auburn -Gresham Development Corporation
- Greater Southwest Development Corporation
- East Side Chamber of Commerce
- Friends of the Parks
- Hegewisch Chamber of Commerce

- Hispanic American Construction Industry Association (HACIA)
- Illinois Hispanic Chamber of Commerce
- Latin American Chamber of Commerce
- Metropolitan Family Services
- Midwest High Speed Rail Association
- National Association of Women Business Owners (NAWBO-Chicago Area Chapter)
- Predestined Incorporated
- Puerto Rican Chamber of Commerce of Illinois
- International Trade Bureau
- Roseland Business Development Council
- Roseland Community Hospital
- South Chicago Chamber of Commerce
- Southeast Chicago Development Corporation
- Southwest REACH Center
- Total Resource Community Development Center
- Union Pacific Railroad
- Women's Business Development Center (WBDC)
- St. Bernard's Hospital and Health Care Center

Associations/Special Interest Groups/Schools

Sensitivity to the surrounding environment is important to the project. The input of various local, state, and federal agencies will be obtained throughout the EIS process. In addition, associations, special interest groups, and schools will be consulted. The director or leader of these groups will be notified of the community update meetings and the public hearings and updated as the project progresses. Some of the key groups that may be interested include the following:

- ACCESS Living
- Alianza Leadership Institute
- Apostolic Church of God
- Carver Military Academy
- Catholic Charities of the Archdiocese of Chicago - Community Affairs & Civic Affairs
- Center for Neighborhood Technology
- Charles H. Wacker Elementary School

- Chicago International Charter School - Prairie
- Chicago State University, Office of Public Affairs
- The Chicago Urban League
- Childrens Center Outreach
- Children's Developmental Institute
- Christian Fenger Academy High School
- Corliss High School
- Developing Communities Project, Inc.
- Dunne Technology Academy
- Equip for Equality
- Firman Community Services
- Gompers Fine Arts Option School
- Gwendolyn Brooks College Preparatory Academy
- Harlan Community Academy High School
- Historic Pullman Foundation & Historic Pullman Visitor Center
- Higgins Community Academy
- House of Hope
- Illinois Institute of Technology
- John G. Shedd Public School
- Johnnie Coleman Academy
- Kennedy-King College
- Marantha Christian Academy
- Marcus Garvey Math & Science School
- Medgar Evers Fine & Performing Arts School
- Metro Seniors in Action
- Morgan Park High School
- National Association for the Advancement of Colored People (NAACP), Chicago Southside Branch
- Northeastern Illinois University – Jacob H. Carruthers Center for Inner City Studies
- Northwestern University

- Olive-Harvey College
- Park Vernon Learning Academy
- Percy L. Julian High School
- Prayer & Faith Outreach Ministries
- The Pullman Civic Organization
- The Pullman State Historic Site
- Rainbow PUSH Coalition
- Riders for Better Transit (Active Transportation Alliance)
- Riverdale Community Resource Center
- Ronald H. Brown Community Academy
- Roseland Christian School
- Roseland Heights Community Association
- Rosemoor Community Association, Inc.
- Saint Anthony of Padua Parish
- Salem Baptist Church of Chicago
- The Salvation Army
- Senior Service Coalition of Southeast Chicago
- Simeon Career Academy
- Southsiders Organized for Unity and Liberation (SOUL)
- South Central Community Service - Far South
- South Shore Cultural Center
- Southeast Environmental Task Force
- Saint Helena of the Cross School
- The Faith Community of St. Sabina
- Strategies for Community Economic Development & Finance
- Tabernacle Christian Academy
- Teamwork Englewood
- Transportation Equity Network
- United Educational Cultural Academy
- The University of Chicago

- University of Illinois at Chicago - Department of Urban Planning and Policy
- Vivian E. Summers Preparatory School
- West Chesterfield Community Association
- West Chatham Improvement Association
- YWCA Metropolitan Chicago

Commuters

Key issues for commuters include access, passenger capacity and comfort, travel times, station/stop locations, and condition of the facilities. Advanced, timely information is important for this group. Commuters will be notified in the same way that the general public is, through newspaper ads, media stories and social media. In addition, meeting announcements for the public hearings and community update meetings will be posted at the CTA stations and in the CTA trains and buses via car alert cards.

Public Agencies and Local Government

Coordination and cooperation among agencies and all levels of government is an important element of this project. The following key agencies and local government representatives will be notified about the project:

- Chicago Housing Authority
- Chicago Park District
- Chicago Roseland Development Corporation
- Chicago Metropolitan Agency for Planning
- City of Blue Island
- City of Burnham
- City of Calumet
- City of Chicago, Alderman (Ward 9) Anthony Beale
- City of Chicago, Alderman (Ward 10) John Pope
- City of Chicago, Alderman (Ward 21) Howard Brookins Jr.
- City of Chicago, Alderman (Ward 34) Carrie Austin
- City of Chicago, Mayor Rahm Emanuel
- City of Chicago Department of Housing and Economic Development
- City of Chicago Department of Business Affairs and Consumer Protection
- City of Chicago Department of Community Development

- City of Chicago Department of Environment
- City of Chicago Department of Transportation
- City of Chicago Community Development Commission
- City of Chicago Police Department
- Metra Commuter Rail
- Metropolitan Water Reclamation District of Greater Chicago
- Pace
- Cook County Board of Commissioners, Board President Toni Preckwinkle
- Cook County Board of Commissioners, Commissioner (District 4) William M. Beavers
- Cook County Board of Commissioners, Commissioner (District 5) Deborah Sims
- Illinois Commerce Commission
- Illinois Department of Transportation
- Illinois Department of Natural Resources
- Illinois Environmental Protection Agency
- Illinois Historic Preservation Agency
- Illinois General Assembly, State Representative (House-27) Monique Davis
- Illinois General Assembly, State Representative (House-28) Robert Rita
- Illinois General Assembly, State Representative (House-29) David Miller
- Illinois General Assembly, State Representative (House-34) Constance Howard
- Illinois State Senate, Senator (Senate-14) Emil Jones Jr.
- Illinois State Senate, Senator (Senate-15) James Meeks
- Illinois State Senate, Senator (Senate-17) Donne Trotter
- State of Illinois, Governor Pat Quinn
- Mayor's Office for People with Disabilities
- South Suburban Mayors and Managers Association
- Southeast Chicago Development Commission
- U.S. Department of Energy
- U.S. Department of Health and Human Services
- U.S. Department of Housing and Urban Development
- U.S. Transportation Security Administration

- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- Federal Emergency Management Agency
- Federal Highway Administration
- Federal Railroad Administration
- U.S. House of Representatives, Congressman (District 1) Bobby Rush
- U.S. House of Representatives, Congressman (District 2) Jesse Jackson
- U.S. Senate, Senator Dick Durbin
- U.S. Senate, Senator Mark Kirk
- Ho-Chunk Nation
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Sac and Fox Nation of Oklahoma
- Pokagon Band of Potawatomi Indians
- Prairie Band of Potawatomi Nation
- Citizen Potawatomi Nation
- Forest County Potawatomi
- Potawatomi Nation – Hannahville Indian Community
- Sac and Fox Nation of Mississippi in Iowa
- Sac and Fox Nation of Missouri
- Village of Calumet Park
- Village of Dolton
- Village of Evergreen Park
- Village of Riverdale

Media

Media coverage offers an efficient means of communicating with the general public. Effective coordination with local and regional media contacts will be crucial to raising public awareness and explaining the RLE Project. Supplying the media with updated, factual information increases the likelihood of balanced, informative coverage. Ethnic, multi-lingual media coverage will also be an important element of the media outreach.

SECTION 5
LIMITED ENGLISH PROFICIENCY ANALYSIS

A fundamental requirement of the NEPA is communication with local citizens who could be affected by a project. This means that informational materials should effectively communicate with everyone in a project area. The project area has historically supported a very diverse population. It was important at the start of this project, prior to developing notification materials, to determine whether there was a significant population with limited English proficiency within the project area.

During the scoping process, an analysis of languages spoken and English proficiency within the study area was conducted based on data collected from the U.S. Census. The RLE project area crosses 12 census tracts. While the majority of the population in those tracts speaks English, there are several tracts adjacent to the LPA where more than 35% of the citizens speak Spanish/Spanish Creole. Furthermore, some of these tracts have linguistically isolated populations where more than 15% speak Spanish, but speak English less than "Very Well."

The RLE project can have large impacts on the community, even more so on the properties adjacent to the LPA. Therefore outreach should be conducted to raise awareness of possible impacts among those potentially affected by this project as well as Environmental Justice populations (minorities and low income).

Based on this analysis, outreach materials will be provided in Spanish and a Spanish translator will be available at the public hearings. A meeting may be conducted in Spanish and outreach will be done through other Spanish-speaking outlets.

SECTION 6
ENVIRONMENTAL JUSTICE ANALYSIS

The Draft EIS will assess environmental justice (EJ) issues related to the proposed project alternatives. The EJ analysis will comply with the Federal Executive Order 12898 to address disproportionately high and adverse human health or environmental effects on minority and low-income populations resulting from federal programs, policies and activities. The social groups specifically benefitted or harmed by the proposed action will be identified. Effects of the alternatives upon the elderly, handicapped, non-drivers, transit-dependent, low income, minorities, and Limited English Proficiency (LEP) populations will be described.

The evaluation of minority and LEP impacts will include analysis of census data for the general project area regarding race, color, national origin and ability to speak English well. Census data analysis will be supplemented and verified through field reconnaissance. Potential displacement of residences, businesses and employees will also be considered when evaluating the potential for disproportionate adverse impacts in EJ communities. Changes in minority employment opportunities, the effect of the proposed action on EJ populations and proposed mitigation measures to reduce or avoid disproportionate impacts upon EJ populations will be discussed in the draft EIS.

Large construction projects often disproportionately impact EJ communities because of a lack of opportunity for these communities to become engaged in the planning and environmental process and voice their issues and concerns. *See section 7 for information on how we intend to address this.*

SECTION 7
PUBLIC PARTICIPATION ACTIVITIES

Resolution of Community Concerns

To fully engage EJ communities and try to identify and resolve potential concerns, a series of stakeholder interviews will be conducted with representatives of the various EJ populations. The interviews will be focused on identifying any concerns of EJ communities along the corridor regarding the RLE Project and its associated impacts, as well as the best ways of discussing those concerns with the community and CTA. In addition, the interviews will help further identify specific groups or associations to engage, existing communication vehicles to leverage and best practices to engage specific communities.

Based on the insight gathered through the stakeholder interviews, a series of up to eight focused grassroots meetings will be conducted to work through EJ community concerns and to identify appropriate project modifications and mitigation measures to address concerns. These meetings may be conducted at a neighborhood level, with an existing organization or with a congregation that is potentially impacted by the project.

Depending on the distribution of LEP populations, some of the community meetings may be conducted and facilitated in Spanish. Sign language interpreters and interpreters for other languages will be provided as needed.

Project materials will be prepared in appropriate languages and cultural contexts. If needed to more effectively engage LEP populations, materials specifically tailored to these groups may be developed.

Community Update Meetings

Community update meetings will be held to keep the general community informed about project progress. These meetings will typically be an open house format and may include information on environmental analyses, results of community surveys, changes in project alternatives, identification of potential funding sources, or resolution of neighborhood issues. These meetings will provide opportunities for the public to provide ongoing input that will help CTA with finalizing options for the LPA. The open house format will be confirmed after discussions with CTA and FTA.

Community Update Schedule

Community Update Meetings: Spring 2013

Location: The meeting locations will be within the project area and must meet FTA criteria such as being ADA accessible and near to transit.

Notification materials will include: Newspaper display ads, invitation postcard, email notice, transit alert cards, community hall and library flyers, and CTA's Facebook, Twitter and website.

Stakeholder and Alderman/Elected Official Briefings

Project briefings will provide existing and potential stakeholders an overview of the public participation program and the project. Approximately fifteen stakeholders will be briefed three times at key milestones in the project. Multiple stakeholders may be briefed at a single meeting.

The team will work with CTA and specifically the CTA Government and Community Relations staff to develop the list of key stakeholders that will be briefed. The list might include elected officials, mayors, aldermen, the Mayor's Office for People with Disabilities, city administrative staff, community leaders and neighborhood groups. CTA will identify appropriate milestones to brief stakeholders.

Stakeholder Briefing Schedule

Meetings in Winter/early Spring 2013 to brief stakeholders before the community update meetings scheduled for Spring 2013.

Meetings in early Fall 2013 to brief stakeholders before the public hearings in late Fall 2013.

Public Hearings on the Draft EIS

Two public hearings on the Draft EIS will be held in the same week to inform the public about the project, the contents of the Draft EIS, and to receive comments on the Draft EIS. The same information will be presented at the two public hearings, but the meeting locations will be different. The hearing format will be confirmed after discussions with CTA and FTA.

Public Hearing Schedule

Two Public Hearings: Fall 2013

Location: The hearing location will be within the project area and must meet FTA criteria such as being ADA accessible and near to transit. Locations selected will be distributed throughout the project area to provide full geographic coverage.

Notification materials will include: Legal notice, newspaper display ads, postcard invitation notice, email notice, media release, transit alert cards, community hall and library flyers, and CTA's website.

Media Relations

Regular monitoring of various media coverage and discussions on the project will be conducted. These media may include print media, on-line blogs, and other social media conversations about the project. This information will inform the development of the project.

SECTION 8
PUBLIC PARTICIPATION NOTIFICATION AND INFORMATION MATERIALS

Project Newsletters

Two project newsletters will be developed to deliver the project messages in a clear and concise manner and to provide information and other data about the project. The newsletters will provide an overview of the EIS process and the opportunities for public input. Graphics and maps will be incorporated in the newsletters in order to make the content easy to read and understand. The newsletters will be mailed to all of the people on the project mailing list.

Website

The existing project website will be updated for this phase of the project. The website provides access to project updates, project background, project materials, and documents and announcements. The community update meetings and public hearing meeting dates will be posted in advance on the website. Information on the website will be in a readable format for people with vision impairments.

Citizens Guide to the Draft EIS

The Citizens Guide to the Draft EIS will be prepared to provide an overview of the Draft EIS with pictures from the study area, maps of the alternatives, colorful bold headings, and succinct descriptions of the impacts and proposed mitigation measures for each resource area. The text will explain the process for public review and will get to the heart of technical issues in an easily understood manner. In order to more fully engage the community, artist's renderings or other visual simulations will be used to help residents understand potential effects of what the proposed extension will look like.

Public Notices

Various formats will be used to invite the public to attend one of the public participation meetings. Below is a chart that shows the type of invitation and outreach that will be conducted for each type of meeting. A more detailed description of the notification materials is provided below.

Outreach	Mailed Postcard Invite	Email or Phone Call	Display Ads	Media Release	Other Notification (flyers, e-blast, blogs, transit alert cards, tweets, Facebook posts)
Community Update Meetings	X		X	X	X
Public Hearings	X		X	X	X
Neighborhood Meetings		X			
Stakeholder Briefings		X			

Other Notification (Village Hall, Libraries, Blogs, e-blasts, Transit Alert Cards)

Notifications for the community update meetings and public hearings will be posted and distributed throughout the area including at Village Halls, libraries, e-list serves, and with community groups.

City Hall, Village Hall, or Community Center Announcement Posting Locations

- City of Burnham
- City of Blue Island
- Calumet City
- Village of Calumet Park
- Village of Dolton
- Village of Evergreen Park
- Village of Riverdale

Library Announcement Posting Locations

- Calumet City Public Library
- Chicago Public Library –Altgeld Branch
- Chicago Public Library –Brainerd Branch
- Chicago Public Library –Hegewisch Branch
- Chicago Public Library –Vodak/East Side Branch
- Chicago Public Library –Jeffrey Manor Branch
- Chicago Public Library –Pullman Branch
- Chicago Public Library –South Chicago Branch
- Chicago Public Library -Walker Branch
- Chicago Public Library -West Pullman Branch

- Riverdale Public Library

Blogs/Websites/List servs

- Riders for Better Transit (Active Transportation Alliance) website and blog
- Aldermen list servs and websites
- Car Free Chicago (blog)
- Chi-Town Daily News
- Chicago"L".org (website)
- CMAP Updates (blogs)
- CTA Twitter
- CTA Facebook
- CTA Tattler (blog)
- Gapers Block (general interest site)
- GridChicago.com (website)
- Movingbeyondcongestion.com (website)
- Metropolitan Planning Council (MPC) (publications: Blog, newsletter, website)
- Ridge99.com
- southwestobserver.com
- Streetsblog (blogs)
- thesixthward.blogspot.com
- Transitchicago.com (website)
- The Urbanophile (an urban affairs blog that covers transportation and economic development)
- Write of Way blog by the Active Transportation Alliance

E-mail Notice

An e-mail notice will be sent to stakeholders, elected officials, and residents who attended previous CTA meetings on this project and provided an email contact, or those who contacted the CTA via email to submit a public comment or request to be added to the email list.

Online Calendars

Information will be sent to online event calendars, most of which are run through newspapers and TV stations. In addition, meeting notices will be sent to local chambers of commerce and to large organizations that cover a wide audience and would communicate with members in the

areas served by the lines, such as the Chicagoland Chamber of Commerce, Illinois Chamber of Commerce, and the Association Forum of Chicagoland.

Promotion in Transit: Transit Alert Cards

Meeting announcements for the public hearings and community update meetings will be posted at the CTA stations and in the CTA trains and buses via car alert cards.

Social Media

There are many opportunities for CTA to reach out and to listen via social media. Information will be posted on the CTA Facebook group page and Twitter sites. CTA also will monitor the ongoing social media dialogue about CTA and the project in order to identify concerns, answer questions, respond to ideas, and correct any misunderstandings or misinformation. CTA also will tap social media sites of partner organizations to provide information and hear feedback.

Display Advertisement for Community Update Meetings and Public Hearings

Display advertisements in local and regional newspapers will be used to publicize the community update meetings and the public hearings. The community update meeting display ads will provide the time, date and location of the update meetings. A more formal public hearing display ad will be placed that includes information on the project, the alternatives analysis, the meeting information, and where and when to submit comments. An email and postal mail address will be provided for written comments. The newspapers in which display ads may be placed include the following:

Publication Placement

- Beverly Review
- Chicago Crusader
- Chicago Defender
- Chicago Sun-Times
- Chicago Tribune
- Hoy
- LaRaza
- Red Eye
- Southtown Star

Media Release

Media releases will be issued to ensure that media outlets are aware of the public meetings and have adequate background information with which to write about the EIS process.

Meeting Materials

Information boards will be developed for the public hearings and the community update meetings and general hand-outs will be prepared.

Project Database

A comprehensive database of approximately 5,000 stakeholders for the RLE Project has been established and maintained. The database includes elected officials, special interest group representatives, agency staff persons who attended the scoping meetings, and persons who requested to be on the mailing list. The mailing list includes property owners and tenants adjacent to the centerline of the proposed project.

SECTION 9
DOCUMENTATION

Comment Tracking/Documentation/Response Management

The public meetings will be fully documented for the administrative record. Comments will be received by mail, email, and by comment card at the public hearings and community update meetings. A summary of all public meetings will be included in the Draft EIS. The summary will include comment cards, letters, attendance sheets, notification materials, and a summary of verbal and written input, such that an evidential record of the meetings is documented.

CHICAGO TRANSIT AUTHORITY (CTA)

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Public Participation Plan Overview Schedule 2012/2013

APPENDIX A

Activity	2012: Summer	2012: Fall	2013: Winter	2013: Spring	2013: Summer	2013: Fall/Winter
Project Milestones						Fall: Publish Draft EIS and Notice of Availability (NOA) in Federal Register Fall-Winter: Public Comment Period (30 days)
Public Participation Activities						
CTA Board Meetings	Brief CTA Board		Brief CTA Board			Brief CTA Board
Public Meetings (neighborhood, community update, and public hearings)		As needed: Neighborhood Meetings to Resolve Concerns	As needed: Neighborhood Meetings to Resolve Concerns	Spring: Update Meetings		Fall: Public Hearings (2) on Draft EIS
Stakeholder and Alderman /Elected Official Briefings			Winter: Stakeholder Briefing Meetings	Early Spring: Stakeholder Briefing Meetings		Fall: Stakeholder Briefing Meetings
Public Participation Notification and Information Materials						
Mailing List/Database	Update	Update	Update	Update	Update	Update
Public Notices				Spring: Postcard Notice for Update Meetings		Fall: Public Hearing Notice
Website	Update	Update	Update	Update	Update	Update
Display Ad/Legal Notice			Display Ads for Update Meetings			Fall: Public Hearings Display Ad/Legal Notice
Media Outreach (Releases distributed by CTA)			Winter: Update Meeting Advisory Release			Fall: Public Hearing Advisory Release & Post Meeting Release
Other Notification: Libraries, Village Halls, e-blasts, blogs, community calendars, transit alert cards			Notification Package for Update Meetings			Notification Package for Public Hearings
Citizens Guide to the Draft EIS					Develop Guide	Print & Distribute Guide
Meeting Materials (boards, handouts, sign-in, etc.)			Meeting Materials for Update Meetings			Meeting Materials for Public Hearings
Project Newsletters		Develop/Distribute Newsletter			Develop/Distribute Newsletter	
Meeting Summary Reports				Update Meeting and Neighborhood Meeting Summaries		Public Hearing Report

Note: All dates are preliminary and subject to change.

APPENDIX B: Stakeholder Interview Summary

Development of the public participation plan was informed by interviews with representatives of community members to identify the most effective outreach and engagement strategies, activities, languages, and channels. Interviews were conducted in April 2012.

Categories of stakeholder perspectives included:

Elected Officials/Aldermen

Community Organizations

Older Adults and People with Disabilities

Businesses

Non-Profits (including places of worship) Serving Environmental Justice Populations

Input Influenced the Public Participation Plan

There is a high level of interest in the Red Line Extension (RLE) Project among the categories of stakeholders listed above. As a result of the process to identify stakeholders to interview, the list of stakeholder organizations in the plan was expanded.

Using a variety of both online and offline communication channels and tools, CTA is most likely to reach the greatest number of interested members of the community. Tapping established communication channels which come from trusted sources means CTA is more likely to be heard. Many of the interviewees offered up specific communications channels which may be used directly or through the stakeholders. These communication channels, such as listservs, websites, and publications, have been added to the plan. Visuals were highlighted as being an essential part of the project information produced and shared.

Communicating with and through places of worship is critically important in the communities along this project corridor.

Stakeholders suggested that the community preferred a more interactive meeting format than CTA has conducted in the past. Using a combination of small community resolution meetings, larger public open house meetings, and targeted meetings with community groups, outreach resources will be leveraged so that more of the community is reached by their trusted sources of information. Working with such groups to gather input from the community also will enhance effectiveness in working with Environmental Justice communities.

Availability of Spanish-language materials and Spanish speakers at meetings will be critical to engaging the isolated Spanish-speaking, limited English proficiency populations along the corridor.

Stakeholders advised that at future meetings CTA have new information to share and be at a point in the process where public input could influence decisions to be made in the near term. This information influences the plans for preparing for the public meetings.

Appendix C
Agency Coordination and Public Involvement

Coordination Plan (August 2012)

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

SAFETEA-LU

Coordination Plan

August 2012

Prepared for:
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Prepared by:

GWC Transit Group
125 South Wacker Drive
Suite 600
Chicago, IL 60606

DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

cta

Table of Contents

Section 1 Purpose of This Coordination Plan 1-1

Section 2 Project Summary 2-1

Section 3 Project Process 3-1

Section 4 Agency Participation 4-1

4.1 Identification of Cooperating and Participating Agencies 4-1

4.1.1 Cooperating Agencies 4-1

4.1.2 Participating Agencies 4-1

4.2 Agency Coordination Objectives 4-2

4.3 Agency Coordination Structure 4-3

4.3.1 Early Coordination 4-3

4.3.2 Coordination during Project Development 4-3

4.3.3 Coordination of Review and Comment on the Draft EIS 4-4

4.3.4 Coordination Subsequent to Draft EIS and Prior to the Record of Decision 4-4

4.3.5 Coordination Subsequent to the Record of Decision 4-4

4.4 Issue Resolution Process 4-4

Section 5 Summary of Public Participation Plan 5-1

5.1 Compliance with Federal Requirements 5-1

5.2 Goals and Objectives of the Public Participation Process 5-2

5.3 Description of Public Participation/Involvement Activities 5-2

5.3.1 Schedule Overview 5-2

5.3.2 Stakeholder Identification and Community Profile 5-3

5.3.3 Public and Agency Scoping Meetings and Elected Official Briefings 5-4

5.3.3.1 Public Scoping Meetings 5-4

5.3.3.2 Agency Scoping Meetings 5-4

5.3.3.3 Stakeholder and Alderman/Elected Official Briefings 5-5

5.3.4 Events 5-5

5.3.4.1 Summer 2011 Public Open House Meeting 5-5

5.3.4.2 Stakeholder and Alderman/Elected Official Briefings 5-5

5.3.5 Public Notice and Review 5-5

5.3.6 Written Materials 5-6

5.3.7 Website 5-6
5.3.8 Media 5-6
5.3.9 Accommodations 5-6
5.4 Outreach to Traditionally Underserved Groups 5-6
5.5 Public Participation Measures of Effectiveness 5-7

Appendices

Appendix A – Participating Agencies
Appendix B – Public Participation Plan

Figures

Figure 2-1: Project Area 2-2

Tables

Table 5-1: Public Participation Process Schedule 5-3
Table A-1: Agencies Invited to Become Participating Agencies A-1
Table A-2: RLE Participating Agencies A-4

Abbreviations

AA - Alternatives Analysis
CTA - Chicago Transit Authority
EIS - Environmental Impact Statement
FHWA - Federal Highway Administration
FTA - Federal Transit Administration
NEPA - National Environmental Policy Act
NOI - Notice of Intent
PPP - Public Participation Plan
RLE - Red Line Extension
ROD - Record of Decision
SAFETEA-LU - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

Section 1
Purpose of This Coordination Plan

The Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) have initiated preparation of a Draft Environmental Impact Statement (EIS) for the Chicago Red Line Extension (RLE) Project. FTA is serving as the lead agency for purposes of National Environmental Policy Act (NEPA) environmental review. The project participants for this Coordination Plan consist of FTA, CTA, and federal, state, and local participating agencies pursuant to the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005, Section 6002.

This Coordination Plan provides a structure for coordinating public and agency participation and comments on the Draft EIS. The plan is intended to guide the CTA and the public through the process. More specifically, the plan outlines the public and agency activities that will take place. The environmental planning and review process for the RLE project began with an Alternatives Analysis (AA) process and will conclude with a NEPA determination and Record of Decision (ROD) from the FTA. Following the issuance of the ROD, the permitting process will begin. CTA will follow this Coordination Plan to solicit public and agency input on the project and to ensure that the received input is considered in the decision-making process. Both agency coordination and the Public Participation Plan (PPP) are addressed below.

The Coordination Plan is considered a "living document" and is designed to provide flexibility, as needed, to address changes in the project and therefore may be adjusted from time to time in response to the evolving communication needs of the project.

This plan complies with SAFETEA-LU, Section 6002, and serves as a plan for coordination (Section 139(g)(1)).

Section 2
Project Summary

The CTA is proposing to extend the Red Line from the 95th Street station to the vicinity of 130th Street, subject to the availability of funding. The proposed extension would include four new stations. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

The project area is 11 miles south of the "Loop," Chicago's central business district and encompasses approximately 20 square miles. Figure 2-1 shows the project area.

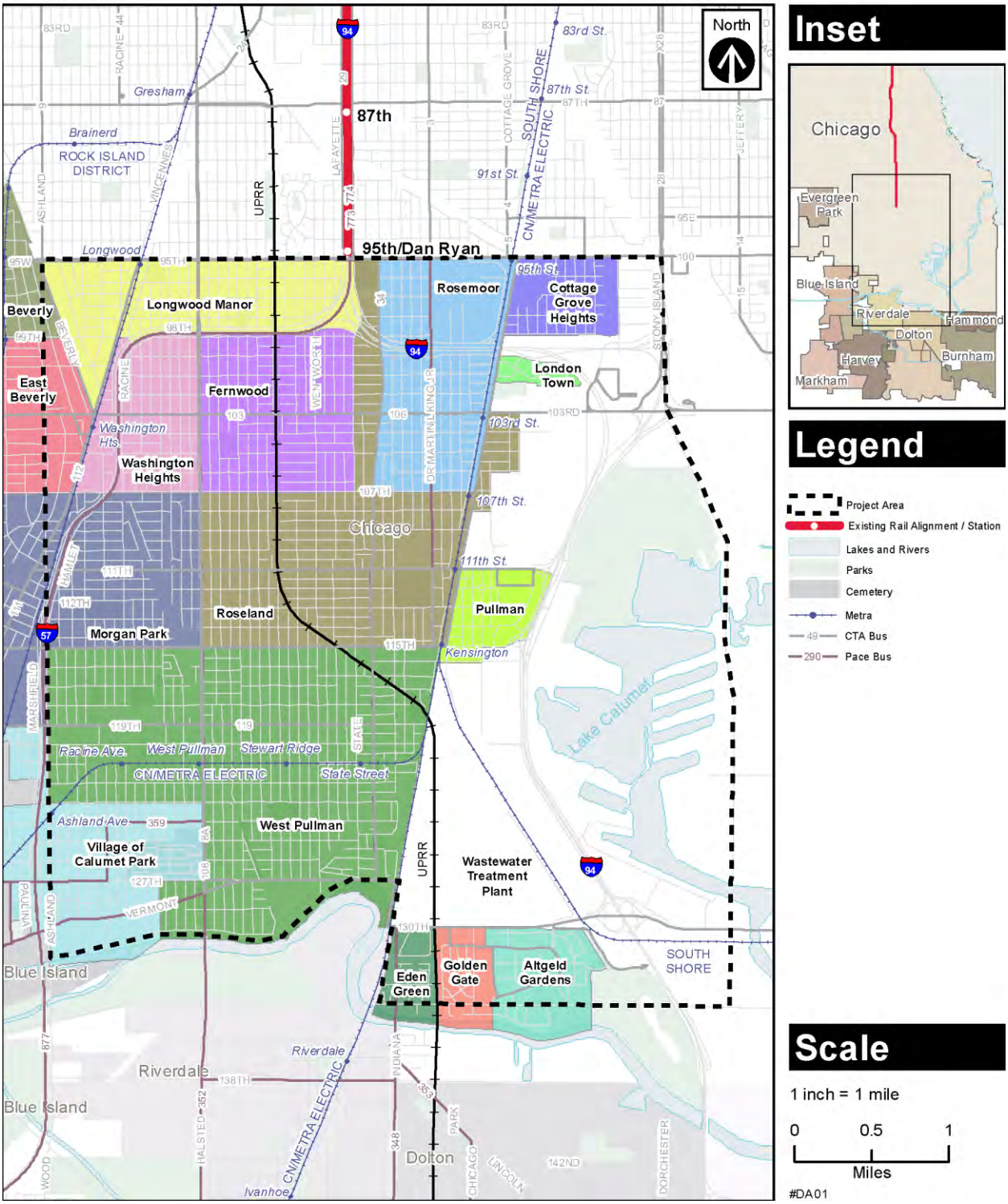

Figure 2-1: Project Area

Section 3
Project Process

In accordance with federal regulations, CTA, in coordination with FTA, will complete the following steps to complete the NEPA environmental document for the project:

- Publish the Notice of Intent (NOI) in the Federal Register
- Complete project scoping to ascertain the scope of the Draft EIS, project purpose and need, and range of alternatives considered, and identify potential impacts and potential mitigation measures to be addressed in the environmental document
- Prepare a Draft EIS
- Complete a public review and comment period for the Draft EIS
- Obtain approval from FTA to enter into Preliminary Engineering
- Prepare a Final EIS
- Obtain Chicago Transit Board certification of the Final EIS and approval of the project
- Obtain a ROD from FTA

The NOI was published in the Federal Register on September 1, 2009. One agency scoping meeting was held on September 24, 2009 and two public scoping meetings were held on September 22, 2009 and September 24, 2009. A public open house was held on August 2, 2011. The Draft EIS analysis will be conducted in 2012 and 2013. The schedule for the remaining steps is dependent on identification of funding.

Agency and public coordination will proceed on an as-needed basis until the release of the Draft EIS. Upon the release of the Draft EIS a public and agency comment period will begin.

Section 4
Agency Participation

As the project lead agencies, FTA and CTA are responsible for preparing the EIS. In accordance with SAFETEA-LU, Section 6002, CTA is required to identify and involve federal, state, regional, and local agencies in the development of the project. Agency coordination will occur on an on-going basis throughout the project development process, with opportunities for public and agency participation occurring at several different stages of the EIS process, including the following major coordination points:

- Developing the scope of the Draft EIS, including issues to be addressed, methodologies to be used to evaluate potential effects, and the significance criteria
- Reviewing and commenting on the Draft EIS throughout the public review period, which includes public meetings that will be held to receive comments
- Commenting on the alternatives including input received at the agency scoping meeting on September 24, 2009
- Notification of the completion of the Final EIS
- Completion of permits, licenses, and approvals following the ROD

4.1 Identification of Cooperating and Participating Agencies

4.1.1 Cooperating Agencies

Cooperating agencies are, by definition in 40 CFR 1508.5, federal agencies with jurisdiction, by law or special expertise, with respect to any environmental impact involved in the proposed project. A state or local agency of similar qualifications may, by agreement with the lead agencies, also become a cooperating agency. The cooperating agencies are by definition participating agencies as well, and while the roles and responsibilities of both are similar, the cooperating agencies have a slightly greater degree of authority, responsibility, and involvement in the environmental review process.

The Federal Highway Administration (FHWA) has requested to be a cooperating agency in the RLE project because a portion of the proposed route extends along I-94 and I-57 and would cross over I-57 as it turns south along either the Union Pacific Railroad right-of-way or Halsted Street. FTA and CTA will consider additional cooperating agencies if approached per 40 CFR 1501.6.

4.1.2 Participating Agencies

Participating agencies can be federal, state, tribal, regional, and local government agencies that may have an interest in the project. The responsibilities of these agencies are defined in SAFETEA-LU, Section 6002, and include but are not limited to:

- Participating in the FTA process starting at the earliest possible time, especially with regards to the development of the purpose and need statement, range of alternatives, methodologies, and the level of detail for the analysis of alternatives
- Identifying, as early as practicable, any issues of concern regarding potential environmental or socioeconomic impacts of the project
- Participating in the issue resolution process, described in Section 4.4
- Providing meaningful and timely input on unresolved issues
- Participating in the scoping process

Accepting the designation as a participating agency does not indicate project support and does not provide the agency with increased oversight or approval authority beyond its statutory limits, if applicable.

Participating agencies for the project are listed in Appendix A. They include federal agencies that did not affirmatively decline the invitation to become a participating agency and regional, state, and local agencies that affirmatively accepted the invitation to become a participating agency.

In accordance with SAFETEA-LU Section 6002 requirements, FTA, in coordination with the CTA, prepared and mailed participating agency invitation letters to 80 agencies with a potential interest in the project on September 1, 2009.

Letters were sent to update participating agencies in June 2011 on the project progress and invite them to the public open house meeting held on August 2, 2011.

4.2 Agency Coordination Objectives

The primary objectives of the CTA, related to the involvement of these and other agencies throughout the project development process, are to:

- Ensure the open and timely exchange of information, ideas, and concerns between the participating agencies, FTA, and CTA throughout the project development process
- Ensure the appropriate integration of the project into the communities through which it operates
- Avoid substantial design changes during the future permitting process by identifying and addressing the permitting requirements of individual agencies during conceptual and preliminary engineering, as practicable

4.3 Agency Coordination Structure

4.3.1 Early Coordination

Agency participation and coordination began in 2006 during the first phase of the project, the AA phase. Agency participation and coordination for the EIS began with the issuance of the NOI in September 2009 and the start of scoping activities. Early coordination creates an opportunity for participating agencies to provide input and guidance on the scope of the environmental document, methods used in the environmental analysis, purpose and need, and the alternatives to be analyzed in the Draft EIS.

EIS coordination was initiated as part of the scoping process by publishing the NOI in the Federal Register on September 1, 2009. In addition, CTA mailed the NOI and scoping information to 28 local, 15 regional, 19 state, and 12 federal agencies, and six Native American tribes, to ensure the awareness of the project and invite scoping comments.

An agency scoping meeting was held on September 24, 2009 to provide additional opportunities for agencies to identify their interest in coordination and provide input on the purpose and need, range of alternatives, proposed schedule, potential areas of impact, and the methodologies to be used to evaluate effects.

After considering input received during the scoping process, the lead agencies will further articulate the project's purpose and need. In accordance with existing guidance, issued by Congress in its conference report on SAFETEA-LU, other federal agencies should afford substantial deference to the FTA's articulation of the purpose and need for a transportation action.

4.3.2 Coordination during Project Development

Ongoing and active coordination will be undertaken with all agencies identified during the AA and scoping processes as having jurisdiction over the right-of-way of the proposed project or an interest or expertise in a specific environmental resource, including cooperating and participating agencies. This coordination process will consist of meetings with individual agencies and appropriate CTA and consultant staff, to discuss the specific concerns and suggestions. Subsequent meetings with agencies will be scheduled as needed to ensure that the appropriate level of coordination and communication is attained, especially as the project progresses. The purpose of these meetings will be to identify and resolve substantive issues, as early as practicable, in the design and environmental review process; finalize the methods that will be used in the environmental analysis; and collect data related to the project. In addition, this direct coordination process will support the documentation of official communications and any agreements between CTA and these agencies.

An effort will be also made to hold meetings with other agencies that may indicate specific issues of concern as the project progresses, and CTA will coordinate with all agencies to ensure that issues are addressed early in the process.

4.3.3 Coordination of Review and Comment on the Draft EIS

As a cooperating agency, FHWA will review administrative drafts of the Draft EIS along with FTA and CTA. Participating agencies will receive a Notice of Availability of the Draft EIS. They will be invited to attend the public hearings on the Draft EIS and to review and comment on the Draft EIS during the public comment period.

4.3.4 Coordination Subsequent to Draft EIS and Prior to the Record of Decision

Coordination of the Final EIS and ROD will be similar to coordination of review and comment on the Draft EIS. The participating agencies will receive a Notice of Availability of the Final EIS and project approval actions. All participating agencies will receive notification of the issuance of the ROD.

4.3.5 Coordination Subsequent to the Record of Decision

After approval of the ROD, the CTA will consult with the FTA prior to requesting any major approvals or grants to establish whether or not the approved EIS remains valid. These consultations will be documented as needed. Per 23 CFR 771.129, an EIS may become invalid if the NEPA process does not proceed as described below:

- A written evaluation of the Draft EIS must be prepared if an acceptable Final EIS is not submitted within three years from the date that the Draft EIS is circulated. The purpose of this evaluation is to determine if a supplement to the Draft EIS or a new Draft EIS is needed.

- A written evaluation of the Final EIS must be prepared before further approvals may be granted if major steps to advance the action have not occurred within three years after the approval of the Final EIS. Major steps to advance the action may include undertaking final design, acquiring significant portions or right-of-way and/or approving plans.

Agencies with permitting authority will continue to be consulted throughout the re-evaluation process as needed and the permit application development process. Permit applications will be submitted and data developed to support needs identified by the permitting agencies.

4.4 Issue Resolution Process

The lead agencies, cooperating agencies, and participating agencies will work cooperatively to identify and resolve issues that could substantially delay completion of the environmental review, and issues of concern that could substantially delay or prevent issuance of permits or approvals needed for the project.

The following issue resolution process will be followed:

- Every attempt will be made to resolve issues of concern between the lead agencies and participating agencies as they arise through direct agency meetings. These meetings will be

held as needed during the NEPA process to discuss and resolve the issues of concern. The meetings will be specific to the issue and agency involved. Therefore, as appropriate, the meetings could range from a single meeting involving technical staff of the agency and CTA to a series of meetings involving incrementally higher executive-level participation from the participating agency and CTA. An effort will be made to hold up to three such meetings within a reasonably available time period consistent with the project process and schedule, to resolve an issue of concern in a timely manner before proceeding to the next step of the process, described below.

- If direct meetings between the agencies are not sufficient to resolve an issue of concern in a timely manner:
  - An official issue resolution meeting will be scheduled.
  - If resolution cannot be reached within 30 days following such a meeting, and a determination has been made by FTA that all information necessary to resolve the issue has been obtained, then:
  - FTA will notify the heads of all participating agencies, CTA, the Committee on Environment and Public Works of the Senate, the Committee on Transportation and Infrastructure of the House of Representatives, and the Council of Environmental Quality of the FTA determination
  - FTA will publish such notice in the Federal Register

Section 5
Summary of Public Participation Plan

The Draft EIS phase of the RLE project will involve an extensive and inclusive community outreach process that builds upon and enhances the public engagement efforts developed during the AA phase; the RLE PPP is included as Appendix B. RLE public involvement includes outreach not only to neighborhood stakeholders, but also to current and potential CTA riders, and the wider population of transit users in Cook County. This effort will also re-engage targeted stakeholders identified during the AA while identifying and involving potentially new stakeholders who may now, more than before, have a special interest in this project. The PPP builds upon CTA's experience with the AA, including lessons learned and identification of potential opportunity areas as well as CTA's best practices in public outreach.

5.1 Compliance with Federal Requirements

SAFETEA-LU has a strong federal emphasis on public participation, requiring that the PPPs of CTA's planning processes "be developed in consultation with all interested parties and … provide that all interested parties have reasonable opportunities to comment on the contents of the transportation plan." SAFETEA-LU's broad definition of participation by "interested parties" includes as its partners, groups, and individuals who are affected by or involved with transportation in the area surrounding the project's service area. Examples stated include citizens, affected public agencies, representatives of public transportation employees, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties. These interested parties are to be provided with a reasonable opportunity to comment on the transportation plan.

As outlined in the Act, methods to accommodate these goals to the maximum extent possible include:

- Holding any public meetings at convenient and accessible locations and times
- Employing visualization techniques to describe plans
- Making public information available in hard copy and electronically accessible formats and means, such as the internet, as appropriate, to afford reasonable opportunity for consideration of public information
- Coordinating local public participation/involvement processes with statewide public involvement processes wherever possible to enhance public consideration of the issues, plans, and programs, and reduce redundancies and costs

SAFETEA-LU also requires that public meetings be held at convenient and accessible times and locations, that all plans be available by website, and documents be written in easy, understandable language utilizing visual components.

This PPP was developed to be compliant with SAFETEA-LU, the public participation requirements of NEPA, and the FTA New Starts program.

5.2 Goals and Objectives of the Public Participation Process

The PPP for the RLE project provides an efficient, proactive, and comprehensive guide to community outreach efforts throughout each phase of this project. This plan builds on the foundation of the public engagement effort developed during the AA. The public involvement and consensus-building effort for this project has several goals and objectives, including:

- Utilize an inclusive outreach strategy that maximizes input from a broad range of project stakeholders
- Provide forums for residents, businesses, and community leaders to participate in the planning
- Create multiple opportunities for the generation of ideas, comments, and possible mitigation measures
- Establish a forum for educating stakeholders on a regular basis as the project evolves

The intent of the public involvement process is to work cooperatively with the community toward the development of a preferred alternative that meets the purpose and need of the project. Issues to be addressed during the Draft EIS outreach process for the RLE might include further development and refinement of the alternatives, locations of stations, bus/rail interface and other transit issues, urban design, land use, neighborhood and community impacts, environmental impacts, and potential mitigation measures.

5.3 Description of Public Participation/Involvement Activities

5.3.1 Schedule Overview

The schedule for the public participation process is summarized in Table 5-1. The proposed schedule for preparation of the Draft EIS will be shared with the public and participating agencies. A series of community update meetings and formal public hearings will be held at key milestones including the dissemination of the Draft EIS. In addition, CTA will continue to meet with individual stakeholder groups. The public engagement effort will continue as the NEPA process progresses.

Table 5-1: Public Participation Process Schedule

Schedule	Activity
August 12, 2009	Chicago Transit Board Meeting
September 1, 2009	Publish NOI in Federal Register Public Comment Period Begins
September 1, 2009	Mail Participating Agency Letters
September 2009	Distribute Media Outreach Releases
September - October 2009	Stakeholder Briefing Meetings
September 24, 2009	Agency Scoping Meeting
September 22 and 24, 2009	Public Scoping Meetings
October 27, 2009	Public Comment Period Ends
August 2, 2011	Public Open House Meeting
Spring 2013	Stakeholder Briefings
Spring 2013	Community Open House Meeting
Fall 2013	Stakeholder Briefings
Fall 2013	Public Hearings
Fall 2013	Public Comment Period

5.3.2 Stakeholder Identification and Community Profile

CTA will maintain and update the stakeholder database developed during the AA and scoping phases to track interested individuals and groups, areas of interest, communication, and other pertinent information for the duration of the project. Building on the database developed during the AA phase, CTA will continue to provide ongoing maintenance and updates to keep the database current.

The Draft EIS phase will include extended outreach beyond the project area, including all jurisdictions that could potentially benefit or be adversely affected by the RLE project. New project stakeholders may be identified as the project progresses in addition to those identified during the AA and scoping phases of the project. All stakeholders will be engaged throughout the NEPA process. Stakeholders for the RLE project include, but are not limited to:

- Local, county, federal, and state elected officials
- Neighborhood councils, associations, and community councils
- Business and labor associations
- Retail and entertainment center destinations
- Education, cultural, religious, and health care institutions along the proposed alignments

- Transit advocacy and environmental groups
- Public agencies/officials

Communication with individuals and organizations beyond the physical project area will be a priority during this phase.

Further, building on information gathered during the AA phase, CTA has developed a stakeholder outreach strategy that includes an identification of:

- Key communities and constituencies in the project area
- Key communities and constituencies outside the project area, likely to benefit from the project
- Issues of special interest to communities and constituencies
- Strategies and actions to address these communities, constituencies, and issues

In this way CTA will be able to monitor the issues and priorities of the distinct communities within and of relevance to the project in and beyond the project area.

5.3.3 Public and Agency Scoping Meetings and Elected Official Briefings

CTA conducted two public scoping meetings, one agency scoping meeting, and briefed three elected officials and one community business association within the scoping period of the project to solicit comment and input for the Draft EIS prior to the Oct 27, 2009, deadline for public scoping comments.

5.3.3.1 Public Scoping Meetings

Two public scoping meetings were held in the project area on September 22 and 24, 2009.

Scoping meetings are a useful opportunity to obtain information from the public and governmental agencies. In particular, the scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential impacts and mitigation measures to be considered. These meetings were documented in a Scoping Report.

5.3.3.2 Agency Scoping Meetings

An agency scoping meeting was held at CTA's offices on September 24, 2009. This meeting was held to coordinate and facilitate work with the designated federal, state, and local agencies. Agendas and sign in sheets for all meetings were prepared and discussions and agreements were fully documented. A detailed summary of comments and meeting notes were prepared afterwards.

5.3.3.3 Stakeholder and Alderman/Elected Official Briefings

An initial task in the public involvement program was to identify areas of agreement and conflict among various stakeholders. Individual meetings with key stakeholders were informal but structured to obtain input on goals, objectives, key issues, preferred communication tools, and public policy considerations. Input obtained from the stakeholder briefings was incorporated in the public participation program. Three elected officials and one stakeholder with interest in the project area were identified and briefed..

5.3.4 Events

To reach out to those not active in civic issues or who do not typically attend community meetings, CTA will explore the feasibility and effectiveness of other non-traditional outreach opportunities including participation in local events, festivals, fairs, and other grassroots outreach opportunities such as farmers markets, mall or shopping center booths, and other more community-focused events. This outreach technique was not employed during the AA or scoping, but remains a potential tool for use during the preparation of the Draft EIS.

Upcoming events including public open house meetings, public hearings, and stakeholder outreach, are summarized in Table 5-1

5.3.4.1 Summer 2011 Public Open House Meeting

A public open house meeting was held on August 2, 2011 to update residents and participating agencies about the project progress. This update summarized the results of the NEPA scoping process that concluded in October 2009. The open house was an opportunity for community members to ask questions about the range of actions, alternatives, environmental effects, and mitigation measures to be analyzed in the Draft EIS. A detailed summary of the meeting with documentation on comment received was prepared.

5.3.4.2 Stakeholder and Alderman/Elected Official Briefings

CTA representatives conducted 12 briefings with elected officials and stakeholders about the project in July and August 2011. Briefings generally covered a description of the project and the scoping process. Meeting notes were prepared.

5.3.5 Public Notice and Review

Public notices for scoping meetings included:

- NOI
- Participating agency invitation letters
- Public scoping invitation notices which were mailed out two weeks prior to the scoping meeting and were translated into Spanish
- Meeting notices were posted at local village halls and libraries

- Email notifications were sent to all in the project database

5.3.6 Written Materials

CTA will develop text and visuals for collateral materials, specifically newsletters, meeting materials, frequently asked questions, technical handouts on specific topics, and other materials as needed throughout the project. Materials for the RLE project will be translated into Spanish and will be available in other languages, including Braille, upon request. See Appendix B - Public Participation Plan.

5.3.7 Website

A project website was developed for the environmental phase. The website provides access to project updates, project background, project materials, documents, and announcements. Public meeting dates were posted in advance on the website. In addition to serving as a source for public information, the website will also serve as a way to gather information. The website includes a clickable link to the project email address that allows people to reach CTA project managers with their comments. The webpage will facilitate ongoing database additions and provide a means for the community to provide input, ask questions, receive responses, and distribute project materials. The website will be updated as the project progresses.

5.3.8 Media

CTA takes a proactive role working with the mainstream media to publicize all community meetings and to raise awareness of RLE project. This includes the development of press releases, complemented by outreach to grassroots, ethnic and niche print, broadcast and public access (radio and television), and new media, as applicable. See Appendix B – Public Participation Plan for details.

5.3.9 Accommodations

All public meetings will be scheduled at locations accessible by transit users and wheelchair accessible. Information regarding bicycle lockers/storage can also be researched upon request. Interpreters (language and hearing) or other auxiliary aids will be arranged if requested at least five days prior to a meeting.

5.4 Outreach to Traditionally Underserved Groups

Federal requirements for PPPs include a process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low income and/or minority groups. CTA has actively worked with organized business and community groups in the project area and will continue outreach efforts to transit users and traditionally underserved groups. In addition, materials will be translated into Spanish. See Appendix B – Public Participation Plan for details.

5.5 Public Participation Measures of Effectiveness

On a periodic basis, the public participation process will be reviewed to determine if modification of any particular strategy is necessary or if additional strategies need to be incorporated into the PPP to reach desired demographic groups.

In addition, the PPP will be revised as needed throughout the NEPA process to ensure that the outreach and involvement efforts are appropriate for the project area and that issues continue to be identified and addressed.

Appendix A
Participating Agencies

Eighty local, regional, state, federal, and tribal agencies were invited to be participating agencies (listed in Table A-1). Of those, 17 agencies affirmatively accepted the invitation and an additional 14 federal and tribal agencies did not decline. Federal and tribal agencies that do not decline the invitation are added to the list of participating agencies. In addition, the FHWA requested to become a cooperating agency. Participating agencies are listed in Table A-2.

Table A-1: Agencies Invited to Become Participating Agencies

Agency Type	Organization
Local	Calumet City - Community & Economic Development
Local	Chicago Bureau of Convention and Tourism
Local	Chicago Housing Authority
Local	Chicago Park District
Local	Chicago Port Authority
Local	Chicago Public Schools, External Resources
Local	Chicago State University, Office of Public Affairs
Local	City of Blue Island
Local	City of Chicago Department of Aviation
Local	City of Chicago Department of Business Affairs and Consumer Protection
Local	City of Chicago Department of Community Development
Local	City of Chicago Department of Cultural Affairs, Office of Tourism
Local	City of Chicago Department of Environment
Local	City of Chicago Department of Fire
Local	City of Chicago Department of Public Health
Local	City of Chicago Department of Streets and Sanitation
Local	City of Chicago Department of Transportation
Local	City of Chicago Department of Water Management
Local	City of Chicago Department of Zoning and Land Use Planning
Local	City of Chicago Office of Emergency Management and Communications
Local	City of Chicago Office of the Mayor
Local	City of Chicago Police Department
Local	Olive-Harvey College
Local	Village of Burnham
Local	Village of Calumet Park, Community Relations Commissioner
Local	Village of Dolton

Agency Type	Organization
Local	Village of Evergreen Park
Local	Village of Riverdale, Community Development Department
Regional	Chicago Metropolitan Agency for Planning
Regional	Circuit Court of Cook County - Fifth Municipal District
Regional	Cook County Building and Zoning
Regional	Cook County Emergency Management Agency
Regional	Cook County Environmental Control Department
Regional	Cook County Forest Preserve District
Regional	Cook County Health & Hospital Systems
Regional	Cook County Highway Department
Regional	Cook County Sheriff's Office
Regional	Cook County Zoning Board of Appeals
Regional	Metra Commuter Rail
Regional	Metropolitan Water Reclamation District of Greater Chicago
Regional	Northern Indiana Commuter Transportation District
Regional	Pace
Regional	Regional Transit Authority
State	Illinois Commerce Commission
State	Illinois Department of Central Management
State	Illinois Department of Commerce and Economic Opportunity
State	Illinois Department of Human Services
State	Illinois Department of Natural Resources
State	Illinois Department of Public Health
State	Illinois Department of Transportation
State	Illinois Emergency Management Agency
State	Illinois Environmental Protection Agency
State	Illinois Historic Preservation Agency
State	Illinois Housing Development Authority
State	Illinois Pollution Control Board
State	Illinois Secretary of State
State	Illinois Sports Facilities Authority
State	Illinois State Board of Education
State	Illinois State Police
State	Illinois State Toll Highway Authority
State	Illinois WorkNet
State	Office of the State Fire Marshal
Federal	Department of Energy

Agency Type	Organization
Federal	Department of Health and Human Services
Federal	Department of Housing and Urban Development
Federal	Department of the Interior, Office of Environmental Policy and Compliance
Federal	Federal Aviation Administration
Federal	Federal Emergency Management Agency
Federal	Federal Highway Administration
Federal	Federal Railroad Administration
Federal	Transportation Security Administration
Federal	U.S. Army Corps of Engineers
Federal	U.S. Environmental Protection Agency
Federal	U.S. Fish and Wildlife Service
Tribal	Citizen Potawatomi Nation
Tribal	Ho-Chunk Nation
Tribal	Peoria Tribe
Tribal	Sac and Fox Tribe - Mississippi and Iowa
Tribal	Sac and Fox Tribe - Missouri and Kansas
Tribal	Sac and Fox Tribe - Oklahoma

Table A-2: RLE Participating Agencies

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Department of Energy	Mr.	Steven	Chu	Secretary	1000 Independence Ave. SW		Washington	DC	20585
Department of Health and Human Services	Mr.	James	Galloway	Acting Regional Director - Region 5	233 N. Michigan Ave.	Ste. 1300	Chicago	IL	60601
Department of Housing and Urban Development	Ms.	Beverly	Bishop	Deputy Regional Director	77 W. Jackson Blvd.		Chicago	IL	60604
Federal Emergency Management Agency	Ms.	Janet	Odeshoo	Deputy Regional Administrator, Region V	536 S. Clark St.	6th floor	Chicago	IL	60605
Federal Highway Administration	Mr.	Norman	Stoner	Division Administrator, Illinois Division Office	3250 Executive Park Drive		Springfield	IL	62703
Federal Highway Administration	Mr.	Matt	Fuller	Environmental Programs Engineer	3251 Executive Park Drive		Springfield	IL	62703
Federal Railroad Administration	Mr.	Laurence	Hasvold	Regional Administrator	200 West Adams	Suite 310	Chicago	IL	60606
Transportation Security Administration	Ms.	Gale	Rossides	Acting Administrator	601 S. 12th St.		Arlington	VA	20598
U.S. Environmental Protection Agency	Mr.	Bharat	Mathur	Acting Regional Administrator - Region 5	77 W. Jackson Blvd.		Chicago	IL	60604
U.S. Fish and Wildlife Service	Mr.	John	Rogner	Field Supervisor - Chicago Field Office	1250 S. Grove	Ste. 103	Barrington	IL	60010
Citizen Potawatomi Nation	Mr.	John	Barrett	Chairperson	1601 S. Gordon Cooper Drive		Shawnee	OK	74801
Forest County Potawatomi	Mr.	Phillip	Shopodock	Chairperson	PO Box 340		Crandon	WI	54520
Ho-Chunk Nation	Mr.	Bill	Quackenbush	Tribal Historic Preservation Officer	P.O. Box 667		Black River Falls	WI	54815
Miami Tribe of Oklahoma	Mr.	George	Strack	Tribal Historic Preservation Officer	202 S. Eight Tribes Trail		Miami	OK	74354
Peoria Tribe of Indians of Oklahoma	Mr.	John	Froman	Chief	118 S. Eight Tribes Trail		Miami	OK	74354
Pokagon Band of Potawatomi Indians	Mr.	Michael	Zimmerman	Tribal Historic Preservation Officer	58620 Sink Road		Dowagiac	MI	49047
Potawatomi Nation-Hannahville Indian Community	Mr.	Earl	Meshigaud		N14911 Hannahville Blvd.		Wilson	MI	49896
Prairie Band of Potawatomi Nation	Mr.	Steve	Ortiz	Chief	16281 Q Road		Mayetta	KS	66509
Sac and Fox Nation of Mississippi in Iowa	Mr.	Homer	Bear, Jr.	Chairman	349 Meskwaki Road		Tama	IA	52339
Sac and Fox Nation of Missouri	Ms.	Twen	Barton	Chairperson	305 N. Main Street		Reserve	KS	66434
Sac and Fox Nation of Oklahoma	Ms.	Sandra	Massey	Tribal Historic Preservation Officer	Rt. 2 Box 246		Stroud	OK	74079
Chicago Housing Authority	Mr.	Lewis	Jordan	CEO	60 E. Van Buren		Chicago	IL	60605
Chicago Housing Authority	Ms.	Edie	Diaz		60 E. Jackson, Suite 1200		Chicago	IL	60605
Chicago Housing Authority, Intergovernmental Affairs	Mr.	Otis	Wright	Director	60 E. Van Buren		Chicago	IL	60605
Chicago Park District	Mr.	Mike	Kelly	CEO	541 N. Fairbanks		Chicago	IL	60611

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Chicago Park District	Mr.	Joseph	Bornstein	Project Manager, Planning & Development	541 N. Fairbanks		Chicago	IL	60611
City of Chicago Department of Business Affairs and Consumer Protection	Ms.	Rosemary	Krimbel	Commissioner	121 N. LaSalle St.	Room 805	Chicago	IL	60602
City of Chicago Department of Community Development	Ms.	Christine	Raguso	Acting Commissioner	121 N. LaSalle St.	Ste. 1000	Chicago	IL	60602
City of Chicago Department of Environment	Ms.	Suzanne	Malec-McKenna	Commissioner	30 N. LaSalle St.	Floor 25	Chicago	IL	60602
City of Chicago Department of Environment	Ms.	Nicole	Kamins	Program Director	30 N. LaSalle St.	Floor 25	Chicago	IL	60602
City of Chicago Department of Transportation	Ms.	Luann	Hamilton	Director, Transportation Planning	30 N. LaSalle St.	Suite 500	Chicago	IL	60602
City of Chicago Department of Transportation	Mr.	Joe	Alonzo	CREATE Manager	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
City of Chicago Department of Transportation	Mr.	Richard	Hazlett	Coordinating Planner	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
City of Chicago Office of the Mayor	Mr.	Pat	Harney	Deputy Chief of Staff	121 N. LaSalle St.	Room 509	Chicago	IL	60602
City of Chicago Police Department	Mr.	Jody	Weis	Superintendent	3510 S. Michigan Ave.		Chicago	IL	60653
City of Chicago Police Department	Mr.	Mark	Harmon	Commanding Officer, Patrol Division	3510 S. Michigan Ave.		Chicago	IL	60653
Metra Commuter Rail	Ms.	Lynette	Ciavarella	Director, Planning and Analysis	547 W. Jackson Blvd.	13th Floor	Chicago	IL	60661
Metra Commuter Rail	Mr.	David	Kralik	Department Head, Long Range Planning	547 W. Jackson Blvd.	13th Floor	Chicago	IL	60661
Metropolitan Water Reclamation District of Greater Chicago	Mr.	Terrence J.	O'Brien	President, Board of Commissioners	100 E. Erie St.		Chicago	IL	60611
Metropolitan Water Reclamation District of Greater Chicago	Mr.	Joseph	Schuessler	Principal Civil Engineer	100 East Erie Street		Chicago	IL	60611
Regional Transportation Authority	Ms.	Leanne	Redden	Senior Deputy, Executive Director of Planning	175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Regional Transportation Authority	Ms.	Aimee	Lee	Manager, Regional Planning	175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Regional Transportation Authority	Mr.	Peter	Fahrenwald		175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Pace	Mr.	David	Tomzik	Manager, Long Range Planning	550 W. Algonquin Road		Arlington Heights	IL	60005
Pace	Ms.	Lorraine	Snorden	Manager, Department of Planning Services	550 W. Algonquin Road		Arlington Heights	IL	60005
Illinois Commerce Commission	Mr.	Steve	Matrisch	Acting Transportation Bureau Chief	527 E. Capitol Ave		Springfield	IL	62701
Illinois Commerce Commission	Mr.	Michael E.	Stead	Rail Safety Program Administrator	527 E. Capitol Ave		Springfield	IL	62701
Illinois Department of Natural Resources	Mr.	Marc	Miller	Director	One Natural Resources Way		Springfield	IL	62702

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Illinois Department of Natural Resources	Mr.	Steve	Hamer	Office of Realty & Environmental Planning, Division of Ecosystems & Environment	One Natural Resources Way		Springfield	IL	62702
Illinois Department of Transportation	Mr.	Chuck	Abraham	Division of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Illinois Department of Transportation	Mr.	Joseph	Shacter	Director, Division of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Illinois Department of Transportation	Ms.	Lil	Budzinski	Section Chief, CTA/ City of Chicago Section	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Illinois Environmental Protection Agency	Ms.	Lisa	Bonnett	Interim Director	1021 North Grand Avenue East	PO Box 19276	Springfield	IL	62794-9276
Illinois Environmental Protection Agency	Ms.	Dianne	Schuerman		1021 North Grand Avenue East	PO Box 19276	Springfield	IL	62794-9276
Illinois Historic Preservation Agency	Mr.	William	Wheeler	State Historic Preservation Officer	#1 Old State Capitol Plaza		Springfield	IL	62701
Illinois Historic Preservation Agency	Ms.	Anne	Haacker	Deputy State Historic Preservation Officer	#1 Old State Capitol Plaza		Springfield	IL	62701

Appendix B
Public Participation Plan

Please see Public Participation Plan provided earlier in Appendix C of the Draft EIS.

Appendix C
Agency Coordination and Public Involvement

Coordination with Chicago Park District

MEETING NOTES

RE: **CTA-CWC-Chicago Park District Meeting**
Red Line South Extension Project

MEETING DATE: **April 18, 2011**

CHAIRPERSON: **Sonali Tandon, CTA**

LOCATION: **at CTA and via Conference Call**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	*Initials*	*Organization / Title*
Sonali Tandon	ST	CTA
Steve Hands	SH	CTA
Joe Iacobucci	JI	CTA
Helene Kornblatt	HK	CWC Transit Group
Claudia Lea	CL	CWC Transit Group
Joseph Bornstein	JB	Chicago Park District

PREPARED BY: Claudia Lea

ISSUE DATE: April 19, 2011

Meeting called to order at 1:30 pm

Project Background
Sonali Tandon discussed the project background, including the Alternatives Analysis process, the determination of a Locally Preferred Alternative (Union Pacific Railroad Heavy Rail Transit Alternative – UPRR HRT Alternative), the scoping process, as well as an overview of the EIS process.

Helene Kornblatt provided background regarding the 4(f) process: Section 4(f) of the Department of Transportation Act of 1966 prohibits the Federal Transit Administration (FTA) from approving a project or program that uses land from a significant public park, recreation area, wildlife or waterfowl refuge, or historic site except if the Administration determines that the other alternatives are not feasible. All parkland that is used for a transit project needs to be compensated. A 4(f) report will need to be completed as part of the EIS.

West Option
The UPRR HRT West Option would intersect Fernwood Park, located along the proposed alignment between 99th Street and 103rd Street. Fernwood Park is a linear park which runs between the UPRR

tracks and Eggleston Avenue. There are limited improvements to the park (no sidewalks), and it is not programmed much as a park. Abandoned houses and vacant lots are located along the park.

Joseph Bornstein indicated that CPD would be amenable to talking about this park. JB stated that if any of the park is used for the Red Line Extension, the remainder of the park will be unusable, and CTA will be responsible for a one-to-one acreage trade for the entire park area between 99th and 103rd Street. JB indicated that there would likely be land available to create new parks given the vacant land in the near vicinity of the park, but CTA will need to see what the community would like. CPD has no current plans for improvements to Fernwood Park. CTA will recommend several sites in the vicinity of Fernwood Park that would replace the entire Fernwood Park area (4.5 acres), and will begin by reviewing City of Chicago owned property.

East Option

The UPRR HRT East Option would intersect Wendell Smith Park, located on South Princeton Avenue between 99th Street and 99th Place. Wendell Smith Park is 4 acres in size and has basketball courts, baseball fields, a play lot, a recreation building, and 0.33 miles of walking trails. There are regularly-scheduled basketball, baseball, and softball games, concerts, and day camps that take place at the park. The UPRR HRT East Option would run through the northwest corner of the park. Impacts to the park would involve the loss of trees in the unused and unkempt northwest corner of the park, a total of 0.66 acres of impacted area.

The East Option would also run through the eastern parcel of Block Park. Block Park is located on two parcels, to the east and west of South Harvard Avenue, and runs along the eastern boundary of the UPRR. A natatorium was located on this property until 1998. A radio tower is located on the property at this time. Approximately 0.69 acres of the park would be impacted by the UPRR HRT East Option; the total parcel area is 1.26 acres. Following the meeting, JB provided information that the potentially impacted parcel is leased property from the Water Department. He indicated that the lease on the property is most likely expired, and CTA may need to work with the Water Department regarding the future of their parcels.

Process

- CTA will need to get feedback from the community regarding their wants and needs
- CPD does one-for-one land swaps
- CPD requires a two-acre minimum for new parks. CPD would prefer new parks to be greater than two acres, if possible.
- Land actions need to go though the CPD Board, which is a relatively quick process.
- CTA will need to discuss findings with FTA prior to proceeding.
- Funding for the park development will need to be discussed with FTA.
- CPD estimates that it costs ~$1 million per acre for development of property into usable park land, which includes lighting, improvements, etc.

Next Steps

As CTA begins to draft the EIS, they will get back in touch with CPD regarding potential sites and compensation, based on FTA's feedback. At this time, the EIS is not funded. CPD has no plans for further park development in the vicinity of the LPA.

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days.

cc: Attendees

MEETING NOTES

RE: **Chicago Park District Meeting**
Red Line Extension Draft EIS

MEETING DATE: **Wednesday, July 24, 2013 1:00PM**

LOCATION: **Chicago Park District Offices**

ATTENDEES:

Name	***Initials***	***Organization***
Sonali Tandon	ST	CTA
Rob Rejman	RR	Chicago Park District
Doreen O'Donnell	DO	Chicago Park District
Helene Kornblatt	HK	CWC Transit Group
Kansai Uchida	KU	CWC Transit Group

PREPARED BY: Kansai Uchida

ISSUE DATE: Thursday, July 25, 2013

- CTA is currently preparing the Draft Environmental Impact Statement for the Red Line Extension project. The ultimate funding sources and schedule for project implementation are still being determined.
- CPD's policy regarding other agencies' use of their property is replacement (whether the property is active or not). Replacement does not need to be in the same location.
- CTA, CPD, and CWC reviewed draft conceptual plan and profile drawings for the UPRR Rail Alternative options at Wendell Smith Park, Fernwood Parkway, and Block Park.
- CPD recently renewed its lease on Block Park for 25 years.
- CPD recognized that a Fernwood Parkway alignment might mean fewer residential displacements. If CPD received equal acreage nearby, they would have the opportunity to provide a better park for the neighborhood than the existing Fernwood Parkway.
- CWC described the potential Section 4(f) findings:
    - Use of Wendell Smith Park under all of the UPRR Rail Alternative Options
    - Use of Fernwood Parkway under the UPRR Rail Alternative West Option
    - De minimis impact on Block Park under the UPRR Rail Alternative East Option
- CPD understands the accessibility benefits that the extension would provide to the community. CPD sees this as an opportunity to improve existing parks or create a new park in alternate locations that would better serve the neighborhood.
- CPD will conduct an internal analysis of the needs of the community, and potential parks for improvement or new park lands to compensate for parks that may be affected by RLE project alternatives.

- CPD would like to have a representative attend a future meeting that CTA may have with Friends of the Parks.
- ST provided a copy of map showing Red Line Extension alternatives.

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days.

cc: Attendees

Meeting Notes

Date: Thursday, May 8, 2014

Meeting: CTA with Chicago Park District and Friends of the Parks

Meeting Purpose: CTA to share RLE Project updates and Parks Impacts

Present:
Erika Sellke, Chicago Park District
Cassandra Francis, Friends of the Parks
Sylvia Jones, Friends of the Parks
Sonali Tandon, Chicago Transit Authority
Virginia Jackson, CWC Transit Group
Jenifer Palmer, CWC Transit Group

Time: 1:00 pm to 2:00 pm

Location: CTA Headquarters, 567 West Lake Street, 10th Floor, Chicago, IL

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served Far South Side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by bringing construction jobs to the area and increasing access to jobs outside of the project area.

- **RLE Project Alternatives and Potential Impacts**
  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a Bus Rapid Transit (BRT) Alternative along Michigan Avenue, and the No Build Alternative.

- CTA is preparing an Environmental Impact Statement (EIS)
  CTA has been evaluating the project alternatives and has begun to prepare a Draft EIS which will analyze the potential positive and negative environmental impacts of construction and operation of each alternative and will propose mitigation measures to reduce or eliminated potential negative impacts. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

- Parks Impacts
  CTA has been analyzing the potential impacts of the project from a number of different perspectives, including potential for displacements, noise and vibration, impacts to historic properties and others and understands this meeting is mainly to discuss findings with respect to parks. Based on the analysis, the No-Build, BRT and Halsted Rail Alternative have no associated potential park impacts. All UPRR Alternatives have an impact to Wendell Smith Park due to the overlap with the park and elevated structure/vertical clearances. There would be temporary occupancy of a small portion of the park during construction, but the area underneath the elevated structure would remain open after construction. Depending upon the UPRR alternative selected, the acreage impacted varies.

  In addition to potential temporary impacts to Wendell Smith Park from all UPRR Alternatives, the UPRR East Alternative has potential impact to Block Park. The affected area includes an isolated portion of the park's open space and a communications tower and is in an area of the park that does not currently serve a recreational use. The key recreational features of the park, walking trails and benches, are on the other side of Harvard Avenue in the eastern half of the park. While there would be some temporary construction impacts, no permanent incorporation is needed as the area underneath the elevated track structure would remain open after construction.

  In addition to potential temporary impacts to Wendell Smith Park from all UPRR Alternatives, the UPRR West Alternative has potential permanent impact to Fernwood Parkway. The West Option alignment would run through two of the four parcels that make up Fernwood Parkway between 101st and 103rd Streets and would affect about 1.9 acres of the park. Temporary closure of the section of the park overlapped by the elevated structure would be necessary during construction. Public use of the park could resume after construction, as long as the area underneath the elevated structure is reopened. However, much of the park between 101st and 103rd Streets would be permanently overlapped and shaded by the structure. Concrete aerial supports would be placed permanently in the park space. The West Option would result in a permanent incorporation of the park space and if this option is selected, CTA would work with the Chicago Parks District on appropriate mitigation. Some options have already been discussed with the City, including creating replacement park space nearby and/or adding enhanced recreational features to improve Fernwood Parkway's functionality as a park. The end result would potentially be a net benefit for park users.

Questions and Comments from Meeting Participants

- Discussion ensued about appropriated funds for project development and Sylvia Jones noted that it was her understanding that $1.5 Billion was to be appropriated in 2009 for the Red Line Extension. CTA stated that funding for the EIS planning study had been received and was used to fund this portion of the project. Once the Final EIS is submitted and a Record of Decision is determined by the Federal Transit Administration (FTA), the project would become eligible under the federally competitive New Starts grant funding. Additional local and state funding sources would be needed at that time for further project development.
- Sylvia Jones asked about the future parking fee for the proposed park and ride facility. This has not yet been determined by CTA and would be dependent upon the alternative selected to move forward. As the project develops further, CTA will evaluate the size and scale needed for the park and ride facilities.
- CTA asked about any areas of community concern with regard to the potential for park impacts of proposed alternatives. Discussion ensued about specific parks in the surrounding community. Sylvia Jones asked about impacts to Princeton Park and Trinity Church. Based on review of study area mapping, these facilities are located near 95th Street, east of Eggleston. CTA noted that these areas are outside of the proposed alternatives' alignments and study area. Similarly, CTA was asked whether the study reviewed potential impacts to Kensington Park. CTA noted that this had been reviewed but was outside of the area of potential effect.
- Sylvia Jones noted that Carver Park in Altgeld Gardens is a good example park in the area.
- Cassandra Francis asked that Major Taylor Bike Trail be added to the park impacts mapping, as appropriate. Major Taylor Bike Trail is not impacted by the project, but should be shown for reference purposes.
- Discussion ensued about potential impacts from all UPRR alternatives on Wendell Smith Park. It is understood that this is not a permanent incorporation and that only a small portion of parkland is affected. However, Ms. Francis noted that leaving the area of overlap between the park and elevated structure afterwards does change the nature of the park use.
- Cassandra Francis had concerns about impacts to parks from the UP Rail alternatives and noted that replacement of parks should be considered as part of the mitigation efforts for Block Park as well as Fernwood Parkway. CTA explained that the portion of Block Park that would be impacted is not used for recreational activity currently and does not contain any amenities. If the UPRR West Option is selected, and Fernwood Parkway is impacted, CTA would work with the Chicago Parks Department on appropriate mitigation, including creating replacement park area nearby and other amenities.
- Ms. Francis noted that she would like to work with Erika Sellke at the Chicago Parks Department to conduct a field visit of the potentially impacted parks and determine ways to enhance compact, integrated park areas within the project study area.

Follow Up

CTA Government and Community Relations staff will provide Ms. Jones with a copy of the Section 106 (Historic) Effects Report.

Friends of the Parks and Chicago Parks Department staff will further coordinate a field visit to discuss the potential impacts on parks and appropriate mitigation. CTA offered to coordinate and be part of these field visits if desired.

Friends of the Parks will look for other properties in the area that could be used for parkland mitigation.

MEETING NOTES

RE: **Chicago Park District Coordination Meeting**
Chicago Transit Authority Red Line Extension Project

DATE: **April 8, 2015, 9:00 a.m.**

LOCATION: **Chicago Park District, 541 N. Fairbanks Court, Chicago, IL**

ATTENDEES:

Name	*Initials*	*Organization*
Sonali Tandon	ST	CTA
Jenifer Palmer	JP	CWC Transit Group
Michael Lange	MH	CPD
Doreen O'Donnell	DO	CPD
Rob Rejman	RR	CPD

PREPARED BY: **Jenifer Palmer**

ISSUE DATE: **April 15, 2015**

MEETING NOTES:

- Sonali Tandon (CTA) provided an update on the status of the Red Line Extension Project. Since CTA last met with the Chicago Park District (CPD), there have been some new developments. CTA is preparing a Draft Environmental Impact Statement (EIS) and has narrowed the number of alternatives under consideration to two options of the Union Pacific Railroad Rail Alternative—the East Option and the West Option.

- After the Draft EIS phase, only one option will move forward for further study in the Final EIS. This is a community-driven project and public feedback on the environmental impacts of each option will help in refining the alignment and in selection of a single preferred option.

- There are a number of environmental resource areas studied in the Draft EIS in addition to parks, such as property displacements and noise and vibration, which could have an effect on community decision-making. CTA's goal, therefore, is to work with CPD on further detailing appropriate mitigation measures for each of these options that will result in a no adverse effect to parks following implementation of measures and which allows the public an opportunity to review the park impacts of the two options after mitigation.

- CPD stated that they would provide further information on appropriate mitigation measures for each option that are responsive to community needs and would allow the public to weigh in on

the park impacts and mitigation measures in line with other considerations on a preferred option.

- CTA shared maps and information on impacts for each option. The alignment has been refined to reduce park impacts and CTA is continuing to coordinate with Illinois Department of Transportation to seek concurrence on refinements in the I-57 segment. For the East Option, park impacts include a portion of Wendell Smith Park and a portion of Block Park. The West Option would impact Fernwood Parkway – a fewer number of parks but greater acreage affected. CPD noted that mitigation measures should note acre-for-acre replacement in either option.

- CTA shared potential mitigation measures for CPD comment, including replacement park provisions, maintaining park area beneath the structure, restoration/landscaping of any disturbed areas, and incorporating design features into the final transportation infrastructure to enhance parks while maintaining safety of the transit facility. For the West Option, there would also be a potential for creating a bike path beneath the elevated structure. CTA would still need to use the area for maintenance purposes.

- CPD noted that when clipping portions of a park, maintaining the park underneath is not as desirable a mitigation measure from a CPD perspective as replacement. The bike path concept is a very desirable one, especially if it could be a connector to other bike park plans that CPD has (i.e., Calumet). There may also be some interesting opportunities/ideas with regard to both options and providing replacement park space near stations. While a park next to the new station might be a non-continuous park, it would have the potential to enhance the surrounding area and provide better park access and connectivity. When parks are incorporated near transit, they are known to attract greater transit-oriented development.

- CTA shared some additional information on requirements under the National Environmental Policy Act and Section 4(f) as it relates to park impacts. Findings related to Section 4(f) will consider not only the impacts to parks, but the significance of parks and the mitigation measures proposed for the determination of a no adverse effect finding on each option after implementation of mitigation measures.

- Obtaining consensus from CPD, as the official with jurisdiction over findings of the impacts and mitigation measures proposed for each option, will allow the continued community-driven process for selection of a preferred option. A public meeting and comment period on findings of all environmental impacts and mitigation measures proposed is expected to occur in spring 2016.

- As a next step, CTA will send CPD a letter (and the materials reviewed during the meeting) that will outline the major items where CTA would like feedback from CPD.

- CTA shared with CPD next steps in the coordination process. These steps will help formalize mitigation measures and impact findings for both options, which can then be shared with the public for further input and feedback on a preferred option.

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

June 8, 2015

Mr. Rob Rejman
Director of Planning and Construction
Chicago Park District
541 N. Fairbanks Court
Chicago, IL 60611

Re: CTA Red Line Extension (RLE) Project

Dear Mr. Rejman:

The Chicago Transit Authority (CTA) and Federal Transit Administration (FTA) are continuing efforts to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) Project in accordance with the National Environmental Policy Act (NEPA).The proposed project would extend the Red Line from the existing 95th Street Terminal to 130th Street, subject to the availability of funding.

CTA recently met with your agency on April 8, 2015 and presented information about the East and West options of the Union Pacific Railroad alignment, potential park impacts, and preliminary mitigation measures for each of the alignment options. In follow up to that meeting, this letter provides additional supporting information on the project, park impacts, and preliminary mitigation measures for further input from your agency. As the official with jurisdiction over these properties, CTA would like additional input from your agency on the following:

1. Confirmation on the attached documentation regarding primary activities and functions that take place at each of the three park properties that would be affected by the options under consideration, including which of these activities and functions constitute the primary purpose of these parks.

2. The views of your agency on the significance of each of these parks in terms of their existing availability and function in meeting the objectives of the Chicago Park District and the surrounding community as well as the impacts and/or benefits of the proposed project with mitigation measures implemented as proposed.

3. Comments and recommendations from your agency on the proposed mitigation measures for impacts and use of each park, including identification of any appropriate replacement park locations for the proposed project mitigation measures.

4. The views of your agency on whether, after implementation of these mitigation measures, the impacts presented would be adverse to the activities, features, or attributes of each park.

We also welcome any other feedback from your agency that would be useful in understanding the views, goals, and objectives of the Chicago Park District in relationship to the proposed RLE Project. Your input will be used and reflected in the Draft EIS and Section 4(f) Evaluation that is being prepared. Section 4(f) of the USDOT Act of 1966 protects significant historic resources as well as publicly owned recreation areas, parks, and wildlife refuges. Once your views on these matters are appropriately incorporated into the document, CTA and FTA will be providing documentation to your agency on the environmental impacts and Section 4(f) findings and will seek concurrence from the Chicago Park District on the determination made. Additional coordination meetings will be scheduled with your agency, as needed, to ensure proper coordination.

At this time, CTA expects to release the Draft EIS and Section 4(f) Evaluation for public review and comment in spring 2016. A public hearing will be scheduled at that time to take public comments on the environmental findings in the Draft EIS and Section 4(f) Evaluation. Based on the technical analysis conducted and public input received, a Final EIS/Record of Decision will be prepared. The Final EIS/Record of Decision will document the results of the Draft EIS process, confirm whether the East or West Option will be constructed, and include a list of committed final mitigation measures for the option chosen. CTA and FTA will continue to work with your agency through this process to keep you informed on the status of this project and to conduct follow up coordination activities, as needed. Additional information about the project is available at: transitchicago.com/RedEIS.

If you have any questions, please do not hesitate to contact me. Thank you for your participation on this project.

Sincerely,

Sonali Tandon
Senior Project Manager, Planning
Chicago Transit Authority
312.681.4246
standon@transitchicago.com

cc:

Michael Lange, Chicago Park District
Doreen O'Donnell, Chicago Park District
Reginald Arkell, Federal Transit Administration
Mark Assam, Federal Transit Administration

Project Overview and Description

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project to extend the existing Red Line heavy rail transit service approximately 5 miles south from the existing 95th Street Terminal to 130th Street on Chicago's Far South Side. The project area for the RLE is approximately 11 miles south of the Loop (Chicago's central business district).

The National Environmental Policy Act of 1969 (NEPA) mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined. FTA and CTA are currently preparing a Draft Environmental Impact Statement (EIS) for this project in accordance with NEPA and other applicable regulations, including Section 106 of the National Historic Preservation Act (NHPA), Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966, joint guidance and regulations from FTA and the Federal Highway Administration (FHWA), and other agency regulations and guidelines.

After extensive planning and study, the Chicago Transit Board designated the Union Pacific Railroad (UPRR) Rail Alternative as the Locally Preferred Alternative (LPA) for this project on August 12, 2009. The UPRR Alternative route would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would turn south to follow the UPRR corridor.

Two options are being considered for the alignment along the UPRR corridor. The CTA elevated structure would be located either east or west of the existing UPRR corridor. The alignment would follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street. South of this point, the East and West Options would follow the same alignment southeast along the NICTD/Chicago South Shore & South Bend Railroad (CSS & SBRR) right-of-way using a portion of the Indiana Harbor Belt Railroad (IHB) right-of-way to the terminus (end) of the RLE at 130th Street.

As described, two UPRR Alternative options for the segment of the proposed route between I-57 and the CN/ME tracks near 119th Street are under further evaluation:

- East Option - The CTA elevated structure would be placed immediately adjacent to the east side of the UPRR right-of-way.
- West Option - The CTA elevated structure would be placed immediately adjacent to the west side of the UPRR right-of-way.

An overview map of the project and alignment options is provided in **Figure 1**.

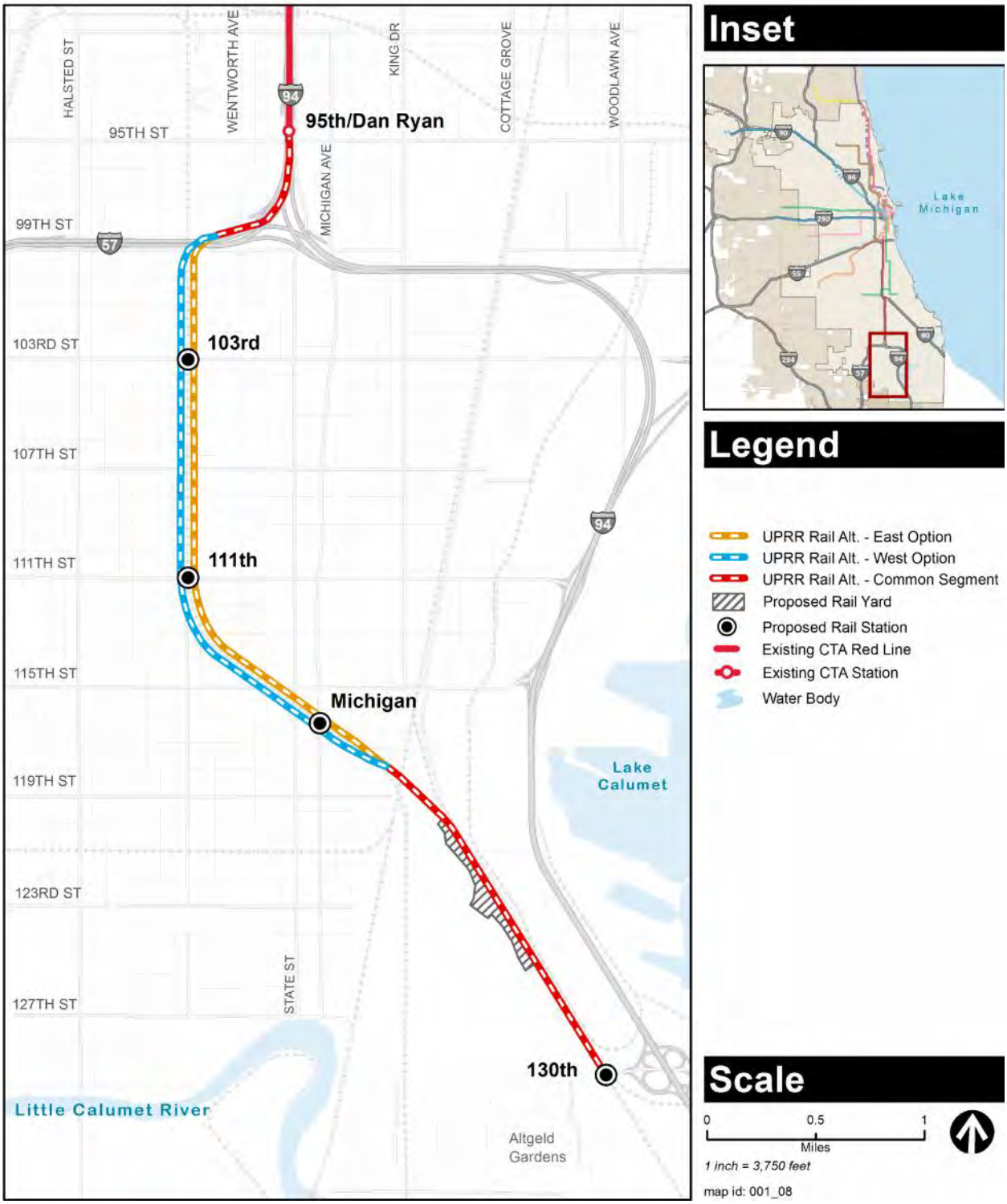

Figure 1: Union Pacific Railroad Alternative Options

Park Impact Overview

All public parks within 500 feet of the proposed right-of-way and within ½ mile around the locations of proposed stations were analyzed for potential impacts as a result of implementing the project. **Table 1** summarizes park impacts as a result of each UPRR alignment option. **Figure 2** shows the locations of all parks in the vicinity of the project. The following section provides further details on the park or parks impacted by each alignment option.

Table 1: Park and Recreational Resources Impacts Overview

Park or Recreational Resource Name	Address	Impact Findings	
		East Option	West Option
Wendell Smith Park	9912 S. Princeton Avenue	0.7 acres	-
Fernwood Parkway	9501 S. Eggleston Avenue	-	1.9 acres
Block Park	346 W. 104th Street	0.9 acres	-
Total		*1.6 acres*	*1.9 acres*

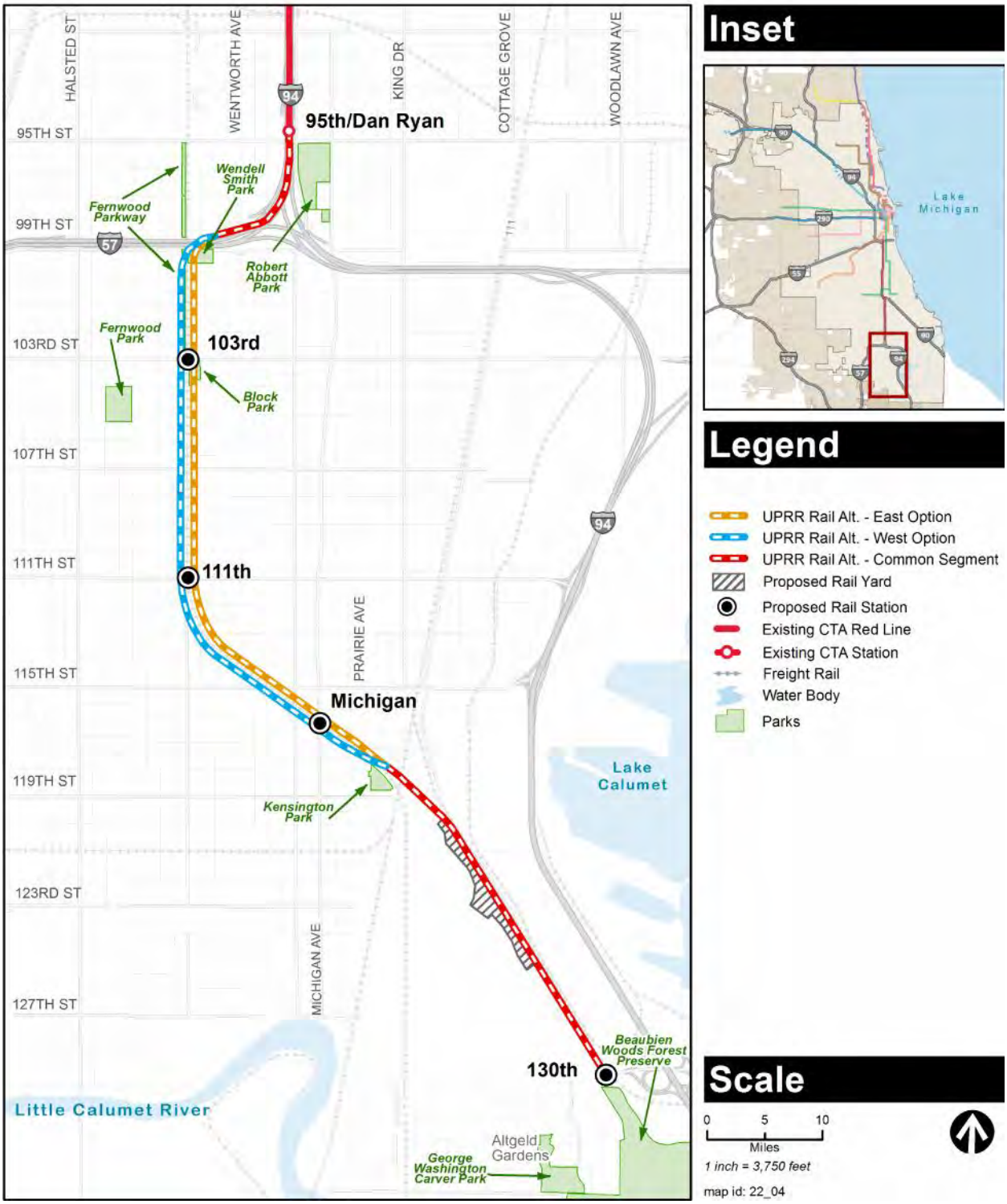

Figure 2: Publicly Owned Park and Recreational Properties Adjacent to the Project

UPRR Alternative East Option - Park Impacts

Two park resources would be used as result of the East Option: Wendell Smith Park and Block Park, which are further described below.

Wendell Smith Park

Wendell Smith Park is approximately 4.7 acres (340 feet wide by 610 feet long) and is an actively used facility with basketball courts, baseball fields, a play lot, recreation building, and 0.3 mile of walking trails. Regularly scheduled activities at Wendell Smith Park include basketball tournaments, baseball/softball games, and concerts. The park is also actively used by day camps and for activities organized by the Chicago Park District.

The East Option alignment would run through the northwestern corner of the park, as shown in Error! Reference source not found.. Of the 4.7 acres of the park, approximately 0.7 acre would be overlapped by the elevated structure and its associated clearances. The overlap area includes open space, trees, benches, and a portion of the park's walking trail. The outfield of an existing baseball field would be used. Piers would be located in the park, and the bottom of the elevated structure would be approximately 15 feet above ground level. Because a permanent easement is proposed, the land within the easement would be considered a permanent incorporation (direct use) of the park facilities. Temporary closure of the overlapped portion of Wendell Smith Park would be necessary during construction.

Preliminary Mitigation Measures

Mitigation and enhancement measures are proposed that would result in no adverse effect to the features, attributes, and activities of the park after implementation, as follows:

- Replacement of impacted park space. Payment would be the fair market value of the land and improvements taken or improvements to the remaining site equal to the fair market value of the land and improvements taken. Location of replacement property would be further defined in coordination with the Chicago Park District.

- Relocation or replacement of the baseball field based on further coordination with the Chicago Park District and outreach to the public so that the attributes, features, and activities are not adversely affected by the use of the northwest corner of the park.

- Replacement of facilities affected by the project including sidewalks, paths, benches, lights, trees, and other facilities within the park.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the park but not adversely affect the safety of the transit facility.

Figure 3: Impacts on Wendell Smith Park – -Union Pacific Railroad Alternative East Option

Block Park

Block Park is a passive green space and is divided into two parcels by Harvard Avenue. The east parcel is approximately 1.4 acres (130 feet wide by 460 feet long) and includes amenities such as benches, walking paths, and sidewalks. The west parcel is approximately 1.3 acres (90 feet wide by 600 feet long) and is open space with a sidewalk and no other park amenities. In addition, a radio tower and two utility structures are on the west parcel. Photos of Block Park are shown in **Figures 4** and **5**.

Figure 4: Block Park with the Roseland Pumping Station in the Background (facing south)

Figure 5: East Parcel (left) and West Parcel (right) of Block Park

The East Option alignment would run through the west parcel of Block Park, and would overlap 0.9 acre of park space with the elevated structure and its associated clearances, as shown in Error! Reference source not found.. A secondary station entrance would also be located in the park, along its western edge. The affected parcel includes an isolated portion of the park's open space and a communications tower, and does not currently serve a recreational use. The key recreational features of the park, walking trails and benches, are on the other side of Harvard Avenue in the east parcel of the park. Because the East Option alignment elevated structure would overlap a portion of this park, there would be a permanent incorporation (direct use) of this passive greenspace. Some temporary closure of the overlapped area would be necessary during construction.

Preliminary Mitigation Measures

Mitigation and enhancement measures are proposed that would result in no adverse effect to the features, attributes, and activities of the park after implementation. CTA and the Chicago Park District are currently coordinating to define any additional or alternative mitigation measures that may be necessary:

- Replacement of impacted park space. Payment would be the fair market value of the land and improvements taken or improvements to the remaining site equal to the fair market value of the land and improvements taken. Location of replacement property would be further defined in coordination with the Chicago Park District. Providing enhanced park connectivity to the proposed station area at 103rd Street and other CPD park projects in the nearby area could be considered to enhance the attributes, features and activities of this existing passive green space.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the park but not adversely affect the safety of the transit facility.

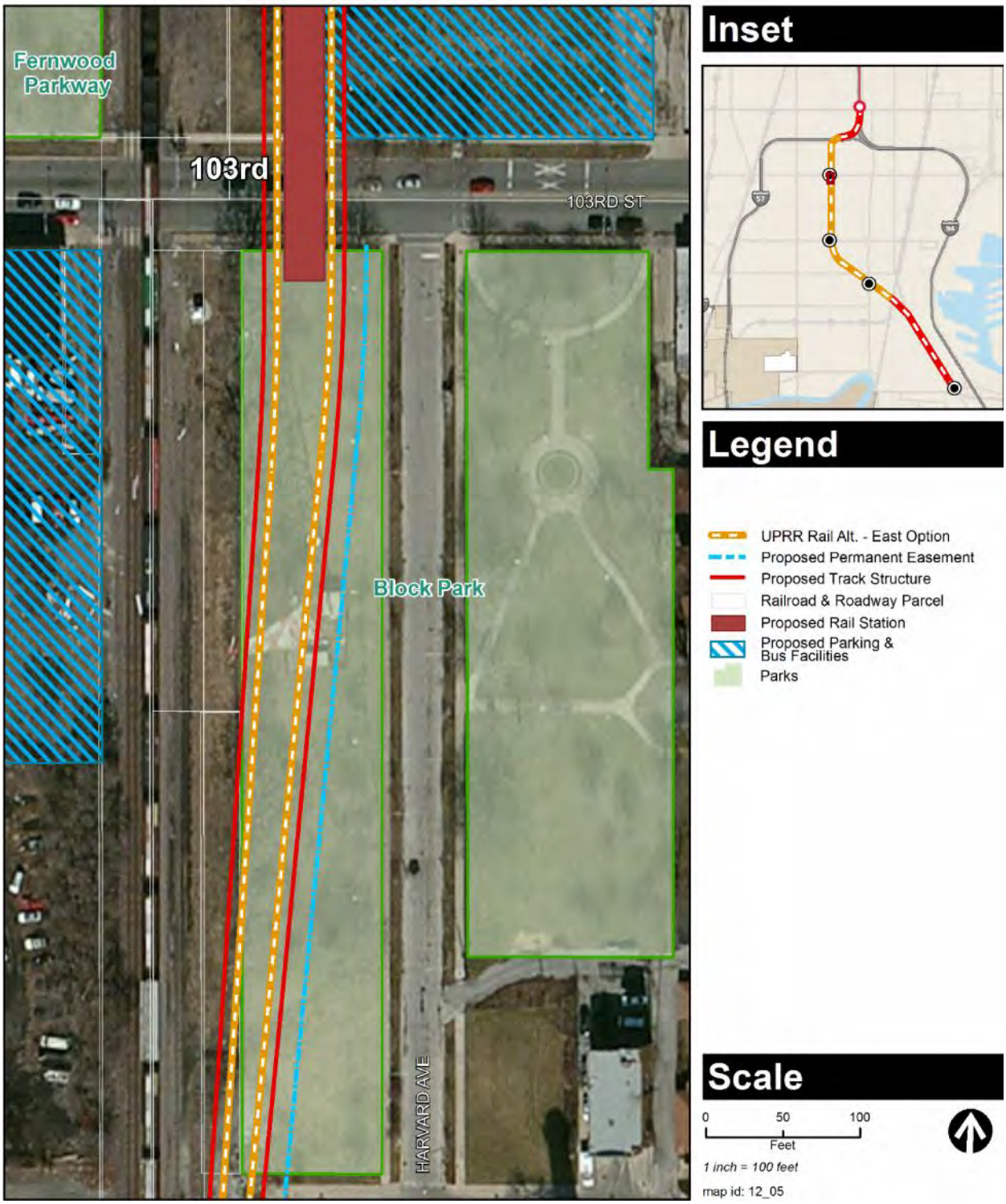

Figure 6: Impacts on Block Park - East Option

UPRR Alternative West Option - Park Impacts

One park resource would be used as result of the West Option—Fernwood Parkway—which is further described below.

Fernwood Parkway

Fernwood Parkway is a passive green space, and is divided into two parcels separated by 101st Street. The northern parcel, from 99th Street to 101st Street, is approximately 2.4 acres (78 feet wide by 1,325 feet long). The southern parcel, from 101st Street to 103rd Street, is approximately 2.9 acres (78 feet wide by 1,277 feet long). Both the north and south parcels of Fernwood Parkway serve as open space and do not contain recreational facilities or amenities such as sidewalks or benches. Some trees are planted within the park and a chain-link fence separates the green space from the existing at-grade UPRR tracks. **Figures 7 and 8** shows Fernwood Parkway facing north and south.

Figure 7: Fernwood Parkway at 100th Street and Eggleston Avenue (facing north)

Figure 8: Fernwood Parkway at 100th Street and Eggleston Avenue (facing south)

The West Option track structure would run through two of the four parcels that make up Fernwood Parkway between 101st and 103rd Streets. Approximately 1.9 acres of the parkway would be overlapped by the elevated structure and its associated clearances (see Error! Reference source not found.). The parkway functions as open space, and does not contain recreational amenities. Temporary closure of the section of the overlapped section of the parkway would be necessary during construction. Public use of the parkway could resume after construction, as long as the area beneath the elevated track structure is reopened, but much of the parkway between 101st and 103rd Streets would be permanently overlapped and shaded by the structure. Elevated track structure supports would be placed permanently in the park space. Because the West Option alignment elevated structure would overlap a portion of this park, there would be a permanent incorporation (direct use) of this passive green space.

Preliminary Mitigation Measures

Mitigation and enhancement measures are proposed that would result in no adverse effect to the features, attributes, and activities of the park after implementation, as follows:

- Replacement of impacted park space. Payment would be the fair market value of the land and improvements taken or improvements to the remaining site equal to the fair market value of the land and improvements taken. Location of replacement property would be further defined in coordination with the Chicago Park District.

- Potential installation of a new bicycle path beneath the elevated track structure, subject to use for CTA maintenance, which would enhance the existing unused green space and better connect parks and the newly proposed transit infrastructure.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the green space but not adversely affect the safety of the transit facility.

Figure 9: Impacts on Fernwood Parkway - Union Pacific Railroad Alternative West Option

chicago park district

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August 17, 2015

Sonali Tandon
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Re: CTA Red Line Extension (RLE) Project

Dear Ms. Tandon:

The Chicago Park District (CPD) appreciates the opportunity to review the draft of the proposed park impacts for the CTA Red Line Extension (RLE) Project dated June 8, 2015. Any proposed mitigation measures should include fully developed replacement property with the appropriate replacement improvements in the community area. The CPD's priorities for replacement park sites is to expand existing parks.

CPD's neighborhood parks range in size from 2-5 acres in size. These are parks that contain indoor and/or outdoor recreation facilities and typically include a playground and/or other sport fields. The standard for new parks is a minimum of two (2) acres in size. If Recognized Environmental Conditions are identified in the Phase 1 Environmental Site Assessment (ESA) then a Phase 2 ESA is required. If there are exceedances of the Illinois Environmental Protection Agency's (IEPA) TACO Tier 1 Residential Standards, then the property is required to receive a Comprehensive No Further Remediation (NFR) Letter from the IEPA's Site Remediation Program.

The documentation regarding primary activities and functions that occur in each of the three parks is accurate. CPD concurs conceptually with the proposed mitigation measures as outlined in the coordination package.

Wendell Smith (#272) Park is a 4.7-acre neighborhood park that primary serves the population within a ½ mile. Improvements include two basketball courts, two baseball fields, a playground, recreation building and .3 miles of walking trails. In addition to the areas described in the letter, the overlap area includes space behind the existing baseball backstop. Preliminary mitigation measures should include replacement property located in the Roseland Community area constructed in accordance with Chicago Park District standards.

Block (#1005) Park is a 2.95-acre passive park that provides informal active recreational uses or other accessory uses. The east option alignment affects the entire function of the 1.3 acre west parcel, including the accessory communication tower space. Preliminary mitigation measures should include replacement property located in the Roseland Community area constructed in accordance with Chicago Park District standards. Additionally, mitigation and replacement of the communications and utility structures is required.

Fernwood (#1215) Parkway is an 8.63-acre linear passive park that provides informal active recreational uses or other accessory uses. The parkway functions as open space and provides a quiet natural setting for park users. The Chicago Park District would not program or maintain areas beneath the elevated track structures. Preliminary mitigation measures should include replacement property located in the Washington Heights Community area constructed in accordance with Chicago Park District standards.

The suggested mitigations strategies coupled with the above comments should address all the adverse impacts on the Parks. We look forward to a successful collaboration.

Sincerely,

Rob Rejman
Director of Planning and Construction

RR/ml

cc: Doreen O'Donnell, Research and Planning Manger
Michael Lange, Senior Project Manager

Appendix C
Agency Coordination and Public Involvement

Website (May 2015)

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Jeffery Jump
Orange Line Extension
Red Ahead
Red & Purple Modernization Project
Red Line Extension
Yellow Line Extension
Press Releases
Public Art
Reports & Notices
System Improvement Projects
Ventra
Videos
Winter Preparedness

RED AHEAD

Red Line Extension

Red Line Extension

Connecting 95th Street Terminal to 130th Street

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to 130th Street, subject to the availability of funding. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

Learn more about this project.

What's New?

In August 2014, we announced that list of extension alternatives have been narrowed to one "preferred alternative" with two variations:

- Union Pacific Railroad Rail (UPRR) Alternative, East Option
  Under this option, the CTA elevated structure would be placed immediately east of the Union Pacific Railroad right-of-way from 99th Street to 118th Street.
- Union Pacific Railroad Rail (UPRR) Alternative, West Option
  Under this option, CTA elevated structure would be placed immediately west of Union Pacific Railroad right-of-way from 99th Street to north of 118th Street.

The proposed alignment of the rapid transit line would be the same for the two East and West options from 95th Street to 99th Street and from 118th Street to 130th Street.

The CTA arrived at these options based on environmental analysis and comments received at the public open house meeting in May 2014 as well as additional public comments submitted in summer 2014.

In addition to the selection of the "preferred alternative", the CTA has also announced $5 million of bond funds to move forward on the required federal planning process for the rail line extension.

Red Line Extension

Quick Links

Home
About / Alternatives
Environmental Review
FAQ

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Trains:

Red Line	Normal Service
Blue Line	Normal Service
Brown Line	Minor Delays
Green Line	Normal Service
Orange Line	Normal Service
Purple Line	Minor Delays
Pink Line	Normal Service
Yellow Line	Normal Service

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1 4 N5 7 12 J14
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29 30 37 47 52 52A
53 55 55A 56 59 60
63 66 71 75 78 95E
120 121 124 126 132 136
143 146 147 151 156 157
172 192

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See maps and learn more...

Press Releases

Mayor Emanuel, CTA Announce Next Steps in Modernizing the Red Line, CTA's busiest rail line (4/17/2014)
CTA Provides Update on Proposed Red Line Extension from 95th to 130th Street (8/11/2014)

Project Status

In accordance with the National Environmental Policy Act (NEPA), the CTA and the Federal Transit Administration (FTA) are preparing a Draft Environmental Impact Statement (EIS). An EIS compares the positive and negative environmental impacts of the various project alternatives. Additional public meetings will be held in 2016.

Get Involved and Stay Informed

Public and agency input is important. This website will keep you informed about the proposed project, the planning process, and opportunities for public input and participation.

If you have any questions related to the Chicago Transit Authority's proposed Red Line Extension, or would like to be added to the project mailing list for future updates, please contact us at:

RedExtension@transitchicago.com

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension
567 W. Lake Street
Chicago, IL 60661-1465

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Press Releases
Public Art
Reports & Notices
System Improvement Projects
Ventra
Videos
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About the Red Line Extension

Connecting 95th Street Station to 130th Street

Overview

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Terminal to the vicinity of 130th Street. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

Purpose & Need

The purpose of the Red Line Extension is to:

- Reduce commute times for residents both within and south of the project area.
- Improve mobility and accessibility for transit-dependent residents in the project area.
- Improve rapid transit rail service to isolated areas and provide viable linkages between affordable housing (e.g., Altgeld Gardens public housing project), jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Provide an opportunity for potential connections and linkages to other public transportation modes including regional commuter rail in the project area.
- Foster economic development in the project area, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.

The RLE Project is needed to respond to the following problems:

- Transit trips to jobs are longer for Far South Side residents than they are for passengers in the Chicago seven-county region as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limit access between affordable housing and employment centers outside of the project area.
- Existing transit markets are underserved and transit connectivity is challenging in the project area.

Red Line Extension

Quick Links

Home
About / Alternatives
Environmental Review
FAQ

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63 66 71 75 78 95E
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- Disinvestment and limited economic development in the project area have negatively impacted Far South Side communities.

Project Alternatives

CTA began developing the alternatives that are being studied in Draft EIS during the Alternatives Analysis (AA) which took place from 2006 to 2009. Starting with multiple modes and corridor options, CTA developed and screened alternatives through a combination of conceptual engineering, public input (open houses and stakeholder meetings), and preliminary analysis of potential impacts and costs.
In preparation for the Draft Environmental Impact Statement (EIS), CTA evaluated the following alternatives and options:

- No Build Alternative
- Bus Rapid Transit Alternative
- Union Pacific Railroad Rail (UPRR) Alternative
  - Right-of-Way Option
  - East Option
  - West Option
- Halsted Rail Alternative

In August 2014, based on the technical analysis and public input CTA announced narrowing down the number of alternatives to a single Preferred Alternative with two options—the UPRR Rail Alternative. The Draft EIS will summarize the environmental benefits and impacts of the No Build Alternative and two UPRR Rail Alternative options: the East Option and the West Option.

No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010-2015 Transportation Improvement Program (TIP). All elements of the No Build Alternative are included in each of the other alternatives.

The No Build Alternative would include the following:

- Existing transportation system
- Committed transportation improvements including bridge reconstructions, 95th Street Terminal Improvement Project, several road improvement projects including resurfacing and coordination of signal timing, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities
- Bus transit service focused on the preservation of existing services and projects

Union Pacific Railroad (UPRR) Rail Alternative – Locally Preferred Alternative

The proposed UPRR Rail Alternative would extend the heavy rail transit line from the existing Red Line 95th Street Terminal to 130th Street. The UPRR Rail Alternative would operate on an elevated structure heading south from 95th Street along the I-57 Expressway for nearly one-half mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of South Prairie Avenue, the alignment would cross over the Canadian National/Metra Electric tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the Northern Indiana Commuter Transportation District Chicago South Shore & South Ben Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Indiana Harbor Belt (IHB) alignment to terminate at 130th Street. The Chicago Transit Board selected the UPRR Alternative as the Locally Preferred Alternative on August 12, 2009.

The Locally Preferred Alternative would include the following features:

- Transportation improvements that are already in the Chicago

Metropolitan Agency for Planning Fiscal Year 2010-2015 Transportation Improvement Program as described in the No Build Alternative

- 5.3-mile heavy rail transit line extension from 95th Street Terminal to 130th Street
- Four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street
- New park & ride and bus terminal facilities at each station
- Bus transit service from the south to the new stations for faster travel to downtown Chicago
- New yard and shop at 120th Street

Two alignment options are being studied in the Draft EIS:

- **East Option**
  Under this option, the CTA elevated structure would be placed immediately east of the Union Pacific Railroad right-of-way from 99th Street to 118th Street.
- **West Option**
  Under this option, CTA elevated structure would be placed immediately west of Union Pacific Railroad right-of-way from 99th Street to north of 118th Street.

The proposed alignment of the rapid transit line would be the same for the two East and West options from 95th Street to 99th Street and from 118th Street to 130th Street.

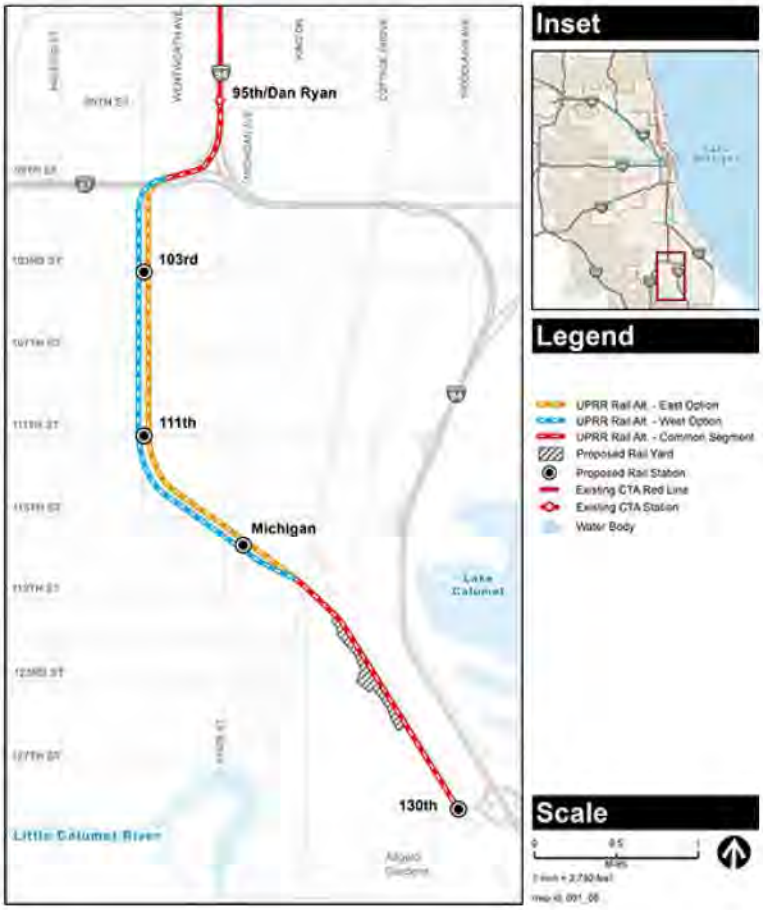

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Red Ahead
Red & Purple Modernization Project
Red Line Extension
Yellow Line Extension
Press Releases
Public Art
Reports & Notices
System Improvement Projects
Ventra
Videos
Winter Preparedness

Red Line Extension

Quick Links

Home
About / Alternatives
Environmental Review
FAQ

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Red Line Extension

Environmental Review

Overview

The National Environmental Policy Act (NEPA) requires evaluation of potential environmental impacts associated with federal projects and actions. In accordance with the NEPA, the Chicago Transit Authority (CTA) and the Federal Transit Administration (FTA) are preparing an Environmental Impact Statement (EIS) that will evaluate the environmental effects of constructing and operating the proposed extension.

Environmental Impact Statement

The CTA is currently in the process of preparing a Draft EIS. The Draft EIS will include an evaluation of the No Build Alternative, the BRT Alternative, the UPRR Rail Alternative, and the Halsted Rail Alternative. The Draft EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of the alternatives, and proposed mitigation measures to reduce or eliminate potential impacts.

The purpose of the EIS is to study, in a public setting, the effects of the proposed project and its alternatives on the quality of the physical, human and natural environment. Areas to be evaluated for potential impacts from construction and operation of the proposed project include, but are not limited to:

- Transportation
- Land use and economic development
- Displacement and relocation of existing uses
- Neighborhoods and communities
- Visual and aesthetic
- Noise and vibration
- Safety and security
- Historic and cultural resources
- Hazardous materials
- Air quality
- Wetlands
- Water quality
- Floodplains
- Vegetation and wildlife habitat
- Threatened and endangered species
- Geology and soils
- Energy
- Environmental Justice

The evaluation will reveal the extent to which the proposed project will or will not affect these areas. Measures to avoid, minimize, and mitigate potential adverse impacts will also be identified and evaluated.

CTA began public outreach on the project as part of the Alternatives Analysis from 2006 to 2009. Outreach continued during the formal Environmental Impact Statement (EIS) scoping period in 2009, and has continued through the preparation of Draft EIS starting in 2012. CTA will continue to involve and consult with the community as the project proceeds through the environmental process.

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53 55 55A 56 59 60
63 66 71 75 78 95E
120 121 124 126 132 136
143 146 147 151 156 157
172 192

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Open House - 2014

CTA conducted outreach in April and May of 2014 to update the public on the status of the project; inform them of proposed alternatives, anticipated project benefits, and impacts; and gather feedback. Outreach included meetings with elected officials, interested community groups, and a public open house. The open house was held May 13, 2014 at the Palmer Park Gymnasium, 201 E. 111th Street in Chicago from 5:30 PM to 7:30 PM.

May 2014 Open House Exhibit Boards
May 2014 Project Summary

Newsletter - 2013

CTA sent a newsletter with a general project update to the approximately 3,200 addresses on the stakeholder database on August 27, 2013.

August 2013 Newsletter

Open House - 2011

CTA held an open house meeting on August 2, 2011 to update the community regarding the RLE Project. The meeting was held at St. John Missionary Baptist Church, 211 E. 115th Street in Chicago from 6:00 PM to 8:30 PM.

August 2011 Open House Exhibit Boards

Scoping and Scoping Meetings - 2009

The process of determining the scope, focus, and content of an EIS is known as "scoping." Scoping meetings are an opportunity to obtain information from the public and governmental agencies. The scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential effects and mitigation measures to be considered.

The official public comment period for scoping concluded on October 27, 2009. The comments received are summarized in the Scoping Report. Input received during scoping is used to refine the project purpose and need and alternatives, and to direct the analysis of environmental impacts. Public input is also used to help planners avoid potential impacts, and to identify potential mitigation measures.

Red Line Extension Scoping Report (.pdf)
Scoping report - revised June, 2010. Appendices are available as separate files.

Red Line Extension Scoping Report Appendices A-G (.pdf)
Public Participation Plan, Notice of Intent, Participating Agencies, Participating Agency Invitation Letters, Agency Scoping Meeting, Agencies and Organizations Notified of Scoping, Notification Materials

Red Line Extension Scoping Report Appendices H-K (.pdf)
Scoping Meeting Materials, Meeting Presentation, Meeting Exhibit Boards, Public Scoping Meeting Transcripts

Red Line Extension Scoping Report Plain Text Supplement for Appendices H-J (.txt)
This text-only supplement describes Scoping Meeting Materials, Meeting Presentation, Meeting Exhibit Boards

Red Line Extension Scoping Report Appendix L Public Comments 1-95 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 96-171 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 172-259 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 260-344 (.pdf)

Red Line Extension Scoping Report Appendix M (.pdf)
Agency Comments - revised June, 2010

Alternatives Analysis - 2006–2009

The purpose of the Alternatives Analysis (AA) Study, which ended in August 2009, was to examine a wide range of potential transportation options. In the AA process, the project's purpose and need were identified, alternatives that meet the purpose and need were developed and evaluated, and comprehensive and ongoing public involvement was initiated. Many different transportation alternatives were identified in the AA process. Based on public comment and an evaluation of those options against criteria that included cost, environmental factors, and feasibility considerations, the number of options was narrowed. There were three screening stages and the results of each screening stage were presented at public meetings. At each stage, there was an opportunity for the public to review and comment on the results. The end result of the AA process was the selection of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009.

Screen 1 Analysis

The CTA held public open houses to receive input on preliminary findings from Screen 1 of the Alternatives Analysis Study for the proposed Red Line Extension.

Tuesday, April 10, 2007, 6-8 p.m.
Chicago State University, New Academic Library, 4th Floor Auditorium
9501 S. King Drive, Chicago, IL 60628

Wednesday, April 11, 2007, 6-8 p.m.
West Pullman Branch, Chicago Public Library
830 W. 119th St., Chicago, IL 60628

Presentations delivered at the Screen 1 meetings are available at the links below:

Public Meeting Presentation Part 1 - April 2007 (3 MB PDF)
Public Meeting Presentation Part 2 - April 2007 (2 MB PDF)
Public Meeting Presentation - April 2007 (Text version)

Public Meeting Display Boards - April 2007 (3 MB PDF)
Public Meeting Display Boards - April 2007 (Text version)

Public Meeting Comment Card - April 2007 (0.4 MB PDF)

The official public comment period for the study's Screen 1 preliminary findings meeting concluded on May 11, 2007. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 1 Public Comment Database (0.1 MB PDF)
Screen 1 Responses to Public Comments (0.1 MB PDF)

Screen 2 Analysis

The CTA held public open houses to present possible transit technologies and alignments in a study area bordered by 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Cal-Sag Channel/Little Calumet River and 134th Street on the south.

Wednesday, December 3, 2008, 6-8 p.m.
Historic Pullman Visitor Center
11141 South Cottage Grove, Chicago, IL 60628

Thursday, December 4, 2008, 6-8 p.m.
Woodson Regional Chicago Public Library
9525 South Halsted Street, Chicago, IL 60628

Presentations delivered at the Screen 2 meetings are available at the links below:

Public Meeting Presentation Part 1 – December 2008 (2.8 MB PDF)
Public Meeting Presentation Part 2 - December 2008 (3.8 MB PDF)
Public Meeting Presentation - December 2008 (Text version)

Public Meeting Display Boards Part 1 - December 2008 (2 MB PDF)
Public Meeting Display Boards Part 2 - December 2008 (2.4 MB PDF)

Public Meeting Display Boards - December 2008 (Text version)

Public Meeting Comment Card - December 2008 (0.4 MB PDF)

The official public comment period for the study's Screen 2 preliminary findings meeting concluded on December 18, 2008. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 2 Public Comment Database (0.1 MB PDF)
Screen 2 Responses to Public Comments (0.1 MB PDF)

Screen 3 Analysis

The CTA invited the public to open houses to present preliminary Screen 3 findings and a recommendation of a locally preferred alternative, which concluded the Alternatives Analysis study for the Red Line Extension.

Wednesday, June 3, 2009, 6-8 p.m.
Olive-Harvey College, Cafeteria
10001 South Woodlawn Avenue, Chicago, IL 60628

Thursday, June 4, 2009, 6-8 p.m.
Woodson Regional Chicago Public Library
9525 South Halsted Street, Chicago, IL 60628

Presentations delivered at the Screen 3 meetings are available at the following links:

Public Meeting Presentation Part 1 – June 2009 (1.4 MB PDF)
Public Meeting Presentation Part 2 – June 2009 (2.9 MB PDF)
Public Meeting Presentation - June 2009 (Text version)

Display Boards Part 1 - June 2009 (2.4 MB PDF)
Display Boards Part 2 - June 2009 (3.4 MB PDF)
Display Boards - June 2009 (Text version)

Display Maps – HRT UPRR Alternative (1.2 MB PDF)
Display Maps – HRT Halsted Alternative (0.9 MB PDF)
Public Meeting Comment Card (0.4 MB PDF)

The official public comment period for the study's Screen 3 findings and preliminary recommendation for a locally preferred alternative concluded on June 25, 2009. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 3 Public Comment Database (0.1 MB PDF)
Screen 3 Responses to Public Comments (0.1 MB PDF)

Locally Preferred Alternative Report

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Reports & Notices
System Improvement Projects
Ventra
Videos
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Red Line Extension Project: FAQ

The Chicago Transit Authority (CTA) knows residents and potential Red Line riders have questions about this proposed extension.

Q: How would CTA fund this proposed project?
A: Two types of funding are needed for the proposed extension – capital and operating. Capital funding (construction funding) for the proposed extension is provided partially by the Federal Transit Administration (FTA), through its "New Starts" grant program. This program provides funding for major public transit infrastructure projects throughout the United States through a highly competitive process. CTA is currently in the environmental review phase of that process that will allow the agency to apply for funding. Upon successfully advancing through the FTA's process, a project would be qualified to receive a Full Funding Grant Agreement (FFGA) from the Federal Transit Administration. The FFGA typically covers about half of a project's capital cost. Other non-federal funds will comprise the remainder of capital funding. Once the proposed extension is built and operational, CTA's operating budget would support day-to-day service.

Q: When would the extended Red Line be open for use?
A: No timeline has yet been established. Project schedule is dependent on federal reviews and approvals and funding availability.

Q: When would construction begin on the proposed Red Line Extension?
A: No timeline has yet been established. Project schedule is dependent on federal reviews and approvals and funding availability.

Q: What will be the operating hours for the proposed extension?
A: In the current project planning phase, the operating hours for the proposed extension are assumed to be the same as for the current Red Line, which operates 24 hours every day of the year.

Q: Would CTA need to buy private property because of the location of the proposed extension?
A: Yes, CTA would need to buy private property for the selected option. The number of properties affected varies; between approximately 215 and 279 properties could be affected. Final property acquisition requirements would be confirmed as project engineering proceeds. Property owners will be paid not less than fair market value for their land and buildings, and may be eligible for compensation equal to the original purchase price of the property. They will also be assisted in relocating their businesses or dwellings, per the Federal Uniform Act on relocation assistance and property acquisition. When

Red Line Extension

Quick Links

Home
About / Alternatives
Environmental Review
FAQ

Quick Links

Schedules Maps Alerts
Transit Trackers Ventra Fare Info

Plan a trip

Start (e.g. O'Hare Airport)

End (e.g. 1 N State St, Chicago, IL)

Leave Now More

Get directions with:
Google Maps RTA Trip Planner

About trip planners (and more options)..

System Status

Trains:

Red Line	Normal Service
Blue Line	Normal Service
Brown Line	Minor Delays
Green Line	Normal Service
Orange Line	Normal Service
Purple Line	Minor Delays
Pink Line	Normal Service
Yellow Line	Normal Service

Buses:

Routes with Current Alerts (View All):

1 4 N5 7 12 J14
18 16 19 20 22 28
29 30 37 47 52 52A
53 55 55A 56 59 60
63 66 71 75 78 95E
120 121 124 126 132 136
143 146 147 151 156 157
172 192

More:

See all Alerts Accessibility

a single option is chosen, CTA will work with the community and property owners (including the UPRR) to minimize property impacts.

Q: Will there be places to park near the new stations?
A: New park & ride lots are proposed at each new station.

Q: How would this proposed extension impact the natural environment and the community?
A: Potential impacts to the environment are being studied in the Draft Environmental Impact Statement (EIS). The Draft EIS will:
• Identify and evaluate measures to avoid, minimize and mitigate adverse impacts.
• Describe the potential environmental effects of the proposed Red Line Extension improvements and the steps that will be taken to alleviate them.
Typically, environmental reviews for proposed transit projects address:

- Transportation
- Land use and economic development
- Displacement and relocation of existing uses
- Neighborhoods and communities
- Visual and aesthetic
- Noise and vibration
- Safety and security
- Historic and cultural resources
- Hazardous materials
- Air quality
- Wetlands
- Water quality
- Floodplains
- Vegetation and wildlife habitat
- Threatened and endangered species
- Geology and soils
- Energy
- Environmental Justice

Q: How would this proposed extension impact noise in the community?
A: The Draft Environmental Impact Statement (EIS) will evaluate the potential for noise impacts to the surrounding community. If it is determined that there could be noise impacts, then mitigation measures to reduce those impacts would be proposed in the Draft EIS such as welded rail, closed deck structures, and noise barriers. During the public review of the Draft EIS, you will have an opportunity to review and comment on the analysis and the proposed mitigation measures.

Q: What is the economic impact of this proposed extension?
A: The Draft Environmental Impact Statement (EIS) will evaluate the fiscal and economic benefits and potential impacts of the proposed extension. During the public review of the Draft EIS, you will have an opportunity to review and comment on the economic analysis. Numerous transit studies suggest that transit investments result in economic development. CTA estimates between 2,600 and 4,100 jobs would be created during Red Line Extension construction. In addition, new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.

Q: How would the proposed Red Line Extension affect current CTA services, both during construction of the new service and during operation of the new service?
A: The specifics of construction for the proposed Red Line Extension have not been established yet. CTA's general guidelines minimize the effects of construction on existing transit services. However, bus reroutes are possible. Once the proposed extension is complete, existing bus routes may be changed to complement the new high-capacity transit service. Depending on the specific route of the service, the number of routes feeding into the 95th Street Terminal may be reduced, which would also reduce congestion in and

around this facility.

Q: Is it possible that at some point this proposed Red Line Extension could go even farther to the Gary Airport and South Bend, Indiana?
A: At this point CTA's proposal for the Red Line Extension is limited to the project's defined study area, which is bounded by the Little Calumet River and 134th Street on the South. Any initiative to further expand service to the Gary Airport and South Bend, Indiana, would merit further investigation and its own planning study.

Q: For the Locally Preferred Alternative near the Union Pacific Railroad (UPRR) tracks, has CTA talked with Union Pacific representatives?
A: CTA has had preliminary conversations with UPRR and will continue to coordinate with the railroad as plans proceed. The UPRR requires that the CTA tracks be located at least 50 feet from the existing freight tracks due to safety considerations.

Q: Can engineering design be done at the same time as the Environmental Impact Statement is being drafted?
A: As part of the new Moving Ahead for Progress in the 21st Century Act (MAP-21) policy, environmental review is completed during the Project Development Phase. The Engineering Phase is the next step, during which engineering and design is completed. The timing for the Engineering Phase is subject to funding availability and federal approvals. Currently, CTA has not secured approval and funding for the Engineering Phase.

Q: How does work on the other Red Ahead projects affect progress on the Red Line Extension?
A: Red Line Extension project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Ahead program consists of separate projects with their own separate sources of potential funding and timelines. These projects are mutually beneficial and are combined into the Red Ahead program to ensure that they are coordinated efficiently.

Q: What portion of the extension would be elevated?
A: The UPRR Rail Alternative would operate on an elevated structure from approximately 95th Street to 118th Street, where it would transition to an at-grade profile and then continue at grade before terminating near 130th Street. The terminal station would be at-grade, whereas other stations would be elevated.

Q: Would this extension connect to existing Metra Electric or South Shore services?
A: There is potential for connection of the proposed Red Line Extension to the Northern Indiana Commuter Transportation District (NICTD) South Shore Commuter Rail Line in the vicinity of 130th Street, where the two lines would be adjacent to each other. This potential connection will be explored in further detail during the engineering phase. A connection between the Red Line Extension and Metra Electric District at Kensington/115th Street station is not possible, as the proposed Red Line Extension routing crosses the Metra Electric District Line approximately one-half mile to the south of the Kensington/115th Street station.

Q: Is CTA coordinating with Metra on the Red Line Extension?
A: CTA is coordinating with Metra on our progress with the Red Line Extension project. Metra is a participating agency in the environmental review process for the Red Line Extension.

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Phone: 1-888-YOUR-CTA TTY: 1-888-CTA-TTY1 E-mail: feedback@transitchicago.com

Appendix C
Agency Coordination and Public Involvement

Alternatives Analysis (2006-2009)

Screen 1

Screen 2

Screen 3

Appendix C
Agency Coordination and Public Involvement

Alternatives Analysis (2006-2009)

Screen 1

- Presentation
- Exhibit Boards
- Comment Card
- Comment Database
- Comment Responses

Federal Transit Administration's
New Starts Process

Red Line Extension Alternatives Analysis Study

4-5-2007

Schedule for Tonight's Meeting

- **Structure of the Meeting**
- **Questions and Answers Process**
  - Submit your comments in writing on comment cards
  - Comments and questions will be grouped and answered by topic
  - All comments and questions will be addressed on CTA's website **-** www.transitchicago.com
  - An interpreter for the hearing impaired and a translator for the Spanish speaking community are available this evening

Tonight's Speakers

- **Darud Akbar – Moderator**
  - Chicago Transit Authority
- **Jeffrey Sriver – Project Manager**
  - Chicago Transit Authority
- **Ronald Shimizu – Red Line Study Area Manager**
  - PB Americas, Inc.

Outline of the Presentation

- **Describe Federal Transit Administration's (FTA) Required "New Starts" Process**
- **Define Alternatives Analysis Study Steps**
- **Emphasize Importance of Public Involvement Process**
- **Discuss Status of Red Line Extension Alternatives Analysis Study**

FTA's Required New Starts Process

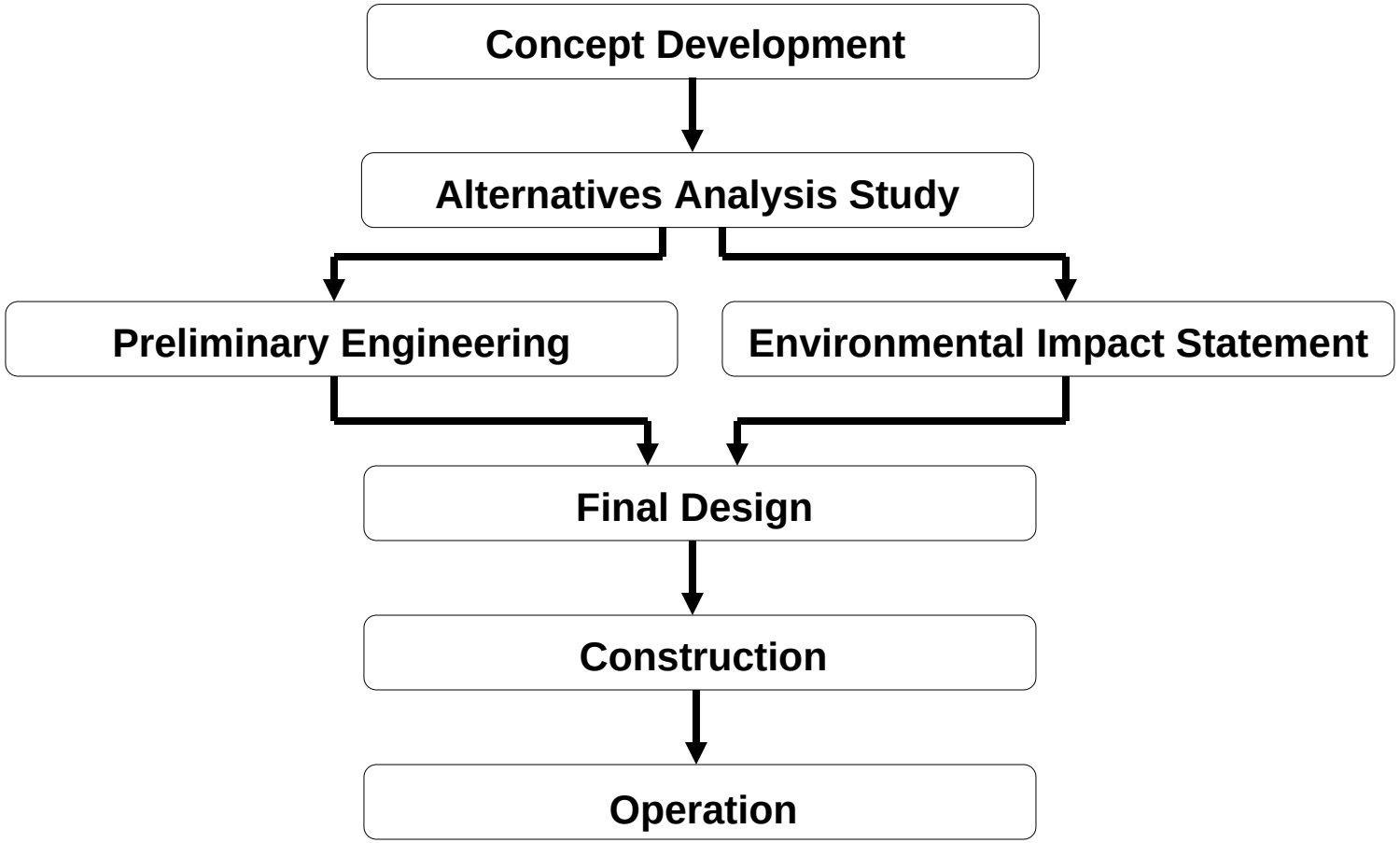

Alternatives Analysis (AA) Studies

- **FTA Requirement for Federal Funding for Transit Expansion (New Starts)**
- **Identifies Transit Opportunities and Ensures All Practical Solutions are Considered**
- **Ensures Planning is Consistent Among All New Starts Projects Throughout the Country**
- **Provides Opportunity to Gather Information and Receive Public Input**
- **Identifies Locally Preferred Alternative**

Alternatives Analysis Process – Key Steps

Public Involvement

- Define Purpose and Need
- Identify all Possible Transportation Alternatives called the "Universe of Alternatives"
- Evaluate Viability of Possible Alternatives through a Screening Procedure
- Identify Locally Preferred Alternative

Public Involvement Process

- **Key Component of the Alternatives Analysis Study**
- **Opportunity to Provide Information and Receive Public Input**
  - Your comments are needed to complete this screening process
- **Community Outreach:**
  - General public, elected officials, community and civic organizations, faith-based organizations, city and state agencies
- **Ongoing Public Involvement/Input**
  - Meetings announced through public notices and advertisements
  - Project updates on the CTA web site - www.transitchicago.com, accessible at local public libraries

Status of Study

Purpose and Need

- **Significant Bus and Passenger Congestion at 95th Street Red Line Station**
- **Lengthy Bus Trips to Access 95th Street Red Line Station**
- **Far South Area Residents Experience 20% Longer Commute Times than Rest of City**
- **Traffic Congestion is Expected to Grow along with Study Area Population and Employment**

Opportunity for Improvement

- **Extend Rapid Transit Service South From 95th Street Red Line Terminal:**
  - **Improve access to, within, and beyond study area**
  - **Shorten transit travel times through faster and more direct routings**
  - **Stimulate economic development and job opportunities**

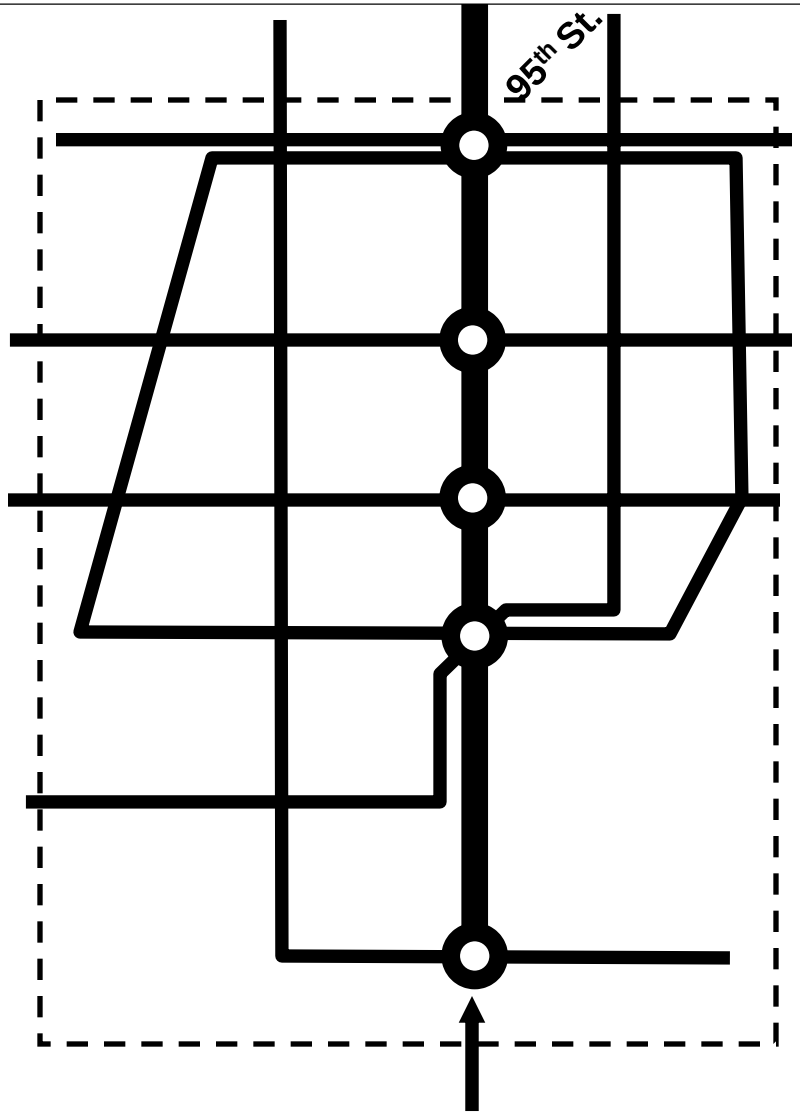

FTA Evaluation Process

As the AA study progresses and the evaluation criteria are applied, options within the Universe of Alternatives are eliminated until, at the end of the process, there is a Locally Preferred Alternative (LPA).

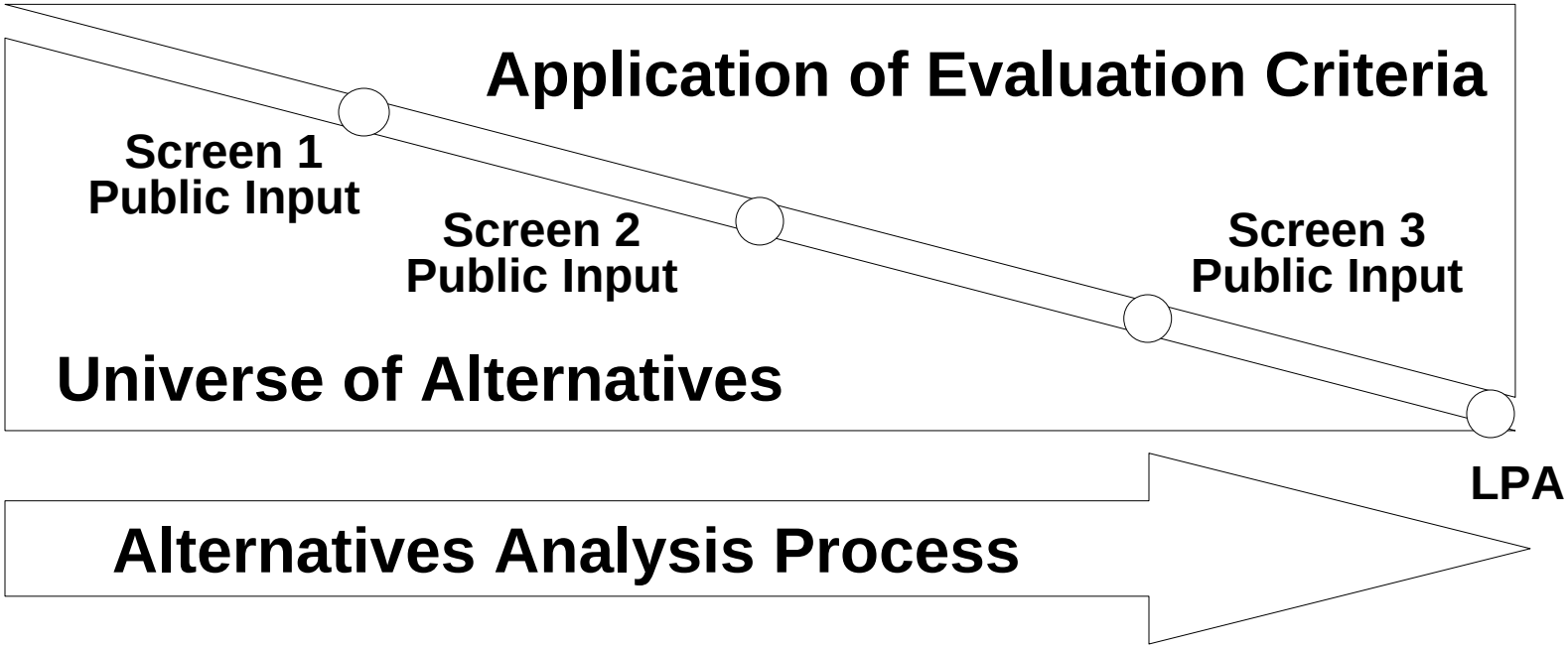

Evaluation Process – Screening Detail

- **Screen 1 – Review Universe of Alternatives**
  - Eliminate alternatives based on technology, corridor and profile
  - Advance strongest alternatives to Screen 2
- **Screen 2 – More Detailed Definition and Evaluation**
  - Define alignments, forecast transit ridership, calculate capital costs, identify neighborhood resources along the alignment
  - Evaluate and reduce number of remaining alternatives
- **Screen 3 – Final Definition**
  - Refine remaining alternatives
  - Identify Locally Preferred Alternative

Screen 1 Process

1. Define the Universe of Alternatives
2. Evaluate all Potential Technologies
3. Evaluate all Potential Alignments (Corridors and Profiles)
4. Evaluate all Potential Combinations of Technological and Alignment Alternatives
5. Advance Strongest Combinations

Technologies Evaluated

Universe of Alternatives Considered

TECHNOLOGIES
Automated Guideway/Monorail
Bus Rapid Transit
Commuter Bus
Commuter Rail
Heavy Rail Transit
High Speed Rail
Light Rail Transit
Local Bus
MagLev
Personal Rapid Transit
Streetcar

Technologies Reviewed

Automated Guideway/Monorail

Technologies Reviewed

Bus Rapid Transit

Technologies Reviewed

Commuter Bus

Technologies Reviewed

Commuter Rail

Technologies Reviewed

Heavy Rail Transit

Technologies Reviewed

High Speed Rail

Technologies Reviewed

Light Rail Transit

Technologies Reviewed

Local Bus

Technologies Reviewed

MagLev

Technologies Reviewed

Personal Rapid Transit

Technologies Reviewed

Streetcar

Corridors and Profiles Evaluated

Universe of Corridors and Profiles Considered

CORRIDORS	PROFILES
I-57 Expressway	At-Grade
Halsted Street	Elevated
UP Railroad	Trench
Wentworth Avenue	Underground
State Street	
Michigan Avenue	
King Drive	
Cottage Grove Avenue / Metra Electric	
I-94 Bishop Ford Freeway	

Study Area

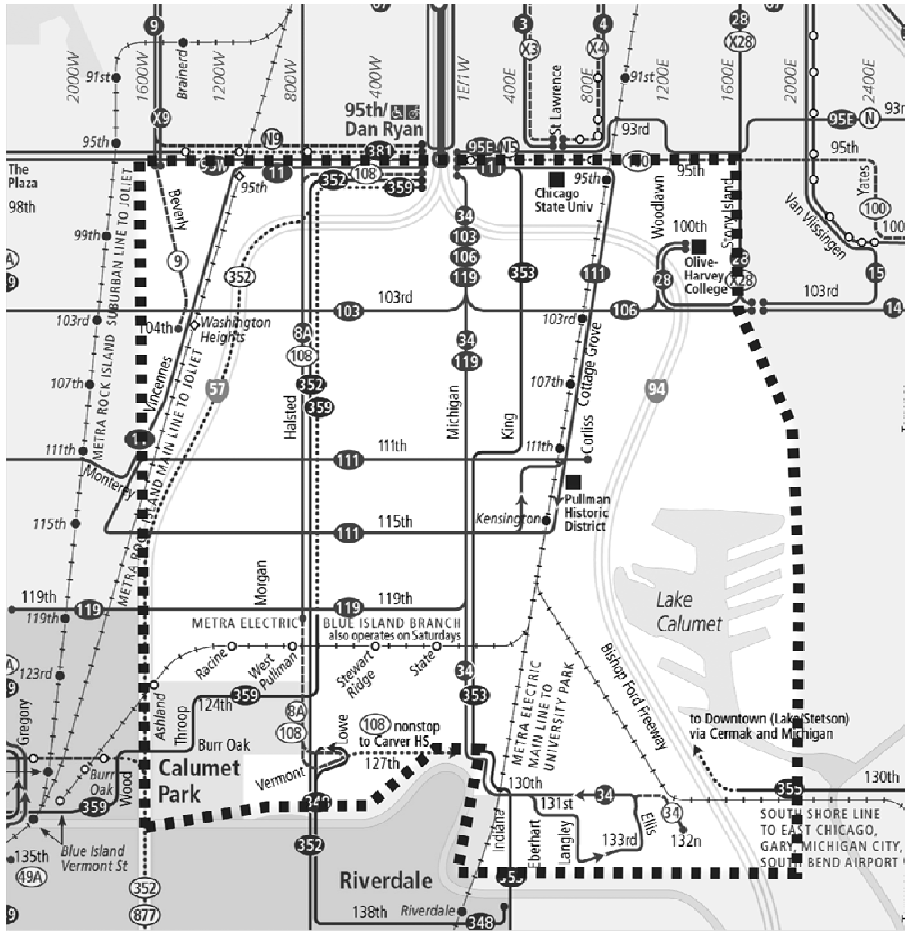
95th/
Dan Ryan
Chicago
State Univ
Olive-
Harvey
College
Washington
Heights
Pullman
Historic
District
Lake
Calumet
Calumet
Park
Riverdale
METRA ELECTRIC
BLUE ISLAND BRANCH
also operates on Saturdays
METRA ROCK ISLAND SUBURBAN LINE TO JOLIET
METRA ELECTRIC
MAIN LINE TO
UNIVERSITY PARK
nonstop
to Carver HS
to Downtown (Lake/Stetson)
via Cermak and Michigan
SOUTH SHORE LINE
TO EAST CHICAGO,
GARY, MICHIGAN CITY,
SOUTH BEND AIRPORT
Blue Island
Vermont St
Burr Oak
Halsted
Michigan
King
Cottage Grove
Corliss
Woodlawn
Stony Island
Van Vlissingen
Yates
Bishop Ford Freeway
Ellis
Langley
Eberhart
Indiana
Vincennes
Morgan
Throop
Ashland
Wood
Gregory
Racine
West
Pullman
Stewart
Ridge
State
Lowe
Vermont
Kensington
Brainerd
Beverly
St Lawrence
Riverdale
The
Plaza
95th
99th
103rd
107th
111th
115th
119th
123rd
124th
127th
130th
131st
132n
133rd
135th
138th
91st
93rd
100th

I-57 Expressway Corridor

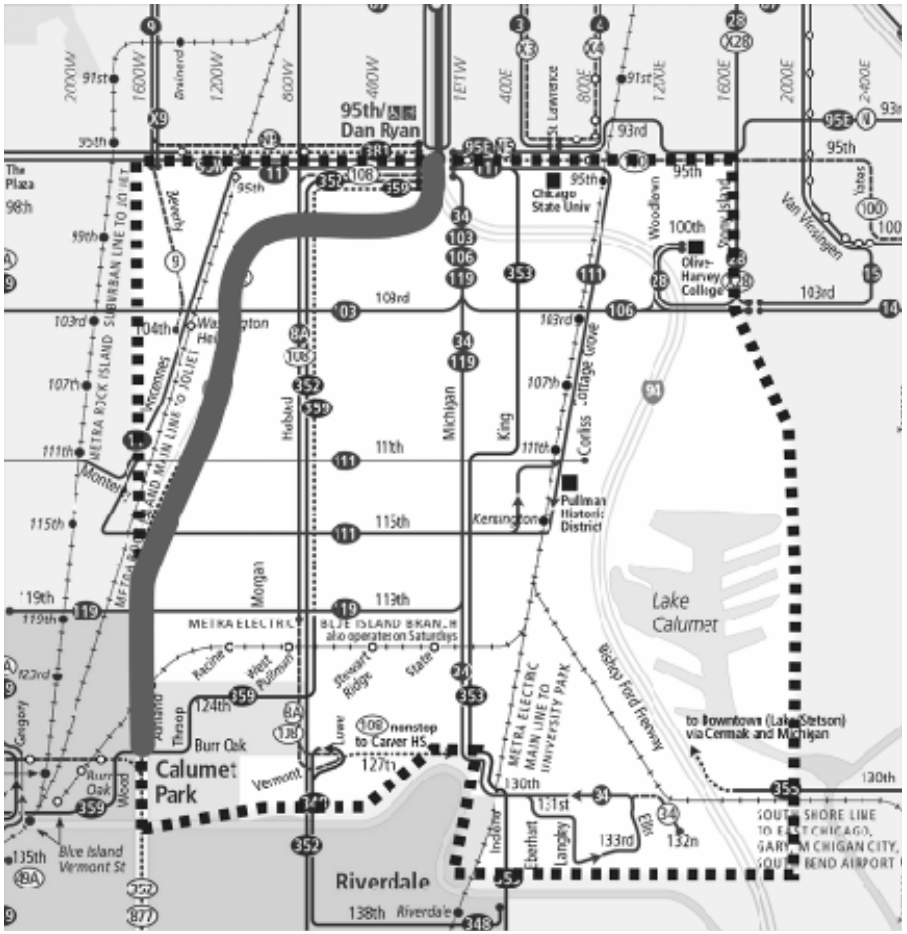

Halsted Street Corridor

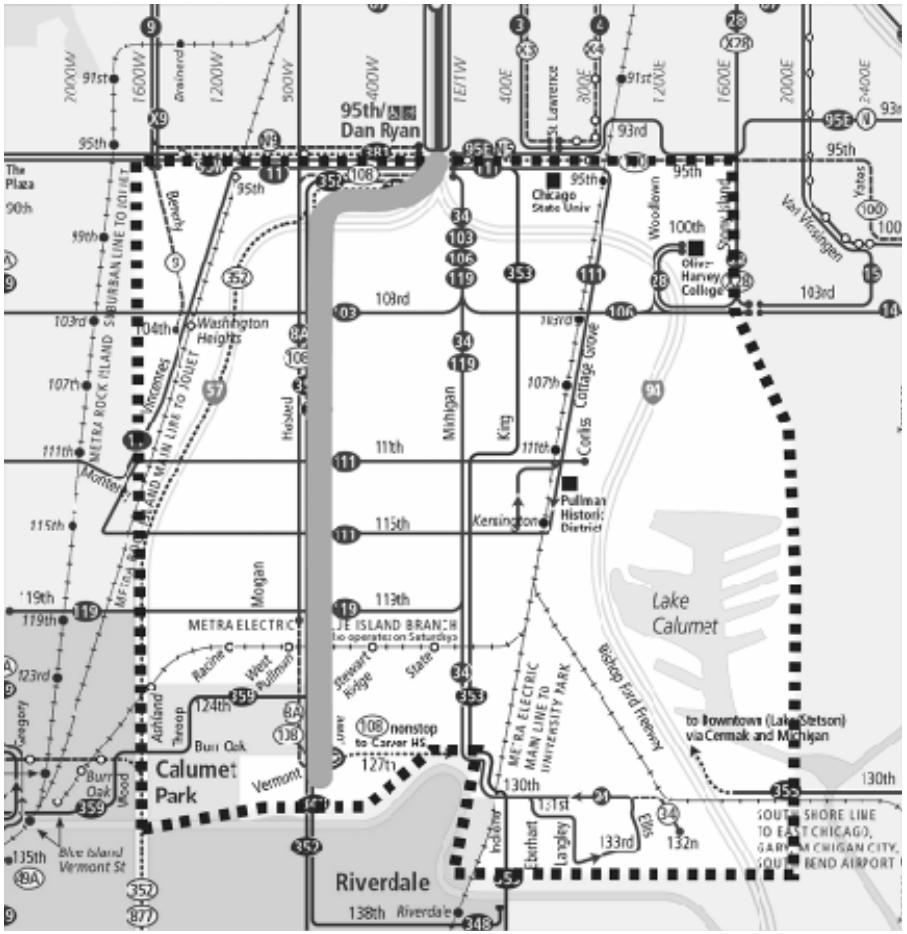

UP Railroad Corridor

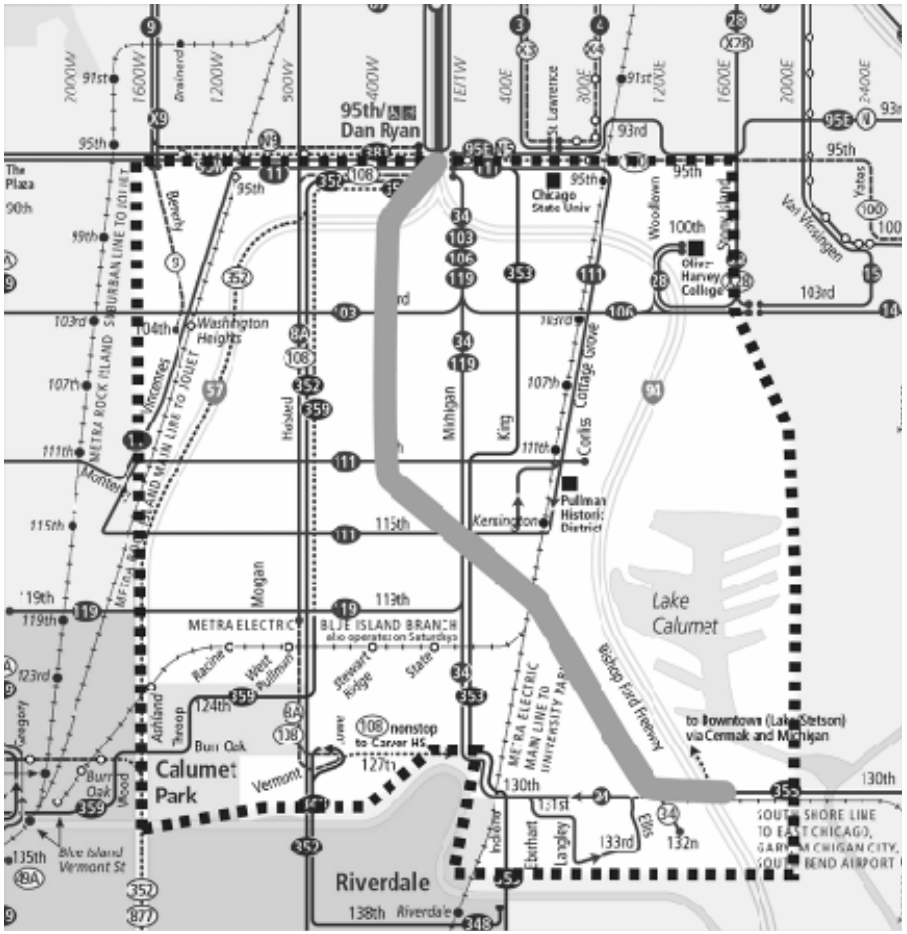

Wentworth Avenue Corridor

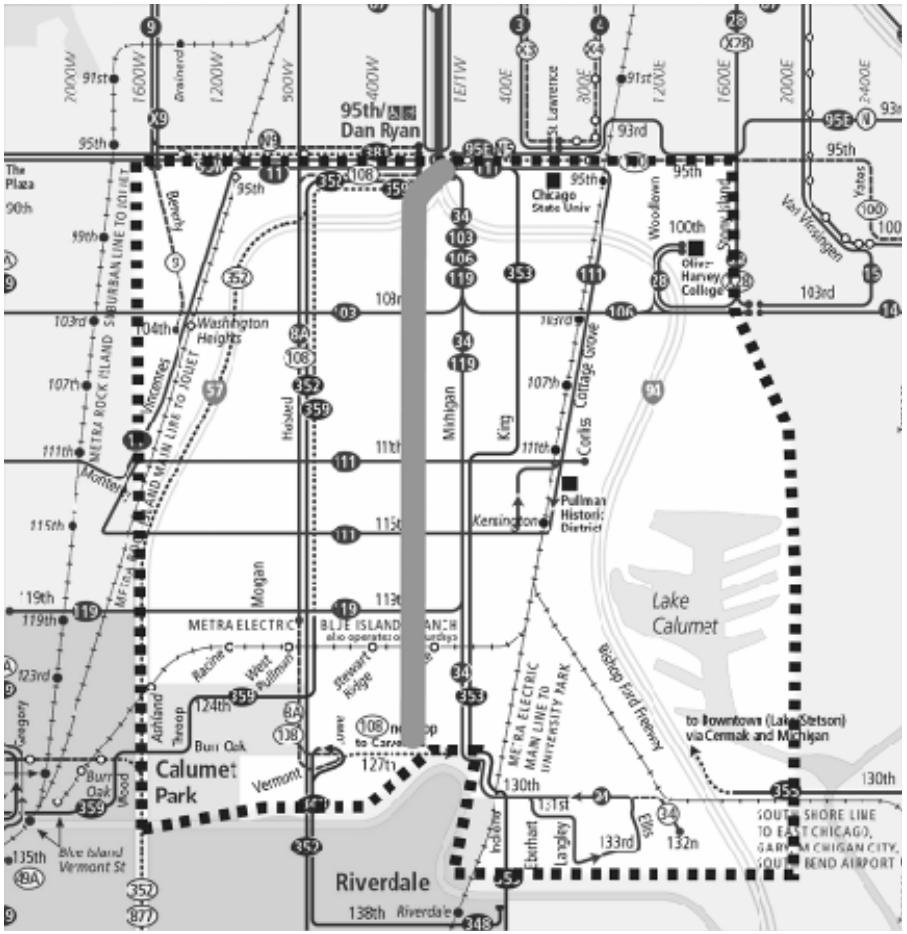

State Street Corridor

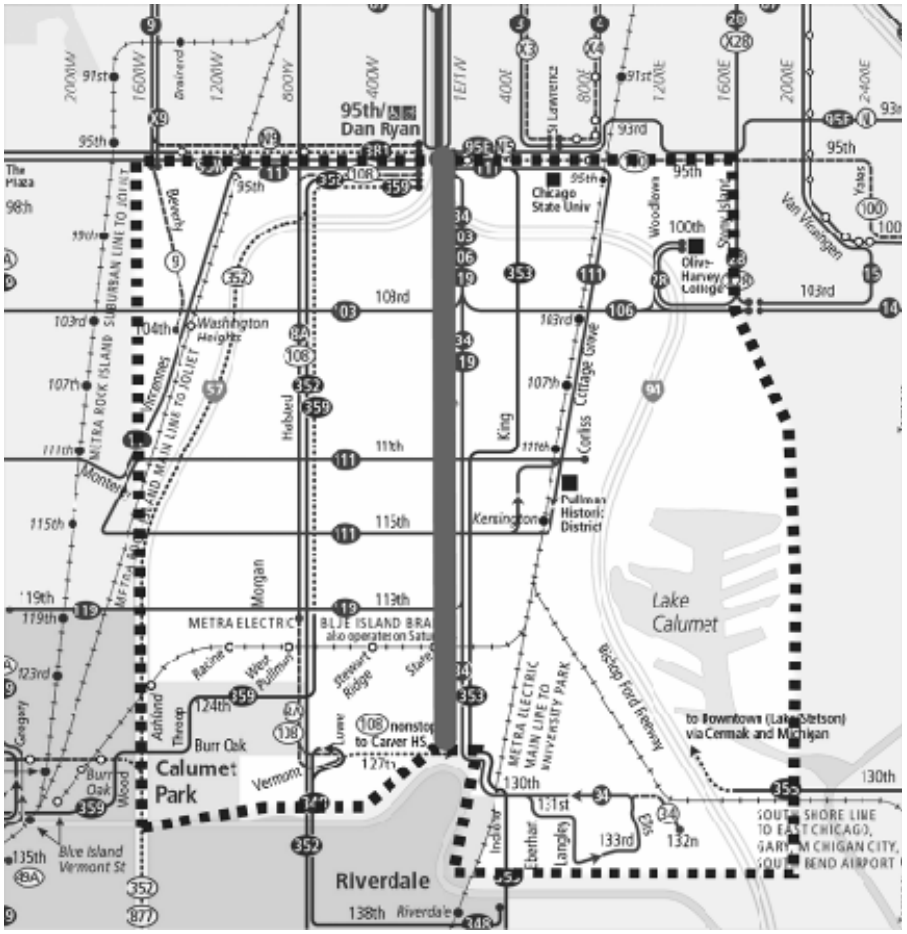

Michigan Avenue Corridor

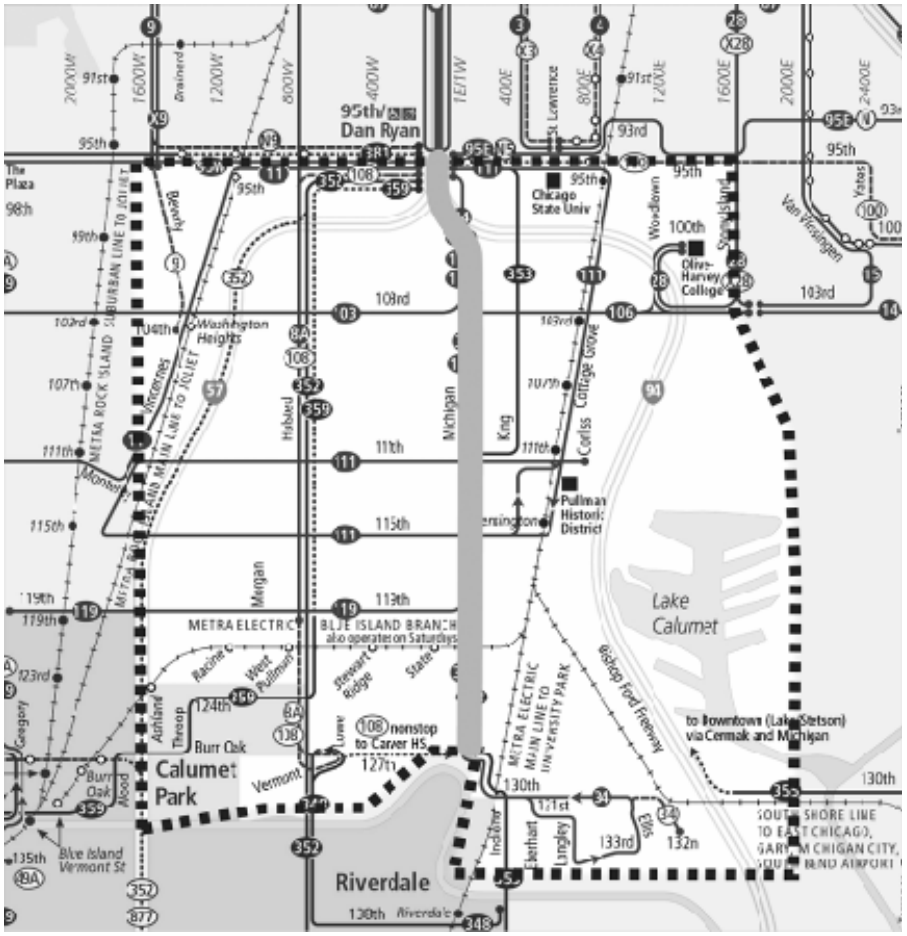

Screen 1

King Drive Corridor

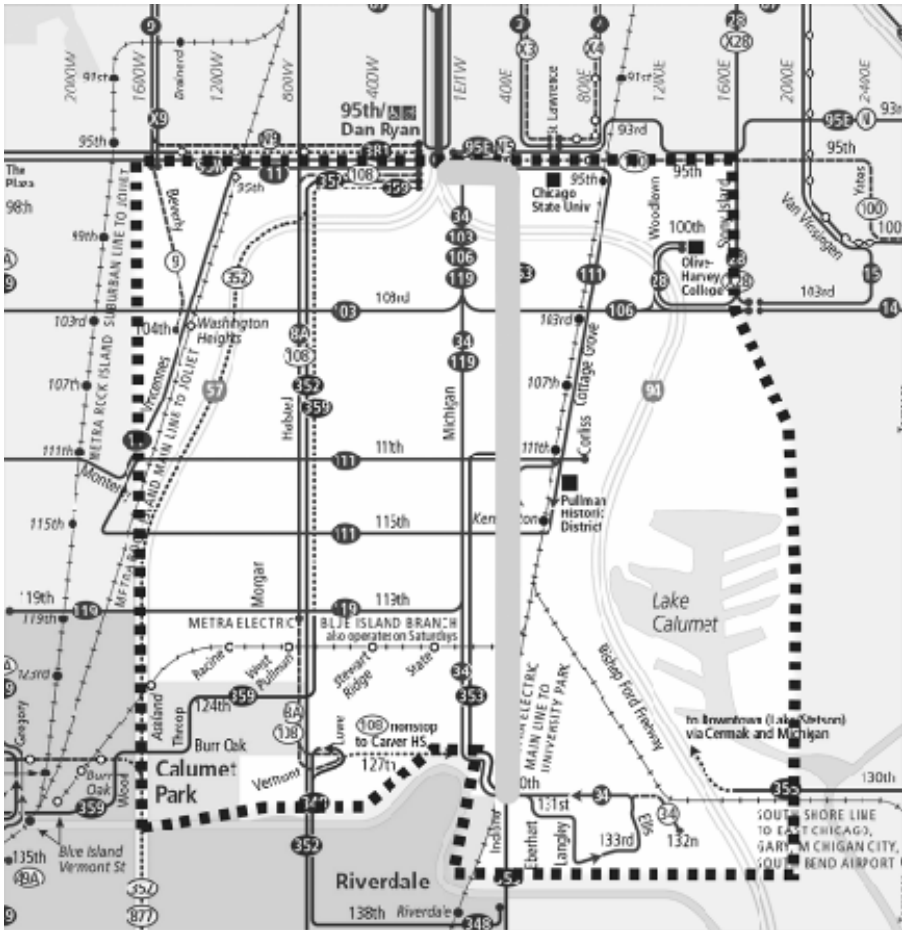
95th/
Dan Ryan
Chicago State Univ
Olive-Harvey College
Washington Heights
Pullman Histori District
Lake Calumet
METRA ELECTRIC
BLUE ISLAND BRANCH
also operates on Saturdays
Calumet Park
Burr Oak
Blue Island Vermont St
Riverdale
138th Riverdale
Michigan
Cottage Grove
Corliss
Halsted
Morgan
Ashland
Western
Vincennes
Bishop Ford Freeway
Van Vleisingen
Woodlawn
Lawrence
Indiana
Eberhart
Langley
Vernon
Stewart Ridge
Racine
West Pullman
State
Lowe
Gregory
Wood
Burr Oak
METRA ROCK ISLAND SUBURBAN LINE TO JOLIET
METRA ROCK ISLAND MAIN LINE TO JOLIET
METRA ELECTRIC MAIN LINE TO UNIVERSITY PARK
SOUTH SHORE LINE TO EAST CHICAGO, GARY, MICHIGAN CITY, SOUTH BEND AIRPORT
via Cermak and Michigan
nonstop to Carver HS
The Plaza
95th
98th
99th
103rd
104th
107th
111th
115th
119th
124th
127th
130th
133rd
135th
138th
93rd
100th
91st
Beverly
Morgan
Halsted
Michigan
Cottage Grove
Corliss
Woodlawn
Van Vleisingen
Yates
Indiana
Eberhart
Langley
Vernon
Racine
West Pullman
Stewart Ridge
State
Lowe
Ashland
Throop
Gregory
Wood
Burr Oak
Vincennes
Western
Bishop Ford Freeway
Lawrence
Dearborn
Clark
Wabash
State
Lake
Michigan
Indiana
Illinois
Wacker
Madison
Monroe
Adams
Jackson
Van Buren
Harrison
Polk
Taylor
Cermak
Archer
Pershing
Garfield
Marquette
Kenwood
Hyde Park
Dorchester
Stony Island
Cottage Grove
Ellis
Drexel
Lake Park
Cottage Grove
Ellis
Drexel
Lake Park
Kenwood
Hyde Park
Dorchester
Stony Island

Cottage Grove Avenue / Metra Electric Corridor

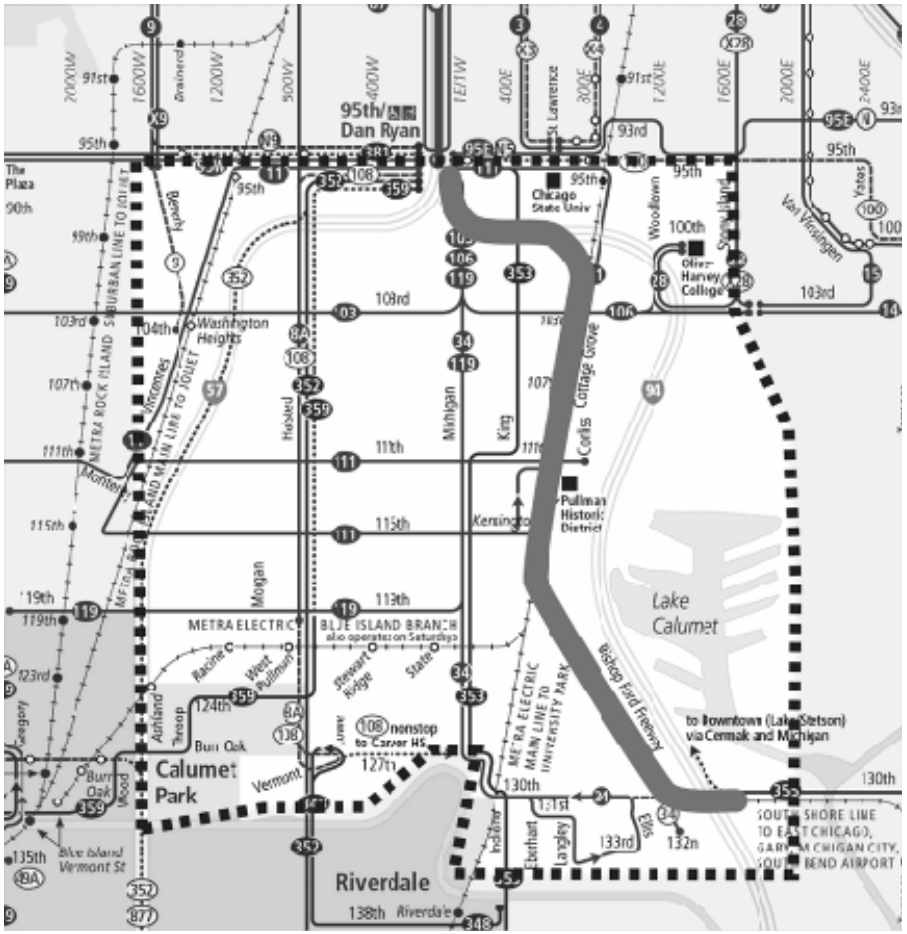

I-94 Bishop Ford Freeway Corridor

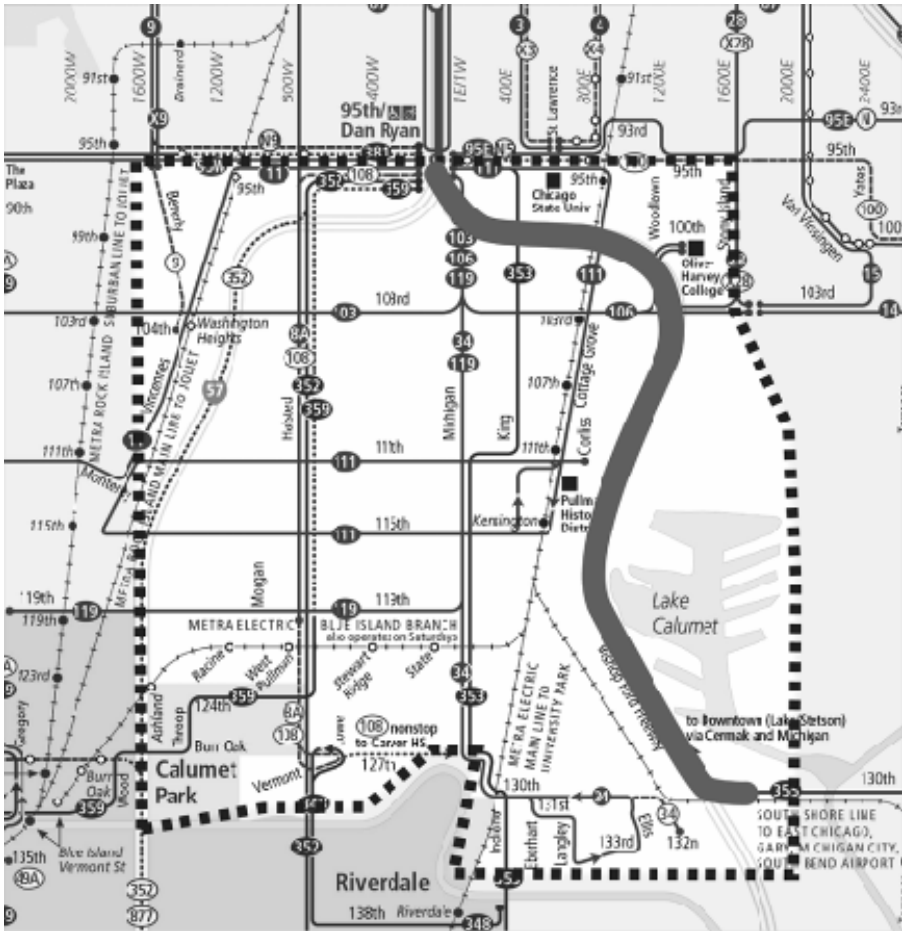

Corridors Considered in the AA Study

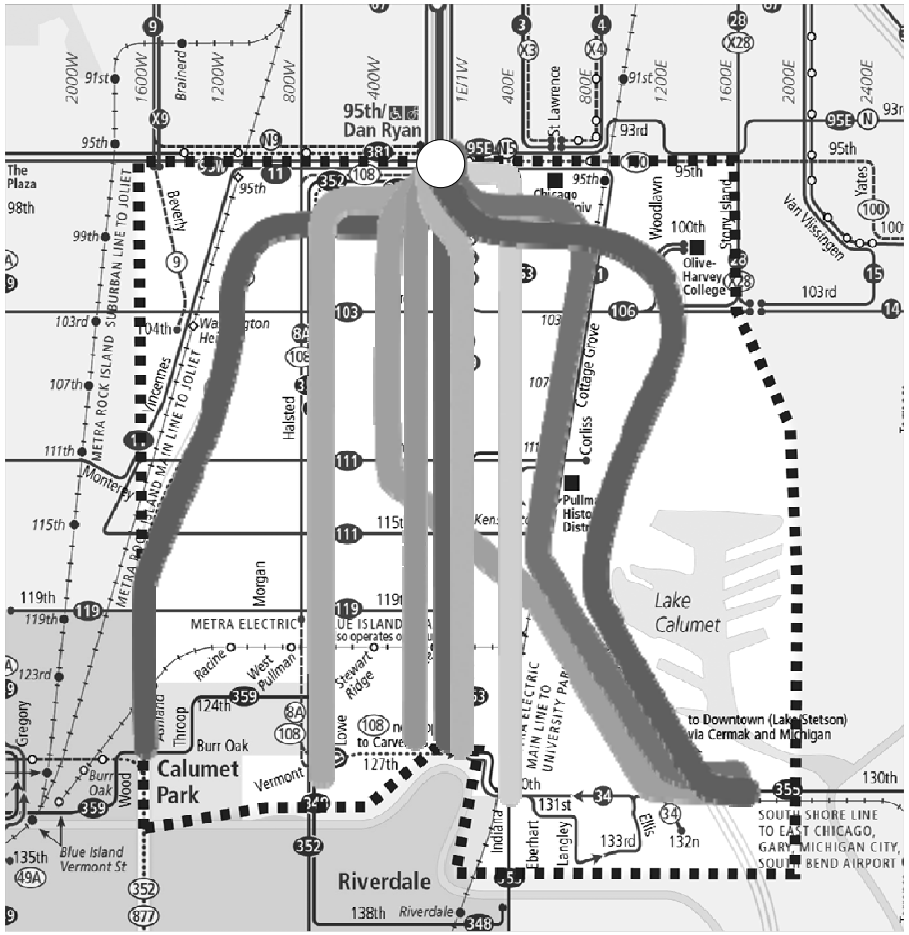

- I-57 Expressway
- Halsted Street
- UP Railroad
- Wentworth Avenue
- State Street
- Michigan Avenue
- King Drive
- Cottage Grove Avenue / Metra Electric
- I-94 Bishop Ford Freeway

Universe of Alternatives in the AA Study

Technologies*

&

Corridors

I-57

Halsted

UP RR

Wentworth

State

Michigan

King

Cottage Grove / Metra Electric

I-94

&

Profiles

At-Grade

Elevated

Trench

Underground

=

Universe

398 Combinations Including No-Build and Baseline

* Not all Technologies Can be Applied to Each Alignment

Screen 1 Evaluation

Screen 1 Evaluation Criteria

Technologies	Corridors	Technologies, Corridors and Profiles
Speed Station Spacing Customer Capacity Proven Reliability	Social Factors Transportation Factors	Effects on Neighborhoods Physical and Operational Factors Opportunities to Access Other Transit Services

Screen 1 Evaluation Process Preliminary Findings

- **Technologies that Meet the Criteria of the Screen 1 Evaluation Process**
  - Bus Rapid Transit (BRT)
  - Heavy Rail Transit (HRT)

- **Technologies that Do Not Meet the Criteria of the Screen 1 Evaluation Process**
  - Light Rail Transit (LRT)
  - High Speed Rail
  - Commuter Rail
  - Commuter Bus
  - Magnetic Levitation Trains
  - AGT / Monorail
  - Personal Rapid Transit
  - Streetcar
  - Local Bus

Screen 1 Evaluation Process Preliminary Findings

- **Corridors that Meet the Criteria of the Screen 1 Evaluation Process**
  - Halsted Street
  - UP Railroad (UPRR)
  - Michigan Avenue
- **Corridors that Do Not Meet the Criteria of the Screen 1 Evaluation Process**
  - I-57 Expressway
  - Wentworth Avenue
  - King Drive
  - State Street
  - Cottage Grove / Metra Electric
  - I-94 Bishop Ford Freeway

Screen 1 Evaluation Process Preliminary Findings

Bus Rapid Transit

- At-Grade

Heavy Rail Transit

- Elevated
- Underground
- Trench

Screen 1 Evaluation Process Preliminary Findings

Technologies*

Bus Rapid Transit

Heavy Rail Rapid Transit

&

Corridors

Halsted

UPRR

Michigan

&

Profiles

At-Grade

Elevated

Trench

Underground

=

Universe

10 Combinations Including No-Build and Baseline

* Not all Technologies Can be Applied to Each Alignment

Next Steps

Next Steps

- **Incorporate Public Comments**
- **Confirm "Screen 1" Preliminary Findings**
- **Refine the Alternatives**
- **Continue Public Involvement**
  - Sign-in cards will be used to create a contact list to send notices and updates
  - Meetings announced through car cards, customer alerts, local media and contact list
  - Project updates on CTA web site - www.transitchicago.com

Screen 1 Meeting Schedule

Tuesday April 10, 2007
6:00 p.m. – 8:00 p.m.
Chicago State University
New Academic Library
4th Floor Auditorium
9501 South King Drive
Chicago, Illinois

Wednesday April 11, 2007
6:00 p.m. – 8:00 p.m.
West Pullman Branch
Chicago Public Library
Community Room
830 West 119th Street
Chicago, Illinois

Questions and Comments

- **CTA representatives are available to answer additional questions**
- **Written comments and questions accepted through May 11, 2007:**

Mr. Darud Akbar
Chicago Transit Authority
Government and Community Relations
P.O. Box 7567
Chicago, IL 60680-7567
dakbar@transitchicago.com
312-681-2708

Federal Transit Administration's
New Starts Process

Red Line Extension Alternatives Analysis Study

4-5-2007

FTA's New Starts Process

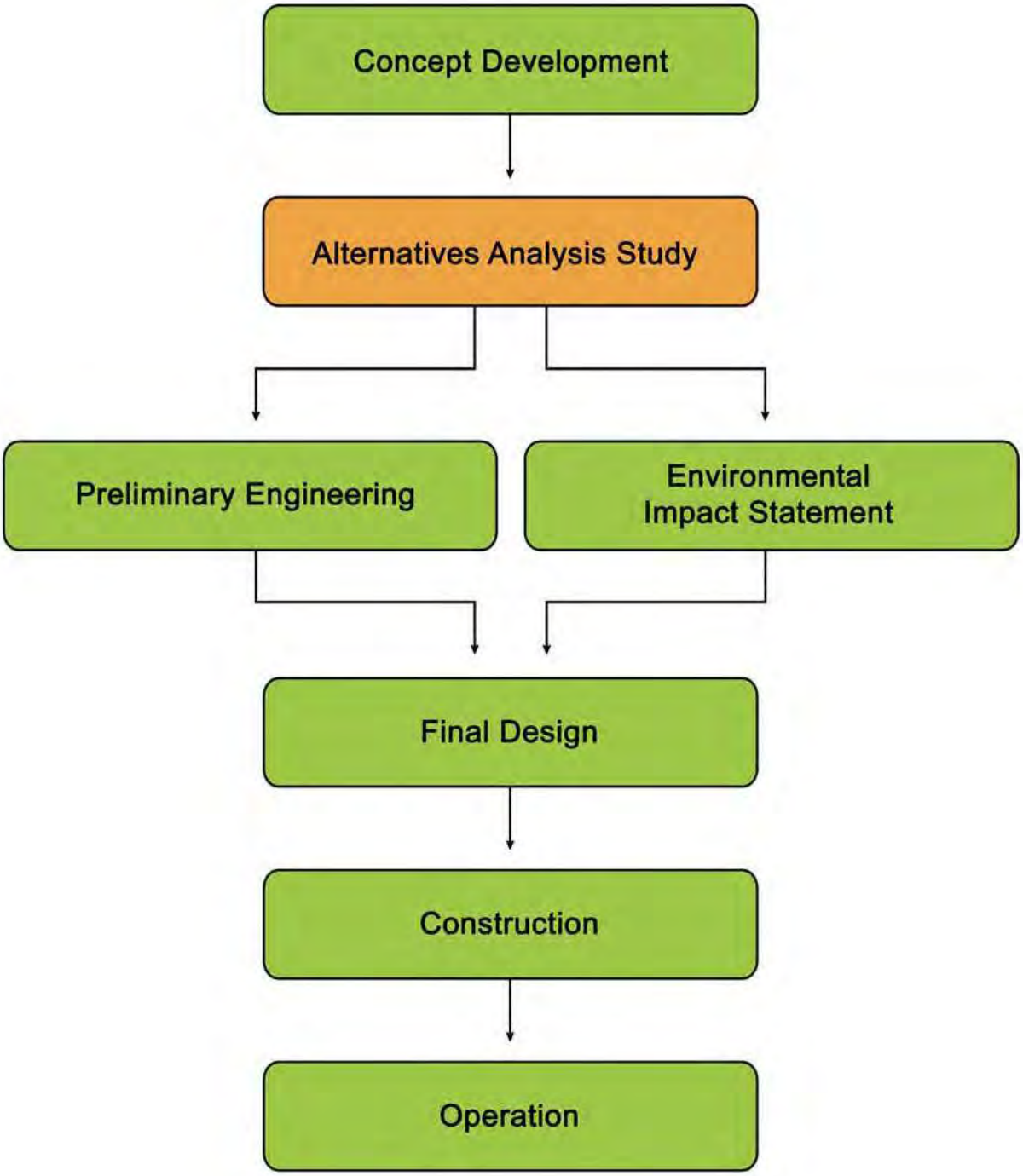

Purpose and Need

Transportation Needs

- Significant bus and passenger congestion at 95th Street Red Line Station
- Lengthy bus trips to access 95th Street Red Line Station
- Far South Area residents experience 20% longer commute than rest of City
- Traffic congestion is expected to grow along with study area population and employment

Opportunity for Improvement

- Extend rapid transit service south from 95th Street Red Line Station
- Improve access to, within, and beyond study area
- Stimulate economic development and job opportunities
- Shorten transit travel times through faster and more direct routings

Community Participation

Community participation is one of the key components of the alternatives analysis.

Community Outreach

- General Public
- Elected and Appointed Officials
- Community and Civic Organizations
- Faith-Based Organizations
- City and State Agencies

Ongoing Public Involvement/Input

- Meetings announced through public notices and advertisements
- Project updates on the CTA web site : www.transitchicago.com, accessible at local public libraries

Alternatives Analysis Process

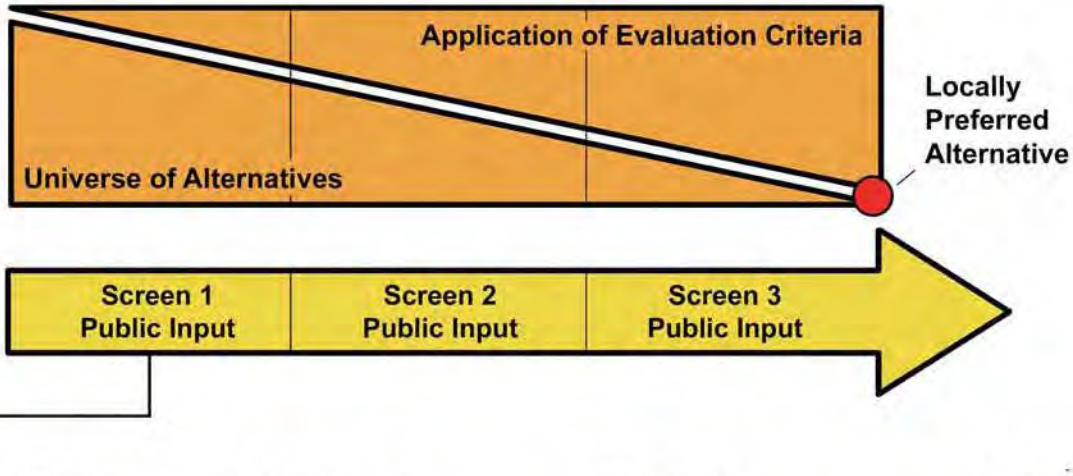

Technologies		Corridors		Profiles		Universe
Automated Guideway / Monorail Bus Rapid Transit Commuter Bus Commuter Rail Heavy Rail High Speed Rail Light Rail Local Bus MagLev Personal Rapid Transit Streetcar	+	I-57 Expressway Halsted Street UP Railroad Wentworth Avenue State Street Michigan Avenue King Drive Cottage Grove / Metra Electric I-94 Bishop Ford Freeway	+	Elevated At-Grade Trench Underground	=	398 Combinations Including No-Build and Baseline

Red Line Extension
Alternative Analysis Study

Technologies Evaluated

Automated Guideway/Monorail

- Service Area: Airports, theme parks, circulators, ½ to 5 miles
- Typical Speeds: 15 to 30 mph
- Station Spacing: ½ to 2 miles

Bus Rapid Transit

- Service Area: Urban and suburban uses, 1 to 10 miles or more
- Typical Speeds: 15 to 25 mph
- Station Spacing: ¼ to 1 mile

Commuter Bus

- Service Area: Suburbs to city, 15 to 100 miles
- Typical Speeds: 30 to 50 mph
- Station Spacing: 3 to 7 miles, or at end points

Commuter Rail

- Service Area: Suburbs to city, 15 to 100 miles
- Typical Speeds: 30 to 50 mph
- Station Spacing: 3 to 7 miles

Technologies Evaluated

Heavy Rail

- Service Area: Urban uses and loadings, 1 to 10 miles or more
- Typical Speeds: 25 to 40 mph
- Station Spacing: ¼ mile downtown, up to 2 miles in neighborhoods

High Speed Rail

- Service Area: Intercity, 150 to 300 miles
- Typical Speeds: 110 to 186 mph
- Station Spacing: 20 to 50 miles

Light Rail

- Service Area: Urban or suburban uses, 1 to 10 miles or more
- Typical Speeds: 15 to 25 mph
- Station Spacing: ¼ to 1 mile

Local Bus

- Service Area: Urban and suburban uses, ½ to 5 miles
- Typical Speeds: 10 mph
- Station Spacing: 2 to 4 blocks

Technologies Evaluated

MagLev

- Service Area: Intercity, 100 to 300 miles
- Typical speeds: 250 to 340 mph
- Station Spacing: 20 to 50 miles

Personal Rapid Transit

- Service Area: Small area networks or campuses, 1 to 5 miles
- Typical Speeds: 15 mph
- Station Spacing: ¼ to 1 mile

Streetcar

- Service Area: Urban and suburban streets, ½ to 6 miles
- Typical Speeds: 10 mph
- Station Spacing: 2 to 4 blocks

Study Area

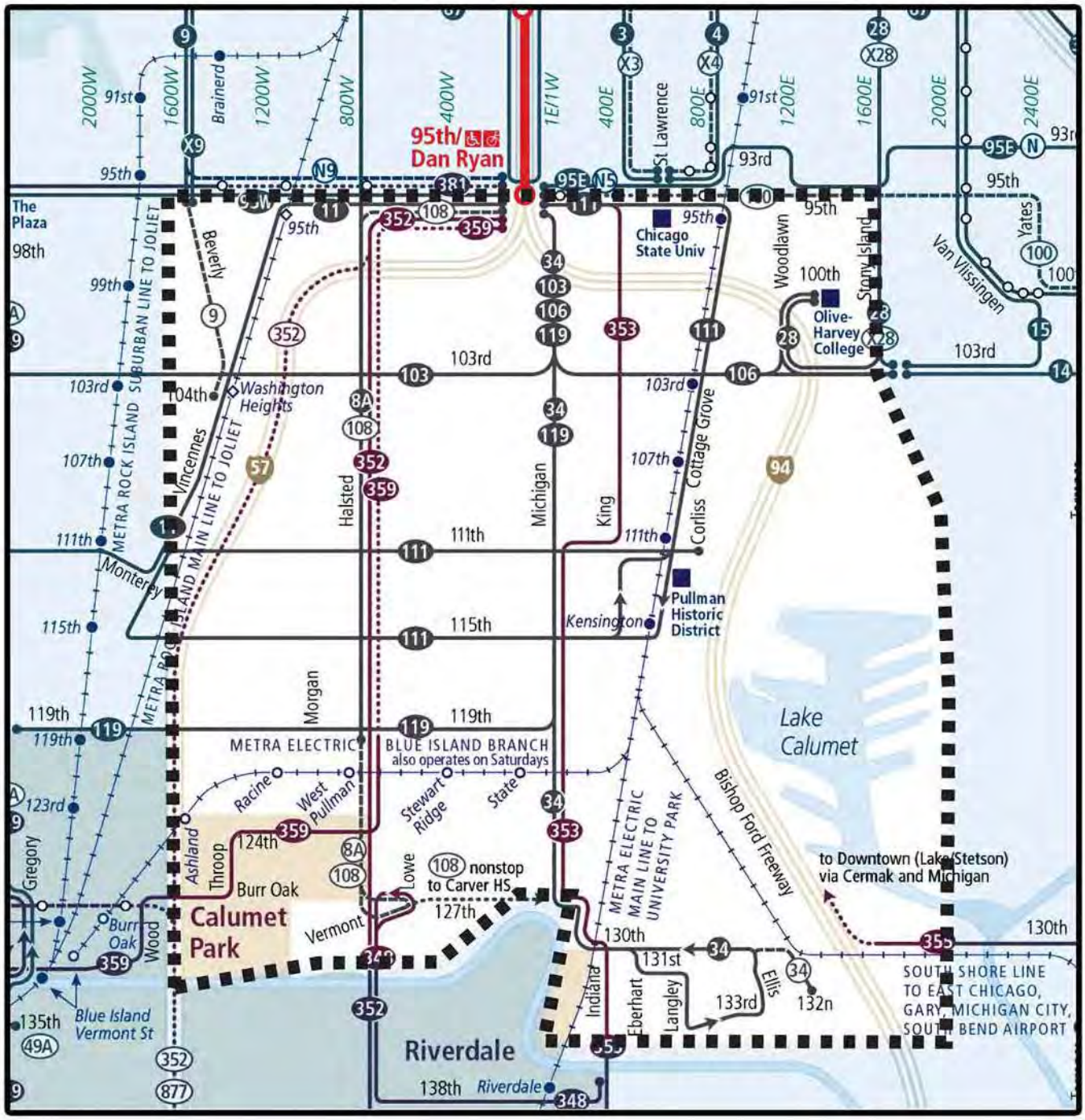

Red Line Extension
Alternative Analysis Study

Corridors Evaluated

I-57 Expressway Corridor

Halsted Street Corridor

UP Railroad Corridor

Corridors Evaluated

Wentworth Avenue Corridor

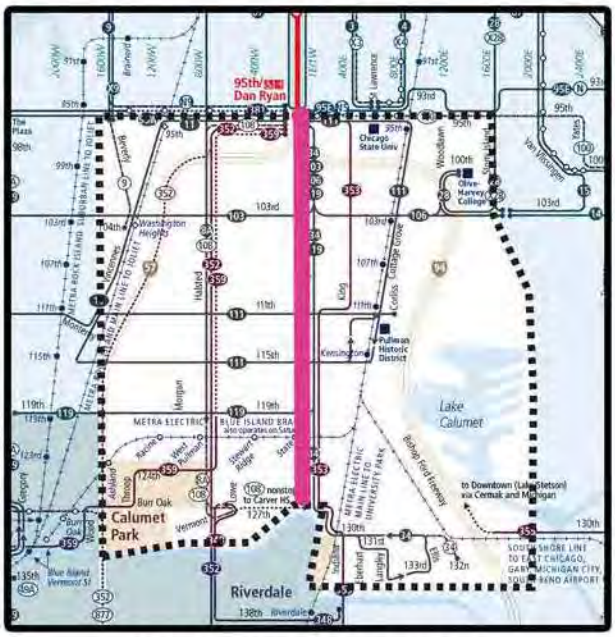

State Street Corridor

Michigan Avenue Corridor

Red Line Extension
Alternative Analysis Study

Corridors Evaluated

King Drive Corridor

Cottage Grove / Metra Electric Corridor

I-94 Bishop Ford Freeway Corridor

Profiles Evaluated

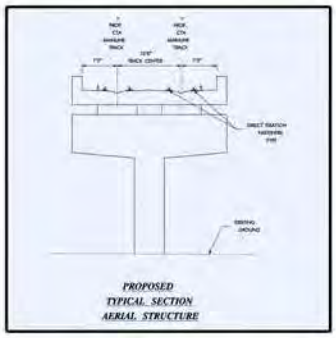

Elevated

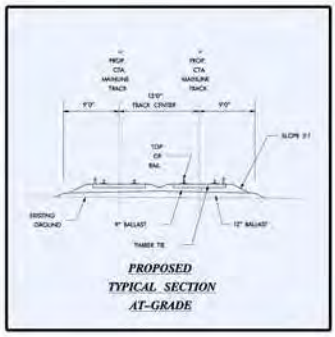

At Grade

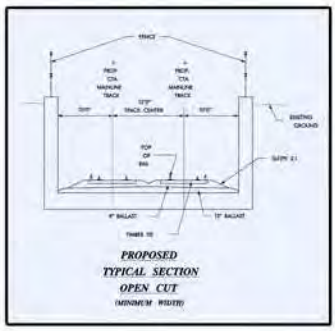

Trench

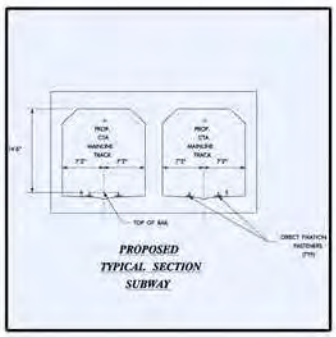

Underground

Step 1:

Technology Evaluation

Technology	Does Mode Meet the Measure of Effectiveness?				Advance for Further Screening?
	Length of Commute	Typical Station Spacing	Operating Speed	System Applicability	
Automated Guideway	●	●	●	●	YES
Bus Rapid Transit	●	●	●	●	YES
Commuter Bus	X	X	●	●	NO
Commuter Rail	X	X	●	●	NO
Heavy Rail Rapid Transit	●	●	●	●	YES
High Speed Rail	X	X	X	X	NO
Light Rail Transit	●	●	●	●	YES
Local Bus	●	X	X	●	NO
MagLev	X	X	X	X	NO
Personal Rapid Transit	●	X	●	X	NO
Streetcar	●	X	X	●	NO

● Yes X No

Step 2:

Technology & Profile Evaluation

Technology	Profile	Air Quality	System Capacity	Travel Time	Compati-bility	Traffic	Project Cost	Advance for Further Screening?
Automated Guideway Transit	Elevated	O	O	-	-	+	O	NO
	Trench	O	O	-	-	O	O	NO
	Underground	O	O	-	-	+	-	NO
Bus Rapid Transit	Elevated	O	O	O	-	+	O	NO
	At-Grade	O	O	O	+	O	+	YES
	Trench	O	O	O	-	O	O	NO
	Underground	O	O	O	-	+	-	NO
Heavy Rail Transit	Elevated	O	+	+	+	+	O	YES
	Trench	O	+	+	+	O	O	YES
	Underground	O	+	+	+	+	-	YES
Light Rail Transit	Elevated	O	O	O	-	+	O	NO
	At-Grade	O	O	O	-	-	+	NO
	Trench	O	O	O	-	O	O	NO
	Underground	O	O	O	-	+	-	NO

+ Better than other alternatives O Comparable to other alternatives - Worse than other alternatives

Step 3:

Corridor Evaluation

Corridor \ Criteria	Land Use	Neigh-borhood	Under-served	Transit Usage	Accessi-bility	Advance for Further Screening?
I-57 Expressway	+	O	O	-	-	NO
Halsted Street	+	+	+	+	O	YES
UP Railroad	+	+	+	+	+	YES
Wentworth Street	-	+	+	O	+	NO
State Street	-	+	+	O	+	NO
Michigan Avenue	+	+	+	+	+	YES
King Drive	-	+	O	O	+	NO
Cottage Grove / Metra Electric	-	O	O	+	O	NO
I-94 Bishop Ford Freeway	+	-	-	-	-	NO

+ Better than other alternatives O Comparable to other alternatives - Worse than other alternatives

Step 4:

Combined Evaluation

Technology	Profile	Recommended to Advance for Detailed Evaluation		
		Halsted Corridor	UPRR Corridor	Michigan Corridor
Bus Rapid Transit	Elevated	NO	NO	NO
	At-Grade	YES	NO	YES
	Trench	NO	NO	NO
	Underground	NO	NO	NO
Heavy Rail Transit	Elevated	YES	YES	YES
	Trench	NO	YES	NO
	Underground	YES	NO	YES

Preliminary Findings

Bus Rapid Transit

Halsted Street Corridor

At Grade

Michigan Avenue Corridor

At Grade

Heavy Rail Transit

Halsted Street Corridor

Elevated
Underground

UP Railroad Corridor

Elevated
Trench

Michigan Avenue Corridor

Elevated
Underground

Red Line Extension
Alternatives Analysis Study
Comment Card

Please print your contact information if you would like to receive a response to the questions and comments.

Name _____

Organization _____

Address (Street, City, Zip)

_____

_____

_____

Phone _____

E-Mail _____

❏ Would you like to be added to the Red Line Extension Project mailing list? Check box if yes.

Please write your question or comment in the area below (please print). When you have completed the form, please give to one of the CTA representatives.

_____

_____

_____

_____

_____

_____

_____

Please send comments and questions to Mr. Darud Akbar, Chicago Transit Authority, Government and Community Relations, P.O. Box 7567, Chicago, IL 60680-7567. Or dakbar@transitchicago.com

Customer Information: 1-888-YOUR-CTA (1-888-968-7282)
Hearing & Speech Impaired: 1-888-CTA-TTY1 (1-888-282-8891)
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CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
Screen One Public Involvement * Public Comments and Questions
November 21, 2007

No.	Comment/Question	Received Via*	Topic Area(s)
1	Heavy Rail using UP Corridor makes the most sense. Seamless ride using existing Red Line and ROW already exists.	STK	7,9
2	Will parking be available at proposed stations and at 95th Street (similar to parking at Green Line)?	STK	17
3	Would like more information on no-build and baseline and proposed station locations.	STK	6,10
4	The Community Route is the best route because it better meets the needs of the main riders - 9th Ward, 34th Ward residents. Very little home displacement while addressing 28 to 30% new ridership. (UP Rail)	STK	7,12
5	The decision to select the three corridors stated in your presentation, was there any community representation at your CTA meetings to inform the community as you prioritize your three selection of corridors?	STK	13
6	What plans are there to provide off-street parking along the Red Line? Specifically at 95th and 55th Street? Also, does the extension provide off street parking at the terminal?	STK	17
7	If extended again, will this line serve the Gary Airport and extend on to South Bend, Indiana?	STK	5
8	Is it possible to get a list of the ten alternatives? If so, please send that out.	STK	7
9	What statistics/demographics can you provide for the study area?	STK	1,5
10	After April 11 public meeting, will representatives come out to groups to provide a presentation?	STK	13
11	If non-federal funds were used, would this project move faster?	STK	14
12	Could the state/city/county do more to help fund this?	STK	14
13	What is the local match needed?	STK	14
14	I think 39,000 voters voted for the route they favor.	CSU	7
15	Extend along the Union Pacific, CSX railroad from 99th Street to 130th & Stony Island, just west of the Ford assembly plant. Also bring back "A" and "B" skip stops.	CSU	7,11,19
16	UP corridor route alternative seems best option (alternative) - heavy rail grade level or trench.	CSU	7,9
17	I believe that the "UP Corridor" route is the best alternative because it provides the best transportation alternative for the greatest number of patrons without the need to transfer at 95th . While the development of communities is not a primary concern for the CTA, the UP Corridor also provides the greatest impetus for community development.	CSU	7
18	Some of the alternative routes pictured (State St., Wentworth, Michigan) would displace existing houses and businesses, are those serious proposals?	CSU	6,12
19	Considering the UP proposal: Where would stations be located?	CSU	10
20	Considering the UP proposal: would it connect with Metra Electric?	CSU	16
21	Considering the UP proposal: would there be parking facilities at each station?	CSU	17
22	Eight final proposals were mentioned - can you please enumerate them again?	CSU	7
23	The UP option looks good. Would the CTA build an elevated line beside the tracks, as they did with the Orange Line, or is the UP line abandoned and they could simply build on the embankment?	CSU	8
24	I believe that the UP route and the heavy rail technology makes the best sense and provides for transit oriented development along with substantial ridership, with fewest displacement.	CSU	7,9,12
25	I think the UP Corridor route would be the best because it would be of greater services to the needs of the residents.	CSU	7,18
26	My community would be interested in the UP rail line. Would that line terminate in Riverdale? Or at 130th Street at the Bishop Ford expressway entrance?	CSU	7,10
27	Suggestion - If the rail is elevated with ground bus service to rail - it's the least disruptive to community and environmental.	CSU	8,9,18
28	DCP supports the UPRR Corridor because the route would benefit the far south side community, creating transit oriented development. It would also allow residents at the 130th Street stop means of getting into the City for work.	CSU	7
29	The UP Corridor is the preferred route of 39,000 residents of 2 Wards from the study area.	CSU	7

CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
Screen One Public Involvement * Public Comments and Questions
November 21, 2007

No.	Comment/Question	Received Via*	Topic Area(s)
30	UP Rail Line - our choice.	CSU	7
31	The (UP Rail) "The Community Route" is the best route because: It's close to my home, ridership will increase and I can get to and from work faster.	CSU	7
32	The Community Route (UP Rail) is by far the best route because: I have lived and work in this area for over 40 years. Now I need and many others work in my age group (60s and 70s) need what should have happened 30 plus years ago. Just do it. I don't have long to use it for work.	CSU	7
33	The Community Route is the best route because: When I get off work, the bus that I ride home - 108 Halsted - has stopped running. I have to ride the closest bus to my house or just walk. The Red Line would run all night. I don't mind the short walk home - and there are plenty of folks like me that come home late from work.	CSU	7,19
34	We need the Community Route because: It would help me get to work and school without having to take so many buses and trains.	CSU	7
35	The Community Route is the best route because: It is the right thing to do. Don't waste time and money trying a lot of options. Most of people riding the Red Line live along the Community Route (UP Rail). I believe that means CTA will have more riders and make more money - enough said.	CSU	7
36	The Community Route is the best route for the Red Line Extension because: my community (Altgeld) will not be isolated to cut off times with transportation and easier to get to jobs, schools or wherever we need to go outside of the community.	CSU	7,18
37	To me the best way to go is where the most people are. The Community Route - UP Rail Corridor - makes the most sense. I know it would help me a great deal.	CSU	7
38	After all the studies are done, the best way to build will be the Community Route. I know it and the CTA knows it. Build the rails close to the most users, simple.	CSU	1,6,7
39	We need the Community Route because it is difficult for the elderly to get on so many buses.	CSU	7
40	The Community Route is the best route because many people will have better access to get out of the community and get better jobs.	CSU	7
41	Heavy Rail trench Michigan Street would probably serve the community best.	CSU	7,8,9
42	Why don't you reconsider taking the Red Line down the Bishop Ford Expressway and reroute buses into station? This would cause less construction hassle.	CSU	7
43	UP Corridor precludes Metra Southeast. There probably needs to be spacing at 18'6" on either side of columns. Columns may be five feet thick. 42' uses up entire so - remaining empty r-o-w Metra need two additional tracks.	CSU	7
44	I like the Cottage/Metra Electric as well as the UP Railroad to try to prevent damage to communities. Bus rapid would also work on longer routes.	CSU	7,9
45	Cottage Grove corridor further east to Olive Harvey. UP Rail corridor to Altgeld Gardens - stops west of Bishop Ford for residents encouraged.	CSU	7
46	Michigan Avenue Corridor - extend hours past school hours.	CSU	7,11
47	If the goal is to improve transit, why not increase frequency of Metra services on both sides of corridor and restructure east-west bus service connections without major capital project?	CSU	16
48	The UP Corridor is not appropriate for dense "transit-oriented" development on account of hazardous materials.	CSU	6,7,18
49	Why was commuter rail rejected? Commuter rail could have closely spread stations as Metra BNSF, UP North, and Rock Island have today. Commuter Rail doesn't require incompatible infrastructure.	CSU	9
50	Why was a viable commuter rail alternative rejected?	CSU	9
51	Can you explain the intermodal modes at 130th and UPRR?	CSU	16
52	Is intermodal transfer being evaluated at 130th and the Metra Electric Line on the Michigan Avenue alternative?	CSU	16

CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
Screen One Public Involvement * Public Comments and Questions
November 21, 2007

No.	Comment/Question	Received Via*	Topic Area(s)
53	What corridor would be the least expensive?	CSU	6,7,14
54	Will the community be able to vote on the corridor they prefer?	CSU	1,6,13
55	Use CTA Gray Line as complement to Red Line Extension.	CSU	5
56	Please contact CMAP for CTA Gray Line project ranking and information.	CSU	5
57	Utilize the Metra Electric as a CTA "L" route as proposed in the Gray Line project: www.Grayline.20M.com as included in the CMAP 2030 RTP in addition to the Red Line Extension.	CSU	5
58	Where and how will the Red Line Extension connect with the South Shore Line to Indiana?	CSU	5,16
59	Are you considering elevated trains for the Halsted and Michigan models?	CSU	8
60	What are connecting streets for the Halsted model? 95th?	CSU	7
61	When you said extending the Red Line, in my mind I am thinking the train will stop at 103rd, 111th, 119th and so on. Why can it not be extended this way?	CSU	6,9,10
62	Howard (A) east 130th Street (I-94) and Howard (B) west 127th (I-57)	CSU	7
63	I -94 alignment east side or west side of expressway?	CSU	7
64	I am a former resident of Altgeld Garden. In over 30 years Altgeld has waited to see the CTA railway realized through to the south side city limits. I support the Community Route for the Red Line because it will remove the isolation that continues to suppress opportunities for economic growth. It will also address the inequity and discrimination that has been prolonged for too long.	CSU	7,18
65	With gas prices escalating it would be feasible to use the heavy rail transit, not buses.	CSU	9
66	Since there is overcrowding already of cars on the streets use the overhead rail for the heavy rail transit.	CSU	8,9
67	At the moment, I like the State Street line which would simply be an extension of the present line. Whichever corridor is used will/should draw more commuters.	CSU	7
68	Heavy rail - Michigan, in my opinion would best serve the need of the community.	CSU	7,9
69	The corridors ending/terminating last at 130th is needed urgently. The Halsted and other corridors currently have bus access on the west and several bus routes in the center of the proposed geographic areas. In the Altgeld area there is not easy access to rail lines, southwest bus routes only the #34 services the area with limited transfer points.	CSU	7
70	The Dan Ryan (Red Line) should have been built all the way to Altgeld Gardens as originally intended. Buses constantly get jammed in 95th terminal.	CSU	4,5,19
71	The Midway (Orange Line) trains should already be going to Ford City. This was originally intended. In fact, trains have Ford City destination signs on them.	CSU	19
72	Why was the extension held from being constructed in the past?	CSU	1
73	I want to see the PRT line because it would be more accessible to and from the community. This line will also provide more jobs for the people in the surrounding community.	CSU	9
74	Please consider future multi-use trail connections - please look at Chicago Trails Plan.	CSU	16,18
75	Please be concerned about possible future gentrified communities when this extension is built.	CSU	18
76	Please be concerned about connections.	CSU	16
77	The Red Line Extension is more than 30 years coming. It should be looked at before younger projects. More ridership will come from the Red Line Extension. Over crowding at 95th Street will be taken care of, and the community will have easy access. The UP Rail Road or the Community Route is the best route to take.	CSU	1,4,7,18
78	I'd rather prefer having the Red Line use the Bishop Ford where it was proposed before. This would be closer to be at the CTA 103rd garage.	CSU	7
79	What are chances that the CTA sub-regional study will supersede the Red Line Extension project?	CSU	3
80	What is the relationship of the CTA sub-regional study to the New Starts Baseline Alternative?	CSU	3

CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
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81	Given that PB did a feasibility study for CDOT that came to most of the conclusions we've heard tonight, what is new in this AA?	CSU	1
82	Why isn't the actual analysis with measures, methodologies, criteria being made available to the public?	CSU	13
83	Metra Line at 95th - will it connect to Red Line? And years from now after 130th, will it go further?	CSU	5,16
84	When will PB/CTA consider noise abatement technologies as a significant need for the Red Line Extension going through residential areas?	CSU	18
85	What is the relationship of Parsons-Brinckerhoff (PB) to CTA? How committed is PB to the CTA's strategic plan?	CSU	1
86	Who will get to bid on these contracts for CTA transportation jobs? Will ALL contract bids be done through City Council or Mayor Daley?	CSU	18
87	Does CTA have any idea right now how much this will be costing the residents of Chicago and the suburbs? Will you print it on the website?	CSU	13,14
88	How will you make continued connections from transit to bus?	CSU	15
89	What are the environmental justice impacts in the AA and why weren't they made public?	CSU	18
90	How does residential displacement factor in decisions to analyze various alternatives?	CSU	6,12
91	Do you foresee any displacement of homes in any of these plans?	CSU	12
92	If the UP Railroad alternative is used, will it run 24 hours and will the price be closer to that of Metra system cost?	CSU	11
93	Buses get hours cut. Don't use bus services when heavy rail is the answer.	CSU	9,19
94	Regardless of the corridor adopted, additional trains would need to be run. This could potential increase congestion within the downtown area and north to the Belmont switch. How do you plan on combating against this plausible congestion problem? Perhaps making the new south extension as a separate line much like Skokie Swift.	CSU	2,15
95	I live in Roseland, the buses are always crowded. Sometimes they are so crowded they pass my stop. I often have to walk to a more populated stop so the buss won't pass me by. The best route for the Red Line to take is the UP Rail Route or the Community Route.	CSU	7,19
96	How committed is the CTA to public involvement? Would CTA support the participation of community stakeholders on the Project Management Team, especially on the "Overall New Starts Criteria" team?	CSU	13
97	How can Chicago South assist in the process? We are a long existing community development organization on the Southside! 1968	CSU	13
98	If the alternatives analysis (AA) screenings are completed by early 2008, will CTA continue immediately to PE instead of waiting until December 2008 according to the CTA's original timeline?	CSU	1,4
99	Is it possible to get email copy of presentation?	CSU	13
100	In order to save money, can the rapid bus transit be made possible for the corridors listed instead of the rail?	CSU	9
101	What impact would hybrid busing bring to the community? Cost?	CSU	9
102	What is the priority among the New Starts projects? Because the Red Line serves low-to-moderate income communities - should that not place high priority on the project? Residents have fewer options, ratio of people to cars is also lower.	CSU	2,18
103	Have you considered splitting the Red Line at the end or midway in the study area like the Green Line?	CSU	7,11
104	How about advertising these public meetings at local stores?	CSU	13
105	Salem Baptist - have you talked to the reps about this project?	CSU	13
106	I am willing to volunteer to do outreach.	CSU	13
107	UP Railroad Corridor best one - could be elevated or below grade. 115th/Michigan location some Pace routes/CTAcould end at 115th/Kensignton/Metra/South Shore. Parking is great.	WPL	7,16,17
108	Will parking be near the stations? 103rd -111th -115th/Michigan- maybe a Metra transfer near 119th street - 130th/Bishop Ford	WPL	10,16,17

CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
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November 21, 2007

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109	Michigan corridor is ok but could be costly - will it change the area around Roseland/West Pullman to something vibrant and bring business near area?	WPL	7,18
110	UPRR corridor - trench	WPL	7,8
111	I support the UP line in the community because this will benefit the Roseland area more efficiently.	WPL	7
112	The Red Line Community Route (UP railroad) is the best route because it will increase ridership, promote economic development, be easier to access, and best reflects the community needs and desires.	WPL	7,18
113	For this community the Red Line Extension is an issue that this will do what ever is necessary to support this project. I support the Community (UP) corridor at grade trench as a route to extend the Red Line.	WPL	7,8
114	The UP Railroad corridor is the route supported by over 39,000 citizens from 2 wards in the study area, and the only one which brings rapid transit service to the south city limits and to underserved patrons and workers in the area. It is the best and preferred route.	WPL	7,18
115	The UP Corridor route would be the best route for the community because it would alleviate congestion and allow Altgeld residents the ability to acquire jobs further north of the City.	WPL	7,18
116	The UP Corridor is the best route for the community!	WPL	7
117	Customer service on the buses overall is not good!	WPL	19
118	Too many unsavory characters, especially at 95th.	WPL	19
119	UP Corridor Route.	WPL	7
120	If you use Bus Rapid Transit or Heavy Rail, what people capacity and scheduled hours of operation are you proposing? Also, how often would they run? The current "EL" operates 24 hours, would this new transit route do the same?	WPL	9,11
121	Red Line Extension is long overdue. I would like to see project kept realistic with a corridor that will make it feasible. I am a little upset to not see a little about on I-57 due to the fact it could be built at-grade with lower cost. The line needs to be rail to stay fluid with system. I believe many people would use line especially I-57 users if adequate parking was to be and anchoring the south end. The population declines as you go east of Halsted and would be betting on an area renewing itself. I believe that would be a gamble. I believe a line would be most feasible terminating near 130th and Halsted.	WPL	4,7
122	Yes, it should be placed near the expressway.	WPL	7
123	I believe the Halsted Route would be more beneficial to the community while stopping some of the local bus services.	WPL	7,15
124	How would you combine the current rail with which ever rail you choose (heavy rail/bus rail)? Or will the whole thing change or just the extension?	WPL	15,16
125	When will construction start?	WPL	4
126	In order to massively increase regional transit ridership and comply with federal ADA, civil rights, and environmental justice statutes, RTA and CTA expansion should prioritize the Red Line Community Route and the MidCity Transitway (MCT) and eliminate Block 37, airport express, Circle Line and Pink Line projects.	WPL	2,4,18
127	There is a cemetery on Halsted from 124th to 127th, how will that work out?	WPL	7,12,18
128	130th is being rehabbed at the Altgeld Garden homes, wouldn't it be more feasible?	WPL	7
129	I am in favor of the Halsted or Michigan corridor being the choice for the Red Line expansion.	WPL	7
130	Will community residents be considered for employment opportunities with this project?	WPL	18
131	Has a "displacement percentage" of residents been evaluated or achieved?	WPL	12
132	Several years ago the 108 Halsted was cut in service. After 9 pm we only have Pace. Has there been any thought to reinstate the route for people who need transportation late night? My son is being picked up at 95th at 4 am because no bus will bring him home until later, or he leaves before the last 108 stop.	WPL	19

CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
Screen One Public Involvement * Public Comments and Questions
November 21, 2007

No.	Comment/Question	Received Via*	Topic Area(s)
133	I think you should use the I-94 Route/Metra Route but people can use the Metra unless they go all the way north to Howard on Red Line. Or use UPRR route on grade. L.V. CPS I could not find any info on website.	WPL	5,7
134	Halsted is better because there are more businesses.	WPL	7,18
135	The rail service should go on the Halsted Corridor. It doesn't make sense to have a rail service that goes along near the south rail system. They already have rail service. Halsted needs something.	WPL	7
136	Buses - Halsted Street/ rail - Michigan	WPL	7,9
137	Everything sounds really good; I especially like the fact that you will try to connect the Metra with the CTA lines. But I was wondering, during the whole construction process, will transportation be affected drastically?	WPL	15
138	How do you get a bus route's hours extended? The 111/115 should be 24 hours/7 days or 24 hours/5 days or some other combination. It needs to run longer than until midnight. Many of its riders work second shift jobs!!	WPL	19
139	At 130th at Ellis, it takes less than 5 minutes by car, 20 - 40 minutes by walking and biking but by public transportation it takes 3 buses and about a six block walk to reach where the proposed new transit is going to be built. How is CTA going to address this need for the residents of the Riverdale Community Area (54) to have bus transportation at 130tth Street.	WPL	4,19
140	What are the environmental impact study stated in regards to the selected technologies?	WPL	18
141	What source of fuel will be used to power the selected technology?	WPL	9
142	What are economic opportunities for communities of low-income that are near this development?	WPL	18
143	Why are public comments or questions from the floor not allowed, since this is a public, mandated meeting?	WPL	13
144	Has the CTA requested the City and/or State to provide the matching funds for the Red Line Extension project?	WPL	14
145	When the final alternative has been narrowed down, who gets to be involved in indicating which is the preferred route? Will the people in the community have a voice?	WPL	6,13
146	The CTA's lack of a true public comment process which allows participants to speak is fundamentally patronizing, classist, racist, and undemocratic. You must allow people to speak.	WPL	13
147	What consideration has been given to having a community person on your project management team for the Red Line Extension? Developing Communities Project (DCP) has been promoting this project a long time and has information that could prove quite valuable/could provide valuable input.	WPL	13
148	No specific questions tonight, but I represent 10 churches on the south side and they need to be aware of what's going on.	WPL	13
149	I live between three of your corridors evaluated. Will this effect my home? If yes, please explain. (Wentworth/State Street/Michigan Street)	WPL	7,12
150	A major concern is the amount of displacement of people, homes, etc. Which takes the least amount of displacement?	WPL	12
151	I am all for extending the Red Line, but how will affect homeowners who would be in the path of the final decision?	WPL	12
152	Will more minority businesses have an opportunity to build and flourish along the expected corridor?	WPL	18
153	Which of the proposed routes will require displacement? If so, how many residents, homes, businesses?	WPL	12
154	How many jobs for the community?	WPL	18
155	When will construction start? And when will jobs be available?	WPL	4,18
156	Is there a maximum amount the FTA will approve for each project?	WPL	14
157	Approximately how long after approval will the project take for completion?	WPL	4
158	Can all four projects be approved in this round and if so how will CTA prioritize the approved projects?	WPL	1,2
159	The Red Line needs to be extended and done in such a way that allows for maximum benefit of the community in terms of easy accessibility and potential for economic development. Why is it taking so long (and has it taken so long) for this to be done?	WPL	1,4,18
160	Will this thing ever be done? If so, when?	WPL	4
161	How much will this project cost?	WPL	14

CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
Screen One Public Involvement * Public Comments and Questions
November 21, 2007

No.	Comment/Question	Received Via*	Topic Area(s)
162	This meeting has been very informative; particularly in the areas of the diversity of transportation systems. Question: The research overwhelmingly indicates that it is feasible to extend the Red Line. Why is the process so long in implementing the extension of the Red Line? Our communities are fitting weary and impatient!	WPL	1,4
163	Like many other people, I would really like to know why this project is taking so long? (Around 40 years) We were told that the monies were available.	WPL	1,4,14
164	Will you have a place in your plan for the displaced persons?	WPL	12
165	What safety precautions will be in place for underground?	WPL	8,11
166	Where will the Red Line stations be along the proposed routes?	WPL	10
167	Who determines the route the Red Line Extension will take?	WPL	1,6
168	Can I get mailings of all your evaluations?	WPL	13
169	If heavy rail is used, what would be done for security purposes? I'm concerned about the overcast and concealing this creates of business and people under this elevated area, eg: 63rd Street.	WPL	8,18
170	With CTA proposing cuts what will be the hours of operation for the new transit line?	WPL	11
171	Will a percentage of the new jobs created with CTA be left open for some of the people in the community where the new line will venture?	WPL	18
172	Presidential Order 12898 detailed environmental justice principles, will CTA include this Order while making decisions about this development?	WPL	18
173	How is environmental justice issues being applied to this development of transportation?	WPL	18
174	Pastor Leroy Sanders - not present tonight, but he should be informed about the progress of this project.	WPL	13
175	What route will the train take?	USPS	7
176	How long will it take for a final decision to be made for construction to start?	USPS	4
177	God's Blessings on this project.	USPS	19
178	Why do south side commuters have to wait two to three times longer than north side commuters to receive basic service that pails in comparison. The red line extension is long overdue and must be constructed before any talk of a Skokie extension. Its not fair the south siders had to wait an additional 10 years for expressway reconstruction when the Kennedy has far less traffic. Now we are repeating this prejudice again to south side commuters of the cta.	EMAIL	1,2,18
179	I'm writing because I'm excited about the CTA finally taking the steps it needs to bring the Dan Ryan line extension to fruition and would like to be added to the Red Line Extension Project mailing list.	EMAIL	13
180	Why do south side commuters have to continually wait for transit improvements? The basic commuter services of the CTA buses and rail lines already pails in comparison from the north side to the south side . The red line extension is long overdue and must be constructed before any talk of a Skokie extension or any other north side improvements. Is not the brown and pink line renovations enough. The tearing down of the 63rd & Stony Island station was insulting, and resulted in longer commutes for anyone living east and south. It is not fair for the south side commuters to continually receive less service, the worst buses and never receive our fair share of transit improvements. When will the prejudice to south side commuters stop!!!	EMAIL	1,2,18,19
181	The South Side has become more populated than when this line was originally designed. An extension would make more passengers further south have an easier commute.	USPS	18
182	CTA needs to create a better time schedule for when a particular bus or train will arrive.	USPS	19
183	I think this addition will be a great opportunity for our community that will bring good paying jobs for the people which will improve the living conditions of our communities. I will support the expansion project by any way I can. UP Route.	HND	7
184	This extension will greatly benefit the entire city of Chicago. I rode the red line with my granddaughter from 87th to Grand to go to Navy Pier 2 days ago. It was a great ride.	HND	7

CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
Screen One Public Involvement * Public Comments and Questions
November 21, 2007

No.	Comment/Question	Received Via*	Topic Area(s)
185	I support the UP route.	HND	7
186	I want the UP Route extended to 130th St.	HND	7
187	I would like to see the UP Route extended.	HND	7
188	I want the UP route extended to 130th St.	HND	7
189	I would like to see the UP Route extended.	HND	7
190	Much need. UP Route.	HND	7
191	The UP Route.	HND	7
192	The UP Route.	HND	7
193	Please extend the Red line to 130rd. It is very much needed for transportation purpses. The UP route	HND	7
194	No questions right now. Except I want the UP Route.	HND	7
195	The UP Route.	HND	7
196	UP Route.	HND	7
197	We would love to let you know we need the UP Route	HND	7
198	I think it would be a good idea to extend the Red Line with stops on Michigan Ave. and King Drive. Also a stop if possible on State Street South.	HND	7
199	I think we should have the UP line so that the traffic on the Bishop Ford will be lessend and the people in that community will have better access to jobs.	HND	7,18
200	It would be nice to see the red line extended to 130th Street.	HND	7
201	I grew up in the Greater Roseland community. I support the UP route.	HND	7
202	Extension of the Red Line should be given highest priority for economic, financial and personal gain to the community. This has been needed for a long time. By the grace of God it shall be done.	HND	18
203	I think that it is a great idea to bring the red line to 130th street. People can get on the bus at 95th Dan Ryan and ride all the way to 130th rather than getting on several trains and buses. Ths is more convienent for individuals and families. There wil also be more jobs available.	HND	7,18
204	I think it would be a good idea for the red line to extend further south.	HND	7
205	I would like to see the red line extended out this way for the convienence of the people who live out this way. Also: this will hopefully create a few more jobs for people.	HND	7,18
206	I would like to see the Red Line Extension added to 130th St.	HND	7
207	I' asking for the Red Line to Create Job for the community	HND	18
208	This extension would be a great opportunity for our community where as it will provide the community with better transportation and provide more job opportunity. I support the UP Route.	HND	7,18
209	You act as though the considerable Metra infrastructure in this area does not exist. Within your Study Area there already exist 10 stations served by the Metra Electric Line, as well as another 2 served by the Metra Rock Island Line. Your "alternatives analysis" overlooks the obvious - and very inexpensive - remedy for the transit needs of this area, which is to turn the in-city portions of the Metra Electric line into a CTA operation. The right-of-way, tracks, and stations exist. This proposal has been nicknamed the "Grey Line".	EMAIL	5

CHICAGO TRANSIT AUTHORITY
Red Line Extension Alternatives Analysis Study
Screen One Public Involvement * Public Comments and Questions
November 21, 2007

No.	Comment/Question	Received Via*	Topic Area(s)
	One major reason for having the CTA operate the Blue Island, Kensington, and South Chicago branches of the Metra Electric as an "L" would be the ability to transfer to other routes to complete a trip. Currently, this requires paying two separate fares using incompatible fare systems. Having the CTA operate the Metra Electric city sections would resolve these issues, and also free up a large number of the CTA buses currently allocated for express bus service along the south lakefront. I think you need to seriously explain why this cheap, easy proposal cannot work, before asking the taxpayers to fund expensive and essentially duplicate facilities. There are already 12 rapid transit stations built, paid for, and in operation within the Study Area. We don't need any more - we just need to make better use of what we already have. It is incumbent on you to include this alternative in your formal Alternatives Analysis, otherwise you will have failed to consider all reasonable alternatives for meeting the very real transit needs of your Study Area. For more information, refer to the Chicago Area Transportation Study "Shared Path 2030" Regional Transportation Plan at http://www.sp2030.com/proposals/index.htm This proposal earned one of the strongest ratings of all those in Shared Path 2030, due to its combination of maximum benefit and minimum cost.		

*** Key to source of comments:**

CSU Comment received at Public Meeting held at Chicago State University
EMAIL Comment sent to CTA by email
HND Comment hand delivered to CTA
STK Comment received at Stakeholder Meeting
USPS Comment sent to CTA by postal mail
WPL Comment received at public Meeting held at West Pullman Library

Chicago Transit Authority
Red Line Extension Alternatives Analysis Study

Screen 1 Public Involvement
Responses to Public Comments and Questions

15 July 2008

Written questions and comments regarding the Red Line Extension Alternatives Analysis Study were submitted by a variety of individuals and groups from throughout the Chicago region at the study's Screen 1 Public Meetings held on April 10 and 11, 2007. In addition, public comments and questions on Screen 1 were submitted directly to the Chicago Transit Authority (CTA) via e-mail and postal mail through May 11, 2007.

All of the questions and comments have been collected and compiled to provide a comprehensive review of the issues raised along with CTA's responses. Every question, comment, and suggestion, submitted during the public comment period has been compiled in the "Outreach Comment Database" (see separate document). Each question has been recorded verbatim and assigned a number that corresponds with the answers provided in this document, ensuring every question or comment submitted has been reviewed and answered or acknowledged. Collectively, the public comments and preferences will be considered in the evaluation of alternatives and concepts introduced through the public involvement process and may be evaluated and/or reflected in advancing alternatives as appropriate.

Many of the comments received were very similar in nature. As a result, similar comments and their responses have been grouped by topic and "General Comment" heading below to avoid duplicative responses. Questions or comments requiring individual or specific responses are also included below along with unique responses. In order to understand some terms used in the Comments and Responses, it may be necessary to review the original Screen 1 presentation materials which are posted on CTA's Web site www.transitchicago.com.

The list below shows the index of topics covered in the report, along with the number of comments received for each. Because comments often refer to more than one topic, the numbers associated with each do not equal the total number of comments received.

Index of Topics

1. FTA's Alternatives Analysis Process (15)
2. Relationship of Red Line Extension to Other Proposed Transit Projects (6)
3. Relationship of Red Line Extension Project to Far South Sub-Regional Study (2)
4. Overall Red Line Extension Project Timeline, Purpose, and Need (14)
5. Red Line Extension Study Area (10)
6. Evaluation Criteria Used in the Alternatives Analysis Study (10)
7. Alignments (Corridors) Analyzed (89)
8. Vertical Profiles Analyzed (9)
9. Transit Vehicle Technologies (Modes) Analyzed (19)
10. Proposed Red Line Extension Stations (6)
11. Proposed Red Line Extension Operations (7)
12. Potential Property Acquisition & Impacts (12)
13. Alternatives Analysis Public Involvement Process and Format (19)
14. Funding for Red Line Extension Construction and Operations (9)
15. Potential Red Line Extension Impacts on Existing CTA Services (5)
16. Potential Red Line Extension Connections with Existing Regional Transit Services (11)
17. Potential Red Line Extension Parking Facilities (5)
18. Potential Red Line Extension Economic and Environmental Impacts (39)
19. General Customer Service Questions/Compliments/Complaints (14)

1.

FTA's Alternatives Analysis Process

General Comment:

Please Describe the Federal Transit Administration's (FTA) Alternatives Analysis process and its components.

Pertains to specific comments:

9, 38, 54, 72, 77, 98, 158, 159, 162, 163, 167, 178, 180

Response to Overall Category Comment:

Alternatives Analysis has for over 25 years been a key part of FTA's decision-making process for awarding grant funding to support fixed guideway transit projects. Federal law requires that projects seeking grant funding from FTA's New Starts program be based upon the results of an alternatives analysis study and subsequent preliminary engineering. Alternatives analysis has also been a part of established transportation planning practice in the United States for several decades. At its core, alternatives analysis is about supporting local decision-making. An effective alternatives analysis answers the questions: What are the transportation problems in a corridor? What are their underlying causes? What are viable options for addressing these problems? What are their costs? What are their benefits?[1]

The Red Line Extension project is currently conducting its Alternatives Analysis study. The Red Line Extension Alternatives Analysis study will have three steps or "screens." Screen 1, which has just been completed and presented to the public, has issued preliminary findings regarding corridors, alignments, and vehicle technologies that should be advanced to Screen 2 for further analysis. These findings have determined 3 vehicle technologies, 3 potential corridors and 3 alignments that should be studied further. Screens 2 and 3 will further refine these corridors, technologies and alignments. In each successive screen, the potential locations, vehicles and alignments will be discussed in more detail, costs and ridership will be projected and operational questions considered. Ultimately, this process will result in the selection of a Locally Preferred Alternative (LPA) which, with FTA approval, will subsequently undergo environmental analysis and preliminary engineering.

A detailed description of the formal FTA Alternatives Analysis process is available at the Federal Transit Administration's web site: http://www.fta.dot.gov/16363_ENG_HTML.htm .

Other Specific Comments Noted on this Topic:

Comment:

81: Given that PB did a feasibility study for CDOT that came to most of the conclusions we've heard tonight, what is new in this AA?

Response:

The feasibility study that was conducted for CDOT served as a starting point to build the "Universe of Alternatives" for the Red Line Extension's Alternatives Analysis. The results presented in Screen 1 represent a shortlist of alternatives that merit further consideration in the alternatives analysis study. In subsequent screens, increasingly rigorous evaluation criteria will be applied to the remaining alternatives with the objective of identifying a Locally Preferred Alternative. Unlike a feasibility study, a formal alternatives analysis (AA) must follow guidelines as prescribed by the Federal Transit Administration. The AA considers additional transit alternatives not considered during the feasibility study introduces public involvement in the planning process and represents the first formal step in the application for New Starts funding.

Comment:

85: What is the relationship of Parsons-Brinkerhoff (PB) to CTA? How committed is PB to the CTA's strategic plan?

[1] "Additional Guidance on Local Initiation of Alternatives Analysis Planning Studies." Federal Transit Authority Web site.

Response:

PB is a paid consultant to the CTA, performing the technical services for the Red Line Extension Alternatives Analysis. CTA relies on transportation consultants like PB to assist in the completion of project analysis and deliverables for special projects for which it is more cost effective to contract for the necessary expertise for limited time rather than adding to CTA planning staff. PB is a widely recognized consulting firm that participated in a competitive bidding process against other consulting companies to assist the CTA with the completion of the Red Line Extension Alternatives Analysis. The CTA awarded the contract to PB due to their technical skills and extensive experience performing similar work. The project team assisting with the Red Line Extension is local to Chicago and familiar with the city, the study area and its related transportation needs. CTA has oversight on all work completed by PB and the CTA and PB are partners in the Red Line Extension Alternatives Analysis; both parties are committed to the goals and success of the project.

2. Relationship of Red Line Extension to Other Proposed Transit Projects

General Comment:

Are other transit projects being considered by CTA, and if so, what is the relationship between the Red Line Extension and these other projects?

Pertains to specific comments:

94, 102, 126, 158, 178, 180

Response:

Every five to six years, the United States Congress enacts legislation that authorizes federal funding for highway, transit, motor carrier, safety, and research programs across the country. This federal support represents the primary source of capital funding for CTA and other transit agencies throughout the U.S. The current legislation, known as SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users), authorizes the federal transit and highway programs through 2009. President Bush signed the act into law on August 10, 2005.

The SAFETEA-LU legislation authorized CTA to seek federal New Starts grant support for five new rail lines or line extensions including: the Red Line Extension to 130th Street; the Orange Line Extension to Ford City; the Yellow Line Extension to Old Orchard; the Circle Line; and the Ogden-Carroll-Navy Pier Transitway. In order to qualify for New Starts funding, CTA is required to perform comprehensive Alternatives Analysis studies for each. Alternatives Analysis studies for all five projects are currently underway following the same federally mandated process as the Red Line Extension study, but addressing the unique transportation needs of their respective study areas.

A key objective of the Federal Transit Administration's Alternatives Analysis process is to measure all transit projects from across the nation by the same set of standards. This process ranks projects based on this measurement and not on where they are located. In this way, the benefits and costs of a project can be objectively measured in comparison to all others. Acknowledging that each project has a unique Purpose and Need, the process allows multiple projects from the same region to be rated highly. It is not unusual for a large region such as Chicago to seek approval for several major transit initiatives at the same time. In the late 1990s, CTA won New Starts funding approval for both the Cermak (Douglas) Branch reconstruction and the Brown Line capacity expansion project at the same time. Metra has also received New Starts funding for multiple projects at the same time. New York City in 2005 had two multi-billion dollar transit projects approved for New Starts funding.

In order to qualify for federal funding, regional transportation projects must also be included in an official Regional Transportation Plan. Chicago's Regional Transportation Plan is prepared by the Chicago Metropolitan Agency for Planning[2] (CMAP) with input from local and state government agencies

[2] CMAP was created in 2006 by the merger of the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC).

(including CTA), community organizations, and the general public. The plan is updated regularly and the Red Line Extension project is included in the plan. The most recent comprehensive update of the 2030 Regional Transportation Plan (RTP) was prepared in 2006 and involved extensive public outreach meetings throughout the region in May and June of 2006. A technical update of the 2030 RTP was also completed earlier this year. Additional information on this plan can be found on CMAP's "Shared Path 2030" Web site www.sp2030.com.

3. Relationship between Far South Sub-Regional Study and Red Line Extension Project

General Comment:

We have questions relating to the Far South Sub-Regional Study and its impact to the Red Line Extension Project.

Pertains to specific comments:

79, 80

Response to Overall Category Comment:

CTA's Far South Sub-regional Study seeks to better meet transportation needs in a relatively short timeframe (approximately one to two years) through potential restructuring of existing bus routes and/or creation of new bus services. Guided by comments voiced by the local communities, the objective of the sub-regional study is to implement solutions that can address transit needs in a shorter time frame. The Red Line Extension project not only examines existing conditions, but it also accounts for what is anticipated to be problems over a longer planning horizon, out to year 2030. As a result, the scope of the Red Line Extension project is focused on a more permanent long-term solution that can not only solve the study area's current day problems, but can mitigate growing transportation problems projected for future years.

4. Overall Red Line Extension Project Schedule and Timeline, Purpose and Need

General Comment:

What is the timeline of the project? How long will it take from design until operation?

Pertains to specific comments:

70, 77, 98, 121, 125, 126, 139, 155, 157, 159, 160, 162, 163, 176

Response to Overall Category Comment:

The FTA New Start grant program requires conceptual transit project proposals to proceed through a formal process of planning, design, and construction. Upon completion of this process, the project is ready for operation. The process involves five formal steps: Alternatives Analysis (AA); Environmental Impact Statement (EIS); Preliminary Engineering (PE); Final Design (FD); and Construction. Each of these steps typically takes 2-3 years to complete. Initiation of each step is also contingent upon continued availability of federal and local funding, the timing of which will also affect the overall project schedule. For highly complex projects the Final Design and Construction steps take longer, particularly if construction is implemented in sequential phases rather than all at once.

In the Alternatives Analysis step, the project's purpose and need is identified, alternatives to address the purpose and need are developed and evaluated, comprehensive and on-going public involvement is initiated, and a Locally Preferred Alternative (LPA) is determined. The Red Line Extension project's "purpose and need" is to improve transportation access and enhance opportunity for economic development within the study area. In particular, transportation improvements are needed to reduce the significant bus and passenger congestion at CTA's existing 95th Street Red Line station; reduce lengthy

bus trip times to access the 95th Street Red Line station from neighborhoods south of 95th Street; reduce the lengthy transit commute times experienced by many residents of the study area; and more effectively manage future traffic growth in the study area. Extending Red Line transit service south of 95th Street is intended to stimulate economic development and enhance job opportunities by improving access to, within, and beyond the study area and shortening transit travel times through faster and more direct transit service.

The Red Line Extension project is currently in the Alternatives Analysis phase. The next step is preparation of an Environmental Impact Statement (EIS). In this step, potential environmental, financial and economic impacts of each alternative are identified, potential environmental impacts of the LPA are analyzed; environmental mitigation strategies are developed, public hearings are conducted to receive input, and a formal Record of Decision is received from the FTA upon successful completion. The Preliminary Engineering step involves engineering effort to support the EIS (30% design level), development of project phasing and construction staging, and feasibility review of mitigation approaches for construction or operational impacts. In the Final Design step the engineering design started in PE is completed, capital and operating cost estimates are updated and construction drawings are prepared, and a Full Funding Grant Agreement is obtained from the FTA upon successful completion. The Construction step commences when federal and local matching funds are secured.

The current Red Line Extension Alternatives Analysis study is expected to conduct public involvement meetings for Screens 2 and 3 in 2008. Identification of an LPA and completion of the study is anticipated in 2008.

5. Red Line Extension Study Area

General Comments:

How large is the project study area? How were the boundaries of the study area determined?

Pertains to specific comments:

9, 58, 70, 83, 133

Response to Overall Category Comment:

A key component of the Alternatives Analysis process is specifying a study area of a definite size for the project. The goal is to establish a specific area and to define the transit challenges and opportunities within this particular space, so that potential solutions can be measured against these defined challenges. Keeping the study area focused also helps to avoid confusion between multiple unique transit project proposals within the same city or region. Too large a study area can make it too difficult to determine accurately whether the potential solutions effectively address the identified transportation needs.

The Red Line Extension study area is bounded by the current terminus of the existing CTA Red Line at 95th Street (9500S) on the north, the Little Calumet River (approximately 13000S) on the south, Ashland Avenue (1600W) on the west, and Stony Island Avenue (1600E) on the east. The study area is four (4) miles east-to-west and approximately five (5) miles north-to-south. These boundaries define an area with numerous opportunities for improving transit connections and growing transit market share. A key goal of the Red Line Extension is to improve transportation access and enhance opportunities for economic development. In particular, transportation improvements are needed to reduce the significant bus and passenger congestion at CTA's existing 95th Street Red Line station; reduce lengthy bus trip times to access the 95th Street Red Line station from neighborhoods south of 95th Street; reduce the lengthy transit commute times experienced by many residents of the study area; and more effectively manage future traffic growth in the study area. Extending Red Line transit service south of 95th Street is intended to stimulate economic development and enhance job opportunities by improving access and shortening transit travel times through faster and more direct transit service. The study area boundaries encompass the areas that would benefit most directly from such transit service improvements.

For more information on the details of the study area population, please see the Screen 1 report document, which is available for download at the CTA's website www.chicagotransit.com as noted in the introduction to this document.

Other Specific Comments Noted on this Topic:

Comment:

We have questions relating to the "Gray Line" proposal and its consideration in this Alternatives Analysis.

Pertains to specific comments:

55, 56, 57, 209

Response:

The "Gray Line" proposal calls for operational changes to increase service frequency on the Metra Electric District Line and improve CTA connections to this facility as well as fare integration between regional transit services.

Opportunities for changes or improvements to the existing Metra commuter rail service and CTA bus services within the corridor will be evaluated in detail during both the Screen 2 and 3 processes. These types of "lower capital cost investment" opportunities will be considered within the no-build and TSM alternatives described in Topic 6, as well as in conjunction and coordination with other more capital intensive options. Additionally, CTA is focusing attention on identifying possibilities to enhance intermodal interchange on the various alignments. See Topic 16 for additional information about connections with existing regional transit services.

A proposed "Gray Line" meets some of the needs of the study area, such as reducing the lengthy transit commute times experienced by many residents of the study area. However, it will not be included as a build alternative in the current Alternatives Analysis because it does not comprehensively address all of the needs of the project, including alleviating the bus and passenger congestion at 95th Street Red Line station, reducing travel times of passengers that transfer from bus to CTA rail to best access their destination, or stimulating economic development in the region. Additionally, as noted in Topic 9, commuter rail has several characteristics that are less favorable for the study area than other modes analyzed (such as bus and heavy rail).

Comment:

7: If extended again, will this line serve the Gary Airport and extend onto South Bend, Indiana?

Response:

The scope of this Alternatives Analysis study is strictly tied to the project's purpose and need (see Topic Area 4) and the project's defined study area (above). While consideration can be made to preserve other future opportunities for expansion, any initiative to further expand service to Gary Airport and South Bend, Indiana would merit further investigation and its own planning study.

6. Evaluation Criteria Used in the Alternatives Analysis Study

General Comment:

How are screening criteria applied throughout the analysis to advance the alternatives being evaluated?

Pertains to specific comments:

18, 38, 48, 53, 54, 61, 90, 145, 167

Response to Overall Category Comment:

A three phase evaluation methodology is being used for the Red Line Extension Alternatives Analysis. With each screen increasingly detailed and comprehensive evaluation criteria are applied to a decreasing number of alignment alternatives that have been identified as the best potential transportation

investments. Each step in the evaluation process is thus designed to increase the level of detailed planning and engineering analysis on progressively fewer alternatives.

In Screen 1, the Alternatives Analysis began with identifying a "universe" of alternatives—all of the conceivable transit service improvements that may address the purpose and need for the project within the study area. These alternatives included a wide array of transit vehicle technologies, six potential corridors through the study area, and three possibilities for vertical profiles (above ground, below ground, and at ground level). This universe of alternatives was evaluated in Screen 1 to identify a shortlist of specific technologies, corridors, and profiles that may best satisfy the project's goals and objectives.

In Screen 1, the transit vehicle technologies were evaluated for study area suitability according to the length of commute, typical station spacing, operating speed and system applicability. Simultaneously, the corridors through the study area were evaluated according to social factors (land use, neighborhoods and communities, and population access) and transportation factors (system usage and accessibility). Next, in combination with possible vertical profiles (subway, trench, at-grade, or elevated), the corridors and technologies that were found to be suitable to the study area were then evaluated according to general environmental, transportation, and economic parameters. These general evaluation criteria were used to eliminate alternatives that were not capable of meeting the project's goals.

For more information on the Screen 1 evaluation criteria or evaluation results of each alternative, please see the detailed summaries available for review on the Screen 1 presentation boards, which are available for download at the CTA's website www.chicagotransit.com as noted in the introduction to this document.

Other Specific Comments Noted on this Topic:

Comment:

3: Would like more information on no-build and baseline?

Response:

The No-Build Alternative incorporates only those transportation improvements that are included in the 2030 Regional Transportation Plan for which need, commitment, financing, and public and political support are identified and are reasonably expected to be implemented. The second alternative that is developed for consideration is called the Transportation System Management (TSM) Alternative and is defined as the best that can be done for improving mobility without constructing a new transit guideway. The TSM Alternative can include applicable transportation system upgrades such as intersection improvements, bus route restructuring, shortened bus headways, express and limited-stop service, signalization improvements, and timed-transfer operations.

The Federal Transit Administration must approve the definition of the No-Build and TSM Alternatives; however, only one of these alternatives advances as the Baseline Alternative. Because the Baseline Alternative should represents the best that can be done to improve transit service in the study area without major capital investment in new infrastructure, it is often the TSM Alternative that is used as the Baseline Alternative. The Baseline Alternative should be designed to address identified transportation needs in the Red Line Extension study area and demonstrate the extent to which these problems can be solved without a proposed major capital investment.

The definitions and selection of the No-Build and TSM Alternatives – and the alternative chosen as the Baseline Alternative – occur in the next stage of the project, Screen 2. At that time, definition of the specifics of these alternatives will be presented to the public in one of the future project public forums. Additionally, measured benefits from the alignment, mode and vertical profile alternatives (or build alternatives) that have advanced to Screen 2 will be compared with the FTA-required Baseline Alternative. This comparative analysis is a key activity that the FTA uses in their annual rating of New Starts transit projects.

7. Alignments (Corridors) Analyzed

General Comment for UPRR Corridor:

There is a strong level of support within the community for extending CTA Red Line service along the Union Pacific Railway corridor.

Pertains to specific comments:

1, 4, 15, 16, 17, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 44, 45, 64, 69, 77, 95, 107, 110, 111, 112, 113, 114, 115, 116, 119, 183, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 200, 201, 203, 206, 208

General Comment for Michigan Avenue / Halsted Street Corridors:

There is support within the community for extending CTA Red Line service along the Michigan Avenue and/or Halsted Street corridors.

Pertains to specific comments:

41, 46, 68, 109, 123, 129, 134, 135, 136, 198

General Comment for Various Corridors Analyzed:

There is support for other corridors and/or please provide clarification on the various corridors considered.

Pertains to specific comments:

8, 14, 22, 43, 48, 53, 60, 62, 63, 67, 78, 103, 121, 122, 127, 128, 133, 149, 175, 184, 199, 204, 205

Response to Overall Category Comment:

Several recommendations and preferences for potential alignment extensions were provided on the question/comment cards submitted by the public. Many are derivations of the alternatives already defined. Others significantly differ from the alternatives proposed by the CTA. Staff will review all suggestions and incorporate in the analysis those that offer merit for further consideration. Suggested alignments that are predominantly or entirely outside the defined study area will not be considered.

Regarding the defined alternatives, nine (9) different north/south corridors were defined and reviewed as part of the universe of alternatives. Collectively, these alternatives encompass the entire study area. From west-to-east across the study area alternatives include: 1) I-57 Expressway Corridor that, similar to the existing Red Line would be an extension of the rapid transit service in the median of the expressway. 2) The next corridor is Halsted, one of the major north/south arterial streets in the study area. Halsted is a wide street with four lanes of traffic, parking and a median. The corridor attracts a large amount of activity and includes a concentration of retail stores. Several local bus routes currently use Halsted. 3) The Union Pacific (UP) Railroad corridor is the freight railroad corridor and then continues south-east parallel to the Bishop-Ford/130th Street area. This alternative would serve the center of the study area and then shift to the southeast. 4)Wentworth is predominantly a residential street, that narrows significantly towards the south. 5) The State Street alternative is also a narrow street that is mostly residential. The latter two alternatives are not currently served by bus service.

Continuing to the east is: 6) Michigan Avenue, which is a major commercial corridor through the heart of the study area with several local bus services operating on it; towards the south end (south of 120th) the land use becomes residential. 7) King Drive is the next corridor to the east. King Drive has bus service over a portion of it, and much of the surrounding land use is residential; the street ends at 115th Street. 8) Cottage Grove/Metra Electric alternative would extend east along 95th Street and then generally operate parallel to the Metra Electric service (along Cottage Grove) and then head to the southeast, adjacent to the South Shore Line, ending in the vicinity of the Bishop Ford and 130th Street. The ninth (9) and last corridor is the I-94 - Bishop Ford alternative. This corridor has been studied previously and would use the expressway median from 95th Street and continue down I-94. This is a low density non-residential corridor over the majority of its length.

Other Specific Comments on this Topic:

Comment:

42. Why don't you reconsider taking the Red Line Extension down the Bishop Ford Expressway and reroute buses into station?

Response:

The ninth alternative considered does propose use of the Bishop Ford expressway median from 95th street to 130th Street. Optimizing existing, and potentially expanding, transit service, including feeder bus and suburban bus services, are important considerations in developing this and other alternatives being studied. One concern with this alternative is that it is somewhat removed from the population centers in the study area. While it is true that feeder buses could link the population centers to the new stations, travel time reductions from reduced transfer activity is a key purpose of this extension. All of these factors will be considered in greater detail as the Alternatives Analysis advances.

8. Vertical Profiles Analyzed

General Comment:

Please provide additional information on the issues involved with elevated, at-grade, trench and underground alignments.

Pertains to specific comments:

27, 41, 66, 110, 113, 165, 169

Response to Overall Category Comment:

Four alignments (or profiles) are possible for any transit service: below ground (subway), open cut (trench), above ground (elevated), or at-grade (street level). The current CTA system features trains that operate on each of the four alignments at various points within the rail system. Following modern transit industry practice, CTA-compatible heavy rail will only be considered in elevated, trench, or below ground alignments in the Red Line Extension analysis (not at street level).[3] Bus rapid transit will only be considered on street level, because the benefits of lower construction costs could not be realized if it used an elevated structure or subway alignment like heavy rail.

In Screen 1, vertical profiles for corridors and transit technologies (rail, bus, etc.) were evaluated according to general environmental, transportation, and economic parameters. These general evaluation criteria were used to eliminate alternatives that were not capable of meeting the project's goals. See Topic Area 6 for more information. Preferences for potential vertical profiles that were provided on the question/comment cards submitted by the public will be reviewed by staff and profiles that offer merit will be incorporated into the analysis for further consideration.

Other Specific Comments on this Topic:

Comment:

23. The UP option looks good. Would the CTA build an elevated line beside the tracks, as they did with the Orange Line, or is the UP line abandoned and they could simply build on the embankment?

Response:

For the Red Line Extension Alternative Analysis, elevated and trench rail profiles are being considered for the UP corridor alternative.

The UP Line is an active rail line and is an important corridor linking Chicago and the south. This freight line is at-grade from the north end of the study area to State Street (south of 115th) and then elevated through the center of Roseland. It returns to an at-grade alignment after crossing over the Metra Electric/Canadian National rail lines around 119th Street. The UP Line is also being evaluated by Metra as a possible commuter rail route for the South-East Service, which is in its own Alternatives Analysis planning process. CTA will coordinate with both Metra and UP to accommodate the existing freight line and any potential transit improvements.

[3] Although there are section of CTA's Brown, Pink, and Purple heavy rail transit lines that currently operate at-grade, this characteristic is due to the design standards that were in place at the time these lines were built nearly 100 years ago. Modern design practice for newly-built heavy rail transit lines calls for complete grade separation to promote faster, safer, and more reliable service for transit customers.

Comment:

59. Are you considering elevated trains for the Halsted and Michigan models?

Response:

In the case of the Halsted and Michigan alignments, both subway and elevated rail profiles continue to be analyzed.

9. Transit Vehicle Technologies (Modes) Analyzed

General Comment for Heavy Rail Rapid Transit:

There is support within the community for Heavy Rail Rapid Transit.

Pertains to Specific Comments:

1, 16, 24, 27, 41, 61, 65, 66, 68, 93

General Comment for Various Transit Vehicle Technologies Analyzed:

There is support for other vehicle technologies and/or please provide clarification on the various modes considered.

Pertains to specific comments:

44, 73, 120, 136

Response to Overall Category Comment:

Several recommendations and preferences for modes were provided on the question/comment cards submitted by the public. Staff will review all suggestions and incorporate in the analysis those that offer merit for further consideration.

During Phase 1, eleven (11) transit technologies were evaluated applying a series of screening factors including vehicle operating speed, station spacing requirements, capacity, reliability, and daily use in revenue transit operations. Preliminary findings for Screen 1 identified two technologies to advance to more detailed evaluation -- Bus Rapid Transit, or BRT, and Heavy Rail Transit, or HRT -- the existing type of Red Line technology -- to be carried forward. The other nine technologies were deemed not as well suited to this study area due to factors like the operating speed and other compatibility issues. Bus Rapid Transit will be considered only as an at-grade application or in-street operation. For Heavy Rail Transit, three different options in terms of profile will be considered including; elevated, in-trench and underground (or subway). HRT and BRT technologies will now be evaluated within the operating context of the alternatives being carried forward.

Other Specific Comments on this Topic:

Comments:

49. Why was commuter rail rejected?
50. Why was a viable commuter rail alternative rejected?

Response:

In Screen 1, the transit vehicle technologies were evaluated for study area suitability according to the length of commute, typical station spacing, operating speed and system applicability. Commuter rail has several characteristics that are less favorable for the study area than other modes analyzed (such as bus and heavy rail). Commuter rail is typically used for longer distance trips, such as from the suburbs to the central city, and station spacing is usually three to seven miles apart. Meanwhile, the study area for the Red Line Extension is four (4) miles east-to-west and approximately five (5) miles north-to-south. Preferred modes in the study area would need to have closely spaced stations to facilitate trip making both within and beyond the study area. Additionally, the frequency of service required to effectively serve short distance trips anticipated in this study area is not conducive to commuter rail. Commuter rail service

tends to be oriented toward peak period travel; in contrast, the technology selected to serve the study area demand would be intended for operation seven days per week and up to 24-hours per day.

Comment:

100. In order to save money, can the rapid bus transit be made possible for the corridors listed instead of rail?

Response:

Bus Rapid Transit (BRT) along with Heavy Rail Transit (HRT) are the two technologies that based upon the analysis will be brought forward into the next planning and evaluation phase. While BRT can utilize separate lanes, station construction, special signalization, and other infrastructure, BRT within this study will be confined to at-grade (or in-street) operations. This reduces the infrastructure requirements -- and costs -- often associated with BRT as confirmed by several of the BRT services in operation throughout the U.S. The planning process is not yet in an advanced stage that would support any statement regarding capital or operating costs.

Screen 1 findings recommend BRT alternatives to operate on Halsted and Michigan at-grade. Heavy rail is recommended to be carried forward to further evaluate its operation along the Halsted and Michigan Avenue corridors in either subway or elevated. For the UP Railroad, operating along an elevated right-of-way or in trench will be considered. Many factors in addition to cost will be evaluated in the consideration and eventual selection of the mode best suited for the projected level of ridership, including the appropriateness for the corridor, environmental compatibility, traffic impacts, safety, and visual impacts. Positive impacts will be identified as well, such as the anticipated positive impacts on community and commercial development and expanded employment opportunity.

Comments:

101. What impact would hybrid busing bring to the community? Cost?
141. What source of fuel will be used to power the selected technology?

Response:

The planning process has not yet advanced to a stage that would support any statement regarding the impacts of various propulsion system alternatives.

10. Proposed Red Line Extension Stations

General Comment:

Where would stations on the proposed Red Line Extension be located?

Pertains to Specific Comments:

3, 19, 26, 61, 108, 166

Response to Overall Category Comment:

Prospective station locations for advancing BRT and HRT alternatives will be reviewed as part of Screen 2.

Physical constraints, the ability to transfer between lines, cost, property acquisition and other critical station design issues will all be addressed in the preparation of the federally required Environmental Impact Statement (EIS). The EIS process is a requirement for federal funding and mandates that any negative environmental impacts—including impacts upon the built environment—must be mitigated in order to receive federal approval. The EIS process begins after the Alternatives Analysis process ends and an LPA is determined.

11. Proposed Red Line Extension Operations

General Comment:

How will the service operate? Will the trains run 24 hours and what will be the fare?

Pertains to Specific Comments:

15, 46, 92, 103, 120, 165, 170

Response to Overall Category Comment:

At this time, specific operating hours, fares, and other operational issues of the Red Line Extension have not been determined. As a part of Screen 3, FTA guidance requires CTA to conduct additional analysis of ridership, travel times, and cost-effectiveness ratings (cost per travel time savings) on the proposed routes and transit technologies. Until these additional reviews have been made, operating recommendations will not be developed. It is expected, however, that any new CTA service will be generally consistent with current CTA operating practices and seek to provide customers with safe, frequent and reliable travel options. Any new CTA service and associated facilities recommended by this study would be consistent with the Americans with Disabilities Act (ADA) requirements.

12. Potential Property Acquisition and Impacts

General Comment:

Alternatives with less residential displacement are preferred. How will you handle displaced residents due to property acquisition?

Pertains to Specific Comments:

4, 18, 24, 90, 91, 127, 131, 149, 150, 151, 153, 164

Response to Overall Category Comment:

At this early stage in the Alternatives Analysis study CTA cannot determine how much private property, if any, would need to be acquired in order to construct and operate the selected alternative. A final determination on the vehicle technology, alignment and vertical profile will need to be established before potential property impacts can be assessed. Potential property impacts are determined in detail as a part of the Preliminary Engineering (PE) phase of project development, which proceeds concurrently with the preparation of the Environmental Impact Statement (EIS). The EIS process is a requirement for federal funding and mandates that any negative environmental impacts—including impacts upon private property—must be mitigated in order to receive federal approval. The EIS and PE processes both begin after the Alternatives Analysis process ends and an LPA is determined. Public acquisition of private property is governed by federal and local laws. In accordance with these laws, affected property owners would be compensated for their properties based on fair market values and can be provided relocation costs. See Topic 18 for additional details about potential economic and environmental impacts of the Red Line Extension project.

13. Alternatives Analysis Public Involvement Process and Format

General Comment:

Does the public involvement process for the Red Line Extension Alternatives Analysis study allow individuals to have a voice in the decision in the corridor selection? Is all the information (evaluation criteria, etc.) available to the public?

Pertains to Specific Comments:

5, 54, 82, 87, 96, 97, 99, 104, 105, 106, 143, 145, 146, 147, 148, 168, 174, 179

Response to Overall Category Comment:

Public involvement is a key component of this process. The outreach has already begun including a community stakeholders meeting with representatives and leaders of various community groups throughout the study area. We also have met with all the elected officials and reached out to all the aldermen representing the Red Line Extension study area and adjacent areas. Many of the state representatives and senators from the area have been given a briefing on this presentation. Meetings also included faith- based organizations, other community organizations, and city and state agencies such as the Chicago Department of Transportation, Illinois Department of Transportation, Regional Transportation Authority, Metra, and Pace. If your organization would like to be included in the stakeholder's meetings please contact Darud Akbar, CTA Government and Community Relations at dakbar@transitchicago.com.

The public involvement process for the Red Line Extension Alternatives Analysis study also includes a total of six public involvement meetings, two each at the conclusion of the Screen 1, Screen 2, and Screen 3/LPA analyses. The Screen 1 meetings were held at Chicago State University and West Pullman Public Library. Meeting locations for Screen 2 and Screen 3 have not yet been determined nor have the dates. The meeting locations must be close to public transit and accessible to people with disabilities. Suggestions for meeting locations may be sent to Darud Akbar, CTA Government and Community Relations at dakbar@transitchicago.com.

Meetings are announced through ads in neighborhood newspapers and publications as well as public alerts on CTA trains and buses, at rail stations, on the CTA Web site, and distributed to print and broadcast media via news releases.

The format of the meetings included groups of presentation boards containing detailed information on each area of analysis in the study, where individual conversations between the public and project staff knowledgeable about that area of analysis could take place. The public meetings also included a community presentation that provided information in a slideshow format led by the study's project managers (available at www.transitchicago.com). Meeting attendees were requested to submit questions and comments in a written format. CTA's goal in emphasizing written questions and comments has been to ensure everyone's thoughts are collected and reviewed, rather than only those individuals who might choose to speak publicly at a meeting or monopolize available time thus precluding others from voicing their questions and comments. The intent has been for everyone to have an equal opportunity to participate in the process. In addition, by reviewing and responding to similarly worded questions, the presenters efficiently addressed multiple individuals at once and avoided repetition during the public meetings. CTA and the consultant team staff have also been available to answer any individual questions on a one-on-one basis following the general question and answer period at each meeting.

The written comments received at the public meetings and other detailed comments submitted subsequently are being answered individually for the record in the format of this document, which will be made available publicly on the CTA Web site, by email to public meeting participants, and in hard copy by written request. All of the comment cards and other written communications (primarily emails) will collectively become part of the evaluation process and will be submitted to the Federal Transit Administration as a part of the official documentation for the Alternatives Analysis study.

Other Specific Comments on this Topic:

Comment:

10. Will representatives come out to groups to provide a presentation?

Response:

Presentations can be scheduled by contacting Darud Akbar, CTA Government and Community Relations at dakbar@transitchicago.com.

14. Funding of Red Line Extension Construction and Operations

General Comment:

How will the construction and operation of the Red Line Extension be funded? How much funding for this project has already been received by CTA? How much with the project cost?

Pertains to Specific Comments:

12, 13, 53, 87, 144, 156, 161, 163

Response:

The Red Line Extension will seek approval and funding for construction from the federal government through the Federal Transit Administration's "New Starts" grant program. This program provides funding for major public transit infrastructure projects throughout the U.S. For projects that ultimately receive a "Full Funding Grant Agreement," the federal government typically provides 50% or more of the project's capital costs. State and local funds comprise the remainder. Other sources may also be used to provide funding for the project, but the federal New Starts grant program is the program most capable of supporting transit projects of this nature. Securing a New Starts grant requires the project to be evaluated as part of a nationally competitive process.

To secure the federal New Starts funding, matching funds of at least 20% are required from non-federal (i.e., state and local) sources. From 2000 through 2004, the Chicago region's matching funds came from the State of Illinois through the Illinois FIRST legislation. The Illinois FIRST legislation expired on June 30, 2004. Since that time, CTA has been working with the Illinois Legislature to enact a replacement to Illinois FIRST and ensure that all future federal transit funds available to the Chicago region can be utilized.

Estimates of the Red Line Extension capital costs will depend on route and alignment and will be prepared during the second and third analysis phases, or Screens. Once the line is built and operational, the funds to operate the system will come from fare revenue as well as local and state funding sources, consistent with the funding mechanisms that support CTA's current bus and rail transit services.

At the present time, CTA only has sufficient funding to initiate this Alternatives Analysis study; it has received no federal funding for completing the remaining steps involved in planning, designing, and constructing the Red Line Extension project. Although the project was listed as "eligible" to receive federal funding in the SAFETEA-LU legislation of 2005 (see Topic 4), no funding for environmental analysis, preliminary engineering, final design, or construction of this project has been appropriated by the U.S. Congress (nor the Illinois State Legislature) at this time.

Other Specific Comments on this Topic:

Comment:

11. If non-federal funds were used, would this project move faster?

Response:

It is possible to build a major transit improvement such as the Red Line Extension without using any federal funding. Due to the high cost of this type of project and the limited availability of non-federal (i.e.,

state and local) funds seeking federal support is desirable. If sufficient state and local funds were identified so that no federal funding would be needed, there may be some time savings from avoiding federal requirements. This time savings may be limited – the project development process would still include similar steps. The Alternatives Analysis step remains a prudent planning process to ensure that the proposed public investment is best suited to addressing the identified purpose and need. Environmental studies will still be required per state and local laws, and the duration of design and construction steps would not change significantly due to a change in funding sources.

15. Potential Red Line Extension Impacts on Existing CTA Services

General Comment:

How would the Red Line Extension impact current CTA services, both during construction of the new service and ultimately during operation of the new service?

Pertains to specific comments:

88, 94, 123, 124, 137

Response to Overall Category Comment:

While the specifics of construction staging and the exact route of the Red Line Extension have not yet been established, a general guideline is that impacts to existing transit services must be minimized during construction. Bus reroutes are possible on paralleling streets through much of the study area.

The structure of existing bus routes in the study area may be changed to complement new high-capacity transit service. Depending on the specific route of the high-capacity service, the number of routes feeding into the 95th Street Red Line station may be reduced, which would reduce congestion in and around this facility.

16. Potential Red Line Extension Connections with Existing Regional Transit Services

General Comment:

Will the Red Line Extension connect with existing CTA and Metra lines? Will I be able to transfer from one service to another?

Pertains to specific comments:

20, 58, 74, 76, 83, 107, 108, 124

Response to Overall Category Comment:

A key goal of the Red Line Extension is to utilize and integrate existing regional transit infrastructure to the greatest extent possible. CTA's bus and rail lines, Metra's commuter rail lines, and Pace's suburban bus services are interrelated. The Red Line Extension will be designed to establish and maintain convenient connections between transit services it intersects. In the Alternatives Analysis study, suggested connection points between the Red Line Extension, CTA bus and rail lines, and Metra commuter rail lines will be identified. In particular, opportunities may exist to develop new connections between the proposed CTA Red Line Extension and the Metra Rock Island District, Metra Electric District and/or the NICTD South Shore Line commuter rail systems, possibly at either existing Metra stations or at new station locations. Similarly, opportunities for connections between the CTA Red Line Extension and Pace bus services will also be explored. These connection possibilities will be further described and analyzed in Screen 2 and 3.

While transit integration is a key goal of the project, regional transportation integration of multiple modes is also a priority. As a part of the Alternatives Analysis process, CTA meets regularly with its counterparts at Metra, Pace, RTA, the Chicago Department of Transportation, the Illinois Department of

Transportation, and the Chicago Metropolitan Agency for Planning to promote coordination within all components of the region's transportation network. The Red Line Extension's Purpose and Need includes effectively managing future traffic growth in the study area. The CTA seeks opportunities to connect with other transportation elements as opportunities permit.

Other Specific Comments on this Topic:

Comment:

47. If the goal is to improve transit, why not increase frequency of Metra services on both sides of corridor and restructure east-west bus service connections without major capital projects?

Response:

Opportunities for changes or improvements to the existing Metra commuter rail service and CTA bus services within the corridor will be evaluated in detail during both the Screen 2 and 3 processes. These types of "lower capital cost investment" opportunities will be considered within the no-build and TSM alternatives described in Topic 6, as well as in conjunction and coordination with other more capital intensive options.

Comments:

51. Can you explain the intermodal modes at 130th and UPRR?
52. Is Intermodal transfer being evaluated at 130th and the Metra Electric Line on the Michigan Avenue Alternative?

Response:

The study area and alignments under consideration have locations where significant intermodal interchange facilities could be built. For example, at Michigan/Kensington a number of local bus routes could interchange with high-capacity transit service (regardless of the technology selected). As noted in a previous response, it is also possible that Metra's Southeast Service might operate over the UP alignment, and so also serve this intermodal facility. At 130th/Bishop Ford, a similar bus interchange is possible, which could also include a South Shore Line interchange station. For various corridor alternatives, an intermodal facility is also possible at 130th and the Metra Electric District (MED) Line, although a new 130th Street MED passenger station would need to be constructed.

17. Potential Red Line Extension Parking Facilities

General Comment:

Will parking facilities be proposed and where will they be located?

Pertains to specific comments:

2, 6, 21, 107, 108

Response to Overall Category Comment:

Parking facilities associated with the proposed transit improvements in the study area are considered along with station locations. The amount of parking to be constructed is determined by forecast station usage. Proposed station locations will be addressed in the Screen 2 process. At that time, the location of each station, the area served, and proximity to major arterials and/or highways will determine whether parking is recommended at each station. If parking is determined to be advantageous at a proposed station, patronage forecast for those stations will determine the number of parking spaces and the type of parking facility required (e.g. parking lot, parking garage).

18. Potential Red Line Extension Economic and Environmental Impacts

General Comment:

What will be the economic and environmental impact of the Red Line Extension? What will be the community and economic benefits of the Red Line Extension?

Pertains to specific comments:

25, 27, 36, 48, 64, 74, 75, 77, 84, 102, 109, 112, 114, 115, 126, 127, 130, 134, 140, 142, 152, 154, 155, 159, 169, 171, 178, 180, 181, 199, 202, 203, 205, 207, 208

Response to Overall Category Comment:

An Environmental Impact Statement (EIS) will analyze in detail the social, economic, and environmental consequences and benefits of the proposed Red Line Extension. The environmental review process required by the *National Environmental Policy Act* of 1969 (NEPA) and related laws includes environmental impact analyses and the preparation of documentation for public review. Per FTA guidance, the environmental evaluation begins upon completion of the Alternatives Analysis study, and it will result in a detailed written statement on the anticipated environmental impacts of the Red Line Extension and the steps that will be taken to reduce any negative impacts to the community and the natural environment.

Typically, environmental reviews for proposed transit projects address the potential impact areas of air and water quality, noise and vibration, historic and cultural properties, parklands, contaminated lands, displacement of residences and businesses, and community preservation. During the federal environmental review process, the CTA will work concurrently with state and other local agencies to also comply with state and local environmental laws. See Topic 12 for additional information about potential property acquisition and impacts.

Regarding the economic impact of the Red Line Extension, FTA guidance requires an economic analysis of the Red Line Extension to be conducted as a part of Screen 3 of the Alternatives Analysis. In general terms, it may be noted that numerous transit studies suggest that transit investments result in economic development. A recently conducted study by the U.S. Department of Transportation, found that for every $1 billion invested in transit projects, 47,500 jobs are created or sustained. Specific projections for the Red Line Extension may be developed in later studies.

Other Specific Comments on this Topic:

89. What are the environmental justice impacts in the AA and why weren't they made public?
172. Presidential Order 12898 detailed environmental justice principles, will CTA include this Order while making decisions about this development?
173. How is environmental justice issues being applied to this development of transportation?

Response:

Environmental justice will be considered throughout the subsequent levels of screening. During these periods the evaluation will identify potential environmental justice situations. These will be noted and alignment and station alternatives will be modified accordingly. Environmental justice is a specific focus in the preparation of the federal environmental impact statements which will begin after the selection of the Locally Preferred Alternative.

Comment:

86. Who will get to bid on these contracts for transportation jobs?

Response:

All contract procurement will follow CTA's competitive bidding requirements open to all qualified firms. More information about CTA's competitive bidding requirements is available on the CTA web site at www.transitchicago.com.

19. General Customer Service Questions/Compliments/Complaints

General Comment:

We have some general comments related to CTA and/or CTA service.

Pertains to specific comments:

15, 33, 70, 71, 93, 95, 117, 118, 132, 138, 139, 177, 180, 182

Response to Overall Category Comment:

CTA Customer Service representatives were also in attendance at the public meetings for the Red Line Extension and were available to answer specific questions on existing CTA services and to take suggestions for improvements to those services. Many questions submitted to the Red Line Extension study team also covered these topics, which are outside the purview of the study itself. The study team notes these questions and comments for the record and has referred them to the CTA Customer Service Department for an independent response and filing through CTA's established Customer Service procedures.

Appendix C
Agency Coordination and Public Involvement

Alternatives Analysis (2006-2009)

Screen 2

- Presentation
- Exhibit Boards
- Comment Card
- Comment Database
- Comment Responses

Federal Transit Administration's
New Starts Process

Red Line Extension Alternatives Analysis Study

Schedule for Tonight's Meeting

- **Structure of the meeting**
- **Questions and answers process**
  - Submit your comments in writing on comment cards
  - Comments and questions will be grouped and answered by topic
  - All comments and questions will be addressed on CTA's website - www.transitchicago.com
  - An interpreter for the hearing impaired and a translator for the Spanish speaking community are available this evening

Screen 2 Public Involvement Process

- **Open Houses are scheduled as follows:**
  - Wednesday, December 3, 2008
    6 - 8 p.m. (presentation begins at 6:15 p.m.)
    Historic Pullman Visitor Center
    11141 South Cottage Grove
    Chicago, IL
  - Thursday, December 4, 2008
    6 – 8 p.m. (presentation begins at 6:15 p.m.)
    Woodson Regional Chicago Public Library
    9525 South Halsted Street
    Chicago, IL

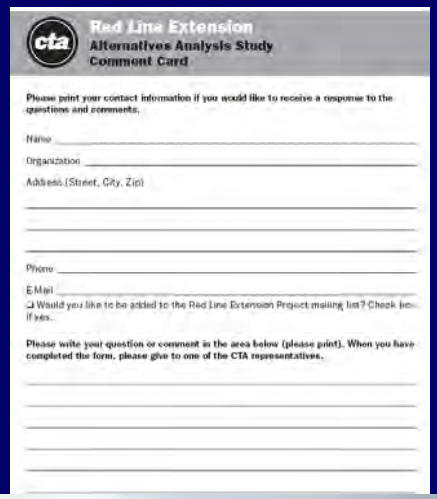
Red Line Extension
Alternatives Analysis Study
Comment Card

Please print your contact information if you would like to receive a response to the questions and comments.

Name

Organization

Address (Street, City, Zip)

Phone

E-Mail

☐ Would you like to be added to the Red Line Extension Project mailing list? Check box if yes.

Please write your question or comment in the area below (please print). When you have completed the form, please give to one of the CTA representatives.

Facilities are accessible to people with disabilities

Tonight's Speakers

- **Darud Akbar – Moderator**
  - **Chicago Transit Authority**
- **Jeffrey Busby – Strategic Planning Manager**
  - **Chicago Transit Authority**
- **Ronald Shimizu – Red Line Study Area Manager**
  - **Parsons Brinckerhoff**

Outline of the Presentation

- **Discuss Status of Red Line Extension Alternatives Analysis Study**
  - New Starts Overview
  - Screen 1 Findings
- **Screen 2 Preliminary Findings**
- **Public Involvement Process**

Status of Study

FTA's Required New Starts Process

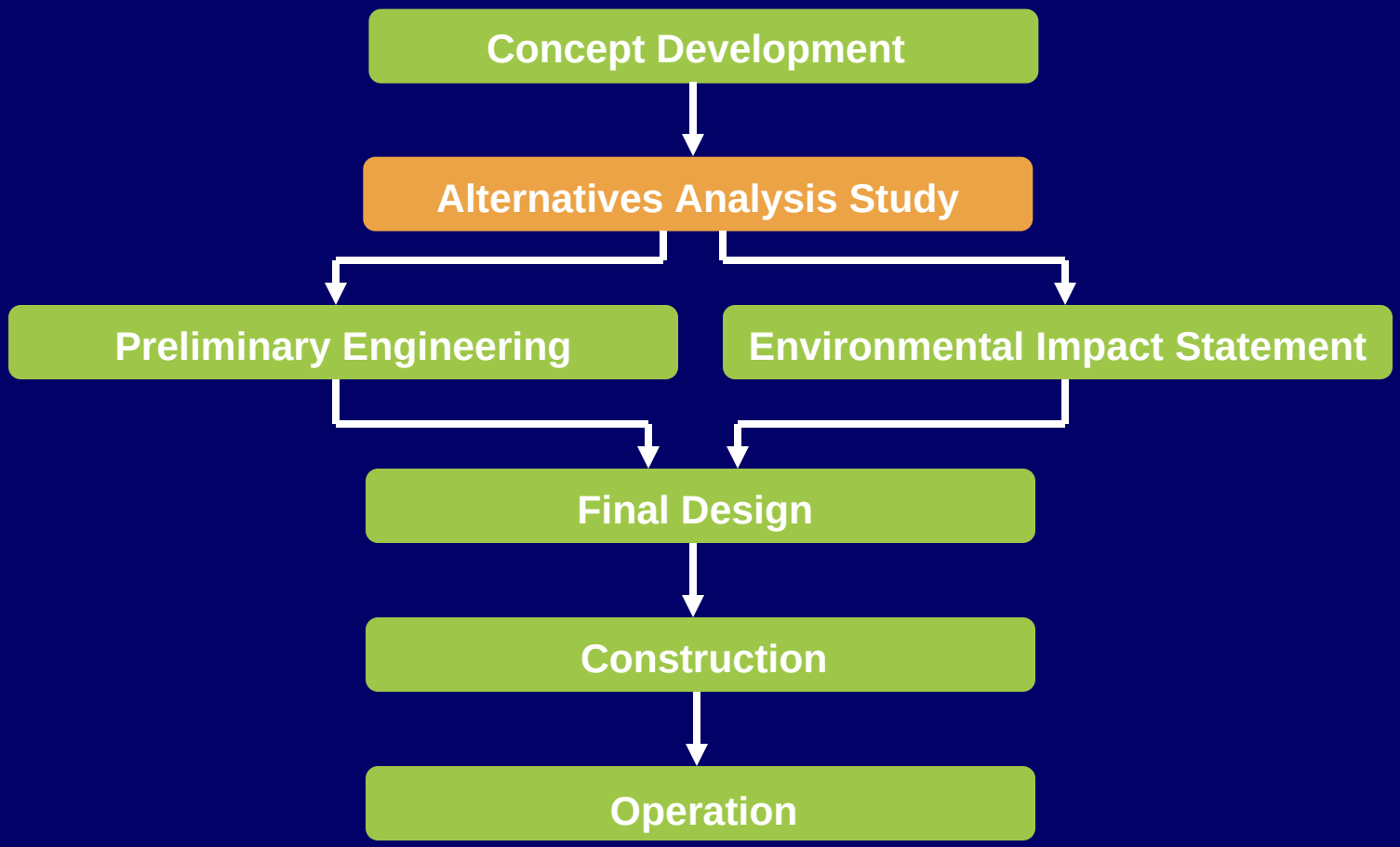

Alternatives Analysis (AA) Studies

- FTA Requirement for federal funding for transit expansion (New Starts)
- Identifies transit opportunities and ensures all practical solutions are considered
- Ensures planning is consistent among all New Starts projects throughout the country
- Provides opportunity to gather information and receive public input
- Identifies Locally Preferred Alternative

FTA Evaluation Process

The Purpose and Need is first defined, the evaluation criteria are applied, and options within the Universe of Alternatives are eliminated until, at the end of the process, there is a Locally Preferred Alternative (LPA).

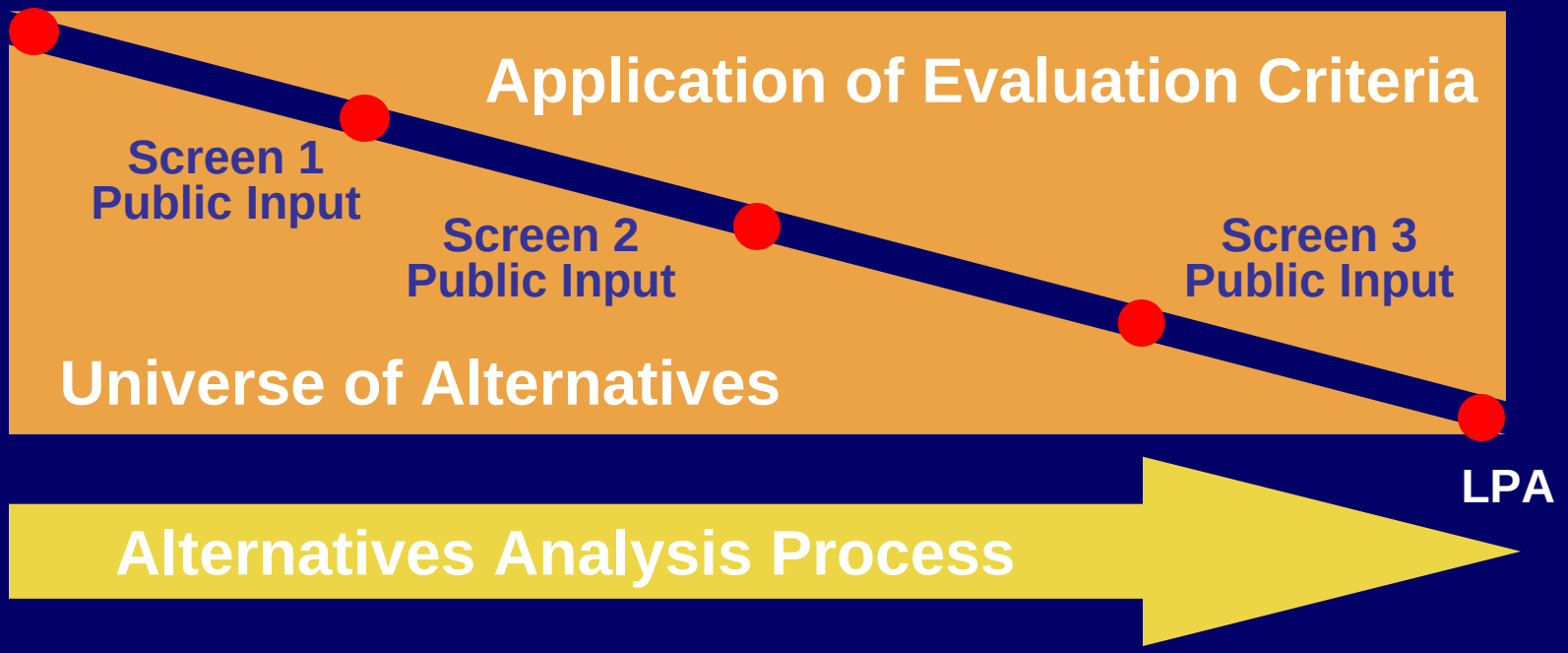

Purpose and Need

- Significant Bus and Passenger Congestion at 95th Street Red Line Station
- Lengthy Bus Trips to Access 95th Street Red Line Station
- Far South Area Residents Experience 20% Longer Commute Times than Rest of City
- Traffic Congestion is Expected to Grow along with Study Area Population and Employment

Screen 1 Process

1. Define the Universe of Alternatives
2. Evaluate all Potential Technologies
3. Evaluate all Potential Alignments (Corridors and Profiles)
4. Evaluate all Potential Combinations of Technological and Alignment Alternatives
5. Advance Strongest Combinations to Screen 2

Universe of Alternatives - Technologies

TECHNOLOGIES
Automated Guideway/Monorail
Bus Rapid Transit
Commuter Bus
Commuter Rail
Heavy Rail Transit
High Speed Rail
Light Rail Transit
Local Bus
MagLev
Personal Rapid Transit
Streetcar

Universe of Alternatives - Corridors

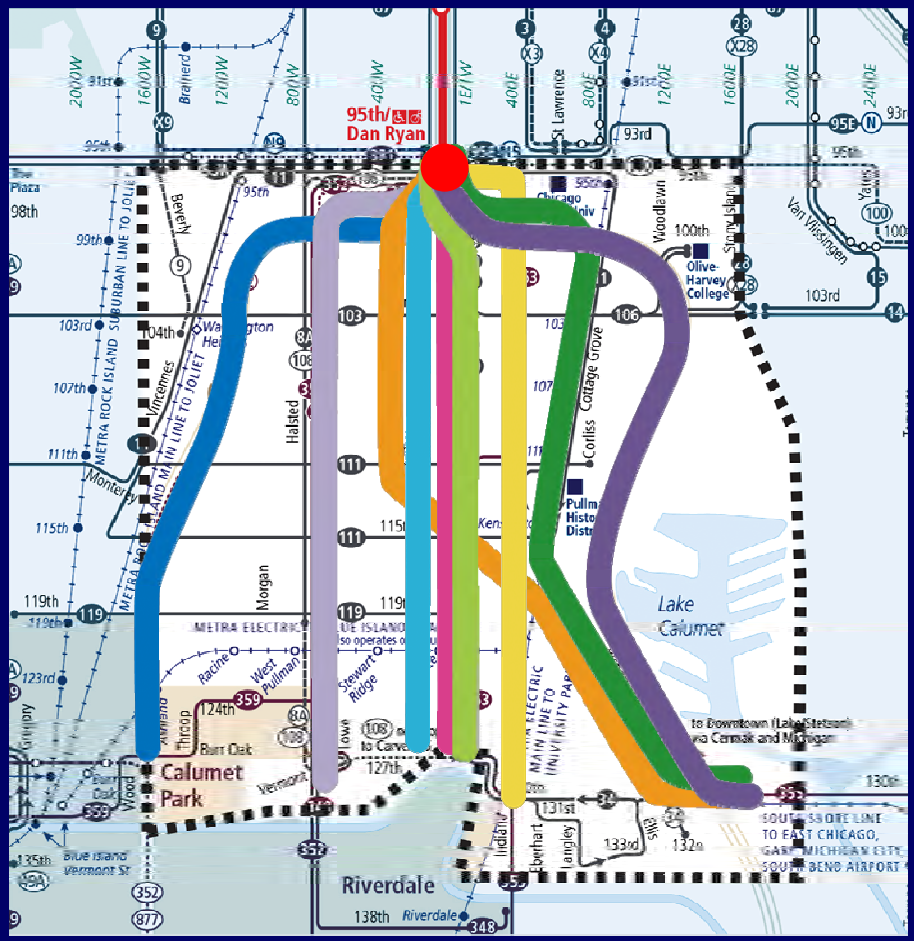

- I-57 Expressway
- Halsted Street
- UP Railroad
- Wentworth Avenue
- State Street
- Michigan Avenue
- King Drive
- Cottage Grove Avenue / Metra Electric
- I-94 Bishop Ford Freeway

Universe of Alternatives - Profiles

PROFILES

Elevated

At-Grade

Trench

Underground

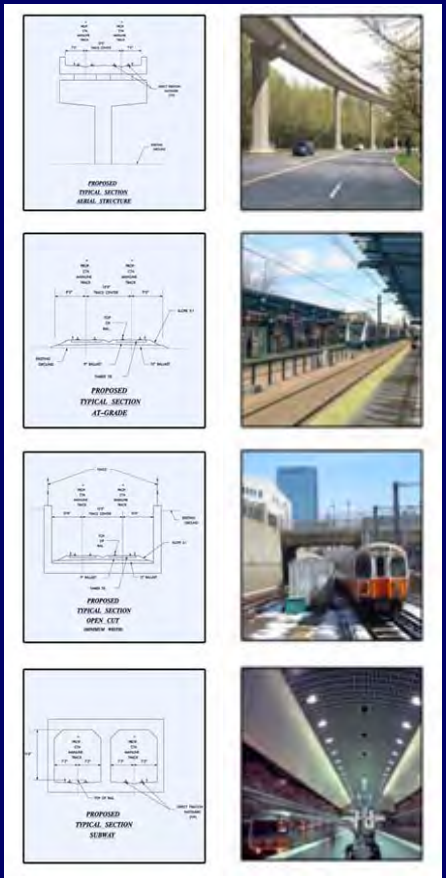

Screen 1 Evaluation - Findings

Bus Rapid Transit

Halsted Street

Michigan Avenue

At Grade

Screen 1 Evaluation - Findings

Heavy Rail Transit

Halsted Street

Elevated / Underground

UP Railroad

Elevated / Trench

Michigan Avenue

Elevated / Underground

Screen 1 Public Involvement Process

- **Two Public Meetings**
  - April 10, 2007 at Chicago State University
  - April 11, 2007 at West Pullman Branch Chicago Public Library
- **More than 140 people attended public meetings**
- **Met with stakeholders and elected officials**
- **Over 200 comments submitted and answered**
- **Significant media coverage**

Screen 2 Analysis

Screen 2 Process

- **Step 1 – Alternatives Definition**
- **Step 2 – Preliminary Evaluation**
  - Physical Constraints (Right-of-Way Requirements)
  - Social & Economic Factors (Demographics and Employment)
  - Environmental Factors (Noise, Visual, Natural and Cultural Resources)
  - Transportation Factors (Travel Time, Transit Connectivity and Traffic)
- **Step 3 – Detailed Evaluation**
  - Capital Cost Comparison
  - Operating and Maintenance (O&M) Cost Comparison
  - Ridership Potential
  - Cost Effectiveness

Step 1 - Alternatives Definition

- **Integrated the most suitable technologies, alignments and potential station locations**

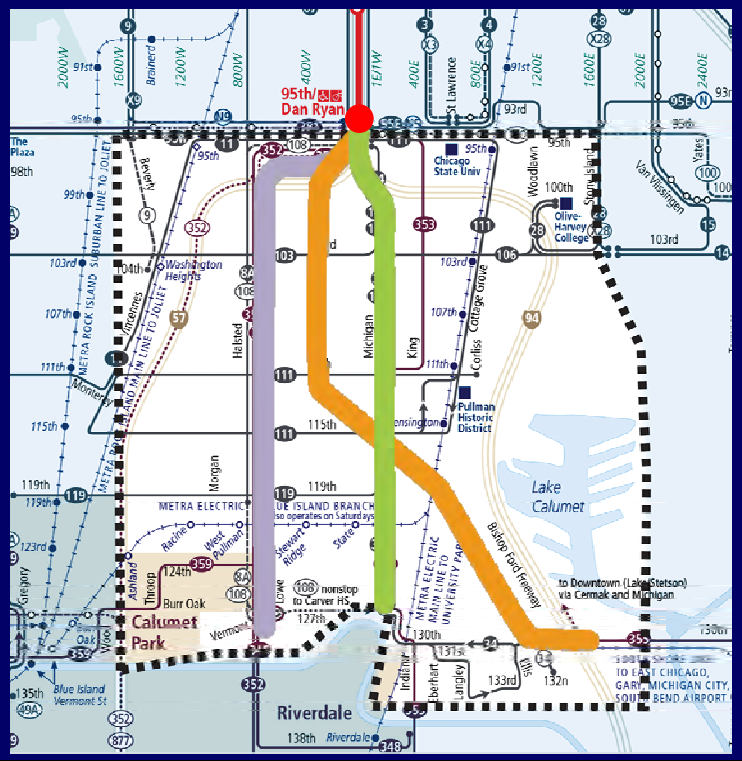

Halsted Street

UP Railroad

Michigan Avenue

Bus Rapid Transit

Heavy Rail Transit

Step 1 - Alternatives Definition

Bus Rapid Transit

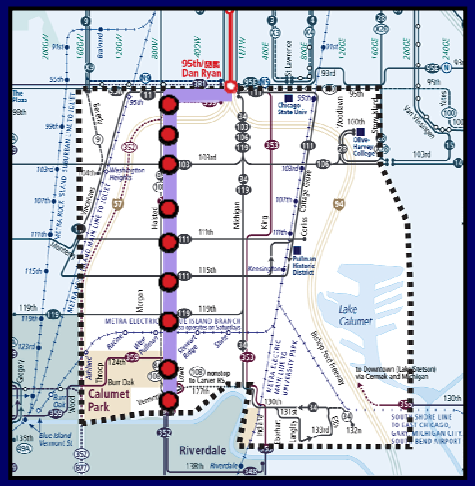

Halsted Street

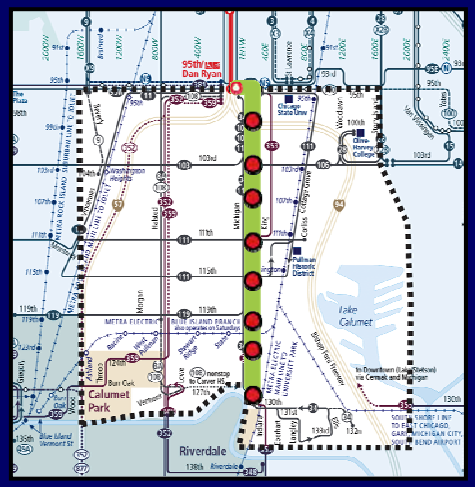

Michigan Avenue

At Grade

Step 1 - Alternatives Definition

Heavy Rail Transit

Halsted Street

Elevated / Underground

UP Railroad

Elevated / Trench

Michigan Avenue

Elevated / Underground

Step 2 - Preliminary Evaluation

Evaluation Factors

- Physical Constraints
  - Right-of-Way Requirements
- Social & Economic factors
  - Demographics and Employment
- Environmental Factors
  - Noise, Visual, Natural and Cultural Resources
- Transportation Factors
  - Travel Time, Transit Connectivity and Traffic

Step 2 - Preliminary Evaluation Preliminary Findings

- **Corridors that Meet the Criteria of the Step 2 Evaluation Process**
  - Halsted Street BRT At-grade
  - Halsted Street HRT Elevated and Underground
  - UP Railroad (UPRR) HRT Elevated and Trench
- **Corridors that Do Not Meet the Criteria of the Step 2 Evaluation Process**
  - Michigan Avenue BRT At-grade
  - Michigan Avenue HRT Underground
  - Michigan Avenue HRT Elevated

Step 3 - Detailed Evaluation

- **Projects Costs and FTA Criteria**
  - Capital Cost Comparison
  - Operating and Maintenance (O&M) Cost Comparison
  - Ridership Potential
  - Cost Effectiveness

Step 3 - Detailed Evaluation Preliminary Findings

- **Corridors that Meet the Criteria of the Step 3 Evaluation Process**
  - Halsted Street BRT At-grade
  - Halsted Street HRT Elevated
  - UP Railroad (UPRR) HRT Elevated
- **Corridors that Do Not Meet the Criteria of the Step 3 Evaluation Process**
  - Halsted Street HRT Underground
  - UP Railroad (UPRR) HRT Trench

Screen 2 Evaluation - Preliminary Findings

Bus Rapid Transit

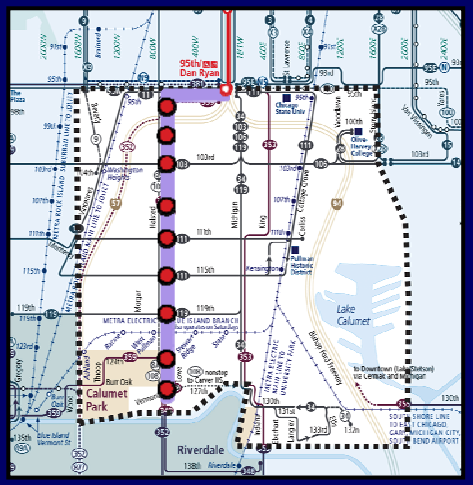

Halsted Street

At Grade

Heavy Rail Transit

Halsted Street

Elevated

UP Railroad

Elevated

Next Steps

- **Screen 2**
  - Confirm Corridor Findings
    - Incorporate comments from public meetings
  - Confirm No Build and Transportation System Management (TSM) Alternatives
- **Screen 3**
  - Detailed Baseline Alternative
  - Detailed Refinement of Alternatives
  - Identify Locally Preferred Alternative (LPA)
  - Continued Public Involvement

Public Involvement

- Sign-in cards will be used to create a contact list to send notices and updates
- Meetings announced through car cards, customer alerts, local media and contact list
- Project updates on CTA web site - www.transitchicago.com

Questions and Comments

- **CTA representatives are available to answer additional questions**
- **Written comments and questions accepted through December 18, 2008:**

Mr. Darud Akbar

Chicago Transit Authority

Government and Community Relations

P.O. Box 7567

Chicago, IL 60680-7567

dakbar@transitchicago.com

CTA Customer Service: 1-888-YOUR-CTA

TTY: 1-888-CTA-TTY1

FTA's New Starts Process

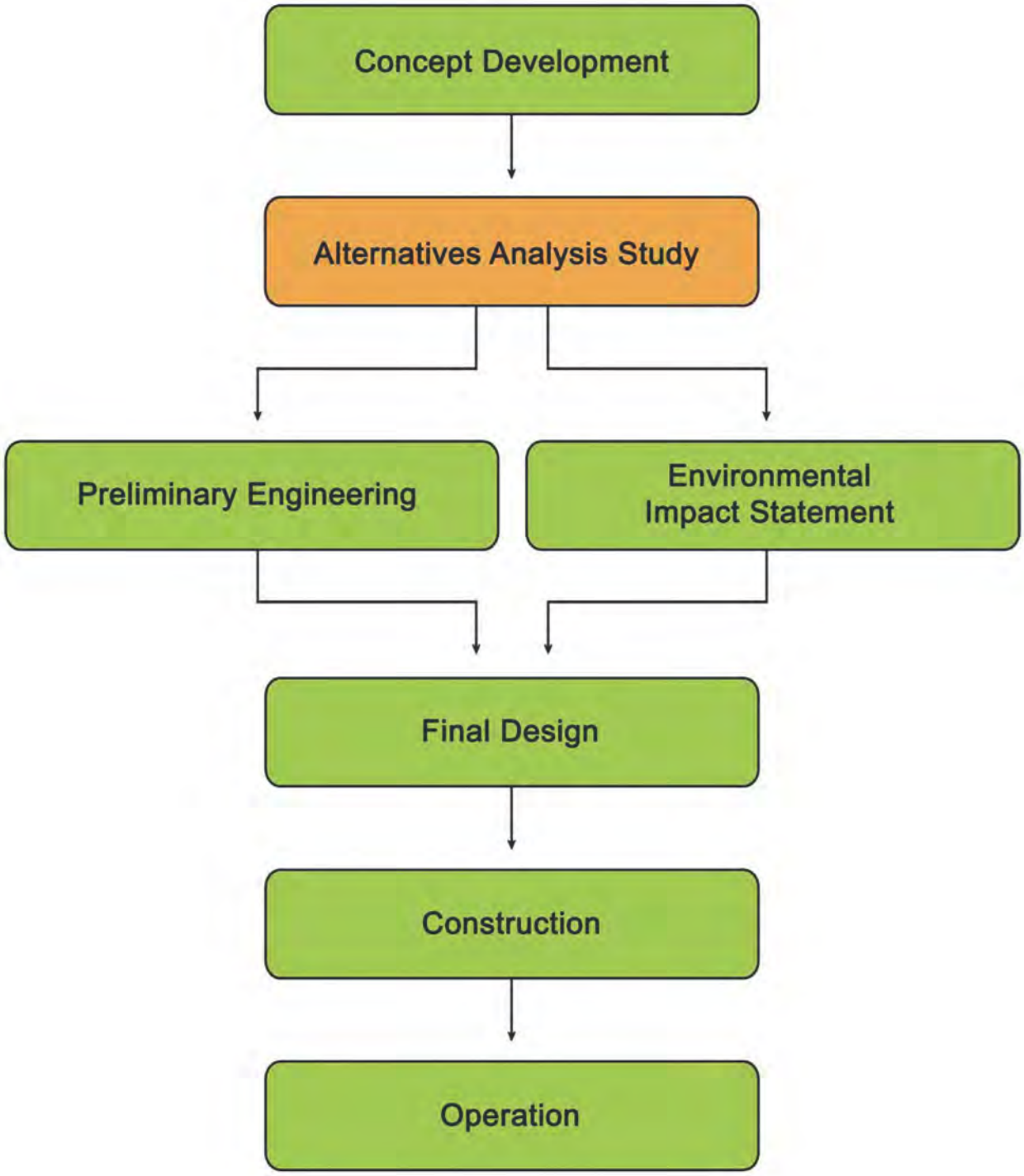

Purpose and Need

Transportation Needs

- Significant bus and passenger congestion at 95th Street Red Line Station
- Lengthy bus trips to access 95th Street Red Line Station
- Far South Area residents experience 20% longer commute than rest of City
- Traffic congestion is expected to grow along with study area population and employment

Opportunity for Improvement

- Extend rapid transit service south from 95th Street Red Line Station
- Improve access to, within, and beyond study area
- Stimulate economic development and job opportunities
- Shorten transit travel times through faster and more direct routings

Study Area

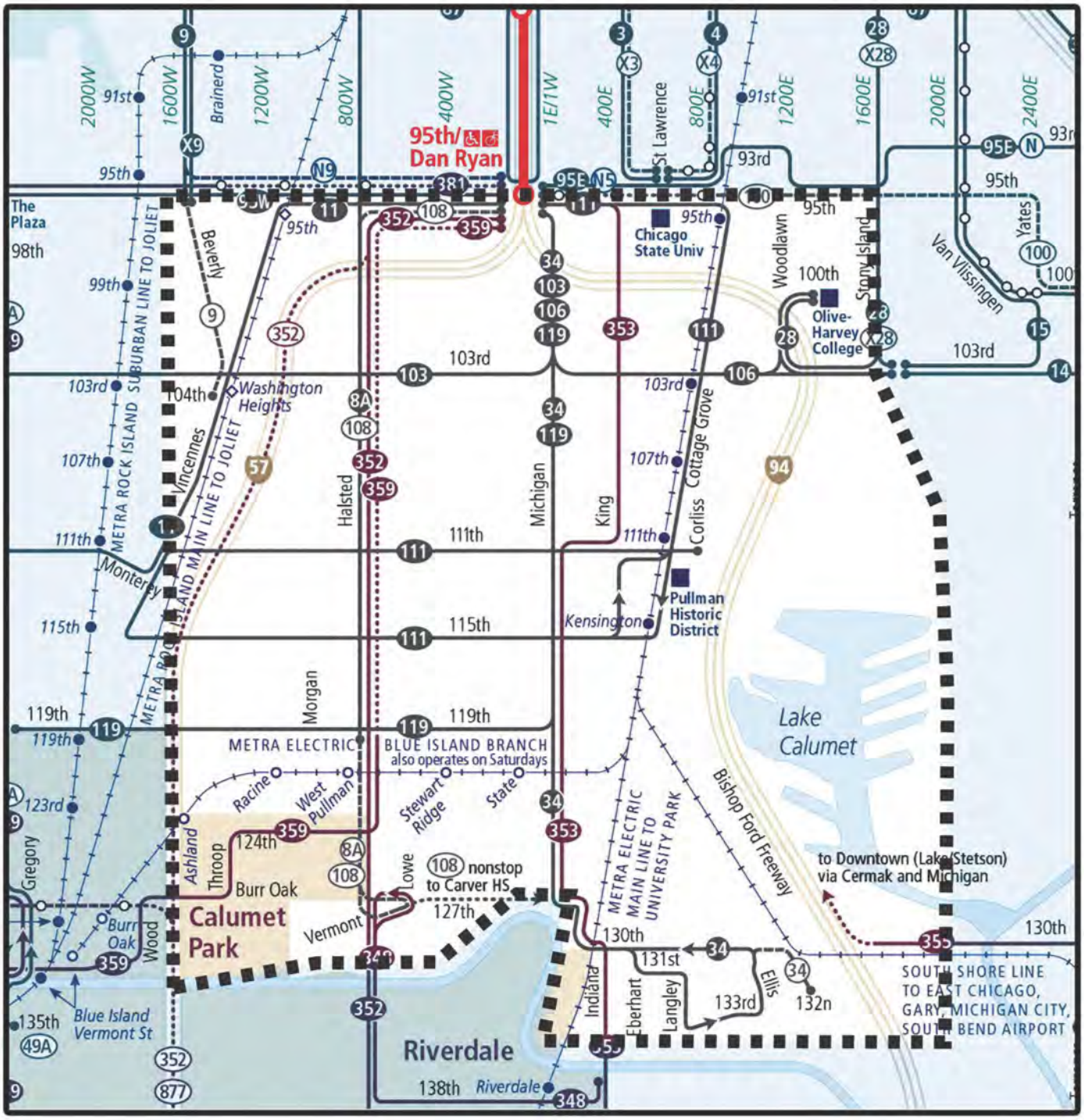

Red Line Extension
Alternative Analysis Study

Community Participation

Community participation is one of the key components of the alternatives analysis.

Community Outreach

- General Public
- Elected and Appointed Officials
- Community and Civic Organizations
- Faith-Based Organizations
- City and State Agencies

Ongoing Public Involvement/Input

- Meetings announced through public notices and advertisements
- Project updates on the CTA web site: www.transitchicago.com, accessible at local public libraries

Universe of Alternatives

Technologies

- Automated Guideway / Monorail
- Bus Rapid Transit
- Commuter Bus
- Commuter Rail
- Heavy Rail
- High Speed Rail
- Light Rail
- Local Bus
- MagLev
- Personal Rapid Transit
- Streetcar

Corridors

- I-57 Expressway
- Halsted Street
- UP Railroad
- Wentworth Avenue
- State Street
- Michigan Avenue
- King Drive
- Cottage Grove / Metra Electric
- I-94 Bishop Ford Freeway

Profiles

- Elevated
- At-Grade
- Trench
- Underground

Red Line Extension
Alternative Analysis Study

cta

Screen 1 Findings

Bus Rapid Transit

Halsted Street Corridor

At Grade

Michigan Avenue Corridor

At Grade

Heavy Rail Transit

Halsted Street Corridor

Elevated
Underground

UP Railroad Corridor

Elevated
Trench

Michigan Avenue Corridor

Elevated
Underground

SCREEN 2 - Step 1:

Alternatives Definition

Bus Rapid Transit

Halsted Street Corridor

At Grade

9 Stations / 5.1 Route Miles

Michigan Avenue Corridor

At Grade

8 Stations / 4.2 Route Miles

Heavy Rail Transit

Halsted Street Corridor

Elevated / Underground

4 Stations / 4.9 Route Miles

UP Railroad Corridor

Elevated / Trench

4 Stations / 6.0 Route Miles

Michigan Avenue Corridor

Elevated / Underground

4 Stations / 4.1 Route Miles

Corridors and stations are shown in generalized locations only.

SCREEN 2 - Step 2:

Evaluation Findings

Technology	Corridor	Profile	Physical Constraints	Social / Economic	Environ-mental	Transpor-tation	Advance for Further Screening?
Bus Rapid Transit	Halsted Street	At-Grade	O	O	+	-	YES
	Michigan Avenue	At-Grade	-	O	O	-	NO
Heavy Rail Transit	Halsted Street	Elevated	O	O	O	+	YES
		Underground	O	O	O	+	YES
	UP Railroad	Elevated	O	O	O	+	YES
		Trench	O	O	O	+	YES
	Michigan Avenue	Underground	-	O	O	+	NO
		Elevated	-	O	-	+	NO

+ Better than other alternatives O Comparable to other alternatives - Worse than other alternatives

SCREEN 2 - Step 3:

Evaluation Findings

Technology	Corridor	Profile	Capital Cost	Operating Cost	Ridership	Cost Effective-ness	Advance for Further Screening?
Bus Rapid Transit	Halsted Street	At-Grade	+	+	-	+	YES
Heavy Rail Transit	Halsted Street	Elevated	O	O	+	O	YES
		Underground	-	O	+	-	NO
	UP Railroad	Elevated	O	O	+	O	YES
		Trench	-	O	+	-	NO

+ Better than other alternatives O Comparable to other alternatives - Worse than other alternatives

Preliminary Screen 2 Findings

Bus Rapid Transit

Halsted Street Corridor

At Grade

Heavy Rail Transit

Halsted Street Corridor

T Elevated

UP Railroad Corridor

T Elevated

Corridors and stations are shown in generalized locations only.

Red Line Extension
Alternatives Analysis Study
Comment Card

Please print your contact information if you would like to receive a response to the questions and comments.

Name _____

Organization _____

Address (Street, City, Zip)

_____

_____

_____

Phone _____

E-Mail _____

❏ Would you like to be added to the Red Line Extension Project mailing list? Check box if yes.

Please write your question or comment in the area below (please print). When you have completed the form, please give to one of the CTA representatives.

_____

_____

_____

_____

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_____

Please send comments and questions to Mr. Darud Akbar, Chicago Transit Authority, Government and Community Relations, P.O. Box 7567, Chicago, IL 60680-7567. Or dakbar@transitchicago.com

Customer Information: 1-888-YOUR-CTA (1-888-968-7282)
Hearing & Speech Impaired: 1-888-CTA-TTY1 (1-888-282-8891)
Transit Information: 836-7000 from any local area code • www.transitchicago.com

Chicago Transit Authority

Red Line Extension Alternative Analysis Study

Screen 2 Public Involvement - Public Comments and Questions

February 2008

No.	Comment/Question	Received Via*	Topic Area(s)
1	What will this extension do to CTA fares? Stay the same or increase?	STK	6
2	DCP (Developing Communities Project) has been advocating for the Red Line extension for 5 years and their work has, we believe, has helped to advance & promote construction of the Red Line Extension. Community impact and input is essential.	STK	15
3	Where does Red Line Extension fall in priority for Rapid Transit capital projects in Chicago?	STK	2
4	When identifying park and ride alternatives priority to look at vacant and available land/properties. Also, the impact of the surrounding community to newly created routes should be addressed via public hearings at that stage. Opportunity for neighborhood/community consensus. Widen your reach to advertising about this project to radar newspapers and public hearings. Job creation opportunities should be promoted and give transfer periods for this project.	STK	7, 12, 13
5	Again as discussed at the meeting a job creation plan for community and minority contractors is crucial. It is imperative that communities with CTA BBE/Mowp etc begin to prepare (certify, educate community on how to enter apprentice ship positions etc) begin. It may appear to plan to be prepared for construction opportunities five to ten years out is futile, but it is not. Please use our organization to set up training sites etc.	STK	13
6	How can the alternative analysis preferred alternatives be arrived at ahead of the environmental impact analysis when one of the routes- the UP Railroad- has significant environmental issues, effecting isolated communities like Altgeld Corridor?	HPC	1, 8
7	I think that the UP Rail Extension is the best alternative.	HPC	5
8* (8-9)	Subways are cost prohibitive? Why? Are the cost constraints the CTA's or the Fed governments?	HPC	8, 10
9	Bus pollution of BRT, how will it be mitigated?	HPC	13
10	What are the transit oriented development values associated with the 3 alternatives?	HPC	8
11	What is the process by which public involvement impacts the evaluation process if arriving at the locally preferred alternatives?	HPC	12
12	Best Alternative in my view: "Union Pacific/Heavy Rail" This would provide service to S Michigan, and Altgeld, and Hegewisch- Also, potential connections to 1. Metra Electric Rail 2. South Shore Electric Rail.	HPC	5
13	I am a longtime rider of this line when it was first open I ride from 95th State Street to Davis Street in Skokie, Illinois Daily and weekends. Sunday from 95th State Street to Dividend once at 6am to 4:30. I would like to know will the extension with go out I-94 to 130th Street or I-57 to 127th Street?	HPC	5
14	Would the amount of revenue generated by the local stops on the Red Line on the South side be a faster in determining the priority of the Red Line Extension via other New Starts Projects?	HPC	2
15	Will the Red Line Extension mean significant redesign of the 95th Street stop.	HPC	14
16	When will the CTA schedule the 3rd screening?	HPC	12
17* (17-18)	When will the final choice of the route be made, and who makes it?	HPC	1, 3
18	When the federal funds become available, how long will it take to get the matching funds? Is there an expectation of getting the matching funds?	HPC	11
19* (19-20)	When will you have the final choice between the different alternatives?	HPC	1, 3
20	When will the next analysis phase meetings take place?	HPC	12
21* (21-23)	When does the CTA anticipate a third and final alternative analysis meeting?	HPC	12
22	When will you make your final choice on the alternatives?	HPC	1, 3
23	What are the CTA's plans for searching matching funding?	HPC	11
24*(24-25)	When will the Red Line extension be a reality?	HPC	3
25	Once the choice is made on the route and the funds are available, how long will it take to complete the work?	HPC	1, 3
26	When does the CTA estimate construction will begin on the Red Line Extension?	HPC	3
27	When will you make the final choice on the alternatives?	HPC	1, 3
28*(28-29)	What are the cost estimates?	HPC	10
29	Where would the yard be located?	HPC	6
30	Will the rail options include park and ride?	HPC	5, 7

31	What are the dollar amounts for the 3 alternatives?	HPC	10
32	What are CTA plans for securing matching funding?	HPC	11
33	What does the CTA believe will be the cost estimate for the 3 final alternatives?	HPC	10
34* (34-38)	What is the impact of the proposed route on economic development?	HPC	8, 13
35	Which projects are being driven by the 2016 Olympics?	HPC	15
36	When will the people have an opportunity to let you know their favored route?	HPC	12
37	What are the CTA's plans for securing matching funds?	HPC	11
38	The UP elevated alternative sounds best.	HPC	5
39	Is the Red Line- rather the advancement of the project being driven by 2016 Olympics?	HPC	15
40* (40-41)	Has CTA proposed or surveyed the communities to obtain an estimate of ridership or preferences for rapid bus or rail?	HPC	1, 9, 12
41	Has rapid bus in other areas addressed the need for rail service?	HPC	5
42	It was stated that south area passengers experience a 20% longer commute currently. With each possibility (HB, HR, UPR) what would the impact be on decreasing the commute time?	HPC	3, 8
43	I am in favor of UP Route. I think that although Halsted is wide enough, any transit additional would make traffic worst.	HPC	5
44	Will the CTA, the RTA and IDOT present the Red Line Extension as a priority project as a public works project to the new Obama Administration?	HPC	2
45	I recommend the UP route for the service it will extend to the underserved area of the far southeast side of Chicago.	HPC	5
46	We need a route that would not make it necessary to transfer at 95th but extend the Red Line to city limits.	HPC	5
47	The Halsted End of the Line will not be as to limiting morning suburban traffic/ commuters to city. End of the line using UP track would be more am to parking and limiting traffic congestion on expressway- and promote access south to shore riders. The UP line offers more options for riders and does not congest community.	HPC	5
48	good meeting	HPC	15
49	The Red Line is the most used line in the city. It would be a great help to those living far south. Many who do not drive together to work, would be a help to them. Thank you.	HPC	15
50	Comment: UP Rail- Best Solution, Halsted Rail- 2nd Best, Halsted Bus- 3rd. UP Rail - Land necessary, impact on environment, etc. This is the top alternative in my opinion.	HPC	5
51	Not exactly a comment, but so far, I wish that the proposed routing of the UP Railroad goes through.	HPC	5
52	For the Heavy Rail/UPRR option, you could end at the 130th on the west side of the Bishop Ford Fwy, thereby preserving the ability to extend further south in the future, while also fitting in a station with walking access to Carver HS & Altgeld Gardens and a transfer station to the South Shore trains. Please see the sketch I sent to CTA a few months ago.	HPC	4, 5
53	This is a little specific but: would the 111/115 Pullman Route return to a "shuttle like" route whenever an alternative is chosen? As I understand, it did not travel to 95th and if so could it be extended to a 24 hour time?	HPC	14
54	Will the fare hikes have any bearing on the completion of the x-tension and is there an anticipated start date to begin construction?	HPC	3, 6, 11
55	What are ridership estimates for the UP Railroad and Halsted route? If ridership estimates have not been done, when will the estimates be done? When will ridership estimates be made public?	HPC	9
56	What are the socioeconomic factors taken into consider for environmental impact analysis?	HPC	8, 13
57	What percentage does socioeconomic impact carry in evaluating routes?	HPC	8, 13
58	What weight does access of isolated communities, like Altgeld Corridor have in evaluating alternatives?	HPC	8, 13
59*(59-61)	Of all projects considered, where does the red line prioritize? 1st, 2nd, 3rd, or 4th? What are the parameters that determine priority?	HPC	2
60	More buses will not help because decrease in funds will decrease bus service.	HPC	5
61	What are the costs of the three proposals?	HPC	10
62	Concept Development Alternative Analysis Study Preliminary Engineering Environmental Construction	WCPL	15
63	Send a copy of presentation and boards.	WCPL	12

64* (64-67)	When will there be a third and final Alternative Analysis meeting?	WCPL	12
65	When will the final choice be made?	WCPL	1, 3
66	Are there any ridership projections for the suggested alternative routes?	WCPL	9
67	How is funding for capital projects obtained?	WCPL	11
68	Are 4 stations along the Red Line Extension Heavy Rail alternative really enough stations to alleviate congestion and promote increase usage of the Red Line? Would it really help the South Side Communities?	WCPL	5
69	Sounds good, where will you get the money?	WCPL	11
70	Why not extend the red line further south to 130th St on Halsted?	WCPL	5
71	Is the land at 127th Street for a new longer train yard?	WCPL	6
72* (72-74)	The UP certainly seems most feasible. It is the most cost effective since the tracks are already there?	WCPL	8
73	How does the Red Line extension compare with other extensions in the city, i.e. circle, orange, etc. Is the Red Line #1? If not why not?	WCPL	2
74	Halsted BRT and UP HRT should both be utilized.	WCPL	5
75	What effect does the Canadian National's RR purchase of the EJ&E RR and subsequent rerouting of freight trains in suburban & city areas have in the final consideration?	WCPL	15
76	The Red line extension is a great idea but will the extension increase the cost for the rider in the city?	WCPL	11
77	Any Bus alternative will add to the congestion would be heavy rail (UP) tracks either elevated, or trench (ideally subway).	WCPL	5
78* (78-79)	I believe that the UP route for the red line extension is the best one.	WCPL	5
79	Is it true that the greatest financial benefit to the CTA would be through the selection of the UP route even though the initial cost might be more?	WCPL	10
80	I choose one of the red line extension is UP Railroad corridor because it connects with bus routes and other train stations. Please try to make the red line extension easy for the people and run on time.	WCPL	5
81	A Referendum was voted on in 2004 by @ 38,000 residents impacted by the Red Line Extension. The locally preferred alternative/the UP line is by far the best, most expedient, most beneficial to the most people, including seniors, and the disabled.	WCPL	5
82	What is the reasoning behind imposing an additional bus line on an existing bus line?	WCPL	5
83	The UP route provides transportation in the area where there is no existing public transportation, this being more accessible to more underserved people.	WCPL	5
84	I was in Boston in the fall of 2007 and rode their Green Line. It was an Articulated Hybrid Bus with the only difference being a Power Pole attached. It opened on an Express Busway. It took me from Boston Logan - Boston Amtrak in 15 minutes. I see an Electrified High Speed Bus way as a LOW COST Alternative Red Line Extension. Agree or Disagree	WCPL	5, 10
85	The city has spent money beautifying Halsted St. The elevated tracks would make the street darker and make it more unsafe looking and who would go underground in Roseland? There are churches in the area & schools what about noise especially on Sundays and street crossings?	WCPL	5, 13
86	Would like to get a hard copy of the power points presentation from both tonight and April of 2007 sent to me or made available for pick up at CTA Headquarters Lake Jefferson.	WCPL	12
87	I'm totally against the red line coming down Halsted.	WCPL	5
88	What exactly would the TSM be for the Red Line Study?	WCPL	8
89	What is the Baseline Alternative, and does not the BRT come closest to the Baseline alternative?	WCPL	8
90	What are the developments of the 3 final alternatives?	WCPL	5
91	How much displacement of residential housing and businesses do each of the options call for?	WCPL	13
92	Why exactly was the trench option for the UPRR HRT not recommended? Would the UPRR tracks really need to be in the trench as well?	WCPL	5, 10
93	Why was underground Heavy Rail for the UP route shot down?	WCPL	5, 10
94	UP Line? Can this line (track) be elevated? Along with existing track?	WCPL	5

95	Have there been examples of elevated rail over existing rail right-of-ways like to UP Railroad? The elevated would be constructed over the freight and Metra rail line.	WCPL	5
96* (96-99)	Since the Federal Government and the CTA are aware of the economic and social benefits that accrue around transportation projects, how will those issues be measured in deciding on the locally preferred route?	WCPL	8
97	Why has it taken decades to get this far with the red line extension, while other lines got completed in relatively short periods of time?	WCPL	3
98	Why has service to suburbs (north and west) received greater attention than service south of 95th?	WCPL	2
99	I highly recommend the UPRR route for the benefits to community.	WCPL	5
100	How important is resolving the train yard congestion at 98th as a factor in choosing the LPA?	WCPL	3, 6
101	How much does existing congestion on Halsted factor into evaluating the BRT option for Halsted?	WCPL	8
102	Comment: Just wondering what interface would be created between bus and rail at 95th, since this intersection is already heavily congested. Would Bus Rapid Transit keep the same schedule as the Red line? 24 hour service? What intervals or headway would BRT have? Same as Red Line? Would bus lines be rerouted as a result of implementing BRT. BRT & Heavy Rail- Median of Halsted? How to keep pedestrians & transit patrons safe? Similar to Day Ryan.	WCPL	6, 13, 14
103	Will the Extension of the Red Line cut the time of getting to your destination on time because the commit time is disgusting.	WCPL	8
104	What are the TOD values of the 3 alternatives?	WCPL	8, 13
105	What kind of support facilities are planned/proposed for New Stations? Will any of the Stations have "park and ride" facility? How many? Will passenger facilities (stations) have stores or stands? Is there any proposed construction for area adjacent to stations? Will only currently owned property be used? (for expansions)	WCPL	5, 7
106	Are the plans/proposals available to the public via CTA website?	WCPL	12
107	Where are your handouts?	WCPL	12
108	What is the CTA doing to obtain funding for its capital projects?	WCPL	11
109	The UP route seems to be the best route for the Extension.	WCPL	5
110* (110-112)	I'm addressing this letter to you about transportation expansion in the city of Chicago. My first issue I would like to talk about is the extension of the CTA Red Line. I think this service improvement is completely necessary, but I think it should be implemented in another form. Instead, I think service levels on the Metra Electric line should be increased to levels comparable with the proposed extension. When the name Metra is mentioned many people think of diesel locomotive pulling a string of cars behind it. However, this is not the case on the Metra Electric line as the name implies. With the electric power comes greatly increased acceleration power and lower operating costs due to not having to pay for diesel fuel. Electrical power is also quieter and pollution free compared to diesel locomotives. These are common characteristics that are shared with CTA trains and even though they are incompatible electrical systems, electrical power is necessary for increased service levels. This brings me to another point- no new cars would be necessary for the increased service levels because Metra has a large stockpile of cars that are used for the extremely frequent rush hour services. These	EMAIL	4
111	Also, the Metra line largely parallels the proposed route of the CTA extension. What would happen as a result is that these two lines would be competing for passengers which is not desirable in any business environment. Metra Electric ridership will decline because in 1969 when the CTA Dan-Ryan line was built ridership between 75th and 111th street stations declined 75%.[1] In addition, Metra Electric stations are far closer together than the CTA Red Line. This may be a little inefficient, but it is a convenience for riders and is a lot better than putting two lines right next to each other like the CTA is proposing to do. To resolve the issue of bus congestion at the CTA 95th station is very easy. If half of the buses were rerouted to nearby Metra stations (which many are closer to the bus routes) the issue would be solved. In addition, the plan of increasing trains on the Metra Electric could be implemented almost immediately compared to the years it will take to build the Red Line extension. Furthermore, the Red Line extension will be extremely cost prohibitive due to the soaring materials costs, acquisition of cars, and operating expenses. If you supported the implementation of the Met	EMAIL	4

112	I also wanted to give you an example of where a similar plan is being put into action. The location is London, and they are creating the Over ground Network. Most people would agree that London is light years ahead of the U.S. when it comes to public transportation, and the planners in London came to a startling conclusion. They realized that it was extremely expensive to build new subway lines, so they took commuter train lines, increased their frequency, and rebranded them into the Over ground network. This is essentially the same thing I'm proposing for the Metra Electric line without the rebranding. So basically, if train frequencies are increased on the Metra Electric and the CTA Red Line extension is not built, it will provide the same service to the taxpayers' of Chicago immediately with much less of their money being spent. I hope you take my suggestions into consideration.	EMAIL	4
113	Can "A" & "B" stops come back to the red line. Along Halsted St. or Michigan Ave, will the elevated be over the street like Lake St. or an adjacent alley?	USPS	5, 6
114	I believe you are making a mistake by considering only linear two-way travel extension options. A one-way loop extension at the end of an existing two-way mainline offers many advantages over a two-way linear extension. Attached is a proposal for a 10 mile long single track loop Red Line south extension. This extension would cost about the same as a two-way 5 mile long extension. But it's ten stations would make the Red Line accessible by walking to twice as many residents of the area as any of the nine two-way alternatives in your study. Note that: For a one-way loop extension compared to a two-way line with the same number of added stations: some trips take longer; but others are quicker. (see attached hypothetical example) One-way loop allows: Single side stations: no crossover structures, Use of narrower existing ROWs, Fewer cars ands operators and power consumption Let me know if you have any questions. Thanks you for your consideration. Sorry I am making my suggestion so late in your process. *Two documents attached	EMAIL	5
115* (115-116)	I can bloody well understand why Michigan Avenue was quashed south of 95th Street. In fact, I was wondering how trolleys plied Michigan Avenue in the olden days, in the first place! But just as most of the Green Line runs along alleys west of Calumet Avenue, and/or east of Prairie Avenue, couldn't a viable Red Line Extension use alleys west of Michigan Avenue, or is the environmental impact (noise) too great to make that an option this time around? Incidentally, I thought I could submit an idea to use Eggleston Avenue for a High Speed Electric Bus way-complete with overhead wires from 95th Street south to 127th and Indiana. But there were misgivings about doing that versus extending the rail portion.	EMAIL	5
116	Also: Has anyone thought about expanding the 95th Street Terminal for auto parking and bus marshalling using the air rights over the Dan Ryan Expressway?	EMAIL	5, 14
117	Thank you for the opportunity to voice my support for the Red Line extension to 130th/Altgeld. I have been attending meetings concerning this for at least 2 years. I continue to support the progress that has been made and I support the UNION PACIFIC ROUTE. This project would provide jobs, new business and a new mode of transportation for many residents. This extension is really needed. I am a regular rider on the Red Line and I would love to be able to have the additional stops. Thanks and keep me on your list for information regarding further developments.	EMAIL	5
118	I'm writing to inform you of the importance of the CTA Red Line. If extended to Altgeld Gardens it would help low-income families as well as our high school students who work. Please consider others when making your decision.	EMAIL	5
119	Please add me to your mailing list for the Greater Roseland Red Line Extension Project. Thank you.	EMAIL	12
120	This email is to indicate my families support of the Red Line extension and the support for the Union Pacific Route be used for the CTA Red Line Extension. The extension of the Red Line is long over due. The Roseland, Morgan Park, Altgeld neighbors were told this extension would happen when I was in grammar school I am now over 20 years in the working world and the extension is still talk. The extension of the Red Line is needed currently it takes two buses and over an hour just to get the 95th Street to board the Red Line.	EMAIL	5

121	I have been riding the Red Line from 95th Street to 4700 North for over 1 year now and I live near 115th and Halsted. The Red Line extension would benefit me and so many other CTA Red Line Riders. We could save time and money if the Red Line is extended to 130th Street. Please move on the Red Line riders behalf and get the extension plan moving a little faster. We have been meeting for over 3 years about this extension and what ever the riders and supporters of the Red Line extension need to do we will do.	EMAIL	3
122	I am writing to encourage you and others to extend the CTA Red Line from 95 Street to 130/Altgeld Gardens. Having lived in the south suburbs for almost 20 years, I know the frustration of not being near a CTA line and the extra time it takes to get to and from work. With over 40,000 people catching the El at 95th Street, I understand it has become the most profitable terminal for CTA. However, not so beneficial for a considerable number of those individuals who make up the 40,000 because they must first drive a long distances (from Altgeld, Riverdale, Dolton, South Holland, Calumet City) to take advantage of this mode of transportation. Extending the Red line could alleviate some of the burden of trying to find parking around 95 Street and then trying to get to work on time. An extension of the line could also help to increase employment opportunities for those in areas beyond 95 and increase CTA ridership. I enthusiastically support extending the Red line to 130/Altgeld and hope you and others will move to do so quickly.	EMAIL	5
123	I am in support of the 95th Street Red Line extension because and the Union Pacific Route: The 95th Street Red Line terminal is the most profitable terminal of all CTA Rails. Over 40,000 people use the 95th Street Rail each day. Most riders have to catch buses or taxis to get to and from the 95th street stop. Altgeld Gardens is the most isolated community in Chicago. Extending the Red Line would increase employment, as businesses develop around station stops. The proposed extension would run along the Union Pacific tracks, and would include stops at 103rd Street, 111th Street, 115th Street/Michigan, and 130th/Altgeld.	EMAIL	5
124	I support the Union Pacific Route to Altgeld. I take the el train everyday and have to catch a bus from the 95th Street line. This is an important part of transportation because our area is very isolated and in the evening, very dangerous.	EMAIL	5
125	Please accept this email as support in favor of extending the Red Line from 95th street to 130th/Altgeld via the union Pacific.	EMAIL	5
126	Please accept my support for the extension of the CTA Red Line from 95th Street to 130th/Altgeld using the Union Pacific Route.	EMAIL	5
127	I am very interested in the Red Line extension. My choice is the Union Pacific line. It is often very inconvenient for me to travel to 95th Street to get to the Loop. If the Red Line is extended to 130th and Stony Island it would make it so much easier for me to get around. I would love to park and ride.	EMAIL	5, 7
128	I wanted to make sure I sent you an email to express my great support of the Red Line Union Pacific extension. I live in the Washington Heights area and think that extending the red line is a fantastic idea. I work downtown and have to drive in order to make it into work at an appropriate time. However, having the redline closer to my home would allow me to substantially decrease my car usage and provide a better commute for me everyday. There is a substantial need to have increase transportation on the south side outskirts of Chicago. The citizens in this neighborhood deserve the services just as does the rest of the city. Here are some of other great reasons that this project should proceed: The 95th Street Red Line terminal is the most profitable terminal of all CTA Rails. Over 40,000 people use the 95th Street Rail each day. Most riders have to catch buses or taxis to get to and from the 95th street stop. Altgeld Gardens is the most isolated community in Chicago. Extending the Red Line would increase employment, as businesses develop around station stops. The proposed extension would run along the Union Pacific tracks, and would include stops at 103rd Street, 111th Street, 115th Street/Michigan, and 130 Please move forward with the expansion project as this will be a positive move for both the CTA and the city of Chicago!	EMAIL	5

129	I am sending this email because I believe that it is a excellent idea to extend the Red Line to 130th. Everyone I know that rides the Red Line everyday has to catch a bus or call a cab or a family member. I'm sure that the money that is spent expanding the Red Line will be reimbursed ten-fold when the project is complete!	EMAIL	15
130	I support the extension of the Union Pacific Route which will commute people to and from 130th/Altgeld Gardens.	EMAIL	5
131	Please accept my support for the extension of the CTA Red Line from 95th Street to 130th/Altgeld using the Union Pacific Route.	EMAIL	5
* Comments were received on the same comment card			
Key to source of comments:			
HPC	**Comment received at Public Meeting held at Historic Pullman Center**		
WCPL	**Comment received at Public Meeting held at Woodson Regional Chicago Public Library**		
EMAIL	**Comment sent to CTA by email**		
STK	**Comment received at Stakeholder Meeting**		
USPS	**Comment sent to CTA by postal mail**		

Chicago Transit Authority
Red Line Extension Alternatives Analysis Study

Screen 2 Public Involvement
Responses to Public Comments and Questions

17 February 2009

Written questions and comments regarding the Red Line Extension Alternatives Analysis Study were submitted by a variety of individuals and groups from throughout the Chicago region at the study's Screen 2 Public Meetings held on December 3 and 4, 2008. In addition, public comments and questions on Screen 2 were submitted directly to the Chicago Transit Authority (CTA) via e-mail and postal mail through December 18, 2008.

All of the questions and comments have been collected and compiled to provide a comprehensive review of the issues raised along with CTA's responses. Every question, comment, and suggestion submitted during the public comment period has been compiled in the "Outreach Comment Database" (see separate document). Each question has been recorded verbatim and assigned a number that corresponds with the answers provided in this document, ensuring every question or comment submitted has been reviewed and answered or acknowledged. Collectively, the public comments and preferences will be considered in the evaluation of alternatives and concepts introduced through the public involvement process and may be evaluated and/or reflected in advancing alternatives as appropriate.

Many of the comments received were very similar in nature. As a result, similar comments and their responses have been grouped by topic and "General Comment" heading below to avoid duplicative responses. Questions or comments requiring individual or specific responses are also included below along with unique responses. In order to understand some terms used in the Comments and Responses, it may be necessary to review the original Screen 2 presentation materials which are posted on CTA's Web site www.transitchicago.com (click on News and Initiatives, then Alternatives Analysis Studies).

The list below shows the index of topics covered in the report, along with the number of comments received for each. Because comments often refer to more than one topic, the numbers associated with each do not equal the total number of comments received.

Index of Topics

1. FTA's Alternatives Analysis Process (8)
2. Relationship of Red Line Extension to Other Proposed Transit Projects (6)
3. Overall Red Line Extension Project Timeline, Purpose and Need (12)
4. Red Line Extension Study Area (4)
5. Alternatives Analyzed (50)
6. Proposed Red Line Extension Operations (7)
7. Potential Red Line Extension Parking Facilities (4)
8. Evaluation Criteria Used in the Alternatives Analysis Study (15)
9. Ridership Estimates and Related Issues (3)
10. Project Cost Estimation (9)
11. Funding of Red Line Extension Construction and Operations (9)
12. Alternatives Analysis Public Involvement Process and Format (13)
13. Potential Red Line Extension Economic and Environmental Impacts (11)
14. Potential Red Line Extension Impacts on Existing CTA Services (4)
15. Other (8)

1. FTA's Alternatives Analysis Process

General Comment:

Please describe the Federal Transit Administration's (FTA) Alternatives Analysis process and its components.

Pertains to Specific Comments:

17, 19, 22, 25, 27, 40, 65

Response to Overall Category Comment:

Alternatives Analysis has for over 25 years been a key part of FTA's decision-making process for awarding grant funding to support fixed guideway transit projects. Federal law requires that projects seeking grant funding from FTA's New Starts program be based upon the results of an alternatives analysis study and subsequent preliminary engineering. Alternatives analysis has also been a part of established transportation planning practice in the United States for several decades. At its core, alternatives analysis is about supporting local decision-making. An effective alternatives analysis answers the questions: What are the transportation problems in a corridor? What are their underlying causes? What are viable options for addressing these problems? What are their costs? What are their benefits?[1]

The Red Line Extension project is currently conducting its Alternatives Analysis study. The Red Line Extension Alternatives Analysis study will have three steps or "screens." Screen 1, completed in April 2007, issued preliminary findings regarding corridors, alignments, and vehicle technologies that should be advanced to Screen 2 for further analysis. Screen 2, just completed in December 2008, further refined the alternatives from Screen 1. These findings have determined three alternatives that should be studied further. Screen 3 will be a quantitative screening process; costs and ridership will be projected and operational questions considered. Screen 3 will result in the recommendation of a Locally Preferred Alternative (LPA) which, with FTA approval, will subsequently undergo environmental analysis and preliminary engineering.

A detailed description of the formal FTA Alternatives Analysis process is available at the Federal Transit Administration's web site: http://www.fta.dot.gov/planning/planning_environment_5221.html .

Other Specific Comments Noted on this Topic:

Comment:

6: How can the alternative analysis preferred alternatives be arrived at ahead of the environmental impact analysis when one of the routes- the UP Railroad- has significant environmental issues, effecting isolated communities, like the Altgeld Corridor?

Response:

While the formal federally mandated Environmental Impact Statement (EIS) is not completed until after the selection of a Locally Preferred Alternative, environmental issues and community impacts are considered for each corridor and technology studied in the Alternatives Analysis. The subsequent EIS phase is used to quantify both positive and negative environmental impacts in detail and develop mitigation measures where necessary. See Topic 8 for more information about evaluation criteria used in the screening process.

[1] "Additional Guidance on Local Initiation of Alternatives Analysis Planning Studies." Federal Transit Authority web site.

2. Relationship of Red Line Extension to Other Proposed Transit Projects

General Comment:

What is the relationship between the Red Line Extension and other projects being considered by CTA? Is the Red Line Extension the highest priority?

Pertains to Specific Comments:

3, 14, 59, 73, 98

Response to Overall Comment Category:

Every five to six years, the United States Congress enacts legislation that authorizes federal funding for highway, transit, motor carrier, safety, and research programs across the country. This federal support represents the primary source of capital funding for CTA and other transit agencies throughout the U.S. The current legislation, known as SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users), authorizes the federal transit and highway programs through 2009. President Bush signed the act into law on August 10, 2005.

The SAFETEA-LU legislation authorized CTA to seek federal New Starts grant support for four new rail lines or line extensions including: the Red Line Extension to 130th Street; the Orange Line Extension to Ford City; the Yellow Line Extension to Old Orchard; and the Circle Line. In order to qualify for New Starts funding, CTA is required to perform comprehensive Alternatives Analysis studies for each. Alternatives Analysis studies for all four projects are currently underway following the same federally mandated process as the Red Line Extension study, but addressing the unique transportation needs of their respective study areas.

A key objective of the Federal Transit Administration's Alternatives Analysis process is to measure all transit projects from across the nation by the same set of standards. This process ranks projects based on this measurement and not on where they are located. In this way, the benefits and costs of a project can be objectively measured in comparison to all others. Acknowledging that each project has a unique Purpose and Need, the process allows multiple projects from the same region to be rated highly. It is not unusual for a large region such as Chicago to seek approval for several major transit initiatives at the same time. In the late 1990s, CTA won New Starts funding approval for both the Cermak (Douglas) Branch reconstruction and the Brown Line capacity expansion project at the same time. Metra has also received New Starts funding for multiple projects at the same time. New York City in 2005 had two multi-billion dollar transit projects approved for New Starts funding.

CTA is preparing all of the New Starts projects to be advanced simultaneously from Alternatives Analysis with the selection of Locally Preferred Alternatives in each study area by fall 2009.

In order to qualify for federal funding, regional transportation projects must also be included in an official Regional Transportation Plan. Chicago's Regional Transportation Plan is prepared by the Chicago Metropolitan Agency for Planning[2] (CMAP) with input from local and state government agencies (including CTA), community organizations, and the general public. The plan is updated regularly and the Red Line Extension project is included in the plan. The most recent comprehensive update of the 2030 Regional Transportation Plan (RTP) was prepared in 2006 and involved extensive public outreach meetings throughout the region in May and June of 2006. A technical update of the 2030 RTP was also completed in 2008. Additional information on this plan can be found on CMAP's "Shared Path 2030" web site http://www.cmap.illinois.gov/sp2030/sp2030main.aspx?terms=2030.

Other Specific Comments Noted on this Topic:

Comment:

44: Will the CTA, the RTA and IDOT present the Red Line Extension as a priority project as a public works project to the new Obama Administration?

[2] CMAP was created in 2006 by the merger of the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC).

Response:

CTA can only speculate that the President's support for transit will be beneficial to transit and transportation systems in our nation. However, CTA is subject to the federal New Starts process that both guides prudent planning activities and determines the evaluation steps required for additional funding.

Current details of a federal stimulus plan that may include additional funding for urban transit systems suggest that funding would need to be spent in a short time frame to have the desired stimulus and jobs creation. This type of funding, as currently specified, would not be available to New Starts projects; however, CTA is reviewing details of the stimulus package and its likely impacts on the CTA. If New Starts funding were increased through stimulus measures, CTA would propose to advance progress on all of its New Starts projects into subsequent Preliminary Engineering and Environmental Impact Statement project phases.

3. Overall Red Line Extension Project Timeline, Purpose and Need

General Comment:

What is the timeline of the project and when will the Locally Preferred Alternative be selected? How long will it take from design until operation?

Pertains to Specific Comments:

17, 19, 22, 24, 25, 26, 27, 42, 54, 65, 97, 100, 121

Response to Overall Category Comment:

Fixed guideway projects are resource intensive and are rarely funded through local funding sources alone. In order to obtain federal funding for fixed guideway projects such as an extension of a rail line, the FTA developed a funding application process called the New Starts process. The FTA New Start grant program requires conceptual transit project proposals to proceed through a formal process of planning, design, and construction. Upon completion of this process, the project is ready for operation. The process involves five formal steps: Alternatives Analysis (AA); Environmental Impact Statement (EIS); Preliminary Engineering (PE); Final Design (FD); and Construction. Each of these steps typically takes 2-3 years to complete. Initiation of each step is also contingent upon continued availability of federal and local funding, the timing of which will also affect the overall project schedule. For highly complex projects the Final Design and Construction steps take longer, particularly if construction is implemented in sequential phases rather than all at once.

In the Alternatives Analysis step, the project's purpose and need is identified, alternatives to address the purpose and need are developed and evaluated, comprehensive and on-going public involvement is initiated, and a Locally Preferred Alternative (LPA) is determined. The Red Line Extension project's "purpose and need" is to improve transportation access and enhance opportunity for economic development within the study area. In particular, transportation improvements are needed to reduce the significant bus and passenger congestion at CTA's existing 95th Street Red Line station; reduce lengthy bus trip times to access the 95th Street Red Line station from neighborhoods south of 95th Street; reduce the lengthy transit commute times experienced by many residents of the study area; and more effectively manage future traffic growth in the study area. Extending Red Line transit service south of 95th Street is intended to stimulate economic development and enhance job opportunities by improving access to, within, and beyond the study area and shortening transit travel times through faster and more direct transit service.

The Red Line Extension project is currently in the Alternatives Analysis phase. The next step is preparation of an Environmental Impact Statement (EIS). In this step, potential environmental, financial and economic impacts of each alternative are identified, potential environmental impacts of the LPA are analyzed; environmental mitigation strategies are developed, public hearings are conducted to receive input, and a formal Record of Decision is received from the FTA upon successful completion. The Preliminary Engineering step involves engineering effort to support the EIS (30% design level), development of project phasing and construction staging, and feasibility review of mitigation approaches

for construction or operational impacts. In the Final Design step the engineering design started in PE is completed, capital and operating cost estimates are updated and construction drawings are prepared, and a Full Funding Grant Agreement is obtained from the FTA upon successful completion. The Construction step commences when federal and local matching funds are secured.

The current Red Line Extension Alternatives Analysis study is expected to conduct the final, Screen 3, public involvement meetings in summer 2009. Prior to these meetings, CTA will complete the quantitative analysis that will help to identify an LPA in the study area. This LPA will be presented at the Screen 3 public outreach meetings and public comments will be reviewed before CTA makes its selection final in late summer 2009. CTA anticipates completing technical work to support an LPA recommendation and submission to the FTA for project advancement in fall 2009.

Specific Comments Noted on this Topic:

Comment:

100: How important is resolving the train yard congestion at 98th as a factor in choosing the LPA?

Response:

A Locally Preferred Alternative cannot advance if it has technical or operational shortcomings without proposed solutions. However, several alternatives exist for resolving congestion at the 98th Street yard.

4. Red Line Extension Study Area

General Comments:

What are the boundaries of the project study area? How were those boundaries determined?

Pertains to Specific Comments:

52, 110, 111, 112

Response to Overall Category Comment:

A key component of the Alternatives Analysis process is specifying a study area of a definite size for the project. The goal is to establish a specific area and to define the transit challenges and opportunities within this particular space, so that potential solutions can be measured against these defined challenges. Keeping the study area focused also helps to avoid confusion between multiple unique transit project proposals within the same city or region. Too large a study area can make it too difficult to determine accurately whether the potential solutions effectively address the identified transportation needs.

The Red Line Extension study area is bounded by the current terminus of the existing CTA Red Line at 95th Street (9500S) on the north, the Little Calumet River (approximately 13400S) on the south, Ashland Avenue (1600W) on the west, and Stony Island Avenue (1600E) on the east. The study area is four miles east-to-west and approximately five miles north-to-south. These boundaries define an area with numerous opportunities for improving transit connections and growing transit market share. A key goal of the Red Line Extension is to improve transportation access and enhance opportunities for economic development. In particular, transportation improvements are needed to reduce the significant bus and passenger congestion at CTA's existing 95th Street Red Line station; reduce lengthy bus trip times to access the 95th Street Red Line station from neighborhoods south of 95th Street; reduce the lengthy transit commute times experienced by many residents of the study area; and more effectively manage future traffic growth in the study area. Extending Red Line transit service south of 95th Street is intended to stimulate economic development and enhance job opportunities by improving access and shortening transit travel times through faster and more direct transit service. The study area boundaries encompass the areas that would benefit most directly from such transit service improvements.

For more information on the details of the study area, please see the Screen 1 presentation materials available for download at the CTA's website www.chicagotransit.com as noted in the introduction to this document.

Other Specific Comments Noted on this Topic:

Comment:

We have questions relating to the —Gray Line" proposal and its consideration in this Alternatives Analysis.

Pertains to Specific Comments:

110, 111, 112

Response:

The —Gray Line" proposal calls for operational changes to increase service frequency on the Metra Electric District Line and improve CTA connections to this facility as well as fare integration between regional transit services.

Opportunities for changes or improvements to the existing Metra commuter rail service and CTA bus services within the corridor will continue to be evaluated in detail during Screen 3. These types of —lower capital cost investment" opportunities will be considered within the no-build and TSM alternatives (described in Topic 8), in conjunction with other more capital intensive options. Additionally, CTA is focusing attention on identifying possibilities to enhance intermodal interchange on the various alignments.

A proposed —Gray Line" meets some of the needs of the study area, such as reducing the lengthy transit commute times experienced by many residents of the study area. However, it will not be included as a build alternative in the current Alternatives Analysis because it does not comprehensively address all of the needs of the project, including alleviating the bus and passenger congestion at 95th Street Red Line station or reducing travel times of passengers that transfer from bus to CTA rail to access their destination. Additionally, as noted in the Screen 1 analysis (available at www.transitchicago.com – click on News and Initiatives, then Alternatives Analysis Studies) commuter rail has several characteristics that are less favorable for the study area than other modes analyzed (such as bus and heavy rail).

5. Alternatives Analyzed

General Comment in Support of UPRR Alternatives:

Many comments received support extending CTA Red Line service along the Union Pacific Railroad corridor. Additionally, some comments expressed opposition to advancing the Halsted Street Corridor or Bus Rapid Transit alternatives.

Pertains to Specific Comments:

7, 12, 38, 43, 45, 46, 47, 50, 51, 60, 74, 77, 78, 80, 81, 83, 85, 87, 99, 109, 117, 120, 122, 123, 124, 125, 126, 127, 128, 130, 131

General Comment for Various Alternatives Analyzed:

Please provide more information about the combined corridor-technology-vertical profile alternatives analyzed in Screen 2.

Pertains to specific comments:

13, 30, 52, 72, 74, 90, 94, 116

Response to Overall Category Comment:

In Screen 1, CTA evaluated potential transit corridors, vehicle technologies, and vertical profiles to determine which would be appropriate to meet the needs of the proposed Red Line Extension. From this analysis, three transit corridors (Halsted Street, Union Pacific Railroad (UPRR) right-of-way, Michigan Avenue) and two vehicle technologies (Bus Rapid Transit (BRT), Heavy Rail Transit (HRT)) were advanced. Additionally, for rail alternatives, three vertical profiles (elevated, subway, trench) were advanced and for bus alternatives, one vertical profile (at-grade) was advanced. These components were combined to create specific alternatives and in total, eight alternatives were advanced to Screen 2.

(For more information about all of the alternatives evaluated in Screen 1, see Screen 1 presentation, technical boards and public comments and responses posted on the CTA website www.transitchicago.com – click on News and Initiatives, then Alternatives Analysis Studies).

In Screen 2, two bus alternatives were evaluated, as follows: 1) Halsted Street BRT at-grade, which is proposed to travel via an exclusive travel lane right-of-way from Vermont Avenue/Halsted Street to the Red Line 95th Street terminal station; and 2) Michigan Avenue BRT at-grade, which is proposed to travel via an exclusive travel lane from 127th Street/Michigan Avenue to the Red Line 95th Street terminal station. Both of these alternatives were defined with BRT station stops proposed every half mile on their respective north-south arteries, consistent with BRT stop spacing, and no stops proposed on 95th Street. The vehicles anticipated for the BRT alternatives would be articulated buses that would be hybrid diesel-electric powered or use alternative fuels.

In addition to the two bus alternatives, six rail alternatives were evaluated, as follows: 1 & 2) Halsted Street HRT elevated and underground alternatives. Both of these alternatives would depart the current CTA 95th Street terminal station and follow the I-57 Expressway median, transitioning to either an elevated or underground structure at Halsted Avenue, where these alternatives would travel south on Halsted Street to Vermont Avenue. These proposed alternatives are both 4.9 miles long and have four station stops – at Vermont Avenue, 119th Street, 111th Street, and 103rd Street – consistent with modern rapid transit station spacing. 3 & 4) UPRR HRT elevated and trench alternatives. Both of these alternatives would follow the I-57 Expressway as it traveled south from the 95th Street terminal station until the UPRR corridor, where it would turn south to follow the corridor. The UPRR corridor travels south to approximately 111th Street, and then travels southeast until the proposed terminal location at 130th Street near the I-94 Bishop Ford Freeway. These alternatives are 6.0 miles long and have four proposed stations – at 130th Street, 115th Street, 111th Street, and 103rd Street. 5 & 6) Michigan Avenue HRT elevated and underground alternatives. Both of these alternatives would follow the I-94 Bishop Ford Expressway median and transition to either an elevated or underground structure at Michigan Avenue, where these alternatives would travel south on Michigan Avenue to 127th Street. These proposed alternatives are both 4.1 miles long and have four station stops – at 127th Street, 119th Street, 111th Street, and 103rd Street.

All rail transit alternatives would be powered via an electric third rail, consistent with the existing CTA system and rail cars would be equivalent to those used by the existing fleet. Note that with regard to the UPRR Corridor, CTA and UPRR operate services with incompatible train cars and power systems; therefore, in the proposed UPRR Corridor, CTA will have its own dedicated tracks. The elevated alternative would operate above the existing UPRR freight right-of-way (currently at-grade); whereas the trench alternative would be in a cut below the surface, with the UPRR freight right-of-way relocated in the trench as well, adjacent to the CTA right-of-way.

All alternatives currently have Park and Ride lots proposed in proximity to their terminal stations; for more information about parking facilities, see Topic 7.

Several recommendations and preferences for potential alternative and terminal configurations were provided on the question/comment cards submitted by the public. Many are derivations of the alternatives already defined. Others significantly differ from the alternatives proposed by the CTA. Staff will review all suggestions and incorporate in the analysis those that merit further consideration.

Other Specific Comments on this Topic:

Comment:

41: Has rapid bus in other areas addressed the need for rail service?
82: What is the reasoning behind imposing an additional bus line on an existing bus line?

Response:

Bus Rapid Transit (BRT) is an option for introducing certain features of rail service (for example, dedicated right-of-way and multi-door boarding) at a lower capital cost and on a more accelerated timeline than building new rail lines. Several cities in North America have successfully adopted BRT services, including New York, Los Angeles, Cleveland, Kansas City, Toronto, and Mexico City.

Introducing BRT in a local bus corridor can increase travel options for customers with different needs. For example, BRT routes may be ideal for those who are willing to walk further to a stop in exchange for a faster more predictable trip, while local routes may be a preferred option for those with limited mobility or those making short trips. Providing both services in one corridor ensures that diverse travel needs are met.

Comment:

68: Are 4 stations along the Red Line Extension Heavy Rail alternative really enough stations to alleviate congestion and promote increase[d] usage of the Red Line? Would it really help the South Side Communities?

Response:

Proposed station locations on each of the rail alternatives are consistent with modern rapid transit station spacing – about one-mile between station stops. In some cases, such as on the UPRR corridor, larger gaps exist between station locations due to the lack of development between proposed stops. Additionally, buses on east-west arterials will be able to service the rapid transit station in closest proximity to that bus line, allowing the proposed Red Line Extension to divert many bus trips currently traveling on north-south arterials in the study area to the 95th Street terminal station. Proposed Park and Ride facilities will provide more convenient auto access and promote transit use in the study area.

Comment:

70: Why not extend the red line further south to 130th St on Halsted?

Response:

The Halsted Street BRT and HRT alternatives were designed to capture the majority of potential transit riders in the Halsted Street corridor, without crossing the Calumet Sag / Little Calumet River located at Halsted Street just south of 129th Street where development density drops significantly. The proposed terminal location of the Halsted Street BRT and HRT alternatives is located at Vermont Street, just two blocks north and within walking distance of the southernmost intersection with Halsted Street in the City of Chicago.

Comment:

84: I see an Electrified High Speed Bus way as a LOW COST Alternative Red Line Extension. Agree or Disagree?
115: Incidentally, I thought I could submit an idea to use Eggleston Avenue for a High Speed Electric Bus way-complete with overhead wires from 95th Street south to 127th and Indiana.

Response:

Bus Rapid Transit (BRT) is an option for introducing certain features of rail service (for example, dedicated right-of-way and multi-door boarding) at a lower capital cost (and on a more accelerated timeline) than building new rail lines.

Eggleston Avenue has a similar width as Michigan Avenue, which is too narrow to support a dedicated BRT corridor.

Propulsion technology for the BRT alternatives has not yet been finalized; however, vehicles are anticipated to be articulated buses that would be hybrid diesel-electric powered or use alternative fuels.

Comment:

92. Why exactly was the trench option for the UPRR HRT not recommended? Would the UPRR tracks really need to be in the trench as well?
93. Why was underground Heavy Rail for the UP route shot down?

Response:

Due to the limited right-of-way available for rail infrastructure in the UPRR corridor, if the CTA Red Line Extension were to be placed in a trench, as considered in one alternative in Screen 2, then the UPRR right-of-way would also need to be placed in a trench. The configuration of rail lines require minimum distances on either sides of the rail tracks and a trench alignment increases these requirements. Without

placing the UPRR rail line in a trench as well, the available right-of-way would not be sufficient for both services to operate. While there are some additional environmental impacts from placing the UPRR rail line in a trench, such as transferring higher elevation diesel emissions to ground-level, the primary reason that this corridor was not advanced was due to the increased cost. Additional costs to put the freight line in a trench will not accrue additional benefits to transit users, making this alternative less cost-effective than the elevated UPRR alternative.

Comment:

95: Have there been examples of elevated rail over existing rail right-of-ways like to UP Railroad?

Response:

Portions of the CTA Orange Line are elevated over a freight railroad right-of-way.

Comment:

105: What kind of support facilities are planned/proposed for New Stations? Will any of the Stations have "park and ride" facility? How many? Will passenger facilities (stations) have stores or stands? Is there any proposed construction for area adjacent to stations? Will only currently owned property be used? (for expansions)?

Response:

Park and Ride facilities are planned in all proposed Red Line Extension alternatives. Size, configuration and specific locations will be determined in Screen 3. Additionally, Park and Ride facilities at intermediate stations as well as station details included in the station area plans will also be developed in Screen 3.

Comment:

113: Along Halsted St. or Michigan Ave, will the elevated be over the street like Lake St. or an adjacent alley?

Response:

In Screen 2, the Halsted Street and Michigan Avenue Corridors both included elevated rail alternatives that would travel over the existing street (not in an adjacent alley). However, the engineering design of these elevated structures has not yet been defined. As suggested, an elevated rail line may have a box-shaped support such as on Lake Street. An alternate elevated structure design on the CTA system exists on the Orange Line, which uses hammerhead columns – a center support that opens for the elevated track structure. Modern engineering variations will be considered for elevated structures advancing to Screen 3.

Comment:

114. I believe you are making a mistake by considering only linear two-way travel extension options.

A one-way loop extension at the end of an existing two-way mainline offers many advantages over a two-way linear extension.

Attached is a proposal for a 10 mile long single track loop Red Line south extension. This extension would cost about the same as a two-way 5 mile long extension. But its ten stations would make the Red Line accessible by walking to twice as many residents of the area as any of the nine two-way alternatives in your study.

Response:

A loop alternative would enhance coverage of the study area but would result in longer travel times on the guideway. Many potential customers in the study area are geographically dispersed and are anticipated to access the rail line by bus or auto beyond the immediate station area as they do today and therefore need faster travel times on the guideway such that transit remains competitive with other modes.

6. Proposed Red Line Extension Operations

General Comment:

How will the service operate? Will the trains run 24 hours and what will be the fare?

Pertains to Specific Comments:

1, 54, 102, 113

Response to Overall Category Comment:

CTA assumes that any new CTA service will be generally consistent with current CTA operating practices and seek to provide customers with safe, frequent and reliable travel options. CTA assumes that the proposed Red Line Extension will operate the same hours as existing Red Line service and that the fare would be consistent with existing fares at the time of implementation. Any new CTA service and associated facilities recommended by this study would be consistent with the Americans with Disabilities Act (ADA) requirements.

Other Specific Comments on this Topic:

Comments:

29: Where would the yard be located?
71: Is the land at 127th Street for a new longer train yard?
100: How important is resolving the train yard congestion at 98th as a factor in choosing the LPA?

Response:

CTA has explored some preliminary yard location sites for each of the proposed rail alternatives. For the Halsted Street HRT elevated alternative, a preliminary yard location has been identified on the west side of Halsted Street near industrial areas in the middle of the corridor. For the UPRR HRT elevated alternative, possible yard sites could be accommodated along the southern leg of the proposed alignment in adjacent industrial areas.

Identifying yard space in coordination with the proposed alternatives is one way to accommodate additional trains required to serve a rail line extension; however, other operational improvements can achieve similar goals. The feasibility of accommodating additional trains at alternate yard locations in the CTA system will also be considered as part of this study.

7. Potential Red Line Extension Parking Facilities

General Comment:

Where will parking facilities be located? Will you look at vacant and available land/properties?

Pertains to Specific Comments:

4, 30, 105, 127

Response to Overall Category Comment:

The CTA is considering Park and Ride facilities for each of the bus and rail alternatives included in Screen 2. For each corridor, Park and Ride facilities are being considered at the terminal locations of the proposed Red Line Extension alternatives. Additionally, in Screen 3, further analysis on adjacent land use and parking needs at interim station locations will also be considered. The amount of parking proposed is determined by forecast station usage. The location of each station, the area served, and proximity to major arterials and/or highways will determine whether parking is recommended at each station. If parking is determined to be advantageous at a proposed station, the ridership forecast for that station will determine the number of parking spaces and the type of parking facility required (e.g. a lot or a garage).

8. Evaluation Criteria Used in the Alternatives Analysis Study

General Comment:

How are screening criteria applied throughout the analysis to advance the alternatives being evaluated?

Pertains to Specific Comments:

6, 8, 57, 58, 72, 96

Response to Overall Category Comment:

A three phase evaluation methodology is being used for the Red Line Extension Alternatives Analysis. With each screen, increasingly detailed and comprehensive evaluation criteria are applied to a decreasing number of alignment alternatives that have been identified as the best potential transportation investments. Each step in the evaluation process is thus designed to increase the level of detailed planning and engineering analysis on progressively fewer alternatives.

In Screen 1, the Alternatives Analysis began with identifying a "universe" of alternatives—all of the conceivable transit service improvements that may address the purpose and need for the project within the study area. This universe of alternatives was qualitatively evaluated in Screen 1 using social, environmental, transportation, and economic parameters to identify a shortlist of specific technologies, corridors, and profiles that may best satisfy the project's goals and objectives.

In Screen 2, after identifying the alternatives in more detail, two additional steps of evaluation were performed. In the first step, four factors were used to evaluate each alternative's performance, as follows: physical constraints, such as right-of-way requirements; social and economic factors, using demographics and employment data; environmental factors, including impacts from each alternative on noise, visual, natural and cultural resources; and transportation factors, such as travel time, transit connectivity, and traffic impacts. At the start of Screen 2, eight distinct build alternatives (not including the No-Build and TSM alternatives, which are discussed in more detail below) were considered. Only five of these alternatives advanced after the application of the four evaluative factors used in this first evaluation step.

Next, a more detailed evaluation of the five remaining build alternatives was performed. In this step, preliminary estimates of capital costs, operating costs and projected ridership were used to compare the alternatives. This evaluation was performed with order-of-magnitude estimates to determine which alternatives were most likely to perform well under FTA's cost-effectiveness evaluation criteria. After this evaluation step, three build alternatives remained, as follows: 1) Halsted BRT at-grade, 2) Halsted HRT elevated, 3) UPRR HRT elevated, plus the No-Build and TSM alternatives.

In Screen 3, these advancing alternatives will be evaluated using detailed and quantitative analysis to identify and recommend an alternative to continue as the Locally Preferred Alternative in the study area. In addition to the quantitative cost, ridership, and cost-effectiveness evaluation performed in Screen 3, evaluation of other FTA criteria, such as analyses of transit-supportive land use and local financial commitment are also prepared.

For more information on the evaluation criteria or evaluation results of each alternative, please see the detailed summaries available for review on the Screen 1 and Screen 2 presentation boards, which are available for download at the CTA's website www.chicagotransit.com as noted in the introduction to this document.

Other Specific Comments on Socioeconomic Criteria:

What are the socio-economic factors considered in the Screen 2 analyses and how are they weighted?

Pertains to Specific Comments:

10, 34, 56, 57, 58, 104

Response:

In Screen 2, after identifying the alternatives in more detail, two additional steps of evaluation were performed. In the first step, social and economic factors were considered, among others. Social factors were evaluated by station area: for BRT this included the area within ¼-mile radius of proposed station stops and for HRT, the area within ½-mile radius of proposed station stops. CTA evaluated factors

including total population, population density, employment, employment density, number of households, total zero-car households, zero-car household percentage, total minority population, minority population percentage, total poverty-status households, poverty-status household percentage, number of hospitals, and number of schools and colleges. All of these factors were evaluated based on year 2000 data and, where available, forecasts for year 2030. CTA compared BRT alternatives and HRT alternatives separately, due to the differing station radii used for collecting and analyzing data.

For the eight alternatives evaluated, the data did not significantly differentiate one alternative from any other. For example, the analysis reveals there are no significant differences in the current percent of minority populations among the three alternatives. The minority population for all of the corridors considered is approximately 99 percent, which is significantly higher than the minority population in Cook County at 44 percent. Additionally, all corridors include a proportion of households without cars (ranging from 15-25 percent) similar to Cook County at 17 percent. And all corridors have a higher percentage of poverty-status households (17-24 percent) than Cook County as a whole (at 12 percent).

A comparison of the potential impact on hospitals and schools did not reveal significant differences either. One hospital is located within quarter of a mile of the Michigan Avenue Alternatives and each alternative has three to five schools within a quarter mile of station areas. Since all schools were along the neighboring streets rather than on the main routes, with the exception of Harlan High School on the west side of South Michigan Avenue at West 97th Street, they did not weigh heavily on the overall social rating.

All economic factors were evaluated within a ¼-mile radius of both BRT and HRT proposed station stops. Factors included the number of Tax Increment Financing (TIF) Districts, Enterprise Zones and Industrial Corridors as well as an evaluation of retail locations and transit-supportive land use potential and impacts to the revenue of adjacent businesses during construction.

For the eight alternatives evaluated, all of the alternatives were equivalent in the evaluation of economic factors. All of the corridors have adjacent areas belonging to (TIF) Districts, Enterprise Zones and Industrial Corridors. The Halsted Street and UPRR Corridors have five and six noted areas, respectively. The Michigan Avenue Corridor has only two of these areas; however, the Michigan Ave TIF district encompasses nearly the entire corridor.

In the evaluation of average retail locations and transit supportive land uses, note that the corridors that perform best (the Halsted and Michigan Avenue Corridors) are also the corridors most affected during construction – as noted in the subsequent economic factor "Impacts to revenue of adjacent businesses during construction." All of the corridors have the potential for enhanced economic development in conjunction with the respective alternative.

Transit-oriented development (TOD) is also an important evaluation factor considered by the Federal Transit Administration (FTA). The FTA evaluation of TOD includes existing land use, transit supportive plans and policies, performance and impacts of these policies, and other land use considerations. As all corridors have the potential for enhanced economic development, there are TOD opportunities for all three alternatives. These opportunities will be further defined and documented during the upcoming station area planning work that CTA will perform to support Screen 3.

Other Specific Comments Noted on this Topic:

Comment:

42: …With each possibility (HB, HR, UPR) what would the impact be on decreasing the commute time?
103: Will the extension of the Red Line cut the time of getting to your destination…?

Response:

Reducing travel times is one of the key elements in the stated Purpose and Need of the Red Line Extension Alternatives Analysis study (see Topic 4 for more information about the project Purpose and Need). All of the proposed build alternatives advancing to Screen 3 (Halsted at-grade Bus Rapid Transit, Halsted elevated Heavy Rail Transit, and UPRR elevated Heavy Rail Transit) include improvements to reduce travel times in the Red Line Extension Alternatives Analysis study area.

The Heavy Rail Transit alternatives on Halsted and the UPRR both result in travel time reductions on the bus trips currently used to access the Red Line. Local bus trips would serve the proposed extension station nearest the east-west bus lines, reducing the total number of buses serving the current Red Line

95th Street terminal station. Estimated travel time by rail from 130th Street to 95th Street by rail is approximately 12 minutes compared to 25 minutes or more today.

For the Bus Rapid Transit alternatives, travel times on Halsted, the corridor with the majority of bus trips in the Red Line Extension Alternatives Analysis study area would improve due to roadway improvements such as dedicated travel lines and traffic signal priority. Additionally, this alternative includes reconfiguring the current bus terminal at the Red Line 95th Street terminal station, alleviating some of the congestion approaching and accessing the terminal, although still requiring a transfer for trips beyond 95th Street.

Comment:

88: What exactly would the TSM be for the Red Line Study?
89: What is the Baseline Alternative, and does not BRT come closest to the Baseline Alternative?

Response:

The No-Build Alternative incorporates only those transportation improvements that are included in the 2030 Regional Transportation Plan for which need, commitment, financing, and public and political support are identified and are reasonably expected to be implemented. The second alternative that is developed for consideration is called the Transportation System Management (TSM) Alternative and is defined as the best that can be done for improving mobility without constructing a new transit guideway. The TSM Alternative can include applicable transportation system upgrades such as intersection improvements, bus route restructuring, shortened bus headways, express and limited-stop service, signalization improvements, and timed-transfer operations.

The Federal Transit Administration must approve the definition of the No-Build and TSM Alternatives; however, only one of these alternatives advances as the Baseline Alternative. Because the Baseline Alternative should represents the best that can be done to improve transit service in the study area without major capital investment in new infrastructure, it is often the TSM Alternative that is used as the Baseline Alternative. The Baseline Alternative should be designed to address identified transportation needs in the Red Line Extension study area and demonstrate the extent to which these problems can be solved without a proposed major capital investment.

The definitions and selection of the No-Build and TSM Alternatives – and the alternative chosen as the Baseline Alternative – is the subject of interaction between FTA and CTA Alternatives Analysis study staff and that process is currently underway. When the final alternatives are selected, definition of the specifics of these alternatives will be presented to the public in the next round of outreach, Screen 3. Additionally, measured benefits from the alignment, mode and vertical profile alternatives (or build alternatives) that have advanced from Screen 2 to Screen 3 will be compared with the FTA-required Baseline Alternative. This comparative analysis is a key activity that the FTA uses in their annual rating of New Starts transit projects.

Comment:

101: How much does existing congestion on Halsted factor into evaluating the BRT option for Halsted?

Response:

In Screen 2, after identifying the alternatives in more detail, two additional steps of evaluation were performed. In the first step, transportation factors were considered, among others. Transportation factors were evaluated along the corridor length of each proposed alternative. CTA evaluated factors such as the anticipated travel speed of each alternative, new traffic impediments introduced by the alternative, and potentially displaced parking spaces.

Since the Halsted Street BRT at-grade alternative assumes that a dedicated lane exists for the BRT vehicles, average travel speed was derived from known travel speeds in other BRT corridors operating in similar conditions – and was not negatively impacted by existing congestion on Halsted Street. The Halsted Street impacts to traffic in general purpose lanes and parking displacement will be assessed in more detail in Screen 3.

9. Ridership Estimates and Related Issues

General Comment:

How were ridership numbers generated? What is the projected ridership on each corridor?

Pertains to Specific Comments:

40, 55, 66

Response to Overall Category Comment:

As required by FTA guidance, CTA is working in cooperation with other regional transportation agencies and the Chicago Metropolitan Agency for Planning (CMAP) to develop a regional travel forecasting computer model that can be used to predict ridership for the various alternatives being studied using information on projected population, employment, congestion, and other factors. This computer model is based on other models already used by CMAP for other regional transportation planning purposes.

In Screen 2, after identifying each alternative in more detail, two steps of evaluation were performed. In the first step, four factors were used to evaluate each alternative's performance including physical constraints, social and economic factors, environmental factors, and transportation factors. (More detail on the evaluation process is provided in Topic 8.) At the start of Screen 2, eight distinct build alternatives, plus the No-Build and TSM alternatives (also discussed in more detail in Topic 8) were considered. Only five of these build alternatives advanced after the application of the four evaluative factors used in this first evaluation step.

Next, in addition to other evaluation criteria, preliminary ridership estimates were developed for each alternative that advanced to the step 2 evaluation of Screen 2. The ridership model requires calibration with current day transit volumes in order to validate the forecasting outputs. This calibration had not yet been completed in detail at the completion of Screen 2; therefore, the ridership volumes produced by the model are only conceptual estimates and can only be referenced for order-of-magnitude comparisons. However, these estimates suggest that the rail alternatives on the Halsted Street and UPRR Corridors are similar in scale. Additionally, the estimates suggest that the rail alternatives have a ridership volume that is about three times higher than BRT ridership estimates. Specific ridership estimates from the calibrated model will be produced for the Screen 3 and will support the recommendation of a Locally Preferred Alternative.

10. Project Cost Estimation

General Comment:

Please describe the project cost estimating process and how these estimates are used to make decisions regarding alternatives advanced in the study. What are the current estimates for each alternative?

Pertains to Specific Comments:

8, 28, 31, 33, 61, 84, 92, 93

Response to Overall Category Comment:

Constructing transportation facilities, purchasing transit vehicles, providing new transit services, and maintaining existing services require a significant financial commitment. Transit capital investments can last several generations and can require continuing public financial support for maintenance and operations. FTA guidelines require that all of these factors must be considered when evaluating the feasibility of an alternative and in determining which alternatives advance for more detailed analysis.

In Screen 2, the costs used in the analysis were preliminary and conceptual in many cases, based on general knowledge of the costs associated with each alternative being evaluated. For example, in the comparison of the underground versus elevated HRT alternatives on Halsted Street, experience from projects in other U.S. cities indicates that underground HRT in this context would cost two to three times as much as elevated HRT, but would yield comparable benefits—such as capacity and travel times. As a result, although highly detailed and precise economic costs regarding the expenses to create an

underground or elevated HRT alternative were not determined (and are not appropriate at this stage), underground HRT was not advanced to Screen 3 because the identified economic factors strongly indicated that there would be higher costs for the underground HRT system with little or no advantage over an elevated HRT system.

This order-of-magnitude analysis was performed on all alternatives advancing into the second evaluation phase of Screen 2 (see Topic 8 for more information about evaluation criteria). Alternatives were compared with each other to determine which would advance into the more detailed capital costing performed in Screen 3. CTA analysis determined that the Halsted Street BRT at-grade alternative rated favorably compared with others under consideration and will be advanced to Screen 3. As mentioned, the Halsted Street HRT underground alternative and the UPRR HRT trench alternative performed poorly compared with other alternatives, as their costs are expected to be much higher than other HRT alternatives. Finally, while these order-of-magnitude estimates suggest that the UPRR HRT elevated alternative would be more expensive than the Halsted Street HRT elevated alternative due to over a mile more in infrastructure costs, both of these alternatives rated favorably compared with different vertical profiles on the same corridors (the trench and underground alternatives, respectively) and will be advanced to Screen 3.

The upcoming Screen 3 analysis will examine capital and operating costs in more detail as well as how the various cost factors apply to the alternatives being considered. In Screen 3, the reduced number of alternatives creates a manageable set of alternatives to be examined in detail. In accordance with FTA guidance, the analysis in Screen 3 will include a capital cost comparison, an operating and maintenance cost comparison, as well as a comparison of the estimated annualized cost per boarding.

Other Specific Comments on this Topic:

Comment:

8: Subways are cost prohibitive? Why? Are the cost constraints the CTA's or the Federal governments?

Response:

There are no local or federal constraints on the project cost. However, since the Red Line Extension and other projects in Chicago are competing with other cities across the country for a limited amount of federal funding to advance into Preliminary Engineering and Environmental Impact Statement project phases, CTA works to keep all of its projects competitive. The current FTA measure of competitiveness is the project cost-effectiveness rating, which compares project cost with estimated user benefits. The project must provide high benefits (measured in terms of new riders and travel time savings) for the people using the facility for the least amount of cost to remain competitive against projects in other cities.

Screen 2 analyses estimated that the cost of building a subway on the Halsted Street corridor in the Red Line Extension Alternatives Analysis study area would be two to three times the cost of an elevated structure in the same corridor. However, while the cost of a subway line is much higher than an elevated structure, the level of service and travel time savings provided by both are identical. Additionally, since the evaluation analyses to advance alternatives are comparative, the subway alternative did not perform as well as the elevated alternative on the Halsted Street corridor.

Comment:

79: Is it true that the greatest financial benefit to the CTA would be through the selection of the UP route even though the initial cost might be more?

Response:

It is too early to tell which alternative will have the greatest financial or ridership benefits. The Screen 3 evaluation process will develop ridership forecasts based on computerized travel models, and more detailed estimates of capital and operating costs associated with the remaining alternatives. Therefore, at the end of Screen 3, the CTA will be able to address this question. It is important to note that all proposed alternatives are expected to require public financial support for construction, operation, and maintenance.

11. Funding of Red Line Extension Construction and Operations

General Comment:

How will the construction and operation of the Red Line Extension be funded? How are matching funds secured? How is the Red Line Extension funding related to transit fares?

Pertains to Specific Comments:

18, 23, 32, 37, 54, 67, 69, 76, 108

Response to Overall Comment Category:

CTA's operating budget supports day-to-day operations and helps determine the service frequency and hours CTA can offer on its bus and rail system. Half of CTA's operating budget comes from customer fares and revenue generated from sources such as advertising and concessions. The other half of the operating budget comes from regional sales taxes and matching funds from the State of Illinois. No federal funds are available specifically to cover operating expenses. Once the Red Line Extension is built and operational, the funds to operate the system will come from fare revenue as well as local and state funding sources, consistent with the funding mechanisms that support CTA's other bus and rail transit services.

Meanwhile, CTA's capital funding is provided both by the federal government and State of Illinois and is granted specifically for improvement projects such as rail station renovations, track and structure rehabilitation, bus and rail car purchases, and rail extensions. It is federal capital funding that is being sought for the Red Line Extension and other New Starts projects. Capital funds help the CTA maintain and improve its service, but federal rules prevent its use for day-to-day operations expenses.

CTA has initiated this Alternatives Analysis study for the Red Line Extension as a first step towards obtaining capital funding for the project through the Federal Transit Administration's "New Starts" grant program.[3] This program provides funding for major public transit infrastructure projects throughout the U.S. through a highly competitive process. Upon successfully advancing through the four phases of project implementation (Alternatives Analysis, Environmental Impact Statement, Preliminary Engineering, and Final Design) a project will be qualified to receive a "Full Funding Grant Agreement" (FFGA) from the U.S. Government. The amount of funding in the FFGA covers up to 80 percent of the project's capital costs. Other federal, state and local funds comprise the remainder of capital funding. It is possible to seek alternative sources of federal and non-federal funding for the project, but the federal New Starts grant program is specifically intended to support transit projects of this nature and is the public funding mechanism generally most capable of doing so.

As indicated above, to ultimately secure federal New Starts grant funding, matching funds for at least 20 percent of the project's capital costs are required from sources other than the New Starts grant program mainly from non-federal (i.e., state and local) sources. From 2000 through 2004, the Chicago region's matching funds came from the State of Illinois through the Illinois FIRST legislation. The Illinois FIRST legislation expired on June 30, 2004. Since that time, CTA has been working with the Illinois Legislature to enact a replacement to Illinois FIRST and ensure that all future federal transit funds available to the Chicago region can be fully utilized.

CTA is simultaneously pursuing solutions to its overall operating and capital funding challenges while also positioning itself (through Alternatives Analysis studies such as this one) to secure capital funding to meet the region's future transit infrastructure needs. While it is necessary and critical for CTA to obtain the capital and operating resources it needs to maintain its system in a state of good repair on an ongoing basis, it is equally important to plan for the future; there is little value in maintaining an existing system if it will not adequately address future travel needs. CTA's overall Capital Improvement Program not only identifies funding needs to maintain the existing system in a state of good repair, but it also identifies and addresses future needs to serve growing regional transit travel demands. With a growing population and shifting travel patterns and travel needs, it is important to anticipate CTA customers' future needs and plan accordingly. For example, many of today's key transit links—including the Blue Line to O'Hare and

[3] CTA is also conducting concurrent Alternatives Analysis studies for other candidate New Starts expansion projects that have been authorized by the U.S. Congress—including extending the Yellow Line to Old Orchard, extending the Orange Line to Ford City Mall, and the constructing the Circle Line.

the Orange Line to Midway—were made possible by past generations who understood the need to invest in transit's future even as they addressed significant day-to-day financial pressures.

It is also important to recognize that federal capital funding for transit system expansion projects comes largely from the New Starts grant program funds that are allocated separately from federal formula funds dedicated to ongoing "state of good repair" capital improvements. While federal formula funds may be used for infrastructure renewal projects, New Starts funds are discretionary funds that can only be used for system expansions. Given that CTA has demonstrated need for both formula and New Starts funding, it is prudent that CTA take all necessary steps to obtain funding from both sources and not focus on just one while passing up the other. CTA does not propose diverting its federal formula funds to support system extensions and expansions.

See Topic 10 for more information about Red Line Extension project costs.

12. Alternatives Analysis Public Involvement Process and Format

General Comment:

Does the public involvement process for the Red Line Extension Alternatives Analysis study allow individuals to have a voice in the decision in the corridor selection? Is all the information (evaluation criteria, etc.) available to the public? When will the next round of meetings be held?

Pertains to Specific Comments:

2, 4, 11, 16, 20, 21, 36, 40, 63, 64, 86, 106,107,119

Response to Overall Category Comment:

Public involvement is a key component of this process. The outreach has already begun including a community stakeholders meeting with representatives and leaders of various community groups throughout the study area. We also have offered to meet with all elected officials representing the Red Line Extension study area and adjacent areas. Meetings also included faith-based organizations, other community organizations, and city and state agencies such as the Chicago Department of Transportation, Illinois Department of Transportation, Regional Transportation Authority, Metra, and Pace. If your organization would like to be included in the stakeholder's meetings please contact Darud Akbar, CTA Government and Community Relations at dakbar@transitchicago.com.

The public involvement process for the Red Line Extension Alternatives Analysis study also includes a total of six public involvement meetings, two each at the conclusion of the Screen 1, Screen 2, and Screen 3/LPA analyses. The Screen 1 meetings were held at Chicago State University and West Pullman Public Library. The Screen 2 meetings were held at the West Pullman Historic Visitors Center and the Woodson Regional Public Library. Meeting locations for Screen 3 have not yet been determined nor have the dates; however, CTA anticipates that meetings will be held in summer 2009. The meeting locations must be close to public transit and accessible to people with disabilities. Suggestions for meeting locations may be sent to Darud Akbar, CTA Government and Community Relations at dakbar@transitchicago.com.

Meetings are announced through ads in neighborhood newspapers and publications as well as public alerts on CTA trains and buses, at rail stations, on the CTA Web site, and distributed to print and broadcast media via news releases. The Screen 2 outreach meeting information was posted in The Chicago Defender (Nov. 12 & 19), The Crusader (Nov. 13), La Raza (Nov. 23rd), and the Daily Southtown (Nov. 20th). In addition to the CTA website, information was posted on at the websites for the Regional Transportation Authority and the Chicago Metropolitan Agency for Planning. Notices were distributed to elected officials and surrounding suburb's village halls for distribution and posting.

The format of the meetings included groups of presentation boards containing detailed information on each area of analysis in the study, where individual conversations between the public and project staff knowledgeable about that area of analysis could take place. The public meetings also included a community presentation that provided information in a slideshow format led by the study's project managers (available at www.transitchicago.com). Meeting attendees were requested to submit questions and comments in a written format. CTA's goal in emphasizing written questions and comments has been

to ensure everyone's thoughts are collected and reviewed, rather than only those individuals who might choose to speak publicly at a meeting. The intent has been for everyone to have an equal opportunity to participate in the process. In addition, by reviewing and responding to similarly worded questions, the presenters efficiently addressed multiple individuals at once and avoided repetition during the public meetings. CTA and the consultant team staff have also been available to answer any individual questions on a one-on-one basis following the general question and answer period at each meeting. All of the meeting materials are available at the CTA's web site (www.transitchicago.com).

The written comments received at the public meetings and other detailed comments submitted subsequently are being answered individually for the record in the format of this document, which will be made available publicly on the CTA web site, by email to public meeting participants, and in hard copy by written request. All of the comment cards and other written communications (primarily emails) will collectively become part of the evaluation process and will be submitted to the Federal Transit Administration as a part of the official documentation for the Alternatives Analysis study.

13. Potential Red Line Extension Economic and Environmental Impacts

General Comment:

What will be the economic and environmental impacts of the Red Line Extension? What will be the community and economic benefits of the Red Line Extension? How are specific impacts and benefits measured and valued?

Pertains to Specific Comments:

4, 5, 34, 56, 57, 58, 85, 91, 102, 104, 105

Response to Overall Category Comment:

An Environmental Impact Statement (EIS) will analyze in detail the social, economic, and environmental consequences and benefits of the proposed Red Line Extension. The environmental review process required by the *National Environmental Policy Act* of 1969 (NEPA) and related laws includes environmental impact analyses and the preparation of documentation for public review. Per FTA guidance, the environmental evaluation begins upon completion of the Alternatives Analysis study, and it will result in a detailed written statement on the anticipated environmental impacts of the Red Line Extension and the steps that will be taken to mitigate any negative impacts to the community and the natural environment.

Typically, environmental reviews for proposed transit projects address the potential impact areas of air and water quality, noise and vibration, historic and cultural properties, parklands, contaminated lands, displacement of residences and businesses, and community preservation. During the federal environmental review process, the CTA will work concurrently with state and other local agencies to also comply with state and local environmental laws.

As part of the preparation of an Environmental Impact Statement, the traffic and parking impacts of the proposed transit improvements – at key intersections, at proposed terminal locations, and throughout the study area – will also be evaluated in more detail. Depending on the Locally Preferred Alternative (LPA), local bus routes may be reduced or reconfigured. Where necessary, CTA coordinates with the Illinois Department of Transportation and local municipalities when evaluating traffic issues. Maintaining traffic flow and related efficiencies is a major consideration in CTA's planning of this extension.

Prior to initial engineering work which outlines specific infrastructure needs in coordination with available right-of-way and current land uses, CTA cannot determine how much private property, if any, would need to be acquired in order to construct and operate the selected alternative. A final determination on the vehicle technology, alignment and vertical profile will need to be established before potential property impacts can be assessed. Potential property impacts are determined in detail as a part of the Preliminary Engineering (PE) phase of project development, which proceeds concurrently with the preparation of the EIS. Public acquisition of private property is governed by federal and local laws. In accordance with these laws, affected property owners would be compensated for their properties based on fair market values and can be provided relocation costs.

Regarding the economic impact of the Red Line Extension, FTA guidance requires an economic analysis of the Red Line Extension to be conducted as a part of Screen 3 of the Alternatives Analysis. In general terms, it may be noted that numerous studies suggest that transit investments result in economic development. A recently conducted study by the U.S. Department of Transportation, found that for every $1 billion invested in transit projects, 47,500 jobs are created or sustained. Specific projections for the Red Line Extension may be developed in later studies. Currently, CTA is working with the Mayor's Office of Workforce Development to ensure that training and jobs access will be available to support the construction of the proposed Red Line Extension.

Other Specific Comments on this Topic:

Comment:

9: Bus pollution of BRT, how will it be mitigated?

Response:

CTA anticipates that any BRT alternatives would use hybrid diesel-electric powered or use alternative fuels-based vehicles. Alternatives fuels could include compressed natural gas, clean diesel technology engines, and/or low sulfur fuel. New technologies, such as fuel cell powered buses are also being developed. All of these options have lower pollution than regular diesel fuel vehicles; however, the potential pollution impacts of any vehicle decision will be further evaluated during the subsequent Environmental Impact Statement project phase. Mitigation strategies, if necessary, would be developed at that time.

14. Potential Red Line Extension Impacts on Existing CTA Services

General Comment:

How would the Red Line Extension impact current CTA services? Will there be redesign or expansion to the existing 95th Street terminal station?

Pertains to Specific Comments:

15, 102, 116

Response to Overall Category Comment:

It is anticipated that the structure of existing bus routes in the study area will be changed to complement new high-capacity transit service. Depending on the specific alternative advanced as the Locally Preferred Alternative, the number of bus routes feeding into the 95th Street Red Line station may change. Changes to bus services will be subject to public input and will be implemented after construction.

The use of the air rights over the Dan Ryan Expressway has been considered for expanding the 95th Street Red Line station facility. This type of expansion is very costly and must be weighed against the needs and benefits of expanding the station facility. The Red Line Extension HRT alternatives – including the Halsted Street HRT elevated and the UPRR HRT elevated alternatives – would reduce the number of buses feeding the 95th Street station, while the Halsted Street BRT at-grade and Transportation System Management (TSM) alternatives (more information about these alternatives is available in Topic 8) would result in an increase in the number of buses serving the 95th Street station. During Screen 3, the potential for expanding the 95th Street station facility will be examined as part of the Halsted Street BRT and TSM alternatives. The Screen 3 evaluation and subsequent engineering design phases will determine the necessity for any significant redesign of the 95th Street station based on proposed bus routing changes that affect the terminal.

Other Specific Comments on this Topic:

Comment:

53: Would the 111/115 Pullman Route return to a "shuttle like" route whenever an alternative is chosen?

Response:

Route 111 Pullman/111th Street/ 115th Street bus may be restructured if it results in a simplified route paths and better service to the proposed alternative. The Screen 3 evaluation will include the development of preliminary service plans for the alternatives that would identify any anticipated changes to the bus route.

15. Other

General Comment:

This section includes general comments and viewpoints that can be characterized as public input into the study process.

Pertains to Specific Comments:

2, 48, 49, 62, 129

Response to Overall Category Comment:

These comments do not ask a question or refer to a specific issue, but rather point out general views on the subject, which have been noted. Thank you for your feedback.

Other Specific Comments on this Topic:

Comment:

35: Which projects are being driven by the 2016 Olympics?
39: Is the Red Line- rather the advancement of the project being driven by 2016 Olympics?

Response:

CTA is working closely with the 2016 bid team and believes that the present transit system can handle transit needs for the 2016 Olympics. The Red Line Extension project is not linked with Chicago's bid for the 2016 Olympics. However, any improvements made to the current system could only benefit the City's Olympic candidacy.

Comment:

75: What effect does the Canadian National's RR purchase of the EJ&E RR and subsequent rerouting of freight trains in suburban & city areas have in the final consideration?

Response:

This purchase does not affect any of the alternatives under consideration in the Red Line Extension Alternatives Analysis study.

Appendix C
Agency Coordination and Public Involvement

Alternatives Analysis (2006-2009)

Screen 3

- Presentation
- Exhibit Boards
- Comment Card
- Comment Database
- Comment Responses

Federal Transit Administration's
New Starts Process

Red Line Extension Alternatives Analysis Study

June 2009

Schedule for Tonight's Meeting

- **Structure of the meeting**
- **Questions and answers process**
  - Submit your comments in writing on comment cards
  - Comments and questions will be grouped and answered by topic
  - All comments and questions will be addressed on CTA's website - www.transitchicago.com
  - An interpreter for the hearing impaired and a translator for the Spanish speaking community are available this evening

Screen 3 Public Meetings

Wednesday, June 3, 2009

6:00 pm - 8:00 pm
(Presentation begins at 6:15 pm)
Olive-Harvey College Cafeteria
10001 S. Woodlawn Ave.
Chicago, IL

Thursday, June 4, 2009

6:00 pm - 8:00 pm
(Presentation begins at 6:15 pm)
Woodson Regional Chicago Public Library
9525 S. Halsted St.
Chicago, IL

Tonight's Speakers

- **Darud Akbar – Moderator**
  - **Chicago Transit Authority**
- **Jeffrey Busby – Strategic Planning Manager**
  - **Chicago Transit Authority**
- **Ronald Shimizu – Red Line Study Area Manager**
  - **Parsons Brinckerhoff**

Outline of the Presentation

- **Discuss Status of Red Line Extension Alternatives Analysis Study**
  - New Starts Overview
  - Prior Findings
- **Screen 3 Preliminary Findings**
- **Public Involvement Process**

Status of Study

FTA's Required New Starts Process

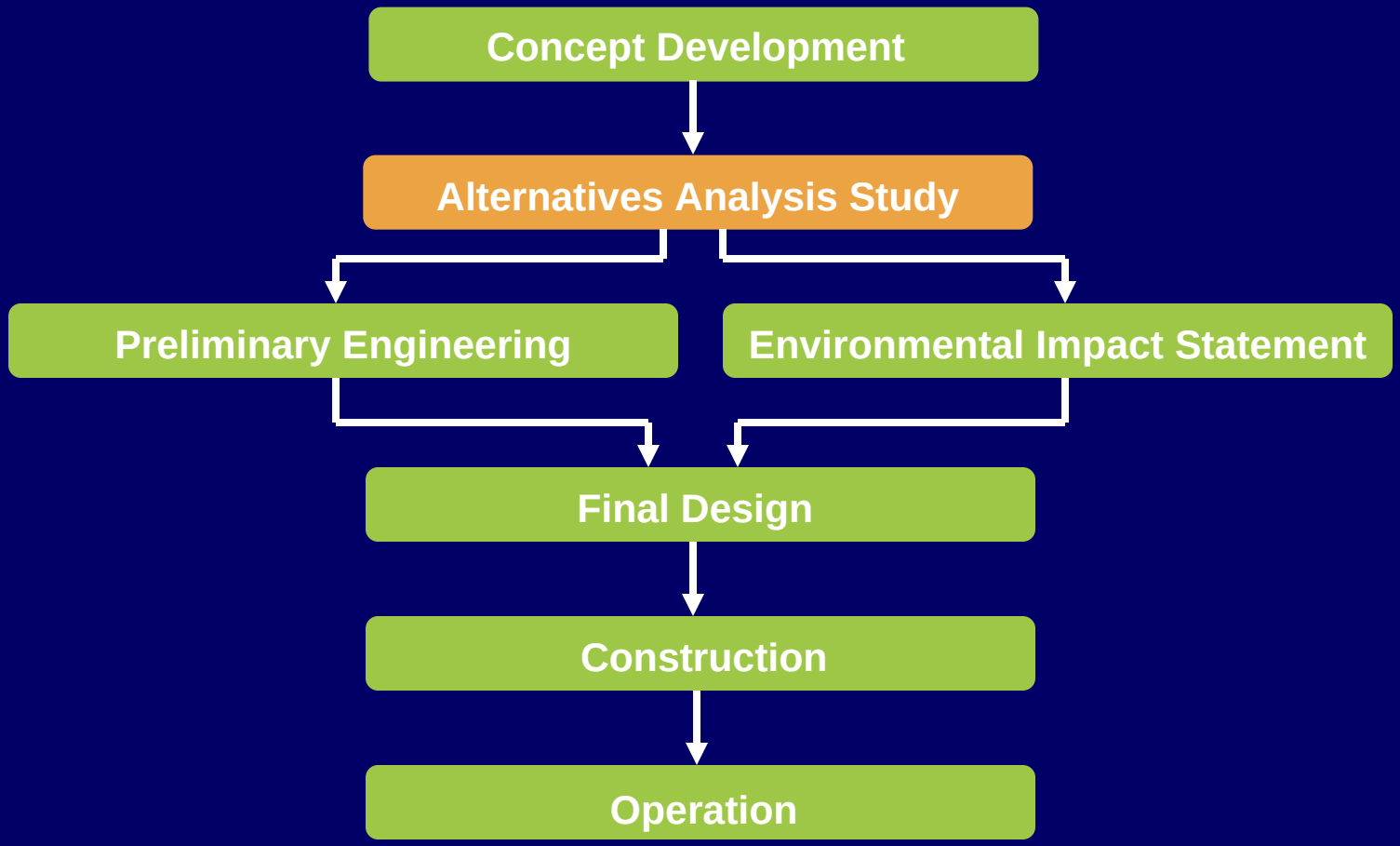

Alternatives Analysis (AA) Studies

- FTA Requirement for federal funding for transit expansion (New Starts)
- Identifies transit opportunities and ensures all practical solutions are considered
- Ensures planning is consistent among all New Starts projects throughout the country
- Provides opportunity to gather information and receive public input
- Identifies Locally Preferred Alternative

FTA Evaluation Process

The Purpose and Need is first defined, the evaluation criteria are applied, and options within the Universe of Alternatives are eliminated until at the end of the process, there is a Locally Preferred Alternative (LPA).

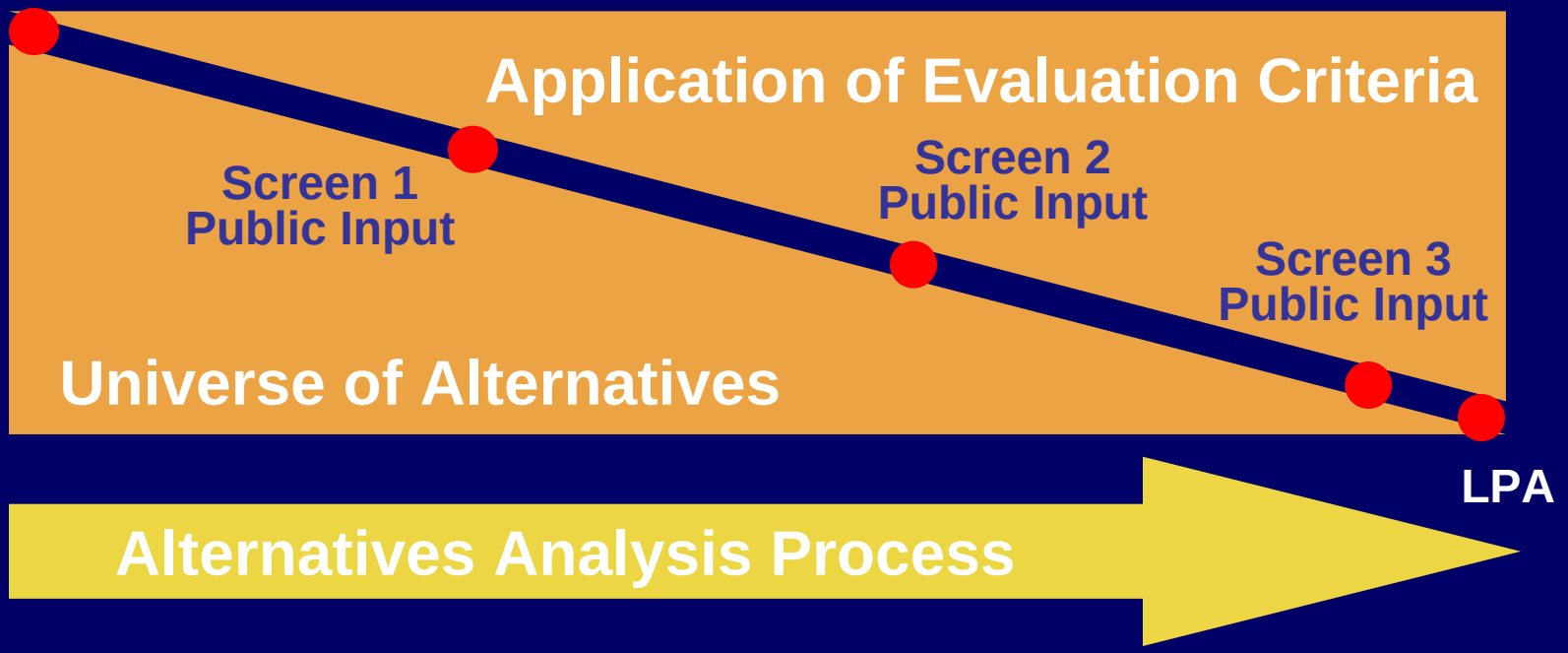

Purpose and Need

- Significant Bus and Passenger Congestion at 95th Street Red Line Station
- Lengthy Bus Trips to Access 95th Street Red Line Station
- Far South Area Residents Experience 20% Longer Commute Times than Rest of City
- Traffic Congestion is Expected to Grow along with Study Area Population and Employment

Screen 1 & 2 Summary

Universe of Alternatives - Technologies

TECHNOLOGIES
Automated Guideway/Monorail
Bus Rapid Transit
Commuter Bus
Commuter Rail
Heavy Rail Transit
High Speed Rail
Light Rail Transit
Local Bus
MagLev
Personal Rapid Transit
Streetcar

Universe of Alternatives - Profiles

PROFILES

Elevated

At-Grade

Trench

Underground

Universe of Alternatives - Corridors

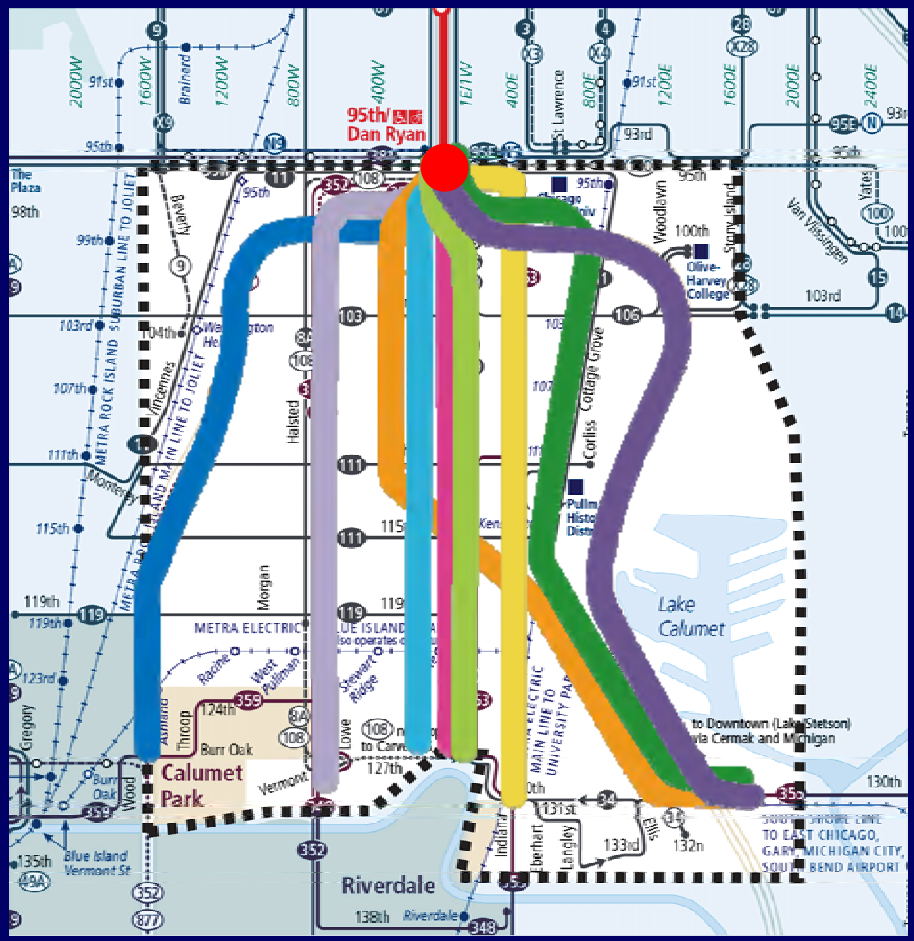

- I-57 Expressway
- Halsted Street
- UP Railroad
- Wentworth Avenue
- State Street
- Michigan Avenue
- King Drive
- Cottage Grove Avenue / Metra Electric
- I-94 Bishop Ford Freeway

Screen 1 Public Involvement Process

- **Two public meetings**
  - April 10, 2007 at Chicago State University
  - April 11, 2007 at West Pullman Branch Chicago Public Library
- **More than 140 people attended public meetings**
- **Met with stakeholders and elected officials**
- **Over 200 comments submitted and answered**
- **Significant media coverage**

Screen 2 Evaluation - Findings

Bus Rapid Transit

Halsted Street

At Grade

Heavy Rail Transit

Halsted Street

Elevated

UP Railroad

Elevated

Screen 2 Public Involvement Process

- **Two public meetings**
  - December 3, 2008 at Historic Pullman Visitor Center
  - December 4, 2008 at Woodson Regional Chicago Public Library
- **More than 80 people attended public meetings**
- **Met with stakeholders and elected officials**
- **Over 130 comments submitted and answered**
- **Significant media coverage**

Red Line Extension
Alternatives Analysis Study
Comment Card

Screen 3 Analysis

Screen 3 Process

- **Step 1 – Alternatives Definition**
  - Conceptual Alignment Refinement
  - Operating Plans
- **Step 2 – Preliminary Evaluation**
  - Physical Constraints
  - Public Support
  - Social/Economic Factors
  - Environmental Factors
  - Transportation Factors
  - Capital Cost Comparison
  - Operating and Maintenance (O&M) Cost Comparison
  - Ridership Potential
  - Cost Effectiveness Index

No Build Alternative

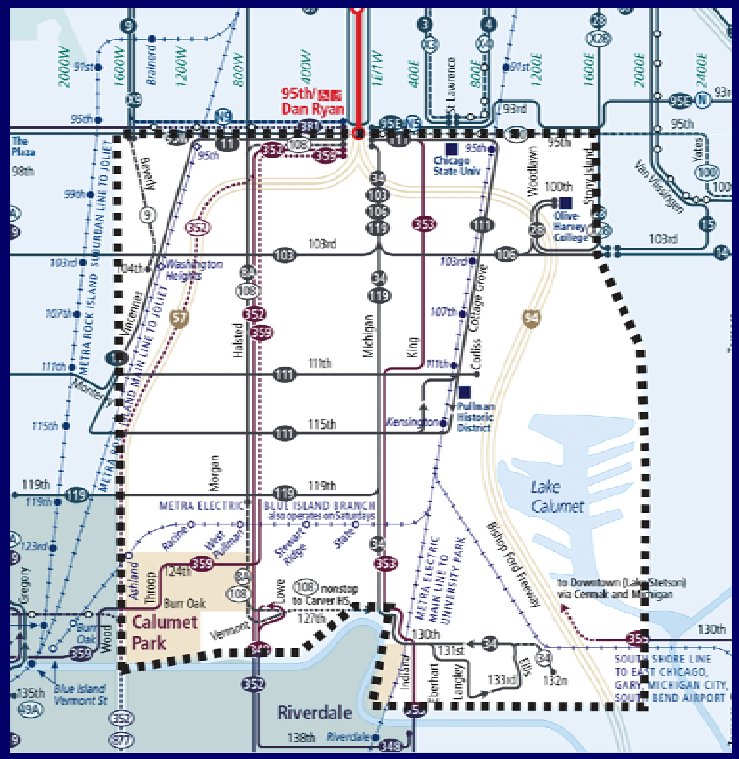

- Existing CTA heavy rail transit service terminating at the 95th Street station
- Existing CTA and Pace bus service

TSM (Bus) Alternative – Halsted Street

- **BRT redefined to be part of TSM Alternative**
- **Express bus between CTA 95th Street station and Halsted/127th Street**
  - 95th Street station expansion
  - No separated exclusive lanes
  - Transit signal priority
  - Intermediate stations at 103rd, 111th and 119th
  - Terminal station at 127th
  - Park-and-ride at stations

HRT (Rail) Alternative – Halsted Street

- **95th Street to I-57 & Halsted Street**
  - Median of I-57 Expressway
- **Halsted from I-57 to 127th Street**
  - Elevated above Halsted
  - Intermediate stations at 103rd, 111th and 119th
  - Terminal station at 127th
  - Park-and-ride at stations

Rail Alternative – Halsted Elevated

NB Halsted Street / 103rd Street

TSM (Bus) Alternative - Michigan Avenue

- **Express bus between CTA 95th Street station and 130th Street**
  - 95th Street station expansion
  - No exclusive lanes
  - Transit signal priority
  - Intermediate stations at 103rd, 111th and 115th
  - Terminal station at 130th
  - Park-and-ride at stations

HRT (Rail) Alternative – UPRR

- **95th Street to I-57 & UPRR**
  - Median of I-57
- **Railroad Section**
  - Elevated adjacent to the UPRR right-of-way
  - At-grade south of 119th to 130th Streets
  - Intermediate stations at 103rd, 111th and 115th
  - Terminal station at 130th
  - Park-and-ride at stations

Rail Alternative – UPRR Elevated

103rd Street Station

Step 2 – Detailed Evaluation

- **Evaluation Factors**
  - Physical Constraints
    - Right-of-Way Requirements
  - Public Support
    - Public Meeting Comments
    - Referendum
  - Social/Economic Factors
    - Demographics
    - Employment
  - Environmental Factors
    - Noise, Visual, Natural and Cultural Resources
  - Transportation Factors
    - Travel Time, Transit Connectivity and Traffic
  - Capital Cost
  - Operating & Maintenance Cost
  - Ridership Potential
  - Cost Effectiveness

Physical Constraints

- **Freight Railroad & Transit Shared-Use Corridor**
  - Due to recent accidents, the transportation industry is adopting greater separation between freight railroad and transit operations for safety reasons
  - For the UPRR Rail Alternative, 50-feet separation distance is desired from freight railroad tracks
- **Right-of-Way Constraints**
  - UPRR needs most of their right-of-way for operational purposes
  - With additional separation distance, CTA extension will be immediately adjacent (east or west) of the UPRR right-of-way and will require adjacent property acquisition

UPRR Rail Alternative – Within UPRR ROW

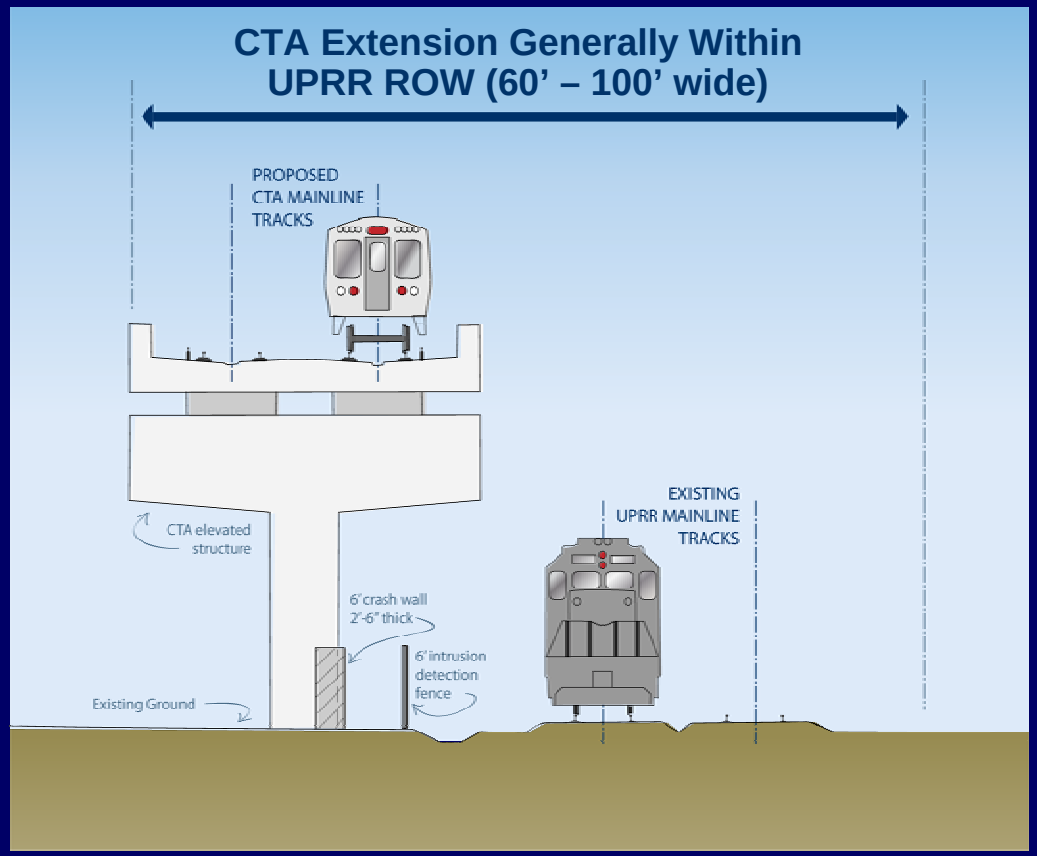

UPRR Rail Alternative – Beyond UPRR ROW

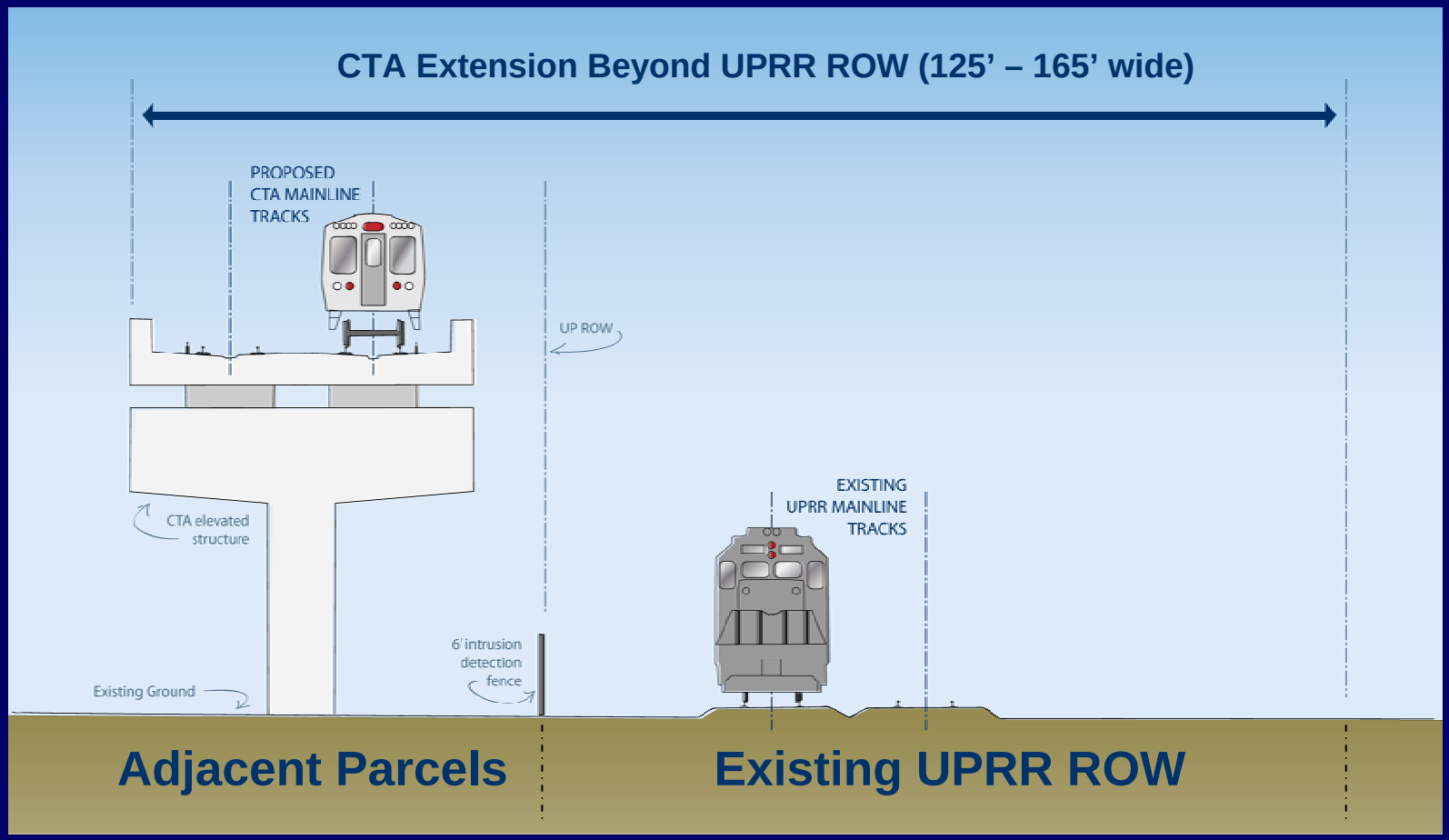

Public Support

- 340 comments were received in Screens 1 & 2 -- 99 of those expressed a preference for a particular alternative
- 87% of these comments were in favor of the UPRR Rail alternative and 7% were in favor of the Halsted Rail alternative
- In a November 2004, 38,000 residents in the 9th and 34th wards supported a public referendum for the Red Line Extension along the UPRR Corridor

Screen 3

Factor	Bus Halsted	Bus Michigan	Rail Halsted	Rail UPRR
Physical	O	O	O	-
Public Support	O	O	O	+
Social/Economic	O	O	O	O
Environmental	O	O	O	O
Transportation	-	-	+	+
Capital Costs	+	+	O	O
O&M Costs	+	+	O	O
Ridership	O	O	+	+
Summary	+1	+1	+2	+2
LPA Recommend	NO	NO	YES	YES*

* Subject to cost-effectiveness requirements

Screen 3

Factor	Bus Halsted	Bus Michigan	Rail Halsted	Rail UPRR
Physical	O	O	O	-
Public Support	O	O	O	+
Social/Economic	O	O	O	O
Environmental	O	O	O	O
Travel Time From 130th or Vermont Streets to Jackson & State (min.)	47	52	39	39
Capital Costs (YOE)	$230 M	$210 M	$1,100 M	$1,100 M
O&M Costs (annual)	$1.2 M	$3.1 M	$20.5 M	$24.1 M
Ridership (annual)	2.5 M	0.9 M	11.6 M	12.7 M
Summary	+1	+1	+2	+2
LPA Recommend	NO	NO	YES	YES*

* Subject to cost-effectiveness requirements

Cost-Effectiveness Evaluation

- **FTA has cost-effectiveness thresholds**
  - Cost per hour of projected user benefits as measured by travel time savings
- **Shorter versions were investigated to see if the cost-effectiveness improved**
  - Halsted Rail to 119th St.
  - UPRR Rail to 115th St.
- **Initial results indicate up to 23% improvement in cost-effectiveness due to greater proportion of capital and O&M cost savings versus ridership reductions**

Screen 3 Evaluation – Preliminary Findings

- **Locally Preferred Alternative Preliminary Recommendation**

Rail Extension via UPRR*

* **Subject to cost-effectiveness requirements**

Next Steps

Next Steps

- Incorporate public comments
- Continue railroad discussions and cost-effectiveness evaluation
- Review findings with FTA
- Final recommendation on LPA
- CTA Board to approve LPA
- Ongoing public involvement
  - Sign-in cards will be used to create a contact list to send notices and updates
  - Project updates on CTA web site - www.transitchicago.com

Questions and Comments

- **CTA representatives are available to answer additional questions**
- **Written comments and questions accepted through June 18, 2009**

Mr. Darud Akbar
Chicago Transit Authority
Government and Community Relations
P.O. Box 7567
Chicago, IL 60680-7567
dakbar@transitchicago.com
CTA Customer Service: 1-888-YOUR-CTA
TTY: 1-888-CTA-TTY1

FTA's New Starts Process

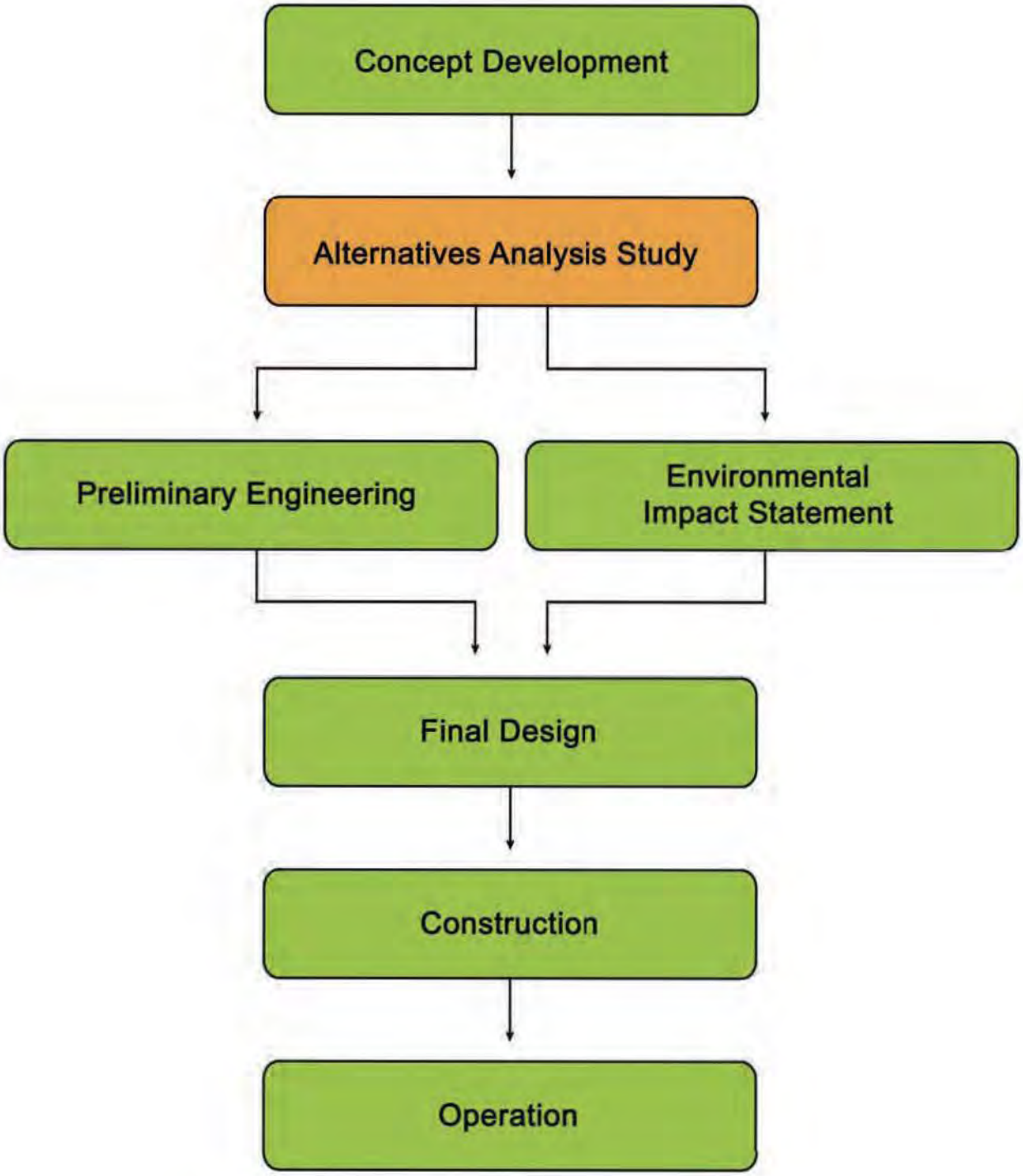

Purpose and Need

Transportation Needs

- Significant bus and passenger congestion at 95th Street Red Line Station
- Lengthy bus trips to access 95th Street Red Line Station
- Far South Area residents experience 20% longer commute than rest of City
- Traffic congestion is expected to grow along with study area population and employment

Opportunity for Improvement

- Extend rapid transit service south from 95th Street Red Line Station
- Improve access to, within, and beyond study area
- Stimulate economic development and job opportunities
- Shorten transit travel times through faster and more direct routings

Study Area

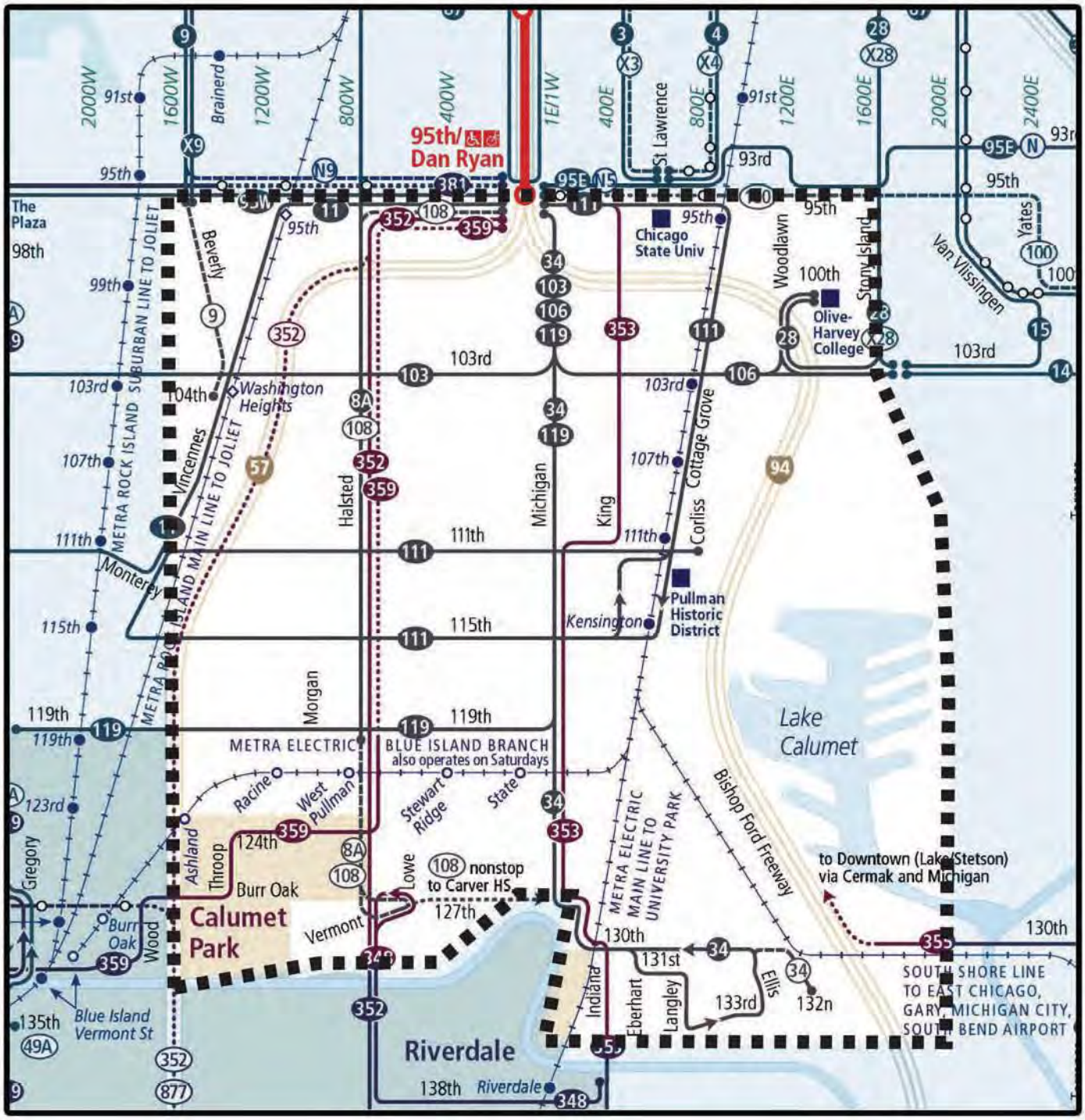
95th/
Dan Ryan
The Plaza
98th
99th
91st
95th
103rd
104th
107th
111th
115th
119th
123rd
124th
127th
130th
131st
133rd
135th
138th
Riverdale
Burr Oak
Calumet Park
Lake Calumet
Washington Heights
Chicago State Univ
Olive-Harvey College
Pullman Historic District
Kensington
Brainerd
Beverly
Vincennes
Monterey
Halsted
Morgan
Michigan
King
Cottage Grove
Corliss
Woodlawn
Stony Island
Van Vlissingen
Yates
St Lawrence
Racine
West Pullman
Stewart Ridge
State
Ashland
Throop
Gregory
Wood
Lowe
Vermont
Indiana
Eberhart
Langley
Ellis
Blue Island Vermont St
METRA ROCK ISLAND SUBURBAN LINE TO JOLIET
METRA ROCK ISLAND MAIN LINE TO JOLIET
METRA ELECTRIC
BLUE ISLAND BRANCH
also operates on Saturdays
METRA ELECTRIC MAIN LINE TO UNIVERSITY PARK
Bishop Ford Freeway
108 nonstop to Carver HS
to Downtown (Lake/Stetson) via Cermak and Michigan
SOUTH SHORE LINE TO EAST CHICAGO, GARY, MICHIGAN CITY, SOUTH BEND AIRPORT

Community Participation

Community participation is one of the key components of the alternatives analysis.

Community Outreach

- General Public
- Elected and Appointed Officials
- Community and Civic Organizations
- Faith-Based Organizations
- City and State Agencies

Ongoing Public Involvement/Input

- Meetings announced through public notices and advertisements
- Project updates on the CTA web site: www.transitchicago.com, accessible at local public libraries

Universe of Alternatives

Technologies

- Automated Guideway / Monorail
- Bus Rapid Transit
- Commuter Bus
- Commuter Rail
- Heavy Rail
- High Speed Rail
- Light Rail
- Local Bus
- MagLev
- Personal Rapid Transit
- Streetcar

Corridors

- I-57 Expressway
- Halsted Street
- UP Railroad
- Wentworth Avenue
- State Street
- Michigan Avenue
- King Drive
- Cottage Grove / Metra Electric
- I-94 Bishop Ford Freeway

Profiles

- Elevated
- At-Grade
- Trench
- Underground

SCREEN 3 - Step 1:

Alternatives Definition

Transportation System Management (Incorporates BRT)

Halsted Street to Vermont Avenue

At-Grade
No Exclusive Lanes
4 Stations / 5.1 Route Miles

Michigan Avenue to 130th Street

At-Grade
No Exclusive Lanes
4 Stations / 8.0 Route Miles

Corridors and stations and parking P are shown in generalized locations only.

SCREEN 3 - Step 1:

Alternatives Definition

Heavy Rail Transit

Halsted Street to Vermont Avenue

T Elevated
4 Stations / 5.0 Route Miles

UP Railroad to 130th Street

T Elevated
4 Stations / 5.3 Route Miles

Corridors and stations and parking P are shown in generalized locations only.

SCREEN 3 - Step 2

Evaluation Findings

Factor	Transportation System Management (Incorporates BRT)		Heavy Rail Transit	
Corridor	Halsted Street to Vermont Avenue	Michigan Avenue to 130th Street	Halsted Street to Vermont Avenue	UP Railroad to 130th Street
Profile	At-Grade No exclusive lanes	At-Grade No exclusive lanes	Elevated	Elevated
Physical Constraints	O	O	O	-
Public Support	O	O	O	+
Social / Economic	O	O	O	O
Environmental	O	O	O	O
Transportation	-	-	+	+
Capital Cost	+	+	O	O
Operating Cost	+	+	O	O
Ridership	O	O	+	+
Summary Rating	+1	+1	+2	+2
LPA Recommendation	NO	NO	YES	YES*

+ Better than other alternatives O Comparable to other alternatives - Worse than other alternatives

* Subject to separation distance/ROW availability and cost-effectiveness requirements

Preliminary Cost-Effectiveness Evaluation

FTA has cost-effectiveness thresholds

- Cost per hour of projected user benefits as measured by travel time savings.

Shorter versions of the HRT alternatives were investigated to see if the cost-effectiveness improved:

- HRT Halsted to 119th Street
- HRT UPRR to 115th Street

Initial results indicate up to 23% improvement in cost-effectiveness due to greater proportion of capital and O&M cost savings versus ridership reductions.

Factor *	HRT Halsted		HRT UPRR	
	Vermont Avenue	119th Street	130th Street	115th Street
Capital Costs (YOE)	$1,100M	$900M	$1,100M	$800M
O&M Costs (Annual)	$21M	$17M	$24M	$17M
Ridership (Annual)	11.6M	10.9M	12.7M	10.6M
YARD and Shop Costs (YOE)	$200M	$200M	$200M	$300M

The Halsted 119th Street alternative improves cost-effectiveness by 23%

The UPRR 115th Street alternative improves cost-effectiveness by 22%

* Costs and ridership figures as of June 2009

Preliminary Cost-Effectiveness Evaluation
Shortened Alignments

Heavy Rail Transit

Halsted Street to 119th Street

T Elevated
4 Stations / 3.8 Route Miles

UP Railroad to 115th Street

T Elevated
4 Stations / 3.3 Route Miles

Corridors and stations and parking P are shown in generalized locations only.

Freight Railroad & Transit Shared Use Corridor

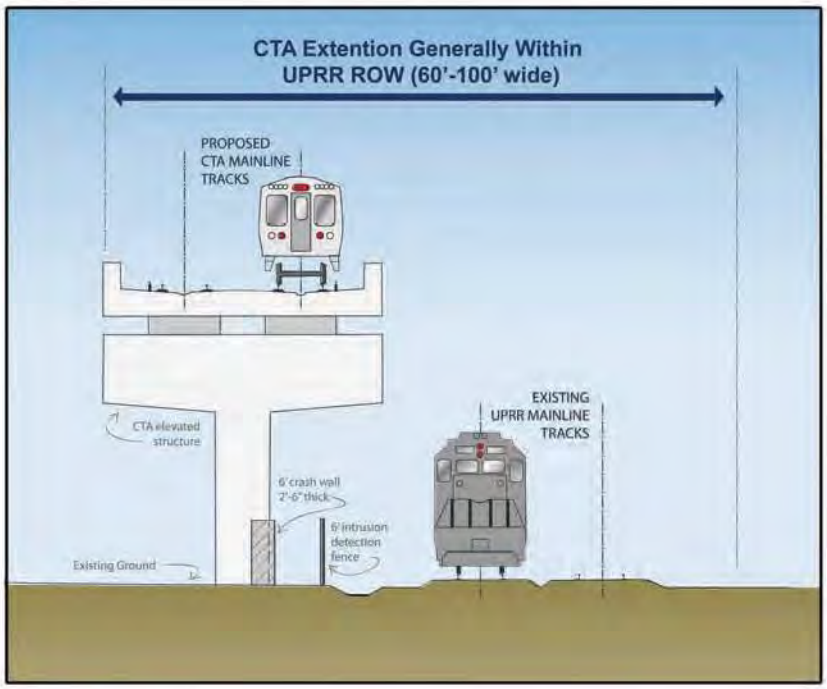

Physical Constraints

Freight Railroad & Transit Shared-Use Corridor

- Due to recent accidents, the transportation industry is adopting greater separation between freight railroad and transit operations for safety reasons
- For the HRT UPRR Elevated Alternative, 50-feet separation distance is desired

Right-of-Way Constraints

- UPRR needs entire right-of-way for operational purposes
- With additional separation distance, CTA extension will require adjacent property acquisition
- East and west alignments immediately adjacent to the UPRR right-of-way are being investigated

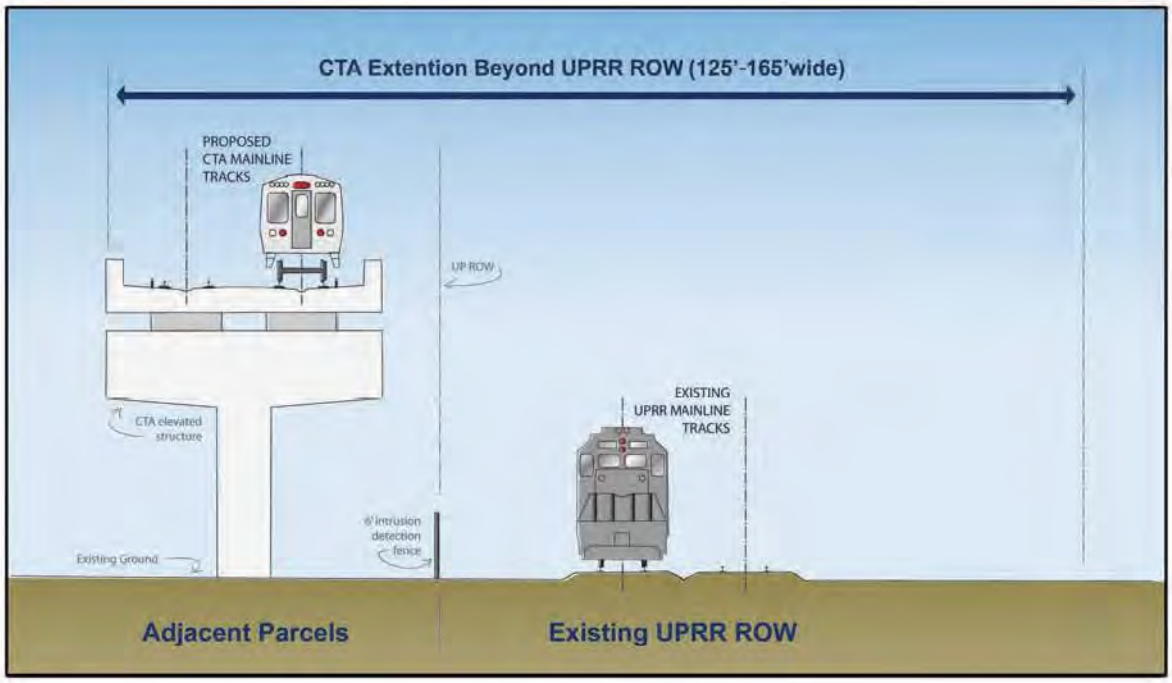

SCREEN 3 - Recomendation:

Locally Preferred Alternative

Heavy Rail Transit

UP Railroad to 130th Street

T Elevated

4 Stations / 5.3 Route Miles

Corridors and stations and parking P are shown in generalized locations only.

HRT UPRR Elevated

HRT UPRR Elevated

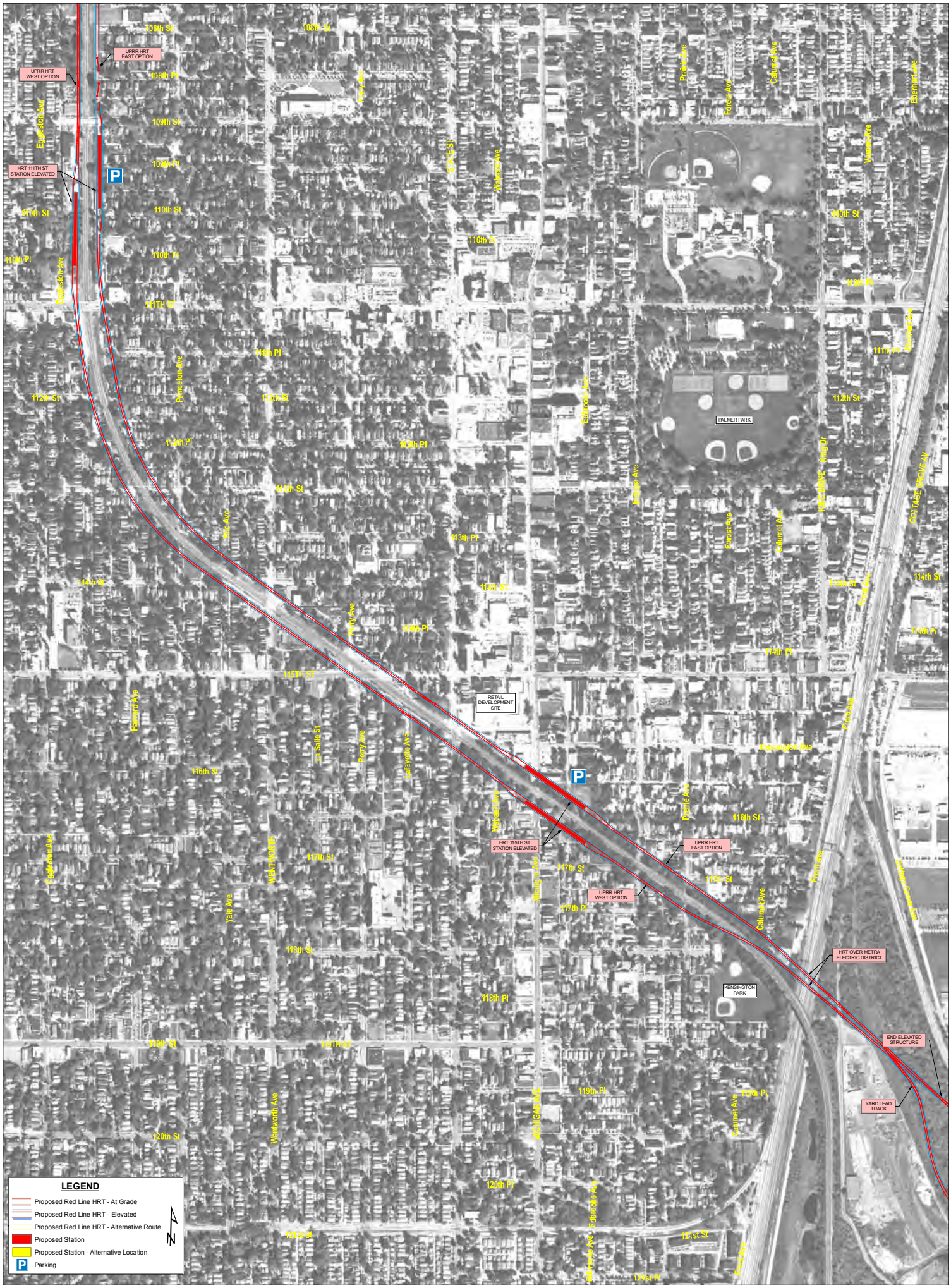

HRT UPRR Elevated

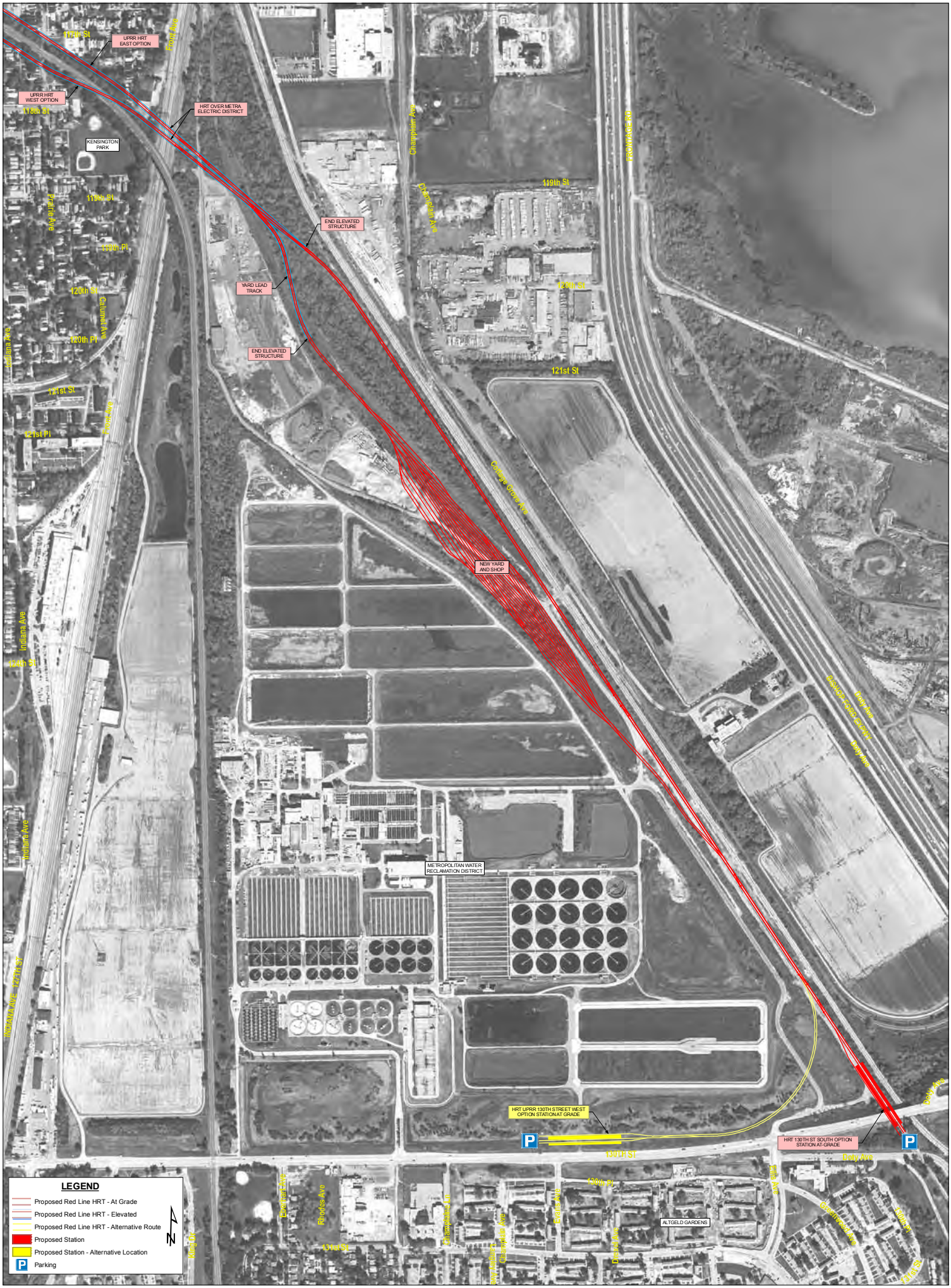

HRT Halsted Street Elevated

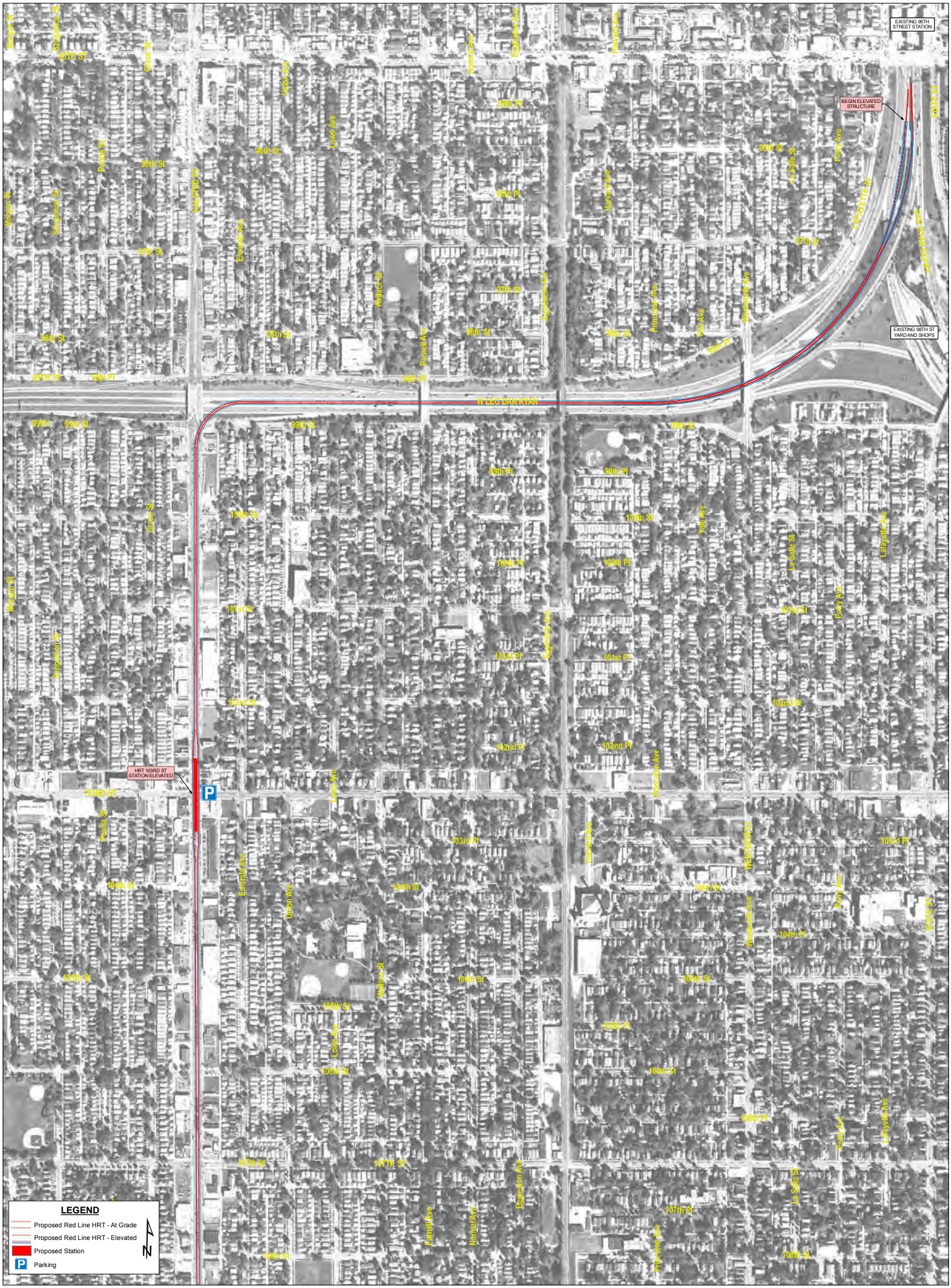

HRT Halsted Street Elevated

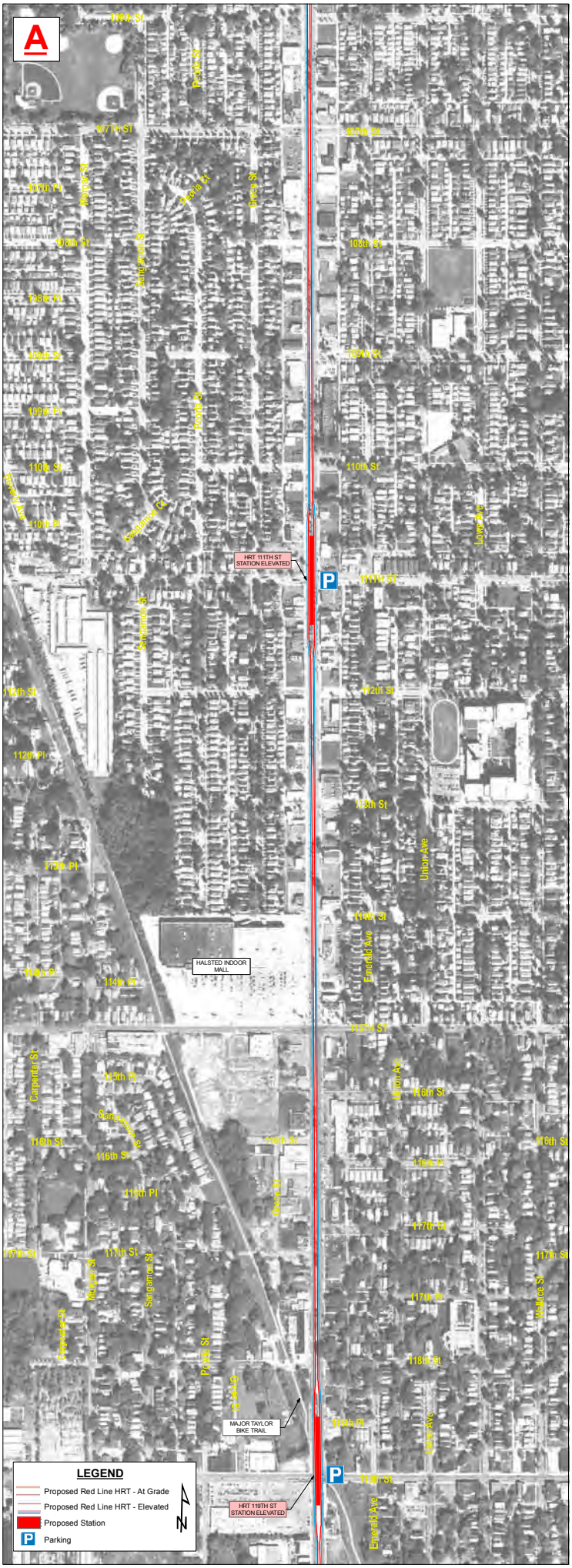

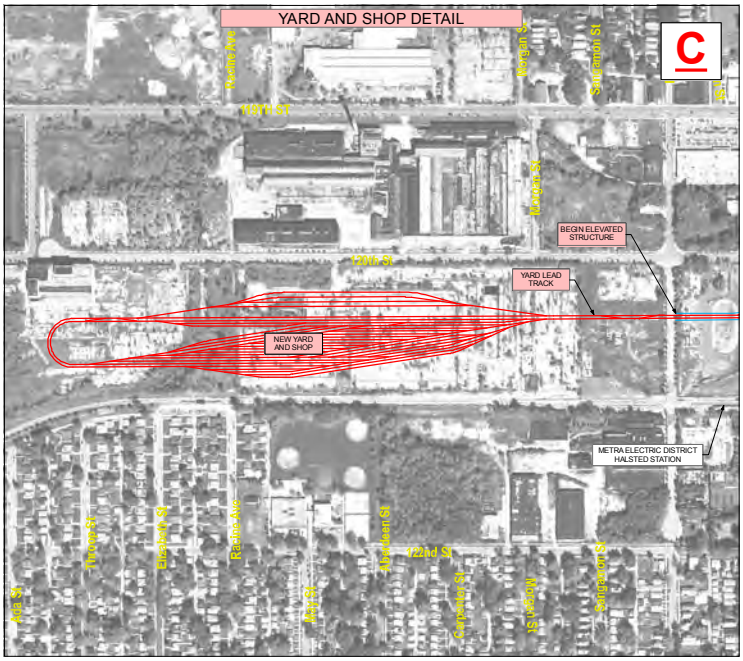

Red Line Extension
Alternatives Analysis Study
Comment Card

Please print your contact information if you would like to receive a response to the questions and comments.

Name _____

Organization _____

Address (Street, City, Zip)

_____

_____

_____

Phone _____

E-Mail _____

❏ Would you like to be added to the Red Line Extension Project mailing list? Check box if yes.

Please write your question or comment in the area below (please print). When you have completed the form, please give to one of the CTA representatives.

_____

_____

_____

_____

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Please send comments and questions to Mr. Darud Akbar, Chicago Transit Authority, Government and Community Relations, P.O. Box 7567, Chicago, IL 60680-7567. Or dakbar@transitchicago.com

Customer Information: 1-888-YOUR-CTA (1-888-968-7282)
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Transit Information: 836-7000 from any local area code • www.transitchicago.com

Chicago Transit Authority

Red Line Extension Alternative Analysis Study

Screen 3 Public Involvement-Public Comments and Questions

August 2009

No.	Comment/Question	Received Via*	Topic Area(s)
1	Planning Committee with CTA/City of Chicago Community leaders to develop & implement economic development impact.	STK	10
2	Planning Committee with CTA/City of Chicago Community leaders to develop & implement economic development impact.	STK	10
3	Will there be any plans to ensure that while the new business are welcomed what mechanisms will be in place to ensure existing businesses are not displaced; homeowners are not negatively impacted via noise abatement and a sharp rise in real estate taxes.	STK	10
*4 (4-6)	How much parking space will be provided at stations?	STK	6
5	Sense of insecurity is a BIG issue on Red Line. How will this be addressed on trains/stations and in new designs?	STK	10
6	How will presence of UP trains at grade affect travel time for passengers accessing Red Line stations?	STK	4
7	What type of security will you provide for passage. At ground level, have pedestrian bridge.	STK	10
8	If the terminal station that would extend to 130th Street is not selected, what alternatives will be available for the potential patrons who live beyond 103rd and 127th for the other alternative stations or plans?	STK	3, 11
9	Development of 130th would bring new "economic development" to a region of the city. This would greatly improve the overall economic structure of the area.	STK	10
10	What considerations have been given to the development of jobs once he construction starts?	STK	10
*11(11-12	Has the improvement if the 95th Street station include going south on 95th Street and extend over the rail right-of-way on the southside of the street? Also, has it been considered to look at the separation of the bus terminal from the ridership to move the bus stations to the south? Can a pedestrian bridge be added? (across 95th St)	STK	3
12	Consider pedestrian bridges for the access of UR rail & rapid transit for passengers/riders. Are there schematics of this?	STK	4
13	Inter-governmental and inter-agency coordination should now be put into action. A project this large and comprehensive needs the cooperation and input from many levels/layers of government, and city agencies- Planning, environmental, transportation, and economic development with CTA. This has been and can be done and certainly should be done.	STK	9
14	How long would it take for the increased ridership on the Red Line Extension to pay for the cost of the extension-if ever.	OLIVE	8
*15(15-17)	I agree with the recommendation to extend the Red Line using the UPRR to 130th St plan.	OLIVE	13
16	How will CTA acquire the match required by the federal government?	OLIVE	8
17	What type of green technologies are being considered for construction of the Red Line?	OLIVE	12
18	If service was increased on the Metra Electric line, in the grey line proposal, why couldn't business be diverted from 95th Street to closer Metra Electric stations.	OLIVE	2
19	In the 1960's when the Dan Ryan line was built ridership went down 75% on parallel Metra Electric stations. If the same is to happen here wouldn't the goals of better transit access be best accomplished by increasing frequency on the Metra Electric.	OLIVE	2
*20(20-21)	Since the money for this project will be included in the general transportation project, what priority will the Red Line extension be given? Is it mainly a matter of getting on the books while other projects are completed?	OLIVE	2, 8
21	Will tomorrow's meeting have the same info as this one?	OLIVE	9
22	Does funding from federal sources, e.g., Omnibus Budget earmarks, have to have state & local matches?	OLIVE	8
23	I understand that the CTA as an organization does not consider any of the proposed rail projects. If limited funds are available, what factors will influence where the funds are directed?	OLIVE	2

Chicago Transit Authority

Red Line Extension Alternative Analysis Study

Screen 3 Public Involvement-Public Comments and Questions

August 2009

No.	Comment/Question	Received Via*	Topic Area(s)
24	How often does UPRR run through the Red Lines extension corridor?	OLIVE	4
25	Can the land east of the UP south of 119th be used to shorten the line & bring it to grade sooner?	OLIVE	3
*26(26-28)	Why not use MWRDGC vacant land @ 130th for park & ride?	OLIVE	3, 6
27	Can an intermodal at both station be added to the south east metra line (proposed)? And reestablish the Wildwood Station on Metra Electric at 130th?	OLIVE	2
28	What is the travel time 130th to Madison?	OLIVE	5
29	Would like you to send me a print copy of your power point presentation. Print copies (reduced) of display cards.	OLIVE	9
30	Will there be public involvement in the Environmental Impact Study? If so, how will that public involvement be conducted?	OLIVE	1, 10
31	Does the public get to comment on the cost-effectiveness option to only built the Red Line Extension to 115th St.?	OLIVE	9
32	Will there be a bidding process for the Preliminary Engineering? If so, when will that process begin?	OLIVE	1
33	Who will compose the Project Management team during the Preliminary Engineering phase? Is there a place for community on the project management team?	OLIVE	1
34	The grade crossing next to stations seem like a danger for car/pedestrian alike. Why not build at-grade and use the savings to build underpasses of both CTA and UPRR?	OLIVE	3, 4, 12
35	How will the Halsted Street bus or train benefit the passengers who don't live west? Yes its beneficial to hose who live south, but not as accessible to those who live south east. (no buses that go that way).	OLIVE	11
36	How will bus services be distributed among the new train station?	OLIVE	11
37	Why is all the trains & buses centered around Halsted?	OLIVE	3
38	Well done, CTA. Continue to work to finalize the approval. In the long run the 130th St stop will be the most cost effective, the most equitable solution, the highest federal priority in the low income communities will have access & more parity.	OLIVE	13
39	One of the concerns CTA expressed previously was the capacity of the existing rail yard at 95th. If the proposed UP route would be shortened, how would the existing rail yard be improved?	OLIVE	5
40	Similar to your presentation on the Heavy Rail findings, improvement to the 95th St station need to considered to your findings for the UP Route and its needs to address overuse at the 95th St station.	OLIVE	3, 11
41	The social and economic benefit factor for the UP Route should be higher, against your heavy rail measurement. Can a review of factors be re-examined prior to June 18th?	OLIVE	7
42	I feel this is a great idea for 130th. And it will contribute to transit riders in the south. And project TSM seems the best of all!	OLIVE	13
43	Originally the Red Line was supposed to continue to Altegeld Gardens. That is what it should do.	OLIVE	13
44	I truly support the far southside Red Line Extension project	OLIVE	13
45	Who was funded this transportation surveys and how much did they cost.	OLIVE	1, 8
46	We are pleased that you have come to the conclusion to recommend the Union Pacific Rail alternatives. This area is the most needed in my opinion and other of my associations. We appreciate your dedication to the project and your hard work.	OLIVE	13
*47(47-49)	What would the station at 130th St (UPRR) be connected to? (Bus-Access to suburbs BRT?	OLIVE	11
48	Would acquiring space for trains cause a delay in final decision?	OLIVE	1,10

Chicago Transit Authority

Red Line Extension Alternative Analysis Study

Screen 3 Public Involvement-Public Comments and Questions

August 2009

No.	Comment/Question	Received Via*	Topic Area(s)
49	Would CTA extend it existing bus service to accommodate the rider-ship w/o passing thru Altegeld Gardens?	OLIVE	11
*(50-52)50	Does this extension depend on the stimulus money from the state to complete?	OLIVE	8
51	How much input or cost would be dependent on acquiring the land adjacent to UPRR lines, are they in favor?	OLIVE	10
52	Proposed date for completion of the screening process and final decision to proceed?	OLIVE	1
53	Recently attended a Chicago Plan Commission Mtg and heard presented the possibility of station being attached to a new shopping center at 115th Michigan your pictures place the station about 2 blocks away . Wondering which way your going in this case.	OLIVE	10
54	I support the far southside Red Line Extension Project to 130th Street. With the extension to 130th St. Are there any plans of the communities east of 130th Street? How does our plan stand in relation to the other extensions?	OLIVE	11,13
55	HRT Ext via UPRR to 130th. Have you considered extension to South Shore Station in Hegewisch. You would have transit interface between "L", South Shore, CTA bus, and PACE bus routes. There is Park & Ride already there.	OLIVE	2, 3
*56 (56-59)	What would the parking lost be-Affordable?	OLIVE	6
57	how many homes will be affected by rail line on Union Pacific Rail Route?	OLIVE	10
58	I don't like the short version of Build Extended Version.	OLIVE	13
59	What connective service will be provided for residents south of 103rd -east of Ford Freeway.	OLIVE	11
*60 (60-61)	Once you reach the environmental impact statement would it be exclusive of environmental justice principles?	OLIVE	10
61	What skills set would be required in eh construction of proposed site for employment purposes? Would area's residents have preference to job opportunities?	OLIVE	10

No.	Comment/Question	Received Via*	Topic Area(s)
62	While I support the initiative the CTA is taking by trying to improve transit in this area. I believe it should be done in different way. Instead of building a new heavy rail to brt extension. I believe the CTA should implement something similar to the grey line proposal. First of all, I think service levels on the Metra Electric line should be increased to near CTA levels. Unknown to many people, train frequencies on the Metra line used to be every 10 minutes until they were cut back in the 1960's. The benefit of this plan is that increasing trains on the Metra Electric could be implemented almost immediately compared tot he years it will take to build the Red Line Extension. Also, the Metra Electric line is not the typical commuter rail described in your alternatives study. In your study you stated that station spacing is typically 3 to 7 miles apart. However, this is far from the true in the study area where Metra Electric stations are as close as 4 blocks. This station spacing is closer than your proposal for heavy rail. This provides a convenience to riders that would not be attainable with the proposed CTA extension. The other thing about the Metra line is that it is totally electrified. With electric power comes greatly increased acceleration power and lower operating costs due to not having to pay for diesel fuel. To address the bus congestion use at the 95th Street is very easy in my proposal. If half of the buses were rerouted to nearby Metra stations (which many are closer tot he bus routes) the issue would be solved. The reason this was not done before was because service frequencies on Metra Electric were traditionally low and would make trips to time consuming while waiting for a train to come. Furthermore, the Red Line extension will be extremely cost prohibitive and it would be cheaper to implement the grey line plan because all of the infrastructure is already in place. This extra money could then be used to rebuild badly aged Metra Stations which then will attract new riders and economic development. Another important factor is that the Metra Electric line largely parallels the proposed route of the CTA extension. Therefore, ridership will decline because in 1969 when the CTA Dan-Ryan line was built, ridership between 75th and 111th Street Metra stations declined 75%. So what essentially is going to happen is that riders will be siphoned off the Metra line to the new CTA line because service frequencies will be higher. In my opinion this is a big waste of taxpayer money when the CTA is having a hard enough time maintaining what they currently have due to a lack of money.	OLIVE	2
63	What park-and-ride plans are there for the UPR alternative at 130th?	WCPL	6
64	Will environmental engineering be used in PE?	WCPL	1, 12
65	How does the new train yard for the UPRR route factor into cost-effectiveness	WCPL	5
66	The reconstruction in the area of people homes want plan do you have to relocate and have you talked to them, and the feed back.	WCPL	10
67	Job training for the people to work on the new line! Starting wages.	WCPL	10
68	Would homes be uprooted in order to extend the Red Line to 130th?	WCPL	10
69	Approximately how many homes will be removed to make way for the rail proposals?	WCPL	10
70	Is there consideration for transfer stop at 115th/Kensington Metra Line? And/or with transfer stop to 130th and South Shore Line?	WCPL	2
71	Please consider establishing connection points between Metra and Kensington/115th or at points along the proposed SE corridor.	WCPL	2
72	With this project and the "New Starts" funding process is there a chance for a Public/Private funding option, which may bring the project to completion sooner.	WCPL	8
73	Why haven't you considered building the rail line on the I-57 expressway?	WCPL	3
74	Why not use Medium of I-57 it would be less destruction to surrounding neighborhoods.	WCPL	3

No.	Comment/Question	Received Via*	Topic Area(s)
75	Will the Red Line Extension project get any money from the American Recovery and Reinvestment Act? If so how will that stimulus money effect phases and time-line for project?	WCPL	8
76	We do hope that we will move forward with this project. The extension of the Red Line to the far southside is desperately needed. I do hope that construction will be done exponentially.	WCPL	13
77	If CTA acknowledges that 95th/Dan Ryan (Red Line) as it is unsafe why did the Brown Line project and Blue Line projects start first? Is there a plan for survey the community on what they want because80 percent meeting are not representative of what we want.	WCPL	2,9
78	The alternatives to the red line extension seems to cut thru some communities and homes. If this is the case what will happen to the homes and residents between 103rd and 117th? Will these residents be compensated? If so, through what method?	WCPL	10
79	If funding is not available for the red line extension, what alternative plan is in place to relieve congestion at the 95th Street station?	WCPL	3, 8
80	95 W has passed by the time get we get out of work on 95th & Halsted.	WCPL	14
81	I'm in support of the Red Line Extension for future.	WCPL	13
82	Support Red Line train.	WCPL	13
83	The safety of CTA & UPRR passenger was great and all people do not have cars so alternative transportation is great for Chicago and CTA it will work.	WCPL	13
84	We are in favor of the Union Pacific Red Line Extension ending at 130th St.	WCPL	13
*85 (85-86)	How long will it take to complete the Red Line extension project. Also when will it begin?	WCPL	1
86	When will the bus alternative on Halsted Street start?	WCPL	1
87	Do you have a starting date for this project 2009-2010?	WCPL	1
88	How long will it take for construction to start? Will all the stations have park N ride? Where will the Red Line leave it current route to get on the UPRR alignment?	WCPL	1, 3, 6
89	Will the proposed rail extension begin at the 95th street terminal or will it be connected by shuttle bus to the 95th street terminal?	WCPL	3
90	Would the extension eliminate the "back up" that generally occurs from 69th to 87th St. from time-to-time especially during the rush hours? Is this caused by limited space in train yard?	WCPL	11
91	Have equity issues been considered as the plans have evolved such as: greater access for low-income communities, no park 'n' rides on the southside from Chinatown south, limited to no accessibility at stops south of 22nd St., and no extensions to city limits for southside residents.	WCPL	10
92	If the rail ended as 115th St wouldn't the likelihood of completing the line be having to go back to this long term drawing board? Another 30 years? Wont this shortchange the prospects for future ridership.	WCPL	3
93	What noise abatements have been considered?	WCPL	10
94	Is it possible to shift the proposed alternative from east to west on the UP to circumvent or limit displacement.	WCPL	10, 12

No.	Comment/Question	Received Via*	Topic Area(s)
95	Based on my review of your current plans, I have decided to support the idea of having a station just north of 130th street. This alternative reduces the potential of at-grade traffic conflicts on 130th street. It also allows for a more seamless access to park and ride lots along with the bus turnaround. I would also like to see a kiss and ride facility along with a small bike and ride lot and car share zip car at the station/ I am also in support of adding a bus turnaround at 103rd Street and 111th Street to accommodate route changes for CTA route 100, 103, Potentially route 14, Potentially route 15, potentially route 28, and potentially a Hammond Transit Route at 103rd. A turnaround at 111th Street could accommodate route 352, 359, and a streetside 111. These stations should also have Coffee shops, bike and ride facilities, and heated bus waiting areas	EMAIL	6, 12, 13
96	Concerning the Red Line extension from 95th to 130th Streets. The route selection paralleling the Burlington Northern Railroad's tracks seems to be the best of the alternatives explored. However, there is a safety issue for CTA riders using the station facilities that are location where the CTA's elevated tracks run parallel with the BN's Tracks. The problem is that large volumes of riders will have to routinely cross the BN's tracks when proceeding to and from the stations. With increased train traffic and longer trains, I think it is reasonable to expect that there will be numerous occasions when pedestrian access over the BN's crossing will be blocked for short periods of time. This may happen because of the length of a train, or because of some sort of operational delay. When this happens, even with grade crossing protection in place, some riders, left with no other options, are going to try and beat approaching trains, or climber through or even under standing trains. I suppose the railroad's right-of-way could be fenced off at the stations, but the streets would still be open and the opportunity for pedestrians to exercise the kind of bad judgments described above would still be available. While it would seem improbable that people would be in such a hurry that they would make such dangerous choices, it has happened before, sometimes with disastrous results. With that having been said, it is my opinion that a pedestrian overpass for CTA riders should be constructed as part of each CTA Station located where the CTA's tracks parallel the BN's tracks.	EMAIL	4, 12
97	The 107 Throop area would be a great second stop on the extension line. Buses could feed into the terminal from Vincennes and Halsted and there is a curved street that could be used for bus turn around this stop would also service two High Schools. The 111th - 115th street buses could pull in the Pullman, Roseland travelers. Riders 119th and beyond would use the end of the line 130th ST terminal. If the 107th terminal is built large enough and High speed tracks are installed there would be little need for costly multiple terminals and stops between 95th and 130th.	EMAIL	3
98	Inka Internet Station at 11320 South Halsted in Chicago, supports the Red Line extension project from 95 th Street to 130th street.	EMAIL	13
99	I'm writing to let you know that I support the extension of the CTA Redline from 95th - 134th St. It is vital that the state and CTA start to recognize the importance of the residents who live beyond 95th & state. It is necessary that Red Line be extended to service these residents, which I might state is long overdue! Governor Quinn, please include the CTA Red Line Extension project in the 2009-2010 Illinois State Budget and request full funding now. "I support the extension of the CTA Redline from 95th - 134th St"	EMAIL	13
100	Please extend the Red Line train to 130th Street	EMAIL	13
*101(101-105)	I do not support the Red Line Extension Plan as designated (the UPRR and Halsted Elevated Proposals). I am in support of effective transportation for the south side of Chicago which is beneficial to the surrounding community. I think that the Red Line Extension proposals will be too destructive to the neighborhood.	EMAIL	13

No.	Comment/Question	Received Via*	Topic Area(s)
102	Please address the following questions: What will happen to the structure of the neighborhood with the removal of the homes and businesses along the proposed UPRR/Halsted route? The neighborhood is primarily single home structures. Have studies of other cities' transit transportation and their impact been considered? Thank you for your consideration.	EMAIL	10
103	What is the plan for the 95th street Station? How will the structure be modified to improve its function? How will the station be more accessible to disabled and or elderly riders? Will the footprint of the station increase? Is a parking lot part of the plans for the 95th Street Red Line Station? Where is the proposed site of this lot? Will the homes west and east of the station be raised? Will the public park land be taken?	EMAIL	3, 10
104	Can additional meetings be scheduled to explain the proposals? In talking to people, most were unaware of the four highlighted proposals in the June 4th meeting. People again and again asked if the extension was going to run down i-57. Although the meetings in June were effective in introducing the analysis, many residents in the effective communities are not informed of the proposals.	EMAIL	1,9
105	Why doesn't the expansion branch off to the east (in the middle of the Bishop Ford Expressway) where it would serve the surrounding neighborhoods? Why isn't the proposal heading east in the middle of the Bishop Ford Expressway where it would serve Chicago State University, Olive-Harvey College, and Corlis High School? Please explain in greater detail the use of land that will be needed to develop an elevated train after 95th Street Station? I am concerned that possible expansion (as presented on June 4, 2009) will destroy the homes of hard working people who have mainstay of the neighborhoods. I am concerned that the cement structures as depicted in the presentation will be a physical separation in the flow of the neighborhoods. How will this be addressed?	EMAIL	3, 10, 13
106	I have been a citizen of Chicago, ILLINOIS my entire life. I want Governor Quinn to support and fund the expansion of the CTA train to 134th Street. This community is under serviced when it come to transportation. This expansion proposal has been defeated several times, I believe now is the time for approval when many cannot afford the expense of an automobile. The CTA is our only viable way to safely commute to jobs in this city. Our fellow northern citizen do not have this problem with transportation because the CTA has been expanded thru and outside the city to O'Hare Airport and beyond. The southern based taxpayer are funding transportation to the north, and west sides. We know some monies should be allocated and spent for our general good. So please add the expansion in the budget while there is funding available. I want our Governor to support this expansion and see that it is done to benefit his citizens regards of their location in our great state.	EMAIL	13
107	I support the CTA's Red Line Extension Project (95th to 130th). This service is needed for the Far South Region communities.	EMAIL	13
108	I would like to support Developing Communities Project's call for a red line extension. This effort has been discussed far too long, and it's time to put the funding into the State's 2009-2010 budget for the Red Line Extension Project. It is necessary to think about Chicagoans south of 9th street, not to mention helping the students who attend Gwendolyn Brooks College Prep.	EMAIL	13
109	Please extend the Red Line south beyond 95th Street. As someone who has lived in Chicago, Skokie, Detroit, and St. Louis, I've seen the huge difference that rail transit (or the lack thereof) can make in a neighborhood. Roseland, Pullman, and the other communities south of 95th would benefit greatly from rail service, from the everyday lives of individual people on up to the streetscapes themselves.	USPS	13

No.	Comment/Question	Received Via*	Topic Area(s)
110	I strongly agree with the choice of the UP alignment, but I am troubled by the inclusion of park and ride at all of the stations. If this line is intended to revitalize the areas around the stations at 103rd, 111th, and 115th, parking lots will work against that. Plus- why would we want to increase car traffic around these neighborhood-oriented stations? Better would be to concentrate parking at 130th/Bishop Ford Espy where there would be easy onto access. If access from I-57 is desired, perhaps, a parking deck could be built over the expressway just south of 95th St, with dedicated lanes to/from I-57 and a direct pedestrian connection to the 95th Street Red Line Station.	USPS	6, 10, 13
111-Petition	We the public, supports the CTA's locally preferred route to Extend the Red Line Rail Line from the 95th Street Station to 130th Street, using the Union Pacific Rail Road (UPRR) corridor. In addition, we support the call for a reduction in air pollution, reduced travel time, and increased access to employment and education opportunities in the Far South Region of Cook County, and the State of Illinois, through the construction of the Red Line Extension Project. [Note: 512 signatures included on petition.]	USPS	10, 13
Key to source of comments:			
OLIVE	**Comment received at Public Meeting held at Olive Harvey College**		
WCPL	**Comment received at Public Meeting held at Woodson Regional Chicago Public Library**		
EMAIL	**Comment sent to CTA by email**		
STK	**Comment received at Stakeholder Meeting**		
USPS	**Comment sent to CTA by postal mail**		
*** Denotes comments listed on the same comment card and/or email**			

Chicago Transit Authority
Red Line Extension Alternatives Analysis Study

Screen 3 Public Involvement
Responses to Public Comments and Questions

31 August 2009

Written questions and comments regarding the Red Line Extension Alternatives Analysis Study were submitted by a variety of individuals and groups from throughout the Chicago region at the study's Screen 3 Public Meetings held on June 3 and 4, 2009. In addition, public comments and questions on Screen 3 were submitted directly to the Chicago Transit Authority (CTA) via e-mail and postal mail through June 25, 2009.

All of the questions and comments have been collected and compiled to provide a comprehensive review of the issues raised along with CTA's responses. Every question, comment, and suggestion submitted during the public comment period has been compiled in the "Outreach Comment Database" (see separate document). Each question has been recorded verbatim and assigned a number that corresponds with the answers provided in this document, ensuring every question or comment submitted has been reviewed and answered or acknowledged. Collectively, the public comments and preferences will be considered in the evaluation of alternatives and concepts introduced through the public involvement process may be evaluated and/or reflected in subsequent project phases as appropriate.

Many of the comments received were very similar in nature. As a result, similar comments and their responses have been grouped by topic and "General Comment" heading below to avoid duplicative responses. Questions or comments requiring individual or specific responses are also included below along with unique responses. In order to understand some terms used in the Comments and Responses, it may be necessary to review the original Screen 3 presentation materials which are posted on CTA's Web site www.transitchicago.com (News and Initiatives, Alternatives Analysis Studies).

The list below shows the index of topics covered in the report, along with the number of comments received for each. Because comments often refer to more than one topic, the numbers associated with each do not equal the total number of comments received.

Index of Topics

1. FTA's Alternatives Analysis Process and Timeline (12)
2. Relationship of Red Line Extension to Other Proposed Transit Projects (10)
3. Alternatives Analyzed (17)
4. Access to Proposed Red Line Extension Stations (4)
5. Proposed Red Line Extension Operations and Yard (3)
6. Proposed Red Line Extension Parking Facilities (7)
7. Evaluation Criteria Used in the Alternatives Analysis Study (1)
8. Funding for Red Line Extension Construction and Operations (9)
9. Alternatives Analysis Public Involvement Process and Format (6)
10. Potential Red Line Extension Economic and Environmental Impacts (27)
11. Potential Red Line Extension Impacts on Existing CTA and Pace Services (9)
12. Issues to Be Addressed in Preliminary Engineering (6)
13. Statements of Support or Opposition of the Extension (25)
14. Other (1)

1. FTA's Alternatives Analysis Process and Timeline

General Comment:

What is the timing of the Environmental Impact Study, Preliminary Engineering, Final Design, Construction and Operation of the Red Line Extension?

Pertains to Specific Comments:

45, 52, 64, 85, 86, 87, 88

Response to Overall Comment Category:

The FTA New Start grant program requires conceptual transit project proposals to proceed through a formal process of planning, design, and construction. Upon completion of this process, the project is ready for operation. The process involves five formal steps: Alternatives Analysis (AA); Environmental Impact Statement (EIS); Preliminary Engineering (PE); Final Design (FD); and Construction. Each of these steps typically takes 2-3 years to complete although the EIS and PE can be done concurrently. Initiation of each step is also contingent upon federal approval and continued availability of federal and local funding, the timing of which will also affect the overall project schedule. For highly complex projects the Final Design and Construction steps take longer, particularly if construction is implemented in sequential phases rather than all at once.

The current Red Line Extension Alternatives Analysis study is being completed in summer 2009, with the adoption of a locally preferred alternative by the Chicago Transit Board. The subsequent project phase, Environmental Impact Study, is projected to begin in fall 2009. A specific completion year depends on factors outside CTA's control, but is expected no earlier than 2016.

Other Specific Comments Noted on this Topic:

Comments:

30. Will there be public involvement in the Environmental Impact Study? If so, how will that public involvement be conducted?
104. Can additional meetings be scheduled to explain the proposals? In talking to people, most were unaware of the four highlighted proposals in the June 4th meeting. People again and again asked if the extension was going to run down i-57. Although the meetings in June were effective in introducing the analysis, many residents in the effective communities are not informed of the proposals.

Response:

Yes, the Environmental Impact Statement (EIS) will have several opportunities for public involvement.

The purpose of the EIS is to provide full and open evaluation of environmental issues and alternatives, and to inform decision-makers and the public of reasonable alternatives that could avoid or minimize adverse impacts and enhance the quality of the environment.

The EIS process begins with Federal Transit Administration's (FTA) publication of a *Notice of Intent* to prepare an EIS in the *Federal Register* along with similar CTA announcements in local newspapers and other media. At this time, a tentative list of alternatives and impacts is established and presented to the public and interested government agencies for comment. This notification is part of *scoping* - the process of affording an early opportunity for the public and agencies to identify potential issues to be addressed in the EIS. Scoping includes the provision of materials describing the project, alternatives, impacts, and any other relevant information known about the proposed undertaking. These materials are distributed to invite early comments, which will be accepted at scoping meetings – anticipated to be held in fall 2009 – and through written comments.

Following scoping, the EIS is prepared in two stages – draft and final. The Draft Environmental Impact Statement (DEIS) provides an opportunity for government agencies and the public to review a proposed

project and alternatives. The principle components of a DEIS include discussion of the following 1) the purpose of and need for action; 2) alternatives, including the proposed action; 3) the affected environment; and 4) environmental consequences. A DEIS must be signed by the FTA Regional Administrator and the authorized official of the local lead or cooperating transit agency. The approved DEIS is then concurrently filed by FTA with the US Environmental Protection Agency (US EPA) and distributed by the local lead agency.

After completion of the circulation period, all substantive written comments and the public hearing testimony are addressed and the preparation of a Final Environmental Impact Statement (FEIS) begins. The principle components of the FEIS include: 1) identification of a preferred alternative; 2) responses to comments made during the circulation period; 3) commitments to mitigate adverse impacts of the project; 4) evidence of compliance with related environmental statutes, Executive Orders and regulations; and 5) a description of changes that have been made to the project since the DEIS was published. Once the appropriate FTA official has approved the FEIS, it is concurrently filed by FTA with the US Environmental Protection Agency (US EPA) for publication of a notification of availability for a 30-day circulation period in the Federal Register and it is distributed and advertised through local media by the local lead agency.

Comments:

32. Will there be a bidding process for the Preliminary Engineering? If so, when will that process begin?
33. Who will compose the Project Management team during the Preliminary Engineering phase? Is there a place for community on the project management team?

Response:

CTA anticipates that the Preliminary Engineering (PE) team will be chosen in 2010. There are two steps that must be completed before the PE team will be selected and PE initiated. After the completion of the Alternatives Analysis study, CTA will submit an Application to Enter Preliminary Engineering to the Federal Transit Administration (FTA) to receive a project rating. First, CTA must receive a favorable rating by FTA to advance to PE. Second, CTA must obtain funding to begin PE. Typically, funding for New Starts projects is obtained at the federal level – more information about funding is provided in Topic Category 8. After these two steps are completed, CTA will procure a consulting team to perform PE services for the Red Line Extension project.

The procurement process will follow standard CTA procurement guidelines, as outlined on the CTA website www.transitchicago.com (click on Doing Business, then Procurement Information). Since PE comprises the technical work to develop and design the engineering specifications for the project, this work is not typically scoped to include community participation. However, this work is often performed in conjunction with the Environmental Impact Statement (EIS), which allows for extensive community participation to understand potential project impacts and evaluate mitigation strategies. Mitigation strategies developed and approved in the EIS phase are incorporated into PE project designs.

Comment:

48. Would acquiring space for trains cause a delay in final decision?

Response:

At this early stage in the process, it is difficult to predict delays associated with land acquisition. Specific issues such as required land acquisition will be studied in the next steps, Preliminary Engineering and the preparation of an Environmental Impact Statement. Required land acquisition typically begins after completion of the Environmental Impact Statement and the issuance of a Record of Decision.

2. Relationship of Red Line Extension to Other Proposed Transit Projects

General Comment:

Wouldn't this area be better served by the Metra Electric Gray Line service? Can this extension connect to existing Metra Electric or South Shore services?

Pertains to Specific Comments:

18, 19, 27, 55, 62, 70, 71

Response to Overall Comment Category:

Various proposals – the Gray Line or the Gold Line -- call for operational changes to increase service frequency on the Metra Electric District Line and improve CTA connections to this facility as well as fare integration between regional transit services. This would terminate at a station in downtown Chicago. It would not have the same connectivity to the CTA rail rapid transit system that provides accessibility to the entire Chicago area that an extension of the CTA Red Line would provide.

Improved Metra Electric Service meets some of the needs of the study area, such as reducing the lengthy transit commute times experienced by many residents of the study area. However, it will not be included as a build alternative in the current Alternatives Analysis because it does not comprehensively address all of the needs of the project, including alleviating the bus and passenger congestion at 95th Street Red Line station or reducing travel times of passengers that transfer from bus to CTA rail to access their destination. Additionally, as noted in the Screen 1 analysis (available at www.transitchicago.com – click on News and Initiatives, then Alternatives Analysis Studies) commuter rail has several characteristics that are less favorable for the study area than other modes analyzed (such as bus and heavy rail).

There is potential for connection of the proposed Red Line extension to the Northern Indiana Commuter Transportation District (NICTD) South Shore Commuter Rail Line in the vicinity of 130th Street, where the two lines would be adjacent to each other. This potential connection will be explored in further detail during Preliminary Engineering. A connection between the Red Line Extension and Metra Electric District at Kensington/115th Street station is not possible, as the proposed Red Line Extension routing crosses the Metra Electric District Line approximately one-half mile to the south of the Kensington/ 115th Street station.

<u>Other Specific Comments on this Topic:</u>

Comments:

20. Since the money for this project will be included in the general transportation project, what priority will the Red Line extension be given? Is it mainly a matter of getting on the books while other projects are completed?
23. I understand that the CTA as an organization does not consider any of the proposed rail projects. If limited funds are available, what factors will influence where the funds are directed?

Response:

Every five to six years, the United States Congress enacts legislation that authorizes federal funding for highway, transit, motor carrier, safety, and research programs across the country. This federal support represents the primary source of capital funding for CTA and other transit agencies throughout the U.S. The current legislation, known as SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users), authorizes the federal transit and highway programs through 2009. President Bush signed the act into law on August 10, 2005.

The SAFETEA-LU legislation authorized CTA to seek federal New Starts grant support for four new rail lines or line extensions including: the Red Line Extension to 130th Street; the Orange Line Extension to Ford City; the Yellow Line Extension to Old Orchard; and the Circle Line. In order to qualify for New Starts funding, CTA is required to perform comprehensive Alternatives Analysis studies for each. Alternatives Analysis studies for all four projects are currently underway following the same federally mandated process as the Red Line Extension study, but addressing the unique transportation needs of their respective study areas.

A key objective of the Federal Transit Administration's Alternatives Analysis process is to measure all transit projects from across the nation by the same set of standards. This process ranks projects based on this measurement and not on where they are located. In this way, the benefits and costs of a project can be objectively measured in comparison to all others. Acknowledging that each project has a unique Purpose and Need, the process allows multiple projects from the same region to be rated highly. It is not unusual for a large region such as Chicago to seek approval for several major transit initiatives at the same time. In the late 1990s, CTA won New Starts funding approval for both the Cermak (Douglas)

Branch reconstruction and the Brown Line capacity expansion project at the same time. Metra has also received New Starts funding for multiple projects at the same time. New York City in 2005 had two multi-billion dollar transit projects approved for New Starts funding.

CTA is preparing all of the New Starts projects to be advanced simultaneously from Alternatives Analysis with the selection of Locally Preferred Alternatives in each study area by fall 2009 and has not expressed a priority for any project as they are all intended to address important transportation objectives in their respective study areas.

Comment:

77. If CTA acknowledges that 95th/Dan Ryan (Red Line) as it is unsafe why did the Brown Line project and Blue Line projects start first?

Response:

CTA uses a variety of factors to prioritize among many worthy projects for which there are limited resources. The Red Line Alternatives Analysis Study has identified deficiencies at the 95th Street bus terminal including narrow sidewalks connecting to surrounding neighborhoods, inadequate space within the terminal for passenger circulation and bus maneuvering and frequent presence of pedestrians in the bus drive lanes. These conditions are not desirable because they make transit less attractive and make the terminal less safe. The proposed LPA is intended to address this bus and passenger congestion (among other goals) and prevent conditions from deteriorating in the future.

The Cermak (Douglas) Blue Line Branch reconstruction project, which is now served by Pink Line trains, was prioritized for reconstruction because of the substantially deteriorated condition of track, structure and station facilities that had reached the end of their useful life. Prior to reconstruction, trains speeds were slowed to no more than 15 miles per hour over most of the branch to minimize the risk of further damage to the structure or derailment significantly lengthening commute times and depressing ridership. Conditions were so deteriorated CTA considered suspending service, but funds were secured through the New Starts program for reconstruction.

The Brown Line Capacity Expansion project was motivated by the significant ridership growth on the Brown Line over the last decade. In response to increasing rush hour crowding, train frequencies were increased to the maximum possible. As ridership continued to grow, crowding on rush hour trains exceeded CTA loading standards and the capacity expansion project was planned to lengthen platforms to accommodate 8-car trains (from 6 cars). The $530 million project, now nearing completion, also modernized stations and made them accessible for people with disabilities.

3. Alternatives Analyzed

General Comment:

Explain the alternatives that were analyzed.

Pertains to Specific Comments:

8, 11, 26, 34, 40, 55, 79, 88, 89, 103, 105

Response to Overall Comment Category:

CTA evaluated five alternatives in the Red Line Extension Alternatives Analysis Screen 3, including the No-Build Alternative, two Transportation System Management (TSM) / Bus Rapid Transit (BRT) Alternatives on Halsted Street and Michigan Avenue, respectively, and two heavy rail (HRT) alternatives terminating on Halsted Street and adjacent to the Union Pacific Railroad (UPRR) right-of-way, respectively.

The No-Build Alternative considers the system if no changes are made to transit services in the study area between today and the forecasted year of evaluation, 2030. Existing transit service in the study area includes 22 CTA bus routes and seven Pace bus routes operating on the edge or within the study area, offering extensive north-south and east-west travel options throughout the study area, and primarily

terminating at the 95th Street station. The 95th Street station includes a bus terminal facility with 20 bus bays.

Next, CTA evaluated two bus alternatives from Screen 2, combining a TSM – a low-cost option – and BRT for evaluation in Screen 3. The first TSM/BRT Alternative is an enhanced bus route from the 95th Street station to Halsted Street and 127th Street/Vermont Avenue, operating in mixed-traffic on Halsted Street. Bus stop locations are proposed at 103rd Street, 111th Street, 119th Street and 127th Street/Vermont Avenue, with park-and-ride facilities at each stop. The second TSM/BRT Alternative is an enhanced bus route from the 95th Street station to 130th Street via East 95th Street, Michigan Avenue, East 127th Street, South Indiana Avenue and East 130th Street. Bus stop locations are proposed at 103rd Street, 111th Street, 115th Street and 130th Street, with park-and-ride facilities at each stop. These alternatives do not propose to use exclusive lanes; however, implementation of transit signal priority at signalized intersections – to increase bus speeds by extending the green light cycle at traffic signals when needed – is proposed along the Halsted Street and Michigan Avenue portions of the respective routes. A fleet of enhanced 60-foot hybrid articulated buses are proposed. Finally, with each of the bus alternatives, expansion of the 95th Street terminal – extending the existing bus bays along State and Lafayette Streets approximately 250-feet north to 94th Street – to improve circulation and safety is also included.

In addition to the two bus alternatives, two rail alternatives were also evaluated in Screen 3. The first alternative is the Halsted Street HRT elevated alternative. This alternative would depart the current CTA 95th Street terminal station and follow the I-57 Expressway median, transitioning to an elevated structure at Halsted Avenue and traveling south on Halsted Street to 127th Street/Vermont Avenue. This alternative is 5.0 miles long and has four proposed stations– at 103rd Street, 111th Street, 119th Street, and 127th Street/Vermont Avenue – consistent with modern rapid transit station spacing. The second HRT alternative is the UPRR HRT elevated alternative. This alternative would follow the I-57 Expressway as it traveled south from the 95th Street terminal station until the UPRR corridor (adjacent to Eggleston Avenue), where it would turn south to follow the corridor to approximately 111th Street, and then southeast until it crosses over the Metra Electric District tracks at about 119th Street; here, the corridor deviates from the UPRR corridor, continuing southeast at-grade adjacent to the Northern Indiana Commuter Transportation District (NICTD) South Shore tracks to the proposed terminal location at 130th Street near the I-94 Bishop Ford Freeway. This alternative is 5.3 miles long and has four proposed stations – at 103rd Street, 111th Street, 115th Street, and 130th Street.

For each of the proposed rail extension alternatives, an intermediate alternative was also evaluated. The intermediate alternative for the Halsted Street HRT elevated alternative would terminate at the proposed 119th Street station – for a total distance of 3.8 miles and three new stations. The intermediate alternative for the UPRR HRT elevated alternative would terminate at the proposed 115th Street Station – for a total distance of 3.3 miles and three new stations.

All rail transit alternatives would be powered via an electric third rail, consistent with the existing CTA system and rail cars would be equivalent to those used by the existing fleet. Note that with regard to the UPRR Corridor, CTA and UPRR operate services with incompatible train cars and power systems; therefore, in the proposed UPRR Corridor, CTA would have its own dedicated tracks. The elevated alternative would operate adjacent to existing UPRR freight right-of-way (currently at-grade). All alternatives currently have bus terminal facilities and Park and Ride lots proposed in proximity to each station.

Other recommendations and preferences for potential alternatives, alternative design elements, and alternatives extending beyond the study area were provided on the question/comments cards submitted by the public. Staff will review all suggestions and incorporate in the analysis those that merit further consideration.

Other Specific Comments on this Topic:

Comment:

25. Can the land east of the UP south of 119th be used to shorten the line & bring it to grade sooner?

Response:

Yes, concept plans for the Red Line Extension show that traveling southbound after crossing over the Metra Electric District tracks, the Red Line Extension would be at-grade (street level) adjacent to the NICTD South Shore tracks.

Comment:

37. Why are all the trains & buses centered around Halsted?

Response:

Within the study area, the majority of north-south existing bus service is located on Halsted Street and Michigan Avenue. These streets have multiple CTA and Pace bus routes operating on them. During Screen 3 of the Alternatives Analysis study, the two Red Line rail extension alternatives that were studied included Halsted Street and the Union Pacific Railroad corridor, which is located to the east of Halsted Street.

Comments:

73: Why haven't you considered building the rail line on the I-57 expressway?
74: Why not use Medium of I-57 it would be less destruction to surrounding neighborhoods.
97: The 107 Throop area would be a great second stop on the extension line…

Response:

During Screen 1, the I-57 Expressway corridor was analyzed. The I-57 Expressway was one of nine corridors that were examined as part of the Universe of Alternatives. The I-57 Expressway corridor was not recommended for further study in Screen 1 because it was located at the far western edge of the study area and did not address all of the needs of the project, including directly serving population and employment in the study area. Additionally, transit access is more difficult to this corridor due to its location in the median of the expressway. For more information about Screen 1, see the project website at www.transitchicago.com.

Comment:

92. If the rail ended as 115th St wouldn't the likelihood of completing the line be having to go back to this long term drawing board? Another 30 years? Won't this shortchange the prospects for future ridership.

Response:

CTA examined the possibility of ending the Red Line Extension at 115th Street to see if it would better position the project to compete for Federal Transit Administration New Starts funding by improving its cost-effectiveness and also lowering the overall cost of the project. The Red Line Extension is unlikely to be built without the federal New Starts funding. CTA will continue its discussions with the Federal Transit Administration as it continues through the New Starts process (Environmental Impact Statement, Preliminary Engineering, and Final Design) to determine the terminal location of the Red Line Extension. In addition, the current federal surface transportation bill expires this fall, and the re-authorization has the potential to contain revisions to the New Starts process, including changes as to how projects are rated and funding commitments to the program. These potential changes could impact decisions as to whether to terminate the Red Line at 115th Street or 130th Street.

If the Red Line Extension were to terminate at 115th Street, it is unknown as to when the line could be extended to 130th Street. Funding availability will likely be a key factor in the timing. It is anticipated that opening and operating a Red Line Extension to 115th Street will result in increased ridership in the corridor, thus strengthening an already strong travel market.

4. Access to Proposed Red Line Extension Stations

General Comment:

How will Union Pacific trains affect access to the red line station? Have you considered pedestrian bridges?

Pertains to Specific Comments:

6, 24, 34, 96

Response to Overall Comment Category:

For the Union Pacific Railroad heavy rail transit elevated alternative, Union Pacific freight railroad trains may affect access to the Red Line Extension at the proposed 103rd Street and 111th Street stations. At these two stations areas, the Union Pacific Railroad right-of-way has approximately 25-30 trains per day using the at-grade corridor, interrupting street traffic and access to potential Red Line Extension stations. Station design options that facilitate or improve access, such as the inclusion of pedestrian bridges at these proposed station locations, will be analyzed in the subsequent Preliminary Engineering project phase (see Topic Category 12 for more information).

At the proposed Red Line Extension 115th Street/Michigan Avenue station, the Union Pacific Railroad is grade separated, so that access to the Red Line Extension station can be maintained by using Michigan Avenue, which passes underneath the Union Pacific Railroad.

5. Proposed Red Line Extension Operations and Yard

General Comment:

Is a rail yard included in the alternatives, even the shortened alternatives? How does a new yard site factor into the evaluation of alternatives, including cost-effectiveness?

Pertains to Specific Comments:

39, 65

Response to Overall Comment Category:

Yard capacity is an important concern when planning for rail line expansion and additional vehicle requirements. Analysis suggests that current CTA yard capacity is sufficient for CTA needs, including additional cars that would be added with the proposed Red Line Extension.

Three rail yards are accessible from the Red Line and considered in a yard capacity analysis. Howard Yard (at the north end of the current Red Line) has a practical operational capacity of 254 cars, while 98th Street Yard (at the south end of the current Red Line) has a capacity of 234 cars and Linden Yard (at the north end of the Purple Line) has a capacity of 76 cars, for a combined total of 564 cars. The current Rail Car Assignment (as of Spring 2009) provides for 356 cars to be assigned to the Red Line, 88 cars assigned to the Purple Line and 6 cars assigned to Yellow Line service. The total car assignment for the three lines is 450 cars. Because the Red Line operates 24 hour service, 48 Red Line “road cars” will be in service at all times, resulting in a normal maximum total of 402 cars that might be stored in the three yards at any given time. This would indicate that the existing total yard capacity of 564 cars is sufficient to cover the current maximum storage requirement.

Several other factors are also considered when evaluating total yard capacity. Cars may not be evenly distributed between yards, based on the cars that must be available from each yard to meet the daily service requirements or peak period requirements for each line, plus car requirements for maintenance and spares. For the yards/shops to function effectively, the yards should not be filled to capacity. For this study, it is assumed that for efficient operation, yards should not exceed more than 90 percent of their maximum capacity. These factors, combined with the assumption of an additional 78 cars for the Red Line Extension (and additional two cars for the Yellow Line Extension), indicates that the combined Red, Yellow, and Purple Line yard capacity must be at least 482 cars, which is still less than the current maximum combined 564 car capacity of the Howard, 95th and Linden Yards.

Since yard capacity is not a constraining factor for advancing the Red Line Extension, a new yard is not included in the project plans or cost assumptions for the Red Line Extension. Therefore, additional yard costs do not weigh into cost-effectiveness analyses. However, a potential yard site has been identified and may be pursued using non New Starts funding.

One additional factor to consider when evaluating yard capacity is associated maintenance shop capacity and condition. The 98th Street Shop facility is currently 40 years old and at the end of its useful life. CTA has identified replacement of this facility as a state-of-good repair need. While the existing shop can be

replaced at its current site, one of the advantages of extending the rail line is that it does allow CTA to consider other sites, which may have additional benefits, for a replacement location. Options to shorten the proposed heavy rail alternatives limit available options for a new yard site; however, if shortened options are considered and alternate shop and yard sites are pursued, non-revenue track (at a cost of up to about $100 million) could be added to the shop replacement cost to extend the line to proposed maintenance locations.

Other Specific Comments Noted on this Topic:

Comment:

28. What is the travel time 130th to Madison?

Response:

Travel time on the proposed Union Pacific Railroad heavy rail transit elevated alternative from the 130th Street station to the Monroe Street station is estimated to be 40 minutes.

6. Proposed Red Line Extension Parking Facilities

General Comment:

Describe the park and ride facilities including locations, fees, and number of parking spaces proposed.

Pertains to Specific Comments:

4, 56, 63, 88, 95

Response to Overall Comment Category:

At this stage in the Red Line Extension project development, general assumptions about park-and-ride facilities were made so that estimate costs for these facilities could be included in total capital and operating cost estimates. However, details for proposed park-and-ride facilities have not yet been finalized. The subsequent project phases, Preliminary Engineering and Environmental Impact Statement, will evaluate land availability and impacts of proposed station locations and adjacent facilities and will provide design requirements for park-and-ride at each station. For the Screen 3 analysis, 1500 total park-and-ride spaces were assumed to be distributed among each of the four stations (or three stations for the shortened alternatives) for each heavy rail transit alternative. The greatest park-and-ride demand (and availability) is assumed at the proposed terminal station for each alternative.

The Chicago Transit Board is responsible for setting the parking rates. Current parking rates for CTA park-and-ride facilities are between $4 and $5 (except for longer-term parking at Rosemont and Cumberland).

Other Specific Comments Noted on this Topic:

Comment:

26. Why not use MWRDGC vacant land at 130th for park & ride?

Response:

Subject to ongoing discussions with the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), CTA is considering property in the vicinity of 130th Street for a station and park-and-ride facilities. The potential use of this land will be evaluated in the next steps, Preliminary Engineering and the preparation of an Environmental Impact Statement.

Comment:

110. I strongly agree with the choice of the UP alignment, but I am troubled by the inclusion of park and ride at all of the stations. If this line is intended to revitalize the areas around the stations at 103rd, 111th, and 115th, parking lots will work against that. Plus- why would we want to increase car traffic around these neighborhood-oriented stations? Better would be to concentrate parking at 130th/Bishop Ford Espy where there would be easy onto access. If access from I-57 is desired, perhaps, a parking deck could be

built over the expressway just south of 95th St, with dedicated lanes to/from I-57 and a direct pedestrian connection to the 95th Street Red Line Station.

Response:

There are no existing CTA park-and-ride facilities on the Dan Ryan branch of the Red Line. The Red Line Extension provides an opportunity to serve auto access to the Red Line. Although the Red Line Extension park-and-ride facilities have not been sized yet, it is anticipated that the majority of the parking will be provided at the 130th Street terminal station. In the subsequent project phases, the preparation of an Environmental Impact Statement and Preliminary Engineering, the Red Line Extension station park-and-ride facilities will be located and sized, and traffic impacts of these park-and-ride facilities will be evaluated. The construction of a park-and-ride facility over the Dan Ryan Expressway on the south side of 95th Street was not considered for the Red Line Extension project due to high capital costs and community concerns.

7. Evaluation Criteria Used in the Alternatives Analysis Study

General Comment:

41. The social and economic benefit factor for the UP Route should be higher, against your heavy rail measurement. Can a review of factors be re-examined prior to June 18th?

Response:

The Screen 3 analysis of social factors reveals some differentiation between the Halsted and UPRR alternatives. The UPRR alternative is higher than the Halsted alternative in percentage of population under 18, poverty-status and zero-car households. Beyond these factors, all the alternatives are similar as previously analyzed in Screen 2, with approximately the same total population and employment (both now and in 2030), and approximately the same percentages of minority population (all being much higher than Cook County as a whole), population age 64 and over, and population with a mental, physical, or sensory disability. No alternative significantly stands out to be better or worse than any other alternative with regards to social factors, and each adequately serves poverty, minority, youth, senior, and disabled populations as well as zero-car households and poverty-status populations (as designated by the 2000 US Census). Because of this lack of differentiation, all alternatives receive a neutral comparative social factor rating.

8. Funding of Red Line Extension Construction and Operations

General Comment:

How will the construction and operation of the Red Line Extension be funded? Is CTA seeking matching funds?

Pertains to Specific Comments:

14, 16, 20, 22, 72

Response to Overall Comment Category:

Two types of funding are needed for the extension – operating funds and capital funds.

CTA's operating budget supports day-to-day service delivery on its bus and rail system and determines the frequency and hours of service offered. Approximately half of CTA's operating budget comes from customer fares and revenue generated from advertising, concessions and other sources. The other half comes from regional sales taxes, real estate transfer taxes, and matching funds from the State of Illinois. Once the Red Line Extension is built and operational, funds to operate the system are anticipated to be consistent with funding mechanisms that support CTA's other bus and rail transit services.

Meanwhile, CTA has initiated this Alternatives Analysis study for the Red Line Extension as a first step towards obtaining capital funding for the project through the Federal Transit Administration's "New Starts"

grant program.[1] This program provides funding for major public transit infrastructure projects throughout the U.S. through a highly competitive process. These are discretionary funds that are only available for system expansions and do not compete with federal funds that CTA receives for capital maintenance (or state of good repair) needs.

Upon successfully advancing through Alternatives Analysis, Environmental Impact Statement, and Preliminary Engineering, a project may receive a Full Funding Grant Agreement (FFGA) from the federal goverment. The FFGA can provide federal funds for up to 80 percent of a project's capital cost including Final Design, although typically project sponsors request 50 percent or less to increase the competitiveness of their projects. Other non-federal funds (in Illinois, these have traditionally been state funds) will comprise the remainder of capital funding. It is possible to seek alternative sources of federal and non-federal funding for the project – such as private sector funding, where available through partnerships or other agreements – but the federal New Starts grant program is specifically intended to support transit projects of this nature and is the public funding mechanism generally most capable of doing so.

CTA is simultaneously pursuing solutions to its overall operating and capital funding challenges while also positioning itself through Alternatives Analysis studies such as this one to secure capital funding to meet the region's future transit infrastructure needs. Many of today's key transit links—including the Blue Line to O'Hare and the Orange Line to Midway—were made possible by past generations who understood the need to invest in transit's future even as they addressed significant day-to-day financial pressures.

At the present time, CTA has limited funding to begin the subsequent Environmental Impact Statement project phase; however, no funding has been identified for completion of the New Starts process.

Other Specific Comments on this Topic:

Comment:

45. Who was funded this transportation surveys and how much did they cost?

Response:

The Red Line Extension Alternatives Analysis Study cost $1.8 million; funding was appropriated for the study by the U.S. Congress through the Federal Transit Administration's 5339 Alternatives Analysis grant program.

Comments:

50: Does this extension depend on the stimulus money from the state to complete?
75: Will the Red Line Extension project get any money from the American Recovery and Reinvestment Act? If so how will that stimulus money effect phases and time-line for project?

Response:

CTA did receive funding from the American Recovery and Reinvestment Act (ARRA); however that funding had very strict requirements. The objective of this funding was to get people working right away, and was only applicable to projects that were "shovel-ready," or had completed final design and were ready for construction. As discussed in Topic Category 1, there are five formal project phases for the Red Line Extension project, including Alternatives Analysis, Environmental Impact Statement, Preliminary Engineering, Final Design, and Construction. Unfortunately, this project still has several planning and design steps before construction, so stimulus funding from the ARRA was not applicable to the Red Line Extension project.

CTA used available ARRA funding to purchase new buses, allowing CTA to replace older buses that are more than 12 years old, which is the life expectancy of a bus. Additionally, CTA was able to put people to work right away replacing ties in the rail system and making other facility improvements. So while the ARRA funding was put to good use, it was not available for this project because it had to be spent in such a short time frame.

[1] CTA is also conducting concurrent Alternatives Analysis studies for other candidate New Starts expansion projects that have been authorized by the U.S. Congress—including extending the Orange Line to Ford City, extending the Yellow Line to Old Orchard Road, and constructing the Circle Line.

Comment:

79. If funding is not available for the red line extension, what alternative plan is in place to relieve congestion at the 95th Street station?

Response:

CTA is an aging transit system and has a large state of good repair funding need, including replacement of buses and railcars, system improvements to electric, signal and communication systems, track structure and facility repairs, and other miscellaneous needs. State of good repair needs are traditionally funded through federal formula and state funding sources designated for capital improvements and investments. CTA's state of good repair needs are currently estimated at nearly $7 billion.

If funding is not available for the Red Line Extension, capital improvements at the 95th Street Station would need to be prioritized against other systemwide state of good repair needs and funded through the federal formula and state funding sources designated for this type of investment. As described in the TSM alternative, expansion of the bus facility at 95th Street to accommodate existing demand would cost approximately $72 million.

9. Alternatives Analysis Public Involvement Process and Format

General Comment:

What is the public involvement process? Does the public involvement process for the Red Line Extension Alternatives Analysis study allow individuals to comment on the options?

Pertains to Specific Comments:

13, 21, 29, 31, 77, 104

Response to Overall Category Comment:

Public comments are collected through CTA public outreach for each screen of the Alternatives Analysis Study. CTA participates in individual stakeholder meetings as necessary to discuss options and listen to individual stakeholder concerns. Additionally, CTA hosts community stakeholder meetings with representatives of various community groups throughout the study area. We also have met or offered to meet with city, county, state and federal elected officials in the study area and surrounding communities. Meetings also included faith-based organizations, other community and commerce organizations, and city and state agencies such as the Illinois Department of Transportation, Regional Transportation Authority, Metra, and Pace. If your organization would like to be included in the stakeholder's meetings for future project phases, please contact Darud Akbar, CTA Government and Community Relations at dakbar@transitchicago.com.

Public comments are also solicited at the public involvement meetings. The public involvement process for the Red Line Extension Alternatives Analysis study included two public involvement meetings at the conclusion of Screen 1, Screen 2 and Screen 3/LPA analyses. Note that for each set of Screening meetings, material presented was identical. The Screen 1 meetings were held at Chicago State University and West Pullman Public Library. The Screen 2 meetings were held at the West Pullman Historic Visitors Center and the Woodson Regional Public Library. The Screen 3 meetings were held at Olive-Harvey College and the Woodson Regional Public Library. CTA's goal in emphasizing written questions and comments has been to ensure everyone's thoughts are collected and reviewed. During the outreach meeting, some of these comments are addressed; however, public comments were accepted for three weeks after the outreach meetings. Written comments received at the public meetings and other subsequently submitted comments are being answered individually for the record in this document, which will be made available publicly on the CTA web site, by email to public meeting participants, and in hard copy by written request. All of the comment cards and other written communications (primarily emails and letters from elected officials) will collectively become part of the evaluation process and will be submitted to the Federal Transit Administration as a part of the official documentation for the Alternatives Analysis study.

The comments received during the public outreach process can and do shape the development of project alternatives. For example, CTA considered the strong preference of public comments in favor of the Union Pacific Railroad heavy rail transit alternative as one criteria in the evaluation and recommendation of a Locally Preferred Alternative in the Screen 3 evaluation process. Additionally, as noted in Topic Category 10, there will be additional opportunities for public involvement in subsequent project phases, including the subsequent Environmental Impact Statement phase.

After the first public meeting for each of the three Screening phases, the presentation, technical boards and maps discussing the screening analysis – including the screening process, evaluation criteria, and analysis results and recommendations – were posted on the CTA website at www.transitchicago.com (News and Intiatives, Alternatives Analysis Studies, Red Line Extension). As noted above, responses to each written comment collected during the outreach process are addressed in this document, which is also available publicly on the CTA website, by email or in hard copy.

10. Potential Red Line Extension Economic and Environmental Impacts

General Comment:

What will be the economic and environmental impact of the Red Line Extension? How and when will the analysis be conducted? Does it evaluate equity issues or include an environmental justice analysis?

Pertains to Specific Comments:

1, 2, 3, 5, 7, 9, 10, 30, 48, 51, 53, 57, 60, 61, 66, 67, 68, 69, 78, 91, 93, 94, 102, 103, 105, 110, 111

Response to Overall Category Comment:

An Environmental Impact Statement (EIS) will analyze in detail the social, economic, and environmental consequences and benefits of the proposed Red Line Extension. The environmental review process required by the *National Environmental Policy Act* of 1969 (NEPA) and related laws include environmental impact analyses and the preparation of documentation for public review. Per Federal Transit Administration (FTA) guidance, the environmental evaluation begins upon completion of the Alternatives Analysis study, and it will result in a detailed written statement on the anticipated environmental impacts of the Red Line Extension improvements and the steps that will be taken to address impacts to the community and the natural environment.

Typically, environmental reviews for proposed transit projects address the potential impact areas of air and water quality, noise and vibration, historic and cultural properties, parklands, contaminated lands, displacement of residences and businesses, and community preservation – including environmental justice. During the federal environmental review process, the CTA will work concurrently with state and other local agencies to also comply with state and local environmental laws. The environmental review process includes opportunities for public review and comment.

See specific comment sections below for more details on particular impacts.

Other Specific Comments regarding Noise and Vibration Impacts:

Comments:

3, 93

Response:

Noise and vibration impacts will be measured according to FTA guidance described in the document "Transit Noise and Vibration Impact Assessment" (FTA-VA-90-1003-06). This assessment includes monitoring existing noise levels along the corridor and using computer models to predict the change in noise levels associated with the extension for residents and other sensitive noise receptors along the corridor. Where noise impacts are predicted to exceed certain thresholds, mitigation strategies will be developed. Mitigation strategies could include rail vehicle measures (vehicle skirts, undercar absorption, and resilient or damped wheels), and guideway measures (sound barriers, rail lubrication on sharp curves, and ballasted track).

Other Specific Comments regarding Property Acquisition:

Comments:

3, 48, 51, 57, 66, 68, 69, 78, 94, 102, 103, 105

Response:

The recommended locally preferred alternative, the Union Pacific Railroad (UPRR) alignment would be located adjacent to the east or west edge of the UPRR right-of-way (ROW). The width of the UPRR ROW ranges from 65 to 135 feet; however, a 50-foot separation distance between the Red Line Extension and the UPRR tracks for safety purposes would require property acquisition from a combination of public, residential, commercial, and Union Pacific properties. Preliminary analysis in Screen 3 determined that both the east and west alignment options for this alternative (discussed in more detail in Topic Category 12) would include between 100-140 property acquisitions or displacements, which will be studied in much greater detail in the subsequent project phase. The Environmental Impact Statement phase will study potential impacts, including community preservation, to both determine the alignment option that minimizes impacts and propose mitigation measures.

Public acquisition of private property is governed by federal and local laws, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act. In accordance with these laws, affected property owners would be compensated for their properties based on fair market values and can be provided relocation costs. Many highway and transit projects require relocations. For example, the CTA's recent Brown Line Expansion Project required some relocations. Furthermore, if relocations or other environmental impacts are found to be too objectionable for alignments adjacent to the Union Pacific Railroad right-of-way, then the Halsted Street alternative for the Red Line Extension could also be examined.

Other Specific Comments regarding Business Impacts and Economic Development:

Comments:

1, 2, 3, 9, 53, 110, 111

Response:

The Red Line Extension is anticipated to support economic development in the study area, especially in the vicinity of the four new stations. The extension will improve access to these areas, including job access for workers and result in greater foot traffic for retail development.

For example, CTA has been coordinating with the City of Chicago Department of Community Development to secure an easement for a potential station at the site of a proposed grocery store and other shopping development near 115th Street and South Michigan Avenue. The recommended locally preferred alternative would provide access to the proposed development and underscores the types of benefits that can be achieved from coordinated transit and city planning. These types of economic development benefits will be further evaluated in the subsequent Environmental Impact Statement project phase.

For business relocation impacts, see comments regarding Property Acquisition (also in Topic Category 10).

Other Specific Comments regarding Jobs:

Comment:

10, 61, 67

Response:

CTA will continue to work with all stakeholder groups to provide information and opportunities for all qualified applicants. All contract procurement will follow CTA's competitive bidding requirements open to all qualified firms. CTA has an established procurement process that works with disadvantaged business enterprises under the Illinois Unified Certification Program. This project will follow the same procurement process as other CTA projects. More information about CTA's competitive bidding requirements is available on the CTA web site at www.transitchicago.com. In addition, CTA is working with the Mayor's

Office of Workforce Development to ensure that training and jobs access will be available to support the construction of the proposed Red Line Extension.

Other Specific Comments regarding Safety and Security:

Comment:

5, 7

Response:

Safety and security are a top priority at the CTA. The CTA works with the City of Chicago and other municipalities served by the CTA to provide plain-clothed and uniformed patrols of system property, in addition to hired private security guards at stations and onboard transit vehicles.

During subsequent detailed design phases, particular attention will be devoted to physical security measures than can be incorporated into the design including CCTV monitoring, lighting, vandal-resistant materials, and clear sightlines.

11. Potential Red Line Extension Impacts on Existing CTA and Pace Services

General Comment:

How will communities beyond the potential extension (south, east or west) be served, depending on which alternative is selected?

Pertains to Specific Comments:

8, 35, 49, 54, 59

Response to Overall Comment Category:

The Red Line Extension heavy rail alternatives will result in shortened feeder bus rides, including to residents in the south and southeastern portion of the study area. East-west feeder buses in the study area and beyond via 103rd, 111th, 115th, 119th, and 127th/130th would provide access to a Red Line Extension heavy rail alternative. In addition, the proposed stations on either Red Line Extension heavy rail alternative would have park-and-ride facilities, which are not available on the existing Red Line Dan Ryan branch.

If the Red Line Extension extends to 115th Street, instead of 130th Street, bus service would be provided from the southern portion of the study area, including Altgeld Gardens, to the new Red Line Extension 115th/Michigan station. These feeder bus trips to the 115th/Michigan station would be over two and one-half miles shorter than going to the 95th Street station.

Specific Comments on this Topic:

Comments:

36. How will bus services be distributed among the new train station?
47. What would the station at 130th St (UPRR) be connected to? (Bus-Access to suburbs BRT?

Response:

Routes that currently go east-west along 103rd, 111th ,115th or 119th Streets would be reconfigured to serve new proposed rail station locations on those streets, instead of traveling north to 95th Street Station. Also buses coming from the south, including Pace buses from the south suburbs, would also connect at intermediate stations instead of traveling to 95th Street Station before connecting with the Red Line. The goal of service reconfigurations to bus routes would be to improve travel times by reducing time spent on buses and at the 95th Street bus terminal and facilitate a faster transfer to rail. In summary, bus routes considered for reconfiguration include CTA Routes 9, 30, 34, 103, 106, 108, 112, and 119, and Pace Routes 352 and 359.

The Red Line Extension 130th Street station would include park-and-ride facilities for automobile access. It is anticipated that CTA bus Routes 30 South Chicago and 34 South Michigan, and Pace bus route 348 Riverdale Connector will serve a proposed Red Line Extension 130th Street station.

In addition, CTA and Pace regularly review existing bus service for improvements and will continue to do so while the Red Line Extension project progresses through the federal New Starts grant process, which includes several phases (see Topic Category 1 for more information about the New Starts process). Opportunities to make changes to bus service between now and the completion of the Red Line Extension will include public input before any changes are implemented permanently.

Comment:

40. Similar to your presentation on the Heavy Rail findings, improvement to the 95th St station need to considered to your findings for the UP Route and its needs to address overuse at the 95th St station.

Response:

The Red Line Extension will relieve congestion at the 95th Street Station by shortening and re-routing several CTA and Pace bus routes that currently serve the 95th Street Station to serve the proposed Red Line Extension intermediate and new terminal stations. Buses that currently serve the 95th Street Station that are proposed to be shortened to terminals at new Red Line Extension stations include CTA Routes 103 – West 103rd Street, 106 – East 103rd Street, 111 – Pullman/111th/115th, 119 – Michigan/119th, and Pace bus routes 348 – Riverdale Connector, 352 – Halsted, and 359 – Robbins/S. Kedzie. These bus re-routings will result in the reduction of current 95th Street station bus terminal congestion, both in terms of the number of bus vehicles serving the station, a reduction in passenger-bus conflicts as passengers walk from the their bus drop-off/pick-up locations to the station house, and the total number of passengers on the station platform.

Comment:

90. Would the extension eliminate the "back up" that generally occurs from 69th to 87th St. from time-to-time especially during the rush hours? Is this caused by limited space in train yard?

Response:

Today, Red Line trains approaching 95th Street station are often delayed outside the station because trains are occupying both terminal tracks. This delay is not a result of insufficient capacity in the rail yard, but is an indication of a rail terminal station that has reached or is exceeding capacity. CTA seeks to manage these delays by minimizing the time trains spend laying over at the 95th Street platform and returning to service. Ideally, the 95th Street terminal station would be configured to have three tracks with two island platforms similar to terminals at the Orange Line or O'Hare Blue Line, which offers an additional track to store trains and prepare trains for a return trip. With the expressway on either side of the tracks, limited right-of-way width does not allow for this design. The extension will allow for a modern station configuration to be constructed, which should minimize or eliminate delays approaching the new terminal station.

12. Issues to be Addressed in Preliminary Engineering

General Comment:

Will green technologies or environmental engineering be used? Will pedestrian access to stations adjacent to the UPRR be provided? Will the UPRR extension be on the east or west side of the UPRR right-of-way? What station amenities may be included in station design?

Pertains to Specific Comments:

17, 34, 64, 94, 95, 96

Response to Overall Comment Category:

A number of comments received include suggestions for detailed project design elements. These comments are noted and will be evaluated during Preliminary Engineering.

13. Statements of Support or Opposition of the Extension

General Comment:

Statements of support or opposition to the extension and the locally preferred alternative presented were provided on the question/comment cards submitted by the public. CTA staff will review statements of support or opposition to the extension; other suggestions will be considered for incorporation into the analysis as appropriate.

In Support:

15, 38, 42, 43, 44, 46, 54, 58, 76, 81, 82, 83, 84, 95, 98, 99, 100, 106, 107, 108, 109, 110, 111 (includes 512-signature petition in support of recommended locally preferred alternative)

In Opposition:

101

Support for Other Alternatives:

105

14. Other

General Comment:

This section includes general comments and viewpoints that can be characterized as public input into the study process.

Pertains to Specific Comment:

80

Response to Overall Comment Category:

These comments do not ask a question or refer to a specific issue, but rather point out general views on the subject, which have been noted. Thank you for your feedback.

CTA Customer Service representatives were in attendance at the public meetings for the Red Line Extension and were available to answer specific questions on existing CTA services and to take suggestions for improvements to those services. Any questions submitted to the Red Line Extension study team that covered customer service topics were outside the purview of this study itself. The study team notes these questions and comments for the record and refers them to the CTA Customer Service Department for an independent response and filing through CTA's established Customer Service procedures.

Appendix C
Agency Coordination and Public Involvement

Outreach to Community Groups (2012)

Red Line Extension Project Update

Monday, March 12th 2012

- **<u>Draft Environmental Impact Statement (DEIS)</u>**
  - Continued Federal Transit Administration coordination and approvals during DEIS

  - DEIS Activities and Schedule
    - Conceptual Engineering Spring 2012 – Summer 2012
      - Conduct field surveys
      - Develop station concepts
      - Finalize drawings for all the alternatives

    - Public Participation Plan Spring 2012
      - Interviews with DCP and other community members

    - Public Meeting Fall 2012
      - Update to community on project progress and get feedback. This meeting may include information on environmental analyses, results of any interim community outreach, changes in project alternatives, identification of potential funding sources, or resolution of neighborhood issues

    - Environmental Analysis Fall 2012 - Winter 2012-2013
      1. Transportation
      2. Land Use and Economic Development
      3. Displacements and Relocation of Existing Uses
      4. Neighborhoods and Community Impacts
      5. Environmental Justice
      6. Historic and Cultural Resources
      7. Visual and Aesthetic Conditions
      8. Noise and Vibration
      9. Safety and Security
      10. Construction Impacts

11. Hazardous Materials
12. Parklands and Community Facilities
13. Air Quality and Climate Change
14. Water Quality
15. Wetlands
16. Floodplains
17. Vegetation and Wildlife Habitat
18. Threatened and Endangered Species
19. Geology and Soils
20. Energy
21. Indirect and Cumulative Impacts
22. Section 4(f)

- Public Meeting Spring 2013
  - Update to community on project progress, present environmental analysis, and get feedback. This meeting may include information on environmental analyses, results of any interim community outreach, changes in project alternatives, identification of potential funding sources, or resolution of neighborhood issues.

- Draft EIS to FTA Summer 2013
  - FTA reviews Draft EIS and provides comments

- Public Hearings Winter 2013-2014
  - Present Draft EIS to the community and get comments

- **<u>Preliminary Engineering and Final EIS</u>**
  - Subject to FTA approvals and funding availability

DCP
DEVELOPING COMMUNITIES PROJECT, INC.

MEMORANDUM

Date: November 15, 2012

To: George Coleman, Government Affairs & Community Relations Officer
Chicago Transit Authority

From: Gwendolyn M. Rice, Executive Director
Developing Communities Project

RE: **November 30, 2012 Meeting with CTA Chairman Peterson and CTA President Claypool**

Thank you for arranging for us to meet with Chairman Peterson and President Claypool on

November 30, 2012
10:30 a.m.
Developing Communities Project
212 E. 95th Street
Chicago, Illinois

Below are the items as requested:

I. Proposed Agenda

- Developing Communities Project's (DCP) Community Advocacy Role
- DCP's partnership with the CTA
- DCP's partnership with other planning groups
- Financing the Red Line Extension
- Workforce Development
- Transit-Oriented Development
- Project Management Team
- Environmental Impact Statement
- 95th Street Station Improvement

II. Invited (to be invited) Attendees

Representatives from the Red Line Oversight Committee (ROC) of DCP:

- Gwendolyn M. Rice, DCP Executive Director, 773-928-2500

- Eugene Rogers, Chairman, DCP Workforce Sub-Committee, 773-568-8324
- Lou Turner, DCP Public Policy Consultant, 217-972-2447
- Rev. Mitchell L. Johnson, JD, DCP Consultant, 708-418-5033

Should you have further questions or need additional information, please let me know. I can be reached at 773-928-2500 or gmrice@dcpchicago.org.

Appendix C
Agency Coordination and Public Involvement

August 2011 Open House Meeting Summary

Red Line Extension Project
August 2, 2011 OPEN HOUSE
SUMMARY

October 2011

Prepared for:
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Prepared by:

CWC Transit Group

Red Line Extension
Connecting 95th Street Station to 130th Street
cta

Prepared by:

CDM
125 South Wacker Drive
Suite 600
Chicago, IL 60606

Kathy Schaeffer and Associates, Inc.
17 N. State St.
Ste. 1690
Chicago, IL 60602

Wight & Company
2500 North Frontage Road
Darien, IL 60561

Jacobs
2705 Bee Cave Road, Suite 300
Austin, TX 78746

Table of Contents

1.0 Overview **Page 4**

2.0 Open House Database **Page 4**

3.0 Public Notification Activities **Page 4**
3.1 Postcard Page 4
3.2 Transit Cards Page 5
3.3 E-blast Page 5
3.4 Newspaper Display Advertisements Page 5
3.5 Project Website Page 5
3.6 Additional Outreach for Open House Page 5

4.0 Elected Official and Stakeholder Briefings **Page 5**

5.0 Participating Agency Update Letters **Page 6**

6.0 Open House **Page 6**
6.1 Materials Page 7
6.2 Comments Received Page 7

Appendices
Appendix A Postcard Mailing List
Appendix B Postcard
Appendix C Transit Card
Appendix D E-Blast
Appendix E Newspaper Advertisements
Appendix F Elected Official Briefing Summaries
Appendix G Participating Agency List
Appendix H Participating Agency Update Letter
Appendix I Sign In Sheets
Appendix J Comment Cards
Appendix K Fact Sheets
Appendix L Exhibit Boards

1.0 Overview

CTA conducted an open house to update residents about the Red Line Extension project. This update included summarizing the results of the NEPA scoping process that concluded October 27, 2009. The open house also was an opportunity for community members to ask questions about the range of actions, alternatives, environmental effects, and mitigation measures to be analyzed in the Environmental Impact Statement (EIS).

2.0 Open House Database

The notification database, which was developed for the September 2009 scoping meetings, was maintained and updated for this open house. To the extent possible, the database included both mailing addresses and e-mail addresses.

The notification database developed for scoping includes residents and businesses adjacent to the proposed build alternative alignments. Addresses for businesses and residences on parcels either immediately adjacent to the proposed alignment or separated from the alignment by a street, park, vacant parcel, or one residence, were included in the notification database. Parcels on both the east and west sides of the UPRR Alternative and parcels adjacent to both sides of the Halsted Alternative were included. The database also included those who attended meetings or provided comments in the Alternatives Analysis (AA) phase and/or during the September 2009 scoping process.

In addition to those identified during the AA process and September 2009 scoping meetings, the database was expanded to include residents who had requested to receive updates about Your Red projects during the January 2011 scoping meetings for the Red & Purple Modernization project. At the time of the open house, a total of 3,868 parties were listed on the Red Line Extension project database including 3,708 mailing addresses and 751 e-mail addresses.

3.0 Public Notification Activities

Postcard invitations were mailed directly to people in the project database and e-blast messages were sent to individuals on the e-mail distribution list. CTA also posted "transit cards" on CTA vehicles and in transit stations, and placed newspaper display ads in three publications. Additionally, the Red Line Extension project website was updated with information about the open house.

3.1 Postcard

Postcards were mailed on July 15, 2011 to a list of 3,868 entries that included elected officials, government agencies, residents, businesses, community organizations, neighborhood associations, and property owners adjacent to both sides of the proposed build alternative alignments. The postcard provided details about the open house including the closest transit access. The mailing list is included in Appendix A and the postcard is in Appendix B.

3.2 Transit Cards

In order to reach a large audience of transit riders, CTA placed "transit cards" or "car cards" with the open house information in various buses and stations in the project area. CTA distributed approximately 860 transit cards on July 11, 2011 for posting at all Red Line stations, on Red Line rail cars and on bus routes originating from the 103rd Street Garage. A copy of the transit card is in Appendix C.

3.3 E-blast

On July 18, 2011, an invitation e-mail that included information about the open house was sent to 751 e-mail addresses of people who had previously demonstrated an interest in the Red Line Extension project. A copy of the e-blast is in Appendix D.

3.4 Newspaper Display Advertisements

To invite the public to the open house, display advertisements were placed in three newspapers within the project area. Newspapers were selected based on their geographic focus, language needs and audited circulation numbers. Display ads ran during the weeks of July 17 and July 24, 2011. Ads were placed in different papers on different days of the week. The tear sheets of each newspaper ad are in Appendix E.

Newspaper	Ad Size	Geographic Coverage	Language	First Ad Date	Second Ad Date
Chicago Sun-Times	1/4 page	Region	English	Sun, 7/17/11	Mon, 7/25/11
Hoy	1/2 page	Citywide	Spanish	Mon, 7/18/11	Tues, 7/26/11
Chicago Defender	1/4 page	South	English	Wed, 7/20/11	--
Chicago Defender	1/2 page	South	English	Wed, 7/27/11	--

3.5 Project Website

The Red Line Extension project website, www.transitchicago.com/redEIS/, was updated in July 2011 to include details about the open house. The website was originally developed in fall 2009 for the project and contains information about the project alternatives, the National Environmental Policy Act (NEPA) process and the scoping report.

3.6 Additional Outreach for Open House

In order to maximize the coverage of the outreach effort for the open house, CTA sent a news release to local media outlets.

4.0 Elected Official and Stakeholder Briefings

CTA representatives conducted 12 briefings with elected officials or stakeholders about the Red Line Extension project. Most of the briefings were conducted prior to the open house to allow elected officials an opportunity to reach out to their constituents prior to the open house. Generally, briefings covered a description of the project and the scoping process. CTA officials met with:

- Office of Illinois Representative Monique Davis, 27th District, July 20, 2011
- Office of Illinois Senator Emil Jones III, 14th District, July 20, 2011

- Office of Chicago Alderwoman Carrie Austin, 34th Ward, July 21, 2011
- Office of Chicago Alderman Anthony Beale, 9th Ward, July 21, 2011
- Developing Communities Project, July 21, 2011
- Office of Chicago Alderman Roderick Sawyer, 6th Ward, July 25, 2011
- Roseland Business Development Council, July 26, 2011
- Office of Chicago Alderman Howard Brookins, Jr., 21st Ward, July 27, 2011
- Office of Cook County Commissioner Joan Patricia Murphy, 6th District, July 27, 2011
- Office of U.S. Representative Jesse Jackson, Jr., 2nd District, July 28, 2011
- Office of Illinois Senator Martin Sandoval, 12th District, July 29, 2011
- Office of Illinois Representative Cynthia Soto, 4th District, August 8, 2011
- Illinois Representative William Davis, 30th District, August 1st, 2011

Summaries of each elected official briefing are in Appendix F except for the meeting on August 1st at which no notes were kept. However, the content of that briefing was similar to the other briefings.

5.0 Participating Agency Update Letters

CTA provided an update on the project to the participating agencies to inform them of the project status and invite them to the Open House. Participating agencies are federal, state, and local agencies with an interest in the project because of an overlap in their area of jurisdiction or some specialized knowledge of potential project effects. The list of participating agencies is in Appendix G. Appendix H contains sample update letters for both federal and state or local participating agencies.

6.0 Open House

CTA conducted an open house to update the public about the project and the results of the NEPA scoping process and to provide people with an opportunity to ask questions about the project in an informal setting. The location was near the center of the project area and was accessible by public transportation. The location was American Disabilities Act (ADA) compliant.

For the convenience of all attendees, bus routes to and from the open house location were publicized on the postcard, the e-blast, and on the website. In order to provide the greatest opportunity for community participation, the open house was scheduled in the early evening on a weekday.

A total of 96 people signed in at the open house. There were a few additional attendees who did not want to sign in. Copies of the sign in sheets are in Appendix I.

Time: 6 to 8:30 p.m.
Date: Tuesday, August 2, 2011

Location: St. John Missionary Baptist Church
211 E. 115th St.
Chicago, IL 60628

During the open house, project team members and CTA representatives were present at project display boards to answer questions related to the technical aspects of the project. The open house session provided attendees with an opportunity to review the project information, clarify their understanding of the project and environmental process, and give feedback about the alternatives. Spanish and sign language interpreters were made available during the open house.

6.1 Materials

Each open house attendee was offered a comment card and a fact sheet on issues that will be analyzed in the Draft EIS. The comment card allowed attendees to submit written comments during or after the open house. The comment card was designed as a self-mailer so that individuals could easily mail comments to CTA if they needed more time to develop them after the open house. The issues fact sheet outlined the concerns community members expressed during the scoping meetings in 2009 and provided a preliminary summary of how the proposed Red Line Extension might affect environmental elements such as traffic, noise, and aesthetics. A second fact sheet on the real estate acquisition process was available to those with specific questions on that topic. Copies of all of the comment cards returned as of the date of this summary are included in Appendix J and a copy of each fact sheet is in Appendix K.

Project exhibit boards were developed and used during the open house. The boards included:

- Welcome to the Red Line Extension Open House
- Red Line Extension – What's New?
- Project Purpose
- Why Extend the Red Line?
- Project Development Process
- Planning for the Red Line Extension
- Environmental Review Process
- Issues Potentially Evaluated in Environmental Impact Statement
- EIS Scoping Comments Received
- Locally Preferred Alternative Union Pacific Railroad (UPRR) Alternative
- Locally Preferred Alternative Union Pacific Railroad (UPRR) Alternative West and East Side Options
- Other Alternatives to be Evaluated in Draft EIS
- Stay Involved
- This is Your Red

Copies of the exhibit boards are in Appendix L.

6.2 Comments Received

Although this open house was not a formal comment period under the NEPA process,

people were provided opportunities to comment in writing during the open house or they could submit their comments after the open house via e-mail, fax, or postal letter. Comment cards distributed at the open house were designed to facilitate return of written comments both at the open house and via postal mail later. E-mail comments could be sent to a project specific e-mail address found on the project website. Approximately 13 people provided written comments at the open house and seven people provided comments via email. Comment cards received as of the date of this open house summary are included in Appendix J.

CTA and CWC Transit Group representatives received a variety of oral and written comments from participants during the open house. Overall there was no major opposition to the Red Line Extension. Several residents were eager to learn when the extension will become a reality. Here is an overview of comment themes:

- Inter-governmental planning – Residents want this project to remain a top priority and want to see more inter-governmental coordination.
- Real estate acquisitions – There was recognition that the project may affect residential parcels. Residents were interested in receiving information about the potential schedule for such acquisitions.
- Park impacts – Residents wanted to know if other parks will be added to the community if parks near the extension would be affected.
- Timeline – Community members wanted to know when construction would start so that they can be prepared for disruptions. They expressed concern that the longer the project takes to come to fruition, the less involved the community will be in providing feedback.
- Halsted Alternative – Members of Developing Communities Project wanted to know why the CTA was still considering this alternative. Other community members wanted to know why the CTA didn't choose the Halsted Alternative as the LPA.
- Hours of operation – Several attendees were concerned that the extended Red Line might not be available for 2nd and 3rd shift workers, and that the hours would not align with the schedules for connecting buses.
- CTA bus reroutes – Several attendees wanted to know where the affected buses would terminate once the Red Line is extended.
- Park & Ride lots – Residents would like to see more parking along the Red Line Extension.
- 130th street terminal – Participants mentioned that people travel beyond 130th Street, and expressed interest in extending the Red Line further south.
- Minority contractors – Residents wanted to make sure that local minority contractors would be considered once construction begins.
- Funding – Community members wanted to know how the CTA will fund the extension and if fares will be raised.
- Duplication of services – Some community members mentioned that Metra, Northern Indiana Commuter Transportation District, and PACE provide adequate service to the area.
- Gray Line – A suggestion was made to use Metra tracks and Highliner trains during non-rush hour periods and offer CTA-style "L" service; the Gray Line

proposal was mentioned as an option because population along the Red Line Extension is low.

- High-speed electric trolley bus – Some participants suggested a high-speed electric trolley bus down Eggleston Avenue.
- Noise and vibration – Many residents were concerned about extra noise and vibration.
- Summer temperatures – Some participants said it was too hot for senior citizens to be out at an open house (temperatures on the day of the open house were in the upper 90s).

Appendix A
Postcard Mailing List
Dated July 14, 2011

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Union Pacific Railroad	Mr.	Joseph	Bateman, Jr.	VP Public Affairs - Northern Region	1400 Douglas St.	STOP 1560	Omaha	NE	68719
Bridgeview Chamber of Commerce & Industry	Ms.	Roseann	Bautista	Executive Director	7300 West 87th Street		Bridgeview	IL	60455
Bronzeville Chamber of Commerce	Mr.	Johnnie	Blair	President	4955 S. King Dr.		Chicago	IL	60615
AMTRAK	Mr.	Joseph	Boarman	President	60 Massachusetts Ave.	NE	Washington	DC	20002
Transform Architecture		James	Boley	Owner	5248 N. Winthrop Ave., 3N		Chicago	IL	60640
South Chicago Chamber of Commerce	Mr.	Neil	Bosanko	Executive Director	2938 East 91st Street		Chicago	IL	60617
Union Pacific Railroad	Mr.	Mark	Bristol	General Director, Network & Bus. Devel.	1400 Douglas St.	STOP 1120	Omaha	NE	68719
Chicago Southland Chamber of Commerce	Ms.	Patrice	Brooks	Executive Vice President	1916 West 174th Street		East Hazel Crest	IL	60429
Streeterville Chamber of Commerce	Ms.	Mable	Buckner	Executive Director	645 N. Michigan Ave. #800		Chicago	IL	60611
			Business Owner		112 W. 115th Street		Chicago	IL	60628
			Business Owner		11426 S. Perry Avenue		Chicago	IL	60628
			Business Owner		135 W. 114th Street		Chicago	IL	60628
			Business Owner		316 W. 103rd Street		Chicago	IL	60628
			Business Owner		327 W. 103rd Street		Chicago	IL	60628
			Business Owner		330 W. 111th Street		Chicago	IL	60628
			Business Owner		340 W. 111th Street		Chicago	IL	60628
			Business Owner		401 W. 111th Street		Chicago	IL	60628
			Business Owner		409 W. 109th Street		Chicago	IL	60628
			Business Owner		415 W. 107th Street		Chicago	IL	60628
			Business Owner		420 W. 111th Street		Chicago	IL	60628
			Business Owner		421 W. 107th Street		Chicago	IL	60628
Cedar Park Cemetery			Business Owner		12540 S. Halsted Street		Chicago	IL	60643
Greater Southwest Development Corp	Mr.	James	Capraro	Chief Executive Officer	2601 West 63rd Street		Chicago	IL	60629
Cosmopolitan Chamber of Commerce	Ms.	Carnice	Carey	Executive Director	203 N. Wabash Ave.	Suite 518	Chicago	IL	60601
National Association of Women Business Owners (NAWBO-Chicago Area Chapter)	Ms.	Deborah	Chima	President	216 W. Jackson Blvd.	Suite 625	Chicago	IL	60606
MKC Associates	Ms.	Mary Kay	Christopher		3112 Maple		Berwyn	IL	60402
Calumet City Chamber of Commerce	Ms.	Kay	Cooper	President	80 River Oaks Center	Arcade-6	Calumet City	IL	60409
Hegewisch Chamber of Commerce	Ms.	Amy	Davis		13330 South Baltimore Avenue		Chicago	IL	60633
International Socialist Organization	Mr.	Nikolai	Diaz		1347 W Cullerton		Chicago	IL	60628
Gruppo di Amici		Phaedra	Divres	Owner	1508 W. Jarvis		Chicago	IL	60626
Laborers Union Local 6	Mr.	Billy	Dorsey		11431 S Union Ave		Chicago	IL	60628
87th Street Stony Island Chamber of Commerce	Ms.	Kimi	Ellen	President	8135 S. Stony Island		Chicago	IL	60617
Historic Pullman Foundation	Ms.	Deedee	Fabris	Staffer	614 East 113th Street		Chicago	IL	60628
American Brotherhood of Contractors	Mr.	Danton	Fielder	President	11509 S. Elizabeth Ave.		Chicago	IL	60643
CSX Transportation Inc.	Ms.	Ellen	Fitzsimmons	Senior Vice President-Law and Public Affairs	500 Water Street.		Jacksonville	Florida	32202
Chicago Transportation Coordination Office	Mr.	Dave	Grewe	Superintendent	1501 S. Canal Street		Chicago	IL	60607
Maple Park Home Owner	Mr.	Jacob	Harston		11519 S. Loomis		Chicago	IL	60643
Material Girlz Fabric Club - CSU	Ms.	Marian	Hayes		9501 S. King Drive		Chicago	IL	60628
East Side Chamber of Commerce	Ms.	Jacqueline	Herod	Execuitve Director	3658 East 106th Street		Chicago	IL	60617
Icanhelputravel.com	Ms.	Geraldine	Hill		11731 S Wallace		Chicago	IL	60628
St. Bernard's Hospital and Health Care Center	Mr.	Charles	Holland		326 W. 64th St.		Chicago	IL	60621
Inclusion Solutions		Patrick	Hughes	President	2000 Greenley		Evanston	IL	60202
Edgewater Development Corporation		Trinette	Johnson	Executive Director	6044 N Broadway		Chicago	IL	60660
Chatam Business Association	Ms.	Melinda	Kelly	Executive Director	8441 South Cottage Grove		Chicago	IL	60619
Transit Riders Authority	Mr.	Adam	Kerman		P.O. Box 529		Chicago	IL	60690
Southeast Chicago Development Commission	Mr.	Doug	Knuth	President	9204 South Commercial Avenue		Chicago	IL	60617
Midwest High-Speed Rail Assoc	Mr.	Christopher	Lacina		10211 S Prospect Ave		Chicago	IL	60643
Chicago Roseland Development Corporation	Mr.	Willie	Lomax	Executive Director	11015 South Michigan Avenue		Chicago	IL	60628
Lumbar Lounge		Janna	Lombardo	Massage Therapist	1445 W. Jarvis		Chicago	IL	60626
Long & Associates	Dr.	John	Long		7258 S. Euclid		Chicago	IL	60649

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Red Line Extension

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ATV Local 308	Mr.	Al	Martin		205 W. Wacker	Suite 700	Chicago	IL	60606
Chicagoland Chamber of Commerce	Mr.	Michael	Mini	Director, Government Affairs	200 East Randolph Street	Suite 2200	Chicago	IL	60601
95th Street Corridor	Mr.	Randy	Moore	President	349 West 93rd Street		Chicago	IL	60620
Centerpoint Development	Mr.	Michael	Mullen	CEO	1808 Swift Drive		Oakbrook	IL	60523
Indiana Harbor Belt Railroad	Mr.	Dave	Nelson		2721 161st Street		Hammond	IN	46323-1099
Greater Auburn-Gresham Development	Mr.	Carlos	Nelson	Executive Director	1159 W. 79th Street		Chicago	IL	60620
C&E Railroad Consultants		Peter	Nicholson		1500 Oak Avenue, Suite 3B		Evanston	IL	60201
Kaufman O'Neil Architects		Tim	O'Neil	Partner	1540 W. Glen Lake Ave		Chicago	IL	60660
Chicago Transportation Coordination Office	Mr.	Phil	Oresik	Superintendent	1501 S. Canal Street		Chicago	IL	60607
Indiana Harbor Belt Railroad	Mr.	Phillip	Oresik		2721 161st Street		Hammond	IN	46323-1099
South Suburban Mayors & Managers	Mr.	Ed	Paesel	Executive Director	1904 W. 174th Street		East Hazel Crest	IL	60429
Strategies for Community Economic Development & Finance	Ms.	Heather	Parish	Consultant	6756 South Oglesby Avenue Third Floor		Chicago	IL	60649
Women's Business Development Center (WBDC)	Ms.	Hedy	Ratner	Executive Director	8 S. Michigan Avenue, Suite 400		Chicago	IL	60603
Little Company of Mary Hospital	Mr.	Dennis	Riley		2800 W. 95th St		Evergreen Park	Il	60805
Hegewisch Chamber of Commerce	Ms.	Bernadette	Rodriguez	Executive Director	13330 South Baltimore Avenue		Chicago	IL	60633
Indiana Harbor Belt Railroad	Mr.	Jim	Roots	General Manager	2721 161st Street		Hammond	IN	46323-1099
Jarvis Greenview		Mohammed	Sabir Junagadhwaln	Owner	7358 N. Greenview		Chicago	IL	60626
Inka Internet Station	Mr.	Semaj	Salinas		11320 S. Halsted St		Chicago	IL	60628
Blue Island Chamber of Commerce	Ms.	Ruth	Sheahan		2434 Vermont Street		Blue Island	IL	60406
Business and Economic Revitalization Association	Mr.	Philip	Sims		200 East 75th Street	Suite 304	Chicago	IL	60619
Sodexo		Rick	Siwecki	Human Resources Mgr.	2245 Sheridan Rd.		Evanston	IL	60208
Business and Economic Revitalization Association	Ms.	Alicia	Spears	Executive Director	200 East 75th Street	Suite 304	Chicago	IL	60619
Calumet Area Industrial Commission	Mr.	Ted	Stalnos	President	1000 East 111th Street	10th Floor	Chicago	IL	60628
P.U.S.H. / N.A.A.C.P/ AFSCME (Council 31)	Ms.	Linda	Steward		920 E. Hyde Park Blvd.		Chicago	IL	60615
Canadian National	Mr.	Patrick	Waldron	Manager, Public Affairs	17641 Ashland Ave		Homewood	IL	60430
The Side Project		Adam	Webster		1439 W. Jarvis		Chicago	IL	60626
Rogers Bark Pet Salon		Marie	Winkeler	Owner	1447 W. Jarvis Ave.		Chicago	IL	60626
Fireman Community Services	Mr.	Warner	Abrams		144 W 47th St.		Chicago	IL	60609
South Shore Cultural Center	Ms.	Andrea	Adams	Center Director	7059 South South Shore Drive		Chicago	IL	60649
YWCA	Ms.	Cynthia	Angline	Director	6600 S. Cottage Grove		Chicago	IL	60637
CFABC-Improve RDA	Mr.	Thomas	Babbington		3653 W 81st St		Chicago	IL	60652
West Chatham Improvement Association	Ms.	Lori	Baldwin	Second Vice-President	8153 S. Harvard Avenue		Chicago	IL	60620
Rogers Park Business Alliance		Katrina	Balog	Project Manager	1448 W. Morse Ave		Chicago	IL	60626
Gangs, Drugs, and Violence Prevention Inc.	Ms.	Addie	Beckam		12600 S. Wallace		Chicago	IL	60628
Gangs, Drugs, and Violence Prevention Inc.	Mr.	Jesse	Beckam Jr.		12600 S. Wallace		Chicago	IL	60628
Illinois Nurses Association	Ms.	Sharon	Bell		1250 W. 112th Place		Chicago	IL	60643
Uptown Neighborhood Council		Katharine	Boyda		4432 N. Clifton		Chicago	IL	60640
Little Village Environmental Justice Organization	Mr.	Harry	Brooks		7818 S South Shore Drive	Apt 2A	Chicago	IL	60649
TCA Health Inc.	Ms.	La Donna	Brown Miller		1029 East 130th St		Chicago	IL	60628
Healthcare Consortium of Illinois	Ms.	Mayme	Buckley	Director External Affairs	1350 E. Sibley Blvd.		Dolton	IL	60419
Pullman Civic Organization	Mr.	Andrew	Bullen		619 E 111th St		Chicago	IL	60628
Pullman Civic Organization	Ms.	Linda	Bullen		619 E 111th St		Chicago	IL	60628
Southsiders Organized for Unity and Liberation (SOUL)	Mr.	Prentice	Butler		5001 S Ellis		Chicago	IL	60615
Chicago Urban League	Mr.	Patrick	Colbert	Client Relationship Mgr	4510 South Michigan Avenue		Chicago	IL	60653
Chesterfield Community Council	Ms.	Cynthia	Coleman	Acting President	501 East 90th Place		Chicago	IL	60619
Healthcare Consortium of Illinois	Ms.	Naomi	Coleman		1350 E Sibley Blvd		Dolton	IL	60419
Edgewater Chamber of Commerce		Jay	Delaney	President & CEO	1210 W Rosedale Ave		Chicago	IL	60660-3436
EV Mark/ Downtown Evanston	Ms.	Carolyn	Dellutri	Executive Director	820 Davis St.	Suite 151	Evanston	IL	60201
Developing Communities Project & L.A.T.S.O.	Ms.	Lisa	Dunbar	President	10231 S. Peoria		Chicago	IL	60643
Community Mental Health Council	Mr.	Ade	Elegbede		8704 S. Constance		Chicago	IL	60617

Open House Notice Mailing List
Red Line Extension

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Southeast Chicago Chamber	Ms.	Joyce	Ellen	Director	8135 S. Stony Island		Chicago	IL	60617
Developing Communities Project	Ms.	Michelle	Evans		12500 S. Lowe		Chicago	IL	60628
Developing Communities Project	Rev.	Michael	Evans		212 E. 95th St.		Chicago	IL	60619
Developing Communities Project	Mr.	Darrell	Evans		12500 S. Lowe		Chicago	IL	60628
Developing Communities Project	Mrs.	Tracie	Evans		12500 S. Lowe		Chicago	IL	60628
Chesterfield Community Council	Ms.	Worthettia	Evans		501 East 90th Place		Chicago	IL	60619
Many People's Church		Rita	Feikema		1323 W. Touhy	1N	Chicago	IL	60626
Pullman Historic Visitor Center	Ms.	Deedee	Frabris	Director	11141 South Cottage Grove		Chicago	IL	60628
Chicago Urban League	Ms.	Cheryl	Freeman Smith	Director, Diversity	4510 South Michigan Avenue		Chicago	IL	60653
Riverdale Community Resource Center	Ms.	Rebecca	George	Director	13725 South Wabash		Riverdale	IL	60827
Voorhees Center	Ms.	Martha	Glas		400 S Peoria St		Chicago	IL	60607
Rosemoor Community Association	Ms.	Hileria	Godfrey	Vice-President	10205 S. Martin Luther King Dr.		Chicago	IL	60628
Partnership for Economic and Community Development	Mr.	Renard	Harvey		1667 W. 92nd Place		Chicago	IL	60620
Developing Communities Project	Ms.	Sandra	Herrin		10956 S State		Chicago	IL	60628
Sherwin Condos		Jennifer	Hitchcock		1546 W. Sherwin Ave.		Chicago	IL	60626
Chicagoland Bicycle Federation	Mr.	Keith	Holt		9 W. Hubbard	#402	Chicago	IL	60610
Developing Communities Project	Ms.	Desta	Houston		212 E. 95th St.		Chicago	IL	60619
Developing Communities Project	Ms.	Sharon	Houston		12240 South Perry		Chicago	IL	60628
Chesterfield Community Council	Mr.	Nell	Howard		8737 W Wabash		Chicago	IL	60619
Chesterfield Community Council	Mr.	WM	Howard		8737 Wabash Ave.		Chicago	IL	60619
Roseland Heights Community Association	Ms.	Louise	Hutchinson		9742 S. Forest Avenue		Chicago	IL	60628
Metro Chicago Synod - ELCA		Rev. William E.	Hutchison	Reverend	1805 Washington St.		Evanston	IL	60202
Chicago Urban League	Ms.	Cheryle	Jackson	CEO	4510 South Michigan Avenue		Chicago	IL	60653
People for Community Recovery	Ms.	Alisha	Jacobs		755 130th Place		Chicago	IL	60827
Golden Gate Homeowners Association	Ms.	Mary	Jefferson		13161 S Rhodes Ave		Chicago	IL	60827
People for Community Recovery	Ms.	Cheryl	Johnson		13116 S. Ellis Ave.		Riverdale	IL	60827
People for Community Recovery	Ms.	Nekeba	Johnson		13041 S Evans Ave		Chicago	IL	60827
People for Community Recovery	Ms.	Imanie	Johnson		13015 S Evans Ave		Chicago	IL	60827
Developing Communities Project	Mr.	John Paul	Jones	Community Organizer	11300 South Halsted		Chicago	IL	60626
Roseland Heights Community Association	Mr.	Arthur	Jones	Representative	9910 South Prairie Avenue		Chicago	IL	60628
Developing Communities Project	Ms.	Ernnesha	Kerr		11300 S Halsted		Chicago	IL	60628
Developing Communities Project	Ms.	Dorothy	King		1453 W. 71st Place		Chicago	IL	60636
Southwest REACH Center	Mr.	Piotr	Korzynski	Industrial Coordinator	6155 S. Pulaski Road	2nd Floor	Chicago	IL	60629
Grand Boulevard Federation	Ms.	Andrea	Lee		4859 S. Wabash	2nd Floor	Chicago	IL	60615
Senior Service Coalition of Southeast Chicago	Ms.	Julia	Lopez	Coordinator, S. S.	3201 East 91st Street		Chicago	IL	60617
Developing Communities Project	Mr.	Dennis	Lucas		11300 S Halsted		Chicago	IL	60628
Blue Island Chamber of Commerce	Mr.	Greg	Luchow	Executive Director	2434 Vermont Street		Blue Island	IL	60406
Community Renewal Society-Senior Action Network	Ms.	Doris	Martin	Member	13207 S. Rhodes Ave		Riverdale	IL	60827
Northgate Pier Condo		Joe	Maschek	Board Member	7641 N. Eastlake Terrace 2A		Chicago	IL	60626
Justice for Children	Ms.	Debra	McLaurin	Development Director	2600 Southwest Frwy	Ste 806	Houston	TX	77098
Rainbow/Push Coalition	Mr.	John	Mitchell	Chief of Staff	930 East 50th Street		Chicago	IL	60615
Southsiders Organized for Unity and Liberation (SOUL)	Mr.	Christian	Mitchell		5001 S Ellis		Chicago	IL	60615
Community Mental Health Council	Dr.	Lynne	Mock, Ph.D.		8704 S. Constance Ave.		Chicago	IL	60617
Rogers Park Vintage Mgmt		Greg	Nielson		1443 W. Jarvis		Chicago	Il	60626
NAACP, Chicago Southside Chapter	Rev.	Phillip	O'Bannon	President	800 East 78th Street		Chicago	IL	60619
Chesterfield Community Council	Ms.	Kristina	Patterson		501 East 90th Place		Chicago	IL	60619
CTA Gray Line Project	Mr.	Mike	Payne		P.O. Box 64614		Chicago	IL	60664
Developing Communities Project	Ms.	Patricia	Peters		648 E. 101st Street		Chicago	IL	60628
The Little Village Environmental Justice Organization	Mr.	Mike	Pitula		2856 S. Millard Ave.		Chicago	IL	60623
Roseland Heights Community Association	Mr.	Michael	Porche	Executive Director	P.O. Box 198751		Chicago	IL	60619
United Neighborhood Organization	Mr.	Juan	Rangel	Chief Executive Officer	954 W. Washington Blvd. 3rd Floor		Chicago	IL	60607
Developing Communities Project	Rev.	Larry	Redd		11320 S Halsted		Chicago	IL	60628
Omnibus Society of America	Mr.	Wiliam	Reynolds		2114 W Balmoral Ave		Chicago	IL	60625
Developing Communities Project	Ms.	Gwendolyn	Rice	Executive Director	11300 South Halsted		Chicago	IL	60626
Developing Communities Project	Mr.	Eugene	Rogers		10763 S. Sangamon		Chicago	IL	60643

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Red Line Extension

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Catholic Charities, Community and Civic Affairs	Mr.	John	Ryan	Executive Director	721 North LaSalle Street		Chicago	IL	60610
Southeast Environmental Task Force	Ms.	Peggy	Salazar	President, Board of Directors	13300 South Baltimore Avenue		Chicago	IL	60633
Pullman Civic Organization	Mr.	Drew	Sexton	President	11111 S. Forrestville Ave.		Chicago	IL	60628
The Community Mental Health Council	Ms.	Diana	Short		333 E 55th Place	Apt 208	Chicago	IL	60637
Historic Pullman Foundation	Mr.	Michael	Shymanski		614 E. 113th St.		Chicago	IL	60628
Village of Riverdale, Community Development Department	Mr.	Earl	Silas, Jr	Director	157 West 144th Street		Riverdale	IL	60827
Metro Seniors in Action	Ms.	Dorothy	Sims		10834 S. Eberhart Ave.		Chicago	IL	60628
Southeast Environmental Task Force	Mr.	Mike	Skuja	President, Board of Directors	13300 South Baltimore Avenue		Chicago	IL	60633
Chesterfield Community Council	Mr.	Lester	Smith	President	501 East 90th Place		Chicago	IL	60619
Developing Communities Project	Mr.	Horace	Smith		10557 S King Drive		Chicago	IL	60628
Neighbors of Fuller Park	Mr.	Kenneth	Smith		239 W. 46th St.		Chicago	IL	60609
Developing Communities Project	Ms.	Patricia	Smith		10557 S King Drive		Chicago	IL	60628
Pullman Civic Organization	Mr.	Drew	Smith		11111 S. Forrestville Ave.		Chicago	IL	60628
Metro Seniors in Action	Mr.	Charles	Spears		6733 S. Ridgeland Ave	Apt. 1-1y	Chicago	IL	60649
Saint Francis Hospital		Nancy	Stermer	Community Outreach	355 Ridge		Evanston	IL	60202
Predestined Incorporated	Ms.	Laticia	Strachan	President/Chief Executive Director	9322 South Emerald Avenue		Chicago	IL	60620
Developing Communities Project	Pastor	Samuel	Strachan		449 W. 129th St.		Chicago	IL	60628
Developing Communities Project	Ms.	Debra	Strickland		212 E. 95th St.		Chicago	IL	60619
Chatham Avalon Park Community Council	Mr.	Keith	Tate	President	8441 South Cottage Grove		Chicago	IL	60619
Developing Communities Project	Mr.	Eugene	Taylor		586 Calhoun Ave		Calumet City	IL	60409
Developing Communities Project	Ms.	Hilda	Taylor		586 Calhoun Ave		Calumet City	IL	60409
Roseland Heights Community Association	Mr.	Clevan	Tucker Jr		P.O. Box 198751		Chicago	IL	60619
Rainbow Push Coalition, International Trade Bureau	Ms.	Marshette	Turner	Executive Director	930 E. 50th Street		Chicago	IL	60615
Beverly Area Planning Association	Mr.	Matt	Walsh	Executive Director	11107 S. Longwood Drive		Chicago	IL	60643
Beverly Area Planning Association	Ms.	Marcia	Walsh	Housing and Economic Development	11107 S. Longwood Drive		Chicago	IL	60643
Riverdale Community Resource Center	Ms.	Myrna	Watkins	Director	13725 South Wabash		Riverdale	IL	60827
Pastors United for Change	Mr.	Roosevelt	Watkins	CEO/President	9231 S. Cottage Grove		Chicago	Il	60619
Roseland Heights Community Association	Ms.	Anne	Wilson		9719 S. Forest Ave.		Chicago	IL	60628
Developing Communities Project	Mr.	James	Woodson		9701 S. Harvard Ave.		Chicago	IL	60628
Citizens Taking Action	Mr.	Charley	Yale		6057 N Lincoln Ave	Apt 611	Chicago	IL	60659
Hispanic American Construction Industry Association	Mr.	Paul	Cerpa	Executive Director	901 W. Jackson Blvd.	Suite 205	Chicago	IL	60607
Black Contractors United (BCU)	Ms.	Florence	Cox	Executive Director	400 West 76th St. Suite 200		Chicago	IL	60620
Illinois Hispanic Chamber of Commerce	Mr.	Omar	Duque	President & CEO	111 W. Washington	Suite 1660	Chicago	IL	60602
American Indian Center, Inc.	Ms.	Frances	Hagemann	Board Vice President	1630 W. Wilson Ave.		Chicago	IL	60640
Chicago Minority Business Development Council	Ms.	Sheila	Hill	President	1 East Wacker Drive	Suite 1200	Chicago	IL	60601
American Indian Center, Inc.	Ms.	Rita	Hodge	Board Secretary	1630 W. Wilson Ave.		Chicago	IL	60640
Puerto Rican Chamber of Commerce of Illinois	Mr.	Marlo	Irizarry	Executive Director	2622 W. Division St.		Chicago	IL	60622
China Town Chamber of Commerce		Man-Men	Lee	Co-Executive Director	2169B S. China Place		Chicago	IL	60616
Lifeline Theatre		Dorothy	Milne	Artistic Director	6912 N. Glenwood Ave.		Chicago	IL	60626
Association of Asian Construction Enterprises	Mr.	Perry	Nakachi	President	333 N. Ogden Avenue		Chicago	IL	60607
Latin American Chamber of Commerce	Mr.	Bennett	Santana	Chairman	3512 W. Fullerton Ave.		Chicago	IL	60647
Chicago Area Gay & Lesbian Chamber of Commerce	Ms.	Christee	Snell	Executive Director	1210 W. Rosedale		Chicago	IL	60660
China Town Chamber of Commerce		Chi Can	To	Co-Executive Director	2169B S. China Place		Chicago	IL	60616
American Indian Center, Inc.	Ms.	Debra	Valentino	Board President	1630 W. Wilson Ave.		Chicago	IL	60640
Chicago City Council 34th Ward Office	Mr.	Lemuel	Austin		500 W. 111th St.		Chicago	IL	60628
Chicago City Council 34th Ward Office	Ms.	Leslie	Austin		507 W. 111th St.		Chicago	IL	60628
Chicago City Council 9th Ward	Alderman	Anthony	Beale	Alderman	34 E. 112th Place		Chicago	IL	60628
Cook County Commissioner	Commissioner	William	Beavers	Commissioner	118 N. Clark Street		Chicago	IL	60602
Chicago City Council 21st Ward	Alderman	Howard	Brookins, Jr.	Alderman	9612 S. Halsted St		Chicago	IL	60628
Illinois House of Representative District 36	Representative	James D.	Brosnahan	Representative	5311 W. 95th St.		Oak Lawn	IL	60453
2nd Congressional District Office	Mr.	Rick	Bryant		17926 South Halsted		Homewood	IL	60430

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Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
U.S. Senator	Senator	Roland	Burris	Senator	230 S. Dearborn	Ste. 3900	Chicago	IL	60604
Cook County Commissioner	Commissioner	Jerry "Iceman"	Butler	Commissioner	118 N. Clark Street		Chicago	IL	60602
Chicago City Council 10th Ward	Ms.	Yessenia	Carreon		3522 E. 106th St.		Chicago	IL	60617
Chicago City Council 20th Ward	Alderman	Willie	Cochran	Alderman	6357 S. Cottage Grove		Chicago	IL	60637
Illinois Senator District 16	Senator	Jacqueline Y.	Collins	Senator	1155 West 79th Street		Chicago	IL	60620
Illinois House of Representative District 33	Representative	Marlow H.	Colvin	Representative	8539 South Cottage Grove		Chicago	IL	60619
Chicago City Council 34th Ward Office	Mr.	Alfred	Connor		1124 W. 107th Place		Chicago	IL	60643
City of Chicago Office of the Mayor	Mayor	Richard	Daley	Mayor	121 N. LaSalle St.	Room 507	Chicago	IL	60602
Illinois House of Representative District 30	Representative	William	Davis	Representative	1912 W. 174th St.		East Hazel Crest	IL	60429
State Rep David Miller's Office	Ms.	Valerie	Davis		1350 E Sibley Blvd	Ste 301 A&B	Chicago	IL	60419
7th Congressional District	Congressman	Danny	Davis	Congressman	3333 West Arthington Street	Ste. 130	Chicago	IL	60624
Illinois House of Representative District 27	Representative	Monique D.	Davis	Representative	1234 West 95th Street		Chicago	IL	60643
Village of Riverdale	Mr.	Deyon L.	Dean	Mayor	157 W. 144th St.		Riverdale	IL	60827
Chicago City Council 3rd Ward	Alderman	Pat	Dowell	Alderman	5046 S. State Street		Chicago	IL	60609
Illinois House of Representative District 5	Representative	Kenneth	Dunkin	Representative	1520 N. Wells		Chicago	IL	60610
Village of Calumet Park	Mr.	Joseph	DuPar	Mayor	12409 S. Throop St.		Calumet Park	IL	60827
U.S. Senator	Senator	Richard	Durbin	Senator	230 S. Dearborn	Ste. 3892	Chicago	IL	60604
Village of Calumet Park, Community Relations Commissioner	Mr.	Norm	Edwards	Director	12409 South Throop		Calumet Park	IL	60827
Democratic Party of the 49th Wd.		David	Fagus	Democratic Committeeman	1340 W. Morse #503		Chicago	IL	60626
Illinois House of Representative District 31	Representative	Mary E.	Flowers	Representative	2525 W. 79th Street		Chicago	IL	60652
City of Calumet - Community & Economic Development	Mr.	James J.	Gigliotti	Coordinator	204 Pulaski Road		Calumet City	IL	60409
Illinois House of Representative District 6	Representative	Esther	Golar	Representative	4926 South Ashland		Chicago	IL	60609
City of Evanston - Community Development Department, Planning Division	Ms.	Susan	Guderley	Community Developmen	2100 Ridge Avenue		Evanston	IL	60201
Illinois House of Representative District 18	Representative	Julie	Hamos	Representative	820 Davis Street	Ste. 103	Evanston	IL	60201
City of Chicago Office of the Mayor	Mr.	Sean B.	Harden	Executive Assistant to the Mayor	121 N. LaSalle St.	Room 406	Chicago	IL	60602
Chicago City Council 6th Ward Office	Mr.	Keith	Harris		406 E 75th St		Chicago	IL	60619
Chicago City Council 8th Ward	Alderman	Michelle A.	Harris	Alderman	8539 S. Cottage Grove		Chicago	IL	60619
City of Evanston - Ward 5	Ald.	Delores	Holmes	Alderman	2100 Ridge Ave.		Evanston	IL	60201
Illinois House of Representative District 34	Representative	Constance A	Howard	Representative	8729 S. State Street		Chicago	IL	60619
Illinois Senator District 3	Senator	Mattie	Hunter	Senator	2929 S. Wabash Avenue	Ste. 102	Chicago	IL	60616
Chicago City Council 7th Ward	Alderman	Sandi	Jackson	Alderman	7129 S. Yates Street		Chicago	IL	60649
2nd Congressional District	Congressman	Jesse	Jackson Jr.	Congressman	7121 S. Yates Blvd.		Chicago	IL	60649
Illinois Senator District 14	Senator	Emil	Jones III	Senator	507 West 111th Street		Chicago	IL	60628
Illinois House of Representative District 35	Representative	Kevin	Joyce	Representative	6965 W. 111th Street		Worth	IL	60482
49th Ward		Michael	Land		7356 N. Greenview		Chicago	IL	60626
City of Chicago Office of the Mayor	Mr.	Gene	Lee	Deputy Chief of Staff	121 N. LaSalle St.	Room 406	Chicago	IL	60602
2nd Congressional District Office	Mr.	Ben	Lenet	Deputy District Admin	17926 South Halsted		Homewood	IL	60430
Village of Dolton	Mayor	Ronnie	Lewis	Mayor	14014 Park Avenue		Dolton	IL	60419
Chicago City Council 34th Ward Office	Ms.	Lee Angela	Lofton		12708 S. Green St.		Chicago	IL	60643
Chicago City Council 6th Ward	Alderman	Freddrenna	Lyle	Alderman	406 E. 75th St.		Chicago	IL	60619
Illinois Senator District 18	Senator	Edward D	Maloney	Senator	10400 South Western Avenue		Chicago	IL	60643
Calumet City	Ms.	Michelle	Markiewicz Qualkinbush	Mayor	204 Pulaski Road		Calumet City	IL	60409
Illinois Senator District 15	Senator	James T	Meeks	Senator	2050 E. 159th Street		Calumet City	IL	60419
Illinois House of Representative District 29	Representative	David E.	Miller	Representative	1350 East Sibley Blvd	Ste 301 A	Dolton	IL	60419
Cook County Commissioner Robert Steele's Office	Ms.	Alexis	Mims		118 N Clark St.	Room 567	Chicago	IL	60619
Illinois State Toll Highway Authority	Mr.	John	Minolta	Chairman	2700 Ogden Ave		Downers Grove	IL	60515
Illinois State Police	Mr.	Jonathan	Monken	Director	801 South Seventh Street	P.O. Box 19461	Springfield	IL	62794
Chicago Alderman - Ward 49	Ald.	Joe	Moore	Alderman	121 N. LaSalle St.	Room 300	Chicago	IL	60202
Cook County Recorder of Deeds & Rgistrar of Titles	Mr.	Eugene	Moore	Recorder of Deeds	118 N. Clark Street	Room 120	Chicago	IL	60602
City of Blue Island	Mr.	Donald E.	Peloquin	Mayor	13051 S. Greenwood Ave.		Blue Island	IL	60406
Illinois State Police District Chicago	Trooper	Clare	Pfotenhauer	Trooper	9511 W. Harrison St.		Des Plaines	IL	60016
Village of Burnham	President	Robert	Polk	President	14450 Manistee		Burnham	IL	60633
Chicago City Council 10th Ward Office	Alderman	John A.	Pope	Alderman	3552 E. 106th St.		Chicago	IL	60617
City of Blue Island	Ms.	Mary	Poulsen	Marketing Director	13051 South Greenwood Avenue		Blue Island	IL	60406

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Illinois Governor	Governor	Patrick	Quinn	Governor	100 W. Randolph, 16-100		Chicago	IL	60601
City of Evanston - Ward 8	Ald.	Ann	Rainey	Alderman	2100 Ridge Ave.	Room 2500	Evanston	IL	60201
Illinois House of Representative District 28	Representative	Robert	Rita	Representative	4818 W. 137th Street		Crestwood	IL	60445
Chicago City Council 19th Ward	Alderman	Ginger	Rugai	Alderman	10400 South Western Avenue		Chicago	IL	60655
Village of Evergreen Park	Mayor	James	Sexton	Mayor	9418 S. Kedzie Ave		Evergreen Park	IL	60805
Village of Riverdale	Ms.	Deborah	Smiley	Village Clerk	157 West 144th Street		Riverdale	IL	60827
Alderman Howard Brookins Jr. Office	Ms.	Adrienne	Smith		9612 S Halsted		Chicago	IL	60628
Cook County Commissioner	Commissioner	Robert	Steele	Commissioner	118 N. Clark Street		Chicago	IL	60602
Cook County Board of Commissioners	Mr.	Todd	Stroger	President	118 N. Clark Street	Room 537	Chicago	IL	60602
Illinois House of Representative District 32	Representative	Andre M.	Thapedi	Representative	371 East 75th St		Chicago	IL	62706
Chicago City Council 17th Ward	Alderman	Latasha	Thomas	Alderman	7811 S. Racine Avenue		Chicago	IL	60620
Illinois Senator District 17	Senator	Donne E.	Trotter	Senator	8704 South Constance Avenue	Ste. 324	Chicago	IL	60617
Chicago City Council 34th Ward Office	Ms.	Diane	Turner		507 W. 111th St.		Chicago	IL	60628
Illinois Secretary of State	Mr.	Jesse	White	Secretary of State	213 State Capitol		Springfield	IL	62756
Alderman Carrie Austin's Office	Mr.	Chester	Wilson		507 W 111th Street		Chicago	IL	60628
Illinois Department of Transportation	Mr.	Chuck	Abraham	Division of Public and Intermodal Transportation	J. R. Thomson Center, Suite 6-600		Chicago	IL	60601
City of Chicago Department of Transportation, Division of Planning	Mr.	Joe	Alonzo	CREATE Manager	30 N. LaSalle Street, Suite 500		Chicago	IL	60602
Metra Commuter Rail	Ms.	Kristen	Andersen	Transportation Planning Analyst	547 West Jackson Boulevard	13th Floor	Chicago	IL	60661
Federal Railroad Administration	Mr.	Timothy	Barkley	Director, Office of Policy & Communication	1200 New Jersey Ave. SE		Washington	DC	20590
Cook County Highway Department	Mr.	John	Beissel		69 West Washington	Room 2300	Chicago	IL	60602
Illinois Commerce Commission	Mr.	Charles	Box	Chairman	527 East Capitol Avenue		Springfield	IL	62701
Chicago Metropolitan Agency for Planning	Ms.	Claire	Bozic	Senior Analyst	233 South Wacker Drive, Suite 800		Chicago	IL	60606
Chicago Metropolitan Agency for Planning	Ms.	Janet	Bright	External Relations	233 S. Wacker Drive	Ste. 800	Chicago	IL	60606
Illinois Department of Transportation	Ms.	Lil	Budzinski		J. R. Thomson Center, Suite 6-600		Chicago	IL	60601
Illinois Department of Transportation	Ms.	Lil	Budzinski		100 West Randolph	J. R. Thomson Cent	Chicago	Illinois	60601
Department of the Interior, Office of Environmental Policy and Compliance	Mr.	Michael	Chezik	Regional Environmental Officer	200 Chestnut St.	Room 244	Philadelphia	PA	19106
Federal Highway Administration	Mr.	Ed	Christopher	Metropolitan Planning Specialist	4749 Lincoln Mall Drive	Ste. 600	Matteson	IL	60443
Federal Highway Administration	Mr.	Chris	DiPalma		200 West Adams, Suite 320		Chicago	IL	60606
City of Chicago Department of Community Development	Ms.	Karen	Forte	Architect - City Planner	121 N. LaSalle St.	Ste. 1000	Chicago	IL	60602
Illinois Department of Transportation, District 1 Bureau of Construction	Mr.	Bill	Frey	Bureau Chief	201 West Center Court		Schaumburg	IL	60196
Illinois Department of Transportation, Bureau of Railroads	Mr.	Michael	Garcia	Chief, Rail Engineering	2300 S. Dirksen Parkway	Room 339	Springfield	IL	62764
Illinois Department of Revenue	Mr.	Brian	Hamer	Director	100 West Randolph Street		Chicago	IL	60601
Federal Railroad Administration	Mr.	Laurence	Hasvold	Regional Administrator	200 West Adams, Suite 310		Chicago	IL	60606
City of Chicago Department of Transportation, Division of Planning	Mr.	Richard	Hazlett	Coordinating Planner	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
Illinois Department of Transportation, Division of Traffic Safety	Mr.	Robert	Hoover	Bureau Chief	2300 S. Dirksen Parkway		Springfield	Il	62764
Chicago Housing Authority	Mr.	Lewis	Jordan	CEO	60 E. Van Buren Street		Chicago	IL	60605
Metra Commuter Rail	Mr.	David	Kralik	Section Manager, New Starts and Corridor Planning	547 West Jackson Boulevard, 13th Floor		Chicago	IL	60661
Regional Transit Authority	Ms.	Aimee	Lee	Manager, Regional Planning	175 West Jackson Boulevard, Suite 1550		Chicago	IL	60604

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
City of Chicago Department of Community Development	Mr.	Edward	Lewis	Coordinator of Economic Development	121 N. LaSalle St.	Ste. 1000	Chicago	IL	60602
City of Chicago Department of Transportation, Division of Planning	Ms.	Brenda	McGruder		30 N. LaSalle Street	Suite 500	Chicago	IL	60602
Illinois Department of Commerce and Economic Opportunity	Ms.	Felisha	McNeal		100 W Randolph	Ste 3-400	Chicago	IL	60601
Illinois Department of Transportation	Mr.	Stanley	Moore		300 W. Adams	2nd Floor	Chicago	IL	60606
Metropolitan Planning Council		Marisa	Novara	Associate	140 S. Dearborn, Suite 1400		Chicago	IL	60603
Northern Indiana Commuter Transportation District	Mr.	Bill	O'Dea		33 East U.S. Highway 12		Chesterton	IN	46304
Illinois Department of Employment Security	Ms.	Maureen T.	O'Donnell	Director	33 S. State St.		Chicago	IL	60603
Illinois Department of Transportation, Central Bureau of Operations	Ms.	Diane	O'Keefe	Deputy Director	201 West Center Court		Schaumburg	IL	60196
Cook County Department of Revenue	Mr.	Nathan	Paige	Director	118 N. Clark St.	Room 1160	Chicago	IL	60602
Metropolitan Water Reclamation District	Mr.	A.S.	Paintal	Supervising Civil Engineer	111 East Erie		Chicago	IL	60611-3154
Regional Transit Authority	Ms.	Diane	Palmer	Director of Communications	175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Northern Indiana Commuter Transportation District	Mr.	John	Parsons		33 East U.S. Highway 12		Chesterton	IN	46304
City of Chicago Department of Streets and Sanitation Bureau of Street Operations	Mr.	Bob	Richardson	Deputy Commissioner	121 N. LaSalle St.	Room 704	Chicago	IL	60602
Chicago Metropolitan Agency for Planning	Mr.	Jose	Rodriguez	Programming & Operations	233 S. Wacker Drive	Ste. 800	Chicago	IL	60606
Federal Highway Administration	Mr.	Michael	Rosenstiehl	Administrative Team Leader	4749 Lincoln Mall Drive	Ste. 600	Matteson	IL	60443
Pace	Mr.	Thomas J.	Ross	Executive Director	550 W. Algonquin Road		Arlington Heights	IL	60005
City of Chicago Department of Aviation	Mr.	Larry	Rzewski		121 N. LaSalle St.		Chicago	IL	60602
City of Chicago Department of Budget and Management	Mr.	Gene	Saffold	Chief Financial Officer	121 N. LaSalle St.	Room 604	Chicago	IL	60602
Cook County Sheriff's Office	Chief	Louis A.	Sbarboro		5600 Old Orchard Rd.		Skokie	IL	60077
Illinois Department of Transportation, ITS Program Office	Mr.	Chuck	Schmitt	Bureau Chief	2300 South Dirksen Parkway		Springfield	IL	62764
Metropolitan Water Reclamation District	Mr.	Joseph	Schuessler	Principal Civil Engineer	111 East Erie		Chicago	IL	60611-3154
Federal Highway Administration	Mr.	Norman	Stoner	Division Administrator, Illinois Division Office	3250 Executive Park Drive		Springfield	IL	62703
Chicago Bureau of Convention and Tourism	Mr.	Mark	Theis	Executive Vice President	2301 N. Lakeshore Drive		Chicago	IL	60616
Pace Suburban Bus Service	Mr.	David	Tomzik	Manager, Long Range Planning	550 West Algonquin Road		Arlington Heights	IL	60005
Metropolitan Water Reclamation District	Mr.	Nicholas	Venuso	Assistant Chief Engineer	111 East Erie		Chicago	IL	60611-3154
Federal Transit Administration	Mr.	David	Werner	Regional Administrator	200 West Adams Street, Suite 320		Chicago	IL	60606
Regional Transit Authority	Mr.	Sid	Weseman		175 West Jackson Boulevard, Suite 1550		Chicago	IL	60604
CPS		Lorraine	Wille	Teacher	1501 W. Chase Ave.		Chicago	IL	60626
Chicago Housing Authority, Intergovernmental Affairs	Mr.	Otis	Wright	Director	60 E. Van Buren		Chicago	IL	60605
Tuley Park Library Branch	Ms.	Stella	Beck	Branch Manager	501 East 90th Place		Chicago	IL	60619
South Chicago Library Branch	Ms.	Kim	Catledge	Branch Manager	9055 South Houston Avenue		Chicago	IL	60617
Blue Island Public Library	Mr.	Jim	Deiters	Director	2433 York Street		Blue Island	IL	60406
Riverdale Public Library	Ms.	Barb	Diel	Representative	208 West 144th Street		Riverdale	IL	60827
West Pullman Library Branch	Ms.	Duwana	Dorsey	Branch Manager	830 West 119th Street		Chicago	IL	60628
Jeffrey Manor Branch Public Library	Ms.	Elizabeth	Garcia	Director	2401 East 100th Street		Chicago	IL	60617
Brainerd Branch Public Library	Ms.	Mary	Jones	Director	1350 West 89th Street		Chicago	IL	60620
Calumet City Public Library	Mr.	Doug	Losey	Director	660 Manistee Avenue		Calumet City	IL	60409
Pullman Public Library	Mr.	Jimmy	Markcom	Director	11001 South Indiana Avenue		Chicago	IL	60628
Walker Branch Public Library	Ms.	Christina	Matera	Director	11071 South Hoyne Avenue		Chicago	IL	60643
Calumet City Public Library	Mr.	William	Pixley	Director	660 Manistee Avenue		Calumet City	IL	60409

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Hegewisch Library Branch	Ms.	Susan	Puterko	Branch Manager	3048 East 130th Street		Chicago	IL	60633
Hope Fellowship Christian Center	Ms.	Carolyn	Cox		PO Box 198567		Chicago	IL	60619
Sheldon Heights Church of Christ	Ms.	Janet	Bailey		11325 S Halsted		Chicago	IL	60628
Apostolic Church of God	Rev. Dr.	Arthur M.	Brazier	Pastor	6320 South Dorchester Avenue		Chicago	IL	60637
Sheldon Heights Church of Christ	Ms.	Vera	Dixon		11325 S Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	LaJoyce	Eason		4929 S. St. Lawrence		Chicago	IL	60615
Lutheran Church of the Holy Spirit	Mr.	Robert	Elliott		1335 W. 115th St.		Chicago	IL	60643
Sheldon Heights Church of Christ	Ms.	Frances	Garrett		11325 S. Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Rhonda	Garrett		11325 S. Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Marie	Gilbert		209 W 109th Place		Chicago	IL	60628
Sheldon Heights Church of Christ	Pastor	Leonardo	Gilbert		11355 S. Halsted		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Brenda L.	Gilbert		11325-55 S Halsted St.		Chicago	IL	60628
Lutheran Church of the Holy Spirit	Rev.	Rayford	Grady		1335 W. 115th Street		Chicago	IL	60643
Sheldon Heights Church of Christ	Mr.	Lionel	Harden		10353 S. Sangamon St.		Chicago	IL	60643
Sheldon Heights Church of Christ	Mr.	CJ	Harmon		5438 S Ridgewood Ct.	#3	Chicago	IL	60615
Lutheran Church of the Holy Spirit	Ms.	Carolyn	Lesmeister		12157 S. Michigan Ave.	#3	Chicago	IL	60628
Bethel House of Prayer	Ms.	Bernadette	Lewis		10956 S. State Street		Chicago	IL	60628
Bethel House of Prayer	Ms.	Vanessa	Lewis		10956 S. State Street		Chicago	IL	60628
Lilydale 1st Baptist Church	Rev.	Alvin	Love		649 W. 113th St.		Chicago	IL	60628
Bethel House of Prayer	Mr.	James	McFadden		10956 S State Street		Chicago	IL	60628
Sheldon Heights Church of Christ	Ms.	Kietta	McFee		11733 S. Sangamon		Chicago	IL	60643
Salem Baptist Church of Chicago	Rev.	James T.	Meeks	Pastor	752 East 114th Street		Chicago	IL	60628
Holy Spirit Lutheran	Mr.	Roger	Mitchell		9210 S. Phillips Avenue		Chicago	IL	60617
New Beginnings Ministry of Faith	Ms.	Belinda	Moore		432 154th Place		Calumet City	IL	60409
New Beginnings Ministry of Faith	Br.	William	Moore		432 154th Place		Calumet City	IL	60409
Joy Fellowship Baptist Church	Ms.	Roberta	Patterson		2025 E 175th		Lansing	IL	60438
St. Sabina Church	Rev.	Dr. Michael L.	Pfleger	Pastor	1210 West 78th Place		Chicago	IL	60620
Sheldon Heights Church of Christ	Ms.	Katherine	Raglin		5044 S. St. Lawrence Ave.	1st Floor	Chicago	IL	60615
Joy Fellowship Baptist Church	Mr.	Albert	Reece		7715 So. Throop		Chicago	IL	60620
Joy Fellowship Baptist Church	Ms.	Carrie	Ross		11733 S. Stewart		Chicago	IL	60628
Kenwood United Church of Christ	Pastor	Leroy	Sanders		4600-08 S. Greenwood		Chicago	IL	60653
Joy Fellowship Baptist Church	Ms.	Cecile	Shannon		11740 S Longwood Drive		Chicago	IL	60643
Joy Fellowship Baptist Church	Ms.	Viola	Smith		11638 S. Parnell Avenue		Chicago	IL	60628
Sheldon Heights Church of Christ	Pastor	Charles	Smith		11355 S. Halsted		Chicago	IL	60628
Joy Fellowship Baptist Church	Ms.	Ruby	Stewart Mitchell		12322 S. Yale		Chicago	IL	60628
Joy Fellowship Baptist Church	Ms.	Donna	Tyson		14427 Chicago Road	Apt. A	Dolton	IL	60419
Joy Fellowship Baptist Church	Mrs.	Sandra	White		9131 So. Claremont Ave.		Chicago	IL	60620
Joy Fellowship Baptist Church	Ms.	Willa Mae	Wilson		750 W. 87th Street		Chicago	IL	60620
Joy Fellowship Baptist Church	Ms.	Rosa	Young Martin		14130 Calumet		Dolton	IL	60419
Trinal, Inc	Ms.	Tammi	Davis		329 W 18th St	Ste 401	Chicago	IL	60616
Trinal, Inc	Ms	Alicia	Garcia-Abner		329 W. 18tth St	Ste 401	Chicago	IL	60616
CirclePoint	Ms.	Shay	Humphrey	Project Associate	455 Capitol Mall	Suite 802	Sacramento	CA	95814
CDM	Mr.	Mike	Izzo		125 S Wacker Drive	Ste 600	Chicago	IL	60606
Trinal, Inc	Ms.	Maye	Kelsey		329 W 18th St	Ste 401	Chicago	IL	60616
CDM	Ms.	Helene	Kornblatt		523 W. Sixth Street	Suite 400	Los Angeles	CA	90014
CirclePoint	Ms.	Sarah	Layton Wallace	Principal	555 12st Street	Suite 290	Oakland	CA	94607
CDM	Mr.	Chris	Martel		125 S Wacker Drive	Ste 600	Chicago	IL	60606
Kathy Schaeffer and Associates, Inc.	Mr.	Bob	Musinski	Account Supervisor	17 North State Street	Suite 1690	Chicago	IL	60602
CDM	Ms.	Melissa	Peters		125 S. Wacker Drive	Suite 600	Chicago	IL	60606
CirclePoint	Ms.	Kristy	Ranieri	Senior Project Manager	182 Oakland Road	Suite 100	Maplewood	NJ	07040
Chicago Transit Authority	Mr.	Richard	Rodriguez	President	567 West Lake Street		Chicago	IL	60661
Kathy Schaeffer and Associates, Inc.	Ms.	Kathy	Schaeffer	Principal	17 North State Street	Suite 1690	Chicago	IL	60602
Kathy Schaeffer and Associates, Inc.	Ms.	Lisa	Soard	Senior Account Executive	17 North State Street	Suite 1690	Chicago	IL	60602
CDM	Ms.	Kate	Stenberg	Senior Environmental Planner	11811 NE 1st	Suite 201	Bellevue	WA	98005

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Wight & Co	Mr.	Bob	Tessiatore		1200 N Frontage Dr		Darien	IL	60561
115-116-117 Elizabeth St. Block Club	Ms.	Claudia	Davis		11531 S. Elizabeth Street		Chicago	IL	60643
Block Club 96 Wentworth	Ms.	Sylvia	Durham		9624 S Wentworth		Chicago	IL	60628
Block Club 96 Wentworth	Ms.	Mable	Echols		9622 Wentworth Ave		Chicago	iL	60628
115-116-117 Elizabeth St. Block Club	Ms.	Marie	Ellis-Milan		11611 S. Elizabeth Street		Chicago	IL	60643
115-116-117 Elizabeth St. Block Club	Ms.	Marie	Milan		11611 S. Elizabeth Street		Chicago	IL	60643
		Dawn	Adams		1608 W. Sherman #314		Chicago	IL	60626
		Jean-Paul	Addie		1625 W. Lunt		Chicago	IL	60626
		Duke	Alden		5430 N. Sheridan Road	408	Chicago	IL	60640
		Antoine	Alexander		1749 W. Jarvis Avenue		Chicago	IL	60626
		Jacob	Aronov		1423 W. Sherwin	1	Chicago	IL	60626
		M	Badanes		6737 N. Greenview		Chicago	IL	60626
		Raymond	Bailey		1335 W. Fargo	3W	Chicago	IL	60626
	Ms.	Andrea	Baker		1567 Ridge Ave		Evanston	IL	60201
		Patrick	Barry		6743 N. Nowgard		Chicago	IL	60626
		Brianna	Bedard		6907 N. Bosworth Ave.		Chicago	IL	60626
		William	Benjamin		623 Linden		Wilmette	IL	60091
		Leroy	Blommaert		5333 N Winthrop		Chicago	IL	60640
		Gemariah	Borough		1936 Central		Evanston	IL	60201
		Donald	Bosan-Bruno		2225 Madison Pl		Evanston	IL	60202
		Carl	Bova		1322 Rosalie St		Evanston	IL	60201
		Sarah	Bracken		4647 N. Magnolia Street, Apt 1 N		Chicago	IL	60640
		Terry	Brennan		7506 N. Rogers		Chicago	IL	60626
		Aaron	Brown		1809 S. Carpenter		Chicago	IL	60608
		Norbert	Budde		1108 South Blvd.		Evanston	IL	60202
		Pat	Burke		2116 W. Lunt Ave.		Chicago	IL	60645
		Brittany	Burran-Stanley		314 1/2 S. Blvd.		Evanston	IL	60202
		Joy	Campbell		1216 W. Jarvis Ave. 15		Chicago	IL	60626
		Helen	Carlock		7729 N. Ashland		Chicago	IL	60626
		Mark	Cartwright		2919 N. Troy St.		Chicago	IL	60618
		Jennifer	Clark		6439 N. Sheridan		Chicago	IL	60626
		Jason	Cocking		1513 W. Chase Ave.	1A	Chicago	IL	60626
		Lynne	Collins		11253-57 S. Champlain		Chicago	IL	60628
		Hector	Colon		6656 N. Glenwood		Chicago	IL	60626
Owner/Renter		Lillie	Council		1415 Lunt, Unit 508		Chicago	IL	60626
		Paul	Damian		1349 W. Thorndale		Chicago	IL	60660
		Jon	Davis		2009 W. Chase Ave. #2		Chicago	IL	60645
		Mark	Dawson		2425 W. Coland		Chicago	IL	60625
		Kenneth	DeMuth		640 N. Lasalle, Suite 400		Chicago	IL	60610
		Brian	DeSantis		6709 N. Lakewood Ave.		Chicago	IL	60626
		Jeff	DeVries		1222 Elmdale	3E	Chicago	IL	60660
		James	Donat		6807 N. Ashland	1	Chicago	IL	60626
		Amy	Dykema		312 South Blvd.		Evanston	IL	60202
		Ingrid	Eckersberg		1501 Walnut		Wilmette	IL	60091
		Paul	Estrich		1461 W. Fargo		Chicago	IL	60626
		Georgia	Evans		2743 W. Pratt		Chicago	IL	60645
		Jane	Evans		813 Gaffield PL		Evanston	IL	60201
		Aaron	Feinstein		5940 N. Lakewood		Chicago	IL	60660
		Kelly	Flyte		5958 N. Kenmore Ave.	503	Chicago	IL	60660
		Daryl & Leslie	Frank		7626 N. Greenview		Chicago	IL	60626
Resident		Elizabeth	Freeman		1501 W. Chase Ave., #1		Chicago	IL	60626
		Lisa	Frohmann		1435 W. Chase		Chicago	IL	60626
Resident		Joselito V.	Gatdula		1455 W. Fargo Ave #1		Chicago	IL	60626
		Eric	Gegner		7409 N. Claremont Ave.		Chicago	IL	60645
		Matt	Gibbs		5052 N. Marine Dr.	D8	Chicago	IL	60640
		Ruben	Gil		6431 N. Hoyne		Chicago	IL	60645
		Eric	Glastein		7012 N. Greenview Ave.		Chicago	IL	60626

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
		David	Gloss		N. Broadway St, Apt 506		Chicago	IL	60660
		Aaron	Glynn		808 Clark St.	2B	Evanston	IL	60201
		Thomas	Gonzales		1608 Ridge Avenue		Evanston	IL	60201
		Donald	Gordon		1228 W. Lunt		Chicago	IL	60626
		Chris	Gray		1257 W. Lunt	416	Chicago	IL	60626
		Donna	Green		8445 S. Rhodes		Chicago	IL	60619
		Earle	Grosvenor		7401 N. Albany Ave.		Chicago	IL	60645-1101
		Tim	Gustafson		5630 N Sheridan Rd #904		Chicago	IL	60660
		Manfred & Jennifer	Haja		1316 W. Fargo	201	Chicago	IL	60626
		Harold	Hansen		7414 N. Sheridan Road		Chicago	IL	60626
		Theo	Harduvel		1436 W. Fargo		Chicago	IL	60626
		Jason	Hartline		453 W Fullerton		Chicago	IL	60614
		Chris	Hein		5100 N. Marine Dr., #16H		Chicago	IL	60640
		Gisele	Hennings		7305 N. Greenview		Chicago	IL	60626
		Judy	Hoffman		1436 W. Fargo		Chicago	IL	60626
Resident		Erick	Howenstine	Dr/Prof	1426 W. Estes		Chicago	IL	60626
		Arefin	Huq		5525 N. Winthrop Ave.	512	Chicago	IL	60640
		Hiromi	Ishikawa		1331 W. Chase	2A	Chicago	IL	60626
		Archie	Jackson		7648 N. Paulina		Chicago	IL	60626
		Brian	Jakosz		1628 W. Greenleaf Ave., #35		Chicago	IL	60626
		Eileen	Jasper		1505 W. Sherwin Ave.		Chicago	IL	60626
		CJ	Jelinek		1542 W. Sherwin	2	Chicago	IL	60626
		Nyisha Mari	Johnson	Student Columbia	1627 W. Touhy Ave.		Chicago	IL	60626
		Shawn	Jones		1114 Monroe		Evanston	IL	60202
		Harvey	Kahler		2041 W. Birchwood	2	Chicago	IL	60645
		Bryan	Kibbe		6610 N. Newgard Ave.		Chicago	IL	60626
		Jackie	Kinnaman		1507 W. Chase Ave.		Chicago	IL	60645
		Diane F.	Korling		1914 Orrington Avenue		Evanston	IL	60201-2910
		Amanda	Kraus		1440 W. Sherwin	302	Chicago	IL	60626
		Daniel	Kraus		1440 W. Sherwin Avenue		Chicago	IL	60676
		Clarence	Krusinski		1526 W Sherwin Ave		Chicago	IL	60626
		Josette	Krusinski		1526 W Sherwin Ave		Chicago	IL	60626
		Bob	LeBailly		2424 Eastwood Ave.		Evanston	IL	60201
		AJ	Lebeda		1915 Maple Ave. #517		Evanston	Il	60201
		Leigh Ann	Leenauskas		7429 N. Greenview Ave.	3	Chicago	IL	60626
		Margene	Lehman		215 Golf Terrace		Wilmette	IL	60091
		Barbara	Leonard		1055 W. 104th St.		Chicago	IL	60643
		Claude D.	Lewis Jr.		11255 S. Loomis		Chicago	IL	60643
Resident		Jeanne	Lindwall		625 Library Place		Evanston	IL	60201
		Carl	Lingenfelter		1900 W. Lunt Ave.		Chicago	IL	60626
		Lilangel	Logan		5934 N. Winthrop		Chicago	IL	60660
		Cecile	Margulies		4430 N Clifton		Chicago	IL	60640
		Alfie	Martin		633 N. Avers Avenue	#2	Chicago	IL	60624
		Julia	McAvoy		2013 W. Greenleaf Avenue		Chicago	IL	60645
Resident		William	McCauslin		1455 W. Fargo Ave #1		Chicago	IL	60626
		Andrew	McGonigle		2526 Princeton Ave.		Evanston	IL	60201
		Norma	McLennon		2041 W Birchwood Ave #2		Chicago	IL	60645
		Lori	Mooney		1039 W. North Shore		Chicago	IL	60626
		Mattie	Moore		1626 W. Sherwin		Chicago	IL	60626
		R	Morris		6901 N. Ashland		Chicago	IL	60626
		Norma	Moruzzi		814 W. Lakeside Place	110	Chicago	IL	60640
		Susan	Mudd		6707 N. Newgard Ave		Chicago	IL	60626
		Tudo	Nguyen		1542 W. Sherwin Ave.	3S	Chicago	IL	60626
		Ernie	Norrman		7450 N. Rogers Ave.	1013	Chicago	IL	60626
		Lynn	Otte		1631 Ashland		Evanston	IL	60202
		Susan S.	Pastin		1340 W. Touhy Ave., #405		Chicago	IL	60626
		Virginia	Paton		2230 Dodge		Evanston	IL	60201

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
		Stella	Patterson		2842 W. Summerdale Ave. #2E		Chicago	IL	60625
		Bobbie	Patzold		1143 W. Pratt	1W	Chicago	IL	60626
		M C	Peceny		1332 W. Birchwood		Chicago	IL	60626
		Stephanie	Pedretti		1355 W. Greenleaf Ave.	1-J	Chicago	IL	60626
		Jacob	Peklo		806 Hinman	303	Evanston	IL	60202
		Mark	Perelman		543 Florence		Evanston	IL	60201
		Brian	Peters		1801 Maple Ave.	2300	Evanston	IL	60201
		Jacob	Peters		2894 W. Leland Avenue		Chicago	IL	60625
		Ellen	Pinkham		1725 W. Jarvis Ave.		Chicago	IL	60626
		Ursula	Pokorska		1609 W. Estes		Chicago	IL	60626
		Anthony	Portnay		1222 Chicago Ave.	302	Evanston	IL	60202
		JoAnn	Preston		4123 N. Keating		Skokie	IL	60076
		John	Prucha		1205 Mulford St.		Evanston	IL	60202
Concerned Citizen		Robert	Puckett		1205 Mulford St.		Evanston	IL	60202
		William	Reynolds		2114 W. Winnemac Avenue		Chicago	IL	60640
		Summer	Roberle		1032 W. Sheridan		Chicago	IL	60642
		Bob	Roberts		180 N. Stetson	1100	Chicago	IL	60611
		Roland	Rodgers		1412 W. Chase Ave., #106		Chicago	IL	60626
Skokie Commission on Family Services		Julie	Roth		9244 Gross Pt. Rd. #409		Skokie	IL	60077
		Julia	Ruemmele		1434 W. Carmen		Chicago	IL	60642
		Bob	Rugh		1235 W. Jarvis #2		Chicago	IL	60626
		Jonathan	Samuel		5112 W. Fulton Street		Chicago	IL	60644
		Kristi	Sanford		1423 W. Greenleaf	2S	Chicago	IL	60626
		Sherri	Schmidt		1422 W. Touhy		Chicago	IL	60626
		John	Selep		3628 N Wilton Ave		Chicago	IL	60613
		Wayne	Seltzer		5858 N. Broadway	505	Chicago	IL	60660
		Timothy	Sheehan		1440 W. Jarvis	3A	Chicago	IL	60626
		Sean	Sheridan		1261 W. Argyle Street		Chicago	IL	60640
		Paul	Shumard		1804 W. Farwell		Chicago	IL	60626
		Brooke	Smart		214 South Blvd. Unit C		Evanston	IL	60202
		Lyle	Smart		214 South Blvd.		Evanston	IL	60202
		Jean	Smiling Coyote		1823 W. Granville Ave., Apt. 1B		Chicago	IL	60660-1060
		Jeff	Smith		2724 Harrison		Evanston	IL	60201
		Bill	Smith		1726 Wesley Ave		Evanston	IL	60201
		Nancy	Solomon		1527 W. Chase	1D	Chicago	IL	60626
		Joseph	Stafford		5958 N. Kenmore Ave.	503	Chicago	IL	60660
		Michael	Stanley		314 1/2 S. Blvd.		Evanston	IL	60202
		Mike	Stone		6240 N. Lakewood Avenue		Chicago	IL	60640
		Igor	Studenkov		5560 W. Northwest Hwy		Palatine	IL	60067
		Mary Anne	Sullivan		110 N. Clifton #7		Park Ridge	IL	60068
		William	Swain		7616 N. Eastlake Ter.		Chicago	IL	60626
		Geoff	Swindells		2254 Sherman	3	Evanston	IL	60201
		Shahab	Tabatabainejad		1205 W. Farwell Ave.		Chicago	IL	60626
		Jennifer	Tani		1542 W. Sherwin Ave.		Chicago	IL	60626
		George	Tibbits		1629 W. Sherwin Ave.	305	Chicago	IL	60626-1933
		Aimee	Tierney		1210 Mulford St.		Evanston	IL	60202
		Patrick	Tierney		1210 Mulford		Evanston	IL	60202
		Robert	Troy		1424 W. Howard St.		Chicago	IL	60607
		Eleanor	Troy		1424 W. Howard St		Chicago	IL	60626
Citizen		Anna	Upson		519 Chicago Ave.		Evanston	IL	60202
		Denzel	Vaden		9225 S. May		Chicago	IL	60620
		Bryan	Vuong		5823 N. Paulina		Chicago	IL	60660
		Horst	Wagener		5648 N. Hermitage		Chicago	IL	60660
		Mike	Wagner		415 South Blvd.		Evanston	IL	60202
		Jaime	Wagner		415 South Blvd.		Evanston	IL	60202
Resident		Maria	Wagner		1513 W. Fargo #2N		Chicago	IL	60626
		Steve	Wall		1832 W. Greenleaf		Chicago	IL	60626

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
		Jennifer	Walling		1430 Thorndale		Chicago	IL	60660
		Elfriede	Wedam		1517 W. Fargo Ave.		Chicago	IL	60626
		Dale	Wheeler		1408 W. Jarvis		Chicago	IL	60626
		Brian	White		1844 N. Greenleaf		Chicago	IL	60626
Resident/Home Owner		Chad	Willetts	Musician/Composer	1642 W. Touhy		Chicago	IL	60626
		Hugh	Williams		6416 N. Lakewood Avenue		Chicago	IL	60626
		Tom	Wood		5062 N. Winthrop		Chicago	IL	60640
		John	Zbesko		1120 Noyes		Evanston	IL	60201
		Kim	Zesiger		7731 N. Eastlake Ter		Chicago	IL	60626
		Jeff	Zoline		207 Skokie Boulevard		Wilmette	IL	60091
		Eric Geguer			7409 N. Claremont Ave.		Chicago	IL	60645
		Resident			1415 W Lunt Ave	501	Chicago	IL	60626
Chicago State University, Office of Public Affaris	Ms.	Patricia	Arnold	Director	9501 South King Drive	ADM 200	Chicago	IL	60628
Illinois Institute of Technology	Mr.	David	Baker	VP of External Affairs	3300 South Federal Street	PH 223	Chicago	IL	60616
UIC Voorhees Center	Ms.	Katie	Bowman		400 S Peoria	Ste 2100	Chicago	IL	60607
Gwendolyn Brooks College Preparatory High School	Dr.	Dushon A.	Brown	Principal	250 East 111th Street		Chicago	IL	60628
Harlan Community Academy High School	Mr.	Reginald	Evans	Principal	9652 S. Michigan Avenue		Chicago	IL	60628
Loyola University		Sangita	Gosalia		6439 N Sheridan		Chicago	IL	60626
Chicago State University	Ms.	Nancy	Hall-Walker		9501 S. King Drive		Chicago	IL	60628
University of Illinois at Chicago College of Urban Planning and Policy	Ms.	Danielle	Inendino	Research Assistant, Urban Transportation Center	412 S Peoria St		Chicago	IL	60607
Olive-Harvey College	Ms.	Stephanie	Johnson	Assistant Dean of Special Events & Planning	10001 South Woodlawn Avenue		Chicago	IL	60628
Kennedy King College	Mr.	Clyde	K. El Amin	President	6800 South Wentworth Avenue		Chicago	IL	60621
Northwestern University		Philip	Keeve	Student	726 University Place		Evanston	IL	60201
University of Chicago, Community & Government Affairs	Ms.	Anne Marie	Lipinski	VP, Civic Engagement	5801 South Ellis Avenue		Chicago	IL	60637
Alianza Leadership Insitute	Mr.	Rey	Lopez-Calderon	Executive Director	2938 E. 91st St.	Ste. 206	Chicago	IL	60617
Chicago State Alumni	Ms.	Marianne	Robinson		7530 S. Vernon		Chicago	IL	60619
Northwestern University	Mr.	Patrick	Ryan	Department Head	633 Clark Street		Evanston	IL	60208
University of Chicago	Mr.	Brian	Shaw	Director of Transit Planning	5555 S. Ellis Ave.	3rd Floor	Chicago	IL	60637
Morgan Park High School	Dr.	Beryl	Shingles	Principal	1744 West Pryor Avenue		Chicago	IL	60643
UIC Voorhees	Ms.	Janet	Smith		412 S Peoria St		Chicago	IL	60607
Corliss High School	Dr.	Anthony	Spivey	Principal	821 East 103rd Street		Chicago	IL	60628
Simeon Career Academy	Ms.	Tamara	Sterling	Principal	8147 South Vincennes Avenue		Chicago	IL	60620
Chicago State University	Mr.	Mark	Sudeith		8720 S. Calument Ave.		Chicago	IL	60619
Carver Military Academy	Mr.	John F.	Thomas	Principal	13100 South Doty Avenue		Chicago	IL	60627
Roseland Christian School	Mr.	James	Van Zyl		314 W. 108th Street		Chicago	IL	60628
Northeastern University Center for Inner City Students	Dr.	Conrad	Worrill	Director Educational Leadership & Development	700 East Oakwood Avenue		Chicago	IL	60653
Percy L. Julian High School	Dr.	Darreyl	Young-Gibson	Principal	10330 South Elizabeth Street		Chicago	IL	60643
	Mr.	Jeremiah	Abdullah		13076 S Drexel		Riverdale	IL	60827
HCI		Kamilah	Abdur-Rahman	Consumer Advocate	10524 S. Vernon Ave.		Chicago	IL	60028
	Ms.	Loyce	Acres		14121 Calumet		Dolton	IL	60419
	Ms.	Denne	Adams		9255 S State		Chicago	IL	60619
	Ms.	Edith	Adams		13079 S Evans		Chicago	IL	60827
Roseland Christian Thrift Store		Ronnie	Adams	Laborer	33 E. 111th Pl.		Chicago	IL	60628
	Ms	Shirley	Adams		1500 Lincoln Ave		Calumet City	IL	60409
Sara Lee Baking		Tony	Adams		3351 W. 21st St.		Chicago	IL	60623
	Ms.	Phenice	Adams-Whiting		1618 E 84th St		Chicago	IL	60617
	Ms.	Khalimah	Al-Farugi		1350 E Sibley Blvd		Dolton	IL	60419
	Ms.	Susan	Allan		11360 S Forest		Chicago	IL	60628
Healthcare Consortium of IL		Addie	Allen	CAO	1350 E. Sibley Blvd.		Dolton	IL	60419
	Ms.	Rosemary	Allen		10153 S Rhodes		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
	Ms	Debbie	Allen		7636 S Jeffrey		Chicago	IL	60649
	Ms	Gertrude	Allen		8137 S Perry		Chicago	IL	60620
	Ms.	Grace	Allen		11512 S Eggleston		Chicago	IL	60628
		Cassandra	Allen Courtney		20630 Crawford		Matteson	IL	60443
	Mr.	Caleb	Anderson		12217 S Carpenter		Chicago	IL	60643
Roseland Christian Ministries		Welton	Anderson		10858 S. Michigan Ave.		Chicago	IL	60628
	Ms.	Edith	Anderson		954 E 131st		Riverdale	IL	60827
	Mr.	Charles	Anderson Sr		954 E 131st		Riverdale	IL	60827
		Johnson	Antony		3351 W. 21st St.		Chicago	IL	60623
	Ms.	Michelle	Appling		112 E 89th Pl		Chicago	IL	60619
	Ms	Menisha	Archie		10818 S Eggleston Ave		Chicago	IL	60628
Trinity Christian College		Elizabeth	Arquilla		6601 W. College Dr.		Palos Heights	IL	60463
Trinity Christian College		Elizabeth	Arquilla		8019 Binford Dr.		Orland Park	IL	60462
		Clifford	Arthur		10906 S. Indiana		Chicago	IL	60628
Roseland Christian Ministries		Graydon	Artis		10858 S. Michigan Ave.		Chicago	IL	60628
	Ms.	Deretra B.	Askew		9738 S LaSalle		Chicago	IL	60628
		Suwanda	Atwates		19 W. 112th Street		Chicago	IL	60628
	Ms.	Geraldine	Austin		764 E 131st St		Riverdale	IL	60827
	Ms.	LaTonya	Aytela		10049 S Perry		Chicago	IL	60628
	Ms.	Elizabeth	B		7831 S Shore Dr		Chicago	IL	60628
		Victor	Bahr		3162 W. Meadow Lane, Apt. 1		Merrionette Park	IL	60803-5856
Developing Communities Project		Harry	Bailey		527 156th Pl.		Calumet City	IL	60409
	Ms.	Cares	Bailey		2616 E 74th St		Chicago	IL	60649
	Mr.	James	Bailey		2616 E 74th St		Chicago	IL	60649
	Ms.	Kimberly	Baker		4532 S Indiana	Unit 2N	Chicago	IL	60653
	Ms	Bettye	Baker Houston		10122 S Prairie		Chicago	IL	60628
		Lori	Baldwin		8217 S. Perry Ave.		Chicago	IL	60643
	Ms.	Victoria	Ballard		9522 S Sangamon		Chicago	IL	60643
	Mr.	Roger	Ballock		9347 S University		Chicago	IL	60619
Roseland Christian Thrift Store		Charles	Balsten	Truck Driver	33 E. 111th Pl.		Chicago	IL	60628
	Ms.	Chaneka	Banks		1035 E 132nd St		Chicago	IL	60827
Roseland Christian Reformed Church		Mary	Barnett	Member	5439 Greenwood Ave.		Chicago	IL	60615
	Mr.	Fred	Barney		2780 E State Street		Burnham	IL	60633
		Darsharlette	Barron		11519 Villa Court, Apt #1D		Alsip	IL	60803
		Darsharlette	Barron		6727 S. Peoria, Apt. #2		Chicago	IL	60621
		Patricia	Barton		10545 S. Prospect Ave.		Chicago	IL	60643
	Ms.	Paula	Basta		1930 W. Estes	Apt. 403	Chicago	IL	60628
Pioneer Baptist Church		Andrew	Bates	Parishioner	12104 Wallace		Chicago	IL	60628
		Christopher	Bates		2145 E. 175th St.		Lansing	IL	60438
	Mr.	Eddie	Bauer		10804 S Hoyne		Chicago	IL	60643
	Mr.	Nathan	Bedell		13088 S Evans		Riverdale	IL	60827
		Ora	Beece		7715 S. Throop		Chicago	IL	60620
		Albert	Beece III		7715 S. Throop		Chicago	IL	60620
Roseland Christian Reformed Church		Angela	Beecham	Member	232 W. 110th St.		Chicago	IL	60628
Roseland Christian Reformed Church		Dornzello	Beecham	Member	9230 S. Lowe Ave.		Chicago	IL	60620
Roseland Christian Reformed Church		Raphael	Beecham	Member	9230 S. Lowe Ave.		Chicago	IL	60620
Roseland Christian Reformed Church		Jessica	Beecham	Member	232 W. 110th St.		Chicago	IL	60628
Roseland Christian Reformed Church		Sabrina	Beecham	Member	232 W. 110th St.		Chicago	IL	60628
Roseland Christian Reformed Church		Raphael	Beecham Jr.	Member	232 W. 110th St.		Chicago	IL	60628
		Janet	Bell		21221 Georgetown Rd.		Frankfort	IL	60423
	Mr.	Cedric	Bell		1250 W. 112th Place		Chicago	IL	60643
Roseland Christian Ministries		Durane	Bell	Salesman	10851 S. Wabash Ave.		Chicago	IL	60628
	Ms.	Markiesha	Bell		636 E 133rd St		Riverdale	IL	60827
	Mr.	Michael	Belton		10944 S Morgan		Chicago	IL	60643
	Ms.	Morteen	Benham-Miller		10222 S Rhodes		Chicago	IL	60628
Metro Strategies Inc.		Kristen	Bennett		226 N. West Ave., Ste. 201		Elmhurst	IL	60126
Roseland Christian Reformed Church		Robert	Bennett	Member	10831 S. Indiana		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
	Ms.	Sheree	Bennett		7641 S Bennett Ave		Chicago	IL	60649
	Ms.	Chiiata	Benson		13072 S Ellis		Riverdale	IL	60827
		Steven	Benson		248 W. 112th Pl.		Chicago	IL	60628
		Ruth	Bernard		1013 E. May St.		Hammond	IN	46320
Roseland Christian Ministries		Merv	Bills	Member	10743 S. Forest		Chicago	IL	60628
	Mr.	Larry	Bishop		629 E 88th Pl		Chicago	IL	60619
Roseland Christian Ministries		Neal	Blaney	Member	12407 S. Princton St.		Chicago	IL	60628
SELL		Joe	Boatner		400 W. 99th Place		Chicago	IL	60628
Reformation Lutheran	Rev. Dr.	Joseph	Bocks	Senior Pastor	11310 S. Forest Ave.		Chicago	IL	60628
		Mary Ann	Booker		13290 S. Vernon Ave.		Chicago	IL	60827
	Mr.	P	Boozer		10348 S Indiana		Chicago	IL	60628
Cotter Consulting, Inc.	Ms.	Pamela	Bordner-Riney	Vice President - Business Dev.	100 South Wacker Drive	Suite 920	Chicago	IL	60606
	Mr.	L	Boughton		916 N Ridgeland		Oak Park	IL	60302
		CJ	Bowers		2316 W. 80th Pl.		Chicago	IL	60620
		Marvin & Dorothy	Boyd		415 W. 102nd St.		Chicago	IL	60628
Angeliz Organicas Learning Center		Martha	Boyd	Program Director	6400 S. Kimbark Ave.		Chicago	IL	60637
Roseland Christian Reformed Church		Harold	Boyd	Member	2018 W. 53rd Place		Chicago	IL	60609
	Mr.	Jimmy	Bradford		9552 S Green St		Chicago	IL	60628
	Ms.	Lillian	Braggs		9635 S Yale Ave		Chicago	IL	60628
	Mr.	Mose	Braggs		9635 S Yale Ave		Chicago	IL	60628
HRDI		Tonya	Braggs	Member	12141 S. Indiana		Chicago	IL	60643
	Mr.	Donald	Branch		11607 S Peoria St		Chicago	IL	60643
	Ms.	Barbara	Branden Lawrence		717 E 130th Pl		Riverdale	IL	60827
	Ms.	Eboney	Brinson		254 W 118th St		Chicago	IL	60628
	Ms.	Sharon	Brooks		9230 S Avalon		Chicago	IL	60619
	Mr.	Dusty	Brooks		434 W 127th St		Chicago	IL	60628
	Ms.	Anntionetta	Browder		616 E 133rd St		Chicago	IL	60827
		Keenya	Brown		8411 S. Ingleside, #3		Chicago	IL	60619
		Senart	Brown		1751 W. Albion		Chicago	IL	60628
	Ms.	Marilyn	Brown		11959 S. LaSalle St.		Chicago	IL	60628
Roseland Christian Ministries		Rochelle	Brown		10858 S. Michigan Ave.		Chicago	IL	60628
		Samina	Brown		4734 S. Indiana Ave.		Chicago	IL	60615
A Gate Call Beautiful		Sylvester	Brown	Member	335 W. 107th Pl.		Chicago	IL	60628
		Lizzie	Brown		11517 S Church St		Chicago	IL	60643
	Ms.	Alicia	Brown		7811 Winchester		Chicago	IL	60620
	Ms.	Antionne	Brown		970 E 133 St		Riverdale	IL	60827
	Mr.	Derrick	Brown		1139 E 131st		Riverdale	IL	60827
	Mr.	Eddie	Brown		445 E Ohio Street, Apt 1807		Chicago	IL	60611
	Ms.	Izora	Brown		10408 S Green		Chicago	IL	60643
	Ms.	Mae	Brown		7637 S Ada St		Chicago	IL	60620
	Ms.	Mary	Brown		10819 S Wabash		Chicago	IL	60628
	Ms.	Monica	Brown		1751 W Steuben Ave		Chicago	IL	60643
		Thomas H.	Brown Sr.		325 W. 99th PL.		Chicago	IL	60628
		Derrick	Brownlee		14416 Sanderson Ave.		Dolton	IL	60419
	Ms.	Leslie	Bruce		636 E 133rd St		Riverdale	IL	60827
	Mr.	Solomon	Brumbolt		13210 S St. Lawrence		Chicago	IL	60819
	Mr.	Charles	Bruster		9604 S Peoria		Chicago	IL	60643
(Deaf)	Mr.	Michael	Bryant		7931 S. East End Ave.		Chicago	IL	60617
TCA Halth Inc.		Nordecai	Buckley		1029 E. 130th St.		Chicago	IL	60640
96th Perry Block Club		Johnnie	Burke		9607 S. Perry Ave.		Chicago	IL	60628
Jeanette's Joy Comm. Service		JoAnn	Burl	Founder/CEO	10639 S. Champlain Ave.		Chicago	IL	60628
	Ms.	Tomika	Burnett		909 W 77th Street		Chicago	IL	60620
	Mr.	Glenn	Burton		10017 S LaSalle		Chicago	IL	60628
	Mr.	M	Burton		10949 S Wabash		Chicago	IL	60628
			Business Owner		10001 S. Halsted Street		Chicago	IL	60628
			Business Owner		10015 S. Halsted Street		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Business Owner		10116 S. Halsted Street		Chicago	IL	60628
			Business Owner		10140 S. Halsted Street		Chicago	IL	60628
			Business Owner		10222 S. Halsted Street		Chicago	IL	60628
			Business Owner		10230 S. Halsted Street		Chicago	IL	60628
			Business Owner		10232 S. Halsted Street		Chicago	IL	60628
			Business Owner		10238 S. Halsted Street		Chicago	IL	60628
			Business Owner		10321 S. Halsted Street		Chicago	IL	60628
			Business Owner		10400 S. Halsted Street		Chicago	IL	60628
			Business Owner		10420 S. Halsted Street		Chicago	IL	60628
			Business Owner		10500 S. Halsted Street		Chicago	IL	60628
			Business Owner		10504 S. Halsted Street		Chicago	IL	60628
			Business Owner		10600 S. Halsted Street		Chicago	IL	60628
			Business Owner		10613 S. Halsted Street		Chicago	IL	60628
			Business Owner		10621 S. Halsted Street		Chicago	IL	60628
			Business Owner		10623 S. Halsted Street		Chicago	IL	60628
			Business Owner		10626 S. Halsted Street		Chicago	IL	60628
			Business Owner		10627 S. Halsted Street		Chicago	IL	60628
			Business Owner		10628 S. Halsted Street		Chicago	IL	60628
			Business Owner		10630 S. Halsted Street		Chicago	IL	60628
			Business Owner		10637 S. Halsted Street		Chicago	IL	60628
			Business Owner		10640 S. Halsted Street		Chicago	IL	60628
			Business Owner		10655 S. Halsted Street		Chicago	IL	60628
			Business Owner		10701 S. Halsted Street		Chicago	IL	60628
			Business Owner		10713 S. Halsted Street		Chicago	IL	60628
			Business Owner		10722 S. Halsted Street		Chicago	IL	60628
			Business Owner		10727 S. Halsted Street		Chicago	IL	60628
			Business Owner		10745 S. Halsted Street		Chicago	IL	60628
			Business Owner		10748 S. Halsted Street		Chicago	IL	60628
			Business Owner		10753 S. Halsted Street		Chicago	IL	60628
			Business Owner		10810 S. Halsted Street		Chicago	IL	60628
			Business Owner		10812 S. Halsted Street		Chicago	IL	60628
			Business Owner		10814 S. Halsted Street		Chicago	IL	60628
			Business Owner		10830 S. Halsted Street		Chicago	IL	60628
			Business Owner		10846 S. Halsted Street		Chicago	IL	60628
			Business Owner		10857 S. Halsted Street		Chicago	IL	60628
			Business Owner		10900 S. Halsted Street		Chicago	IL	60628
			Business Owner		10906 S. Halsted Street		Chicago	IL	60628
			Business Owner		10910 S. Halsted Street		Chicago	IL	60628
			Business Owner		10936 S. Halsted Street		Chicago	IL	60628
			Business Owner		10942 S. Halsted Street		Chicago	IL	60628
			Business Owner		10946 S. Halsted Street		Chicago	IL	60628
			Business Owner		10958 S. Halsted Street		Chicago	IL	60628
			Business Owner		11013 S. Halsted Street		Chicago	IL	60628
			Business Owner		11019 S. Halsted Street		Chicago	IL	60628
			Business Owner		11023 S. Halsted Street		Chicago	IL	60628
			Business Owner		11025 S. Halsted Street		Chicago	IL	60628
			Business Owner		11026 S. Halsted Street		Chicago	IL	60628
			Business Owner		11038 S. Halsted Street		Chicago	IL	60628
			Business Owner		11043 S. Halsted Street		Chicago	IL	60628
			Business Owner		11045 S. Halsted Street		Chicago	IL	60628
			Business Owner		11057 S. Halsted Street		Chicago	IL	60628
			Business Owner		11117 S. Halsted Street		Chicago	IL	60628
			Business Owner		11119 S. Halsted Street		Chicago	IL	60628
			Business Owner		11123 S. Halsted Street		Chicago	IL	60628
			Business Owner		11125 S. Halsted Street		Chicago	IL	60628
			Business Owner		11126 S. Halsted Street		Chicago	IL	60628
			Business Owner		11127 S. Halsted Street		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Business Owner		11128 S. Halsted Street		Chicago	IL	60628
			Business Owner		11134 S. Halsted Street		Chicago	IL	60628
			Business Owner		11135 S. Halsted Street		Chicago	IL	60628
			Business Owner		11139 S. Halsted Street		Chicago	IL	60628
			Business Owner		11142 S. Halsted Street		Chicago	IL	60628
			Business Owner		11200 S. Halsted Street		Chicago	IL	60628
			Business Owner		11201 S. Halsted Street		Chicago	IL	60628
			Business Owner		11223 S. Halsted Street		Chicago	IL	60628
			Business Owner		11226 S. Halsted Street		Chicago	IL	60628
			Business Owner		11254 S. Halsted Street		Chicago	IL	60628
			Business Owner		11301 S. Halsted Street		Chicago	IL	60628
			Business Owner		11302 S. Halsted Street		Chicago	IL	60628
			Business Owner		11306 S. Halsted Street		Chicago	IL	60628
			Business Owner		11322 S. Halsted Street		Chicago	IL	60628
			Business Owner		11325 S. Halsted Street		Chicago	IL	60628
			Business Owner		11328 S. Halsted Street		Chicago	IL	60628
			Business Owner		11357 S. Halsted Street		Chicago	IL	60628
			Business Owner		11435 S. Halsted Street		Chicago	IL	60628
			Business Owner		11443 S. Halsted Street		Chicago	IL	60628
			Business Owner		11500 S. Halsted Street		Chicago	IL	60628
			Business Owner		11509 S. Halsted Street		Chicago	IL	60628
			Business Owner		11526 S. Halsted Street		Chicago	IL	60628
			Business Owner		11550 S. Halsted Street		Chicago	IL	60628
			Business Owner		11600 S. Halsted Street		Chicago	IL	60628
			Business Owner		11601 S. Halsted Street		Chicago	IL	60628
			Business Owner		11643 S. Halsted Street		Chicago	IL	60628
			Business Owner		11656 S. Halsted Street		Chicago	IL	60628
			Business Owner		11717 S. Halsted Street		Chicago	IL	60628
			Business Owner		11720 S. Halsted Street		Chicago	IL	60628
			Business Owner		11724 S. Halsted Street		Chicago	IL	60628
			Business Owner		11815 S. Halsted Street		Chicago	IL	60628
			Business Owner		11932 S. Halsted Street		Chicago	IL	60628
			Business Owner		11944 S. Halsted Street		Chicago	IL	60628
			Business Owner		11948 S. Halsted Street		Chicago	IL	60628
			Business Owner		11957 S. Halsted Street		Chicago	IL	60628
			Business Owner		11958 S. Halsted Street		Chicago	IL	60628
			Business Owner		711 W. 120th Street		Chicago	IL	60628
			Business Owner		719 W. 119th Street		Chicago	IL	60628
			Business Owner		723 W. 119th Street		Chicago	IL	60628
			Business Owner		725 W. 119th Street		Chicago	IL	60628
			Business Owner		741 W. 115th Street		Chicago	IL	60628
			Business Owner		9900 S. Halsted Street		Chicago	IL	60628
			Business Owner		9911 S. Halsted Street		Chicago	IL	60628
			Business Owner		9934 S. Halsted Street		Chicago	IL	60628
Roseland Christian Ministries		Terry	Butler	Member	10517 S. Indiana		Chicago	IL	60628
	Mr.	Norman	Cage		10238 S Torrence		Chicago	IL	60617
	Ms.	Cozine	Calhoun		10217 S Eberhart		Chicago	IL	60628
	Ms.	Julia	Calvin		720 W 76th		Chicago	IL	60620
Teach Them How		Clotiel	Cameron	Executive Director	10501 S. Parnell		Chicago	IL	60628
		Eric	Campbell		P.O. Box 81144		Chicago	IL	60681
		Melvin	Campbell		11411 S. Emerald		Chicago	IL	60628
		Debra	Campbell		10842 S. Eberhart		Chicago	IL	60628
	Mr.	Emil	Campbell		9601 S Vanderpoel		Chicago	IL	60643
	Ms	Erica	Campbell		5041 S Princeton		Chicago	IL	60609
	Ms.	Elisabeth	Caron		1462 W. Argyle	Apt. #2-S	Chicago	IL	60640
Michael Carroll for 46th Ward Alderman	Mr.	Mark	Carroll		4760 N. Sheridan		Chicago	IL	60646

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
	Ms	Mary	Carter		101069 S King		Chicago	IL	60628
	Ms.	Tatianna	Carter		13175 S Eberhardt		Chicago	IL	60827
	Ms	Julia	Cartwright		10221 S Eberhart		Chicago	IL	60628
	Ms.	Beverly	Catherine		9345 S Greenwood Ave		Chicago	IL	60619
	Ms.	Loina	Cesse		3530 W 83rd St		Chicago	IL	60652
	Ms.	Carolyn	Chatman		801 E 87th		Chicago	IL	60619
Roseland Christian Ministries		Betty	Cheeks		12420 S. ??		Chicago	IL	60628
Rosemoor Community Assoc.	Ms.	Dolores	Chestnut	Member	10522 S. Vernon Ave.		Chicago	IL	60628
Rosemoor Community Assoc.		Monica	Chestnut	Member	10522 S. Vernon Ave.		Chicago	IL	60628
	Mr.	Robert	Chi		1776 W. Winnemac	Apt. 302	Chicago	IL	60640
	Mr.	Robert	Christopher		12408 S Normal		Chicago	IL	60628
Roseland Christian Reformed Church		Leonard	Clark	Member	10903 S. State St.		Chicago	IL	60628
		Patricia	Clark		3623 188th Pl.		Lansing	IL	60438
CAPS		Vivian	Clark		13230 S. Vernon Ave.		Chicago	IL	60827
Roseland Christian Ministries		Saleena	Claybourne	Member	19 E. 102nd Street		Chicago	IL	60628
Cuffes Catering		Jason	Clayton	Cook, Cashier	10826 S. Wabash		Chicago	IL	60628
	Ms.	Shelytia	Cocroft		1900 W VanBuren		Chicago	IL	60614
	Mr.	Darian	Coffey		1157 E 101st St		Chicago	IL	60628
Roseland Christian Reformed Church		Harold	Coleman	Member	1621 W. Walnut St.		Chicago	IL	60612
	Ms.	Shany	Coleman		5219 W Madison		Chicago	IL	60644
	Mr.	Darius	Coleman		10543 S King Drive		Chicago	IL	60628
	Ms.	Kelly	Collier		815 E 130th		Riverdale	IL	60827
	Ms.	Stacy	Combs		1552 W 122nd St		Chicago	IL	60643
	Ms.	Mary	Commons		2032 E 79th		Chicago	IL	60649
	Ms	Pamela	Conley		11351 S Loomis		Chicago	IL	60643
Roseland Christian Ministries		Jordan	Connell	Member	49 E. 102nd Place		Chicago	IL	60628
		Angela	Conner		10018 S. Eberhart		Chicago	IL	60628
	Ms.	Amailia	Conway		13254 S Ellis		Riverdale	IL	60627
	Mr.	James	Conway		1131 E 131 St		Riverdale	IL	60827
	Mr.	Gramer	Cook		5925 S Bishop St		Chicago	IL	60636
	Ms.	Shekema	Cook		257 W 107th Pl		Chicago	IL	60628
Roseland Christian Reformed Church		Hilda	Cooks	Member	10740 S. State St.		Chicago	IL	60628
Roseland Christian Reformed Church		Carol	Cooley Watkins	Member	31 W. 108th Place		Chicago	IL	60628
	Ms.	Gloria	Cosey		10133 Rhodes		Chicago	IL	60628
	Mr.	Stephen	Costello		1723 E 71st Street		Chicago	IL	60649
Roslang Christen Ministries		Calvin	Cotton	Member	10529 S. Perry		Chicago	IL	60628
Roseland Comm. Collaborative NFP		Derek	Covington	President	258 E. 115th St.		Chicago	IL	60628
Roseland Christian Ministries		DeEldridge	Covington	Member	10858 Michigan Ave.		Chicago	IL	60628
	Ms.	Carolyn	Cox		10124 S Rhodes		Chicago	IL	60628
	Ms.	Tearra	Cox		12846 S Wallace		Chicago	IL	60628
	Ms	Kim	Craig		18550 Torrence Ave		Chicago	IL	60438
	Ms.	Kory	Crain		10057 S Prairie		Chicago	IL	60628
	Ms.	Altee	Crocker		9300 S Rhodes Ave		Chicago	IL	60619
	Ms.	Brittany	Crockrom		14729 Lincoln		Chicago	IL	60419
	Mr.	Eugene	Crowley		55 W. Chestnut	Apt 2304	Chicago	IL	60610
	Mr.	Jacob	Cummings		13113 S St. Lawrence		Chicago	IL	60827
	Ms.	Jasmine	Cummings		13113 S St. Lawrence		Chicago	IL	60827
	Mr.	Mike	Cummings		13113 S St. Lawrence		Chicago	IL	60827
	Ms.	Tamieka	Cummings		13113 S St. Lawrence		Chicago	IL	60827
	Ms.	Tanisha	Cummings		13113 S St. Lawrence		Chicago	IL	60827
New Life		Phillip	Cusic	Pastor	8201 S. Jeffery		Chicago	IL	60628
	Mr.	Reginald	Daniel		6631 S Champlain		Chicago	IL	60637
	Mr	Darryl	Daniels		9625 S Yale Ave		Chicago	IL	60628
	Mr.	Edmund Dewayne	Daniels		8822 South Dante Ave		Chicago	IL	60619
	Mr.	Robert	Daniels		5480 South Cornell Ave		Chicago	IL	60615

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
	Mr.	Caesar	Davidson		7732 S Honore		Chicago	IL	60620
	Ms.	Karlise	Davidson		7732 S Honore		Chicago	IL	60620
	Ms.	Peggy	Davidson		7732 S Honore		Chicago	IL	60620
	Ms.	Tiffany	Davidson		7732 S Honore		Chicago	IL	60620
		Ashley	Davis		7940 S. Wood St.		Chicago	IL	60620
Blacks in Green		Naomi	Davis	President	6839 S. Ridgeland		Chicago	IL	60649
	Mr.	Kenneth	Davis		11557 S Yale		Chicago	IL	60628
Roseland Christian Ministries		Pearle	Davis	Member	341 W. 108th Place		Chicago	IL	60628
	Ms.	Talisha	Davis		4709 176th St		Country Club Hills	IL	60478
	Mr.	James	Dawson		7102 S Luella		Chicago	IL	60649
		Juanita	Dean		315 W. 99th Place		Chicago	IL	60628
	Ms.	Alicia	DeBarry		426 E 48th Pl	#1W	Chicago	IL	60615
Trinity Christian College		Michelle	DeHaan		6601 W. College Dr.		Palos Heights	IL	60463
	Mr.	D	Delaney		13057 S Champlain		Chicago	IL	60628
	Ms.	Moesha	Delaney		13057 S Champlain		Chicago	IL	60628
	Mr.	Solomon	Densby		2534 W 68th St		Chicago	IL	60629
	Mr.	Michael	Denton Jr.		10931 S Vernon Ave	#1E	Chicago	IL	60628
Roseland Christian Reformed Church		Juan	Diaz	Member	27 W. 114th Place		Chicago	IL	60628
CAP Meeting		Evelyn	Dickerson	Member	13278 S. Riverdale		Chicago	IL	60827
	Ms.	Fannie	Dickett		9924 S Lafayette		Chicago	IL	60628
		Ann	Dillemuth		4841 N. Ashland #1F		Chicago	IL	60640
		Alzonia	Dixon		11426 Egglesten		Chicago	IL	60678
	Ms.	Cheryl	Dixon		634 C E 133rd St		Riverdale	IL	60827
	Ms.	Jessie	Dixon		535 E 102nd St		Chicago	IL	60628
	Ms.	Sharon	Dixon		13118 S Ellis		Chicago	IL	60633
Roseland Christian Reformed Church		Alma	Donald	Member	7623 S. Wood		Chicago	IL	60620
	Mr.	William	Dortch		970 E 133 St		Riverdale	IL	60827
S.O.N. Foundation		Robert	Douglas	Founder	10812 S. Forest		Chicago	IL	60628
	Mr.	Alex	duBuclet		4936 S Ellis		Chicago	IL	60615
	Ms.	Marilyn	Duffis		13044 S Drexel		Riverdale	IL	60827
	Mr.	Antonio	Dukes		9925 S Beverly		Chicago	IL	60643
Roseland Christian Reformed Church		Bobbie	Dunbar	Member	31 W. 108th Place		Chicago	IL	60628
	Ms.	Joyce	Dunmore		10321 S Calumet		Chicago	IL	60628
	Ms.	Beth	Dybala		4170 N. Marine	13K	Chicago	IL	60613
	Mr.	George	E		11306 S Church St		Chicago	IL	60643
Impact Family Center		Marsha	Eaglin	CEO	10835 S. Hermosa		Chicago	IL	60643
	Ms.	Diana	Echiles		13093 S Drexel		Riverdale	IL	60827
		Arlene	Echols		11329 St. Lawrence		Chicago	IL	60628
	Ms.	Everlian	Eckols		10822 S Wabash		Chicago	IL	60628
	Ms.	Izola	Elliot		12559 S Lowe		Chicago	IL	60628
	Ms.	Marie	Elliot		10944 S Parnell		Chicago	IL	60628
		Melanie	Ellis		8653 S. Tripp		Chicago	IL	60652
	Mrs.	Dora	Engram		12230 S Perry Ave		Chicago	IL	60628
	Ms.	Lavell	Enis		13020 S Drexel		Riverdale	IL	60827
	Mr.	Stewart	Evans		5948 S Rockwell		Chicago	IL	60620
	Ms.	Alisha	Evans		12500 S. Lowe		Chicago	IL	60628
		Charlotte	Evans		4827 S. Kimbark		Chicago	IL	60619
	Mr.	Jon	Evans		119036 S Princeton Ave		Chicago	IL	60628
	Mr.	S	Evans		801 E 193rd		Chicago	IL	60425
	Ms.	Paulette	Ewing		38 W 109th Pl		Chicago	IL	60628
	Mr	Tony	Fields		830 W 119th		Chicago	IL	60643
		Barry	Finkel		10314 S. Oakley		Chicago	IL	60643
	Mr.	Michael	Flemming		10239 S LaSalle		Chicago	IL	60628
	Ms.	Tracy	Flemming		1717 Ashland		Chicago	IL	60620
Roseland Christian Ministries		Evelyn	Fletcher	Member	6511 S. Eberthard		Chicago	IL	60637
99th & 100th Green St. Block Club		Deborah	Fletcher		9929 S. Green St.		Chicago	IL	60643
Black Star Community PTA		Cynthia	Flowers	President	3509 S. King Drive		Chicago	IL	60616

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Roseland Christian Reformed Church		Curtis	Flowers	Member	10858 S. Michigan Ave.		Chicago	IL	60628
Joy Fellowship Baptist Church		Dr. Isaac	Floyd	Pastor	2025 E. 175th		Lansing	IL	60438
Roseland Christian Ministries		Eddie	Floyd	Carpenter	10858 Michigan Ave.		Chicago	IL	60628
Victory Temple COFIC		Pamela	Fluellen	Member	10209 S. St. Lawrence		Chicago	IL	60628
	Ms.	Shirley	Forte		453 E 107th St		Chicago	IL	60628
Honor Roll AU Stars		Moe	Fourte	Executive Director	3473 S. King Dr., #462		Chicago	IL	60616
		Maria	Fowler		10210 Eggleston		Chicago	IL	60628
HRDI		Larris	Fox	Member	13034 S. Wood		Blue Island	IL	60406
		Robert	Franklin		10152 S. Eggleston		Chicago	IL	60628
	Ms.	Doretha	Franklin		13042 S Ellis		Riverdale	IL	60827
	Mr.	Leron	Frencha		6717 S. Evans Ave.		Chicago	IL	60637
		Bill	Fried		4543 N. Hamilton Ave.		Chicago	IL	60625-1643
Church of God		James	Fulford	Member	12528 Edbrook		Chicago	IL	60623
	Mr.	Keith	Gaitor		10645 S Green St		Chicago	IL	60643
	Mr.	Graham	Garfield		901 W Gordan Ter	#1	Chicago	IL	60613
	Mr	TS	Gary		1181 S Lyman Ave		Oak Park	IL	60304
	Ms.	Ellen	Garza		11338 S. St. Lawrence		Chicago	IL	60628
		Sandra	Gaskin		701 E. 105th Street		Chicago	IL	60628
	Mr.	Donald	Gater		9404 S Vernon		Chicago	IL	60619
	Ms.	Nobie	Gatson		14343 Hoxie		Chicago	IL	60633
	Ms.	Jamian	Gaydon		7659 S Damen		Chicago	IL	60620
	Ms.	Patty	Gaydon		7659 S Damen		Chicago	IL	60620
	Mr.	Lesszes	George		7125 S Eggleston		Chicago	IL	60621
		Darryl	Gibson		11142 S. Emerald		Chicago	IL	60628
Roseland Christian Ministries		Hyland	Gilder Barry		33 E. 111th Pl.		Chicago	IL	60628
House of Hope		William	Gill	Member	10559 S. State St.		Chicago	IL	60628
Roseland Christian Ministries		Aaron	Gill		10858 Michigan Ave.		Chicago	IL	60628
	Mr.	Larry	Gill		6926 S Racine		Chicago	IL	60621
	Ms.	Dida	Gillard		13105 s St Lawrence		Chicago	IL	60827
	Mr.	Aaron	Glasper		10817 S Forest		Chicago	IL	60628
		Pamela	Glenn		53 E. 100th St.		Chicago	IL	60628
Trinity Christian College		Kayla	Godinez		6601 W. College Dr.		Palos Heights	IL	60463
	Mr.	Charles	Goodrum		7317 S. Prairie		Chicago	IL	60619
	Mr.	Stephan	Gordan		13098 S Ellis		Chicago	IL	60827
Roseland Christian Ministries		William	Gordon II	Member	131 E. 103rd Place		Chicago	IL	60628
	Mr.	Don	Grabowski		30 W LaSalle	Ste 3220	Chicago	IL	60602
De Stefano Partners	Ms.	Mary Jo	Graf	Director of Marketing and Public Relations	330 North Wabash Avenue	Suite 3200	Chicago	IL	60611
	Ms.	Karen	Graham		9354 S Parnell		Chicago	IL	60620
	Ms.	April	Gray		13048 S Deluxe		Riverdale	IL	60827
	Ms.	Carmelita	Gray		5750 S Lafayette		Chicago	IL	60621
		Martese	Gray		5750 Lafayette		Chicago	IL	60628
Developing Communities Project		Patricia	Gray Smith	Prevention Specialist	11300 South Halsted St.		Chicago	IL	60628
Healthcare Consortium of IL		Ella	Grays	Chief Program Officer	1350 E. Sibley Blvd.		Dolton	IL	60419
		Robert	Graziano		1530 N. Dearborn		Chicago	IL	60610
	Ms.	Gloria	Green		10143 S Calumet		Chicago	IL	60628
	Ms	Deloris	Green		9335 S Parnell		Chicago	IL	60620
Roseland Christian Reformed Church		James	Green	Member	11210 S. Normal		Chicago	IL	60642
	Ms	Kenisha	Greene		20030 Monterey Av		Lynwood	IL	60411
	Ms	Miedred	Greenlaw		251 W 79th St		Chicago	IL	60620
	Mr.	Alvin	Greenup Jr.		12118 S. Parnell Ave.		Chicago	IL	60628
Precision Management		Donna	Greenwood	President	8445 S. Rhodes		Chicago	IL	60619
	Ms.	Rachel	Gregersen		11239 S Forrestville		Chicago	IL	60628
	Ms.	Odella	Grey		11138 S Vernon		Chicago	IL	60628
		Vincent	Griffin		715 E. 56th Pl., #3A		Chicago	IL	60615
		Jen	Groen		1258 W. Winona St.		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
	Ms.	Barbara	Gross		10720 S Yates		Chicago	IL	60617
	Mr.	Ross	Guthrie		5217 N. Clark		Chicago	IL	60640
		Abraham	Gutierrez	Special Education Classroom Asst.	6024 S. Fairfield Ave.		Chicago	IL	60629
R.C.A.	Mr.	Clinton	Hall	Board Member	10536 S. Rhodes		Chicago	IL	60628
	Mr.		Hall		557 W. 125th St.		Chicago	IL	60628
		Edward	Hamb		7903 S. Rhodes, #211		Chicago	IL	60611
	Mr.	Renardo	Hamilton		4340 S. Drexel Blvd.	7D	Chicago	IL	60653
	Mr.	Horace	Hamilton		2032 E 79th		Chicago	IL	60649
	Mr.	Mitchell	Hampton		13067 S Champlain		Chicago	IL	60628
Roseland Christian Ministries		Charisse	Hancox	Member	10517 S. Indiana		Chicago	IL	60628
		Denise	Handy		11408 S. Prairie Ave.		Chicago	IL	60628
Kenjiva Energy		Mark	Handy	Principal	519 E. Hyde Park		Chicago	IL	60615
	Mr.	Michael	Hargis		10724 S Sangamon		Chicago	IL	60643
United Church of Christ Association	Rev.	Rev. Alice	Harper Jones	Pastor	P.O. Box 208491		Chicago	IL	60620
111th Street Block Club		Mark	Harrell		11121 S. Emerald		Chicago	IL	60628
		Dolphin	Harris		7438 S. Eberhart		Chicago	IL	60619
	Ms.	Joanna	Harris		922 E 155th St		Chicago	IL	60426
	Ms.	Latrice	Harris		40 W 113th Pl		Chicago	IL	60628
Roseland Christian Reformed Church		Gregory & Kay	Hart	Member	15122 Walgreen Dr.		South Holland	IL	60473
Roseland Christian Ministries		Ethel	Harts	Member	10858 S. Michigan Ave.		Chicago	IL	60628
Roseland Christian Ministries		Tony	Harts	Member	9331 S. Saginaw		Chicago	IL	60617
	Mr.	Sherman	Hatley		10945 S Vernon		Chicago	IL	60628
	Ms.	Nadine	Hawley		9631 S Green St		Chicago	IL	60643
Candidate for U.S. Congress, IL 2nd Congressional District	Rev.	Isaac	Hayes		P.O. Box 996		Richton Park	IL	60471
Christ the Answer COGIC		Sherrie	Hayes	Member	12129 S. Parnell		Chicago	IL	60628
	Mr.	Byron	Hayes		7609 S Emerald		Chicago	IL	60620
		Cheryl	Haynel		3515 W. 85th Pl.		Chicago	IL	60652
	Mr.	J	Haynes		10335 S Vernon		Chicago	IL	60628
	Mr.	Ronald	Haynes		10335 S Vernon		Chicago	IL	60628
Striving for Justice Min.		Barbara	Hearon	Executive Director	258 E. 115th St.		Chicago	IL	60620
	Ms.	Nancy	Henderson		10543 King Drive		Chicago	IL	60628
	Mr.	Gregory	Hendricks		9355 S Michigan		Chicago	IL	60619
		Jeremy	Henley		10012 S. Calumet Ave.		Chicago	IL	60628
	Ms.	Bridget	Henry		9337 S Marquette Ave		Chicago	IL	60617
	Ms.	Cierra	Herdon		10216 S Princeton		Chicago	IL	60628
	Mr.	Dion	Hibbler		13043 S Evans		Riverdale	IL	60827
	Ms.	Evelyn J.	Hicks		11342 S. Lowe		Chicago	IL	60628
	Ms.	Angelies	Hightower		10217 S St Lawrence		Chicago	IL	60628
		Hapri	Hill		9225 S. May		Chicago	IL	60620
Rosemoor Community Assoc.		Shirley	Hill	Membership Chairperson	10220 S. Rhodes Ave.		Chicago	IL	60628
	Ms.	Stephanie	Hill		36 W 113th		Chicago	IL	60628
	Ms.	Julia	Hines		501 E 107th St		Chicago	IL	60628
	Mr.	John	Holden		4729 N. Dover St.		Chicago	IL	60640
	Ms.	Mattie	Holden		13113 S St. Lawrence		Chicago	IL	60827
	Ms.	Kyra	Hollingsworld		13217 S Rhodes		Riverdale	IL	60827
Trinity Christian College		Leah	Hollingsworth		6601 W. College Dr.		Palos Heights	IL	60463
	Ms	Luvenia	Holman		8453 S Paulina		Chicago	IL	60620
	Mr.	Donald	Hood		9837 S Ingleside		Chicago	IL	60628
	Ms.	Blanche	Hoplans		11426 S Wallace		Chicago	IL	60628
	Mr.	Melvin	Hopson		1515 S Prairie		Chicago	IL	60605
	Ms.	Christina	Horde		1520 W. 99th St.		Chicago	IL	60643
	Ms.	Cecilia	Horde		1514 W. 99th		Chicago	IL	60643
	Mrs.	Jerre	Horde		9628 S Perry Ave		Chicago	IL	60628
95-97 Perry Ave. Block Club	Mr.	John	Horde		9628 S. Perry Ave.		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
		Mary J.	Horde		9228 S. Perry		Chicago	IL	60628-1344
		Beesie	Hoskins		1641 Harbor Ave.		Calumet City	IL	60409
	Mr.	Kirk	Hoskins		319 E 130th St		Chicago	IL	60827
		Demetrius	Houston		12240 South Perry		Chicago	IL	60628
		Desta	Houston		11300 S. Halsted, Suite A		Chicago	IL	60628
		R.C.	Houston		12240 South Perry		Chicago	IL	60628
Roseland Christian Reformed Church		Annette	Howard	Member	840 S. Wood Street		Chicago	IL	60629
	Mr.	Joe	Howard		15531 Cottage Grove		Chicago	IL	60419
	Ms.	Lucille	Howye		1358 S Throop		Chicago	IL	60608
Roseland Christian Reformed Church		Dashan	Hudson	Deacon	5 E. 102nd Place		Chicago	IL	60628
	Mr.	Jerry	Hudson		9696 S Indiana		Chicago	IL	60628
Roseland Christian Ministries		Evelyn	Hughes	Member	10858 S. Michigan Ave.		Chicago	IL	60628
DCP		Amy	Hughs		10949 S. Ridgeway		Chicago	IL	60655
		G	Hunter		501 E. 105th St.		Chicago	IL	60628
	Mr.	Michael	Hunter Jr.		13254 S Ellis		Chicago	IL	60628
		Mackenzi	Huyser		5346 S. Drexel Ave.		Chicago	IL	60615
	Mr.	JR	Hyde		9543 S Union Ave		Chicago	IL	60628
	Mr.	Yul	Ivy		1000 E 130th Street		Chicago	IL	60628
Roseland Christian Reformed Church		Tynisha	Jackson	Member	120 E. 103rd Place		Chicago	IL	60620
New Life		Kimberly Renee	Jackson	Member	7255 S. Philips		Chicago	IL	60649
Roseland Christian Ministries		Alvis Dean	Jackson	Member	10449 S. Wabash		Chicago	IL	60628
Developing Communities Project		Emanual	Jackson		8101 S. Maryland		Chicago	IL	60619
	Mr.	Edward	Jackson		10540 S Vernon		Chicago	IL	60628
	Mr.	Emmanuel	Jackson		8101 S Maryland		Chicago	IL	60619
	Ms.	Jackie	Jackson		9921 S Normal		Chicago	IL	60628
	Ms.	Kay	Jackson		9372 Vanderpoel Ave		Chicago	IL	60643
	Mr.	Marcus	Jackson		6404 S Troy		Chicago	IL	60629
	Mr.	Hoy	Jackson III		11347 S Green		Chicago	IL	60643
Healthcare Consortium of IL		Jessica	Jagielnik		2329 W. Walton St.		Chicago	IL	60622
	Mr.	Deon	James		13169 S Corliss		Chicago	IL	60827
	Mr.	Derrick	James		1743 E 83rd Pl		Chicago	IL	60617
	Ms.	Elaine	Jefferson		705 West 107th St.		Chicago	IL	60628
Roseband Christianity		Gregory	Jefferson	Member	128 W. 109th Place		Chicago	IL	60628
	Mr.	Michael	Jefferson		13075 S Evans		Riverdale	IL	60827
	Ms.	Jacqueline	Jefferson		247 E 132nd		Riverdale	IL	60827
Roseland Christian Ministries		Debbie	Jenkins	Member	13129 S. St. Lawrence		Chicago	IL	60827
	Ms.	Jocelynn	Jenkins		6342 S Kenwood		Chicago	IL	60637
Aldridge PTA		Maxine	Jennings	President	13100 S. St. Lawrence		Chicago	IL	60827
		Ronn	Johnson		9539 S. Dobson		Chicago	IL	60628
	Ms.	Dee'Annah	Johnson		8201 S State St		Chicago	IL	60619
	Mr.	Eric	Johnson		338 E. 99th St.		Chicago	IL	60628
		Horatio	Johnson		13027 S. Drexel		Chicago	IL	60827
	Mr.	James	Johnson		11118 S Homewood		Chicago	IL	60643
		Jerry	Johnson		11329 S. Indiana Ave.		Chicago	IL	60628
		Joyce	Johnson		368 E. 134th		Chicago	IL	60827
Roseland Christian Ministries		Shuna	Johnson	Member	10858 S. Michigan Ave.		Chicago	IL	60628
Golden Gate Community Association		Ulondia	Johnson	Teacher	13027 S. Drexel Ave.		Chicago	IL	60827
		Ursula	Johnson		13027 S. Drexel		Chicago	IL	60827
CAP Meeting		Walter	Johnson		368 E. 134th		Chicago	IL	60827
	Mr.	Anthony	Johnson		1929 S Homan Ave		Chicago	IL	60623
	Mr.	Anthony	Johnson		3351 W 21st St		Chicago	IL	60623
	Ms.	Carolyn	Johnson		13130 S Corliss		Riverdale	IL	60827
	Ms.	Cheryl	Johnson		13116 S. Ellis Ave.		Riverdale	IL	60827
	Ms.	Mamie	Johnson		10041 S State		Chicago	IL	60628
	Ms.	Mikeisha	Johnson		12025 S Wentworth		Chicago	IL	60628
	Ms.	Reba	Johnson		13262 S Ellis		Riverdale	IL	60827

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
	Ms.	Shatrice	Johnson		304 E 132nd St		Riverdale	IL	60827
	Ms.	Valerie	Johnson		923 E 130th Place		Riverdale	IL	60827
	Mr.		Johnson		13041 S Evans		Riverdale	IL	60827
Salem B. Church		Brenda	Johnson Fisher	Member	10503 S. Corliss Ave.		Chicago	IL	60628
	Ms.	Sonja	Johnson Hall		12700 S Sangamon		Chicago	IL	60643
	Mr.	Lanita	Jones		10531 S. Eberhart		Chicago	IL	60628
		Joanne	Jones		145 W. 125th St.		Chicago	IL	60628
Sustainable Englewood Project		John Paul	Jones	President	2113 W. 71st St.		Chicago	IL	60636
	Mr.	Alexander	Jones		9537 S Racine		Chicago	IL	60643
	Ms.	Chane	Jones		830 W 50th Pl		Chicago	IL	60609
	Mr.	Christopher	Jones		10331 S Eberhart		Chicago	IL	60628
Golden Gate Community Association		Claudia	Jones		13273 S. Eberhart		Chicago	IL	60827
	Ms.	Erica	Jones		713 E 131st		Riverdale	IL	60827
Roseland Christian Ministries		Fred	Jones	Member	11218 S. Zangley		Chicago	IL	60628
	Mr.	James	Jones		917 E 130th		Chicago	IL	60827
Roseland Christian Ministries		Johnnie	Jones	Member	108 S. Michigan Ave.		Chicago	IL	60628
	Mr.	Jordhan	Jones		600 E 88th Street		Chicago	IL	60619
	Ms	Karen	Jones		10314 S Vernon		Chicago	IL	60628
	Mr.	Levi	Jones		10537 S King Drive		Chicago	IL	60628
	Ms.	Regina	Jones		10531 S. Eberhart		Chicago	IL	60628
Roseland Christian Reformed Church		Roderick	Jones	Musician	5 E. 102nd Place		Chicago	IL	60620
Joy Fellowship Baptist Church		Verdia	Jones		8623 S. Elizabeth St.		Chicago	IL	60620
	Mr.	Javon	Jordan		9900 S Peoria		Chicago	IL	60643
	Mr.	Bruce	Jordan		8105 S Peoria		Chicago	IL	60628
	Mr.	Larry	Jordan		857 w 107th		Chicago	IL	60643
	Ms.	Brandy	Julien		10957 S Green		Chicago	IL	60643
K.A. Pridjian Rug Store		Thomas	Jundanian	Owner	11600 S. Halsted St.		Chicago	IL	60628
	Mr.	Lowell	Junior		14032 Marquette Ave		Chicago	IL	60633
	Mr.	Harvey	Kahler		2041 W. Birchwood		Chicago	IL	60645
Roseland CDC		Yahya	Karim	Ex. Director	11409 S. Michigan		Chicago	IL	60628
Domenech Hicks & Krockmalnic Architects	Mr.	George	Katsoufis	Associate	54 Canal Street	Suite 200	Boston	MA	02114
	Mr.	Ryan	Kaufmann		8552 Village Qtr.	#6	Dundee	IL	60118
Roseland Comm. Dev. Corp.		Yahya	Kavim	Executive Director	11409 S. Michigan		Chicago	IL	60628
		J	Keane		936 W. Sunnyside Ave.	Apt. 303	Chicago	IL	60640
Wefarm America		Seneca	Kein		4121 S. Drexel Blvd.		Chicago	IL	60653
Gompers Fine Arts		Robert	Kelsey		12302 S. State		Chicago	IL	60628
	Mr.	Dwayne	Kennedy		10538 S Corliss		Chicago	IL	60628
	Ms.	Renee	Kennedy		950 E 86th		Chicago	IL	60619
		Richard	Kennedy		10538 S. Corliss		Chicago	IL	60628-3059
	Ms.	Reaeh	King		12409 S Yale		Chicago	IL	60628
	Mr.	Randy	King		11014 S. Lowe		Chicago	IL	60628
Roseland Christian Ministries		Rachel	Kirkpatrick	Member	49 E. 102nd Place		Chicago	IL	60628
	Mr.	James	Kline		12817 S Union		Chicago	IL	60628
		Jane	Klunk		3857 W. 111th St.		Chicago	IL	60655
	Mr.	Tyrone	Kyles		5525 W Congress Pkwy		Chicago	IL	60644
		Craig	Laramore		10225 S. Green St.		Chicago	IL	60643-2341
Kids Off the Block		Diane	Latiker	Founder/President	11621 S. Michigan		Chicago	IL	60628
Roseland Christian Ministries		Shaun	Lawler	Member	49 E. 102nd Place		Chicago	IL	60628
	Mr.	Carl	Laws		408 W Marquette		Chicago	IL	60621
	Mr.	Katherine	Leatherwood		1366 S Eberhart		Chicago	IL	60628
	Mr.	Michael	Leatherwood		10207 Eberhart		Chicago	IL	60628
Golden Gate Community Association		Angaleak	Lee	Secretary	13256 S. Vernon Ave.		Riverdale	IL	60827
	Mr.	Allen	Lee		10554 S Eberhart		Chicago	IL	60628
	Mr.	Julius	Lee		1044 E 132nd St		Chicago	IL	60827
Roseland Christian Ministries		Marion	Lee	Member	11020 S. Indiana		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
	Ms.	Cadisha	Lemon		13113 S St. Lawrence		Chicago	IL	60827
	Ms.	Camaya	Lemon		13113 S St. Lawrence		Chicago	IL	60827
	Ms.	Danasha	Lemon		13113 S St. Lawrence		Chicago	IL	60827
	Ms.	Toni	Lemon		13113 S St. Lawrence		Chicago	IL	60827
		Monique	Lenvir		11544 S. Perry		Chicago	IL	60628
Leroy Cleaning Service		Carlton	Lewis	Janitor	11037 S. Edbrook		Chicago	IL	60628
	Mr.	Donald	Lewis		739 E 131st		Chicago	IL	60827
		Arzetta	Libbett		P.O. Box 288776		Chicago	IL	60628
	Ms.	Essence	Lindsey		2100 W Washington		Chicago	IL	60612
	Ms.	Patricia	Litefoot		10224 S Walden Parkway	#B1	Chicago	IL	60643
	Mr.	Jeffrey	Littleton		4727 N. Malden St.		Chicago	IL	60640
		Bobbie	Lloyd		12357 S. Perry		Chicago	IL	60628
	Ms.	Gladis	Lloyd Vinson		10011 S Prairie Ave		Chicago	IL	60628
	Mr.	Brandon	Lockett		10436 S Eberhart		Chicago	IL	60628
Golden Gate Community Association		Lamont	Lofton	Treasurer	13164 S. Vernon Ave.		Riverdale	IL	60827
New Life		Niesha	Long	Member	7003 S. Chicago		Chicago	IL	60640
		David	Lopez		11344 S. Forestville		Chicago	IL	60628
		Frank A.	LoPresti		6252 S. Central	Apt.# 35	Chicago	IL	60638
		Chequita	Loston		12837 S. Parnell Ave.		Chicago	IL	60628
Developing Communities Project	Mr.	Brandon	Love	Prevention Specialist	11300 S. Halsted Street	Suite A	Chicago	IL	60628
		Annette	Love		10521 S. Peary		Chicago	IL	60628
Golden Gate Community Association		Deloris	Lucas	President	13134 S. Vernon Ave.		Riverdale	IL	60827
		Edmond	Lumpkin		7940 S. Wood St., Apt. 1		Chicago	IL	60620
		Yolanda	Luvert		700 W. 111th St.		Chicago	IL	60628
		Lori	Lypson		10748 S. Parnell		Chicago	IL	60628
	Ms	Christina	Macias		3044 E 87th		Chicago	IL	60617
Golden Gate Community Association		Leola	Macklin		13236 S. Vernon Ave.		Chicago	IL	60827
		Freda	Madison		9907 S. Parnell Ave.		Chicago	IL	60628
	Ms.	Mary	Magee		917 E 130th		Chicago	IL	60827
City of Chicago, Dept. of Environment		Suzanne	Malec-McKenna	Commissioner	30 N. LaSalle Street, 25 Floor		Chicago	IL	60602
	Ms.	Mercedes	Mallette		1380 Ring Rd		Calumet City	IL	60409
		Jamonica	Marion		11543 S. Campbell Ave.		Chicago	IL	60655
		Debra	Martin		24625 Mulberry Lane		Crete	IL	60417
Roseland Christian Ministries		Katrina	Martin	Member	338 W. 116th Street		Chicago	IL	60628
Roseland Christian Ministries		Elena	Martin	Member	341 W. 108th Place		Chicago	IL	60628
	Ms.	Joann	Martin		10351 S Forest		Chicago	IL	60628
	Ms.	Beverly	Martin		742 East 69th		Chicago	IL	60637
	Ms.	Melayna	Martin		9859 S Muskegon		Chicago	IL	60617
	Mr.	P	Martin		9347 S Phillips		Chicago	IL	60617
		Brian	Maryland		8751 S. Euclid		Chicago	IL	60617
		Rita	Maryland		9230 S. Bennett Ave.		Chicago	IL	60617
Mechanic Shop		Reginald	Massonburg	Shop Foreman	11324 S. Wentworth St.		Chicago	IL	60628
	Ms.	Vivian	Mathis		10534 S Rhodes		Chicago	IL	60628
	Mr.	David	Matthews		1953 Grove St.		Blue Island	IL	60457
	Ms.	Sabrina	Matthews		9343 Ridgeland		Chicago	IL	60617
	Mr.	Walter	Matthews		8905 S Eggleston		Chicago	IL	60628
		David	May		400 S. 8th Ave.		LaGrange	IL	60525
		Daniel	Mays		9800 South		Chicago	IL	60628
Maple Park UMC		Antoinette	McAllister		11705 S. Elizabeth		Chicago	IL	60643
		Jean	McBride		10524 S. Corliss Ave.		Chicago	IL	60628
	Ms.	Risa	McCall		13057 S Drexel Ave		Riverdale	IL	60827
	Ms.	Chiaudriana	McClatchey		112 W 110th Pl		Chicago	IL	60628
	Ms.	Precious	McCoy		13100 Doty		Chicago	IL	60628
	Mr.	Muhammad	McCrax		10441 S Prairie		Chicago	IL	60628
	Ms.	Omega	McDaniels		1131 E 131 St		Riverdale	IL	60827
	Ms.	Venita	McDonald		2813 W 85th Pl		Chicago	IL	60652
	Ms.	Frances	McFee		11733 S. Sangamon		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

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		John	McGarry		10615 Princess Ave.		Chicago Ridge	IL	60415
		Patrice	McGee		9433 S. Indiana Ave.		Chicago	IL	60619
	Mr.	James	McGinnis		10850 Wentworth		Chicago	IL	60628
Roseland Christian Ministries		Edward	McGut		10858 Michigan Ave.		Chicago	IL	60628
Pullman Civic Org.		Tom	McMahon		639 E. 111th Street		Chicago	IL	60628
Rosemoor Com. Assoc.		Deena	McMillan		10109 S. King Dr.		Chicago	IL	60628
	Ms	Haroldeena	McMillian		10109 S King Drive		Chicago	IL	60628
Walsh Construction		Chris	McNally	Project Engineer	929 W. Adams St.		Chicago	IL	60607
Roseland Christian Reformed Church		Corclero	McNeal	Member	313 E. 137th		Chicago	IL	60628
	Ms.	Qiana	Mcose		9924 S Hoxie		Chicago	IL	60617
	Ms.	Sahauanna	Measman		6442 S Maplewood		Chicago	IL	60229
	Mr.	Jack	Meeks		446 E 103rd St		Chicago	IL	60628
	Ms.	Valerie	Meeks		9551 S Princeton		Chicago	IL	60628
	Mr.	Trinadad	Mendez		11332 S Forrestville Ave		Chicago	IL	60628
Assoc. for the Advocant of Creative Musicians		Nicole	Michell	Chairperson	10841 S. Forest Ave.		Chicago	IL	60628
	Ms.	Brandy	Miles		14620 S Union		Chicago	IL	60426
	Mr.	Ashleigh	Miller		4532 s King Drive		Chicago	IL	60653
	Mr.	Ray	Miller		10041 S LaSalle		Chicago	IL	60628
	Mr.	Ronnel	Milton		10555 S Eggleston		Chicago	IL	60629
		L	Minter		P.O. Box 368443		Chicago	IL	60628
	Ms.	Cheryl	Mister Thompson		8007 S Washtenaw		Chicago	IL	60652
	Mr.	R.C.	Mitchell		1335 W. 115th Street		Chicago	IL	60643
	Mr.	Deril	Mitchell		6311 N Kedzie		Chicago	IL	60649
	Ms.	Latasha	Monden		13066 E Ellis		Riverdale	IL	60827
Roseland Christian Ministries		Mia	Montgomery		19 E. 102nd Place		Chicago	IL	60628
	Mr.	Lawrence	Moore		P.O. Box 87288		Chicago	IL	60680
	Ms.	Tina	Moore		11629 S Eggleston Ave		Chicago	IL	60628
	Ms.	Deneta	Moore		10215 S Rhodes		Chicago	IL	60628
Star Project		Teresa	Moore		538 W. 62nd St.		Chicago	IL	60621
	Ms.	Venus	Mordis		14800 Minerva		Dolton	IL	60419
LAC		Miranda	Morgan	Block Rep.	13072 S. Drexel Ave.		Chicago	IL	60827
	Ms.	Katrin	Morgan		12018 S Wentworth		Chicago	IL	60628
	Mr.	Rufus	Morris		12351 S Union		Chicago	IL	60628
	Ms.	Lisa	Mosley		10319 S Calumet		Chicago	IL	60628
		Carol	Moss		7936 Justine		Chicago	IL	60620
Edgewater Community Council	Mr.	Tom	Murphy		1314 Glenlake		Chicago	IL	60660
ICES		Eric	Myers	Employment Rep.	4931 W. Diversey		Chicago	IL	60639
	Mr.	Christian	Nalar		512 E 115th St		Chicago	IL	60628
		Carlos	Nelson		1640-C W. 103rd St.		Chicago	IL	60643
Roseland Christian Ministries		Toni	Nelson	Member	10808 S. State		Chicago	IL	60628
	Ms.	Maxine	Nelson		7944 S Francisco		Chicago	IL	60652
		Patricia	Nesbary		6316 Allemong Drive		Matteson	IL	60443
		Percy	Nesbary		10621 S. State St.		Chicago	IL	60628
	Mr.	Alonzo	Nevils		7039 Justine		Chicago	IL	60636
	Ms.	Tahisa	Newson		16470 S Paulina		Chicago	IL	60428
	Mr.	David	Niemeier		P.O. Box 60621		Chicago	IL	60660
	Mr	Cedric	Nixon		10620 S Lowe		Chicago	IL	60628
	Ms.	Claire	Nowak-Boyd		3204 N 19th		St. Louis	MO	63107
	Mr.	Albert	Odits		9231 S Forest Ave		Chicago	IL	60619
	Ms.	Anita	Officer		9773 S Prospect Ave		Chicago	IL	60620
	Ms.	Dorothy	Olivier		PO Box 09374		Chicago	IL	60609
	Mr.	Olumide	Olupitan		9226 S Parnell		Chicago	IL	60620
Roseland Christian Ministries		Bruce	O'Neal		6511 S. Eberhart		Chicago	IL	60637
Roseland Christian Reformed Church		DiWitt	Orlawndo Casey Jr.	Member	10859 S. State Street, 1st Fl.		Chicago	IL	60628
	Mr.	Joseph	Orr		11423 S Calumet		Chicago	IL	60628
	Mr.	J.J.	Ostarello		11326 S. Forrestville Ave.		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
	Ms.	Jaime	Pacheco		7120 S Spaulding		Chicago	IL	60629
Golden Gate Community Association		Phyllis	Palmer	Assoc. Business Manager	13107 S. Eberhart		Chicago	IL	60827
Roseland Christian Reformed Church		Julia	Parham	Member	313 E. 137th		Chicago	IL	60628
	Ms.	Monisha	Parker		5818 S Wolcott		Chicago	IL	60636
	Mr.	Joe	Parks		13113 S St. Lawrence		Chicago	IL	60827
		Lena	Patton		13138 S. Vernon Ave.		Riverdale	IL	60827
		Robert	Patton		13138 S. Vernon Ave.		Riverdale	IL	60827
Chicago Hopes		Ashley	Payton	Tutor/Mentor	14214 University		Dolton	IL	60419
	Mr.	Jerome	Payton		810 E 131st		Chicago	IL	60827
	Ms.	Lacy Dell	Payton		13044 S Ellis		Riverdale	IL	60827
The Uptown Exchange	Ms.	Sharon	Pearson	Staff Reporter	3033 W. Lexington St.	3rd Floor	Chicago	Il	60612
	Ms.	Arletta	Pearson		633 E 131st		Chicago	IL	60827
True Light Baptist Church		Saudra	Pearson	Member	239 E. 108th St., 1st Floor		Chicago	IL	60628
	Ms.	Calandra	Pennington		750 E 132nd		Riverdale	IL	60827
	Ms	Dorothy	Peoples		19517 Oakwood		Chicago	IL	60411
	Ms	Josephine	Peoples		321 W 100 St		Chicago	IL	60628
Trinity Christian College		Melissa	Perkins		Box 788, 6601 W. College Dr.		Palos Heights	IL	60463
Inner Voice		Wesley	Perry	Job Developer	1639 W. Walnut St.		Chicago	IL	60612
Healthcare Consortium of IL		Ashley	Phillips		1350 E. Sibley Blvd.		Dolton	IL	60419
	Mr.	A	Phillips		917 E 78th	303E	Chicago	IL	60619
	Ms.	Precious	Pickens		626 A E 133rd		Riverdale	IL	60827
	Ms.	Dolores	Pillow		2352 E 96th St		Chicago	IL	60617
		Mae	Piszczor		5716 W. 111th St.		Oak Lawn	IL	60453
Little Village Environmental Justice Organization		Richard	Pitula	Community Organizer - Public Transit	2856 S. Millard Avenue		Chicago	IL	60623
	Mr.	Booker	Plume		10552 S Vernon		Chicago	IL	60628
	Mr.	Brian	Poe		10952 S Emerald		Chicago	IL	60628
	Mr.	Charles	Poindexter		7201 S Sawyer		Chicago	IL	60629
		Guy	Pollion		5245 S. Indiana		Chicago	IL	60615
Trinity Christian College		Shawna	Poppert		6601 W. College Dr.		Palos Heights	IL	60463
Roseland Christian Ministries		Bernie	Powell	Staff aid	10758 S. Michigan		Chicago	IL	60628
	Mr.	Demetrius	Preston		1011 King		Chicago	IL	60628
		Jarvis	Price		418 Illinois St.		Park Forest	IL	60466
		Jeanine	Price		418 Illinois St.		Park Forest	IL	60466
	Mr.	Anthony	Price		10520 S Wabash		Chicago	IL	60628
Roseland Christian Reformed Church		Shelby	Price	Member	27 W. 114th Place		Chicago	IL	60628
	Ms.	Shirley	Pryor		651 E 130th Pl		Riverdale	IL	60827
		Shyaam	Ramkumar		5 N. Wabash, #1205		Chicago	IL	60602
Inner Voice		Deborah	Randall	Senior Case Manager	1639 W. Walnut St.		Chicago	IL	60612
	Ms.	Allie	Rea Jackson		12539 S. Emerald		Chicago	IL	60628
	Mr.	Eddie	Reed		10324 S Prarie		Chicago	IL	60628
Altgeld - Local Advisory Council		Gayle	Reed	Block Rep.	976 E. 133rd St.		Chicago	IL	60827
	Ms.	Tanya	Reid		13213 S Ellis		Riverdale	IL	60827
Roseland Christian Ministries		Jimmie	Reliford	Member	131 E. 132nd St.		Chicago	IL	60628
			Resident		10000 S Eggleston Ave		Chicago	IL	60628
			Resident		10000 S Green St		Chicago	IL	60643
			Resident		10001 S Emerald Ave		Chicago	IL	60628
			Resident		10001 S Green St		Chicago	IL	60643
			Resident		10004 S Emerald Ave		Chicago	IL	60628
			Resident		10005 S Green St		Chicago	IL	60643
			Resident		10006 S Eggleston Ave		Chicago	IL	60628
			Resident		10007 S Emerald Ave		Chicago	IL	60628
			Resident		10008 S Green St		Chicago	IL	60643
			Resident		10009 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10009 S Green St		Chicago	IL	60643
			Resident		10010 S Eggleston Ave		Chicago	IL	60628
			Resident		10010 S Emerald Ave		Chicago	IL	60628
			Resident		10010 S Green St		Chicago	IL	60643
			Resident		10011 S Green St		Chicago	IL	60643
			Resident		10014 S Eggleston Ave		Chicago	IL	60628
			Resident		10014 S Green St		Chicago	IL	60643
			Resident		10015 S Emerald Ave		Chicago	IL	60628
			Resident		10015 S Green St		Chicago	IL	60643
			Resident		10016 S Green St		Chicago	IL	60643
			Resident		10018 S Eggleston Ave		Chicago	IL	60628
			Resident		10018 S Emerald Ave		Chicago	IL	60628
			Resident		10019 S Emerald Ave		Chicago	IL	60628
			Resident		10019 S Green St		Chicago	IL	60643
			Resident		10020 S Eggleston Ave		Chicago	IL	60628
			Resident		10020 S Emerald Ave		Chicago	IL	60628
			Resident		10020 S Green St		Chicago	IL	60643
			Resident		10022 S Emerald Ave		Chicago	IL	60628
			Resident		10023 S Emerald Ave		Chicago	IL	60628
			Resident		10023 S Green St		Chicago	IL	60643
			Resident		10024 S Eggleston Ave		Chicago	IL	60628
			Resident		10024 S Emerald Ave		Chicago	IL	60628
			Resident		10024 S Green St		Chicago	IL	60643
			Resident		10025 S Green St		Chicago	IL	60643
			Resident		10026 S Emerald Ave		Chicago	IL	60628
			Resident		10026 S Green St		Chicago	IL	60643
			Resident		10027 S Emerald Ave		Chicago	IL	60628
			Resident		10029 S Green St		Chicago	IL	60643
			Resident		10030 S Emerald Ave		Chicago	IL	60628
			Resident		10030 S Green St		Chicago	IL	60643
			Resident		10031 S Emerald Ave		Chicago	IL	60628
			Resident		10032 S Eggleston Ave		Chicago	IL	60628
			Resident		10033 S Green St		Chicago	IL	60643
			Resident		10034 S Emerald Ave		Chicago	IL	60628
			Resident		10034 S Green St		Chicago	IL	60643
			Resident		10035 S Emerald Ave		Chicago	IL	60628
			Resident		10036 S Eggleston Ave		Chicago	IL	60628
			Resident		10036 S Green St		Chicago	IL	60643
			Resident		10037 S Green St		Chicago	IL	60643
			Resident		10038 S Emerald Ave		Chicago	IL	60628
			Resident		10039 S Emerald Ave		Chicago	IL	60628
			Resident		10039 S Green St		Chicago	IL	60643
			Resident		10040 S Eggleston Ave		Chicago	IL	60628
			Resident		10040 S Green St		Chicago	IL	60643
			Resident		10041 S Emerald Ave		Chicago	IL	60628
			Resident		10042 S Eggleston Ave		Chicago	IL	60628
			Resident		10042 S Emerald Ave		Chicago	IL	60628
			Resident		10042 S Green St		Chicago	IL	60643
			Resident		10043 S Green St		Chicago	IL	60643
			Resident		10044 S Emerald Ave		Chicago	IL	60628
			Resident		10045 S Emerald Ave		Chicago	IL	60628
			Resident		10046 S Emerald Ave		Chicago	IL	60628
			Resident		10046 S Green St		Chicago	IL	60643
			Resident		10047 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10047 S Green St		Chicago	IL	60643
			Resident		10050 S Emerald Ave		Chicago	IL	60628
			Resident		10050 S Green St		Chicago	IL	60643
			Resident		10051 S Emerald Ave		Chicago	IL	60628
			Resident		10051 S Green St		Chicago	IL	60643
			Resident		10052 S Eggleston Ave		Chicago	IL	60628
			Resident		10052 S Emerald Ave		Chicago	IL	60628
			Resident		10052 S Green St		Chicago	IL	60643
			Resident		10054 S Eggleston Ave		Chicago	IL	60628
			Resident		10055 S Emerald Ave		Chicago	IL	60628
			Resident		10056 S Emerald Ave		Chicago	IL	60628
			Resident		10056 S Green St		Chicago	IL	60643
			Resident		10058 S Eggleston Ave		Chicago	IL	60628
			Resident		10059 S Emerald Ave		Chicago	IL	60628
			Resident		101 W. 114th Street		Chicago	IL	60628
			Resident		10100 S Eggleston Ave		Chicago	IL	60628
			Resident		10100 S Emerald Ave		Chicago	IL	60628
			Resident		10100 S Green St		Chicago	IL	60643
			Resident		10101 S Emerald Ave		Chicago	IL	60628
			Resident		10101 S Green St		Chicago	IL	60643
			Resident		10102 S Green St		Chicago	IL	60643
			Resident		10104 S Eggleston Ave		Chicago	IL	60628
			Resident		10104 S Emerald Ave		Chicago	IL	60628
			Resident		10105 S Emerald Ave		Chicago	IL	60628
			Resident		10105 S Green St		Chicago	IL	60643
			Resident		10106 S Emerald Ave		Chicago	IL	60628
			Resident		10106 S Green St		Chicago	IL	60643
			Resident		10107 S Emerald Ave		Chicago	IL	60628
			Resident		10109 S Green St		Chicago	IL	60643
			Resident		1011 S King Drive		Chicago	IL	60628
			Resident		10110 S Eggleston Ave		Chicago	IL	60628
			Resident		10110 S Emerald Ave		Chicago	IL	60628
			Resident		10110 S Green St		Chicago	IL	60643
			Resident		10111 S Emerald Ave		Chicago	IL	60628
			Resident		10112 S Emerald Ave		Chicago	IL	60628
			Resident		10113 S Green St		Chicago	IL	60643
			Resident		10114 S Eggleston Ave		Chicago	IL	60628
			Resident		10114 S Emerald Ave		Chicago	IL	60628
			Resident		10114 S. Halsted Street		Chicago	IL	60628
			Resident		10115 S Emerald Ave		Chicago	IL	60628
			Resident		10115 S Green St		Chicago	IL	60643
			Resident		10116 S Green St		Chicago	IL	60643
			Resident		10118 S Emerald Ave		Chicago	IL	60628
			Resident		10118 S Green St		Chicago	IL	60643
			Resident		10119 S Emerald Ave		Chicago	IL	60628
			Resident		10119 S Green St		Chicago	IL	60643
			Resident		10120 S Eggleston Ave		Chicago	IL	60628
			Resident		10120 S Emerald Ave		Chicago	IL	60628
			Resident		10121 S Green St		Chicago	IL	60643
			Resident		10122 S Green St		Chicago	IL	60643
			Resident		10124 S Emerald Ave		Chicago	IL	60628
			Resident		10125 S Emerald Ave		Chicago	IL	60628
			Resident		10125 S Green St		Chicago	IL	60643
			Resident		10126 S Emerald Ave		Chicago	IL	60628
			Resident		10126 S Green St		Chicago	IL	60643
			Resident		10128 S Green St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10129 S Emerald Ave		Chicago	IL	60628
			Resident		10129 S Green St		Chicago	IL	60643
			Resident		10130 S Emerald Ave		Chicago	IL	60628
			Resident		10131 S Emerald Ave		Chicago	IL	60628
			Resident		10132 S Green St		Chicago	IL	60643
			Resident		10133 S Green St		Chicago	IL	60643
			Resident		10134 S Emerald Ave		Chicago	IL	60628
			Resident		10135 S Emerald Ave		Chicago	IL	60628
			Resident		10136 S Emerald Ave		Chicago	IL	60628
			Resident		10136 S Green St		Chicago	IL	60643
			Resident		10137 S Emerald Ave		Chicago	IL	60628
			Resident		10139 S Green St		Chicago	IL	60643
			Resident		10140 S Emerald Ave		Chicago	IL	60628
			Resident		10140 S Green St		Chicago	IL	60643
			Resident		10141 S Emerald Ave		Chicago	IL	60628
			Resident		10142 S Eggleston Ave		Chicago	IL	60628
			Resident		10142 S Emerald Ave		Chicago	IL	60628
			Resident		10144 S Green St		Chicago	IL	60643
			Resident		10145 S Emerald Ave		Chicago	IL	60628
			Resident		10145 S Green St		Chicago	IL	60643
			Resident		10146 S Emerald Ave		Chicago	IL	60628
			Resident		10148 S Eggleston Ave		Chicago	IL	60628
			Resident		10151 S Emerald Ave		Chicago	IL	60628
			Resident		10152 S Eggleston Ave		Chicago	IL	60628
			Resident		10152 S Emerald Ave		Chicago	IL	60628
			Resident		10152 S Green St		Chicago	IL	60643
			Resident		10153 S Green St		Chicago	IL	60643
			Resident		10154 S Eggleston Ave		Chicago	IL	60628
			Resident		10154 S Emerald Ave		Chicago	IL	60628
			Resident		10155 S Emerald Ave		Chicago	IL	60628
			Resident		10156 S Green St		Chicago	IL	60643
			Resident		10157 S Green St		Chicago	IL	60643
			Resident		10158 S Emerald Ave		Chicago	IL	60628
			Resident		10158 S Green St		Chicago	IL	60643
			Resident		10159 S Emerald Ave		Chicago	IL	60628
			Resident		10200 S Eggleston Ave		Chicago	IL	60628
			Resident		10200 S Emerald Ave		Chicago	IL	60628
			Resident		10200 S Green St		Chicago	IL	60643
			Resident		10201 S Emerald Ave		Chicago	IL	60628
			Resident		10201 S Green St		Chicago	IL	60643
			Resident		10202 S Emerald Ave		Chicago	IL	60628
			Resident		10202 S Green St		Chicago	IL	60643
			Resident		10204 S Emerald Ave		Chicago	IL	60628
			Resident		10205 S Emerald Ave		Chicago	IL	60628
			Resident		10206 S Emerald Ave		Chicago	IL	60628
			Resident		10206 S Green St		Chicago	IL	60643
			Resident		10208 S Green St		Chicago	IL	60643
			Resident		10209 S Emerald Ave		Chicago	IL	60628
			Resident		10209 S Green St		Chicago	IL	60643
			Resident		10210 S Eggleston Ave		Chicago	IL	60628
			Resident		10210 S Emerald Ave		Chicago	IL	60628
			Resident		10211 S Emerald Ave		Chicago	IL	60628
			Resident		10211 S Green St		Chicago	IL	60643
			Resident		10212 S Green St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10213 S Green St		Chicago	IL	60643
			Resident		10214 S Eggleston Ave		Chicago	IL	60628
			Resident		10214 S Green St		Chicago	IL	60643
			Resident		10215 S Emerald Ave		Chicago	IL	60628
			Resident		10215 S Green St		Chicago	IL	60643
			Resident		10216 S Emerald Ave		Chicago	IL	60628
			Resident		10218 S Eggleston Ave		Chicago	IL	60628
			Resident		10218 S Green St		Chicago	IL	60643
			Resident		10219 S Emerald Ave		Chicago	IL	60628
			Resident		10219 S Green St		Chicago	IL	60643
			Resident		10220 S Emerald Ave		Chicago	IL	60628
			Resident		10221 S Emerald Ave		Chicago	IL	60628
			Resident		10222 S Emerald Ave		Chicago	IL	60628
			Resident		10223 S Green St		Chicago	IL	60643
			Resident		10224 S Eggleston Ave		Chicago	IL	60628
			Resident		10224 S Green St		Chicago	IL	60643
			Resident		10225 S Green St		Chicago	IL	60643
			Resident		10226 S Emerald Ave		Chicago	IL	60628
			Resident		10229 S Green St		Chicago	IL	60643
			Resident		10230 S Green St		Chicago	IL	60643
			Resident		10231 S Emerald Ave		Chicago	IL	60628
			Resident		10231 S Green St		Chicago	IL	60643
			Resident		10232 S Emerald Ave		Chicago	IL	60628
			Resident		10233 S Green St		Chicago	IL	60643
			Resident		10236 S Green St		Chicago	IL	60643
			Resident		10237 S Green St		Chicago	IL	60643
			Resident		10238 S Emerald Ave		Chicago	IL	60628
			Resident		10238 S Green St		Chicago	IL	60643
			Resident		10239 S Emerald Ave		Chicago	IL	60628
			Resident		10240 S Eggleston Ave		Chicago	IL	60628
			Resident		10241 S Green St		Chicago	IL	60643
			Resident		10241 S. Halsted Street		Chicago	IL	60628
			Resident		10242 S Emerald Ave		Chicago	IL	60628
			Resident		10242 S Green St		Chicago	IL	60643
			Resident		10243 S Green St		Chicago	IL	60643
			Resident		10248 S Eggleston Ave		Chicago	IL	60628
			Resident		10314 S Green St		Chicago	IL	60643
			Resident		10315 S Emerald Ave		Chicago	IL	60628
			Resident		10318 S Green St		Chicago	IL	60643
			Resident		10319 S Emerald Ave		Chicago	IL	60628
			Resident		10320 S Emerald Ave		Chicago	IL	60628
			Resident		10321 S Green St		Chicago	IL	60643
			Resident		10323 S Emerald Ave		Chicago	IL	60628
			Resident		10324 S Green St		Chicago	IL	60643
			Resident		10325 S Emerald Ave		Chicago	IL	60628
			Resident		10325 S Green St		Chicago	IL	60643
			Resident		10326 S Emerald Ave		Chicago	IL	60628
			Resident		10327 S Green St		Chicago	IL	60643
			Resident		10329 S Emerald Ave		Chicago	IL	60628
			Resident		10330 S Green St		Chicago	IL	60643
			Resident		10331 S Green St		Chicago	IL	60643
			Resident		10332 S Emerald Ave		Chicago	IL	60628
			Resident		10333 S Emerald Ave		Chicago	IL	60628
			Resident		10333 S Green St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10334 S Emerald Ave		Chicago	IL	60628
			Resident		10334 S Green St		Chicago	IL	60643
			Resident		10335 S Emerald Ave		Chicago	IL	60628
			Resident		10335 S Green St		Chicago	IL	60643
			Resident		10336 S Green St		Chicago	IL	60643
			Resident		10338 S Emerald Ave		Chicago	IL	60628
			Resident		10338 S Green St		Chicago	IL	60643
			Resident		10340 S Green St		Chicago	IL	60643
			Resident		10342 S Emerald Ave		Chicago	IL	60628
			Resident		10343 S Emerald Ave		Chicago	IL	60628
			Resident		10344 S Emerald Ave		Chicago	IL	60628
			Resident		10344 S Green St		Chicago	IL	60643
			Resident		10345 S Emerald Ave		Chicago	IL	60628
			Resident		10346 S Emerald Ave		Chicago	IL	60628
			Resident		10349 S Green St		Chicago	IL	60643
			Resident		10350 S Green St		Chicago	IL	60643
			Resident		10351 S Emerald Ave		Chicago	IL	60628
			Resident		10351 S Green St		Chicago	IL	60643
			Resident		10352 S Emerald Ave		Chicago	IL	60628
			Resident		10354 S Green St		Chicago	IL	60643
			Resident		10356 S Green St		Chicago	IL	60643
			Resident		10357 S Emerald Ave		Chicago	IL	60628
			Resident		10357 S Green St		Chicago	IL	60643
			Resident		10358 S Emerald Ave		Chicago	IL	60628
			Resident		10400 S Emerald Ave		Chicago	IL	60628
			Resident		10400 S Green St		Chicago	IL	60643
			Resident		10401 S Emerald Ave		Chicago	IL	60628
			Resident		10401 S Green St		Chicago	IL	60643
			Resident		10404 S Emerald Ave		Chicago	IL	60628
			Resident		10404 S Green St		Chicago	IL	60643
			Resident		10405 S Emerald Ave		Chicago	IL	60628
			Resident		10405 S Green St		Chicago	IL	60643
			Resident		10408 S Emerald Ave		Chicago	IL	60628
			Resident		10408 S Green St		Chicago	IL	60643
			Resident		10409 S Emerald Ave		Chicago	IL	60628
			Resident		10409 S Green St		Chicago	IL	60643
			Resident		10410 S Green St		Chicago	IL	60643
			Resident		10411 S Green St		Chicago	IL	60643
			Resident		10412 S Emerald Ave		Chicago	IL	60628
			Resident		10413 S Emerald Ave		Chicago	IL	60628
			Resident		10414 S Eggleston Ave		Chicago	IL	60628
			Resident		10414 S Green St		Chicago	IL	60643
			Resident		10415 S Eggleston Ave		Chicago	IL	60628
			Resident		10415 S Green St		Chicago	IL	60643
			Resident		10416 S Emerald Ave		Chicago	IL	60628
			Resident		10417 S Emerald Ave		Chicago	IL	60628
			Resident		10417 S Green St		Chicago	IL	60643
			Resident		10418 S Eggleston Ave		Chicago	IL	60628
			Resident		10418 S Green St		Chicago	IL	60643
			Resident		10419 S Eggleston Ave		Chicago	IL	60628
			Resident		10420 S Eggleston Ave		Chicago	IL	60628
			Resident		10420 S Emerald Ave		Chicago	IL	60628
			Resident		10420 S Green St		Chicago	IL	60643
			Resident		10421 S Eggleston Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10421 S Emerald Ave		Chicago	IL	60628
			Resident		10421 S Green St		Chicago	IL	60643
			Resident		10422 S Eggleston Ave		Chicago	IL	60628
			Resident		10422 S Emerald Ave		Chicago	IL	60628
			Resident		10423 S Green St		Chicago	IL	60643
			Resident		10424 S Green St		Chicago	IL	60643
			Resident		10425 S Eggleston Ave		Chicago	IL	60628
			Resident		10425 S Emerald Ave		Chicago	IL	60628
			Resident		10426 S Eggleston Ave		Chicago	IL	60628
			Resident		10427 S Eggleston Ave		Chicago	IL	60628
			Resident		10427 S Emerald Ave		Chicago	IL	60628
			Resident		10427 S Green St		Chicago	IL	60643
			Resident		10428 S Emerald Ave		Chicago	IL	60628
			Resident		10428 S Green St		Chicago	IL	60643
			Resident		10430 S Eggleston Ave		Chicago	IL	60628
			Resident		10430 S Emerald Ave		Chicago	IL	60628
			Resident		10430 S Green St		Chicago	IL	60643
			Resident		10431 S Eggleston Ave		Chicago	IL	60628
			Resident		10431 S Emerald Ave		Chicago	IL	60628
			Resident		10431 S Green St		Chicago	IL	60643
			Resident		10432 S Eggleston Ave		Chicago	IL	60628
			Resident		10433 S Eggleston Ave		Chicago	IL	60628
			Resident		10433 S Green St		Chicago	IL	60643
			Resident		10434 S Eggleston Ave		Chicago	IL	60628
			Resident		10434 S Green St		Chicago	IL	60643
			Resident		10436 S Emerald Ave		Chicago	IL	60628
			Resident		10436 S Green St		Chicago	IL	60643
			Resident		10437 S Emerald Ave		Chicago	IL	60628
			Resident		10437 S Green St		Chicago	IL	60643
			Resident		10439 S Eggleston Ave		Chicago	IL	60628
			Resident		10440 S Eggleston Ave		Chicago	IL	60628
			Resident		10440 S Emerald Ave		Chicago	IL	60628
			Resident		10440 S Green St		Chicago	IL	60643
			Resident		10441 S Emerald Ave		Chicago	IL	60628
			Resident		10441 S Green St		Chicago	IL	60643
			Resident		10442 S Eggleston Ave		Chicago	IL	60628
			Resident		10443 S Eggleston Ave		Chicago	IL	60628
			Resident		10444 S Eggleston Ave		Chicago	IL	60628
			Resident		10444 S Emerald Ave		Chicago	IL	60628
			Resident		10444 S Green St		Chicago	IL	60643
			Resident		10445 S Emerald Ave		Chicago	IL	60628
			Resident		10446 S Eggleston Ave		Chicago	IL	60628
			Resident		10446 S Green St		Chicago	IL	60643
			Resident		10447 S Eggleston Ave		Chicago	IL	60628
			Resident		10447 S Green St		Chicago	IL	60643
			Resident		10448 S Eggleston Ave		Chicago	IL	60628
			Resident		10448 S Emerald Ave		Chicago	IL	60628
			Resident		10449 S Emerald Ave		Chicago	IL	60628
			Resident		10450 S Green St		Chicago	IL	60643
			Resident		10451 S Eggleston Ave		Chicago	IL	60628
			Resident		10451 S Green St		Chicago	IL	60643
			Resident		10452 S Eggleston Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10452 S Emerald Ave		Chicago	IL	60628
			Resident		10453 S Eggleston Ave		Chicago	IL	60628
			Resident		10453 S Emerald Ave		Chicago	IL	60628
			Resident		10453 S Green St		Chicago	IL	60643
			Resident		10454 S Green St		Chicago	IL	60643
			Resident		10456 S Emerald Ave		Chicago	IL	60628
			Resident		10456 S Green St		Chicago	IL	60643
			Resident		10457 S Emerald Ave		Chicago	IL	60628
			Resident		10457 S Green St		Chicago	IL	60643
			Resident		10459 S Eggleston Ave		Chicago	IL	60628
			Resident		10460 S Emerald Ave		Chicago	IL	60628
			Resident		10461 S Emerald Ave		Chicago	IL	60628
			Resident		10500 S Eggleston Ave		Chicago	IL	60628
			Resident		10500 S Emerald Ave		Chicago	IL	60628
			Resident		10500 S Green St		Chicago	IL	60643
			Resident		10501 S Eggleston Ave		Chicago	IL	60628
			Resident		10501 S Emerald Ave		Chicago	IL	60628
			Resident		10501 S Green St		Chicago	IL	60643
			Resident		10502 S Emerald Ave		Chicago	IL	60628
			Resident		10502 S Green St		Chicago	IL	60643
			Resident		10503 S Emerald Ave		Chicago	IL	60628
			Resident		10504 S Eggleston Ave		Chicago	IL	60628
			Resident		10505 S Eggleston Ave		Chicago	IL	60628
			Resident		10505 S Green St		Chicago	IL	60643
			Resident		10506 S Eggleston Ave		Chicago	IL	60628
			Resident		10506 S Emerald Ave		Chicago	IL	60628
			Resident		10506 S Green St		Chicago	IL	60643
			Resident		10507 S Eggleston Ave		Chicago	IL	60628
			Resident		10507 S Emerald Ave		Chicago	IL	60628
			Resident		10509 S Green St		Chicago	IL	60643
			Resident		10510 S Eggleston Ave		Chicago	IL	60628
			Resident		10510 S Emerald Ave		Chicago	IL	60628
			Resident		10510 S Green St		Chicago	IL	60643
			Resident		10511 S Eggleston Ave		Chicago	IL	60628
			Resident		10511 S Emerald Ave		Chicago	IL	60628
			Resident		10512 S Eggleston Ave		Chicago	IL	60628
			Resident		10512 S Green St		Chicago	IL	60643
			Resident		10513 S Green St		Chicago	IL	60643
			Resident		10514 S Emerald Ave		Chicago	IL	60628
			Resident		10515 S Eggleston Ave		Chicago	IL	60628
			Resident		10515 S Emerald Ave		Chicago	IL	60628
			Resident		10515 S Green St		Chicago	IL	60643
			Resident		10516 S Green St		Chicago	IL	60643
			Resident		10517 S Eggleston Ave		Chicago	IL	60628
			Resident		10518 S Eggleston Ave		Chicago	IL	60628
			Resident		10518 S Emerald Ave		Chicago	IL	60628
			Resident		10519 S Eggleston Ave		Chicago	IL	60628
			Resident		10519 S Emerald Ave		Chicago	IL	60628
			Resident		10519 S Green St		Chicago	IL	60643
			Resident		10520 S Green St		Chicago	IL	60643
			Resident		10521 S Green St		Chicago	IL	60643
			Resident		10522 S Eggleston Ave		Chicago	IL	60628
			Resident		10522 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10522 S Green St		Chicago	IL	60643
			Resident		10523 S Eggleston Ave		Chicago	IL	60628
			Resident		10523 S Emerald Ave		Chicago	IL	60628
			Resident		10524 S Eggleston Ave		Chicago	IL	60628
			Resident		10525 S Eggleston Ave		Chicago	IL	60628
			Resident		10525 S Green St		Chicago	IL	60643
			Resident		10526 S Emerald Ave		Chicago	IL	60628
			Resident		10526 S Green St		Chicago	IL	60643
			Resident		10527 S Emerald Ave		Chicago	IL	60628
			Resident		10527 S Green St		Chicago	IL	60643
			Resident		10528 S Eggleston Ave		Chicago	IL	60628
			Resident		10529 S Eggleston Ave		Chicago	IL	60628
			Resident		10529 S Green St		Chicago	IL	60643
			Resident		10530 S Eggleston Ave		Chicago	IL	60628
			Resident		10530 S Emerald Ave		Chicago	IL	60628
			Resident		10531 S Eggleston Ave		Chicago	IL	60628
			Resident		10531 S Emerald Ave		Chicago	IL	60628
			Resident		10531 S Green St		Chicago	IL	60643
			Resident		10532 S Eggleston Ave		Chicago	IL	60628
			Resident		10532 S Green St		Chicago	IL	60643
			Resident		10534 S Emerald Ave		Chicago	IL	60628
			Resident		10535 S Eggleston Ave		Chicago	IL	60628
			Resident		10535 S Green St		Chicago	IL	60643
			Resident		10536 S Eggleston Ave		Chicago	IL	60628
			Resident		10536 S Green St		Chicago	IL	60643
			Resident		10537 S Eggleston Ave		Chicago	IL	60628
			Resident		10537 S Green St		Chicago	IL	60643
			Resident		10538 S Emerald Ave		Chicago	IL	60628
			Resident		10539 S Eggleston Ave		Chicago	IL	60628
			Resident		10539 S Green St		Chicago	IL	60643
			Resident		10540 S Eggleston Ave		Chicago	IL	60628
			Resident		10542 S Emerald Ave		Chicago	IL	60628
			Resident		10543 S Eggleston Ave		Chicago	IL	60628
			Resident		10544 S Eggleston Ave		Chicago	IL	60628
			Resident		10544 S Green St		Chicago	IL	60643
			Resident		10545 S Eggleston Ave		Chicago	IL	60628
			Resident		10545 S Green St		Chicago	IL	60643
			Resident		10546 S Emerald Ave		Chicago	IL	60628
			Resident		10546 S Green St		Chicago	IL	60643
			Resident		10547 S Green St		Chicago	IL	60643
			Resident		10548 S Eggleston Ave		Chicago	IL	60628
			Resident		10549 S Eggleston Ave		Chicago	IL	60628
			Resident		10549 S Emerald Ave		Chicago	IL	60628
			Resident		10549 S Green St		Chicago	IL	60643
			Resident		10550 S Eggleston Ave		Chicago	IL	60628
			Resident		10550 S Emerald Ave		Chicago	IL	60628
			Resident		10550 S Green St		Chicago	IL	60643
			Resident		10551 S Eggleston Ave		Chicago	IL	60628
			Resident		10551 S Green St		Chicago	IL	60643
			Resident		10552 S Green St		Chicago	IL	60643
			Resident		10554 S Eggleston Ave		Chicago	IL	60628
			Resident		10554 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10555 S Green St		Chicago	IL	60643
			Resident		10556 S Emerald Ave		Chicago	IL	60628
			Resident		10556 S Green St		Chicago	IL	60643
			Resident		10557 S Eggleston Ave		Chicago	IL	60628
			Resident		10557 S Green St		Chicago	IL	60643
			Resident		10600 S Eggleston Ave		Chicago	IL	60628
			Resident		10600 S Emerald Ave		Chicago	IL	60628
			Resident		10600 S Green St		Chicago	IL	60643
			Resident		10601 S Eggleston Ave		Chicago	IL	60628
			Resident		10601 S Emerald Ave		Chicago	IL	60628
			Resident		10601 S Green St		Chicago	IL	60643
			Resident		10604 S Eggleston Ave		Chicago	IL	60628
			Resident		10604 S Emerald Ave		Chicago	IL	60628
			Resident		10604 S Green St		Chicago	IL	60643
			Resident		10605 S Eggleston Ave		Chicago	IL	60628
			Resident		10605 S Emerald Ave		Chicago	IL	60628
			Resident		10605 S Green St		Chicago	IL	60643
			Resident		10608 S Eggleston Ave		Chicago	IL	60628
			Resident		10608 S Emerald Ave		Chicago	IL	60628
			Resident		10608 S Green St		Chicago	IL	60643
			Resident		10609 S Eggleston Ave		Chicago	IL	60628
			Resident		10609 S Green St		Chicago	IL	60643
			Resident		10610 Perry		Chicago	IL	60628
			Resident		10610 S Emerald Ave		Chicago	IL	60628
			Resident		10611 S Eggleston Ave		Chicago	IL	60628
			Resident		10612 S Eggleston Ave		Chicago	IL	60628
			Resident		10612 S Green St		Chicago	IL	60643
			Resident		10613 S Green St		Chicago	IL	60643
			Resident		10614 S Emerald Ave		Chicago	IL	60628
			Resident		10615 S Emerald Ave		Chicago	IL	60628
			Resident		10616 S Eggleston Ave		Chicago	IL	60628
			Resident		10616 S Emerald Ave		Chicago	IL	60628
			Resident		10616 S Green St		Chicago	IL	60643
			Resident		10617 S Emerald Ave		Chicago	IL	60628
			Resident		10617 S Green St		Chicago	IL	60643
			Resident		10619 S Eggleston Ave		Chicago	IL	60628
			Resident		10620 S Eggleston Ave		Chicago	IL	60628
			Resident		10620 S Emerald Ave		Chicago	IL	60628
			Resident		10620 S Green St		Chicago	IL	60643
			Resident		10621 S Eggleston Ave		Chicago	IL	60628
			Resident		10621 S Emerald Ave		Chicago	IL	60628
			Resident		10621 S Green St		Chicago	IL	60643
			Resident		10622 S Eggleston Ave		Chicago	IL	60628
			Resident		10622 S Emerald Ave		Chicago	IL	60628
			Resident		10623 S Eggleston Ave		Chicago	IL	60628
			Resident		10623 S Emerald Ave		Chicago	IL	60628
			Resident		10624 S Green St		Chicago	IL	60643
			Resident		10625 S Green St		Chicago	IL	60643
			Resident		10626 S Eggleston Ave		Chicago	IL	60628
			Resident		10626 S Emerald Ave		Chicago	IL	60628
			Resident		10627 S Eggleston Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10627 S Emerald Ave		Chicago	IL	60628
			Resident		10628 S Eggleston Ave		Chicago	IL	60628
			Resident		10628 S Emerald Ave		Chicago	IL	60628
			Resident		10629 S Eggleston Ave		Chicago	IL	60628
			Resident		10629 S Emerald Ave		Chicago	IL	60628
			Resident		10629 S Green St		Chicago	IL	60643
			Resident		10632 S Emerald Ave		Chicago	IL	60628
			Resident		10633 S Eggleston Ave		Chicago	IL	60628
			Resident		10633 S Emerald Ave		Chicago	IL	60628
			Resident		10633 S Green St		Chicago	IL	60643
			Resident		10634 S Emerald Ave		Chicago	IL	60628
			Resident		10635 S Eggleston Ave		Chicago	IL	60628
			Resident		10635 S Emerald Ave		Chicago	IL	60628
			Resident		10636 S Green St		Chicago	IL	60643
			Resident		10637 S Green St		Chicago	IL	60643
			Resident		10638 S Eggleston Ave		Chicago	IL	60628
			Resident		10638 S Emerald Ave		Chicago	IL	60628
			Resident		10639 S Eggleston Ave		Chicago	IL	60628
			Resident		10639 S Emerald Ave		Chicago	IL	60628
			Resident		10640 S Eggleston Ave		Chicago	IL	60628
			Resident		10640 S Emerald Ave		Chicago	IL	60628
			Resident		10640 S Green St		Chicago	IL	60643
			Resident		10641 S Eggleston Ave		Chicago	IL	60628
			Resident		10641 S Green St		Chicago	IL	60643
			Resident		10643 S Emerald Ave		Chicago	IL	60628
			Resident		10644 S Eggleston Ave		Chicago	IL	60628
			Resident		10644 S Emerald Ave		Chicago	IL	60628
			Resident		10644 S Green St		Chicago	IL	60643
			Resident		10645 S Emerald Ave		Chicago	IL	60628
			Resident		10648 S Green St		Chicago	IL	60643
			Resident		10649 S Green St		Chicago	IL	60643
			Resident		10652 S Green St		Chicago	IL	60643
			Resident		10653 S Green St		Chicago	IL	60643
			Resident		10655 S Emerald Ave		Chicago	IL	60628
			Resident		10656 S Green St		Chicago	IL	60643
			Resident		10657 S Green St		Chicago	IL	60643
			Resident		10701 S Green St		Chicago	IL	60643
			Resident		10705 S Green St		Chicago	IL	60643
			Resident		10709 S Green St		Chicago	IL	60643
			Resident		10714 S Eggleston Ave		Chicago	IL	60628
			Resident		10714 S Green St		Chicago	IL	60643
			Resident		10715 S Emerald Ave		Chicago	IL	60628
			Resident		10715 S Green St		Chicago	IL	60643
			Resident		10718 S Eggleston Ave		Chicago	IL	60628
			Resident		10718 S Green St		Chicago	IL	60643
			Resident		10719 S Eggleston Ave		Chicago	IL	60628
			Resident		10719 S Green St		Chicago	IL	60643
			Resident		10721 S Emerald Ave		Chicago	IL	60628
			Resident		10722 S Green St		Chicago	IL	60643
			Resident		10723 S Green St		Chicago	IL	60643
			Resident		10725 S Emerald Ave		Chicago	IL	60628
			Resident		10726 S Green St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10727 S Eggleston Ave		Chicago	IL	60628
			Resident		10727 S Green St		Chicago	IL	60643
			Resident		10728 S Eggleston Ave		Chicago	IL	60628
			Resident		10729 S Emerald Ave		Chicago	IL	60628
			Resident		10730 S Emerald Ave		Chicago	IL	60628
			Resident		10730 S Green St		Chicago	IL	60643
			Resident		10731 S Eggleston Ave		Chicago	IL	60628
			Resident		10731 S Green St		Chicago	IL	60643
			Resident		10732 S Eggleston Ave		Chicago	IL	60628
			Resident		10732 S Emerald Ave		Chicago	IL	60628
			Resident		10733 S Eggleston Ave		Chicago	IL	60628
			Resident		10733 S Emerald Ave		Chicago	IL	60628
			Resident		10734 S Green St		Chicago	IL	60643
			Resident		10735 S Green St		Chicago	IL	60643
			Resident		10736 S Eggleston Ave		Chicago	IL	60628
			Resident		10736 S Emerald Ave		Chicago	IL	60628
			Resident		10737 S Eggleston Ave		Chicago	IL	60628
			Resident		10737 S Emerald Ave		Chicago	IL	60628
			Resident		10738 S Eggleston Ave		Chicago	IL	60628
			Resident		10738 S Green St		Chicago	IL	60643
			Resident		10739 S Green St		Chicago	IL	60643
			Resident		10740 S Emerald Ave		Chicago	IL	60628
			Resident		10741 S Eggleston Ave		Chicago	IL	60628
			Resident		10741 S Eggleston Ave		Chicago	IL	60628
			Resident		10741 S Emerald Ave		Chicago	IL	60628
			Resident		10742 S Emerald Ave		Chicago	IL	60628
			Resident		10742 S Green St		Chicago	IL	60643
			Resident		10743 S Emerald Ave		Chicago	IL	60628
			Resident		10743 S Green St		Chicago	IL	60643
			Resident		10745 S Eggleston Ave		Chicago	IL	60628
			Resident		10746 S Emerald Ave		Chicago	IL	60628
			Resident		10746 S Green St		Chicago	IL	60643
			Resident		10747 S Emerald Ave		Chicago	IL	60628
			Resident		10747 S Green St		Chicago	IL	60643
			Resident		10749 S Eggleston Ave		Chicago	IL	60628
			Resident		10750 S Emerald Ave		Chicago	IL	60628
			Resident		10750 S Green St		Chicago	IL	60643
			Resident		10751 S Eggleston Ave		Chicago	IL	60628
			Resident		10751 S Emerald Ave		Chicago	IL	60628
			Resident		10751 S Green St		Chicago	IL	60643
			Resident		10754 S Eggleston Ave		Chicago	IL	60628
			Resident		10754 S Emerald Ave		Chicago	IL	60628
			Resident		10755 S Emerald Ave		Chicago	IL	60628
			Resident		10756 S Eggleston Ave		Chicago	IL	60628
			Resident		10756 S Emerald Ave		Chicago	IL	60628
			Resident		10756 S Green St		Chicago	IL	60643
			Resident		10757 S Green St		Chicago	IL	60643
			Resident		10759 S Emerald Ave		Chicago	IL	60628
			Resident		10800 S Eggleston Ave		Chicago	IL	60628
			Resident		10800 S Emerald Ave		Chicago	IL	60628
			Resident		10800 S Green St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10801 S Eggleston Ave		Chicago	IL	60628
			Resident		10801 S Emerald Ave		Chicago	IL	60628
			Resident		10801 S Green St		Chicago	IL	60643
			Resident		10804 S Green St		Chicago	IL	60643
			Resident		10805 S Eggleston Ave		Chicago	IL	60628
			Resident		10805 S Green St		Chicago	IL	60643
			Resident		10806 S Eggleston Ave		Chicago	IL	60628
			Resident		10806 S Emerald Ave		Chicago	IL	60628
			Resident		10807 S Eggleston Ave		Chicago	IL	60628
			Resident		10807 S Emerald Ave		Chicago	IL	60628
			Resident		10808 S Green St		Chicago	IL	60643
			Resident		10809 S Green St		Chicago	IL	60643
			Resident		10810 S Eggleston Ave		Chicago	IL	60628
			Resident		10810 S Emerald Ave		Chicago	IL	60628
			Resident		10811 S Eggleston Ave		Chicago	IL	60628
			Resident		10811 S Emerald Ave		Chicago	IL	60628
			Resident		10812 S Green St		Chicago	IL	60643
			Resident		10813 S Eggleston Ave		Chicago	IL	60628
			Resident		10813 S Green St		Chicago	IL	60643
			Resident		10815 S Emerald Ave		Chicago	IL	60628
			Resident		10816 S Eggleston Ave		Chicago	IL	60628
			Resident		10816 S Green St		Chicago	IL	60643
			Resident		10818 S Eggleston Ave		Chicago	IL	60628
			Resident		10818 S Emerald Ave		Chicago	IL	60628
			Resident		10819 S Emerald Ave		Chicago	IL	60628
			Resident		10820 S Eggleston Ave		Chicago	IL	60628
			Resident		10820 S Green St		Chicago	IL	60643
			Resident		10821 S Green St		Chicago	IL	60643
			Resident		10823 S Eggleston Ave		Chicago	IL	60628
			Resident		10823 S Emerald Ave		Chicago	IL	60628
			Resident		10824 S Eggleston Ave		Chicago	IL	60628
			Resident		10824 S Emerald Ave		Chicago	IL	60628
			Resident		10824 S Green St		Chicago	IL	60643
			Resident		10825 S Eggleston Ave		Chicago	IL	60628
			Resident		10825 S Green St		Chicago	IL	60643
			Resident		10828 S Eggleston Ave		Chicago	IL	60628
			Resident		10828 S Emerald Ave		Chicago	IL	60628
			Resident		10828 S Green St		Chicago	IL	60643
			Resident		10829 S Emerald Ave		Chicago	IL	60628
			Resident		10829 S Green St		Chicago	IL	60643
			Resident		10831 S Emerald Ave		Chicago	IL	60628
			Resident		10832 S Emerald Ave		Chicago	IL	60628
			Resident		10832 S Green St		Chicago	IL	60643
			Resident		10833 S Green St		Chicago	IL	60643
			Resident		10834 S Eggleston Ave		Chicago	IL	60628
			Resident		10835 S Eggleston Ave		Chicago	IL	60628
			Resident		10835 S Emerald Ave		Chicago	IL	60628
			Resident		10836 S Eggleston Ave		Chicago	IL	60628
			Resident		10836 S Emerald Ave		Chicago	IL	60628
			Resident		10836 S Green St		Chicago	IL	60643
			Resident		10837 S Eggleston Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10837 S Green St		Chicago	IL	60643
			Resident		10839 S Emerald Ave		Chicago	IL	60628
			Resident		10840 S Eggleston Ave		Chicago	IL	60628
			Resident		10840 S Emerald Ave		Chicago	IL	60628
			Resident		10840 S Green St		Chicago	IL	60643
			Resident		10841 S Eggleston Ave		Chicago	IL	60628
			Resident		10841 S Emerald Ave		Chicago	IL	60628
			Resident		10841 S Green St		Chicago	IL	60643
			Resident		10843 S Eggleston Ave		Chicago	IL	60628
			Resident		10844 S Emerald Ave		Chicago	IL	60628
			Resident		10844 S Green St		Chicago	IL	60643
			Resident		10845 S Green St		Chicago	IL	60643
			Resident		10846 S Eggleston Ave		Chicago	IL	60628
			Resident		10846 S Emerald Ave		Chicago	IL	60628
			Resident		10847 S Eggleston Ave		Chicago	IL	60628
			Resident		10848 S Green St		Chicago	IL	60643
			Resident		10849 S Eggleston Ave		Chicago	IL	60628
			Resident		10849 S Emerald Ave		Chicago	IL	60628
			Resident		10849 S Green St		Chicago	IL	60643
			Resident		10850 S Eggleston Ave		Chicago	IL	60628
			Resident		10850 S Emerald Ave		Chicago	IL	60628
			Resident		10851 S Eggleston Ave		Chicago	IL	60628
			Resident		10852 S Green St		Chicago	IL	60643
			Resident		10853 S Emerald Ave		Chicago	IL	60628
			Resident		10853 S Green St		Chicago	IL	60643
			Resident		10854 S Eggleston Ave		Chicago	IL	60628
			Resident		10855 S Eggleston Ave		Chicago	IL	60628
			Resident		10857 S Emerald Ave		Chicago	IL	60628
			Resident		10857 S Green St		Chicago	IL	60643
			Resident		10858 S Eggleston Ave		Chicago	IL	60628
			Resident		10858 S Emerald Ave		Chicago	IL	60628
			Resident		10858 S Michigan		Chicago	IL	60620
			Resident		10858 S Michigan		Chicago	IL	60620
			Resident		10859 S Eggleston Ave		Chicago	IL	60628
			Resident		10900 S Eggleston Ave		Chicago	IL	60628
			Resident		10900 S Green St		Chicago	IL	60643
			Resident		10901 S Eggleston Ave		Chicago	IL	60628
			Resident		10901 S Green St		Chicago	IL	60643
			Resident		10904 S Eggleston Ave		Chicago	IL	60628
			Resident		10904 S Emerald Ave		Chicago	IL	60628
			Resident		10904 S Green St		Chicago	IL	60643
			Resident		10905 S Eggleston Ave		Chicago	IL	60628
			Resident		10905 S Emerald Ave		Chicago	IL	60628
			Resident		10905 S Green St		Chicago	IL	60643
			Resident		10906 S Eggleston Ave		Chicago	IL	60628
			Resident		10907 S Eggleston Ave		Chicago	IL	60628
			Resident		10908 S Green St		Chicago	IL	60643
			Resident		10909 S Green St		Chicago	IL	60643
			Resident		10910 S Eggleston Ave		Chicago	IL	60628
			Resident		10911 S Eggleston Ave		Chicago	IL	60628
			Resident		10912 S Eggleston Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10912 S Green St		Chicago	IL	60643
			Resident		10913 S Eggleston Ave		Chicago	IL	60628
			Resident		10913 S Green St		Chicago	IL	60643
			Resident		10916 S Eggleston Ave		Chicago	IL	60628
			Resident		10916 S Emerald Ave		Chicago	IL	60628
			Resident		10916 S Green St		Chicago	IL	60643
			Resident		10917 S Eggleston Ave		Chicago	IL	60628
			Resident		10917 S Emerald Ave		Chicago	IL	60628
			Resident		10917 S Green St		Chicago	IL	60643
			Resident		10918 S Eggleston Ave		Chicago	IL	60628
			Resident		10919 S Eggleston Ave		Chicago	IL	60628
			Resident		10920 S Emerald Ave		Chicago	IL	60628
			Resident		10920 S Green St		Chicago	IL	60643
			Resident		10921 S Emerald Ave		Chicago	IL	60628
			Resident		10921 S Green St		Chicago	IL	60643
			Resident		10922 S Eggleston Ave		Chicago	IL	60628
			Resident		10923 S Eggleston Ave		Chicago	IL	60628
			Resident		10924 S Eggleston Ave		Chicago	IL	60628
			Resident		10924 S Emerald Ave		Chicago	IL	60628
			Resident		10924 S Green St		Chicago	IL	60643
			Resident		10925 S Eggleston Ave		Chicago	IL	60628
			Resident		10925 S Emerald Ave		Chicago	IL	60628
			Resident		10925 S Green St		Chicago	IL	60643
			Resident		10928 S Eggleston Ave		Chicago	IL	60628
			Resident		10928 S Emerald Ave		Chicago	IL	60628
			Resident		10928 S Green St		Chicago	IL	60643
			Resident		10929 S Eggleston Ave		Chicago	IL	60628
			Resident		10929 S Emerald Ave		Chicago	IL	60628
			Resident		10929 S Green St		Chicago	IL	60643
			Resident		10930 S Eggleston Ave		Chicago	IL	60628
			Resident		10931 S Eggleston Ave		Chicago	IL	60628
			Resident		10932 S Emerald Ave		Chicago	IL	60628
			Resident		10932 S Green St		Chicago	IL	60643
			Resident		10933 S Eggleston Ave		Chicago	IL	60628
			Resident		10933 S Emerald Ave		Chicago	IL	60628
			Resident		10933 S Green St		Chicago	IL	60643
			Resident		10934 S Eggleston Ave		Chicago	IL	60628
			Resident		10936 S Emerald Ave		Chicago	IL	60628
			Resident		10936 S Green St		Chicago	IL	60643
			Resident		10937 S Eggleston Ave		Chicago	IL	60628
			Resident		10937 S Emerald Ave		Chicago	IL	60628
			Resident		10937 S Green St		Chicago	IL	60643
			Resident		10939 S Eggleston Ave		Chicago	IL	60628
			Resident		10940 S Eggleston Ave		Chicago	IL	60628
			Resident		10940 S Emerald Ave		Chicago	IL	60628
			Resident		10940 S Green St		Chicago	IL	60643
			Resident		10941 S Emerald Ave		Chicago	IL	60628
			Resident		10941 S Green St		Chicago	IL	60643
			Resident		10942 S Eggleston Ave		Chicago	IL	60628
			Resident		10943 S Eggleston Ave		Chicago	IL	60628
			Resident		10944 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		10944 S Green St		Chicago	IL	60643
			Resident		10945 S Emerald Ave		Chicago	IL	60628
			Resident		10945 S Green St		Chicago	IL	60643
			Resident		10946 S Eggleston Ave		Chicago	IL	60628
			Resident		10947 S Eggleston Ave		Chicago	IL	60628
			Resident		10948 S Eggleston Ave		Chicago	IL	60628
			Resident		10948 S Emerald Ave		Chicago	IL	60628
			Resident		10948 S Green St		Chicago	IL	60643
			Resident		10949 S Eggleston Ave		Chicago	IL	60628
			Resident		10949 S Emerald Ave		Chicago	IL	60628
			Resident		10949 S Green St		Chicago	IL	60643
			Resident		10952 S Emerald Ave		Chicago	IL	60628
			Resident		10952 S Green St		Chicago	IL	60643
			Resident		10953 S Eggleston Ave		Chicago	IL	60628
			Resident		10953 S Emerald Ave		Chicago	IL	60628
			Resident		10953 S Green St		Chicago	IL	60643
			Resident		10954 S Eggleston Ave		Chicago	IL	60628
			Resident		10956 S Emerald Ave		Chicago	IL	60628
			Resident		10956 S Green St		Chicago	IL	60643
			Resident		10957 S Emerald Ave		Chicago	IL	60628
			Resident		10957 S Green St		Chicago	IL	60643
			Resident		10958 S Eggleston Ave		Chicago	IL	60628
			Resident		11000 S Green St		Chicago	IL	60643
			Resident		11000 S Green St		Chicago	IL	60643
			Resident		11001 S Emerald Ave		Chicago	IL	60628
			Resident		11001 S Green St		Chicago	IL	60643
			Resident		11006 S Emerald Ave		Chicago	IL	60628
			Resident		11007 S Emerald Ave		Chicago	IL	60628
			Resident		11007 S Green St		Chicago	IL	60643
			Resident		11008 S Green St		Chicago	IL	60643
			Resident		11010 S Emerald Ave		Chicago	IL	60628
			Resident		11011 S Emerald Ave		Chicago	IL	60628
			Resident		11011 S Green St		Chicago	IL	60643
			Resident		11012 S Emerald Ave		Chicago	IL	60628
			Resident		11012 S Green St		Chicago	IL	60643
			Resident		11013 S. Halsted Street		Chicago	IL	60628
			Resident		11015 S Emerald Ave		Chicago	IL	60628
			Resident		11016 S Emerald Ave		Chicago	IL	60628
			Resident		11016 S Green St		Chicago	IL	60643
			Resident		11017 S Emerald Ave		Chicago	IL	60628
			Resident		11018 S Green St		Chicago	IL	60643
			Resident		11019 S Green St		Chicago	IL	60643
			Resident		11020 S Emerald Ave		Chicago	IL	60628
			Resident		11021 S Green St		Chicago	IL	60643
			Resident		11022 S Green St		Chicago	IL	60643
			Resident		11023 S Emerald Ave		Chicago	IL	60628
			Resident		11024 S Emerald Ave		Chicago	IL	60628
			Resident		11025 S Emerald Ave		Chicago	IL	60628
			Resident		11025 S Green St		Chicago	IL	60643
			Resident		11026 S Emerald Ave		Chicago	IL	60628
			Resident		11026 S Green St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11027 S Emerald Ave		Chicago	IL	60628
			Resident		11027 S Green St		Chicago	IL	60643
			Resident		11028 S Green St		Chicago	IL	60643
			Resident		11031 S Emerald Ave		Chicago	IL	60628
			Resident		11031 S Green St		Chicago	IL	60643
			Resident		11032 S Emerald Ave		Chicago	IL	60628
			Resident		11032 S Green St		Chicago	IL	60643
			Resident		11034 S Emerald Ave		Chicago	IL	60628
			Resident		11035 S Emerald Ave		Chicago	IL	60628
			Resident		11035 S Green St		Chicago	IL	60643
			Resident		11036 S Green St		Chicago	IL	60643
			Resident		11036 S. Green Street		Chicago	IL	60628
			Resident		11038 S Emerald Ave		Chicago	IL	60628
			Resident		11038 S. Green Street		Chicago	IL	60628
			Resident		11039 S Emerald Ave		Chicago	IL	60628
			Resident		11039 S Green St		Chicago	IL	60643
			Resident		11041 S Emerald Ave		Chicago	IL	60628
			Resident		11042 S Emerald Ave		Chicago	IL	60628
			Resident		11042 S. Green Street		Chicago	IL	60628
			Resident		111 W. 114th Street		Chicago	IL	60628
			Resident		11100 S Emerald Ave		Chicago	IL	60628
			Resident		11101 S Green St		Chicago	IL	60643
			Resident		11101 S Green St		Chicago	IL	60643
			Resident		11103 S Green St		Chicago	IL	60643
			Resident		11103 S Green St		Chicago	IL	60643
			Resident		11103 S Green St		Chicago	IL	60643
			Resident		11104 S Emerald Ave		Chicago	IL	60628
			Resident		11105 S Green St		Chicago	IL	60643
			Resident		11105 S Green St		Chicago	IL	60643
			Resident		11107 S Green St		Chicago	IL	60643
			Resident		11107 S Green St		Chicago	IL	60643
			Resident		11108 S Emerald Ave		Chicago	IL	60628
			Resident		11109 S Green St		Chicago	IL	60643
			Resident		11109 S Green St		Chicago	IL	60643
			Resident		11111 S Green St		Chicago	IL	60643
			Resident		11111 S Green St		Chicago	IL	60643
			Resident		11114 S Eggleston Ave		Chicago	IL	60628
			Resident		11114 S Emerald Ave		Chicago	IL	60628
			Resident		11116 S Green St		Chicago	IL	60643
			Resident		11118 S Eggleston Ave		Chicago	IL	60628
			Resident		11118 S Emerald Ave		Chicago	IL	60628
			Resident		11118 S Green St		Chicago	IL	60643
			Resident		11119 S Eggleston Ave		Chicago	IL	60628
			Resident		11119 S Emerald Ave		Chicago	IL	60628
			Resident		11120 S Eggleston Ave		Chicago	IL	60628
			Resident		11121 S Emerald Ave		Chicago	IL	60628
			Resident		11122 S Emerald Ave		Chicago	IL	60628
			Resident		11122 S Green St		Chicago	IL	60643
			Resident		11124 S Emerald Ave		Chicago	IL	60628
			Resident		11124 S Stewart Ave		Chicago	IL	60628
			Resident		11126 S Green St		Chicago	IL	60643
			Resident		11128 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11128 S Green St		Chicago	IL	60643
			Resident		11129 S Eggleston Ave		Chicago	IL	60628
			Resident		11129 S Green St		Chicago	IL	60643
			Resident		11130 S Eggleston Ave		Chicago	IL	60628
			Resident		11130 S Stewart Ave		Chicago	IL	60628
			Resident		11131 S Eggleston Ave		Chicago	IL	60628
			Resident		11131 S Emerald Ave		Chicago	IL	60628
			Resident		11132 S Emerald Ave		Chicago	IL	60628
			Resident		11132 S Green St		Chicago	IL	60643
			Resident		11133 S Eggleston Ave		Chicago	IL	60628
			Resident		11133 S Emerald Ave		Chicago	IL	60628
			Resident		11133 S Green St		Chicago	IL	60643
			Resident		11136 S Eggleston Ave		Chicago	IL	60628
			Resident		11136 S Emerald Ave		Chicago	IL	60628
			Resident		11136 S Green St		Chicago	IL	60643
			Resident		11137 S Emerald Ave		Chicago	IL	60628
			Resident		11137 S Green St		Chicago	IL	60643
			Resident		11138 S Emerald Ave		Chicago	IL	60628
			Resident		11139 S Eggleston Ave		Chicago	IL	60628
			Resident		11139 S Green St		Chicago	IL	60643
			Resident		11140 S Green St		Chicago	IL	60643
			Resident		11141 S Emerald Ave		Chicago	IL	60628
			Resident		11142 S Eggleston Ave		Chicago	IL	60628
			Resident		11142 S Emerald Ave		Chicago	IL	60628
			Resident		11143 S Emerald Ave		Chicago	IL	60628
			Resident		11143 S Green St		Chicago	IL	60643
			Resident		11144 S Eggleston Ave		Chicago	IL	60628
			Resident		11144 S Green St		Chicago	IL	60643
			Resident		11145 S Eggleston Ave		Chicago	IL	60628
			Resident		11146 S Emerald Ave		Chicago	IL	60628
			Resident		11147 S Emerald Ave		Chicago	IL	60628
			Resident		11147 S Green St		Chicago	IL	60643
			Resident		11148 S Eggleston Ave		Chicago	IL	60628
			Resident		11149 S Eggleston Ave		Chicago	IL	60628
			Resident		11149 S Green St		Chicago	IL	60643
			Resident		11150 S Eggleston Ave		Chicago	IL	60628
			Resident		11150 S Emerald Ave		Chicago	IL	60628
			Resident		11150 S Green St		Chicago	IL	60643
			Resident		11150 S Stewart Ave		Chicago	IL	60628
			Resident		11151 S Emerald Ave		Chicago	IL	60628
			Resident		11152 S Emerald Ave		Chicago	IL	60628
			Resident		11153 S Eggleston Ave		Chicago	IL	60628
			Resident		11153 S Green St		Chicago	IL	60643
			Resident		11154 S Green St		Chicago	IL	60643
			Resident		11155 S Eggleston Ave		Chicago	IL	60628
			Resident		11156 S Emerald Ave		Chicago	IL	60628
			Resident		11157 S Eggleston Ave		Chicago	IL	60628
			Resident		11158 S Green St		Chicago	IL	60643
			Resident		11159 S Green St		Chicago	IL	60643
			Resident		11200 S Emerald Ave		Chicago	IL	60628
			Resident		11200 S Green St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11200 S Stewart Ave		Chicago	IL	60628
			Resident		11201 S Emerald Ave		Chicago	IL	60628
			Resident		11201 S Green St		Chicago	IL	60643
			Resident		11204 S Emerald Ave		Chicago	IL	60628
			Resident		11204 S Green St		Chicago	IL	60643
			Resident		11204 S Stewart Ave		Chicago	IL	60628
			Resident		11205 S Green St		Chicago	IL	60643
			Resident		11207 S Emerald Ave		Chicago	IL	60628
			Resident		11208 S Emerald Ave		Chicago	IL	60628
			Resident		11208 S Green St		Chicago	IL	60643
			Resident		11209 S Emerald Ave		Chicago	IL	60628
			Resident		11209 S Green St		Chicago	IL	60643
			Resident		11210 S Green St		Chicago	IL	60643
			Resident		11210 S Stewart Ave		Chicago	IL	60628
			Resident		11211 S Emerald Ave		Chicago	IL	60628
			Resident		11212 S Emerald Ave		Chicago	IL	60628
			Resident		11212 S Stewart Ave		Chicago	IL	60628
			Resident		11213 S Green St		Chicago	IL	60643
			Resident		11215 S Emerald Ave		Chicago	IL	60628
			Resident		11215 S Green St		Chicago	IL	60643
			Resident		11216 S Emerald Ave		Chicago	IL	60628
			Resident		11216 S Stewart Ave		Chicago	IL	60628
			Resident		11219 S Green St		Chicago	IL	60643
			Resident		11220 S Emerald Ave		Chicago	IL	60628
			Resident		11221 S Emerald Ave		Chicago	IL	60628
			Resident		11222 S Green St		Chicago	IL	60643
			Resident		11223 S Green St		Chicago	IL	60643
			Resident		11224 S Emerald Ave		Chicago	IL	60628
			Resident		11224 S Stewart Ave		Chicago	IL	60628
			Resident		11225 S Emerald Ave		Chicago	IL	60628
			Resident		11225 S Emerald Ave		Chicago	IL	60628
			Resident		11226 S Green St		Chicago	IL	60643
			Resident		11227 S Green St		Chicago	IL	60643
			Resident		11229 S Emerald Ave		Chicago	IL	60628
			Resident		11229 S Stewart Ave		Chicago	IL	60628
			Resident		11230 S Green St		Chicago	IL	60643
			Resident		11230 S Stewart Ave		Chicago	IL	60628
			Resident		11231 S Green St		Chicago	IL	60643
			Resident		11232 S Emerald Ave		Chicago	IL	60628
			Resident		11232 S Green St		Chicago	IL	60643
			Resident		11233 S Emerald Ave		Chicago	IL	60628
			Resident		11233 S Green St		Chicago	IL	60643
			Resident		11234 S Stewart Ave		Chicago	IL	60628
			Resident		11236 S Emerald Ave		Chicago	IL	60628
			Resident		11236 S Green St		Chicago	IL	60643
			Resident		11236 S Stewart Ave		Chicago	IL	60628
			Resident		11237 S Emerald Ave		Chicago	IL	60628
			Resident		11237 S Green St		Chicago	IL	60643
			Resident		11240 S Emerald Ave		Chicago	IL	60628
			Resident		11240 S Stewart Ave		Chicago	IL	60628
			Resident		11241 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11241 S Green St		Chicago	IL	60643
			Resident		11241 S Stewart Ave		Chicago	IL	60628
			Resident		11241 S Stewart Ave		Chicago	IL	60628
			Resident		11243 S Green St		Chicago	IL	60643
			Resident		11244 S Emerald Ave		Chicago	IL	60628
			Resident		11244 S Green St		Chicago	IL	60643
			Resident		11244 S Stewart Ave		Chicago	IL	60628
			Resident		11245 S Emerald Ave		Chicago	IL	60628
			Resident		11246 S Green St		Chicago	IL	60643
			Resident		11246 S Stewart Ave		Chicago	IL	60628
			Resident		11247 S Green St		Chicago	IL	60643
			Resident		11248 S Emerald Ave		Chicago	IL	60628
			Resident		11249 S Emerald Ave		Chicago	IL	60628
			Resident		11250 S Green St		Chicago	IL	60643
			Resident		11251 S Green St		Chicago	IL	60643
			Resident		11252 S Emerald Ave		Chicago	IL	60628
			Resident		11252 S Stewart Ave		Chicago	IL	60628
			Resident		11254 S Stewart Ave		Chicago	IL	60628
			Resident		11255 S Green St		Chicago	IL	60643
			Resident		11256 S Emerald Ave		Chicago	IL	60628
			Resident		11258 S Green St		Chicago	IL	60643
			Resident		11259 S Green St		Chicago	IL	60643
			Resident		11300 S Green St		Chicago	IL	60643
			Resident		11300 S Stewart Ave		Chicago	IL	60628
			Resident		11300 S Wentworth Ave		Chicago	IL	60628
			Resident		11301 S Emerald Ave		Chicago	IL	60628
			Resident		11301 S Green St		Chicago	IL	60643
			Resident		11301 S Stewart Ave		Chicago	IL	60628
			Resident		11303 S Stewart Ave		Chicago	IL	60628
			Resident		11304 S Green St		Chicago	IL	60643
			Resident		11304 S Stewart Ave		Chicago	IL	60628
			Resident		11305 S Green St		Chicago	IL	60643
			Resident		11305 S Stewart Ave		Chicago	IL	60628
			Resident		11306 S Church St		Chicago	IL	60643
			Resident		11307 S Emerald Ave		Chicago	IL	60628
			Resident		11308 S Stewart Ave		Chicago	IL	60628
			Resident		11308 S Wentworth Ave		Chicago	IL	60628
			Resident		11309 S Stewart Ave		Chicago	IL	60628
			Resident		11310 S Green St		Chicago	IL	60643
			Resident		11310 S Stewart Ave		Chicago	IL	60628
			Resident		11311 S Emerald Ave		Chicago	IL	60628
			Resident		11311 S Green St		Chicago	IL	60643
			Resident		11311 S Stewart Ave		Chicago	IL	60628
			Resident		11312 S Wentworth Ave		Chicago	IL	60628
			Resident		11314 S Green St		Chicago	IL	60643
			Resident		11314 S Wentworth Ave		Chicago	IL	60628
			Resident		11314 S Yale Ave		Chicago	IL	60628
			Resident		11315 S Emerald Ave		Chicago	IL	60628
			Resident		11315 S Green St		Chicago	IL	60643
			Resident		11315 S Stewart Ave		Chicago	IL	60628
			Resident		11315 S Yale Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11316 S Harvard Ave		Chicago	IL	60628
			Resident		11318 S Green St		Chicago	IL	60643
			Resident		11319 S Green St		Chicago	IL	60643
			Resident		11319 S Princeton Ave		Chicago	IL	60628
			Resident		11320 S Emerald Ave		Chicago	IL	60628
			Resident		11320 S Harvard Ave		Chicago	IL	60628
			Resident		11320 S Stewart Ave		Chicago	IL	60628
			Resident		11320 S Wentworth Ave		Chicago	IL	60628
			Resident		11321 S Princeton Ave		Chicago	IL	60628
			Resident		11321 S Stewart Ave		Chicago	IL	60628
			Resident		11321 S Yale Ave		Chicago	IL	60628
			Resident		11322 S Green St		Chicago	IL	60643
			Resident		11322 S Yale Ave		Chicago	IL	60628
			Resident		11323 S Green St		Chicago	IL	60643
			Resident		11324 S Stewart Ave		Chicago	IL	60628
			Resident		11324 S Wentworth Ave		Chicago	IL	60628
			Resident		11325 S Emerald Ave		Chicago	IL	60628
			Resident		11325 S Stewart Ave		Chicago	IL	60628
			Resident		11326 S Emerald Ave		Chicago	IL	60628
			Resident		11326 S Green St		Chicago	IL	60643
			Resident		11326 S Harvard Ave		Chicago	IL	60628
			Resident		11326 S Yale Ave		Chicago	IL	60628
			Resident		11327 S Green St		Chicago	IL	60643
			Resident		11327 S Harvard Ave		Chicago	IL	60628
			Resident		11327 S Princeton Ave		Chicago	IL	60628
			Resident		11328 S Stewart Ave		Chicago	IL	60628
			Resident		11329 S Emerald Ave		Chicago	IL	60628
			Resident		11329 S Harvard Ave		Chicago	IL	60628
			Resident		11329 S Stewart Ave		Chicago	IL	60628
			Resident		11330 S Emerald Ave		Chicago	IL	60628
			Resident		11330 S Green St		Chicago	IL	60643
			Resident		11330 S Harvard Ave		Chicago	IL	60628
			Resident		11330 S Stewart Ave		Chicago	IL	60628
			Resident		11330 S Wentworth Ave		Chicago	IL	60628
			Resident		11330 S Yale Ave		Chicago	IL	60628
			Resident		11331 S Green St		Chicago	IL	60643
			Resident		11331 S Harvard Ave		Chicago	IL	60628
			Resident		11331 S Yale Ave		Chicago	IL	60628
			Resident		11333 S Emerald Ave		Chicago	IL	60628
			Resident		11333 S Stewart Ave		Chicago	IL	60628
			Resident		11334 S Emerald Ave		Chicago	IL	60628
			Resident		11334 S Green St		Chicago	IL	60643
			Resident		11334 S Harvard Ave		Chicago	IL	60628
			Resident		11334 S Wentworth Ave		Chicago	IL	60628
			Resident		11334 S Yale Ave		Chicago	IL	60628
			Resident		11335 S Green St		Chicago	IL	60643
			Resident		11336 S Harvard Ave		Chicago	IL	60628
			Resident		11336 S Yale Ave		Chicago	IL	60628
			Resident		11338 S Emerald Ave		Chicago	IL	60628
			Resident		11338 S Green St		Chicago	IL	60643
			Resident		11338 S Wentworth Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11339 S Emerald Ave		Chicago	IL	60628
			Resident		11339 S Green St		Chicago	IL	60643
			Resident		11339 S Harvard Ave		Chicago	IL	60628
			Resident		11339 S Harvard Ave		Chicago	IL	60628
			Resident		11339 S Stewart Ave		Chicago	IL	60628
			Resident		11339 S Yale Ave		Chicago	IL	60628
			Resident		11340 S Emerald Ave		Chicago	IL	60628
			Resident		11340 S Harvard Ave		Chicago	IL	60628
			Resident		11340 S Princeton Ave		Chicago	IL	60628
			Resident		11342 S Green St		Chicago	IL	60643
			Resident		11342 S Princeton Ave		Chicago	IL	60628
			Resident		11343 S Emerald Ave		Chicago	IL	60628
			Resident		11343 S Green St		Chicago	IL	60643
			Resident		11343 S Stewart Ave		Chicago	IL	60628
			Resident		11344 S Emerald Ave		Chicago	IL	60628
			Resident		11344 S Harvard Ave		Chicago	IL	60628
			Resident		11344 S Stewart Ave		Chicago	IL	60628
			Resident		11344 S Wentworth Ave		Chicago	IL	60628
			Resident		11345 S Harvard Ave		Chicago	IL	60628
			Resident		11346 S Green St		Chicago	IL	60643
			Resident		11346 S Harvard Ave		Chicago	IL	60628
			Resident		11347 S Green St		Chicago	IL	60643
			Resident		11347 S Stewart Ave		Chicago	IL	60628
			Resident		11348 S Emerald Ave		Chicago	IL	60628
			Resident		11348 S Stewart Ave		Chicago	IL	60628
			Resident		11349 S Emerald Ave		Chicago	IL	60628
			Resident		11349 S Wentworth Ave		Chicago	IL	60628
			Resident		11350 S Green St		Chicago	IL	60643
			Resident		11350 S Stewart Ave		Chicago	IL	60628
			Resident		11350 S Wentworth Ave		Chicago	IL	60628
			Resident		11351 S Green St		Chicago	IL	60643
			Resident		11351 S Stewart Ave		Chicago	IL	60628
			Resident		11352 S Emerald Ave		Chicago	IL	60628
			Resident		11353 S Emerald Ave		Chicago	IL	60628
			Resident		11354 S Green St		Chicago	IL	60643
			Resident		11355 S Green St		Chicago	IL	60643
			Resident		11356 S Emerald Ave		Chicago	IL	60628
			Resident		11356 S Stewart Ave		Chicago	IL	60628
			Resident		11357 S Emerald Ave		Chicago	IL	60628
			Resident		11358 S Green St		Chicago	IL	60643
			Resident		11359 S Green St		Chicago	IL	60643
			Resident		11400 S Emerald Ave		Chicago	IL	60628
			Resident		11401 S Emerald Ave		Chicago	IL	60628
			Resident		11404 S Emerald Ave		Chicago	IL	60628
			Resident		11407 S Emerald Ave		Chicago	IL	60628
			Resident		11408 S Emerald Ave		Chicago	IL	60628
			Resident		11410 S Emerald Ave		Chicago	IL	60628
			Resident		11411 S Emerald Ave		Chicago	IL	60628
			Resident		11412 S Harvard Ave		Chicago	IL	60628
			Resident		11412 S Harvard Ave		Chicago	IL	60628
			Resident		11412 S Princeton Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11412 S Yale Ave		Chicago	IL	60628
			Resident		11413 S Princeton Ave		Chicago	IL	60628
			Resident		11413 S Yale Ave		Chicago	IL	60628
			Resident		11414 S Emerald Ave		Chicago	IL	60628
			Resident		11415 S Emerald Ave		Chicago	IL	60628
			Resident		11415 S Harvard Ave		Chicago	IL	60628
			Resident		11416 S Yale Ave		Chicago	IL	60628
			Resident		11417 S Princeton Ave		Chicago	IL	60628
			Resident		11418 S Emerald Ave		Chicago	IL	60628
			Resident		11418 S Harvard Ave		Chicago	IL	60628
			Resident		11418 S Princeton Ave		Chicago	IL	60628
			Resident		11419 S Emerald Ave		Chicago	IL	60628
			Resident		11419 S Harvard Ave		Chicago	IL	60628
			Resident		11420 S Princeton Ave		Chicago	IL	60628
			Resident		11420 S Yale Ave		Chicago	IL	60628
			Resident		11421 S Yale Ave		Chicago	IL	60628
			Resident		11422 S Emerald Ave		Chicago	IL	60628
			Resident		11422 S Harvard Ave		Chicago	IL	60628
			Resident		11422 S Princeton Ave		Chicago	IL	60628
			Resident		11422 S Yale Ave		Chicago	IL	60628
			Resident		11423 S Emerald Ave		Chicago	IL	60628
			Resident		11423 S Harvard Ave		Chicago	IL	60628
			Resident		11423 S Princeton Ave		Chicago	IL	60628
			Resident		11423 S Wentworth Ave		Chicago	IL	60628
			Resident		11423 S Yale Ave		Chicago	IL	60628
			Resident		11426 S Emerald Ave		Chicago	IL	60628
			Resident		11426 S Princeton Ave		Chicago	IL	60628
			Resident		11426 S Yale Ave		Chicago	IL	60628
			Resident		11427 S Emerald Ave		Chicago	IL	60628
			Resident		11427 S Harvard Ave		Chicago	IL	60628
			Resident		11427 S Yale Ave		Chicago	IL	60628
			Resident		11428 S Emerald Ave		Chicago	IL	60628
			Resident		11428 S Harvard Ave		Chicago	IL	60628
			Resident		11428 S Princeton Ave		Chicago	IL	60628
			Resident		11429 S Emerald Ave		Chicago	IL	60628
			Resident		11429 S Harvard Ave		Chicago	IL	60628
			Resident		11431 S Harvard Ave		Chicago	IL	60628
			Resident		11431 S Yale Ave		Chicago	IL	60628
			Resident		11432 S Emerald Ave		Chicago	IL	60628
			Resident		11432 S Wentworth Ave		Chicago	IL	60628
			Resident		11433 S Emerald Ave		Chicago	IL	60628
			Resident		11433 S Harvard Ave		Chicago	IL	60628
			Resident		11433 S Princeton Ave		Chicago	IL	60628
			Resident		11434 S Harvard Ave		Chicago	IL	60628
			Resident		11434 S Princeton Ave		Chicago	IL	60628
			Resident		11435 S Yale Ave		Chicago	IL	60628
			Resident		11436 S Emerald Ave		Chicago	IL	60628
			Resident		11436 S Harvard Ave		Chicago	IL	60628
			Resident		11436 S Wentworth Ave		Chicago	IL	60628
			Resident		11436 S Yale Ave		Chicago	IL	60628
			Resident		11437 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11437 S Princeton Ave		Chicago	IL	60628
			Resident		11438 S Harvard Ave		Chicago	IL	60628
			Resident		11438 S Princeton Ave		Chicago	IL	60628
			Resident		11438 S Wentworth Ave		Chicago	IL	60628
			Resident		11439 S Harvard Ave		Chicago	IL	60628
			Resident		11439 S Princeton Ave		Chicago	IL	60628
			Resident		11440 S Emerald Ave		Chicago	IL	60628
			Resident		11441 S Emerald Ave		Chicago	IL	60628
			Resident		11441 S Princeton Ave		Chicago	IL	60628
			Resident		11441 S Wentworth Ave		Chicago	IL	60628
			Resident		11441 S Yale Ave		Chicago	IL	60628
			Resident		11442 S Emerald Ave		Chicago	IL	60628
			Resident		11442 S Harvard Ave		Chicago	IL	60628
			Resident		11442 S Princeton Ave		Chicago	IL	60628
			Resident		11442 S Wentworth Ave		Chicago	IL	60628
			Resident		11442 S Yale Ave		Chicago	IL	60628
			Resident		11443 S Emerald Ave		Chicago	IL	60628
			Resident		11443 S Yale Ave		Chicago	IL	60628
			Resident		11446 S Emerald Ave		Chicago	IL	60628
			Resident		11446 S Wentworth Ave		Chicago	IL	60628
			Resident		11449 S Emerald Ave		Chicago	IL	60628
			Resident		11450 S Emerald Ave		Chicago	IL	60628
			Resident		11455 S Emerald Ave		Chicago	IL	60628
			Resident		11456 S Emerald Ave		Chicago	IL	60628
			Resident		11514 S Yale Ave		Chicago	IL	60628
			Resident		11515 S Perry Ave		Chicago	IL	60628
			Resident		11516 S Yale Ave		Chicago	IL	60628
			Resident		11517 S Church St		Chicago	IL	60643
			Resident		11517 S Perry Ave		Chicago	IL	60628
			Resident		11517 S Wentworth Ave		Chicago	IL	60628
			Resident		11518 S Perry Ave		Chicago	IL	60628
			Resident		11518 S Wentworth Ave		Chicago	IL	60628
			Resident		11520 S Wentworth Ave		Chicago	IL	60628
			Resident		11521 S Perry Ave		Chicago	IL	60628
			Resident		11521 S Perry Ave		Chicago	IL	60628
			Resident		11522 S Yale Ave		Chicago	IL	60628
			Resident		11523 S Yale Ave		Chicago	IL	60628
			Resident		11524 S Perry Ave		Chicago	IL	60628
			Resident		11526 S Wentworth Ave		Chicago	IL	60628
			Resident		11527 S Yale Ave		Chicago	IL	60628
			Resident		11528 S Perry Ave		Chicago	IL	60628
			Resident		11528 S Yale Ave		Chicago	IL	60628
			Resident		11530 S Wentworth Ave		Chicago	IL	60628
			Resident		11530 S Yale Ave		Chicago	IL	60628
			Resident		11532 S Lafayette Ave		Chicago	IL	60628
			Resident		11532 S Yale Ave		Chicago	IL	60628
			Resident		11534 S Lafayette Ave		Chicago	IL	60628
			Resident		11536 S Wentworth Ave		Chicago	IL	60628
			Resident		11537 S Perry Ave		Chicago	IL	60628
			Resident		11538 S Lafayette Ave		Chicago	IL	60628
			Resident		11538 S Wentworth Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11538 S Yale Ave		Chicago	IL	60628
			Resident		11539 S Wentworth Ave		Chicago	IL	60628
			Resident		11539 S Wentworth Ave		Chicago	IL	60628
			Resident		11540 S Lafayette Ave		Chicago	IL	60628
			Resident		11541 S Lafayette Ave		Chicago	IL	60628
			Resident		11541 S Michigan Ave		Chicago	IL	60628
			Resident		11542 S Michigan Ave		Chicago	IL	60628
			Resident		11542 S Wentworth Ave		Chicago	IL	60628
			Resident		11543 S Michigan Ave		Chicago	IL	60628
			Resident		11543 S Wentworth Ave		Chicago	IL	60628
			Resident		11544 S Perry Ave		Chicago	IL	60628
			Resident		11545 S Perry Ave		Chicago	IL	60628
			Resident		11546 S State St		Chicago	IL	60628
			Resident		11546 S Wentworth Ave		Chicago	IL	60628
			Resident		11547 S Wentworth Ave		Chicago	IL	60628
			Resident		11547 S Yale Ave		Chicago	IL	60628
			Resident		11548 S Lafayette Ave		Chicago	IL	60628
			Resident		11548 S Perry Ave		Chicago	IL	60628
			Resident		11548 S State St		Chicago	IL	60628
			Resident		11548 S Yale Ave		Chicago	IL	60628
			Resident		11549 S Lafayette Ave		Chicago	IL	60628
			Resident		11549 S Perry Ave		Chicago	IL	60628
			Resident		11549 S Perry Ave		Chicago	IL	60628
			Resident		11549 S Yale Ave		Chicago	IL	60628
			Resident		11550 S Lafayette Ave		Chicago	IL	60628
			Resident		11550 S Perry Ave		Chicago	IL	60628
			Resident		11551 S Yale Ave		Chicago	IL	60628
			Resident		11555 S Yale Ave		Chicago	IL	60628
			Resident		11556 S State St		Chicago	IL	60628
			Resident		11559 S Wentworth Ave		Chicago	IL	60628
			Resident		11560 S State St		Chicago	IL	60628
			Resident		11564 S State St		Chicago	IL	60628
			Resident		11568 S State St		Chicago	IL	60628
			Resident		11569 S State St		Chicago	IL	60628
			Resident		11571 S Wentworth Ave		Chicago	IL	60628
			Resident		11572 S State St		Chicago	IL	60628
			Resident		11572 S Wabash Ave		Chicago	IL	60628
			Resident		11573 S State St		Chicago	IL	60628
			Resident		11574 S Wabash Ave		Chicago	IL	60628
			Resident		11576 S State St		Chicago	IL	60628
			Resident		11576 S State St		Chicago	IL	60628
			Resident		11579 S Wentworth Ave		Chicago	IL	60628
			Resident		11583 S State St		Chicago	IL	60628
			Resident		11586 S State St		Chicago	IL	60628
			Resident		11586 S State St		Chicago	IL	60628
			Resident		11592 S Michigan Ave		Chicago	IL	60628
			Resident		116 E. 117th Street		Chicago	IL	60628
			Resident		116 W. 115th Street	#1	Chicago	IL	60628
			Resident		116 W. 115th Street	#2	Chicago	IL	60628
			Resident		11600 S Michigan Ave		Chicago	IL	60628
			Resident		11601 S State St		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11605 S State St		Chicago	IL	60628
			Resident		11608 S Michigan Ave		Chicago	IL	60628
			Resident		11610 S Michigan Ave		Chicago	IL	60628
			Resident		11610 S State St		Chicago	IL	60628
			Resident		11611 S Michigan Ave		Chicago	IL	60628
			Resident		11611 S State St		Chicago	IL	60628
			Resident		11614 S Prairie Ave		Chicago	IL	60628
			Resident		11614 S State St		Chicago	IL	60628
			Resident		11615 S Prairie Ave		Chicago	IL	60628
			Resident		11618 S Prairie Ave		Chicago	IL	60628
			Resident		11618 S State St		Chicago	IL	60628
			Resident		11619 S Prairie Ave		Chicago	IL	60628
			Resident		11620 S Prairie Ave		Chicago	IL	60628
			Resident		11620 S State St		Chicago	IL	60628
			Resident		11622 S Prairie Ave		Chicago	IL	60628
			Resident		11623 S Prairie Ave		Chicago	IL	60628
			Resident		11624 S Prairie Ave		Chicago	IL	60628
			Resident		11626 S Michigan Ave		Chicago	IL	60628
			Resident		11626 S Prairie Ave		Chicago	IL	60628
			Resident		11628 S State St		Chicago	IL	60628
			Resident		11630 S Prairie Ave		Chicago	IL	60628
			Resident		11634 S Prairie Ave		Chicago	IL	60628
			Resident		11642 S. Halsted Street		Chicago	IL	60628
			Resident		11644 S. Halsted Street		Chicago	IL	60628
			Resident		117 W. 114th Street		Chicago	IL	60628
			Resident		11700 S Michigan Ave		Chicago	IL	60628
			Resident		11700 S Peoria St		Chicago	IL	60643
			Resident		11701 S Peoria St		Chicago	IL	60643
			Resident		11704 S Peoria St		Chicago	IL	60643
			Resident		11706 S Peoria St		Chicago	IL	60643
			Resident		11708 S Indiana Ave		Chicago	IL	60628
			Resident		11709 S Indiana Ave		Chicago	IL	60628
			Resident		11709 S Peoria St		Chicago	IL	60643
			Resident		11709 S Peoria St		Chicago	IL	60643
			Resident		11710 S Peoria St		Chicago	IL	60643
			Resident		11710 S. Halsted Street		Chicago	IL	60628
			Resident		11711 S Indiana Ave		Chicago	IL	60628
			Resident		11712 S Peoria St		Chicago	IL	60643
			Resident		11714 S Indiana Ave		Chicago	IL	60628
			Resident		11715 S Indiana Ave		Chicago	IL	60628
			Resident		11715 S. Calumet	#1	Chicago	IL	60628
			Resident		11715 S. Calumet	#2	Chicago	IL	60628
			Resident		11716 S Peoria St		Chicago	IL	60643
			Resident		11717 S Peoria St		Chicago	IL	60643
			Resident		11718 S Indiana Ave		Chicago	IL	60628
			Resident		11718 S Peoria St		Chicago	IL	60643
			Resident		11718 S Prairie Ave		Chicago	IL	60628
			Resident		11719 S Peoria St		Chicago	IL	60643
			Resident		11719 S. Calumet		Chicago	IL	60628
			Resident		11720 S Peoria St		Chicago	IL	60643
			Resident		11720 S. Halsted Street		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11721 S Indiana Ave		Chicago	IL	60628
			Resident		11721 S Peoria St		Chicago	IL	60643
			Resident		11721 S. Calumet	#1	Chicago	IL	60628
			Resident		11721 S. Calumet	#2	Chicago	IL	60628
			Resident		11722 S Peoria St		Chicago	IL	60643
			Resident		11722 S Prairie Ave		Chicago	IL	60628
			Resident		11723 S. Calumet		Chicago	IL	60628
			Resident		11724 S Peoria St		Chicago	IL	60643
			Resident		11724 S Prairie Ave		Chicago	IL	60628
			Resident		11724 S. Halsted Street		Chicago	IL	60628
			Resident		11726 S Peoria St		Chicago	IL	60643
			Resident		11726 S Prairie Ave		Chicago	IL	60628
			Resident		11727 S Peoria St		Chicago	IL	60643
			Resident		11727 S. Calumet		Chicago	IL	60628
			Resident		11731 S. Calumet	#1	Chicago	IL	60628
			Resident		11731 S. Calumet	#2	Chicago	IL	60628
			Resident		11733 S Peoria St		Chicago	IL	60643
			Resident		11734 S Prairie Ave		Chicago	IL	60628
			Resident		11735 S Indiana Ave		Chicago	IL	60628
			Resident		11735 S Peoria St		Chicago	IL	60643
			Resident		11736 S Peoria St		Chicago	IL	60643
			Resident		11737 S Peoria St		Chicago	IL	60643
			Resident		11738 S Prairie Ave		Chicago	IL	60628
			Resident		11739 S Peoria St		Chicago	IL	60643
			Resident		11740 S Peoria St		Chicago	IL	60643
			Resident		11744 S Peoria St		Chicago	IL	60643
			Resident		11745 S Indiana Ave		Chicago	IL	60628
			Resident		11745 S Indiana Ave		Chicago	IL	60628
			Resident		11745 S Peoria St		Chicago	IL	60643
			Resident		11745 S. Halsted Street		Chicago	IL	60628
			Resident		11748 S Indiana Ave		Chicago	IL	60628
			Resident		11749 S Peoria St		Chicago	IL	60643
			Resident		11752 S Indiana Ave		Chicago	IL	60628
			Resident		11753 S Peoria St		Chicago	IL	60643
			Resident		11753 S. Halsted Street		Chicago	IL	60628
			Resident		11755 S Peoria St		Chicago	IL	60643
			Resident		11756 S Peoria St		Chicago	IL	60643
			Resident		11759 S. Halsted Street		Chicago	IL	60628
			Resident		11763 S. Halsted Street		Chicago	IL	60628
			Resident		118 E. 117th Street		Chicago	IL	60628
			Resident		11800 S Peoria St		Chicago	IL	60643
			Resident		11800 S Peoria St		Chicago	IL	60643
			Resident		11801 S Prairie Ave		Chicago	IL	60628
			Resident		11801 S. Prairie		Chicago	IL	60628
			Resident		11805 S Peoria St		Chicago	IL	60643
			Resident		11805 S Peoria St		Chicago	IL	60643
			Resident		11806 S Peoria St		Chicago	IL	60643
			Resident		11806 S Peoria St		Chicago	IL	60643
			Resident		11807 S Indiana Ave		Chicago	IL	60628
			Resident		11807 S Peoria St		Chicago	IL	60643
			Resident		11807 S Peoria St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11808 S Peoria St		Chicago	IL	60643
			Resident		11808 S Peoria St		Chicago	IL	60643
			Resident		11809 S Indiana Ave		Chicago	IL	60628
			Resident		11811 S Peoria St		Chicago	IL	60643
			Resident		11811 S Peoria St		Chicago	IL	60643
			Resident		11812 S Peoria St		Chicago	IL	60643
			Resident		11812 S Peoria St		Chicago	IL	60643
			Resident		11814 S Prairie Ave		Chicago	IL	60628
			Resident		11815 S Peoria St		Chicago	IL	60643
			Resident		11815 S Peoria St		Chicago	IL	60643
			Resident		11817 S Prairie Ave		Chicago	IL	60628
			Resident		11818 S Peoria St		Chicago	IL	60643
			Resident		11819 S Peoria St		Chicago	IL	60643
			Resident		11819 S Peoria St		Chicago	IL	60643
			Resident		11820 S Prairie Ave		Chicago	IL	60628
			Resident		11821 S Indiana Ave		Chicago	IL	60628
			Resident		11821 S Peoria St		Chicago	IL	60643
			Resident		11821 S Peoria St		Chicago	IL	60643
			Resident		11821 S Prairie Ave		Chicago	IL	60628
			Resident		11822 S Prairie Ave		Chicago	IL	60628
			Resident		11823 S Peoria St		Chicago	IL	60643
			Resident		11823 S Peoria St		Chicago	IL	60643
			Resident		11824 S Peoria St		Chicago	IL	60643
			Resident		11824 S Peoria St		Chicago	IL	60643
			Resident		11825 S Prairie Ave		Chicago	IL	60628
			Resident		11826 S Prairie Ave		Chicago	IL	60628
			Resident		11828 S Peoria St		Chicago	IL	60643
			Resident		11828 S Peoria St		Chicago	IL	60643
			Resident		11828 S Prairie Ave		Chicago	IL	60628
			Resident		11829 S Prairie Ave		Chicago	IL	60628
			Resident		11831 S Indiana Ave		Chicago	IL	60628
			Resident		11831 S Indiana Ave		Chicago	IL	60628
			Resident		11831 S Prairie Ave		Chicago	IL	60628
			Resident		11832 S Prairie Ave		Chicago	IL	60628
			Resident		11833 S Indiana Ave		Chicago	IL	60628
			Resident		11833 S Prairie Ave		Chicago	IL	60628
			Resident		11834 S Indiana Ave		Chicago	IL	60628
			Resident		11834 S Peoria St		Chicago	IL	60643
			Resident		11834 S Peoria St		Chicago	IL	60643
			Resident		11834 S Prairie Ave		Chicago	IL	60628
			Resident		11835 S Peoria St		Chicago	IL	60643
			Resident		11835 S Peoria St		Chicago	IL	60643
			Resident		11836 S Indiana Ave		Chicago	IL	60628
			Resident		11836 S Peoria St		Chicago	IL	60643
			Resident		11836 S Peoria St		Chicago	IL	60643
			Resident		11837 S Indiana Ave		Chicago	IL	60628
			Resident		11837 S Prairie Ave		Chicago	IL	60628
			Resident		11838 S Indiana Ave		Chicago	IL	60628
			Resident		11838 S Peoria St		Chicago	IL	60643
			Resident		11838 S Peoria St		Chicago	IL	60643
			Resident		11838 S Prairie Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		11839 S Indiana Ave		Chicago	IL	60628
			Resident		11841 S Indiana Ave		Chicago	IL	60628
			Resident		11841 S Prairie Ave		Chicago	IL	60628
			Resident		11845 S Indiana Ave		Chicago	IL	60628
			Resident		11845 S Prairie Ave		Chicago	IL	60628
			Resident		11848 S Indiana Ave		Chicago	IL	60628
			Resident		11853 S Indiana Ave		Chicago	IL	60628
			Resident		11915 S Emerald Ave		Chicago	IL	60628
			Resident		11925 S Emerald Ave		Chicago	IL	60628
			Resident		11927 S Prairie Ave		Chicago	IL	60628
			Resident		11931 S Prairie Ave		Chicago	IL	60628
			Resident		11935 S Emerald Ave		Chicago	IL	60628
			Resident		11936 S Prairie Ave		Chicago	IL	60628
			Resident		11952 S Prairie Ave		Chicago	IL	60628
			Resident		11953 S Prairie Ave		Chicago	IL	60628
			Resident		11959 S Prairie Ave		Chicago	IL	60628
			Resident		12000 S Halsted St		Chicago	IL	60628
			Resident		12001 S Halsted St		Chicago	IL	60628
			Resident		12003 S Halsted St		Chicago	IL	60628
			Resident		12004 S Emerald Ave		Chicago	IL	60628
			Resident		12011 S Union Ave		Chicago	IL	60628
			Resident		12012 S Emerald Ave		Chicago	IL	60628
			Resident		12014 S Union Ave		Chicago	IL	60628
			Resident		12015 S Union Ave		Chicago	IL	60628
			Resident		12018 S Union Ave		Chicago	IL	60628
			Resident		12022 S Halsted St		Chicago	IL	60628
			Resident		12023 S Union Ave		Chicago	IL	60628
			Resident		12024 S Union Ave		Chicago	IL	60628
			Resident		12029 S Union Ave		Chicago	IL	60628
			Resident		12032 S Union Ave		Chicago	IL	60628
			Resident		12033 S Halsted St		Chicago	IL	60628
			Resident		12034 S Union Ave		Chicago	IL	60628
			Resident		12039 S Union Ave		Chicago	IL	60628
			Resident		12043 S Union Ave		Chicago	IL	60628
			Resident		12045 S Union Ave		Chicago	IL	60628
			Resident		12046 S Union Ave		Chicago	IL	60628
			Resident		12047 S Union Ave		Chicago	IL	60628
			Resident		12049 S Union Ave		Chicago	IL	60628
			Resident		12050 S Emerald Ave		Chicago	IL	60628
			Resident		12051 S Union Ave		Chicago	IL	60628
			Resident		12054 S Union Ave		Chicago	IL	60628
			Resident		12102 S Emerald Ave		Chicago	IL	60628
			Resident		12103 S Emerald Ave		Chicago	IL	60628
			Resident		12105 S Halsted St		Chicago	IL	60628
			Resident		12106 S Emerald Ave		Chicago	IL	60628
			Resident		12107 S Emerald Ave		Chicago	IL	60628
			Resident		12107 S Halsted St		Chicago	IL	60628
			Resident		12110 S Halsted St		Chicago	IL	60628
			Resident		12111 S Emerald Ave		Chicago	IL	60628
			Resident		12114 S Emerald Ave		Chicago	IL	60628
			Resident		12114 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		12115 S Emerald Ave		Chicago	IL	60628
			Resident		12117 S Emerald Ave		Chicago	IL	60628
			Resident		12118 S Emerald Ave		Chicago	IL	60628
			Resident		12119 S Emerald Ave		Chicago	IL	60628
			Resident		12120 S Halsted St		Chicago	IL	60628
			Resident		12123 S Emerald Ave		Chicago	IL	60628
			Resident		12124 S Emerald Ave		Chicago	IL	60628
			Resident		12125 S Emerald Ave		Chicago	IL	60628
			Resident		12125 S Halsted St		Chicago	IL	60628
			Resident		12126 S Halsted St		Chicago	IL	60628
			Resident		12128 S Emerald Ave		Chicago	IL	60628
			Resident		12128 S Halsted St		Chicago	IL	60628
			Resident		12128 S Halsted St		Chicago	IL	60628
			Resident		12129 S Emerald Ave		Chicago	IL	60628
			Resident		12131 S Emerald Ave		Chicago	IL	60628
			Resident		12131 S Green St		Chicago	IL	60643
			Resident		12132 S Emerald Ave		Chicago	IL	60628
			Resident		12136 S Emerald Ave		Chicago	IL	60628
			Resident		12137 S Emerald Ave		Chicago	IL	60628
			Resident		12137 S Green St		Chicago	IL	60643
			Resident		12138 S Emerald Ave		Chicago	IL	60628
			Resident		12141 S Emerald Ave		Chicago	IL	60628
			Resident		12141 S Green St		Chicago	IL	60643
			Resident		12142 S Emerald Ave		Chicago	IL	60628
			Resident		12142 S Halsted St		Chicago	IL	60628
			Resident		12143 S Emerald Ave		Chicago	IL	60628
			Resident		12143 S Green St		Chicago	IL	60643
			Resident		12143 S Halsted St		Chicago	IL	60628
			Resident		12147 S Emerald Ave		Chicago	IL	60628
			Resident		12148 S Emerald Ave		Chicago	IL	60628
			Resident		12151 S Emerald Ave		Chicago	IL	60628
			Resident		12154 S Emerald Ave		Chicago	IL	60628
			Resident		12155 S Emerald Ave		Chicago	IL	60628
			Resident		12155 S Halsted St		Chicago	IL	60628
			Resident		12156 S Emerald Ave		Chicago	IL	60628
			Resident		12200 S Emerald Ave		Chicago	IL	60628
			Resident		12205 S Emerald Ave		Chicago	IL	60628
			Resident		12208 S Emerald Ave		Chicago	IL	60628
			Resident		12210 S Green St		Chicago	IL	60643
			Resident		12211 S Green St		Chicago	IL	60643
			Resident		12214 S Emerald Ave		Chicago	IL	60628
			Resident		12214 S Green St		Chicago	IL	60643
			Resident		12215 S Green St		Chicago	IL	60643
			Resident		12216 S Emerald Ave		Chicago	IL	60628
			Resident		12216 S Green St		Chicago	IL	60643
			Resident		12217 S Halsted St		Chicago	IL	60628
			Resident		12219 S Green St		Chicago	IL	60643
			Resident		12220 S Emerald Ave		Chicago	IL	60628
			Resident		12220 S Green St		Chicago	IL	60643
			Resident		12222 S Green St		Chicago	IL	60643
			Resident		12223 S Green St		Chicago	IL	60643

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		12225 S Emerald Ave		Chicago	IL	60628
			Resident		12225 S Emerald Ave		Chicago	IL	60628
			Resident		12226 S Emerald Ave		Chicago	IL	60628
			Resident		12226 S Green St		Chicago	IL	60643
			Resident		12227 S Green St		Chicago	IL	60643
			Resident		12228 S Emerald Ave		Chicago	IL	60628
			Resident		12230 S Emerald Ave		Chicago	IL	60628
			Resident		12230 S Green St		Chicago	IL	60643
			Resident		12231 S Emerald Ave		Chicago	IL	60628
			Resident		12231 S Green St		Chicago	IL	60643
			Resident		12234 S Green St		Chicago	IL	60643
			Resident		12235 S Green St		Chicago	IL	60643
			Resident		12236 S Green St		Chicago	IL	60643
			Resident		12238 S Emerald Ave		Chicago	IL	60628
			Resident		12239 S Green St		Chicago	IL	60643
			Resident		12240 S Green St		Chicago	IL	60643
			Resident		12241 S Emerald Ave		Chicago	IL	60628
			Resident		12241 S Green St		Chicago	IL	60643
			Resident		12242 S Emerald Ave		Chicago	IL	60628
			Resident		12242 S Green St		Chicago	IL	60643
			Resident		12242 S Green St		Chicago	IL	60643
			Resident		12244 S Emerald Ave		Chicago	IL	60628
			Resident		12245 S Emerald Ave		Chicago	IL	60628
			Resident		12245 S Green St		Chicago	IL	60643
			Resident		12246 S Halsted St		Chicago	IL	60628
			Resident		12247 S Green St		Chicago	IL	60643
			Resident		12250 S Green St		Chicago	IL	60643
			Resident		12251 S Green St		Chicago	IL	60643
			Resident		12251 S Halsted St		Chicago	IL	60628
			Resident		12252 S Green St		Chicago	IL	60643
			Resident		12254 S Emerald Ave		Chicago	IL	60628
			Resident		12255 S Halsted St		Chicago	IL	60628
			Resident		12257 S Green St		Chicago	IL	60643
			Resident		12258 S Green St		Chicago	IL	60643
			Resident		12259 S Halsted St		Chicago	IL	60628
			Resident		123 W. 114th Street		Chicago	IL	60628
			Resident		12300 S Emerald Ave		Chicago	IL	60628
			Resident		12301 S Halsted St		Chicago	IL	60628
			Resident		12303 S Halsted St		Chicago	IL	60628
			Resident		12305 S Halsted St		Chicago	IL	60628
			Resident		12308 S Emerald Ave		Chicago	IL	60628
			Resident		12310 S Emerald Ave		Chicago	IL	60628
			Resident		12311 S Emerald Ave		Chicago	IL	60628
			Resident		12312 S Emerald Ave		Chicago	IL	60628
			Resident		12315 S Emerald Ave		Chicago	IL	60628
			Resident		12316 S Emerald Ave		Chicago	IL	60628
			Resident		12319 S Emerald Ave		Chicago	IL	60628
			Resident		12320 S Emerald Ave		Chicago	IL	60628
			Resident		12324 S Emerald Ave		Chicago	IL	60628
			Resident		12325 S Emerald Ave		Chicago	IL	60628
			Resident		12328 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		12334 S Emerald Ave		Chicago	IL	60628
			Resident		12335 S Emerald Ave		Chicago	IL	60628
			Resident		12335 S Halsted St		Chicago	IL	60628
			Resident		12336 S Emerald Ave		Chicago	IL	60628
			Resident		12338 S Emerald Ave		Chicago	IL	60628
			Resident		12341 S Emerald Ave		Chicago	IL	60628
			Resident		12341 S Halsted St		Chicago	IL	60628
			Resident		12342 S Emerald Ave		Chicago	IL	60628
			Resident		12345 S Emerald Ave		Chicago	IL	60628
			Resident		12349 S Emerald Ave		Chicago	IL	60628
			Resident		12350 S Emerald Ave		Chicago	IL	60628
			Resident		12352 S Emerald Ave		Chicago	IL	60628
			Resident		12354 S Emerald Ave		Chicago	IL	60628
			Resident		124 W. 115th Street		Chicago	IL	60628
			Resident		124 W. 115th Street	#1	Chicago	IL	60628
			Resident		124 W. 115th Street	#2	Chicago	IL	60628
			Resident		12400 S Emerald Ave		Chicago	IL	60628
			Resident		12400 S Emerald Ave		Chicago	IL	60628
			Resident		12401 S Emerald Ave		Chicago	IL	60628
			Resident		12401 S Halsted St		Chicago	IL	60628
			Resident		12405 S Emerald Ave		Chicago	IL	60628
			Resident		12406 S Emerald Ave		Chicago	IL	60628
			Resident		12409 S Emerald Ave		Chicago	IL	60628
			Resident		12409 S Emerald Ave		Chicago	IL	60628
			Resident		12410 S Emerald Ave		Chicago	IL	60628
			Resident		12413 S Emerald Ave		Chicago	IL	60628
			Resident		12414 S Emerald Ave		Chicago	IL	60628
			Resident		12415 S Emerald Ave		Chicago	IL	60628
			Resident		12416 S Emerald Ave		Chicago	IL	60628
			Resident		12421 S Emerald Ave		Chicago	IL	60628
			Resident		12424 S Emerald Ave		Chicago	IL	60628
			Resident		12425 S Emerald Ave		Chicago	IL	60628
			Resident		12429 S Emerald Ave		Chicago	IL	60628
			Resident		12432 S Emerald Ave		Chicago	IL	60628
			Resident		12433 S Emerald Ave		Chicago	IL	60628
			Resident		12433 S Halsted St		Chicago	IL	60628
			Resident		12435 S Emerald Ave		Chicago	IL	60628
			Resident		12436 S Emerald Ave		Chicago	IL	60628
			Resident		12439 S Emerald Ave		Chicago	IL	60628
			Resident		12442 S Emerald Ave		Chicago	IL	60628
			Resident		12445 S Emerald Ave		Chicago	IL	60628
			Resident		12446 S Emerald Ave		Chicago	IL	60628
			Resident		12448 S Emerald Ave		Chicago	IL	60628
			Resident		12449 S Emerald Ave		Chicago	IL	60628
			Resident		12450 S Emerald Ave		Chicago	IL	60628
			Resident		12453 S Emerald Ave		Chicago	IL	60628
			Resident		12454 S Emerald Ave		Chicago	IL	60628
			Resident		12456 S Emerald Ave		Chicago	IL	60628
			Resident		12457 S Emerald Ave		Chicago	IL	60628
			Resident		125 W. 114th Street		Chicago	IL	60628
			Resident		12500 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		12501 S Emerald Ave		Chicago	IL	60628
			Resident		12501 S Halsted St		Chicago	IL	60628
			Resident		12507 S Emerald Ave		Chicago	IL	60628
			Resident		12508 S Emerald Ave		Chicago	IL	60628
			Resident		12509 S Emerald Ave		Chicago	IL	60628
			Resident		12512 S Emerald Ave		Chicago	IL	60628
			Resident		12512 S Halsted St		Chicago	IL	60628
			Resident		12513 S Emerald Ave		Chicago	IL	60628
			Resident		12515 S Emerald Ave		Chicago	IL	60628
			Resident		12516 S Emerald Ave		Chicago	IL	60628
			Resident		12516 S Emerald Ave		Chicago	IL	60628
			Resident		12519 S Emerald Ave		Chicago	IL	60628
			Resident		12525 S Emerald Ave		Chicago	IL	60628
			Resident		12526 S Emerald Ave		Chicago	IL	60628
			Resident		12527 S Emerald Ave		Chicago	IL	60628
			Resident		12529 S Emerald Ave		Chicago	IL	60628
			Resident		12533 S Emerald Ave		Chicago	IL	60628
			Resident		12534 S Emerald Ave		Chicago	IL	60628
			Resident		12535 S Emerald Ave		Chicago	IL	60628
			Resident		12538 S Emerald Ave		Chicago	IL	60628
			Resident		12539 S Emerald Ave		Chicago	IL	60628
			Resident		12542 S Emerald Ave		Chicago	IL	60628
			Resident		12543 S Emerald Ave		Chicago	IL	60628
			Resident		12546 S Emerald Ave		Chicago	IL	60628
			Resident		12547 S Emerald Ave		Chicago	IL	60628
			Resident		12550 S Emerald Ave		Chicago	IL	60628
			Resident		12551 S Emerald Ave		Chicago	IL	60628
			Resident		12552 S Emerald Ave		Chicago	IL	60628
			Resident		12555 S Emerald Ave		Chicago	IL	60628
			Resident		12558 S Emerald Ave		Chicago	IL	60628
			Resident		12559 S Emerald Ave		Chicago	IL	60628
			Resident		126 E. 117th Street		Chicago	IL	60628
			Resident		12600 S Emerald Ave		Chicago	IL	60628
			Resident		12601 S Emerald Ave		Chicago	IL	60628
			Resident		12605 S Emerald Ave		Chicago	IL	60628
			Resident		12608 S Emerald Ave		Chicago	IL	60628
			Resident		12609 S Emerald Ave		Chicago	IL	60628
			Resident		12610 S Emerald Ave		Chicago	IL	60628
			Resident		12612 S Emerald Ave		Chicago	IL	60628
			Resident		12613 S Emerald Ave		Chicago	IL	60628
			Resident		12616 S Emerald Ave		Chicago	IL	60628
			Resident		12617 S Emerald Ave		Chicago	IL	60628
			Resident		12621 S Emerald Ave		Chicago	IL	60628
			Resident		12622 S Emerald Ave		Chicago	IL	60628
			Resident		12625 S Emerald Ave		Chicago	IL	60628
			Resident		12627 S Emerald Ave		Chicago	IL	60628
			Resident		12628 S Emerald Ave		Chicago	IL	60628
			Resident		12631 S Emerald Ave		Chicago	IL	60628
			Resident		12632 S Emerald Ave		Chicago	IL	60628
			Resident		12635 S Emerald Ave		Chicago	IL	60628
			Resident		12636 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		12638 S Emerald Ave		Chicago	IL	60628
			Resident		12639 S Emerald Ave		Chicago	IL	60628
			Resident		12640 S Emerald Ave		Chicago	IL	60628
			Resident		12643 S Emerald Ave		Chicago	IL	60628
			Resident		12645 S Emerald Ave		Chicago	IL	60628
			Resident		12648 S Emerald Ave		Chicago	IL	60628
			Resident		12650 S Emerald Ave		Chicago	IL	60628
			Resident		12651 S Emerald Ave		Chicago	IL	60628
			Resident		12654 S Emerald Ave		Chicago	IL	60628
			Resident		12655 S Emerald Ave		Chicago	IL	60628
			Resident		12658 S Emerald Ave		Chicago	IL	60628
			Resident		12659 S Emerald Ave		Chicago	IL	60628
			Resident		127 E 68th St		Chicago	IL	60637
			Resident		12700 S Emerald Ave		Chicago	IL	60628
			Resident		12700 S Green St		Chicago	IL	60643
			Resident		12700 S Halsted St		Chicago	IL	60628
			Resident		12701 S Emerald Ave		Chicago	IL	60628
			Resident		12701 S Green St		Chicago	IL	60643
			Resident		12701 S Halsted St		Chicago	IL	60628
			Resident		12704 S Emerald Ave		Chicago	IL	60628
			Resident		12704 S Green St		Chicago	IL	60643
			Resident		12705 S Emerald Ave		Chicago	IL	60628
			Resident		12705 S Green St		Chicago	IL	60643
			Resident		12706 S Emerald Ave		Chicago	IL	60628
			Resident		12707 S Emerald Ave		Chicago	IL	60628
			Resident		12708 S Green St		Chicago	IL	60643
			Resident		12709 S Green St		Chicago	IL	60643
			Resident		12711 S Emerald Ave		Chicago	IL	60628
			Resident		12712 S Green St		Chicago	IL	60643
			Resident		12713 S Emerald Ave		Chicago	IL	60628
			Resident		12713 S Green St		Chicago	IL	60643
			Resident		12716 S Green St		Chicago	IL	60643
			Resident		12717 S Emerald Ave		Chicago	IL	60628
			Resident		12717 S Green St		Chicago	IL	60643
			Resident		12717 S Halsted St		Chicago	IL	60628
			Resident		12718 S Emerald Ave		Chicago	IL	60628
			Resident		12719 S Emerald Ave		Chicago	IL	60628
			Resident		12719 S Green St		Chicago	IL	60643
			Resident		12720 S Green St		Chicago	IL	60643
			Resident		12722 S Emerald Ave		Chicago	IL	60628
			Resident		12722 S Green St		Chicago	IL	60643
			Resident		12723 S Emerald Ave		Chicago	IL	60628
			Resident		12723 S Green St		Chicago	IL	60643
			Resident		12726 S Emerald Ave		Chicago	IL	60628
			Resident		12726 S Emerald Ave		Chicago	IL	60628
			Resident		12726 S Green St		Chicago	IL	60643
			Resident		12727 S Green St		Chicago	IL	60643
			Resident		12730 S Green St		Chicago	IL	60643
			Resident		12730 S Halsted St		Chicago	IL	60628
			Resident		12747 S Halsted St		Chicago	IL	60628
			Resident		12751 S Emerald Ave		Chicago	IL	60628
			Resident		12752 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		12755 S Emerald Ave		Chicago	IL	60628
			Resident		12756 S Emerald Ave		Chicago	IL	60628
			Resident		12757 S Emerald Ave		Chicago	IL	60628
			Resident		12758 S Halsted St		Chicago	IL	60628
			Resident		12760 S Emerald Ave		Chicago	IL	60628
			Resident		12761 S Emerald Ave		Chicago	IL	60628
			Resident		12762 S Emerald Ave		Chicago	IL	60628
			Resident		12765 S Emerald Ave		Chicago	IL	60628
			Resident		12765 S Emerald Ave		Chicago	IL	60628
			Resident		128 E. 117th Street		Chicago	IL	60628
			Resident		12800 S Emerald Ave		Chicago	IL	60628
			Resident		12801 S Emerald Ave		Chicago	IL	60628
			Resident		12801 S Halsted St		Chicago	IL	60628
			Resident		12803 S Halsted St		Chicago	IL	60628
			Resident		12804 S Emerald Ave		Chicago	IL	60628
			Resident		12805 S Emerald Ave		Chicago	IL	60628
			Resident		12805 S Halsted St		Chicago	IL	60628
			Resident		12806 S Emerald Ave		Chicago	IL	60628
			Resident		12807 S Emerald Ave		Chicago	IL	60628
			Resident		12810 S Emerald Ave		Chicago	IL	60628
			Resident		12814 S Emerald Ave		Chicago	IL	60628
			Resident		12815 S Emerald Ave		Chicago	IL	60628
			Resident		12816 S Emerald Ave		Chicago	IL	60628
			Resident		12816 S Green St		Chicago	IL	60643
			Resident		12817 S Emerald Ave		Chicago	IL	60628
			Resident		12819 S Green St		Chicago	IL	60643
			Resident		12821 S Emerald Ave		Chicago	IL	60628
			Resident		12822 S Emerald Ave		Chicago	IL	60628
			Resident		12822 S Green St		Chicago	IL	60643
			Resident		12823 S Green St		Chicago	IL	60643
			Resident		12824 S Emerald Ave		Chicago	IL	60628
			Resident		12824 S Green St		Chicago	IL	60643
			Resident		12825 S Emerald Ave		Chicago	IL	60628
			Resident		12825 S Green St		Chicago	IL	60643
			Resident		12828 S Green St		Chicago	IL	60643
			Resident		12829 S Green St		Chicago	IL	60643
			Resident		12830 S Green St		Chicago	IL	60643
			Resident		12831 S Green St		Chicago	IL	60643
			Resident		12834 S Emerald Ave		Chicago	IL	60628
			Resident		12835 S Emerald Ave		Chicago	IL	60628
			Resident		12835 S Green St		Chicago	IL	60643
			Resident		12836 S Emerald Ave		Chicago	IL	60628
			Resident		12837 S Green St		Chicago	IL	60643
			Resident		12838 S Green St		Chicago	IL	60643
			Resident		12839 S Emerald Ave		Chicago	IL	60628
			Resident		12840 S Emerald Ave		Chicago	IL	60628
			Resident		12842 S Emerald Ave		Chicago	IL	60628
			Resident		12846 S Emerald Ave		Chicago	IL	60628
			Resident		12847 S Emerald Ave		Chicago	IL	60628
			Resident		12847 S Halsted St		Chicago	IL	60628
			Resident		12848 S Emerald Ave		Chicago	IL	60628
			Resident		12849 S Emerald Ave		Chicago	IL	60628

Open House Notice Mailing List
Red Line Extension

Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
			Resident		12850 S Green St		Chicago	IL	60643
			Resident		12850 S Green St		Chicago	IL	60643
			Resident		12851 S Green St		Chicago	IL	60643
			Resident		12852 S Emerald Ave		Chicago	IL	60628
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			Resident		12853 S Emerald Ave		Chicago	IL	60628
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			Resident		12853 S Halsted St		Chicago	IL	60628
			Resident		12854 S Emerald Ave		Chicago	IL	60628
			Resident		12856 S Green St		Chicago	IL	60643
			Resident		12857 S Green St		Chicago	IL	60643
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			Resident		12858 S Emerald Ave		Chicago	IL	60628
			Resident		12858 S Green St		Chicago	IL	60643
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			Resident		12865 S Emerald Ave		Chicago	IL	60628
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			Resident		12876 S Green St		Chicago	IL	60643
			Resident		12877 S Green St		Chicago	IL	60643
			Resident		12900 S Emerald Ave		Chicago	IL	60628
			Resident		12900 S Green St		Chicago	IL	60643
			Resident		12900 S Halsted St		Chicago	IL	60628
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			Resident		12909 S Green St		Chicago	IL	60643
			Resident		12910 S Green St		Chicago	IL	60643
			Resident		12911 S Green St		Chicago	IL	60643
			Resident		12911 S Halsted St		Chicago	IL	60628
			Resident		12912 S Emerald Ave		Chicago	IL	60628
			Resident		12913 S Emerald Ave		Chicago	IL	60628
			Resident		12914 S Emerald Ave		Chicago	IL	60628
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			Resident		12915 S Green St		Chicago	IL	60643
			Resident		12916 S Green St		Chicago	IL	60643
			Resident		12917 S Green St		Chicago	IL	60643
			Resident		130 W. 114th Street		Chicago	IL	60628

Appendix B
Postcard

YOUR RED

Red Line Extension

You're Invited to Join the Chicago Transit Authority (CTA) at an Open House on the Red Line Extension

Connecting 95th Street Station to 130th Street

CTA is proposing to extend the Red Line 5.3 miles from the 95th Street Station to the vicinity of 130th Street, subject to the availability of funding. This project is one part of the ***Your Red*** Program to extend and enhance the entire Red Line.

Learn about the Red Line Extension

This open house will continue to keep you informed about the proposed Red Line Extension project.

If you require an interpreter, including sign language services, or other accommodations at this open house, contact Deborah Lopez, Senior Government Relations Officer, at least five days prior to the open house at (312) 681-2709 or dlopez@transitchicago.com.

Tuesday, August 2, 2011
6:00 to 8:30 p.m.

St. John Missionary Baptist Church
211 E. 115th St.
Chicago, IL 60628

This location is accessible to people with disabilities and is served by:
CTA Bus #111, #34, and #119 and
Metra Kensington Station

For more information, visit http://www.transitchicago.com/redeis/

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YOUR RED

Red Line Extension

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Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

OPEN HOUSE

Tuesday, August 2, 2011

6:00 to 8:30 p.m.

St. John Missionary Baptist Church
211 E. 115th St.
Chicago, IL 60628

This location is accessible to people with disabilities and is served by:
CTA Bus #111, #34, and #119 and
Metra Kensington Station

Appendix C
Transit Card

CTA OPEN HOUSE

Red Line Extension – Progress Update

This meeting will serve to update the public on the status of CTA's Red Line Extension project, which proposes to extend the rail line from 95th Street to 130th Street. Current developments and next steps for the project will be discussed.

Tuesday, August 2, 2011

6pm to 8:30pm

St. John Missionary Baptist Church*

211 E. 115 Street, Chicago

*Facility accessible to people with disabilities.

transitchicago.com

Customer Information: 1-888-YOUR-CTA (1-888-968-7282); CTA TTY: 1-888-CTA-TTY1 (1-888-282-8891)
Transit Information: 312-836-7000; RTA TTY: 312-836-4949

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Appendix D
E-Blast

YOUR RED

Red Line Extension

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You're Invited to Join Chicago Transit Authority (CTA) at an Open House on the Red Line Extension

Connecting 95th Street Station to 130th Street

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Ghost bikes haunt city sidewalks

Critic says memorials set up for dead cyclists become eyesores over time

BY KARA SPAK

Staff Reporter/kspak@suntimes.com

Almost every day for the last 16 months, Ed Hooks has walked his dog Nugget past a painted white bike at the entrance to the North Side's Kosciuszko Park.

It's a memorial for Jepson Livingston, a 32-year-old man who died in 2009. Livingston was riding his bike on Diversey when he was struck by a van involved in a high-speed chase. The driver was arrested and charged with murder.

Hooks feels for Livingston's family — he also lost a child too young. But he also believes there should be a time limit for memorials on public property, like the so-called "ghost bikes," which he considers an unnecessary eyesore after spending countless months or even years in Chicago weather.

"I grieve for them," he said of Livingston's family. "I grieve with them. That has nothing to do with whether or not a painted white bicycle should be chained to a light post forever in my neighborhood. At a certain point, the family needs to go to the cemetery."

Ed Hooks poses next to the bicycle memorial for a victim of a hit and run crash in 2009. | JOHN J. KIM~SUN-TIMES

But for Livingston's family, the bike remains a source of comfort.

"When I go by the bike, I feel more at peace compared to the cemetery," said Henrietta Livingston, Jepson Livingston's mother.

The urban equivalent of flower-strewn crosses along rural highways, there are about a dozen ghost bikes on sidewalks around Chicago. Painted white and bearing a sign with the name of the dead cyclist, the bikes are meant to serve as a memorial and a warning for drivers and cyclists.

Ghost bikes meet the criteria of Chicago's code for abandoned bikes. Purposefully stripped of parts, they cannot be ridden. They have not been moved in seven days — one ghost bike has been on Western since 2006. City code says abandoned bikes can be ticketed and then disposed of.

But Brian Steele, spokesman for Chicago's Department of Transportation, said the city doesn't move ghost bikes because officials don't consider them abandoned but "important memorials."

"If they do not infringe on the public way, or take up space that would be used by bicycles or pedestrians, [they] can be an important reminder of the impact on loved ones and our society when the rules are not followed by all modes, including the cyclists," Steele said in an e-mail.

For Hooks, a gentle-speaking 65-year-old teacher, author and former actor, the bikes are a legitimate memorial, just like those that appear outside fatal crime scenes featuring candles and stuffed animals. The difference is that the crime memorials are short-lived, he said.

"I would not object to these ghost bikes being there," he said. "I just think they should have an expiration date."

His request for an honest neighborhood discussion about the issue at the website Everyblock led to anonymous cyclists calling him everything from insensitive to a bigot. He said he isn't either, and has learned the hard way what the death of a child is like. His daughter Dagny was 21 when she accidentally overdosed on drugs in 2005 in Lake View.

"There is no closure for the death of a child," he said. "It's a crime against nature. Yet what's the lesson from my daughter's death — don't mess around with drugs. It didn't occur to me to go over [to Lake View] and put a sign up with her pictures and cover it with drug stuff and expect it to be there forever."

Ghost bikes started in 2002 in St. Louis by a bike shop worker. Since then, the bikes have appeared in 22 countries and, in America, 37 states.

In Chicago, the bikes are put up and maintained by concerned cyclists. Some ghost bikes are maintained more carefully than others.

In Boston, the bikes are typically taken down within days by the city, said James McBride of MassBikes, a Boston-based bicycle advocacy organization.

"Some of the shorter-term ghost bikes that stay up, I know people get upset they got moved quickly," he said.

Not all of the Chicago bikes are permanent. One placed near a West Side church was removed by church officials, said Howard Kaplan, who has helped install many ghost bikes. Another near a Walgreen's on the North Side also didn't stay up long, and a ghost bike at the Lincoln, Damen and Irving Park intersection has come and gone several times.

"When I work with the family [of the dead cyclist] to get one put up I tell them there's no guarantee for how long it's going to stay," he said. "If it's up for a year it's a good run."

Kaplan agrees with Hooks that there is no clear way to quantify how effective ghost bikes are as safety warnings. That doesn't mean that they are not valuable, he said.

"I think it's outrageous that you can't ride a bike around the city without risking your life," he said. "I think when a bicyclists is killed it should be noticed."

YOUR RED
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You're Invited to Join the Chicago Transit Authority (CTA) at an Open House on the Red Line Extension

Connecting 95th Street Station to 130th Street

Tuesday, August 2, 2011
6:00 to 8:30 p.m.

St. John Missionary Baptist Church
211 E. 115th St.
Chicago, IL 60628

This location is accessible to people with disabilities and is served by: CTA Bus #111, #34, and #119 and Metra Kensington Station

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Learn about the Red Line Extension
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Red Line Extension
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SU LÍNEA ROJA
Extensión de la Línea Roja

Usted queda invitado para acompañar a la Chicago Transit Authority (CTA) a una Recepción Pública para la Extensión de la Línea Roja

Para conectar la Estación de la 95th Street a la 130th Street

martes, 2 de agosto de 2011
Desde las 6:00 a las 8:30 p.m.

St. John Missionary Baptist Church
211 E. 115th St.
Chicago, IL 60628

Las personas con incapacidades pueden tener acceso a este lugar, al cual brindan servicio los Autobuses de la CTA #111, #34, y #119 y la Estación Kensington de la Metra.

La Chicago Transit Authority (CTA) se propone extender la Línea Roja desde la Estación de la 95th Street al vecindario de la 130th Street, sujeto a la disponibilidad de financiación. Esta extensión propuesta de 5.3 millas abarcará tres nuevas paradas intermedias cerca de las 103rd, 111th, y 115th Streets, así como una nueva estación terminal en las inmediaciones de la 130th Street. Cada nueva parada incluirá las instalaciones para autobuses y el estacionamiento de vehículos. Este proyecto forma parte del Programa de Su Línea Roja para extender y reformar la Línea Roja por completo.

Infórmese sobre la Extensión de la Línea Roja
Esta recepción pública se dedica a darle noticias actualizadas sobre el proyecto propuesto de Extensión de la Línea Roja.

Si usted necesita intérprete, incluso los servicios de interpretación en el idioma de señas, u otras adaptaciones para esta recepción pública, por favor comuníquese con Deborah López, Oficial Superior de Relaciones Gubernamentales por lo menos cinco días antes de la fecha de la recepción pública al (312) 681-2709 o dlopez@transitchicago.com.

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Para información en español, llame al 312-681-2709
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Al Frente

Soldados canadienses se preparan para partir de la base militar de Kandahar. La OTAN empezó a transferir la seguridad del país a las autoridades locales. GETTY

La seguridad cambia de manos

Afganistán empieza a asumir el control del país

Por Fawad Peikar
EFE/KABUL

La misión de la OTAN en Afganistán empezó ayer oficialmente en la provincia central de Bamiyán la transferencia de competencias de seguridad a las autoridades locales, proceso que continuará en cinco zonas más del país durante la próxima semana.

La ceremonia formal de traspaso, celebrada este mediodía, contó con la presencia del máximo responsable de la misión de la OTAN en Afganistán, el general David Petraeus, y de los titulares afganos de Interior, Bismilá Mohamadi, y de Defensa, Abdul Rahim Wardak.

"Las fuerzas de seguridad afganas homenajearon a los militares del contingente internacional por su servicio de los últimos diez años al pueblo de Afganistán y a este país asolado por la guerra", explicó a EFE el portavoz afgano de Interior, Sediq Sediqi.

El acto tuvo lugar en el cuartel de la Policía afgana en la capital de una provincia relativamente libre de actividad insurgente pero que, paradójicamente, es uno de los símbolos del régimen talibán por la voladura de sus famosos Budas gigantes en 2001.

Los cerca de 200 militares de Nueva Zelanda -país representado en la ceremonia por su embajador- y la veintena de soldados de Singapur desplegados en Bamiyán serán los primeros miembros del contingente internacional en cambiar sus funciones.

"Los soldados extranjeros harán a partir de ahora trabajos de entrenamiento militar y de rehabilitación en la zona", dijo el portavoz provincial, Abdul Rahman Ahmadi.

El traspaso de hoy responde al compromiso anunciado el pasado marzo por el presidente afgano, Hamid Karzai, de que las fuerzas afganas asumirían el control de siete áreas durante el mes de julio, en paralelo al inicio de la retirada de tropas de EEUU.

Durante la próxima semana se irán transfiriendo las competencias de otras cinco zonas: la provincia de Panjshir (este) y las ciudades de Mihtarlam (este), Lashkar Gah (sur), Herat (oeste) y Mazar-i Sharif (norte).

Sólo queda por determinar cuándo se hará el traspaso sobre la séptima de esas zonas, la estratégica provincia de Kabul.

"Seguramente se hará al final de esta primera fase de cesión de competencias, pero el Gobierno aún no ha tomado una decisión definitiva sobre la provincia de la capital", dijo el portavoz del Ministerio de Interior.

El inicio de la transferencia en materia de seguridad llega apenas días después de que, el pasado miércoles, empezaran a salir del país los primeros 650 soldados estadounidenses, pertenecientes a dos regimientos estacionados hasta ahora cerca de Kabul.

EEUU prevé retirar este año 10 mil efectivos y 23 mil más hasta de septiembre de 2012, mientras que sus cerca de 70.000 soldados restantes abandonarán Afganistán entre 2013 y 2014.

staurants will make kids menus healthier

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Joe Taylor of Chilis said the company has responded to consumer demands for healthier foods. While diners looking for a healthier meal used to have to ask for substitutions, they now have more options.

"We've seen our guests customize their meals to a greater degree when they are looking to hold the mayo or add the broccoli," Taylor said.

Patrick Lenow of IHOP said the restaurant will add two new children's menu items because of the effort, including pancakes with fruit and scrambled eggs with fruit. The company had already limited everything on their children's menu to fewer than 600 calories and made fruit a default side, instead of fries -

See KIDS MENUS, page 14

YOUR RED

Red Line Extension

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Bachmann, Pawlenty ramp up war of words

WASHINGTON — The campaigns of Republican presidential hopefuls Michele Bachmann and Tim Pawlenty resumed their war of words Sunday, arguing via press release over which candidate has the stronger conservative credentials.

Minnesota Rep. Bachmann accused Pawlenty of supporting policies that are anathema to her Tea Party supporters, such as the mandate to buy health insurance and a "cap-and-trade" agreement to reduce greenhouse gases. And she slammed the former Minnesota governor for praising the federal government's 2008 bailouts.

"I have fought against irresponsible spending while Governor Pawlenty was leaving a multi-billion-dollar budget mess in Minnesota," Bachmann added.

Pawlenty's campaign swiftly rejected Bachmann's claims, saying there is "very little difference" between the two candidates' positions.

Michele Bachmann

Tim Pawlenty

However, Pawlenty spokesman Alex Conant said, "The difference is that when Governor Pawlenty was scoring conservative victories . . . Congresswoman Bachmann was giving speeches and offering failed amendments, all while struggling mightily to hold onto the most Republican house seat in the state."

Pawlenty in July raised Bachmann's ire when he called her record of accomplishment in Congress "nonexistent."

Bachmann argued again Sunday against that assessment, saying, "I have demonstrated leadership and the courage of my convictions to change Washington, stop wasteful spending, lower taxes, put Americans back to work and turn our economy around."

AP

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Extensión de la Línea Roja

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Para conectar la Estación de la 95th Street a la 130th Street

martes, 2 de agosto de 2011
Desde las 6:00 a las 8:30 p.m.

St. John Missionary Baptist Church
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Chicago, IL 60628

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✔ DECLARE CAPÍTULO 7 BANCARROTA CON TARIFAS BAJAS
✔ MODIFICACIÓN DE HIPOTECA
✔ DIVORCIO A BAJO COSTO, EMPEZANDO DESDE $350
✔ CARGOS RAZONABLES, BAJOS

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CUANDO NUESTROS JÓVENES ESCALAN MÁS ALTO, NOSOTROS TAMBIÉN SOMOS ENALTECIDOS.

El futuro del área de Chicago depende del éxito de los jóvenes de hoy. A través de la promoción de programas educativos para jóvenes y familias necesitadas, el Chicago Tribune está comprometido a servir a jóvenes en desventaja para que aspiren a un mañana brillante y seguro. Después de todo, no hay mejor manera de ayudar a la comunidad de Chicago que elevando a nuestros jóvenes.

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an pleads ss burning

admitted that he and the others schemed Aug. 28 to burn a cross in a Black person's yard. Officials say Tony Branscum built a wooden cross and the men covered it in gasoline-soaked clothing.

Prosecutors say that after they drove to the victim's residence, Coffee propped up the cross on a satellite dish and ignited it.

His attorney, Misty Borkowski, declined to comment Monday night. *AP*

ntenced for ack churches

The 46-year-old Smith had previously pleaded guilty to 11 counts of mailing letters threatening to burn down seven predominantly Black churches and four NAACP offices in Cambridge, Roxbury and Medford in Massachusetts; Providence, R.I.; and Charlotte, N.C.

The letters allegedly said the author didn't like African Americans or minorities as his office supervisors "nor I like them as President of the United States." *AP*

n gap widens , minorities

ment accounts or other stock holdings.

"What's pushing the wealth of whites is the rebound in the stock market and corporate savings, while younger Hispanics and African Americans who bought homes in the last decade - because that was the American dream - are seeing big declines," said Timothy Smeeding, a University of Wisconsin-Madison professor who specializes in income inequality.

The median wealth of white U.S. households in 2009 was $113,149, compared with $6,325 for Hispanics and $5,677 for blacks, according to the analysis released Tuesday by the Pew Research Center. Those ratios, roughly 20 to 1 for Blacks and 18 to 1 for –

See WEALTH GAP, page 21

RED rx Red Line Extension cta

You're Invited to Join the Chicago Transit Authority (CTA) at an Open House on the Red Line Extension

Connecting 95th Street Station to 130th Street

Tuesday, August 2, 2011
6:00 to 8:30 p.m.

St. John Missionary Baptist Church
211 E. 115th St.
Chicago, IL 60628

This location is accessible to people with disabilities and is served by: CTA Bus #111, #34, and #119 and Metra Kensington Station

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street, subject to the availability of funding. The proposed 5.3-mile extension would include three new intermediate stops near 103rd, 111th, and 115th streets, as well as a new terminal station in the vicinity of 130th Street. Each new stop would include bus and parking facilities. This project is one part of the Your Red Program to extend and enhance the entire Red Line.

Learn about the Red Line Extension

This open house will continue to keep you informed about the proposed Red Line Extension project.

If you require an interpreter, including sign language services, or other accommodations at this open house, contact Deborah Lopez, Senior Government Relations Officer, at least five days prior to the open house at (312) 681-2709 or dlopez@transitchicago.com.

For more information, visit
http://www.transitchicago.com/redeis/
Para informacion en Español, llame al 312-681-2709
Customer Information: 888-YOUR-CTA (888-968-7282)

Appendix F
Elected Official Briefing Summaries

Meeting Notes

Date: July 21, 2011

Present: Alderman Anthony A. Beale, 9th Ward
George Coleman, CTA
Sonali Tandon, CTA
Jeffrey Sriver, Chicago Department of Transportation
Lisa Soard (note taker), CWC Transit Group

Time: 12:30 p.m.

Highlights:

CTA staff presented and left a seven-page packet of Red Line Extension materials. The materials and CTA representatives stressed that:

- Since the 95th Street Station is a highly used terminal and the area south of the Red Line has a need for more transit options, CTA is pursuing this extension.

- Better transit will spur economic revitalization along the current Red Line and the extension.

- Between 2006 and 2009, planners worked with the community to examine several options for placement of the extension. Based on those discussions and studies, the Union Pacific Railroad alternative was chosen as the Locally Preferred Alternative.

- The CTA is in the Environmental Impact Study (EIS) phase of the project as it collects information about how plans would affect the local community and the environment. The August 2nd Open House is part of the EIS phase.

The Chicago Department of Transportation representative added that CDOT would study if there is another way for Union Pacific trains to take a different route to the city, which would free the Union Pacific Railroad right-of-way for the Locally Preferred Alternative.

Overall Alderman Beale was supportive of the plans, and was hopeful that the money can be secured to build the extension.

He had questions and suggestions abut the Red Line Extension.

- **Affect on Parks and Housing**
  Alderman Beale asked if only parks would be reduced or if residential property also would be impacted.
  - CTA responded that they didn't know what would truly be affected as far as housing, but that would be studied in the next part of the EIS.

- **Environmental Impact Statement and Funding**
  He asked when the EIS would be completed and whether CTA had the funding it needed.
  - CTA representatives said to move forward in the process they need to identify state, local and federal funds. They also mentioned that the August 2nd Open House would let the community know that CTA is still focused on the Red Line Extension project and that it is moving forward.

- **Legislative Champions**
  Alderman Beale asked who was spearheading the efforts to obtain funding for the Red Line Extension in Washington D.C. He specifically asked if it was Representative Jesse L. Jackson, Jr. He stated that in his opinion funding for the project was a federal issue and that the project needed a Congressional champion.

Meeting Notes

Date: July 21, 2011

Present: Alderman Carrie M. Austin, 34th Ward
George Coleman, CTA
Sonali Tandon, CTA
Jeffrey Sriver, Chicago Department of Transportation
Lisa Soard (note taker), CWC Transit Group

Time: 1:05 p.m.

Highlights:

CTA staff presented and left a seven-page packet of Red Line Extension materials. The materials and CTA representatives stressed that:

- The August 2nd Open House will update the community about where CTA is in the process on the Red Line Extension project.

- The CTA completed the Alternatives Analysis phase and chose the Union Pacific Railroad alternative as its Locally Preferred Alternative based on community input. Scoping meetings were hosted in September 2009 to initiate the Environmental Impact Study (EIS) phase.

- The project is in the EIS phase. In this phase, the effect of plans on the local community and the environment would be studied. However in order to continue, CTA needs funding for the Draft EIS and for construction and operation.

The Chicago Department of Transportation representative added that the Union Pacific Railroad is requesting a 50-foot separation between the tracks. He said that CDOT would study if there is another way for Union Pacific trains to take a different route to the city, which would free the Union Pacific Railroad right-of-way for the Locally Preferred Alternative.

Overall Alderman Austin is supportive of the plans and is thinking about the long term and wants to leave a legacy for the residents of her ward. She also said that she knows her State Representative and Senator support the project.

Alderman Austin had questions and suggestions abut the Red Line Extension.

- **Elected Officials**
  Alderman Austin asked if the CTA had reached out to U.S. Representative Bobby Lee Rush. She also suggested that the CTA contact Andrew J. Mooney, Commissioner of the City of Chicago Department of Housing and Economic Development.
    - CTA responded by saying they would consider reaching out to Representative Rush and Commissioner Mooney.

- **Effect on Parks**
  While looking at the map of the LPA, Alderman Austin asked if any park land would be taken with the extension.
    - CTA representatives said that the purpose of the EIS is to research how parks would be affected and that several parks could be impacted.

- **Metra Modernization**
  Alderman Austin also asked if Metra had any plans to modernize its Kensington Station. She said she was only asking for fresh paint, better lighting, and new signage. Austin wants to make sure that Metra stations are consistent with the potential new Red Line Extension stations.
    - The Chicago Department of Transportation representative answered this question by saying that an elevator was installed at the Kensington Metra station more than 10 years ago and he would convey Austin's request to Metra.

Meeting Notes

Date: July 27, 2011

Present: Alderman Howard B. Brookins, Jr., 21st Ward
Curtis V. Thompson, Jr., chief of staff, Alderman Brookins, Jr.
Sonali Tandon, CTA
George Coleman, CTA
Lisa Soard (note taker), CWC Transit Group

Time: 12:12 p.m.

Highlights:

CTA staff presented and left a seven-page packet about the proposed Red Line Extension (RLE). The materials and CTA representatives stressed that:

- This extension is part of "Your Red," which also includes Dan Ryan Track Renewal and the North Red and Purple Modernization projects.

- CTA is partnering with the Federal Transit Administration on the extension.

- The extension will help South Side residents save 20 minutes on their commute from 130th Street to downtown and reduce the need for transfers.

- All four proposed stations would have park and ride facilities. The extension would be elevated from 99th Street to 119th Street and after that it would be at-grade.

- Between 2006 and 2009, planners worked with the community to examine several options for alignment of the extension. Based on those discussions and studies, the Union Pacific Railroad (UPRR) alternative was chosen as the Locally Preferred Alternative (LPA).

- The CTA is in the Environmental Impact Study (EIS) phase of the project which will examine at least four alternatives and collect information about how plans would affect local community members and the environment. The August 2nd Open House is part of the EIS phase.

- Funding for the EIS was announced Monday by Senator Richard Durbin. CTA still needs funding for construction and operation of the extension.

Overall Alderman Brookins and his chief of staff, Mr. Thompson, were supportive of the plans and felt that it would have minimal impact on the 21st Ward. Alderman Brookins mentioned that he would have preferred the Halsted alternative and appreciates that it is still being considered during the EIS.

Alderman Brookins and Mr. Thompson had questions and suggestions about the Red Line Extension.

- **Safety**
  Mr. Thompson asked how far the students from Carver Military Academy would have to walk to the proposed 130th Street Station. He said a lot can happen between the school and the station.
  - CTA responded that the distance would likely be ½ mile to one mile from the proposed station to Carver Military Academy.

- **Quiet Zones**
  Mr. Thompson mentioned to CTA that the 21st Ward was pursuing to be a quiet zone and asked whether a CTA train would be quieter than or as noisy as a Union Pacific train.
  - CTA replied that the City of Chicago Department of Transportation (CDOT) is initiating a quiet zone study in the area, and that CDOT also is working with Union Pacific to study if Union Pacific trains could be rerouted.

- **Timeline**
  Alderman Brookins asked when they could expect the RLE to be complete and operating.
  - CTA mentioned that it typically takes two to three years to finish the EIS, and if everything is in place (funding and federal approval) it could be seven to eight years from now, at the earliest, that the RLE could begin operating.

- **Effect on Housing**
  Alderman Brookins wanted to know whether homes would be demolished when the extension becomes a reality.
  - CTA said that some homes might be affected and explained that whether houses will be affected or not depends on conversations with Union Pacific. CTA also stated that it will work with Union Pacific to discuss issues, such as the Union Pacific's need to have 50 feet of clearance between its track and the CTA track.

- **Economic Development**
  Alderman Brookins asked whether there would be an opportunity for businesses to locate near the station.
  - CTA responded that it would consider retail space, but that it was too early in the process to say anything specific.

Meeting Notes

Date: July 25, 2011

Present: Alderman Roderick Sawyer, 6th Ward
George Coleman, CTA
Sonali Tandon, CTA
Lisa Soard (note taker), CWC Transit Group

Time: 1:57 p.m.

Highlights:

CTA staff presented and left a seven-page packet of Red Line Extension materials. The materials and CTA representatives stressed that:

- This extension is part of "Your Red," which also includes Dan Ryan Track Renewal and the North Red and Purple Modernization projects.

- The extension will begin at the 95th Street Station and either terminate just north of 130th Street or east of Altgeld Gardens. It also will help South Side residents save 20 minutes on their commute from 130th Street to downtown and reduce the need for transfers.

- All four proposed stations would have park and ride facilities. No park and ride lot would be added to the 95th Street Station. The extension would be elevated from 99th Street to 119th Street and after that it would be at-grade.

- Between 2006 and 2009, planners worked with the community to examine several options for alignment of the extension. Based on those discussions and studies, the Union Pacific Railroad alternative was chosen as the Locally Preferred Alternative (LPA).

- The CTA is in the Environmental Impact Study (EIS) phase of the project as it collects information about how plans would affect local community members and the environment. The August 2nd Open House is part of the EIS phase and will allow community members to have informal discussions with CTA representatives about the proposed extension.

- Funding for the EIS was announced this morning by Senator Richard Durbin. CTA still needs funding for construction and operation of the extension.

Overall Alderman Sawyer is supportive of the plans. He said that the South Side is long overdue for better access to public transportation and he is happy to see that plans are moving forward. Alderman Sawyer is most interested in what is happening at the 95th Street Station and the Dan Ryan Track Renewal project because they are in his ward.

Alderman Sawyer had questions and suggestions about the Red Line Extension.

- **Train Stations**
  He mentioned that the 95th Street Station is a huge hub that needs improvements. He also said that there is a desire in the community to see the Red Line stops in his ward modernized. He asked about whether CTA was considering making improvements to the stops in his ward (69th, 79th, 87th, and 95th streets).
    - CTA responded that one of the alternatives was expanding the 95th Street Station and improving bus service. CTA said that it would like to walk through the four stations with him to hear about what he and the community would like improved. CTA also would like to talk with him about the new adopt-a-station program.

- **Next Steps**
  He wanted to know when the EIS would be complete and what funding CTA had or needs to move forward with the extension.
    - CTA replied that in order to construct and operate the RLE it needs to have funding in place and would need federal approvals. CTA also mentioned that it would take two to three years to finish the EIS, and if everything is in place it could be seven to eight years from now, at the earliest, that the RLE could be operating.

- **Economic Development**
  He asked if there would be opportunities for local contractors to get involved with the construction of the RLE. He also wants to make sure that retailers can locate near the stations. He explained that he couldn't even buy a newspaper by the 69th Street Station.
    - CTA representatives said that local contractors would be considered during the construction phase and that it would consider retail possibilities.

Meeting Notes

Date: July 27, 2011

Present: Cook County Commissioner Joan Patricia Murphy, 6th District
Sonali Tandon, CTA
Maria-Teresa Roman, CTA
Lisa Soard (note taker), CWC Transit Group

Time: 3:10 p.m.

Highlights:

CTA staff presented and left a seven-page packet about the proposed Red Line Extension (RLE). The materials and CTA representatives stressed that:

- This extension is part of "Your Red," which also includes Dan Ryan Track Renewal and the North Red and Purple Modernization projects.

- CTA is partnering with the Federal Transit Administration on the extension.

- The extension will begin at the 95th Street Station and either terminate just north of 130th Street or east of Altgeld Gardens. It also will help South Side residents save 20 minutes on their commute from 130th Street to downtown and reduce the need for transfers.

- All four proposed stations would have park and ride facilities. The extension would be elevated from 99th Street to 119th Street and after that it would be at-grade.

- Between 2006 and 2009, planners worked with the community to examine several options for alignment of the extension. Based on those discussions and studies, the Union Pacific Railroad (UPRR) alternative was chosen as the Locally Preferred Alternative (LPA).

- The CTA is in the Environmental Impact Study (EIS) phase of the project and it will examine at least four alternatives and collect information about how plans would affect local community members and the environment. The August 2nd Open House is part of the EIS phase.

- Funding for the EIS was announced Monday by Senator Richard Durbin. CTA still needs funding for construction and operation of the extension.

Commissioner Murphy is in favor of the extension and mentioned she is happy to help however she can at the county level. Murphy knows a lot about transportation and supports high-speed rail to and from Chicago. Murphy had questions and suggestions about the Red Line Extension.

- **Union Pacific Railroad**
  Commissioner Murphy asked how CTA is working with Union Pacific because she knew of a high-speed rail plan that also relied on using the Union Pacific Railroad right-of-way. She suggested that perhaps the high-speed rail could be above ground and the RLE could be below ground. She also said that she thought Union Pacific had 600 feet of right-of-way, which led her to inquire about how much space CTA needs for its track and platforms.
    - CTA said that it prefers the UPRR alternative, and is working with Union Pacific to discuss issues, such as the Union Pacific's need to have 50 feet of clearance between its track and the CTA track. The CTA representative told Murphy she would have to get back to Murphy about how much space CTA would need for its track and platforms.

- **Safety**
  Commissioner Murphy voiced her concern about keeping people and property safe if the RLE ends near Altgeld Gardens. She asked if the terminal station could be moved further east or west. She also suggested a paid monthly pass to park in a fenced, secure lot near the terminal.
    - CTA responded that safety is a top priority and that part of the EIS would review safety.

- **130th Street Terminal**
  Commissioner Murphy questioned why CTA was stopping the RLE at 130th and why CTA wouldn't take the extension further south.
    - CTA said that the extension stops at the city's southern border, which is 130th Street. The CTA staff also explained that south of 130th is a forest preserve. In order to justify extending the line south of 130th, CTA would have to go all the way to 159th Street where there is more population density.

Meeting Notes

Date: July 21, 2011

Present: John Paul Jones, Developing Communities Project (DCP)
Phyllis Palmer, DCP
Eugene X*, DCP
Elder X*, DCP
Lou Turner, DCP
Reagan Robinson, student leader from DCP
Kevin Austria, student leader from DCP
Lee Melis, student leader from DCP
Andre X*, student leader from DCP
Centrall X*, student leader from DCP
Shonay Jackson, student leader from DCP
Naomi Mitch, student leader from DCP
Tiara X*, student leader from DCP
Diane Williams, Parent Leadership in Action Network (PLAN)
Christina Willis, PLAN
Chelsea Smith, PLAN
George Coleman, CTA
Sonali Tandon, CTA
Jeffrey Sriver, Chicago Department of Transportation
Lisa Soard (note taker), CWC Transit Group

Time: 11:00 a.m.

The Red Line Extension (RLE) meeting was preceded by a discussion about general environmental issues that included a mention of the RLE. More focused discussions on RLE followed as described below.

Highlights:

CTA staff showed a seven-slide PowerPoint presentation and a map of the proposed RLE. The presentation and CTA representatives stressed that:

- This extension is part of the "Your Red" Program, which also includes Dan Ryan Track Renewal and the North Red and Purple Modernization projects.

- Since the 95th Street Station is a highly used terminal and the area south of the Red Line has a need for more transit options, CTA is pursuing this extension.

* The "X" means we were unable to obtain the last name of the participant.

- Better transit would spur economic revitalization along the current Red Line and the extension.

- The extension will begin at the 95th Street Station and either terminate just north of 130th Street or east of Altgeld Gardens. It also will help South Side residents save 20 minutes on their commute from 130th Street to downtown and reduce the need for transfers.

- Between 2006 and 2009, CTA worked with the community to examine several options for placement of the extension. Based on those discussions and studies, the Union Pacific Railroad alternative was chosen as the Locally Preferred Alternative (LPA).

- The CTA is in the Environmental Impact Study (EIS) phase of the project as it collects information about how plans would affect local community and the environment. The August 2nd Open House is part of the EIS phase.

Overall DCP is supportive of the plans. The organization reminded CTA that it has been working on this extension for about 20 years. They see that the CTA's transportation projects are being compared to other projects in major U.S. cities, and they want to make sure CTA stays on schedule and doesn't fall behind other cities. They also want to know what they can do to help CTA move the Red Line Extension forward and want to keep the community motivated to help this process.

DCP had questions and suggestions abut the Red Line Extension.

- **Elevation**
  DCP asked if the whole extension will be elevated.
  - CTA responded that only part of it would be elevated up to 119th Street, after which it will become at-grade. CTA clarified that three of the four proposed new stations would be elevated and the terminal station at 130th would be at-grade.

- **Affect on Parks and Housing**
  DCP expressed concern about park land being taken for the extension and explained that the portions that would be impacted are used by families for picnics. DCP would like to work with CTA and the community to see where new green space could be found.
  - CTA representatives said that ideally CTA would like to operate in the existing railroad right-of-way, and will work with the railroad to minimize impacts to parks and homes.

- **Union Pacific Railroad**
  A DCP representative wanted to know if CTA was talking to the Union Pacific about the UPRR alternative.
  - CTA said that it has had some conversations with Union Pacific and that those conversations are ongoing.

- **Alternatives**
  In addition to asking for a reminder about the different alternatives to consider during the EIS, DCP also asked why other alternatives were still being considered when the CTA and the community had already chosen the UPRR as the LPA. DCP also reminded the CTA that noise is a concern and that they particularly supported the UPRR alternative because the noise wouldn't be as bad in its opinion.
    - CTA described each of the three other alternatives: No Build, Transportation System Management, and Halsted Street. CTA representatives also reminded DCP that each of the proposed new stations would include park and ride lots and bus transfer facilities. To answer the question about why other alternatives are still being considered, CTA said that it is required by the Federal Transit Administration (FTA).

- **Funding for EIS**
  DCP wanted to know when the EIS would be complete and what funding CTA had to move forward with the extension. They also asked how much money would be needed to complete the EIS.
    - CTA responded that in order to go any further they needed funds to prepare the Draft EIS and identify funds for construction and operation. CTA said it would continue to work with FTA and elected officials to identify funds. The August 2nd Open House is planned so that residents can see the results from the first scoping meeting and see that CTA is moving forward. CTA said that they would need $3 million to $5 million to complete the EIS and approximately $30 million to finish preliminary engineering. CTA also mentioned that it would take two to three years to finish the EIS.

- **Livable Communities Grant**
  DCP asked whether the CTA was working with CMAP to pass a city ordinance that would give CTA $1 million of a $4.25 million grant from CMAP to study the Red Line Extension. DCP seemed confident that this ordinance would move forward and said they testified at the July 15th CTA Board meeting about the ordinance.
    - CTA representatives said they were unfamiliar with the ordinance, but they would look into it and continue to work with other partners for funding.

- **Your Red**
  There was a concern among DCP representatives that several projects were getting piled into one program – "Your Red" – and that may slow down the Red Line Extension.
    - CTA responded that there are three separate projects and that the Red Line Extension is following the New Starts process.

- **Open House**
  DCP asked if there was anything they could do during the Open House to help move the process forward.
    - CTA said that the comments received from the community during the Open House will be considered when drafting the EIS.

Meeting Notes

Date: July 26, 2011

Present: Ledall Edwards, Executive Director, Roseland Business Development Council
George Coleman, CTA
Sonali Tandon, CTA
Lisa Soard (note taker), CWC Transit Group

Time: 10:20 a.m.

Highlights:

CTA staff presented a seven-page packet about the proposed Red Line Extension. The materials and CTA representatives stressed that:

- This extension is part of "Your Red," which also includes the Dan Ryan Track Renewal and the North Red and Purple Modernization projects. In addition, any improvements made to one part of the Red Line help the entire line.

- The extension will begin at the 95th Street Station and terminate either just north of 130th Street or east of Altgeld Gardens. It also will help South Side residents save 20 minutes on their commute from 130th Street to downtown and reduce the need for transfers.

- All four proposed stations would have park and ride facilities. The extension would be elevated from 99th Street to 119th Street and after that it would be at-grade.

- Between 2006 and 2009, planners worked with the community to examine several options for alignment of the extension. Based on those discussions and studies, the Union Pacific Railroad (UPRR) alternative was chosen as the Locally Preferred Alternative (LPA).

- The CTA is in the Environmental Impact Study (EIS) phase of the project as it examines four alternatives and collects information about how plans would affect local community members and the environment. The August 2nd Open House is part of the EIS phase.

- Funding for the EIS was announced yesterday by Senator Richard Durbin. CTA still needs funding for construction and operation of the extension.

Overall Mr. Edwards and the Roseland Business Development Council (RDBC) are supportive of the plans. He suggested that CTA come back during RBDC's next quarterly meeting to give all members an update. Edwards had questions and suggestions about the Red Line Extension.

- **Community Support**
  Mr. Edwards asked if the CTA had community support for this extension. He also mentioned that he has been hearing some concerns about noise from the community.
    - CTA affirmed that the community supports this extension, particularly the UPRR alternative because it goes to Altgeld Gardens. CTA said that it is working with UPRR to discuss issues, such as the UPRR's need to have 50 feet of clearance between its track and the CTA track. CTA responded to the noise concern by reminding Mr. Edwards that it will be looking at noise impacts during the EIS.

- **Funding**
  He asked if CTA anticipated having problems getting the funding needed to make this extension a reality.
    - CTA said that identifying funding will be a challenge. CTA also explained that in order to construct and operate the RLE, the CTA will need to have funding in place first, and then the project would need federal approval.

- **Economic Development**
  Mr. Edwards asked about the look of the 115th Street Station, since that would be closest to his business. He asked if it would mirror the 95th Street Station. He wanted to make sure there would be an opportunity for businesses to locate near the station so that passengers might go even further to the retail strip and his business on South Michigan Avenue.
    - CTA responded that it would consider retail space, but that it was too early in the process to say anything specific. CTA also said that all new stations would have park and ride lots.

- **Timeline**
  He also asked about when to expect the RLE to be up and operating.
    - CTA mentioned that it could take two to three years to finish the EIS, and if everything is in place (funding and federal approval) it could be seven to eight years from now, at the earliest, that the RLE could be operating.

- **Effect on Environment and Housing**
  Mr. Edwards wanted to know how the RLE would impact the environment, and if any homes would be demolished.
    - CTA said that some parks might be affected, as well as homes. CTA explained that whether houses will be affected depends on conversations with UPRR. And, CTA officials reminded Mr. Edwards effects to historical properties will be analyzed during the EIS.

Meeting Notes

Date: August 8, 2011

Present: Representative Cynthia Soto, 4th District
Joe Iacobucci, CTA
Sonali Tandon, CTA
Deborah Lopez, CTA
Lisa Soard (note taker), CWC Transit Group

Time: 8:53 a.m.

Highlights:
CTA staff presented information about the Red Line Extension (RLE) and left a seven-page packet for Representative Soto to reference, as needed. CTA representatives emphasized that:

- This extension is part of "Your Red," which also includes Dan Ryan Track Renewal and the North Red and Purple Modernization (RPM) projects.

- The extension will begin at the 95th Street Station and terminate either just north of 130th Street or east of Altgeld Gardens. It will help South Side residents save about 20 minutes on their commute from 130th Street to downtown and reduce the need for transfers.

- All four proposed stations would have park and ride facilities. The extension would be elevated from 99th Street to 119th Street and after that it would be at-grade.

- Between 2006 and 2009, planners worked through the Alternatives Analysis process. Based on discussions with the community and studies, the Union Pacific Railroad alternative was chosen as the Locally Preferred Alternative (LPA).

- Although Senator Durbin recently announced federal money to complete the EIS for the RLE and RPM projects, CTA would still need federal, state, and local funds for design and construction of the RLE.

- The CTA is in the Environmental Impact Study (EIS) phase of the project as it collects information about how plans would affect residents and the environment. CTA conducted an Open House on August 2nd to allow community members to ask CTA representatives about the proposed extension.

Representative Soto said CTA is doing good things and that she likes this project. She appreciated that CTA came out to brief her, but mentioned that she felt CTA should be doing more advertising and community events to raise awareness about this project. She also said she hoped that minority participation in construction would be high.

Representative Soto had questions and suggestions about the Red Line Extension.

- **130th Street Terminal**
  Representative Soto asked if CTA had future plans to extend the Red Line beyond 130th Street.
    - CTA said that it would need to go through another EIS process before it considered extending beyond 130th Street, and that it had to get the RLE approved and built first.

- **Timing and Funding**
  Representative Soto wanted to know how long the CTA had been working on the RLE. She also asked about whether any of the federal money for high speed rail could be used for the RLE, whether CTA got any capital dollars, and how much CTA would need to complete the RLE. She emphasized that she would be meeting with Transportation Secretary Ray LaHood soon, which could help inform where funding should be directed.
    - CTA replied that it had been working on the RLE since 2006. CTA stated that no federal money for high speed rail could be used on this project, but that the RLE was going through the “New Starts” funding process for new rail projects. CTA answered that it had received some capital funds, but those were to keep the existing system in a state of good repair, and would not address the RLE. CTA also said that its original 2009 estimate to complete the RLE was $1.1 billion, but that will likely rise with inflation.

- **Feasibility**
  Representative Soto asked if CTA had completed a feasibility study for the RLE.
    - CTA explained that a preliminary feasibility study was completed as part of the Alternatives Analysis phase, and that a more comprehensive feasibility study would be part of the next steps in the preliminary engineering phase.

Meeting Notes

Date: July 28, 2011

Present: Rick Bryant, Chief of Staff, Representative Jesse Jackson, Jr., 2nd District
Joe Iacobucci, CTA
Michael McLaughlin, CTA
Deborah Lopez, CTA
Lisa Soard (note taker), CWC Transit Group

Time: 10:40 a.m.

Highlights:
CTA staff presented and left a seven-page packet of Red Line Extension (RLE) materials. The materials and CTA representatives stressed that:

- This extension is part of "Your Red," which also includes Dan Ryan Track Renewal and the North Red and Purple Modernization (RPM) projects.

- The CTA is taking a balanced approach to the Red Line; roughly half the money announced by Sen. Durbin recently will go to the EIS for the RLE and half to RPM.

- The CTA is partnering with the Federal Transit Administration (FTA) on the RLE.

- The extension will begin at the 95th Street Station and terminate either just north of 130th Street or east of Altgeld Gardens. It also will help South Side residents save 20 minutes on their commute from 130th Street to downtown and reduce the need for transfers.

- All four proposed stations would have park and ride facilities. The extension would be elevated from 99th Street to 119th Street and after that it would be at-grade.

- Between 2006 and 2009, planners worked through the Alternatives Analysis process. Based on discussions with the community and studies, the Union Pacific Railroad alternative was chosen as the Locally Preferred Alternative (LPA).

- The CTA is in the Environmental Impact Study (EIS) phase of the project which will collect information about how plans would affect local community members and the environment. The August 2nd Open House is part of the EIS phase and will allow community members to ask CTA representatives about the proposed extension.

Mr. Bryant said CTA is doing good work and that he has been impressed with the CTA's commitment to this project. Mr. Bryant also said he and Representative Jackson, Jr., will support the community's decision for the LPA. Mr. Bryant had questions and suggestions about the Red Line Extension.

- **Union Pacific**
  Mr. Bryant asked if CTA and the Chicago Department of Transportation were able to work with the UP to vacate its track or move to the Canadian National line, would the CTA use the UP's track?
  - CTA said that it would still build an elevated track. CTA also said that it would continue to work with the UP because the UP has several concerns. For example, the UP may consider adding a third track, and the UP wants to make sure that it doesn't lose income because this line is its main line to Texas.

- **Timing and Funding**
  He wanted to know when the EIS would be complete and what funding CTA had or needs to move forward with the extension.
  - CTA replied that in order to construct and operate the RLE it needed to have full funding in place and would need federal approval. CTA representatives said that they were looking at a state match and an operating subsidy. CTA also mentioned that it could take two to three years to finish the EIS, and if everything is in place it could be seven to eight years from now, at the earliest, that the RLE could be operating.

- **Halsted Alternative**
  Mr. Bryant asked about the Halsted Alternative and whether it would be elevated.
  - CTA explained that it would be elevated and that it scored just as well as the Union Pacific Railroad right-of-way. CTA is keeping the Halsted Alternative in the EIS for comparison purposes and to meet FTA requirements.

Meeting Notes

Date: July 20, 2011

Present: Representative Monique Davis, 27th District
Deborah Lopez, CTA
Sonali Tandon, CTA
One local resident
Karen Huelsman (note taker), CWC Transit Group

Time: Noon

Highlights:

CTA staff presented and left a seven-page packet of Red Line Extension materials. The materials and CTA representatives stressed that:

- Since the 95th Street Station is a highly used terminal and the area south of the Red Line has a need for more transit options, CTA is pursuing this extension.

- Better transit will spur economic revitalization along the current Red Line and the extension.

- Between 2006 and 2009, planners worked with the community to examine several options for placement of the extension. Based on those discussions and studies, the Union Pacific Railroad alternative, was chosen as the Locally Preferred Alternative.

- The CTA is in the Environmental Impact Study (EIS) phase of the project as it collects information about how plans would affect the local community and the environment. The August 2nd Open House is part of the EIS phase.

Overall Representative Davis was supportive of the plans, and was hopeful that the money can be secured to build the extension. Since the state government will have to contribute a portion of the funding, she noted that there is a lot of work ahead.

Representative Davis had questions and suggestions abut the Red Line Extension.

- **Safety**
  She said one of her biggest concerns is that people feel safe riding the train. She suggested looking at what other cities do to address these concerns.
    - CTA answered that security personnel and cameras could address safety concerns.

- **Community Involvement**
  She said many in her district feel forgotten when it comes to transit. She also stressed the need for keeping the community informed through every step.
    - CTA representatives said this extension is in direct response to the need for more transit options south of 95th Street. If the extension is built, it would eliminate the need for time-consuming transfers. Transit riders traveling from the proposed 130th Street terminal to the Loop would save about 20 minutes.

- **Affect on Housing**
  She was optimistic that the community would support the plan as long as the disruption to housing was minimal and that elevated tracks would not be placed over existing homes in the area. In addition, she was concerned about toxic train emissions too close to housing. A resident also was concerned if the extension would serve residents of Altgeld Gardens. The resident also asked where tracks would be placed in relation to existing structures.
    - CTA representatives responded that the extension would serve Altgeld Gardens and that ideally CTA would like to operate in the existing railroad right-of-way, and will work with the railroad to minimize effects on residents.

Meeting Notes

Date: July 29, 2011

Present: Senator Martin A. Sandoval, 12th District
Sean J. Murray, chief of staff, Senator Sandoval
Sonali Tandon, CTA
Joe Iacobucci, CTA
Deborah Lopez, CTA
Joan Coogan, CTA
Lisa Soard (note taker), CWC Transit Group

Time: 1:05 p.m.

Highlights:
CTA staff presented and left a seven-page packet of Red Line Extension (RLE) materials. The materials and CTA representatives stressed that:

- This extension is part of "Your Red," which also includes Dan Ryan Track Renewal and the North Red and Purple Modernization (RPM) projects; and that when improvements are made to one part of the line it helps the whole line.

- The CTA is partnering with the Federal Transit Administration (FTA) on the RLE.

- The extension will begin at the 95th Street Station and terminate either just north of 130th Street or east of Altgeld Gardens. It also will help South Side residents save 20 minutes from 130th Street on their commute to downtown and reduce the need for transfers.

- All four proposed stations would have park and ride facilities. The extension would be elevated from 99th Street to 119th Street and after that it would be at-grade.

- Between 2006 and 2009, planners worked through the Alternatives Analysis process. Based on discussions with the community and studies, the Union Pacific Railroad (UPRR) alternative was chosen as the Locally Preferred Alternative (LPA).

- The CTA is in the Environmental Impact Study (EIS) phase of the project which will collect information about how plans would affect local community members and the environment. The August 2nd Open House is part of the EIS phase and will allow community members to ask CTA representatives about the proposed extension.

Senator Sandoval was pleased to see progress on the RLE. He said people are really getting excited about this extension and that CTA and its supporters need to get the federal government to help move this forward. He also mentioned that he would try to get to the open house and asked to keep getting briefings as this process moves forward.

- **130th Street Terminal**
  Senator Sandoval mentioned that the unions have asked him if the CTA is considering extending the Red Line beyond 130th Street. The unions seem to think there is a greater ridership at 159th Street.
    - CTA representatives explained that the "New Starts" process, which is the process the CTA is going through for the RLE, is very competitive and that the projects considered need to be cost effective. The CTA staff also said that south of 130th is a forest preserve, which is low density for ridership. In order to justify extending the line south of 130th, CTA would have to go to where there is more population density.

- **Timing and Funding**
  He wanted to know when the EIS would be complete and what funding CTA had or needs to move forward with the extension. Senator Sandoval also asked how much the CTA got from the federal government, which Senator Durbin announced recently.
    - CTA replied that in order to construct and operate the RLE it needed to have full funding in place first and then it would need federal approval. CTA representatives said that they were looking at a 50/50 federal-local match, which could be a combination of city and state funding.

      CTA also mentioned that it could take two to three years to finish the EIS. After the EIS, CTA would focus on engineering and design, and if everything (including funding) is in place it could be seven to eight years from now, at the earliest, that the RLE could be operating.

      Additionally, CTA explained that roughly half the money announced by Senator Durbin recently will go to the EIS for the RLE (approximately $3 million) and half to RPM. CTA added that it would cost about $1.4 billion to construct RLE.

- **City Elected Official Support**
  Senator Sandoval asked who the transportation chair was at the city level and whether that person had hearings on the RLE. He also asked about the wards that the RLE would go through and whether the aldermen supported it. In addition, he asked if the CTA chairman and president, and Chicago's new mayor were aggressively seeking funding. He followed that up by asking if the mayor had transportation in his transition report.
    - CTA said that the transportation chair was Alderman Anthony Beale and that he hadn't hosted hearings yet. CTA also said that they had briefed all of the aldermen who would have the RLE in their wards and that all have voiced support. CTA affirmed that the CTA chairman and president, and Mayor Emanuel were aggressively seeking funding for the RLE, and that transportation was in the transition report.

- **Effect on Property and Environment**
  Sandoval asked about the impact on the environment and whether any housing would be affected.
    - CTA replied that the UPRR alternative could have minimal impacts on property and some impact on parks; the impacts would be evaluated in EIS. CTA also said that it is working with the Union Pacific because the UP has requested a 50-foot buffer between its tracks and the extension.

Meeting Notes

Date: July 20, 2011

Present: Senator Emil Jones III, 14th District
Deborah Lopez, CTA
Sonali Tandon, CTA
Karen Huelsman (note taker), CWC Transit Group

Time: 1:40 p.m.

Highlights:

CTA staff presented and left a seven-page packet of Red Line Extension materials. The materials and CTA representatives stressed that:

- Since the 95th Street Station is a highly used terminal and the area south of the Red Line has a need for more transit options, CTA is pursuing this extension.

- Better transit will spur economic revitalization along the current Red Line and the extension.

- Four new transit stations with parking facilities are planned for the extension.

- Between 2006 and 2009, planners worked with the community to examine several options for placement of the extension. Based on those discussions and studies, the Union Pacific Railroad alternative was chosen as the Locally Preferred Alternative.

- The CTA is in the Environmental Impact Study (EIS) phase of the project as it collects information about how plans would affect the local community and the environment. The Aug. 2 Open House is part of the EIS phase.

Senator Jones was very supportive of the proposal, saying, “We want to get this done.” He said that he was planning to attend the Open House on Aug. 2.

He had questions and suggestions abut the Red Line Extension.

- **Park Land and Homes that Would be Affected**
  He expressed concern that the community would be reluctant to give up any park space for more transit tracks. He also mentioned that if housing would need to be razed then that could be a challenge to the community.
    - Within the locally preferred option, the CTA pointed out that different parks would be affected depending on whether the CTA tracks were built East or West of the Union Pacific Railroad's existing tracks. Likewise, different housing units could be affected. Ideally CTA would like to operate in the existing railroad right-of-way, and will work with the railroad to minimize land acquisition.

- **Length of Time for Completion and Costs**
  Senator Jones said that he and his community have been waiting a long time for more transit, and that he was unaware completion could be eight years away. His biggest funding concern, upon hearing the project could cost $1.1 billion, was coming up with the state's portion of the funding. But he was optimistic about the CTA being able to secure the funding and that he had already talked with Gov. Quinn about supporting the project.
    - CTA explained that the proposed extension would require federal, state and local funding.

- **How This Would Help Commuters**
  Senator Jones was pleased that transit riders would not have to make any transfers to travel from 130th Street to the Loop, and that the extension would reduce about 20 minutes off that trip.
    - CTA staff pointed out that reduced commuting time would make travel more convenient for those who have jobs or are looking for jobs downtown. Coupled with the park and ride facilities, the project would be an economic booster for local businesses along the line as well.

Appendix G
Participating Agency List
Dated June 21, 2011

Participating Agencies
Red Line Extension

Category	Sub-Category	Organization	Salutation	First Name	Last Name	Title	Address	Apt/ Floor	City	State	Zip
Government Agency	Federal	Department of Energy	Mr.	Steven	Chu	Secretary	1000 Independence Ave. SW		Washington	DC	20585
Government Agency	Federal	Department of Health and Human Services	Mr.	James	Galloway	Acting Regional Director - Region 5	233 N. Michigan Ave.	Ste. 1300	Chicago	IL	60601
Government Agency	Federal	Department of Housing and Urban Development	Ms.	Beverly	Bishop	Deputy Regional Director	77 W. Jackson Blvd.		Chicago	IL	60604
Government Agency	Federal	Federal Emergency Management Agency	Ms.	Janet	Odeshoo	Deputy Regional Administrator, Region V	536 S. Clark St.	6th floor	Chicago	IL	60605
Government Agency	Federal	Federal Highway Administration	Mr.	Norman	Stoner	Division Administrator, Illinois Division Office	3250 Executive Park Drive		Springfield	IL	62703
Government Agency	Federal	Federal Highway Administration	Mr.	Matt	Fuller	Environmental Programs Engineer	3251 Executive Park Drive		Springfield	IL	62703
Government Agency	Federal	Federal Railroad Administration	Mr.	Laurence	Hasvold	Regional Administrator	200 West Adams	Suite 310	Chicago	IL	60606
Government Agency	Federal	Transportation Security Administration	Ms.	Gale	Rossides	Acting Administrator	601 S. 12th St.		Arlington	VA	20598
Government Agency	Federal	U.S. Environmental Protection Agency	Mr.	Bharat	Mathur	Acting Regional Administrator - Region 5	77 W. Jackson Blvd.		Chicago	IL	60604
Government Agency	Federal	U.S. Fish and Wildlife Service	Mr.	John	Rogner	Field Supervisor - Chicago Field Office	1250 S. Grove	Ste. 103	Barrington	IL	60010
Tribes		Citizen Potawatomi Nation					1601 S. Gordon Cooper Drive		Shawnee	OK	74801
Tribes		Ho-Chunk Nation					5744 W. Irving Park Road		Chicago	IL	60634
Tribes		Peoria Tribe	Chief	John	Froman	Chief	118 S. Eight Tribes Trail	P.O. Box 1527	Miami	OK	74355
Tribes		Sac and Fox Tribe - Mississippi and Iowa	Mr.	Jonathan	Buffalo		349 Meskwaki		Tama	IA	52339
Tribes		Sac and Fox Tribe - Missouri and Kansas					305 N. Main Street		Reserve	KS	66434
Tribes		Sac and Fox Tribe - Oklahoma					Rt. 2 Box 246		Stroud	OK	74079
Government Agency	Local	Chicago Housing Authority	Mr.	Lewis	Jordan	CEO	60 E. Van Buren		Chicago	IL	60605
Government Agency	Local	Chicago Housing Authority	Ms.	Edie	Diaz		60 E. Jackson, Suite 1200		Chicago	IL	60605
Government Agency	Local	Chicago Housing Authority, Intergovernmental Affairs	Mr.	Otis	Wright	Director	60 E. Van Buren		Chicago	IL	60605
Government Agency	Local	Chicago Park District	Mr.	Mike	Kelly	CEO	541 N. Fairbanks		Chicago	IL	60611
Government Agency	Local	Chicago Park District	Mr.	Joseph	Bornstein	Project Manager, Planning & Development	541 N. Fairbanks		Chicago	IL	60611
Government Agency	Local	City of Chicago Department of Business Affairs and Consumer Protection	Ms.	Norma I.	Reyes	Commissioner	50 W. Washington St.	Room 208	Chicago	IL	60602
Government Agency	Local	City of Chicago Department of Community Development	Ms.	Christine	Raguso	Acting Commissioner	121 N. LaSalle St.	Ste. 1000	Chicago	IL	60602
Government Agency	Local	City of Chicago Department of Environment	Ms.	Suzanne	Malec-McKenna	Commissioner	30 N. LaSalle St.	Floor 25	Chicago	IL	60602
Government Agency	Local	City of Chicago Department of Environment	Ms.	Nicole	Kamins	Program Director	30 N. LaSalle St.	Floor 25	Chicago	IL	60602
Government Agency	Local	City of Chicago Department of Transportation	Ms.	Luann	Hamilton	Director, Transportation Planning	30 N. LaSalle St.	Suite 500	Chicago	IL	60602
Government Agency	Local	City of Chicago Department of Transportation	Mr.	Joe	Alonzo	CREATE Manager	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
Government Agency	Local	City of Chicago Department of Transportation	Mr.	Richard	Hazlett	Coordinating Planner	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
Government Agency	Local	City of Chicago Office of the Mayor	Mr.	Pat	Harney	Deputy Chief of Staff	121 N. LaSalle St.	Room 509	Chicago	IL	60602
Government Agency	Local	City of Chicago Police Department	Mr.	Jody	Weis	Superintendent	3510 S. Michigan Ave.		Chicago	IL	60653
Government Agency	Local	City of Chicago Police Department	Mr.	Mark	Harmon	Commanding Officer, Patrol Division	3510 S. Michigan Ave.		Chicago	IL	60653
Government Agency	Regional	Metra Commuter Rail	Ms.	Lynette	Ciavarella	Director, Planning and Analysis	547 W. Jackson Blvd.	13th Floor	Chicago	IL	60661
Government Agency	Regional	Metra Commuter Rail	Mr.	David	Kralik	Department Head, Long Range Planning	547 W. Jackson Blvd.	13th Floor	Chicago	IL	60661
Government Agency	Regional	Metropolitan Water Reclamation District of Greater Chicago	Mr.	Terrence J.	O'Brien	President, Board of Commissioners	100 E. Erie St.		Chicago	IL	60611
Government Agency	Regional	Metropolitan Water Reclamation District of Greater Chicago	Mr.	Joseph	Schuessler	Principal Civil Engineer	100 East Erie Street		Chicago	IL	60611
Government Agency	Regional	Regional Transportation Authority	Ms.	Leanne	Redden	Senior Deputy, Executive Director of Planning	175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Government Agency	Regional	Regional Transportation Authority	Ms.	Aimee	Lee	Manager, Regional Planning	175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Government Agency	Regional	Regional Transportation Authority	Mr.	Peter	Fahrenwald		175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Government Agency	Regional	Pace	Mr.	David	Tomzik	Manager, Long Range Planning	550 W. Algonquin Road		Arlington Heights	IL	60005
Government Agency	Regional	Pace	Ms.	Lorraine	Snorden	Manager, Department of Planning Services	550 W. Algonquin Road		Arlington Heights	IL	60005
Government Agency	State	Illinois Commerce Commission	Ms.	Shauna	Kelley	Bureau of Transportation Chief	160 N. LaSalle St.	C800	Chicago	IL	60601
Government Agency	State	Illinois Department of Natural Resources	Mr.	Marc	Miller	Director	One Natural Resources Way		Springfield	IL	62702
Government Agency	State	Illinois Department of Natural Resources	Mr.	Steve	Hamer	Office of Realty & Environmental Planning, Division of Ecosystems & Environment	One Natural Resources Way		Springfield	IL	62702
Government Agency	State	Illinois Department of Transportation	Mr.	Chuck	Abraham	Division of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Government Agency	State	Illinois Department of Transportation	Mr.	Joseph	Clary	Director, Division of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Government Agency	State	Illinois Department of Transportation	Ms.	Lil	Budzinski	Section Chief, CTA/ City of Chicago Section	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Government Agency	State	Illinois Environmental Protection Agency	Mr.	Douglas	Scott	Director	500 Stratton Office Building		Springfield	IL	62076
Government Agency	State	Illinois Environmental Protection Agency	Ms.	DiAnne	Schuerman		Deputy Director's Office/MC#1, P.O. Box 19276		Springfield	IL	62794-9276
Government Agency	State	Illinois Historic Preservation Agency	Mr.	William	Wheeler	State Historic Preservation Officer	#1 Old State Capitol Plaza		Springfield	IL	62701
Government Agency	State	Illinois Historic Preservation Agency	Ms.	Anne	Hacker	Deputy State Historic Preservation Officer	#1 Old State Capitol Plaza		Springfield	IL	62701

Appendix H
Participating Agency Update Letter

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

June 15, 2011

[Insert Agency Representative]
[Insert Agency Name]
[Insert Address]
[Insert, City, State, Zip]

Re: CTA Red Line Extension Environmental Review Process Update

Dear *[Agency Representative]*:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), has completed scoping in preparation for the development of an Environmental Impact Statement (EIS) for the proposed Red Line Extension project. This project would extend the Red Line, a rail transit line, 5.3 miles from its existing 95th Street Station to a new terminal station at 130th Street. Future project development is subject to available funding.

CTA will be hosting an open house on August 2, 2011 from 6:00 p.m.to 8:30 p.m. at St. John Missionary Baptist Church, 211 E. 115th Street, Chicago, IL to update the community on the results of the scoping process and on project progress. Your agency is cordially invited to attend this update meeting. CTA continues to receive feedback on the project and potential effects which will be addressed in the Draft EIS. The meeting format will be an open exchange of information between the attendees and CTA staff. There will be no formal presentation or testimony.

The EIS scoping process included an agency scoping meeting on September 24, 2009 and two public scoping meetings on September 22, 2009, and September 24, 2009. The scoping comment period ran from September 1 to October 27, 2009. Input received on the project from both agencies and the public is summarized in the scoping report dated June 2010. Agencies, community groups, members of the public, elected officials, and other interested parties submitted 316 letters, e-mails, and comment cards, and 28 individuals provided oral testimony during this period. The scoping report can be accessed at http://www.transitchicago.com/Redeis/documents.aspx.

The comments that were received will be used to guide the analysis in the Draft EIS. Preliminary evaluations have also identified potential issues that will likely require coordination and further study regarding parks, utilities, I-94 and I-57, and acquisitions.

As the project moves forward and the Draft EIS is developed, as a participating agency, you may be asked to:

- Provide input on the impact assessment methodologies and level of detail in your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and
- Review and comment on sections of the pre-draft or pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

If you have questions regarding this process, please contact either:

Ms. Sonali Tandon, Project Manager
Strategic Planning and Policy
Chicago Transit Authority
PO Box 7602
Chicago, IL 60680-7602
Phone: (312) 681-4246
Email: RedExtension@transitchicago.com

Mr. Reginald Arkell, Community Planner
Federal Transit Administration Region V
200 W. Adams, Suite 320
Chicago, IL 60606
Phone: (312) 886-3704
Email: Reginald.Arkell@dot.gov

Sincerely,

Marisol R. Simon
Regional Administrator

cc: Sonali Tandon, Chicago Transit Authority

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

June 15, 2011

[Insert Agency Representative]
[Insert Agency Name]
[Insert Address]
[Insert, City, State, Zip]

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Ms. Sonali Tandon, Project Manager
Strategic Planning and Policy
Chicago Transit Authority
PO Box 7602
Chicago, IL 60680-7602
Phone: (312) 681-4246
Email: RedExtension@transitchicago.com

Mr. Reginald Arkell, Community Planner
Federal Transit Administration Region V
200 W. Adams, Suite 320
Chicago, IL 60606
Phone: (312) 886-3704
Email: Reginald.Arkell@dot.gov

Sincerely,

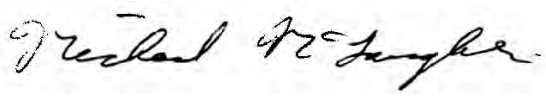

Michael McLaughlin
Vice President
Strategic Planning and Policy

cc: Reginald Arkell, Federal Transit Administration

Appendix I
Sign In Sheets

YOUR RED

Red Line Extension

cta

(1)

OPEN HOUSE
August 2, 2011

St. John Missionary Baptist Church

PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	FRANCINE DAVIS	RESIDENT	CHICAGO, IL 60628	773-934-4929	FDAVIS114@YAHOO.COM	✓
2	Mike Payne	CTA Gray Line Project	4609 Yender Ave Lyle, IL 60532	(773) 787-8078	grayline15@Yahoo.com	✓
3	DAVID HARRISON	Resident	8404 S Bennett Chicago IL 60617	773 221 0120	msibnsf@sbcglobal.net	✓
4	Deena McMullan	Rosemoor Community Association	10109 S. King Dr. 60628	—	—	✓
5	Debra Strickland	Developing Comm. Project	11300 S Halsted Chgo Ill. 60628	773-928-2500	d.strickland@dcpchicago.org	✓
6	Manie Thomas	Developing Comm Project	11300 S. Halsted Chicago Il 60628	773-928-2500	womanofgodmit@att.net	✓
7	AREFIN HUQ	-	5525 N Winthrop #512 Chicago IL 60640	773-682-0664	fiq@arefin.net	
8	P E Palmer	DCP	13107 S Eberhart Chicago Il 60827	773 264-0213	palmerphyllis13@yahoo.com	✓
9	Rebell Huey		352 W 101st Street	773-568-0531		
10	MARIA FOWLER		1621 S. Eggleston	773-779-5397	MFOWLER128@YAHOO	✓

YOUR RED

Red Line Extension

cta

(2)

OPEN HOUSE
August 2, 2011

St. John Missionary Baptist Church

PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	R McClellan	99/100 BIK Club	Chgo, Ill. 4941 So Green			
2	Billy Dorsey		11431 So. Union	773-264-5260	None	✓
3	Michael D. Denton		10931 S. Vernon			
4	David Kralik	Metra	547 W. Jackson Chicago, IL 60661			
5	Willie & Lula Spruill	Block	20 W. 115th Street	773-909-5011		
6	Josephine (Josie) Smith	PLAN 99th Yale Block Club	9921 S. Yale	773-468-4019	JosieSmith79@yahoo.com	✓
7	Cheryl Johnson	People for Community Recovery	13116 So. Ellis Chgo 60627	773.840.4618	hazelmJohnson@aol.com	
8	David Patten	SGIA Youth & Family Services (Roseland)		7		
9	L. MINTER	V.O.T.E		(773) 886 5745	brokeparty@gmail.com	
10	Tony Anthony Johnson	CTG MPTFG	3351 W 21th St	1-773-542-0587		

YOUR RED

Red Line Extension

cta

(3)

OPEN HOUSE
August 2, 2011

St. John Missionary Baptist Church

PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	Peter Wilson	Alderman Carrie Austin	Chgo Ill 60605	773 928-6961	cwilson@cityofchicago.org	
2	Mary Johnson	Smith Park	346 W. 101st Street	773-264-5984		
3	Deborah Fletcher	99th & 100th Green St. Block Club	9929 So. Green St. - Chgo. 60643			✓
4	Taylor Lang	reporter In these times	525 S. State St. Chicago 60605	724.456.2378	tslang91@gmail.com	✓
5	RITA MARYLAND		9230 S. BENNETT	773-978-5626		✓
6	Shawnde Burton	New Commandment Church Mother	Chicago, IL. 60636 1742 W. 63rd st / 120 W. 115th St. Chgo 60636	773.747.8517	sis.burton@yahoo.com	✓
7	DORIAN A. JOHNSON	FAR SOUTH CDC SSA # 45	9923 S. HALSTED STE D CHgo. IL. 60628	773 800 5510	DORIAN@FARSOUTHCDC.org	✓
8	LOU TURNER	DCP	Chicago IL	217/972-2447	lotturner@illinois.edu	✓
9	Dewanna Dorsey	Ward 9 Alderman Library	830 W. 119th St 60643	3127471425	DDORSEY@CHIPUBLIB.ORG	✓
10	HAROLD AARON	A&H Mech.	1215 E. 79th St	773-933-2400	haron@a-hmechanical.com	

YOUR RED

Red Line Extension

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August 2, 2011

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PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	Jon K. Evans		11936 S. Princeton Ave Chicago IL 60628-6014	773-821-8142	jkeiit963827@sbcglobal.net JKEIIT96@hormail.com	X
2	TINA MOORE	RIDER	11629 S. Eggleston 60628	(773) 668 1612	TinaMoore859 @ hotmail	
3	Harvey Kahler		2041 W Birchwood Chicago 60645		harvey.kahler@att.net	✓
4	Tracy Swartz	RedEye		(312) 259-4232	tswartz@tribune.com	X
5	Dolores Ruiz	resident	11623 So. Prairie Chicago 60628	773) 719-3182	dvillalvaz@aol.com	X
6	Renee Kuruc	FTA	200 W. Adams #320 Chgo IL 606606	312-353 1646	renee.kuruc@dot.gov	✓
7	J. OSTARELLO		11326 S. FORRESTVILLE CHCO 60628		PULLMAN 78S@YAHOO.COM	✓
8	Samuel Strachan	DCP	113 & Halsted	(773) 928-2500	sssstrachan444@sbcglobal.net	✓
9	Phil Sung	DCP		(630 810 6103	psung26@gmail.com	✓
10	Jennifer O'Neill	reporter FM 101.1 News	Merchandise Mart	630. 336.9981	ojenn13@hot.mail.com	

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August 2, 2011

St. John Missionary Baptist Church

PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	MARY POLK		9731 PRAIRIE			
2	E. DENIS	City of Chicago / HED	121 N. LASALLE / # 1000	312-744 4401	—	—
3	S. Al Nurridin	RCH / HCI	139 E. 115th St	708-841-9575	—	—
4	Peter Fahrenwald	RTA	175 W. Jackson / Chicago			
5	Jeffrey Sriver	CDOT	30 N. LaSalle / ~~7920 S Wabash Ave~~	312 744 7089		
6	DORIS H. WHITE		7920 S. Wabash / Chicago IL 60619	312 972 9652		
7	JANICE Allen		22 W 115 Street / Chicago Il 60628	773-818-4978		
8	Robert Douglas	S.O.N Foundation	10812 S. Forest / Chicago, IL. 60628	773-653-7527	Sonfourlife@yahoo.com	
9	John Paul Jones	Community Organizer / D.C.P.	11300 S Halsted / Chicago Il. 60628			
10	Leon Walker	D-J Realty	1050 E 95th Street	773-643-2793	LWalker@DJrealty.com	

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PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	Jon Samuel		5112 W. Fulton St. Chicago, IL 60644	(773) 544-8424	jonsamuel32@yahoo.com	✓
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YOUR RED

Red Line Extension

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August 2, 2011

St. John Missionary Baptist Church

PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	REBBIE ARKEL	COMM. ALMANAC / FTA	200 W. ADAMS ST. / CHICAGO, IL 60606	312-888-5704	REBECCA.ARKEL@DOT.GOV	✓
2	Ryan Hicks	Transportation Systems Planner / NIRPC	6100 Southport Road / Portage, IN	219-763-6060	RHicks@nirpc.org	✓
3	Chris Gray	Freelance journalist	1257 W. Lunt / Chicago 60626	414-434-3526	topher.gray@gmail.com	✓
4	Roberta Parkman	Resident	346 W. 100th Place / Chgo. 60628	773-264-7842	—	✓
5	Donald Miller	R-2	733 E 84	773 886 2811		
6	Madie L. Burton	Resident	120 W 115th St. Chgo / Chgo, IL 60628	773 368 8436	all lower case Pastor.Madie@gmail.com	✓
7	RYAN RICHTER	METRA	547 W. Jackson Blvd / Chicago, IL 60661	312-322-8036	richter@metrair.com	✓
8	DON RASHID	ALLPOINTS SECURITY + DETECTIVE, INC	2112 EAST 71ST ST / CHGO. IL 60649	773.955.6700	drashid@allpointssecurityinc.com	
9	Xavier Tidwell	Inspiration Cafe	6957 W. Sheridan	708 238 0001	Tidwellx@yahoo.com	
10	Minister Sylvia Y. Jones	DCP / ROC	8719 S Emerald / e 60620	773-368-0991	elohimINC@SBCGlobal.net	✓

YOUR RED

Red Line Extension

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PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	LaDwain Shaw		Chicago IL 60827	773-419-1746		✓
2	Rennie M. Grace		Chicago Ill 60614	773-723-7294		✓
3	John Long		Chicago, IL.	773.450.7617	jow107@aol.com	✓
4	Naomi Tate	SEIU	Chgo Ill	773.603.6956		
5	Donnat Tony Van Zanten		Chic. Ill	773-881-3937		✓
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(9)

YOUR RED

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PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	Tom Coleman	PB	230 W. Monroe Suite 900	312-351-4302	colemant@pbworld.com	✓
2	EUGENE ROGERS	D-C-P	10763 S. SANGAMON	773-568-8324		
3	Diane Williams	Public	9900 S. Yale	773 568-7551	dylynnx@yhoo.	
4	Mary Parker	Public	9050 S Dauphin	773 706-4421		
5	HENRY TAYLOR	MEDIA ACTIONS NBNK/CHICAGO	1525 E 84TH ST CHGO ILLINOIS	773-221-2512	HTAYLOR@HATTAYLOR-AND CO.COM	
6	Patricia Young		11582 S Prairie	773-815-1597		
7	Jasmine Young		11582 S. prairie	773-815-1597		
8	William Glover	CFABC	PO Box 1273	708-781-5233		
9	Monique Lenoir		11544 S. Perry Ave Chicago, IL 60628	773-447-2198	mlenoir22@yahoo.com	✓
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(10)

YOUR RED

Red Line Extension

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August 2, 2011

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PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	Roland Solinski		5531 N. Sheridan Chicago IL	224-305-8008	rsolinsk@voa.com	X
2	DOLORES CHESTNUT	ROSEMOOR COMMUNITY ASSC	10522 SO. VERNON CHG 60628	773 928-0971		X
3	Dolores Thibodeaux	Allpoints Security	2112 E. 71st St 60649	773-955-6700	mail@allpointssecurityinc.com	X
4	LILLIAN BRAGGS		9635 S. YALE AVE 60628	773-821-1095		X
5	Christopher Young					
6	Rogers Mitchell		9210 S. Phillips	(773)768-8825		X
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(11)

YOUR RED

Red Line Extension

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August 2, 2011

St. John Missionary Baptist Church

PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	ELLA McGEE		1025 W. 102nd St CHGO, IL 60643	773445 1779		
2	Lizzie BROWN		11517 So. Church St.	773-239-6065		
3	Donnell Williams	Nehemiah Restoration Coal.	211 E. 115th	773-451-9329	donjehavon@hotmail.com	✓
4	EDMUND HAWKINS		1515 GRANT ST. DALTON, IL 60419		EGHAWK@SBCGLOBAL.NET	
5	Dexter Muhammad		12137 S. Wallace Chicago 60628		coachdexter@live.com	
6	Ron Shimizu	Parsons Brinckerhoff	230 W. Monroe, Suite 900 Chicago, IL 60606	312-803-6638	shimizur@pbworld.com	✓
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(12)

YOUR RED

Red Line Extension

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August 2, 2011

St. John Missionary Baptist Church

PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	Dorothy Anderson		10121 S. Kreer	773-779-8606	msda25@yahoo.com	
2	Glendolyn M. Rice	Developing Communities Project (DCP)	11300 S. Halsted	773-928-2500	gmrice@dpchicago.org	
3	Scott Enterprise Edmund Scott	President Roseland Bus. Dev. C.	11513 S. Michigan Chicago, IL 60628	773 568 8181 773 928 6100	Scott Ent 11513@AOL	✓
4	Kenneth Jenkins	Roseland Bus Dev	10822 S. Normal	773 255 6931		
5	Mon Bragg		9635 So Yale Chicago Ill. 60628			
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(13)

YOUR RED

Red Line Extension

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August 2, 2011

St. John Missionary Baptist Church

PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT

	PRINTED NAME	TITLE / ORGANIZATION	ADDRESS / CITY, STATE ZIP	PHONE	E-MAIL	Check to receive updates on Your Red
1	Lorri Baldwin	Red-Line Oversight Com.	8217 S. Perry Ave Chgo, IL. 60620	773-873-3698	lebaldwin@sbcglobal.net	Yes
2	Lonnetta Jones	PCP	Chgo Ill 60620	773-928-2500		
3	Rev. Rayford Grady	DCP	Chgo IL-60643	773.5044527	mrrg2@msn.com	YES
4	Robert Young		11582 S Prairie	773-1597		
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Appendix J
Comment Cards

YOUR RED

Red Line Extension

cta

(1)

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Lori Baldwin

Organization: Red-Line Oversight Committee Title: Red-Line 95th Street Station Adopt-A-Station Committee

Address: 8217 S. Perry Avenue

City: Chicago State: IL Zip: 60620

Phone: 773-873-3698 Email: lebaldwin@sbcglobal.net

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

My most concern is that as we moved through this planning and EIS phases - I would like to see more inter-governmental planning coordinated. Also, that the density and activity (busiest station in the system) 95th Street Red-Line station be identified as a transportation HUB. As part of the Red-Line Oversight Committee, I truly hope that city government continues to make this project a priority. Equity in transportation development projects and community needs (does really matter). Referred the the Voorhees (UIC) + DCP report. We want to be sure this opportunity does not get lost in politics. We have to move forward and the commitments that our politicians have made - including the Mayor - This project must remain a priority and on the front-lines.

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

For more information about the Red Line Extension Project visit: www.transitchicago.com/redeis. For **Hearing & Speech Impaired**: 1-888-CTA-TTY1 (1-888-282-6891). For information on other transit matters: **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), and **Transit Information:** 312-836-7000, or **RTA TTY:** 312-836-4949.

(2)

YOUR RED

Red Line Extension

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Madie L. Burton

Organization: _____ Title: _____

Address: 120 W 115th st.

City: Chicago State: IL Zip: 60628

Phone: _____ Email: pastor.madie@gmail.com

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

The proposed route adjacent to UP RR seems like a good route. Will it be east or west of the UP RR tracks. IF it ran above the UPRR or on existing tracks I think that will save a lot of homes from being razed

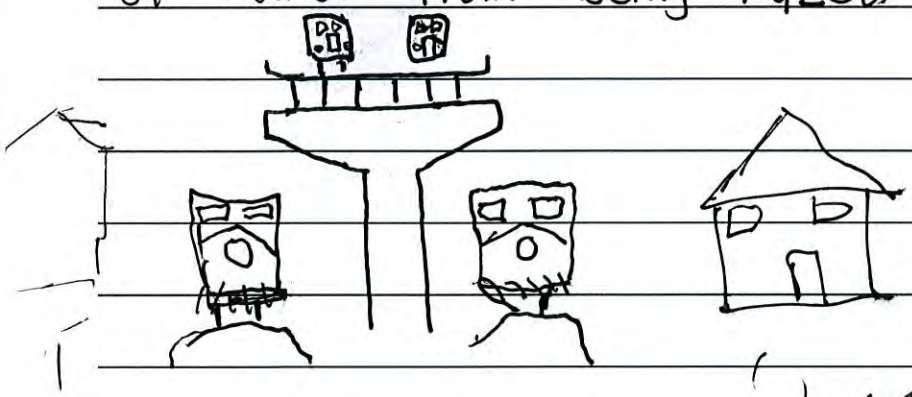

HRT (Rail) Alternative is definitly a NoNo. please do not take the sun from us along Halsted St

Madie L. Burton

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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(3)

YOUR RED

Red Line Extension

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Jon Keith Evans

Organization: 11936 South Princeton Avenue Title:

Address: 11936 South Princeton Avenue

City: Chicago State: Illinois Zip: 60628-6014

Phone: 773-821-8142 Email: jkeiit963827@sbcglobal.net JKEIIT96@hotmail.com

1 Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street. I firmly believe that a high speed electric trolley bus similar to Boston Massachusetts Green Line (down a modified Eggleston Avenue in Chicago) could've been less expensive to build and quicker to implement. It, as I envisioned it, also would've run parallel to UPRR

2 I DO NOT BLAME THE CTA FOR FOOTDRAGGING on constructing the Red Line Extension. From a business standpoint it would be foolhardy to invest in an area where graffiti and vandalism is common, assaults on women and girls could easily occur at the construction sites, and finally - CTA riders FLOUT advisories against eating, littering, radio playing and smoking on vehicles

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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(4)

YOUR RED

Red Line Extension

cta

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: EDMUND HAWKINS

Organization: _____ Title: _____

Address: 15015 GRANT ST.

City: DOLTON State: IL Zip: 60419

Phone: _____ Email: EGHAWK@SBCGLOBAL.NET

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

I AM IN AGREEMENT THAT AN EXTENSION TO THE RED LINE TO 130TH ST. IS MUCH NEEDED. FROM WHAT I AM HEARING, IT DOESN'T HAVE A CHANCE ON BECOMING A REALITY FOR THE NEXT 10 TO 20 YRS. I AM CONCERNED THAT WITH WHAT YOU CURRENTLY HAVE, TRAVEL ON THE RED LINE FROM 95TH ST. TO DOWNTOWN HAS BECOME PAINFULLY SLOW DUE TO LACK OF MAINTENANCE TO THE TRACKS. ANOTHER CONCERN OF MINE IS THAT WHEN I VISITED OTHER CITIES WITH RAPID TRANSIT OR LIGHT RAIL SYSTEMS, PARKING IS AMPLE. ON THE RED LINE, THE ONLY PARKING FACILITY IS HOWARD ST. UNTIL OR IF EVER THIS EXTENSION HAPPENS, I ~~COULD~~ WOULD LIKE TO SEE THE TRACKS IN A STATE OF GOOD REPAIR SO THE TRAVEL TIME WOULD BE REDUCED TO NO MORE THAN 25 MINUTES FROM 95TH TO THE LOOP. WITH THE TRAVEL TIME BEING SO SLOW, I HAVE EITHER DRIVEN TO THE LOOP OR HAVE OPTED TO RIDE METRA OR THE SOUTH SHORE LINE SINCE IT GETS YOU FROM THE FAR SOUTH SIDE TO DOWNTOWN IN APPROXIMATELY 30-35 MINUTES

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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(5)

YOUR RED

Red Line Extension

cta

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: tony Anhony Johnson

Organization: Sara Lee baking group Title: 1

Address: 3351 W 21 th 0 th st

City: Chicago State: Illinois Zip: 60623

Phone: 1-773-542-0500 Email: 3351 W 21 th st

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

the federal transit Administration and
cta have initiated
the federal environmental review
process and are preparing
the EIS will describe
Alternative
No action.
transportation system management
bus rapid transit
halsted street
union pacific railroad - the locally preferred

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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(6)

YOUR RED

Red Line Extension

cta

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Tony Anthony Adams Tonnson

Organization: Saraipe bakins Title:

Address: 3351 W 21 th St

City: Chicago State: Ill Zip: 60623

Phone: 1-773-592-0588 Email: 3351 W 21 th St

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

the draft Environmantal impact statement EIS will analyze potential impacts to environmental social and benefilial such as increased trasit access reduced travel time and reliability or reduced consestion on area streets while only very preliminary evaluations of the project area have been conducted to-date it is likely that there would not be substantial impacts to natural resources such as wildlife wetlands

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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(7)

YOUR RED

Red Line Extension

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We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: tony Adams

Organization: sara Lee bakingsroup Title: 1

Address: 3351 W 21th St

City: Chicago State: Illinois Zip: 60623

Phone: 1-773-549-0588 Email: 3351 W 21th St

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

traffic - the proposed ine would be elevated and not have at grade crossings that could increase traffic

conspiton all alternatives would inclide net park and ride facilities at each station and there could be traffic

preferred Alternative - union pacific railroad upper Alternative

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

For more information about the Red Line Extension Project visit: www.transitchicago.com/redeis. For **Hearing & Speech Impaired**: 1-888-CTA-TTY1 (1-888-282-6891). For information on other transit matters: **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), and **Transit Information:** 312-836-7000, or **RTA TTY:** 312-836-4949.

Proposed Red Line Extension to 130th Street

The Red Line Extension to 130th & Bishop Ford/I-94 is a wholly unnecessary and wasteful expenditure.

- The hundred million dollars for the Red Line extension represents a costly duplication of existing and nearby Metra and Northern Indiana Commuter Transportation District services to the South Suburbs.
- Suburban buses could be routed just as easily and more efficiently to existing suburban stations at 115th/Kensington, Riverdale, or Hegewisch or to a new station on the NICTD South Shore Line at 130th & Bishop Ford.
- The extension and station at 130th bypassing Roseland would be relevant to very few City residents that couldn't use existing Metra, NICTD and Pace services.
- Existing Pace services to 95th do not extend much beyond Harvey or into Indiana and do not afford the reach into distant suburbs provided by Metra and NICTD.
- Metra Electric offers nearly as many connections to east-west CTA buses across the South Side as the Red Line and Green Line combined, and to CTA trains downtown.
- If Metra Electric frequency is a community issue, add trains.
- If Metra Electric fares are an issue, incorporate Metra South Chicago and Blue Island and NICTD South Shore lines in the City into the CTA system as the Gray Line.
- The 2-person Metra crew represents a savings over the CTA 1-person crew and manned stations.
- The CTA extension would attract few if any new transit users without park-n-ride in addition to a bus transfer terminal. Parking facilities and a station could be built just as easily on the South Shore without a CTA rail extension.
- The CTA extension seeks to divert existing transit users from other services with lower fares that willfully increase its operating deficit. The premise seems to be that increasing the deficit raises the amount of State funding that can be brought into the City. There is complete disregard for regional fiscal responsibility and accessibility need priorities for transit.
- The only value in constructing the extension is in the State and Federal dollars brought into the City; and that competes with needs, some desperate, elsewhere.
- In a related matter, extending Metra/Gray Line local service to Hegewisch would open capacity for NICTD South Shore service growth to Northwest Indiana while facilitating expanded bus-rail transfers. Tracks used by the South Shore from the State Line are owned by Metra.

Harvey I Kahler 8/2/2011

(9)

From: Harvey Kahler (harvey.kahler@att.net)
To: CHICAGOTRANSIT@yahoogroups.com;
Date: Tue, July 12, 2011 12:02:57 PM
Cc:
Subject: Re: [CHICAGOTRANSIT] Re: Red Line 130th extension

In the first place, you totally ignore existing transit infrastructure in the area that could be exploited more fully for less money.
The bus volume into 95th is more artificial and competitive than economic. While the service in Chicago is understandable, the number of Pace routes incurs significant additional mileage to feed the CTA than the nearest suburban Metra station whose service would be faster. These extra miles are not free of expense, consuming resources and limiting the ability to expand into unserved areas.
As I see it, a CTA extension to 130th would shorten the Pace feeder routes and avoid expressway congestion approaching 95th to be more compete on fare and travel time to poach Metra riders at a cost of a $-billion. I suspect that the cost for the length of trip for such service is above the system average and represents a subsidy equal to or greater than that for Metra.
The CTA Red Line Extension intermediate station volumes projected to be quite low, comparable to those proposed to be closed in a Red Line reconstruction between Clark Jct & Howard. Even so, the volumes probably include a fair number of Metra customers diverted from the nearby Electric and Rock Island stations (didn't get a feel for those numbers from the study).
Yes, a transfer is required to continue north; but is the cost of a parallel line worth the new or diverted Metra riders attracted to the Red Line bound for north of the Loop?
Yes, in principal the Red Line should extend from the northern to the southern corporate limits; but given the existence of other alternatives, is this a responsible use of capital resources?
Finally, the proposed CTA extension would not tie in with Metra to reach suburban destinations, obliging parallel competing Pace-CTA services with a limited pot of dollars for operations.

--- On **Tue, 7/12/11, PJ** ***<choochoopw@yahoo.com>*** wrote:

> From: PJ <choochoopw@yahoo.com>
> Subject: Re: [CHICAGOTRANSIT] Re: Red Line 130th extension
> To: "CHICAGOTRANSIT@yahoogroups.com" <CHICAGOTRANSIT@yahoogroups.com>
> Date: Tuesday, July 12, 2011, 8:36 AM
>
> I've been sitting back trying to understand why so many are against the red line being extended. Isn't 95th like the 2nd busiest station in the entire system? Doesn't that warrant an extension since so many buses feed into that terminal? None of the buses with the exception of the 29 cross another CTA rail line so people that take the bus out there don't have another option to get downtown and points beyond other than the red line. I used to have to take that long ride from the suburbs by the 352 or 353 daily and running the red line further south would eliminate a good portion of my commute. If I still lived out there I probably wouldn't take the 352 considering I don't see how that bus would end up anywhere but at 95th but the 353 was always my preferred bus and it would make sense for me to take that. While I can see the fight for the gray line, I think it is somewhat limited for what the red line extension is trying to do. If my final destination was downtown, then yes that would work but if I was

(10)

trying to go elsewhere, Lakeview or points north or west, that creates an unnecessary transfer with a walk from Millennium Station to Wabash or State to the appropriate train. And before anyone jumps up and chews my head off, I'm just searching for clarification not a debate.

From: Dennis McClendon <dennismcclendon@gmail.com>
To: CHICAGOTRANSIT@yahoogroups.com
Sent: Monday, July 11, 2011 10:47 PM
Subject: Re: [CHICAGOTRANSIT] Re: Red Line 130th extension

David Harrison wrote:

> The Red line extension is needed to solve the congestion at the
> most crowded outlying station in the city.

Congestion of vehicles or people? Wouldn't it be a lot cheaper to build a big parking garage at 95th with a huge bus terminal on the ground floor?

> The extension is needed to provide service to the most isolated
> area in the city.

Isolated? It's squeezed in between two Metra lines with stations every half mile. Do you think folks in Scottsdale, Sauganash, Montclare, Mount Greenwood, or Garfield Ridge would agree that Roseland is "the most isolated area in the city?"

The bigger problem is that the Red Line extension area is low density. Roseland, West Pullman, and Pullman are all under 11,000 persons per square mile. For comparison, South Shore is 21,000, Lake View is 30,000.

Check it out: http://i55.tinypic.com/2jbnrq0.jpg

::::::::::::::::::::::::::::::::::::
Dennis McClendon
dennismcclendon@gmail.com

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(11)

From: Harvey Kahler (harvey.kahler@att.net)
To: CHICAGOTRANSIT@yahoogroups.com;
Date: Tue, July 12, 2011 12:15:37 AM
Cc:
Subject: Re: [CHICAGOTRANSIT] Re: Red Line 130th extension

Just how would FRA regs be any different with the Gray line since Metra would continue to operate its trains on its plant for a CTA service? Or continue to operate as Metra with an integrated RTA fare system?
The other advantage of the Gray Line is that Metra is not eligible (directly) for revenue from the dedicated RTA sales tax generated in the City. CTA could use this to purchase service from Metra, thereby making Metra whole. The suburban-generated tax revenue could be shifted to CTA mitigated by the purchase of service, offsetting the added expense of the Gray Line to the CTA.
Further Pace and CTA operating savings may be achieved by orienting buses to feed the Gray Line and Metra Electric rather than going much farther either to Downtown or 95th.

--- On **Mon, 7/11/11, Albert** <***buslist@yahoo.com***> wrote:

From: Albert <buslist@yahoo.com>
Subject: [CHICAGOTRANSIT] Re: Red Line 130th extension
To: CHICAGOTRANSIT@yahoogroups.com
Date: Monday, July 11, 2011, 9:43 PM

And how does that purchase of survice align with the higher cost per passenger mile due to FRA regs and requirements? These folks deserve a higher subsidy? And don't think FRA will go away as PATH will tell you all about (far less a FRA railroad than the Gray Line would be)

--- In CHICAGOTRANSIT@yahoogroups.com, "Adam H. Kerman" <ahk@...> wrote:
>
> At 3:24pm -0000, 07/10/11, chicagopcc <msibnsf@...> wrote:
>
> >More "costly" as in rider has to pay twice. The entire sentence was
> >written in a present tense.....or past perfect....it's too damn hot to
> >argue rhetoric. There was nothing in the entire passage relating to your
> >Gray Line proposal.
>
> Aargh.
>
> That is not Mike's position. Mike is in favor of fare integration. He
> envisions Gray Line as city/CTA purchase of service from Metra, so if the
> city funded it, why would you believe it would be done without fare
> integration?
>
> Mike is in favor of stations staffed with CTA customer assistants as if
> they were rapid transit stations, so obviously he's in favor of fare
> integration. I don't agree with his premature assumptions on fare
> collection.
>

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(12)

From: Harvey Kahler (harvey.kahler@att.net)
To: CHICAGOTRANSIT@yahoogroups.com;
Date: Sat, July 9, 2011 1:37:35 PM
Cc:
Subject: Re: [CHICAGOTRANSIT] Re: Red Line 130th extension

With the Gray Line proposal, #95W-#95E and #103-#106 could be combined and returned to through routes across the South Side and connect with suburban rail services to Joliet, University Park, and Indiana as well as feeding the Gray Line to Downtown.
Have I mentioned before that 130th & Bishop Ford is at the South Shore that could be transformed to a Gray Line branch from Hegewisch?

--- On **Sat, 7/9/11, chicagopcc** ***<msibnsf@sbcglobal.net>*** wrote:

From: chicagopcc <msibnsf@sbcglobal.net>
Subject: [CHICAGOTRANSIT] Re: Red Line 130th extension
To: CHICAGOTRANSIT@yahoogroups.com
Date: Saturday, July 9, 2011, 11:17 AM

The most important fact is that the present 95th Street terminal of the Red line is the most congested in the city and the only way to relieve this is to extend the Red line into those territories feeding 95th. Decades ago planners thought the extension would be both east and west and left space in the two expressway medians. We now know that neither median is the best routing and the concept of the UP ROW or south Halsted competed and the UP won out as the best of both worlds, and undoubtedly the cheaper. The UP does bend east and touches the commercial strip. After crossing the Metra/CN its a surface operation to 130th.

Is 130th a great place for a terminal. It is a good place for parking. Desolate locations can still be secured and there is plenty of potential traffic on the Freeway. Those who want the express to downtown already have Hegwisch and Harvey. 130th can hold a super rail yard. The other "L" lines certainly don't boast packed trains at their end points, so why shpould the Red line be any different.

In short, the extension relieves 95th Street and that can only be done extending the "L". It cannot be done with a "pie in the sky" new Metra service. Of course, we could get Six Flags to develop a winter ski park on that mountain of landfill....that would be in the old tradition of interurban lines that went to a park at the end of the line.

David Harrison

David Harrison

--- In CHICAGOTRANSIT@yahoogroups.com, Eric Pancer <epancer@...> wrote:
>
> On Sat, Jul 9, 2011 at 10:28, chicagopcc <msibnsf@...> wrote:
> > It's not Chicago's fault that the city is not perfectly geometric. Â But to keep from having the two rail services cloud their spheres of influence...."city of" equals CTA "L"..."suburbs and beyond" equals Metra.
>
> You're putting a lot of effort in to making something asymmetrical, symmentrical
>
> [..]
> > Hey on the other sides the CTA has parking for the incoming commuters from the burbs....Rosemont, Forest Park, Wilmette, Skokie. Â Whats with this constant looking for reasons to

13

deny the south side the "L." Â Yes, I'm defensive.
>
> There's actually business in those locations. There is NOTHING at
> 130th Street (other than a handful of residents). Are you proposing
> that there be development there? If you want to run an to 115th and
> truncate it back, make your argument. No one will park-n-ride at 130th
> street. Why? It's a desolate location, you're at least an hour from
> the Loop, and it's easier just to drive to Harvey or Riverdale and
> save time by taking MED.
>
> - Eric
>

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(14)

From: Harvey Kahler (harvey.kahler@att.net)
To: CHICAGOTRANSIT@yahoogroups.com;
Date: Sat, July 9, 2011 1:22:08 PM
Cc:
Subject: Re: [CHICAGOTRANSIT] Re: Red Line 130th extension

Trains are trains and railways are railways; that's why some metropolitan systems like BART, Metro, and others act as regional services in outlying areas, and why Metra (electric and diesel) could serve as metropolitan lines in Chicago. There may be service characteristics that distinguish equipment needs; but these often are in conflict and less than ideal for different market segments. The CTA-Metra distinction is functionally artificial and political.
The provision for seating on rapid transit was made early on. Later, center doors and bowling alley seating were added for the relatively short runs, high loads, and constrained capacity of the Loop. Quarter-point doors improved access within the cars; and the State and Dearborn subways relieved the limited capacity of the Loop and the need to pack as many passengers as possible on the trains. Basically, I'm opposed to building a costly parallel rapid transit line to serve much the same area as an existing and underutilized rail line that could be exploited for much less money.

--- On **Sat, 7/9/11, chicagopcc** ***<msibnsf@sbcglobal.net>*** wrote:

> From: chicagopcc <msibnsf@sbcglobal.net>
> Subject: [CHICAGOTRANSIT] Re: Red Line 130th extension
> To: CHICAGOTRANSIT@yahoogroups.com
> Date: Saturday, July 9, 2011, 10:28 AM
>
> It's not Chicago's fault that the city is not perfectly geometric. But to keep from having the two rail services cloud their spheres of influence...."city of" equals CTA "L"..."suburbs and beyond" equals Metra.
>
> 130th ST maybe was picked out of a hat. It puts Altgeld Gardens within walking distance...good for demographics. I have a friend who says the Tribune did a story and 130th ST was given because there was plenty of space for a "super rail yard."
>
> Personally, I am leaning back towards bending the line east to 115th ST and the Ford Freeway. Takes a while to get used to that name "freeway." If the tracks come back along the Metra/CN a connecting station could go in at Kensington, then the "L" goes east to 115th and Ford. You've got the second largest assembly hall and the new WalMart led retail going in there at 115th. There should be plenty of space for the parking facility. You're now a shorter one and a half mile from the college at 103rd and Altgeld is still within reach. Or if needed the line can turn south and go alongside the Freeway and still go to 130th ST.
>
> Hey on the other sides the CTA has parking for the incoming commuters from the burbs....Rosemont, Forest Park, Wilmette, Skokie. Whats with this constant looking for reasons to deny the south side the "L." Yes, I'm defensive.
>
> David Harrison
>
> --- In CHICAGOTRANSIT@yahoogroups.com, Dennis McClendon <dennismcclendon@...> wrote:
> >
> > David Harrison wrote:
> >
> > > The extension to 130th ST falls within the CTA "L"'s sphere.

15

>
> I can't agree. 130th St. is the same distance from State & Madison
> as Evanston Davis Street, Skokie-Dempster, or Melrose Park. More
> importantly, it's not an urban neighborhood with any possibility of
> walk-in traffic. The fact that it's just barely within Chicago city
> limits should be irrelevant. It's park-n-ride territory, and
> deserves the fast service provided by regional rail. From CTA's
> point of view, it makes no sense to run mostly empty Red Line trains
> all the way out there and back. From the patron's point of view, it
> makes no sense to stop every mile on the way downtown.
>
> ::::::::::::::::::::::::::::::::::::::
> Dennis McClendon
> dennismcclendon@...
>

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- It's obvious that without a stronger, coordinating, hand for RTA, self-serving expansion proposals like the CTA Red Line extension will abound.
- Metra services are categorized *by CTA* as serving longer trips to downtown. As a generalization there some truth to it; but it totally misrepresents the capacity and history for providing the frequent urban service expected in the City.
    - Metra Electric trains and infrastructure have the characteristics of heavy rail transit with multi-stream floor-level boarding and electric traction.
    - The Rock Island Blue Island and Electric South Chicago branches still schedule some rush-hour trains as little as ten and fifteen minutes apart respectively.
    - CTA fares are lower than Metra's and provided little reduction for transfers other than the monthly Link-up pass.
    - The alternative to increase the frequency and reduce the intervals between Metra trains, particularly on the Electric to 115th and Blue Island, is not even considered as it should if RTA were the lead agency.
    - The South Side Elevated Railway Company and Illinois Central Railroad both provided frequent urban rail transit services with similar steam locomotives and coaches. Both electrified and the IC eventually bought larger cars. Both continued to compete with the separate streetcar and bus companies.
    - It wasn't until 1946 when the CTA took over L-subway and surface operations that reduced fare transfers were instituted between the L-subway and surface lines. This drew City riders away from the IC or CRI&P and started the declines in riders and service.
- Much of the reduced Metra (xIC and xCRI&P) service stems from diversion to the CTA owing in part to bus service changes and the Dan Ryan Line construction.
    - The more Metra service was cut back to reflect lower demand, still more riders switched to the CTA.
    - Ridership declines were exacerbated by the deterioration of South Side neighborhoods and declining population that seems to be on the rebound.
    - Buses on 95th and 103rd do not continue across the corridor to facilitate use for passengers that might want to use Metra.Few 1/2-mile east-west CTA routes are available to feed existing Metra stations.
    - CTA bus routes in the study corridor are typically 1-mile apart.
- The report in the Tribune on Wednesday, April 11, 2007 regarding crowding and lack of capacity on the Metra Electric and NICTD South Shore is a shallow, biased, and unfair representation to justify the CTA initiative.
    - Sufficient capacity is available on tracks 2 & 3 for expanded, frequent urban service more extensive than proposed for the Gray Line with South Chicago, Blue Island, and Hegewisch branches.
    - Service to Hegewisch would relieve demand and crowding on the South Shore trains.
    - The Randolph Street terminal can be modified easily enough for the Gray Line and handle demands for frequent service.

- Alternative reduced 15-minute skip-stop service to Blue Island and Hegewisch would allow reverse-peak Metra and South Shore trains to share tracks 2 & 3 and greatly expand suburban peak capacity for tracks 1 & 4.

-

- Urban Service (Gray Line)

	Headway Min.	Run Time Min.	Cycle Time Min.	Trains	Cars
93rd/So. Chicago-ED	6	40	84	14	48
	7.5	40	90	12	24
115th/Kensington-ED	6	40	*	*	*
	7.5	40	*	*	*
Blue Island-ED	12	57	120	10	30
	15	57	120	8	16
Hegewisch-SS	12	50	108	9	28
	15	50	105	7	14
111th/Morgan Pk-RID	15	35	#	#	#
Blue Island-RID	15	45	105	7	40

(18)

Date: Wed, 3 Oct 2007 18:55:43 -0700 (PDT)
From: "Harvey Kahler" <harvey.kahler@att.net> View Contact Details Add Mobile Alert
Subject: Re: Gray Line Randolph St operation
To: "Adam H. Kerman" <ahk@chinet.com>

A representative evening cycle begins at :00 at the top and proceeds at :02 min intervals. The Gray Line service consists of alternating South Chicago and Blue Island/Hegewisch trains on either a 4-train, 16-minute, or 3-train, 12-minute cycle. Given the additional capacity on the Metra side, continued Metra Blue Island Expresses every 16 minutes and alternating South Chicago and Mainline-Hegewisch trains on respective 8-minute headways for the Gray Line are another option.

Inbound reverse-commute trains would be augmented by equipment pulling out from the 12th St Yard on Track 2 to make up outbound trains. Gray Line would run left-hand on Tracks 2 & 3 in PM, Metra left-hand on Track 1 in AM.

This plan takes advantage of the yard lead between local tracks and the platform between tracks 4 & 5 at Randolph Street that can be isolated for fare control. Reverse running solves the terminal problem that would be more difficult and expensive to rectify; but it poses other issues down the line such as bi-directional signaling, crossovers, and boarding platform for direction of travel.

"Adam H. Kerman" <ahk@chinet.com> wrote:
At 1:48pm -0700, 10/03/07, Harvey Kahler wrote:

>Sorry, I couldn't post the Randolph St schematic, so I'm sending this the
>hard way as an attachment.

Harvey, will you explain the schematic?

(19)

YOUR RED

Red Line Extension

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Dr. John Long, Ed.D.

Organization: Lilydale First Baptist Title:

Address: P.O. Box 490564

City: Chgo State: IL Zip: 60649

Phone: 773.450-7617 Email: jow107@aol.com

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

I agree with the proposed Red Line Route. My hope is that the EIS is expedited so that some real planning in finalizing the ready-shovel plan is completed ~~Work~~. No more stalling. Thank you for informing us on your project

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

For more information about the Red Line Extension Project visit: www.transitchicago.com/redeis. For **Hearing & Speech Impaired**: 1-888-CTA-TTY1 (1-888-282-6891). For information on other transit matters: **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), and **Transit Information:** 312-836-7000, or **RTA TTY:** 312-836-4949.

(20)

YOUR RED

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cta

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Phyllis E Palmer

Organization: Golden Gate Title: Business Mgr

Address: 13101 S. Eberhart

City: Chicago State: Il Zip: 60827

Phone: (773) 264-0213 Email:

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

Very bad plan. It's to hot to have people out standing!

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Debra A. Strickland

Organization: Developing Communities Project Title: Parent Leadership in Action Admin. Coordinator

Address: 11300 S. Halsted

City: Chgo State: Il. Zip: 60628

Phone: 773-928-2500 Email: d.strickland@dcpchicago.org

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

Developing Communities Project should be given recognition were recognition is due for Advocating for the CTA Red Line Extension Project. However, CTA is during a good job.

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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Name: Naomi Tate

Organization: _____ Title: _____

Address: 357 E. 71 st

City: Chgo State: Ill Zip: 60619

Phone: 773. 603. 6956 Email: _____

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

Extending the Redline is a step in the right direction. Ten-Twenty years ago it would have been an excellent idea! People live and travel well past 130th and much further east and west.

I hope a significant number of minority contractors will ~~get~~ be on board. Jobs provided for local people in the area and how many home owners will be effected by the extension.

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Naomi Tate

Organization: _____ Title: _____

Address: 357 E. 71st.

City: Chgo State: _____ Zip: _____

Phone: 773. 603. 6950 Email: _____

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

This meeting was a waste of time!
NO presentation.
NO question and answer session
This did not serve the community adequately!

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Doris H. White

Organization: _____ Title: _____

Address: 7920 S. Wabash Avenue Apt 3B

City: Chicago State: IL Zip: 60619

Phone: 312 972 9652 847 294 2146 Email: Doris_white@usc.salvationarmy.org

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

(1) When will this happen?

(2) My Church is at 115 street closer to the Bishop Ford Expressway, so will it be that close to the expressway?

(3) Will there be buses at these stops?

(4) When these new stops are built and the trains coming northbound for downtown will there be no seats and riders would have to stand.

(5) Will there be an fare increase?

(6) Where is the money coming from to extend the redline?

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Donnell Williams

Organization: Nehemiah Restoration Coalition Title: Community Organizer

Address: 9356 S. Lowe

City: Chicago State: IL Zip: 60620

Phone: 773- Email: donjehavon@hotmail.com

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

To be honest the major things I am concerned about is have community benefit agreement. I want to make sure the community has a voice And that minority businesses are going get their fair share. The physical proposals I have read the reports to make an accurate assessment. From the presentation I don't get a clear Idea what going on. all I get is they are working on the process & they will keep us informed I would like to see a specific person who is in charge of community and a community organization in an advisory capacity.

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

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26

YOUR RED

Red Line Extension

cta

We are always interested in receiving your comments on the proposed Red Line Extension Project. This project is one part of the Your Red Program to extend and enhance the entire Red Line. Please PRINT.

Name: Jasmine Young

Organization: None Title: Constmer

Address: 11522 S. prairie

City: Chacago State: IL Zip: 60628

Phone: 1773-815-1592 Email: don't have one

Please provide your comments about the proposed alternatives to extend the Red Line south to the vicinity of 130th Street.

I think they should run a train from 130th street to 95th street be cuse people could travel farther the the use to and the could get to where they need to be

Comments may be submitted via **mail**: Sonali Tandon, Strategic Planning & Policy, Chicago Transit Authority, P.O. Box 7602, Chicago, IL 60680-7602, **fax**: 312-681-4297, or **e-mail**: RedExtension@transitchicago.com.

For more information about the Red Line Extension Project visit: www.transitchicago.com/redeis. For **Hearing & Speech Impaired**: 1-888-CTA-TTY1 (1-888-282-6891). For information on other transit matters: **Customer Information:** 1-888-YOUR-CTA (1-888-968-7282), and **Transit Information:** 312-836-7000, or **RTA TTY:** 312-836-4949.

Lea, Claudia

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, August 10, 2011 7:59 AM
To: Lea, Claudia
Cc: Stenberg, Kate
Subject: FW: Public Input

RedExtension@transitchicago.com

CTA Strategic Planning Department
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602
Fax: (312) 681-4297

From: T R [madsaavy@yahoo.com]
Sent: Tuesday, August 09, 2011 12:04 PM
To: Red Extension
Subject: Public Input

I would like to be kept informed on the progress of this project as it will have huge impact on my neighbors, as well as, our group. We weren't informed about any opportunity to have input in the past, despite your notices. I find it curious there weren't any postings at Wendell Smith Park, being as everyone around here would/will be impacted by this project if your "Locally" Preferred Alternative continues as suggested. I would like to be put on a mailing list that would provide information, schedules, and opportunities for public input. I have questions to pose when you at the stage where you will provide answers!

R. Ross
madsaavy@yahoo.com

Lea, Claudia

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, August 17, 2011 9:26 AM
To: Lea, Claudia
Cc: Stenberg, Kate
Subject: FW: Notification

RedExtension@transitchicago.com

CTA Strategic Planning Department
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602
Fax: (312) 681-4297

From: Chris Rowe [chrisrowe85@gmail.com]
Sent: Saturday, August 13, 2011 11:04 AM
To: Red Extension
Subject: Notification

Hi there, I would like to receive notification about any activity related to the extension of the red line. Thanks.

Lea, Claudia

From: Red Extension [redextension@transitchicago.com]
Sent: Friday, September 09, 2011 8:21 AM
To: Lea, Claudia
Cc: Stenberg, Kate
Subject: FW: 115th and State

RedExtension@transitchicago.com

CTA Strategic Planning Department
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602
Fax: (312) 681-4297

From: Stella Brown [creolestubbie@yahoo.com]
Sent: Thursday, August 25, 2011 7:05 PM
To: Red Extension
Subject: 115th and State

We were not informed of the August 2, 2011 meeting held for this proposal. We have lived at 12 West 115th Street for the last 35 years we would like to know if the expansion does in fact effect our property. We also would like to be informed of any further meetings that are held to discuss the project. If it is indeed possible, we would like to know what was mentioned at the afore mentioned meeting.

Sincerely,
Charles and Stella Brown
12 West 115th Street
Chicago Il 60628-5512
773 928-6950

Lea, Claudia

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, September 14, 2011 1:12 PM
To: Lea, Claudia
Cc: Stenberg, Kate
Subject: FW: location of the elevated tracks

RedExtension@transitchicago.com

CTA Strategic Planning Department
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602
Fax: (312) 681-4297

From: Stella Brown [creolestubbie@yahoo.com]
Sent: Friday, September 09, 2011 5:37 PM
To: Red Extension
Subject: location of the elevated tracks

Thank you for including me in this breifing. I would like to be informed of where and when the next community input meeting will be held. There are a lot of questions, I have concerned the true location of the elevated tracks, since I live at 115th and State! There is already a train track at the end of the block that has caused structual damage to our home. The addtion of more trains plus the vibrations, noise and traffic that will accompany it are beyond any reasonable plan. Please be more specific in your replies, not just the already available information on the www.

Sincerely,
Stella Brown
12 West 115th Street
Chicago Il 60628-5512
773 928-6950

Lea, Claudia

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, September 14, 2011 1:13 PM
To: Lea, Claudia
Cc: Stenberg, Kate
Subject: FW: Reline Extension

RedExtension@transitchicago.com

CTA Strategic Planning Department
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602
Fax: (312) 681-4297

From: Daniel Pate [danpate42@yahoo.com]
Sent: Sunday, September 11, 2011 6:23 PM
To: Red Extension
Cc: juliet72@comcast.net
Subject: Reline Extension

To whom it may concern can you please keep me informed and let me know when your next redline exention meetings

Lea, Claudia

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, September 14, 2011 1:16 PM
To: Lea, Claudia
Cc: Stenberg, Kate
Subject: FW: Connecting with Northwest Indiana Transit

RedExtension@transitchicago.com

CTA Strategic Planning Department
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602
Fax: (312) 681-4297

From: Chris Retson [chris@retson.net]
Sent: Monday, August 15, 2011 1:12 PM
To: Red Extension
Subject: Connecting with Northwest Indiana Transit

I encourage you to consider issues with coordination with Region (Northwest Indiana) mass-transit systems and highways. Coordinating to connect with region bus authority buses and building sufficient, safe parking at the 130th St terminal will encourage commuters and tourists to use the CTA rather than congesting the expressways and downtown streets by driving to work and entertainment venues. The Red Line serves Soldier Field, Wrigley, and US Cellular Field – if people on the south side and northwest Indiana could safely and conveniently park their car where space is abundant and ride in, it would improve the downtown experience for residents and tourists alike.

Thank You for your consideration,
Chris Retson
chris@retson.net

Lea, Claudia

From: Red Extension [redextension@transitchicago.com]
Sent: Wednesday, September 14, 2011 1:19 PM
To: Lea, Claudia
Cc: Stenberg, Kate
Subject: FW: Redline Extension

RedExtension@transitchicago.com

CTA Strategic Planning Department
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60680-7602
Fax: (312) 681-4297

From: WILLIAM GLOVER [w_glover@msn.com]
Sent: Wednesday, August 03, 2011 8:29 PM
To: Red Extension
Subject: Redline Extension

8/03/2011

I'm having some serious problems with this Redline Extension, this project has been in the works for 20+ years and I know that most of the community that the new station will go through are a ruff area. Does it really take that long? Does that area not have any TIF funds available? When the community cried out about closing the Greenline "Homan" stop you all took it away anyway. The community in and around the new Morgan St. station said that they wanted a station built because their is no bus service or rail stations in that area, or you have to walk blocks to get to where you want to go in that area. The Blacks have been asking for this extension for years. Now you need another 2 years to do another survey. Their was never any public hearings on the Morgan St. station or if it was it was so little known about it. You all had pretty signs the other night, but what was it all for? You had CDOT money for that project, but no money for the extension project, I'm just not getting it. The you all are buying camera's to put in every station, but the thugs have taken over 95th, 87th, 79th, 69th, and 63rd street stations. Police @ 95th spend most of their days in that corner office or talking to CTA employee's. Do I feel safe at any of these station, "No I don't". Why do Police officer come to the customer service desk, ask the clerk to sign a form and then leave? What are you paying these guys to do? you seem to have money to buy all of this equipment but no one is manning them. how is it that people can come and shit on the platform piss on the platform and never and do mean never get caught, that's crazy. the police never ride past the 35th Sox stop going South. you all need to monitor your employee's more. whatever happen to the secret travel program, after you all got a ton of how your employee's really work the program kind of disappeared. I ride CTA because I like how I can get from one part of the city to another with less hassle, but I never ever speak or ask a CTA employee anything because they are so rude to a person just asking for directions. When it comes time for you all to ask Springfield for money, I sit at my desk at work and call and tell them to not give you all a dime, the employee's are just to rude. The bus driver's are again about to start letting the school kids get on the bus without using that have fare card...it happens every year. you need a system that monitor's your employee's. The supervisor's are to buddie, buddie with their co-workers do that system is really broke. come stand at 95th with me and I can spot all the problem and just show them to you

Appendix K
Fact Sheets

Draft Environmental Impact Statement Issues

The Draft Environmental Impact Statement (EIS) will analyze potential impacts to environmental, social, and economic resources of the area surrounding each Red Line Extension alternative. Some of the effects would be beneficial such as increased transit access, reduced travel time, and reliability or reduced congestion on area streets. While only very preliminary evaluations of the project area have been conducted to-date, it is likely that there would not be substantial impacts to natural resources such as wildlife, wetlands, air quality, or water quality. The resources in the project area that could experience impacts will be identified in the Draft EIS along with potential mitigation measures.

During scoping in 2009, the community expressed concerns about potential impacts related to traffic, property acquisitions, community and neighborhood compatibility, visual and aesthetic effects, and noise and vibration. This handout provides a preliminary summary of some of these potential effects, focusing mainly on the Locally Preferred Alternative – Union Pacific Railroad (UPPRR) Alternative.

Traffic – The proposed line would be elevated and would not have at-grade crossings that could increase traffic congestion. All alternatives would include new park and ride facilities at each station and there could be traffic effects in the vicinity of the stations that would be evaluated in the Draft EIS. Mitigation measures would be developed to help offset potential impacts. Overall, the effect of the extension would be expected to be beneficial as more people would be able to access transit and reduce the number of cars on the roads.

Community and Neighborhood Compatibility – None of the alternatives would divide neighborhoods with new transit structures, but the project could change the character of some blocks. Through community involvement and context sensitive design, mitigation measures would be developed to address this potential impact in a way that would be acceptable to the community.

Visual/Aesthetics – All of the build alternatives envision an elevated line that would be constructed adjacent to freight lines, businesses, and residences. Some neighborhoods are oriented so that the new transit line would face the fronts of homes while in other neighborhoods the new tracks would face the sides or backs of homes. How this orientation affects the visual conditions of each neighborhood will be studied in the Draft EIS.

Property Acquisition – Ideally CTA would like to operate in UPRR right-of-way so that there are no / minimal property impacts and will work with UPRR to negate / minimize property impacts. CTA is also evaluating two options for the Union Pacific Railroad (UPRR) Heavy Rail Transit Alternative - the East Side Option and the West Side Option, if UPRR right-of-way is not available. The amount of acquisition will depend on UPRR expansion plans and clearance requirements. If acquisition is required, the effects could range from a narrow easement along the edge of a property to a full acquisition and property owners would be compensated in compliance with federal laws.

Historic Resources – Several structures within the project area are older than 50 years and could potentially be considered historic. The Draft EIS will conduct a survey of such structures and determine the eligibility of each for listing on the National Register of Historic Places.

Noise and Vibration - Construction involves the use of heavy equipment which can create noise, work zones that can have visual impacts, traffic detours, and activities that generate dust which can all affect neighboring properties. Operation of a rail transit system can generate noise and vibration. Mitigation measures would be developed to reduce these potential impacts.

Parks – The East Side Option of the UPPR alternative could directly affect portions of Wendell Smith and Block Parks, while the West Side Option could affect portions of the Fernwood Parkway. If these impacts were allowed, mitigation would be required.

UPRR Alignment Options Comparison

	West Side Option	East Side Option
Length of extension	5.3 miles	
New stations	4 new stations near 103rd, 111th, 115th, and 130th Streets	
New park-and-ride facilities	4 new park-and-ride facilities with total 1,500 parking spaces	
Expected travel time savings from 130th Terminal to Loop, compared to No Build Alternative	20.50 Minutes	
Increased mobility	Fewer transfers	
Potentially affected parks	Fernwood Parkway	Wendell Smith Park Block Park
Potentially affected properties	Ideally CTA would like to operate in UPRR right-of-way so that there are no / minimal property impacts and will work with UPRR to negate / minimize property impacts.	

Transit Projects and Your Property

Ideally CTA would like to operate the Red Line Extension in Union Pacific Rail Road (UPRR) right-of-way so that there are no / minimal property impacts and will work with UPRR to negate / minimize property impacts. As part of the federal environmental review process, CTA has to evaluate different alternatives for potential impacts and mitigation measures.

How does CTA acquire private property for a project?

Government programs designed to benefit the public as a whole can result in acquisition of private property and, sometimes, in the displacement of people from their residences or businesses. State and federal constitutions recognize the need for public agencies to purchase private property for public use. Congress passed the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (The Uniform Act), and amended it in 1987. The Uniform Act, along with state and federal constitutions, authorize this purchase and assure full protection of the rights of each property owner. As a public agency, CTA can purchase private property for public use, such as for a transit project.

How is property appraised and acquired?

CTA must appraise and purchase properties needed for a transit project in accordance with federal rules. If CTA is interested in acquiring your property, or a portion of it for a transit project, you, the property owner, will be notified as soon as possible. Shortly thereafter, an independent appraiser will contact you to make an appointment to inspect your property. The appraiser is responsible for determining the initial fair market value of the property. You, or a representative that you designate, will be invited to accompany the appraiser when the appraiser inspects your property. You or your representative may provide information about improvements to the property and any special features that may affect the value of the property to CTA's appraiser to ensure that these facts are considered in the appraisal. After the appraisal and a review appraisal is completed (and approval of CTA's funding agencies is obtained, if required), CTA will present a written offer for the property based upon the appraised value of the property. CTA is legally required to offer to purchase your property for an amount that is not less than the appraised value of the property.

Does CTA assist with relocation for those displaced by the property acquisition?

CTA will provide financial assistance and relocation services, as required by federal rules, for property owners and for commercial and residential occupants who must move because of a transit project. Both owners and occupants are contacted promptly by CTA and/or its relocation consultant after CTA has presented an offer to the property owner to acquire the property. The relocation procedure as well as eligibility for relocation payments and advisory services to be provided by CTA and/or its relocation consultant is explained.

Will the Red Line Extension project require any residential or business relocation?

The land acquisition, displacements, and relocations sections of the Environmental Impact Statement (EIS) will present a summary of the potential impacts related to residential and non-residential relocations. The Draft EIS, when complete will be available for public review.

For More Information

For additional information, please contact Deborah Lopez, Senior Government Relations Officer, at (312) 681-2709 or dlopez@transitchicago.com.

Appendix L
Exhibit Boards

Welcome to Red Line Extension Open House!

This open house is to keep you informed about the proposed Red Line Extension.

Tonight we have an interactive open house format in lieu of a formal presentation.

If you have questions, feel free to ask the representatives stationed around the boards.

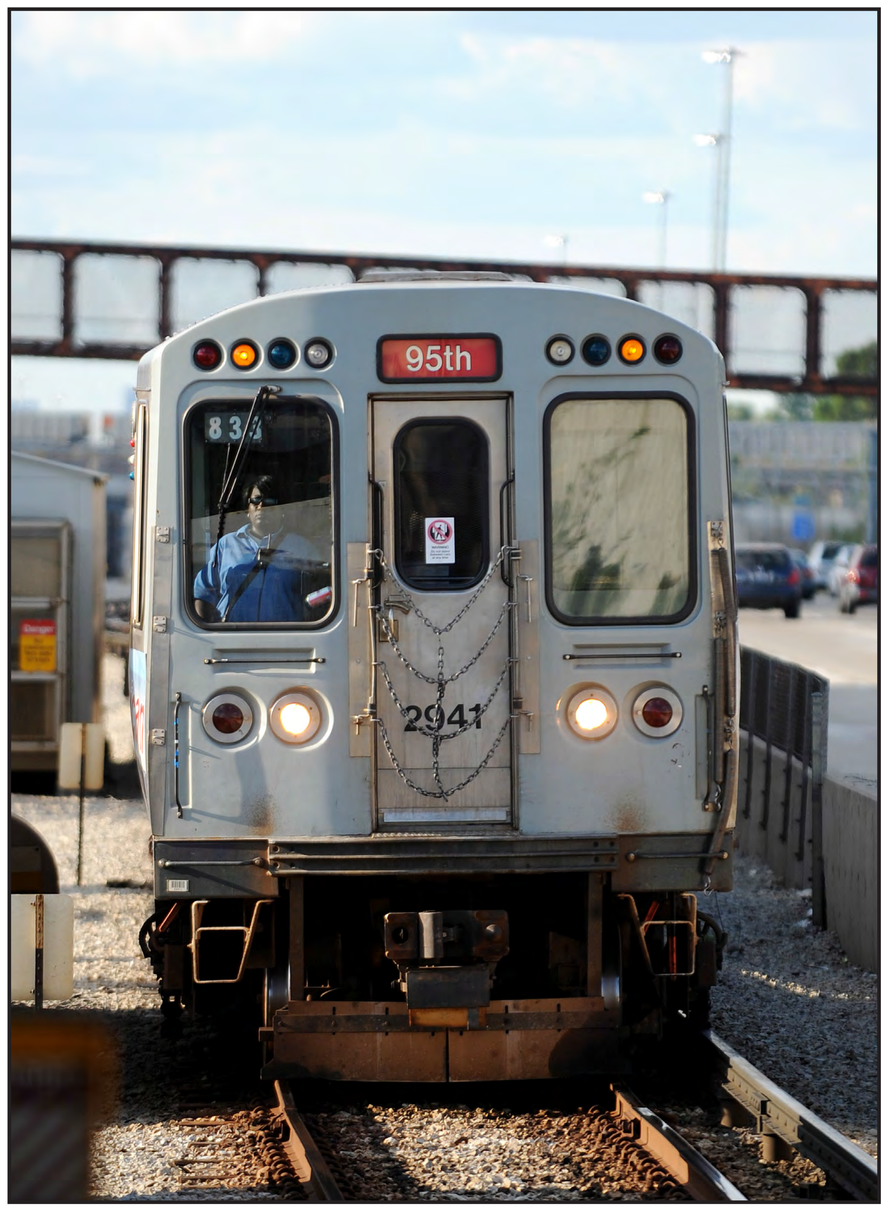

CTA continues to make progress on the proposed Red Line Extension project.

Red Line Extension

Red Line Extension — What's New

- Red Line Extension is now part of the ***YOUR RED*** Program to extend and enhance the entire Red Line
- CTA pursued and received $8.4 Million in federal funding for preparing Environmental Impact Statements (EIS) for ***YOUR RED*** projects
- Red Line Extension is identified as a Priority Project in the Chicago Metropolitan Agency for Planning's GO TO 2040 Regional Transportation Plan
- EIS Scoping completed
- Next Step – Prepare Draft EIS

Red Line Extension

Project Purpose

- Enhance economic competitiveness and neighborhood livability through access and mobility improvements
- Reduce travel times to jobs and community destinations for Far South Side and South Suburban residents
- Increase transportation choices
- Improve transit performance
- Support community revitalization initiatives

Red Line Extension

Why Extend the Red Line?

- Reliable and timely access to employment centers and community destinations is not readily available on the Far South Side
- 95th Street Terminal has poor passenger access with no Park & Ride
- Riders experience delays at the 95th Street Terminal due to crowded nearby intersections and insufficient space for bus transfers
- Crowded conditions at 95th Street Terminal for buses and riders may result in safety issues
- Road congestion in the Far South Side limits mobility
- Area population is highly transit-dependent

Red Line Extension

cta

Project Development Process

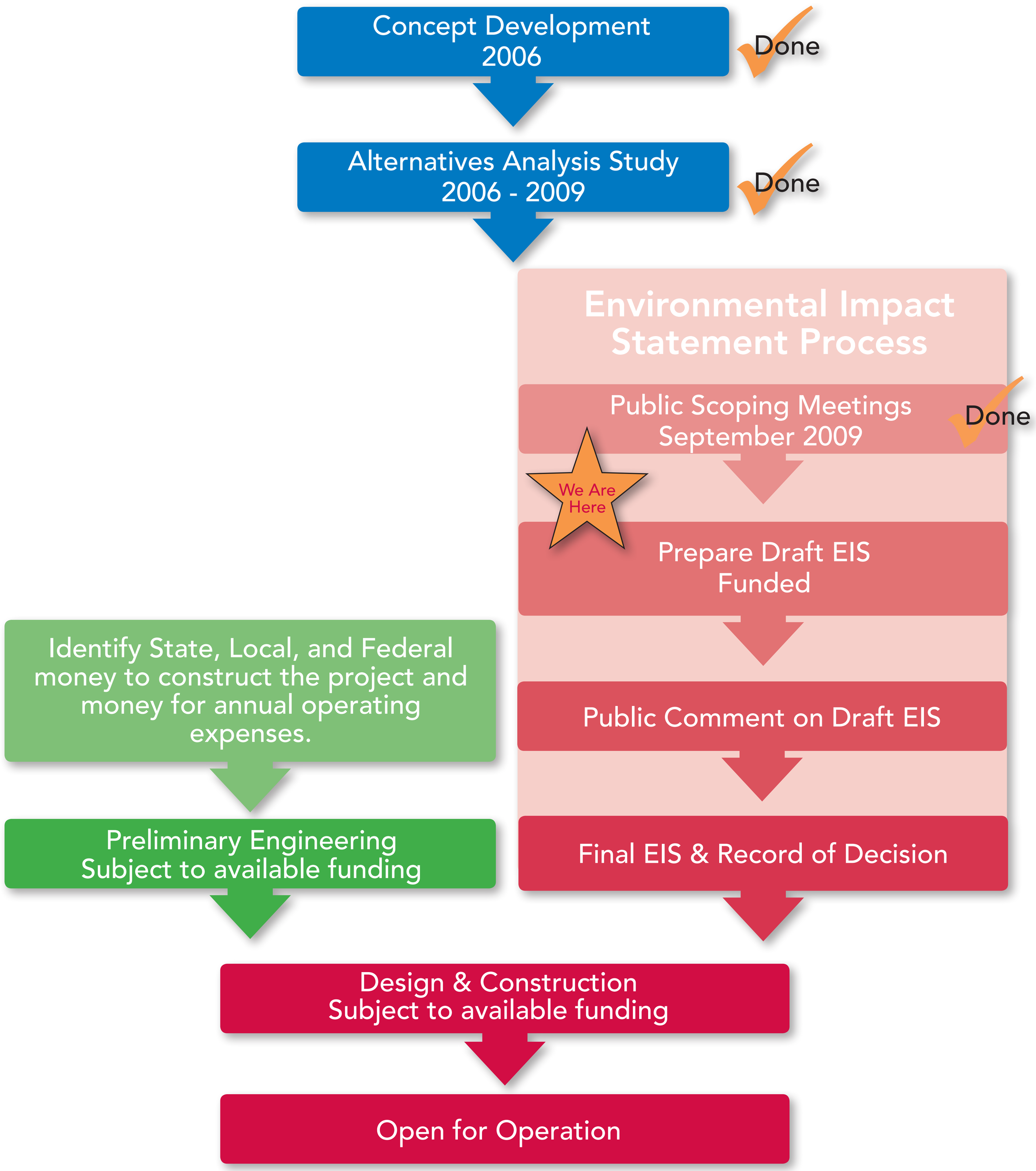

Red Line Extension

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Planning for the Red Line Extension

Alternatives Analysis 2006 - 2009

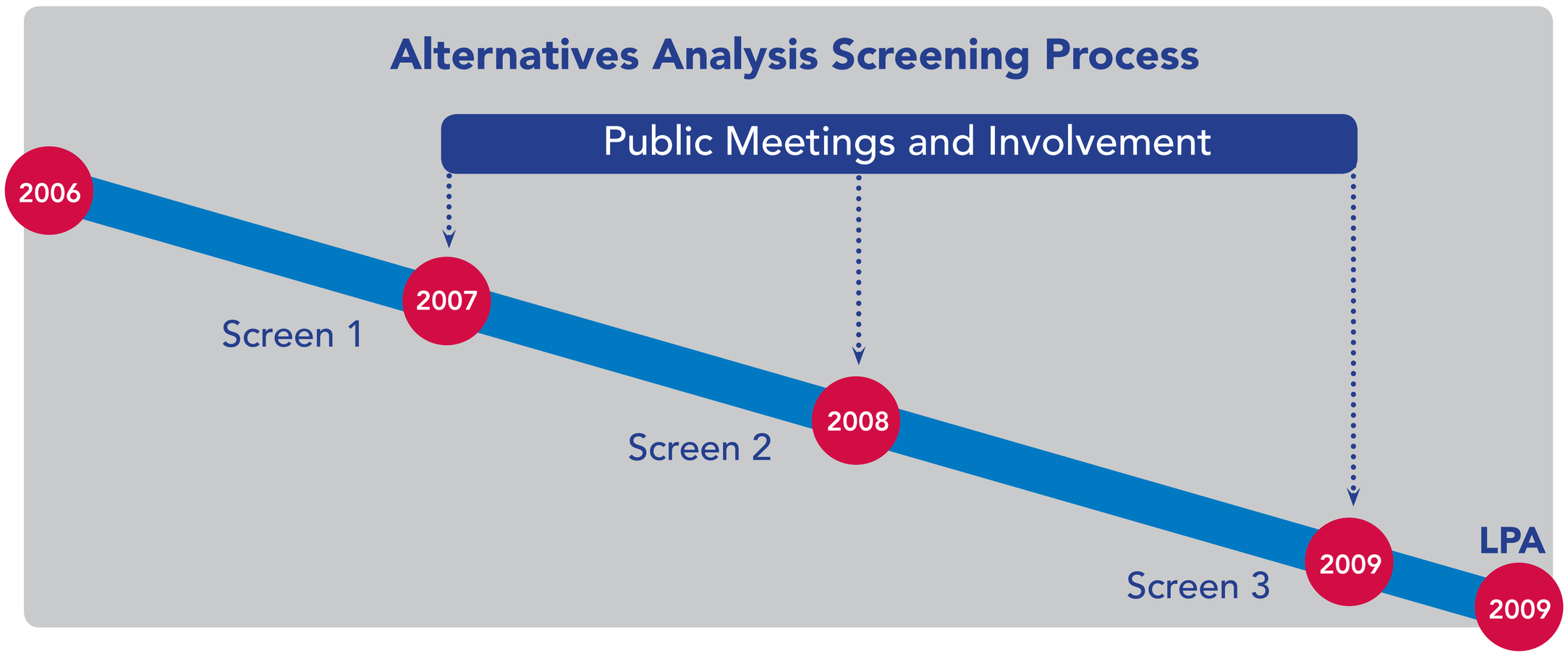

- CTA adopted the Union Pacific Railroad Heavy Rail Transit Alternative as the Locally Preferred Alternative (LPA).

Environmental Impact Statement Scoping meetings, September 2009

- More than 340 comments were received and we heard from you that this is an important project with significant benefits.
- Comments received during scoping will be addressed in the Draft EIS. The Scoping Report summarizing your input can be found at www.transitchicago.com/redeis or by calling Customer Service at 888-YOUR-CTA.

Red Line Extension

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Environmental Review Process

The Federal Transit Administration and CTA have initiated the federal environmental review process and are preparing an Environmental Impact Statement (EIS).

The EIS will describe:

- Alternatives
  - No Action
  - Transportation System Management (Bus Rapid Transit)
  - Halsted Street
  - Union Pacific Railroad - the Locally Preferred Alternative
- Existing environmental setting
- Potential impacts from construction and operation of each alternative
- Proposed mitigation measures to minimize potential impacts

This process will help refine the locally preferred alternative.

Red Line Extension

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Issues Potentially Evaluated in Environmental Impact Statement (EIS)

- Historical and Cultural Resources
- Natural Resources such as Air Quality, Water Quality, Wildlife, Wetlands, and Endangered Species
- Land Use including Neighborhood Compatibility, Land Acquisition, Displacement, and Relocation
- Parklands and Recreational Facilities
- Safety and Security
- Transportation including Traffic, Parking, and Transit Access
- Visual and Aesthetic Impacts
- Noise and Vibration
- Energy Use
- Zoning and Economic Development
- Cumulative Impacts such as from Secondary Development
- Construction Impacts

Other issues may be added for evaluation as needed.

EIS Scoping Comments Received

Scoping comments will be addressed in the Draft EIS.

	Number of comments received	
Purpose and Need	7	Ease congestion in the region Improve transit access to and from Far South side Reduce congestion at 95th and Dan Ryan terminal Provide connections to transit disadvantaged communities
Proposed Alternatives	326	Locally Preferred Alternative – UPRR HRT Alternative *317 comments supported the alternative; 1 comment opposed the alternative* Halsted Street Alternative *3 comments supported the alternative* Other Alternatives *8 comments*
Station Locations and Connections	338	Connectivity to Altgeld Gardens at 130th Street Bike access and parking facilities Parking facilities – size and location Bus Transfer Facilities
Design Features	12	Operator facilities Passenger information Green roofs Signal priority for bus access Recycling Alternative energy Natural storm water management Native landscaping
Potential Impacts	384	Transportation Impacts Land Acquisitions, Displacement and Relocations Community and Neighborhood Impacts Visual and Aesthetic Impacts Noise and Vibration Parklands Economic and Fiscal Impacts Safety and Security Environmental Justice Construction Impacts Public Services

Note: *Tallies are approximate. Combined numbers of comments listed in the subsections will be greater than the total number of comment submissions because some people discussed multiple topics in their submission.*

Red Line Extension

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Locally Preferred Alternative
Union Pacific Railroad (UPRR) Alternative

	West Side Option	East Side Option
Length of extension	5.3 miles	
New stations	4 new stations near 103rd, 111th, 115th, and 130th Streets	
New park-and-ride facilities	4 new park-and-ride facilities with total 1,500 parking spaces	
Expected travel time savings from 130th Terminal to Loop, compared to No Build Alternative	20.50 Minutes	
Increased mobility	Fewer transfers	
Potentially affected parks	Fernwood Parkway	Wendell Smith Park Block Park
Potentially affected properties	Ideally CTA would like to operate in UPRR right-of-way so that there are no / minimal property impacts and will work with UPRR to negate / minimize property impacts.	

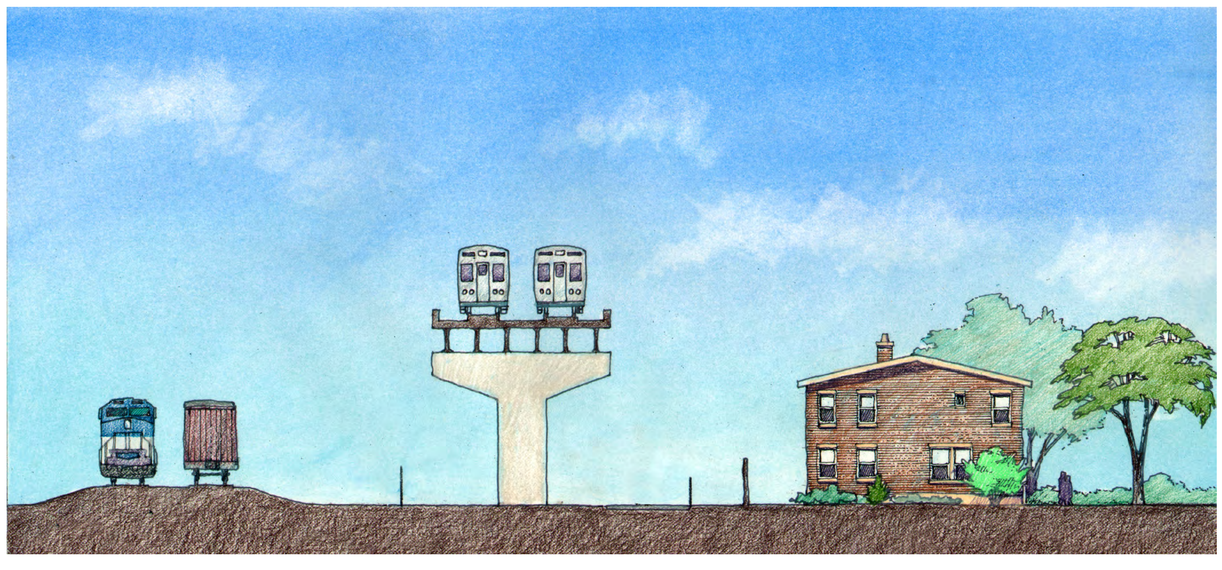

East Side Option typical cross section (looking north)

West Side Option typical cross section (looking north)

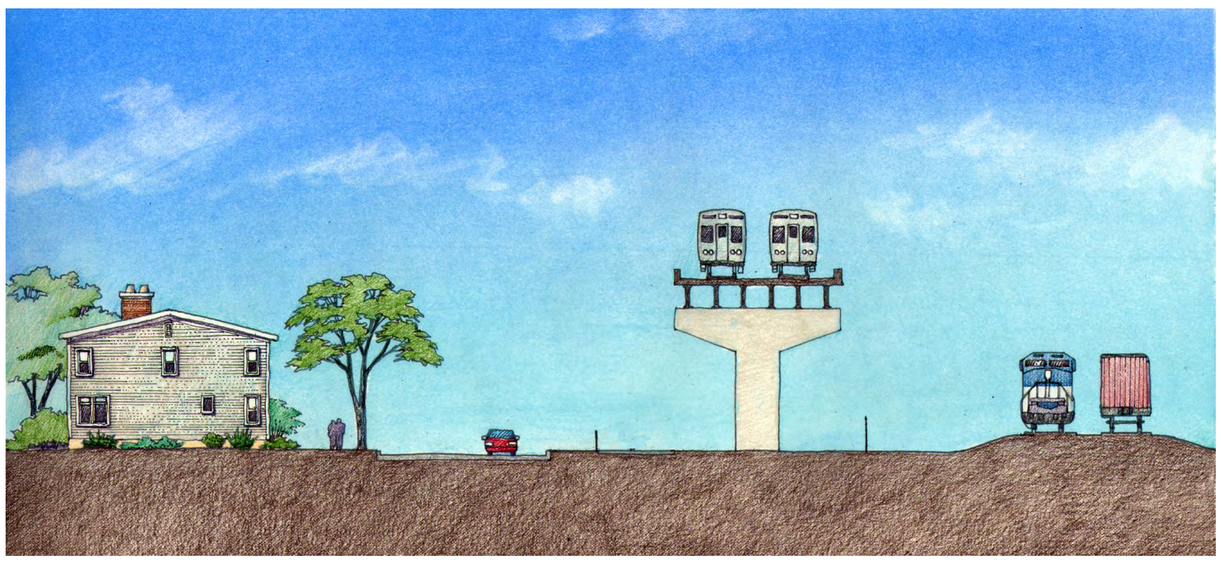

Red Line Extension

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Locally Preferred Alternative
Union Pacific Railroad (UPRR) Alternative

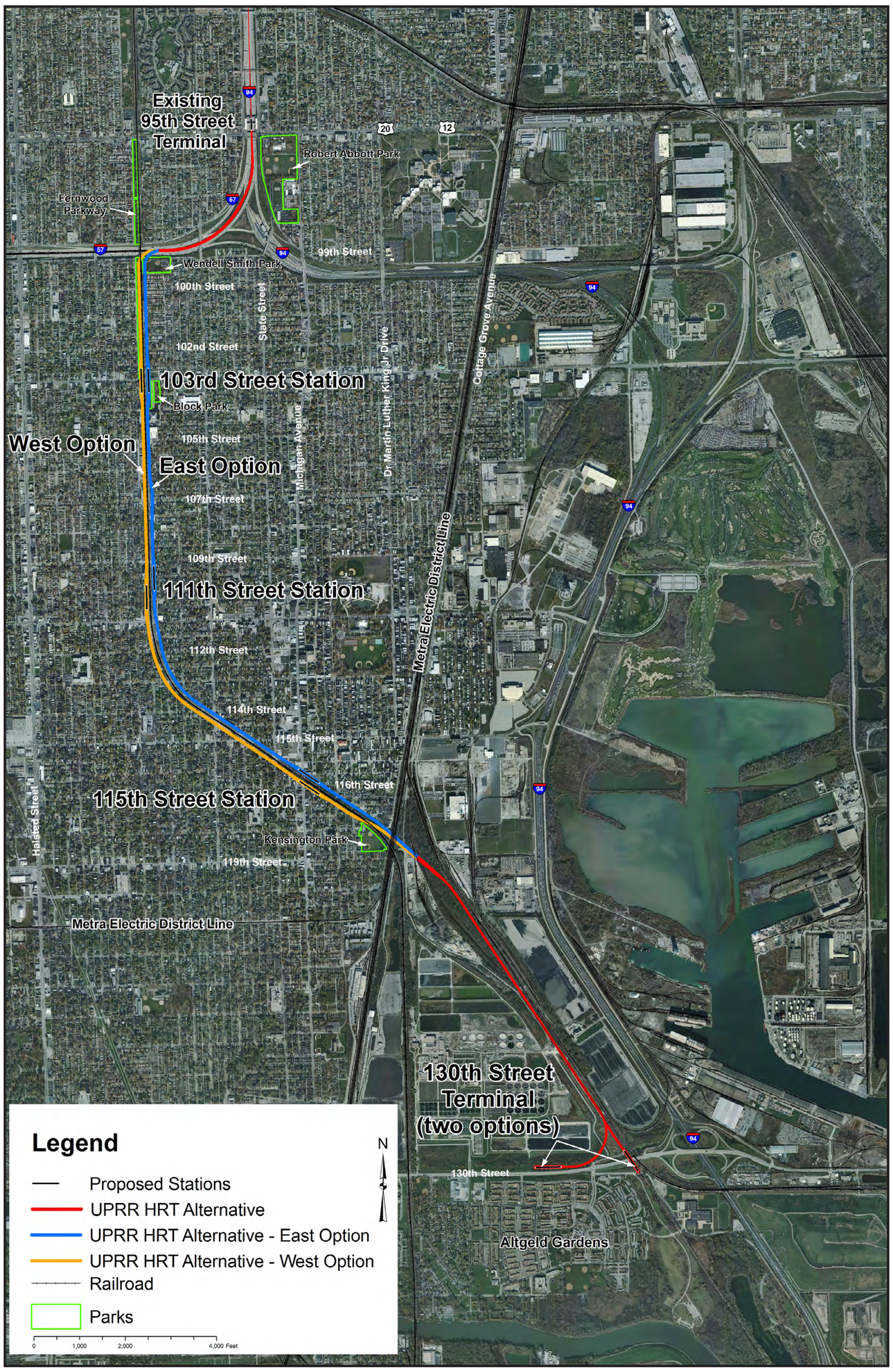

- Based on public support, the UPRR Alternative was adopted by the Chicago Transit Board as the Locally Preferred Alternative in August 2009.

Red Line Extension

cta

Other Alternatives to be Evaluated in the Draft EIS

No Build Alternative

- Existing CTA heavy rail transit service terminating at the 95th Street station
- Existing CTA and Pace bus service

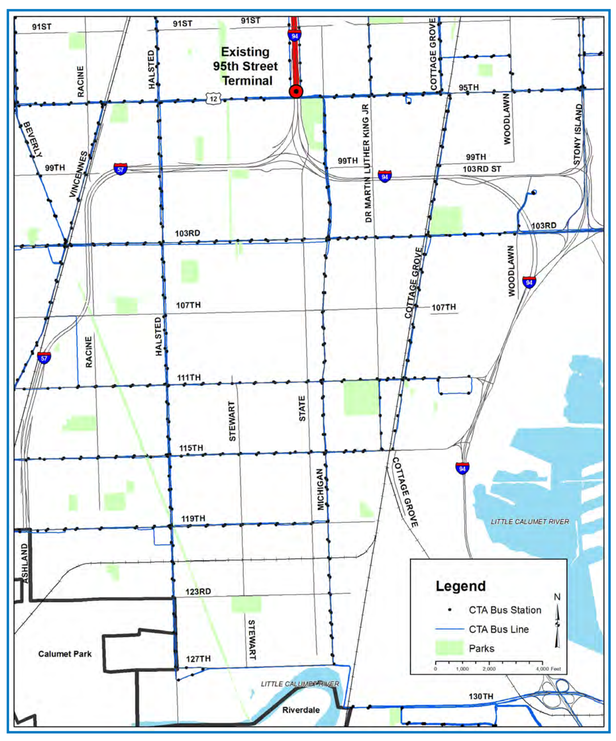

Transportation System Management (Bus) Alternative — Michigan Avenue

- Expansion of 95th Street Terminal
- Express bus along Michigan Avenue with transit signal priority

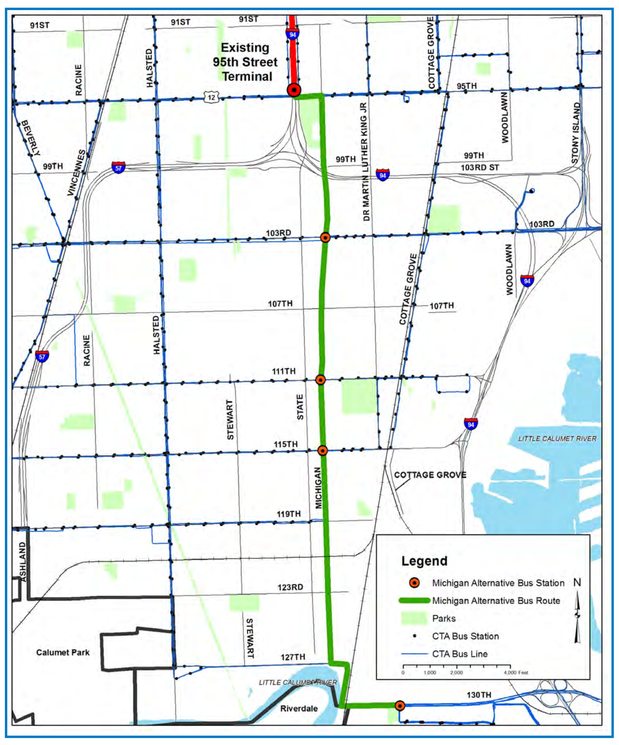

HRT (Rail) Alternative — Halsted Street

- 95th Street to I-57 & Halsted Street
- Halsted from I-57 to 127th Street
- Elevated above Halsted Street

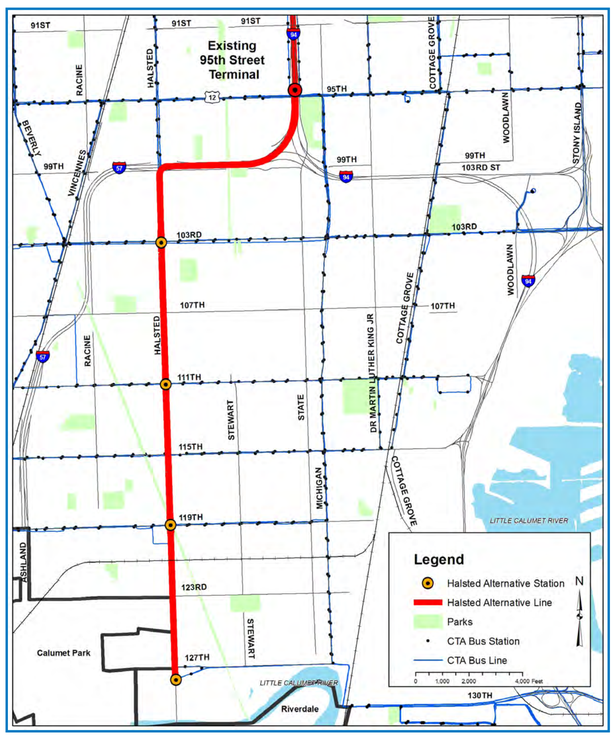

Red Line Extension

Stay Involved

To submit comments tonight, fill out a comment card and place it in the box provided.

There are six ways to stay involved:

Visit: http://www.transitchicago.com/redeis

Join the Mailing/E-list: At the sign-in desk

Mail:
Sonali Tandon
Strategic Planning & Policy
Chicago Transit Authority
P.O. Box 7602
Chicago, IL 60608-7602

Phone: 888-YOUR-CTA (888-968-7282)

Fax: 312-681-4297

E-mail: RedExtension@transitchicago.com

Red Line Extension

cta

YOUR RED

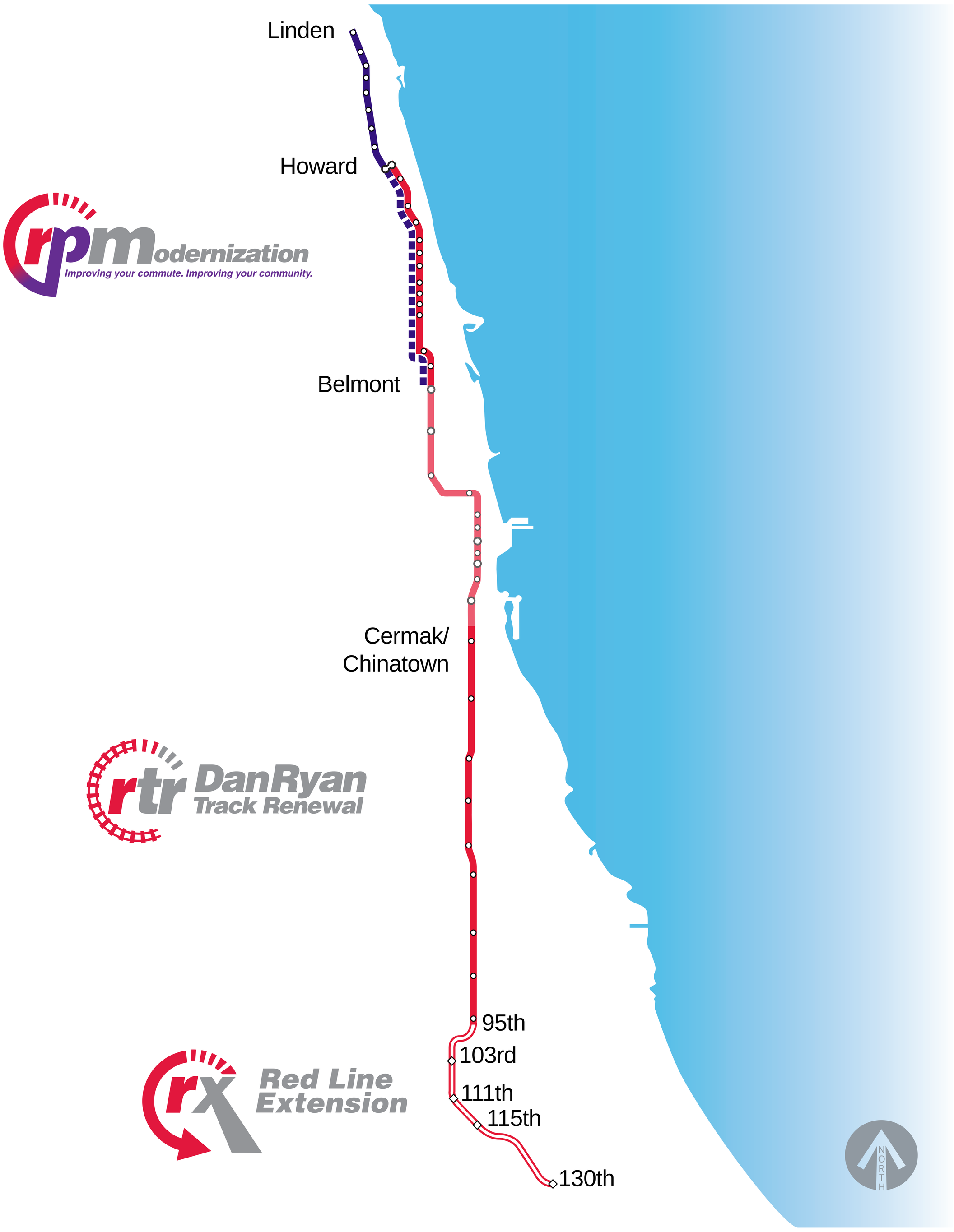

rpm Modernization
Improving your commute. Improving your community.

rtr Dan Ryan Track Renewal

rx Red Line Extension

cta

Appendix C
Agency Coordination and Public Involvement

August 2013 Newsletter

RED AHEAD

Red Line Extension

CTA wants to keep you informed about our proposed Red Line Extension (RLE) Project, part of the Red Ahead Program, a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line.

Summer 2013 Newsletter

RLE Project:

The CTA is proposing to make transportation improvements by extending the Red Line from the 95th Street Terminal to the vicinity of 130th Street. The proposed 5.3-mile extension would include four new stations near 103rd, 111th, Michigan, and 130th Streets.

RLE Project Status:

Since the RLE Project open house meeting during the summer of 2011, we have started the technical analysis of the project and are preparing a Draft Environment Impact Statement (EIS) on behalf of Federal Transit Administration (FTA), which is the federal lead agency for the project.

What is an Environmental Impact Statement?

RLE Project will require significant ederal funding for construction. To acquire federal funding, an EIS is required by the National Environmental Policy Act (NEPA). An EIS includes a description and comparison of each of the studied alternatives, explanation of the existing environmental setting and community context, and analysis of potential positive and negative effects of construction and operation of each alternative.

What's Next for RLE?

The CTA is continuing to coordinate with communities and will be hosting an open house and attending community group meetings throughout the winter to share preliminary findings of the e vironmental studies and learn about the communities' desires and concerns. After that outreach, we will make sure the proposed project responds to community concerns, and then issue the Draft EIS in conjunction with the FTA. A public hearing will be held on the Draft EIS in 2014.

Red Line South Reconstruction Project:

The CTA is rebuilding the tracks along the Red Line's Dan Ryan Branch from Cermak-Chinatown to 95th/Dan Ryan—a project that will provide faster, smoother and more reliable service for Red Line South riders. Crews are replacing everything in the track bed, including ties, rail, third rail, ballast and drainage systems. Red Line South stations are receiving improvements ranging from new canopies, paint, and lighting upgrades to new benches and bike racks, plus accessibility upgrades (including new elevators) that will make the entire 10.2-mile route fully accessible. The project is on time and the Red Line South is expected to reopen in October.

The work is part of Mayor Rahm Emanuel's Building a New Chicago program, updating infrastructure critical to the city. Funding for the work is part of more than $1 billion in federal, state and local funding announced in late 2011 by Governor Pat Quinn and Mayor Emanuel for the Red and Purple lines. For more information, visit **redlinesouth.com**.

RED AHEAD PROGRAM

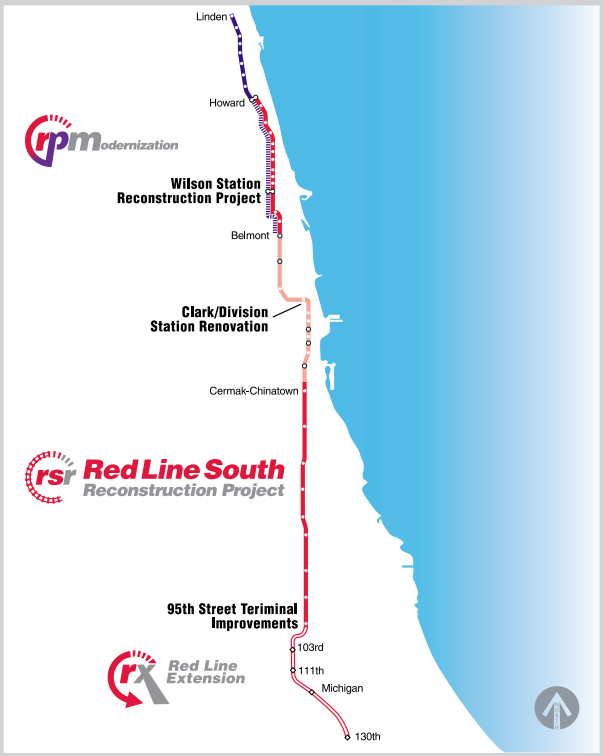

Learn more about the Red Ahead program by visiting our website: **transitchicago.com/redahead**

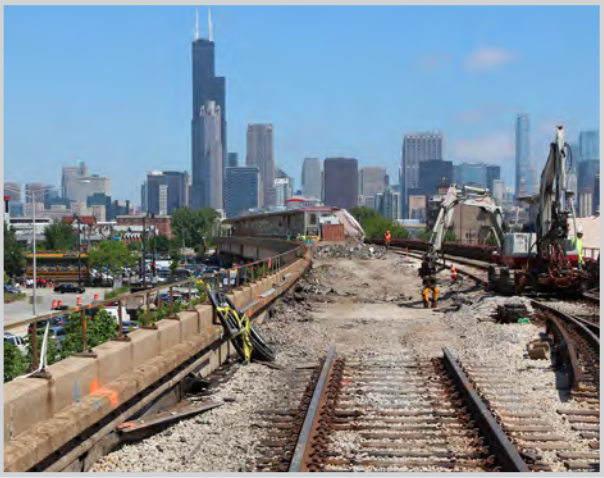

BUILDING A NEW CHICAGO

transitchicago.com/RedEIS

cta

RED AHEAD

Red Line Extension

Get Involved and Stay Informed:

We appreciate your feedback and encourage you to stay involved in the Red Line Extension (RLE) Project.

By providing us your email address, we can keep you up-to-date on information about the next meetings and project progress.

If you would like to be added to the project mailing list or e-list for future updates or have any questions about the RLE project, please contact:

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension
567 W. Lake Street
Chicago, IL 60661-1465
Email: **RedExtension@transitchicago.com**

For more information about RLE and project updates,
visit: **www.transitchicago.com/RedEIS**

BUILDING A NEW CHICAGO

transitchicago.com/RedEIS

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Lea, Claudia

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, September 03, 2013 8:09 AM
To: Lea, Claudia; Bojan, Sharon
Subject: FW: Future updates

-----Original Message-----
From: Cedric Bell [mailto:ceds1972@gmail.com]
Sent: Wednesday, August 28, 2013 7:11 PM
To: Red Extension
Subject: Future updates

I would like to be added to the project mailing list: Cedric bell, 1250 w. 112th place, Chicago, il. 60643

Sent from my iPhone

Lea, Claudia

From: Kenae Martin <kenaeinthemixcom@yahoo.com>
Sent: Tuesday, August 27, 2013 9:11 AM
To: Red Extension

this is redicioulus that train should have been extened years ago 95th to 130th iz all bought race if it was whites in the area train would have been expaned like northside improvements..cta when r u gonna wake up those old habits got to change this iz new chicago act like it....u got the money

Lea, Claudia

From: Dora Engram <d.engram@sbcglobal.net>
Sent: Tuesday, August 27, 2013 10:36 PM
To: Red Extension
Subject: Re: CTA Red Line Extension News

Thank you for this information. Please keep me on your email distribution list for all RLE Updates.

Dora Engram
d.engram@sbcglobal.net

From: CTA RLE Project <RedExtension@transitchicago.com>
To: d.engram@sbcglobal.net
Sent: Tuesday, August 27, 2013 8:45 AM
Subject: CTA Red Line Extension News

View this email in your browser

The summer newsletter for the Chicago Transit Authority's Red Line Extension Project is available to view or download. Click here.

CTA wants to keep you informed about our proposed Red Line Extension Project (RLE), a part of the Red Ahead Program, a comprehensive initiative for maintaining, modernizing and expanding Chicago's most traveled rail line. Thank you for your continued interest.

RLE Project Team
Chicago Transit Authority
RedExtension@transitchicago.com

Copyright © 2013 Chicago Transit Authority, All rights reserved.
You are receiving this e-mail because you signed up to receive updates on the RLE Project as they are available.

Our mailing address is:
Chicago Transit Authority

567 West Lake Street
10th Floor
Chicago, IL 60661
Add us to your address book

unsubscribe from this list update subscription preferences

Lea, Claudia

From: currentz09@gmail.com
Sent: Tuesday, August 27, 2013 11:12 PM
To: Red Extension
Subject: Newsletter Request

I am inquiring in requesting 10 copies of the Red Line Extension Newsletter & a copy of the most recent edition of Up to speed

Corey Ellison
3518 N. 60th st
Milwaukee, WI 53216

Lea, Claudia

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, September 11, 2013 8:19 AM
To: Lea, Claudia; Bojan, Sharon
Subject: FW: mailing list

-----Original Message-----
From: Pavel Arzate [mailto:skyscraperfan@gmail.com]
Sent: Tuesday, September 10, 2013 9:13 PM
To: Red Extension
Subject: mailing list

Hi, I would like to be added to the mailing list for the Red Line Extension. Thank you.

Mrs. Dolphin Pierce
10929 S Emerald Ave.
Chicago, IL 60628

03 SEP 2013 PM 5 L

Chgo. Transit Authority
Strategic Planning & Policy - 10th Fl.
Attn: Red Line Extension
567 W. Lake St.
Chgo., IL 60661-1465

A note from...

Dolphin Pierce 08-31-13
10929 S. Emerald
Chgo., Il. 60628

Re: RLE Project

Please keep me informed about meetings and progress of the RLE. Unfortunately, I have no Email address.

Sincerely -
D. M. Pierce

Sonali -
can you add this nice lady to your snail mail contacts for RLE?

MC

9/3/13

Habitat for Humanity®

To: CTA

Please keep me updated on Red Line Extension meetings and *projected progress.

Thank you!

J Burke

Johnnie G. Burke
9607 S. Perry Ave.
Chicago, IL 60628-1343

* US mail only!

Appendix C
Agency Coordination and Public Involvement

Spring 2014 Outreach Summary

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Spring 2014 Outreach Summary

Final

October 9, 2014

Prepared for:
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Prepared by:
CWE Transit Group
125 South Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Executive Summary 1
Connecting 95th Street Terminal to 130th Street 1
Open House Meeting 1
Inviting the Public 1
What We Heard 2

Section 1 Project Background 1-1

Section 2 Public Notification Activities 2-1
2.1 Press Release 2-1
2.2 Elected Officials and Stakeholders 2-1
2.3 Project Website 2-2
2.4 Social Media Updates 2-2
2.5 Postcards 2-2
2.6 E-blasts 2-2
2.7 Transit Alert Cards 2-3
2.8 Media 2-3

Section 3 Participating Agencies 3-1

Section 4 Community Group Meetings 4-1

Section 5 Open House Meeting 5-1
5.1 Meeting Materials 5-1
5.2 Comments Received 5-3

Tables

Table 1: Elected Officials Briefed 2-1
Table 2: Libraries Receiving Flyers 2-2
Table 3: Published Media Articles April and May 2014 2-4
Table 4: Community Group Meetings 4-1
Table 5: Use of Project Area Parks 5-4

Appendices

Appendix A – Meeting Notifications
Appendix B – April 17, 2014 Aldermanic Briefing Notes
Appendix C – Participating Agency List, Update Letters, and Responses
Appendix D – Community Group Meeting Materials and Meeting Notes
Appendix E – Open House Sign-in Sheets
Appendix F – Open House Meeting Photos
Appendix G – Open House Meeting Materials
Appendix H – Open House Exhibit Boards
Appendix I – Comments Received

Executive Summary

Connecting 95th Street Terminal to 130th Street

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

Open House Meeting

CTA conducted an open house meeting on May 13, 2014 to update the public on the status of the Red Line Extension Project; inform them of proposed alternatives, anticipated project benefits and impacts; and gather feedback from the residents of the Far South Side of Chicago. The meeting was designed to give the public a chance to share their concerns about the project with CTA representatives, as well as learn about the preliminary impact analysis of alternatives and the ongoing Draft Environmental Impact Statement process.

The open house meeting was held in the project area at a location that was accessible by public transportation and ADA compliant. In order to provide the greatest opportunity for community participation, the public meetings were scheduled in the early evening on a weekday. Spanish and sign language interpreters were available during the open house meeting. Outreach was conducted in both English and Spanish languages, as recommended in the limited English proficiency analysis performed during scoping in 2009.

During the meeting, residents had the opportunity to review boards displaying information about the proposed alternatives, talk with CTA representatives about the project, and provide comments.

Inviting the Public

In order to hear from as many members of the community as possible at the public meeting, CTA:

- Sent invitation emails to 670 residents who had previously demonstrated an interest in Red Line projects.
- Updated the Red Line Extension Project webpage, www.transitchicago.com/redeis, with information about the meeting.
- Contacted aldermen and local libraries and provided them with flyers about the open house meeting to distribute to community members.

- Posted alert cards providing information about the open house meeting at the 95th Street Terminal, on Red Line trains, and in buses operating out of the 103rd Street bus garage.

What We Heard

Attendees had the opportunity to comment in writing during the open house meeting. They also could submit their comments after the open house meeting via email or mail. A total of 212 community members attended the meeting. A total of 97 written comments were received from community members as of the date of this outreach summary.

Community members were asked what specific comments or concerns they had about Red Line Extension alternatives, potential impacts, and mitigation measures. Overall, the community supports the RLE Project and noted concerns related to the following topics:

- Property Displacements
- Community and Economic Development
- Noise and Vibration
- Timeline
- Safety and Security
- Traffic
- Alternatives Analysis
- Alternative Preference

As part of the comment card, residents also were asked about their use of Wendell Smith Park, Fernwood Parkway, and Block Park. Of the 81 completed comment cards, 63 filled out the section on the use of local parks. Most commenters responded that they did not use any of the parks. Of the comments received, Wendell Smith Park is the most-used park, primarily for walking, jogging, and community events.

Section 1
Project Background

The Chicago Transit Authority (CTA) conducted an open house meeting on May 13, 2014 to inform the public about the preliminary environmental impact analysis of the alternatives and options being studied for the Red Line Extension (RLE) Project. CTA is proposing to add major new transit service on Chicago's South Side by extending its busiest rail line, the Red Line, south from the 95th Street Terminal to the vicinity of 130th Street. The proposed 5.5-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street as well as bus and parking facilities. The public outreach conducted in April and May 2014, along with the open house meeting, provided an opportunity for community members to learn more about the project, give their input about which alternative and option would best meet their transit needs, and the environmental impacts of each of the alternatives and options.

Section 2
Public Notification Activities

2.1 Press Release

The Mayor's Press Office and CTA Media Relations issued a press release announcing open house meetings for both the RLE and Red and Purple Modernization projects. The press release was posted to CTA's website on April 17, 2014 and is included in Appendix A.

2.2 Elected Officials and Stakeholders

CTA contacted elected officials and stakeholders starting April 10, 2014 to brief them on the project and provide information about the open house meeting. CTA representatives met with elected officials as summarized in Table 1.

Table 1: Elected Officials Briefed

Name	Representing	Briefing Date
Alderman Carrie Austin	34th Ward	April 10, 2014
Alderman Anthony Beale	9th Ward	April 15, 2014
Alderman Roderick Sawyer's Office Alderwoman Michelle Harris's Office Alderman Anthony Beale's Office Alderman Howard Brookins	6th Ward 8th Ward 9th Ward 21st Ward	April 17, 2014
State Representative Al Riley's office	38th District	April 17, 2014
Alderman Carrie Austin's Town Hall Meeting	34th Ward	June 19, 2014

Meeting notes from the April 17th Aldermanic Briefing are included in Appendix B.

CTA provided flyers with information about the open house meeting to elected officials and other stakeholders to distribute to community members. The flyer, available in both English and Spanish, is included in Appendix A. The flyers were also emailed to libraries surrounding the project area to be distributed to patrons. A list of libraries receiving notices is included in Table 2.

Table 2: Libraries Receiving Flyers

Library	Address	City, State Zip
Blue Island Public Library	2433 York Street	Blue Island, IL 60406
Brainerd Branch Public Library	1350 West 89th Street	Chicago, IL 60620
Calumet City Public Library	660 Manistee Avenue	Calumet City, IL 60409
Calumet City Public Library	660 Manistee Avenue	Calumet City, IL 60409
Hegewisch Library Branch	3048 East 130th Street	Chicago, IL 60633
Jeffrey Manor Branch Public Library	2401 East 100th Street	Chicago, IL 60617
Pullman Public Library	11001 South Indiana Avenue	Chicago, IL 60628
Riverdale Public Library	208 West 144th Street	Riverdale, IL 60827
South Chicago Library Branch	9055 South Houston Avenue	Chicago, IL 60617
Walker Branch Public Library	11071 South Hoyne Avenue	Chicago, IL 60643
West Pullman Library Branch	830 West 119th Street	Chicago, IL 60628

2.3 Project Website

CTA updated the project website for the Red Line Extension Project, www.transitchicago.com/redeis, on April 17, 2014 with up-to-date project information. The webpage provided general information about the project and alternatives, details about the open house meeting, information about project funding and timeline, and frequently asked questions. A printout of the project webpage is included in Appendix A.

2.4 Social Media Updates

CTA shared three Twitter tweets and three Facebook posts regarding the project on April 17 and 18, 2014. Copies of these social media updates are included in Appendix A.

2.5 Postcards

CTA mailed postcards inviting community members to the public open house on April, 17, 2014, to a list of 3,456 addresses that included public agencies, business groups, churches, schools, and community/neighborhood groups/associations within or near the project area, as well as attendees of previous RLE Project open house meetings and/or those that requested information about future Red Line projects. The postcard provided details about the open house meeting, including the closest transit access, and contact information to request assistance at the meeting. The postcard is included in Appendix A.

2.6 E-blasts

CTA sent an invitation email (e-Blast) with information about the open house meeting and links to the project website on April 17, 2014. A second email reminding recipients of the open house meeting was sent on May 12, 2014. The e-Blasts were sent to 666 and 670, respectively, email

addresses of residents who had previously demonstrated an interest in the RLE Project and/or requested information about future Red Line projects. The two e-Blasts are included in Appendix A.

2.7 Transit Alert Cards

A transit alert card providing information about the open house meeting was printed on April 30, 2014 and provided to the following locations:

- 20 alerts were produced for posting at the Red Line 95th Street Terminal station
- 370 alerts were produced for posting on all Red Line rail cars
- 350 alerts were produced for posting on all buses operating out of the 103rd Street bus garage

In total, 740 open house alerts were produced and distributed. The transit alert card is included in Appendix A.

2.8 Media

In response to the CTA announcement, a number of news articles about the RLE Project appeared in local media. Table 3 summarizes the articles that appeared in April and May 2014. The full articles are included in Appendix A.

Table 3: Published Media Articles April and May 2014

Date	Media Outlet	Article Title
4/14/2014	Chicago Sun-Times	CTA weighs two options for Red Line extension route
4/15/2014	Chicago Sun-Times	CTA narrows possible routes for proposed Red Line expansion
4/16/2014	Chicago Tribune	Red Line to Get North Side Overhaul, While South Siders Decry Wait
4/17/2014	Chicago Sun-Times	CTA Plans Red Line Improvements on North, South Sides
4/17/2014	Chicagoist	CTA Officially Announces Red Line South Extension, Red/Purple Line Renovation
4/17/2014	NBC 5 Chicago	CTA Announces Plans For Red Line Extension and Rehab
4/18/2014	CBS 2 Chicago	Far South Side Residents Endorse Red Line Extension
4/20/2014	The Times of Northwest Indiana	Southeast Chicago residents awaiting proposed Red Line extension to 130th Street
4/21/2014	The Chicago Maroon	Multi-billion Boost to Red Line
4/22/2014	Progressive Railroading	CTA Unveils First Phase of Modernization Project, Red Line Extension Environmental Steps
4/23/2014	Bid Ocean	CTA Announces Next Steps in Modernizing the Red Line
5/14/2014	ABC 7 Chicago	Red Line Extension Project Moving Forward
5/14/2014	CTA Tattler	Nearly 100 buildings would be razed to build preferred Red Line south extension
5/14/2014	Curbed Chicago	CTA Could Consume 259 Properties For Red Line Extension
5/14/2014	Chicago Sun-Times	Whistleblower off-base on CTA budget, Claypool says
5/13/2014	Chicago Sun-Times	CTA: Hundreds of parcels might be needed for Red Line expansion
5/18/2014	RedEye	Construction Ahead

Section 3
Participating Agencies

CTA provided an update on the project to the RLE Project participating agencies to inform them of the project status and invite them to the Open House. Participating agencies are federal, state, and local agencies with an interest in the project because of an overlap in their area of jurisdiction or some specialized knowledge of potential project effects. The list of participating agencies and copies of the letters sent to both federal and state, regional, or local participating agencies is included in Appendix C. Responses were received from the Regional Transportation Authority, Chicago Park District, Illinois Department of Transportation, Transportation Security Administration, and Illinois Environmental Protection Agency. Responses are also included in Appendix C.

Section 4
Community Group Meetings

CTA met with local community groups to share information about the project and allow community members to ask questions. Appendix D contains the meeting presentation (the same presentation was given at each meeting), sign-in sheets, and meeting summaries. The meetings are summarized in Table 4.

Table 4: Community Group Meetings

Group Name	Meeting Date
Developing Communities Project (Leadership)	April 16, 2014
Chicago Neighborhood Initiatives Greater Roseland Chamber of Commerce	April 29, 2014
Developing Communities Project (Membership)	April 30, 2014
People for Community Recovery Golden Gate Homeowners Association	May 6, 2014
Rosemoor Community Association	May 7, 2014
Friends of the Parks Chicago Park District	May 8, 2014
Roseland Manor	May 13, 2014
Far South Side Community Development Corporation	May 14, 2014
Agape Community Center	May 15, 2014
34th Ward Town Hall	June 19, 2014

In addition to the groups with which CTA met, CTA also reached out to St. Anthony of Padua Parish and the Roseland Business Development Council in April 2014, but did not meet with either organization.

Section 5
Open House Meeting

CTA conducted an open house meeting to inform the public about the project and to provide people with an opportunity to ask questions about the RLE Project in an informal setting.

Time:	5:30 to 7:30 p.m.
Date:	Tuesday, May 13, 2014
Location:	Palmer Park Gymnasium 201 E. 111th Street Chicago, IL 60628

The meeting was held in a community center familiar to area residents, accessible by public transportation, and was ADA compliant. For the convenience of all attendees, bus lines to and from the meeting site were publicized on the flyer, notice, e-Blast, and on the website. In order to provide the greatest opportunity for community participation, the open house was scheduled in the early evening on a weekday. Spanish translation and a sign language interpreter were made available during the open house meeting.

A total of 212 people signed in at the May 13, 2014 open house. Although everyone was encouraged to sign in, there were a few additional attendees who declined to sign in. Copies of the sign in sheets are included as Appendix E.

During the open house meeting, project team members explained information presented on exhibit boards and answered project-related questions. Attendees also had the opportunity to view a video prepared by the Chicago Metropolitan Agency for Planning (CMAP) about the RLE Project. The video was played continuously during the open house, and is available online at: cmap.illinois.gov/mobility/transit/red-line. The open house provided attendees an opportunity to review the project information and give feedback about which project alternative would best meet their transit needs and the potential environmental impacts.

Photos from the meeting are included in Appendix F.

5.1 Meeting Materials

Meeting attendees were offered comment cards, a project factsheet with information on the project (available in both English and Spanish), and a glossary of terms to be consulted as they visited the project exhibit boards. The comment card allowed attendees to submit written comments during or after the open house meeting. Two specific questions were posed on the comment card:

- What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

- How do you use the following parks? (Accompanied by a table listing Wendell Smith Park, Fernwood Park, and Block Park and activities options such as "Playground," "Community Events," and "Other.")

The comment card, English and Spanish project factsheet, and glossary are included in Appendix G.

CTA developed exhibit boards about the project, which were used during the open house meetings. The boards included:

- Welcome
- Red Ahead Program
- What is the RLE Project?
- Why are we preparing an Environmental Impact Statement (EIS)?
- Project Alternatives: UPRR Rail Alternative
- Project Alternatives: Halsted Rail Alternative
- Project Alternatives: BRT Alternative
- Potential Impacts to Parks
- Potential Property Displacements
- Potential Noise Impacts
- Potential Visual and Community Impacts
- Potential Effects to Historic Properties
- Impacts to Wetlands
- Temporary Construction Impacts
- RLE Project Benefits
- Project Development Process
- Stay Involved

The exhibit boards illustrated the RLE Project alternatives, potential impacts, and potential mitigation measures. Project team members provided meeting attendees with specific information related to these topics and answered questions at each exhibit board. At the "Potential Property Displacements" exhibit board, TA real estate acquisition brochures were available for distribution. Copies of the exhibit boards are in Appendix H.

5.2 Comments Received

Attendees could comment in writing during the open house or submit their comments after the open house via email or mail. Email comments could be sent to a project specific email address (RedExtension@transitchicago.com) found on the comment cards, project website, and on all notification materials. At the May 13, 2014 open house meeting, 76 people filled out and submitted comment cards. In addition, one letter, six comment cards, and fourteen emails were received following the May 13 open house meeting. All comment cards and emailed comments received as of the date of this meeting summary are included in Appendix I.

Community members were asked what specific comments or concerns they had about Red Line Extension alternatives, potential impacts, and mitigation measures. Overall, the community supports the RLE Project. They noted the following concerns and comments:

- Property Displacements: Commenters wanted to know how many properties would be purchased, what properties would be purchased, how owners would be compensated, and how the RLE Project would impact property values. Commenters also expressed concern regarding the potential emotional impacts of property acquisitions on long-time area residents, particularly senior citizens.

- Community and Economic Development: Commenters stated that communities in the project area are underserved by public transit and have been waiting for this project. Commenters would like to see the RLE project create jobs for area residents and increase economic development. Some commenters expressed concern that the RLE Project would disrupt the residential communities along the project alternative alignments.

- Noise and Vibration: Commenters requested additional information regarding train noise and if its vibration would affect home foundations.

- Timeline: Commenters requested additional information regarding the project timeline and length of construction.

- Safety and Security: Commenters suggested that the elevated trains could make the street darker, possibly increase crime, and decrease safety. Commenters also suggested that pedestrian safety be evaluated at stations along the UPRR tracks as well as the 130th Street Station.

- Traffic: Commenters expressed concern about traffic impacts related to the project. One commenter also suggested that the project would reduce congestion on I-94.
- Alternatives Analysis: Several commenters provided suggestions for alternate routes, modes, parking, and/or the RLE terminal station.
- Alternative Preference: Commenters provided preferences for both the UPRR Rail Alternative and Halsted Rail Alternative. The majority of comments that expressed a preference related to the alternatives were in support of the UPRR Rail Alternative although some commenters were in opposition to the UPRR Alternative because of property displacements. Multiple commenters opposed the Halsted Rail Alternative because of visual, noise, historic resources, and safety impacts, and because it wouldn't provide transit access to underserved communities.

The comment cards also asked how attendees use project area parks; attendees could mark multiple activities and multiple parks. Of the 82 completed comment cards, 67 filled out the section on the use of local parks. A summary of responses to the second question is shown in Table 5.

Table 5: Use of Project Area Parks

Park	Baseball / Softball / Basketball	Play ground	Walking / Jogging	Community Events	Other	I do not use this park	No Response
Wendell Smith Park	8	5	14	13	5	47	18
Fernwood Parkway	3	5	7	7	7	40	27
Block Park	1	1	7	3	3	47	26

Appendix A
Meeting Notifications

Press Release

Flyers

Website

Social Media Updates

Postcard

E-blast

Transit Alert Card

Media Articles

Mayor Emanuel, CTA Announce Next Steps in Modernizing the Red Line, CTA's busiest rail line

4/17/2014

CTA Unveils First Phase of its Red and Purple Modernization Program That Will Ultimately Rebuild the Northern Section of the Red Line and the Parallel Purple Line

Red Line Extension Plan to Extend the Red Line South of 95th Street to 130th Street Moves Forward with its Environmental Process

Mayor Rahm Emanuel and CTA President Forrest Claypool today announced the first phase of its Red and Purple Modernization (RPM) program, which will completely rebuild the northern section of the Red Line and the parallel Purple Line, and beginning of the next step in a federal process to secure funding for the Red Line Extension plan, which would extend the Red Line south from 95th Street to 130th Street.

These are the latest steps in the ongoing modernization of the CTA under Mayor Emanuel.

"As a world-class city, Chicago has a world-class transit service to connect residents to jobs, education, culture and above all opportunity," said Mayor Emanuel. "CTA is investing in modernizing the Red Line as part of our strategy to create a seamless, safe, and reliable transportation system for every neighborhood."

The CTA's Red Line, which runs 24/7 along 23 miles of tracks, is Chicago's busiest rail line with about 75 million annual rides.

The Red and Purple Modernization program and the Red Line Extension project are the latest in a series of Red Line projects to modernize and extend the backbone of the CTA's rail system that have been undertaken since 2011.

With a significant portion of the Red Line built more than a century ago, the improvements would address the current need to expand capacity by building new infrastructure to accommodate growing ridership. Additional Red Line modernization projects under Mayor Emanuel include:

- Successful $425 million replacement of the Red Line South railroad in 2013, as well as station rehabilitations.

- $86 million renewal and rehabilitation of seven far north side stations in 2012.
- $240 million new 95th Street Terminal, work beginning in late summer.
- $203 million Wilson station reconstruction and track and signal replacement, major construction to begin this fall.

"These projects are the next steps in our overall vision to rebuild, modernize and expand the entire Red Line," said P President Claypool. "We're already kicking off Red and Purple Modernization by beginning reconstruction of the Wilson station this fall and continuing progress on the South Side by starting the new 95th Street Terminal this summer, following the successful completion of the Red Line South reconstruction last year. With both the Red and Purple Modernization and Red Line Extension projects, we'll replace outdated infrastructure with a modern, efficient rail, and build more than five miles of new track. Together these improvements will offer CTA customers faster, more reliable service, and increasing access to quality rail transportation for thousands of future riders."

The CTA is also moving forward with its proposed Red Line Extension plan by beginning the second step of its environmental process to ultimately finish the Environmental Impact Study, which is required to begin engineering on the plan to extend the Red Line south of 95th Street to 130th Street. Both projects will include a broad community outreach process that will begin next month to solicit community feedback on both projects and provide updates on the funding process for each project.

About Red and Purple Modernization

The RPM program will proceed in phases to fully replace old, deteriorating infrastructure and stations along the entire north branch of the Red Line and the parallel Purple Line, and will pave the way for CTA to significantly increase train capacity for the next 80 years.

This section of the Red and Purple lines carries one out of every five CTA rail rides and serves customers in some of the densest, most diverse neighborhoods in Chicago. Rush-hour ridership has jumped 40 percent in the last five years alone.

Most tracks and bridges along the Red and Purple lines are nearly 100 years old. Despite rising demand, the CTA is unable to increase capacity because of the current infrastructure's age and structural limitations. Continuing to operate a busy rail line on this outdated infrastructure results in high maintenance costs, the need for frequent repairs that disrupt service and slow travel, as well as outdated stations that can't accommodate elevators or other necessary and modern amenities.

RPM will create a completely rebuilt rail line, resulting in faster, smoother rides, modern, fully ADA accessible stations along the entire corridor and more frequent train service to alleviate overcrowding.

The first phase of the RPM improvements will include two main components:

- **Station and track modernization, Wilson to Bryn Mawr:** Completely rebuilding the Wilson, Lawrence, Argyle, Berwyn, and Bryn Mawr stations and rebuilding all tracks, support structures, bridges and viaducts for the Red and Purple lines between Lawrence and Bryn Mawr. Replacement of the Wilson station and surrounding infrastructure begins this fall. These

Systemwide:

New Schedules in Effect (All Tra
Routes)

Trains:

Red Line	Normal Service
Blue Line	Normal Service
Brown Line	Normal Service
Green Line	Normal Service
Orange Line	Normal Service
Purple Line	Normal Service
Pink Line	Normal Service
Yellow Line	Normal Service

Buses:

Routes with Current Alerts (View A

1	2	3	4	7
15	20	24	29	36
39	44	49	56	59
62	63W	65	66	70
120	121	124	132	156
171	172	192		

More:

See all Alerts Acc

Plan a trip

Start (e.g. O'Hare Airport)

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stations were built originally between 1908 and 1923 and the elevated support structures date back to the 1920s. The Bryn Mawr station was last updated 40 years ago, in 1974; the remaining three stations received interim station renewal work in 2012. Reconstruction of these stations will include adding elevators at each to make them accessible to customers with disabilities. The project also includes rebuilding the tracks, signals and support structures, which will significantly improve train speeds and service reliability on the slow zone-plagued stretch. (The Wilson station project is already funded from state, federal and local sources, and is currently proceeding through a separate Environmental Assessment process.)

- **Construction of a Red-Purple bypass.** Construction of a bypass north of the Belmont station to eliminate delays and speed up train service where the Red, Purple and Brown lines currently all intersect. The current configuration requires trains on three of four tracks to stop and wait for Brown Line trains to cross, which results in more than 40 percent of weekday trains being delayed by as much as three minutes. About 150,000 rides travel through this intersection each weekday, all of which are slowed down because trains must stop and wait for signal clearance. The structure's original 1907 design makes it difficult, under present day and service demands, to provide reliable service and makes adding service extremely challenging.

"Modernizing Red Line rail service and stations strengthens our neighborhoods by making transit more reliable and ultimately generating new economic development near revitalized stations," said Ald. Harry Osterman. "We're pleased that Mayor Emanuel and the CTA recognize the importance of safe, reliable transit in neighborhoods near the Red Line, including Andersonville, Edgewater and Uptown, and look forward to working closely with the CTA on this exciting program."

Future phases of RPM will bring the same level of infrastructure and station improvements to the remaining sections of the Red and Purple lines, from north of Belmont station to Linden station in Wilmette.

Estimated cost for the first phase of RPM is $1.7 billion.

In November 2013, the CTA became the first transit system accepted into the Federal Transit Administration's (FTA) new Core Capacity Program that provides funding to transit systems to add capacity on existing infrastructure for future ridership growth. The RPM project is eligible for 2014 Core Capacity federal funding approved by Congress earlier this year.

About RLE

The 5.3-mile Red Line Extension project will extend south from the 95th Street Terminal through the greater Roseland community. Plans include construction of four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street and 130th Street, all with bus and parking facilities.

The RLE project will provide rapid transit rail access to a low income, transit-dependent Far South Side area that does not have direct CTA rail service. An extended Red Line will provide up to a 20-minute time savings to downtown by providing one-seat service, as opposed to the current bus-rail trip from 130th Street. It will also improve access to jobs and education, and foster economic development.

In 2011, the CTA received funding from the FTA to conduct the Environmental Impact Statement (EIS) for the RLE project—a major, important step in the multi-step federal process to secure approval and funding of the $2.3 billion dollar project.

Public Input and Next Steps

The CTA will meet with community groups and host public open houses to share details and seek input on the proposed RPM and RLE projects. Members of the public can submit formal comments directly to the CTA or at public open houses where CTA and representatives will provide additional information on RPM and RLE project plans. For each project, CTA is seeking community input on the location, design, and social, economic, and environmental effects of the proposed improvements.

The **Lawrence to Bryn Mawr Modernization Open House** will be held Wednesday, May 21, at Truman Community College, 1145 W. Wilson Ave. from 5:30 p.m. to 7:30 p.m.

The **Red-Purple Bypass Open House** will be held Thursday, May 22, at the 19th District Police Station, 850 W. Addison St., from 5:30 p.m. to 7:30 p.m.

The **RLE Open House** will be held Tuesday, May 13, at Palmer Park Gymnasium, 201 E. 111th St., between 5:30 p.m. and 7:30 p.m.

Comments for either project can also be submitted by email or postal mail to:

RPM@transitchicago.com

RedExtension@transitchicago.com

Chicago Transit Authority
Strategic Planning, 10th floor
Attn: RPM Project or RLE Project
567 W. Lake Street
Chicago, IL. 60661-1465

Following public input, the CTA will deliver draft environmental studies for both RPM Phase One and RLE to the FTA as part of the process to request federal funding. Timing for construction starts on each project is dependent upon the receipt of funding for each project. By the beginning of May, the CTA will release a request for Letters of Interest and Qualifications (LIQ) for Preliminary Engineering (PE) services for Phase One of RPM.

For more information about the Red Purple Modernization and Red Line Extension projects, visit transitchicago.com.

###

More Information

Red Line Extension Project: http://www.transitchicago.com/redeis/

Red and Purple Modernization Project: http://www.transitchicago.com/rpmproject/

Current Red-Purple and Brown Track Intersection Configuration

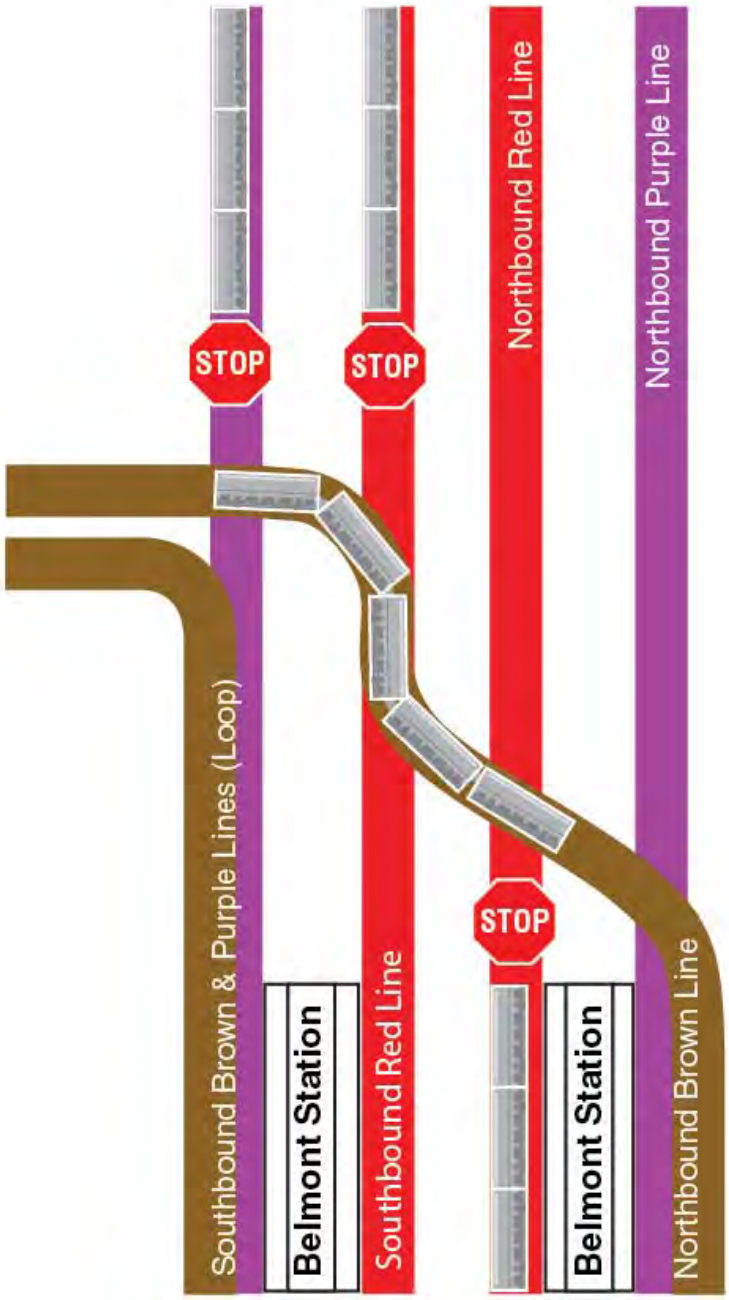

RPM Bypass Track Configuration

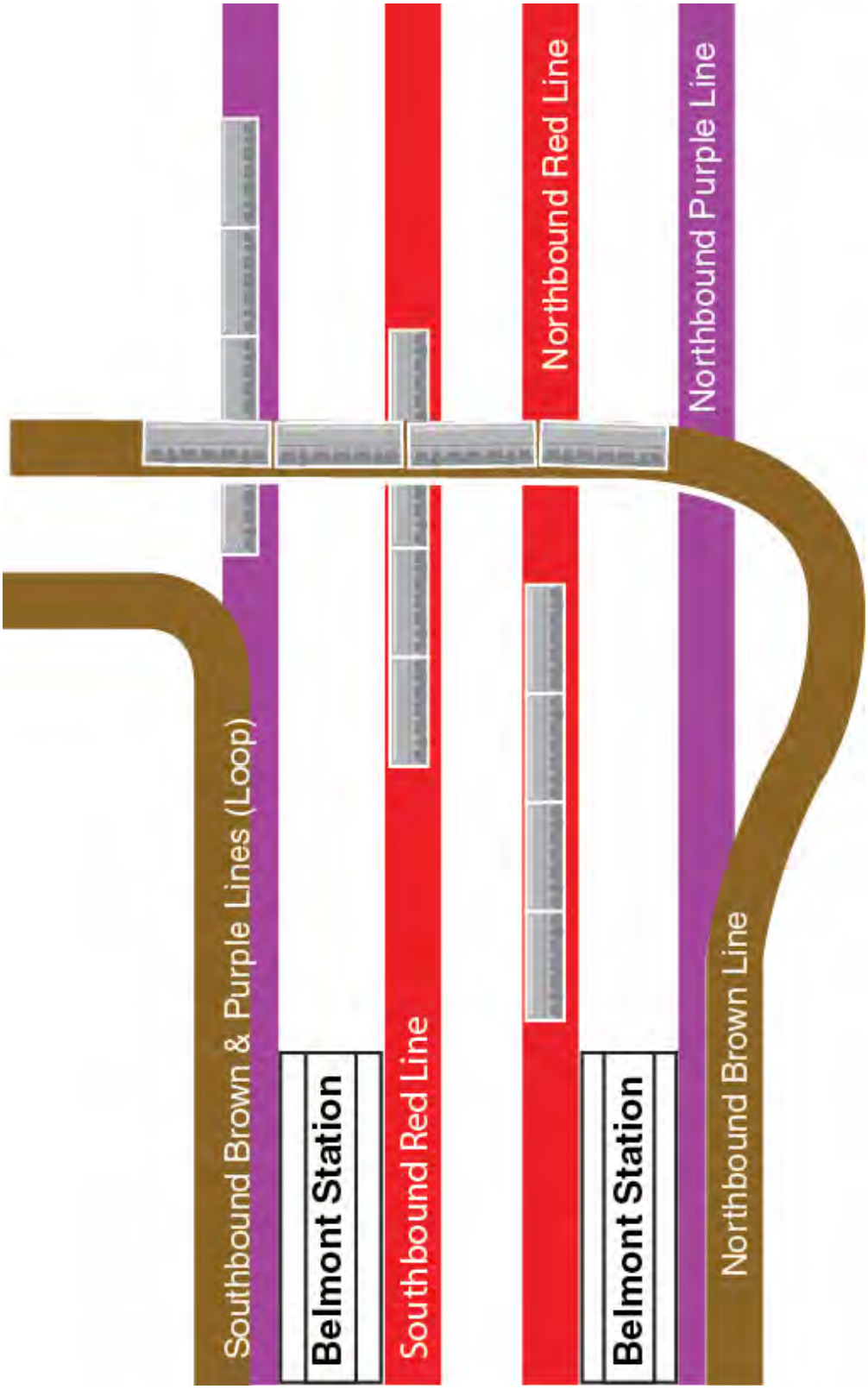

RPM Bypass Track-Level View Concept

RPM Bypass Street-Level View Concept

Bryn Mawr Station Interior Concept

Bryn Mawr Platform Concept

Bryn Mawr Station Entry (Street View) Concept

Back to News

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E-mail: feedback@transitchicago.com

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

You're invited to attend a CTA open house on the

Red Line Extension Project

When and Where?

Tuesday, May 13, 2014
5:30 to 7:30 p.m.

Palmer Park Gymnasium
201 E. 111th Street
Chicago, IL 60628

This location is served by:
CTA Bus #34, #111, #119; Pace Bus #353;
and Metra Electric 111th Street (Pullman).

This facility is accessible to people with disabilities.

At the open house, you will learn more about the proposed alternatives, hear about anticipated project benefits and impacts, and have the opportunity to provide feedback.

What's New with the Red Line Extension Project?

Since the RLE Project open house meeting during the summer of 2011, we have been preparing a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the alternatives. Findings from this preliminary impact analysis of the alternatives will be discussed at the Open House. CTA welcomes your comments and feedback about the RLE Project alternatives and potential impacts, which will be incorporated into the Draft EIS.

This project is one part of CTA's Red Ahead Program, a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line.

Do you require assistance?

If you require an interpreter, including sign language services, or other accommodations at this meeting, contact Gerald Nichols, CTA Government and Community Relations, at least five days prior to the meeting at 312-681-2807 or GNichols@transitchicago.com.

Para informacion en Español, llame al 312-681-2807

Customer Information: 1-888-YOUR-CTA (1-888-968-7282)

RedExtension@transitchicago.com

transitchicago.com/redeis **/thecta** **@cta**

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Red Line Extension

Usted está invitado a una reunión abierta al público sobre el proyecto

Extensión de la Línea Roja

¿Cuándo y Dónde?

Martes, 13 de Mayo del 2014
5:30 p.m. a 7:30 p.m.

Gimnasio de Palmer Park
201 E. 111th Street
Chicago, IL 60628

Este lugar es accesible por: Las rutas de autobus #34, #111, #119; Autobús Pace #353; y Metra Electric 111th Street (Pullman).

Las instalaciones son accesibles para las personas con discapacidad.

Durante la reunión, usted se informará acerca de las alternativas propuestas y los beneficios e impactos anticipados. También tendrá la oportunidad de compartir sus preferencias y sugerencias.

¿Qué hay de nuevo con la Extensión de la Línea Roja?

Desde la última reunión de la Extensión de la Línea Roja en el verano del 2011, CTA ha estado preparando el borrador de la Declaración de Impacto Ambiental, basada en el análisis técnico de los impactos de las alternativas. Las conclusiones de este análisis preliminar de las alternativas será discutido en la reunión. CTA con gusto acepta sus comentarios y sugerencias acerca de las alternativas y los impactos del proyecto de Extensión de la Línea Roja, los cuales serán incorporados en el borrador de la Declaración de Impacto Ambiental.

Este proyecto es una parte del programa *Red Ahead Program* de la CTA, una iniciativa comprensiva para mantener, modernizar y extender la línea de tren más usada en Chicago.

¿Requiere Asistencia?

Si usted necesita un intérprete, incluyendo servicios de lenguaje de señas, u otros servicios especiales durante la reunión, comuníquese con Gerald Nichols, oficial de relaciones gubernamentales y comunitarias para la CTA, al (312) 681-2807 o GNichols@transitchicago.com por lo menos cinco días antes de la reunión.

Llame al 312-681-2807 para información en español

Información a los clientes: 1-888-968-7282

RedExtension@transitchicago.com

transitchicago.com/redeis **/thecta** **@cta**

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Appendix A
Meeting Notifications

Press Release

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Social Media Updates

Postcard

E-blast

Transit Alert Card

Media Articles

Line, CTA's busiest rail line (4/17/2014)

Project Status

In accordance with the National Environmental Policy Act (NEPA), the CTA and the Federal Transit Administration (FTA) have initiated the environmental review process for this project and are preparing an Environmental Impact Statement (EIS). An EIS compares the positive and negative environmental impacts of the various project alternatives.

See alternatives under consideration and learn more about the project, here.

Get Involved and Stay Informed

Public and agency input is important. This website will keep you informed about the proposed project, the planning process, and opportunities for public input and participation.

If you have any questions related to the Chicago Transit Authority's proposed Red Line Extension, or would like to be added to the project mailing list for future updates, please contact us at:

RedExtension@transitchicago.com

Chicago Transit Authority
Strategic Planning & Policy, 10th Floor
Attn: Red Line Extension
567 W. Lake Street
Chicago, IL 60661-1465

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Red & Purple Modernization Project
Red Line Extension
Yellow Line Extension
Orange Line Extension
Alternatives Analysis Studies (and archives)
Circle Line Alternatives Analysis
Jeffery Jump
Ashland Bus Rapid Transit (BRT)
Blue Line Forest Pk. Br. Feas./Vision Study
Press Releases
Public Art
Reports & Notices
System Improvement Projects
Ventra
Videos
Winter Preparedness

About the Red Line Extension

Connecting 95th Street Station to 130th Street

Overview

The Chicago Transit Authority (CTA) is proposing to make transportation improvements by extending the Red Line from the 95th Street Terminal to the vicinity of 130th Street. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

See a PDF summary of the project

Purpose & Need

The purpose of the Red Line Extension is to:

- Reduce commute times for residents both within and south of the project area.
- Improve mobility and accessibility for low-income and transit-dependent residents in the project area.
- Improve rapid transit rail service to isolated areas and provide viable linkages to affordable housing, jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Improve connections and linkages of public transportation modes in the project area.
- Foster economic development in the project area, where new stations/stops may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.

The RLE Project is needed to respond to the following problems:

- Transit trips to jobs are longer for Far South Side residents compared to the Chicago region as a whole.
- Transit-dependent populations lack direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and lacks viable transportation options, which limits access to affordable housing and supporting infrastructure.
- Existing transit markets are underserved and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have

Red Line Extension

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Home
About / Alternatives
Environmental Review
FAQ

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System Status

Systemwide:

New Schedules in Effect (All Train Routes)

Trains:

Red Line	Significant Delays
Blue Line	Normal Service
Brown Line	Normal Service
Green Line	Planned Work w/Station(s) Bypassed
Orange Line	Normal Service
Purple Line	Normal Service
Pink Line	Normal Service
Yellow Line	Normal Service

Buses:

Routes with Current Alerts (View All):

1 2 3 4 7 8
11 15 20 24 29 36
37 39 44 49 49B 56
59 60 62 63W 65 66
70 72 120 121 124 132
156 170 171 172 192

More:

See all Alerts Accessibility

negatively impacted Far South Side communities.

Project Alternatives

Several alternatives, which included different routes and technologies, were considered during the Alternatives Analysis process. The alternatives were then narrowed down through public and agency feedback to the four alternatives described here. These alternatives are being analyzed in the Draft Environmental Impact Statement.

No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010-2015 Transportation Improvement Program (TIP). All elements of the No Build Alternative are included in each of the other alternatives.

The No Build Alternative would include the following:

- Existing transportation system
- Committed transportation improvements including bridge reconstructions, 95th Street Terminal Improvement Project, several road improvement projects including resurfacing and coordination of signal timing, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities
- Bus transit service focused on the preservation of existing services and projects

Bus Rapid Transit (BRT) Alternative

The proposed Bus Rapid Transit (BRT) Alternative (formerly referred to as the transportation system management alternative) would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue via East 95th Street, Michigan Avenue, East 127th Street, South Indiana Avenue, and East 130th Street. The BRT would operate in mixed traffic and would not include new dedicated bus lanes.

The BRT Alternative would include the following features:

- Transportation improvements that are already in the Chicago Metropolitan Agency for Planning Fiscal Year 2010-2015 Transportation Improvement Program as described in the No Build Alternative
- 5.5 mile BRT service from 95th Street Terminal with four stops at 103rd Street, 111th Street, Kensington Avenue, and 130th Street
- New park & ride facilities at all stops
- Traffic signal priority at signalized intersections along 95th Street, Michigan Avenue, and 130th Street

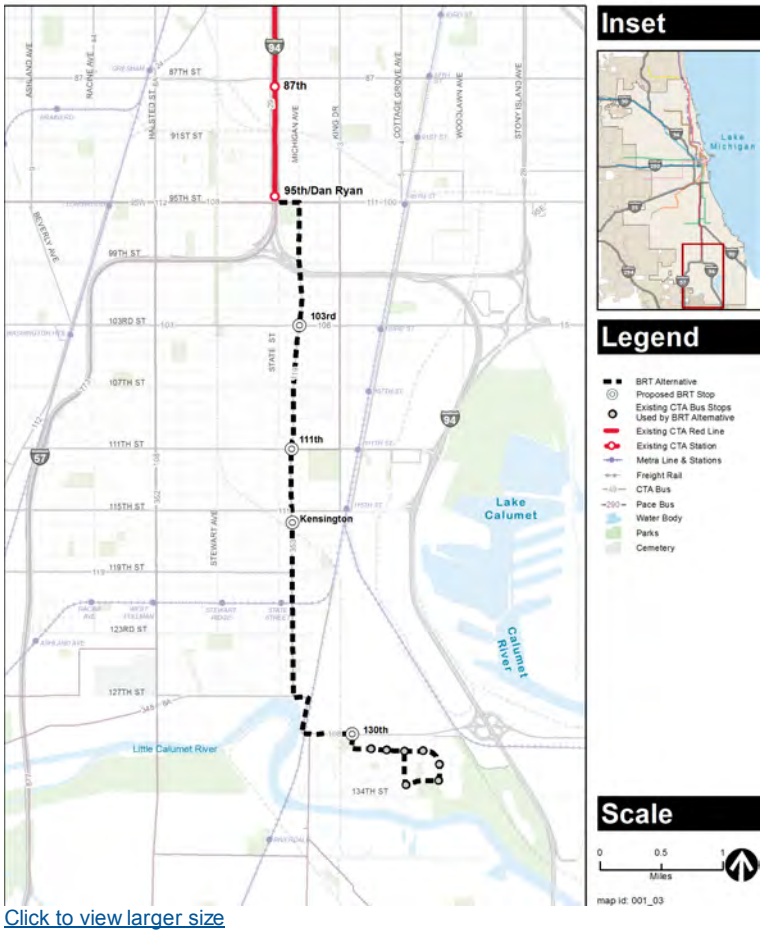

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Union Pacific Railroad (UPRR) Rail Alternative – Locally Preferred Alternative

The proposed UPRR Rail Alternative would extend the heavy rail transit line from the existing Red Line 95th Street Terminal to 130th Street. The UPRR Rail Alternative would operate on an elevated structure heading south from 95th Street along the I-57 Expressway for nearly one-half mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of South Prairie Avenue, the alignment would cross over the Canadian National/Metra Electric tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the Northern Indiana Commuter Transportation District Chicago South Shore & South Ben Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Indiana Harbor Belt (IHB) alignment to terminate at 130th Street. The UPRR Alternative was selected by the Chicago Transit Board as the Locally Preferred Alternative on August 12, 2009.

The Locally Preferred Alternative would include the following features:

- Transportation improvements that are already in the Chicago Metropolitan Agency for Planning Fiscal Year 2010-2015 Transportation Improvement Program as described in the No Build Alternative
- 5.3-mile heavy rail transit line extension from 95th Street Terminal to 130th Street
- Four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street
- New park & ride and bus terminal facilities at each station
- Bus transit service from the south to the new stations for faster travel to downtown Chicago
- New yard and shop at 120th Street

Three alignment options are being studied in the Draft EIS:

- Right-of-Way (ROW) Option
  The ROW Option was identified during the environmental analysis. As part of this option, the UPRR freight trains would relocate to another area (as part of a separate project), and new elevated CTA Red Line tracks would be built in the space where the Union Pacific freight rail tracks are now. This option would be contingent upon the UPRR relocating. The Chicago Department of Transportation (CDOT) has been working with the affected railroads to assess the technical and operational feasibility of such relocation. The results of CDOT's analysis will help to inform the feasibility of this new option.
- East Option
  As part of the East Option, CTA tracks would be placed immediately adjacent to the UPRR right-of-way to the east.
- West Option
  As part of the West Option, CTA tracks would be placed immediately adjacent to the UPRR right-of-way to the west.

Two options for the 130th Street terminal station are being studied in the Draft EIS. The South Station Option would be located to the west of the NICTD/CSS & SBRR right-of-way at 130th Street. The West Station Option would be located along the north side of 130th Street to the west of the NICTD/CSS & SBRR route.

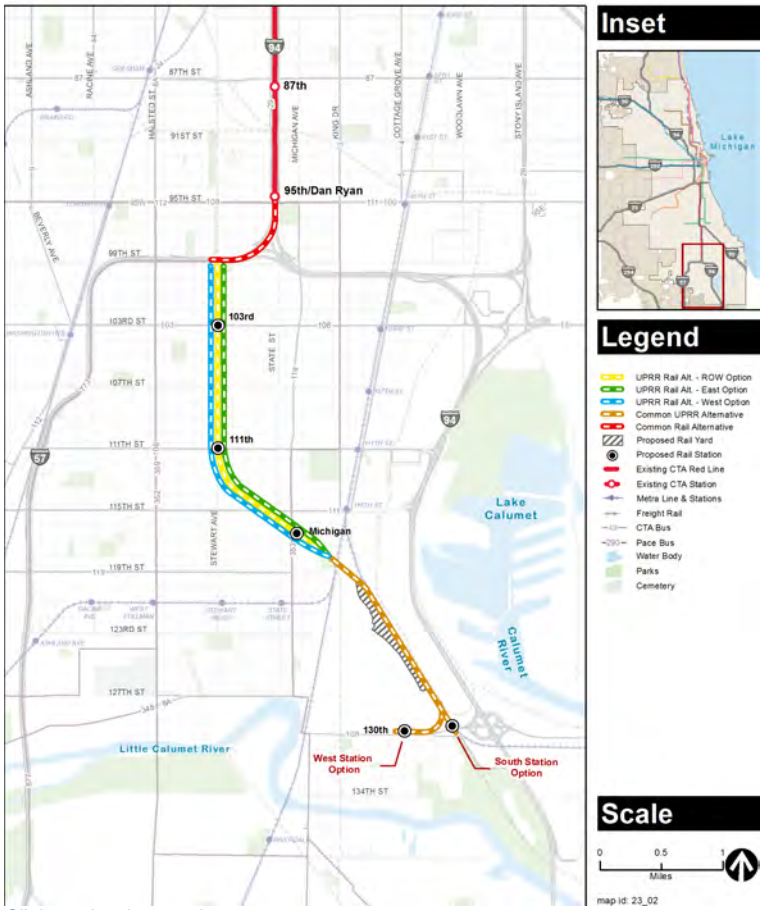

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Halsted Rail Alternative

The proposed Halsted Rail Alternative would extend the rail line from the existing 95th Street Terminal to the intersection of Halsted Street and Vermont Avenue near 127th Street.

The Halsted Alternative would operate on an elevated structure between the existing 95th Street Terminal and the intersection of Halsted Street and Vermont Avenue near 127th Street. The alignment would follow the median of the I-57 Expressway until reaching Halsted Street. It would then turn south

onto Halsted Street and continue to Vermont Avenue.

The Halsted Alternative would include the following features:

- Transportation improvements that are already in the Chicago Metropolitan Agency for Planning Fiscal Year 2010-2015 Transportation Improvement Program as described in the No Build Alternative
- 5-mile heavy rail transit line extension from 95th Street Terminal to the intersection of Halsted Street and Vermont Avenue
- Four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue
- New park & ride facilities at each station
- Bus transit service from the south to the new stations for faster travel to downtown Chicago
- New yard and shop at 119th Street

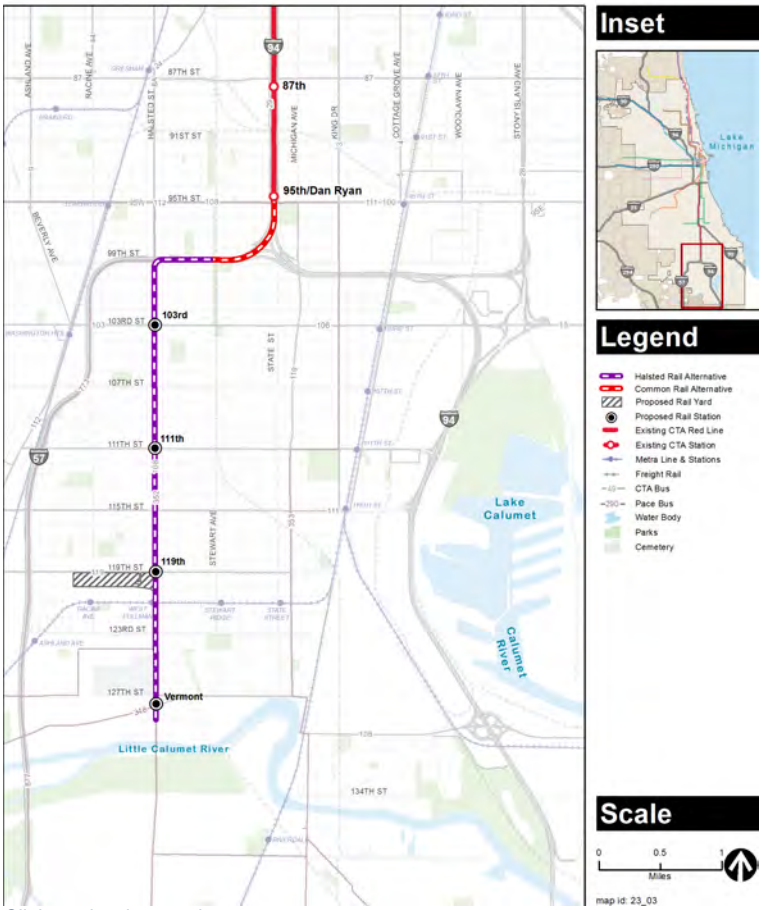

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Press Releases
Public Art
Reports & Notices
System Improvement Projects
Ventra
Videos
Winter Preparedness

Red Line Extension

Quick Links

Home
About / Alternatives
Environmental Review
FAQ

RED AHEAD Red Line Extension

Environmental Review

Overview

The National Environmental Policy Act (NEPA) requires evaluation of potential environmental impacts associated with federal projects and actions. In accordance with the NEPA, the Chicago Transit Authority (CTA) and the Federal Transit Administration (FTA) are preparing an Environmental Impact Statement (EIS) that will evaluate the environmental effects of constructing and operating the proposed extension.

Environmental Impact Statement

The CTA is currently in the process of preparing a Draft EIS. The Draft EIS will include an evaluation of the No Build Alternative, the BRT Alternative, the UPRR Rail Alternative, and the Halsted Rail Alternative. The Draft EIS will describe the alternatives, the existing environmental setting, the potential impacts from construction and operation of the alternatives, and proposed mitigation measures to reduce or eliminate potential impacts.

The purpose of the EIS is to study, in a public setting, the effects of the proposed project and its alternatives on the quality of the physical, human and natural environment. Areas to be evaluated for potential impacts from construction and operation of the proposed project include, but are not limited to:

- Transportation
- Land use and economic development
- Displacement and relocation of existing uses
- Neighborhood and community
- Visual and aesthetic
- Noise and vibration
- Safety and security
- Historic and cultural resources
- Hazardous materials
- Air quality
- Wetlands
- Water quality
- Floodplains
- Vegetation and wildlife habitat
- Threatened and endangered species
- Geology and soils
- Energy
- Environmental Justice

The evaluation will reveal the extent to which the proposed project will or will not affect these areas. Measures to avoid, minimize, and mitigate potential adverse impacts will also be identified and evaluated.

To keep you informed about the proposed Red Line Extension Project, a newsletter was sent out in Summer 2013 and is available here.

Schedule

The CTA expects to publish the Draft EIS in early 2015 for public review. The public will have an opportunity to comment on the published Draft EIS during

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Buses:

Routes with Current Alerts (View All):

1 2 3 4 7 8
11 15 20 24 29 36
37 39 44 49 49B 56
59 60 62 63W 65 66
70 72 120 121 124 132
156 170 171 172 192

More:

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a 45-day public comment period. During the review period, CTA will host public hearings to receive comments on the Draft EIS from the public and agencies. The CTA will then prepare a Final EIS that will include responses to public comments received in Draft EIS, the environmental analysis of the single NEPA Preferred Alternative, and a list of committed final mitigation measures.

The FTA will consider the Final EIS and prepare a Record of Decision (ROD) selecting the preferred alternative including mitigations for adverse impacts. Issuance of the ROD indicates that CTA has satisfied all of the requirements of the NEPA. The issuance of the ROD will allow CTA to move forward with engineering and construction of the project.

The project schedule is dependent on federal reviews and approvals and funding availability.

August 2011 Open House

The CTA hosted an Open House in August 2011 to keep the public informed about the proposed Red Line Extension.

Tuesday, August 2, 2011, 6:00 p.m. to 8:30 p.m.
St. John Missionary Baptist Church
211 E. 115th Street, Chicago, IL 60628

Open House Exhibit Boards – August 2011

Scoping and Scoping Meetings

The process of determining the scope, focus, and content of an EIS is known as “scoping.” Scoping meetings are an opportunity to obtain information from the public and governmental agencies. The scoping process asks agencies and interested parties to provide input on the proposed alternatives, the purpose and need for the project, the proposed topics of evaluation, and potential effects and mitigation measures to be considered.

The official public comment period for scoping concluded on October 27, 2009. The comments received are summarized in the Scoping Report. Input received during scoping is used to refine the project purpose and need and alternatives, and to direct the analysis of environmental impacts. Public input is also used to help planners avoid potential impacts, and to identify potential mitigation measures.

Red Line Extension Scoping Report (.pdf)
Scoping report - revised June, 2010. Appendices are available as separate files.

Red Line Extension Scoping Report Appendices A-G (.pdf)
Public Participation Plan, Notice of Intent, Participating Agencies, Participating Agency Invitation Letters, Agency Scoping Meeting, Agencies and Organizations Notified of Scoping, Notification Materials

Red Line Extension Scoping Report Appendices H-K (.pdf)
Scoping Meeting Materials, Meeting Presentation, Meeting Exhibit Boards, Public Scoping Meeting Transcripts

Red Line Extension Scoping Report Plain Text Supplement for Appendices H-J (.txt)
This text-only supplement describes Scoping Meeting Materials, Meeting Presentation, Meeting Exhibit Boards

Red Line Extension Scoping Report Appendix L Public Comments 1-95 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 96-171 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 172-259 (.pdf)

Red Line Extension Scoping Report Appendix L Public Comments 260-344 (.pdf)

Red Line Extension Scoping Report Appendix M (.pdf)
Agency Comments - revised June, 2010

Alternatives Analysis

The purpose of the Alternatives Analysis (AA) Study, which ended in August 2009, was to examine a wide range of potential transportation options. In the AA process, the project's purpose and need were identified, alternatives that meet the purpose and need were developed and evaluated, and comprehensive and ongoing public involvement was initiated. Many different transportation alternatives were identified in the AA process. Based on public comment and an evaluation of those options against criteria that included cost, environmental factors, and feasibility considerations, the number of options was narrowed. There were three screening stages and the results of each screening stage were presented at public meetings. At each stage, there was an opportunity for the public to review and comment on the results. The end result of the AA process was the selection of a Locally Preferred Alternative by the Chicago Transit Board on August 12, 2009.

Screen 1 Analysis

The CTA held public open houses to receive input on preliminary findings from Screen 1 of the Alternatives Analysis Study for the proposed Red Line Extension.

Tuesday, April 10, 2007, 6-8 p.m.
Chicago State University, New Academic Library, 4th Floor Auditorium
9501 S. King Drive, Chicago, IL 60628

Wednesday, April 11, 2007, 6-8 p.m.
West Pullman Branch, Chicago Public Library
830 W. 119th St., Chicago, IL 60628

Presentations delivered at the Screen 1 meetings are available at the links below:

Public Meeting Presentation Part 1 - April 2007 (3 MB PDF)
Public Meeting Presentation Part 2 - April 2007 (2 MB PDF)
Public Meeting Presentation - April 2007 (Text version)

Public Meeting Display Boards - April 2007 (3 MB PDF)
Public Meeting Display Boards - April 2007 (Text version)

Public Meeting Comment Card - April 2007 (0.4 MB PDF)

The official public comment period for the study's Screen 1 preliminary findings meeting concluded on May 11, 2007. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 1 Public Comment Database (0.1 MB PDF)
Screen 1 Responses to Public Comments (0.1 MB PDF)

Screen 2 Analysis

The CTA held public open houses to present possible transit technologies and alignments in a study area bordered by 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Cal-Sag Channel/Little Calumet River and 134th Street on the south.

Wednesday, December 3, 2008, 6-8 p.m.
Historic Pullman Visitor Center
11141 South Cottage Grove, Chicago, IL 60628

Thursday, December 4, 2008, 6-8 p.m.
Woodson Regional Chicago Public Library
9525 South Halsted Street, Chicago, IL 60628

Presentations delivered at the Screen 2 meetings are available at the links below:

Public Meeting Presentation Part 1 – December 2008 (2.8 MB PDF)
Public Meeting Presentation Part 2 - December 2008 (3.8 MB PDF)
Public Meeting Presentation - December 2008 (Text version)

Public Meeting Display Boards Part 1 - December 2008 (2 MB PDF)
Public Meeting Display Boards Part 2 - December 2008 (2.4 MB PDF)
Public Meeting Display Boards - December 2008 (Text version)

Public Meeting Comment Card - December 2008 (0.4 MB PDF)

The official public comment period for the study's Screen 2 preliminary findings meeting concluded on December 18, 2008. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 2 Public Comment Database (0.1 MB PDF)
Screen 2 Responses to Public Comments (0.1 MB PDF)

Screen 3 Analysis

The CTA invited the public to open houses to present preliminary Screen 3 findings and a recommendation of a locally preferred alternative, which concluded the Alternatives Analysis study for the Red Line Extension.

Wednesday, June 3, 2009, 6-8 p.m.
Olive-Harvey College, Cafeteria
10001 South Woodlawn Avenue, Chicago, IL 60628

Thursday, June 4, 2009, 6-8 p.m.
Woodson Regional Chicago Public Library
9525 South Halsted Street, Chicago, IL 60628

Presentations delivered at the Screen 3 meetings are available at the following links:

Public Meeting Presentation Part 1 – June 2009 (1.4 MB PDF)
Public Meeting Presentation Part 2 – June 2009 (2.9 MB PDF)
Public Meeting Presentation - June 2009 (Text version)

Display Boards Part 1 - June 2009 (2.4 MB PDF)
Display Boards Part 2 - June 2009 (3.4 MB PDF)
Display Boards - June 2009 (Text version)

Display Maps – HRT UPRR Alternative (1.2 MB PDF)
Display Maps – HRT Halsted Alternative (0.9 MB PDF)
Public Meeting Comment Card (0.4 MB PDF)

The official public comment period for the study's Screen 3 findings and preliminary recommendation for a locally preferred alternative concluded on June 25, 2009. Full documentation of all comments and questions as well as complete responses are provided in the following files:

Screen 3 Public Comment Database (0.1 MB PDF)
Screen 3 Responses to Public Comments (0.1 MB PDF)

Locally Preferred Alternative Report

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Jeffery Jump
Ashland Bus Rapid Transit (BRT)
Blue Line Forest Pk. Br. Feas./Vision Study
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Red Line Extension Project: FAQ

The Chicago Transit Authority (CTA) knows residents and potential Red Line riders have questions about this proposed extension.

Q: How would CTA fund this proposed project?
A: Two types of funding are needed for the proposed extension – capital and operating. Capital funding (construction funding) for the proposed extension is provided partially by the Federal Transit Administration (FTA), through its "New Starts" grant program. This program provides funding for major public transit infrastructure projects throughout the United States through a highly competitive process. CTA is currently in the environmental review phase of that process that will allow the agency to apply for funding. Upon successfully advancing through the FTA's process, a project would be qualified to receive a Full Funding Grant Agreement (FFGA) from the Federal Transit Administration. The FFGA typically covers about half of a project's capital cost. Other non-federal funds will comprise the remainder of capital funding. Once the proposed extension is built and operational, CTA's operating budget would support day-to-day service.

Q: When would the extended Red Line be open for use?
A: No timeline has yet been established. Project schedule is dependent on federal reviews and approvals and funding availability.

Q: When would construction begin on the proposed Red Line Extension?
A: No timeline has yet been established. Project schedule is dependent on federal reviews and approvals and funding availability.

Q: What will be the operating hours for the proposed extension?
A: In the current project planning phase, the operating hours for the proposed extension are assumed to be the same as for the current Red Line, which operates 24 hours every day of the year.

Q: Would CTA need to buy private property because of the location of the proposed extension?
A: Yes, CTA would need to buy private property for each of the build alternatives. The number of properties impacted varies by alternative; between approximately 52 and 259 properties could be impacted. Final property acquisition requirements would be confirmed as project engineering proceeds. Property owners will be paid not less than fair market value for their land and buildings, and may be eligible for compensation equal to the original purchase price of the property. They would also be assisted in relocating their businesses or dwellings, per the Federal Uniform Act on

Red Line Extension

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Systemwide:
New Schedules in Effect (All Train Routes)

Trains:

Red Line	Significant Delays
Blue Line	Normal Service
Brown Line	Normal Service
Green Line	Planned Work w/Station(s) Bypassed
Orange Line	Normal Service
Purple Line	Normal Service
Pink Line	Normal Service
Yellow Line	Normal Service

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relocation assistance and property acquisition. When a single alternative or option is chose, CTA will work with the community and property owners (including the UPRR) to minimize property impacts.

Q: Will there be places to park near the new stations?
A: New park & ride lots are proposed at each new station.

Q: How would this proposed extension impact the natural environment and the community?
A: Potential impacts to the environment are being studied in the Draft Environmental Impact Statement (EIS). The Draft EIS will:
• Identify and evaluate measures to avoid, minimize and mitigate adverse impacts.
• Describe the potential environmental effects of the proposed Red Line Extension improvements and the steps that will be taken to alleviate them.
Typically, environmental reviews for proposed transit projects address:

- Transportation
- Land use and economic development
- Displacement and relocation of existing uses
- Neighborhood and community
- Visual and aesthetic
- Noise and vibration
- Safety and security
- Historic and cultural resources
- Hazardous materials
- Air quality
- Wetlands
- Water quality
- Floodplains
- Vegetation and wildlife habitat
- Threatened and endangered species
- Geology and soils
- Energy
- Environmental Justice

Q: How would this proposed extension impact noise in the community?
A: The Draft Environmental Impact Statement (EIS) will evaluate the potential for noise impacts to the surrounding community. If it is determined that there could be noise impacts, then mitigation measures to reduce those impacts would be proposed in the Draft EIS such as welded rail, closed deck structures, and noise barriers. During the public review of the Draft EIS, you will have an opportunity to review and comment on the analysis and the proposed mitigation measures.

Q: What is the economic impact of this proposed extension?
A: The Draft Environmental Impact Statement (EIS) will evaluate the fiscal and economic benefits and potential impacts of the proposed extension. During the public review of the Draft EIS, you will have an opportunity to review and comment on the economic analysis. Numerous transit studies suggest that transit investments result in economic development. CTA estimates between 2,600 and 4,100 jobs would be created during Red Line Extension construction. In addition, new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.

Q: How would the proposed Red Line Extension affect current CTA services, both during construction of the new service and during operation of the new service?
A: The specifics of construction for the proposed Red Line Extension have not been established yet. CTA's general guidelines minimize the effects of construction on existing transit services. However, bus reroutes are possible. Once the proposed extension is complete, existing bus routes may be changed to complement the new high-capacity transit service. Depending on the specific route of the service, the number of routes feeding into the 95th

Street Terminal may be reduced, which would also reduce congestion in and around this facility.

Q: Is it possible that at some point this proposed Red Line Extension could go even farther to the Gary Airport and South Bend, Indiana?
A: At this point CTA's proposal for the Red Line Extension is limited to the project's defined study area, which is bounded by the Little Calumet River and 134th Street on the South. Any initiative to further expand service to the Gary Airport and South Bend, Indiana, would merit further investigation and its own planning study.

Q: If the CTA already has a Locally Preferred Alternative, why is the Draft Environmental Impact Statement (EIS) still studying two other build alternatives?
A: The federal National Environmental Policy Act (NEPA) process requires that we evaluate a range of alternatives in the EIS along with the Locally Preferred Alternative and a No Build Alternative (which looks at the existing transportation system, plus any committed transportation improvements that already are in the Chicago Metropolitan Agency for Planning Fiscal Year 2010 to 2015 Transportation Improvement Program). Other alternatives to be evaluated in the Draft EIS would include a Bus Rapid Transit Alternative and an elevated transit line along Halsted Street (which would not impact any parkland but could have other impacts). Federal law protects parklands from use by transportation projects unless there are no feasible or prudent alternatives that avoid the use of parklands. Project planning must include all possible planning to minimize harm to parklands and therefore, the Halsted Alternative will be evaluated in further detail in the Draft EIS. Based on the environmental analysis and public feedback received in the Draft EIS, a single NEPA preferred alternative will be selected and proposed in the Final EIS.

Q: For the Locally Preferred Alternative near the Union Pacific Railroad (UPRR) tracks, has CTA talked with Union Pacific representatives?
A: CTA has had preliminary conversations with UPRR and will continue to coordinate with the railroad as plans proceed. The UPRR requires that the CTA tracks be located at least 50 feet from the existing freight tracks due to safety considerations.

Q: Can engineering design be done at the same time as the Environmental Impact Statement is being drafted?
A: As part of the new Moving Ahead for Progress in the 21st Century Act (MAP-21) policy, environmental review is completed during the Project Development Phase. The Engineering Phase is the next step, during which engineering and design is completed. The timing for the Engineering Phase is subject to funding availability and federal approvals. Currently, CTA has not secured approval and funding for the Engineering Phase.

Q: How does work on the other Red Ahead projects affect progress on the Red Line Extension?
A: Red Line Extension project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Ahead program consists of separate projects with their own separate sources of potential funding and timelines. These projects are mutually beneficial and are combined into the Red Ahead program to ensure that they are coordinated efficiently.

Q: What portion of the extension would be elevated?
A: The UPRR Rail Alternative would operate on an elevated structure from approximately 95th Street up to 119th Street, where it would transition to an at-grade profile and then continue at grade before terminating in the vicinity of 130th Street. The terminal station would be at-grade, whereas other stations would be elevated. The Halsted Rail Alternative would operate on an elevated structure from 95th Street to the intersection of Halsted Avenue and Vermont Avenue and all stations on this alternative would be elevated.

Q: Would this extension connect to existing Metra Electric or South Shore services?
A: There is potential for connection of the proposed Red Line Extension to the Northern Indiana Commuter Transportation District (NICTD) South Shore Commuter Rail Line in the vicinity of 130th Street, where the two lines would

be adjacent to each other. This potential connection will be explored in further detail during the engineering phase. A connection between the Red Line Extension and Metra Electric District at Kensington/115th Street station is not possible, as the proposed Red Line Extension routing crosses the Metra Electric District Line approximately one-half mile to the south of the Kensington/115th Street station.

Q: Is CTA coordinating with Metra on the Red Line Extension?
A: CTA is coordinating with Metra on our progress with the Red Line Extension project. Metra is a participating agency in the environmental review process for the Red Line Extension.

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Today, @ChicagosMayor and we announced the next steps in modernizing the Red Line: http://ow.ly/vTMp0

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1:29 PM - 18 Apr 2014

Red Line Extension

cta

You're invited to attend a CTA open house on the

Red Line Extension Project

Since the RLE Project open house meeting during the summer of 2011, we have been preparing a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the alternatives. Findings from this preliminary impact analysis of the alternatives will be discussed at the Open House. CTA welcomes your comments and feedback about the RLE Project alternatives and potential impacts, which will be incorporated into the Draft EIS.

This project is one part of CTA's Red Ahead Program, a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line.

When and where?

Tuesday, May 13, 2014
5:30 to 7:30 p.m.

Palmer Park Gymnasium
201 E. 111th Street
Chicago, IL 60628

This location is served by: CTA Bus #34, #111, #119; Pace Bus #353; and Metra Electric 111th Street (Pullman).

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Red Line Extension

Chicago Transit Authority
Strategic Planning, 10th Floor
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Do you require assistance?

If you require an interpreter, including sign language services, or other accommodations at this meeting, contact Gerald Nichols, CTA Government and Community Relations, at least five days prior to the meeting at 312-681-2807 or GNichols@transitchicago.com.

You're invited to attend a CTA

OPEN HOUSE

on Red Line Extension (RLE) Project

Since the last RLE Project open house meeting during the summer of 2011, CTA has been preparing a Draft Environmental Impact Statement (EIS) to evaluate the impacts of three potential build alternatives for the project. At the open house, you will learn more about the proposed alternatives, hear about anticipated project benefits and impacts of the alternatives under consideration, and have the opportunity to provide feedback. CTA welcomes your comments about the RLE Project alternatives and potential impacts, which will be incorporated into the Draft EIS.

Learn More About the Project!

CTA encourages you to visit the RLE webpage to get more information about the project. The RLE Project is one part of the Red Ahead Program, a comprehensive initiative for maintaining, modernizing and expanding Chicago's most traveled rail line. Thank you for your continued interest.

RLE Project Team
Chicago Transit Authority

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OPEN HOUSE

on Red Line Extension (RLE) Project

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CTA Open House

Red Line Extension Project – Progress Update

At the Red Line Extension (RLE) Project open house, you will learn more about the proposed alternatives, hear about anticipated project benefits and impact , and have the opportunity to provide feedback.

What's New with the Red Line Extension Project?
Since the RLE Project open house meeting during the summer of 2011, CTA has been preparing a Draft Environmental Impact Statement (EIS) based on the technical analysis of impacts of the alternatives. Findings from this preliminary impact analysis of the alternatives will be discussed at the open house.

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Early & Often

http://politics.suntimes.com/article/chicago/cta-announces-final-two-options-red-line-extension-route/tue-04152014-613pm

The 95th Street station is now the end of the Red Line. That station is due for a major renovation, and the CTA is looking at routes to extend the Red Line to 130th Street. | Sun-Times File Photo

CTA weighs two options for Red Line extension route

TUE, 04/15/2014 - 6:13PM

FRAN SPIELMAN AND ROSALIND ROSSI
@FSPIELMAN | EMAIL

The CTA has narrowed to two the routes for a long-awaited Red Line extension from 95th to 130th Street — one down the middle of busy Halsted Street, the other mostly running along existing freight tracks.

Ald. Anthony Beale (9th), whose South Side ward would be most heavily affected by the extension, was briefed on the options Tuesday. The chairman of the City Council's Transportation Committee emerged with a ringing endorsement of the alternative that steers clear of Halsted.

That option for the $2 billion, 5-mile-plus extension generally follows freight tracks operated by the Union Pacific Railroad. A large portion of the tracks run along Eggleston — four blocks west of the existing 95th Street station — and curve eastward as they move farther and farther south.

The CTA's plan calls for four new stations: at 103rd, 111th, 115th and 130th, with a combined total of up to 2,000 "Park & Ride" spaces, the alderman said.

In addition, construction of a new, $240 million station at the end of the current Red Line, at 95th Street, is due to begin this year and follows massive improvements to Red Line track from Cermak to 95th, completed last October.

"Halsted Street is wide open. Putting elevated tracks down the middle of the street would disrupt the integrity and cosmetics of Halsted. It would hurt existing businesses. I don't think anybody wants that," Beale said.

CTA President Forrest Claypool could not be reached for comment on Tuesday's briefing.

Union Pacific spokesman Mark Davis said Tuesday that the CTA approached the railroad about the possibility of extending the Red Line about a year ago and "we haven't heard anything back since.''

However, Davis said, "If they want to approach us again, I'm sure our team would be happy to talk with them.''

Davis noted that CTA trains, which are powered by an electrified third rail, cannot travel on the same tracks as diesel freight trains.

That means the option Beale favors would require the CTA to build its own tracks, either alongside the UP track or above them. Elevating the tracks could present its own set of problems, considering the hazardous materials freight trains sometimes carry. Davis did not immediately know whether any hazardous materials are transported on the portion of UP track in question.

Either way, the CTA would be required to obtain right-of-way from the railroad, Davis said. Another question is whether UP owns a wide enough right-of-way to allow another set of tracks to be built.

"From a safety standpoint, putting a commuter train next to freight lines — you need wider areas. It's a complex negotiation to make that happen," Davis said.

Mayor Rahm Emanuel campaigned on a promise to rebuild the 95th Street station and extend the Red Line South to 130th Street.

The mayor also sold aldermen on his risky, $425 million plan to close the Red Line for five months with the argument that the line needed to be rebuilt before it could be extended.

Now that the possible routes for an extension have been narrowed from five to two, the next step is an exhaustive set of community hearings to decide which option South Side residents favor and how much parking they want at each station.

Beale called it "phase four" of seven or eight hurdles that must be cleared before construction can begin — in three or four years, at the earliest.

The biggest question is whether the CTA can persuade the federal government to bankroll the $2 billion project.

Beale believes the chances are good and not just because of the clout Emanuel carries as a former North Side congressman who served as White House chief-of-staff under President Barack Obama.

"That's a huge ask from the federal government. But, we've been talking about the Red Line extension since I was a kid. Since I've been chairman, I've made this a priority. So has the mayor. I have all the confidence in the world it's going to happen," Beale said.

"95th Street is not the end of the city. What about people who need access to jobs downtown and deserve the right get there in a timely manner? Now that we've completed the Red Line upgrade and the [$240 million] 95th Street Station reconstruction is about to start, we can walk right into the extension that will finally complete the Red Line from one end of the city to the other."

If federal funding falls short, Beale said the Red Line extension could be a candidate for Emanuel's much-ballyhooed Infrastructure Trust to persuade private investors to bankroll projects Chicago can't afford to build on its own.

That option would likely require CTA riders to pay higher fees to guarantee private investors an attractive return on their money.

"If we have to, we can look at it, but only if it's the only way," Beale said.

"We don't want to put an extra fee on top [of CTA fares]. If we can get the money from the federal government, we can keep the fees down. We're gonna

lean on the federal government for funding first. My emphasis is on the federal government — not the trust."

The extension of the Red Line is part of the CTA's "Red Ahead" project to extend and enhance the CTA's most-traveled rail line. The project includes improvements on the Red Line as well as upgrades to the line it connects into at its north end — the Purple Line — all the way to the last stop, at Linden in Wilmette.

Chicago Sun-Times

http://www.suntimes.com/news/metro/26869554-418/cta-narrows-possible-routes-for-proposed-red-line-expansion.html#.U1rcFVVdV8F

CTA narrows possible routes for proposed Red Line expansion

BY FRAN SPIELMAN AND ROSALIND ROSSI Staff Reporters April 15, 2014 10:04PM

The 95th Street station is now the end of the Red Line. That station is due for a major renovation, and the CTA is looking at routes to extend the Red Line to 130th Street. | Sun-Times File Photo

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Union Pacific “would be happy to talk” with the CTA about extending the Red Line, spokesman Mark Davis said Tuesday, but he noted CTA trains, powered by an electrified third rail, can’t use the same tracks as diesel freight trains.

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Chicago Tribune

http://www.chicagotribune.com/news/local/breaking/chi-cta-to-redo-4-north-side-red-line-stations-20140416,0,6118418.story?page=2&r=1662C3061245J7V

Red Line to get North Side overhaul, while South Siders decry wait

Residents react to the news that 16 buildings could be razed to make way for an expansion for the Brown, Purple, and Red line trains at Belmont.

Residents react to the news that 16 buildings could be razed to make way for an expansion for the Brown, Purple, and Red line trains at Belmont.

By Jon HilkevitchTribune reporter

8:32 p.m. CDT, April 16, 2014

The CTA said Wednesday it is moving forward with a multibillion-dollar overhaul of the Red Line's aging north branch tracks and stations, just hours after South Siders aired complaints to the agency's board that Mayor Rahm Emanuel's promised southern extension of the same rail line was moving too slowly.

CTA officials later said they also were planning a "major announcement" for Thursday about the 5 1/2-mile extension, envisioned to run from the current 95th Street terminal to about 130th Street and feature four new stops.

Despite the strong billing, however, Thursday's disclosure will focus primarily on that project moving deeper into an ongoing environmental impact study, officials said.

It's an incremental step in a long process. Ultimately, the planned rail service enhancement would provide vital transportation links to downtown and other areas of the city from some of the poorest and transit-underserved communities in the U.S., officials have said.

That's in contrast to Wednesday's more definitive announcement that four north-branch stations — Lawrence, Argyle, Berwyn and Bryn Mawr — will be replaced and that track in that area will be upgraded to allow faster trains, starting no sooner than in 2017. That work comes with a commitment of some amount of federal money and would be the first phase of a $4 billion-plus rehab project along the Purple and northern Red lines.

And for Emanuel, getting closer to breaking ground on the extension would likely help to shore up support among African-American voters, which Tribune polling shows has fallen since his election.

But transit officials have not even hinted when construction might begin. That's because the Red Line south extension project, estimated to cost $2.3 billion, has no funding for construction currently.

The 59,000 residents of the Greater Roseland area are "growing impatient" with elected officials about the slow pace of progress on the extension, the Rev. Paul Brown, representing the Zion Temple Missionary Baptist Church and the Developing Communities Project, testified before the CTA board Wednesday. He said "a sense of urgency" is needed.

"I simply do not understand why the communities that seem to have your attention have succeeded while we are clearly failing," Brown said.

The CTA last year spent $425 million to rebuild the tracks on the Red Line south branch from Cermak-Chinatown to 95th Street, cutting up to 10 minutes each way between 95th Street and downtown. A $240 million expansion and overhaul of the crowded 95th Street terminal begins this year. But the Red Line south extension hasn't taken off, despite pledges from a handful of past CTA presidents dating to the mid-1990s.

Current CTA president Forrest Claypool said Wednesday that he cannot speak about earlier decisions.

"Mayor Emanuel has been here less than three years and in that three years I think this has been on a very fast trajectory," Claypool said. "The federal government makes it a very extensive process ... where you are basically starting from scratch as a new start. It is very onerous and time-consuming, but we are moving that as fast as possible."

The CTA is counting on federal funding to finance the bulk of the extension work, but current federal transportation spending legislation expires at the end of September and many experts consider it a long shot that a new spending plan will be approved soon.

There is, however, the commitment to some as-yet-unknown level of federal funding for the CTA's modernization of the Red Line north branch and the Purple Line. The multi-year project will involve replacing stations, deteriorated tracks and outdated signals as well as rebuild structure on a 9.6-mile stretch from north of the Belmont station through Evanston to the Linden station in Wilmette.

The overall goals are to increase capacity on the Red and Purple lines by 20 to 50 percent, reduce travel times, alleviate overcrowded station platforms and provide access for transit riders with disabilities, officials said.

The Federal Transit Administration, which allocates money for large-scale transit projects across the nation, recently listed the CTA's Red-Purple Modernization project as the first project in the U.S. eligible for a new pot of money under a so-called "core capacity" program, which is aimed at helping cities renew heavily used transit lines. No specific dollar pledge has been made yet. The U.S. Department of Transportation has recommended spending a total of $275 million in fiscal 2015 on all eligible core capacity projects in the U.S.

The CTA said in documents released in March that it expects to seek $1.5 billion from the FTA to begin the Purple Line and Red Line north branch work. More funding could be sought later from different pots of federal money, officials said.

The CTA said Wednesday that it will start the ball rolling by rebuilding the four contiguous stations that date to the early 1900s, as well as conduct track and structure work on the Red Line north branch, at an estimated cost of $1.13 billion.

"Some of this infrastructure has stood since the last time the Chicago Cubs won the World Series (in 1908)," Steele said.

The Argyle and Bryn Mawr stations were built in 1908, according to the CTA. Berwyn was built in 1916 and Lawrence in 1923. The complete redo will include the installation of elevators to make the stations accessible to disabled riders.

Officials said it is too early to know how the work will affect service.

The North Side project's total cost is $4.7 billion, according to the FTA.

In addition to the four stations, the nearby Wilson station will also be rebuilt as part of a previously announced and already funded $203 million project that is set to begin this fall.

Meanwhile, an extension of the Red Line south branch has been sought for decades by South Siders, and at different points in time labeled as a high priority by mayors and CTA presidents. In August 2009, the CTA board made it official by voting to extend the line.

The preferred route that the CTA identified in 2009 would operate on an elevated structure that heads south from 95th Street along the median of I-57 for nearly one-half mile until reaching a corridor owned by the Union Pacific Railroad, in the vicinity of Eggleston Avenue.

It would then turn south along the UP corridor to approximately 111th Street, where it would turn southeast. East of South Prairie Avenue, the alignment crosses over the Canadian National/Metra tracks near 119th Street, where it transitions to ground level and then continues southeast along the former Michigan Central/Indiana Harbor Belt railroad right-of-way to terminate in the vicinity of 130th Street.

The extension would include four stations near 103rd, 111th, 115th and 130th streets. Each new station would include park-and-ride lots and bus terminals to serve connecting riders, officials said.

Emanuel said the Red Line extension was his No. 1 transportation priority when he was campaigning for mayor, and CTA officials say the extension remains a top priority.

But riders like lifelong Chicago resident Phyllis Johnson, who spoke at a CTA board meeting Wednesday before the agency released information on either Red Line project, question whether it's the case.

"What can we do to get this ball rolling to resolve this problem?" said Johnson, a resident of the Roseland community. "Wouldn't you agree with me that it is way beyond time to extend the CTA Red Line?"

That skepticism is common on the South Side, said Ald. Howard Brookins, 21st, when reached by the Tribune on Wednesday.

"I think a lot people think that it's so far off that it won't occur for another 20 years," he said.

He said South Siders tend to feel shortchanged with it comes to public transportation, because other areas of the city have multiple CTA and Metra lines.

Tribune reporter Hal Dardick contributed.

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Chicago Sun-Times

http://www.suntimes.com/26889866-761/cta-plans-red-line-improvements-on-north-south-sides.html#.U1VzoVVdV8F

CTA plans Red Line improvements on North, South sides

By ROSALIND ROSSI Transportation Reporter April 17, 2014 1:10AM

North and South Side riders of the CTA's busiest rail line — the Red Line — should see improvements under plans outlined Wednesday.

For North Siders, the CTA could begin work as early as 2017 on a $1.13 billion plan to upgrade track and rehab four stations, from Lawrence to Bryn Mawr.

The stations are among the oldest in the system, officials said. Bryn Mawr was built in 1908, when the Cubs last won the World Series.

The project is contingent on funding, but the CTA hopes to bankroll it with new federal "core capacity" money that can be tapped by older transit lines.

For South Siders, President Forrest Claypool insisted Wednesday that the CTA is "putting the pedal to the metal" on a long-awaited plan to extend the south end of the Red Line from 95th Street to 130th.

One CTA user, Phyllis Johnson, told CTA board members Wednesday that the extension once promised by former Mayor Richard J. Daley after the Red Line opened in 1969 is "becoming the dream deferred.'' Other lines have been extended or created while the Roseland community, which would be affected by an extension, has sat by with no transit developments, Johnson said.

The layers of requirements needed to win federal money for the $2 billion project are "onerous," Claypool said, but Mayor Rahm Emanuel is "putting this on a faster trajectory than previous administrations.''

Emanuel campaigned on extending the Red Line and has emphasized the project since his election, Claypool said.

“Mayor Emanuel’s mandate to us is to modernize the Red Line, from top to bottom, from north to south, and that’s what we’re doing,’’ Claypool said.

The CTA’s “preferred” extension method would be to run an elevated track from the 95th Street station, along Interstate 57 to 98th Street, where the elevated tracks would run parallel with some Union Pacific freight tracks to 130th Street, Claypool said. The tracks could run to the east of UP’s right of way or to the west, CTA officials said. The CTA also had considered building inside the UP’s right of way, but UP has ruled that out, a UP spokesman said.

Although the UP route is the top option, the CTA must give federal authorities at least two more, Claypool said. They include running the rail extension down Halsted Street — something local Ald. Anthony Beale (9th) opposes — or doing a less expensive bus-rapid transit route to 130th.

Beale said Tuesday he was briefed on only two plans — the UP route and the Halsted route, leading him to believe the CTA had only two options under active consideration.

“I can see how he might have perceived it that way because that’s where the focus of the conversation was,’’ Claypool said. “But there’s always been a federally required third alternative, which is the BRT.’’

Claypool conceded that land will have to be acquired as part of the extension project, although it’s too early to say where or how many parcels.

The next step involves publication of the final environmental impact study in 2015, Claypool said.

On the North Side, the planned improvements are part of a larger project to rejuvenate the Red Line and Purple lines, from the Belmont station to the Linden Station in Wilmette. Project estimates have ranged from $2 billion to $4 billion.

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Chicagoist

http://chicagoist.com/2014/04/17/cta_officially_announces_red_line_s.php#photo-1

CTA Officially Announces Red Line South Extension, Red/Purple Line Renovation

A rendering of the proposed Belmont Overpass.(*Chicago Transit Authority*)

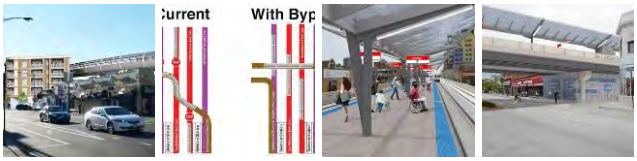

Chicago Transit Authority formally released details of its planned renovations of the Purple Line and Red Line north branch and the long planned extension of the Red Line's south branch Thursday and let's just say we're cautiously optimistic that maybe CTA has done some solid planning.

We already know the first phase of the project, set to begin in 2017, will involve rehabbing the Lawrence, Argyle, Berwyn and Bryn Mawr Red Line stations and replacing tracks for the Red and Purple Lines at those stations to reduce slow zones. CTA has started the process of securing federal funding to extend the Red Line from its current southern endpoint at 95th Street to 130th Street, using existing freight rail tracks. That project would cost $2.3 billion.

The aspect of the Red/Purple Line rehab we're most impressed by is a "Belmont bypass" allowing the Brown Line to continue along its route by riding above the existing Red and Purple Line rails. Currently the Brown Line has to negotiate its route by crossing those rails, resulting in 40 percent of weekday trains being delayed by up to three minutes.

In order for the bypass to be built CTA will have to buy 16 buildings between Belmont Avenue and Addison Street in order to make room for the project. The total cost of the Belmont bypass is included in the $1.7 billion cost the first phase of Red and Purple Line rehab is expected to cost.

CTA has been busy with infrastructure improvements lately. They rebuilt the Red Line's south branch last year at a cost of $425 million, spent $86 million renovating and rehabbing seven stations on the Red Line north branch two years ago, and work will begin later this year on extensive renovations to the 95th Street and Wilson Red Line stations. "With both the Red and Purple Modernization and Red Line Extension projects, we'll replace outdated infrastructure with a modern, efficient rail, and build more than five miles of new track," CTA President Forrest Claypool said. "Together these improvements will offer CTA customers faster, more reliable service, and increasing access to quality rail transportation for thousands of future riders."

NBC 5 Chicago

http://www.nbcchicago.com/traffic/transit/CTA-Announces-Plans-For-Red-Line-Extension-and-Rehab-255653171.html

CTA Announces Plans For Red Line Extension and Rehab

Plans to extend the Red Line past 95th Street, rebuild oldest North Side stations

By Colleen Connolly

Thursday, Apr 17, 2014 | Updated 5:04 PM CDT

The CTA is planning to overhaul tracks on the North Side's Red, Brown and Purple lines, and expand Red Line service on the far South Side. Charlie Wojciechowski has details.

Red Line riders have something to look forward to in the coming years.

Chicago Transit Authority officials announced Thursday plans for rehabbing five North Side stations and building a long-awaited South Side extension. The projects are part of the first phase of the city's Red and Purple Modernization program.

The stations at Wilson, Lawrence, Argyle, Berwyn and Bryn Mawr were specified for the rehabilitation, which could begin as early as 2017. The five stations are among the oldest, having been built between 1908 and 1923.

The CTA also announced plans to build a Red-Purple Line bypass north of Belmont to eliminate delays and speed up train service where the Red, Purple and Brown Lines intersect.

On the South Side, the CTA plans to extend tracks for 5.3 miles and add four new Red Line stations south of 95th Street. Stops would be located at 103rd, 111th, 115th and 130th Streets, and up to 2,000 “Park and Ride” spaces would be added.

No date has been set to begin the construction of the new stations, but plans for the route have been narrowed down to three options. The first option is to build tracks parallel to the Union Pacific freight tracks from 98th Street to 130th Street. The

second option is to build elevated tracks above Halsted Street. The final option is to build a bus-rapid transit route to 130th Street.

Last year, the CTA closed nine Red Line stops south of Roosevelt Road as part of the Red Line South Track Renewal Project. The $425 construction project repaired the crumbling tracks and reduced commute times.

CBS 2 Chicago

http://chicago.cbslocal.com/2014/04/18/far-south-side-residents-endorse-red-line-extension/

Far South Side Residents Endorse Red Line Extension

April 18, 2014 6:11 PM

Dorothy Tucker

(CBS) – The CTA has an ambitious proposal in the works: extending the Red Line from 95th Street south to 130th, with four new stops along the way.

CBS 2's Dorothy Tucker has reaction from CTA riders.

Timothy Thomas rises every morning at 5 to catch the Pace bus near 130th.

"It's not always accurate," he says of the schedule.

But the bus is the only way to connect to the CTA train on 95th, which gets him to his job downtown. "So, if the Red Line were extended it would be great," Thomas says.

One hundred and thirtieth would be the new last stop on the Red Line extension. New, too, would be stops at 115th, 111th and 103rd. That's where Kelia Louis now catches the bus.

"That would be very convenient," Louis says.

The extension would shave 10 to 15 minutes off Louis' commute from Chicago's South Side, and even more for suburban commuters.

The Times of Northwest Indiana

http://www.nwitimes.com/news/local/illinois/chicago/southeast-chicago-residents-awaiting-proposed-red-line-extension-to-th/article_b5c42660-b95d-5eff-8b39-fd190ef09e0a.html

Southeast Chicago residents awaiting proposed Red Line extension to 130th Street

April 20, 2014 1:00 am • Gregory Tejeda Times Correspondent

CHICAGO | When Peggy Salazar, of the Slag Valley neighborhood, needs to travel to downtown, her commute is longer than that of many suburban residents who live farther away.

Her community has only one Chicago Transit Authority route that leads downtown. It's a No. 30 South Chicago bus route that works its way from the Hegewisch station on the South Shore line at Brandon and Brainard avenues north to the Red Line train line at 69th Street.

"It's a long, slow kind of route," she said of the commute that can take 1 1/2 hours to complete.

Salazar and others at Chicago's southern end were interested in the news the CTA is looking at improvements on the Red Line trains.

For now, the focus is on building a bypass meant to ease congestion on CTA train lines that service North Side neighborhoods. CTA officials said they're also submitting applications to federal agencies for more funding for an expansion of the Red Line trains south to 130th Street.

CTA President Forrest Claypool said money is to complete environmental impact studies that began in 2011 and are required before engineering studies on the extension proposal can begin.

Officials said they will begin a community outreach program this spring meant to get local views on the project, while also allowing the CTA to disseminate information to the public about when the long-desired extension would begin. An open house already is scheduled for May 13 at Palmer Park gym, 201 E. 111th St.

What they're going to find is that some people already are working to prepare area businesses and residents for the day when a CTA train route extends nearly to Chicago's far southern border at 138th Street.

Michael LaFargue, president of the West Chesterfield Community Association, said his group and several other far South Side community organizations meet regularly to discuss the extension, which they say will revitalize businesses in their area by making it easier for people to travel so far south in Chicago.

“We want any businesses located near the train stations on the extension to be ready when it takes place,” LaFargue said, adding it also would allow people to work jobs outside their home neighborhoods.

“It will provide motivation for many unemployed people to go out and get a job if we make it easier for them to get to work,” he said.

LaFargue said he and other activists will be watching closely as CTA and City Hall officials act on the project.

“We’re hoping this doesn’t get bogged down by politics, because this is a very important project,” he said.

Currently, the Red Line goes south down the middle of the Dan Ryan Expressway as far as 95th Street. In 2009, the CTA’s governing board approved the concept of an extension to add stations in the Roseland neighborhood at 103rd Street, 111th Street, 116th Street and Michigan Avenue, and a final station at 130th Street near the Bishop Ford Freeway in between the Hegewisch neighborhood and the Altgeld Gardens public housing complex.

CTA officials do have an alternate route in mind that would go south along Interstate 57, then become an elevated train on Halsted Street ultimately winding up at 127th Street in Blue Island, if negotiations with the Union Pacific Railroad are unsuccessful in getting access needed to make the 130th Street extension.

But CTA officials say the route to 130th Street is the “locally preferred” route that community officials have expressed support for.

Cheryl Johnson, an Altgeld Gardens resident and head of the People for Community Recovery group, said she and her neighbors are “confident” the day will come when the extension will be built.

“Chicago is a big city that stretches so far south,” Johnson said. “It isn’t right that such a large part of it doesn’t have train access.”

She also said that with plans to build extensive parking lots around a 130th Street station to accommodate commuters, it might be possible for people from nearby suburbs such as Calumet City and Dolton to also begin using CTA trains on a regular basis.

“This would help revitalize the entire area,” Johnson said. Agreeing was Peggy Salazar, executive director of the Hegewisch-based Southeast Environmental Task Force, who said people from other parts of Chicago often have trouble getting to the 10th Ward.

“When we try to bring in interns, it is hard for them to get here if they don’t happen to drive,” she said. “If they extend the trains and put in a 130th Street bus, it would really help improve the connection between Hegewisch and the rest of Chicago.”

The Chicago Maroon

http://chicagomaroon.com/2014/04/21/north-side-to-see-red-line-upgrade/

Multi-billion boost to Red Line

CTA PLANS TO EXPAND RED LINE TO 130TH STREET.

Posted Apr 21, 2014 by Felicia Woron

Chicago Mayor Rahm Emanuel and the Chicago Transit Authority (CTA) recently announced plans to begin renovations of the Red and Purple Lines in 2017. The CTA hopes to begin an extension of the Red Line further south after these renovations are completed.

The agency plans to replace parts of tracks on the Red and Purple Lines as well as build at least five miles of new track as an extension of the Red Line. The Red Line currently runs from 95th Street to the Uptown neighborhood, remaining parallel for much of its length to the Purple Line, which runs from the Loop to Wilmette, a suburb north of Evanston.

In a $1.7 billion project, what CTA President Forrest Claypool described in a CTA press release as "outdated infrastructure" will be replaced with "modern, efficient rail." Most Red and Purple Line tracks are nearly 100 years old, and a significant amount of time and money is currently spent on repairs, hindering service greatly, according to the press release. These tracks will be replaced and five stations originally built between 1908 and 1923—Wilson, Lawrence, Argyle, Berwyn, and Bryn Mawr—will be completely rebuilt, with new elevators to improve accessibility.

According to the press release, in a spot north of the Belmont station in the Lakeview neighborhood where the Red, Purple, and Brown Lines all intersect, delays of up to three minutes often occur because trains on the Red and Purple Lines must wait for Brown Line trains to cross. In order to remedy this, a bypass will be built, allowing the Brown Line to cross over the Red and Purple Lines. According to an article in*Chicagoist*, the CTA will have to buy 16 buildings between Belmont Avenue and Addison Street in order for this bypass to be built, which is included in the $1.7 billion cost of the first phase of the project.

The second phase is a $2.3 billion endeavor in which the Red Line will be extended from 95th Street through the Roseland community south to 130th Street, a low-income area that largely depends on public transit but lacks the infrastructure that is available in other areas. The project is expected to shorten the commute from 130th Street to downtown by 20 minutes, allowing better access to education and jobs downtown, according to the CTA press release.

Progressive Railroading

http://www.progressiverailroading.com/passenger_rail/news/CTA-unveils-first-phase-of-modernization-project-Red-Line-extension-environmental-steps--40170

Rail News: Passenger Rail

CTA unveils first phase of modernization project, Red Line extension environmental steps

Chicago Transit Authority (CTA) officials late last week announced the first phase of the Red and Purple modernization program to rebuild the northern section of the Red Line and the parallel Purple Line.

They also announced the beginning of the next step in a federal process to secure funding for the Red Line extension project, which would extend the Red Line south from 95th Street to 130th Street, according to a CTA press release.

The CTA's Red Line, which runs 24/7 along 23 miles of tracks, is Chicago's busiest rail line with about 75 million annual rides.

The first phase of the Red and Purple modernization improvements will include two main components: station and track modernization from Wilson to Bryn Mawr, which entails rebuilding the Wilson, Lawrence, Argyle, Berwyn and Bryn Mawr stations and rebuilding all track, support structures, bridges and viaducts for the Red and Purple lines between Lawrence and Bryn Mawr; and construction of a Red-Purple bypass north of the Belmont Station.
The first phase of the Red and Purple modernization is estimated to cost $1.7 billion.

The 5.3-mile Red Line extension project will extend south from the 95th Street Terminal through the greater Roseland community. Plans include construction of four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street and 130th Street, all with bus and parking facilities.

In 2011, the CTA received funding from the Federal Transit Authority to conduct the Environmental Impact Statement for the Red Line project — a major step in the multi-step federal process to secure approval and funding of the $2.3 billion dollar project, authority officials said.

The CTA will host the following open houses to solicit public comments on the projects: May 13 for the Red Line project; May 21 for the Lawrence-to-Bryn Mawr modernization; and May 22 for the Red-Purple bypass.

Bid Ocean

http://www.bidocean.com/business-news/108966-IL--CTA-Announces-Next-Steps-in-Modernizing-the-Red-Line.html

Illinois Construction and Business News

IL - CTA Announces Next Steps in Modernizing the Red Line

April 23, 2014

CTA President Forrest Claypool recently announced the first phase of its Red and Purple Modernization (RPM) program.

Mayor Rahm Emanuel and CTA President Forrest Claypool recently announced the first phase of its Red and Purple Modernization (RPM) program, which will completely rebuild the northern section of the Red Line and the parallel Purple Line, and beginning of the next step in a federal process to secure funding for the Red Line Extension plan, which would extend the Red Line south from 95th Street to 130th Street.

These are the latest steps in the ongoing modernization of the CTA under Mayor Emanuel.

“As a world-class city, Chicago has a world-class transit service to connect residents to jobs, education, culture and above all opportunity,” said Mayor Emanuel. “CTA is investing in modernizing the Red Line as part of our strategy to create a seamless, safe, and reliable transportation system for every neighborhood.”

The CTA’s Red Line, which runs 24/7 along 23 miles of tracks, is Chicago’s busiest rail line with about 75 million annual rides.

The Red and Purple Modernization program and the Red Line Extension project are the latest in a series of Red Line projects to modernize and extend the backbone of the CTA’s rail system that have been undertaken since 2011.

With a significant portion of the Red Line built more than a century ago, the improvements would address the current need to expand capacity by building new infrastructure to accommodate growing ridership. Additional Red Line modernization projects under Mayor Emanuel include:

- Successful $425 million replacement of the Red Line South railroad in 2013, as well as station rehabilitations.
- $86 million renewal and rehabilitation of seven far north side stations in 2012.

- $240 million new 95th Street Terminal, work beginning in late summer.
- $203 million Wilson station reconstruction and track and signal replacement, major construction to begin this fall.

"These projects are the next steps in our overall vision to rebuild, modernize and expand the entire Red Line," said P President Claypool. "We're already kicking off Red and Purple Modernization by beginning reconstruction of the Wilson station this fall and continuing progress on the South Side by starting the new 95th Street Terminal this summer, following the successful completion of the Red Line South reconstruction last year. With both the Red and Purple Modernization and Red Line Extension projects, we'll replace outdated infrastructure with a modern, efficient rail, and build more than five miles of new track. Together these improvements will offer CTA customers faster, more reliable service, and increasing access to quality rail transportation for thousands of future riders."

The CTA is also moving forward with its proposed Red Line Extension plan by beginning the second step of its environmental process to ultimately finish the Environmental Impact Study, which is required to begin engineering on the plan to extend the Red Line south of 95th Street to 130th Street. Both projects will include a broad community outreach process that will begin next month to solicit community feedback on both projects and provide updates on the funding process for each project.

About Red and Purple Modernization

The RPM program will proceed in phases to fully replace old, deteriorating infrastructure and stations along the entire north branch of the Red Line and the parallel Purple Line, and will pave the way for CTA to significantly increase train capacity for the next 80 years.

This section of the Red and Purple lines carries one out of every five CTA rail rides and serves customers in some of the densest, most diverse neighborhoods in Chicago. Rush-hour ridership has jumped 40 percent in the last five years alone.

Most tracks and bridges along the Red and Purple lines are nearly 100 years old. Despite rising demand, the CTA is unable to increase capacity because of the current infrastructure's age and structural limitations. Continuing to operate a busy rail line on this outdated infrastructure results in high maintenance costs, the need for frequent repairs that disrupt service and slow travel, as well as outdated stations that can't accommodate elevators or other necessary and modern amenities.

RPM will create a completely rebuilt rail line, resulting in faster, smoother rides, modern, fully ADA accessible stations along the entire corridor and more frequent train service to alleviate overcrowding.

The first phase of the RPM improvements will include two main components:

- **Station and track modernization, Wilson to Bryn Mawr:** Completely rebuilding the Wilson, Lawrence, Argyle, Berwyn, and Bryn Mawr stations and rebuilding all tracks, support structures, bridges and viaducts for the Red and Purple lines between Lawrence and Bryn Mawr. Replacement of the Wilson station and surrounding infrastructure begins this fall. These stations were built originally between 1908 and 1923 and the elevated support structures date back to the 1920s. The Bryn Mawr station was last updated 40 years ago, in 1974; the remaining three stations received interim station renewal work in 2012. Reconstruction of these stations will include adding elevators at each to make them accessible to customers with disabilities. The project also includes rebuilding the tracks, signals and support structures, which will significantly improve train speeds and service reliability on the slow zone-plagued stretch. (The Wilson station project is already funded from state, federal and local sources, and is currently proceeding through a separate Environmental Assessment process.)
- **Construction of a Red-Purple bypass.** Construction of a bypass north of the Belmont station to eliminate delays and speed up train service where the Red, Purple and Brown lines currently all intersect. The current configuration requires trains on three of four tracks to stop and wait for Brown Line trains to cross, which results in more than 40 percent of weekday trains being delayed by as much as three minutes. About 150,000 rides travel through this intersection each weekday, all of which are slowed down because trains must stop and wait for signal clearance. The structure's original 1907 design makes it difficult, under present day and service demands, to provide reliable service and makes adding service extremely challenging.

"Modernizing Red Line rail service and stations strengthens our neighborhoods by making transit more reliable and ultimately generating new economic development near revitalized stations," said Ald. Harry Osterman. "We're pleased that Mayor Emanuel and the CTA recognize the importance of safe, reliable transit in neighborhoods near the Red Line, including Andersonville, Edgewater and Uptown, and look forward to working closely with the CTA on this exciting program."

Future phases of RPM will bring the same level of infrastructure and station improvements to the remaining sections of the Red and Purple lines, from north of Belmont station to Linden station in Wilmette.

Estimated cost for the first phase of RPM is $1.7 billion.

In November 2013, the CTA became the first transit system accepted into the Federal Transit Administration's (FTA) new Core Capacity Program that provides funding to transit systems to add capacity on existing infrastructure for future ridership growth. The RPM project is eligible for 2014 Core Capacity federal funding approved by Congress earlier this year.

About RLE

The 5.3-mile Red Line Extension project will extend south from the 95th Street Terminal through the greater Roseland community. Plans include construction of four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street and 130th Street, all with bus and parking facilities.

The RLE project will provide rapid transit rail access to a low income, transit-dependent Far South Side area that does not have direct CTA rail service. An extended Red Line will provide up to a 20-minute time savings to downtown by providing one-seat service, as opposed to the current bus-rail trip from 130th Street. It will also improve access to jobs and education, and foster economic development.

In 2011, the CTA received funding from the FTA to conduct the Environmental Impact Statement (EIS) for the RLE project—a major, important step in the multi-step federal process to secure approval and funding of the $2.3 billion dollar project.

Public Input and Next Steps

The CTA will meet with community groups and host public open houses to share details and seek input on the proposed RPM and RLE projects. Members of the public can submit formal comments directly to the CTA or at public open houses where CTA and representatives will provide additional information on RPM and RLE project plans. For each project, CTA is seeking community input on the location, design, and social, economic, and environmental effects of the proposed improvements.

The Lawrence to Bryn Mawr Modernization Open House will be held Wednesday, May 21, at Truman Community College, 1145 W. Wilson Ave. from 5:30 p.m. to 7:30 p.m.

The Red-Purple Bypass Open House will be held Thursday, May 22, at the 19th District Police Station, 850 W. Addison St., from 5:30 p.m. to 7:30 p.m.

The RLE Open House will be held Tuesday, May 13, at Palmer Park Gymnasium, 201 E. 111th St., between 5:30 p.m. and 7:30 p.m.

Comments for either project can also be submitted by email or postal mail to:

RPM@transitchicago.com

RedExtension@transitchicago.com

Chicago Transit Authority Strategic Planning, 10th floor Attn: RPM Project or RLE Project 567 W. Lake Street Chicago, IL. 60661-1465

Following public input, the CTA will deliver draft environmental studies for both RPM Phase One and RLE to the FTA as part of the process to request federal funding. Timing for construction

starts on each project is dependent upon the receipt of funding for each project. By the beginning of May, the CTA will release a request for Letters of Interest and Qualifications (LIQ) for Preliminary Engineering (PE) services for Phase One of RPM.

For more information about the Red Purple Modernization and Red Line Extension projects, visit transitchicago.com.

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ABC 7 Chicago

http://abc7chicago.com/news/red-line-extension-project-moving-forward/59881/

RED LINE EXTENSION PROJECT MOVING FORWARD

The CTA is moving forward with its plan to build a $2.3 billion extension to the south end of the Red Line.

By Leah Hope

Wednesday, May 14, 2014

CHICAGO (WLS) --
The Chicago Transit Authority is moving forward with its largest expansion project in decades. The CTA is planning a $2.3 billion extension to the south end of the Red Line.

Currently, 95th Street is the end of the line. CTA Red Line riders that go farther south rely on buses.

"It's a two and half trip for me, two buses and one 'L' train, each way from the doctor probably four or five times a month," said John Schellenbach, CTA rider.

A five-mile Red Line extension would be welcomed news to riders Eyewitness News spoke with on Wednesday.

"Out that way it's kinda hard catching the buses, you know, sometimes they're late. And just for the Red Line to go further, I think that would lessen traffic conditions also," said Sandra Cotton, CTA rider.

On Tuesday night, CTA held an open house to offer more information and get feedback. The agency is just starting the process to make the extension a reality. There are five possibilities currently, from adding new rail lines to a bus rapid transit line extended south to 130th Street.

"Our impact on natural habitats, historic properties, neighborhoods, up and down the list of concerns when you talk about churches, schools, homes," said Steve Mayberry, CTA spokesman.

A local community organization advocates for the extension to help residents in the area and the city as a whole.

"This has been something the community has desperately needed. Transit brings about business, better job opportunities, economic development," said Tiffany Hightower, Developing Communities Project.

While many support the idea of extending the Red Line, the project is still a few years out. The CTA plans to submit an environmental impact statement next year on one of those possibilities.

CTA Tattler - Chicago Now

http://www.chicagonow.com/cta-tattler/2014/05/nearly-100-buildings-would-be-razed-to-build-preferred-red-line-south-extension/

Nearly 100 buildings would be razed to build preferred Red Line south extension

By **Kevin O'Neil**, *Wednesday at 6:58 pm*

Almost 100 residential buildings could be torn down if the "locally preferred alternative" for the the Red Line south extension were to be built. That's what the CTA revealed at a community meeting Tuesday night.

More than 250 total land parcels would have to be acquired for the "preferred" extension alternative. From the CTA website:

> The proposed UPRR Rail Alternative would extend the heavy rail transit line from the existing Red Line 95th Street Terminal to 130th Street. The UPRR Rail Alternative would operate on an elevated structure heading south from 95th Street along the I-57 Expressway for nearly one-half mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of South Prairie Avenue, the alignment would cross over the Canadian National/Metra Electric tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the Northern Indiana Commuter Transportation District Chicago South Shore & South Ben Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Indiana Harbor Belt (IHB) alignment to terminate at 130th Street.
>
> **The Locally Preferred Alternative would include the following features:**
>
> - Transportation improvements that are already in the Chicago Metropolitan Agency for Planning Fiscal Year 2010-2015 Transportation Improvement Program as described in the No Build Alternative
> - 5.3-mile heavy rail transit line extension from 95th Street Terminal to 130th Street
> - Four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street

- New park & ride and bus terminal facilities at each station
- Bus transit service from the south to the new stations for faster travel to downtown Chicago
- New yard and shop at 120th Street

The Sun-Times reported on the impact of other alternatives:

> If an elevated were built west of the UP tracks, up to 195 parcels would need to be purchased, 30 of them residential.
>
> Another alternative, which would run the extension down the center of Halsted Street, would require seizing 110 parcels, including 17 residential ones.
>
> A final option, involving a bus "rapid transit" system with dedicated bus lanes, would require seizing only 52 parcels, including one residential one.
>
> In comparison, the CTA seized 40 parcels before a project to expand capacity on the Brown Line, completed in 2009.
>
> No estimate of the maximum number of people displaced by each alternative was available.

There were lots of North Siders unhappy about just 16 buildings that would have to be razed if the Belmont Flyover is built. And yet I haven't heard the same cries on the Far South Side about the nearly 100 buildings with targets on their roofs. Maybe word hasn't gotten out yet.

Curbed Chicago

http://chicago.curbed.com/archives/2014/05/14/cta-could-consume-259-properties-for-red-line-extension.php

CTA Could Consume 259 Properties For Red Line Extension

Wednesday, May 14, 2014, by AJ LaTrace

[photo by Flickr user vxla]

Last night at an open house, the CTA laid out its complete **$2.3 billion** plan to extend the Red Line south to 130th Street, and revealed that in order for the ambitious expansion to happen, the transit agency would need to acquire **259 properties** along the path. The Red Line currently ends at 95th Street, and the extension would add **5.3 miles** of new track to the busy transit line. In addition to shortening commute times for South Side residents going to the Loop, the city believes that the extension would connect the neighborhoods to much needed jobs, green space, educational institutions and medical facilities. Of the 259 properties needed to complete the project, 95 contain residential buildings. The city has been ambitious with transit updates and expansions lately, however, the Red Line extension would be the CTA's biggest since the Blue Line was extended to O'Hare in the early 80s.

Chicago Sun-Times

http://www.suntimes.com/27443532-418/whistleblower-off-base-on-cta-budget-transit-agency-president-says.html#.U3pFhtJdV8E

Whistleblower off-base on CTA budget, Claypool says

BY ROSALIND ROSSI AND FRAN SPIELMAN Staff Reporters May 14, 2014 6:04PM

Updated: May 15, 2014 2:21AM

A former CTA employee who says he was axed for blowing the whistle on what he called unrealistic budget projections “has no clue what he’s talking about,’’ CTA President Forrest Claypool said Wednesday.
And the fact that, through March, the CTA’s 2013 budget is coming in at $3.8 million less than projected is no big deal, Claypool told reporters after the CTA’s monthly meeting.

“We have another eight, nine months to deal with a two-tenths-of-one-percent variance, which is a rounding error in a budget of this size,’’ Claypool said.

The CTA will adjust expenses throughout the year to make sure the agency ends the year in balance, Claypool said. Some of the variance was blamed on a brutally cold and snowy January and February that left first quarter fare revenues $3 million under projections.

Claypool’s comments came about a week after former CTA employee Casey Loop filed a whistleblower lawsuit against the transit agency, charging he was told he was being laid off less than three months after he tipped off the RTA that the CTA’s 2013 budget had been packed with what he considered unrealistic and even “astonishing” projections.

They included a $56 million labor “credit” based on an assumption that 347 vacancies would remain vacant for an entire year, Loop said. Normally, budgets assume vacancies will not be filled for about three months, allowing for a 25 percent savings, said Loop.

However, Claypool said Wednesday the 2013 budget assumed a “reasonable” percent of the agency’s 11,000 total positions would be vacant during the year.

“Every public budget has a reasonable allowance to reflect the fact that there are savings and salvage from the fact that all those positions aren’t filled throughout the year,’’ Claypool said. “The CTA is no different than the city of Chicago, Cook County, the Park District.’’

Claypool said Loop “just didn’t understand” and “has no clue what he’s talking about.”

Loop’s suit states he was hired in February 2012 as a CTA budget project consultant; given a raise in July 2012; promoted in June 2013 to manager of performance analysis and then told in September 2013 that he was being laid off. However, Claypool insisted Loop did not get the June promotion.

“He was not promoted,’’ Claypool said. “He volunteered to do some budget work, so that’s not a promotion.”

Loop’s attorney, Betty Tsamis, said Wednesday that Loop “came forward in good faith because he believes in open and transparent government.” She added: “We stand behind our pleadings.’’

Claypool also told reporters the possibility that the CTA would have to acquire 259 parcels of land, including 95 residential buildings, to extend the Red Line from 95th to 130th Street was “a normal occurrence for any major extension.’’ Such purchases are not unusual when a transit agency must create a “brand new railroad” in an urban area, Claypool said.

Up to 259 parcels would need to be seized under one of several alternatives being considered. That particular option would place an elevated track mostly east of existing Union Pacific tracks.

Far South Side Ald. Anthony Beale (9th), chairman of the City Council’s Transportation Committee, said Wednesday he’s concerned about the number of residential and business parcels that must be seized to make way for the Red Line extension.

But the alderman said he doesn’t “want to alarm anyone” until the CTA makes a final decision on the precise route.

“At that point, we’ll make sure people are well-compensated, well-protected and not taken advantage of,” Beale said.

As for whether it’s worth displacing hundreds to improve transportation for tens of thousands, Beale said: “We have to do what’s in the best interest of the community.

That is, making sure this 40-year-old promise is kept to run the Red Line to the end of the city. If that means displacement, we can get over that hurdle."

In other business, Claypool revealed that CTA bus drivers were expected to receive a bulletin Wednesday, reminding them to announce priority seating rules if a disabled rider is unable to find a seat. Priority seating is reserved first for the disabled, then seniors, then riders with strollers.

His comments came after Ray Yung, a disabled rider with crutches, complained that female riders with strollers have refused to give up their priority seats to him.

CTA officials also revealed that the No. 10 bus to the Museum of Science and Industry could be cancelled if its ridership does not increase. The CTA agreed Wednesday to increase the museum's contribution for that service from $39.28 an hour to as high as $47 an hour over the next two years. However, the bus averages 30 riders an hour; the system average is 50 riders an hour. It needs 106 riders an hour to break even, CTA Chief Planning Officer Carole Morey said.

Museum officials said they are investing $75,000 this year on an aggressive marketing campaign to try to boost ridership.

Chicago Sun-Times

http://www.suntimes.com/27429137-761/cta-hundreds-of-parcels-might-be-needed-for-red-line-expansion.html#.U3pFVdJdV8E

CTA: Hundreds of parcels might be needed for Red Line expansion

BY ROSALIND ROSSI Transportation Reporter May 13, 2014 9:58PM

Updated: May 14, 2014 2:18AM

As many as 259 parcels of land — including 95 with residential buildings — could be seized as part of a Chicago Transit Authority plan to extend the Red Line to 130th Street, officials revealed Tuesday.
The $2.3 billion, 5.3-mile project would be the biggest CTA extension in 30-some years — since the Blue Line was extended to O'Hare, CTA officials said.

About 200 Chicagoans showed up Tuesday night at the Palmer Park Gym, 201 E. 111th St., to view and discuss about two dozen posterboards outlining the project.

"There was a high level of interest,'' said CTA spokesman Steve Mayberry. "Folks wanted as much information as they could get.''

One board in particular outlined what may be the most controversial numbers associated with the project — how many parcels would have to be seized to extend the Red Line to 130th Street from its current endpoint at 95th Street.

The CTA in 2009 selected a "preferred" route down the middle of I-57 to 98th St., and then alongside existing Union Pacific tracks to 130th.

Under that "preferred" route, if an elevated were built east of the UP tracks, a maximum of 259 parcels would need to be purchased, 95 of them residential, the posterboard indicated.

If an elevated were built west of the UP tracks, up to 195 parcels would need to be purchased, 30 of them residential.

Another alternative, which would run the extension down the center of Halsted Street, would require seizing 110 parcels, including 17 residential ones.

A final option, involving a bus “rapid transit” system with dedicated bus lanes, would require seizing only 52 parcels, including one residential one.

In comparison, the CTA seized 40 parcels before a project to expand capacity on the Brown Line, completed in 2009.

No estimate of the maximum number of people displaced by each alternative was available.

CTA Red Line project manager Carole Morey said all alternatives are “on equal footing” and further engineering analysis could reduce some displacements. The community will be asked for input at public hearings after an environmental assessment of each option is completed in 2015, she said.

At that time, Morey said, some citizens may want to endorse alternatives that displace fewer people.

“I think it’s too early to reach any conclusions,’’ Morey said. “We really need to hear from the community and hear their concerns.’’

The extension would run through such impoverished neighborhoods as Roseland and Englewood, and, it is hoped, give businesses there a boost, Mayberry said. It also would trim 20 minutes from the commute of residents near 130th, who would need only to hop a Red line train to get downtown instead of riding a bus to 95th Street and boarding the Red Line there, Mayberry said.

Email: rrossi@suntimes.com

Twitter: @rosalindrossi

RedEye

http://www.redeyechicago.com/news/redeye-cta-construction-ahead-20140518,0,993517.htmlpage

By Tracy Swartz | REDEYE

You thought winter was a long season? CTA construction season can seem to last forever.

The agency is midway through projects to improve parts of the Blue and Orange line tracks, which means shuttle buses replace train service in those areas on some weekends. Meanwhile, the CTA is overhauling the Harrison Red Line stop in Printers Row, affecting Red Line service and access to that stop since last month.

The Clark/Division stop in Old Town has been undergoing a monthslong renovation that will include a new mezzazine this year. Also, a new Green Line stop at Cermak Road is underway.

And let's not forget about the projects on the horizon—the agency is scheduled to begin turning the Wilson Red Line station into a transfer point for the Purple Line Express. Additionaly, there are plans to overhaul the Quincy Loop station and the 95th Street Red Line stop and combine the Madison/Wabash and Randolph/Wabash stations into a superstation in the Loop.

Future projects that don't have timetables include overhauling Red Line stations from Lawrence to Bryn Mawr on the North Side and creating a bypass north of the Belmont stop in Lakeview to ease Red, Brown and Purple line train traffic there.

The CTA is holding a hearing about the Lawrence to Bryn Mawr modernization project 5:30-7:30 p.m. Wednesday at Truman College, 1145 W. Wilson Ave. A meeting about the Red-Purple Bypass project will be held 5:30 to 7:30 p.m. Thursday at the 19th District Police Department, 850 W. Addison St.

RedEye mapped all current and future rail construction projects below.

TSWARTZ@TRIBUNE.COM | @TRACYSWARTZ

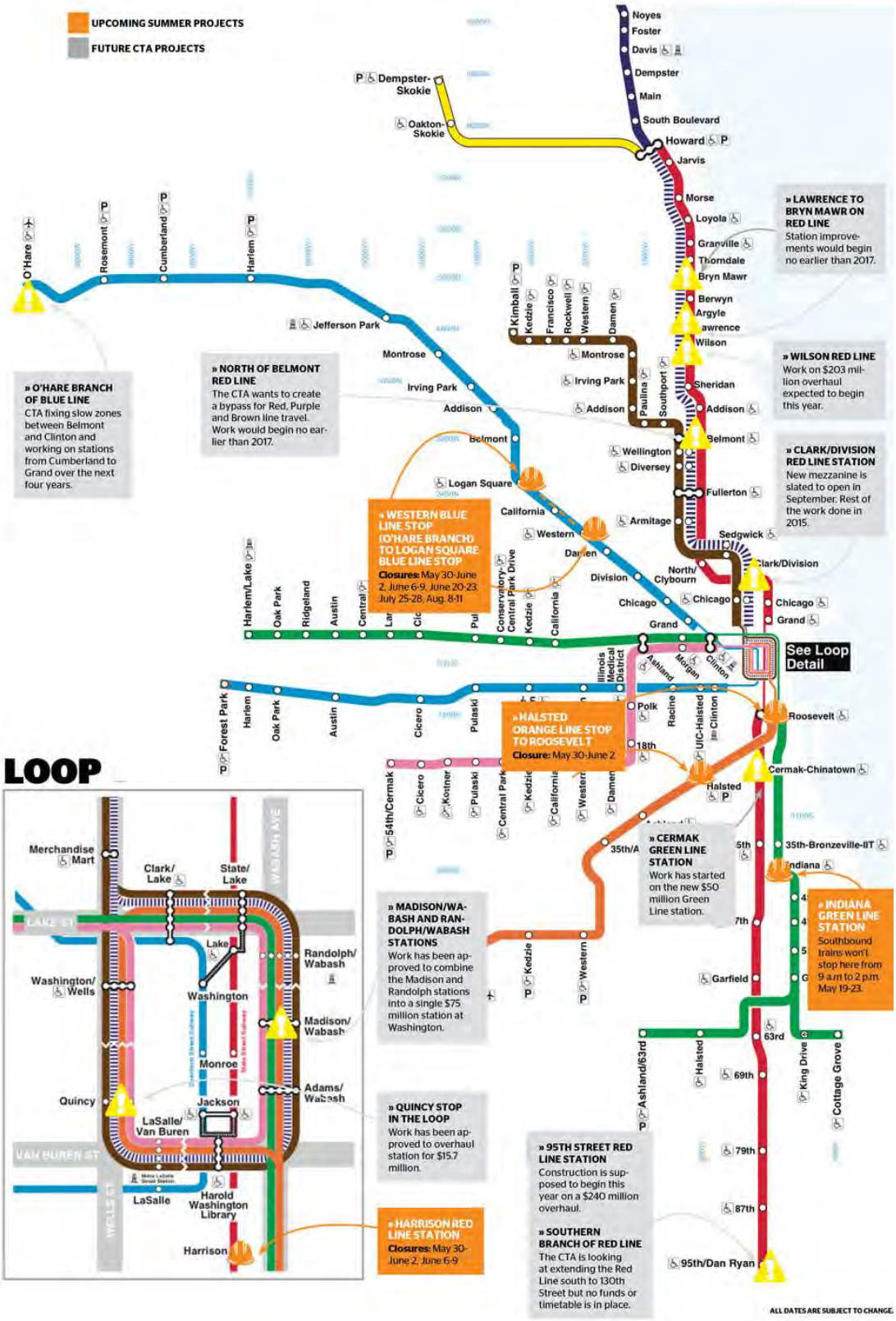

Appendix B
April 17th, 2014 Aldermanic Briefing Meeting Notes

MEETING NOTES

RE: **Aldermanic Briefing – Red Line Extension Draft EIS**

MEETING DATE: **Thursday, April 17, 2014 - 10:00 AM**

LOCATION: **City Hall (406A)**

ATTENDEES:

Name	***Initials***	***Organization***
April Branch	AB	Alderman Beale's Office
Brian Sleet	BS	Alderman Sawyer's Office
Carole Morey	CM	CTA
Eva-Dina Delgado	ED	CTA
Gerald Nichols	GN	CTA
Ald. Howard Brookins	HB	21st Ward Alderman
Jeff Wilson	JW	CTA
Lamar Brown	LB	Alderwoman Harris' Office
Loren Harris	LH	Alderwoman Harris' Office
Sonali Tandon	ST	CTA

PREPARED BY: Sonali Tandon

ISSUE DATE:

- ED kicked off the meeting and thanked everyone for attending.
- CM gave a presentation about CTA's Red Line Extension (RLE) project and discussed:
    - the Red Ahead program and different projects that are part of it. She mentioned recent CTA board action on the 95th Street Terminal Project.
    - that CTA is pursuing New Starts federal funds for RLE and the project will have to compete with other New Starts projects in the country. Red and Purple Modernization Project, which is also part of the Read Ahead Program is pursuing Core Capacity federal funds.
    - RLE project history, previous public involvement, and project benefits
    - the Environmental Impact Statement (EIS) process and different project alternatives for RLE
        - HB commented that although Union Pacific Railroad (UPRR) Alternative was the Locally Preferred (LPA) Alternative, it doesn't seem that is where people are and the Halsted Alternative would capture more of Chicago. He also mentioned that attendees that supported the UPRR alternative in previous RLE meetings were from Roseland. He asked if CTA had analyzed population density along different alternatives.
    - potential project impacts and mitigations including park impacts and potential displacements for each alternative

        - BS asked if CTA would provide grants to residents for new windows, if there are noise impacts. CM mentioned that as part of the EIS, CTA is doing detailed noise modeling to identify impacts. Mitigation measures would accordingly be identified.
    - topic areas where minimal impacts are likely to occur
    - project funding and project development process
- BS asked about Park & Ride at 95th Street Terminal. He also requested a map of proposed RLE stops in relation to Metra stops. He also mentioned that Metra stops were not in good condition and difficult locations.
- ED mentioned that CTA will be conducting small community meetings and an Open House meeting.
- RLE collaterals and flyers in English and Spanish were handed out to the attendees and the meeting was adjourned.

Appendix C
Participating Agency List, Update Letters, and Responses

Red Line Extension Project
List of Cooperating and Participating Agencies

RLE Project Involvement	Category	Sub-Category	Organization	Salutation	First Name	Last Name	Title	Address 1	Address 2	City	State	Zip
Cooperating Agency	Government Agency	Federal	Federal Highway Administration	Mr.	Norman	Stoner	Division Administrator, Illinois Division Office	3250 Executive Park Drive		Springfield	IL	62703
Cooperating Agency	Government Agency	Federal	Federal Highway Administration	Mr.	Matt	Fuller	Environmental Programs Engineer	3250 Executive Park Drive		Springfield	IL	62703
Cooperating Agency	Government Agency	Federal	Federal Highway Administration	Mr.	Mike	Hine	Engineering Team Leader	3250 Executive Park Drive		Springfield	IL	62703
Cooperating Agency	Government Agency	Federal	Federal Highway Administration		Chris	Byars	Metropolitan Transportation Engineer	200 West Adams	Suite 330	Chicago	IL	60606
Participating Agency	Government Agency	Federal	Department of Energy	Dr.	Ernest	Moniz	Secretary	1000 Independence Ave. SW		Washington	DC	20585
Participating Agency	Government Agency	Federal	Department of Health and Human Services	Mr.	James	Galloway	Acting Regional Director - Region 5	233 N. Michigan Ave.	Suite 1300	Chicago	IL	60601
Participating Agency	Government Agency	Federal	Department of Housing and Urban Development	Ms.	Beverly	Bishop	Deputy Regional Director	77 W. Jackson Blvd.		Chicago	IL	60604
Participating Agency	Government Agency	Federal	Department of Housing and Urban Development	Ms.	Melanie	Haywood	Field Environmental Officer	77 W. Jackson Blvd.	Room 2420	Chicago	IL	60604
Participating Agency	Government Agency	Federal	Department of Housing and Urban Development	Mr.	Steve	Vahl	Region 5 Environmental Officer	77 W. Jackson Blvd.	Room 2420	Chicago	IL	60604
Participating Agency	Government Agency	Federal	Federal Emergency Management Agency	Ms.	Janet	Odeshoo	Deputy Regional Administrator, Region V	536 S. Clark St.	6th Floor	Chicago	IL	60605
Participating Agency	Government Agency	Federal	Federal Emergency Management Agency	Mr.	Nicholas	Mueller	Regional Environmental Officer	536 S. Clark St.	6th Floor	Chicago	IL	60605
Participating Agency	Government Agency	Federal	Federal Railroad Administration	Mr.	Laurence	Hasvold	Regional Administrator	200 West Adams	Suite 310	Chicago	IL	60606
Participating Agency	Government Agency	Federal	Transportation Security Administration	Mr.	John	Pistole	Administrator	601 S. 12th St.		Arlington	VA	20598
Participating Agency	Government Agency	Federal	Transportation Security Administration	Mr.	Fred	Goodine	Section Chief, Risk Reduction, Mass Transit and Passenger Rail Branch	601 S. 12th St.		Arlington	VA	20598
Participating Agency	Government Agency	Federal	U.S. Environmental Protection Agency	Ms.	Susan	Hedman	Regional Administrator - Region 5	77 W. Jackson Blvd.		Chicago	IL	60604
Participating Agency	Government Agency	Federal	U.S. Environmental Protection Agency	Mr.	Norm	West	NEPA Review	77 W. Jackson Blvd.		Chicago	IL	60604
Participating Agency	Government Agency	Federal	U.S. Fish and Wildlife Service	Mr.	John	Rogner	Field Supervisor - Chicago Field Office	1250 S. Grove	Suite 103	Barrington	IL	60010
Participating Agency	Tribe	Tribe	Peoria Tribe of Indians of Oklahoma	Mr.	John F.	Froman	Chief	118 S. Eight Tribes Trail		Miami	OK	74354
Participating Agency	Tribe	Tribe	Prairie Band of Potawatomi Nation	Mr.	Steve	Ortiz	Chief	16281 Q Road		Mayetta	KS	66509
Participating Agency	Tribe	Tribe	Miami Tribe of Oklahoma	Mr.	George	Strack	Tribal Historic Preservation Officer	202 S. Eight Tribes Trail		Miami	OK	74354
Participating Agency	Tribe	Tribe	Sac and Fox Nation of Missouri	Ms.	Twen	Barton	Chairperson	305 N. Main Street		Reserve	KS	66434
Participating Agency	Tribe	Tribe	Sac and Fox Nation of Mississippi in Iowa	Mr.	Homer	Bear, Jr.	Chairman	394 Meskwaki Road		Tama	IA	52339
Participating Agency	Tribe	Tribe	Pokagon Band of Potawatomi Indians		Michael	Zimmerman	Tribal Historic Preservation Officer	58620 Sink Road		Dowagiac	MI	49047
Participating Agency	Tribe	Tribe	Potawatomi Nation-Hannahville Indian Community	Mr.	Earl	Meshiguad		N14911 Hannahville Blvd.		Wilson	MI	49896
Participating Agency	Tribe	Tribe	Forest Country Potawatomi	Mr.	Phillip	Shopodock	Chariperson	P.O. Box 340		Crandon	WI	54520
Participating Agency	Tribe	Tribe	Ho-Chunk Nation	Mr.	Bill	Quackenbush	Tribal Historic Preservation Officer	P.O. Box 667P		Black River	WI	54815
Participating Agency	Tribe	Tribe	Sac and Fox Nation of Oklahoma	Ms.	Sandra	Massey	Tribal Historic Preservation Officer	Rt. 2 Box 246		Stroud	OK	74079
Participating Agency	Tribe	Tribe	Citizen Potawatomi Nation	Mr.	John	Barrett	Chairperson	1601 S. Gordon Cooper		Shawnee	OK	74801
Participating Agency	Government Agency	Local	Chicago Housing Authority	Mr.	John	Gerut	Senior Vice President	60 E. Van Buren		Chicago	IL	60605
Participating Agency	Government Agency	Local	Chicago Housing Authority	Mr.	Jose Anthony	Alvarez	Development Manager, Office of Development Management	60 E. Van Buren		Chicago	IL	60605

Red Line Extension Project
List of Cooperating and Participating Agencies

RLE Project Involvement	Category	Sub-Category	Organization	Salutation	First Name	Last Name	Title	Address 1	Address 2	City	State	Zip
Participating Agency	Government Agency	Local	Chicago Park District	Mr.	Rob	Rejman		541 N. Fairbanks		Chicago	IL	60611
Participating Agency	Government Agency	Local	Chicago Park District	Ms.	Doreen	O'Donnell	Research and Planning Manager	541 N. Fairbanks		Chicago	IL	60611
Participating Agency	Government Agency	Local	Chicago Park District	Ms.	Gia	Biagi		541 N. Fairbanks		Chicago	IL	60611
Participating Agency	Government Agency	Local	City of Chicago Department of Business Affairs and Consumer Protection	Ms.	Norma I.	Reyes	Commissioner	50 W. Washington St.	Room 208	Chicago	IL	60602
Participating Agency	Government Agency	Local	City of Chicago Department of Housing and Economic Development	Mr.	Benet	Haller		121 N. LaSalle St	10th Floor	Chicago	IL	60602
Participating Agency	Government Agency	Local	City of Chicago Department of Fleet and Facility Management	Mr.	Kevin	Laberge	Bureau of Environmental, Health & Safety Management	30 N. LaSalle St.	Suite 300	Chicago	IL	60602
Participating Agency	Government Agency	Local	City of Chicago Department of Transportation	Ms.	Luann	Hamilton	Director, Transportation Planning	30 N. LaSalle St.	Suite 500	Chicago	IL	60602
Participating Agency	Government Agency	Local	City of Chicago Department of Transportation	Mr.	Jeffrey	Sriver	Projects Administrator	30 N. LaSalle Street	Suite 500	Chicago	IL	60602
Participating Agency	Government Agency	Local	City of Chicago Office of the Mayor	Mr.	Joe	Deal	Director of Regional Programs	121 N. LaSalle St.	Room 509	Chicago	IL	60602
Participating Agency	Government Agency	Local	City of Chicago Police Department	Mr.	Garry	McCarthy	Superintendent	3510 S. Michigan Ave.		Chicago	IL	60653
Participating Agency	Government Agency	Local	City of Chicago Police Department	Deputy Chief	Steve	Georgas	Bureau of Patrol; Special Functions	3510 S. Michigan Ave.		Chicago	IL	60653
Participating Agency	Government Agency	Local	City of Chicago Police Department	Commander	Nancy	Lipman	Public Transportation Section	1718 S. State St.	Annex Building	Chicago	IL	60616
Participating Agency	Government Agency	Regional	Metra Commuter Rail	Ms.	Lynette	Ciavarella	Director, Planning and Analysis	547 W. Jackson Blvd.	13th Floor	Chicago	IL	60661
Participating Agency	Government Agency	Regional	Metra Commuter Rail	Mr.	David	Kralik	Department Head, Long Range Planning	547 W. Jackson Blvd.	13th Floor	Chicago	IL	60661
Participating Agency	Government Agency	Regional	Metropolitan Water Reclamation District of Greater Chicago	Ms.	Kathleen	Meany	President, Board of Commissioners	100 E. Erie St.		Chicago	IL	60611
Participating Agency	Government Agency	Regional	Metropolitan Water Reclamation District of Greater Chicago	Mr.	Joseph	Schuessler	Principal Civil Engineer	100 E. Erie St.		Chicago	IL	60611
Participating Agency	Government Agency	Regional	Regional Transportation Authority	Ms.	Leanne	Redden	Senior Deputy, Executive Director of Planning	175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Participating Agency	Government Agency	Regional	Regional Transportation Authority	Mr.	Peter	Fahrenwald	Manager, Regional and Corridor Planning	175 W. Jackson Blvd.	Suite 1550	Chicago	IL	60604
Participating Agency	Government Agency	Regional	Pace	Mr.	David	Tomzik	Manager, Long Range Planning	550 W. Algonquin Road		Arlington Heights	IL	60005
Participating Agency	Government Agency	Regional	Pace	Ms.	Lorraine	Snorden	Manager, Department of Planning Services	550 W. Algonquin Road		Arlington Heights	IL	60005
Participating Agency	Government Agency	State	Illinois Commerce Commission	Ms.	Shauna	Kelley	Bureau of Transportation Chief	160 N. LaSalle St.	C800	Chicago	IL	60601
Participating Agency	Government Agency	State	Illinois Commerce Commission	Mr.	Dan	Powers	Senior Rail Safety Specialist	527 East Capitol Avenue		Springfield	IL	62701
Participating Agency	Government Agency	State	Illinois Department of Natural Resources	Mr.	Marc	Miller	Director	One Natural Resources Way		Springfield	IL	62702
Participating Agency	Government Agency	State	Illinois Department of Natural Resources	Mr.	Steve	Hamer	Office of Realty & Environmental Planning, Division of Ecosystems & Environment	One Natural Resources Way		Springfield	IL	62702
Participating Agency	Government Agency	State	Illinois Department of Transportation	Mr.	John	Fortman	Deputy Director, Region 1 Engineer	201 W. Center Court		Schaumburg	IL	60196
Participating Agency	Government Agency	State	Illinois Department of Transportation	Mr.	Charles	Abraham	Division of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Participating Agency	Government Agency	State	Illinois Department of Transportation	Mr.	Joe	Shacter	Director, Department of Public and Intermodal Transportation	100 W. Randolph	Suite 6-600	Chicago	IL	60601
Participating Agency	Government Agency	State	Illinois Department of Transportation	Ms.	John	Baczek	Environmental Studies Section Chief	201 W. Center Court		Schaumburg	IL	60196
Participating Agency	Government Agency	State	Illinois Environmental Protection Agency	Ms.	Lisa	Bonnett	Director	500 Stratton Office Building		Springfield	IL	62076
Participating Agency	Government Agency	State	Illinois Environmental Protection Agency	Ms.	DiAnne	Schuerman		Deputy Director's Office/MC#1 P.O. Box 19276		Springfield	IL	62794-9276

Red Line Extension Project
List of Cooperating and Participating Agencies

RLE Project Involvement	Category	Sub-Category	Organization	Salutation	First Name	Last Name	Title	Address 1	Address 2	City	State	Zip
Participating Agency	Government Agency	State	Illinois Historic Preservation Agency	Mr.	David	Halpin	Cultural Resources Manager	#1 Old State Capitol Plaza		Springfield	IL	62701
Participating Agency	Government Agency	State	Illinois Historic Preservation Agency	Ms.	Anne	Haacker	Deputy State Historic Preservation Officer	#1 Old State Capitol Plaza		Springfield	IL	62701

April 17, 2014

Mr. Matt Fuller
Environmental Programs Engineer
3250 Executive Park Drive
Springfield, IL 62703

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Fuller:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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In developing the Draft EIS over the last year, CTA has reached out to a number of agencies, including FHWA, regarding input on the impact assessment methodologies and the draft technical analyses in each agency's area of expertise. As the project moves forward and the Draft

EIS is further developed CTA will continue to coordinate with you on the project developments and submit a pre-draft and pre-final environmental document for your review.

Your agency has previously agreed to be a cooperating agency for this project. At this time, we would like to reconfirm your involvement as a cooperating agency and your contact information. Please respond to confirm the single point-of-contact within your organization for future coordination efforts by emailing Sonali Tandon, CTA Project Manager, at STandon@transitchicago.com with the contact's name, title, and email address. FTA and CTA will use this contact information to provide future updates about the project.

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If you have questions regarding this process, please contact either:

Sonali Tandon, Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661-1465
Phone: (312) 681-4246
Email: standon@transitchicago.com

Reginald Arkell, Community Planner
U.S. DOT
Federal Transit Administration, Region V
200 West Adams Street, Suite 320
Chicago, IL 60606
Phone: (312) 886-3704
Email: reginald.arkell@dot.gov

Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

Cc: Mike Hine, Federal Highway Administration

April 17, 2014

Dr. Ernest Moniz
Secretary
Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Dr. Ernest Moniz:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. James Galloway
Acting Regional Director - Region 5
Department of Health and Human Services
233 N. Michigan Ave. Ste. 1300
Chicago, IL 60601

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. James Galloway:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Ms. Beverly Bishop
Deputy Regional Director
Department of Housing and Urban Development
77 W. Jackson Blvd.
Chicago, IL 60604

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Beverly Bishop:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Ms. Melanie Haywood
Field Environmental Officer
Department of Housing and Urban Development
77 W. Jackson Blvd. Rm 2420
Chicago, IL 60604

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Melanie Haywood:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Steve Vahl
Region 5 Environmental Officer
Department of Housing and Urban Development
77 W. Jackson Blvd. Rm 2420
Chicago, IL 60604

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Steve Vahl:

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Ms. Janet Odeshoo
Deputy Regional Administrator, Region V
Federal Emergency Management Agency
536 S. Clark St. 6th floor
Chicago, IL 60605

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Janet Odeshoo:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Nicholas Mueller
Regional Environmental Officer
Federal Emergency Management Agency
536 S. Clark St. 6th floor
Chicago, IL 60605

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Nicholas Mueller:

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Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Laurence Hasvold
Regional Administrator
Federal Railroad Administration
200 West Adams Suite 310
Chicago, IL 60606

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Laurence Hasvold:

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Chicago, IL 60606
Phone: (312) 886-3704
Email: reginald.arkell@dot.gov

Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. John Pistole
Administrator
Transportation Security Administration
601 S. 12th St.
Arlington, VA 20598

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. John Pistole:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Sonali Tandon, Project Manager
Strategic Planning and Policy
Chicago Transit Authority
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Chicago, IL 60661-1465
Phone: (312) 681-4246
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Reginald Arkell, Community Planner
U.S. DOT
Federal Transit Administration, Region V
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Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Fred Goodine
Section Chief, Risk Reduction, Mass Transit and Passenger Rail Branch
Transportation Security Administration
601 S. 12th St.
Arlington, VA 20598

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Fred Goodine:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Ms. Susan Hedman
Regional Administrator - Region 5
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Susan Hedman:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Norm West
NEPA Review
U.S. Environmental Protection Agency
77 W Jackson Blvd.
Chicago, IL 60604

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Norm West:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. John Rogner
Field Supervisor - Chicago Field Office
U.S. Fish and Wildlife Service
1250 S. Grove Ste. 103
Barrington, IL 60010

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. John Rogner:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. John F. Froman
Chief
Peoria Tribe of Indians of Oklahoma
118 S. Eight Tribes Trail
Miami, OK 74354

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. John F. Froman:

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Steve Ortiz
Chief
Prairie Band of Potawatomi Nation
16281 Q Road
Mayetta, KS 66509

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Steve Ortiz:

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. George Strack
Tribal Historic Preservation Officer
Miami Tribe of Oklahoma
202 S. Eight Tribes Trail
Miami, OK 74354

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. George Strack:

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Ms. Twen Barton
Chairperson
Sac and Fox Nation of Missouri
305 N. Main Street
Reserve, KS 66434

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Twen Barton:

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Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Homer Bear, Jr.
Chairman
Sac and Fox Nation of Mississippi in Iowa
394 Meskwaki Road
Tama, IA 52339

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Homer Bear, Jr.:

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If you have questions regarding this process, please contact either:

Sonali Tandon, Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661-1465
Phone: (312) 681-4246
Email: standon@transitchicago.com

Reginald Arkell, Community Planner
U.S. DOT
Federal Transit Administration, Region V
200 West Adams Street, Suite 320
Chicago, IL 60606
Phone: (312) 886-3704
Email: reginald.arkell@dot.gov

Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Michael Zimmerman
Tribal Historic Preservation Officer
Pokagon Band of Potawatomi Indians
58620 Sink Road
Dowagiac, MI 49047

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Michael Zimmerman:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Earl Meshiguad
Potawatomi Nation-Hannahville Indian Community
N14911 Hannahville Blvd.
Wilson, MI 49896

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Earl Meshiguad:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Phillip Shopodock
Chariperson
Forest Country Potawatomi
P.O. Box 340
Crandon, WI 54520

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Phillip Shopodock:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. Bill Quackenbush
Tribal Historic Preservation Officer
Ho-Chunk Nation
P.O. Box 667P
Black River, WI 54815

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Bill Quackenbush:

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Ms. Sandra Massey
Tribal Historic Preservation Officer
Sac and Fox Nation of Oklahoma
Rt. 2 Box 246
Stroud, OK 74079

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Sandra Massey:

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Thank you for your participation on this project.

Sincerely,

Marisol R. Simón
Regional Administrator

April 17, 2014

Mr. John Barrett
Chairperson
Citizen Potawatomi Nation
1601 S. Gordon Cooper
Shawnee, OK 74801

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. John Barrett:

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Regional Administrator

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Mr. John Gerut
Senior Vice President
Chicago Housing Authority
60 E. Van Buren
Chicago, IL 60605

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Gerut:

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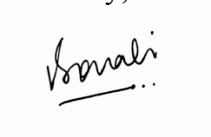

Sonali Tandon
Project Manager
Strategic Planning and Policy
312.681.4246
standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Mr. Jose Anthony Alvarez
Development Manager, Office of Development Management
Chicago Housing Authority
60 E. Van Buren
Chicago, IL 60605

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Alvarez:

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April 17, 2014

Mr. Rob Rejman
Chicago Park District
541 N. Fairbanks
Chicago, IL 60611

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

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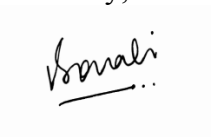

Sonali Tandon
Project Manager
Strategic Planning and Policy
312.681.4246
standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Ms. Doreen O'Donnell
Research and Planning Manager
Chicago Park District
541 N. Fairbanks
Chicago, IL 60611

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. O'Donnell:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Sonali Tandon
Project Manager
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312.681.4246
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567 West Lake Street
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April 17, 2014

Ms. Gia Biagi
Chicago Park District
541 N. Fairbanks
Chicago, IL 60611

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Biagi:

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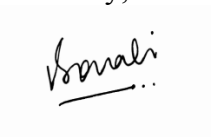

Sonali Tandon
Project Manager
Strategic Planning and Policy
312.681.4246
standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

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TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Ms. Norma I. Reyes
Commissioner
City of Chicago Department of Business Affairs and Consumer Protection
50 W. Washington St.
Room 208
Chicago, IL 60602

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Reyes:

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cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Mr. Benet Haller
City of Chicago Department of Housing and Economic Development
121 N. LaSalle St.
10th Floor
Chicago, IL 60602

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Haller:

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cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
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April 17, 2014

Mr. Kevin Laberge
Bureau of Environmental, Health & Safety Management
City of Chicago Department of Fleet and Facility Management
30 N. LaSalle St.
Suite 300
Chicago, IL 60602

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Laberge:

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312.681.4246
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cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
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April 17, 2014

Ms. Luann Hamilton
Director, Transportation Planning
City of Chicago Department of Transportation
30 N. LaSalle St.
Suite 500
Chicago, IL 60602

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Hamilton:

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cc: Reginald Arkell, Federal Transit Administration

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567 West Lake Street
Chicago, Illinois 60661-1498
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April 17, 2014

Mr. Jeffrey Sriver
Projects Administrator
City of Chicago Department of Transportation
30 N. LaSalle Street
Suite 500
Chicago, IL 60602

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Sriver:

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April 17, 2014

Mr. Joe Deal
Director of Regional Programs
City of Chicago Office of the Mayor
121 N. LaSalle St.
Room 509
Chicago, IL 60602

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Deal:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Chicago, Illinois 60661-1498
TEL 312 664-7200
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April 17, 2014

Mr. Garry McCarthy
Superintendent
City of Chicago Police Department
3510 S. Michigan Ave.
Chicago, IL 60653

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. McCarthy:

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If you have any questions, please do not hesitate to contact me. Thank you for your participation on this project.

Sincerely,

Sonali Tandon
Project Manager
Strategic Planning and Policy
312.681.4246
standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
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April 17, 2014

Deputy Chief Steve Georgas
Bureau of Patrol; Special Functions
City of Chicago Police Department
3510 S. Michigan Ave.
Chicago, IL 60653

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Deputy Chief Georgas:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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April 17, 2014

Commander Nancy Lipman
Public Transportation Section
City of Chicago Police Department
1718 S. State St.
Annex Building
Chicago, IL 60616

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Commander Lipman:

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April 17, 2014

Ms. Lynette Ciavarella
Director, Planning and Analysis
Metra Commuter Rail
547 W. Jackson Blvd.
13th Floor
Chicago, IL 60661

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Ciavarella:

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April 17, 2014

Mr. David Kralik
Department Head, Long Range Planning
Metra Commuter Rail
547 W. Jackson Blvd.
13th Floor
Chicago, IL 60661

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Kralik:

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April 17, 2014

Ms. Kathleen Meany
President, Board of Commissioners
Metropolitan Water Reclamation District of Greater Chicago
100 E. Erie St.
Chicago, IL 60611

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Meany:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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CHICAGO TRANSIT AUTHORITY

567 West Lake Street
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April 17, 2014

Mr. Joseph Schuessler
Principal Civil Engineer
Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street
Chicago, IL 60611

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Schuessler:

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April 17, 2014

Ms. Leanne Redden
Senior Deputy, Executive Director of Planning
Regional Transportation Authority
175 W. Jackson Blvd.
Suite 1550
Chicago, IL 60604

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Redden:

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April 17, 2014

Mr. Peter Fahrenwald
Manager, Regional and Corridor Planning
Regional Transportation Authority
175 W. Jackson Blvd.
Suite 1550
Chicago, IL 60604

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Fahrenwald:

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April 17, 2014

Mr. David Tomzik
Manager, Long Range Planning
Pace
550 W. Algonquin Road
Arlington Heights, IL 60005

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

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April 17, 2014

Ms. Lorraine Snorden
Manager, Department of Planning Services
Pace
550 W. Algonquin Road
Arlington Heights, IL 60005

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Snorden:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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Additional information about the project is available at: transitchicago.com/RedEIS.

If you have any questions, please do not hesitate to contact me. Thank you for your participation on this project.

Sincerely,

Sonali Tandon
Project Manager
Strategic Planning and Policy
312.681.4246
standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Ms. Shauna Kelley
Bureau of Transportation Chief
Illinois Commerce Commission
160 N. LaSalle St.
C800
Chicago, IL 60601

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Kelley:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

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567 West Lake Street
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April 17, 2014

Mr. Dan Powers
Senior Rail Safety Specialist
Illinois Commerce Commission
527 East Capitol Avenue
Springfield, IL 62701

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Powers:

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567 West Lake Street
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April 17, 2014

Mr. Marc Miller
Director
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Miller:

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April 17, 2014

Mr. Steve Hamer
Office of Realty & Environmental Planning, Division of Ecosystems & Environment
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Hamer:

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April 17, 2014

Mr. John Fortman
Deputy Director, Region 1 Engineer
Illinois Department of Transportation
201 W. Center Court
Schaumburg, IL 60196

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Fortman:

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Chicago, Illinois 60661-1498
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April 17, 2014

Mr. Charles Abraham
Division of Public and Intermodal Transportation
Illinois Department of Transportation
100 W. Randolph
Suite 6-600
Chicago, IL 60601

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Abraham:

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Chicago, Illinois 60661-1498
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April 17, 2014

Mr. Joe Shacter
Director, Department of Public and Intermodal Transportation
Illinois Department of Transportation
100 W. Randolph
Suite 6-600
Chicago, IL 60601

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Shacter:

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Chicago, Illinois 60661-1498
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April 17, 2014

Ms. John Baczek
Environmental Studies Section Chief
Illinois Department of Transportation
201 W. Center Court
Schaumburg, IL 60196

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Baczek:

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567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
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April 17, 2014

Ms. Lisa Bonnett
Director
Illinois Environmental Protection Agency
500 Stratton Office Building
Springfield, IL 62076

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Bonnett:

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standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Ms. DiAnne Schuerman
Illinois Environmental Protection Agency
Deputy Director's Office/MC#1, P.O. Box 19276
Springfield, IL 0

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Schuerman:

The Federal Transit Administration (FTA) as lead agency, in cooperation with the Chicago Transit Authority (CTA) as a joint lead agency, has been working to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) project. The proposed project would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding.

CTA will be hosting an open house on May 13, 2014 from 5:30 p.m. to 7:30 p.m. at Palmer Park, 201 E. 111th Street, Chicago, IL 60628 to update the community on results of the environmental analysis to date and project progress. Your agency is cordially invited to attend this open house meeting. CTA continues to receive feedback on the project and potential impacts, which will be addressed in the Draft EIS. The meeting format will be an open exchange of information between the attendees and the CTA staff. There will be no formal presentation or testimony.

CTA previously held agency and public scoping meetings in September 2009, and hosted a public open house in August 2011. Since this time, CTA has been preparing the Draft EIS based on analysis of the impacts identified for each of the project alternatives. The Draft EIS is expected to be published for public review in spring 2015. The Draft EIS will document potential benefits and impacts of the Locally Preferred Alternative. This first alternative includes three possibilities: an option running along the existing freight rail tracks of the Union Pacific Railroad (UPRR) right-of-way (ROW Option), in addition to an East Option and a West Option adjacent to the UPRR tracks. The Draft EIS will also describe other build alternatives that are under consideration, including a rail alternative along Halsted Street, and a bus rapid transit (BRT) alternative along Michigan Avenue, in addition to the No Build Alternative.

In developing the Draft EIS over the last year, CTA has reached out to a number of participating agencies regarding input on the impact assessment methodologies and the draft technical analyses in each agency's area of expertise. As the project moves forward and the Draft EIS is further developed, as a participating agency, you may be asked to review and comment on sections of the document. This will be your opportunity to communicate any concerns of your

agency on the adequacy of the document, the alternatives considered, the anticipated impacts and proposed mitigation.

Your agency has previously agreed to be a participating agency for this project. At this time, we would like to reconfirm your involvement as a participating agency and your contact information. If you are not the right contact within your organization or would like to designate another person for future coordination efforts, please email me at standon@transitchicago.com with the contact's name, title, and email address. FTA and CTA will use this contact information to provide future updates about the project.

Additional information about the project is available at: transitchicago.com/RedEIS.

If you have any questions, please do not hesitate to contact me. Thank you for your participation on this project.

Sincerely,

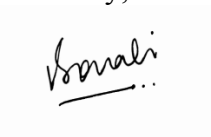

Sonali Tandon
Project Manager
Strategic Planning and Policy
312.681.4246
standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Mr. David Halpin
Cultural Resources Manager
Illinois Historic Preservation Agency
#1 Old State Capitol Plaza
Springfield, IL 62701

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Mr. Halpin:

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Additional information about the project is available at: transitchicago.com/RedEIS.

If you have any questions, please do not hesitate to contact me. Thank you for your participation on this project.

Sincerely,

Sonali Tandon
Project Manager
Strategic Planning and Policy
312.681.4246
standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

April 17, 2014

Ms. Anne Haacker
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
#1 Old State Capitol Plaza
Springfield, IL 62701

Re: CTA Red Line Extension (RLE) Project Environmental Review Process Update

Dear Ms. Haacker:

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If you have any questions, please do not hesitate to contact me. Thank you for your participation on this project.

Sincerely,

Sonali Tandon
Project Manager
Strategic Planning and Policy
312.681.4246
standon@transitchicago.com

cc: Reginald Arkell, Federal Transit Administration

From: Fahrenwald, Peter [mailto:FahrenwaldP@RTACHICAGO.ORG]
Sent: Wednesday, April 23, 2014 11:06 AM
To: Tandon, Sonali
Subject: Red Line Extension Project Environmental Review Process

Sonali – thanks for your letter of April 17, 2014. Yes, RTA would like to continue to be a participating agency, and we appreciate the opportunity.

Regards,
Peter

Peter Fahrenwald
Manager, Regional and Corridor Planning
Regional Transportation Authority • 175 W. Jackson Blvd • Suite 1650 • Chicago, IL 60604-2705
312-913-3247 • fahrenwaldp@rtachicago.org
Securely send me files

From: Hernandez, Nancy [mailto:nancy.hernandez@chicagoparkdistrict.com]
Sent: Monday, April 21, 2014 12:51 PM
To: Tandon, Sonali
Subject: Revised Contact Information

Hi there,

The new contacts for the Chicago Park District are:

Rob Rejman
Director of Capital, Planning and Facilities

Doreen O'Donnell
Research and Planning Manager
Department of Planning and Development

Nancy J. Hernandez
Staff Assistant to:
Gia Biagi, Chief of Staff
Steve Lux, Chief Financial Officer
Chicago Park District Commissioners

CHICAGO PARK DISTRICT
541 N. Fairbanks Ct. | Chicago, IL 60611
(312) 742-4743 | fax (312) 742-6098
Nancy.hernandez@chicagoparkdistrict.com

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PROPRIETARY MATERIAL and is thus for use only by the intended recipient. If you received this in error, please contact the sender and delete the e-mail and its attachments from all computers.

Illinois Department of Transportation
Division of Highways / Region 1 / District 1
201 West Center Court / Schaumburg, Illinois 60196-1096

May 21, 2014

Ms. Sonali Tandon
Project Manager
Strategic Planning and Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Dear Ms. Tandon:

Thank you for your letter to the Illinois Department of Transportation (Department) regarding the Chicago Transit Authority's (CTA's) Red Line Extension.

The Department would like to confirm our involvement as a participating agency in this project. We look forward to working with the CTA in the development of this project and we ask that any reports or other documents that require Department review be sent to our Bureau of Programming with an attention to John Baczek, Project and Environmental Studies Section Chief.

If you have any questions or need additional information, please contact me or John Baczek, Project and Environmental Studies Section Chief, at (847) 705-4104.

Very truly yours,

John Fortmann, P.E.
Deputy Director of Highways
Region One Engineer

cc: Reginald Arkell – Federal Transit Authority

From: McKay, Christopher [mailto:Christopher.McKay@tsa.dhs.gov]
Sent: Thursday, May 01, 2014 1:57 PM
To: reginald.arkell@dot.gov
Cc: Tandon, Sonali; Mitchell, Cindy; 'Chris McKay' (christopher.mckay@dhs.gov)
Subject: Red Line Extension Project

Dear Mr. Arkell,

On April 17, 2014, we received a letter from the Regional Administrator, Federal Transit Administration, inviting the Transportation Security Administration (TSA) to attend an open house on May 13, 2014 to receive an update on results of the environmental analysis to date and progress in regards to the red line extension project.

TSA will not be able to participate in this open house, however, we do maintain a compelling interest in all areas related to security and security related risk reduction activities in the design, development, construction and eventual operation of the project. I will serve as your point-of-contact and appreciate the opportunity to partner with you going forward.

Sincerely yours,
Chris

Christopher T. McKay
Industry Engagement Manager
Mass Transit and Passenger Rail
Transportation Security Administration
Office: 571-227-2160
Cell: 202-253-5029

From: McQuillen, Deirdre [mailto:Deirdre.McQuillen@Illinois.gov]
Sent: Wednesday, April 23, 2014 9:41 AM
To: Tandon, Sonali
Subject: Illinois EPA contact

DiAnne Schuerman is no longer with the Agency. I now coordinate the review and Agency's response to these requests, if you could please update your files.

If you need anything else please let me know.

Thank you.

Deirdre McQuillen
Illinois EPA/Illinois Partners for Clean Air
Outreach/Sponsorship Coordinator
phone: 217-558-0073
fax: 217-785-8346

PARTNERS
FOR CLEAN AIR
ILLINOIS

Appendix D
Community Group Meeting Materials and Meeting Notes

RED AHEAD

Red Line Extension

Red Line Extension
2014

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1

RED AHEAD

Red Line Extension

- CTA plans to extend the Red Line 5.3 miles south from 95th Street to 130th Street
- CTA needs public input to move forward on the environmental analysis

RED AHEAD

Red Line Extension

RLE and the Red Ahead Program

Red Ahead is a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most traveled rail line.

- **Red Line Extension (RLE)**
- Red North Station Interim Improvements (completed 2012)
- Red Line South (Dan Ryan) Reconstruction Project (completed 2013)
- Wilson Station Reconstruction Project (starting 2014)
- 95th Street Terminal Improvement Project (starting 2014)
- Red Purple Modernization (RPM)

cta

RED AHEAD

Red Line Extension

CTA is continuing the public processes on two critical components of the Red Ahead Program in 2014

Red Line Extension (RLE)

- Pursuing New Starts federal funds
- New Starts projects expand rail service into an area that is not within the current transit footprint, therefore entail a relatively longer environmental and planning process
- CTA must compete with other New Starts projects from across the country that are already in line for funding
- Multiple alternatives and their impacts are being evaluated

Red and Purple Modernization (RPM)

- Pursuing Core Capacity federal funds
- Core Capacity projects are intended to increase capacity of existing rail lines within the current transit footprint, therefore entail a relatively shorter environmental and planning process
- RPM is the first and only Core Capacity project in the FTA's Project Development phase and is recommended for funding in the proposed FY2015 federal budget
- Phase One includes two main projects and a single alternative is proposed for each of these projects

RED AHEAD

Red Line Extension

Project Overview

- The end of the line for the CTA's Red Line South is currently the 95th/Dan Ryan Terminal.
- Later this year construction will begin on the 95th Street Terminal Improvement Project, which will expand and greatly improve the 95th/Dan Ryan Terminal.
- With the estimated $2.3B Red Line Extension (RLE) Project, CTA is proposing to extend service from south of 95th/Dan Ryan Terminal to the vicinity of 130th Street.

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RED AHEAD

Red Line Extension

Project History and Public Involvement

Alternatives Analysis (2006-2009)

- Project alternatives were presented at six public meetings
- Locally Preferred Alternative adopted by the CTA Board in 2009

Environmental Scoping (2009)

- Community members and public agencies assessed the range of project actions, alternatives and potential environmental impacts

Early Technical Work & Open House (2011)

Draft Environmental Impact Statement (2012 – present)

- Under preparation by CTA and the Federal Transit Administration (FTA)
- Public feedback on the preliminary impact of the alternatives is necessary to complete the Draft EIS

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RED AHEAD

Red Line Extension

RLE Means a Better Served Far South Side

The Red Line Extension project will:

- Serve a low-income, transit dependent area of the City that does not have direct CTA rail service
- Faster commute - provide a 20-minute time savings to downtown by providing one-seat service, as opposed to the current bus-rail trip from 130th.
- Include four new stations, a new rail yard, and bus and parking facilities at all stations.

RED AHEAD

Red Line Extension

Community & Economic Development Benefits

- **Increased transit access to affordable housing**
- **Encourages community investment and economic development**
- **Direct construction jobs created**

  Estimate: 2,600 – 4,100
- **Increased access to jobs**

  Newly accessible jobs within an hour commute of the proposed 111th Street station would increase by 56% (CMAP, 2012)

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RED AHEAD

Red Line Extension

Environmental Impact Statement (EIS)

To acquire future federal funding, an EIS study is required by the National Environmental Policy Act (NEPA)

The EIS allows the public to fully understand the potential environmental impacts and provide input before final decisions are made

The EIS includes:

- A description and comparison of alternatives
- An explanation of the existing environmental setting
- An analysis of potential positive and negative environmental impacts of construction and operation of each alternative
- Proposed mitigation measures to reduce or eliminate potential negative impacts

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RED AHEAD

Red Line Extension

Project Alternatives

Union Pacific Railroad (UPRR) Rail Alternative

- East Option
- Right-of-Way (ROW) Option
- West Option

Halsted Rail Alternative

Bus Rapid Transit (BRT) Alternative

No Build Alternative

Based on the environmental analysis and public feedback during the Draft EIS process, a single alternative will be designated in the Final EIS

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RED AHEAD

Red Line Extension

UPRR Rail Alternative

Chicago Transit Board Adopted Alternative

5.3-mile extension along the UPRR tracks

Three options

- East Option
- ROW Option (contingent upon the relocation of UPRR, significant cost and delay TBD)
- West Option

Four stations (103rd, 111th, Michigan, 130th)

- Park & ride facilities (up to 3,700 total parking spaces)
- Bus facilities

Elevated structure from 95th Street Terminal to 119th Street, then at-grade (ground level) tracks from 119th Street to 130th Street

120th Street Yard and Shop

RED AHEAD

Red Line Extension

Anticipated Project Impacts

Feedback required from the public on:

- Parks
- Property displacements
- Visual
- Noise
- Community character
- Wetlands
- Historic properties

RED AHEAD

Red Line Extension

Parks

Parklands Affected by UPRR Rail Alternative Options			
Parkland	East Option	ROW Option	West Option
Wendell Smith Park	0.4 acres	0.2 acres	0.2 acres
Fernwood Parkway	-	-	1.9 acres
Block Park	0.8 acres	-	-
Total	*1.2 acres*	*0.2 acres*	*2.1 acres*

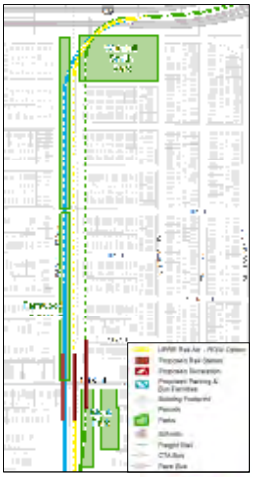

Mitigation Strategies

Coordination with Chicago Park District is ongoing to identify mitigation including improvements to other parklands or replacement nearby if there are any displacements

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RED AHEAD

Red Line Extension

Property Displacements

Construction of the project would require the acquisition of private property

Potential Permanent Displacements by Alternative					
	UPRR			Halsted	BRT
	East Option	ROW Option	West Option		
Affected Parcels without Building Displacements	149	112	144	72	49
Affected Parcels with Building Displacements	110	22	51	38	3
(Residential Building Displacements)	*(95)*	*(17)*	*(30)*	*(17)*	*(1)*
Total Affected Parcels	259	134	195	110	52

Impacts presented are
- based on Conceptual Engineering and represent maximum impacts on all alternatives
- for the purposes of comparing alternatives and will be confirmed in the Final EIS following more detailed conceptual design of the single NEPA preferred alternative

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RED AHEAD

Red Line Extension

Property Displacements

All major transit construction projects have impacts:

- The Brown Line Expansion had 40 building displacements
- The RPM project (Phase 1) may displace 19 buildings

Mitigation Strategies

Property owners would be paid not less than fair market value for their land and buildings and may be eligible for compensation equal to the original purchase price of the property. They would also be assisted in relocating their businesses or dwellings, per the Federal Uniform Act on relocation assistance and property acquisition.

When a single option is chosen, CTA will work with the community and property owners (including the UPRR) to minimize property impacts.

RED AHEAD

Red Line Extension

Visualizations

UPRR Rail Alternative

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

Existing

UPRR West Option

UPRR East Option

Visualization

RED AHEAD

Red Line Extension

Visualizations

Halsted Rail Alternative

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

Existing

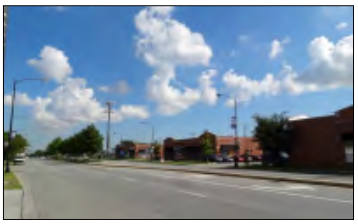

Visualization

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RED AHEAD

Red Line Extension

Visual Impacts

Mitigation Strategies

- Provide new landscaping or other urban design amenities
- New structures would reflect the character of neighborhoods or communities to the extent feasible
- Careful placement of exterior lighting adjacent to residential communities
- Construction best management practices including maintaining vegetation and debris-free construction areas

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RED AHEAD

Red Line Extension

Noise

Mitigation Strategies

- Continuous welded rail
  Fewer joints mean a smoother and quieter ride
- Closed deck structure
  Limits noise beneath the elevated tracks
- Noise barriers
  Absorb railway noise

Open versus Closed Deck

Jointed versus Welded Rail

Noise Barriers

Moderate noise impacts would remain along the Halsted Rail Alternative after mitigation.

RED AHEAD

Red Line Extension

Temporary Construction Impacts

Mitigation Strategies

- Notices of noise-generating activities would be posted
- Road closures would be announced
- Special advertising for affected businesses
- Limited idling of construction vehicles
- Alternative parking provisions

RED AHEAD

Red Line Extension

Where Minimal Impacts Would Occur

- Land use
- Safety & security
- Environmental justice
- Energy
- Transportation
- Water resources
- Biological resources
- Hazardous materials
- Air quality

RED AHEAD

Red Line Extension

Project Funding

- CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community.
- The New Starts process is very competitive and funds are limited.

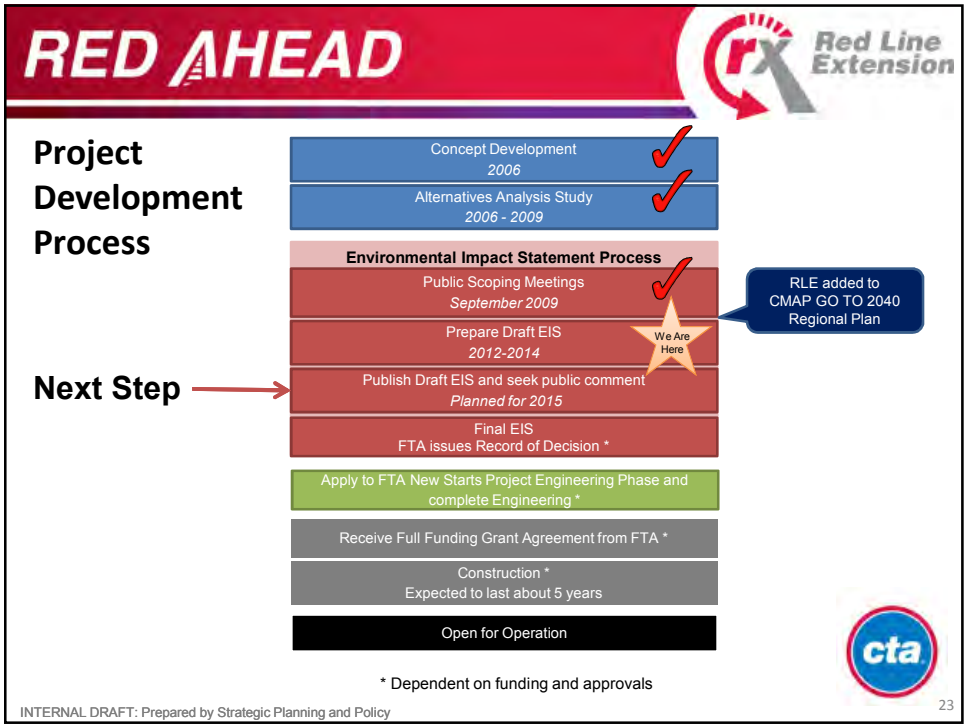
RED AHEAD
Red Line Extension
Project Development Process
Concept Development
2006
Alternatives Analysis Study
2006 - 2009
Environmental Impact Statement Process
Public Scoping Meetings
September 2009
Prepare Draft EIS
2012-2014
We Are Here
RLE added to CMAP GO TO 2040 Regional Plan
Next Step
Publish Draft EIS and seek public comment
Planned for 2015
Final EIS
FTA issues Record of Decision *
Apply to FTA New Starts Project Engineering Phase and complete Engineering *
Receive Full Funding Grant Agreement from FTA *
Construction *
Expected to last about 5 years
Open for Operation
* Dependent on funding and approvals
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23

Meeting Notes

Date: Tuesday, April 29, 2014

Meeting: CTA with Chicago Neighborhood Initiatives and Greater Roseland Chamber of Commerce

Meeting Purpose: CTA to share RLE Project updates

Present:
Andrea D. Reed, Greater Roseland Chamber of Commerce
Anthony Beckham, Office of Congresswoman Robin Kelly
Jason Swan, Chicago Neighborhood Initiatives
David Doig, Chicago Neighborhood Initiatives
Carole Morey, Chicago Transit Authority
Gerald Nichols, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority
Melissa Williams (note taker), CWC Transit Group

Time: 10:03 am to 10:52 am

Location: Chicago Neighborhood Initiatives, 1000 E. 111th St., Chicago, IL

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served far south side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by adding construction jobs and increasing access to jobs.

- **CTA is preparing an Environmental Impact Statement (EIS)**
  CTA has been evaluating the project alternatives and is preparing a Draft EIS, which will analyze the potential positive and negative environmental impacts of construction and operation of each alternative and will propose mitigation measures to minimize potential negative impacts.

- **RLE Project Alternatives and Potential Impacts**
  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a bus rapid transit (BRT) alternative along Michigan Avenue, and the No Build Alternative. Potential project impacts include impacts to parks, property displacements, visual impacts, noise impacts, community character, wetlands, and historic properties.

- **Funding and Next Steps**
  The CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

Questions and Comments from Meeting Participants

- **Anthony Beckham: An article in the Chicago Sun-Times stated that CTA will receive $2B in funding for this project. How accurate is that statement?**
  Carole Morey: The cost of the project has been estimated at approximately $2.3B. The cost depends on the actual route that will be selected. That estimate is based on the Locally Preferred Alternative which is the UPRR Rail Alternative.

- **Anthony Beckham: Will CTA seek funds from the TIGER grant?**
  Carole Morey: In order for CTA to become eligible for a full funding grant agreement from Federal Transit Administration (FTA), the NEPA process and preliminary engineering have to be completed and local funding has to be committed.

- **Jason Swan: Regarding the UPRR Alternative, it appears that the only viable route is the West Option? Is it possible to acquire part of a particular alternative?**
  Carole Morey: No, a specific option will have to be selected.

- **David Doig: What are the alternative options?**
  Carole Morey: The four alternatives are UPRR Rail Alternative, Halsted Rail Alternative, BRT Alternative, and No Build Alternative.

- **David Doig: What main streets are near the East Option?**
  Sonali Tandon: The East Option is between Wentworth and the Union Pacific railroad.

- **Anthony Beckham: With the line coming from the 130th Street area, has there been any communication with the Altgeld Gardens community?**
  Gerald Nichols: Yes, a meeting was held with the community group. Another meeting is scheduled for the near future.

- **Jason Swan: Will there be employment opportunities for the community during construction phase? One issue that will be posed is that most of the jobs are union. The people from the area are not part of the union.**
  Gerald Nichols: Yes. CTA will make sure that jobs are available to those in the community as it did for the Red Line South project. It is important for the community to be involved with the process because these concerns can be expressed to the unions.

- **Anthony Beckham: What other community groups have been engaged in this process?**
  Gerald Nichols: Developing Communities Project has been involved. CTA will be meeting with the group tomorrow.

- **Jason Swan: What church organizations if any have been engaged in this process?**
  Gerald Nichols: CTA is working on engaging the various community churches. It is CTA's understanding that Developing Communities Project has over 130 churches within its organization.

- **Jason Swan: What is the project construction process? Will the City be the general contractor and have subcontractors bidding on the various scopes?**
  Gerald Nichols: No. There will be a bidding process to select the general contractor. The project bidding process will be similar to that of the Red Line South project.

- **Anthony Beckham: What is the target date for construction?**
  Carole Morey: It is a challenge to put a date in place because there are other items that have to be completed before securing a funding grant agreement from FTA.

  Jason Swan and Anthony Beckham: CTA should have renderings for all alternative routes displaying before and after visuals. The drawings should also show bus routes and current and potential businesses.

  Jason Swan: CNI is available to help galvanize community support. It has extensive involvement with the community in building of the local Walmart in the Pullman community.

Follow Up

CTA will keep communication lines open and consider issues discussed during this meeting in the upcoming Draft EIS.

CTA RED LINE EXTENSION
04.29.2014
1000 E 111th Street, CHICAGO

NAME	ORGANIZATION	SIGN
Sonali Tandon	CTA	Sonali
Andrea D. Reed (773) 785-4000	Greater Roseland Chamber of Commerce grccworking01@yahoo.com	Andrea D. Reed
Melissa Williams	CDM Trial	Melissa Williams
Anthony Beckham	Cong. Kelly Office	
JASON SWAN	CHICAGO NEIGHBORHOOD INITIATIVES	
David Doig	CDI	

Meeting Notes

Date: Wednesday, April 30, 2014

Meeting: CTA with Developing Communities Projects (DCP)

Meeting Purpose: CTA to share RLE Project updates

Present:
Renett Arrington, I Have A Voice
Phyllis Johnson, 95th St. POD
Godfrey Lawson, Roseland Chamber of Commerce
Lillie Muhammad, Medical POD
Fred Jackson, 130th POD
Rev. Paul Brown, 103rd POD
Rev. J. Leon Thorn, 95th St. POD
Michael LaFargue, West Chesterfield Community Association (WCCA)
Mariann McGill, TCA Health Inc.
Cherneecia Muhammad, 95th St. POD
Tiffany D. Hightower, DCP
Katherine Thornton, DCP
Deborah L. Truss, DCP
Rev. Rayford Grady, DCP
Michael McLaughlin, Chicago Transit Authority
Gerald Nichols, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority
Melissa Williams (note taker), CWC Transit Group

Time: 11:23 am to 1:32 pm

Location: Developing Communities Project, 212 E. 95th Street, Chicago, IL

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served far south side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at

all stations. The project would encourage economic development and benefit the community by adding construction jobs and increasing access to jobs.

- **CTA is preparing an Environmental Impact Statement (EIS)**
  CTA has been evaluating the project alternatives and is preparing a Draft EIS, which will analyze the potential positive and negative environmental impacts of construction and operation of each alternative and will propose mitigation measures to minimize potential negative impacts.

- **RLE Project Alternatives and Potential Impacts**
  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a bus rapid transit (BRT) alternative along Michigan Avenue, and the No Build Alternative. Potential project impacts include impacts to parks, property displacements, visual impacts, noise impacts, community character, wetlands, and historic properties.

- **Funding and Next Steps**
  The CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community. Once the CTA completes the EIS, a public hearing will be held to share the findings of the EIS.

Questions and Comments from Developing Communities Project (DCP)

- **Rev. J. Leon Thorn: Where will the proposed rail yard will be located?**
  Michael McLaughlin: The yard and maintenance facility will be located at the south end around 120th Street to 127th Street. It is not a residential area and currently has industrial, railroad, and MWRD properties.

- **Phyllis Johnson: What is CMAP? What is the website address?**
  Michael McLaughlin: CMAP is the acronym for the Chicago Metropolitan Agency for Planning (CMAP). In short, the agency integrates planning and land use for the seven counties. The website is www.cmap.illinois.gov
  Sonali Tandon: RLE is the only fiscally constrained extension project in the CMAP 2040 regional plan.

- **Rev. Paul Brown: Is there a time limit on the completion and submission of the EIS? What is CTA's estimated timeframe?**
  Michael McLaughlin: Once CTA enters into the Project Development stage by submitting a letter to FTA, it has two years to complete the EIS. As of now, there is no time limit because the letter has not been submitted to FTA; the Draft EIS has to be completed first. The estimated timeframe is about 3 years to complete the Draft and Final EIS.
  Sonali Tandon: CTA plans to publish the Draft EIS next year. It typically takes 2 years to complete the final EIS with preliminary engineering.

- **Rev. Paul Brown: This project can not move forward until 3 to 5 years from now because the EIS has to be completed?**
  Michael McLaughlin: CTA is working to complete the Draft EIS and has biweekly coordination calls with Federal Transit Administration (FTA) on the project. EIS is FTA's document and requires coordinating with them. Once the environmental work and preliminary engineering (which involves 30% design) is finished, the Final EIS can be completed.

- **Phyllis Johnson: Why does 30% of design have to be completed in order to create the document?**
  Michael McLaughlin: You need to complete about 30% design to complete the Final EIS as some of the information is needed for the Final EIS.

- **Lillie Muhammad: Please clarify the purpose of this meeting.**
  Michael McLaughlin: The purpose of this meeting is two-fold. First, CTA wants to inform the group of items that will be discussed at the public meeting. Secondly, information and feedback from these types of meetings help inform the EIS. CTA has met and will meet with other groups to get feedback.

- **Michael LaFargue: Is money available and budgeted for costs related to the 30% design phase and the creation of the EIS?**
  Deborah L. Truss: Is this cost separate from the estimated project cost of $2.3B?
  Michael McLaughlin: The $2.3B is inclusive of soft costs that include engineering and consultant costs. A budget is being put in place for the extensive cost relative to the preliminary engineering. CTA will seek funding for this process.
  Sonali Tandon: There is prior funding available that will be used for costs associated with drafting the EIS which is planned to be published next year.

- **Deborah L. Truss: Is this project shown on CTA's budget?**
  Michael McLaughlin: DCP has raised this concern previously. The budget writers are taking it into consideration. As of today, the budget does not show projects that are in the planning process. That does not mean that the budget structure cannot be changed.

  > Rev. Paul Brown: Please understand our concern. If these items are not shown, there is a great possibility that this project will be lost over the time period it will take to complete the EIS. The community feels that this project has been set aside while other projects in other communities are constantly being reported on in the newspapers as being completed. If this project is shown as a line item in the budget, it will not get lost. The community does not want to wait another 50 years before this project is done.
  > Deborah L. Truss: CTA will display good faith if the project is shown as a line item even if the amount is $0.
  > Fred Jackson: The project is not as transparent as it should be. The project should be shown as a line item in the budget.

- **Deborah L. Truss: Will the Metra – South Shore or Metra Electric tracks be used for the extension?**
  Michael McLaughlin: The Metra tracks will not be used but will be near the RLE tracks. CTA trains are different from those of Metra.

- **Lillie Muhammad: What parks would be affected? With the replacement of parks, has there been consideration as to where they will be relocated?**
  Michael McLaughlin: Wendell Smith Park, Fernwood Parkway, and Block Park would be affected depending on the alternative and option selected. Parks could be replaced if there are vacant parcels. The West Option will affect Fernwood Parkway and the East Option would impact Wendell Smith Park and Block Park.
  Sonali Tandon: A park would be replaced only if the entire park is affected. If only a small portion would be affected, other mitigation methods will be considered.

- **Rev. Paul Brown: Residents are concerned about displacements and how displacements would affect them as property owners, residents, and those who are leasing. Is there a process in place that assesses fair value and assist them with moving to an area that is conducive to their living?**
  Michael McLaughlin: When the NEPA preferred alternative route has been chosen and the affected parcels have been identified, property owners, renters, and business owners will be assisted in relocating. The Federal Uniform Relocation Act will be followed. If the property value has decreased, the fair value or purchase price could be granted.

- **Godfrey Lawson: Will future potential property value such as the Obama Library or the Chicago port system in the Altgeld Gardens area be factored into assessing property values relative to eminent domain?**
  Rev. Paul Brown: Will the mitigation strategies, relocation process, and means of assessing fair value be itemized in the Draft EIS?
  Michael McLaughlin: The Federal Uniform Relocation Act has to be followed for assessing fair value. This information is not included in the Draft EIS. Pamphlets will be made available at the public meeting regarding the Federal Uniform Relocation Act.
  > Mike Lafarge: Land development and business development coordinators should look into the Uniform Act and do research because there is such a concern for those who are upside down with their mortgage. Also, a challenge has been posed to home owners who have paid their house off 10 to 20 year ago and now would have to relocate to something comparable.

- **Deborah L. Truss: Are there drawings available that show the proposed alternative routes with enough detail to display elevations and properties that would be affected?**
  Michael McLaughlin: Additional information, maps and visuals will be displayed during the public meeting

- **Rev. Paul Brown: How will the public meeting be set up? Will information be gathered through a survey where tabulations can be made? Will there be mailings?**
  Sonali Tandon: There will be no mailings. Information similar to what is being presented today but with more detail will be available at the public meeting. CTA staff will be available to answer specific questions and talk one-on-one. Additional maps and visuals will be available.
  > Deborah L Truss: The PODS which are part of DCP should be the focus group for this project. The group should review the maps prior to being made available to the public. The PODS/DCP can help better prepare CTA for a town hall forum.

- **Lillie Muhammad: Has a strategy been put into place as to how the public will be addressed? Especially those who are affected by this transformation.**
  Michael McLaughlin: Feedback is welcome as the strategy is being formulated. Once the NEPA preferred alternative route is chosen, the affected parcels will be identified. Notification will then be released to affected persons. Relocation options and rights will be explained.

- **Rev. Paul Brown: Will the community have input in choosing the alternative route? What method has been put in place to evaluate the community's opinions?**
  Sonali Tandon: There will be comment cards at the open houses on which community can provide their feedback on alternatives. Results are documented and will be included in the EIS. Once the Draft EIS is published, there will be a formal hearing. A court reporter will be present at that hearing to record public comments. The route will be chosen based on public feedback and technical environmental analysis.
  > Michael LaFargue: A real survey is a cost but can be beneficial. A questionnaire type of survey that can be documented needs to be done and analyzed by a real statistician.

- **Rev. J. Leon Thorn: Has the Halsted Street Route been eliminated?**
  Michael McLaughlin: The statement was misconstrued. The Halsted route has not been eliminated. The board chose the UPRR Rail Alternative as a Locally Preferred Alternative based on public opinion from 2006.

- **Rev. J. Leon Thorn: What is the durability of the system? The community does not want a system that has to be replaced every 20 years.**
  Michael McLaughlin: There are maintenance measures that are put into place so that the structure would not have to be replaced in a short period of time.

- **Deborah L Truss: Is there a benchmark system similar to Chicago's that is used to determine the longevity of this type of structure?**
  Michael McLaughlin: Philadelphia, Boston, and New York are similar in the category of wear and tear in usage.

- **Tiffany D. Hightower: Is there a budget for maintenance and upgrades?**
  Michael McLaughlin: FTA requires a budget for projected maintenance and upgrades in the financial analysis. FTA must be confident in CTA maintaining the structure. FTA considers this type of project as an investment and do not want to waste federal dollars.

- **Rev. J. Leon Thorn: What is the estimated number of people that will be serviced?**
  Michael McLaughlin: That information is being gathered and will be provided at the public meeting.

- **Deborah L Truss: Will the Project Development Process and Next Steps slides be placed on CTA's website?**
  Sonali Tandon: This information will be placed on the website after the public meeting.

- **Fred Jackson: When will the plan be put in place?**
  Michael McLaughlin: It all depends on the local funding. This group's assistance is needed in securing the local match. Once funding is in place, the sooner the project will begin.

- **Rev. Paul Brown: The local PODS are being tapped into by the county commissioner, aldermen, congressmen, and state senators regarding local community projects. The more CTA communicates with these groups, the more information can be relayed to officials.**
  Michael McLaughlin: On April 17th, public officials were briefed about the project. There are more meetings scheduled in the future. CTA will continue communication regarding the project and its efforts.

- **Phyllis Johnson: What is the process in determining historic properties and community characteristics?**
  Michael McLaughlin: Properties that are eligible to be listed on the National Register of Historic Places are deemed historic properties. Community characteristics are addressed by the composition of homes and businesses in the area.

- **Phyllis Johnson: What consideration is taken from the Department of Planning regarding building and developing areas around the alternate routes?**
  Michael McLaughlin: It is a challenge considering options for building and developing areas when the NEPA preferred alternative route has not been chosen.

- **Rev. J. Leon Thorn: Have Park and Ride facilities been addressed?**
  Michael McLaughlin: All four proposed stations will have park and ride facilities with up to 3,700 total parking spaces. The public will decide if they want them.

- **Rev. Paul Brown: The community feels as if there is no sense of urgency with the RLE but other lines are coming up in other communities.**
  Michael McLaughlin: Previous projects that have been completed did not require an EIS.
  Sonali Tandon: This is the first EIS that CTA is preparing.

- **Deborah L Truss: Has FTA given CTA a timeline to finish the EIS? How will businesses be assessed through eminent domain? Especially, strip malls.**
  Michael McLaughlin: CTA will work with the businesses in helping them find a suitable relocation. CTA will also work with the City of Chicago Planning Department for relocation of any strip malls.

- **Tiffany D. Hightower: DCP will support CTA in its efforts if it provides clarity, transparency, and integrity throughout the process. DCP is requesting:**
  1. **Hardcopy of the report that has all of the public comments**
  2. **FAQ from CTA regarding this project**
  3. **Updated timeline which may include "contingent upon funding"**
  4. **A comparison document of completed projects in Chicago which lists things that are needed to get the project completed**
  5. **A comparison of other mega projects in the USA noting timelines and requirements**

  Deborah L Truss: CTA should use the HUD HOME Investment Partnerships Program FAQ as a guideline for creating its own FAQ.
  Michael McLaughlin: DCP should submit a listing of all of its meetings to CTA.

Follow Up

CTA will keep communication lines open and consider issues discussed during this meeting in the upcoming Draft EIS.

Red Line Extension Draft EIS
CTA – DCP Meeting
DCP headquarters - 212 E 95th St.
April 30, 2014 at 10AM

Sign-In Sheet

Name	Organization	Signature
SONALI TANDON	CTA	
Renett Arrington	I HAVE A VOICE, NFP	
Phyllis Johnson	95TH St POD	
GODFREY LAWSON	ROSEWOOD C.C.	
Melissa Williams	TDM / Trinal	
Lillie Muhammad	Medical POD	
FRED JACKSON	130th POD	
REV PAUL BROWN	103RD ST POD	
Rev. J. Leon Thorn	St. James 95th St Pod	
Michael E. Hagan	WCCA	
Mariann McGill	TCA Health	MMcgill@tcahealth.org
Cherneecia Muhammad	95th St. POD	
Tiffany D. Hightower	DCP, Inc.	
Katherine Thornton	DCP	
DEBORAH L. TRUSS	DCP/CTA RLEP BUS. DEVELOPMENT PROJECT MGR	
Rev. Paxton J. Grant	DCP - Pres.	
Gerald Nichols	CTA	
Michael McLaughlin	CTA	

Meeting Notes

Date: Tuesday, May 6, 2014

Meeting: CTA with Golden Gate Homeowners Association, People for Community Recovery, and Altgeld Local Advisory Council

Meeting Purpose: CTA to share RLE Project updates

Present:
Gwenda Hoskins, People for Community Recovery
Georgia Curtis, People for Community Recovery
Marguerite Jacobs, People for Community Recovery
Naomi Allen, Altgeld Local Advisory Council
Sharon Davis, Altgeld Local Advisory Council
Doris Martin, Golden Gate Homeowners Association
Cheryl Johnson, People for Community Recovery
Deloris Lucas, Golden Gate Homeowners Association
Regina Scott
Christian Strachan, People for Community Recovery
Kevin O'Malley, Chicago Transit Authority
Gerald Nichols, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority
Melissa Williams (note taker), CWC Transit Group

Time: 12:41 pm to 1:50 pm

Location: Chicago Youth Center, 951 East 132nd Place, Chicago, IL

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served far south side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by adding construction jobs and increasing access to jobs.

- **CTA is preparing an Environmental Impact Statement (EIS)**
  CTA has been evaluating the project alternatives and is preparing a Draft EIS, which will analyze the potential positive and negative environmental impacts of construction and operation of each alternative and will propose mitigation measures to minimize potential negative impacts.

- **RLE Project Alternatives and Potential Impacts**
  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a Bus Rapid Transit (BRT) Alternative along Michigan Avenue, and the No Build Alternative. Potential project impacts include impacts to parks, property displacements, visual impacts, noise impacts, community character, wetlands, and historic properties.

- **Funding and Next Steps**
  The CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

Questions and Comments from Meeting Participants

- **Deloris Lucas: What are the names of the streets associated with the 130th Street Station options?**
  Sonali Tandon: South Station Option – Ellis Avenue; West Station Option – MWRD property.
  Doris Martin: It would be best if the station could be placed in a location where bus routes wouldn't be disturbed, preferably on the side of Altgeld Gardens.

- **Marguerite Jacobs: Have any of the alternatives changed since previous discussions?**
  Sonali Tandon: No, the alternative routes are the same.

- **Marguerite Jacobs: What is the low cost alternative?**
  Sonali Tandon: The Bus Rapid Transit Alternative is the low cost alternative.

- **Georgia Curtis: What parks would be affected if the West Option is selected?**
  Sonali Tandon: Fernwood Parkway and Wendell Smith Park would be affected. Only the jogging area of Wendell Smith Park would be affected.

- **Deloris Curtis: Where are the affected parks located?**
  Sonali Tandon: Block Park is located near the Roseland pumping station; Fernwood Parkway is located between 103rd and 99th Street, next to Eggleston Avenue; Wendell Smith Park is located just south of I-57.

- **Marguerite Jacobs: Will parking be available?**
  Sonali Tandon: Yes, parking would be available at the four designated stations.

- **Gwenda Hoskins: How many homes will be affected along the East Option? A visual should be provided.**
  Sonali Tandon: Approximately 95 residential buildings would be displaced by the East Option.

- **Marguerite Jacobs: Are the homes that will be affected vacant? Will newly built structures be affected? Will CTA pay homeowners for their property?**
  Sonali Tandon: Approximately 95 residential buildings would be displaced by the East Options, which includes vacant homes. The number of vacant homes is not available. CTA is required to follow the Federal Relocation Act - homeowners will be compensated for their property.
  Doris Martin: Most of the buildings along this route are abandoned. There do not appear to be any newly built structures along this path.

- **Cheryl Johnson: Will the project be completed before 2016?**
  Sonali Tandon: The Final EIS and Preliminary Engineering have to be completed and funding has to be secured in order for construction to begin.

- **Cheryl Johnson: Could this project have both public and private funding?**
  Sonali Tandon: That is an option at this time.

- **Christian Strachan: How many people would ride between 130th and 95th Street?**
  Sonali Tandon: There will be approximately 13 million rides annually, both ways, on the new segment.

- **Marguerite Jacobs: Will bus and train fares increase?**
  Gerald Nichols: CTA does not use fares to fund capital projects; this is a capital project.

- **Christian Strachan: How is CTA coordinating with bus routes to avoid long waiting periods?**
  Kevin O'Malley: Logistics will be planned once the route is selected. CTA is too early in the process to work out those details.

- **Cheryl Johnson: What is CTA's preferred route?**
  Sonali Tandon: Based on the community feedback, the CTA Board adopted the UPRR Alternative as the Locally Preferred Alternative.

- **Cheryl Johnson: What can constituents do to voice their opinions? With which political officials have CTA spoken?**
  Gerald Nichols: CTA has briefed Aldermen from the 6th, 8th, 9th, 21st and 34th wards. CTA has also spoken to congressmen. We need the people to come to the public meeting to express their concerns. Comment cards will be available.

Follow Up

CTA will keep communication lines open and consider issues discussed during this meeting in the upcoming Draft EIS.

Red Line Extension Meeting

Sign-in Sheet.

05.06.14
951 East 132 Place, CYC

Name	Organization	Signature
Gwenda Hoskins	P.C.R.	Gwenda Hoskins
Georgia Curtis	PCR	Georgia Curtis
Marguerite Jacobs		Marguerite Jacobs
Naomi Allen		Naomi Allen
Sharon Davis		Sharon Davis
Doris Martin	GGHOA	Doris Martin
Melissa Williams	1 Right	Melissa Williams
Cheryl Johnson	PCR	Cheryl Johnson
Deloris Lucas	GGHA	Deloris Lucas
Kevin O'Malley	CTA	Kevin O'Malley
Regina Scott		Regina Scott
Christian Strachan	PCR	
Sonali Tandon	CTA	Sonali..
Gerald Nichols	CTA	

Meeting Notes

Date: Wednesday, May 7, 2014

Meeting: CTA with Rosemoor Community Association (RCA)

Meeting Purpose: CTA to share RLE Project updates

Present:
Nancy Wimberly, Concerned Community Defenders
Eleanor Banks, RCA
Joyce A. Dunmore, RCA
Godfrey Lawson, RCA
Arnold Pugh, RCA
Lola Davis, RCA
Vernetta Rucker, RCA
Angela Ware, RCA
Gloria Cosey, RCA
Janet Poole, RCA
Pat Hight, RCA
Gerald Nichols, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority
Melissa Williams (note taker), CWC Transit Group

Time: 10:04 am to 11:14 am

Location: St. John De La Salle, 10205 S. King Drive, Chicago, IL

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served far south side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by adding construction jobs and increasing access to jobs.

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  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a bus rapid transit (BRT) alternative along Michigan Avenue, and the No Build Alternative. Potential project impacts include impacts to parks, property displacements, visual impacts, noise impacts, community character, wetlands, and historic properties.

- **Funding and Next Steps**
  The CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

Questions and Comments from Meeting Participants

- **Arnold Pugh: Would the structure along Halsted Street be elevated?**
  Sonali Tandon: Yes. The tracks would be positioned on elevated structures. Columns would be placed to avoid interfering with traffic lanes.

- **Godfrey Lawson: What types of businesses are located near the proposed Halsted Street structure that would be affected?**
  Arnold Pugh: This route is a positive for business because they would have exposure to more visitors.

- **Vernetta Rucker: Where would parking be located for the surrounding businesses?**
  Sonali Tandon: Street parking would remain available between the columns.

- **Arnold Pugh: Moving forward it would be beneficial to have the addresses of the affected parks.**
  Sonali Tandon: Yes, that will be included in the Draft EIS.

- **Godfrey Lawson: There are plans for economic development on the south side of Chicago. Relative to eminent domain, would future value be considered when acquiring property to build the RLE?**
  Sonali Tandon: CTA is required to follow the Federal Relocation Act when compensating property owners.
  Janet Poole: Property owners might not be at an advantage with fair market value. Owners might be able to yield more from selling the property on their own.

Arnold Pugh: Property owners are concerned that they would not receive the same value in property and community once they have been relocated.

- **Nancy Wimberly: Does the CTA have a list of all addresses of homes and businesses that would be affected? Regarding CTA's Relocation Consultant, Melody Carvajal: What is her job description? What is her salary? What are her credentials? Why isn't her voicemail box set-up?**
  Sonali Tandon: The CTA does not have a relocation consultant for this project because it is still early in the process.
  Nancy Wimberly: CTA should engage someone now to help the community with relocating. Owners need to prepare themselves for losing their homes.
  Sonali Tandon: There are four alternatives that have been presented and one must be selected. Once the preferred alternative has been selected, CTA would contact the property owners to discuss next steps. CTA is trying to be judicious in its communication with the community.

- **Gloria Cosey: When would the route be selected?**
  Sonali Tandon: The Draft EIS is expected to be published in 2015. CTA will then prepare the Final EIS on a single route. The Final EIS is expected to take two years from start to completion.
  Nancy Wimberly: CTA should engage someone now to help the community with relocating. Owners need to prepare themselves for losing their homes.

- **Nancy Wimberly: CTA should release names of all contractors with contract amounts and the demographics of the workforce.**
  Gerald Nichols: This information isn't available for the RLE because construction has not started.
  Godfrey Lawson: This organization will be contacting the black contractors now so that they can be in alignment when the time comes.

- **Janet Poole: Will contractors that have only held $500,000 contracts be afforded opportunities to bid on a $1M+ contract?**
  Gerald Nichols: Yes, CTA engages small contractors in working on its projects.

- **Angela Ware: How far in advance will the RFP be released?**
  Gerald Nichols: Contractors will have ample amount of time to bid. Contractors can go online now and see a listing of all jobs that are available now. It is called JOC.

Follow Up

CTA will keep communication lines open and consider issues discussed during this meeting in the upcoming Draft EIS.

Red Line Extension Project
Community Group Meeting – Rosemoor Community Association
DATE: 05/07/2014
LOCATION: 10205 S. King Drive

Name	Organization	Email Address
Melissa Williams	CDM/ Trinal	mwilliams@trinalinc.com
Sonali Tandon	CTA	
Nancy Wimberly	Concerned Community Defenders	9137psnw@sbcglobal.net
ELEANOR BANKS,	10505 S. Cal	773-785-2704
JOYCE A. DUNMORE	10321 SO. CALUMET AVE	Jdunmore@wowway.com
GODFREY LAWSON	10019 E. EBERHART	lawsong411.aol
Arnold Pugh	12257 S. Perrie Ave	appugh@AmericaTech.net
LOLA DAVIS	10137 S. EBERHART	davis_lola@sbcglobal.NET
VERNETTA RUCKER	10278 S. Calumet	
ANGELA WARE	ROSEMOOR C A	rosemoorchicago@yahoo.com
Gloria Cosey	RCA	" "
Janet Poole	RCA	none
Pat Hight	RCA	pathight@yahoo.com

Meeting Notes

Date: Thursday, May 8, 2014

Meeting: CTA with Chicago Park District and Friends of the Parks

Meeting Purpose: CTA to share RLE Project Updates and Parks Impacts

Present:
Erika Sellke, Chicago Park District
Cassandra Francis, Friends of the Parks
Sylvia Jones, Friends of the Parks
Sonali Tandon, Chicago Transit Authority
Virginia Jackson, CWC Transit Group
Jenifer Palmer, CWC Transit Group

Time: 1:00 pm to 2:00 pm

Location: CTA Headquarters, 567 West Lake Street, 10th Floor, Chicago, IL

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served far south side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by adding construction jobs and increasing access to jobs.

- **CTA is preparing an Environmental Impact Statement (EIS)**
  CTA has been evaluating the project alternatives and is preparing a Draft EIS, which will analyze the potential positive and negative environmental impacts of construction and operation of each alternative and will propose mitigation measures to minimize potential negative impacts.

- **CTA is preparing an Environmental Impact Statement (EIS)**
  CTA has been evaluating the project alternatives and has begun to prepare a Draft EIS which will analyze the potential positive and negative environmental

impacts of construction and operation of each alternative and will propose mitigation measures to reduce or eliminated potential negative impacts. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

- **Parks Impacts**
  CTA has been analyzing the potential impacts of the project from a number of different perspectives, including potential for displacements, noise and vibration, effects on historic properties and others, and will mainly discuss findings with respect to parks in the meeting. Based on the analysis, the No Build, BRT, and Halsted Rail Alternative have no associated potential park impacts. All UPRR Rail Alternative options would impact Wendell Smith Park due to the overlap with the park and elevated structure/vertical clearances. There would be temporary occupancy of a small portion of the park during construction, but the area underneath the elevated structure would remain open after construction. Depending upon the UPRR Alternative option selected, the acreage impacted varies.

  In addition to potential temporary impacts to Wendell Smith Park from all UPRR Alternative options, the UPRR Alternative East Option would impact Block Park. The affected area includes an isolated portion of the park's open space and a communications tower, which is in an area of the park that does not currently serve a recreational use. The key recreational features of the park, walking trails and benches, are on the other side of Harvard Avenue in the eastern half of the park. While there would be some temporary construction impacts, no permanent incorporation is needed as the area underneath the elevated track structure would remain open after construction.

  In addition to potential temporary impacts to Wendell Smith Park from all UPRR Alternative options, the UPRR Alternative West Option would impact Fernwood Parkway. The West Option alignment would run through two of the four parcels that make up Fernwood Parkway between 101st and 103rd Streets and would affect about 1.9 acres of the park. Temporary closure of the section of the park overlapped by the elevated structure would be necessary during construction. Public use of the park could resume after construction, as long as the area underneath the elevated structure is reopened. However, much of the park between 101st and 103rd Streets would be permanently overlapped and shaded by the structure. Concrete aerial supports would be placed permanently in the park space. The West Option would result in a permanent incorporation of the park space and if this option is selected, CTA would work with the Chicago Park District on appropriate mitigation. Some options have already been discussed with the City, including creating replacement park space nearby and/or adding enhanced recreational features to improve Fernwood Parkway's functionality as a park. The end result would potentially be a net benefit for park users.

Questions and Comments from Meeting Participants

- Discussion followed regarding appropriated funds for project development and Sylvia Jones noted that it was her understanding that $1.5 Billion was to be appropriated in 2009 for the Red Line Extension. CTA stated that funding for the EIS planning study had been received and was used to fund this portion of the project. Once the Final EIS is submitted and a Record of Decision is determined by the Federal Transit Administration (FTA), the project would become eligible under the federally competitive New Starts grant funding. Local and state funding would be needed to secure federal funding.

- Sylvia Jones asked about the future parking fee for the proposed park and ride facility. This has not yet been determined by CTA and would be dependent upon the alternative and option selected to move forward. As the project advances, CTA will further evaluate the size and scale needed for the park and ride facilities.

- CTA asked about any areas of community concern with regard to the potential for park impacts of proposed alternatives. Discussion followed regarding specific parks in the surrounding community. Sylvia Jones asked about impacts to Princeton Park and Trinity Church. Based on review of study area mapping, these facilities are located near 95th Street, east of Eggleston. CTA noted that these areas are outside of the proposed alternatives alignments and study area. Similarly, CTA was asked whether the study reviewed potential impacts to Kensington Park. CTA noted that this had been reviewed but was outside of the area of potential effect.

- Sylvia Jones noted that Carver Park in Altgeld Gardens is a good example park in the area.

- Cassandra Francis asked that Major Taylor Bike Trail be added to the park impacts mapping, as appropriate. Major Taylor Bike Trail is not impacted by the project, but should be shown for reference purposes.

- Discussion followed regarding potential impacts from all UPRR Alternative options on Wendell Smith Park. It is understood that this is not a permanent incorporation and that only a small portion of parkland is affected. However, Ms. Francis noted that leaving the area of overlap between the park and elevated structure afterwards does change the nature of the park use.

- Cassandra Francis had concerns about impacts to parks from the UPRR Alternative options and noted that replacement of parks should be considered as part of the mitigation efforts for Block Park as well as Fernwood Parkway. CTA explained that the portion of Block Park that would be impacted is not used for recreational activity currently and does not contain any amenities. If the UPRR West Option is selected and Fernwood Parkway is impacted, CTA would work with the Chicago Park Department on appropriate mitigation, including creating replacement park area nearby and other amenities.

- Ms. Francis noted that she would like to work with Erika Sellke at the Chicago Park Department to conduct a field visit of the potentially impacted parks and determine ways to enhance compact, integrated park areas within the project study area.

Follow Up

CTA Government and Community Relations staff will provide Ms. Jones with a copy of the Section 106 (Historic) Effects Report.

Friends of the Parks and Chicago Park Department staff will further coordinate a field visit to discuss the potential impacts on parks and appropriate mitigation. CTA offered to coordinate and be part of these field visits if desired.

Friends of the Parks will look for other properties in the area that could be used for parkland mitigation.

Red Line Extension Project
Community Group Meeting
DATE: 05/08/2014
LOCATION: CTA HQ - 567 W Lake Street

Name	Organization	Email Address
Sonali Tandon	CTA	standon@transitchicago.com
Sylvia Y. Jones	Friends of the Parks	elohimINC@SBCglobal.Net
ERIKA SELLKE	Chicago Park District	erika.sellke@chicagoparkdistrict.com
CASSANDRA FRANCIS	FRIENDS OF THE PARKS	FRANCISC@FOTP.ORG
JENNIFER PALMER	CWC	palmerjs@cdmsmith.com
Virginia Jackson	CWC	

Meeting Notes

Date: Tuesday, May 13, 2014

Meeting: CTA with Roseland Manor

Meeting Purpose: CTA to share RLE Project updates

Present:
Idamae McKinney, Roseland Manor
Blythe Wood
Frank Thomas, Roseland Manor
Diane Elem
Roberta Walker
Paula Evans, Roseland Manor, All Saints
Frankie A. Parker
Dorothy White
L. Williams
Roberta Harmon
Gerald Nichols, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority
Tammi Davis (note taker), CWC Transit Group

Time: 10:35 am to 11:15 am

Location: Roseland Manor, 11717 S. State Street, Chicago

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served far south side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by adding construction jobs and increasing access to jobs.

- **CTA is preparing an Environmental Impact Statement (EIS)**
  CTA has been evaluating the project alternatives and is preparing a Draft EIS, which will analyze the potential positive and negative environmental

impacts of construction and operation of each alternative and will propose mitigation measures to minimize potential negative impacts.

- **RLE Project Alternatives and Potential Impacts**
  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a bus rapid transit (BRT) alternative along Michigan Avenue, and the No Build Alternative. Potential project impacts include impacts to parks, property displacements, visual impacts, noise impacts, community character, wetlands, and historic properties.

- **Funding and Next Steps**
  The CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

Questions and Comments from Meeting Participants

- **How will the best option be determined?**
  Sonali Tandon: CTA is hosting a public Open House in Pullman Park tonight. Based upon the Environmental Analysis and public feedback, CTA will be designating a single alternative in the next step. Your feedback is very important at this point.

- **Are all the alternative options possible at this point?**
  Sonali Tandon: Yes. They are all possible alternatives. The community has shown preference for the option along the Union Pacific Railroad tracks in the past. We are studying all of them currently.

- **Are they going to take a poll? How are they going to determine which option is best?**
  Sonali Tandon: We are doing outreach and getting comments from the public. We'll review those comments from the public. We'll also look at the environmental analysis and impacts of the project. Then, we'll decide on the best alternative based on our analysis and the feedback that we get during this outreach.

- **What is the first stop after 95th Street?**
  Sonali Tandon: 103rd Street is the first stop after 95th Street.

- **There are high schools and houses that have been here for 50 years. What's going to happen?**
  Sonali Tandon: The Union Pacific Railroad tracks are there. We are looking at several options where we can either go to the east or west of the

Union Pacific tracks. We are required to be 50 feet away from the UP tracks for safety considerations which would require some displacements.

- **Mr. Williams: You have been doing this for five years. People are saying that the government does not have the money. How is the community going to get this focused?**
  Sonali Tandon: CTA is currently in the planning phase. We will be pursuing federal and local money for this project. This is a huge project. We estimate the cost to be $2.3 billion. A project of this scale requires intensive planning and time.

- **Mr. Williams: For the money that was just spent on the Red Line, was that used for rehabilitation?**
  Sonali Tandon: That was a very crucial project for CTA because we needed to fix what we already had first before extending. If we build an extension but don't fix the really slow Red Line, then the extension won't work that well.

- **Mr. Williams: How will you get the funding?**
  Sonali Tandon: CTA will be working with the New Starts Program of the federal government that funds such projects. It is very competitive. Different projects from the nation apply for the funding. CTA will be submitting its application for that funding. It only funds up to 50 percent of the project costs. The rest has to come from local and state sources. We will be working with local aldermen and state officials to acquire that funding so that we can apply for federal funding to get the rest of the match.

- **Why won't they extend the line? It would create more jobs.**
  Sonali Tandon: We need to acquire the right-of-way which is why we have all these impacts. We are required to do this study and to identify those impacts. Projects of this scale take time. I understand your concern that it's been on the table for a while.

- **Ms. Harmon: What about the historical value and background of the buildings?**
  Sonali Tandon: As part of the environmental document, we are required to look at historic buildings and if there are any effects on the historic buildings. We are working with the Federal Transit Authority, State Historic Preservation Officer, and local community organizations that specifically work on historic buildings to identify the risk effects. We look at the proposed alignment to see if there are any historic buildings that have already been identified or if there are buildings that could be historic. There is specific guidance on that from the federal government on what could be historic. We then look at the projects effects on those resources. There will be more information at tonight's Open House on historic buildings specifically and historians will be there if you have additional questions.

- **Where is tonight's meeting?**
  Sonali Tandon: The meeting is at Pullman Park. Most of the information provided will be similar to what we presented today. There will be some additional information given and an opportunity to talk one-on-one with CTA staff. If you have more specific questions, we'll have comment cards there for you to provide your feedback.

- **Mr. Thomas: Do you have the land already checked out that you are trying to use?**
  No, we don't have the land currently because we can't go on the railroad right-of-way. We need to acquire properties for the right-of-way.

- **Mr. Thomas: You need permission to do it, right?**
  Sonali Tandon: We need to complete this environmental document first. Then we'll have permission to acquire that land. South of 119th street, there are some old railroad tracks that we may be able to use.

- **Mr. Thomas: You can tie into those railroad tracks?**
  Sonali Tandon: Exactly.

Follow Up

CTA will keep communication lines open and consider issues discussed during this meeting in the upcoming Draft EIS.

Red Line Extension Project
Community Group Meeting
DATE: 05.13.14
LOCATION: ROSELAND MANOR

Name	Organization	~~Signature~~ EMAIL.
SONALI TANDON	CTA	~~[illegible]~~ standon@transitchicago.com
Tammi Davis	CWC ~~CDM/TRINAL~~	tdavis@trinalinc.com
Idamae M[illegible]	Roseland Manor	
[illegible]		
[illegible]	ROSELAND MANOR	
Duane Elem	11722 So. State	
Roberta Walker	11701 S. State	robertawalker2@yahoo.com
PAULA EVANS	Roseland Manor/ALL SAINTS	Paula Evans - Service Coord.
FRANKIE A. PARKER	11717 S. STATE ST APT 509	FAP1816@GMAIL.COM
Dorothy [illegible]	11717 S. State Apt 111	
[illegible]		
[illegible]	11701 S. State 401	

Meeting Notes

Date: Wednesday, May 14, 2014

Meeting: CTA with Far South Community Development Corp.

Meeting Purpose: CTA to share RLE Project updates

Present:
Abraham Lacy, Far South Community Development Corp.
Leroy Chalmers, Far South Community Development Corp.
Eric Thompson, Pullman Bank & Trust
Tina Sanders, Phalanx Family Services
Nikiesha Emery, Far South Community Development Corp.
Gerald Nichols, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority
Tammi Davis (note taker), CWC Transit Group

Time: 10:08 am to 11:00 am

Location: Kroc Center, 1250 West 119th Street, Chicago

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

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  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a bus rapid transit (BRT) alternative along Michigan Avenue, and the No Build Alternative. Potential project impacts include impacts to parks, property displacements, visual impacts, noise impacts, community character, wetlands, and historic properties.

- **Funding and Next Steps**
  The CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community. Once the CTA completes the EIS, a public hearing will be held to share the findings of the EIS.

Questions and Comments from Meeting Participants

- **Leroy Jones: How lengthy is the environmental process?**
  Sonali Tandon: We started the environmental analysis in 2012 and are preparing a Draft EIS. We hope to publish it next year. After the Draft EIS is published, we'll have a public hearing to get public feedback and comments. We currently have several alternatives that we are analyzing in the Draft EIS. The Final EIS will present a single alternative with additional engineering, which could take two years for a project of this scale.

- **Abraham Lacy: Relative to the Union Pacific Railroad Alternatives, are all of these alternatives going to be elevated? What conversations have happened relative to proximity to freight trains?**
  Sonali Tandon: The elevated structure, rather than at-grade, is proposed in the median of Halsted Street due to safety implications. For the Union Pacific Railroad, we are looking at an elevated structure from 99th to 119th Street. It would be at-grade (ground) level after that. There are also existing unused tracks that we can potentially use. We have had conversations with UPRR. They would like a 50-foot separation from the tracks because of safety reasons.

- **Abraham Lacy: Would you have to build a new track?**
  Sonali Tandon: We would have to acquire right-of-way and would not be able to use the existing UPRR right-of-way. Acquiring right-of-way means taking some property either east or west of the UPRR tracks. The yellow line shown on the presentation is based on the CDOT study that looked at moving UPRR out of this corridor into a separate area. The ROW Option does not look very feasible at this point because of the significant costs and time delays.

- **Abraham Lacy: Regarding Halsted, you mentioned that it wouldn't be at grade level because of safety concerns.**
  Sonali Tandon: Yes, because of the third (electrified) rail being at street level.

- **Abraham Lacy: I've seen it by the Orange Line, on the other side like on the West side, where you have it at grade level, which is a different type of safety precaution.**
  Sonali Tandon: We always get community concerns on the Yellow Line as there is a safety hazard there. We are not looking at building at grade even though it would be cheaper. There are other technologies like light rail. But the concern with that is that if you have a different type of service then it would not be connected to the Red Line. So people would still need to transfer, which defeats the purpose of the project.

- **Leroy Jones: Where is the proposed yard?**
  Sonali Tandon: With the UPRR Alternative, the yard would be north of 130th Street at the MWRD property. With the Halsted Alternative, we are proposing for the yard to be just south of 119th Street. There is a shopping mall there that would be impacted.

- **Abraham Lacy: At 119th Street, you have intermodal opportunities because it connects to the Metra. It's close to shopping and is a busy corridor.**
  Sonali Tandon: We are here to get your feedback and comments. Most of the comments we've gotten are for the UPRR. There has not been a strong preference from the community for Halsted.

- **Leroy Jones: Most people think that the option is going to be elevated on Halsted. I think that that's what turned a lot of people off because they don't want any type of structure in their neighborhood. I think that if something was presented at grade level to them, then they may say "ok." It might even attract businesses to the area.**
  Sonali Tandon: This would be a modern structure. We have some visuals but they are not the final designs. They are just there to help us see what it could look like.

- **Leroy Jones: What were some of the things that people brought up as to why they preferred the UPRR Alternative as opposed to Halsted?**
  Sonali Tandon: Some people felt that it would be more connected to the community and could connect to Altgeld Gardens, which is the public housing development in that area.

- **Abraham Lacy: Are the impacts only for the Union Pacific Railroad Alternative?**
  Sonali Tandon: No, there are impacts for all alternatives. We are coordinating with the State Historic Preservation Officer and community organizations that concentrate on historic buildings. There are historic

properties along Halsted that would be impacted and historic buildings along UPRR that might be impacted. That has been a big concern that has come out of this EIS process. Currently, we have identified four historic properties which would be impacted but they would not be displaced. I encourage you to go to our website for more information.

- **Abraham Lacy: During conversations with the community, what were some of the comments regarding noise, especially around 103rd Street?**
  Sonali Tandon: That could definitely be a concern and was brought up at the Open House yesterday. We haven't analyzed those comments yet. We have heard concerns about the noise in the past. With the mitigation strategies, our analysis shows that there would not be noise impacts along the UPRR Alternative because of the existing train line. Someone from Green Street did express a concern about the noise at the Open House. Green Street has been identified as a Historic District.

- **Leroy Jones: I understand that there was a recommendation for the CTA and the RTA to coordinate their efforts. Is that something that you're looking at or is the CTA going after the funds by themselves?**
  Sonali Tandon: We are coordinated at every level with RTA. For this project, we will apply for federal funds. To apply for federal funds, we will be in a very good position if are able to identify local funds. The federal government will not even look at our application if we do not have a local funds match. That local match will essentially come from state resources.

- **Leroy Jones: Are bonds being considered for the additional funding?**
  Sonali Tandon: CTA and RTA already have bonds to meet state of good repair needs. We'll be looking at all potential sources. The cost is $2.3 billion and we need at least half of that. One additional point, we have done ridership analysis and modeling for this. The modeling shows that it will be mostly existing bus riders that will benefit from and use the new rail line.

- **Abraham Lacy: What will be the outreach regarding construction jobs for local contractors participating in this project? And is there a certain type of certification that they are supposed to have?**
  Gerald Nichols: We'll do the same thing that we did on the Red Line Reconstruction project. The Chicago Urban League was the filtering house for getting young folks in that neighborhood employed on that project. We'll try to filter all of the young folks or individuals from the community to actually work on the project. We'll provide training beforehand as well. A lot of that is going on at the Urban League right now.

- **Abraham Lacy: Are some of the dollars earmarked to go to business in the community and not some large construction firm in the suburbs?**
  Gerald Nichols: Whoever the contractor is, we'll work with the community to ensure that. We set up meet and greets for local businesses with either the prime or subcontractors.

- **Abraham Lacy: But is there a percentage that will be set aside for construction**
  Gerald Nichols: Yes, we don't call it a set aside but we do have goals just like on Red Line South. Like on the station work, the contractor said he would bid 40%. On the track work, it was 28%. They exceeded that number.

- **Abraham Lacy: Was that a local contractor?**
  Gerald Nichols: That was with DBEs. Yes.

- **Abraham Lacy: Were the DBEs from local communities or statewide?**
  Gerald Nichols: That was with African-American firms.

- **Abraham Lacy: Not just African-American firms but this impacts the East Side as well. Just want to make sure that minority interests are involved.**
  Gerald Nichols: Yes.

- **Abraham Lacy: Are you coordinating your efforts with other prospective projects as well? For instance, a developer is trying to open a store at 115th and Michigan. Are you coordinating with developers in that area?**
  Sonali Tandon: We are working with the City. You mentioned 115th & Michigan; an Aldi's was trying to come there.

- **Abraham Lacy: Yes. Aldi's is there. They moved across the street. So another developer is trying to put a store there.**
  Sonali Tandon: We coordinate with the City of Chicago and whatever plans they have will be shared with us for that project.

- **Abraham Lacy: You work with DCP right? UIC?**
  Gerald Nichols: Yes. They had a separate project with UIC years back. They did something with the Chicago Metropolitan Agency for Planning. Last year, CMAP prepared this video which we showed in our open house yesterday. They are one of the many community organizations with whom we work.

- **Abraham Lacy: I think that 111th and 103rd are going to be heavily impacted. I think the DCP is counting on those stations being at 111th and 103rd. What did the coordination look like on your end as far as keeping up to date with them?**
  Gerald Nichols: We're at the table. They consider themselves a partner with us.

- **Abraham Lacy: I read the article that Ald. Beale put out about Halsted that was in the Sun-Times where it said that it was not going to happen having an elevated track on Halsted, which is understandable. I think it would obscure the business corridor. But I think that if there was a visual showing more of a grade level to show people the potential impact, and then it**

would help financially and with attracting new business to the corridor. I think that should be shown as an alternative as opposed to it just being an elevated track in the middle of a community.

- **Leroy Jones: Why would we not consider light rail assuming that at some point the CTA will eventually have to move to light rail?**
  Sonali Tandon: Light rail is not compatible with the rail system that we have now.

- **Abraham Lacy: What impact will there be on the Metra stations?**
  Sonali Tandon: Metra is a participating agency on this project, which means that we coordinate with them in every step of the process. Metra's market is a different market. People who take CTA are still taking the bus to the CTA and not taking Metra from existing different Metra stations. They want frequent service and access to CTA. It's a different market that Metra is trying to serve than what CTA serves. There is a lot of coordination with Metra and Pace. We had Metra and Pace representatives at our meeting yesterday.

- **Abraham Lacy: Regarding the safety aspect and security, we noticed that at a couple of CTA and Metra stations that they are poorly lit. Has it been discussed as to the level of security and coordination with local police departments to enforce a safer environment, especially with people getting off late from work?**
  Sonali Tandon: In this planning process, we look at safety and security and how that can be improved. It will be a section in the Draft EIS, which will be published next year, as well as in the Final EIS. When we get to the Final EIS, we'll solidify the mitigations, which include additional lighting and cameras. Those are the kind of elements that we are analyzing and proposing for the project in this planning phase. As it moves along to the engineering and future phases, those recommendations will get solidified. So, again, all the feedback that we get from the community is very helpful and insightful because the more you speak, the more it will count.

- **Abraham Lacy: When it comes to the nearby stops, there are abandoned buildings near the right-of-way. The last thing residents want to see coming off a stop is an abandoned house. Are you looking at the surrounding radius? What does that radius look like?**
  Sonali Tandon: We anticipate with the urban design and landscaping features that it will be an attractive stop. It will encourage more community activity and more interest for people to move in rather than move out. We have seen increased development and growth along the Brown Line.

- **Abraham Lacy: How many permanent jobs would be created?**
  Sonali Tandon: We haven't looked at the operations jobs, but there will be some once the project is complete.
  Gerald Nichols: On the Dan Ryan/Red Line, about 775 CTA jobs were created. That doesn't include the construction jobs.

- **Leroy Jones: How long will the actual construction project take?**
  Sonali Tandon: We are planning to publish the draft document in 2015. The final document can take up to two years after that. Everything is dependent upon federal funding and approval. If everything goes great, it may take about five years to build it. Before that, we will have the engineering phase, acquiring the right-of-way, which will take about two to three years prior to the five years.

- **Leroy Jones: So, we're looking at about eight years?**
  Sonali Tandon: Yes.
  Gerald Nichols: That's about average for a brand new railroad being built whether the project is here, Baltimore, or New York. That's about average.

- **Eric Thompson: Does CTA have some type of barometer on how the state feels about the project?**
  Gerald Nichols: The state funded the entire Red Line South Project. The entire $425 million was State money.

- **Eric Thompson: How long did it take to get the money from the state?**
  Gerald Nichols: I don't know.

- **Tina Sanders: What percentage is the state bringing to the table for this project?**
  Sonali Tandon: The maximum that that federal government would provide is 50%, but typically they provide 30%. The other 70% – 50% would be needed from local resources.

- **Eric Thompson: Has there been any indication as to what the state or the city is willing to give as far as financial commitments?**
  Gerald Nichols: This project has to be done, so we'll find the money. It's the only line that doesn't extend to the city limits.

- **Abraham Lacy: Is this coordinated with Olive Harvey and the Mayor's Transportation & Logistics Center, which is opening in the fall of this year?**
  Sonali Tandon: We were not aware of it. Do you have any contact information on it?

- **Leroy Jones: I have it.**
- **Abraham Lacy: The Mayor is definitely pushing that.**
  Sonali Tandon: Ok. Thanks.

Follow Up

CTA will keep communication lines open and consider issues discussed during this meeting in the upcoming Draft EIS.

Red Line Extension Project
Community Group Meeting
DATE: 05/14/2014
LOCATION: Kroc Center, 1250 West 119th Street, 10:00am

Name	Organization	Email Address
LEROY CHALMERS	FAR SOUTH CDC	LCHALMERS@GRWPFOODNETWORK.ORG
Abraham Lacy	Far South CDC	lacy@farsouthcdc.org
Nihesha Emery	Far South cdc	Nihesha@farsouthcdc.org
Eric Thompson	Pullman Bank	ETHOMPSON@BANKPULLMAN.com
Tammi Davis	CUC	tdavis@trinalinc.com
Tria Sanders	Phalanx Family Svcs	TSANDERS@phalanxgrpservices.org
Sonali Tandon	CTA	Standon@transitchicago.com
Gerald Nichols	CTA	

Meeting Notes

Date: Thursday, May 15, 2014

Meeting: CTA with Agape Community Center

Meeting Purpose: CTA to share RLE Project updates

Present:
Benjamin Sutton, Resident
Brad Harry, Agape Community Center
Tonya Easter, Agape Community Center
Marc Henkel, Agape Community Center
Linda Cotton, Agape Community Center
Laverne Horne, BNCO & Roseland Neighborhood Community Organization
Marcus Kellum, Resident
Gerald Nichols, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority
Tammi Davis (note taker), CWC Transit Group

Time: 10:45 am to 11:37 am

Location: Agape Community Center, 342 West 111th Street, Chicago

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served far south side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by adding construction jobs and increasing access to jobs.

- **CTA is preparing an Environmental Impact Statement (EIS)**
  CTA has been evaluating the project alternatives and is preparing a Draft EIS, which will analyze the potential positive and negative environmental impacts of construction and operation of each alternative and will propose mitigation measures to minimize potential negative impacts.

- **RLE Project Alternatives and Potential Impacts**
  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a bus rapid transit (BRT) alternative along Michigan Avenue, and the No Build Alternative. Potential project impacts include impacts to parks, property displacements, visual impacts, noise impacts, community character, wetlands, and historic properties.

- **Funding and Next Steps**
  The CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

Questions and Comments from Meeting Participants

- **Marc Henkel: There was an open house meeting on Tuesday. Is this similar to that meeting or is this completely different? How does this compare to the Tuesday meeting?**
  Sonali Tandon: This is a preview of what we presented at that meeting. We don't have all the boards that we shared at the meeting; all the boards are available online. Today we'll provide the big picture of what was shared. We asked people in the community to provide feedback. Today, we are also here to get your feedback. You can also provide your feedback later by mail or email.

- **Linda Cotton: Why wouldn't CTA use the UPRR tracks?**
  Sonali Tandon: The CTA doesn't have right-of-way for those tracks. Those tracks are Union Pacific Railroad tracks. It's their right-of-way. They want us to be 50 feet away from their tracks.

- **Marc Henkel: Is there a projected end date?**
  Sonali Tandon: We have almost completed the analysis internally. We are here to present our findings. After this, we will be coordinating with the Federal Transit Administration because this is their project and document. We will publish the Draft EIS sometime next year.

- **Laverne Horne: And that allows you to pursue funding?**
  Sonali Tandon: Yes. This whole EIS process allows us to pursue funding. But that will be just a Draft EIS. The Final EIS will be prepared on one single alternative. In this Draft EIS, we are evaluating three different alternatives. In the Final EIS there will be just one alternative. Then, we'll do additional engineering to ensure that whatever impacts we are presenting are accurate. We will also have more negotiations on mitigations with different partners.

- **Laverne Horne: Regarding access to affordable housing, how will the housing be affected?**
  Sonali Tandon: This project will provide increased transit access to affordable housing and general housing stock. By bringing transit to the area, people will be able to utilize transit more.

- **Marc Henkel: Will the RLE be elevated? From where to where?**
  Sonali Tandon: Yes, it will be elevated from 99th Street to 119th Street.

- **Marc Henkel: Do you mean overhead?**
  Sonali Tandon: Yes, overhead. The structure will be like what's on the Orange Line. Some of our structures downtown are older, like 100 years old; this will be a more modern structure.

- **Marc Henkel: Do any of these options include a subway underground?**
  Sonali Tandon: No, subway is very expensive. One example is the 2nd Avenue Subway in New York. CTA is not looking at subway options.

- **Marc Henkel: I see the end of the orange line on the slide. Is the orange one of the alternatives?**
  Sonali Tandon: All of these options will continue on the same segment. It differs just where we are relative to the Union Pacific Railroad.

- **Brad Harry: You say it's elevated, but it's not necessarily elevated over the existing railroad track?**
  Sonali Tandon: No, it won't be elevated over the existing railroad track. It can't be for safety reasons. We have to be 50 feet away from the existing UPRR tracks.

- **Marc Henkel: Are you going to zoom in on these three options?**
  Sonali Tandon: Yes. I have another slide about the UPRR Alternative. The Halsted Alternative would be elevated and in the median of Halsted Street. We have a few visuals here and more are on our website.

- **Marc Henkel: Will this extension only have four stations?**
  Sonali Tandon: Right.

- **Marc Henkel: Will all the Bus Rapid Transit stops be along Michigan Avenue?**
  Sonali Tandon: Yes. Then, the BRT route will run along Michigan Avenue and then it will continue into Altgeld Gardens just like our #34 Bus Route but with BRT elements in it.

- **Marc Henkel: Will there be any traffic impacts? If there's a stop at 111th Street, will traffic be stopped every time?**
  Sonali Tandon: The tracks will be elevated so traffic will not be stopped. People will be trying to access the CTA and also crossing the railroad with

freight trains passing. There could be safety concerns; to mitigate the safety concerns we could put quad-gates, which are basically two gates on each side, and a pedestrian gate to discourage crossing.

- **Brad Harry: Not Fernwood Park but Fernwood Parkway? I don't know where that is.**
  Sonali Tandon: Fernwood Park is separate. There is just green land with some trees at Fernwood Parkway. It's just next to the UPRR right-of-way.

- **Brad Harry: On this slide, you're showing the East Option, Right-of-Way Option, and West Option. But, the ROW Option is not really an option because of the safety concerns. So it's going to be either East or West?**
  Sonali Tandon: The ROW Option assumes that Union Pacific would no longer be in their current right-of-way and that they would move somewhere else. There was a study conducted that looked at moving them.

- **Brad Harry: They said no?**
  Sonali Tandon: It would have unlimited delays and cost implications.

- **Marc Henkel: Have you thought about putting something above them?**
  Sonali Tandon: No, because we would still need to be 50 feet away.

- **Linda Cotton: Would this building be a displacement?**
  Sonali Tandon: What we are evaluating at this stage are not defined engineering plans; we are looking at what could be impacted. As the process proceeds, displacements will be minimized.

- **Linda Cotton: But you have identified 110 properties that could be displaced.**
  Sonali Tandon: Yes.

- **Brad Harry: Trains blow horns because there aren't quad gates that come down. Ald.Carrie Austin says that we can't get money for quad gates because it's a federal thing. But we could have quad gates with this option?**
  Sonali Tandon: Yes. That is one of the mitigation measures that we are looking at because we don't want people crossing freight to get to a CTA train. It would be a safety concern.

- **Brad Harry: Some of these impacts are negative and some are positive?**
  Sonali Tandon: Yes. But the negatives are not adverse. There will be some impact but not to the level that it would be a concern to the community.

- **Laverne Horne: What's the difference between the type of noise that the Metra train that runs through Beverly makes and the type of noise that this track will make?**
  Sonali Tandon: Our findings show that moderate impact will be defined as something people will be concerned about. Our analysis did show that the impacts would be moderate along the Union Pacific after we adopt all those mitigation measures. But in terms of the decibel noise of the Metra trains versus the decibel noise of the CTA trains, I will have to get back to you.

- **Marc Henkel: It seems to me that the CTA has less noise than the Union Pacific but more noise than the Metra. When you're on the North side or downtown and hear the "L", you can definitely know it's there.**
  Sonali Tandon: These structures would be new structures and quieter than some of the structures downtown. As the trains come to the station, the speed really reduces, so there won't be much noise from the trains but will be from the station itself such as, "doors closing" type of announcements. We also have noise maps on the exhibit boards online that designate moderate and severe noise levels. They show at what distance the noise will be moderate and at what distance it will be severe.

- **Marc Henkel: Have you done anything with the safety and security?**
  Sonali Tandon: We are looking at additional lighting and cameras around the stations. That has come up as a concern, so obviously it will be a part of the mitigation. We will work with the City of Chicago and the OEMC to identify who will be maintaining and monitoring those cameras as well as their exact distance. Is that a concern that you have for the station here?

- **Marc Henkel: I don't take the Red Line often. Sometimes when I go by the 95th Street Station, I see additional police officers and there are occasional incidences there. I was wondering if that's going to increase incidences here or at the other stops.**
  Sonali Tandon: Our analysis didn't show that bringing the stations would increase crime, but it is definitely a concern from the community. We will be addressing it in the project design so that the design is more open and includes more lighting and cameras.

- **Marc Henkel: Will there be additional security at the different stations?**
  Sonali Tandon: It is too early to say. We are still in the planning phase. As some of the things get decided and built, we'll see how the community reacts. There will obviously be security.

- **Brad Harry: You need local funding first before you get federal funding?**
  Sonali Tandon: Yes. It is a very competitive process. Different states have different projects that they are funding. The federal government would want to know what local match we have. But there are other criteria including the ridership, cost of the project, how many transit-dependent

people will use it, etc. There are several different criteria that the federal government reviews, but local funding is one of the major items.

- **Brad Harry: Let's say it takes five or ten years to get the funding. How long do you have to wait before you have to do another EIS?**
  Sonali Tandon: An EIS has a short shelf life. We would have to look at the EIS again. At some point, if the wait gets really long, then we'd have to redo the whole EIS. But if it's not that long, then we'd just have to redo some of the work but not all of it.

- **Marc Henkel: What's the soonest that everything will fall into place and things will start getting built - estimated?**
  Sonali Tandon: It all depends on funding and approvals. We currently have funding to finish the Draft EIS. We also need funding to do the Final EIS and the engineering. If we had all the funding and approvals, then the Final EIS could take two to three years. The engineering step could take another two to three years. Then construction would take about five years. So, to clarify, the ten years that I mentioned earlier was when the construction would start and not when it would end.

- **Marc Henkel: So it could take six years before you get funding to start construction?**
  Sonali Tandon: Right, to start construction.

- **Brad Harry: Construction is expected to last about five years?**
  Sonali Tandon: Yes.

- **Brad Harry: Our initial concern is if you choose that East Option, our business would be one of the businesses that would be displaced. To my knowledge, we have not been contacted by CTA. I spoke with residents on the west side of the tracks that stated that they had been contacted by CTA about exploring whether or not they would be willing to sell their property.**
  Sonali Tandon: We have not contacted anyone regarding that. So if someone had been contacted, then that's not from CTA. We just sent postcards to inform people about this meeting. We have not contacted anyone. We have these alternatives. We have not finalized on any of them and have not identified specific properties. The numbers that I have presented are just based on the maximum envelope.

- **Brad Harry: So even after the Final EIS, there's no guarantee that you'll get funding in time to go forward with this.**
  Sonali Tandon: Acquisition will not start until we have the funding and approval from FTA. The EIS gives us approval to start that acquisition, but it doesn't mean that we will start. We'll only start when we have the funding.

- **Brad Harry: Acquisition happens when you receive full funding?**
  Sonali Tandon: Yes.

- **Marc Henkel: Who's the person or entity that will determine which alternatives will be chosen?**
  Sonali Tandon: It would be CTA and FTA, based on the comments we have been getting through the public comment process, and based on our analysis. There are park impacts, historic property impacts, displacements on east versus west, and also further discussions with FTA.

- **Marc Henkel: Would aldermen be involved?**
  Sonali Tandon: We have been briefing aldermen and getting their feedback as well.

- **Brad Harry: We know that CTA has the Alderman's voice in their ear.**
  Gerald Nichols: Some years ago, we came out this way to discuss the West Option. We've spoken with Ald. Carrie Austin. She wants to go back out to the community to see if they still want that option.

- **Marc Henkel: So with the Halsted Alternative available, they still chose the West Option?**
  Gerald Nichols: Yes. We're still going to discuss all of the options to see if their minds have changed. They might want the Halsted Alternative.

- **Marc Henkel: Was there a 25 feet restriction then or was the 50 feet restriction presented at that time?**
  Sonali Tandon: Previously when we presented, it was not at this level of detail. It was a single Union Pacific Railroad option. We didn't discuss East Option versus West Option. This time around, we are discussing it in greater detail with displacements and impacts.

- **Marc Henkel: You mentioned your website a couple of times. What is the exact website where we can access this?**
  Sonali Tandon: transitchicago.com/redeis

- **Linda Cotton: You talked about the West Option. But even then, it sounds like if there is going to be a parking area, that it could be on the east side and that's the whole issue/area surrounding safety. So, could that be an impact and would it be an impact no matter what?**
  Sonali Tandon: It could be. But we are trying to identify vacant parcels for parking locations because it's more flexible. Second, we are also looking at if it's on that side and the parking is also on that side, then people would not have to cross as much. But some people who live on the East side will have to cross if they parked there. There will be more in-depth studies on the traffic movement. We've already coordinated with CDOT, IDOT, and Cook County on the traffic studies and impacts. There will be more studies conducted.

- **Brad Harry: If the East Option is chosen and this building is demolished for the project or if the West Option is chosen and this building is demolished for the project, it would be a great loss to this neighborhood. We've been here 35 years servicing the neighborhood and the city. I think the neighborhood would feel the loss of the Agape Community Center.**

- **Marc Henkel: Could there be something in the plan where the building can be relocated?**
  Sonali Tandon: In the EIS, we are also looking at community facilities that could be impacted. We would look at the potential locations for them to be relocated. We would be paying the owners the fair market value and help with relocation and costs of relocation. There are a lot of vacant parcels within the community so it should be possible to relocate them within the community.

- **Brad Harry: Great.**
  Sonali Tandon: Any other comments or questions?
  Gerald Nichols: You can also go online and put comments in there. We'll still take them.

- **Marc Henkel: Is that last slide on the website?**
  Sonali Tandon: We have this on the website.

- **Marc Henkel: Is the whole slideshow on the website?**
  Sonali Tandon: It's not exactly this slideshow. This slide is on the website. But it has additional information than what was presented today. It's called Boards. So look for Boards from the open house.

Follow Up

CTA will keep communication lines open and consider issues discussed during this meeting in the upcoming Draft EIS.

Red Line Extension Project
Community Group Meeting
DATE: 05/15/2014
LOCATION: Agape Community Center, 342 WEST 111TH STREET, 11:00am

Name	Organization	Email Address
Laverne Horne	BNCO-Barbara Horne Pres. Roseland Neighborhood Community Org	laverne1110@sbcglobal.net
Linda Cotton	Agape Center	linda.cotton@cru.org
Marc Henkel	Agape Center	marc.henkel@cru.org
Brad Harry	Agape Center	brad.harry@cru.org
Benjamin Sutton	Agape Center	bensuttan73@yahoo.com
Tonya [illegible]	Agape Center	tdeLOVESjesus@yahoo.com
Marco [illegible]	Agape Center	edwardsmarco@yahoo

Meeting Notes

Date: Thursday, June 19, 2014

Meeting: CTA with Alderman Carrie M. Austin and 34th Ward Residents

Meeting Purpose: CTA to share RLE Project updates

Present:
Alderman Carrie M. Austin
Reverend Leonardo Gilbert
34th Ward Residents
Gerald Nichols, Chicago Transit Authority
Carole Morey, Chicago Transit Authority
Melissa Williams (note taker), CWC Transit Group

Time: 6:07 pm to 7:13 pm

Location: Sheldon Heights Church of Christ, 11325 S. Halsted Street, Chicago

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served far south side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by adding construction jobs and increasing access to jobs.

- **CTA is preparing an Environmental Impact Statement (EIS)**
  CTA has been evaluating the project alternatives and is preparing a Draft EIS, which will analyze the potential positive and negative environmental impacts of construction and operation of each alternative and will propose mitigation measures to minimize potential negative impacts.

- **RLE Project Alternatives and Potential Impacts**
  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West

Option. CTA is also evaluating a rail alternative along Halsted Street, a bus rapid transit (BRT) alternative along Michigan Avenue, and the No Build Alternative. Potential project impacts include impacts to parks, property displacements, visual impacts, noise impacts, community character, wetlands, and historic properties.

- **Funding and Next Steps**
  The CTA will pursue a wide range of local, state and federal (New Starts) sources with the help and support of the community. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

Questions and Comments from Meeting Participants

- **34th Ward Resident: What part of Halsted Street would be affected?**
  Carole Morey: Halsted Street would be impacted from the I-57 alignment around 99th Street on Halsted Street down to Vermont Avenue.

- **34th Ward Resident: How many parcels would be affected along Halsted Street?**
  Carole Morey: The Halsted Alternative would impact 38 total parcels. A total of 17 are homes and the remaining 21 would be commercial and industrial properties.

- **34th Ward Resident: How many streets with homes from east and west of Halsted Street would be affected?**
  Carole Morey: The structure would be elevated; therefore only parcels that are along Halsted Street would be affected. This land would be used for parking.

- **34th Ward Resident: Would the remaining properties on Halsted Street be facing the train tracks as they do along Lake Street?**
  Carole Morey: Yes.

- **34th Ward Resident: Can a portion of the Union Pacific Right-of-Way be taken?**
  Carole Morey: The Union Pacific Railroad evaluated potentially relocating but based on a study they will not be relocating. Therefore, we were left with the East and West Options.

- **34th Ward Resident: Does the Union Pacific Railroad Alternative require taking more homes?**
  Carole Morey: Yes, this alternative has the most displaced homes.

- **34th Ward Resident: What about the Michigan Avenue Bus Rapid Transit Alternative? Would you have to widen Michigan Avenue and take more properties?**
  Carole Morey: No we would not need to widen Michigan Avenue.

- **34th Ward Resident: Is the number of affected parcels based on occupied or vacant properties?**
  Carole Morey: The count includes both occupied and vacant properties. When we go back out to survey the land we would determine how many people would be displaced since that is important.

- **34th Ward Resident: Regarding noise mitigation, would considerations be taken similar to O'Hare?**
  Carol Morey: CTA is required to meet FTA's minimal noise level. CTA would try to minimize noise by using a specific type of structure. If that does not meet the requirement, then CTA may assist residents with getting the proper home insulation.

- **34th Ward Resident: Can the community impose a quiet zone; would CTA assist the community in getting it?**
  Carol Morey: I don't know the answer to that question.

- **34th Ward Resident: Would structure be at street level? Would traffic be affected?**
  Carol Morey: The structure would be elevated. Traffic would not be affected because the train would run above the street.

- **34th Ward Resident: Would there be parking available at the stations?**
  Carole Morey: Yes there would be park and rides available at the stations totaling around 3,100 parking spot.

- **34th Ward Resident: How many homes would be affected along 111th Street because of the park and ride? The main concern is safety. There could be an increase in break-ins.**
  Carole Morey: Please place all your concerns on the comment cards. We will take it into consideration.

- **34th Ward Resident: To avoid homes and businesses being affected, why the train can't go down I-57?**
  Carole Morey: The route has to go through the community in order to have a positive economic impact.

- **34th Ward Resident: Look at how long the train has been going through Englewood with no economic impacts.**
  Carole Morey: We are noting the concern.

- **34th Ward Resident: What types of business would come into the area because of the RLE Project?**
  Alderman Austin: Small businesses are encouraged to come to the area. I would rather see a multitude of smaller businesses rather than a big box business. This would be great for us to create business.

- **34th Ward Resident: Would the Halsted Alternative and the East/West Options be the only options?**
  Carole Morey: So far they are our primary options. If you feel like there is an alternative we are not considering, I encourage you to fill out a comment card.

- **34th Ward Resident: Has CTA considered placing the line down the Bishop Ford?**
  Carole Morey: In order to have an economic impact, it has to be brought through the community.

- **34th Ward Resident: Time Frame – When would an alternative be chosen?**
  Carole Morey: Hopefully in 2015. Further engineering would have to take place.

- **34th Ward Resident: How would the alternative be chosen?**
  Carole Morey: After the FTA approves the document to be published, CTA has 30 days in which people can comment through a public hearing.

- **34th Ward Resident: Would there be permanent jobs with CTA? How many jobs overall?**
  Carole Morey: There would be 2,600 to 4,600 construction jobs and there would be permanent jobs with CTA.
  Gerald Nichols: CTA is currently hiring. Please visit www.transitchicago.com

- **34th Ward Resident: Would federal and private funding be able to cover the project?**
  Carole Morey: Federal and private funding won't cover the entire cost of the project. State funding is also needed.

- **34th Ward Resident: How would the private consumers be affected? Would bus fares increase?**
  Carole Morey: CTA does not use fares to fund capital projects; this is a capital project.

Follow Up

CTA will keep communication lines open and consider issues discussed during this meeting in the upcoming Draft EIS.

Town Hall Meeting Sign -In -Sheet June 19, 2014

Name/ Tittle	Home / Business Address	PHONE	E-Mail
1. Mary Alma	11558 So Morgan	773 468-0667	
2. Roosevelt + Cynthia Green	10505 S. Green St.	773 429 0471	bxerswife@sbcglobal.net
3. Mordecai Funches, Jr	11321 So. Stewart Ave	773.468.5466	–
4. Gary Mines	10857 S. Normal	773-744-4561	GMines71@yahoo.com
5. Wendy Scott	12035 S. Justine	773 909 8641	savanahwm@yahoo
6. Willie Potter	10355 S. Halsted	708-572-7037	
7. Ellen Dotson	11201 S Peoria	773-568-2340	
8. Martha Burchett	11442 S. Emerald Ave	773-995-0726	
9. Daisy Reese	11429 S. Emerald Ave	773 928 0380	
10. Rose Shuffer	11346 Peoria St	773-568-9747	
11. Lena Lee	12837 S. Peoria	773-995-5021	lenallee@att.net
12. Leslie Harris	2456 W. Marquette Rd	773-558 6578	LHarris1074@gmail.com
13. Connie Tinner		773-468-7476	
14. Tanya Hicks	10119 S. Green	773-771-3431	
15. William Jones	10783 S. Peoria	773 675-0707	willyr483@yahoo.com
16. Anthony Collins	1027 W. 108 Pl	773-957-8238	

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Name/ Tittle	Home / Business Address	PHONE	E-Mail
1. Steve Loveless	10501 Normal		
2. Muriel Stansberry	10846 S. Union	773 785 4572	
3. Shelby Hamilton	11355 S. Racine	773-468-1613	
4. Dawn D. Colar	10641 S. Racine Ave	773 416-5397	
5. Willie Hatchett	11330 So Green St	773 660 8913	
6. Laura Williams	956 W. 115th St.	773-821-8404	
7. BJ Gunn	10818 S. Normal	773-568-8986	
8. Doris McKinney	11313 So Peoria	773-568-0828	
9. Dominique Davis	15859 LeClaire Ave Apt C211	(773) 732-0105	
10. Reginald Jackson-Rank	10159 S. Halsted St.	(773) 239-3032	
11. PO.			
12. Carolyn Shelby	10040 S. Eberhart	773 556-5636	
13. Julie Fair	10816 S. Parnell	77-264-8394	
14. Ramona James	10736 S. Normal	773.616.9338	
15. Rev. Gwendolyn Payton	The Christian Service MBC 914 W. 119th St. Chgo. 60643	773-568-5532	Mattisonivory1@hotmail.com
16. Kenya Cason	10952 S. Emerald 60628	773-552-5819	mrscason0305@sbcglobal.net

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Name/ Tittle	Home / Business Address	PHONE	E-Mail
1. Celester Burton	10500 S. Normal Ave		
2. BEVERLY MARTIN	10605 S. PEORIA	(773)881-3120	
3. Emma Dixson Brown	10824 S Halsted	773 9284318	ed kisonleg@sbcglobal.net
4. Melissa Williams	Teinal, Inc 320 W 18th St Chicago, IL 60616	312-738-0500	mwilliams@trinalinc.com
5. Brenda morgan	10635 So. Racine	773-575-1139	
6. LARRY ANDERSON	11026 S EMERALD		
7. Jim Murrell	12231 So. Normal	773-785-7334	
8. BRENDA PRICE	12107 S Eggleston	773-468-5667	
9. Sgt. Alvin Jones	727 E. 111th Area South	773-507-3711	
10. Andrew Anderson	11439 So. May	773-991-0522	
11. Kevin McDonald	10901 S. Normal	773-568-1869	
12. Joann Curtis	12230 S. Carpenter	773 573-4489	
13. Johnson	149 WEST 115th St	773)785-6007	
14. Evelyn Woodard	946 W 115th St	773-928-7145	
15. Marie Gueline	209 W 109 Pl	773-785-7546	
16. Vanessa Griffin	12005 S. Stewart	773-676-6235	nessag27@yahoo.com

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Name/ Tittle	Home / Business Address	PHONE	E-Mail
1. Tony & Virginia Harey	9814 S. Green St	773-445-4481	djr12@att.net
2. Daisy Kim	512 W. 115 St	773-995-5061	
3. Jessie Peterson	516 W. 115th St	773-785-9860	
4. Alfredo Peacock	10431 So Parnell	773-233-9387	
5. Joyce Kelley	10708 S. Sangamon	773-995-03[illegible]	
6. Alfred Broadway	11031 S Morgan	773/821-5369	
7. Ms. Marie Jeffries	11629 S. Hamano	773-732-5941	
8. Arthur Mitcham	10947 S. Normal	773-468-4903	
9. V Matthews	112th Emerald	773 6009337	
10. Patricia McCain	11806 So. LaSalle	"	
11. Rita Horne	521 W. 111th St.	773 468 876	
12. Elmer Horne	" "	" "	
13. Claudia Stewart	11412 morgan	773-785-2828	
14. Ricco Coleman	11819 S. Normal	773 995-8650	
15. Eamon Davis	11610 So. Ada St	773-677-1519	
16. Neal Coleman	1238 W. 102nd Pl	773-445-0978	

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Name/ Tittle	Home / Business Address	PHONE	E-Mail
1. Rosie Henderson	12225 Carpenter St	708 228 3483	
2. Brandon Moore	4225 W. 177th	773-732-8982	
3. Antoinette Manuel	11705 So. Elizabeth	773) 928-5220	
4. Laurita Viola Shaw	10640 S Eggleston	773-785-5447	
5. Robert S. Moore	11649 So. Peoria	773-416-8487	
6. Edward Tarver	350 W. 109th St	773-264-5096	
7. PERRY JONES	10615 SO HALSTED	773294-5856	
8. Eunice WALKER	11701 S. Justine	708 227-7095	
9. Annette Cain	727 W. Vermont	773-370-1116	
10. Deakhane Davis	143 W. 104th St	7739285239	
11. Dr Angela Scott	137 W 104 St	773 919-5727	
12. Lyretta Jones	10456 S. Normal	773-505-0571	
13. Constance Coleman Robertson	11406 S. Parnell Ave	7739955143	
14. Terence W. Johnson	337 W. 113th St.	312-678-9107	
15.			
16.			

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Name/ Tittle	Home / Business Address	PHONE	E-Mail
1. Clifton Holliday	11036 S. Parnell	773 764 3517	
2. J. Washington	10820 S. Parnell	773-785-2087	
3. C Cavaneso	11157 S Peoria	708-846-3188	cupcake153@sbc global.net
4. Regina Kent	11437 S. Emerald	773-660-8571	RPK1948@wow way
5. Jo Ann Arrington	341 West 116th Street	773 386-1556	
6. Lynette M Roberts	11441 So May	(773)468-2889	Lynette-frank @sbcglobal.net
7. Alton Logan	2016 W 80th St	773-629-2299	altonl.logan@hotmail.com
8. Jessie mcgee vp	825 E 99th St	773-417-0313	linda construction@sbc global.net
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Appendix E
Open House Sign-in Sheets

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Palmer Park Gymnasium
Tuesday, May 13, 2014

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PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT OPEN HOUSE (PLEASE PRINT)

	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	STEVEN BARRETT	BLACK CONSTRUCTION ALLIANCE	340 NASSAU ST. Park FOREST IL 60466	815-596-0900	STEVEBARRETT.CEO@gmail.com	✓
2	JACOB E. PETERS		2722 W. BELDEN AVE #1F CHICAGO, IL 60647	773 870-1987	jacob.e.peters@gmail.com	✓
3	ANTOINE TINSLEY		143-151 E. 112th STREET	(773) 620-0585	TONEYAP@YAHOO.COM	✓
4	Lillie Muhammad	111th-112th VERNON AVE Block Club	11220 S. VERNON 60628	773 821-8412	lilliemuhammad	✓
5	JoAnn Walker	100 place	348 W. 100th Pl 60628	773)228-320		✓
6	C LEWIS	/	10659 S. Normal Ave			
7	Mike Moore	clark Construction			mike moore@ clarkchicago.com	
8	LATONYA MICKENS		11311 S Eggleston	773-971-7296	lmickens8135@yahoo.com	✓
9	Sharon Pincham	West Chesterfield Comm Org	9313 S Wabash	773-264-9801	sharonpincham@gmail.com	✓
10	HERMAN ROSS		11119 S. VERNON			
11	Alonzo Anderson	West Chesterfield Comm. Org.	9336 So. Michigan Av 60619	(773) 995-9686	alonzoma7@yahoo.com	✓
12	Eugene Rogers		10763 So. SANGAMON	773-881-8824		

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Jashe Hardy		10214 S. Eggleston	7732383462		
2	RENNEL BLACK SR		2306 ORCHARD	104-388-4723		
3	B. Wheeler		1336 W 110th St	773-934-9453		
4	Paula Pierson	TYLIN	200 S. WACKER	3127772868		
5	DAN DREW	TYLI	200 S. Wacker	3127772956		
6	Cheryl Johnson	P.C.R	13330 S. Corliss Chgo IL 60827	773-846-4618		
7	Anand Patel	IDOT		847-705-4677	anand.patel@illinois.gov	
8	Shirley M. Evans	Resident	9242 S Wabash	773 568-1326	shirleyevans@sbcglobal.net	
9	ANTOINETTE MCALLISTER	SEEDS CENTER	11705 So. ELIZABETH	(773) 928-5220	Theseedcenter@gmail.com	
10	T Colbert		1615 Racine			
11	Samantha Donald		251 W. 106th St Chicago IL 60628	773-864-0563	Sampetties@gmail.com	✓
12	HENRY TAYLOR	MEDIA ONE CHICAGO CITIZEN NEWS	~~HAE~~ 1525 E 84TH ST CHGO IL	773-221-2512	HTAYLOR@HATAYLORANDCO.COM HATAYLORANDCO.COM	✓

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Marine Eggleston	Resident	735 W 115th St IL 60628			✓
2	David Kralik	Metra	547 W. Jackson Blvd 60661		dkralik@metrarr.com	
3	George Krupa	Parsons	10 South River St 60606		george.krupa@parsons.com	✓
4	Kendra Smith	CMAP	233 S Wacker Dr #800 60606		ksmith@cmapillinois.gov	✓
5	Carolyn Drummond	Resident	9412 S Perry			
6	Shawn Gowden		7533 S Winchester	773 757-9709		
7	Delecta Wilmington	Resident 7 yrs	11543 S. Throop		dwilmington@sbcglobal	✓
8	Beth Eckerty	Resident	13208 S Exchange		betheckerty@hotmail	✓
9	Renita Gulbeza-Kyles	WCCA / 95th PUO	9230 So. Indiana		MSNADA@comcast.net	✓
10	Elgin Townsend	Resident	113 W 110th St.		sonny30120@yahoo.com	✓
11	Cheena Credit	Resident	1022 W 108th St		Cheenacredit.com	✓
12	Delores [illegible]	Resident	11731 S Yale		Delores.DH@gmail	

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1	GERALD DOLES	WESTBROOK CAPITAL.	P.O. BOX 657 LAGRANGE, IL 60525	708 579-9696	G DOLES @ WESTBROOK CAPITAL.com	
2	JOHNNY CAVERS		10837 S NORMAL CHICAGO IL 60628			
3	Alesia Hushaw/Anna Williams		349 W. 99th Place Chicago, IL 60628	773-568 2087	ash2@sbcglobal.net	
4	Roe Hardy Jr	USOC	4455 S. King Dr.	773-285-4205	Alabova1015@yahoo.com	
5	Vanessa Adams	FTA	300 W. Adams St	312 886 0309		
6	Marguerite Jacobs	PCR/ALGEBRA FARMER/LAC/MARKET	755 E 130 PLACE	708510 8677	MARGUERITE1955 @yahoo.com	YES
7	Wayland Johnson Jr.	9th Ward Republican Committeeman	11340 S. Prairie Av. 2ND Fl	773 416 1503	waylandj20@sbcglobal.net	✓
8	B. Earl Agnew		10505 S. Calumet	773-785-274	BARNESEARL935@Aol.com	✓
9	Robyn Grange	Office of Cong. Bobby Rush	700 E. 79th St. Chicago 60619	773224-6500	robyn.wheelergrange @mail.house.gov	
10	Clarence D. Williams		34 W. 115 St. Chicago IL 60628	773-621-1350	Clarence66@wowway.com	✓
11	Michael La Fargue	West Chesterfield Community Assoc	9327 S. Michigan Ave Chicago, IL 60619	773-251-0760	MLAFARGUE1@GMAIL.COM	✓
12	L W INFIELD		3413 ELLIS	(773)374-2665		

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Donell Randle		10812 S. State St Chicago IL 60628	928 2149	don.roe44@gmail.com	
2	Edward Tarver		350 W. 109th St. Chicago Il. 60628	773-412-3773	edtarver@yahoo.com	✓
3	Cedric Bell		1250 W. 112th Place, Chgo. Il. 60643	773-239-2331	ceds1972@gmail.com	✓
4	Sharon Bell		"	"	sharonbell120@comcast.net	✓
5	Patrick McGee		9433 S. Indiana Ave., Chi., IL 60619	773 264-1176	—	✓
6	Donald Millen		733 E 84 Pl	773 454 6458	[illegible]	✓
7	Samuel Strachan	DCP	212 E. 95th Chi.	773 928-7026	sstrachan49@sbcglobal.net	✓
8	Cristal Simmons		10859 S. Green Chgo IL 60643	773 568-4608	cristal.simmons@cityofchicago.org	
9	Mark Assam	FTA			mark.assam@dot.gov	
10	Michael Sherley		347 W 99th Pl Chgo IL 60628	418 (773) 2545	mike-sherley@sbcglobal.net	
11	Brenda Taylor		12229 S. Lafayette Ave 60628			✓
12	Robert E. Wordlaw	Chgo Jobs Council	29 E. Madison Street	312 252-0468 ext 331	bob@cjc.net	✓

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	JT THOMAS		10220 S. MICH	773 616-5560	JTTHOMAS1585 @ YAHOO.COM	
2	M. Elem					
3	Jerome Fleming		122 E 104th pl	773 633 8132		
4	James Northern	150	117 Pheasant rd	312 343-0923		
5	Kelli Simmons		11362 S. Bishop	—	Kelli8X@yahoo.com	
6	Erika Sellke	Chicago Park District	451 N Fairbanks Ct	312 742 5389	erika.sellke@chicagoparkdistrict.com	
7	Greg Osborne		1846 W. Superior		gosborne@epsteinglobal.com	
8	Lou Turner	UIUC	1201 W Nevada Champaign 61801	217/972-2447	loturner@illinois.edu	✓
9	Cornelius Bailey		1110 S Indiana			
10	Carlos Estes	Prologue	134 TH Vernon	312-804-3741	carlosestes@gmail.com	
11	GWEN McCURDY		10338 S. PRAIRIE	773-203-5522	GYM1211@ATT.NET	✓
12	Arron Washington	Citizen	109th & Longe		aarronwashington@gmail	✓

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Tuesday, May 13, 2014

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Igor Sdutenker		6165 N. Winthrop Ave #217 Chicago, IL		igorst3@hotmail.com	✓
2	Jackie McDonald		9906 S State Street Chicago, IL 60628		Mack27_2000@yahoo.com	✓
3	Miranda Morgan	L.A.C	13022 S. Drexel Ave Chicago IL 60827	708-201 7959	whitEmmorgan53@gmail.com	✓
4	Carlos Nelson	Greater Auburn-Gresham Development Corp	7901 So. Racine Chgo IL 60620	773 483 3696	cnelson@gagdc.org	✓
5	CHRISTINE DUNBAY		9758 So. EGGleston	773-239-5383		✓
6	T Johnson		149 WEST 115th St		TAMJohnsonAK@gmail.com	✓
7	Chester Wilson Jr	Alderman Austin	507 West 111th St	773 928 6961	CWILSON@cityofchicago	✓
8	Maria Fowler		10210 S. Eggleston	773-707-1131	MFowler128@yahoo.com	✓
9	Michael Scott		10 E. 91st Street	773 948 5545	Michael.Michael7500@gmail.com	✓
10	Brenadan Hope		7339 S. Chappel Ave	(708) 710-4997	BLHope7339@gmail.com	
11	Rev Alice Harper-Jones	Block Club	PO Box 208491	773 568-0195	alice hj19@gmail.com	✓
12	TOMMIE MEDIOUS		11834 S. PRAIRIE AVE	773 821-5537		

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Eli Washington	Chesterfield Community Council	501 E 90 Pl. 19	773-651-3958	chesterfield@ameritech.net	✓
2	Lois Lance		10513 S. Calumet			
3	Nancy Lyles		10501 S Vernon	—	—	—
4	Roberta Walker	Citizen	11701 S. State #209 Chicago IL 60628-5301	847-800-4523		
5	Deborah Bates	citizen	9750 S. Eggleston			
6	Zach Goldhammer	South Side Weekly	1210 Hyde Park BLVD.	617-460-1765	zgoldhammer@uchicago.edu	✓
7	Rachel Schastok	South Side Weekly			rschastok@uchicago.edu	
8	Pamela M Burden		132 E 117th Place	773 750-5691	nurseptb1996@yahoo.com	✓
9	Patricia Smith	DCP	212 E 95th St	773 928 2500	pgsmith@dcpchicago.org	✓
10	GENA SANTA	—	312 E. 111TH ST	—	—	—
11	Edith Showers	—	110335 Parnell	773 264-4301	E_showers@ccl.org	✓
12	Robert Barclay	West Chesterfield	9193 S. Burnside Av	773 568-3321		

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Rosemary Weyche	Concerned Citizen	322 W 101st 40628			
2	Leslie Bruce	Resident TCA	1029 E. 130th	995-6300		
3	James Washington	President	9936 Yale	568.6188		
4	Lillian Braggs	Citizen	9635 S. Yale	773 821-1095		
5	John Kent	J. Kent Construction	8025 S Laflin	773-994-0994	JOHNKENT1028@AOL.COM	✓
6	Matthew Walker	Citizen	11167 S Vernon	(312) 731-0273	MATWALKER8@aol.com	✓
7	Annette Cain	United Neighbor	727 W. Vermont	773-370 1116	annettecain@yahoo.com	✓
8	Geraldine Baldwin	concerned citizen	11118 So Peoria	(773) 928-2741	N/A	✓
9	William Cook	C&C Const. Co.	429 E. 91st Place	773-339-1001	William Cook5234@SBCGLOBAL.NET	✓
10	Willie McKenzie	citizen	10608 S. Wabash	773-928-0972	willrdmckn2@yahoo	✓
11	Melvin Thompson	The Endeleo Institute	1947 W. 95th Street	312-545-6765	mrthompson@trinitychicago.org	✓
12	Leon Jackson		10540 S. LaSalle	773-928-1120		

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Palmer Park Gymnasium
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1	MARTIN WILSON	CSS	10825 S. PARNELL	928-5377		✓
2	DOLORES CHESTNUT	Greater Roseland (RCA) Block Club Coalition	10522 S. VERNON AV	773 928-0971		✓
3	Margaret McDONALD	WCC	9405 S. Calumet Ave	773-468-3523		
4	Arlene Echols		11329 S. St. Lawrence	773-821-1637	AEchols1979@gmail.com	✓
5	Mae Bragg		9635 S YALE AVE	773-82-1095		
6	[illegible]	Friends of the Parks/DEP		773-368-8911		
7	KEVIN IRVINE	CTA BOARD	3113 W. LAWRENCE AVE. #B462 CHIC. 60625	773-368-7313	KIRVINE@TRANSITCHICAGO.COM	✓
8	ROSEMARY DEAN	TCA Health	11139 Sking Dr	7735102565		
9	Amelia Taylor		341 W 99th Place Chicago, Ill 60628	773-408-5960	amelia.taylor415@yahoo.com	
10	MACY JOHNSON		346 W. 101st Street 60628	773-264-5984		✓
11	Joseph Johnson		346 W. 101st Street 60628	773-264-5984		✓
12	[illegible]		134 E. 117 PL 60628	773-464-6055	✓	✓

DANTE SAWYER
DISTRICT REPRESENTATIVE & CHICAGO OFFICE MANAGER
CONGRESSWOMAN ROBIN L. KELLY, IL02
RAY PLAZA DRIVE
SUITE 505
GO, IL 60443
679-0078
DANTE.SAWYER@MAIL.HOUSE.GOV
2419 RAYBURN BUILDING
WASHINGTON, DC 20515
(202) 225-0773
1000 E. 111TH STREET
11TH FLOOR
CHICAGO, IL 60628
(773) 568-2623

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1	CARL JOSSELL		10744 WALLACE CHICAGO 60628	773 785 5784	CARL JOSSELL AT AHEC.COM	✓
2	Lisa Granados	WGBO TV	341 N. Fairbanks	312-494 6483	lgranados@univision.net	
3	CYNTHIA ANDERSON	West Chesterfield Community	9336 S. Michigan	773 995-9686	celaine108@aol.com	✓
4	GWENDOLYN RICE		8600 S. PRAIRIE AVE	737 488-0570	gmrch@AOL.com	✓
5	Peter Taylor	Friend of the Mayor Taylor Bag RCHA	9600 S Prairie Ave		pbtaylor27@Comcast.net	
6	MIKE OVITZ	Friends of Mike Ovitz	622 91st Street	312-880-7520	INFO@MIKEOVITZ.ORG	
7	EVERETT RICE		212 E. 109th	7739928-0321	E109PR@AOL.COM	
8	Jonathan Samuel		7245 S. Phillips #3W	(773)538-7560	jonsamuel32@yahoo.com	✓
9	Alva Earsery		11021 VERNON 3			
10	Christina Horde		1520 W. 99th St		cmhorde@aol.com	
11	[illegible]				DESIA205@AOL.COM	
12	Jenny LaFargue	West Chesterfield Comm Asso	9327 S. Michigan	773-255 9164	jlafargue81@gmail.com	

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Lettye W. Campbell	WCCA	9428 S. Michigan Ave	773/264-0126	—	
2	Willie Carter	CARTERS EXC	235 E 157 St HAVEY IL	7735191181		
3	Tommie Lindsey Jr		56 west 99th St. Chgo IL 60628			
4	Nancy Wimberly	NAACP PUSH	10531 S. Calumet Ave.	(773) 568-7900	concernedcommunitydefenders@gmail.com	
5	Georgia Bonner	104th & Green St	10423 S. Green St			
6	Eleanor Banks	10509 S. Calumet		773 785 2706		
7	Joe E Floyd	355 W 99th Pl.	~~355 W 99th Pl.~~	773 468-2932		
8	James L Floyd	355 W 99th Pl	~~355 W 99th Pl.~~	773 468-2932		
9	Willie + Arleen McGee		10424 S. Forest 60628	773 785-6873		
10	Quanchaize Edwards	9th Ward Alderman	34 E 112th Pl	(773) 785-1100	quanchaize.edwards@cityofchicago.org	
11	Phyllis Johnson	WCCA	9400 S Calumet	773-610 2056	PJ9400@gmail.com	
12	J. Ostarello					

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1	TERESA BARBOSA	Alderman John Pope	3522 E 106th St	773/721-1999	barbosatey@sinyahoo.com	
2	JONATHAN SUMMONS		10231 S. Eggleston	773(615-4940)	Jonathan.Summons1956@yahoo	
3	Hulda Swan		310 East 107 St	773)568-5595		
4	Toni Stith	None	1829 S. Bishop	773/940 6888		
5	Anita Bridge	community resident	10418 S. Eggleston	773) 580-1121	abridge1121@gmail.com	
6	DORA Engram	Lilydale First Church	12230 S. PERRY Ave	773-928-1823	d.engram@sbcglobal.net	
7	DAVID HALEY	VILLAGE OF RIVERDALE	157 W. 144th	(708) 841-2200	dhaley@villageofriverdale.net	
8	LOURDES SOLORZANO	HACIA	8236 Highgate Court ORLAND PARK IL 60462	(773)447-5559	Cadillactie@gmail.com ~~[illegible]~~	
9	Ora Floyd		9746 S Eggleston Ave Chicago, IL	773-881-4181	Ora floyd@ameritech.net	
10	ANGELA CONNER		10018 S EBERHART CHICAGO, IL 60628	(773)568-8218	ACONNER@SBCGLOBAL.NET	
11	Dr. Carmen Palmer	9th Ward Greater Roseland Community Coalition	10552 S. Vernon Chgo, Il. 60628	773-785-8532		
12	C. HUNT		9947 So WENTWORTH	773-468-5114		

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1	Bettis Lewis		9252 S Eggleston Chicago, IL 60620	773-238-5051		
2	Troy D. Lewis Jr		1328 W 109th Chgo IL	773 240-0971		
3	Adam Eichenberger	Pace	550 W Algonquin Rd Arlington Hts	847-228-2471	Adam.eichenberger@Pace.bus.com	✓
4	Zetta A. White	WCCA West Chester Gold	Chicago, IL 60619 9440 S. Michigan Ave	773-264-8950		
5	Alexander Wikstrom		5122 S University Ave Chicago, IL 60615	(917) 664-6724	awikstrom@uchicago.edu	✓
6	Deborah Pierce	CTA	11 East 103rd Pl. Chgo IL 60628	773-468-4771		
7	Betty JONES	99ST Block Club.	9921 S. Yale	773-468-4019		
8	Charlean Preston	~~11201 So. Sangamon~~	11201 So. Sangamon	773-291-0931	raspberrywater647@yahoo.com	
9	Alzonia ESTES	10437 S. Green				✓
10	Siller Coleman	4350 110th ST →	60628	773-568-7718		
11	WILLIAM BOXTER	250 W 106TH ST	60628	773.564-2009		
12	Rev. Alvin Love	Lilydale First Baptist	649 W 113th Chg, IL 60628	773-785-8623	Revluv@MSN	

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1	SAM FORD		11518 So. LASALLE		Sammiezz@yahoo.com	
2	Jeanette Slone	None			jslone6@sbcglobal.net	✓
3	Jon Evans	Rank & File Member Acting Transportation Alliance	11936 South Princeton Avenue Chicago, IL 60628-6014	773-821-8142 773-844-0568	Jkeit963827@sbcglobal.net jkeneworleansyp91@ogr.net JKEIIT96@hotmail.com	✓
4	Charles & Stella Brown	Resident	12 WEST 115th ST	773 928-6950 773 213-6185	creolestubbe@yahoo.com	✓
5	VICTOR JACKSON	RESIDENT	9912 So. YALE AVE	773 568 1763	VicJAC2001@GMAIL.com	
6	Oliver Swan	" "	310 E 107th ST	773 568 5578		
7	Jackie Jones	Jackie's CDE Service	3070 E 79th ST	773 612 4341	Jackie Jones 3070@gmail 3070	✓
8	Mildred A. Murry	Resident	12426 S. La Salle	773-821-8056		
9	Marlene Harper	Resident	441 W. 110th St	773-264-1690		
10	PEARLIE SPELLS	RESIDENT	10537 S. KING DR	773-660-1994		
11	ROSIE BAXTER	RESIDENT	250 W. 106th ST	773-568-3009	RB76184@gmail.com	—
12	Tyler Harris	Resident	10919 S. Eberhart St 60628	773-995-8951	tylerg@hotmail.com	✓

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PLEASE SIGN IN FOR THE RED LINE EXTENSION PROJECT OPEN HOUSE (PLEASE PRINT)

	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Erma Williams		318 W. 117th Street Chgo Il. 60628	773. 264.7860	esw@att.net	✓
2	Mary Mott		11837 S Indiana			
3	Hanif Shakir	118th st Indiana Block Club	11831 S Indiana	773-821 4243	hshakir45@att.net	✓
4	Doris Martin	Golden Gate Home Owner Assc.	13207 S. Rhodes	(773) 821-6874		
5	Ernestine Alexander	108th Pornell Block Club	10845 So. Pornell Ave	773 995-5771		
6	Beverly Martin		10605 S. Peoria St	773 881-3120		
7	Rhychell Barnes	Progress Center for independent living	7521 Madison St Forest Park, IL 60130	708-689-1381	RBarnes@ProgressCil.org	✓
8	Julie A. Pate	~~RETIREE~~	345 W 99 Pl	7735683760	ladyjulieann@yahoo.com	✓
9	Daniel E Pate	RETIREE CTA	345 S. W. 99 Pl.	773-568-3760		
10	Donald M. Branch		11607 S. Peoria St. Chicago, IL 60643	773-568-1989		
11	Rosa Pledger		12443 S. Perry Ave Chgo, IL 60628	773-568-7301		
12	Barbara Lee	99th St. Block Club	40 West 99th St Chgo 60628	773-468-8241		✓

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Red Line Extension

Palmer Park Gymnasium
Tuesday, May 13, 2014

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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	R. E. C. / Richard Johnson	REC	15 E 112th	708.862.2849	Rico J3 1414@Gmail.com	
2	Karen W Jones		10314 S. Vernon	773 454-1954	KJones7208@gmail.com	
3	Carolyn L. Beasley		11315 So. Green St.	708 259-2788	cljackson1122@hotmail.com	
4	Janice Foney		9430 S. Calumet	773-264-7085		
5	Nicholas Foney		"	"		
6	K Rossi	Sun Times		312 321 2553	krossi@suntimes	
7	Sharon Cook	—	79 E 89th ST, Chgo, IL 60619	773-846-8819		
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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Julius McKinne	REC	Chicago 10826 S. Edbrooke 60628	773 440 9912	Julius4SERVICE@yahoo	
2	Velvetta Young	DCP	400 E. 111th St. 60628	708 612-8417	yTvel@aol.com	
3	Kent Merritt		8153 So. Rhodes 60619		Kmerritt29@yahoo.com	
4	Regens Jones / Wendy Jones	Youth Peace Center	420 W. 111th Street		Rw commll equal.com YPC 420 equal.com	
5	Deanna Burrell	WVON	1000 E. 87th St	773 336.3427	deanna@wvon.com	✓
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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Michael Scott		18 E. 91st Street	773 949 5545	Michael Michael 950@gmail.com	
2	Vincent Holt		122-C-109-PL			
3	Bryan Lynch		734 N. Wells St., 60654	312 573. 2727	bpl@blynchlaw.com	✓
4	Lawrence Moore		P.O. Box 87288, Chgo IL. 60680	—	lawrencemoore2@yahoo.com	✓
5	David E Ransburg		9228 S May	773 457 7664		
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	NAME	ORGANIZATION	ADDRESS CITY, STATE ZIP	PHONE	E-MAIL	CHECK HERE TO ALSO RECEIVE UPDATES ABOUT OTHER RED LINE PROJECTS
1	Debra Murphy		Chicago IL 60628	312 408 1584	bongold@yahoo.com	
2	DARRYL Gibson	South-side Education Economic Development Sistens (SEEDS)	11142 S Emerald Chicago IL 60628	773 443-6925	darrylgibson2@yahoo.com	
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Appendix F
Open House Meeting Photos

Red Line Extension (RLE) Project Open House Photos

Tuesday, May 13, 2014; 5:30 to 7:30 p.m.

Palmer Park Gymnasium

201 E. 111th Street, Chicago, IL 60628

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Project Alternatives:
UPRR Rail Alternative

Appendix G
Open House Meeting Materials

Comment Card

Project Factsheet

Glossary

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Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension Project

This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name _____

Address _____

City _____ State _____ Zip _____

Email Address _____

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

_____

_____

_____

_____

_____

_____

_____

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park *(99th Street / Princeton Avenue)*	☐	☐	☐	☐	☐	☐
Fernwood Parkway *(Eggleston Avenue between 99th and 103rd Street)*	☐	☐	☐	☐	☐	☐
Block Park *(103rd Street / Harvard Avenue)*	☐	☐	☐	☐	☐	☐

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Additional Comments:

Thank you for attending this CTA Red Line Extension Project open house.

Comments may also be submitted via mail or e-mail to:
Chicago Transit Authority, Strategic Planning, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465

RedExtension@transitchicago.com

transitchicago.com/redeis

facebook.com/thecta

@cta

Para informacion en Espanol, llame al (312) 681-2807
Customer Information: (888) YOUR-CTA (888 968-7282)

Red Line Extension

Red Line Extension: Expanding Transit Access on Chicago's Far South Side

The Chicago Transit Authority (CTA) is proposing to add major new transit service on Chicago's South Side by extending its busiest rail line, the Red Line, south from the 95th Street Terminal to the vicinity of 130th Street. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street, and 130th Street – each new station would include bus and parking facilities. CTA is evaluating the environmental impacts of three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. A rail alternative along Halsted Street and a bus rapid transit (BRT) alternative along Michigan Avenue are also under evaluation.

Red Line Extension Alternatives

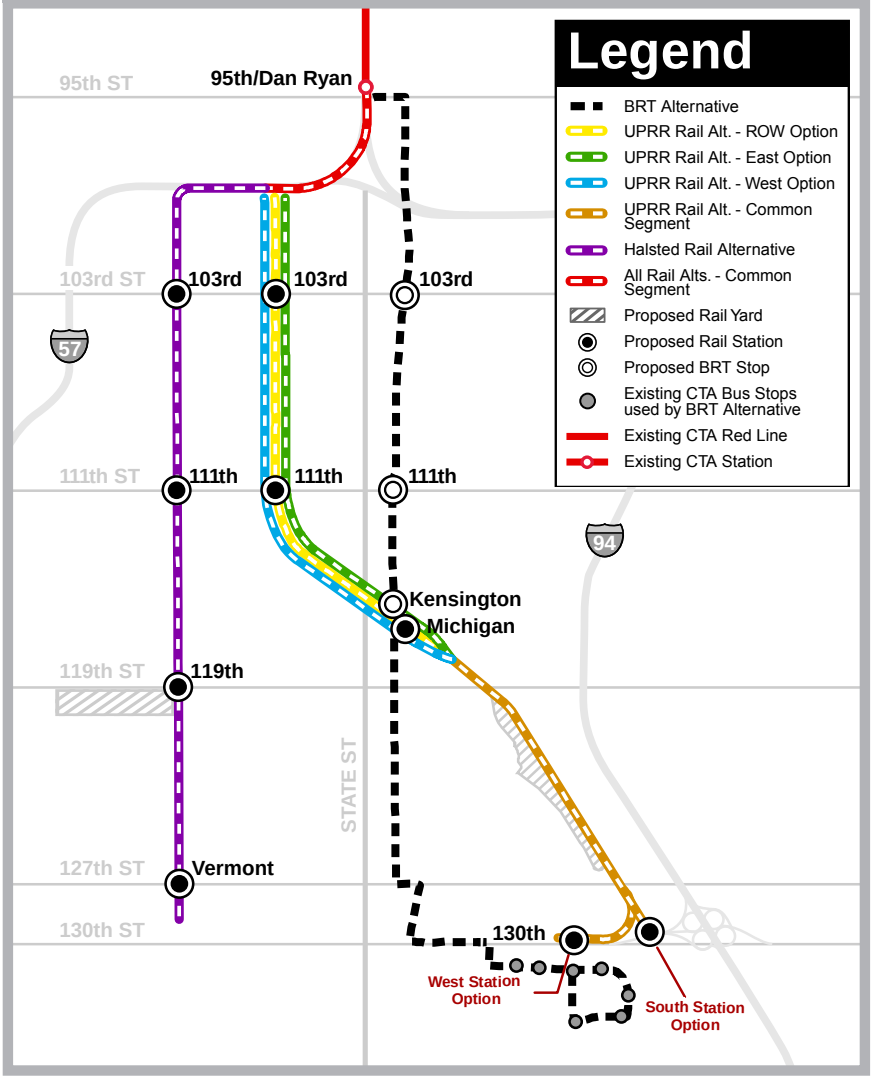

Why is the Red Line Extension Project important?

- ***Expanded access and service improvements*** – The Red Line Extension would improve service and transit accessibility for Far South Side neighborhoods where transit-dependent residents currently lack direct access to rail service.
- ***Reduced commute times*** – Between 2005 and 2010, commute times were, on average, 20 percent longer for those that currently live in the area that would be served by the Red Line Extension, than for other commuters in the Chicago region. The Red Line Extension would save the average commuter in the communities affected by this project 87 hours per year.
- ***Catalyst for economic growth*** – CTA estimates between 2,600 and 4,100 jobs would be created during Red Line Extension construction. In addition, new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.
- ***Enhanced livability*** – The improvements would also provide linkages to affordable housing, jobs, services, and educational opportunities – enhancing livability and neighborhood vitality.

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Red Line Extension

Red Line Extension: Project Update

CTA is progressing on what is a multi-step federal process to secure project approval and funding. CTA has been conducting the technical environmental analysis of the project alternatives, and is preparing a Draft Environmental Impact Statement (EIS), expected to be published in early 2015. The Draft EIS will describe each alternative, explain the existing environmental setting and community context for the proposed route, and review potential positive/negative effects of construction and operation.

Following approval of the EIS, CTA can apply to the Federal Transit Administration (FTA) for entry into the Engineering Phase of this project and pursue federal funding under the competitive federal "New Starts" program. There will be future opportunities for public input as this process progresses.

Red Ahead

The Red Line Extension is part of the CTA's Red Ahead program, a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. The Red Ahead program also includes the Red Line South Reconstruction Project (completed 2013), the 95th Street Terminal Project (beginning in summer 2014), the Wilson Station Reconstruction Project (beginning in fall 2014), and the Red and Purple Modernization program (currently in planning).

Estimated Travel Time Savings

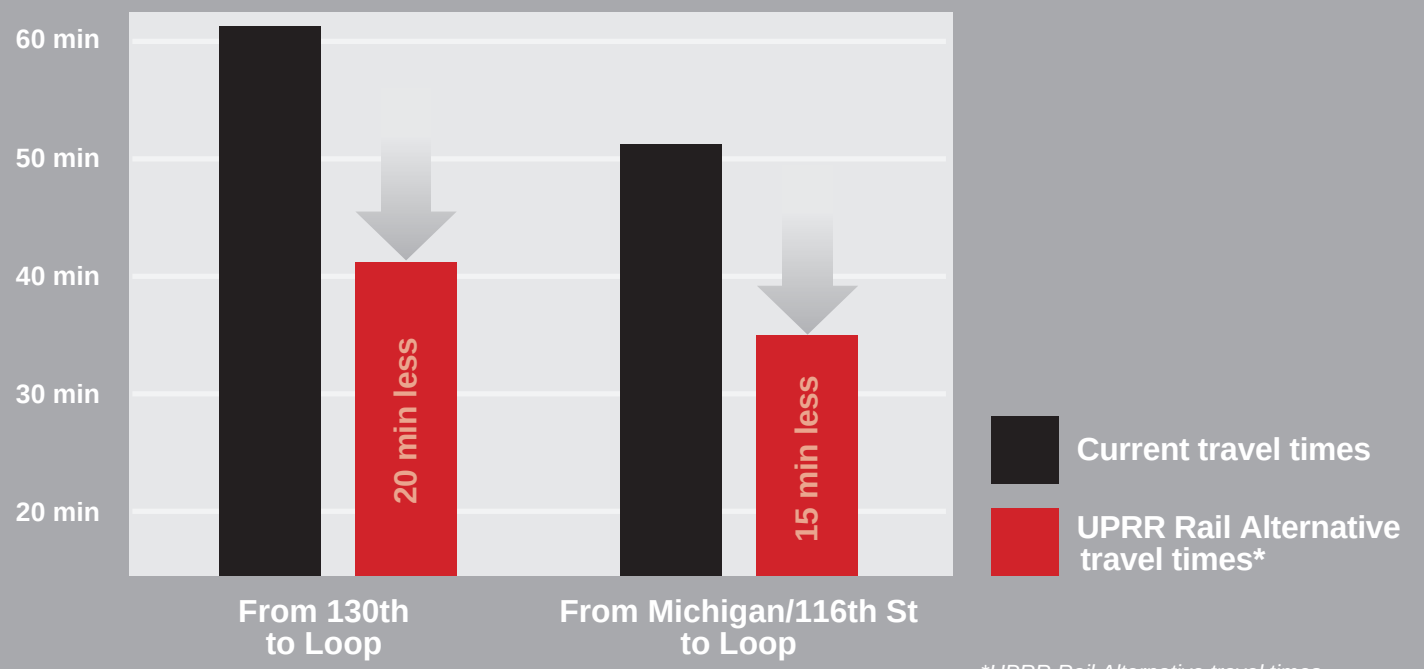

*UPRR Rail Alternative travel times represent the Locally Preferred Alternative.

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Red Line Extension

Extensión de la Línea Roja: Extender el acceso al tránsito hasta el lado del sur lejano de Chicago

La Chicago Transit Authority (CTA) se propone agregar nuevo servicio mayor de tránsito al lado del sur de Chicago al extender la línea ferroviaria más transitada, la Línea Roja, hasta el sur desde la Terminal de la calle 95 Street hasta las proximidades de la calle 130. La extensión propuesta de 5.3 millas incluiría cuatro nuevas estaciones cerca de las calles 103, y 111, la avenida Michigan/calle 116, y la calle 130 – cada nueva estación incluiría instalaciones para autobuses y estacionamiento. La CTA está en vías de evaluar los efectos ambientales de tres opciones para la Alternativa Localmente Preferida a lo largo de la red ferroviaria de la Compañía de Ferrocarril Union Pacific ("UPRR", por sus siglas en inglés), lo cual incluiría una opción dentro de la servidumbre de cargo existente ("Opción ROW", por sus siglas en inglés), una Opción del Este, y una Opción del Oeste. Está considerándose también una alternativa ferroviaria por Halsted Street y una alternativa de tránsito rápido en autobús ("BRT", por sus siglas en inglés) a lo largo de la avenida Michigan.

Alternativas para la extensión de la Línea Roja

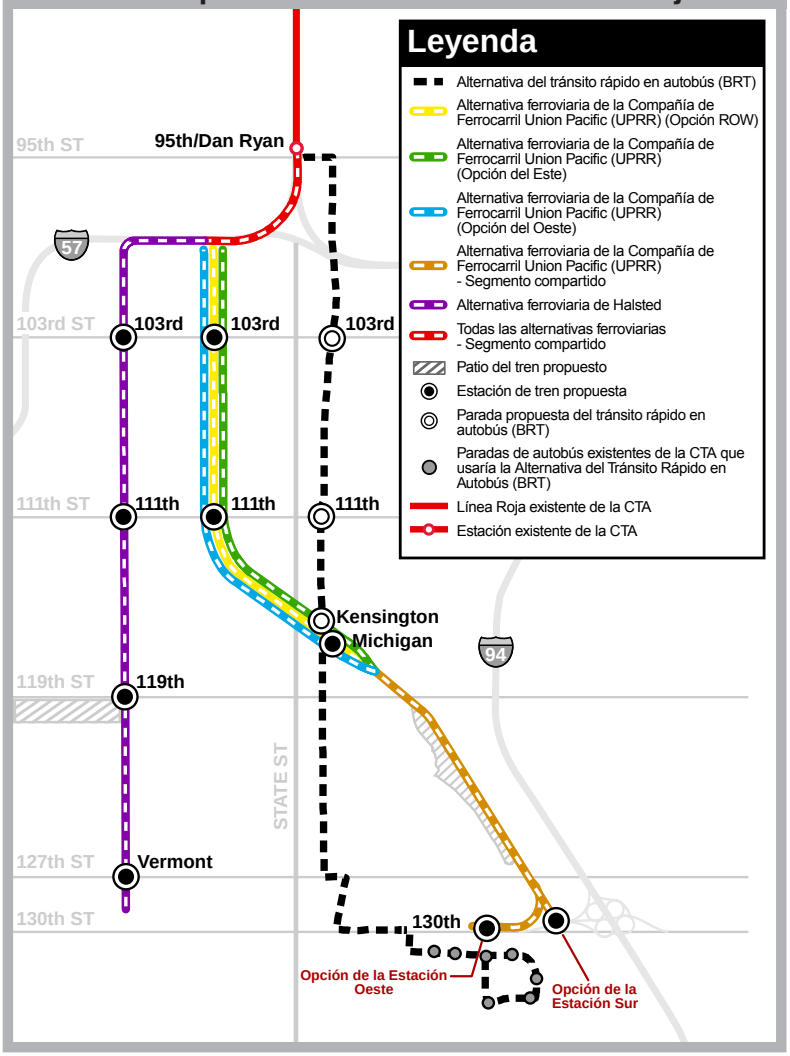

¿Por qué es el Proyecto de Extensión de la Línea Roja importante?

- ***Acceso ampliado y mejoras en el servicio*** – La Extensión de la Línea Roja mejoraría el servicio y la accesibilidad al tránsito para los vecindarios del lado del sur lejano donde los residentes que dependen del tránsito actualmente carecen de acceso directo al servicio ferroviario.
- ***Tiempos reducidos del desplazamiento al trabajo*** – Entre 2005 y 2010, el tiempo del desplazamiento al trabajo eran, en promedio, 20 por ciento más largo para las personas que actualmente viven en el área a que brindaría servicio la Extensión de la Línea Roja que para los otros viajeros en la región de Chicago. La Extensión de la Línea Roja ahorraría al viajero pro medio en las comunidades a quienes beneficiaría este pr yecto 87 horas por año.
- ***Catalizador para el crecimiento económico*** – La CTA calcula que se crearían entre 2,600 y 4,100 trabajos durante la construcción de la Extensión de la Línea Roja. Además, las nuevas estaciones pueden servir de catalizador para la revitalización de vecindarios y ayudaría a revertir décadas de desinversión en los distritos comerciales locales.
- ***Habitabilidad aumentada*** – Las mejoras también brindarán enlaces a la viviend asequible, trabajos, servicios, y oportunidades educativas – con el fi de potenciar la habitabilidad y la vitalidad de los vecindarios.

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Red Line Extension

Extensión de la Línea Roja: Últimas noticias sobre el Proyecto

La CTA está progresando en lo que es un proceso federal de múltiples etapas para conseguir la aprobación y el financiamiento para el proyecto. La CTA está en vías de llevar un análisis ambiental técnico de las alternativas del proyecto y está elaborando una Declaración de los Efectos Ambientales en borrador ("EIS", por sus siglas en inglés), la cual se espera que sea publicada a principios del 2015. La Declaración de Efectos Ambientales (EIS) en borrador describiría cada alternativa, explicaría el marco ambiental existente y el contexto comunitario para la ruta propuesta, y repasaría los efectos positivos/negativos potenciales de las obras y las operaciones.

A partir de la aprobación de la Declaración de Efectos Ambientales (EIS), la CTA puede solicitar a la Federal Transit Administration ("FTA", por sus siglas en inglés) permiso para entrar en la Fase de Ingeniería de este proyecto y perseguiría el financiamiento federal bajo un programa federal competitivo llamado "Nuevos Comienzos". Habrá oportunidades futuras para las aportaciones por parte del público a medida que va progresando este proceso.

El Programa Red Ahead

La Extensión de la Línea Roja forma parte del Programa de Red Ahead de la CTA, una iniciativa global para el mantenimiento, la modernización y la extensión de la línea ferroviaria más transitada de Chicago. El programa de Red Ahead también incluye el Proyecto de Reconstrucción de la Línea Roja al Sur (terminado en 2013), el Proyecto de la Terminal de 95th Street (de próximo inicio en el verano de 2014), el Proyecto de Reconstrucción de la Estación de Wilson (de próximo inicio en el otoño de 2014), y el Programa de Modernización de las Líneas Roja y Púrpura (actualmente en etapa de planificación)

Ahorro aproximado de los tiempos de recorrido

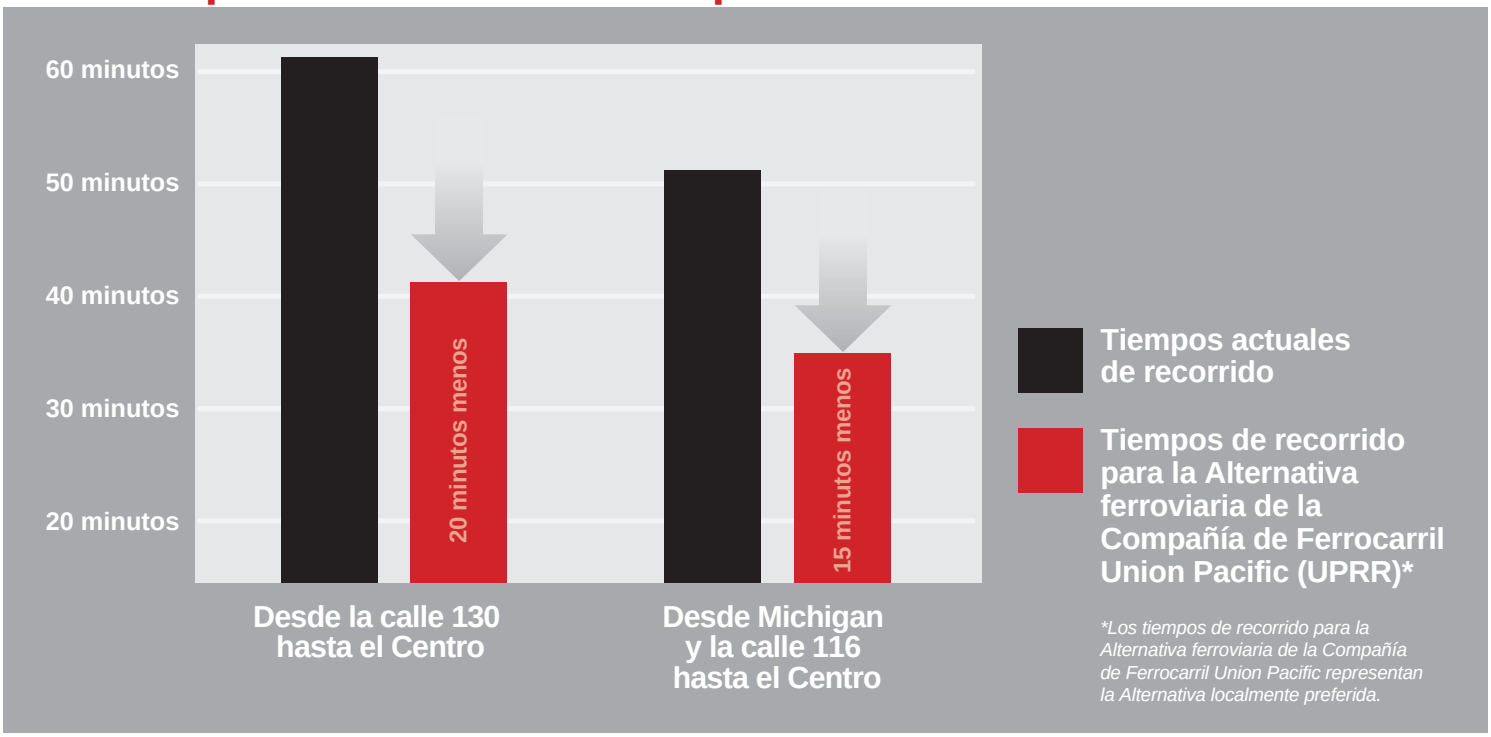

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Glossary of Terms

The following are definitions of terms used as part of the Environmental Impact Statement process.

Affected Environment: The physical, biological, social, and economic setting potentially affected by one or more of the alternatives under consideration.

Alternative: One of a number of specific transportation improvement proposals or options.

Bus Rapid Transit (BRT): BRT is a bus service which provides faster, more efficient, and more reliable service than an ordinary bus line. Often this is achieved by making improvements to existing street and traffic infrastructure. Typically high-capacity, uniquely-identified buses are used.

Chicago Department of Transportation (CDOT): CDOT is the City of Chicago agency responsible for transportation.

Chicago Metropolitan Agency for Planning (CMAP): The planning organization for the Chicago region. CMAP has prepared the GO TO 2040 comprehensive regional plan that provides strategies for the regional transportation network.

Chicago Transit Authority (CTA): The CTA is an independent governmental agency created by state legislation. It operates the nation's second largest public transportation system and covers the City of Chicago and 35 surrounding suburbs. CTA is the local lead agency on the RLE Project.

Core Capacity: A new federal program to fund substantial improvements to existing transit lines that are currently (or expected to be in the next five years) at or over capacity. This means that trains and/or stations are overcrowded and additional service cannot be added without the proposed improvements. To be eligible, these projects must increase passenger carrying capacity by at least 10 percent.

Cumulative Impact: The incremental environmental impact or effect of the project when added to the impacts of other separate past, present, and reasonably foreseeable future actions.

Environmental Impact Statement (EIS): An EIS is a document that evaluates the economic, social, and environmental effects of a major proposed project. The National Environmental Policy Act (NEPA) requires an EIS to be prepared when federal funds are being sought to fund all or part of a project.

Environmental Justice: Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to transportation planning and decision-making processes, per Executive Order 12898.

Federal Transit Administration (FTA): The FTA is a division of the U.S. Department of Transportation that funds transit planning and programs. FTA is the federal lead agency on the RLE Project.

Impact: An impact is a change in the condition or function of an environmental resource that occurs as a result of the proposed alternative. An impact can be adverse (negative) or beneficial (positive), permanent or temporary.

Lead Agency: The agency or agencies responsible for preparing the EIS in compliance with the NEPA. The FTA and CTA are the lead agencies for the RLE Project.

Locally Preferred Alternative (LPA): The Union Pacific Railroad (UPRR) Rail Alternative was selected by the Chicago Transit Board as the LPA in August 2009, indicating that it is the alternative that best meets the purpose and need of the project while addressing potential impacts and other potential constraints

Mitigation: Action or measure taken to minimize, reduce, eliminate, or rectify the adverse impacts of a project, practice, action, or activity.

National Environmental Policy Act (NEPA): Requires all agencies to examine and disclose the environmental impacts of their actions, incorporate environmental information into project decisions, and use public participation in the planning and implementation of all actions.

National Register of Historic Places (NRHP): The national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture. It is maintained by the Secretary of the Interior under authority of Section 101(2)(1)(A) of the National Historic Preservation Act, as amended.

NEPA Preferred Alternative: The NEPA Preferred Alternative will be designated following circulation of the Draft EIS and consideration of all comments received in accordance with NEPA.

New Starts: FTA's primary grand program for funding major transit capital investments, including rapid rail, light rail, bus rapid transit, commuter rail, and ferries.

No Build Alternative: The No Build Alternative refers to an alternative under which no action would be taken (no infrastructure would be built and no new management or operational practices would be instituted).

Option: One of the several possibilities for an alternative. The UPRR Rail Alternative has three options: ROW Option, East Option, and West Option, each along the same general alignment but slightly different.

Right-of-Way (ROW): In transit usage, the corridor along a railway that is controlled by a transit or transportation agency/authority.

Scoping: An early and open process for identifying the extent, variety, and significance of issues related to a proposed action in the EIS. Scoping for RLE was held in the form of public open house meetings in 2009 and the scoping report is available on CTA's website.

Section 4(f): Section 4(f) of the Department of Transportation Act of 1966 states that no transportation project should be approved which requires the use of land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless there is no feasible or prudent alternative to the use of such land.

Section 106: Section 106 of the National Historic Preservation Act deals with project effects on historic properties. It requires consultation with parties with expertise and interest in historic resources.

State Historic Preservation Office (SHPO): The official appointed or designated, pursuant to Section 101(b)(1) of the National Historic Preservation Act, to administer the State historic preservation program. The SHPO consults with state and federal agencies during the Section 106 process review. The SHPO administers the national historic preservation program at the State level, reviews National Register nominations, and maintains file data on historic properties that have been identified but not yet nominated. Agencies seek the view of the SHPO in the identification of historic properties and the assessment of the effects of a project on historic properties.

Travel Time: The time spent traveling from a place of origin to a place of destination.

Union Pacific Railroad (UPRR): The UPRR owns and operates tracks and trains that run through the project corridor along Eggleston Avenue.

Stay Involved

visit: transitchicago.com/RedEIS email: RedExtension@transitchicago.com
mail: Chicago Transit Authority, Strategic Planning, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465

More Relocation Information

Business

A business that is relocated as a result of the project may be entitled to benefits such as:

1. *Moving and Related Costs*
2. *Reestablishment Costs*
3. *Fixed Payment*

Statements applicable to all categories and benefits listed

Please keep in mind that there are specific benefit requirements that must be met to receive any of the funds mentioned above. Your assigned relocation agent will assist you to fully understand the payments and requirements.

No one may be displaced until adequate housing has been made available to them.

All persons required to move personal property, their home, or business must be given at least 90 days to vacate.

Your Local Transit Agency will establish an appeal process should you be aggrieved by a denial of benefits or if you feel the benefits are inadequate.

A message from the FTA and your local transit agency

It is sometimes necessary to acquire private property and displace persons and businesses in order to build a transit facility that will benefit the entire community. However, we will work with you to minimize the inevitable disruption that this causes. Please feel free to contact the agency and person listed below should you have any further questions.

Revised rules for the Uniform Act were published in the Federal Register on January 4, 2005. The rules are reprinted each year in the Code of Federal Regulations, Title 49, Part 24. All Federal, State and local government agencies, as well as others receiving Federal financial assistance for public programs and projects, that require the acquisition of real property, must comply with the policies and provisions set forth in the Uniform Act and the regulation.

For further information, please contact:

FEDERAL TRANSIT ADMINISTRATION

GENERAL ACQUISITION & RELOCATION INFORMATION

FTA | U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL TRANSIT ADMINISTRATION

SEE THE BACK PANEL OF THIS BROCHURE FOR INFORMATION ON CONTACTING YOUR LOCAL AGENCY.

GENERAL INFORMATION

Your local transit agency may need to purchase property from you with funding from the Federal Transit Administration (FTA) in order to benefit the general public. To assure fair and consistent treatment of all persons, the FTA will require your local transit agency to follow the Uniform Relocation Assistance and Real Property Policies Act of 1970, as amended. The Uniform Act is a law passed by Congress to promote uniformity and fairness when a local transit agency must acquire property or displace persons. There are two main parts of this process:

1. *Acquisition, which is the purchase of your real estate.*
2. *Relocation which offers additional benefits should you or your business be displaced.*

Acquisition of Real Property

The purchase of real estate by a transit agency begins with the appraisal of your property. An appraiser will inspect your property to determine the value. The property owner should accompany the appraiser while making this inspection. A second appraiser will then review and approve the work of the first appraiser and will recommend a value to the local transit agency.

You should then receive a written offer to purchase your property. You will have sufficient time to consider the offer or make any counter offers that you believe is fair.

If you elect to sell your property to the local transit agency, you will be paid the full amount less any encumbrances (mortgage, lien, etc.) owed on that property. Possession of vacant property may be taken the day of closing by the local transit agency; possession of occupied property will be at an agreed future date.

Relocation

Advisory Assistance will be offered to every displaced person. A Relocation Agent will visit you to explain all of the benefits and services that you may be eligible to receive.

Below is a very brief outline of the various types of financial benefits available if you or your business are required to move.

Residential Homeowner Occupants, are those that have owned and occupied their home for at least 180 days. Typical benefits include:

1. *Moving Costs*
2. *Price Differential Payment*
3. *Increased Mortgage Interest*
4. *Incidental Closing Costs*

90 day Occupant or Tenant, is either a tenant or a homeowner that has occupied their home for less than 180 days but at least 90 days. Relocation benefits include:

1. *Moving Costs*
2. *Rental Assistance Payment/Down Payment*

Appendix H
Open House Exhibit Boards

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Welcome to the Red Line Extension (RLE) Open House

The purpose of this meeting is to:

- Provide information on the RLE Project
- Share findings regarding anticipated project benefits and impacts
- Hear and gather your feedback and suggestions
- Discuss next steps and additional opportunities to be involved

If you have questions, feel free to ask the representatives stationed around the boards.

RED AHEAD

Moving Ahead to a Better Red

Red Line Extension

The Red Ahead Program

Improving the Red Line from End to End

rpm Modernization

Improving your commute. Improving your community.

Status: In planning
Scope:
- Multi-stage project to be completed in phases
- Rebuilding all stations, track, support structures north of Belmont
- Will result in faster rides, increased capacity, less crowding and more frequent service
- **Phase 1:**
  - New Lawrence, Argyle, Berwyn, Bryn Mawr stations; new track and support structures along 1.3 miles
  - New Red-Purple Bypass north of Belmont where Red, Purple and Brown lines intersect

Wilson Station Reconstruction Project

Status: Starting Fall 2014
Scope:
- Modernize station and make it accessible to customers with disabilities
- Creates new transfer point between the Red and Purple lines
- New security measures including brighter lighting and 100 security cameras

Clark/Division Station Renovation

Status: Starting Fall 2014
Scope:
- Modernize station and make it accessible to customers with disabilities
- State-of-the-art security equipment

rsr Red Line South Reconstruction Project

Status: Completed Fall 2013
Scope:
- Rebuilt tracks along 10.2 miles, from Cermak-Chinatown to 95th/Dan Ryan
- Rehabbed eight stations, all with elevators, making entire Red Line South accessible to customers with disabilities
- Shortened round-trip commutes between 95th/Dan Ryan and downtown up to 20 minutes

95th Street Terminal Improvements

Status: Starting Summer 2014
Scope:
- Redesigned and expanded terminal will increase space for busses and improve access for pedestrians
- New layout will reduce delays and congestion, and improve passenger safety
- Modern, mostly glass station and public art will improve comfort and overall transit experience

rx Red Line Extension

Status: In planning
Scope:
- Proposed 5.3-mile extension, including four new stations near 103rd Street, 111th Street, Michigan Avenue/116th Street and 130th Street
- Would improve service and transit accessibility for Far South Side neighborhoods, reduce commute times
- CTA progressing on a multi-step federal process to secure project approval and funding

1-kgg030 Red Ahead Program Poster

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Red Line Extension

What is the RLE Project?

The end of the line for the CTA's Red Line South is currently the 95th/Dan Ryan Terminal.

This year, construction will begin on the 95th Street Terminal Improvement Project, which will expand and greatly improve the 95th/Dan Ryan Terminal.

With the estimated $2.3B Red Line Extension (RLE) Project, CTA is proposing to extend service from south of 95th/Dan Ryan Terminal to the vicinity of 130th Street.

RLE Means a Better Served Far South Side

The Red Line Extension Project would:

- Serve a transit dependent area of the City that does not have direct CTA rail service.
- Provide a faster commute. The RLE would offer a 20-minute time savings by providing one-seat service, as opposed to the current bus-rail trip from 130th Street to downtown.
- Include four new stations, a new rail yard, plus bus and parking facilities at all stations.

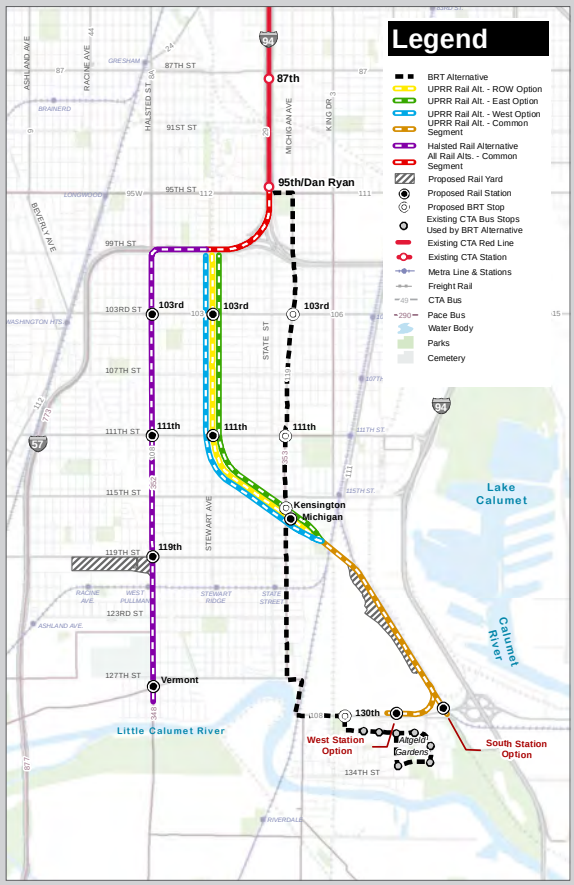

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Why are we preparing an Environmental Impact Statement (EIS)?

An EIS allows the public to fully understand the potential environmental impacts and provide input before final decisions are made.

Transportation projects seeking Federal funding are required to conduct environmental analysis. An EIS is being prepared for the RLE Project by CTA and Federal Transit Administration (FTA).

Public feedback on the preliminary impacts of the alternatives is necessary to complete the Draft EIS.

The EIS includes:

- A description and comparison of alternatives
- An explanation of the existing environmental setting
- An analysis of potential positive and negative environmental impacts of construction and operation of each alternative
- Proposed mitigation measures to reduce or eliminate potential negative impacts

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Project Alternatives:
UPRR Rail Alternative

Chicago Transit Board Adopted Alternative

5.3-mile extension along the UPRR tracks

Three options:

- East Option
- Right-of-Way (ROW) Option (contingent upon the relocation of UPRR, significant cost and delay TBD)
- West Option

Four stations (103rd, 111th, Michigan, 130th)

- Park & ride facilities (up to 3,700 total parking spaces)
- Bus facilities

Elevated structure from 95th Street Terminal to 119th Street, then at-grade (ground level) tracks from 119th Street to 130th Street

120th Street Yard and Shop

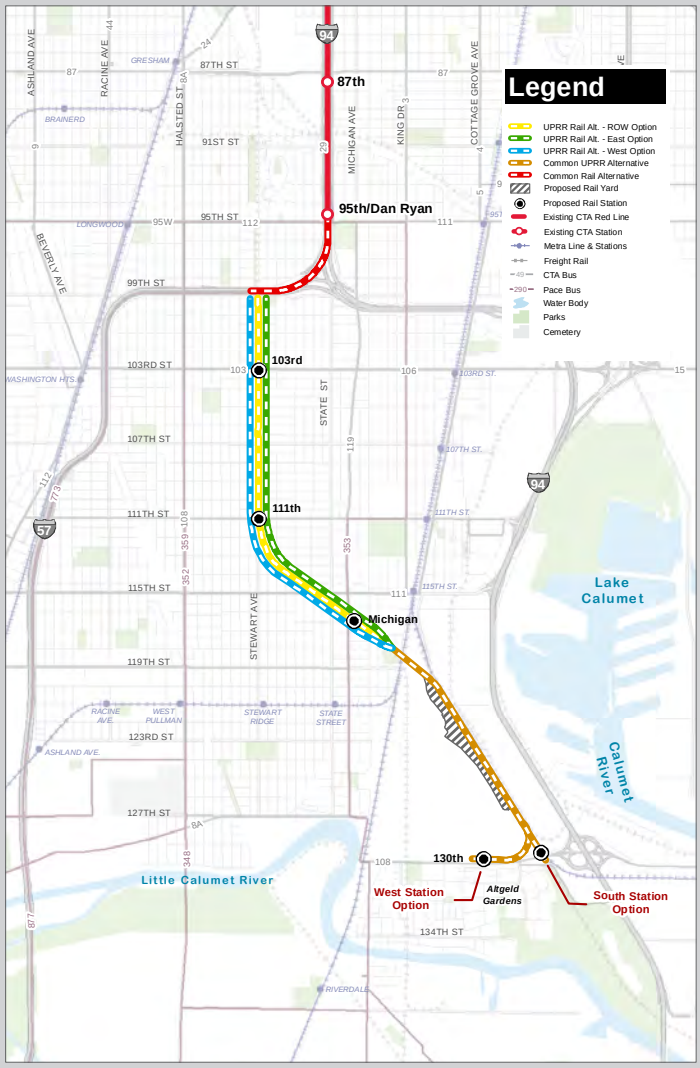

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Project Alternatives:
UPRR Rail Alternative

Visualizations

Existing - 115th Street and UPRR Tracks

ROW Option

East Option

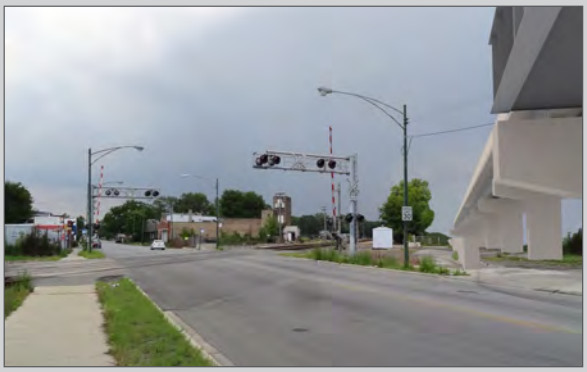

West Option

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Project Alternatives:
UPRR Rail Alternative

Visualizations

East Option - 103rd Street Station
103rd Street and Harvard Avenue

East Option - 111th Street Station
111th Street and UPRR Tracks

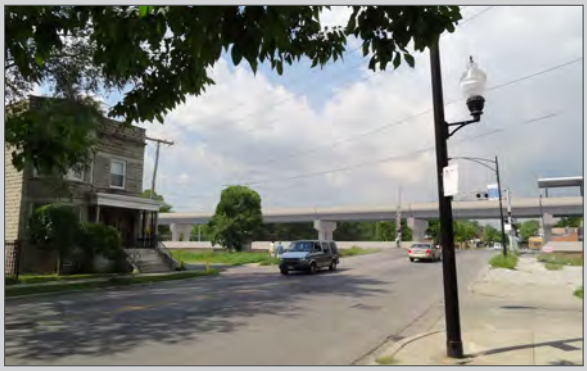

East Option - Michigan Avenue Station
115th Street and Michigan Avenue

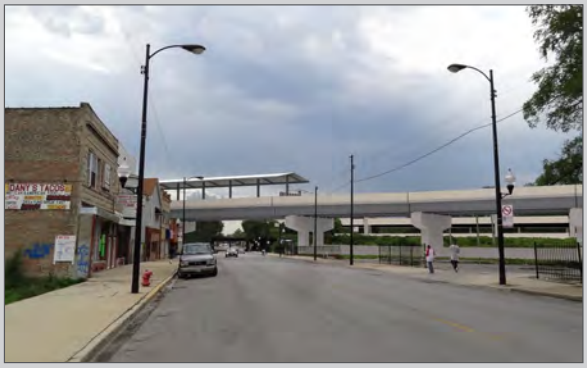

130th Street Station - South Station Option

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Project Alternatives:
Halsted Rail Alternative

5-mile extension above Halsted Street

Four stations (103rd, 111th, 119th, Vermont)

- Park & ride facilities (up to 3,700 total parking spaces)
- Bus facilities

Elevated structure

119th Street Yard and Shop

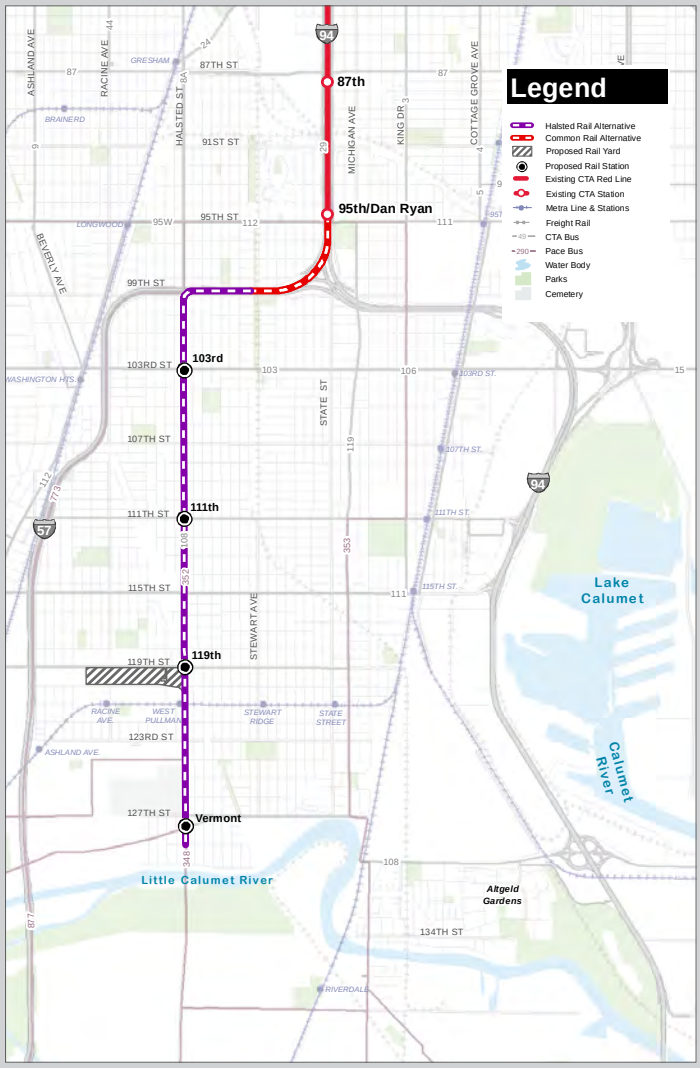

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Project Alternatives:
Halsted Rail Alternative

Visualizations

103rd Street Station
103rd Street and Emerald Avenue

111th Street Station
111th Street and Halsted Street

119th Street Station
118th Street and Halsted Street

Vermont Avenue Station
128th Street and Halsted Street

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Project Alternatives:
BRT Alternative

5.5-mile long Bus Rapid Transit (BRT) Route along Michigan Avenue

The BRT Alternative is a "low cost" alternative. It would run along Michigan Avenue, which has one of the CTA's busiest bus routes.

Four BRT stops

- Improved bus shelters (103rd, 111th, Kensington, and 130th)
- Park & ride facilities (up to 2,800 total parking spaces)

Bus route would continue through Altgeld Gardens making existing stops

No dedicated bus lanes; parking lanes would be removed in some locations

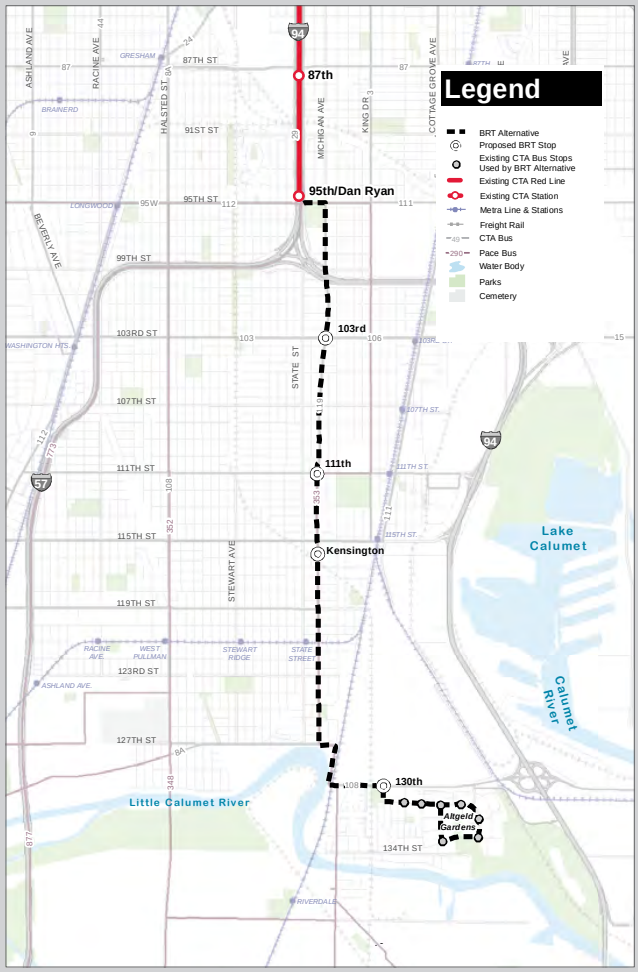

No Build Alternative

The No Build Alternative is used to compare the other alternatives to the current state and existing service. No new infrastructure would be built.

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Potential Impacts to Parks

Only the UPRR Rail Alternative would impact parks.

Parklands Affected by UPRR Rail Alternative Options

Parkland	East Option	ROW Option	West Option
Wendell Smith Park	0.4 acres	0.2 acres	0.2 acres
Fernwood Parkway	-	-	1.9 acres
Block Park	0.8 acres	-	-
Total	*1.2 acres*	*0.2 acres*	*2.1 acres*

Preliminary Mitigation Strategies

Coordination with Chicago Park District is ongoing to identify mitigation including improvements to other parklands or replacement parklands nearby.

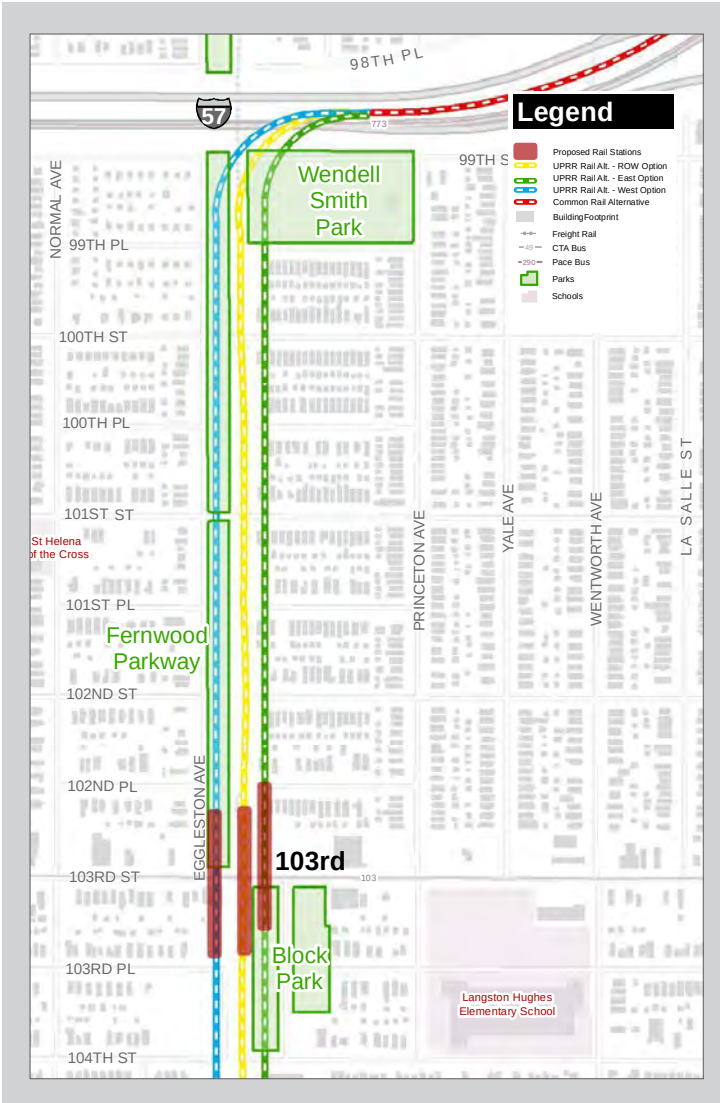

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Potential Property Displacements

Construction of the project would require the acquisition of property.

Permanent Displacements by Alternative

	UPRR East Option	UPRR ROW Option	UPRR West Option	Halsted	BRT
Affected Parcels without Building Displacements	149	112	144	72	49
Affected Parcels with Building Displacements	110	22	51	38	3
(Residential Building Displacements)	(95)	(17)	(30)	(17)	(1)
Total Affected Parcels	*259*	*134*	*195*	*110*	*52*

Impacts presented are:

- Based on Conceptual Engineering and represent maximum impacts on all alternatives
- For the purposes of comparing alternatives and will be confirmed in the Final EIS following more detailed conceptual design of the single NEPA preferred alternative

All major transit construction projects have impacts:

- The Brown Line Expansion had 40 building displacements
- The RPM Program (Phase One) may displace 19 buildings

Preliminary Mitigation Strategies

Property owners would be paid not less than fair market value for their land and buildings, and may be eligible for compensation equal to the original purchase price of the property. They would also be assisted in relocating their businesses or dwellings, per the Federal Uniform Act on relocation assistance and property acquisition.

When a single alternative or option is chosen, CTA will work with the community and property owners to minimize property impacts.

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Potential Noise Impacts

Noise Impacts by Alternative

	UPRR East Option	UPRR ROW Option	UPRR West Option	Halsted	BRT
Moderate and Severe Noise Impacts	None	None	None	Moderate impacts would remain after mitigation	Moderate impacts south of 120th Street
Vibration Impacts	None	None	None	None	None

Moderate Noise Impacts: The change in noise would be noticeable but might not be sufficient to cause a strong, adverse community reaction
Severe Noise Impacts: A significant percentage of the population would be highly annoyed by the change in noise

Preliminary Mitigation Strategies

Continuous welded rail

- Fewer joints mean a smoother and quieter ride

Jointed Rail versus Welded Rail

Closed deck structure

- Limits noise beneath the elevated tracks

Open Deck versus Closed Deck

Noise barriers

- Absorb railway noise

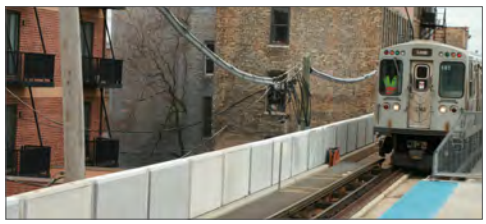

Noise Barriers

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Potential Noise Impacts and Mitigations

BRT Alternative

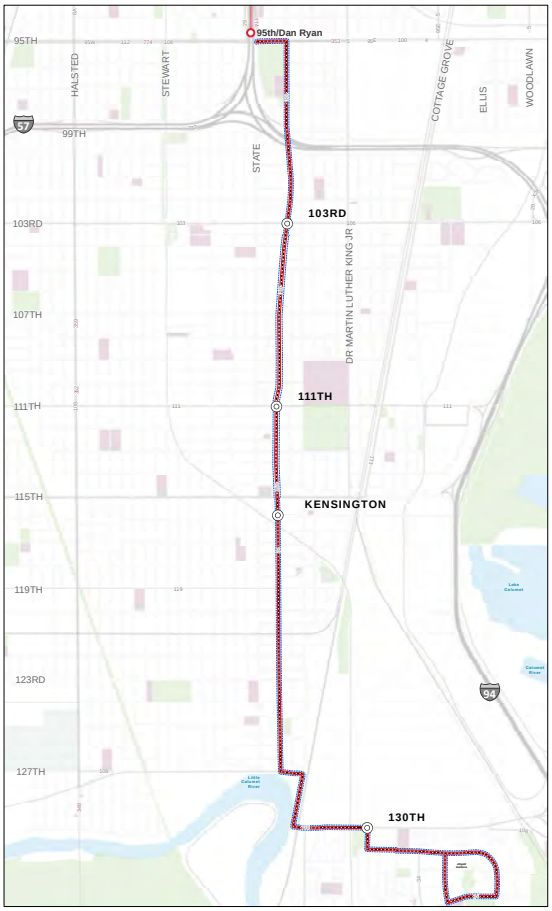

UPRR Rail Alternative East Option

Legend

- Mitigation - Noise Barriers

Noise Contours
- Moderate Impact
- Severe Impact

- Common Rail Alternative
- Common UPRR Alternative
- UPRR Rail Alt. - ROW
- UPRR Rail Alt. - West Option
- UPRR Rail Alt. - East Option
- Halsted Rail Alternative
- BRT Alternative
- Proposed BRT Stop
- Existing CTA Red Line
- Existing CTA Station
- Metra Line & Stations
- Freight Rail
- CTA Bus
- Pace Bus
- Water Body
- Parks
- Cemetery
- Schools

Impacts presented are based on Conceptual Engineering and represent maximum impacts. Impacts and mitigations will be confirmed in the Final EIS following more detailed design of the NEPA preferred alternative.

UPRR Rail Alternative West Option

Halsted Rail Alternative

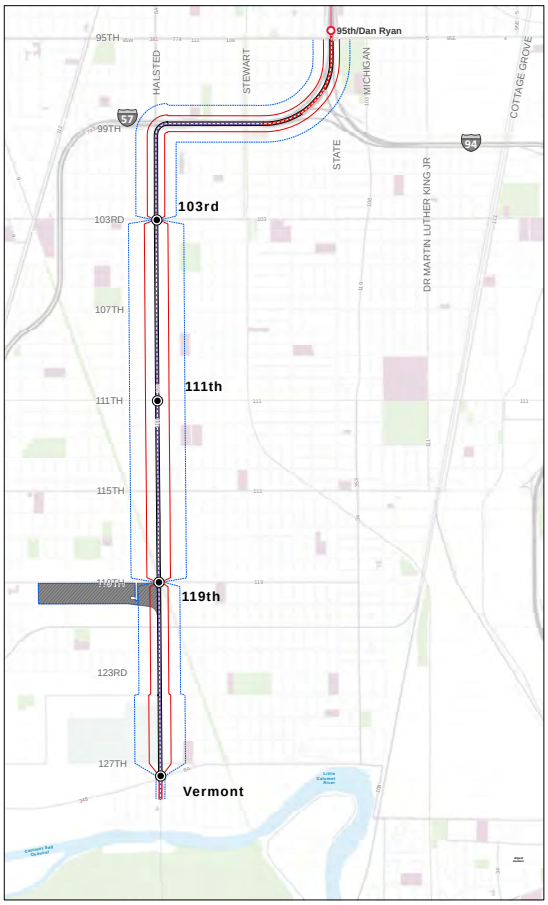

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Potential Visual and Community Impacts

Visualizations

UPRR Rail Alternative

West Option | East Option

Existing

Visualization

102nd Place and Eggleston Avenue

117th Street and Prairie Avenue

Note that appearance of project elements (such as parking structures, beamvs, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Potential Visual and Community Impacts

Visualizations

Halsted Rail Alternative

Existing

Visualization

100th and Halsted Streets

Vermont Avenue and Halsted Street

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

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Potential Visual and Community Impacts

UPRR West Option
Roseland and Washington Heights communities

UPRR East Option
West Pullman community

Halsted Rail Alternative
West Pullman community

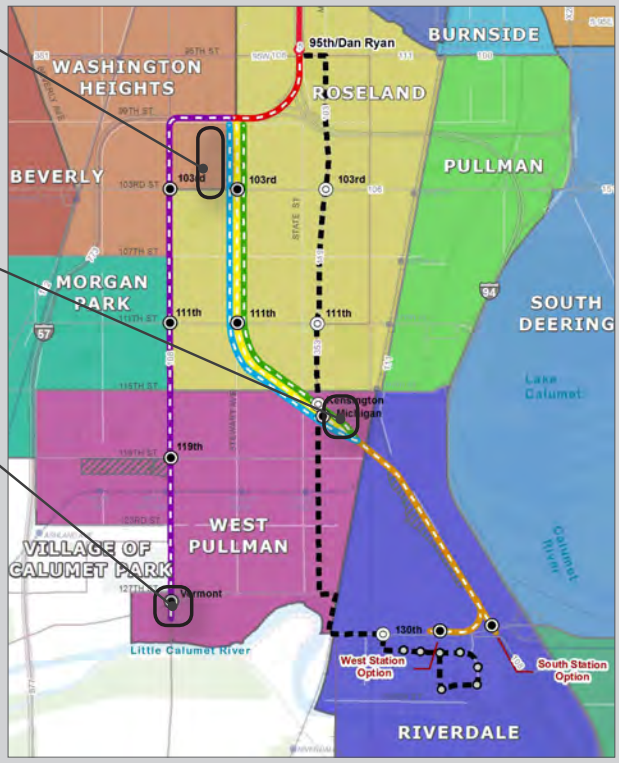

Preliminary Mitigation Strategies

- Provide new landscaping or other urban design amenities
- New structures would reflect the character of neighborhoods or communities to the extent feasible
- Careful placement of exterior lighting adjacent to residential communities
- Construction best management practices including maintaining vegetation and debris-free construction areas

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Potential Effects to Historic Properties

- Historic experts evaluated a sample of 541 properties near the project alternatives
- CTA/FTA invited interested parties to help evaluate potential historic resources
- CTA/FTA identified two historic districts and 13 properties that have been recommended for inclusion on the National Register of Historic Places

Adverse Effects by Alternative

	UPRR East Option	UPRR ROW Option	UPRR West Option	Halsted	BRT
Effected Properties	0	0	0	4 adversely effected after mitigation *but not demolished*	0

Preliminary Mitigation Strategies

Consultation with the State Historic Preservation Office and other interested parties is ongoing to confirm effects and identify mitigation strategies.

An adverse effect occurs when a project alters (directly or indirectly) any of the characteristics of a historic property that qualify it for the National Register, diminishing the integrity of its location, design, setting, materials, workmanship, feeling, or association.

931 W. 120th Street (Fire Department Engine House)

12433 S. Halsted Street (S.S. Peter and Paul Church)

12540 S. Halsted Street (Cedar Park Cemetery)

10227 S. Halsted Street (Former Classic Revival Substation)

These properties will not be demolished but would have potential adverse effects due to potential visual, noise, or construction impacts.

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Impacts to Wetlands

Impacts to potential wetlands could occur at the UPRR 120th Street yard and shop, the West Station Option, the South Station Option, and/or the BRT 130th Street park & ride. Impacts to wetlands have not yet been confirmed.

Preliminary Mitigation Strategies

- Replace, restore, enhance, or preserve wetlands

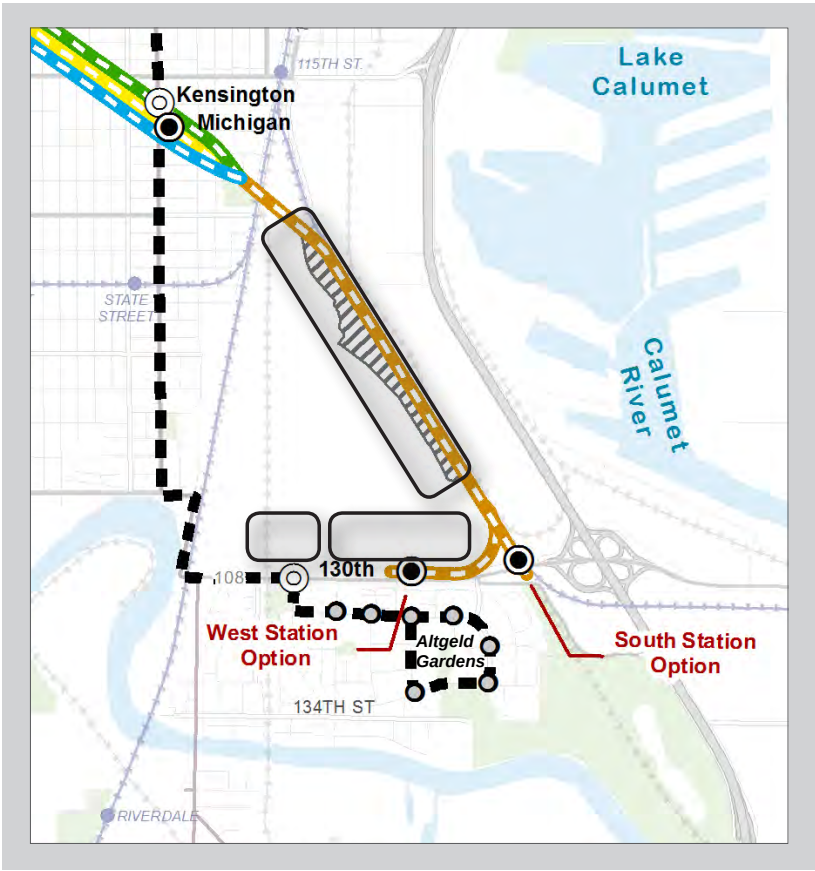

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Temporary Construction Impacts

Preliminary Mitigation Strategies

- Notices of noise-generating activities would be posted
- Road closures would be announced
- Special advertising for affected businesses
- Limited idling of construction vehicles
- Alternative parking provisions

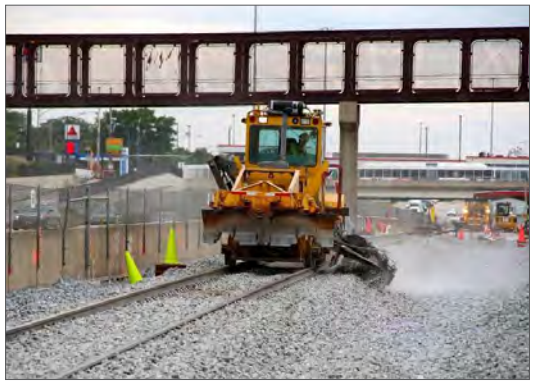

Minimal Impact Areas

- Land Use
- Safety & Security
- Environmental Justice
- Energy
- Transportation
- Water Resources
- Biological Resources
- Hazardous Materials
- Air Quality

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RLE Project Benefits

- Increase access to affordable housing, hospitals, schools, and other community facilities
- Encourage community investment and economic development
- Create direct construction jobs
  - Rail alternative estimated to create 2,600 to 4,100 jobs
- Increase access to jobs
  - Newly accessible jobs within an hour commute of the proposed 111th Street station would increase by 56% (CMAP 2012)

Ridership Benefits

	UPRR (All Options)	Halsted	BRT	No Build
Estimated Annual Trips*	13,000,000	12,000,000	1,000,000	0

**Rides taken on the RLE (95th Street to 130th Street)*

Travel Time Savings

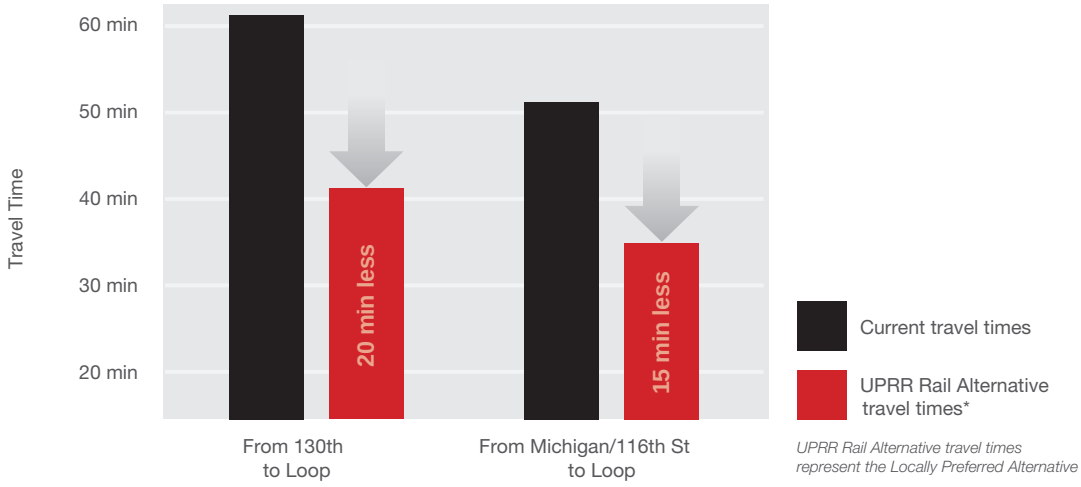

UPRR Rail Alternative travel times represent the Locally Preferred Alternative

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Project Development Process

Conceptual Development
2006

Alternatives Analysis Study
2006 - 2009

Environmental Impact Statement Process

Public Scoping Meetings
September 2009

Prepare Draft EIS
2012-2014

We Are Here

RLE added to CMAP *GO TO 2040* Regional Plan

Publish Draft EIS and Seek Public Comment
Planned for 2015

Next step

Final EIS
FTA issues Record of Decision*

Apply to FTA New Starts Project Engineering Phase and Complete Engineering*

Receive Full Funding Grant Agreement from FTA*

Construction*

Open for Operation

**Dependent on funding and approvals*

Continuing dialogue with the public

Incorporate public feedback into Draft EIS → Complete and publish Draft EIS → Hold public hearing → Incorporate comments into Final EIS → Complete and publish Final EIS → Record of Decision by FTA

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Stay Involved

To provide your input, fill out a questionnaire and place it in the box provided.

Join Contact List: At the sign-in desk

RedExtension@transitchicago.com

transitchicago.com/redeis

facebook.com/thecta

@cta

Mail:

Chicago Transit Authority
Strategic Planning, 10th Floor
567 W. Lake Street
Chicago, IL 60661-1465

Appendix I
Comments Received

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Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension Project

This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name Jon K. Evans

Address 11936 South Princeton Avenue

City Chicago State IL Zip 60628-6014

Email Address jkeiit963827@sbcglobal.net jkenewordeansgp91@att.net
JKEIIT96@hotmail.com

☒ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I have resigned myself to the fact that the Red Line Extension is years away from completion. In the INTERIM, I propose a TEMPORARY RED LINE EXTENSION via one of the following routes

A State; 103rd Wentworth, 119th, Michigan 127th, Indiana & 130th between 95th Street and FOMOCO

B State, 127th Indiana, 130th,

BOTH: Stops would be limited to 103rd, 107th, 111th, 115th, 119th 127th; METROWATER, and FOMOCO

OVER →

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Additional Comments:

1 Michigan Avenue is WAY TOO Narrow for a BRT of any kind

2 Halsted Street is MUCH BETTER SUITED for a BRT, a Subway, or an overhead system, A Light Rail should be avoided Remember the 1950 Streetcar Crash @ 63d & State

3 My proposed Halsted Street BRT should run from the GRESHAM Metra (Rock Island) Station @ 86th Vincennes and Halsted to FOMOCO via Vermont, 127th Indiana and 130th Streets, with stops @ 95th 99th 103rd 107th 111th 115th 119th 123rd 127th Vermont Halsted Bus Terminal State/Michigan, Metro Water Reclamation and FOMOCO

SUMMARY & SYNOPSIS

The area between 79th Street to the Southern City Corporate Limits and between Ashland and the State Line IS A TRANSIT DESERT SOME FORM OF INTERIM RAPID TRANSIT IS NECESSARY That interim system should be implemented most quickly at the lowest possible cost. It should also be a 24/7/365-6 alternative

Thank you for attending this CTA Red Line Extension Project open house.

Comments may also be submitted via mail or e-mail to:
Chicago Transit Authority, Strategic Planning, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465

RedExtension@transitchicago.com

transitchicago.com/redeis

facebook.com/thecta

@cta

Para informacion en Espanol, llame al (312) 681-2807
Customer Information: (888) YOUR-CTA (888 968-7282)

Jon Evans
11936 South Princeton Avenue
Chicago Illinois 60628-6014
773-821-8142
773-844-0568

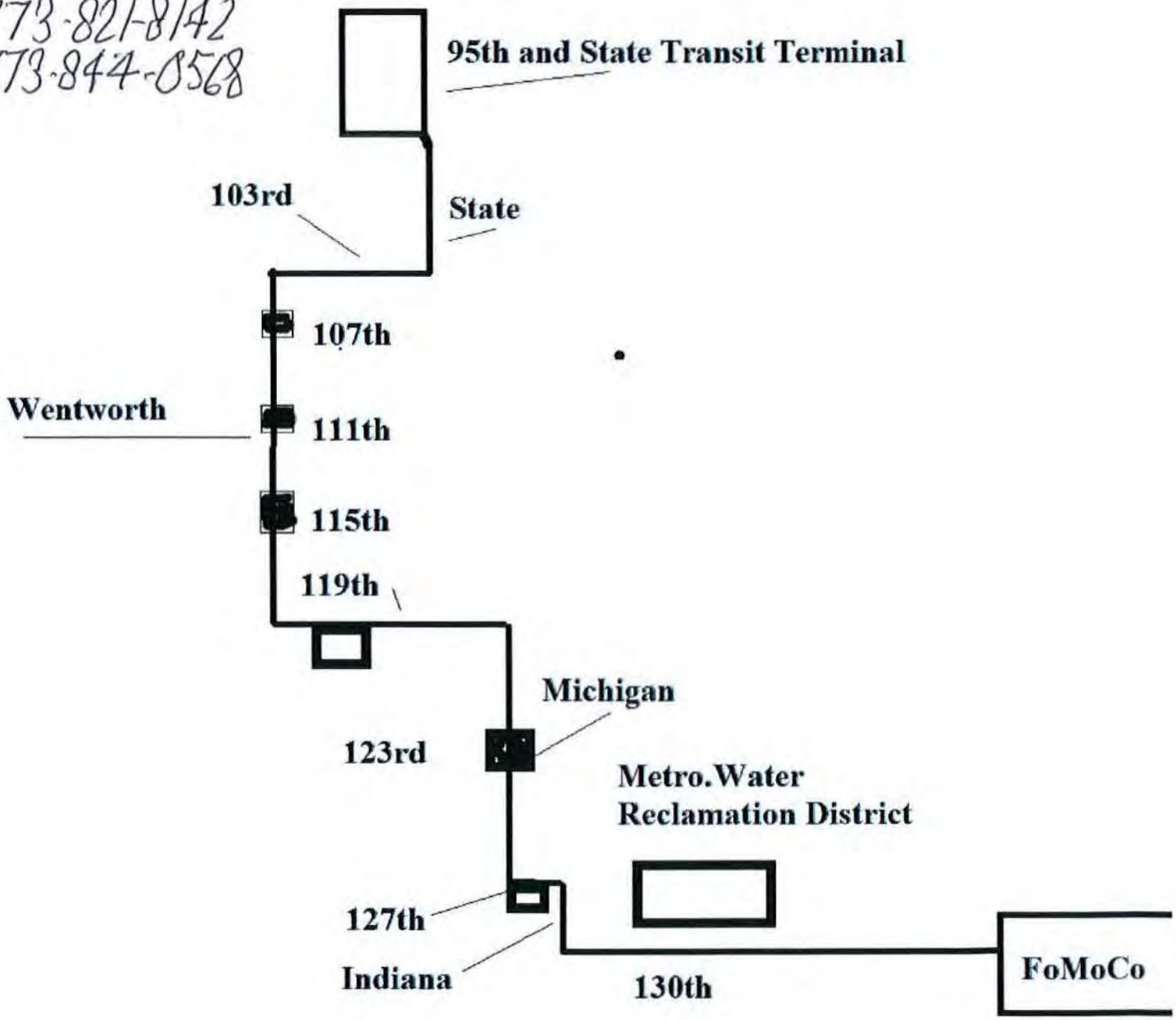

Temporary Bus Rapid Transit Red Line Extension

Jon Evans
11936 South Princeton Avenue
Chicago Illinois 60628-6014
773-821-8142
773-844-0568 Cell

OR

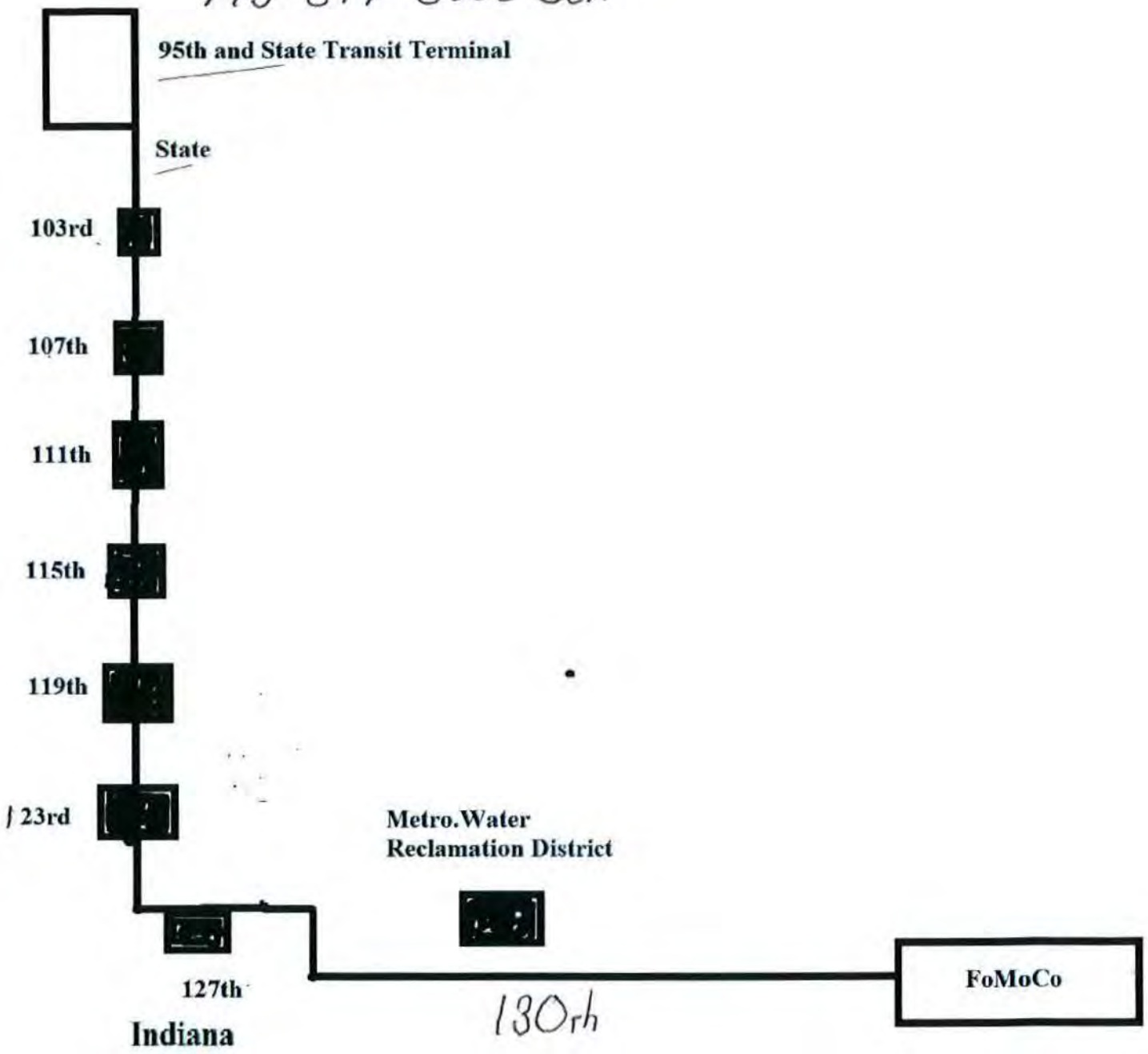

Temporary Bus Rapid Transit Red Line Extension

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WE WANT YOUR INPUT

on the Red Line Extension Project

This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name Alexander Wikstrom

Address 5122 S. University Ave.

City Chicago State IL Zip 60615

Email Address awikstrom@uchicago.edu

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

- The rail alternatives must be pursued. The "BRT" Line may not have a dedicated lane which means it would get stuck in traffic.
- If the UPRR Alternative is pursued, pedestrian access must be addressed for 130th street. It's not pedestrian friendly at the moment.
- Parking should be minimal at best. Creating large parking lots adjacent to the sidewalk is poor planning because it is not pedestrian friendly. Areas around stations should have (cont.)

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Additional Comments:

(cont. from last page) street-level, pedestrian-oriented retail or be mixed with housing. Parking lots would exclude the possibility for Transit Oriented Development on either rail alternative if they are large and sidewalk adjacent.

• I have seen extremely long trains on the UPRR passing through. Could pedestrian underpasses or bridges be constructed? They are long trains that block the intersections, making it impossible to pass.

Thank you for attending this CTA Red Line Extension Project open house.

Comments may also be submitted via mail or e-mail to:
Chicago Transit Authority, Strategic Planning, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465

RedExtension@transitchicago.com

transitchicago.com/redeis

facebook.com/thecta

@cta

Para informacion en Espanol, llame al (312) 681-2807
Customer Information: (888) YOUR-CTA (888 968-7282)

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Red Line Extension

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Name Mrs. Dora Engram

Address 12230 S. Perry Ave

City Chicago, State IL Zip 60628-6827

Email Address d.engram@sbcglobal.net

☑ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I want to see the Red Line Extension happen. It will help residents get downtown faster and handicapped people can travel easier without having to use the PARA transit system. This will also improve the economy in the Greater Roseland/West Pullman area. We need jobs

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (110rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

cta

Additional Comments:

and revitalization like communities on the North side.

What is the target date for this project?

Please let me know when the next meeting will be held

Please hire the residents in our neighborhood to complete this work.

Lastly, I would like to see, the Red Line Run along the ~~Red bidding~~ existing tracks.

Thank you for attending this CTA Red Line Extension Project open house.

Comments may also be submitted via mail or e-mail to:
Chicago Transit Authority, Strategic Planning, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465

RedExtension@transitchicago.com

transitchicago.com/redeis

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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension Project

This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name Anna Williams

Address 349 W. 99th Place

City Chicago State Il Zip 60628

Email Address ash2@sbcglobal.net

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I want to know about the impact on my house, if there is an additional train that goes by every 10 min 24/7. My house already shakes from the freight train, I do not want additional vibration to distribute my house any more. How many homes will have to be remove if the train goes along side UPRR? There need to be several different meeting before the project is in final preparation.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☒	☒	☒	☒	☒	☐
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

cta

Additional Comments:

Please take into consideration that most people who live around this new Red Line Extension are older & retired, and on a fix income. Asking these people to move, you should take into consideration the market value, offering them relocation cost and so portion of the closing cost. Do not be insensitive to the fact that these people lived here most all their life, and to up root them will affect them emotional. Do not make these decision based on profit but also people life. I would think going down Halsted would be a better decision, this way people won't have to move.

Thank you for attending this CTA Red Line Extension Project open house.

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Name Rosa Pledger

Address 12443 S. Perry Ave

City Chicago State IL Zip 60627

Email Address redple@comcast.net

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

The BRT alternative is my preference as it adds to the existing service. Without knowing if there would be bus lines to support access to the proposed rail lines it is not possible for me to see how the rail lines would improve the current situation. I am saying this based on the premise that either the Halsted or Michigan Ave bus service

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Additional Comments:

would be discontinued based on whether the UPRR rail or Halsted rail is built. While all of the plans would reduce traveling times, they also reduce access to the service, as the stops would be severely reduced. Perhaps in the future you can let the public know what supportive bus service, if any, would be available.

Thank you for attending this CTA Red Line Extension Project open house.

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Name Williams, Erma

Address 318 W. 112th STREET

City Chicago State Il Zip 60628

Email Address egw@att.net

☒ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

My Comment and Request is to construct the Red Line down the East Side of the UPRR past 112th Street. When This Project is completed. the people will have better and more means to travel. The Halsted plan should be cancelled. I'm Ready to sell my home and move on to better living. If anyone is

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (59th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Additional Comments:

interested in purchasing for the future plans
Be my guest.

Thank you.

Thank you for attending this CTA Red Line Extension Project open house.

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Name Mary White

Address

City State Zip

Email Address

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park *(99th Street / Princeton Avenue)*	☐	☐	☐	☐	☐	☐
Fernwood Parkway *(Eggleston Avenue between 99th and 103rd Street)*	☐	☐	☐	☐	☐	☐
Block Park *(103rd Street / Harvard Avenue)*	☐	☐	☐	☐	☐	☐

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Additional Comments:

My main concerns are you had your house built and now paid for and now your home is going to be taken away and you wont get enough money to pay it full for a home at todays prices. We don't want to sell our property a very low price and dont even come up or left with anything extra.

Be fair to all.
God Bless you

Thank you for attending this CTA Red Line Extension Project open house.

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Name PHYLLIS A JOHNSON

Address 9400 S. CALUMET

City CHICAGO State IL Zip 60619

Email Address PJ9400@GMAIL.COM

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

- BRT IS UNACCEPTABLE
- I AM CONCERNED THAT CTA OR THEIR MGRS. of existing PARK + Rides (ARCHER ORANGE, Logan Sq - BLUE)
- I AM CONCERNED THAT CTA WILL NOT TAKE THE COMMUNITIES NEEDS INTO ACCOUNT AFTER THE DRAFT EIS IS COMPLETED.
- I AM CONCERNED ABOUT MITIGATING AIR POLLUTION DURING CONSTRUCTION + OPERATION

(OVER)

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☒ SWIMMING POOL	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Additional Comments:

- I BELIEVE THE [redacted] WEST STATION OPTION WILL PROVIDE CTA SERVICE TO AN EMBARRASSINGLY UNDERSERVED (BY CTA) COMMUNITY.

- I BELIEVE THE GREATEL ECONOMIC OPPORTUNITY FOR THE CTA, THE CITY + THE COMMUNITY IS THE CURRENT PERFERRED OPTION

Thank you for attending this CTA Red Line Extension Project open house.

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Name Beth Eckerty

Address 13208 S. Exchange Ave

City Chicago State IL Zip 60633

Email Address betheckerty@hotmail.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

- Except for the service to Altgeld, bus rapid transit does not provide much over the existing alternatives - especially without designated lanes.
- Halsted rail alternative doesn't serve underserved communities to the east (and impacts historic properties)

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (115th Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Additional Comments:

* My primary concern is service to the communities East of State - Altgeld and Hegewisch. #30 needs to connect with a South or west station alternative - there are just as many people living E of Stoney Island as there are in Altgeld to the west.

Overall the UPRR alternative ~~or~~ seems to provide the fastest service to the largest # of people.
I think environmental concerns could be mitigated with careful planning - there is a large amount of vacant industrial space to utilize.

Thank you for attending this CTA Red Line Extension Project open house.

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Name David Ransburg

Address 9228 S May

City Chicago State IL Zip 60620

Email Address ransburgdavid@sbcglobal.net

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I do not like/agree with either Station location at 130th. The two locations are very poorly planned interms of serving the community. For better benifit to the system/community, have the CTA Station at 130th to terminate at the Ford motor plant and the surrounding industrial park. A better location would be the establishment of a major transfer point on

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 94th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Additional Comments:

130th with Metra electric. (Now CTA has access to more riders and riders can have access to points as far as South Bend, Ind (Notre Dame Univ)

Thank you for attending this CTA Red Line Extension Project open house.

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Name CHEENA CREDIT

Address 1022 W 108th st

City CHICAGO State IL Zip 60643

Email Address Cheenagc@aol.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

FIRST, LET ME START BY STATING I FEEL LIKE I ~~S~~ WAS INVITED TO THE PARTY AFTER ITS STARTED.

(1) PROPERTY VALUES: CONCERNED W/ HOW THIS WILL EFFECT THE RE SALE VALUE.

(2) SENIOR RESIDENCE: THE PROPOSED ELEVATED RAIL LINE ALONG EGGLESTON HAS THE POTENTIAL TO DISPLACE SENIOR RESIDENCE. NOT ONLY THAT BUT YOU WOULD BE CHANGING THE ENVIRONMENT, INCREASING CAR AND PEDESTRIAN TRAFFIC.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (59th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☒	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☒	☐	☐	☐

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Additional Comments:

2 CONT.; IF FORCED TO SALE WILL I get COMPENSATED.
AND FAIR MARKET VALUE, WHO DETERMINES THAT.
IS THAT BASED ON TODAYS COST.
(3) ENVIRONMENT
(4) INCREASED CRIME?

Thank you for attending this CTA Red Line Extension Project open house.

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Name Clarine Eggleston

Address 735 W 115th St.

City Chicago, IL State IL Zip 60628

Email Address

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

It appears to me that your concern is not for the residents. Your primary focus seems to be what can bring the most money for those who will invest in this project. I find that government has little or no concern for the people, even though they say they do. I will be praying that God will do what is best for the population at large and that greed will not dictate your decision.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 93rd and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Additional Comments:

I have lived at my current resident 1971. I cannot imagine day in and day out listening to a train as it constantly goes by.

I would hate to see an over head train one-half block from my house.

This is a residential area and it would be inappropriate to alter my community to that degree.

If you wanted to buy my property, I would not object, but I definitely would not want to live there if these changes occurred.

Thank you for attending this CTA Red Line Extension Project open house.

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Name Robert E. Wordlaw

Address 29 E. Madison Street

City Chicago State IL Zip 60602

Email Address bob@cjc.net

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

To ensure that local residents have equal access to some of the projected 2,000 plus construction jobs, the CTA needs to enter into a Community Benefit Agreement with the Developing Community Project. A draft of such an agreement with the assistance of a pro bono law firm is currently being drafted

(Continue on the back)

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue Driveway, 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Additional Comments:

Entering into a CBA with a local recognized community group could become ~~how~~ of a model for local residents can successfully obtain training and jobs on other public works projects. Begin discussions and negotiations with DCP early would be a way defusing the tension surely to arise regarding employment opportunities for local residents DCP's Workforce Collaborative is willing and able to discuss this matter in more detail whenever the CTA calls.

Thank you for attending this CTA Red Line Extension Project open house.

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Name Jeanette Slone

Address 10553 S. Lafayette

City Chicago State Ill Zip 60628

Email Address jslone6@sbcglobal.net

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I'm excited to see the red line extended to 130th Street. Please don't pick the Bus Route. I know it is cheaper and less impact on community but it won't improve commute. The Halsted/Rail Alternative will make too much of an impact ~~but~~ in regard of properties.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Additional Comments:

My first time coming to this type of meeting. I learned a lot. I hope to come to the next one when make final decesion.

Thanks for hiring sign language interpreter,

Thank you for attending this CTA Red Line Extension Project open house.

Comments may also be submitted via mail or e-mail to:
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Name Charles Brown

Address 12 West 115th Street

City Chicago State IL Zip 60628

Email Address Jhuh1951@yahoo.com

☑ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Only concern is if my home will be acquired and if not how a CTA stop would affect the property left behind

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 102nd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Additional Comments:

My wife and I have been attending these meetings for a couple of years and we still don't know the route or the date the construction will start we would appreciate getting those concrete details

Thank you for attending this CTA Red Line Extension Project open house.

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Name STELLA BROWN

Address 12 WEST 115th STREET

City Chicago State IL Zip 60628

Email Address creolestubbie @ yahoo.com

☐ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

(1) my biggest concern the whether or not my property will be impacted by the traffic, noise, pollution + the vibrations of the TRAIN.

(2) where will the station, parking + tracks be placed?

(PLEASE SEE ATTACHMENT)

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☑	☑	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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May 13, 2014

Red Line Extension Project

To whom it may Concern:

We as residents of 115th and State Street would like to know exactly where the purposed station, the tracks and the parking are going to be at the Michigan Avenue (115th Street Station). In the past we were told various things, such as an Aldi's was to be built at 115th and State. Then all of a sudden the sign disappeared and there is only vacant land from Michigan to State.

Since an environmental survey was done, what are the results for the area where are homes are located? How far east or west, north or south did the survey go? The majority of our homes were built in the late 1800's, hence the name West Pullman, so how will the noise and the vibrations affect the foundation of our home.

Sincerely,

Charles and Stella Brown

12 West 115th Street

Chicago IL 60628

773 928 6950

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This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name Jammie FORD

Address 11518 So. LASalle st

City Chicago State IL Zip 60628

Email Address Jammie FORD22@yahoo.com

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☒	☐	☒	☒	☐	☐
Fernwood Parkway (Eggleston Avenue between 109th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Donald M. Branch

Address 11607 S. Peoria St.

City Chicago State IL Zip 60643

Email Address

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Please, do not have it circle around Altgale Gardens Housing Project. We already see enough of their vandalizm and food trash at 95th Street and on the No. 34 South Michigan Bus. I would like to see the 130th Street station on the north side of 130th Street.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name BETTY JONES

Address 9921 S. YALE

City Chgo State Ill Zip 60628

Email Address

☑ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I will welcome the extension of the Red line in the Wendell Smith Park area.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☑	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name DANIEL E PATE

Address 345 W. 99PL.

City CHICAGO State ILL. Zip 60628

Email Address

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

CONCERN ABOUT MY HOUSE BEING TORN DOWN.
345 W. 99PL.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☑	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Julie A Pate

Address 345 W 99th.

City Chicago State IL Zip 60628

Email Address Lady JULIEANNI@yahoo.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I live At 345 west 99th Place with my house be in the ~~Best~~ PATH of the Red Line.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☑	☑	☑	☑	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Eli Washington

Address 501 E 90 Place

City Chgo State Ill Zip 19

Email Address Chesterfield@ameritech.net

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Insuring minority business participation on this project.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Hermitage Avenue)	☐	☐	☐	☐	☐	☐

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Name Deborah Pierce

Address 11 EAST 103rd Pl

City Chgo State IL Zip 60628

Email Address PDPierce8888@Sbc Global.Net

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I am concern about the traffic in the area, and my Home. and also bus Service.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☑	☑	☐	☐
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☑	☑	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☑	☑	☐	☐

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Name Nancy Wimberly

Address (See attached letter.)

City _____ State _____ Zip _____

Email Address 9137psnw@sbcglobal.net

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Please see attachment letter.
Why this meeting today? A focus group is needed before plans are made.
This meeting is probably just a "formality" to say "We asked you for your input."
CTA officials have already decided what will be done. This "Open House" is an insult to the average man's intelligence.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Wimberly and Associates
10531 South Calumet Avenue
Chicago, Illinois 60628
(773) 568-0949

Mr. Gerald Nichols
Representative - CTA
CTA Government and Community Relations
Chicago, Illinois

May 7, 2014

Subject: **95th Street Red Line Extension Project**

Issues: *Accountability, Transparency, Economic Benefits (if any) for 9th Ward Residents

Dear Mr. Nichols:

This is a letter requesting specific, **written answers** to important questions regarding the Proposed 95th Street CTA Red Line Extension.

Please provide the complete list of addresses of homes and businesses slated for demolition in the 9th ward for the 95th Street Red Line Extension Project along both proposed routes.

Where is the complete budget?

According to The Sun-Times:

Construction of a new station at the end of the Current Red Line	$240 million
Five mile plus extension of the Red Line from 95th to 130th Street	$ 2 billion

Furthermore, sources indicate that there is an additional $425 million plan to close the Red Line for 5 months with the argument that the closure Is needed because the current 95th Street Station has to be rebuilt (even) before it can be extended. Whose fault is that? What have the Aldermen done to take care of their communities on the South Side?

This awful, decrepit condition of the 95th Street Station is the result of years of neglect on the upkeep and safety of the 95th Street Station. Currently, the station is filthy. The concrete block with railings on the east side of the bus terminal is broken in spots, the rails are rusted. There is no evidence that the station has been painted or power washed in years.

Please list the complete, itemized budget for all persons receiving payment. Please list the business names, owners and addresses of all persons receiving compensation. **Who's really making the money on this project?**

Companies	Contracts Amounts
Electrical contractors	$_____
Mechanical engineers	$_____
Architectural firms	$_____
Wrecking companies	$_____
Painters	$_____
Trash removal/ disposal companies	$_____
HVAC companies and specialists	$_____
Security systems installers	$_____
Construction companies	$-_____
Portable toilet(s) companies	$_____
Project consultants	$_____
Specialized Equipment	$_____
Lawyers, legal fees, etc.	$_____
Any and all other persons receiving compensation	

85% of jobs must reflect the racial diversity of the community in which the construction project(s) will take place (9th Ward). Who's responsible for making this happen for our community?

Who is Melody Carvajal? Who is Melody McKissack?

CTA's Relocation Consultant is Melody Carvajal. What is her job description? What is her **annual salary?** Who appointed her to this position? Is she a licensed real estate broker? Is she an urban planner? What are her educational and

financial credentials? What are her previous achievements as a relocation consultant? Why isn't her voice mail box not yet even set up?

We are requesting a complete list of addresses of all homes and businesses in the 9th ward that will be destroyed.

The people who bought homes in Roseland in the 70's and 80's were young parents buying their first home. And guess what? When the color changes, the service changes. Today, these young parents are now senior citizens on fixed incomes who raised their children, put them through college, took care of elderly parents and paid property taxes all these years. They have roots here. They have neighbors who look out for them in extreme heat and inclement weather. Their homes are part of their legacies that can be passed on to their children. Their fixed incomes and property taxes pay salaries for corrupt politicians at City Hall.

However, sources indicate that Rahm Emanuel only wants to give homeowners what they originally paid for their homes. Please explain how this scheme benefits families whose homes are demolished and taken away from them.

For the record, any and all homeowners who lose their homes must be compensated according to replacement cost value (as determined in their homeowner's **insurance policies)** – not historical evaluation. Homeowners should be compensated for moving expenses and/or relocation costs, home inspections and closing costs on their new home. Displaced homeowners have the right to make a lateral move with no increase in property taxes, homeowners insurance and/or water bills. We need a written, detailed explanation and specific information on how these families will be compensated for their homes being destroyed.

What are the hourly parking fees (rates) for the 4 new stations' parking facilities?

If the purpose of a focus group is to gather data and input, why is this Focus Group being held after all the plans and budgets have been made? How many 9th Ward residents were involved in the initial stages of planning? Is this meeting just a "formality" to say, "Yes. We included you."

This is only Part I of a series of unanswered questions about the Red Line Project. Please send a written response within the next 3 business days. Thank you.

Respectfully,

Nancy Wimberly

cc: Rosemoor Community Association
Concerned Community Defenders

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Name Jonathan Summers

Address 10731 S. Eggleston

City Chicago State IL Zip 60628

Email Address Jonathan.Summers1959@Yahoo.com

☑ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

What is the potential Impact to my residence?
Noise, possible displacement? property acquisition?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☒	☒	☒	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Roberta Walker

Address 11701 S. State #209

City Chicago State IL Zip 60628-5808

Email Address robertawalker2@yahoo.com

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

With regard the certain Historic sites / dwellings this extension should bring an awareness the Pullman Roseland area. It should also finally bring an end to the transporation desert that has separated this portion of the city from the rest of Chicago.

Bravo !!

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☒	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☒	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name BARBARA LEE

Address 40 West 99th Street

City Chgo State IL Zip 60628-1360

Email Address

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

My chief concern is the probable loss thru sale of my home.

How will this project be different from the Englewood plan which resulted in the sale of many homes many years ago and the land remains vacant?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (113rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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5/13/14

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Name Deanna Burrell

Address 1000 E. 87th St

City Chgo State IL Zip 60619

Email Address deanna@wvon.com

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I agree with the extension.
I prefer the upper rail options.
This forum was very informative.
Good luck.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 103rd and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Alvin Love

Address 11311 S. Union

City Chicago State IL Zip 60628

Email Address RevLuv@MSN.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

In a 2009 referendum, the community voted to recommend the "Community Route", which follows the Union Pacific rail lines. There were 43,000 people who voted, making it the largest referendum in Chicago history. It is my hope that the choice of the community will be honored!

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Georgia Bonner

Address 10423 S. Green St

City Chicago State Il Zip 60643

Email Address

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Should Not be Constructed on or Near Halsted Street
Displacement of homes and Historical buildings is Not an option
I recommend faster, more efficient buses for commute

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☑	☑	☑	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Lee E Floyd

Address 355 W. 99th Pl.

City Chicago State ILL Zip 60628

Email Address

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☑	☑	☑	☐
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☑	☑	☑	☐

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Name James T. Floyd

Address 355 W. 99th Pl.

City Chicago State ILL Zip 60628

Email Address

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What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Will we be Relocated & moving expensives

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☑	☑	☑	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☑	☑	☑	☐

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Name Kevin Taylor

Address 341 W. 99th pl

City Chicago Il. State Il Zip 60628

Email Address KevinTaylor2556@gmail.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

The Rail or Tracks should go down, Holstead, The present Rail tracks are already doing a lot of Damage to our Homes foundation. and also our property Value will Drastically Decrease if you allow a Train to Run ~~every~~ every 10 min.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☒	☒	☒	☒	☒	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Rev. Alice Harper-Jones

Address PO Box 208491

City Chicago State Il Zip 60620

Email Address alicehj19@gmail.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

How much guide will the community contractors be involved in the construction process?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Sharon Bell

Address 1250 W. 112th Pl.

City Chgo State Il Zip 60643

Email Address sharonbell1250@comcast.net

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

1) Concerned with safety of elevated tracks and potential comes change in element ie: 63rd street.

2) What about elderly that are on fixed incomes have paid their mortgage and now with relocation they maybe faced with a mortgage.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Rosie lee BAXTER

Address 250 W. 106th

City Chicago State Ill Zip 60628

Email Address RB76814@gmail.com

☑ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (56th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 90th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (110th Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension Project

This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name WILLIAM BAXTER

Address 250 W 106TH ST

City CHICAGO State IL Zip 60628

Email Address BAXTERPLACE@AMERITECH.NET

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (95th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name George Krupa

Address 10 South Riverside, Suite 400

City Chicago State IL Zip 60606

Email Address george.krupa@parsons.com

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

What is the timeline for implementing this project

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Annette Cain

Address 727 W. Vermont

City Chicago State IL Zip 60628

Email Address annettecain@ymail.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Our community organization do not want the Red line to come down Rusted. It will make it Dark, increase crime, and make a quiet community noisy

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (113rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name _____

Address _____

City _____ State _____ Zip _____

Email Address _____

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I ~~FEEL NO~~ HAVE A BAD FEELING ABOUT THE ELEVATED OPTIONS

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Anita Bridge

Address 10418 S. Eggleston

City Chicago State Il Zip 60628

Email Address abridge1121@gmail.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

- Concern: If displaced will compensation pay off existing mortgage and assist with relocation (down payment)
- When will decision be made on the existing options.
- How soon will community be notified of existing option? (final decision)

If relocation is needed - will efforts be made to keep homeowners "above water"?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☑	☑	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name: RONNIE R. MEDIOUS

Address: 11834 S. PRAIRIE AVE.

City: CHGO. State: IL Zip: 60628

Email Address: MEDIOUS@COMCAST.NET

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures? WE ARE WAITING FOR IT TO START RUNNING.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Shirley M. Evans

Address 9242 S. Wabash Ave.

City Chicago State IL Zip 60619

Email Address shirleyevans@sbeglobal.net

☑ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

- ADDRESS Potential crime
- AREA should be kept clean
- well lite
- ADDRESS Potential loitering that might occur.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (69th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Langley Avenue between 104th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Charlean Preston

Address 10415 So. Eggleston

City Chicago State Il Zip 60628

Email Address raspberrywater647@yahoo.com

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

If we have to relocate, just be fair.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Delois Coleman

Address 138 E 117th Place

City Chgo State IL Zip 60628

Email Address N/A

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Will it affect my home?
When will it start?
How long will this project take?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Longwood Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Pamela M Burden

Address 132 East 117th Place

City Chgo State IL Zip 60628

Email Address nurse pb 69 @ yahoo.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Will the Project directly affect my home?
When is either project projected to start?
How much notification will we be given?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (116th Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Toni Stith

Address 1829 S. Bishop

City Chicago State Ill. Zip 60643

Email Address

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

What Percentage of Jobs will go to the Community.
Going Down Halsted is a bad option
I recommend travel Down Fraight Train Tracks will be the ~~cheaper~~ cheaper option

A train down state or michigan

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☑	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☑	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☑	☐	☐	☐

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Name LOURDES SOLORZANO (CADILLAC TRANSPORTATION INC DBE CERTIFY)

Address 8236 HIGHGATE COURT

City ORLAND PARK State IL Zip 60462

Email Address cadillacti@gmail.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

TRUCKING - HAULING
(773) 447-5559

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Geraldine Baldwin

Address 11118 So. Peoria St.

City Chgo. State IL Zip 60643

Email Address MA

☑ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

(1) How many homes will have to be displaced near 111th + Peoria Chgo?

(2) Are they going to demolish Cedar Park Cemetary on 12.Th & Halstead?

(3) Run the Red line project near the Freight Trains.

(4) Do you have Plans to prevent damage to buildings/foundations?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Tony Lawson

Address

City Chicago State Ill Zip 60628

Email Address

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I had my house built, its paid for, I dont want to move or have the extra negative element near my home

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☑	☑	☑	☑	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☑	☑	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☑	☑	☐	☐	☐

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Name Igor Stuzenkov

Address 6165 N Winthrop Ave #214

City Chicago State IL Zip 60660

Email Address igorst3@hotmail.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I support the UPRR alternative - whether directly on the ROW or west/east of it. (though east seems to be the less disruptive of the two, so I guess I'd prefer that). I would ask CTA to consider potential transfer opportunities between Metra and CTA, especially near Kensington station

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Delota Wilmington

Address 11543 S. Throop

City Chicago State IL Zip 60643

Email Address dwilmington@sbcglobal.net

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

State or Michigan to Altgeral Gordon

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (56th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (110th Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Carlos Nelson

Address 7901 So. Racine

City Chicago State IL Zip 60620

Email Address cnelson@gzgdc.org

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

This project was designed 50 years ago so it is long overdue. The I-57 median was designed to accomodate a rapid transit line! Consider it and its impact!

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Christine Dungey

Address 9750 S. Eggleston

City Chicago State IL Zip 60628

Email Address

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

When my polling place was changed to St thaddeus church from Euclid Park (I voted there since 1967) that put me into another ward, precinct putting my house value to a lower value. Very frankly I feel as if I have been bamboozled! with your fair market pricing.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 98th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Carlos Nelson

Address 9517 So. Bell

City Chicago State IL Zip 60643

Email Address cnelson@gagck.org

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

What are the population density numbers within a ½ mile or 1 mile radius of each station on all routes?

The UP option seems to terminate in an extremely low dense area! The Halsted option would not only reach a larger population foot to toe but would also have a bigger economic development impact along the Halsted corridor AND the east west corridors

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (59th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Melvin Thompson, Executive Director, The Endeleo Institute

Address 1947 W. 95th street

City Chicago State IL Zip 60643

Email Address mrthompson@trinitychicago.org

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

The salient impact of both the Red Line Extension and renovation of the 95th street station will be profound in terms of the economic significance along the 1/2 mile West Corridor at 95th street. Please ensure that attention is paid to this four-block area west of the renovated station so the desired walkable community indeed comes to fruition.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name ANGELA CONNER

Address 12018 S. EBERHART

City CHICAGO State IL Zip 60628

Email Address AYCONNER@SBCGLOBAL.NET

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

IF THE EAST OPTION IS SELECTED I'M CONCERNED ABOUT THE NOISE.
ALSO I DON'T UNDERSTAND WHY THERE IS NO OPTION ~~X~~ FOR THE RED LINE EXTENSION BEYOND 95TH DAN RYAN ON AROUND TO THE BISHOP FORD TO 130TH.
WHATEVER RAIL OPTION IS DECIDED THE BRT ALTERNATIVE SHOULD GO ALONG WITH IT. THE BUS SERVICE IN THAT AREA IS UNDER SERVICED NOW.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (113rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name _____

Address _____

City _____ State _____ Zip _____

Email Address _____

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

VERY DISAPPOINTED ABOUT THIS PRESENTATION, I'VE ATTENDED BEFORE AND IT DOESN'T LOOK AS THOUGH MUCH TECHNICAL PROGRESS HAS BEEN MADE; THIS SHOULD NOT BE A DECISION BASED ON PRETTY PICTURES; NEED MORE FINANCIAL & TRANSIT RELATED INFO. WHY TO ALTGELD ~~GARDENS~~ GARDENS? WITH SO MANY VACANT LOTS, IT IS SHORT SIGHTED TO FOCUS ON THAT AREA SO FAR REMOVED FROM CITY CENTER. THANKS FOR YOUR CONSIDERATION.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (Ellis Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension Project

This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name Hulda Swan

Address 310 East 107 St.

City Chicago State Il. Zip 60628

Email Address

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

My Concern is about the neighborhood being Overwhelm with parking for bus and train.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name JULIUS McKINNES (REC)

Address 10826 S. EDBROOKE

City CHICAGO IL State IL. Zip 60628

Email Address JULIUS4SERVICE@YAHOO.COM

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I LIKE THE RAIL IDEA BEST. THE HALSTED NOT NEAR TO A EXPRESS WAY.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Cynthia Anderson

Address 9336 S. Michigan Ave

City Chicago State IL Zip 60619

Email Address celaine108@aol.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Investigate the use and cost of using the Shaker Hts, OH rapid transit system for use along the proposed expansions,

What would be the impact on property values for existing neighborhoods surrounding the Red Line Extension Alternatives

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (69th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (113th Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Alonzo Anderson

Address 9336 So. Michigan Avenue

City Chicago State IL Zip 60619

Email Address alonzoma76@yahoo.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Have CTA considered using Rapid Transit Cars/Buses ~~Bus~~ on the new Halsted Rail Alternative Line? Since Halsted Street is two lanes running both North & South with a divider, it offers more space than Michigan Avenue for such a propose. I have to believe that it will be more cost-effective than operating the existing red-line trains/cars on the Halsted Rail Alternative proposal?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Lawrence Moore

Address P.O. Box 87288

City Chicago State IL Zip 60680

Email Address lawrencemoore2@yahoo.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

As that I have been following the project since 2006, I think that the UPPR Alternative East Option would be the best selection because it would eliminate alot of the existing congestion at the 95th terminal, and it would give riders better options and access that would be coming from the South East Suburbs + Northwest Indiana. It would also allow for less congestion on the Bishop Ford Expressway, and allow for more jobs to open upon this corridor.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name OLIVER W SWAN

Address 310 E. 107TH

City CHICAGO State ILL Zip 60628

Email Address

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I HAVE NO CONCERNS, IT IS A GOOD THING TO HAVE A BETTER WAY TO TRAVER. I LIVE 310 E 107 ST FOR 45 YRS, SO IT TIME FOR US TO GET SOME EMPROVMENT

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☒	☐	☒	☒	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 100rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Rhychell Barnes

Address

City State Zip

Email Address Rhychell_barnes@att.net

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Your ideas, designed and staffs are really helpful and understand the visual public trasportation. I think Halstad Rail. May bring community to find more jobs. I hope people will try to give up some property. Please save and help them. People will feel upset. Also more bus availality in the Area.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Velvetta Young

Address 400 E. 111th St

City Chicago State IL Zip 60628

Email Address yvel@aol.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Please provide a thourgh cleaning of the current 95th Street station. The steps are filthy AND the escalator WAS broke

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (95th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Longwood Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Velvetta Young

Address 400 E. 111th Street

City Chicago State IL Zip 60628

Email Address yJvel@aol.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

In future outreach opportunities consider sending information to the grammer and high schools to distribute, send notices, texts and emails to churches and non-profits in the community (food pantries). Send information where community can get it, most of us don't have home computers

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue to West 99th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name CARL P JOSSELL SR

Address 10744 SOUTH WALLACE

City CHICAGO State ILL Zip 60628-

Email Address CARL JOSSELL AT

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

WILL CONTRACTOR BE FAIR IN HIRING + TRAINING.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (59th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☑	☐	☑	☑	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Rosemary Wyche

Address 322 W 101 Street

City Chgo State IL Zip 60628

Email Address RWYCHE@ameritech.net

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

— I just put raised beds in my back yard — so, I don't want an elevated train blocking the sun.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☒	☒	☐
Fernwood Parkway (Eggleston Avenue between 95th and 100rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Peter Taylor

Address 9600 S. Prairie Ave

City Chicago State IL Zip 60628

Email Address pbtaylor27@comcast.net

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

CMAP identified the 'Grey Line' project in 2010 utilizing excess capacity on the Metra Electric to provide CTA access & connectivity to Roseland, West Pullman, Pullman & Hedwisch. The Grey Line could be brought online much more quickly than the Red Line and would complement service for the Red Line. Rapid Transit could be provided for these residents 5 years earlier.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 95th and 103rd Street)	☐	☐	☐	☐	☐	☒
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name Willard Mckenzie

Address 10608 S. Wabash

City Chicago State IL Zip 60628

Email Address willrdmcknz@yahoo.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I have no concerns other than potential problems with (imminent domain abuses) I want this project to be completed as it is long overdue no buses should be used for this project otherwise I personally would consider it a complete and utter failure.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☑	☐	☑	☑	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☑	☐

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Name MARGUERITE JACOBS

Address 755 E 130 PLACE

City Chicago State IL Zip 60827

Email Address MARGUERITE1955@yahoo.com

☒ Check here to also receive updates about other projects along the Red Line.

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

It would BE GREAT if the PACE BUS IS included. THE DIAGRAMS WAS A GREAT IDEA. Good VISION. NOW IN THE MAIL would help the ONES that IS NONE BELIEVERS.

130th -

* Not Down Halsted

PACIFIC (YES)

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☒	☐	☐	☐	☐	☐
Fernwood Parkway (Fulton Avenue between 99th and 103rd Street)	☒	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☒	☐	☐	☐	☐	☐

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Name _____

Address _____

City _____ State _____ Zip _____

Email Address CNELSON@gagdc.org

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

The far south side an south suburbs are some of the most economically disadvantaged areas in the entire region with little to no access to jobs. All other areas of the city has rapid transit to beyond the city limits! Halsted option would be the closest to accomplishing this!

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☑
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☐	☐	☑
Block Park (113rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☑

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Name Nancy Wimberly

Address

City State Zip

Email Address

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

How many black contractors and businessmen will work on this 2 billion dollarproject? 95% of the business should be minority contractors

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 91st and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name _____

Address _____

City _____ State _____ Zip _____

Email Address _____

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What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

This whole "so called" set-ups is a disgrace to the black community. Where are the flyers for the meeting at St. James Church?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (69th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☐
Fernwood Parkway (Eggleston Avenue between 91st and 103rd Street)	☐	☐	☐	☐	☐	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☐

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Name Matthew Walker

Address 11163 S Vernon Apt 3

City Chicago State IL Zip 60628

Email Address MATWALKER8@aol.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

I am concerned that demolition will begin but no extension will take place in the foreseeable future.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (95th Street / Princeton Avenue)	☐	☐	☒	☒	☐	☐
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☒	☐	☒	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☒	☐	☐	☐

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Name ROBERT C. BARCLAY (WEST CHESTERFIELD COMMUNITY ASSOC.)

Address 9191 S. BURNSIDE AVE. CHICAGO,

City CHICAGO State IL Zip 60619

Email Address

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

WHERE I LIVE, I AM CONCERN ABOUT THE 95TH ST STATION, WHICH SHOULD HAVE MULTI-LEVEL PARKING FOR AUTOS. A SAFE CLEAN PARKING LOTS FOR AUTOS & BIKES AT 95TH STREET STATION.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park *(99th Street / Princeton Avenue)*	☐	☐	☐	☐	☐	☑
Fernwood Parkway *(Eggleston Avenue between 99th and 103rd Street)*	☐	☐	☐	☐	☐	☑
Block Park *(103rd Street / Harvard Avenue)*	☐	☐	☐	☐	☐	☑

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Name Cynthia + Roosevelt Green

Address 10505 S. Green Street

City Chicago State IL Zip 60643

Email Address bxerswife@sbcglobal.net

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

the Halsted Rail alternative should not be an option. Halsted is a main street out south. Halsted is busy with rush hour traffic in the a.m. and p.m. the noise of the rail line would be awful, the traffic from the train stops would be awful as well as the look of the overhead tracks. I live one street west of Halsted and would definatly not want the extension to run down Halsted. Economic development is always good for a community but how do we know the extension down Halsted will REALLY improve our community?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park (99th Street / Princeton Avenue)	☐	☐	☐	☐	☐	☒
Fernwood Parkway (Eggleston Avenue between 99th and 103rd Street)	☐	☐	☐	☒	☒	☐
Block Park (103rd Street / Harvard Avenue)	☐	☐	☐	☐	☐	☒

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Name _____

Address _____

City _____ State _____ Zip _____

Email Address Mattisonivory1@hotmail.com

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

- FTA requires a match for funds.
1. Does CTA have a plan to secure the additional funds? 2. Will the additional money needed be paid by the consumers?
3. What is the budget for this project?
4. Why is CTA asking for approval from the public without a clear financial plan to present to the public?

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park *(99th Street / Princeton Avenue)*	☑	☑	☑	☑	☐	☐
Fernwood Parkway *(Eggleston Avenue between 99th and 103rd Street)*	☐	☐	☐	☐	☐	☑
Block Park *(103rd Street / Harvard Avenue)*	☐	☐	☐	☐	☐	☑

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Additional Comments:

The entire plan should be submitted before approval is obtained. The plan should have the construction lay-out & financial budget as well.

Thank you for attending this CTA Red Line Extension Project open house.

Comments may also be submitted via mail or e-mail to:
Chicago Transit Authority, Strategic Planning, 10th Floor, 567 W. Lake Street, Chicago, IL 60661-1465

RedExtension@transitchicago.com

transitchicago.com/redeis

facebook.com/thecta

@cta

Para informacion en Espanol, llame al (312) 681-2807
Customer Information: (888) YOUR-CTA (888 968-7282)

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Name Annette Cain United Neighbor

Address 727 W. Vermont

City Chicago State IL Zip 60625

Email Address annettecain@ymail.com

☐ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

No Red line Down Halsted. Our Community will be dark, noisy.

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park *(99th Street / Princeton Avenue)*	☐	☐	☐	☐	☐	☑
Fernwood Parkway *(Eggleston Avenue between 99th and 103rd Street)*	☐	☐	☐	☐	☐	☑
Block Park *(103rd Street / Harvard Avenue)*	☐	☐	☐	☐	☐	☑

cta

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension Project

This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name Leonardo Gilbert

Address 11200 Peoria

City CHGO State IL Zip 60643

Email Address leodeegilbert@aol.com

☒ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

- NOT DOWN Halsted option
- Please investigate any other UP options

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park *(99th Street / Princeton Avenue)*	☐	☐	☐	☐	☐	☑
Fernwood Parkway *(Eggleston Avenue between 99th and 103rd Street)*	☐	☐	☐	☐	☐	☑
Block Park *(103rd Street / Harvard Avenue)*	☐	☐	☐	☐	☐	☑

cta

RED AHEAD

Moving Ahead to a Better Red

Red Line Extension

WE WANT YOUR INPUT

on the Red Line Extension Project

This project is one part of the Red Ahead Program, CTA's comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line. CTA is interested in hearing your thoughts on the project. Please PRINT.

Name GWENDOLYN GREEN

Address 10136 South MAY STREET

City Chicago State IL Zip 60643

Email Address

☑ *Check here to also receive updates about other projects along the Red Line.*

What specific comments or concerns do you have about the Red Line Extension alternatives, potential impacts, and mitigation measures?

Impacts: How many families will be displaced by the extension? Will this project infuse an ~~economic~~ revenue stream into those communities impacted? How will this spend impact force ridership? What is the volume of riders expected to utilize the extension? Increased traffic introduces increased risks. What are the safety/security concerns tied to this project and how will they be mitigated? What % age of the jobs created from this initiative (short and long term as well as permanent, will be recruited for out of the communities that will be impacted?)

How do you use the following parks? (Check all that apply)

	Baseball / Softball / Basketball	Playground	Walking / Jogging	Community Events	Other	I do not use this park
Wendell Smith Park *(99th Street / Princeton Avenue)*	☐	☐	☐	☐	☐	☑
Fernwood Parkway *(Eggleston Avenue between 99th and 103rd Street)*	☐	☐	☐	☐	☐	☑
Block Park *(103rd Street / Harvard Avenue)*	☐	☐	☐	☐	☐	☑

cta

MAY 12, 2014
(MONDAY)

ENTLEMEN:

1.) PLEASE KEEP MY NAME ON YOUR AILING LIST FOR PROGRESS AND UPDATES ON HE 2014 RED LINE EXTENSION.

2.) I AM A REGULAR RIDER ON THIS BRANCH ND HAVE FOLLOWED THE CITY'S PROGRESS FOR NO YEARS. THE EXTENSION IS A LONG-NEEDED, UCH OVERDUE CONVENIENCE FOR ALL RIDERS.

3.) ANY FURTHER MAILINGS, PLEASE INFORM IE THROUGH REGULAR UNITED STATES POSTAL DELIVERY SERVICE. I AM A RETIRED U.S. ITIZEN AND CONCERNED ABOUT IMPROVED RANSPORTATION SERVICE IN THE CITY AND SUBURBS.

Mr. Victor Bahr

From: Carolyn Dellutri [mailto:cdellutri@downtownevanston.org]
Sent: Monday, May 12, 2014 8:45 AM
To: Red Extension
Subject: Happy New Year

Thank you for your e-mail. I no longer work for Downtown Evanston.
Please contact Matt DiNello at 847-866-6319 (mdinello@downtownevanston.org) Carolyn Dellutri

From: Red Extension <redextension@transitchicago.com>
Sent: Tuesday, May 13, 2014 1:07 PM
To: WheelerGrange, Robyn
Subject: RE: Please add me to the project mailing list. Thank you.

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: WheelerGrange, Robyn [mailto:Robyn.WheelerGrange@mail.house.gov]
Sent: Tuesday, May 13, 2014 3:01 PM
To: Red Extension
Subject: Please add me to the project mailing list. Thank you.

robyn.wheelergrange@mail.house.gov

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, May 14, 2014 12:17 PM
To: ifiworld2 .
Subject: RE: CTA Red Line Extension Open House

Martin,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. We will take your comments into consideration as we develop the Draft Environmental Impact Statement. Please visit our webpage at www.transitchicago.com/Redeis to learn more about the project and to follow the progress of the Draft Environmental Impact Statement.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60680-1465
Fax: (312) 681-4297

From: ifiworld2 . [mailto:ifiworld@gmail.com]
Sent: Tuesday, May 13, 2014 4:17 PM
To: Red Extension
Subject: CTA Red Line Extension Open House

Sirs:

Although I will not be able to attend the public hearing, I suggest the CTA expand its plan for the Red Line Extension to include the line to extend to just north of I-80 in Lansing with a terminus, triple-decker garage parking area (Kiss n' Ride) with bicycle racks, and rail yard there for all south suburban rides to get to the Loop, with a stop at 159th Street near the River Oaks Mall in Calumet City and one stop at Sibley Boulevard.

Sincerely,

Martin Edward Lewis
ifiworld@gmail.com

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, May 14, 2014 12:16 PM
To: Jon Samuel
Subject: RE: Red Line Extension

Jon,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. We will take your comments into consideration as we develop the Draft Environmental Impact Statement. Please visit our webpage at www.transitchicago.com/Redeis to learn more about the project and to follow the progress of the Draft Environmental Impact Statement.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60680-1465
Fax: (312) 681-4297

From: Jon Samuel [mailto:jonsamuel32@yahoo.com]
Sent: Tuesday, May 13, 2014 9:47 PM
To: Red Extension
Subject: Red Line Extension

I'm open to just about every option except for the Halsted option because that will go to Halsted & 127th, but it won't serve Altgeld Gardens, as residents there feel isolated from the rest of Chicago. I think that the existing #34 South Michigan should be served with articulated buses. I'd go with you purchasing whole new articulated buses or purchasing and refurbishing articulated buses previously used by another transit agency (as well as if your final decision is to implement the BRT route).

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, May 14, 2014 12:15 PM
To: Judy Hartmann
Subject: RE: red line expansion

Judy,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Judy Hartmann [mailto:judy@integritywallpanel.com]
Sent: Wednesday, May 14, 2014 12:37 AM
To: Red Extension
Subject: red line expansion

Please put me on the list my factory is to he west of the tracks on 109th street. I have a facility of 10,000 feet where we fabricate panels for high rise construction

Judy Hartmann
judy@integritywallpanel.com

From: Red Extension <redextension@transitchicago.com>
Sent: Wednesday, May 14, 2014 12:14 PM
To: NANCY WIMBERLY
Subject: RE: Request for Newsletters

Nancy,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: NANCY WIMBERLY [mailto:9137psnw@sbcglobal.net]
Sent: Wednesday, May 14, 2014 2:07 PM
To: Red Extension
Cc: NANCY WIMBERLY
Subject: Request for Newsletters

5/14/14

To Whom It May Concern:

Please put me on the list to receive Newsletters and other bulletins and information from CTA.
My E-mail is 9137psnw@sbcglobal.net

Thanks.

Nancy Wimberly

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, May 19, 2014 6:25 AM
To: Claire Williams
Subject: RE: add me to email list

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Claire Williams [mailto:sag19@sbcglobal.net]
Sent: Wednesday, May 14, 2014 4:40 PM
To: Red Extension
Subject: add me to email list

please add me to the emailing list for the CTA red line extension.

From: Red Extension <redextension@transitchicago.com>
Sent: Monday, May 19, 2014 6:25 AM
To: Tondelya
Subject: RE: Informed

Tonya,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

-----Original Message-----
From: Tondelya [mailto:tondelya@aol.com]
Sent: Wednesday, May 14, 2014 10:18 PM
To: Red Extension
Subject: Informed

Please keep me informed with the red extension process due to the fact I might get affected my this change.

Tonya McDonald
99th and Yale Ave

Sent from my iPad

From: Red Extension
Sent: Monday, May 19, 2014 10:09 AM
To: 'Kara Mitchell'
Subject: RE: Red Line

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. Please visit our webpage at www.transitchicago.com/Redeis to learn more about the project and to follow the progress of the Draft Environmental Impact Statement.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60680-1465
Fax: (312) 681-4297

From: Kara Mitchell [mailto:Kara.Mitchell@EEOC.GOV]
Sent: Thursday, May 15, 2014 11:48 AM
To: Red Extension
Subject: Red Line

I hope the extension is better constructed than the 87th street station which has dripping overhead now it is both the north and side steps) and puddles of water coming in from the coves (north and side).

-----Original Message-----
From: North Red & Purple Modernization
Sent: Tuesday, May 20, 2014 1:26 PM
To: Red Extension; Feedback
Subject: FW: Contact List For Meetings

Sending this to you for other transit projects.

Best,
Steve

-----Original Message-----
From: Dominic Morris [mailto:tnnfpen1@icloud.com]
Sent: Tuesday, May 20, 2014 12:31 PM
To: North Red & Purple Modernization
Subject: Contact List For Meetings

Please add me to the list for future public meetings relating to all transit projects.

Regards,

Dominic Morris
dominicmorris2013@gmail.com

From: Red Extension [mailto:redextension@transitchicago.com]
Sent: Wednesday, May 21, 2014 7:09 AM
To: Jennifer Cobb
Subject: RE: Mailing List

Jennifer,

Thank you for your interest in the Red Line Extension Project. We will add you to our contact list and make sure you receive all future communications.

RedExtension@transitchicago.com
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465

From: Jennifer Cobb [mailto:randomuser1105@gmail.com]
Sent: Tuesday, May 20, 2014 10:08 PM
To: Red Extension
Subject: Mailing List

Hello, I would like to be added to the mailing list. Thank you.

-Jennifer Cobb

-----Original Message-----
From: Red Extension [mailto:redextension@transitchicago.com]
Sent: Wednesday, May 21, 2014 7:20 AM
To: Arlene Echols
Subject: RE: Comments on the Red Line Extension

Arlene,

Thank you for your interest in the Red Line Extension Project.

We appreciate your input and thank you for taking the time to provide comments. We will take your comments into consideration as we develop the Draft Environmental Impact Statement. Please visit our webpage at www.transitchicago.com/Redeis to learn more about the project and to follow the progress of the Draft Environmental Impact Statement.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661-1465
Fax: (312) 681-4297

-----Original Message-----
From: Arlene Echols [mailto:aechols1979@gmail.com]
Sent: Tuesday, May 20, 2014 11:08 PM
To: Red Extension
Cc: ctc-tribletter@tribune.com
Subject: Comments on the Red Line Extension

Chicago Transit Authority, Strategic Planning
567 W Lake St, 10th Fl
Chicago, IL 60661-1465

May 20, 2014

Dear Madam or Sir,
I attended the Open House for the Red Line extension on May 13, and I have several concerns about the project. The overriding issue is that inadequate funds are being committed to such a major project, and because of the inadequacy of the funding, the options for and the scope of the extension are severely limited to the point that the finished product will be a solution that disrupts many, and adequately serves the transportation needs of few.

A subway is needed. Any train that travels above ground will cast a pall on any throughway that it is over or near. The support posts and the overhead structure will be intrusive to the street scape, and the clamor of the train and the announcements from the train will be a permanent noise nuisance to people blocks away.

The Halsted overhead alternative is not likely to appeal to anyone with property along the route. What business would welcome an overhead transit structure in front of it? What household would want the noise of an above ground train anywhere within hearing? What pedestrian would choose to walk along a street covered by a set of train tracks? An above Halsted train will take a throughway that needs to be lifted up, and turn it into a street that upstanding members of the community try to avoid. Not so for the less upstanding members. The structure and support posts will provide many opportunities for graffiti and for thieves and lawbreakers to hide behind to the detriment of any pedestrians unwise enough to walk down the street.

The Michigan Avenue Bus Rapid Transit is rapid in name only. While the route would serve many, the bus will not be rapid, and will do little more than give true BRT a bad name. I learned at the open house that the BRT will be only 5 minutes faster than the present #34 Michigan. This, as you well know, is nothing like Bus Rapid Transit.

The locally preferred alternative is preferable only because it is the least disruptive to businesses and homes along and near Halsted. The train stations do not seem to serve areas populated by any significant population, and the while the end of the line is nicely located to serve Indianans and suburbanites who want to park and ride, the main purpose of the line should be to serve south siders whose rapid transit needs have been long ignored.

The scope and permanency of any rapid transit project is great enough that accommodation for the future success of the neighborhood should be taken into account before abandoning an option because it's too expensive. If the project cannot be done right, then increased and timely bus service should be added to the affected streets, and the funds should be banked until such time as a commitment to adequate funding can be made. Please do not impose this permanent, noisy, unsightly, and potential crime haven on a thoroughfare that needs a subway.

Sincerely,
Arlene Echols
11329 St Lawrence
Chicago, IL 60628
AEchols1979@gmail.com
773-821-1637

From: Red Extension [mailto:redextension@transitchicago.com]
Sent: Wednesday, June 18, 2014 1:42 PM
To: 고두종
Subject: RE: inquiries for project schedule and condition of eligibility

Thank you for your interest in the Red Line Extension Project.

CTA is currently preparing the Draft Environmental Impact Statement. Future phases of the project, which include the Final Environmental Impact Statement, Engineering, and Construction are currently not funded and project schedule is dependent on federal reviews and approvals and funding availability.

Please visit our webpage at www.transitchicago.com/Redeis to learn more about the project and to follow the progress of the Draft Environmental Impact Statement. We will continue to update the webpage with new information as it becomes available.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60680-1465
Fax: (312) 681-4297

From: 고두종 [mailto:doojong@hyundai-rotem.co.kr]
Sent: Tuesday, June 17, 2014 5:13 AM
To: Red Extension
Subject: inquiries for project schedule and condition of eligibility

Dear Sir/Madam;

This is Doojong KOH, working for Hyundai-Rotem Company (train and railway system provider) and got informed this project today.

I will be appreciated if you inform its project schedule and qualifications for joining this bidding.

Best regards,

Doojong KOH

GQR- 2015 Global Quality Rotem

고두종 Koh Doojong
철도시스템영업팀 | 과장 | PMP
Railway System Sales & Marketing Team | Manager | PMP

Hyundai Rotem Company
T 02 3464 7237 M 016 265 4546
doojong@hyundai-rotem.co.kr

상기 메일은 지정된 수신인만을 위해 발송되는 것으로서 보안을 유지해야 하는 정보 및 관련 법령에 따라 보호되는 영업비밀 등을 포함하고 있을 수 있습니다. 본 메일에 포함된 정보를 권한 없이 보유, 전송, 공개, 배포, 복사 또는 사용하는 것은 엄격하게 금지되어 있습니다. 만약

귀하가 지정된 수신인이 아닌 경우 회신메일로 발신자에게 연락하여 주시고, 원본 및 사본과 첨부 문서를 모두 삭제하여 주시기 바랍니다.
협조하여 주셔서 감사합니다.

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From: Red Extension
Sent: Wednesday, June 18, 2014 3:43 PM
To: 'Rod Muir'
Subject: RE: Opening Year of the Red Line extension

Rod,

Thank you for your interest in the Red Line Extension Project.

CTA is currently preparing the Draft Environmental Impact Statement. Future phases of the project, which include the Final Environmental Impact Statement, Engineering, and Construction are currently not funded and project schedule is dependent on federal reviews and approvals and funding availability.

Please visit our webpage at www.transitchicago.com/Redeis to learn more about the project and to follow the progress of the Draft Environmental Impact Statement. We will continue to update the webpage with new information as it becomes available.

RedExtension@transitchicago.com

Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60680-1465
Fax: (312) 681-4297

From: Rod Muir [mailto:rodmuir@sympatico.ca]
Sent: Wednesday, June 18, 2014 9:08 AM
To: Red Extension
Subject: Opening Year of the Red Line extension

Dear Madam or Sir;
Can you tell me plse the
current anticipated opening Year of operation
of the Red Line extension all the way down to 130st
I expect it's 2020 or beyond?
Thanks
Rod Muir

Appendix D
Purpose and Need Report

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Purpose and Need
Report

May 25, 2016

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
CWE Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Introduction 1-1
Section 2 The Purpose of the Red Line Extension Project 2-1
Section 3 The Need for the Red Line Extension Project 3-1
Section 4 The Red Line Extension Project Area 4-1
Section 5 Justification of the Purpose and Need 5-1
5.1 Long Transit Trips to Job Centers for Far South Side Residents 5-1
5.2 Transit-Dependent Populations Lack Direct Access to Rapid Transit Rail Service 5-6
5.3 Isolation from Major Activity Centers and Limited Viable Transportation Options 5-8
5.4 Underserved Transit Markets and Limited Transit Connectivity 5-13
5.5 Disinvestment and Limited Economic Development Have Affected Far South Side Communities 5-15
5.6 The Need for a Rail Car Storage Yard and Maintenance Facility 5-17
Section 6 Project Goals 6-1
Section 7 Conclusions 7-1
Section 8 References 8-1

Figures

Figure 4-1: Red Line Extension Project Area 4-2
Figure 5-1: Mean Travel Time to Work (Minutes) 5-2
Figure 5-2: Existing Traffic Volume/Capacity (2010, AM Peak Period) 5-4
Figure 5-3: Projected Traffic Volume/Capacity (2030, AM Peak Period, No Build Alternative Conditions) 5-5
Figure 5-5: Existing Public Transportation in the Red Line Extension Project Area 5-9
Figure 5-6: Affordable Housing Locations in the Red Line Extension Project Area 5-12

Tables

Table 5-1: Mean Travel Time to Work (2005-2010) 5-1
Table 5-2: Unemployment Rates in Affected Communities 5-6
Table 5-3: Household Income Declines in Red Line Extension Project Area (2000 to 2010, 2010 Dollars) 5-7
Table 5-4: Vehicle Ownership - Indicator of Transit Dependency 5-7
Table 5-5: Socioeconomic Indicators Correlated to Transit Dependence 5-7
Table 5-6: Chicago Transit Authority Ridership Summary 5-14
Table 5-7: Population Decline in Red Line Extension Project Area (2000 to 2010) 5-15
Table 5-8: Employment Decline in Red Line Extension Project Area (2000 to 2010) 5-16
Table 6-1: Goals of the Red Line Extension Project Area 6-1

Abbreviations and Acronyms

CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
MAP-21	Moving Ahead for Progress in the 21st Century Act
NICTD	Northern Indiana Commuter Transportation District
RA	redevelopment areas
RLE	Red Line Extension
TIF	tax increment financing

Section 1
Introduction

The Federal Transit Administration (FTA), as lead federal agency, and the Chicago Transit Authority (CTA), as the project sponsor, have jointly prepared a Draft Environmental Impact Statement (EIS) to evaluate potential impacts on the human and natural environment that may result from the construction and operation of Red Line Extension (RLE) alternatives including the Locally Preferred Alternative. As part of the Red Ahead Program, the CTA proposes to extend the existing Red Line 5.3 miles south from the existing 95th Street Terminal. CTA proposes to cover a portion of the project funding by applying for federal funds administered by the FTA.

This report identifies the purpose and need for transportation improvements within the project area. Developed from the Purpose and Need statement presented in the RLE Alternatives Analysis document, as well as from input received from the public during the EIS public scoping process, this report describes CTA's basis for advancing the proposed action, identifies objectives that frame the development and evaluation of the alternatives, and sets the stage for subsequent National Environmental Policy Act analysis leading to the final agency decision on the proposed action.

Section 2
The Purpose of the Red Line Extension Project

The purpose of the RLE Project is as follows:

- Reduce commute times for residents both within and south of the project area.
- Improve mobility and accessibility for transit-dependent residents in the project area.
- Improve rapid transit rail service to isolated areas and provide viable linkages between affordable housing (e.g., Altgeld Gardens Housing Complex),[1] jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Provide an opportunity for potential connections and linkages to other public transportation modes including regional commuter rail in the project area.
- Foster economic development in the project area, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.
- Provide a modern, efficient rail car storage yard and shop facility to provide storage and cost-effective preventive maintenance for rail cars associated with the RLE Project, rail cars currently stored in the existing 98th Street Yard and Shop, and rail cars supporting additional Red Line expansion of service.

[1] The Altgeld Gardens Housing Complex meets the FTA's definition of *legally binding affordability restricted housing*. This definition includes, but is not limited to, state or federal-supported public housing and housing owned by organizations dedicated to providing affordable housing. The Altgeld Gardens Housing Complex is owned and operated by the City of Chicago Housing Authority.

Section 3
The Need for the Red Line Extension Project

The need for the RLE Project is demonstrated by the following existing conditions:

- Transit trips to jobs are longer for Far South Side residents than they are for commuters in the Chicago region as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limit access between affordable housing (e.g., Altgeld Gardens Housing Complex), and employment centers outside of the project area.
- Existing transit markets are underserved and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Street Yard does not have capacity to store rail cars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

Section 4
The Red Line Extension Project Area

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries extend from 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south (see **Figure 4-1**).

The project area includes expressways, regional arterials (through roads), commuter and freight railroads, intermodal connectors, local streets, and pedestrian facilities. The expressways that pass through the project area are Interstate 94 (I-94, also known as the Dan Ryan Expressway north of 95th Street and the Bishop Ford Freeway south of 95th Street) and Interstate 57 (I-57). I-94 runs north-south from 95th Street to 99th Street, curves east, then curves south and extends along the west side of Lake Calumet. I-57 splits from I-94 at 95th Street, runs south, on an alignment east of the Metra Rock Island District commuter rail line to 115th Street, then curves south along the western limit of the project area. Halsted Street and Ashland Avenue are the only north-south arterial streets that extend well beyond the northern and southern project limits.

Commuter rail in the project area is operated by Metra and includes the Rock Island District, Electric District Mainline, and Electric District Blue Island Branch. The Northern Indiana Commuter Transportation District operates the South Shore Line, which shares tracks with the Metra Electric District Mainline north of 115th Street. Freight trains in the project area use tracks owned by the Union Pacific Railroad, Canadian National Railroad, Chicago South Shore & South Bend Railroad, Norfolk Southern Railroad, and Indiana Harbor Belt Railroad.

The project area comprises residential (primarily single-family), industrial (both existing and vacant), and commercial development. It encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, South Deering, West Pullman, Riverdale, and Hegewisch.

The ethnicity of the population in the project area is predominantly Black or African American, ranging from 89 percent in the Village of Calumet Park to 97 percent in Roseland and Washington Heights. A majority of the project area population is low income.

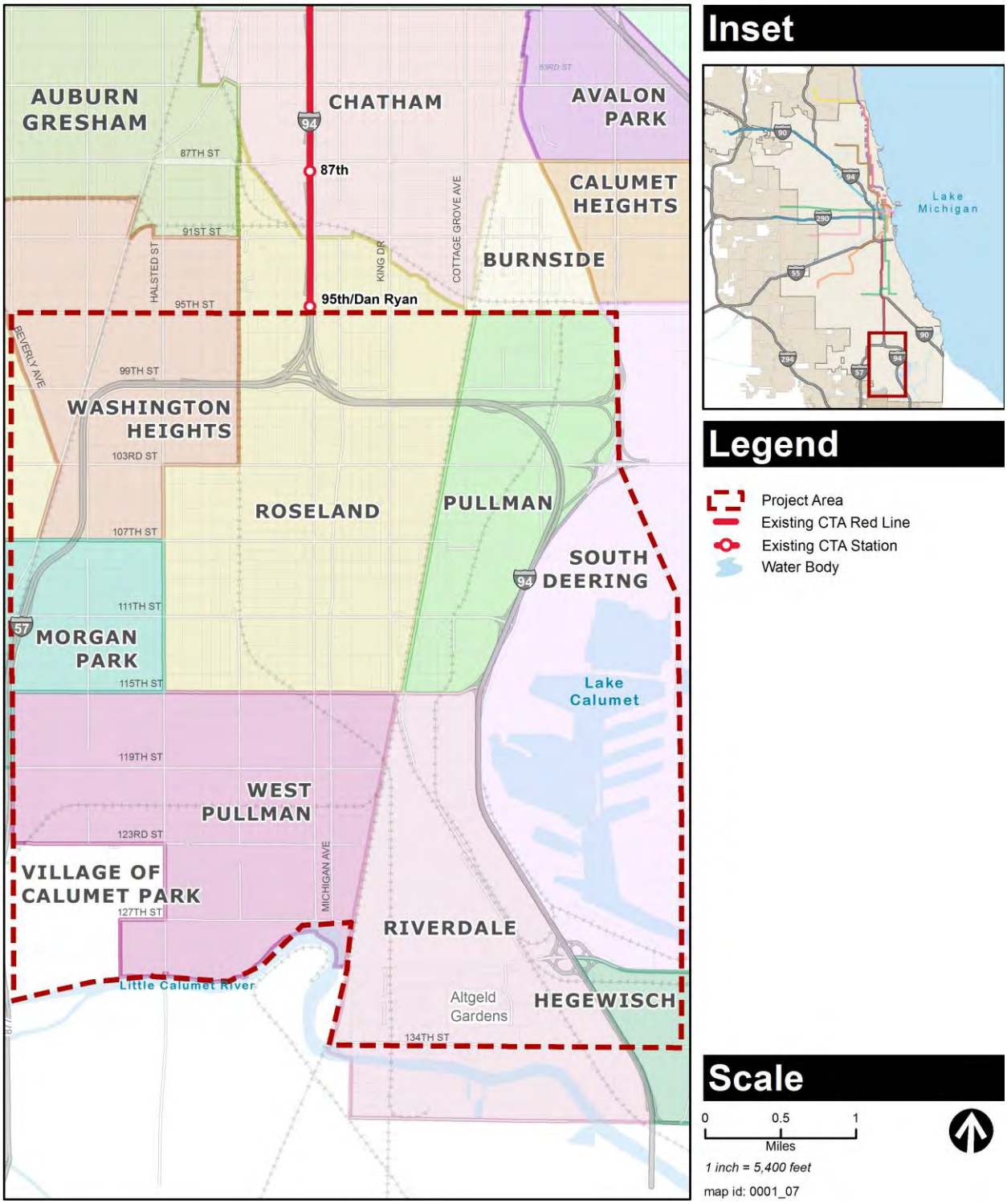

Figure 4-1: Red Line Extension Project Area

Section 5
Justification of the Purpose and Need

5.1 Long Transit Trips to Job Centers for Far South Side Residents

Lengthy travel times affect low-income, minority, and transit-dependent populations in the project area. During 2005–2010, commute times were 24 percent longer for project area residents than for other commuters in the Chicago region (see **Table 5-1**). The Chicago region is a seven-county area including the counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will. The average commute time in the Chicago region was 31.6 minutes one-way, while commute times for residents in the project area averaged 39.3 minutes. **Figure 5-1** details commute times in the project area.

Table 5-1: Mean Travel Time to Work (2005-2010)

Area	Mean Travel Time to Work (Minutes)
Chicago Region (Seven-County Area)	31.7
City of Chicago	33.6
Red Line Extension Project Area	39.3

Source: U.S. Census Bureau 2010

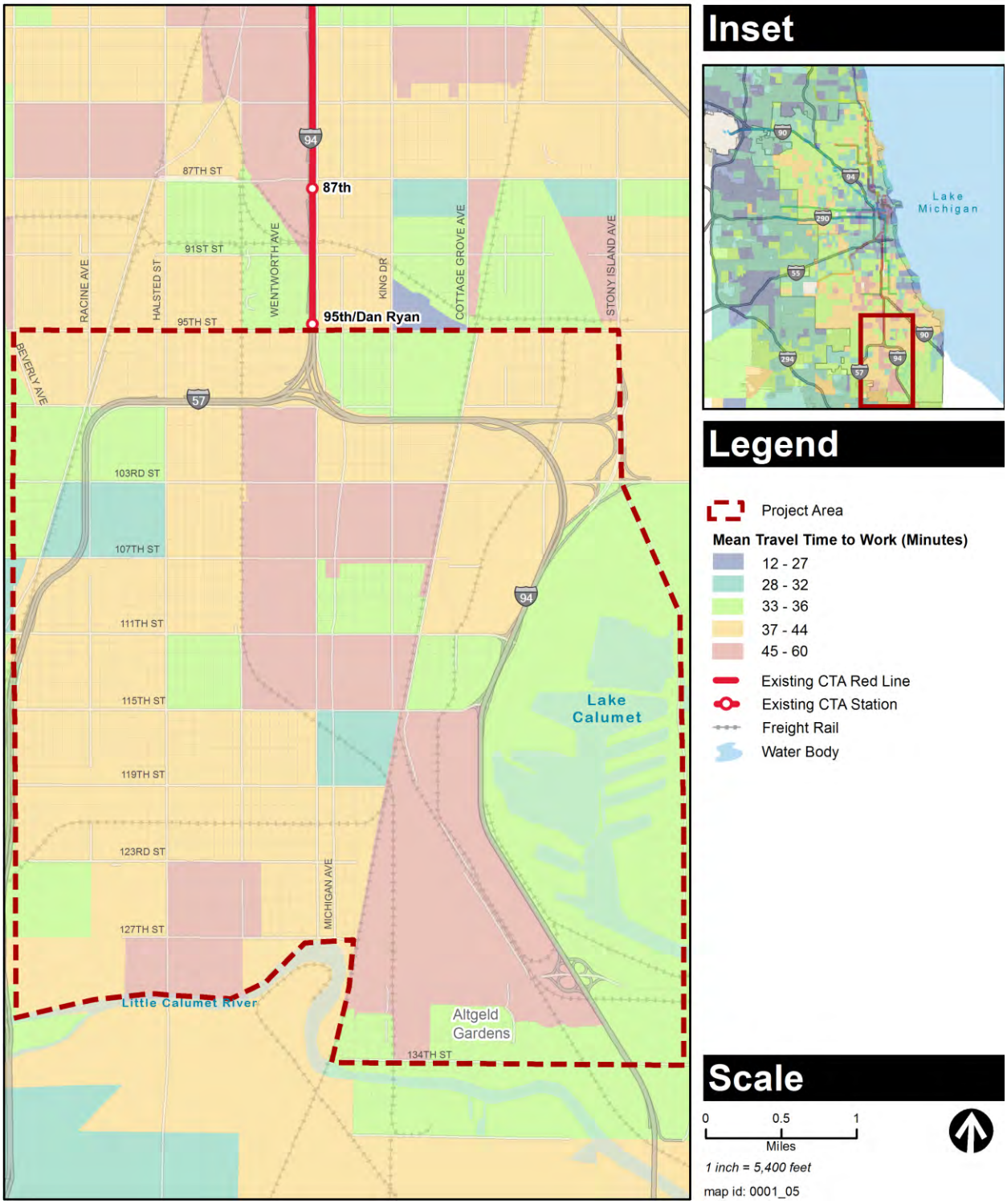

Source: U.S. Census Bureau 2010

Figure 5-1: Mean Travel Time to Work (Minutes)

On the region's expressways and major arterials, traffic congestion has steadily increased over the past decades. In the project area, roadway capacity constraints and expressway and arterial traffic congestion limit the mobility of residents. **Figure 5-2** shows existing traffic volume per roadway capacity (AM peak period, 2010) on project area roadways based on 2010 data. The 2010 traffic data is based on actual traffic counts provided by the Chicago Department of Transportation and Illinois Department of Transportation. Chicago is ranked seventh in the nation for travel time ratio (peak travel times versus free flow travel time), and third for travel delay, excess fuel consumed, and total congestion costs (Texas Transportation Institute 2011).

Substantial traffic congestion occurs on expressways and arterial streets throughout the project area. Traffic on the roadway network is approaching capacity during the morning peak period and congestion is expected to worsen by 2030 (see **Figure 5-3**). At-grade freight railroad crossings cause further delays on arterial streets, affecting travel times to the CTA 95th Street Terminal. The Union Pacific Railroad operates approximately 27 trains per day through the project area and has at-grade crossings at several east-west arterials. Similarly, delays occur due to the Metra Electric District Blue Island Branch commuter trains, which have at-grade crossings at several major arterials. The *Transportation Technical Memorandum* contains additional information about existing traffic conditions and CMAP traffic projections.

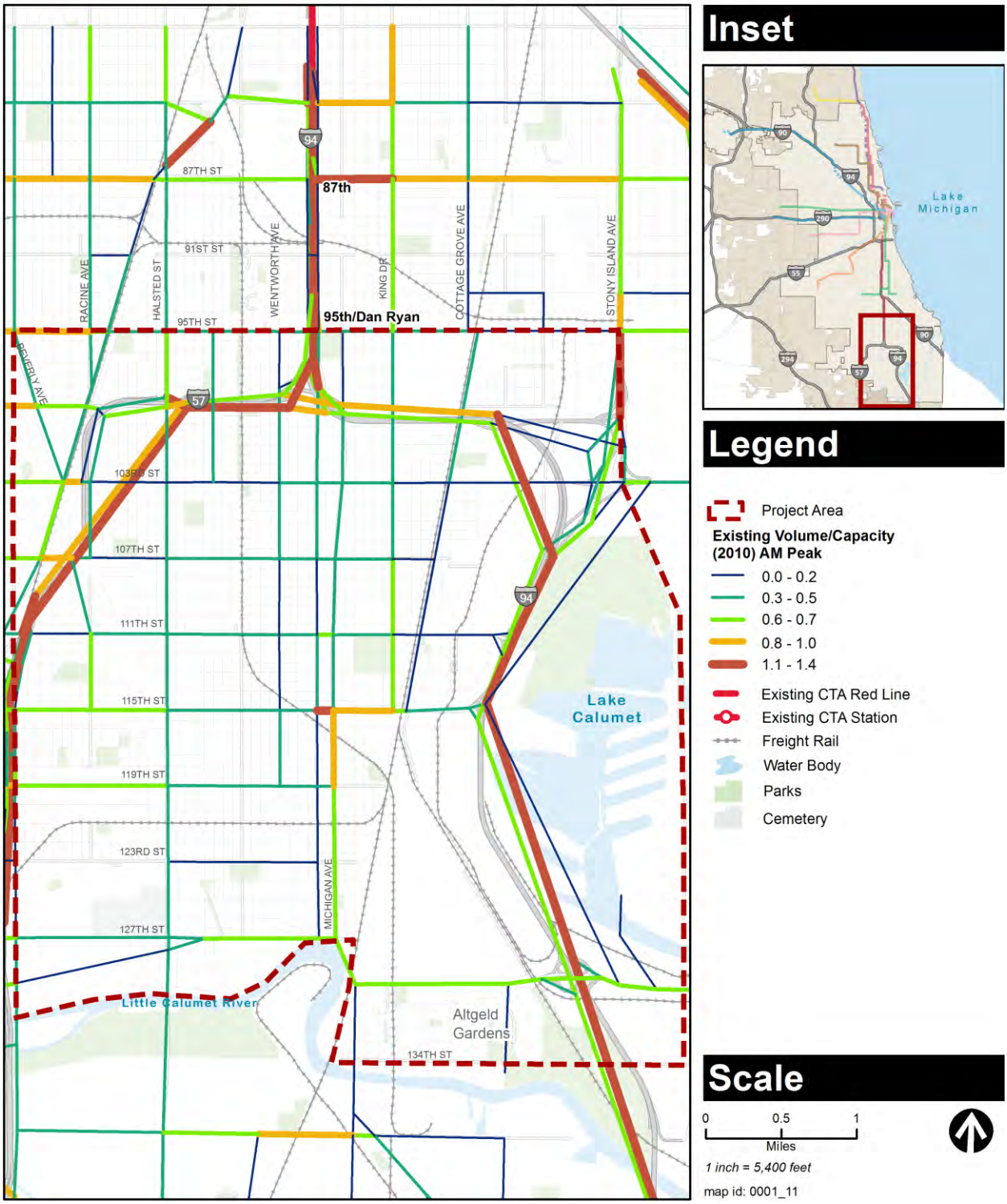

Figure 5-2: Existing Traffic Volume/Capacity (2010, AM Peak Period)

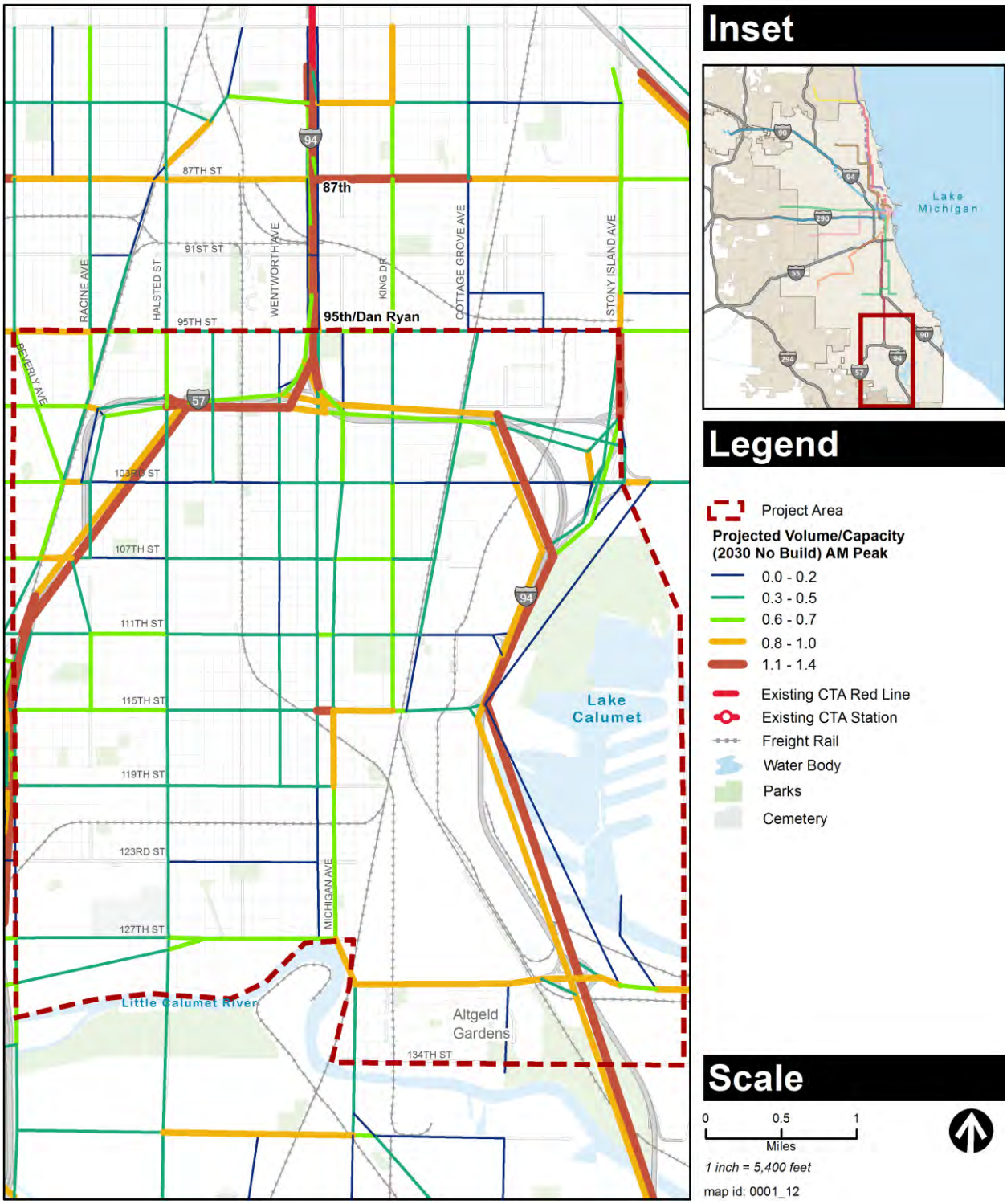

Figure 5-3: Projected Traffic Volume/Capacity (2030, AM Peak Period, No Build Alternative Conditions)

Complex transfers to reach the 95th Street Terminal make commute times greater than two hours one-way for some project area residents (Chicago Metropolitan Agency for Planning [CMAP] 2012). Project area residents accessing the station by bus and other modes of transportation experience measureable delays and difficult transfers resulting from congestion at arterial street intersections. Travel times to jobs north of 95th Street, including the major employment centers in downtown Chicago, are long for both auto and transit commuters.

High unemployment rates in the area indicate the need for improved access to jobs, as shown in Table 5-2. By 2030, the jobs-to-population balance is expected to improve for the project area from one job for every seven adult residents in 2010 to one job for every five adult residents. This ratio would represent improved access to jobs in the project area; however, at that ratio, the area would remain far below the existing and forecasted city and regional averages of one job for every two adult residents in years 2010 and 2030, respectively (CMAP 2012, 2013).

Table 5-2: Unemployment Rates in Affected Communities

Area	Unemployment Rate
Seven-County Area	19.9%
City of Chicago	12.0%
Red Line Extension Project Area	19.0%
Community Areas within the Project Area	
Washington Heights	18.8%
Roseland	21.2%
Morgan Park	17.0%
West Pullman	18.5%
Pullman	21.4%
Riverdale	34.8%
Village of Calumet Park	17.4%

Source: ACS 2009-2013 5-Year Estimates

5.2 Transit-Dependent Populations Lack Direct Access to Rapid Transit Rail Service

The majority of the project area population is low income. According to the 2010 U.S. Census, the median household income in the project area is $41,014, which is less than the median household income for the City of Chicago ($46,877), and also less than the median household income for the seven-county area ($61,863) (U.S. Census Bureau 2010). The community with the lowest median household income in the project area is Riverdale ($11,181), which is substantially lower than the rest of the project area and the City of Chicago. The community with the highest median household income in the project area is the Village of Calumet Park ($53,785). While the seven-county region, the City of Chicago, and the project area all experienced a decline in median household incomes between 2000 and 2010, the project area has experienced a far greater decline (see **Table 5-3**).

Table 5-3: Household Income Declines in Red Line Extension Project Area (2000 to 2010, 2010 Dollars)

Area	2000 Median Household Income	2010 Median Household Income	Percent Change
Seven-County Area	$ 66,064	$ 61,863	-6.8%
City of Chicago	$ 48,911	$ 46,877	-4.3%
RLE Project Area	$ 49,548	$ 41,014	-20.8%

Source: U.S. Census Bureau 2010

Lengthy travel times to jobs are a particular problem for transit-dependent populations in the project area. Based on the number of vehicles available per household, transit-dependency is higher in the project area than in the seven-county region (see **Table 5-4** and **Table 5-5**). As **Table 5-5** shows, the project area has higher percentages of elderly and disabled populations than the seven-county region and the City of Chicago, along with lower household income levels.

Table 5-4: Vehicle Ownership - Indicator of Transit Dependency

Area	Average Household Size	Total Households	No Vehicle Available	1 Vehicle Available	2 Vehicles Available	3 or More Vehicles Available
Seven-County Area	2.84	3,824,379	229,889 (6%)	963,008 (25%)	1,576,468 (41%)	1,055,014 (28%)
City of Chicago	2.52	1,161,573	177,352 (15%)	470,228 (40%)	353,218 (30%)	160,775 (14%)
RLE Project Area	2.88	44,610	4,446 (10%)	16,263 (36%)	14,857 (33%)	9,044 (20%)
Altgeld Gardens	3.06	1,374	457 (33%)	618 (45%)	185 (13%)	114 (8%)
Southwest Roseland (Tract 4910)	3.39	1,116	249 (22%)	325 (29%)	428 (38%)	114 (10%)

Source: U.S. Census Bureau 2010

Table 5-5: Socioeconomic Indicators Correlated to Transit Dependence

Characteristic	Seven-County Area		City of Chicago		RLE Project Area	
	Total	Percent	Total	Percent	Total	Percent
Total Population	8,431,386	100.0%	2,695,598	100.0%	128,366	100.0%
Persons Age 65+	*952,026*	*11.3%*	*277,932*	*10.3%*	*16,733*	*15.3%*
Persons Age 17 and Younger	*2,118,767*	*25.1%*	*621,630*	*23.1%*	*29,584*	*27.0%*
Total Population (Ages 5+)	7,450,445	100.0%	2,651,049	100.0%	126,657	100.0%
Disabled People (Ages 5+)	*765,147*	*10.3%*	*290,748*	*11%*	*19,562*	*15.4%*
Total Households	3,824,379	100.0%	1,161,573	100.0%	44,610	100.0%
Households with income <$40,000	*988,729*	*25.9%*	*452,957*	*39%*	*20,710*	*46.4%*

Source: U.S. Census Bureau 2010; U.S. Census Bureau 2012 (data for disabled people only)

Average household size is greater in the project area than in the seven-county region and the City of Chicago, increasing the demand for multiple vehicles. In particular, residents in locations such as the Altgeld Gardens Housing complex and southwest Roseland have a much greater dependency on transit, with higher household size and lower number of vehicles available per household. Based on vehicle ownership, the City of Chicago shows a slightly higher transit-dependent population than the project area; however, it may be attributed to lifestyle choice versus automobile affordability in addition to greater access to public transportation.

Compared to the seven-county region and the City of Chicago, the project area has a greater concentration of elderly and disabled populations. More information on sensitive populations is available in the *Environmental Justice Technical Memorandum*.

Based on the socioeconomic indicators presented in this section, the RLE project area generally has higher transit dependency than the overall Chicago region. The closest rapid transit rail station is at the northern edge of the project area (CTA's 95th Street Terminal) requiring long trips to access the rapid transit rail system. As further discussed in **Sections 5.1 and 5.3**, average travel time for work trips are higher in the project area than in the seven-county region due to traffic congestion and the time required to ride a bus to the 95th Street Terminal and transfer to the Red Line. The combination of these conditions underscores the need for improved connectivity and access to more efficient modes of travel.

5.3 Isolation from Major Activity Centers and Limited Viable Transportation Options

5.3.1 Existing Transportation Options

Despite the substantial amount of roadway infrastructure in the project area, expressways and arterial streets frequently become congested, limiting mobility. Mobility is further inhibited by the limited options for connecting to the CTA's rail system. Although bus routes operated by CTA and Pace provide service 24 hours a day, buses in the project area are frequently delayed by congestion on arterial streets leading to the 95th Street Terminal. None of the Red Line stations along the Dan Ryan branch currently have park & ride facilities, precluding residents from accessing the stations by car unless they are dropped off. Several bus routes serve the 95th Street Terminal and Metra stations; however, the large residential tracts surrounded by local streets limit the bus network. **Figure 5-5** shows the existing bus routes and rail lines in the project area.

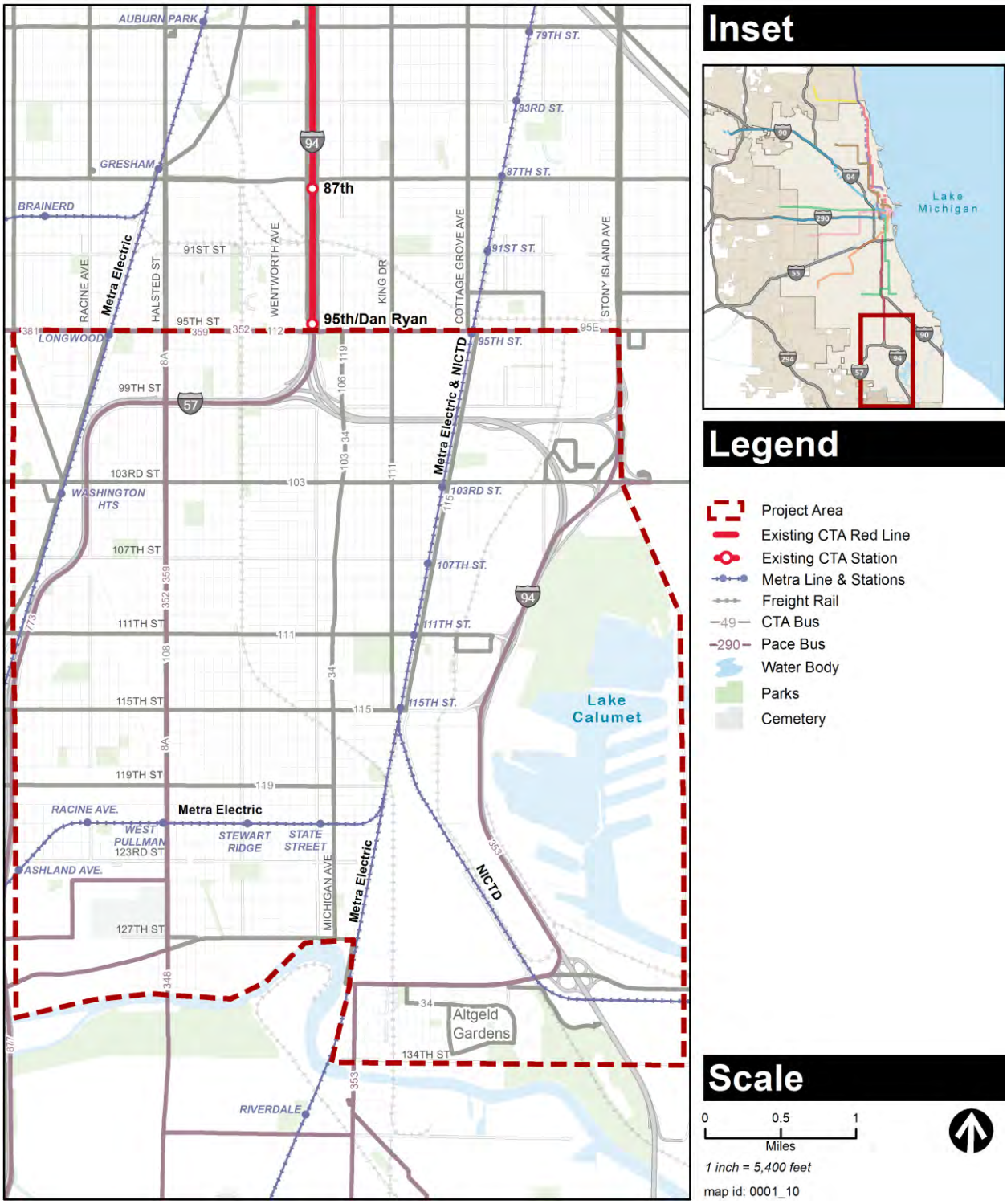

Figure 5-5: Existing Public Transportation in the Red Line Extension Project Area

The Metra Rock Island District commuter rail line has two stations at the west end of the project area at 95th Street and 103rd Street. The Metra Electric District Mainline has four stations from 103rd Street to 115th Street and the Metra Electric Blue Island Branch has five stations from Ashland Avenue to State Street. Although it is unaffected by automobile congestion, Metra service is infrequent, and some stations, including both of the Rock Island District stations, have no mid-day or weekend service. Metra service is useful for peak-hour commuters traveling to and from downtown Chicago, but less convenient for off-peak travel or for non-downtown commutes that may require transferring to the CTA network. The Northern Indiana Commuter Transportation District does not have a station in the project area.

While the project area does have an extensive sidewalk and crosswalk system along the road network, physical divisions between communities include the ME mainline, which is on an embankment; Lake Calumet; the Little Calumet River; and the UPRR right-of-way, which extends north-south from 99th Street to 119th Street; and large tracts of industrial land. These physical divisions are difficult to cross for pedestrians and bicyclists, and effectively separate the communities on either side. This geographic isolation is particularly problematic for residents of the Altgeld Gardens public housing project at the south end of the project area between 130th Street and 134th Street in the Riverdale community area. Residents in this area have limited employment opportunities and transportation choices within walking distance of their homes. The project area currently has limited bicycle infrastructure although improvements are planned. The off-street bicycle trail, the Major Taylor Trail, extends southeast from 105th Street and Throop Street to the Whistler Woods Forest Preserve, south of the Little Calumet River in Riverdale. Bicycle lanes in the project area include the following:

- 103rd Street – From Michigan Avenue to Cottage Grove Avenue - Standard Bicycle Lanes
- State Street - From 95th Street to 99th Street - Standard Bicycle Lanes
- State Street - From 99th Street to 103rd Street - Marked-Shared Bicycle Lanes
- Vincennes Avenue - From 89th Street to 103rd Street - Barrier-Protected Bicycle Lanes
- Woodlawn Avenue - From 103rd Street to 111th Street - Standard Bicycle Lanes
- Vincennes Avenue - From 103rd Street to 105th Street "Future 2015" Buffer - Protected Bicycle Lanes
- 105th Street - From Vincennes Avenue to Major Taylor Trail - "Future 2015" Marked Shared Lanes
- Cottage Grove Avenue - From 93rd Street to 115th Street - "Future 2015" Buffer-Protected Bicycle Lanes

There is a need for additional transportation options to address the shortcomings in roadway, transit, pedestrian, and bicycle infrastructure in the project area. More information on existing travel patterns in the project area is available in the *Transportation Technical Memorandum*.

5.3.2 Affordable Housing Options

Residential houses in the project area had an estimated median value of $95,000 compared to $161,000 for the City of Chicago (2013 dollars). The median monthly rental price (for 2012) in the project area is estimated at $1,237 compared to $1,501 for the City of Chicago (Zillow 2012a, 2012b).

An example of vacant affordable housing in the project area is Altgeld Gardens, one of the country's first public housing complexes, where approximately 3,500 residents currently reside in 1,500 housing units (Altgeld Gardens, 2013). Given the age of the complex, several of the vacant units require rehabilitation before they can be inhabited. As a result, the Chicago Housing Authority (CHA), supported by a $265 capital improvement program, will rehabilitate 218 units in fiscal year 2015 (CHA 2014). As with other affordable housing opportunities in the project area, residents at Altgeld Gardens are challenged by the affordable housing/transit availability mismatch, in that housing in the project area is affordable but the commute time and effort required to reach viable employment areas are high. Given CHA's investment at Altgeld Gardens, the proposed project has the opportunity to result in a mutual benefit by leveraging the rehabilitation of the housing units and providing a viable transportation option thereby further off-setting the housing/transit availability mismatch.

There is a high percentage of vacant homes in the project area—13 percent higher than the City of Chicago (CMAP 2012). Several factors contribute to housing vacancy rates in a particular community. These factors include, but are not limited to, safety and security, proximity to public services, access to jobs, quality of schools, age and type of available housing units, quality of life, and the overall health of the community. Improved public transportation options, combined with affordable housing stock, would serve as a catalyst to bring people to the area that would not otherwise consider communities in the project area as a viable place to live. The mutual benefit for project area residents, and those seeking affordable housing, could be met through rapid transit south of the 95th Street Terminal. See **Figure 5-6** for affordable housing locations in the project area.

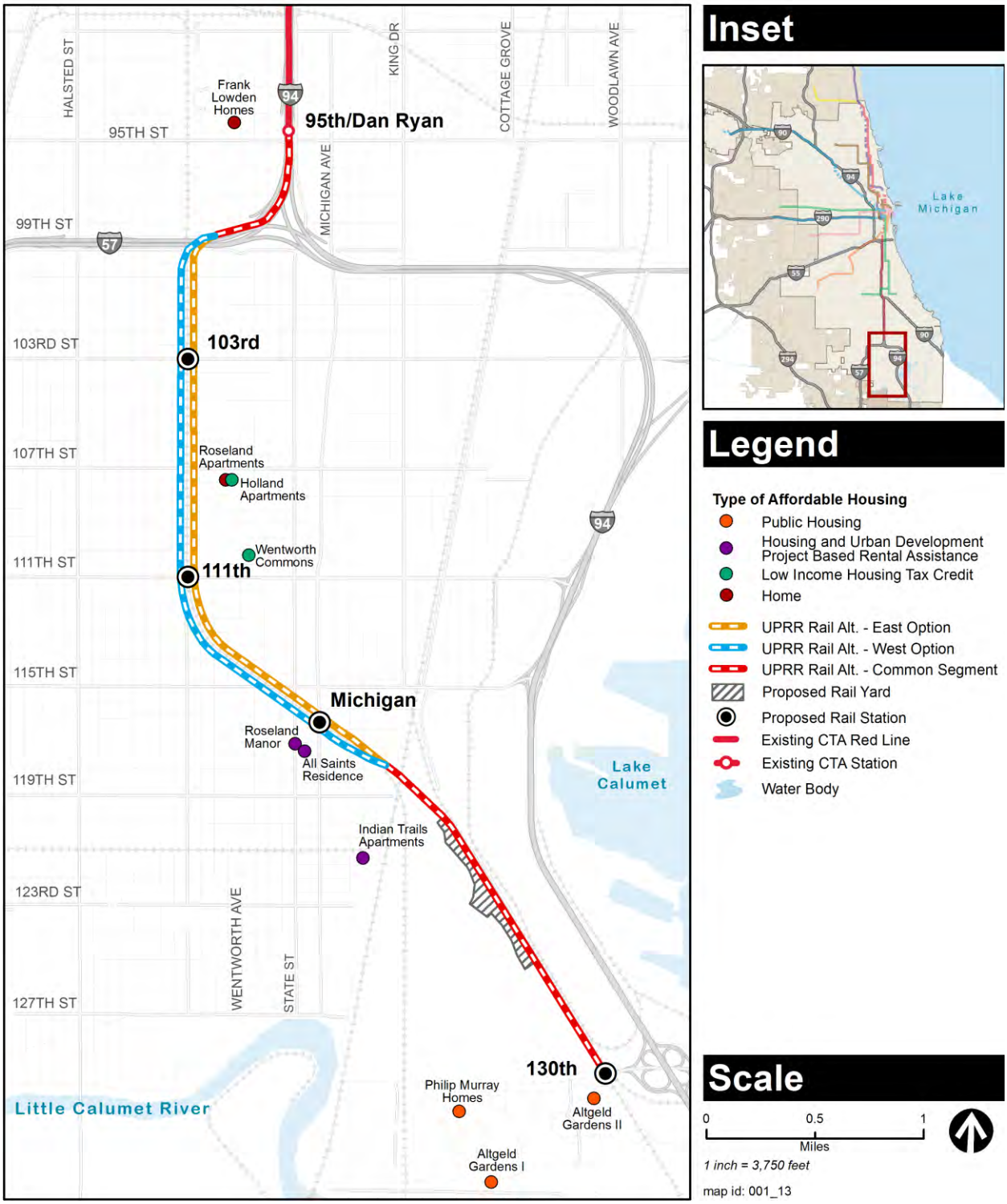

Figure 5-6: Affordable Housing Locations in the Red Line Extension Project Area

5.3.3 FTA Regulatory Framework

In August, 2013, FTA published the final rule implementing changes to the New Starts/Small Starts program. This rule is known as the *Moving Ahead for Progress in the 21st Century Act* (known as "MAP-21"). The program is focused on measuring a wider set of project benefits and streamlining the project evaluation process. Under Map-21, "land use" is a quantitative evaluation of several measures, including the share of legally binding affordable housing in the corridor.

In addition to the Map-21 evaluation of affordable housing, the U.S. Department of Housing and Urban Development, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency joined together to form the Partnership for Sustainable Communities. This interagency partnership helps communities nationwide to improve access to affordable housing, increase transportation options, and lower transportation costs while protecting the environment.

The partnership agencies incorporated six principles of livability into federal funding programs, policies, and future legislative proposals:

- Provide more transportation choice.
- Promote equitable, affordable housing.
- Enhance economic competitiveness.
- Support existing communities.
- Coordinate and leverage federal policies and investment.
- Value communities and neighborhoods.

Each of the livability principles identified above are key elements of this project area. More transportation options and improved access to affordable housing would enhance livability in the project area.

5.4 Underserved Transit Markets and Limited Transit Connectivity

CTA and Pace bus services are provided on the east-west and north-south thoroughfares with 16 CTA and 6 Pace routes operating in the project area (not including night bus routes). Of those 22 total bus routes, 18 serve the 95th Street Terminal on the Red Line. **Table 5-6** summarizes existing bus routes, average bus ridership, and routes that serve the 95th Street Terminal. Currently the 95th Street Terminal serves as the only point of connection between CTA and Pace buses.

Metra service in the project area includes the Rock Island District, Electric District Mainline, and Electric District Blue Island Branch. The Northern Indiana Commuter Transportation District (NICTD) operates the South Shore Line, which shares tracks with the Metra Electric District Mainline north of 115th Street. Neither Metra nor NICTD connect to the 95th Street Terminal.

Table 5-6 demonstrates the demand for access to the 95th Street Terminal and the Red Line.

Table 5-6: Chicago Transit Authority Ridership Summary

Route Number and Name	2014 Average Weekday Ridership	Maximum Monthly Average Weekday Ridership (May 2012 to April 2013)[3]	Serves 95th Street Terminal[5]
#3 King Drive	19,224	21,125	No
#8A South Halsted	3,238	3,784	No
#9 Ashland[1]	26,871	29,066	Yes
#28 Stony Island	7,208	8,014	No
#29 State	13,342	14,012	Yes
#34 South Michigan	5,150	5,690	Yes
#95E 93rd/95th	3,830	4,307	Yes
#95W West 95th	2,369	2,605	Yes
#100 Jeffery Manor Express	674	733	Yes
#103 West 103rd	2,674	3,101	Yes
#106 East 103rd	1,831	2,309	Yes
#108 Halsted/95th	1,322	1,553	Yes
#111 111th/King Drive[2]	3,763	4,366	Yes
#112 Vincennes/111th[2]	2,289	2,740	Yes
#115 Pullman/115th[2]	3,990	4,594	Yes
#119 Michigan/119th	4,725	5,068	Yes
#348 Harvey - Riverdale - Blue Island	332	399	No
#352 Halsted	6,099	6,574	Yes
#353 95th - Riverdale- Homewood	1,769	2,011	Yes
#359 Robbins/South Kedzie Avenue	1,460	1,643	Yes
#381 95th Street	4,038	4,593	Yes
#395 CTA 95th - UPS	529	669	Yes

Source: CTA 2014

Notes:

1. #9 Ashland serves the 95th Street Terminal only with the Night Owl Service.
2. Only January through April 2013 is shown for bus routes #111 and #115 due to a route change in December 2012.
3. Maximum monthly average weekday ridership is based on the 12-month period from May 2012 through April 2013. In May 2013, Red Line (Dan Ryan) reconstruction changed ridership patterns during construction.
4. Night service route #N5 is not included in this table.
5. Service to the 95th Street Terminal is based on route maps current as of July 31, 2013.

A potential transit travel market that is not currently well served is drive-access transit trips from within and south of the project area. There are no CTA park & ride facilities on the existing Red Line Dan Ryan branch. All of the other CTA rail rapid transit branches, with the exception of the Green Line Lake Street branch, have park & ride facilities. CTA's newest rail rapid transit line, the Orange Line (opened in 1993), has park & ride facilities at five of eight stations. The Blue Line has

park & ride facilities at Rosemont and Cumberland stations, conveniently located near the I-90 Kennedy Expressway. A previous survey at these Blue Line park & ride stations found that passenger access CTA rail by car from 93 suburbs; 74 percent of all trips originated in the northwest suburbs or northwest Chicago (CTA 1994). Similar conditions, such as crowded expressways and expensive parking in the Loop, face travelers from southern Cook County and beyond. CTA park & ride facilities near major expressways or arterial streets in the southern portions of the project area, would provide new, convenient drive access possibilities on the Red Line.

Other potential transit travel markets include reverse commute trips, school trips, and home-based other trips within southern communities. Several educational facilities are in the project area, including Chicago State University (7,200 students), Olive-Harvey College (4,300 students), and several high schools (including Harlan, Corliss, Fenger, Julian, Brooks, and Carver High Schools) that would benefit from transit improvements in the project area.

Transportation equity is the fair distribution of transportation resources so that no group carries an unfair burden of the negative environmental, social, or economic impacts, or receives an unfair share of benefits. The project area population is almost entirely minority. Many residents do not have access to an automobile and rely on transit for mobility. In addition, daily parking costs in downtown Chicago are among the highest in the United States, further limiting the project area population's access to downtown. Transit improvements in the project area would serve all transportation system users, including low-income and underrepresented populations, and would provide better access to affordable housing in the project area.

5.5 Disinvestment and Limited Economic Development Have Affected Far South Side Communities

The project area has had ongoing disinvestment, including loss of manufacturing jobs, which has led to a decline in population, services, and job opportunities. Once-vibrant retail districts, such as Michigan Avenue and Halsted Street, now contain vacant land and storefronts. This decline may be seen in decreases in project area population and employment compared to the City of Chicago and the seven-county region (see **Table 5-7** and **Table 5-8**).

Table 5-7: Population Decline in Red Line Extension Project Area (2000 to 2010)

Area	2000 Population	2010 Population	Percent Change
Seven-County Area	8,146,264	8,399,893	3.02%
City of Chicago	2,895,964	2,700,741	-7.23%
RLE Project Area	147,662	128,366	-15.03%

Source: U.S. Census Bureau 2010

Table 5-8: Employment Decline in Red Line Extension Project Area (2000 to 2010)

Area	2000 Employment[1]	2010 Employment[1]	Percent Change
Seven-County Area	4,083,530	4,429,414	8.49%
City of Chicago	1,358,054	1,410,294	3.84%
RLE Project Area	62,587	56,105	-11.50%

Source: U.S. Census Bureau 2010

The City of Chicago is focusing on stabilizing, improving, and redeveloping communities in and adjacent to the project area. As a result, the City has designated several tax increment financing (TIF) districts, Redevelopment Areas (RA), Special Service Areas (SSAs), and Industrial Corridors in the project area. Major incentive zone areas in the project area include the following:

- 119th/Halsted Mixed-Use Area
- Roseland/Michigan Avenue Mixed-Use Area
- West Pullman Industrial Park Mixed Use Area
- North Pullman Mixed-Use Area
- 105th/Vincennes Mixed-Use Area
- 87th/Cottage Mixed-Use Area
- 119th & I-57 Redevelopment Area
- 107th/Halsted Mixed-Use Area
- Calumet Commercial Area
- Lake Calumet Indiana Industrial Corridor
- Stoney Island/Burnside Industrial Area
- SSA#40 Michigan Avenue/Roseland
- SSA #41 103rd Street/Roseland
- SSA $45 103rd Street/Halsted

In addition to economic revitalization initiatives, viable transportation options continue to be a key element in the success of economic development efforts and revitalization for communities within the project area. Examples of redevelopment in the project area include the Pullman District, the Method factory, and Walmart opening a store in 2014.

Located in the project area and referred to as the Pullman community area of Chicago, the Pullman District includes the Pullman factory, the Hotel Florence, and the Pullman Railroad Porters National Museum. This district was named a National Monument on February 19, 2015, making it a component of the National Park System. (Ward 9 Website 2015)

Building on the Pullman's community history as a manufacturing hub, Method, a manufacturer of environmentally-friendly cleaning and personal care products, has announced the opened a new 150,000 square foot factory in Pullman in April 2015. The Community Development Commission approved $8.1 million in tax increment financing for infrastructure improvements in Pullman Park in support of the Method plant construction. The plant has created approximately 100 jobs with good salaries, giving employees the opportunity to buy a home, raise a family, and build a financially secure future (Method 2015).

Bringing rail transit to an area that has not experienced recent growth may not only directly improve mobility for community residents, but it may also promote business and real estate investment confidence through the permanency of the improvement. The realization by investors that the rail infrastructure is a permanent enhancement in the area, and would provide better regional connectivity, may promote redevelopment and economic stabilization in the area. A local example is CTA's Brown Line Capacity Expansion Project where median home values near the Brown Line grew more than 40 percent between the years 2000 and 2011; the same time transit improvements where implemented in the corridor. Moreover, a Chicago-based economic development research organization determined that for every dollar spent on transit operating and capital expenses, the Chicago area will realize a return on investment of at least $1.21 and as much as $1.64. (Chicago Metropolis 2020 2007)

5.6 The Need for a Rail Car Storage Yard and Maintenance Facility

The existing 98th Street Yard does not have capacity to store rail cars required for any substantial increase in Red Line capacity accompanying future Red Line expansion. Two yard and shop facilities, Howard Yard at the north end of the Red Line and 98th Street Yard at the south end of the Red Line, provide storage for vehicles operating along the Red Line. Any Red Line expansion must consider the capacity of both yards. (The Howard Yard and the 98th Street Yard together supply rail cars for both the northern and southern portion of the Red Line.) All northbound trains currently begin their run at 98th Street Yard, and any expansion of Red Line service would require expanded yard capacity at or near the southern end of the Red Line. The existing 98th Street Yard in landlocked between interstate ramps for I-94 and I-57. There is no room to expand the yard without major realignments for the two highways. In addition, the existing 98th Street Yard is oriented as a terminal yard for service to and north of the 95th Street station. With the RLE Project expanding service to the south, use of the 98th Street Yard would lead to inefficient operations. Moving trains into and out of the existing yard, due to the orientation of the yard, would cause operational inefficiencies and potential capacity constraints to Red Line service.

Section 6
Project Goals

The goals for the RLE Project were developed, reviewed, and defined during CTA's RLE Alternatives Analysis. The goals, which helped define the evaluation criteria used in screening potential alternatives, are included in **Table 6-1**.

Table 6-1: Goals of the Red Line Extension Project Area

Goal	Objectives	Description
Goal 1	Reduce Travel Times	Reduce travel times for residents from within and south of the project area to the 95th Street Terminal and the Loop. Provide direct access to the CTA rail system for transit-dependent populations. Provide new stations convenient to transit-dependent communities. Provide direct service to public housing such as Altgeld Gardens.
Goal 2	Increase Travel Choices	Provide better transit access to regional employment centers and local commercial areas. Allow for potential connections to other public transportation modes including regional commuter rail. Reduce geographic isolation of the project area and improve connections to major activity centers. Provide opportunities for drivers commuting on expressways to park and use transit to complete their trips.
Goal 3	Increase Economic Competitiveness	Foster economic development in the project area by providing stations that can encourage nearby development.
Goal 4	Environmental Criteria	▪ Displacement and relocation impacts ▪ Noise Impacts ▪ Park Impacts ▪ Community Character Impacts ▪ Visual and Aesthetic Impacts
Goal 5	Provide the Best Value	▪ Projected ridership ▪ Capital costs to construct the project ▪ Changes in operating and maintenance costs for the system

Section 7
Conclusions

To meet the project needs identified in CTA's RLE Alternatives Analysis document and in response to the stated project goals above, the RLE Project is being proposed to reduce commute times, improve transit service, increase transportation choices, and promote economic development. The project is needed to respond to the limited transit choices, limited employment options, the need for connectivity to affordable housing, and the need to reverse disinvestment for communities on the Far South Side of Chicago. The purpose and need describes CTA's basis for advancing the proposed project and identifies objectives that frame the development and evaluation of the alternatives in the Draft EIS.

Section 8
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Appendix E

Description of Alternatives

- Final EIS Addendum E, Description of Alternatives, July 2022

RED AHEAD

Red Line Extension

Chicago Red Line Extension Project

Description of Alternatives

Final EIS Addendum E

July 2022

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Table of Contents

Section 1 - Background Information 1-1
Section 2 - No Build Alternative 2-1
2.1 Infrastructure 2-1
2.2 Stations and Parking 2-1
2.3 Yard 2-1
2.4 Operating Plan 2-1
Section 3 - Union Pacific Railroad Alternative – Preferred Alignment 3-1
3.1 Design Refinements Since the Draft EIS 3-3
3.2 Infrastructure 3-9
3.3 Stations and Parking 3-10
3.4 Yard and Shop 3-13
3.5 Operating Plan 3-16
Section 4 - References Cited 4-1

Figures

Figure 1-1: Preferred Alignment 1-4
Figure 3-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 3-2
Figure 3-2: 107th Place Cross-over Location 3-4
Figure 3-3: 120th Street Yard and Shop Refinement 3-6
Figure 3-4: 130th Street Station Concept 3-8
Figure 3-5: Example rendering of the 103rd Street station looking north from 103rd Street ... 3-11
Figure 3-6: Example rendering of the Michigan Avenue station looking west 3-12
Figure 3-7: Example rendering of the 130th Street station looking west from Beaubien Woods Forest Preserve 3-13
Figure 3-8: Schematic of 120th Street yard and shop 3-15

Abbreviations

ADA	Americans with Disabilities Act
API	area of potential impact
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
Conrail	Consolidated Rail Corporation
CSS & SBRR	Chicago South Shore & South Bend Railroad
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
IHB	Indiana Harbor Belt Railroad
MED	Metra Electric District
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NICTD	Northern Indiana Commuter Transportation District
NS	Norfolk Southern Railway
RLE	Red Line Extension
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad

Section 1 - Background Information

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side, terminating near 130th Street. The proposed Red Line Extension (RLE) Project would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the Union Pacific Railroad (UPRR) Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option.

The UPRR Rail Alternative East and West Options would be elevated and generally run south along I-94 Bishop Ford Freeway from 95th/Dan Ryan terminal, then curve west along the north side of I-57 Expressway (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor near Eggleston Avenue. The alignment would then turn south to follow the UPRR corridor, either east or west of the existing UPRR tracks, to Prairie Avenue, where the RLE Project would cross over the Metra Electric District (MED) tracks near 119th Street. South of 119th Street, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway (NS) and Consolidated Rail Corporation (Conrail) right-of-way to the terminus of the RLE Project at 130th Street. Southeast of the Canadian National (CN)/MED tracks, the elevated RLE Project, as described in the Draft EIS, would descend to an at-grade profile, travel past the proposed 120th Street yard and shop, and terminate at the 130th Street station located north of 130th Street.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options. The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks.

All hybrid options considered in selecting the Preferred Alignment of the UPRR Alternative started with the West Option and crossed over from the west to the east side of the UPRR tracks north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses, minimize impacts on schools, residences, and the historic Roseland Pumping Station, and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Public outreach, stakeholder input, and agency coordination have continued to influence CTA's ongoing design efforts. Norfolk Southern Railway (NS) shared their plans for future potential access to the CN/MED tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access and access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The

design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and the selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment analyzed in this Final EIS, shown in **Figure 1-1**.

The following sections describe the two alternatives being evaluated as part of the Final EIS, the No Build Alternative and the Preferred Alignment.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-1: Preferred Alignment

Section 2 - No Build Alternative

Projects done to satisfy the requirement of the National Environmental Policy Act (NEPA) require analysis of the No Build Alternative. Comparison with the Build Alternatives helps to assess the relative benefits and impacts of the other alternatives being evaluated. The No Build Alternative is carried into the Final EIS phase of the project development regardless of its performance versus the Build Alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative.

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Transportation Improvement Program (TIP). The No Build Alternative includes all projects currently programmed in the fiscally constrained portion of the CMAP *FY 2019-2024 TIP* that are within the project area. The primary change to the No Build Alternative since the Draft EIS is that the 95th/Dan Ryan terminal improvements were completed in January of 2019; they were noted as future improvements in the Draft EIS.

2.1 Infrastructure

No new infrastructure would be constructed as part of the No Build Alternative other than projects already committed through the CMAP TIP and regular maintenance of existing track and structures.

2.2 Stations and Parking

No new stations would be constructed as part of the No Build Alternative.

2.3 Yard

The 98th Street Yard and Shop at the south end of the existing Red Line would continue to be used for Red Line trains. The No Build Alternative does not include any improvements to this yard; however, the 98th Street Yard and Shop would need to be replaced as it is past its useful life.

2.4 Operating Plan

As part of the No Build Alternative, bus transit service would be focused on the preservation of existing services and projects. Bus routes in the vicinity of the RLE Project are not expected to change as part of the No Build Alternative.

Section 3 - Union Pacific Railroad Alternative – Preferred Alignment

The Draft EIS evaluated the East and West Options of the UPRR Alternative (**Figure 3-1**). Impacts resulting from the East or West Options were disclosed, and proposed mitigation measures were presented in the Draft EIS. After the publication of the Draft EIS, CTA continued to refine the RLE Project and selected the Preferred Alignment, which is a combination of the East and West Options of the UPRR Alternative presented in the Draft EIS (see **Figure 3-1**). The Preferred Alignment maximizes the benefits of both the East and West Options and minimizes the range of impacts that would come from the selection of one option over the other. The impacts and mitigation measures of the Preferred Alignment are presented in the Final EIS document, which was influenced by the agency and public comments received on the Draft EIS, at the Preferred Alignment open house, and on the Supplemental EA. **Figure 3-1** shows the UPRR East and West Options as presented in the Draft EIS beside the Preferred Alignment that highlights the design refinements presented in this addendum. The three design refinements listed below are described in detail in the next section:

- 107th Place cross-over
- 120th Street yard and shop refinement
- 130th Street station relocation

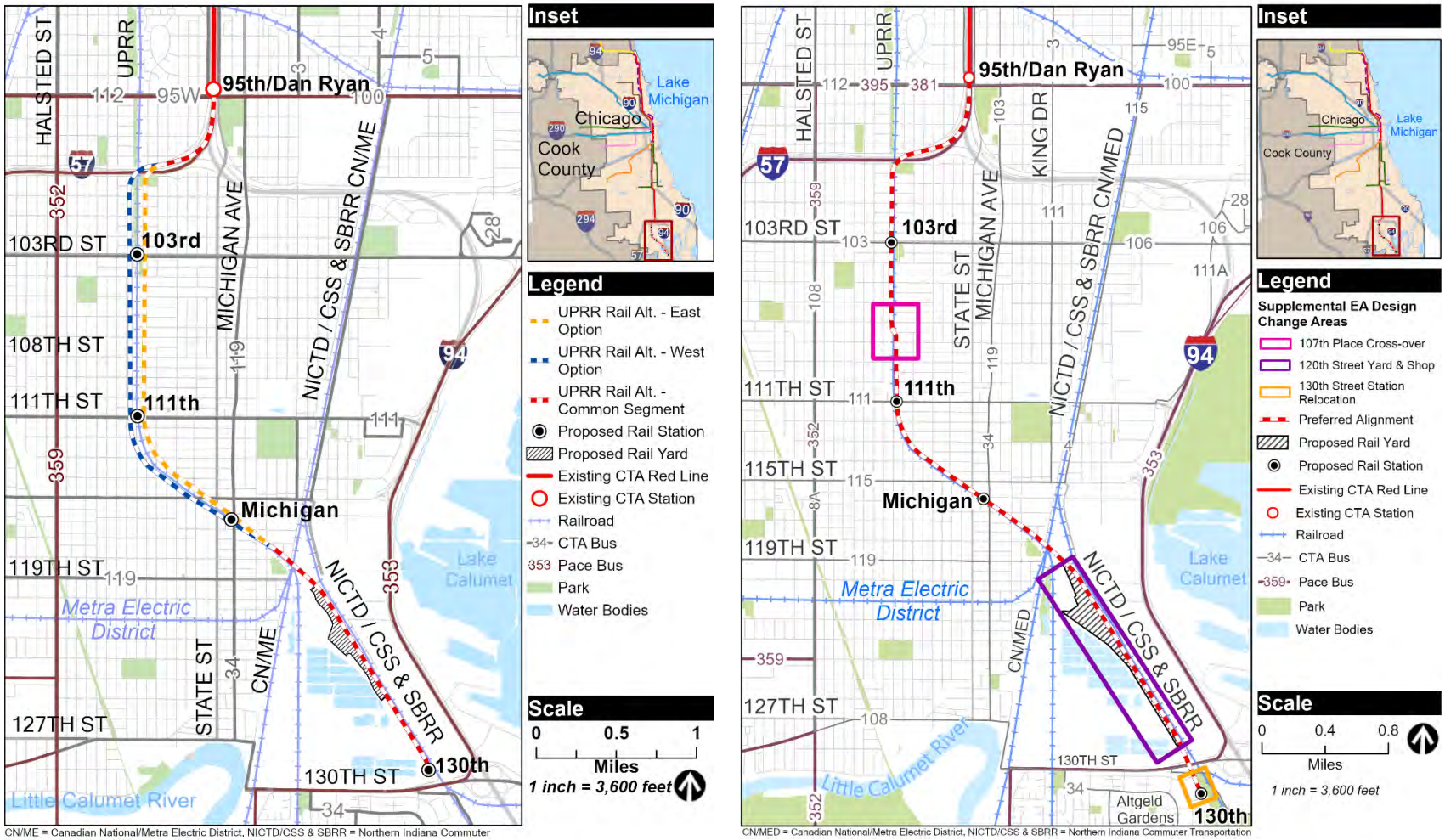

Figure 3-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

3.1 Design Refinements Since the Draft EIS

3.1.1 107th Place Cross-over

Based on public feedback received on the Draft EIS as well as subsequent project planning and engineering work, the Preferred Alignment for the RLE Project was selected in 2018. Engineering was conducted to determine the optimum location to cross over the UPRR tracks. **Figure 3-1** shows the East and West Options from the Draft EIS and **Figure 3-2** features the location of the 107th Place cross-over that is part of the Preferred Alignment. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options. The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the East Option's proximity to their tracks. All hybrid options considered started with the West Option and crossed over from the west to the east side of the UPRR tracks north of 115th Street, with refinements to the East Option alignment to address the UPRR comment regarding proximity to their tracks.

Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified 108th Place as the cross-over location that would provide the greatest benefit. The cross-over at the 108th Place location would preserve viable businesses; minimize impacts to schools, residences, and the historic Roseland Pumping Station; and preserve parcels slated for future development surrounding the station areas. The hybrid option was then presented to the public as the Preferred Alignment on January 26, 2018. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height; would lower the profile of the elevated structure; and would place the crossing at 107th Place. **Appendix F** contains plans and profiles for the 107th Place cross-over.

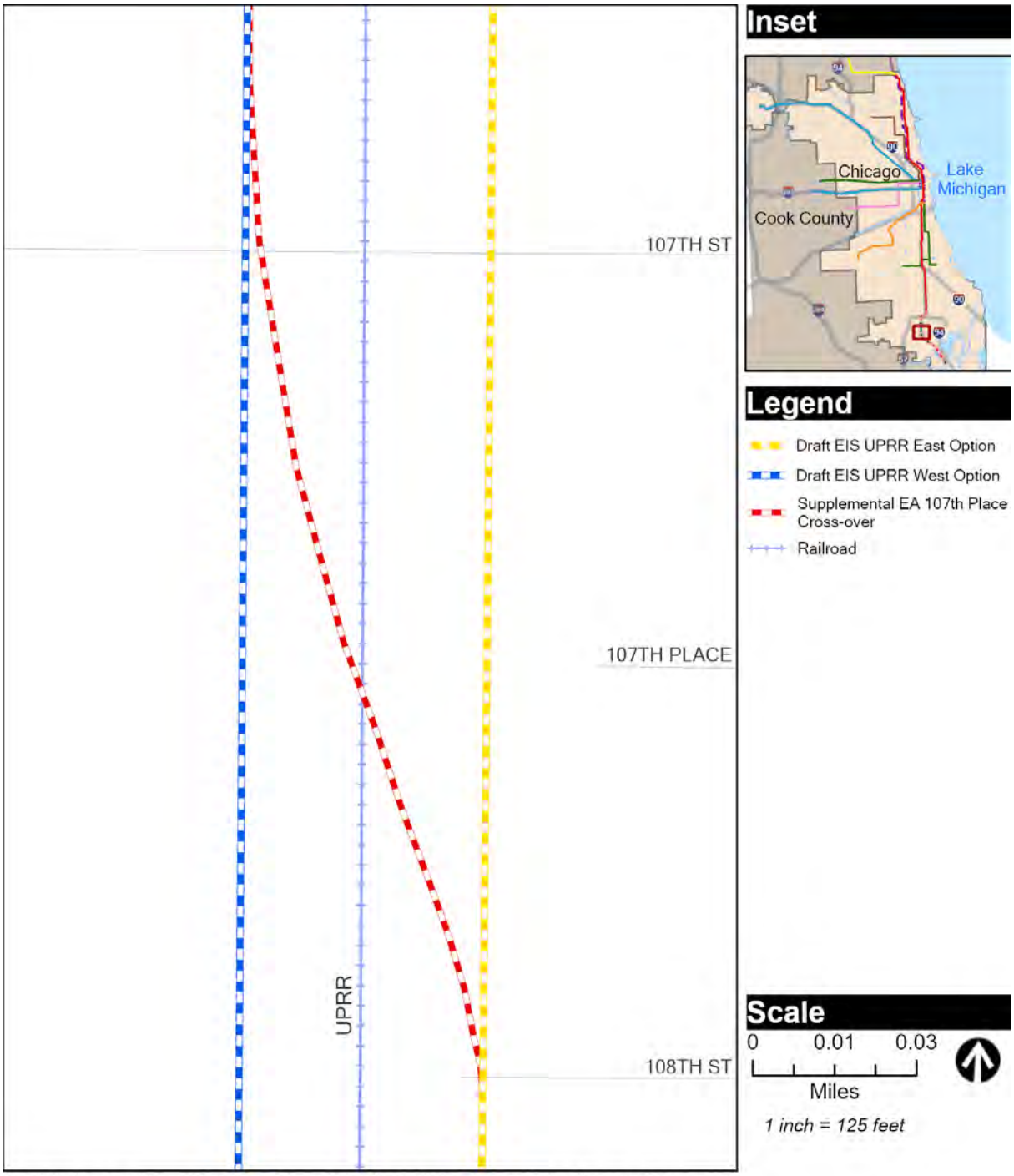

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-2: 107th Place Cross-over Location

3.1.2 120th Street Yard and Shop Refinement

The 120th Street yard and shop would provide a larger, modern railcar storage and repair facility for CTA at the south end of the RLE Project, and it would replace the function of the existing 98th Yard and Shop as a maintenance facility. The property selected for the yard and shop was originally a rail yard for the Michigan Central Railroad, known as the Kensington Yard. NS now owns the Kensington Yard property, which has had all the yard trackage removed. Presently, only a single spur track exists, which provides rail access to the All American Recycling facility at 11900 S. Cottage Grove Avenue from the south.

After the announcement of the Preferred Alignment, CTA continued to conduct stakeholder coordination and further design plans. NS shared their plans for future potential access to the CN/MED tracks to the north of Kensington Yard and potential improvements to the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The restoration of the former connection would not be part of the RLE Project. The 120th Street yard and shop presented in the Draft EIS would preclude that future potential access and access to All American Recycling. The All American Recycling facility is served by the NS via trackage rights to Conrail on which the IHB also operates. This coordination with NS resulted in adjustments to the Preferred Alignment near the 120th Street yard and shop (see **Figure 3-3**) to accommodate:

- 100-foot-wide right-of-way for the NS line immediately west of the NICTD/CSS & SBRR.
- Future connection from the NS track to CN tracks along the MED corridor.
- Maintain connection from the NS tracks to the All American Recycling facility.
- Rail connection to facilitate rail delivery of ballast, ties, and other material to CTA.

Based on these considerations, the 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west. This shift resulted in the project footprint expanding into areas that were not included in the previous analysis disclosed in the Draft EIS. **Appendix F** contains plans and profiles for the 120th Street yard and shop refinement.

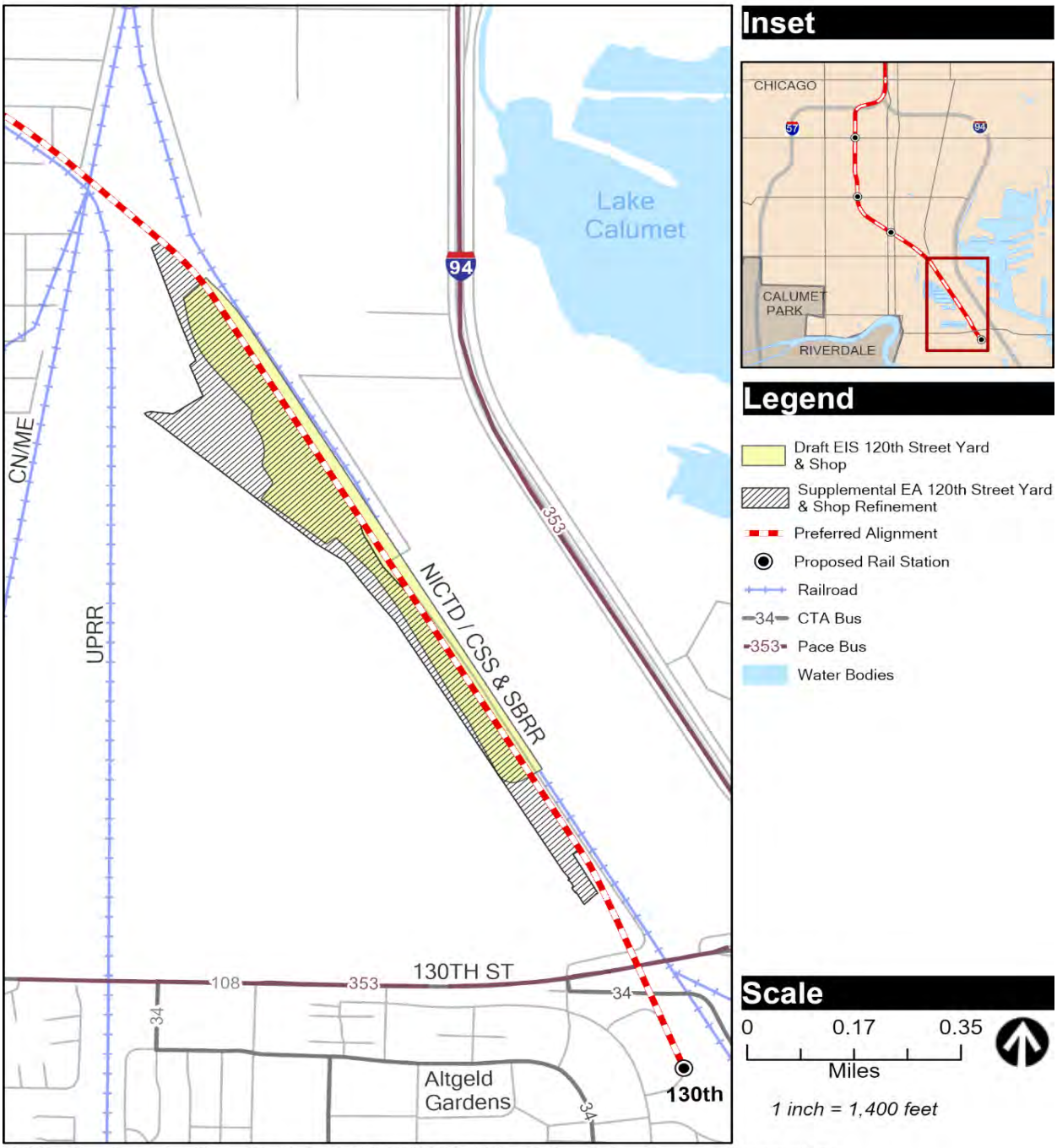

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-3: 120th Street Yard and Shop Refinement

3.1.3 130th Street Station Relocation

The Draft EIS proposed a terminal station, the 130th Street station, located north of 130th Street adjacent to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) Calumet Reclamation Plant. This location was selected and determined to be the most viable option for the RLE Project's terminus station at the time of the Draft EIS. However, there were concerns about pedestrians needing to cross 130th Street to access the station. The ability to connect the transit station to the Altgeld Gardens neighborhood was limited due to the existing four-lane roadway that would separate the neighborhood from the proposed station. In addition, the station would be located with MWRD facilities on both sides of it, and concerns were raised about potential odors from the wastewater treatment plant.

In 2017, after publication of the Draft EIS, CHA demolished Blocks 11, 12, and 13 of Altgeld Gardens. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. This created an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. In 2019, CTA began exploring a possibility to relocate the 130th Street station to this location south of 130th Street. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. CTA therefore proposed a location change for the 130th Street station.

The refinement would relocate the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood as shown in **Figure 3-1**. The station area concept is shown in **Figure 3-4**. **Appendix F** contains plans and profiles for the 130th Street station relocation. The station platform would be at-grade located south of 130th Street. A station entrance would be located at the terminus of the extension north of 132nd Street. A five-bay bus turnaround would be located to the west of the main station for direct transfers. A park & ride facility would be located northwest of the station platform, with another station entrance at the top level to bridge over the tracks to access the station platform for park & ride transfers. CTA Transportation Offices would also be located at the terminus, with a connection to the park & ride facility and nearby station entrance. The Transportation Offices would include office space and restroom facilities for station personnel.

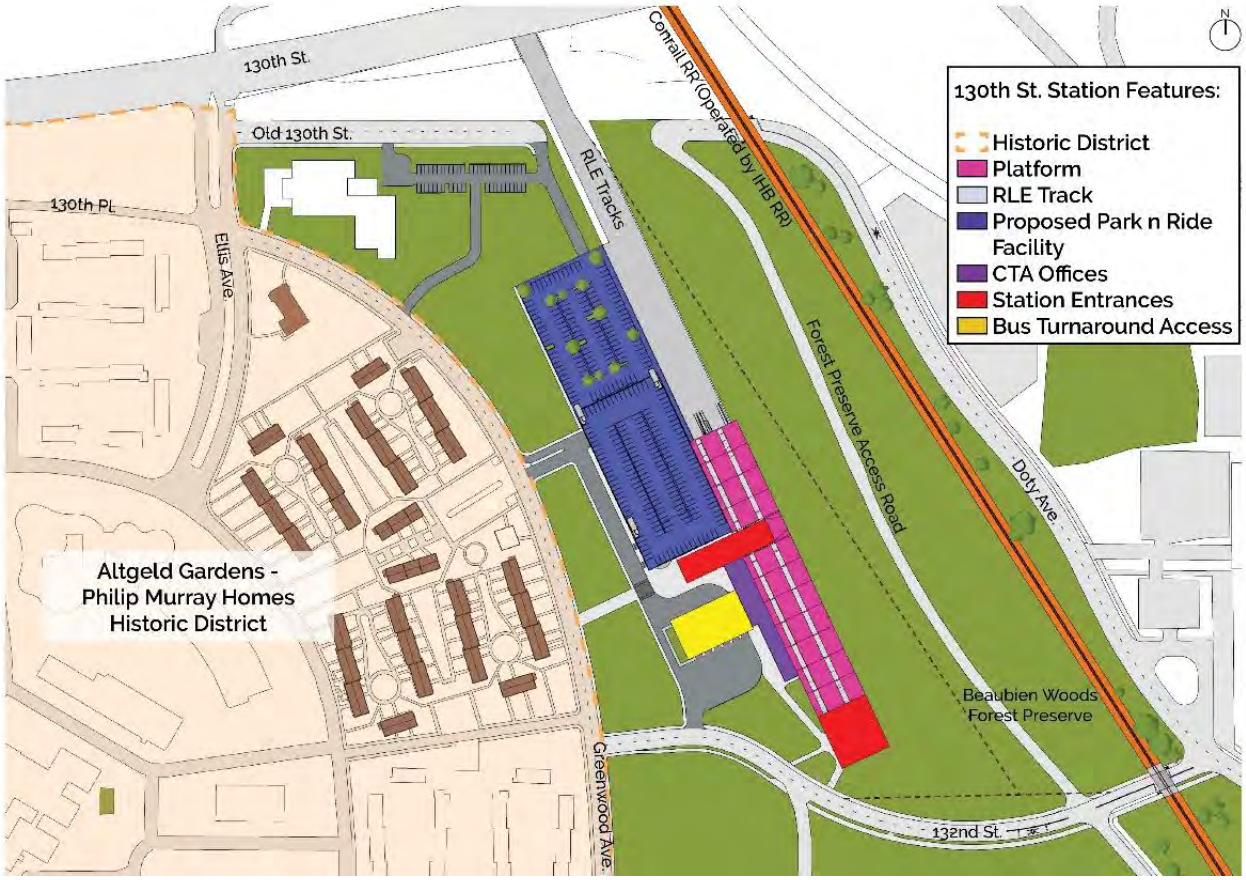

Figure 3-4: 130th Street Station Concept

The proposed station south of 130th Street would offer many benefits over the north station location, including:

- Creating better transit connections with the existing bus services that run within the Altgeld Gardens neighborhood.
- Providing pedestrian access to the station using neighborhood roadways while not having to cross 130th Street.
- Being closer and more accessible for Altgeld Gardens' residents and Carver Military Academy High School students.
- Providing safer and more secure access for transit users by avoiding the need to use a walking path under the 130th Street viaduct or cross 130th Street at-grade.

- Providing better transit access to the Beaubien Woods Forest Preserve.
- Being farther from the MWRD plant and the odors potentially associated with it.
- Avoiding interaction with truck traffic entering and exiting the MWRD plant.
- Better opportunities for future development.
- Supporting objectives in the 2013 Altgeld *Gardens - Philip Murray Homes Master Plan* for improving transportation options and access to jobs, services, and retail.

3.2 Infrastructure

Several infrastructure improvements would be made as part of the Preferred Alignment. Projects already committed through the CMAP TIP would be constructed as described for the No Build Alternative. Regular maintenance of existing track and structures would continue.

The CTA Red Line heavy rail transit tracks would be extended south to 130th Street from the existing 95th/Dan Ryan Terminal, turning west along the north side of the I-57 right-of-way on elevated tracks, which would turn south and proceed down through Fernwood Parkway directly adjacent on the west side of the UPRR right-of-way until 107th Place, where the elevated tracks would cross over the UPRR. The tracks would proceed south along the east side of the UPRR until the CN/MED tracks, where the tracks would cross over and descend to grade. The tracks would then travel southeast until the terminal station at 130th Street.

The elevated substructure would consist of reinforced cast-in-place concrete hammerhead piers on drilled shafts or steel piles. The superstructure would consist of steel girders or concrete box segmental girders, with a concrete closed deck supporting direct fixation track with welded rail.

Minimum vertical clearances would be 14 feet 9 inches. At locations where the Preferred Alignment would cross the UPRR tracks, the minimum vertical clearance would be 23 feet 4 inches. Span lengths between piers would be based on site conditions, geometrics, and clearance requirements. Longer spans than typical would be required when crossing certain elements, such as I-57, the UPRR, and the CN/MED tracks.

Electrical substations would be installed along the tracks to provide power to the trains. Six substations would be constructed, at 95th, 103rd, 110th, 116th, 120th, and 130th Streets. The location of these substations can be seen in **Appendix F**.

No roadways that currently cross the UPRR tracks would be severed by the RLE Project. However, numerous streets and alleys would be shortened to accommodate the new tracks. Cul-de-sacs

would be built at the end of these shortened streets and alleys to allow traffic to turn around. These streets include 103rd Place, 104th Street, 105th Street, 109th Place, 110th Street, 111th Place, 112th Street, 112th Place, 113th Street, Princeton Avenue, Yale Avenue, Perry Avenue, and Calumet Avenue. Additionally, Old 130th Street would be permanently closed at the location of the RLE tracks where they cross the existing Old 130th Street at grade. The primary access to the Carver Military Academy High School via Greenwood Avenue to 132nd Street would be maintained, as would the secondary access along Doty Avenue south of the high school.

3.3 Stations and Parking

Four stations would be included in the RLE Project: 103rd Street, 111th Street, Michigan Avenue, and 130th Street.

All stations would have island platforms, 26 feet wide and 520 feet long, while the 130th Street station would have an additional platform. Platforms would be built to accommodate ten-car trains. All stations would be accessible in line with the Americans with Disabilities Act (ADA), including elevators to accommodate users with mobility challenges. Station footprints are depicted on the plans and profiles as noted in the sections below.

All stations would include bus connections and park & ride facilities.

3.3.1 103rd Street Station

The 103rd Street station would be an elevated structure that would be located between approximately 102nd Place and 104th Street. There would be ground level entrances on both the north and south side of 103rd Street. Parking would be provided south of the station along the west side of the UPRR right-of-way in a new surface lot between 103rd Place and 104th Street that would contain 175 parking spaces. The CTA bus route #103 would provide a connection to this station. A new electrical substation would be located in the southeast corner of the parking lot. **Appendix F** contains plans and profiles for the 103rd Street station. **Figure 3-5** shows an example rendering of the 103rd Street station.

Figure 3-5: Example rendering of the 103rd Street station looking north from 103rd Street

3.3.2 111th Street Station

The 111th Street station would be an elevated structure that would be located between approximately 109th Place and 111th Street. The primary ground level entrance would be located along the north side of 111th Street, with a secondary entrance at the south side of 110th Street. Parking would be provided south of 111th Street on the east side of the UPRR right-of-way, from 111th Street to 111th Place, in a surface lot that would contain 225 parking spaces. The CTA bus route #111 would provide a connection to this station. An electrical substation would be located directly north of the station south of 109th Place. Part of the station would occupy the existing parking lot used by the Agape Community Center at 342 W. 111th Street, eliminating its off-street parking to the west of the building. A new parking lot and access point to the loading dock east of the Agape Community Center would be provided as part of the RLE Project. **Appendix F** contains plans and profiles for the 111th Street station.

3.3.3 Michigan Avenue Station

The Michigan Avenue station would be an elevated structure that would be located between State Street and Michigan Avenue. The primary ground level entrance would be located along the west side of Michigan Avenue directly north of the UPRR embankment, and the secondary entrance located on the east side of Michigan Avenue across the street from the primary entrance. Parking would be provided north of the station and east of State Street in a surface parking lot containing 180 parking spaces. CTA bus routes would provide connections to the station. **Appendix F** contains plans and profiles for the Michigan Avenue station. **Figure 3-6** shows an example rendering of the Michigan Avenue station.

Figure 3-6: Example rendering of the Michigan Avenue station looking west

3.3.4 130th Street Station

The 130th Street station would be a ground-level facility located south of 130th Street and east of the Altgeld Gardens neighborhood. It would be the new terminal station of the CTA Red Line. The entrances to the station would be located on the south and west side of the station. Three tracks would be located in the station, two of which would be served by a central platform and one of which would be served by a platform on the west side. Access to the central platform would be from

the south end at ground level, as well as from the middle of the platform via an overhead pedestrian bridge which would be accessible by both stairs and elevators on both sides of the bridge.

130th Street station would include a park & ride facility with a four-level garage and surface parking lot to provide a total of 760 parking spaces. (The parking layout would accommodate future parking expansion if the parking demand increases.) A bus turnaround with bus bays would be provided. CTA and Pace bus routes would provide connections to the station. **Appendix F** contains plans and profiles for the 130th Street station. **Figure 3-7** shows an example of the 130th Street station.

Figure 3-7: Example rendering of the 130th Street station looking west from Beaubien Woods Forest Preserve

3.4 Yard and Shop

A yard and shop facility would be sited on a combination of industrial/vacant land to the east of the CN/MED tracks and west of the NICTD/CSS & SBRR tracks at approximately 120th Street and Cottage Grove Avenue. The yard would be entirely at grade and would have a capacity to hold up to 330 CTA rail cars, with room for additional tracks that could expand the capacity to 360 cars. A nominal amount of parking for employees would be included at the yard. A preliminary schematic layout of the yard is shown in **Figure 3-8**.

A pair of 500-foot transload tracks for transfers of ballast and similar material between the NS and the CTA would be constructed at the north edge of the yard. The shop would contain a wheel truing track, annual inspection tracks, two regular inspection tracks, and a wash track. The 98th Street Yard and Shop at the south end of the existing Red Line could continue to be used for Red Line trains. The CTA would repurpose the existing 98th Street Shop for other uses once the new revenue shop at 120th Street is constructed. **Appendix F** contains plans for the 120th Street yard and shop.

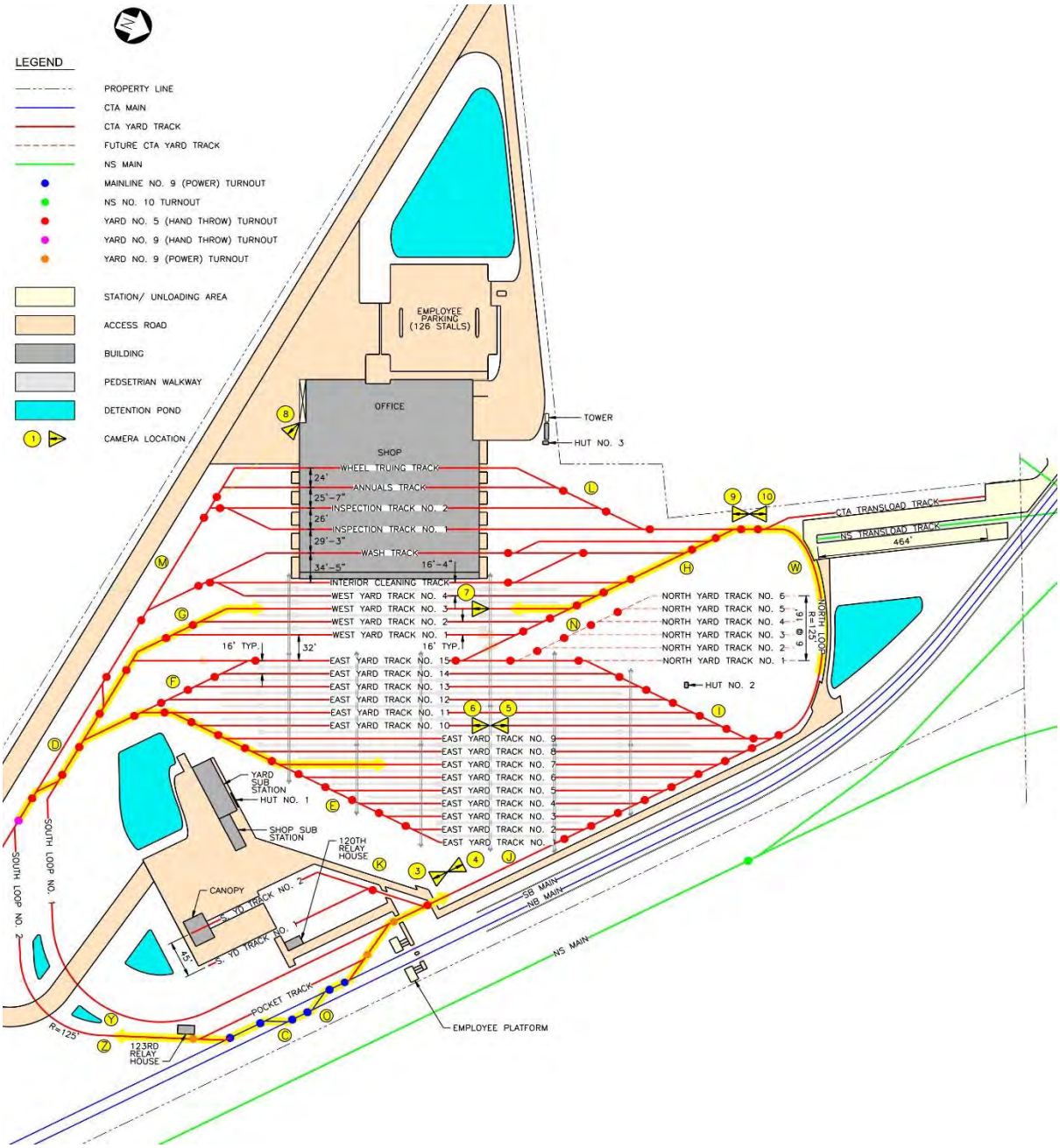

Figure 3-8: Schematic of 120th Street yard and shop

3.5 Operating Plan

The RLE Project would operate 24 hours a day, each day of the year. Service frequency is anticipated to be the same as with the current service at the 95th/Dan Ryan terminal—approximately 3-minute to 6-minute headways during morning and afternoon peak hours. Headways during off-peak periods during the day would be approximately 6-10 minutes. Headways at night (between 1 AM and 4 AM) would be approximately 15 minutes. Service frequency would be adjusted to accommodate demand once the RLE service is implemented.

Based on the estimated running time for the RLE Project, an additional 78 railcars would be required as part of this project. The additional 78 railcars would include 64 railcars to meet the peak period schedule, plus 14 spare railcars. Train sets would be eight cars long. No additional railcars would be purchased as part of the RLE Project. Stations and track alignment would accommodate ten-car trains to maintain the option of running ten-car trains in the future. With the extension of the Red Line, some existing bus routes would be rerouted to feed into the new stations.

The potential exists for UPRR freight trains to affect access to the facilities in the Preferred Alignment at the proposed 103rd Street and 111th Street stations. At these two stations areas, the UPRR is at-grade; passing freight railroad trains would interrupt pedestrian and vehicle access to the proposed RLE stations. All park & ride lots would be located on the same side of the UPRR as the proposed stations. Park & ride users would not need to cross the UPRR while walking from their vehicles to the station. At the Michigan Avenue station, the UPRR is grade separated on an embankment with a viaduct over Michigan Avenue so that access to the Red Line station could be maintained using Michigan Avenue as it passes underneath the UPRR.

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Appendix E

Description of Alternatives

- Draft EIS Appendix E, Description of Alternatives, July 2015
  - Appendix A, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Description of Alternatives

October 31, 2012
Updated July 29, 2015

Prepared for:
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Table of Contents

Section 1 Background Information 1-1

Section 2 No Build Alternative 2-1

2.1 Infrastructure 2-3
2.2 Stations 2-3
2.3 Yard 2-3
2.4 Operating Plan 2-3

Section 3 BRT Alternative 3-1

3.1 Infrastructure 3-1
3.2 Stops and Parking 3-3
3.3 Yard 3-4
3.4 Operating Plan 3-4

Section 4 UPRR Rail Alternative 4-1

4.1 Infrastructure 4-3
4.2 Stations and Parking 4-6
4.3 120th Street Yard and Shop 4-12
4.4 Operating Plan 4-13

Section 5 Halsted Rail Alternative 5-1

5.1 Infrastructure 5-1
5.2 Stations and Parking 5-5
5.3 119th Street Yard and Shop 5-6
5.4 Operating Plan 5-6

Section 6 Additional Resources 6-1

Appendices

Appendix A - 2014-2015 Red Line Extension Project Update

Figures

Figure 1-2: RLE Project Alternatives 1-3
Figure 2-1: No Build Alternative 2-2
Figure 3-1: BRT Alternative 3-2
Figure 4-1: UPRR Rail Alternative Options 4-2
Figure 4-2: UPRR Rail Alternative typical span cross section 4-4
Figure 4-3: UPRR Rail Alternative ROW Option Typical Cross Section 4-5
Figure 4-4: UPRR Rail Alternative East Option Typical Cross Section 4-6
Figure 4-5: Example Rendering of the UPRR Rail Alternative Elevated Structure at the Proposed 103rd Street Station 4-8
Figure 4-6: Station Area Showing South and West Station Options 4-10
Figure 5-1: Halsted Rail Alternative 5-2
Figure 5-2: Halsted Rail Alternative Typical Hammerhead Cross Section 5-3
Figure 5-3: Halsted Rail Alternative Typical Straddle Bent Cross Section 5-3

Tables

Table 2-1: Northbound Travel Times for No Build Alternative 2-3
Table 2-2: 2010-2015 CMAP TIP Projects in the Project Area; Projects Assumed in No Build Alternative 2-4
Table 3-1: BRT Alternative Street Summary 3-1
Table 3-2: BRT Alternative Park & Ride Facility Parking Spaces 3-3
Table 3-3: Northbound Travel Times for BRT Alternative 3-5
Table 4-1: UPRR Rail Alternative Span Widths at Viaducts 4-3
Table 4-2: UPRR Rail Alternative Park & Ride Faciliy Parking Spaces 4-7
Table 4-3: UPRR Rail Alternative and Existing Northbound Red Line Weekday Service Characteristics 4-13
Table 4-4: Northbound Red Line Travel Times for UPRR Rail Alternative 4-14
Table 4-5: Proposed Bus Route Changes for UPRR Rail Alternative 4-14
Table 5-1: Halsted Rail Span Widths at Viaducts 5-3
Table 5-2: Halsted Rail Alternative Park & Ride Facility Parking Spaces 5-5
Table 5-3: Proposed Bus Route Changes for Halsted Rail Alternative 5-7

Abbreviations

AREMA	American Railway Engineering and Maintenance-of-Way Association
BRT	Bus Rapid Transit
CDOT	Chicago Department of Transportation
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
IDOT	Illinois Department of Transportation
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
RLE	Red Line Extension
ROW	Right-of-Way
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad

Section 1
Background Information

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street station to the vicinity of 130th Street, subject to the availability of funding. The proposed Red Line Extension (RLE) would include four stops. Each stop would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. Figure 1-1 shows the project area.

The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) will focus on the following alternatives that emerged from the Alternatives Analysis and National Environmental Policy Act (NEPA) scoping process, which are shown in Figure 1-2:

- No Build Alternative
- Bus Rapid Transit (BRT) Alternative
- Union Pacific Railroad (UPRR) Rail Alternative
    - Right-of-Way (ROW) Option
    - East Option
    - West Option
- Halsted Rail Alternative

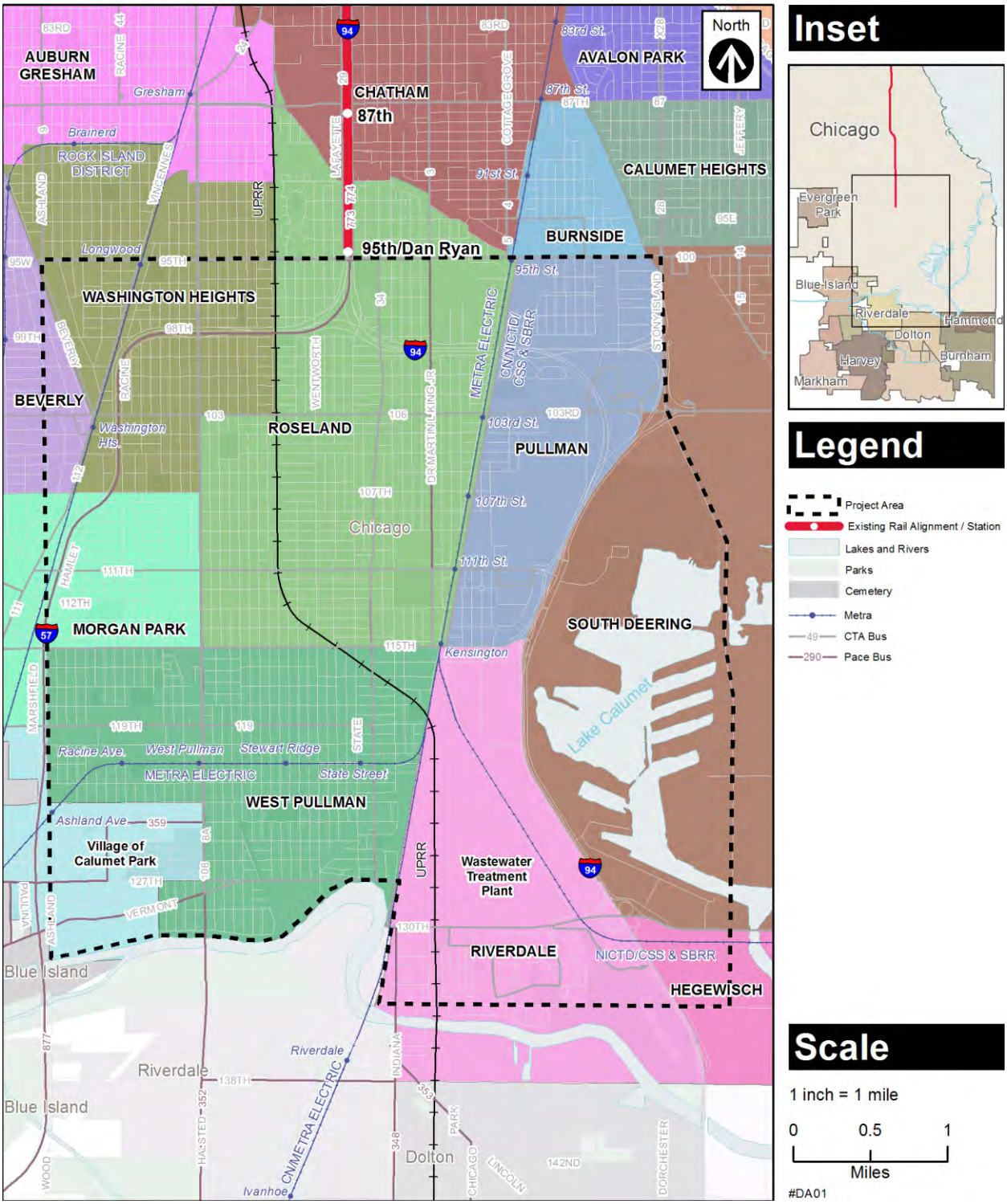

Figure 1-1: RLE Project Area

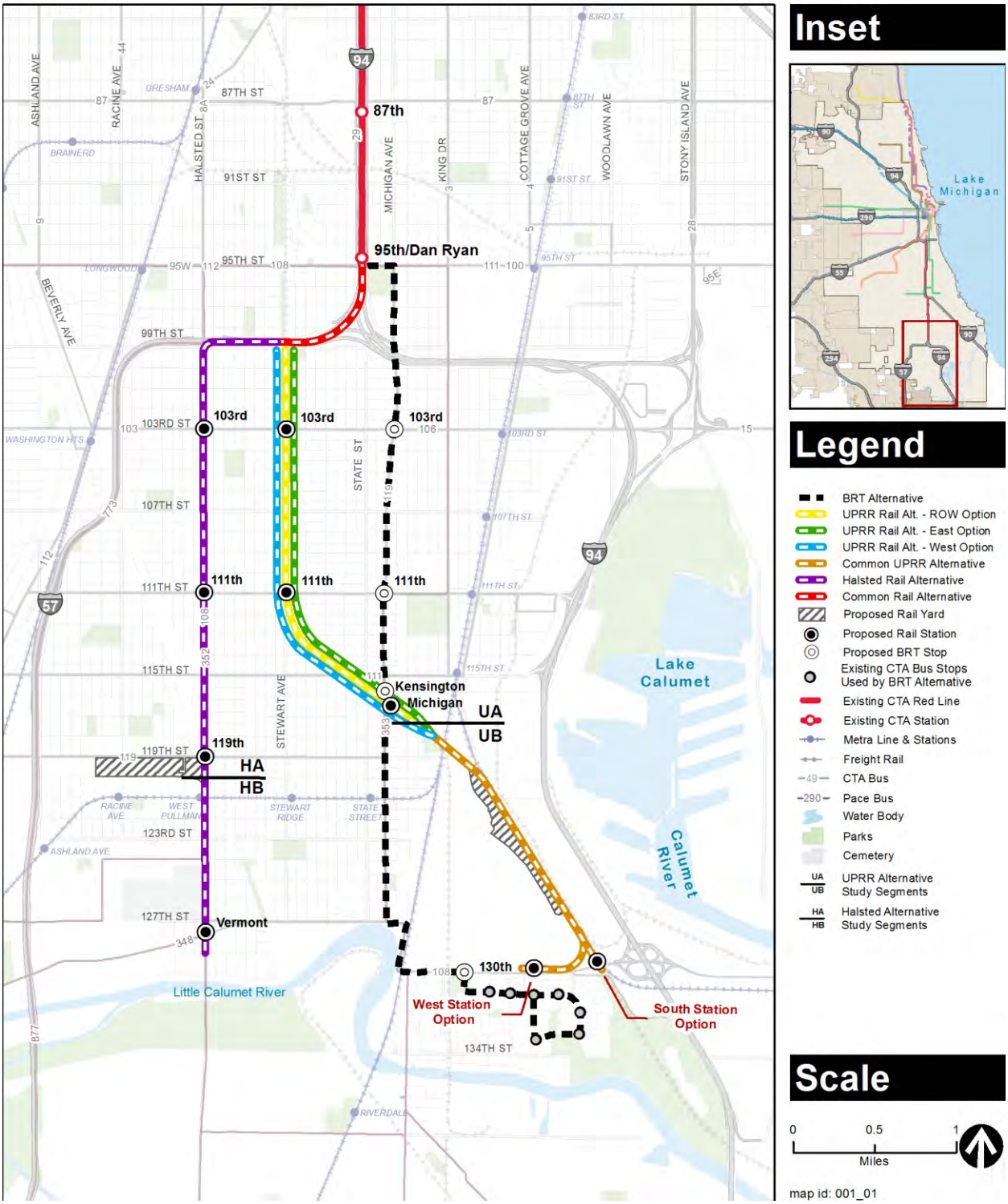

Figure 1-2: RLE Project Alternatives

This technical memorandum defines the four different alternatives (note: one alternative has three options) to be evaluated in the Draft EIS for potential environmental, economic, and social impacts. Each alternative will be described based on infrastructure improvements, stations, and operating plans.

Additional Information about the RLE Project

- The Dan Ryan branch of the Red Line (Cermak-Chinatown station to 95th Street station) opened for service in September 1969.
- In late 2006, CTA initiated an Alternatives Analysis study to identify and evaluate potential major fixed guideway transit solutions in the project area.
    - Community meetings to share the results of the Screen 1 process were held on April 10 and 11, 2007.
    - Community meetings to share the results of the Screen 2 process were held on December 3 and 4, 2008.
    - Community meetings to share the results of the Screen 3 process were held on June 3 and 4, 2009.
- On August 12, 2009, the UPRR Rail Alternative was designated by the Chicago Transit Board as the Locally Preferred Alternative.
- The NEPA scoping process occurred in 2009 with an agency scoping meeting held on September 24, 2009. Public scoping meetings were held on September 22 and 24, 2009. A Notice of Intent was published in the Federal Register on September 1, 2009.
- An Open House meeting to inform the public of progress on the RLE Project was held on August 2, 2011.

Updated July 29, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix A of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix A supersedes information presented in other chapters of this technical memorandum.

Section 2
No Build Alternative

NEPA requires analysis of the No Build Alternative. Comparison with the build alternatives helps to assess the relative benefits and impacts of the other alternatives being evaluated. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative. The bus routes assumed to be part of the No Build Alternative are illustrated in Figure 2-1.

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP). Table 2-1 lists the TIP projects within the project area, which consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities.

Improvements to the 95th Street Terminal are anticipated to be completed prior to construction of the RLE. While specific details on the improvements are not yet available, major renovations and expansions to the station house are aimed at providing more space and improving the walking flow of passengers, with new or expanded bus terminal facilities—as well as Red Line platform improvements. Included in the upgrades are the following:

- New station building with bright, airy spaces and clear sightlines
- Expanded platforms to provide more room and easier flow of passengers
- Station will be largely enclosed in glass for maximum light and protection from the elements
- Wider bus lanes and increased spacing between bus bays to reduce congestion
- Wider sidewalks and waiting areas in bus terminal for increased passenger comfort and safety
- Sound panels at platform level to provide a more comfortable, less noisy space
- Additional escalators and elevators
- Additional space in front of ticket vending machines and fare gates

All elements of the No Build Alternative are included in each of the other alternatives.

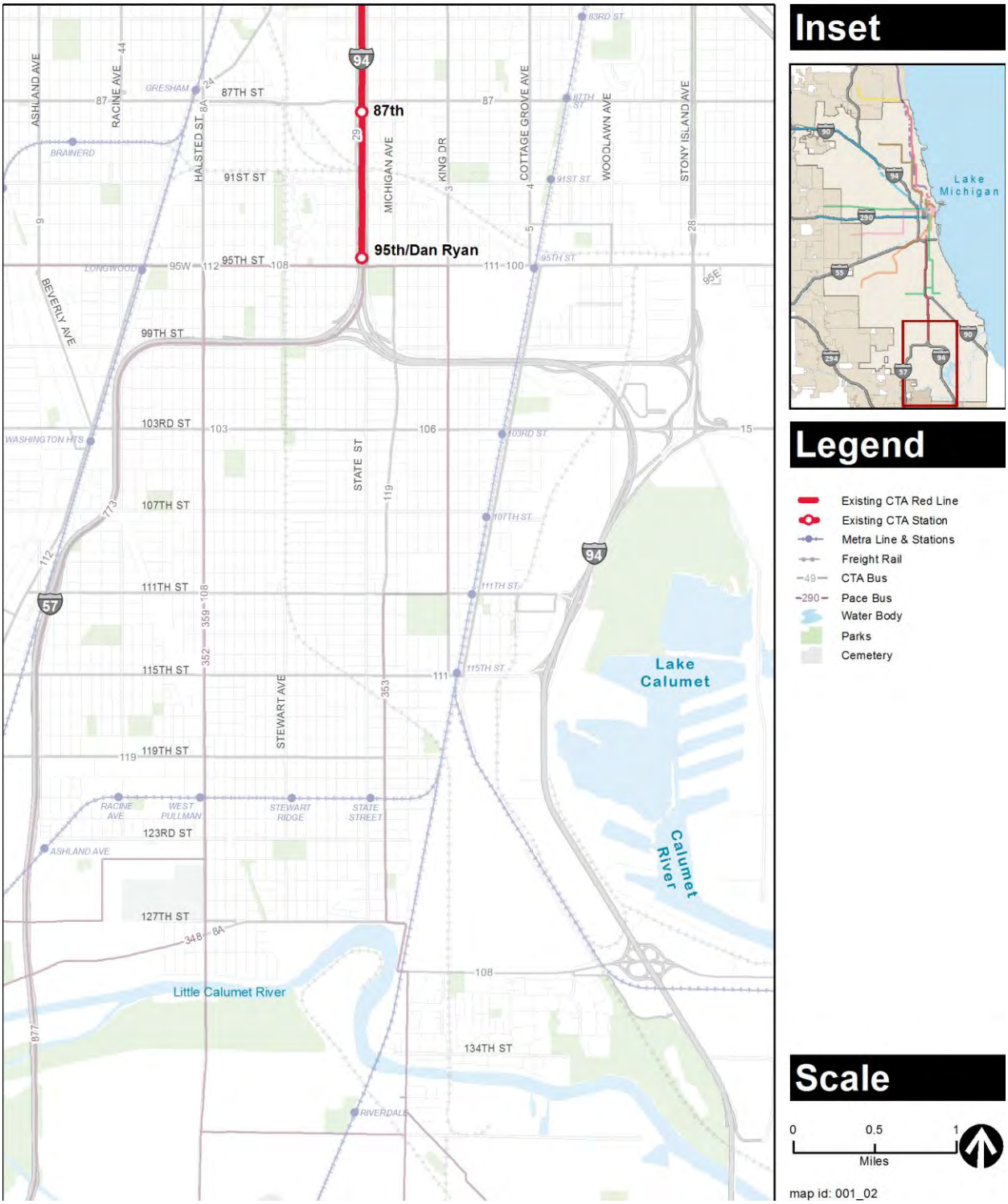

Figure 2-1: No Build Alternative

Table 2-1: Northbound Travel Times for No Build Alternative

Route Segment	Travel Time (minutes)
130th to 95th Street Station	28.0
130th to Jackson Station	57.0
130th to Clark/Division Station	64.5
130th to Howard Station	93.5

2.1 Infrastructure

No new infrastructure would be constructed as part of the No Build Alternative other than projects already committed through the CMAP TIP and regular maintenance of existing track and structures.

2.2 Stations

No stations would be constructed as part of the No Build Alternative.

2.3 Yard

The 98th Street yard and shop at the south end of the existing Red Line would continue to be used for Red Line trains. The 98th Street yard and shop would need to be replaced as it is past its useful life.

2.4 Operating Plan

As part of the No Build Alternative, bus transit service would be focused on the preservation of existing services and projects. Bus routes in the project area are not expected to change as part of the No Build Alternative. The following bus routes (shown in Figure 2-1) run in the project area: #8A, #9, #30, #34, #103, #106, #108, #111, #112, #115, #119, #348, #352, #353, and #359.

Red Line travel times during the morning peak period for the No Build Alternative are presented in Table 2-2.

Table 2-2: 2010-2015 CMAP TIP Projects in the Project Area; Projects Assumed in No Build Alternative

Agency	Location	Project	Expected Completion Date
Illinois Department of Transportation (IDOT)	I-94 Bishop Ford Expressway from Stony Island feeder includes Blue Island	Repair/replace two bridges	2016
IDOT	Bridge over I-94 Bishop Ford Expressway at 111th Street	Repair bridge	2013
IDOT	I-57 from US 30 (Lincoln Highway) to I-94 (Dan Ryan Expressway /Mainline)	Repair bridge	2013
Chicago Department of Transportation (CDOT)	95th Street from Western Avenue to Ewing Avenue	Coordination of traffic signal timing	2016
IDOT	Vermont Street from Western Avenue to 127th Street	Resurface road	2013
IDOT	IL 1 (Halsted Street) from 127th Street to 152nd Street	Resurface road	2013
Metra	Regionwide	Acquire shop facility and/or equipment; work on rail tower or yard; work on vehicle maintenance facility	2016
IDOT	Bike Facility: Palos Heights-Cal Sag Multi-Use Greenway from Centennial Trail to Burnham Greenway	Build bicycle and pedestrian facility	2014
IDOT	Hotel Florence from 11111 South Forestville Pullman Historic District	Preserve historic facility	2012
IDOT	North Pullman Historic District Area	Conduct landscaping, preserve historic facility	2013

Section 3
BRT Alternative

The proposed transportation system management alternative is a 5.5-mile long Bus Rapid Transit (BRT) route, which would operate between the existing 95th Street station and the intersection of 130th Street and Eberhart Avenue via 95th Street, Michigan Avenue, 127th Street, Indiana Avenue, and 130th Street. Four stops with improved bus shelters would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements will not continue south of the 130th Street stop, the bus route will continue through Altgeld Gardens with stops at 131st Street and Langley Avenue, 131st Street and Corliss Avenue, 131st Street and Ingleside Avenue, 132nd Street and Ellis Avenue, 133rd Street and Ellis Avenue, and 133rd Place and Corliss Avenue. Figure 3-1 shows the BRT Alternative. Table 3-1 summarizes the streets on which the BRT Alternative would operate.

Table 3-1: BRT Alternative Street Summary

Street	Street Width (feet)	Number of Lanes	Center Turn Lane	Parking
95th Street	80	4	Yes	No
Michigan Avenue	40	2	No	Yes
127th Street	40	4	No	No
Indiana Avenue	40	4	No	No
130th Street	60	4	Yes	No

The BRT Alternative would incorporate bus routing changes that may occur as part of improvements to the 95th Street Terminal. The routing shown on the BRT Plans and Profiles reflects the existing station design. Routing will be adjusted when terminal is renovated.

3.1 Infrastructure

Projects already committed through the CMAP TIP would be constructed as described for the No Build Alternative. Regular maintenance of existing track and structures would continue.

No dedicated bus lanes would be provided for the BRT Alternative. Parking lanes would be removed for some portions of the alignment.

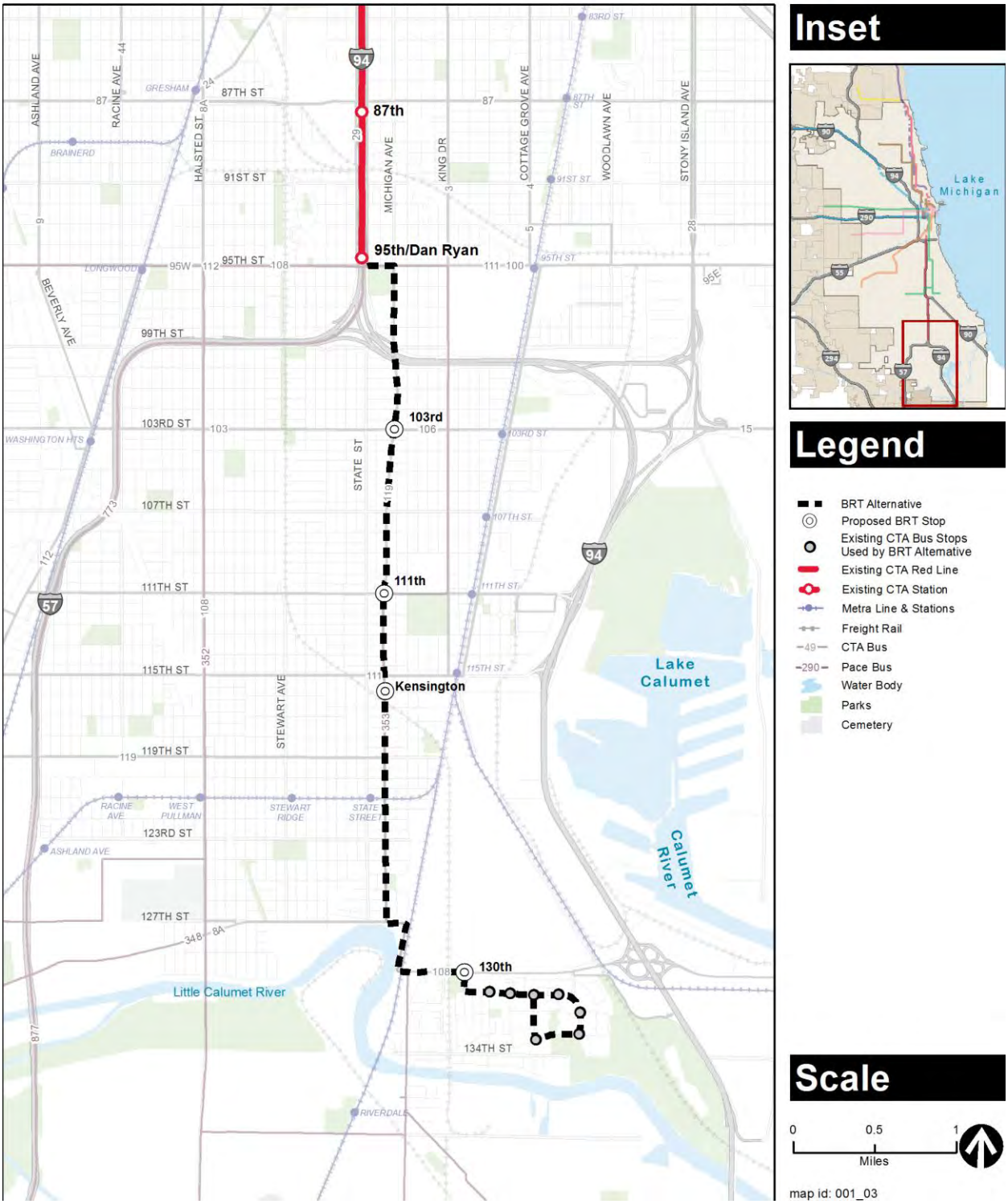

Figure 3-1: BRT Alternative

3.2 Stops and Parking

Improved bus shelters would be provided at the 103rd Street, 111th Place, Kensington Avenue, and 130th Street stops. Park & ride facilities with a total capacity of 700 parking spaces in the year of construction and up to 2,800 parking spaces in a later year (2030) would be constructed at the stop locations, as shown in Table 3-2.

Table 3-2: BRT Alternative Park & Ride Facility Parking Spaces

Location	Construction Year	Horizon Year (2030)
103rd Street	100	200
111th Street	100	200
Kensington Avenue	100	1,000
130th Street	400	1,400
Total	700	2,800

3.2.1 103rd Street Stop

Improved bus shelters for the 103rd Street stop would be on the northwest corner (nearside) of the 103rd Street and Michigan Avenue intersection for the southbound bus and at the northeast corner (farside) of the 103rd Street and Michigan Avenue intersection for the northbound bus. There are existing bus stops at these locations for CTA routes #34 and #119.

A surface parking lot with capacity for 200 spaces would be located on the southeast quadrant of the 102nd Street and Michigan Avenue intersection. The driveway for the parking lot would be on the west side of the lot, directly across from 102nd Place, onto Michigan Avenue.

3.2.2 111th Street Stop

Improved bus shelters for the 111th Street stop would be on the southwest corner (farside) of the 111th Street and Michigan Avenue intersection for the southbound bus and either the northeast or southeast corner (nearside or farside, respectively) of the 111th Street and Michigan Avenue intersection for the northbound bus. There are existing bus stops at these locations for CTA routes #34 and #119.

A surface parking lot with capacity for 200 spaces would be located on the southeast quadrant of the 111th Place and State Street intersection. Driveways for the parking lot would be on the north side of the parking lot, midway between State Street and Michigan Avenue, onto 111th Place, and on the south side of the parking lot, midway between State Street and Michigan Avenue, only 112th Street.

3.2.3 Kensington Avenue Stop

Improved bus shelters for the Kensington Avenue stop would be on the northwest corner (nearside) of the Kensington Avenue and Michigan Avenue intersection for the southbound bus

and at the southeast corner (nearside) of the Kensington Avenue and Michigan Avenue intersection for the northbound bus. There are existing bus stops at these locations for CTA routes #34 and #119.

A three-story parking garage with capacity for 1,000 spaces would be located on the southeast quadrant of the Kensington Avenue and Michigan Avenue intersection; the ground level of the parking garage would be available for retail and/or community facilities. Driveways for the parking garage would be on the west side of the parking structure, midway between Kensington Avenue and the railroad crossing, onto Michigan Avenue, and on the south side of the parking structure, midway between Indiana Avenue and the railroad crossing, onto 116th Street.

3.2.4 130th Street Stop

Improved bus shelters for the 130th Street stop would be on the southwest corner (nearside) of the 130th Street and Eberhart Avenue intersection for the southbound bus and at the northwest corner (farside) of the 130th Street and Eberhart Avenue intersection for the northbound bus. A signalized intersection with crosswalk is proposed at the 130th Street and Eberhart Avenue intersection.

A three-story parking garage with capacity for 1,400 spaces would be located on the northwest quadrant of the 130th Street and Water Treatment Plan Access Road intersection. Driveways for the parking garage would be on the south side of the parking lot, adjacent from Eberhart Avenue, onto 130th Street, and on the east side of the parking lot, onto the Water Treatment Plant Access Road.

3.2.5 Additional Stops

Although BRT service elements will not continue south of the 130th Street stop, the bus route will continue through Altgeld Gardens along the existing #34 route with stops at 131st Street and Langley Avenue, 131st Street and Corliss Avenue, 131st Street and Ingleside Avenue, 132nd Street and Ellis Avenue, 133rd Street and Ellis Avenue, and 133rd Place and Corliss Avenue. Existing bus shelters will remain unchanged.

3.3 Yard

The existing 103rd Street Garage at 1702 103rd Street would be used to store BRT Alternative buses.

3.4 Operating Plan

The BRT Alternative would add a limited-stop enhanced bus route, #X34, along the existing #34 South Michigan Avenue bus route to 130th Street. The BRT Alternative would utilize traffic signal priority at signalized intersections along 95th Street, Michigan Avenue, and 130th Street.

The BRT Alternative would require a net increase of 12, 60-foot articulated buses plus two spares.

The BRT Alternative bus would run 24 hours per day. Bus frequencies would be adjusted during peak periods to a four-minute frequency between 6 AM and 8 PM on weekdays and a 12-minute frequency on the existing route #34 to better serve anticipated demand.

Table 3-3 presents the proposed travel times during the morning peak period for the BRT Alternative via route #X34 and the Red Line.

Table 3-3: Northbound Travel Times for BRT Alternative

Route Segment	Travel Time (minutes)
130th Street to 95th Street Station	23.0
130th Street to Jackson Station	52.0
130th Street to Clark/Division Station	59.5
130th Street to Howard Station	88.5

Section 4
UPRR Rail Alternative

The proposed UPRR Rail Alternative would extend the heavy rail transit Red Line from the existing 95th Street Station to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting.

The UPRR Rail Alternative is a 5.3-mile extension of the existing Red Line. The trains would operate on an elevated structure heading south from 95th Street along I-57 for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of Prairie Avenue, the alignment would cross over the Canadian National (CN)/Metra Electric tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) ROW using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation ROW to terminate at 130th Street. Four stations would be included at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Figure 4-1 shows the UPRR Rail Alternative.

Three UPRR Rail Alternative options for the segment between I-57 and the CN/Metra Electric tracks are studied in the EIS:

- ROW Option: CTA tracks placed in the UPRR ROW; UPRR trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE implementation. The City of Chicago is performing this separate, independent study to evaluate relocating the UPRR trains to another corridor.
- East Option: CTA tracks placed immediately adjacent to and east of the UPRR ROW.
- West Option: CTA tracks placed immediately adjacent to and west of the UPRR ROW.

Two options for the 130th Street terminal station are studied in the EIS:

- South Station Option: located to the west of the NICTD/CSS & SBRR ROW at 130th Street.
- West Station Option: located along the north side of 130th Street to the west of the NICTD/CSS & SBRR route.

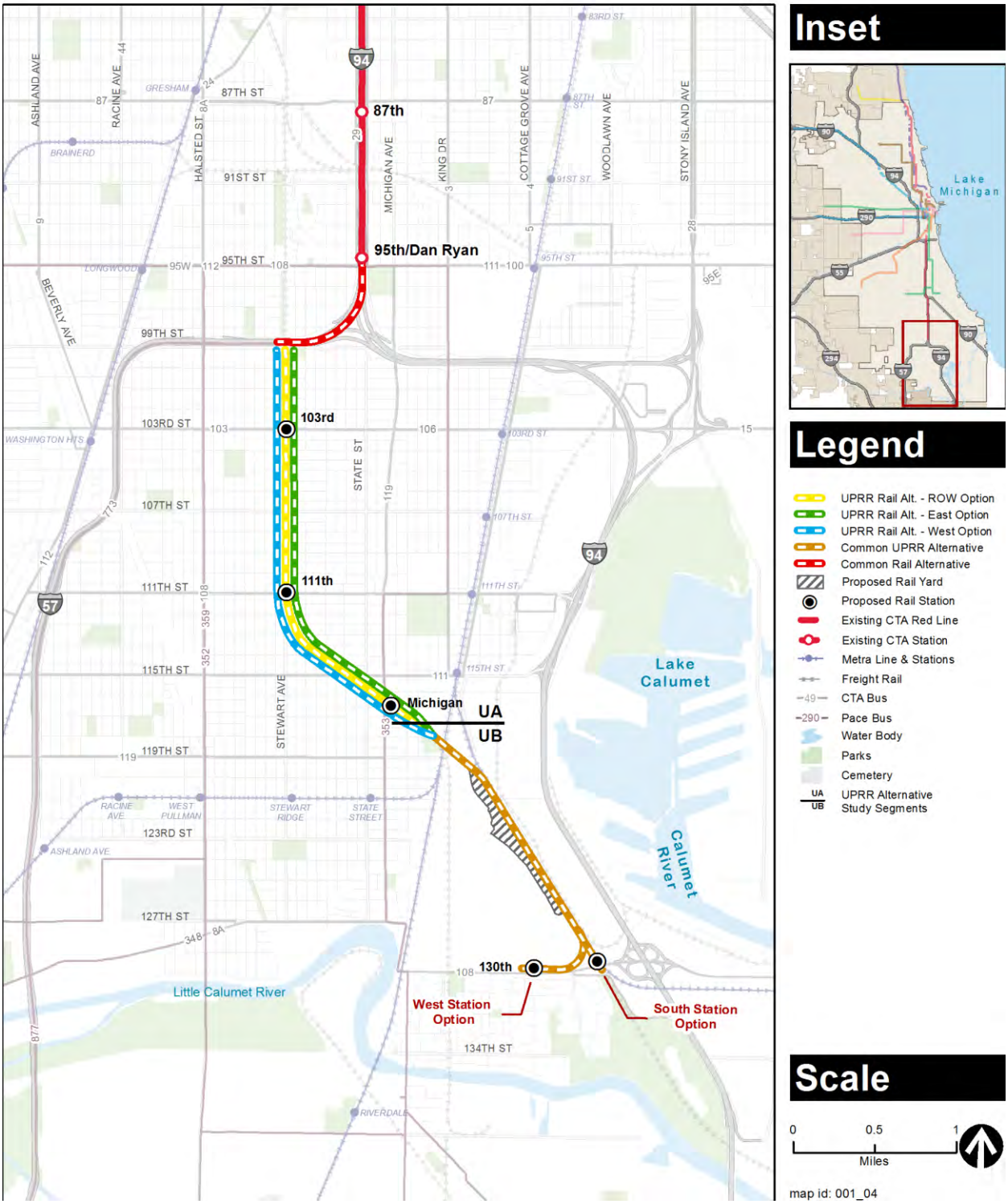

Figure 4-1: UPRR Rail Alternative Options

4.1 Infrastructure

Projects already committed through the CMAP TIP would be constructed as described for the No Build Alternative. Regular maintenance of existing track and structures would continue.

All three UPRR Rail Alternative options would include operation on elevated structure from 95th Street to the CN/Metra Electric tracks near 119th Street. The alignment would then continue at grade through an industrial area with no public through streets. Existing service driveways and Metropolitan Water Reclamation District of Greater Chicago (MWRD) access roads would be grade separated as indicated on the plans and profiles.

The elevated substructure would consist of reinforced cast-in-place concrete hammerhead piers on drilled shafts or steel piles. The superstructure would consist of steel girders with a concrete closed deck supporting direct fixation track with welded rail.

Minimum vertical clearances would be 14 feet 9 inches. At locations where the RLE alignment would cross UPRR tracks, the minimum vertical clearance would be 23 feet 4 inches.

Spans between piers are expected to typically be 60 to 100 feet, and as long as 140 feet. Span length is based on site conditions, geometrics, and clearance requirements. Table 4-1 lists the clearances between piers at viaducts and Figure 4-2 shows a typical span.

Table 4-1: UPRR Rail Alternative Span Widths at Viaducts

Street Crossing	ROW Option (feet)	East Option (feet)	West Option (feet)	Notes
I-57 ramp	105	105	105	Straddle Bent
Wentworth Avenue	85	85	85	
Northbound I-57*	100/100	100/100	100/100	Straddle Bent
UPRR*	-	-	100/100	
101st Street	75	75	75	
103rd Street	85	85	85	
107th Street	75	75	75	
109th Street	75	75	75	
111th Street	75	75	75	
Wentworth Avenue	85	85	85	
115th Street	120	120	120	Through Plate Girder
Perry Avenue	-	-	85	
State Avenue	85	85	85	
Michigan Avenue	85	85	85	

Street Crossing	ROW Option (feet)	East Option (feet)	West Option (feet)	Notes
116th Street	120	120	120	Through Plate Girder
Indiana Avenue	85	85	85	
UPRR*	-	-	85/100/10/100/100	Straddle Bent
Prairie Avenue	-	75	-	
CN/Metra Electric	100/70	115/70	110/70	Through Plate Girder

*Crossings may have multiple spans due to skewed alignment and the use of bent structure

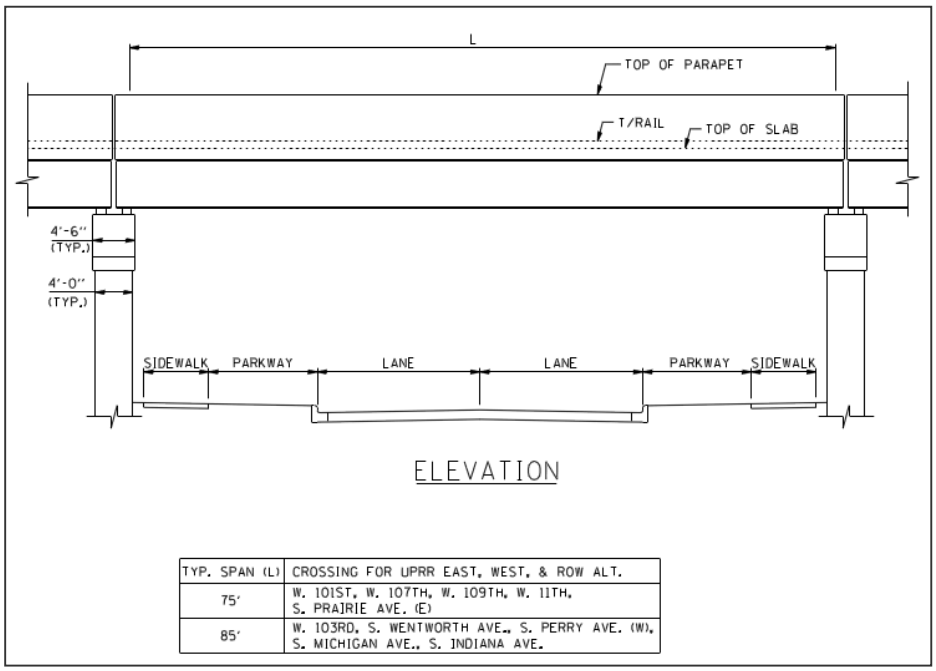

Figure 4-2: UPRR Rail Alternative typical span cross section

4.1.1 ROW Option

The UPRR Rail Alternative ROW Option would place the CTA tracks in the UPRR ROW between I-57 and the CN/Metra Electric tracks. UPRR trains along this alternative may relocate to another corridor as part of a separate, earlier project that would occur regardless of RLE implementation. Figure 4-3 shows a typical ROW Option cross section.

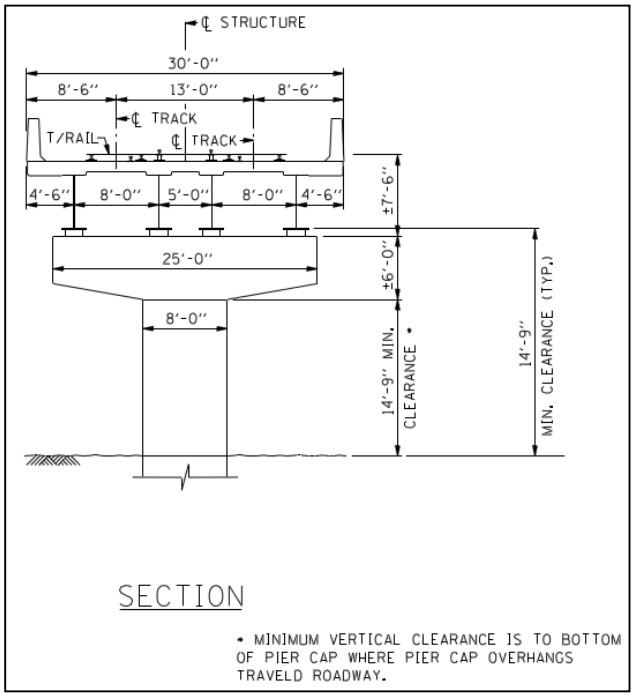

Figure 4-3: UPRR Rail Alternative ROW Option Typical Cross Section

Substations are tentatively proposed at the following locations: to the west of the CTA tracks between 104th and 105th Street, to the west of the CTA tracks between Perry Avenue and Lafayette Avenue, and to the west of the CTA tracks north of the proposed parking structure for the South Station Option or along the curve of the CTA tracks near 130th Street for the West Station Option. An additional substation is proposed within the 120th Street yard and shop facility.

4.1.2 East Option

In the UPRR Rail Alternative East Option, CTA tracks would be placed immediately adjacent to and east of the UPRR ROW between I-57 and the CN/Metra Electric tracks. The UPRR is evaluating adding a third track to the east of their two existing tracks. The distance between the centerline of the proposed easternmost UPRR third track and the CTA structure would be 50 feet except for the following locations: 103rd Street station (approximate stationing 154+00 to 181+00 and between State Street and Michigan Avenue (approximate stationing 255+00 to 270+00). Pier protection crash walls per American Railway Engineering and Maintenance-of-Way Association (AREMA) would be installed in areas where the CTA tracks are less than 50 feet from the UPRR tracks. Figure 4-4 shows a typical East Side Option cross section.

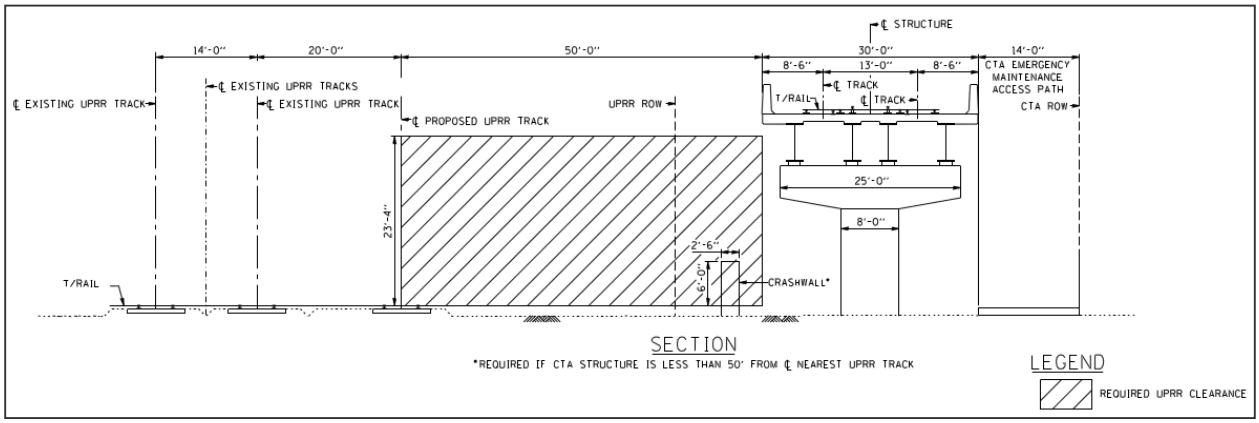

Figure 4-4: UPRR Rail Alternative East Option Typical Cross Section

The UPRR Rail Alternative East Option would include substations at the following locations: west of the UPRR tracks between 104th and 105th Streets, west of the UPRR tracks between Perry Avenue and Lafayette Avenue, and west of the CTA tracks south of the proposed yard location near 130th Street station. An additional substation is proposed within the 120th Street yard and shop facility.

4.1.3 West Option

In the UPRR Rail Alternative West Option, CTA tracks would be placed immediately adjacent to and west of the UPRR ROW between I-57 on the north end and the UPRR tracks near Kensington Park on the south end. The distance between the UPRR centerline of existing west track and the proposed CTA structure centerline of track would be 50 feet except for the following locations: 99th Street (approximate stationing 138+00 to 142+00) and at the Prairie Avenue/UPRR crossing (approximate stationing 275+00 to 285+00).

The UPRR Rail Alternative West Option would include substations at the following locations: east of the UPRR tracks between 105th Street and 105th Place, west of the UPRR tracks between Perry Avenue and Lafayette Avenue, and east of the CTA tracks south of the proposed yard location near 130th Street station. An additional substation is proposed within the 120th Street yard and shop facility.

4.2 Stations and Parking

Four stations would be included in the UPRR Rail Alternative options: 103rd Street, 111th Street, Michigan Avenue, and 130th Street. One terminal station with two options is under evaluation for the 130th Street station: the South Station Option and the West Station Option.

All stations would be island platforms, 26 feet wide and 520 feet long. Platforms would be built to accommodate ten-car trains. All stations would be ADA accessible with elevators. Station footprints are depicted on the Plans and Profiles.

Bus and park & ride facilities would be placed at all stations, with capacities of 1,500 parking spaces in the year of construction and up to 3,700 parking spaces in a later year (2030), as shown in Table 4-2.

Table 4-2: UPRR Rail Alternative Park & Ride Faciliy Parking Spaces

Location	Construction Year	Horizon Year (2030)
103rd Street	200	200
111th Street	200	200
Michigan Avenue	200	1,000
130th Street	900	2,300
Total	**1,500**	**3,700**

4.2.1 103rd Street Station

The primary entrance to the 103rd Street station would be on the north side of 103rd Street, and an auxiliary entrance would be on the north side of 103rd Place. Figure 4-5 shows an example rendering of the UPRR Rail Alternative elevated structure at the 103rd Street station.

As part of the ROW Option, two surface parking lots, each with capacity for 100 vehicles, would be located to the northeast and southwest of the intersection of 103rd Street with the UPRR tracks. A bus turnaround for CTA bus route #9 would be included at the northeast parking lot.

As part of the East Option, a surface parking lot with capacity for 75 vehicles would be located to the east of the tracks north of 103rd Street as well as a second surface parking lot with capacity for 125 vehicles located to the west of the tracks between 103rd Street and 103rd Place. A bus turnaround for CTA bus route #9 would be included at the northeast parking lot.

As part of the West Option, a surface parking lot with capacity for 200 vehicles would be located to the west of the tracks between 103rd Place and 104th Street. A bus turnaround for CTA bus route #9 would be included at the northeast corner of the 103rd Street and UPRR tracks intersection.

Source: *Locally Preferred Alternative Report, August 2009*

Figure 4-5: Example Rendering of the UPRR Rail Alternative Elevated Structure at the Proposed 103rd Street Station

4.2.2 111th Street Station

As part of the ROW and West Options, the primary entrance to the 111th Street station would be just north of 111th Street. An auxiliary entrance would be south of 110th Street.

As part of the East Option, the primary entrance to the 111th Street station would be just north of 111th Street. An auxiliary entrance would be at 110th Street.

As part of the ROW Option, two surface parking lots, each with capacity for 100 vehicles, would be located to the northeast and northwest of the intersection of 111th Street with the UPRR tracks. A bus turnaround for Pace bus route #352 would be included at the northwestern parking lot.

As part of the East Option, a surface parking lot with capacity for 55 vehicles would be located to the east of the tracks north of 110th Place, and a second surface parking lot with capacity for 145 vehicles located to the west of the tracks between 111th Street and 110th Street. A bus turnaround for Pace bus route #352 would be included at the northwestern parking lot.

As part of the West Option, a surface parking lot with capacity for 200 vehicles would be located to the west of the tracks between 110th Place and 110th Street. A bus turnaround for Pace bus route #352 would be included at the parking lot.

4.2.3 Michigan Avenue Station

As part of the ROW and West Options, the primary entrance to the Michigan Avenue station would be on the west side of Michigan Avenue, and an auxiliary entrance would be located on the south side of 116th Street.

As part of the East Option, a primary entrance to the Michigan Avenue station would be on the east side of Michigan Avenue. An auxiliary entrance would be on the north side of 116th Street.

As part of the ROW Option, a three-story parking garage with capacity for 750 vehicles would be located to the west of the tracks, northeast of the State Avenue and 116th Street intersection; the ground level of the parking garage would be available for retail and/or community facilities and would include a bus turnaround facility for CTA route #119 and Pace route #359. A second surface lot with capacity for 250 vehicles would be located to the east of the tracks, between 116th Street and Kensington Avenue.

As part of the East Option, a three-story parking garage with capacity for 825 vehicles would be located to the west of the tracks, northeast of the State Avenue and 116th Street intersection; the ground level of the parking garage would be available for retail and/or community facilities, and would include a bus turnaround facility for CTA route #119 and Pace route #359. A second surface lot with capacity for 175 vehicles would be located to the east of the tracks, between 116th Street and Kensington Avenue.

As part of the West Option, a five-story parking garage with capacity for 1,000 vehicles would be located to the west of the tracks, northeast of the State Avenue and 116th Street intersection; the ground level of the parking garage would be available for retail and/or community facilities, and would include a bus turnaround facility for CTA route #119 and Pace route #359.

4.2.4 130th Street Station

Two options for the 130th Street station will be studied in the EIS:

- South Station Option: along the NICTD/CSS & SBRR ROW at 130th Street
- West Station Option: along the north side of 130th Street to the west of the NICTD/CSS & SBRR route

The 130th Street station area is shown in Figure 4-6.

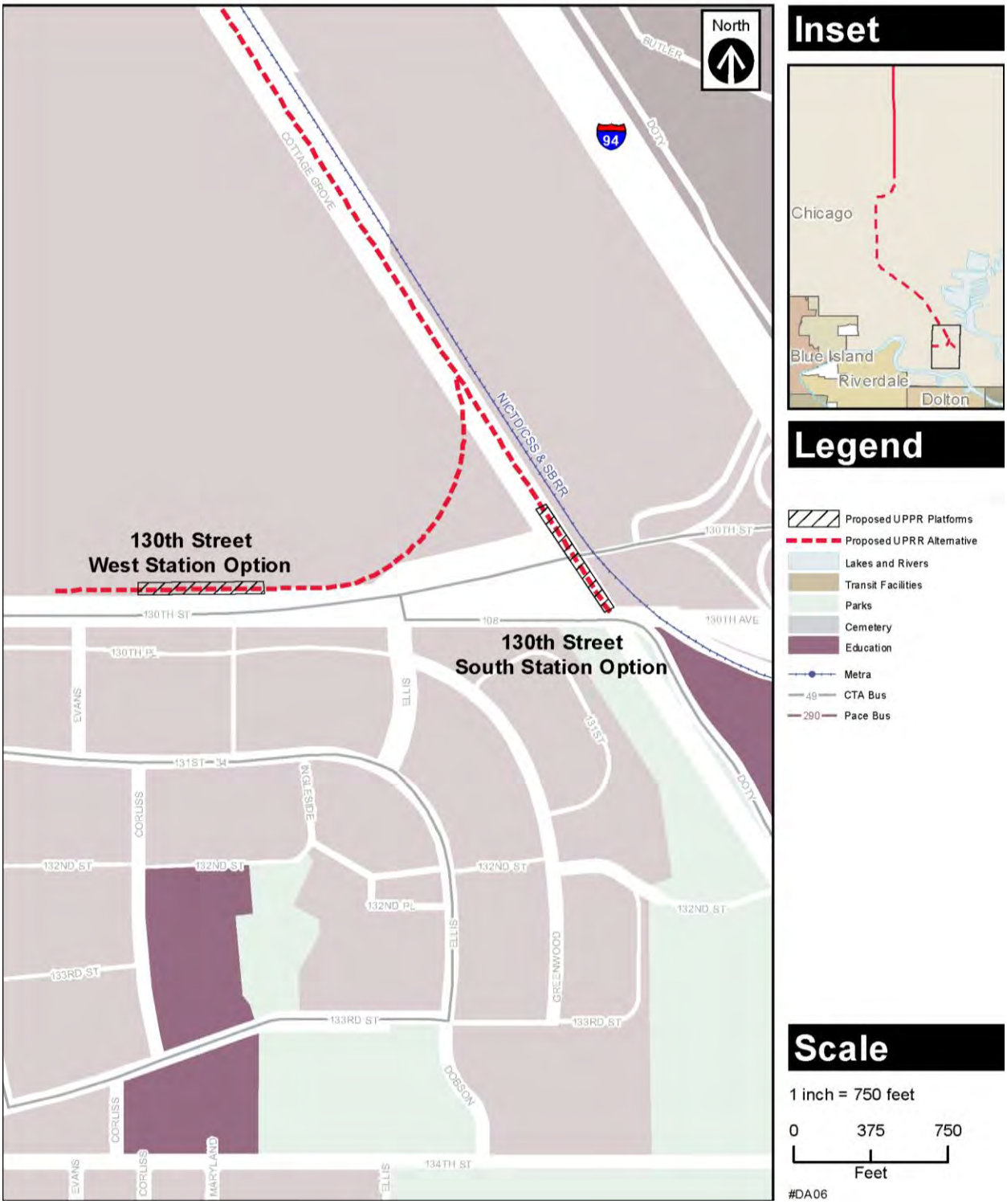

Figure 4-6: Station Area Showing South and West Station Options

The conceptual design for the station, based on Chicago Department of Transportation's December 2010 *130th Street Station Market/Access Study*, meets the needs for transit use, economic development, and connectivity to the proposed future pedestrian and bicycle trail network. The conceptual plans show a building approximately 15,000 square feet (200 feet by 75 feet), which would follow CTA's typical design standards for terminal stations. The station house would provide sufficient space for CTA customer operations, maintenance, mechanical rooms, staff offices, and areas for small retail stores. The retail area would primarily serve commuters and local residents.

Both the South and West Station Options would be configured with three tracks, creating a 600-foot long side and center platform arrangement. The boarding platform would be designed to allow for ten-car trains. The primary entrance to the station house would be handicap accessible.

Each station option would include a bus terminal with four bus bays and an overhead canopy. Buses would queue directly outside the primary entrance of the station to provide the closest possible connection between the rail line and bus routes. An auto drop-off area would be sited near the station house. Secure, weather-protected bicycle parking would be provided at the station. A park & ride facility with 2,300 parking spaces would be constructed by 2030 for the South Station Option, and a park & ride facility with 1,950 parking spaces plus a surface lot with 350 parking spaces would be constructed by 2030 for the West Station Option.

4.2.4.1 South Station Option

The South Station Option would be located between the MWRD facility (on the west) and the NICTD/CSS & SBRR rail tracks (on the east), using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation right-of-ways. The concept plan shows a primary station entrance north of 130th Street at 130th Place, and an auxiliary entrance south of 130th Street between 130th Street and Doty Avenue; the tracks and platforms would extend beneath 130th Street. The handicapped-accessible auxiliary entrance on Doty Avenue would provide more convenient and direct access to Altgeld Gardens and Carver Military Academy.

The South Station Option site is constrained due to its tight location between the MWRD drying ponds and the train tracks. The parking area would be to the east of the existing MWRD fence. The parking area would be approximately 2.8 acres. In the construction year, a parking garage would be built with capacity for 900 vehicles. The parking garage would be developed into a seven-story parking garage with capacity for 2,300 vehicles by 2030.

The station area is significantly lower in elevation than 130th Street, which rises to cross the NICTD/CSS & SBRR tracks before crossing I-94. As a result, the station building would not be highly visible from the freeway or from cars travelling east towards the station entrance on Cottage Grove Avenue. The sloped areas adjacent to 130th Street limit the ability to place the South Option station house closer to the street.

Bus and vehicle traffic would enter and leave the station area from the current intersection of 130th Street and Cottage Grove Avenue. Cottage Grove Avenue, which primarily provides access to the MWRD drying ponds and truck traffic, would be relocated to circulate around the station. Ideally, transferring customers would not have to cross a general traffic lane to access bus transfer bays. Further refinement of this concept would likely eliminate general traffic from entering the parking lot near the station house. Currently, Cottage Grove Avenue intersects 130th Street at the same location as the proposed entrance to the South Option station. Cottage Grove Avenue would be relocated west of the station entrance. This would eliminate potential traffic conflicts between trucks servicing the MWRD facility and commuters entering the station. The new street alignment could also serve future commercial development along 130th Street.

4.2.4.2 West Station Option

The West Station Option would be located on the north side of 130th Street across from Evans Avenue, nearly ¼ mile west of the South Station Option location. The station would be west of Evans Avenue (on the south side of 130th Street) across from Altgeld Gardens. The West Station Option site is nearly twice the size of the South Station Option site, primarily due to available open land along the north side of 130th Street south of the MWRD facility. However, the dimensions of the station, bus terminal, and surface parking areas would be similar in total area as the South Station Option. The station area would be outside the existing MWRD fence. In the construction year, a surface lot would be constructed with capacity for 350 vehicles, and a parking garage would be built with capacity for 550 vehicles. The parking garage would be developed into a four-story parking garage with capacity for 1,950 vehicles by 2030.

There would be no intersections or crosswalks on 130th Street between Indiana Avenue and Cottage Grove Avenue. As a result, a signal and pedestrian crosswalk is proposed at the intersection of 130th Street and Evans Avenue to accommodate pedestrians from the south side of 130th Street. The proposed pedestrian crossing and signalized intersection would be located south of the primary station entrance.

4.3 120th Street Yard and Shop

A 270-car yard and shop facility would be sited on a combination of industrial/vacant land to the east of the CN/Metra Electric tracks and west of the NICTD/CSS & SBRR tracks at approximately 120th Street and Cottage Grove Avenue. The yard would be entirely at grade. A nominal amount of parking for employees would be included at the yard. A substation is tentatively proposed within the 120th Street yard on the west of the existing railroad tracks and to the east of the proposed shop facility. Figure 4-1 shows the proposed yard and shop location.

The 98th Street yard and shop at the south end of the existing Red Line could continue to be used for Red Line trains. The CTA would utilize the existing 98th Street shop for non-revenue equipment repairs once a new revenue shop is constructed.

4.4 Operating Plan

The UPRR Rail Alternative is anticipated to operate train sets consisting of eight cars. Although the design is for ten-car trains, the service plan is for eight-car trains as in operation today. The maximum scheduled capacity of each car is 90 passengers, which would provide a maximum capacity of 360 passengers for a four-car train, a maximum capacity of 720 passengers for an eight-car train, and a maximum capacity of 900 passengers for a ten-car train. The current Red Line vehicle requirement during the morning peak period is 304 cars. Based on the estimated travel time for the UPRR Rail Alternative, an additional 78 cars would be required in the morning rush period. This estimate includes 64 cars required for the schedule plus 14 spares.

CTA 2600-series rail cars are currently in use on the Red Line. As new CTA 5000-series rail cars replace older cars in the system, the cars currently operating on the Red Line could be replaced with CTA 5000-series or CTA 3200-series cars.

The hours of operation for the UPRR Rail Alternative would be the same as for the current Red Line, which operates 24 hours every day of the year. The UPRR Rail Alternative service frequency is expected to be the same as current service, which is approximately five minutes in the northbound direction and four minutes southbound during the morning peak period. Weekday service characteristics for the existing northbound Red Line and proposed UPRR Rail Alternative are presented in Table 4-3.

Table 4-3: UPRR Rail Alternative and Existing Northbound Red Line Weekday Service Characteristics

Service Period	Hours	Time Period	Average Northbound Frequency (minutes)	Train Length	Cars Required
Early Morning	3	3 AM-6 AM	13	8	
AM Peak	3	6 AM-9 AM	5	8	304
Base	6	9 AM-3 PM	7	8	184
PM Peak	3	3 PM-6 PM	5	8	304
Evening	4	6 PM-10 PM	7.5	4	
Late Evening/Owl	5	10 PM-3 AM	15	4	48

Proposed travel times during the morning peak period for the UPRR Rail Alternative are presented in Table 4-4.

Table 4-4: Northbound Red Line Travel Times for UPRR Rail Alternative

Route Segment	Travel Time (minutes)
130th to 95th Street Station	14.0
130th to Jackson Station	39.0
130th to Clark/Division Station	46.5
130th to Howard Station	75.5

Bus transit service from the south would serve the new stations. The UPRR Rail Alternative would result in the rerouting of 11 bus routes to new Red Line stations and elimination of two routes. Table 4-5 summarizes the proposed bus route changes to existing CTA bus routes that currently operate within the study area.

Table 4-5: Proposed Bus Route Changes for UPRR Rail Alternative

Bus Route	Proposed Change
#8A	None
#9	Terminate at 103rd Street station rather than 104th Street /Vincennes Avenue
#30	Terminate at 130th Street station rather than 130th Street /Exchange Avenue
#34	Terminate southbound at 130th Street station rather than 131st Street/Ellis Avenue
#103	Combine with #106; west terminal at Pulaski Avenue and east terminal at Stony Island Avenue
#106	Combine with #103; west terminal at Pulaski Avenue and east terminal at Stony Island Avenue
#108	Eliminate
#111	Serve 111th Street between 111th Street /Pulaski Avenue and 111th Street /Corliss Avenue
#112	Eliminate
#115	New bi-directional loop route via 115th Street, Cottage Grove Avenue, 95th Street, and Vincennes Avenue
#119	Terminate at 115th Street / Michigan Avenue
#348	Terminate southbound at 130th Street station rather than 136th Street /Indiana Avenue
#352	Terminate at 111th Street station rather than 95th Street station
#353	None
#359	Terminate at 115th Street station rather than 95th Street station

UPRR operates approximately 27 at-grade trains per day through this corridor. The potential exists for UPRR freight trains to affect access to the facilities in the UPRR Rail Alterative at the proposed 103rd Street and 111th Street stations. At these two stations areas, the UPRR is at-grade, so that passing freight railroad trains would interrupt access to the proposed Red Line stations. At the Michigan Avenue station, the UPRR is grade separated, so that access to the Red Line station could be maintained using Michigan Avenue, which passes underneath the UPRR.

Section 5
Halsted Rail Alternative

The proposed Halsted Rail Alternative is a five-mile extension of the existing Red Line. It would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. It would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. Four stations would be at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. Figure 5-1 shows the Halsted Rail Alternative.

5.1 Infrastructure

Projects already committed through the CMAP TIP would be constructed as described for the No Build Alternative. Regular maintenance of existing track and structures would continue.

The proposed corridor would be elevated and would be required to span over I-94 and I-57, UPRR and Metra Electric, local roads, and pedestrian facilities. See Figures 5-2 and 5-3 for typical cross sections of the Halsted Rail Alternative.

The proposed typical structure required for the elevated section is anticipated to be similar to sections on the CTA's elevated Orange Line. Spans between piers would typically be 60 to 100 feet, and as long as 140 feet. Span length would be based on site conditions, geometrics, and clearance requirements. At specific locations, steel cross girder bents would be used. Lengths would be based on geometrics, horizontal clearances, and the use of pier protection crash walls per AREMA. Table 5-1 shows the horizontal clearances between piers at viaducts.

The substructure would be reinforced cast-in-place concrete hammerhead piers on drilled shafts or steel piles. The superstructure would consist of steel girders with a concrete closed deck supporting direct fixation track with welded rail. At the I-57 crossing at Halsted Street the profile height would be approximately 22 feet over the Halsted Street pavement, and approximately 34 feet over the expressway.

Minimum vertical clearances would be 14 feet 9 inches above local roads and 16 feet 6 inches above urban expressways. At locations where the proposed CTA structure would cross the UPRR, the minimum vertical clearance would be 23 feet 4 inches, per the UPRR standards. The minimum vertical clearance for the Metra Electric tracks would be 23 feet zero inches per AREMA standards.

Substations are proposed at the following locations: the northeast corner at the intersection of Halsted Street and 101st Street, the southeast corner at the intersection of Halsted Street and 110th Street, along Halsted Street between 120th Street and Metra Electric tracks, the southeast corner at the intersection of Halsted Street and 126th Street, and at the entrance to the yard along Peoria Street.

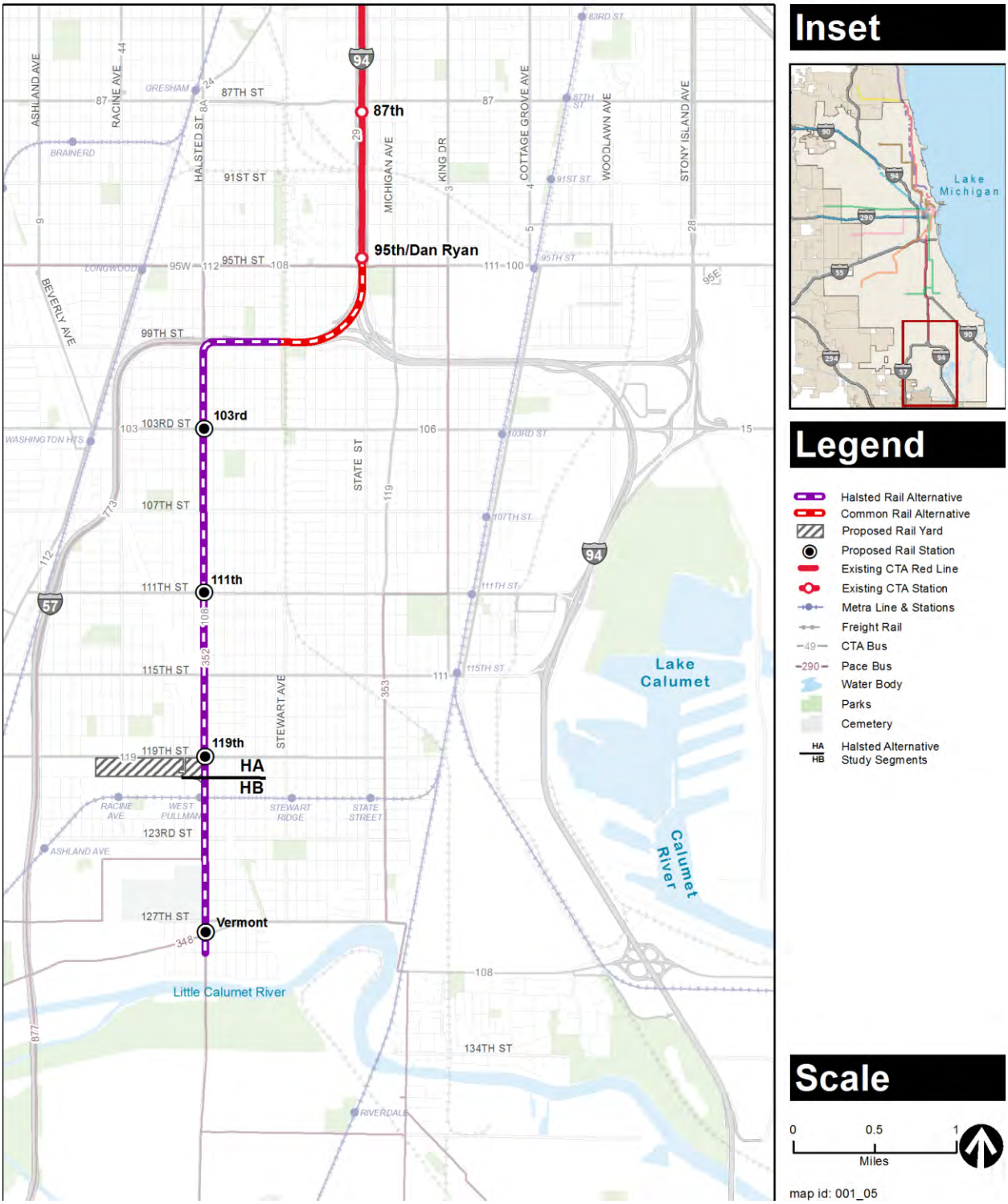

Figure 5-1: Halsted Rail Alternative

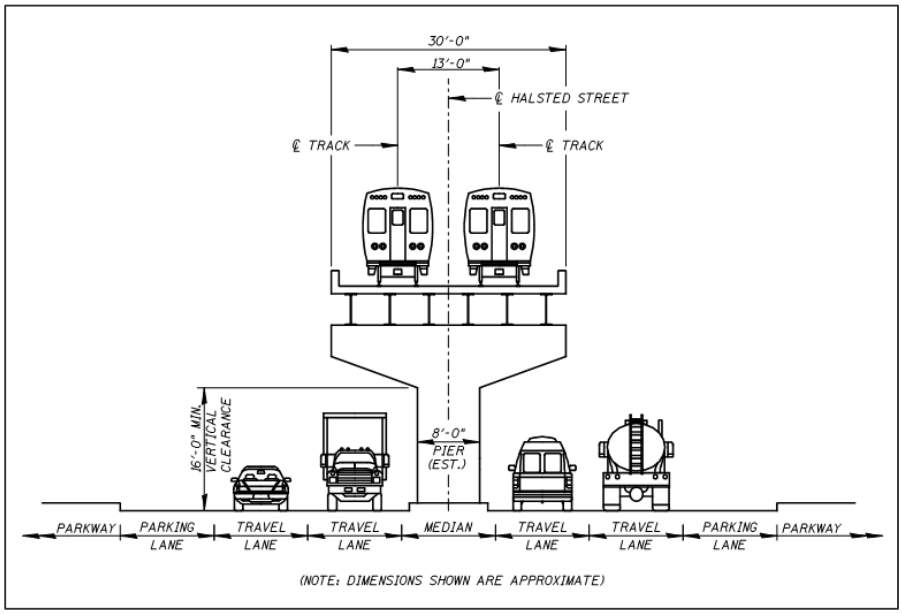

Source: *Red Line Extension Early Engineering Review Memo*

Figure 5-2: Halsted Rail Alternative Typical Hammerhead Cross Section

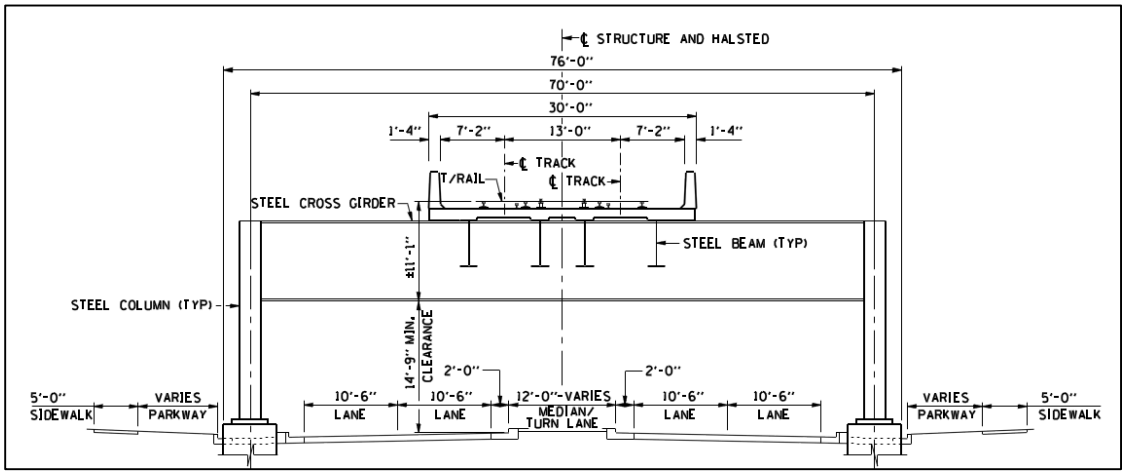

Source: *Red Line Extension Plans and Profiles*

Figure 5-3: Halsted Rail Alternative Typical Straddle Bent Cross Section

Table 5-1: Halsted Rail Span Widths at Viaducts

Street Crossing	Track Span Widths (feet)	Notes
I-57 Ramp	105	Straddle Bent
Wentworth Avenue	85	
UPRR	65	
Parnell Avenue	65	
Northbound I-57*	100/100	Straddle Bent

Street Crossing	Track Span Widths (feet)	Notes
Halsted Street*	100/100	Straddle Bent
100th Street	85	Straddle Bent
101st Street	85	Straddle Bent
102nd Street	75	Straddle Bent
103rd Street	75	Straddle Bent
104th Street	75	Straddle Bent
105th Street	85	Straddle Bent
106th Street	85	Straddle Bent
107th Street	85	Straddle Bent
108th Street	75	Straddle Bent
109th Street	70	Straddle Bent
110th Street	75	Straddle Bent
111th Street	80	Straddle Bent
112th Street	75	Straddle Bent
113th Street	75	Straddle Bent
114th Street	80	Straddle Bent
115th Street	85	Straddle Bent
116th Street	85	Straddle Bent
117th Street	85	Straddle Bent
118th Street	80	Straddle Bent
119th Street	85	Straddle Bent
120th Street	85	Straddle Bent
Metra Electric District - Blue Island Branch	80	Straddle Bent
122nd Street	70	Straddle Bent
123rd Street	75	Straddle Bent
124th Street	70	Straddle Bent
125th Street	70	Straddle Bent
126th Street	75	Straddle Bent
127th Street	85	Straddle Bent
Vermont Avenue	120	Straddle Bent
128th Street	75	Straddle Bent
129th Street	70	Straddle Bent

* Crossings may have multiple spans due to skewed alignment and the use of bent structure

5.2 Stations and Parking

This alternative would include four stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The 103rd, 111th, and 119th Street stations would be side platforms, with a minimum of 14 feet wide and 520 feet long with shelters. The Vermont Avenue station would be an island platform 26 feet wide and 520 feet long. Bus and park & ride facilities would be sited at all stations as shown in Table 5-2. All stations would be ADA accessible with elevators and stairs. Station footprints are depicted on the Plans and Profiles.

Table 5-2: Halsted Rail Alternative Park & Ride Facility Parking Spaces

Location	Construction Year	Horizon Year (2030)
103rd Street	200	200
111th Street	200	200
119th Street	200	1,000
Vermont Avenue	900	2,300
Total	1,500	3,700

5.2.1 103rd Street Station

Station entrances would be located on the east and west sidewalks of Halsted Street at the intersection with 103rd Street. The primary station entrance would be north of the intersection and the auxiliary entrance would be south of the intersection. Each entrance area would be on street level and contain an elevator and stairs.

The 103rd Street station would have a surface park & ride lot on the northwest parcel adjacent to the station at the intersection of 103rd Street and Halsted Street. This lot would provide approximately 200 parking spaces. A bus turnaround for CTA bus route #9 would be included at the northeast parking lot.

5.2.2 111th Street Station

Station entrances would be located on the east and west sidewalks of Halsted Street at the intersection with 111th Street. The primary station entrance would be north of the intersection and the auxiliary entrance would be south of the intersection. Each entrance area would be on street level and contain an elevator and stairs.

The 111th Street station would have a park & ride lot on the northwest parcel adjacent to the station at the intersection of 111th Street and Halsted Street. This lot would provide approximately 200 parking spaces.

5.2.3 119th Street Station

Station entrances would be located on the east and west sidewalks of Halsted Street at the intersection with 119th Street. The primary station entrance would be north of the intersection

with 119th Street and the auxiliary entrance would be south of the intersection with 118th Street. Each entrance area would be on street level and contain an elevator and stairs.

The 119th Street station would have a surface park & ride facility that would hold approximately 1,000 parking spaces. The lot would be on the southwest parcel at the intersection of 119th Street and Halsted Street. A bus turnaround for Pace bus route #359 would be included at the parking lot.

5.2.4 Vermont Street Station

Station entrances would be located on the east and west sidewalks of Halsted Street between the 128th Street and Vermont Avenue. The primary station entrance would be south of Vermont Avenue and the auxiliary entrance would be north of 128th Street. Each entrance area would be on street level and contain an elevator and stairs.

The Vermont Street station would have a surface park & ride lot with approximately 300 parking spaces located to the east of Halsted Street between Vermont Avenue and 128th Street. A seven-story park & ride facility with capacity for an addition 2,000 vehicles would be located to the west of Halsted Street between Vermont Avenue and 128th Street; the ground level of the parking garage would be available for CTA office space as well as retail and/or community facilities. Bus bays for CTA bus route #8A and Pace routes #348 and #352 would be included at the station.

5.3 119th Street Yard and Shop

The 119th Street yard and shop would be located south of the 119th Street station and north of Vermont Avenue station to the west of Halsted Street. The parcel on which the yard and shop would be constructed sits west of the proposed park & ride facility at the 119th Street station. Track height would transition from elevated at station height to at-grade between Halsted Street and Morgan Street, through the proposed park & ride facility. The yard would be entirely at grade. A nominal amount of parking for employees would be included at the yard. Figure 5-1 shows the location of the proposed yard and shop.

The 98th Street yard and shop at the south end of the existing Red Line could continue to be used for Red Line trains. The CTA would utilize the existing 98th Street shop for non-revenue equipment repairs once a new revenue equipment shop is constructed at 119th Street.

5.4 Operating Plan

The Halsted Rail Alternative is anticipated to operate train sets consisting of eight cars. Although the design is for ten-car trains, the service plan is for eight-car trains as in operation today. The maximum scheduled capacity of each car is 90 passengers, which would provide a maximum capacity of 360 passengers for a four-car train, a maximum capacity of 720 passengers for an eight-car train, and a maximum capacity of 900 passengers for a ten-car train. The current Red Line vehicle requirement during the morning peak period is 304 cars. Based on the estimated travel

time for the Halsted Rail Alternative, an additional 78 cars would be required in the morning rush period. This estimate includes 64 cars required for the schedule plus 14 spares.

CTA 2600-series rail cars are currently in use on the Red Line. As new CTA 5000-series rail cars replace older cars in the system, the cars currently operating on the Red Line could be replaced with CTA 5000-series or CTA 3200-series cars.

The hours of operation for the Halsted Rail Alternative would be the same as for the current Red Line, which operates 24 hours every day of the year. The Halsted Rail Alternative service frequency is expected to be the same as current service, which is approximately five minutes in the northbound direction and four minutes southbound during the morning peak period.

Bus transit service from the south would serve the new stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity between the Red Line and the existing bus network. Table 5-3 summarizes the proposed bus route changes to existing CTA bus routes that currently operate within the study area.

Table 5-3: Proposed Bus Route Changes for Halsted Rail Alternative

Bus Route	Proposed Change
#8A	None
#9	Terminate at 103rd Street station rather than 104th Street/Vincennes Avenue
#30	None
#34	None
#103	Combine with #106
#106	Combine with #103
#108	Eliminate
#111	Serve 111th Street between 111th Street/Pulaski Avenue and 111th Street/Corliss Avenue
#112	Eliminate
#115	New bi-directional loop route via 115th Street, Cottage Grove Avenue, 95th Street, and Vincennes Avenue
#119	Terminate at 115th Street/Michigan Avenue
#348	None
#352	Terminate at Vermont Avenue
#353	None
#359	Terminate at 119th Street

Section 6
Additional Resources

The following resources were used in preparing this technical memorandum.

Alternatives Analysis (https://team.cdm.com/eRoom/il/CTA_RedLineExtension_DEIS/0_1045d)

- Screen 1 Report (December 2008)
- Screen 2 Report (March 2009)
- Screen 3 Report (November 2009)
- Definition of Alternatives Summary - Draft (July 2009)
- RLE Locally Preferred Alternative Report (August 2009)

CDOT 130th Street Terminal Report (December 2010)
(https://team.cdm.com/eRoom/il/CTA_RedLineExtension_DEIS/0_f737)

CWC Early Draft EIS Work
(https://team.cdm.com/eRoom/il/CTA_RedLineExtension_DEIS/0_10004)

- Early Engineering Review (May 2011)
- Parkland Impacts Evaluation (May 2011)
- UPRR Alignment Options Impacts (June 2011)

CMAP Transportation Improvement Program (TIP) (http://www.cmap.illinois.gov/tip)

RLE EIS Plans and Profiles
(https://team.cdm.com/eRoom/il/CTA_RedLineExtension_DEIS/0_f4d6)

Appendix A
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Appendix F

Plans and Profiles

- Final EIS Plans and Profiles, July 2022

PLOTTED ON: 4/8/2022 1:32:21 PM

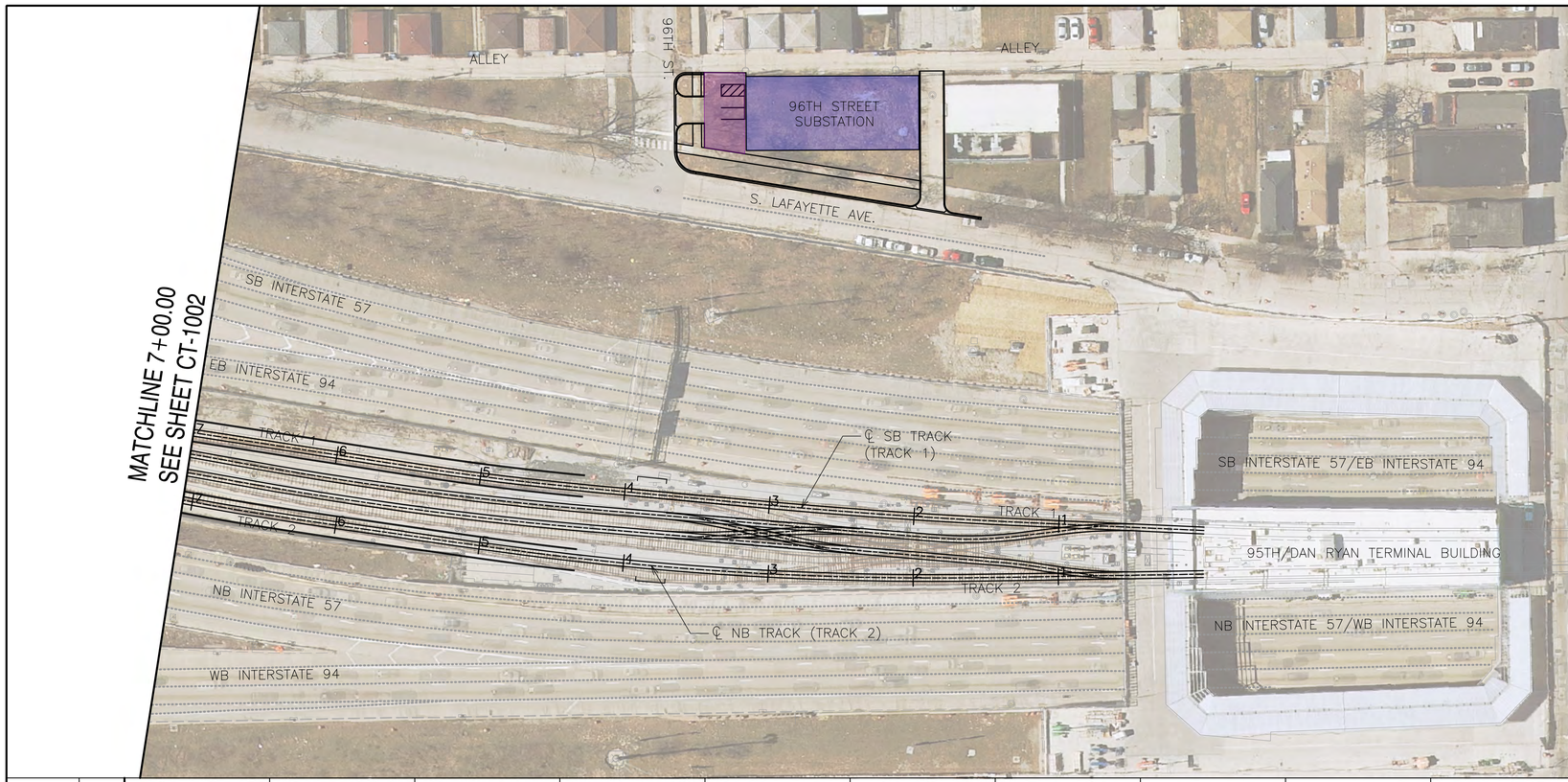

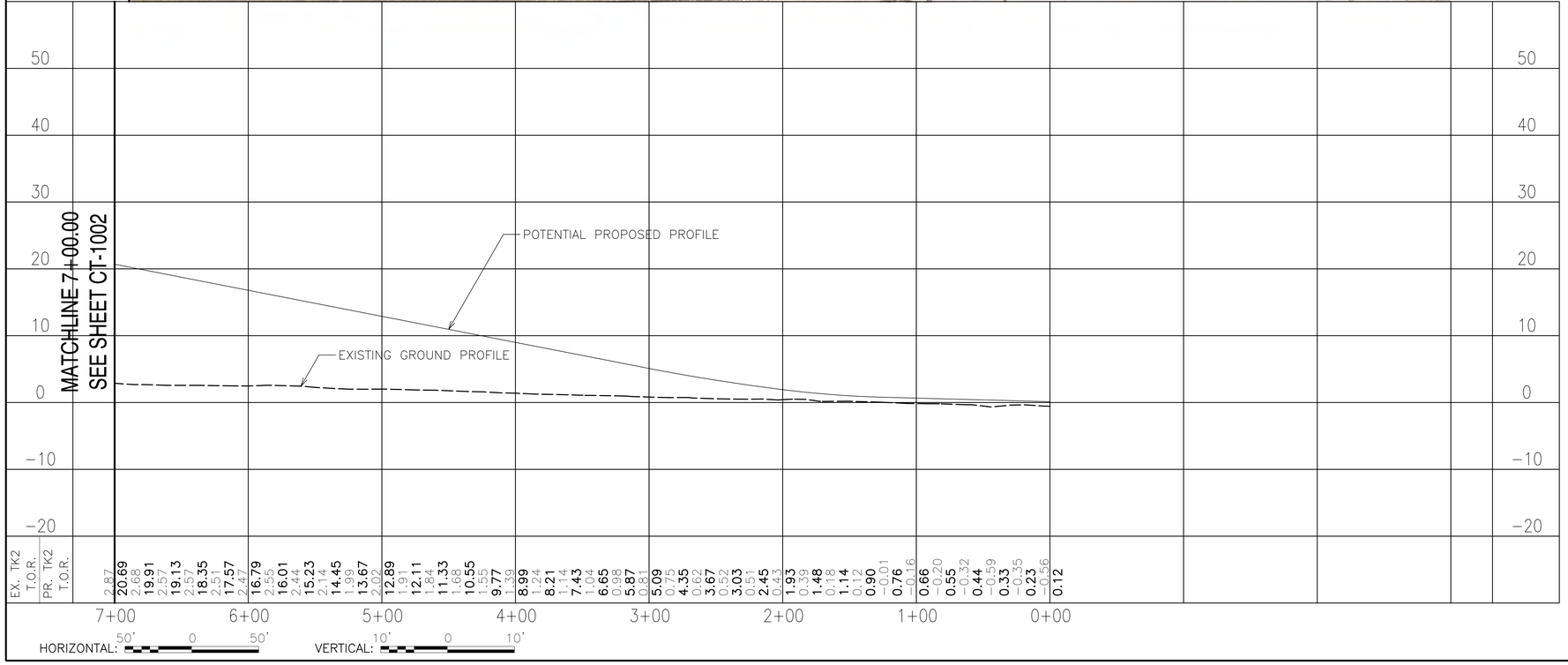

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

GENERAL NOTES

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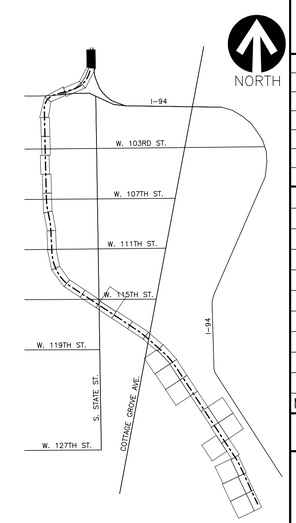

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1001

051_DRXROW_CT-1001.dgn

PLOTTED ON: 3/30/2022 3:20:22 PM

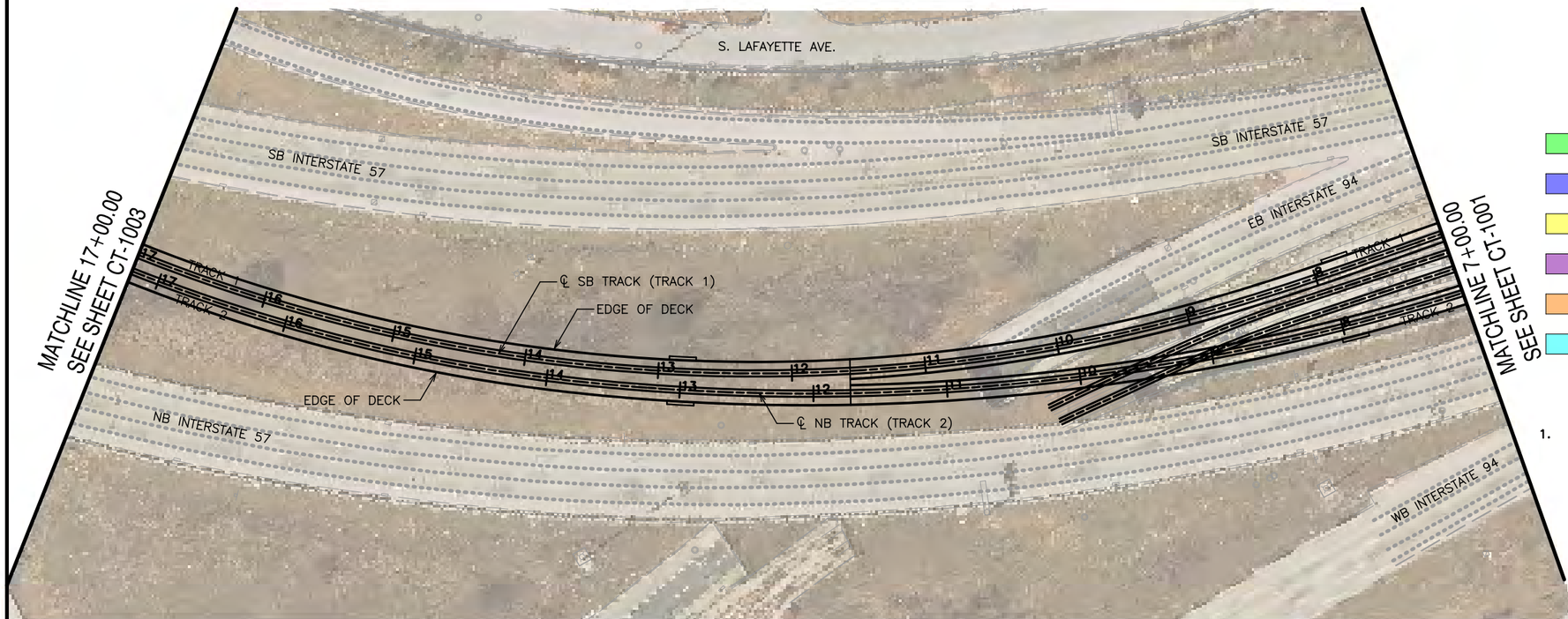

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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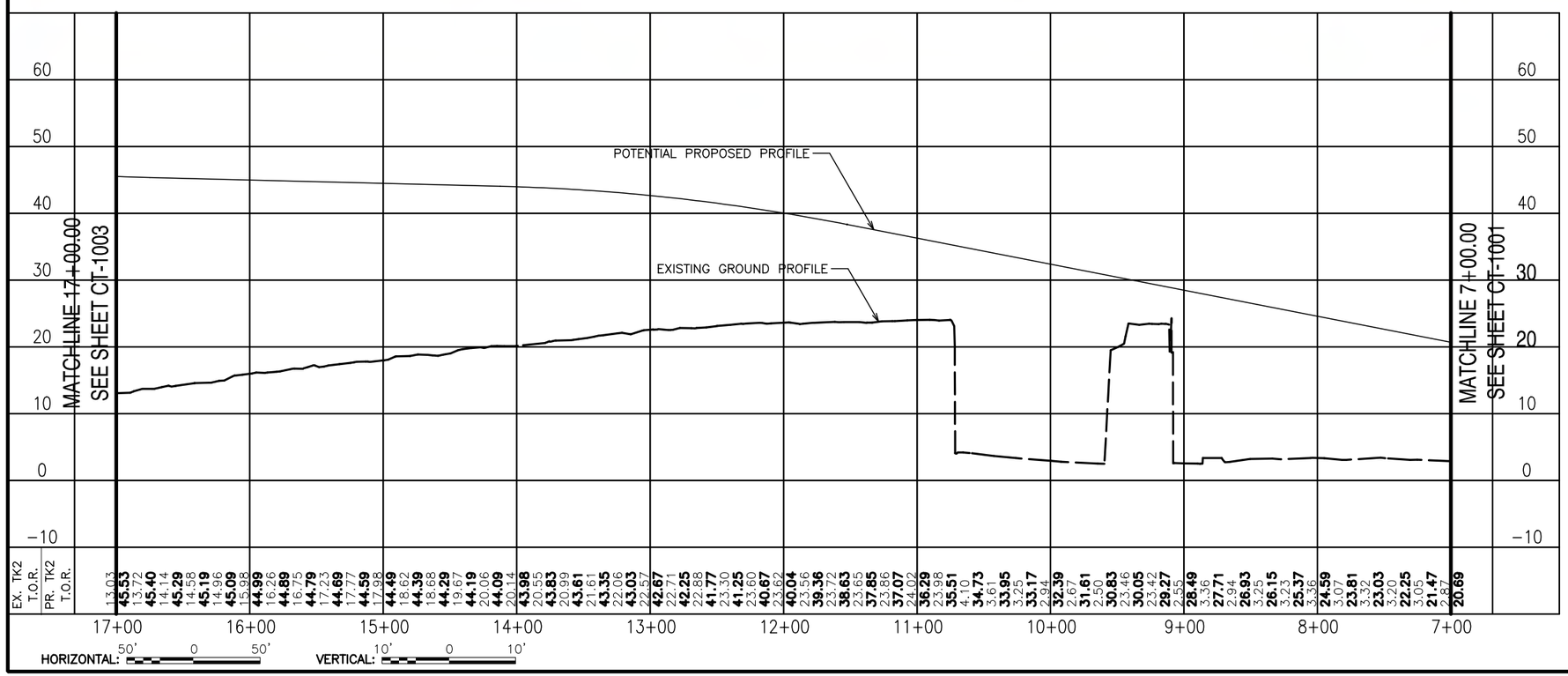

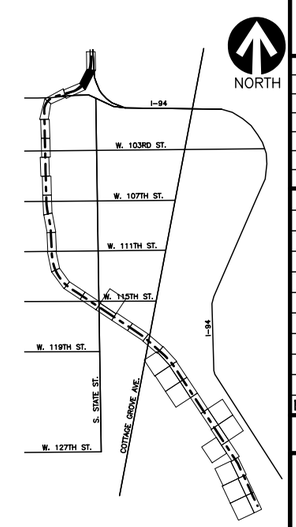

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1002

051_DRXROW_CT-1002.dgn

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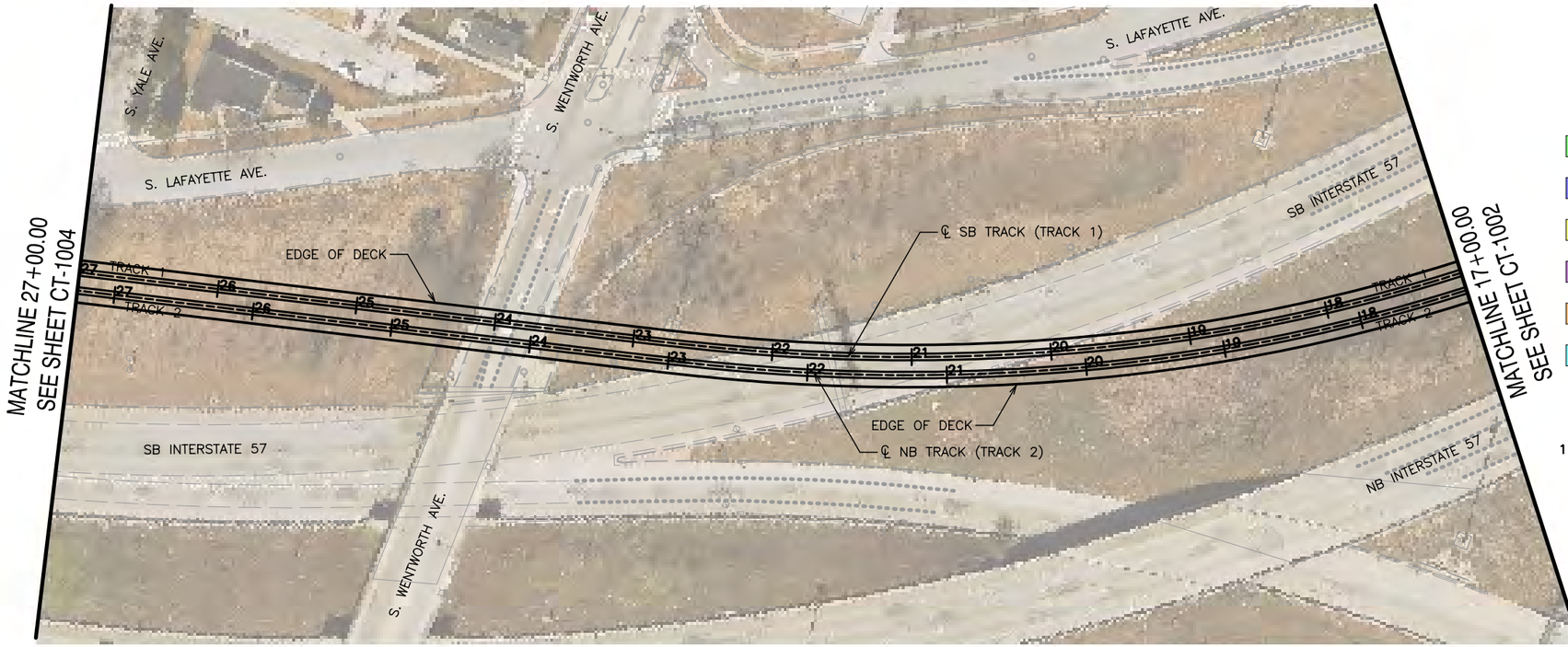

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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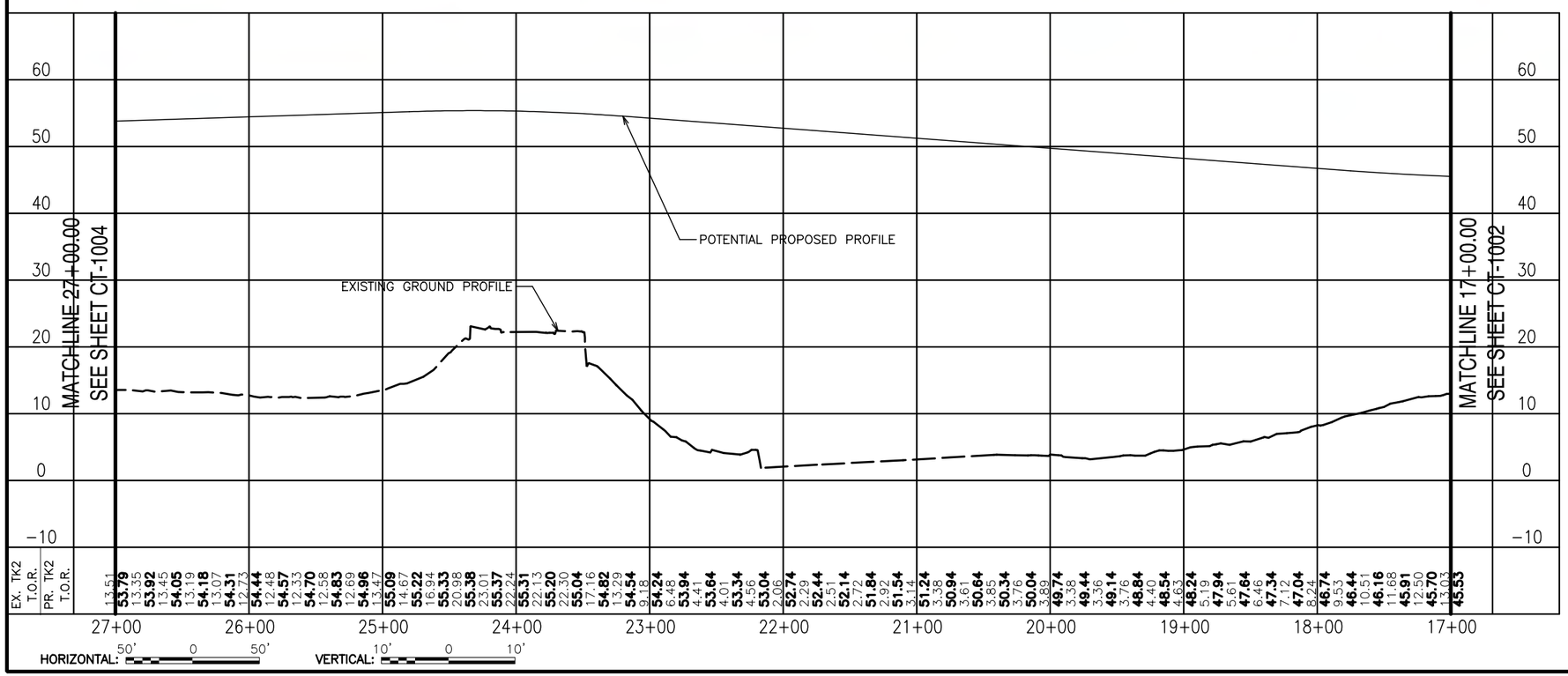

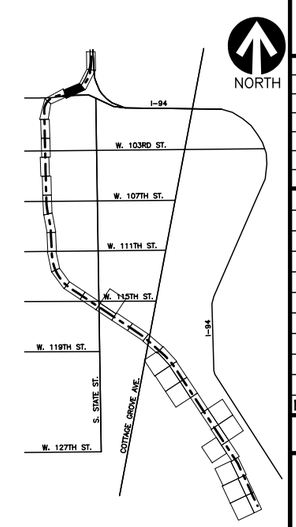

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1003

051_DRXROW_CT-1003.dgn

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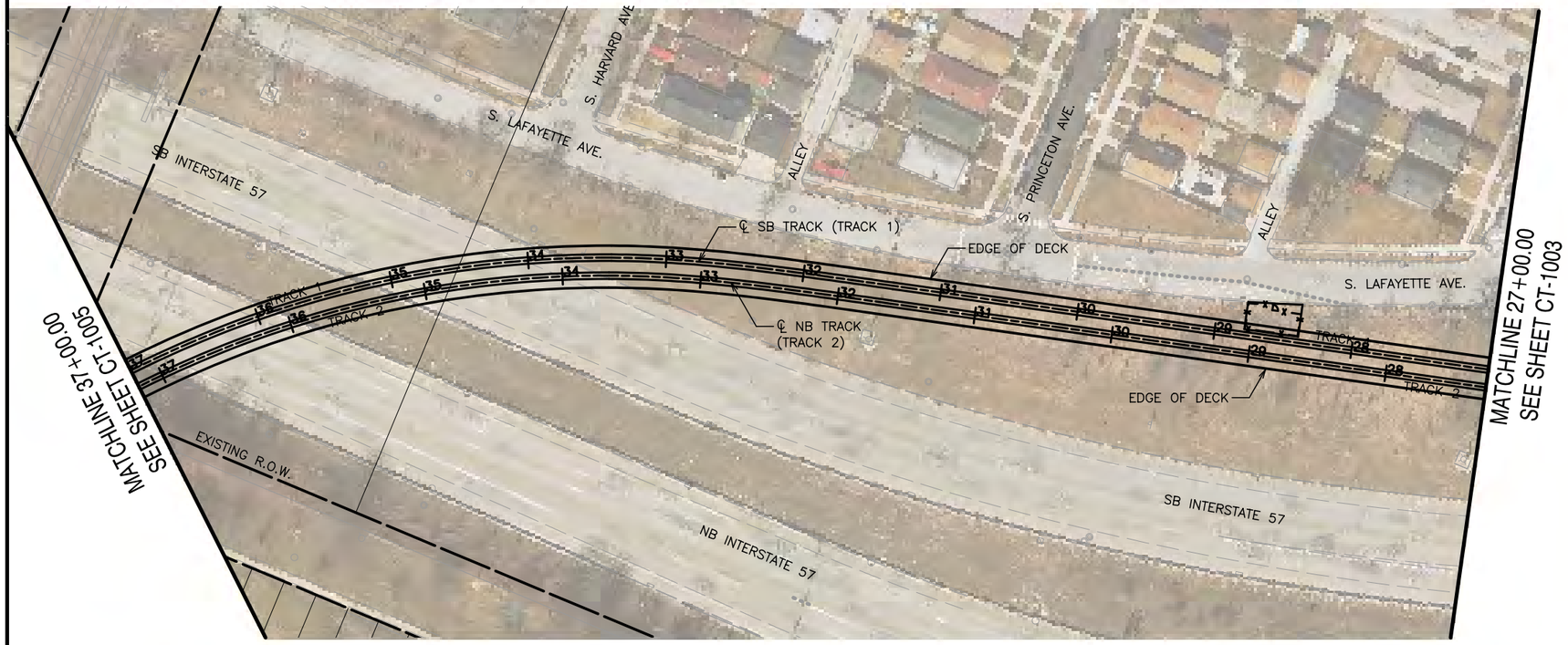

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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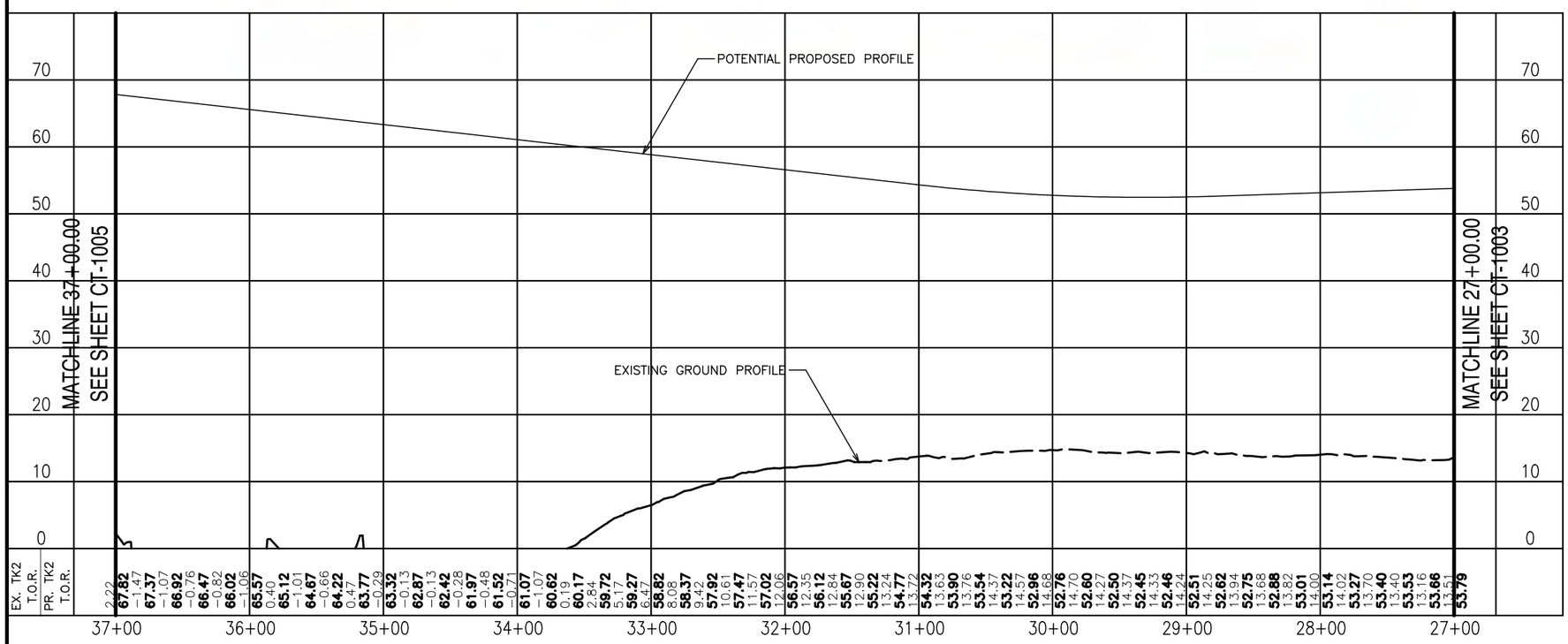

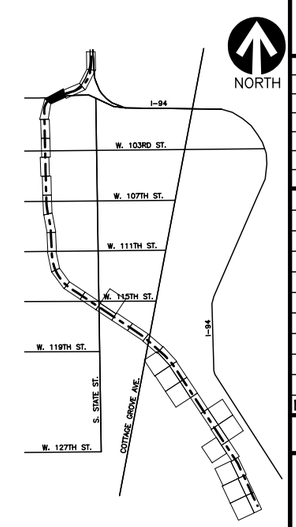

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1004

051_DRXROW_CT-1004.dgn

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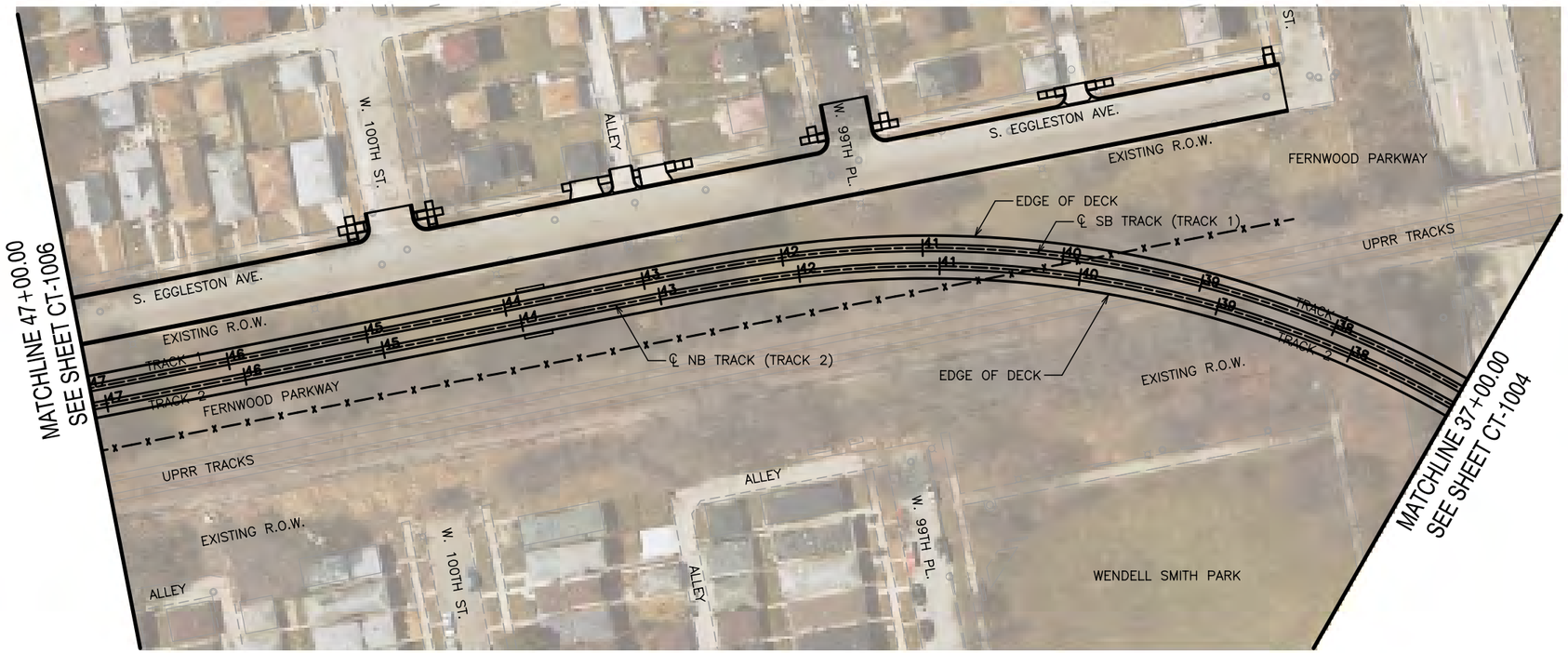

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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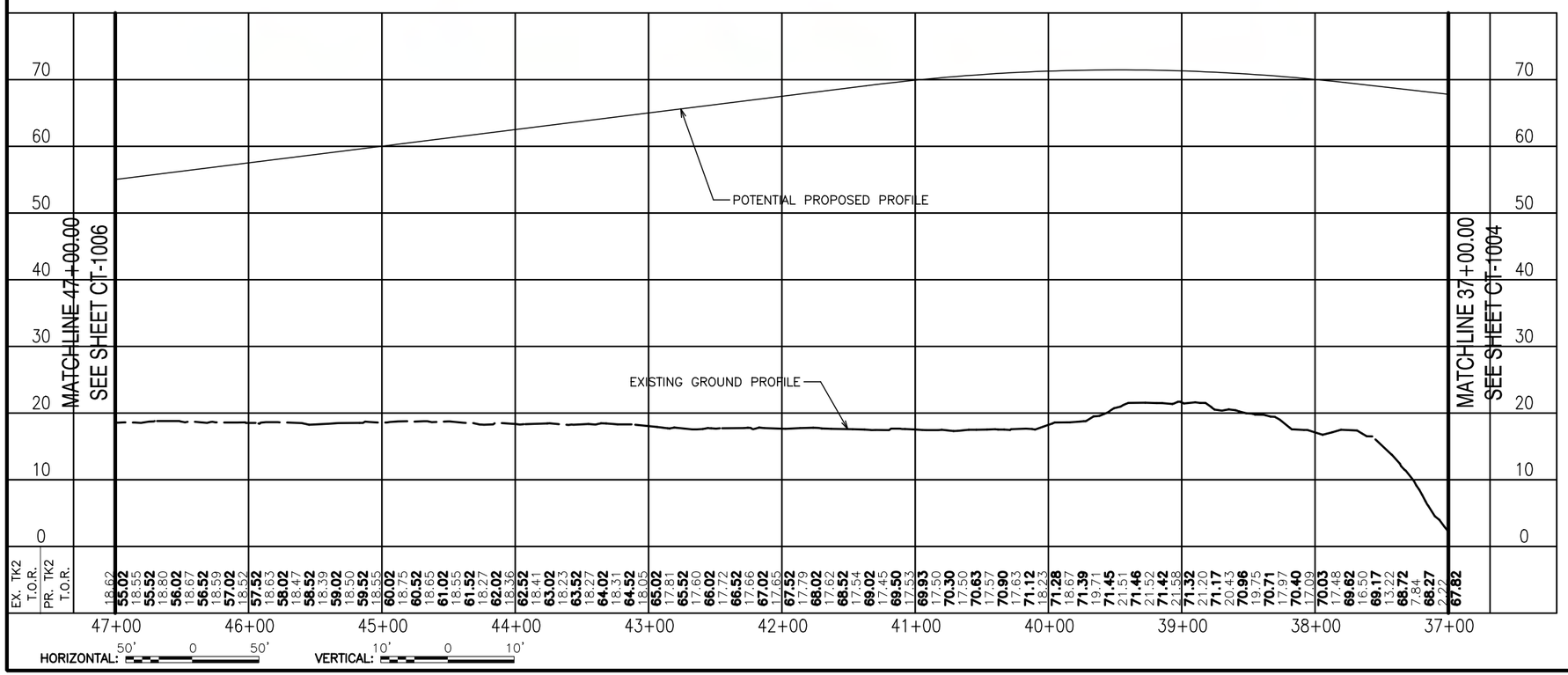

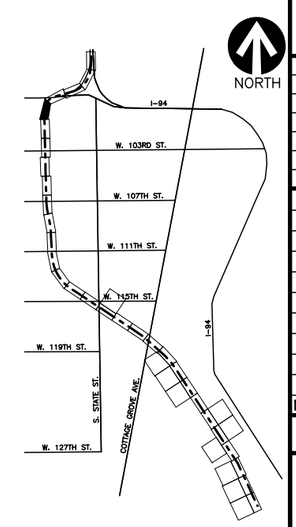

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1005

051_DRXROW_CT-1005.dgn

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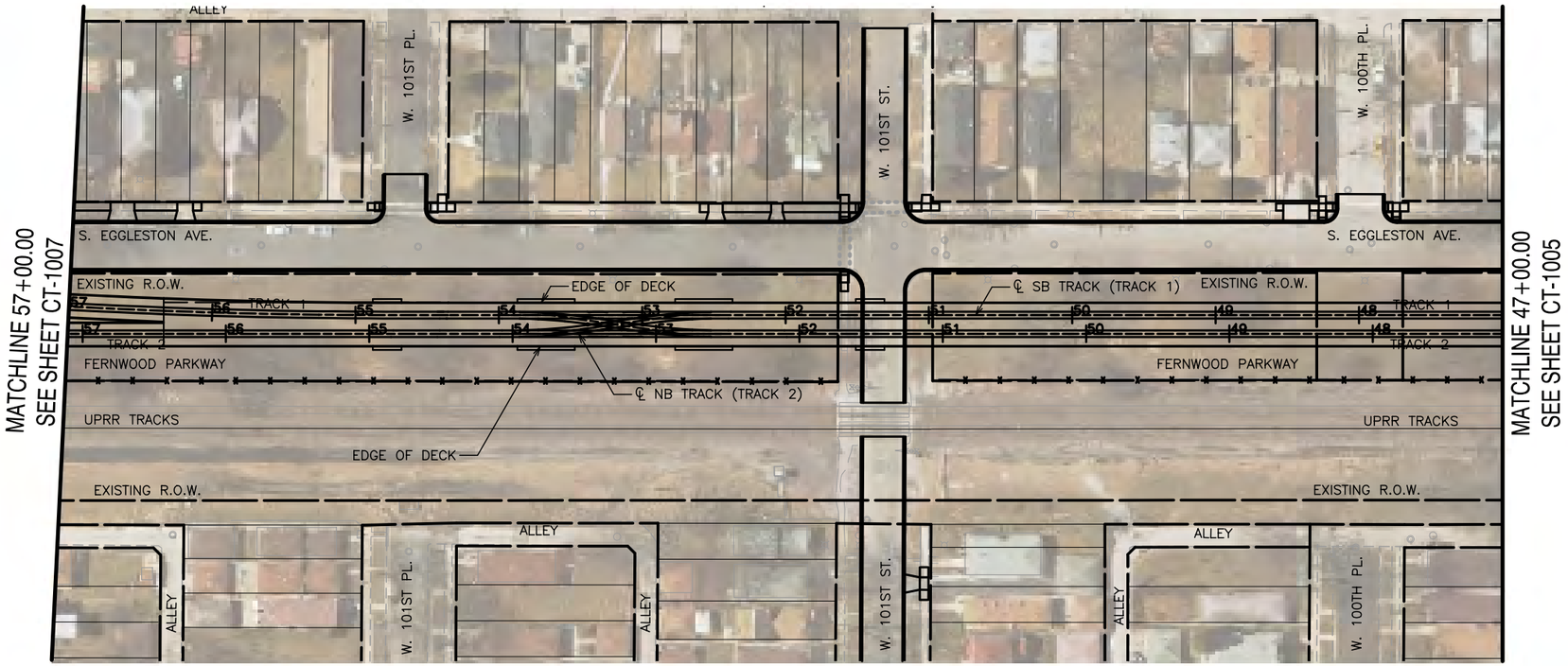

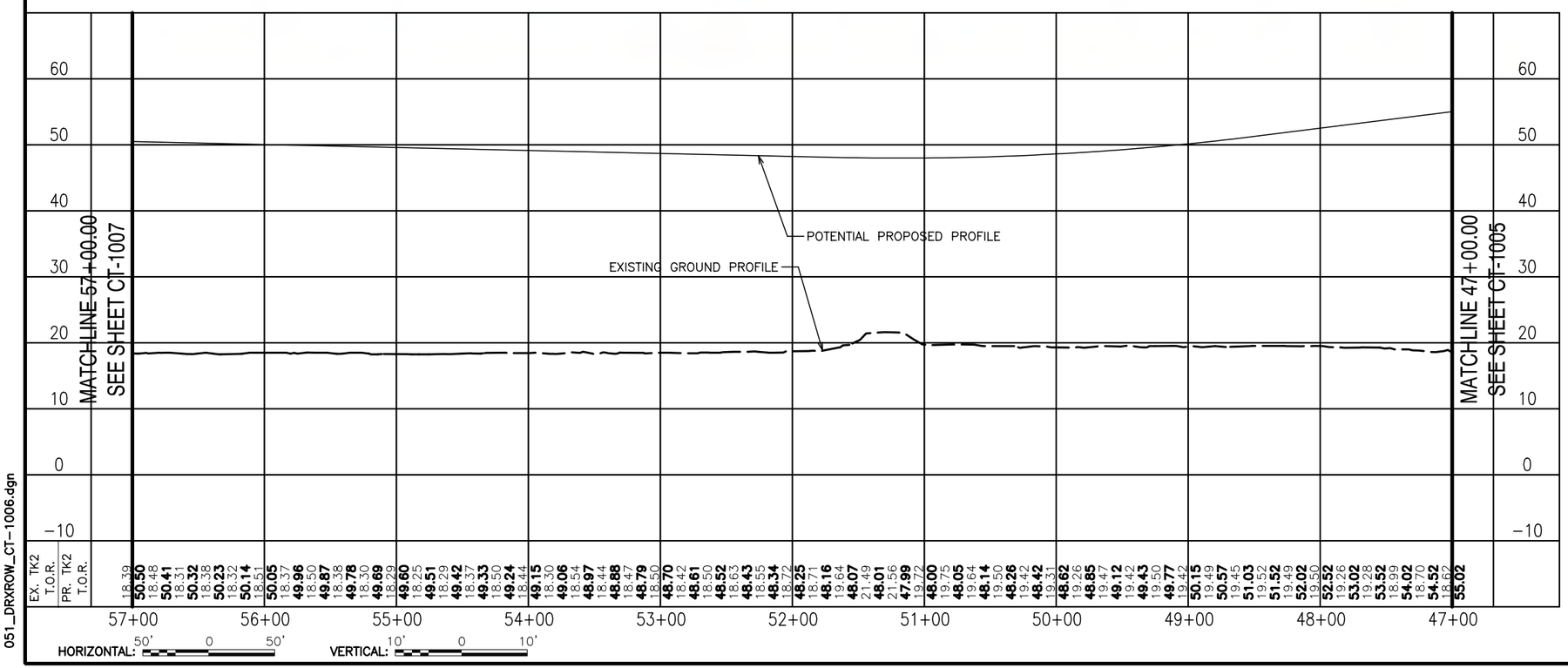

NORTH

50' 0 50'

LEGEND

- STATION
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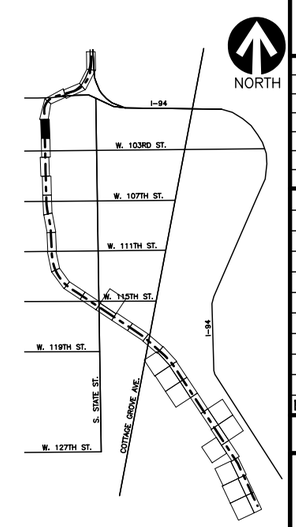

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1006

051_DRXROW_CT-1006.dgn

PLOTTED ON: 3/30/2022 3:35:20 PM

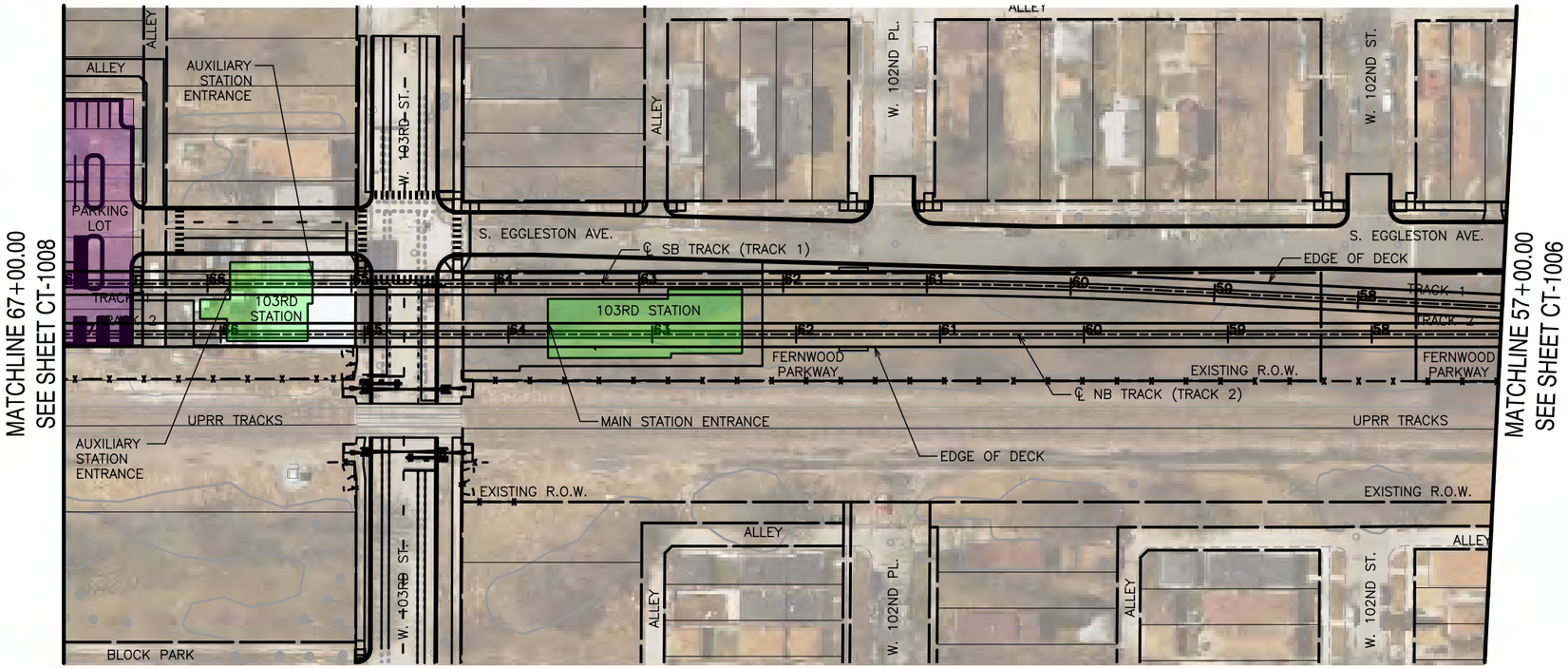

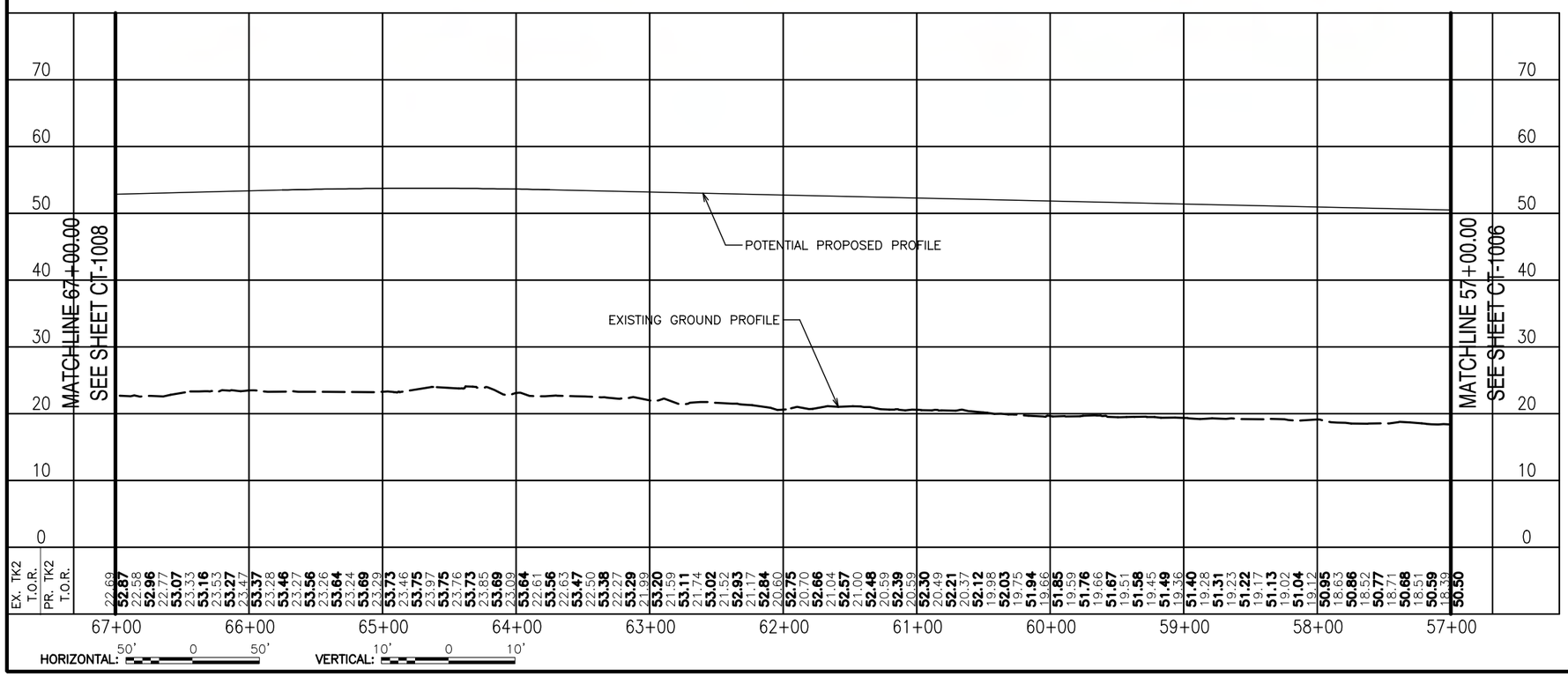

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
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- PARKING MITIGATION
- WETLAND

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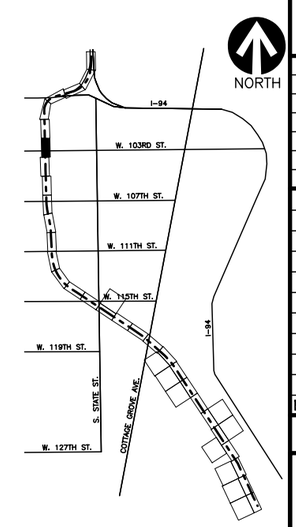

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1007

051_DRXROW_CT-1007.dgn

PLOTTED ON: 3/30/2022 3:37:25 PM

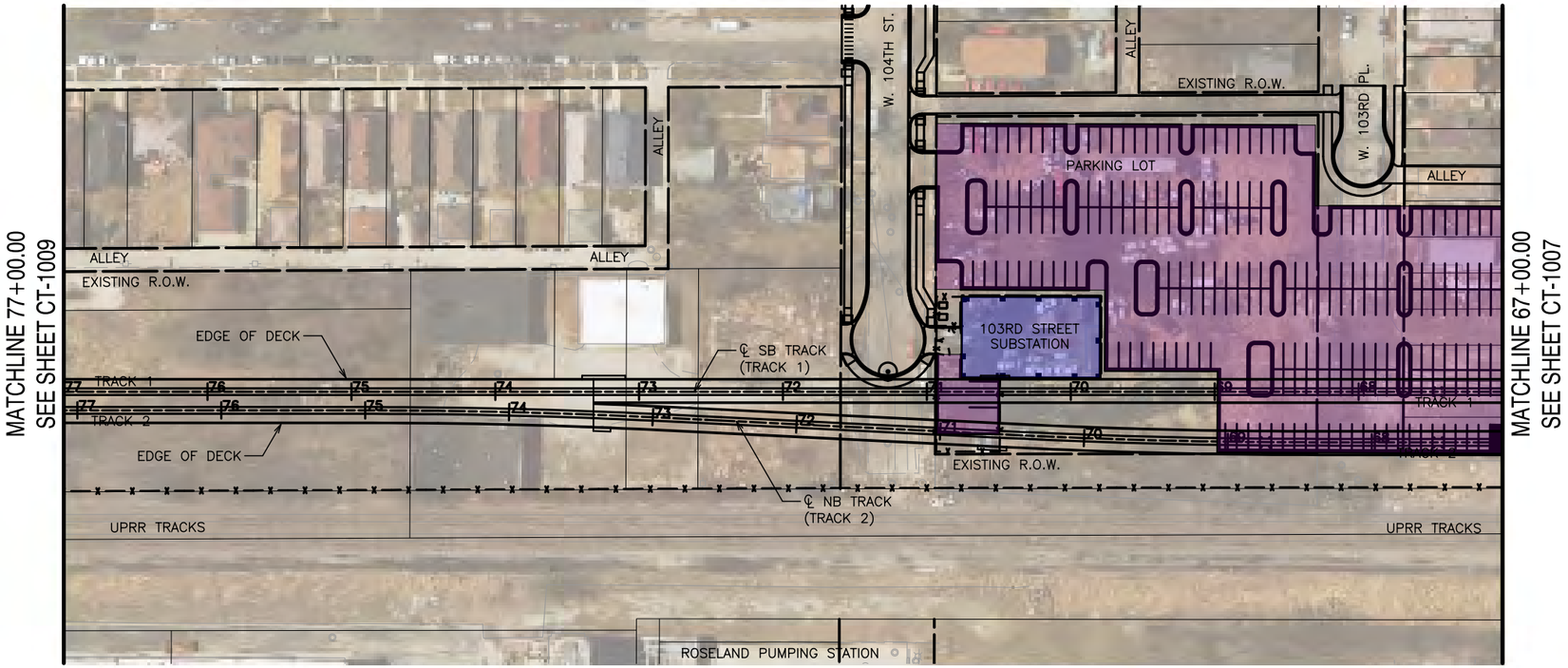

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
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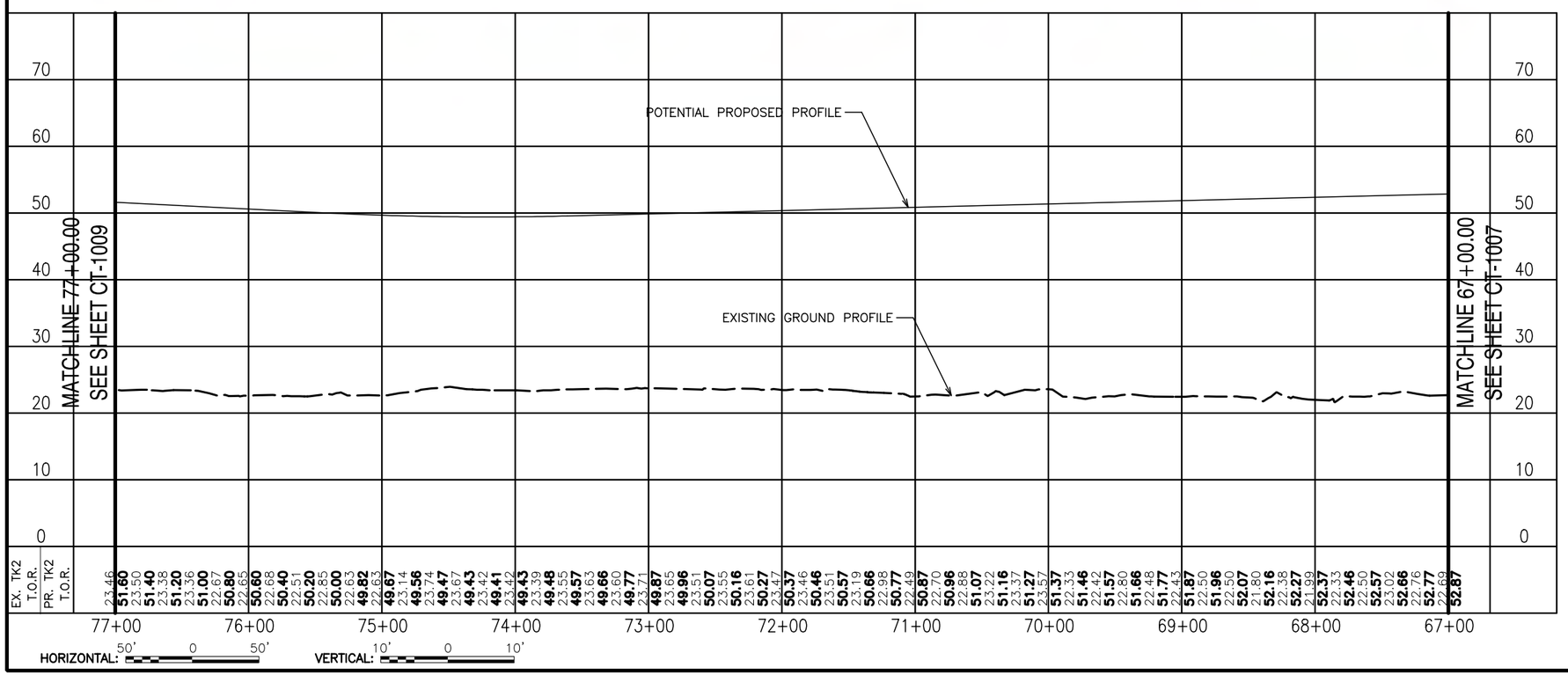

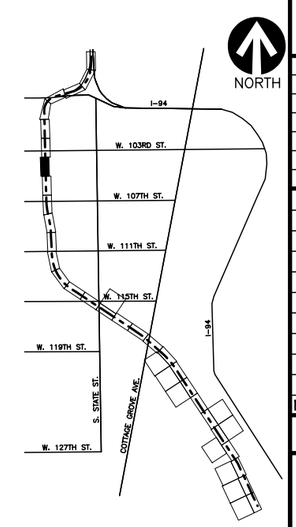

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IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1008

051_DRXROW_CT-1008.dgn

PLOTTED ON: 3/30/2022 3:39:57 PM

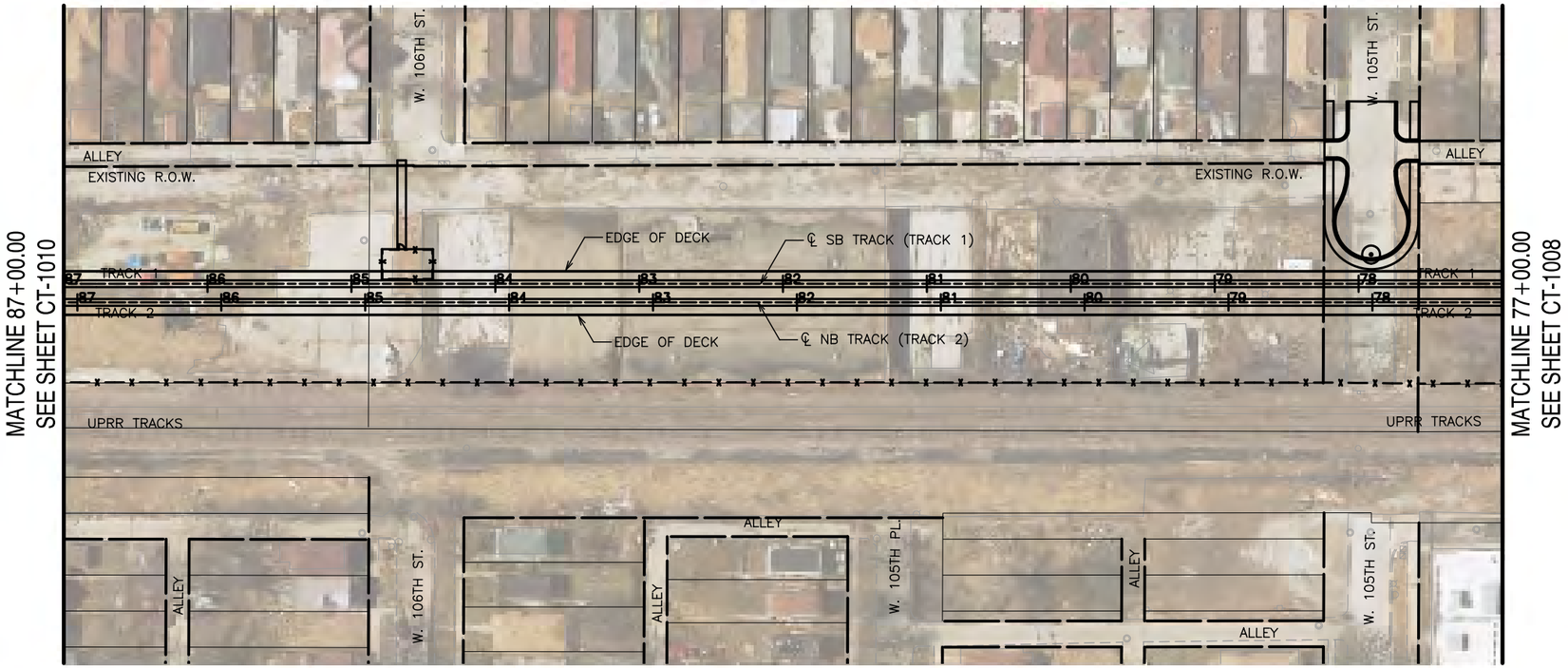

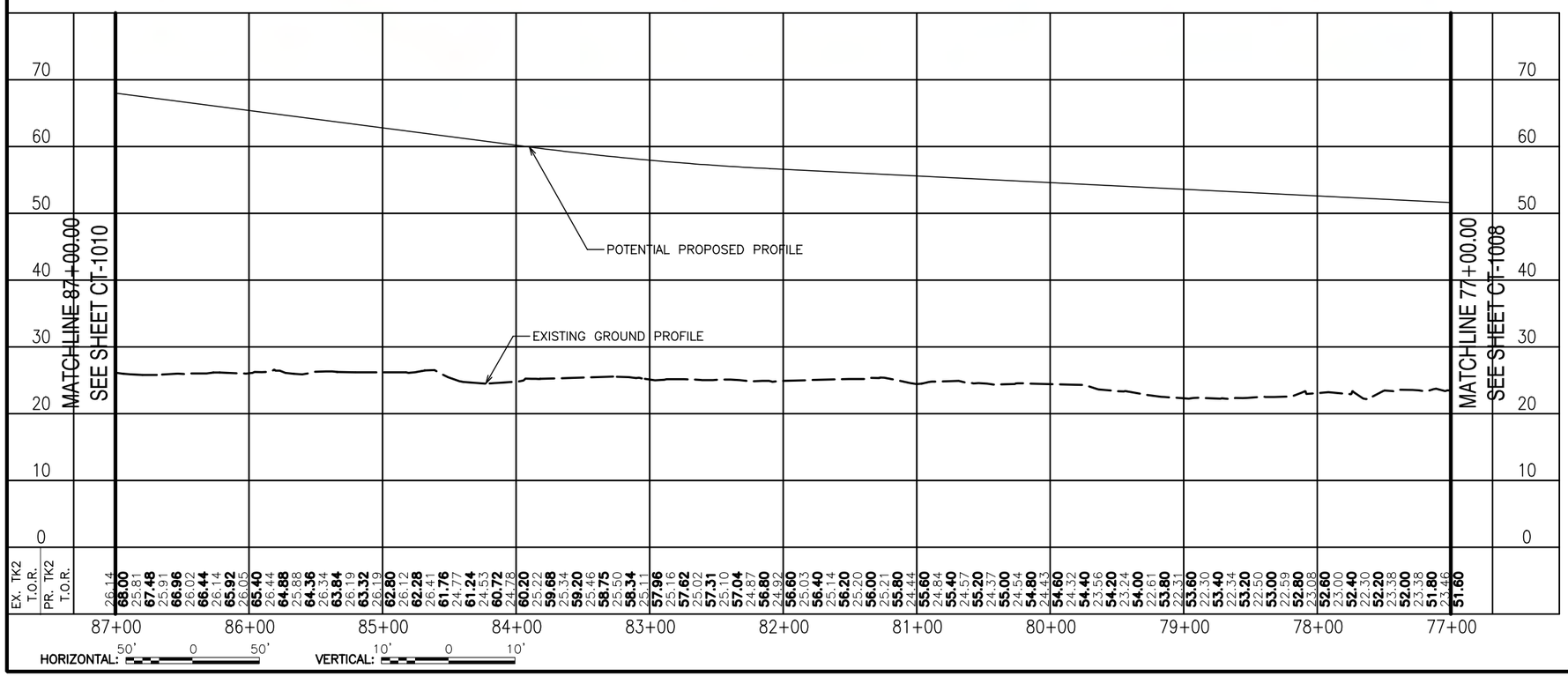

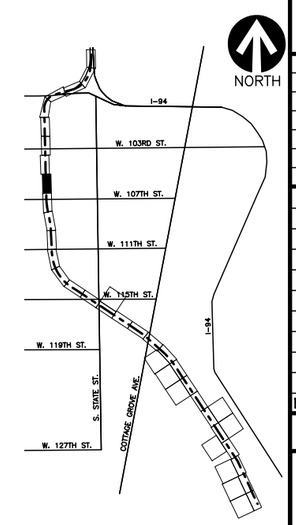

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

GENERAL NOTES

1. THESE DRAWINGS ARE NOT FOR CONSTRUCTION NOR SHOW A FULLY APPROVED DESIGN. THE INTENT IS TO SHOW PROGRESS OF DESIGN THROUGH APRIL 11, 2022.

NOT FOR CONSTRUCTION

TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

CHICAGO TRANSIT AUTHORITY
ENGINEERING

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1009

051_DRXROW_CT-1009.dgn

PLOTTED ON: 3/30/2022 3:47:59 PM

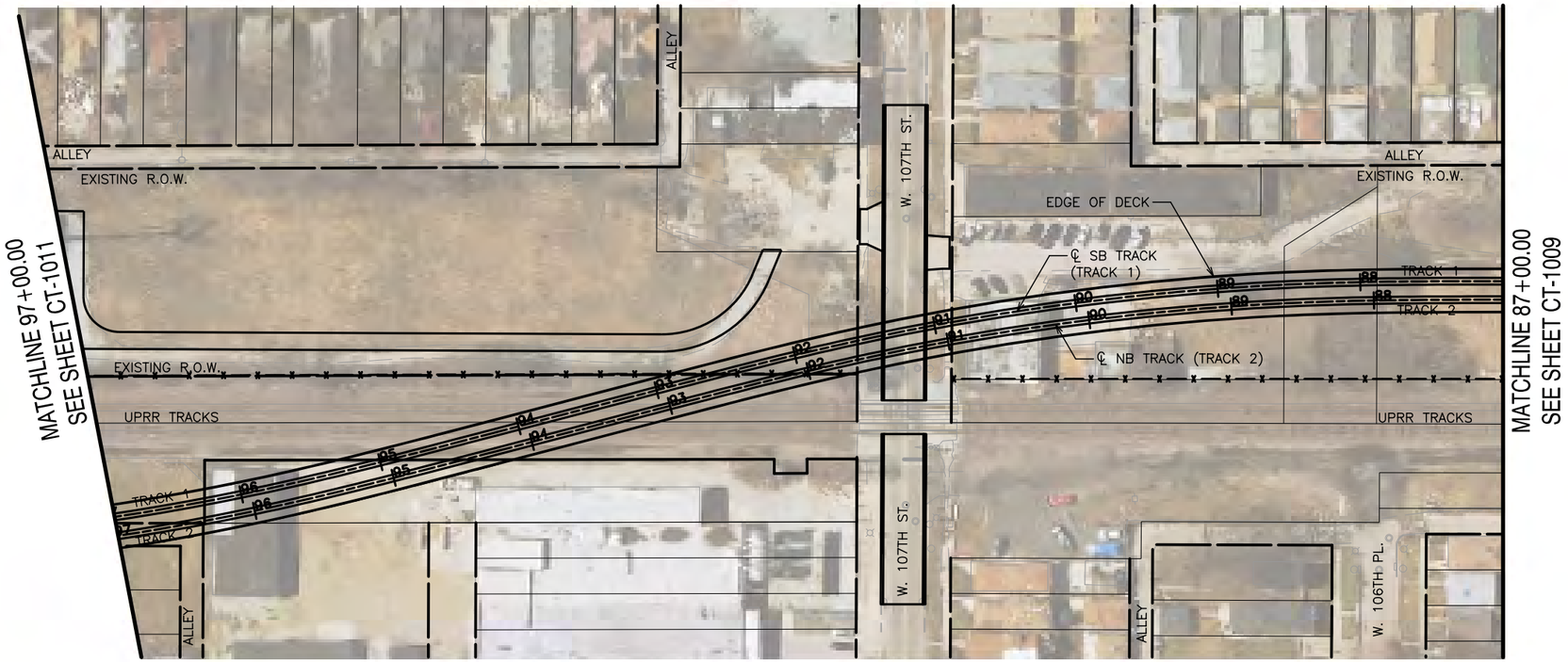

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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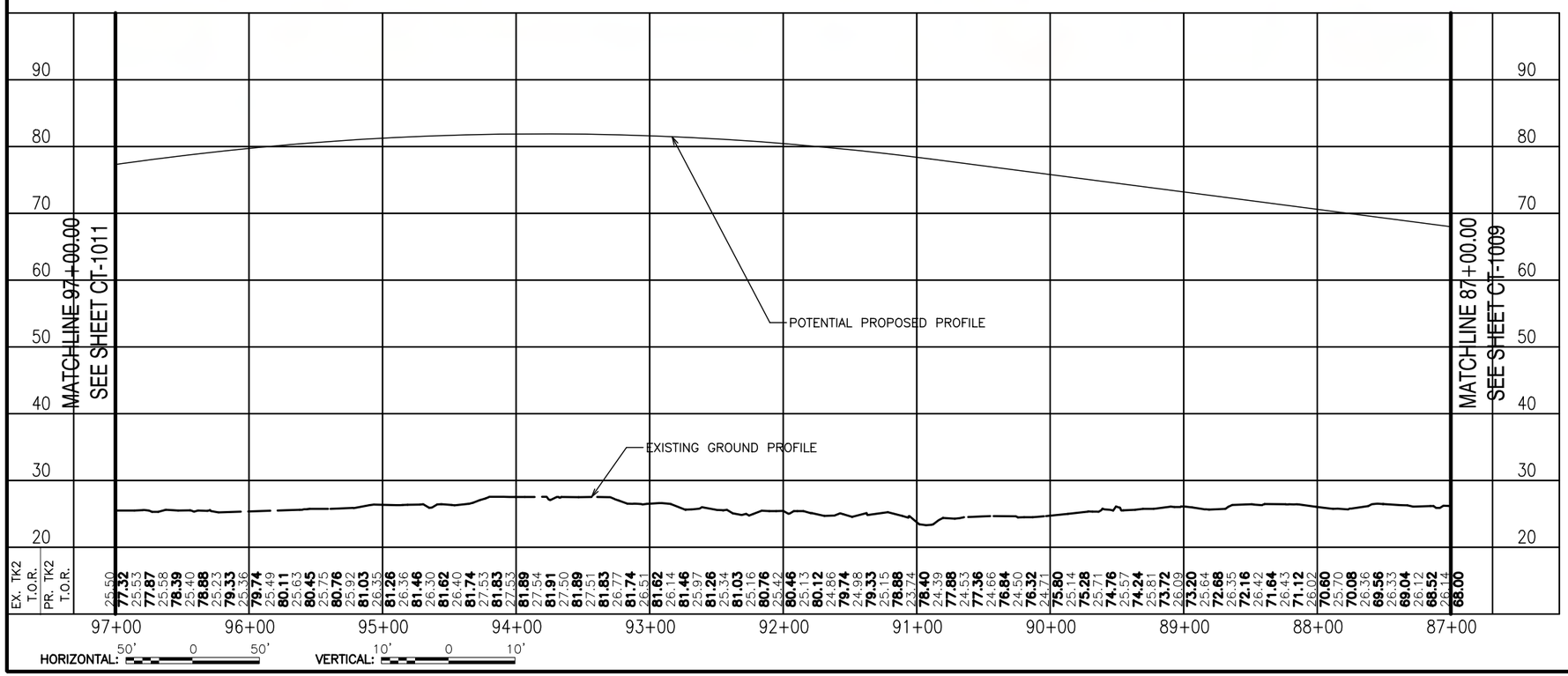

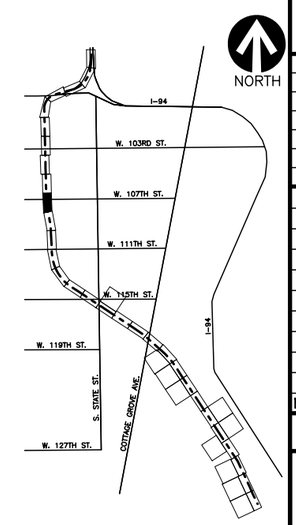

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1010

051_DRXROW_CT-1010.dgn

PLOTTED ON: 3/30/2022 3:49:31 PM

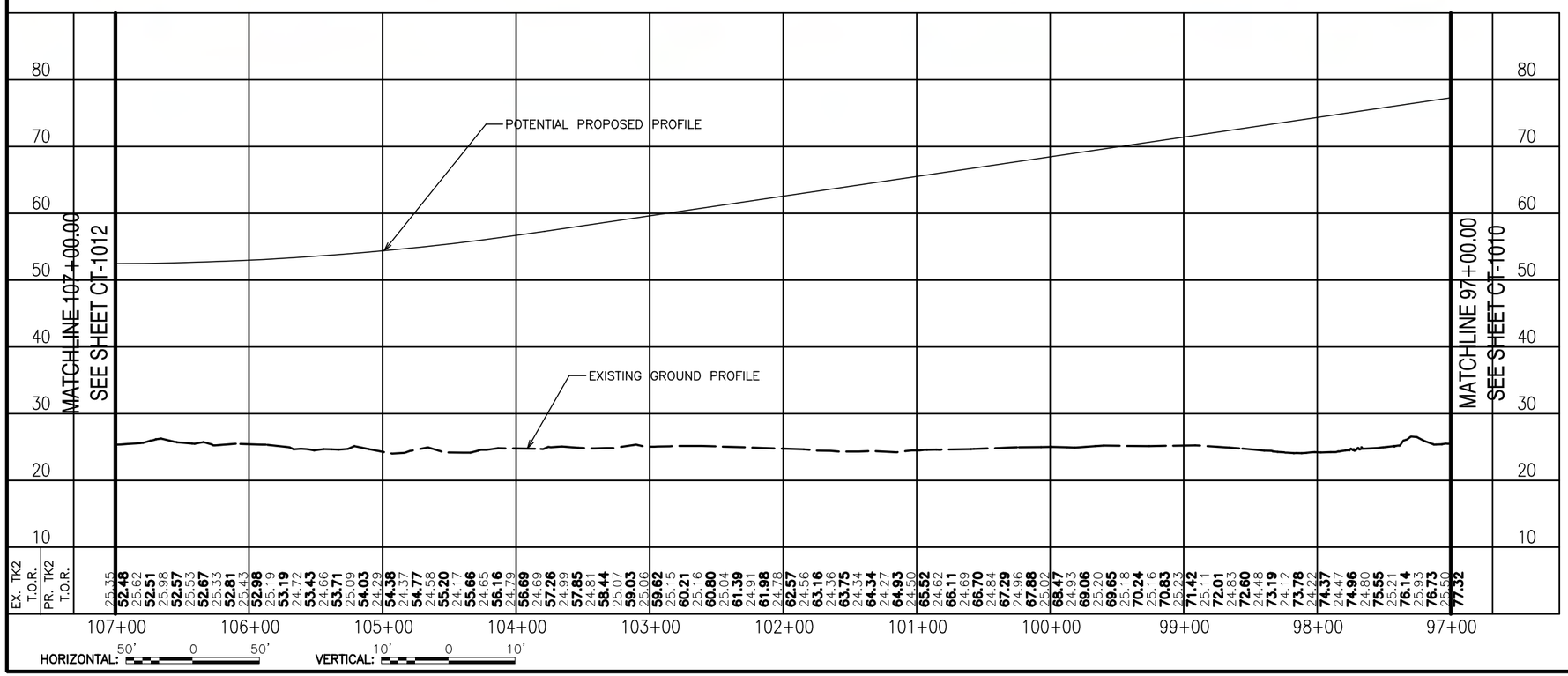

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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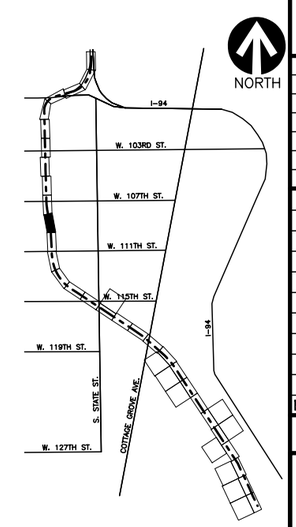

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1011

051_DRXROW_CT-1011.dgn

PLOTTED ON: 3/30/2022 3:50:21 PM

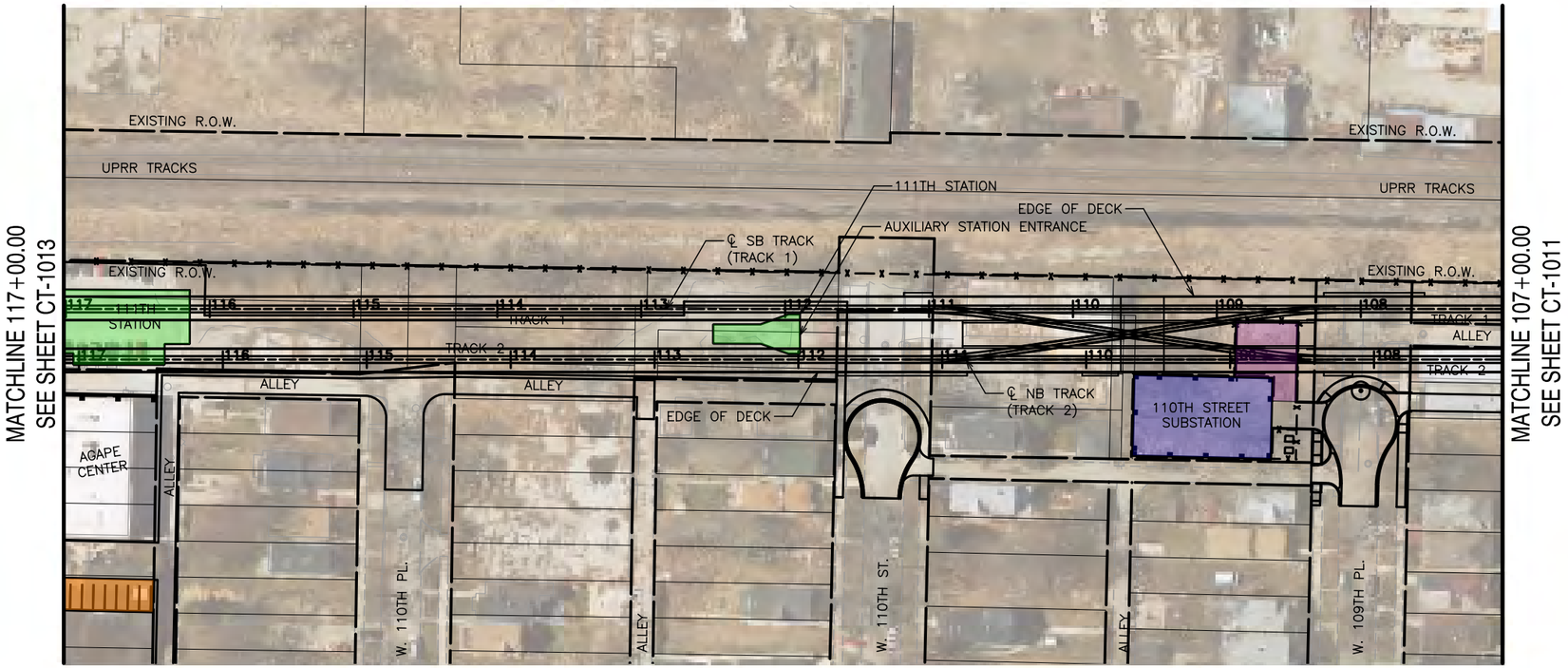

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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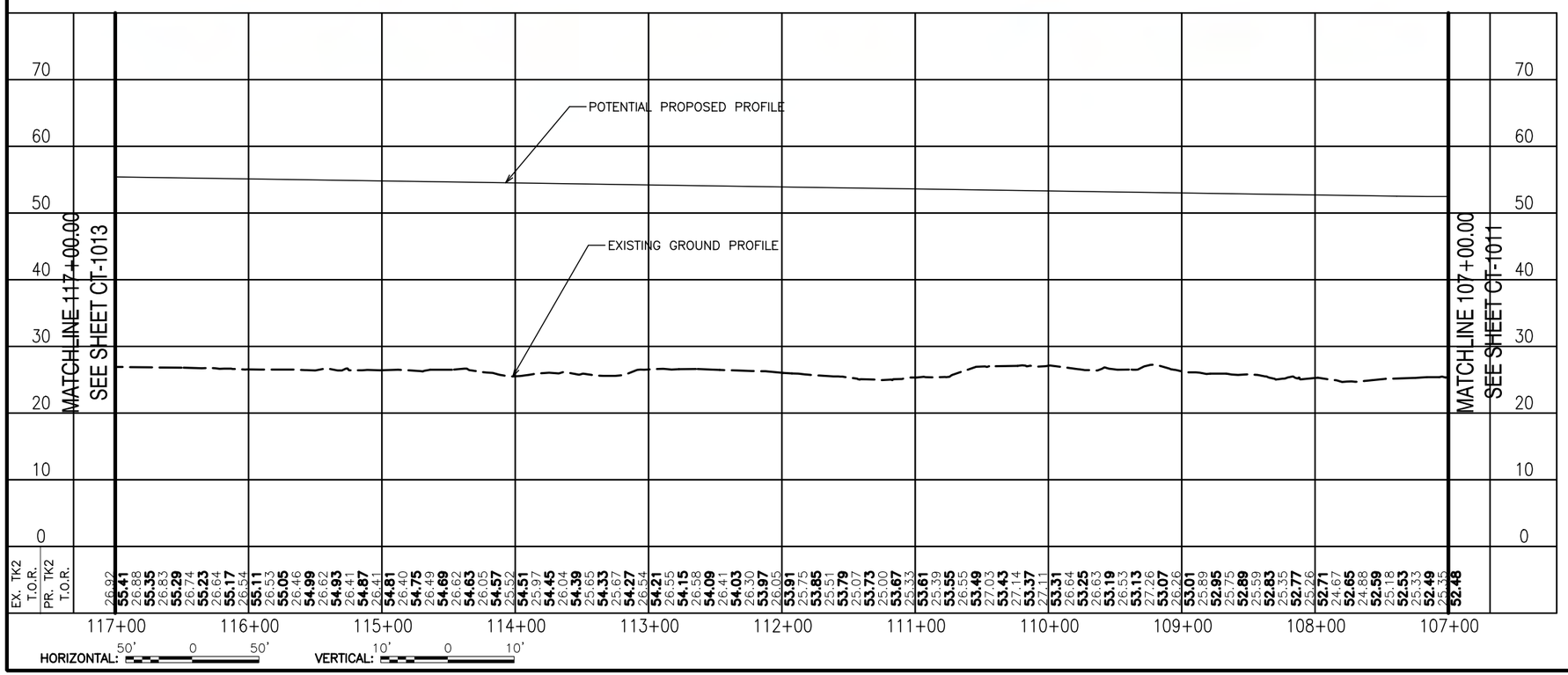

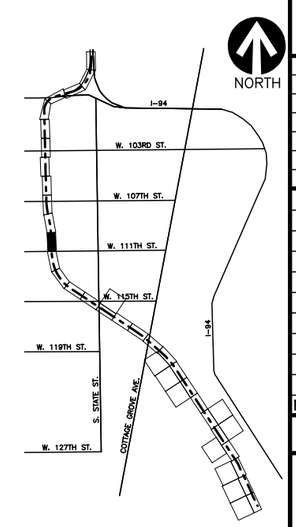

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1012

051_DRXROW_CT-1012.dgn

PLOTTED ON: 3/30/2022 3:54:58 PM

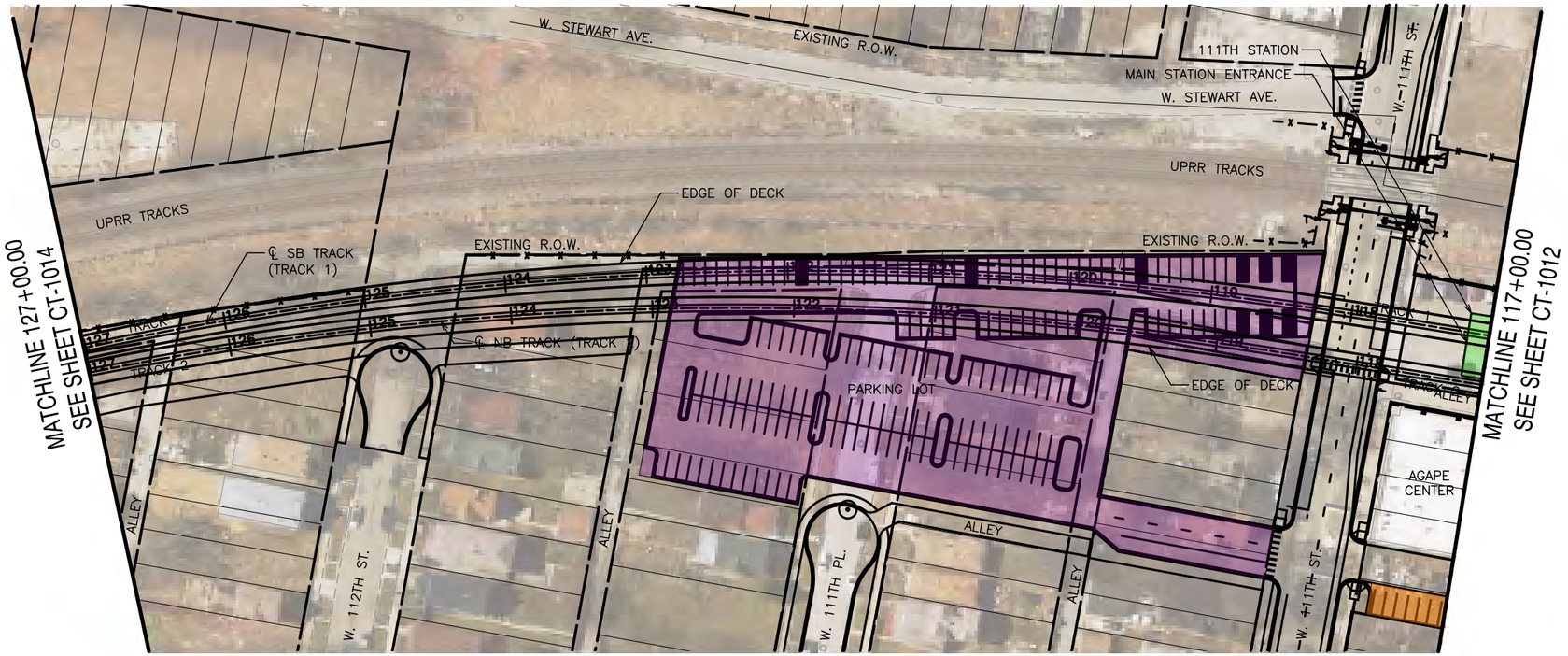

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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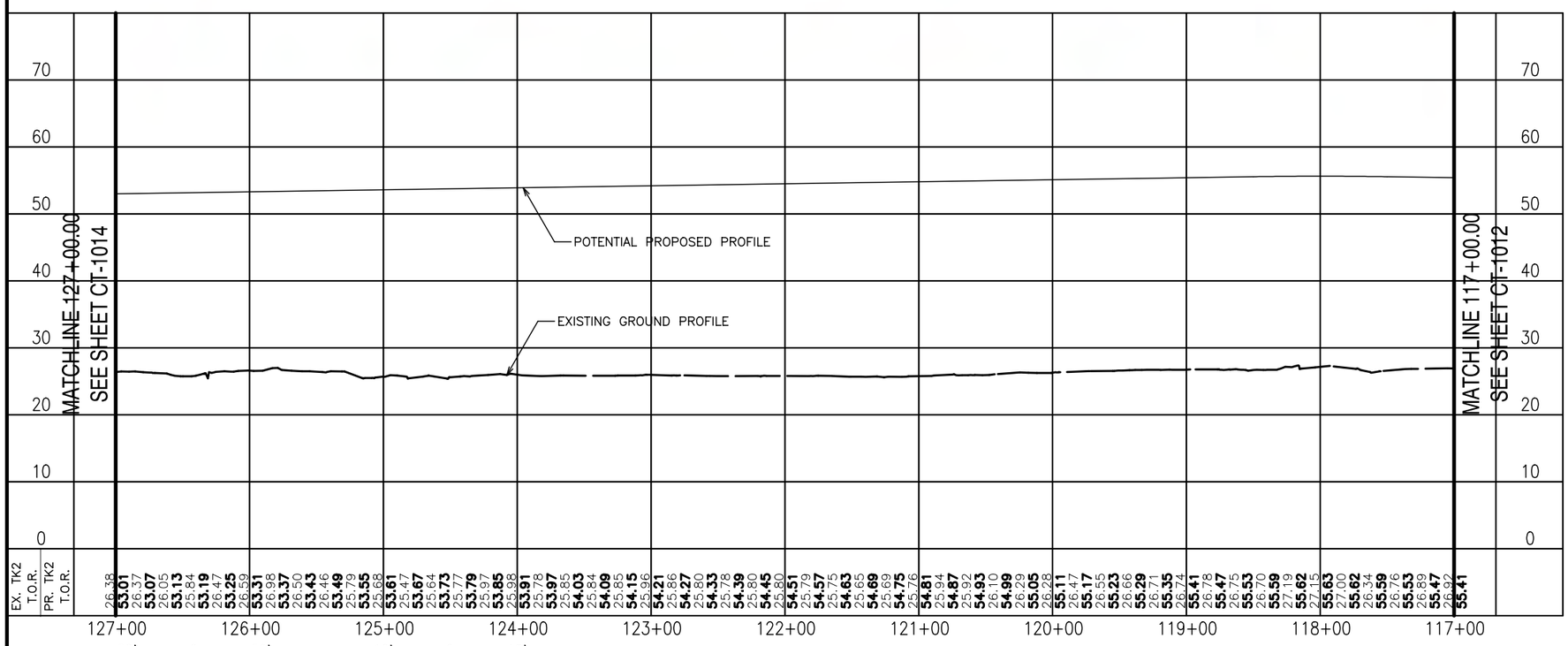

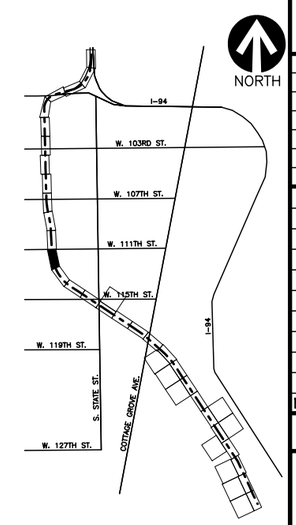

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1013

051_DRXROW_CT-1013.dgn

PLOTTED ON: 3/30/2022 4:02:22 PM

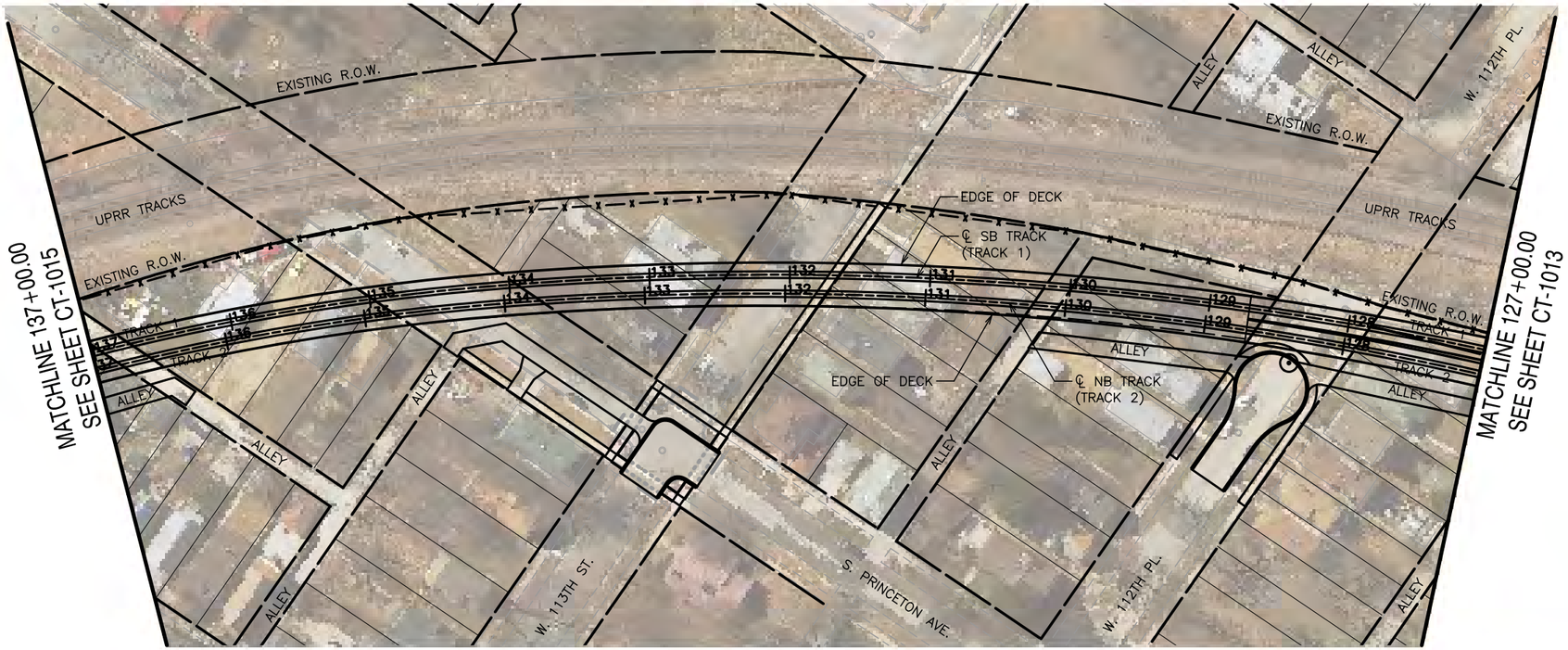

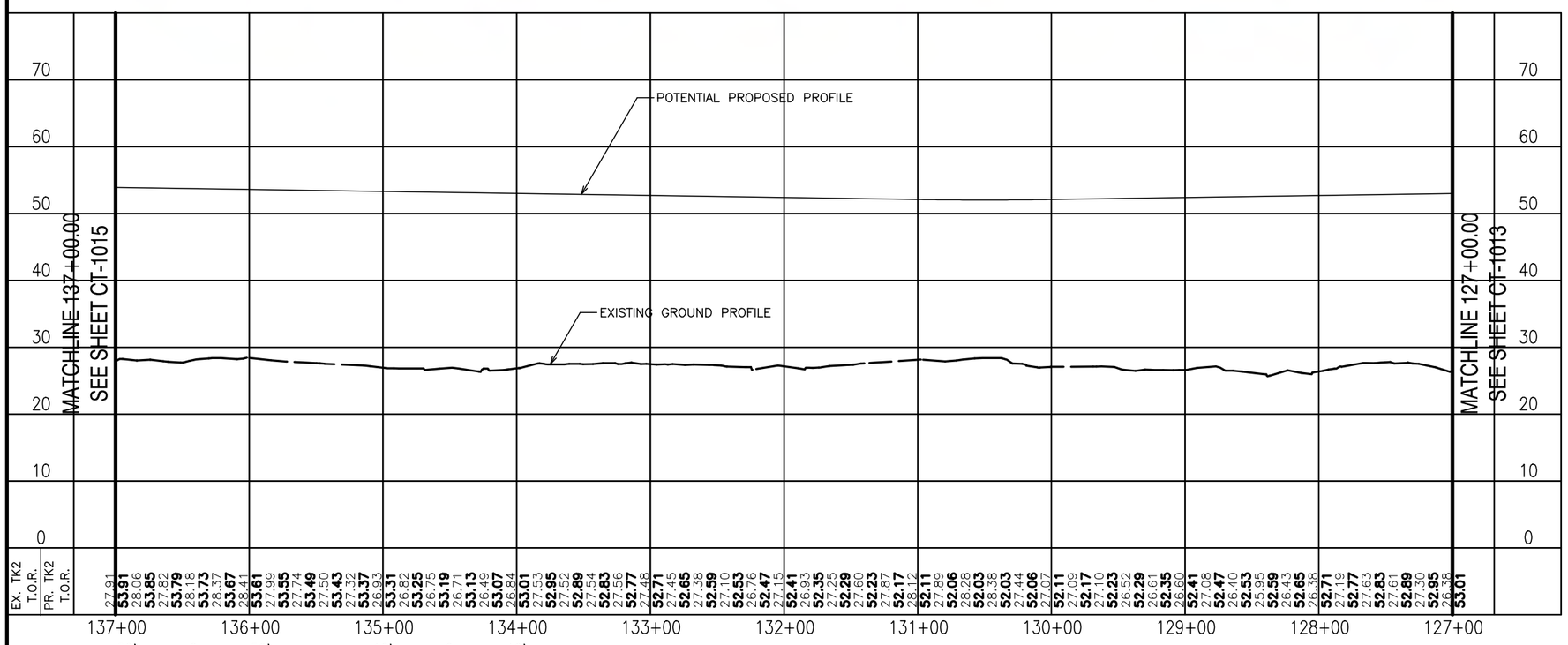

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

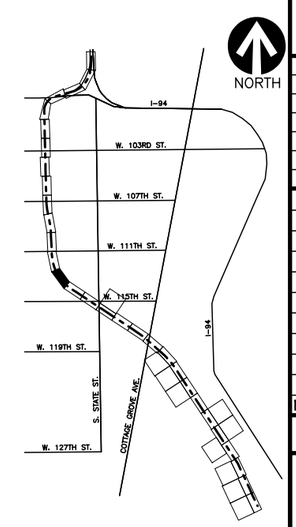

PLAN AND PROFILE

CT-1014

051_DRXROW_CT-1014.dgn

PLOTTED ON: 3/30/2022 4:06:25 PM

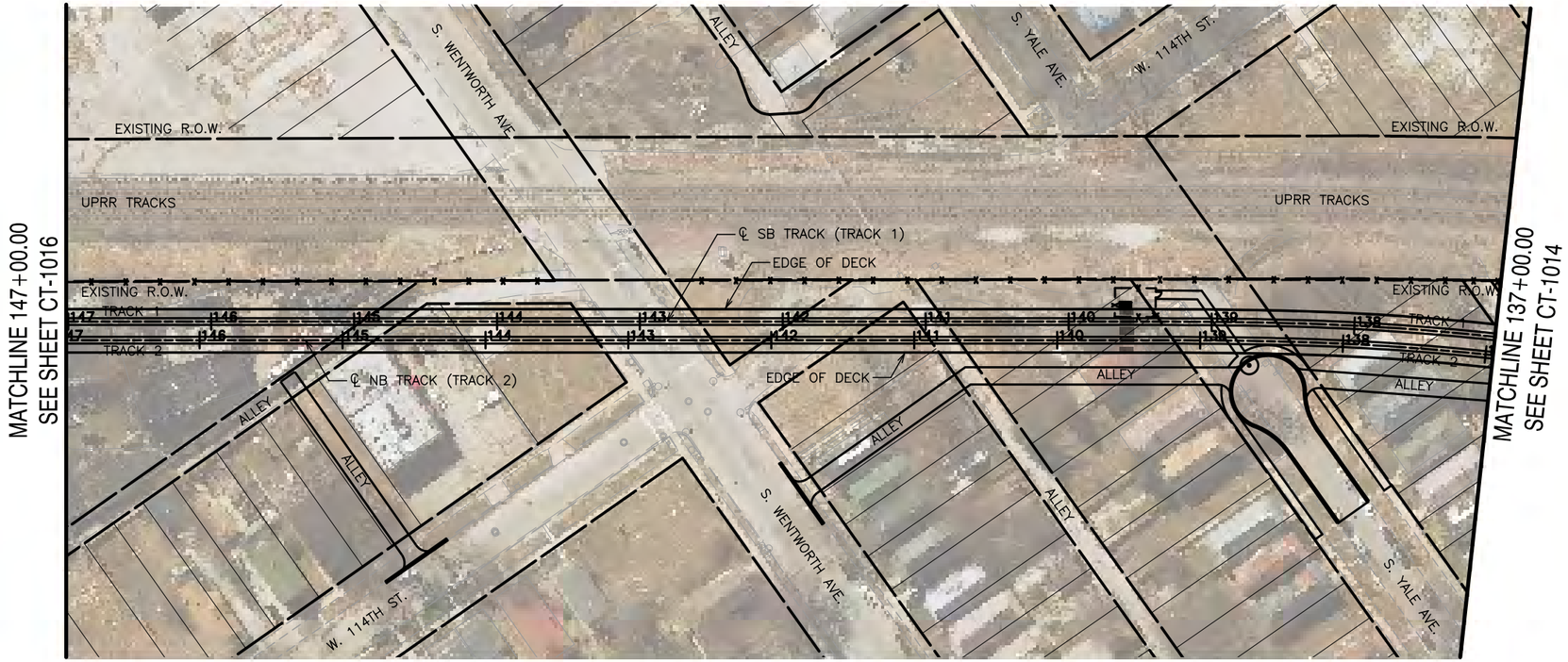

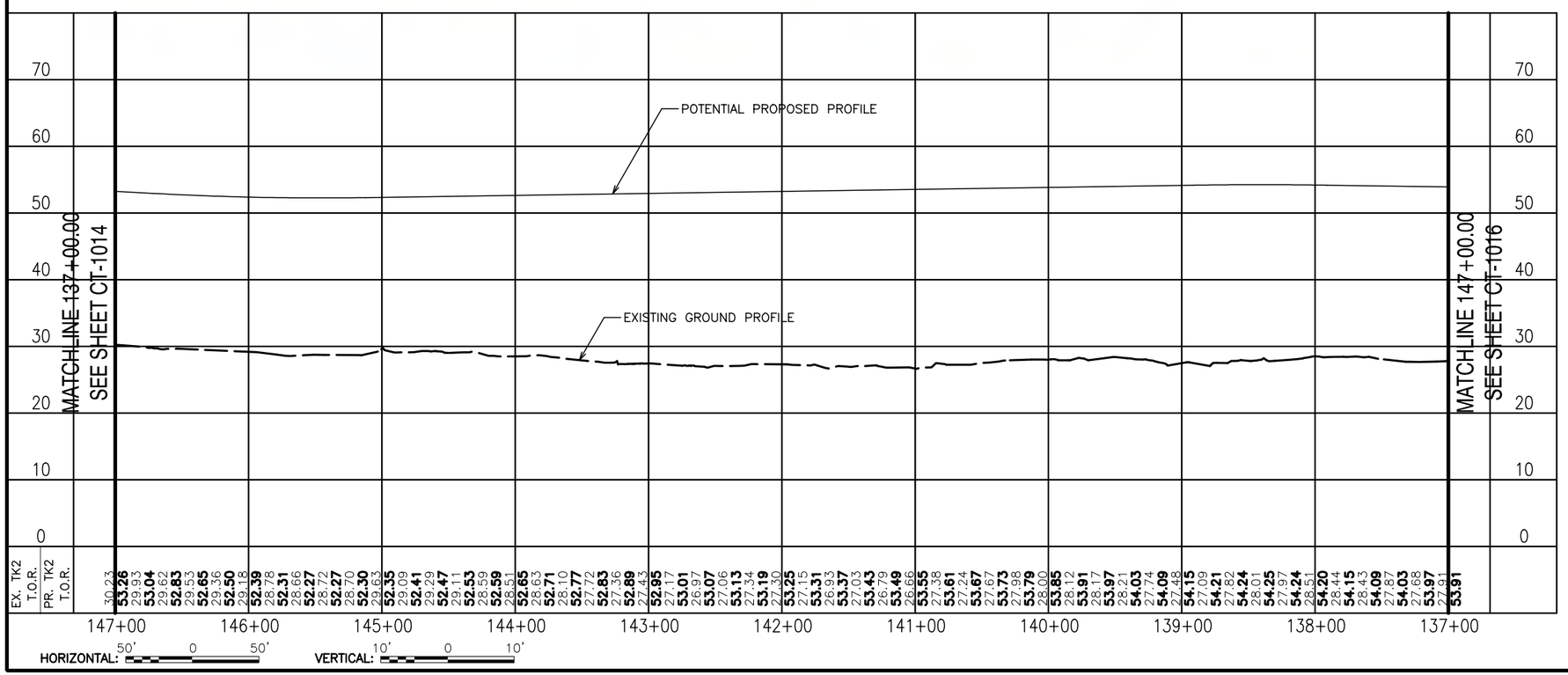

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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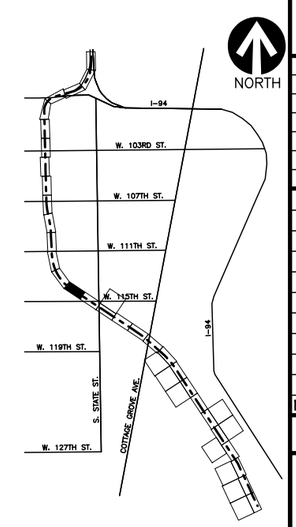

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1015

051_DRXROW_CT-1015.dgn

PLOTTED ON: 3/30/2022 4:11:18 PM

MATCHLINE 157+00.00
SEE SHEET CT-1017

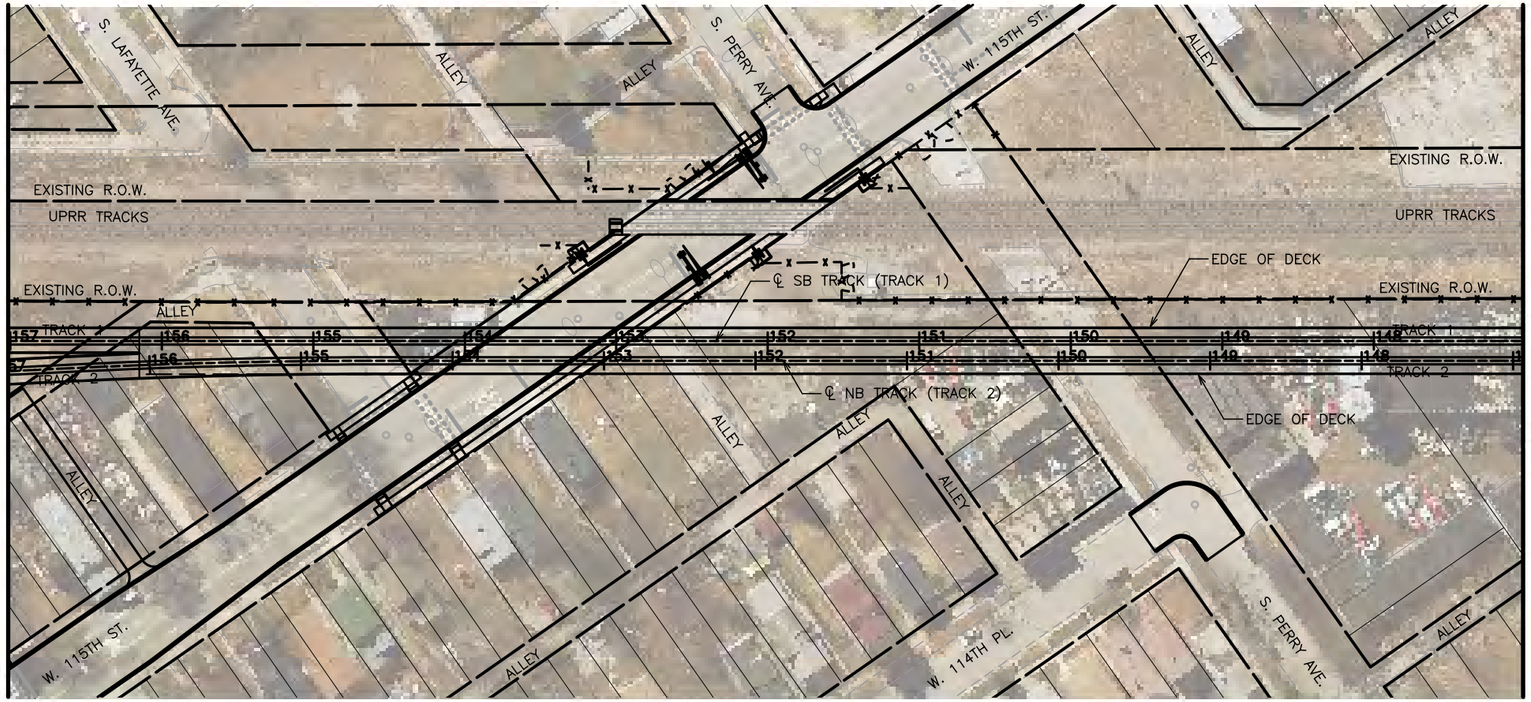

MATCHLINE 147+00.00
SEE SHEET CT-1015

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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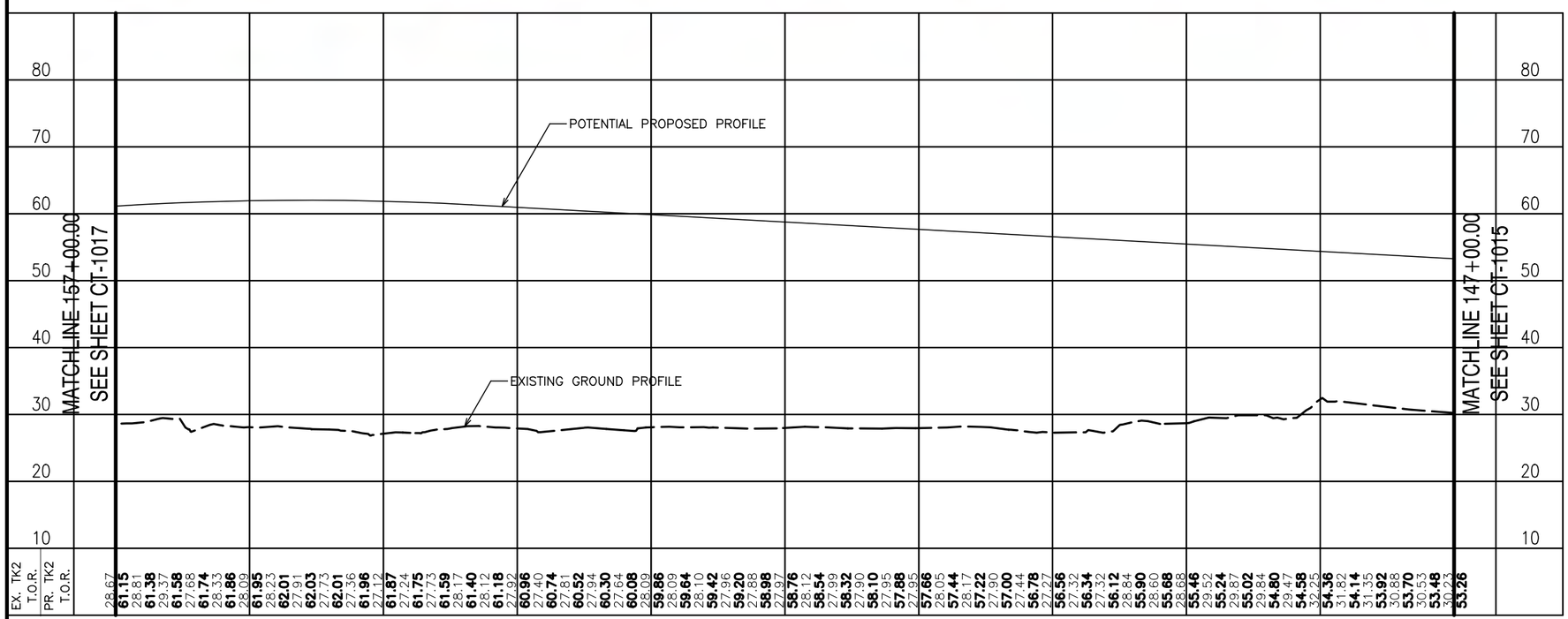

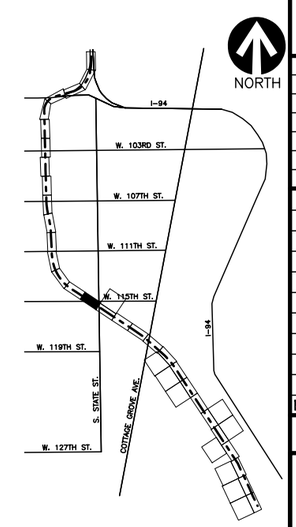

NOT FOR CONSTRUCTION

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1016

051_DRXROW_CT-1016.dgn

PLOTTED ON: 3/30/2022 4:26:14 PM

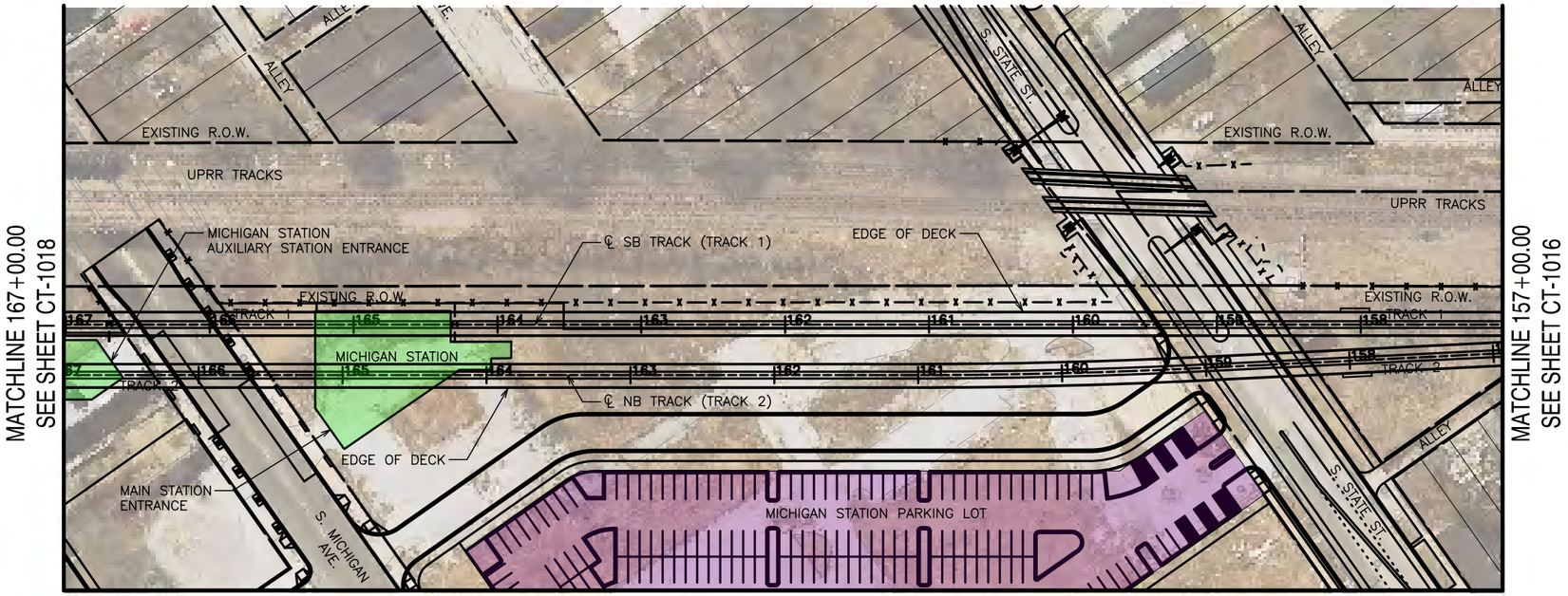

MATCHLINE A-A
SEE SHEET CT-1031

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

GENERAL NOTES

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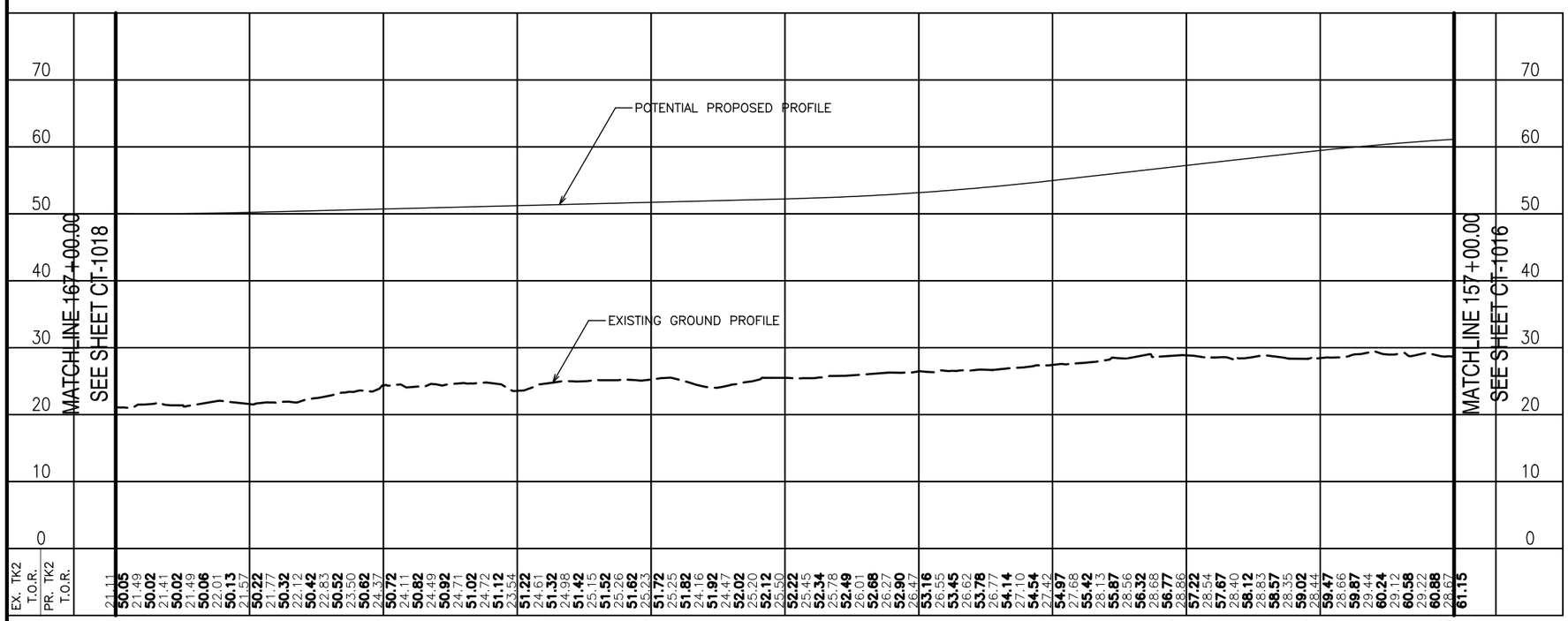

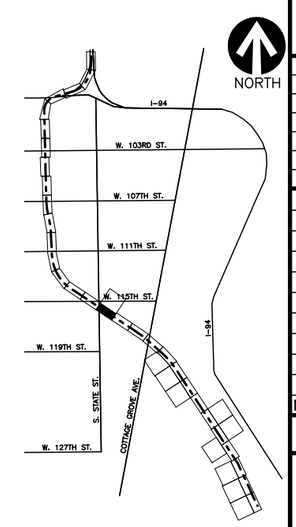

NOT FOR CONSTRUCTION

TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

CHICAGO TRANSIT AUTHORITY
ENGINEERING

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1017

051_DRXROW_CT-1017.dgn

PLOTTED ON: 3/30/2022 4:31:18 PM

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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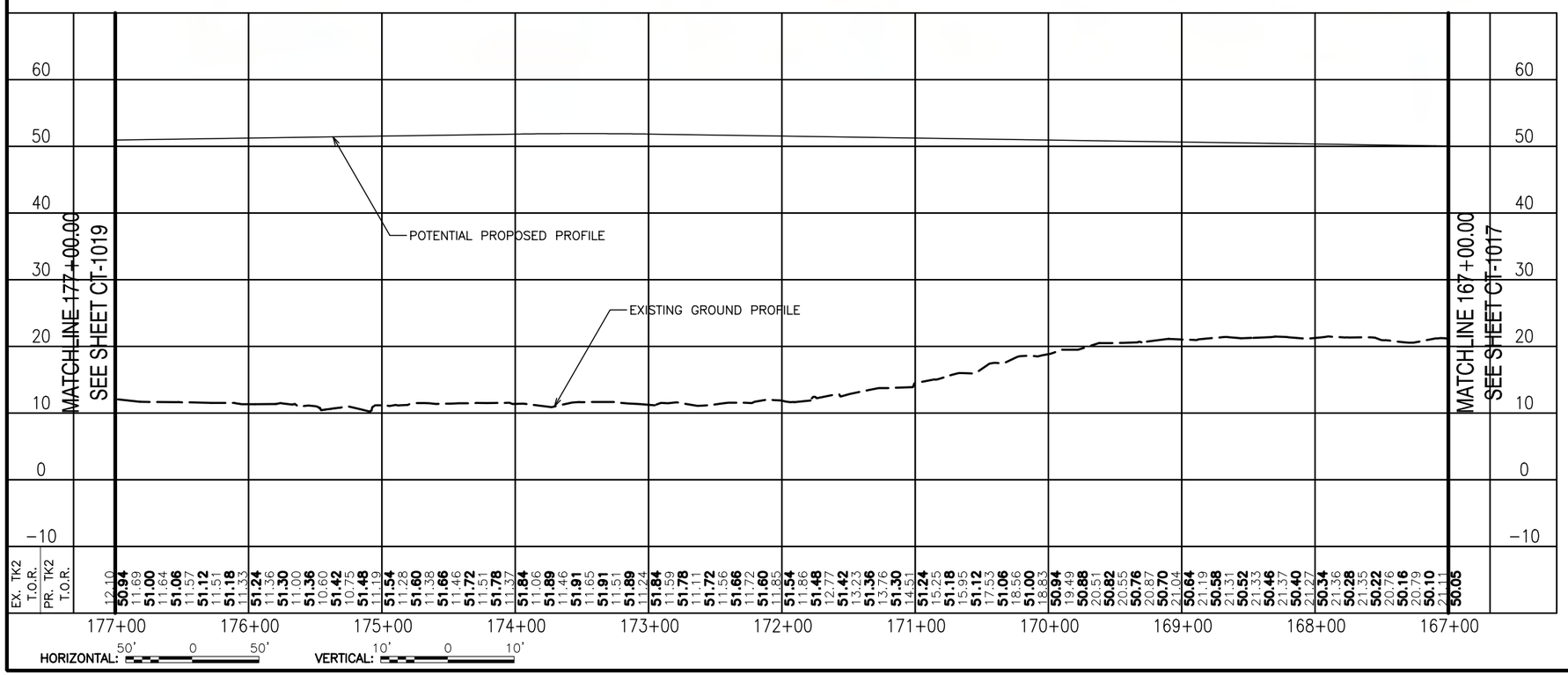

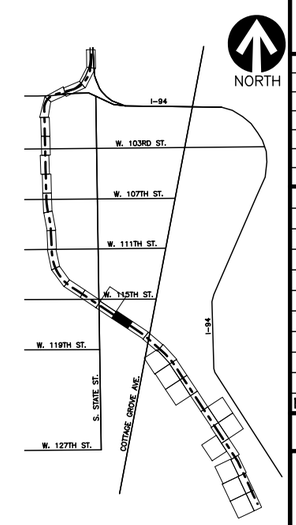

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RED LINE EXTENSION PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1018

051_DRXROW_CT-1018.dgn

PLOTTED ON: 3/30/2022 5:16:35 PM

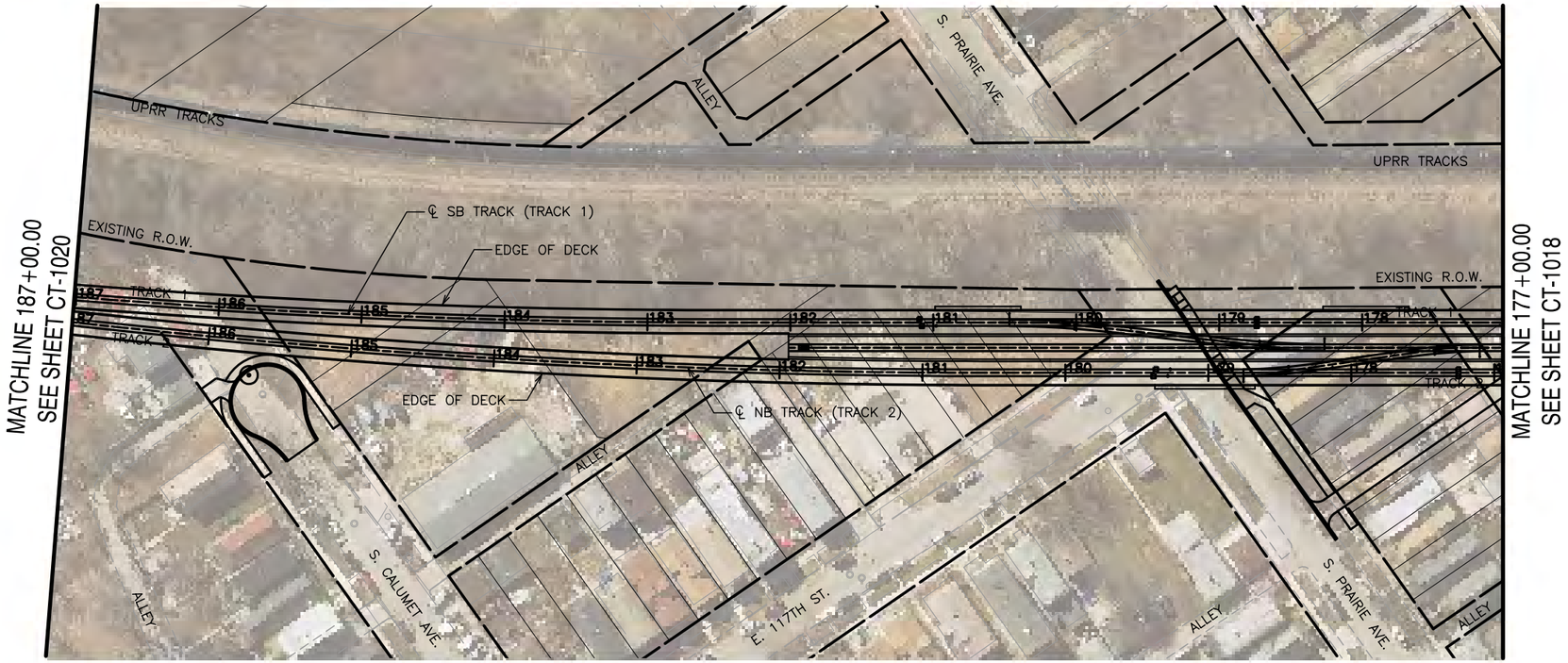

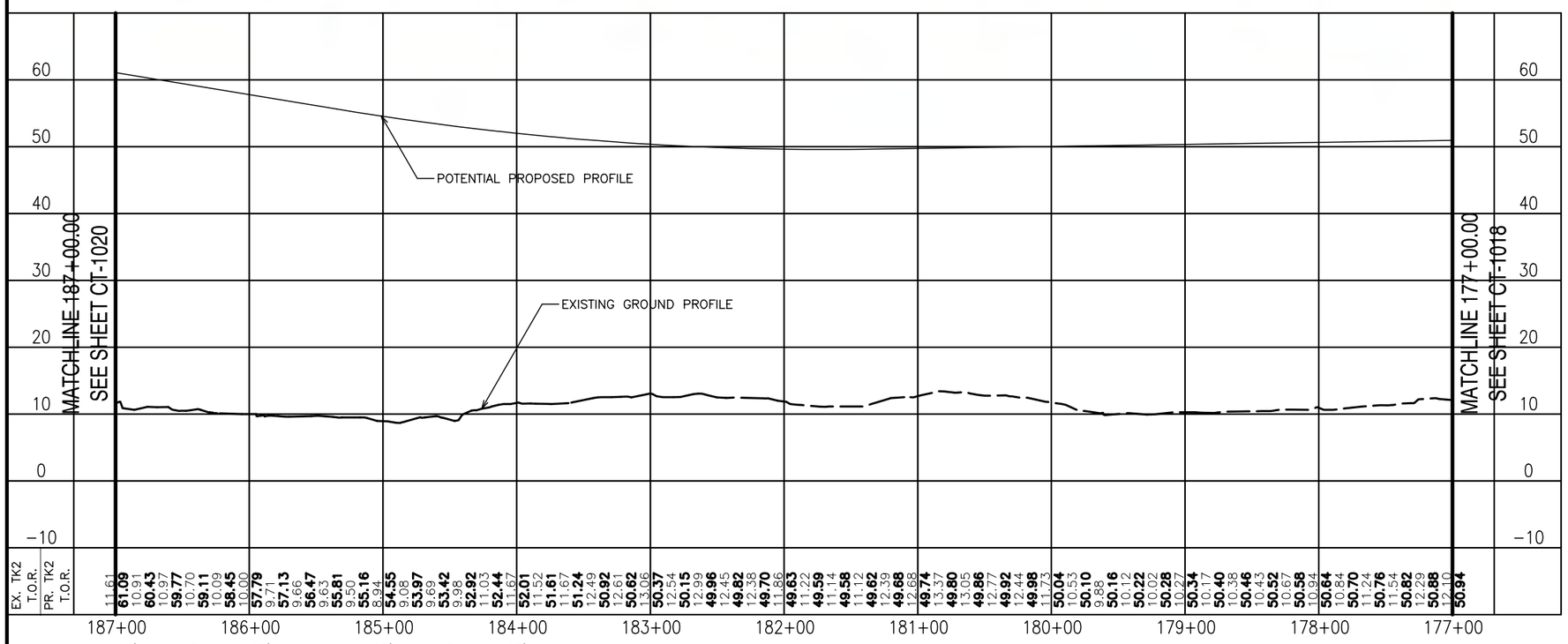

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

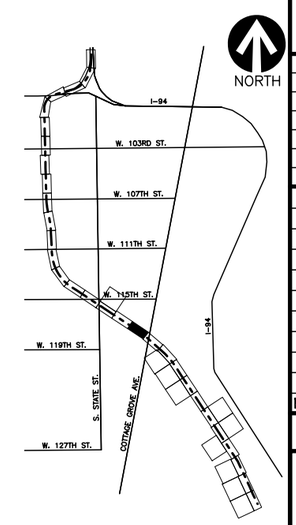

PLAN AND PROFILE

CT-1019

051_DRXROW_CT-1019.dgn

PLOTTED ON: 4/6/2022 9:04:49 AM

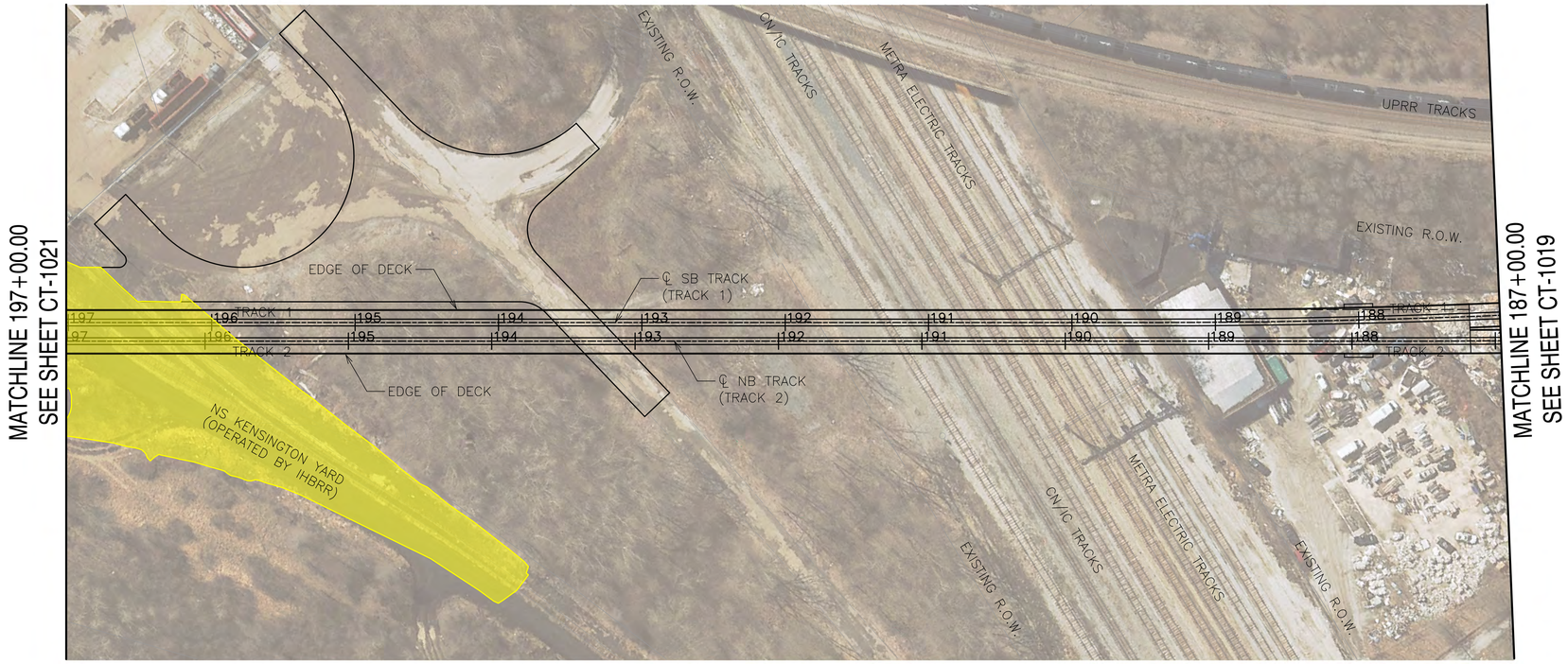

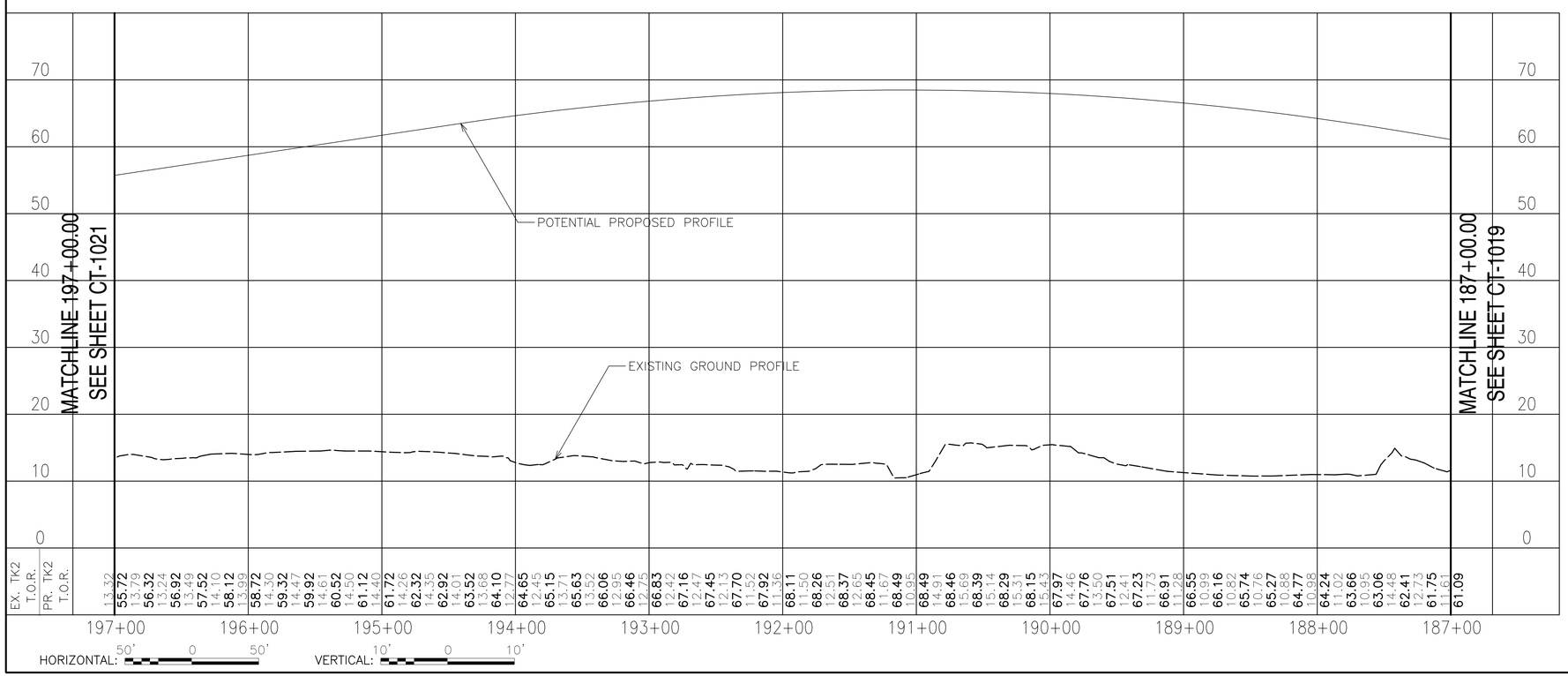

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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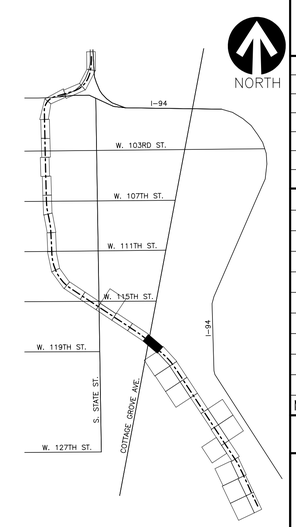

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1020

051_DRXROW_CT-1020.dgn

PLOTTED ON: 4/8/2022 1:35:15 PM

MATCHLINE B-B
SEE SHEET CT-1032

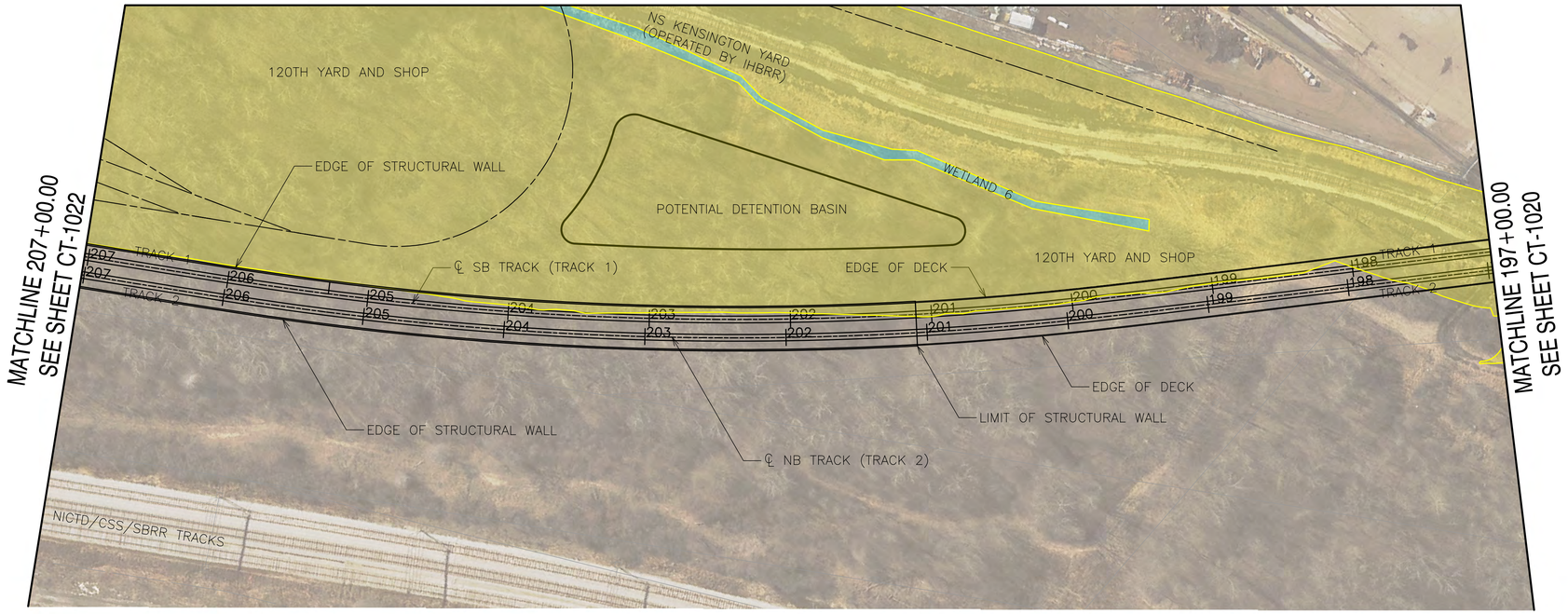

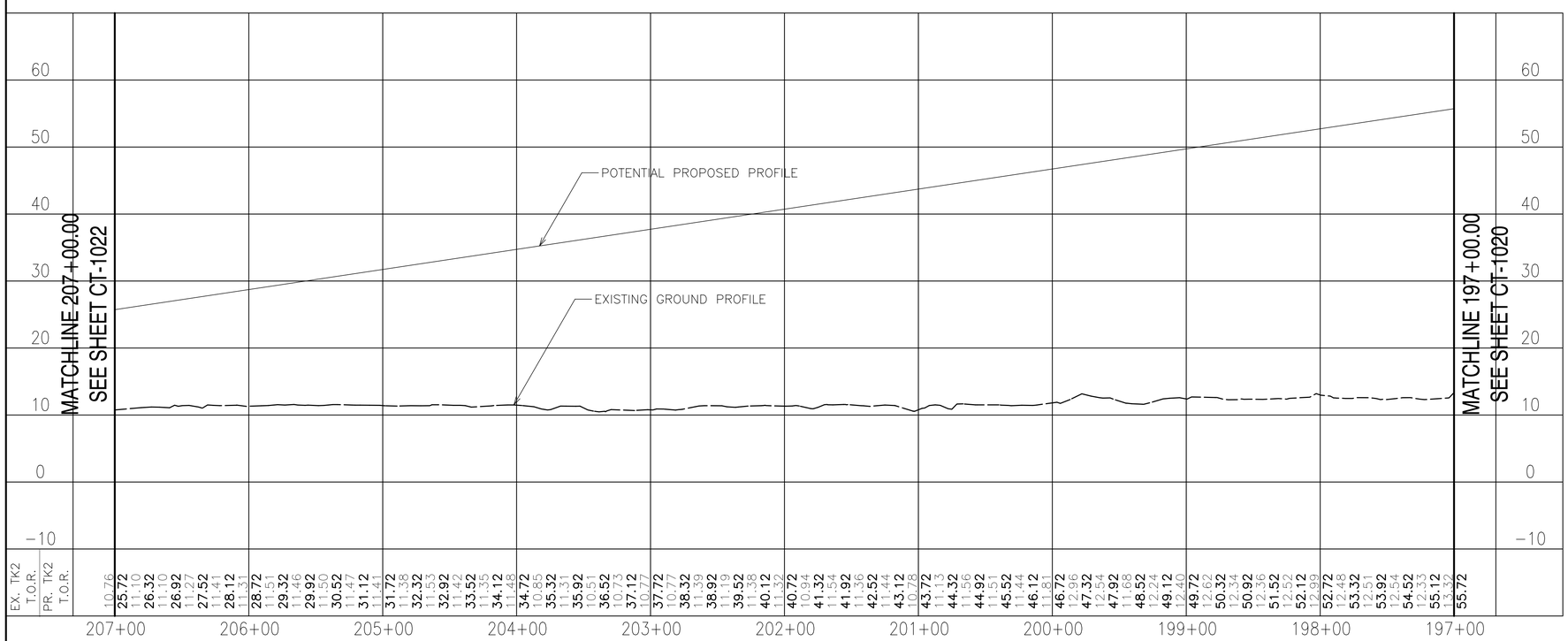

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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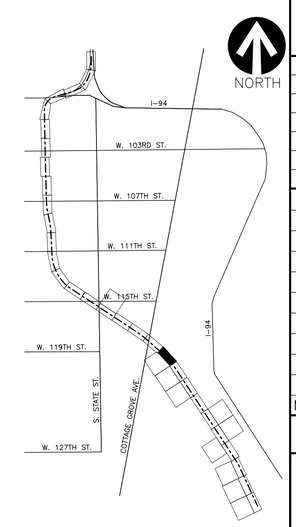

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1021

051_DRXROW_CT-1021.dgn

PLOTTED ON: 4/8/2022 1:38:56 PM

MATCHLINE D-D
SEE SHEET CT-1033

MATCHLINE 217+00.00
SEE SHEET CT-1023

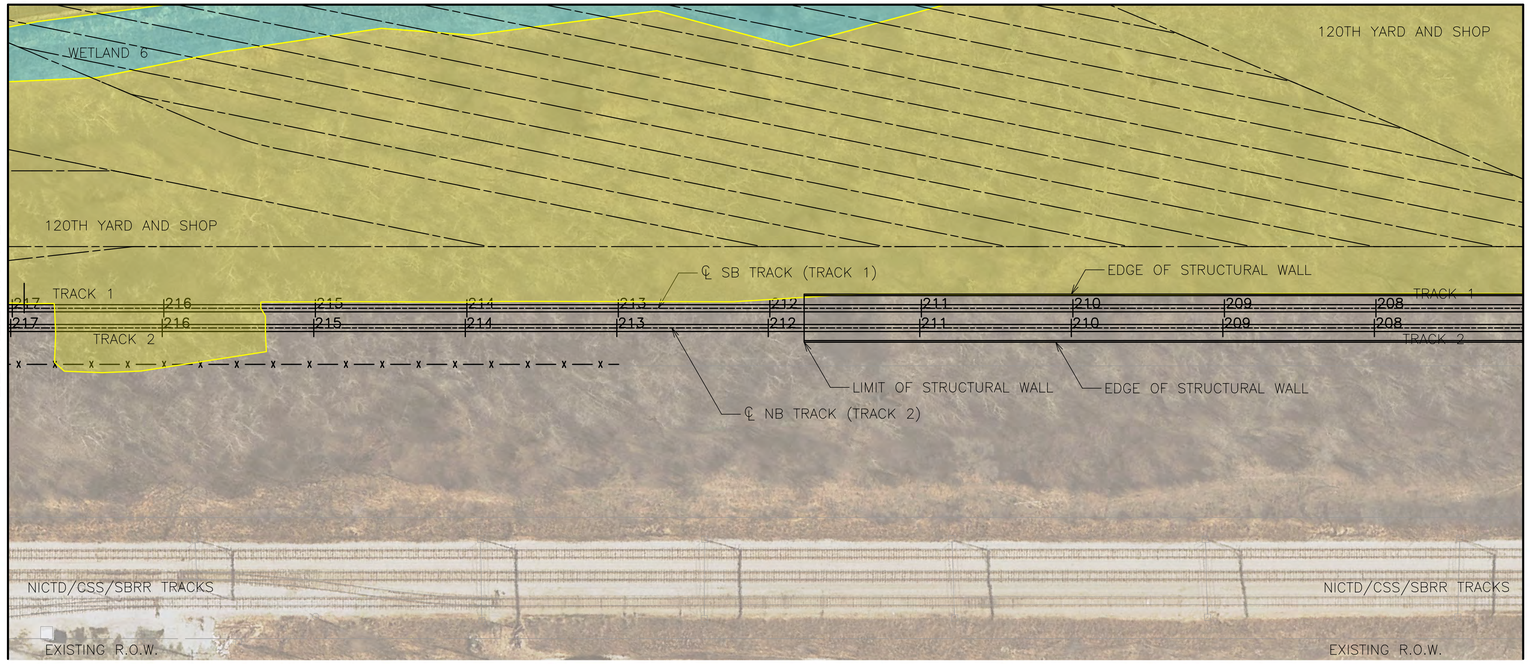

MATCHLINE 207+00.00
SEE SHEET CT-1021

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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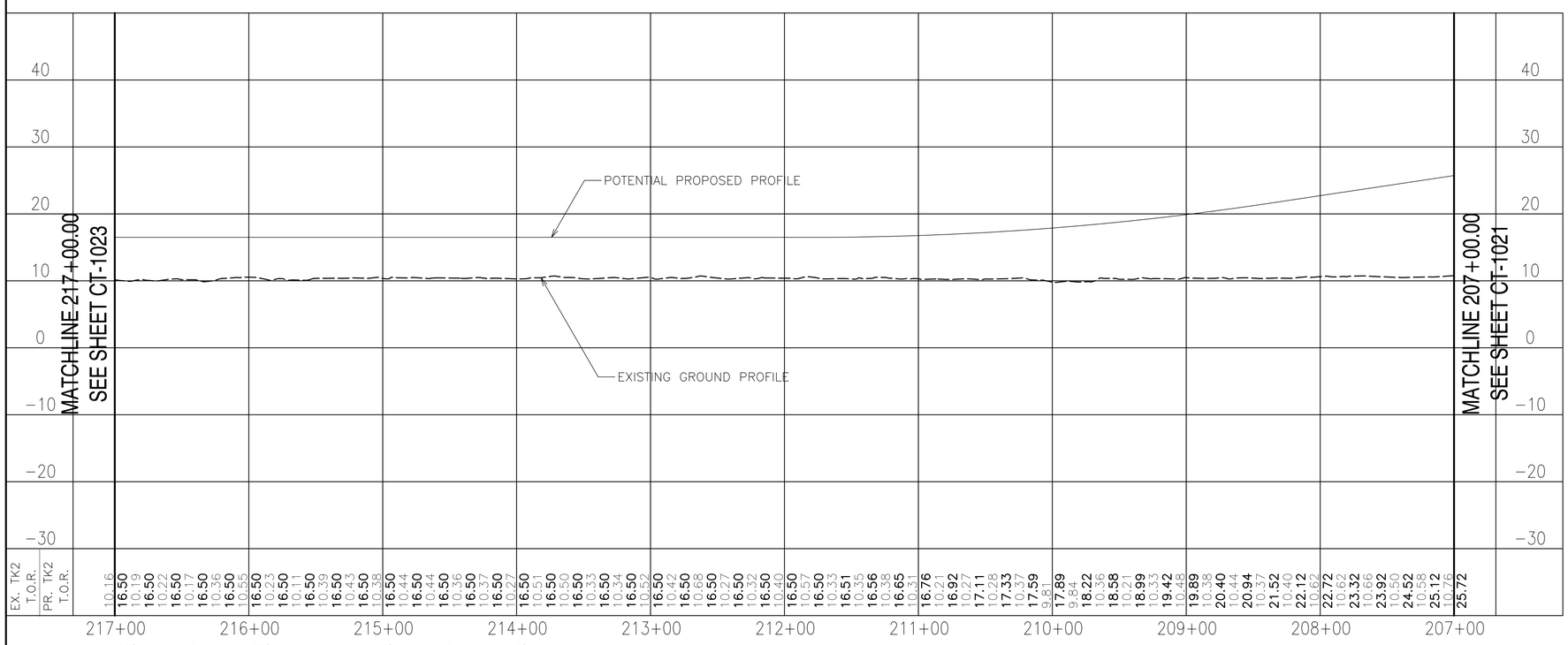

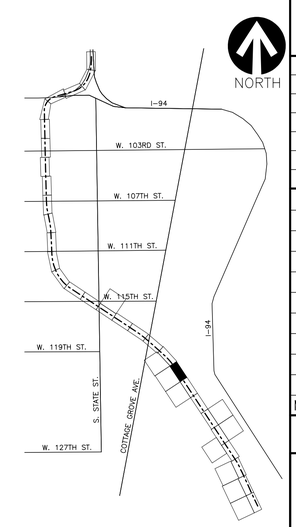

NOT FOR CONSTRUCTION

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1022

051_DRXROW_CT-1022.dgn

PLOTTED ON: 4/6/2022 12:15:13 PM

MATCHLINE F-F
SEE SHEET CT-1034

MATCHLINE 227+00.00
SEE SHEET CT-1024

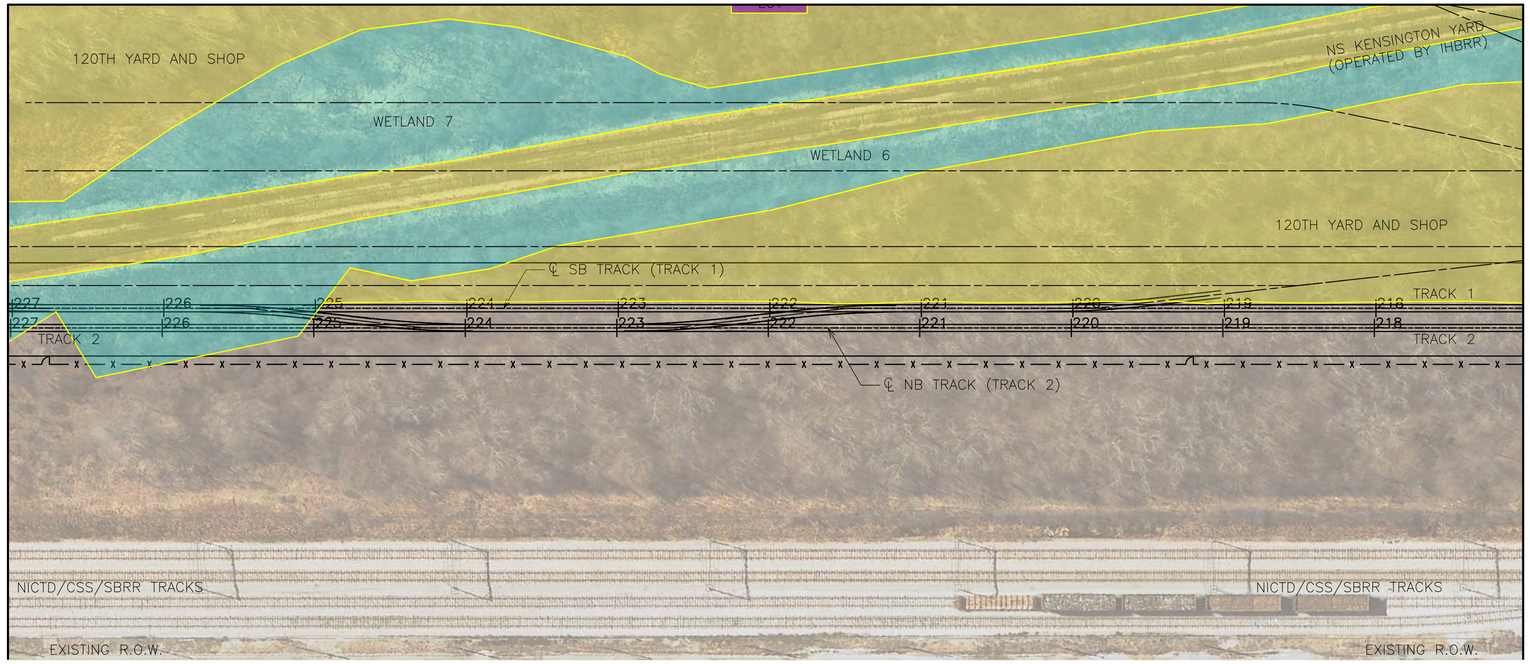

MATCHLINE 217+00.00
SEE SHEET CT-1022

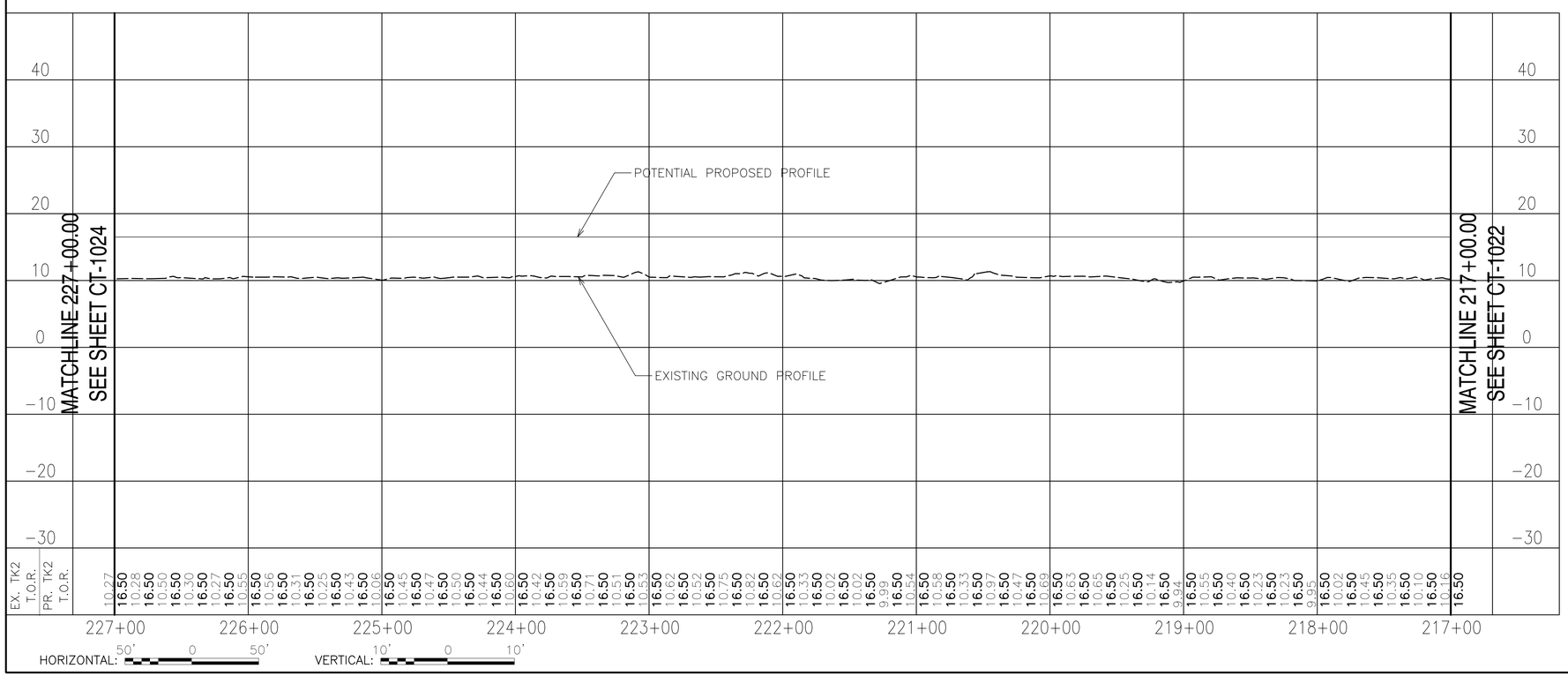

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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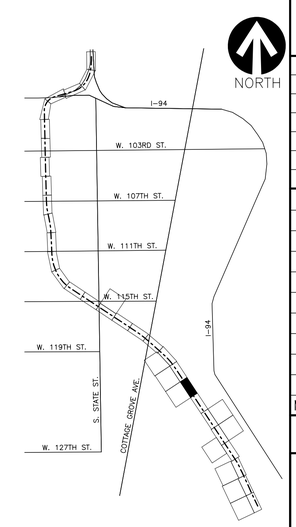

NOT FOR CONSTRUCTION

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1023

051_DRXROW_CT-1023.dgn

PLOTTED ON: 4/6/2022 12:54:33 PM

MATCHLINE H-H
SEE SHEET CT-1035

MATCHLINE 237+00.00
SEE SHEET CT-1025

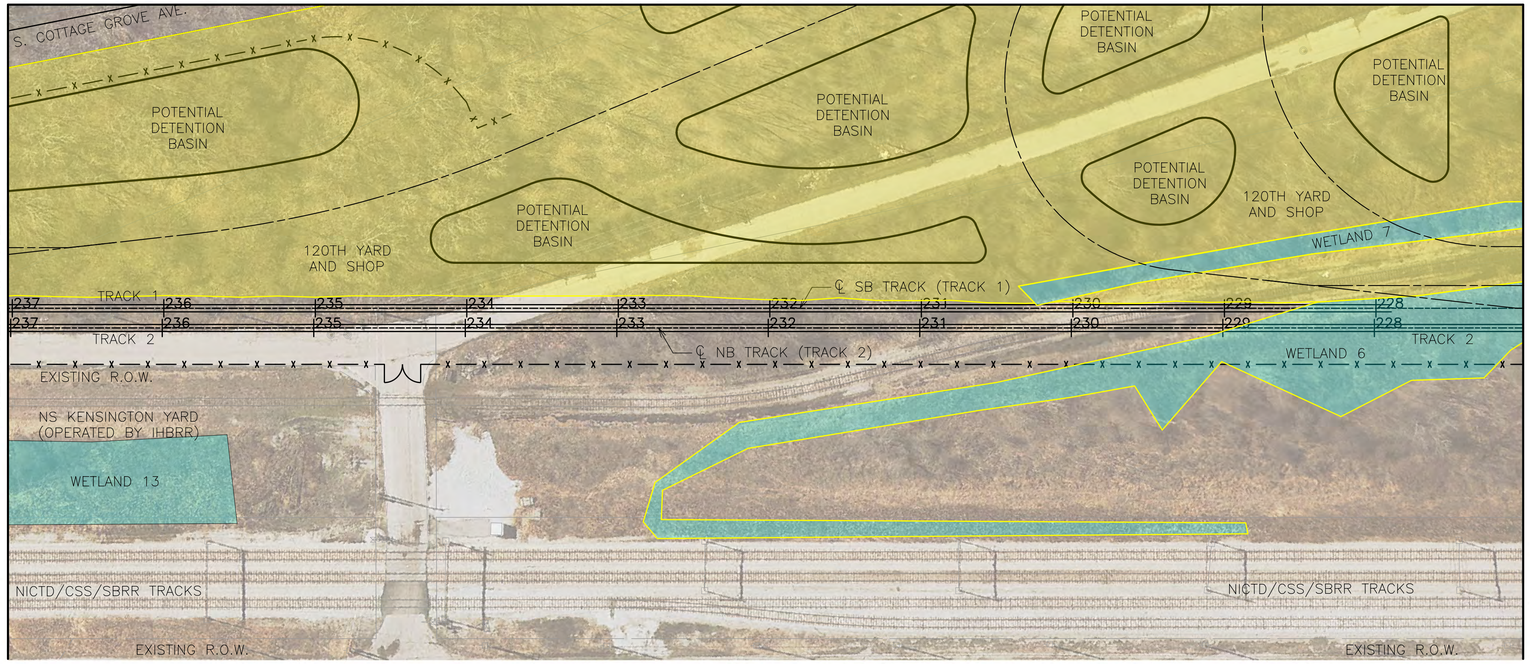

MATCHLINE 227+00.00
SEE SHEET CT-1023

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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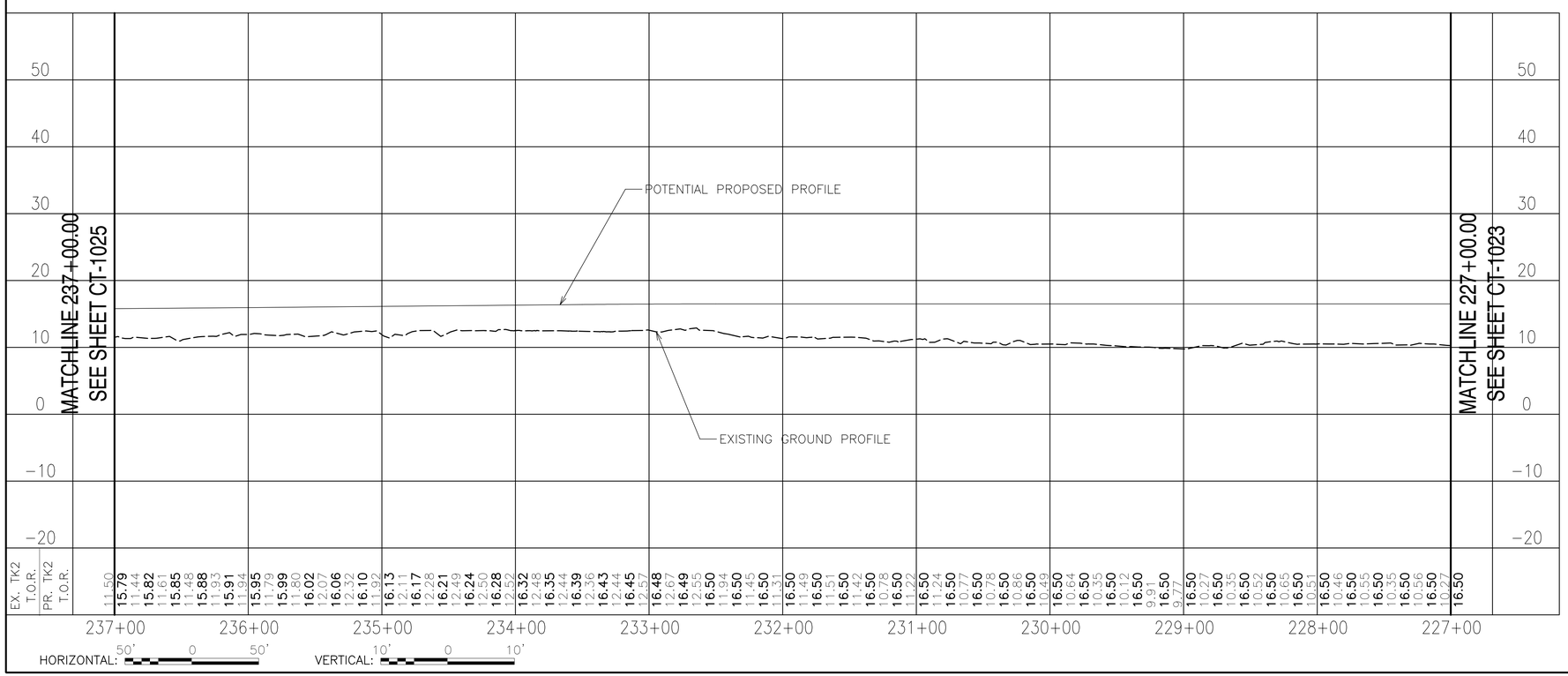

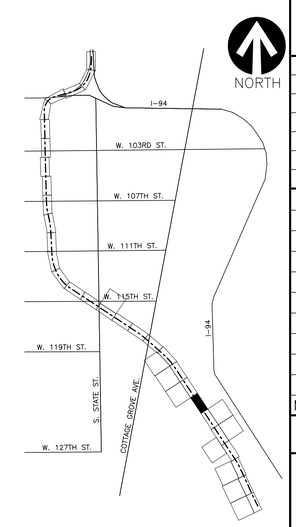

NOT FOR CONSTRUCTION

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1024

051_DRXROW_CT-1024.dgn

PLOTTED ON: 4/6/2022 1:20:04 PM

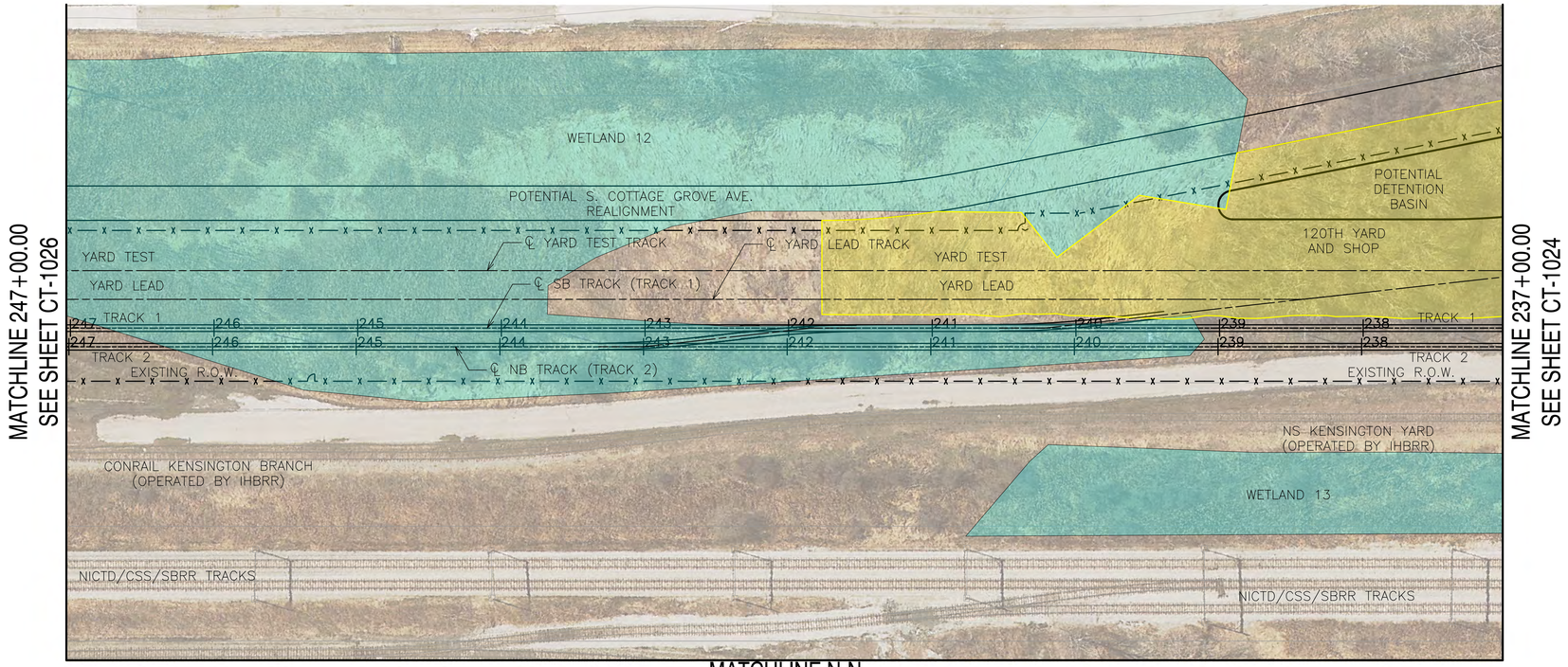

MATCHLINE N-N
SEE SHEET CT-1039

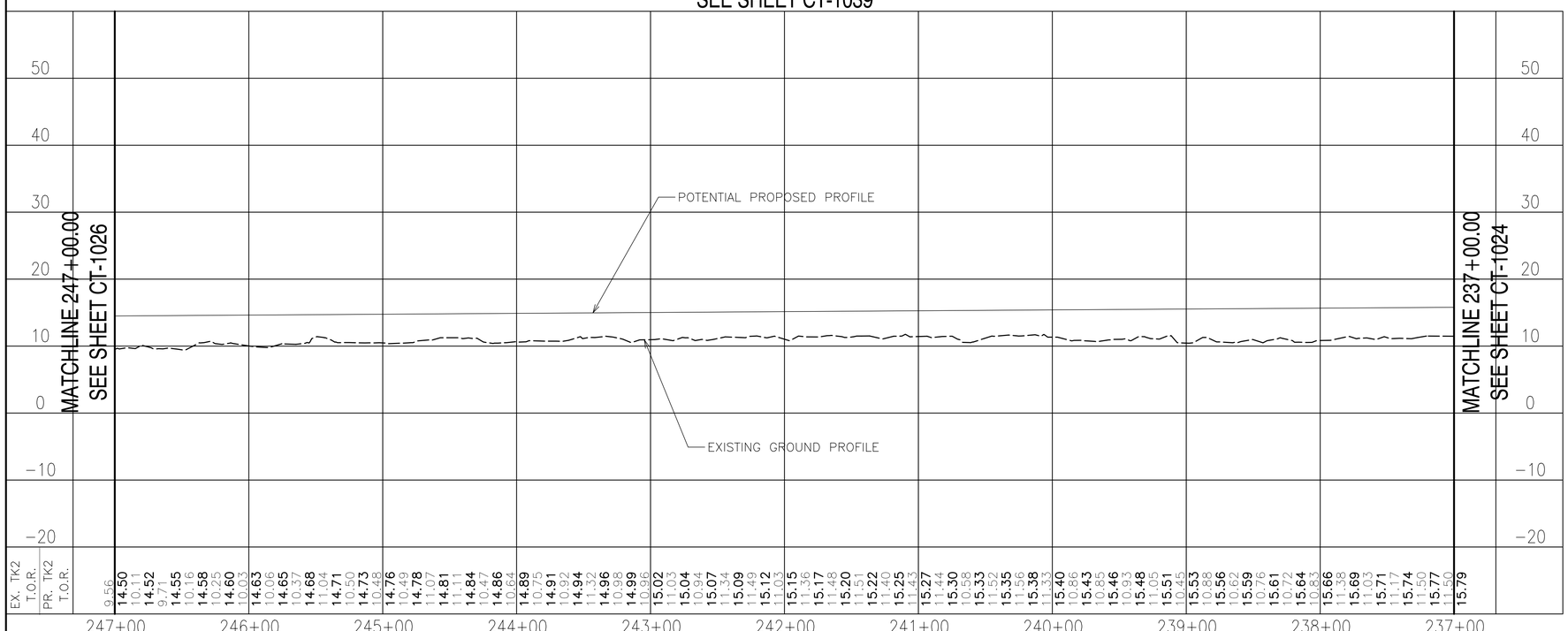

HORIZONTAL: 50' 0 50' VERTICAL: 10' 0 10'

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

GENERAL NOTES

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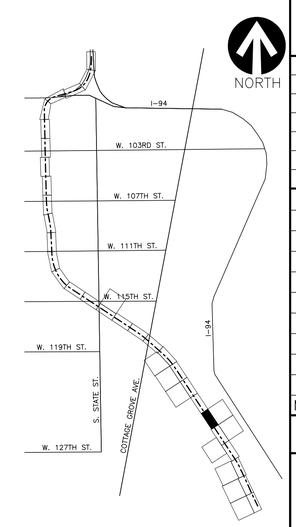

NOT FOR CONSTRUCTION

TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

CHICAGO TRANSIT AUTHORITY
ENGINEERING

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1025

051_DRXROW_CT-1025.dgn

PLOTTED ON: 4/6/2022 1:19:10 PM

MATCHLINE P-P
SEE SHEET CT-1041

MATCHLINE 257+00.00
SEE SHEET CT-1027

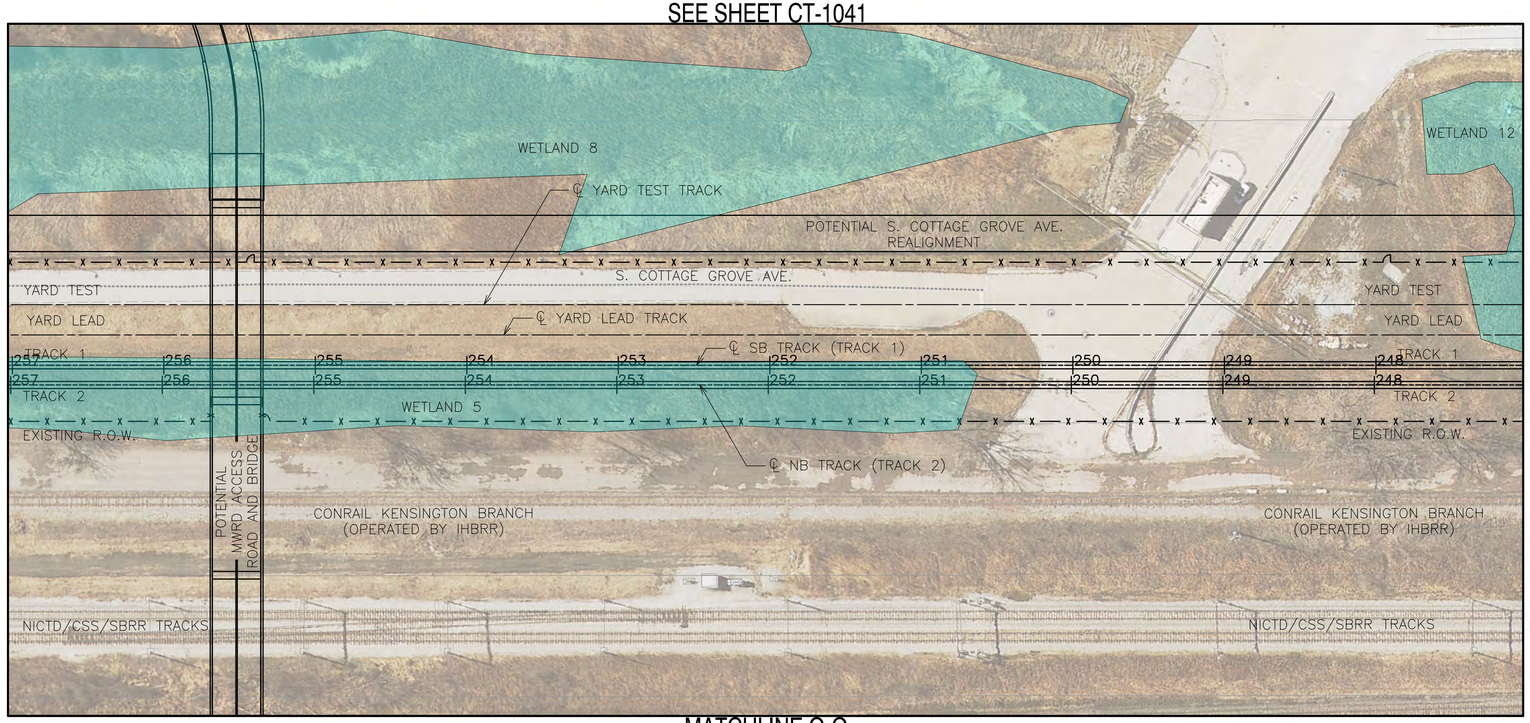

MATCHLINE 247+00.00
SEE SHEET CT-1025

MATCHLINE O-O
SEE SHEET CT-1040

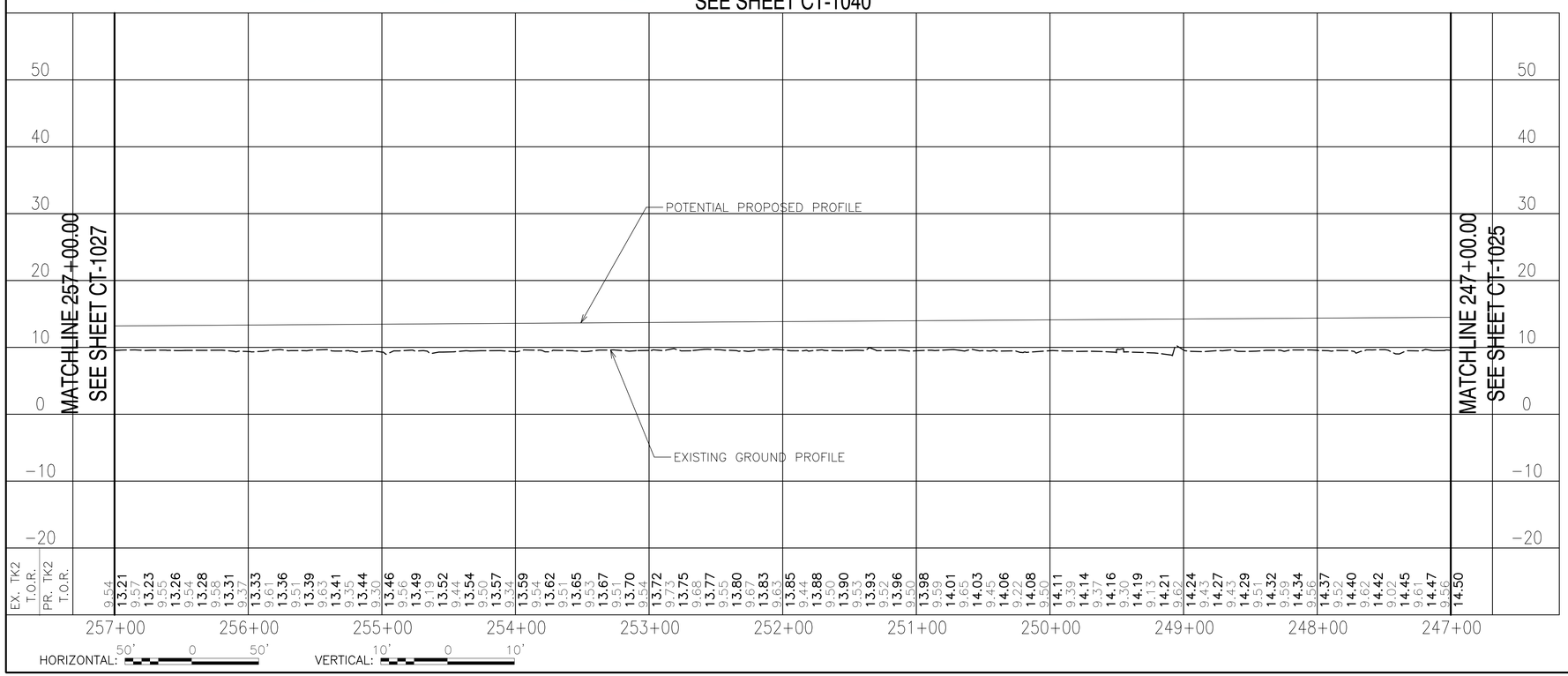

HORIZONTAL: 50' 0 50' VERTICAL: 10' 0 10'

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

GENERAL NOTES

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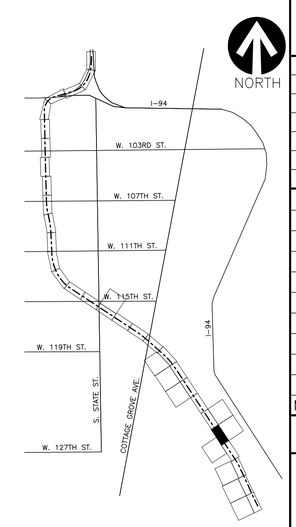

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1026

051_DRXROW_CT-1026.dgn

PLOTTED ON: 4/6/2022 1:18:06 PM

MATCHLINE P-P
SEE SHEET CT-1041

MATCHLINE 267+00.00
SEE SHEET CT-1028

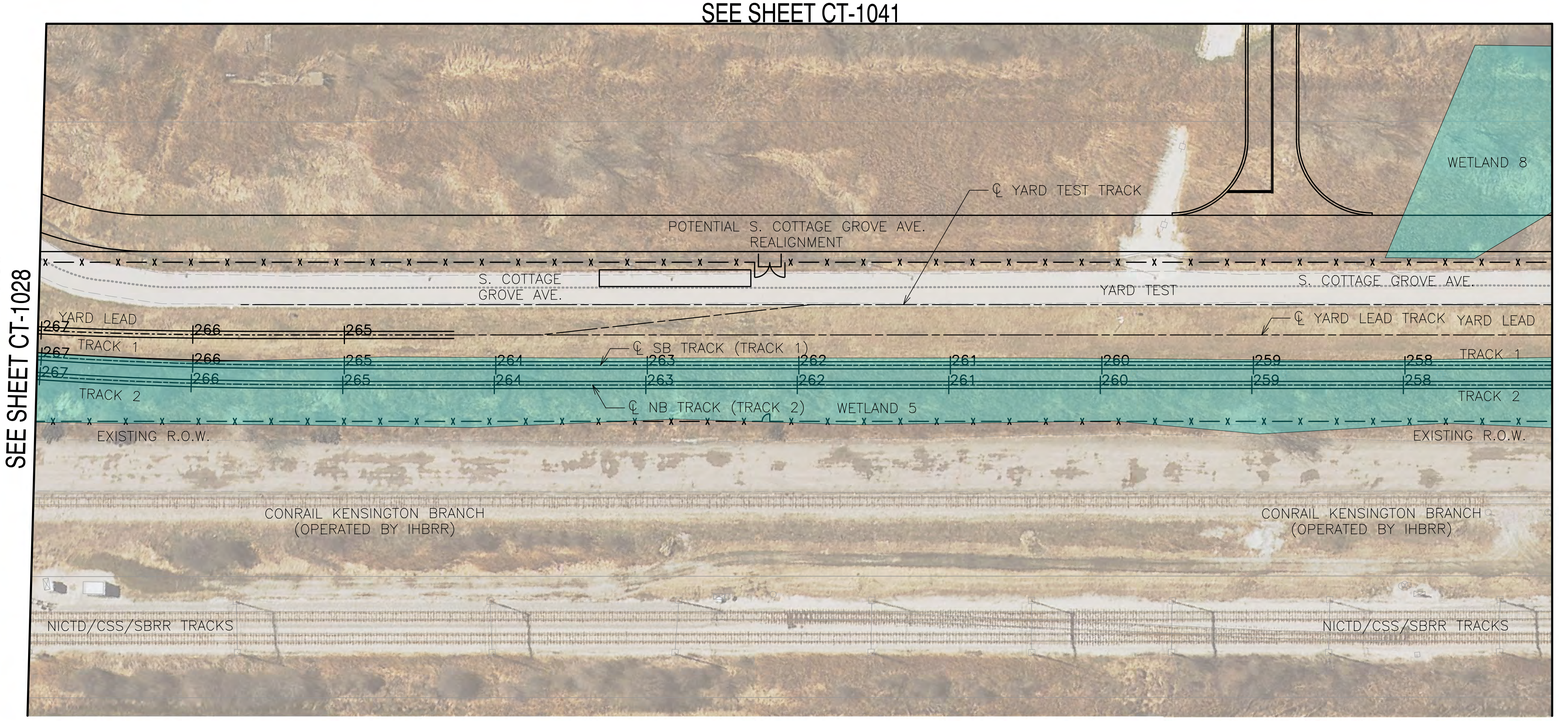

MATCHLINE 257+00.00
SEE SHEET CT-1026

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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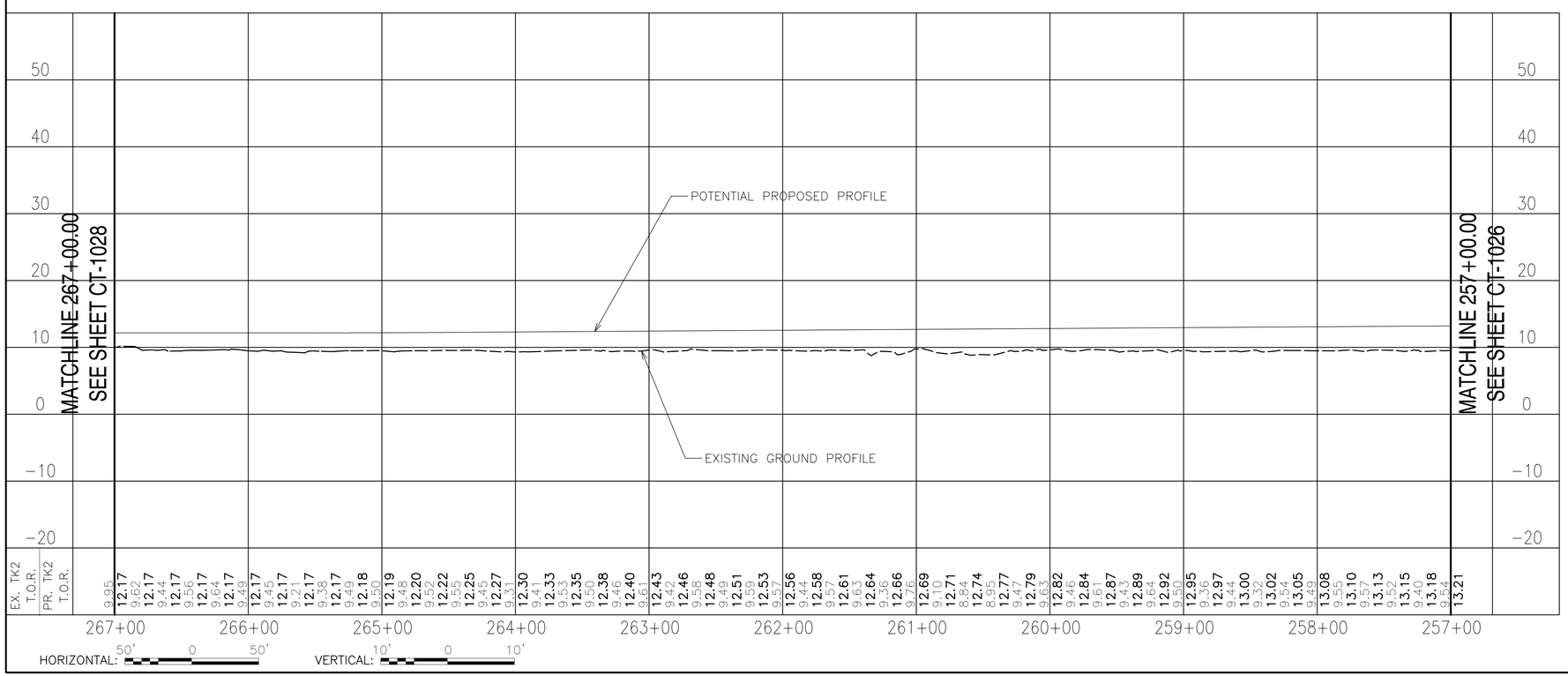

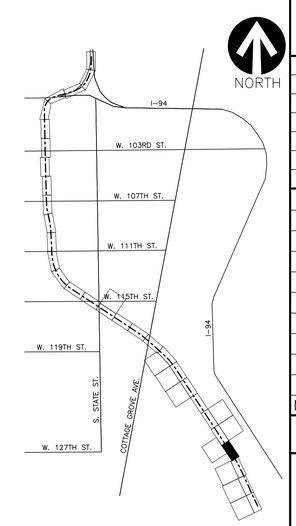

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CHICAGO, IL 60606
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CHICAGO TRANSIT AUTHORITY
ENGINEERING

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1027

051_DRXROW_CT-1027.dgn

PLOTTED ON: 4/6/2022 1:16:50 PM

MATCHLINE I-I
SEE SHEET CT-1036

MATCHLINE 277+00.00
SEE SHEET CT-1029

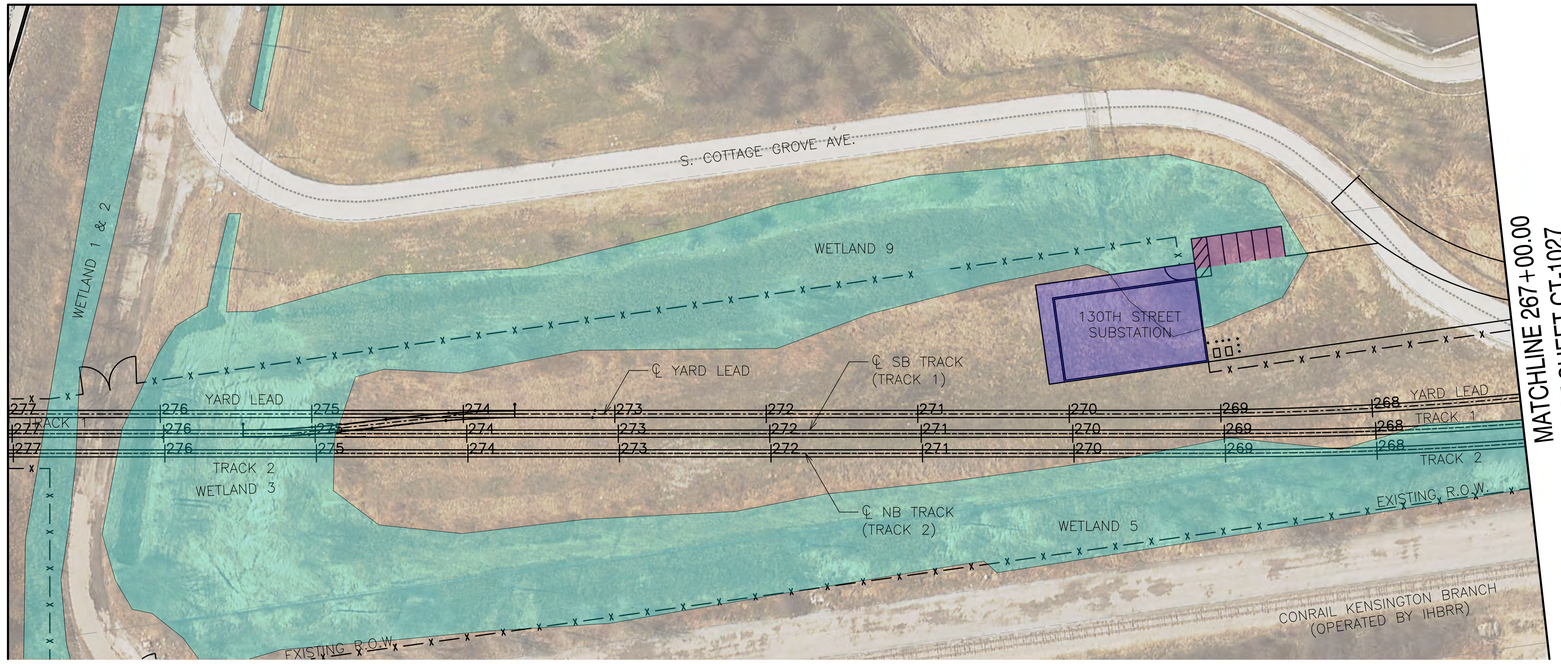

MATCHLINE 267+00.00
SEE SHEET CT-1027

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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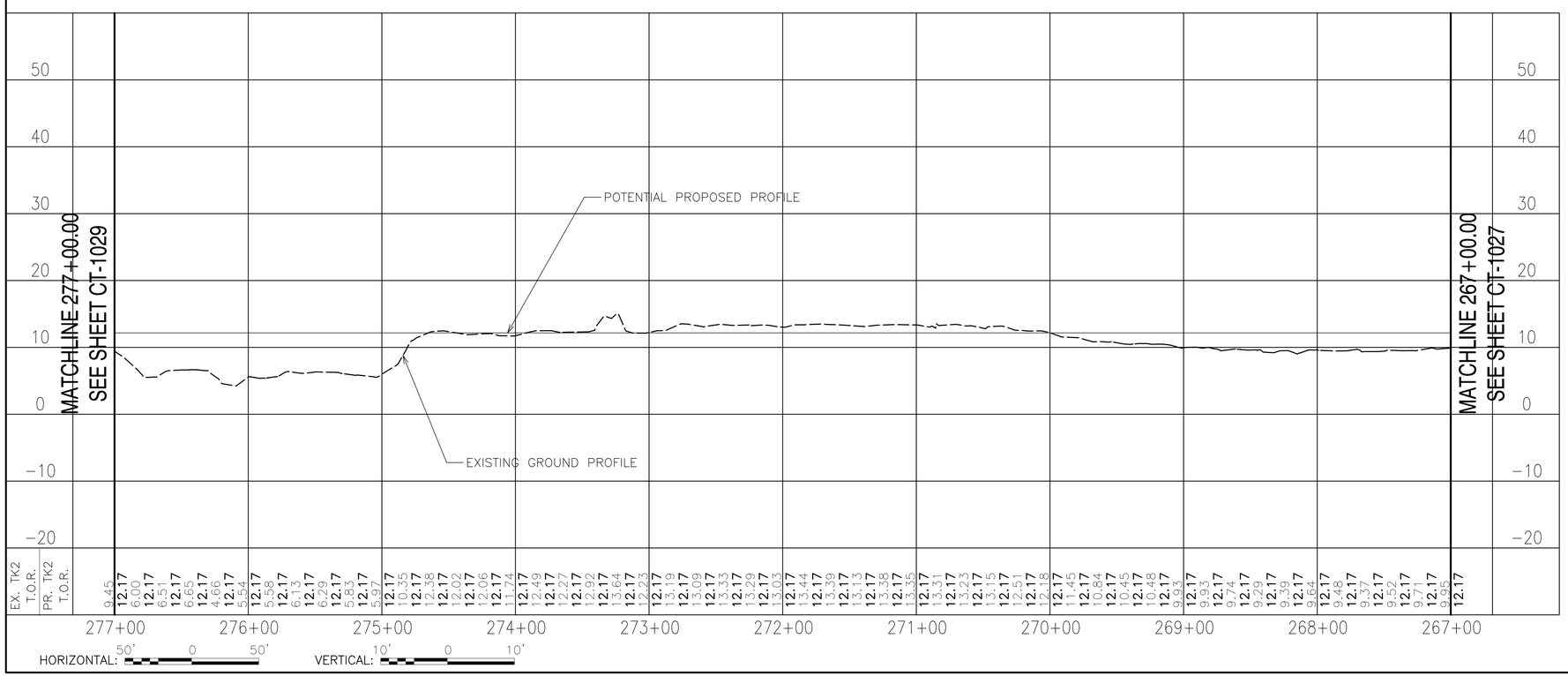

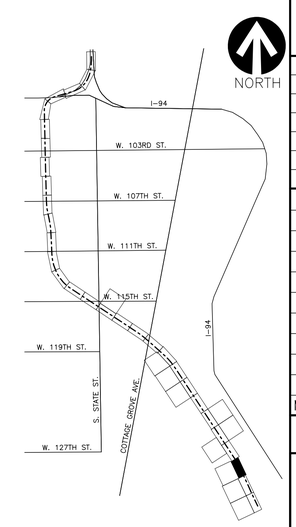

NOT FOR CONSTRUCTION

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CHICAGO, IL 60606
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CHICAGO TRANSIT AUTHORITY
ENGINEERING

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1028

051_DRXROW_CT-1028.dgn

PLOTTED ON: 4/6/2022 1:23:29 PM

MATCHLINE K-K
SEE SHEET CT-1037

MATCHLINE 287+00.00
SEE SHEET CT-1030

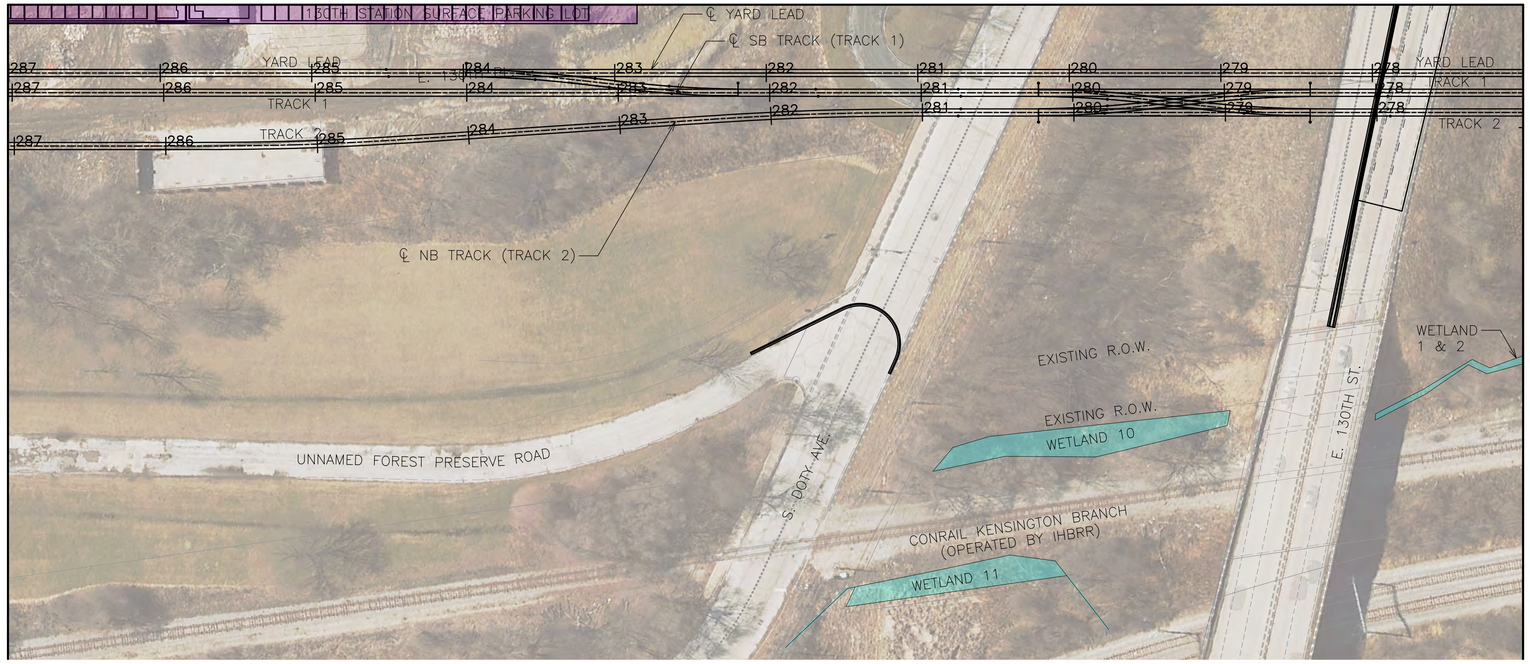

MATCHLINE 277+00.00
SEE SHEET CT-1028

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

GENERAL NOTES

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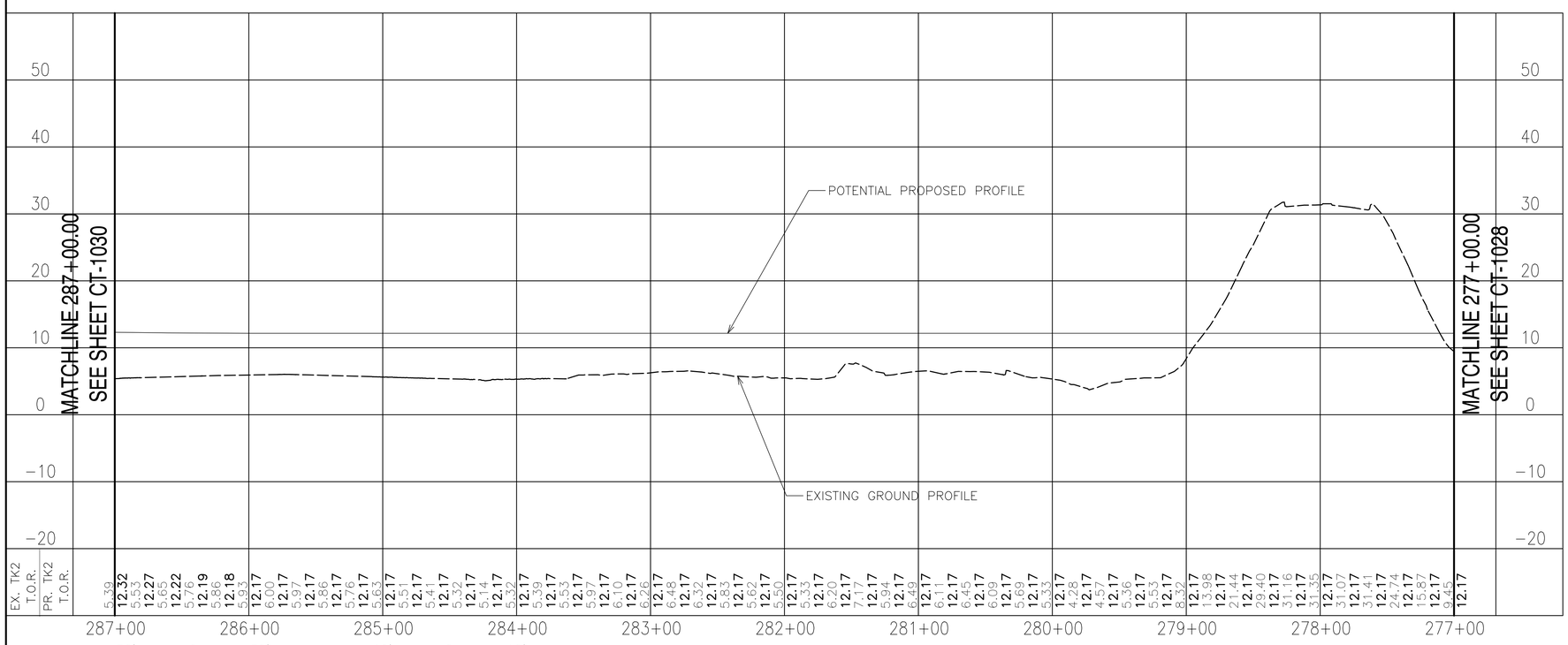

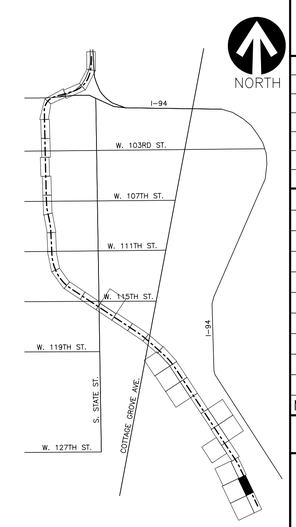

NOT FOR CONSTRUCTION

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SUITE 1400
CHICAGO, IL 60606
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ENGINEERING

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1029

051_DRXROW_CT-1029.dgn

PLOTTED ON: 4/6/2022 1:27:45 PM

MATCHLINE M-M
SEE SHEET CT-1038

MATCHLINE 287+00.00
SEE SHEET CT-1029

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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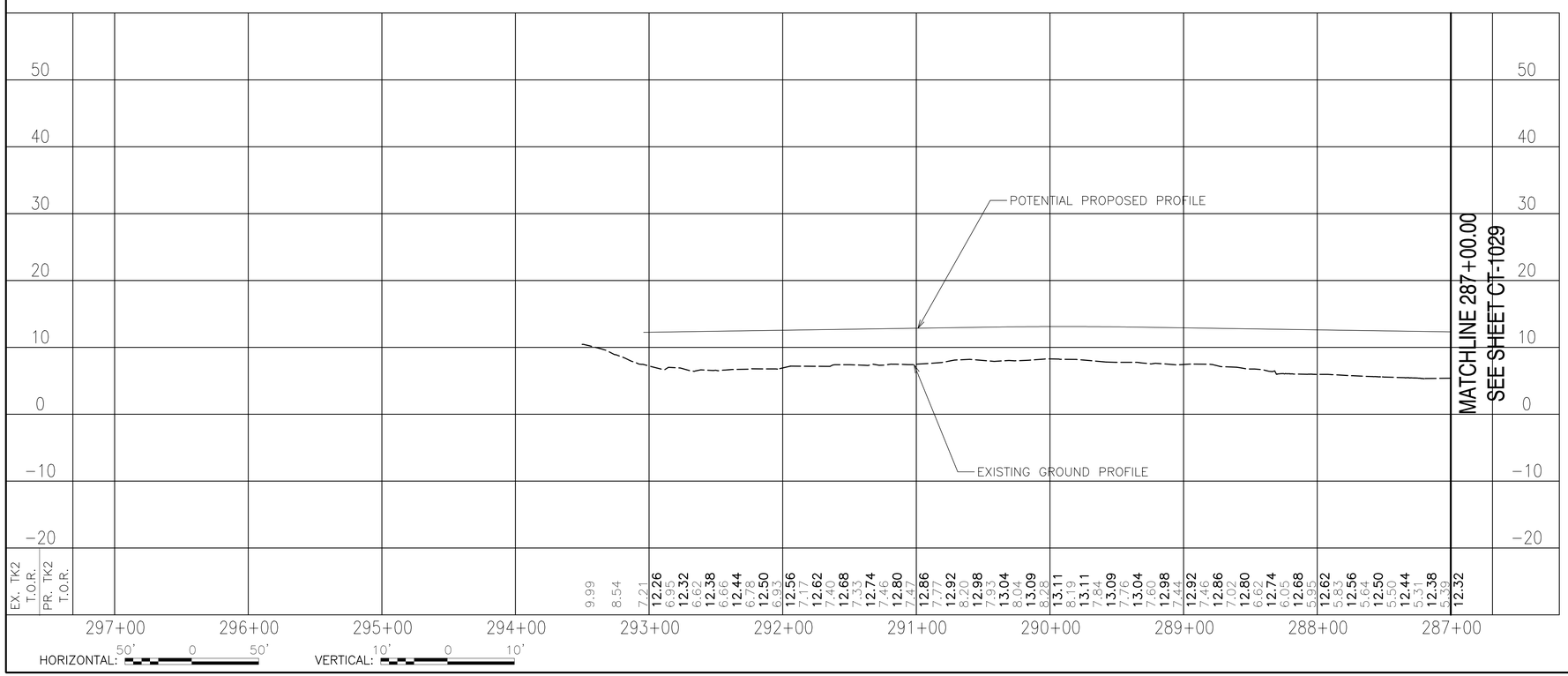

MATCHLINE 287+00.00
SEE SHEET CT-1029

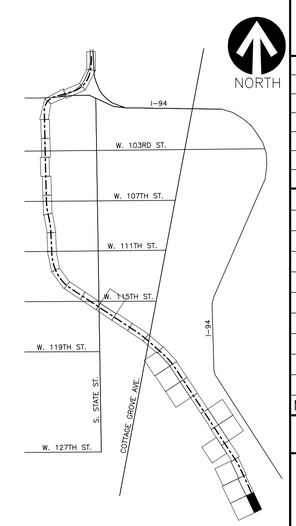

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200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

CHICAGO TRANSIT AUTHORITY
ENGINEERING

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1030

051_DRXROW_CT-1030.dgn

MATCHLINE A-A
SEE SHEET CT-1017

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

GENERAL NOTES

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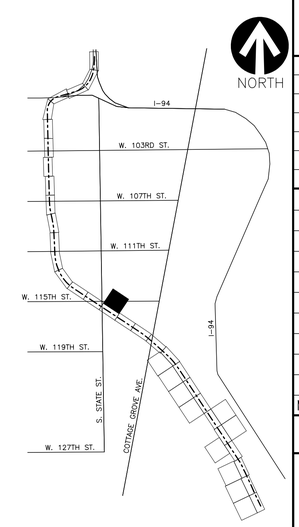

NOT FOR CONSTRUCTION

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1031

PLOTTED ON: 4/6/2022 1:30:02 PM
051_DRXROW_CT-1031_new.dgn

PLOTTED ON: 4/8/2022 1:46:04 PM

MATCHLINE C-C
SEE SHEET CT-1033

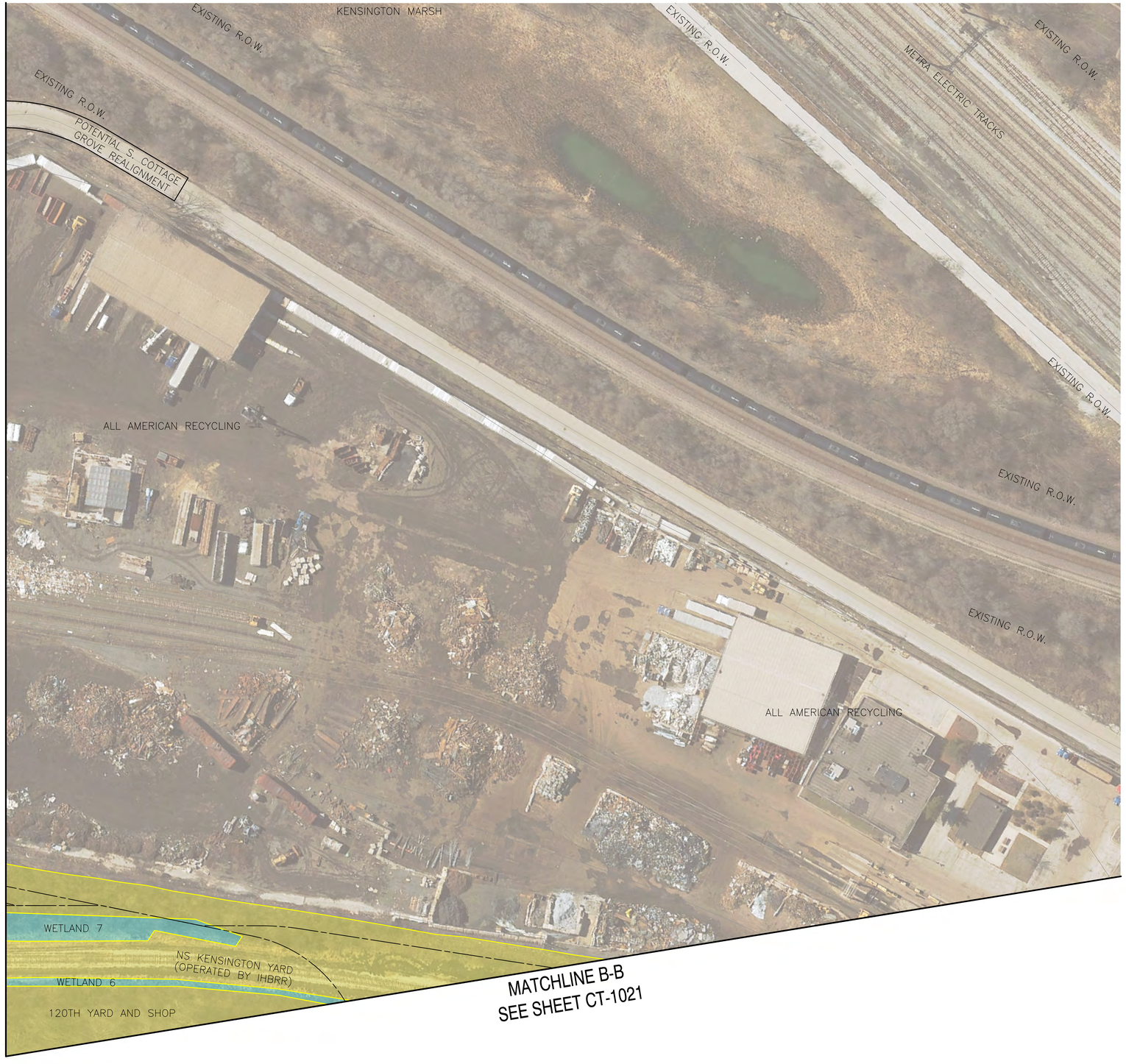

MATCHLINE B-B
SEE SHEET CT-1021

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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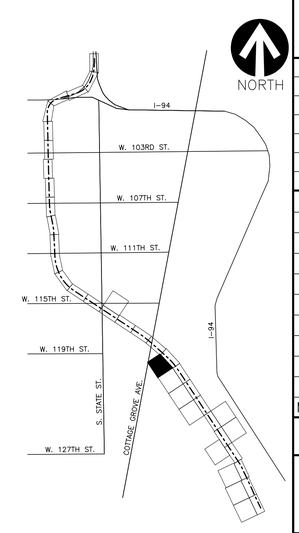

NOT FOR CONSTRUCTION

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1032

051_DRXROW_CT-1032_new.dgn

PLOTTED ON: 4/8/2022 1:48:23 PM

MATCHLINE E-E
SEE SHEET CT-1034

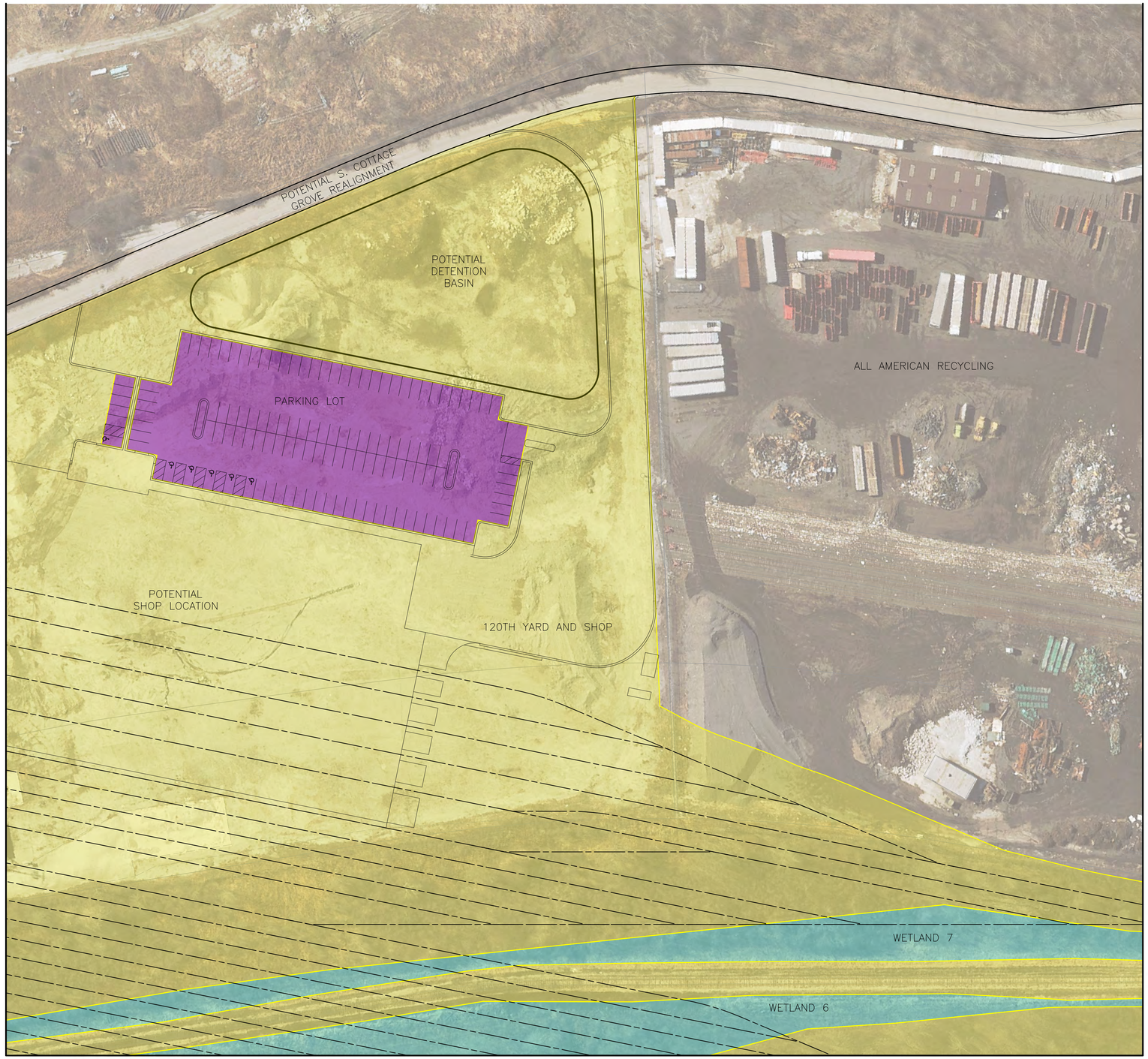

MATCHLINE C-C
SEE SHEET CT-1032

MATCHLINE D-D
SEE SHEET CT-1022

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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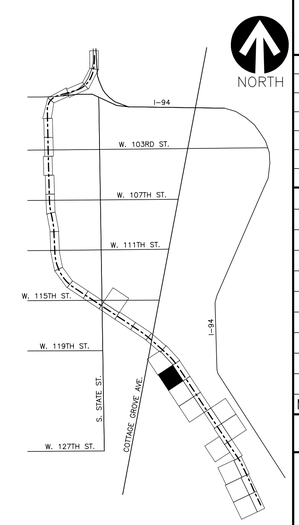

NOT FOR CONSTRUCTION

TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

CHICAGO TRANSIT AUTHORITY
ENGINEERING

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1033

051_DRXROW_CT-1033_new.dgn

PLOTTED ON: 4/7/2022 3:18:04 PM

MATCHLINE G-G
SEE SHEET CT-1035

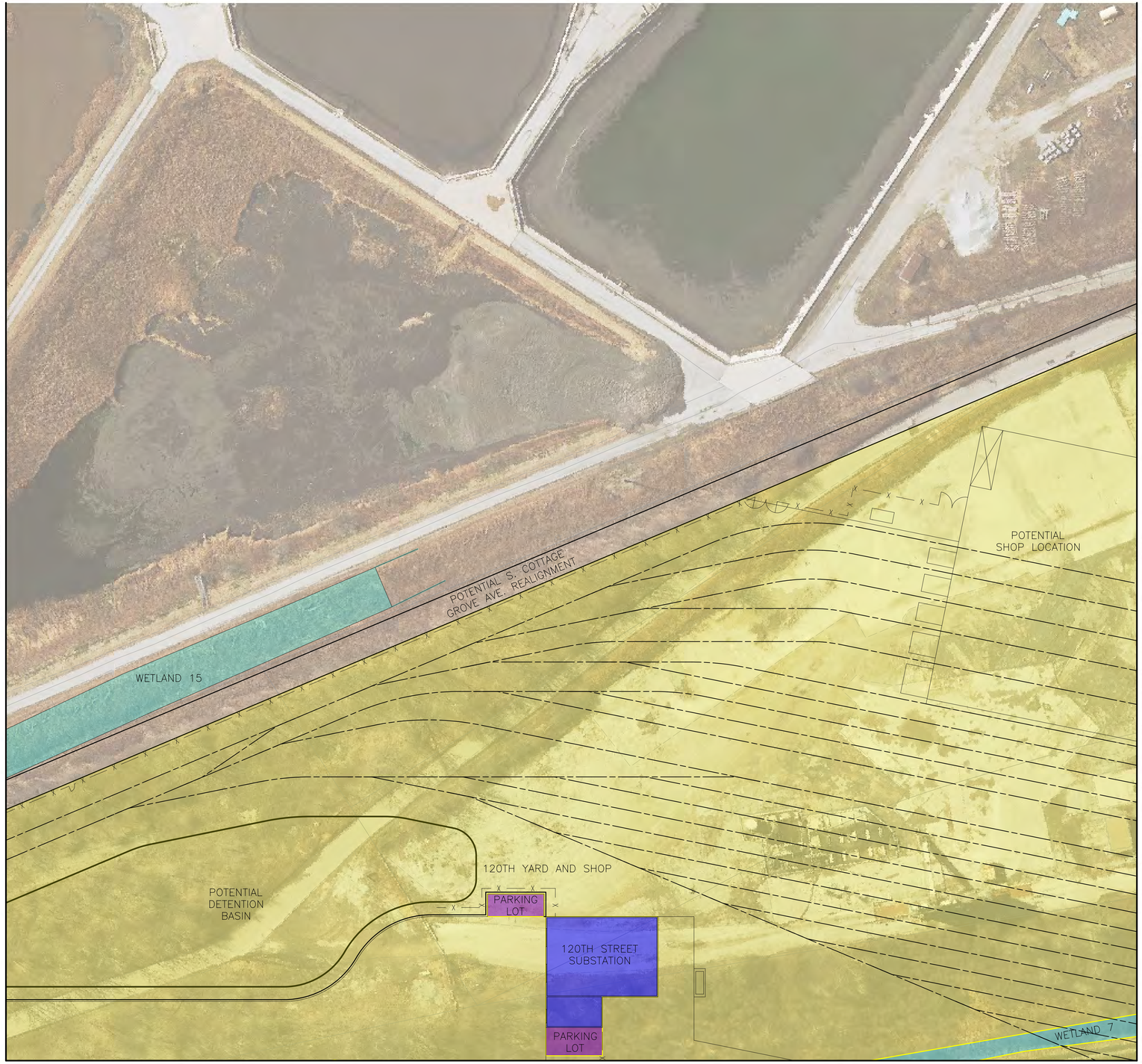

MATCHLINE E-E
SEE SHEET CT-1033

MATCHLINE F-F
SEE SHEET CT-1023

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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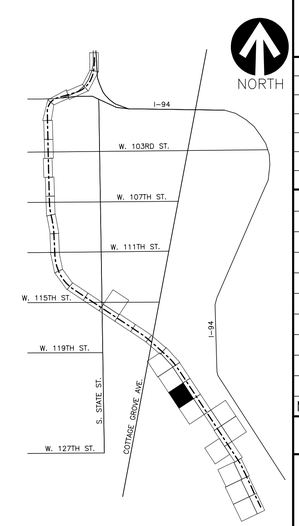

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1034

051_DRXROW_CT-1034_new.dgn

PLOTTED ON: 4/7/2022 3:26:30 PM

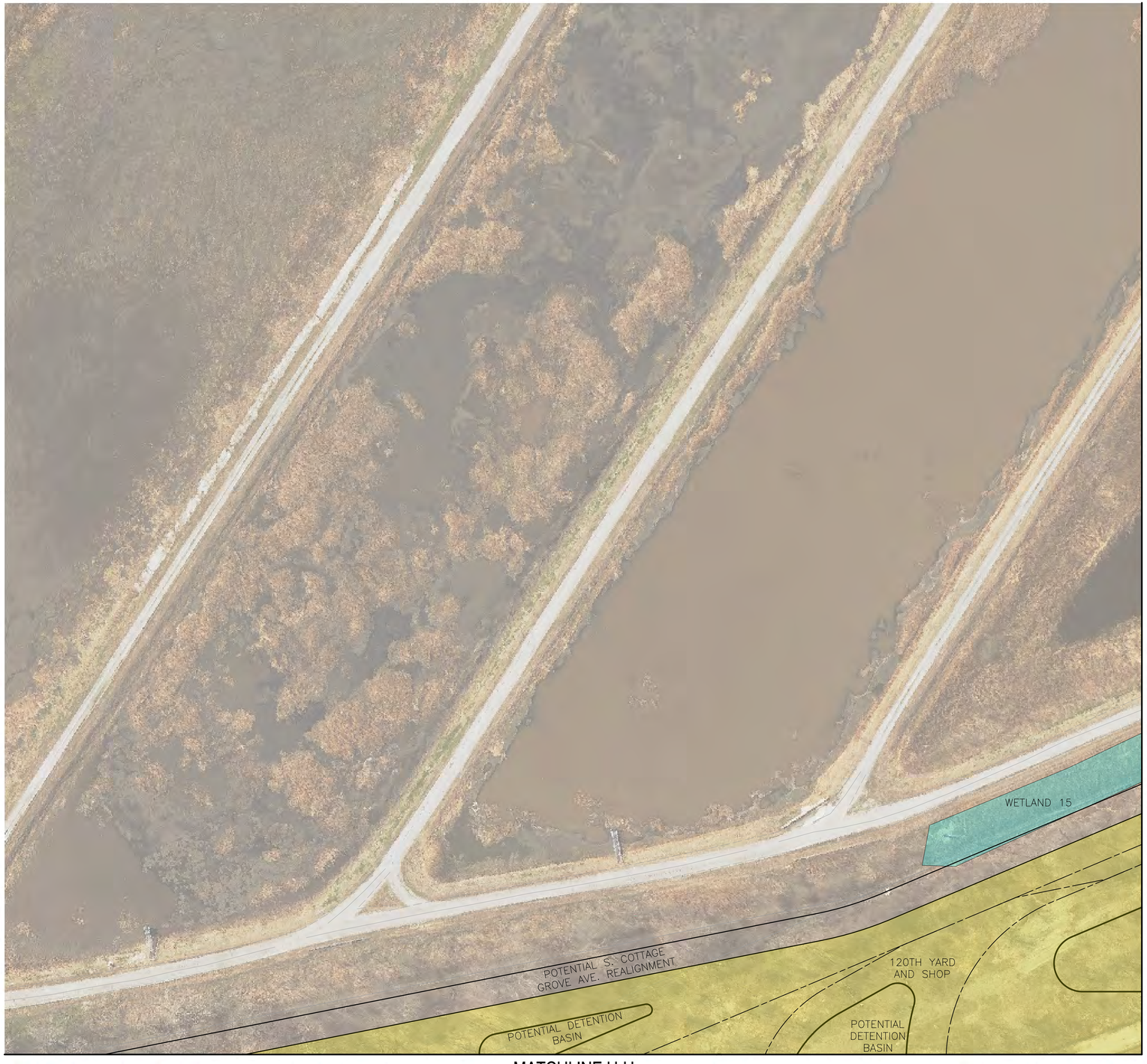

MATCHLINE G-G
SEE SHEET CT-1034

MATCHLINE H-H
SEE SHEET CT-1024

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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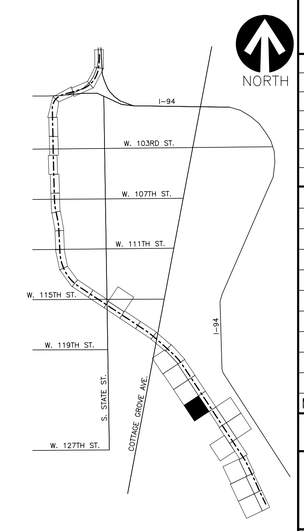

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1035

051_DRXROW_CT-1035_new.dgn

PLOTTED ON: 4/6/2022 4:32:52 PM

MATCHLINE J-J
SEE SHEET CT-1037

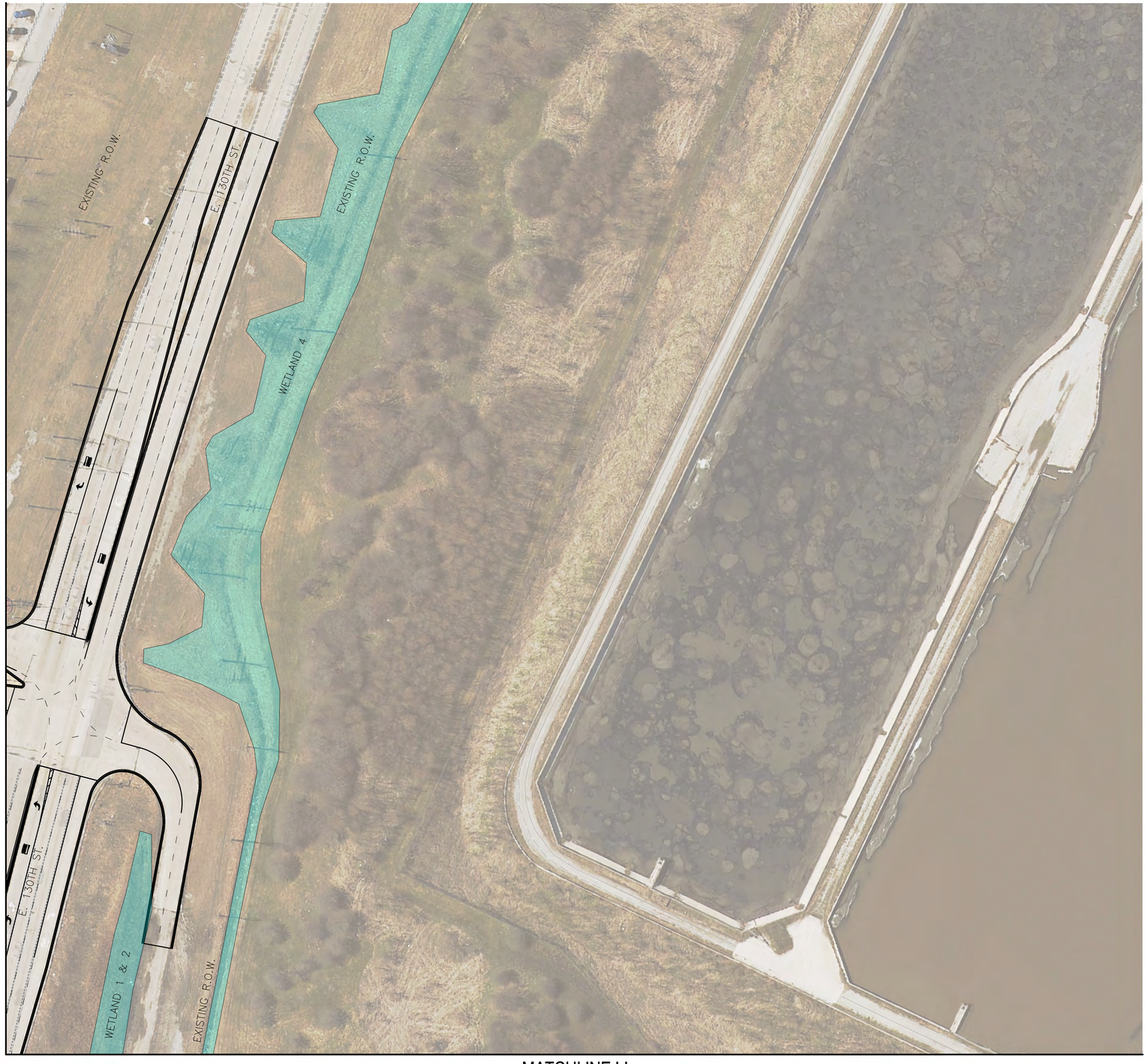

MATCHLINE I-I
SEE SHEET CT-1028

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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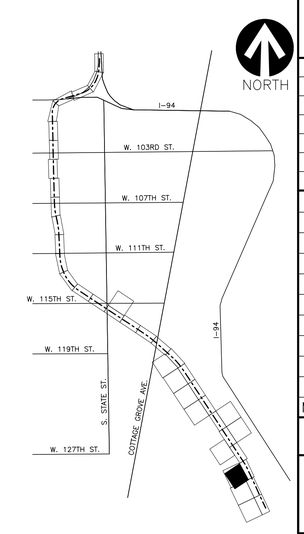

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1036

051_DRXROW_CT-1036_new.dgn

PLOTTED ON: 6/2/2022 1:05:39 PM

MATCHLINE L-L
SEE SHEET CT-1038

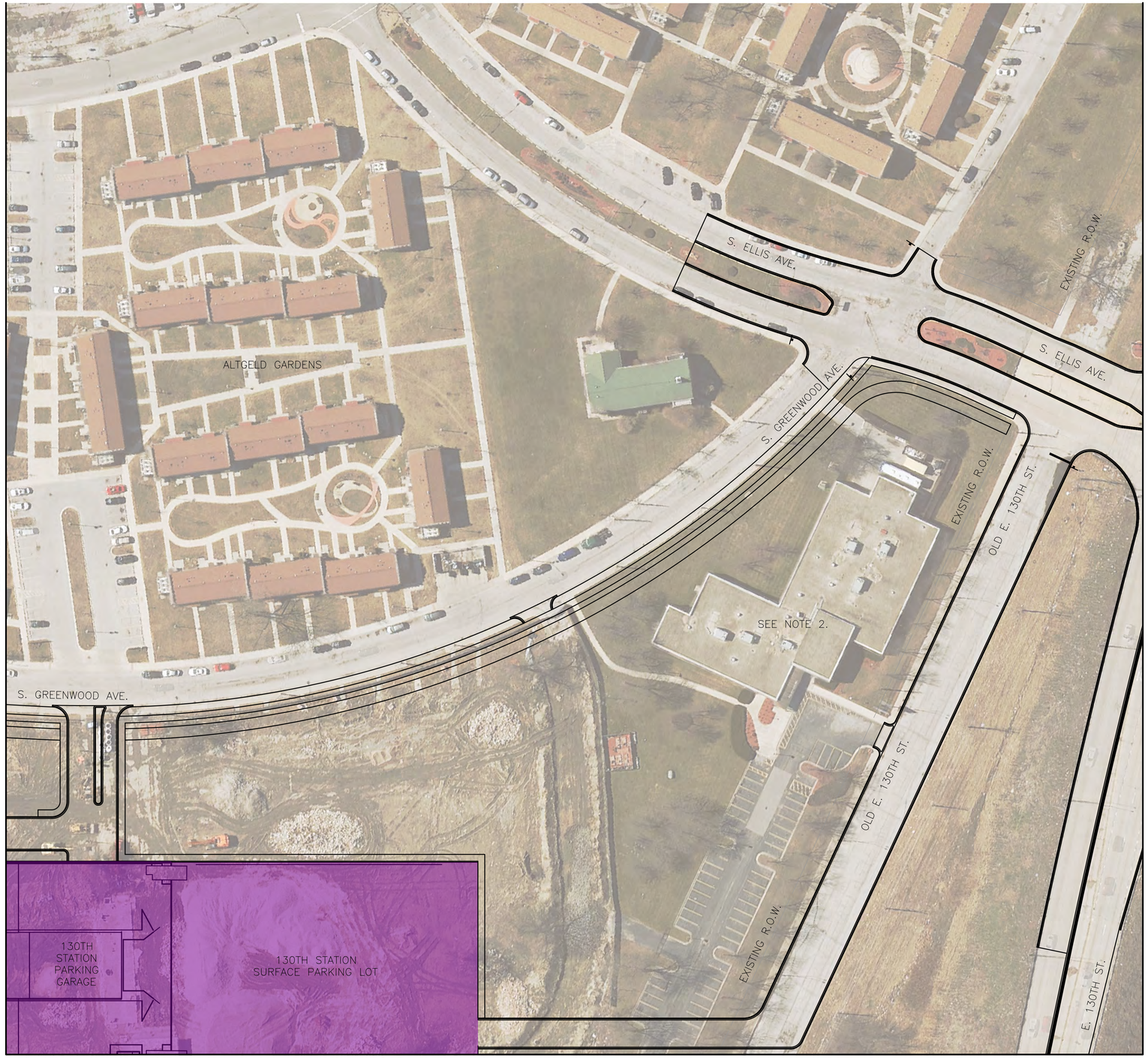

MATCHLINE J-J
SEE SHEET CT-1036

MATCHLINE K-K
SEE SHEET CT-1029

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

GENERAL NOTES

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2. CTA WILL CONTINUE TO COORDINATE WITH TCA HEALTH TO MAINTAIN ACCESS TO THE TCA HEALTH PARKING LOT AND REPLACE PARKING SPACE IMPACTS, IF ANY, AT A RATIO OF 1 TO 1 IN THE FINAL DESIGN OF THE RLE PROJECT.

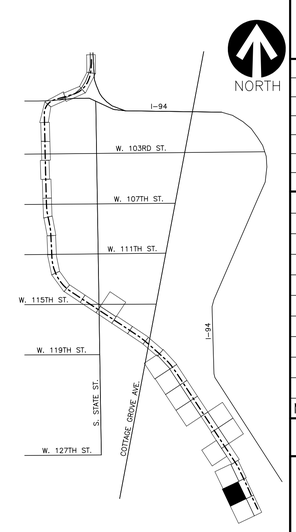

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1037

051_DRXROW_CT-1037_new.dgn

PLOTTED ON: 4/6/2022 4:58:51 PM

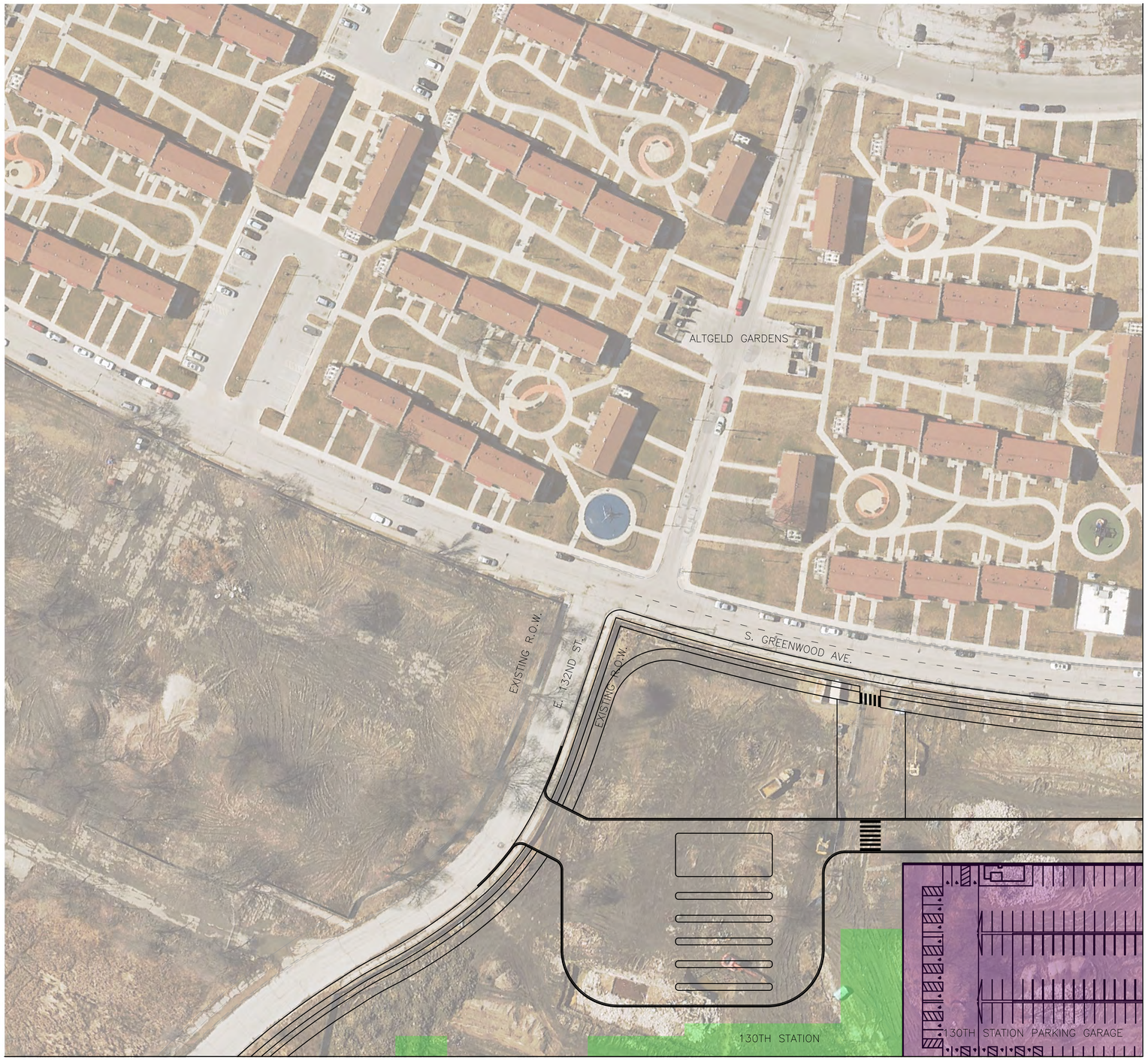

MATCHLINE M-M
SEE SHEET CT-1030

MATCHLINE L-L
SEE SHEET CT-1037

NORTH

50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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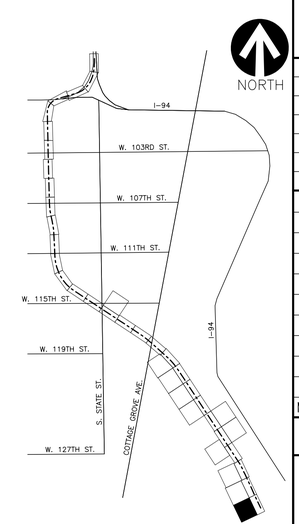

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1038

051_DRXROW_CT-1038_new.dgn

PLOTTED ON: 4/6/2022 5:00:19 PM

MATCHLINE N-N
SEE SHEET CT-1025

MATCHLINE Q-Q
SEE SHEET CT-1040

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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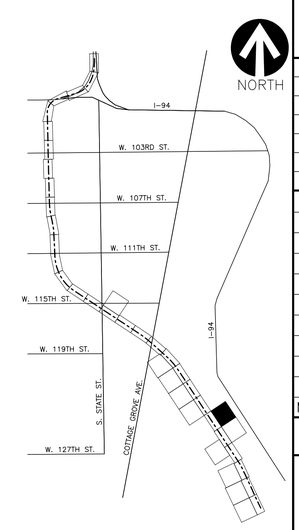

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: **DRXROW**

PLAN AND PROFILE

CT-1039

051_DRXROW_CT-1039_new.dgn

PLOTTED ON: 4/6/2022 5:02:09 PM

MATCHLINE O-O
SEE SHEET CT-1026

MATCHLINE Q-Q
SEE SHEET CT-1039

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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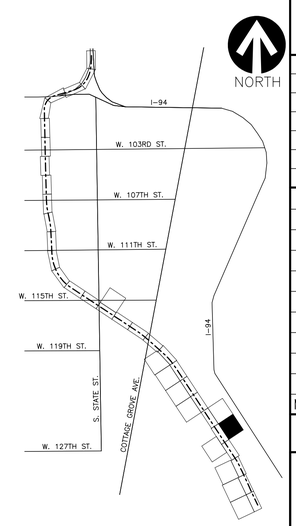

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1040

051_DRXROW_CT-1040_new.dgn

PLOTTED ON: 4/6/2022 5:03:23 PM

MATCHLINE P-P
SEE SHEET CT-1026 & CT-1027

NORTH
50' 0 50'

LEGEND

- STATION
- SUBSTATION
- YARD AND SHOP
- PARKING LOT
- PARKING MITIGATION
- WETLAND

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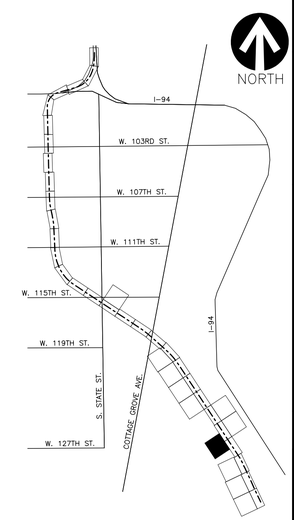

NOT FOR CONSTRUCTION

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RED LINE EXTENSION
PRELIMINARY ENGINEERING

IN CHARGE	PP
APPROVED BY	PP
CHECKED BY	DPS
DESIGNED BY	DPS
DRAWN BY	CRH
PROJECT NO	2014-0017.05
FILE NAME	FILE NAME

MARK	DATE	DESCRIPTION

LOCATION IDENTIFIER: DRXROW

PLAN AND PROFILE

CT-1041

051_DRXROW_CT-1041_new.dgn

Appendix F

Plans and Profiles

- Draft EIS Appendix F, Plans and Profiles, May 2015

DRAFT ENVIRONMENTAL IMPACT STATEMENT
CTA RED LINE EXTENSION
ALL ALTERNATIVES

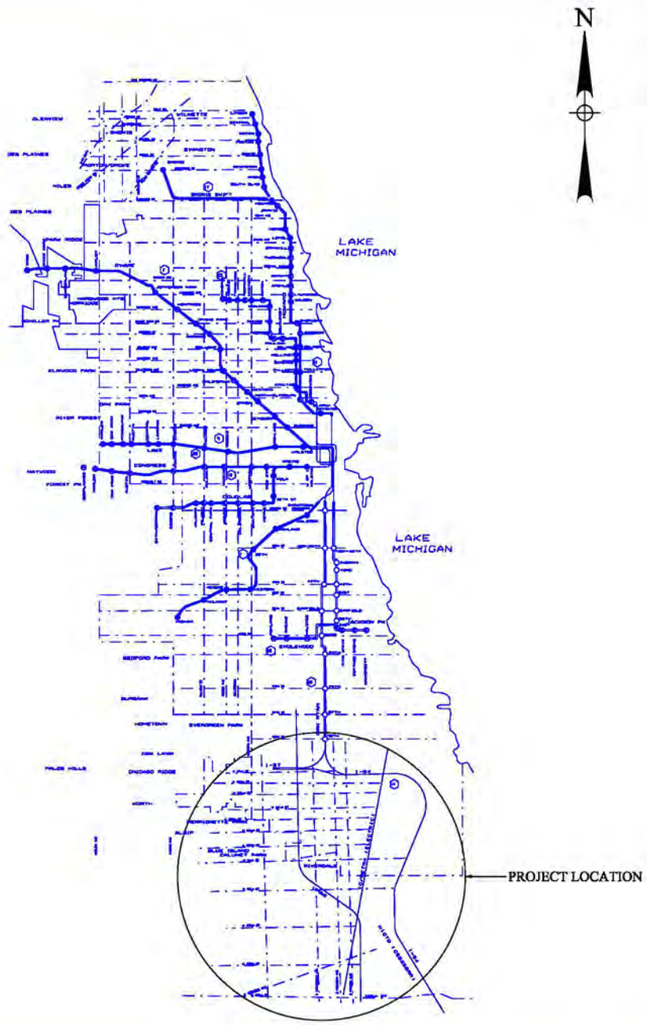

ORIENTATION MAP

INDEX

COVER SHEET	1
UNION PACIFIC RAILROAD ALTERNATIVE	
EAST OPTION	2 - 18
WEST OPTION	19 - 34
ALL ALTERNATIVES	
PIER LOCATIONS	35 - 43
SECTIONS	44 - 51

MAY 1, 2015

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
ALL ALTERNATIVES

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_G_COVER_TITLE.dgn

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:24:39 AM
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DRAFT ENVIRONMENTAL IMPACT STATEMENT
CTA RED LINE EXTENSION
UNION PACIFIC RAILROAD
EAST OPTION

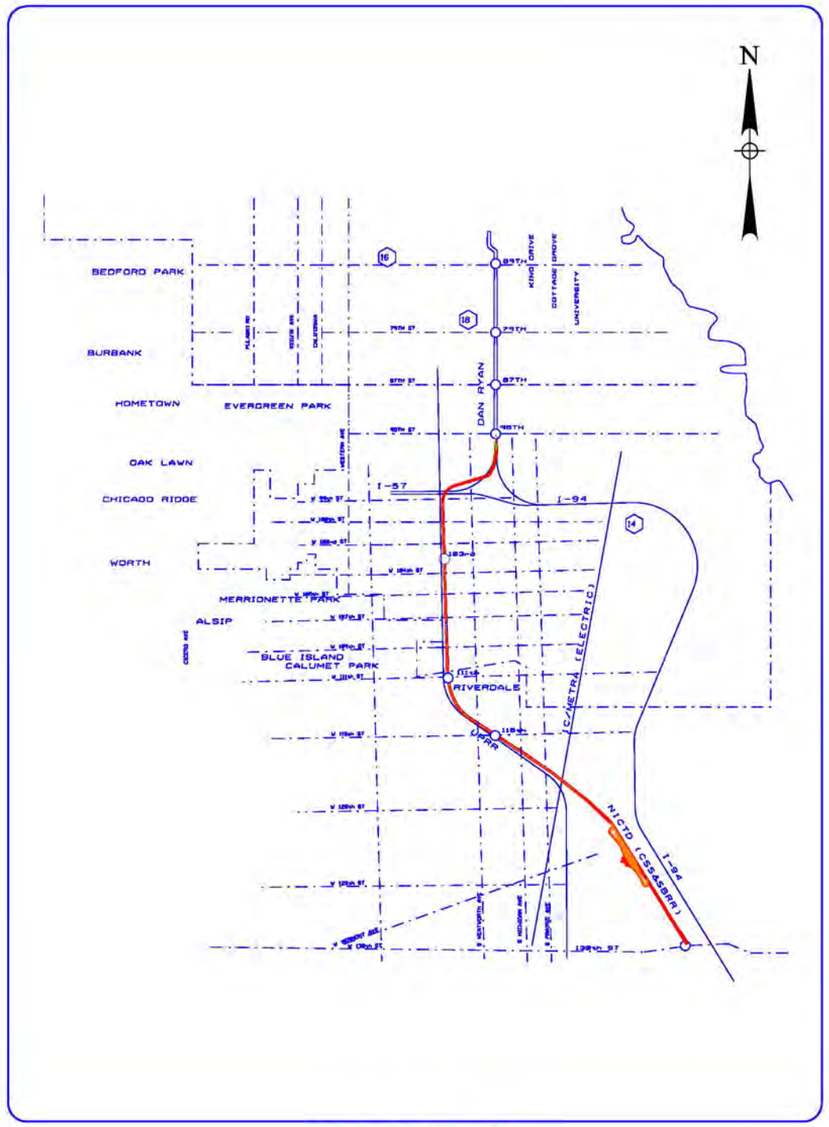

ORIENTATION MAP

INDEX

UNION PACIFIC RAILROAD ALTERNATIVE

EAST OPTION 2 - 18

MAY 1, 2015

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 CFR PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW" AS DEFINED IN CFR PARTS 15 AND 1520, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTY OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE IS GOVERNED BY 5 U.S.C. 552 AND 49 CFR PARTS 15 AND 1520.

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

2 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
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PROJECT NO	CTA-RLE
FILE NAME	CTARLE_G_COVER.dgn

MARK	DATE	DESCRIPTION

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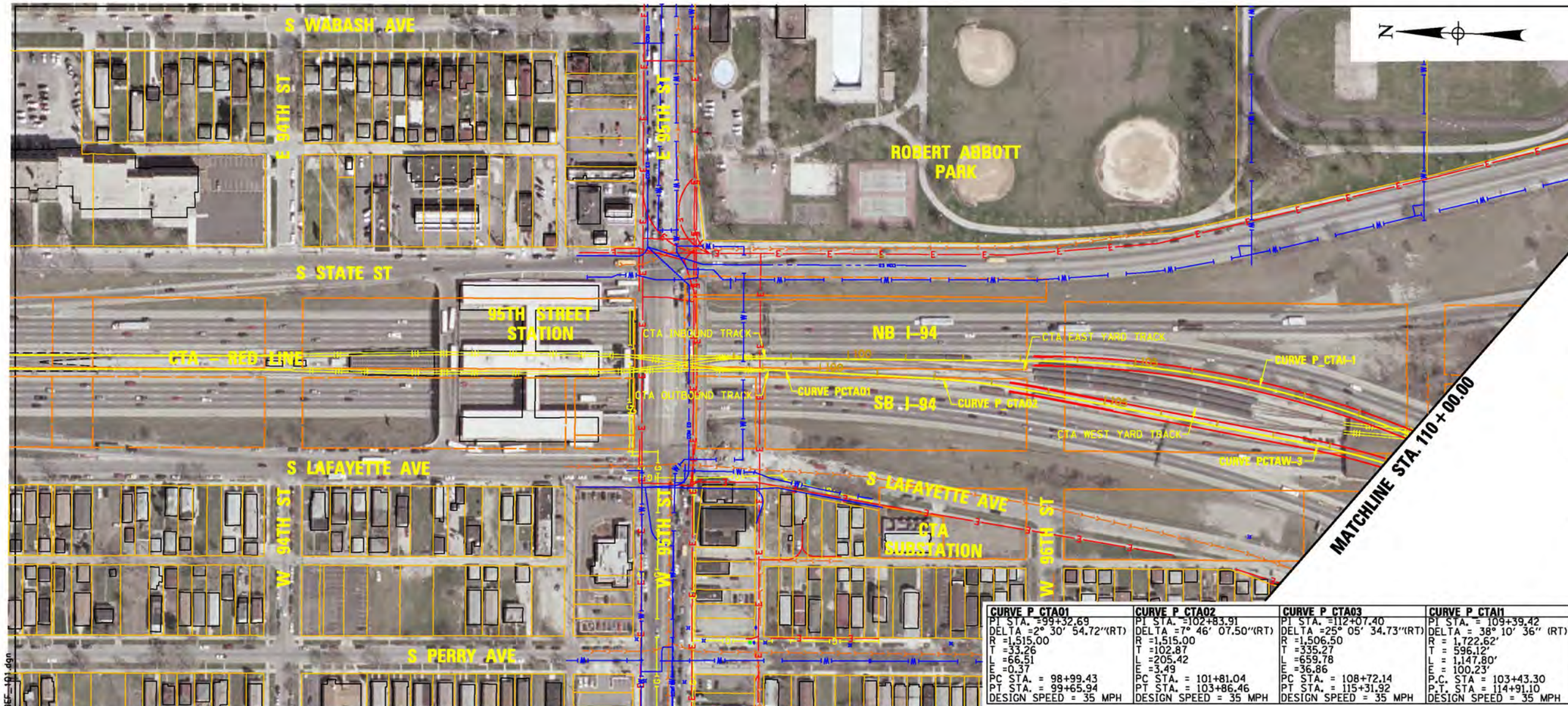

CURVE P CTA01	CURVE P CTA02	CURVE P CTA03	CURVE P CTAI1
PI STA. =99+32.69	PI STA. =102+83.91	PI STA. =112+07.40	PI STA. = 109+39.42
DELTA =2° 30' 54.72"(RT)	DELTA =7° 46' 07.50"(RT)	DELTA =25° 05' 34.73"(RT)	DELTA = 38° 10' 36" (RT)
R =1,515.00	R =1,515.00	R =1,506.50	R = 1,722.62'
T =33.26	T =102.87	T =335.27	T = 596.12'
L =66.51	L =205.42	L =659.78	L = 1,147.80'
E =0.37	E =3.49	E =36.86	E = 100.23'
PC STA. = 98+99.43	PC STA. = 101+81.04	PC STA. = 108+72.14	P.C. STA = 103+43.30
PT STA. = 99+65.94	PT STA. = 103+86.46	PT STA. = 115+31.92	P.T. STA = 114+91.10
DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH

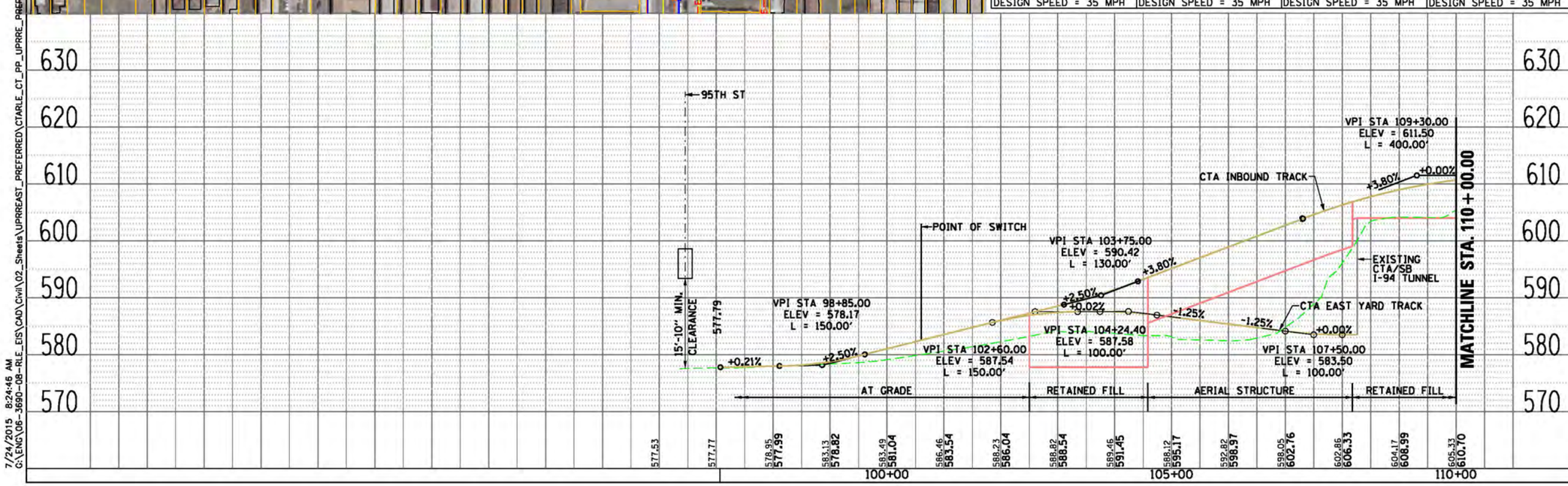

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_101.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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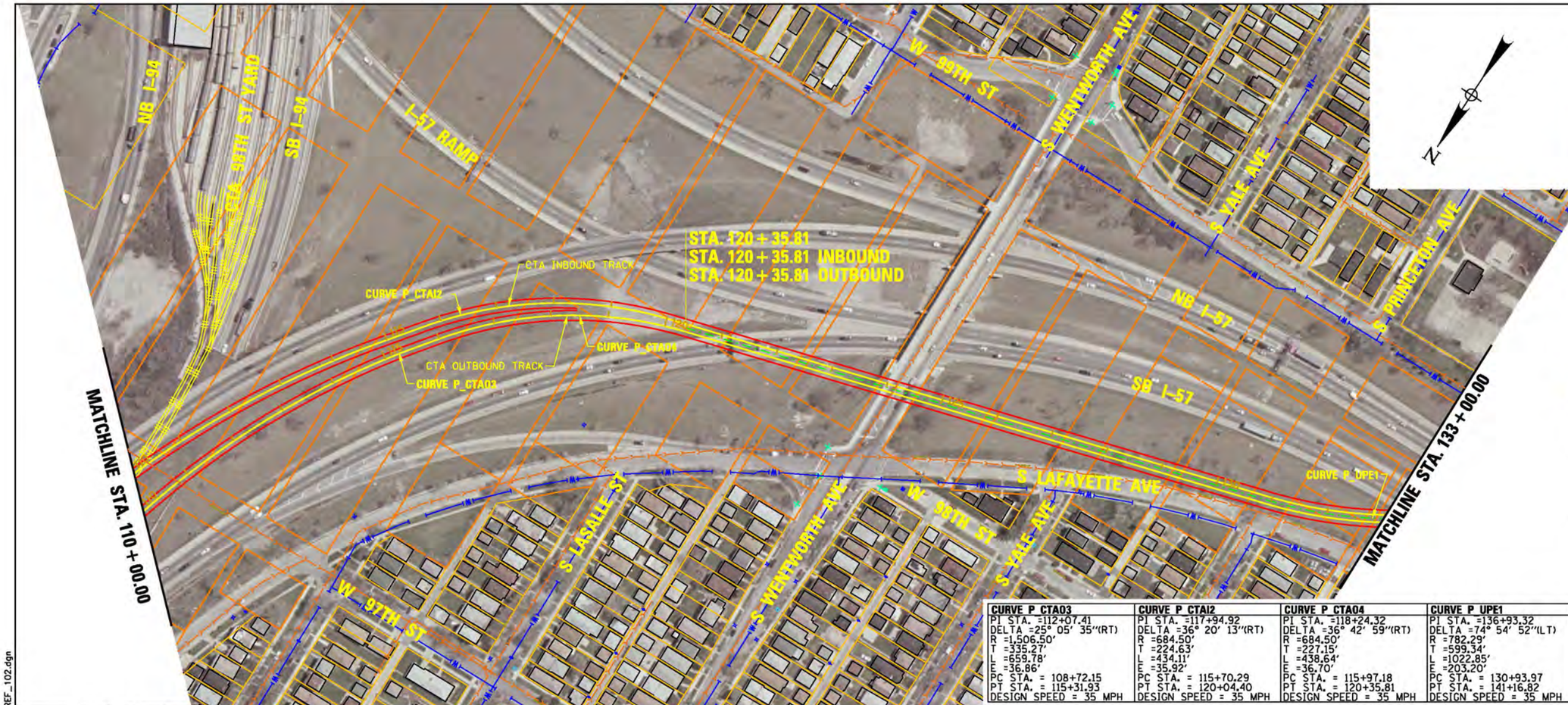

CURVE P_CTAO3	CURVE P_CTAI2	CURVE P_CTAO4	CURVE P_UPE1
PI STA. =112+07.41	PI STA. =117+94.92	PI STA. =118+24.32	PI STA. =136+93.32
DELTA =25° 05' 35"(RT)	DELTA =36° 20' 13"(RT)	DELTA =36° 42' 59"(RT)	DELTA =74° 54' 52"(LT)
R =1,506.50'	R =684.50'	R =684.50'	R =782.29'
T =335.27'	T =224.63'	T =227.15'	T =599.34'
L =659.78'	L =434.11'	L =438.64'	L =1022.85'
E =36.86'	E =35.92'	E =36.70'	E =203.20'
PC STA. = 108+72.15	PC STA. = 115+70.29	PC STA. = 115+97.18	PC STA. = 130+93.97
PT STA. = 115+31.93	PT STA. = 120+04.40	PT STA. = 120+35.81	PT STA. = 141+16.82
DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

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DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_102.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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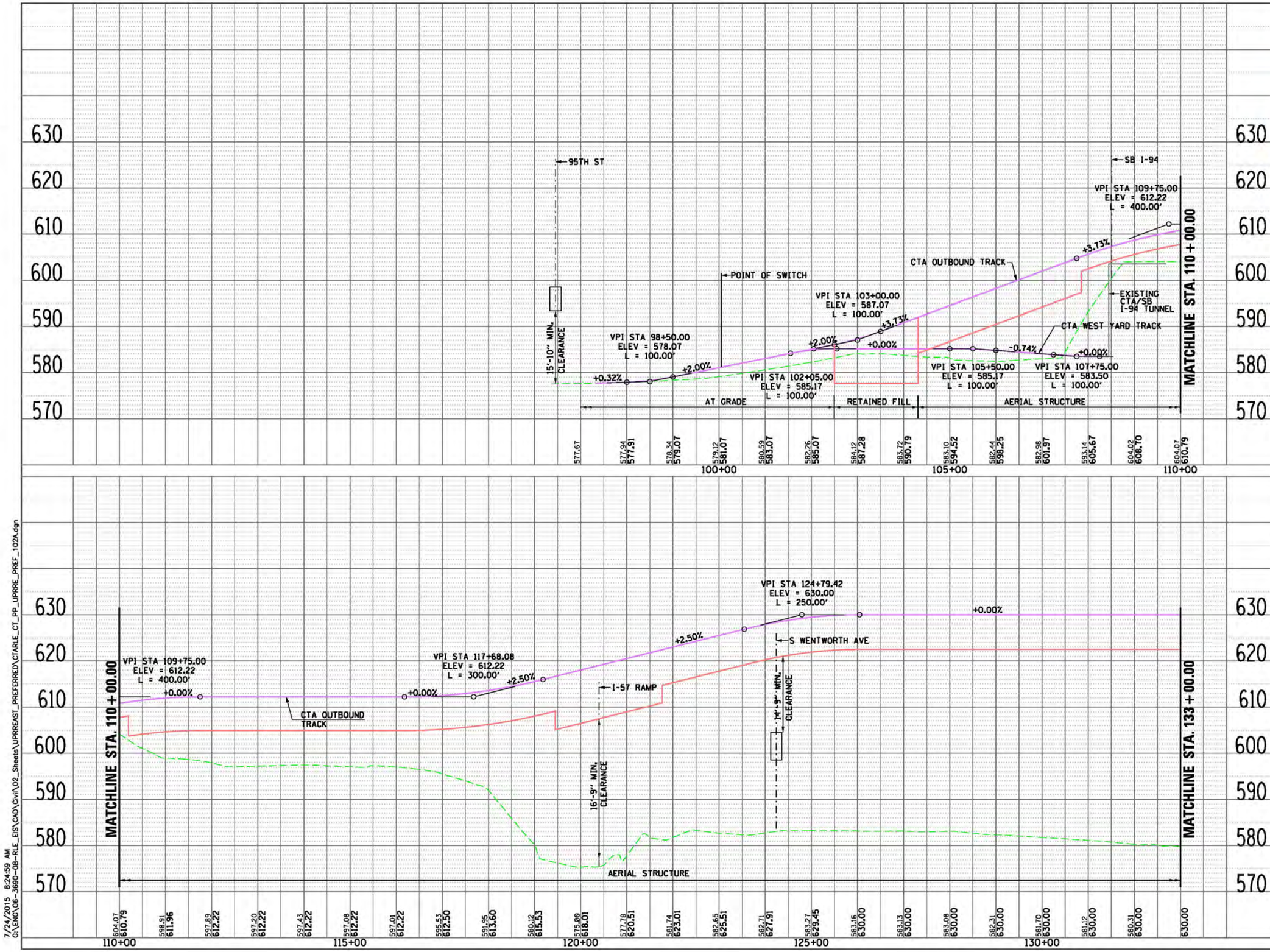

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

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CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_102A.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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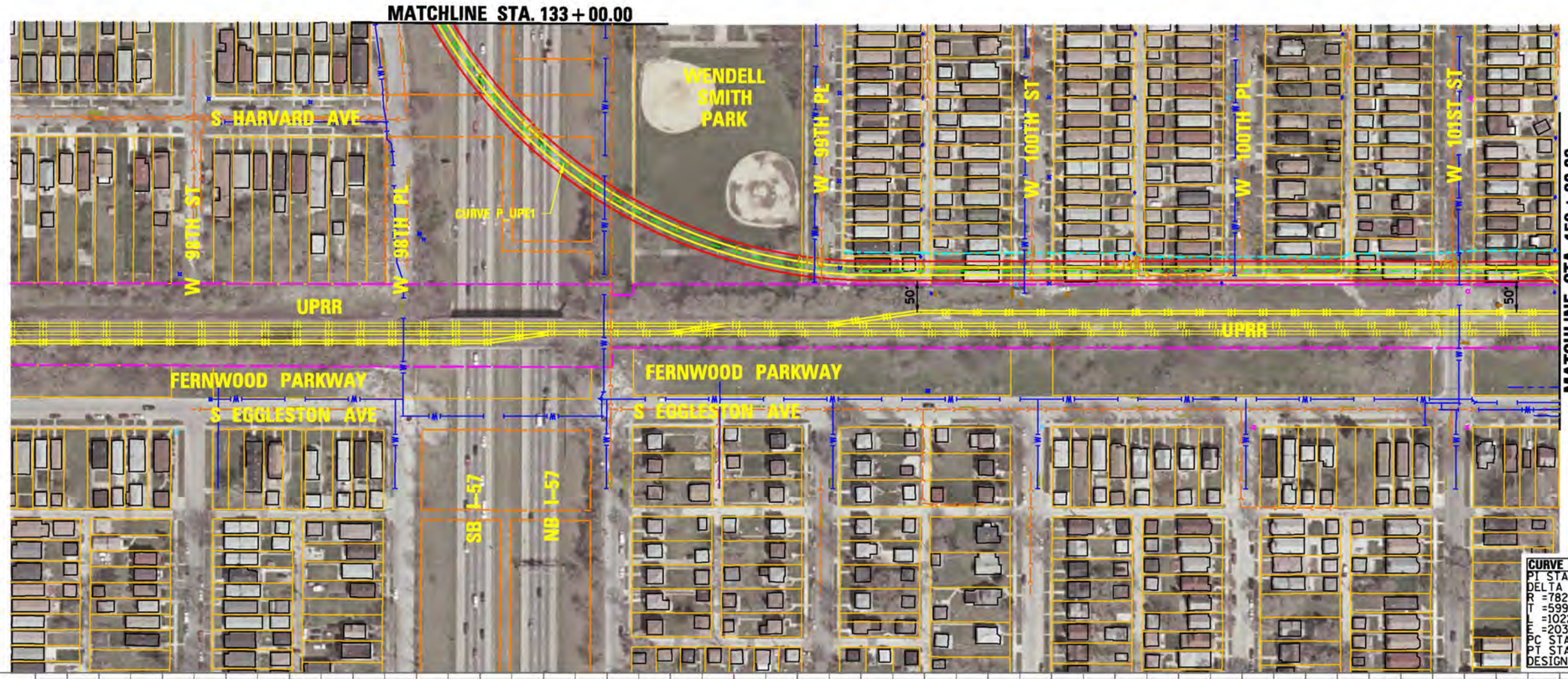

CURVE P UPE1
PI STA. =136+93.32
DELTA =74° 54' 52"(LT)
R =782.29'
T =599.34'
L =1022.85'
E =203.20'
PC STA. = 130+93.97
PT STA. = 141+16.82
DESIGN SPEED = 35 MPH

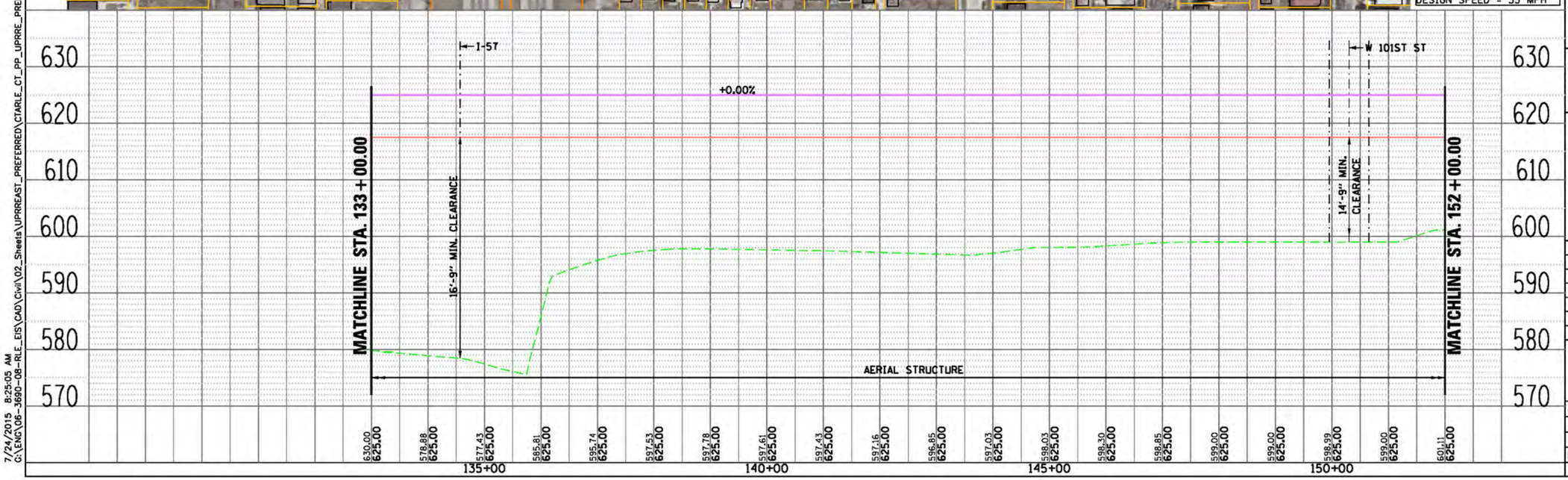

LEGEND

PLAN
- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES
- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE
- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

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DESIGNED BY	
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PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_103.dgn

100 0 100 200
SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

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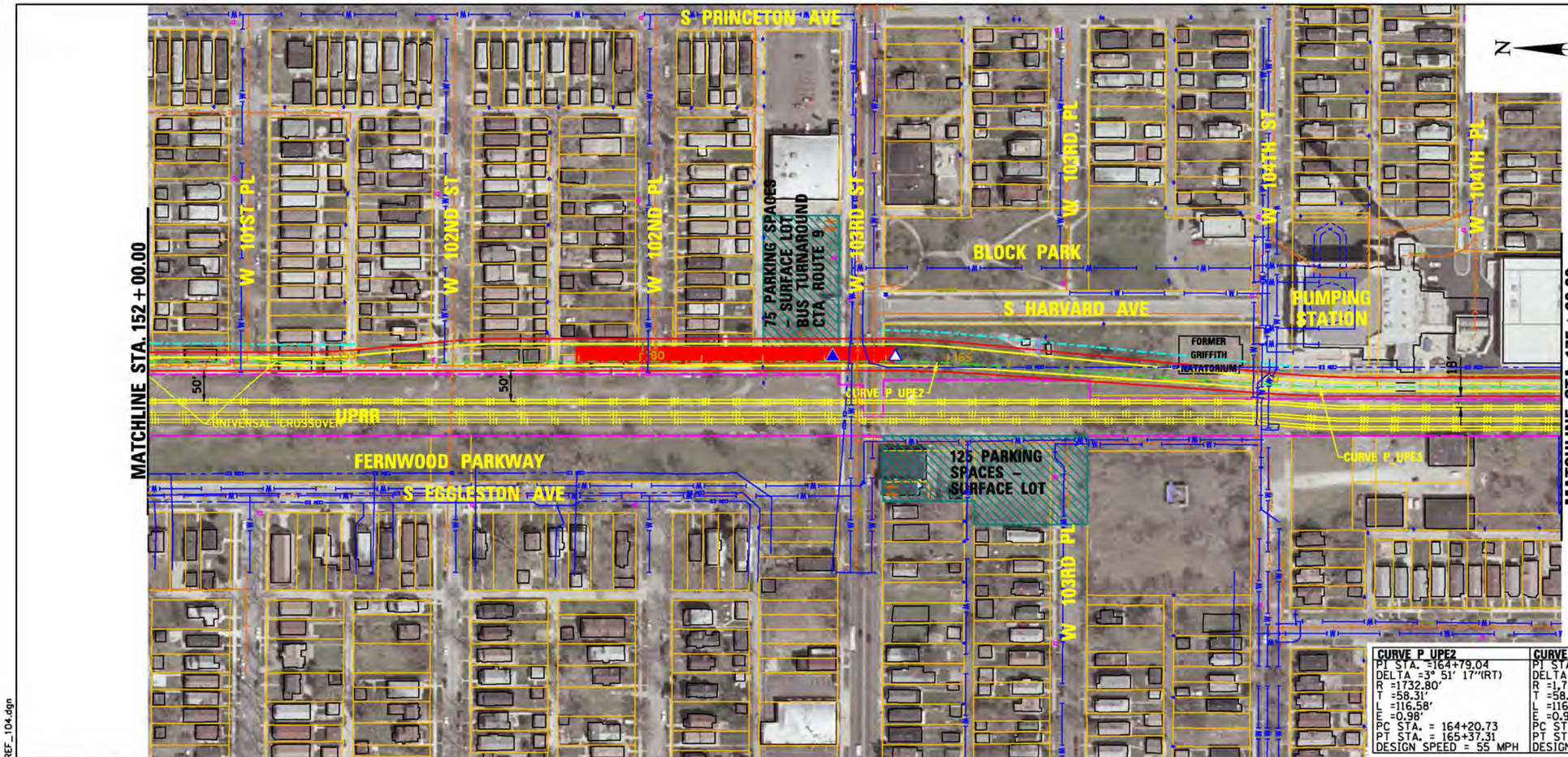

CURVE P UPE2	CURVE P UPE3
PI STA. =164+79.04	PI STA. =170+87.96
DELTA =3° 51' 17"(RT)	DELTA =3° 51' 35"(LT)
R =1732.80'	R =1,732.80'
T =58.31'	T =58.39'
L =116.58'	L =116.73'
E =0.98'	E =0.98'
PC STA. = 164+20.73	PC STA. = 170+29.57
PT STA. = 165+37.31	PT STA. = 171+46.30
DESIGN SPEED = 55 MPH	DESIGN SPEED = 55 MPH

NOTE: CRASH WALL WILL BE REQUIRED BETWEEN PROPOSED RED LINE EXTENSION AND UNION PACIFIC RAILROAD FROM STATION 164+40 TO STATION

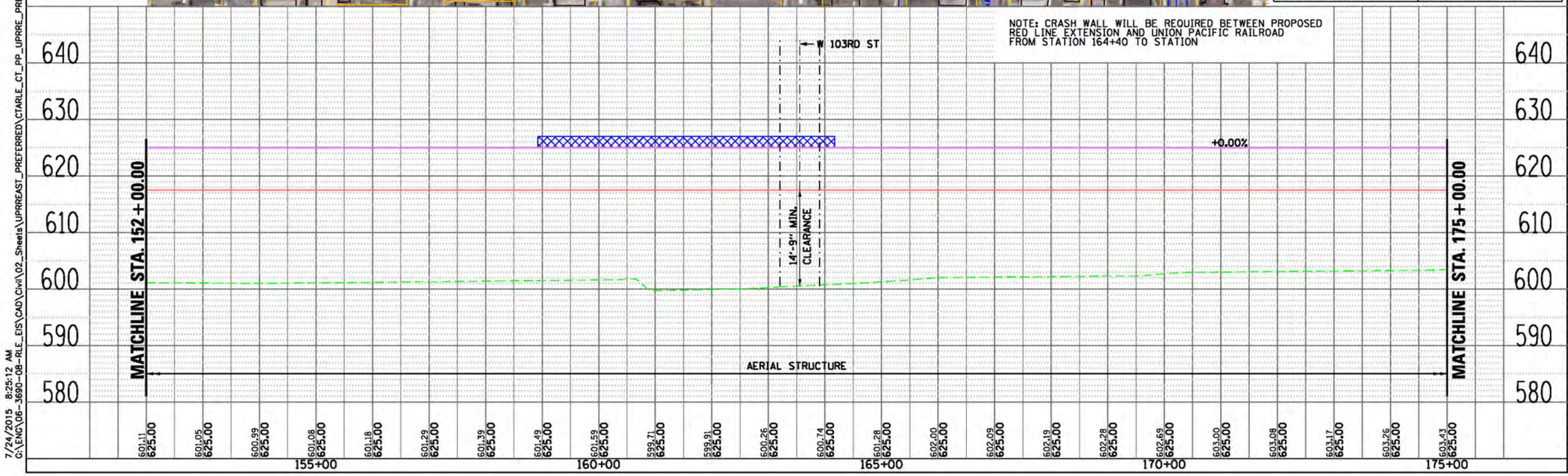

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
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UTILITIES

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ENTRANCES

- PRIMARY ENTRANCE
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PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

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cta

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_104.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

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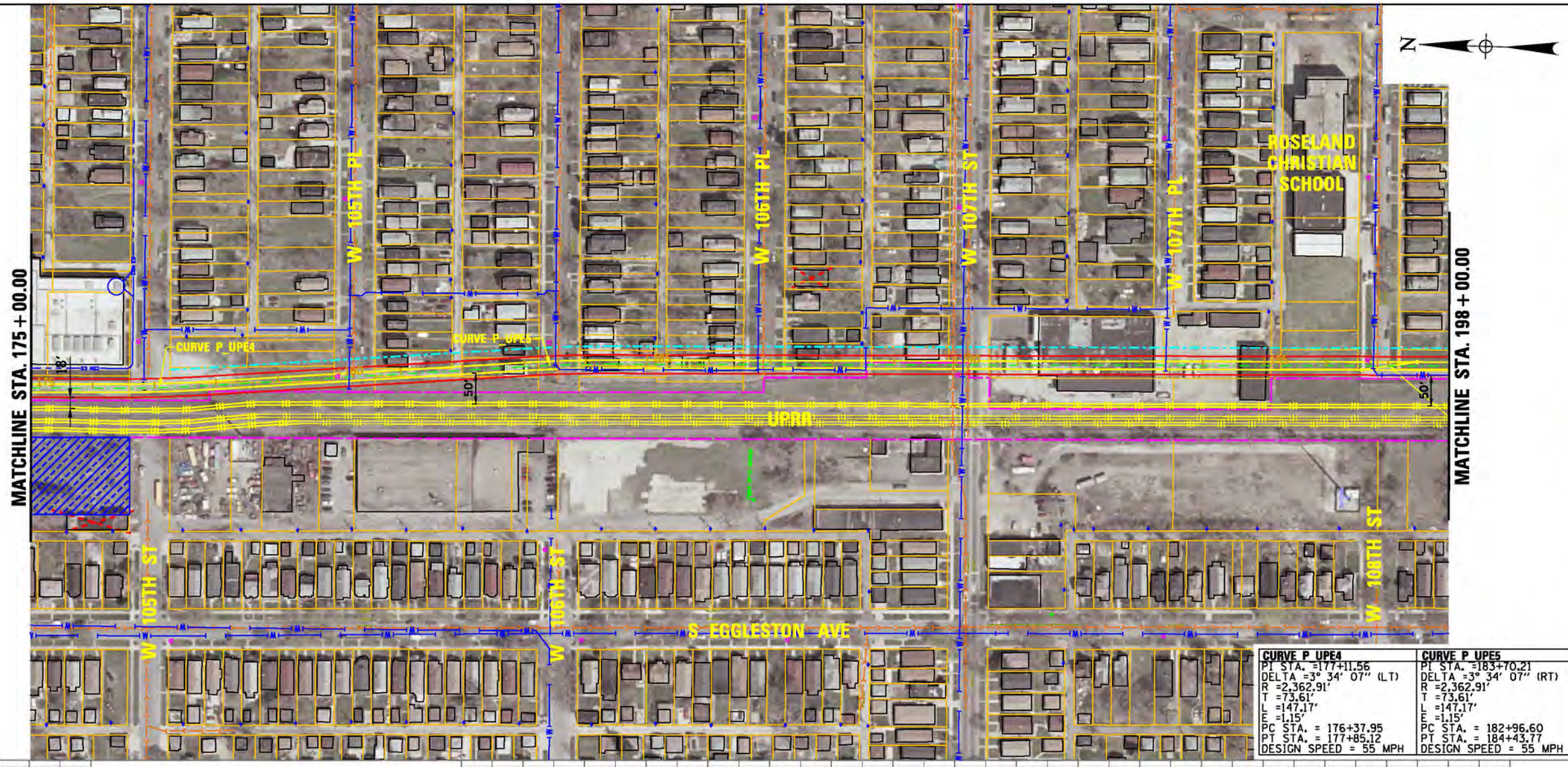

CURVE P UPE4	CURVE P UPE5
PI STA. =177+11.56	PI STA. =183+70.21
DELTA =3° 34' 07" (LT)	DELTA =3° 34' 07" (RT)
R =2,362.91'	R =2,362.91'
T =73.61'	T =73.61'
L =147.17'	L =147.17'
E =1.15'	E =1.15'
PC STA. = 176+37.95	PC STA. = 182+96.60
PT STA. = 177+85.12	PT STA. = 184+43.77
DESIGN SPEED = 55 MPH	DESIGN SPEED = 55 MPH

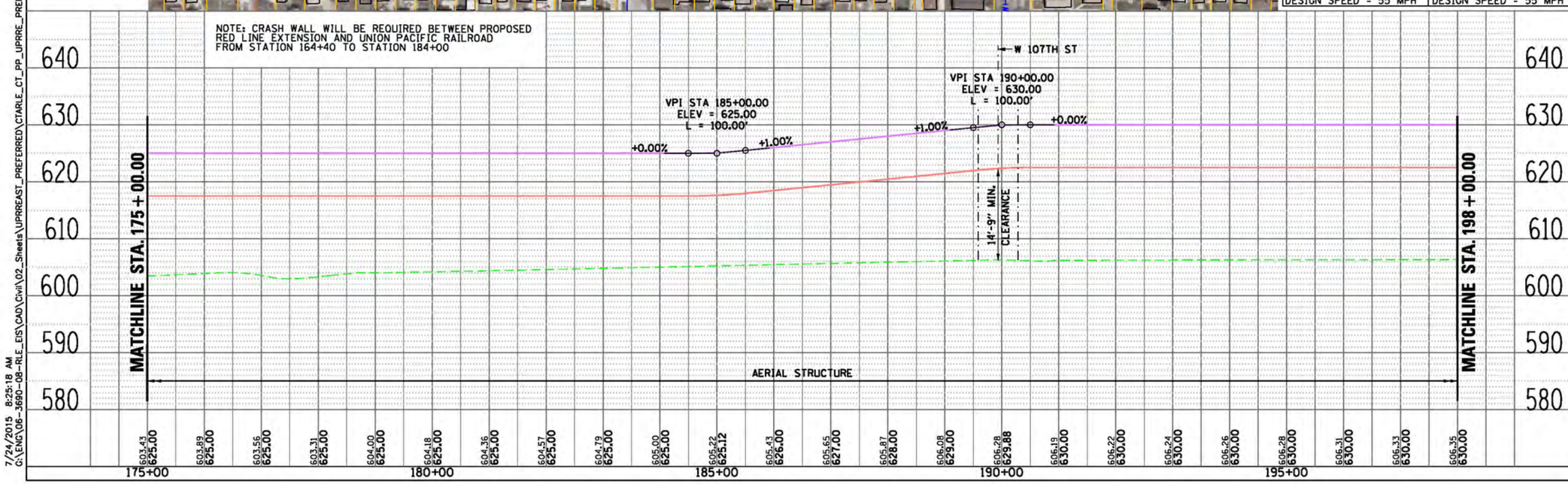

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
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- PR STATION PLATFORM
- EX BUILDING OUTLINE
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- PR PARKING
- PR CTA SUBSTATION
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- EXIT ONLY
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PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
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UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE
APPROVED BY
CHECKED BY
DESIGNED BY
DRAWN BY
PROJECT NO CTA-RLE
FILE NAME CTARLE_CT_PP_UPRRE_PREF_105.dgn

100 0 100 200
SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:25:18 AM
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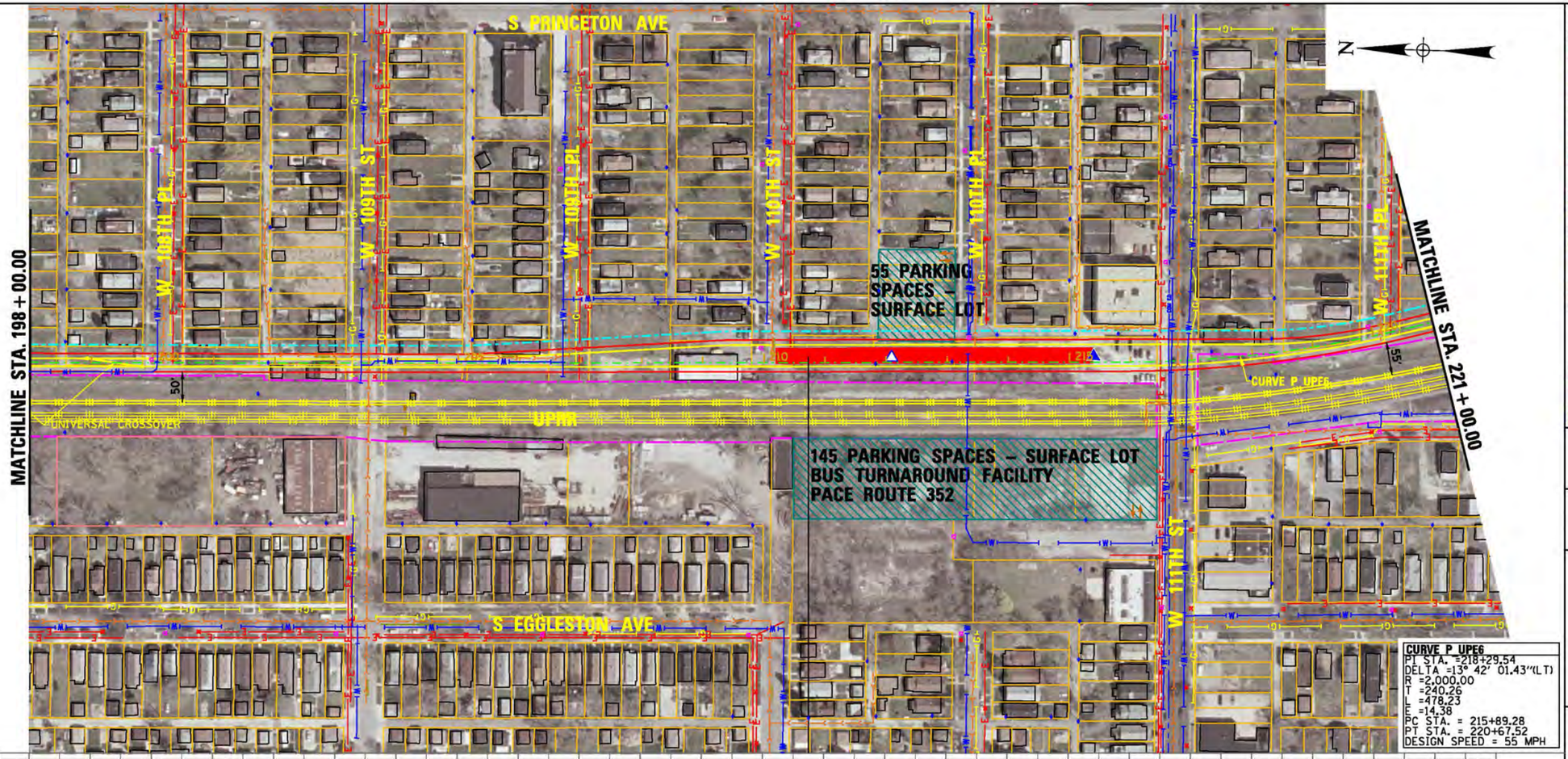

CURVE P UPE6
PI STA. =218+29.54
DELTA =13° 42' 01.43"(LT)
R =2,000.00
T =240.26
L =478.23
E =14.38
PC STA. = 215+89.28
PT STA. = 220+67.52
DESIGN SPEED = 55 MPH

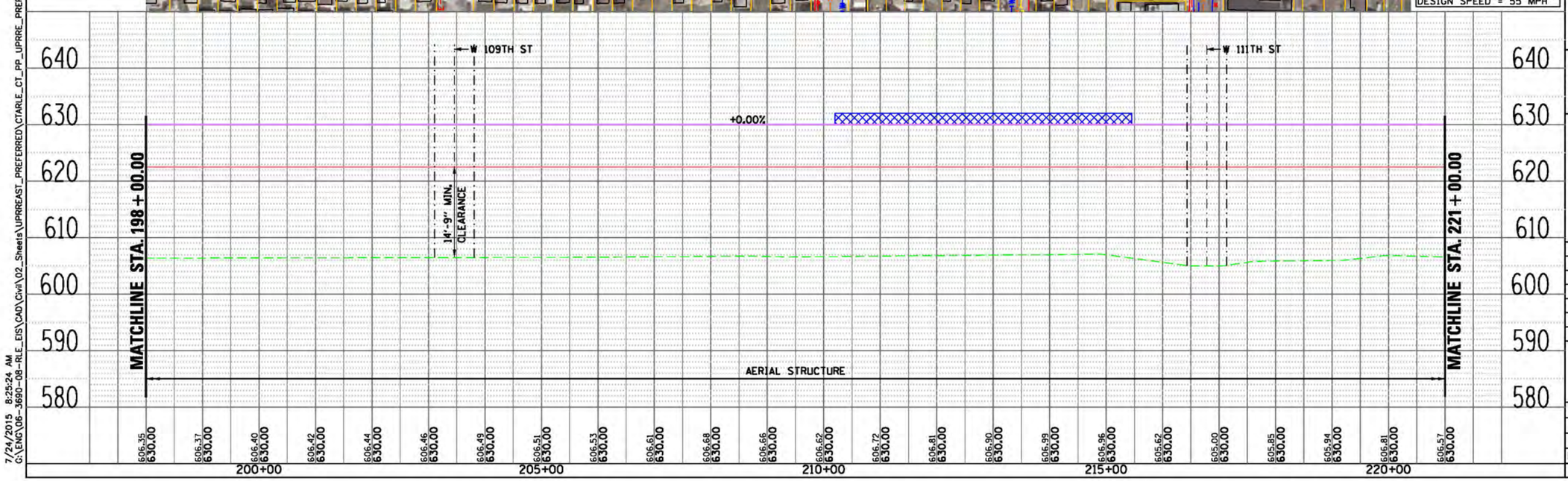

LEGEND

PLAN
- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES
- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE
- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_106.dgn

100 0 100 200
SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:25:24 AM
G:\ENG\06-3690-08-RLE_EIS\CAD\Civil\02_Sheets\UPRREAST_PREFERRED\CTARLE_CT_PP_UPRRE_PREF_106.dgn

CURVE P_UPE7	CURVE P_UPE8
PI STA. =225+40.49	PI STA. =233+10.45
DELTA =11° 16' 52.99"(LT)	DELTA =30° 56' 04.69"(LT)
R =2,379.00	R =1,695.00
T =234.97	T =469.02
L =468.42	L =915.15
E =11.58	E =63.70
PC STA. = 223+05.52	PC STA. = 228+41.42
PT STA. = 227+73.94	PT STA. = 237+56.57
DESIGN SPEED = 55 MPH	DESIGN SPEED = 55 MPH

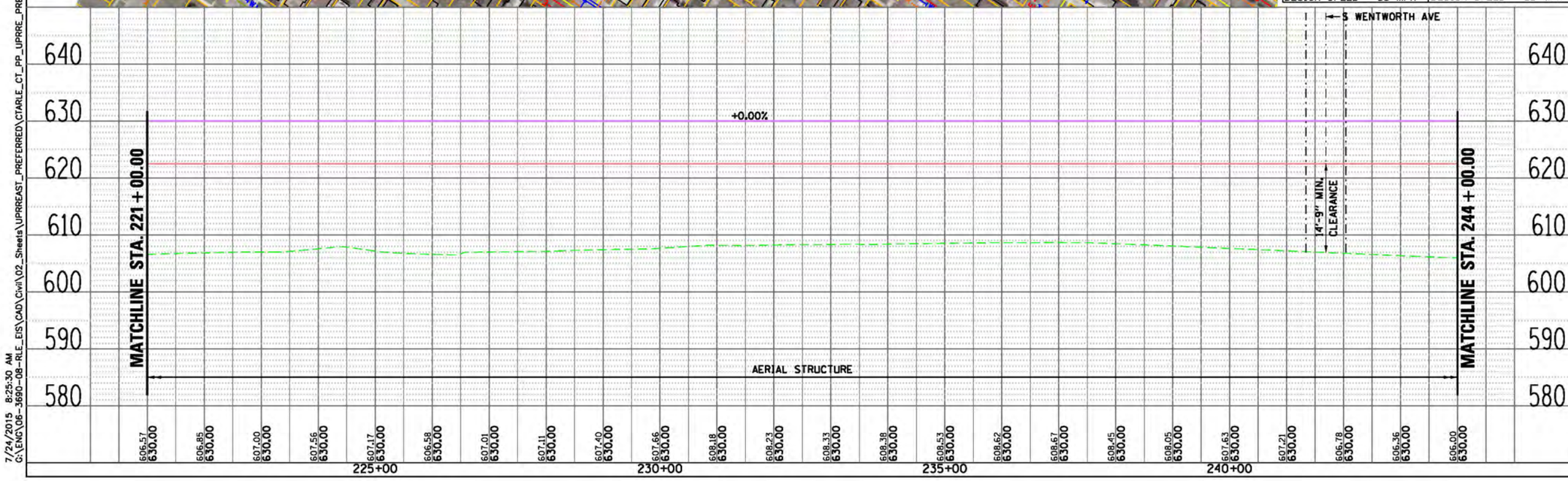

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_107.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:25:30 AM
G:\ENG\06-3690-08-RLE_EIS\CAD\Civil\02_Sheets\UPRREAST_PREFERRED\CTARLE_CT_PP_UPRRE_PREF_107.dgn

CURVE P UPE9	CURVE P UPE10
PI STA. =254+15.00	PI STA. =259+99.68
DELTA =2° 11' 37" (RT)	DELTA =2° 23' 35" (LT)
R =2,362.91	R =2,362.91
T =45.24	T =49.35
L =90.46	L =98.69
E =0.43	E =0.52
PC STA. = 253+69.76	PC STA. = 259+50.32
PT STA. = 254+60.23	PT STA. = 260+49.01
DESIGN SPEED = 55 MPH	DESIGN SPEED = 55 MPH

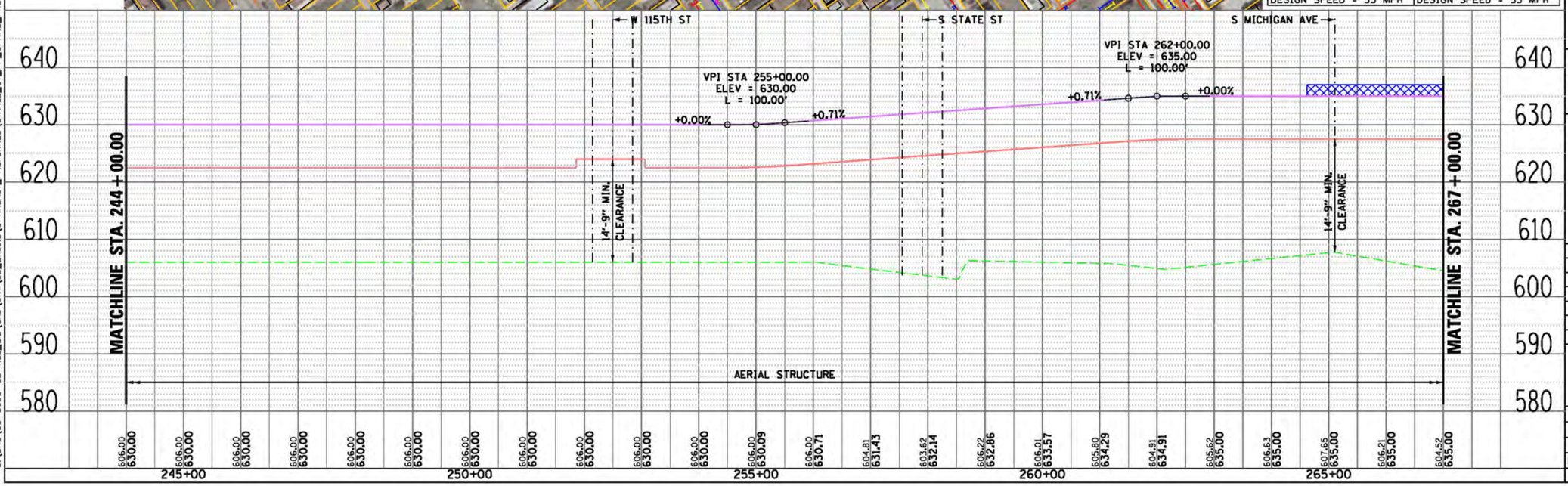

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_108.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:25:36 AM
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CURVE P_UPE11
PI STA. =287+41.84
DELTA =8° 22' 49.78" (RT)
R =2,400.00
T =175.83
L =351.04
E =6.43
PC STA. = 285+66.01
PT STA. = 289+17.05
DESIGN SPEED = 55 MPH

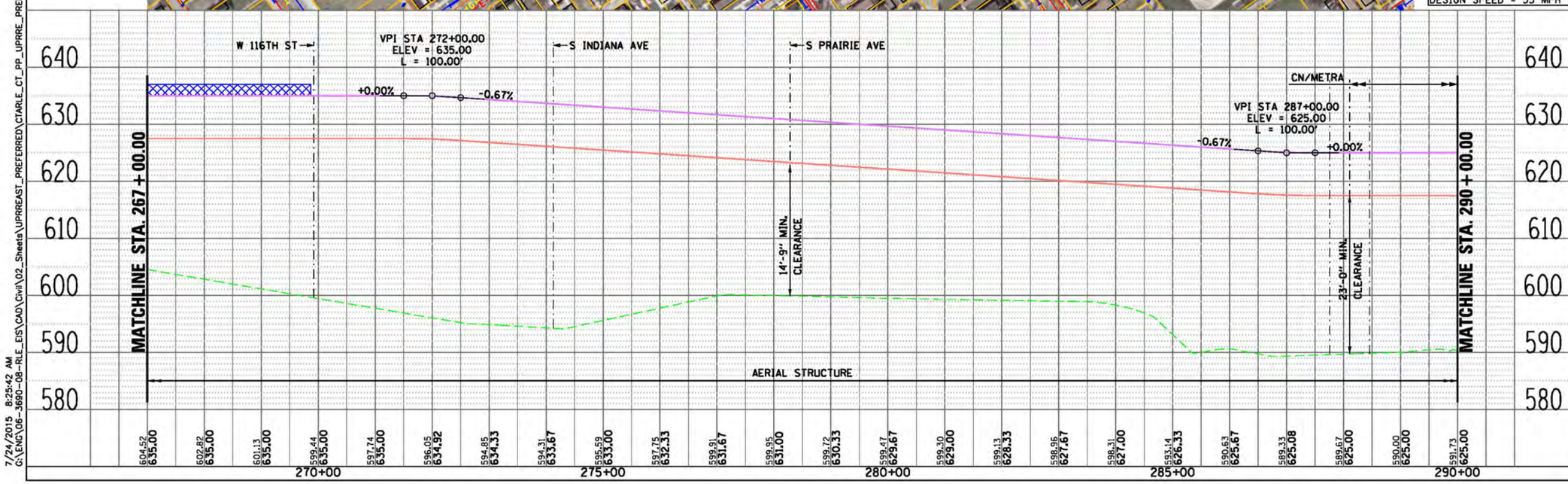

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_109.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:25:42 AM
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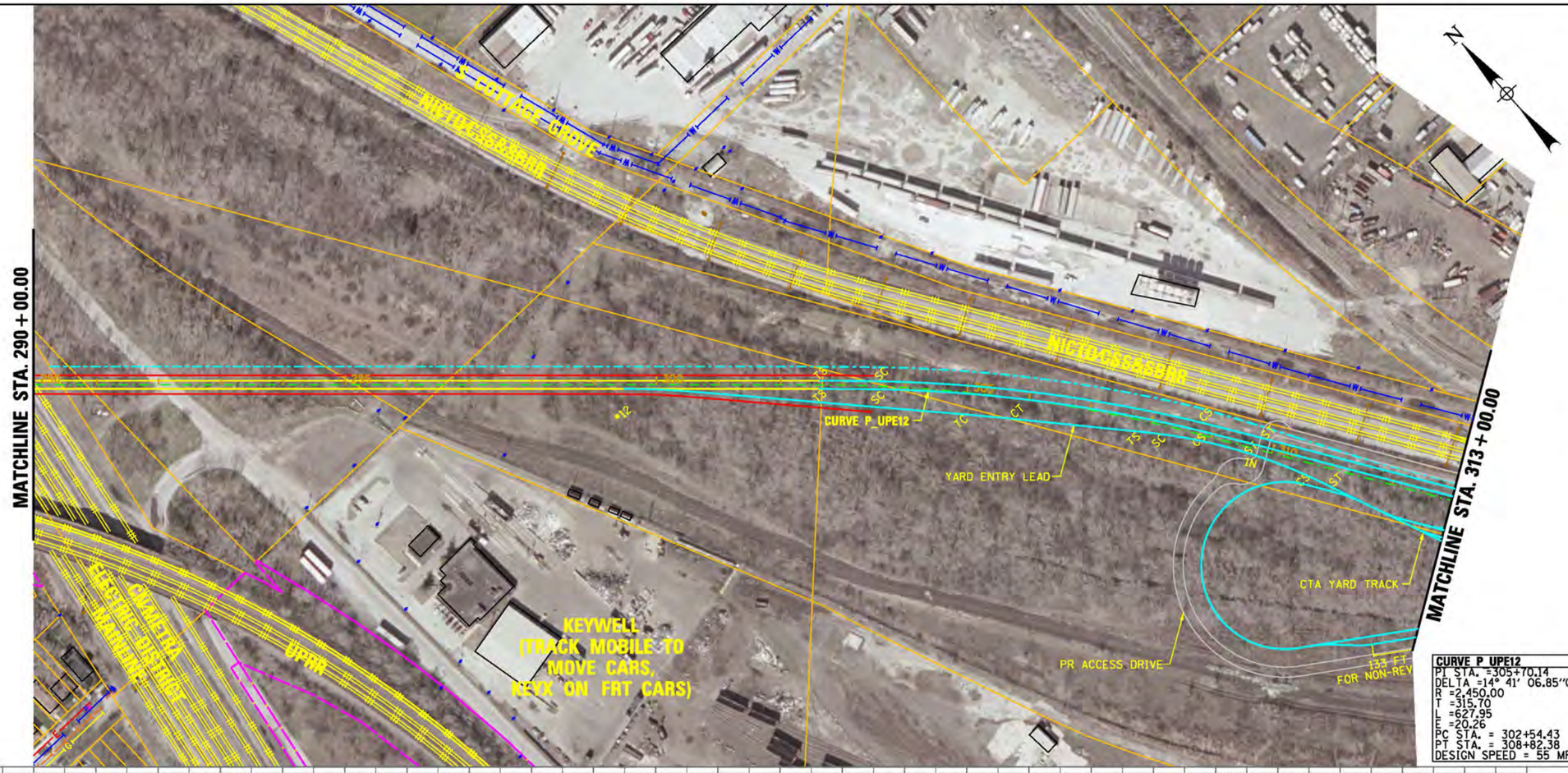

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R =2,450.00
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L =627.95
E =20.26
PC STA. = 302+54.43
PT STA. = 308+82.38
DESIGN SPEED = 55 MPH

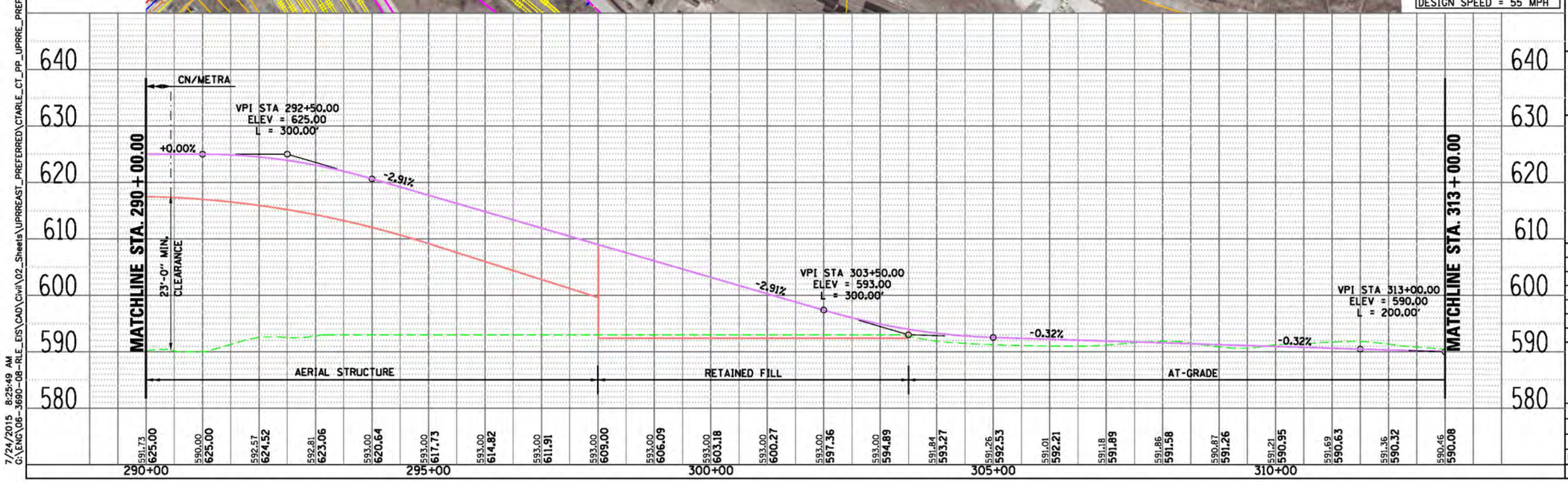

LEGEND

PLAN
- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES
- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE
- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_110.dgn

100 0 100 200
SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

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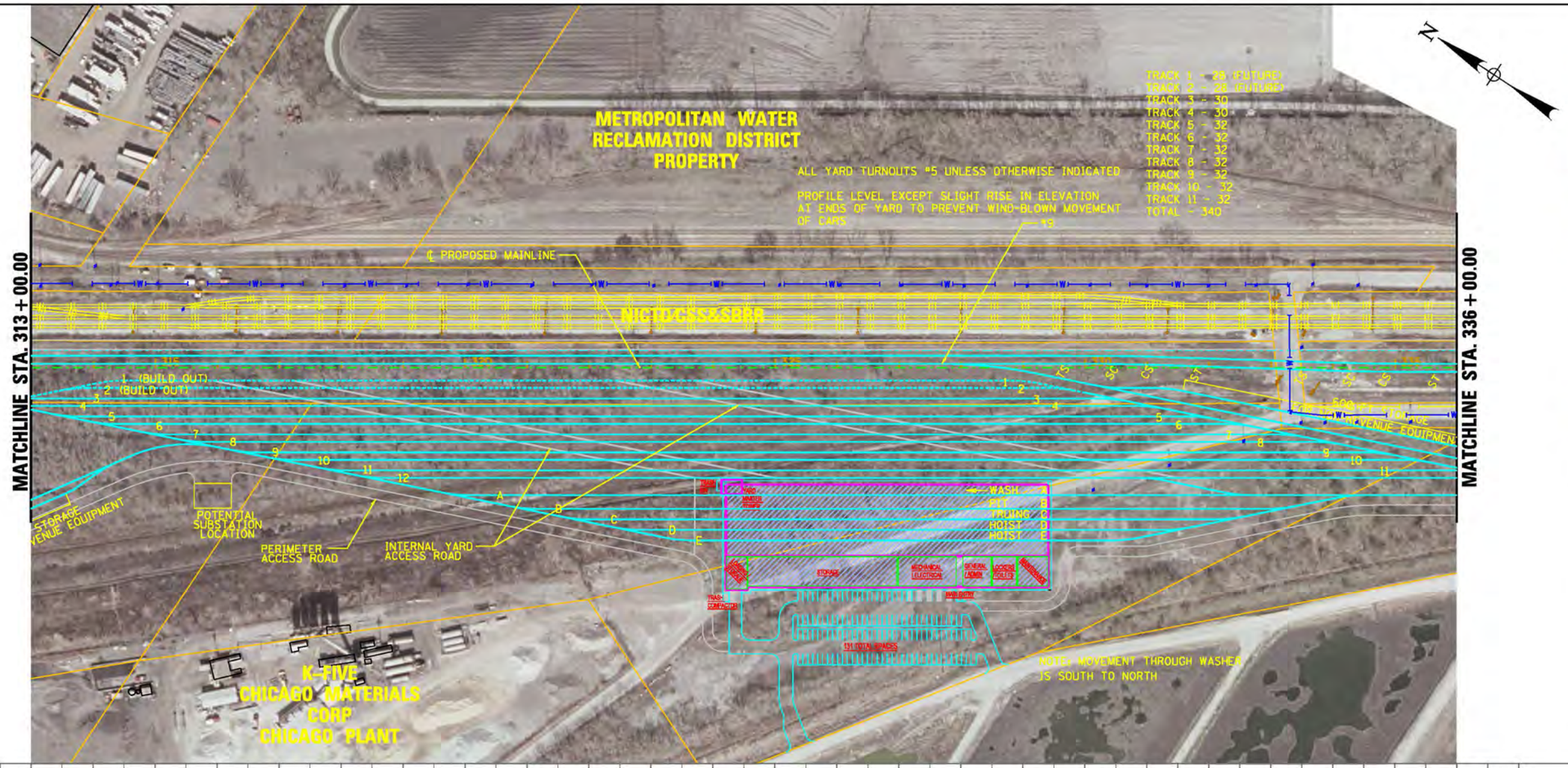

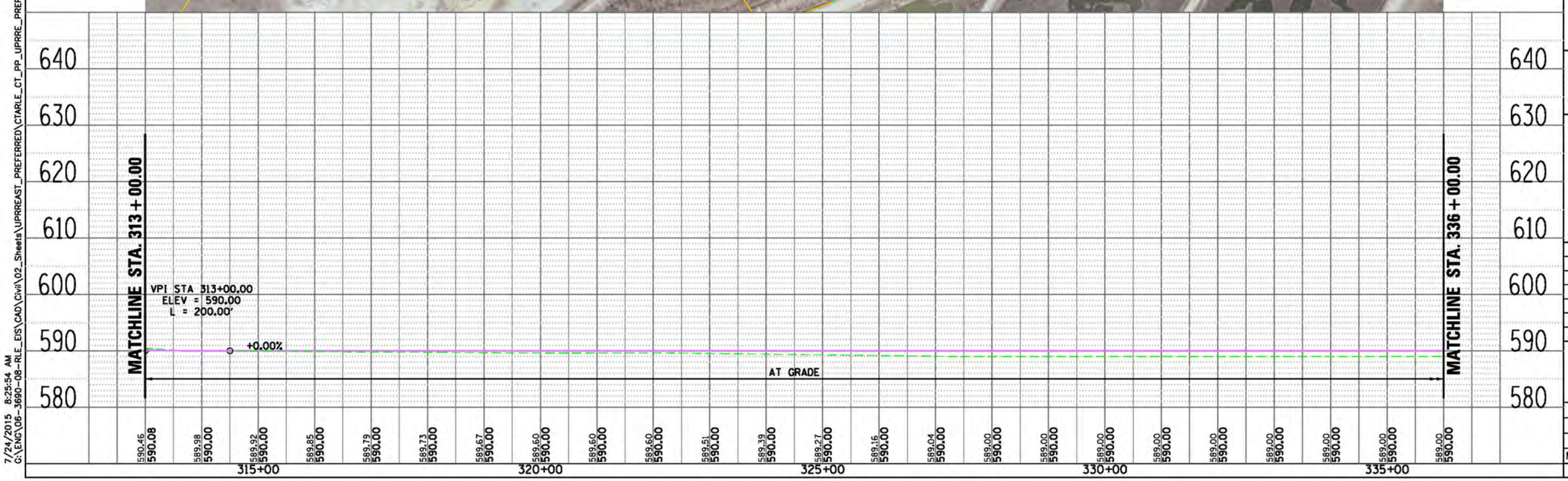

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_111.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:25:54 AM
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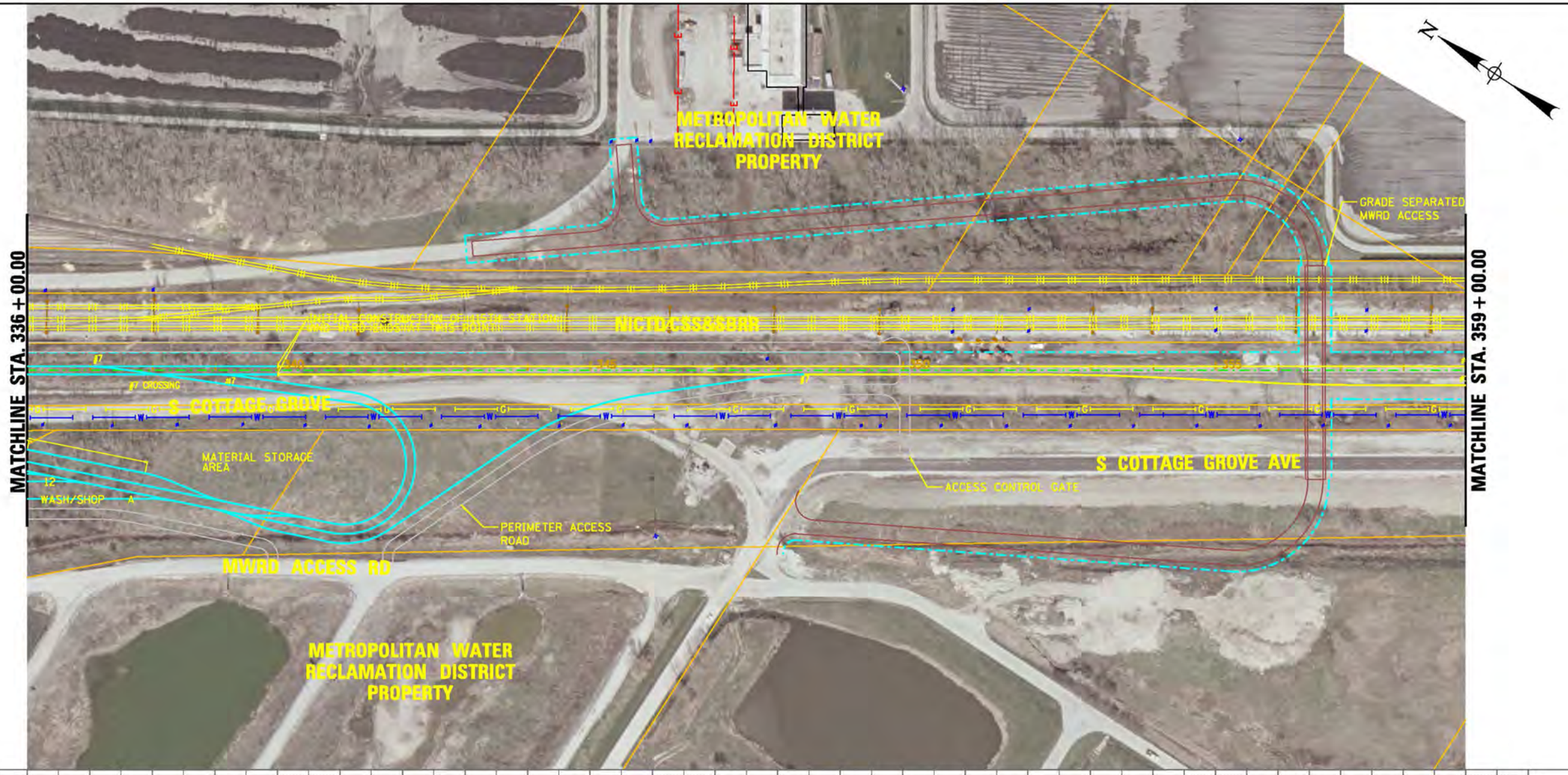

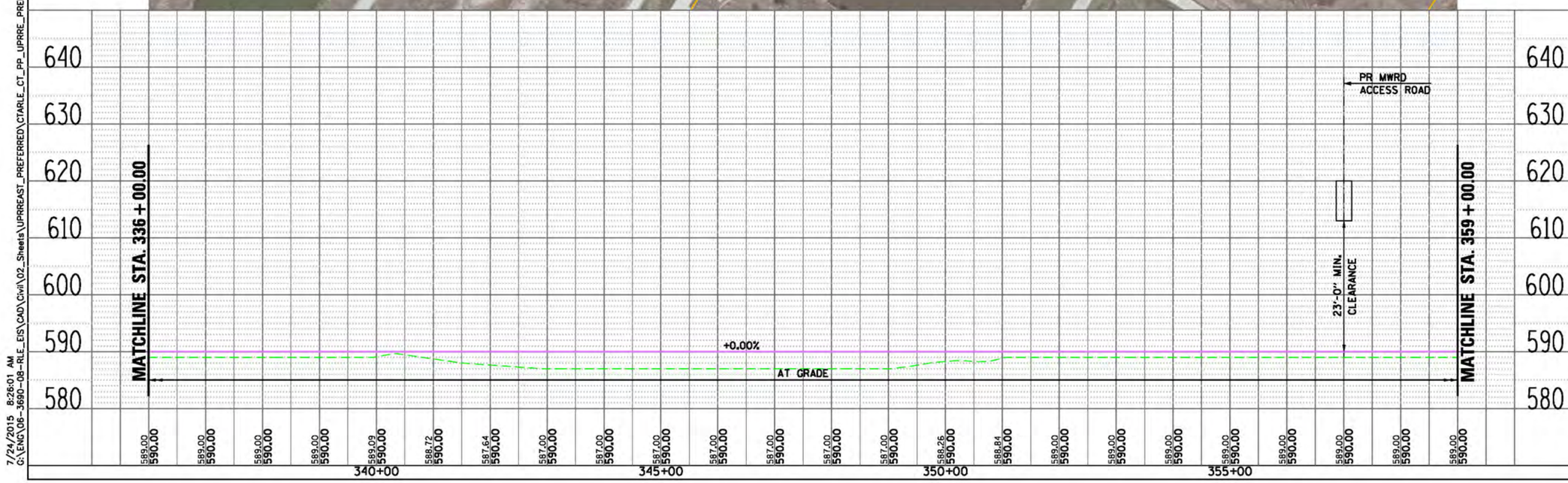

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

15 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_112.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:26:01 AM
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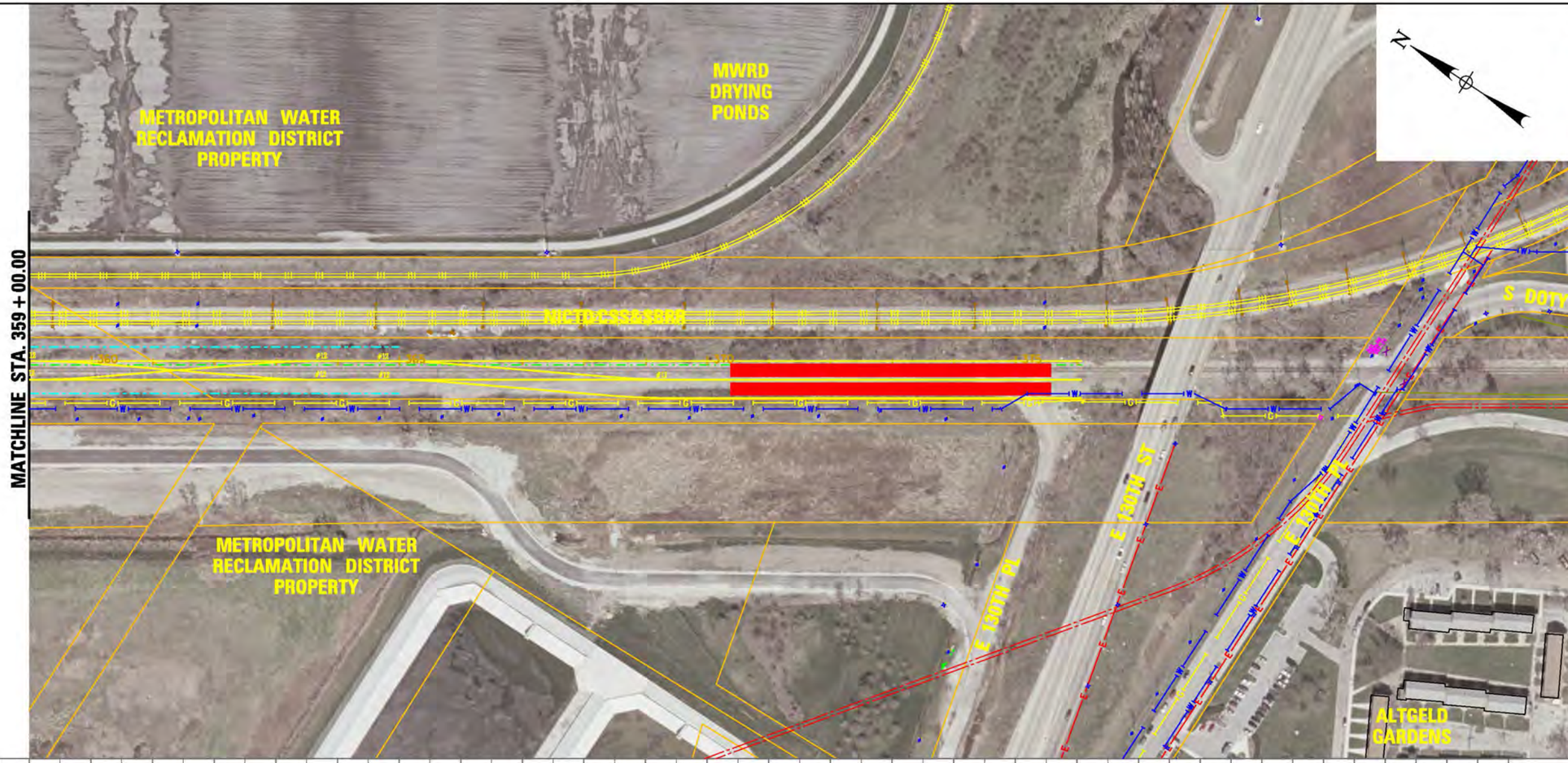

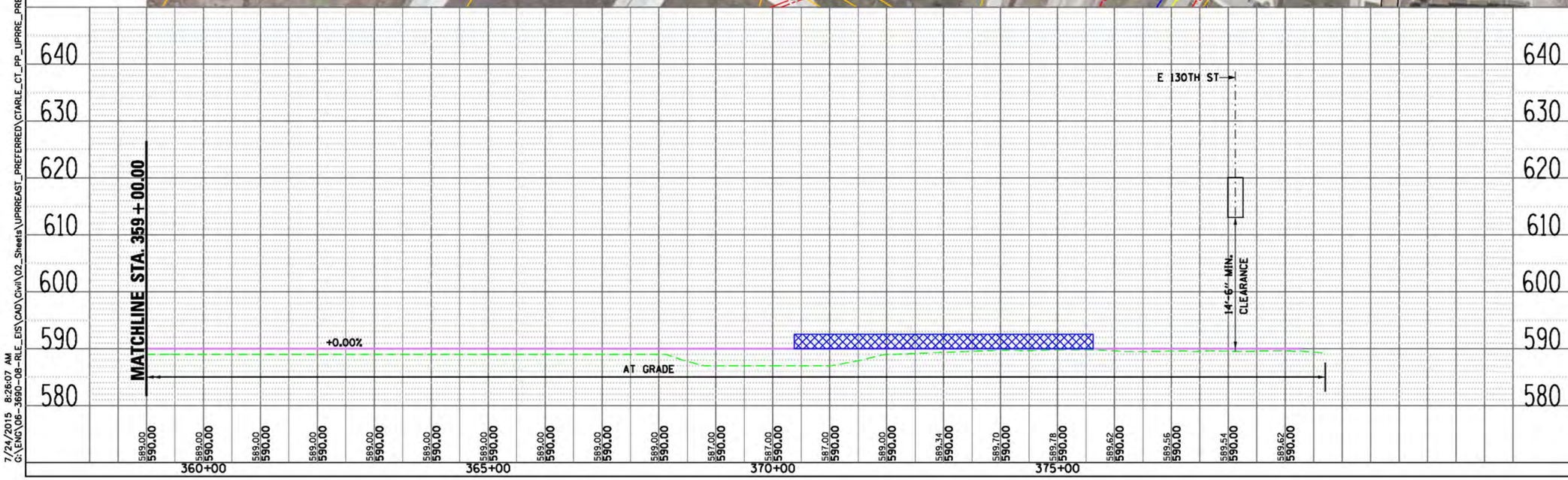

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_113.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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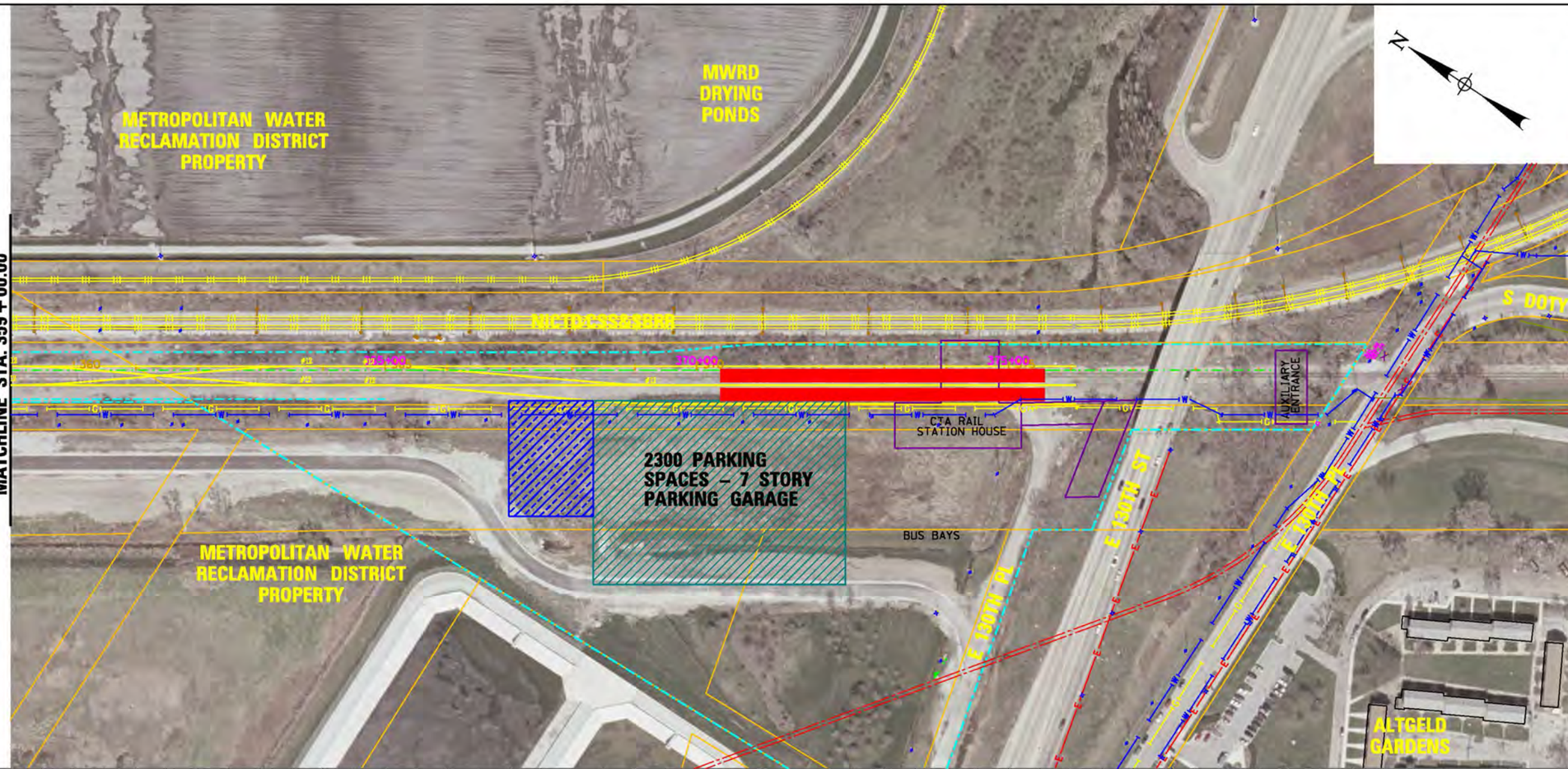

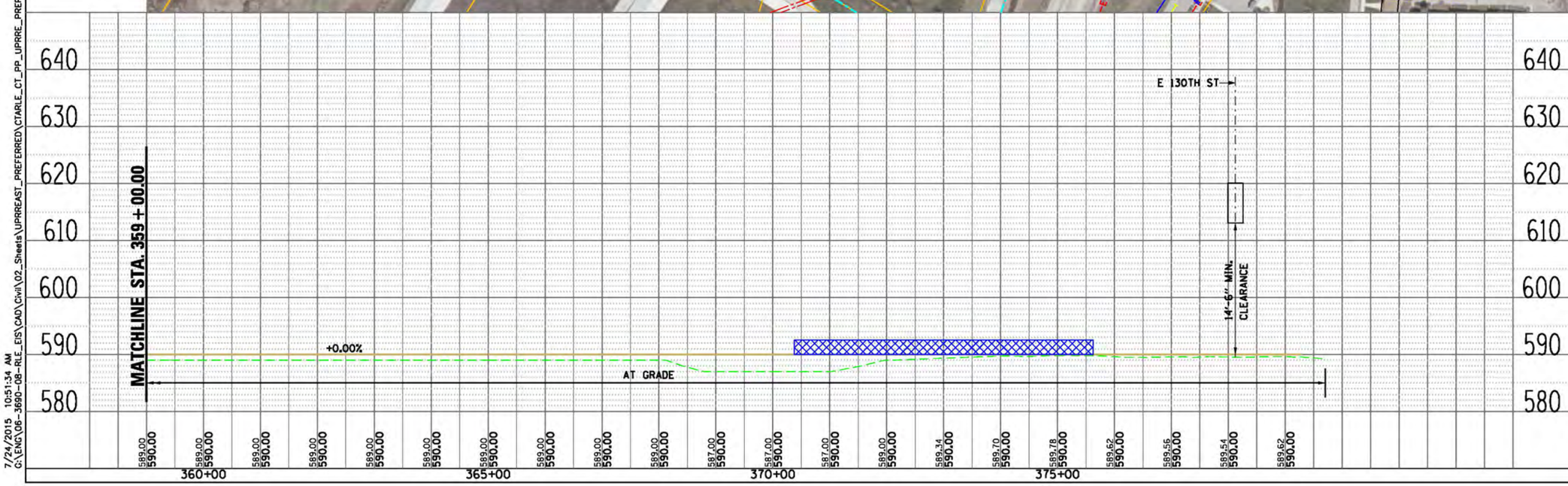

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_113_StationAlt.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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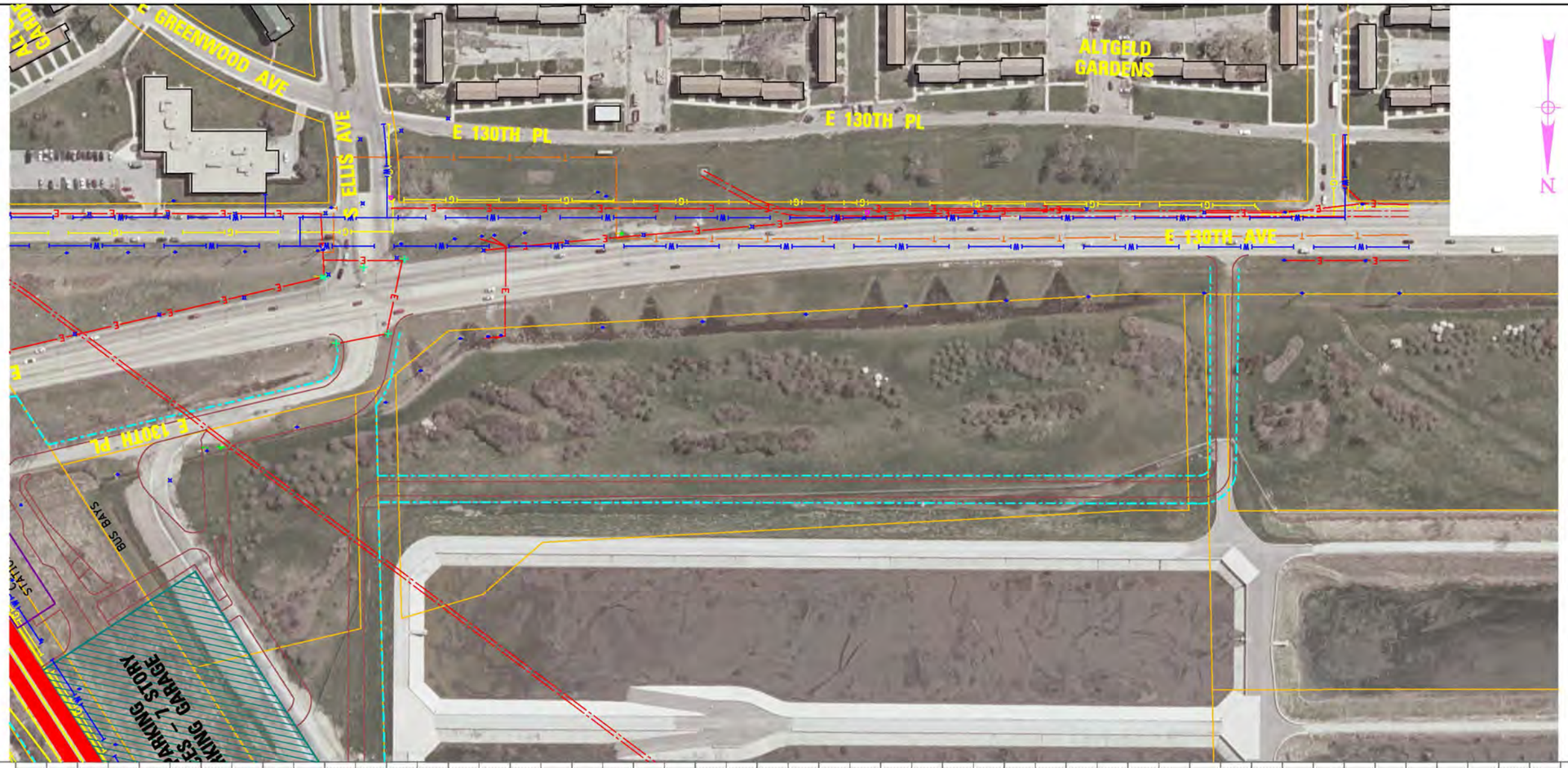

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

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- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST OPTION

IN CHARGE	
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CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_114.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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CTA RED LINE EXTENSION
UNION PACIFIC RAILROAD
WEST OPTION

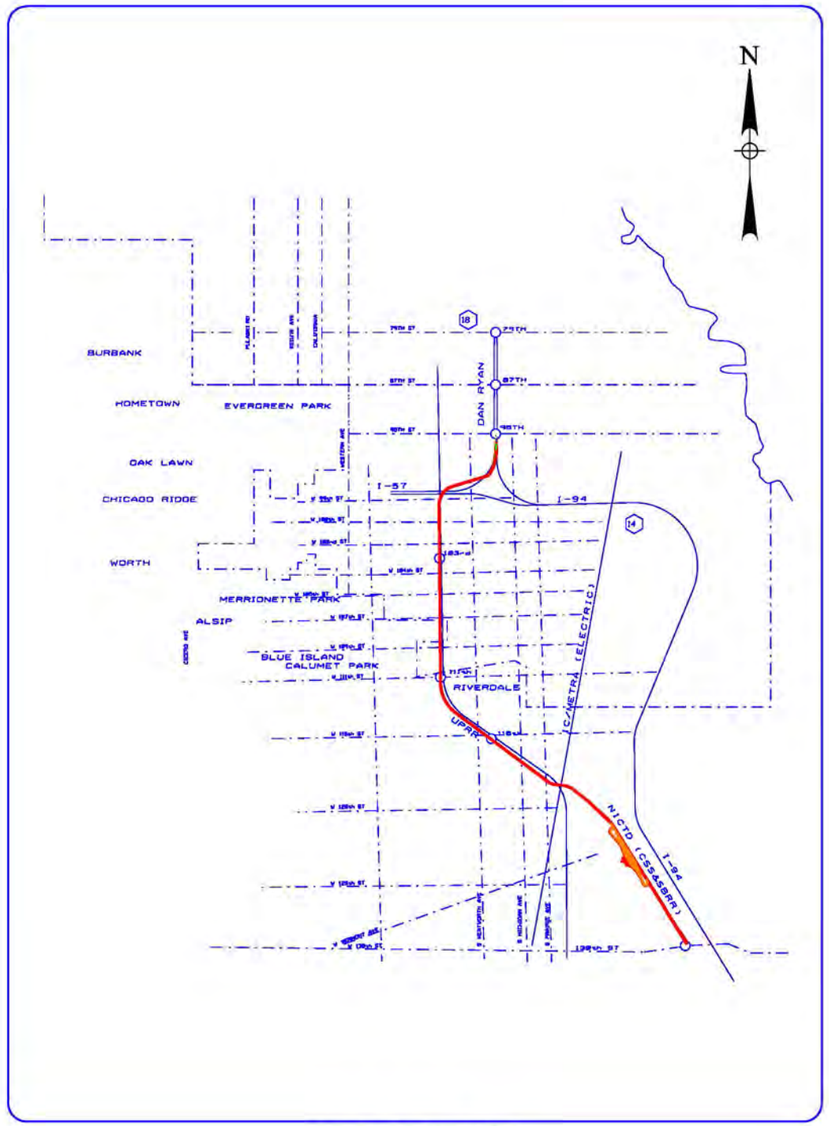

ORIENTATION MAP

INDEX

UNION PACIFIC RAILROAD ALTERNATIVE

WEST OPTION 19 - 34

MAY 1, 2015

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

19 OF 51

IN CHARGE	
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DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_G_COVER.dgn

MARK	DATE	DESCRIPTION

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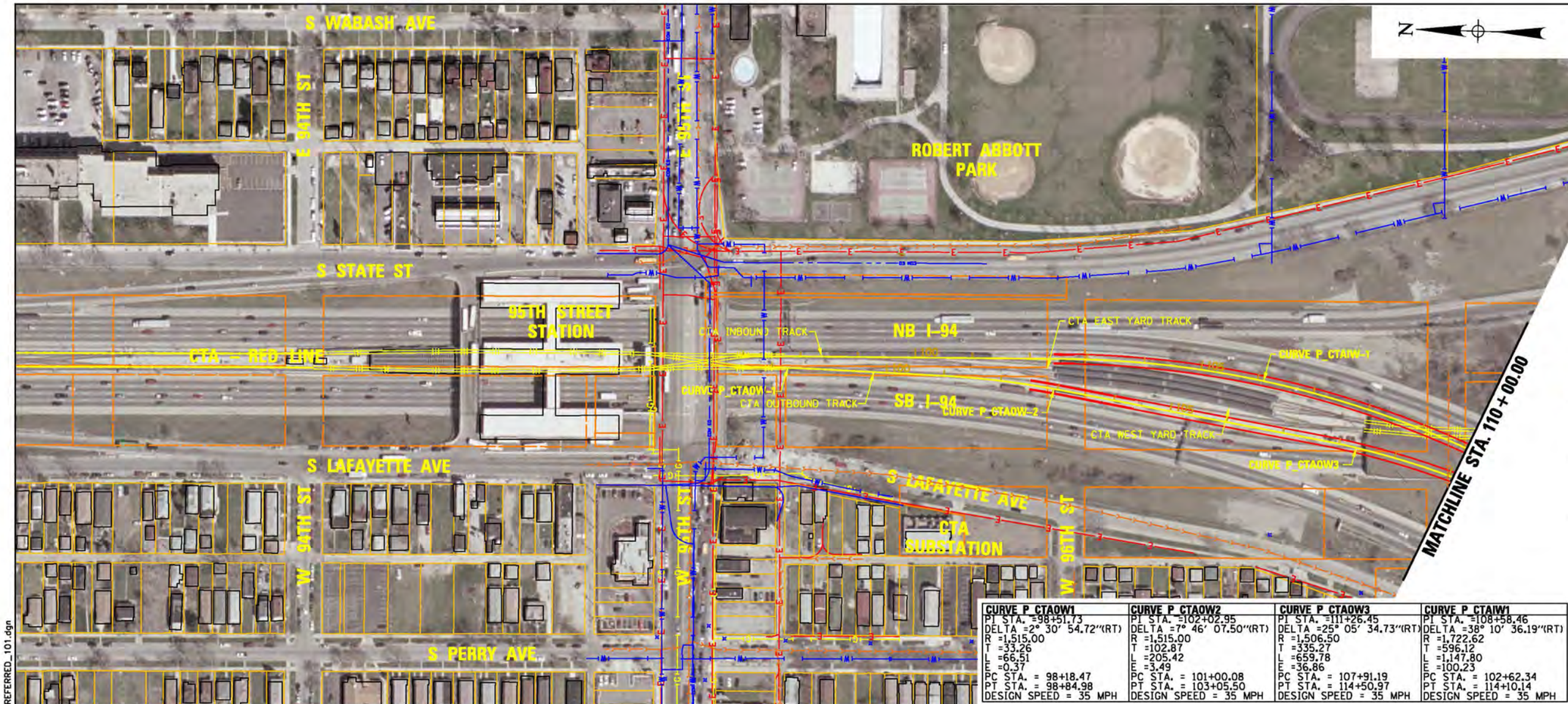

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DELTA =2° 30' 54.72"(RT)	DELTA =7° 46' 07.50"(RT)	DELTA =25° 05' 34.73"(RT)	DELTA =38° 10' 36.19"(RT)
R =1,515.00	R =1,515.00	R =1,506.50	R =1,722.62
T =33.26	T =102.87	T =335.27	T =596.12
L =66.51	L =205.42	L =659.78	L =1,147.80
E =0.37	E =3.49	E =36.86	E =100.23
PC STA. = 98+18.47	PC STA. = 101+00.08	PC STA. = 107+91.19	PC STA. = 102+62.34
PT STA. = 98+84.98	PT STA. = 103+05.50	PT STA. = 114+50.97	PT STA. = 114+10.14
DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH

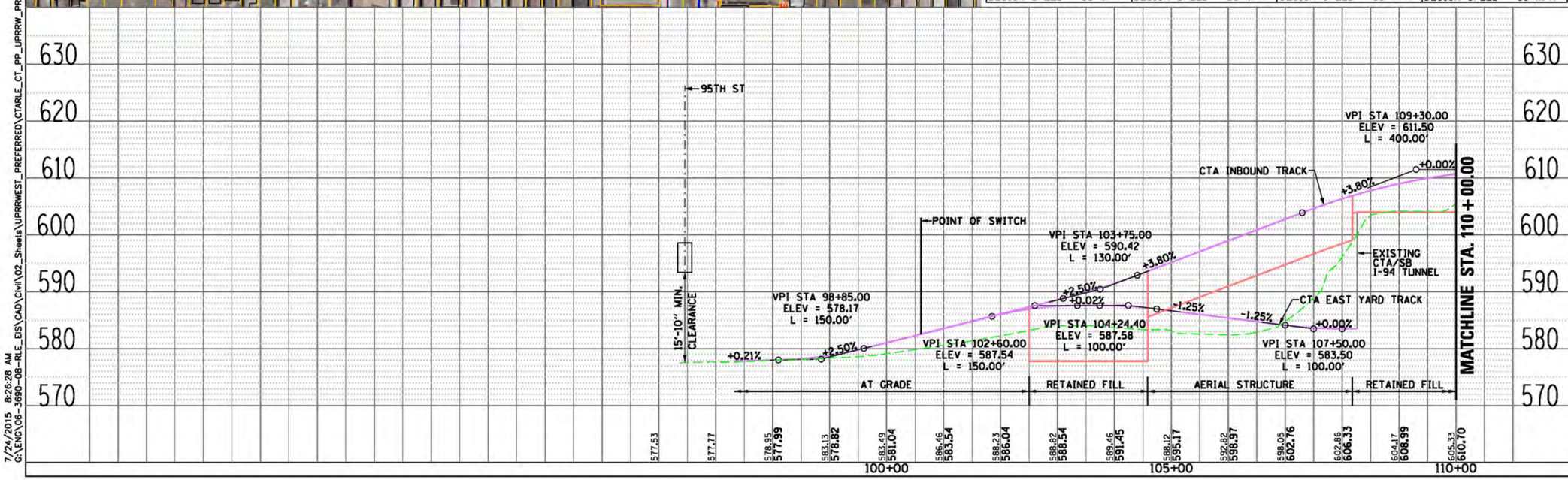

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_101.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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DELTA =25° 05' 34.73"(RT)	DELTA =36° 20' 12.77"(RT)	DELTA =36° 42' 58.83"(RT)
R =1,506.50	R =684.50	R =684.50
T =335.27	T =224.63	T =227.15
L =659.78	L =434.11	L =438.64
E =35.98	E =35.92	E =36.70
PC STA. = 107+91.19	PC STA. = 114+89.33	PC STA. = 115+16.22
PT STA. = 114+50.97	PT STA. = 119+23.44	PT STA. = 119+54.86
DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH	DESIGN SPEED = 35 MPH

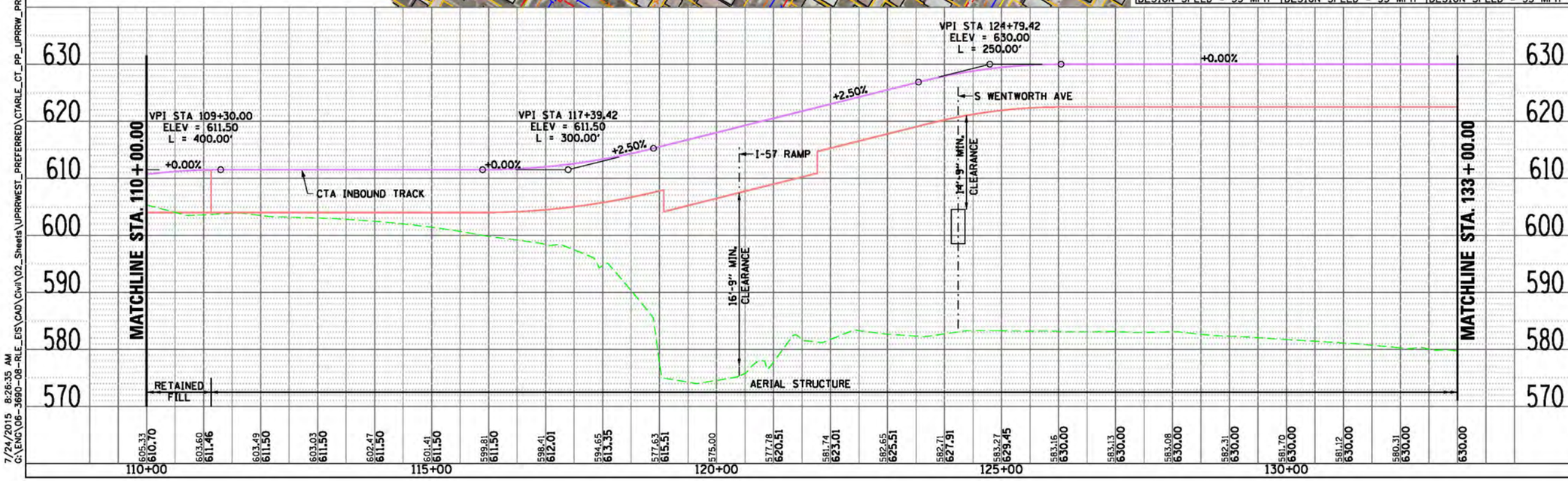

LEGEND

PLAN
- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES
- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE
- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_102.dgn

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V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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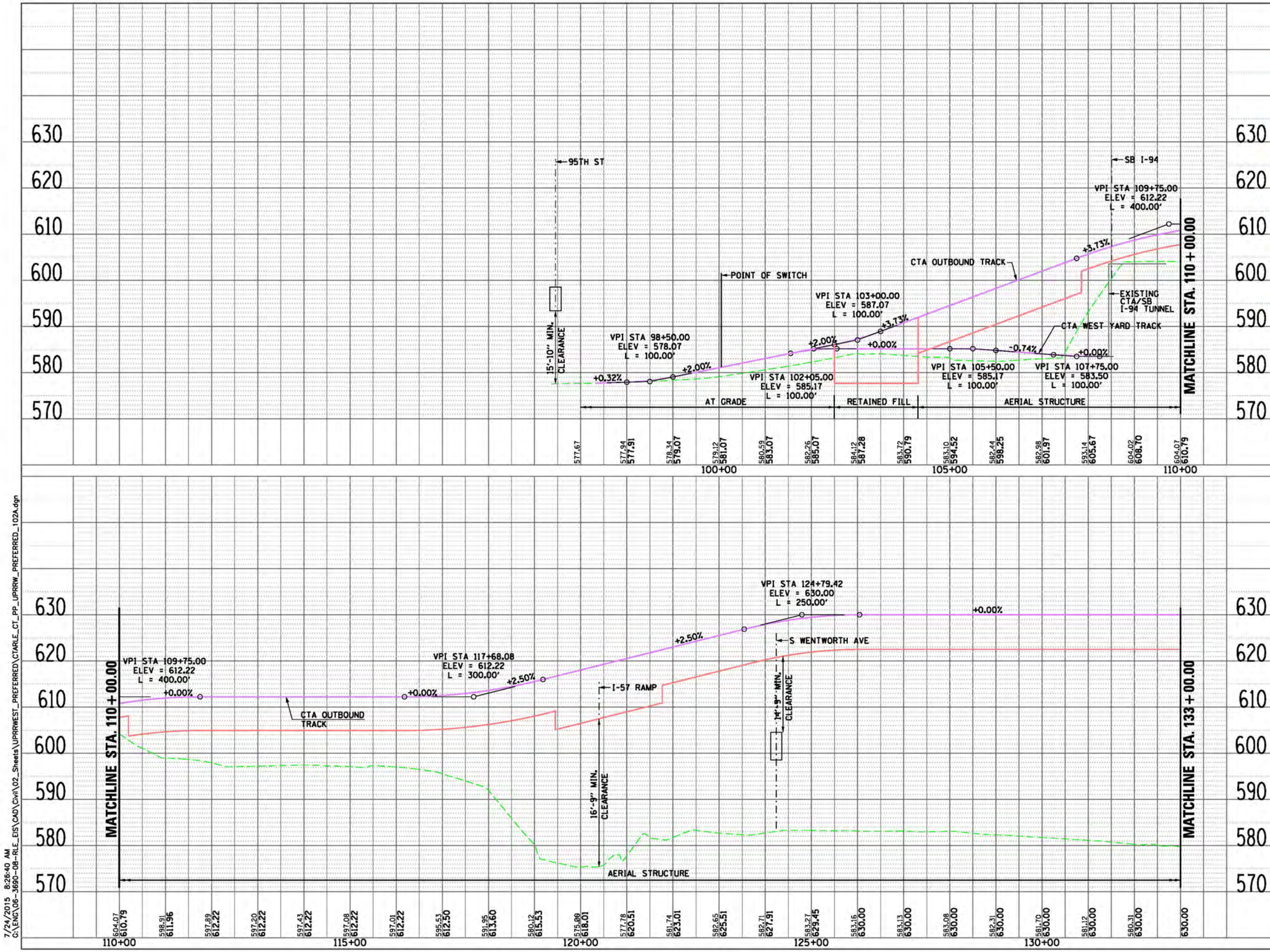

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

IN CHARGE	
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CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_102A.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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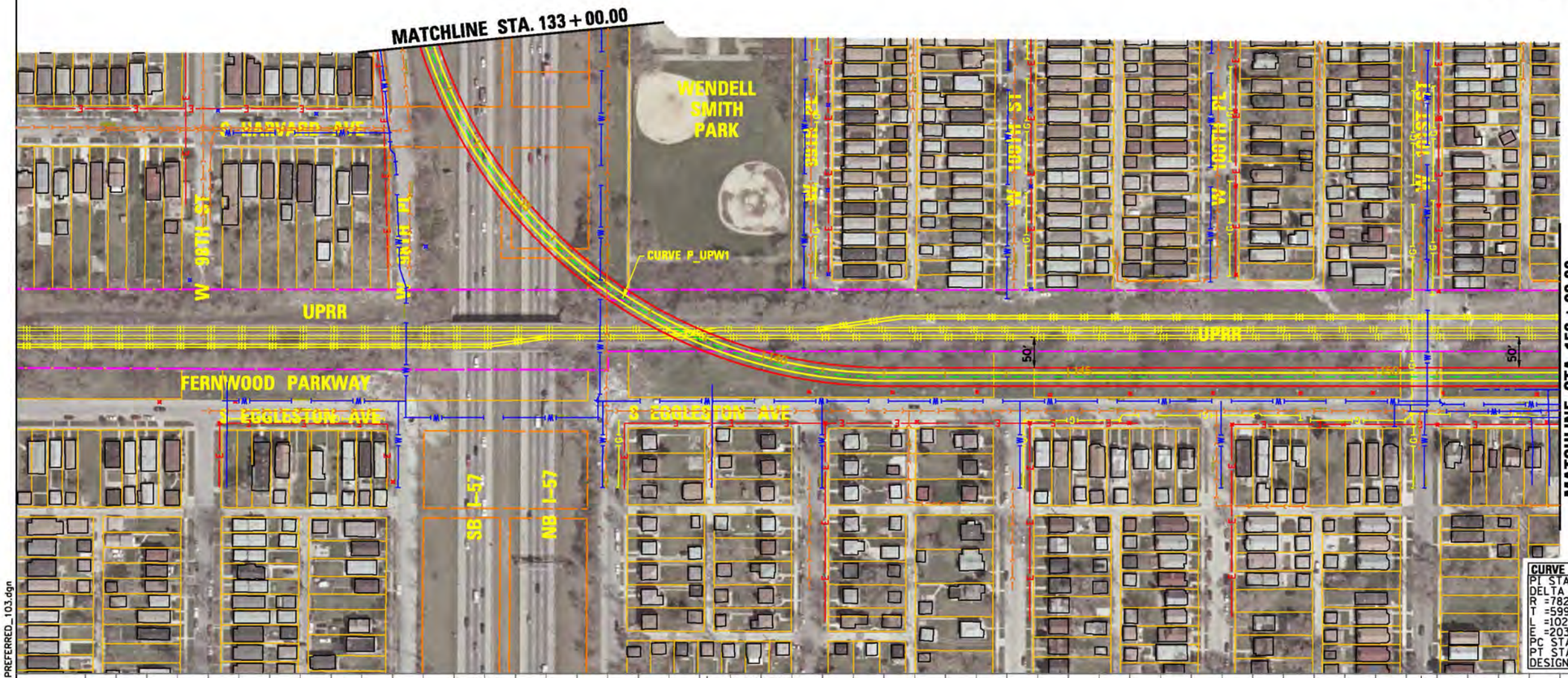

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DELTA =74° 56' 54.61"(LT)
R =782.29
T =599.71
L =1023.31
E =203.43
PC STA. = 131+81.46
PT STA. = 142+04.78
DESIGN SPEED = 35 MPH

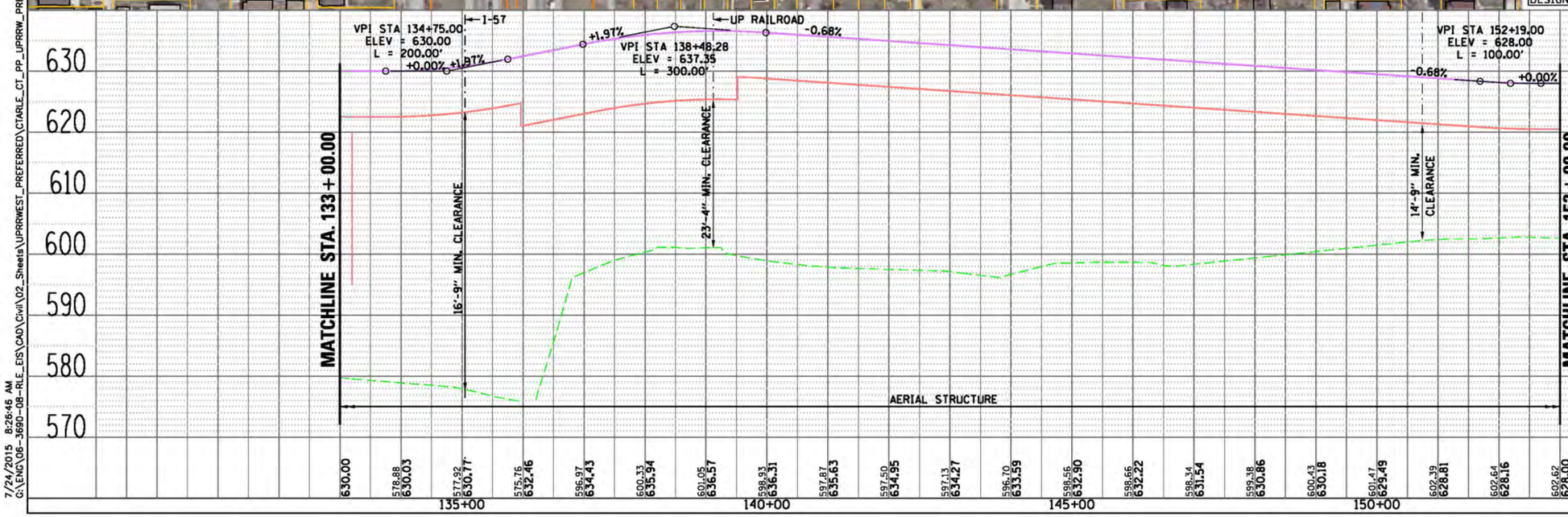

LEGEND

PLAN

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- PR CENTERLINE
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- PR TRACK CENTERLINE
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- EX ROADWAY RIGHT-OF-WAY
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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

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CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_103.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

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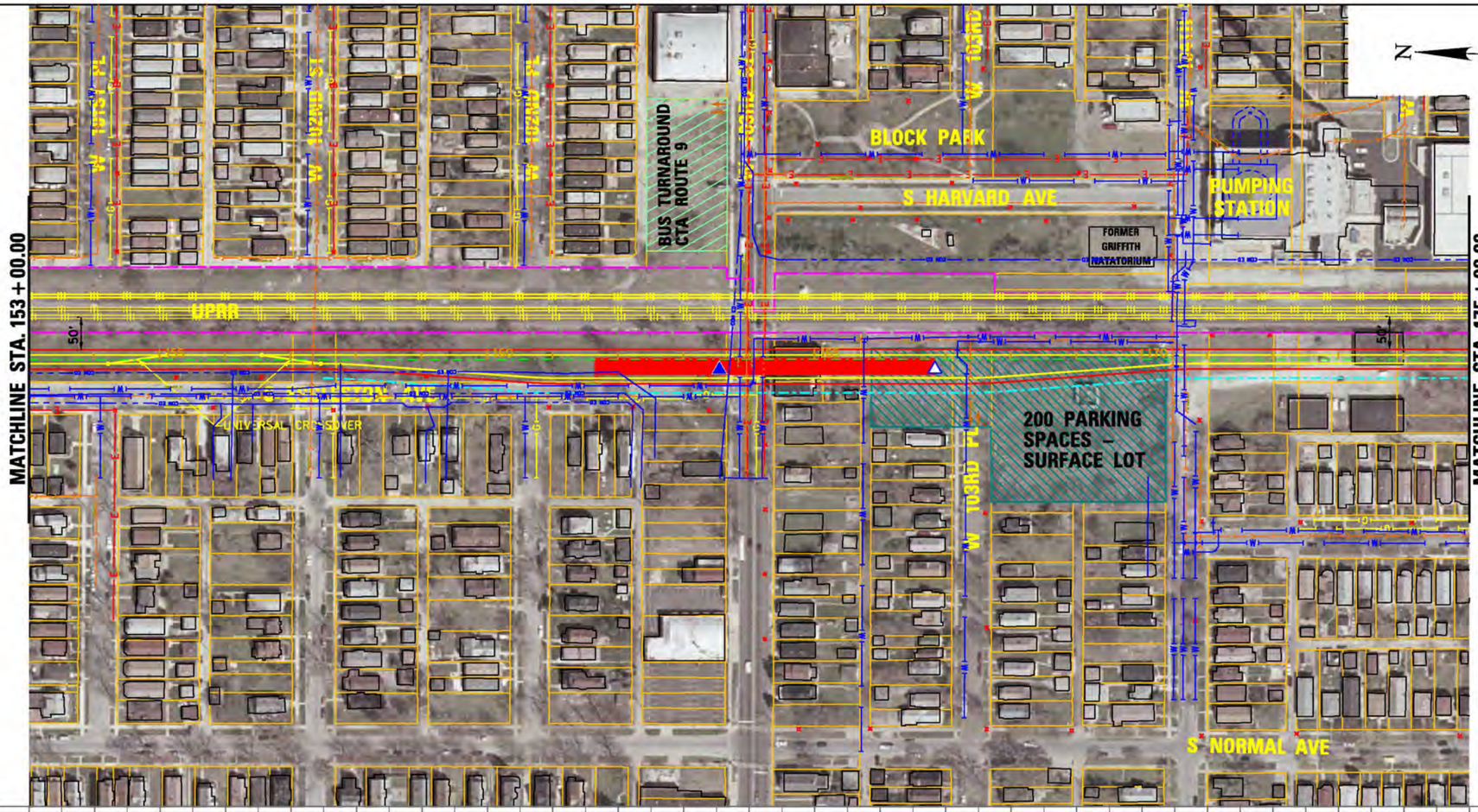

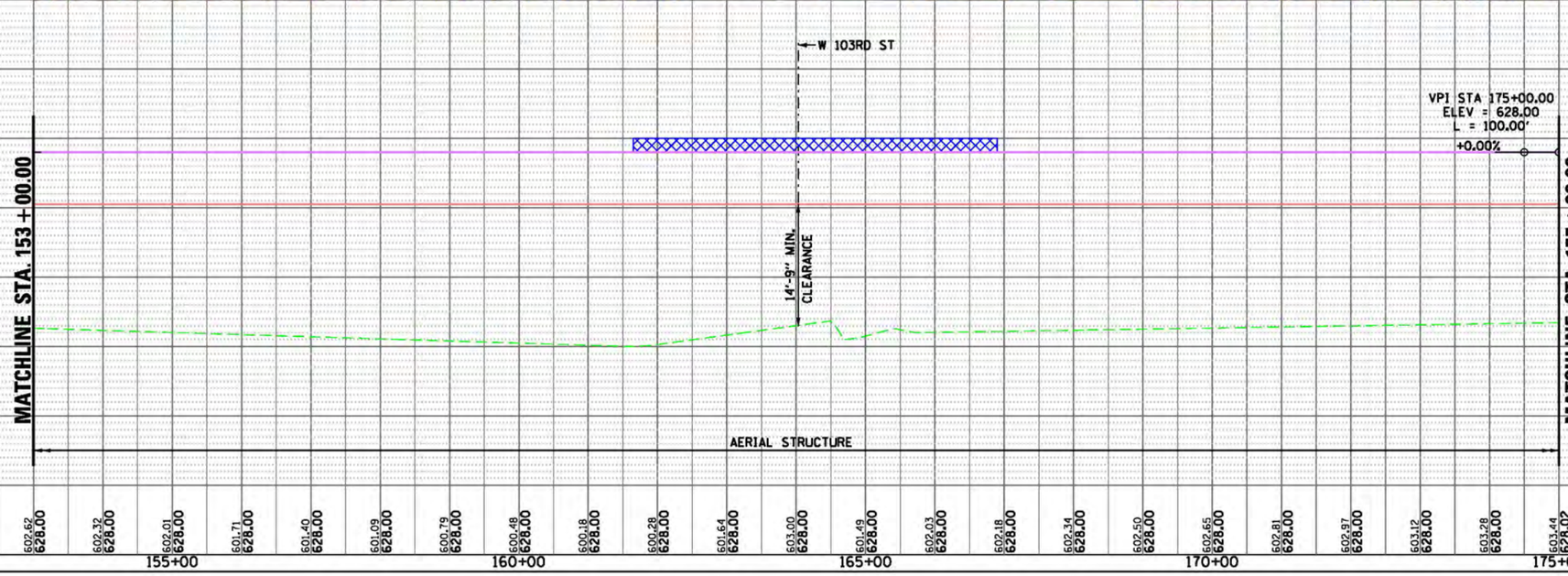

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_104.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:26:53 AM
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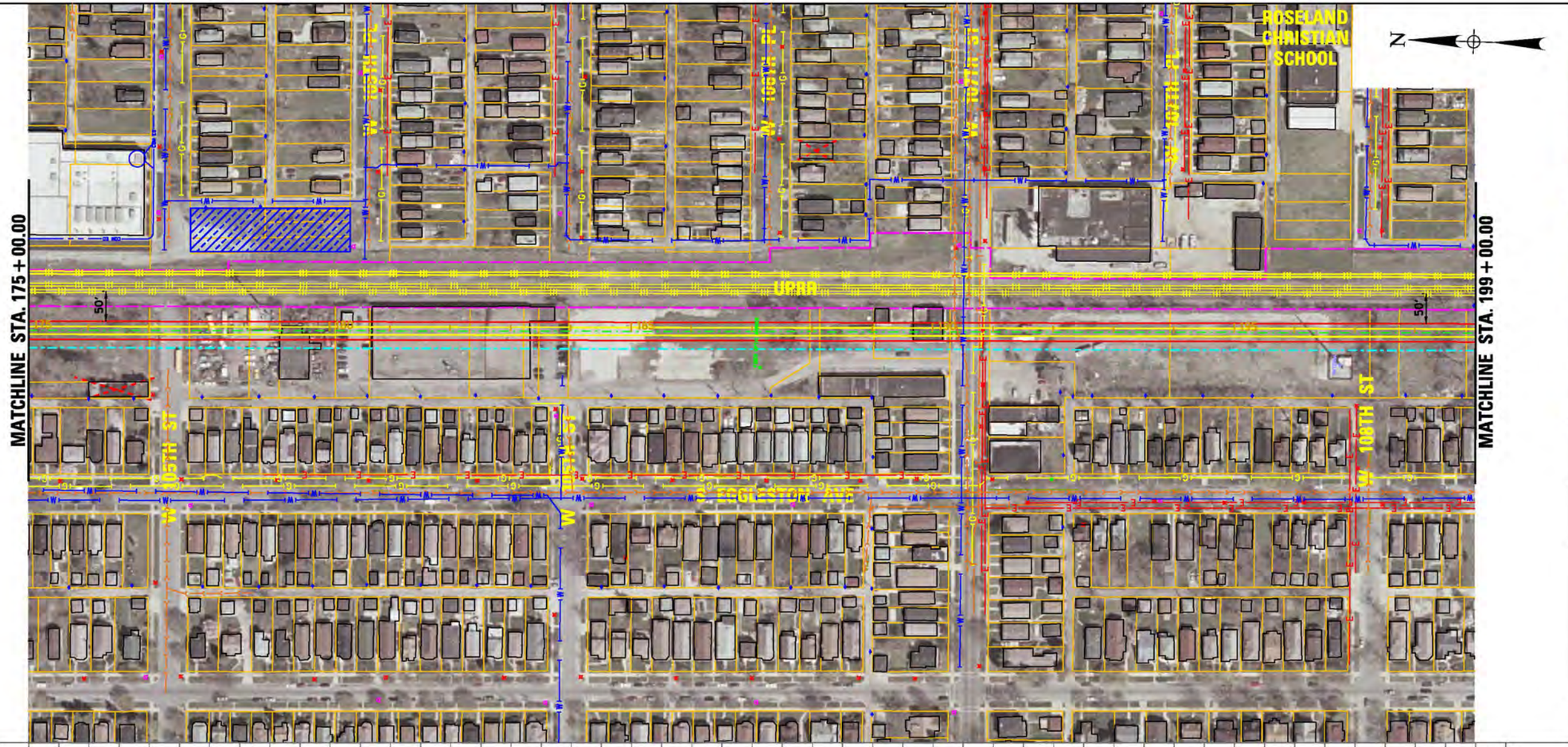
ROSELAND CHRISTIAN SCHOOL
N
MATCHLINE STA. 175+00.00
MATCHLINE STA. 199+00.00
UPRR
W 105TH ST
W 106TH ST
W 107TH ST
W 108TH ST
W 109TH ST
W 110TH ST
W 111TH ST
W 112TH ST
W 113TH ST
W 114TH ST
W 115TH ST
W 116TH ST
W 117TH ST
W 118TH ST
W 119TH ST
W 120TH ST
W 121ST ST
W 122ND ST
W 123RD ST
W 124TH ST
W 125TH ST
W 126TH ST
W 127TH ST
W 128TH ST
W 129TH ST
W 130TH ST
W 131ST ST
W 132ND ST
W 133RD ST
W 134TH ST
W 135TH ST
W 136TH ST
W 137TH ST
W 138TH ST
W 139TH ST
W 140TH ST
W 141ST ST
W 142ND ST
W 143RD ST
W

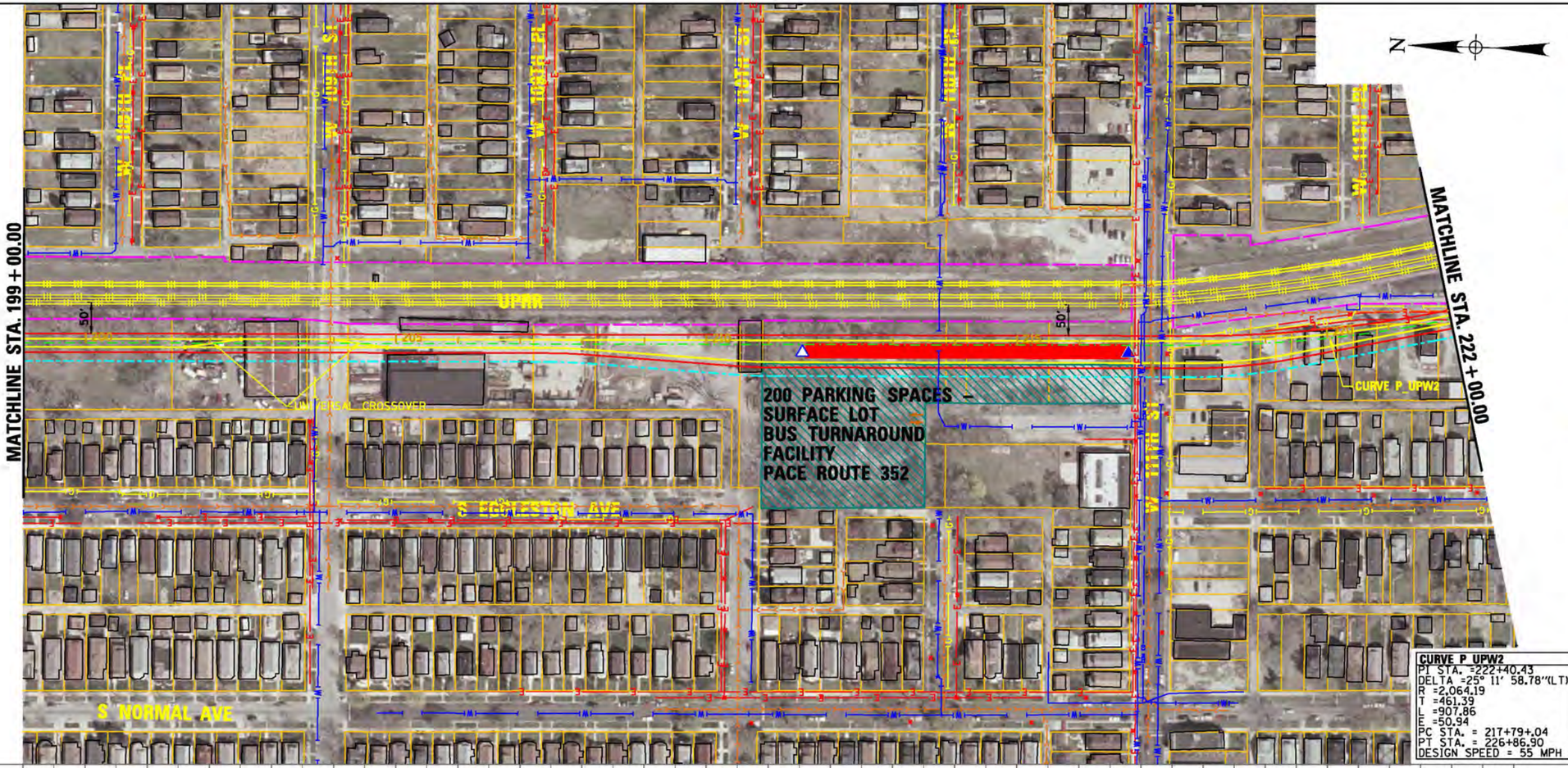

CURVE P UPW2
PI STA. =222+40.43
DELTA =25° 11' 58.78"(LT)
R =2,064.19
T =461.39
L =907.86
E =50.94
PC STA. = 217+79+.04
PT STA. = 226+86.90
DESIGN SPEED = 55 MPH

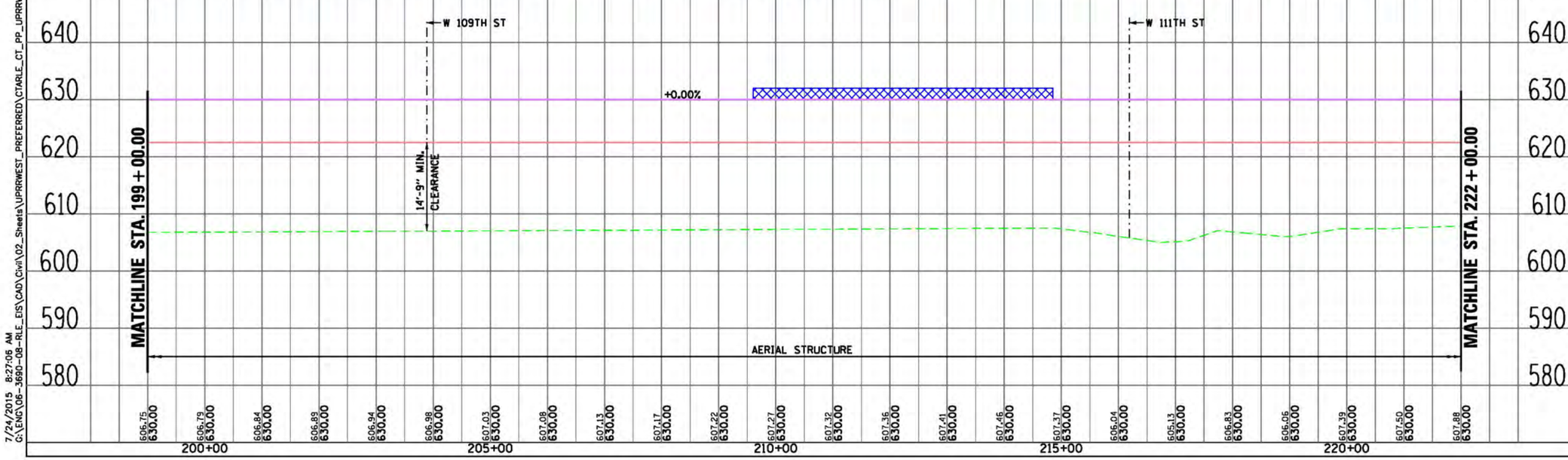

LEGEND

PLAN
- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES
- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE
- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_106.dgn

100 0 100 200
SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

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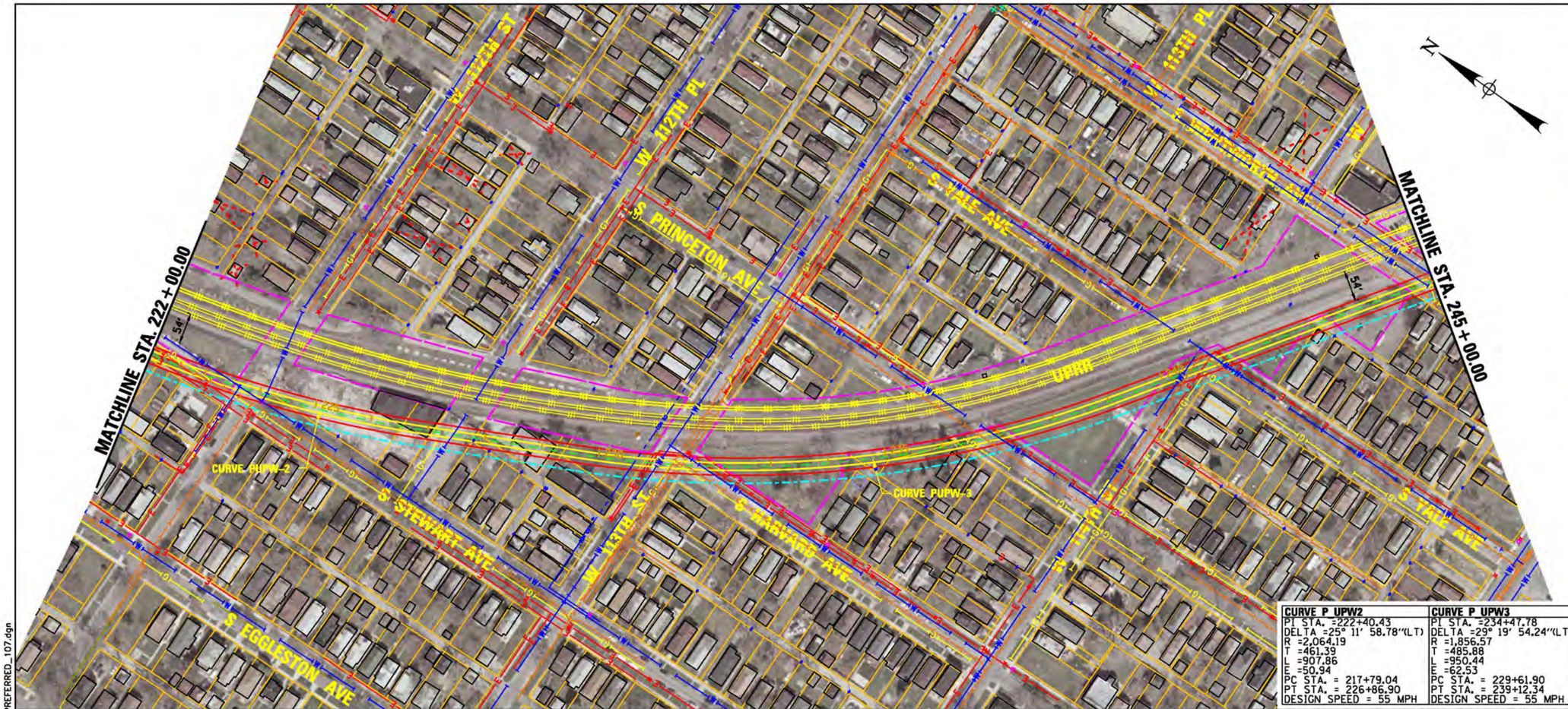

CURVE P UPW2	CURVE P UPW3
PI STA. =222+40.43	PI STA. =234+47.78
DELTA =25° 11' 58.78"(LT)	DELTA =29° 19' 54.24"(LT)
R =2,064.19	R =1,856.57
T =461.39	T =485.88
L =907.86	L =950.44
E =50.94	E =62.53
PC STA. = 217+79.04	PC STA. = 229+61.90
PT STA. = 226+86.90	PT STA. = 239+12.34
DESIGN SPEED = 55 MPH	DESIGN SPEED = 55 MPH

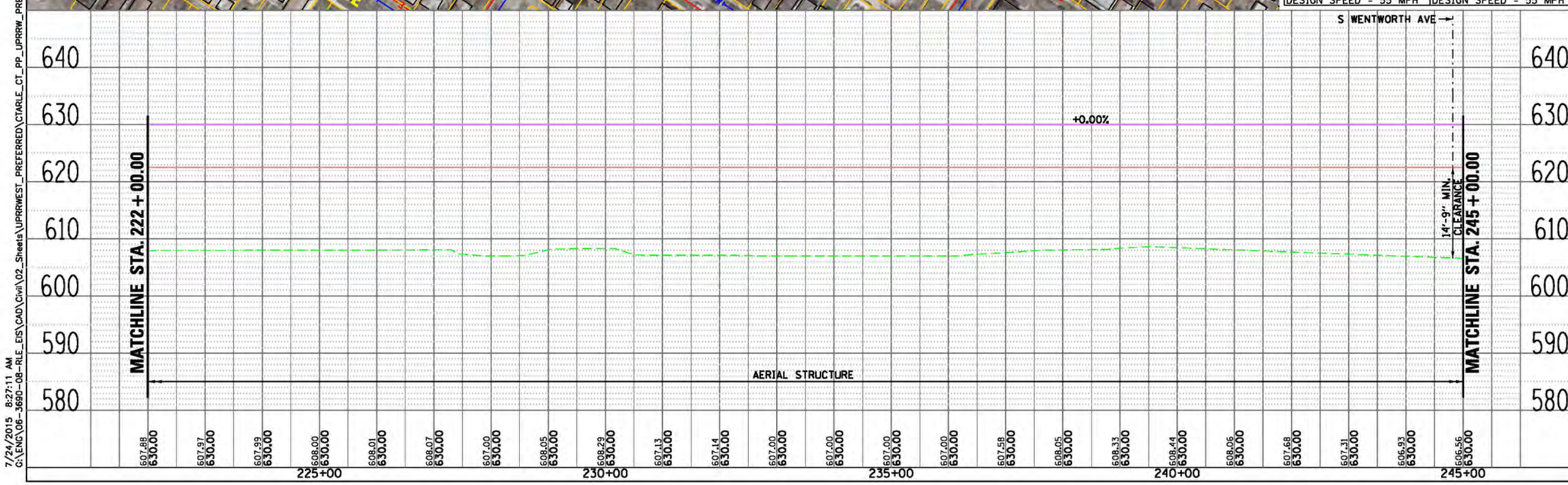

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

27 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_107.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

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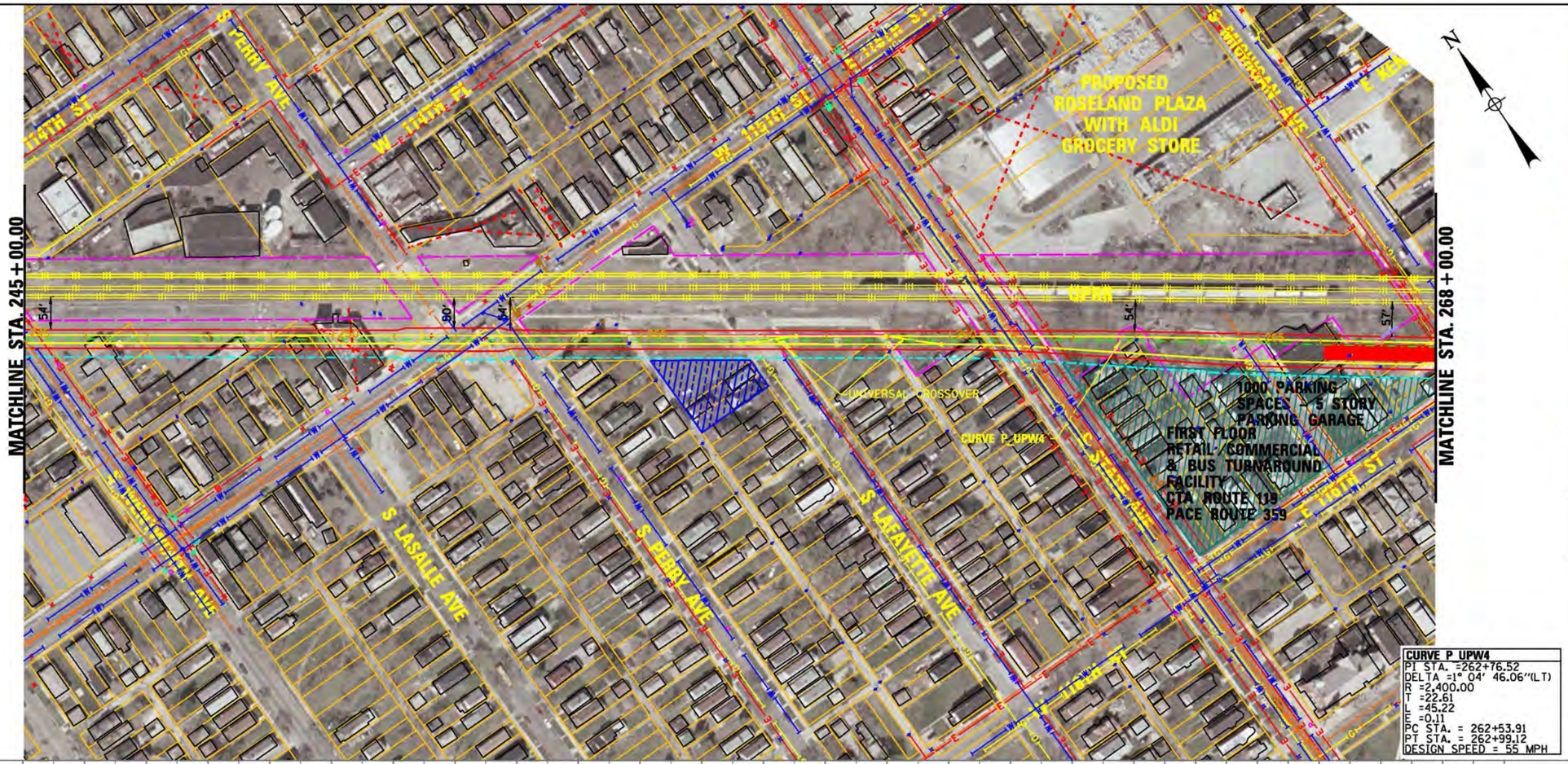

CURVE P UPW4
PI STA. =262+76.52
DELTA =1° 04' 46.06"(LT)
R =2,400.00
T =22.61
L =45.22
E =0.11
PC STA. = 262+53.91
PT STA. = 262+99.12
DESIGN SPEED = 55 MPH

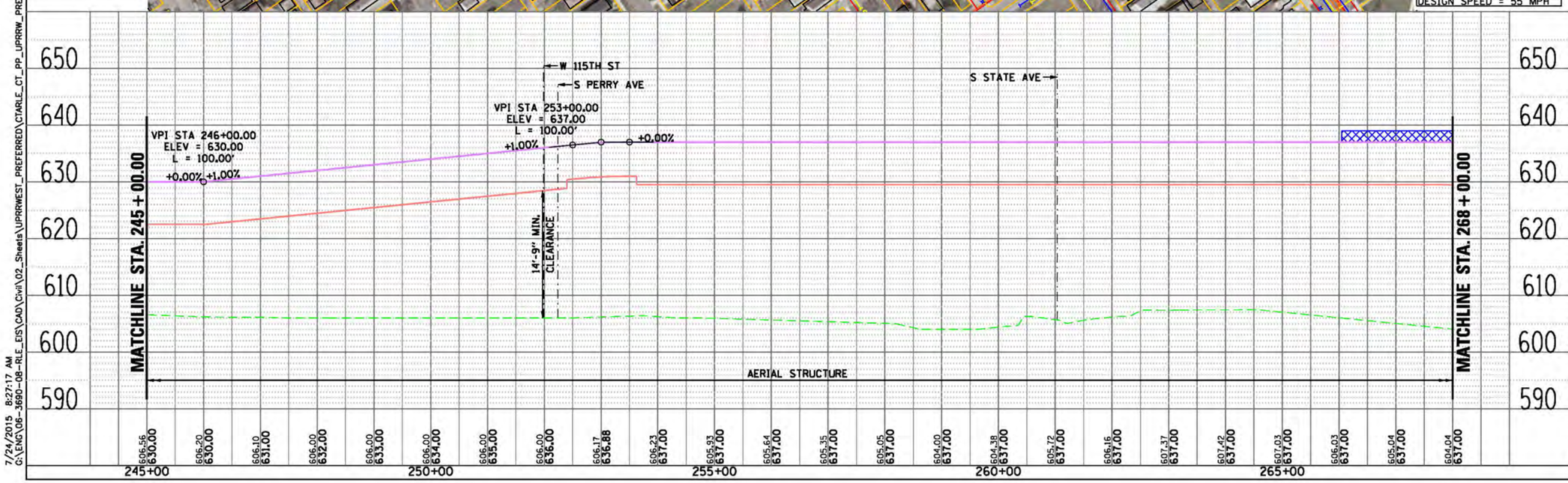

LEGEND

PLAN
- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES
- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE
- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

28 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_108.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

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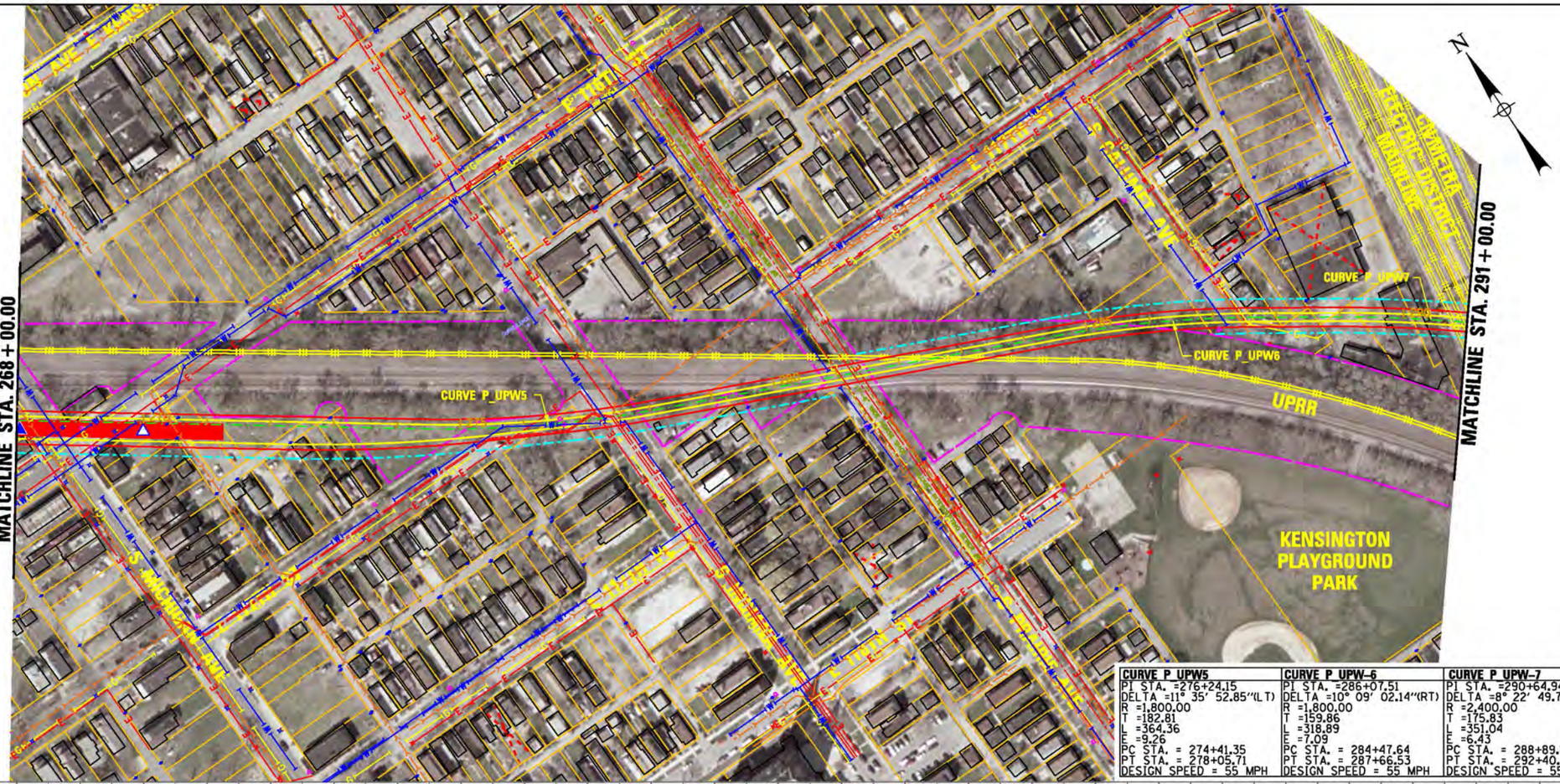

CURVE P_UPW5	CURVE P_UPW-6	CURVE P_UPW-7
PI STA. =276+24.15	PI STA. =286+07.51	PI STA. =290+64.94
DELTA =11° 35' 52.85"(LT)	DELTA =10° 09' 02.14"(RT)	DELTA =8° 22' 49.78"(RT)
R =1,800.00	R =1,800.00	R =2,400.00
T =182.81	T =159.86	T =175.83
L =364.36	L =318.89	L =351.04
E =9.26	E =7.09	E =6.43
PC STA. = 274+41.35	PC STA. = 284+47.64	PC STA. = 288+89.11
PT STA. = 278+05.71	PT STA. = 287+66.53	PT STA. = 292+40.15
DESIGN SPEED = 55 MPH	DESIGN SPEED = 55 MPH	DESIGN SPEED = 55 MPH

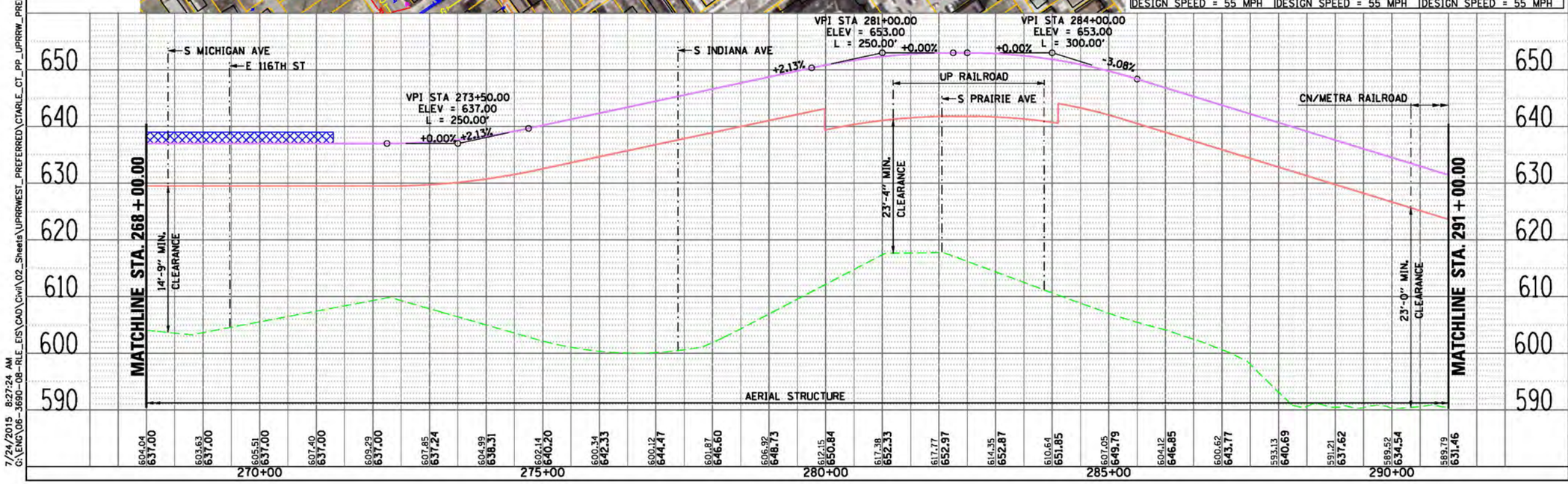

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

29 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_109.dgn

100 0 100 200

SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:27:24 AM
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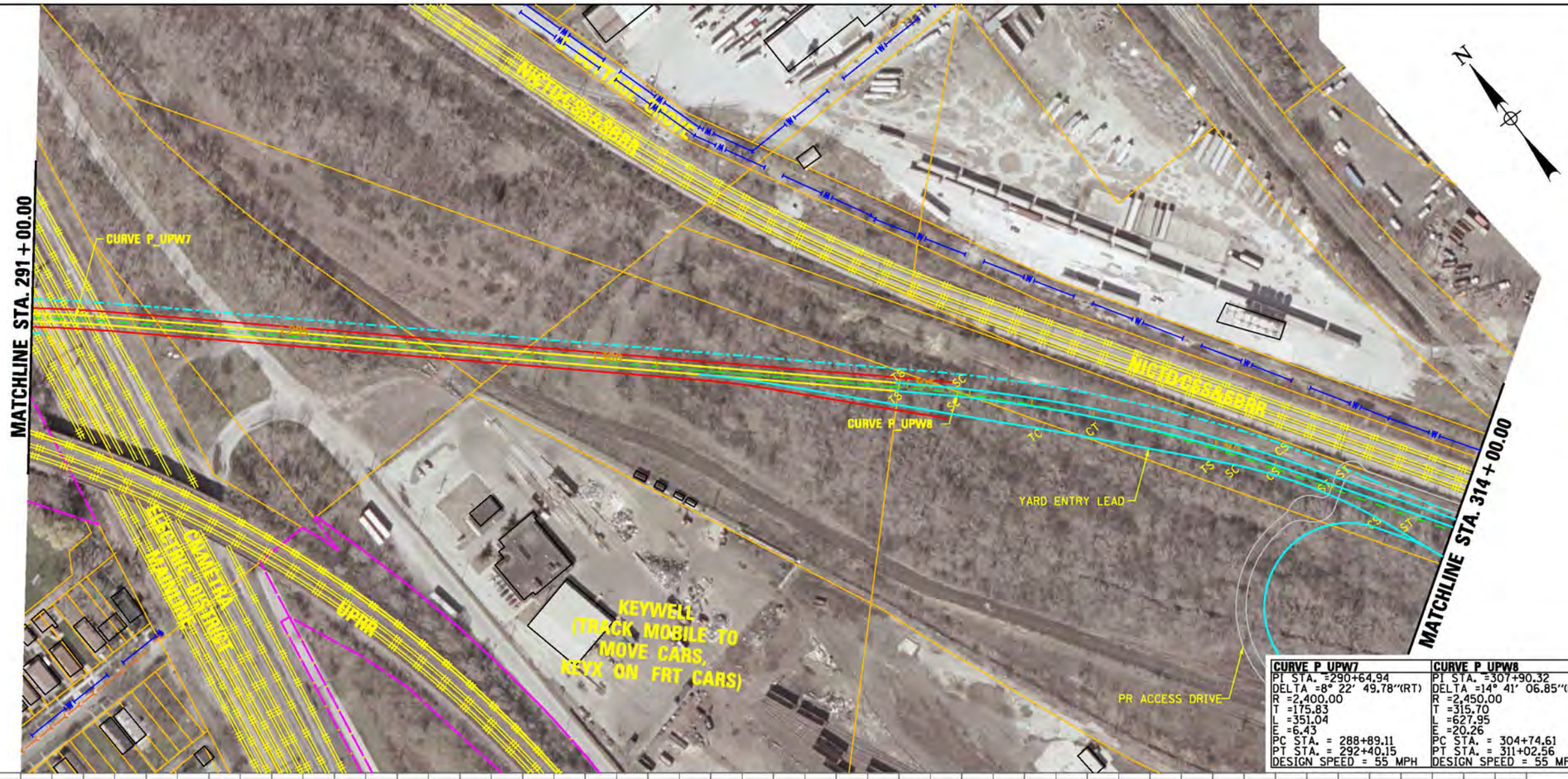

CURVE P_UPW7	CURVE P_UPW8
PI STA. =290+64.94	PI STA. =307+90.32
DELTA =8° 22' 49.78"(RT)	DELTA =14° 41' 06.85"(RT)
R =2,400.00	R =2,450.00
T =175.83	T =315.70
L =351.04	L =627.95
E =6.43	E =20.26
PC STA. = 288+89.11	PC STA. = 304+74.61
PT STA. = 292+40.15	PT STA. = 311+02.56
DESIGN SPEED = 55 MPH	DESIGN SPEED = 55 MPH

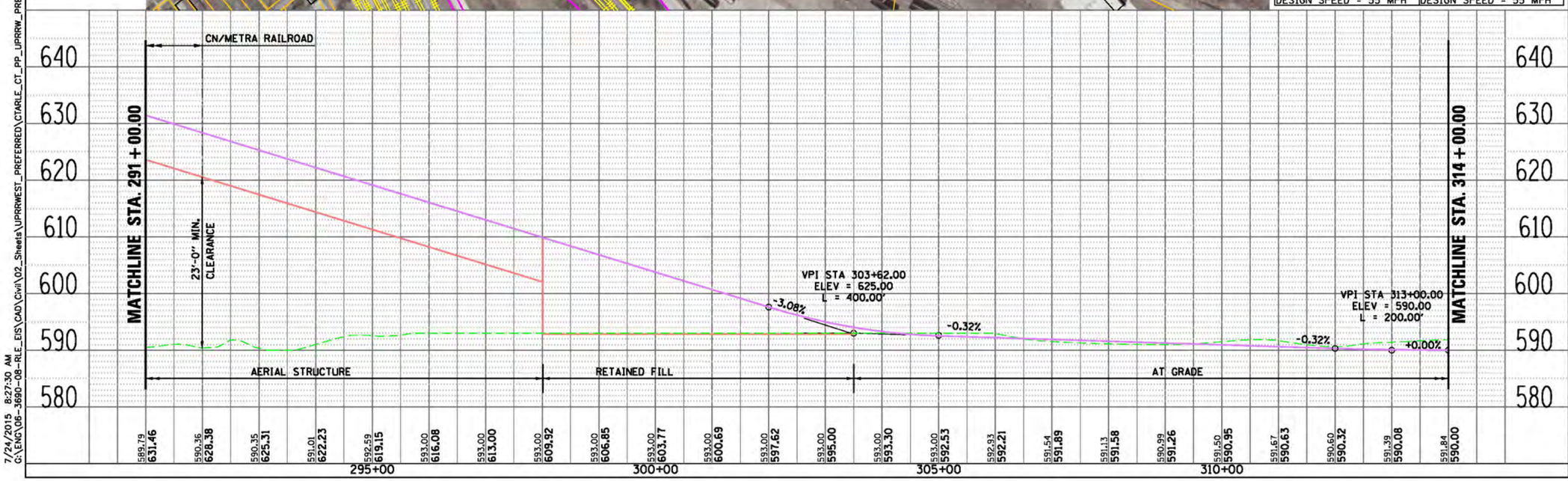

LEGEND

PLAN
- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES
- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE
- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_110.dgn

100 0 100 200
SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 8:27:30 AM
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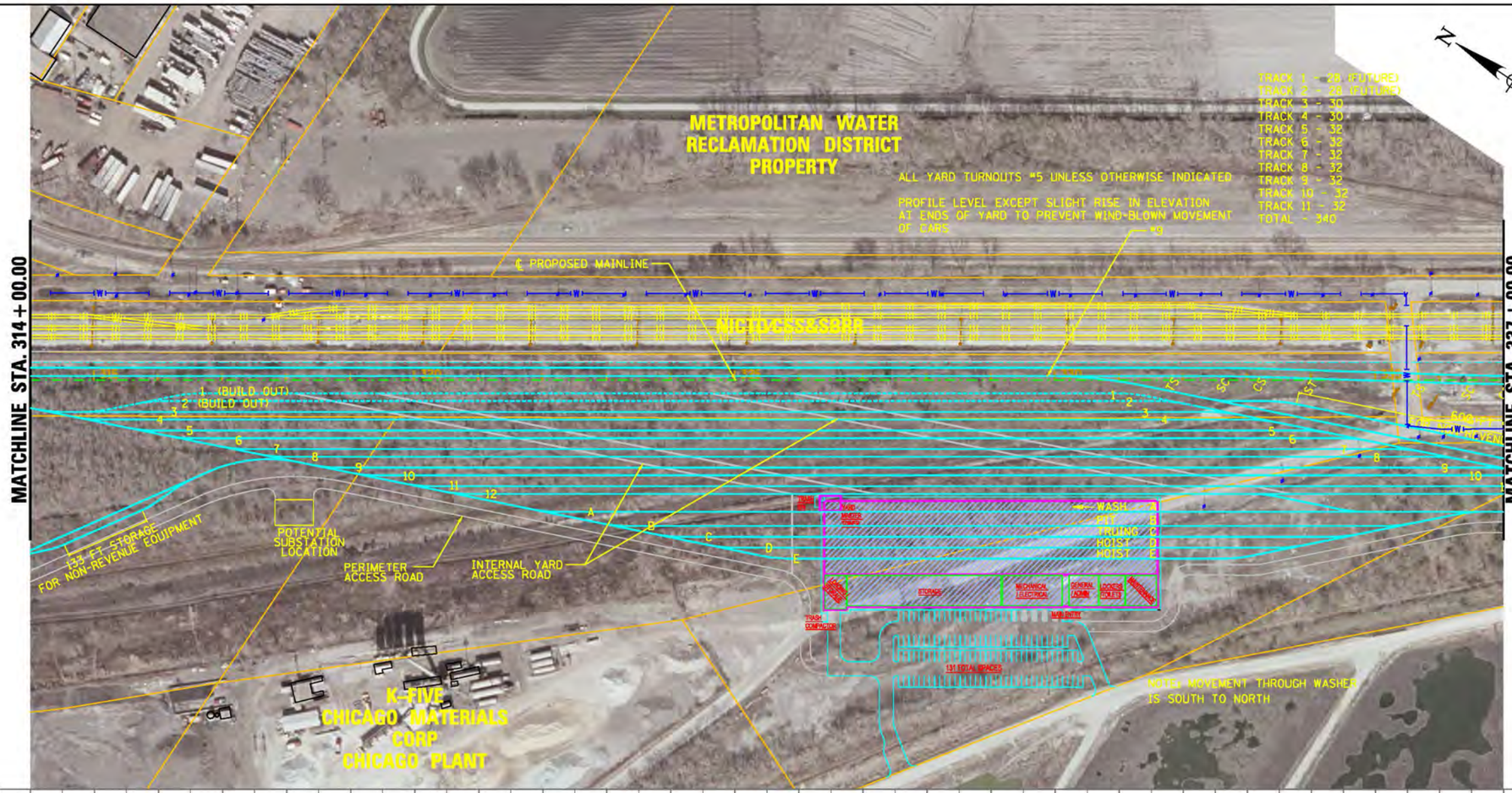

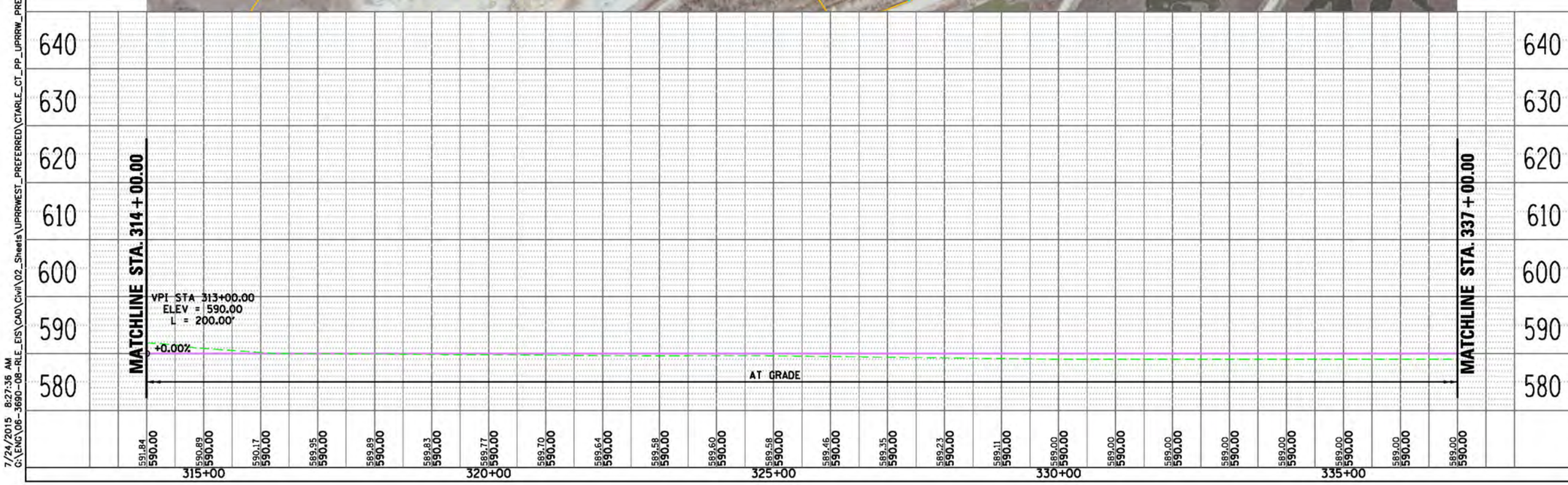

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

30 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_111.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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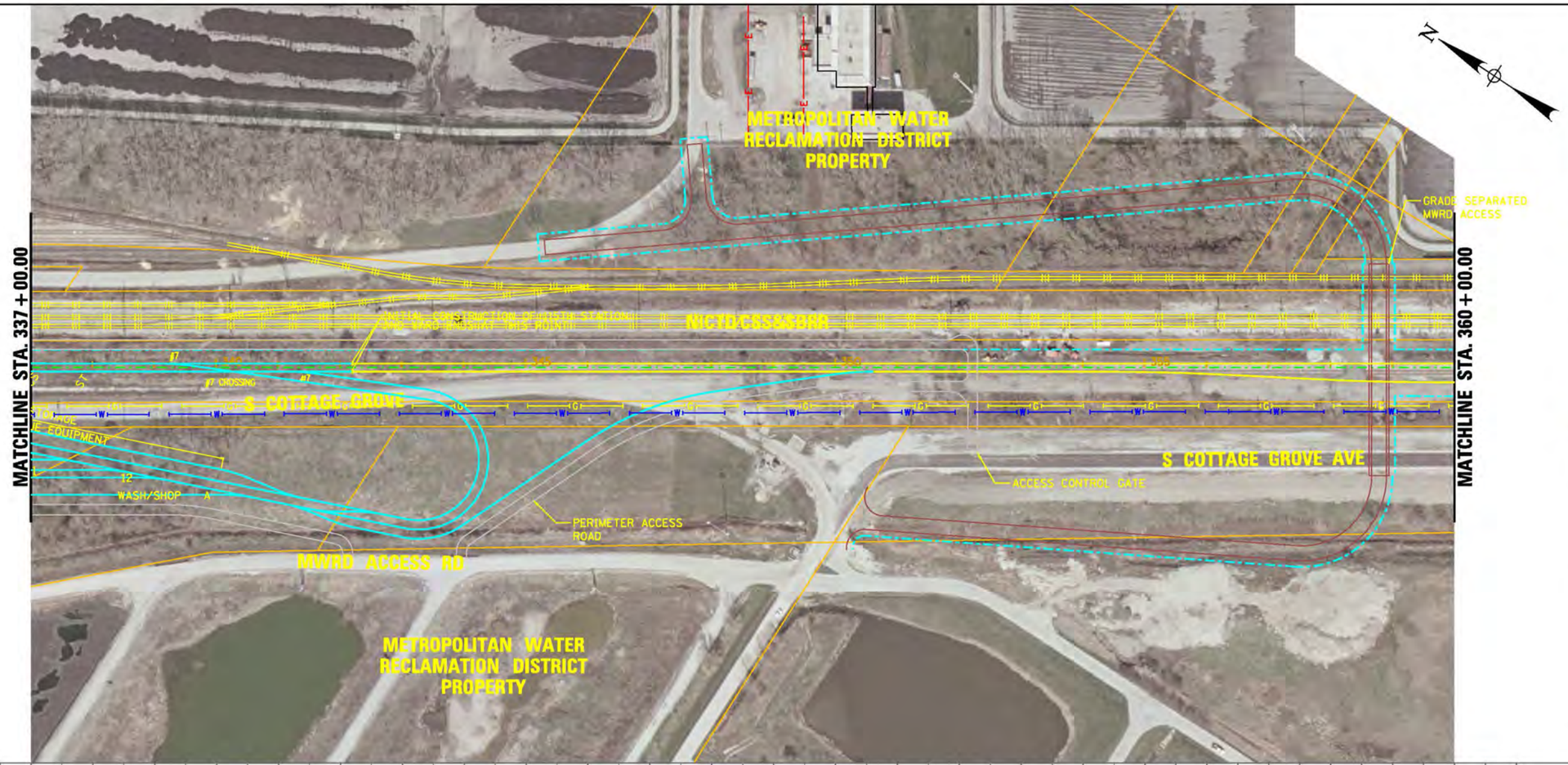

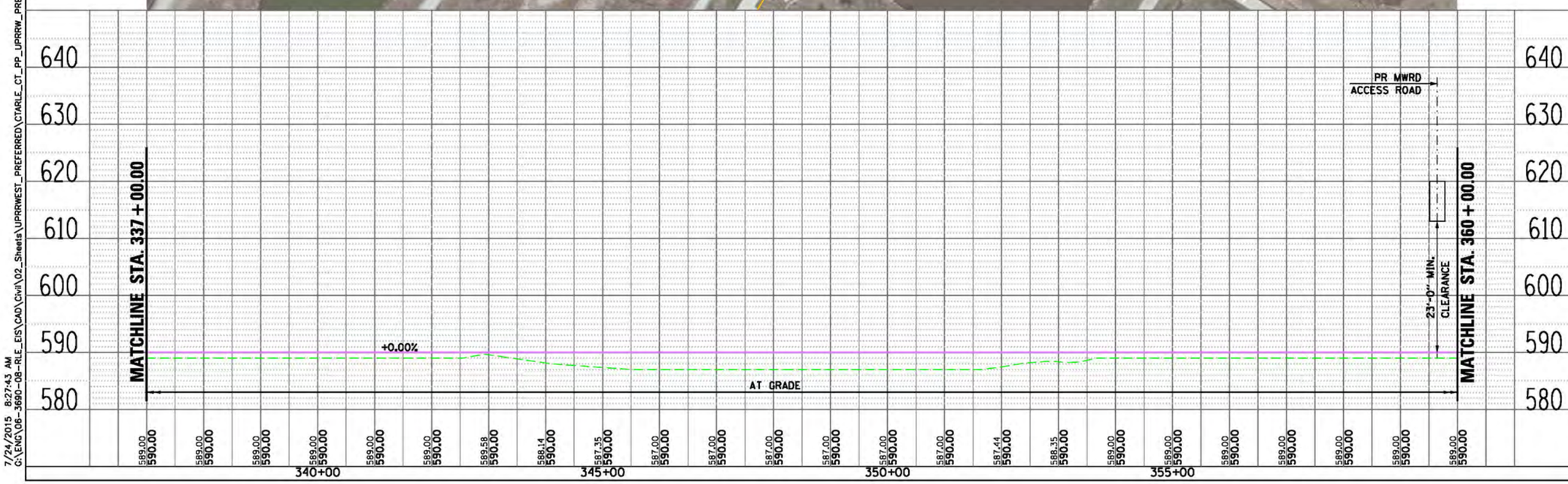

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PLAN

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- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
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- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

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- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

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CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_112.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

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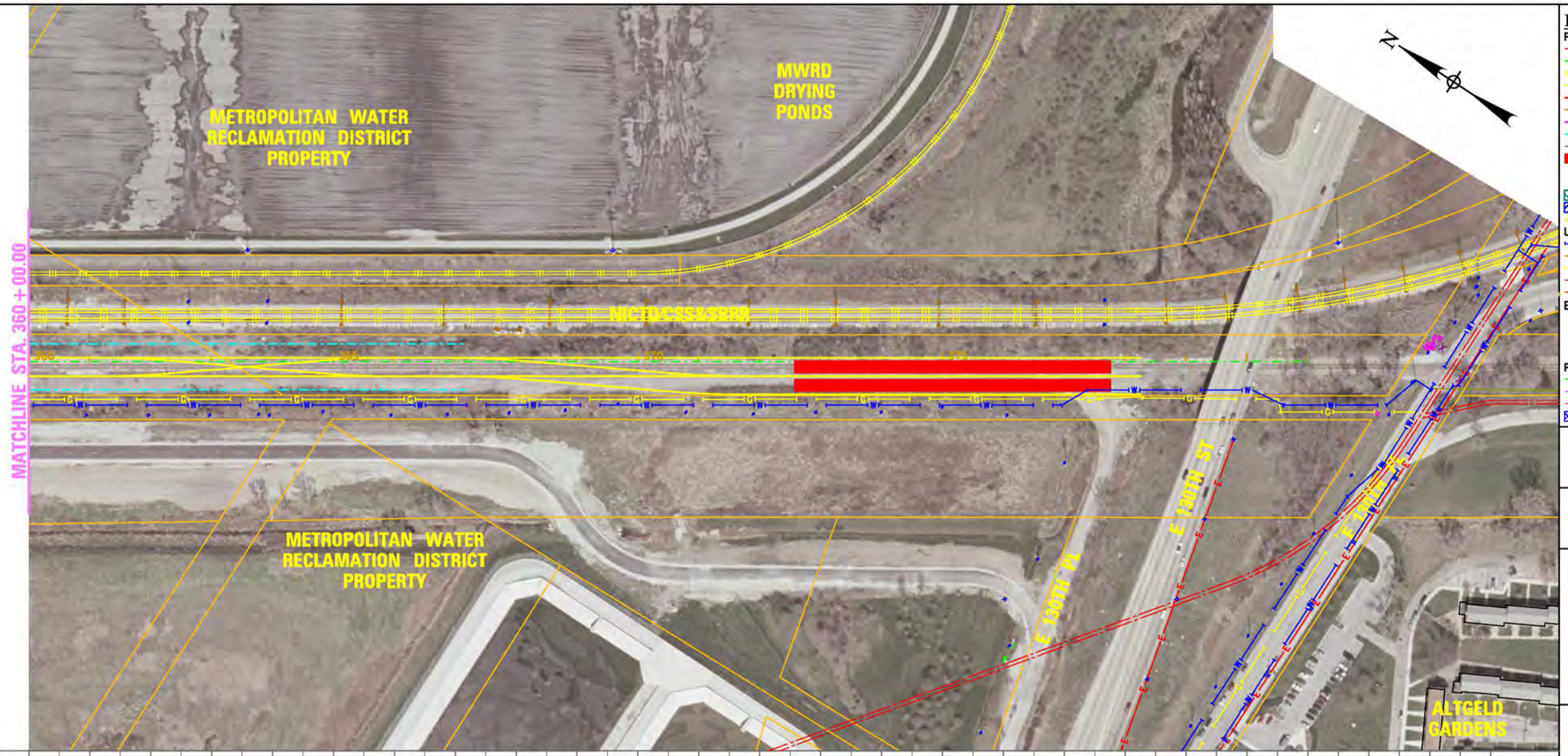

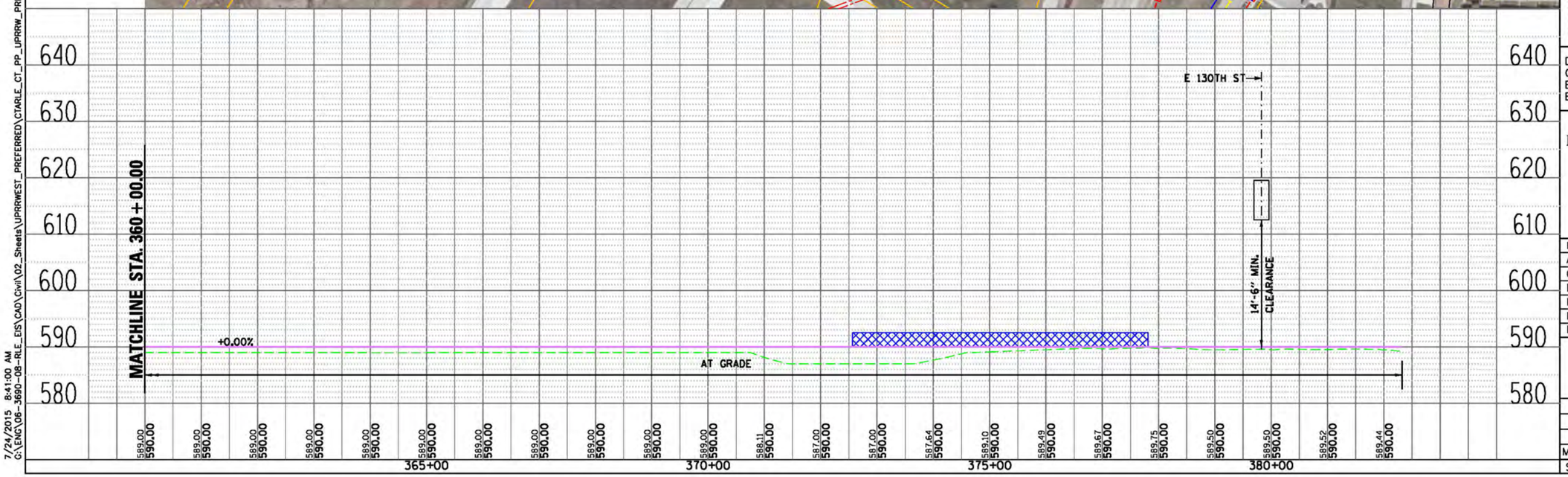

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PLAN

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- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

33 OF 51

IN CHARGE	
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CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRW_PREFERRED_113.dgn

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SCALE H 1" = 100'-0"
V 1" = 10'-0"

MARK	DATE	DESCRIPTION

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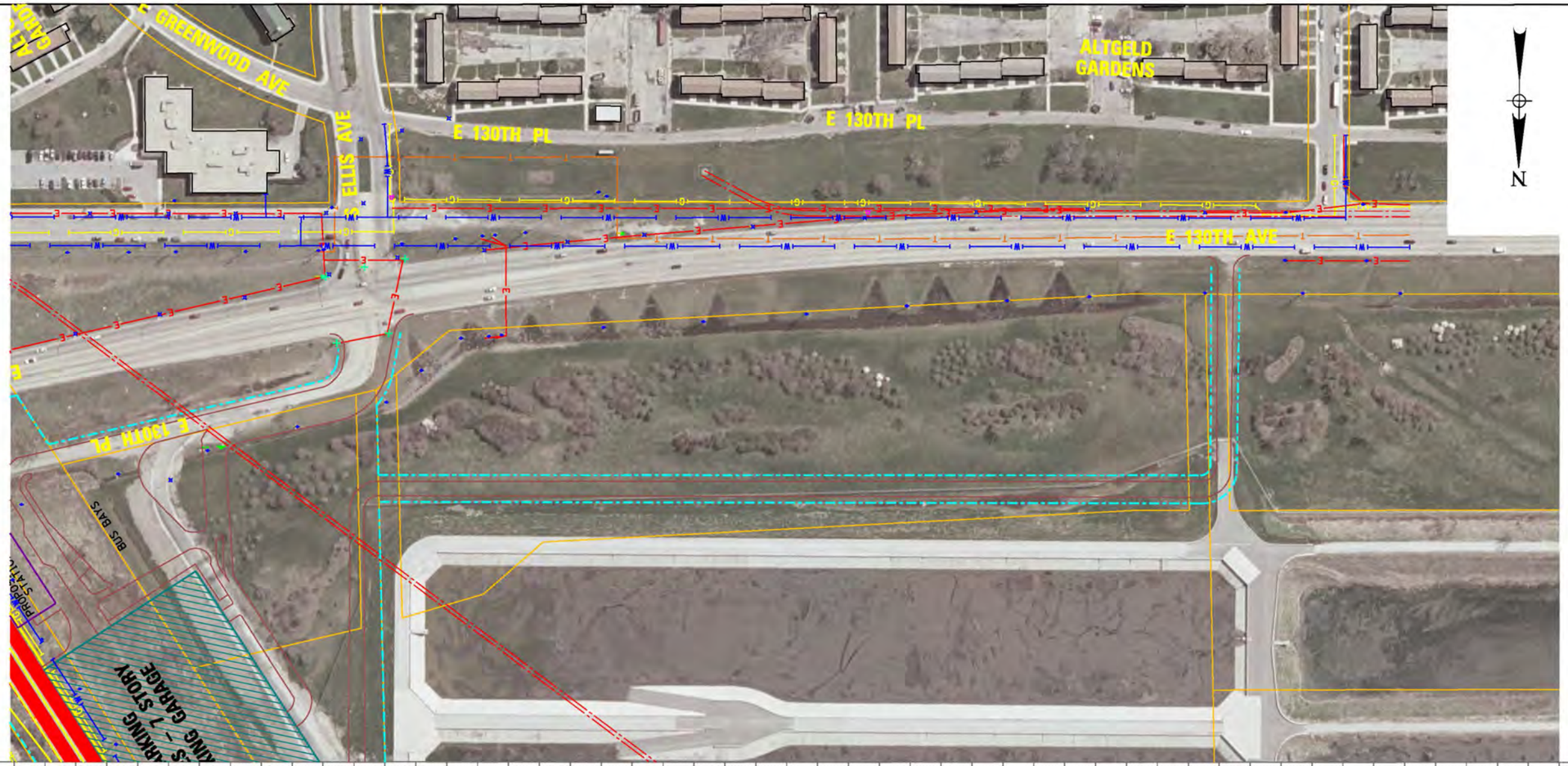

LEGEND

PLAN

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- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
WEST OPTION

34 OF 51

IN CHARGE
APPROVED BY
CHECKED BY
DESIGNED BY
DRAWN BY
PROJECT NO CTA-RLE
FILE NAME CTARLE_CT_PP_UPRRW_PREFERRED_114.dgn

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CTA RED LINE EXTENSION
ALL ALTERNATIVES
PIER LOCATIONS

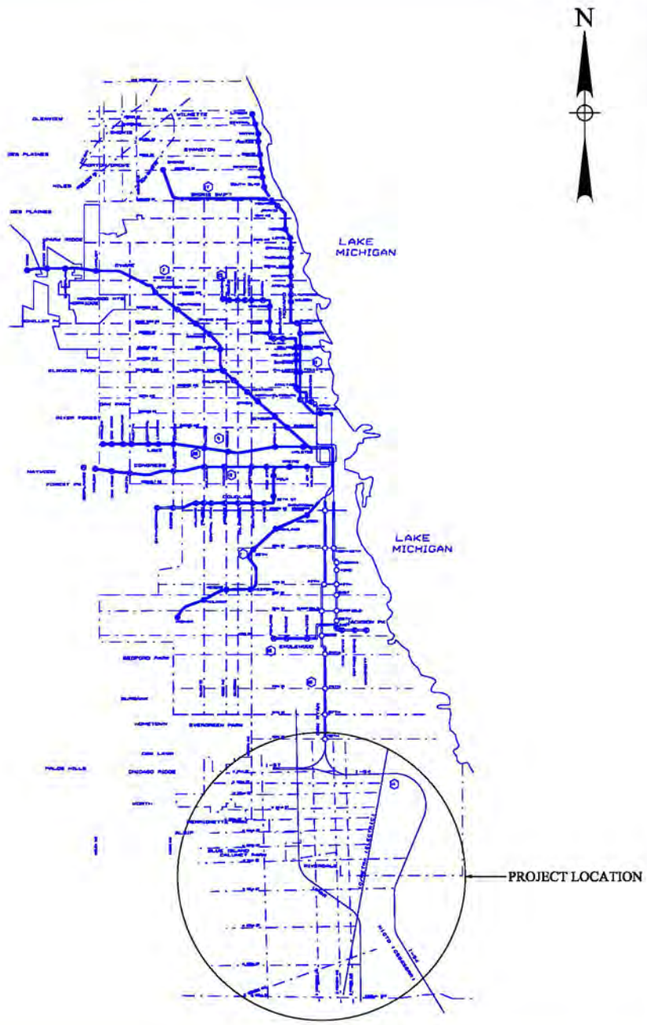

ORIENTATION MAP

INDEX

ALL ALTERNATIVES

PIER LOCATIONS 35 - 43

MAY 1, 2015

PRELIMINARY DRAFT

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CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
ALL ALTERNATIVES
PIER LOCATIONS

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PROJECT NO	CTA-RLE
FILE NAME	CTARLE_G_COVER_PIERS.dgn

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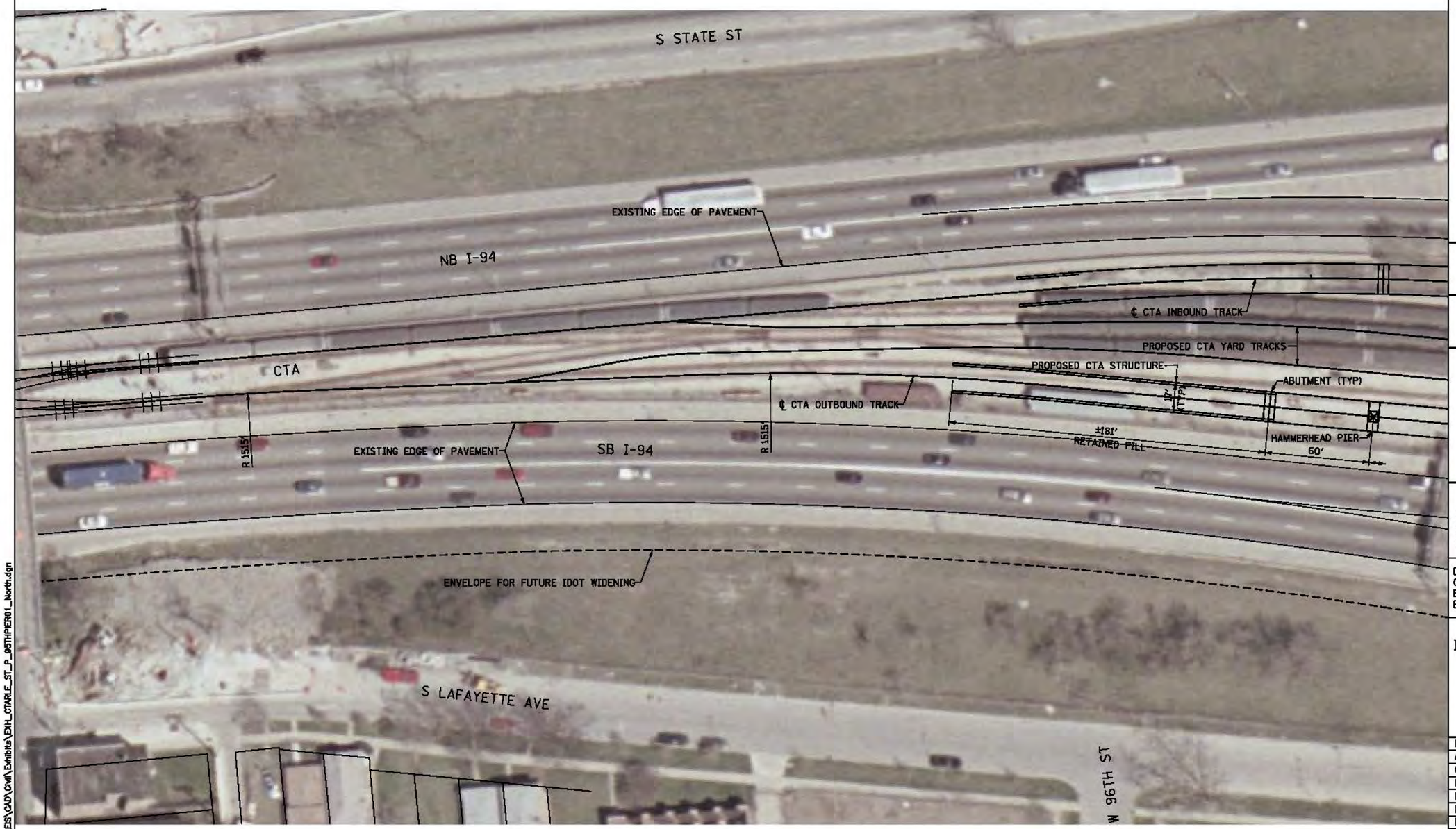

PLAN

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

ALL ALTERNATIVES
PIER LOCATION
SOUTH OF 95TH ST STATION

36 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
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PROJECT NO	CTA-RLE
FILE NAME	EXH_CTARLE_ST_P_95THPIER01_North.dgn

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MARK	DATE	DESCRIPTION

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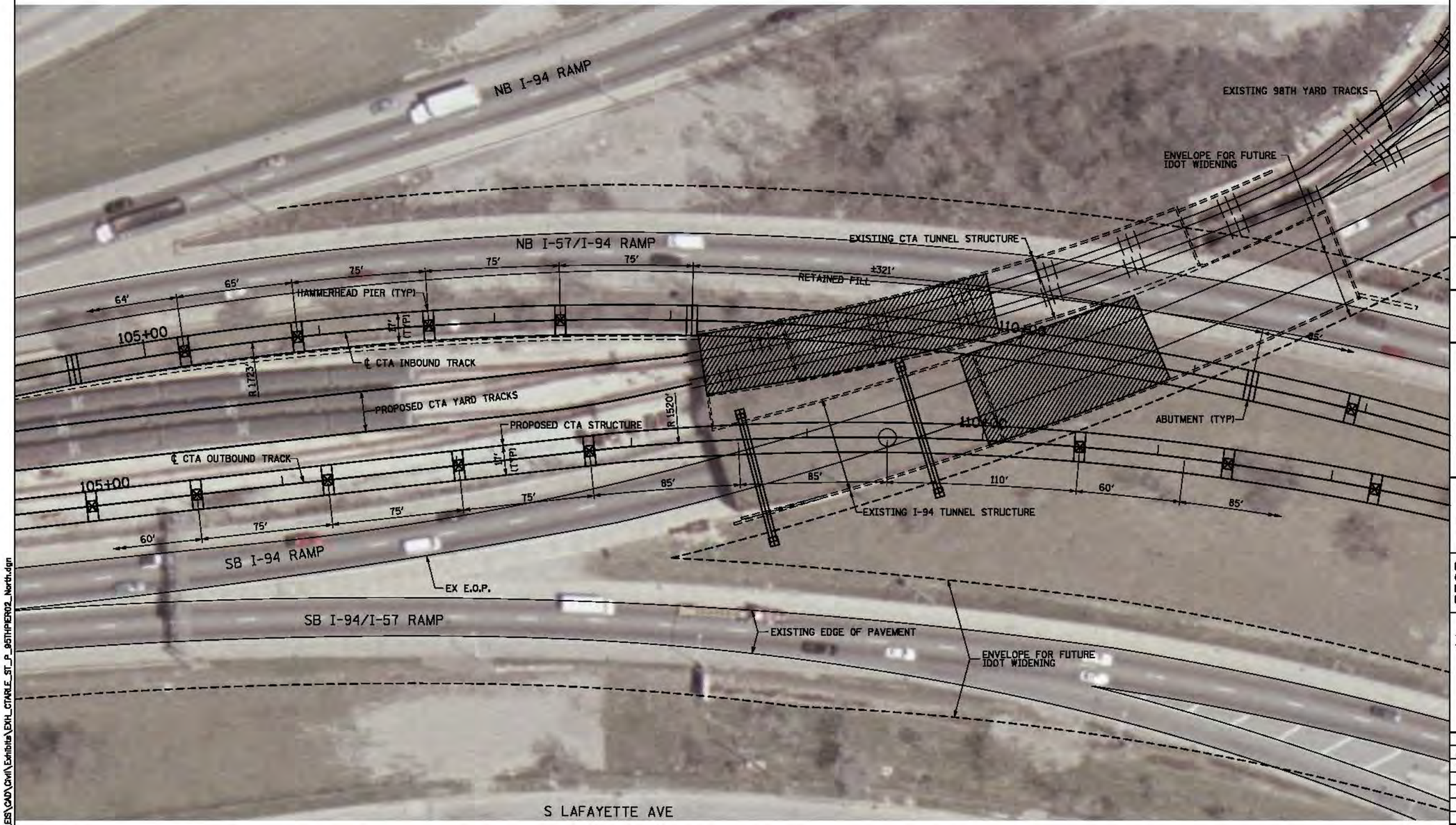

PLAN

LEGEND

RE-DECK EXISTING TUNNEL SUPERSTRUCTURE

PRELIMINARY DRAFT

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

ALL ALTERNATIVES
PIER LOCATION
SOUTH OF 95TH ST STATION

37 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	EXH_CTARLE_ST_P_95THPIER02_North.dgn

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SCALE H 1" = 30'-0"

MARK	DATE	DESCRIPTION

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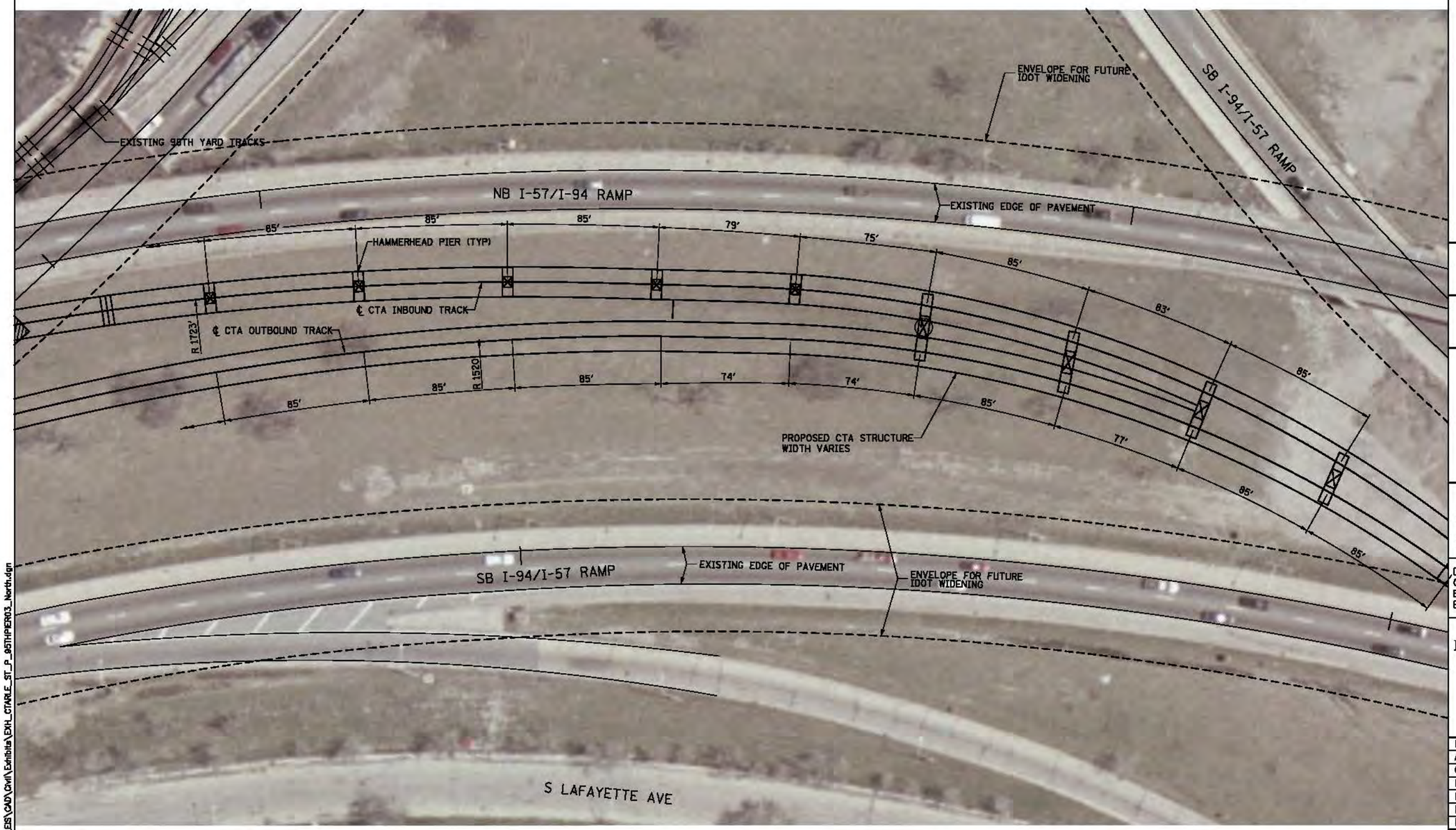

PLAN

PRELIMINARY DRAFT

CWC Transit Group

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

ALL ALTERNATIVES
PIER LOCATION
SOUTH OF 95TH ST STATION

38 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	EXH_CTARLE_ST_P_95THPIER03_North.dgn

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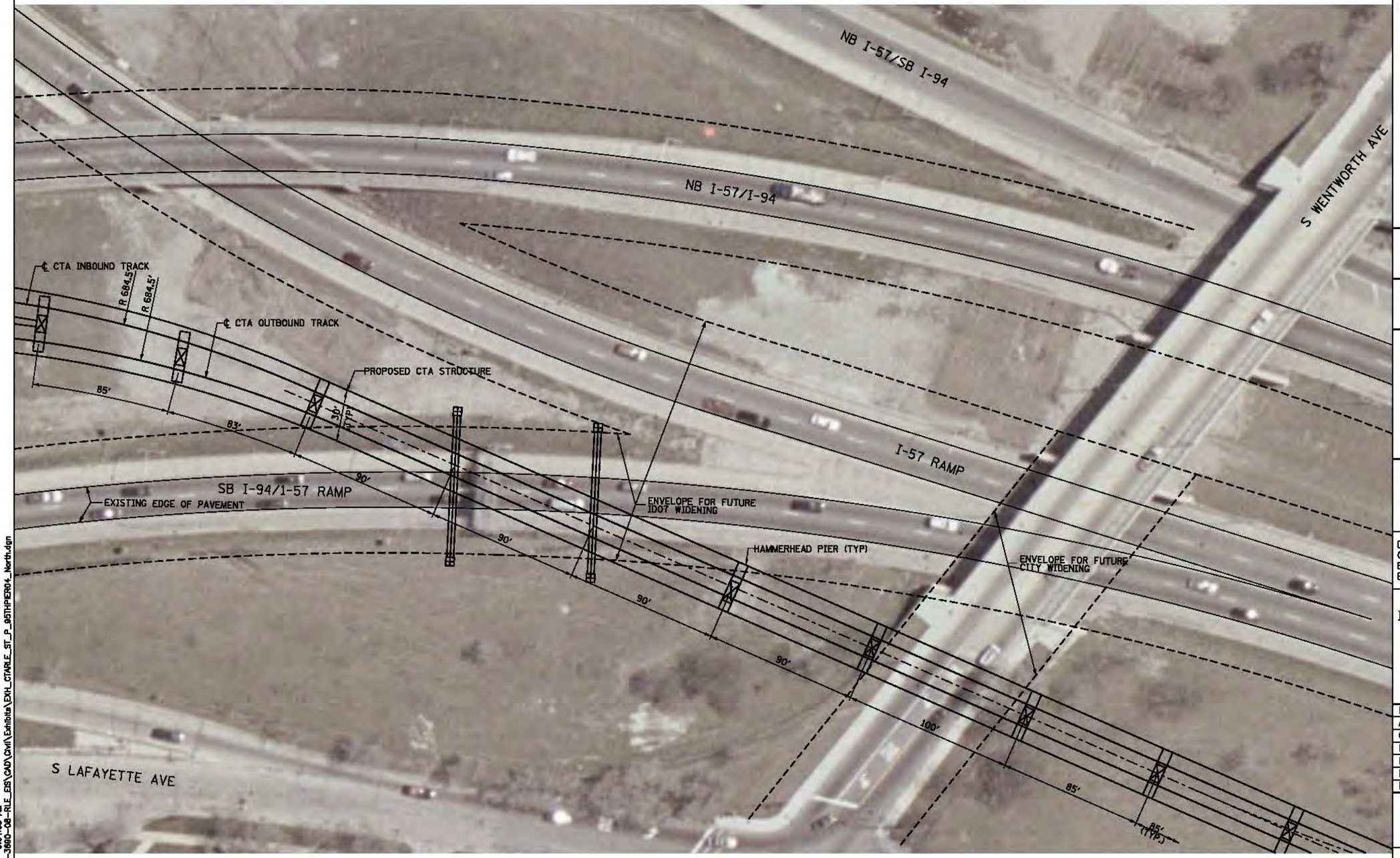

PLAN

PRELIMINARY DRAFT

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

ALL ALTERNATIVES
PIER LOCATION
SOUTH OF 95TH ST STATION

39 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	EXH_CTARLE_ST_P_95THPIER04_North.dgn

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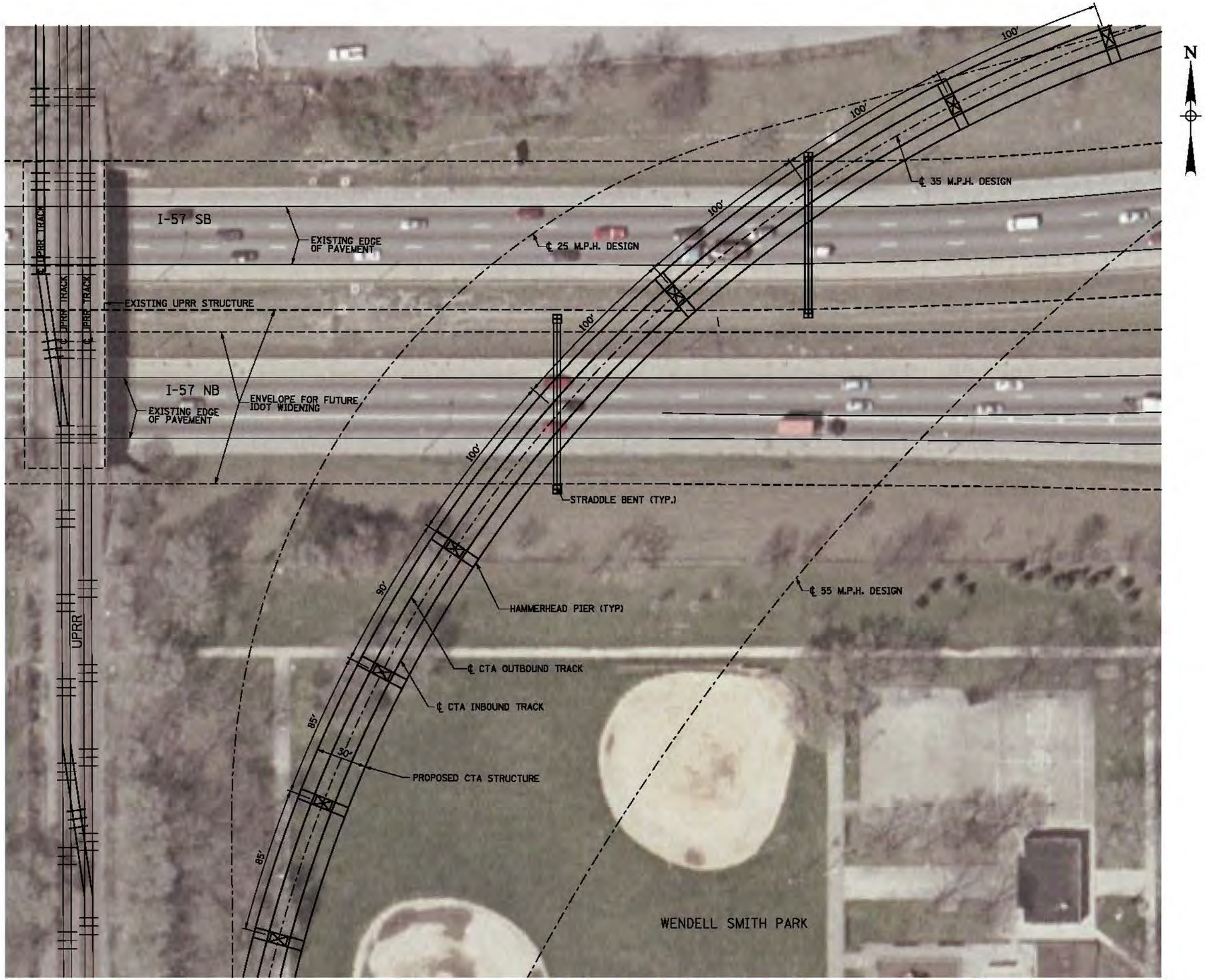

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
EAST SIDE ALTERNATIVE
PIER LOCATION OVER I-57

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	EXH_CTARLE_ST_P_95THPIER05_NorthEastA2.dgn

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SCALE H 1" = 30'-0"

MARK	DATE	DESCRIPTION

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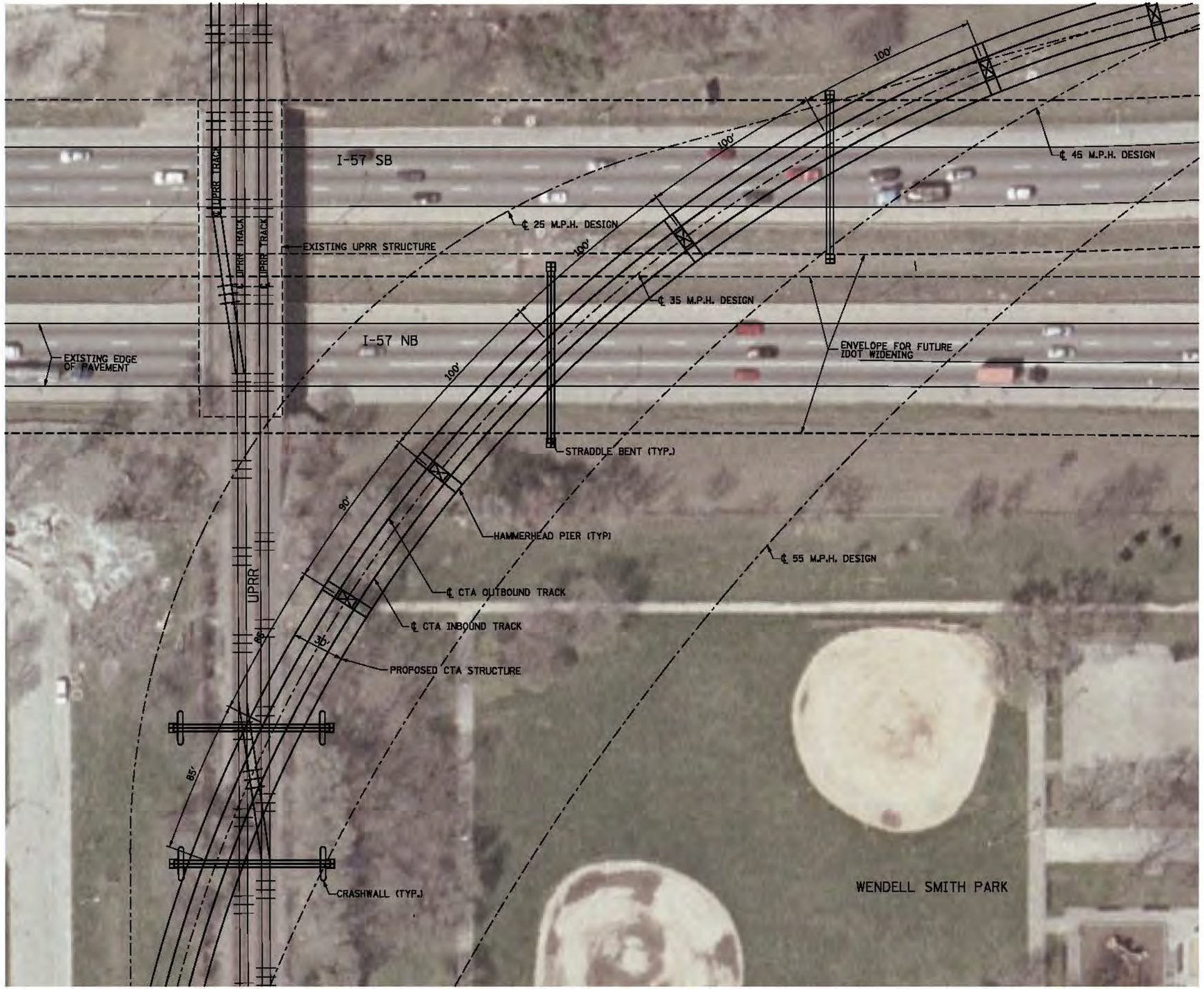

PRELIMINARY DRAFT

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CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
WEST SIDE ALTERNATIVE
PIER LOCATION OVER I-57

41 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	EXH_CTARLE_ST_P_95THPIER05_NorthWESTA2.dgn

30 0 30 60
SCALE H 1" = 30'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

7/24/2015 9:34:08 AM
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PLAN

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
WEST SIDE ALTERNATIVE
PIER LOCATION OVER PRAIRIE AVE

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_ST_P_UPWPRPIER.dgn

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SCALE H 1" = 30'-0"

MARK	DATE	DESCRIPTION

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7/24/2015 9:23:40 AM
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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
EAST & WEST SIDE ALTERNATIVE
PIER LOCATION OVER CN/METRA

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APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_ST_P_UPEMETPIER.dgn

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SCALE H 1" = 30'-0"

MARK	DATE	DESCRIPTION

SHEET TITLE

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DRAFT ENVIRONMENTAL IMPACT STATEMENT
CTA RED LINE EXTENSION
ALL ALTERNATIVES
SECTIONS

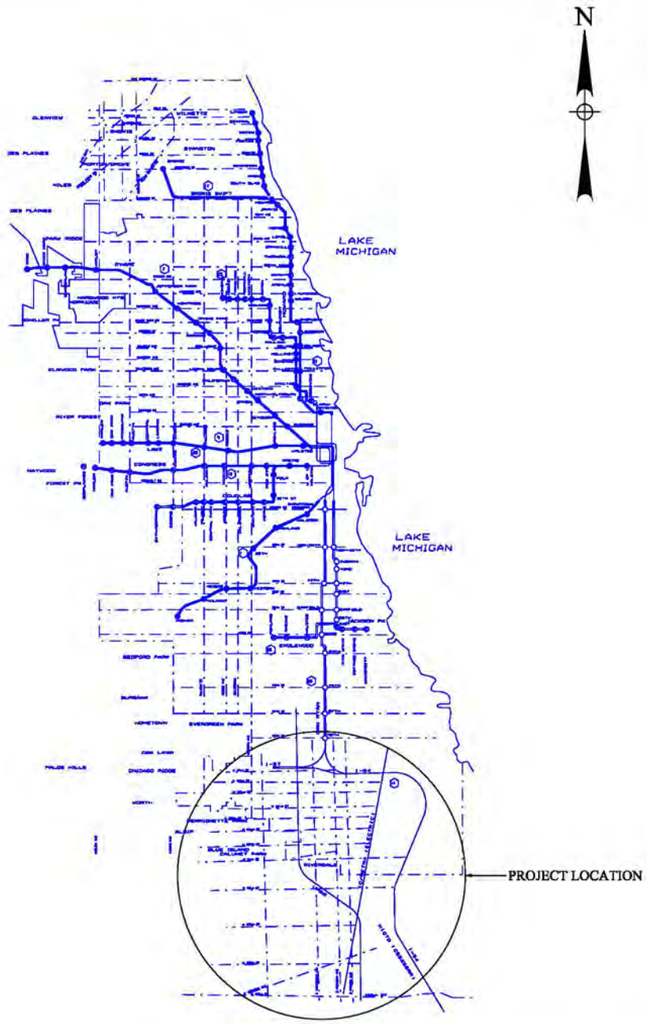

ORIENTATION MAP

INDEX

ALL ALTERNATIVES

SECTIONS 44 - 51

MAY 1, 2015

PRELIMINARY DRAFT

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
ALL ALTERNATIVES
SECTIONS

44 OF 51

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
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FILE NAME	CTARLE_G_COVER_Sections.dgn

MARK	DATE	DESCRIPTION

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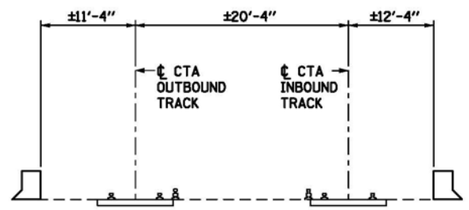

SECTION LEAVING 95TH ST. STATION

LOOKING NORTH

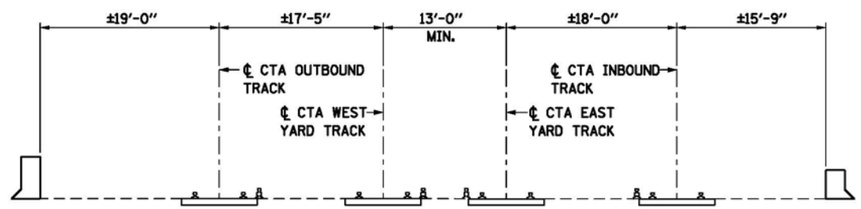

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LOOKING NORTH

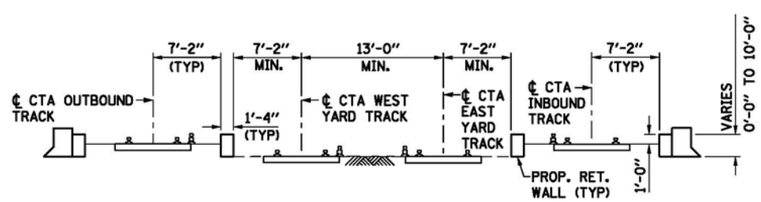

SECTION IN RETAINED EMBANKMENT STRUCTURE

LOOKING NORTH

PRELIMINARY DRAFT

CWC Transit Group

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CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
ALL ALTERNATIVES
SECTIONS SOUTH OF 95TH ST.

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_ST_TS_95THSECT01.dgn

MARK	DATE	DESCRIPTION

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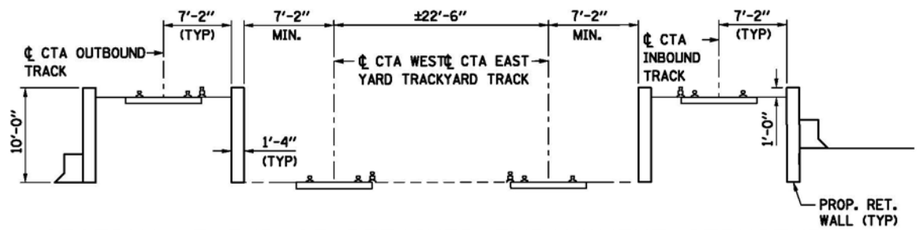

SECTION AT END OF RETAINED EMBANKMENT STRUCTURE

LOOKING NORTH

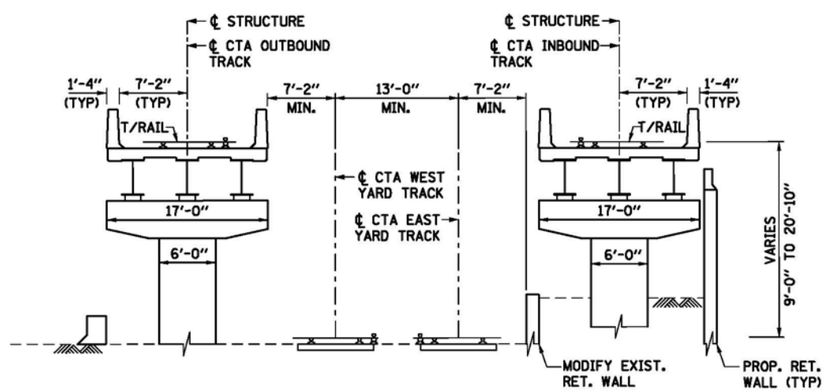

AERIAL STRUCTURE

LOOKING NORTH

PRELIMINARY DRAFT

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
ALL ALTERNATIVES
SECTIONS SOUTH OF 95TH ST.

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_ST_TS_95THSECT02.dgn

MARK	DATE	DESCRIPTION

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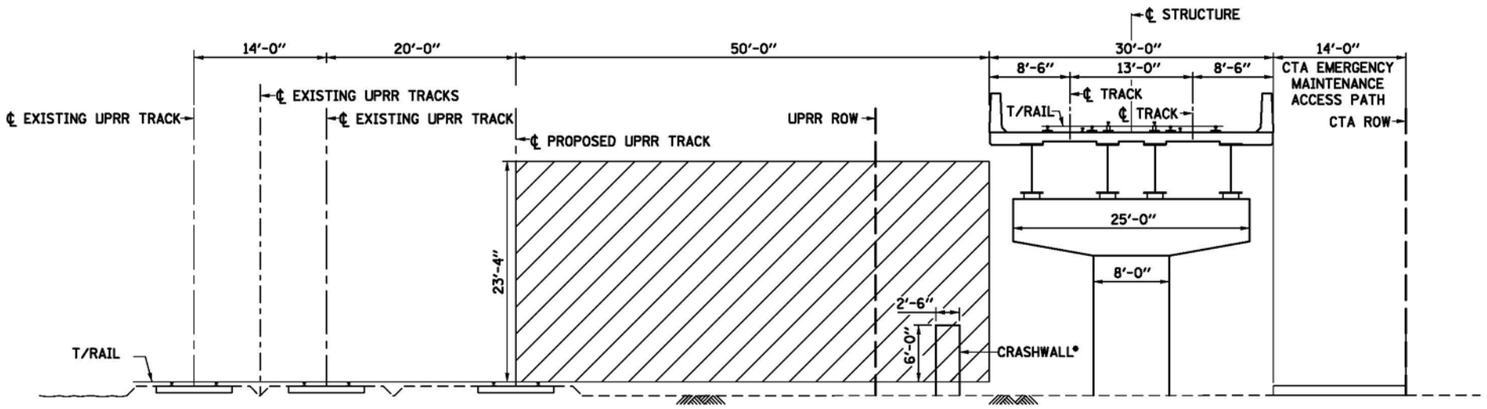

SECTION

*REQUIRED IF CTA STRUCTURE IS LESS THAN 50' FROM ℄ NEAREST UPRR TRACK

LEGEND

REQUIRED UPRR CLEARANCE

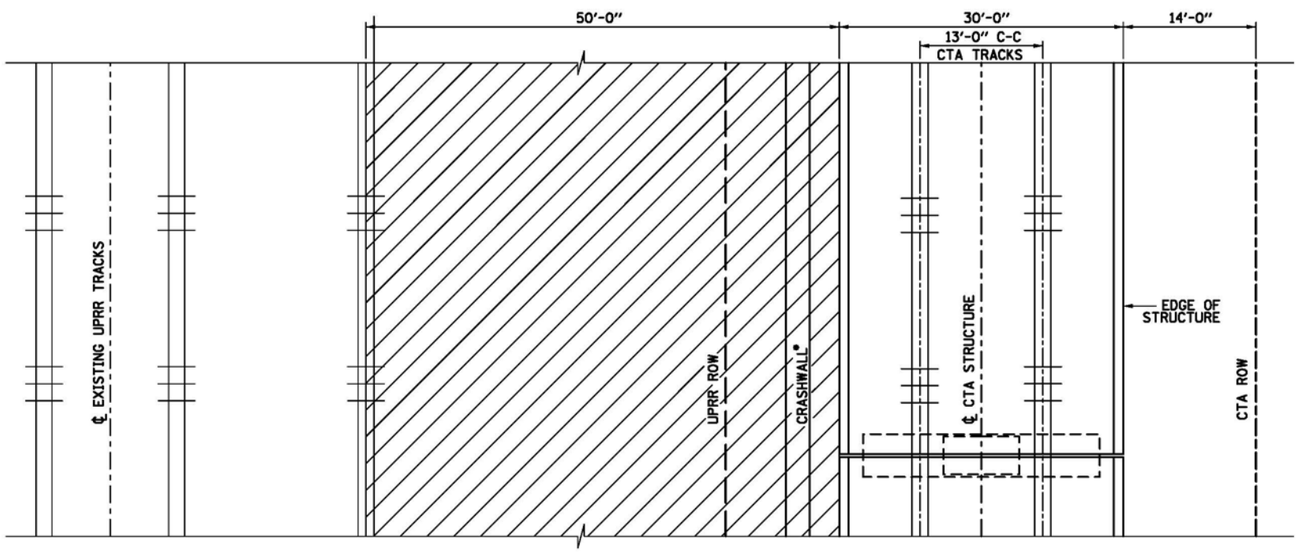

PLAN

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
CLEARANCE

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_ST_TS_201_UPCLEAR.dgn

MARK	DATE	DESCRIPTION

SHEET TITLE

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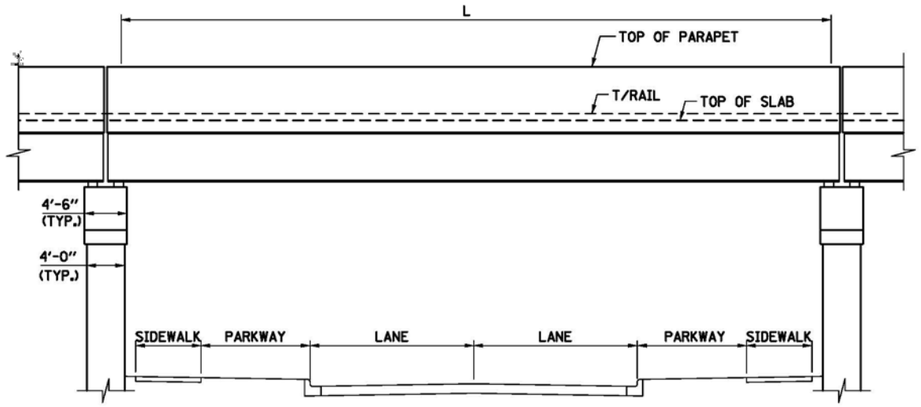

ELEVATION

TYP. SPAN (L)	CROSSING FOR UPRR EAST, WEST, & ROW ALT.
75'	W. 101ST, W. 107TH, W. 109TH, W. 11TH, S. PRAIRIE AVE. (E)
85'	W. 103RD, S. WENTWORTH AVE., S. PERRY AVE. (W), S. MICHIGAN AVE., S. INDIANA AVE.

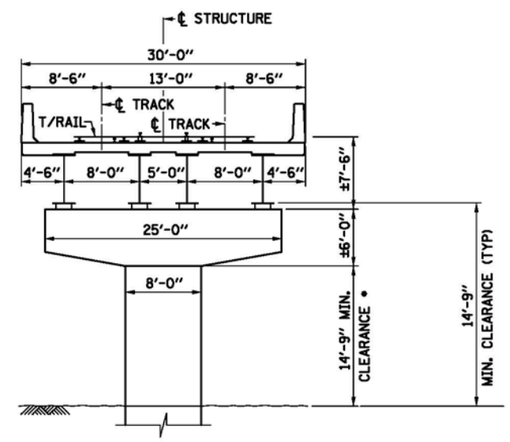

SECTION

• MINIMUM VERTICAL CLEARANCE IS TO BOTTOM OF PIER CAP WHERE PIER CAP OVERHANGS TRAVELD ROADWAY.

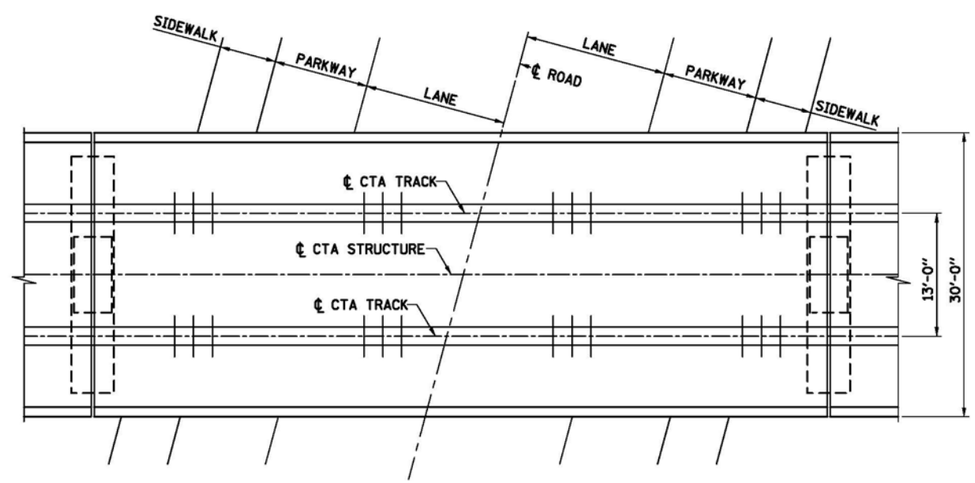

PLAN

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
VIADUCT CROSSING
75' AND 85' SPAN

IN CHARGE
APPROVED BY
CHECKED BY
DESIGNED BY
DRAWN BY
PROJECT NO CTA–RLE
FILE NAME CTARLE_ST_TS_202_UP85.dgn

MARK	DATE	DESCRIPTION

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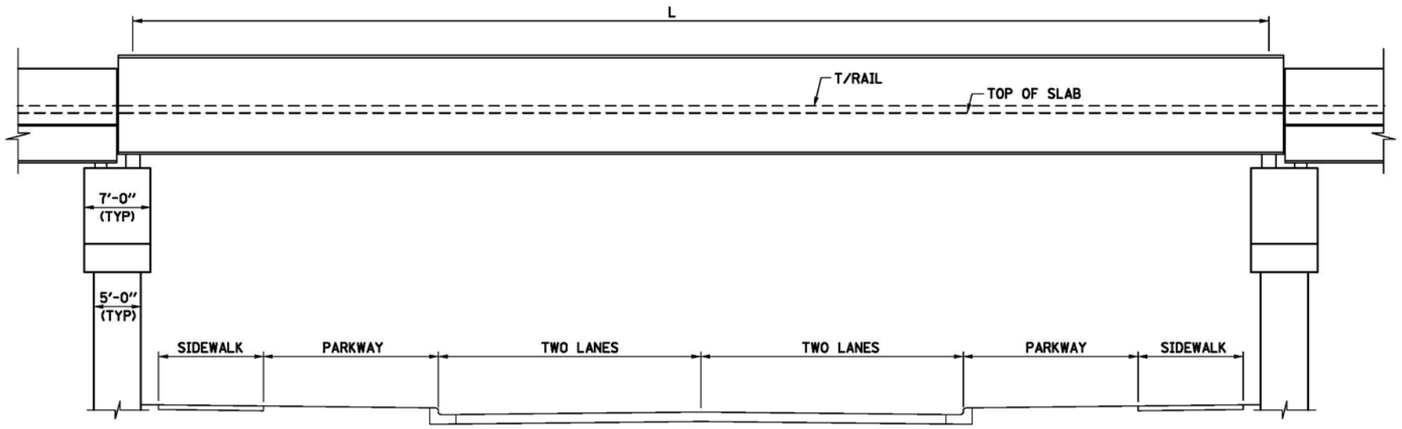

ELEVATION

TYP. SPAN (L)	CROSSING FOR UPRR EAST, ROW, AND WEST ALT.
120' (TPG)	W. 115TH, W. 1116TH

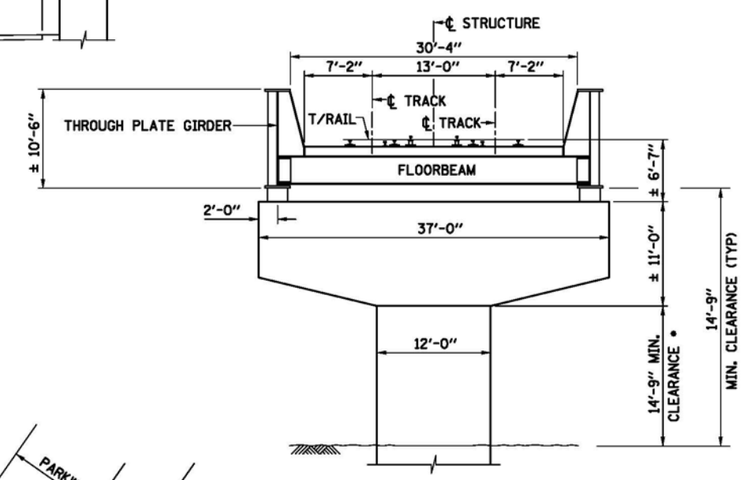

SECTION

• MINIMUM VERTICAL CLEARANCE IS TO BOTTOM OF PIER CAP WHERE PIER CAP OVERHANGS TRAVELD ROADWAY.

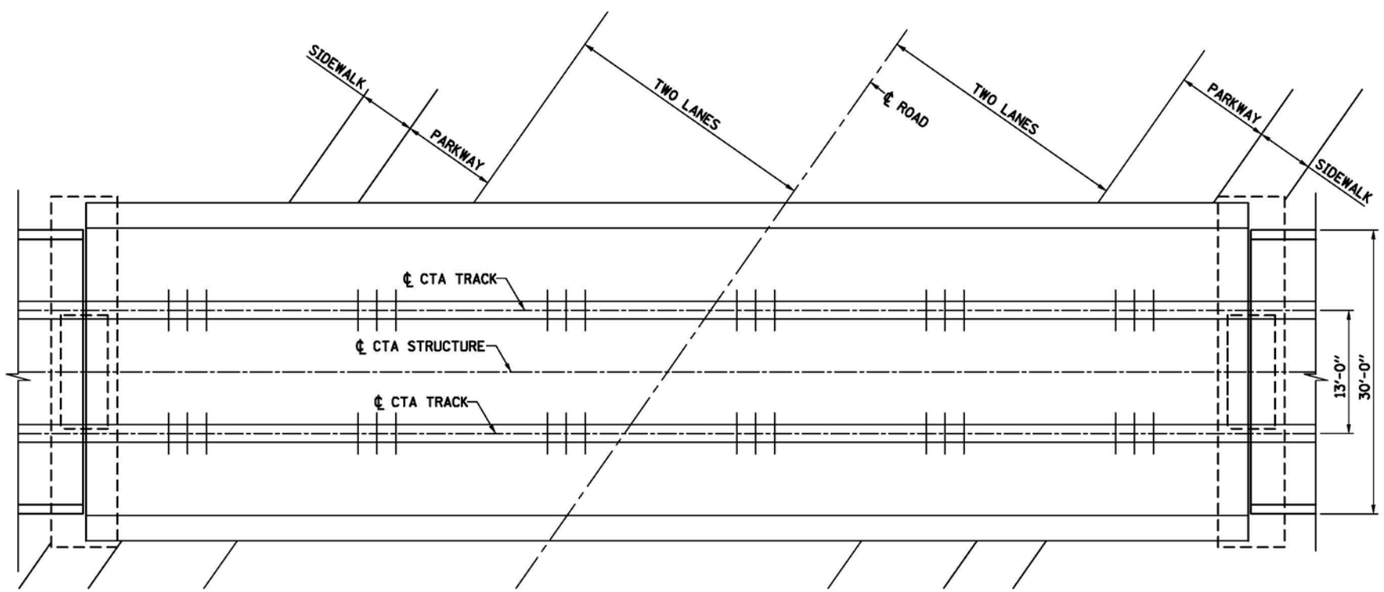

PLAN

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
VIADUCT CROSSING
120' SPAN

IN CHARGE	
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CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA–RLE
FILE NAME	CTARLE_ST_TS_203_UP120.dgn

MARK	DATE	DESCRIPTION

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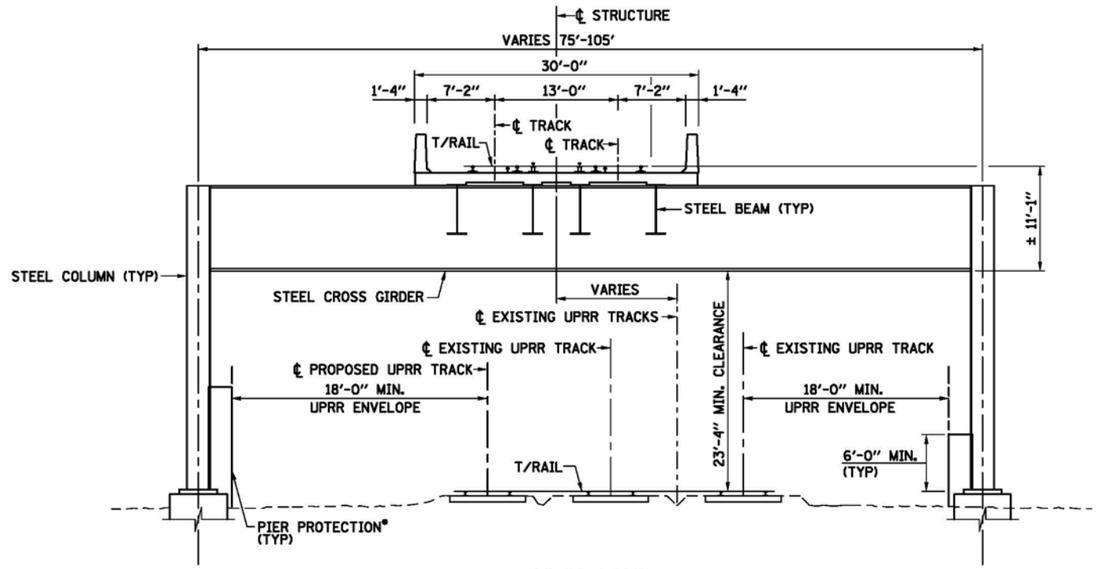

SECTION

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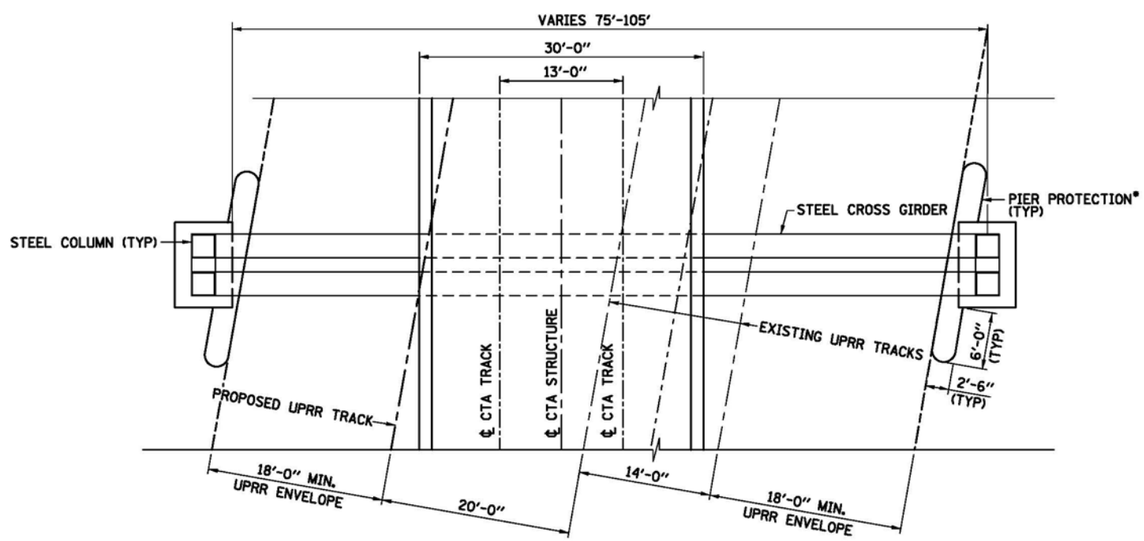

PLAN

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
THRU BENT SECTION

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RLE
FILE NAME	CTARLE_ST_TS_204_UPBENT.dgn

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SHEET TITLE

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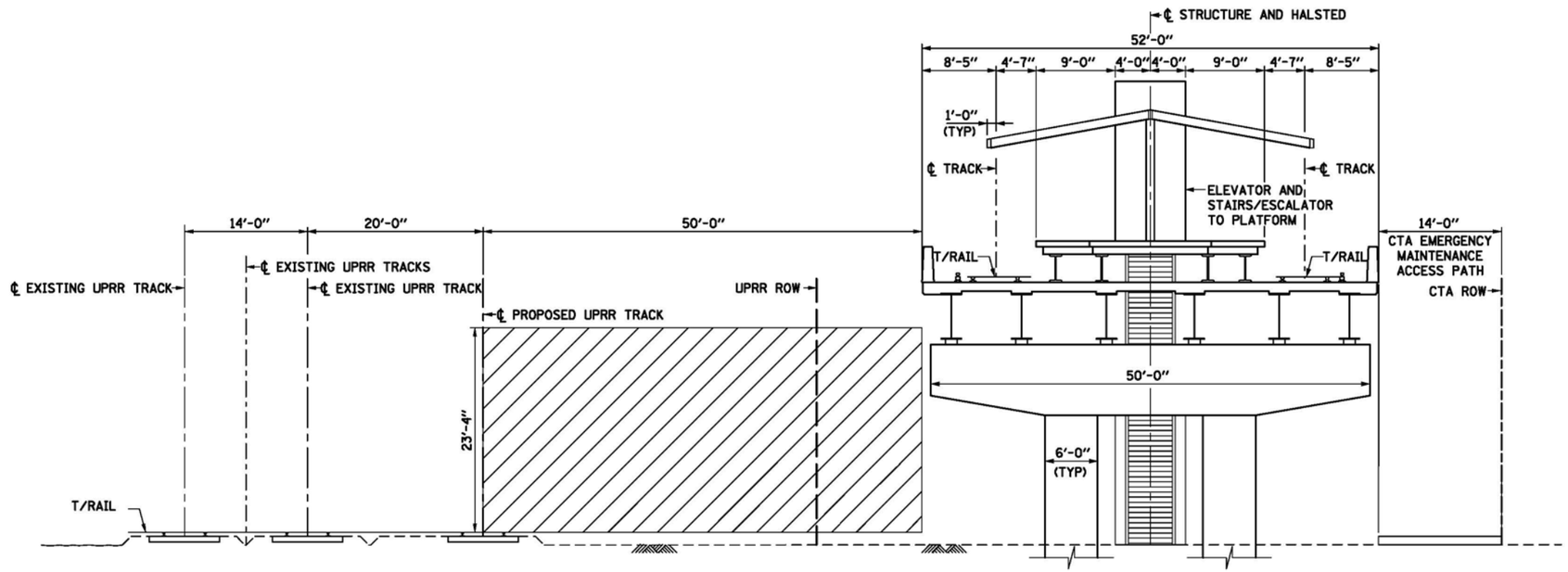

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LEGEND

REQUIRED UPRR CLEARANCE

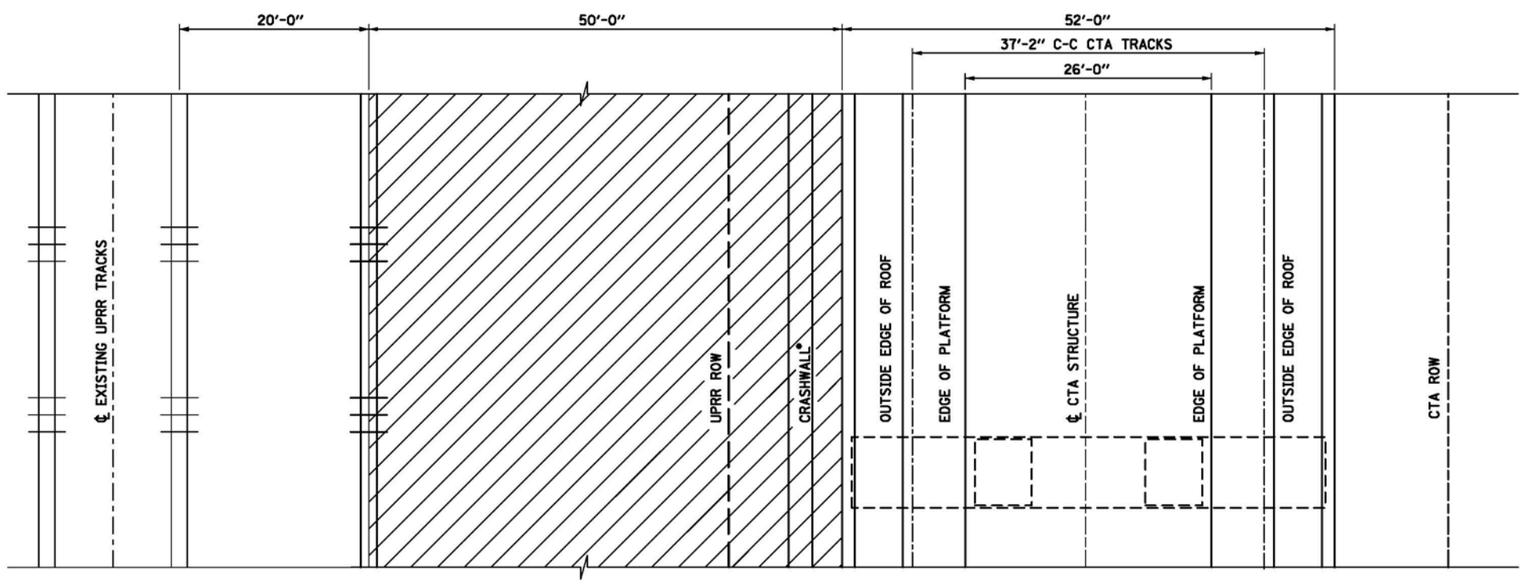

PLAN

PRELIMINARY DRAFT

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CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
TYPICAL STATION SECTION

51 OF 51

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PROJECT NO	CTA-RLE
FILE NAME	CTARLE_ST_TS_205_UPSTCLR.dgn

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Memorandum

To: *CTA, Sonali Tandon*

From: *CWC - Wight & Company*

Date: *January 6, 2015, revised March 16, 2015*

Subject: *Evaluation of Conceptual Red Line Extension Alignment*

Purpose

The purpose of this memo is to verify that the conceptual Red Line Extension (RLE) alignment meets certain minimum design criteria and to analyze the potential benefits or drawbacks of different variations of the two Union Pacific Railroad (UPRR) Alignments. Both the East and West Options have been checked for horizontal clearance and curves.

Verification #1: UPRR Horizontal Clearance

We checked the proposed alignment to verify that it would provide a minimum fifty foot horizontal clearance from the centerline of UPRR's future third track on east side of the UPRR corridor.

The minimum clearance distance is met along the entire East Alignment, with the exception of the following two locations:

- The proposed alignment would shift west to avoid an existing pump station at 104th Street (proposed alignment stationing 166+00 through 182+25). The centerline of UPRR's potential third track and the centerline of the proposed RLE would have a minimum separation of 27.6 feet. If the UPRR East Option is selected, the minimum separation distance would not be met through this segment of the extension. Relocating the existing pump station so the alignment could be adjusted is not feasible. A crash wall could be provided between the UPRR tracks and the proposed extension.

- Farther south from 104th Street, the proposed alignment again shifts west towards the UPRR tracks north of the proposed Michigan Avenue station (near 116th Street, from approximate station 257+00 to 278+00). The centerline of UPRR's potential third track and the centerline of the proposed RLE have a minimum separation of 46.8 feet. More detailed design could likely adjust the proposed alignment through this section to provide the minimum required separation. Note that the proposed alignment in this area is entirely outside the existing UPRR right-of-way.

The minimum clearance distance would be met along the entire West Option except where the CTA facility would cross the UPRR at I-57 and near the Metra Electric District tracks.

Verification #2: Design Speed at Wendell Smith Park

The proposed alignment from April 2013 had a 15 mph (335-foot radius) curve connecting the East-West portion of the extension (which runs along I-57) to the North-South portion of the extension (which would run along the east edge of the UPRR right-of-way.) The small radius was intended to minimize the impacts the proposed improvement would have on Wendell Smith Park. A curve speed of 15 mph would be a severe constraint on a new rail alignment and has been dropped from further consideration. We checked the possibility of increasing the design speed through this turn to improve future operations. (See the February 27, 2015 memorandum *Documentation of Red Line Extension Curve Speed Discussion* for curve speed criteria.) The attached Exhibit 1 depicts the various design speeds that were analyzed and their corresponding impacts to the park.

Generally, as the design speed increases the impacts on the park would become more severe. A 25 mph (388.80-foot radius) curve could provide a faster operation speed for the CTA with minimal additional impacts on the park compared to the proposed 15 mph curve. Increasing to a 35 mph (730.13-foot radius) curve for the East Option would cause severe impacts to the park, specifically eliminating the ability to use the existing baseball fields. Curves of 45 mph and 55 mph are not recommended with either alignment due to impacts at the park.

Verification #3: Location of Proposed 103rd St Station

The proposed 103rd Street station would be located one block north of the historic Roseland Pump Station, located at 351 West 104th Street. The Roseland Pump Station provides water to approximately 750,000 residents of the City of Chicago and south suburbs. The minimum separation between the edge of the proposed track structure and the face of the pump station building is 8.8 feet. We checked to see if adjusting the location of the proposed 103rd Street station could increase this spacing. Shifting the station to the north would have no impact on the spacing between the proposed CTA structure and the pump station. The minimum spacing occurs south of the point of tangency of the southernmost curve associated with the 103rd Street station, as shown in the attached Exhibit 2; therefore, shifting the station north has no effect on this minimum spacing. Shifting the station south would decrease this minimum spacing.

The station could be shifted approximately 265 feet north to avoid conflict with the existing communications tower located just west of the intersection of Harvard Avenue and 103rd Place. This shift would require two additional properties to be acquired where the northernmost station curves tie back into the alignment. The distance pedestrians would walk from both the surface lot (at the southwest corner of the UPRR and 103rd Street) and the bus turnaround lot (at the northeast corner to the station platform) would be increased by this

shift. The shift of the 103rd Street station to the north to avoid the tower is not included on the plan sheets as additional residential displacements would be required.

Verification #4: Illinois Department of Transportation Comments

The Illinois Department of Transportation (IDOT) provided several comments via e-mail (attached Exhibit 3) after reviewing the proposed RLE horizontal alignment in the area of I-90/94, I-57, and 95th Street.

IDOT commented that the piers for the proposed RLE structure "should be placed such that the Department has the flexibility to widen our roadways either towards the roadway's median or outward with standard cross-section elements. As such any pier(s) placed in our medians should be placed in the middle of our medians, not immediately behind any existing or proposed barrier walls. Also, any piers proposed on the outside of our roadways should be placed at least 27feet from the existing outside edges of pavement to account for any additional lanes, shoulders, and barrier walls that are needed to protect the pier from being struck by a vehicle." Exhibit 1 depicts the conceptual pier locations for the proposed alignment from the existing 95th street station south to Wendell Smith Park. CWC adjusted the pier locations to fall outside the limits of IDOT's future widening.

IDOT pointed out that any structure crossing a roadway should provide a minimum of 15'-0" of vertical clearance. The RLE would cross the following IDOT facilities: 95th Street, southbound I-94, I-57 ramp, and I-57 mainline. The extension would not modify the existing 15'-10" clearance at 95th Street. The proposed extension would cross the existing southbound I-94 tunnel. This clearance would not be affected by the RLE. The profile would rise from the tunnel, cross the I-57 ramp, and eventually cross over Wentworth Avenue. A 16-foot clearance is provided over Wentworth Avenue, which would lead to an approximately 31-foot clearance over the I-57 ramp. The alignment would then cross the I-57 mainline with an approximately 39-foot clearance. Excessive clearance is provided over the IDOT roadways because of the height the profile reaches to go over Wentworth Avenue.

IDOT also commented on the need for barrier warrant analysis, permitting, and air rights agreements. These tasks will be addressed in the future when the project moves from conceptual to preliminary design.

cc: file

PLAN

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

ALL ALTERNATIVES
PIER LOCATION
SOUTH OF 95TH ST STATION

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EXHIBIT 1 - CURVES AT WENDALL SMITH AND PIER LOCATIONS (1/6)

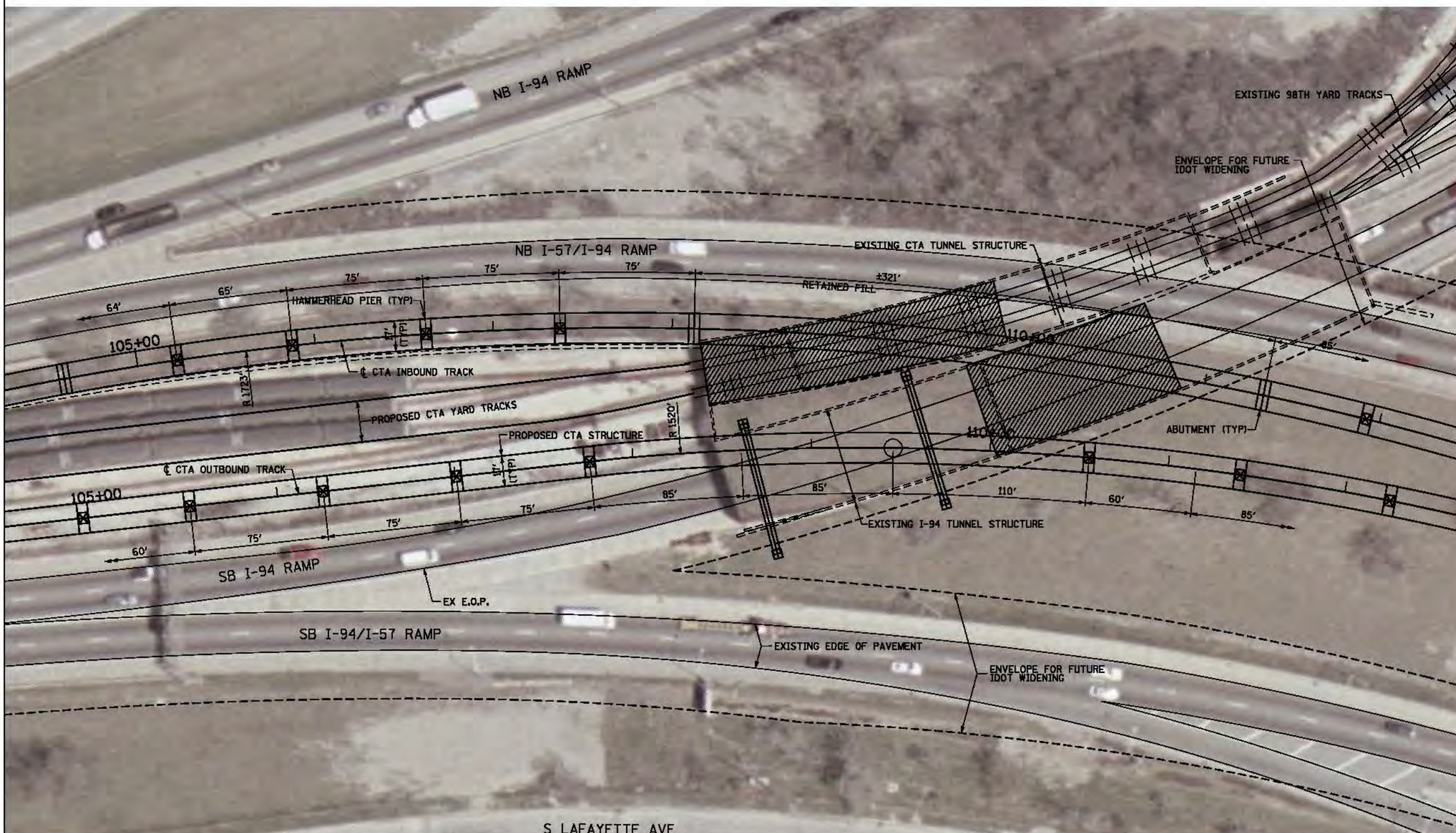

PLAN

LEGEND

RE-DECK EXISTING TUNNEL SUPERSTRUCTURE

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

ALL ALTERNATIVES
PIER LOCATION
SOUTH OF 95TH ST STATION

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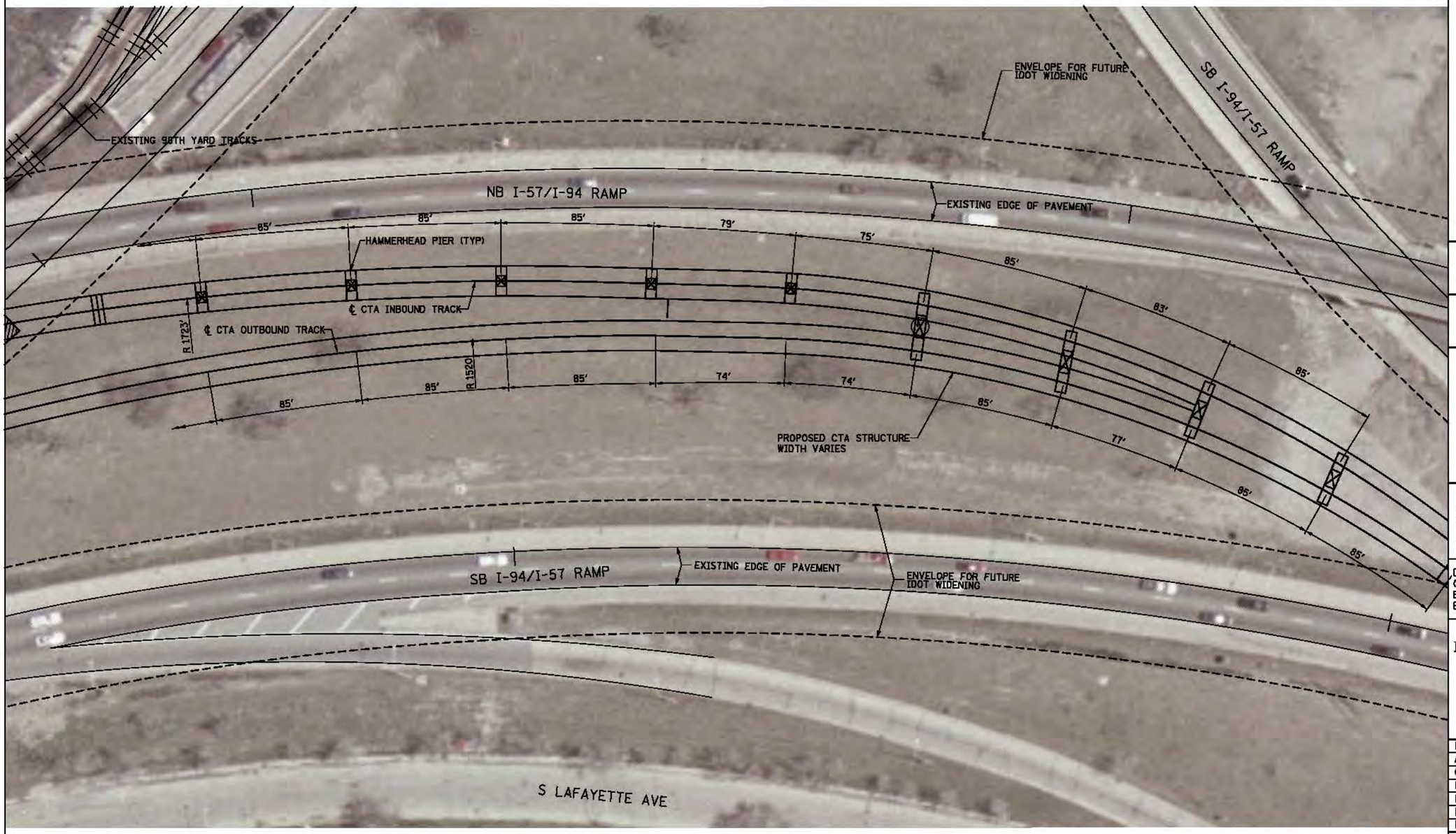

PLAN

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

ALL ALTERNATIVES
PIER LOCATION
SOUTH OF 95TH ST STATION

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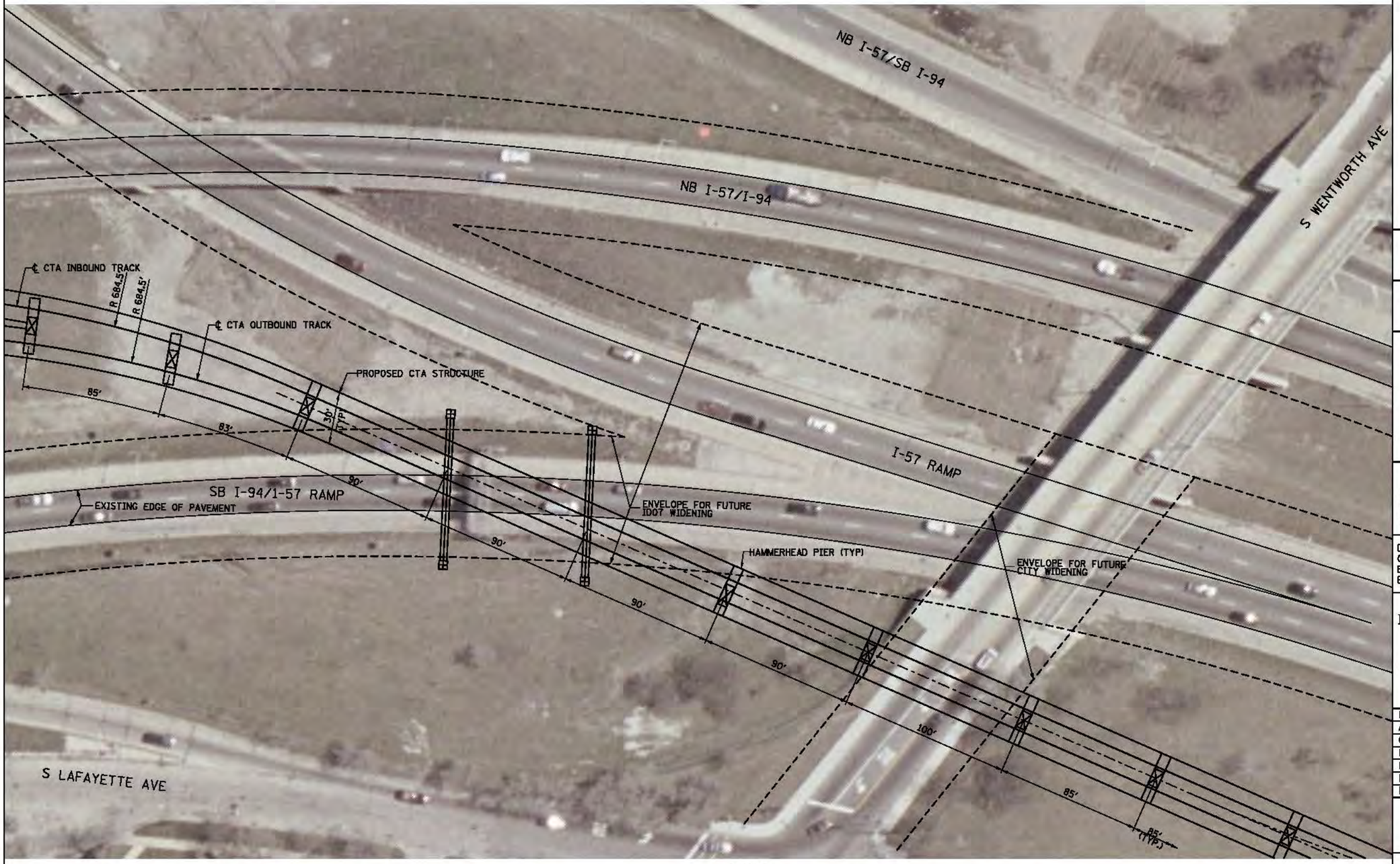

PLAN

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

ALL ALTERNATIVES
PIER LOCATION
SOUTH OF 95TH ST STATION

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EXHIBIT 1 - CURVES AT WENDALL SMITH AND PIER LOCATIONS (4/6)

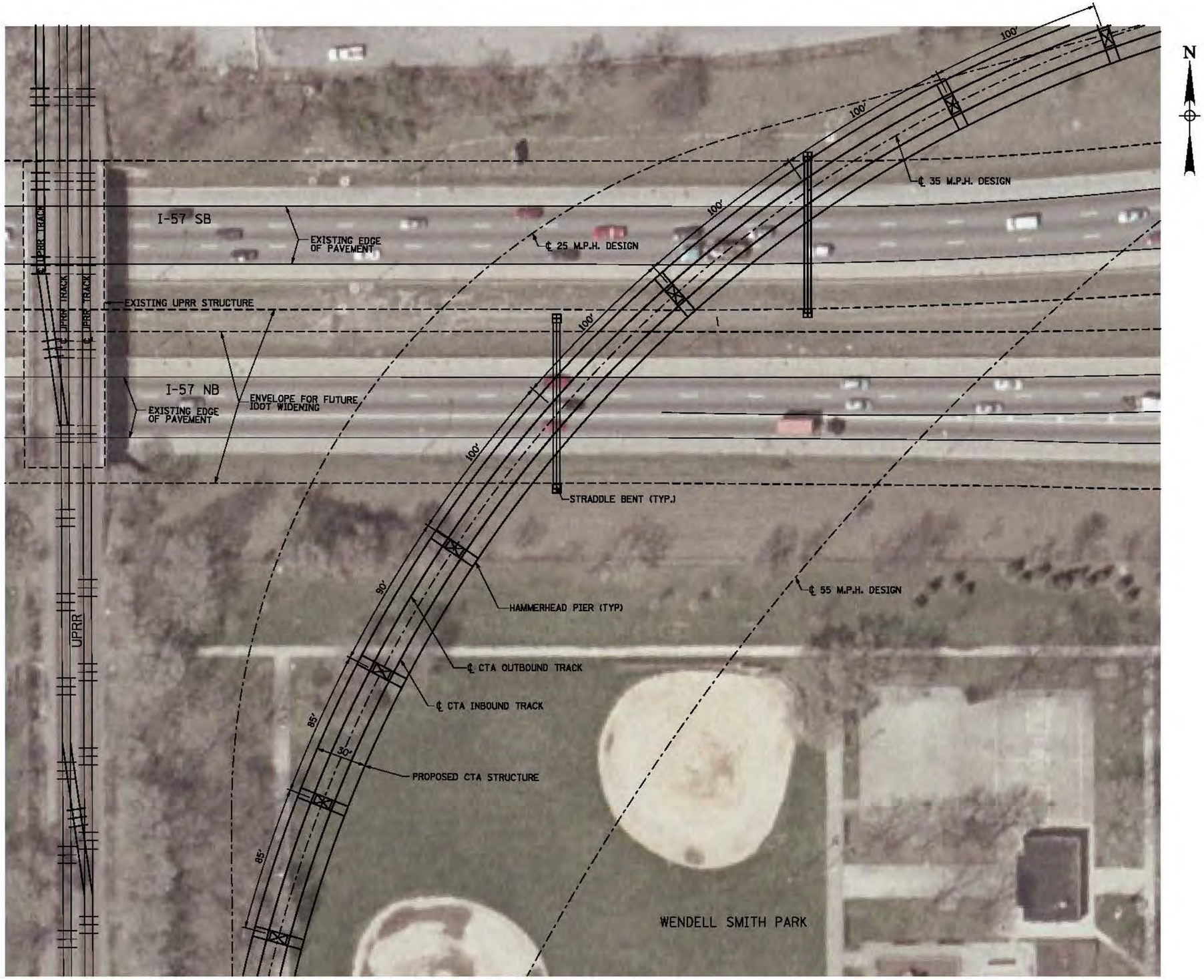

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
EAST SIDE ALTERNATIVE
PIER LOCATION OVER I-57

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EXHIBIT 1 - CURVES AT WENDALL SMITH AND PIER LOCATIONS (5/6)

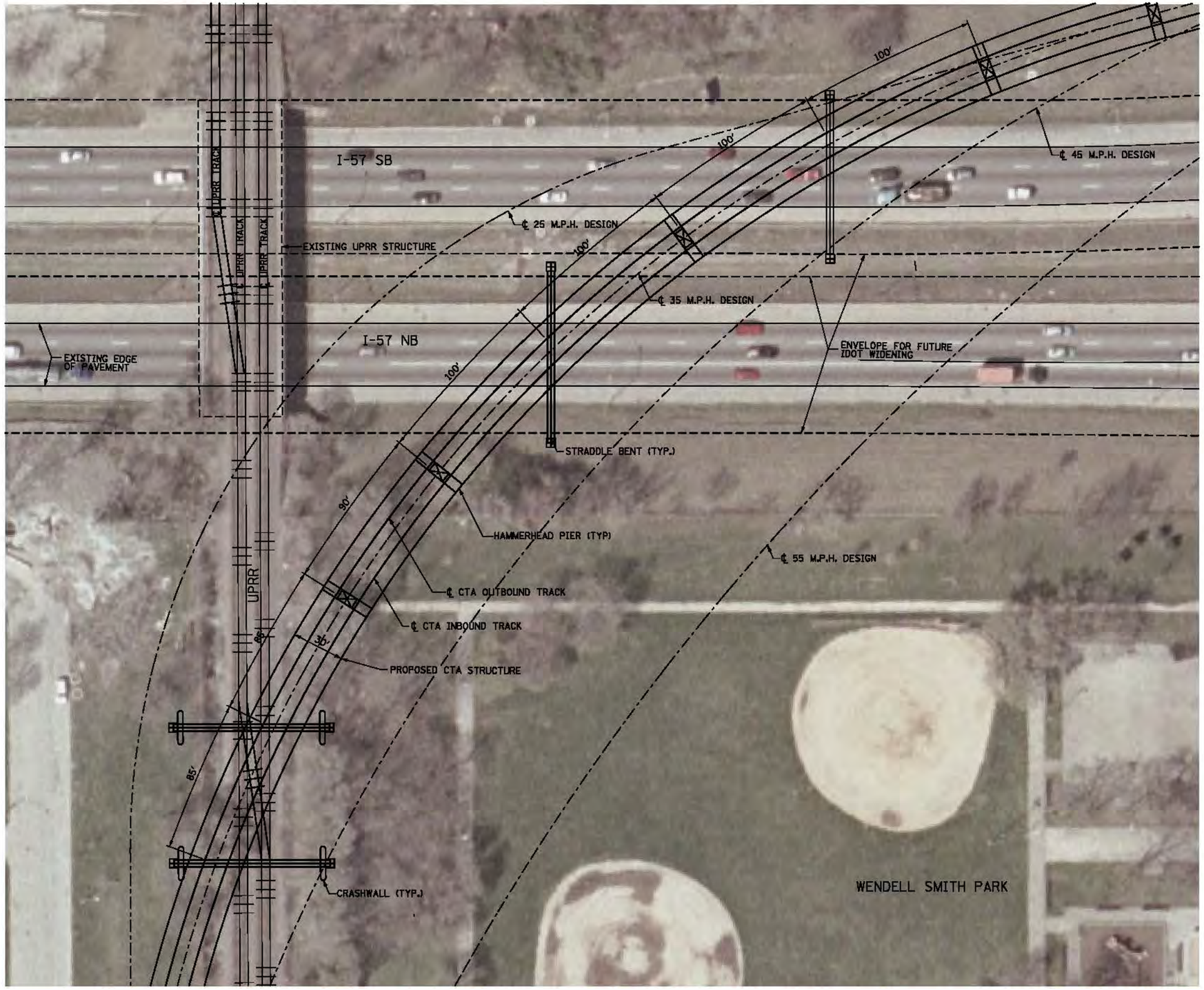

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
WEST SIDE ALTERNATIVE
PIER LOCATION OVER I-57

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EXHIBIT 1 - CURVES AT WENDALL SMITH AND PIER LOCATIONS (6/6)

W 104TH ST

W 104TH PL

PUMPING STATION

FORMER GRIFFITH NATATORIUM

170+00

175+00

8.8' MINIMUM SEPARATION

P.O.T. 103RD ST STATION CURVE

SUBSTATION

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION

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EXHIBIT 2 - 103RD ST STATION ANALYSIS (1/1)

From: Salley, Jason R [mailto:Jason.Salley@illinois.gov]
Sent: Tuesday, December 16, 2014 8:39 AM
To: Tandon, Sonali; Baczek, John A
Subject: RE: CTA Red Line Extension

Sonali,
Good morning.

We have looked at your proposed alignment of the CTA's Red Line Extension near I-90/94 at I-57 & 95th St and we offer the following comments:

1. The piers for the structures carrying the Red-Line over any of the Department's roadways should be placed such that the Department has the flexibility to widen our roadways either towards the roadway's median or outward with standard cross-section elements. As such any pier(s) placed in our medians should be placed in the middle of our medians, not immediately behind any existing or proposed barrier walls. Also, any piers proposed on the outside of our roadways should be placed at least 27-ft from the existing outside edges of pavement to account for any additional lanes, shoulders and barrier walls that are needed to protect the pier from being struck by a vehicle.
2. Any structures carrying the Red-Line over our roadways should provide at least 15'-0" of vertical clearance over our roadways.
3. The existing barrier walls along I-57 may have to be extended and/or replaced in order to adequately protect any proposed piers along I-57 from being struck by vehicles. The length of the extensions will be subject to barrier warrant and length of need analyses to be done during Contract Plan preparation should this project proceed towards construction. New barrier walls or guardrail may also be required if piers are proposed along I-57 where there are no existing barrier walls to extend. Lastly, existing barrier that are to be extended to protect proposed CTA piers may need to be rehabilitated or replaced depending on their condition at the time of the construction of this project. The cost sharing of this work is to be determined at the time of the preparation of the Contract Plans.
4. Should the extension of the Red-Line move towards Contract Plan preparation, the CTA should ascertain a Permit from the Department for the construction of the extension within our Right-of-Way.
5. The extension of the Red-Line as depicted will require an Air Rights Agreement with the Federal Highway Administration as well as the Department.
6. Wentworth Ave is under the Jurisdiction and Maintenance of the City of Chicago. Please coordinate this extension with them in order to ascertain any requirements or concerns that they might have. Please share their comments with the Department so that all concerns are shared with all of the interested parties along the corridor.

Attached you will find a copy of the geometrics for I-57 south of its interchange with I-90/94 as per the Department's Phase I report for I-90/94 from 31st Street to I-57.

Please contact me or John Baczek if you have any questions or need any clarifications.

Sincerely,
Jason Salley, P.E.
Geometrics Engineer
IDOT - District 1
P: 847.705.4085
F: 847.705.4159

Memorandum

To: *CTA, Sonali Tandon*

From: *CWC - Wight & Company*

Date: *December 2, 2014, revised March 16, 2015*

Subject: *Evaluation of Grade Separation of Red Line Extension*

Purpose

The purpose of this memo is to compare the potential benefits or drawbacks of constructing the proposed Red Line Extension (RLE) as an elevated track structure with the benefits or drawbacks of constructing the RLE as an at-grade track with roadway overpasses or underpasses.

The proposed extension must be elevated from 95th Street until south of Interstate 57 (I-57) (approximately station 135+00) to provide the required clearance over the expressway. South of I-57, the proposed track structure could potentially be lowered to match existing grade. Using the maximum allowable grade, this match point would occur 950 feet south of the interstate (approximately station 144+50.) The profile of this option is shown in the attached Exhibit A. The proposed track can potentially remain at grade for 2.57 miles (approximately station 280+00), at which point the track must be elevated to clear the CN/Metra Electric District mainline tracks.

Costs presented in this memorandum are macro-level estimates based on 2012 dollars. The costs presented are for comparison of the construction costs and do not include soft costs and unallocated contingencies. These costs do not represent the full cost of implementing the RLE.

Option #1: Aerial Track Structure

The initial planning phases, including the Alternatives Analysis study that was completed in 2009, has the RLE on aerial track structure.

Approximate construction cost = $100 to $120 million per mile of double track

Estimated Total Construction Cost ~ $120 M * 2.57 miles = $308.4 Million

Benefits:

- Minimizes effects on the neighborhood
- Minimizes noise levels as compared to at-grade trains
- Built-in security by being above grade
- Maintains existing roadway access

Drawbacks:

- Cost of aerial structure
- Public perception of visual impacts due to height of the structure

Option #2: At-grade track, roads overpass track

Approximate construction cost = $10 million per mile of double track.

Track construction cost ~ $10 M * 2.57 miles = $25.7 Million

Roadway overpasses would be constructed at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Wentworth Avenue, 115th Street, and State Street (8 Crossings).

Overpass construction cost ~ $25 million / each * 8 = $200 Million

Estimated Total Construction Cost ~ $25.7 Million + $200 Million = $225.7 Million

Benefits:

- Potential $82.7M construction savings versus Option #1: Aerial Track Option (Note: Potential construction savings would not outweigh the additional right-of-way acquisition covered under "Drawbacks" below.)
- CTA at-grade, vehicular traffic is grade separated from the CTA and Union Pacific Railroad (UPRR)

Drawbacks:

- An analysis of the potential 107th Street overpass revealed approximately 220 residents would be adversely affected by the construction of the overpass (reduced access, increased travel distance and time, perceived visual impacts of overpasses, additional displacements, neighborhood interruption during construction, etc.) Extrapolating to the entire project, approximately 1,500 homes would have some adverse impact. Refer to Exhibit B.
- Additional right-of-way acquisition. Refer to Exhibit B.

- Closure of some cross streets where they intersect with the embankment for bridge approaches.
- Relocation of utilities along the roadways and cross streets.
- Community impacts due to neighborhood isolation.
- Potential visual impacts for homes near overpasses (abutting an approximately 30-foot tall embankment).
- Additional security may be required to protect the train operations and third rail as compared to aerial track structure.
- Potential increase in noise levels affecting adjoining residents.

Option #3: At-grade track, cross-roads underpass track

Approximate construction cost = $10 million per mile of double track.

Track construction cost ~ $10 M * 2.57 miles = $25.7 Million

Roadway underpasses would be constructed at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Wentworth Avenue, 115th Street, and State Street (8 Crossings).

Underpass construction cost ~ $60 million / each * 8 = $480 Million

Estimated Total Construction Cost ~ $25.7 Million + $480 Million = $505.7 Million

Benefits:

- CTA at-grade, vehicular traffic is grade separated from the CTA and UPRR

Drawbacks:

- Costs of structure is significantly higher than Options #1 and #2.
- Property impacts similar to Option #2; additional property impacts would occur to accommodate the underpass structure (reduced access due to grade difference and needed retaining wall for underpass structure).
- Additional right-of-way acquisition.
- Closure of some cross streets required where the streets intersect or would require lowing cross streets to intersect at grade. Lowering of cross streets would require additional right-of-way and additional property impacts due to access.
- Community impacts due to neighborhood isolation.

- Additional costs associated with a pumping station for drainage (flood prevention).
- Relocation of utilities along the major roadways and cross streets.
- Additional security may be required to protect the train operations and third rail as compared to aerial track structure.
- No additional benefits over the Options #1 or #2

Option #4: At-grade track between crossroads, maximum allowable grade

Another option considered to take advantage of the significantly lower cost of constructing at-grade track is to lower the profile of the proposed extension between crossroads to run at-grade as much as possible while avoiding the prohibitive adverse effects of constructing roadway overpasses or underpasses. Using the maximum allowable grades provided in the *CTA Infrastructure Design Criteria Manual*, and the minimum vertical curves recommended by AREMA, Exhibit C was created to show what the proposed profile would look like if the track were lowered to grade between crossroads. Note that Exhibit C does not show a realistic construction alternative; its purpose is solely to show the maximum possible length of at-grade construction between crossroads.

The combination of the tight existing crossroad spacing and the relatively shallow maximum allowable profile grade prevents the profile from dropping down to grade in all but two locations: 950 feet between 103rd Street/ 107th Street, and 1000 feet between 111th Street/ Wentworth Avenue.

Benefits:

- Potential construction savings versus Option #1: Aerial Track Option =

  1950 ft/5280 ft * ($120 Million - $10 Million) = $ 40.6 Million

Drawbacks:

- Potential customer discomfort caused by constantly varying profile (a “rollercoaster” feel).
- Increased train spacing to provide safe braking distance which would lead to increased running time and need for additional cars.
- Increased operational risks related to traction.
- Additional energy consumption, vehicle wear and tear, and wheel/track maintenance.

Option #5: Track on retained embankment

After analyzing the option of varying the vertical alignment at the maximum allowable grade, we considered varying the vertical alignment at a gentler grade which would avoid the

"rollercoaster" feel of the maximum grade while taking advantage of shorter structure heights. In conjunction with the gentler grade, we evaluated where it would be feasible to install the tracks on embankment with retaining walls rather than aerial track structure.

A significant portion of the alignment could potentially be built on embankment with retaining walls. Below are the approximate station ranges of the UPRR East Option which could be built on retained embankment:

Start Station	End Station	Retaining Wall Length
137+50	150+00	1,250 ft
150+75	159+85	910 ft
165+80	189+60	2,380 ft
190+30	203+08	1,278 ft
203+83	209+85	602 ft
217+13	241+34	2,421 ft
242+04	252+14	1,010 ft
252+84	257+55	471 ft
258+25	264+27	602 ft
270+40	280+00	960 ft
	Total	11,884 ft

Benefits:

- Track structure on retained embankment can be constructed for approximately $50 Million / mile. Potential construction savings for this option versus Option #1: Aerial Track Option = 11884 ft/5280 ft * ($120 Million - $50 Million) = $ 157.5 Million (Note that the "planning level" costs per mile are intended to show the order of magnitude of cost savings in order to determine whether an alternative has merit for further study in the Preliminary Engineering phase. If additional crossings are required, the order of magnitude cost savings would be similar.)

- Potential for reduced noise impacts based on use of ballasted track system on the embankment.

- Potential lower maintenance for retaining walls versus aerial track structure.

Drawbacks:

- Visual impacts (and accompanying community impacts) from retaining walls (approximate 23′ retained height above grade).
- Visual impacts from potential graffiti (and accompanying increased maintenance cost).

Conclusions:

- Constructing the proposed extension at-grade, with roadway underpasses is the most expensive option, and offers no unique benefits.
- Constructing the proposed extension at-grade, with roadway overpasses offers potential construction savings on the track, but could potentially adversely affect more homes than Option #1: Aerial Track Structure. Although a detailed analysis of the additional right-of-way acquisition was not performed, the potential adverse impacts on such a large number of homes likely outweigh the potential $100 million in savings.
- The small cost benefits of Option #4 (which shows only a short section of track has the potential to be constructed at-grade) would not outweigh the operational drawbacks of the inclines.
- Options #1 and #5: Aerial Track Structure and Track on Retained Embankment would extend transit service with the best balance of cost and neighborhood impacts over Options #2, #3, and#4. Option #5 has the potential for a sizable construction cost savings (over $100 million) if the potential community impacts (including visual impacts) are acceptable or can be mitigated.

cc: file

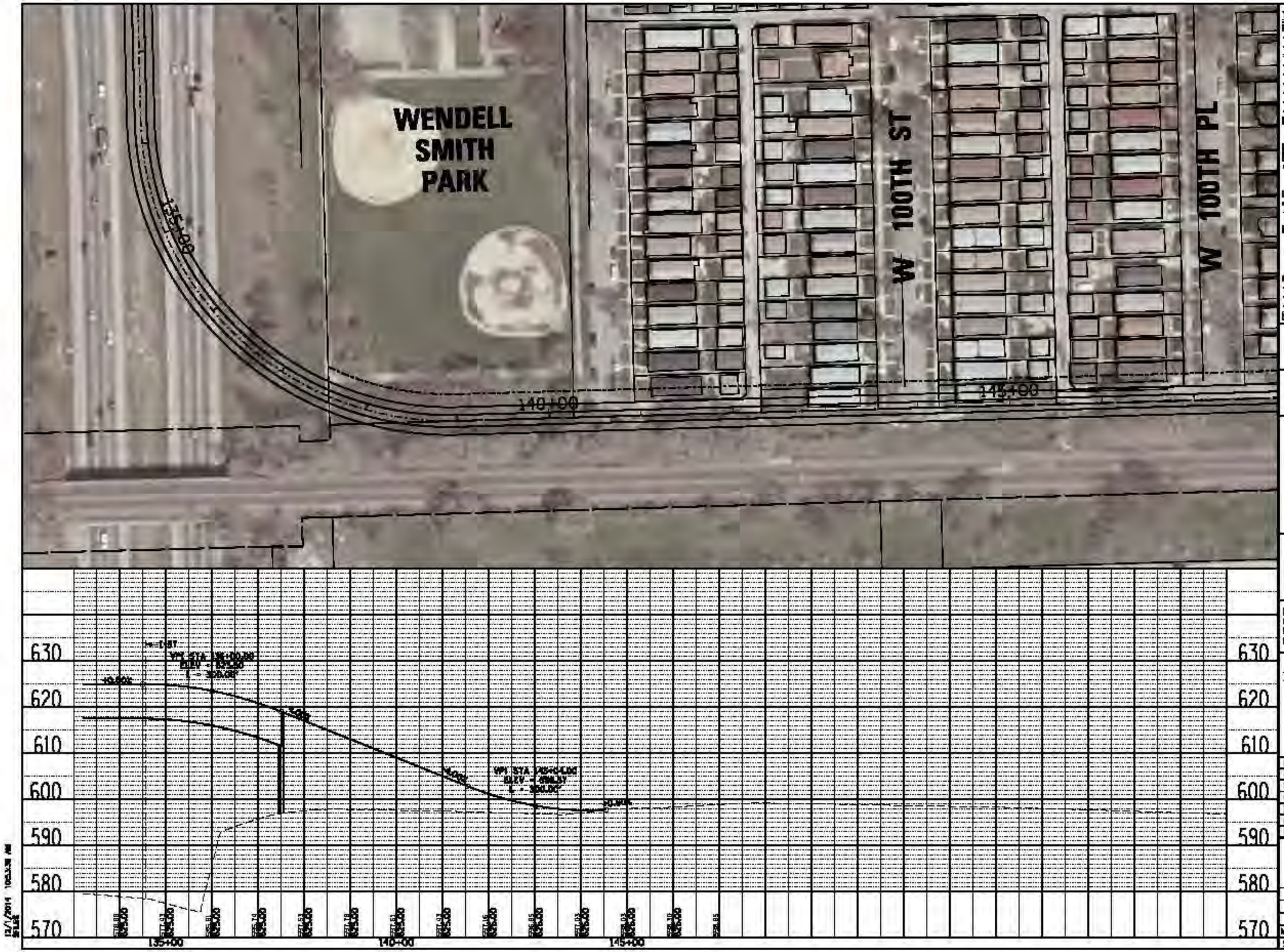

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPPER TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

[redacted]

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY

UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION
- AT GRADE PROFILE

IN CHARGE	
APPROVED BY	
CHECKED BY	
DESIGNED BY	
DRAWN BY	
PROJECT NO	CTA-RILE
FILE NAME	EXH_AtGradeProfileOption.dgn

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V 1" = 10'-0"

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EXHIBIT A - AT GRADE OPTION ANALYSIS

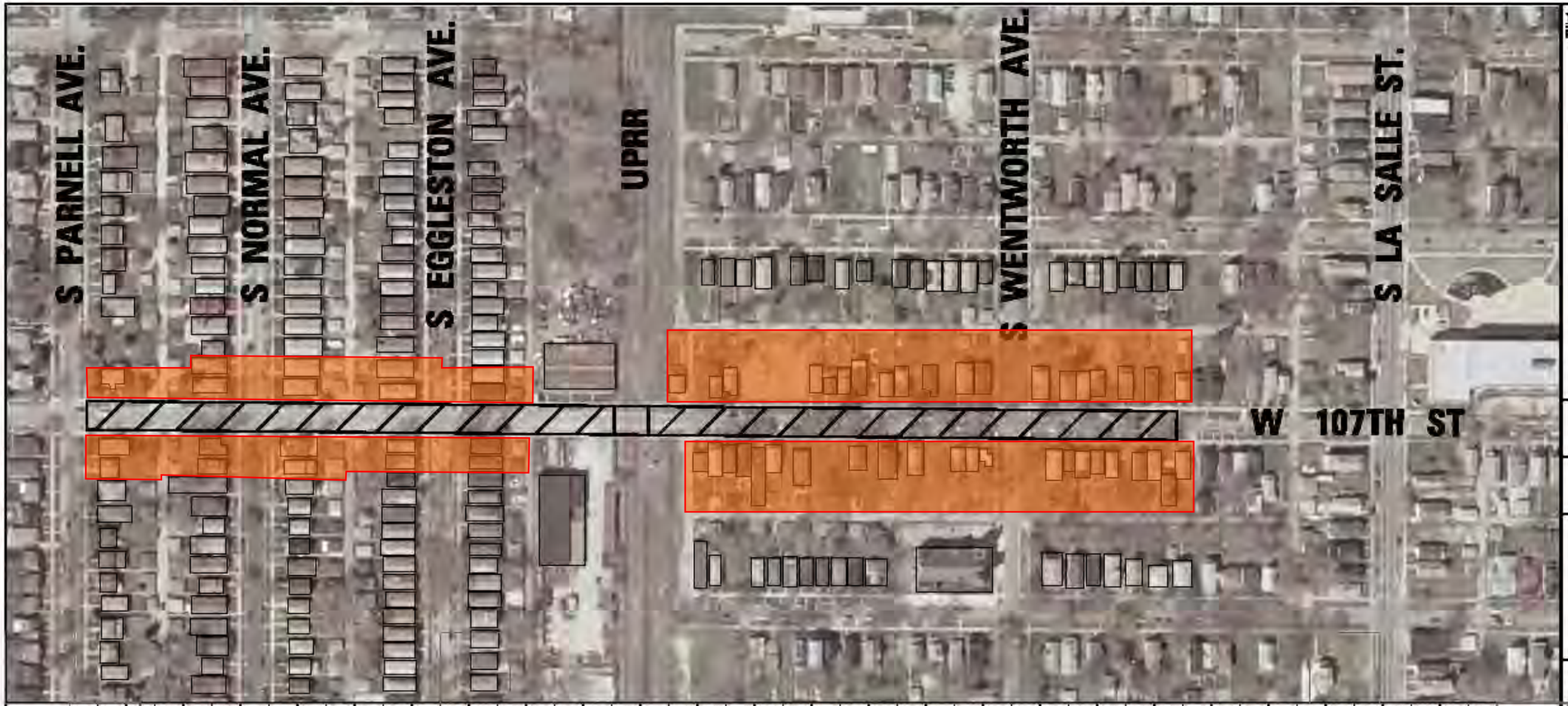

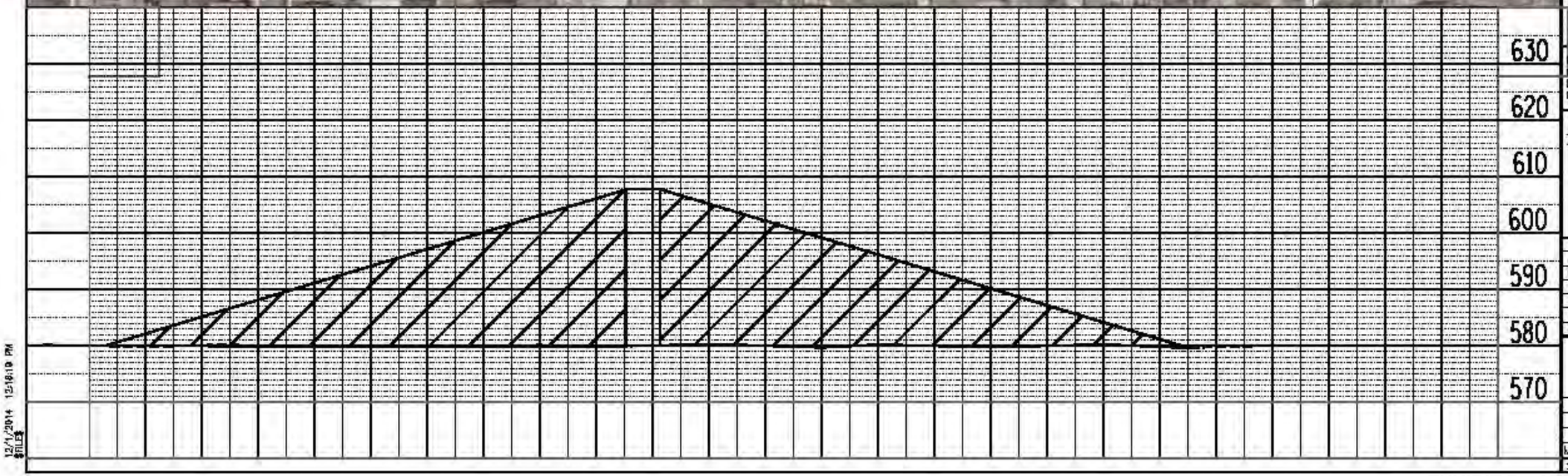

LEGEND
PLAN

- EX BUILDING - INFLUENCED
- EX BUILDING - PROBABLE ACQUISITION
- NSE WALL - BRIDGE APPROACH

GWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD ALTERNATIVE
EAST SIDE OPTION - PROPOSED ROADWAY OVERPASS

IN CHARGE
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CHECKED BY
DESIGNED BY
DRAWN BY
PROJECT NO CTA-RLE
FILE NAME EXH_CT_SP_OVERPASS.dgn

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EXHIBIT B - AT GRADE OPTION ANALYSIS

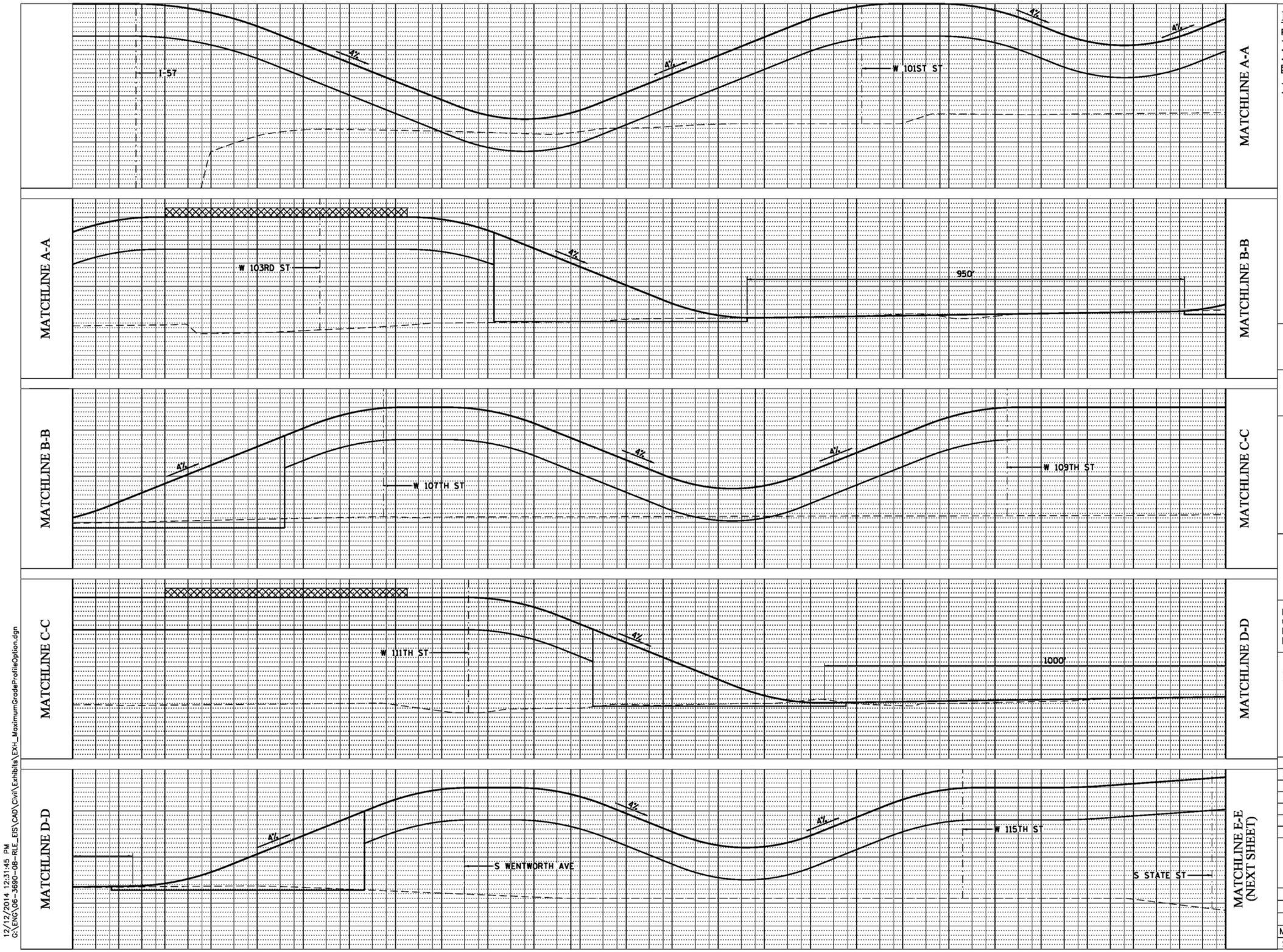

LEGEND

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION
- EX CENTERLINE
- PR CENTERLINE

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION -
MAXIMUM PROFILE GRADES

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EXHIBIT C - MAXIMUM GRADE PROFILE OPTION ANALYSIS -1/2

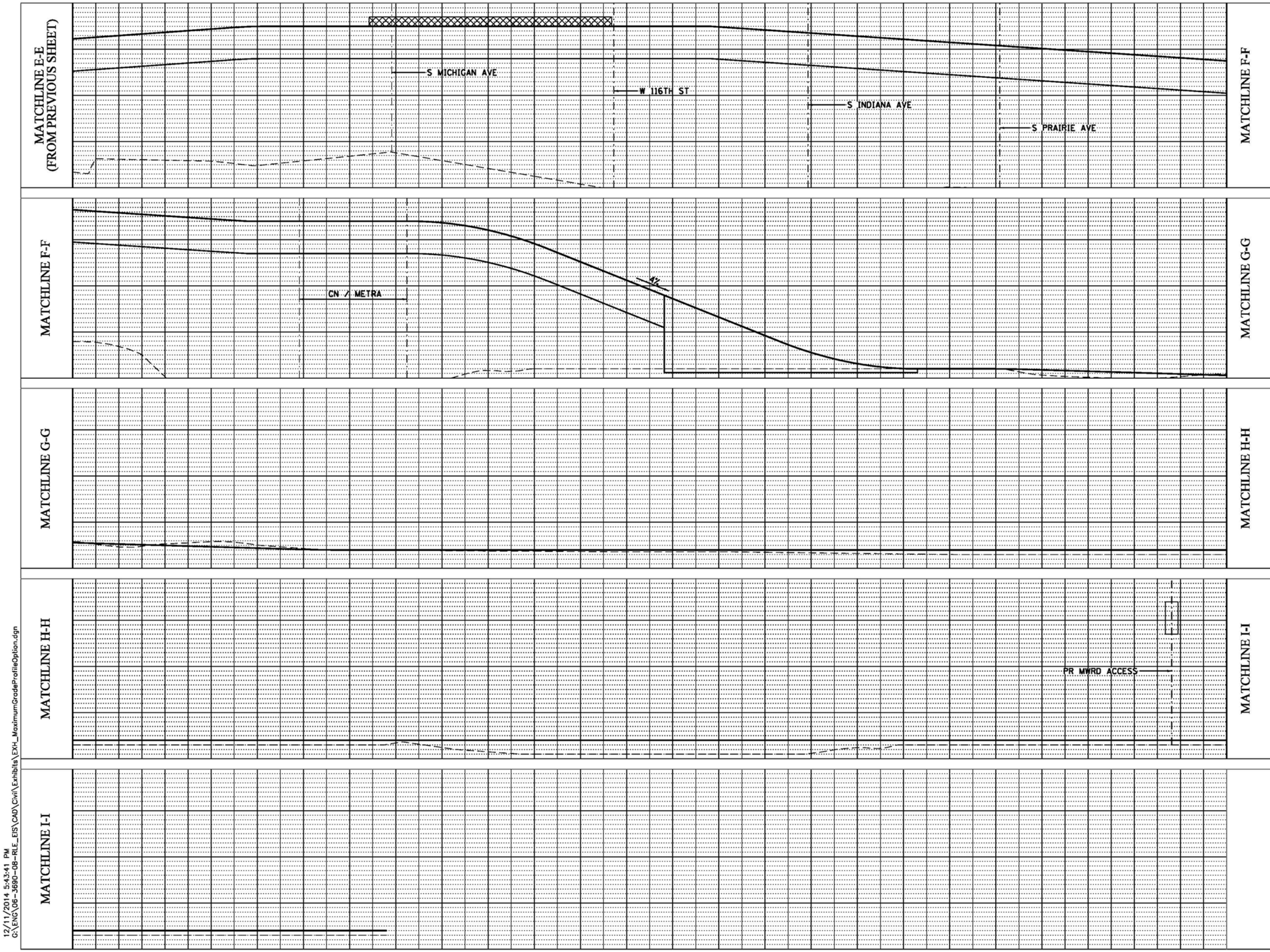

LEGEND

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION
- EX CENTERLINE
- PR CENTERLINE

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION -
MAXIMUM PROFILE GRADES

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EXHIBIT C - MAXIMUM GRADE PROFILE OPTION ANALYSIS -2/2

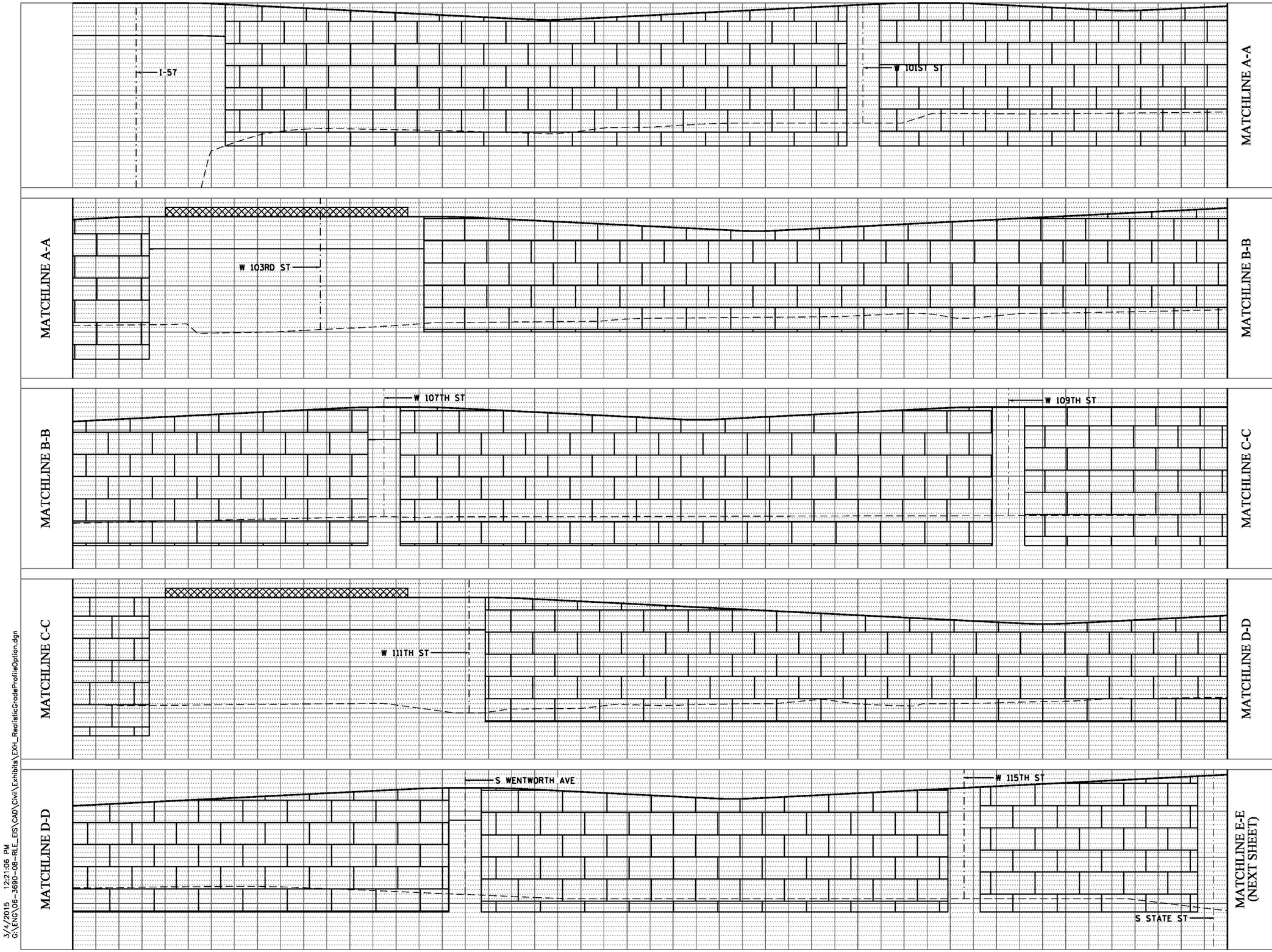

LEGEND

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION
- EX CENTERLINE
- PR CENTERLINE
- PR RETAINING WALL

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION -
REALISTIC PROFILE GRADES

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EXHIBIT D - RETAINING WALL OPTION ANALYSIS -1/2

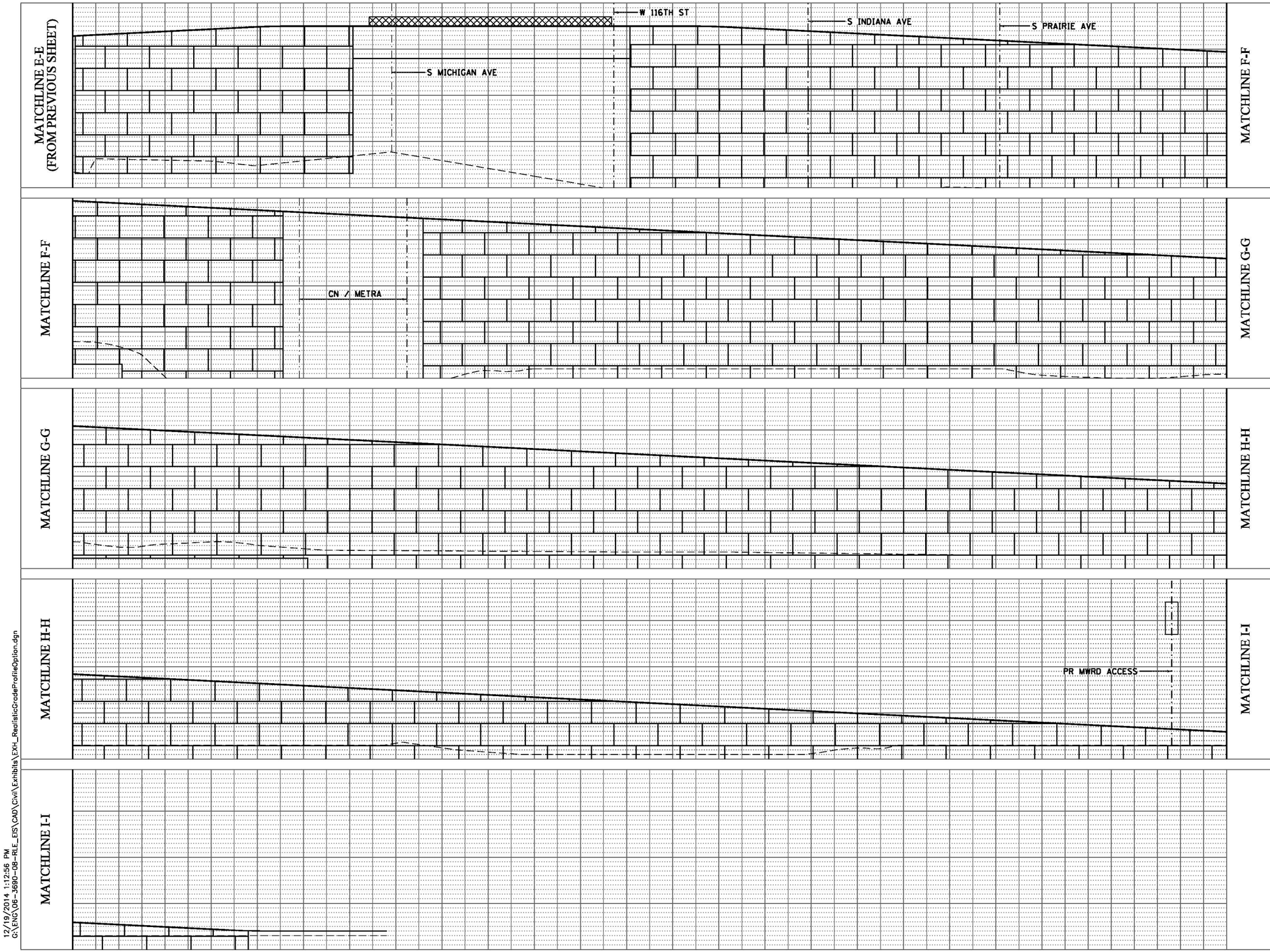

LEGEND

PROFILE
- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION
- EX CENTERLINE
- PR CENTERLINE
- PR RETAINING WALL

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION -
REALISTIC PROFILE GRADES

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EXHIBIT D - RETAINING WALL OPTION ANALYSIS -2/2

CWC Transit Group

Memorandum

To: *Sonali Tandon*

From: *CWC, Wight & Company*

Date: *December 2, 2014, revised June 11, 2015*

Subject: *120th Street Rail Shop and Yard Program*

The purpose of this document is to summarize program data collected for a Red Line Extension (RLE) yard for use in a future design phase of the project. This document was developed through meetings with CTA Rail Operations, Infrastructure, Planning, Maintenance, and Scheduling. The programming elements listed in this document indicate an ideal yard and are based on past experiences and lessons learned. The design and layout of the Midway yard was used as a guide when developing this document as Midway represents a yard on the current CTA system with good flow and operations. At the time of design, current CTA design criteria pertinent to yards (as found in the Infrastructure Design Criteria Manual) should be reflected in the layout and design.

Note that the conceptual layout related to this document was required to function with an intermediate RLE phase having service terminating at 115th Street and the ultimate RLE extension to 130th Street. In the intermediate phase, yard storage should accommodate a minimum of 288 cars on storage tracks. (Potential storage on the interior cleaning track, shop leads, or yard leads would not be included in this count.) In the ultimate build-out, yard storage should accommodate a minimum of 340 cars. See the yard capacity attachment to this memorandum for further detail.

The existing 98th Street Yard could be used to store extra trains or for sweeping cars. The use of the existing 98th Street Yard should be considered when designing the future yard. The 98th Street Yard should not be used as a maintenance facility after the new yard becomes active.

GENERAL

This scope document was developed to indicate the overall scope of the Red Line Extension - 120th Street Rail Shop and Yard and indicate the general design parameters. The scope does not indicate or describe all the work required for the full performance and completion of the project. The materials, details, sizes and quantities of the rail shop and yard are to be designed by a future designer and constructed by a contactor. The designer and contractor shall provide

all the requirements of the scope documents and shall include all items and services reasonably inferable from the scope documents. The designer and contractor shall only have contact with the firm retained to prepare these scope documents as authorized by the CTA. The preparer of the scope documents will not be responsible for the acts or omissions of the designer, contractor or any subcontractor or sub-consultant.

PROJECT LOCATION & EXISTING CONDITIONS:

The site of the proposed Red Line Extension Rail Yard is generally industrial in nature. It is located west of the I-94 expressway and Lake Calumet at approximately 122nd Street. The site is accessible by Cottage Grove Avenue as well as local access drives. The Metropolitan Water Reclamation District currently owns the site as well as much of the adjacent properties to the south and east. Three existing train tracks directly to the east of the site are operated by the Northern Indiana Commuter Transportation District, Chicago South Shore and South Bend Railroads. The K-Five Materials Corporation plant is directly northwest of the proposed site.

CODE COMPLIANCE

The entire project shall comply with the City of Chicago, State of Illinois and Federal Code requirements and the American with Disabilities Act (ADA) as applicable.

The entire project shall also comply with the Chicago Transit Authority standards, unless otherwise shown.

ARCHITECTURAL SCOPE

Site

Yard:

- 11 Storage tracks – various combinations of train lengths for a total of 340 cars not including any shop tracks, shop leads, or yard leads

- Track 12 (adjacent to shop) shall have door level cleaning platform with area allocated for trash containers.

- Sidewalks between every storage track, or utility vehicle access width between every other storage track – see yard section alternatives attachment to this memorandum.

- The storage track shall accommodate two 16-foot drives crossing the storage tracks generally running southwest to northeast from each end of the shop building – see plan view.

- The yard should generally be level and should be raised above the potential flood elevation. The profile should include slight upward slopes at each end to prevent wind-driven roll-away trains.

- The use of photovoltaic panels should be studied to cover and protect the parked trains or a portion of the parked trains from the elements and to offset the building electrical load.
- A yard master tower is required. Master tower is depicted in the exhibit documents on the roof of the shop.
- The site lighting should be carefully planned to be energy efficient, vandal resistant, easy to maintain, and meet safety regulations. American Railway Engineering Maintenance of Way Association (AREMA) policy should be used as a minimum standard and guideline for the lighting of the yard. Fixtures utilizing the latest available technologies should be considered.
- A secure fence shall be provided around the entire yard and coordinated with the security system. (Perimeter cameras with infrared and analytics should be considered.)

Other Site Requirements (including exterior of shop):

- Minimum of 130 vehicle parking spaces including handicap accessible spots as required by code.
- All site utilities shall be coordinated for clearances and cover depths to meet each specific utilities requirement.
- Site drainage shall conform to the City of Chicago Stormwater Management Ordinance Manual and City of Chicago Regulations for Sewer Construction and Stormwater Management. Best Management Practices shall be utilized wherever possible.
- Loading dock is required for parts delivery. Truck turning radius required to be coordinated with CTA.
- Landscape shall be in accordance with the City of Chicago zoning code.
- Provide locations for snow and track/bulk material storage.
- Trash compactor located near loading dock.
- Trash bin near cleaning platform.
- Provide sections of short track for non-revenue equipment storage.

Building

The floor area of the entire shop including the track bays, administration, maintenance and ancillary areas is depicted in the exhibit document as 85,000 SF. The final area should be coordinated with CTA to confirm all building requirements are met. The envelope design must properly address performance concerns including thermal, condensation, durability, constructability and economy. Daylighting and high performance glazing shall be utilized in the

shop and administration areas. The floor area depicted in the exhibit drawings show all the programed space located on the main level but multiple levels may be utilized if it is found to be economical. Stairs and an elevator would need to be added to the program if multiple floors are utilized. Depending on the type of hoists used, a partial basement may be required.

Shop:

- Five required track bays - All five tracks run all the way through shop
- Interior Wash Track:
  - No Pit
  - Minimum capacity of 10 cars
  - Pull Through access with overhead doors at both ends
  - Out-to-out width for the bay to accommodate the brushes and control room
  - Water treatment and water recycling equipment
- Pit Track:
  - Minimum capacity of 10 cars
  - Overhead door access on both ends
- Wheel Truing Track:
  - Truing machine (4-car length) with hoists on the remainder of the track
- Two (2) Shop Tracks with Hoists
  - Minimum capacity of 10 cars each
  - Overhead door access on both ends

General/Administration:

- Shop Office (must be located on 1st floor)
- Superintendent Office
- Conference/Classroom
- Lunch Room
- Pantry/Kitchen

- Janitor Closets (2)
- Building Maintenance
- Grounds Maintenance
- Track Maintenance
- Cab Signal Maintenance
- Yard Master Tower

Toilet/Lockers:

- Main Men's Locker Room
- Main Women's Locker Room
- Maintenance Men's Locker Room
- Maintenance Women's Locker
- Office Unisex Toilet

Mechanical/Electrical:

- Mechanical Equipment Room
- Electrical Equipment Room
- Communications/IT Room

Storage Areas:

- General Building Storage
- Small Part Storage
- Hazardous Material Storage
- Oil Storage

STRUCTURAL

The foundation and slab system shall be designed by a structural engineer based on recommendations from the geotechnical engineering report. The structural framing system shall be designed in accordance with generally accepted engineering principles. The structural system shall be selected so that the chemicals and materials used in the shop and wash track shall not have a negative impact on the structural systems performance.

MEP

Mechanical

The HVAC system shall be selected to be energy efficient, meet all indoor air quality and thermal comfort requirements and must be straightforward to operate and maintain. Incorporation of renewable energy sources into the design of the building is recommended where possible. An appropriate system includes wind turbines and photovoltaic panels capable of generating electric energy to offset the building's electrical load.

Electrical

Incoming electrical service should be discussed with the CTA and selected to meet the facility needs. The size of the electrical service equipment shall be determined by a Professional Engineer to conform to the City of Chicago Building Code and the National Electrical Code. Interior Lighting shall be provided to meet the requirements of the occupants and utilize a minimum number of separate lamps for building maintenance.

Plumbing/Fire Protection

The building shall provide restrooms facilities capable of meeting CTA requirements and plumbing and accessibility codes. Low water consumption fixtures should be selected. Selection of toilet accessories, partitions and lockers should be durable and easy to maintain. The design shall include fire protection according to applicable codes including heat and smoke detectors, and associated alarm sirens and strobes. The fire alarm system shall be integrated with the City of Chicago security annunciation system to alert proper authorities. An automatic sprinkler system shall also be included. The fire alarm system will be of addressable type, and be in accordance with the City of Chicago Building Code, National Fire Protection Association and the requirements of the Bureau of Fire Prevention, whichever is more stringent.

Communications

The provisions for information technology shall be coordinate with the CTA IT department. The data system shall be a combination of direct cable and wireless.

Automation, Measurement & Verifications

The building shall include a Building Automation System (BAS). The systems that tie into the BAS system shall be discussed with the CTA. The controls system shall integrate to a Graphical User Interface (GUI). A measurement and verification system to monitor energy use should be considered and shall be discussed with CTA.

SECURITY

The security system shall consist of intrusion detection/access control and Surveillance System. The security system will be monitored, if required, by a third party security contract, or with a direct link to the Chicago Police Department local precinct. A direct link to the CTA Control Center will also be included. The surveillance system shall be provided with Raceways, Closed-

Circuit Television (CCTV)-UTP cables, jacks, patch panels, patch cords, high resolution Pan Tilt Zoom (PTZ) cameras, infrared cameras, multiplexes, monitors, Digital Video Recorder (DVR), interface modules, fiber distribution and all appurtenances for a complete surveillance system. The surveillance system coverage shall include but not be limited to, the building interior, the rail yard, loading areas and parking areas. Exterior cameras shall have the capability to send the video signal to the OEMC (Office of Emergency Management and Communications) upon request as a part of the Third Party Initiative Program. Camera selection shall be coordinated with OEMC for their compatibility.

Attachments:

- Plan view conceptual schematics of yard and shop
- Yard capacity detail
- Flow schematics (into and out of the yard, and internal movements)
- Yard Storage Track Spacing Alternatives

cc: File

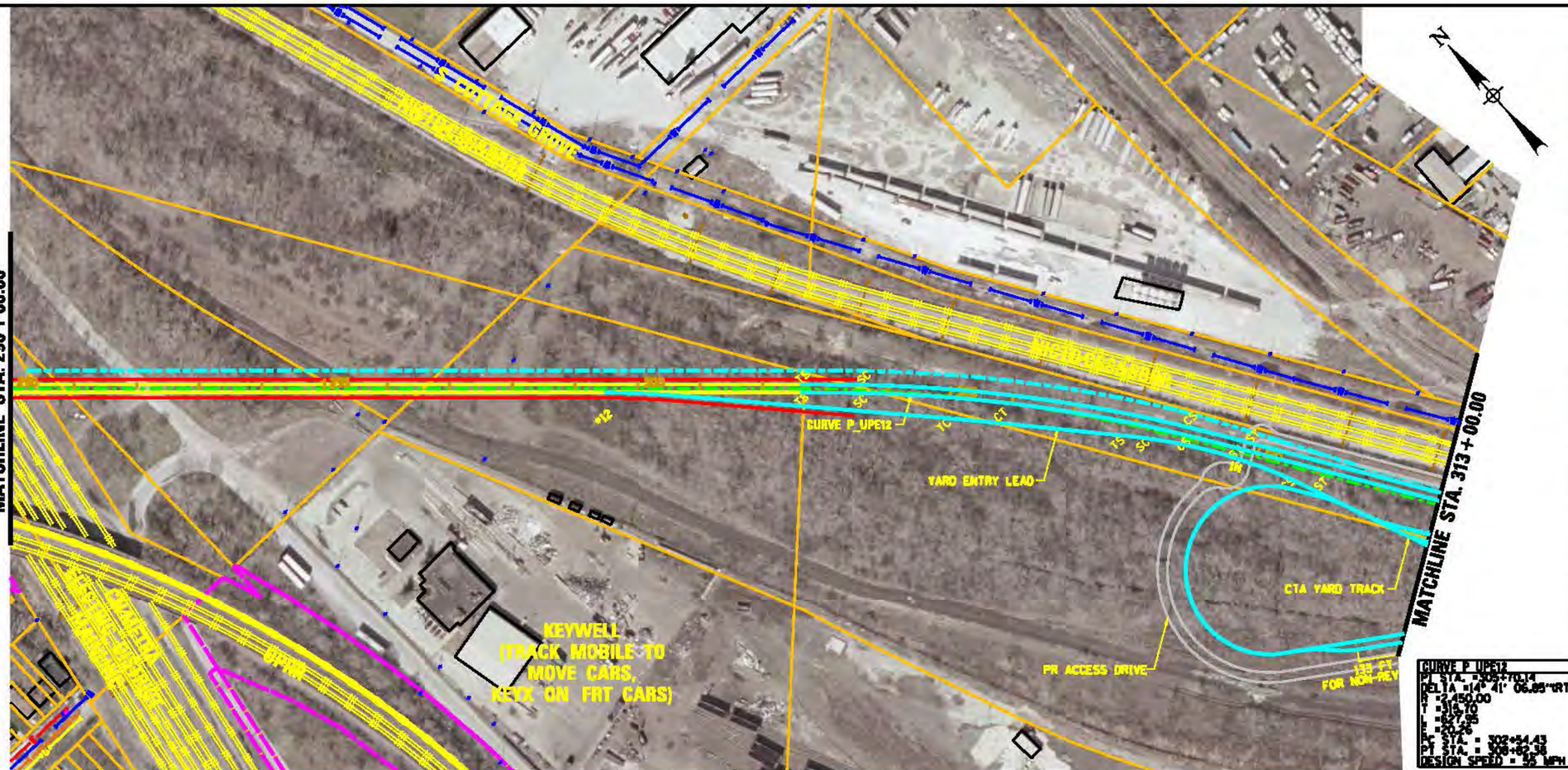

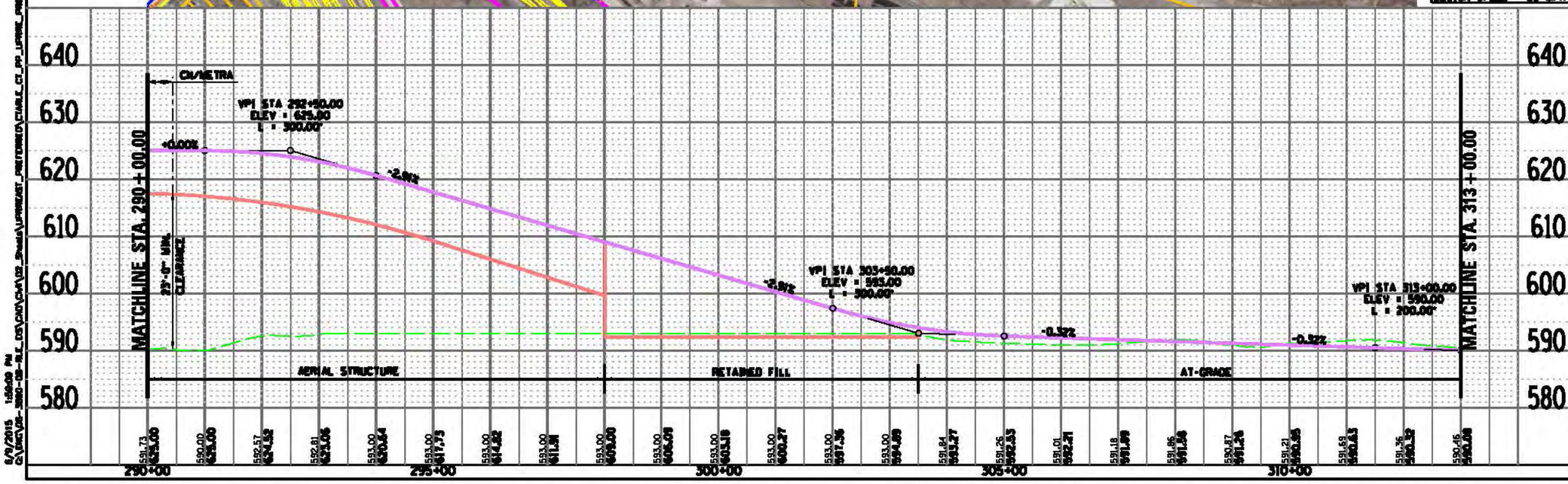

LEGEND

PLAN

- EX CENTERLINE
- PR CENTERLINE
- EX TRACK CENTERLINE
- PR TRACK CENTERLINE
- PR TRACK STRUCTURE
- EX ROADWAY RIGHT-OF-WAY
- EX RAILROAD RIGHT-OF-WAY
- PR PERMANENT ENVELOPE
- PR ROADWAY/HARDSCAPE
- PR STATION PLATFORM
- EX BUILDING OUTLINE
- PR BUILDING OUTLINE
- PR PARKING
- PR CTA SUBSTATION
- PR UPRR TRACK CENTERLINE

UTILITIES

- EXISTING WATER LINES
- EXISTING SEWER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING TELEPHONE LINE

ENTRANCES

- PRIMARY ENTRANCE
- SECONDARY ENTRANCE
- EXIT ONLY
- PROPOSED PARKING ENTRANCE

PROFILE

- EX GROUND
- PR TOP OF RAIL
- PR ELEVATED STRUCTURE DEPTH
- PLATFORM LOCATION

CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION

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PROJECT NO	CTA-RLE
FILE NAME	CTARLE_CT_PP_UPRRE_PREF_110.dgn

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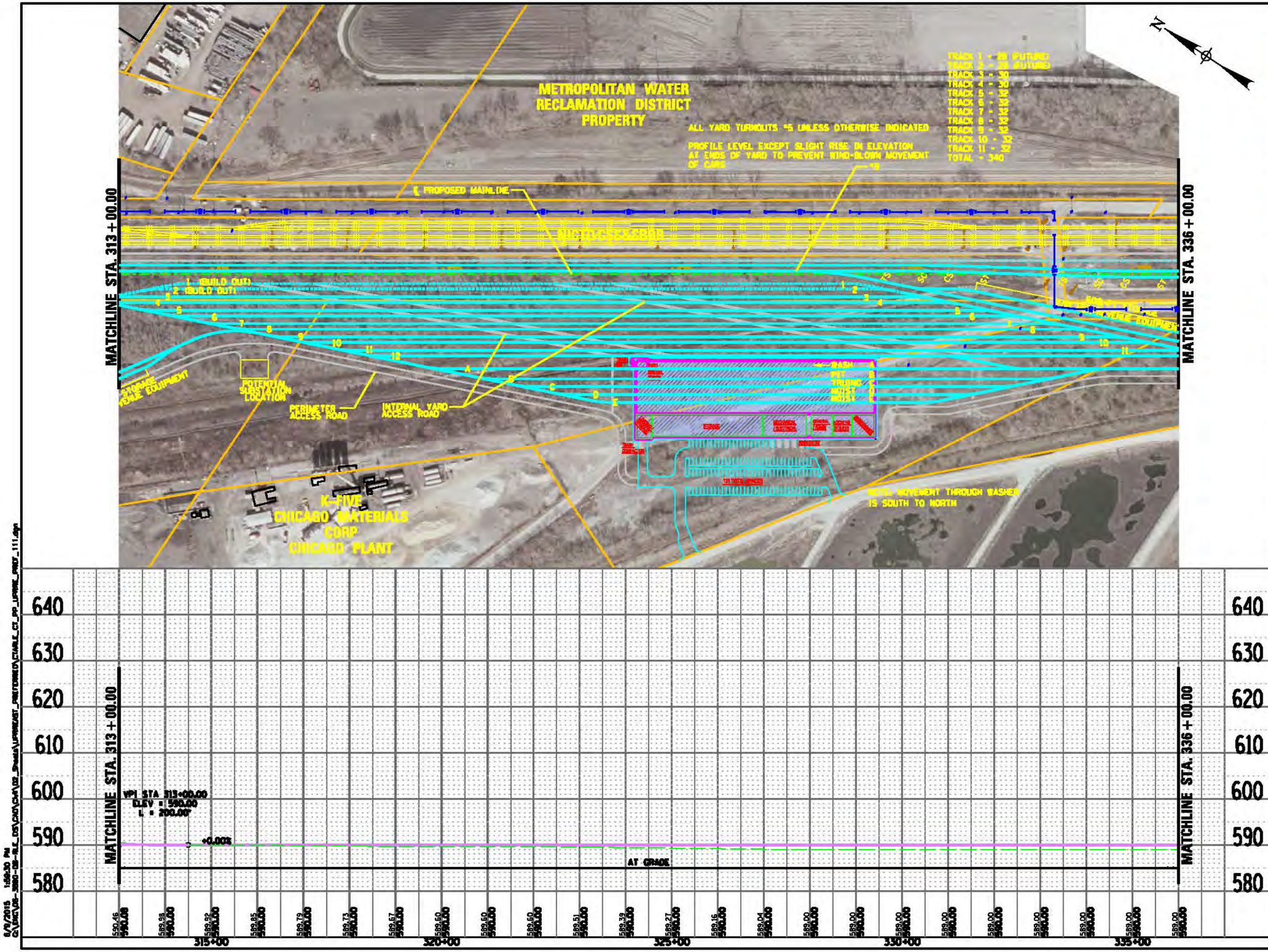

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION

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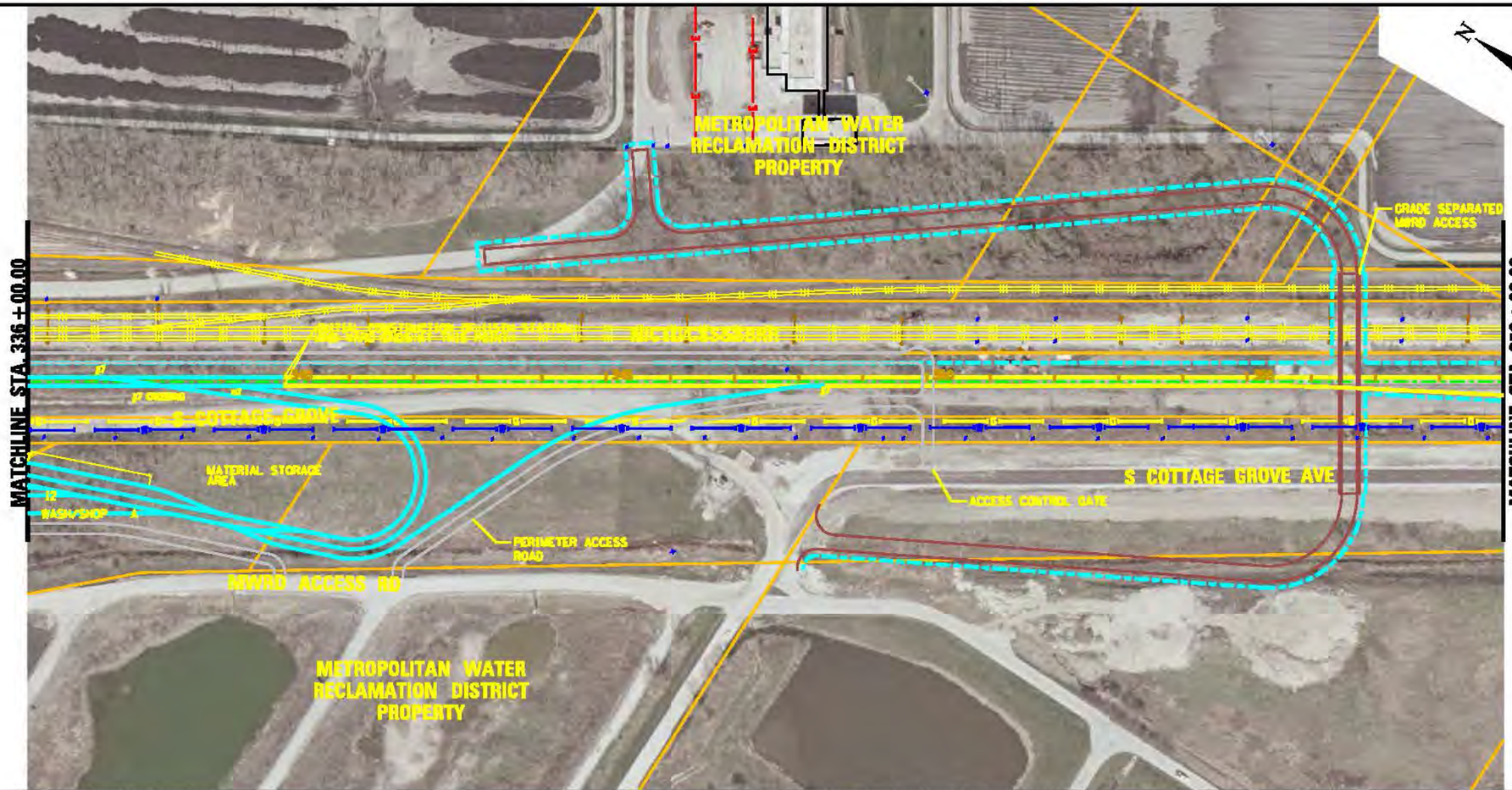

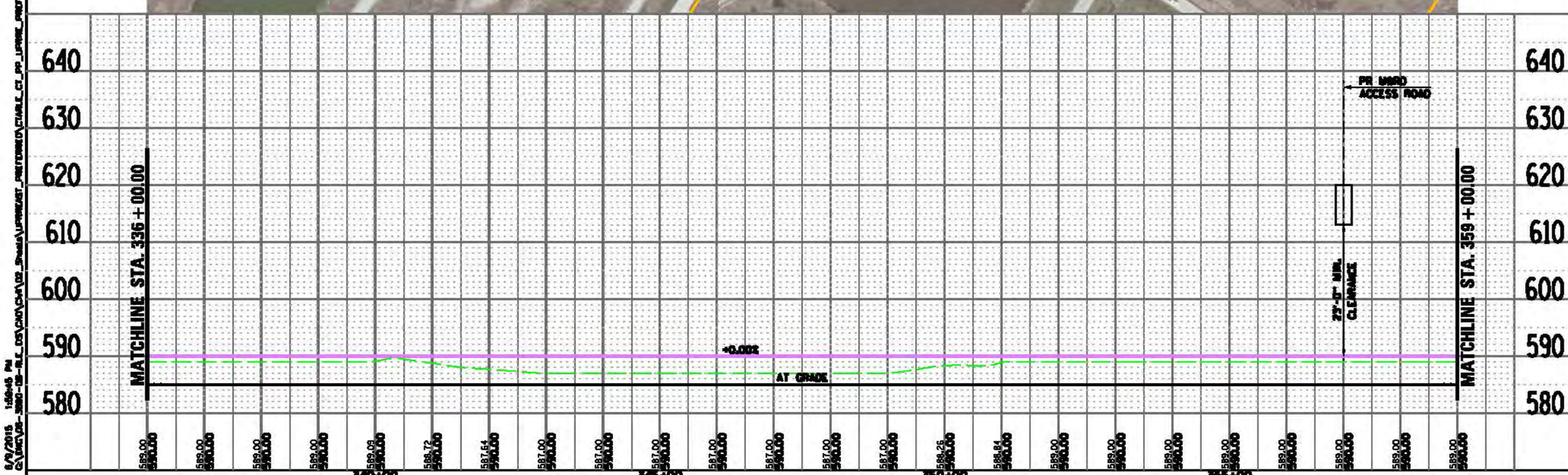

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- PR CENTERLINE
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CWC Transit Group

cta

CHICAGO TRANSIT AUTHORITY

SENSITIVE SECURITY INFORMATION

[redacted]

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RED LINE EXTENSION
ENVIRONMENTAL IMPACT STUDY
UNION PACIFIC RAILROAD
ALTERNATIVE
EAST SIDE OPTION

15 OF 51

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RLE Yard Storage Requirements

Ultimate Build-Out

Assumptions:

- Store 80 cars (8 x 10-car trains) for RPM ultimate build-out
- Replace maximum storage in 98th Yard
- Store 78 additional cars for RLE operation
- The minimum number of Red Line cars in operation (due to 7/24 service) is 40 cars (10 trains x 4 cars)
- Do not assume any trains stored on yard leads
- Discount storage requirements by 12 cars (~3%) for cars in shop undergoing maintenance, wheel truing, washing or interior cleaning

At night when 4-car trains are operating, ten 10-car trains are broken into ten 4-car trains (in service) plus ten 6-car trains which need to be stored

RPM	80	cars
98th Yard	234	cars
RLE	78	cars
Total	392	cars
In Service	(40)	cars
In Shop	(12)	cars
Storage	**340**	**cars**

5 Storage Tracks @ 32 cars (2 trains x 10 cars/train + 2 trains x 6 cars/train) +
6 Storage Tracks @ 30 cars (3 trains x 10 cars/train) = 340 cars

RPM Phase 1 and RLE to 115th Street

Assumptions:

- Store 40 cars (5 x 8-car trains) for RPM Phase 1
- Replace maximum storage in 98th Yard
- Store 64 additional cars for RLE operation to 115th Street
- The minimum number of Red Line cars in operation (due to 7 day/24 hour service) is 40 cars (10 trains x 4 cars)
- Do not assume any trains stored on yard leads
- Discount storage requirements by 10 cars (~3%) for cars in shop undergoing maintenance, wheel truing, washing or interior cleaning

At night when 4-car trains are operating, five 8-car trains are broken into ten 4-car trains - no need to store partial trains

RPM	40	cars
98th Yard	234	cars
RLE	64	cars
Total	338	cars
In Service	(40)	cars
In Shop	(10)	cars
Storage	**288**	**cars**

9 Storage Tracks @ 32 cars (4 trains x 8 cars/train) = 288 cars

YARD ENTRY FROM 115TH

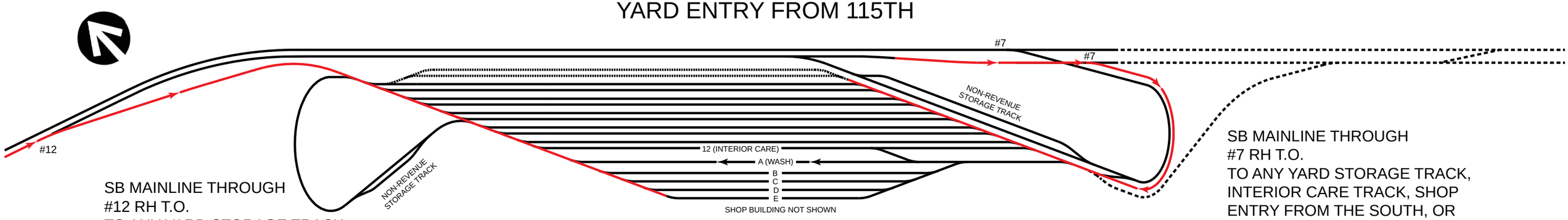

SB MAINLINE THROUGH
#12 RH T.O.
TO ANY YARD STORAGE TRACK,
INTERIOR CARE TRACK, OR SHOP
ENTRY FROM THE NORTH

SB MAINLINE THROUGH
#7 RH T.O.
TO ANY YARD STORAGE TRACK,
INTERIOR CARE TRACK, SHOP
ENTRY FROM THE SOUTH, OR
WASH TRACK

RETURN TO SERVICE FROM 115TH

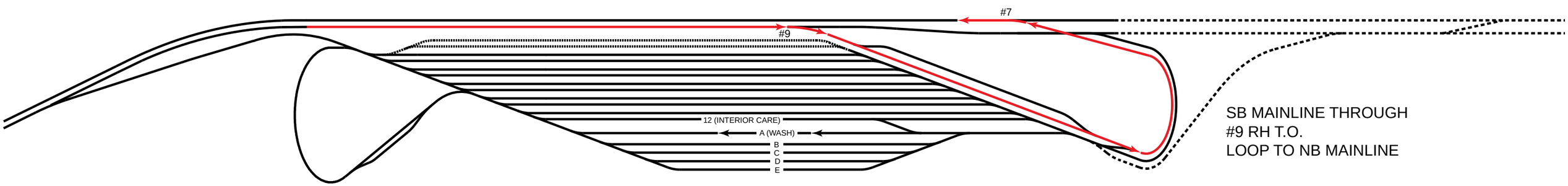

SB MAINLINE THROUGH
#9 RH T.O.
LOOP TO NB MAINLINE

EXIT YARD TO 115TH

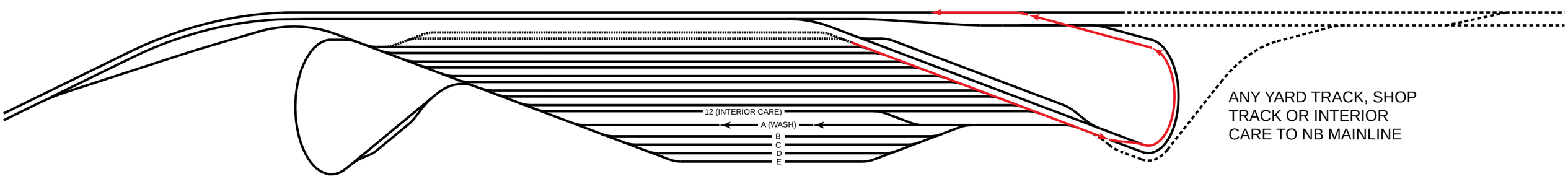

ANY YARD TRACK, SHOP
TRACK OR INTERIOR
CARE TO NB MAINLINE

NTS

YARD ENTRY FROM 130TH

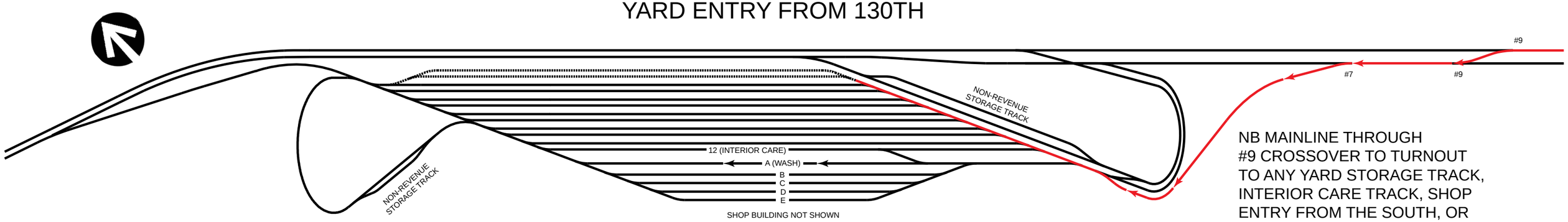

NB MAINLINE THROUGH #9 CROSSOVER TO TURNOUT TO ANY YARD STORAGE TRACK, INTERIOR CARE TRACK, SHOP ENTRY FROM THE SOUTH, OR WASH TRACK

EXIT YARD TO 130TH

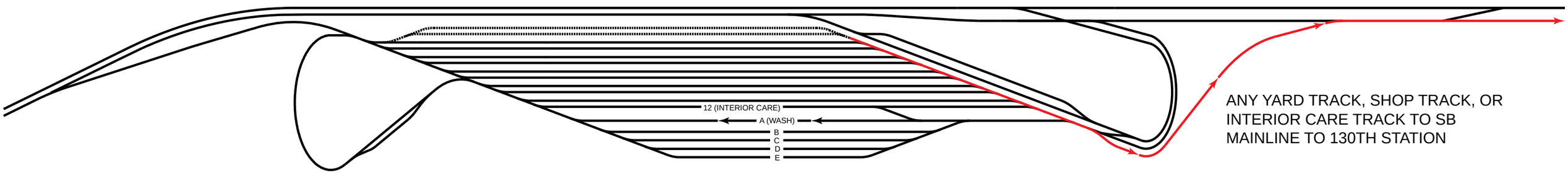

ANY YARD TRACK, SHOP TRACK, OR INTERIOR CARE TRACK TO SB MAINLINE TO 130TH STATION

INTERNAL YARD MOVEMENTS

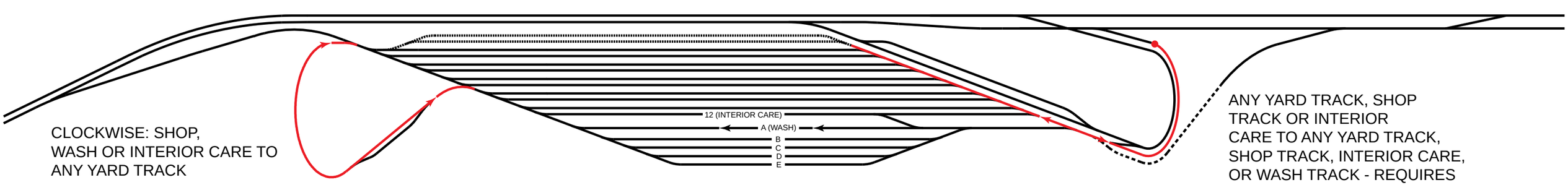

CLOCKWISE: SHOP, WASH OR INTERIOR CARE TO ANY YARD TRACK

COUNTER CLOCKWISE: ANY YARD TRACK TO SHOP (NORTH ENTRANCE) OR INTERIOR CARE

ANY YARD TRACK, SHOP TRACK OR INTERIOR CARE TO ANY YARD TRACK, SHOP TRACK, INTERIOR CARE, OR WASH TRACK - REQUIRES REVERSAL OF TRAIN AT ●

ALL INTERNAL YARD TURNOUTS ARE #5

NTS

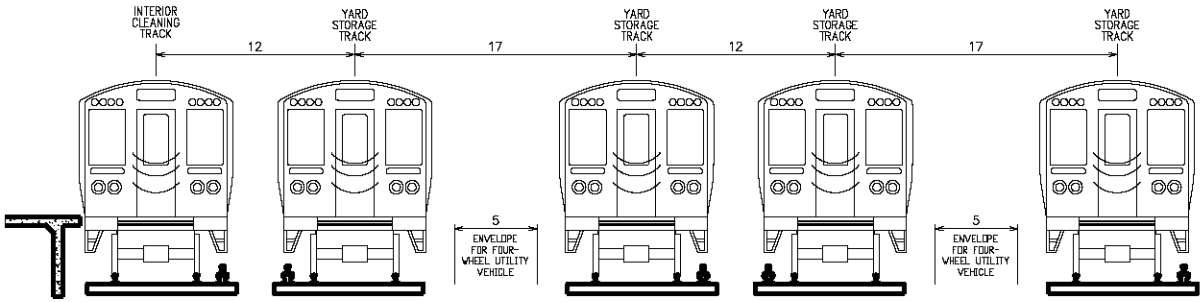

POTENTIAL YARD TRACK LAYOUT WITH ROOM FOR UTILITY VEHICLE BETWEEN EVERY OTHER TRACK

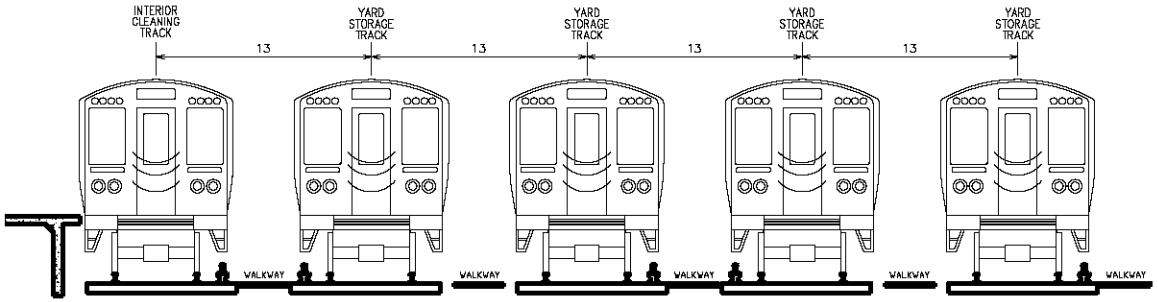

POTENTIAL YARD TRACK LAYOUT WITH WALKWAY BETWEEN EACH TRACK

Memorandum

To: *Sonali Tandon*

From: *CWC, Wight & Company*

Date: *February 19, 2015, revised March 16, 2015*

Subject: *130th Street Terminal Station Options*

The purpose of this memorandum is to provide a decision support document for the elimination of one of the station options for the extension of the Red Line to 130th Street. To date, the Union Pacific Railroad (UPRR) Rail Alternative has included two options for the 130th Street terminal station: the South and West Station Options. FTA has indicated that CTA should prepare the Draft Environmental Impact Statement (EIS) for the Red Line Extension (RLE) with the preferred alternative clearly identified to streamline the environmental process. To streamline the Draft EIS, CTA would like to present one terminal station in the Draft EIS; this memorandum serves as documentation.

This memorandum briefly describes the station options and evaluates the pros and cons of each option. This memorandum also provides a recommendation for the preferred station location.

130th South Station Option (Figure 1)

The South Station Option would be located immediately west of the Northern Indiana Commuter Transportation District/Chicago South Short & South Bend Railroad (NICTD/CSS&SBRR) right-of-way at 130th Street. The station and platform would be at grade. The station area would have three tracks running to the station. The platform would extend underneath 130th Street and would terminate before 130th Place, south of 130th Street. A total of 2,300 parking spaces are proposed in a seven-story parking structure. Pedestrians would access the station from 130th Place or from the parking structure. Vehicles would access the parking structure from 130th Street. Pedestrians from Altgeld Gardens would access the station from 130th Place, not needing to cross 130th Street.

130th West Station Option (Figure 2)

The West Station Option would be located along the north side of 130th Street at Evans Avenue. The station and platform would be at grade. A total of 2,300 parking spaces are proposed in a four-story parking structure plus a surface parking lot. Pedestrians from Altgeld Gardens would access the station through a pedestrian cross walk on 130th Street. A traffic signal at 130th Street, marked crosswalk, and curb ramps would be provided as part of the project.

Evaluation of Station Options

The City of Chicago Department of Transportation conducted a Market/Access study for the 130th Street Station in 2010 which evaluated the two station options. The study built upon CTA's Alternatives Analysis from 2009 but did not provide a recommendation for the final location of the station. The results of the study indicated that the South Station Option provided the best opportunity to meet the goals of the 130th Street Gateway Vision. The 130th Street Gateway Vision is to develop 130th Street into a gateway for the City of Chicago as well as the greater Calumet Area. The study stated that the South Station Option would:

- Promote possible development of a joint intermodal station with NICTD
- Support future studies to extend the Red Line across the Little Calumet River
- Encourage the visioning conducted by the Chicago Housing Authority for Altgeld Gardens
- Establish pedestrian and bicycle accessibility between 130th Street Station and the City's proposed Kensington Bikeway, Carver Military Academy and Altgeld Gardens
- Provide a potential catalyst for other public and private investment in the study area and as identified in the City's plans for the Calumet Region.

Stakeholders from the project area have indicated a preference for the South Station Option, as indicated in *Summary Report of the Developing Communities Project Community Visioning Session for the Proposed Red Line Extension*, compiled in September 2010. The master planning process undertaken by the Chicago Housing Authority (CHA) for the Altgeld Gardens Murray Homes in 2013 included evaluating the existing conditions, land uses in the planning area, and community facilities. The comprehensive master planning process recommended the South Station Option because it provided better connectivity to the Community Center and Ellis Avenue, which is a major north-south street that includes proposed retail. Stakeholders also indicated their preference for the South Station Option during the CTA public informational meeting held May 13, 2014.

The South Station Option is on tangent track leading to/from the proposed yard, which would be north of the station. To access the West Station Option, the tracks would curve to the west. In addition to the curved tracks, the cost of approximately 1100 feet of additional track needed for the West Station Option increases the cost over the South Station Option by nearly $30 million, assuming all other amenities to the station would be of equal value. The additional track and curve leading to the West Station Option would create higher operational costs over the South Station Option.

Based on the results of the environmental analysis performed for the RLE Draft EIS in 2012–2015, the West Station Option would have an impact on pedestrian safety; however, the

proposed traffic signal at 130th Street and the pedestrian crosswalk would mitigate the impact. Both station options have the potential for wetland impacts. Fieldwork would be required at either location to determine if jurisdictional wetlands are present. Both station options would have traffic impacts related to the park & ride facilities off of 130th Street. Mitigation measures to minimize the traffic impacts include optimizing the traffic cycles and adding in turn-lanes. Both station options would also require land acquisition from the Metropolitan Water Reclamation District of Greater Chicago (MWRD).

The South Station Option would better serve the Carver Military Academy High School, located east of the station area, south of 130th Street. Students and faculty of the Carver Military Academy would be able to access the station through Doty Avenue. The South Station Option would be closer to the Ford Motor Company on Torrence Avenue.

The South Station Option would provide the best opportunity for a future connection to NICTD, because the NICTD tracks would parallel the proposed RLE at this station. Improving regional rail connections and linkages to other public transportation modes in the project area is one element of the RLE Project's purpose and need. The West Station Option would not accommodate a direct regional rail connection to other public transportation.

During a meeting with MWRD on September 16, 2013 regarding the proposed RLE yard and station options, MWRD indicated that they do not have future plans for any of the parcels where the station options are proposed. MWRD indicated that the vacant parcels are intended to act as buffers (both visually and for odors) for the lagoons to the surrounding communities. MWRD tentatively indicated that the South Station Option would be better than the West Station Option.

Recommendations

Based on the evaluation of station options, input from the local community, and project costs, the South Station Option is the preferred station location for the 130th Street Terminal Station. The South Station Option would provide benefits to the project and would best meet the project's purpose and need of providing other transit connections to NICTD in the future.

cc: CWC, File

Appendix G

Description of Construction and Phasing for Build Alternatives

- Final EIS Addendum G, Description of Construction and Phasing, July 2022
  - Attachment A, Construction Activities Matrix
  - Attachment B, Construction Schedule

Chicago Red Line Extension Project

Description of Construction and Phasing

Final EIS Addendum G

July 2022

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
TranSystems
222 S. Riverside Plaza, Suite 610
Chicago, IL 60606

Table of Contents

Section 1 - Summary 1-1
Section 2 - Project Description and Background 2-1
Section 3 - Description of Construction 3-1
3.1 Construction Phasing and Segments 3-1
3.2 Potential Construction Staging Areas 3-9
3.3 Description of Anticipated Construction Activities and Methods 3-12
3.4 Methods for Protecting Nearby Utilities and Adjacent Structures 3-18
Section 4 - Project Schedule 4-1
Section 5 - References Cited 5-1

Figures

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4
Figure 3-1: Construction Segments of the Preferred Alignment 3-4

Attachments

Attachment A – Construction Activity Matrix for the Preferred Alignment
Attachment B – Construction Schedule for the Preferred Alignment

Abbreviations

AREMA	American Railway Engineering and Maintenance-of-Way Association
CHA	Chicago Housing Authority
Chicago DIGGER	Chicago Utility Alert Network
CN/MED	Canadian National/Metra Electric District
Conrail	Consolidated Rail Corporation
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement

FTA	Federal Transit Administration
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt Railroad
JULIE	Joint Utility Locating Information for Excavators
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
NS	Norfolk Southern
OUC	Office of Underground Coordination
RLE	Red Line Extension
UPRR	Union Pacific Railroad

Section 1 - Summary

The Chicago Transit Authority (CTA) is preparing the Final Environmental Impact Statement (EIS) for Red Line Extension (RLE) Project. This Addendum updates the description of construction activities and phasing for the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative, as compared with the Draft EIS.

Construction activities for the Preferred Alignment would occur for up to five years, including construction staging and utility relocations. Construction is anticipated to occur from 2025 through 2029.

Section 2 - Project Description and Background

CTA, as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic

Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid

Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

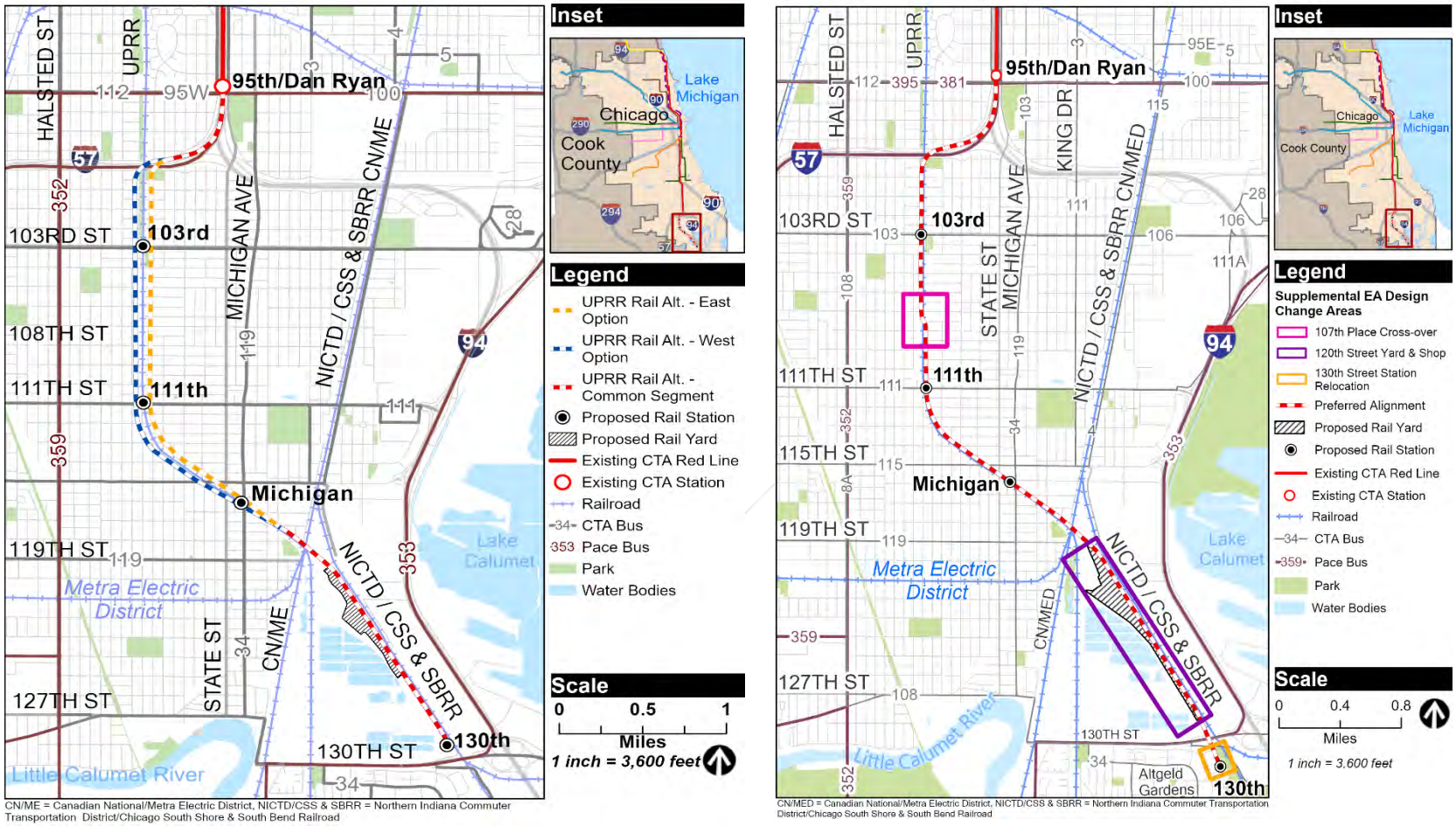

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Description of Construction

This section summarizes the construction that would be needed for the Preferred Alignment. Construction activities are not expected to be markedly different than those described in the Draft EIS. The construction matrix for the Preferred Alignment is presented as **Attachment A**.

3.1 Construction Phasing and Segments

This section describes the anticipated construction activities and phasing for the Preferred Alignment. Construction and equipment related definitions are provided in **Section 3.3.9** for additional reference. The overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th/Dan Ryan terminal and 98th Street Yard and Shop, and to minimize vehicular traffic on affected expressways and roadways. Only temporary interruptions to CTA operations and vehicular traffic would occur.

3.1.1 Construction Assumptions

The following are the major constructability, construction sequencing, and phasing assumptions. Phasing and construction segments may change due to refined engineering, available funding, and other factors later in the project implementation stage.

The coordinated construction of infrastructure and stations is a key component of planning and design of the RLE Project. Assumptions that affect design solutions include the following:

- Refinement of station, park & ride facility, and yard locations.
- Refinement of aerial structure type. New construction of elevated structure includes foundation, columns, superstructure, and deck. New construction of retained fill structures includes foundation and two parallel reinforced concrete retaining walls with fill in between.
- The ability to construct facilities in sequences and phases to facilitate CTA operations, specifically around the 95th/Dan Ryan terminal and 98th Street Yard and Shop. This includes systems such as trackwork, traction power, signals, and communications.
- The ability to construct facilities in sequences and phases to facilitate UPRR operations.
- The location and size of proposed foundations and structural members, potentially limited by clearance requirements (e.g., caisson size and depth, concrete pour access, steel piece weight and size, etc.).
- The ability to construct structures in sequences and phases to facilitate vehicular traffic operations on I-94, I-57, and 130th Street.

The following parameters have been assumed for construction of the Preferred Alignment:

- The methods of construction required along the alignment are anticipated to be conventional, utilizing standard construction methods and materials including cast-in-place concrete, pre-cast concrete, and structural steel.
- Demolition of buildings would be performed in accordance with local ordinances for construction activities. CTA would make every effort to demolish buildings to clear the area for construction of the RLE Project in a timely manner.
- New construction in and around the 95th Street Terminal would require some tracks to be taken out of service or realigned to access and perform the work. To perform this work in an efficient manner while maintaining reasonable service and access to the 98th Street Yard and Shop, it is anticipated that construction would be sequenced and phased to maintain access to the 98th Street Yard and Shop.
- Space for storage and staging of construction materials, equipment, and temporary facilities would be needed within and/or adjacent to the right-of-way. Construction material storage and contractor yard areas appear to be available along the alignment through a combination of publicly owned and privately owned properties. Construction access adjacent to the right-of-way could be required.
- During construction, access to work zones adjacent to the expressway would require shoulder and possible lane closures. Temporary closures would occur per Illinois Department of Transportation (IDOT) approval. For the superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per IDOT's approval. Construction adjacent to or over railroads would require flagging operations and scheduled track closures.
- It is anticipated that streets crossed by stations and aerial guideway structures, along with adjacent alleys, would be closed temporarily or the number of travel lanes would be reduced during heavy construction. Aerial guideway construction activities, along with all construction access, would be centered upon or phased around these streets and alleys.

Prior to construction, advance work would be necessary to verify existing site conditions, relocate and protect utilities, provide any temporary modifications to signal and traction-powered systems including the 95th/Dan Ryan terminal as well as along or across any roadway crossings, and provide special or temporary trackwork at required construction interface zones.

Constructability is a key issue that must be coordinated with the design to ensure the ability to construct facilities in sequences and phases as required in facilitating CTA, UPRR, and highway operations.

3.1.2 Construction Segments

For the purposes of describing construction activities, the RLE Project has been divided into seven segments. The segments indicate similar construction activities and are not intended to indicate any sequencing or phasing. The seven construction segments for the Preferred Alignment are shown on **Figure 3-1**.

The construction segments and phasing plans are based on preliminary engineering completed to date and provide the greatest amount of flexibility for future design within a maximum envelope for evaluating environmental impacts. Construction activities and phasing would be determined during final design of the RLE Project, in coordination with the design-build contractor. Preliminary engineering plans (30 percent completion level) are provided in **Appendix F** and construction is anticipated to occur from 2025 through 2029.

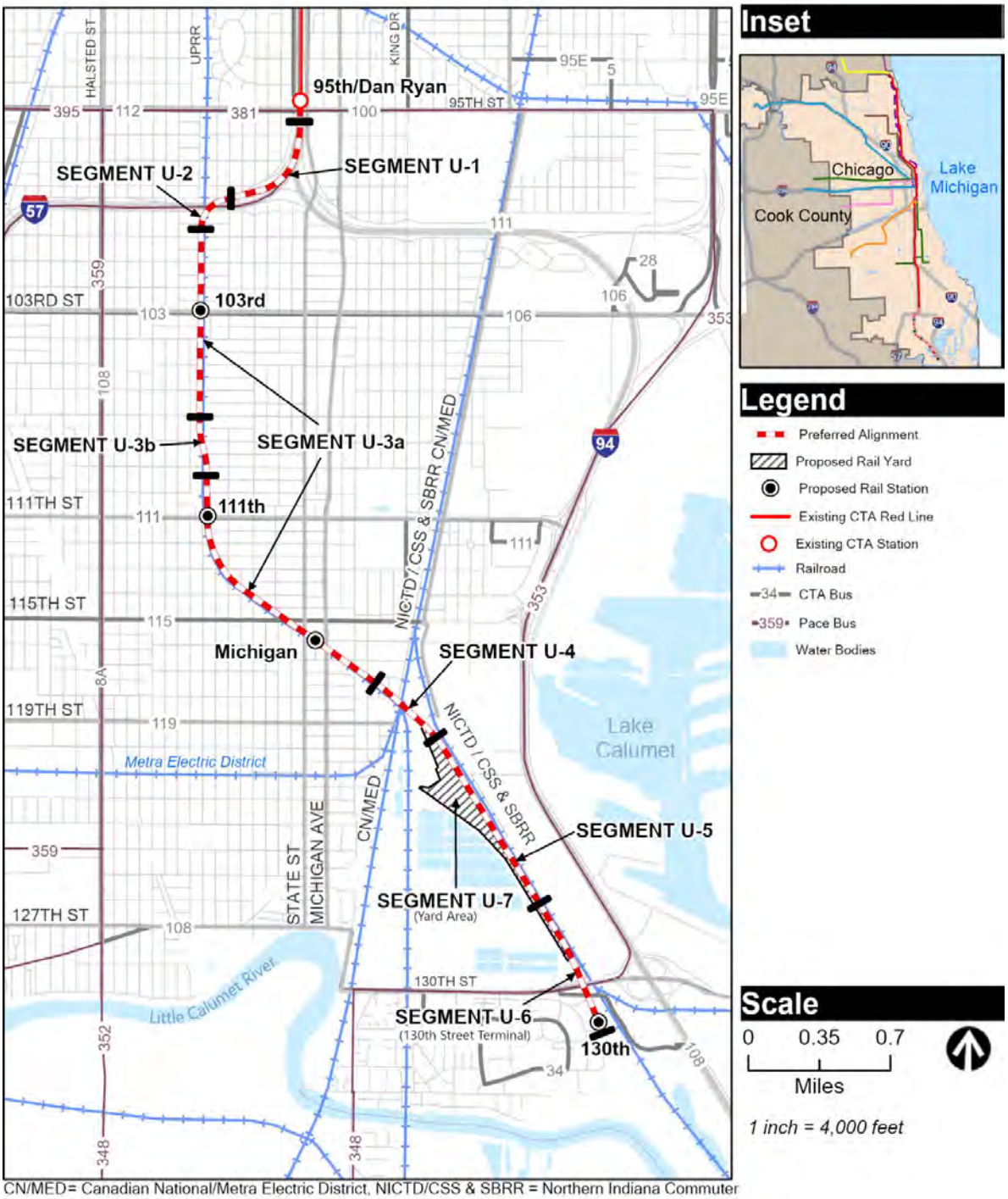

CN/MED= Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Construction Segments of the Preferred Alignment

3.1.3 Preferred Alignment

Construction work activities and phasing within the seven segments for the Preferred Alignment are described below.

Segment U-1: From the 95th/Dan Ryan terminal to the beginning of the horizontal curve at the UPRR crossing

Work Activities

- Install trackwork and signals to tie into the 95th/Dan Ryan terminal.
- Relocate trackwork between the 95th/Dan Ryan terminal and the 98th Street Yard and Shop.
- Construct approximately 500 feet of retained fill structure south of the 95th/Dan Ryan terminal within the CTA's right-of-way.
- Construct single-track, elevated structures over existing CTA tracks leading to the 98th Yard and Shop and over the existing CTA/southbound I-94 tunnel (IDOT SN 016-0073).
- Construct the dual-track, elevated structure through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from southbound I-94, and north of the southbound I-57 lane.
- Replace the 95th Street substation with a new 96th Street substation.

Construction Phasing

It may be necessary to relocate trackwork leading from the 95th/Dan Ryan terminal to the 98th Street Yard and Shop to allow construction of proposed substructure within the CTA right-of-way. Tying proposed trackwork and structure into the existing trackwork at the 95th/Dan Ryan terminal would be sequenced to provide railcar access to the 98th Street Yard and Shop. Proposed structure construction would be sequenced to maintain operating routes from the 95th/Dan Ryan terminal to the 98th Street Yard and Shop, as well as to minimize impacts to traffic flow along I-94 through the tunnel at SN 016-0073.

Superstructure erection over CTA tracks and I-94, the I-57 ramp, and Wentworth Avenue would require temporary shutdown of operation and traffic. Work would be sequenced to minimize impacts on traffic flow on the I-57/I-94 interchange as well as in the I-57 corridor. Work zones adjacent to the expressway would require shoulder and possibly lane closures. Work activities may also affect traffic flow on the north frontage road to I-57 (also called Lafayette Avenue and 98th Place).

The existing 6.5-foot-diameter sewer underneath both 99th Street and 102nd Street would be protected during construction. See **Section 3.4** for more information regarding the protection of utilities during construction.

Segment U-2: The horizontal curve at the UPRR crossing

Work Activities

- Construct the dual-track, elevated structure spanning both lanes of I-57 and the UPRR mainline.

Construction Phasing

Work would be sequenced to minimize impacts on traffic flow on I-57 and UPRR operations. Work zones adjacent to the expressway would require temporary shoulder and possible lane closures. Superstructure erection over I-57 would require temporary shutdown of northbound traffic. Temporary closures would occur at nighttime and during low traffic volume intervals and would be coordinated with IDOT. Construction adjacent and across railroads would require flagging operations and scheduled track closures.

The existing 10-foot-diameter Stewart Avenue water tunnel would be protected during construction of the foundations. See **Section 3.4** for more information regarding the protection of utilities during construction.

Segments U-3a and U3b: From the end of the horizontal curve at the UPRR crossing to the CN/MED track crossing near 119th Street

Work Activities

- Demolish existing buildings and structures in the proposed right-of-way where necessary.
- Construct the dual-track, elevated structure along the UPRR corridor.
- Construct stations near 103rd Street, 111th Street, and Michigan Avenue.
- Construct parking lots/structures and bus turnarounds at stations.
- Construct three substations.
- Construct three signaled interlockings.

Construction Phasing

Work would be sequenced along the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and possible scheduled track closures. Flagging operations would be needed to replace existing at-grade crossing gates and

signals during construction of the aerial guideway at the following at-grade UPRR crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street.

The underground pipes and vaults associated with the Roseland Pumping Station and the 10-foot-diameter sewer underneath Wentworth Avenue near 114th Street would be protected during construction.

All existing structures and underground utilities would be identified. All existing utilities would be protected or relocated. The following known existing utilities and structures would be protected during construction activities:

- 10-foot-diameter Stewart Avenue water tunnel along the UPRR corridor
- Former Griffith Natatorium
- Roseland Pumping Station and the associated underground pipes and vaults
- 10-foot-diameter sewer underneath Wentworth Avenue near 114th Street
- 17.5-foot, horseshoe shaped, Metropolitan Water Reclamation District of Greater Chicago (MWRD) Calumet Intercepting Sewer tunnel

Segment U-4: From the CN/MED track crossing near 119th Street to the at-grade track

Work Activities

- Demolish existing buildings and structures in the proposed right-of-way where necessary.
- Construct the dual-track, elevated structure along the UPRR corridor and over the CN/MED tracks near 119th Street.
- Construct the 120th Street yard and shop track tie-in.
- Construct retained embankment structure to carry the elevated structure grade.

Construction Phasing

Construction at the CN/Metra Electric crossing would be phased to minimize impacts on CN and Metra operations. Construction over and adjacent to the railroads would require flagging operations and potential limited track closures.

Segment U-5: From the end of the aerial structure crossing the CN/MED tracks near 119th Street to the south end of the yard test track near 124th Street

Work Activities

- Construct the track roadbed.

- Construct MWRD access road and bridge over the RLE tracks and the NICTD/CSS & SBRR crossing.

Construction Phasing

Coordination with MWRD is necessary to maintain operations during new track roadbed construction. If necessary, construction would be sequenced to construct the proposed access road and bridge over the CTA tracks first to allow MWRD facilities to continue operation.

Coordination with the NICTD/CSS & SBRR would be necessary as construction over and adjacent to the railroads would require flagging operations and scheduled track closures.

Segment U-6: From the yard test track to the south end of the project including the 130th Street station

Work Activities

- Construct the track roadbed.
- Construct the 130th Street station.
- Construct an underpass at 130th Street for track alignment.
- Construct the parking garage/lot for the 130th Street station.
- Construct bus bays and road access for the 130th Street station.
- Construct the MWRD access road to 130th Street.
- Construct the substation.
- Construct signaled interlocking.
- Construct direct fixation slab track at 130th Street station platform.

Construction Phasing

Coordination with MWRD would be necessary to maintain current operations during new track roadbed construction and during the new road access for the 130th Street station. If necessary, construction would be sequenced to construct the proposed MWRD access road to the west of the proposed station first, allowing MWRD facilities to continue operation. Coordination with the NICTD/CSS & SBRR also would be necessary as construction over and adjacent to the railroads would require flagging operations and scheduled track closures.

Segment U-7: 120th Street yard and shop

The overall schedule and coordination of construction for the 120th Street yard and shop would be scheduled to maintain operations at the MWRD facilities.

Work Activities

- Construct the yard and track.
- Construct the shop building.
- Construct the access road and CTA employee parking.
- Construct the substation.

Construction Phasing

Work would be sequenced to minimize impacts on adjacent roadways.

3.2 Potential Construction Staging Areas

Construction staging areas provide space to store equipment and materials, load trucks, and have workers perform parts of the construction process. Construction staging areas are currently anticipated to be within the project right-of-way or within property acquired for stations, park & ride facilities, and the yard and shop. Final staging would depend upon final design and the means and methods of the design builder. Staging and item assembly would be performed off-street to the fullest extent practicable, to minimize traffic and community disruption.

3.2.1 Construction Staging Criteria

Construction staging would be within the proposed right-of-way or within construction easements of stations and the alignment, as indicated in the *Plans and Profiles* (**Appendix F**). Construction staging areas are required to function for the following basic use criteria:

- Provide access to the construction work for construction personnel. Staging areas would include areas for office trailers, subcontractor site trailers, personnel facilities, and similar.
- Provide access to the construction work for construction equipment. This would include on-site storage of equipment being used on a continuous basis.
- Provide room for the construction personnel and equipment to perform the construction work.

- Provide access for trucks and associated loading equipment to remove materials generated on site, such as demolition salvaged materials and debris and excavation spoils. This type of material handling typically would require on-site segregation and interim on-site storage.
- Provide access, if possible, to store excavated material acceptable for reuse on the site.
- Provide access to receive and store permanent construction materials such as backfill and sub-base aggregates, steel reinforcing bars, and structural steel.
- Provide access to receive and store temporary construction materials such as concrete forms, shoring materials, scaffolding, and excavation support items.

Each construction site would have specific attributes to be accommodated, including the design of the proposed structure, existing conditions such as adjacent structures, and limited access from both an off-site and an on-site perspective. A productive and useful site access plan, with actual known requirements, would be developed after the proposed structure design is complete and adjacent property site conditions are known. Construction access is a critical contractor requirement that directly equates to an efficient construction process.

While the specific design and adjacent land uses at the time of construction would ultimately dictate the access plan, the following provides a general description of the types of properties typically targeted for construction staging in order to minimize impacts:

- CTA-acquired parcels, obtained for increased future infrastructure envelopes, may be used. Whole parcels or groups of parcels may be acquired and utilized during construction. After construction, residual property may be sold.
- Nearby parking lots may be used through the establishment of temporary construction easements.
- Abandoned adjacent parcels may be used through the establishment of temporary construction easements.

Because of limited available space adjacent to the construction site, off-site CTA, municipal, or privately owned storage yards may need to be provided for the contractor's use. This would allow secure storage of an equipment fleet or permanent materials needing large storage or assembly areas.

3.2.2 Construction Staging for Preferred Alignment

The anticipated construction staging needs under the Preferred Alignment have been identified for each of the seven segments, as shown in **Figure 3-1**.

Segment U-1: From the 95th/Dan Ryan terminal to the beginning of the horizontal curve at the UPRR crossing

Construction of segment U-1 may require the following:

- Numerous temporary construction easements on the adjacent expressway, requiring shoulder and lane closures as well as temporary shutdown of traffic.
- Off-site construction materials storage yards, due to limited space adjacent to the construction site. Storage yards may be located on parcels acquired for the project in adjacent construction segments to minimize disruptions to traffic and access within the surrounding neighborhoods and communities.

Segment U-2: The horizontal curve at the UPRR crossing

This construction segment may require the following:

- Numerous temporary construction easements on the adjacent expressway requiring lane closures as well as temporary shutdown of traffic.
- Off-site construction materials storage yards due to limited space adjacent to the construction site. Storage yards may be located on parcels acquired for the project in adjacent construction segments to minimize disruptions to traffic and access within the surrounding neighborhoods and communities.
- Numerous temporary construction easements on adjacent streets and parcels including parking lots, abandoned properties, and other adjacent properties. A 0.1-acre temporary construction easement would be needed in the northwest corner of Wendell Smith Park, which would not rise to the level of a Section 4(f) temporary occupancy (see *Section 4(f) Replacement Park Analysis*, **Addendum Y**).

Segments U-3a and U3b: From the end of the horizontal curve at the UPRR crossing to the CN/MED track crossing near 119th Street

Construction of Segments U-3a and U-3b may require the following:

- Numerous temporary construction easements on adjacent streets and parcels including parking lots, abandoned properties, and other adjacent properties.

Segment U-4: From the CN/MED track crossing near 119th Street to the at-grade track

This construction segment may require the following:

- Some of the parcels acquired for project right-of-way could be used for staging, site access, or storage of materials during construction.
- Temporary construction easements on adjacent parcels including abandoned properties, MWRD property, and other adjacent properties.

Segment U-5: From the end of the aerial structure crossing the CN/MED tracks near 119th Street to the south end of the yard test track near 124th Street

These construction segments may require the following:

- Some of the parcels acquired for project right-of-way could be used for staging, site access, or storage of materials during construction.
- A limited amount of temporary construction easements would be obtained on adjacent parcels including abandoned properties and MWRD property.

Segment U-6: From the yard test track to the south end of the project including the 130th Street station

These construction segments may require the following:

- Some of the parcels acquired for project right-of-way and stations could be used for staging, site access, or storage of materials during construction.
- A limited amount of temporary construction easements would be obtained on adjacent parcels including abandoned properties and MWRD property.

Segment U-7: 120th Street yard and shop

Possible staging area requirements for the yard and shop would be minimal. Parcels would be acquired by CTA in the area and would provide most construction area requirements.

3.3 Description of Anticipated Construction Activities and Methods

3.3.1 Basic Construction Activities and Methods

Off-site and staging yard assembly of construction items would be performed to the fullest extent possible, especially in Segments U-1 and U-2 based on site-specific access requirements. Construction activities and methods under the Preferred Alignment would be similar to the East and West Options evaluated in the Draft EIS (**Appendix G**).

3.3.2 Preconstruction Activities

Contractor preconstruction activities would include development of construction schedules, quality plans, and procurement schedules. Process plans would be developed for coordination of work activities to match construction constraints and site access. Existing conditions would be verified for design and construction interface criteria. Survey control establishment would be essential to the verification of site, existing conditions, and utility conflict/relocation information.

Utility protection/relocation information would be coordinated and verified in the sequence of scheduled construction, far in advance of the early construction activities.

Community notifications would be initiated by CTA and the contractor as early as possible to afford the community best-fit conditions for understanding the construction schedule, neighborhood conditions, and related environmental impacts.

Demolition and building permits would be obtained at the earliest opportunity. Office of Underground Coordination requirements (e.g., shoring designs, support of excavation, drilled shaft procedures) must all be coordinated and approved before permits are issued.

Portions of the Preferred Alignment are located in a residential area coexisting with various houses, parks, schools, and businesses. Therefore, construction activities would be evaluated locally to ensure that the local dynamics of the area and the needs of the property owners and businesses, as well as the end users, are incorporated into the project.

Construction activities would include new, at-grade, retained embankment, and elevated structure, station, substation, parking, yard, and access road construction. **Sections 3.3.3** through **3.3.8** provide details on construction activities would be expected for the infrastructure and station construction.

3.3.3 Traffic Rerouting

During construction, vehicles, pedestrians, and buses may need to be rerouted around the construction sites. Rerouting of traffic would be normally done by using detours and complete street closures. The street closures may include main streets, side streets, alleys, and access points. To help mitigate the impacts on traffic routes, station and aerial guideway construction activities would be sequenced around these street and alley closures. However, complete closure of streets may not always be possible because residents and businesses would still need access. Therefore, temporary traffic lanes, temporary access points, or staged construction would be used. The following activities would be part of the traffic rerouting activities:

- Construction signage and temporary traffic barriers
- Temporary reduction (from two to one) in the number of thru-traffic lanes in each direction, if feasible
- One-way traffic on a temporary basis
- Detours/complete street closures including alleys and access points
- Temporary traffic lanes
- Designated space for storage and staging of construction materials, equipment, and temporary facilities within and/or adjacent to the right-of-way
- Construction vehicle access points within and/or adjacent to the right-of-way
- Business, residential, and pedestrian impacts including limited parking or parking bans

3.3.4 Demolition

The Preferred Alignment would require complete removal or partial demolition of existing buildings or structures. The demolition process would result in increased noise and debris. Work would be performed in accordance with local ordinances for construction activities. In general, pedestrian, and vehicular traffic would not be allowed into demolition areas.

The demolition process may include concrete removal, requiring construction workers to saw cut, jackhammer, and/or knock out the existing concrete, cut or remove the existing reinforcement, or completely demolish existing concrete structures.

For removal of foundations and/or streets, to relocate existing utilities, or excavate existing ground, the contractor would excavate using bulldozers, compact tractors, or backhoes to dig and remove earth. The disposal material would be placed in dump trucks and trucked off-site. During excavation, temporary shoring may be required to protect adjacent buildings or structures.

Construction vehicles would access the construction site on a regular basis and would require special hauling routes to deliver materials and equipment to the site and remove the debris from the site. The routes may require complete street closures, temporary street shutdowns, or traffic rerouting. Depending on the type of material being removed, special handling of waste may be necessary. For example, older buildings with asbestos would require special handling. All materials would be disposed of in the proper manner, following federal, state, and local regulations.

3.3.5 Temporary Shoring

During demolition and excavation, temporary shoring may be required to protect adjacent property. The shoring would consist of steel sheet piling driven into the ground with a vibratory

pile driver. The rig may be located within the construction zone or outside the right-of-way depending on the space limitations and access points. The temporary shoring may require the use of tiebacks. Tiebacks are long rods that would be drilled through the sheet piling, embedded into sound rock, or other approved materials, and then grouted into place.

3.3.6 Foundations

Due to the variety of structures, including CTA elevated structure, buildings, and the parking garage, there would be a variety of foundation types used on the RLE Project. Foundations can consist of concrete spread footings, steel pile foundations, or concrete drilled shafts. Foundation type depends on site conditions and location. To determine the geotechnical properties of the soil, a geotechnical engineer would drill exploratory borings and take soil samples. The geotechnical engineer would then test the samples, determine soil properties, and make recommendations on the type of foundation to use, as part of the design process.

All types of spread or shallow-type foundations would require excavation and removal of earth to form the concrete footings. The use of bulldozers, bobcats, or backhoes would be used to dig and remove earth. The earth may be placed in dump trucks and shipped off-site or stored for use on the construction site for backfill. Materials shipped off-site for disposal would be handled through approved facilities.

Large cranes with pile driving leads that help guide the piles into position would be used for installation of pile foundations. A diesel hammer would drive the piles into the ground by impact. A test pile would be driven to test the pile length and capacity. Based on soil properties, the test pile would determine whether piles would be driven to a different elevation, designed to a different capacity, or would encounter rocks or boulders in the ground. Pile shoes or pile tips would be added to the end of the piles or a pre-drilled hole supported by a steel casing would be used to aid the pile installation process. It is important for the contractor to locate existing utilities such as sewer, or cable lines before excavation or pile installation to avoid damaging the services. Evaluation of nearby foundations may be required to prevent damage to existing structures during new foundation construction.

Drilled shaft construction is performed with a crane-mounted drill rig. An auger of the design diameter would be drilled into the ground and soil would be piled nearby for removal. As the auger advanced, extensions would be added to the supporting shaft. The drill hole would be fitted with a lining where required by unsuitable soils. A pre-formed reinforcement cage would be installed, and concrete would be placed to form the drilled shaft support.

To reduce construction noise and vibration levels, pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station and sensitive receivers.

3.3.7 Concrete Placement

Part of the construction logistics and process plan would be to determine the concrete plant based on location and availability of the required concrete mix. The plant would supply and deliver the concrete to the site using concrete trucks. Temporary street closures and truck routes may need to be established to access the construction site. Coordination of multiple trucks may be necessary for large pours and may require special access and scheduling. The contractor may elect to create an on-site ready mix plant to supply the concrete if space limitations and location of the nearest concrete plant require it.

Before the concrete can be poured, all necessary reinforcement and concrete forms would need to be in place. The reinforcement would be delivered on large flatbed trucks and would be stored on-site in bundles. The contractor would assure that the number of bars (and the size of bars, spacing of bars, edge clearances, etc.) is per contract documents before the concrete is poured. The formwork may consist of large steel panels or plywood to hold the wet concrete in place. To maintain the weight of the concrete until it cures, the formwork would be braced or temporarily supported.

After arriving on-site, the truck would be positioned at the location required for the pour. If the truck could not access the location of the pour, the concrete would need to be placed by pump, conveyor system, or other method. Concrete would need to be poured within 1 to 1.5 hours after loading depending on the outside temperature and whether the truck has a retarder. During the pouring, workers would push and move the concrete into position. The concrete would be vibrated to eliminate any voids and smoothed to obtain a good finish. The concrete may need to cure for a week before forms can be removed. Concrete is typically not loaded for 28 days after placement.

3.3.8 Structural Steel and Concrete

Foundations for elevated structures and the parking garage would consist of concrete and steel footings or drilled concrete shafts, depending on site conditions. After placement of foundations for the elevated structures, reinforced cast-in-place concrete piers would be constructed. The superstructure would use steel or concrete beams with a concrete deck to support the tracks. Along at-grade segments, tracks would be placed on ballast and ties after grading and soil preparation

Standard structural steel erection would be required for the RLE Project. Structural steel can consist of plates, angles, girders, beams, columns, cross frames, and related elements. The steel can vary in

size, length, weight, and use. Steel members would be delivered to the site on large flatbed trucks or semi-trucks and could require special hauling permits. The construction zone would require special access areas so that the steel could be delivered, assembled on-site, stored, or moved into position. Cranes would be used to pick the pieces off the trucks, move the material overhead, and place into position. Iron workers would be located on the structure to help move the pieces into place by bolting or welding the members. The ironworkers would perform most of the steel erection procedures, which could consist of framing, bolting, welding, coping, cutting, hammering, and similar activities.

3.3.9 Construction and Equipment Definition

Demolition - Heavy equipment, efficiently sized to match available access and reach requirements, including cranes with a demolition ball, front-end loaders, shears mounted to backhoes, concrete breakers mounted to combination tractors or backhoes, dump trucks, and off- site tractors with dump trailers.

Excavation - Heavy equipment, efficiently sized to match available access and reach requirements, including backhoes, front-end loaders, concrete breakers mounted to combination tractors or backhoes, dump trucks, and off-site tractors with dump trailers.

On-site hoisting - Heavy equipment used to hoist or move materials about the construction site, efficiently sized to match available access and reach requirements, including telehandlers, front-end loaders, mobile cranes of varying sizes, crawler-mounted cranes, and track-mounted equipment.

Concrete Placement - Heavy equipment efficiently sized to match available access and reach requirements. If concrete trucks cannot directly access the pour location, concrete would typically be placed utilizing a truck/trailer mounted concrete pump(s) or truck/trailer mounted concrete/material type conveyors.

Steel Erection - Heavy equipment, efficiently sized to match available access and reach requirements, including truck cranes, all-terrain cranes, and mobile cranes of varying sizes. Crawler-mounted cranes would typically be used to hoist and erect steel members under normal conditions, while track-mounted equipment (rail-borne equipment) may be used where platform steel and precast materials, including canopy steel framing, track work materials, and similar cannot be reached from normal ground access locations or where there are limited staging area restrictions.

3.4 Methods for Protecting Nearby Utilities and Adjacent Structures

Methods for protecting nearby utilities and adjacent structures include standard industry practice techniques. These techniques include coordinating with existing utilities and field verifying locations. The Office of Underground Coordination (OUC) requires a review of foundations that are within two feet of the property line. Dig requests must be submitted to Chicago DIGGER (Chicago Utility Alert Network) for areas within the limits of the City of Chicago and JULIE (Joint Utility Locating Information for Excavators) for areas outside the City of Chicago limits before any excavation can begin.

3.4.1 Industry Practice

To protect nearby utilities and adjacent structures, construction of the Preferred Alignment would include the following standard industry-practice techniques:

- Identification of existing location (and condition) during preliminary engineering phase for foundation design. Development of review criteria for further coordination of new underground structures, for example, foundations, cable trenches, and ductwork.
- Coordination with existing utilities.
- Leave as is if no conflict.
- Field verification of locations, if a potential conflict exists, during preliminary design phase.
- Determination of the need to protect, redesign to clear, or relocate to allow completion of design. May require a cost impact analysis for redesign versus relocate costs.
- OUC Review.
- Department of Water Management Review with water review and sewer review.
- Preconstruction - with contractor identification and location.
- Utility contact with digger location.
- Relocation cost.
- Pothole at caisson location prior to placing temporary liner.
- Coordination with contractor and all parties.
- Identification and protection/relocation away from construction zone all known cables/systems (typically: cable TV, AT&T, gas, electric, Chicago sewer and water, fiber optic, CTA signals, CTA communications, CTA traction power, and similar). May need specific plan written into project specifications delineating contractor responsibility.

3.4.2 Adjacent Structures

New structure protection would be provided along the UPRR track for structures within 50 feet of the centerline of the adjacent UPRR track. Structure protection would be a crash wall running parallel to the UPRR track per the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual. If the proposed CTA structure would come within 18 to 25 feet of the centerline of the adjacent UPRR track, pier protection would be provided per the Manual for Railway Engineering (AREMA 2012) and Guidelines for Railroad Grade Separation Projects (BNSF Railway and UPRR, 2007).

For conflicts with existing adjacent structures, field verification of structure location during the design phase would be necessary to evaluate the potential conflicts.

3.4.3 Foundations at Interface Areas

An OUC review is required for foundations within two feet of the property line within the City of Chicago. Earth retention systems, with a named sheeting contractor and with sealed earth retention design, are to comply with OUC restrictions.

3.4.4 Monitoring of Adjacent Structures

Construction of the Preferred Alignment would include the following monitoring measures to evaluate potential construction effects on adjacent structures:

- The contractor would develop, obtain CTA approval for, and institute a program for monitoring settlement, noise, and vibration of buildings and structures on or adjacent to the right-of-way. Prior to mobilization, the contractor would survey (both physically and with photos and videos) existing conditions of all areas that are to be occupied, worked on, restored, or affected in any way. The contractor would be responsible for and must repair or replace any portions of such areas damaged by his acts.
- Monitoring for settlement, noise, and vibration of buildings and structures on or adjacent to the right-of-way would start prior to the start of excavation, foundation work, work requiring the use of heavy equipment, or work that may cause damage to CTA or adjacent structures. Monitoring would accommodate vertical and horizontal controls.
- Settlement and vibration monitoring programs for specific structures and locations would be defined during design.
- Special provisions would be included in the construction documents to ensure that all monitoring requirements are completely outlined for contractor clarity.

Section 4 - Project Schedule

The estimated project schedule to construct the Preferred Alignment is presented in **Attachment B**. The construction schedule is based on unconstrained funding and on the level of design work currently completed. The schedule assumes advance work that may take one to two years. The advance work would consist of utility relocations, land acquisition, and other work necessary prior to starting heavy construction work. The heavy construction work is estimated to require three years and could be phased according to construction in the work segments. Construction activities for the Preferred Alignment would occur for up to five years, including construction staging and utility relocations. Construction is anticipated to occur from 2025 through 2029.

Section 5 - References Cited

Chicago Transit Authority (CTA), 2016. Chicago Red Line Extension Draft Environmental Impact Statement and Section 4(f) Evaluation. Accessed at https://www.transitchicago.com/rle/drafteis/. Accessed on January 20, 2021.

Attachment A – Construction Activity Matrix for the Preferred Alignment

Preferred Alignment Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-1: 95th/Dan Ryan Terminal to the Beginning of the Horizontal Curve at the UPRR Crossing	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,750	500	5-10	10-15
Elevated Concrete Structure														
Single Track - Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	4,100	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,090	11,917	3,701,705	5-10	10-15
Segment U-2: Horizontal Curve at UPRR Crossing	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	600	1,174	364,700	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	340	951	1,581,000	5-10	10-15
Segments U-3a and U-3b: End of Horizontal Curve at UPRR Crossing to CN/MED Track Crossing near 119th Street	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - Michigan Avenue	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - Michigan Avenue	12	x	x	x	x			x		18,600	6,200		2-5	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	36	x	x	x	x	x	x	x	x	29,700	58,113	18,052,650	50-100	30-35
Traction Power														
Substation – 175+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substation – 254+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

Preferred Alignment Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-4: CN/MED Track Crossing near 119th Street to At-Grade Track	**12-36**													
Advance Work														
Utility relocation; staging	12													
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926		5-10	10-15
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-36									5,700	11,153	3,464,650		
Double Track - TPG, Hammerhead Substructure	24-36									400	895	730,320		
Segment U-5: End of the Aerial Structure Crossing the CN/MED Tracks near 119th Street to the South End of the Yard Test Track near 124th Street	**12-36**													
Advance Work														
Utility relocation; staging	12													
At Grade														
Double Track	24-36									22,950				
Access Road														
Crossing proposed tracks at 357+00	12-24	x	x	x	x			x		6,778	2,260		5-10	5-10
Bridge for access Road, Crossing at 357+00	24	x	x	x	x	x		x	x	3,105	4,610	495,000	5-10	10-15
Connector access road, West of Proposed CTA tracks	12	x	x	x	x			x		717	239		5-10	5-10
Segment U-6: Yard Test Track to the South End of the Project including the 130th Street Station	**12-36**													
Advance Work														
Utility relocation; staging	24	x				x							1	5-10
Station														
Construct - 130th Street Station	24-36									6,773	2,653	696,305		
Parking														
Construct - 130th Street Station	24	x	x	x	x			x		13,900	4,700		2-5	5-10
At Grade														
Double Track	24-36								x	4,500				
Triple Track	24								x	7,700				
Access Road														
At 130th Street Station	12-24	x	x	x	x			x		5,778	1,926		5-10	5-10

Preferred Alignment Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-7: 120th Street Yard and Shop	**12-36**													
Advance Work														
Utility relocation; staging	24													
Access Road														
Construct	12-24	x	x	x	x			x		10,977	3,659		5-10	5-10
At Grade														
Single Track	36	x		x	x	x		x	x	89,500	1,000		5-10	
Double Track	36	x		x	x	x		x	x	8,100			5-10	
Retained Embankment														
Double Track	24									2,771	926	500		
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24									2,100	4,109	1,276,450		
Shop Facility														
Construct - Shop Building	24-36									10,380	3,114	1,038,000		
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
Traction Power														
Substation - Yard	24									5,000	1,100	160,000		
Final Phase - 95th/Dan Ryan Terminal to 130th Street Station	**10-12**													
Signal/Communication														
Signal/Interlocking	10-12							x	x				2-5	10 - 20
Communication System	10-12							x	x				2-5	10 - 20

Conditions/Assumptions used in the Construction Matrix

The intent of this Construction Matrix is to provide a general level of construction activity that may occur with the Preferred Alignment, and is to be used for the NEPA process. The Construction Matrix identifies a range of potential impacts based on currently available information and is not intended to be used for scheduling construction nor is it intended to be used for cost estimating construction.

Activity

Segments and grouping of activities are based on Engineering Plan and Profile Drawings, April 2022.
Work elements are based on the Engineering Plans.
Stationing is based on the Engineering Plan and Profile Drawings.
Trackwork is included with the listed activity.

Duration (Months)

Estimate of the expected duration of work for the activity row.
Activities are not sequential except for Advance Work if required in the segment.
Construction implementation and maintaining operations will have a major effect on construction durations.

Construction Equipment

Possible types of construction equipment that may be used for some duration within an activity.

Soil (CY)

Represents the potential soil or aggregate that may be excavated, removed, or fill. Concrete removed is included in quantity.
Includes caisson and foundation excavation.

Concrete (CY)

Represents the potential quantity of new concrete including caissons.
Concrete at stations includes building and platforms. Concrete for track support included in Elevated Structure.

Structural Steel (LB)

Represents the potential quantity of new structural steel.
Structural Steel at stations includes building and platforms. Structural Steel for track support included in Elevated Structure.

Avg Truck Trips Per Workday

Estimated average number of truck trips for an activity per work day. Excludes minor vehiclesand worker vehicles.

Ave. Workers Per Workday

Estimated average number of workers for an activity per workday.

Attachment B - Construction Schedule for the Preferred Alignment

Preferred Alignment Construction Schedule	Duration (Months)	YEARS 1	2	3	4	5
Segment U-1: 95th/Dan Ryan Terminal to Beginning of Horizontal Curve at UPRR Crossing	**12-36**					
Advance Work						
Signal/cross-over installation; utility relocation; staging	12					
At Grade						
Single Track	12-18					
Retained Embankment						
Single Track	24					
Elevated Concrete Structure						
Single Track - Rehab/Modify Existing CTA/IDOT tunnel	24					
Elevated Steel Structure						
Single Track - Hammerhead Substructure	24					
Double Track - Hammerhead Substructure	24-36					
Segment U-2: Horizontal Curve at UPRR Crossing	**12-36**					
Advance Work						
Utility relocation; staging	12					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-30					
Double Track - TPG, Hammerhead Substructure	24-30					
Double Track - Straddle Bent Substructure	24-30					
Segments U-3a and U-3b: End of Horizontal Curve at UPRR Crossing to CN/MED Crossing near 119th Street	**12-36**					
Advance Work						
Utility relocation; staging	12					
Stations						
Construct - 103rd Street	24-36					
Construct - 111th Street	24-36					
	24-36					
Parking						
Construct - 103rd Street	12					
Construct - 111th Street	12					
Construct - Michigan Avenue	12					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	36					
Traction Power						
Substation	24					
Substation	24					
Segment U-4: CN/MED Track Crossing near 119th Street to At-Grade Track	**12-36**					
Advance Work						
Utility relocation; staging	12					
Retained Embankment						
Double Track	24-30					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-36					
Double Track - TPG, Hammerhead Substructure	24-36					
Segment U-5: End of the Aerial Structure Crossing the CN/MED Tracks near 119th Street to the South End of the Yard Test Track near 124th Street	**12-36**					
Advance Work						
Utility relocation; staging	12					
At Grade						
Double Track	24-36					
Access Road						
Crossing proposed tracks	12-24					
Bridge for Access Road, Crossing	24					
Connector access road, West of Proposed CTA tracks	12					
Segment U-6: Yard Test Track to the South End of the Project including the 130th Street Station	**12-36**					
Advance Work						
Utility relocation; staging	24					
Station						
Construct - 130th Street Station	24-36					
Parking						
Construct - 130th Street Station	24					
At Grade						
Double Track	24-36					
Triple Track	24					
Access Road						
At 130th Street Station	12-24					
Segment U-7: 120th Street Yard and Shop	**12-36**					
Advance Work						
Utility relocation; staging	24					
Access Road						
Construct	12-24					
At Grade						
Single Track	36					
Double Track	36					
Retained Embankment						
Double Track	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24					
Shop Facility						
Construct - Shop Building	24-36					
Parking						
Construct - Shop	24					
Traction Power						
Substation - Yard	24					
Final Phase - 95th/Dan Ryan Terminal to 130th Street Station	**10 - 12**					
Signal/Communication						
Signal/Interlocking	10-12					
Communication System	10-12					

Appendix G

Description of Construction and Phasing for Build Alternatives

- Draft EIS Appendix G, Description of Construction and Phasing for Build Alternatives, July 2015
  - Attachment A, Construction Activity Matrices for the Build Alternatives
  - Attachment B, Construction Schedules for the Build Alternatives
  - Attachment C, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Description of Construction and Phasing for Build Alternatives

July 28, 2015

Prepared for:
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cta

Table of Contents

Section 1 Introduction 1-1

Section 2 Description of Build Alternatives 2-1

2.1 BRT Alternative 2-1
2.2 UPRR Rail Alternative 2-3
2.3 Halsted Rail Alternative 2-10

Section 3 Description of Construction 3-1

3.1 Construction Phasing and Segments 3-1
3.2 Potential Construction Staging Areas 3-23
3.3 Description of Anticipated Construction Activities and Methods 3-27
3.4 Methods for Protecting Nearby Utilities and Adjacent Structures 3-32

Section 4 Project Schedule 4-1

Section 5 References 5-1

Figures

Figure 1-1: RLE Project Area and Community Areas within the City of Chicago 1-2
Figure 1-2: RLE Project Alternatives 1-3
Figure 2-1: BRT Alternative 2-2
Figure 2-2: UPRR Rail Alternative with ROW, East, and West Options 2-4
Figure 2-3: UPRR Rail Alternative Side Option Typical Cross Section 2-5
Figure 2-4: Halsted Rail Alternative 2-11
Figure 2-5: Typical Hammerhead Cross Section for Halsted Rail Alternative 2-12
Figure 2-6: Typical Straddle Bent Cross-Section for Halsted Rail Alternative 2-12
Figure 3-1: RLE Alternatives Construction Segment Map 3-5

Tables

Table 2-1: BRT Alternative Street Summary 2-1
Table 2-2: BRT Alternative Park & Ride Facilities 2-3
Table 2-3: UPRR Rail Alternative Park & Ride Facilities 2-7
Table 2-4: Halsted Rail Alternative Park & Ride Facilities 2-13

Attachments

Attachment A – Construction Activity Matrices for the Build Alternatives

Attachment B – Construction Schedules for the Build Alternatives

Abbreviations

ADA	Americans with Disabilities Act
AREMA	American Railway Engineering and Maintenance-of-Way Association
BRT	bus rapid transit
Chicago DIGGER	Chicago Utility Alert Network
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
IDOT	Illinois Department of Transportation
JULIE	Joint Utility Locating Information for Excavators
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NB	northbound
NEPA	National Environmental Policy Act
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
OUC	Office of Underground Coordination
RLE	Red Line Extension
ROW	right-of-way
SB	southbound
UPRR	Union Pacific Railroad
WB	westbound

Section 1
Introduction

The Chicago Transit Authority (CTA) is proposing to extend the heavy rail Red Line from the 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed Red Line Extension (RLE) Project would include four stops. Each stop would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway (I-57) and I-94 Bishop Ford Freeway (I-94) cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. Figure 1-1 shows the project area.

The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Description of Construction summarizes analysis for the following alternatives (shown in Figure 1-2) that emerged from the Alternatives Analysis and National Environmental Policy Act (NEPA) scoping process. This list includes alternatives considered but not pursued.

- No Build Alternative
- Bus Rapid Transit (BRT) Alternative
- Union Pacific Railroad (UPRR) Rail Alternative
  - Right-of-Way (ROW) Option
  - East Option
  - West Option
- Halsted Rail Alternative

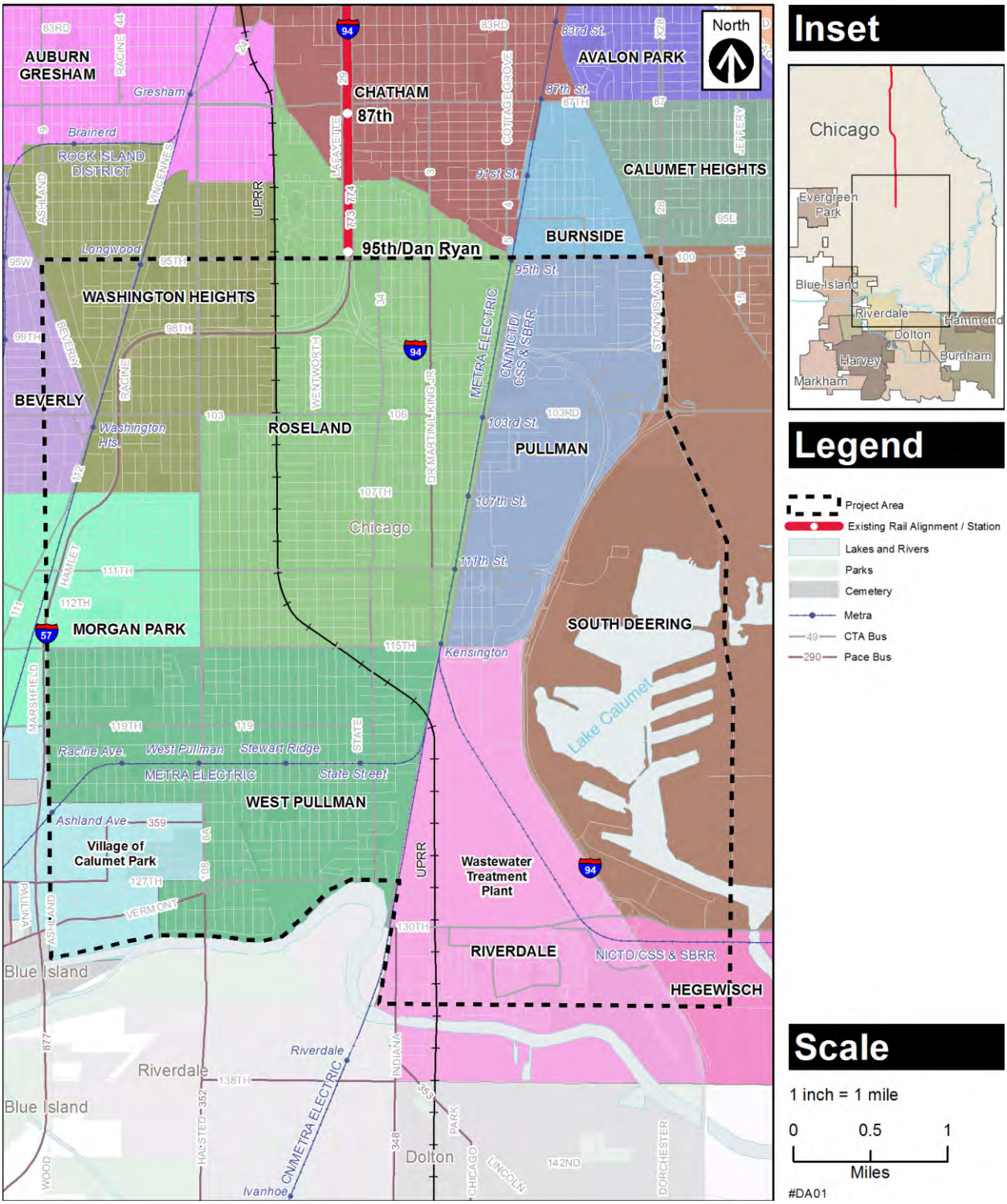

Figure 1-1: RLE Project Area and Community Areas within the City of Chicago

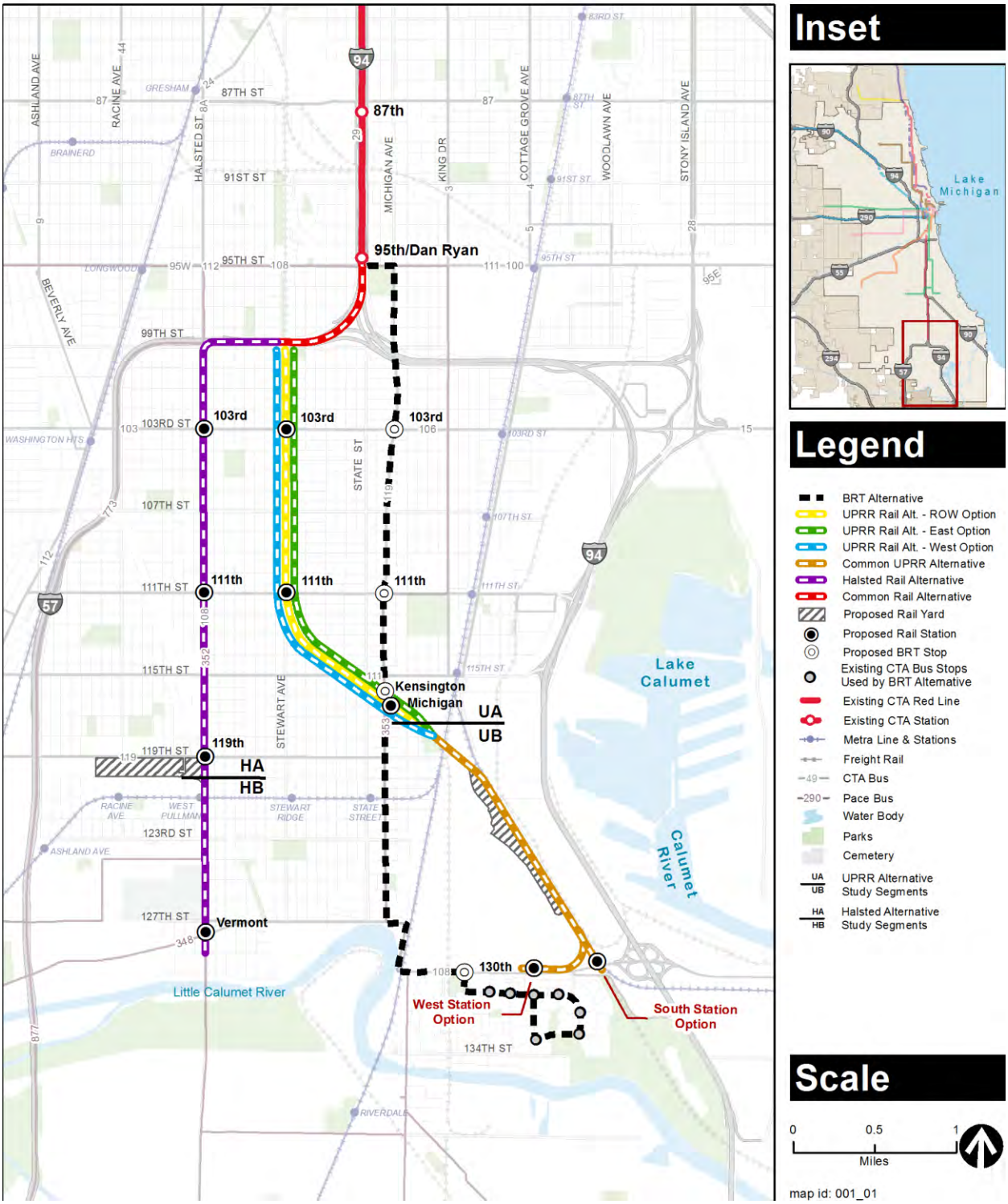

Figure 1-2: RLE Project Alternatives

Section 2
Description of Build Alternatives

The following three alternatives are discussed in this technical memorandum: BRT Alternative, UPRR Rail Alternative, and Halsted Rail Alternative. One of the alternatives, the UPRR Rail Alternative, has three options. For a more detailed description of the alternatives, including the proposed transit operations, refer to the *Description of Alternatives*. Two alternatives and one option are no longer being pursued (for reasons stated in the Draft Environmental Impact Statement: BRT Alternative (Section 2.1), UPRR Rail Alternative – ROW Option (Section 2.2.1.1), and Halsted Rail Alternative (Section 2.3 including the 119th Street Yard and Shop). The UPRR Rail Alternative West Station Option is also no longer being pursued.

2.1 BRT Alternative

The proposed BRT Alternative is a 5.5-mile long BRT alternative that would operate between the existing 95th Street Terminal and 130th Street via 95th Street, Michigan Avenue, 127th Street, Indiana Avenue, and 130th Street. Four stops with improved bus shelters would be built at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. The bus route would continue through Altgeld Gardens with stops at 131st Street and Langley Avenue, 131st Street and Corliss Avenue, 131st Street and Ingleside Avenue, 132nd Street and Ellis Avenue, 133rd Street and Ellis Avenue, and 133rd Place and Corliss Avenue. The BRT Alternative is illustrated in Figure 2-1.

The streets on which the BRT Alternative would operate are summarized in Table 2-1.

Table 2-1: BRT Alternative Street Summary

Street	Width (feet)	Number of Lanes	Center Turn Lane	Parking
95th Street	80	4	Yes	No
Michigan Avenue	40	2	No	Yes
127th Street	40	4	No	No
Indiana Avenue	40	4	No	No
130th Street	60	4	Yes	No

2.1.1 Infrastructure

Projects already committed through the Chicago Metropolitan Agency for Planning Fiscal Year 2010–2015 Transportation Improvement Program would be constructed. Regular maintenance of existing track and structures would continue.

No new dedicated bus lanes would be provided for the BRT Alternative. Parking lanes would be removed along some portions of the alignment.

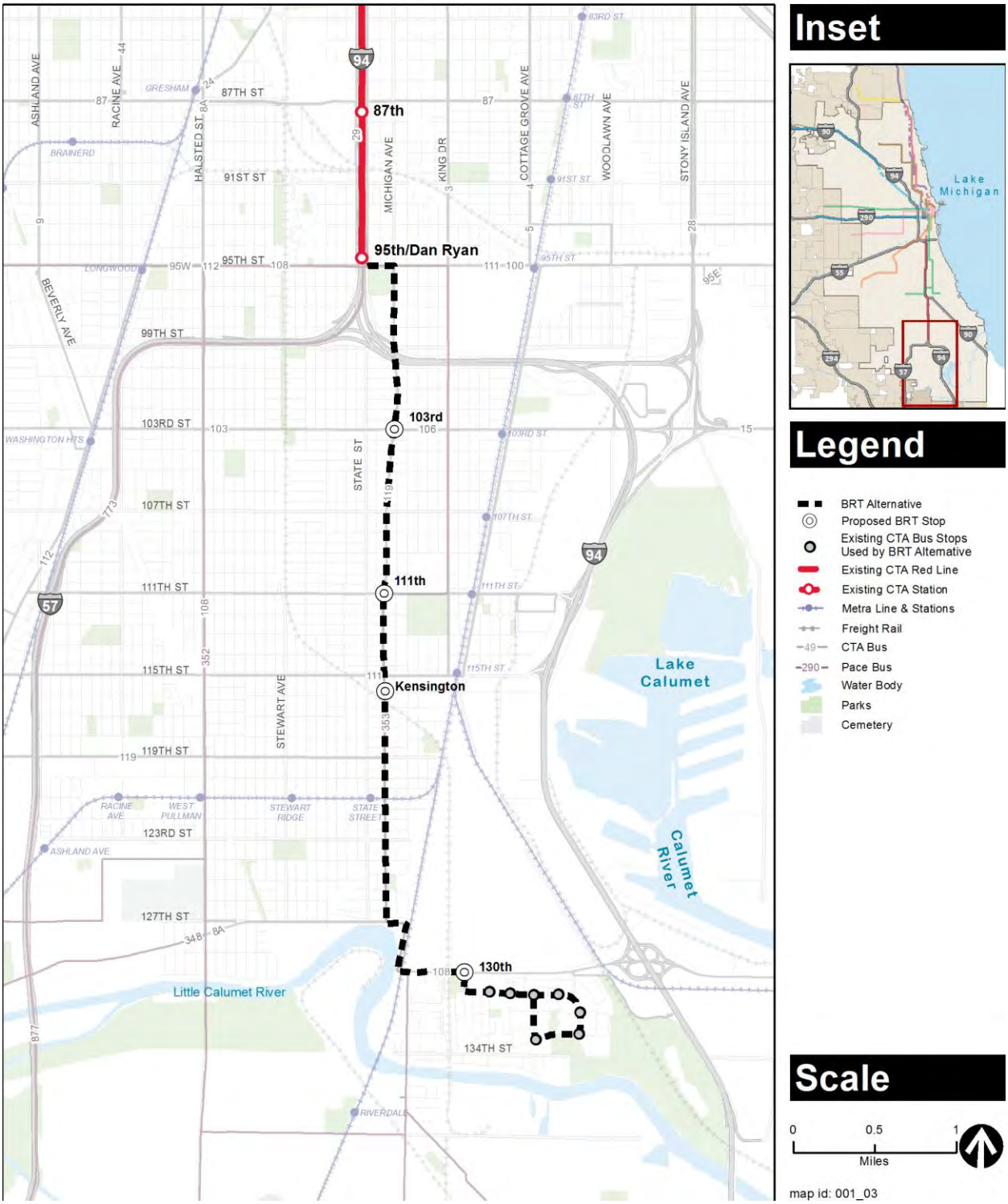

Figure 2-1: BRT Alternative

2.1.2 Stops

Improved bus shelters would be provided at the 103rd Street, 111th Street, Kensington Avenue, and 130th Street stops. Park & ride facilities with a total capacity of 700 parking spaces in the year of construction and up to 2,800 parking spaces in a later year (2030) would be constructed at the stop locations, as shown in Table 2-2.

Table 2-2: BRT Alternative Park & Ride Facilities

Location	Construction Year	Horizon Year (2030)
103rd Street	100	200
111th Street	100	200
Kensington Avenue	100	1,000
130th Street	400	1,400
Total	**700**	**2,800**

2.1.3 Yard

The 98th Street yard and shop at the south end of the existing Red Line would continue to be used for Red Line trains. Currently all Red Line cars are operated and maintained from the Howard and 98th Street facilities. The 98th Street shop facility is more than 40 years old, having been constructed in 1969 as part of the original Dan Ryan Line construction project. The 98th Street shop is within an expressway median and is difficult to access for material delivery because of its grade separation from local streets. The 98th Street yard and shop would eventually need to be replaced regardless of the RLE Project. There is capacity at existing CTA bus garages to store buses for the BRT Alternative, and the 103rd Street Garage would be primarily used.

2.2 UPRR Rail Alternative

The UPRR Rail Alternative would extend the heavy rail transit Red Line from the existing 95th Street Terminal to a terminal location at 130th Street. The Chicago Transit Board adopted the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 meeting.

The UPRR Rail Alternative is a 5.3-mile extension of the existing Red Line. The Red Line would operate on an elevated structure heading south from 95th Street along I-57 for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. It would then turn south along the UPRR corridor to approximately 111th Street where it would head southeast. East of Prairie Avenue, the alignment crosses over the Canadian National (CN)/Metra Electric tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast alongside the Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) ROW using a portion of Norfolk Southern Railway and Consolidated Rail Corporation right-of-ways to terminate at 130th Street. Four stations are planned at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The UPRR Rail Alternative is illustrated in Figure 2-2.

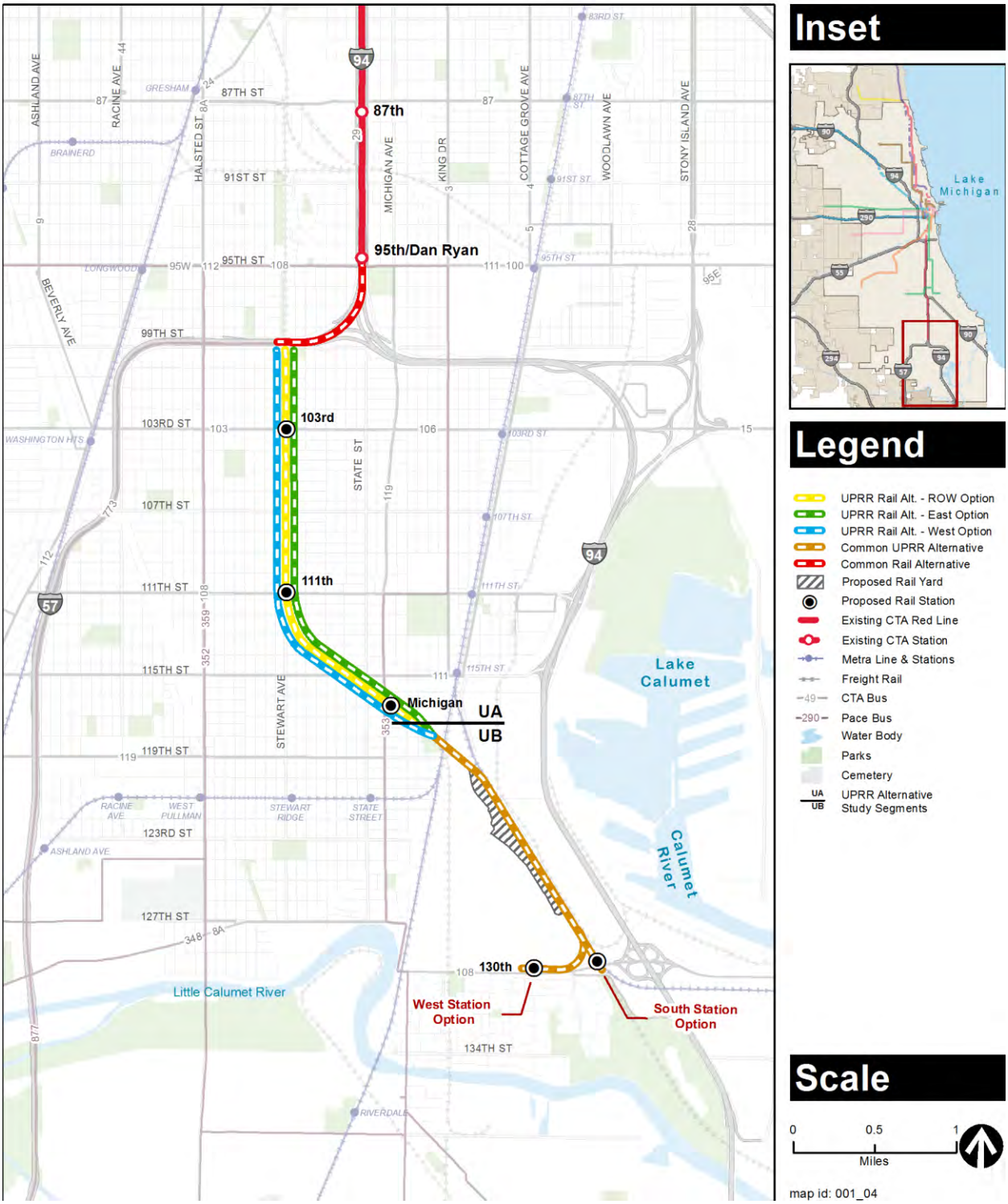

Figure 2-2: UPRR Rail Alternative with ROW, East, and West Options

Three UPRR Rail Alternative options for the length between I-57 and the CN/Metra Electric tracks will be studied in the EIS:

- ROW Option: CTA tracks placed in the UPRR ROW; UPRR trains would relocate to another corridor as part of a separate, independent project under study by the City of Chicago
- East Option: CTA tracks placed immediately adjacent to the UPRR ROW to the east
- West Option: CTA tracks placed immediately adjacent to the UPRR ROW to the west

Two options for the 130th Street station would be studied in the EIS:

- South Station Option: located to the west of the NICTD/CSS & SBRR ROW at 130th Street
- West Station Option: located along the north side of 130th Street to the west of the NICTD/CSS & SBRR route

2.2.1 Infrastructure

All three UPRR Rail Alternative options would include operations on elevated structure from 95th Street to the CN/Metra Electric tracks near 119th Street. The alignment would then continue at grade through an industrial area with no public through streets. Existing service driveways and Metropolitan Water Reclamation District of Greater Chicago (MWRD) access roads would be grade separated.

The elevated substructure would consist of reinforced cast-in-place concrete hammerhead piers on drilled shafts or steel piles. The superstructure would consist of steel girders with a concrete deck supporting direct fixation track. A typical cross section is shown on Figure 2-3.

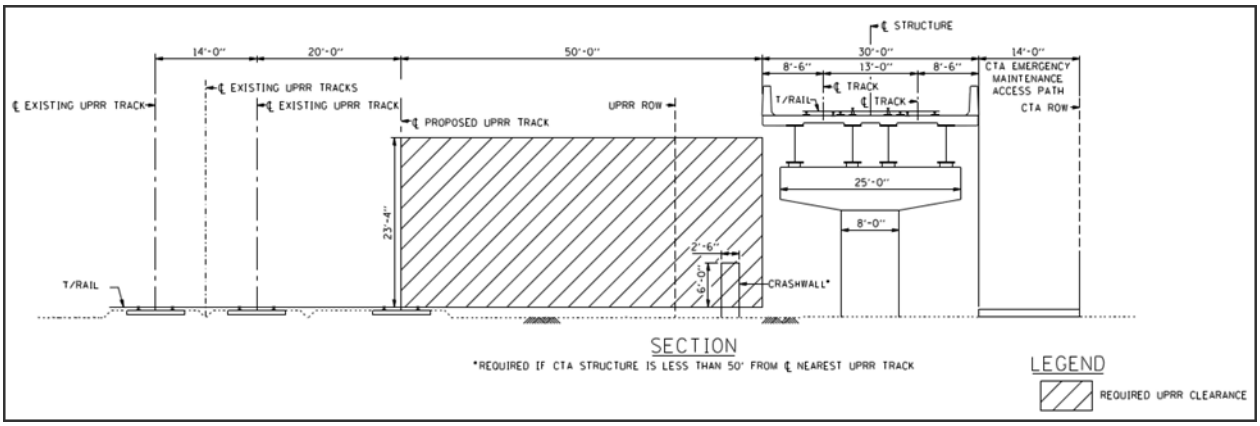

Figure 2-3: UPRR Rail Alternative Side Option Typical Cross Section

The minimum vertical clearances are 14 feet 9 inches for local roadways and 16 feet 9 inches for freeways. At locations where the alignment would cross UPRR tracks, the minimum vertical clearance would be 23 feet 4 inches in accordance with UPRR standards. The minimum vertical

clearance for all other railroads is 23 feet 0 inches. IDOT has requested a minimum of 27'-0" from existing edge of pavement along I-57 to the face of any pier to preserve room for future widening.

Spans between piers are expected to typically be 60 to 100 feet, and as long as 140 feet. Span length is based on site conditions, geometrics, and clearance requirements.

2.2.1.1 ROW Option

As part of the UPRR Rail Alternative ROW Option, the CTA tracks would be placed in the UPRR ROW between I-57 and the CN/Metra Electric tracks. The UPRR tracks may be relocated to another corridor as part of a separate, independent project under study by the City of Chicago.

Substations are tentatively proposed at the following locations: to the west of the CTA tracks between 104th and 105th Street; to the west of the CTA tracks between Perry Avenue and Lafayette Avenue; and to the west of the CTA tracks north of the proposed parking structure for the South Station Option, or along the curve of the CTA tracks near 130th Street for the West Station Option. An additional substation is proposed within the 120th Street yard and shop facility.

2.2.1.2 East Option

As part of the East Option, the CTA tracks would be placed immediately adjacent to the UPRR ROW to the east between I-57 and the CN/Metra Electric tracks. UPRR anticipates adding a third track to the east of their existing two tracks. The distance between the centerline of the proposed UPRR third track and the CTA structure would be 50 feet except for the following locations: 103rd Street station (approximate stationing 154+00 to 181+00 and between State Street and Michigan Avenue (approximate stationing 255+00 to 270+00).

Substations are proposed at the following locations: 98th Street Yard and Shop, near 101st Street, near 107th Street, near Lafayette Avenue, within the 120th Street yard and shop area, and near the 130th Street station.

2.2.1.3 West Option

As part of the West Option, the CTA tracks would be placed immediately adjacent to the UPRR ROW to the west between I-57 on the north end and the UPPR tracks near Kensington Park on the south end. The distance between the UPRR centerline of existing west track and the proposed CTA structure would be 50 feet except for the following locations: 99th Street (approximate stationing 138+00 to 142+00) and at the Prairie Avenue/UPRR crossing (approximate stationing 275+00 to 285+00).

Substations are proposed at the following locations: 98th Street Yard and Shop, near 101st Street, near 107th Street, near Lafayette Avenue, within the 120th Street yard and shop area, and near the 130th Street station.

2.2.2 Stations

Four stations are proposed for the UPRR Rail Alternative options: 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Two station options are under evaluation for the 130th Street station: a South Station Option and a West Station Option.

All intermediate stations are proposed as island platforms, 26 feet wide and 520 feet long. Platforms would be built to accommodate ten-car trains. All stations would be Americans with Disabilities Act (ADA) accessible with elevators.

Bus transfer and park & ride facilities are planned for all stations with a capacity of 1,500 parking spaces in the year of construction and up to 3,700 parking spaces in a later year (2030), as shown in Table 2-3.

Table 2-3: UPRR Rail Alternative Park & Ride Facilities

Location	Construction Year	Horizon Year (2030)
103rd Street	200	200
111th Street	200	200
Michigan Avenue	200	1,000
130th Street	900	2,300
Total	**1,500**	**3,700**

A brief description of the stations and parking is provided below. For more details, please refer to the *Description of Alternatives*.

2.2.2.1 103rd Street Station

The primary entrance to the 103rd Street station would be located on the north side of 103rd Street, and the auxiliary entrance would be located on the north side of 103rd Place. The station would be ADA accessible with elevators.

As part of the ROW Option, two surface parking lots would be located to the northeast and southwest of the intersection of 103rd Street with the UPRR tracks. A bus turnaround for CTA bus route #9 would be included at the northeast parking lot.

As part of the East Option, a surface parking lot would be located to the east of the tracks north of 103rd Street and a second surface parking lot would be located to the west of the tracks between 103rd Street and 103rd Place. A bus turnaround for CTA bus route #9 would be included at the northeast parking lot.

As part of the West Option, a surface parking lot would be located to the west of the tracks between 103rd Place and 104th Street. A bus turnaround for CTA bus route #9 would be included at the northeast corner of the 103rd Street and UPRR tracks intersection.

2.2.2.2 111th Street Station

For the ROW and West Options, the primary entrance to the 111th Street station would be located near 110th Place. The auxiliary entrance would be located north of 110th Street. For the East Option, the primary entrance to the 111th Street station would be located at 110th Street. The auxiliary entrance would be located between 109th Street and 109th Place. The station would be ADA accessible with elevators.

As part of the ROW Option, two surface parking lots would be located to the northeast and northwest of the intersection of 111th Street with the UPRR tracks. A bus turnaround for Pace bus route #352 would be included at the northwestern parking lot.

As part of the East Option, a surface parking lot would be located to the east of the tracks north of 110th Place, and a second surface parking lot would be located to the west of the tracks between 111th Street and 110th Street. A bus turnaround for Pace bus route #352 would be included at the northwestern parking lot.

As part of the West Option, a surface parking lot would be located to the west of the tracks between 110th Place and 110th Street. A bus turnaround for Pace bus route #352 would be included at the parking lot.

2.2.2.3 Michigan Avenue Station

For the ROW and West Options, the primary entrance to the Michigan Avenue station would be located on the west side of Michigan Avenue, and the auxiliary entrance would be located on the south side of 116th Street. For the East Option, the primary entrance to the Michigan Avenue station would be located on the east side of Michigan Avenue. The auxiliary entrance would be located on the north side of 116th Street. The station would be ADA accessible with elevators.

As part of the ROW Option, a three-story parking garage would be constructed. The ground level of the parking garage would be available for retail and/or community facilities and would include a bus turnaround facility for CTA route #119 and Pace route #359. A second surface lot would be located to the east of the tracks, between 116th Street and Kensington Avenue.

As part of the East Option, a three-story parking garage would be constructed. The ground level of the parking garage would be available for retail and/or community facilities, and would include a bus turnaround facility for CTA route #119 and Pace route #359. A second surface lot would be located to the east of the tracks, between 116th Street and Kensington Avenue.

As part of the West Option, a five-story parking garage would be constructed. The ground level of the parking garage would be available for retail and/or community facilities, and would include a bus turnaround facility for CTA route #119 and Pace route #359.

2.2.2.4 130th Street Station

Two options for the 130th Street station are being studied in the EIS:

- South Station Option: located along the west side of the NICTD/CSS & SBRR ROW, just north of 130th Street
- West Station Option: located to the west of the NICTD/CSS & SBRR ROW and along the north side of 130th Street

As part of both station options, the station building would be approximately 15,000 square feet (200 feet by 75 feet), which would follow CTA's typical design standards for stations. The station house would provide sufficient space for CTA customer operations, maintenance, mechanical rooms, staff offices, and areas for small retail stores. The retail area would primarily serve commuters and local residents.

Both the South and West Station Options would be configured with three tracks, creating a 600-foot-long side and center platform arrangement. The boarding platform would allow for ten-car trains. The primary entrance to the station house would be ADA accessible.

Each station option would include a bus terminal with four bus bays and an overhead canopy. Buses would queue directly outside the primary entrance of the station to provide the closest possible connection between the rail line and bus routes. An auto drop-off area would be located near the station house in addition to a park & ride facility. Secure, weather-protected bicycle parking would be provided.

2.2.2.4.1 South Station Option

The South Station Option site would be between the MWRD facility (on the west) and the NICTD/CSS & SBRR rail track (on the east), using a portion of the Indiana Harbor Belt alignment. There would be a primary station entrance north of 130th Street at 130th Place, and an auxiliary entrance south of 130th Street between 130th Street and Doty Avenue; the tracks and platforms would extend beneath 130th Street. The ADA-accessible auxiliary entrance on Doty Avenue would provide a more convenient and direct access to Altgeld Gardens and Carver Military Academy.

The South Station Option site is constrained due to its tight location between the MWRD drying ponds and the train tracks. The parking area would be located to the east of the existing MWRD fence. The parking area would be would consist of a multi-story parking garage with capacity for 2,300 vehicles.

Bus and vehicle traffic would enter and leave the station area from the current intersection of 130th Street and Cottage Grove Avenue. Cottage Grove Avenue, which primarily provides access to the MWRD drying ponds and semi-truck traffic, would be relocated to circulate around the station.

2.2.2.4.2 West Station Option

The West Station Option site would be on the north side of 130th Street across from Evans Avenue, nearly ¼ mile west of the South Station Option site. The site is west of where Evans Avenue meets 130th Street, across from Altgeld Gardens. The West Station Option site is nearly

twice the size of the South Station Option site, primarily due to available open land along the north side of 130th Street, south of the MWRD facility. The dimensions of the station, bus terminal, and surface parking areas would be similar in total area to those in the South Station Option. The station area would be located outside the existing MWRD fence. Parking would include a surface parking lot that could accommodate up to 350 parking spaces and a multi-storage garage that could accommodate 1,950 parking spaces.

There are no crosswalks on 130th Street between Indiana Avenue and Cottage Grove Avenue. As a result, a signal and pedestrian crosswalk is proposed at the intersection of 130th Street and Evans Avenue to accommodate pedestrians from the south side of 130th Street. The proposed pedestrian crossing and signalized intersection would be located south of the primary station entrance.

2.2.3 120th Street Yard and Shop

A yard (with capacity for up to 340 cars) and shop facility would be located on a combination of industrial and vacant land to the east of the CN/Metra Electric tracks and west of the NICTD/CSS & SBRR tracks at approximately 120th Street and Cottage Grove. The yard would be entirely at grade. A nominal amount of parking for employees would be included at the yard. The proposed yard location is shown in Figure 2-2. A tentative substation is proposed within the 120th Street yard on the west of the existing railroad tracks and to the east of the proposed shop facility.

2.3 Halsted Rail Alternative

The proposed Halsted Rail Alternative is a 5-mile extension of the existing Red Line. The Red Line would operate on an elevated structure heading south from 95th Street along I-57 until Halsted Street. It would then turn south and continue along Halsted Street past the intersection of Halsted Street and Vermont Avenue and end near 129th Street. Four stations are planned: for 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Halsted Rail Alternative is illustrated in Figure 2-4.

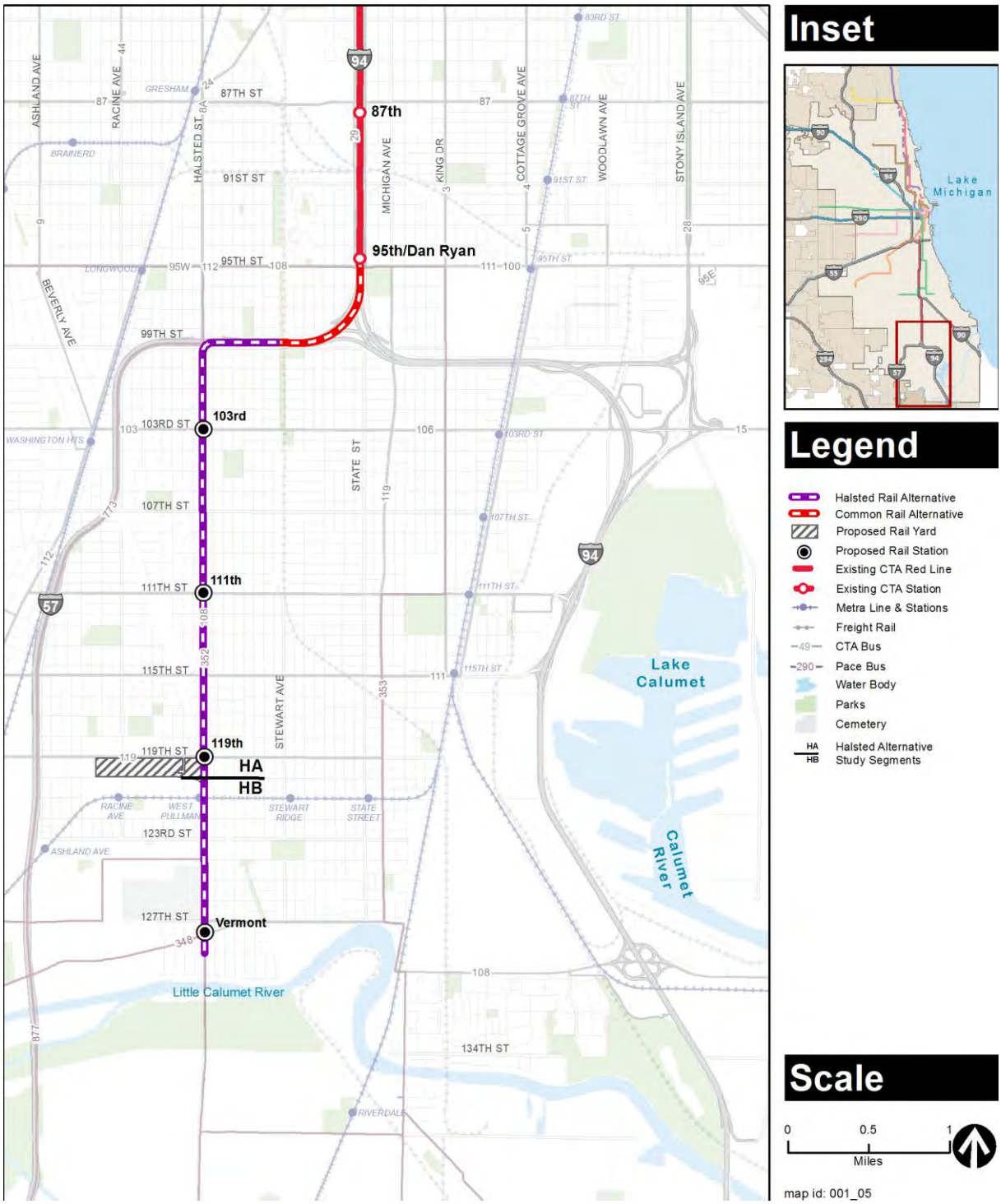

Figure 2-4: Halsted Rail Alternative

2.3.1 Infrastructure

The proposed corridor would be elevated and would be required to span over I-94 and I-57, UPRR and Metra Electric, local roads, and pedestrian facilities. A typical section is shown on Figure 2-5 and Figure 2-6.

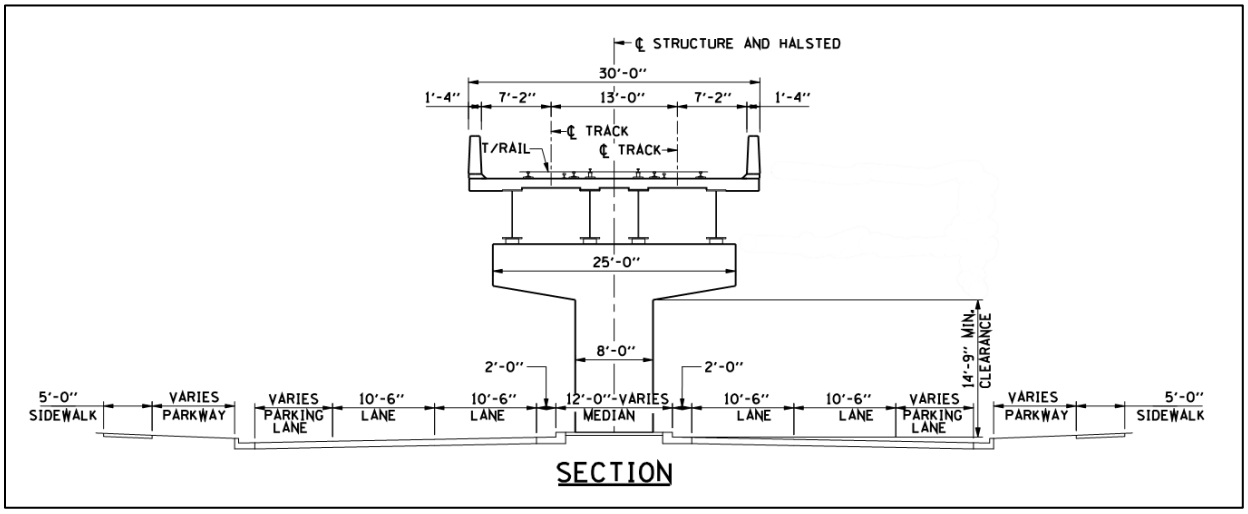

Source: *Red Line Extension Plans and Profiles*

Figure 2-5: Typical Hammerhead Cross Section for Halsted Rail Alternative

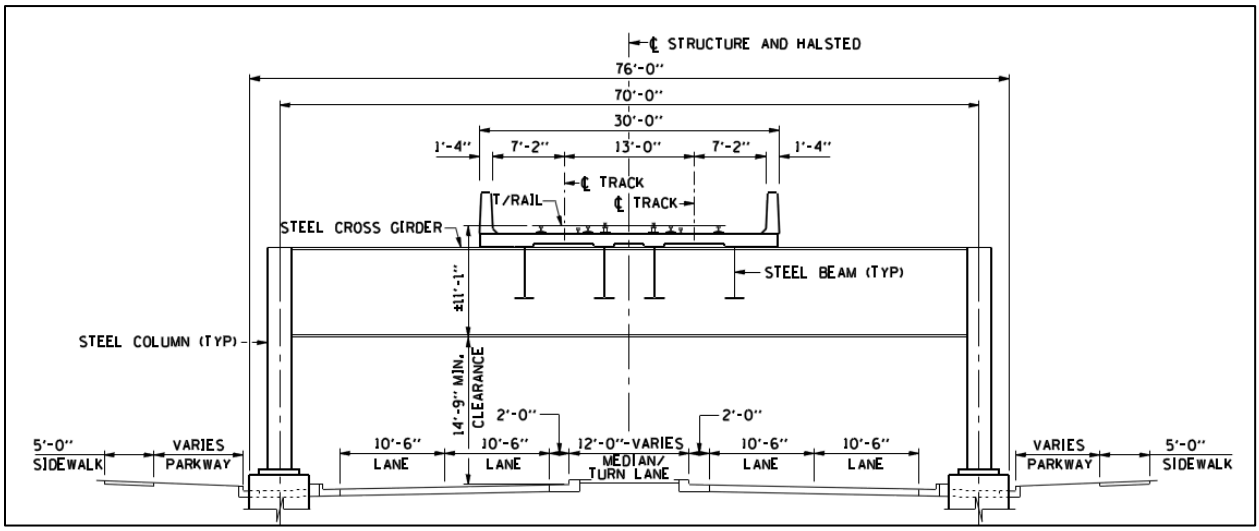

Source: *Red Line Extension Plans and Profiles*

Figure 2-6: Typical Straddle Bent Cross-Section for Halsted Rail Alternative

The proposed typical structure required for the elevated section is anticipated to be similar to sections on the CTA's elevated Orange Line. Spans between piers are expected to typically be 60 to 100 feet, and as long as 140 feet. Span length is based on site conditions, geometries, and clearance requirements. At specific locations, steel cross girder bents would be used. Lengths

would be based on geometries, horizontal clearances, and the use of pier protection crash walls per American Railway Engineering and Maintenance-of-Way (AREMA) manual.

The substructure would consist of reinforced cast-in-place concrete hammerhead piers on drilled shafts or steel piles. The superstructure would consist of steel girders with a concrete deck supporting direct fixation track. Crossing I-57 at Halsted Street, the profile height would be approximately 22 feet over Halsted Street pavement, and approximately 34 feet over the expressway.

Minimum vertical clearances would be 14 feet 9 inches above local roads and 16 feet 6 inches above urban expressways. At locations where the Halsted Rail alignment would cross the UPRR, the minimum vertical clearance would be 23 feet 4 inches, per the UPRR standards. The minimum vertical clearance for the Metra Electric tracks would be 23 feet zero inches per AREMA standards.

Substations are proposed at the following locations: the northeast corner at the intersection of 101st Street and Halsted Street, the southeast corner at the intersection of 110th Street and Halsted Street, along Halsted Street between 120th Street and Metra Electric tracks, the southeast corner at the intersection of 126th Street and Halsted Street, and at the entrance to the yard along Peoria Street.

2.3.2 Stations

Four stations are proposed for the Halsted Rail Alternative: 103rd Street, 111th Street, 119th Street, and Vermont Avenue. All stations are proposed as side platforms, each a minimum of 14 feet wide and 520 feet long with shelters. Bus and park & ride facilities are planned for all stations. The anticipated number of parking spots is provided in Table 2-4.

Table 2-4: Halsted Rail Alternative Park & Ride Facilities

Location	Construction Year	Horizon Year (2030)
103rd Street	200	200
111th Street	200	200
119th Street	200	1,000
Vermont Avenue	900	2,300
Total	**1,500**	**3,700**

2.3.2.1 103rd Street Station

Station entrances to the 103rd Street station would be located on the east and west sidewalks of Halsted Street at the intersection with 103rd Street. The primary station entrances would be north of the intersection and the auxiliary entrances would be south of the intersection. Each entrance area would be on street level and would contain an elevator and stairs.

The 103rd Street station would have a park & ride lot on the northwest parcel adjacent to the station at the intersection of 103rd Street and Halsted Street. This lot would provide

approximately 200 new parking spaces. A bus turnaround for CTA bus route #9 would be included at the northeast parking lot.

2.3.2.2 111th Street Station

Station entrances to the 111th Street station would be located on the east and west sidewalks of Halsted Street at the intersection with 111th Street. The primary station entrances would be north of the intersection and the auxiliary entrances would be south of the intersection. Each entrance area would be on street level and would contain an elevator and stairs.

The 111th Street station would have a park & ride lot on the northwest parcel adjacent to the station at the intersection of 111th Street and Halsted Street. This lot would provide approximately 200 new parking spaces.

2.3.2.3 119th Street Station

Station entrances to the 119th Street station would be located on the east and west sidewalks of Halsted Street between 118th Street and 119th Street. The primary station entrances would be north of 119th Street and the auxiliary entrances would be south of 118th Street. Each entrance area would be on street level and would contain an elevator and stairs.

The 119th Street station would have a new multi-story park & ride facility that would hold approximately 1,000 parking spaces. The lot would be on the southwest parcel at the intersection of 119th Street and Halsted Street. A bus turnaround for Pace bus route #359 would be included at the parking lot.

2.3.2.4 Vermont Avenue Station

Station entrances to the Vermont Avenue station would be located on the east and west sidewalks of Halsted Street between the 128th Street and Vermont Avenue. The primary station entrances would be south of Vermont Avenue and the auxiliary entrances would be north of 128th Street. Each entrance area would be on street level and would contain an elevator and stairs.

The Vermont Avenue station would have a new, multi-story park & ride facility with approximately 2,300 parking spaces. The lot would be located on the south side of the intersection of Halsted and Vermont Avenues. The ground level of the parking garage would be available for CTA office space as well as retail and/or community facilities. Bus bays for CTA bus route #8A and Pace routes #348 and #352 would be included at the station.

2.3.3 119th Street Yard and Shop

The 119th Street yard and shop would be located south of the 119th Street station and north of the Vermont Avenue station to the west of Halsted Street. The parcel on which the yard would be constructed is west of the proposed park & ride facility at the 119th Street station. Track height would transition from elevated at station height to at grade between Halsted Street and Morgan Street, through the proposed park & ride facility. The yard would be entirely at grade. A nominal

amount of parking for employees would be included at the yard. The location of the proposed yard is shown in Figure 2-4.

The 98th Street yard and shop at the south end of the existing Red Line would continue to be used for Red Line trains. The CTA is considering utilizing the existing 98th Street shop for non-revenue equipment repairs once a new revenue equipment shop is constructed at 119th Street.

Section 3
Description of Construction

3.1 Construction Phasing and Segments

Section 3.3 describes the anticipated construction activities and methods of construction. Please refer to Section 3.3 for more details regarding construction methods. The estimated quantities and potential equipment are summarized in Attachment A.

3.1.1 Construction Assumptions For All Alternatives

The following are the major constructability, construction sequencing, and phasing assumptions. Phasing and construction segments may change due to refined engineering, available funding, and other factors later in the project implementation stage.

3.1.1.1 Constructability Assumptions

The coordinated construction of infrastructure and stations is a key component of planning and design. Assumptions that affect design solutions include the following:

- Ultimate station, park & ride facility, and yard locations.
- Ultimate aerial structure type. New construction of elevated structure includes foundation, columns, superstructure, and deck. New construction of retained fill structures includes foundation and two parallel reinforced concrete retaining walls with fill in between.
- The ability to construct facilities in sequences and phases to facilitate CTA operations, specifically around the 95th Street Terminal and 98th Street yard and shop. This includes systems (trackwork, traction power, signals and communications).
- The ability to construct facilities in sequences and phases to facilitate UPRR operations.
- The location and size of proposed foundations and structural members, potentially limited by clearance requirements (e.g., caisson size and depth, concrete pour access, steel piece weight and size, etc.)
- The ability to construct structures in sequences and phases to facilitate vehicular traffic operations on I-94 and 1-57.

The following parameters have been assumed for all build alternatives:

- The methods of construction required along the proposed alignments are anticipated to be conventional, utilizing standard construction methods and materials including cast-in-place concrete, pre-cast concrete, and structural steel.

- Streets with adjacent alleys would be used for site access during construction. New construction in and around the 95th Street Terminal would require some tracks to be taken out of service or realigned to access and perform the work. To perform this work in an efficient manner while maintaining reasonable service and access to the 98th Street yard and shop, it is anticipated that construction would be sequenced and phased to maintain access to the 98th Street yard and shop.

- Space for storage and staging of construction materials, equipment, and temporary facilities would be needed within and/or adjacent to the ROW. Construction material storage and contractor yard areas appear to be available along the alignments through a combination of publicly owned and privately owned properties. Construction access adjacent to the ROW could be required, especially during embankment, viaduct, and station construction durations.

- During construction, access to work zones adjacent to the expressway would require shoulder and lane closures. For the superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per Illinois Department of Transportation (IDOT) approval. Construction adjacent to or over railroads would require flagging operations and scheduled track closures.

- It is anticipated that streets crossed by stations and viaducts, along with adjacent alleys, would be closed temporarily or the number of travel lanes would be reduced during heavy construction. Viaduct construction activities, along with all construction access, would be centered upon or phased around these streets and alleys.

Prior to construction, advance work would be necessary to verify existing site conditions, relocate and protect utilities, provide any temporary modifications to signal systems including the 95th Street Terminal as well as along or across any viaduct or roadway crossings, and provide special or temporary trackwork at required construction interface zones.

Constructability is a key issue that must be coordinated with the design to ensure the ability to construct facilities in sequences and phases as required in facilitating CTA, UPRR, and highway operations.

3.1.2 BRT Alternative

3.1.2.1 Construction Segments

Construction activities would be grouped by type of work and location. Overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street yard and shop, and vehicular traffic on affected expressways and roadways. Construction for the single segment could be sequenced to coordinate with CTA operations at the 95th Street Terminal.

The corridor is divided into one segment for the purposes of describing construction activities. The construction segment for the BRT Alternative is shown on Figure 3-1. The conceptual engineering plans for the alternative have been provided separately.

3.1.2.2 Construction Phasing

Work activities within the single segment for the BRT Alternative are described below.

Segment BRT-B-1: From the 95th Street Terminal to the Eberhart Avenue stop.

Work Activities

- New construction of BRT shelters and amenities at BRT stops
- New construction of park & ride facilities
- New construction of pavement markings and crosswalks
- New construction of signage
- New construction of sidewalk improvements at BRT stops
- New construction of ADA-compliant ramps at BRT stops
- New construction of bus pads at BRT stops
- New construction of lighting at BRT stops
- New construction of a traffic signal at the 130th Street/Eberhart Avenue intersection
- New construction of transit signal priority detectors and improvement of traffic signal controllers at existing signalized intersections
- Utility relocation or new construction at BRT stops, park & ride facilities, and signalized intersections
- Removal of on-street parking spaces at BRT stops

Construction Phasing

All of the construction work activities may require temporary shutdown of traffic. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Work zones along the BRT Alternative would likely require temporary lane closures. Work would be sequenced to minimize impacts on adjacent roadways and both commercial and residential buildings.

Existing utilities would be protected during construction of the BRT stations, park & ride facilities, and traffic signal improvements.

3.1.3 UPRR Rail Alternative

3.1.3.1 Right-Of-Way Option

3.1.3.1.1 Construction Segments

Construction activities would be grouped by type of work and location. Overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street yard and shop, and vehicular traffic on affected expressways and roadways. Special or temporary trackwork may be required between the 95th Street Terminal and the 98th Street yard and shop. Construction for single segments or groups of adjacent segments could be sequenced to coordinate with CTA operations at the 95th Street Terminal.

The corridor is divided into seven segments for the purposes of describing construction activities. The construction segments discussed in the proceeding sections do not correspond to Segments UA and UB that are being used in the environmental analysis for the UPRR Rail Alternative. Segments UA and UB are described in the *Description of Alternatives*. Construction segments for the three UPRR Rail Alternative Options are shown on Figure 3-1. The conceptual engineering plans for each of the alternatives and options have been provided separately.

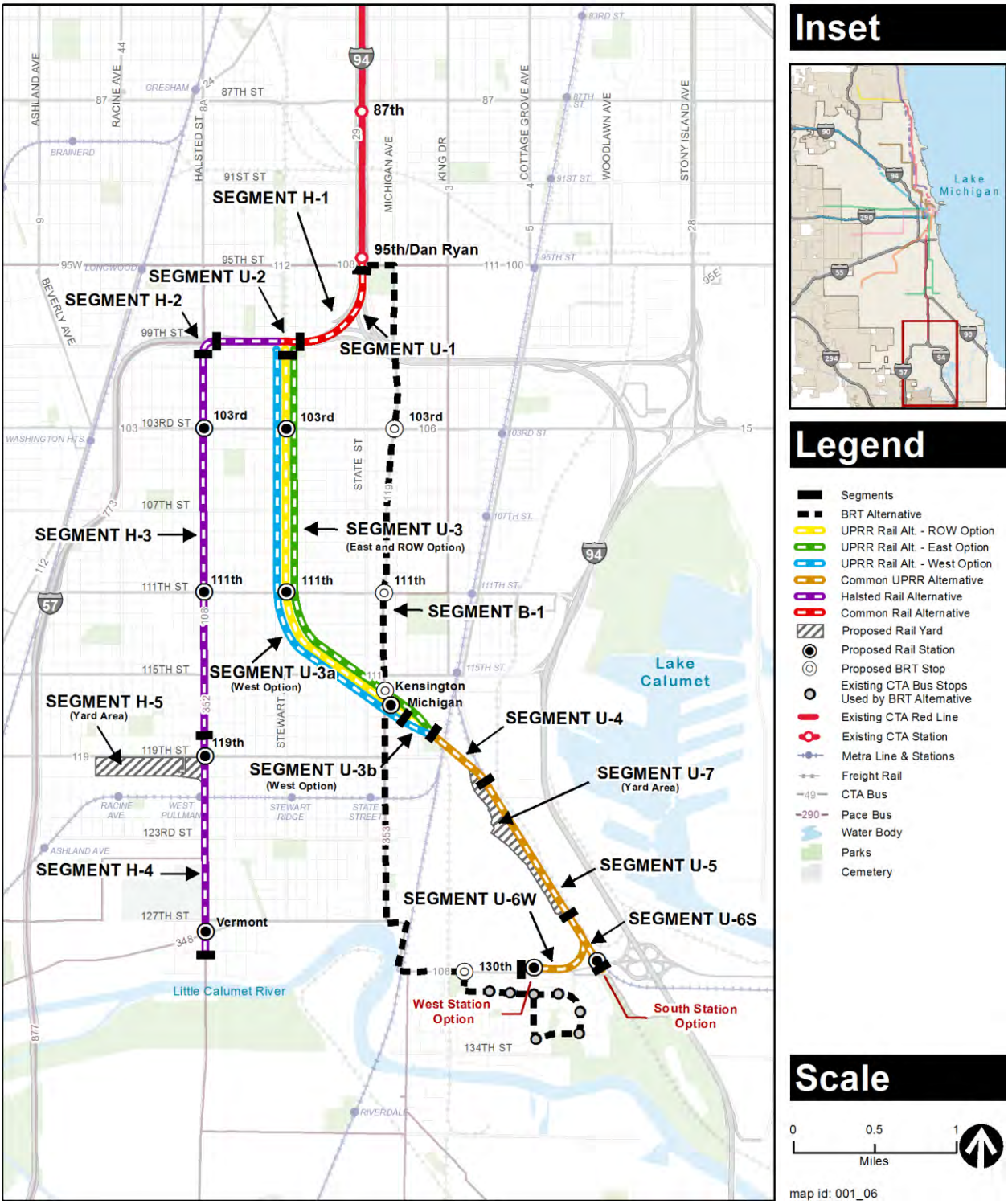

Figure 3-1: RLE Alternatives Construction Segment Map

3.1.3.1.2 Construction Phasing

Work activities within the eight segments for the ROW Option are described below.

Segment UPRR-ROW-U-1: From the 95th Street Terminal to the beginning of the horizontal curve at the UPRR crossing (approximate stationing 96+60 to 132+00)

Work Activities

- New trackwork and signals to tie into the 95th Street Terminal.
- Possible relocation of trackwork between 95th Street Terminal and the 98th Street yard and shop.
- New construction of retained fill structure south of 95th Street Terminal.
- New construction of single track, elevated structures over existing CTA tracks leading to the 98th Street yard and shop and over the existing CTA/SB I-94 tunnel.
- New construction of dual track, elevated structure through the I-94/I-57 interchange, across the westbound (WB) I-57 entrance ramp from northbound (NB) I-94, and along the I-57 corridor.
- Proposed structure construction would be sequenced to minimally affect traffic flow on the WB I-57 entrance ramp from NB I-94. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per IDOT approval.

Construction Phasing

It may be necessary to relocate trackwork leading from the 95th Street Terminal to the 98th Street yard and shop to allow construction of proposed substructure within CTA ROW. Tying proposed trackwork and structure into existing trackwork at the 95th Street Terminal would be sequenced to provide rail car access to the 98th Street yard and shop. Proposed structure construction would be sequenced to maintain operating routes from the 95th Street Terminal to the 98th Street yard and shop as well as maintain traffic flow on I-94 through the tunnel.

Superstructure erection over the CTA tracks, I-94, the WB I-57 entrance ramp from NB I-94, and Wentworth Avenue would require temporary shutdown of CTA non-revenue operations and traffic. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per IDOT approval. CTA non-revenue operations would be shutdown during off-peak hours or weekends. Work would be sequenced to minimize impacts on traffic flow on the I-57/I-94 interchange as well as in the I-57 corridor. Work zones adjacent to the expressway would require shoulder and probably lane closures.

The existing 6.5-foot-diameter sewer underneath both 99th Street and 102nd Street would be protected during construction. See Section 3.4 for more information regarding the protection of utilities during construction.

Segment UPRR-ROW-U-2: The horizontal curve at the UPRR crossing (approximate stationing 132+00 to 142+19)

Work Activities

- New construction of dual track, elevated structure consisting of multiple types of superstructure and substructure spanning along and across I-57 and within the UPRR corridor

Construction Phasing

Work would be sequenced to minimize impacts on traffic flow on I-57. Work zones adjacent to the expressway would require temporary shoulder and lane closures. Superstructure erection over I-57 would require temporary shutdown of northbound traffic.

The existing 10-foot-diameter Stewart Avenue water tunnel would be protected during construction of the foundations. See Section 3.4 for more information regarding the protection of utilities during construction.

Segment UPRR-ROW-U-3: From the end of the horizontal curve at the UPRR crossing to the CN/Metra Electric crossing (approximate stationing 142+19 to 286+12)

Work Activities

- New construction of elevated structure within the UPRR corridor
- New station construction at 103rd Street, 111th Street, and 115th Street
- New construction of surface parking lots and bus turnarounds at 103rd Street station and 111th Street station and new construction of a structured parking lot and bus turnaround at 1115th Street station
- New construction of two substations (approximate stationing 174+50 and 254+50)

Construction Phasing

Signaling would need to be replaced following construction of viaducts for the following at-grade UPRR crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street.

All existing structures and underground utilities will be identified. All existing utilities would be protected or relocated. The following known existing utilities and structures would be protected

during construction activities. Section 3.4 discusses methods for protecting nearby utilities and structures.

- 10-foot-diameter Stewart Avenue water tunnel
- Roseland Pumping Station and the associated underground pipes and vaults
- 10-foot-diameter sewer underneath Wentworth Avenue near 114th Street
- 17.5 foot, horseshoe shaped, MWRD Calumet Intercepting Sewer tunnel

Segment UPRR-ROW-U-4: From the CN/Metra Electric crossing to at-grade track (approximate stationing 286+12 to 310+03)

Work Activities

- New construction of dual track, elevated structure within the UPRR corridor, branching off and running along the east side of the corridor and over CN/Metra Electric
- New construction of elevated structure to 120th Street yard and shop track tie-in
- New construction of retained embankment structure to carry elevated structure to grade

Construction Phasing

Construction at the CN/Metra Electric crossing would be phased to minimize impacts on CN and Metra operations. Construction over and adjacent to the railroads would require flagging operations and potential limited track closures.

Segment UPRR-ROW-U-5: From at-grade track to the beginning of 130th Street station options (approximate stationing 310+03 to 360+02)

Work Activities

- Removal of Norfolk Southern Railway and Consolidated Rail Corporation right-of-way tracks. New construction of track roadbed at grade (including removal of any unsuitable soils, as applicable).
- New construction of the MWRD access road and bridge over the proposed CTA tracks and the NICTD/CSS & SBRR crossing (approximate stationing 357+00)

Construction Phasing

Coordination with MWRD is necessary to maintain operations during new track roadbed construction. If necessary, construction would be sequenced to construct the proposed access road and bridge over the CTA tracks first to allow MWRD facilities to continue operation.

Coordination with the NICTD/CSS & SBRR would be necessary as construction over and adjacent to the railroads would require flagging operations and scheduled track closures.

Segment UPRR-ROW-U-6S: South Station Option (approximate stationing 360+02 to 380+29)

Work Activities

- New construction of track roadbed
- New construction of the 130th Street station
- New construction of parking lots and a multi-story garage for the 130th Street station
- New construction for land development, bus bays, and road access for the 130th Street station
- New construction of the MWRD access road to 130th Street
- New construction of a substation (approximate stationing at 365+60)

Construction Phasing

Coordination with MWRD would be necessary to maintain current operations during new track roadbed construction and during the new road access for the 130th Street station. If necessary, construction would be sequenced to construct the proposed MWRD access road to the west of the proposed station first, allowing MWRD facilities to continue operation. Coordination with the NICTD/CSS & SBRR is also necessary as construction over and adjacent to the railroads would require flagging operations and scheduled track closures.

Segment UPRR-ROW-U-6W: West Station Option (approximate stationing 380+29 to 395+40)

Work Activities

- New construction of track roadbed
- New construction of the 130th Street station
- New construction of parking lots and a multi-story garage for 130th Street station
- New construction for land development, bus bays, and road access for the 130th Street station
- New construction of the MWRD access road and bridge to 130th Street
- New construction of a substation (approximate stationing at 375+50)
- New construction of crosswalks and signalized intersection at 130th Street and Evans Avenue

Construction Phasing

Coordination with MWRD would be necessary to maintain current operations during new track roadbed construction and during the new road access for the 130th Street station. If necessary, construction would be sequenced to construct the proposed MWRD access road and bridge crossing the proposed CTA tracks near station 371+00 first, allowing MWRD facilities to continue operation. Coordination with the NICTD/CSS & SBRR is also necessary as construction over and adjacent to the railroads would require flagging operations and scheduled track closures.

Segment UPRR-ROW-U-7: 120th Street yard and shop (approximate stationing 291+85/45+00 to 352+69/106+12)

See Section 3.2 for construction phasing and group information.

3.1.3.2 East Option

3.1.3.2.1 Construction Segments

Construction activities would be grouped by type of work and location. Overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street yard and shop, and vehicular traffic on affected expressways and roadways. Special or temporary trackwork may be required between the 95th Street Terminal and the 98th Street yard and shop. Construction for single segments or groups of adjacent segments could be sequenced to coordinate with CTA operations at the 95th Street Terminal.

The corridor is divided into seven segments for the purposes of describing construction activities. Construction segments for the three UPRR Rail Alternative Options are shown on Figure 3-1.

3.1.3.2.2 Construction Phasing

Work activities within the eight segments for the East Option are described below.

Segment UPRR-E-U-1: From the 95th Street Terminal to the beginning of the horizontal curve at the UPRR crossing (approximate stationing 96+60 to 132+00)

Work activities (same as Segment UPRR-ROW-U-1)

- New trackwork and signals to tie into the 95th Street Terminal. Possible relocation of trackwork between the 95th Street Terminal and the 98th Street yard and shop.
- New construction of retained fill structure south of 95th Street Terminal.
- New construction of single track, elevated structures over existing CTA tracks leading to the 98th Street yard and shop and over the existing CTA/southbound (SB) I-94 tunnel.
- New construction of dual track, elevated structure through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor.

- Proposed structure construction would be sequenced to minimally affect traffic flow on the WB I-57 entrance ramp from NB I-94. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per IDOT approval.

Construction Phasing (same as Segment UPRR-ROW-U-1)

It will be necessary to relocate trackwork leading from the 95th Street Terminal to the 98th Street yard and shop to allow construction of proposed substructure within CTA ROW. Tying proposed trackwork and structure into existing trackwork at 95th Street Terminal would be sequenced to provide rail car access to 98th Street yard. Proposed structure construction would be sequenced to maintain operating routes from 95th Street Terminal to 98th Street yard and maintain traffic flow on I-94 through the tunnel.

Superstructure erection over the CTA tracks, I-94, the WB I-57 entrance ramp from NB I-94, and Wentworth Avenue would require temporary shutdown of CTA non-revenue operations and traffic. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Work would be sequenced to minimize impacts on traffic flow on the I-57/I-94 interchange as well as in the I-57 corridor. Work zones adjacent to the expressway would require shoulder and probably lane closures. Work activities would also affect traffic flow on the north frontage road to I-57 (also called Lafayette Avenue and 98th Place).

The existing 6.5-foot-diameter sewer underneath both 99th Street and 102nd Street would be protected during construction. See Section 3.4 for more information regarding the protection of utilities during construction.

Segment UPRR-E-U-2: The horizontal curve at the UPRR crossing (approximate stationing 132+00 to 142+00)

Work Activities (same as Segment UPRR-ROW-U-2)

- New construction of dual track, elevated structure consisting of multiple types of superstructure and substructure spanning along and across I-57 and within the UPRR corridor

- For the East Option, this construction segment crosses the western portion of Wendell Smith Park

Construction Phasing

Work would be sequenced to minimize impacts on traffic flow on I-57 and UPRR operations. Work zones adjacent to the expressway may require temporary shoulder and lane closures. Superstructure erection over I-57 would require temporary shutdown of northbound traffic. Construction adjacent to railroads would require flagging operations and scheduled track closures.

The existing 10-foot-diameter Stewart Avenue water tunnel would be protected during construction of the foundations. See Section 3.4 for more information regarding the protection of utilities during construction.

The construction activities in the western portion of Wendell Smith Park would include construction of foundations, placement of beams, and construction of the superstructure. Activities require access of a variety of construction equipment, material delivery, haul trucks, and labor. Construction fencing would be required to separate activities occurring in the eastern portion of the park from the construction activities in the western portion.

Segment UPRR-E-U-3: From the end of the horizontal curve at the UPRR crossing to the CN/Metra Electric crossing (approximate stationing 142+00 to 285+00)

Work Activities

- Demolition of existing buildings and structures in the proposed ROW where necessary. The conceptual engineering plans and profiles (provided separately) show the proposed ROW and construction easements necessary to conduct this work.
- Demolition or relocation of the communication tower currently located in Block Park.
- New construction of dual track, elevated structure consisting of multiple types of superstructure and substructure along the east side of the UPRR corridor. New construction of elevated structure includes foundation, columns, and deck.
- New station construction of stations at 103rd Street, 111th Street, and 115th Street.
- New construction of surface parking lots and bus turnarounds at 103rd Street station and 111th Street station and new construction of a structured parking lot and bus turnaround at 115th Street station.
- New construction of two substations (approximate stationing 174+30 and 253+60) with ductbanks to be constructed beneath the UPRR tracks.
- UPRR at-grade crossing gate and signal infrastructure replacement at seven crossings.

Construction Phasing

Work would be sequenced along the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Flagging operations would be needed to replace existing at-grade crossing gates and signals during construction of viaducts for the following at-grade UPRR crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street.

All existing structures and underground utilities will be identified. All existing utilities will be protected or relocated. The following known existing utilities and structures would be protected during construction activities:

- 10-foot-diameter Stewart Avenue water tunnel along the UPRR corridor
- Former Griffith Natatorium
- Roseland Pumping Station and the associated underground pipes and vaults
- 10-foot-diameter sewer underneath Wentworth Avenue near 114th Street
- 17.5 foot, horseshoe shaped, MWRD Calumet Intercepting Sewer tunnel

Segment UPRR-E-U-4: From the CN/Metra Electric crossing to at-grade track (approximate stationing 285+00 to 308+83)

Work Activities

- Demolition of existing buildings and structures in the proposed ROW where necessary. The conceptual engineering plans and profiles (provided separately) show the proposed ROW and construction easements necessary to conduct this work.
- New construction of dual track, elevated structure along the east side of the UPRR corridor and over the CN/Metra Electric tracks. Construction of track bed may include removal of unsuitable soils (as applicable).
- New construction of CTA yard and shop and substation construction.
- New construction of retained embankment structure to carry elevated structure to grade.

Construction Phasing

Construction at the CN/Metra Electric crossing would be phased to minimize impacts on CN and Metra operations. Construction over and adjacent to the railroads would require flagging operations and potential limited track closures.

Segment UPRR-E-U-5: From the at-grade track to the beginning of the 130th Street station options (approximate stationing 308+83 to 359+00)

Same as Segment UPRR-ROW-U-5. See Section 3.1.3.1 Segment UPRR-ROW-U-5 for more information.

Segment UPRR-E-U-6S: South Station Option (approximate stationing 359+00 to 379+27)

Work Activities (same as Segment UPRR-ROW-U-6S)

- Remove Norfolk Southern Railway and Consolidated Rail Corporation right-of-way tracks. New construction of track roadbed (including removal of any unsuitable soils as applicable) and systems elements
- New construction of the 130th Street station
- New construction of the parking lot and multi-story garage for 130th Street station
- New construction for land development, bus bays, and road access for the 130th Street station
- New construction for the MWRD access road to 130th Street
- New construction of a substation (approximate stationing at 365+60)

Construction Phasing (same as Segment UPRR-ROW-U-6S)

Coordination with MWRD would be necessary to maintain current operations during new track roadbed construction and during the new road access for the 130th Street station. If necessary, construction would be sequenced to construct the proposed MWRD access road to the west of the proposed station first, allowing MWRD facilities to continue operation. Coordination with the NICTD/CSS & SBRR would be necessary as construction over and adjacent to the railroads would require flagging operations and scheduled track closures. Construction of access roads will require temporary shoulder and lane closures.

Segment UPRR-E-U-6W: West Station Option (approximate stationing 379+27 to 394+38)

Work Activities (same as Segment UPRR-ROW-U-6W)

- New construction of track roadbed
- New construction of the 130th Street station
- New construction of parking for the 130th Street station
- New construction for land development, bus bays, and road access for the 130th Street station
- New construction of the MWRD access road and bridge to 130th Street
- New construction of a substation (approximate stationing at 375+50)
- New construction of crosswalks and signalized intersection at 130th Street and Evans Avenue

Construction Phasing (same as Segment UPRR-ROW-U-6W)

Coordination with MWRD would be necessary to maintain current operations during new track roadbed construction and during the new road access for the 130th Street station. If necessary, construction would be sequenced to construct the proposed MWRD access road and bridge crossing proposed CTA tracks (approximate stationing 370+00) first, allowing MWRD facilities to continue operation. Coordination with the NICTD/CSS & SBRR would be necessary as construction over and adjacent to the railroads would require flagging operations and scheduled track closures

Segment UPRR-E-U-7: 120th Street yard and shop (approximate stationing 290+26/45+00 to 351+67/106+79)

See Section 3.2 for construction phasing and group information for the 120th Street yard and shop.

3.1.3.3 West Option

3.1.3.3.1 Construction Segments

Construction activities would be grouped by type of work and location. Overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street yard and shop, and vehicular traffic on affected expressways and roadways. Special or temporary trackwork may be required between the 95th Street Terminal and the 98th Street yard and shop. Construction for single segments or groups of adjacent segments could be sequenced to coordinate with CTA operations at the 95th Street Terminal.

The corridor is divided into seven segments for the purposes of describing construction activities. Construction segments for the three UPRR Rail Alternative Options are shown on Figure 3-1.

3.1.3.3.2 Construction Phasing

Work activities within the segments for the West Option are described below.

Segment UPRR-W-U-1: From the 95th Street Terminal to the beginning of the horizontal curve at the UPRR crossing (approximate stationing 96+60 to 132+00)

Work Activities (same as Segment UPRR-ROW-U-1)

- New trackwork and signals to tie into the 95th Street Terminal.
- Modifications of trackwork traction power and signals between the 95th Street Terminal and the 98th Street yard and shop.
- New construction of retained fill structures south of 95th Street Terminal.
- New construction of single track, elevated structures over existing CTA tracks leading to the 98th Street yard and shop and over the existing CTA/SB I-94 tunnel. New construction of dual

track, elevated structure through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94 and along the I-57 corridor.

- Proposed structure construction would be sequenced to minimally affect traffic flow on the WB I-57 entrance ramp from NB I-94. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required.

Construction Phasing (same as Segment UPRR-ROW-U-1)

It will be necessary to relocate trackwork leading from the 95th Street Terminal to the 98th Street yard and shop to allow construction of proposed substructure within CTA ROW. Tying proposed trackwork and structure into existing trackwork at 95th Street Terminal would be sequenced to provide rail car access to 98th Street yard and shop. Proposed structure construction would be sequenced to maintain operating routes from the 95th Street Terminal to the 98th Street yard and shop and maintain traffic flow on I-94 through the tunnel.

Superstructure erection over CTA tracks and I-94, the I-57 ramp, and Wentworth Avenue would require temporary shutdown of operation and traffic. Work would be sequenced to minimize impacts on traffic flow on the I-57/I-94 interchange as well as in the I-57 corridor. Work zones adjacent to the expressway would require shoulder and probably lane closures. Work activities would also affect traffic flow on the north frontage road to I-57 (also called Lafayette Avenue and 98th Place).

The existing 6.5-foot-diameter sewer underneath 99th Street and 102nd Street would be protected during construction. See Section 3.4 for more information regarding the protection of utilities during construction.

Segment UPRR-W-U-2: Horizontal curve at the UPRR crossing (approximate stationing 132+00 to 142+43)

Work Activities (same as Segment UPRR-ROW-U-2)

- New construction of dual track, elevated structure consisting of multiple types of substructure spanning along and across I-57 and the UPRR corridor

Construction Phasing

Work zones adjacent to the expressway and Eggleston Avenue may require temporary shoulder and lane closures. Superstructure erection over I-57 would require temporary shutdown of northbound traffic. Construction adjacent and across railroads would require flagging operations and scheduled track closures.

The existing 10-foot-diameter Stewart Avenue water tunnel would be protected during foundation construction. See section 3.4 for more information regarding the protection of utilities during construction.

Segment UPRR-W-U-3a: From the end of the horizontal curve at the UPRR crossing to the Prairie Street crossing (approximate stationing 142+43 to 275+00)

Work Activities

- Demolition of existing buildings and structures in the proposed ROW where necessary. The conceptual engineering plans and profiles (provided separately) show the proposed ROW and construction easements.
- New construction of dual track, elevated structure along the west side of the UPRR corridor.
- New construction of stations at 103rd Street, 111th Street, and Michigan Avenue.
- New construction of surface parking lots and bus turnarounds at 103rd Street station and 111th Street station and new construction of a structured parking lot and bus turnaround at 115th Street station.
- New construction of two substations and ductbanks beneath the UPRR ROW (approximate stationing 179+00 and 256+00).

Construction Phasing

Work would be sequenced along the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Flagging operations would be needed to replace existing at-grade crossing gates and signals during construction of viaducts for the following at-grade UPRR crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street.

The underground pipes and vaults associated with the Roseland Pumping Station and the 10-foot-diameter sewer underneath Wentworth Avenue near 114th Street would be protected during construction.

Segment UPRR-W-U-3b: From the Prairie Street crossing to the CN/Metra Electric crossing (approximate stationing 275+00 to 287+20)

Work Activities

- New construction of dual track, elevated structure along the east and west side of the UPRR corridor as well as across the UPRR tracks would consist of multiple types of super- and substructure spanning along and across the UPRR corridor and Prairie Avenue.

Construction Phasing

Work would be sequenced along and across the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and scheduled

track closures. Work zones adjacent to Prairie Avenue may require lane closures and may cause temporary shutdown of all traffic.

The existing 17.5 foot, horseshoe shaped, MWRD Calumet Intercepting Sewer tunnel would be protected during construction.

Segment UPRR-W-U-4: From the CN/Metra Electric crossing to at-grade track (approximate stationing 287+20 to 311+02)

Work Activities

- Demolition of existing buildings and structures in the proposed ROW where necessary. The conceptual engineering plans and profiles (provided separately) show the proposed ROW and the construction easements.
- New construction of dual track, elevated structure along the east side of the UPRR corridor and over the CN/Metra Electric tracks.
- New construction of 120th Street yard and shop track tie-in and substation.
- New construction of retained embankment structure to carry elevated structure to grade.

Construction Phasing

Construction at the CN/Metra Electric crossing would be phased to minimize impacts on CN and Metra operations. Construction over and adjacent to the railroads would require flagging operations and potential limited track closures.

Segment UPRR-W-U-5: From the at-grade track to the beginning of the 130th Street station options (approximate stationing 311+02 to 361+19)

Same as Segment UPRR-ROW-U-5. See Section 3.1.3.1 Segment UPRR-ROW-U-5 for more information.

Segment UPRR-W-U-6S: South Station Option (approximate stationing 361+19 to 381+46)

Same as Segment UPRR-ROW-U-6S. See Section 3.1.3.1 Segment UPRR-ROW-U-6S for more information.

Segment UPRR-W-U-6W: West Station Option (approximate stationing 381+46 to 396+57)

Same as Segment UPRR-ROW-U6W. See Section 3.1.3.1 Segment UPRR-ROW-U-6W for more information.

Segment UPRR-W-U-7: 120th Street yard and shop (approximate stationing 292+45/45+00 to 353+86/106+79)

See Section 3.1.3.4 description of construction for the 120th Street yard and shop.

3.1.3.4 120th Street Yard and Shop

Overall schedule and coordination of construction for the 120th Street yard and shop would be scheduled in order to maintain operations at the MWRD facilities.

Work Activities

- Preparation of site (including removal of unsuitable soils, as applicable) and installation of drainage systems.
- Construction of the new yard and trackwork
- Construction of the new shop building
- Construction of the yard and shop access roads and parking
- Construction of new substation (approximate stationing at 320+90)

Construction Phasing

Work would be sequenced to minimize impacts on adjacent roadways and both commercial and residential buildings.

3.1.4 Halsted Rail Alternative

3.1.4.1 Construction Segments

Construction activities would be grouped by type of work and location. Overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street yard and shop, and vehicular traffic on affected expressways and roadways. Special or temporary trackwork may be required between the 95th Street Terminal and the 98th Street yard and shop. Construction for single segments or groups of adjacent segments could be sequenced to coordinate with CTA operations at the 95th Street Terminal.

The corridor is divided into five segments for the purposes of describing construction activities. Construction segments for the Halsted Alternative are shown on Figure 3-1. The construction segments discussed in the proceeding sections do not correspond to Segments HA and HB that are being used in the environmental analysis for the Halsted Rail Alternative. Segments HA and HB are described in the *Description of Alternatives*.

3.1.4.2 Construction Phasing

Work activities within the five segments for the Halsted Alternative are described below.

Segment H-1: From the 95th Street Terminal to the beginning of the horizontal curve at the I-57 crossing (approximate stationing 96+60 to 158+00)

Work Activities

- New trackwork and signals to tie into the 95th Street Terminal. Possible relocation of trackwork between the 95th Street Terminal and the 98th Street yard and shop.
- New construction of retained fill structure south of 95th Street Terminal.
- New construction of single track, elevated structures over the existing CTA tracks leading to the 98th Street yard and shop and over the existing CTA/SB I-94 tunnel.
- New construction of dual track, elevated structure through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and along the I-57 corridor.
- Proposed structure construction would be sequenced to minimally affect traffic flow on the WB I-57 entrance ramp from NB I-94. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per IDOT approval.

Construction Phasing

It may be necessary to relocate trackwork leading from the 95th Street Terminal to the 98th Street yard and shop to allow construction of proposed substructure within CTA ROW. Tying proposed trackwork and structure into existing trackwork at 95th Street Terminal would also be sequenced to provide rail car access to 98th Street yard and shop. Proposed single track, elevated structure construction would be sequenced to maintain CTA operation between the 95th Street Terminal and the 98th Street yard and shop as well as to maintain vehicular traffic flow on I-94 through the tunnel. Superstructure erection over the existing CTA/SB I-94 tunnel would require temporary shutdown of vehicular traffic and CTA non-revenue operations to and from the 98th Street yard and shop.

Work would be sequenced to minimize impacts on traffic flow on the I-57/I-94 interchange, in the I-57 corridor, and in the I-57 corridor. Work zones adjacent to the expressway would require shoulder and probably lane closures. Superstructure erection over the I-57 ramp and Parnell Avenue would require temporary shutdown of traffic. Temporary shutdown of traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Superstructure erection over and construction near the UPRR structure would require flagging operations and scheduled track closures.

The existing 6.5-foot-diameter sewer underneath both 99th and 102nd Streets would be protected during construction. See Section 3.4 for more information regarding the protection of utilities during construction.

Segment H-2: The horizontal curve at the I-57 crossing (approximate stationing 158+00 to 168+00)

Work Activities

- New construction of dual track, elevated structure consisting of multiple types of super- and substructure spanning along and across I-57 and across Halsted Street

Construction Phasing

Work zones adjacent to and across the expressway may require shoulder and lane closures. Superstructure erection would require temporary shutdown of NB traffic on I-57 and at the intersection of 99th Street and Halsted Street.

Segment H-3: From the end of the horizontal curve at the I-57 crossing to 119th Street station (approximate stationing 168+00 to 285+00)

Work Activities

- New construction of dual track, elevated structure consisting of multiple types of substructure along the Halsted Street corridor
- New construction of stations at 103rd Street and 111th Street
- New construction of surface parking lot and bus turnaround at 103rd Street station
- New construction of surface parking lot at 111th Street station
- New construction of two substations (approximate stationing 175+00 and 237+00)

Construction Phasing

Work would be phased to minimize traffic impacts on Halsted Street and adjoining streets. Elevated structure construction would require lane and street closures. Parking would potentially be eliminated along Halsted Street during construction to increase traffic flow. Superstructure erection would require temporary shutdown of all traffic along segments of Halsted Street during off-peak or weekend hours. Traffic would be detoured to the next major north/south roadway to minimize traffic impacts. Detour routes for Halsted Street would be identified in a Maintenance of Traffic Plan as part of final engineering.

Segment H-4: From 119th Street station to Vermont Avenue station (approximate stationing 285+00 to 367+30)

Work Activities

- Work will be tied into adjacent improvements.
- New construction of dual track, elevated structure consisting of multiple types of substructure along the Halsted Street corridor.
- New construction of stations at 119th Street and Vermont Avenue.
- New construction of surface parking lot and bus turnaround at 119th Street station.
- New construction of both surface and structured parking lots as well as bus bays at Vermont Avenue station.
- New construction of two substations (approximate stationing 293+50 and 343+00).
- New construction of three track, elevated structure south of the Vermont Avenue station.

Construction Phasing

Work would be phased to minimize traffic impacts on Halsted Street and adjoining streets. Elevated structure construction would require lane and street closures. Parking would potentially be eliminated from Halsted during construction to increase traffic flow. Superstructure erection would require temporary shutdown of all traffic along Halsted Street. Detour routes for Halsted Street would be identified as part of final engineering.

Segment H-5: 119th Street Yard and Shop (approximate stationing 299+47/500+00 to 306+96/1014+64)

See Section 3.1.4.3 for construction phasing and group information for the 119th Street yard and shop.

3.1.4.3 119th Street Yard and Shop

For analysis of construction, the 119th Street yard and shop has been separated from the Halsted Rail segments.

Work Activities

- Demolition of existing buildings and structures in the proposed ROW where necessary
- Construction of the new yard and track
- Construction of the new shop building

- Construction of the yard and shop access road and parking

Construction Phasing

Work would be sequenced to minimize impacts on adjacent roadways and buildings.

3.2 Potential Construction Staging Areas

Construction staging would be within the proposed ROW or within construction easements of stations and alternative alignments as indicated on the plan and profile drawings (provided separately). Construction staging areas are required to function for the following basic use criteria:

- Provide access to the construction work for construction personnel. Staging areas would include areas for office trailers, subcontractor site trailers, personnel facilities, and similar.
- Provide access to the construction work for construction equipment. This would include on-site storage of equipment being used on a continuous basis.
- Provide room for the construction personnel and equipment to perform the construction work.
- Provide access for trucks and associated loading equipment to remove materials generated on site, such as demolition salvaged materials and debris and excavation spoils. This type of material handling typically requires on-site segregation and interim on-site storage.
- Provide access, if possible, to store excavated material acceptable for reuse on the site.
- Provide access to receive and store permanent construction materials such as backfill and sub-base aggregates, steel reinforcing bars, and structural steel.
- Provide access to receive and store temporary construction materials such as concrete forms, shoring materials, scaffolding, and excavation support items.

Each construction site would have specific attributes to be accommodated, including the design of the proposed structure, existing conditions such as adjacent structures, and limited access from both an off-site and an on-site perspective. A productive and useful site access plan, with actual known requirements, would be developed after the proposed structure design is complete and adjacent property site conditions are known. Construction access is a critical contractor requirement that directly equates to an efficient construction process.

While the specific design and adjacent land uses at the time of construction would ultimately dictate the access plan, the following provides a general description of the types of properties typically targeted for construction staging in order to minimize impacts:

- CTA-acquired parcels, obtained for increased future infrastructure envelopes. Whole parcels or groups of parcels may be acquired and utilized during construction. After construction, residual property may be sold.

- Nearby parking lots may be used through the establishment of temporary construction easements.

- Abandoned adjacent parcels may be used through the establishment of temporary construction easements.

Because of limited available space adjacent to the construction site, off-site CTA, municipal, or privately owned storage yards may need to be provided for the contractor's use. This would allow secure storage of an equipment fleet or permanent materials needing large storage or assembly areas.

Attempts to define required access limits may not prove to be effective at this time due to lack of a constructible design.

3.2.1 BRT Alternative

The BRT Alternative has been divided into one construction segment, as defined in Section 3.1.2.1. Segment BRT-B-1 consists of new construction from the 95th Street Terminal to the Eberhart Avenue stop. The construction of the BRT segment may require limited temporary construction easements on adjacent streets and on parcels, including parking lots, abandoned properties, and other adjacent properties.

3.2.2 UPRR Rail Alternative

3.2.2.1 ROW Option

The ROW Option has been divided into eight construction segments, as defined in Section 3.1.3.1.

Segment UPRR-ROW-U-1 consists of all new construction south of the 95th Street Terminal within the CTA ROW, over the CTA track/I-94 tunnel, the WB I-57 entrance ramp from NB I-94, and Wentworth Avenue structure within the I-57 corridor. These construction segments may require the following:

- Numerous temporary construction easements on the adjacent expressway, requiring shoulder and lane closures as well as temporary shutdown of traffic.

- Off-site construction materials storage yards, due to limited space adjacent to the construction site. Storage yards may be located on parcels acquired for the project in adjacent construction segments to minimize impacts on the surrounding neighborhoods and communities.

Segment UPRR-ROW-U-2 consists of all new construction along the I-57 corridor, across NB I-57 and along Wendell Smith Park. This construction segment may require the following:

- Numerous temporary construction easements on the adjacent expressway requiring shoulder and lane closures as well as temporary shutdown of traffic.
- Off-site construction materials storage yards due to limited space adjacent to the construction site. Storage yards may be located on parcels acquired for the project in adjacent construction segments to minimize impacts on the surrounding neighborhoods and communities.
- Numerous temporary construction easements on adjacent streets, parks, and parcels including parking lots, abandoned properties, and other adjacent properties.

Segment UPRR-ROW-U-3 consists of new construction along the east side of the UPRR corridor. This construction segment may require the following:

- Numerous temporary construction easements on adjacent streets, parks, and parcels including parking lots, abandoned properties, and other adjacent properties.

Segment UPRR-ROW-U-4 consists of new construction over the CN/Metra Electric tracks. This construction segment may require the following:

- CTA-acquired parcels would provide most required access needs.
- Temporary construction easements on adjacent parcels including abandoned properties, MWRD property, and other adjacent properties.

Segments UPRR-ROW-U-5, UPRR-ROW-U-6S, and UPRR-ROW-U-6W consist of new construction along the NICTD/CSS & SBRR tracks and in the vicinity of the 130th Street station option. These construction segments may require the following:

- CTA-acquired parcels would provide most required access needs.
- A limited amount of temporary construction easements on adjacent parcels including abandoned properties and MWRD property.

Staging requirements of Segment UPRR-ROW-U-7 are discussed in Section 3.2.3.

3.2.2.2 East Option

The East Option has been divided into eight construction segments, as defined in Section 3.1.3.2.

Possible staging area requirements for Segments UPRR-E-U-1 and UPRR-E-U-2 are the same as those for Segments UPRR-ROW-U-1 and UPRR-ROW-U-2, respectively.

Segment UPRR-E-U-3 may require more temporary construction staging areas than Segment UPRR-ROW-U-3 because the UPRR ROW provides space for construction needs.

Possible staging area requirements for Segments UPRR-E-U-4, UPRR-E-U-5, UPRR-E-U-6S, and UPRR-E-U-6W are the same as those for Segments UPRR-ROW-U-4, UPRR-ROW-U-5, UPRR-ROW-U-6S, and UPRR-ROW-U-6W, respectively.

Staging requirements of Segment UPRR-E-U-7 are discussed in Section 3.2.3.

3.2.2.3 West Option

The West Option has been divided into seven construction segments, as defined in Section 3.1.3.3.

Possible staging area requirements of Segments UPRR-W-U-1 and UPRR-W-U-2 match those of Segments UPRR-ROW-U-1 and UPRR-ROW-U-2, respectively.

Segment UPRR-W-U-3a staging area requirements match those of Segment UPRR-ROW-U-3.

Segment and UPRR-W-U-3b consists of new construction of crossings over the UPRR tracks and Prairie Avenue. These construction segments may require the following:

- Temporary construction easements on adjacent streets and parcels including parking lots, abandoned properties, and other adjacent properties. Temporary lane closures and shutdown of traffic may be required on Prairie Avenue.

Possible staging area requirements for Segments UPRR-W-U-4, UPRR-W-U-5, UPRR-W-U-6, and UPRR-W-U-7 match those of Segments UPRR-E-U-4, UPRR-E-U-5, UPRR-E-U-6S, and UPRR-E-U-6W, respectively.

Staging requirements of Segment UPRR-W-U-7 are discussed in Section 3.2.3.

3.2.3 120th Street Yard and Shop

The 120th Street yard and shop is considered construction segments UPRR-ROW-U-7, UPRR-E-U-7, and UPRR-W-U-7 for the UPRR Alternative options.

Possible staging area requirements for the yard and shop are minimal. Parcels would be acquired by CTA in the area and would provide most construction area requirements.

3.2.4 Halsted Rail Alternative

The Halsted Rail Alternative has been divided into five segments, as defined in Section 3.1.6.

Possible staging area requirements of Segment H-1 match Segment UPRR-ROW-U-1. Segment H-2 consists of new construction within the I-57 corridor and across northbound I-57 and Halsted Street. This construction segment may include the following:

- Temporary construction easements on the adjacent expressway requiring shoulder and lane closures as well as temporary shutdown of traffic.
- Temporary construction easements on adjacent streets, parks, and parcels including parking lots, abandoned properties, and other adjacent properties.

Segment H-3 and Segment H-4 consist of new construction within the Halsted Street corridor. These construction segments may require the following:

- Temporary construction easements on Halsted Street and adjacent streets, parking lots, abandoned properties, and other adjacent properties. Temporary lane closures and shutdown of traffic may be required on streets.

3.2.5 119th Street Yard and Shop

The 119th Street yard and shop is Segment H-5 for the Halsted Rail Alternative. Possible staging area requirements for the yard and shop are minimal. Parcels would be acquired by CTA in the area and would provide most construction area requirements.

3.3 Description of Anticipated Construction Activities and Methods

3.3.1 Basic Construction Activities and Methods

Construction for the UPRR Rail Alternative options and the Halsted Rail Alternative would be very similar. Construction activities and methods for these alternatives are discussed interchangeably in this section unless otherwise noted.

Off-site and staging yard assembly of construction items would be performed to the fullest extent possible, especially in Segments U-1 and U-2 of each alternative and Segment H-3 and Segment H-4 based on site-specific access requirements.

The construction matrix for each build alternative is presented as Attachment A. The construction matrix summarizes the construction activities that would be completed including potential construction equipment; estimated quantities of soil, concrete, and steel based on conceptual engineering; and estimated duration of construction activities. Section 4 presents the estimated construction schedule for the alternatives.

3.3.2 Preconstruction Activities

Contractor preconstruction activities would include development of construction schedules, quality plans, and procurement schedules. Process plans would be developed for coordination of

work activities to match construction constraints and site access. Existing conditions would be verified for design and construction interface criteria. Survey control establishment would be essential to the verification of site, existing conditions, and utility conflict/relocation information.

Utility protection/relocation information would be coordinated and verified in the sequence of scheduled construction, far in advance of the early construction activities.

Community notifications would be initiated by the CTA and the contractor as early as possible to afford the community best fit conditions for understanding the construction schedule, neighborhood conditions, and related environmental impacts.

Demolition and building permits would be obtained at the earliest opportunity. Office of Underground Coordination requirements (e.g., shoring designs, support of excavation, drilled shaft procedures) must all be coordinated and approved before permits are issued.

The proposed UPRR Alignments are in a residential area coexisting with various homes, parks, schools, and businesses. Therefore, construction activities would be evaluated locally to ensure that the local dynamics of the area and the needs of the property owners and businesses, as well as the end users, are incorporated into the project. While the Halsted Rail Alternative would primarily affect commercial buildings, the aforementioned applies to the Halsted Rail Alternative as well.

Construction activities would include new, at grade, retained embankment, and elevated structure, station, substation, parking, yard, and access road construction. The following construction activities would be expected for the infrastructure and station construction.

3.3.3 Traffic Rerouting

During construction, vehicles, pedestrians, and buses may need to be rerouted around the construction site. Rerouting of traffic is normally done by using detours and complete street closures. The street closures may include main streets, side streets, and alleys and access points. To help mitigate the impacts on traffic routes, station and viaduct construction activities would be sequenced around these street and alley closures. However, complete closure of streets may not always be possible because residents and businesses would still need access. Therefore, temporary traffic lanes, temporary access points, or staged construction would be used. The following activities would be part of traffic rerouting activities:

- Construction signage and temporary traffic barriers.
- Temporary reduction (from two to one) in the number of thru-traffic lanes in each direction, if feasible.
- One-way traffic may be implemented on a temporary basis.
- Detours/complete street closures including alleys and access points.

- Temporary traffic lanes.
- Designated space for storage and staging of construction materials, equipment, and temporary facilities within and/or adjacent to the ROW.
- Construction vehicle access points within and/or adjacent to the ROW.
- Business, residential, and pedestrian impacts including limited parking or parking bans.

3.3.4 Demolition

All RLE alternatives require complete removal or partial demolition of existing buildings or structures. The demolition process would result in increased noise and debris. Work would be performed in accordance with local ordinances for construction activities. In general, pedestrian and vehicular traffic would not be allowed into demolition areas.

The demolition process may include concrete removal, requiring construction workers to saw cut, jackhammer, and/or knock out the existing concrete, cut or remove the existing reinforcement, or completely demolish existing concrete structures.

For removal of foundations and/or streets, to relocate existing utilities, or excavate existing ground, the contractor would excavate using bulldozers, compact tractors, or backhoes to dig and remove earth. The disposal material would be placed in dump trucks and trucked off-site. During excavation, temporary shoring may be required to protect adjacent buildings or structures.

Construction vehicles would access the construction site on a regular basis and would require special hauling routes to deliver materials and equipment to the site and remove the debris from the site. The routes may require complete street closures, temporary street shutdowns, or traffic rerouting. Depending on the type of material being removed, special handling of waste may be necessary. For example, older buildings with asbestos would require special handling. All materials would be disposed of in the proper manner, following federal, state, and local regulations.

3.3.5 Temporary Shoring

During demolition and excavation, temporary shoring may be required to protect adjacent property. The shoring would consist of steel sheet piling driven into the ground with a vibratory pile driver. The rig may be located within the construction zone or outside the ROW depending on the space limitations and access points. The temporary shoring may require the use of tiebacks. Tiebacks are long rods that would be drilled through the sheet piling, embedded into sound rock, or other approved materials, and then grouted into place.

3.3.6 Foundations

Due to the variety of structures, including CTA elevated structure, buildings, and parking garages, there would be a variety of foundations on the RLE Project. Foundations can consist of concrete

spread footings, steel pile foundations, or concrete drilled shafts. Foundation type depends on site conditions and location. To determine the geotechnical properties of the soil, a geotechnical engineer would drill exploratory borings and take soil samples. The geotechnical engineer would then test the samples, determine soil properties, and make recommendations on the type of foundation to use, as part of the design process.

All types of spread or shallow type foundations would require excavation and removal of earth to form the concrete footings. As stated above in Section 3.3.4, the use of bulldozers, bobcats, or backhoes would be used to dig and remove earth. The earth may be placed in dump trucks and shipped off-site or stored for use on the construction site for backfill. Materials shipped off-site for disposal would be handled through approved facilities.

Large cranes with pile driving leads that help guide the piles into position would be used for installation of pile foundations. A diesel hammer would drive the piles into the ground by impact. A test pile would be driven to test the pile length and capacity. Based on soil properties, the test pile would determine whether piles would be driven to a different elevation, designed to a different capacity, or would encounter rocks or boulders in the ground. Pile shoes or pile tips would be added to the end of the piles or a pre-drilled hole supported by a steel casing would be used to aid the pile installation process. It is very important for the contractor to locate existing utilities such as sewer, or cable lines before excavation or pile installation to avoid damaging the services. Evaluation of nearby foundations may be required to prevent damage to existing structures during new foundation construction.

Drilled shaft construction is performed with a crane-mounted drill rig. An auger of the design diameter would be drilled into the ground and soil would be piled nearby for removal. As the auger advanced, extensions would be added to the supporting shaft. The drill hole would be fitted with a lining where required by unsuitable soils. A pre-formed reinforcement cage would be installed and concrete would be placed to form the drilled shaft support.

3.3.7 Concrete Placement

Part of the construction logistics and process plan would be to determine the concrete plant based on location and availability of the required concrete mix. The plant would supply and deliver the concrete to the site using concrete trucks. Temporary street closures and truck routes may need to be established to access the construction site. Coordination of multiple trucks may be necessary for large pours and may require special access and scheduling. The contractor may elect to create an on-site ready mix plant to supply the concrete if space limitations and location of the nearest concrete plant require it.

Before the concrete can be poured, all necessary reinforcement and concrete forms would need to be in place. The reinforcement would be delivered on large flatbed trucks and would be stored on-site in bundles. The contractor would assure that the number of bars (and the size of bars, spacing of bars, edge clearances, etc.) is per contract documents before the concrete is poured. The formwork may consist of large steel panels or plywood to hold the wet concrete in place. To

maintain the weight of the concrete until it cures, the formwork would be braced or temporarily supported.

After arriving on-site, the truck would be positioned at the location required for the pour. If the truck could not access the location of the pour, the concrete would need to be placed by pump, conveyor system, or other method. Concrete would need to be poured within 1 to 1.5 hours after loading depending on the outside temperature and whether the truck has a retarder. During the pouring, workers would push and move the concrete into position. The concrete would be vibrated to eliminate any voids and smoothed to obtain a good finish. The concrete may need to cure for a week before forms can be removed. Concrete is typically not loaded for 28 days after placement.

3.3.8 Structural Steel Erection

Standard structural steel erection would be required for most new construction on the RLE Project. Structural steel can consist of plates, angles, girders, beams, columns, cross frames, and related elements. The steel can vary in size, length, weight, and use.

Steel members would be delivered to the site on large flatbed trucks or semi-trucks and could require special hauling permits. The construction zone would require special access areas so that the steel could be delivered, assembled on-site, stored, or moved into position. Cranes would be used to pick the pieces off the trucks, move the material overhead, and place into position. Iron workers would be located on the structure to help move the pieces into place by bolting or welding the members. The ironworkers would perform most of the steel erection procedures, which could consist of framing, bolting, welding, coping, cutting, hammering, and similar activities.

3.3.9 Equipment Definition

Demolition - Heavy equipment, efficiently sized to match available access and reach requirements, including cranes with a demolition ball, front-end loaders, shears mounted to backhoes, concrete breakers mounted to combination tractors or backhoes, dump trucks, and off-site tractors with dump trailers.

Excavation - Heavy equipment, efficiently sized to match available access and reach requirements, including backhoes, front-end loaders, concrete breakers mounted to combination tractors or backhoes, dump trucks, and off-site tractors with dump trailers.

On-site hoisting - Heavy equipment used to hoist or move materials about the construction site, efficiently sized to match available access and reach requirements, including telehandlers, front-end loaders, mobile cranes of varying sizes, crawler-mounted cranes, and track-mounted equipment.

Concrete Placement - Heavy equipment efficiently sized to match available access and reach requirements. If concrete trucks cannot directly access the pour location, concrete would typically

be placed utilizing a truck/trailer mounted concrete pump(s) or truck/trailer mounted concrete /material type conveyors.

Steel Erection - Heavy equipment, efficiently sized to match available access and reach requirements, including truck cranes, all-terrain cranes, and mobile cranes of varying sizes. Crawler-mounted cranes would typically be used to hoist and erect steel members under normal conditions, while track-mounted equipment (rail-borne equipment) may be used where platform steel and precast materials, including canopy steel framing, track work materials, and similar cannot be reached from normal ground access locations or where there are limited staging area restrictions.

3.4 Methods for Protecting Nearby Utilities and Adjacent Structures

Methods for protecting nearby utilities and adjacent structures include standard industry practice techniques. These techniques include coordinating with existing utilities and field verifying locations. The Office of Underground Coordination (OUC) requires a review of foundations that are within two feet of the property line. Dig requests must be submitted to Chicago DIGGER (Chicago Utility Alert Network) for areas within the limits of the City of Chicago and JULIE (Joint Utility Locating Information for Excavators) for areas outside the City of Chicago limits before any excavation can begin.

3.4.1 Utility Identification

Major utilities can be found on the conceptual engineering plan and profile sheets for each of the build alternatives. Further work would be required to verify the location of all utilities for each alternative.

3.4.2 Industry Practice

- Designer of Record/Owner - Identify existing location (and condition) during preliminary engineering phase for foundation design. Develop review criteria for further coordination of new underground structures, for example, foundations, cable trenches, and ductwork.
- Coordination with existing utilities.
- Leave as is if no conflict.
- Field verify locations, if a potential conflict exists, during preliminary design phase.
- Determine need to protect, redesign to clear, or relocate to allow completion of design. May require a cost impact analysis for redesign versus relocate costs.
- Plat of Survey with location of existing underground structures, with size and location of all existing private and public utilities (below and above ground).

- OUC Review.
- Department of Water Management Review with water review and sewer review.
- Preconstruction - with contractor identification and location.
- Utility contact with digger location.
- Relocation cost.
- Coordination with contractor.
- Field verify locations.
- Pothole at caisson location prior to placing temporary liner.
- Coordination with all parties.
- Identify and protect/relocate away from construction zone all known cables/systems (typically: cable TV, AT&T, gas, electric, Chicago sewer and water, fiber optic, CTA signals, CTA communications, CTA traction power, and similar). May need specific plan written into project specifications delineating contractor responsibility.

3.4.3 Adjacent Structures

New structure protection would be provided along the UPRR track for structures within 50 feet of the centerline of the adjacent UPRR track. Structure protection would be a crash wall running parallel to the UPRR track per the AREMA Manual. If the proposed CTA structure would come within 18 to 25 feet of the centerline of the adjacent UPRR track, pier protection would be provided per the Manual for Railway Engineering (AREMA 2012) and Guidelines for Railroad Grade Separation Projects (BNSF Railway and UPRR, 2007).

For conflicts with existing adjacent structures, field verification of structure location during the design phase would be necessary to evaluate the potential conflict.

3.4.4 Foundations at Interface Areas

An OUC review is required for foundations within two feet of the property line within the City of Chicago. Earth retention systems, with a named sheeting contractor and with sealed earth retention design, are to comply with OUC restrictions.

3.4.5 Monitoring of Adjacent Structures

- The contractor would develop, obtain CTA approval for, and institute a program for monitoring settlement, noise, and vibration of buildings and structures on or adjacent to the ROW. Prior to mobilization, the contractor would survey (both physically and with photos and videos) existing conditions of all areas that are to be occupied, worked on, restored or

affected in any way. The contractor would be responsible for and must repair or replace any portions of such areas damaged by his acts.

- Monitoring for settlement, noise, and vibration of buildings and structures on or adjacent to the ROW would start prior to the start of excavation, foundation work, work requiring the use of heavy equipment, or work which may cause damage to CTA or adjacent structures. Monitoring would accommodate vertical and horizontal controls.
- Settlement and vibration monitoring programs for specific structures and locations would be defined during design.
- Special provisions would be included in the construction documents to ensure that all monitoring requirements are completely outlined for contractor clarity.

Section 4
Project Schedule

The estimated project schedule to construct the proposed alternatives is presented in Attachment B. The schedule is based on unconstrained funding and design limitations. The schedule for each alternative assumes advance work that may take one to two years. The final engineering and advance work could start in 2018 and go through 2021. The advance work would consist of utility relocations, land acquisition, and other work necessary prior to starting heavy construction work. The heavy construction work is estimated to require three years and could be phased according to construction in the work segments. It is anticipated that the heavy construction work may occur during the 2022 through 2025, including one year of testing. With this construction schedule, the opening year of the RLE would be 2026.

Section 5
References

AREMA. 2012. Manual for Railway Engineering.

BNSF Railway and Union Pacific Railway. 2007. Guidelines for Railroad Grade Separation Projects. Accessed at http://www.uprr.com/reus/roadxing/industry/process/grade_separation.shtml.

CMAP. 2012. Transportation Improvement Program (2010-2015). Accessed at http://www.cmap.illinois.gov/tip.

Attachment A
Construction Activity Matrices for the Build Alternatives

UPRR HRT ROW Option	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
Construction Activity		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-1: 95th Street Station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,750	500	5-10	10-15
Elevated Concrete Structure														
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	4,100	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,090	11,917	3,701,705	5-10	10-15
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+19)	**12-30**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	600	1,174	364,700	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	170	457	892,100	5-10	10-15
Segment U-3: End of Horizontal Curve to Metra/CN Crossing (142+19 to 286+12)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	7,800	9,967	3,484,100	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	7,800	9,967	3,484,100	5-10	20-30
Construct - Michigan Avenue	24-36	x	x	x	x	x	x	x	x	7,800	9,967	3,484,100	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x	x		x	x	9,300	3,100		2-6	5-11
Construct - Michigan Avenue (2 lots)	24	x	x	x	x			x		18,600	6,200		2-7	5-12
Elevated Steel Structure														
Double Track - Hammerhead Substructure	36	x	x	x	x	x	x	x	x	43,200	84,528	26,258,400	50-100	30-35
Traction Power														
Substation - 175+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substation - 254+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

UPRR HRT ROW Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-4: Metra/CN Crossing to At Grade Track (286+12 to 310+03)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926		5-10	10-15
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,300	12,327	3,829,350	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	400	895	730,320	5-10	10-15
Segment U-5: At Grade Track to 130th Street Station Options (310+03 to 360+02)	**12-36**													
Advance Work														
Utility relocation; staging	12													
At Grade														
Double Track	24-36	x	x	x	x	x	x	x	x	22,950			5-10	20-30
Access Road														
Crossing proposed tracks at 358+00	12-24	x	x	x	x			x		6,778	2,260		5-10	5-10
Bridge for Access Road, Crossing at 358+00	24	x	x	x	x	x		x	x	3,105	4,610	495,000	5-10	10-15
Connector access road, West of Proposed CTA tracks	12	x	x	x	x			x		717	239		5-10	5-10
Segment U-6S: 130th Street South Station Option (360+02 to 380+29)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Station														
Construct - 130th Street South Station Option	24-36	x	x	x	x	x	x	x	x	6,773	2,653	696,305	5-10	20-30
Parking														
Construct - 130th Street South Station Option	24	x	x	x	x			x					2-5	5-10
At Grade														
Double Track	24-36	x		x	x			x	x	5,400				
Triple Track	24	x		x	x			x	x	7,000				
Access Road														
At South Station Option	12-24	x	x	x	x			x		5,778	1,926		5-10	5-10
Segment U-6W: 130th Street West Station Option (380+29 to 395+40)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10

UPRR HRT ROW Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Station														
Construct - 130th Street West Station Option										3,148	1,565	467,055		
Construct - 130th Street West Station Option (2 lots)	24	x	x	x	x			x					2-5	5-10
Double Track	24-36	x		x	x			x	x	12,600				
Triple Track	24	x		x	x			x	x	6,300				
Access Road														
At West Station Option	12-24	x	x	x	x			x		6,512	2,171		5-10	5-10
Bridge for Access Road, Crossing at 371+00	24	x	x	x	x	x		x	x	1,553	2,305	247,500	5-10	10-15
Segment U-7: 120th Street Yard and Shop (291+85/45+00 to 352+69/106+12)	**12-36**													
Advance Work														
Access Road														
Construct	12-24	x	x	x	x			x		10,977	3,659		5-10	5-10
Single Track	36	x		x	x	x		x	x	89,500	1,000		5-10	10-15
Double Track	36	x		x	x	x		x	x	8,100			5-10	10-15
Double Track	24	x	x	x	x	x	x	x	x	2,771	926	500	5-10	10-15
Double Track - Hammerhead Substructure	24									2,100	4,109	1,276,450		
Construct-Shop Building										10,380	3,114	1,038,000		
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
										5,000	1,100	160,000		

UPRR HRT East Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-1: 95th Street station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,750	500	5-10	10-15
Elevated Concrete Structure														
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	4,100	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,090	11,917	3,701,705	5-10	10-15
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	300	587	182,350	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	170	457	916,100	5-10	10-15
Segment U-3: End of Horizontal Curve to Metra/CN Crossing (142+00 to 285+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - Michigan Avenue	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x			x		9,300	3,100		2-6	5-11
Construct - Michigan Avenue (2 lots)	24	x	x	x	x			x		18,600	6,200		2-7	5-12
Elevated Steel Structure														
Double Track - Hammerhead Substructure	36	x	x	x	x	x	x	x	x	32,700	63,983	19,876,150	50-100	30-35
Traction Power														
Substation - 175+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substation - 254+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

UPRR HRT East Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-4: Metra/CN Crossing to At Grade Track (285+00 to 308+83)	**12-36**													
Advance Work														
													1	
Double Track	24									2,771	926			
Double Track - Hammerhead Substructure	24-36									6,300	12,327	3,829,350		
Double Track - TPG, Hammerhead Substructure	24-36									400	897	730,320		
Segment U-5: At Grade Track to 130th Street Station Options (308+83 to 359+00)	**12-36**													
Advance Work														
	12													
At Grade														
Double Track										22,950				
Access Road														
Crossing proposed tracks at 357+00	12-24	x	x	x	x			x		6,778	2,260		5-10	5-10
Bridge for access Road, Crossing at 357+00	24	x	x	x	x	x		x	x	3,105	4,610	495,000	5-11	10-15
Connector access road, West of Proposed CTA tracks	12	x	x	x	x			x		717	239		5-10	5-10
Segment U-6S: 130th Street South Station Option (359+00 to 379+27)	**12-36**													
Advance Work														
	12	x				x							1	5-10
Station														
Construct - 130th Street South Station Option										6,773	2,653	696,305		
Parking														
At South Station Option	24	x	x	x	x			x		13,900	4,700		2-5	5-10
At Grade														
Double Track	24-36								x	4,500				
Triple Track	24								x	7,700				
Access Road														
At South Station Option	12-24	x	x	x	x			x		5,778	1,926		5-10	5-10
Segment U-6W: 130th Street West Station Option (379+27 to 394+38)	**12-36**													
Advance Work														
	12	x				x							1	5-10
Station														
Construct - 130th Street West Station Option										3,148	1,565	467,055		

UPRR HRT East Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Parking														
At West Station Option (2 lots)	24	x	x	x	x			x		27,800	9,400		2-5	5-10
At Grade														
Double Track	24-36									12,150				
Triple Track	24									6,300				
Access Road														
At West Station Option	12-24	x	x	x	x			x		6,512	2,171		5-10	5-10
Bridge for Access Road, Crossing at 369+50	24	x	x	x	x	x		x	x	1,553	2,305	247,500	5-10	10-15
Segment U-7: 120th Street Yard and Shop (290+26/45+00 to 351+67/106+79)	**12-36**													
Advance Work														
Access Road														
Construct	12-24	x	x	x	x			x		10,977	3,659		5-10	5-10
At Grade														
Single Track		x		x	x	x		x	x	89,500	1,000		5-10	
Double Track		x		x	x	x		x	x	8,100			5-10	
Retained Embankment														
Double Track	24									2,771	926	500		
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24									2,100	4,109	1,276,450		
Shop Facility														
Construct-Shop Building										10,380	3,114	1,038,000		
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
Traction Power														
										5,000	1,100	160,000		

UPRR HRT West Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-1: 95th Street Station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,750	500	5-10	10-15
Elevated Concrete Structure														
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	4,100	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,090	11,917	3,701,705	5-10	10-15
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+43)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	600	1,174	364,700	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	340	951	1,581,000	5-10	10-15
Segment U-3A: End of Horizontal Curve to Prairie/UPRR Crossing (142+43 to 275+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - Michigan Avenue	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x	x		x	x	9,300	3,100		2-5	5-10
Construct -Michigan Avenue (2 lots)	24	x	x	x	x			x		18,600	6,200		2-5	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	36	x	x	x	x	x	x	x	x	29,700	58,113	18,052,650	50-100	30-35
Traction Power														
Substation - 180+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substation - 260+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

UPRR HRT West Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-3B: Prairie/UPRR crossing to Metra/CN Crossing (275+00 to 287+20)	**24-36**													
Advance Work														
Utility relocation; staging														
Elevated Steel Structure														
Double Track -Hammerhead Substructure	36									1,200	2,438	729,400		
Double Track - Straddle Bent Substructure	36									1,020	3,014	3,948,600		
Segment U-4: Metra/CN Crossing to At Grade Track (287+20 to 311+02)	**12-36**													
Advance Work														
Utility relocation; staging														
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926		5-10	10-15
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-36									5,700	11,153	3,464,650		
Double Track - TPG, Hammerhead Substructure	24-36									400	895	730,320		
Segment U-5: At Grade Track to 130th Street Station Options (311+02 to 361+19)	**12-36**													
Advance Work														
Utility relocation; staging	12													
At Grade														
Double Track										23,400				
Access Road														
Crossing proposed tracks at 360+00	12-24	x	x	x	x			x		6,778	2,260		5-10	5-10
Bridge for Access Road, Crossing at 360+00	24	x	x	x	x	x		x	x	3,105	4,610	495,000	5-10	10-15
Connector access road, West of Proposed CTA tracks	12	x	x	x	x			x		717	239		5-10	5-10
Segment U-6S: South 130th Street Station Option (361+19 to 381+46)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Station														
Construct - 130th Street South Station Option										6,773	2,653	696,305		
Parking														
Construct - 130th Street South Station Option	24	x	x	x	x			x		13,900	4,700		2-5	5-10
At Grade														

UPRR HRT West Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Double Track	24-36									5,400				
Triple Track	24									7,700				
Access Road														
At South Station Option	12-24	x	x	x	x			x		5,778	1,926		5-10	5-10
Segment U-6W: West 130th Street Station Option (381+46 to 396+57)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Station														
Construct - 130th Street West Option										3,148	1,565	467,055		
Parking														
Construct - 130th Street West Option (2 lots)	24	x	x	x	x			x		27,800	9,400		2-5	5-10
At Grade														
Double Track	24-36	x		x	x			x	x	13,050				
Triple Track	24	x		x	x			x	x	5,600				
Access Road														
At West Station Option	12-24	x	x	x	x			x		6,512	2,171		5-10	5-10
Bridge for Access Road, Crossing at 372+00	24	x	x	x	x			x		1,553	2,305	247,500	5-10	10-15
Segment U-7: 120th Street Yard and Shop (292+45/45+00 to 353+86/106+79)	**12-36**													
Advance Work														
Utility relocation; staging														
Access Road														
Construct	12-24	x	x	x	x			x		10,977	3,659		5-10	5-10
At Grade														
Single Track		x		x	x	x		x	x	89,500	1000		5-10	10-15
Double Track		x		x	x	x		x	x	8,100			5-10	10-15
Retained Embankment														
Double Track	24									2,771	926	500		
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24									2,100	4,109	1,276,450		
Shop Facility														
Construct-Shop Building										10,380	3,114	1,038,000		
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
Traction Power														
Substation - Yard										5,000	1,100	160,000		

UPRR HRT West Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Final Phase - 95th Street Station to 130th Street (96+50 to 382+30/396+50)														
Signal/Communication														
Signal/Interlocking														
Communication System														

Halsted Street HRT Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment H-1: 95th Street Station to Beginning of Horizontal Curve at Halsted (96+60 to 158+00)	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,500	500	5-10	10-15
Elevated Concrete Structure														
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track-Hammerhead Substructure	24	x	x	x	x	x	x	x	x	2,381	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	8,344	26,820	8,625,155	5-10	10-15
Segment H-2: Horizontal Curve at Halsted (158+00 to 168+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track -TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	340	914	1,664,200	5-10	10-15
Segment H-3: End of Horizontal Curve to 119th Street Station (168+00 to 285+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	2,903	4,052	4,764,000	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	2,903	4,052	4,764,000	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	12,600	23,814	7,658,700	50-100	30-35
Double Track - Straddle Bent Substructure	24-36	x	x	x	x	x	x	x	x	13,104	32,261	45,252,480	50-100	30-35
Traction Power														
Substations - 101st Street	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substations - 110th Street	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

Halsted Street HRT Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment H-4: 119th Street station to Vermont Avenue station (285+00 to 367+30)	**12-36**													
Advance Work														
	12													
Stations														
Construct - 119th Street										2,903	4,052	4,764,000		
Construct - Vermont Avenue										3,363	3,914	4,741,000		
Parking														
Construct - 119th Street	12									9,300	3,100		2-5	5-10
Construct - Vermont Avenue	24									13,900	4,700		2-5	5-10
Double Track - Hammerhead Substructure	24-36									8,400	15,876	5,105,800		
Double Track - Straddle Bent Substructure	24-36									8,736	21,507	30,168,320		
Triple Track - Straddle Bent Substructure	12-24									1,260	3,420	5,875,200		
										5,000	1,100	160,000		
										5,000	1,100	160,000		
Segment H-5: 119th Street Yard and Shop (299+47/500+00 to 306+96/1014+64)	**12-36**													
Advance Work														
Single Track		x		x	x	x		x	x	87,000	1,000		5-10	
Double Track		x		x	x	x		x	x	3,150			5-10	
Double Track	24									3,709	1,242	500		
Double Track - Hammerhead Substructure	24									3,300	6,237	2,005,850		
Double Track - Straddle Bent Substructure	24-36									2,520	6,204	8,702,400		
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct-Shop Building	24-36	x	x	x	x	x	x	x	x	8,075	2,423	807,500	5-10	20-30
Access Road														
Construct	12-24	x	x	x	x			x		7,041	2,347		2-5	5-10
										5,000	1,100	160,000		

Halsted Street HRT		Construction Equipment												
Construction Activity	Duration (Months)	Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed	Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day

Conditions/Assumptions used in the Construction Matrix

The intent of this Construction Matrix is to provide a general level of construction activity that may occur with each alternative and is to be used for the NEPA process. The Construction Matrix identifies a range of potential impacts based on currently available information and is not intended to be used for scheduling construction nor is it intended to be used for cost estimating construction.

Activity

Segments and grouping of activities based on the Conceptual Engineering Plan and Profile Drawings, July 2012, revised September 2012.
Work elements based on the Conceptual Engineering Plans.
Stationing based on the Conceptual Engineering Plan and Profile Drawings.
Trackwork is included with the listed activity.

Duration (Months)

Estimate of the expected duration of work for the activity row.
Activities are not sequential except for Advance Work if required in the segment.
Construction implementation and maintaining operations will have a significant impact on construction durations.

Construction Equipment

Possible types of construction equipment that may be used for some duration within an activity.

Soil (CY)

Represents the potential soil or aggregate that may be excavated, removed, or fill. Concrete removed is included in quantity.
Includes caisson and foundation excavation.

Concrete(CY)

Represents the potential quantity of new concrete including caissons.
Concrete at stations includes building and platforms. Concrete for track support included in Elevated Structure

Structural Steel (LB)

Represents the potential quantity of new structural steel.
Structural Steel at stations includes building and platforms. Structural Steel for track support included in Elevated Structure.

Avg Truck Trips Per Work Day

Estimated average number of truck trips for an activity per work day. Excludes minor vehicles and worker vehicles.

Ave. Workers Per Work Day

Estimated average number of workers for an activity per work day.

Attachment B
Construction Schedules for the Build Alternatives

Bus Rapid Transit (BRT) Alternative Construction Schedule	Duration (Weeks)	Quarter Years											
		1			2			3			4		
		1	2	3	4	5	6	7	8	9	10	11	12
Advance Work													
Utility relocation; staging	12												
Stop													
Construct - 103rd Street	8												
Construct - 111th Street	8												
Construct - Kensington Avenue	8												
Construct - 130th Street	8												
Parking Lot													
Construct - 103rd Street	12												
Construct - 111th Street	16												
Construct - Kensington Avenue	20												
Construct -130th Street	26												
Signal/Communication													
Traffic Signal Prioritization													
Upgrade-Lafayette Ave	3												
Upgrade-State Street	3												
Upgrade-Michigan Avenue	3												
Upgrade-99th Place	3												
Upgrade-100th Street	3												
Upgrade-103rd Street	3												
Upgrade-107th Street	3												
Upgrade-111th Street	3												
Upgrade-115th Street	3												
Upgrade-119th Street	3												
Upgrade-127th Street	3												
Traffic Signal													
Construct-130th Street	4												
Roadway													
Pavement Markings	2												
ADA compliance													
103rd Street	2												
Kensington Avenue	2												
130th Street	2												

Stop Assumptions:

Stops will be constructed one direction of traffic at a time to reduce traffic due to construction activities and to reduce disturbance to existing bus services.

Stop construction start dates are staggered to reduce disturbance to existing bus service.

Traffic Signal Assumptions:

Eberhart Avenue signal constructed once 130th Street parking lot is near completion. Possible entrance of parking lot at Eberhart Avenue therefore signal shall be constructed after entrance to parking lot is constructed.

Traffic Signal Prioritization Assumptions:

Traffic signal prioritization assumes that light poles will be upgraded with detector and equipment. The installation is staggered to reduce traffic during construction activities.

UPRR HRT ROW Option Construction Schedule	Duration (Months)	YEARS 1	2	3	4	5
Segment U-1: 95th Street Station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**					
Advance Work						
Signal/cross-over installation; utility relocation; staging	12					
At Grade						
Single Track	12-18					
Retained Embankment						
Single Track	24					
Elevated Concrete Structure						
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24					
Elevated Steel Structure						
Single Track - Hammerhead Substructure	24					
Double Track - Hammerhead Substructure	24-36					
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+19)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-30					
Double Track - TPG, Hammerhead Substructure	24-30					
Double Track - Straddle Bent Substructure	24-30					
Segment U-3: End of Horizontal Curve to Metra/CN Crossing (142+19 to 286+12)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Stations						
Construct - 103rd Street	24-36					
Construct - 111th Street	24-36					
Construct - Michigan Avenue	24-36					
Parking						
Construct - 103rd Street	12					
Construct - 111th Street	12					
Construct - Michigan Avenue (2 lots)	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	36					
Traction Power						
Substation - 175+00	24					
Substation - 254+00	24					
Segment U-4: Metra/CN Crossing to At Grade Track (286+12 to 310+03)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Retained Embankment						
Double Track	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-36					
Double Track - TPG, Hammerhead Substructure	24-36					
Segment U-5: At Grade Track to 130th Street Station Options (310+03 to 360+02)	**12-36**					
Advance Work						
Utility relocation; staging	12					
At Grade						
Double Track	24-36					
Access Road						
Crossing proposed tracks at 358+00	12-24					
Bridge for Access Road, Crossing at 358+00	24					
Connector access road, West of Proposed CTA tracks	12					
Segment U-6S: 130th Street South Station Option (360+02 to 380+29)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Station						
Construct - 130th Street South Station Option	24-36					
Parking						
Construct - 130th Street South Station Option	24					
At Grade						
Double Track	24-36					
Triple Track	24					
Access Road						
At South Station Option	12-24					
Segment U-6W: 130th Street West Station Option (380+29 to 395+40)	**12-36**					
Advance Work						
Utility relocation; staging	24					
Station						
Construct - 130th Street West Station Option	24-36					
Parking						
Construct - 130th Street West Station Option (2 lots)	24					
At Grade						
Double Track	24-36					
Triple Track	24					
Access Road						
At West Station Option	12-24					
Bridge for Access Road, Crossing at 371+00	24					
Segment U-7: 120th Street Yard and Shop (291+85/45+00 to 352+69/106+12)	**12-36**					
Advance Work						
Utility relocation; staging	24					
Access Road						
Construct	12-24					
At Grade						
Single Track	36					
Double Track	36					
Retained Embankment						
Double Track	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24					
Shop Facility						
Construct-Shop Building	24-36					
Parking						
Construct - Shop	24					
Traction Power						
Substation - Yard	24					
Final Phase - 95th Street Station to 130th Street (96+50 to 380+50/396+00)	**10 - 12**					
Signal/Communication						
Signal/Interlocking	12					
Communication System	12					

UPRR HRT East Side Option Construction Schedule	Duration (Months)	YEARS 1	2	3	4	5
Segment U-1: 95th Street Station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**					
Advance Work						
Signal/cross-over installation; utility relocation; staging	12					
At Grade						
Single Track	12-18					
Retained Embankment						
Single Track	24					
Elevated Concrete Structure						
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24					
Elevated Steel Structure						
Single Track - Hammerhead Substructure	24					
Double Track - Hammerhead Substructure	24-36					
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+00)	**24-36**					
Advance Work						
Utility relocation; staging	12					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-30					
Double Track - TPG, Hammerhead Substructure	24-30					
Double Track - Straddle Bent Substructure	24-30					
Segment U-3: End of Horizontal Curve to Metra/CN Crossing (142+00 to 285+00)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Stations						
Construct - 103rd Street	24-36					
Construct - 111th Street	24-36					
Construct - Michigan Avenue	24-36					
Parking						
Construct - 103rd Street	12					
Construct - 111th Street	12					
Construct - Michigan Avenue (2 lots)	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	36					
Traction Power						
Substation - 175+00	24					
Substation - 254+00	24					
Segment U-4: Metra/CN Crossing to At Grade Track (285+00 to 308+83)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Retained Embankment						
Double Track	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-36					
Double Track - TPG, Hammerhead Substructure	24-36					
Segment U-5: At Grade Track to 130th Street Station Options (308+83 to 359+00)	**12-36**					
Advance Work						
Utility relocation; staging	12					
At Grade						
Double Track	24-36					
Access Road						
Crossing proposed tracks at 357+00	12-24					
Bridge for Access Road, Crossing at 357+00	24					
Connector access road, West of Proposed CTA tracks	12					
Segment U-6S: 130th Street South Station Option (359+00 to 379+27)	**12-36**					
Advance Work						
Utility relocation; staging	24					
Station						
Construct - 130th Street South Station Option	24-36					
Parking						
At South Station Option	24					
At Grade						
Double Track	24-36					
Triple Track	24					
Access Road						
At South Station Option	12-24					
Segment U-6W: 130th Street West Station Option (379+27 to 394+38)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Station						
Construct - 130th Street West Station Option	24-36					
Parking						
At West Station Option (2 lots)	24					
At Grade						
Double Track	24-36					
Triple Track	24					
Access Road						
At West Station Option	12-24					
Bridge for Access Road, Crossing at 369+50	24					
Segment U-7: 120th Street Yard and Shop (290+26/45+00 to 351+67/106+79)	**12-36**					
Advance Work						
Utility relocation; staging	24					
Access Road						
Construct	12-24					
At Grade						
Single Track	36					
Double Track	36					
Retained Embankment						
Double Track	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24					
Shop Facility						
Construct-Shop Building	24-36					
Parking						
Construct - Shop	24					
Traction Power						
Substation - Yard	24					
Final Phase - 95th Street Station to 130th Street (96+50 to 379+70/394+53)	**10 - 12**					
Signal/Communication						
Signal/Interlocking	12					
Communication System	12					

UPRR HRT West Side Option Construction Schedule	Duration (Months)	YEARS 1	2	3	4	5
Segment U-1: 95th Street Station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**					
Advance Work						
Signal/cross-over installation; utility relocation; staging	12					
At Grade						
Single Track	12-18					
Retained Embankment						
Single Track	24					
Elevated Concrete Structure						
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24					
Elevated Steel Structure						
Single Track - Hammerhead Substructure	24					
Double Track - Hammerhead Substructure	24-36					
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+43)	24-36					
Advance Work						
Utility relocation; staging	12					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-30					
Double Track - TPG, Hammerhead Substructure	24-30					
Double Track - Straddle Bent Substructure	24-30					
Segment U-3A: End of Horizontal Curve to Prairie/UPRR Crossing (142+43 to 275+00)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Stations						
Construct - 103rd Street	24-36					
Construct - 111th Street	24-36					
Construct - Michigan Avenue.	24-36					
Parking						
Construct - 103rd Street	12					
Construct - 111th Street	12					
Construct -Michigan Avenue (2 lots)	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-36					
Traction Power						
Substation - 180+00	24					
Substation - 260+00	24					
Segment U-3B: Prairie/UPRR crossing to Metra/CN Crossing (275+00 to 287+20)	**36**					
Advance Work						
Utility relocation; staging	24					
Elevated Steel Structure						
Double Track -Hammerhead Substructure	24					
Double Track - Straddle Bent Substructure	36					
Segment U-4: Metra/CN Crossing to At Grade Track (287+20 to 311+02)	**24-36**					
Advance Work						
Utility relocation; staging	24					
Retained Embankment						
Double Track	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-36					
Double Track - TPG, Hammerhead Substructure	24-36					
Segment U-5: At Grade Track to 130th Street Station Options (311+02 to 361+19)	**12-36**					
Advance Work						
Utility relocation; staging	24					
At Grade						
Double Track	24-36					
Access Road						
Crossing proposed tracks at 360+00	12-24					
Bridge for Access Road, Crossing at 360+00	24					
Connector access road, West of Proposed CTA tracks	12					
Segment U-6S: South 130th Street Station Option (361+19 to 381+46)	**24-36**					
Advance Work						
Utility relocation; staging	24					
Station						
Construct - 130th Street South Station Option	24-36					
Parking						
Construct - 130th Street South Station Option	24					
At Grade						
Double Track	24-36					
Triple Track	24					
Access Road						
At South Station Option	12-24					
Segment U-6W: West 130th Street Station Option (381+46 to 396+57)	**12-36**					
Advance Work						
Utility relocation; staging	24					
Station						
Construct - 130th Street West Option	24-36					
Parking						
Construct - 130th Street West Option (2 lots)	24					
At Grade						
Double Track	24-36					
Triple Track	24					
Access Road						
At West Station Option	12-24					
Bridge for Access Road, Crossing at 372+00	24					
Segment U-7: 120th Street Yard and Shop (292+45/45+00 to 353+86/106+79)	**12-36**					
Advance Work						
Utility relocation; staging	24					
Access Road						
Construct	12-24					
At Grade						
Single Track	36					
Double Track	36					
Retained Embankment						
Double Track	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24					
Shop Facility						
Construct-Shop Building	24-36					
Parking						
Construct - Shop	24					
Traction Power						
Substation - Yard	24					
Final Phase - 95th Street Station to 130th Street (96+50 to 382+30/396+50)	**10 - 12**					
Signal/Communication						
Signal/Interlocking	12					
Communication System	12					

Halsted Street HRT Construction Schedule	Duration (Months)	YEARS 1	2	3	4	5
Segment H-1: 95th Street Station to Beginning of Horizontal Curve at Halsted (96+50 to 158+00)	**12-36**					
Advance Work						
Signal/cross-over installation; utility relocation; staging	12					
At Grade						
Single Track	12-18					
Retained Embankment						
Single Track	24					
Elevated Concrete Structure						
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24					
Elevated Steel Structure						
Single Track-Hammerhead Substructure	24					
Double Track - Hammerhead Substructure	24-36					
Segment H-2: Horizontal Curve at Halsted (158+00 to 168+00)	**12-30**					
Advance Work						
Utility relocation; staging	12					
Elevated Steel Structure						
Double Track -TPG, Hammerhead Substructure	24-30					
Double Track - Straddle Bent Substructure	24-30					
Segment H-3: End of Horizontal Curve to 119th Street Station (168+00 to 285+00)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Stations						
Construct - 103rd Street	24-36					
Construct - 111th Street	24-36					
Parking						
Construct - 103rd Street	12					
Construct - 111th Street	12					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-36					
Double Track - Straddle Bent Substructure	24-36					
Traction Power						
Substations - 101st Street	24					
Substations - 110th Street	24					
Segment H-4: 119th Street station to Vermont Avenue station (285+00 to 367+30)	**12-36**					
Advance Work						
Utility relocation; staging	12					
Stations						
Construct - 119th Street	24-36					
Construct - Vermont Avenue	24-36					
Parking						
Construct - 119th Street	12					
Construct - Vermont Avenue	12					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24-36					
Double Track - Straddle Bent Substructure	24-36					
Triple Track - Straddle Bent Substructure	12-24					
Traction Power						
Substations - 118th Place	24					
Substations - 126th Street	24					
Segment H-5: 119th Street Yard and Shop (299+47/500+00 to 306+96/1014+64)	**12-36**					
Advance Work						
Utility relocation; staging	12					
At Grade						
Single Track	24-36					
Double Track	24-36					
Retained Embankment						
Double Track	24					
Elevated Steel Structure						
Double Track - Hammerhead Substructure	24					
Double Track - Straddle Bent Substructure	24-36					
Parking						
Construct - Shop	24					
Shop Facility						
Construct-Shop Building	24-36					
Access Road						
Construct	12-24					
Traction Power						
Substations - Yard	24					
Final Phase - 95th Street Station to 129th Street (STA 96+50 to 367+00)	**10 - 12**					
Signal/Communication						
Signal/Interlocking	12					
Communication System	12					

Attachment C
2014-2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Appendix H

Transportation Technical Memorandum

- Final EIS Addendum H, Transportation Technical Memorandum, July 2022
  - Attachment A, Existing Condition
  - Attachment B, No Build
  - Attachment C, Build Condition (Unmitigated)
  - Attachment D, Build Condition (Mitigated)

Chicago Red Line Extension Project

Transportation

Final EIS Addendum H

July 2022

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Table of Contents

Section 1 - Summary **1-1**
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-2
3.3 Area of Potential Impact 3-3
3.4 Methods 3-4
Section 4 - Affected Environment **4-1**
4.1 Public Transportation 4-1
4.2 Traffic 4-5
4.3 Freight Transportation 4-10
4.4 Bicycle Facilities 4-12
4.5 Pedestrians 4-14
4.6 Parking 4-14
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-5
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative – Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4
Figure 3-1: Area of Potential Impact 3-5
Figure 3-2: Study Intersections for Transportation Impact Analysis 3-9
Figure 3-3: Study Intersection Traffic Count 3-13
Figure 4-1: Existing Public Transportation in the API 4-2
Figure 4-2: Intersection Control Types in the API 4-9

Figure 4-3: Freight Railroads in the API 4-11
Figure 4-4: Existing Bicycle Facilities within and near the API 4-13
Figure 5-1: 130th Street Station Traffic Circulation 5-6

Tables

Table 1-1: Transportation - Impacts Summary 1-1
Table 1-2: Summary of Mitigated Intersections within the Area of Potential Impact 1-3
Table 3-1: Area of Potential Impact Study Intersections 3-6
Table 3-2: Historic Average Daily Traffic on Roadways within the API 3-10
Table 4-1: Existing Bus Route Information within the Area of Potential Impact 4-3
Table 4-2: Existing CTA and Pace Bus Service Hours and Peak Headways 4-4
Table 4-3: Metra Boardings and Parking by Station 4-5
Table 4-4: Existing Intersection Level of Service Comparing Draft and Final EIS Values..... 4-6
Table 4-5: Existing On-Street Parking 14
Table 5-1: No Build Intersection Level of Service Comparing Draft and Final EIS Values..... 5-2
Table 5-2: Union Pacific Railroad Alternative Intersection Level of Service Comparing Draft and Final EIS Values 5-10
Table 5-3: Mitigation Measures for the Preferred Alignment (2050) Conditions 5-13
Table 5-4: Preferred Alignment Mitigated Intersection (2050) Level of Service..... 5-14
Table 5-5: Preferred Alignment Park & Ride Facilities 5-21

Attachments

Attachment A 2020 Existing Condition
Attachment B 2050 No Build Condition
Attachment C 2050 Build Condition (Unmitigated)
Attachment D 2050 Build Condition (Mitigated)

Abbreviations

ADA	Americans with Disabilities Act
API	area of potential impact
CCDoTH	Cook County Department of Transportation and Highways
CDOT	Chicago Department of Transportation
CIP	CREATE 75th Street Corridor Improvement Project
CN/MED	Canadian National/Metra Electric District

CMAP	Chicago Metropolitan Agency for Planning
CREATE	Chicago Region Environmental and Transportation Efficiency
CSS & SBRR	Chicago South Shore & South Bend Railroad
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
GIS	Geographic Information System
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt
LOS	level of service
MED	Metra Electric District
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NICTD	Northern Indiana Commuter Transportation District
NS	Norfolk Southern
RI	Metra Rock Island District
RLE	Red Line Extension
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
UPRR	Union Pacific Railroad

Section 1 - Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on transportation facilities that include public transportation, vehicular and freight traffic, cyclists, pedestrians, and parking.

Impacts on the transportation facilities were identified based on the predicted changes from the existing conditions to the horizon year of 2050 using the regional travel demand model, Chicago Metropolitan Agency for Planning's (CMAP) *ON TO 2050*. The impacts on transportation facilities were evaluated through a combination of qualitative and quantitative analysis. **Section 3** presents the specific methods used to determine impacts. The following paragraphs summarize the impacts and mitigation measures for the No Build Alternative and the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative. The summary of these impacts can also be found in **Table 1-1.**

Table 1-1: Transportation - Impacts Summary

Alternative	Permanent Impacts						Construction Impacts
	Public Transportation	Vehicular Traffic	Freight Transportation	Bicycles Facilities	Pedestrians	Parking	
No Build Alternative	No Impacts	Adverse Impacts	No Impacts	No Impacts	No Impacts	No Impacts	No Impacts
Preferred Alignment	Beneficial	Impacts would not be adverse after mitigation	No Impacts	Beneficial	Impacts would not be adverse after mitigation	Impacts would not be adverse after mitigation	No Impacts

People using public transportation would benefit from the extension of the Red Line south from the 95th Street/Dan Ryan terminal. Various bus routes within the area of potential impact (API) would be rerouted to complement the RLE Project and provide a means for connectivity to the expanded service. The extension of the Red Line would provide an alternative mode of travel to reach downtown Chicago (and destinations between downtown Chicago and 95th Street) for people south of the 95th Street/Dan Ryan terminal. There would be no adverse permanent impacts on public transportation services for the Preferred Alignment. Temporary construction impacts on public transportation, including intermittent delays and detours, would occur.

The traffic analysis consisted of analyzing 49 intersections within the API. **Table 1-2** provides a summary of the intersections that are projected to experience impacts from the Preferred Alignment based on 30 percent plans and the 2050 Preferred Alignment condition. A summary of all the intersections within the API can be found in **Tables 4-4**, **5-1**, **5-2**, and **5-4**. At intersections where the level of service (LOS) is undesirable (LOS E or LOS F) or where the existing storage length for turning lanes is insufficient based on the red time queue analysis, mitigation measures have been identified to offset the insufficiencies that are attributable to the RLE Project. After mitigation, there would be no adverse permanent impacts from the Preferred Alignment. Temporary construction impacts on traffic would occur during construction activities. The temporary impacts would be mitigated by following the applicable federal, state, and local requirements for construction activities.

There would be no permanent impacts on freight transportation due to the implementation of the Preferred Alignment. There would be temporary impacts during construction of the Preferred Alignment due to temporary closures of the roadways or highways to erect the aerial structures and superstructures. Railroad flagging would be included where any construction crosses or is adjacent to railroad operations.

There would be no adverse permanent impacts on pedestrians after mitigation for the Preferred Alignment. Mitigation measures include pedestrian crosswalks and/or pedestrian crossing gates at the at-grade railroad crossings of the UPRR tracks near the Preferred Alignment.

Bicycle facilities would benefit from the implementation of the Preferred Alignment. The four proposed RLE stations would have bicycle parking to accommodate bicyclists. The Preferred Alignment would create efficient transit connections, as well as provide potential future connections, to the RLE and the larger network of Chicago Transit Authority (CTA) stops and stations for bicyclists.

There would be no permanent impacts on parking under either the No Build Alternative or Preferred Alignment.

The Preferred Alignment has the potential for cumulative impacts. With the Preferred Alignment, freight traffic would remain on the existing UPRR tracks. Although the project would not increase the number of freight trains, with increased traffic bound for stations (including bus traffic, bicyclists, and pedestrians), delays at the at-grade crossings may increase.

Table 1-2: Summary of Potentially Affected Intersections within the Area of Potential Impact

Intersection ID	Intersection	Control Type	Existing (2020)		No Build Alternative (2050)		Preferred Alignment - Mitigated (2050)	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
16	103rd Street and Halsted Street	Signalized	E	C	F	D	F	D
52	115th Street and Michigan Avenue	Signalized	B	D	C	E	C	D
55a	115th Street and Cottage Grove Avenue (West)	Signalized	D	C	D	D	D	D
55b	115th Street and Cottage Grove Avenue (East)	Signalized	F	D	F	F	F	F
60	119th Street and Halsted Street	Signalized	C	C	C	D	C	C
64	127th Street and Paulina Street	Signalized	C	C	D	E	D	D
65	127th Street and Marshfield Avenue	Signalized	D	C	D	D	D	D
66	127th Street and Ashland Avenue	Signalized	C	C	D	C	C	C
68	127th Street and Halsted Street	Signalized	C	C	C	D	C	C
70	127th Street and Vermont Street and Wallace Street	Signalized	C	D	E	F	B	B
71	127th Street and State Street	Signalized	A	B	B	C	B	B
73	130th Street and Indiana Avenue	Signalized	B	B	C	C	C	B

Section 2 - Project Description and Background

CTA, as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic

Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station

would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

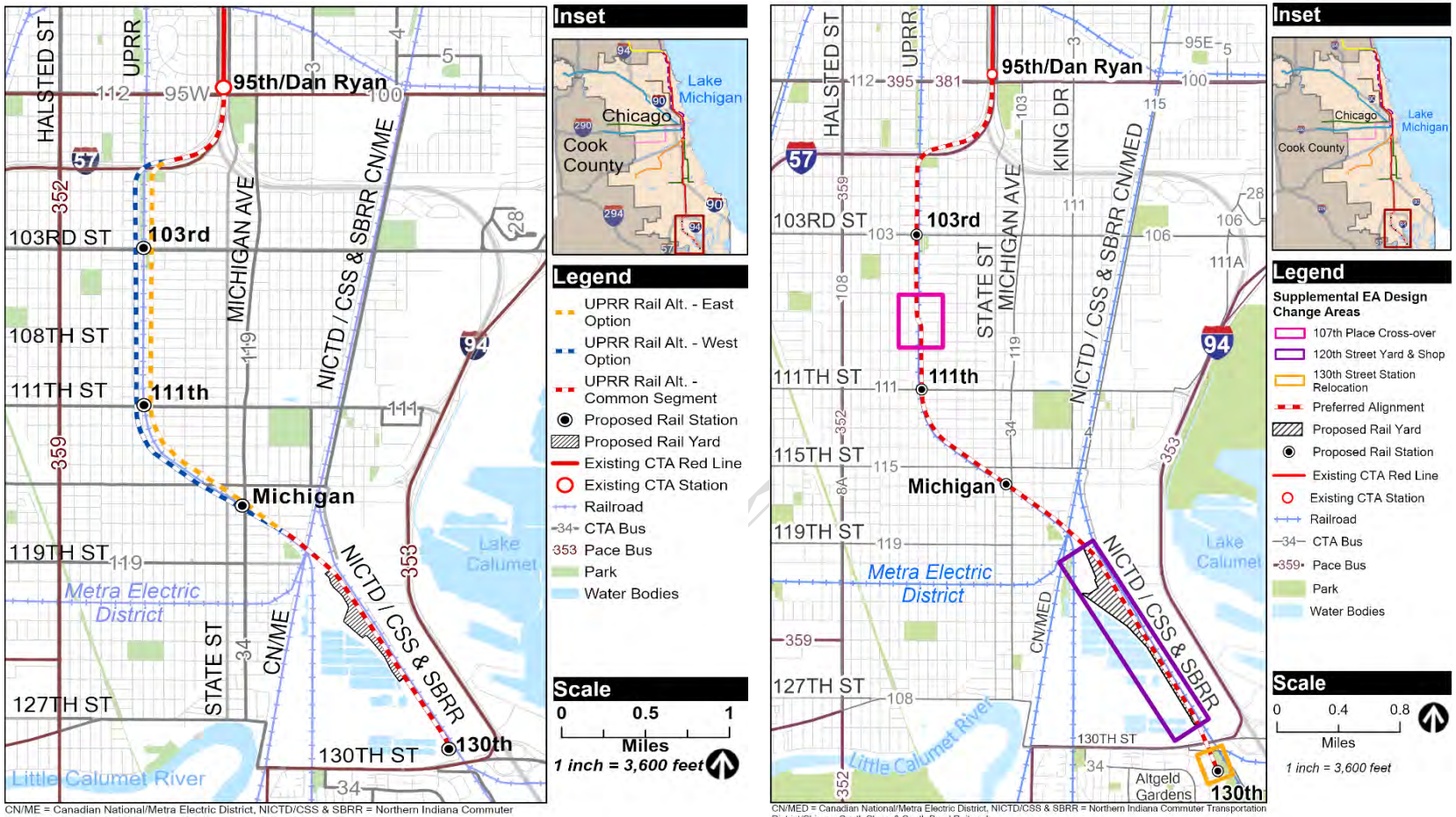

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix H** for the Draft EIS analysis have been carried forward to evaluate the Preferred Alignment. This section documents the methodology for evaluating the transportation systems within the API, consistency with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

One of the applicable federal regulations used for the Draft EIS, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), expired September 30, 2009. Funding for SAFETEA-LU was renewed following that expiration date until passage of its replacement, Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2012. In 2015, MAP-21 expired and was replaced with the Fixing America's Surface Transportation (FAST) Act. This transportation analysis was completed in compliance of FAST Act requirements. However, the updated regulation has no effect on the analysis of transportation impacts of the Preferred Alignment. There are no additional changes to the applicable federal regulations referenced in **Appendix H** of the Draft EIS.

3.1.1 Federal

Applicable federal regulations for the analysis of transportation impacts are provided by the FAST Act, Public Law 114-94, signed into law on December 4, 2015. The FAST Act focuses on reducing traffic congestion, increasing intermodal connectivity, protecting the environment, and reducing delays in project delivery. It provides funding and changes the policy and programmatic framework for investments to guide the growth and development of the country's vital transportation infrastructure (Federal Highway Administration 2015).

3.1.2 State

There are no changes to the applicable state regulations referenced in **Appendix H** of the Draft EIS. As noted in the Draft EIS, Illinois state law does not require additional transportation environmental analysis to be performed for proposed projects subject to NEPA.

3.1.3 Local

The Chicago area's comprehensive regional plan identified in the Draft EIS, CMAP's *GO TO 2040*, has been superseded by CMAP's *ON TO 2050* regional plan (adopted in 2018). However, the updated

plan has no effect on the approach of the regional transportation network for the Preferred Alignment. There are no additional changes to the applicable local regulations referenced in **Appendix H** of the Draft EIS.

3.2 Impact Analysis Thresholds

The Draft EIS future baseline year of 2030 for transportation analysis has been updated to year 2050 for the Preferred Alignment analysis. Consistent with the Draft EIS approach, FTA, CTA, Chicago Department of Transportation (CDOT), Illinois Department of Transportation (IDOT), and Cook County Department of Transportation and Highways (CCDoTH) transportation analysis criteria guidance are used as the basis for the thresholds of impact for this project. There are no additional changes to the impact analysis thresholds referenced in **Appendix H** of the Draft EIS.

3.2.1 Public Transportation

There are no changes to the impact analysis threshold for public transportation referenced in **Appendix H** of the Draft EIS.

3.2.2 Traffic

Like the Draft EIS, the impact threshold for traffic for the Final EIS is a change in intersection LOS from LOS A, B, C, or D under the No Build Alternative to LOS E or F under the Build Alternative. This change in intersection LOS would result in an adverse impact. However, the Final EIS also includes analysis of storage capacity for turning lanes. Lanes in which storage capacity was not adequate for vehicle traffic would be considered an adverse impact. Storage capacity for turning lanes is based on red time queue formula provided in the IDOT Bureau of Design and Environment manual. There are no additional changes to the impact analysis threshold for traffic referenced in **Appendix H** of the Draft EIS.

3.2.3 Freight Transportation

There are no changes to the impact analysis threshold for freight transportation referenced in **Appendix H** of the Draft EIS.

3.2.4 Bicycles

There are no changes to the impact analysis threshold for bicycles referenced in **Appendix H** of the Draft EIS.

3.2.5 Pedestrians

There are no changes to the impact analysis threshold for pedestrians referenced in **Appendix H** of the Draft EIS.

3.2.6 Parking

There are no changes to the impact analysis threshold for parking referenced in **Appendix H** of the Draft EIS.

3.3 Area of Potential Impact

Consistent with the Draft EIS approach, the API for determining potential transportation impacts and benefits for the Preferred Alignment includes transportation facilities directly adjacent to the proposed stations, as well as intersections and roadways of the transportation network that users would utilize to access the stations.

Although there is no change to the approach to identifying an API, the Preferred Alignment was not defined in the Draft EIS. The transportation API for the Final EIS has therefore been revised to reflect the study area for the Preferred Alignment only.

The transportation API is situated 11 miles south of the downtown Chicago (commonly referred to as the "Loop") and encompasses approximately 10 square miles. The Red Line currently terminates at the 95th Street/Dan Ryan terminal.

The API boundaries are as follows:

- On the north by 95th Street;
- On the south by a varying boundary that includes Vermont Street, 127th Street, and 134th Street;
- On the east by a varying boundary that includes State Street, Michigan Avenue, and I-94 (from the north to south); and
- On the west by a varying boundary that includes Halsted Street and I-57 (from north to south).

Figure 3-1 shows the API.

3.4 Methods

The evaluation of the Preferred Alignment was performed using the same methods as documented in the Draft EIS, consistent with the following sections of **Appendix H**, except when noted.

3.4.1 Public Transportation

The Draft EIS ridership estimates were developed using the Chicago New Starts forecasting model for the 2030 project horizon year. However, for the Final EIS, Year 2040 ridership estimates were projected using the Simplified Trips-on-Project Software (STOPS) analysis for the RLE Project. The analysis of public transportation impacts of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS.

3.4.2 Traffic

Forty-nine study intersections were identified for traffic analysis within the updated API, reduced from 76 in the larger API presented in the Draft EIS. These intersections are listed in **Table 3-1** and presented in **Figure 3-2**. Existing and historic traffic count data from CDOT, CTA, CMAP, and IDOT were compiled. In addition, new manual traffic counts at intersections where historical data were not available were collected. The following traffic data were compiled and reviewed:

- Traffic distribution and local circulation patterns
- Vehicle occupancy levels
- Road capacity levels
- Road peak-hour traffic volumes
- Intersection lane geometry and traffic signal timing plans
- Planned roadway improvements

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Area of Potential Impact

Table 3-1: Area of Potential Impact Study Intersections

Intersection ID	Intersection	Control Type	Jurisdiction	Freeway Ramp
2	95th Street and Lafayette Avenue	Signalized	IDOT/CDOT	Yes
3	95th Street and State Street	Signalized	IDOT/CDOT	Yes
16	103rd Street and Halsted Street	Signalized	IDOT/CCDoTH	No
17	103rd Street and Normal Avenue	Signalized	CCDoTH/CDOT	No
18	103rd Street and Wentworth Avenue	Signalized	CCDoTH/CDOT	No
34	111th Street and Halsted Street	Signalized	IDOT/CCDoTH	No
35	111th Street and Normal Avenue	Signalized	CCDOTH/CDOT	No
36	111th Street and Wentworth Avenue	Signalized	CCDoTH/CDOT	No
37	111th Street and State Street	Signalized	CCDoTH/CDOT	No
38	111th Street and Michigan Avenue	Signalized	CCDoTH/CDOT	No
49	115th Street and Halsted Street	Signalized	IDOT	No
50	115th Street and Wentworth Avenue	Signalized	CDOT	No
51	115th Street and State Street	Signalized	CCDoTH/CDOT	No
52	115th Street and Michigan Avenue	Signalized	CCDoTH/CDOT	No
53	115th Street and Indiana Avenue	Signalized	CCDoTH/CDOT	No
54	115th Street and Martin Luther King Jr Drive	Unsignalized	CCDoTH	No
55a	115th Street and Cottage Grove Avenue (West)	Signalized	CCDoTH/CDOT	No

Intersection ID	Intersection	Control Type	Jurisdiction	Freeway Ramp
55b	115th Street and Cottage Grove Avenue (East)	Signalized	CCDoTH/CDOT	No
56	115th Street and I-94 EB Ramps	Unsignalized	IDOT	Yes
57	115th Street and I-94 WB Ramps	Unsignalized	IDOT	Yes
60	119th Street and Halsted Street	Signalized	IDOT/CDOT	No
61	119th Street and Wentworth Avenue	Signalized	CDOT	No
62	119th Street and State Street	Signalized	IDOT/CCDoTH/ CDOT	No
64	127th Street and Paulina Street	Signalized	IDOT	Yes
65	127th Street and Marshfield Avenue	Signalized	IDOT	Yes
66	127th Street and Ashland Avenue	Signalized	IDOT	No
67	Vermont Street and Ashland Avenue	Signalized	IDOT	No
68	127th Street and Halsted Street	Signalized	IDOT	No
69	Vermont Street and Halsted Street	Signalized	IDOT	No
70	127th Street and Vermont Street and Wallace Street	Signalized	IDOT/CDOT	No
71	127th Street and State Street	Signalized	IDOT	No
72	127th Street and Michigan Avenue	Signalized	IDOT/CDOT	No
73	130th Street and Indiana Avenue	Signalized	IDOT	No
74	130th Street and Ellis Avenue	Signalized	IDOT/CDOT	No

Intersection ID	Intersection	Control Type	Jurisdiction	Freeway Ramp
75	Old 130th Street and Ellis Avenue	Unsignalized	CDOT	No
76	Greenwood Avenue and Ellis Avenue	Unsignalized	CDOT	No
77	130th Place and Greenwood Avenue	Unsignalized	CDOT	No
78	131st Street and Greenwood Avenue	Unsignalized	CDOT	No
79	132nd Street and Greenwood Avenue	Unsignalized	CDOT	No
80	132nd Street and Beaubien Woods Driveway	Unsignalized	CDOT	No
81	132nd Street and Doty Avenue	Unsignalized	CDOT	No
82	EB 130th Street and I-94E On-Ramp (Ramp A)	Uncontrolled	IDOT	Yes
83	EB 130th Street and I-94E Off-Ramp (Ramp B)	Uncontrolled	IDOT	Yes
84	EB 130th Street and I-94W On-Ramp (Ramp C)	Uncontrolled	IDOT	Yes
85	EB 130th Street and I-94W Off-Ramp (Ramp D)	Uncontrolled	IDOT	Yes
86	WB 130th Street and I-94W On-Ramp (Ramp E)	Uncontrolled	IDOT	Yes
87	WB 130th Street and I-94W Off-Ramp (Ramp F)	Uncontrolled	IDOT	Yes
88	WB 130th Street and I-94E On-Ramp (Ramp G)	Uncontrolled	IDOT	Yes
89	WB 130th Street and I-94E Off-Ramp (Ramp H)	Uncontrolled	IDOT	Yes

Source: IDOT – IL Road Jurisdiction GIS Map, 2021

Notes: IDOT – Illinois Department of Transportation; CCDoTH – Cook County Department of Transportation and Highways; CDOT – Chicago Department of Transportation

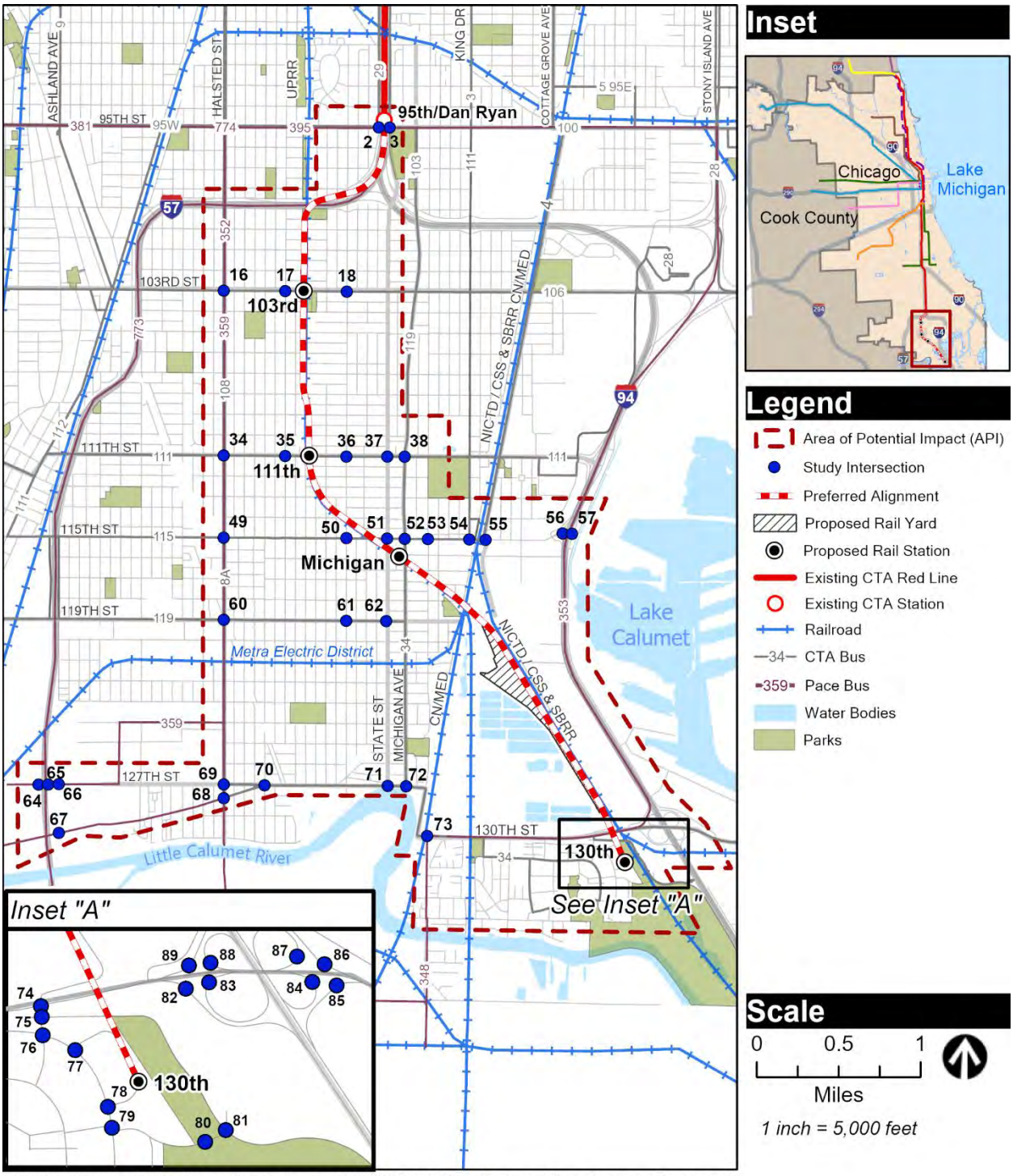

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-2: Study Intersections for Transportation Impact Analysis

3.4.2.1 Traffic Adjustments Due to COVID-19

Due to the COVID-19 pandemic, travel patterns and traffic volumes have been greatly altered. Traffic data for the 49 locations were acquired through one of three ways: 1) from the Draft EIS, 2) historic traffic data provided by IDOT, and 3) traffic data collected in 2020.

CTA reviewed historic Average Daily Traffic (ADT) volumes, as listed in **Table 3-2,** across the years for the major roadways within the API and it was determined that the ADT values in the 2017-2018 timeframe are either very close or lower than the values in the 2009-2012 timeframe. As a result, of the 49 study intersections, 33 intersections used the 2012 traffic counts from the Draft EIS.

Table 3-2: Historic Average Daily Traffic on Roadways within the API

Street	2004	2006	2008	2009	2010	2012	2013	2014	2015	2017	2018
95th St.	-	-	-	20,000	-	-	18,200	-	15,200	14,100	-
103rd St.	-	14,800	-	-	13,800	-	-	11,700	-	-	10,300
107th St.	-	7,800	-	-	6,600	-	-	4,000	-	-	5,400
111th St.	-	11,000	-	-	9,000	-	-	10,000	-	-	9,650
115th St.	-	10,800	-	-	10,500	-	-	7,350	-	-	11,700
State St.	15,100	-	-	-	-	-	-	3,100	-	-	-
Michigan Ave.	-	8,300	-	-	11,600	-	-	8,150	-	-	10,600
127th St.	-	21,100	-	-	18,800	-	-	13,300	-	-	15,500
130th St.	-	19,600	-	-	20,100	-	-	19,500	-	-	18,200
Bishop Ford Freeway (I-94)	-	-	160,500	166,300	149,400	150,500	146,700	146,600	149,300	158,200	149,000

Source: IDOT Getting Around Illinois Website. Accessed at http://www.gettingaroundillinois.com/gai.htm?mt=aadt Accessed on April 13, 2020.

The traffic data collected in 2020 had a growth factor applied to it to account for the variation in traffic patterns as a result of the COVID-19 pandemic. Below are the locations where historic traffic data and applied growth factors to existing traffic data were used.

130th Street/Ellis Avenue Intersection and 130th Street/I-94 Ramps

Historic traffic data for the 130th Street and Ellis Avenue intersection and the I-94 ramps were compared to their 2020 volume data to determine if traffic data were affected by the COVID-19 pandemic. The comparison of data determined that additional factors outside population growth impacted traffic volumes, and that the COVID-19 pandemic has affected transportation patterns. The 2020 volume data were collected September 1 and 2, 2020 as video traffic and turning movement counts during the AM and PM period for the 130th Street and Ellis Avenue intersection and the I-94 ramps. For comparison of the 2020 volume data, the intersection of 130th Street and Ellis Avenue used 2012 historic traffic data from the Draft EIS, whereas the I-94 ramps used a

combination of 2018 and 2019 historic traffic data, based on availability from IDOT. For these two locations, the pandemic's effect on traffic has led to a reduction in traffic in the AM and a modest increase in traffic in the PM, compared to historic traffic. As a result of CTA's coordination with IDOT, it was agreed to use all historic volumes for the 130th Street and Ellis Avenue intersection. For the I-94 ramps, per IDOT direction, the higher of the two volumes, between the 2020 counts and the historic data, for each ramp was chosen as the volume to be analyzed for the project.

Altgeld Gardens Neighborhood Intersections

For these locations, 2020 traffic data were collected. However, no historic traffic data for these intersections were available for comparison; therefore, a separate AM and PM growth factor was applied to the 2020 volumes of these intersections to account for the variation of transportation patterns resulting from the COVID-19 pandemic. These growth factors were calculated using historic volumes from the neighboring intersection of 130th Street and Ellis Avenue.

The volumes that were established using the methods above will be considered existing condition volumes moving forward in the analysis. The type of traffic count data used for each intersection is shown in **Figure 3-3**.

The above data were used to calculate intersection LOS using Synchro 10 and ramp LOS using Highway Capacity Software 7. Peak-hour traffic volumes used for the intersection LOS analysis for Existing Conditions, 2050 No Build Conditions, 2050 Build Conditions (Unmitigated) and 2050 Build Conditions (Mitigated) are included in **Attachments A**, **B**, **C**, and **D**, respectively.

3.4.2.2 Traffic Methodology

Data from CMAP's 2050 Regional Travel Demand model were used to develop "No Build" intersection-level traffic projections. These "No Build" traffic projections accounted for the background growth in traffic due to additional regional and subregional land use development and population growth. The background growth of traffic for roadway segments was determined by using the data from the regional travel demand model. Average annual traffic growth for roadway segments ranged from 0 to 1.1 percent.

The 2050 "No Build" traffic projections were analyzed under the No Build Alternative. To simulate the future year (2050) conditions without the RLE Project, background traffic growth between the existing year (2020) and future conditions year (2050) was grown based on 30-year growth factor. The No Build Alternative traffic projections served as the baseline for evaluating the future "with project."

Conditions for the Preferred Alignment included the generation of park & ride and kiss & ride automobile trips to the stations. While the RLE Project is anticipated to have an impact on mode shift from vehicles to transit, the trip generation did not remove these vehicles to provide a conservative level of analysis. The traffic analysis therefore represents the "worst-case" scenario for impact analysis.

The trip generation is based on the STOPS analysis and data from similar sized existing CTA parking facilities. STOPS is a trip modeling software used to estimate future ridership for transit projects. The software provides station mode-of-access numbers, including estimates of those driving to the new stations. These estimates feed into the traffic analysis. STOPS is used nationally and is recommended for use in trip modeling by the FTA. The STOPS analysis was run for both existing year (2017), to serve as a baseline, and future year (2040) condition. The park & ride generated trips for 2040 will be valid for 2050 because those trips are constrained by parking capacity. The Preferred Alignment generated trips were added to the No Build Alternative traffic projections to develop the total Preferred Alignment traffic volumes. The Preferred Alignment analysis uses the 2050 background No Build Alternative traffic plus the traffic generation from the 2040 STOPS analysis. The Preferred Alignment intersection LOS analyses were conducted for the study intersections.

3.4.3 Freight Transportation

There are no changes to the evaluation methodology for freight transportation referenced in **Appendix H** of the Draft EIS.

3.4.4 Bicycle Facilities

There are no changes to the evaluation methodology for bicycles referenced in **Appendix H** of the Draft EIS.

3.4.5 Pedestrians

There are no changes to the evaluation methodology for pedestrians referenced in **Appendix H** of the Draft EIS.

3.4.6 Parking

There are no changes to the evaluation methodology for parking referenced in **Appendix H** of the Draft EIS.

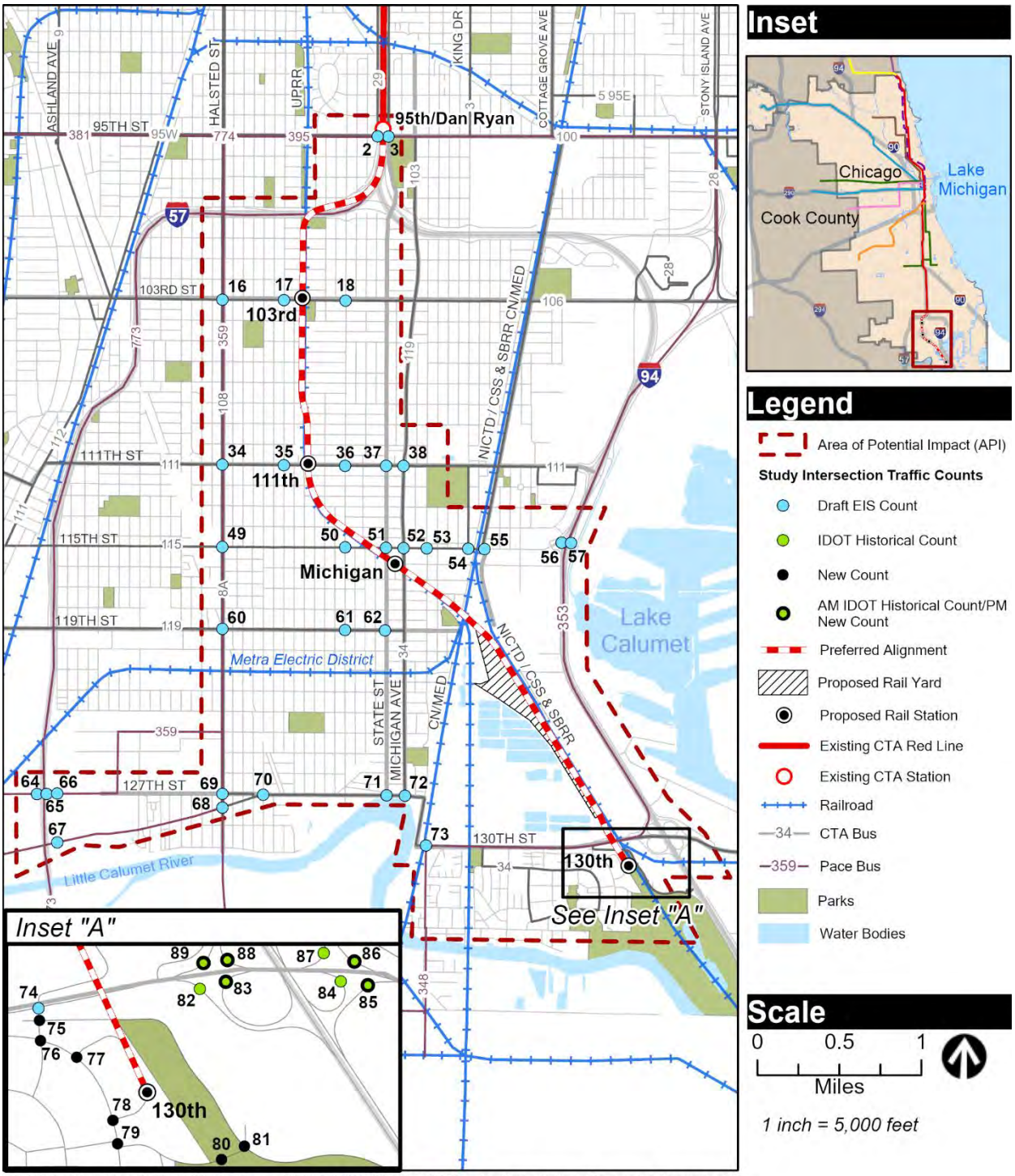

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-3: Study Intersection Traffic Count

Section 4 - Affected Environment

This section describes any updates to the existing conditions of the transportation services and facilities near the transportation API since the publication of the Draft EIS. It also documents any updates to the baseline data and planning horizon, as well as any changes to transportation planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

Where appropriate, Draft EIS data from **Appendix H** have been included for comparison to provide context to the updates in this addendum. Consistent with the Draft EIS, the analysis includes any changes to the transportation facilities directly adjacent to the Preferred Alignment stations, as well as intersections and roadways of the transportation network that users would utilize to access the stations.

4.1 Public Transportation

Changes to the public transportation systems within the API since the Draft EIS publication in 2016 are summarized below.

- CTA bus routes – Routes #3 King Drive and #28 Stony Island no longer fall within the updated API and have been removed from this report. Route #4 Cottage Grove has been added to the report.

Figure 4-1 shows the existing bus routes provided by CTA and Pace, as well as the Metra routes.

4.1.1 CTA Rail Service

There are no changes to the CTA rail service referenced in **Appendix H** of the Draft EIS.

4.1.2 CTA and Pace Bus Services

Bus ridership data (2012) from the Draft EIS have been updated to the most recent non-COVID-19 affected year, 2019. **Table 4-1** provides a summary of the existing bus routes and its 2019 ridership data within the API. Due to a change in data provided on the RTAMS website, average weekday ridership values are no longer provided. Route #95E and #95W are now represented as a single route. In general, ridership has declined from the 2012 to 2019. **Table 4-2** is also updated to show existing bus service hours and headways (time between buses) in peak hours for CTA and Pace bus service.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-1: Existing Public Transportation in the API

Table 4-1: Existing Bus Route Information within the Area of Potential Impact

Bus Route Number and Name	Operating Agency	Monthly Average Weekday Ridership (September 2019)	Serves 95th Street/Dan Ryan Terminal
#4 Cottage Grove	CTA	20,179	No
#8A South Halsted	CTA	2,931	No
#9 Ashland	CTA	18,388	Yes
#29 State	CTA	12,099	Yes
#34 South Michigan	CTA	5,045	Yes
#95 95th	CTA	5,919	Yes
#100 Jeffery Manor Express	CTA	578	Yes
#103 West 103rd	CTA	2,192	Yes
#106 East 103rd	CTA	1,484	Yes
#108 Halsted/95th	CTA	1,080	Yes
#111 Pullman/111th	CTA	3,412	Yes
#112 Vincennes/111th	CTA	2,046	Yes
#115 Pullman/115th	CTA	3,049	Yes
#119 Michigan/119th	CTA	4,258	Yes
#348 Harvey - Riverdale - Blue Island	Pace	333	No
#352 Halsted	Pace	5,334	Yes
#353 95th/Dan Ryan CTA - River Oaks - Homewood Limited	Pace	1,482	Yes
#359 Robbins - South Kedzie Avenue	Pace	1,201	Yes
#381 95th Street	Pace	2,987	Yes
#395 CTA 95th St Station - UPS	Pace	349	Yes

Source: Regional Transportation Authority Asset Mapping and Statistics (RTAMS) 2021

Notes: - Night service route #N5 is not included in the above table.

- September is considered the peak month for ridership and is typically used for planning purposes.
- #9 Ashland serves the 95th Street/Dan Ryan terminal only with the Night Owl Service.
- Due to a change in data provided on the RTAMS website, average weekday ridership values are no longer provided.

Table 4-2: Existing CTA and Pace Bus Service Hours and Peak Headways

Bus Route Number and Name	Operating Agency	Weekday Hours of Service	Headway in Peak Hours (minutes)
#4 Cottage Grove	CTA	24 hours	6-7
#8A South Halsted	CTA	5:25 AM-8:30 PM	11-17
#9 Ashland	CTA	24 hours	10-15
#29 State	CTA	4:00 AM-12:30 AM	11-13
#34 South Michigan	CTA	24 hours	11-13
#95 95th	CTA	4:30 AM-12:30 AM	11-14
#100 Jeffery Manor Express	CTA	Peak Periods Only	18-22
#103 West 103rd	CTA	4:30 AM-11:20 PM	12-15
#106 East 103rd	CTA	4:45 AM-10:30 PM	11-15
#108 Halsted/95th	CTA	Peak Periods Only	15-19
#111 Pullman/111th	CTA	4:30 AM-11:10 PM	11-15
#112 Vincennes/111th	CTA	4:30 AM-10:20 PM	14-16
#115 Pullman/115th	CTA	4:25 AM-11:15 PM	11-12
#119 Michigan/119th	CTA	4:00 AM-1:00 AM	8-11
#348 Harvey - Riverdale - Blue Island	Pace	5:45 AM-7:30 PM	60
#352 Halsted	Pace	24 hours	10
#353 95th/Dan Ryan CTA - River Oaks - Homewood Limited	Pace	4:45 AM-12:45 AM	20
#359 Robbins - South Kedzie Avenue	Pace	5:00 AM-12:30 AM	30-60
#381 95th Street	Pace	4:45 AM-12:30 AM	20
#395 CTA 95th St Station - UPS	Pace	2:15 AM-10:50 PM	10-20

Source: CTA, 2022, Pace 2022

Notes- Service to 95th Street/Dan Ryan terminal is based on route maps current as of April 2022. Pace route #395 operates with limited service between its hours of service.

There are no changes to the existing bus services for the Preferred Alignment, referenced as the Union Pacific Railroad Rail Alternative, in **Appendix H** of the Draft EIS.

4.1.3 Commuter Rail Service

There are no changes to the commuter rail service referenced in **Appendix H** of the Draft EIS. However, 2006 daily boardings from the Draft EIS have been updated to the most recent available non-COVID-19 affected year, 2018. **Table 4-3** presents a summary of the 2018 daily boardings and the 2015 parking statistics at the Metra stations within the API.

Table 4-3: Metra Boardings and Parking by Station

Line/Station	2018 Daily Boardings	Parking Available	Parking Spaces Available (2015)	Parking Utilization Rate (2015)
Metra Electric District Mainline				
103rd Street (Rosemoor)	36	Yes	18	89%
107th Street	27	No	-	-
111th Street (Pullman)	31	No	-	-
Kensington/115th Street	1,136	Yes	359	82%
Metra Electric District Blue Island Branch				
State Street	41	No	-	-
Stewart Ridge	19	No	-	-
West Pullman	13	Yes	27	0%
Racine Avenue	28	Yes	29	41%
Ashland Avenue	97	Yes	89	45%
Metra Rock Island				
95th Street/Longwood	60*	Yes	104	47%
103rd Street/Washington Heights	101	Yes	267	26%

Source: Regional Transportation Authority Asset Mapping and Statistics (RTAMS), Metra, 2021
Notes: - *2006 Boardings. Boardings for 2018 at 95th Street/Longwood were not available.

4.2 Traffic

The existing traffic data have been updated from the Draft EIS to year 2020 for the Final EIS. **Figure 4-2** shows the signalized and unsignalized intersections within the API. The existing traffic volumes (2020) and capacity analysis for the intersections can be found in **Attachment A**.

Table 4-4 provides a comparison of the existing intersection LOS conditions from the Draft EIS and the Final EIS. Due to the updated API, some intersections differ between the Draft EIS and the Final EIS. Intersections that were analyzed only in the Draft EIS are not shown and intersections analyzed only for the Final EIS are listed. Changes in intersection LOS values were a result of updates to signal timings and intersection geometrics since the Draft EIS analysis. These changes would affect both signalized and unsignalized intersections since the traffic analysis takes into account traffic flow along the entire street. For the Final EIS, under existing (2020) conditions, most of the study intersections within the API operate at LOS D or better in both the AM and PM peak hours. Under existing (2020) conditions, the following intersections operate at LOS E or F in either or both the AM and PM peak hours:

- 103rd Street and Halsted Street – AM LOS E
- 115th Street and Martin Luther King Jr Drive – PM LOS E
- 115th Street and Cottage Grove Avenue East – AM LOS F

Table 4-4: Existing Intersection Level of Service Comparing Draft and Final EIS Values

Intersection ID	Intersection	Control Type	Draft EIS		Final EIS	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
2	95th Street and Lafayette Avenue	Signalized	D	D	C	C
3	95th Street and State Street	Signalized	C	C	D	D
16	103rd Street and Halsted Street	Signalized	E	D	E	C
17	103rd Street and Normal Avenue	Signalized	B	B	A	A
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
34	111th Street and Halsted Street	Signalized	C	C	B	B
35	111th Street and Normal Avenue	Signalized	A	A	A	A
36	111th Street and Wentworth Avenue	Signalized	A	A	A	B
37	111th Street and State Street	Signalized	A	B	A	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B

Intersection ID	Intersection	Control Type	Draft EIS		Final EIS	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
52	115th Street and Michigan Avenue	Signalized	B	C	B	D
53	115th Street and Indiana Avenue	Signalized	B	B	B	B
54	115th Street and Martin Luther King Jr Drive	Unsignalized	A	A	C	E
55a	115th Street and Cottage Grove Avenue (West)	Signalized	C	C	D	C
55b	115th Street and Cottage Grove Avenue (East)	Signalized	D	C	F	D
56	115th Street and I-94 EB Ramps	Unsignalized	A	A	A	A
57	115th Street and I-94 WB Ramps	Unsignalized	C	B	C	B
60	119th Street and Halsted Street	Signalized	C	C	C	C
61	119th Street and Wentworth Avenue	Signalized	B	B	B	A
62	119th Street and State Street	Signalized	B	B	A	A
64	127th Street and Paulina Street	Signalized	C	C	C	C
65	127th Street and Marshfield Avenue	Signalized	C	B	D	C
66	127th Street and Ashland Avenue	Signalized	C	C	C	C
67	Vermont Street and Ashland Avenue	Signalized	C	C	C	C
68	127th Street and Halsted Street	Signalized	C	C	C	C
69	Vermont Street and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Street and Wallace Street	Signalized	C	D	C	D
71	127th Street and State Street	Signalized	A	B	A	B
72	127th Street and Michigan Avenue	Signalized	A	B	A	B
73	130th Street and Indiana Avenue	Signalized	B	C	B	B
74	130th Street and Ellis Avenue	Signalized	A	A	B	A
75	Old 130th Street and Ellis Avenue	Unsignalized	---	---	A	A
76	Greenwood Avenue and Ellis Avenue	Unsignalized	---	---	A	A
77	130th Place and Greenwood Avenue	Unsignalized	---	---	A	A

Intersection ID	Intersection	Control Type	Draft EIS		Final EIS	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
78	131st Street and Greenwood Avenue	Unsignalized	---	---	A	A
79	132nd Street and Greenwood Avenue	Unsignalized	---	---	A	A
80	132nd Street and Beaubien Woods Driveway	Unsignalized	---	---	A	A
81	132nd Street and Doty Avenue	Unsignalized	---	---	A	A
82	EB 130th Street and I-94E On-Ramp (Ramp A)	Uncontrolled	---	---	A	B
83	EB 130th Street and I-94E Off-Ramp (Ramp B)	Uncontrolled	---	---	B	B
84	EB 130th Street and I-94W On-Ramp (Ramp C)					
85	EB 130th Street and I-94W Off-Ramp (Ramp D)	Uncontrolled	---	---	B	B
86	WB 130th Street and I-94W On-Ramp (Ramp E)	Uncontrolled	---	---	A	B
87	WB 130th Street and I-94W Off-Ramp (Ramp F)	Uncontrolled	---	---	B	B
88	WB 130th Street and I-94E On-Ramp (Ramp G)					
89	WB 130th Street and I-94E Off-Ramp (Ramp H)	Uncontrolled	---	---	B	A

Notes: - LOS = level of service
- Signalized and unsignalized intersection LOS reported as the average for all movements.
- I-94 ramps B and C, as well as ramps F and G, were analyzed as weaving segments and therefore analyzed as one location per ramp pair.
- "---" indicates that no LOS was reported for those intersections for the Draft EIS since they were not originally included in the Draft EIS API.

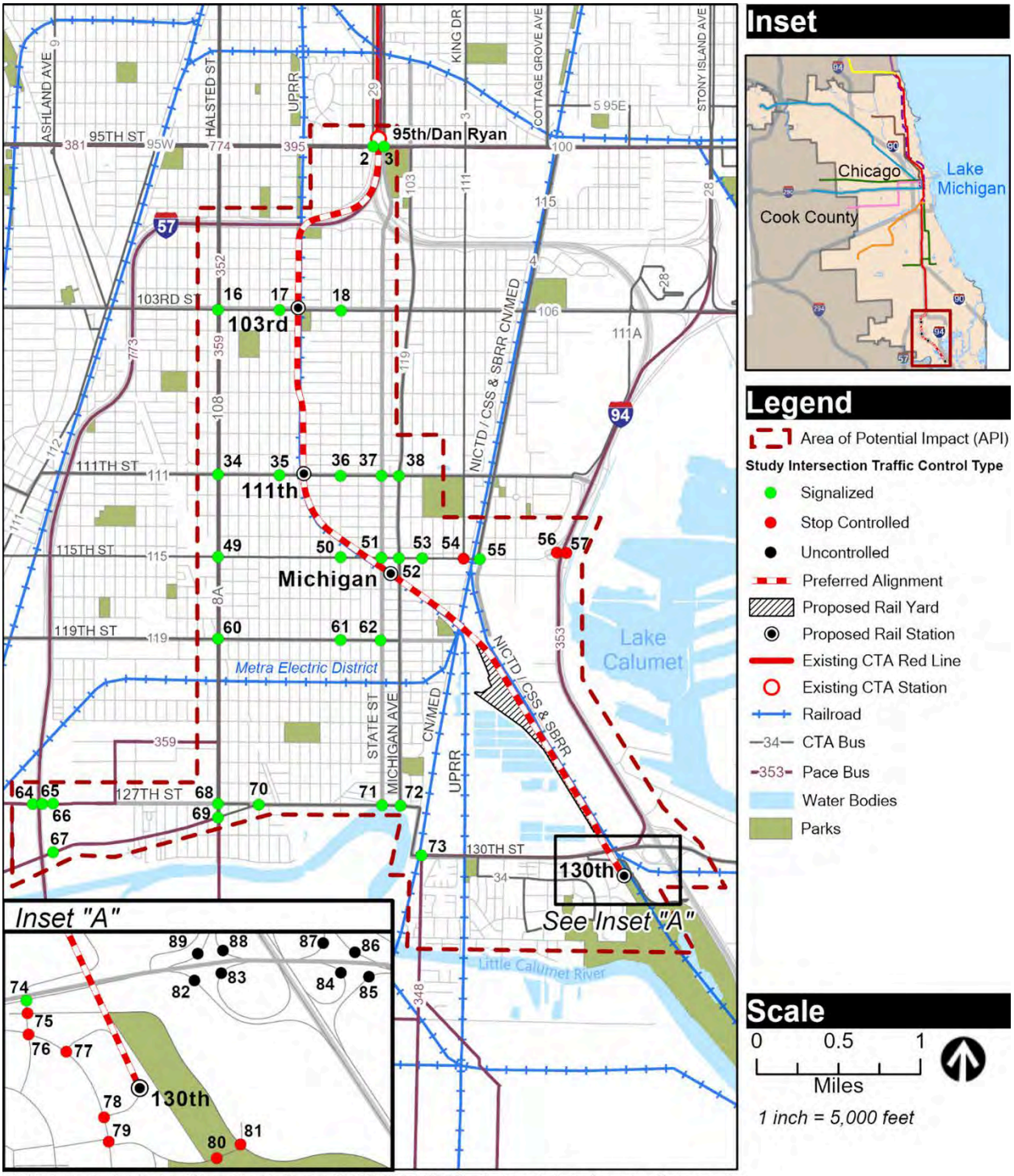

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-2: Intersection Control Types in the API

4.3 Freight Transportation

Approximately 500 freight trains per day operate in the Chicago region (CMAP 2014). In 2007, regional rail tonnage was estimated at more than 631 million tons, with about 24,000 trailers and containers and about 16,800 carload units moving into, out of, or through the region daily (CMAP 2012b). The 2007 forecast has not been updated since the Draft EIS. The following active freight railways operate through the API and are identified on **Figure 4-3**.

- UPRR
- CN/MED
- NICTD/CSS and SBRR
- NS Railway
- IHB Railroad
- Conrail (operated on NS Railway)

The UPRR reported 14 freight trains per day within the API, although multi-day data collection efforts conducted on May 20, 21, 22, and 28 and June 4, 2021 indicate a current average of only eight to ten trains per day. In addition, Amtrak runs two passenger trains three times a week on the UPRR tracks within the API. The CN/MED tracks carry 34 passenger and 12 freight trains. The NICTD/CSS and SBRR tracks carry 34 passenger and 6 freight trains and converge with the CN/MED tracks between 115th Street and Kensington Avenue and both carry passenger and freight trains.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad, NS = Norfolk Southern, IHB = Indiana Harbor Belt Railroad

Figure 4-3: Freight Railroads in the API

4.4 Bicycle Facilities

The City of Chicago has 200 miles of on-street bike lanes and more than 36 miles of trails. This is an increase of 53 miles of bike lanes since the Draft EIS. In addition, the City has more than 12,000 racks for bicycle parking, including racks at CTA stations (City of Chicago 2012c). CTA identified existing bicycle facilities within ½ mile of the Preferred Alignment (see **Figure 4-4**). Bicycle facilities recommended in the City of Chicago's Bike 2015 Plan (City of Chicago 2006) and pertinent recommended cycling routes from the Chicago Streets for Cycling Plan 2020 are also shown on the figure.

Chicago's bicycle sharing system, Divvy, currently has over 6,000 bicycles at over 600 stations across the city. In the summer and fall of 2020, Divvy expanded to Chicago's Far South Side. Currently there are 12 Divvy stations located within the API. Of the 12 Divvy stations, four Divvy stations are within a ½ mile of the three northern RLE Project stations, and these can be found at 104th Street and Wentworth Avenue, 111th Street and Halsted Street, 111th Street and Wentworth Avenue, and 114th Street and Michigan Avenue. In addition, there is one Divvy station within the Altgeld Gardens neighborhood, located at the Altgeld Branch of the Chicago Public Library and within a ½ mile of the 130th Street station. There were no Divvy stations present in the API in the Draft EIS.

Major Taylor Trail is an off-street cycling trail that runs through the API. Bicycle facilities, which have been constructed within the API since the Draft EIS, are bike lanes located on 103rd Street, 111th Street, 115th Street, and State Street and a greenway located on 124th Street.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-4: Existing Bicycle Facilities within and near the API

4.5 Pedestrians

There are no changes to the existing pedestrian network referenced in **Appendix H** of the Draft EIS.

4.6 Parking

The relocation of the 130th Street station adjacent to the Altgeld Gardens neighborhood has expanded the potential area used for parking, since the Draft EIS. Most of the streets in the API have on-street parking, including the Altgeld Gardens neighborhood. **Table 4-5** is a summary of the on-street parking at some of the major roadways along the Preferred Alignment. On-street parking is allowed (as posted) on most of the local streets not listed in this table. There is currently no park & ride facility at the existing 95th Street/Dan Ryan terminal.

Table 4-5: Existing On-Street Parking

Street	Roadway Functional Classification	On-Street Parking
95th Street	Other Principal Arterial	No
103rd Street	Minor Arterial	Yes
111th Street	Minor Arterial	Yes
115th Street	Major Collector	Yes
119th Street	Major Collector	Yes
127th Street	Other Principal Arterial	No
130th Street	Other Principal Arterial	No
Wentworth Avenue	Major Collector	Yes
State Street	Minor Arterial/Local Road	Yes
Michigan Avenue	Major Collector	Yes
Indiana Avenue	Minor Arterial	No

Source: IDOT – Roadway Functional Classification GIS Map, 2021

A permit or fee is not required to park on the streets within the API. There are a number of existing off-street surface parking lots in the Altgeld Gardens neighborhood, but they are strictly reserved for local private residences and businesses. Many of the commercial and retail buildings within the API have plenty of parking available either through on-street or parking lots associated with the buildings. TCA Health has a parking lot off Old 130th Street adjacent to the Altgeld Gardens neighborhood. The Agape Community Center uses a City-owned parcel of land that is located immediately west of the center for parking.

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to affected communities.

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

This section also documents any new or revised mitigation measures for identified project impacts, where applicable. If there is no change in the mitigation measures, this section indicates where there is no change when compared to the East or West Options of the UPRR Alternative evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) mitigation measures apply to the Preferred Alignment.

5.1 No Build Alternative

As described in **Appendix H** in the Draft EIS, there would be no impacts on public transportation, freight transportation, bicycle facilities, pedestrians, and parking from the No Build Alternative.

5.1.1 Permanent Impacts and Mitigation – No Build Alternative

5.1.1.1 Traffic

Under No Build (2050) conditions, 84 percent (41 intersections) of the study intersections within the API would operate at LOS D or better in both the AM and PM peak hours. **Table 5-1** provides a comparison of the No Build conditions from the Draft EIS (2030) and Final EIS (2050) intersection LOS. Due to the updated API, some intersections differ between the Draft and Final EIS. Intersections that were analyzed only in the Draft EIS are not shown and intersections analyzed only for the Final EIS are listed. **Attachment B** contains the No Build traffic data used in the traffic impact analysis. Under No Build (2050) conditions, there would be eight intersections that would operate at LOS E or F in either or both the AM and PM peak hours. Because eight intersections would operate at LOS E or F, there would be an adverse impact on transportation, specifically vehicular traffic, under the No Build Alternative.

Table 5-1: No Build Intersection Level of Service Comparing Draft and Final EIS Values

Intersection ID	Intersection	Control Type	Draft EIS No Build (2030)		Final EIS No Build (2050)	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	F	E
16	103rd Street and Halsted Street	Signalized	F	D	F	D
17	103rd Street and Normal Avenue	Signalized	B	B	B	A
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	A	A	B
36	111th Street and Wentworth Avenue	Signalized	B	A	B	B
37	111th Street and State Street	Signalized	A	B	A	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	B	D	C	E
53	115th Street and Indiana Avenue	Signalized	B	B	B	C
54	115th Street and Martin Luther King Jr Drive	Unsignalized	A	B	D	F
55a	115th Street and Cottage Grove Avenue (West)	Signalized	D	C	D	D
55b	115th Street and Cottage Grove Avenue (East)	Signalized	E	C	F	F
56	115th Street and I-94 EB Ramps	Unsignalized	A	A	A	A
57	115th Street and I-94 WB Ramps	Unsignalized	C	B	E	B
60	119th Street and Halsted Street	Signalized	C	C	C	D
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	B	B	B	B

Intersection ID	Intersection	Control Type	Draft EIS No Build (2030)		Final EIS No Build (2050)	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
64	127th Street and Paulina Street	Signalized	C	C	D	E
65	127th Street and Marshfield Avenue	Signalized	C	C	D	D
66	127th Street and Ashland Avenue	Signalized	C	C	D	C
67	Vermont Street and Ashland Avenue	Signalized	C	C	C	D
68	127th Street and Halsted Street	Signalized	C	C	C	D
69	Vermont Street and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Street and Wallace Street	Signalized	D	D	E	F
71	127th Street and State Street	Signalized	B	B	B	C
72	127th Street and Michigan Avenue	Signalized	A	B	A	B
73	130th Street and Indiana Avenue	Signalized	C	C	C	C
74	130th Street and Ellis Avenue	Signalized	A	A	B	B
75	Old 130th Street and Ellis Avenue	Unsignalized	---	---	A	A
76	Greenwood Avenue and Ellis Avenue	Unsignalized	---	---	A	A
77	130th Place and Greenwood Avenue	Unsignalized	---	---	A	A
78	131st Street and Greenwood Avenue	Unsignalized	---	---	A	A
79	132nd Street and Greenwood Avenue	Unsignalized	---	---	A	A
80	132nd Street and Beaubien Woods Driveway	Unsignalized	---	---	A	A
81	132nd Street and Doty Avenue	Unsignalized	---	---	A	A
82	EB 130th Street and I-94E On-Ramp (Ramp A)	Uncontrolled	---	---	A	B
83	EB 130th Street and I-94E Off-Ramp (Ramp B)	Uncontrolled	---	---	B	B
84	EB 130th Street and I-94W On-Ramp (Ramp C)					

Intersection ID	Intersection	Control Type	Draft EIS No Build (2030)		Final EIS No Build (2050)	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
85	EB 130th Street and I-94W Off-Ramp (Ramp D)	Uncontrolled	---	---	B	B
86	WB 130th Street and I-94W On-Ramp (Ramp E)	Uncontrolled	---	---	B	B
87	WB 130th Street and I-94W Off-Ramp (Ramp F)	Uncontrolled	---	---	C	C
88	WB 130th Street and I-94E On-Ramp (Ramp G)					
89	WB 130th Street and I-94E Off-Ramp (Ramp H)	Uncontrolled	---	---	B	B

Notes: - LOS = level of service
- Signalized and unsignalized intersection LOS reported as the average for all movements.
- I-94 ramps B and C, as well as ramps F and G, were analyzed as weaving segments and therefore analyzed as one location per ramp pair.
- "---" indicates that no LOS was reported for those intersections for the Draft EIS since they were not originally included in the Draft EIS API.

5.1.2 Construction Impacts and Mitigation – No Build Alternative

As described in **Appendix H** in the Draft EIS, there would be no construction impacts or mitigation measures from the No Build Alternative.

5.1.3 Cumulative Impacts and Mitigation – No Build Alternative

As described in **Appendix H** in the Draft EIS, there would be no cumulative impacts or mitigation measures from the No Build Alternative.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

5.2.1.1 Public Transportation

Currently the 95th Street/Dan Ryan terminal is the southern terminus of the Red Line. Many of the existing bus routes within the API terminate at this location. From this station, passengers continue to travel north on the Red Line or connect to a different bus route. With the expansion of the Red Line, some existing bus routes would be rerouted to feed into the RLE stations. Passengers would benefit from reduced travel times to connecting rail service, farther south of the 95th Street/Dan Ryan terminal. Transportation modeling indicates over 21,500 average weekday boardings for the Preferred Alignment for year 2040 based on the STOPS analysis.

The 130th Street station access would be from the east side of Greenwood Avenue. At the 130th Street station, buses would enter the same entrance as other vehicles at the station access from Greenwood Avenue and would use the south driveway leading to a bus turnaround and bus bay to unload and pick up riders at the southern entrance access point. Based on the layout, an option under consideration, is to have the buses that serve the Altgeld Gardens neighborhood from the south, enter the station at the 132nd Street entrance and unload and pick up riders at the same bus bay. When exiting the station, all buses would exit using the station access from Greenwood Avenue. **Figure 5-1** shows the 130th Street station traffic circulation plan.

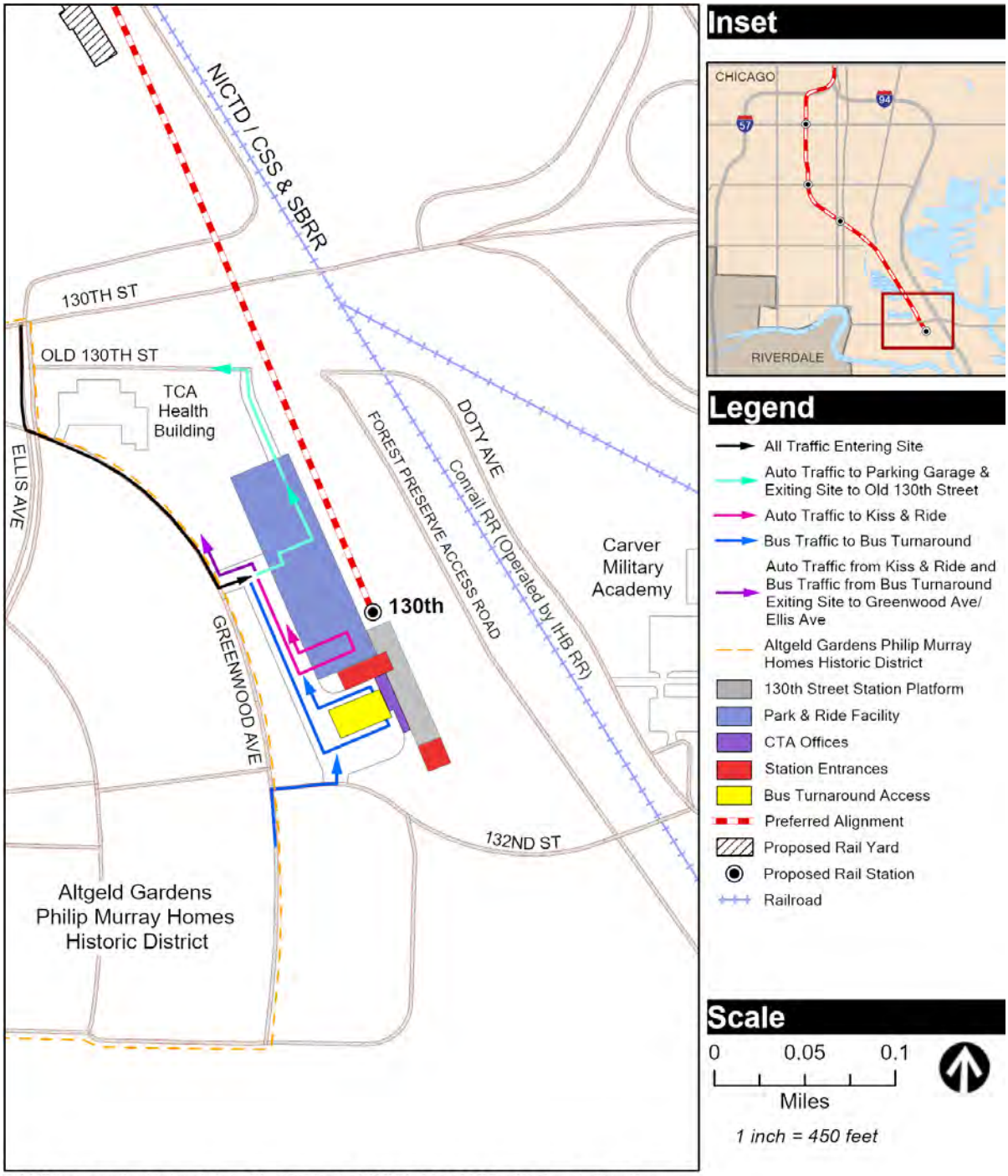

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad, IHB = Indiana Harbor Belt Railroad

Figure 5-1: 130th Street Station Traffic Circulation

The following describes the potential modifications to existing bus routes to create more efficient bus routes and to directly connect riders to their nearest RLE station. These recommendations may change before the RLE Project opens and would take into account public feedback at that time. While some bus routes have changed from what was proposed in the Draft EIS, as a result of additional coordination with Pace and through internal coordination within CTA, overall concept of bus routes connecting to new stations remains the same.

- CTA route #4 (Cottage Grove) select trips (those currently terminating at 115th/Kensington Metra station) would be extended to the new Michigan Avenue station.
- CTA route #8A South Halsted would be extended to 127th Street for all trips; currently all but midday and evening trips terminate at 120th Street.
- CTA route #24 (Wentworth) would be extended south to 119th Street/Ashland Avenue via Vincennes Avenue, covering a portion of the current CTA route #112, which would be eliminated, and a portion of CTA route #111, which would be realigned. As a result, Vincennes Avenue would be served by one route instead of three.
- CTA route #103 (West 103rd) and #106 (East 103rd) would be combined into one route operating between a west terminal at Pulaski Road and an east terminal at the 103rd Street bus garage. This change would eliminate the Michigan Avenue and 95th Street segments of both routes. This route would serve the 103rd Street station providing connections from east and west of the Preferred Alignment.
- CTA route #111 (111th/King Drive) would be extended to 111th Street and Pulaski Road, covering a portion of CTA route #112 (Vincennes/111th), which would be eliminated. CTA route #111 would operate on 111th Street between Pulaski Road and Corliss Avenue, serving the new 111th Street station. The segments of CTA route #111 north of 111th Street would be eliminated. The segment of CTA route #111 south of 111th Street would be served by the extended CTA route #24 instead.
- CTA route #115 (Pullman/115th) would be realigned, operating via Doty Avenue and Woodlawn Avenue to the 103rd Street bus garage instead of terminating at the 95th Street/Dan Ryan terminal. The realignment would cover most of CTA route #111A, which would be eliminated. This route will serve the Michigan Avenue station.
- CTA route #119 (Michigan/119th) would terminate at the new Michigan Avenue station instead of the 95th Street/Dan Ryan terminal, eliminating the segments north of 115th Street.
- CTA route #30 (South Chicago) would be extended from its current terminal at 130th Street/Exchange Avenue to terminate at the new 130th Street station.

- CTA routes #108 (Halsted/95th), 111A (Pullman Shuttle), and 112 (Vincennes-111th) would be eliminated and coverage would be provided by extension and realignment of other bus routes, as explained above.
- Pace route #348 (Harvey – Riverdale – Blue Island) would be restructured into two routes to provide connectivity to the new 130th Street station. One route would cover the northern portion of the existing route #348, operating east-west through the City of Blue Island, with an eastward extension to the 130th Street station via 138th Street. The second route would cover the southern portion of the existing route, operating from the Harvey Transportation Center to the 130th Street station through the Village of Riverdale.
- Pace route #353 (95th/Dan Ryan CTA – River Oaks – Homewood Limited), rather than running along I-94 to the 95th Street/Dan Ryan terminal, would be shortened to terminate at the 130th Street station, providing passengers a transfer at the 130th Street station.
- Pace route #355 (Wentworth Limited) would be extended to connect to the new 130th Street station. This route would provide connections to the Hegewisch neighborhood and communities to the south.
- Pace route #358 (Torrence Avenue) would be extended to connect to the new 130th Street station. This route would provide connections to the Hegewisch neighborhood and communities to the south.
- Pace route #359 (Robbins – South Kedzie Avenue) would be shortened to terminate at the Michigan Avenue station instead of the 95th Street/Dan Ryan terminal, connecting from Halsted Street to Michigan Avenue via 115th Street.
- Pace Route #385 (87th/111th/127th) would be restructured and extended to the new 130th Street station via 127th Street. This route would provide connections to communities to the west of the 130th Street station. Portions of the route south of 127th Street would be eliminated, served instead by Pace route #348.

Public transportation would be restructured to supplement the Preferred Alignment, allowing riders reduced travel times to the Loop. Congestion at the 95th Street/Dan Ryan terminal would be reduced by minimizing the number of bus transfers riders need because they would be able to transfer to or directly board at the proposed stations closer to their origins. Consistent with the Draft EIS, there would be no adverse impacts on public transportation from the Preferred Alignment. Public transportation would benefit from the Preferred Alignment.

5.2.1.2 Traffic

Under Preferred Alignment (2050) conditions, most of the study intersections within the API would operate at LOS D or better in both the AM and PM peak hours, as shown in **Table 5-2**. The traffic data and Synchro results for the unmitigated intersections are in **Attachment C** for the Preferred Alignment. A red time queue analysis using Preferred Alignment volumes was performed at 130th Street/Ellis Avenue and 127th Street/Vermont Street/Wallace Street intersections to determine the storage lengths required for the auxiliary turn lanes. The results of this analysis determined that the eastbound right turn and westbound left turn lanes at the 130th Street/Ellis Avenue intersection currently provide sufficient storage space to accommodate Preferred Alignment traffic volumes in the AM peak hour. However, in coordination with IDOT (having jurisdiction of 130th Street) and CDOT (having jurisdiction of Ellis Avenue), CTA could extend turn lane storage lengths and recommend adjusting the signal timing per the Intersection Design Study and the traffic analysis results to support potential ancillary development associated with the 130th Street station. This mitigation would be based on actual (measured) traffic volumes, agency requirements, coordination within the traffic network, and any traffic demand management and/or traffic calming measures being implemented at the time of mitigation.

All increases in traffic volumes are related to vehicle access to park & ride facilities at stations. Under the Preferred Alignment (2050) conditions, there would be ten intersections that would operate at an undesirable LOS (LOS E or F) in either or both the AM and PM peak hours. Of those ten intersections, five would operate at conditions worse than the No Build conditions.

The intersections that would operate at worse than the No Build conditions are shown in bold in **Table 5-2** and are listed below:

- Intersection #16: 103rd Street and Halsted Street – AM LOS = F; PM LOS = E
- Intersection #54: 115th Street and Martin Luther King Jr Drive – AM LOS = E; PM LOS = F
- Intersection #64: 127th Street and Paulina Street – PM LOS = E
- Intersection #70: 127th Street and Vermont Street and Wallace Street– AM LOS = F; PM LOS = F
- Intersection #71: 127th Street and State Street – PM LOS = E

Table 5-2: Union Pacific Railroad Alternative Intersection Level of Service Comparing Draft and Final EIS Values

Intersection ID	Intersection	Control Type	Draft EIS Build: UPRR (2030)		Final EIS Build: Preferred Alignment (2050)	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	F	E
16	**103rd Street and Halsted Street**	Signalized	F	E	F	E
17	103rd Street and Normal Avenue	Signalized	B	C	B	B
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	B	A	B
36	111th Street and Wentworth Avenue	Signalized	B	A	B	B
37	111th Street and State Street	Signalized	A	B	B	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	C
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	F	E	C	E
53	115th Street and Indiana Avenue	Signalized	B	C	B	C
54	**115th Street and Martin Luther King Jr Drive**	Unsignalized	A	C	E	F
55a	115th Street and Cottage Grove Avenue (West)	Signalized	D	F	D	D
55b	115th Street and Cottage Grove Avenue (East)	Signalized	F	D	F	F
56	115th Street and I-94 EB Ramps	Unsignalized	A	A	A	A
57	115th Street and I-94 WB Ramps	Unsignalized	D	B	E	B
60	119th Street and Halsted Street	Signalized	C	D	C	D
61	119th Street and Wentworth Avenue	Signalized	B	F	B	B

Intersection ID	Intersection	Control Type	Draft EIS Build: UPRR (2030)		Final EIS Build: Preferred Alignment (2050)	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
62	119th Street and State Street	Signalized	F	F	B	B
64	**127th Street and Paulina Street**	Signalized	C	D	D	E
65	127th Street and Marshfield Avenue	Signalized	D	C	D	D
66	127th Street and Ashland Avenue	Signalized	C	D	D	C
67	Vermont Street and Ashland Avenue	Signalized	C	C	C	D
68	127th Street and Halsted Street	Signalized	E	F	D	D
69	Vermont Street and Halsted Street	Signalized	B	B	B	B
70	**127th Street and Vermont Street and Wallace Street**	Signalized	F	F	F	F
71	**127th Street and State Street**	Signalized	E	E	B	D
72	127th Street and Michigan Avenue	Signalized	B	D	A	B
73	130th Street and Indiana Avenue	Signalized	F	F	C	D
74	130th Street and Ellis Avenue	Signalized	B	E	B	B
75	Old 130th Street and Ellis Avenue	Unsignalized	---	---	A	A
76	Greenwood Avenue and Ellis Avenue	Unsignalized	---	---	A	A
77	130th Place and Greenwood Avenue	Unsignalized	---	---	A	A
78	131st Street and Greenwood Avenue	Unsignalized	---	---	A	A
79	132nd Street and Greenwood Avenue	Unsignalized	---	---	A	A
80	132nd Street and Beaubien Woods Driveway	Unsignalized	---	---	A	A
81	132nd Street and Doty Avenue	Unsignalized	---	---	A	A
82	EB 130th Street and I-94E On-Ramp (Ramp A)	Uncontrolled	---	---	A	B
83	EB 130th Street and I-94E Off-Ramp (Ramp B)	Uncontrolled	---	---	B	B
84	EB 130th Street and I-94W On-Ramp (Ramp C)					
85	EB 130th Street and I-94W Off-Ramp (Ramp D)	Uncontrolled	---	---	B	B

Intersection ID	Intersection	Control Type	Draft EIS Build: UPRR (2030)		Final EIS Build: Preferred Alignment (2050)	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
86	WB 130th Street and I-94W On-Ramp (Ramp E)	Uncontrolled	---	---	B	B
87	WB 130th Street and I-94W Off-Ramp (Ramp F)	Uncontrolled	---	---	C	C
88	WB 130th Street and I-94E On-Ramp (Ramp G)					
89	WB 130th Street and I-94E Off-Ramp (Ramp H)	Uncontrolled	---	---	B	B

Notes: - LOS = level of service, UPRR = Union Pacific Railroad
- Signalized and unsignalized intersection LOS reported as the average for all movements.
- I-94 ramps B and C, as well as ramps F and G, were analyzed as weaving segments and therefore analyzed as one location per ramp pair.
- "---" indicates that no LOS was reported for those intersections for the Draft EIS since they were not originally included in the Draft EIS API.

The number of intersections operating at an undesirable LOS (LOS E or F) differs from the 2030 UPRR Alternative of **Appendix H** in the Draft EIS, because there were 21 intersections operating at an undesirable LOS (LOS E or F) in either or both the AM and PM peak hours. Of those 21 intersections, 15 would operate at conditions worse than the No Build conditions.

Mitigation measures to reduce or minimize impacts were evaluated for the transportation network surrounding the Preferred Alignment. Mitigation measures for intersections near the affected intersection may also be necessary to provide better flow of traffic; therefore, the provided mitigation measures include the affected intersections as well as adjacent or nearby intersections. **Table 5-3** lists recommendations for consideration by the agencies of jurisdiction - IDOT, CDOT, and CCDoTH - based on the Preferred Alignment (2050) conditions. At intersections where adverse impacts are projected (2050), potential improvements have been identified to offset the portion of the LOS deterioration or insufficient storage length attributable to the RLE Project. CTA has provided RLE Project traffic analysis to these agencies of jurisdiction through ongoing coordination and recommended improvements as documented in the Final Environmental Impact Statement (EIS)/Record of Decision (ROD) through 30 percent design. CTA would coordinate intersection improvements with IDOT, CDOT, and CCDoTH for intersections affected by the change in traffic volumes and patterns associated with the final design of the RLE Project. However, the mitigation measures would be based on actual (measured) traffic volumes, agency requirements, coordination within the traffic network, and any traffic demand management and/or traffic calming measures being implemented at the time of mitigation. Agency requirements may include level of service analysis under Complete Streets guidelines, examining an overall level of service for pedestrians,

bicycles, transit modes, and other vehicles (rather than placing an emphasis on the movement of automobiles).

Table 5-3: Potential Improvement to Support the Preferred Alignment (2050) Conditions

Intersection ID	Intersection	Mitigation Measure
16	103rd Street and Halsted Street	AM/PM: Adjusted signal timing splits AM/PM: Changed westbound left movement to permissive-protected
52	115th Street and Michigan Avenue	PM: Increased cycle length to 85 seconds
55a	115th Street and Cottage Grove Avenue (West)	AM/PM: Adjusted signal timing splits
55b	115th Street and Cottage Grove Avenue (East)	AM/PM: Adjusted signal timing splits
60	119th Street and Halsted Street	PM: Adjusted signal timing splits
64	127th Street and Paulina Street	AM/PM: Adjusted signal timing splits (Maintained existing offset timing)
65	127th Street and Marshfield Avenue	AM/PM: Adjusted signal timing splits (Maintained existing offset timing)
66	127th Street and Ashland Avenue	AM: Adjusted signal timing splits (Maintained existing offset timing)
68	127th Street and Halsted Street	AM/PM: Increased cycle length to 90 seconds
70	127th Street and Vermont Street and Wallace Street	AM/PM: Adjusted signal timing splits AM/PM: Prohibited left turns for the northeast bound leg, right turn only AM/PM: Changed the northeast bound right turn movement to overlap AM/PM: Converted westbound thru-left lane to a westbound left turn lane
71	127th Street and State Street	PM: Increased cycle length to 90 seconds
73	130th Street and Indiana Avenue	AM/PM: Increased cycle length to 85 seconds

The intersection of 119th Street and Halsted Street is the only intersection from **Table 5-3** not included in the Draft EIS for mitigation. The intersections from the Draft EIS that required

mitigation measures but no longer do in the Final EIS are 119th Street and Wentworth Avenue and 127th Street and Michigan Avenue. Only intersections that fall within the Final EIS API are listed.

Under the Preferred Alignment (2050) conditions, if the recommended improvements were implemented by the respective jurisdictions, then most of the study intersections within the API would operate at LOS D or better in both the AM and PM peak hours, as shown in **Table 5-4**. Under these Preferred Alignment mitigated (2050) conditions, some intersections would operate at LOS E or F. Coordination regarding LOS thresholds was conducted with IDOT and CDOT. LOS D is considered to be acceptable for urban areas. The traffic data and Synchro results are in **Attachment D** for the Preferred Alignment (Mitigated).

Table 5-4: Preferred Alignment Intersection (2050) Level of Service with Improvements

Intersection ID	Intersection	Control Type	Final EIS No Build (2050)		Final EIS Preferred Alignment (2050) Mitigated	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	F	E	F	E
16	103rd Street and Halsted Street	Signalized	F	D	F	D
17	103rd Street and Normal Avenue	Signalized	B	A	B	B
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	A	B	A	B
36	111th Street and Wentworth Avenue	Signalized	B	B	B	B
37	111th Street and State Street	Signalized	A	B	B	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	C	E	C	D
53	115th Street and Indiana Avenue	Signalized	B	C	B	C
54	115th Street and Martin Luther King Jr Drive	Unsignalized	A	C	E	F

Intersection ID	Intersection	Control Type	Final EIS No Build (2050)		Final EIS Preferred Alignment (2050) Mitigated	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
55a	115th Street and Cottage Grove Avenue (West)	Signalized	D	D	D	D
55b	115th Street and Cottage Grove Avenue (East)	Signalized	F	F	F	F
56	115th Street and I-94 EB Ramps	Unsignalized	A	A	A	A
57	115th Street and I-94 WB Ramps	Unsignalized	D	B	E	B
60	119th Street and Halsted Street	Signalized	C	D	C	D
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	B	B	B	B
64	127th Street and Paulina Street	Signalized	D	E	D	D
65	127th Street and Marshfield Avenue	Signalized	D	D	D	D
66	127th Street and Ashland Avenue	Signalized	D	C	C	C
67	Vermont Street and Ashland Avenue	Signalized	C	D	C	D
68	127th Street and Halsted Street	Signalized	C	D	C	C
69	Vermont Street and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Street and Wallace Street	Signalized	E	F	B	B
71	127th Street and State Street	Signalized	B	C	B	B
72	127th Street and Michigan Avenue	Signalized	A	B	A	B
73	130th Street and Indiana Avenue	Signalized	C	C	C	B
74	130th Street and Ellis Avenue	Signalized	B	B	B	B
75	Old 130th Street and Ellis Avenue	Unsignalized	A	A	A	A
76	Greenwood Avenue and Ellis Avenue	Unsignalized	A	A	A	A
77	130th Place and Greenwood Avenue	Unsignalized	A	A	A	A
78	131st Street and Greenwood Avenue	Unsignalized	A	A	A	A
79	132nd Street and Greenwood Avenue	Unsignalized	A	A	A	A
80	132nd Street and Beaubien Woods Driveway	Unsignalized	A	A	A	A

Intersection ID	Intersection	Control Type	Final EIS No Build (2050)		Final EIS Preferred Alignment (2050) Mitigated	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
81	132nd Street and Doty Avenue	Unsignalized	A	A	A	A
82	EB 130th Street and I-94E On-Ramp (Ramp A)	Uncontrolled	A	B	A	B
83	EB 130th Street and I-94E Off-Ramp (Ramp B)	Uncontrolled	B	B	B	B
84	EB 130th Street and I-94W On-Ramp (Ramp C)					
85	EB 130th Street and I-94W Off-Ramp (Ramp D)	Uncontrolled	B	B	B	B
86	WB 130th Street and I-94W On-Ramp (Ramp E)	Uncontrolled	B	B	B	B
87	WB 130th Street and I-94W Off-Ramp (Ramp F)	Uncontrolled	C	C	C	C
88	WB 130th Street and I-94E On-Ramp (Ramp G)					
89	WB 130th Street and I-94E Off-Ramp (Ramp H)	Uncontrolled	B	B	B	B

Notes: - LOS = level of service, UPRR = Union Pacific Railroad
- Signalized and unsignalized intersection LOS reported as the average for all movements.
- I-94 ramps B and C, as well as ramps F and G, were analyzed as weaving segments and therefore analyzed as one location per ramp pair.

At the 130th Street station, nearly all automobiles and most buses would enter using the same entrance at the station access from Greenwood Avenue. An option that is in consideration, based on the layout, is to have the buses that serve Altgeld Gardens from the south, to enter the station at the 132nd Street entrance and unload and pick up riders at the same bus bay. Kiss & ride vehicles would drop off their passenger(s) and exit using the same station access that they had used entering the station. Park & ride vehicles would exit on the northern end of the garage using Old 130th Street westbound and follow that to the 130th Street and Ellis Avenue intersection. Old 130th Street east of Ellis Avenue would maintain two-way access. Minimal traffic is expected to enter Old 130th Street from Ellis Avenue because southbound left turns are not a possible movement due to a barrier median on Ellis Avenue. All buses would proceed to the bus turnaround and exit using the same station access from Greenwood Avenue.

The impacts on vehicular circulation would not be adverse due to the relocation of 130th Street station. **Figure 5-1** shows the 130th Street station traffic circulation plan.

The 130th Street station would close Old 130th Street across the new RLE tracks. Old 130th Street currently provides access to the TCA Health building and Carver Military Academy High School

and would serve as the park & ride exit from the 130th Street station. Access from Old 130th Street would remain to both driveways leading to TCA Health and from 130th Place to Greenwood Avenue. Carver Military Academy High School has two existing access points: the primary inbound and outbound access from Greenwood Avenue to 132nd Street and secondary access via Doty Avenue and Old 130th Street when traveling north to/from the high school. Under the Preferred Alignment, the secondary access via Doty Avenue would be closed and vehicles traveling to Carver Military Academy High School would only use the primary entrance at Greenwood Avenue to 132nd Street. However, Doty Avenue can still be used for access to/from the south of the high school. While unlikely, this access from Doty Avenue can also be used by automobiles accessing the 130th Street station on Greenwood Avenue.

5.2.1.3 Freight Transportation

For the Preferred Alignment, the impacts to freight transportation are the same as described in the Draft EIS, unless otherwise stated.

Rail

As part of the Preferred Alignment, the UPRR tracks would continue to be operational. Because the RLE track would be elevated, there would be no permanent impacts on UPRR freight train operations. Future freight train movements on the UPRR track may increase, causing additional delays to motorists at at-grade crossings.

The Preferred Alignment would provide enhanced crossing protection for vehicles and pedestrians across UPRR at-grade rail crossings adjacent to RLE stations (103rd Street, 111th Street, 115th Street, and State Street). At the four RLE stations, CTA would provide parking on the same side of the tracks so riders that use park & ride facilities do not have to cross the UPRR tracks to access the station. CTA would coordinate with the UPRR regarding fencing or other appropriate design elements and CTA will include the agreed upon design features in final design of the RLE Project to deter trespassing into UPRR property.

Truck

According to CMAP's *On TO 2050,* the biggest challenge to the trucking industry is highway congestion. CMAP congestion data show that on several corridors where truck volumes are over 10,000 per day, congestion during the morning peak period increases travel times an average of 60 percent. Because the RLE track would be elevated above local streets, there would be no impact on truck routes, other than the impacts on all motorized vehicular traffic. The 130th Street station park & ride facility may divert motorists from I-94 commuting into the city during these peak periods.

This may marginally help alleviate congestion on the expressway, reducing freight truck travel times and cost.

5.2.1.4 Bicycle Facilities

The impacts to bicycle facilities are the same as described in the Draft EIS.

Under the Preferred Alignment there would be no adverse permanent impacts on existing or recommended bike routes. Bike routes along 103rd, 111th, 115th Streets, and State Street have the potential to be used by bicyclists to access the RLE Project. CTA would provide bicycle parking at the four RLE stations to accommodate bicyclists. The impacts to bicycle facilities would be beneficial. Bicyclists would benefit from the addition of bicycle parking at stations and connections to nearby existing and proposed bike routes via expanded transit access from the RLE Project.

5.2.1.5 Pedestrians

The impacts and mitigation measures to pedestrians are the same as described in the Draft EIS, unless otherwise stated.

The Preferred Alignment would provide pedestrians with more choices, flexibility, and potentially reduced travel times as compared to the No Build Alternative. The existing at-grade crossings at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 113th Street (pedestrian only), Wentworth Avenue, 115th Street, and State Street would remain. At the crossings directly adjacent to stations, CTA would include implementation of at-grade warning device enhancements including pedestrian gates and improvements for Americans with Disabilities Act (ADA) compliance in the final design of the RLE Project in coordination with the UPRR. Illinois Commerce Commission (ICC), CDOT, and CCDoTH.

103rd Street Station

Existing striped crosswalks at Eggleston Avenue and 103rd Street, and Harvard Avenue and 103rd Street, could be used to access the station. CTA would coordinate with CDOT to include crosswalks at the existing intersection adjacent to 103rd Street station and determine if additional improvements are merited at the 103rd Station location to enhance safety for crossing pedestrians. These crosswalks would be improved with the construction of the proposed bus turnaround and station. The auxiliary entrance to the station would be adjacent to the surface parking lot, allowing for a direct route from the platform to the parking lot. The parking lot on the south side of 103rd Street would have an entrance at 103rd Place, allowing cars to leave the parking lot farther away from the station, where the majority of pedestrian traffic would occur. These improvements would contribute to convenient, safe, and secure access for all users. This station narrative has been

updated to reflect the design refinements since the Draft EIS; however, the impacts are generally the same. There would be no adverse impacts after mitigation.

111th Street Station

Because the majority of the properties adjacent to the existing railroad tracks are currently undeveloped, proposed sidewalks would need to be provided for pedestrian access and egress to the primary entrance and auxiliary exit of the station. Existing striped crosswalks are not close to the proposed primary entrance of the station. At 111th Street station, where the proposed pedestrian roadway crossing is considered "mid-block," CTA would provide enhanced crosswalk warning devices (in coordination with CDOT) in the final design of the RLE Project. This crosswalk enhancement may include a raised-table style crosswalk with the addition of rapid flash, pedestrian-activated warning lights. A surface parking lot would be on the south side of 111th Street, east of the UPRR tracks. The location of the parking lot would require pedestrians to cross 111th Street to access the station. Existing railroad crossing signals with road gates and railroad crossing pavement markings are at the crossing on 111th Street. These improvements would contribute to convenient, safe, and secure access for all users. This station narrative has been updated to reflect the design refinements since the Draft EIS; however, the impacts are generally the same. There would be no adverse impacts after mitigation.

Michigan Avenue Station

Pedestrian access for the Michigan Avenue station would be located along the north side of the UPRR with entry points on the east and west sides of Michigan Avenue. The surface parking lot would be near the primary entrance of the station, allowing commuters who park in this parking lot to avoid crossing Michigan Avenue or the UPRR. Existing striped, signalized crosswalks on 115th Street at State Street and Michigan Avenue could be used to access the station. In addition to the parking lot driveway, another access driveway just south of the surface parking lot entrance on State Street would serve as a busway with five bays and would connect with the west side of Michigan Avenue with direct access the main stationhouse. A kiss & ride lot would be located on the east side of Michigan Avenue south of Kensington Avenue, where the auxiliary stationhouse would be located. CTA would coordinate with CDOT to include crosswalks at an existing intersection at Michigan Avenue and Kensington Avenue and evaluate the need for a traffic signal related to exiting buses. If the intersection is signalized, pedestrian signals with pedestrian activation will be included. . These improvements would contribute to convenient, safe, and secure access for all users. This station narrative has been updated to reflect the design refinements since the Draft EIS; however, the impacts are generally the same. There would be no adverse impacts after mitigation.

130th Street Station

Since the Draft EIS, the 130th Street station was relocated, so the impacts have changed. Parking facilities for the 130th Street station would be west of the Conrail tracks and south of 130th Street in the Altgeld Gardens neighborhood. Pedestrians would benefit from the 130th Street station, as intersections would be upgraded immediately adjacent to the station with ADA-accessible curb ramps and deteriorated sidewalks would be replaced in the Altgeld Gardens neighborhood adjacent to the 130th Street station. The station area intersections would receive these improvements. The park & ride facility for the 130th Street station would be located to the south of 130th Street in the Altgeld Gardens neighborhood. The bus turnaround and bays would be on-site for the 130th Street station. These improvements would provide access for all users and would improve pedestrian safety.

The impacts on pedestrian circulation would not be adverse due to the relocation of 130th Street station. No mitigation measures would be required.

5.2.1.6 Parking

The permanent impacts and mitigation measures to parking are the same as described in **Appendix H** of the Draft EIS, unless otherwise stated.

Each of the station locations would have a surface parking lot and/or parking garage. These parking facilities would expand the reach of the RLE Project and provide an opportunity for users to access the stations by car. These users may benefit from reduced travel time and costs by taking the Red Line. Another benefit would be that motorists could be diverted from congested sections of roadway. Sufficient parking capacity, within the CTA parking facilities, would be provided in all locations to accommodate all CTA ridership traveling by vehicle. Existing on-street parking along the east side of Greenwood Avenue from Ellis Avenue to the proposed 130th Street station entrance would be removed to allow for CTA buses to travel on Greenwood Avenue. On-street parking along the west side of Greenwood Avenue, from Ellis Avenue to 132nd Street and along the east side of Greenwood Avenue south of the 130th Street Station entrance, would remain.

Existing bus stops are on 103rd Street and 111th Street at the location of the proposed stations. These existing stops already have a no parking zone in the locations of the existing bus lanes, so there would be no impact to on-street parking due to bus stop locations.

The park & ride facility for the 130th Street station would be near the I-94 and 130th Street interchange. This facility would expand the reach of the RLE Project to south suburban Cook County and northwest Indiana automobile commuters. These commuters could benefit from

decreased travel times and cost by riding the Red Line and avoiding congestion and travel delays on I-94. **Table 5-5** presents a summary of the proposed parking for each of the stations.

Table 5-5: Preferred Alignment Park & Ride Facilities

Station	Number of Parking Spaces for Preferred Alignment	Parking Facility Description
103rd Street	175	Station Area Surface Parking Lot
111th Street	225	Station Area Surface Parking Lot
Michigan Avenue	180	Station Area Surface Parking Lot
130th Street	760	Parking Garage and Surface Parking Lot
Total Parking Spaces	**1,340**	

Notes: - Capacity indicates customer parking supply. CTA staff parking is not shown.

The parking capacity at each station has changed since the Draft EIS. While the parking at 111th Street station would increase by 25 spaces, parking at all three other stations has been reduced since the Draft EIS proposed a total of 3,700 parking spaces.

Existing parking facilities at the Agape Community Center would be affected by the Preferred Alignment because a City-owned parcel that is currently used for parking would be acquired. Replacement parking is being proposed in the parcel directly east with the alley behind the Agape Community Center providing access to the new parking lot.

Existing parking facilities at TCA Health would be affected by the Preferred Alignment and would require mitigation measures. Mitigation measures would include maintaining access to the parking lot and replacing parking spaces, if any are impacted, at a ratio of 1 to 1. Any redesign of the parking lot would be done in coordination with TCA Health.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

5.2.2.1 Public Transportation

The construction impacts and mitigation measures to public transportation are the same as described in **Appendix H** of the Draft EIS, unless otherwise stated.

Bus Transit

The construction activities associated with the Preferred Alignment would temporarily affect the physical capacity of roadways and intersections requiring detours. This may lead to increased travel times and a possible shift in traffic volumes, which would increase travel times for bus transit users.

Bus stop locations may be eliminated or relocated temporarily, and buses may be rerouted during construction activities. With adherence to local, state, and federal construction and temporary traffic and public transportation management guidelines, no adverse impacts would result from the Preferred Alignment.

Commuter Rail

The Preferred Alignment would run over existing Canadian National/Metra Electric District (CN/MED) tracks. Construction at the CN/MED crossing would be phased to minimize the impacts on Metra Electric operations. During construction for the new access road for the existing Metropolitan Water Reclamation District of Greater Chicago (MWRD) facility, construction over and adjacent to the NICTD/CSS & SBRR right-of-way would occur.. Construction activities would be coordinated with the affected railroads for appropriate flagging, and scheduled track outages to minimize the impacts on passenger trains.

The rail cross-over taking place at 107th Place differs from the UPRR West Option in the Draft EIS because that cross-over would take place farther southeast along the alignment at Prairie Avenue. The Amtrak Cardinal service trains travel three times a week in each direction along the UPRR. However, construction impacts are expected to be similar to impacts noted in the Draft EIS.

5.2.2.2 Traffic

The construction impacts and mitigation measures to traffic are the same as described in **Appendix H** of the Draft EIS.

The construction activities associated with the Preferred Alignment would temporarily affect the physical capacity of local roadways and intersections. This may lead to increased travel times, possible shift in traffic volumes, and the need to reroute traffic patterns during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For

superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Temporary shutdown of other traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Proposed structure construction in the vicinity of the I-94/I-57 interchange would be sequenced to limit effect on I-57 traffic flow to the extent practicable per IDOT traffic management requirements. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

Traffic management and maintenance of traffic plans would be prepared that identify traffic detours and emergency response access routes. Coordination with IDOT, CCDoTH, CDOT, and local businesses, and organizations would occur to select the most appropriate access and traffic management for each situation. With adherence to local, state, and federal construction and temporary traffic management guidelines, no adverse traffic impacts would result from the Preferred Alignment.

5.2.2.3 Freight Transportation

The construction impacts and mitigation measures to freight transportation are the same as described in **Appendix H** of the Draft EIS, unless otherwise stated.

Rail

The Preferred Alignment would consist of new construction of a dual-track, elevated structure crossing over the UPRR at Fernwood Parkway just south of I-57 and continuing immediately adjacent to and west of the UPRR right-of-way, crossing over the UPRR tracks again at 107th Place and running along the east side of the UPRR corridor and over existing CN/MED tracks. Construction activities would be coordinated with the UPRR for appropriate flagging, and scheduled track outages to minimize impacts on UPRR freight operations, such as sequencing the construction of crossings..

All construction would be specified to be completed with minimal impact on UPRR operations and in a manner that would provide safe conditions for vehicles, pedestrian and bicycles using the road across the railroad right-of-way.

Construction activities would be phased to reduce construction impacts on UPRR operations as much as possible. Construction at the CN/MED crossing would be phased to minimize the impacts on CN and Metra Electric operations. Railroad flagging and scheduled track closures would be needed to construct the crossing.

Truck

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Temporary shutdown of other traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Proposed structure construction would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-57.

5.2.2.4 Bicycle Facilities

The construction impacts and mitigation measures to bicycle facilities are the same as described in **Appendix H** of the Draft EIS.

Bicyclists using 103rd Street, 111th Street, or 115th Street may incur increased travel times due to detours or increase vehicular traffic due to construction activities.

5.2.2.5 Pedestrians

The construction impacts and mitigation measures to pedestrians are the same as described in **Appendix H** of the Draft EIS.

Due to the construction of the aerial structure and stations, sidewalks would need to be temporarily closed during these construction activities. Increased travel distance and time may be incurred due to pedestrian traffic reroutes. Impacts would be minimized by adhering to local, state, and federal guidelines for maintaining pedestrian and ADA access during construction.

5.2.2.6 Parking

The construction impacts and mitigation measures to parking are the same as described in **Appendix H** of the Draft EIS.

On-street parking would be temporarily affected during construction of the aerial structure and stations. Construction along roadways would also contribute to temporary on-street parking loss due to maintenance of traffic.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

The cumulative impacts and mitigation measures to the Preferred Alignment are the same as described in **Appendix H** of the Draft EIS, unless otherwise stated.

5.2.3.1 Freight Transportation

The cumulative impacts and mitigation measures to freight transportation are the same as described in **Appendix H** of the Draft EIS, unless otherwise stated.

The Chicago Region Environmental and Transportation Efficiency (CREATE) Program 75th Street Corridor Improvement Project (CIP) consists of the following improvements:

- Reconfiguring the Belt Railway of Chicago main tracks between the Dan Ryan and Belt Junction, where there are existing conflicts between the freight railroads and Metra SouthWest Service.
- Reconfiguring and building a third Belt Railway Company main track and constructing a flyover to connect the Metra SouthWest Service to the Metra Rock Island District (RI) Line in the vicinity of 74th Street and Normal Avenue and 75th Street and Parnell Avenue.
- Constructing a bridge that reduces conflicts between CSX and Belt Railway Company, Metra RI, and NS.
- Road-rail grade separation of 71st Street and CSX freight line north of project boundary.

The corridor improvements would be north of the Preferred Alignment.

The UPRR tracks currently average 14 trains per day. Because the UPRR tracks would remain in the Preferred Alignment, future increases in freight trains on the UPRR tracks may have potential impacts on pedestrian and vehicular traffic near the proposed stations. This could affect travel times for bus transit servicing the stations and increase delays for commuters who choose to park & ride.

Section 6 - Impacts Remaining after Mitigation

Impacts can be adverse or beneficial. In the category of transportation, as summarized below, there would be no adverse impacts after mitigation. The project would provide transportation benefits by improving travel times and transit access. Existing average travel times to work are higher in the RLE Project API than many other parts of Chicago. Within the API, some sections are somewhat isolated from transit access. Benefits that directly address needs within the API are summarized below for each alternative.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on transportation as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative – Preferred Alignment

Benefits applicable to the Preferred Alignment include:

- Direct rail service (without requiring one or more bus transfers) from 130th Street, an area currently isolated from transportation connectivity; and
- Bicycle parking provided at each station to allow for future bicycle facility connections to the station.

There is no change from the benefits made for the East and West Options of the UPRR Alternative in the Draft EIS.

Section 7 - References Cited

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Attachment A
2020 Existing Condition

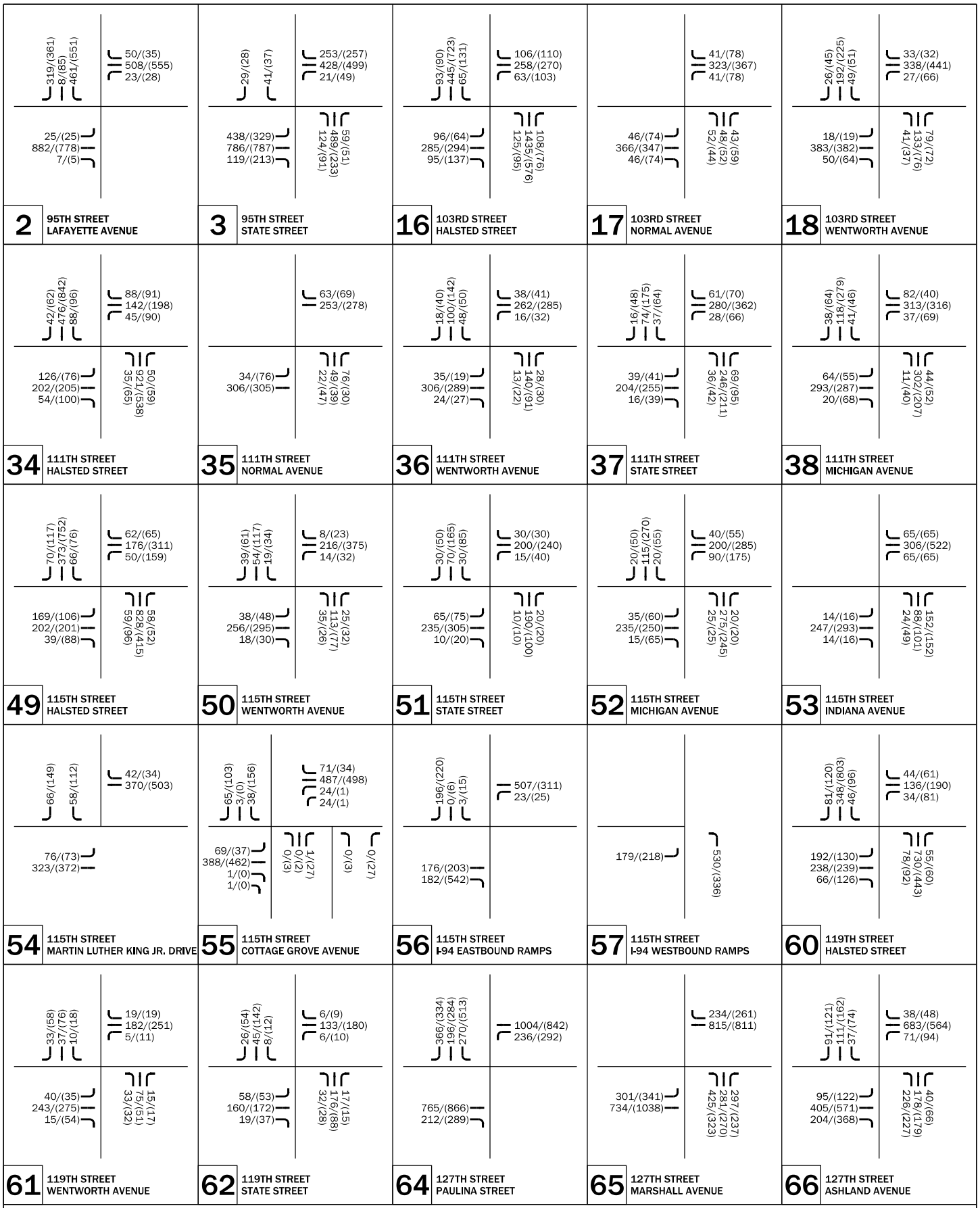

EXISTING (2020) INTERSECTION TRAFFIC VOLUMES

PAGE 1 OF 2

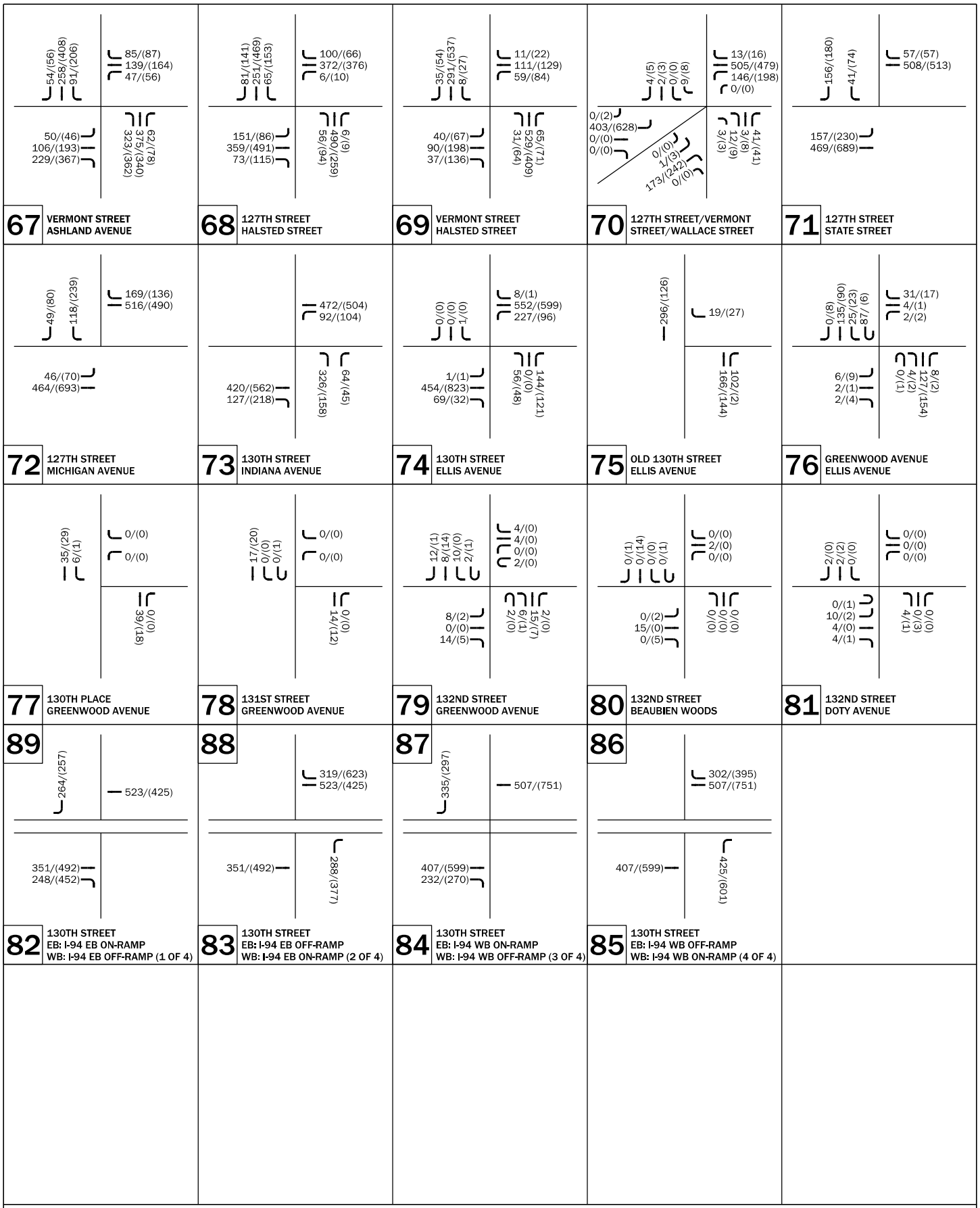

EXISTING (2020) INTERSECTION TRAFFIC VOLUMES

PAGE 2 OF 2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	454	69	227	552	8	56	0	144	1	0	0
Future Volume (vph)	1	454	69	227	552	8	56	0	144	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	16	12
Storage Length (ft)	165		165	165		165	0		0	0		0
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	210			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1710	3109	1471	1644	3138	1366	0	1449	1443	0	969	0
Flt Permitted	0.436			0.435				0.757			0.719	
Satd. Flow (perm)	785	3109	1471	753	3138	1366	0	1155	1443	0	733	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		5340			1172			141			331	
Travel Time (s)		104.0			22.8			3.2			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Adj. Flow (vph)	1	473	72	236	575	8	58	0	150	1	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	473	72	236	575	8	0	58	150	0	1	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	4	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	43.0	43.0	43.0	7.0	43.0	43.0	6.0	6.0	6.0	6.0	6.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	47.0	47.0	47.0	10.0	47.0	47.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	47.0	47.0	47.0	10.0	57.0	57.0	28.0	28.0	28.0	28.0	28.0	
Total Split (%)	55.3%	55.3%	55.3%	11.8%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%	32.9%	
Maximum Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		4.0	4.0		4.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	48.4	48.4	48.4	61.1	60.1	60.1		16.9	16.9		16.9	
Actuated g/C Ratio	0.57	0.57	0.57	0.72	0.71	0.71		0.20	0.20		0.20	
v/c Ratio	0.00	0.27	0.09	0.37	0.26	0.01		0.25	0.52		0.01	
Control Delay	10.0	10.7	10.3	6.4	5.4	5.1		30.2	36.7		24.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Delay	10.0	10.7	10.3	6.4	5.4	5.1		30.2	36.7		24.0	
LOS	A	B	B	A	A	A		C	D		C	
Approach Delay		10.6			5.7			34.9			24.0	
Approach LOS		B			A			C			C	
90th %ile Green (s)	43.0	43.0	43.0	7.9	53.9	53.9	23.1	23.1	23.1	23.1	23.1	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
70th %ile Green (s)	43.9	43.9	43.9	11.0	57.9	57.9	19.1	19.1	19.1	19.1	19.1	
70th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
50th %ile Green (s)	47.8	47.8	47.8	9.4	60.2	60.2	16.8	16.8	16.8	16.8	16.8	
50th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
30th %ile Green (s)	51.5	51.5	51.5	8.1	62.6	62.6	14.4	14.4	14.4	14.4	14.4	
30th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
10th %ile Green (s)	55.9	55.9	55.9	7.0	65.9	65.9	11.1	11.1	11.1	11.1	11.1	
10th %ile Term Code	Coord	Coord	Coord	Min	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
Stops (vph)	1	225	33	73	186	3		47	128		2	
Fuel Used(gal)	0	20	3	3	8	0		1	2		0	
CO Emissions (g/hr)	3	1411	213	220	532	8		47	136		1	
NOx Emissions (g/hr)	1	274	42	43	103	2		9	26		0	
VOC Emissions (g/hr)	1	327	49	51	123	2		11	31		0	
Dilemma Vehicles (#)	0	26	0	0	33	0		0	0		0	
Queue Length 50th (ft)	0	63	16	34	48	1		27	74		0	
Queue Length 95th (ft)	3	105	41	77	90	6		58	127		4	
Internal Link Dist (ft)		5260			1092			61			251	
Turn Bay Length (ft)	165		165	165		165						
Base Capacity (vph)	447	1770	838	632	2218	966		326	407		206	
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	
Reduced v/c Ratio	0.00	0.27	0.09	0.37	0.26	0.01		0.18	0.37		0.00	

Intersection Summary	
Area Type:	Other

Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Ellis Avenue & 130th Street

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	19	166	102	0	296
Future Volume (vph)	0	19	166	102	0	296
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.865	0.943			
Flt Protected						
Satd. Flow (prot)	0	1557	3225	0	0	3420
Flt Permitted						
Satd. Flow (perm)	0	1557	3225	0	0	3420
Link Speed (mph)	30		30			30
Link Distance (ft)	642		174			141
Travel Time (s)	14.6		4.0			3.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	21	184	113	0	329
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	21	297	0	0	329
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	19	166	102	0	296
Future Volume (Veh/h)	0	19	166	102	0	296
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	21	184	113	0	329
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						141
pX, platoon unblocked						
vC, conflicting volume	405	148			297	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	405	148			297	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	579	878			1276	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	21	123	174	164	164
Volume Left	0	0	0	0	0
Volume Right	21	0	113	0	0
cSH	878	1700	1700	1700	1700
Volume to Capacity	0.02	0.07	0.10	0.10	0.10
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	9.2	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.2	0.0		0.0	
Approach LOS	A				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	18.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	2	2	2	4	31	4	127	8	87	25	135
Future Volume (vph)	6	2	2	2	4	31	4	127	8	87	25	135
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.885			0.992				
Flt Protected		0.969			0.998			0.999				0.978
Satd. Flow (prot)	0	1701	0	0	1590	0	0	1727	0	0	0	1737
Flt Permitted		0.969			0.998			0.999				0.978
Satd. Flow (perm)	0	1701	0	0	1590	0	0	1727	0	0	0	1737
Link Speed (mph)		30			30			30				30
Link Distance (ft)		472			392			265				174
Travel Time (s)		10.7			8.9			6.0				4.0
Confl. Peds. (#/hr)			4	4		1			1	4	1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	25%	0%	8%	1%
Adj. Flow (vph)	7	2	2	2	4	34	4	141	9	97	28	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	0	40	0	0	154	0	0	0	275
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Sign Control		Stop			Stop			Free				Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	1800
Flt Permitted	
Satd. Flow (perm)	1800
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	6	2	2	2	4	31	4	127	8	87	25	135
Future Volume (Veh/h)	6	2	2	2	4	31	4	127	8	87	25	135
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	2	2	2	4	34	4	141	9	0	28	150
Pedestrians		4			1			4				1
Lane Width (ft)		12.0			12.0			12.0				12.0
Walking Speed (ft/s)		4.0			4.0			4.0				4.0
Percent Blockage		0			0			0				0
Right turn flare (veh)												
Median type								None				None
Median storage veh)												
Upstream signal (ft)												315
pX, platoon unblocked	0.99	0.99	0.99	0.99	0.99		0.99			0.00		
vC, conflicting volume	400	369	158	368	364	148	154			0	151	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	385	353	139	351	348	148	134			0	151	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			0.0	4.2	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.3	
p0 queue free %	99	100	100	100	99	96	100			0	98	
cM capacity (veh/h)	531	552	896	581	555	903	1437			0	1393	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total	11	40	154	178	0
Volume Left	7	2	4	28	0
Volume Right	2	34	9	0	0
cSH	578	828	1437	1393	1700
Volume to Capacity	0.02	0.05	0.00	0.02	0.00
Queue Length 95th (ft)	1	4	0	2	0
Control Delay (s)	11.3	9.6	0.2	1.3	0.0
Lane LOS	B	A	A	A	
Approach Delay (s)	11.3	9.6	0.2	1.3	
Approach LOS	B	A			

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	39	0	6	35
Future Volume (vph)	0	0	39	0	6	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						0.992
Satd. Flow (prot)	1765	0	1765	0	0	1751
Flt Permitted						0.992
Satd. Flow (perm)	1765	0	1765	0	0	1751
Link Speed (mph)	30		30			30
Link Distance (ft)	330		257			242
Travel Time (s)	7.5		5.8			5.5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	42	0	7	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	42	0	0	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 10.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	39	0	6	35
Future Volume (Veh/h)	0	0	39	0	6	35
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	42	0	7	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	94	42			42	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	94	42			42	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	902	1029			1567	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	42	45
Volume Left	0	0	7
Volume Right	0	0	0
cSH	1700	1700	1567
Volume to Capacity	0.00	0.02	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	1.2
Lane LOS	A		A
Approach Delay (s)	0.0	0.0	1.2
Approach LOS	A		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	10.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	14	0	0	17
Future Volume (vph)	0	0	14	0	0	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1800	0	1800	0	0	1622
Flt Permitted						
Satd. Flow (perm)	1800	0	1800	0	0	1622
Link Speed (mph)	30		30			30
Link Distance (ft)	383		252			706
Travel Time (s)	8.7		5.7			16.0
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	11%
Adj. Flow (vph)	0	0	16	0	0	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	16	0	0	19
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 7.6%	ICU Level of Service A
Analysis Period (min) 15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	14	0	0	17
Future Volume (Veh/h)	0	0	14	0	0	17
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	16	0	0	19
Pedestrians	3		3			
Lane Width (ft)	12.0		12.0			
Walking Speed (ft/s)	4.0		4.0			
Percent Blockage	0		0			
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	41	19			19	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	41	19			19	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	971	1062			1607	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	16	19
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1607
Volume to Capacity	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	7.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	8	0	14	2	0	4	4	2	6	15	2	2
Future Volume (vph)	8	0	14	2	0	4	4	2	6	15	2	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.914				0.946				0.990		
Flt Protected		0.982				0.990				0.984		
Satd. Flow (prot)	0	1616	0	0	0	1686	0	0	0	1637	0	0
Flt Permitted		0.982				0.990				0.984		
Satd. Flow (perm)	0	1616	0	0	0	1686	0	0	0	1637	0	0
Link Speed (mph)		30				30				30		
Link Distance (ft)		311				1025				274		
Travel Time (s)		7.1				23.3				6.2		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%
Adj. Flow (vph)	9	0	16	2	0	4	4	2	7	17	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	0	10	0	0	0	28	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA
Median Width(ft)		0				0				0		
Link Offset(ft)		0				0				0		
Crosswalk Width(ft)		16				16				16		
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	9	15		9	9	15		9	9
Sign Control		Stop				Stop				Free		

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	10	8	12
Future Volume (vph)	10	8	12
Ideal Flow (vphpl)	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00
Frt		0.950	
Flt Protected		0.982	
Satd. Flow (prot)	0	1578	0
Flt Permitted		0.982	
Satd. Flow (perm)	0	1578	0
Link Speed (mph)		30	
Link Distance (ft)		252	
Travel Time (s)		5.7	
Peak Hour Factor	0.90	0.90	0.90
Heavy Vehicles (%)	0%	25%	0%
Adj. Flow (vph)	11	9	13
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	35	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.07	1.07	1.07
Turning Speed (mph)	15		9
Sign Control		Free	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (veh/h)	8	0	14	2	0	4	4	2	6	15	2	2
Future Volume (Veh/h)	8	0	14	2	0	4	4	2	6	15	2	2
Sign Control		Stop				Stop				Free		
Grade		0%				0%				0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	0	16	0	0	4	4	0	7	17	2	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type										None		
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked				0.00				0.00				0.00
vC, conflicting volume	76	70	16	0	86	76	18	0	22			0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	76	70	16	0	86	76	18	0	22			0
tC, single (s)	7.1	6.5	6.2	0.0	7.1	6.5	6.2	0.0	4.1			0.0
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	0.0	3.5	4.0	3.3	0.0	2.2			0.0
p0 queue free %	99	100	99	0	100	100	100	0	100			0
cM capacity (veh/h)	905	815	1070	0	884	809	1066	0	1607			0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	25	8	26	33
Volume Left	9	0	7	11
Volume Right	16	4	2	13
cSH	1004	920	1607	1611
Volume to Capacity	0.02	0.01	0.00	0.01
Queue Length 95th (ft)	2	1	0	1
Control Delay (s)	8.7	8.9	2.0	2.5
Lane LOS	A	A	A	A
Approach Delay (s)	8.7	8.9	2.0	2.5
Approach LOS	A	A		

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (veh/h)	10	8	12
Future Volume (Veh/h)	10	8	12
Sign Control		Free	
Grade		0%	
Peak Hour Factor	0.90	0.90	0.90
Hourly flow rate (vph)	11	9	13
Pedestrians			
Lane Width (ft)			
Walking Speed (ft/s)			
Percent Blockage			
Right turn flare (veh)			
Median type		None	
Median storage veh)			
Upstream signal (ft)			
pX, platoon unblocked			
vC, conflicting volume	19		
vC1, stage 1 conf vol			
vC2, stage 2 conf vol			
vCu, unblocked vol	19		
tC, single (s)	4.1		
tC, 2 stage (s)			
tF (s)	2.2		
p0 queue free %	99		
cM capacity (veh/h)	1611		
Direction, Lane #			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	15	0	0	2	0	0	0	0	0	0	0
Future Volume (vph)	0	15	0	0	2	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1104	0	0	1800	0	0	1800	0	0	1800	0
Flt Permitted												
Satd. Flow (perm)	0	1104	0	0	1800	0	0	1800	0	0	1800	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1025			255			543			489	
Travel Time (s)		23.3			5.8			12.3			11.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	63%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	15	0	0	2	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	15	0	0	2	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2			17			19	19	2	19	19	17
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2			17			19	19	2	19	19	17
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1634			1613			1000	879	1088	1000	879	1068

Direction, Lane #	EB 1	WB 1	SE 1	NW 1
Volume Total	17	2	0	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1634	1613	1700	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS			A	A
Approach Delay (s)	0.0	0.0	0.0	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	4	4	0	0	0	4	0	0	0	2	2
Future Volume (vph)	10	4	4	0	0	0	4	0	0	0	2	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.972									0.932	
Flt Protected		0.972						0.950				
Satd. Flow (prot)	0	1667	0	0	1765	0	0	1676	0	0	1645	0
Flt Permitted		0.972						0.950				
Satd. Flow (perm)	0	1667	0	0	1765	0	0	1676	0	0	1645	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		357			354			334			259	
Travel Time (s)		8.1			8.0			7.6			5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	4	4	0	0	0	4	0	0	0	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	0	0	0	4	0	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.5%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	4	4	0	0	0	4	0	0	0	2	2
Future Volume (Veh/h)	10	4	4	0	0	0	4	0	0	0	2	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	4	4	0	0	0	4	0	0	0	2	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	11	11	3	17	12	0	4			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	11	11	3	17	12	0	4			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	100	100	100	100			100		
cM capacity (veh/h)	1005	882	1081	989	880	1085	1618			1623		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	19	0	4	4
Volume Left	11	0	4	0
Volume Right	4	0	0	2
cSH	990	1700	1618	1700
Volume to Capacity	0.02	0.00	0.00	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	8.7	0.0	7.2	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.7	0.0	7.2	0.0
Approach LOS	A	A		

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	13.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	882	7	23	508	50	0	0	0	461	8	319
Future Volume (vph)	25	882	7	23	508	50	0	0	0	461	8	319
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	11
Storage Length (ft)	120		0	180		190	0		0	0		0
Storage Lanes	1		0	0		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor	0.77	1.00		1.00		0.49				0.98		0.97
Frt		0.999				0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	855	4720	0	1710	3138	765	0	1800	0	3100	1392	1409
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	655	4720	0	1702	3138	373	0	1800	0	3032	1392	1361
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		1				101						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		808			328			758			669	
Travel Time (s)		18.4			7.5			17.2			15.2	
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Adj. Flow (vph)	27	948	8	25	546	54	0	0	0	496	9	343
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	956	0	25	546	54	0	0	0	496	9	343
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm				Split	NA	pm+ov
Protected Phases	7	4		3	8		5	5		6	6	7
Permitted Phases						8						6
Detector Phase	7	4		3	8	8	5	5		6	6	7
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	4.0	10.0	10.0		4.0	4.0	10.0
Minimum Split (s)	15.0	53.0		10.0	51.0	51.0	15.0	15.0		44.0	44.0	15.0
Total Split (s)	15.0	53.0		13.0	51.0	51.0	20.0	20.0		44.0	44.0	15.0
Total Split (%)	11.5%	40.8%		10.0%	39.2%	39.2%	15.4%	15.4%		33.8%	33.8%	11.5%
Maximum Green (s)	10.0	48.0		9.0	46.0	46.0	15.0	15.0		39.0	39.0	10.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		4.0	5.0	5.0		5.0		5.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None
Walk Time (s)		25.0			19.0	19.0				9.0	9.0	
Flash Dont Walk (s)		23.0			27.0	27.0				30.0	30.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	10.0	73.7		7.4	66.0	66.0				39.0	39.0	49.0
Actuated g/C Ratio	0.08	0.57		0.06	0.51	0.51				0.30	0.30	0.38
v/c Ratio	0.42	0.36		0.26	0.34	0.23				0.53	0.02	0.66
Control Delay	76.8	16.5		57.9	31.2	13.9				40.5	32.4	39.5
Queue Delay	0.0	0.0		0.0	2.7	0.0				0.0	0.0	0.0
Total Delay	76.8	16.5		57.9	34.0	13.9				40.5	32.4	39.5
LOS	E	B		E	C	B				D	C	D
Approach Delay		18.1			33.2						40.0	
Approach LOS		B			C						D	
90th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
90th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
70th %ile Green (s)	10.0	68.7		8.3	66.0	66.0	0.0	0.0		39.0	39.0	10.0
70th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
50th %ile Green (s)	10.0	69.7		7.3	66.0	66.0	0.0	0.0		39.0	39.0	10.0
50th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
30th %ile Green (s)	10.0	81.0		0.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
30th %ile Term Code	Max	Coord		Skip	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
10th %ile Green (s)	10.0	81.0		0.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
10th %ile Term Code	Max	Coord		Skip	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
Stops (vph)	25	471		25	318	15				375	6	326
Fuel Used(gal)	1	11		0	6	0				8	0	6
CO Emissions (g/hr)	48	782		33	440	25				578	9	421
NOx Emissions (g/hr)	9	152		6	86	5				113	2	82
VOC Emissions (g/hr)	11	181		8	102	6				134	2	98
Dilemma Vehicles (#)	0	0		0	0	0				0	0	0
Queue Length 50th (ft)	22	165		22	153	1				179	5	220

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	56	204		m40	264	m37				236	19	325
Internal Link Dist (ft)		728			248			678			589	
Turn Bay Length (ft)	120			180		190						
Base Capacity (vph)	65	2675		118	1593	239				930	417	516
Starvation Cap Reductn	0	0		0	904	0				0	0	0
Spillback Cap Reductn	0	45		0	0	0				9	0	0
Storage Cap Reductn	0	0		0	0	0				0	0	0
Reduced v/c Ratio	0.42	0.36		0.21	0.79	0.23				0.54	0.02	0.66

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 110 (85%), Referenced to phase 4:EBT and 8:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 29.5	Intersection LOS: C
Intersection Capacity Utilization 80.8%	ICU Level of Service D
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1002: Lafayette Avenue & 95th Street

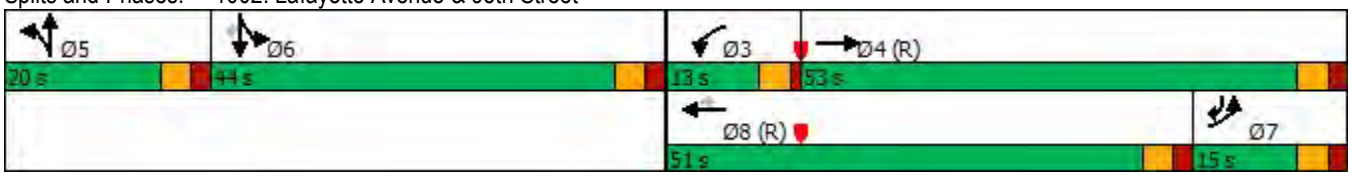

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	438	786	119	21	428	253	124	489	59	41	0	29
Future Volume (vph)	438	786	119	21	428	253	124	489	59	41	0	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	11	12	11	12	11	14	12	12	12
Storage Length (ft)	200		0	150		350	300		400	0		0
Storage Lanes	0		0	1		1	1		1	1		1
Taper Length (ft)	25			25			100			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor	0.70	0.99		0.99		0.65		1.00	0.95	0.99		
Frt		0.980				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.990		0.950		
Satd. Flow (prot)	3190	3103	0	1503	2923	1409	0	3190	1600	855	0	765
Flt Permitted	0.950			0.950				0.990		0.950		
Satd. Flow (perm)	2219	3103	0	1492	2923	917	0	3186	1523	842	0	765
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				62			92			134
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		328			972			10386			681	
Travel Time (s)		7.5			18.9			236.0			15.5	
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Adj. Flow (vph)	466	836	127	22	455	269	132	520	63	44	0	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	466	963	0	22	455	269	0	652	63	44	0	31
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.12	1.07	1.12	1.07	1.12	0.99	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1		1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50		50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50		50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Prot		Prot
Protected Phases	7	4		3	8	6	2	2	3	6		6
Permitted Phases						8			2			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8	6	2	2	3	6		6
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	10.0	4.0	4.0	6.0	10.0		10.0
Minimum Split (s)	14.0	54.0		11.0	37.0	15.0	41.0	41.0	11.0	15.0		15.0
Total Split (s)	32.0	54.0		15.0	37.0	20.0	41.0	41.0	15.0	20.0		20.0
Total Split (%)	24.6%	41.5%		11.5%	28.5%	15.4%	31.5%	31.5%	11.5%	15.4%		15.4%
Maximum Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
All-Red Time (s)	1.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	4.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max	None	Max	Max	None	None		None
Walk Time (s)		21.0			7.0		7.0	7.0				
Flash Dont Walk (s)		28.0			25.0		29.0	29.0				
Pedestrian Calls (#/hr)		0			0		0	0				
Act Effct Green (s)	23.7	53.9		9.2	38.2	51.3		36.0	45.2	13.1		13.1
Actuated g/C Ratio	0.18	0.41		0.07	0.29	0.39		0.28	0.35	0.10		0.10
v/c Ratio	0.80	0.74		0.21	0.53	0.60		0.74	0.11	0.52		0.16
Control Delay	51.2	36.8		61.2	42.4	18.3		49.5	3.1	76.1		1.7
Queue Delay	1.2	1.4		0.0	0.0	0.0		1.0	0.0	0.0		0.1
Total Delay	52.4	38.2		61.2	42.4	18.3		50.6	3.1	76.1		1.8
LOS	D	D		E	D	B		D	A	E		A
Approach Delay		42.9			34.3			46.4			45.4	
Approach LOS		D			C			D			D	
90th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
90th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
70th %ile Green (s)	26.5	49.0		10.0	33.5	15.0	36.0	36.0	10.0	15.0		15.0
70th %ile Term Code	Gap	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
50th %ile Green (s)	24.1	50.2		10.0	37.1	13.8	36.0	36.0	10.0	13.8		13.8
50th %ile Term Code	Gap	Coord		Hold	Coord	Gap	MaxR	MaxR	Hold	Gap		Gap
30th %ile Green (s)	21.8	52.3		10.0	41.5	11.7	36.0	36.0	10.0	11.7		11.7
30th %ile Term Code	Gap	Coord		Hold	Coord	Gap	MaxR	MaxR	Hold	Gap		Gap
10th %ile Green (s)	18.3	69.0		0.0	46.7	10.0	36.0	36.0	0.0	10.0		10.0
10th %ile Term Code	Gap	Coord		Skip	Coord	Min	MaxR	MaxR	Skip	Min		Min
Stops (vph)	420	612		21	356	139		568	7	39		0
Fuel Used(gal)	8	12		1	9	4		60	5	1		0
CO Emissions (g/hr)	560	872		40	655	263		4221	349	75		11
NOx Emissions (g/hr)	109	170		8	127	51		821	68	15		2
VOC Emissions (g/hr)	130	202		9	152	61		978	81	17		3
Dilemma Vehicles (#)	0	0		0	17	0		0	0	0		0
Queue Length 50th (ft)	184	196		18	171	68		281	1	36		0
Queue Length 95th (ft)	231	227		47	241	113		350	4	77		0
Internal Link Dist (ft)		248			892			10306			601	
Turn Bay Length (ft)	200			150		350			400			
Base Capacity (vph)	687	1295		115	858	468		883	604	98		206
Starvation Cap Reductn	78	164		0	0	0		0	0	0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0	0		77	0	0		15
Storage Cap Reductn	0	0		0	0	0		0	0	0		0
Reduced v/c Ratio	0.77	0.85		0.19	0.53	0.57		0.81	0.10	0.45		0.16

Intersection Summary

Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 41.6	Intersection LOS: D
Intersection Capacity Utilization 93.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1003: State Street & 95th Street

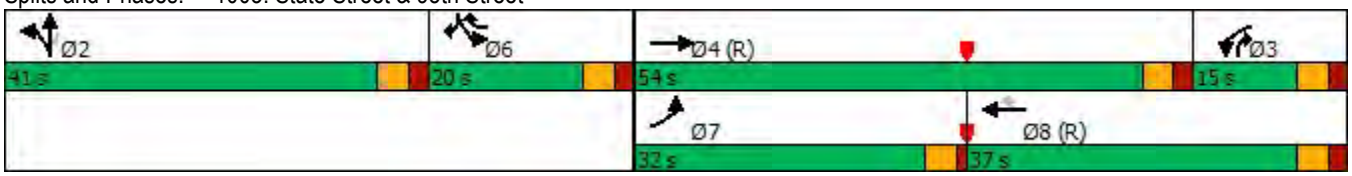

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	285	95	63	258	106	125	1435	108	65	445	93
Future Volume (vph)	96	285	95	63	258	106	125	1435	108	65	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	10	10	9	9	10	9
Storage Length (ft)	60		260	55		260	92		130	115		130
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.98	0.99		0.98	0.98		0.99		0.97	1.00		0.96
Frt		0.962			0.956				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	1872	0	1710	1814	0	1506	3099	1324	1425	2956	1324
Flt Permitted	0.214			0.514			0.391			0.094		
Satd. Flow (perm)	357	1872	0	910	1814	0	612	3099	1283	141	2956	1265
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			19				83			100
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		663			2036			5304			1099	
Travel Time (s)		15.1			46.3			120.5			25.0	
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Adj. Flow (vph)	103	306	102	68	277	114	134	1543	116	70	478	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	408	0	68	391	0	134	1543	116	70	478	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.17	1.17	1.22	1.22	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		11.0	11.0		5.0	31.0	31.0	5.0	31.0	31.0
Minimum Split (s)	13.0	47.0		34.0	34.0		8.0	46.0	46.0	8.0	46.0	46.0
Total Split (s)	13.0	47.0		34.0	34.0		12.0	46.0	46.0	12.0	46.0	46.0
Total Split (%)	12.4%	44.8%		32.4%	32.4%		11.4%	43.8%	43.8%	11.4%	43.8%	43.8%
Maximum Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	5.0		5.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		24.0		11.0	11.0			31.0	31.0		31.0	31.0
Flash Dont Walk (s)		18.0		18.0	18.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)	44.0	42.0		29.0	29.0		53.2	45.0	45.0	51.1	42.4	42.4
Actuated g/C Ratio	0.42	0.40		0.28	0.28		0.51	0.43	0.43	0.49	0.40	0.40
v/c Ratio	0.38	0.54		0.27	0.76		0.35	1.16	0.19	0.43	0.40	0.18
Control Delay	23.4	26.1		33.3	44.1		15.9	111.6	8.2	21.3	23.6	4.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	26.1		33.3	44.1		15.9	111.6	8.2	21.3	23.6	4.9
LOS	C	C		C	D		B	F	A	C	C	A
Approach Delay		25.5			42.5			97.7			20.5	
Approach LOS		C			D			F			C	
90th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
90th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
70th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	43.0	43.0	8.0	42.0	42.0
50th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	10.0	42.0		29.0	29.0		8.9	44.0	44.0	7.0	42.1	42.1
30th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	10.0	42.0		29.0	29.0		7.1	54.0	54.0	0.0	43.9	43.9
10th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Skip	Coord	Coord
Stops (vph)	57	270		48	310		63	1123	25	33	306	12
Fuel Used(gal)	1	5		2	11		6	98	5	1	8	1
CO Emissions (g/hr)	89	382		118	752		414	6860	334	71	534	67
NOx Emissions (g/hr)	17	74		23	146		81	1335	65	14	104	13
VOC Emissions (g/hr)	21	88		27	174		96	1590	78	17	124	15
Dilemma Vehicles (#)	0	0		0	0		0	0	0	0	0	0
Queue Length 50th (ft)	42	196		36	230		45	~671	13	23	118	0
Queue Length 95th (ft)	78	291		75	#352		79	#819	50	47	163	32
Internal Link Dist (ft)		583			1956			5224			1019	
Turn Bay Length (ft)	60			55			92		130	115		130
Base Capacity (vph)	269	760		251	514		386	1328	597	180	1193	570
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.54		0.27	0.76		0.35	1.16	0.19	0.39	0.40	0.18

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 86 (82%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.16
Intersection Signal Delay: 64.8 Intersection LOS: E
Intersection Capacity Utilization 105.2% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1016: Halsted Street & 103rd Street

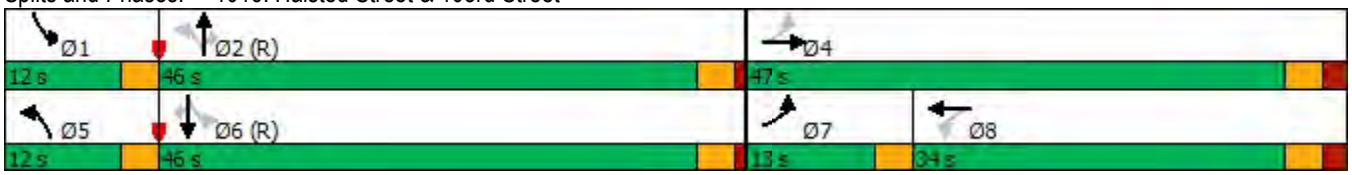

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	366	46	41	323	41	52	48	43	0	0	0
Future Volume (vph)	46	366	46	41	323	41	52	48	43	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	9	9	10	9	9	12	15	12	12	16	12
Storage Length (ft)	60		70	60		80	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	85			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.960				
Flt Protected	0.950			0.950				0.982				
Satd. Flow (prot)	1520	1543	1311	1520	1543	1311	0	1778	0	0	0	0
Flt Permitted	0.529			0.494				0.982				
Satd. Flow (perm)	846	1543	1311	790	1543	1311	0	1778	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			49			44		31				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2036			1955			343			764	
Travel Time (s)		46.3			44.4			7.8			17.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	49	394	49	44	347	44	56	52	46	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	394	49	44	347	44	0	154	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.22	1.22	1.17	1.22	1.22	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Minimum Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (%)	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%	30.8%	30.8%				
Maximum Green (s)	41.0	41.0	41.0	41.0	41.0	41.0	15.0	15.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		5.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	31.0	31.0	31.0	31.0	31.0	31.0	5.0	5.0				
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0				
Act Effct Green (s)	41.0	41.0	41.0	41.0	41.0	41.0		15.0				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	31%
Maximum Green (s)	15.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	5.0
Flash Dont Walk (s)	10.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.23				
v/c Ratio	0.09	0.40	0.06	0.09	0.36	0.05		0.35				
Control Delay	5.3	7.5	1.8	5.3	7.0	1.8		19.4				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Delay	5.3	7.5	1.8	5.3	7.0	1.8		19.4				
LOS	A	A	A	A	A	A		B				
Approach Delay		6.7			6.3			19.4				
Approach LOS		A			A			B				
Stops (vph)	17	167	7	16	141	6		93				
Fuel Used(gal)	1	7	1	1	6	1		1				
CO Emissions (g/hr)	61	510	55	53	431	47		102				
NOx Emissions (g/hr)	12	99	11	10	84	9		20				
VOC Emissions (g/hr)	14	118	13	12	100	11		24				
Dilemma Vehicles (#)	0	0	0	0	0	0		0				
Queue Length 50th (ft)	7	66	0	6	56	0		40				
Queue Length 95th (ft)	18	114	10	17	98	9		87				
Internal Link Dist (ft)		1956			1875			263			684	
Turn Bay Length (ft)	60		70	60		80						
Base Capacity (vph)	533	973	845	498	973	843		434				
Starvation Cap Reductn	0	0	0	0	0	0		0				
Spillback Cap Reductn	0	0	0	0	0	0		0				
Storage Cap Reductn	0	0	0	0	0	0		0				
Reduced v/c Ratio	0.09	0.40	0.06	0.09	0.36	0.05		0.35				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:Hold, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.40
Intersection Signal Delay: 8.3 Intersection LOS: A
Intersection Capacity Utilization 43.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1017: Normal Avenue & 103rd Street

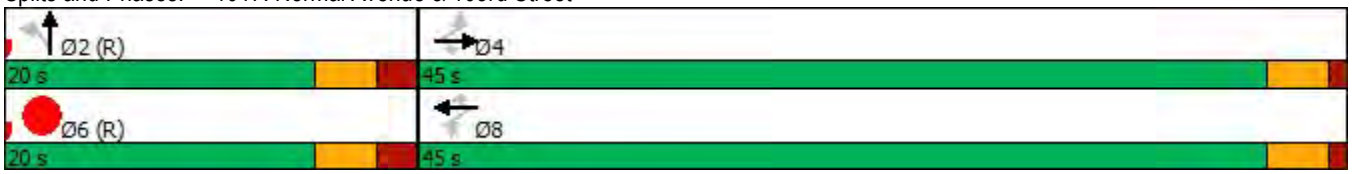

Lane Group	Ø6
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	383	50	27	338	33	41	133	79	49	192	26
Future Volume (vph)	18	383	50	27	338	33	41	133	79	49	192	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	11	10	11	11	12	11	12	12	15	12
Storage Length (ft)	58		200	58		75	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	100			90			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00		0.99	1.00			0.99	0.97		0.99	
Frt		0.983			0.987				0.850		0.987	
Flt Protected	0.950			0.950				0.988			0.991	
Satd. Flow (prot)	1596	1607	0	1341	1623	0	0	1685	1515	0	1778	0
Flt Permitted	0.471			0.420				0.895			0.916	
Satd. Flow (perm)	779	1607	0	589	1623	0	0	1506	1473	0	1641	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			11				83		8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1955			4661			5190			1320	
Travel Time (s)		44.4			105.9			118.0			30.0	
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Adj. Flow (vph)	19	403	53	28	356	35	43	140	83	52	202	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	456	0	28	391	0	0	183	83	0	281	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.12	1.12	1.17	1.12	1.12	1.07	1.12	1.07	1.07	0.95	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (%)	62.7%	62.7%		62.7%	62.7%		37.3%	37.3%	37.3%	37.3%	37.3%	
Maximum Green (s)	43.0	43.0		43.0	43.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	33.0	33.0		33.0	33.0		13.0	13.0	13.0	13.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	43.0	43.0		43.0	43.0			24.0	24.0		24.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57			0.32	0.32		0.32	
v/c Ratio	0.04	0.49		0.08	0.42			0.38	0.16		0.53	
Control Delay	7.4	11.4		8.0	10.4			22.6	5.6		24.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	7.4	11.4		8.0	10.4			22.6	5.6		24.7	
LOS	A	B		A	B			C	A		C	
Approach Delay		11.3			10.2			17.3			24.7	
Approach LOS		B			B			B			C	
Stops (vph)	9	238		14	192			131	14		207	
Fuel Used(gal)	0	9		1	15			9	3		5	
CO Emissions (g/hr)	25	624		77	1072			616	243		366	
NOx Emissions (g/hr)	5	121		15	208			120	47		71	
VOC Emissions (g/hr)	6	145		18	248			143	56		85	
Dilemma Vehicles (#)	0	0		0	0			0	0		0	
Queue Length 50th (ft)	4	110		5	90			65	0		103	
Queue Length 95th (ft)	12	181		16	148			119	28		175	
Internal Link Dist (ft)		1875			4581			5110			1240	
Turn Bay Length (ft)	58			58					100			
Base Capacity (vph)	446	927		337	935			481	527		530	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.04	0.49		0.08	0.42			0.38	0.16		0.53	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.53
Intersection Signal Delay: 14.7 Intersection LOS: B
Intersection Capacity Utilization 85.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1018: Wentworth Avenue & 103rd Street

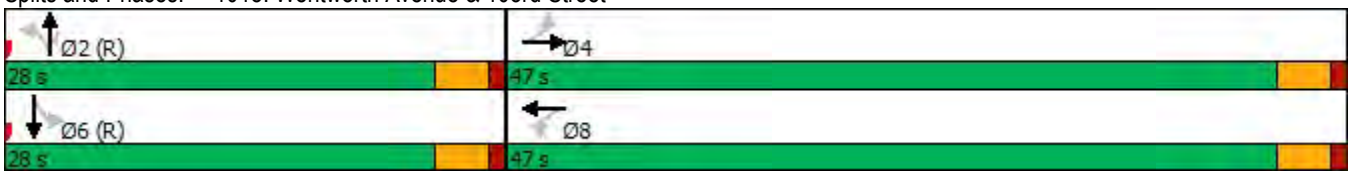

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	202	54	45	142	88	35	921	50	88	476	42
Future Volume (vph)	126	202	54	45	142	88	35	921	50	88	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	9	10	10	9
Storage Length (ft)	0		0	0		0	115		90	115		120
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			80			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99			0.98		0.99		0.98	1.00		0.97
Frt		0.979			0.952				0.850			0.850
Flt Protected		0.984			0.992		0.950			0.950		
Satd. Flow (prot)	0	2848	0	0	2772	0	1506	3069	1377	1550	2956	1311
Flt Permitted		0.727			0.841		0.397			0.148		
Satd. Flow (perm)	0	2084	0	0	2347	0	623	3069	1352	241	2956	1270
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			91				103			103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1044			375			2662			5304	
Travel Time (s)		23.7			8.5			60.5			120.5	
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Adj. Flow (vph)	130	208	56	46	146	91	36	949	52	91	491	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	394	0	0	283	0	36	949	52	91	491	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.22	1.17	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Minimum Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (%)	9.4%	47.1%		37.6%	37.6%		9.4%	43.5%	43.5%	9.4%	43.5%	43.5%
Maximum Green (s)	5.0	35.0		27.0	27.0		5.0	33.0	33.0	5.0	33.0	33.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)		-1.0			-1.0		1.0	-0.5	0.0	1.0	-0.5	0.0
Total Lost Time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Walk Time (s)		12.0		4.0	4.0			19.0	19.0		19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		23.0		23.0	23.0			14.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)		36.0			28.0		37.0	33.5	33.0	37.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.44	0.39	0.39	0.44	0.39	0.39
v/c Ratio		0.42			0.34		0.12	0.78	0.09	0.55	0.42	0.08
Control Delay		17.1			15.6		13.4	20.4	2.0	26.6	20.1	0.3
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.1			15.6		13.4	20.4	2.0	26.6	20.1	0.3
LOS		B			B		B	C	A	C	C	A
Approach Delay		17.1			15.6			19.3			19.7	
Approach LOS		B			B			B			B	
Stops (vph)		227			136		18	408	5	51	331	0
Fuel Used(gal)		6			6		1	25	1	4	23	2
CO Emissions (g/hr)		398			408		64	1761	76	307	1640	122
NOx Emissions (g/hr)		77			79		13	343	15	60	319	24
VOC Emissions (g/hr)		92			95		15	408	18	71	380	28
Dilemma Vehicles (#)		0			0		0	0	0	0	0	0
Queue Length 50th (ft)		66			38		8	112	1	26	97	0
Queue Length 95th (ft)		100			71		m16	184	m2	#56	140	0
Internal Link Dist (ft)		964			295			2582			5224	
Turn Bay Length (ft)							115		90	115		120
Base Capacity (vph)		934			834		312	1209	587	166	1165	556
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.42			0.34		0.12	0.78	0.09	0.55	0.42	0.08

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 58 (68%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 18.6 Intersection LOS: B
Intersection Capacity Utilization 97.6% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1034: Halsted Street & 111th Street

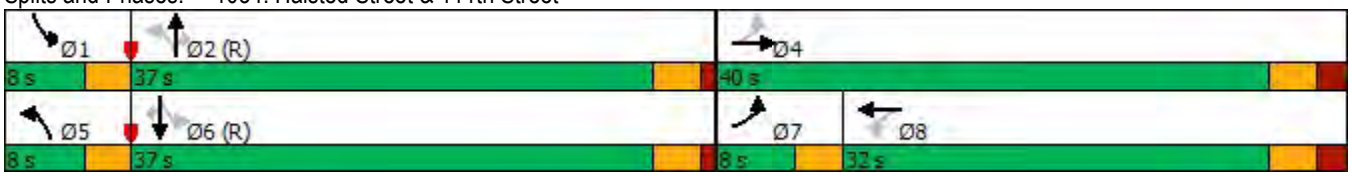

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	306	0	0	253	63	22	49	76	0	0	0
Future Volume (vph)	34	306	0	0	253	63	22	49	76	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.973			0.930				
Flt Protected		0.995						0.993				
Satd. Flow (prot)	0	1706	0	0	1668	0	0	1583	0	0	0	0
Flt Permitted		0.948						0.993				
Satd. Flow (perm)	0	1625	0	0	1668	0	0	1583	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					35			82				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1591			2004			794			646	
Travel Time (s)		36.2			45.5			18.0			14.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	37	329	0	0	272	68	24	53	82	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	366	0	0	340	0	0	159	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Minimum Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (%)	66.2%	66.2%			66.2%		33.8%	33.8%				
Maximum Green (s)	39.0	39.0			39.0		18.0	18.0				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.0			4.0			4.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	32.0	32.0			32.0		10.0	10.0				
Flash Dont Walk (s)	7.0	7.0			7.0		8.0	8.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		39.0			39.0			18.0				
Actuated g/C Ratio		0.60			0.60			0.28				
v/c Ratio		0.38			0.34			0.32				
Control Delay		8.1			2.7			11.8				
Queue Delay		0.0			0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		8.1			2.7			11.8				
LOS		A			A			B				
Approach Delay		8.1			2.7			11.8				
Approach LOS		A			A			B				
Stops (vph)		163			30			61				
Fuel Used(gal)		7			5			2				
CO Emissions (g/hr)		466			369			113				
NOx Emissions (g/hr)		91			72			22				
VOC Emissions (g/hr)		108			86			26				
Dilemma Vehicles (#)		0			0			0				
Queue Length 50th (ft)		66			13			23				
Queue Length 95th (ft)		113			19			65				
Internal Link Dist (ft)		1511			1924			714			566	
Turn Bay Length (ft)												
Base Capacity (vph)		975			1014			497				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.38			0.34			0.32				

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 16 (25%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay: 6.7	Intersection LOS: A
Intersection Capacity Utilization 56.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1035: Normal Avenue & 111th Street

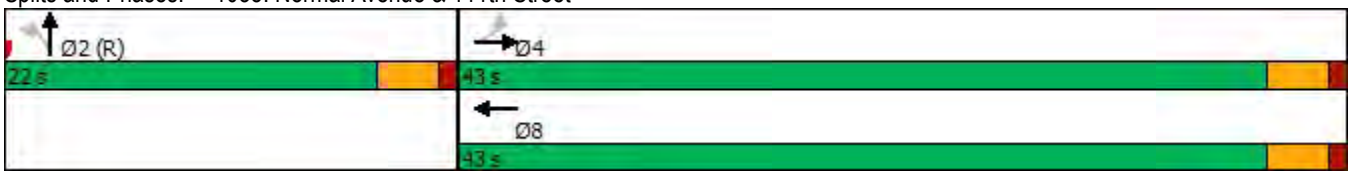

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	306	24	16	262	38	13	140	28	48	100	18
Future Volume (vph)	35	306	24	16	262	38	13	140	28	48	100	18
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	11	11	12	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.991			0.984			0.977			0.984	
Flt Protected		0.995			0.997			0.996			0.986	
Satd. Flow (prot)	0	1887	0	0	1833	0	0	3084	0	0	3060	0
Flt Permitted		0.949			0.976			0.936			0.846	
Satd. Flow (perm)	0	1798	0	0	1794	0	0	2893	0	0	2616	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			14			30			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2004			892			181			180	
Travel Time (s)		45.5			20.3			4.1			4.1	
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Adj. Flow (vph)	37	326	26	17	279	40	14	149	30	51	106	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	389	0	0	336	0	0	193	0	0	176	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.12	1.12	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (%)	52.3%	52.3%		52.3%	52.3%		47.7%	47.7%		47.7%	47.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	21.0	21.0		21.0	21.0		19.0	19.0		19.0	19.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			27.0			27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
v/c Ratio		0.47			0.40			0.16			0.16	
Control Delay		13.1			6.2			8.3			11.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		13.1			6.2			8.3			11.1	
LOS		B			A			A			B	
Approach Delay		13.1			6.2			8.3			11.1	
Approach LOS		B			A			A			B	
Stops (vph)		192			86			104			87	
Fuel Used(gal)		8			4			5			8	
CO Emissions (g/hr)		542			287			324			542	
NOx Emissions (g/hr)		105			56			63			106	
VOC Emissions (g/hr)		126			66			75			126	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		83			27			10			19	
Queue Length 95th (ft)		155			36			18			37	
Internal Link Dist (ft)		1924			812			101			100	
Turn Bay Length (ft)												
Base Capacity (vph)		833			835			1219			1097	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.47			0.40			0.16			0.16	

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 9.8	Intersection LOS: A
Intersection Capacity Utilization 82.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1036: Wentworth Avenue & 111th Street

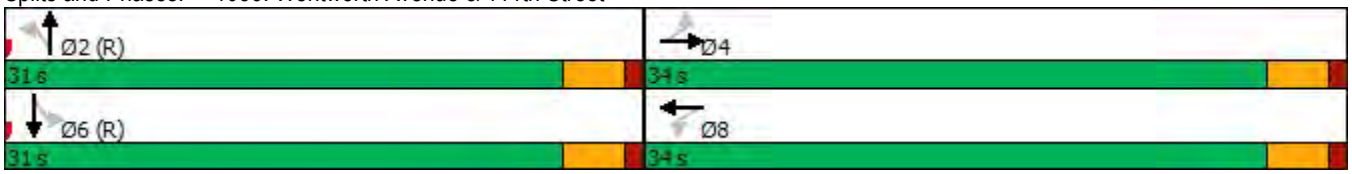

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	204	16	28	280	61	36	246	69	37	74	16
Future Volume (vph)	39	204	16	28	280	61	36	246	69	37	74	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	9	10	10	9	10	10	12	10	10	12
Storage Length (ft)	70		0	60		0	70		70	80		75
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	115			90			80			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99	0.99		0.99	1.00		1.00	1.00	
Frt		0.989			0.973			0.967			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	2932	0	1596	2932	0	1506	3033	0	1596	2937	0
Flt Permitted	0.508			0.606			0.692			0.550		
Satd. Flow (perm)	802	2932	0	1003	2932	0	1090	3033	0	923	2937	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			43			73			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			546			2651			298	
Travel Time (s)		9.5			12.4			60.3			6.8	
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Adj. Flow (vph)	41	217	17	30	298	65	38	262	73	39	79	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	234	0	30	363	0	38	335	0	39	96	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.22	1.17	1.17	1.22	1.17	1.17	1.07	1.17	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		9.0	9.0		22.0	22.0		22.0	22.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
v/c Ratio	0.15	0.23		0.09	0.36		0.06	0.20		0.08	0.06	
Control Delay	12.2	10.7		12.6	12.5		5.1	4.4		9.2	7.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	12.2	10.7		12.6	12.5		5.1	4.4		9.2	7.5	
LOS	B	B		B	B		A	A		A	A	
Approach Delay		10.9			12.5			4.5			8.0	
Approach LOS		B			B			A			A	
Stops (vph)	28	164		23	240		18	155		16	35	
Fuel Used(gal)	1	4		0	4		1	8		3	8	
CO Emissions (g/hr)	45	254		22	255		62	535		226	547	
NOx Emissions (g/hr)	9	49		4	50		12	104		44	106	
VOC Emissions (g/hr)	11	59		5	59		14	124		52	127	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	11	31		9	55		3	3		14	16	
Queue Length 95th (ft)	m23	46		m29	93		m7	11		m25	m27	
Internal Link Dist (ft)		338			466			2571			218	
Turn Bay Length (ft)	70			60			70			80		
Base Capacity (vph)	271	1000		339	1020		586	1666		497	1589	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.15	0.23		0.09	0.36		0.06	0.20		0.08	0.06	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.36
Intersection Signal Delay: 9.1 Intersection LOS: A
Intersection Capacity Utilization 64.1% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1037: State Street & 111th Street

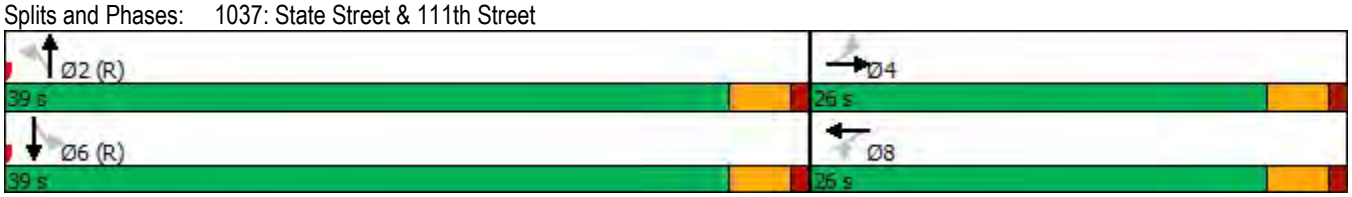

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	293	20	37	313	82	11	302	44	41	118	38
Future Volume (vph)	64	293	20	37	313	82	11	302	44	41	118	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	12	12	10	12	12	10	12
Storage Length (ft)	60		0	75		77	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.98	1.00		0.98	0.99			0.99			0.99	
Frt		0.991			0.969			0.981			0.971	
Flt Protected	0.950			0.950				0.998			0.990	
Satd. Flow (prot)	1425	3011	0	1350	2919	0	0	2828	0	0	2732	0
Flt Permitted	0.494			0.551				0.946			0.841	
Satd. Flow (perm)	727	3011	0	765	2919	0	0	2677	0	0	2315	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			69			28			40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		546			835			277			230	
Travel Time (s)		12.4			19.0			6.3			5.2	
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Adj. Flow (vph)	68	312	21	39	333	87	12	321	47	44	126	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	333	0	39	420	0	0	380	0	0	210	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.17	1.22	1.22	1.17	1.07	1.07	1.17	1.07	1.07	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	31.0	31.0		31.0	31.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	20.0	20.0		20.0	20.0		14.0	14.0		14.0	14.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		12.0	12.0		12.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
v/c Ratio	0.20	0.23		0.11	0.29			0.35			0.22	
Control Delay	16.7	15.1		10.4	9.2			9.2			11.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	16.7	15.1		10.4	9.2			9.2			11.0	
LOS	B	B		B	A			A			B	
Approach Delay		15.4			9.3			9.2			11.0	
Approach LOS		B			A			A			B	
Stops (vph)	49	232		22	186			203			99	
Fuel Used(gal)	1	4		0	4			9			1	
CO Emissions (g/hr)	53	250		31	303			645			94	
NOx Emissions (g/hr)	10	49		6	59			125			18	
VOC Emissions (g/hr)	12	58		7	70			149			22	
Dilemma Vehicles (#)	0	0		0	0			0			0	
Queue Length 50th (ft)	20	50		8	41			26			22	
Queue Length 95th (ft)	42	70		23	67			35			43	
Internal Link Dist (ft)		466			755			197			150	
Turn Bay Length (ft)	60			75								
Base Capacity (vph)	346	1443		364	1428			1087			950	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.20	0.23		0.11	0.29			0.35			0.22	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 48 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 77.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1038: Michigan Avenue & 111th Street

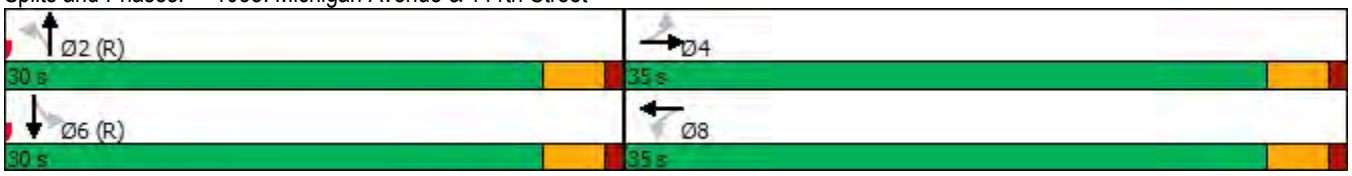

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	169	202	39	50	176	62	59	828	58	66	373	70
Future Volume (vph)	169	202	39	50	176	62	59	828	58	66	373	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	9	14	16	9	14	16
Storage Length (ft)	120		115	60		58	165		165	110		80
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			60			90			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98	1.00		1.00	0.99		0.99	1.00		1.00	0.99	
Frt		0.976			0.961			0.990			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3005	0	1596	2892	0	1494	3445	0	1494	3348	0
Flt Permitted	0.585			0.581			0.420			0.158		
Satd. Flow (perm)	944	3005	0	972	2892	0	651	3445	0	248	3348	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			61			10			30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			564			2655			2662	
Travel Time (s)		30.3			12.8			60.3			60.5	
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Adj. Flow (vph)	178	213	41	53	185	65	62	872	61	69	393	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	178	254	0	53	250	0	62	933	0	69	467	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.07	1.17	1.17	1.07	1.22	0.99	0.91	1.22	0.99	0.91
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	8.0	32.0		8.0	32.0		8.0	37.0		8.0	37.0	
Total Split (s)	8.0	32.0		8.0	32.0		8.0	37.0		8.0	37.0	
Total Split (%)	9.4%	37.6%		9.4%	37.6%		9.4%	43.5%		9.4%	43.5%	
Maximum Green (s)	5.0	27.0		5.0	27.0		5.0	33.0		5.0	33.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0		1.0	-1.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Walk Time (s)		7.0			7.0			21.0			21.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		20.0			20.0			12.0			12.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	32.0	28.0		32.0	28.0		37.0	33.0		37.0	33.0	
Actuated g/C Ratio	0.38	0.33		0.38	0.33		0.44	0.39		0.44	0.39	
v/c Ratio	0.46	0.25		0.13	0.25		0.19	0.69		0.42	0.35	
Control Delay	22.4	19.3		15.7	16.3		13.6	24.9		29.0	13.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	22.4	19.3		15.7	16.3		13.6	24.9		29.0	13.0	
LOS	C	B		B	B		B	C		C	B	
Approach Delay		20.5			16.2			24.2			15.0	
Approach LOS		C			B			C			B	
Stops (vph)	130	150		30	126		31	707		47	245	
Fuel Used(gal)	3	4		2	9		2	27		2	12	
CO Emissions (g/hr)	227	299		131	619		109	1869		141	821	
NOx Emissions (g/hr)	44	58		25	120		21	364		27	160	
VOC Emissions (g/hr)	53	69		30	143		25	433		33	190	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	60	45		16	37		17	212		17	44	
Queue Length 95th (ft)	106	75		38	66		38	281		59	81	
Internal Link Dist (ft)		1251			484			2575			2582	
Turn Bay Length (ft)	120			60			165			110		
Base Capacity (vph)	384	1008		395	993		323	1343		166	1318	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.46	0.25		0.13	0.25		0.19	0.69		0.42	0.35	

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 13 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 85	
Control Type: Pretimed	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 20.3	Intersection LOS: C
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1049: Halsted Street & 115th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	256	18	14	216	8	35	113	25	19	54	39
Future Volume (vph)	38	256	18	14	216	8	35	113	25	19	54	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	11	12	11	11	12	10	10	12	10	10
Storage Length (ft)	0		80	0		0	0		30	0		30
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.994			0.997			0.988			0.987	
Satd. Flow (prot)	0	1647	1395	0	1665	1321	0	1624	1373	0	1588	1360
Flt Permitted		0.942			0.976			0.934			0.929	
Satd. Flow (perm)	0	1560	1336	0	1629	1287	0	1532	1356	0	1494	1318
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			19			17			26			41
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3405			1340			2669			2476	
Travel Time (s)		77.4			30.5			60.7			56.3	
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Adj. Flow (vph)	40	269	19	15	227	8	37	119	26	20	57	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	309	19	0	242	8	0	156	26	0	77	41
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.12	1.07	1.12	1.12	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (%)	52.3%	52.3%	52.3%	52.3%	52.3%	52.3%	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	19.0	19.0	19.0	19.0	19.0	19.0	16.0	16.0	16.0	16.0	16.0	16.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
v/c Ratio		0.43	0.03		0.32	0.01		0.25	0.04		0.12	0.07
Control Delay		14.1	4.9		6.0	0.6		15.0	6.0		10.8	2.7
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		14.1	4.9		6.0	0.6		15.0	6.0		10.8	2.7
LOS		B	A		A	A		B	A		B	A
Approach Delay		13.6			5.9			13.7			8.0	
Approach LOS		B			A			B			A	
Stops (vph)		188	6		56	0		108	12		49	9
Fuel Used(gal)		11	1		3	0		4	1		2	1
CO Emissions (g/hr)		768	43		209	6		289	43		136	61
NOx Emissions (g/hr)		149	8		41	1		56	8		26	12
VOC Emissions (g/hr)		178	10		49	1		67	10		31	14
Dilemma Vehicles (#)		0	0		0	0		0	0		0	0
Queue Length 50th (ft)		78	0		21	0		49	0		11	0
Queue Length 95th (ft)		136	10		31	1		93	m8		25	3
Internal Link Dist (ft)		3325			1260			2589			2396	
Turn Bay Length (ft)			80						30			30
Base Capacity (vph)		720	626		751	603		636	578		620	571
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.43	0.03		0.32	0.01		0.25	0.04		0.12	0.07

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 10.7	Intersection LOS: B
Intersection Capacity Utilization 82.5%	ICU Level of Service E
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1050: Wentworth Avenue & 115th Street

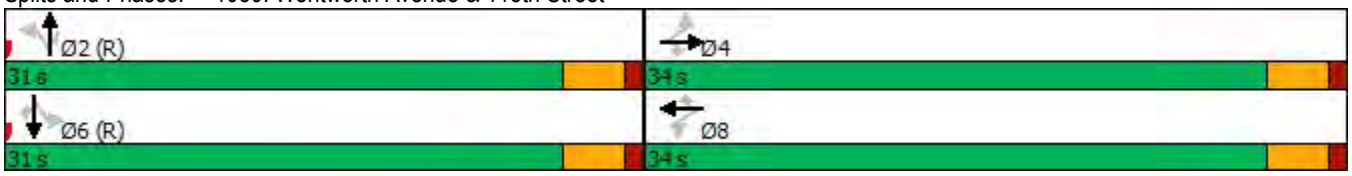

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	235	10	15	200	30	10	190	20	30	70	30
Future Volume (vph)	65	235	10	15	200	30	10	190	20	30	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	80		0	55		75	45		50	55		260
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	90			95			110			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.981			0.985			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	1600	1360	1520	2982	0	1520	2994	0	1520	2903	0
Flt Permitted	0.950			0.602			0.684			0.611		
Satd. Flow (perm)	1520	1600	1360	963	2982	0	1094	2994	0	978	2903	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1340			559			516			2651	
Travel Time (s)		30.5			12.7			11.7			60.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	70	253	11	16	215	32	11	204	22	32	75	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	253	11	16	247	0	11	226	0	32	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases			4	8			2			6		
Minimum Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	15.4%	53.8%	53.8%	38.5%	38.5%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?												
Walk Time (s)		8.0	8.0	8.0	8.0		13.0	13.0		13.0	13.0	
Flash Dont Walk (s)		13.0	13.0	13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0	0	
Act Effct Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.11	0.48	0.48	0.32	0.32		0.40	0.40		0.40	0.40	
v/c Ratio	0.43	0.33	0.02	0.05	0.26		0.03	0.19		0.08	0.09	
Control Delay	32.2	5.3	3.9	14.3	13.3		7.2	8.8		14.7	13.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.2	5.3	3.9	14.3	13.3		7.2	8.8		14.7	13.9	
LOS	C	A	A	B	B		A	A		B	B	
Approach Delay		10.9			13.3			8.8			14.1	
Approach LOS		B			B			A			B	
Stops (vph)	42	70	2	7	90		5	124		23	68	
Fuel Used(gal)	1	3	0	0	2		0	5		1	3	
CO Emissions (g/hr)	93	216	9	10	148		18	381		58	190	
NOx Emissions (g/hr)	18	42	2	2	29		3	74		11	37	
VOC Emissions (g/hr)	22	50	2	2	34		4	88		14	44	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	14	15	1	2	19		1	14		8	14	
Queue Length 95th (ft)	37	24	m2	m9	36		m4	24		31	30	
Internal Link Dist (ft)		1260			479			436			2571	
Turn Bay Length (ft)	80			55			45			55		
Base Capacity (vph)	163	763	648	311	963		437	1197		391	1161	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.43	0.33	0.02	0.05	0.26		0.03	0.19		0.08	0.09	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 11.5	Intersection LOS: B
Intersection Capacity Utilization 39.3%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1051: State Street & 115th Street

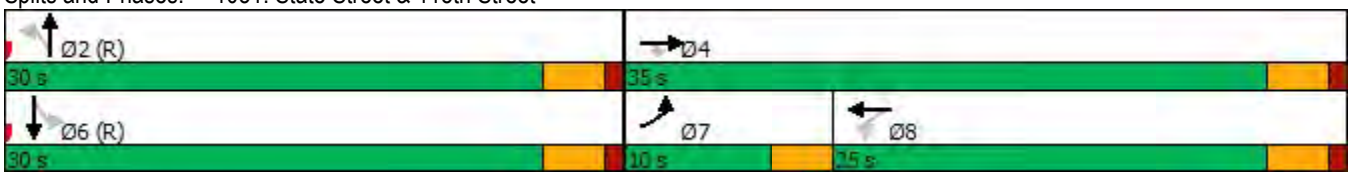

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	235	15	90	200	40	25	275	20	20	115	20
Future Volume (vph)	35	235	15	90	200	40	25	275	20	20	115	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	10	10	12	10	10
Storage Length (ft)	55		120	95		75	0		85	0		90
Storage Lanes	1		1	1		1	0		1	0		1
Taper Length (ft)	75			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.996			0.993	
Satd. Flow (prot)	1520	1600	1360	1520	1600	1360	0	1594	1360	0	1589	1360
Flt Permitted	0.624			0.950				0.970			0.928	
Satd. Flow (perm)	998	1600	1360	1520	1600	1360	0	1552	1360	0	1485	1360
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			67			101			185
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		559			386			1340			2394	
Travel Time (s)		12.7			8.8			30.5			54.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	38	253	16	97	215	43	27	296	22	22	124	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	253	16	97	215	43	0	323	22	0	146	22
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	NA
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4			8	2		2	6		
Minimum Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (%)	36.9%	36.9%	36.9%	13.8%	50.8%	50.8%	44.6%	44.6%	44.6%	44.6%	44.6%	
Maximum Green (s)	20.0	20.0	20.0	6.0	29.0	29.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		5.0	5.0		5.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0	9.0		18.0	18.0	12.0	12.0	12.0	12.0	12.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	12.0	12.0	12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0	0	
Act Effct Green (s)	20.0	20.0	20.0	6.0	29.0	29.0		24.0	24.0		24.0	0.0

Lane Group	Ø12
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	12
Permitted Phases	
Minimum Split (s)	3.0
Total Split (s)	3.0
Total Split (%)	5%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.31	0.31	0.31	0.09	0.45	0.45		0.37	0.37		0.37	0.00
v/c Ratio	0.12	0.51	0.03	0.69	0.30	0.07		0.56	0.04		0.27	0.12
Control Delay	10.8	14.1	0.1	64.3	10.9	2.4		14.1	0.5		15.1	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	10.8	14.1	0.1	64.3	10.9	2.4		14.1	0.5		15.1	1.5
LOS	B	B	A	E	B	A		B	A		B	A
Approach Delay		13.0			24.4			13.2			13.3	
Approach LOS		B			C			B			B	
Stops (vph)	12	82	0	82	76	4		184	1		93	1
Fuel Used(gal)	0	2	0	2	2	0		21	1		4	0
CO Emissions (g/hr)	21	151	5	152	144	20		1444	88		263	30
NOx Emissions (g/hr)	4	29	1	30	28	4		281	17		51	6
VOC Emissions (g/hr)	5	35	1	35	33	5		335	20		61	7
Dilemma Vehicles (#)	0	0	0	0	0	0		0	0		0	0
Queue Length 50th (ft)	6	40	0	43	34	0		76	0		42	0
Queue Length 95th (ft)	13	56	0	m#113	70	m6		132	m1		70	0
Internal Link Dist (ft)		479			306			1260			2314	
Turn Bay Length (ft)	55		120	95		75			85			90
Base Capacity (vph)	307	492	499	140	713	643		573	565		548	185
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	0
Reduced v/c Ratio	0.12	0.51	0.03	0.69	0.30	0.07		0.56	0.04		0.27	0.12

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 16.6 Intersection LOS: B
Intersection Capacity Utilization 53.5% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1052: Michigan Avenue & 115th Street

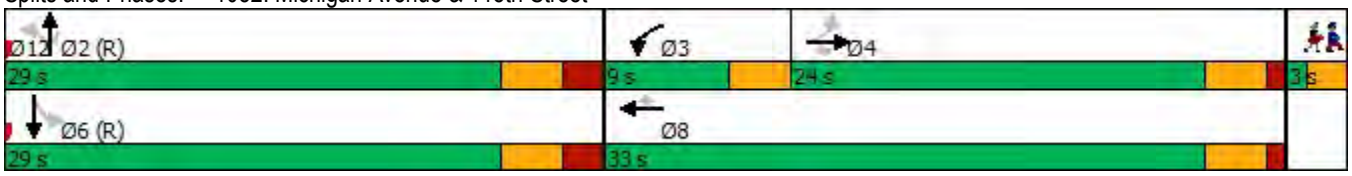

Lane Group	Ø12
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	247	14	65	306	65	24	88	152	0	0	0
Future Volume (vph)	14	247	14	65	306	65	24	88	152	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	12	12	10	15	10
Storage Length (ft)	0		95	0		80	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.923				
Flt Protected		0.997			0.991			0.995				
Satd. Flow (prot)	0	1595	1360	0	1586	1360	0	1574	0	0	0	0
Flt Permitted		0.976			0.902			0.995				
Satd. Flow (perm)	0	1562	1360	0	1443	1360	0	1574	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			17			70		108				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			636			791			721	
Travel Time (s)		8.7			14.5			18.0			16.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	15	266	15	70	329	70	26	95	163	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	15	0	399	70	0	284	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.07	1.07	1.17	0.95	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2				
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru				
Leading Detector (ft)	20	100	20	20	100	20	20	100				
Trailing Detector (ft)	0	0	0	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0	0	0	0				
Detector 1 Size(ft)	20	6	20	20	6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Detector Phase	4	4	4	8	8	8	2	2				
Switch Phase												
Minimum Initial (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Minimum Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (%)	63.1%	63.1%	63.1%	63.1%	63.1%	63.1%	36.9%	36.9%				
Maximum Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0				
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0				
Total Lost Time (s)		5.0	5.0		5.0	5.0		4.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	8.0	8.0				
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None				
Walk Time (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Flash Dont Walk (s)	8.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	30	30				
Act Effct Green (s)		39.2	39.2		39.2	39.2		16.8				
Actuated g/C Ratio		0.60	0.60		0.60	0.60		0.26				
v/c Ratio		0.30	0.02		0.46	0.08		0.58				
Control Delay		15.3	9.4		10.1	2.3		17.2				
Queue Delay		0.0	0.0		0.0	0.0		0.0				
Total Delay		15.3	9.4		10.1	2.3		17.2				
LOS		B	A		B	A		B				
Approach Delay		15.0			9.0			17.3				
Approach LOS		B			A			B				
90th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
90th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
70th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
70th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
50th %ile Green (s)	37.8	37.8	37.8	37.8	37.8	37.8	18.2	18.2				
50th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
30th %ile Green (s)	41.2	41.2	41.2	41.2	41.2	41.2	14.8	14.8				
30th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
10th %ile Green (s)	45.0	45.0	45.0	45.0	45.0	45.0	11.0	11.0				
10th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
Stops (vph)		161	9		203	9		137				
Fuel Used(gal)		3	0		6	1		3				
CO Emissions (g/hr)		228	11		399	52		232				
NOx Emissions (g/hr)		44	2		78	10		45				
VOC Emissions (g/hr)		53	3		92	12		54				
Dilemma Vehicles (#)		0	0		0	0		0				
Queue Length 50th (ft)		77	0		81	0		56				
Queue Length 95th (ft)		120	m5		155	15		119				
Internal Link Dist (ft)		304			556			711			641	
Turn Bay Length (ft)			95			80						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		942	826		870	848		559				
Starvation Cap Reductn		0	0		0	0		0				
Spillback Cap Reductn		0	0		0	0		0				
Storage Cap Reductn		0	0		0	0		0				
Reduced v/c Ratio		0.30	0.02		0.46	0.08		0.51				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 25 (38%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 12.9 Intersection LOS: B
Intersection Capacity Utilization 74.5% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1053: Indiana Avenue & 115th Street

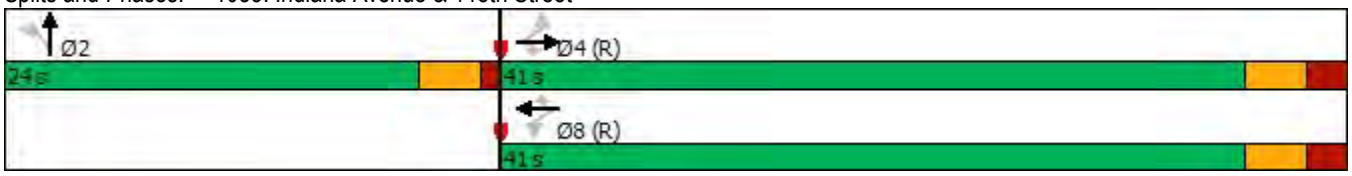

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	76	323	370	42	58	66
Future Volume (vph)	76	323	370	42	58	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	14	16	12	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.986			0.850
Flt Protected		0.991			0.950	
Satd. Flow (prot)	0	1817	1925	0	1565	1400
Flt Permitted		0.991			0.950	
Satd. Flow (perm)	0	1817	1925	0	1565	1400
Link Speed (mph)		30	30		30	
Link Distance (ft)		683	263		1350	
Travel Time (s)		15.5	6.0		30.7	
Confl. Peds. (#/hr)	21			21	5	3
Confl. Bikes (#/hr)					2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	12%	3%	5%	0%	2%	2%
Adj. Flow (vph)	86	367	420	48	66	75
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	453	468	0	66	75
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.07	0.99	0.91	1.07	1.17	1.17
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 60.2%	ICU Level of Service B
Analysis Period (min) 15	

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	76	323	370	42	58	66
Future Volume (vph)	76	323	370	42	58	66
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	86	367	420	48	66	75

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total (vph)	453	468	66	75
Volume Left (vph)	86	0	66	0
Volume Right (vph)	0	48	0	75
Hadj (s)	0.12	0.01	0.53	-0.67
Departure Headway (s)	5.1	5.0	7.3	6.0
Degree Utilization, x	0.64	0.65	0.13	0.13
Capacity (veh/h)	686	707	440	530
Control Delay (s)	16.7	16.6	10.2	8.7
Approach Delay (s)	16.7	16.6	9.4	
Approach LOS	C	C	A	

Intersection Summary			
Delay	15.7		
Level of Service	C		
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	426	1	24	582	0	0				
Future Volume (vph)	426	1	24	582	0	0				
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800				
Lane Width (ft)	10	12	12	10	16	12				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Frt		0.850								
Flt Protected				0.998						
Satd. Flow (prot)	1600	1457	0	1437	1943	0				
Flt Permitted				0.973						
Satd. Flow (perm)	1600	1457	0	1401	1943	0				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)		1								
Link Speed (mph)	30			30	30					
Link Distance (ft)	105			1228	505					
Travel Time (s)	2.4			27.9	11.5					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%				
Parking (#/hr)				0						
Adj. Flow (vph)	458	1	26	626	0	0				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	458	1	0	652	0	0				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			0	16					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.17	1.07	1.07	1.33	0.91	1.07				
Turning Speed (mph)		9	15		15	9				
Turn Type	NA	Perm	Perm	NA	Prot					
Protected Phases	6 4			4	3		1	2	6	8
Permitted Phases		6 4	4							
Minimum Split (s)			16.0	16.0	18.0		20.0	12.0	32.0	35.0
Total Split (s)			35.0	35.0	18.0		20.0	12.0	32.0	35.0
Total Split (%)			41.2%	41.2%	21.2%		24%	14%	38%	41%
Maximum Green (s)			31.0	31.0	14.0		15.0	9.0	27.0	31.0
Yellow Time (s)			3.0	3.0	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)			1.0	1.0	1.0		2.0	0.0	2.0	1.0
Lost Time Adjust (s)				0.0	0.0					
Total Lost Time (s)				4.0	4.0					
Lead/Lag							Lag	Lead		
Lead-Lag Optimize?										
Walk Time (s)					2.0				14.0	18.0
Flash Dont Walk (s)					12.0				13.0	13.0
Pedestrian Calls (#/hr)					0				0	0
Act Effct Green (s)	62.0	62.0		31.0						
Actuated g/C Ratio	0.73	0.73		0.36						
v/c Ratio	0.39	0.00		1.28						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Control Delay	2.9	0.0		166.9						
Queue Delay	1.2	0.0		0.3						
Total Delay	4.1	0.0		167.2						
LOS	A	A		F						
Approach Delay	4.1			167.2						
Approach LOS	A			F						
Stops (vph)	85	0		477						
Fuel Used(gal)	1	0		35						
CO Emissions (g/hr)	75	0		2445						
NOx Emissions (g/hr)	15	0		476						
VOC Emissions (g/hr)	17	0		567						
Dilemma Vehicles (#)	0	0		0						
Queue Length 50th (ft)	34	0		~446						
Queue Length 95th (ft)	57	m0		#650						
Internal Link Dist (ft)	25			1148	425					
Turn Bay Length (ft)										
Base Capacity (vph)	1167	1063		510						
Starvation Cap Reductn	478	1015		0						
Spillback Cap Reductn	0	0		20						
Storage Cap Reductn	0	0		0						
Reduced v/c Ratio	0.66	0.02		1.33						

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 95	
Control Type: Pretimed	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 99.8	Intersection LOS: F
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1055: Cottage Grove Avenue & 115th Street

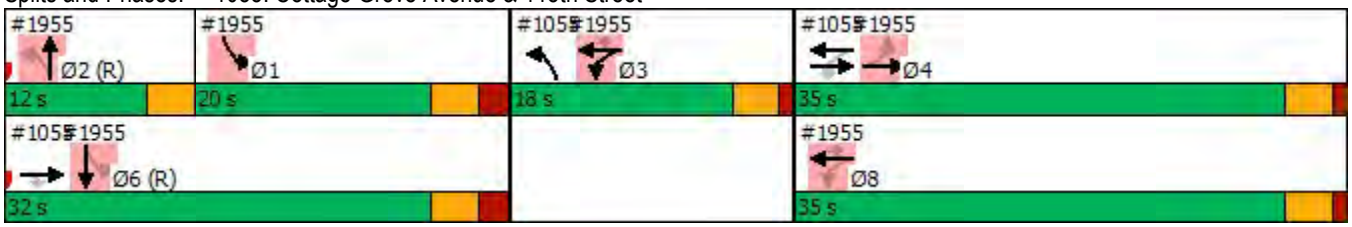

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	176	182	23	507	0	0	0	0	3	0	196
Future Volume (vph)	0	176	182	23	507	0	0	0	0	3	0	196
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	16	12	12	12	12	12	12	15	12	12	16	12
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.924										0.850
Flt Protected					0.998						0.950	
Satd. Flow (prot)	0	3038	0	0	3195	0	0	0	0	0	1938	1471
Flt Permitted					0.998						0.950	
Satd. Flow (perm)	0	3038	0	0	3195	0	0	0	0	0	1938	1471
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1260			277			633			783	
Travel Time (s)		28.6			6.3			14.4			17.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	5%	70%	4%	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	0	187	194	24	539	0	0	0	0	3	0	209
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	381	0	0	563	0	0	0	0	0	3	209
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.91	1.07	1.07	1.07	1.07	1.07	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.1%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	176	182	23	507	0	0	0	0	3	0	196
Future Volume (Veh/h)	0	176	182	23	507	0	0	0	0	3	0	196
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	187	194	24	539	0	0	0	0	3	0	209
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	539			187			602	871	190	680	774	270
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	539			187			602	871	190	680	774	270
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	99	100	71
cM capacity (veh/h)	1040			1005			271	285	825	334	324	722

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	125	256	204	359	3	209
Volume Left	0	0	24	0	3	0
Volume Right	0	194	0	0	0	209
cSH	1700	1700	1005	1700	334	722
Volume to Capacity	0.07	0.15	0.02	0.21	0.01	0.29
Queue Length 95th (ft)	0	0	2	0	1	30
Control Delay (s)	0.0	0.0	1.2	0.0	15.9	12.0
Lane LOS			A		C	B
Approach Delay (s)	0.0		0.4		12.1	
Approach LOS					B	

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	179	0	530	0	0	0
Future Volume (vph)	179	0	530	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3159	0	1629	0	0	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3159	0	1629	0	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	277			605	530	
Travel Time (s)	6.3			13.8	12.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	192	0	570	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	192	0	570	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	179	0	530	0	0	0
Future Volume (vph)	179	0	530	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	192	0	570	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	96	96	570
Volume Left (vph)	96	96	570
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.6	6.6	4.8
Degree Utilization, x	0.18	0.18	0.76
Capacity (veh/h)	513	513	737
Control Delay (s)	9.8	9.8	21.1
Approach Delay (s)	9.8		21.1
Approach LOS	A		C

Intersection Summary			
Delay	18.2		
Level of Service	C		
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	238	66	34	136	44	78	730	55	46	348	81
Future Volume (vph)	192	238	66	34	136	44	78	730	55	46	348	81
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	14	12	10	11	12	9	10	12
Storage Length (ft)	140		0	60		0	120		0	115		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	195			95			95			90		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98		0.99	1.00	0.99		0.97	1.00		1.00	0.99	
Frt			0.850		0.963			0.990			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1550	1556	1347	1596	1717	0	1535	3098	0	1509	2870	0
Flt Permitted	0.538			0.558			0.417			0.231		
Satd. Flow (perm)	856	1556	1327	936	1717	0	655	3098	0	366	2870	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		18			10			36	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			3955			5338			2655	
Travel Time (s)		21.5			89.9			121.3			60.3	
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Adj. Flow (vph)	196	243	67	35	139	45	80	745	56	47	355	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	196	243	67	35	184	0	80	801	0	47	438	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	0.99	1.07	1.17	1.12	1.07	1.22	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	4.0	4.0	7.0	4.0		7.0	18.0		7.0	18.0	
Minimum Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (%)	11.1%	35.6%	35.6%	11.1%	35.6%		11.1%	42.2%		11.1%	42.2%	
Maximum Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0	0.0	1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	C-Max		None	C-Max	
Walk Time (s)		4.0	4.0		4.0			18.0			18.0	
Flash Dont Walk (s)		23.0	23.0		23.0			16.0			16.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	35.6	32.0	31.0	34.0	27.0		41.6	38.0		40.8	36.0	
Actuated g/C Ratio	0.40	0.36	0.34	0.38	0.30		0.46	0.42		0.45	0.40	
v/c Ratio	0.51	0.44	0.13	0.09	0.35		0.22	0.61		0.20	0.37	
Control Delay	24.1	26.7	4.4	16.1	24.4		14.2	23.4		14.3	19.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	24.1	26.7	4.4	16.1	24.4		14.2	23.4		14.3	19.2	
LOS	C	C	A	B	C		B	C		B	B	
Approach Delay		22.8			23.1			22.6			18.7	
Approach LOS		C			C			C			B	
90th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
90th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
70th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
50th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		7.0	44.0		0.0	34.0	
30th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Max	Coord		Skip	Coord	
10th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Skip	Coord		Skip	Coord	
Stops (vph)	141	183	8	21	123		42	594		24	271	
Fuel Used(gal)	3	4	1	1	7		4	40		1	12	
CO Emissions (g/hr)	219	284	41	89	498		259	2775		85	843	
NOx Emissions (g/hr)	43	55	8	17	97		50	540		17	164	
VOC Emissions (g/hr)	51	66	10	21	115		60	643		20	195	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	72	112	0	11	73		23	194		14	85	
Queue Length 95th (ft)	123	186	21	29	130		48	261		32	126	
Internal Link Dist (ft)		866			3875			5258			2575	
Turn Bay Length (ft)	140			60			120			115		
Base Capacity (vph)	384	553	512	397	527		361	1313		241	1169	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.51	0.44	0.13	0.09	0.35		0.22	0.61		0.20	0.37	

Intersection Summary

Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 21.8	Intersection LOS: C
Intersection Capacity Utilization 82.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1060: Halsted Street & 119th Street

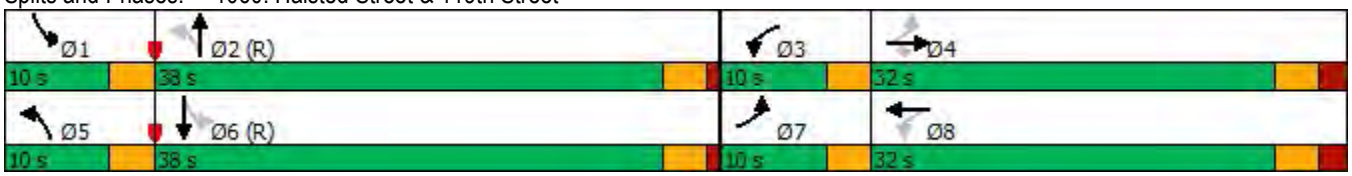

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	243	15	5	182	19	33	75	15	10	37	33
Future Volume (vph)	40	243	15	5	182	19	33	75	15	10	37	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	10	10	10	10	12	15	12	12	16	12
Storage Length (ft)	0		105	0		75	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.97		1.00	0.97		1.00			0.99	
Frt			0.850			0.850		0.984			0.945	
Flt Protected		0.993			0.999			0.987			0.994	
Satd. Flow (prot)	0	1630	1428	0	1600	1231	0	1916	0	0	1851	0
Flt Permitted		0.944			0.994			0.929			0.974	
Satd. Flow (perm)	0	1548	1383	0	1592	1198	0	1801	0	0	1812	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			16			21		13			36	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3955			1331			2677			2669	
Travel Time (s)		89.9			30.3			60.8			60.7	
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Adj. Flow (vph)	44	267	16	5	200	21	36	82	16	11	41	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	311	16	0	205	21	0	134	0	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.17	1.17	1.17	1.17	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	32.0	27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	22.0	22.0	22.0	22.0	22.0	22.0	17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
v/c Ratio		0.41	0.02		0.26	0.04		0.18			0.11	
Control Delay		12.5	4.6		8.5	2.9		11.6			5.5	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		12.5	4.6		8.5	2.9		11.6			5.5	
LOS		B	A		A	A		B			A	
Approach Delay		12.2			8.0			11.6			5.5	
Approach LOS		B			A			B			A	
Stops (vph)		172	5		57	3		66			47	
Fuel Used(gal)		10	1		3	0		3			2	
CO Emissions (g/hr)		727	35		180	16		224			141	
NOx Emissions (g/hr)		141	7		35	3		44			27	
VOC Emissions (g/hr)		168	8		42	4		52			33	
Dilemma Vehicles (#)		0	0		0	0		0			0	
Queue Length 50th (ft)		73	0		28	1		29			1	
Queue Length 95th (ft)		128	8		45	5		60			9	
Internal Link Dist (ft)		3875			1251			2597			2589	
Turn Bay Length (ft)			105			75						
Base Capacity (vph)		762	688		783	600		755			773	
Starvation Cap Reductn		0	0		0	0		0			0	
Spillback Cap Reductn		0	0		0	0		0			0	
Storage Cap Reductn		0	0		0	0		0			0	
Reduced v/c Ratio		0.41	0.02		0.26	0.04		0.18			0.11	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.41
Intersection Signal Delay: 10.1 Intersection LOS: B
Intersection Capacity Utilization 85.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1061: Wentworth Avenue & 119th Street

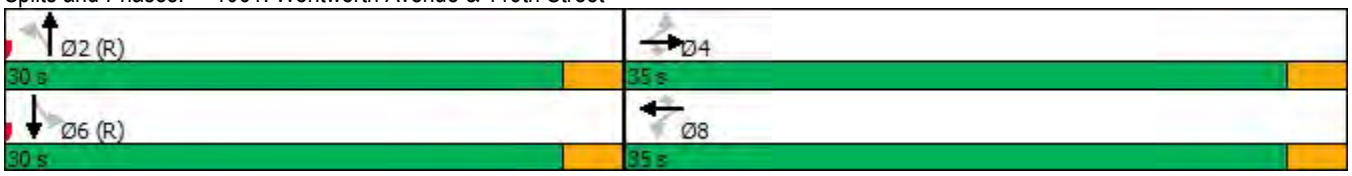

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	160	19	6	133	6	32	176	17	8	45	26
Future Volume (vph)	58	160	19	6	133	6	32	176	17	8	45	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	12	10	10	12	10	10	12	16	12
Storage Length (ft)	0		70	0		215	0		75	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Frt			0.850			0.850			0.850		0.956	
Flt Protected		0.987			0.998			0.992			0.995	
Satd. Flow (prot)	0	1555	1360	0	1498	1428	0	1638	1347	0	1875	0
Flt Permitted		0.888			0.988			0.956			0.975	
Satd. Flow (perm)	0	1394	1299	0	1482	1376	0	1577	1297	0	1835	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34			34			34		27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			477			2671			2164	
Travel Time (s)		30.3			10.8			60.7			49.2	
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Adj. Flow (vph)	60	167	20	6	139	6	33	183	18	8	47	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	227	20	0	145	6	0	216	18	0	82	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	43.1%	43.1%	43.1%	43.1%	43.1%	43.1%	56.9%	56.9%	56.9%	56.9%	56.9%	
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0	23.0	32.0	32.0	32.0	32.0	32.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	14.0	14.0	14.0	14.0	14.0	14.0	23.0	23.0	23.0	23.0	23.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
v/c Ratio		0.46	0.04		0.28	0.01		0.28	0.03		0.09	
Control Delay		12.0	2.3		16.9	0.0		4.5	1.4		5.2	
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Delay		12.0	2.3		16.9	0.0		4.5	1.4		5.2	
LOS		B	A		B	A		A	A		A	
Approach Delay		11.2			16.2			4.2			5.2	
Approach LOS		B			B			A			A	
Stops (vph)		168	7		97	0		100	3		28	
Fuel Used(gal)		4	0		2	0		9	1		2	
CO Emissions (g/hr)		260	17		107	2		656	51		132	
NOx Emissions (g/hr)		51	3		21	0		128	10		26	
VOC Emissions (g/hr)		60	4		25	0		152	12		31	
Dilemma Vehicles (#)		0	0		0	0		0	0		0	
Queue Length 50th (ft)		72	1		40	0		32	1		0	
Queue Length 95th (ft)		133	m3		80	0		53	m2		7	
Internal Link Dist (ft)		1251			397			2591			2084	
Turn Bay Length (ft)			70			215			75			
Base Capacity (vph)		493	481		524	508		776	655		917	
Starvation Cap Reductn		0	0		0	0		0	0		0	
Spillback Cap Reductn		0	0		0	0		0	0		0	
Storage Cap Reductn		0	0		0	0		0	0		0	
Reduced v/c Ratio		0.46	0.04		0.28	0.01		0.28	0.03		0.09	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.46
Intersection Signal Delay: 9.3 Intersection LOS: A
Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1062: State Street & 119th Street

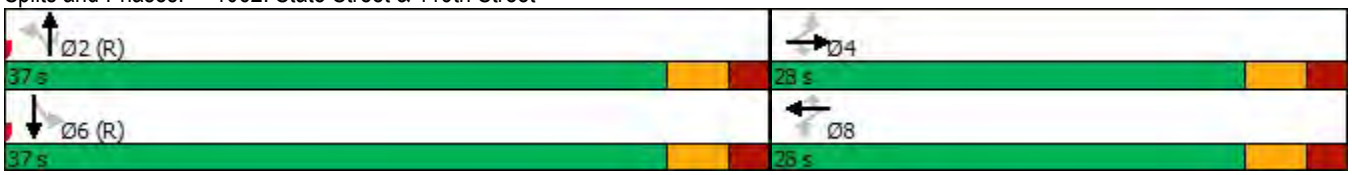

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	765	212	236	1004	0	0	0	0	270	196	366
Future Volume (vph)	0	765	212	236	1004	0	0	0	0	270	196	366
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	14
Storage Length (ft)	0		85	216		0	0		0	360		360
Storage Lanes	0		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.86	0.91
Ped Bike Factor		1.00		1.00							0.99	0.99
Frt		0.968									0.939	0.850
Flt Protected				0.950						0.950	0.994	
Satd. Flow (prot)	0	4305	0	1644	3226	0	0	0	0	1468	2713	1375
Flt Permitted				0.222						0.950	0.994	
Satd. Flow (perm)	0	4305	0	384	3226	0	0	0	0	1468	2713	1356
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		77									111	115
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1359			322			474			954	
Travel Time (s)		30.9			7.3			10.8			21.7	
Confl. Peds. (#/hr)	6		4	4		6	2					2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Adj. Flow (vph)	0	781	216	241	1024	0	0	0	0	276	200	373
Shared Lane Traffic (%)										20%		47%
Lane Group Flow (vph)	0	997	0	241	1024	0	0	0	0	221	430	198
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			34			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1					1	1	1
Detector Template												
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		50		50	50					50	50	50
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1	6					4	4	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)		15.0		3.0	15.0					8.0	8.0	8.0
Minimum Split (s)		46.0		24.0	70.0					35.0	35.0	35.0
Total Split (s)		46.0		24.0	70.0					35.0	35.0	35.0
Total Split (%)		43.8%		22.9%	66.7%					33.3%	33.3%	33.3%
Maximum Green (s)		40.0		19.5	64.0					29.0	29.0	29.0
Yellow Time (s)		4.5		3.5	4.5					4.5	4.5	4.5
All-Red Time (s)		1.5		1.0	1.5					1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)		7.0		3.5	7.0					3.0	3.0	3.0
Minimum Gap (s)		3.5		0.2	3.5					0.2	0.2	0.2
Time Before Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Time To Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Recall Mode		C-Max		None	C-Max					None	None	None
Walk Time (s)										2.0	2.0	2.0
Flash Dont Walk (s)										27.0	27.0	27.0
Pedestrian Calls (#/hr)										0	0	0
Act Effct Green (s)		54.3		72.6	71.1					21.9	21.9	21.9
Actuated g/C Ratio		0.52		0.69	0.68					0.21	0.21	0.21
v/c Ratio		0.44		0.58	0.47					0.72	0.66	0.53
Control Delay		16.9		18.0	13.4					51.7	32.2	20.1
Queue Delay		0.0		1.2	4.3					0.0	0.0	0.0
Total Delay		16.9		19.2	17.6					51.7	32.2	20.1
LOS		B		B	B					D	C	C
Approach Delay		16.9			17.9						34.5	
Approach LOS		B			B						C	
90th %ile Green (s)		40.9		18.6	64.0					29.0	29.0	29.0
90th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
70th %ile Green (s)		49.0		13.7	67.2					25.8	25.8	25.8
70th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
50th %ile Green (s)		54.1		11.7	70.3					22.7	22.7	22.7
50th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
30th %ile Green (s)		60.0		9.8	74.3					18.7	18.7	18.7
30th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
10th %ile Green (s)		67.5		7.9	79.9					13.1	13.1	13.1
10th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
Stops (vph)		560		151	622					195	279	73
Fuel Used(gal)		17		2	9					5	7	3
CO Emissions (g/hr)		1174		160	608					348	520	185
NOx Emissions (g/hr)		228		31	118					68	101	36
VOC Emissions (g/hr)		272		37	141					81	120	43
Dilemma Vehicles (#)		0		0	0					0	0	0
Queue Length 50th (ft)		135		72	211					151	113	51
Queue Length 95th (ft)		220		m159	m340					225	159	120
Internal Link Dist (ft)		1279			242			394			874	
Turn Bay Length (ft)				216						360		360

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		2263		499	2185					405	829	457
Starvation Cap Reductn		0		110	1062					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.44		0.62	0.91					0.55	0.52	0.43

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 89 (85%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 22.1 Intersection LOS: C
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1064: S Paulina ST & 127th Street

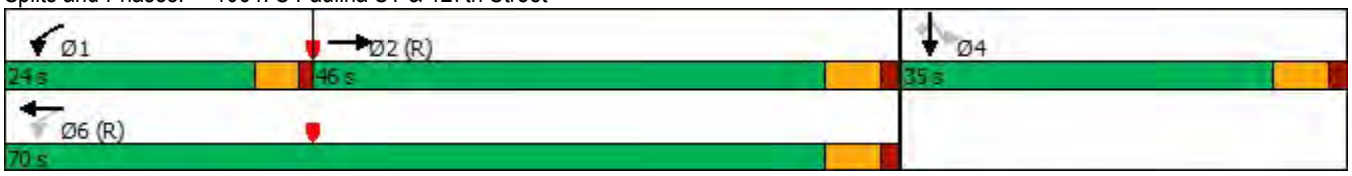

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	301	734	0	0	815	234	425	281	297	0	0	0
Future Volume (vph)	301	734	0	0	815	234	425	281	297	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	216		216	0		130	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				1.00							
Frt					0.967			0.923				
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3016	3138	0	0	4486	0	1644	3034	0	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3012	3138	0	0	4486	0	1644	3034	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					76							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			336			554			548	
Travel Time (s)		7.3			7.6			12.6			12.5	
Confl. Peds. (#/hr)	4					4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Adj. Flow (vph)	317	773	0	0	858	246	447	296	313	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	317	773	0	0	1104	0	447	609	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1		1	1				
Detector Template												
Leading Detector (ft)	50	50			50		50	50				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	50	50			50		50	50				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	3.0	15.0			15.0		10.0	10.0				
Minimum Split (s)	27.5	70.5			43.0		34.5	34.5				
Total Split (s)	27.5	70.5			43.0		34.5	34.5				
Total Split (%)	26.2%	67.1%			41.0%		32.9%	32.9%				
Maximum Green (s)	21.5	64.5			37.0		28.5	28.5				
Yellow Time (s)	4.5	4.5			4.5		4.5	4.5				
All-Red Time (s)	1.5	1.5			1.5		1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0			7.0		5.0	5.0				
Minimum Gap (s)	0.2	3.5			3.5		0.2	0.2				
Time Before Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Time To Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Recall Mode	None	C-Max			C-Max		None	None				
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							21.5	21.5				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	16.7	64.5			41.8		28.5	28.5				
Actuated g/C Ratio	0.16	0.61			0.40		0.27	0.27				
v/c Ratio	0.66	0.40			0.60		1.00	0.74				
Control Delay	44.6	8.2			20.5		82.6	41.3				
Queue Delay	0.0	0.3			0.3		34.3	0.0				
Total Delay	44.6	8.5			20.8		116.9	41.3				
LOS	D	A			C		F	D				
Approach Delay		19.0			20.8			73.3				
Approach LOS		B			C			E				
90th %ile Green (s)	21.1	64.5			37.4		28.5	28.5				
90th %ile Term Code	Gap	Coord			Coord		Max	Max				
70th %ile Green (s)	18.5	64.5			40.0		28.5	28.5				
70th %ile Term Code	Gap	Coord			Coord		Max	Max				
50th %ile Green (s)	16.7	64.5			41.8		28.5	28.5				
50th %ile Term Code	Gap	Coord			Coord		Max	Max				
30th %ile Green (s)	14.8	64.5			43.7		28.5	28.5				
30th %ile Term Code	Gap	Coord			Coord		Max	Max				
10th %ile Green (s)	12.2	64.5			46.3		28.5	28.5				
10th %ile Term Code	Gap	Coord			Coord		Max	Max				
Stops (vph)	237	283			447		366	517				
Fuel Used(gal)	5	5			10		11	10				
CO Emissions (g/hr)	335	323			671		769	715				
NOx Emissions (g/hr)	65	63			131		150	139				
VOC Emissions (g/hr)	78	75			156		178	166				
Dilemma Vehicles (#)	0	0			0		0	0				
Queue Length 50th (ft)	77	81			115		~301	196				
Queue Length 95th (ft)	123	73			m175		#509	262				
Internal Link Dist (ft)		242			256			474			468	
Turn Bay Length (ft)	216											
Base Capacity (vph)	617	1927			1833		446	823				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	551			212		0	0				
Spillback Cap Reductn	0	0			4		98	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.51	0.56			0.68		1.28	0.74				

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 7 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 37.2 Intersection LOS: D
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1065: Marshfield Ave & 127th Street

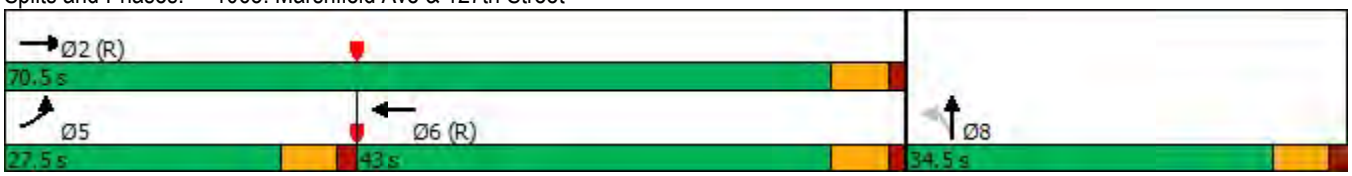

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	405	204	71	683	38	226	178	40	37	111	91
Future Volume (vph)	95	405	204	71	683	38	226	178	40	37	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	11	12	12	10	12	13	10	10	10
Storage Length (ft)	120		0	85		0	240		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			120			125			140		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	0.99	1.00		0.99	1.00		1.00	0.99	
Frt			0.850		0.992			0.972			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3167	1311	1605	3232	0	1451	3222	0	1550	2789	0
Flt Permitted	0.176			0.501			0.523			0.607		
Satd. Flow (perm)	290	3167	1282	842	3232	0	793	3222	0	986	2789	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			217		6			27			97	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		336			5379			1555			925	
Travel Time (s)		7.6			122.3			35.3			21.0	
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Adj. Flow (vph)	101	431	217	76	727	40	240	189	43	39	118	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	431	217	76	767	0	240	232	0	39	215	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.07	1.22	1.12	1.07	1.07	1.17	1.07	1.03	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	13.5	42.0	12.5	12.5	41.0		12.5	38.0		12.5	38.0	
Total Split (s)	13.5	42.0	12.5	12.5	41.0		12.5	38.0		12.5	38.0	
Total Split (%)	12.9%	40.0%	11.9%	11.9%	39.0%		11.9%	36.2%		11.9%	36.2%	
Maximum Green (s)	9.0	36.0	8.0	8.0	35.0		8.0	32.0		8.0	32.0	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	0.2	4.0	0.2	0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	25.0	0.0	0.0	25.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Recall Mode	Max	C-Max	None	None	C-Max		None	None		None	None	
Walk Time (s)		14.0			13.0			5.0			5.0	
Flash Dont Walk (s)		22.0			22.0			26.0			26.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	65.5	54.0	63.5	44.0	35.0		28.0	21.7		25.1	16.5	
Actuated g/C Ratio	0.62	0.51	0.60	0.42	0.33		0.27	0.21		0.24	0.16	
v/c Ratio	0.21	0.26	0.25	0.19	0.71		0.92	0.34		0.14	0.41	
Control Delay	8.4	16.0	3.4	11.6	34.7		70.2	28.8		27.7	23.6	
Queue Delay	0.0	0.0	0.2	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	8.4	16.0	3.6	11.6	34.7		70.2	28.8		27.7	23.6	
LOS	A	B	A	B	C		E	C		C	C	
Approach Delay		11.4			32.6			49.8			24.3	
Approach LOS		B			C			D			C	
90th %ile Green (s)	20.7	46.1	8.0	9.6	35.0		8.0	20.3		8.0	20.3	
90th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Max	Hold	
70th %ile Green (s)	23.7	50.5	8.0	8.2	35.0		8.0	17.3		8.0	17.3	
70th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Max	Hold	
50th %ile Green (s)	25.9	53.6	8.0	7.3	35.0		8.0	15.7		7.4	15.1	
50th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Gap	Hold	
30th %ile Green (s)	26.0	54.4	8.0	6.6	35.0		8.0	27.5		0.0	15.0	
30th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Skip	Min	
10th %ile Green (s)	26.0	65.5	8.0	0.0	35.0		8.0	27.5		0.0	15.0	
10th %ile Term Code	MaxR	Coord	Max	Skip	Coord		Max	Hold		Skip	Min	
Stops (vph)	34	286	63	38	607		238	201		28	97	
Fuel Used(gal)	1	4	1	3	39		7	5		1	3	
CO Emissions (g/hr)	42	277	72	234	2704		509	352		44	207	
NOx Emissions (g/hr)	8	54	14	46	526		99	68		9	40	
VOC Emissions (g/hr)	10	64	17	54	627		118	81		10	48	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	21	113	18	18	233		~151	70		19	37	
Queue Length 95th (ft)	m38	148	m19	41	303		#290	111		42	70	
Internal Link Dist (ft)		256			5299			1475			845	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	120			85			240			120		
Base Capacity (vph)	477	1629	863	420	1081		261	1000		287	917	
Starvation Cap Reductn	0	0	201	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.21	0.26	0.33	0.18	0.71		0.92	0.23		0.14	0.23	

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 16 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 28.3 Intersection LOS: C
Intersection Capacity Utilization 81.4% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1066: S Ashland & 127th Street

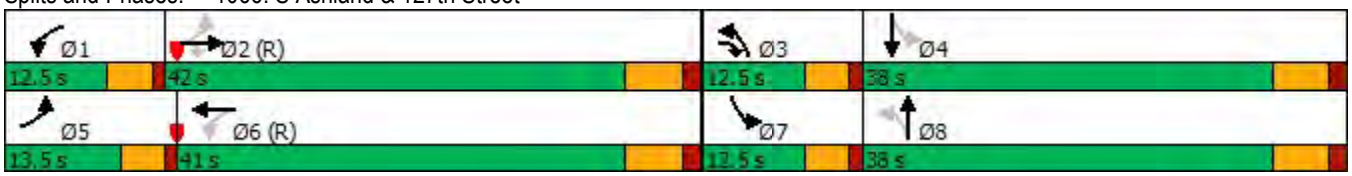

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	106	229	47	139	85	323	375	62	91	258	54
Future Volume (vph)	50	106	229	47	139	85	323	375	62	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	11	12	12	12	12	12
Storage Length (ft)	85		0	140		0	140		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	55			135			115			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98				0.99		1.00	1.00		1.00	1.00	
Frt		0.897			0.943			0.979			0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1644	2903	0	1513	3012	0	1589	3157	0	1660	3243	0
Flt Permitted	0.599			0.475			0.448			0.478		
Satd. Flow (perm)	1019	2903	0	757	3012	0	749	3157	0	834	3243	0
Right Turn on Red			No			Yes			Yes			No
Satd. Flow (RTOR)					93			21				
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		542			3053			918			1555	
Travel Time (s)		10.6			59.5			17.9			30.3	
Confl. Peds. (#/hr)	20					20	1		2	2		1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Adj. Flow (vph)	55	116	252	52	153	93	355	412	68	100	284	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	368	0	52	246	0	355	480	0	100	343	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	13.5	31.5		13.5	31.5		24.0	46.5		13.5	36.0	
Total Split (s)	13.5	31.5		13.5	31.5		24.0	46.5		13.5	36.0	
Total Split (%)	12.9%	30.0%		12.9%	30.0%		22.9%	44.3%		12.9%	34.3%	
Maximum Green (s)	9.5	25.5		9.5	25.5		20.0	40.5		9.5	30.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	1.0	1.5		1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Minimum Gap (s)	0.2	4.0		0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Time To Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Recall Mode	None	Max		None	Max		None	C-Max		None	C-Max	
Walk Time (s)					2.0						2.0	
Flash Dont Walk (s)					23.5						28.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)	37.8	29.0		37.8	29.0		56.0	43.6		42.4	31.8	
Actuated g/C Ratio	0.36	0.28		0.36	0.28		0.53	0.42		0.40	0.30	
v/c Ratio	0.13	0.46		0.16	0.27		0.65	0.36		0.25	0.35	
Control Delay	21.3	34.9		21.6	20.2		21.1	22.0		14.3	25.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.3	34.9		21.6	20.2		21.1	22.0		14.3	25.7	
LOS	C	C		C	C		C	C		B	C	
Approach Delay		33.1			20.5			21.6			23.1	
Approach LOS		C			C			C			C	
90th %ile Green (s)	9.5	25.5		9.5	25.5		20.0	40.5		9.5	30.0	
90th %ile Term Code	Max	MaxR		Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	9.1	25.8		9.2	25.9		20.0	40.5		9.5	30.0	
70th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	8.2	26.8		8.2	26.8		20.0	40.9		9.1	30.0	
50th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Gap	Coord	
30th %ile Green (s)	7.2	27.8		7.2	27.8		17.2	41.9		8.1	32.8	
30th %ile Term Code	Gap	MaxR		Gap	MaxR		Gap	Coord		Gap	Coord	
10th %ile Green (s)	0.0	39.0		0.0	39.0		13.6	54.0		0.0	36.4	
10th %ile Term Code	Skip	MaxR		Skip	MaxR		Gap	Coord		Skip	Coord	
Stops (vph)	32	275		30	108		188	283		51	211	
Fuel Used(gal)	1	6		2	11		5	7		2	7	
CO Emissions (g/hr)	46	403		163	756		346	488		117	470	
NOx Emissions (g/hr)	9	78		32	147		67	95		23	91	
VOC Emissions (g/hr)	11	93		38	175		80	113		27	109	
Dilemma Vehicles (#)	0	16		0	11		0	21		0	17	
Queue Length 50th (ft)	23	111		22	42		136	114		22	84	
Queue Length 95th (ft)	49	161		47	78		207	159		47	133	
Internal Link Dist (ft)		462			2973			838			1475	
Turn Bay Length (ft)	85			140			140			150		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	430	801		346	899		559	1321		419	983	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.46		0.15	0.27		0.64	0.36		0.24	0.35	

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 9 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 24.2 — Intersection LOS: C
Intersection Capacity Utilization 85.1% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1067: S Ashland & Vermont St

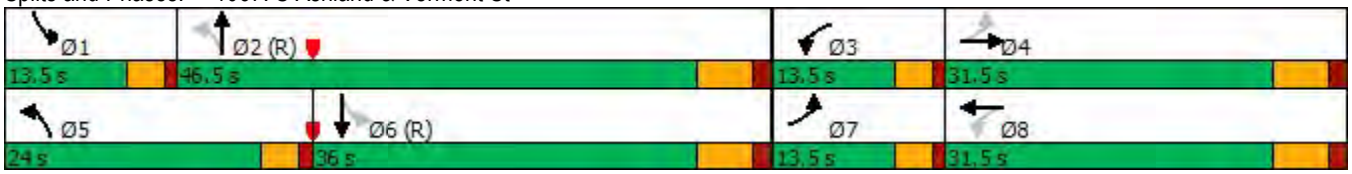

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	359	73	6	372	100	56	490	6	65	251	81
Future Volume (vph)	151	359	73	6	372	100	56	490	6	65	251	81
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	11	12	11	12	12	11	11	12
Storage Length (ft)	0		0	0		0	135		0	130		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			100			105		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		0.99	1.00		0.99	0.99	
Frt		0.981			0.968			0.998			0.963	
Flt Protected		0.987			0.999		0.950			0.950		
Satd. Flow (prot)	0	2992	0	0	2988	0	1545	3296	0	1559	2992	0
Flt Permitted		0.685			0.947		0.538			0.371		
Satd. Flow (perm)	0	2075	0	0	2832	0	869	3296	0	605	2992	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			39			1			51	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5379			1323			450			5338	
Travel Time (s)		122.3			30.1			10.2			121.3	
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Adj. Flow (vph)	162	386	78	6	400	108	60	527	6	70	270	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	626	0	0	514	0	60	533	0	70	357	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.07	1.07	1.12	1.07	1.12	1.07	1.07	1.12	1.12	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		15.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	37.0		21.0	21.0		6.5	31.0		6.5	21.0	
Total Split (s)	10.0	40.0		30.0	30.0		15.0	33.0		12.0	30.0	
Total Split (%)	11.8%	47.1%		35.3%	35.3%		17.6%	38.8%		14.1%	35.3%	
Maximum Green (s)	6.5	34.0		24.0	24.0		11.5	27.0		8.5	24.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Time To Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		9.0						7.0				
Flash Dont Walk (s)		22.0						18.0				
Pedestrian Calls (#/hr)		11						14				
Act Effct Green (s)		28.8			28.8		30.9	22.7		31.7	24.8	
Actuated g/C Ratio		0.40			0.40		0.43	0.31		0.44	0.34	
v/c Ratio		0.75			0.45		0.14	0.52		0.19	0.34	
Control Delay		25.8			17.1		12.4	23.9		13.0	18.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		25.8			17.1		12.4	23.9		13.0	18.1	
LOS		C			B		B	C		B	B	
Approach Delay		25.8			17.1			22.8			17.3	
Approach LOS		C			B			C			B	
90th %ile Green (s)	0.0	34.0		34.0	34.0		9.3	27.0		8.5	26.2	
90th %ile Term Code	Skip	Max		Hold	Hold		Gap	Max		Max	Hold	
70th %ile Green (s)	0.0	34.0		34.0	34.0		8.0	27.0		8.4	27.4	
70th %ile Term Code	Skip	Max		Hold	Hold		Gap	Max		Gap	Hold	
50th %ile Green (s)	0.0	33.0		33.0	33.0		7.2	23.9		7.5	24.2	
50th %ile Term Code	Skip	Gap		Hold	Hold		Gap	Gap		Gap	Hold	
30th %ile Green (s)	0.0	25.7		25.7	25.7		0.0	20.0		6.5	30.0	
30th %ile Term Code	Skip	Gap		Hold	Hold		Skip	Gap		Gap	Hold	
10th %ile Green (s)	0.0	17.5		17.5	17.5		0.0	15.0		0.0	15.0	
10th %ile Term Code	Skip	Gap		Hold	Hold		Skip	Min		Skip	Min	
Stops (vph)		454			298		29	377		33	195	
Fuel Used(gal)		30			8		0	6		3	16	
CO Emissions (g/hr)		2095			576		35	436		214	1127	
NOx Emissions (g/hr)		408			112		7	85		42	219	
VOC Emissions (g/hr)		486			134		8	101		50	261	
Dilemma Vehicles (#)		0			0		0	0		0	0	
Queue Length 50th (ft)		128			85		16	115		19	62	
Queue Length 95th (ft)		209			137		37	169		41	103	
Internal Link Dist (ft)		5299			1243			370			5258	
Turn Bay Length (ft)							135			130		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		1045			1230		515	1305		385	1178	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.60			0.42		0.12	0.41		0.18	0.30	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 72.4
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 21.2 Intersection LOS: C
Intersection Capacity Utilization 73.8% ICU Level of Service D
Analysis Period (min) 15
90th %ile Actuated Cycle: 85
70th %ile Actuated Cycle: 84.9
50th %ile Actuated Cycle: 79.9
30th %ile Actuated Cycle: 67.7
10th %ile Actuated Cycle: 44.5

Splits and Phases: 1068: Halsted Street & 127th Street

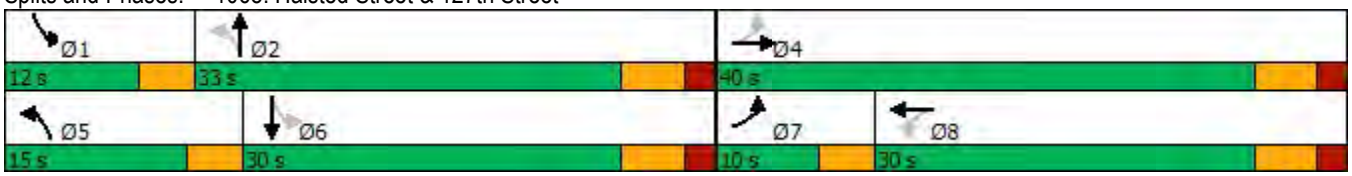

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	90	37	59	111	11	31	529	65	8	291	35
Future Volume (vph)	40	90	37	59	111	11	31	529	65	8	291	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	60		0	55		0	105		0	90		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			55			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.99	1.00		1.00	1.00		1.00	1.00	
Frt		0.957			0.986			0.984			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1676	1857	0	1629	1937	0	1660	3213	0	1140	3193	0
Flt Permitted	0.672			0.669			0.540			0.368		
Satd. Flow (perm)	1178	1857	0	1135	1937	0	941	3213	0	441	3193	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			9			28			27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2456			1385			1856			450	
Travel Time (s)		55.8			31.5			42.2			10.2	
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Adj. Flow (vph)	43	98	40	64	121	12	34	575	71	9	316	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	138	0	64	133	0	34	646	0	9	354	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	19.0	19.0		19.0	19.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
v/c Ratio	0.10	0.19		0.15	0.18		0.08	0.42		0.04	0.23	
Control Delay	14.3	11.3		25.8	24.9		9.9	11.6		9.9	9.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.3	11.3		25.8	24.9		9.9	11.6		9.9	9.7	
LOS	B	B		C	C		A	B		A	A	
Approach Delay		12.0			25.2			11.5			9.7	
Approach LOS		B			C			B			A	
Stops (vph)	28	63		58	110		18	347		6	164	
Fuel Used(gal)	2	6		1	3		1	12		0	3	
CO Emissions (g/hr)	139	426		89	178		43	833		5	188	
NOx Emissions (g/hr)	27	83		17	35		8	162		1	37	
VOC Emissions (g/hr)	32	99		21	41		10	193		1	44	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	11	26		27	54		7	78		2	37	
Queue Length 95th (ft)	30	60		m37	m72		21	115		9	60	
Internal Link Dist (ft)		2376			1305			1776			370	
Turn Bay Length (ft)	60			55			105			90		
Base Capacity (vph)	434	708		419	720		448	1547		210	1536	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.10	0.19		0.15	0.18		0.08	0.42		0.04	0.23	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.42
Intersection Signal Delay: 13.0 Intersection LOS: B
Intersection Capacity Utilization 63.1% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1069: Halsted Street & Vermont St

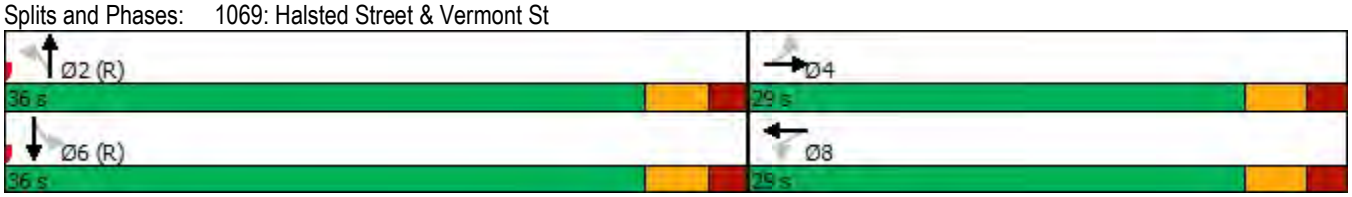

Lane Group	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	403	146	505	13	3	12	3	41	9	0	2	4
Future Volume (vph)	403	146	505	13	3	12	3	41	9	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	12	12	16	12	12	16	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.99		
Frt			0.997				0.904			0.949		
Flt Protected			0.989				0.988			0.970		
Satd. Flow (prot)	2956	0	2959	0	0	0	1733	0	0	1859	0	0
Flt Permitted			0.669				0.945			0.877		
Satd. Flow (perm)	2956	0	1999	0	0	0	1656	0	0	1681	0	0
Right Turn on Red				No				No				No
Satd. Flow (RTOR)												
Link Speed (mph)	30		30				30			30		
Link Distance (ft)	1323		3930				1256			658		
Travel Time (s)	30.1		89.3				28.5			15.0		
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	448	162	561	14	3	13	3	46	10	0	2	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	448	0	737	0	0	0	65	0	0	16	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)	0		0				0			0		
Link Offset(ft)	0		0				0			0		
Crosswalk Width(ft)	16		16				16			16		
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.07	1.07	0.91	1.07	1.07	0.91	1.07	1.07
Turning Speed (mph)		15		9	15	15		9	15		9	9
Turn Type	NA	custom	NA		Perm	Perm	NA		Perm	NA		
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7			2	2			6			
Minimum Split (s)	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0		
Total Split (s)	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0		
Total Split (%)	35.4%	13.8%	49.2%		27.7%	27.7%	27.7%		27.7%	27.7%		
Maximum Green (s)	18.0	6.0	27.0		14.0	14.0	14.0		14.0	14.0		
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	0.0	2.0		1.0	1.0	1.0		1.0	1.0		
Lost Time Adjust (s)	0.0		0.0				0.0			0.0		
Total Lost Time (s)	5.0		5.0				4.0			4.0		
Lead/Lag	Lag	Lead										
Lead-Lag Optimize?												
Walk Time (s)	9.0		18.0		5.0	5.0	5.0					
Flash Dont Walk (s)	9.0		9.0		9.0	9.0	9.0					
Pedestrian Calls (#/hr)	0		0		0	0	0					
Act Effct Green (s)	18.0		27.0				14.0			14.0		

Lane Group	NEL	NER
Lane Configurations		
Traffic Volume (vph)	1	173
Future Volume (vph)	1	173
Ideal Flow (vphpl)	1800	1800
Lane Width (ft)	12	12
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt	0.866	
Flt Protected		
Satd. Flow (prot)	1431	0
Flt Permitted		
Satd. Flow (perm)	1431	0
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	1385	
Travel Time (s)	31.5	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.90	0.90
Heavy Vehicles (%)	0%	9%
Adj. Flow (vph)	1	192
Shared Lane Traffic (%)		
Lane Group Flow (vph)	193	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.07	1.07
Turning Speed (mph)	15	9
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Minimum Split (s)	15.0	
Total Split (s)	15.0	
Total Split (%)	23.1%	
Maximum Green (s)	10.0	
Yellow Time (s)	3.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)	10.0	

Lane Group	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
v/c Ratio	0.55		0.83				0.18			0.04		
Control Delay	23.0		24.0				22.4			20.7		
Queue Delay	0.0		0.0				0.0			0.0		
Total Delay	23.0		24.0				22.4			20.7		
LOS	C		C				C			C		
Approach Delay	23.0		24.0				22.4			20.7		
Approach LOS	C		C				C			C		
Stops (vph)	330		492				47			13		
Fuel Used(gal)	8		26				1			0		
CO Emissions (g/hr)	550		1836				76			14		
NOx Emissions (g/hr)	107		357				15			3		
VOC Emissions (g/hr)	128		426				18			3		
Dilemma Vehicles (#)	0		0				0			0		
Queue Length 50th (ft)	78		100				21			5		
Queue Length 95th (ft)	121		#209				51			19		
Internal Link Dist (ft)	1243		3850				1176			578		
Turn Bay Length (ft)												
Base Capacity (vph)	818		889				356			362		
Starvation Cap Reductn	0		0				0			0		
Spillback Cap Reductn	0		0				0			0		
Storage Cap Reductn	0		0				0			0		
Reduced v/c Ratio	0.55		0.83				0.18			0.04		

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 29.5 Intersection LOS: C
Intersection Capacity Utilization 76.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1070: S Wallance St & 127th Street

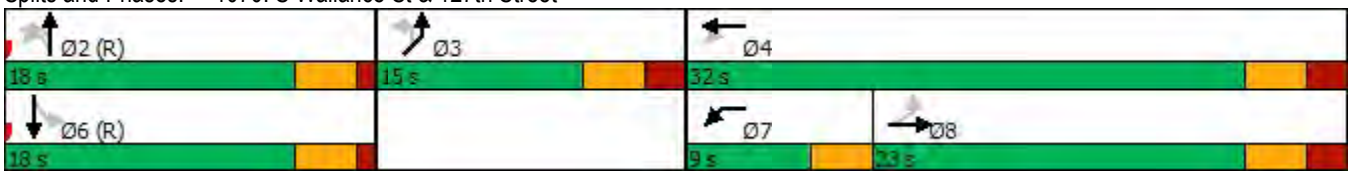

Lane Group	NEL	NER
Actuated g/C Ratio	0.15	
v/c Ratio	0.88	
Control Delay	69.1	
Queue Delay	0.0	
Total Delay	69.1	
LOS	E	
Approach Delay	69.1	
Approach LOS	E	
Stops (vph)	151	
Fuel Used(gal)	5	
CO Emissions (g/hr)	361	
NOx Emissions (g/hr)	70	
VOC Emissions (g/hr)	84	
Dilemma Vehicles (#)	0	
Queue Length 50th (ft)	82	
Queue Length 95th (ft)	#192	
Internal Link Dist (ft)	1305	
Turn Bay Length (ft)		
Base Capacity (vph)	220	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.88	

Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	157	469	508	57	41	156
Future Volume (vph)	157	469	508	57	41	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	150
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.985			0.850
Flt Protected		0.988			0.950	
Satd. Flow (prot)	0	3004	2994	0	1520	1360
Flt Permitted		0.692			0.950	
Satd. Flow (perm)	0	2104	2994	0	1520	1360
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			34			168
Link Speed (mph)		30	30		30	
Link Distance (ft)		3930	637		2686	
Travel Time (s)		89.3	14.5		61.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	169	504	546	61	44	168
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	673	607	0	44	168
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (%)	67.7%	67.7%	67.7%		32.3%	32.3%
Maximum Green (s)	40.0	40.0	40.0		17.0	17.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			30.0			
Flash Dont Walk (s)			10.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		40.0	40.0		17.0	17.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.62	0.62		0.26	0.26
v/c Ratio		0.52	0.33		0.11	0.35
Control Delay		10.4	8.0		17.4	4.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		10.4	8.0		17.4	4.1
LOS		B	A		B	A
Approach Delay		10.4	8.0		6.9	
Approach LOS		B	A		A	
Stops (vph)		527	198		27	16
Fuel Used(gal)		23	5		2	7
CO Emissions (g/hr)		1637	337		140	471
NOx Emissions (g/hr)		318	66		27	92
VOC Emissions (g/hr)		379	78		33	109
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		133	48		12	0
Queue Length 95th (ft)		m182	73		28	26
Internal Link Dist (ft)		3850	557		2606	
Turn Bay Length (ft)						150
Base Capacity (vph)		1294	1855		397	479
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.52	0.33		0.11	0.35

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 43 (66%), Referenced to phase 2: and 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 8.9	Intersection LOS: A
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1071: 127th Street & State Street

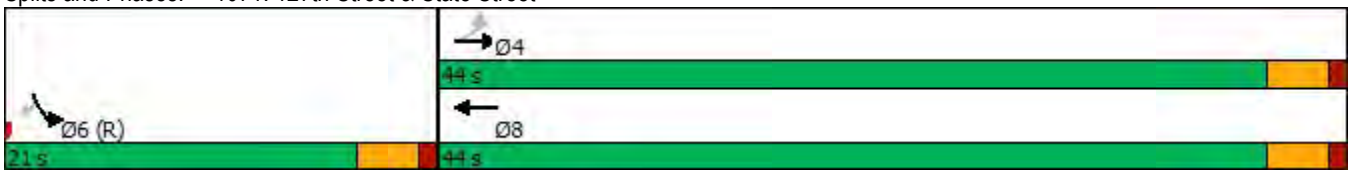

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	46	464	516	169	118	49
Future Volume (vph)	46	464	516	169	118	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.99			
Frt			0.963			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	2929	2805	0	1464	1373
Flt Permitted		0.850			0.950	
Satd. Flow (perm)	0	2499	2805	0	1464	1373
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			118			53
Link Speed (mph)		30	30		30	
Link Distance (ft)		637	664		6686	
Travel Time (s)		14.5	15.1		152.0	
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Adj. Flow (vph)	50	504	561	184	128	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	554	745	0	128	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	42.0	42.0	42.0		23.0	23.0
Total Split (s)	42.0	42.0	42.0		23.0	23.0
Total Split (%)	64.6%	64.6%	64.6%		35.4%	35.4%
Maximum Green (s)	38.0	38.0	38.0		19.0	19.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			25.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)			13.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
v/c Ratio		0.38	0.44		0.30	0.12
Control Delay		3.2	4.1		19.5	6.8
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		3.2	4.1		19.5	6.8
LOS		A	A		B	A
Approach Delay		3.2	4.1		15.8	
Approach LOS		A	A		B	
Stops (vph)		71	269		75	12
Fuel Used(gal)		3	16		8	3
CO Emissions (g/hr)		228	1116		578	224
NOx Emissions (g/hr)		44	217		112	44
VOC Emissions (g/hr)		53	259		134	52
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		17	13		35	0
Queue Length 95th (ft)		34	18		m54	m0
Internal Link Dist (ft)		557	584		6606	
Turn Bay Length (ft)						30
Base Capacity (vph)		1460	1688		427	438
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.38	0.44		0.30	0.12

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 42 (65%), Referenced to phase 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.44	
Intersection Signal Delay: 5.2	Intersection LOS: A
Intersection Capacity Utilization 73.6%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1072: 127th Street & Michigan Avenue

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	420	127	92	472	326	64
Future Volume (vph)	420	127	92	472	326	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	12	12	10	10
Storage Length (ft)		100	105		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor		0.97	1.00			0.98
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1568	1382	1660	3196	1565	1400
Flt Permitted			0.389		0.950	
Satd. Flow (perm)	1568	1347	678	3196	1565	1374
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						70
Link Speed (mph)	30			35	30	
Link Distance (ft)	163			5340	2671	
Travel Time (s)	3.7			104.0	60.7	
Confl. Peds. (#/hr)		4	4			8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Adj. Flow (vph)	462	140	101	519	358	70
Shared Lane Traffic (%)						
Lane Group Flow (vph)	462	140	101	519	358	70
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.12	1.12	1.07	1.07	1.17	1.17
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm
Protected Phases	4	2		8	2	
Permitted Phases		4	8			2
Minimum Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (%)	55.4%	44.6%	55.4%	55.4%	44.6%	44.6%
Maximum Green (s)	31.0	24.0	31.0	31.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	17.0	5.0			5.0	5.0
Flash Dont Walk (s)	14.0	19.0			19.0	19.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Pedestrian Calls (#/hr)	0	0			0	0
Act Effct Green (s)	31.0	55.0	31.0	31.0	24.0	24.0
Actuated g/C Ratio	0.48	0.85	0.48	0.48	0.37	0.37
v/c Ratio	0.62	0.12	0.31	0.34	0.62	0.13
Control Delay	20.9	0.9	13.9	11.4	22.5	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	0.9	13.9	11.4	22.5	4.8
LOS	C	A	B	B	C	A
Approach Delay	16.3			11.8	19.6	
Approach LOS	B			B	B	
Stops (vph)	374	16	56	274	260	13
Fuel Used(gal)	12	3	4	21	10	1
CO Emissions (g/hr)	865	188	296	1493	679	103
NOx Emissions (g/hr)	168	37	57	290	132	20
VOC Emissions (g/hr)	201	44	68	346	157	24
Dilemma Vehicles (#)	0	0	0	36	0	0
Queue Length 50th (ft)	181	0	23	63	113	0
Queue Length 95th (ft)	263	0	56	94	195	22
Internal Link Dist (ft)	83			5260	2591	
Turn Bay Length (ft)		100	105			
Base Capacity (vph)	747	1152	323	1524	577	551
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.12	0.31	0.34	0.62	0.13

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 15.5	Intersection LOS: B
Intersection Capacity Utilization 84.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1073: Indiana Ave & 130th Street

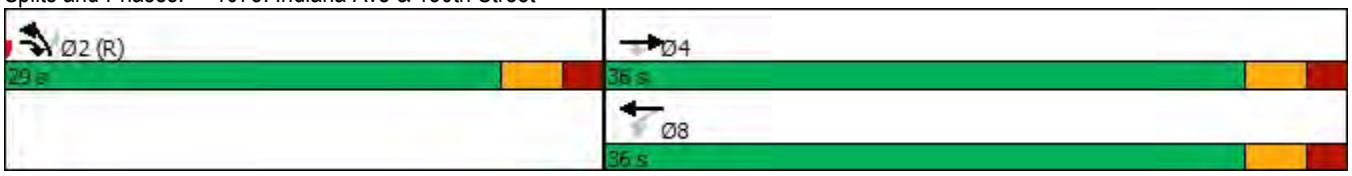

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	388	1	24	487	71	0	0	1	38	3	65
Future Volume (vph)	69	388	1	24	487	71	0	0	1	38	3	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	9	12	12	12	11	15	11
Storage Length (ft)	0		30	0		50	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00	0.88		0.95			0.96	
Frt						0.850		0.865			0.917	
Flt Protected		0.992			0.998						0.982	
Satd. Flow (prot)	0	3070	0	0	1615	1377	0	1482	0	0	1577	0
Flt Permitted		0.796			0.977						0.945	
Satd. Flow (perm)	0	2446	0	0	1580	1213	0	1482	0	0	1511	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						79		594			72	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			105			169			1380	
Travel Time (s)		5.2			2.4			3.8			31.4	
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Adj. Flow (vph)	77	431	1	27	541	79	0	0	1	42	3	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	509	0	0	568	79	0	1	0	0	117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.07	1.07	1.17	1.22	1.07	1.07	1.07	1.12	0.95	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		pm+pt	NA	Perm		NA		pm+pt	NA	
Protected Phases		4		3	3 8			2		1	6	
Permitted Phases	4			3 8	3	3 8	2	2		6		
Minimum Split (s)	16.0	16.0		18.0			12.0	12.0		20.0	32.0	
Total Split (s)	35.0	35.0		18.0			12.0	12.0		20.0	32.0	
Total Split (%)	41.2%	41.2%		21.2%			14.1%	14.1%		23.5%	37.6%	
Maximum Green (s)	31.0	31.0		14.0			9.0	9.0		15.0	27.0	
Yellow Time (s)	3.0	3.0		3.0			3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0			0.0	0.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						3.0			5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?												
Walk Time (s)				2.0							14.0	

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Minimum Split (s)	35.0
Total Split (s)	35.0
Total Split (%)	41%
Maximum Green (s)	31.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	18.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)				12.0							13.0	
Pedestrian Calls (#/hr)				0							0	
Act Effct Green (s)		31.0			45.0	49.0		9.0			27.0	
Actuated g/C Ratio		0.36			0.53	0.58		0.11			0.32	
v/c Ratio		0.57			0.67	0.11		0.00			0.22	
Control Delay		24.8			7.6	0.3		0.0			10.7	
Queue Delay		0.2			53.5	10.6		0.0			0.0	
Total Delay		25.0			61.1	10.9		0.0			10.7	
LOS		C			E	B		A			B	
Approach Delay		25.0			55.0						10.7	
Approach LOS		C			D						B	
Stops (vph)		355			83	1		0			34	
Fuel Used(gal)		6			2	0		0			2	
CO Emissions (g/hr)		421			116	5		0			108	
NOx Emissions (g/hr)		82			23	1		0			21	
VOC Emissions (g/hr)		98			27	1		0			25	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		112			29	0		0			17	
Queue Length 95th (ft)		164			m23	m0		0			55	
Internal Link Dist (ft)		148			25			89			1300	
Turn Bay Length (ft)						50						
Base Capacity (vph)		892			842	732		688			540	
Starvation Cap Reductn		0			348	620		0			0	
Spillback Cap Reductn		57			0	0		0			1	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.61			1.15	0.71		0.00			0.22	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 95
Control Type: Pretimed
Maximum v/c Ratio: 1.28
Intersection Signal Delay: 38.9 Intersection LOS: D
Intersection Capacity Utilization 75.3% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1955: 115th Street & Cottage Grove Avenue

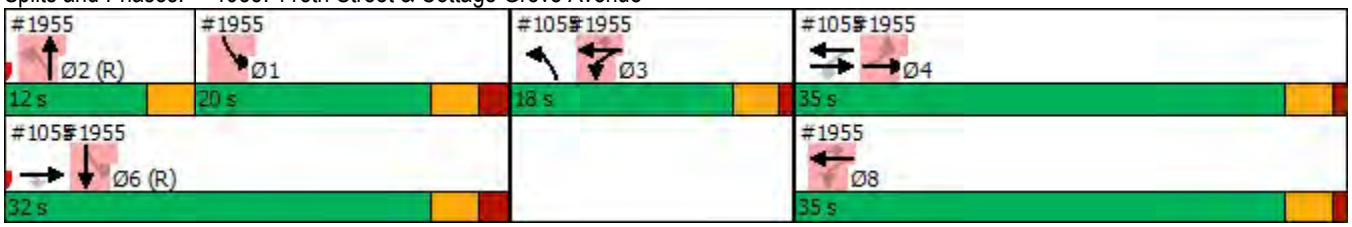

Lane Group	Ø8
Flash Dont Walk (s)	13.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	823	32	96	599	1	48	0	121	0	0	0
Future Volume (vph)	1	823	32	96	599	1	48	0	121	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	16	12
Storage Length (ft)	165		165	165		165	0		0	0		0
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	210			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950				0.950				
Satd. Flow (prot)	1710	3320	1530	1644	3320	1530	0	1710	1500	0	2040	0
Flt Permitted	0.415			0.278				0.757				
Satd. Flow (perm)	747	3320	1530	481	3320	1530	0	1363	1500	0	2040	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		5343			1170			134			331	
Travel Time (s)		104.1			22.8			3.0			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	1	857	33	100	624	1	50	0	126	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	857	33	100	624	1	0	50	126	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	4	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	43.0	43.0	43.0	7.0	43.0	43.0	6.0	6.0	6.0	6.0	6.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	47.0	47.0	47.0	10.0	47.0	47.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	47.0	47.0	47.0	10.0	57.0	57.0	28.0	28.0	28.0	28.0	28.0	
Total Split (%)	55.3%	55.3%	55.3%	11.8%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%	32.9%	
Maximum Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		4.0	4.0		4.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	57.0	57.0	57.0	65.7	65.5	65.5		15.2	15.2			
Actuated g/C Ratio	0.67	0.67	0.67	0.77	0.77	0.77		0.18	0.18			
v/c Ratio	0.00	0.39	0.03	0.21	0.24	0.00		0.21	0.47			
Control Delay	9.0	9.5	8.5	4.8	4.3	4.0		30.4	36.5			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			
Total Delay	9.0	9.5	8.5	4.8	4.3	4.0		30.4	36.5			
LOS	A	A	A	A	A	A		C	D			
Approach Delay		9.5			4.3			34.8				
Approach LOS		A			A			C				
90th %ile Green (s)	44.9	44.9	44.9	8.9	56.8	56.8	20.2	20.2	20.2	20.2	20.2	
90th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
70th %ile Green (s)	49.2	49.2	49.2	7.6	59.8	59.8	17.2	17.2	17.2	17.2	17.2	
70th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
50th %ile Green (s)	51.8	51.8	51.8	7.0	61.8	61.8	15.2	15.2	15.2	15.2	15.2	
50th %ile Term Code	Coord	Coord	Coord	Min	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
30th %ile Green (s)	53.9	53.9	53.9	7.0	63.9	63.9	13.1	13.1	13.1	13.1	13.1	
30th %ile Term Code	Coord	Coord	Coord	Min	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
10th %ile Green (s)	81.0	81.0	81.0	0.0	81.0	81.0	0.0	0.0	0.0	0.0	0.0	
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord	Coord	Skip	Skip	Skip	Skip	Skip	
Stops (vph)	1	379	14	26	170	1		39	105			
Fuel Used(gal)	0	36	1	1	8	0		1	2			
CO Emissions (g/hr)	3	2530	97	88	550	1		39	112			
NOx Emissions (g/hr)	1	492	19	17	107	0		8	22			
VOC Emissions (g/hr)	1	586	23	20	128	0		9	26			
Dilemma Vehicles (#)	0	41	0	0	31	0		0	0			
Queue Length 50th (ft)	0	114	6	12	48	0		23	61			
Queue Length 95th (ft)	3	192	21	31	85	2		51	106			
Internal Link Dist (ft)		5263			1090			54			251	
Turn Bay Length (ft)	165		165	165		165						
Base Capacity (vph)	500	2224	1025	474	2556	1178		384	423			
Starvation Cap Reductn	0	0	0	0	0	0		0	0			
Spillback Cap Reductn	0	0	0	0	0	0		0	0			
Storage Cap Reductn	0	0	0	0	0	0		0	0			
Reduced v/c Ratio	0.00	0.39	0.03	0.21	0.24	0.00		0.13	0.30			

Intersection Summary	
Area Type:	Other

Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 9.9	Intersection LOS: A
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Ellis Avenue & 130th Street

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	27	144	2	0	126
Future Volume (vph)	0	27	144	2	0	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.865	0.998			
Flt Protected						
Satd. Flow (prot)	0	1557	3413	0	0	3420
Flt Permitted						
Satd. Flow (perm)	0	1557	3413	0	0	3420
Link Speed (mph)	30		30			30
Link Distance (ft)	602		184			134
Travel Time (s)	13.7		4.2			3.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	30	160	2	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	30	162	0	0	140
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 14.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	27	144	2	0	126
Future Volume (Veh/h)	0	27	144	2	0	126
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	30	160	2	0	140
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						134
pX, platoon unblocked						
vC, conflicting volume	231	81			162	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	231	81			162	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	742	969			1429	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	30	107	55	70	70
Volume Left	0	0	0	0	0
Volume Right	30	0	2	0	0
cSH	969	1700	1700	1700	1700
Volume to Capacity	0.03	0.06	0.03	0.04	0.04
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	8.8	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	8.8	0.0		0.0	
Approach LOS	A				

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	14.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	9	1	4	2	1	17	1	2	154	2	6	23
Future Volume (vph)	9	1	4	2	1	17	1	2	154	2	6	23
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.883				0.998			
Flt Protected		0.968			0.995				0.999			
Satd. Flow (prot)	0	1680	0	0	1581	0	0	0	1744	0	0	0
Flt Permitted		0.968			0.995				0.999			
Satd. Flow (perm)	0	1680	0	0	1581	0	0	0	1744	0	0	0
Link Speed (mph)		30			30				30			
Link Distance (ft)		472			392				265			
Travel Time (s)		10.7			8.9				6.0			
Confl. Peds. (#/hr)						43				43		43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	4%
Adj. Flow (vph)	10	1	4	2	1	19	1	2	171	2	7	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	22	0	0	0	176	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(ft)		0			0				0			
Link Offset(ft)		0			0				0			
Crosswalk Width(ft)		16			16				16			
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	9	15		9	9	15
Sign Control		Stop			Stop				Free			

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	90	8
Future Volume (vph)	90	8
Ideal Flow (vphpl)	1800	1800
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected	0.988	
Satd. Flow (prot)	1752	1530
Flt Permitted	0.988	
Satd. Flow (perm)	1752	1530
Link Speed (mph)	30	
Link Distance (ft)	184	
Travel Time (s)	4.2	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.90	0.90
Heavy Vehicles (%)	1%	0%
Adj. Flow (vph)	100	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	133	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.07	1.07
Turning Speed (mph)		9
Sign Control	Free	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	9	1	4	2	1	17	1	2	154	2	6	23
Future Volume (Veh/h)	9	1	4	2	1	17	1	2	154	2	6	23
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	1	4	2	1	19	0	2	171	2	0	26
Pedestrians					43							
Lane Width (ft)					12.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					4							
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked							0.00				0.00	
vC, conflicting volume	390	372	100	376	380	258	0	109			0	216
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	390	372	100	376	380	258	0	109			0	216
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	98	100	100	100	100	97	0	100			0	98
cM capacity (veh/h)	513	530	961	537	524	730	0	1494			0	1294

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total	15	22	175	126	9
Volume Left	10	2	2	26	0
Volume Right	4	19	2	0	9
cSH	588	695	1494	1294	1700
Volume to Capacity	0.03	0.03	0.00	0.02	0.01
Queue Length 95th (ft)	2	2	0	2	0
Control Delay (s)	11.3	10.3	0.1	1.8	0.0
Lane LOS	B	B	A	A	
Approach Delay (s)	11.3	10.3	0.1	1.6	
Approach LOS	B	B			

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	90	8
Future Volume (Veh/h)	90	8
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.90	0.90
Hourly flow rate (vph)	100	9
Pedestrians	43	
Lane Width (ft)	12.0	
Walking Speed (ft/s)	4.0	
Percent Blockage	4	
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	318	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	18	0	1	29
Future Volume (vph)	0	0	18	0	1	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						0.998
Satd. Flow (prot)	1765	0	1765	0	0	1761
Flt Permitted						0.998
Satd. Flow (perm)	1765	0	1765	0	0	1761
Link Speed (mph)	30		30			30
Link Distance (ft)	280		286			308
Travel Time (s)	6.4		6.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	0	1	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	20	0	0	33
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	18	0	1	29
Future Volume (Veh/h)	0	0	18	0	1	29
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	20	0	1	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	54	20			20	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	54	20			20	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	953	1058			1596	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	20	33
Volume Left	0	0	1
Volume Right	0	0	0
cSH	1700	1700	1596
Volume to Capacity	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.2
Lane LOS	A		A
Approach Delay (s)	0.0	0.0	0.2
Approach LOS	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	0	0	12	0	1	0	20
Future Volume (vph)	0	0	12	0	1	0	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt							
Flt Protected							0.998
Satd. Flow (prot)	1800	0	1800	0	0	0	1730
Flt Permitted							0.998
Satd. Flow (perm)	1800	0	1800	0	0	0	1730
Link Speed (mph)	30		30				30
Link Distance (ft)	396		262				692
Travel Time (s)	9.0		6.0				15.7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	0	0	13	0	1	0	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	13	0	0	0	22
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		0				0
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane							
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 6.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	0	0	12	0	1	0	20
Future Volume (Veh/h)	0	0	12	0	1	0	20
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	13	0	0	0	21
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None				None
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	34	13			0	13	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	34	13			0	13	
tC, single (s)	6.4	6.2			0.0	4.1	
tC, 2 stage (s)							
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	984	1073			0	1619	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	13	21
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1619
Volume to Capacity	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	5	0	0	0	1	7	0	1	0	14
Future Volume (vph)	2	0	5	0	0	0	1	7	0	1	0	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.899										0.992
Flt Protected		0.988						0.994				0.997
Satd. Flow (prot)	0	1599	0	0	1800	0	0	1789	0	0	0	1780
Flt Permitted		0.988						0.994				0.997
Satd. Flow (perm)	0	1599	0	0	1800	0	0	1789	0	0	0	1780
Link Speed (mph)		30			30			30				30
Link Distance (ft)		274			1039			274				262
Travel Time (s)		6.2			23.6			6.2				6.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	0	6	0	0	0	1	8	0	1	0	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	0	0	0	0	0	9	0	0	0	18
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Sign Control		Stop			Stop			Free				Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	1
Future Volume (vph)	1
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	1
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	2	0	5	0	0	0	1	7	0	1	0	14
Future Volume (Veh/h)	2	0	5	0	0	0	1	7	0	1	0	14
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	6	0	0	0	1	8	0	0	0	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None				None
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked										0.00		
vC, conflicting volume	26	26	16	32	27	8	17			0	8	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	26	26	16	32	27	8	17			0	8	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	100	100	99	100	100	100	100			0	100	
cM capacity (veh/h)	988	870	1068	974	870	1080	1613			0	1625	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	8	0	9	17
Volume Left	2	0	1	0
Volume Right	6	0	0	1
cSH	1047	1700	1613	1625
Volume to Capacity	0.01	0.00	0.00	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	8.5	0.0	0.8	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.5	0.0	0.8	0.0
Approach LOS	A	A		

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	1
Future Volume (Veh/h)	1
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	1
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEU	SEL	SET	SER	NWL	NWT
Lane Configurations												
Traffic Volume (vph)	2	0	5	0	0	0	1	0	14	1	0	0
Future Volume (vph)	2	0	5	0	0	0	1	0	14	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.899							0.992			
Flt Protected		0.988							0.997			
Satd. Flow (prot)	0	1599	0	0	1800	0	0	0	1780	0	0	1800
Flt Permitted		0.988							0.997			
Satd. Flow (perm)	0	1599	0	0	1800	0	0	0	1780	0	0	1800
Link Speed (mph)		30			30				15			15
Link Distance (ft)		1039			253				374			412
Travel Time (s)		23.6			5.8				17.0			18.7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	0	6	0	0	0	1	0	16	1	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	0	0	0	0	0	0	18	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				0			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Sign Control		Free			Free				Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEU	SEL	SET	SER	NWL	NWT
Lane Configurations												
Traffic Volume (veh/h)	2	0	5	0	0	0	1	0	14	1	0	0
Future Volume (Veh/h)	2	0	5	0	0	0	1	0	14	1	0	0
Sign Control		Free			Free				Stop			Stop
Grade		0%			0%				0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	6	0	0	0	0	0	16	1	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	0			6			0	7	10	0	16	7
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			6			0	7	10	0	16	7
tC, single (s)	4.1			4.1			0.0	7.1	6.5	6.2	7.1	6.5
tC, 2 stage (s)												
tF (s)	2.2			2.2			0.0	3.5	4.0	3.3	3.5	4.0
p0 queue free %	100			100			0	100	98	100	100	100
cM capacity (veh/h)	1636			1628			0	1017	888	1091	989	891

Direction, Lane #	EB 1	WB 1	SE 1	NW 1
Volume Total	8	0	17	0
Volume Left	2	0	0	0
Volume Right	6	0	1	0
cSH	1636	1700	898	1700
Volume to Capacity	0.00	0.00	0.02	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	1.8	0.0	9.1	0.0
Lane LOS	A		A	A
Approach Delay (s)	1.8	0.0	9.1	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay	6.8		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	NWR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	3
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	3
tC, single (s)	6.2
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	100
cM capacity (veh/h)	1087

Direction, Lane #

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Future Volume (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.966									
Flt Protected			0.964						0.988			
Satd. Flow (prot)	0	0	1643	0	0	1765	0	0	1744	0	0	1765
Flt Permitted			0.964						0.988			
Satd. Flow (perm)	0	0	1643	0	0	1765	0	0	1744	0	0	1765
Link Speed (mph)			30			30			30			30
Link Distance (ft)			288			303			294			228
Travel Time (s)			6.5			6.9			6.7			5.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	4	0	0	0	0	0	4	0	0	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			0			0			0			0
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Sign Control			Stop			Stop			Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.92
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	1	2	0	1	0	0	0	1	3	0	0	2
Future Volume (Veh/h)	1	2	0	1	0	0	0	1	3	0	0	2
Sign Control			Stop			Stop			Free			Free
Grade			0%			0%			0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2	0	1	0	0	0	1	3	0	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked	0.00											
vC, conflicting volume	0	7	7	2	8	7	3	2			3	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	7	7	2	8	7	3	2			3	
tC, single (s)	0.0	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1	
tC, 2 stage (s)												
tF (s)	0.0	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2	
p0 queue free %	0	100	100	100	100	100	100	100			100	
cM capacity (veh/h)	0	1012	888	1082	1010	888	1081	1620			1619	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	3	0	4	2
Volume Left	2	0	1	0
Volume Right	1	0	0	0
cSH	1035	1700	1620	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	8.5	0.0	1.8	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.5	0.0	1.8	0.0
Approach LOS	A	A		

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	778	5	28	555	35	0	0	0	551	85	361
Future Volume (vph)	25	778	5	28	555	35	0	0	0	551	85	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	11
Storage Length (ft)	120		0	180		190	0		0	0		0
Storage Lanes	1		0	0		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor	0.78	1.00		1.00		0.49				0.99		0.98
Frt		0.999				0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	855	4854	0	1710	3226	765	0	1800	0	3285	1673	1464
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	670	4854	0	1707	3226	376	0	1800	0	3265	1673	1435
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		1				101						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		809			325			759			669	
Travel Time (s)		18.4			7.4			17.3			15.2	
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	4		1			7				1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Adj. Flow (vph)	27	837	5	30	597	38	0	0	0	592	91	388
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	842	0	30	597	38	0	0	0	592	91	388
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm				Split	NA	pm+ov
Protected Phases	7	4		3	8		5	5		6	6	7
Permitted Phases						8						6
Detector Phase	7	4		3	8	8	5	5		6	6	7
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	4.0	10.0	10.0		4.0	4.0	10.0
Minimum Split (s)	15.0	53.0		10.0	51.0	51.0	15.0	15.0		44.0	44.0	15.0
Total Split (s)	15.0	53.0		13.0	51.0	51.0	20.0	20.0		44.0	44.0	15.0
Total Split (%)	11.5%	40.8%		10.0%	39.2%	39.2%	15.4%	15.4%		33.8%	33.8%	11.5%
Maximum Green (s)	10.0	48.0		9.0	46.0	46.0	15.0	15.0		39.0	39.0	10.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		4.0	5.0	5.0		5.0		5.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None
Walk Time (s)		25.0			19.0	19.0				9.0	9.0	
Flash Dont Walk (s)		23.0			27.0	27.0				30.0	30.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	10.0	73.5		7.6	66.0	66.0				39.0	39.0	49.0
Actuated g/C Ratio	0.08	0.57		0.06	0.51	0.51				0.30	0.30	0.38
v/c Ratio	0.42	0.31		0.30	0.36	0.16				0.60	0.18	0.71
Control Delay	76.8	15.9		76.2	15.5	2.3				41.9	34.9	41.8
Queue Delay	0.0	0.0		0.0	0.5	0.0				1.2	0.0	0.0
Total Delay	76.8	15.9		76.2	16.0	2.3				43.2	34.9	41.8
LOS	E	B		E	B	A				D	C	D
Approach Delay		17.8			17.9						42.0	
Approach LOS		B			B						D	
90th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
90th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
70th %ile Green (s)	10.0	68.2		8.8	66.0	66.0	0.0	0.0		39.0	39.0	10.0
70th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
50th %ile Green (s)	10.0	69.3		7.7	66.0	66.0	0.0	0.0		39.0	39.0	10.0
50th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
30th %ile Green (s)	10.0	81.0		0.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
30th %ile Term Code	Max	Coord		Skip	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
10th %ile Green (s)	10.0	81.0		0.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
10th %ile Term Code	Max	Coord		Skip	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
Stops (vph)	25	400		29	174	2				462	62	385
Fuel Used(gal)	1	10		1	4	0				10	1	7
CO Emissions (g/hr)	48	677		47	288	8				708	97	495
NOx Emissions (g/hr)	9	132		9	56	2				138	19	96
VOC Emissions (g/hr)	11	157		11	67	2				164	23	115
Dilemma Vehicles (#)	0	0		0	0	0				0	0	0
Queue Length 50th (ft)	22	141		26	77	0				220	57	257

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	56	175		m56	145	m2				281	102	373
Internal Link Dist (ft)		729			245			679			589	
Turn Bay Length (ft)	120			180		190						
Base Capacity (vph)	65	2744		118	1637	240				985	501	543
Starvation Cap Reductn	0	0		0	583	0				0	0	0
Spillback Cap Reductn	0	51		0	0	0				200	0	0
Storage Cap Reductn	0	0		0	0	0				0	0	0
Reduced v/c Ratio	0.42	0.31		0.25	0.57	0.16				0.75	0.18	0.71

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 124 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 27.8	Intersection LOS: C
Intersection Capacity Utilization 80.8%	ICU Level of Service D
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1002: Lafayette Avenue & 95th Street

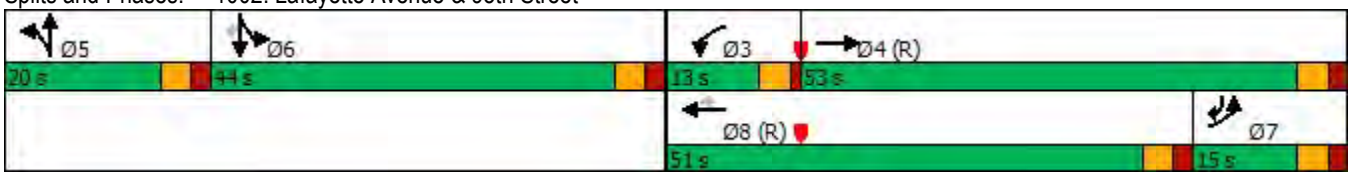

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	329	787	213	49	499	257	91	233	51	37	0	28
Future Volume (vph)	329	787	213	49	499	257	91	233	51	37	0	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	11	12	11	12	11	14	12	12	12
Storage Length (ft)	200		0	150		350	300		400	0		0
Storage Lanes	0		0	1		1	1		1	1		1
Taper Length (ft)	25			25			100			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor	0.75	0.99		1.00		0.68		1.00	0.92	0.96		
Frt		0.968				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.986		0.950		
Satd. Flow (prot)	3285	3259	0	1653	3138	1464	0	3191	1600	855	0	765
Flt Permitted	0.950			0.950				0.986		0.950		
Satd. Flow (perm)	2471	3259	0	1647	3138	998	0	3185	1479	821	0	765
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31				150			92			134
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		325			954			10393			681	
Travel Time (s)		7.4			18.6			236.2			15.5	
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	1					6						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Adj. Flow (vph)	350	837	227	52	531	273	97	248	54	39	0	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	350	1064	0	52	531	273	0	345	54	39	0	30
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.12	1.07	1.12	1.07	1.12	0.99	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1		1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50		50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50		50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Prot		Prot
Protected Phases	7	4		3	8	6	2	2	3	6		6
Permitted Phases						8			2			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8	6	2	2	3	6		6
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	10.0	4.0	4.0	6.0	10.0		10.0
Minimum Split (s)	14.0	56.0		11.0	41.0	15.0	41.0	41.0	11.0	15.0		15.0
Total Split (s)	28.0	56.0		13.0	41.0	20.0	41.0	41.0	13.0	20.0		20.0
Total Split (%)	21.5%	43.1%		10.0%	31.5%	15.4%	31.5%	31.5%	10.0%	15.4%		15.4%
Maximum Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
All-Red Time (s)	1.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	4.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max	None	Max	Max	None	None		None
Walk Time (s)		23.0			11.0		7.0	7.0				
Flash Dont Walk (s)		28.0			25.0		29.0	29.0				
Pedestrian Calls (#/hr)		0			0		0	0				
Act Effct Green (s)	19.1	56.6		7.6	43.9	55.9		36.0	43.6	12.0		12.0
Actuated g/C Ratio	0.15	0.44		0.06	0.34	0.43		0.28	0.34	0.09		0.09
v/c Ratio	0.73	0.74		0.54	0.50	0.49		0.39	0.10	0.50		0.16
Control Delay	53.1	33.8		80.1	37.5	9.3		40.6	2.8	77.0		1.8
Queue Delay	0.2	2.4		0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	53.3	36.2		80.1	37.5	9.3		40.6	2.8	77.0		1.8
LOS	D	D		F	D	A		D	A	E		A
Approach Delay		40.5			31.1			35.5			44.3	
Approach LOS		D			C			D			D	
90th %ile Green (s)	23.9	51.0		8.0	36.1	15.0	36.0	36.0	8.0	15.0		15.0
90th %ile Term Code	Gap	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
70th %ile Green (s)	21.1	52.2		8.0	40.1	13.8	36.0	36.0	8.0	13.8		13.8
70th %ile Term Code	Gap	Coord		Max	Coord	Gap	MaxR	MaxR	Max	Gap		Gap
50th %ile Green (s)	19.1	54.7		8.0	44.6	11.3	36.0	36.0	8.0	11.3		11.3
50th %ile Term Code	Gap	Coord		Max	Coord	Gap	MaxR	MaxR	Max	Gap		Gap
30th %ile Green (s)	17.0	56.0		8.0	48.0	10.0	36.0	36.0	8.0	10.0		10.0
30th %ile Term Code	Gap	Coord		Hold	Coord	Min	MaxR	MaxR	Hold	Min		Min
10th %ile Green (s)	14.2	69.0		0.0	50.8	10.0	36.0	36.0	0.0	10.0		10.0
10th %ile Term Code	Gap	Coord		Skip	Coord	Min	MaxR	MaxR	Skip	Min		Min
Stops (vph)	276	955		48	394	75		267	7	34		0
Fuel Used(gal)	6	15		1	10	3		31	4	1		0
CO Emissions (g/hr)	414	1028		105	713	197		2176	302	67		11
NOx Emissions (g/hr)	80	200		20	139	38		423	59	13		2
VOC Emissions (g/hr)	96	238		24	165	46		504	70	16		3
Dilemma Vehicles (#)	0	0		0	19	0		0	0	0		0
Queue Length 50th (ft)	131	431		43	185	37		121	0	32		0
Queue Length 95th (ft)	148	508		#90	266	75		174	5	71		0
Internal Link Dist (ft)		245			874			10313			601	
Turn Bay Length (ft)	200			150		350			400			
Base Capacity (vph)	606	1436		101	1060	588		883	568	98		206
Starvation Cap Reductn	26	241		0	0	0		0	0	0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0	0		0	0	0		0
Storage Cap Reductn	0	0		0	0	0		0	0	0		0
Reduced v/c Ratio	0.60	0.89		0.51	0.50	0.46		0.39	0.10	0.40		0.15

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 36.9 Intersection LOS: D
Intersection Capacity Utilization 91.6% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1003: State Street & 95th Street

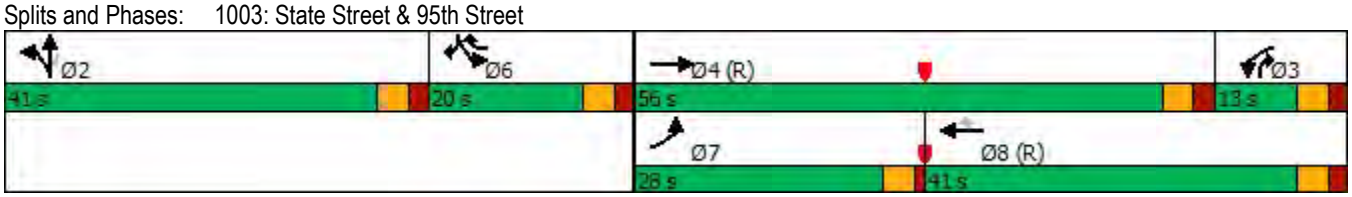

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	294	137	103	270	110	95	576	76	131	723	90
Future Volume (vph)	64	294	137	103	270	110	95	576	76	131	723	90
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	10	10	9	9	10	9
Storage Length (ft)	60		260	55		260	92		130	115		130
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99	0.99		0.98	0.99		0.99		0.95	0.99		0.94
Frt		0.952			0.957				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1676	1877	0	1676	1880	0	1550	3040	1363	1509	3069	1337
Flt Permitted	0.191			0.431			0.240			0.318		
Satd. Flow (perm)	334	1877	0	748	1880	0	387	3040	1296	499	3069	1251
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			19				83			84
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		663			2036			5304			668	
Travel Time (s)		15.1			46.3			120.5			15.2	
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)						1				1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Adj. Flow (vph)	69	316	147	111	290	118	102	619	82	141	777	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	463	0	111	408	0	102	619	82	141	777	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.17	1.17	1.22	1.22	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		11.0	11.0		5.0	31.0	31.0	5.0	31.0	31.0
Minimum Split (s)	13.0	47.0		34.0	34.0		8.0	46.0	46.0	8.0	46.0	46.0
Total Split (s)	13.0	47.0		34.0	34.0		12.0	46.0	46.0	12.0	46.0	46.0
Total Split (%)	12.4%	44.8%		32.4%	32.4%		11.4%	43.8%	43.8%	11.4%	43.8%	43.8%
Maximum Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	5.0		5.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		24.0		11.0	11.0			31.0	31.0		31.0	31.0
Flash Dont Walk (s)		18.0		18.0	18.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)	44.0	42.0		29.0	29.0		51.6	42.4	42.4	52.4	42.8	42.8
Actuated g/C Ratio	0.42	0.40		0.28	0.28		0.49	0.40	0.40	0.50	0.41	0.41
v/c Ratio	0.26	0.60		0.54	0.77		0.36	0.50	0.14	0.43	0.62	0.17
Control Delay	21.1	27.4		43.6	44.2		16.7	25.4	5.1	17.4	27.6	6.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.1	27.4		43.6	44.2		16.7	25.4	5.1	17.4	27.6	6.6
LOS	C	C		D	D		B	C	A	B	C	A
Approach Delay		26.6			44.1			22.2			24.2	
Approach LOS		C			D			C			C	
90th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
90th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
70th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
50th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	10.0	42.0		29.0	29.0		7.9	42.0	42.0	9.0	43.1	43.1
30th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	10.0	42.0		29.0	29.0		6.3	43.8	43.8	7.2	44.7	44.7
10th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Gap	Coord	Coord
Stops (vph)	38	317		88	324		47	419	10	67	557	17
Fuel Used(gal)	1	6		3	11		5	29	3	2	11	1
CO Emissions (g/hr)	57	446		212	784		315	2035	229	106	762	48
NOx Emissions (g/hr)	11	87		41	153		61	396	45	21	148	9
VOC Emissions (g/hr)	13	103		49	182		73	472	53	25	177	11
Dilemma Vehicles (#)	0	0		0	0		0	0	0	0	0	0
Queue Length 50th (ft)	27	228		63	241		33	162	0	48	216	5
Queue Length 95th (ft)	56	334		125	#368		62	215	29	83	283	38
Internal Link Dist (ft)		583			1956			5224			588	
Turn Bay Length (ft)	60			55			92		130	115		130
Base Capacity (vph)	267	767		206	532		292	1226	572	337	1249	559
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.60		0.54	0.77		0.35	0.50	0.14	0.42	0.62	0.17

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 47 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 27.7 Intersection LOS: C
Intersection Capacity Utilization 101.8% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1016: Halsted Street & 103rd Street

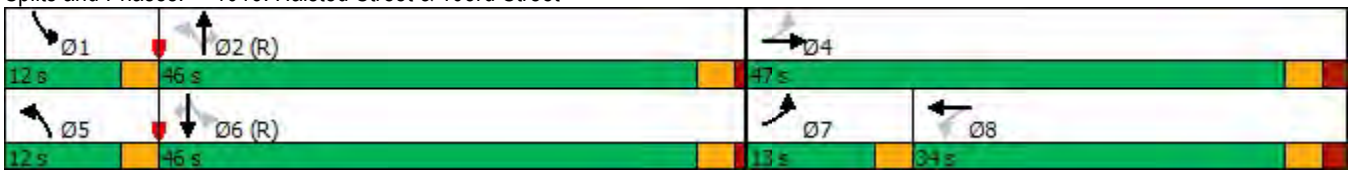

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	347	74	78	367	78	44	52	59	0	0	0
Future Volume (vph)	74	347	74	78	367	78	44	52	59	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	9	9	10	9	9	12	15	12	12	16	12
Storage Length (ft)	60		70	60		80	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	85			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.949				
Flt Protected	0.950			0.950				0.986				
Satd. Flow (prot)	1550	1573	1337	1550	1573	1337	0	1799	0	0	0	0
Flt Permitted	0.493			0.510				0.986				
Satd. Flow (perm)	804	1573	1337	832	1573	1337	0	1799	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80			84		44				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2036			1955			343			764	
Travel Time (s)		46.3			44.4			7.8			17.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	80	373	80	84	395	84	47	56	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	373	80	84	395	84	0	166	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.22	1.22	1.17	1.22	1.22	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Minimum Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (%)	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%	30.8%	30.8%				
Maximum Green (s)	41.0	41.0	41.0	41.0	41.0	41.0	15.0	15.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		5.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	31.0	31.0	31.0	31.0	31.0	31.0	5.0	5.0				
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0				
Act Effct Green (s)	41.0	41.0	41.0	41.0	41.0	41.0		15.0				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	31%
Maximum Green (s)	15.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	5.0
Flash Dont Walk (s)	10.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.23				
v/c Ratio	0.16	0.38	0.09	0.16	0.40	0.10		0.37				
Control Delay	5.9	7.2	1.6	5.9	7.4	1.6		18.1				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Delay	5.9	7.2	1.6	5.9	7.4	1.6		18.1				
LOS	A	A	A	A	A	A		B				
Approach Delay		6.1			6.3			18.1				
Approach LOS		A			A			B				
Stops (vph)	29	155	7	30	166	7		93				
Fuel Used(gal)	1	7	1	1	7	1		1				
CO Emissions (g/hr)	100	480	86	101	494	88		104				
NOx Emissions (g/hr)	19	93	17	20	96	17		20				
VOC Emissions (g/hr)	23	111	20	23	114	20		24				
Dilemma Vehicles (#)	0	0	0	0	0	0		0				
Queue Length 50th (ft)	11	61	0	12	66	0		40				
Queue Length 95th (ft)	27	105	12	28	113	12		88				
Internal Link Dist (ft)		1956			1875			263			684	
Turn Bay Length (ft)	60		70	60		80						
Base Capacity (vph)	507	992	872	524	992	874		449				
Starvation Cap Reductn	0	0	0	0	0	0		0				
Spillback Cap Reductn	0	0	0	0	0	0		0				
Storage Cap Reductn	0	0	0	0	0	0		0				
Reduced v/c Ratio	0.16	0.38	0.09	0.16	0.40	0.10		0.37				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:Hold, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.40
Intersection Signal Delay: 7.8 Intersection LOS: A
Intersection Capacity Utilization 44.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1017: Normal Avenue & 103rd Street

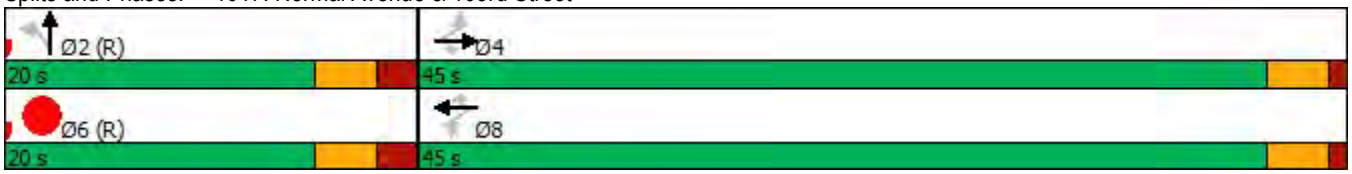

Lane Group	Ø6
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	382	64	66	441	32	37	76	72	51	225	45
Future Volume (vph)	19	382	64	66	441	32	37	76	72	51	225	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	11	10	11	11	12	11	12	12	15	12
Storage Length (ft)	58		200	58		75	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	100			90			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.99		0.99	1.00			0.99	0.93		0.98	
Frt		0.979			0.990				0.850		0.981	
Flt Protected	0.950			0.950				0.984			0.992	
Satd. Flow (prot)	1596	1645	0	1596	1702	0	0	1701	1515	0	1893	0
Flt Permitted	0.389			0.410				0.846			0.937	
Satd. Flow (perm)	647	1645	0	683	1702	0	0	1449	1415	0	1776	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			8				76		11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1955			674			5189			1320	
Travel Time (s)		44.4			15.3			117.9			30.0	
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	4		2			1						3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Adj. Flow (vph)	20	402	67	69	464	34	39	80	76	54	237	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	469	0	69	498	0	0	119	76	0	338	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.12	1.12	1.17	1.12	1.12	1.07	1.12	1.07	1.07	0.95	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (%)	62.7%	62.7%		62.7%	62.7%		37.3%	37.3%	37.3%	37.3%	37.3%	
Maximum Green (s)	43.0	43.0		43.0	43.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	33.0	33.0		33.0	33.0		13.0	13.0	13.0	13.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	43.0	43.0		43.0	43.0			24.0	24.0		24.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57			0.32	0.32		0.32	
v/c Ratio	0.05	0.49		0.18	0.51			0.26	0.15		0.59	
Control Delay	7.6	11.3		9.1	11.7			20.8	5.8		25.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	7.6	11.3		9.1	11.7			20.8	5.8		25.6	
LOS	A	B		A	B			C	A		C	
Approach Delay		11.1			11.4			15.0			25.6	
Approach LOS		B			B			B			C	
Stops (vph)	10	243		31	267			83	14		254	
Fuel Used(gal)	0	9		1	5			6	3		6	
CO Emissions (g/hr)	26	641		45	356			396	222		446	
NOx Emissions (g/hr)	5	125		9	69			77	43		87	
VOC Emissions (g/hr)	6	148		10	82			92	51		103	
Dilemma Vehicles (#)	0	0		0	0			0	0		0	
Queue Length 50th (ft)	4	113		14	125			41	0		126	
Queue Length 95th (ft)	13	184		34	200			81	27		208	
Internal Link Dist (ft)		1875			594			5109			1240	
Turn Bay Length (ft)	58			58					100			
Base Capacity (vph)	370	951		391	979			463	504		575	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.05	0.49		0.18	0.51			0.26	0.15		0.59	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.59
Intersection Signal Delay: 14.8 Intersection LOS: B
Intersection Capacity Utilization 85.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1018: Wentworth Avenue & 103rd Street

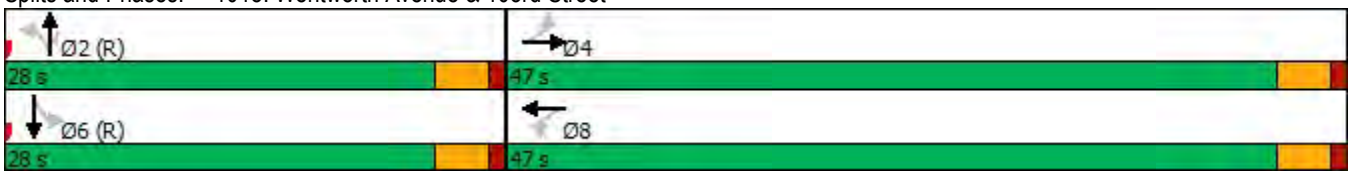

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	205	100	90	198	91	65	538	59	96	842	62
Future Volume (vph)	76	205	100	90	198	91	65	538	59	96	842	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	9	10	10	9
Storage Length (ft)	0		0	0		0	115		90	115		120
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			80			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99			0.99		0.99		0.98	1.00		0.96
Frt		0.961			0.964				0.850			0.850
Flt Protected		0.990			0.988		0.950			0.950		
Satd. Flow (prot)	0	2941	0	0	2933	0	1565	3069	1350	1565	3099	1350
Flt Permitted		0.804			0.768		0.184			0.354		
Satd. Flow (perm)	0	2380	0	0	2273	0	301	3069	1326	582	3099	1298
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			53				103			103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		667			375			2662			5304	
Travel Time (s)		15.2			8.5			60.5			120.5	
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	2					1						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Adj. Flow (vph)	78	211	103	93	204	94	67	555	61	99	868	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	392	0	0	391	0	67	555	61	99	868	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.22	1.17	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Minimum Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (%)	9.4%	47.1%		37.6%	37.6%		9.4%	43.5%	43.5%	9.4%	43.5%	43.5%
Maximum Green (s)	5.0	35.0		27.0	27.0		5.0	33.0	33.0	5.0	33.0	33.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)		-1.0			-1.0		1.0	-0.5	0.0	1.0	-0.5	0.0
Total Lost Time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Walk Time (s)		12.0		4.0	4.0			19.0	19.0		19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		23.0		23.0	23.0			14.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)		36.0			28.0		37.0	33.5	33.0	37.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.44	0.39	0.39	0.44	0.39	0.39
v/c Ratio		0.36			0.50		0.35	0.46	0.11	0.33	0.71	0.11
Control Delay		14.2			22.2		17.4	14.9	0.7	16.0	25.6	1.8
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		14.2			22.2		17.4	14.9	0.7	16.0	25.6	1.8
LOS		B			C		B	B	A	B	C	A
Approach Delay		14.2			22.2			13.9			23.2	
Approach LOS		B			C			B			C	
Stops (vph)		194			256		34	241	1	56	685	3
Fuel Used(gal)		4			9		2	14	1	5	43	3
CO Emissions (g/hr)		290			625		124	988	87	321	3006	182
NOx Emissions (g/hr)		56			122		24	192	17	62	585	35
VOC Emissions (g/hr)		67			145		29	229	20	74	697	42
Dilemma Vehicles (#)		0			0		0	0	0	0	0	0
Queue Length 50th (ft)		56			74		15	75	0	28	200	0
Queue Length 95th (ft)		88			118		44	100	3	55	270	11
Internal Link Dist (ft)		587			295			2582			5224	
Turn Bay Length (ft)							115		90	115		120
Base Capacity (vph)		1076			784		190	1209	577	299	1221	566
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.36			0.50		0.35	0.46	0.11	0.33	0.71	0.11

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 48 (56%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 19.1 Intersection LOS: B
Intersection Capacity Utilization 98.1% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 1034: Halsted Street & 111th Street

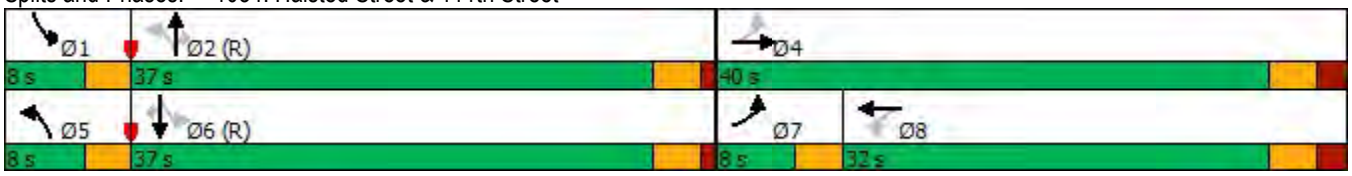

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	305	0	0	278	69	47	39	30	0	0	0
Future Volume (vph)	76	305	0	0	278	69	47	39	30	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.973			0.965				
Flt Protected		0.990						0.980				
Satd. Flow (prot)	0	1730	0	0	1700	0	0	1653	0	0	0	0
Flt Permitted		0.869						0.980				
Satd. Flow (perm)	0	1519	0	0	1700	0	0	1653	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					34			26				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1591			2004			794			646	
Travel Time (s)		36.2			45.5			18.0			14.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	82	328	0	0	299	74	51	42	32	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	410	0	0	373	0	0	125	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Minimum Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (%)	66.2%	66.2%			66.2%		33.8%	33.8%				
Maximum Green (s)	39.0	39.0			39.0		18.0	18.0				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.0			4.0			4.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	32.0	32.0			32.0		10.0	10.0				
Flash Dont Walk (s)	7.0	7.0			7.0		8.0	8.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		39.0			39.0			18.0				
Actuated g/C Ratio		0.60			0.60			0.28				
v/c Ratio		0.45			0.36			0.26				
Control Delay		9.1			3.8			16.4				
Queue Delay		0.0			0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		9.1			3.8			16.4				
LOS		A			A			B				
Approach Delay		9.1			3.8			16.4				
Approach LOS		A			A			B				
Stops (vph)		195			47			70				
Fuel Used(gal)		8			6			1				
CO Emissions (g/hr)		533			416			104				
NOx Emissions (g/hr)		104			81			20				
VOC Emissions (g/hr)		124			96			24				
Dilemma Vehicles (#)		0			0			0				
Queue Length 50th (ft)		78			21			30				
Queue Length 95th (ft)		135			31			69				
Internal Link Dist (ft)		1511			1924			714			566	
Turn Bay Length (ft)												
Base Capacity (vph)		911			1033			476				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.45			0.36			0.26				

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 16 (25%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 7.9	Intersection LOS: A
Intersection Capacity Utilization 58.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1035: Normal Avenue & 111th Street

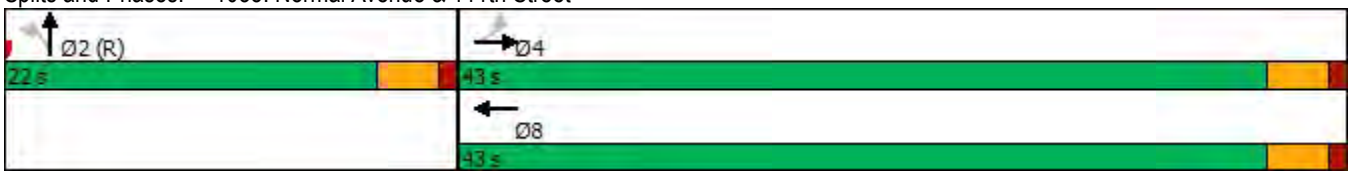

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	289	27	32	285	41	22	91	30	50	142	40
Future Volume (vph)	19	289	27	32	285	41	22	91	30	50	142	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	11	11	12	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00			0.98			0.98	
Frt		0.989			0.984			0.968			0.974	
Flt Protected		0.997			0.996			0.992			0.989	
Satd. Flow (prot)	0	1956	0	0	1940	0	0	3096	0	0	3106	0
Flt Permitted		0.972			0.951			0.902			0.874	
Satd. Flow (perm)	0	1906	0	0	1851	0	0	2793	0	0	2731	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			13			32			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2004			892			179			181	
Travel Time (s)		45.5			20.3			4.1			4.1	
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	1		2			3	1		2			4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Adj. Flow (vph)	20	307	29	34	303	44	23	97	32	53	151	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	356	0	0	381	0	0	152	0	0	247	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.12	1.12	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (%)	52.3%	52.3%		52.3%	52.3%		47.7%	47.7%		47.7%	47.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	21.0	21.0		21.0	21.0		19.0	19.0		19.0	19.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			27.0			27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
v/c Ratio		0.40			0.44			0.13			0.21	
Control Delay		14.0			6.3			10.8			10.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		14.0			6.3			10.8			10.6	
LOS		B			A			B			B	
Approach Delay		14.0			6.3			10.8			10.6	
Approach LOS		B			A			B			B	
Stops (vph)		202			86			120			115	
Fuel Used(gal)		7			5			4			11	
CO Emissions (g/hr)		510			321			275			758	
NOx Emissions (g/hr)		99			62			54			148	
VOC Emissions (g/hr)		118			74			64			176	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		64			39			10			25	
Queue Length 95th (ft)		138			55			19			47	
Internal Link Dist (ft)		1924			812			99			101	
Turn Bay Length (ft)												
Base Capacity (vph)		884			861			1178			1159	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.40			0.44			0.13			0.21	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 10.2 — Intersection LOS: B
Intersection Capacity Utilization 82.8% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1036: Wentworth Avenue & 111th Street

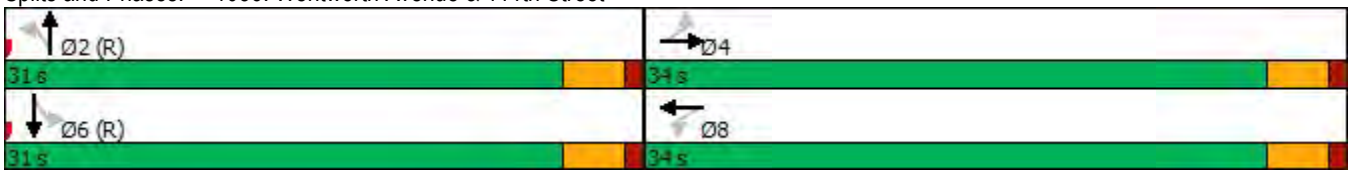

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	255	39	66	362	70	42	211	95	64	175	48
Future Volume (vph)	41	255	39	66	362	70	42	211	95	64	175	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	9	10	10	9	10	10	12	10	10	12
Storage Length (ft)	70		0	60		0	70		70	80		75
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	115			90			80			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.97	1.00		0.99	0.99		0.99	1.00	
Frt		0.980			0.976			0.953			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	3023	0	1596	3075	0	1596	2961	0	1596	3076	0
Flt Permitted	0.429			0.554			0.604			0.555		
Satd. Flow (perm)	680	3023	0	903	3075	0	1008	2961	0	926	3076	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			37			101			51	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			546			2651			289	
Travel Time (s)		9.5			12.4			60.3			6.6	
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)	1					1			1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Adj. Flow (vph)	44	271	41	70	385	74	45	224	101	68	186	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	44	312	0	70	459	0	45	325	0	68	237	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.22	1.17	1.17	1.22	1.17	1.17	1.07	1.17	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		9.0	9.0		22.0	22.0		22.0	22.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
v/c Ratio	0.19	0.30		0.23	0.43		0.08	0.20		0.14	0.14	
Control Delay	13.9	11.2		17.6	16.5		6.4	4.3		9.3	7.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.9	11.2		17.6	16.5		6.4	4.3		9.3	7.2	
LOS	B	B		B	B		A	A		A	A	
Approach Delay		11.5			16.6			4.6			7.7	
Approach LOS		B			B			A			A	
Stops (vph)	27	215		54	331		21	89		31	83	
Fuel Used(gal)	1	5		1	5		1	7		6	19	
CO Emissions (g/hr)	48	339		57	357		73	495		393	1353	
NOx Emissions (g/hr)	9	66		11	69		14	96		76	263	
VOC Emissions (g/hr)	11	79		13	83		17	115		91	314	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	12	38		23	77		5	9		24	38	
Queue Length 95th (ft)	m36	77		56	120		m15	27		m42	m63	
Internal Link Dist (ft)		338			466			2571			209	
Turn Bay Length (ft)	70			60			70			80		
Base Capacity (vph)	230	1041		305	1065		542	1641		498	1679	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.19	0.30		0.23	0.43		0.08	0.20		0.14	0.14	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.43
Intersection Signal Delay: 10.8 Intersection LOS: B
Intersection Capacity Utilization 68.4% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1037: State Street & 111th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	287	68	69	316	40	40	207	52	46	279	64
Future Volume (vph)	55	287	68	69	316	40	40	207	52	46	279	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	12	12	10	12	12	10	12
Storage Length (ft)	60		0	75		77	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99	1.00			0.98			0.98	
Frt		0.971			0.983			0.974			0.975	
Flt Protected	0.950			0.950				0.993			0.994	
Satd. Flow (prot)	1539	3013	0	1438	3071	0	0	2890	0	0	2906	0
Flt Permitted	0.523			0.524				0.867			0.884	
Satd. Flow (perm)	835	3013	0	788	3071	0	0	2506	0	0	2576	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		61			29			45			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		546			221			277			684	
Travel Time (s)		12.4			5.0			6.3			15.5	
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Adj. Flow (vph)	59	305	72	73	336	43	43	220	55	49	297	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	377	0	73	379	0	0	318	0	0	414	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.17	1.22	1.22	1.17	1.07	1.07	1.17	1.07	1.07	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	31.0	31.0		31.0	31.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	20.0	20.0		20.0	20.0		14.0	14.0		14.0	14.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		12.0	12.0		12.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
v/c Ratio	0.15	0.26		0.19	0.26			0.31			0.39	
Control Delay	15.5	14.0		11.6	9.9			8.1			13.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	15.5	14.0		11.6	9.9			8.1			13.7	
LOS	B	B		B	A			A			B	
Approach Delay		14.2			10.1			8.1			13.7	
Approach LOS		B			B			A			B	
Stops (vph)	40	419		40	182			165			235	
Fuel Used(gal)	1	5		1	3			8			4	
CO Emissions (g/hr)	44	338		50	242			533			312	
NOx Emissions (g/hr)	9	66		10	47			104			61	
VOC Emissions (g/hr)	10	78		12	56			124			72	
Dilemma Vehicles (#)	0	0		0	0			0			0	
Queue Length 50th (ft)	17	37		16	40			19			52	
Queue Length 95th (ft)	34	73		39	65			37			85	
Internal Link Dist (ft)		466			141			197			604	
Turn Bay Length (ft)	60			75								
Base Capacity (vph)	398	1468		375	1479			1029			1055	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.15	0.26		0.19	0.26			0.31			0.39	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 48 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 11.7	Intersection LOS: B
Intersection Capacity Utilization 86.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1038: Michigan Avenue & 111th Street

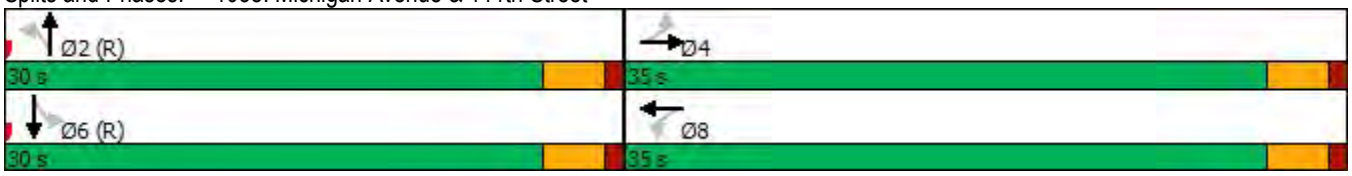

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	201	88	159	311	65	96	415	52	76	752	117
Future Volume (vph)	106	201	88	159	311	65	96	415	52	76	752	117
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	9	14	16	9	14	16
Storage Length (ft)	120		115	60		58	165		165	110		80
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			60			90			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.99	0.99		1.00	1.00		0.99	1.00	
Frt		0.954			0.974			0.983			0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	2979	0	1580	3033	0	1509	3451	0	1524	3471	0
Flt Permitted	0.450			0.532			0.148			0.392		
Satd. Flow (perm)	734	2979	0	876	3033	0	234	3451	0	623	3471	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		86			31			18			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			564			2655			2662	
Travel Time (s)		30.3			12.8			60.3			60.5	
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Adj. Flow (vph)	112	212	93	167	327	68	101	437	55	80	792	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	305	0	167	395	0	101	492	0	80	915	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.07	1.17	1.17	1.07	1.22	0.99	0.91	1.22	0.99	0.91
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	8.0	32.0		8.0	32.0		10.0	35.0		10.0	35.0	
Total Split (s)	8.0	32.0		8.0	32.0		10.0	35.0		10.0	35.0	
Total Split (%)	9.4%	37.6%		9.4%	37.6%		11.8%	41.2%		11.8%	41.2%	
Maximum Green (s)	5.0	27.0		5.0	27.0		7.0	31.0		7.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0		1.0	-1.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Walk Time (s)		7.0			7.0			19.0			19.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		20.0			20.0			12.0			12.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	32.0	28.0		32.0	28.0		37.0	31.0		37.0	31.0	
Actuated g/C Ratio	0.38	0.33		0.38	0.33		0.44	0.36		0.44	0.36	
v/c Ratio	0.36	0.29		0.46	0.39		0.53	0.39		0.24	0.71	
Control Delay	19.7	15.8		22.3	21.4		23.0	20.3		19.2	26.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.7	15.8		22.3	21.4		23.0	20.3		19.2	26.7	
LOS	B	B		C	C		C	C		B	C	
Approach Delay		16.9			21.7			20.8			26.1	
Approach LOS		B			C			C			C	
Stops (vph)	72	148		120	255		54	318		43	475	
Fuel Used(gal)	2	5		6	15		3	13		2	25	
CO Emissions (g/hr)	134	333		441	1024		191	934		148	1774	
NOx Emissions (g/hr)	26	65		86	199		37	182		29	345	
VOC Emissions (g/hr)	31	77		102	237		44	216		34	411	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	36	44		56	77		29	96		24	155	
Queue Length 95th (ft)	70	76		100	116		57	137		m43	224	
Internal Link Dist (ft)		1251			484			2575			2582	
Turn Bay Length (ft)	120			60			165			110		
Base Capacity (vph)	315	1038		362	1019		191	1270		334	1280	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.29		0.46	0.39		0.53	0.39		0.24	0.71	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 5 (6%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 22.4 Intersection LOS: C
Intersection Capacity Utilization 76.9% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1049: Halsted Street & 115th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	295	30	32	375	23	26	77	32	34	117	61
Future Volume (vph)	48	295	30	32	375	23	26	77	32	34	117	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	11	12	11	11	12	10	10	12	10	10
Storage Length (ft)	0		80	0		0	0		30	0		30
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.993			0.996			0.988			0.989	
Satd. Flow (prot)	0	1675	1479	0	1702	1479	0	1660	1428	0	1649	1428
Flt Permitted		0.904			0.956			0.923			0.931	
Satd. Flow (perm)	0	1524	1417	0	1632	1431	0	1550	1406	0	1551	1398
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			32			24			34			64
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3405			1340			2669			2478	
Travel Time (s)		77.4			30.5			60.7			56.3	
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Adj. Flow (vph)	51	311	32	34	395	24	27	81	34	36	123	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	362	32	0	429	24	0	108	34	0	159	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.12	1.07	1.12	1.12	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (%)	52.3%	52.3%	52.3%	52.3%	52.3%	52.3%	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	19.0	19.0	19.0	19.0	19.0	19.0	16.0	16.0	16.0	16.0	16.0	16.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
v/c Ratio		0.51	0.05		0.57	0.04		0.17	0.06		0.25	0.10
Control Delay		15.6	4.2		10.9	1.7		15.4	6.7		12.9	2.6
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		15.6	4.2		10.9	1.7		15.4	6.7		12.9	2.6
LOS		B	A		B	A		B	A		B	A
Approach Delay		14.7			10.4			13.3			9.9	
Approach LOS		B			B			B			A	
Stops (vph)		235	8		170	1		75	16		107	14
Fuel Used(gal)		13	1		6	0		3	1		4	1
CO Emissions (g/hr)		911	70		427	18		201	56		288	96
NOx Emissions (g/hr)		177	14		83	3		39	11		56	19
VOC Emissions (g/hr)		211	16		99	4		47	13		67	22
Dilemma Vehicles (#)		0	0		0	0		0	0		0	0
Queue Length 50th (ft)		96	0		63	1		28	0		51	1
Queue Length 95th (ft)		167	12		85	3		70	m11		83	5
Internal Link Dist (ft)		3325			1260			2589			2398	
Turn Bay Length (ft)			80						30			30
Base Capacity (vph)		703	671		753	673		643	603		644	618
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.51	0.05		0.57	0.04		0.17	0.06		0.25	0.10

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.57
Intersection Signal Delay: 12.1 Intersection LOS: B
Intersection Capacity Utilization 82.5% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1050: Wentworth Avenue & 115th Street

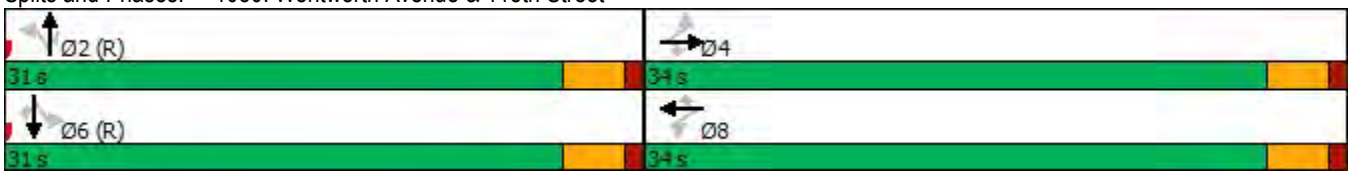

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	305	20	40	240	30	10	100	20	85	165	50
Future Volume (vph)	75	305	20	40	240	30	10	100	20	85	165	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	80		0	55		75	45		50	55		260
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	90			95			110			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.983			0.975			0.965	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1550	1631	1386	1550	3046	0	1550	3022	0	1550	2991	0
Flt Permitted	0.950			0.562			0.608			0.670		
Satd. Flow (perm)	1550	1631	1386	917	3046	0	992	3022	0	1093	2991	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1340			559			516			2651	
Travel Time (s)		30.5			12.7			11.7			60.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	81	328	22	43	258	32	11	108	22	91	177	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	328	22	43	290	0	11	130	0	91	231	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases			4	8			2			6		
Minimum Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	15.4%	53.8%	53.8%	38.5%	38.5%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?												
Walk Time (s)		8.0	8.0	8.0	8.0		13.0	13.0		13.0	13.0	
Flash Dont Walk (s)		13.0	13.0	13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0	0	
Act Effct Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.11	0.48	0.48	0.32	0.32		0.40	0.40		0.40	0.40	
v/c Ratio	0.49	0.42	0.03	0.15	0.29		0.03	0.11		0.21	0.19	
Control Delay	36.6	7.4	5.0	14.2	13.6		10.8	11.2		15.5	14.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.6	7.4	5.0	14.2	13.6		10.8	11.2		15.5	14.2	
LOS	D	A	A	B	B		B	B		B	B	
Approach Delay		12.8			13.7			11.2			14.6	
Approach LOS		B			B			B			B	
Stops (vph)	56	127	4	17	106		8	73		60	146	
Fuel Used(gal)	2	4	0	0	3		0	3		2	6	
CO Emissions (g/hr)	116	304	18	27	176		19	224		165	411	
NOx Emissions (g/hr)	22	59	3	5	34		4	44		32	80	
VOC Emissions (g/hr)	27	70	4	6	41		4	52		38	95	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	21	27	2	8	29		2	12		39	51	
Queue Length 95th (ft)	46	40	m4	m16	35		m7	23		77	64	
Internal Link Dist (ft)		1260			479			436			2571	
Turn Bay Length (ft)	80			55			45			55		
Base Capacity (vph)	166	777	661	296	984		396	1208		437	1196	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.49	0.42	0.03	0.15	0.29		0.03	0.11		0.21	0.19	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 13.3 Intersection LOS: B
Intersection Capacity Utilization 41.9% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1051: State State & 115th Street

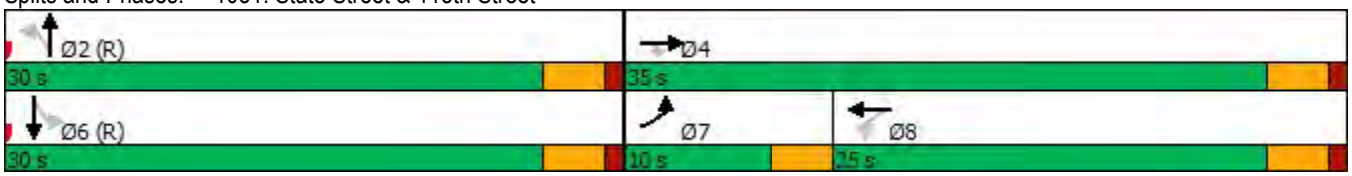

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	250	65	175	285	55	25	245	20	55	270	50
Future Volume (vph)	60	250	65	175	285	55	25	245	20	55	270	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	10	10	12	10	10
Storage Length (ft)	55		120	95		75	0		85	0		90
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	75			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.995			0.992	
Satd. Flow (prot)	1550	1631	1386	1550	1631	1386	0	1623	1386	0	1618	1386
Flt Permitted	0.574			0.950				0.947			0.898	
Satd. Flow (perm)	936	1631	1386	1550	1631	1386	0	1545	1386	0	1465	1386
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			67			101			185
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		559			386			1340			2394	
Travel Time (s)		12.7			8.8			30.5			54.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	65	269	70	188	306	59	27	263	22	59	290	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	269	70	188	306	59	0	290	22	0	349	54
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	NA
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4			8	2		2	6		
Minimum Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (%)	36.9%	36.9%	36.9%	13.8%	50.8%	50.8%	44.6%	44.6%	44.6%	44.6%	44.6%	
Maximum Green (s)	20.0	20.0	20.0	6.0	29.0	29.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		5.0	5.0		5.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0	9.0		18.0	18.0	12.0	12.0	12.0	12.0	12.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	12.0	12.0	12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0	0	
Act Effct Green (s)	20.0	20.0	20.0	6.0	29.0	29.0		24.0	24.0		24.0	0.0

Lane Group	Ø12
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	12
Permitted Phases	
Minimum Split (s)	3.0
Total Split (s)	3.0
Total Split (%)	5%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.31	0.31	0.31	0.09	0.45	0.45		0.37	0.37		0.37	0.00
v/c Ratio	0.23	0.54	0.14	1.31	0.42	0.09		0.51	0.04		0.65	0.29
Control Delay	13.1	15.7	1.2	206.1	14.9	5.9		13.6	0.8		22.1	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	13.1	15.7	1.2	206.1	14.9	5.9		13.6	0.8		22.1	4.9
LOS	B	B	A	F	B	A		B	A		C	A
Approach Delay		12.8			79.0			12.7			19.8	
Approach LOS		B			E			B			B	
Stops (vph)	24	108	4	137	142	13		170	1		275	7
Fuel Used(gal)	1	2	0	9	3	0		19	1		10	1
CO Emissions (g/hr)	39	174	22	640	235	33		1299	88		681	79
NOx Emissions (g/hr)	8	34	4	124	46	6		253	17		133	15
VOC Emissions (g/hr)	9	40	5	148	54	8		301	20		158	18
Dilemma Vehicles (#)	0	0	0	0	0	0		0	0		0	0
Queue Length 50th (ft)	13	54	0	~105	63	0		69	0		116	0
Queue Length 95th (ft)	27	83	4	m#176	m114	m8		132	m1		155	10
Internal Link Dist (ft)		479			306			1260			2314	
Turn Bay Length (ft)	55		120	95		75			85			90
Base Capacity (vph)	288	501	507	143	727	655		570	575		540	185
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	0
Reduced v/c Ratio	0.23	0.54	0.14	1.31	0.42	0.09		0.51	0.04		0.65	0.29

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 1.31
Intersection Signal Delay: 36.3 Intersection LOS: D
Intersection Capacity Utilization 72.4% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1052: Michigan Avenue & 115th Street

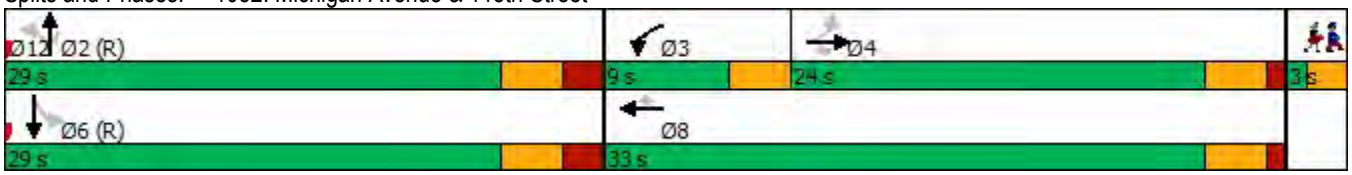

Lane Group	Ø12
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	293	16	65	522	65	49	101	152	0	0	0
Future Volume (vph)	16	293	16	65	522	65	49	101	152	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	12	12	10	15	10
Storage Length (ft)	0		95	0		80	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.932				
Flt Protected		0.997			0.994			0.992				
Satd. Flow (prot)	0	1626	1386	0	1621	1386	0	1616	0	0	0	0
Flt Permitted		0.964			0.928			0.992				
Satd. Flow (perm)	0	1572	1386	0	1514	1386	0	1616	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			17			58		80				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			636			791			721	
Travel Time (s)		8.7			14.5			18.0			16.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	17	315	17	70	561	70	53	109	163	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	332	17	0	631	70	0	325	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.07	1.07	1.17	0.95	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2				
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru				
Leading Detector (ft)	20	100	20	20	100	20	20	100				
Trailing Detector (ft)	0	0	0	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0	0	0	0				
Detector 1 Size(ft)	20	6	20	20	6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Detector Phase	4	4	4	8	8	8	2	2				
Switch Phase												
Minimum Initial (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Minimum Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (%)	63.1%	63.1%	63.1%	63.1%	63.1%	63.1%	36.9%	36.9%				
Maximum Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0				
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0				
Total Lost Time (s)		5.0	5.0		5.0	5.0		4.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	8.0	8.0				
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None				
Walk Time (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Flash Dont Walk (s)	8.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	30	30				
Act Effct Green (s)		37.8	37.8		37.8	37.8		18.2				
Actuated g/C Ratio		0.58	0.58		0.58	0.58		0.28				
v/c Ratio		0.36	0.02		0.72	0.08		0.64				
Control Delay		14.8	8.0		16.7	3.0		21.1				
Queue Delay		0.0	0.0		0.0	0.0		0.0				
Total Delay		14.8	8.0		16.7	3.0		21.1				
LOS		B	A		B	A		C				
Approach Delay		14.4			15.3			21.1				
Approach LOS		B			B			C				
90th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
90th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
70th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
70th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
50th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
50th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
30th %ile Green (s)	38.1	38.1	38.1	38.1	38.1	38.1	17.9	17.9				
30th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
10th %ile Green (s)	42.8	42.8	42.8	42.8	42.8	42.8	13.2	13.2				
10th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
Stops (vph)		195	9		414	12		194				
Fuel Used(gal)		4	0		10	1		4				
CO Emissions (g/hr)		270	12		721	54		296				
NOx Emissions (g/hr)		53	2		140	11		58				
VOC Emissions (g/hr)		63	3		167	13		69				
Dilemma Vehicles (#)		0	0		0	0		0				
Queue Length 50th (ft)		85	1		173	2		79				
Queue Length 95th (ft)		145	m5		#312	17		155				
Internal Link Dist (ft)		304			556			711			641	
Turn Bay Length (ft)			95			80						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		913	812		879	829		552				
Starvation Cap Reductn		0	0		0	0		0				
Spillback Cap Reductn		0	0		0	0		0				
Storage Cap Reductn		0	0		0	0		0				
Reduced v/c Ratio		0.36	0.02		0.72	0.08		0.59				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 25 (38%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 16.4 Intersection LOS: B
Intersection Capacity Utilization 86.1% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1053: Indiana Avenue & 115th Street

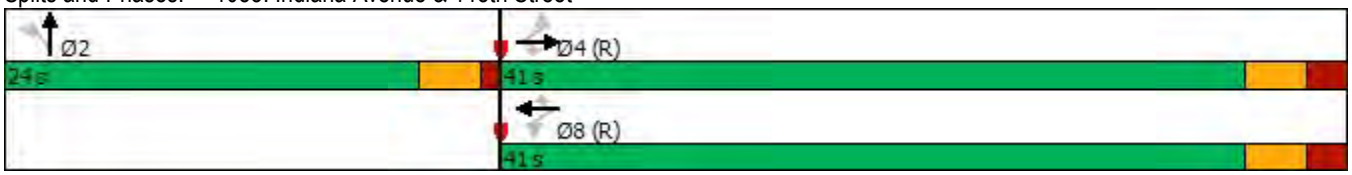

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	73	372	503	34	112	149
Future Volume (vph)	73	372	503	34	112	149
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	14	16	12	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.991			0.850
Flt Protected		0.992			0.950	
Satd. Flow (prot)	0	1858	1984	0	1596	1428
Flt Permitted		0.992			0.950	
Satd. Flow (perm)	0	1858	1984	0	1596	1428
Link Speed (mph)		30	30		30	
Link Distance (ft)		683	263		1350	
Travel Time (s)		15.5	6.0		30.7	
Confl. Peds. (#/hr)	17			17	6	5
Confl. Bikes (#/hr)				3	2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	2%	2%	0%	0%	0%
Adj. Flow (vph)	83	423	572	39	127	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	506	611	0	127	169
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.07	0.99	0.91	1.07	1.17	1.17
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 72.7%	ICU Level of Service C
Analysis Period (min) 15	

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	73	372	503	34	112	149
Future Volume (vph)	73	372	503	34	112	149
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	83	423	572	39	127	169

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total (vph)	506	611	127	169
Volume Left (vph)	83	0	127	0
Volume Right (vph)	0	39	0	169
Hadj (s)	0.08	-0.01	0.50	-0.70
Departure Headway (s)	6.0	5.7	8.0	6.7
Degree Utilization, x	0.84	0.97	0.28	0.32
Capacity (veh/h)	506	622	442	520
Control Delay (s)	32.5	53.6	12.9	11.6
Approach Delay (s)	32.5	53.6	12.2	
Approach LOS	D	F	B	

Intersection Summary			
Delay	37.3		
Level of Service	E		
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	645	0	1	533	3	27				
Future Volume (vph)	645	0	1	533	3	27				
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800				
Lane Width (ft)	10	12	12	10	16	12				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Frt					0.878					
Flt Protected					0.995					
Satd. Flow (prot)	1631	1748	0	1468	1730	0				
Flt Permitted				0.999	0.995					
Satd. Flow (perm)	1631	1748	0	1466	1730	0				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)					29					
Link Speed (mph)	30			30	30					
Link Distance (ft)	105			1228	505					
Travel Time (s)	2.4			27.9	11.5					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%				
Parking (#/hr)				0						
Adj. Flow (vph)	694	0	1	573	3	29				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	694	0	0	574	32	0				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			0	16					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.17	1.07	1.07	1.33	0.91	1.07				
Turning Speed (mph)		9	15		15	9				
Turn Type	NA	Perm	Perm	NA	Prot					
Protected Phases	6 4			4	3		1	2	6	8
Permitted Phases		6 4	4							
Minimum Split (s)			16.0	16.0	18.0		20.0	12.0	32.0	35.0
Total Split (s)			35.0	35.0	18.0		20.0	12.0	32.0	35.0
Total Split (%)			41.2%	41.2%	21.2%		24%	14%	38%	41%
Maximum Green (s)			31.0	31.0	14.0		15.0	9.0	27.0	31.0
Yellow Time (s)			3.0	3.0	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)			1.0	1.0	1.0		2.0	0.0	2.0	1.0
Lost Time Adjust (s)				0.0	0.0					
Total Lost Time (s)				4.0	4.0					
Lead/Lag							Lag	Lead		
Lead-Lag Optimize?										
Walk Time (s)					2.0				14.0	18.0
Flash Dont Walk (s)					12.0				13.0	13.0
Pedestrian Calls (#/hr)					0				0	0
Act Effct Green (s)	62.0			31.0	14.0					
Actuated g/C Ratio	0.73			0.36	0.16					
v/c Ratio	0.58			1.07	0.10					

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Control Delay	5.1			89.3	13.7					
Queue Delay	0.9			9.8	0.0					
Total Delay	6.0			99.1	13.7					
LOS	A			F	B					
Approach Delay	6.0			99.1	13.7					
Approach LOS	A			F	B					
Stops (vph)	201			438	11					
Fuel Used(gal)	2			22	0					
CO Emissions (g/hr)	162			1572	18					
NOx Emissions (g/hr)	31			306	4					
VOC Emissions (g/hr)	37			364	4					
Dilemma Vehicles (#)	0			0	0					
Queue Length 50th (ft)	97			~345	1					
Queue Length 95th (ft)	129			#540	26					
Internal Link Dist (ft)	25			1148	425					
Turn Bay Length (ft)										
Base Capacity (vph)	1189			534	309					
Starvation Cap Reductn	243			0	0					
Spillback Cap Reductn	0			16	0					
Storage Cap Reductn	0			0	0					
Reduced v/c Ratio	0.73			1.11	0.10					

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 85	
Control Type: Pretimed	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 47.3	Intersection LOS: D
Intersection Capacity Utilization 46.7%	ICU Level of Service A
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1055: Cottage Grove Avenue & 115th Street

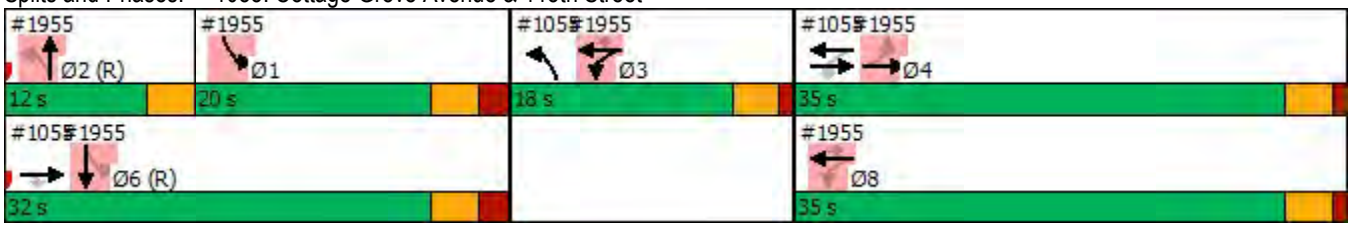

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	203	542	25	311	0	0	0	0	15	6	220
Future Volume (vph)	0	203	542	25	311	0	0	0	0	15	6	220
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	16	12	12	12	12	12	12	15	12	12	16	12
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.891										0.850
Flt Protected					0.996						0.965	
Satd. Flow (prot)	0	3025	0	0	3365	0	0	0	0	0	1969	1500
Flt Permitted					0.996						0.965	
Satd. Flow (perm)	0	3025	0	0	3365	0	0	0	0	0	1969	1500
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1260			277			633			783	
Travel Time (s)		28.6			6.3			14.4			17.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	4%	1%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	0	216	577	27	331	0	0	0	0	16	6	234
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	793	0	0	358	0	0	0	0	0	22	234
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.91	1.07	1.07	1.07	1.07	1.07	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 39.2%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	203	542	25	311	0	0	0	0	15	6	220
Future Volume (Veh/h)	0	203	542	25	311	0	0	0	0	15	6	220
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	216	577	27	331	0	0	0	0	16	6	234
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	331			216			727	890	396	493	601	166
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	331			216			727	890	396	493	601	166
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	96	99	72
cM capacity (veh/h)	1240			1337			223	279	609	456	408	850

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	144	649	137	221	22	234
Volume Left	0	0	27	0	16	0
Volume Right	0	577	0	0	0	234
cSH	1700	1700	1337	1700	442	850
Volume to Capacity	0.08	0.38	0.02	0.13	0.05	0.28
Queue Length 95th (ft)	0	0	2	0	4	28
Control Delay (s)	0.0	0.0	1.7	0.0	13.6	10.8
Lane LOS			A		B	B
Approach Delay (s)	0.0		0.6		11.1	
Approach LOS					B	

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	218	0	336	0	0	0
Future Volume (vph)	218	0	336	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3221	0	1660	0	0	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3221	0	1660	0	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	277			605	530	
Travel Time (s)	6.3			13.8	12.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	234	0	361	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	234	0	361	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	218	0	336	0	0	0
Future Volume (vph)	218	0	336	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	234	0	361	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	117	117	361
Volume Left (vph)	117	117	361
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.0	6.0	4.8
Degree Utilization, x	0.19	0.19	0.48
Capacity (veh/h)	570	572	729
Control Delay (s)	9.2	9.2	12.2
Approach Delay (s)	9.2		12.2
Approach LOS	A		B

Intersection Summary			
Delay	11.0		
Level of Service	B		
Intersection Capacity Utilization	32.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	239	126	81	190	61	92	443	60	96	803	120
Future Volume (vph)	130	239	126	81	190	61	92	443	60	96	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	14	12	10	11	12	9	10	12
Storage Length (ft)	140		0	60		0	120		0	115		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	195			95			95			90		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98		0.98	0.99	0.99		0.98	1.00		0.99	0.99	
Frt			0.850		0.964			0.982			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1580	1600	1400	1596	1778	0	1580	3122	0	1539	3002	0
Flt Permitted	0.456			0.516			0.151			0.384		
Satd. Flow (perm)	745	1600	1372	862	1778	0	247	3122	0	618	3002	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		18			19			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		752			3955			5338			2655	
Travel Time (s)		17.1			89.9			121.3			60.3	
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)						3	1		2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Adj. Flow (vph)	133	244	129	83	194	62	94	452	61	98	819	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	133	244	129	83	256	0	94	513	0	98	941	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	0.99	1.07	1.17	1.12	1.07	1.22	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	4.0	4.0	7.0	4.0		7.0	18.0		7.0	18.0	
Minimum Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (%)	11.1%	35.6%	35.6%	11.1%	35.6%		11.1%	42.2%		11.1%	42.2%	
Maximum Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0	0.0	1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	C-Max		None	C-Max	
Walk Time (s)		4.0	4.0		4.0			18.0			18.0	
Flash Dont Walk (s)		23.0	23.0		23.0			16.0			16.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	34.8	30.0	29.0	34.0	27.0		40.8	36.0		40.8	36.0	
Actuated g/C Ratio	0.39	0.33	0.32	0.38	0.30		0.45	0.40		0.45	0.40	
v/c Ratio	0.39	0.46	0.24	0.22	0.47		0.47	0.41		0.29	0.78	
Control Delay	20.7	28.0	5.8	17.6	27.2		20.7	20.4		15.1	29.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.7	28.0	5.8	17.6	27.2		20.7	20.4		15.1	29.1	
LOS	C	C	A	B	C		C	C		B	C	
Approach Delay		20.4			24.8			20.5			27.8	
Approach LOS		C			C			C			C	
90th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
90th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
70th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
50th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
30th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Skip	Coord		Skip	Coord	
Stops (vph)	85	188	19	50	186		49	339		52	761	
Fuel Used(gal)	2	4	1	3	10		4	25		3	29	
CO Emissions (g/hr)	124	266	69	214	710		314	1741		180	2010	
NOx Emissions (g/hr)	24	52	14	42	138		61	339		35	391	
VOC Emissions (g/hr)	29	62	16	50	165		73	403		42	466	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	46	112	0	28	109		28	107		29	244	
Queue Length 95th (ft)	85	185	40	57	182		55	152		57	326	
Internal Link Dist (ft)		672			3875			5258			2575	
Turn Bay Length (ft)	140			60			120			115		
Base Capacity (vph)	344	533	529	374	546		200	1260		341	1213	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.39	0.46	0.24	0.22	0.47		0.47	0.41		0.29	0.78	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 24.1	Intersection LOS: C
Intersection Capacity Utilization 78.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1060: Halsted Street & 119th Street

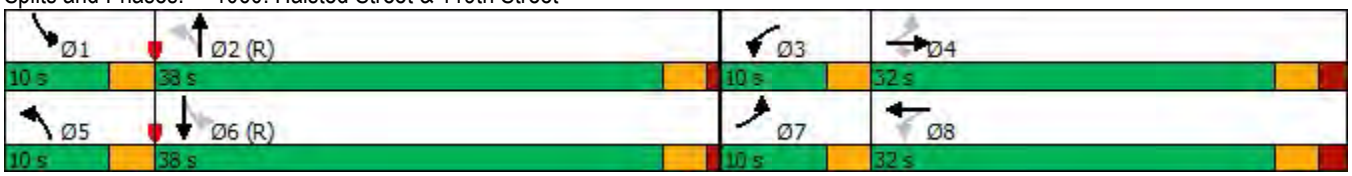

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	275	54	11	251	19	32	51	17	18	76	58
Future Volume (vph)	35	275	54	11	251	19	32	51	17	18	76	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	10	10	10	10	12	15	12	12	16	12
Storage Length (ft)	0		105	0		75	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		0.99			0.99	
Frt			0.850			0.850		0.977			0.949	
Flt Protected		0.994			0.998			0.984			0.994	
Satd. Flow (prot)	0	1679	1428	0	1630	1428	0	1896	0	0	1872	0
Flt Permitted		0.949			0.986			0.900			0.971	
Satd. Flow (perm)	0	1602	1369	0	1609	1381	0	1730	0	0	1828	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59			21		19			58	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3955			1331			2677			2669	
Travel Time (s)		89.9			30.3			60.8			60.7	
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	1		1			1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Adj. Flow (vph)	38	302	59	12	276	21	35	56	19	20	84	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	340	59	0	288	21	0	110	0	0	168	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.17	1.17	1.17	1.17	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	32.0	27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	22.0	22.0	22.0	22.0	22.0	22.0	17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
v/c Ratio		0.43	0.08		0.36	0.03		0.15			0.21	
Control Delay		12.8	3.2		9.3	2.8		10.6			6.1	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		12.8	3.2		9.3	2.8		10.6			6.1	
LOS		B	A		A	A		B			A	
Approach Delay		11.4			8.8			10.6			6.1	
Approach LOS		B			A			B			A	
Stops (vph)		189	9		86	3		49			89	
Fuel Used(gal)		11	2		4	0		3			4	
CO Emissions (g/hr)		795	122		258	16		180			270	
NOx Emissions (g/hr)		155	24		50	3		35			53	
VOC Emissions (g/hr)		184	28		60	4		42			63	
Dilemma Vehicles (#)		0	0		0	0		0			0	
Queue Length 50th (ft)		81	0		45	1		21			3	
Queue Length 95th (ft)		140	16		66	3		49			22	
Internal Link Dist (ft)		3875			1251			2597			2589	
Turn Bay Length (ft)			105			75						
Base Capacity (vph)		788	703		792	690		729			793	
Starvation Cap Reductn		0	0		0	0		0			0	
Spillback Cap Reductn		0	0		0	0		0			0	
Storage Cap Reductn		0	0		0	0		0			0	
Reduced v/c Ratio		0.43	0.08		0.36	0.03		0.15			0.21	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.43
Intersection Signal Delay: 9.6 Intersection LOS: A
Intersection Capacity Utilization 85.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1061: Wentworth Avenue & 119th Street

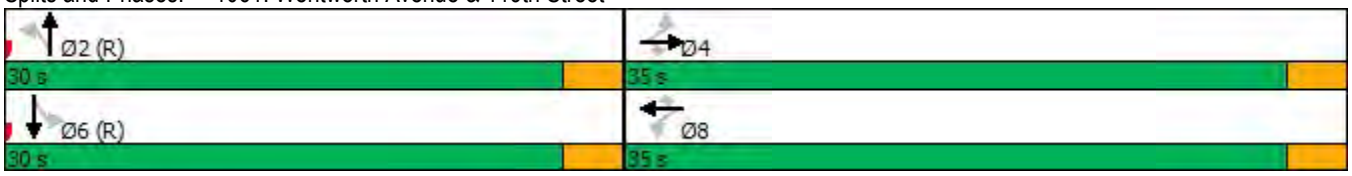

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	172	37	10	180	9	28	88	15	12	142	54
Future Volume (vph)	53	172	37	10	180	9	28	88	15	12	142	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	12	10	10	12	10	10	12	16	12
Storage Length (ft)	0		70	0		215	0		75	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.94		1.00	0.95		1.00	0.97		0.99	
Frt			0.850			0.850			0.850		0.965	
Flt Protected		0.988			0.997			0.988			0.997	
Satd. Flow (prot)	0	1635	1428	0	1614	1428	0	1599	1428	0	1941	0
Flt Permitted		0.889			0.983			0.912			0.985	
Satd. Flow (perm)	0	1464	1347	0	1589	1360	0	1475	1390	0	1917	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			39			34			34		38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			477			2671			2164	
Travel Time (s)		30.3			10.8			60.7			49.2	
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	1		1	1		1			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Adj. Flow (vph)	55	179	39	10	188	9	29	92	16	13	148	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	234	39	0	198	9	0	121	16	0	217	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	43.1%	43.1%	43.1%	43.1%	43.1%	43.1%	56.9%	56.9%	56.9%	56.9%	56.9%	
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0	23.0	32.0	32.0	32.0	32.0	32.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	14.0	14.0	14.0	14.0	14.0	14.0	23.0	23.0	23.0	23.0	23.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
v/c Ratio		0.45	0.08		0.35	0.02		0.17	0.02		0.23	
Control Delay		12.1	2.7		17.8	0.9		2.4	0.9		7.2	
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Delay		12.1	2.7		17.8	0.9		2.4	0.9		7.2	
LOS		B	A		B	A		A	A		A	
Approach Delay		10.8			17.0			2.2			7.2	
Approach LOS		B			B			A			A	
Stops (vph)		173	13		134	0		34	3		166	
Fuel Used(gal)		4	0		2	0		5	1		6	
CO Emissions (g/hr)		269	33		149	2		356	45		389	
NOx Emissions (g/hr)		52	6		29	0		69	9		76	
VOC Emissions (g/hr)		62	8		35	1		82	10		90	
Dilemma Vehicles (#)		0	0		0	0		0	0		0	
Queue Length 50th (ft)		74	3		57	0		10	0		15	
Queue Length 95th (ft)		136	m7		105	2		m11	m0		24	
Internal Link Dist (ft)		1251			397			2591			2084	
Turn Bay Length (ft)			70			215			75			
Base Capacity (vph)		518	501		562	503		726	701		963	
Starvation Cap Reductn		0	0		0	0		0	0		0	
Spillback Cap Reductn		0	0		0	0		0	0		0	
Storage Cap Reductn		0	0		0	0		0	0		0	
Reduced v/c Ratio		0.45	0.08		0.35	0.02		0.17	0.02		0.23	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 10.0 Intersection LOS: A
Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1062: State Street & 119th Street

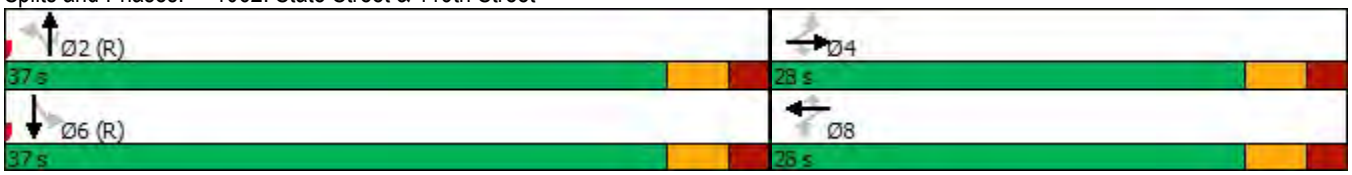

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	866	289	292	842	0	0	0	0	513	284	334
Future Volume (vph)	0	866	289	292	842	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	14
Storage Length (ft)	0		85	216		0	0		0	360		360
Storage Lanes	0		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.86	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.962									0.980	0.850
Flt Protected				0.950						0.950	0.981	
Satd. Flow (prot)	0	4564	0	1676	3320	0	0	0	0	1541	2911	1442
Flt Permitted				0.153						0.950	0.981	
Satd. Flow (perm)	0	4564	0	270	3320	0	0	0	0	1541	2911	1442
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		76									12	180
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1359			322			590			708	
Travel Time (s)		30.9			7.3			13.4			16.1	
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Adj. Flow (vph)	0	884	295	298	859	0	0	0	0	523	290	341
Shared Lane Traffic (%)										43%		23%
Lane Group Flow (vph)	0	1179	0	298	859	0	0	0	0	298	593	263
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			34			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1					1	1	1
Detector Template												
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		50		50	50					50	50	50
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		15.0		3.0	15.0					8.0	8.0	8.0
Minimum Split (s)		41.5		39.0	80.5					34.5	34.5	34.5
Total Split (s)		41.5		39.0	80.5					34.5	34.5	34.5
Total Split (%)		36.1%		33.9%	70.0%					30.0%	30.0%	30.0%
Maximum Green (s)		35.5		34.5	74.5					28.5	28.5	28.5
Yellow Time (s)		4.5		3.5	4.5					4.5	4.5	4.5
All-Red Time (s)		1.5		1.0	1.5					1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)		7.0		3.5	7.0					3.0	3.0	3.0
Minimum Gap (s)		3.5		0.2	3.5					0.2	0.2	0.2
Time Before Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Time To Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Recall Mode		C-Max		None	C-Max					None	None	None
Walk Time (s)										1.5	1.5	1.5
Flash Dont Walk (s)										27.0	27.0	27.0
Pedestrian Calls (#/hr)										0	0	0
Act Effct Green (s)		51.9		77.5	76.0					27.0	27.0	27.0
Actuated g/C Ratio		0.45		0.67	0.66					0.23	0.23	0.23
v/c Ratio		0.56		0.71	0.39					0.82	0.86	0.55
Control Delay		24.3		25.1	17.2					61.0	54.2	17.1
Queue Delay		0.0		0.7	11.9					0.0	0.0	0.0
Total Delay		24.3		25.8	29.2					61.0	54.2	17.1
LOS		C		C	C					E	D	B
Approach Delay		24.3			28.3						47.5	
Approach LOS		C			C						D	
90th %ile Green (s)		41.0		29.0	74.5					28.5	28.5	28.5
90th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
70th %ile Green (s)		46.4		23.6	74.5					28.5	28.5	28.5
70th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
50th %ile Green (s)		50.3		19.7	74.5					28.5	28.5	28.5
50th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
30th %ile Green (s)		55.6		15.7	75.8					27.2	27.2	27.2
30th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
10th %ile Green (s)		66.2		9.8	80.5					22.5	22.5	22.5
10th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
Stops (vph)		791		219	574					265	525	78
Fuel Used(gal)		22		3	8					7	13	3
CO Emissions (g/hr)		1561		240	576					468	875	193
NOx Emissions (g/hr)		304		47	112					91	170	37
VOC Emissions (g/hr)		362		56	133					109	203	45
Dilemma Vehicles (#)		0		0	0					0	0	0
Queue Length 50th (ft)		220		157	244					227	236	53
Queue Length 95th (ft)		310		m220	317					#372	#316	147
Internal Link Dist (ft)		1279			242			510			628	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)				216						360		360
Base Capacity (vph)		2101		603	2192					381	730	492
Starvation Cap Reductn		0		106	1313					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.56		0.60	0.98					0.78	0.81	0.53

Intersection Summary	
Area Type:	Other
Cycle Length: 115	
Actuated Cycle Length: 115	
Offset: 85 (74%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 33.3	Intersection LOS: C
Intersection Capacity Utilization 92.9%	ICU Level of Service F
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1064: S Paulina ST & 127th Street

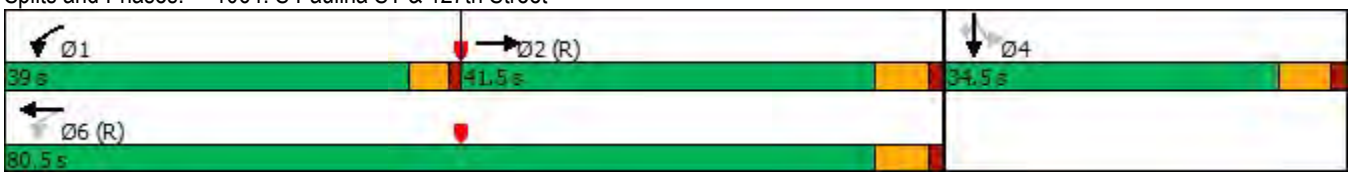

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	341	1038	0	0	811	261	323	270	237	0	0	0
Future Volume (vph)	341	1038	0	0	811	261	323	270	237	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	216		216	0		130	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				1.00							
Frt					0.963			0.930				
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3252	3353	0	0	4631	0	1676	3120	0	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3244	3353	0	0	4631	0	1676	3120	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					87							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			336			554			548	
Travel Time (s)		7.3			7.6			12.6			12.5	
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)			1			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Adj. Flow (vph)	359	1093	0	0	854	275	340	284	249	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	359	1093	0	0	1129	0	340	533	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1		1	1				
Detector Template												
Leading Detector (ft)	50	50			50		50	50				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	50	50			50		50	50				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0			15.0		10.0	10.0				
Minimum Split (s)	26.5	80.5			54.0		34.5	34.5				
Total Split (s)	26.5	80.5			54.0		34.5	34.5				
Total Split (%)	23.0%	70.0%			47.0%		30.0%	30.0%				
Maximum Green (s)	20.5	74.5			48.0		28.5	28.5				
Yellow Time (s)	4.5	4.5			4.5		4.5	4.5				
All-Red Time (s)	1.5	1.5			1.5		1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0			7.0		5.0	5.0				
Minimum Gap (s)	0.2	3.5			3.5		0.2	0.2				
Time Before Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Time To Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Recall Mode	None	C-Max			C-Max		None	None				
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							21.5	21.5				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	17.8	75.4			51.6		27.6	27.6				
Actuated g/C Ratio	0.15	0.66			0.45		0.24	0.24				
v/c Ratio	0.71	0.50			0.53		0.85	0.71				
Control Delay	48.1	4.9			17.6		61.5	45.9				
Queue Delay	0.0	0.6			0.2		5.5	0.0				
Total Delay	48.1	5.5			17.8		67.1	45.9				
LOS	D	A			B		E	D				
Approach Delay		16.0			17.8			54.2				
Approach LOS		B			B			D				
90th %ile Green (s)	20.5	74.5			48.0		28.5	28.5				
90th %ile Term Code	Max	Coord			Coord		Max	Max				
70th %ile Green (s)	20.2	74.5			48.3		28.5	28.5				
70th %ile Term Code	Gap	Coord			Coord		Max	Max				
50th %ile Green (s)	18.3	74.5			50.2		28.5	28.5				
50th %ile Term Code	Gap	Coord			Coord		Max	Max				
30th %ile Green (s)	16.4	74.5			52.1		28.5	28.5				
30th %ile Term Code	Gap	Coord			Coord		Max	Max				
10th %ile Green (s)	13.6	79.1			59.5		23.9	23.9				
10th %ile Term Code	Gap	Coord			Coord		Gap	Gap				
Stops (vph)	303	373			440		291	452				
Fuel Used(gal)	6	6			9		7	9				
CO Emissions (g/hr)	410	399			635		493	658				
NOx Emissions (g/hr)	80	78			124		96	128				
VOC Emissions (g/hr)	95	93			147		114	153				
Dilemma Vehicles (#)	0	0			0		0	0				
Queue Length 50th (ft)	124	213			132		239	189				
Queue Length 95th (ft)	m147	10			165		#388	251				
Internal Link Dist (ft)		242			256			474			468	
Turn Bay Length (ft)	216											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	579	2199			2126		415	773				
Starvation Cap Reductn	0	653			353		0	0				
Spillback Cap Reductn	0	0			179		40	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.62	0.71			0.64		0.91	0.69				

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 26.3 Intersection LOS: C
Intersection Capacity Utilization 92.9% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1065: Marshfield Ave & 127th Street

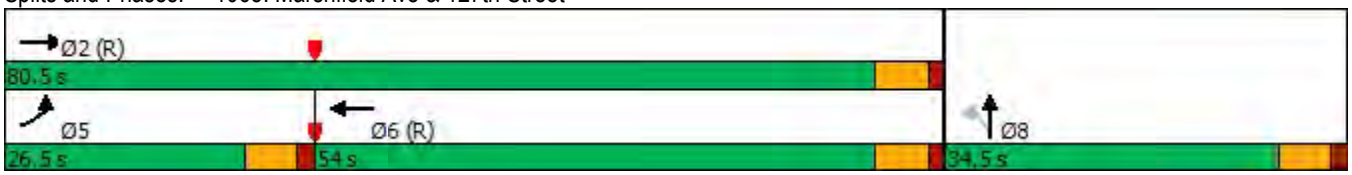

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	571	368	94	564	48	227	179	66	74	162	121
Future Volume (vph)	122	571	368	94	564	48	227	179	66	74	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	11	12	12	10	12	13	10	10	10
Storage Length (ft)	120		0	85		0	240		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			120			125			140		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.97	0.99	1.00		0.99	0.99		0.99	0.99	
Frt			0.850		0.988			0.960			0.936	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3386	1337	1605	3282	0	1580	3220	0	1550	2949	0
Flt Permitted	0.224			0.422			0.375			0.591		
Satd. Flow (perm)	368	3386	1292	707	3282	0	620	3220	0	955	2949	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			391		8			49			129	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		336			5379			1555			925	
Travel Time (s)		7.6			122.3			35.3			21.0	
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Adj. Flow (vph)	130	607	391	100	600	51	241	190	70	79	172	129
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	607	391	100	651	0	241	260	0	79	301	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.07	1.22	1.12	1.07	1.07	1.17	1.07	1.03	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	15.0	44.0	20.5	12.5	41.5		20.5	43.5		15.0	38.0	
Total Split (s)	15.0	44.0	20.5	12.5	41.5		20.5	43.5		15.0	38.0	
Total Split (%)	13.0%	38.3%	17.8%	10.9%	36.1%		17.8%	37.8%		13.0%	33.0%	
Maximum Green (s)	10.5	38.0	16.0	8.0	35.5		16.0	37.5		10.5	32.0	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	0.2	4.0	0.2	0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	25.0	0.0	0.0	25.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Recall Mode	Max	C-Max	None	None	C-Max		None	None		None	None	
Walk Time (s)		14.0			13.0			5.0			5.0	
Flash Dont Walk (s)		22.0			22.0			26.0			26.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	67.1	52.2	69.1	45.8	35.5		38.9	26.1		28.1	17.6	
Actuated g/C Ratio	0.58	0.45	0.60	0.40	0.31		0.34	0.23		0.24	0.15	
v/c Ratio	0.27	0.39	0.42	0.29	0.64		0.71	0.34		0.28	0.54	
Control Delay	8.6	18.3	5.0	15.7	37.2		36.1	27.4		28.6	28.5	
Queue Delay	0.0	0.4	0.1	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	8.6	18.7	5.1	15.7	37.2		36.1	27.4		28.6	28.5	
LOS	A	B	A	B	D		D	C		C	C	
Approach Delay		12.8			34.4			31.6			28.5	
Approach LOS		B			C			C			C	
90th %ile Green (s)	19.8	43.4	16.0	11.9	35.5		16.0	28.2		10.5	22.7	
90th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Max	Gap	
70th %ile Green (s)	23.5	49.2	16.0	9.8	35.5		16.0	24.5		10.5	19.0	
70th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Max	Gap	
50th %ile Green (s)	26.4	53.3	16.0	8.6	35.5		16.0	22.5		9.6	16.1	
50th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Gap	Gap	
30th %ile Green (s)	27.5	55.4	16.0	7.6	35.5		16.0	22.8		8.2	15.0	
30th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Gap	Min	
10th %ile Green (s)	30.6	59.9	12.9	6.2	35.5		12.9	32.4		0.0	15.0	
10th %ile Term Code	MaxR	Coord	Gap	Gap	Coord		Gap	Hold		Skip	Min	
Stops (vph)	44	380	106	55	509		182	184		53	145	
Fuel Used(gal)	1	6	2	5	33		5	5		1	4	
CO Emissions (g/hr)	54	400	134	318	2315		379	373		88	314	
NOx Emissions (g/hr)	11	78	26	62	450		74	73		17	61	
VOC Emissions (g/hr)	13	93	31	74	537		88	86		20	73	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	20	161	85	30	215		150	76		41	62	
Queue Length 95th (ft)	m64	232	128	64	280		216	110		72	101	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		256			5299			1475			845	
Turn Bay Length (ft)	120			85			240			120		
Base Capacity (vph)	480	1538	943	356	1018		343	1083		299	913	
Starvation Cap Reductn	0	460	82	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.27	0.56	0.45	0.28	0.64		0.70	0.24		0.26	0.33	

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 15 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 24.3 Intersection LOS: C
Intersection Capacity Utilization 82.7% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1066: S Ashland & 127th Street

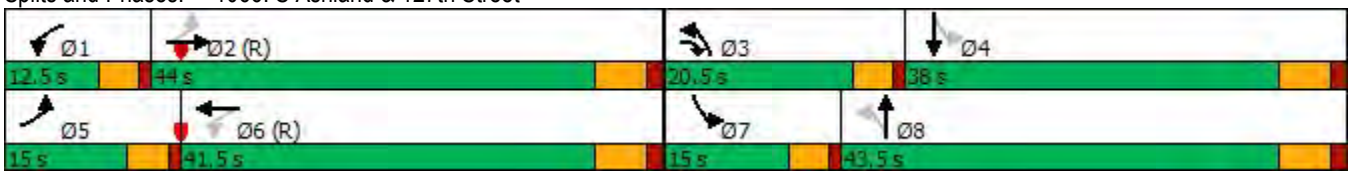

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	193	367	56	164	87	362	340	78	206	408	56
Future Volume (vph)	46	193	367	56	164	87	362	340	78	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	11	12	12	12	12	12
Storage Length (ft)	85		0	140		0	140		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	55			135			115			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	0.99		1.00				1.00	
Frt		0.902			0.948			0.972			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	2993	0	1710	3182	0	1621	3297	0	1693	3294	0
Flt Permitted	0.575			0.280			0.300			0.487		
Satd. Flow (perm)	1026	2993	0	503	3182	0	511	3297	0	868	3294	0
Right Turn on Red			No			Yes			Yes			No
Satd. Flow (RTOR)					84			28				
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		542			3053			918			1555	
Travel Time (s)		10.6			59.5			17.9			30.3	
Confl. Peds. (#/hr)	12		3	3		12	5					5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Adj. Flow (vph)	51	212	403	62	180	96	398	374	86	226	448	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	615	0	62	276	0	398	460	0	226	510	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	15.0	32.5		19.5	37.0		25.0	50.5		12.5	38.0	
Total Split (s)	15.0	32.5		19.5	37.0		25.0	50.5		12.5	38.0	
Total Split (%)	13.0%	28.3%		17.0%	32.2%		21.7%	43.9%		10.9%	33.0%	
Maximum Green (s)	11.0	26.5		15.5	31.0		21.0	44.5		8.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	1.0	1.5		1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Minimum Gap (s)	0.2	4.0		0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Time To Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Recall Mode	None	Max		None	Max		None	C-Max		None	C-Max	
Walk Time (s)					6.0						4.0	
Flash Dont Walk (s)					25.0						28.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)	44.4	35.5		45.2	36.0		59.0	44.5		43.0	32.5	
Actuated g/C Ratio	0.39	0.31		0.39	0.31		0.51	0.39		0.37	0.28	
v/c Ratio	0.12	0.88dr		0.22	0.26		0.87	0.36		0.59	0.55	
Control Delay	21.0	39.9		22.3	22.0		39.3	24.4		25.7	35.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.0	39.9		22.3	22.0		39.3	24.4		25.7	35.9	
LOS	C	D		C	C		D	C		C	D	
Approach Delay		38.4			22.1			31.3			32.8	
Approach LOS		D			C			C			C	
90th %ile Green (s)	10.2	31.1		10.9	31.8		21.0	44.5		8.5	32.0	
90th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	8.9	32.5		9.5	33.1		21.0	44.5		8.5	32.0	
70th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	8.0	33.5		8.5	34.0		21.0	44.5		8.5	32.0	
50th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.1	34.5		7.5	34.9		21.0	44.5		8.5	32.0	
30th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	0.0	46.0		0.0	46.0		18.3	44.5		8.5	34.7	
10th %ile Term Code	Skip	MaxR		Skip	MaxR		Gap	Coord		Max	Coord	
Stops (vph)	28	484		33	129		217	271		147	353	
Fuel Used(gal)	1	10		3	12		7	7		4	11	
CO Emissions (g/hr)	41	726		194	857		484	482		314	787	
NOx Emissions (g/hr)	8	141		38	167		94	94		61	153	
VOC Emissions (g/hr)	10	168		45	199		112	112		73	182	
Dilemma Vehicles (#)	0	24		0	11		0	18		0	22	
Queue Length 50th (ft)	22	213		27	55		183	117		68	143	
Queue Length 95th (ft)	47	290		55	94		#317	161		134	225	
Internal Link Dist (ft)		462			2973			838			1475	
Turn Bay Length (ft)	85			140			140			150		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	478	924		372	1052		464	1292		385	931	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.67		0.17	0.26		0.86	0.36		0.59	0.55	

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 5 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 32.3 Intersection LOS: C
Intersection Capacity Utilization 93.7% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 1067: S Ashland & Vermont St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	491	115	10	376	66	94	259	9	153	469	141
Future Volume (vph)	86	491	115	10	376	66	94	259	9	153	469	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	11	12	11	12	12	11	11	12
Storage Length (ft)	0		0	0		0	135		0	130		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			100			105		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	0.99	
Frt		0.975			0.978			0.995			0.965	
Flt Protected		0.994			0.999		0.950			0.950		
Satd. Flow (prot)	0	3138	0	0	3143	0	1559	3337	0	1637	3082	0
Flt Permitted		0.795			0.933		0.313			0.552		
Satd. Flow (perm)	0	2509	0	0	2935	0	512	3337	0	948	3082	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			23			4			46	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5379			1323			450			5338	
Travel Time (s)		122.3			30.1			10.2			121.3	
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Adj. Flow (vph)	92	528	124	11	404	71	101	278	10	165	504	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	744	0	0	486	0	101	288	0	165	656	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.07	1.07	1.12	1.07	1.12	1.07	1.07	1.12	1.12	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	15.0		15.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	8.0	37.0		21.0	21.0		8.0	31.0		8.0	21.0	
Total Split (s)	10.0	40.0		30.0	30.0		15.0	33.0		12.0	30.0	
Total Split (%)	11.8%	47.1%		35.3%	35.3%		17.6%	38.8%		14.1%	35.3%	
Maximum Green (s)	6.5	34.0		24.0	24.0		11.5	27.0		8.5	24.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Time To Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		9.0						7.0				
Flash Dont Walk (s)		22.0						18.0				
Pedestrian Calls (#/hr)		2						4				
Act Effct Green (s)		29.1			29.1		34.1	22.8		33.7	24.8	
Actuated g/C Ratio		0.38			0.38		0.45	0.30		0.44	0.33	
v/c Ratio		0.76			0.43		0.29	0.29		0.33	0.63	
Control Delay		25.6			18.0		14.0	21.6		14.2	25.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		25.6			18.0		14.0	21.6		14.2	25.6	
LOS		C			B		B	C		B	C	
Approach Delay		25.6			18.0			19.6			23.3	
Approach LOS		C			B			B			C	
90th %ile Green (s)	0.0	34.0		34.0	34.0		11.5	27.0		8.5	24.0	
90th %ile Term Code	Skip	Max		Hold	Hold		Max	Hold		Max	Max	
70th %ile Green (s)	0.0	34.0		34.0	34.0		10.3	25.8		8.5	24.0	
70th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Max	Max	
50th %ile Green (s)	0.0	31.9		31.9	31.9		9.0	24.5		8.5	24.0	
50th %ile Term Code	Skip	Gap		Hold	Hold		Gap	Hold		Max	Max	
30th %ile Green (s)	0.0	27.2		27.2	27.2		7.5	22.7		8.5	23.7	
30th %ile Term Code	Skip	Gap		Hold	Hold		Gap	Hold		Max	Gap	
10th %ile Green (s)	0.0	19.4		19.4	19.4		0.0	15.0		6.6	25.1	
10th %ile Term Code	Skip	Gap		Hold	Hold		Skip	Min		Gap	Hold	
Stops (vph)		544			293		48	187		85	469	
Fuel Used(gal)		36			8		1	3		7	31	
CO Emissions (g/hr)		2491			555		60	220		509	2178	
NOx Emissions (g/hr)		485			108		12	43		99	424	
VOC Emissions (g/hr)		577			129		14	51		118	505	
Dilemma Vehicles (#)		0			0		0	0		0	0	
Queue Length 50th (ft)		156			85		27	56		45	141	
Queue Length 95th (ft)		234			131		56	91		85	216	
Internal Link Dist (ft)		5299			1243			370			5258	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)							135			130		
Base Capacity (vph)		1167			1184		410	1216		500	1039	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.64			0.41		0.25	0.24		0.33	0.63	

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 75.9	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 22.4	Intersection LOS: C
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	
90th %ile Actuated Cycle: 85	
70th %ile Actuated Cycle: 83.8	
50th %ile Actuated Cycle: 80.4	
30th %ile Actuated Cycle: 73.9	
10th %ile Actuated Cycle: 56.5	

Splits and Phases: 1068: Halsted Street & 127th Street

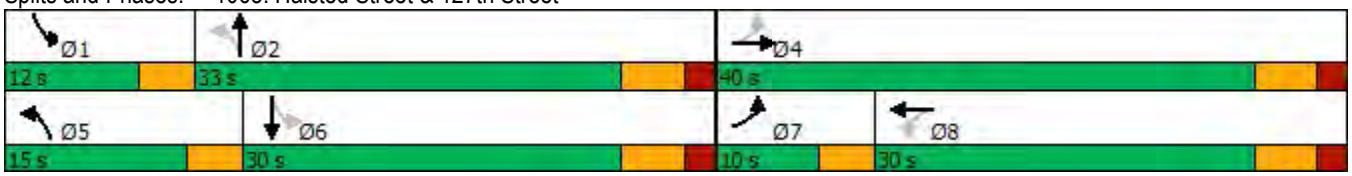

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	198	136	84	129	22	64	409	71	27	537	54
Future Volume (vph)	67	198	136	84	129	22	64	409	71	27	537	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	60		0	55		0	105		0	90		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			55			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99		0.99	1.00		1.00	1.00		1.00	1.00	
Frt		0.939			0.978			0.978			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	1886	0	1613	1991	0	1676	3222	0	1437	3270	0
Flt Permitted	0.653			0.423			0.370			0.442		
Satd. Flow (perm)	1173	1886	0	712	1991	0	652	3222	0	668	3270	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		60			15			41			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2456			1385			1856			450	
Travel Time (s)		55.8			31.5			42.2			10.2	
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	4					2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Adj. Flow (vph)	73	215	148	91	140	24	70	445	77	29	584	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	363	0	91	164	0	70	522	0	29	643	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	19.0	19.0		19.0	19.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
v/c Ratio	0.17	0.49		0.35	0.22		0.23	0.34		0.09	0.41	
Control Delay	15.1	15.8		23.4	18.2		12.4	10.4		10.3	11.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	15.1	15.8		23.4	18.2		12.4	10.4		10.3	11.6	
LOS	B	B		C	B		B	B		B	B	
Approach Delay		15.7			20.1			10.7			11.6	
Approach LOS		B			C			B			B	
Stops (vph)	45	208		81	135		38	255		17	347	
Fuel Used(gal)	3	17		2	3		1	9		0	5	
CO Emissions (g/hr)	233	1158		123	205		91	655		17	377	
NOx Emissions (g/hr)	45	225		24	40		18	127		3	73	
VOC Emissions (g/hr)	54	268		28	48		21	152		4	87	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	19	88		38	65		15	57		6	78	
Queue Length 95th (ft)	45	158		m45	m74		40	88		19	115	
Internal Link Dist (ft)		2376			1305			1776			370	
Turn Bay Length (ft)	60			55			105			90		
Base Capacity (vph)	433	734		262	744		310	1558		318	1571	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.17	0.49		0.35	0.22		0.23	0.34		0.09	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 57 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 13.3 Intersection LOS: B
Intersection Capacity Utilization 71.7% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1069: Halsted Street & Vermont St

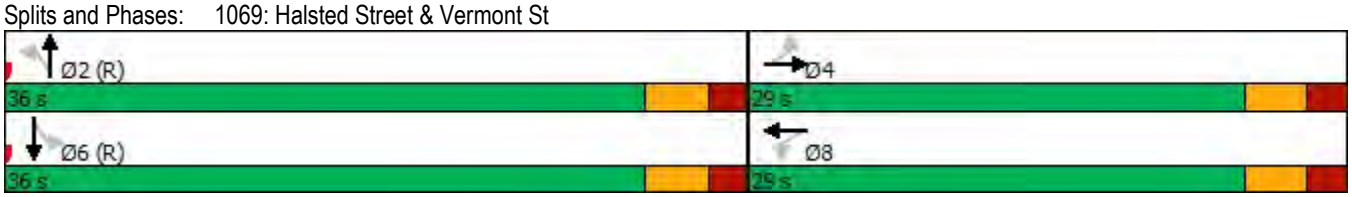

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	628	198	479	16	3	9	8	41	8	0	3
Future Volume (vph)	2	628	198	479	16	3	9	8	41	8	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	10	10	12	12	16	12	12	16	12
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.99			0.98	
Frt				0.996				0.909			0.932	
Flt Protected				0.986				0.991			0.976	
Satd. Flow (prot)	0	3160	0	3089	0	0	0	1817	0	0	1819	0
Flt Permitted		0.953		0.552				0.959			0.898	
Satd. Flow (perm)	0	3012	0	1729	0	0	0	1755	0	0	1672	0
Right Turn on Red					No				No			
Satd. Flow (RTOR)												
Link Speed (mph)		30		30				30			30	
Link Distance (ft)		1323		3930				1256			658	
Travel Time (s)		30.1		89.3				28.5			15.0	
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)			1						2			2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	698	220	532	18	3	10	9	46	9	0	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	700	0	770	0	0	0	68	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right
Median Width(ft)		0		0				0			0	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.17	1.17	1.07	1.07	0.91	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		15		9	15	15		9	15		9
Turn Type	Perm	NA	custom	NA		Perm	Perm	NA		Perm	NA	
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7			2	2			6		
Minimum Split (s)	23.0	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0	
Total Split (s)	23.0	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0	
Total Split (%)	35.4%	35.4%	13.8%	49.2%		27.7%	27.7%	27.7%		27.7%	27.7%	
Maximum Green (s)	18.0	18.0	6.0	27.0		14.0	14.0	14.0		14.0	14.0	
Yellow Time (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	0.0	2.0		1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0				0.0			0.0	
Total Lost Time (s)		5.0		5.0				4.0			4.0	
Lead/Lag	Lag	Lag	Lead									
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		18.0		5.0	5.0	5.0				
Flash Dont Walk (s)	9.0	9.0		9.0		9.0	9.0	9.0				
Pedestrian Calls (#/hr)	0	0		0		0	0	0				
Act Effct Green (s)		18.0		27.0				14.0			14.0	

Lane Group	SBR2	NEL	NER
Lane Configurations			
Traffic Volume (vph)	5	3	242
Future Volume (vph)	5	3	242
Ideal Flow (vphpl)	1800	1800	1800
Lane Width (ft)	12	12	12
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt		0.866	
Flt Protected		0.999	
Satd. Flow (prot)	0	1557	0
Flt Permitted		0.999	
Satd. Flow (perm)	0	1557	0
Right Turn on Red	No		
Satd. Flow (RTOR)			
Link Speed (mph)		30	
Link Distance (ft)		1385	
Travel Time (s)		31.5	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	6	3	269
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	272	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Right	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.07	1.07	1.07
Turning Speed (mph)	9	15	9
Turn Type		Prot	
Protected Phases		3	
Permitted Phases			
Minimum Split (s)		15.0	
Total Split (s)		15.0	
Total Split (%)		23.1%	
Maximum Green (s)		10.0	
Yellow Time (s)		3.0	
All-Red Time (s)		2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.0	
Lead/Lag			
Lead-Lag Optimize?			
Walk Time (s)			
Flash Dont Walk (s)			
Pedestrian Calls (#/hr)			
Act Effct Green (s)		10.0	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
v/c Ratio		0.84		1.04dl				0.18			0.05	
Control Delay		33.4		39.0				22.3			20.8	
Queue Delay		0.0		0.0				0.0			0.0	
Total Delay		33.4		39.0				22.3			20.8	
LOS		C		D				C			C	
Approach Delay		33.4		39.0				22.3			20.8	
Approach LOS		C		D				C			C	
Stops (vph)		545		529				49			15	
Fuel Used(gal)		14		30				1			0	
CO Emissions (g/hr)		965		2074				80			16	
NOx Emissions (g/hr)		188		403				16			3	
VOC Emissions (g/hr)		224		481				19			4	
Dilemma Vehicles (#)		0		0				0			0	
Queue Length 50th (ft)		136		113				22			6	
Queue Length 95th (ft)		#225		#224				52			20	
Internal Link Dist (ft)		1243		3850				1176			578	
Turn Bay Length (ft)												
Base Capacity (vph)		834		801				378			360	
Starvation Cap Reductn		0		0				0			0	
Spillback Cap Reductn		0		0				0			0	
Storage Cap Reductn		0		0				0			0	
Reduced v/c Ratio		0.84		0.96				0.18			0.05	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 49.0 Intersection LOS: D
Intersection Capacity Utilization 84.4% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1070: S Wallance St & 127th Street

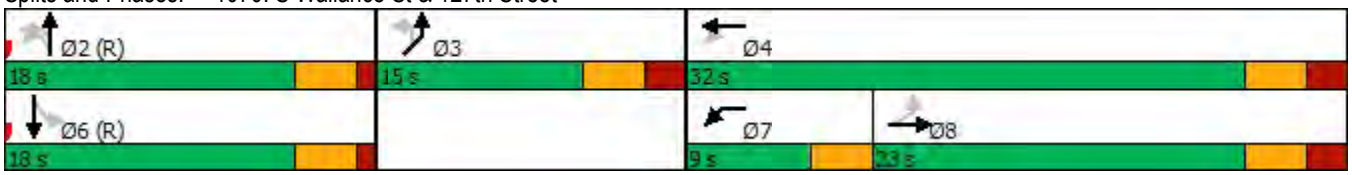

Lane Group	SBR2	NEL	NER
Actuated g/C Ratio		0.15	
v/c Ratio		1.14	
Control Delay		126.0	
Queue Delay		0.0	
Total Delay		126.0	
LOS		F	
Approach Delay		126.0	
Approach LOS		F	
Stops (vph)		183	
Fuel Used(gal)		10	
CO Emissions (g/hr)		695	
NOx Emissions (g/hr)		135	
VOC Emissions (g/hr)		161	
Dilemma Vehicles (#)		0	
Queue Length 50th (ft)		~122	
Queue Length 95th (ft)		#256	
Internal Link Dist (ft)		1305	
Turn Bay Length (ft)			
Base Capacity (vph)		239	
Starvation Cap Reductn		0	
Spillback Cap Reductn		0	
Storage Cap Reductn		0	
Reduced v/c Ratio		1.14	

Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	230	689	513	57	74	180
Future Volume (vph)	230	689	513	57	74	180
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	150
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.985			0.850
Flt Protected		0.988			0.950	
Satd. Flow (prot)	0	3062	3053	0	1550	1386
Flt Permitted		0.665			0.950	
Satd. Flow (perm)	0	2061	3053	0	1550	1386
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			34			194
Link Speed (mph)		30	20		30	
Link Distance (ft)		3930	637		2686	
Travel Time (s)		89.3	21.7		61.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	247	741	552	61	80	194
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	988	613	0	80	194
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (%)	67.7%	67.7%	67.7%		32.3%	32.3%
Maximum Green (s)	40.0	40.0	40.0		17.0	17.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			30.0			
Flash Dont Walk (s)			10.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		40.0	40.0		17.0	17.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.62	0.62		0.26	0.26
v/c Ratio		0.78	0.32		0.20	0.38
Control Delay		15.1	9.2		21.6	7.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		15.1	9.2		21.6	7.4
LOS		B	A		C	A
Approach Delay		15.1	9.2		11.6	
Approach LOS		B	A		B	
Stops (vph)		878	280		50	49
Fuel Used(gal)		36	5		4	8
CO Emissions (g/hr)		2505	361		258	563
NOx Emissions (g/hr)		487	70		50	110
VOC Emissions (g/hr)		581	84		60	131
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		224	72		25	1
Queue Length 95th (ft)		m255	89		55	49
Internal Link Dist (ft)		3850	557		2606	
Turn Bay Length (ft)						150
Base Capacity (vph)		1268	1891		405	505
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.78	0.32		0.20	0.38

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 43 (66%), Referenced to phase 2: and 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1071: 127th Street & State Street

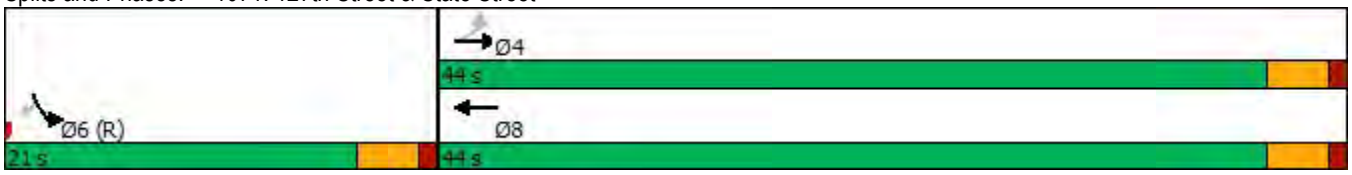

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	70	693	490	136	239	80
Future Volume (vph)	70	693	490	136	239	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			0.99
Frt			0.967			0.850
Flt Protected		0.995			0.950	
Satd. Flow (prot)	0	3117	2961	0	1506	1360
Flt Permitted		0.834			0.950	
Satd. Flow (perm)	0	2612	2961	0	1506	1343
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			82			63
Link Speed (mph)		30	30		30	
Link Distance (ft)		637	664		6686	
Travel Time (s)		14.5	15.1		152.0	
Confl. Peds. (#/hr)	2			2		1
Confl. Bikes (#/hr)	1					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Adj. Flow (vph)	76	753	533	148	260	87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	829	681	0	260	87
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	38.0	38.0	38.0		27.0	27.0
Total Split (s)	38.0	38.0	38.0		27.0	27.0
Total Split (%)	58.5%	58.5%	58.5%		41.5%	41.5%
Maximum Green (s)	34.0	34.0	34.0		23.0	23.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			21.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)			13.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
v/c Ratio		0.61	0.43		0.49	0.17
Control Delay		13.4	7.4		24.2	11.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		13.4	7.4		24.2	11.6
LOS		B	A		C	B
Approach Delay		13.4	7.4		21.0	
Approach LOS		B	A		C	
Stops (vph)		363	367		188	46
Fuel Used(gal)		8	16		17	5
CO Emissions (g/hr)		550	1097		1200	381
NOx Emissions (g/hr)		107	213		234	74
VOC Emissions (g/hr)		127	254		278	88
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		91	31		93	4
Queue Length 95th (ft)		149	84		m118	m10
Internal Link Dist (ft)		557	584		6606	
Turn Bay Length (ft)						30
Base Capacity (vph)		1366	1587		532	515
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.61	0.43		0.49	0.17

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 35 (54%), Referenced to phase 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 85.8%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1072: 127th Street & Michigan Avenue

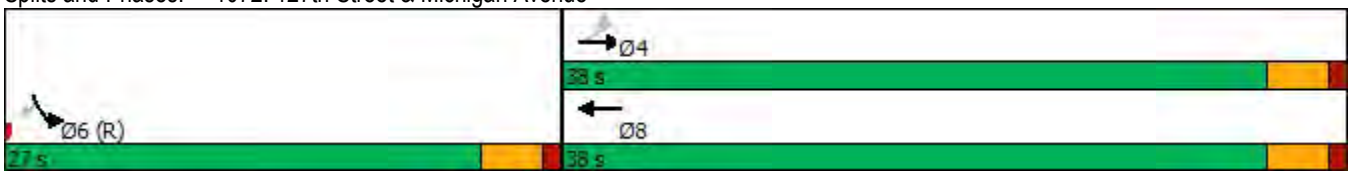

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	562	218	104	504	158	45
Future Volume (vph)	562	218	104	504	158	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	12	12	10	10
Storage Length (ft)		100	105		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor						0.99
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1706	1450	1676	3288	1492	1428
Flt Permitted			0.253		0.950	
Satd. Flow (perm)	1706	1450	446	3288	1492	1410
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						49
Link Speed (mph)	30			35	30	
Link Distance (ft)	163			5343	2671	
Travel Time (s)	3.7			104.1	60.7	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Adj. Flow (vph)	618	240	114	554	174	49
Shared Lane Traffic (%)						
Lane Group Flow (vph)	618	240	114	554	174	49
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.12	1.12	1.07	1.07	1.17	1.17
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm
Protected Phases	4	2		8	2	
Permitted Phases		4	8			2
Minimum Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (%)	55.4%	44.6%	55.4%	55.4%	44.6%	44.6%
Maximum Green (s)	31.0	24.0	31.0	31.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	17.0	5.0			5.0	5.0
Flash Dont Walk (s)	14.0	19.0			19.0	19.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Pedestrian Calls (#/hr)	0	0			0	0
Act Effct Green (s)	31.0	65.0	31.0	31.0	24.0	24.0
Actuated g/C Ratio	0.48	1.00	0.48	0.48	0.37	0.37
v/c Ratio	0.76	0.17	0.54	0.35	0.32	0.09
Control Delay	24.9	0.2	23.8	11.5	16.7	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	0.2	23.8	11.5	16.7	5.1
LOS	C	A	C	B	B	A
Approach Delay	18.0			13.6	14.1	
Approach LOS	B			B	B	
Stops (vph)	465	0	79	296	109	10
Fuel Used(gal)	17	4	5	23	4	1
CO Emissions (g/hr)	1176	310	357	1597	310	73
NOx Emissions (g/hr)	229	60	69	311	60	14
VOC Emissions (g/hr)	273	72	83	370	72	17
Dilemma Vehicles (#)	0	0	0	39	0	0
Queue Length 50th (ft)	224	0	30	67	48	0
Queue Length 95th (ft)	#342	0	#97	100	92	19
Internal Link Dist (ft)	83			5263	2591	
Turn Bay Length (ft)		100	105			
Base Capacity (vph)	813	1450	212	1568	550	551
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.17	0.54	0.35	0.32	0.09

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 15.8 Intersection LOS: B
Intersection Capacity Utilization 89.6% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1073: Indiana Ave & 130th Street

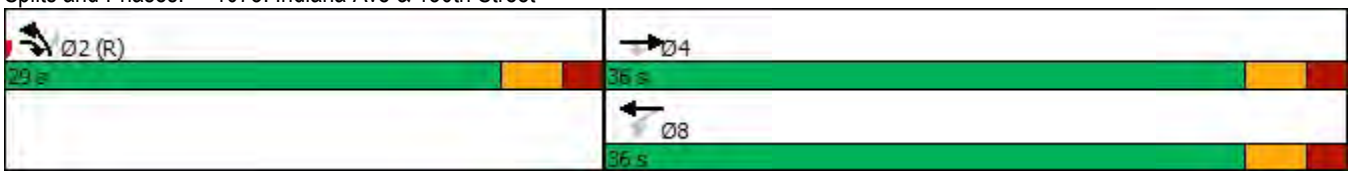

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	462	0	1	498	34	3	2	27	156	0	103
Future Volume (vph)	37	462	0	1	498	34	3	2	27	156	0	103
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	9	12	12	12	11	15	11
Storage Length (ft)	0		30	0		50	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00	0.80		0.96			0.98	
Frt						0.850		0.884			0.946	
Flt Protected		0.996						0.996			0.971	
Satd. Flow (prot)	0	3150	0	0	1663	1337	0	1505	0	0	1730	0
Flt Permitted		0.884						0.983			0.845	
Satd. Flow (perm)	0	2778	0	0	1663	1071	0	1484	0	0	1498	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						64		30			64	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			105			169			1380	
Travel Time (s)		5.2			2.4			3.8			31.4	
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1			1		1						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Adj. Flow (vph)	41	513	0	1	553	38	3	2	30	173	0	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	554	0	0	554	38	0	35	0	0	287	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.07	1.07	1.17	1.22	1.07	1.07	1.07	1.12	0.95	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	3 8			2		1	6	
Permitted Phases	4			3 8	3	3 8	2	2		6		
Minimum Split (s)	16.0	16.0		18.0			12.0	12.0		20.0	32.0	
Total Split (s)	35.0	35.0		18.0			12.0	12.0		20.0	32.0	
Total Split (%)	41.2%	41.2%		21.2%			14.1%	14.1%		23.5%	37.6%	
Maximum Green (s)	31.0	31.0		14.0			9.0	9.0		15.0	27.0	
Yellow Time (s)	3.0	3.0		3.0			3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0			0.0	0.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						3.0			5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?												
Walk Time (s)				2.0							14.0	

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Minimum Split (s)	35.0
Total Split (s)	35.0
Total Split (%)	41%
Maximum Green (s)	31.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	18.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)				12.0							13.0	
Pedestrian Calls (#/hr)				0							0	
Act Effct Green (s)		31.0			49.0	49.0		9.0			27.0	
Actuated g/C Ratio		0.36			0.58	0.58		0.11			0.32	
v/c Ratio		0.55			0.58	0.06		0.19			0.51	
Control Delay		23.9			5.4	0.2		17.9			22.2	
Queue Delay		0.3			44.5	4.8		0.0			0.0	
Total Delay		24.2			49.9	5.0		17.9			22.2	
LOS		C			D	A		B			C	
Approach Delay		24.2			47.0			17.9			22.2	
Approach LOS		C			D			B			C	
Stops (vph)		382			61	0		14			159	
Fuel Used(gal)		6			1	0		0			5	
CO Emissions (g/hr)		451			90	2		16			337	
NOx Emissions (g/hr)		88			18	0		3			66	
VOC Emissions (g/hr)		105			21	0		4			78	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		121			29	1		2			93	
Queue Length 95th (ft)		172			m27	m1		29			167	
Internal Link Dist (ft)		148			25			89			1300	
Turn Bay Length (ft)						50						
Base Capacity (vph)		1013			958	644		183			560	
Starvation Cap Reductn		0			443	558		0			0	
Spillback Cap Reductn		102			0	0		0			2	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.61			1.08	0.44		0.19			0.51	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 32.9 Intersection LOS: C
Intersection Capacity Utilization 73.8% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1955: 115th Street & Cottage Grove Avenue

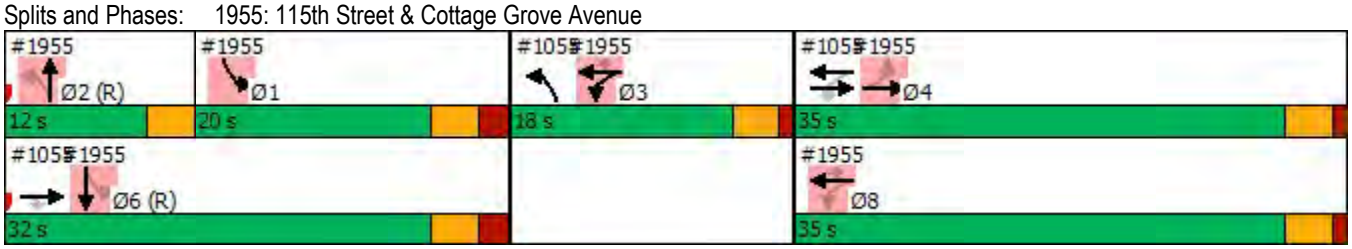

Lane Group	Ø8
Flash Dont Walk (s)	13.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCS7 Freeway Diverge Report

Project Information

Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB 130th Street Entrance Ramp to EB I-94	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Deceleration Length (LA),ft	1610	310
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	599	248
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	5.50	7.60
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.948	0.929
Flow Rate (vi),pc/h	702	297
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.16	0.15

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.390
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	43.8
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	702	Ramp Junction Speed (S), mi/h	43.8
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	8.0
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	7.5

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	750	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	119	288	0	232
Peak Hour Factor (PHF)	0.90	0.90	0.90	0.90
Total Trucks, %	5.50	15.40	0.00	7.10
Heavy Vehicle Adjustment Factor (f_{HV})	0.948	0.867	1.000	0.934
Flow Rate (v_i), pc/h	139	369	0	276
Weaving Flow Rate (v_W), pc/h	645	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	139	Density-Based Capacity (c_{IWL}), pc/h/ln		1352
Total Flow Rate (v), pc/h	784	Demand Flow-Based Capacity (c_{IW}), pc/h		2916
Volume Ratio (VR)	0.823	Weaving Segment Capacity (c_W), veh/h		2447
Minimum Lane Change Rate (LC_{MIN}), lc/h	645	Adjusted Weaving Area Capacity, pc/h		2704
Maximum Weaving Length (L_{MAX}), ft	11839	Volume-to-Capacity Ratio (v/c)		0.29

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	7	Average Weaving Speed (S_W), mi/h	39.5
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	50	Average Non-Weaving Speed (S_{NW}), mi/h	38.5
Weaving Lane Change Rate (LC_W), lc/h	695	Average Speed (S), mi/h	39.3
Weaving Lane Change Rate (LC_{All}), lc/h	745	Density (D), pc/mi/ln	10.0
Weaving Intensity Factor (W)	0.225	Level of Service (LOS)	A

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB I-94 Exit Ramp to EB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	940	325
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	407	425
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	14.00	40.30
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.877	0.713
Flow Rate (v_i),pc/h	516	662
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.26	0.33

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.308
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	45.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	516	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1178	Average Density (D), pc/mi/ln	13.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	12.4

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HCS7 Freeway Diverge Report

Project Information

Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB 130th Street Entrance Ramp to WB I-94	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1885	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	809	302
Peak Hour Factor (PHF)	0.95	0.90
Total Trucks, %	30.20	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.768	0.901
Flow Rate (vi),pc/h	1109	372
Capacity (c), pc/h	4500	2100
Volume-to-Capacity Ratio (v/c)	0.25	0.18

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.331
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	44.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	1109	Ramp Junction Speed (S), mi/h	44.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	12.6
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	9.1

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	570	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	188	335	0	319
Peak Hour Factor (PHF)	0.95	0.90	0.90	0.90
Total Trucks, %	30.20	11.70	0.00	43.60
Heavy Vehicle Adjustment Factor (f_{HV})	0.768	0.895	1.000	0.696
Flow Rate (v_i), pc/h	258	416	0	509
Weaving Flow Rate (v_W), pc/h	925	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	258	Density-Based Capacity (c_{IWL}), pc/h/ln		1379
Total Flow Rate (v), pc/h	1183	Demand Flow-Based Capacity (c_{IW}), pc/h		3069
Volume Ratio (VR)	0.782	Weaving Segment Capacity (c_W), veh/h		2155
Minimum Lane Change Rate (LC_{MIN}), lc/h	925	Adjusted Weaving Area Capacity, pc/h		2758
Maximum Weaving Length (L_{MAX}), ft	11304	Volume-to-Capacity Ratio (v/c)		0.43

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	10	Average Weaving Speed (S_W), mi/h	37.4
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	0	Average Non-Weaving Speed (S_{NW}), mi/h	35.5
Weaving Lane Change Rate (LC_W), lc/h	964	Average Speed (S), mi/h	37.0
Weaving Lane Change Rate (LC_{All}), lc/h	964	Density (D), pc/mi/ln	16.0
Weaving Intensity Factor (W)	0.342	Level of Service (LOS)	B

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB I-94 Exit Ramp to WB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	850	340
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	523	264
Peak Hour Factor (PHF)	0.95	0.90
Total Trucks, %	7.90	4.70
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.927	0.955
Flow Rate (vi),pc/h	594	307
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.20	0.15

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.303
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	45.0
Flow in Lanes 1 and 2 (v12), pc/h	594	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	901	Average Density (D), pc/mi/ln	10.2
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	10.3

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HCS7 Freeway Diverge Report

Project Information

Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB 130th Street Entrance Ramp to EB I-94	Unit	United States Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Deceleration Length (LA),ft	1610	310
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	944	452
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	1.60	3.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.984	0.971
Flow Rate (vi),pc/h	1066	517
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.24	0.26

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.410
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	43.8
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	1066	Ramp Junction Speed (S), mi/h	43.8
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	12.2
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	10.6

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	750	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	222	377	0	270
Peak Hour Factor (PHF)	0.90	0.95	0.90	0.90
Total Trucks, %	1.60	2.70	0.00	3.20
Heavy Vehicle Adjustment Factor (f_{HV})	0.984	0.974	1.000	0.969
Flow Rate (v_i), pc/h	251	407	0	310
Weaving Flow Rate (v_W), pc/h	717	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	251	Density-Based Capacity (c_{IWL}), pc/h/ln		1433
Total Flow Rate (v), pc/h	968	Demand Flow-Based Capacity (c_{IW}), pc/h		3239
Volume Ratio (VR)	0.741	Weaving Segment Capacity (c_W), veh/h		2794
Minimum Lane Change Rate (LC_{MIN}), lc/h	717	Adjusted Weaving Area Capacity, pc/h		2866
Maximum Weaving Length (L_{MAX}), ft	10777	Volume-to-Capacity Ratio (v/c)		0.34

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	13	Average Weaving Speed (S_W), mi/h	39.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	73	Average Non-Weaving Speed (S_{NW}), mi/h	37.5
Weaving Lane Change Rate (LC_W), lc/h	767	Average Speed (S), mi/h	38.7
Weaving Lane Change Rate (LC_{All}), lc/h	840	Density (D), pc/mi/ln	12.5
Weaving Intensity Factor (W)	0.247	Level of Service (LOS)	B

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB I-94 Exit Ramp to EB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	940	325
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	599	601
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	1.30	6.20
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.987	0.942
Flow Rate (vi),pc/h	674	709
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.31	0.35

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.311
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	45.0
Flow in Lanes 1 and 2 (v12), pc/h	674	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	1383	Average Density (D), pc/mi/ln	15.7
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	14.0

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HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB 130th Street Entrance Ramp to WB I-94	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1885	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1146	395
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	9.60	2.50
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.912	0.976
Flow Rate (vi),pc/h	1396	450
Capacity (c), pc/h	4500	2100
Volume-to-Capacity Ratio (v/c)	0.31	0.21

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.338
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	44.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	1396	Ramp Junction Speed (S), mi/h	44.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	15.9
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	11.5

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	570	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	128	297	0	623
Peak Hour Factor (PHF)	0.90	0.90	0.90	0.90
Total Trucks, %	9.60	5.00	0.00	6.70
Heavy Vehicle Adjustment Factor (f_{HV})	0.912	0.952	1.000	0.937
Flow Rate (v_i), pc/h	156	347	0	739
Weaving Flow Rate (v_W), pc/h	1086	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	156	Density-Based Capacity (c_{IWL}), pc/h/ln		1286
Total Flow Rate (v), pc/h	1242	Demand Flow-Based Capacity (c_{IW}), pc/h		2746
Volume Ratio (VR)	0.874	Weaving Segment Capacity (c_W), veh/h		2413
Minimum Lane Change Rate (LC_{MIN}), lc/h	1086	Adjusted Weaving Area Capacity, pc/h		2572
Maximum Weaving Length (L_{MAX}), ft	12515	Volume-to-Capacity Ratio (v/c)		0.48

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	6	Average Weaving Speed (S_W), mi/h	36.6
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	0	Average Non-Weaving Speed (S_{NW}), mi/h	34.2
Weaving Lane Change Rate (LC_W), lc/h	1125	Average Speed (S), mi/h	36.3
Weaving Lane Change Rate (LC_{All}), lc/h	1125	Density (D), pc/mi/ln	17.1
Weaving Intensity Factor (W)	0.386	Level of Service (LOS)	B

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Existing
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB I-94 Exit Ramp to WB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	850	340
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	425	257
Peak Hour Factor (PHF)	0.90	0.95
Total Trucks, %	1.80	2.70
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.982	0.974
Flow Rate (v_i),pc/h	481	278
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.17	0.14

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.302
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	45.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	481	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	759	Average Density (D), pc/mi/ln	8.6
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.2

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Attachment B

2050 No Build Condition

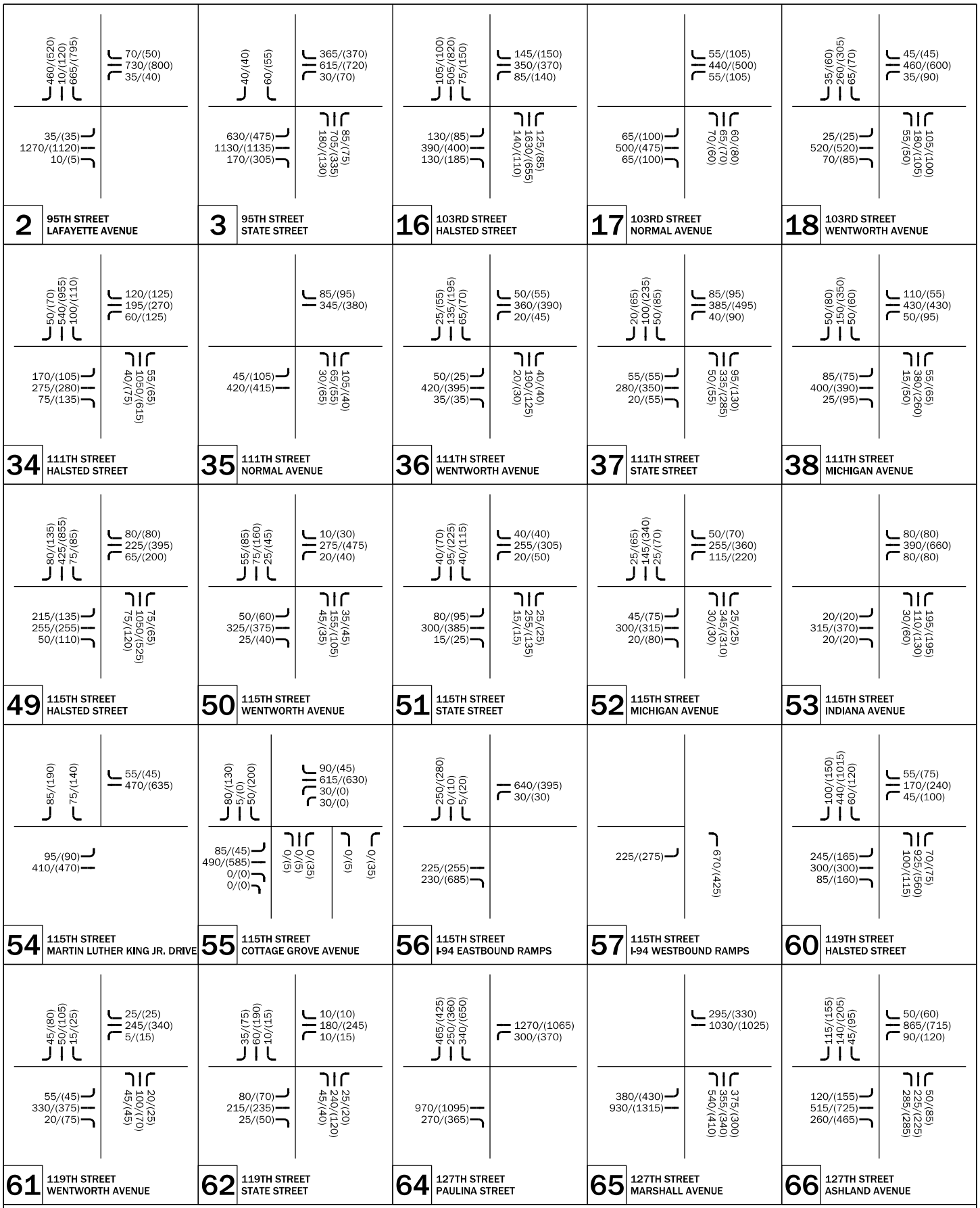

NO-BUILD (2050) INTERSECTION TRAFFIC VOLUMES

PAGE 1 OF 2

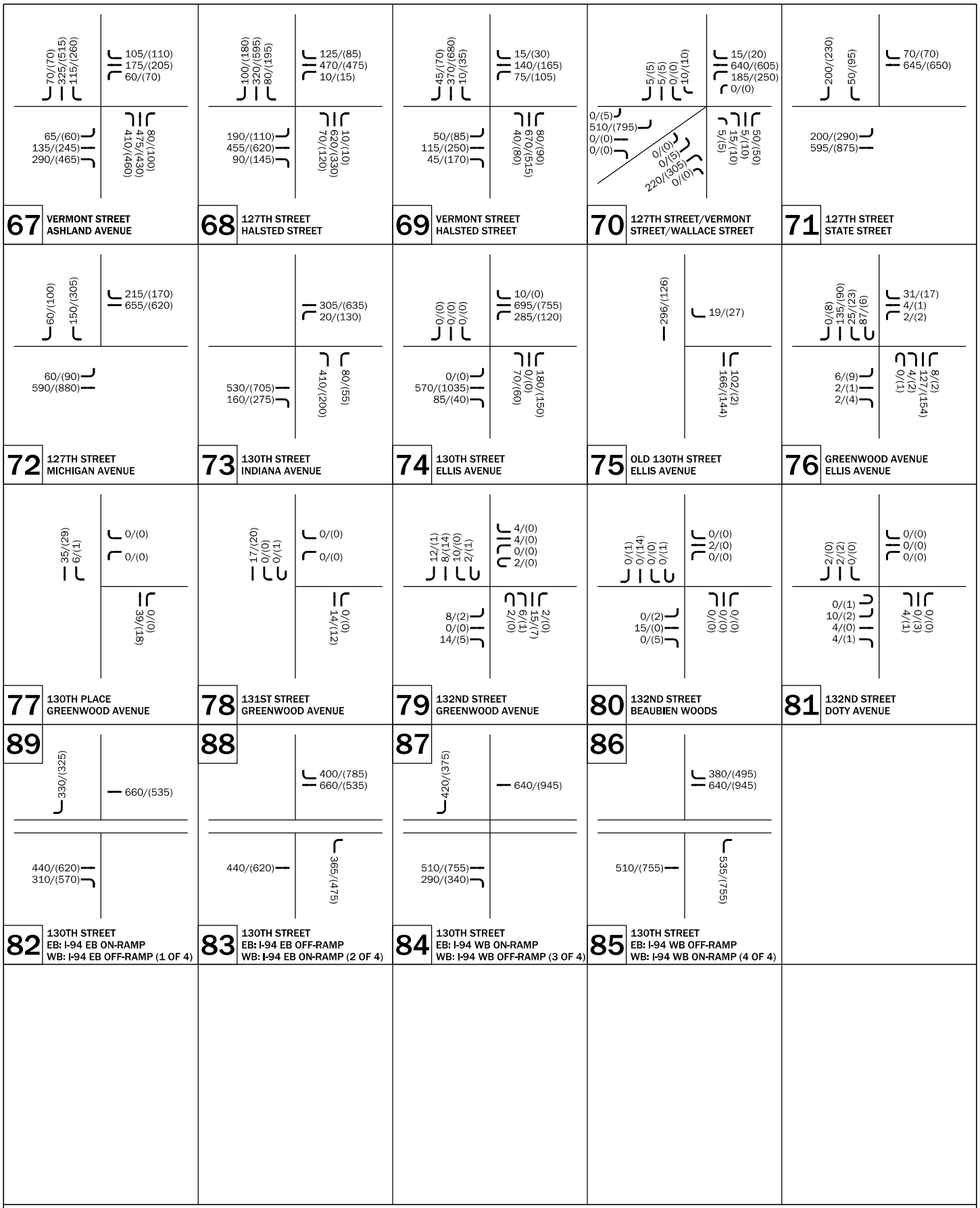

NO-BUILD (2050) INTERSECTION TRAFFIC VOLUMES

PAGE 2 OF 2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	570	85	285	695	10	70	0	180	0	0	0
Future Volume (vph)	0	570	85	285	695	10	70	0	180	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	16	12
Storage Length (ft)	165		165	165		165	0		0	0		0
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	210			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			
Flt Protected				0.950				0.950				
Satd. Flow (prot)	1800	3109	1471	1644	3138	1366	0	1449	1443	0	2040	0
Flt Permitted				0.366				0.757				
Satd. Flow (perm)	1800	3109	1471	633	3138	1366	0	1155	1443	0	2040	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		5340			1172			141			331	
Travel Time (s)		104.0			22.8			3.2			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Adj. Flow (vph)	0	594	89	297	724	10	73	0	188	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	594	89	297	724	10	0	73	188	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	4	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	43.0	43.0	43.0	7.0	43.0	43.0	6.0	6.0	6.0	6.0	6.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	47.0	47.0	47.0	10.0	47.0	47.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	47.0	47.0	47.0	10.0	57.0	57.0	28.0	28.0	28.0	28.0	28.0	
Total Split (%)	55.3%	55.3%	55.3%	11.8%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%	32.9%	
Maximum Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		4.0	4.0		4.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)		46.4	46.4	59.4	58.4	58.4		18.6	18.6			
Actuated g/C Ratio		0.55	0.55	0.70	0.69	0.69		0.22	0.22			
v/c Ratio		0.35	0.11	0.54	0.34	0.01		0.29	0.59			
Control Delay		12.3	11.1	9.9	6.5	5.6		29.6	37.5			
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0			
Total Delay		12.3	11.1	9.9	6.5	5.6		29.6	37.5			
LOS		B	B	A	A	A		C	D			
Approach Delay		12.1			7.5			35.3				
Approach LOS		B			A			D				
90th %ile Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold	
70th %ile Green (s)	43.0	43.0	43.0	9.6	55.6	55.6	21.4	21.4	21.4	21.4	21.4	
70th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
50th %ile Green (s)	43.9	43.9	43.9	11.2	58.1	58.1	18.9	18.9	18.9	18.9	18.9	
50th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
30th %ile Green (s)	48.3	48.3	48.3	9.4	60.7	60.7	16.3	16.3	16.3	16.3	16.3	
30th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
10th %ile Green (s)	54.0	54.0	54.0	7.5	64.5	64.5	12.5	12.5	12.5	12.5	12.5	
10th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
Stops (vph)		310	42	104	269	5		58	161			
Fuel Used(gal)		26	4	4	10	0		1	2			
CO Emissions (g/hr)		1798	265	297	699	11		57	172			
NOx Emissions (g/hr)		350	51	58	136	2		11	33			
VOC Emissions (g/hr)		417	61	69	162	2		13	40			
Dilemma Vehicles (#)		34	0	0	41	0		0	0			
Queue Length 50th (ft)		94	23	50	72	2		33	93			
Queue Length 95th (ft)		134	48	102	122	7		m67	153			
Internal Link Dist (ft)		5260			1092			61			251	
Turn Bay Length (ft)			165	165		165						
Base Capacity (vph)		1698	803	548	2155	938		326	407			
Starvation Cap Reductn		0	0	0	0	0		0	0			
Spillback Cap Reductn		0	0	0	0	0		0	0			
Storage Cap Reductn		0	0	0	0	0		0	0			
Reduced v/c Ratio		0.35	0.11	0.54	0.34	0.01		0.22	0.46			

Intersection Summary	
Area Type:	Other

Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 12.7	Intersection LOS: B
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Ellis Avenue & 130th Street

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	19	166	102	0	296
Future Volume (vph)	0	19	166	102	0	296
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.865	0.943			
Flt Protected						
Satd. Flow (prot)	0	1557	3225	0	0	3420
Flt Permitted						
Satd. Flow (perm)	0	1557	3225	0	0	3420
Link Speed (mph)	30		30			30
Link Distance (ft)	642		174			141
Travel Time (s)	14.6		4.0			3.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	21	184	113	0	329
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	21	297	0	0	329
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	19	166	102	0	296
Future Volume (Veh/h)	0	19	166	102	0	296
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	21	184	113	0	329
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						141
pX, platoon unblocked						
vC, conflicting volume	405	148			297	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	405	148			297	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	579	878			1276	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	21	123	174	164	164
Volume Left	0	0	0	0	0
Volume Right	21	0	113	0	0
cSH	878	1700	1700	1700	1700
Volume to Capacity	0.02	0.07	0.10	0.10	0.10
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	9.2	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.2	0.0		0.0	
Approach LOS	A				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	18.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	2	2	2	4	31	4	127	8	87	25	135
Future Volume (vph)	6	2	2	2	4	31	4	127	8	87	25	135
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.975			0.885			0.992				
Flt Protected		0.969			0.998			0.999				0.978
Satd. Flow (prot)	0	1701	0	0	1590	0	0	1727	0	0	0	1737
Flt Permitted		0.969			0.998			0.999				0.978
Satd. Flow (perm)	0	1701	0	0	1590	0	0	1727	0	0	0	1737
Link Speed (mph)		30			30			30				30
Link Distance (ft)		472			392			265				174
Travel Time (s)		10.7			8.9			6.0				4.0
Confl. Peds. (#/hr)			4	4		1			1	4	1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	25%	0%	8%	1%
Adj. Flow (vph)	7	2	2	2	4	34	4	141	9	97	28	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	0	40	0	0	154	0	0	0	275
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Sign Control		Stop			Stop			Free				Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	1800
Flt Permitted	
Satd. Flow (perm)	1800
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	6	2	2	2	4	31	4	127	8	87	25	135
Future Volume (Veh/h)	6	2	2	2	4	31	4	127	8	87	25	135
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	2	2	2	4	34	4	141	9	0	28	150
Pedestrians		4			1			4				1
Lane Width (ft)		12.0			12.0			12.0				12.0
Walking Speed (ft/s)		4.0			4.0			4.0				4.0
Percent Blockage		0			0			0				0
Right turn flare (veh)												
Median type								None				None
Median storage veh)												
Upstream signal (ft)												315
pX, platoon unblocked	0.99	0.99	0.99	0.99	0.99		0.99			0.00		
vC, conflicting volume	400	369	158	368	364	148	154			0	151	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	385	353	139	351	348	148	135			0	151	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			0.0	4.2	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.3	
p0 queue free %	99	100	100	100	99	96	100			0	98	
cM capacity (veh/h)	531	552	896	581	555	903	1437			0	1393	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total	11	40	154	178	0
Volume Left	7	2	4	28	0
Volume Right	2	34	9	0	0
cSH	578	828	1437	1393	1700
Volume to Capacity	0.02	0.05	0.00	0.02	0.00
Queue Length 95th (ft)	1	4	0	2	0
Control Delay (s)	11.3	9.6	0.2	1.3	0.0
Lane LOS	B	A	A	A	
Approach Delay (s)	11.3	9.6	0.2	1.3	
Approach LOS	B	A			

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	39	0	6	35
Future Volume (vph)	0	0	39	0	6	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						0.992
Satd. Flow (prot)	1765	0	1765	0	0	1751
Flt Permitted						0.992
Satd. Flow (perm)	1765	0	1765	0	0	1751
Link Speed (mph)	30		30			30
Link Distance (ft)	331		199			206
Travel Time (s)	7.5		4.5			4.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	42	0	7	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	42	0	0	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 10.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	39	0	6	35
Future Volume (Veh/h)	0	0	39	0	6	35
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	42	0	7	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	94	42			42	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	94	42			42	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	902	1029			1567	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	42	45
Volume Left	0	0	7
Volume Right	0	0	0
cSH	1700	1700	1567
Volume to Capacity	0.00	0.02	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	1.2
Lane LOS	A		A
Approach Delay (s)	0.0	0.0	1.2
Approach LOS	A		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	10.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	14	0	0	17
Future Volume (vph)	0	0	14	0	0	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1800	0	1800	0	0	1622
Flt Permitted						
Satd. Flow (perm)	1800	0	1800	0	0	1622
Link Speed (mph)	30		30			30
Link Distance (ft)	383		252			706
Travel Time (s)	8.7		5.7			16.0
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	11%
Adj. Flow (vph)	0	0	16	0	0	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	16	0	0	19
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 7.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	14	0	0	17
Future Volume (Veh/h)	0	0	14	0	0	17
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	16	0	0	19
Pedestrians	3		3			
Lane Width (ft)	12.0		12.0			
Walking Speed (ft/s)	4.0		4.0			
Percent Blockage	0		0			
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	41	19			19	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	41	19			19	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	971	1062			1607	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	16	19
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1607
Volume to Capacity	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	7.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	8	0	14	2	0	4	4	2	6	15	2	2
Future Volume (vph)	8	0	14	2	0	4	4	2	6	15	2	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.914				0.946				0.990		
Flt Protected		0.982				0.990				0.984		
Satd. Flow (prot)	0	1616	0	0	0	1686	0	0	0	1637	0	0
Flt Permitted		0.982				0.990				0.984		
Satd. Flow (perm)	0	1616	0	0	0	1686	0	0	0	1637	0	0
Link Speed (mph)		30				30				30		
Link Distance (ft)		303				1025				274		
Travel Time (s)		6.9				23.3				6.2		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%
Adj. Flow (vph)	9	0	16	2	0	4	4	2	7	17	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	0	10	0	0	0	28	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA
Median Width(ft)		0				0				0		
Link Offset(ft)		0				0				0		
Crosswalk Width(ft)		16				16				16		
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	9	15		9	9	15		9	9
Sign Control		Stop				Stop				Free		

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	10	8	12
Future Volume (vph)	10	8	12
Ideal Flow (vphpl)	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00
Frt		0.950	
Flt Protected		0.982	
Satd. Flow (prot)	0	1578	0
Flt Permitted		0.982	
Satd. Flow (perm)	0	1578	0
Link Speed (mph)		30	
Link Distance (ft)		252	
Travel Time (s)		5.7	
Peak Hour Factor	0.90	0.90	0.90
Heavy Vehicles (%)	0%	25%	0%
Adj. Flow (vph)	11	9	13
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	35	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.07	1.07	1.07
Turning Speed (mph)	15		9
Sign Control		Free	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (veh/h)	8	0	14	2	0	4	4	2	6	15	2	2
Future Volume (Veh/h)	8	0	14	2	0	4	4	2	6	15	2	2
Sign Control		Stop				Stop				Free		
Grade		0%				0%				0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	0	16	0	0	4	4	0	7	17	2	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type										None		
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked				0.00				0.00				0.00
vC, conflicting volume	76	70	16	0	86	76	18	0	22			0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	76	70	16	0	86	76	18	0	22			0
tC, single (s)	7.1	6.5	6.2	0.0	7.1	6.5	6.2	0.0	4.1			0.0
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	0.0	3.5	4.0	3.3	0.0	2.2			0.0
p0 queue free %	99	100	99	0	100	100	100	0	100			0
cM capacity (veh/h)	905	815	1070	0	884	809	1066	0	1607			0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	25	8	26	33
Volume Left	9	0	7	11
Volume Right	16	4	2	13
cSH	1004	920	1607	1611
Volume to Capacity	0.02	0.01	0.00	0.01
Queue Length 95th (ft)	2	1	0	1
Control Delay (s)	8.7	8.9	2.0	2.5
Lane LOS	A	A	A	A
Approach Delay (s)	8.7	8.9	2.0	2.5
Approach LOS	A	A		

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (veh/h)	10	8	12
Future Volume (Veh/h)	10	8	12
Sign Control		Free	
Grade		0%	
Peak Hour Factor	0.90	0.90	0.90
Hourly flow rate (vph)	11	9	13
Pedestrians			
Lane Width (ft)			
Walking Speed (ft/s)			
Percent Blockage			
Right turn flare (veh)			
Median type		None	
Median storage veh)			
Upstream signal (ft)			
pX, platoon unblocked			
vC, conflicting volume	19		
vC1, stage 1 conf vol			
vC2, stage 2 conf vol			
vCu, unblocked vol	19		
tC, single (s)	4.1		
tC, 2 stage (s)			
tF (s)	2.2		
p0 queue free %	99		
cM capacity (veh/h)	1611		

Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	15	0	0	2	0	0	0	0	0	0	0
Future Volume (vph)	0	15	0	0	2	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1104	0	0	1800	0	0	1800	0	0	1800	0
Flt Permitted												
Satd. Flow (perm)	0	1104	0	0	1800	0	0	1800	0	0	1800	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1025			255			543			489	
Travel Time (s)		23.3			5.8			12.3			11.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	63%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	15	0	0	2	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	15	0	0	2	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2			17			19	19	2	19	19	17
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2			17			19	19	2	19	19	17
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1634			1613			1000	879	1088	1000	879	1068

Direction, Lane #	EB 1	WB 1	SE 1	NW 1
Volume Total	17	2	0	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1634	1613	1700	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS			A	A
Approach Delay (s)	0.0	0.0	0.0	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	4	4	0	0	0	4	0	0	0	2	2
Future Volume (vph)	10	4	4	0	0	0	4	0	0	0	2	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.972									0.932	
Flt Protected		0.972						0.950				
Satd. Flow (prot)	0	1667	0	0	1765	0	0	1676	0	0	1645	0
Flt Permitted		0.972						0.950				
Satd. Flow (perm)	0	1667	0	0	1765	0	0	1676	0	0	1645	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		275			334			409			294	
Travel Time (s)		6.3			7.6			9.3			6.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	4	4	0	0	0	4	0	0	0	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	0	0	0	4	0	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.5%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	4	4	0	0	0	4	0	0	0	2	2
Future Volume (vph)	10	4	4	0	0	0	4	0	0	0	2	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	4	4	0	0	0	4	0	0	0	2	2

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	19	0	4	4
Volume Left (vph)	11	0	4	0
Volume Right (vph)	4	0	0	2
Hadj (s)	0.02	0.00	0.23	-0.27
Departure Headway (s)	3.9	3.9	4.2	3.7
Degree Utilization, x	0.02	0.00	0.00	0.00
Capacity (veh/h)	905	900	845	968
Control Delay (s)	7.0	6.9	7.2	6.7
Approach Delay (s)	7.0	0.0	7.2	6.7
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.0		
Level of Service	A		
Intersection Capacity Utilization	13.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1270	10	35	730	70	0	0	0	665	10	460
Future Volume (vph)	35	1270	10	35	730	70	0	0	0	665	10	460
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	11
Storage Length (ft)	120		0	180		190	0		0	0		0
Storage Lanes	1		0	0		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor	0.83	1.00		1.00		0.49				0.98		0.97
Frt		0.999				0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	855	4720	0	1710	3138	765	0	1800	0	3100	1392	1409
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	711	4720	0	1706	3138	373	0	1800	0	3032	1392	1361
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		1				101						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		808			328			758			669	
Travel Time (s)		18.4			7.5			17.2			15.2	
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Adj. Flow (vph)	38	1366	11	38	785	75	0	0	0	715	11	495
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	1377	0	38	785	75	0	0	0	715	11	495
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm				Split	NA	pm+ov
Protected Phases	7	4		3	8		5	5		6	6	7
Permitted Phases						8						6
Detector Phase	7	4		3	8	8	5	5		6	6	7
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	4.0	10.0	10.0		4.0	4.0	10.0
Minimum Split (s)	15.0	53.0		10.0	51.0	51.0	15.0	15.0		44.0	44.0	15.0
Total Split (s)	15.0	53.0		13.0	51.0	51.0	20.0	20.0		44.0	44.0	15.0
Total Split (%)	11.5%	40.8%		10.0%	39.2%	39.2%	15.4%	15.4%		33.8%	33.8%	11.5%
Maximum Green (s)	10.0	48.0		9.0	46.0	46.0	15.0	15.0		39.0	39.0	10.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		4.0	5.0	5.0		5.0		5.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None
Walk Time (s)		25.0			19.0	19.0				9.0	9.0	
Flash Dont Walk (s)		23.0			27.0	27.0				30.0	30.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	10.0	71.1		7.9	66.0	66.0				39.0	39.0	49.0
Actuated g/C Ratio	0.08	0.55		0.06	0.51	0.51				0.30	0.30	0.38
v/c Ratio	0.58	0.53		0.37	0.49	0.31				0.77	0.03	0.96
Control Delay	92.1	20.3		52.9	46.9	20.8				47.9	32.5	69.5
Queue Delay	0.0	0.1		0.0	52.7	0.0				5.7	0.0	0.0
Total Delay	92.1	20.4		52.9	99.5	20.8				53.7	32.5	69.5
LOS	F	C		D	F	C				D	C	E
Approach Delay		22.3			91.0						59.9	
Approach LOS		C			F						E	
90th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
90th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
70th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
70th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
50th %ile Green (s)	10.0	68.7		8.3	66.0	66.0	0.0	0.0		39.0	39.0	10.0
50th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
30th %ile Green (s)	10.0	70.0		7.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
30th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
10th %ile Green (s)	10.0	81.0		0.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
10th %ile Term Code	Max	Coord		Skip	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
Stops (vph)	32	794		35	614	44				595	9	513
Fuel Used(gal)	1	18		1	12	1				13	0	12
CO Emissions (g/hr)	74	1241		46	855	50				926	12	821
NOx Emissions (g/hr)	14	241		9	166	10				180	2	160
VOC Emissions (g/hr)	17	288		11	198	12				215	3	190
Dilemma Vehicles (#)	0	0		0	0	0				0	0	0
Queue Length 50th (ft)	32	273		33	314	25				282	7	371

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#86	321		m37	m341	m27				356	22	#631
Internal Link Dist (ft)		728			248			678			589	
Turn Bay Length (ft)	120			180		190						
Base Capacity (vph)	65	2583		118	1593	239				930	417	516
Starvation Cap Reductn	0	0		0	963	0				0	0	0
Spillback Cap Reductn	0	240		0	0	0				162	0	0
Storage Cap Reductn	0	0		0	0	0				0	0	0
Reduced v/c Ratio	0.58	0.59		0.32	1.25	0.31				0.93	0.03	0.96

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 110 (85%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 52.8 Intersection LOS: D
Intersection Capacity Utilization 80.8% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1002: Lafayette Avenue & 95th Street

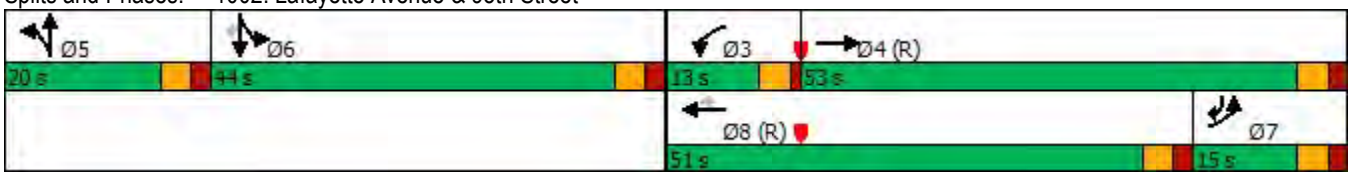

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	630	1130	170	30	615	365	180	705	85	60	0	40
Future Volume (vph)	630	1130	170	30	615	365	180	705	85	60	0	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	11	12	11	12	11	14	12	12	12
Storage Length (ft)	200		0	150		350	300		400	0		0
Storage Lanes	0		0	1		1	1		1	1		1
Taper Length (ft)	25			25			100			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor	0.77	0.99		1.00		0.65		1.00	0.95	0.99		
Frt		0.980				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.990		0.950		
Satd. Flow (prot)	3190	3103	0	1503	2923	1409	0	3190	1600	855	0	765
Flt Permitted	0.950			0.950				0.990		0.950		
Satd. Flow (perm)	2453	3103	0	1497	2923	917	0	3186	1523	846	0	765
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				50			92			134
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		328			972			10386			681	
Travel Time (s)		7.5			18.9			236.0			15.5	
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Adj. Flow (vph)	670	1202	181	32	654	388	191	750	90	64	0	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	670	1383	0	32	654	388	0	941	90	64	0	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.12	1.07	1.12	1.07	1.12	0.99	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1		1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50		50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50		50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Prot		Prot
Protected Phases	7	4		3	8	6	2	2	3	6		6
Permitted Phases						8			2			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8	6	2	2	3	6		6
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	10.0	4.0	4.0	6.0	10.0		10.0
Minimum Split (s)	14.0	54.0		11.0	37.0	15.0	41.0	41.0	11.0	15.0		15.0
Total Split (s)	32.0	54.0		15.0	37.0	20.0	41.0	41.0	15.0	20.0		20.0
Total Split (%)	24.6%	41.5%		11.5%	28.5%	15.4%	31.5%	31.5%	11.5%	15.4%		15.4%
Maximum Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
All-Red Time (s)	1.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	4.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max	None	Max	Max	None	None		None
Walk Time (s)		21.0			7.0		7.0	7.0				
Flash Dont Walk (s)		28.0			25.0		29.0	29.0				
Pedestrian Calls (#/hr)		0			0		0	0				
Act Effct Green (s)	28.0	49.0		10.0	32.0	47.0		36.0	46.0	15.0		15.0
Actuated g/C Ratio	0.22	0.38		0.08	0.25	0.36		0.28	0.35	0.12		0.12
v/c Ratio	0.98	1.17		0.28	0.91	0.92		1.07	0.15	0.65		0.21
Control Delay	66.3	119.7		63.2	65.5	49.0		94.5	5.9	85.3		2.3
Queue Delay	39.7	0.0		0.0	1.6	0.0		17.7	0.0	0.0		0.8
Total Delay	106.0	119.7		63.2	67.1	49.0		112.2	5.9	85.3		3.0
LOS	F	F		E	E	D		F	A	F		A
Approach Delay		115.2			60.4			102.9			52.2	
Approach LOS		F			E			F			D	
90th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
90th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
70th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
70th %ile Term Code	Max	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
50th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
50th %ile Term Code	Max	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
30th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
30th %ile Term Code	Max	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
10th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
10th %ile Term Code	Max	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
Stops (vph)	572	848		29	561	250		792	24	54		0
Fuel Used(gal)	13	40		1	17	8		95	7	2		0
CO Emissions (g/hr)	928	2774		57	1169	565		6649	511	116		16
NOx Emissions (g/hr)	181	540		11	228	110		1294	99	23		3
VOC Emissions (g/hr)	215	643		13	271	131		1541	119	27		4
Dilemma Vehicles (#)	0	0		0	23	0		0	0	0		0
Queue Length 50th (ft)	272	~717		26	283	127		~467	1	52		0
Queue Length 95th (ft)	#407	#881		61	#394	#339		#603	33	#124		0
Internal Link Dist (ft)		248			892			10306			601	
Turn Bay Length (ft)	200			150		350			400			
Base Capacity (vph)	687	1178		115	719	420		883	604	98		206
Starvation Cap Reductn	97	3		0	0	0		0	0	0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	16	0		403	0	0		56
Storage Cap Reductn	0	0		0	0	0		0	0	0		0
Reduced v/c Ratio	1.14	1.18		0.28	0.93	0.92		1.96	0.15	0.65		0.29

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 96.9 Intersection LOS: F
Intersection Capacity Utilization 97.0% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1003: State Street & 95th Street

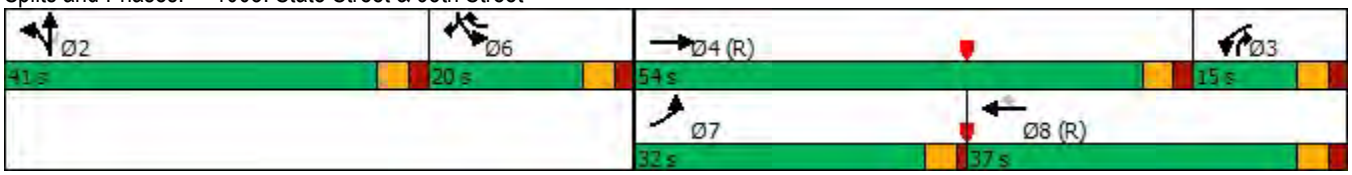

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	390	130	85	350	145	140	1630	125	75	505	105
Future Volume (vph)	130	390	130	85	350	145	140	1630	125	75	505	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	10	10	9	9	10	9
Storage Length (ft)	60		260	55		260	92		130	115		130
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99		0.99	0.98		0.99		0.97	1.00		0.96
Frt		0.962			0.956				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	1872	0	1710	1814	0	1506	3099	1324	1425	2956	1324
Flt Permitted	0.125			0.292			0.350			0.095		
Satd. Flow (perm)	212	1872	0	519	1814	0	549	3099	1283	142	2956	1265
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			20				83			113
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		663			2036			5304			1099	
Travel Time (s)		15.1			46.3			120.5			25.0	
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Adj. Flow (vph)	140	419	140	91	376	156	151	1753	134	81	543	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	559	0	91	532	0	151	1753	134	81	543	113
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.17	1.17	1.22	1.22	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		11.0	11.0		5.0	31.0	31.0	5.0	31.0	31.0
Minimum Split (s)	13.0	47.0		34.0	34.0		8.0	46.0	46.0	8.0	46.0	46.0
Total Split (s)	13.0	47.0		34.0	34.0		12.0	46.0	46.0	12.0	46.0	46.0
Total Split (%)	12.4%	44.8%		32.4%	32.4%		11.4%	43.8%	43.8%	11.4%	43.8%	43.8%
Maximum Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	5.0		5.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		24.0		11.0	11.0			31.0	31.0		31.0	31.0
Flash Dont Walk (s)		18.0		18.0	18.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)	44.0	42.0		29.0	29.0		53.0	44.8	44.8	51.3	42.3	42.3
Actuated g/C Ratio	0.42	0.40		0.28	0.28		0.50	0.43	0.43	0.49	0.40	0.40
v/c Ratio	0.63	0.74		0.64	1.03		0.42	1.33	0.23	0.49	0.46	0.20
Control Delay	33.4	32.8		55.8	85.4		17.3	180.2	9.8	24.5	24.6	4.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	32.8		55.8	85.4		17.3	180.2	9.8	24.5	24.6	4.8
LOS	C	C		E	F		B	F	A	C	C	A
Approach Delay		32.9			81.1			156.9			21.5	
Approach LOS		C			F			F			C	
90th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
90th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
70th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.5	42.5	8.5	42.0	42.0
50th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	43.6	43.6	7.4	42.0	42.0
30th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	10.0	42.0		29.0	29.0		7.5	54.0	54.0	0.0	43.5	43.5
10th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Skip	Coord	Coord
Stops (vph)	81	422		74	409		73	1228	35	39	358	13
Fuel Used(gal)	2	8		3	19		7	134	6	1	9	1
CO Emissions (g/hr)	140	593		190	1309		467	9366	392	86	617	75
NOx Emissions (g/hr)	27	115		37	255		91	1822	76	17	120	15
VOC Emissions (g/hr)	32	138		44	303		108	2171	91	20	143	17
Dilemma Vehicles (#)	0	0		0	0		0	0	0	0	0	0
Queue Length 50th (ft)	59	304		54	~375		51	~831	21	26	138	0
Queue Length 95th (ft)	#116	437		#131	#585		88	#975	62	58	187	34
Internal Link Dist (ft)		583			1956			5224			1019	
Turn Bay Length (ft)	60			55			92		130	115		130
Base Capacity (vph)	222	760		143	515		359	1322	595	180	1190	576
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.74		0.64	1.03		0.42	1.33	0.23	0.45	0.46	0.20

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 86 (82%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 145
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay: 99.9 Intersection LOS: F
Intersection Capacity Utilization 111.1% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1016: Halsted Street & 103rd Street

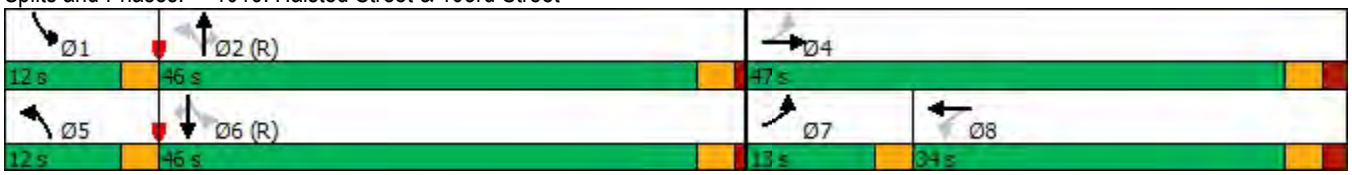

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	500	65	55	440	55	70	65	60	0	0	0
Future Volume (vph)	65	500	65	55	440	55	70	65	60	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	9	9	10	9	9	12	15	12	12	16	12
Storage Length (ft)	60		70	60		80	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	85			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.958				
Flt Protected	0.950			0.950				0.982				
Satd. Flow (prot)	1520	1543	1311	1520	1543	1311	0	1774	0	0	0	0
Flt Permitted	0.438			0.393				0.982				
Satd. Flow (perm)	701	1543	1311	629	1543	1311	0	1774	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			59		32				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2036			1955			343			764	
Travel Time (s)		46.3			44.4			7.8			17.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	70	538	70	59	473	59	75	70	65	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	538	70	59	473	59	0	210	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.22	1.22	1.17	1.22	1.22	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Minimum Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (%)	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%	30.8%	30.8%				
Maximum Green (s)	41.0	41.0	41.0	41.0	41.0	41.0	15.0	15.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		5.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	31.0	31.0	31.0	31.0	31.0	31.0	5.0	5.0				
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0				
Act Effct Green (s)	41.0	41.0	41.0	41.0	41.0	41.0		15.0				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	31%
Maximum Green (s)	15.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	5.0
Flash Dont Walk (s)	10.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.23				
v/c Ratio	0.16	0.55	0.08	0.15	0.49	0.07		0.48				
Control Delay	6.0	9.5	1.7	6.0	8.5	1.7		22.6				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Delay	6.0	9.5	1.7	6.0	8.5	1.7		22.6				
LOS	A	A	A	A	A	A		C				
Approach Delay		8.3			7.6			22.6				
Approach LOS		A			A			C				
Stops (vph)	26	268	7	22	220	7		141				
Fuel Used(gal)	1	10	1	1	9	1		2				
CO Emissions (g/hr)	88	726	76	72	607	63		154				
NOx Emissions (g/hr)	17	141	15	14	118	12		30				
VOC Emissions (g/hr)	20	168	18	17	141	15		36				
Dilemma Vehicles (#)	0	0	0	0	0	0		0				
Queue Length 50th (ft)	10	103	0	8	86	0		60				
Queue Length 95th (ft)	25	179	11	22	146	11		119				
Internal Link Dist (ft)		1956			1875			263			684	
Turn Bay Length (ft)	60		70	60		80						
Base Capacity (vph)	442	973	852	396	973	848		434				
Starvation Cap Reductn	0	0	0	0	0	0		0				
Spillback Cap Reductn	0	0	0	0	0	0		0				
Storage Cap Reductn	0	0	0	0	0	0		0				
Reduced v/c Ratio	0.16	0.55	0.08	0.15	0.49	0.07		0.48				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:Hold, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.55
Intersection Signal Delay: 10.1 Intersection LOS: B
Intersection Capacity Utilization 53.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1017: Normal Avenue & 103rd Street

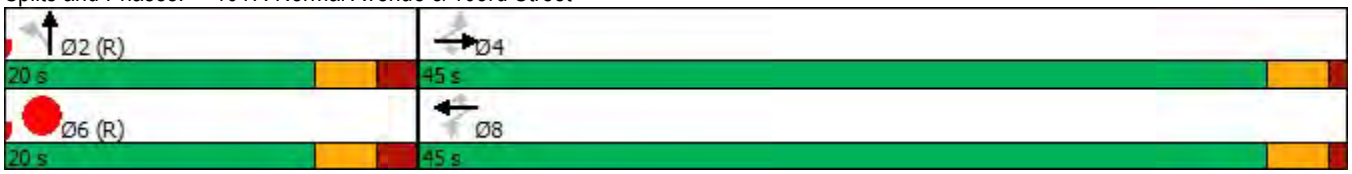

Lane Group	Ø6
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	520	70	35	460	45	55	180	105	65	260	35
Future Volume (vph)	25	520	70	35	460	45	55	180	105	65	260	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	11	10	11	11	12	11	12	12	15	12
Storage Length (ft)	58		200	58		75	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	100			90			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		1.00	1.00			0.99	0.97		0.99	
Frt		0.982			0.987				0.850		0.987	
Flt Protected	0.950			0.950				0.988			0.991	
Satd. Flow (prot)	1596	1605	0	1341	1623	0	0	1685	1515	0	1777	0
Flt Permitted	0.365			0.301				0.820			0.899	
Satd. Flow (perm)	606	1605	0	423	1623	0	0	1383	1473	0	1611	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			11				111		8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1955			4661			5190			1320	
Travel Time (s)		44.4			105.9			118.0			30.0	
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Adj. Flow (vph)	26	547	74	37	484	47	58	189	111	68	274	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	621	0	37	531	0	0	247	111	0	379	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.12	1.12	1.17	1.12	1.12	1.07	1.12	1.07	1.07	0.95	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (%)	62.7%	62.7%		62.7%	62.7%		37.3%	37.3%	37.3%	37.3%	37.3%	
Maximum Green (s)	43.0	43.0		43.0	43.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	33.0	33.0		33.0	33.0		13.0	13.0	13.0	13.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	43.0	43.0		43.0	43.0			24.0	24.0		24.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57			0.32	0.32		0.32	
v/c Ratio	0.07	0.67		0.15	0.57			0.56	0.20		0.73	
Control Delay	7.9	15.3		9.5	12.9			27.0	5.2		32.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	7.9	15.3		9.5	12.9			27.0	5.2		32.0	
LOS	A	B		A	B			C	A		C	
Approach Delay		15.0			12.7			20.2			32.0	
Approach LOS		B			B			C			C	
Stops (vph)	13	390		17	300			192	17		300	
Fuel Used(gal)	0	13		1	21			12	5		8	
CO Emissions (g/hr)	34	908		100	1488			852	322		539	
NOx Emissions (g/hr)	7	177		19	290			166	63		105	
VOC Emissions (g/hr)	8	210		23	345			197	75		125	
Dilemma Vehicles (#)	0	0		0	0			0	0		0	
Queue Length 50th (ft)	5	178		7	139			94	0		151	
Queue Length 95th (ft)	16	293		22	227			166	33		#275	
Internal Link Dist (ft)		1875			4581			5110			1240	
Turn Bay Length (ft)	58			58					100			
Base Capacity (vph)	347	926		242	935			442	546		520	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.07	0.67		0.15	0.57			0.56	0.20		0.73	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 18.6 Intersection LOS: B
Intersection Capacity Utilization 86.8% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1018: Wentworth Avenue & 103rd Street

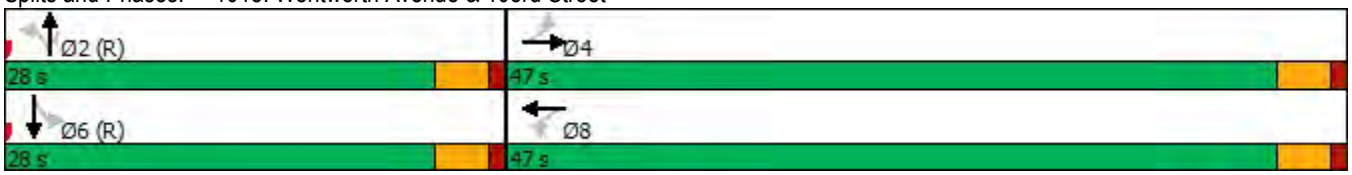

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	275	75	60	195	120	40	1050	55	100	540	50
Future Volume (vph)	170	275	75	60	195	120	40	1050	55	100	540	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	9	10	10	9
Storage Length (ft)	0		0	0		0	115		90	115		120
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			80			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99			0.98		0.99		0.98	1.00		0.97
Frt		0.978			0.952				0.850			0.850
Flt Protected		0.984			0.992		0.950			0.950		
Satd. Flow (prot)	0	2845	0	0	2773	0	1506	3069	1377	1550	2956	1311
Flt Permitted		0.658			0.800		0.353			0.125		
Satd. Flow (perm)	0	1888	0	0	2234	0	555	3069	1352	204	2956	1270
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			98				103			103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1044			375			2662			5304	
Travel Time (s)		23.7			8.5			60.5			120.5	
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Adj. Flow (vph)	175	284	77	62	201	124	41	1082	57	103	557	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	536	0	0	387	0	41	1082	57	103	557	52
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.22	1.17	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Minimum Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (%)	9.4%	47.1%		37.6%	37.6%		9.4%	43.5%	43.5%	9.4%	43.5%	43.5%
Maximum Green (s)	5.0	35.0		27.0	27.0		5.0	33.0	33.0	5.0	33.0	33.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)		-1.0			-1.0		1.0	-0.5	0.0	1.0	-0.5	0.0
Total Lost Time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Walk Time (s)		12.0		4.0	4.0			19.0	19.0		19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		23.0		23.0	23.0			14.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)		36.0			28.0		37.0	33.5	33.0	37.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.44	0.39	0.39	0.44	0.39	0.39
v/c Ratio		0.62			0.48		0.14	0.89	0.10	0.68	0.48	0.09
Control Delay		21.1			19.0		16.2	28.5	3.3	38.4	20.9	0.9
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		21.1			19.0		16.2	28.5	3.3	38.4	20.9	0.9
LOS		C			B		B	C	A	D	C	A
Approach Delay		21.1			19.0			26.9			22.0	
Approach LOS		C			B			C			C	
Stops (vph)		336			218		22	582	6	53	387	1
Fuel Used(gal)		8			8		1	31	1	5	27	2
CO Emissions (g/hr)		582			588		76	2174	85	364	1871	146
NOx Emissions (g/hr)		113			114		15	423	16	71	364	28
VOC Emissions (g/hr)		135			136		18	504	20	84	434	34
Dilemma Vehicles (#)		0			0		0	0	0	0	0	0
Queue Length 50th (ft)		97			62		12	173	1	29	114	0
Queue Length 95th (ft)		141			105		m15	m#232	m3	#80	161	4
Internal Link Dist (ft)		964			295			2582			5224	
Turn Bay Length (ft)							115		90	115		120
Base Capacity (vph)		860			801		286	1209	587	152	1165	556
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.62			0.48		0.14	0.89	0.10	0.68	0.48	0.09

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 58 (68%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 23.5 Intersection LOS: C
Intersection Capacity Utilization 101.5% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1034: Halsted Street & 111th Street

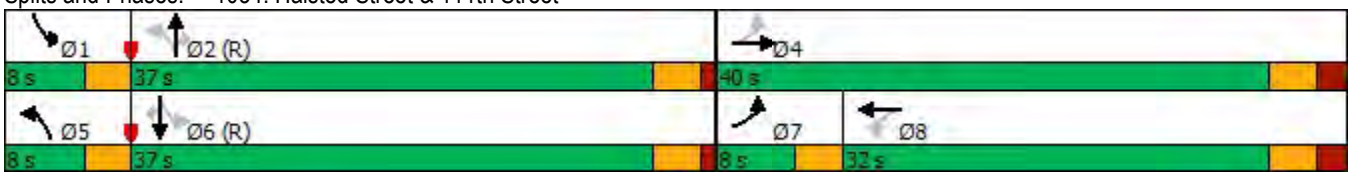

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	420	0	0	345	85	30	65	105	0	0	0
Future Volume (vph)	45	420	0	0	345	85	30	65	105	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.973			0.929				
Flt Protected		0.995						0.993				
Satd. Flow (prot)	0	1706	0	0	1668	0	0	1581	0	0	0	0
Flt Permitted		0.932						0.993				
Satd. Flow (perm)	0	1598	0	0	1668	0	0	1581	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					34			85				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1591			2004			794			646	
Travel Time (s)		36.2			45.5			18.0			14.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	48	452	0	0	371	91	32	70	113	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	500	0	0	462	0	0	215	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Minimum Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (%)	66.2%	66.2%			66.2%		33.8%	33.8%				
Maximum Green (s)	39.0	39.0			39.0		18.0	18.0				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.0			4.0			4.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	32.0	32.0			32.0		10.0	10.0				
Flash Dont Walk (s)	7.0	7.0			7.0		8.0	8.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		39.0			39.0			18.0				
Actuated g/C Ratio		0.60			0.60			0.28				
v/c Ratio		0.52			0.46			0.43				
Control Delay		10.0			3.4			14.7				
Queue Delay		0.0			0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		10.0			3.4			14.7				
LOS		B			A			B				
Approach Delay		10.0			3.4			14.7				
Approach LOS		B			A			B				
Stops (vph)		256			46			100				
Fuel Used(gal)		9			7			2				
CO Emissions (g/hr)		663			508			167				
NOx Emissions (g/hr)		129			99			33				
VOC Emissions (g/hr)		154			118			39				
Dilemma Vehicles (#)		0			0			0				
Queue Length 50th (ft)		101			20			40				
Queue Length 95th (ft)		172			27			95				
Internal Link Dist (ft)		1511			1924			714			566	
Turn Bay Length (ft)												
Base Capacity (vph)		958			1014			499				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.52			0.46			0.43				

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 16 (25%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 72.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1035: Normal Avenue & 111th Street

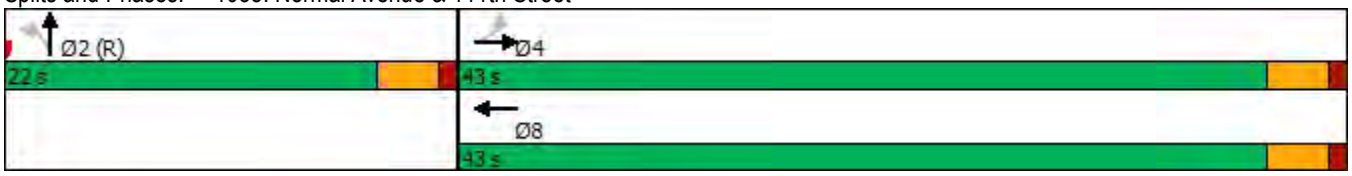

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	420	35	20	360	50	20	190	40	65	135	25
Future Volume (vph)	50	420	35	20	360	50	20	190	40	65	135	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	11	11	12	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.991			0.984			0.976			0.983	
Flt Protected		0.995			0.998			0.996			0.986	
Satd. Flow (prot)	0	1888	0	0	1835	0	0	3081	0	0	3056	0
Flt Permitted		0.926			0.970			0.926			0.815	
Satd. Flow (perm)	0	1755	0	0	1783	0	0	2859	0	0	2517	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			13			42			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2004			892			181			180	
Travel Time (s)		45.5			20.3			4.1			4.1	
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Adj. Flow (vph)	53	447	37	21	383	53	21	202	43	69	144	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	537	0	0	457	0	0	266	0	0	240	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.12	1.12	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (%)	52.3%	52.3%		52.3%	52.3%		47.7%	47.7%		47.7%	47.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	21.0	21.0		21.0	21.0		19.0	19.0		19.0	19.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			27.0			27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
v/c Ratio		0.66			0.55			0.22			0.23	
Control Delay		18.5			7.4			8.2			11.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.5			7.4			8.2			11.6	
LOS		B			A			A			B	
Approach Delay		18.5			7.4			8.2			11.6	
Approach LOS		B			A			A			B	
Stops (vph)		308			129			143			121	
Fuel Used(gal)		11			6			6			11	
CO Emissions (g/hr)		803			402			446			745	
NOx Emissions (g/hr)		156			78			87			145	
VOC Emissions (g/hr)		186			93			103			173	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		137			38			13			27	
Queue Length 95th (ft)		238			46			25			49	
Internal Link Dist (ft)		1924			812			101			100	
Turn Bay Length (ft)												
Base Capacity (vph)		814			829			1212			1060	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.66			0.55			0.22			0.23	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 12.2 Intersection LOS: B
Intersection Capacity Utilization 100.3% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 1036: Wentworth Avenue & 111th Street

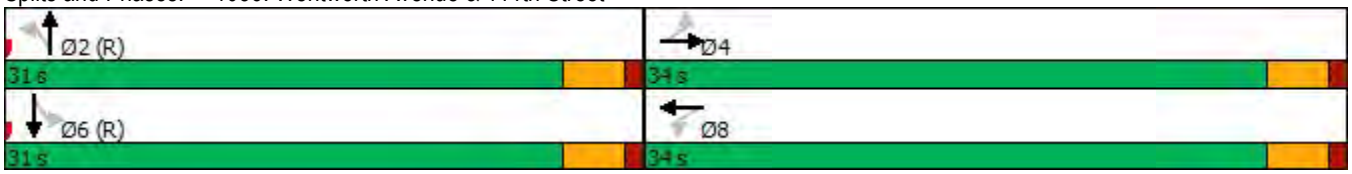

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	280	20	40	385	85	50	335	95	50	100	20
Future Volume (vph)	55	280	20	40	385	85	50	335	95	50	100	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	9	10	10	9	10	10	12	10	10	12
Storage Length (ft)	70		0	60		0	70		70	80		75
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	115			90			80			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99	0.99		0.99	1.00		1.00	1.00	
Frt		0.990			0.973			0.967			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	2936	0	1596	2932	0	1506	3033	0	1596	2946	0
Flt Permitted	0.397			0.548			0.671			0.480		
Satd. Flow (perm)	629	2936	0	909	2932	0	1058	3033	0	805	2946	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			44			87			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			546			2651			298	
Travel Time (s)		9.5			12.4			60.3			6.8	
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Adj. Flow (vph)	59	298	21	43	410	90	53	356	101	53	106	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	319	0	43	500	0	53	457	0	53	127	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.22	1.17	1.17	1.22	1.17	1.17	1.07	1.17	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		9.0	9.0		22.0	22.0		22.0	22.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
v/c Ratio	0.28	0.32		0.14	0.49		0.09	0.27		0.12	0.08	
Control Delay	14.0	10.9		12.6	13.9		5.3	4.8		9.6	8.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.0	10.9		12.6	13.9		5.3	4.8		9.6	8.0	
LOS	B	B		B	B		A	A		A	A	
Approach Delay		11.4			13.8			4.9			8.5	
Approach LOS		B			B			A			A	
Stops (vph)	36	157		32	364		24	176		26	55	
Fuel Used(gal)	1	5		0	5		1	10		4	10	
CO Emissions (g/hr)	64	321		31	374		85	719		308	728	
NOx Emissions (g/hr)	12	63		6	73		17	140		60	142	
VOC Emissions (g/hr)	15	74		7	87		20	167		71	169	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	15	41		13	84		4	10		23	25	
Queue Length 95th (ft)	m22	m55		m36	131		m9	27		m24	m24	
Internal Link Dist (ft)		338			466			2571			218	
Turn Bay Length (ft)	70			60			70			80		
Base Capacity (vph)	212	1001		307	1021		569	1673		433	1596	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.28	0.32		0.14	0.49		0.09	0.27		0.12	0.08	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 9.8 Intersection LOS: A
Intersection Capacity Utilization 67.5% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1037: State Street & 111th Street

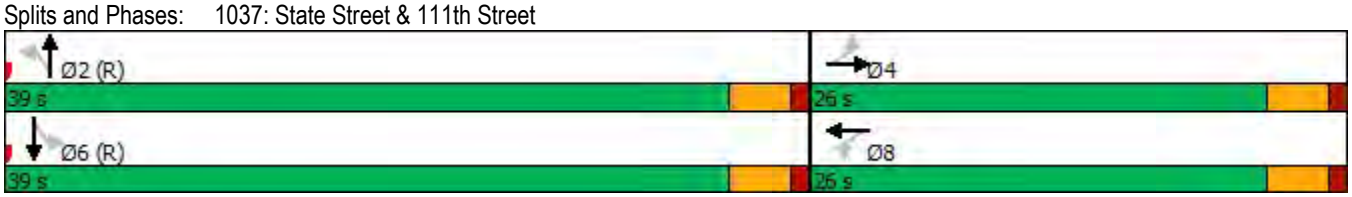

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	400	25	50	430	110	15	380	55	50	150	50
Future Volume (vph)	85	400	25	50	430	110	15	380	55	50	150	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	12	12	10	12	12	10	12
Storage Length (ft)	60		0	75		77	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.99	1.00		0.98	0.99			0.99			0.99	
Frt		0.991			0.969			0.982			0.970	
Flt Protected	0.950			0.950				0.998			0.990	
Satd. Flow (prot)	1425	3011	0	1350	2919	0	0	2831	0	0	2727	0
Flt Permitted	0.396			0.472				0.943			0.817	
Satd. Flow (perm)	585	3011	0	658	2919	0	0	2672	0	0	2246	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			67			28			53	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		546			835			277			230	
Travel Time (s)		12.4			19.0			6.3			5.2	
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Adj. Flow (vph)	90	426	27	53	457	117	16	404	59	53	160	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	90	453	0	53	574	0	0	479	0	0	266	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.17	1.22	1.22	1.17	1.07	1.07	1.17	1.07	1.07	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	31.0	31.0		31.0	31.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	20.0	20.0		20.0	20.0		14.0	14.0		14.0	14.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		12.0	12.0		12.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
v/c Ratio	0.32	0.31		0.17	0.40			0.44			0.29	
Control Delay	20.0	16.4		11.5	10.6			10.9			11.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	20.0	16.4		11.5	10.6			10.9			11.4	
LOS	B	B		B	B			B			B	
Approach Delay		17.0			10.7			10.9			11.4	
Approach LOS		B			B			B			B	
Stops (vph)	70	336		29	289			326			129	
Fuel Used(gal)	1	5		1	6			12			2	
CO Emissions (g/hr)	76	356		42	439			851			122	
NOx Emissions (g/hr)	15	69		8	85			166			24	
VOC Emissions (g/hr)	18	82		10	102			197			28	
Dilemma Vehicles (#)	0	0		0	0			0			0	
Queue Length 50th (ft)	31	76		11	63			29			28	
Queue Length 95th (ft)	63	101		31	97			70			52	
Internal Link Dist (ft)		466			755			197			150	
Turn Bay Length (ft)	60			75								
Base Capacity (vph)	279	1443		313	1427			1085			930	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.32	0.31		0.17	0.40			0.44			0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 48 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.44	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 87.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1038: Michigan Avenue & 111th Street

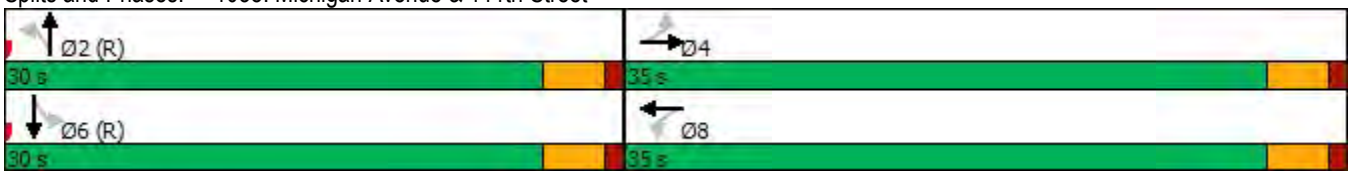

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	255	50	65	225	80	75	1050	75	75	425	80
Future Volume (vph)	215	255	50	65	225	80	75	1050	75	75	425	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	9	14	16	9	14	16
Storage Length (ft)	120		115	60		58	165		165	110		80
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			60			90			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98	1.00		1.00	0.99		0.99	1.00		1.00	0.99	
Frt		0.975			0.961			0.990			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3002	0	1596	2892	0	1494	3446	0	1494	3348	0
Flt Permitted	0.517			0.517			0.376			0.125		
Satd. Flow (perm)	836	3002	0	865	2892	0	584	3446	0	196	3348	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29			62			10			30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			564			2655			2662	
Travel Time (s)		30.3			12.8			60.3			60.5	
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Adj. Flow (vph)	226	268	53	68	237	84	79	1105	79	79	447	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	226	321	0	68	321	0	79	1184	0	79	531	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.07	1.17	1.17	1.07	1.22	0.99	0.91	1.22	0.99	0.91
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	8.0	32.0		8.0	32.0		8.0	37.0		8.0	37.0	
Total Split (s)	8.0	32.0		8.0	32.0		8.0	37.0		8.0	37.0	
Total Split (%)	9.4%	37.6%		9.4%	37.6%		9.4%	43.5%		9.4%	43.5%	
Maximum Green (s)	5.0	27.0		5.0	27.0		5.0	33.0		5.0	33.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0		1.0	-1.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Walk Time (s)		7.0			7.0			21.0			21.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		20.0			20.0			12.0			12.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	32.0	28.0		32.0	28.0		37.0	33.0		37.0	33.0	
Actuated g/C Ratio	0.38	0.33		0.38	0.33		0.44	0.39		0.44	0.39	
v/c Ratio	0.65	0.32		0.19	0.32		0.27	0.88		0.54	0.40	
Control Delay	29.5	20.4		16.5	18.1		14.9	33.4		38.8	14.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	29.5	20.4		16.5	18.1		14.9	33.4		38.8	14.8	
LOS	C	C		B	B		B	C		D	B	
Approach Delay		24.2			17.8			32.2			17.9	
Approach LOS		C			B			C			B	
Stops (vph)	177	199		40	178		43	966		59	317	
Fuel Used(gal)	5	6		2	12		2	36		2	14	
CO Emissions (g/hr)	315	387		171	807		141	2535		173	960	
NOx Emissions (g/hr)	61	75		33	157		27	493		34	187	
VOC Emissions (g/hr)	73	90		40	187		33	588		40	222	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	79	60		21	53		22	300		27	54	
Queue Length 95th (ft)	134	94		46	87		46	#428		m#73	106	
Internal Link Dist (ft)		1251			484			2575			2582	
Turn Bay Length (ft)	120			60			165			110		
Base Capacity (vph)	349	1008		360	994		297	1343		146	1318	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.65	0.32		0.19	0.32		0.27	0.88		0.54	0.40	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 13 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 25.6 Intersection LOS: C
Intersection Capacity Utilization 86.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1049: Halsted Street & 115th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	325	25	20	275	10	45	155	35	25	75	55
Future Volume (vph)	50	325	25	20	275	10	45	155	35	25	75	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	11	12	11	11	12	10	10	12	10	10
Storage Length (ft)	0		80	0		0	0		30	0		30
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.993			0.997			0.989			0.988	
Satd. Flow (prot)	0	1646	1395	0	1665	1321	0	1627	1373	0	1588	1360
Flt Permitted		0.925			0.966			0.926			0.915	
Satd. Flow (perm)	0	1532	1336	0	1612	1287	0	1520	1356	0	1471	1318
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			26			17			37			58
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3405			1340			2669			2476	
Travel Time (s)		77.4			30.5			60.7			56.3	
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Adj. Flow (vph)	53	342	26	21	289	11	47	163	37	26	79	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	395	26	0	310	11	0	210	37	0	105	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.12	1.07	1.12	1.12	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (%)	52.3%	52.3%	52.3%	52.3%	52.3%	52.3%	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	19.0	19.0	19.0	19.0	19.0	19.0	16.0	16.0	16.0	16.0	16.0	16.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
v/c Ratio		0.56	0.04		0.42	0.02		0.33	0.06		0.17	0.10
Control Delay		16.5	4.5		7.2	0.9		15.7	4.9		11.0	2.1
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		16.5	4.5		7.2	0.9		15.7	4.9		11.0	2.1
LOS		B	A		A	A		B	A		B	A
Approach Delay		15.8			7.0			14.1			7.8	
Approach LOS		B			A			B			A	
Stops (vph)		263	7		88	0		151	13		70	13
Fuel Used(gal)		14	1		4	0		6	1		3	1
CO Emissions (g/hr)		1001	58		279	7		394	58		188	86
NOx Emissions (g/hr)		195	11		54	1		77	11		36	17
VOC Emissions (g/hr)		232	14		65	2		91	14		43	20
Dilemma Vehicles (#)		0	0		0	0		0	0		0	0
Queue Length 50th (ft)		107	0		30	0		69	0		16	0
Queue Length 95th (ft)		185	11		40	m1		122	m9		m35	m2
Internal Link Dist (ft)		3325			1260			2589			2396	
Turn Bay Length (ft)			80						30			30
Base Capacity (vph)		707	630		744	603		631	584		611	581
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.56	0.04		0.42	0.02		0.33	0.06		0.17	0.10

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 11.8 Intersection LOS: B
Intersection Capacity Utilization 87.2% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1050: Wentworth Avenue & 115th Street

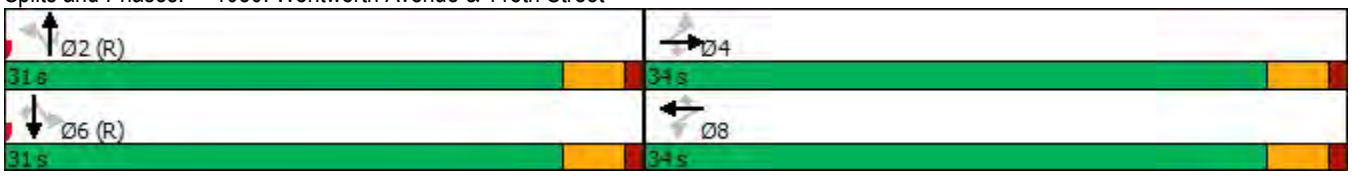

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	300	15	20	255	40	15	255	25	40	95	40
Future Volume (vph)	80	300	15	20	255	40	15	255	25	40	95	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	80		0	55		75	45		50	55		260
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	90			95			110			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.980			0.987			0.956	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	1600	1360	1520	2979	0	1520	3000	0	1520	2906	0
Flt Permitted	0.950			0.565			0.660			0.568		
Satd. Flow (perm)	1520	1600	1360	904	2979	0	1056	3000	0	909	2906	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1340			559			516			2651	
Travel Time (s)		30.5			12.7			11.7			60.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	86	323	16	22	274	43	16	274	27	43	102	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	323	16	22	317	0	16	301	0	43	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases			4	8			2			6		
Minimum Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	15.4%	53.8%	53.8%	38.5%	38.5%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?												
Walk Time (s)		8.0	8.0	8.0	8.0		13.0	13.0		13.0	13.0	
Flash Dont Walk (s)		13.0	13.0	13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0	0	
Act Effct Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.11	0.48	0.48	0.32	0.32		0.40	0.40		0.40	0.40	
v/c Ratio	0.53	0.42	0.02	0.08	0.33		0.04	0.25		0.12	0.12	
Control Delay	39.3	6.0	3.9	13.8	14.1		6.8	8.4		15.2	14.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	39.3	6.0	3.9	13.8	14.1		6.8	8.4		15.2	14.3	
LOS	D	A	A	B	B		A	A		B	B	
Approach Delay		12.7			14.1			8.4			14.5	
Approach LOS		B			B			A			B	
Stops (vph)	59	95	3	9	123		7	150		29	100	
Fuel Used(gal)	2	4	0	0	3		0	7		1	4	
CO Emissions (g/hr)	126	281	13	14	197		26	501		78	261	
NOx Emissions (g/hr)	25	55	3	3	38		5	97		15	51	
VOC Emissions (g/hr)	29	65	3	3	46		6	116		18	61	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	22	20	1	4	34		2	18		13	27	
Queue Length 95th (ft)	48	30	m2	m9	38		m4	34		45	41	
Internal Link Dist (ft)		1260			479			436			2571	
Turn Bay Length (ft)	80			55			45			55		
Base Capacity (vph)	163	763	648	292	962		422	1200		363	1162	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.53	0.42	0.02	0.08	0.33		0.04	0.25		0.12	0.12	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 12.2	Intersection LOS: B
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1051: State State & 115th Street

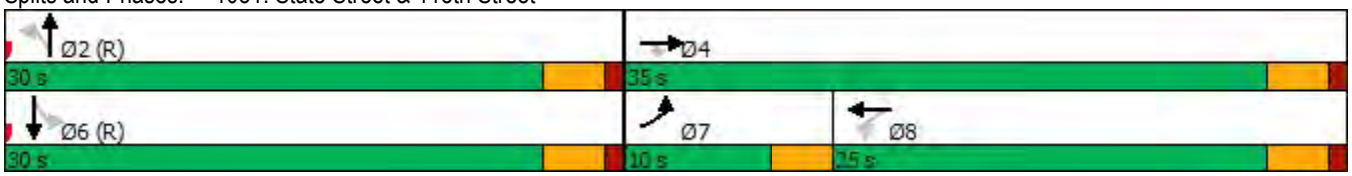

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	300	20	115	255	50	30	345	25	25	145	25
Future Volume (vph)	45	300	20	115	255	50	30	345	25	25	145	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	10	10	12	10	10
Storage Length (ft)	55		120	95		75	0		85	0		90
Storage Lanes	1		1	1		1	0		1	0		1
Taper Length (ft)	75			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.996			0.993	
Satd. Flow (prot)	1520	1600	1360	1520	1600	1360	0	1594	1360	0	1589	1360
Flt Permitted	0.591			0.950				0.967			0.913	
Satd. Flow (perm)	946	1600	1360	1520	1600	1360	0	1547	1360	0	1461	1360
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			67			101			185
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		559			386			1340			2394	
Travel Time (s)		12.7			8.8			30.5			54.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	48	323	22	124	274	54	32	371	27	27	156	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	323	22	124	274	54	0	403	27	0	183	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	NA
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4			8	2		2	6		
Minimum Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (%)	36.9%	36.9%	36.9%	13.8%	50.8%	50.8%	44.6%	44.6%	44.6%	44.6%	44.6%	
Maximum Green (s)	20.0	20.0	20.0	6.0	29.0	29.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		5.0	5.0		5.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0	9.0		18.0	18.0	12.0	12.0	12.0	12.0	12.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	12.0	12.0	12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0	0	
Act Effct Green (s)	20.0	20.0	20.0	6.0	29.0	29.0		24.0	24.0		24.0	0.0

Lane Group	Ø12
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	12
Permitted Phases	
Minimum Split (s)	3.0
Total Split (s)	3.0
Total Split (%)	5%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.31	0.31	0.31	0.09	0.45	0.45		0.37	0.37		0.37	0.00
v/c Ratio	0.16	0.66	0.04	0.89	0.38	0.08		0.71	0.05		0.34	0.15
Control Delay	12.4	17.9	0.1	85.3	13.5	4.9		19.3	0.5		15.7	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	12.4	17.9	0.1	85.3	13.5	4.9		19.3	0.5		15.7	1.8
LOS	B	B	A	F	B	A		B	A		B	A
Approach Delay		16.2			32.2			18.1			13.9	
Approach LOS		B			C			B			B	
Stops (vph)	16	131	0	94	113	9		293	1		117	1
Fuel Used(gal)	0	3	0	3	3	0		27	2		5	1
CO Emissions (g/hr)	28	218	6	224	200	28		1856	110		331	37
NOx Emissions (g/hr)	5	43	1	44	39	5		361	21		64	7
VOC Emissions (g/hr)	6	51	1	52	46	6		430	25		77	9
Dilemma Vehicles (#)	0	0	0	0	0	0		0	0		0	0
Queue Length 50th (ft)	8	53	0	56	45	0		120	0		53	0
Queue Length 95th (ft)	19	85	m0	m#117	m105	m9		#246	m0		84	1
Internal Link Dist (ft)		479			306			1260			2314	
Turn Bay Length (ft)	55		120	95		75			85			90
Base Capacity (vph)	291	492	499	140	713	643		571	565		539	185
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	0
Reduced v/c Ratio	0.16	0.66	0.04	0.89	0.38	0.08		0.71	0.05		0.34	0.15

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 21.3 Intersection LOS: C
Intersection Capacity Utilization 68.8% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1052: Michigan Avenue & 115th Street

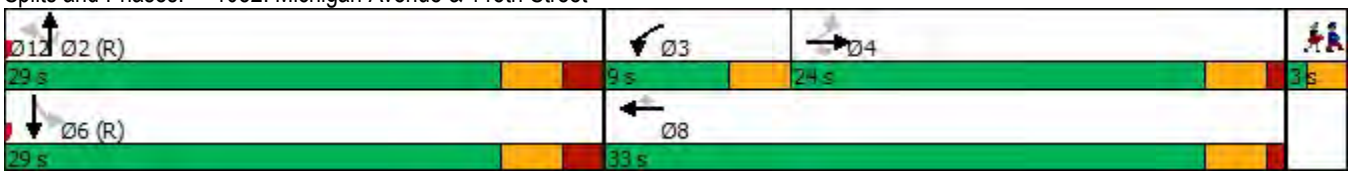

Lane Group	Ø12
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	315	20	80	390	80	30	110	195	0	0	0
Future Volume (vph)	20	315	20	80	390	80	30	110	195	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	12	12	10	15	10
Storage Length (ft)	0		95	0		80	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.921				
Flt Protected		0.997			0.992			0.996				
Satd. Flow (prot)	0	1595	1360	0	1587	1360	0	1573	0	0	0	0
Flt Permitted		0.962			0.882			0.996				
Satd. Flow (perm)	0	1539	1360	0	1411	1360	0	1573	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			22			86		112				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			636			791			721	
Travel Time (s)		8.7			14.5			18.0			16.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	22	339	22	86	419	86	32	118	210	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	361	22	0	505	86	0	360	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.07	1.07	1.17	0.95	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2				
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru				
Leading Detector (ft)	20	100	20	20	100	20	20	100				
Trailing Detector (ft)	0	0	0	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0	0	0	0				
Detector 1 Size(ft)	20	6	20	20	6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Detector Phase	4	4	4	8	8	8	2	2				
Switch Phase												
Minimum Initial (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Minimum Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (%)	63.1%	63.1%	63.1%	63.1%	63.1%	63.1%	36.9%	36.9%				
Maximum Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0				
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0				
Total Lost Time (s)		5.0	5.0		5.0	5.0		4.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	8.0	8.0				
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None				
Walk Time (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Flash Dont Walk (s)	8.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	30	30				
Act Effct Green (s)		37.7	37.7		37.7	37.7		18.3				
Actuated g/C Ratio		0.58	0.58		0.58	0.58		0.28				
v/c Ratio		0.40	0.03		0.62	0.10		0.69				
Control Delay		17.6	9.6		13.7	2.2		21.3				
Queue Delay		0.0	0.0		0.0	0.0		0.0				
Total Delay		17.6	9.6		13.7	2.2		21.3				
LOS		B	A		B	A		C				
Approach Delay		17.2			12.1			21.3				
Approach LOS		B			B			C				
90th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
90th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
70th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
70th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
50th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
50th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
30th %ile Green (s)	37.8	37.8	37.8	37.8	37.8	37.8	18.2	18.2				
30th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
10th %ile Green (s)	42.9	42.9	42.9	42.9	42.9	42.9	13.1	13.1				
10th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
Stops (vph)		226	13		307	10		205				
Fuel Used(gal)		4	0		8	1		5				
CO Emissions (g/hr)		313	16		548	64		325				
NOx Emissions (g/hr)		61	3		107	12		63				
VOC Emissions (g/hr)		72	4		127	15		75				
Dilemma Vehicles (#)		0	0		0	0		0				
Queue Length 50th (ft)		104	2		126	0		81				
Queue Length 95th (ft)		158	m5		224	16		166				
Internal Link Dist (ft)		304			556			711			641	
Turn Bay Length (ft)			95			80						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		893	799		819	825		561				
Starvation Cap Reductn		0	0		0	0		0				
Spillback Cap Reductn		0	0		0	0		0				
Storage Cap Reductn		0	0		0	0		0				
Reduced v/c Ratio		0.40	0.03		0.62	0.10		0.64				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 25 (38%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 16.0 Intersection LOS: B
Intersection Capacity Utilization 81.8% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1053: Indiana Avenue & 115th Street

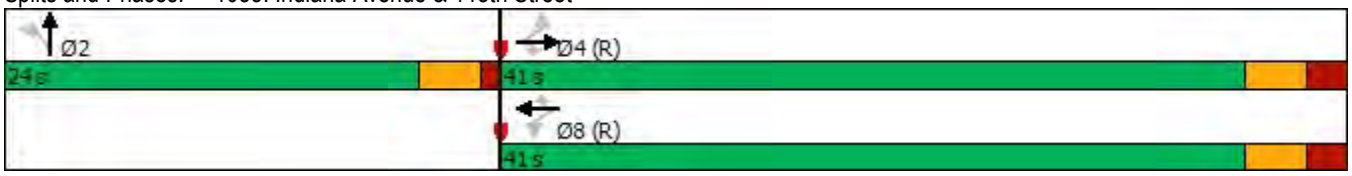

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	95	410	470	55	75	85
Future Volume (vph)	95	410	470	55	75	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	14	16	12	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.986			0.850
Flt Protected		0.991			0.950	
Satd. Flow (prot)	0	1817	1925	0	1565	1400
Flt Permitted		0.991			0.950	
Satd. Flow (perm)	0	1817	1925	0	1565	1400
Link Speed (mph)		30	30		30	
Link Distance (ft)		683	263		1350	
Travel Time (s)		15.5	6.0		30.7	
Confl. Peds. (#/hr)	21			21	5	3
Confl. Bikes (#/hr)					2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	12%	3%	5%	0%	2%	2%
Adj. Flow (vph)	108	466	534	63	85	97
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	574	597	0	85	97
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.07	0.99	0.91	1.07	1.17	1.17
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 73.4%	ICU Level of Service D
Analysis Period (min) 15	

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	95	410	470	55	75	85
Future Volume (vph)	95	410	470	55	75	85
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	108	466	534	63	85	97

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total (vph)	574	597	85	97
Volume Left (vph)	108	0	85	0
Volume Right (vph)	0	63	0	97
Hadj (s)	0.12	0.01	0.53	-0.67
Departure Headway (s)	5.5	5.4	8.0	6.7
Degree Utilization, x	0.88	0.90	0.19	0.18
Capacity (veh/h)	641	656	438	514
Control Delay (s)	35.9	37.5	11.6	10.0
Approach Delay (s)	35.9	37.5	10.8	
Approach LOS	E	E	B	

Intersection Summary			
Delay	33.2		
Level of Service	D		
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	540	0	30	735	0	0				
Future Volume (vph)	540	0	30	735	0	0				
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800				
Lane Width (ft)	10	12	12	10	16	12				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Frt										
Flt Protected				0.998						
Satd. Flow (prot)	1600	1714	0	1437	1943	0				
Flt Permitted				0.965						
Satd. Flow (perm)	1600	1714	0	1390	1943	0				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)										
Link Speed (mph)	30			30	30					
Link Distance (ft)	105			1228	505					
Travel Time (s)	2.4			27.9	11.5					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%				
Parking (#/hr)				0						
Adj. Flow (vph)	581	0	32	790	0	0				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	581	0	0	822	0	0				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			0	16					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.17	1.07	1.07	1.33	0.91	1.07				
Turning Speed (mph)		9	15		15	9				
Turn Type	NA	Perm	Perm	NA	Prot					
Protected Phases	6 4			4	3		1	2	6	8
Permitted Phases		6 4	4							
Minimum Split (s)			16.0	16.0	18.0		20.0	12.0	32.0	35.0
Total Split (s)			35.0	35.0	18.0		20.0	12.0	32.0	35.0
Total Split (%)			41.2%	41.2%	21.2%		24%	14%	38%	41%
Maximum Green (s)			31.0	31.0	14.0		15.0	9.0	27.0	31.0
Yellow Time (s)			3.0	3.0	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)			1.0	1.0	1.0		2.0	0.0	2.0	1.0
Lost Time Adjust (s)				0.0	0.0					
Total Lost Time (s)				4.0	4.0					
Lead/Lag							Lag	Lead		
Lead-Lag Optimize?										
Walk Time (s)					2.0				14.0	18.0
Flash Dont Walk (s)					12.0				13.0	13.0
Pedestrian Calls (#/hr)					0				0	0
Act Effct Green (s)	62.0			31.0						
Actuated g/C Ratio	0.73			0.36						
v/c Ratio	0.50			1.62						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Control Delay	3.3			314.4						
Queue Delay	2.9			1.2						
Total Delay	6.2			315.6						
LOS	A			F						
Approach Delay	6.2			315.6						
Approach LOS	A			F						
Stops (vph)	92			565						
Fuel Used(gal)	1			67						
CO Emissions (g/hr)	92			4673						
NOx Emissions (g/hr)	18			909						
VOC Emissions (g/hr)	21			1083						
Dilemma Vehicles (#)	0			0						
Queue Length 50th (ft)	39			~640						
Queue Length 95th (ft)	m62			#858						
Internal Link Dist (ft)	25			1148	425					
Turn Bay Length (ft)										
Base Capacity (vph)	1167			506						
Starvation Cap Reductn	459			0						
Spillback Cap Reductn	0			64						
Storage Cap Reductn	0			0						
Reduced v/c Ratio	0.82			1.86						

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 125
Control Type: Pretimed
Maximum v/c Ratio: 1.62
Intersection Signal Delay: 187.5 Intersection LOS: F
Intersection Capacity Utilization 69.8% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1055: Cottage Grove Avenue & 115th Street

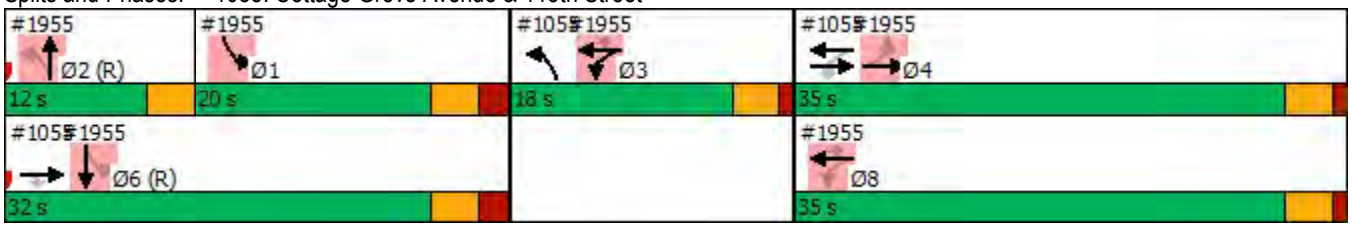

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	225	230	30	640	0	0	0	0	5	0	250
Future Volume (vph)	0	225	230	30	640	0	0	0	0	5	0	250
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	16	12	12	12	12	12	12	15	12	12	16	12
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.924										0.850
Flt Protected					0.998						0.950	
Satd. Flow (prot)	0	3038	0	0	3191	0	0	0	0	0	1938	1471
Flt Permitted					0.998						0.950	
Satd. Flow (perm)	0	3038	0	0	3191	0	0	0	0	0	1938	1471
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1260			277			633			783	
Travel Time (s)		28.6			6.3			14.4			17.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	5%	70%	4%	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	0	239	245	32	681	0	0	0	0	5	0	266
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	484	0	0	713	0	0	0	0	0	5	266
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.91	1.07	1.07	1.07	1.07	1.07	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 47.3%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	225	230	30	640	0	0	0	0	5	0	250
Future Volume (Veh/h)	0	225	230	30	640	0	0	0	0	5	0	250
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	239	245	32	681	0	0	0	0	5	0	266
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	681			239			766	1106	242	864	984	340
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	681			239			766	1106	242	864	984	340
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	98	100	59
cM capacity (veh/h)	921			947			170	205	765	245	242	650

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	159	325	259	454	5	266
Volume Left	0	0	32	0	5	0
Volume Right	0	245	0	0	0	266
cSH	1700	1700	947	1700	245	650
Volume to Capacity	0.09	0.19	0.03	0.27	0.02	0.41
Queue Length 95th (ft)	0	0	3	0	2	50
Control Delay (s)	0.0	0.0	1.4	0.0	20.0	14.3
Lane LOS			A		C	B
Approach Delay (s)	0.0		0.5		14.4	
Approach LOS					B	

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	225	0	670	0	0	0
Future Volume (vph)	225	0	670	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3159	0	1629	0	0	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3159	0	1629	0	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	277			605	530	
Travel Time (s)	6.3			13.8	12.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	242	0	720	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	242	0	720	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	225	0	670	0	0	0
Future Volume (vph)	225	0	670	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	242	0	720	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	121	121	720
Volume Left (vph)	121	121	720
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	7.0	7.0	5.0
Degree Utilization, x	0.24	0.24	0.99
Capacity (veh/h)	511	512	720
Control Delay (s)	11.0	11.0	53.9
Approach Delay (s)	11.0		53.9
Approach LOS	B		F

Intersection Summary			
Delay	43.1		
Level of Service	E		
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	300	85	45	170	55	100	925	70	60	440	100
Future Volume (vph)	245	300	85	45	170	55	100	925	70	60	440	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	14	12	10	11	12	9	10	12
Storage Length (ft)	140		0	60		0	120		0	115		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	195			95			95			90		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98		0.99	1.00	0.99		0.98	1.00		1.00	0.99	
Frt			0.850		0.963			0.990			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1550	1556	1347	1596	1717	0	1535	3098	0	1509	2871	0
Flt Permitted	0.476			0.467			0.356			0.120		
Satd. Flow (perm)	759	1556	1327	783	1717	0	562	3098	0	190	2871	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87		18			10			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			3955			5338			2655	
Travel Time (s)		21.5			89.9			121.3			60.3	
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Adj. Flow (vph)	250	306	87	46	173	56	102	944	71	61	449	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	250	306	87	46	229	0	102	1015	0	61	551	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	0.99	1.07	1.17	1.12	1.07	1.22	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	4.0	4.0	7.0	4.0		7.0	18.0		7.0	18.0	
Minimum Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (%)	11.1%	35.6%	35.6%	11.1%	35.6%		11.1%	42.2%		11.1%	42.2%	
Maximum Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0	0.0	1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	C-Max		None	C-Max	
Walk Time (s)		4.0	4.0		4.0			18.0			18.0	
Flash Dont Walk (s)		23.0	23.0		23.0			16.0			16.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	35.6	32.0	31.0	34.0	27.0		40.8	36.0		40.8	36.0	
Actuated g/C Ratio	0.40	0.36	0.34	0.38	0.30		0.45	0.40		0.45	0.40	
v/c Ratio	0.71	0.55	0.17	0.13	0.43		0.32	0.82		0.35	0.47	
Control Delay	33.8	29.4	6.4	16.6	26.4		15.7	31.2		18.2	20.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	33.8	29.4	6.4	16.6	26.4		15.7	31.2		18.2	20.9	
LOS	C	C	A	B	C		B	C		B	C	
Approach Delay		28.0			24.7			29.8			20.6	
Approach LOS		C			C			C			C	
90th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
90th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
70th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
50th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		7.0	34.0		7.0	34.0	
30th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Skip	Coord		Skip	Coord	
Stops (vph)	187	243	15	27	161		55	833		31	366	
Fuel Used(gal)	5	5	1	2	9		5	52		2	15	
CO Emissions (g/hr)	316	374	57	118	629		334	3659		114	1083	
NOx Emissions (g/hr)	62	73	11	23	122		65	712		22	211	
VOC Emissions (g/hr)	73	87	13	27	146		78	848		26	251	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	95	148	0	15	96		30	273		18	115	
Queue Length 95th (ft)	#181	238	33	36	162		59	#390		39	164	
Internal Link Dist (ft)		866			3875			5258			2575	
Turn Bay Length (ft)	140			60			120			115		
Base Capacity (vph)	353	553	514	350	527		319	1245		174	1169	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.71	0.55	0.17	0.13	0.43		0.32	0.82		0.35	0.47	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 26.7 Intersection LOS: C
Intersection Capacity Utilization 86.2% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1060: Halsted Street & 119th Street

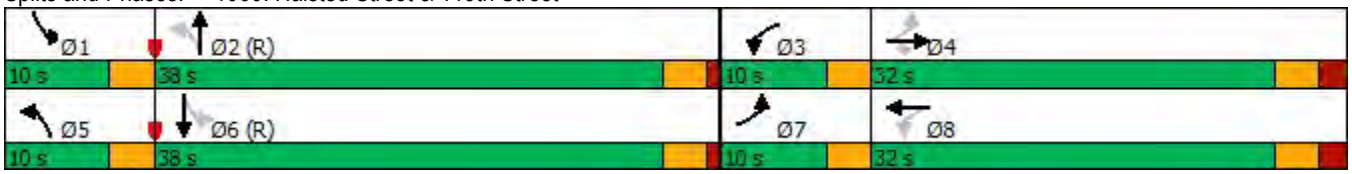

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	330	20	5	245	25	45	100	20	15	50	45
Future Volume (vph)	55	330	20	5	245	25	45	100	20	15	50	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	10	10	10	10	12	15	12	12	16	12
Storage Length (ft)	0		105	0		75	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.97		1.00	0.97		1.00			0.99	
Frt			0.850			0.850		0.984			0.945	
Flt Protected		0.993			0.999			0.987			0.993	
Satd. Flow (prot)	0	1630	1428	0	1600	1231	0	1916	0	0	1848	0
Flt Permitted		0.927			0.995			0.913			0.964	
Satd. Flow (perm)	0	1521	1383	0	1593	1198	0	1770	0	0	1792	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			22			27		13			49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3955			1331			2677			2669	
Travel Time (s)		89.9			30.3			60.8			60.7	
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Adj. Flow (vph)	60	363	22	5	269	27	49	110	22	16	55	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	423	22	0	274	27	0	181	0	0	120	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.17	1.17	1.17	1.17	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	32.0	27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	22.0	22.0	22.0	22.0	22.0	22.0	17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
v/c Ratio		0.57	0.03		0.35	0.04		0.24			0.16	
Control Delay		15.3	4.2		8.7	2.2		12.5			5.6	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		15.3	4.2		8.7	2.2		12.5			5.6	
LOS		B	A		A	A		B			A	
Approach Delay		14.8			8.1			12.5			5.6	
Approach LOS		B			A			B			A	
Stops (vph)		262	5		79	2		94			64	
Fuel Used(gal)		15	1		3	0		4			3	
CO Emissions (g/hr)		1015	46		242	20		306			192	
NOx Emissions (g/hr)		197	9		47	4		60			37	
VOC Emissions (g/hr)		235	11		56	5		71			44	
Dilemma Vehicles (#)		0	0		0	0		0			0	
Queue Length 50th (ft)		110	0		40	0		41			1	
Queue Length 95th (ft)		190	10		57	3		80			10	
Internal Link Dist (ft)		3875			1251			2597			2589	
Turn Bay Length (ft)			105			75						
Base Capacity (vph)		748	692		784	603		742			773	
Starvation Cap Reductn		0	0		0	0		0			0	
Spillback Cap Reductn		0	0		0	0		0			0	
Storage Cap Reductn		0	0		0	0		0			0	
Reduced v/c Ratio		0.57	0.03		0.35	0.04		0.24			0.16	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.57
Intersection Signal Delay: 11.4 Intersection LOS: B
Intersection Capacity Utilization 85.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1061: Wentworth Avenue & 119th Street

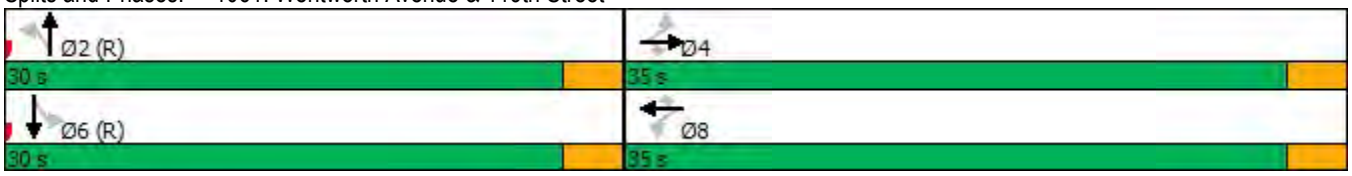

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	215	25	10	180	10	45	240	25	10	60	35
Future Volume (vph)	80	215	25	10	180	10	45	240	25	10	60	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	12	10	10	12	10	10	12	16	12
Storage Length (ft)	0		70	0		215	0		75	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Frt			0.850			0.850			0.850		0.955	
Flt Protected		0.987			0.997			0.992			0.995	
Satd. Flow (prot)	0	1556	1360	0	1494	1428	0	1637	1347	0	1873	0
Flt Permitted		0.860			0.980			0.945			0.969	
Satd. Flow (perm)	0	1351	1299	0	1467	1376	0	1559	1297	0	1822	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34			34			34		36	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			477			2671			2164	
Travel Time (s)		30.3			10.8			60.7			49.2	
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Adj. Flow (vph)	83	224	26	10	188	10	47	250	26	10	63	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	307	26	0	198	10	0	297	26	0	109	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	43.1%	43.1%	43.1%	43.1%	43.1%	43.1%	56.9%	56.9%	56.9%	56.9%	56.9%	
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0	23.0	32.0	32.0	32.0	32.0	32.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	14.0	14.0	14.0	14.0	14.0	14.0	23.0	23.0	23.0	23.0	23.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
v/c Ratio		0.64	0.05		0.38	0.02		0.39	0.04		0.12	
Control Delay		15.3	1.7		18.4	1.2		4.5	1.0		5.5	
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Delay		15.3	1.7		18.4	1.2		4.5	1.0		5.5	
LOS		B	A		B	A		A	A		A	
Approach Delay		14.3			17.6			4.2			5.5	
Approach LOS		B			B			A			A	
Stops (vph)		247	6		138	1		105	3		44	
Fuel Used(gal)		5	0		2	0		13	1		3	
CO Emissions (g/hr)		374	21		152	3		891	74		179	
NOx Emissions (g/hr)		73	4		30	1		173	14		35	
VOC Emissions (g/hr)		87	5		35	1		206	17		41	
Dilemma Vehicles (#)		0	0		0	0		0	0		0	
Queue Length 50th (ft)		105	1		57	0		35	1		0	
Queue Length 95th (ft)		188	m2		108	3		m47	m1		12	
Internal Link Dist (ft)		1251			397			2591			2084	
Turn Bay Length (ft)			70			215			75			
Base Capacity (vph)		478	481		519	508		767	655		915	
Starvation Cap Reductn		0	0		0	0		0	0		0	
Spillback Cap Reductn		0	0		0	0		0	0		0	
Storage Cap Reductn		0	0		0	0		0	0		0	
Reduced v/c Ratio		0.64	0.05		0.38	0.02		0.39	0.04		0.12	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1062: State Street & 119th Street

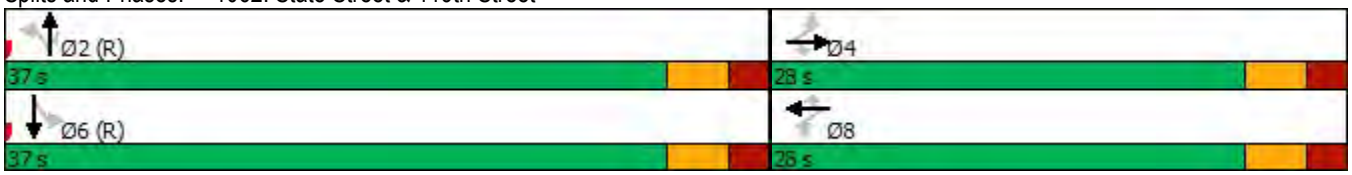

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	970	270	300	1270	0	0	0	0	340	250	465
Future Volume (vph)	0	970	270	300	1270	0	0	0	0	340	250	465
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	14
Storage Length (ft)	0		85	216		0	0		0	360		360
Storage Lanes	0		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.86	0.91
Ped Bike Factor		1.00		1.00							0.99	0.99
Frt		0.967									0.939	0.850
Flt Protected				0.950						0.950	0.994	
Satd. Flow (prot)	0	4301	0	1644	3226	0	0	0	0	1468	2713	1375
Flt Permitted				0.130						0.950	0.994	
Satd. Flow (perm)	0	4301	0	225	3226	0	0	0	0	1468	2713	1356
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		77									62	78
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1359			322			474			954	
Travel Time (s)		30.9			7.3			10.8			21.7	
Confl. Peds. (#/hr)	6		4	4		6	2					2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Adj. Flow (vph)	0	990	276	306	1296	0	0	0	0	347	255	474
Shared Lane Traffic (%)										19%		47%
Lane Group Flow (vph)	0	1266	0	306	1296	0	0	0	0	281	544	251
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			34			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1					1	1	1
Detector Template												
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		50		50	50					50	50	50
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1	6					4	4	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)		15.0		3.0	15.0					8.0	8.0	8.0
Minimum Split (s)		46.0		24.0	70.0					35.0	35.0	35.0
Total Split (s)		46.0		24.0	70.0					35.0	35.0	35.0
Total Split (%)		43.8%		22.9%	66.7%					33.3%	33.3%	33.3%
Maximum Green (s)		40.0		19.5	64.0					29.0	29.0	29.0
Yellow Time (s)		4.5		3.5	4.5					4.5	4.5	4.5
All-Red Time (s)		1.5		1.0	1.5					1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)		7.0		3.5	7.0					3.0	3.0	3.0
Minimum Gap (s)		3.5		0.2	3.5					0.2	0.2	0.2
Time Before Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Time To Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Recall Mode		C-Max		None	C-Max					None	None	None
Walk Time (s)										2.0	2.0	2.0
Flash Dont Walk (s)										27.0	27.0	27.0
Pedestrian Calls (#/hr)										0	0	0
Act Effct Green (s)		46.1		69.1	67.6					25.4	25.4	25.4
Actuated g/C Ratio		0.44		0.66	0.64					0.24	0.24	0.24
v/c Ratio		0.66		0.81	0.62					0.79	0.77	0.65
Control Delay		25.0		29.1	20.1					53.5	40.4	32.0
Queue Delay		0.0		6.6	49.8					0.0	0.0	0.0
Total Delay		25.0		35.6	69.9					53.5	40.4	32.0
LOS		C		D	E					D	D	C
Approach Delay		25.0			63.4						41.9	
Approach LOS		C			E						D	
90th %ile Green (s)		40.0		19.5	64.0					29.0	29.0	29.0
90th %ile Term Code		Coord		Max	Coord					Max	Max	Max
70th %ile Green (s)		40.0		19.5	64.0					29.0	29.0	29.0
70th %ile Term Code		Coord		Max	Coord					Max	Max	Max
50th %ile Green (s)		41.1		19.9	65.5					27.5	27.5	27.5
50th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
30th %ile Green (s)		49.6		15.6	69.7					23.3	23.3	23.3
30th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
10th %ile Green (s)		59.9		10.3	74.7					18.3	18.3	18.3
10th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
Stops (vph)		913		241	932					252	431	152
Fuel Used(gal)		25		4	14					6	11	4
CO Emissions (g/hr)		1713		270	947					450	750	299
NOx Emissions (g/hr)		333		53	184					87	146	58
VOC Emissions (g/hr)		397		63	219					104	174	69
Dilemma Vehicles (#)		0		0	0					0	0	0
Queue Length 50th (ft)		246		161	375					190	172	112
Queue Length 95th (ft)		308		m194	m418					291	237	204
Internal Link Dist (ft)		1279			242			394			874	
Turn Bay Length (ft)				216						360		360

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		1932		412	2076					405	794	430
Starvation Cap Reductn		0		67	1055					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.66		0.89	1.27					0.69	0.69	0.58

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 89 (85%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 45.2 Intersection LOS: D
Intersection Capacity Utilization 114.4% ICU Level of Service H
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1064: S Paulina ST & 127th Street

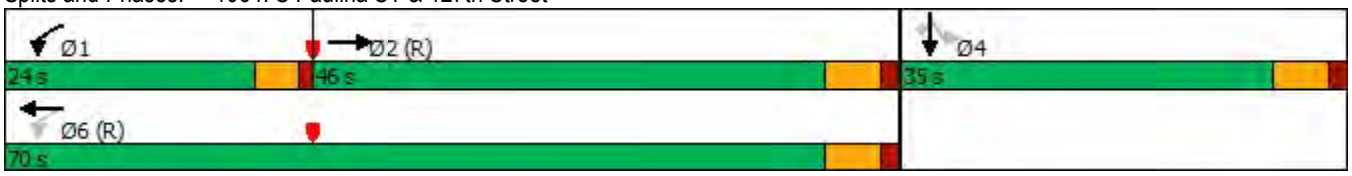

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	930	0	0	1030	295	540	355	375	0	0	0
Future Volume (vph)	380	930	0	0	1030	295	540	355	375	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	216		216	0		130	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				1.00							
Frt					0.967			0.923				
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3016	3138	0	0	4486	0	1644	3034	0	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3013	3138	0	0	4486	0	1644	3034	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					76							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			336			554			548	
Travel Time (s)		7.3			7.6			12.6			12.5	
Confl. Peds. (#/hr)	4					4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Adj. Flow (vph)	400	979	0	0	1084	311	568	374	395	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	400	979	0	0	1395	0	568	769	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1		1	1				
Detector Template												
Leading Detector (ft)	50	50			50		50	50				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	50	50			50		50	50				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	3.0	15.0			15.0		10.0	10.0				
Minimum Split (s)	27.5	70.5			43.0		34.5	34.5				
Total Split (s)	27.5	70.5			43.0		34.5	34.5				
Total Split (%)	26.2%	67.1%			41.0%		32.9%	32.9%				
Maximum Green (s)	21.5	64.5			37.0		28.5	28.5				
Yellow Time (s)	4.5	4.5			4.5		4.5	4.5				
All-Red Time (s)	1.5	1.5			1.5		1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0			7.0		5.0	5.0				
Minimum Gap (s)	0.2	3.5			3.5		0.2	0.2				
Time Before Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Time To Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Recall Mode	None	C-Max			C-Max		None	None				
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							21.5	21.5				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	18.9	64.5			39.6		28.5	28.5				
Actuated g/C Ratio	0.18	0.61			0.38		0.27	0.27				
v/c Ratio	0.74	0.51			0.80		1.27	1.00dr				
Control Delay	53.5	7.9			28.6		173.5	57.1				
Queue Delay	0.0	0.5			1.6		8.9	0.0				
Total Delay	53.5	8.4			30.2		182.4	57.1				
LOS	D	A			C		F	E				
Approach Delay		21.5			30.2			110.3				
Approach LOS		C			C			F				
90th %ile Green (s)	21.5	64.5			37.0		28.5	28.5				
90th %ile Term Code	Max	Coord			Coord		Max	Max				
70th %ile Green (s)	21.5	64.5			37.0		28.5	28.5				
70th %ile Term Code	Max	Coord			Coord		Max	Max				
50th %ile Green (s)	19.5	64.5			39.0		28.5	28.5				
50th %ile Term Code	Gap	Coord			Coord		Max	Max				
30th %ile Green (s)	17.4	64.5			41.1		28.5	28.5				
30th %ile Term Code	Gap	Coord			Coord		Max	Max				
10th %ile Green (s)	14.4	64.5			44.1		28.5	28.5				
10th %ile Term Code	Gap	Coord			Coord		Max	Max				
Stops (vph)	308	255			754		427	653				
Fuel Used(gal)	7	5			15		24	15				
CO Emissions (g/hr)	475	366			1073		1661	1066				
NOx Emissions (g/hr)	92	71			209		323	207				
VOC Emissions (g/hr)	110	85			249		385	247				
Dilemma Vehicles (#)	0	0			0		0	0				
Queue Length 50th (ft)	118	73			193		~484	265				
Queue Length 95th (ft)	162	96			m224		#695	#384				
Internal Link Dist (ft)		242			256			474			468	
Turn Bay Length (ft)	216											
Base Capacity (vph)	617	1927			1741		446	823				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	497			184		0	0				
Spillback Cap Reductn	0	0			53		236	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.65	0.68			0.90		2.70	0.93				

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 7 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.27
Intersection Signal Delay: 53.3 Intersection LOS: D
Intersection Capacity Utilization 114.4% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 1065: Marshfield Ave & 127th Street

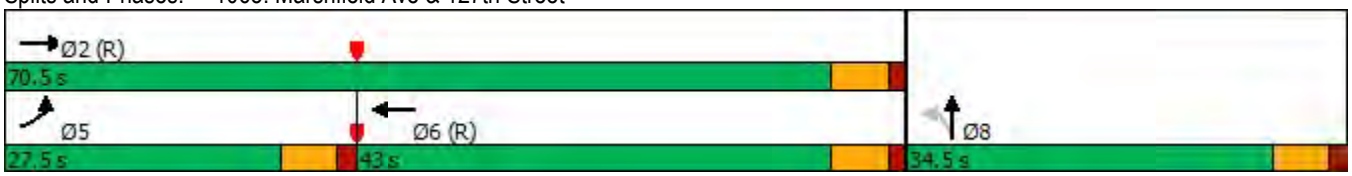

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	515	260	90	865	50	285	225	50	45	140	115
Future Volume (vph)	120	515	260	90	865	50	285	225	50	45	140	115
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	11	12	12	10	12	13	10	10	10
Storage Length (ft)	120		0	85		0	240		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			120			125			140		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00	1.00		0.99	1.00		1.00	0.99	
Frt			0.850		0.992			0.973			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3167	1311	1605	3232	0	1451	3226	0	1550	2789	0
Flt Permitted	0.103			0.447			0.493			0.573		
Satd. Flow (perm)	170	3167	1282	752	3232	0	748	3226	0	931	2789	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			277		6			26			122	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		336			5379			1555			925	
Travel Time (s)		7.6			122.3			35.3			21.0	
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Adj. Flow (vph)	128	548	277	96	920	53	303	239	53	48	149	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	548	277	96	973	0	303	292	0	48	271	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.07	1.22	1.12	1.07	1.07	1.17	1.07	1.03	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	13.5	42.0	12.5	12.5	41.0		12.5	38.0		12.5	38.0	
Total Split (s)	13.5	42.0	12.5	12.5	41.0		12.5	38.0		12.5	38.0	
Total Split (%)	12.9%	40.0%	11.9%	11.9%	39.0%		11.9%	36.2%		11.9%	36.2%	
Maximum Green (s)	9.0	36.0	8.0	8.0	35.0		8.0	32.0		8.0	32.0	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	0.2	4.0	0.2	0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	25.0	0.0	0.0	25.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Recall Mode	Max	C-Max	None	None	C-Max		None	None		None	None	
Walk Time (s)		14.0			13.0			5.0			5.0	
Flash Dont Walk (s)		22.0			22.0			26.0			26.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	63.7	51.6	61.1	44.7	35.0		28.9	21.0		27.0	18.3	
Actuated g/C Ratio	0.61	0.49	0.58	0.43	0.33		0.28	0.20		0.26	0.17	
v/c Ratio	0.32	0.35	0.32	0.25	0.90		1.17	0.44		0.17	0.46	
Control Delay	12.3	16.9	3.0	12.7	45.6		137.8	30.5		26.3	23.0	
Queue Delay	0.0	0.3	0.2	0.0	3.3		0.0	0.0		0.0	0.0	
Total Delay	12.3	17.2	3.2	12.7	48.9		137.8	30.5		26.3	23.0	
LOS	B	B	A	B	D		F	C		C	C	
Approach Delay		12.5			45.7			85.2			23.5	
Approach LOS		B			D			F			C	
90th %ile Green (s)	17.6	41.7	8.0	10.9	35.0		8.0	23.4		8.0	23.4	
90th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Max	Hold	
70th %ile Green (s)	20.7	46.6	8.0	9.1	35.0		8.0	20.3		8.0	20.3	
70th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Max	Hold	
50th %ile Green (s)	23.4	50.4	8.0	8.0	35.0		8.0	17.7		7.9	17.6	
50th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Gap	Hold	
30th %ile Green (s)	26.0	53.9	8.0	7.1	35.0		8.0	16.2		6.8	15.0	
30th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Gap	Min	
10th %ile Green (s)	26.0	65.5	8.0	0.0	35.0		8.0	27.5		0.0	15.0	
10th %ile Term Code	MaxR	Coord	Max	Skip	Coord		Max	Hold		Skip	Min	
Stops (vph)	57	350	59	50	813		286	263		33	120	
Fuel Used(gal)	1	5	1	4	51		13	6		1	4	
CO Emissions (g/hr)	65	353	81	299	3591		911	453		52	258	
NOx Emissions (g/hr)	13	69	16	58	699		177	88		10	50	
VOC Emissions (g/hr)	15	82	19	69	832		211	105		12	60	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	27	116	3	25	323		~245	92		23	46	
Queue Length 95th (ft)	m60	m188	m33	54	#446		#405	137		48	82	
Internal Link Dist (ft)		256			5299			1475			845	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	120			85			240			120		
Base Capacity (vph)	405	1556	864	395	1081		259	1001		293	934	
Starvation Cap Reductn	0	447	158	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	56		0	0		0	1	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.32	0.49	0.39	0.24	0.95		1.17	0.29		0.16	0.29	

Intersection Summary	
Area Type:	Other
Cycle Length: 105	
Actuated Cycle Length: 105	
Offset: 16 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 40.5	Intersection LOS: D
Intersection Capacity Utilization 86.3%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1066: S Ashland & 127th Street

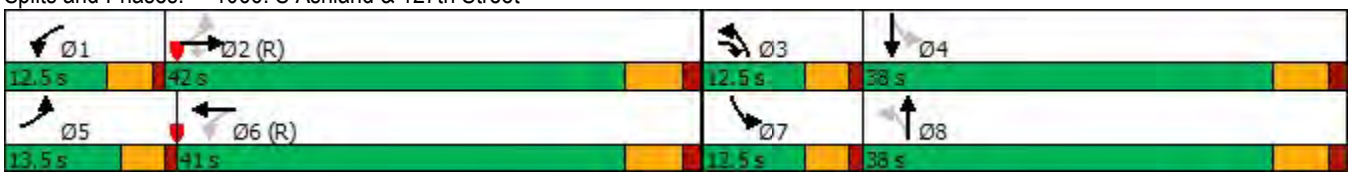

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	135	290	60	175	105	410	475	80	115	325	70
Future Volume (vph)	65	135	290	60	175	105	410	475	80	115	325	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	11	12	12	12	12	12
Storage Length (ft)	85		0	140		0	140		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	55			135			115			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98				0.99		1.00	1.00		1.00	1.00	
Frt		0.898			0.944			0.978			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1644	2906	0	1513	3015	0	1589	3154	0	1660	3240	0
Flt Permitted	0.535			0.382			0.365			0.421		
Satd. Flow (perm)	912	2906	0	608	3015	0	610	3154	0	735	3240	0
Right Turn on Red			No			Yes			Yes			No
Satd. Flow (RTOR)					111			21				
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		542			3053			918			1555	
Travel Time (s)		10.6			59.5			17.9			30.3	
Confl. Peds. (#/hr)	20					20	1		2	2		1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Adj. Flow (vph)	71	148	319	66	192	115	451	522	88	126	357	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	467	0	66	307	0	451	610	0	126	434	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	13.5	31.5		13.5	31.5		24.0	46.5		13.5	36.0	
Total Split (s)	13.5	31.5		13.5	31.5		24.0	46.5		13.5	36.0	
Total Split (%)	12.9%	30.0%		12.9%	30.0%		22.9%	44.3%		12.9%	34.3%	
Maximum Green (s)	9.5	25.5		9.5	25.5		20.0	40.5		9.5	30.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	1.0	1.5		1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Minimum Gap (s)	0.2	4.0		0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Time To Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Recall Mode	None	Max		None	Max		None	C-Max		None	C-Max	
Walk Time (s)					2.0						2.0	
Flash Dont Walk (s)					23.5						28.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)	37.8	28.7		37.8	28.7		56.0	41.1		41.0	30.1	
Actuated g/C Ratio	0.36	0.27		0.36	0.27		0.53	0.39		0.39	0.29	
v/c Ratio	0.18	0.59		0.23	0.34		0.88	0.49		0.35	0.47	
Control Delay	21.9	37.8		22.7	21.4		38.0	24.9		17.8	30.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.9	37.8		22.7	21.4		38.0	24.9		17.8	30.7	
LOS	C	D		C	C		D	C		B	C	
Approach Delay		35.7			21.6			30.5			27.8	
Approach LOS		D			C			C			C	
90th %ile Green (s)	9.5	25.5		9.5	25.5		20.0	40.5		9.5	30.0	
90th %ile Term Code	Max	MaxR		Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	9.5	25.5		9.5	25.5		20.0	40.5		9.5	30.0	
70th %ile Term Code	Max	MaxR		Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	8.8	26.1		8.9	26.2		20.0	40.5		9.5	30.0	
50th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.8	27.3		7.7	27.2		20.0	41.2		8.8	30.0	
30th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Gap	Coord	
10th %ile Green (s)	0.0	39.0		0.0	39.0		19.6	42.8		7.2	30.4	
10th %ile Term Code	Skip	MaxR		Skip	MaxR		Gap	Coord		Gap	Coord	
Stops (vph)	41	365		39	143		243	391		70	289	
Fuel Used(gal)	1	8		3	14		8	9		2	9	
CO Emissions (g/hr)	60	537		209	950		539	660		156	635	
NOx Emissions (g/hr)	12	104		41	185		105	128		30	123	
VOC Emissions (g/hr)	14	124		49	220		125	153		36	147	
Dilemma Vehicles (#)	0	20		0	13		0	26		0	19	
Queue Length 50th (ft)	30	148		28	55		188	155		32	118	
Queue Length 95th (ft)	60	206		57	96		#360	208		66	177	
Internal Link Dist (ft)		462			2973			838			1475	
Turn Bay Length (ft)	85			140			140			150		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	398	793		303	904		511	1247		374	928	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.18	0.59		0.22	0.34		0.88	0.49		0.34	0.47	

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 9 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 29.7 Intersection LOS: C
Intersection Capacity Utilization 90.7% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1067: S Ashland & Vermont St

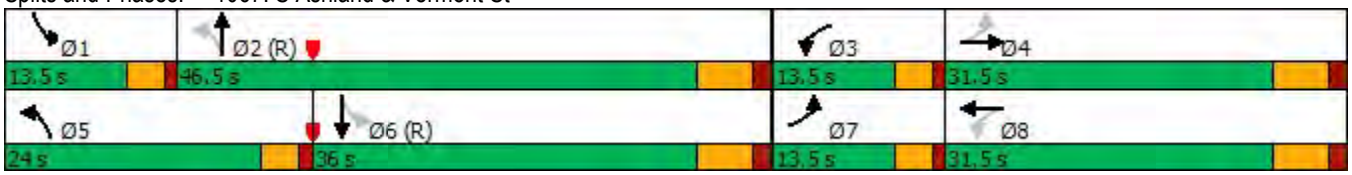

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	455	90	10	470	125	70	620	10	80	320	100
Future Volume (vph)	190	455	90	10	470	125	70	620	10	80	320	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	11	12	11	12	12	11	11	12
Storage Length (ft)	0		0	0		0	135		0	130		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			100			105		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		0.99	1.00		1.00	0.99	
Frt		0.982			0.969			0.998			0.964	
Flt Protected		0.987			0.999		0.950			0.950		
Satd. Flow (prot)	0	2995	0	0	2985	0	1545	3288	0	1559	2995	0
Flt Permitted		0.626			0.938		0.437			0.274		
Satd. Flow (perm)	0	1899	0	0	2802	0	707	3288	0	448	2995	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			38			2			49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5379			1323			450			5338	
Travel Time (s)		122.3			30.1			10.2			121.3	
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Adj. Flow (vph)	204	489	97	11	505	134	75	667	11	86	344	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	790	0	0	650	0	75	678	0	86	452	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.07	1.07	1.12	1.07	1.12	1.07	1.07	1.12	1.12	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		15.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	37.0		21.0	21.0		6.5	31.0		6.5	21.0	
Total Split (s)	10.0	40.0		30.0	30.0		15.0	33.0		12.0	30.0	
Total Split (%)	11.8%	47.1%		35.3%	35.3%		17.6%	38.8%		14.1%	35.3%	
Maximum Green (s)	6.5	34.0		24.0	24.0		11.5	27.0		8.5	24.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Time To Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		9.0						7.0				
Flash Dont Walk (s)		22.0						18.0				
Pedestrian Calls (#/hr)		11						14				
Act Effct Green (s)		34.4			34.4		34.1	25.2		33.7	25.0	
Actuated g/C Ratio		0.43			0.43		0.42	0.31		0.42	0.31	
v/c Ratio		0.96			0.53		0.20	0.66		0.30	0.47	
Control Delay		48.9			19.3		13.2	27.8		14.8	22.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		48.9			19.3		13.2	27.8		14.8	22.2	
LOS		D			B		B	C		B	C	
Approach Delay		48.9			19.3			26.3			21.0	
Approach LOS		D			B			C			C	
90th %ile Green (s)	0.0	34.0		34.0	34.0		10.0	27.0		8.5	25.5	
90th %ile Term Code	Skip	Max		Hold	Hold		Gap	Max		Max	Hold	
70th %ile Green (s)	0.0	34.0		34.0	34.0		8.6	27.0		8.5	26.9	
70th %ile Term Code	Skip	Max		Hold	Hold		Gap	Max		Max	Hold	
50th %ile Green (s)	0.0	34.0		34.0	34.0		7.7	27.0		8.0	27.3	
50th %ile Term Code	Skip	Max		Hold	Hold		Gap	Max		Gap	Hold	
30th %ile Green (s)	0.0	34.0		34.0	34.0		6.8	26.3		7.0	26.5	
30th %ile Term Code	Skip	Max		Hold	Hold		Gap	Gap		Gap	Hold	
10th %ile Green (s)	0.0	34.0		34.0	34.0		0.0	19.3		0.0	19.3	
10th %ile Term Code	Skip	Max		Hold	Hold		Skip	Gap		Skip	Hold	
Stops (vph)		574			409		37	517		43	287	
Fuel Used(gal)		41			11		1	9		4	21	
CO Emissions (g/hr)		2887			759		45	604		266	1465	
NOx Emissions (g/hr)		562			148		9	118		52	285	
VOC Emissions (g/hr)		669			176		10	140		62	340	
Dilemma Vehicles (#)		0			0		0	0		0	0	
Queue Length 50th (ft)		~220			128		21	160		24	87	
Queue Length 95th (ft)		#352			184		44	221		49	137	
Internal Link Dist (ft)		5299			1243			370			5258	
Turn Bay Length (ft)							135			130		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		822			1217		440	1115		307	1007	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.96			0.53		0.17	0.61		0.28	0.45	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 80.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 30.1 Intersection LOS: C
Intersection Capacity Utilization 84.1% ICU Level of Service E
Analysis Period (min) 15
90th %ile Actuated Cycle: 85
70th %ile Actuated Cycle: 85
50th %ile Actuated Cycle: 84.5
30th %ile Actuated Cycle: 82.8
10th %ile Actuated Cycle: 65.3
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1068: Halsted Street & 127th Street

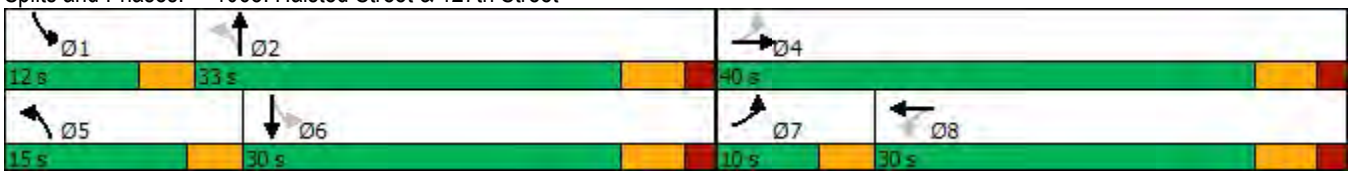

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	115	45	75	140	15	40	670	80	10	370	45
Future Volume (vph)	50	115	45	75	140	15	40	670	80	10	370	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	60		0	55		0	105		0	90		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			55			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.99	1.00		1.00	1.00		1.00	1.00	
Frt		0.958			0.986			0.984			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1676	1860	0	1629	1937	0	1660	3214	0	1140	3193	0
Flt Permitted	0.651			0.647			0.489			0.282		
Satd. Flow (perm)	1141	1860	0	1098	1937	0	853	3214	0	338	3193	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			9			27			28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2456			1385			1856			450	
Travel Time (s)		55.8			31.5			42.2			10.2	
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Adj. Flow (vph)	54	125	49	82	152	16	43	728	87	11	402	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	174	0	82	168	0	43	815	0	11	451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	19.0	19.0		19.0	19.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
v/c Ratio	0.13	0.25		0.20	0.23		0.11	0.53		0.07	0.29	
Control Delay	14.7	12.5		25.4	24.4		10.3	13.0		10.7	10.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.7	12.5		25.4	24.4		10.3	13.0		10.7	10.3	
LOS	B	B		C	C		B	B		B	B	
Approach Delay		13.0			24.7			12.8			10.3	
Approach LOS		B			C			B			B	
Stops (vph)	33	86		72	143		23	476		7	220	
Fuel Used(gal)	2	8		2	3		1	15		0	4	
CO Emissions (g/hr)	173	542		112	226		55	1081		7	247	
NOx Emissions (g/hr)	34	105		22	44		11	210		1	48	
VOC Emissions (g/hr)	40	126		26	52		13	251		2	57	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	14	37		35	69		9	107		2	50	
Queue Length 95th (ft)	36	76		m38	m71		25	154		11	77	
Internal Link Dist (ft)		2376			1305			1776			370	
Turn Bay Length (ft)	60			55			105			90		
Base Capacity (vph)	421	708		405	720		406	1546		161	1537	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.25		0.20	0.23		0.11	0.53		0.07	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.53
Intersection Signal Delay: 13.9 Intersection LOS: B
Intersection Capacity Utilization 70.2% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1069: Halsted Street & Vermont St

Lane Group	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	510	185	640	15	5	15	5	50	10	0	5	5
Future Volume (vph)	510	185	640	15	5	15	5	50	10	0	5	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	12	12	16	12	12	16	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.99		
Frt			0.997				0.911			0.930		
Flt Protected			0.989				0.987			0.977		
Satd. Flow (prot)	2956	0	2959	0	0	0	1749	0	0	1828	0	0
Flt Permitted			0.612				0.933			0.892		
Satd. Flow (perm)	2956	0	1829	0	0	0	1651	0	0	1669	0	0
Right Turn on Red				No				No				No
Satd. Flow (RTOR)												
Link Speed (mph)	30		30				30			30		
Link Distance (ft)	1323		3930				1256			658		
Travel Time (s)	30.1		89.3				28.5			15.0		
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	567	206	711	17	6	17	6	56	11	0	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	567	0	934	0	0	0	85	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)	0		0				0			0		
Link Offset(ft)	0		0				0			0		
Crosswalk Width(ft)	16		16				16			16		
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.07	1.07	0.91	1.07	1.07	0.91	1.07	1.07
Turning Speed (mph)		15		9	15	15		9	15		9	9
Turn Type	NA	custom	NA		Perm	Perm	NA		Perm	NA		
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7			2	2			6			
Minimum Split (s)	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0		
Total Split (s)	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0		
Total Split (%)	35.4%	13.8%	49.2%		27.7%	27.7%	27.7%		27.7%	27.7%		
Maximum Green (s)	18.0	6.0	27.0		14.0	14.0	14.0		14.0	14.0		
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	0.0	2.0		1.0	1.0	1.0		1.0	1.0		
Lost Time Adjust (s)	0.0		0.0				0.0			0.0		
Total Lost Time (s)	5.0		5.0				4.0			4.0		
Lead/Lag	Lag	Lead										
Lead-Lag Optimize?												
Walk Time (s)	9.0		18.0		5.0	5.0	5.0					
Flash Dont Walk (s)	9.0		9.0		9.0	9.0	9.0					
Pedestrian Calls (#/hr)	0		0		0	0	0					
Act Effct Green (s)	18.0		27.0				14.0			14.0		

Lane Group	NEL	NER
Lane Configurations		
Traffic Volume (vph)	0	220
Future Volume (vph)	0	220
Ideal Flow (vphpl)	1800	1800
Lane Width (ft)	12	12
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt	0.865	
Flt Protected		
Satd. Flow (prot)	1428	0
Flt Permitted		
Satd. Flow (perm)	1428	0
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	1385	
Travel Time (s)	31.5	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.90	0.90
Heavy Vehicles (%)	0%	9%
Adj. Flow (vph)	0	244
Shared Lane Traffic (%)		
Lane Group Flow (vph)	244	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.07	1.07
Turning Speed (mph)	15	9
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Minimum Split (s)	15.0	
Total Split (s)	15.0	
Total Split (%)	23.1%	
Maximum Green (s)	10.0	
Yellow Time (s)	3.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)	10.0	

Lane Group	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
v/c Ratio	0.69		1.13				0.24			0.06		
Control Delay	26.3		88.9				23.2			21.0		
Queue Delay	0.0		0.0				0.0			0.0		
Total Delay	26.3		88.9				23.2			21.0		
LOS	C		F				C			C		
Approach Delay	26.3		88.9				23.3			21.0		
Approach LOS	C		F				C			C		
Stops (vph)	439		521				61			19		
Fuel Used(gal)	10		44				1			0		
CO Emissions (g/hr)	728		3067				101			21		
NOx Emissions (g/hr)	142		597				20			4		
VOC Emissions (g/hr)	169		711				23			5		
Dilemma Vehicles (#)	0		0				0			0		
Queue Length 50th (ft)	105		~144				28			7		
Queue Length 95th (ft)	156		#351				62			24		
Internal Link Dist (ft)	1243		3850				1176			578		
Turn Bay Length (ft)												
Base Capacity (vph)	818		829				355			359		
Starvation Cap Reductn	0		0				0			0		
Spillback Cap Reductn	0		0				0			0		
Storage Cap Reductn	0		0				0			0		
Reduced v/c Ratio	0.69		1.13				0.24			0.06		

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 70.8 Intersection LOS: E
Intersection Capacity Utilization 81.7% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1070: S Wallance St & 127th Street

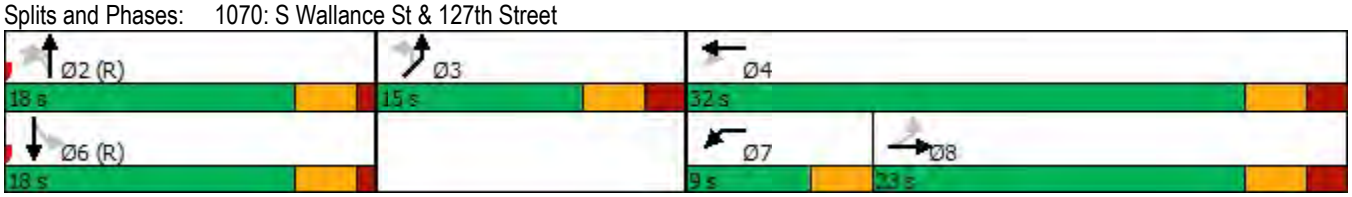

Lane Group	NEL	NER
Actuated g/C Ratio	0.15	
v/c Ratio	1.11	
Control Delay	126.4	
Queue Delay	0.0	
Total Delay	126.4	
LOS	F	
Approach Delay	126.4	
Approach LOS	F	
Stops (vph)	178	
Fuel Used(gal)	9	
CO Emissions (g/hr)	630	
NOx Emissions (g/hr)	123	
VOC Emissions (g/hr)	146	
Dilemma Vehicles (#)	0	
Queue Length 50th (ft)	~120	
Queue Length 95th (ft)	#252	
Internal Link Dist (ft)	1305	
Turn Bay Length (ft)		
Base Capacity (vph)	219	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	1.11	

Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	200	595	645	70	50	200
Future Volume (vph)	200	595	645	70	50	200
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	150
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.985			0.850
Flt Protected		0.988			0.950	
Satd. Flow (prot)	0	3004	2994	0	1520	1360
Flt Permitted		0.616			0.950	
Satd. Flow (perm)	0	1873	2994	0	1520	1360
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			33			215
Link Speed (mph)		30	30		30	
Link Distance (ft)		3930	637		2686	
Travel Time (s)		89.3	14.5		61.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	215	640	694	75	54	215
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	855	769	0	54	215
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (%)	67.7%	67.7%	67.7%		32.3%	32.3%
Maximum Green (s)	40.0	40.0	40.0		17.0	17.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			30.0			
Flash Dont Walk (s)			10.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		40.0	40.0		17.0	17.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.62	0.62		0.26	0.26
v/c Ratio		0.74	0.41		0.14	0.42
Control Delay		15.3	5.5		17.7	4.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		15.3	5.5		17.7	4.6
LOS		B	A		B	A
Approach Delay		15.3	5.5		7.3	
Approach LOS		B	A		A	
Stops (vph)		762	170		34	22
Fuel Used(gal)		31	5		2	9
CO Emissions (g/hr)		2170	370		172	606
NOx Emissions (g/hr)		422	72		33	118
VOC Emissions (g/hr)		503	86		40	140
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		187	41		15	3
Queue Length 95th (ft)		m226	61		34	32
Internal Link Dist (ft)		3850	557		2606	
Turn Bay Length (ft)						150
Base Capacity (vph)		1152	1855		397	514
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.74	0.41		0.14	0.42

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 43 (66%), Referenced to phase 2: and 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 10.2	Intersection LOS: B
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1071: 127th Street & State Street

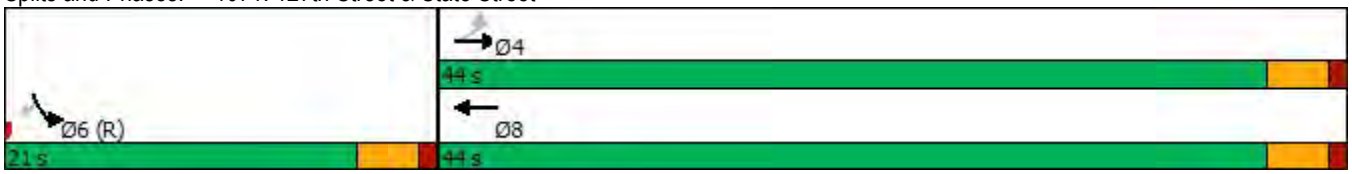

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	60	590	655	215	150	60
Future Volume (vph)	60	590	655	215	150	60
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.99			
Frt			0.963			0.850
Flt Protected		0.995			0.950	
Satd. Flow (prot)	0	2926	2805	0	1464	1373
Flt Permitted		0.806			0.950	
Satd. Flow (perm)	0	2370	2805	0	1464	1373
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			118			65
Link Speed (mph)		30	30		30	
Link Distance (ft)		637	664		6686	
Travel Time (s)		14.5	15.1		152.0	
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Adj. Flow (vph)	65	641	712	234	163	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	706	946	0	163	65
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	42.0	42.0	42.0		23.0	23.0
Total Split (s)	42.0	42.0	42.0		23.0	23.0
Total Split (%)	64.6%	64.6%	64.6%		35.4%	35.4%
Maximum Green (s)	38.0	38.0	38.0		19.0	19.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			25.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)			13.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
v/c Ratio		0.51	0.56		0.38	0.15
Control Delay		6.6	5.8		21.1	7.2
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		6.6	5.8		21.1	7.2
LOS		A	A		C	A
Approach Delay		6.6	5.8		17.2	
Approach LOS		A	A		B	
Stops (vph)		169	431		94	16
Fuel Used(gal)		5	21		11	4
CO Emissions (g/hr)		352	1472		738	275
NOx Emissions (g/hr)		68	286		143	53
VOC Emissions (g/hr)		82	341		171	64
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		36	60		46	0
Queue Length 95th (ft)		91	80		m67	m3
Internal Link Dist (ft)		557	584		6606	
Turn Bay Length (ft)						30
Base Capacity (vph)		1385	1688		427	447
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.51	0.56		0.38	0.15

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 42 (65%), Referenced to phase 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 7.5	Intersection LOS: A
Intersection Capacity Utilization 88.8%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1072: 127th Street & Michigan Avenue

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	530	160	20	305	410	80
Future Volume (vph)	530	160	20	305	410	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	12	12	10	10
Storage Length (ft)		100	105		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor		0.97	1.00			0.98
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1568	1382	1660	3196	1565	1400
Flt Permitted			0.284		0.950	
Satd. Flow (perm)	1568	1347	496	3196	1565	1374
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						88
Link Speed (mph)	30			35	30	
Link Distance (ft)	163			5340	2671	
Travel Time (s)	3.7			104.0	60.7	
Confl. Peds. (#/hr)		4	4			8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Adj. Flow (vph)	582	176	22	335	451	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	582	176	22	335	451	88
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.12	1.12	1.07	1.07	1.17	1.17
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm
Protected Phases	4	2		8	2	
Permitted Phases		4	8			2
Minimum Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (%)	55.4%	44.6%	55.4%	55.4%	44.6%	44.6%
Maximum Green (s)	31.0	24.0	31.0	31.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	17.0	5.0			5.0	5.0
Flash Dont Walk (s)	14.0	19.0			19.0	19.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Pedestrian Calls (#/hr)	0	0			0	0
Act Effct Green (s)	31.0	55.0	31.0	31.0	24.0	24.0
Actuated g/C Ratio	0.48	0.85	0.48	0.48	0.37	0.37
v/c Ratio	0.78	0.15	0.09	0.22	0.78	0.16
Control Delay	28.0	1.2	10.7	10.4	30.1	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.0	1.2	10.7	10.4	30.1	4.5
LOS	C	A	B	B	C	A
Approach Delay	21.7			10.4	26.0	
Approach LOS	C			B	C	
Stops (vph)	482	28	12	166	336	14
Fuel Used(gal)	16	3	1	14	13	2
CO Emissions (g/hr)	1149	240	63	954	902	127
NOx Emissions (g/hr)	224	47	12	186	176	25
VOC Emissions (g/hr)	266	56	15	221	209	29
Dilemma Vehicles (#)	0	0	0	23	0	0
Queue Length 50th (ft)	232	0	5	38	154	0
Queue Length 95th (ft)	#365	0	16	61	#298	25
Internal Link Dist (ft)	83			5260	2591	
Turn Bay Length (ft)		100	105			
Base Capacity (vph)	747	1152	236	1524	577	562
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.15	0.09	0.22	0.78	0.16

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 20.7 Intersection LOS: C
Intersection Capacity Utilization 61.8% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1073: Indiana Ave & 130th Street

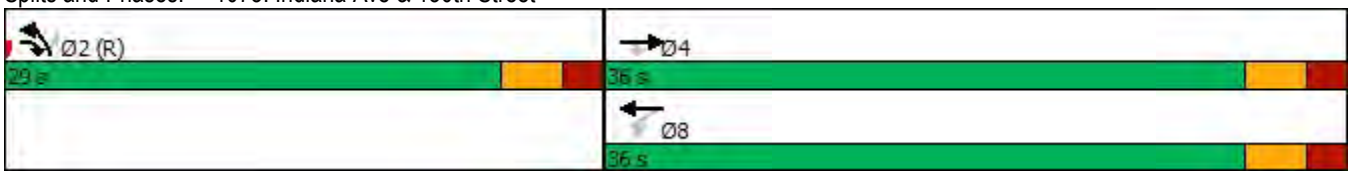

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	490	0	30	615	90	0	0	0	50	5	80
Future Volume (vph)	85	490	0	30	615	90	0	0	0	50	5	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	9	12	12	12	11	15	11
Storage Length (ft)	0		30	0		50	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00	0.88					0.96	
Frt						0.850					0.920	
Flt Protected		0.993			0.998						0.982	
Satd. Flow (prot)	0	3073	0	0	1615	1377	0	1800	0	0	1588	0
Flt Permitted		0.734			0.968						0.925	
Satd. Flow (perm)	0	2261	0	0	1566	1213	0	1800	0	0	1489	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						100					89	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			105			169			1380	
Travel Time (s)		5.2			2.4			3.8			31.4	
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Adj. Flow (vph)	94	544	0	33	683	100	0	0	0	56	6	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	638	0	0	716	100	0	0	0	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.07	1.07	1.17	1.22	1.07	1.07	1.07	1.12	0.95	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		pm+pt	NA	Perm				pm+pt	NA	
Protected Phases		4		3	3 8			2		1	6	
Permitted Phases	4			3 8	3	3 8	2	2		6		
Minimum Split (s)	16.0	16.0		18.0			12.0	12.0		20.0	32.0	
Total Split (s)	35.0	35.0		18.0			12.0	12.0		20.0	32.0	
Total Split (%)	41.2%	41.2%		21.2%			14.1%	14.1%		23.5%	37.6%	
Maximum Green (s)	31.0	31.0		14.0			9.0	9.0		15.0	27.0	
Yellow Time (s)	3.0	3.0		3.0			3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0			0.0	0.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						3.0			5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?												
Walk Time (s)				2.0							14.0	

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Minimum Split (s)	35.0
Total Split (s)	35.0
Total Split (%)	41%
Maximum Green (s)	31.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	18.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)				12.0							13.0	
Pedestrian Calls (#/hr)				0							0	
Act Effct Green (s)		31.0			45.0	49.0					27.0	
Actuated g/C Ratio		0.36			0.53	0.58					0.32	
v/c Ratio		0.77			0.86	0.13					0.27	
Control Delay		31.7			15.6	0.3					11.3	
Queue Delay		0.9			51.2	26.0					0.0	
Total Delay		32.6			66.9	26.2					11.3	
LOS		C			E	C					B	
Approach Delay		32.6			61.9						11.3	
Approach LOS		C			E						B	
Stops (vph)		489			169	1					46	
Fuel Used(gal)		9			4	0					2	
CO Emissions (g/hr)		601			245	6					142	
NOx Emissions (g/hr)		117			48	1					28	
VOC Emissions (g/hr)		139			57	1					33	
Dilemma Vehicles (#)		0			0	0					0	
Queue Length 50th (ft)		156			110	0					23	
Queue Length 95th (ft)		224			m24	m0					67	
Internal Link Dist (ft)		148			25			89			1300	
Turn Bay Length (ft)						50						
Base Capacity (vph)		824			837	741					551	
Starvation Cap Reductn		0			343	629					0	
Spillback Cap Reductn		49			0	0					1	
Storage Cap Reductn		0			0	0					0	
Reduced v/c Ratio		0.82			1.45	0.89					0.27	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 125
Control Type: Pretimed
Maximum v/c Ratio: 1.62
Intersection Signal Delay: 45.5 Intersection LOS: D
Intersection Capacity Utilization 86.2% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1955: 115th Street & Cottage Grove Avenue

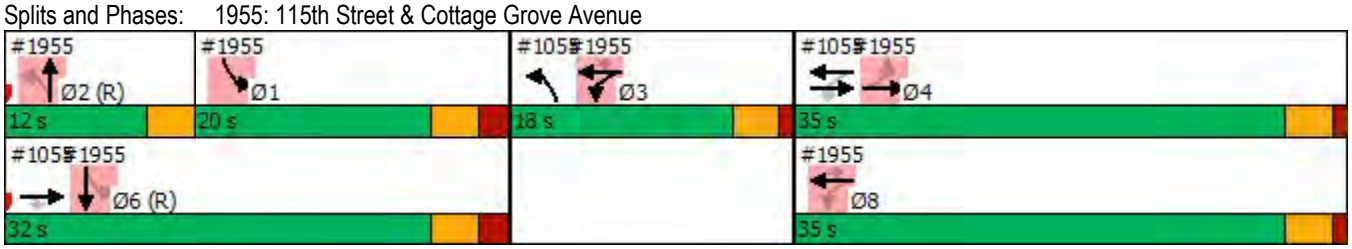

Lane Group	Ø8
Flash Dont Walk (s)	13.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1035	40	120	755	0	60	0	150	0	0	0
Future Volume (vph)	0	1035	40	120	755	0	60	0	150	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	16	12
Storage Length (ft)	165		165	165		165	0		0	0		0
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	210			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected				0.950				0.950				
Satd. Flow (prot)	1800	3320	1530	1644	3320	1800	0	1710	1500	0	2040	0
Flt Permitted				0.188				0.757				
Satd. Flow (perm)	1800	3320	1530	325	3320	1800	0	1363	1500	0	2040	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		5343			1170			134			331	
Travel Time (s)		104.1			22.8			3.0			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	0	1078	42	125	786	0	63	0	156	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1078	42	125	786	0	0	63	156	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	4	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	43.0	43.0	43.0	7.0	43.0	43.0	6.0	6.0	6.0	6.0	6.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	47.0	47.0	47.0	10.0	47.0	47.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	47.0	47.0	47.0	10.0	57.0	57.0	28.0	28.0	28.0	28.0	28.0	
Total Split (%)	55.3%	55.3%	55.3%	11.8%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%	32.9%	
Maximum Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		4.0	4.0		4.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)		49.5	49.5	61.1	60.1			16.9	16.9			
Actuated g/C Ratio		0.58	0.58	0.72	0.71			0.20	0.20			
v/c Ratio		0.56	0.05	0.36	0.34			0.23	0.52			
Control Delay		13.2	9.5	7.3	5.8			29.1	36.1			
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0			
Total Delay		13.2	9.5	7.3	5.8			29.1	36.1			
LOS		B	A	A	A			C	D			
Approach Delay		13.1			6.0			34.1				
Approach LOS		B			A			C				
90th %ile Green (s)	43.0	43.0	43.0	8.0	54.0	54.0	23.0	23.0	23.0	23.0	23.0	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
70th %ile Green (s)	46.6	46.6	46.6	8.3	57.9	57.9	19.1	19.1	19.1	19.1	19.1	
70th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
50th %ile Green (s)	49.8	49.8	49.8	7.4	60.2	60.2	16.8	16.8	16.8	16.8	16.8	
50th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
30th %ile Green (s)	52.5	52.5	52.5	7.0	62.5	62.5	14.5	14.5	14.5	14.5	14.5	
30th %ile Term Code	Coord	Coord	Coord	Min	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
10th %ile Green (s)	55.8	55.8	55.8	7.0	65.8	65.8	11.2	11.2	11.2	11.2	11.2	
10th %ile Term Code	Coord	Coord	Coord	Min	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
Stops (vph)		622	18	36	272			48	129			
Fuel Used(gal)		47	2	2	11			1	2			
CO Emissions (g/hr)		3313	123	116	740			48	138			
NOx Emissions (g/hr)		645	24	23	144			9	27			
VOC Emissions (g/hr)		768	28	27	172			11	32			
Dilemma Vehicles (#)		61	0	0	44			0	0			
Queue Length 50th (ft)		171	9	17	71			29	75			
Queue Length 95th (ft)		276	27	43	126			58	123			
Internal Link Dist (ft)		5263			1090			54			251	
Turn Bay Length (ft)			165	165								
Base Capacity (vph)		1935	891	350	2346			384	423			
Starvation Cap Reductn		0	0	0	0			0	0			
Spillback Cap Reductn		0	0	0	0			0	0			
Storage Cap Reductn		0	0	0	0			0	0			
Reduced v/c Ratio		0.56	0.05	0.36	0.34			0.16	0.37			

Intersection Summary	
Area Type:	Other

Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 12.3	Intersection LOS: B
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Ellis Avenue & 130th Street

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	27	144	2	0	126
Future Volume (vph)	0	27	144	2	0	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.865	0.998			
Flt Protected						
Satd. Flow (prot)	0	1557	3413	0	0	3420
Flt Permitted						
Satd. Flow (perm)	0	1557	3413	0	0	3420
Link Speed (mph)	30		30			30
Link Distance (ft)	602		184			134
Travel Time (s)	13.7		4.2			3.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	30	160	2	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	30	162	0	0	140
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 14.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	27	144	2	0	126
Future Volume (Veh/h)	0	27	144	2	0	126
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	30	160	2	0	140
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						134
pX, platoon unblocked						
vC, conflicting volume	231	81			162	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	231	81			162	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	742	969			1429	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	30	107	55	70	70
Volume Left	0	0	0	0	0
Volume Right	30	0	2	0	0
cSH	969	1700	1700	1700	1700
Volume to Capacity	0.03	0.06	0.03	0.04	0.04
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	8.8	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	8.8	0.0		0.0	
Approach LOS	A				

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	14.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	9	1	4	2	1	17	1	2	154	2	6	23
Future Volume (vph)	9	1	4	2	1	17	1	2	154	2	6	23
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.964			0.883				0.998			
Flt Protected		0.968			0.995				0.999			
Satd. Flow (prot)	0	1680	0	0	1581	0	0	0	1744	0	0	0
Flt Permitted		0.968			0.995				0.999			
Satd. Flow (perm)	0	1680	0	0	1581	0	0	0	1744	0	0	0
Link Speed (mph)		30			30				30			
Link Distance (ft)		472			392				265			
Travel Time (s)		10.7			8.9				6.0			
Confl. Peds. (#/hr)						43				43		43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	4%
Adj. Flow (vph)	10	1	4	2	1	19	1	2	171	2	7	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	22	0	0	0	176	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(ft)		0			0				0			
Link Offset(ft)		0			0				0			
Crosswalk Width(ft)		16			16				16			
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	9	15		9	9	15
Sign Control		Stop			Stop				Free			

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	90	8
Future Volume (vph)	90	8
Ideal Flow (vphpl)	1800	1800
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected	0.988	
Satd. Flow (prot)	1752	1530
Flt Permitted	0.988	
Satd. Flow (perm)	1752	1530
Link Speed (mph)	30	
Link Distance (ft)	184	
Travel Time (s)	4.2	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.90	0.90
Heavy Vehicles (%)	1%	0%
Adj. Flow (vph)	100	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	133	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.07	1.07
Turning Speed (mph)		9
Sign Control	Free	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	9	1	4	2	1	17	1	2	154	2	6	23
Future Volume (Veh/h)	9	1	4	2	1	17	1	2	154	2	6	23
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	1	4	2	1	19	0	2	171	2	0	26
Pedestrians					43							
Lane Width (ft)					12.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					4							
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked							0.00				0.00	
vC, conflicting volume	390	372	100	376	380	258	0	109			0	216
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	390	372	100	376	380	258	0	109			0	216
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	98	100	100	100	100	97	0	100			0	98
cM capacity (veh/h)	513	530	961	537	524	730	0	1494			0	1294

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total	15	22	175	126	9
Volume Left	10	2	2	26	0
Volume Right	4	19	2	0	9
cSH	588	695	1494	1294	1700
Volume to Capacity	0.03	0.03	0.00	0.02	0.01
Queue Length 95th (ft)	2	2	0	2	0
Control Delay (s)	11.3	10.3	0.1	1.8	0.0
Lane LOS	B	B	A	A	
Approach Delay (s)	11.3	10.3	0.1	1.6	
Approach LOS	B	B			

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	90	8
Future Volume (Veh/h)	90	8
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.90	0.90
Hourly flow rate (vph)	100	9
Pedestrians	43	
Lane Width (ft)	12.0	
Walking Speed (ft/s)	4.0	
Percent Blockage	4	
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	318	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	18	0	1	29
Future Volume (vph)	0	0	18	0	1	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						0.998
Satd. Flow (prot)	1765	0	1765	0	0	1761
Flt Permitted						0.998
Satd. Flow (perm)	1765	0	1765	0	0	1761
Link Speed (mph)	30		30			30
Link Distance (ft)	278		312			264
Travel Time (s)	6.3		7.1			6.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	0	1	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	20	0	0	33
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 6.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	18	0	1	29
Future Volume (Veh/h)	0	0	18	0	1	29
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	20	0	1	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	54	20			20	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	54	20			20	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	953	1058			1596	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	20	33
Volume Left	0	0	1
Volume Right	0	0	0
cSH	1700	1700	1596
Volume to Capacity	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.2
Lane LOS	A		A
Approach Delay (s)	0.0	0.0	0.2
Approach LOS	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	0	0	12	0	1	0	20
Future Volume (vph)	0	0	12	0	1	0	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt							
Flt Protected							0.998
Satd. Flow (prot)	1800	0	1800	0	0	0	1730
Flt Permitted							0.998
Satd. Flow (perm)	1800	0	1800	0	0	0	1730
Link Speed (mph)	30		30				30
Link Distance (ft)	396		262				692
Travel Time (s)	9.0		6.0				15.7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	0	0	13	0	1	0	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	13	0	0	0	22
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		0				0
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane							
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 6.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	0	0	12	0	1	0	20
Future Volume (Veh/h)	0	0	12	0	1	0	20
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	13	0	0	0	21
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None				None
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	34	13			0	13	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	34	13			0	13	
tC, single (s)	6.4	6.2			0.0	4.1	
tC, 2 stage (s)							
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	984	1073			0	1619	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	13	21
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1619
Volume to Capacity	0.00	0.01	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	5	0	0	0	1	7	0	1	0	14
Future Volume (vph)	2	0	5	0	0	0	1	7	0	1	0	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.899										0.992
Flt Protected		0.988						0.994				0.997
Satd. Flow (prot)	0	1599	0	0	1800	0	0	1789	0	0	0	1780
Flt Permitted		0.988						0.994				0.997
Satd. Flow (perm)	0	1599	0	0	1800	0	0	1789	0	0	0	1780
Link Speed (mph)		30			30			30				30
Link Distance (ft)		330			1039			274				262
Travel Time (s)		7.5			23.6			6.2				6.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	0	6	0	0	0	1	8	0	1	0	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	0	0	0	0	0	9	0	0	0	18
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Sign Control		Stop			Stop			Free				Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	1
Future Volume (vph)	1
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	1
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	2	0	5	0	0	0	1	7	0	1	0	14
Future Volume (Veh/h)	2	0	5	0	0	0	1	7	0	1	0	14
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	6	0	0	0	1	8	0	0	0	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None				None
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked										0.00		
vC, conflicting volume	26	26	16	32	27	8	17			0	8	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	26	26	16	32	27	8	17			0	8	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	100	100	99	100	100	100	100			0	100	
cM capacity (veh/h)	988	870	1068	974	870	1080	1613			0	1625	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	8	0	9	17
Volume Left	2	0	1	0
Volume Right	6	0	0	1
cSH	1047	1700	1613	1625
Volume to Capacity	0.01	0.00	0.00	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	8.5	0.0	0.8	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.5	0.0	0.8	0.0
Approach LOS	A	A		

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	1
Future Volume (Veh/h)	1
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	1
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEU	SEL	SET	SER	NWL	NWT
Lane Configurations												
Traffic Volume (vph)	2	0	5	0	0	0	1	0	14	1	0	0
Future Volume (vph)	2	0	5	0	0	0	1	0	14	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.899							0.992			
Flt Protected		0.988							0.997			
Satd. Flow (prot)	0	1599	0	0	1800	0	0	0	1780	0	0	1800
Flt Permitted		0.988							0.997			
Satd. Flow (perm)	0	1599	0	0	1800	0	0	0	1780	0	0	1800
Link Speed (mph)		30			30				15			15
Link Distance (ft)		1039			253				374			412
Travel Time (s)		23.6			5.8				17.0			18.7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	0	6	0	0	0	1	0	16	1	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	0	0	0	0	0	0	18	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				0			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Sign Control		Free			Free				Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEU	SEL	SET	SER	NWL	NWT
Lane Configurations												
Traffic Volume (veh/h)	2	0	5	0	0	0	1	0	14	1	0	0
Future Volume (Veh/h)	2	0	5	0	0	0	1	0	14	1	0	0
Sign Control		Free			Free				Stop			Stop
Grade		0%			0%				0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	6	0	0	0	0	0	16	1	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	0			6			0	7	10	0	16	7
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			6			0	7	10	0	16	7
tC, single (s)	4.1			4.1			0.0	7.1	6.5	6.2	7.1	6.5
tC, 2 stage (s)												
tF (s)	2.2			2.2			0.0	3.5	4.0	3.3	3.5	4.0
p0 queue free %	100			100			0	100	98	100	100	100
cM capacity (veh/h)	1636			1628			0	1017	888	1091	989	891

Direction, Lane #	EB 1	WB 1	SE 1	NW 1
Volume Total	8	0	17	0
Volume Left	2	0	0	0
Volume Right	6	0	1	0
cSH	1636	1700	898	1700
Volume to Capacity	0.00	0.00	0.02	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	1.8	0.0	9.1	0.0
Lane LOS	A		A	A
Approach Delay (s)	1.8	0.0	9.1	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay	6.8		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	NWR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	3
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	3
tC, single (s)	6.2
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	100
cM capacity (veh/h)	1087

Direction, Lane #

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Future Volume (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.966									
Flt Protected			0.964						0.988			
Satd. Flow (prot)	0	0	1643	0	0	1765	0	0	1744	0	0	1765
Flt Permitted			0.964						0.988			
Satd. Flow (perm)	0	0	1643	0	0	1765	0	0	1744	0	0	1765
Link Speed (mph)			30			30			30			30
Link Distance (ft)			315			317			259			232
Travel Time (s)			7.2			7.2			5.9			5.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	4	0	0	0	0	0	4	0	0	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			0			0			0			0
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Sign Control			Stop			Stop			Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.92
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	1	2	0	1	0	0	0	1	3	0	0	2
Future Volume (Veh/h)	1	2	0	1	0	0	0	1	3	0	0	2
Sign Control			Stop			Stop			Free			Free
Grade			0%			0%			0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2	0	1	0	0	0	1	3	0	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked	0.00											
vC, conflicting volume	0	7	7	2	8	7	3	2			3	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	7	7	2	8	7	3	2			3	
tC, single (s)	0.0	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1	
tC, 2 stage (s)												
tF (s)	0.0	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2	
p0 queue free %	0	100	100	100	100	100	100	100			100	
cM capacity (veh/h)	0	1012	888	1082	1010	888	1081	1620			1619	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	3	0	4	2
Volume Left	2	0	1	0
Volume Right	1	0	0	0
cSH	1035	1700	1620	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	8.5	0.0	1.8	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.5	0.0	1.8	0.0
Approach LOS	A	A		

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1120	5	40	800	50	0	0	0	795	120	520
Future Volume (vph)	35	1120	5	40	800	50	0	0	0	795	120	520
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	11
Storage Length (ft)	120		0	180		190	0		0	0		0
Storage Lanes	1		0	0		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor	0.85	1.00		1.00		0.49				0.99		0.98
Frt		0.999				0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	855	4856	0	1710	3226	765	0	1800	0	3285	1673	1464
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	727	4856	0	1708	3226	376	0	1800	0	3265	1673	1435
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		1				101						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		809			325			759			669	
Travel Time (s)		18.4			7.4			17.3			15.2	
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	4		1			7				1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Adj. Flow (vph)	38	1204	5	43	860	54	0	0	0	855	129	559
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	1209	0	43	860	54	0	0	0	855	129	559
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm				Split	NA	pm+ov
Protected Phases	7	4		3	8		5	5		6	6	7
Permitted Phases						8						6
Detector Phase	7	4		3	8	8	5	5		6	6	7
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	4.0	10.0	10.0		4.0	4.0	10.0
Minimum Split (s)	15.0	53.0		10.0	51.0	51.0	15.0	15.0		44.0	44.0	15.0
Total Split (s)	15.0	53.0		13.0	51.0	51.0	20.0	20.0		44.0	44.0	15.0
Total Split (%)	11.5%	40.8%		10.0%	39.2%	39.2%	15.4%	15.4%		33.8%	33.8%	11.5%
Maximum Green (s)	10.0	48.0		9.0	46.0	46.0	15.0	15.0		39.0	39.0	10.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		4.0	5.0	5.0		5.0		5.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None
Walk Time (s)		25.0			19.0	19.0				9.0	9.0	
Flash Dont Walk (s)		23.0			27.0	27.0				30.0	30.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	10.0	71.0		8.0	66.0	66.0				39.0	39.0	49.0
Actuated g/C Ratio	0.08	0.55		0.06	0.51	0.51				0.30	0.30	0.38
v/c Ratio	0.58	0.46		0.41	0.53	0.23				0.87	0.26	1.03
Control Delay	92.1	19.0		71.1	26.3	6.9				53.7	36.3	85.4
Queue Delay	0.0	0.0		0.0	5.0	0.0				48.4	0.0	0.0
Total Delay	92.1	19.0		71.1	31.3	6.9				102.1	36.3	85.4
LOS	F	B		E	C	A				F	D	F
Approach Delay		21.3			31.7						90.5	
Approach LOS		C			C						F	
90th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
90th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
70th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
70th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
50th %ile Green (s)	10.0	68.4		8.6	66.0	66.0	0.0	0.0		39.0	39.0	10.0
50th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
30th %ile Green (s)	10.0	69.7		7.3	66.0	66.0	0.0	0.0		39.0	39.0	10.0
30th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
10th %ile Green (s)	10.0	81.0		0.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
10th %ile Term Code	Max	Coord		Skip	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
Stops (vph)	32	657		39	369	8				722	89	581
Fuel Used(gal)	1	15		1	8	0				17	2	15
CO Emissions (g/hr)	74	1054		63	584	17				1176	140	1046
NOx Emissions (g/hr)	14	205		12	114	3				229	27	203
VOC Emissions (g/hr)	17	244		15	135	4				273	32	242
Dilemma Vehicles (#)	0	0		0	0	0				0	0	0
Queue Length 50th (ft)	32	227		38	197	3				352	83	~461

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#86	268		m52	258	m11				#443	137	#729
Internal Link Dist (ft)		729			245			679			589	
Turn Bay Length (ft)	120			180		190						
Base Capacity (vph)	65	2653		118	1637	240				985	501	543
Starvation Cap Reductn	0	0		0	696	0				0	0	0
Spillback Cap Reductn	0	64		0	0	0				226	0	0
Storage Cap Reductn	0	0		0	0	0				0	0	0
Reduced v/c Ratio	0.58	0.47		0.36	0.91	0.23				1.13	0.26	1.03

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 124 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 52.5 Intersection LOS: D
Intersection Capacity Utilization 81.5% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1002: Lafayette Avenue & 95th Street

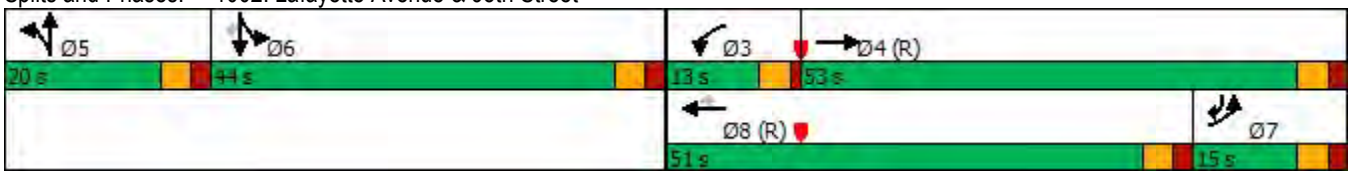

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	475	1135	305	70	720	370	130	335	75	55	0	40
Future Volume (vph)	475	1135	305	70	720	370	130	335	75	55	0	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	11	12	11	12	11	14	12	12	12
Storage Length (ft)	200		0	150		350	300		400	0		0
Storage Lanes	0		0	1		1	1		1	1		1
Taper Length (ft)	25			25			100			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor	0.82	0.99		1.00		0.68		1.00	0.92	0.97		
Frt		0.968				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.986		0.950		
Satd. Flow (prot)	3285	3259	0	1653	3138	1464	0	3191	1600	855	0	765
Flt Permitted	0.950			0.950				0.986		0.950		
Satd. Flow (perm)	2697	3259	0	1650	3138	998	0	3185	1479	827	0	765
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31				78			92			134
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		325			954			10393			681	
Travel Time (s)		7.4			18.6			236.2			15.5	
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	1					6						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Adj. Flow (vph)	505	1207	324	74	766	394	138	356	80	59	0	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	505	1531	0	74	766	394	0	494	80	59	0	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.12	1.07	1.12	1.07	1.12	0.99	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1		1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50		50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50		50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Prot		Prot
Protected Phases	7	4		3	8	6	2	2	3	6		6
Permitted Phases						8			2			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8	6	2	2	3	6		6
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	10.0	4.0	4.0	6.0	10.0		10.0
Minimum Split (s)	14.0	56.0		11.0	41.0	15.0	41.0	41.0	11.0	15.0		15.0
Total Split (s)	28.0	56.0		13.0	41.0	20.0	41.0	41.0	13.0	20.0		20.0
Total Split (%)	21.5%	43.1%		10.0%	31.5%	15.4%	31.5%	31.5%	10.0%	15.4%		15.4%
Maximum Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
All-Red Time (s)	1.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	4.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max	None	Max	Max	None	None		None
Walk Time (s)		23.0			11.0		7.0	7.0				
Flash Dont Walk (s)		28.0			25.0		29.0	29.0				
Pedestrian Calls (#/hr)		0			0		0	0				
Act Effct Green (s)	23.0	51.3		8.0	37.4	52.0		36.0	44.0	14.7		14.7
Actuated g/C Ratio	0.18	0.39		0.06	0.29	0.40		0.28	0.34	0.11		0.11
v/c Ratio	0.87	1.17		0.73	0.85	0.79		0.56	0.14	0.61		0.21
Control Delay	59.7	117.5		97.5	54.3	28.1		43.7	5.5	82.0		2.3
Queue Delay	7.2	0.0		0.0	0.0	0.0		0.3	0.0	0.0		0.2
Total Delay	66.8	117.5		97.5	54.3	28.1		44.0	5.5	82.0		2.5
LOS	E	F		F	D	C		D	A	F		A
Approach Delay		104.9			48.5			38.6			48.5	
Approach LOS		F			D			D			D	
90th %ile Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
90th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
70th %ile Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
70th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
50th %ile Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
50th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
30th %ile Green (s)	23.1	51.0		8.0	36.9	15.0	36.0	36.0	8.0	15.0		15.0
30th %ile Term Code	Gap	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
10th %ile Green (s)	19.7	52.6		8.0	41.9	13.4	36.0	36.0	8.0	13.4		13.4
10th %ile Term Code	Gap	Coord		Hold	Coord	Gap	MaxR	MaxR	Hold	Gap		Gap
Stops (vph)	426	1282		62	649	238		405	21	50		0
Fuel Used(gal)	9	45		2	18	6		45	6	1		0
CO Emissions (g/hr)	652	3155		163	1244	451		3146	451	104		16
NOx Emissions (g/hr)	127	614		32	242	88		612	88	20		3
VOC Emissions (g/hr)	151	731		38	288	105		729	104	24		4
Dilemma Vehicles (#)	0	0		0	27	0		0	0	0		0
Queue Length 50th (ft)	171	~818		62	325	116		200	3	48		0
Queue Length 95th (ft)	m#247	#608		#144	#433	#201		261	m8	#111		0
Internal Link Dist (ft)		245			874			10313			601	
Turn Bay Length (ft)	200			150		350			400			
Base Capacity (vph)	606	1305		101	901	502		883	568	98		206
Starvation Cap Reductn	70	3		0	0	0		0	0	0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0	0		80	0	0		20
Storage Cap Reductn	0	0		0	0	0		0	0	0		0
Reduced v/c Ratio	0.94	1.18		0.73	0.85	0.78		0.62	0.14	0.60		0.23

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 76.2 Intersection LOS: E
Intersection Capacity Utilization 99.7% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1003: State State & 95th Street

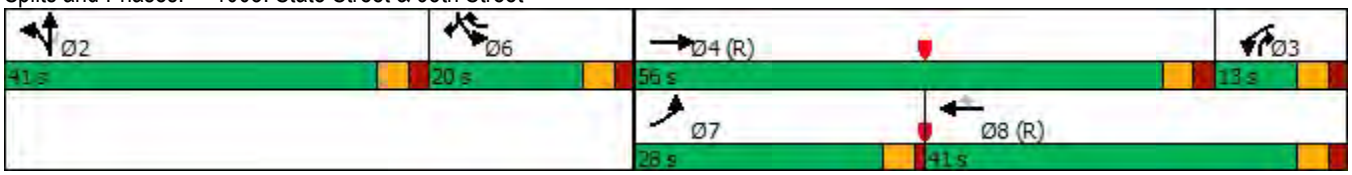

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	400	185	140	370	150	110	655	85	150	820	100
Future Volume (vph)	85	400	185	140	370	150	110	655	85	150	820	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	10	10	9	9	10	9
Storage Length (ft)	60		260	55		260	92		130	115		130
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99		0.99	0.99		0.99		0.95	0.99		0.94
Frt		0.953			0.957				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1676	1879	0	1676	1880	0	1550	3040	1363	1509	3069	1337
Flt Permitted	0.125			0.193			0.190			0.271		
Satd. Flow (perm)	221	1879	0	337	1880	0	307	3040	1296	426	3069	1251
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			19				87			83
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		663			2036			5304			668	
Travel Time (s)		15.1			46.3			120.5			15.2	
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)						1				1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Adj. Flow (vph)	91	430	199	151	398	161	118	704	91	161	882	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	629	0	151	559	0	118	704	91	161	882	108
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.17	1.17	1.22	1.22	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		11.0	11.0		5.0	31.0	31.0	5.0	31.0	31.0
Minimum Split (s)	13.0	47.0		34.0	34.0		8.0	46.0	46.0	8.0	46.0	46.0
Total Split (s)	13.0	47.0		34.0	34.0		12.0	46.0	46.0	12.0	46.0	46.0
Total Split (%)	12.4%	44.8%		32.4%	32.4%		11.4%	43.8%	43.8%	11.4%	43.8%	43.8%
Maximum Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	5.0		5.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		24.0		11.0	11.0			31.0	31.0		31.0	31.0
Flash Dont Walk (s)		18.0		18.0	18.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)	44.0	42.0		29.0	29.0		51.7	42.3	42.3	52.3	42.6	42.6
Actuated g/C Ratio	0.42	0.40		0.28	0.28		0.49	0.40	0.40	0.50	0.41	0.41
v/c Ratio	0.39	0.82		1.62	1.05		0.47	0.58	0.16	0.53	0.71	0.19
Control Delay	24.0	37.4		353.2	89.7		19.5	26.8	5.5	20.5	30.0	7.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.0	37.4		353.2	89.7		19.5	26.8	5.5	20.5	30.0	7.7
LOS	C	D		F	F		B	C	A	C	C	A
Approach Delay		35.7			145.8			23.7			26.6	
Approach LOS		D			F			C			C	
90th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
90th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
70th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
50th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	10.0	42.0		29.0	29.0		8.4	42.0	42.0	9.0	42.6	42.6
30th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	10.0	42.0		29.0	29.0		6.6	43.3	43.3	7.7	44.4	44.4
10th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Gap	Coord	Coord
Stops (vph)	50	484		95	432		55	495	13	78	667	21
Fuel Used(gal)	1	10		13	20		5	33	4	2	13	1
CO Emissions (g/hr)	79	710		896	1408		370	2334	257	129	907	55
NOx Emissions (g/hr)	15	138		174	274		72	454	50	25	176	11
VOC Emissions (g/hr)	18	164		208	326		86	541	60	30	210	13
Dilemma Vehicles (#)	0	0		0	0		0	0	0	0	0	0
Queue Length 50th (ft)	37	357		~147	~401		39	191	2	55	257	10
Queue Length 95th (ft)	70	#551		#274	#614		71	251	33	94	333	45
Internal Link Dist (ft)		583			1956			5224			588	
Turn Bay Length (ft)	60			55			92		130	115		130
Base Capacity (vph)	231	767		93	532		259	1223	573	306	1245	556
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.82		1.62	1.05		0.46	0.58	0.16	0.53	0.71	0.19

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 47 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.62
Intersection Signal Delay: 51.9 Intersection LOS: D
Intersection Capacity Utilization 103.2% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1016: Halsted Street & 103rd Street

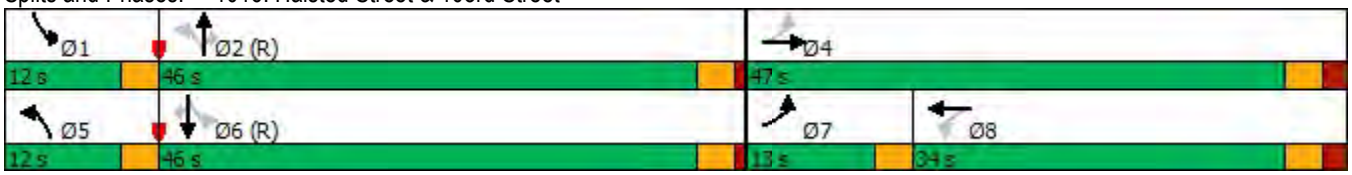

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	475	100	105	500	105	60	70	80	0	0	0
Future Volume (vph)	100	475	100	105	500	105	60	70	80	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	9	9	10	9	9	12	15	12	12	16	12
Storage Length (ft)	60		70	60		80	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	85			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.949				
Flt Protected	0.950			0.950				0.986				
Satd. Flow (prot)	1550	1573	1337	1550	1573	1337	0	1799	0	0	0	0
Flt Permitted	0.393			0.411				0.986				
Satd. Flow (perm)	641	1573	1337	670	1573	1337	0	1799	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108			113		44				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2036			1955			343			764	
Travel Time (s)		46.3			44.4			7.8			17.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	108	511	108	113	538	113	65	75	86	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	511	108	113	538	113	0	226	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.22	1.22	1.17	1.22	1.22	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Minimum Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (%)	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%	30.8%	30.8%				
Maximum Green (s)	41.0	41.0	41.0	41.0	41.0	41.0	15.0	15.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		5.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	31.0	31.0	31.0	31.0	31.0	31.0	5.0	5.0				
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0				
Act Effct Green (s)	41.0	41.0	41.0	41.0	41.0	41.0		15.0				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	31%
Maximum Green (s)	15.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	5.0
Flash Dont Walk (s)	10.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.23				
v/c Ratio	0.27	0.52	0.12	0.27	0.54	0.13		0.50				
Control Delay	7.5	8.9	1.5	7.4	9.3	1.5		21.9				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Delay	7.5	8.9	1.5	7.4	9.3	1.5		21.9				
LOS	A	A	A	A	A	A		C				
Approach Delay		7.6			7.9			21.9				
Approach LOS		A			A			C				
Stops (vph)	44	244	9	45	264	9		145				
Fuel Used(gal)	2	10	2	2	10	2		2				
CO Emissions (g/hr)	139	681	117	140	701	118		161				
NOx Emissions (g/hr)	27	133	23	27	136	23		31				
VOC Emissions (g/hr)	32	158	27	33	162	27		37				
Dilemma Vehicles (#)	0	0	0	0	0	0		0				
Queue Length 50th (ft)	16	95	0	17	102	0		62				
Queue Length 95th (ft)	40	161	14	41	175	14		123				
Internal Link Dist (ft)		1956			1875			263			684	
Turn Bay Length (ft)	60		70	60		80						
Base Capacity (vph)	404	992	883	422	992	885		449				
Starvation Cap Reductn	0	0	0	0	0	0		0				
Spillback Cap Reductn	0	0	0	0	0	0		0				
Storage Cap Reductn	0	0	0	0	0	0		0				
Reduced v/c Ratio	0.27	0.52	0.12	0.27	0.54	0.13		0.50				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:Hold, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.54
Intersection Signal Delay: 9.6 Intersection LOS: A
Intersection Capacity Utilization 57.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 1017: Normal Avenue & 103rd Street

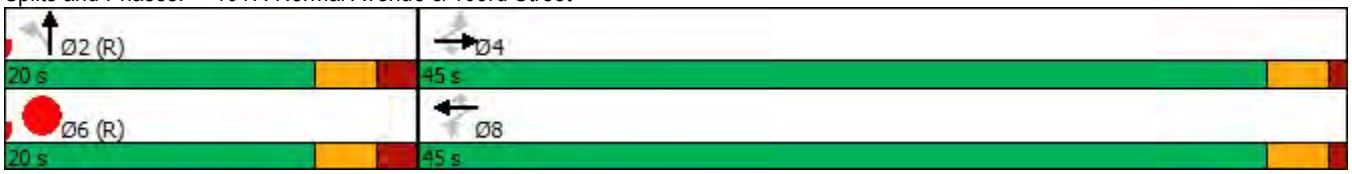

Lane Group	Ø6
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	520	85	90	600	45	50	105	100	70	305	60
Future Volume (vph)	25	520	85	90	600	45	50	105	100	70	305	60
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	11	10	11	11	12	11	12	12	15	12
Storage Length (ft)	58		200	58		75	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	100			90			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.99		0.99	1.00			0.99	0.93		0.98	
Frt		0.979			0.990				0.850		0.981	
Flt Protected	0.950			0.950				0.984			0.992	
Satd. Flow (prot)	1596	1645	0	1596	1702	0	0	1701	1515	0	1893	0
Flt Permitted	0.261			0.291				0.732			0.921	
Satd. Flow (perm)	435	1645	0	486	1702	0	0	1257	1415	0	1747	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			8				105		11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1955			674			5189			1320	
Travel Time (s)		44.4			15.3			117.9			30.0	
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	4		2			1						3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Adj. Flow (vph)	26	547	89	95	632	47	53	111	105	74	321	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	636	0	95	679	0	0	164	105	0	458	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.12	1.12	1.17	1.12	1.12	1.07	1.12	1.07	1.07	0.95	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (%)	62.7%	62.7%		62.7%	62.7%		37.3%	37.3%	37.3%	37.3%	37.3%	
Maximum Green (s)	43.0	43.0		43.0	43.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	33.0	33.0		33.0	33.0		13.0	13.0	13.0	13.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	43.0	43.0		43.0	43.0			24.0	24.0		24.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57			0.32	0.32		0.32	
v/c Ratio	0.10	0.67		0.34	0.69			0.41	0.20		0.81	
Control Delay	8.6	15.1		12.8	15.9			23.8	5.3		36.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	8.6	15.1		12.8	15.9			23.8	5.3		36.2	
LOS	A	B		B	B			C	A		D	
Approach Delay		14.9			15.5			16.6			36.2	
Approach LOS		B			B			B			D	
Stops (vph)	13	395		49	438			120	17		363	
Fuel Used(gal)	0	13		1	8			8	4		10	
CO Emissions (g/hr)	35	926		68	552			556	307		678	
NOx Emissions (g/hr)	7	180		13	107			108	60		132	
VOC Emissions (g/hr)	8	215		16	128			129	71		157	
Dilemma Vehicles (#)	0	0		0	0			0	0		0	
Queue Length 50th (ft)	5	180		21	201			59	0		189	
Queue Length 95th (ft)	17	295		54	324			112	32		#342	
Internal Link Dist (ft)		1875			594			5109			1240	
Turn Bay Length (ft)	58			58					100			
Base Capacity (vph)	249	950		278	979			402	524		566	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.10	0.67		0.34	0.69			0.41	0.20		0.81	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 19.8 Intersection LOS: B
Intersection Capacity Utilization 91.1% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1018: Wentworth Avenue & 103rd Street

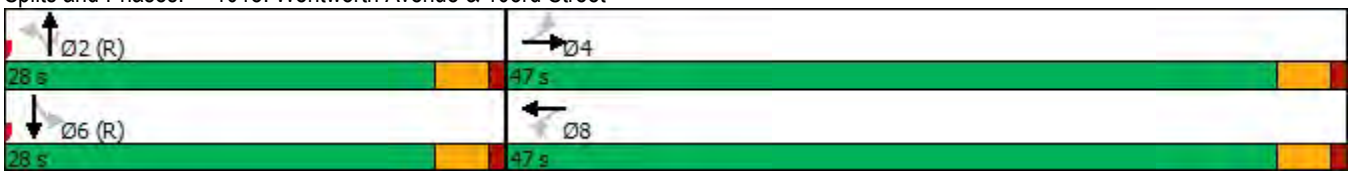

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	280	135	125	270	125	75	615	65	110	955	70
Future Volume (vph)	105	280	135	125	270	125	75	615	65	110	955	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	9	10	10	9
Storage Length (ft)	0		0	0		0	115		90	115		120
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			80			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99			0.99		1.00		0.98	1.00		0.96
Frt		0.961			0.964				0.850			0.850
Flt Protected		0.990			0.988		0.950			0.950		
Satd. Flow (prot)	0	2941	0	0	2933	0	1565	3069	1350	1565	3099	1350
Flt Permitted		0.683			0.709		0.133			0.306		
Satd. Flow (perm)	0	2024	0	0	2100	0	218	3069	1326	503	3099	1298
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		71			53				103			103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		667			375			2662			5304	
Travel Time (s)		15.2			8.5			60.5			120.5	
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	2					1						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Adj. Flow (vph)	108	289	139	129	278	129	77	634	67	113	985	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	536	0	0	536	0	77	634	67	113	985	72
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.22	1.17	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Minimum Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (%)	9.4%	47.1%		37.6%	37.6%		9.4%	43.5%	43.5%	9.4%	43.5%	43.5%
Maximum Green (s)	5.0	35.0		27.0	27.0		5.0	33.0	33.0	5.0	33.0	33.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)		-1.0			-1.0		1.0	-0.5	0.0	1.0	-0.5	0.0
Total Lost Time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Walk Time (s)		12.0		4.0	4.0			19.0	19.0		19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		23.0		23.0	23.0			14.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)		36.0			28.0		37.0	33.5	33.0	37.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.44	0.39	0.39	0.44	0.39	0.39
v/c Ratio		0.57			0.74		0.49	0.52	0.12	0.42	0.81	0.13
Control Delay		18.1			29.8		29.4	14.7	0.8	18.4	29.2	2.3
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		18.1			29.8		29.4	14.7	0.8	18.4	29.2	2.3
LOS		B			C		C	B	A	B	C	A
Approach Delay		18.1			29.8			14.9			26.5	
Approach LOS		B			C			B			C	
Stops (vph)		303			412		55	263	1	64	813	5
Fuel Used(gal)		6			13		2	16	1	5	50	3
CO Emissions (g/hr)		440			937		161	1122	95	372	3472	207
NOx Emissions (g/hr)		86			182		31	218	19	72	676	40
VOC Emissions (g/hr)		102			217		37	260	22	86	805	48
Dilemma Vehicles (#)		0			0		0	0	0	0	0	0
Queue Length 50th (ft)		87			119		20	82	0	32	240	0
Queue Length 95th (ft)		129			182		m61	111	m2	62	321	15
Internal Link Dist (ft)		587			295			2582			5224	
Turn Bay Length (ft)							115		90	115		120
Base Capacity (vph)		941			727		158	1209	577	268	1221	566
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.57			0.74		0.49	0.52	0.12	0.42	0.81	0.13

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 48 (56%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 22.6 Intersection LOS: C
Intersection Capacity Utilization 98.9% ICU Level of Service F
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1034: Halsted Street & 111th Street

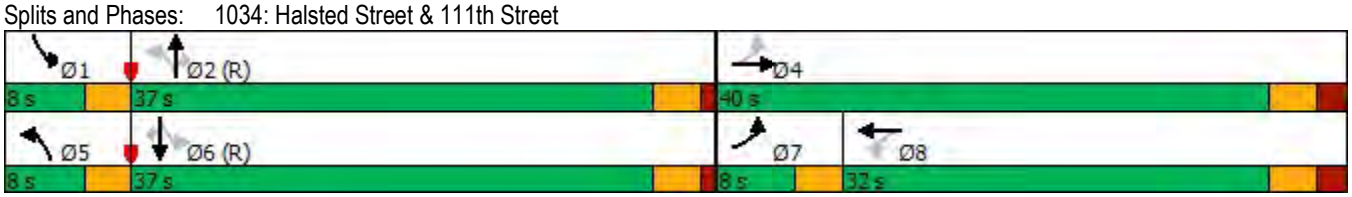

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	415	0	0	380	95	65	55	40	0	0	0
Future Volume (vph)	105	415	0	0	380	95	65	55	40	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.973			0.966				
Flt Protected		0.990						0.980				
Satd. Flow (prot)	0	1730	0	0	1700	0	0	1654	0	0	0	0
Flt Permitted		0.819						0.980				
Satd. Flow (perm)	0	1431	0	0	1700	0	0	1654	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					35			26				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1591			2004			794			646	
Travel Time (s)		36.2			45.5			18.0			14.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	113	446	0	0	409	102	70	59	43	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	559	0	0	511	0	0	172	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Minimum Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (%)	66.2%	66.2%			66.2%		33.8%	33.8%				
Maximum Green (s)	39.0	39.0			39.0		18.0	18.0				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.0			4.0			4.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	32.0	32.0			32.0		10.0	10.0				
Flash Dont Walk (s)	7.0	7.0			7.0		8.0	8.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		39.0			39.0			18.0				
Actuated g/C Ratio		0.60			0.60			0.28				
v/c Ratio		0.65			0.49			0.36				
Control Delay		13.1			4.5			18.5				
Queue Delay		0.0			0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		13.1			4.5			18.5				
LOS		B			A			B				
Approach Delay		13.1			4.5			18.5				
Approach LOS		B			A			B				
Stops (vph)		329			70			106				
Fuel Used(gal)		11			8			2				
CO Emissions (g/hr)		781			576			152				
NOx Emissions (g/hr)		152			112			30				
VOC Emissions (g/hr)		181			134			35				
Dilemma Vehicles (#)		0			0			0				
Queue Length 50th (ft)		128			32			46				
Queue Length 95th (ft)		227			42			94				
Internal Link Dist (ft)		1511			1924			714			566	
Turn Bay Length (ft)												
Base Capacity (vph)		858			1034			476				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.65			0.49			0.36				

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 16 (25%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.3	Intersection LOS: B
Intersection Capacity Utilization 75.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1035: Normal Avenue & 111th Street

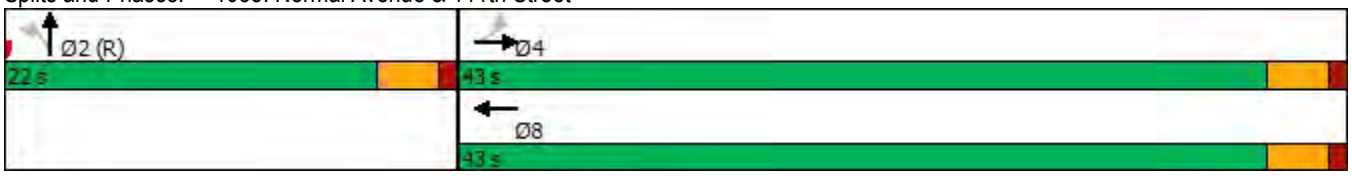

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	395	35	45	390	55	30	125	40	70	195	55
Future Volume (vph)	25	395	35	45	390	55	30	125	40	70	195	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	11	11	12	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00			0.98			0.98	
Frt		0.990			0.985			0.969			0.974	
Flt Protected		0.997			0.995			0.992			0.989	
Satd. Flow (prot)	0	1958	0	0	1940	0	0	3100	0	0	3106	0
Flt Permitted		0.961			0.929			0.881			0.849	
Satd. Flow (perm)	0	1887	0	0	1810	0	0	2735	0	0	2654	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			13			43			47	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2004			892			179			181	
Travel Time (s)		45.5			20.3			4.1			4.1	
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	1		2			3	1		2			4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Adj. Flow (vph)	27	420	37	48	415	59	32	133	43	74	207	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	484	0	0	522	0	0	208	0	0	340	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.12	1.12	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (%)	52.3%	52.3%		52.3%	52.3%		47.7%	47.7%		47.7%	47.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	21.0	21.0		21.0	21.0		19.0	19.0		19.0	19.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			27.0			27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
v/c Ratio		0.55			0.62			0.18			0.30	
Control Delay		18.9			8.1			9.9			11.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.9			8.1			9.9			11.7	
LOS		B			A			A			B	
Approach Delay		18.9			8.1			9.9			11.7	
Approach LOS		B			A			A			B	
Stops (vph)		287			137			158			172	
Fuel Used(gal)		10			7			5			15	
CO Emissions (g/hr)		730			460			373			1056	
NOx Emissions (g/hr)		142			90			72			206	
VOC Emissions (g/hr)		169			107			86			245	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		124			58			13			38	
Queue Length 95th (ft)		220			72			m22			65	
Internal Link Dist (ft)		1924			812			99			101	
Turn Bay Length (ft)												
Base Capacity (vph)		875			842			1161			1129	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.55			0.62			0.18			0.30	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 96.5%	ICU Level of Service F
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1036: Wentworth Avenue & 111th Street

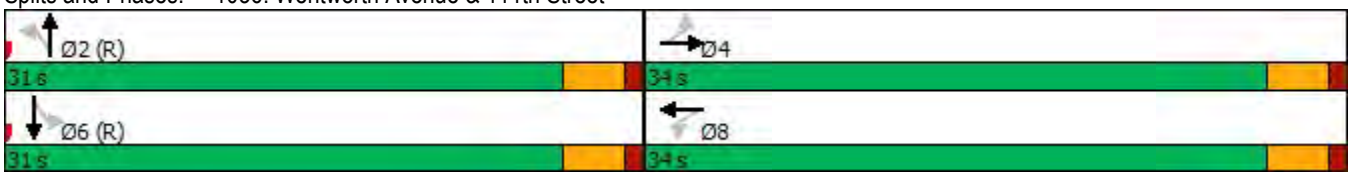

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	350	55	90	495	95	55	285	130	85	235	65
Future Volume (vph)	55	350	55	90	495	95	55	285	130	85	235	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	9	10	10	9	10	10	12	10	10	12
Storage Length (ft)	70		0	60		0	70		70	80		75
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	115			90			80			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.98	1.00		0.99	0.99		0.99	1.00	
Frt		0.979			0.976			0.953			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	3019	0	1596	3075	0	1596	2961	0	1596	3076	0
Flt Permitted	0.307			0.451			0.558			0.490		
Satd. Flow (perm)	488	3019	0	740	3075	0	932	2961	0	818	3076	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29			37			138			69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			546			2651			289	
Travel Time (s)		9.5			12.4			60.3			6.6	
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)	1					1			1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Adj. Flow (vph)	59	372	59	96	527	101	59	303	138	90	250	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	431	0	96	628	0	59	441	0	90	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.22	1.17	1.17	1.22	1.17	1.17	1.07	1.17	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		9.0	9.0		22.0	22.0		22.0	22.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
v/c Ratio	0.36	0.41		0.38	0.59		0.12	0.27		0.20	0.19	
Control Delay	18.9	12.4		21.1	18.7		6.7	4.4		9.8	7.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.9	12.4		21.1	18.7		6.7	4.4		9.8	7.9	
LOS	B	B		C	B		A	A		A	A	
Approach Delay		13.2			19.0			4.7			8.3	
Approach LOS		B			B			A			A	
Stops (vph)	45	336		77	489		25	134		48	142	
Fuel Used(gal)	1	7		1	7		1	10		8	26	
CO Emissions (g/hr)	71	490		84	522		94	677		525	1835	
NOx Emissions (g/hr)	14	95		16	101		18	132		102	357	
VOC Emissions (g/hr)	17	114		19	121		22	157		122	425	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	19	68		33	114		7	13		39	62	
Queue Length 95th (ft)	m40	93		m76	168		m21	45		m38	m57	
Internal Link Dist (ft)		338			466			2571			209	
Turn Bay Length (ft)	70			60			70			80		
Base Capacity (vph)	165	1041		250	1065		501	1658		440	1688	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.41		0.38	0.59		0.12	0.27		0.20	0.19	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.59
Intersection Signal Delay: 12.2 Intersection LOS: B
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1037: State Street & 111th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	390	95	95	430	55	50	260	65	60	350	80
Future Volume (vph)	75	390	95	95	430	55	50	260	65	60	350	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	12	12	10	12	12	10	12
Storage Length (ft)	60		0	75		77	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99	1.00			0.99			0.98	
Frt		0.971			0.983			0.974			0.976	
Flt Protected	0.950			0.950				0.993			0.994	
Satd. Flow (prot)	1539	3013	0	1438	3071	0	0	2890	0	0	2909	0
Flt Permitted	0.431			0.431				0.843			0.860	
Satd. Flow (perm)	690	3013	0	649	3071	0	0	2439	0	0	2510	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		63			29			45			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		546			221			277			684	
Travel Time (s)		12.4			5.0			6.3			15.5	
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Adj. Flow (vph)	80	415	101	101	457	59	53	277	69	64	372	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	516	0	101	516	0	0	399	0	0	521	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.17	1.22	1.22	1.17	1.07	1.07	1.17	1.07	1.07	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	31.0	31.0		31.0	31.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	20.0	20.0		20.0	20.0		14.0	14.0		14.0	14.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		12.0	12.0		12.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
v/c Ratio	0.24	0.35		0.33	0.35			0.40			0.51	
Control Delay	17.5	15.7		14.3	10.8			10.4			15.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	17.5	15.7		14.3	10.8			10.4			15.5	
LOS	B	B		B	B			B			B	
Approach Delay		15.9			11.4			10.4			15.5	
Approach LOS		B			B			B			B	
Stops (vph)	57	536		58	267			250			324	
Fuel Used(gal)	1	7		1	5			10			6	
CO Emissions (g/hr)	63	460		74	343			698			416	
NOx Emissions (g/hr)	12	89		14	67			136			81	
VOC Emissions (g/hr)	15	106		17	80			162			96	
Dilemma Vehicles (#)	0	0		0	0			0			0	
Queue Length 50th (ft)	24	86		23	58			23			71	
Queue Length 95th (ft)	50	93		57	90			62			113	
Internal Link Dist (ft)		466			141			197			604	
Turn Bay Length (ft)	60			75								
Base Capacity (vph)	329	1469		309	1479			1002			1029	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.24	0.35		0.33	0.35			0.40			0.51	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 48 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 13.5	Intersection LOS: B
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1038: Michigan Avenue & 111th Street

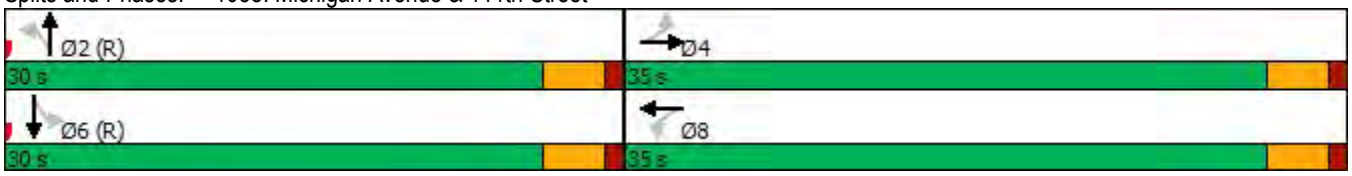

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	255	110	200	395	80	120	525	65	85	855	135
Future Volume (vph)	135	255	110	200	395	80	120	525	65	85	855	135
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	9	14	16	9	14	16
Storage Length (ft)	120		115	60		58	165		165	110		80
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			60			90			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.99	1.00		1.00	1.00		0.99	1.00	
Frt		0.955			0.975			0.984			0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	2982	0	1580	3036	0	1509	3454	0	1524	3471	0
Flt Permitted	0.365			0.460			0.133			0.306		
Satd. Flow (perm)	596	2982	0	759	3036	0	211	3454	0	487	3471	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85			30			18			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			564			2655			2662	
Travel Time (s)		30.3			12.8			60.3			60.5	
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Adj. Flow (vph)	142	268	116	211	416	84	126	553	68	89	900	142
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	384	0	211	500	0	126	621	0	89	1042	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.07	1.17	1.17	1.07	1.22	0.99	0.91	1.22	0.99	0.91
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	8.0	32.0		8.0	32.0		10.0	35.0		10.0	35.0	
Total Split (s)	8.0	32.0		8.0	32.0		10.0	35.0		10.0	35.0	
Total Split (%)	9.4%	37.6%		9.4%	37.6%		11.8%	41.2%		11.8%	41.2%	
Maximum Green (s)	5.0	27.0		5.0	27.0		7.0	31.0		7.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0		1.0	-1.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Walk Time (s)		7.0			7.0			19.0			19.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		20.0			20.0			12.0			12.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	32.0	28.0		32.0	28.0		37.0	31.0		37.0	31.0	
Actuated g/C Ratio	0.38	0.33		0.38	0.33		0.44	0.36		0.44	0.36	
v/c Ratio	0.53	0.37		0.65	0.49		0.69	0.49		0.31	0.81	
Control Delay	25.4	17.9		30.3	23.3		35.0	21.8		20.2	30.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	25.4	17.9		30.3	23.3		35.0	21.8		20.2	30.8	
LOS	C	B		C	C		C	C		C	C	
Approach Delay		19.9			25.4			24.0			29.9	
Approach LOS		B			C			C			C	
Stops (vph)	98	207		161	344		63	425		52	629	
Fuel Used(gal)	3	6		8	19		4	17		2	30	
CO Emissions (g/hr)	184	438		581	1318		258	1201		168	2113	
NOx Emissions (g/hr)	36	85		113	256		50	234		33	411	
VOC Emissions (g/hr)	43	101		135	305		60	278		39	490	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	47	62		73	104		36	128		29	199	
Queue Length 95th (ft)	86	100		#128	150		#101	177		m41	268	
Internal Link Dist (ft)		1251			484			2575			2582	
Turn Bay Length (ft)	120			60			165			110		
Base Capacity (vph)	269	1039		324	1020		183	1271		285	1280	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.53	0.37		0.65	0.49		0.69	0.49		0.31	0.81	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 5 (6%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 25.8 Intersection LOS: C
Intersection Capacity Utilization 84.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1049: Halsted Street & 115th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	375	40	40	475	30	35	105	45	45	160	85
Future Volume (vph)	60	375	40	40	475	30	35	105	45	45	160	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	11	12	11	11	12	10	10	12	10	10
Storage Length (ft)	0		80	0		0	0		30	0		30
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.993			0.996			0.988			0.989	
Satd. Flow (prot)	0	1675	1479	0	1702	1479	0	1660	1428	0	1649	1428
Flt Permitted		0.789			0.945			0.903			0.919	
Satd. Flow (perm)	0	1330	1417	0	1613	1431	0	1517	1406	0	1531	1398
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			40			32			47			86
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3405			1340			2669			2478	
Travel Time (s)		77.4			30.5			60.7			56.3	
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Adj. Flow (vph)	63	395	42	42	500	32	37	111	47	47	168	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	458	42	0	542	32	0	148	47	0	215	89
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.12	1.07	1.12	1.12	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (%)	52.3%	52.3%	52.3%	52.3%	52.3%	52.3%	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	19.0	19.0	19.0	19.0	19.0	19.0	16.0	16.0	16.0	16.0	16.0	16.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
v/c Ratio		0.75	0.06		0.73	0.05		0.23	0.08		0.34	0.14
Control Delay		24.1	4.2		15.1	1.7		15.3	5.4		13.5	2.1
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		24.1	4.2		15.1	1.7		15.3	5.4		13.5	2.1
LOS		C	A		B	A		B	A		B	A
Approach Delay		22.4			14.3			12.9			10.2	
Approach LOS		C			B			B			B	
Stops (vph)		338	10		288	2		104	17		156	19
Fuel Used(gal)		17	1		9	0		4	1		6	2
CO Emissions (g/hr)		1221	93		598	23		276	75		395	133
NOx Emissions (g/hr)		238	18		116	5		54	15		77	26
VOC Emissions (g/hr)		283	21		139	5		64	17		92	31
Dilemma Vehicles (#)		0	0		0	0		0	0		0	0
Queue Length 50th (ft)		141	0		88	1		43	1		72	1
Queue Length 95th (ft)		#289	15		111	4		m89	m12		110	m3
Internal Link Dist (ft)		3325			1260			2589			2398	
Turn Bay Length (ft)			80						30			30
Base Capacity (vph)		613	675		744	677		630	611		635	630
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.75	0.06		0.73	0.05		0.23	0.08		0.34	0.14

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 101.8% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1050: Wentworth Avenue & 115th Street

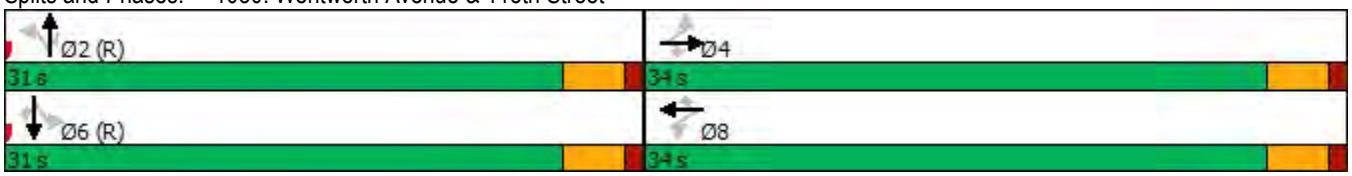

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	385	25	50	305	40	15	135	25	115	225	70
Future Volume (vph)	95	385	25	50	305	40	15	135	25	115	225	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	80		0	55		75	45		50	55		260
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	90			95			110			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.983			0.976			0.965	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1550	1631	1386	1550	3046	0	1550	3025	0	1550	2991	0
Flt Permitted	0.950			0.520			0.560			0.643		
Satd. Flow (perm)	1550	1631	1386	848	3046	0	913	3025	0	1049	2991	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1340			559			516			2651	
Travel Time (s)		30.5			12.7			11.7			60.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	102	414	27	54	328	43	16	145	27	124	242	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	414	27	54	371	0	16	172	0	124	317	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases			4	8			2			6		
Minimum Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	15.4%	53.8%	53.8%	38.5%	38.5%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?												
Walk Time (s)		8.0	8.0	8.0	8.0		13.0	13.0		13.0	13.0	
Flash Dont Walk (s)		13.0	13.0	13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0	0	
Act Effct Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.11	0.48	0.48	0.32	0.32		0.40	0.40		0.40	0.40	
v/c Ratio	0.61	0.53	0.04	0.20	0.38		0.04	0.14		0.30	0.27	
Control Delay	45.0	7.9	4.9	13.8	13.6		10.0	10.6		17.0	15.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	45.0	7.9	4.9	13.8	13.6		10.0	10.6		17.0	15.1	
LOS	D	A	A	B	B		A	B		B	B	
Approach Delay		14.7			13.6			10.6			15.6	
Approach LOS		B			B			B			B	
Stops (vph)	76	148	6	19	136		10	92		92	222	
Fuel Used(gal)	2	5	0	0	3		0	4		3	8	
CO Emissions (g/hr)	160	381	22	32	224		28	293		229	575	
NOx Emissions (g/hr)	31	74	4	6	44		5	57		45	112	
VOC Emissions (g/hr)	37	88	5	8	52		6	68		53	133	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	32	34	2	9	33		3	15		62	76	
Queue Length 95th (ft)	m52	49	m4	m17	43		m8	m28		105	91	
Internal Link Dist (ft)		1260			479			436			2571	
Turn Bay Length (ft)	80			55			45			55		
Base Capacity (vph)	166	777	661	273	984		365	1210		419	1196	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.61	0.53	0.04	0.20	0.38		0.04	0.14		0.30	0.27	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 14.2	Intersection LOS: B
Intersection Capacity Utilization 50.3%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1051: State State & 115th Street

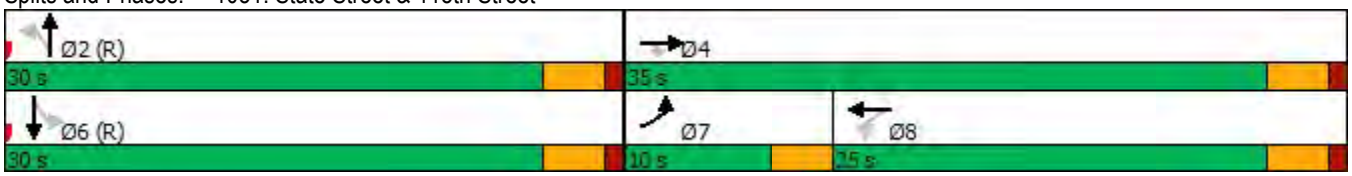

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	315	80	220	360	70	30	310	25	70	340	65
Future Volume (vph)	75	315	80	220	360	70	30	310	25	70	340	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	10	10	12	10	10
Storage Length (ft)	55		120	95		75	0		85	0		90
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	75			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.996			0.992	
Satd. Flow (prot)	1550	1631	1386	1550	1631	1386	0	1625	1386	0	1618	1386
Flt Permitted	0.533			0.950				0.929			0.805	
Satd. Flow (perm)	869	1631	1386	1550	1631	1386	0	1515	1386	0	1313	1386
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			75			101			185
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		559			386			1340			2394	
Travel Time (s)		12.7			8.8			30.5			54.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	81	339	86	237	387	75	32	333	27	75	366	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	339	86	237	387	75	0	365	27	0	441	70
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	NA
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4			8	2		2	6		
Minimum Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (%)	36.9%	36.9%	36.9%	13.8%	50.8%	50.8%	44.6%	44.6%	44.6%	44.6%	44.6%	
Maximum Green (s)	20.0	20.0	20.0	6.0	29.0	29.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		5.0	5.0		5.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0	9.0		18.0	18.0	12.0	12.0	12.0	12.0	12.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	12.0	12.0	12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0	0	
Act Effct Green (s)	20.0	20.0	20.0	6.0	29.0	29.0		24.0	24.0		24.0	0.0

Lane Group	Ø12
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	12
Permitted Phases	
Minimum Split (s)	3.0
Total Split (s)	3.0
Total Split (%)	5%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.31	0.31	0.31	0.09	0.45	0.45		0.37	0.37		0.37	0.00
v/c Ratio	0.30	0.68	0.17	1.66	0.53	0.11		0.65	0.05		0.91	0.38
Control Delay	16.7	21.4	2.1	335.0	16.8	6.8		17.0	0.8		42.1	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	16.7	21.4	2.1	335.0	16.8	6.8		17.0	0.8		42.1	6.6
LOS	B	C	A	F	B	A		B	A		D	A
Approach Delay		17.4			123.6			15.9			37.2	
Approach LOS		B			F			B			D	
Stops (vph)	37	189	9	171	201	19		255	2		367	10
Fuel Used(gal)	1	4	0	17	5	1		24	2		14	1
CO Emissions (g/hr)	55	265	30	1207	315	43		1663	110		984	105
NOx Emissions (g/hr)	11	52	6	235	61	8		324	21		191	20
VOC Emissions (g/hr)	13	61	7	280	73	10		385	26		228	24
Dilemma Vehicles (#)	0	0	0	0	0	0		0	0		0	0
Queue Length 50th (ft)	18	78	2	~149	101	5		101	0		166	1
Queue Length 95th (ft)	40	128	8	m#166	m109	m6		m164	m1		#351	14
Internal Link Dist (ft)		479			306			1260			2314	
Turn Bay Length (ft)	55		120	95		75			85			90
Base Capacity (vph)	267	501	507	143	727	659		559	575		484	185
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	0
Reduced v/c Ratio	0.30	0.68	0.17	1.66	0.53	0.11		0.65	0.05		0.91	0.38

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 1.66
Intersection Signal Delay: 57.1 Intersection LOS: E
Intersection Capacity Utilization 87.3% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1052: Michigan Avenue & 115th Street

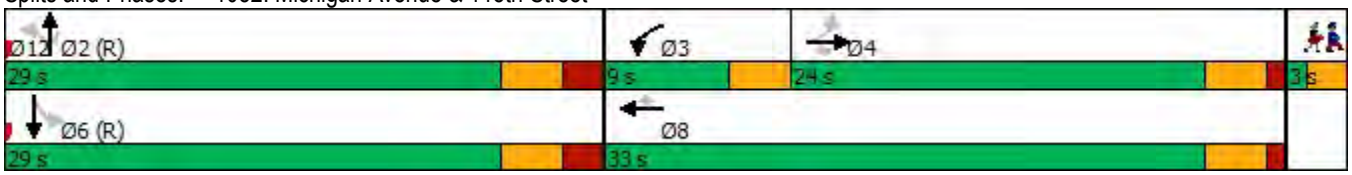

Lane Group	Ø12
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	370	20	80	660	80	60	130	195	0	0	0
Future Volume (vph)	20	370	20	80	660	80	60	130	195	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	12	12	10	15	10
Storage Length (ft)	0		95	0		80	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.932				
Flt Protected		0.997			0.995			0.992				
Satd. Flow (prot)	0	1626	1386	0	1623	1386	0	1616	0	0	0	0
Flt Permitted		0.949			0.912			0.992				
Satd. Flow (perm)	0	1548	1386	0	1488	1386	0	1616	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			22			56		82				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			636			791			721	
Travel Time (s)		8.7			14.5			18.0			16.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	22	398	22	86	710	86	65	140	210	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	420	22	0	796	86	0	415	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.07	1.07	1.17	0.95	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2				
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru				
Leading Detector (ft)	20	100	20	20	100	20	20	100				
Trailing Detector (ft)	0	0	0	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0	0	0	0				
Detector 1 Size(ft)	20	6	20	20	6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Detector Phase	4	4	4	8	8	8	2	2				
Switch Phase												
Minimum Initial (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Minimum Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (%)	63.1%	63.1%	63.1%	63.1%	63.1%	63.1%	36.9%	36.9%				
Maximum Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0				
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0				
Total Lost Time (s)		5.0	5.0		5.0	5.0		4.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	8.0	8.0				
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None				
Walk Time (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Flash Dont Walk (s)	8.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	30	30				
Act Effct Green (s)		36.8	36.8		36.8	36.8		19.2				
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.30				
v/c Ratio		0.48	0.03		0.95	0.11		0.77				
Control Delay		17.0	8.3		37.1	3.7		28.2				
Queue Delay		0.0	0.0		0.0	0.0		0.0				
Total Delay		17.0	8.3		37.1	3.7		28.2				
LOS		B	A		D	A		C				
Approach Delay		16.6			33.8			28.2				
Approach LOS		B			C			C				
90th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
90th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
70th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
70th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
50th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
50th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
30th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
30th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
10th %ile Green (s)	39.8	39.8	39.8	39.8	39.8	39.8	16.2	16.2				
10th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
Stops (vph)		264	12		561	18		270				
Fuel Used(gal)		5	0		16	1		6				
CO Emissions (g/hr)		361	15		1139	69		426				
NOx Emissions (g/hr)		70	3		222	13		83				
VOC Emissions (g/hr)		84	4		264	16		99				
Dilemma Vehicles (#)		0	0		0	0		0				
Queue Length 50th (ft)		126	3		274	5		117				
Queue Length 95th (ft)		m174	m4		#521	22		#248				
Internal Link Dist (ft)		304			556			711			641	
Turn Bay Length (ft)			95			80						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		875	793		841	808		554				
Starvation Cap Reductn		0	0		0	0		0				
Spillback Cap Reductn		0	0		0	0		0				
Storage Cap Reductn		0	0		0	0		0				
Reduced v/c Ratio		0.48	0.03		0.95	0.11		0.75				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 25 (38%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 28.1 Intersection LOS: C
Intersection Capacity Utilization 99.7% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1053: Indiana Avenue & 115th Street

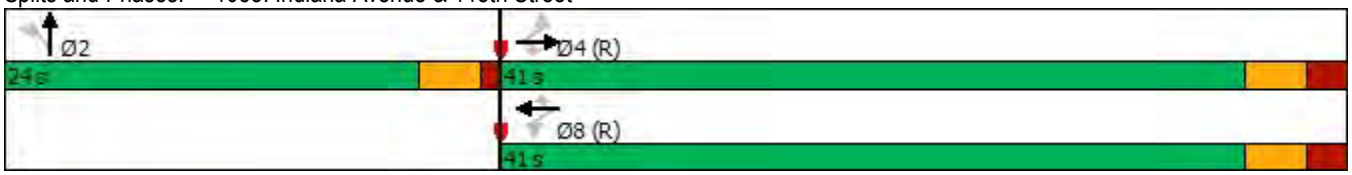

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	90	470	635	45	140	190
Future Volume (vph)	90	470	635	45	140	190
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	14	16	12	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.991			0.850
Flt Protected		0.992			0.950	
Satd. Flow (prot)	0	1859	1985	0	1596	1428
Flt Permitted		0.992			0.950	
Satd. Flow (perm)	0	1859	1985	0	1596	1428
Link Speed (mph)		30	30		30	
Link Distance (ft)		683	263		1350	
Travel Time (s)		15.5	6.0		30.7	
Confl. Peds. (#/hr)	17			17	6	5
Confl. Bikes (#/hr)				3	2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	2%	2%	0%	0%	0%
Adj. Flow (vph)	102	534	722	51	159	216
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	636	773	0	159	216
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.07	0.99	0.91	1.07	1.17	1.17
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 88.6%	ICU Level of Service E
Analysis Period (min) 15	

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	90	470	635	45	140	190
Future Volume (vph)	90	470	635	45	140	190
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	102	534	722	51	159	216

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total (vph)	636	773	159	216
Volume Left (vph)	102	0	159	0
Volume Right (vph)	0	51	0	216
Hadj (s)	0.07	-0.01	0.50	-0.70
Departure Headway (s)	6.2	6.1	8.1	6.9
Degree Utilization, x	1.09	1.31	0.36	0.41
Capacity (veh/h)	573	599	441	518
Control Delay (s)	89.4	171.6	14.3	13.4
Approach Delay (s)	89.4	171.6	13.8	
Approach LOS	F	F	B	

Intersection Summary			
Delay	109.1		
Level of Service	F		
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	815	0	0	700	5	35				
Future Volume (vph)	815	0	0	700	5	35				
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800				
Lane Width (ft)	10	12	12	10	16	12				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Frt					0.881					
Flt Protected					0.994					
Satd. Flow (prot)	1631	1748	0	1468	1734	0				
Flt Permitted					0.994					
Satd. Flow (perm)	1631	1748	0	1468	1734	0				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)					38					
Link Speed (mph)	30			30	30					
Link Distance (ft)	105			1228	505					
Travel Time (s)	2.4			27.9	11.5					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%				
Parking (#/hr)				0						
Adj. Flow (vph)	876	0	0	753	5	38				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	876	0	0	753	43	0				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			0	16					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.17	1.07	1.07	1.33	0.91	1.07				
Turning Speed (mph)		9	15		15	9				
Turn Type	NA	Perm		NA	Prot					
Protected Phases	6 4			4	3		1	2	6	8
Permitted Phases		6 4	4							
Minimum Split (s)			16.0	16.0	18.0		20.0	12.0	32.0	35.0
Total Split (s)			35.0	35.0	18.0		20.0	12.0	32.0	35.0
Total Split (%)			41.2%	41.2%	21.2%		24%	14%	38%	41%
Maximum Green (s)			31.0	31.0	14.0		15.0	9.0	27.0	31.0
Yellow Time (s)			3.0	3.0	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)			1.0	1.0	1.0		2.0	0.0	2.0	1.0
Lost Time Adjust (s)				0.0	0.0					
Total Lost Time (s)				4.0	4.0					
Lead/Lag							Lag	Lead		
Lead-Lag Optimize?										
Walk Time (s)					2.0				14.0	18.0
Flash Dont Walk (s)					12.0				13.0	13.0
Pedestrian Calls (#/hr)					0				0	0
Act Effct Green (s)	62.0			31.0	14.0					
Actuated g/C Ratio	0.73			0.36	0.16					
v/c Ratio	0.74			1.41	0.14					

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Control Delay	7.6			220.3	13.2					
Queue Delay	4.2			0.9	0.0					
Total Delay	11.8			221.2	13.2					
LOS	B			F	B					
Approach Delay	11.8			221.2	13.3					
Approach LOS	B			F	B					
Stops (vph)	293			541	14					
Fuel Used(gal)	4			48	0					
CO Emissions (g/hr)	248			3353	24					
NOx Emissions (g/hr)	48			652	5					
VOC Emissions (g/hr)	57			777	6					
Dilemma Vehicles (#)	0			0	0					
Queue Length 50th (ft)	145			~546	2					
Queue Length 95th (ft)	155			#759	30					
Internal Link Dist (ft)	25			1148	425					
Turn Bay Length (ft)										
Base Capacity (vph)	1189			535	317					
Starvation Cap Reductn	234			0	0					
Spillback Cap Reductn	0			55	0					
Storage Cap Reductn	0			0	0					
Reduced v/c Ratio	0.92			1.57	0.14					

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 105	
Control Type: Pretimed	
Maximum v/c Ratio: 1.41	
Intersection Signal Delay: 106.2	Intersection LOS: F
Intersection Capacity Utilization 56.1%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1055: Cottage Grove Avenue & 115th Street

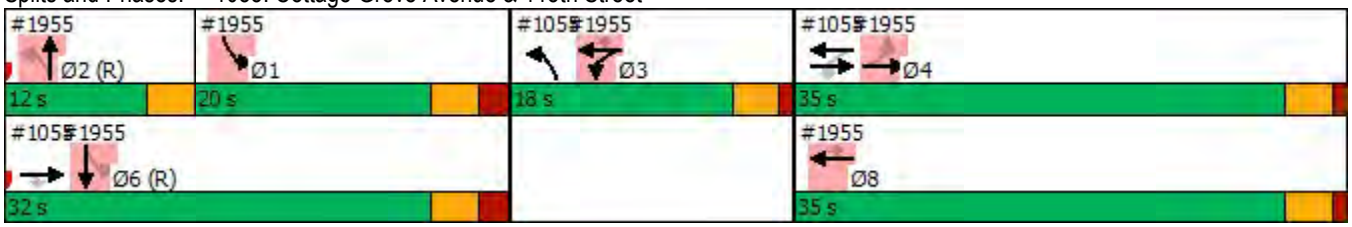

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	255	685	30	395	0	0	0	0	20	10	280
Future Volume (vph)	0	255	685	30	395	0	0	0	0	20	10	280
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	16	12	12	12	12	12	12	15	12	12	16	12
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.891										0.850
Flt Protected					0.996						0.968	
Satd. Flow (prot)	0	3025	0	0	3366	0	0	0	0	0	1975	1500
Flt Permitted					0.996						0.968	
Satd. Flow (perm)	0	3025	0	0	3366	0	0	0	0	0	1975	1500
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1260			277			633			783	
Travel Time (s)		28.6			6.3			14.4			17.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	4%	1%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	0	271	729	32	420	0	0	0	0	21	11	298
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1000	0	0	452	0	0	0	0	0	32	298
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.91	1.07	1.07	1.07	1.07	1.07	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 45.6%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	255	685	30	395	0	0	0	0	20	10	280
Future Volume (Veh/h)	0	255	685	30	395	0	0	0	0	20	10	280
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	271	729	32	420	0	0	0	0	21	11	298
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	420			271			915	1120	500	620	755	210
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	420			271			915	1120	500	620	755	210
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	94	97	63
cM capacity (veh/h)	1150			1275			138	203	522	369	332	796

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	181	819	172	280	32	298
Volume Left	0	0	32	0	21	0
Volume Right	0	729	0	0	0	298
cSH	1700	1700	1275	1700	356	796
Volume to Capacity	0.11	0.48	0.03	0.16	0.09	0.37
Queue Length 95th (ft)	0	0	2	0	7	44
Control Delay (s)	0.0	0.0	1.6	0.0	16.1	12.2
Lane LOS			A		C	B
Approach Delay (s)	0.0		0.6		12.6	
Approach LOS					B	

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	275	0	425	0	0	0
Future Volume (vph)	275	0	425	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3221	0	1660	0	0	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3221	0	1660	0	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	277			605	530	
Travel Time (s)	6.3			13.8	12.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	296	0	457	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	296	0	457	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	275	0	425	0	0	0
Future Volume (vph)	275	0	425	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	296	0	457	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	148	148	457
Volume Left (vph)	148	148	457
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.3	6.3	5.0
Degree Utilization, x	0.26	0.26	0.63
Capacity (veh/h)	544	545	697
Control Delay (s)	10.3	10.3	16.2
Approach Delay (s)	10.3		16.2
Approach LOS	B		C

Intersection Summary			
Delay	13.9		
Level of Service	B		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	300	160	100	240	75	115	560	75	120	1015	150
Future Volume (vph)	165	300	160	100	240	75	115	560	75	120	1015	150
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	14	12	10	11	12	9	10	12
Storage Length (ft)	140		0	60		0	120		0	115		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	195			95			95			90		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98		0.98	1.00	0.99		0.99	1.00		0.99	0.99	
Frt			0.850		0.964			0.982			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1580	1600	1400	1596	1778	0	1580	3122	0	1539	3002	0
Flt Permitted	0.364			0.425			0.123			0.290		
Satd. Flow (perm)	596	1600	1372	711	1778	0	203	3122	0	467	3002	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			163		18			19			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		752			3955			5338			2655	
Travel Time (s)		17.1			89.9			121.3			60.3	
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)						3	1		2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Adj. Flow (vph)	168	306	163	102	245	77	117	571	77	122	1036	153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	306	163	102	322	0	117	648	0	122	1189	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	0.99	1.07	1.17	1.12	1.07	1.22	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	4.0	4.0	7.0	4.0		7.0	18.0		7.0	18.0	
Minimum Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (%)	11.1%	35.6%	35.6%	11.1%	35.6%		11.1%	42.2%		11.1%	42.2%	
Maximum Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0	0.0	1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	C-Max		None	C-Max	
Walk Time (s)		4.0	4.0		4.0			18.0			18.0	
Flash Dont Walk (s)		23.0	23.0		23.0			16.0			16.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	34.8	30.0	29.0	34.0	27.0		40.0	34.0		40.0	34.0	
Actuated g/C Ratio	0.39	0.33	0.32	0.38	0.30		0.44	0.38		0.44	0.38	
v/c Ratio	0.57	0.57	0.30	0.31	0.59		0.64	0.54		0.44	1.04	
Control Delay	26.6	30.9	5.6	19.1	30.5		31.3	23.3		18.4	65.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	26.6	30.9	5.6	19.1	30.5		31.3	23.3		18.4	65.1	
LOS	C	C	A	B	C		C	C		B	E	
Approach Delay		23.3			27.7			24.6			60.8	
Approach LOS		C			C			C			E	
90th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
90th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
70th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
50th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
30th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		7.0	34.0		7.0	34.0	
10th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Max	Coord		Max	Coord	
Stops (vph)	116	249	22	63	249		61	465		68	990	
Fuel Used(gal)	3	5	1	4	13		6	32		3	45	
CO Emissions (g/hr)	175	351	87	267	914		409	2238		231	3147	
NOx Emissions (g/hr)	34	68	17	52	178		80	435		45	612	
VOC Emissions (g/hr)	41	81	20	62	212		95	519		54	729	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	60	147	0	35	146		35	144		37	~383	
Queue Length 95th (ft)	106	236	44	67	234		#91	198		69	#514	
Internal Link Dist (ft)		672			3875			5258			2575	
Turn Bay Length (ft)	140			60			120			115		
Base Capacity (vph)	295	533	552	327	546		182	1191		279	1147	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.57	0.57	0.30	0.31	0.59		0.64	0.54		0.44	1.04	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 39.9 Intersection LOS: D
Intersection Capacity Utilization 88.3% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1060: Halsted Street & 119th Street

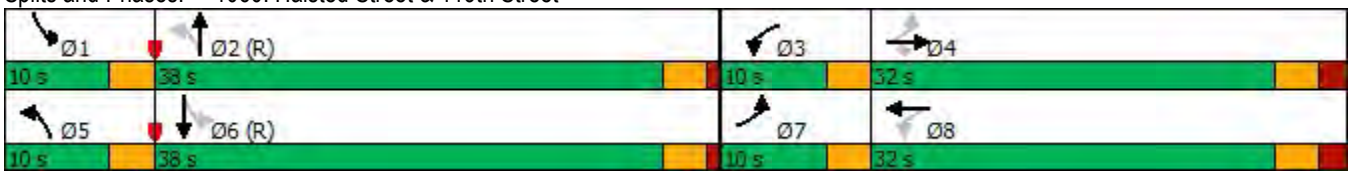

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	375	75	15	340	25	45	70	25	25	105	80
Future Volume (vph)	45	375	75	15	340	25	45	70	25	25	105	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	10	10	10	10	12	15	12	12	16	12
Storage Length (ft)	0		105	0		75	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		0.99			0.99	
Frt			0.850			0.850		0.976			0.948	
Flt Protected		0.995			0.998			0.984			0.994	
Satd. Flow (prot)	0	1681	1428	0	1630	1428	0	1894	0	0	1870	0
Flt Permitted		0.935			0.980			0.872			0.964	
Satd. Flow (perm)	0	1578	1369	0	1600	1381	0	1675	0	0	1813	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			27		20			59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3955			1331			2677			2669	
Travel Time (s)		89.9			30.3			60.8			60.7	
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	1		1			1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Adj. Flow (vph)	49	412	82	16	374	27	49	77	27	27	115	88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	461	82	0	390	27	0	153	0	0	230	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.17	1.17	1.17	1.17	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	32.0	27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	22.0	22.0	22.0	22.0	22.0	22.0	17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
v/c Ratio		0.59	0.11		0.50	0.04		0.22			0.29	
Control Delay		15.8	2.9		10.5	2.4		11.6			6.9	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		15.8	2.9		10.5	2.4		11.6			6.9	
LOS		B	A		B	A		B			A	
Approach Delay		13.9			9.9			11.6			6.9	
Approach LOS		B			A			B			A	
Stops (vph)		291	11		134	3		74			135	
Fuel Used(gal)		16	2		5	0		4			5	
CO Emissions (g/hr)		1112	169		362	20		254			377	
NOx Emissions (g/hr)		216	33		70	4		49			73	
VOC Emissions (g/hr)		258	39		84	5		59			87	
Dilemma Vehicles (#)		0	0		0	0		0			0	
Queue Length 50th (ft)		123	0		66	1		32			10	
Queue Length 95th (ft)		209	19		88	m4		66			m27	
Internal Link Dist (ft)		3875			1251			2597			2589	
Turn Bay Length (ft)			105			75						
Base Capacity (vph)		776	715		787	693		707			787	
Starvation Cap Reductn		0	0		0	0		0			0	
Spillback Cap Reductn		0	0		0	0		0			0	
Storage Cap Reductn		0	0		0	0		0			0	
Reduced v/c Ratio		0.59	0.11		0.50	0.04		0.22			0.29	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.59
Intersection Signal Delay: 11.2 Intersection LOS: B
Intersection Capacity Utilization 85.8% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1061: Wentworth Avenue & 119th Street

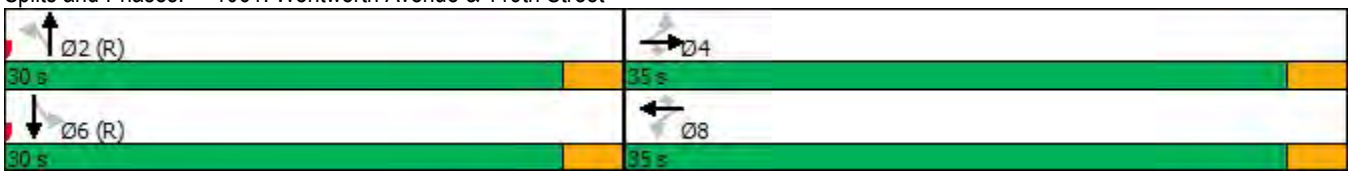

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	235	50	15	245	10	40	120	20	15	190	75
Future Volume (vph)	70	235	50	15	245	10	40	120	20	15	190	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	12	10	10	12	10	10	12	16	12
Storage Length (ft)	0		70	0		215	0		75	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.94		1.00	0.95		1.00	0.97		0.99	
Frt			0.850			0.850			0.850		0.964	
Flt Protected		0.989			0.997			0.988			0.997	
Satd. Flow (prot)	0	1636	1428	0	1614	1428	0	1600	1428	0	1938	0
Flt Permitted		0.863			0.972			0.880			0.984	
Satd. Flow (perm)	0	1422	1347	0	1572	1360	0	1424	1390	0	1912	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			52			34			34		40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			477			2671			2164	
Travel Time (s)		30.3			10.8			60.7			49.2	
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	1		1	1		1			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Adj. Flow (vph)	73	245	52	16	255	10	42	125	21	16	198	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	318	52	0	271	10	0	167	21	0	292	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	43.1%	43.1%	43.1%	43.1%	43.1%	43.1%	56.9%	56.9%	56.9%	56.9%	56.9%	
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0	23.0	32.0	32.0	32.0	32.0	32.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	14.0	14.0	14.0	14.0	14.0	14.0	23.0	23.0	23.0	23.0	23.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
v/c Ratio		0.63	0.10		0.49	0.02		0.24	0.03		0.30	
Control Delay		15.0	1.9		20.1	1.2		2.2	0.8		8.2	
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Delay		15.0	1.9		20.1	1.2		2.2	0.8		8.2	
LOS		B	A		C	A		A	A		A	
Approach Delay		13.2			19.4			2.0			8.2	
Approach LOS		B			B			A			A	
Stops (vph)		254	12		198	1		41	3		238	
Fuel Used(gal)		6	1		3	0		7	1		8	
CO Emissions (g/hr)		385	42		218	3		488	60		533	
NOx Emissions (g/hr)		75	8		42	1		95	12		104	
VOC Emissions (g/hr)		89	10		51	1		113	14		124	
Dilemma Vehicles (#)		0	0		0	0		0	0		0	
Queue Length 50th (ft)		109	3		82	0		11	1		136	
Queue Length 95th (ft)		178	m4		146	3		m11	m1		142	
Internal Link Dist (ft)		1251			397			2591			2084	
Turn Bay Length (ft)			70			215			75			
Base Capacity (vph)		503	510		556	503		701	701		961	
Starvation Cap Reductn		0	0		0	0		0	0		0	
Spillback Cap Reductn		0	0		0	0		0	0		0	
Storage Cap Reductn		0	0		0	0		0	0		0	
Reduced v/c Ratio		0.63	0.10		0.49	0.02		0.24	0.03		0.30	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.63
Intersection Signal Delay: 11.6 Intersection LOS: B
Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1062: State Street & 119th Street

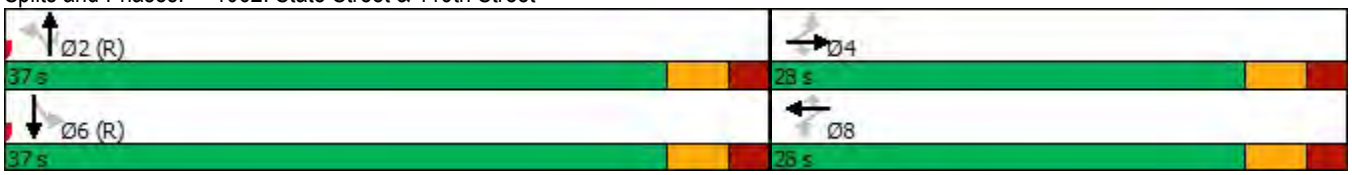

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1095	365	370	1065	0	0	0	0	650	360	425
Future Volume (vph)	0	1095	365	370	1065	0	0	0	0	650	360	425
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	14
Storage Length (ft)	0		85	216		0	0		0	360		360
Storage Lanes	0		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.86	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.963									0.980	0.850
Flt Protected				0.950						0.950	0.981	
Satd. Flow (prot)	0	4569	0	1676	3320	0	0	0	0	1541	2911	1442
Flt Permitted				0.081						0.950	0.981	
Satd. Flow (perm)	0	4569	0	143	3320	0	0	0	0	1541	2911	1442
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		76									12	111
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1359			322			590			708	
Travel Time (s)		30.9			7.3			13.4			16.1	
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Adj. Flow (vph)	0	1117	372	378	1087	0	0	0	0	663	367	434
Shared Lane Traffic (%)										43%		23%
Lane Group Flow (vph)	0	1489	0	378	1087	0	0	0	0	378	752	334
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			34			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1					1	1	1
Detector Template												
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		50		50	50					50	50	50
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		15.0		3.0	15.0					8.0	8.0	8.0
Minimum Split (s)		41.5		39.0	80.5					34.5	34.5	34.5
Total Split (s)		41.5		39.0	80.5					34.5	34.5	34.5
Total Split (%)		36.1%		33.9%	70.0%					30.0%	30.0%	30.0%
Maximum Green (s)		35.5		34.5	74.5					28.5	28.5	28.5
Yellow Time (s)		4.5		3.5	4.5					4.5	4.5	4.5
All-Red Time (s)		1.5		1.0	1.5					1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)		7.0		3.5	7.0					3.0	3.0	3.0
Minimum Gap (s)		3.5		0.2	3.5					0.2	0.2	0.2
Time Before Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Time To Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Recall Mode		C-Max		None	C-Max					None	None	None
Walk Time (s)										1.5	1.5	1.5
Flash Dont Walk (s)										27.0	27.0	27.0
Pedestrian Calls (#/hr)										0	0	0
Act Effct Green (s)		44.6		76.0	74.5					28.5	28.5	28.5
Actuated g/C Ratio		0.39		0.66	0.65					0.25	0.25	0.25
v/c Ratio		0.82		0.87	0.51					0.99	1.03	0.76
Control Delay		35.7		36.3	22.3					88.1	83.4	38.8
Queue Delay		0.1		7.9	51.0					0.0	0.0	0.0
Total Delay		35.8		44.2	73.3					88.1	83.4	38.8
LOS		D		D	E					F	F	D
Approach Delay		35.8			65.8						74.4	
Approach LOS		D			E						E	
90th %ile Green (s)		35.5		34.5	74.5					28.5	28.5	28.5
90th %ile Term Code		Coord		Max	Coord					Max	Max	Max
70th %ile Green (s)		40.0		30.0	74.5					28.5	28.5	28.5
70th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
50th %ile Green (s)		44.2		25.8	74.5					28.5	28.5	28.5
50th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
30th %ile Green (s)		48.5		21.5	74.5					28.5	28.5	28.5
30th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
10th %ile Green (s)		54.8		15.2	74.5					28.5	28.5	28.5
10th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
Stops (vph)		1148		320	895					321	638	206
Fuel Used(gal)		32		5	12					10	20	6
CO Emissions (g/hr)		2264		380	871					731	1405	386
NOx Emissions (g/hr)		441		74	169					142	273	75
VOC Emissions (g/hr)		525		88	202					169	326	90
Dilemma Vehicles (#)		0		0	0					0	0	0
Queue Length 50th (ft)		343		219	353					307	~343	171
Queue Length 95th (ft)		#511		m261	m415					#525	#481	#319
Internal Link Dist (ft)		1279			242			510			628	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)				216						360		360
Base Capacity (vph)		1818		554	2150					381	730	440
Starvation Cap Reductn		0		136	1318					0	0	0
Spillback Cap Reductn		24		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.83		0.90	1.31					0.99	1.03	0.76

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 85 (74%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 58.5 Intersection LOS: E
Intersection Capacity Utilization 115.4% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1064: S Paulina St & 127th Street

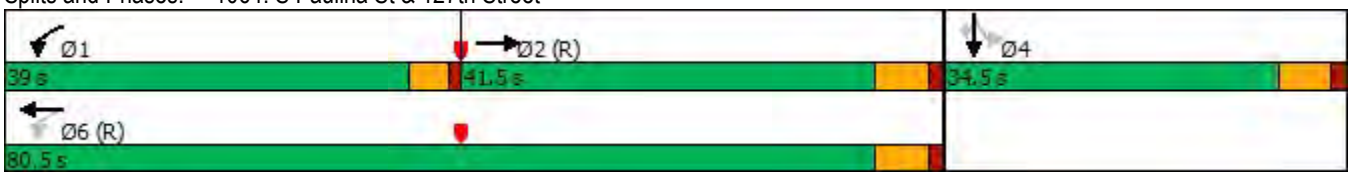

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	430	1315	0	0	1025	330	410	340	300	0	0	0
Future Volume (vph)	430	1315	0	0	1025	330	410	340	300	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	216		216	0		130	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				1.00							
Frt					0.963			0.930				
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3252	3353	0	0	4631	0	1676	3120	0	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3247	3353	0	0	4631	0	1676	3120	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					87							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			336			554			548	
Travel Time (s)		7.3			7.6			12.6			12.5	
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)			1			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Adj. Flow (vph)	453	1384	0	0	1079	347	432	358	316	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	453	1384	0	0	1426	0	432	674	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1		1	1				
Detector Template												
Leading Detector (ft)	50	50			50		50	50				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	50	50			50		50	50				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0			15.0		10.0	10.0				
Minimum Split (s)	26.5	80.5			54.0		34.5	34.5				
Total Split (s)	26.5	80.5			54.0		34.5	34.5				
Total Split (%)	23.0%	70.0%			47.0%		30.0%	30.0%				
Maximum Green (s)	20.5	74.5			48.0		28.5	28.5				
Yellow Time (s)	4.5	4.5			4.5		4.5	4.5				
All-Red Time (s)	1.5	1.5			1.5		1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0			7.0		5.0	5.0				
Minimum Gap (s)	0.2	3.5			3.5		0.2	0.2				
Time Before Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Time To Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Recall Mode	None	C-Max			C-Max		None	None				
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							21.5	21.5				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	19.5	74.5			49.0		28.5	28.5				
Actuated g/C Ratio	0.17	0.65			0.43		0.25	0.25				
v/c Ratio	0.82	0.64			0.71		1.04	0.87				
Control Delay	53.3	3.1			22.6		97.9	55.0				
Queue Delay	0.4	2.8			2.0		21.8	0.0				
Total Delay	53.7	5.9			24.5		119.8	55.0				
LOS	D	A			C		F	D				
Approach Delay		17.6			24.5			80.3				
Approach LOS		B			C			F				
90th %ile Green (s)	20.5	74.5			48.0		28.5	28.5				
90th %ile Term Code	Max	Coord			Coord		Max	Max				
70th %ile Green (s)	20.5	74.5			48.0		28.5	28.5				
70th %ile Term Code	Max	Coord			Coord		Max	Max				
50th %ile Green (s)	20.5	74.5			48.0		28.5	28.5				
50th %ile Term Code	Max	Coord			Coord		Max	Max				
30th %ile Green (s)	19.6	74.5			48.9		28.5	28.5				
30th %ile Term Code	Gap	Coord			Coord		Max	Max				
10th %ile Green (s)	16.5	74.5			52.0		28.5	28.5				
10th %ile Term Code	Gap	Coord			Coord		Max	Max				
Stops (vph)	376	308			630		348	581				
Fuel Used(gal)	8	6			13		12	13				
CO Emissions (g/hr)	547	408			927		830	918				
NOx Emissions (g/hr)	106	79			180		161	179				
VOC Emissions (g/hr)	127	94			215		192	213				
Dilemma Vehicles (#)	0	0			0		0	0				
Queue Length 50th (ft)	142	11			179		~346	253				
Queue Length 95th (ft)	m170	m12			m250		#545	#353				
Internal Link Dist (ft)		242			256			474			468	
Turn Bay Length (ft)	216											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	579	2172			2022		415	773				
Starvation Cap Reductn	11	646			295		0	0				
Spillback Cap Reductn	0	130			420		40	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.80	0.91			0.89		1.15	0.87				

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 35.7 Intersection LOS: D
Intersection Capacity Utilization 115.4% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1065: Marshfield Ave & 127th Street

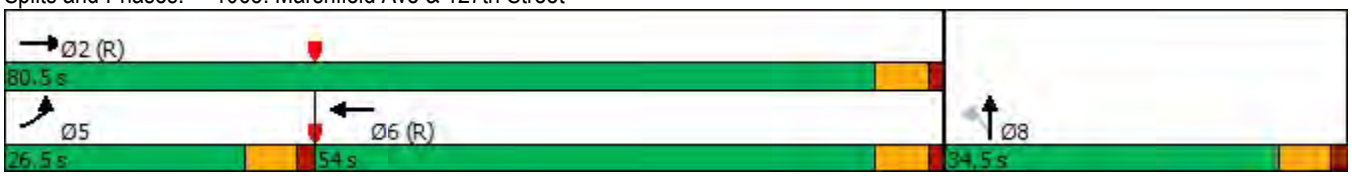

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	725	465	120	715	60	285	225	85	95	205	155
Future Volume (vph)	155	725	465	120	715	60	285	225	85	95	205	155
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	11	12	12	10	12	13	10	10	10
Storage Length (ft)	120		0	85		0	240		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			120			125			140		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.97	0.99	1.00		1.00	0.99		0.99	0.99	
Frt			0.850		0.988			0.959			0.935	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3386	1337	1605	3282	0	1580	3216	0	1550	2945	0
Flt Permitted	0.138			0.352			0.298			0.553		
Satd. Flow (perm)	227	3386	1292	591	3282	0	493	3216	0	894	2945	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			384		8			50			165	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		336			5379			1555			925	
Travel Time (s)		7.6			122.3			35.3			21.0	
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Adj. Flow (vph)	165	771	495	128	761	64	303	239	90	101	218	165
Shared Lane Traffic (%)												
Lane Group Flow (vph)	165	771	495	128	825	0	303	329	0	101	383	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.07	1.22	1.12	1.07	1.07	1.17	1.07	1.03	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	15.0	44.0	20.5	12.5	41.5		20.5	43.5		15.0	38.0	
Total Split (s)	15.0	44.0	20.5	12.5	41.5		20.5	43.5		15.0	38.0	
Total Split (%)	13.0%	38.3%	17.8%	10.9%	36.1%		17.8%	37.8%		13.0%	33.0%	
Maximum Green (s)	10.5	38.0	16.0	8.0	35.5		16.0	37.5		10.5	32.0	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	0.2	4.0	0.2	0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	25.0	0.0	0.0	25.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Recall Mode	Max	C-Max	None	None	C-Max		None	None		None	None	
Walk Time (s)		14.0			13.0			5.0			5.0	
Flash Dont Walk (s)		22.0			22.0			26.0			26.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	63.9	48.2	65.7	47.1	35.5		41.7	26.2		30.8	19.8	
Actuated g/C Ratio	0.56	0.42	0.57	0.41	0.31		0.36	0.23		0.27	0.17	
v/c Ratio	0.42	0.54	0.55	0.39	0.81		0.92	0.43		0.34	0.60	
Control Delay	14.4	22.1	6.3	18.1	43.7		58.4	29.0		27.8	27.9	
Queue Delay	0.0	1.1	0.2	0.0	0.1		0.0	0.0		0.0	0.0	
Total Delay	14.4	23.2	6.5	18.1	43.8		58.4	29.0		27.8	27.9	
LOS	B	C	A	B	D		E	C		C	C	
Approach Delay		16.4			40.3			43.1			27.9	
Approach LOS		B			D			D			C	
90th %ile Green (s)	16.4	38.0	16.0	13.9	35.5		16.0	31.6		10.5	26.1	
90th %ile Term Code	MaxR	Coord	Max	Max	Coord		Max	Hold		Max	Gap	
70th %ile Green (s)	20.4	44.5	16.0	11.4	35.5		16.0	27.6		10.5	22.1	
70th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Max	Gap	
50th %ile Green (s)	23.6	49.3	16.0	9.8	35.5		16.0	24.4		10.5	18.9	
50th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Max	Gap	
30th %ile Green (s)	25.8	52.8	16.0	8.5	35.5		16.0	23.6		9.1	16.7	
30th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Gap	Gap	
10th %ile Green (s)	27.8	56.5	15.7	6.8	35.5		15.7	23.8		6.9	15.0	
10th %ile Term Code	MaxR	Coord	Gap	Gap	Coord		Gap	Hold		Gap	Min	
Stops (vph)	69	535	164	69	690		233	244		69	186	
Fuel Used(gal)	1	8	3	6	43		8	7		2	6	
CO Emissions (g/hr)	87	567	190	409	3024		569	484		112	396	
NOx Emissions (g/hr)	17	110	37	80	588		111	94		22	77	
VOC Emissions (g/hr)	20	131	44	95	701		132	112		26	92	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	35	229	126	42	293		195	100		51	78	
Queue Length 95th (ft)	m96	m305	m168	85	372		#263	136		83	121	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		256			5299			1475			845	
Turn Bay Length (ft)	120			85			240			120		
Base Capacity (vph)	391	1419	909	334	1018		330	1082		306	938	
Starvation Cap Reductn	0	389	72	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	5		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.42	0.75	0.59	0.38	0.81		0.92	0.30		0.33	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 15 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 29.3 Intersection LOS: C
Intersection Capacity Utilization 88.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1066: S Ashland & 127th Street

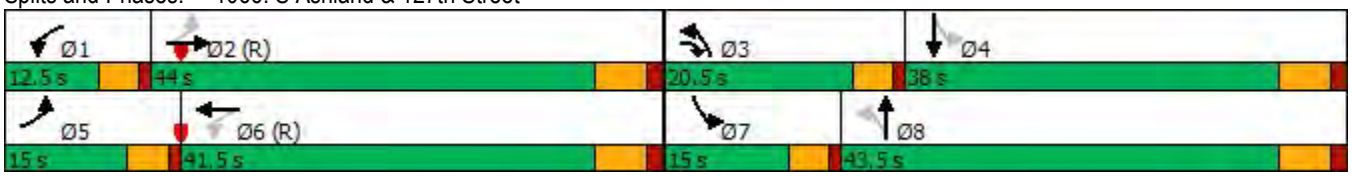

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	245	465	70	205	110	460	430	100	260	515	70
Future Volume (vph)	60	245	465	70	205	110	460	430	100	260	515	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	11	12	12	12	12	12
Storage Length (ft)	85		0	140		0	140		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	55			135			115			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	0.99		1.00				1.00	
Frt		0.902			0.948			0.972			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	2993	0	1710	3182	0	1621	3297	0	1693	3294	0
Flt Permitted	0.504			0.175			0.206			0.432		
Satd. Flow (perm)	900	2993	0	315	3182	0	351	3297	0	770	3294	0
Right Turn on Red			No			Yes			Yes			No
Satd. Flow (RTOR)					85			29				
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		542			3053			918			1555	
Travel Time (s)		10.6			59.5			17.9			30.3	
Confl. Peds. (#/hr)	12		3	3		12	5					5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Adj. Flow (vph)	66	269	511	77	225	121	505	473	110	286	566	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	780	0	77	346	0	505	583	0	286	643	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	15.0	32.5		19.5	37.0		25.0	50.5		12.5	38.0	
Total Split (s)	15.0	32.5		19.5	37.0		25.0	50.5		12.5	38.0	
Total Split (%)	13.0%	28.3%		17.0%	32.2%		21.7%	43.9%		10.9%	33.0%	
Maximum Green (s)	11.0	26.5		15.5	31.0		21.0	44.5		8.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	1.0	1.5		1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Minimum Gap (s)	0.2	4.0		0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Time To Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Recall Mode	None	Max		None	Max		None	C-Max		None	C-Max	
Walk Time (s)					6.0						4.0	
Flash Dont Walk (s)					25.0						28.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)	44.3	35.0		45.3	35.4		59.0	44.5		42.5	32.0	
Actuated g/C Ratio	0.39	0.30		0.39	0.31		0.51	0.39		0.37	0.28	
v/c Ratio	0.16	1.13dr		0.33	0.33		1.23	0.45		0.81	0.70	
Control Delay	21.6	49.6		24.5	24.9		147.1	26.1		42.0	41.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.6	49.6		24.5	24.9		147.1	26.1		42.0	41.9	
LOS	C	D		C	C		F	C		D	D	
Approach Delay		47.4			24.8			82.3			41.9	
Approach LOS		D			C			F			D	
90th %ile Green (s)	11.0	30.1		11.9	31.0		21.0	44.5		8.5	32.0	
90th %ile Term Code	Max	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	9.7	31.8		10.2	32.3		21.0	44.5		8.5	32.0	
70th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	8.6	32.9		9.1	33.4		21.0	44.5		8.5	32.0	
50th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.6	34.0		8.0	34.4		21.0	44.5		8.5	32.0	
30th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	0.0	46.0		0.0	46.0		21.0	44.5		8.5	32.0	
10th %ile Term Code	Skip	MaxR		Skip	MaxR		Max	Coord		Max	Coord	
Stops (vph)	36	606		42	182		263	363		205	496	
Fuel Used(gal)	1	15		3	16		19	9		7	15	
CO Emissions (g/hr)	54	1014		244	1098		1314	634		467	1068	
NOx Emissions (g/hr)	10	197		48	214		256	123		91	208	
VOC Emissions (g/hr)	12	235		57	255		305	147		108	248	
Dilemma Vehicles (#)	0	29		0	14		0	23		0	29	
Queue Length 50th (ft)	29	293		34	78		~371	157		106	208	
Queue Length 95th (ft)	58	#439		66	124		#585	209		#217	284	
Internal Link Dist (ft)		462			2973			838			1475	
Turn Bay Length (ft)	85			140			140			150		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	435	909		319	1038		411	1293		352	916	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.15	0.86		0.24	0.33		1.23	0.45		0.81	0.70	

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 5 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.23
Intersection Signal Delay: 54.5 Intersection LOS: D
Intersection Capacity Utilization 99.6% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 1067: S Ashland & Vermont St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	620	145	15	475	85	120	330	10	195	595	180
Future Volume (vph)	110	620	145	15	475	85	120	330	10	195	595	180
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	11	12	11	12	12	11	11	12
Storage Length (ft)	0		0	0		0	135		0	130		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			100			105		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	0.99	
Frt		0.975			0.978			0.995			0.965	
Flt Protected		0.994			0.999		0.950			0.950		
Satd. Flow (prot)	0	3138	0	0	3143	0	1559	3337	0	1637	3082	0
Flt Permitted		0.711			0.918		0.159			0.534		
Satd. Flow (perm)	0	2244	0	0	2888	0	261	3337	0	918	3082	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			23			4			47	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5379			1323			450			5338	
Travel Time (s)		122.3			30.1			10.2			121.3	
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Adj. Flow (vph)	118	667	156	16	511	91	129	355	11	210	640	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	941	0	0	618	0	129	366	0	210	834	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.07	1.07	1.12	1.07	1.12	1.07	1.07	1.12	1.12	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	15.0		15.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	8.0	37.0		21.0	21.0		8.0	31.0		8.0	21.0	
Total Split (s)	10.0	40.0		30.0	30.0		15.0	33.0		12.0	30.0	
Total Split (%)	11.8%	47.1%		35.3%	35.3%		17.6%	38.8%		14.1%	35.3%	
Maximum Green (s)	6.5	34.0		24.0	24.0		11.5	27.0		8.5	24.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Time To Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		9.0						7.0				
Flash Dont Walk (s)		22.0						18.0				
Pedestrian Calls (#/hr)		2						4				
Act Effct Green (s)		34.0			34.0		37.3	25.2		34.9	24.0	
Actuated g/C Ratio		0.41			0.41		0.45	0.30		0.42	0.29	
v/c Ratio		1.00			0.52		0.48	0.36		0.46	0.90	
Control Delay		56.5			19.8		18.8	23.5		17.3	42.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		56.5			19.8		18.8	23.5		17.3	42.1	
LOS		E			B		B	C		B	D	
Approach Delay		56.5			19.8			22.3			37.1	
Approach LOS		E			B			C			D	
90th %ile Green (s)	0.0	34.0		34.0	34.0		11.5	27.0		8.5	24.0	
90th %ile Term Code	Skip	Max		Hold	Hold		Max	Hold		Max	Max	
70th %ile Green (s)	0.0	34.0		34.0	34.0		11.4	26.9		8.5	24.0	
70th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Max	Max	
50th %ile Green (s)	0.0	34.0		34.0	34.0		10.0	25.5		8.5	24.0	
50th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Max	Max	
30th %ile Green (s)	0.0	34.0		34.0	34.0		8.6	24.1		8.5	24.0	
30th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Max	Max	
10th %ile Green (s)	0.0	34.0		34.0	34.0		6.6	22.6		8.0	24.0	
10th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Gap	Max	
Stops (vph)		710			399		65	251		124	643	
Fuel Used(gal)		51			10		1	4		9	43	
CO Emissions (g/hr)		3542			731		87	294		663	2971	
NOx Emissions (g/hr)		689			142		17	57		129	578	
VOC Emissions (g/hr)		821			169		20	68		154	689	
Dilemma Vehicles (#)		0			0		0	0		0	0	
Queue Length 50th (ft)		~252			120		37	77		63	209	
Queue Length 95th (ft)		#402			175		69	114		107	#333	
Internal Link Dist (ft)		5299			1243			370			5258	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)							135			130		
Base Capacity (vph)		937			1195		302	1087		460	923	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		1.00			0.52		0.43	0.34		0.46	0.90	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 83.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 37.2 Intersection LOS: D
Intersection Capacity Utilization 92.6% ICU Level of Service F
Analysis Period (min) 15
90th %ile Actuated Cycle: 85
70th %ile Actuated Cycle: 84.9
50th %ile Actuated Cycle: 83.5
30th %ile Actuated Cycle: 82.1
10th %ile Actuated Cycle: 80.1
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1068: Halsted Street & 127th Street

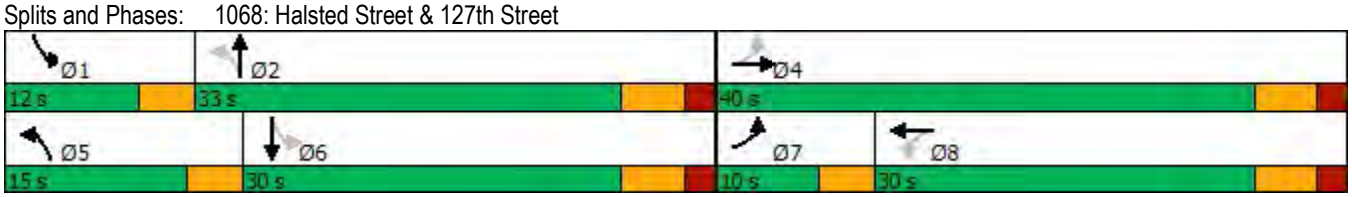

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	250	170	105	165	30	80	515	90	35	680	70
Future Volume (vph)	85	250	170	105	165	30	80	515	90	35	680	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	60		0	55		0	105		0	90		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			55			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99		0.99	1.00		1.00	1.00		1.00	1.00	
Frt		0.939			0.977			0.978			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	1886	0	1613	1989	0	1676	3221	0	1437	3270	0
Flt Permitted	0.613			0.313			0.282			0.362		
Satd. Flow (perm)	1101	1886	0	528	1989	0	497	3221	0	547	3270	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		60			16			42			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2456			1385			1856			450	
Travel Time (s)		55.8			31.5			42.2			10.2	
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	4					2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Adj. Flow (vph)	92	272	185	114	179	33	87	560	98	38	739	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	457	0	114	212	0	87	658	0	38	815	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	19.0	19.0		19.0	19.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
v/c Ratio	0.23	0.62		0.59	0.28		0.37	0.42		0.15	0.52	
Control Delay	16.0	18.9		26.4	18.0		16.5	11.4		11.4	12.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.0	18.9		26.4	18.0		16.5	11.4		11.4	12.9	
LOS	B	B		C	B		B	B		B	B	
Approach Delay		18.4			20.9			12.0			12.8	
Approach LOS		B			C			B			B	
Stops (vph)	57	293		99	177		52	346		21	475	
Fuel Used(gal)	4	21		2	4		2	12		0	7	
CO Emissions (g/hr)	297	1487		157	266		120	844		22	505	
NOx Emissions (g/hr)	58	289		31	52		23	164		4	98	
VOC Emissions (g/hr)	69	345		36	62		28	196		5	117	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	24	124		50	84		21	77		8	107	
Queue Length 95th (ft)	55	214		m50	m80		55	115		24	153	
Internal Link Dist (ft)		2376			1305			1776			370	
Turn Bay Length (ft)	60			55			105			90		
Base Capacity (vph)	406	734		194	744		237	1558		260	1571	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.23	0.62		0.59	0.28		0.37	0.42		0.15	0.52	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 57 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 14.9 Intersection LOS: B
Intersection Capacity Utilization 78.9% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1069: Halsted Street & Vermont St

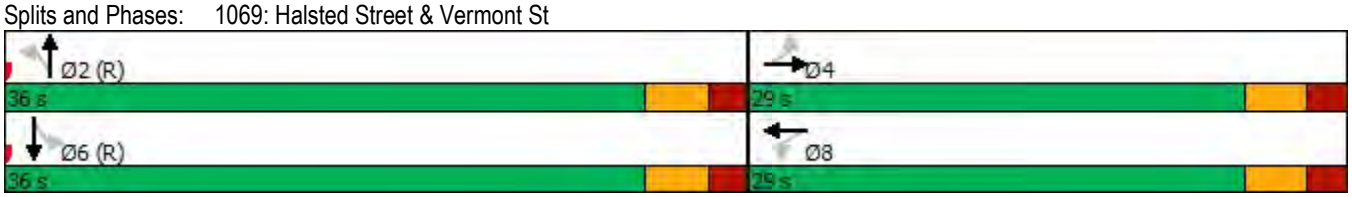

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	795	250	605	20	5	10	10	50	10	0	5
Future Volume (vph)	5	795	250	605	20	5	10	10	50	10	0	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	10	10	12	12	16	12	12	16	12
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.99			0.98	
Frt				0.997				0.910			0.930	
Flt Protected				0.986				0.990			0.977	
Satd. Flow (prot)	0	3161	0	3093	0	0	0	1817	0	0	1816	0
Flt Permitted		0.947		0.563				0.952			0.893	
Satd. Flow (perm)	0	2993	0	1765	0	0	0	1744	0	0	1658	0
Right Turn on Red					No				No			
Satd. Flow (RTOR)												
Link Speed (mph)		30		30				30			30	
Link Distance (ft)		1323		3930				1256			658	
Travel Time (s)		30.1		89.3				28.5			15.0	
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)			1						2			2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	883	278	672	22	6	11	11	56	11	0	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	889	0	972	0	0	0	84	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right
Median Width(ft)		0		0				0			0	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.17	1.17	1.07	1.07	0.91	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		15		9	15	15		9	15		9
Turn Type	Perm	NA	custom	NA		Perm	Perm	NA		Perm	NA	
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7			2	2			6		
Minimum Split (s)	23.0	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0	
Total Split (s)	23.0	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0	
Total Split (%)	35.4%	35.4%	13.8%	49.2%		27.7%	27.7%	27.7%		27.7%	27.7%	
Maximum Green (s)	18.0	18.0	6.0	27.0		14.0	14.0	14.0		14.0	14.0	
Yellow Time (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	0.0	2.0		1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0				0.0			0.0	
Total Lost Time (s)		5.0		5.0				4.0			4.0	
Lead/Lag	Lag	Lag	Lead									
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		18.0		5.0	5.0	5.0				
Flash Dont Walk (s)	9.0	9.0		9.0		9.0	9.0	9.0				
Pedestrian Calls (#/hr)	0	0		0		0	0	0				
Act Effct Green (s)		18.0		27.0				14.0			14.0	

Lane Group	SBR2	NEL	NER
Lane Configurations			
Traffic Volume (vph)	5	5	305
Future Volume (vph)	5	5	305
Ideal Flow (vphpl)	1800	1800	1800
Lane Width (ft)	12	12	12
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt		0.867	
Flt Protected		0.999	
Satd. Flow (prot)	0	1559	0
Flt Permitted		0.999	
Satd. Flow (perm)	0	1559	0
Right Turn on Red	No		
Satd. Flow (RTOR)			
Link Speed (mph)		30	
Link Distance (ft)		1385	
Travel Time (s)		31.5	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	6	6	339
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	345	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Right	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.07	1.07	1.07
Turning Speed (mph)	9	15	9
Turn Type		Prot	
Protected Phases		3	
Permitted Phases			
Minimum Split (s)		15.0	
Total Split (s)		15.0	
Total Split (%)		23.1%	
Maximum Green (s)		10.0	
Yellow Time (s)		3.0	
All-Red Time (s)		2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.0	
Lead/Lag			
Lead-Lag Optimize?			
Walk Time (s)			
Flash Dont Walk (s)			
Pedestrian Calls (#/hr)			
Act Effct Green (s)		10.0	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
v/c Ratio		1.07		1.34dl				0.22			0.06	
Control Delay		78.9		116.0				22.9			21.0	
Queue Delay		0.0		0.0				0.0			0.0	
Total Delay		78.9		116.0				22.9			21.0	
LOS		E		F				C			C	
Approach Delay		78.9		116.0				22.9			21.0	
Approach LOS		E		F				C			C	
Stops (vph)		670		595				61			19	
Fuel Used(gal)		25		51				1			0	
CO Emissions (g/hr)		1734		3549				100			21	
NOx Emissions (g/hr)		337		690				20			4	
VOC Emissions (g/hr)		402		822				23			5	
Dilemma Vehicles (#)		0		0				0			0	
Queue Length 50th (ft)		~211		~178				28			7	
Queue Length 95th (ft)		#318		#366				61			24	
Internal Link Dist (ft)		1243		3850				1176			578	
Turn Bay Length (ft)												
Base Capacity (vph)		828		814				375			357	
Starvation Cap Reductn		0		0				0			0	
Spillback Cap Reductn		0		0				0			0	
Storage Cap Reductn		0		0				0			0	
Reduced v/c Ratio		1.07		1.19				0.22			0.06	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.44
Intersection Signal Delay: 116.5 Intersection LOS: F
Intersection Capacity Utilization 97.1% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1070: S Wallance St & 127th Street

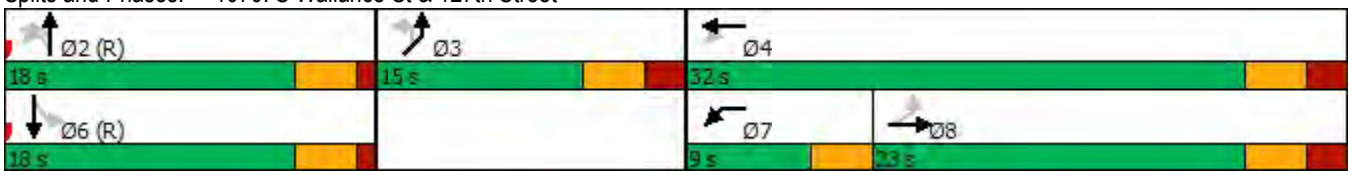

Lane Group	SBR2	NEL	NER
Actuated g/C Ratio		0.15	
v/c Ratio		1.44	
Control Delay		243.8	
Queue Delay		0.0	
Total Delay		243.8	
LOS		F	
Approach Delay		243.8	
Approach LOS		F	
Stops (vph)		231	
Fuel Used(gal)		20	
CO Emissions (g/hr)		1399	
NOx Emissions (g/hr)		272	
VOC Emissions (g/hr)		324	
Dilemma Vehicles (#)		0	
Queue Length 50th (ft)		~184	
Queue Length 95th (ft)		#337	
Internal Link Dist (ft)		1305	
Turn Bay Length (ft)			
Base Capacity (vph)		239	
Starvation Cap Reductn		0	
Spillback Cap Reductn		0	
Storage Cap Reductn		0	
Reduced v/c Ratio		1.44	

Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	290	875	650	70	95	230
Future Volume (vph)	290	875	650	70	95	230
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	150
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.985			0.850
Flt Protected		0.988			0.950	
Satd. Flow (prot)	0	3062	3053	0	1550	1386
Flt Permitted		0.616			0.950	
Satd. Flow (perm)	0	1909	3053	0	1550	1386
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			33			247
Link Speed (mph)		30	20		30	
Link Distance (ft)		3930	637		2686	
Travel Time (s)		89.3	21.7		61.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	312	941	699	75	102	247
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1253	774	0	102	247
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (%)	67.7%	67.7%	67.7%		32.3%	32.3%
Maximum Green (s)	40.0	40.0	40.0		17.0	17.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			30.0			
Flash Dont Walk (s)			10.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		40.0	40.0		17.0	17.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.62	0.62		0.26	0.26
v/c Ratio		1.07	0.41		0.25	0.45
Control Delay		51.2	8.7		24.2	9.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		51.2	8.7		24.2	9.3
LOS		D	A		C	A
Approach Delay		51.2	8.7		13.7	
Approach LOS		D	A		B	
Stops (vph)		1052	329		68	96
Fuel Used(gal)		54	6		5	11
CO Emissions (g/hr)		3751	446		336	739
NOx Emissions (g/hr)		730	87		65	144
VOC Emissions (g/hr)		869	103		78	171
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		~316	87		38	22
Queue Length 95th (ft)		m262	95		71	71
Internal Link Dist (ft)		3850	557		2606	
Turn Bay Length (ft)						150
Base Capacity (vph)		1174	1891		405	544
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		1.07	0.41		0.25	0.45

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 43 (66%), Referenced to phase 2: and 6:SBL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 31.8	Intersection LOS: C
Intersection Capacity Utilization 91.9%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1071: 127th Street & State Street

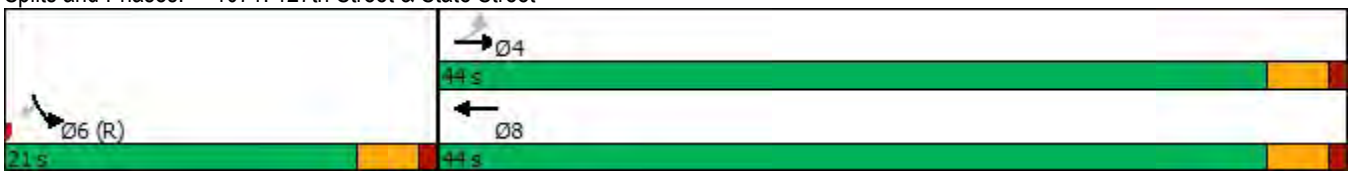

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	90	880	620	170	305	100
Future Volume (vph)	90	880	620	170	305	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			0.99
Frt			0.968			0.850
Flt Protected		0.995			0.950	
Satd. Flow (prot)	0	3117	2965	0	1506	1360
Flt Permitted		0.773			0.950	
Satd. Flow (perm)	0	2421	2965	0	1506	1343
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			80			62
Link Speed (mph)		30	30		30	
Link Distance (ft)		637	664		6686	
Travel Time (s)		14.5	15.1		152.0	
Confl. Peds. (#/hr)	2			2		1
Confl. Bikes (#/hr)	1					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Adj. Flow (vph)	98	957	674	185	332	109
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1055	859	0	332	109
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	38.0	38.0	38.0		27.0	27.0
Total Split (s)	38.0	38.0	38.0		27.0	27.0
Total Split (%)	58.5%	58.5%	58.5%		41.5%	41.5%
Maximum Green (s)	34.0	34.0	34.0		23.0	23.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			21.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)			13.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
v/c Ratio		0.83	0.54		0.62	0.21
Control Delay		17.9	10.3		25.5	13.5
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		17.9	10.3		25.5	13.5
LOS		B	B		C	B
Approach Delay		17.9	10.3		22.6	
Approach LOS		B	B		C	
Stops (vph)		604	406		254	70
Fuel Used(gal)		12	20		22	7
CO Emissions (g/hr)		818	1393		1543	484
NOx Emissions (g/hr)		159	271		300	94
VOC Emissions (g/hr)		189	323		358	112
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		149	78		129	10
Queue Length 95th (ft)		m145	101		m123	m10
Internal Link Dist (ft)		557	584		6606	
Turn Bay Length (ft)						30
Base Capacity (vph)		1266	1589		532	515
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.83	0.54		0.62	0.21

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 35 (54%), Referenced to phase 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 85.9%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1072: 127th Street & Michigan Avenue

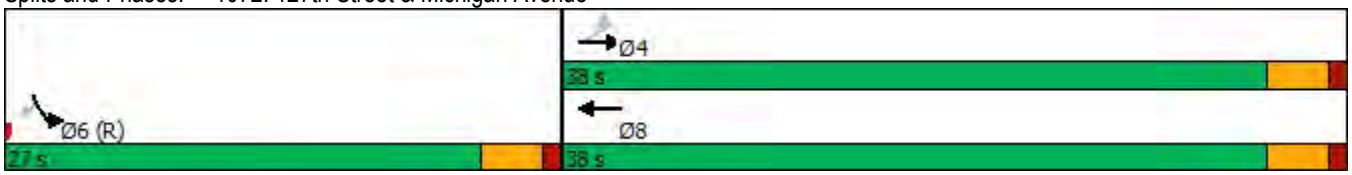

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	705	275	130	635	200	55
Future Volume (vph)	705	275	130	635	200	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	12	12	10	10
Storage Length (ft)		100	105		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor						0.99
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1706	1450	1676	3288	1492	1428
Flt Permitted			0.129		0.950	
Satd. Flow (perm)	1706	1450	228	3288	1492	1410
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						60
Link Speed (mph)	30			35	30	
Link Distance (ft)	163			5343	2671	
Travel Time (s)	3.7			104.1	60.7	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Adj. Flow (vph)	775	302	143	698	220	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	775	302	143	698	220	60
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.12	1.12	1.07	1.07	1.17	1.17
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm
Protected Phases	4	2		8	2	
Permitted Phases		4	8			2
Minimum Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (%)	55.4%	44.6%	55.4%	55.4%	44.6%	44.6%
Maximum Green (s)	31.0	24.0	31.0	31.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	17.0	5.0			5.0	5.0
Flash Dont Walk (s)	14.0	19.0			19.0	19.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Pedestrian Calls (#/hr)	0	0			0	0
Act Effct Green (s)	31.0	65.0	31.0	31.0	24.0	24.0
Actuated g/C Ratio	0.48	1.00	0.48	0.48	0.37	0.37
v/c Ratio	0.95	0.21	1.32	0.45	0.40	0.11
Control Delay	40.3	0.2	220.9	12.4	17.9	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.3	0.2	220.9	12.4	17.9	4.9
LOS	D	A	F	B	B	A
Approach Delay	29.1			47.9	15.1	
Approach LOS	C			D	B	
Stops (vph)	592	0	89	394	143	12
Fuel Used(gal)	23	6	12	29	6	1
CO Emissions (g/hr)	1633	391	806	2032	397	89
NOx Emissions (g/hr)	318	76	157	395	77	17
VOC Emissions (g/hr)	379	91	187	471	92	21
Dilemma Vehicles (#)	0	0	0	49	0	0
Queue Length 50th (ft)	306	0	~75	90	63	0
Queue Length 95th (ft)	m#453	m0	#136	130	116	21
Internal Link Dist (ft)	83			5263	2591	
Turn Bay Length (ft)		100	105			
Base Capacity (vph)	813	1450	108	1568	550	558
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.21	1.32	0.45	0.40	0.11

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 1.32
Intersection Signal Delay: 34.5 Intersection LOS: C
Intersection Capacity Utilization 97.5% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1073: Indiana Ave & 130th Street

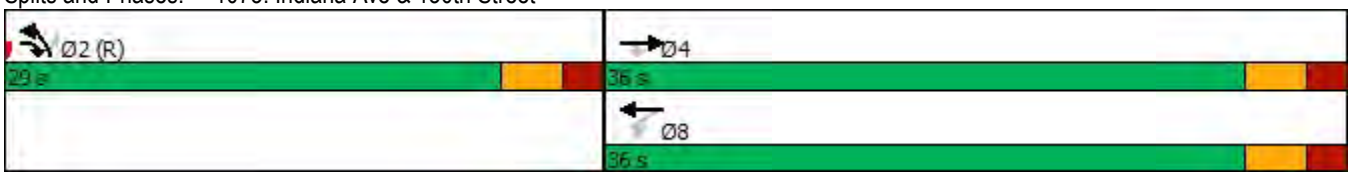

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	585	0	0	630	45	5	5	35	200	0	130
Future Volume (vph)	45	585	0	0	630	45	5	5	35	200	0	130
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	9	12	12	12	11	15	11
Storage Length (ft)	0		30	0		50	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00				0.80		0.97			0.98	
Frt						0.850		0.897			0.947	
Flt Protected		0.996						0.994			0.971	
Satd. Flow (prot)	0	3150	0	0	1663	1337	0	1520	0	0	1733	0
Flt Permitted		0.862						0.970			0.819	
Satd. Flow (perm)	0	2713	0	0	1663	1071	0	1482	0	0	1454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						64		39			64	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			105			169			1380	
Travel Time (s)		5.2			2.4			3.8			31.4	
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1			1		1						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Adj. Flow (vph)	50	650	0	0	700	50	6	6	39	222	0	144
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	700	0	0	700	50	0	51	0	0	366	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.07	1.07	1.17	1.22	1.07	1.07	1.07	1.12	0.95	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	3 8			2		1	6	
Permitted Phases	4				3	3 8	2	2		6		
Minimum Split (s)	16.0	16.0		18.0			12.0	12.0		20.0	32.0	
Total Split (s)	35.0	35.0		18.0			12.0	12.0		20.0	32.0	
Total Split (%)	41.2%	41.2%		21.2%			14.1%	14.1%		23.5%	37.6%	
Maximum Green (s)	31.0	31.0		14.0			9.0	9.0		15.0	27.0	
Yellow Time (s)	3.0	3.0		3.0			3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0			0.0	0.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						3.0			5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?												
Walk Time (s)				2.0							14.0	

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Minimum Split (s)	35.0
Total Split (s)	35.0
Total Split (%)	41%
Maximum Green (s)	31.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	18.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)				12.0							13.0	
Pedestrian Calls (#/hr)				0							0	
Act Effct Green (s)		31.0			49.0	49.0		9.0			27.0	
Actuated g/C Ratio		0.36			0.58	0.58		0.11			0.32	
v/c Ratio		0.71			0.73	0.08		0.27			0.66	
Control Delay		27.9			12.4	0.2		19.5			27.7	
Queue Delay		1.3			53.2	8.6		0.0			0.0	
Total Delay		29.2			65.5	8.8		19.5			27.7	
LOS		C			E	A		B			C	
Approach Delay		29.2			61.8			19.5			27.7	
Approach LOS		C			E			B			C	
Stops (vph)		524			146	0		19			229	
Fuel Used(gal)		9			3	0		0			7	
CO Emissions (g/hr)		621			203	3		24			465	
NOx Emissions (g/hr)		121			40	1		5			91	
VOC Emissions (g/hr)		144			47	1		6			108	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		165			83	0		6			135	
Queue Length 95th (ft)		230			m23	m1		38			227	
Internal Link Dist (ft)		148			25			89			1300	
Turn Bay Length (ft)						50						
Base Capacity (vph)		989			958	644		191			554	
Starvation Cap Reductn		0			454	559		0			0	
Spillback Cap Reductn		128			0	0		1			2	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.81			1.39	0.59		0.27			0.66	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Pretimed
Maximum v/c Ratio: 1.41
Intersection Signal Delay: 41.7 Intersection LOS: D
Intersection Capacity Utilization 88.1% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1955: 115th Street & Cottage Grove Avenue

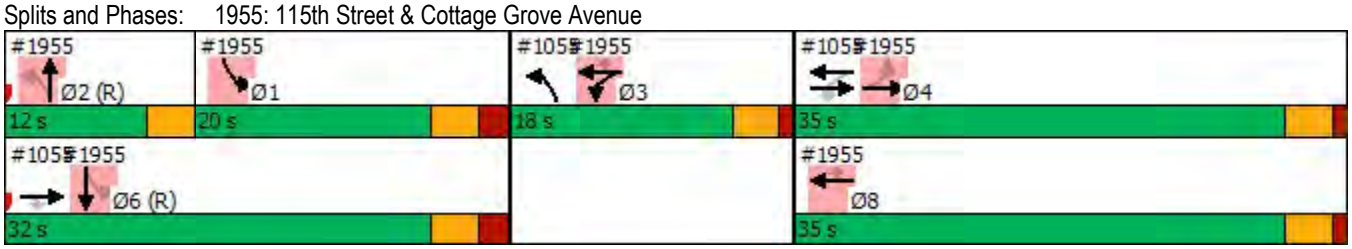

Lane Group	Ø8
Flash Dont Walk (s)	13.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB 130th Street Entrance Ramp to EB I-94	Unit	United States Customary

Geometric Data	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Deceleration Length (LA),ft	1610	310
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	750	310
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	5.50	7.60
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.948	0.929
Flow Rate (vi),pc/h	879	371
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.20	0.19

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.396
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	43.8
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	879	Ramp Junction Speed (S), mi/h	43.8
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	10.0
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	9.0

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	750	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	150	365	0	290
Peak Hour Factor (PHF)	0.90	0.90	0.90	0.90
Total Trucks, %	5.50	15.40	0.00	7.10
Heavy Vehicle Adjustment Factor (f_{HV})	0.948	0.867	1.000	0.934
Flow Rate (v_i), pc/h	176	468	0	345
Weaving Flow Rate (v_W), pc/h	813	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	176	Density-Based Capacity (c_{IWL}), pc/h/ln		1353
Total Flow Rate (v), pc/h	989	Demand Flow-Based Capacity (c_{IW}), pc/h		2920
Volume Ratio (VR)	0.822	Weaving Segment Capacity (c_W), veh/h		2448
Minimum Lane Change Rate (LC_{MIN}), lc/h	813	Adjusted Weaving Area Capacity, pc/h		2706
Maximum Weaving Length (L_{MAX}), ft	11826	Volume-to-Capacity Ratio (v/c)		0.37

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	9	Average Weaving Speed (S_W), mi/h	38.7
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	58	Average Non-Weaving Speed (S_{NW}), mi/h	36.8
Weaving Lane Change Rate (LC_W), lc/h	863	Average Speed (S), mi/h	38.3
Weaving Lane Change Rate (LC_{All}), lc/h	921	Density (D), pc/mi/ln	12.9
Weaving Intensity Factor (W)	0.266	Level of Service (LOS)	B

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB I-94 Exit Ramp to EB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	940	325
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	510	535
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	14.00	40.30
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.877	0.713
Flow Rate (v_i),pc/h	646	834
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.33	0.42

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.312
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	45.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	646	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1480	Average Density (D), pc/mi/ln	16.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	14.7

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HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB 130th Street Entrance Ramp to WB I-94	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1885	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1020	380
Peak Hour Factor (PHF)	0.95	0.90
Total Trucks, %	30.20	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.768	0.901
Flow Rate (vi),pc/h	1398	469
Capacity (c), pc/h	4500	2100
Volume-to-Capacity Ratio (v/c)	0.31	0.22

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.340
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	44.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	1398	Ramp Junction Speed (S), mi/h	44.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	15.9
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	11.5

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	570	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	240	420	0	400
Peak Hour Factor (PHF)	0.95	0.90	0.90	0.90
Total Trucks, %	30.20	11.70	0.00	43.60
Heavy Vehicle Adjustment Factor (f_{HV})	0.768	0.895	1.000	0.696
Flow Rate (v_i), pc/h	329	521	0	639
Weaving Flow Rate (v_W), pc/h	1160	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	329	Density-Based Capacity (c_{IWL}), pc/h/ln		1382
Total Flow Rate (v), pc/h	1489	Demand Flow-Based Capacity (c_{IW}), pc/h		3081
Volume Ratio (VR)	0.779	Weaving Segment Capacity (c_W), veh/h		2160
Minimum Lane Change Rate (LC_{MIN}), lc/h	1160	Adjusted Weaving Area Capacity, pc/h		2764
Maximum Weaving Length (L_{MAX}), ft	11265	Volume-to-Capacity Ratio (v/c)		0.54

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	13	Average Weaving Speed (S_W), mi/h	36.3
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	0	Average Non-Weaving Speed (S_{NW}), mi/h	33.1
Weaving Lane Change Rate (LC_W), lc/h	1199	Average Speed (S), mi/h	35.5
Weaving Lane Change Rate (LC_{All}), lc/h	1199	Density (D), pc/mi/ln	21.0
Weaving Intensity Factor (W)	0.406	Level of Service (LOS)	C

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB I-94 Exit Ramp to WB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	850	340
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	660	330
Peak Hour Factor (PHF)	0.95	0.90
Total Trucks, %	7.90	4.70
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.927	0.955
Flow Rate (v_i),pc/h	749	384
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.25	0.19

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.306
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	45.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	749	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1133	Average Density (D), pc/mi/ln	12.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	12.1

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HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB 130th Street Entrance Ramp to EB I-94	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Deceleration Length (LA),ft	1610	310
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	1190	570
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	1.60	3.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.984	0.971
Flow Rate (v_i),pc/h	1344	652
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.30	0.33

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.422
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	43.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	49.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	1344	Ramp Junction Speed (S), mi/h	43.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	15.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.0

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	750	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	280	475	0	340
Peak Hour Factor (PHF)	0.90	0.95	0.90	0.90
Total Trucks, %	1.60	2.70	0.00	3.20
Heavy Vehicle Adjustment Factor (f_{HV})	0.984	0.974	1.000	0.969
Flow Rate (v_i), pc/h	316	513	0	390
Weaving Flow Rate (v_W), pc/h	903	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	316	Density-Based Capacity (c_{IWL}), pc/h/ln		1433
Total Flow Rate (v), pc/h	1219	Demand Flow-Based Capacity (c_{IW}), pc/h		3239
Volume Ratio (VR)	0.741	Weaving Segment Capacity (c_W), veh/h		2794
Minimum Lane Change Rate (LC_{MIN}), lc/h	903	Adjusted Weaving Area Capacity, pc/h		2866
Maximum Weaving Length (L_{MAX}), ft	10777	Volume-to-Capacity Ratio (v/c)		0.43

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	16	Average Weaving Speed (S_W), mi/h	38.2
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	86	Average Non-Weaving Speed (S_{NW}), mi/h	35.6
Weaving Lane Change Rate (LC_W), lc/h	953	Average Speed (S), mi/h	37.5
Weaving Lane Change Rate (LC_{All}), lc/h	1039	Density (D), pc/mi/ln	16.3
Weaving Intensity Factor (W)	0.292	Level of Service (LOS)	B

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB I-94 Exit Ramp to EB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	940	325
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	755	755
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	1.30	6.20
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.987	0.942
Flow Rate (v_i),pc/h	850	891
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.39	0.45

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.317
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	44.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	45.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	850	Ramp Junction Speed (S), mi/h	44.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1741	Average Density (D), pc/mi/ln	19.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	16.7

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HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB 130th Street Entrance Ramp to WB I-94	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1885	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1440	495
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	9.60	2.50
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.912	0.976
Flow Rate (vi),pc/h	1754	564
Capacity (c), pc/h	4500	2100
Volume-to-Capacity Ratio (v/c)	0.39	0.27

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.349
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	44.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	1754	Ramp Junction Speed (S), mi/h	44.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	19.9
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	14.6

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	570	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	160	375	0	785
Peak Hour Factor (PHF)	0.90	0.90	0.90	0.90
Total Trucks, %	9.60	5.00	0.00	6.70
Heavy Vehicle Adjustment Factor (f_{HV})	0.912	0.952	1.000	0.937
Flow Rate (v_i), pc/h	195	438	0	931
Weaving Flow Rate (v_W), pc/h	1369	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	195	Density-Based Capacity (c_{IWL}), pc/h/ln		1285
Total Flow Rate (v), pc/h	1564	Demand Flow-Based Capacity (c_{IW}), pc/h		2743
Volume Ratio (VR)	0.875	Weaving Segment Capacity (c_W), veh/h		2411
Minimum Lane Change Rate (LC_{MIN}), lc/h	1369	Adjusted Weaving Area Capacity, pc/h		2570
Maximum Weaving Length (L_{MAX}), ft	12528	Volume-to-Capacity Ratio (v/c)		0.61

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	7	Average Weaving Speed (S_W), mi/h	35.5
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	0	Average Non-Weaving Speed (S_{NW}), mi/h	31.4
Weaving Lane Change Rate (LC_W), lc/h	1408	Average Speed (S), mi/h	34.9
Weaving Lane Change Rate (LC_{All}), lc/h	1408	Density (D), pc/mi/ln	22.4
Weaving Intensity Factor (W)	0.461	Level of Service (LOS)	C

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	No-Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB I-94 Exit Ramp to WB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	850	340
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	535	325
Peak Hour Factor (PHF)	0.90	0.95
Total Trucks, %	1.80	2.70
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.982	0.974
Flow Rate (v_i),pc/h	605	351
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.21	0.18

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.304
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	45.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	605	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	956	Average Density (D), pc/mi/ln	10.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	10.7

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Attachment C

2050 Build Condition (Unmitigated)

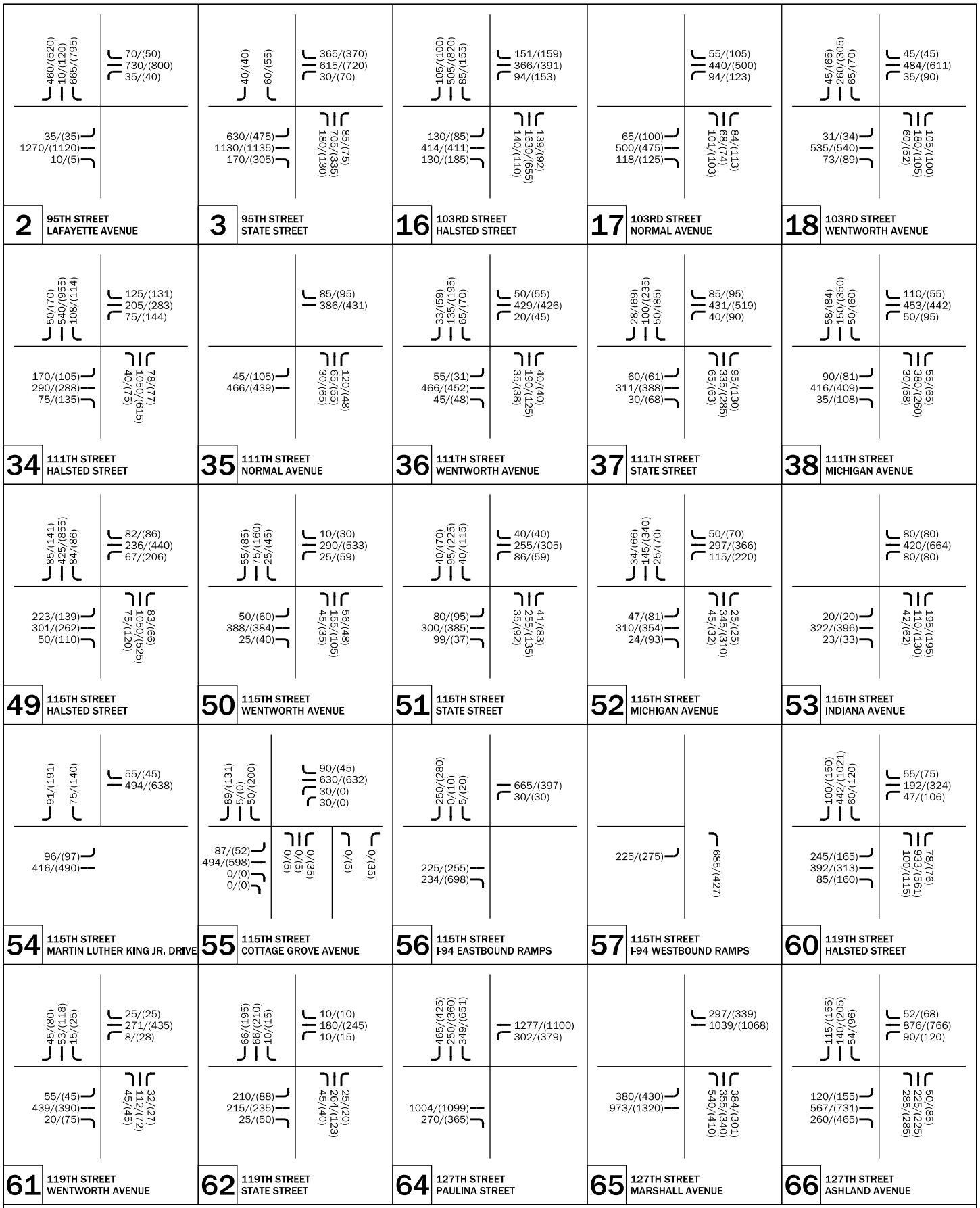

BUILD (2050) INTERSECTION TRAFFIC VOLUMES (UNMITIGATED)

PAGE 1 OF 2

67 VERMONT STREET / ASHLAND AVENUE

70/(70)
325/(515)
115/(260)

105/(110)
182/(240)
62/(79)

65/(60)
169/(249)
290/(465)

89/(101)
475/(430)
410/(460)

68 127TH STREET / HALSTED STREET

100/(180)
320/(595)
84/(195)

126/(85)
490/(574)
10/(15)

190/(110)
559/(632)
90/(145)

10/(10)
620/(330)
70/(120)

69 VERMONT STREET / HALSTED STREET

45/(70)
370/(680)
10/(35)

15/(30)
152/(224)
77/(113)

50/(85)
175/(257)
45/(170)

89/(91)
670/(515)
40/(80)

70 127TH STREET/VERMONT STREET/WALLACE STREET

5/(5)
5/(5)
0/(0)
10/(10)

15/(20)
660/(704)
198/(316)
0/(0)

0/(5)
618/(807)
0/(0)
0/(0)

0/(0)
0/(5)
289/(313)
0/(0)

50/(50)
5/(10)
15/(10)
5/(5)

71 127TH STREET / STATE STREET

200/(230)
54/(95)

71/(70)
681/(831)

200/(290)
789/(897)

72 127TH STREET / MICHIGAN AVENUE

60/(100)
159/(306)

217/(178)
692/(801)

60/(90)
788/(902)

73 130TH STREET / INDIANA AVENUE

343/(823)
32/(187)

144/(62)
410/(200)

737/(728)
160/(275)

74 130TH STREET / ELLIS AVENUE

0/(0)
0/(0)
0/(0)
0/(0)

10/(0)
695/(755)
435/(137)

0/(0)
570/(1035)
356/(70)

207/(290)
0/(0)
122/(314)

75 OLD 130TH STREET / ELLIS AVENUE

717/(175)

25/(374)

102/(2)
241/(191)

76 GREENWOOD AVENUE / ELLIS AVENUE

0/(8)
135/(90)
446/(70)
87/(6)

106/(64)
6/(2)
2/(2)

6/(9)
11/(2)
2/(4)

8/(2)
127/(154)
4/(2)
0/(1)

77 130TH PLACE / GREENWOOD AVENUE

465/(77)
6/(1)

0/(0)
0/(0)

0/(0)
116/(66)

78 131ST STREET / GREENWOOD AVENUE

17/(20)
430/(48)
0/(1)

77/(48)
0/(0)

0/(0)
14/(12)

79 132ND STREET / GREENWOOD AVENUE

12/(1)
8/(14)
10/(0)
2/(1)

4/(0)
4/(0)
0/(0)
2/(0)

8/(2)
0/(0)
14/(5)

2/(0)
15/(7)
6/(1)
2/(0)

80 132ND STREET / BEAUBIEN WOODS

0/(1)
0/(14)
0/(0)
0/(1)

0/(0)
2/(0)
0/(0)

0/(2)
15/(0)
0/(5)

0/(0)
0/(0)
0/(0)

81 132ND STREET / DOTY AVENUE

2/(0)
2/(2)
0/(0)

0/(0)
0/(0)
0/(0)

0/(1)
10/(2)
4/(0)
4/(1)

0/(0)
0/(3)
4/(1)

89

330/(325)

801/(552)

459/(719)
318/(611)

82 130TH STREET
EB: I-94 EB ON-RAMP
WB: I-94 EB OFF-RAMP (1 OF 4)

88

400/(785)
810/(552)

459/(719)

365/(475)

83 130TH STREET
EB: I-94 EB OFF-RAMP
WB: I-94 EB ON-RAMP (2 OF 4)

87

463/(380)

747/(957)

529/(854)
290/(340)

84 130TH STREET
EB: I-94 WB ON-RAMP
WB: I-94 WB OFF-RAMP (3 OF 4)

86

380/(495)
747/(957)

529/(854)

535/(755)

85 130TH STREET
EB: I-94 WB OFF-RAMP
WB: I-94 WB ON-RAMP (4 OF 4)

BUILD (2050) INTERSECTION TRAFFIC VOLUMES (UNMITIGATED)

PAGE 2 OF 2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	570	356	435	695	10	122	0	207	0	0	0
Future Volume (vph)	0	570	356	435	695	10	122	0	207	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	16	12
Storage Length (ft)	165		165	165		165	0		0	0		0
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	210			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			
Flt Protected				0.950				0.950				
Satd. Flow (prot)	1800	3109	1471	1644	3138	1366	0	1449	1443	0	2040	0
Flt Permitted				0.356				0.757				
Satd. Flow (perm)	1800	3109	1471	616	3138	1366	0	1155	1443	0	2040	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		5340			1172			141			331	
Travel Time (s)		104.0			22.8			3.2			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Adj. Flow (vph)	0	594	371	453	724	10	127	0	216	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	594	371	453	724	10	0	127	216	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	4	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	43.0	43.0	43.0	7.0	43.0	43.0	6.0	6.0	6.0	6.0	6.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	47.0	47.0	47.0	10.0	47.0	47.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	47.0	47.0	47.0	10.0	57.0	57.0	28.0	28.0	28.0	28.0	28.0	
Total Split (%)	55.3%	55.3%	55.3%	11.8%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%	32.9%	
Maximum Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		4.0	4.0		4.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)		43.4	43.4	58.1	57.1	57.1		19.9	19.9			
Actuated g/C Ratio		0.51	0.51	0.68	0.67	0.67		0.23	0.23			
v/c Ratio		0.37	0.49	0.82	0.34	0.01		0.47	0.64			
Control Delay		13.5	16.6	25.6	7.0	5.9		32.9	37.6			
Queue Delay		0.0	0.0	0.0	0.0	0.0		0.0	0.0			
Total Delay		13.5	16.6	25.6	7.0	5.9		32.9	37.6			
LOS		B	B	C	A	A		C	D			
Approach Delay		14.7			14.1			35.9				
Approach LOS		B			B			D				
90th %ile Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold	
70th %ile Green (s)	43.0	43.0	43.0	7.2	53.2	53.2	23.8	23.8	23.8	23.8	23.8	
70th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
50th %ile Green (s)	43.0	43.0	43.0	10.6	56.6	56.6	20.4	20.4	20.4	20.4	20.4	
50th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
30th %ile Green (s)	43.0	43.0	43.0	13.3	59.3	59.3	17.7	17.7	17.7	17.7	17.7	
30th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
10th %ile Green (s)	45.0	45.0	45.0	15.4	63.4	63.4	13.6	13.6	13.6	13.6	13.6	
10th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
Stops (vph)		327	226	160	280	5		104	184			
Fuel Used(gal)		26	17	8	10	0		2	3			
CO Emissions (g/hr)		1818	1162	551	710	11		107	198			
NOx Emissions (g/hr)		354	226	107	138	2		21	38			
VOC Emissions (g/hr)		421	269	128	165	2		25	46			
Dilemma Vehicles (#)		34	0	0	41	0		0	0			
Queue Length 50th (ft)		96	124	93	77	2		60	107			
Queue Length 95th (ft)		134	200	#274	122	7		m106	m170			
Internal Link Dist (ft)		5260			1092			61			251	
Turn Bay Length (ft)			165	165		165						
Base Capacity (vph)		1587	751	550	2108	917		326	407			
Starvation Cap Reductn		0	0	0	0	0		0	0			
Spillback Cap Reductn		0	0	0	0	0		0	0			
Storage Cap Reductn		0	0	0	0	0		0	0			
Reduced v/c Ratio		0.37	0.49	0.82	0.34	0.01		0.39	0.53			

Intersection Summary	
Area Type:	Other

Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 88.8%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Ellis Avenue & 130th Street

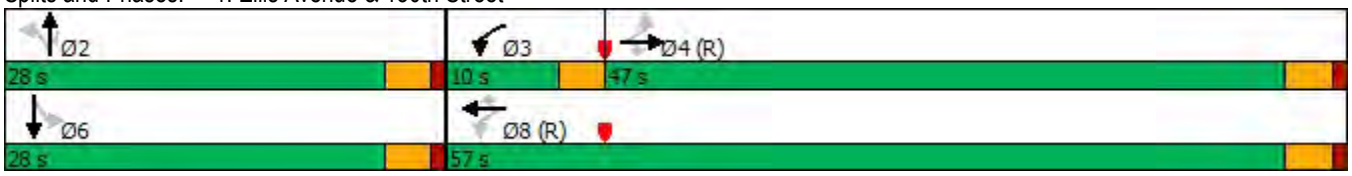

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	25	241	102	0	717
Future Volume (vph)	0	25	241	102	0	717
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.865	0.956			
Flt Protected						
Satd. Flow (prot)	0	1557	3270	0	0	3420
Flt Permitted						
Satd. Flow (perm)	0	1557	3270	0	0	3420
Link Speed (mph)	30		30			30
Link Distance (ft)	642		174			141
Travel Time (s)	14.6		4.0			3.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	28	268	113	0	797
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	28	381	0	0	797
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 24.3%	ICU Level of Service A
Analysis Period (min) 15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	25	241	102	0	717
Future Volume (Veh/h)	0	25	241	102	0	717
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	28	268	113	0	797
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						141
pX, platoon unblocked						
vC, conflicting volume	723	190			381	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	723	190			381	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	365	825			1189	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	28	179	202	398	398
Volume Left	0	0	0	0	0
Volume Right	28	0	113	0	0
cSH	825	1700	1700	1700	1700
Volume to Capacity	0.03	0.11	0.12	0.23	0.23
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	9.5	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.5	0.0		0.0	
Approach LOS	A				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	24.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	6	11	2	2	6	106	4	127	8	87	446	135
Future Volume (vph)	6	11	2	2	6	106	4	127	8	87	446	135
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.987			0.875			0.992				
Flt Protected		0.984			0.999			0.999				0.962
Satd. Flow (prot)	0	1748	0	0	1573	0	0	1727	0	0	0	1641
Flt Permitted		0.984			0.999			0.999				0.962
Satd. Flow (perm)	0	1748	0	0	1573	0	0	1727	0	0	0	1641
Link Speed (mph)		30			30			30				30
Link Distance (ft)		472			392			265				174
Travel Time (s)		10.7			8.9			6.0				4.0
Confl. Peds. (#/hr)			4	4		1			1	4	1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	25%	0%	8%	1%
Adj. Flow (vph)	7	12	2	2	7	118	4	141	9	97	496	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	21	0	0	127	0	0	154	0	0	0	743
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Sign Control		Stop			Stop			Free				Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 64.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	1800
Flt Permitted	
Satd. Flow (perm)	1800
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	4
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	6	11	2	2	6	106	4	127	8	87	446	135
Future Volume (Veh/h)	6	11	2	2	6	106	4	127	8	87	446	135
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	12	2	2	7	118	4	141	9	0	496	150
Pedestrians		4			1			4				1
Lane Width (ft)		12.0			12.0			12.0				12.0
Walking Speed (ft/s)		4.0			4.0			4.0				4.0
Percent Blockage		0			0			0				0
Right turn flare (veh)												
Median type								None				None
Median storage veh)												
Upstream signal (ft)												315
pX, platoon unblocked	0.89	0.89	0.89	0.89	0.89		0.89			0.00		
vC, conflicting volume	1422	1305	158	1308	1300	148	154			0	151	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1412	1281	0	1285	1276	148	0			0	151	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			0.0	4.2	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.3	
p0 queue free %	89	87	100	98	93	87	100			0	64	
cM capacity (veh/h)	61	95	966	83	96	903	1454			0	1393	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total	21	127	154	646	0
Volume Left	7	2	4	496	0
Volume Right	2	118	9	0	0
cSH	87	557	1454	1393	1700
Volume to Capacity	0.24	0.23	0.00	0.36	0.00
Queue Length 95th (ft)	22	22	0	41	0
Control Delay (s)	59.3	13.4	0.2	7.7	0.0
Lane LOS	F	B	A	A	
Approach Delay (s)	59.3	13.4	0.2	7.7	
Approach LOS	F	B			

Intersection Summary			
Average Delay	8.4		
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	116	0	6	465
Future Volume (vph)	0	0	116	0	6	465
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						0.999
Satd. Flow (prot)	1765	0	1765	0	0	1763
Flt Permitted						0.999
Satd. Flow (perm)	1765	0	1765	0	0	1763
Link Speed (mph)	30		30			30
Link Distance (ft)	356		300			278
Travel Time (s)	8.1		6.8			6.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	126	0	7	505
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	126	0	0	512
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	116	0	6	465
Future Volume (Veh/h)	0	0	116	0	6	465
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	126	0	7	505
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	645	126			126	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	645	126			126	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	435	924			1460	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	126	512
Volume Left	0	0	7
Volume Right	0	0	0
cSH	1700	1700	1460
Volume to Capacity	0.00	0.07	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.2
Lane LOS	A		A
Approach Delay (s)	0.0	0.0	0.2
Approach LOS	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	77	14	0	430	17
Future Volume (vph)	0	77	14	0	430	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.865					
Flt Protected						0.954
Satd. Flow (prot)	1557	0	1800	0	0	1710
Flt Permitted						0.954
Satd. Flow (perm)	1557	0	1800	0	0	1710
Link Speed (mph)	30		30			30
Link Distance (ft)	383		252			706
Travel Time (s)	8.7		5.7			16.0
Confl. Peds. (#/hr)	3			3		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	11%
Adj. Flow (vph)	0	86	16	0	478	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	86	0	16	0	0	497
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	77	14	0	430	17
Future Volume (Veh/h)	0	77	14	0	430	17
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	86	16	0	478	19
Pedestrians	3		3			
Lane Width (ft)	12.0		12.0			
Walking Speed (ft/s)	4.0		4.0			
Percent Blockage	0		0			
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	997	19			19	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	997	19			19	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			70	
cM capacity (veh/h)	191	1062			1607	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	86	16	497
Volume Left	0	0	478
Volume Right	86	0	0
cSH	1062	1700	1607
Volume to Capacity	0.08	0.01	0.30
Queue Length 95th (ft)	7	0	31
Control Delay (s)	8.7	0.0	8.0
Lane LOS	A		A
Approach Delay (s)	8.7	0.0	8.0
Approach LOS	A		

Intersection Summary			
Average Delay	7.9		
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	8	0	14	2	0	4	4	2	6	15	2	2
Future Volume (vph)	8	0	14	2	0	4	4	2	6	15	2	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.914				0.946				0.990		
Flt Protected		0.982				0.990				0.984		
Satd. Flow (prot)	0	1616	0	0	0	1686	0	0	0	1637	0	0
Flt Permitted		0.982				0.990				0.984		
Satd. Flow (perm)	0	1616	0	0	0	1686	0	0	0	1637	0	0
Link Speed (mph)		30				30				30		
Link Distance (ft)		336				1025				274		
Travel Time (s)		7.6				23.3				6.2		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%
Adj. Flow (vph)	9	0	16	2	0	4	4	2	7	17	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	0	10	0	0	0	28	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	R NA	Left	Left	Right	R NA
Median Width(ft)		0				0				0		
Link Offset(ft)		0				0				0		
Crosswalk Width(ft)		16				16				16		
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	9	15		9	9	15		9	9
Sign Control		Stop				Stop				Free		

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	10	8	12
Future Volume (vph)	10	8	12
Ideal Flow (vphpl)	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00
Frt		0.950	
Flt Protected		0.982	
Satd. Flow (prot)	0	1578	0
Flt Permitted		0.982	
Satd. Flow (perm)	0	1578	0
Link Speed (mph)		30	
Link Distance (ft)		252	
Travel Time (s)		5.7	
Peak Hour Factor	0.90	0.90	0.90
Heavy Vehicles (%)	0%	25%	0%
Adj. Flow (vph)	11	9	13
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	35	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Left	Left	Right
Median Width(ft)		0	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.07	1.07	1.07
Turning Speed (mph)	15		9
Sign Control		Free	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (veh/h)	8	0	14	2	0	4	4	2	6	15	2	2
Future Volume (Veh/h)	8	0	14	2	0	4	4	2	6	15	2	2
Sign Control		Stop				Stop				Free		
Grade		0%				0%				0%		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	0	16	0	0	4	4	0	7	17	2	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type										None		
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked				0.00				0.00				0.00
vC, conflicting volume	76	70	16	0	86	76	18	0	22			0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	76	70	16	0	86	76	18	0	22			0
tC, single (s)	7.1	6.5	6.2	0.0	7.1	6.5	6.2	0.0	4.1			0.0
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	0.0	3.5	4.0	3.3	0.0	2.2			0.0
p0 queue free %	99	100	99	0	100	100	100	0	100			0
cM capacity (veh/h)	905	815	1070	0	884	809	1066	0	1607			0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	25	8	26	33
Volume Left	9	0	7	11
Volume Right	16	4	2	13
cSH	1004	920	1607	1611
Volume to Capacity	0.02	0.01	0.00	0.01
Queue Length 95th (ft)	2	1	0	1
Control Delay (s)	8.7	8.9	2.0	2.5
Lane LOS	A	A	A	A
Approach Delay (s)	8.7	8.9	2.0	2.5
Approach LOS	A	A		

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (veh/h)	10	8	12
Future Volume (Veh/h)	10	8	12
Sign Control		Free	
Grade		0%	
Peak Hour Factor	0.90	0.90	0.90
Hourly flow rate (vph)	11	9	13
Pedestrians			
Lane Width (ft)			
Walking Speed (ft/s)			
Percent Blockage			
Right turn flare (veh)			
Median type		None	
Median storage veh)			
Upstream signal (ft)			
pX, platoon unblocked			
vC, conflicting volume	19		
vC1, stage 1 conf vol			
vC2, stage 2 conf vol			
vCu, unblocked vol	19		
tC, single (s)	4.1		
tC, 2 stage (s)			
tF (s)	2.2		
p0 queue free %	99		
cM capacity (veh/h)	1611		

Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	15	0	0	2	0	0	0	0	0	0	0
Future Volume (vph)	0	15	0	0	2	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1104	0	0	1800	0	0	1800	0	0	1800	0
Flt Permitted												
Satd. Flow (perm)	0	1104	0	0	1800	0	0	1800	0	0	1800	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1025			255			543			489	
Travel Time (s)		23.3			5.8			12.3			11.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	63%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	15	0	0	2	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	15	0	0	2	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	17	0	0	2	0	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2			17			19	19	2	19	19	17
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2			17			19	19	2	19	19	17
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1634			1613			1000	879	1088	1000	879	1068

Direction, Lane #	EB 1	WB 1	SE 1	NW 1
Volume Total	17	2	0	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1634	1613	1700	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS			A	A
Approach Delay (s)	0.0	0.0	0.0	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	4	4	0	0	0	4	0	0	0	2	2
Future Volume (vph)	10	4	4	0	0	0	4	0	0	0	2	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.972									0.932	
Flt Protected		0.972						0.950				
Satd. Flow (prot)	0	1667	0	0	1765	0	0	1676	0	0	1645	0
Flt Permitted		0.972						0.950				
Satd. Flow (perm)	0	1667	0	0	1765	0	0	1676	0	0	1645	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		328			319			317			301	
Travel Time (s)		7.5			7.3			7.2			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	4	4	0	0	0	4	0	0	0	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	0	0	0	4	0	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.5%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	4	4	0	0	0	4	0	0	0	2	2
Future Volume (Veh/h)	10	4	4	0	0	0	4	0	0	0	2	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	4	4	0	0	0	4	0	0	0	2	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	11	11	3	17	12	0	4			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	11	11	3	17	12	0	4			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	100	100	100	100			100		
cM capacity (veh/h)	1005	882	1081	989	880	1085	1618			1623		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	19	0	4	4
Volume Left	11	0	4	0
Volume Right	4	0	0	2
cSH	990	1700	1618	1700
Volume to Capacity	0.02	0.00	0.00	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	8.7	0.0	7.2	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.7	0.0	7.2	0.0
Approach LOS	A	A		

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	13.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1270	10	35	730	70	0	0	0	665	10	460
Future Volume (vph)	35	1270	10	35	730	70	0	0	0	665	10	460
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	11
Storage Length (ft)	120		0	180		190	0		0	0		0
Storage Lanes	1		0	0		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor	0.83	1.00		1.00		0.49				0.98		0.97
Frt		0.999				0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	855	4720	0	1710	3138	765	0	1800	0	3100	1392	1409
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	711	4720	0	1706	3138	373	0	1800	0	3032	1392	1361
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		1				101						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		808			328			758			669	
Travel Time (s)		18.4			7.5			17.2			15.2	
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Adj. Flow (vph)	38	1366	11	38	785	75	0	0	0	715	11	495
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	1377	0	38	785	75	0	0	0	715	11	495
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm				Split	NA	pm+ov
Protected Phases	7	4		3	8		5	5		6	6	7
Permitted Phases						8						6
Detector Phase	7	4		3	8	8	5	5		6	6	7
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	4.0	10.0	10.0		4.0	4.0	10.0
Minimum Split (s)	15.0	53.0		10.0	51.0	51.0	15.0	15.0		44.0	44.0	15.0
Total Split (s)	15.0	53.0		13.0	51.0	51.0	20.0	20.0		44.0	44.0	15.0
Total Split (%)	11.5%	40.8%		10.0%	39.2%	39.2%	15.4%	15.4%		33.8%	33.8%	11.5%
Maximum Green (s)	10.0	48.0		9.0	46.0	46.0	15.0	15.0		39.0	39.0	10.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		4.0	5.0	5.0		5.0		5.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None
Walk Time (s)		25.0			19.0	19.0				9.0	9.0	
Flash Dont Walk (s)		23.0			27.0	27.0				30.0	30.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	10.0	71.1		7.9	66.0	66.0				39.0	39.0	49.0
Actuated g/C Ratio	0.08	0.55		0.06	0.51	0.51				0.30	0.30	0.38
v/c Ratio	0.58	0.53		0.37	0.49	0.31				0.77	0.03	0.96
Control Delay	92.1	20.3		53.0	46.9	20.8				47.9	32.5	69.5
Queue Delay	0.0	0.1		0.0	52.7	0.0				5.7	0.0	0.0
Total Delay	92.1	20.4		53.0	99.6	20.8				53.7	32.5	69.5
LOS	F	C		D	F	C				D	C	E
Approach Delay		22.3			91.0						59.9	
Approach LOS		C			F						E	
90th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
90th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
70th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
70th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
50th %ile Green (s)	10.0	68.7		8.3	66.0	66.0	0.0	0.0		39.0	39.0	10.0
50th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
30th %ile Green (s)	10.0	70.0		7.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
30th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
10th %ile Green (s)	10.0	81.0		0.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
10th %ile Term Code	Max	Coord		Skip	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
Stops (vph)	32	794		35	614	44				595	9	513
Fuel Used(gal)	1	18		1	12	1				13	0	12
CO Emissions (g/hr)	74	1241		46	855	50				926	12	821
NOx Emissions (g/hr)	14	241		9	166	10				180	2	160
VOC Emissions (g/hr)	17	288		11	198	12				215	3	190
Dilemma Vehicles (#)	0	0		0	0	0				0	0	0
Queue Length 50th (ft)	32	273		33	314	25				282	7	371

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#86	321		m37	m341	m27				356	22	#631
Internal Link Dist (ft)		728			248			678			589	
Turn Bay Length (ft)	120			180		190						
Base Capacity (vph)	65	2583		118	1593	239				930	417	516
Starvation Cap Reductn	0	0		0	963	0				0	0	0
Spillback Cap Reductn	0	240		0	0	0				162	0	0
Storage Cap Reductn	0	0		0	0	0				0	0	0
Reduced v/c Ratio	0.58	0.59		0.32	1.25	0.31				0.93	0.03	0.96

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 110 (85%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 52.8 Intersection LOS: D
Intersection Capacity Utilization 80.8% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1002: Lafayette Avenue & 95th Street

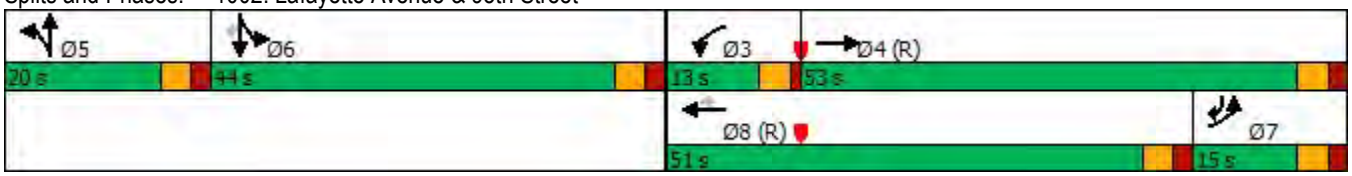

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	630	1130	170	30	615	365	180	705	85	60	0	40
Future Volume (vph)	630	1130	170	30	615	365	180	705	85	60	0	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	11	12	11	12	11	14	12	12	12
Storage Length (ft)	200		0	150		350	300		400	0		0
Storage Lanes	0		0	1		1	1		1	1		1
Taper Length (ft)	25			25			100			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor	0.77	0.99		1.00		0.65		1.00	0.95	0.99		
Frt		0.980				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.990		0.950		
Satd. Flow (prot)	3190	3103	0	1503	2923	1409	0	3190	1600	855	0	765
Flt Permitted	0.950			0.950				0.990		0.950		
Satd. Flow (perm)	2453	3103	0	1497	2923	917	0	3186	1523	846	0	765
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				50			92			134
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		328			972			10386			681	
Travel Time (s)		7.5			18.9			236.0			15.5	
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Adj. Flow (vph)	670	1202	181	32	654	388	191	750	90	64	0	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	670	1383	0	32	654	388	0	941	90	64	0	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.12	1.07	1.12	1.07	1.12	0.99	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1		1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50		50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50		50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Prot		Prot
Protected Phases	7	4		3	8	6	2	2	3	6		6
Permitted Phases						8			2			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8	6	2	2	3	6		6
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	10.0	4.0	4.0	6.0	10.0		10.0
Minimum Split (s)	14.0	54.0		11.0	37.0	15.0	41.0	41.0	11.0	15.0		15.0
Total Split (s)	32.0	54.0		15.0	37.0	20.0	41.0	41.0	15.0	20.0		20.0
Total Split (%)	24.6%	41.5%		11.5%	28.5%	15.4%	31.5%	31.5%	11.5%	15.4%		15.4%
Maximum Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
All-Red Time (s)	1.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	4.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max	None	Max	Max	None	None		None
Walk Time (s)		21.0			7.0		7.0	7.0				
Flash Dont Walk (s)		28.0			25.0		29.0	29.0				
Pedestrian Calls (#/hr)		0			0		0	0				
Act Effct Green (s)	28.0	49.0		10.0	32.0	47.0		36.0	46.0	15.0		15.0
Actuated g/C Ratio	0.22	0.38		0.08	0.25	0.36		0.28	0.35	0.12		0.12
v/c Ratio	0.98	1.17		0.28	0.91	0.92		1.07	0.15	0.65		0.21
Control Delay	66.3	119.7		63.2	65.5	49.0		94.5	5.9	85.3		2.3
Queue Delay	39.7	0.0		0.0	1.6	0.0		17.7	0.0	0.0		0.8
Total Delay	106.0	119.7		63.2	67.1	49.0		112.2	5.9	85.3		3.0
LOS	F	F		E	E	D		F	A	F		A
Approach Delay		115.2			60.4			102.9			52.2	
Approach LOS		F			E			F			D	
90th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
90th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
70th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
70th %ile Term Code	Max	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
50th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
50th %ile Term Code	Max	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
30th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
30th %ile Term Code	Max	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
10th %ile Green (s)	28.0	49.0		10.0	32.0	15.0	36.0	36.0	10.0	15.0		15.0
10th %ile Term Code	Max	Coord		Hold	Coord	Max	MaxR	MaxR	Hold	Max		Max
Stops (vph)	572	848		29	561	250		792	24	54		0
Fuel Used(gal)	13	40		1	17	8		95	7	2		0
CO Emissions (g/hr)	928	2774		57	1169	565		6649	511	116		16
NOx Emissions (g/hr)	181	540		11	228	110		1294	99	23		3
VOC Emissions (g/hr)	215	643		13	271	131		1541	119	27		4
Dilemma Vehicles (#)	0	0		0	23	0		0	0	0		0
Queue Length 50th (ft)	272	~717		26	283	127		~466	2	52		0
Queue Length 95th (ft)	#407	#881		61	#394	#339		#603	0	#124		0
Internal Link Dist (ft)		248			892			10306			601	
Turn Bay Length (ft)	200			150		350			400			
Base Capacity (vph)	687	1178		115	719	420		883	604	98		206
Starvation Cap Reductn	97	3		0	0	0		0	0	0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	16	0		403	0	0		56
Storage Cap Reductn	0	0		0	0	0		0	0	0		0
Reduced v/c Ratio	1.14	1.18		0.28	0.93	0.92		1.96	0.15	0.65		0.29

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 96.9 Intersection LOS: F
Intersection Capacity Utilization 97.0% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1003: State Street & 95th Street

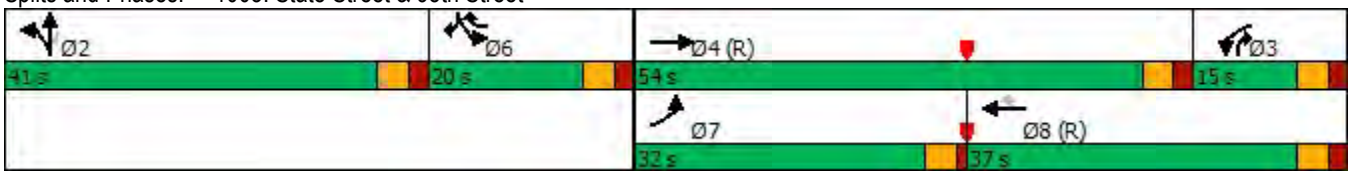

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	414	130	94	366	151	140	1630	139	85	505	105
Future Volume (vph)	130	414	130	94	366	151	140	1630	139	85	505	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	10	10	9	9	10	9
Storage Length (ft)	60		260	55		260	92		130	115		130
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99		0.99	0.98		0.99		0.97	1.00		0.96
Frt		0.964			0.956				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	1877	0	1710	1814	0	1506	3099	1324	1425	2956	1324
Flt Permitted	0.125			0.255			0.351			0.095		
Satd. Flow (perm)	212	1877	0	454	1814	0	550	3099	1283	142	2956	1265
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			19				83			113
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		663			2036			5304			1099	
Travel Time (s)		15.1			46.3			120.5			25.0	
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Adj. Flow (vph)	140	445	140	101	394	162	151	1753	149	91	543	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	585	0	101	556	0	151	1753	149	91	543	113
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.17	1.17	1.22	1.22	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		11.0	11.0		5.0	31.0	31.0	5.0	31.0	31.0
Minimum Split (s)	13.0	47.0		34.0	34.0		8.0	46.0	46.0	8.0	46.0	46.0
Total Split (s)	13.0	47.0		34.0	34.0		12.0	46.0	46.0	12.0	46.0	46.0
Total Split (%)	12.4%	44.8%		32.4%	32.4%		11.4%	43.8%	43.8%	11.4%	43.8%	43.8%
Maximum Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	5.0		5.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		24.0		11.0	11.0			31.0	31.0		31.0	31.0
Flash Dont Walk (s)		18.0		18.0	18.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)	44.0	42.0		29.0	29.0		52.9	44.7	44.7	51.4	42.3	42.3
Actuated g/C Ratio	0.42	0.40		0.28	0.28		0.50	0.43	0.43	0.49	0.40	0.40
v/c Ratio	0.63	0.77		0.81	1.08		0.42	1.33	0.25	0.54	0.46	0.20
Control Delay	33.4	34.5		79.8	99.7		17.3	182.1	11.0	27.5	24.6	4.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	34.5		79.8	99.7		17.3	182.1	11.0	27.5	24.6	4.8
LOS	C	C		E	F		B	F	B	C	C	A
Approach Delay		34.3			96.6			157.5			21.9	
Approach LOS		C			F			F			C	
90th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
90th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
70th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.1	42.1	8.9	42.0	42.0
50th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	43.3	43.3	7.7	42.0	42.0
30th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	10.0	42.0		29.0	29.0		7.5	54.0	54.0	0.0	43.5	43.5
10th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Skip	Coord	Coord
Stops (vph)	81	451		78	422		73	1226	43	45	358	13
Fuel Used(gal)	2	9		3	21		7	135	6	1	9	1
CO Emissions (g/hr)	140	638		241	1470		467	9409	440	102	617	75
NOx Emissions (g/hr)	27	124		47	286		91	1831	86	20	120	15
VOC Emissions (g/hr)	32	148		56	341		108	2181	102	24	143	17
Dilemma Vehicles (#)	0	0		0	0		0	0	0	0	0	0
Queue Length 50th (ft)	59	325		63	~410		51	~835	27	30	138	0
Queue Length 95th (ft)	#116	467		#162	#623		88	#975	72	69	187	34
Internal Link Dist (ft)		583			1956			5224			1019	
Turn Bay Length (ft)	60			55			92		130	115		130
Base Capacity (vph)	222	761		125	514		359	1318	593	180	1190	576
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.77		0.81	1.08		0.42	1.33	0.25	0.51	0.46	0.20

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 86 (82%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 145
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay: 102.4 Intersection LOS: F
Intersection Capacity Utilization 111.7% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1016: Halsted Street & 103rd Street

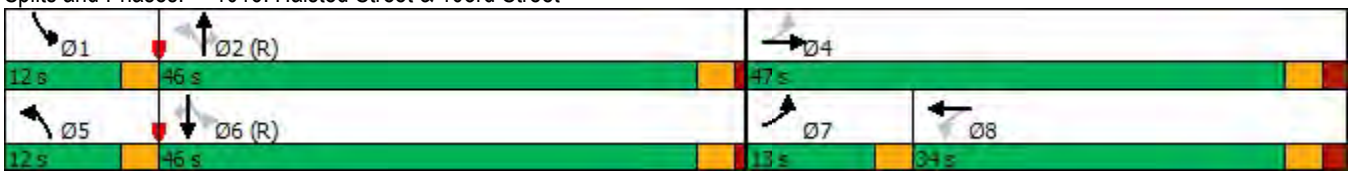

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	500	118	94	440	55	101	68	84	0	0	0
Future Volume (vph)	65	500	118	94	440	55	101	68	84	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	9	9	10	9	9	12	15	12	12	16	12
Storage Length (ft)	60		70	60		80	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	85			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.955				
Flt Protected	0.950			0.950				0.980				
Satd. Flow (prot)	1520	1543	1311	1520	1543	1311	0	1765	0	0	0	0
Flt Permitted	0.438			0.393				0.980				
Satd. Flow (perm)	701	1543	1311	629	1543	1311	0	1765	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127			59		36				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2036			1955			343			764	
Travel Time (s)		46.3			44.4			7.8			17.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	70	538	127	101	473	59	109	73	90	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	538	127	101	473	59	0	272	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.22	1.22	1.17	1.22	1.22	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Minimum Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (%)	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%	30.8%	30.8%				
Maximum Green (s)	41.0	41.0	41.0	41.0	41.0	41.0	15.0	15.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		5.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	31.0	31.0	31.0	31.0	31.0	31.0	5.0	5.0				
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0				
Act Effct Green (s)	41.0	41.0	41.0	41.0	41.0	41.0		15.0				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	31%
Maximum Green (s)	15.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	5.0
Flash Dont Walk (s)	10.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.23				
v/c Ratio	0.16	0.55	0.15	0.26	0.49	0.07		0.63				
Control Delay	6.0	9.5	1.5	7.3	8.5	1.7		26.7				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Delay	6.0	9.5	1.5	7.3	8.5	1.7		26.7				
LOS	A	A	A	A	A	A		C				
Approach Delay		7.8			7.7			26.7				
Approach LOS		A			A			C				
Stops (vph)	26	268	10	40	220	7		194				
Fuel Used(gal)	1	10	2	2	9	1		3				
CO Emissions (g/hr)	88	726	137	125	607	63		218				
NOx Emissions (g/hr)	17	141	27	24	118	12		42				
VOC Emissions (g/hr)	20	168	32	29	141	15		51				
Dilemma Vehicles (#)	0	0	0	0	0	0		0				
Queue Length 50th (ft)	10	103	0	15	86	0		84				
Queue Length 95th (ft)	25	179	15	37	146	11		156				
Internal Link Dist (ft)		1956			1875			263			684	
Turn Bay Length (ft)	60		70	60		80						
Base Capacity (vph)	442	973	873	396	973	848		435				
Starvation Cap Reductn	0	0	0	0	0	0		0				
Spillback Cap Reductn	0	0	0	0	0	0		0				
Storage Cap Reductn	0	0	0	0	0	0		0				
Reduced v/c Ratio	0.16	0.55	0.15	0.26	0.49	0.07		0.63				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:Hold, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.63
Intersection Signal Delay: 10.9 Intersection LOS: B
Intersection Capacity Utilization 59.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 1017: Normal Avenue & 103rd Street

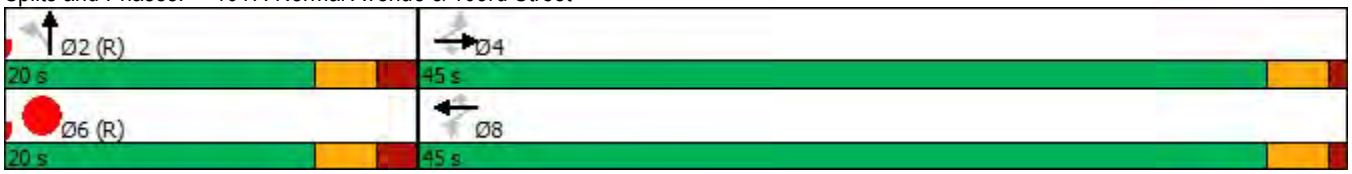

Lane Group	Ø6
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	535	73	35	484	45	60	180	105	65	260	45
Future Volume (vph)	31	535	73	35	484	45	60	180	105	65	260	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	11	10	11	11	12	11	12	12	15	12
Storage Length (ft)	58		200	58		75	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	100			90			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		1.00	1.00			0.99	0.97		0.98	
Frt		0.982			0.987				0.850		0.984	
Flt Protected	0.950			0.950				0.988			0.991	
Satd. Flow (prot)	1596	1604	0	1341	1623	0	0	1685	1515	0	1767	0
Flt Permitted	0.347			0.288				0.794			0.897	
Satd. Flow (perm)	576	1604	0	405	1623	0	0	1339	1473	0	1598	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			10				111		10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1955			4661			5190			1320	
Travel Time (s)		44.4			105.9			118.0			30.0	
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Adj. Flow (vph)	33	563	77	37	509	47	63	189	111	68	274	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	640	0	37	556	0	0	252	111	0	389	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.12	1.12	1.17	1.12	1.12	1.07	1.12	1.07	1.07	0.95	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (%)	62.7%	62.7%		62.7%	62.7%		37.3%	37.3%	37.3%	37.3%	37.3%	
Maximum Green (s)	43.0	43.0		43.0	43.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	33.0	33.0		33.0	33.0		13.0	13.0	13.0	13.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	43.0	43.0		43.0	43.0			24.0	24.0		24.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57			0.32	0.32		0.32	
v/c Ratio	0.10	0.69		0.16	0.60			0.59	0.20		0.75	
Control Delay	8.3	16.0		9.7	13.5			28.1	5.2		33.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	8.3	16.0		9.7	13.5			28.1	5.2		33.2	
LOS	A	B		A	B			C	A		C	
Approach Delay		15.6			13.2			21.1			33.2	
Approach LOS		B			B			C			C	
Stops (vph)	16	410		17	323			198	17		306	
Fuel Used(gal)	1	14		1	22			12	5		8	
CO Emissions (g/hr)	43	944		100	1567			871	322		559	
NOx Emissions (g/hr)	8	184		20	305			170	63		109	
VOC Emissions (g/hr)	10	219		23	363			202	75		130	
Dilemma Vehicles (#)	0	0		0	0			0	0		0	
Queue Length 50th (ft)	6	187		7	149			97	0		156	
Queue Length 95th (ft)	19	308		23	244			172	33		#287	
Internal Link Dist (ft)		1875			4581			5110			1240	
Turn Bay Length (ft)	58			58					100			
Base Capacity (vph)	330	926		232	934			428	546		518	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.10	0.69		0.16	0.60			0.59	0.20		0.75	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 19.3 Intersection LOS: B
Intersection Capacity Utilization 87.5% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1018: Wentworth Avenue & 103rd Street

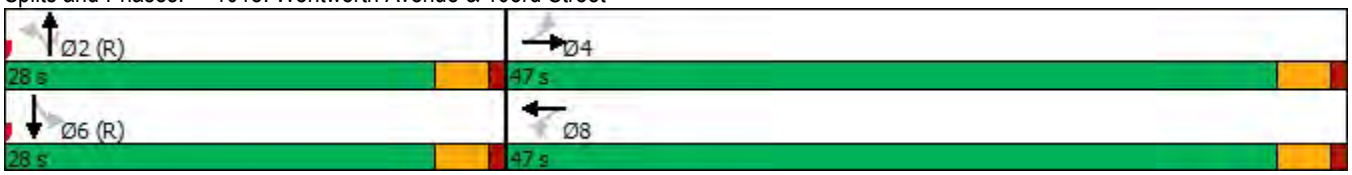

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	290	75	75	205	125	40	1050	78	108	540	50
Future Volume (vph)	170	290	75	75	205	125	40	1050	78	108	540	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	9	10	10	9
Storage Length (ft)	0		0	0		0	115		90	115		120
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			80			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99			0.98		0.99		0.98	1.00		0.97
Frt		0.979			0.954				0.850			0.850
Flt Protected		0.984			0.991		0.950			0.950		
Satd. Flow (prot)	0	2849	0	0	2776	0	1506	3069	1377	1550	2956	1311
Flt Permitted		0.647			0.768		0.353			0.125		
Satd. Flow (perm)	0	1860	0	0	2148	0	555	3069	1352	204	2956	1270
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			91				103			103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1044			375			2662			5304	
Travel Time (s)		23.7			8.5			60.5			120.5	
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Adj. Flow (vph)	175	299	77	77	211	129	41	1082	80	111	557	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	551	0	0	417	0	41	1082	80	111	557	52
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.22	1.17	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Minimum Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (%)	9.4%	47.1%		37.6%	37.6%		9.4%	43.5%	43.5%	9.4%	43.5%	43.5%
Maximum Green (s)	5.0	35.0		27.0	27.0		5.0	33.0	33.0	5.0	33.0	33.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)		-1.0			-1.0		1.0	-0.5	0.0	1.0	-0.5	0.0
Total Lost Time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Walk Time (s)		12.0		4.0	4.0			19.0	19.0		19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		23.0		23.0	23.0			14.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)		36.0			28.0		37.0	33.5	33.0	37.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.44	0.39	0.39	0.44	0.39	0.39
v/c Ratio		0.65			0.54		0.14	0.89	0.14	0.73	0.48	0.09
Control Delay		21.9			21.0		16.1	28.5	5.4	44.0	20.9	0.9
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		21.9			21.0		16.1	28.5	5.4	44.0	20.9	0.9
LOS		C			C		B	C	A	D	C	A
Approach Delay		21.9			21.0			26.6			23.0	
Approach LOS		C			C			C			C	
Stops (vph)		346			254		22	593	20	57	387	1
Fuel Used(gal)		9			9		1	31	2	6	27	2
CO Emissions (g/hr)		604			652		76	2179	127	402	1871	146
NOx Emissions (g/hr)		118			127		15	424	25	78	364	28
VOC Emissions (g/hr)		140			151		18	505	29	93	434	34
Dilemma Vehicles (#)		0			0		0	0	0	0	0	0
Queue Length 50th (ft)		101			73		12	175	2	32	114	0
Queue Length 95th (ft)		145			119		m15	m#230	m7	#91	161	4
Internal Link Dist (ft)		964			295			2582			5224	
Turn Bay Length (ft)							115		90	115		120
Base Capacity (vph)		849			768		286	1209	587	152	1165	556
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.65			0.54		0.14	0.89	0.14	0.73	0.48	0.09

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 58 (68%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 24.0 Intersection LOS: C
Intersection Capacity Utilization 102.0% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1034: Halsted Street & 111th Street

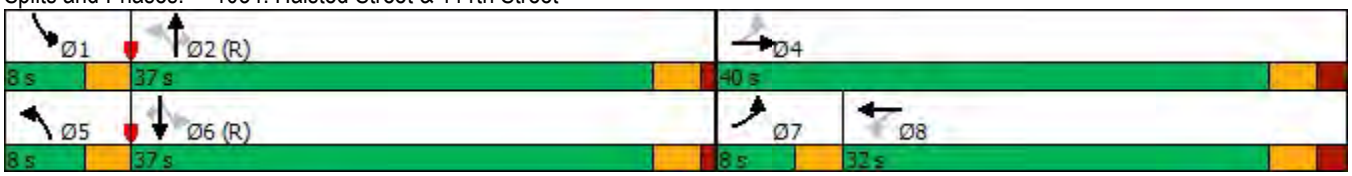

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	466	0	0	386	85	30	65	120	0	0	0
Future Volume (vph)	45	466	0	0	386	85	30	65	120	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.976			0.925				
Flt Protected		0.996						0.993				
Satd. Flow (prot)	0	1707	0	0	1673	0	0	1575	0	0	0	0
Flt Permitted		0.933						0.993				
Satd. Flow (perm)	0	1599	0	0	1673	0	0	1575	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					30			97				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1591			2004			794			646	
Travel Time (s)		36.2			45.5			18.0			14.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	48	501	0	0	415	91	32	70	129	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	549	0	0	506	0	0	231	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Minimum Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (%)	66.2%	66.2%			66.2%		33.8%	33.8%				
Maximum Green (s)	39.0	39.0			39.0		18.0	18.0				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.0			4.0			4.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	32.0	32.0			32.0		10.0	10.0				
Flash Dont Walk (s)	7.0	7.0			7.0		8.0	8.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		39.0			39.0			18.0				
Actuated g/C Ratio		0.60			0.60			0.28				
v/c Ratio		0.57			0.50			0.46				
Control Delay		10.9			3.8			14.6				
Queue Delay		0.0			0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		10.9			3.8			14.6				
LOS		B			A			B				
Approach Delay		10.9			3.8			14.6				
Approach LOS		B			A			B				
Stops (vph)		294			53			103				
Fuel Used(gal)		11			8			3				
CO Emissions (g/hr)		740			560			177				
NOx Emissions (g/hr)		144			109			35				
VOC Emissions (g/hr)		172			130			41				
Dilemma Vehicles (#)		0			0			0				
Queue Length 50th (ft)		116			24			42				
Queue Length 95th (ft)		198			32			99				
Internal Link Dist (ft)		1511			1924			714			566	
Turn Bay Length (ft)												
Base Capacity (vph)		959			1015			506				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.57			0.50			0.46				

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 16 (25%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1035: Normal Avenue & 111th Street

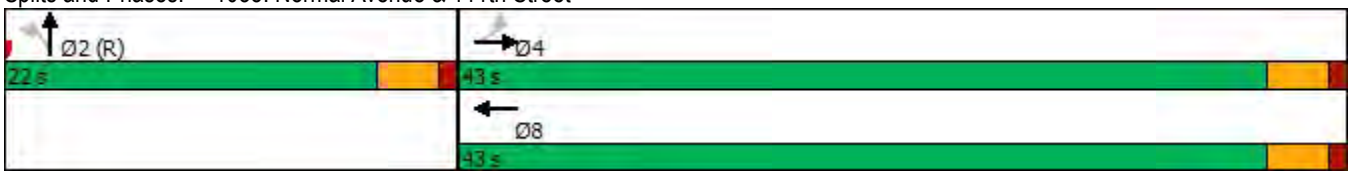

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	466	45	20	429	50	35	190	40	65	135	33
Future Volume (vph)	55	466	45	20	429	50	35	190	40	65	135	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	11	11	12	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.989			0.986			0.977			0.979	
Flt Protected		0.995			0.998			0.993			0.986	
Satd. Flow (prot)	0	1884	0	0	1842	0	0	3082	0	0	3037	0
Flt Permitted		0.922			0.971			0.897			0.814	
Satd. Flow (perm)	0	1744	0	0	1792	0	0	2776	0	0	2499	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			11			39			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2004			892			181			180	
Travel Time (s)		45.5			20.3			4.1			4.1	
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Adj. Flow (vph)	59	496	48	21	456	53	37	202	43	69	144	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	603	0	0	530	0	0	282	0	0	248	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.12	1.12	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (%)	52.3%	52.3%		52.3%	52.3%		47.7%	47.7%		47.7%	47.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	21.0	21.0		21.0	21.0		19.0	19.0		19.0	19.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			27.0			27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
v/c Ratio		0.75			0.64			0.24			0.23	
Control Delay		21.8			9.0			8.5			11.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		21.8			9.0			8.5			11.2	
LOS		C			A			A			B	
Approach Delay		21.8			9.0			8.5			11.2	
Approach LOS		C			A			A			B	
Stops (vph)		365			168			148			121	
Fuel Used(gal)		13			7			7			11	
CO Emissions (g/hr)		936			484			473			766	
NOx Emissions (g/hr)		182			94			92			149	
VOC Emissions (g/hr)		217			112			110			177	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		165			50			16			27	
Queue Length 95th (ft)		#275			60			30			49	
Internal Link Dist (ft)		1924			812			101			100	
Turn Bay Length (ft)												
Base Capacity (vph)		809			833			1175			1058	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.75			0.64			0.24			0.23	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 13.9 Intersection LOS: B
Intersection Capacity Utilization 107.3% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1036: Wentworth Avenue & 111th Street

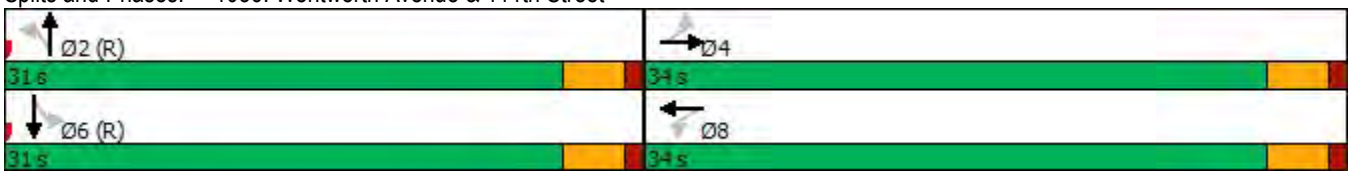

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	311	30	40	431	85	65	335	95	50	100	28
Future Volume (vph)	60	311	30	40	431	85	65	335	95	50	100	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	9	10	10	9	10	10	12	10	10	12
Storage Length (ft)	70		0	60		0	70		70	80		75
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	115			90			80			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99	0.99		0.99	1.00		1.00	1.00	
Frt		0.987			0.975			0.967			0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	2922	0	1596	2938	0	1506	3033	0	1596	2906	0
Flt Permitted	0.361			0.508			0.666			0.480		
Satd. Flow (perm)	572	2922	0	843	2938	0	1050	3033	0	805	2906	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			38			87			30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			546			2651			298	
Travel Time (s)		9.5			12.4			60.3			6.8	
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Adj. Flow (vph)	64	331	32	43	459	90	69	356	101	53	106	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	363	0	43	549	0	69	457	0	53	136	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.22	1.17	1.17	1.22	1.17	1.17	1.07	1.17	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		9.0	9.0		22.0	22.0		22.0	22.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
v/c Ratio	0.33	0.36		0.15	0.54		0.12	0.27		0.12	0.09	
Control Delay	14.2	10.1		13.5	15.5		5.7	4.9		9.6	7.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.2	10.1		13.5	15.5		5.7	4.9		9.6	7.8	
LOS	B	B		B	B		A	A		A	A	
Approach Delay		10.7			15.4			5.0			8.3	
Approach LOS		B			B			A			A	
Stops (vph)	38	245		33	416		32	203		26	57	
Fuel Used(gal)	1	6		0	6		2	10		4	11	
CO Emissions (g/hr)	70	387		32	428		112	730		308	782	
NOx Emissions (g/hr)	14	75		6	83		22	142		60	152	
VOC Emissions (g/hr)	16	90		7	99		26	169		71	181	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	15	37		14	96		5	10		23	26	
Queue Length 95th (ft)	m20	m47		m35	147		m14	28		m24	m25	
Internal Link Dist (ft)		338			466			2571			218	
Turn Bay Length (ft)	70			60			70			80		
Base Capacity (vph)	193	1000		285	1019		565	1673		433	1578	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.33	0.36		0.15	0.54		0.12	0.27		0.12	0.09	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.54
Intersection Signal Delay: 10.3 Intersection LOS: B
Intersection Capacity Utilization 68.1% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1037: State Street & 111th Street

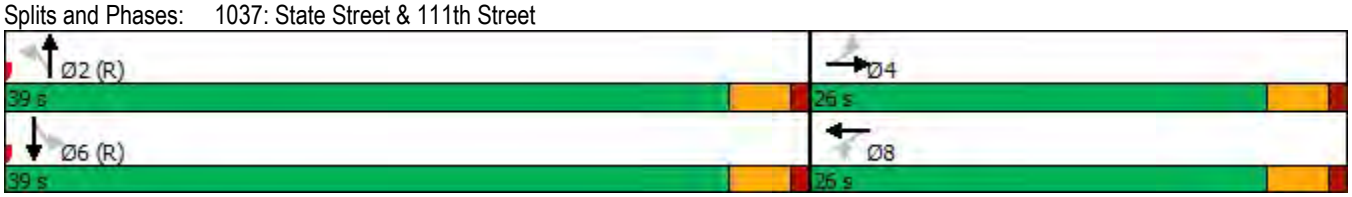

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	416	35	50	453	110	30	380	55	50	150	58
Future Volume (vph)	90	416	35	50	453	110	30	380	55	50	150	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	12	12	10	12	12	10	12
Storage Length (ft)	60		0	75		77	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.99	1.00		0.98	0.99			0.99			0.98	
Frt		0.988			0.971			0.982			0.966	
Flt Protected	0.950			0.950				0.997			0.990	
Satd. Flow (prot)	1425	3002	0	1350	2925	0	0	2837	0	0	2717	0
Flt Permitted	0.381			0.454				0.923			0.817	
Satd. Flow (perm)	564	3002	0	634	2925	0	0	2621	0	0	2238	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			63			27			62	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		546			835			277			230	
Travel Time (s)		12.4			19.0			6.3			5.2	
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Adj. Flow (vph)	96	443	37	53	482	117	32	404	59	53	160	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	480	0	53	599	0	0	495	0	0	275	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.17	1.22	1.22	1.17	1.07	1.07	1.17	1.07	1.07	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	31.0	31.0		31.0	31.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	20.0	20.0		20.0	20.0		14.0	14.0		14.0	14.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		12.0	12.0		12.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
v/c Ratio	0.36	0.33		0.18	0.42			0.47			0.30	
Control Delay	21.4	16.9		11.6	10.9			11.9			11.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	21.4	16.9		11.6	10.9			11.9			11.2	
LOS	C	B		B	B			B			B	
Approach Delay		17.7			11.0			11.9			11.2	
Approach LOS		B			B			B			B	
Stops (vph)	77	362		29	308			215			128	
Fuel Used(gal)	1	5		1	7			12			2	
CO Emissions (g/hr)	84	382		42	463			838			123	
NOx Emissions (g/hr)	16	74		8	90			163			24	
VOC Emissions (g/hr)	19	89		10	107			194			28	
Dilemma Vehicles (#)	0	0		0	0			0			0	
Queue Length 50th (ft)	36	86		11	67			35			28	
Queue Length 95th (ft)	69	110		31	103			75			53	
Internal Link Dist (ft)		466			755			197			150	
Turn Bay Length (ft)	60			75								
Base Capacity (vph)	268	1441		302	1427			1064			932	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.36	0.33		0.18	0.42			0.47			0.30	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 48 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 13.1	Intersection LOS: B
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1038: Michigan Avenue & 111th Street

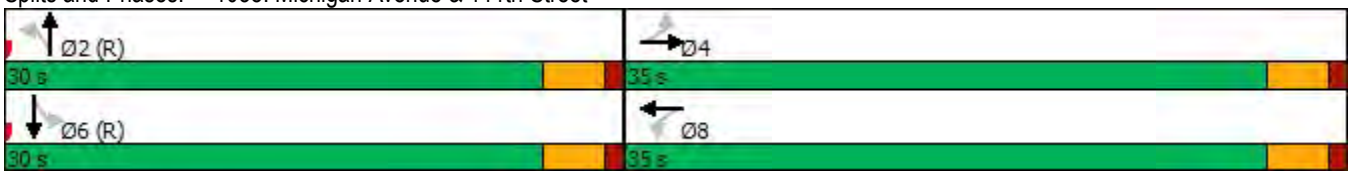

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	301	50	67	236	82	75	1050	83	84	425	85
Future Volume (vph)	223	301	50	67	236	82	75	1050	83	84	425	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	9	14	16	9	14	16
Storage Length (ft)	120		115	60		58	165		165	110		80
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			60			90			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98	1.00		1.00	0.99		0.99	1.00		1.00	0.99	
Frt		0.979			0.961			0.989			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3013	0	1596	2892	0	1494	3443	0	1494	3344	0
Flt Permitted	0.504			0.472			0.372			0.125		
Satd. Flow (perm)	815	3013	0	790	2892	0	578	3443	0	196	3344	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			60			11			32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			564			2655			2662	
Travel Time (s)		30.3			12.8			60.3			60.5	
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Adj. Flow (vph)	235	317	53	71	248	86	79	1105	87	88	447	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	235	370	0	71	334	0	79	1192	0	88	536	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.07	1.17	1.17	1.07	1.22	0.99	0.91	1.22	0.99	0.91
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	8.0	32.0		8.0	32.0		8.0	37.0		8.0	37.0	
Total Split (s)	8.0	32.0		8.0	32.0		8.0	37.0		8.0	37.0	
Total Split (%)	9.4%	37.6%		9.4%	37.6%		9.4%	43.5%		9.4%	43.5%	
Maximum Green (s)	5.0	27.0		5.0	27.0		5.0	33.0		5.0	33.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0		1.0	-1.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Walk Time (s)		7.0			7.0			21.0			21.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		20.0			20.0			12.0			12.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	32.0	28.0		32.0	28.0		37.0	33.0		37.0	33.0	
Actuated g/C Ratio	0.38	0.33		0.38	0.33		0.44	0.39		0.44	0.39	
v/c Ratio	0.69	0.37		0.21	0.34		0.27	0.89		0.60	0.41	
Control Delay	32.1	21.5		16.8	18.6		14.9	33.9		43.0	14.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.1	21.5		16.8	18.6		14.9	33.9		43.0	14.7	
LOS	C	C		B	B		B	C		D	B	
Approach Delay		25.6			18.3			32.7			18.7	
Approach LOS		C			B			C			B	
Stops (vph)	183	241		41	188		43	974		67	321	
Fuel Used(gal)	5	7		3	12		2	37		3	14	
CO Emissions (g/hr)	334	456		177	842		141	2560		199	969	
NOx Emissions (g/hr)	65	89		34	164		27	498		39	189	
VOC Emissions (g/hr)	77	106		41	195		33	593		46	225	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	83	73		22	56		22	303		31	56	
Queue Length 95th (ft)	#150	110		48	91		46	#433		m#85	109	
Internal Link Dist (ft)		1251			484			2575			2582	
Turn Bay Length (ft)	120			60			165			110		
Base Capacity (vph)	342	1008		335	992		294	1343		146	1317	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.37		0.21	0.34		0.27	0.89		0.60	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 13 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 26.2 Intersection LOS: C
Intersection Capacity Utilization 87.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1049: Halsted Street & 115th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	388	25	25	290	10	45	155	56	25	75	55
Future Volume (vph)	50	388	25	25	290	10	45	155	56	25	75	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	11	12	11	11	12	10	10	12	10	10
Storage Length (ft)	0		80	0		0	0		30	0		30
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.994			0.996			0.989			0.988	
Satd. Flow (prot)	0	1647	1395	0	1663	1321	0	1627	1373	0	1588	1360
Flt Permitted		0.932			0.952			0.926			0.915	
Satd. Flow (perm)	0	1544	1336	0	1588	1287	0	1520	1356	0	1471	1318
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			24			17			59			58
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3405			1340			2669			2476	
Travel Time (s)		77.4			30.5			60.7			56.3	
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Adj. Flow (vph)	53	408	26	26	305	11	47	163	59	26	79	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	461	26	0	331	11	0	210	59	0	105	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.12	1.07	1.12	1.12	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (%)	52.3%	52.3%	52.3%	52.3%	52.3%	52.3%	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	19.0	19.0	19.0	19.0	19.0	19.0	16.0	16.0	16.0	16.0	16.0	16.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
v/c Ratio		0.65	0.04		0.45	0.02		0.33	0.10		0.17	0.10
Control Delay		18.7	4.9		9.0	1.5		14.8	3.6		11.9	2.5
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		18.7	4.9		9.0	1.5		14.8	3.6		11.9	2.5
LOS		B	A		A	A		B	A		B	A
Approach Delay		18.0			8.7			12.3			8.6	
Approach LOS		B			A			B			A	
Stops (vph)		327	7		106	1		150	15		72	14
Fuel Used(gal)		17	1		4	0		6	1		3	1
CO Emissions (g/hr)		1190	59		310	8		391	90		190	87
NOx Emissions (g/hr)		232	11		60	2		76	18		37	17
VOC Emissions (g/hr)		276	14		72	2		91	21		44	20
Dilemma Vehicles (#)		0	0		0	0		0	0		0	0
Queue Length 50th (ft)		132	0		39	1		68	0		20	0
Queue Length 95th (ft)		228	12		52	m1		m115	m9		m38	m3
Internal Link Dist (ft)		3325			1260			2589			2396	
Turn Bay Length (ft)			80						30			30
Base Capacity (vph)		712	629		732	603		631	597		611	581
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.65	0.04		0.45	0.02		0.33	0.10		0.17	0.10

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 13.0 Intersection LOS: B
Intersection Capacity Utilization 87.2% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1050: Wentworth Avenue & 115th Street

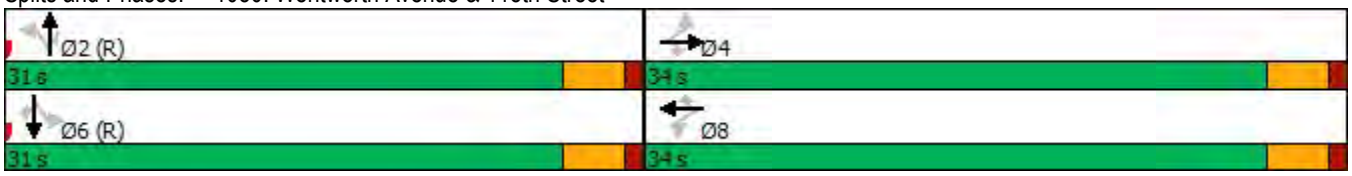

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	300	99	86	255	40	35	255	41	40	95	40
Future Volume (vph)	80	300	99	86	255	40	35	255	41	40	95	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	80		0	55		75	45		50	55		260
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	90			95			110			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.980			0.979			0.956	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	1600	1360	1520	2979	0	1520	2976	0	1520	2906	0
Flt Permitted	0.950			0.565			0.660			0.559		
Satd. Flow (perm)	1520	1600	1360	904	2979	0	1056	2976	0	894	2906	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1340			559			516			2651	
Travel Time (s)		30.5			12.7			11.7			60.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	86	323	106	92	274	43	38	274	44	43	102	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	323	106	92	317	0	38	318	0	43	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases			4	8			2			6		
Minimum Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	15.4%	53.8%	53.8%	38.5%	38.5%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?												
Walk Time (s)		8.0	8.0	8.0	8.0		13.0	13.0		13.0	13.0	
Flash Dont Walk (s)		13.0	13.0	13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0	0	
Act Effct Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.11	0.48	0.48	0.32	0.32		0.40	0.40		0.40	0.40	
v/c Ratio	0.53	0.42	0.16	0.32	0.33		0.09	0.27		0.12	0.12	
Control Delay	40.8	5.7	4.3	16.3	14.2		11.1	12.4		16.1	15.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	40.8	5.7	4.3	16.3	14.2		11.1	12.4		16.1	15.1	
LOS	D	A	A	B	B		B	B		B	B	
Approach Delay		11.3			14.7			12.2			15.3	
Approach LOS		B			B			B			B	
Stops (vph)	61	81	18	39	127		22	198		31	101	
Fuel Used(gal)	2	4	1	1	3		1	8		1	4	
CO Emissions (g/hr)	128	275	85	61	198		65	561		79	263	
NOx Emissions (g/hr)	25	53	17	12	39		13	109		15	51	
VOC Emissions (g/hr)	30	64	20	14	46		15	130		18	61	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	24	20	7	19	34		8	39		15	27	
Queue Length 95th (ft)	m46	31	m12	m28	m40		m14	m51		45	43	
Internal Link Dist (ft)		1260			479			436			2571	
Turn Bay Length (ft)	80			55			45			55		
Base Capacity (vph)	163	763	648	292	962		422	1190		357	1162	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.53	0.42	0.16	0.32	0.33		0.09	0.27		0.12	0.12	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 13.0	Intersection LOS: B
Intersection Capacity Utilization 47.2%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1051: State Street & 115th Street

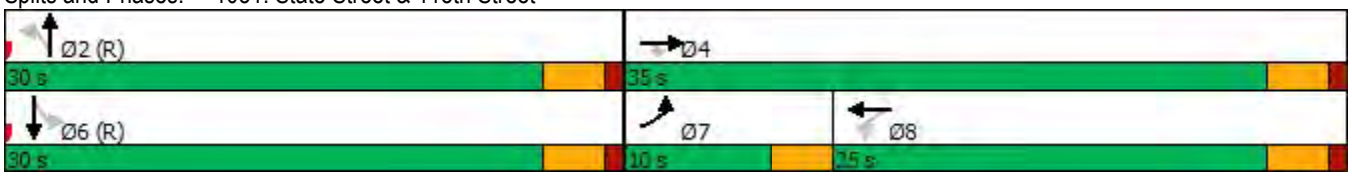

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	310	24	115	297	50	45	345	25	25	145	34
Future Volume (vph)	47	310	24	115	297	50	45	345	25	25	145	34
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	10	10	12	10	10
Storage Length (ft)	55		120	95		75	0		85	0		90
Storage Lanes	1		1	1		1	0		1	0		1
Taper Length (ft)	75			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.994			0.993	
Satd. Flow (prot)	1520	1600	1360	1520	1600	1360	0	1590	1360	0	1589	1360
Flt Permitted	0.567			0.950				0.946			0.911	
Satd. Flow (perm)	907	1600	1360	1520	1600	1360	0	1514	1360	0	1458	1360
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			67			101			101
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		559			386			1340			2394	
Travel Time (s)		12.7			8.8			30.5			54.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	51	333	26	124	319	54	48	371	27	27	156	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	333	26	124	319	54	0	419	27	0	183	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4			8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (%)	36.9%	36.9%	36.9%	13.8%	50.8%	50.8%	44.6%	44.6%	44.6%	44.6%	44.6%	44.6%
Maximum Green (s)	20.0	20.0	20.0	6.0	29.0	29.0	24.0	24.0	24.0	24.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		5.0	5.0		5.0	5.0
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0	9.0		18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	12.0	12.0	12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	20.0	20.0	20.0	6.0	29.0	29.0		24.0	24.0		24.0	24.0

Lane Group	Ø12
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	12
Permitted Phases	
Minimum Split (s)	3.0
Total Split (s)	3.0
Total Split (%)	5%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.31	0.31	0.31	0.09	0.45	0.45		0.37	0.37		0.37	0.37
v/c Ratio	0.18	0.68	0.05	0.89	0.45	0.08		0.75	0.05		0.34	0.07
Control Delay	14.2	20.3	0.2	82.9	14.5	5.1		21.9	0.4		15.1	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	14.2	20.3	0.2	82.9	14.5	5.1		21.9	0.4		15.1	2.3
LOS	B	C	A	F	B	A		C	A		B	A
Approach Delay		18.2			30.5			20.6			13.0	
Approach LOS		B			C			C			B	
Stops (vph)	19	168	0	97	140	10		305	1		111	5
Fuel Used(gal)	0	4	0	3	3	0		28	2		5	1
CO Emissions (g/hr)	31	249	7	221	240	28		1945	110		327	53
NOx Emissions (g/hr)	6	48	1	43	47	6		378	21		64	10
VOC Emissions (g/hr)	7	58	2	51	56	7		451	25		76	12
Dilemma Vehicles (#)	0	0	0	0	0	0		0	0		0	0
Queue Length 50th (ft)	9	59	0	55	58	0		127	0		51	0
Queue Length 95th (ft)	23	101	m0	m#106	m125	m8		#278	m0		80	3
Internal Link Dist (ft)		479			306			1260			2314	
Turn Bay Length (ft)	55		120	95		75			85			90
Base Capacity (vph)	279	492	499	140	713	643		559	565		538	565
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	0
Reduced v/c Ratio	0.18	0.68	0.05	0.89	0.45	0.08		0.75	0.05		0.34	0.07

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 22.0 Intersection LOS: C
Intersection Capacity Utilization 70.3% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1052: Michigan Avenue & 115th Street

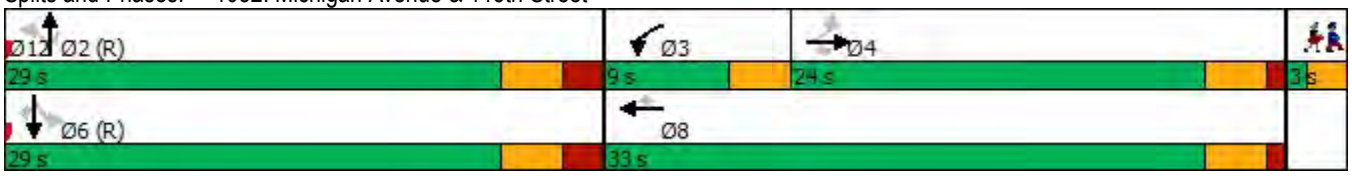

Lane Group	Ø12
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	322	23	80	420	80	42	110	195	0	0	0
Future Volume (vph)	20	322	23	80	420	80	42	110	195	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	12	12	10	15	10
Storage Length (ft)	0		95	0		80	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.924				
Flt Protected		0.997			0.992			0.994				
Satd. Flow (prot)	0	1595	1360	0	1587	1360	0	1574	0	0	0	0
Flt Permitted		0.961			0.887			0.994				
Satd. Flow (perm)	0	1538	1360	0	1419	1360	0	1574	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			25			83		103				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			636			791			721	
Travel Time (s)		8.7			14.5			18.0			16.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	22	346	25	86	452	86	45	118	210	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	368	25	0	538	86	0	373	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.07	1.07	1.17	0.95	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2				
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru				
Leading Detector (ft)	20	100	20	20	100	20	20	100				
Trailing Detector (ft)	0	0	0	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0	0	0	0				
Detector 1 Size(ft)	20	6	20	20	6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Detector Phase	4	4	4	8	8	8	2	2				
Switch Phase												
Minimum Initial (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Minimum Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (%)	63.1%	63.1%	63.1%	63.1%	63.1%	63.1%	36.9%	36.9%				
Maximum Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0				
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0				
Total Lost Time (s)		5.0	5.0		5.0	5.0		4.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	8.0	8.0				
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None				
Walk Time (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Flash Dont Walk (s)	8.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	30	30				
Act Effct Green (s)		37.5	37.5		37.5	37.5		18.5				
Actuated g/C Ratio		0.58	0.58		0.58	0.58		0.28				
v/c Ratio		0.42	0.03		0.66	0.11		0.71				
Control Delay		17.7	9.5		14.9	2.4		23.1				
Queue Delay		0.0	0.0		0.0	0.0		0.0				
Total Delay		17.7	9.5		14.9	2.4		23.1				
LOS		B	A		B	A		C				
Approach Delay		17.1			13.2			23.1				
Approach LOS		B			B			C				
90th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
90th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
70th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
70th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
50th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
50th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
30th %ile Green (s)	37.1	37.1	37.1	37.1	37.1	37.1	18.9	18.9				
30th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
10th %ile Green (s)	42.2	42.2	42.2	42.2	42.2	42.2	13.8	13.8				
10th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
Stops (vph)		227	14		343	10		225				
Fuel Used(gal)		5	0		9	1		5				
CO Emissions (g/hr)		317	18		598	64		351				
NOx Emissions (g/hr)		62	4		116	12		68				
VOC Emissions (g/hr)		74	4		139	15		81				
Dilemma Vehicles (#)		0	0		0	0		0				
Queue Length 50th (ft)		106	3		139	1		90				
Queue Length 95th (ft)		161	m6		247	17		178				
Internal Link Dist (ft)		304			556			711			641	
Turn Bay Length (ft)			95			80						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		886	794		817	819		555				
Starvation Cap Reductn		0	0		0	0		0				
Spillback Cap Reductn		0	0		0	0		0				
Storage Cap Reductn		0	0		0	0		0				
Reduced v/c Ratio		0.42	0.03		0.66	0.11		0.67				

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 25 (38%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 17.0	Intersection LOS: B
Intersection Capacity Utilization 84.2%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1053: Indiana Avenue & 115th Street

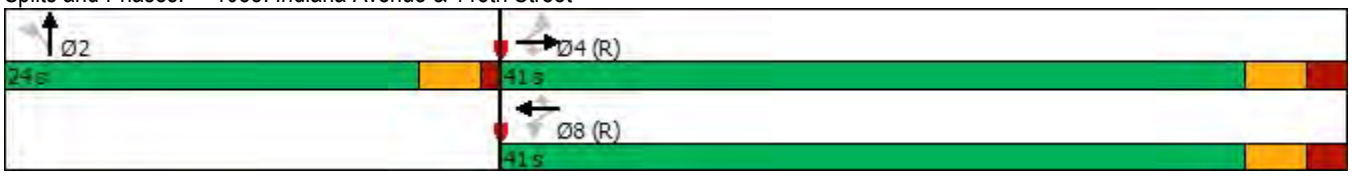

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	96	416	494	55	75	91
Future Volume (vph)	96	416	494	55	75	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	14	16	12	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.986			0.850
Flt Protected		0.991			0.950	
Satd. Flow (prot)	0	1818	1925	0	1565	1400
Flt Permitted		0.991			0.950	
Satd. Flow (perm)	0	1818	1925	0	1565	1400
Link Speed (mph)		30	30		30	
Link Distance (ft)		683	263		1350	
Travel Time (s)		15.5	6.0		30.7	
Confl. Peds. (#/hr)	21			21	5	3
Confl. Bikes (#/hr)					2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	12%	3%	5%	0%	2%	2%
Adj. Flow (vph)	109	473	561	63	85	103
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	582	624	0	85	103
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.07	0.99	0.91	1.07	1.17	1.17
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 75.1%	ICU Level of Service D
Analysis Period (min) 15	

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	96	416	494	55	75	91
Future Volume (vph)	96	416	494	55	75	91
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	109	473	561	63	85	103

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total (vph)	582	624	85	103
Volume Left (vph)	109	0	85	0
Volume Right (vph)	0	63	0	103
Hadj (s)	0.12	0.02	0.53	-0.67
Departure Headway (s)	5.6	5.5	8.1	6.8
Degree Utilization, x	0.91	0.95	0.19	0.20
Capacity (veh/h)	633	653	438	514
Control Delay (s)	40.0	46.5	11.8	10.3
Approach Delay (s)	40.0	46.5	11.0	
Approach LOS	E	E	B	

Intersection Summary			
Delay	39.0		
Level of Service	E		
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	544	0	30	750	0	0				
Future Volume (vph)	544	0	30	750	0	0				
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800				
Lane Width (ft)	10	12	12	10	16	12				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Frt										
Flt Protected				0.998						
Satd. Flow (prot)	1600	1714	0	1437	1943	0				
Flt Permitted				0.965						
Satd. Flow (perm)	1600	1714	0	1390	1943	0				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)										
Link Speed (mph)	30			30	30					
Link Distance (ft)	105			1228	505					
Travel Time (s)	2.4			27.9	11.5					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%				
Parking (#/hr)				0						
Adj. Flow (vph)	585	0	32	806	0	0				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	585	0	0	838	0	0				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			0	16					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.17	1.07	1.07	1.33	0.91	1.07				
Turning Speed (mph)		9	15		15	9				
Turn Type	NA		Perm	NA	Prot					
Protected Phases	6 4			4	3		1	2	6	8
Permitted Phases			4							
Minimum Split (s)			16.0	16.0	18.0		20.0	12.0	32.0	35.0
Total Split (s)			35.0	35.0	18.0		20.0	12.0	32.0	35.0
Total Split (%)			41.2%	41.2%	21.2%		24%	14%	38%	41%
Maximum Green (s)			31.0	31.0	14.0		15.0	9.0	27.0	31.0
Yellow Time (s)			3.0	3.0	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)			1.0	1.0	1.0		2.0	0.0	2.0	1.0
Lost Time Adjust (s)				0.0	0.0					
Total Lost Time (s)				4.0	4.0					
Lead/Lag							Lag	Lead		
Lead-Lag Optimize?										
Walk Time (s)					2.0				14.0	18.0
Flash Dont Walk (s)					12.0				13.0	13.0
Pedestrian Calls (#/hr)					0				0	0
Act Effct Green (s)	62.0			31.0						
Actuated g/C Ratio	0.73			0.36						
v/c Ratio	0.50			1.66						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Control Delay	3.2			328.2						
Queue Delay	3.0			1.2						
Total Delay	6.2			329.4						
LOS	A			F						
Approach Delay	6.2			329.4						
Approach LOS	A			F						
Stops (vph)	84			574						
Fuel Used(gal)	1			70						
CO Emissions (g/hr)	88			4916						
NOx Emissions (g/hr)	17			956						
VOC Emissions (g/hr)	20			1139						
Dilemma Vehicles (#)	0			0						
Queue Length 50th (ft)	33			~658						
Queue Length 95th (ft)	m49			#878						
Internal Link Dist (ft)	25			1148	425					
Turn Bay Length (ft)										
Base Capacity (vph)	1167			506						
Starvation Cap Reductn	459			0						
Spillback Cap Reductn	0			67						
Storage Cap Reductn	0			0						
Reduced v/c Ratio	0.83			1.91						

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 125	
Control Type: Pretimed	
Maximum v/c Ratio: 1.66	
Intersection Signal Delay: 196.5	Intersection LOS: F
Intersection Capacity Utilization 70.7%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1055: Cottage Grove Avenue & 115th Street

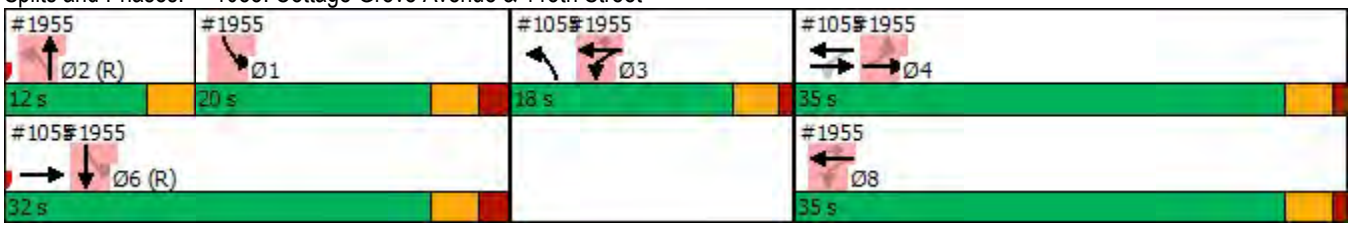

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	225	234	30	665	0	0	0	0	5	0	250
Future Volume (vph)	0	225	234	30	665	0	0	0	0	5	0	250
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	16	12	12	12	12	12	12	15	12	12	16	12
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.923										0.850
Flt Protected					0.998						0.950	
Satd. Flow (prot)	0	3035	0	0	3194	0	0	0	0	0	1938	1471
Flt Permitted					0.998						0.950	
Satd. Flow (perm)	0	3035	0	0	3194	0	0	0	0	0	1938	1471
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1260			277			633			783	
Travel Time (s)		28.6			6.3			14.4			17.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	5%	70%	4%	0%	0%	0%	0%	0%	0%	4%
Adj. Flow (vph)	0	239	249	32	707	0	0	0	0	5	0	266
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	488	0	0	739	0	0	0	0	0	5	266
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.91	1.07	1.07	1.07	1.07	1.07	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	225	234	30	665	0	0	0	0	5	0	250
Future Volume (Veh/h)	0	225	234	30	665	0	0	0	0	5	0	250
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	239	249	32	707	0	0	0	0	5	0	266
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	707			239			781	1134	244	890	1010	354
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	707			239			781	1134	244	890	1010	354
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	98	100	58
cM capacity (veh/h)	901			947			164	197	763	234	234	637

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	159	329	268	471	5	266
Volume Left	0	0	32	0	5	0
Volume Right	0	249	0	0	0	266
cSH	1700	1700	947	1700	234	637
Volume to Capacity	0.09	0.19	0.03	0.28	0.02	0.42
Queue Length 95th (ft)	0	0	3	0	2	51
Control Delay (s)	0.0	0.0	1.4	0.0	20.7	14.6
Lane LOS			A		C	B
Approach Delay (s)	0.0		0.5		14.8	
Approach LOS					B	

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	225	0	685	0	0	0
Future Volume (vph)	225	0	685	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3159	0	1629	0	0	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3159	0	1629	0	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	277			605	530	
Travel Time (s)	6.3			13.8	12.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	242	0	737	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	242	0	737	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	225	0	685	0	0	0
Future Volume (vph)	225	0	685	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	242	0	737	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	121	121	737
Volume Left (vph)	121	121	737
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	7.0	7.0	5.0
Degree Utilization, x	0.23	0.23	1.02
Capacity (veh/h)	512	512	737
Control Delay (s)	10.9	10.9	59.4
Approach Delay (s)	10.9		59.4
Approach LOS	B		F

Intersection Summary			
Delay	47.4		
Level of Service	E		
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	392	85	47	192	55	100	933	78	60	442	100
Future Volume (vph)	245	392	85	47	192	55	100	933	78	60	442	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	14	12	10	11	12	9	10	12
Storage Length (ft)	140		0	60		0	120		0	115		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	195			95			95			90		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98		0.99	1.00	0.99		0.98	1.00		1.00	0.99	
Frt			0.850		0.967			0.988			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1550	1556	1347	1596	1725	0	1535	3090	0	1509	2871	0
Flt Permitted	0.445			0.337			0.354			0.120		
Satd. Flow (perm)	711	1556	1327	565	1725	0	559	3090	0	190	2871	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87		16			11			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			3955			5338			2655	
Travel Time (s)		21.5			89.9			121.3			60.3	
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Adj. Flow (vph)	250	400	87	48	196	56	102	952	80	61	451	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	250	400	87	48	252	0	102	1032	0	61	553	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	0.99	1.07	1.17	1.12	1.07	1.22	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	4.0	4.0	7.0	4.0		7.0	18.0		7.0	18.0	
Minimum Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (%)	11.1%	35.6%	35.6%	11.1%	35.6%		11.1%	42.2%		11.1%	42.2%	
Maximum Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0	0.0	1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	C-Max		None	C-Max	
Walk Time (s)		4.0	4.0		4.0			18.0			18.0	
Flash Dont Walk (s)		23.0	23.0		23.0			16.0			16.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	35.6	32.0	31.0	34.0	27.0		40.8	36.0		40.8	36.0	
Actuated g/C Ratio	0.40	0.36	0.34	0.38	0.30		0.45	0.40		0.45	0.40	
v/c Ratio	0.74	0.72	0.17	0.17	0.48		0.32	0.83		0.35	0.47	
Control Delay	36.6	36.0	6.4	17.2	27.6		15.7	32.1		18.2	20.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.6	36.0	6.4	17.2	27.6		15.7	32.1		18.2	20.9	
LOS	D	D	A	B	C		B	C		B	C	
Approach Delay		32.7			26.0			30.6			20.6	
Approach LOS		C			C			C			C	
90th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
90th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
70th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
50th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		7.0	34.0		7.0	34.0	
30th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Skip	Coord		Skip	Coord	
Stops (vph)	184	322	15	29	184		55	849		31	369	
Fuel Used(gal)	5	8	1	2	10		5	53		2	16	
CO Emissions (g/hr)	325	527	57	124	701		334	3730		114	1088	
NOx Emissions (g/hr)	63	103	11	24	136		65	726		22	212	
VOC Emissions (g/hr)	75	122	13	29	162		78	865		26	252	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	95	209	0	16	109		30	279		18	116	
Queue Length 95th (ft)	#192	#365	33	37	181		59	#402		39	165	
Internal Link Dist (ft)		866			3875			5258			2575	
Turn Bay Length (ft)	140			60			120			115		
Base Capacity (vph)	337	553	514	282	528		318	1242		174	1169	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.74	0.72	0.17	0.17	0.48		0.32	0.83		0.35	0.47	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 28.5 Intersection LOS: C
Intersection Capacity Utilization 86.7% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1060: Halsted Street & 119th Street

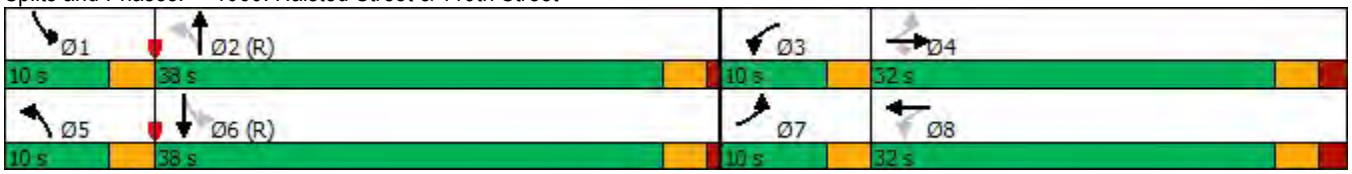

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	439	20	8	271	25	45	112	32	15	53	45
Future Volume (vph)	55	439	20	8	271	25	45	112	32	15	53	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	10	10	10	10	12	15	12	12	16	12
Storage Length (ft)	0		105	0		75	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.97		1.00	0.97		0.99			0.99	
Frt			0.850			0.850		0.977			0.946	
Flt Protected		0.994			0.999			0.988			0.994	
Satd. Flow (prot)	0	1628	1428	0	1601	1231	0	1901	0	0	1853	0
Flt Permitted		0.938			0.987			0.922			0.963	
Satd. Flow (perm)	0	1536	1383	0	1581	1198	0	1773	0	0	1794	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			22			27		19			49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3955			1331			2677			2669	
Travel Time (s)		89.9			30.3			60.8			60.7	
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Adj. Flow (vph)	60	482	22	9	298	27	49	123	35	16	58	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	542	22	0	307	27	0	207	0	0	123	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.17	1.17	1.17	1.17	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	32.0	27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	22.0	22.0	22.0	22.0	22.0	22.0	17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
v/c Ratio		0.72	0.03		0.39	0.04		0.28			0.16	
Control Delay		19.7	4.2		9.7	3.0		12.6			6.4	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		19.7	4.2		9.7	3.0		12.6			6.4	
LOS		B	A		A	A		B			A	
Approach Delay		19.1			9.2			12.6			6.4	
Approach LOS		B			A			B			A	
Stops (vph)		376	5		100	4		107			70	
Fuel Used(gal)		19	1		4	0		5			3	
CO Emissions (g/hr)		1346	46		280	21		349			200	
NOx Emissions (g/hr)		262	9		54	4		68			39	
VOC Emissions (g/hr)		312	11		65	5		81			46	
Dilemma Vehicles (#)		0	0		0	0		0			0	
Queue Length 50th (ft)		157	0		49	0		47			2	
Queue Length 95th (ft)		271	10		72	m4		89			20	
Internal Link Dist (ft)		3875			1251			2597			2589	
Turn Bay Length (ft)			105			75						
Base Capacity (vph)		756	692		778	603		747			773	
Starvation Cap Reductn		0	0		0	0		0			0	
Spillback Cap Reductn		0	0		0	0		0			0	
Storage Cap Reductn		0	0		0	0		0			0	
Reduced v/c Ratio		0.72	0.03		0.39	0.04		0.28			0.16	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 14.0 Intersection LOS: B
Intersection Capacity Utilization 86.8% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1061: Wentworth Avenue & 119th Street

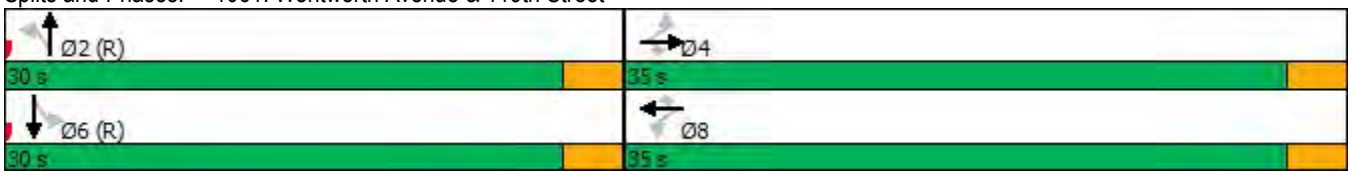

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	215	25	10	180	10	45	264	25	10	66	66
Future Volume (vph)	210	215	25	10	180	10	45	264	25	10	66	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	12	10	10	12	10	10	12	16	12
Storage Length (ft)	0		70	0		215	0		75	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.96		1.00	0.96		1.00	0.96		0.99	
Frt			0.850			0.850			0.850		0.937	
Flt Protected		0.976			0.997			0.993			0.997	
Satd. Flow (prot)	0	1568	1360	0	1494	1428	0	1640	1347	0	1816	0
Flt Permitted		0.738			0.974			0.943			0.976	
Satd. Flow (perm)	0	1179	1299	0	1459	1376	0	1557	1297	0	1777	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34			34			34		69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			477			2671			2164	
Travel Time (s)		30.3			10.8			60.7			49.2	
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Adj. Flow (vph)	219	224	26	10	188	10	47	275	26	10	69	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	443	26	0	198	10	0	322	26	0	148	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	43.1%	43.1%	43.1%	43.1%	43.1%	43.1%	56.9%	56.9%	56.9%	56.9%	56.9%	
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0	23.0	32.0	32.0	32.0	32.0	32.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	14.0	14.0	14.0	14.0	14.0	14.0	23.0	23.0	23.0	23.0	23.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
v/c Ratio		1.06	0.05		0.38	0.02		0.42	0.04		0.16	
Control Delay		72.8	1.2		18.5	1.2		4.9	0.8		9.5	
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Delay		72.8	1.2		18.5	1.2		4.9	0.8		9.5	
LOS		E	A		B	A		A	A		A	
Approach Delay		68.9			17.6			4.6			9.5	
Approach LOS		E			B			A			A	
Stops (vph)		333	4		138	1		111	3		107	
Fuel Used(gal)		13	0		2	0		14	1		4	
CO Emissions (g/hr)		877	20		153	3		967	74		268	
NOx Emissions (g/hr)		171	4		30	1		188	14		52	
VOC Emissions (g/hr)		203	5		35	1		224	17		62	
Dilemma Vehicles (#)		0	0		0	0		0	0		0	
Queue Length 50th (ft)		~203	1		57	0		38	1		9	
Queue Length 95th (ft)		m#346	m1		108	3		m50	m1		42	
Internal Link Dist (ft)		1251			397			2591			2084	
Turn Bay Length (ft)			70			215			75			
Base Capacity (vph)		417	481		516	508		766	655		909	
Starvation Cap Reductn		0	0		0	0		0	0		0	
Spillback Cap Reductn		0	0		0	0		0	0		0	
Storage Cap Reductn		0	0		0	0		0	0		0	
Reduced v/c Ratio		1.06	0.05		0.38	0.02		0.42	0.04		0.16	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 33.2 Intersection LOS: C
Intersection Capacity Utilization 90.0% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1062: State Street & 119th Street

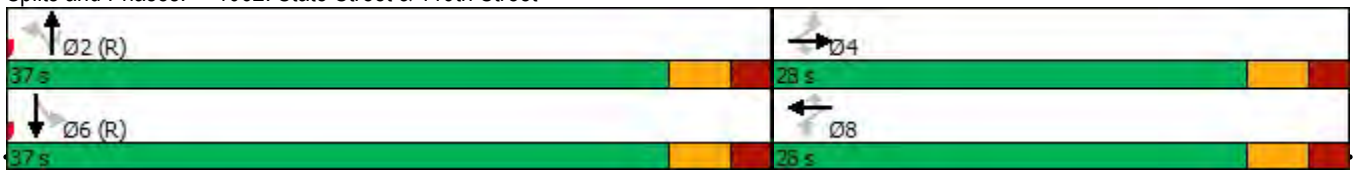

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1004	270	302	1277	0	0	0	0	349	250	465
Future Volume (vph)	0	1004	270	302	1277	0	0	0	0	349	250	465
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	14
Storage Length (ft)	0		85	216		0	0		0	360		360
Storage Lanes	0		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.86	0.91
Ped Bike Factor		1.00		1.00							0.99	0.99
Frt		0.968									0.940	0.850
Flt Protected				0.950						0.950	0.993	
Satd. Flow (prot)	0	4305	0	1644	3226	0	0	0	0	1468	2714	1375
Flt Permitted				0.121						0.950	0.993	
Satd. Flow (perm)	0	4305	0	209	3226	0	0	0	0	1468	2714	1356
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		75									61	78
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1359			322			474			954	
Travel Time (s)		30.9			7.3			10.8			21.7	
Confl. Peds. (#/hr)	6		4	4		6	2					2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Adj. Flow (vph)	0	1024	276	308	1303	0	0	0	0	356	255	474
Shared Lane Traffic (%)										21%		47%
Lane Group Flow (vph)	0	1300	0	308	1303	0	0	0	0	281	553	251
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			34			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1					1	1	1
Detector Template												
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		50		50	50					50	50	50
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1	6					4	4	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)		15.0		3.0	15.0					8.0	8.0	8.0
Minimum Split (s)		46.0		24.0	70.0					35.0	35.0	35.0
Total Split (s)		46.0		24.0	70.0					35.0	35.0	35.0
Total Split (%)		43.8%		22.9%	66.7%					33.3%	33.3%	33.3%
Maximum Green (s)		40.0		19.5	64.0					29.0	29.0	29.0
Yellow Time (s)		4.5		3.5	4.5					4.5	4.5	4.5
All-Red Time (s)		1.5		1.0	1.5					1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)		7.0		3.5	7.0					3.0	3.0	3.0
Minimum Gap (s)		3.5		0.2	3.5					0.2	0.2	0.2
Time Before Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Time To Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Recall Mode		C-Max		None	C-Max					None	None	None
Walk Time (s)										2.0	2.0	2.0
Flash Dont Walk (s)										27.0	27.0	27.0
Pedestrian Calls (#/hr)										0	0	0
Act Effct Green (s)		45.6		69.0	67.5					25.5	25.5	25.5
Actuated g/C Ratio		0.43		0.66	0.64					0.24	0.24	0.24
v/c Ratio		0.68		0.82	0.63					0.79	0.78	0.65
Control Delay		25.9		30.1	20.3					53.1	41.1	31.9
Queue Delay		0.0		8.8	49.8					0.0	0.0	0.0
Total Delay		25.9		38.8	70.1					53.1	41.1	31.9
LOS		C		D	E					D	D	C
Approach Delay		25.9			64.1						42.1	
Approach LOS		C			E						D	
90th %ile Green (s)		40.0		19.5	64.0					29.0	29.0	29.0
90th %ile Term Code		Coord		Max	Coord					Max	Max	Max
70th %ile Green (s)		40.0		19.5	64.0					29.0	29.0	29.0
70th %ile Term Code		Coord		Max	Coord					Max	Max	Max
50th %ile Green (s)		40.3		20.7	65.5					27.5	27.5	27.5
50th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
30th %ile Green (s)		48.5		16.5	69.5					23.5	23.5	23.5
30th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
10th %ile Green (s)		59.1		10.8	74.4					18.6	18.6	18.6
10th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
Stops (vph)		958		245	941					252	443	152
Fuel Used(gal)		26		4	14					6	11	4
CO Emissions (g/hr)		1783		277	957					448	770	298
NOx Emissions (g/hr)		347		54	186					87	150	58
VOC Emissions (g/hr)		413		64	222					104	178	69
Dilemma Vehicles (#)		0		0	0					0	0	0
Queue Length 50th (ft)		260		165	378					190	176	112
Queue Length 95th (ft)		320		m197	m421					291	242	204
Internal Link Dist (ft)		1279			242			394			874	
Turn Bay Length (ft)				216						360		360

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		1911		406	2073					405	793	430
Starvation Cap Reductn		0		69	1055					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.68		0.91	1.28					0.69	0.70	0.58

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 89 (85%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 45.7 Intersection LOS: D
Intersection Capacity Utilization 115.3% ICU Level of Service H
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1064: S Paulina ST & 127th Street

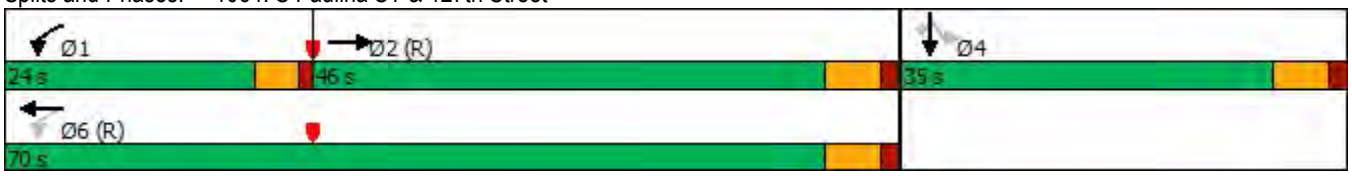

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	973	0	0	1039	297	540	355	384	0	0	0
Future Volume (vph)	380	973	0	0	1039	297	540	355	384	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	216		216	0		130	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				1.00							
Frt					0.967			0.922				
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3016	3138	0	0	4486	0	1644	3031	0	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3013	3138	0	0	4486	0	1644	3031	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					76							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			336			554			548	
Travel Time (s)		7.3			7.6			12.6			12.5	
Confl. Peds. (#/hr)	4					4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Adj. Flow (vph)	400	1024	0	0	1094	313	568	374	404	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	400	1024	0	0	1407	0	568	778	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1		1	1				
Detector Template												
Leading Detector (ft)	50	50			50		50	50				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	50	50			50		50	50				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	3.0	15.0			15.0		10.0	10.0				
Minimum Split (s)	27.5	70.5			43.0		34.5	34.5				
Total Split (s)	27.5	70.5			43.0		34.5	34.5				
Total Split (%)	26.2%	67.1%			41.0%		32.9%	32.9%				
Maximum Green (s)	21.5	64.5			37.0		28.5	28.5				
Yellow Time (s)	4.5	4.5			4.5		4.5	4.5				
All-Red Time (s)	1.5	1.5			1.5		1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0			7.0		5.0	5.0				
Minimum Gap (s)	0.2	3.5			3.5		0.2	0.2				
Time Before Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Time To Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Recall Mode	None	C-Max			C-Max		None	None				
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							21.5	21.5				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	18.9	64.5			39.6		28.5	28.5				
Actuated g/C Ratio	0.18	0.61			0.38		0.27	0.27				
v/c Ratio	0.74	0.53			0.81		1.27	1.02dr				
Control Delay	54.3	7.8			29.0		173.5	59.1				
Queue Delay	0.0	0.6			1.8		9.1	0.0				
Total Delay	54.3	8.4			30.7		182.6	59.1				
LOS	D	A			C		F	E				
Approach Delay		21.3			30.7			111.2				
Approach LOS		C			C			F				
90th %ile Green (s)	21.5	64.5			37.0		28.5	28.5				
90th %ile Term Code	Max	Coord			Coord		Max	Max				
70th %ile Green (s)	21.5	64.5			37.0		28.5	28.5				
70th %ile Term Code	Max	Coord			Coord		Max	Max				
50th %ile Green (s)	19.5	64.5			39.0		28.5	28.5				
50th %ile Term Code	Gap	Coord			Coord		Max	Max				
30th %ile Green (s)	17.4	64.5			41.1		28.5	28.5				
30th %ile Term Code	Gap	Coord			Coord		Max	Max				
10th %ile Green (s)	14.4	64.5			44.1		28.5	28.5				
10th %ile Term Code	Gap	Coord			Coord		Max	Max				
Stops (vph)	310	257			766		427	659				
Fuel Used(gal)	7	5			16		24	16				
CO Emissions (g/hr)	480	379			1092		1661	1099				
NOx Emissions (g/hr)	93	74			213		323	214				
VOC Emissions (g/hr)	111	88			253		385	255				
Dilemma Vehicles (#)	0	0			0		0	0				
Queue Length 50th (ft)	122	75			197		~484	270				
Queue Length 95th (ft)	163	99			m223		#695	#392				
Internal Link Dist (ft)		242			256			474			468	
Turn Bay Length (ft)	216											
Base Capacity (vph)	617	1927			1741		446	822				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	479			184		0	0				
Spillback Cap Reductn	0	13			55		239	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.65	0.71			0.90		2.74	0.95				

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 7 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.27
Intersection Signal Delay: 53.5 Intersection LOS: D
Intersection Capacity Utilization 115.3% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 1065: Marshfield Ave & 127th Street

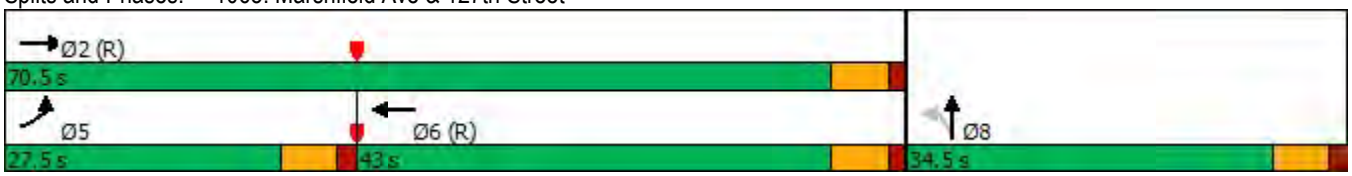

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	567	260	90	876	52	285	225	50	54	140	115
Future Volume (vph)	120	567	260	90	876	52	285	225	50	54	140	115
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	11	12	12	10	12	13	10	10	10
Storage Length (ft)	120		0	85		0	240		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			120			125			140		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00	1.00		0.99	1.00		1.00	0.99	
Frt			0.850		0.992			0.973			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3167	1311	1605	3232	0	1451	3226	0	1550	2789	0
Flt Permitted	0.104			0.424			0.496			0.572		
Satd. Flow (perm)	171	3167	1282	713	3232	0	753	3226	0	929	2789	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			277		6			26			122	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		336			5379			1555			925	
Travel Time (s)		7.6			122.3			35.3			21.0	
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Adj. Flow (vph)	128	603	277	96	932	55	303	239	53	57	149	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	603	277	96	987	0	303	292	0	57	271	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.07	1.22	1.12	1.07	1.07	1.17	1.07	1.03	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	13.5	42.0	12.5	12.5	41.0		12.5	38.0		12.5	38.0	
Total Split (s)	13.5	42.0	12.5	12.5	41.0		12.5	38.0		12.5	38.0	
Total Split (%)	12.9%	40.0%	11.9%	11.9%	39.0%		11.9%	36.2%		11.9%	36.2%	
Maximum Green (s)	9.0	36.0	8.0	8.0	35.0		8.0	32.0		8.0	32.0	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	0.2	4.0	0.2	0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	25.0	0.0	0.0	25.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Recall Mode	Max	C-Max	None	None	C-Max		None	None		None	None	
Walk Time (s)		14.0			13.0			5.0			5.0	
Flash Dont Walk (s)		22.0			22.0			26.0			26.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	63.7	51.6	61.1	44.7	35.0		28.9	21.0		27.2	18.3	
Actuated g/C Ratio	0.61	0.49	0.58	0.43	0.33		0.28	0.20		0.26	0.17	
v/c Ratio	0.32	0.39	0.32	0.26	0.91		1.17	0.44		0.20	0.46	
Control Delay	12.3	17.1	2.8	12.9	47.1		136.2	30.7		26.8	23.0	
Queue Delay	0.0	0.3	0.2	0.0	4.5		0.0	0.0		0.0	0.0	
Total Delay	12.3	17.4	3.0	12.9	51.6		136.2	30.7		26.8	23.0	
LOS	B	B	A	B	D		F	C		C	C	
Approach Delay		12.8			48.1			84.4			23.6	
Approach LOS		B			D			F			C	
90th %ile Green (s)	17.6	41.7	8.0	10.9	35.0		8.0	23.4		8.0	23.4	
90th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Max	Hold	
70th %ile Green (s)	20.7	46.6	8.0	9.1	35.0		8.0	20.3		8.0	20.3	
70th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Max	Hold	
50th %ile Green (s)	23.3	50.3	8.0	8.0	35.0		8.0	17.7		8.0	17.7	
50th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Max	Hold	
30th %ile Green (s)	25.8	53.7	8.0	7.1	35.0		8.0	16.0		7.2	15.2	
30th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Gap		Gap	Hold	
10th %ile Green (s)	26.0	65.5	8.0	0.0	35.0		8.0	27.5		0.0	15.0	
10th %ile Term Code	MaxR	Coord	Max	Skip	Coord		Max	Hold		Skip	Min	
Stops (vph)	57	390	55	50	826		291	263		38	120	
Fuel Used(gal)	1	6	1	4	52		13	6		1	4	
CO Emissions (g/hr)	65	392	79	300	3661		906	454		62	258	
NOx Emissions (g/hr)	13	76	15	58	712		176	88		12	50	
VOC Emissions (g/hr)	15	91	18	69	849		210	105		14	60	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	26	127	3	25	330		~244	92		28	46	
Queue Length 95th (ft)	m59	m209	m31	54	#457		#405	137		54	82	
Internal Link Dist (ft)		256			5299			1475			845	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	120			85			240			120		
Base Capacity (vph)	405	1555	863	382	1081		260	1001		293	934	
Starvation Cap Reductn	0	429	161	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	58		0	0		0	1	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.32	0.54	0.39	0.25	0.96		1.17	0.29		0.19	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 16 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 40.8 Intersection LOS: D
Intersection Capacity Utilization 86.3% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1066: S Ashland & 127th Street

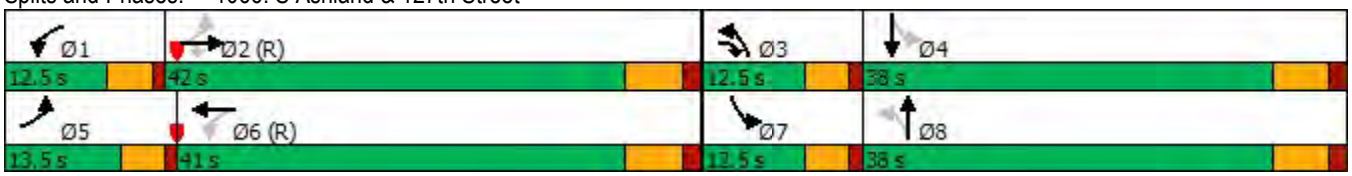

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	169	290	62	182	105	410	475	89	115	325	70
Future Volume (vph)	65	169	290	62	182	105	410	475	89	115	325	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	11	12	12	12	12	12
Storage Length (ft)	85		0	140		0	140		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	55			135			115			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98				0.99		1.00	1.00		1.00	1.00	
Frt		0.905			0.945			0.976			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1644	2930	0	1513	3019	0	1589	3147	0	1660	3240	0
Flt Permitted	0.528			0.347			0.365			0.417		
Satd. Flow (perm)	900	2930	0	553	3019	0	610	3147	0	728	3240	0
Right Turn on Red			No			Yes			Yes			No
Satd. Flow (RTOR)					102			24				
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		542			3053			918			1555	
Travel Time (s)		10.6			59.5			17.9			30.3	
Confl. Peds. (#/hr)	20					20	1		2	2		1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Adj. Flow (vph)	71	186	319	68	200	115	451	522	98	126	357	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	505	0	68	315	0	451	620	0	126	434	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	13.5	31.5		13.5	31.5		24.0	46.5		13.5	36.0	
Total Split (s)	13.5	31.5		13.5	31.5		24.0	46.5		13.5	36.0	
Total Split (%)	12.9%	30.0%		12.9%	30.0%		22.9%	44.3%		12.9%	34.3%	
Maximum Green (s)	9.5	25.5		9.5	25.5		20.0	40.5		9.5	30.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	1.0	1.5		1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Minimum Gap (s)	0.2	4.0		0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Time To Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Recall Mode	None	Max		None	Max		None	C-Max		None	C-Max	
Walk Time (s)					2.0						2.0	
Flash Dont Walk (s)					23.5						28.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)	37.8	28.6		37.8	28.7		56.0	41.1		41.0	30.1	
Actuated g/C Ratio	0.36	0.27		0.36	0.27		0.53	0.39		0.39	0.29	
v/c Ratio	0.19	0.63		0.25	0.35		0.88	0.50		0.35	0.47	
Control Delay	21.9	38.9		23.0	22.7		38.0	25.0		18.0	31.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.9	38.9		23.0	22.7		38.0	25.0		18.0	31.0	
LOS	C	D		C	C		D	C		B	C	
Approach Delay		36.8			22.7			30.4			28.1	
Approach LOS		D			C			C			C	
90th %ile Green (s)	9.5	25.5		9.5	25.5		20.0	40.5		9.5	30.0	
90th %ile Term Code	Max	MaxR		Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	9.5	25.5		9.5	25.5		20.0	40.5		9.5	30.0	
70th %ile Term Code	Max	MaxR		Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	8.8	26.0		9.0	26.2		20.0	40.5		9.5	30.0	
50th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.8	27.2		7.8	27.2		20.0	41.2		8.8	30.0	
30th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Gap	Coord	
10th %ile Green (s)	0.0	39.0		0.0	39.0		19.6	42.8		7.2	30.4	
10th %ile Term Code	Skip	MaxR		Skip	MaxR		Gap	Coord		Gap	Coord	
Stops (vph)	41	401		39	156		243	398		70	290	
Fuel Used(gal)	1	8		3	14		8	10		2	9	
CO Emissions (g/hr)	60	591		216	987		539	671		156	637	
NOx Emissions (g/hr)	12	115		42	192		105	131		30	124	
VOC Emissions (g/hr)	14	137		50	229		125	155		36	148	
Dilemma Vehicles (#)	0	22		0	14		0	27		0	20	
Queue Length 50th (ft)	30	162		29	61		188	157		33	120	
Queue Length 95th (ft)	60	224		58	102		#360	212		66	177	
Internal Link Dist (ft)		462			2973			838			1475	
Turn Bay Length (ft)	85			140			140			150		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	395	799		288	898		511	1246		372	928	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.18	0.63		0.24	0.35		0.88	0.50		0.34	0.47	

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 9 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 30.2 Intersection LOS: C
Intersection Capacity Utilization 90.7% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1067: S Ashland & Vermont St

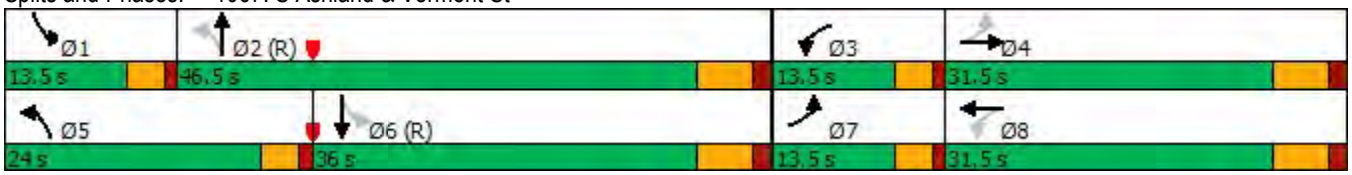

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	559	90	10	490	126	70	620	10	84	320	100
Future Volume (vph)	190	559	90	10	490	126	70	620	10	84	320	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	11	12	11	12	12	11	11	12
Storage Length (ft)	0		0	0		0	135		0	130		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			100			105		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		0.99	1.00		1.00	0.99	
Frt		0.984			0.970			0.998			0.964	
Flt Protected		0.989			0.999		0.950			0.950		
Satd. Flow (prot)	0	3011	0	0	2989	0	1545	3288	0	1559	2995	0
Flt Permitted		0.631			0.936		0.437			0.274		
Satd. Flow (perm)	0	1920	0	0	2800	0	707	3288	0	448	2995	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			36			2			49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5379			1323			450			5338	
Travel Time (s)		122.3			30.1			10.2			121.3	
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Adj. Flow (vph)	204	601	97	11	527	135	75	667	11	90	344	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	902	0	0	673	0	75	678	0	90	452	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.07	1.07	1.12	1.07	1.12	1.07	1.07	1.12	1.12	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		15.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	37.0		21.0	21.0		6.5	31.0		6.5	21.0	
Total Split (s)	10.0	40.0		30.0	30.0		15.0	33.0		12.0	30.0	
Total Split (%)	11.8%	47.1%		35.3%	35.3%		17.6%	38.8%		14.1%	35.3%	
Maximum Green (s)	6.5	34.0		24.0	24.0		11.5	27.0		8.5	24.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Time To Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		9.0						7.0				
Flash Dont Walk (s)		22.0						18.0				
Pedestrian Calls (#/hr)		11						14				
Act Effct Green (s)		34.4			34.4		34.1	25.3		33.8	25.1	
Actuated g/C Ratio		0.43			0.43		0.42	0.31		0.42	0.31	
v/c Ratio		1.09			0.55		0.20	0.66		0.31	0.47	
Control Delay		84.1			19.7		13.2	27.8		15.0	22.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		84.1			19.7		13.2	27.8		15.0	22.2	
LOS		F			B		B	C		B	C	
Approach Delay		84.1			19.7			26.4			21.0	
Approach LOS		F			B			C			C	
90th %ile Green (s)	0.0	34.0		34.0	34.0		10.0	27.0		8.5	25.5	
90th %ile Term Code	Skip	Max		Hold	Hold		Gap	Max		Max	Hold	
70th %ile Green (s)	0.0	34.0		34.0	34.0		8.6	27.0		8.5	26.9	
70th %ile Term Code	Skip	Max		Hold	Hold		Gap	Max		Max	Hold	
50th %ile Green (s)	0.0	34.0		34.0	34.0		7.7	27.0		8.1	27.4	
50th %ile Term Code	Skip	Max		Hold	Hold		Gap	Max		Gap	Hold	
30th %ile Green (s)	0.0	34.0		34.0	34.0		6.8	26.3		7.1	26.6	
30th %ile Term Code	Skip	Max		Hold	Hold		Gap	Gap		Gap	Hold	
10th %ile Green (s)	0.0	34.0		34.0	34.0		0.0	19.3		0.0	19.3	
10th %ile Term Code	Skip	Max		Hold	Hold		Skip	Gap		Skip	Hold	
Stops (vph)		640			432		37	517		44	286	
Fuel Used(gal)		53			11		1	9		4	21	
CO Emissions (g/hr)		3711			794		45	604		279	1465	
NOx Emissions (g/hr)		722			154		9	118		54	285	
VOC Emissions (g/hr)		860			184		10	140		65	339	
Dilemma Vehicles (#)		0			0		0	0		0	0	
Queue Length 50th (ft)		~299			135		21	160		25	87	
Queue Length 95th (ft)		#423			193		44	221		51	137	
Internal Link Dist (ft)		5299			1243			370			5258	
Turn Bay Length (ft)							135			130		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		829			1214		440	1114		308	1008	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		1.09			0.55		0.17	0.61		0.29	0.45	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 80.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 41.9 Intersection LOS: D
Intersection Capacity Utilization 87.1% ICU Level of Service E
Analysis Period (min) 15
90th %ile Actuated Cycle: 85
70th %ile Actuated Cycle: 85
50th %ile Actuated Cycle: 84.6
30th %ile Actuated Cycle: 82.9
10th %ile Actuated Cycle: 65.3
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1068: Halsted Street & 127th Street

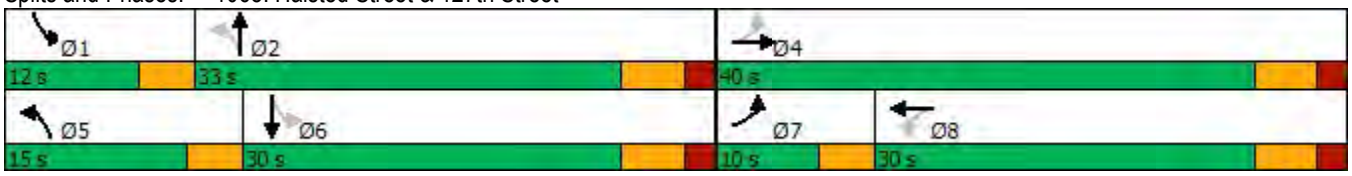

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	175	45	77	152	15	40	670	89	10	370	45
Future Volume (vph)	50	175	45	77	152	15	40	670	89	10	370	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	60		0	55		0	105		0	90		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			55			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.99	1.00		1.00	1.00		1.00	1.00	
Frt		0.969			0.987			0.982			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1676	1886	0	1629	1939	0	1660	3205	0	1140	3193	0
Flt Permitted	0.643			0.578			0.489			0.277		
Satd. Flow (perm)	1128	1886	0	982	1939	0	853	3205	0	332	3193	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			9			30			28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2456			1385			1856			450	
Travel Time (s)		55.8			31.5			42.2			10.2	
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Adj. Flow (vph)	54	190	49	84	165	16	43	728	97	11	402	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	239	0	84	181	0	43	825	0	11	451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	19.0	19.0		19.0	19.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
v/c Ratio	0.13	0.34		0.23	0.25		0.11	0.53		0.07	0.29	
Control Delay	14.7	14.9		25.9	24.7		10.3	13.0		10.7	10.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.7	14.9		25.9	24.7		10.3	13.0		10.7	10.3	
LOS	B	B		C	C		B	B		B	B	
Approach Delay		14.9			25.1			12.9			10.3	
Approach LOS		B			C			B			B	
Stops (vph)	33	136		74	154		23	482		7	220	
Fuel Used(gal)	2	11		2	3		1	16		0	4	
CO Emissions (g/hr)	173	760		115	244		55	1095		7	247	
NOx Emissions (g/hr)	34	148		22	48		11	213		1	48	
VOC Emissions (g/hr)	40	176		27	57		13	254		2	57	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	14	59		36	75		9	108		2	50	
Queue Length 95th (ft)	36	109		m37	m71		25	156		11	77	
Internal Link Dist (ft)		2376			1305			1776			370	
Turn Bay Length (ft)	60			55			105			90		
Base Capacity (vph)	416	710		362	721		406	1544		158	1537	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.34		0.23	0.25		0.11	0.53		0.07	0.29	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.53
Intersection Signal Delay: 14.3 Intersection LOS: B
Intersection Capacity Utilization 70.3% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1069: Halsted Street & Vermont St

Lane Group	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	618	198	660	15	5	15	5	50	10	0	5	5
Future Volume (vph)	618	198	660	15	5	15	5	50	10	0	5	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	12	12	16	12	12	16	12	12
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00				1.00			0.99		
Frt			0.997				0.911			0.930		
Flt Protected			0.989				0.987			0.977		
Satd. Flow (prot)	2956	0	2958	0	0	0	1749	0	0	1828	0	0
Flt Permitted			0.561				0.933			0.892		
Satd. Flow (perm)	2956	0	1677	0	0	0	1651	0	0	1669	0	0
Right Turn on Red				No				No				No
Satd. Flow (RTOR)												
Link Speed (mph)	30		30				30			30		
Link Distance (ft)	1323		3930				1256			658		
Travel Time (s)	30.1		89.3				28.5			15.0		
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	687	220	733	17	6	17	6	56	11	0	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	687	0	970	0	0	0	85	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)	0		0				0			0		
Link Offset(ft)	0		0				0			0		
Crosswalk Width(ft)	16		16				16			16		
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.07	1.07	0.91	1.07	1.07	0.91	1.07	1.07
Turning Speed (mph)		15		9	15	15		9	15		9	9
Turn Type	NA	custom	NA		Perm	Perm	NA		Perm	NA		
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7			2	2			6			
Minimum Split (s)	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0		
Total Split (s)	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0		
Total Split (%)	35.4%	13.8%	49.2%		27.7%	27.7%	27.7%		27.7%	27.7%		
Maximum Green (s)	18.0	6.0	27.0		14.0	14.0	14.0		14.0	14.0		
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	0.0	2.0		1.0	1.0	1.0		1.0	1.0		
Lost Time Adjust (s)	0.0		0.0				0.0			0.0		
Total Lost Time (s)	5.0		5.0				4.0			4.0		
Lead/Lag	Lag	Lead										
Lead-Lag Optimize?												
Walk Time (s)	9.0		18.0		5.0	5.0	5.0					
Flash Dont Walk (s)	9.0		9.0		9.0	9.0	9.0					
Pedestrian Calls (#/hr)	0		0		0	0	0					
Act Effct Green (s)	18.0		27.0				14.0			14.0		

Lane Group	NEL	NER
Lane Configurations		
Traffic Volume (vph)	0	289
Future Volume (vph)	0	289
Ideal Flow (vphpl)	1800	1800
Lane Width (ft)	12	12
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt	0.865	
Flt Protected		
Satd. Flow (prot)	1428	0
Flt Permitted		
Satd. Flow (perm)	1428	0
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)	30	
Link Distance (ft)	1385	
Travel Time (s)	31.5	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.90	0.90
Heavy Vehicles (%)	0%	9%
Adj. Flow (vph)	0	321
Shared Lane Traffic (%)		
Lane Group Flow (vph)	321	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	24	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.07	1.07
Turning Speed (mph)	15	9
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Minimum Split (s)	15.0	
Total Split (s)	15.0	
Total Split (%)	23.1%	
Maximum Green (s)	10.0	
Yellow Time (s)	3.0	
All-Red Time (s)	2.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	5.0	
Lead/Lag		
Lead-Lag Optimize?		
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)	10.0	

Lane Group	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
v/c Ratio	0.84		1.25				0.24			0.06		
Control Delay	33.7		141.3				23.2			21.0		
Queue Delay	0.0		0.0				0.0			0.0		
Total Delay	33.7		141.3				23.2			21.0		
LOS	C		F				C			C		
Approach Delay	33.7		141.3				23.3			21.0		
Approach LOS	C		F				C			C		
Stops (vph)	535		509				61			19		
Fuel Used(gal)	14		55				1			0		
CO Emissions (g/hr)	948		3821				101			21		
NOx Emissions (g/hr)	185		743				20			4		
VOC Emissions (g/hr)	220		886				23			5		
Dilemma Vehicles (#)	0		0				0			0		
Queue Length 50th (ft)	134		~237				28			7		
Queue Length 95th (ft)	#222		#380				62			24		
Internal Link Dist (ft)	1243		3850				1176			578		
Turn Bay Length (ft)												
Base Capacity (vph)	818		775				355			359		
Starvation Cap Reductn	0		0				0			0		
Spillback Cap Reductn	0		0				0			0		
Storage Cap Reductn	0		0				0			0		
Reduced v/c Ratio	0.84		1.25				0.24			0.06		

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 1.47
Intersection Signal Delay: 117.6 Intersection LOS: F
Intersection Capacity Utilization 90.3% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1070: S Wallance St & 127th Street

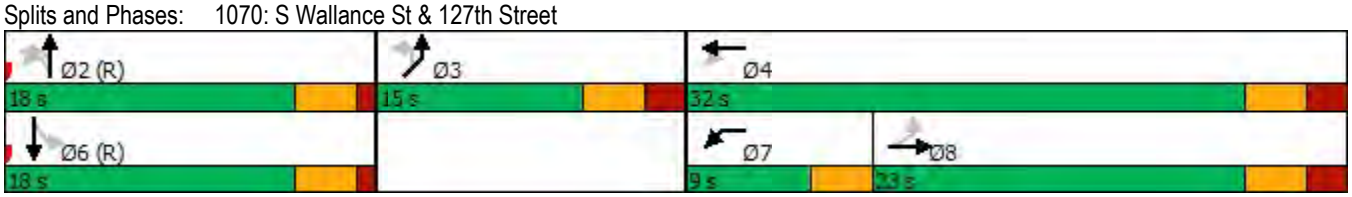

Lane Group	NEL	NER
Actuated g/C Ratio	0.15	
v/c Ratio	1.47	
Control Delay	257.9	
Queue Delay	0.0	
Total Delay	257.9	
LOS	F	
Approach Delay	257.9	
Approach LOS	F	
Stops (vph)	228	
Fuel Used(gal)	20	
CO Emissions (g/hr)	1367	
NOx Emissions (g/hr)	266	
VOC Emissions (g/hr)	317	
Dilemma Vehicles (#)	0	
Queue Length 50th (ft)	~187	
Queue Length 95th (ft)	#335	
Internal Link Dist (ft)	1305	
Turn Bay Length (ft)		
Base Capacity (vph)	219	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	1.47	

Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	200	789	681	71	54	200
Future Volume (vph)	200	789	681	71	54	200
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	150
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.986			0.850
Flt Protected		0.990			0.950	
Satd. Flow (prot)	0	3010	2997	0	1520	1360
Flt Permitted		0.628			0.950	
Satd. Flow (perm)	0	1909	2997	0	1520	1360
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			31			215
Link Speed (mph)		30	30		30	
Link Distance (ft)		3930	637		2686	
Travel Time (s)		89.3	14.5		61.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	215	848	732	76	58	215
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1063	808	0	58	215
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (%)	67.7%	67.7%	67.7%		32.3%	32.3%
Maximum Green (s)	40.0	40.0	40.0		17.0	17.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			30.0			
Flash Dont Walk (s)			10.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		40.0	40.0		17.0	17.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.62	0.62		0.26	0.26
v/c Ratio		0.91	0.44		0.15	0.42
Control Delay		20.3	6.2		17.7	4.7
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		20.3	6.2		17.7	4.7
LOS		C	A		B	A
Approach Delay		20.3	6.2		7.5	
Approach LOS		C	A		A	
Stops (vph)		942	196		38	25
Fuel Used(gal)		40	6		3	9
CO Emissions (g/hr)		2767	402		186	607
NOx Emissions (g/hr)		538	78		36	118
VOC Emissions (g/hr)		641	93		43	141
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		251	47		16	3
Queue Length 95th (ft)		m262	70		35	29
Internal Link Dist (ft)		3850	557		2606	
Turn Bay Length (ft)						150
Base Capacity (vph)		1174	1856		397	514
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.91	0.44		0.15	0.42

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 43 (66%), Referenced to phase 2: and 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 13.3	Intersection LOS: B
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1071: 127th Street & State Street

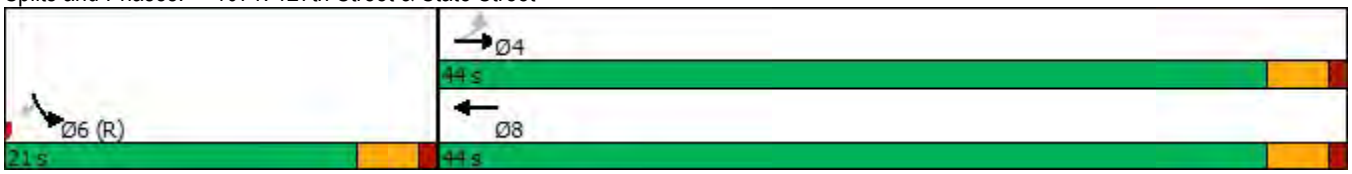

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	60	778	692	217	159	60
Future Volume (vph)	60	778	692	217	159	60
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.99			
Frt			0.964			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	2926	2810	0	1464	1373
Flt Permitted		0.822			0.950	
Satd. Flow (perm)	0	2415	2810	0	1464	1373
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			111			65
Link Speed (mph)		30	30		30	
Link Distance (ft)		637	664		6686	
Travel Time (s)		14.5	15.1		152.0	
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Adj. Flow (vph)	65	846	752	236	173	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	911	988	0	173	65
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	42.0	42.0	42.0		23.0	23.0
Total Split (s)	42.0	42.0	42.0		23.0	23.0
Total Split (%)	64.6%	64.6%	64.6%		35.4%	35.4%
Maximum Green (s)	38.0	38.0	38.0		19.0	19.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			25.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)			13.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
v/c Ratio		0.65	0.59		0.41	0.15
Control Delay		8.9	6.1		21.9	7.2
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		8.9	6.1		21.9	7.2
LOS		A	A		C	A
Approach Delay		8.9	6.1		17.9	
Approach LOS		A	A		B	
Stops (vph)		283	452		102	16
Fuel Used(gal)		7	22		11	4
CO Emissions (g/hr)		506	1543		784	275
NOx Emissions (g/hr)		99	300		153	53
VOC Emissions (g/hr)		117	358		182	64
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		76	67		50	0
Queue Length 95th (ft)		m101	89		m70	m2
Internal Link Dist (ft)		557	584		6606	
Turn Bay Length (ft)						30
Base Capacity (vph)		1411	1688		427	447
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.65	0.59		0.41	0.15

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 42 (65%), Referenced to phase 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 8.6	Intersection LOS: A
Intersection Capacity Utilization 89.2%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1072: 127th Street & Michigan Avenue

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	737	160	32	343	410	144
Future Volume (vph)	737	160	32	343	410	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	12	12	10	10
Storage Length (ft)		100	105		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor		0.97	1.00			0.98
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1568	1382	1660	3196	1565	1400
Flt Permitted			0.129		0.950	
Satd. Flow (perm)	1568	1347	225	3196	1565	1374
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						113
Link Speed (mph)	30			35	30	
Link Distance (ft)	163			5340	2671	
Travel Time (s)	3.7			104.0	60.7	
Confl. Peds. (#/hr)		4	4			8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Adj. Flow (vph)	810	176	35	377	451	158
Shared Lane Traffic (%)						
Lane Group Flow (vph)	810	176	35	377	451	158
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.12	1.12	1.07	1.07	1.17	1.17
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm
Protected Phases	4	2		8	2	
Permitted Phases		4	8			2
Minimum Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (%)	55.4%	44.6%	55.4%	55.4%	44.6%	44.6%
Maximum Green (s)	31.0	24.0	31.0	31.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	17.0	5.0			5.0	5.0
Flash Dont Walk (s)	14.0	19.0			19.0	19.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Pedestrian Calls (#/hr)	0	0			0	0
Act Effct Green (s)	31.0	55.0	31.0	31.0	24.0	24.0
Actuated g/C Ratio	0.48	0.85	0.48	0.48	0.37	0.37
v/c Ratio	1.08	0.15	0.33	0.25	0.78	0.27
Control Delay	81.5	1.1	20.9	10.6	30.1	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.5	1.1	20.9	10.6	30.1	6.7
LOS	F	A	C	B	C	A
Approach Delay	67.2			11.5	24.0	
Approach LOS	E			B	C	
Stops (vph)	640	27	25	189	336	37
Fuel Used(gal)	31	3	2	15	13	3
CO Emissions (g/hr)	2148	240	109	1076	902	238
NOx Emissions (g/hr)	418	47	21	209	176	46
VOC Emissions (g/hr)	498	56	25	249	209	55
Dilemma Vehicles (#)	0	0	0	26	0	0
Queue Length 50th (ft)	~382	0	8	43	154	11
Queue Length 95th (ft)	#591	m0	33	68	#298	47
Internal Link Dist (ft)	83			5260	2591	
Turn Bay Length (ft)		100	105			
Base Capacity (vph)	747	1152	107	1524	577	578
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.15	0.33	0.25	0.78	0.27

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 42.7 Intersection LOS: D
Intersection Capacity Utilization 73.3% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1073: Indiana Ave & 130th Street

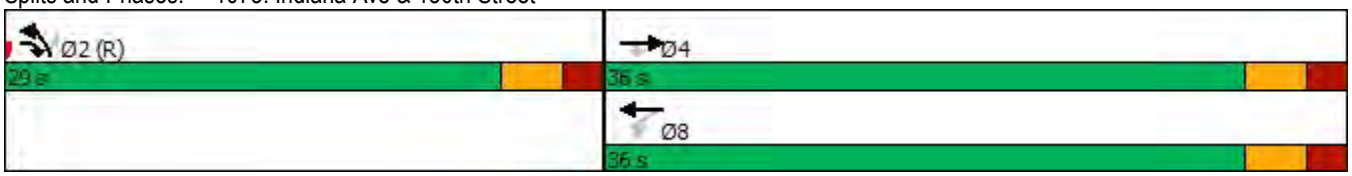

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	494	0	30	630	90	0	0	0	50	5	89
Future Volume (vph)	87	494	0	30	630	90	0	0	0	50	5	89
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	9	12	12	12	11	15	11
Storage Length (ft)	0		30	0		50	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00	0.88					0.96	
Frt						0.850					0.917	
Flt Protected		0.993			0.998						0.983	
Satd. Flow (prot)	0	3073	0	0	1615	1377	0	1800	0	0	1579	0
Flt Permitted		0.713			0.968						0.929	
Satd. Flow (perm)	0	2197	0	0	1566	1213	0	1800	0	0	1486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						100					99	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			105			169			1380	
Travel Time (s)		5.2			2.4			3.8			31.4	
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Adj. Flow (vph)	97	549	0	33	700	100	0	0	0	56	6	99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	646	0	0	733	100	0	0	0	0	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.07	1.07	1.17	1.22	1.07	1.07	1.07	1.12	0.95	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		pm+pt	NA	Perm				pm+pt	NA	
Protected Phases		4		3	3 8			2		1	6	
Permitted Phases	4			3 8	3	3 8	2	2		6		
Minimum Split (s)	16.0	16.0		18.0			12.0	12.0		20.0	32.0	
Total Split (s)	35.0	35.0		18.0			12.0	12.0		20.0	32.0	
Total Split (%)	41.2%	41.2%		21.2%			14.1%	14.1%		23.5%	37.6%	
Maximum Green (s)	31.0	31.0		14.0			9.0	9.0		15.0	27.0	
Yellow Time (s)	3.0	3.0		3.0			3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0			0.0	0.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						3.0			5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?												
Walk Time (s)				2.0							14.0	

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Minimum Split (s)	35.0
Total Split (s)	35.0
Total Split (%)	41%
Maximum Green (s)	31.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	18.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)				12.0							13.0	
Pedestrian Calls (#/hr)				0							0	
Act Effct Green (s)		31.0			45.0	49.0					27.0	
Actuated g/C Ratio		0.36			0.53	0.58					0.32	
v/c Ratio		0.81			0.88	0.13					0.29	
Control Delay		33.8			16.7	0.3					10.9	
Queue Delay		1.3			50.6	27.3					0.0	
Total Delay		35.1			67.3	27.6					10.9	
LOS		D			E	C					B	
Approach Delay		35.1			62.5						10.9	
Approach LOS		D			E						B	
Stops (vph)		496			182	1					46	
Fuel Used(gal)		9			4	0					2	
CO Emissions (g/hr)		627			265	6					149	
NOx Emissions (g/hr)		122			51	1					29	
VOC Emissions (g/hr)		145			61	1					35	
Dilemma Vehicles (#)		0			0	0					0	
Queue Length 50th (ft)		160			120	0					23	
Queue Length 95th (ft)		#252			m24	m0					68	
Internal Link Dist (ft)		148			25			89			1300	
Turn Bay Length (ft)						50						
Base Capacity (vph)		801			837	741					555	
Starvation Cap Reductn		0			342	630					0	
Spillback Cap Reductn		46			0	0					1	
Storage Cap Reductn		0			0	0					0	
Reduced v/c Ratio		0.86			1.48	0.90					0.29	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 125
Control Type: Pretimed
Maximum v/c Ratio: 1.66
Intersection Signal Delay: 46.6 Intersection LOS: D
Intersection Capacity Utilization 87.2% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1955: 115th Street & Cottage Grove Avenue

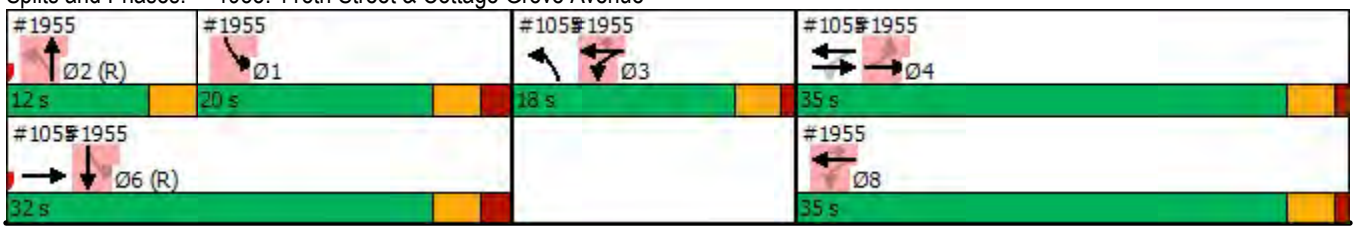

Lane Group	Ø8
Flash Dont Walk (s)	13.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1035	70	137	755	0	314	0	290	0	0	0
Future Volume (vph)	0	1035	70	137	755	0	314	0	290	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	16	12
Storage Length (ft)	165		165	165		165	0		0	0		0
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	210			200			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected				0.950				0.950				
Satd. Flow (prot)	1800	3320	1530	1644	3320	1800	0	1710	1500	0	2040	0
Flt Permitted				0.162				0.757				
Satd. Flow (perm)	1800	3320	1530	280	3320	1800	0	1363	1500	0	2040	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		5343			1170			134			331	
Travel Time (s)		104.1			22.8			3.0			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	0	1078	73	143	786	0	327	0	302	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1078	73	143	786	0	0	327	302	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	4	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	33.0	33.0	33.0	7.0	43.0	43.0	6.0	6.0	6.0	6.0	6.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	37.0	37.0	37.0	10.0	47.0	47.0	10.0	10.0	10.0	10.0	10.0	
Total Split (s)	47.0	47.0	47.0	10.0	57.0	57.0	28.0	28.0	28.0	28.0	28.0	
Total Split (%)	55.3%	55.3%	55.3%	11.8%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%	32.9%	
Maximum Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		4.0	4.0		4.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)		43.6	43.6	54.6	53.6			23.4	23.4			
Actuated g/C Ratio		0.51	0.51	0.64	0.63			0.28	0.28			
v/c Ratio		0.63	0.09	0.49	0.38			0.87	0.73			
Control Delay		17.2	11.4	12.0	8.3			54.8	39.9			
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0			
Total Delay		17.2	11.4	12.0	8.3			54.8	39.9			
LOS		B	B	B	A			D	D			
Approach Delay		16.8			8.9			47.6				
Approach LOS		B			A			D				
90th %ile Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold	
70th %ile Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
70th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold	
50th %ile Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
50th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold	
30th %ile Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0	24.0	24.0	24.0	
30th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold	
10th %ile Green (s)	46.2	46.2	46.2	7.0	56.2	56.2	20.8	20.8	20.8	20.8	20.8	
10th %ile Term Code	Coord	Coord	Coord	Min	Coord	Coord	Gap	Gap	Gap	Hold	Hold	
Stops (vph)		713	35	51	339			272	254			
Fuel Used(gal)		49	3	2	11			5	4			
CO Emissions (g/hr)		3419	218	147	803			373	284			
NOx Emissions (g/hr)		665	43	29	156			73	55			
VOC Emissions (g/hr)		792	51	34	186			86	66			
Dilemma Vehicles (#)		61	0	0	44			0	0			
Queue Length 50th (ft)		210	19	27	97			164	144			
Queue Length 95th (ft)		276	41	50	131			#311	#256			
Internal Link Dist (ft)		5263			1090			54			251	
Turn Bay Length (ft)			165	165								
Base Capacity (vph)		1704	785	292	2095			384	423			
Starvation Cap Reductn		0	0	0	0			0	0			
Spillback Cap Reductn		0	0	0	0			0	0			
Storage Cap Reductn		0	0	0	0			0	0			
Reduced v/c Ratio		0.63	0.09	0.49	0.38			0.85	0.71			

Intersection Summary	
Area Type:	Other

Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 21.3	Intersection LOS: C
Intersection Capacity Utilization 91.7%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Ellis Avenue & 130th Street

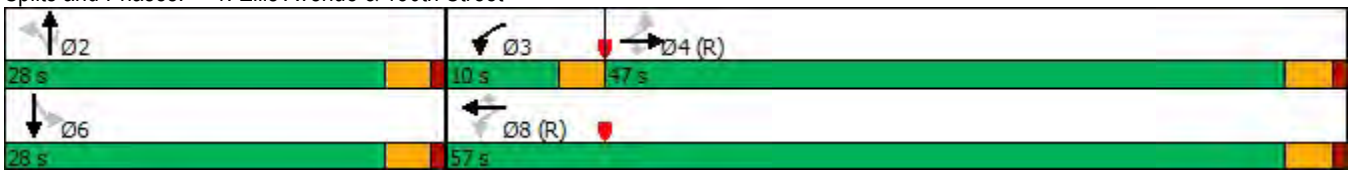

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	374	191	2	0	175
Future Volume (vph)	0	374	191	2	0	175
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.865	0.999			
Flt Protected						
Satd. Flow (prot)	0	1557	3417	0	0	3420
Flt Permitted						
Satd. Flow (perm)	0	1557	3417	0	0	3420
Link Speed (mph)	30		30			30
Link Distance (ft)	602		184			134
Travel Time (s)	13.7		4.2			3.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	416	212	2	0	194
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	416	214	0	0	194
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	374	191	2	0	175
Future Volume (Veh/h)	0	374	191	2	0	175
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	416	212	2	0	194
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						134
pX, platoon unblocked						
vC, conflicting volume	310	107			214	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	310	107			214	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	55			100	
cM capacity (veh/h)	663	933			1368	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	416	141	73	97	97
Volume Left	0	0	0	0	0
Volume Right	416	0	2	0	0
cSH	933	1700	1700	1700	1700
Volume to Capacity	0.45	0.08	0.04	0.06	0.06
Queue Length 95th (ft)	58	0	0	0	0
Control Delay (s)	11.9	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.9	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	9	2	4	2	2	64	1	2	154	2	6	70
Future Volume (vph)	9	2	4	2	2	64	1	2	154	2	6	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.966			0.872				0.998			
Flt Protected		0.970			0.999				0.999			
Satd. Flow (prot)	0	1687	0	0	1568	0	0	0	1744	0	0	0
Flt Permitted		0.970			0.999				0.999			
Satd. Flow (perm)	0	1687	0	0	1568	0	0	0	1744	0	0	0
Link Speed (mph)		30			30				30			
Link Distance (ft)		472			392				265			
Travel Time (s)		10.7			8.9				6.0			
Confl. Peds. (#/hr)						43				43		43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	4%
Adj. Flow (vph)	10	2	4	2	2	71	1	2	171	2	7	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	16	0	0	75	0	0	0	176	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	R NA	Left
Median Width(ft)		0			0				0			
Link Offset(ft)		0			0				0			
Crosswalk Width(ft)		16			16				16			
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	9	15		9	9	15
Sign Control		Stop			Stop				Free			

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	90	8
Future Volume (vph)	90	8
Ideal Flow (vphpl)	1800	1800
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected	0.978	
Satd. Flow (prot)	1722	1530
Flt Permitted	0.978	
Satd. Flow (perm)	1722	1530
Link Speed (mph)	30	
Link Distance (ft)	184	
Travel Time (s)	4.2	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.90	0.90
Heavy Vehicles (%)	1%	0%
Adj. Flow (vph)	100	9
Shared Lane Traffic (%)		
Lane Group Flow (vph)	185	9
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.07	1.07
Turning Speed (mph)		9
Sign Control	Free	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	9	2	4	2	2	64	1	2	154	2	6	70
Future Volume (Veh/h)	9	2	4	2	2	64	1	2	154	2	6	70
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	2	4	2	2	71	0	2	171	2	0	78
Pedestrians					43							
Lane Width (ft)					12.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					4							
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked							0.00				0.00	
vC, conflicting volume	547	476	100	480	484	258	0	109			0	216
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	547	476	100	480	484	258	0	109			0	216
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	97	100	100	100	100	90	0	100			0	94
cM capacity (veh/h)	363	444	961	443	439	730	0	1494			0	1294

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total	16	75	175	178	9
Volume Left	10	2	2	78	0
Volume Right	4	71	2	0	9
cSH	441	706	1494	1294	1700
Volume to Capacity	0.04	0.11	0.00	0.06	0.01
Queue Length 95th (ft)	3	9	0	5	0
Control Delay (s)	13.5	10.7	0.1	3.8	0.0
Lane LOS	B	B	A	A	
Approach Delay (s)	13.5	10.7	0.1	3.6	
Approach LOS	B	B			

Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	43.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	90	8
Future Volume (Veh/h)	90	8
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.90	0.90
Hourly flow rate (vph)	100	9
Pedestrians	43	
Lane Width (ft)	12.0	
Walking Speed (ft/s)	4.0	
Percent Blockage	4	
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	318	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	66	0	1	77
Future Volume (vph)	0	0	66	0	1	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						0.999
Satd. Flow (prot)	1765	0	1765	0	0	1763
Flt Permitted						0.999
Satd. Flow (perm)	1765	0	1765	0	0	1763
Link Speed (mph)	30		30			30
Link Distance (ft)	345		375			351
Travel Time (s)	7.8		8.5			8.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	72	0	1	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	72	0	0	85
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 8.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	66	0	1	77
Future Volume (Veh/h)	0	0	66	0	1	77
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	72	0	1	84
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	158	72			72	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	158	72			72	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	833	990			1528	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	72	85
Volume Left	0	0	1
Volume Right	0	0	0
cSH	1700	1700	1528
Volume to Capacity	0.00	0.04	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.1
Lane LOS	A		A
Approach Delay (s)	0.0	0.0	0.1
Approach LOS	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	8.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	0	48	12	0	1	48	20
Future Volume (vph)	0	48	12	0	1	48	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865						
Flt Protected							0.966
Satd. Flow (prot)	1557	0	1800	0	0	0	1739
Flt Permitted							0.966
Satd. Flow (perm)	1557	0	1800	0	0	0	1739
Link Speed (mph)	30		30				30
Link Distance (ft)	396		262				692
Travel Time (s)	9.0		6.0				15.7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	51	13	0	1	51	21
Shared Lane Traffic (%)							
Lane Group Flow (vph)	51	0	13	0	0	0	73
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	R NA	Left	Left
Median Width(ft)	12		0				0
Link Offset(ft)	0		0				0
Crosswalk Width(ft)	16		16				16
Two way Left Turn Lane							
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9		9	9	15	
Sign Control	Stop		Free				Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.6%	ICU Level of Service A
Analysis Period (min) 15	

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (veh/h)	0	48	12	0	1	48	20
Future Volume (Veh/h)	0	48	12	0	1	48	20
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	51	13	0	0	51	21
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None				None
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	136	13			0	13	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	136	13			0	13	
tC, single (s)	6.4	6.2			0.0	4.1	
tC, 2 stage (s)							
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	95			0	97	
cM capacity (veh/h)	835	1073			0	1619	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	51	13	72
Volume Left	0	0	51
Volume Right	51	0	0
cSH	1073	1700	1619
Volume to Capacity	0.05	0.01	0.03
Queue Length 95th (ft)	4	0	2
Control Delay (s)	8.5	0.0	5.2
Lane LOS	A		A
Approach Delay (s)	8.5	0.0	5.2
Approach LOS	A		

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	20.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	2	0	5	0	0	0	1	7	0	1	0	14
Future Volume (vph)	2	0	5	0	0	0	1	7	0	1	0	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.899										0.992
Flt Protected		0.988						0.994				0.997
Satd. Flow (prot)	0	1599	0	0	1800	0	0	1789	0	0	0	1780
Flt Permitted		0.988						0.994				0.997
Satd. Flow (perm)	0	1599	0	0	1800	0	0	1789	0	0	0	1780
Link Speed (mph)		30			30			30				30
Link Distance (ft)		318			1039			274				262
Travel Time (s)		7.2			23.6			6.2				6.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	0	6	0	0	0	1	8	0	1	0	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	0	0	0	0	0	9	0	0	0	18
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		0			0			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Sign Control		Stop			Stop			Free				Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	1
Future Volume (vph)	1
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	1
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	2	0	5	0	0	0	1	7	0	1	0	14
Future Volume (Veh/h)	2	0	5	0	0	0	1	7	0	1	0	14
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	6	0	0	0	1	8	0	0	0	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None				None
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked										0.00		
vC, conflicting volume	26	26	16	32	27	8	17			0	8	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	26	26	16	32	27	8	17			0	8	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	100	100	99	100	100	100	100			0	100	
cM capacity (veh/h)	988	870	1068	974	870	1080	1613			0	1625	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	8	0	9	17
Volume Left	2	0	1	0
Volume Right	6	0	0	1
cSH	1047	1700	1613	1625
Volume to Capacity	0.01	0.00	0.00	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	8.5	0.0	0.8	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.5	0.0	0.8	0.0
Approach LOS	A	A		

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	1
Future Volume (Veh/h)	1
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	1
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEU	SEL	SET	SER	NWL	NWT
Lane Configurations												
Traffic Volume (vph)	2	0	5	0	0	0	1	0	14	1	0	0
Future Volume (vph)	2	0	5	0	0	0	1	0	14	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.899							0.992			
Flt Protected		0.988							0.997			
Satd. Flow (prot)	0	1599	0	0	1800	0	0	0	1780	0	0	1800
Flt Permitted		0.988							0.997			
Satd. Flow (perm)	0	1599	0	0	1800	0	0	0	1780	0	0	1800
Link Speed (mph)		30			30				15			15
Link Distance (ft)		1039			253				374			412
Travel Time (s)		23.6			5.8				17.0			18.7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	0	6	0	0	0	1	0	16	1	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	0	0	0	0	0	0	18	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right	Left	Left
Median Width(ft)		0			0				0			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	9	15		9	15	
Sign Control		Free			Free				Stop			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.90
Heavy Vehicles (%)	0%
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEU	SEL	SET	SER	NWL	NWT
Lane Configurations												
Traffic Volume (veh/h)	2	0	5	0	0	0	1	0	14	1	0	0
Future Volume (Veh/h)	2	0	5	0	0	0	1	0	14	1	0	0
Sign Control		Free			Free				Stop			Stop
Grade		0%			0%				0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	6	0	0	0	0	0	16	1	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	0			6			0	7	10	0	16	7
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			6			0	7	10	0	16	7
tC, single (s)	4.1			4.1			0.0	7.1	6.5	6.2	7.1	6.5
tC, 2 stage (s)												
tF (s)	2.2			2.2			0.0	3.5	4.0	3.3	3.5	4.0
p0 queue free %	100			100			0	100	98	100	100	100
cM capacity (veh/h)	1636			1628			0	1017	888	1091	989	891

Direction, Lane #	EB 1	WB 1	SE 1	NW 1
Volume Total	8	0	17	0
Volume Left	2	0	0	0
Volume Right	6	0	1	0
cSH	1636	1700	898	1700
Volume to Capacity	0.00	0.00	0.02	0.00
Queue Length 95th (ft)	0	0	1	0
Control Delay (s)	1.8	0.0	9.1	0.0
Lane LOS	A		A	A
Approach Delay (s)	1.8	0.0	9.1	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay	6.8		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	NWR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.90
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	3
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	3
tC, single (s)	6.2
tC, 2 stage (s)	
tF (s)	3.3
p0 queue free %	100
cM capacity (veh/h)	1087

Direction, Lane #

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Future Volume (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.865									
Flt Protected		0.950							0.988			
Satd. Flow (prot)	0	1676	0	0	0	1765	0	0	1744	0	0	1765
Flt Permitted		0.950							0.988			
Satd. Flow (perm)	0	1676	0	0	0	1765	0	0	1744	0	0	1765
Link Speed (mph)			30			30			30			30
Link Distance (ft)			306			254			288			234
Travel Time (s)			7.0			5.8			6.5			5.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	2	0	1	0	0	0	1	3	0	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	1	0	0	0	0	0	4	0	0	2
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			12			0			0			0
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Sign Control			Stop			Stop			Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization Err%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1800
Lane Util. Factor	1.00
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.92
Adj. Flow (vph)	0
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.07
Turning Speed (mph)	9
Sign Control	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	1	2	0	1	0	0	0	1	3	0	0	2
Future Volume (Veh/h)	1	2	0	1	0	0	0	1	3	0	0	2
Sign Control			Stop			Stop			Free			Free
Grade			0%			0%			0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2	0	1	0	0	0	1	3	0	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked	0.00											
vC, conflicting volume	0	7	7	2	8	7	3	2			3	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	7	7	2	8	7	3	2			3	
tC, single (s)	0.0	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1	
tC, 2 stage (s)												
tF (s)	0.0	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2	
p0 queue free %	0	100	100	100	100	100	100	100			100	
cM capacity (veh/h)	0	1012	888	1082	1010	888	1081	1620			1619	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	3	0	4	2
Volume Left	2	0	1	0
Volume Right	1	0	0	0
cSH	1035	1700	1620	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	8.5	0.0	1.8	0.0
Lane LOS	A	A	A	
Approach Delay (s)	8.5	0.0	1.8	0.0
Approach LOS	A	A		

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1120	5	40	800	50	0	0	0	795	120	520
Future Volume (vph)	35	1120	5	40	800	50	0	0	0	795	120	520
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	11
Storage Length (ft)	120		0	180		190	0		0	0		0
Storage Lanes	1		0	0		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor	0.85	1.00		1.00		0.49				0.99		0.98
Frt		0.999				0.850						0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	855	4856	0	1710	3226	765	0	1800	0	3285	1673	1464
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	727	4856	0	1708	3226	376	0	1800	0	3265	1673	1435
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		1				101						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		809			325			759			669	
Travel Time (s)		18.4			7.4			17.3			15.2	
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	4		1			7				1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Adj. Flow (vph)	38	1204	5	43	860	54	0	0	0	855	129	559
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	1209	0	43	860	54	0	0	0	855	129	559
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	Perm				Split	NA	pm+ov
Protected Phases	7	4		3	8		5	5		6	6	7
Permitted Phases						8						6
Detector Phase	7	4		3	8	8	5	5		6	6	7
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	4.0	10.0	10.0		4.0	4.0	10.0
Minimum Split (s)	15.0	53.0		10.0	51.0	51.0	15.0	15.0		44.0	44.0	15.0
Total Split (s)	15.0	53.0		13.0	51.0	51.0	20.0	20.0		44.0	44.0	15.0
Total Split (%)	11.5%	40.8%		10.0%	39.2%	39.2%	15.4%	15.4%		33.8%	33.8%	11.5%
Maximum Green (s)	10.0	48.0		9.0	46.0	46.0	15.0	15.0		39.0	39.0	10.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		4.0	5.0	5.0		5.0		5.0	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lead		Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		Max	Max	None
Walk Time (s)		25.0			19.0	19.0				9.0	9.0	
Flash Dont Walk (s)		23.0			27.0	27.0				30.0	30.0	
Pedestrian Calls (#/hr)		0			0	0				0	0	
Act Effct Green (s)	10.0	71.0		8.0	66.0	66.0				39.0	39.0	49.0
Actuated g/C Ratio	0.08	0.55		0.06	0.51	0.51				0.30	0.30	0.38
v/c Ratio	0.58	0.46		0.41	0.53	0.23				0.87	0.26	1.03
Control Delay	92.1	19.0		71.1	26.3	6.9				53.7	36.3	85.4
Queue Delay	0.0	0.0		0.0	5.0	0.0				48.4	0.0	0.0
Total Delay	92.1	19.0		71.1	31.3	6.9				102.1	36.3	85.4
LOS	F	B		E	C	A				F	D	F
Approach Delay		21.3			31.7						90.5	
Approach LOS		C			C						F	
90th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
90th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
70th %ile Green (s)	10.0	68.0		9.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
70th %ile Term Code	Max	Coord		Max	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
50th %ile Green (s)	10.0	68.4		8.6	66.0	66.0	0.0	0.0		39.0	39.0	10.0
50th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
30th %ile Green (s)	10.0	69.7		7.3	66.0	66.0	0.0	0.0		39.0	39.0	10.0
30th %ile Term Code	Max	Coord		Gap	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
10th %ile Green (s)	10.0	81.0		0.0	66.0	66.0	0.0	0.0		39.0	39.0	10.0
10th %ile Term Code	Max	Coord		Skip	Coord	Coord	Skip	Skip		MaxR	MaxR	Max
Stops (vph)	32	657		39	369	8				722	89	581
Fuel Used(gal)	1	15		1	8	0				17	2	15
CO Emissions (g/hr)	74	1054		63	584	17				1176	140	1046
NOx Emissions (g/hr)	14	205		12	114	3				229	27	203
VOC Emissions (g/hr)	17	244		15	135	4				273	32	242
Dilemma Vehicles (#)	0	0		0	0	0				0	0	0
Queue Length 50th (ft)	32	227		38	196	3				352	83	~461

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#86	268		m52	258	m11				#443	137	#729
Internal Link Dist (ft)		729			245			679			589	
Turn Bay Length (ft)	120			180		190						
Base Capacity (vph)	65	2653		118	1637	240				985	501	543
Starvation Cap Reductn	0	0		0	696	0				0	0	0
Spillback Cap Reductn	0	64		0	0	0				226	0	0
Storage Cap Reductn	0	0		0	0	0				0	0	0
Reduced v/c Ratio	0.58	0.47		0.36	0.91	0.23				1.13	0.26	1.03

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 124 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 52.5 Intersection LOS: D
Intersection Capacity Utilization 81.5% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1002: Lafayette Avenue & 95th Street

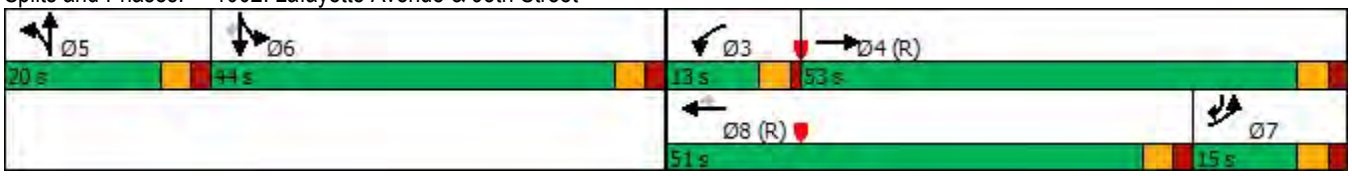

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	475	1135	305	70	720	370	130	335	75	55	0	40
Future Volume (vph)	475	1135	305	70	720	370	130	335	75	55	0	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	11	12	11	12	11	14	12	12	12
Storage Length (ft)	200		0	150		350	300		400	0		0
Storage Lanes	0		0	1		1	1		1	1		1
Taper Length (ft)	25			25			100			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor	0.82	0.99		1.00		0.68		1.00	0.92	0.97		
Frt		0.968				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.986		0.950		
Satd. Flow (prot)	3285	3259	0	1653	3138	1464	0	3191	1600	855	0	765
Flt Permitted	0.950			0.950				0.986		0.950		
Satd. Flow (perm)	2697	3259	0	1650	3138	998	0	3185	1479	827	0	765
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31				78			92			134
Link Speed (mph)		30			35			30			30	
Link Distance (ft)		325			954			10393			681	
Travel Time (s)		7.4			18.6			236.2			15.5	
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	1					6						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Adj. Flow (vph)	505	1207	324	74	766	394	138	356	80	59	0	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	505	1531	0	74	766	394	0	494	80	59	0	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.12	1.07	1.12	1.07	1.12	0.99	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1		1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50		50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0		0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50		50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Prot		Prot
Protected Phases	7	4		3	8	6	2	2	3	6		6
Permitted Phases						8			2			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8	6	2	2	3	6		6
Switch Phase												
Minimum Initial (s)	10.0	4.0		6.0	4.0	10.0	4.0	4.0	6.0	10.0		10.0
Minimum Split (s)	14.0	56.0		11.0	41.0	15.0	41.0	41.0	11.0	15.0		15.0
Total Split (s)	28.0	56.0		13.0	41.0	20.0	41.0	41.0	13.0	20.0		20.0
Total Split (%)	21.5%	43.1%		10.0%	31.5%	15.4%	31.5%	31.5%	10.0%	15.4%		15.4%
Maximum Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
All-Red Time (s)	1.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	4.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	C-Max		None	C-Max	None	Max	Max	None	None		None
Walk Time (s)		23.0			11.0		7.0	7.0				
Flash Dont Walk (s)		28.0			25.0		29.0	29.0				
Pedestrian Calls (#/hr)		0			0		0	0				
Act Effct Green (s)	23.0	51.3		8.0	37.4	52.0		36.0	44.0	14.7		14.7
Actuated g/C Ratio	0.18	0.39		0.06	0.29	0.40		0.28	0.34	0.11		0.11
v/c Ratio	0.87	1.17		0.73	0.85	0.79		0.56	0.14	0.61		0.21
Control Delay	59.7	117.5		97.5	54.3	28.1		43.7	5.5	82.0		2.3
Queue Delay	7.2	0.0		0.0	0.0	0.0		0.3	0.0	0.0		0.2
Total Delay	66.8	117.5		97.5	54.3	28.1		44.0	5.5	82.0		2.5
LOS	E	F		F	D	C		D	A	F		A
Approach Delay		104.9			48.5			38.6			48.5	
Approach LOS		F			D			D			D	
90th %ile Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
90th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
70th %ile Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
70th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
50th %ile Green (s)	24.0	51.0		8.0	36.0	15.0	36.0	36.0	8.0	15.0		15.0
50th %ile Term Code	Max	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
30th %ile Green (s)	23.1	51.0		8.0	36.9	15.0	36.0	36.0	8.0	15.0		15.0
30th %ile Term Code	Gap	Coord		Max	Coord	Max	MaxR	MaxR	Max	Max		Max
10th %ile Green (s)	19.7	52.6		8.0	41.9	13.4	36.0	36.0	8.0	13.4		13.4
10th %ile Term Code	Gap	Coord		Hold	Coord	Gap	MaxR	MaxR	Hold	Gap		Gap
Stops (vph)	426	1282		62	649	238		405	21	50		0
Fuel Used(gal)	9	45		2	18	6		45	6	1		0
CO Emissions (g/hr)	652	3155		163	1244	451		3146	451	104		16
NOx Emissions (g/hr)	127	614		32	242	88		612	88	20		3
VOC Emissions (g/hr)	151	731		38	288	105		729	104	24		4
Dilemma Vehicles (#)	0	0		0	27	0		0	0	0		0
Queue Length 50th (ft)	171	~818		62	325	116		200	3	48		0
Queue Length 95th (ft)	m#247	#608		#144	#433	#201		263	m9	#111		0
Internal Link Dist (ft)		245			874			10313			601	
Turn Bay Length (ft)	200			150		350			400			
Base Capacity (vph)	606	1305		101	901	502		883	568	98		206
Starvation Cap Reductn	70	3		0	0	0		0	0	0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0	0		80	0	0		20
Storage Cap Reductn	0	0		0	0	0		0	0	0		0
Reduced v/c Ratio	0.94	1.18		0.73	0.85	0.78		0.62	0.14	0.60		0.23

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 76.2 Intersection LOS: E
Intersection Capacity Utilization 99.7% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1003: State State & 95th Street

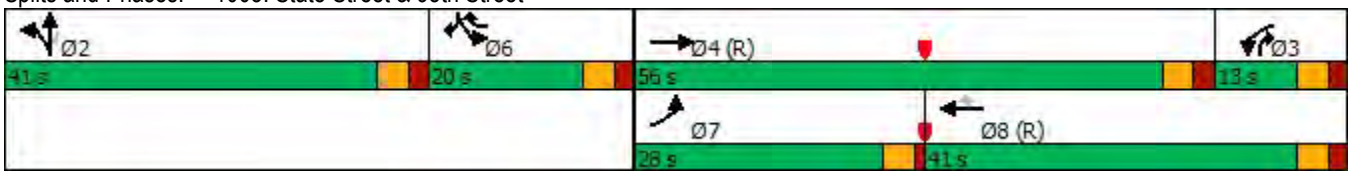

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	411	185	153	391	159	110	655	92	155	820	100
Future Volume (vph)	85	411	185	153	391	159	110	655	92	155	820	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	10	10	9	9	10	9
Storage Length (ft)	60		260	55		260	92		130	115		130
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99		0.99	0.99		0.99		0.95	0.99		0.94
Frt		0.953			0.957				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1676	1879	0	1676	1880	0	1550	3040	1363	1509	3069	1337
Flt Permitted	0.125			0.177			0.190			0.270		
Satd. Flow (perm)	221	1879	0	309	1880	0	307	3040	1296	425	3069	1251
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			19				95			83
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		663			2036			5304			668	
Travel Time (s)		15.1			46.3			120.5			15.2	
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)						1				1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Adj. Flow (vph)	91	442	199	165	420	171	118	704	99	167	882	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	641	0	165	591	0	118	704	99	167	882	108
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.17	1.17	1.22	1.22	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		11.0	11.0		5.0	31.0	31.0	5.0	31.0	31.0
Minimum Split (s)	13.0	47.0		34.0	34.0		8.0	46.0	46.0	8.0	46.0	46.0
Total Split (s)	13.0	47.0		34.0	34.0		12.0	46.0	46.0	12.0	46.0	46.0
Total Split (%)	12.4%	44.8%		32.4%	32.4%		11.4%	43.8%	43.8%	11.4%	43.8%	43.8%
Maximum Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	5.0		5.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		24.0		11.0	11.0			31.0	31.0		31.0	31.0
Flash Dont Walk (s)		18.0		18.0	18.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)	44.0	42.0		29.0	29.0		51.6	42.2	42.2	52.4	42.6	42.6
Actuated g/C Ratio	0.42	0.40		0.28	0.28		0.49	0.40	0.40	0.50	0.41	0.41
v/c Ratio	0.39	0.84		1.94	1.11		0.47	0.58	0.17	0.55	0.71	0.19
Control Delay	24.0	38.6		488.6	108.6		19.5	26.8	5.4	21.2	30.0	7.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.0	38.6		488.6	108.6		19.5	26.8	5.4	21.2	30.0	7.7
LOS	C	D		F	F		B	C	A	C	C	A
Approach Delay		36.8			191.5			23.6			26.7	
Approach LOS		D			F			C			C	
90th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
90th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
70th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	10.0	42.0		29.0	29.0		9.0	42.0	42.0	9.0	42.0	42.0
50th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	10.0	42.0		29.0	29.0		8.4	42.0	42.0	9.0	42.6	42.6
30th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	10.0	42.0		29.0	29.0		6.6	43.1	43.1	7.9	44.4	44.4
10th %ile Term Code	MaxR	MaxR		MaxR	MaxR		Gap	Coord	Coord	Gap	Coord	Coord
Stops (vph)	50	496		103	449		55	495	13	84	667	21
Fuel Used(gal)	1	11		18	23		5	33	4	2	13	1
CO Emissions (g/hr)	79	734		1273	1634		370	2335	278	136	907	55
NOx Emissions (g/hr)	15	143		248	318		72	454	54	26	176	11
VOC Emissions (g/hr)	18	170		295	379		86	541	64	31	210	13
Dilemma Vehicles (#)	0	0		0	0		0	0	0	0	0	0
Queue Length 50th (ft)	37	368		~172	~447		39	191	2	57	257	10
Queue Length 95th (ft)	70	#570		#305	#665		71	251	34	97	333	45
Internal Link Dist (ft)		583			1956			5224			588	
Turn Bay Length (ft)	60			55			92		130	115		130
Base Capacity (vph)	231	767		85	532		259	1222	577	305	1245	556
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.84		1.94	1.11		0.46	0.58	0.17	0.55	0.71	0.19

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 47 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.94
Intersection Signal Delay: 62.9 Intersection LOS: E
Intersection Capacity Utilization 104.1% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1016: Halsted Street & 103rd Street

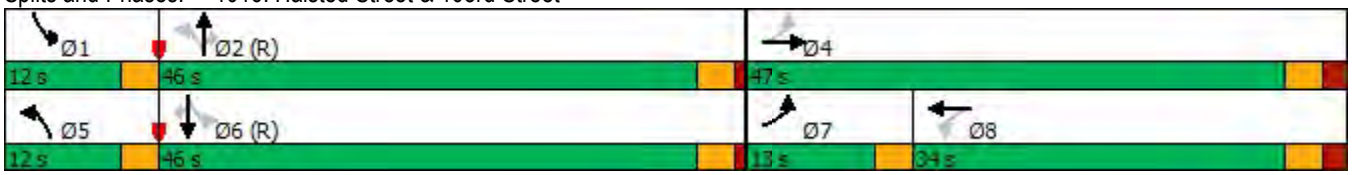

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	475	125	123	500	105	103	74	113	0	0	0
Future Volume (vph)	100	475	125	123	500	105	103	74	113	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	9	9	10	9	9	12	15	12	12	16	12
Storage Length (ft)	60		70	60		80	0		0	0		0
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	85			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.947				
Flt Protected	0.950			0.950				0.983				
Satd. Flow (prot)	1550	1573	1337	1550	1573	1337	0	1789	0	0	0	0
Flt Permitted	0.393			0.411				0.983				
Satd. Flow (perm)	641	1573	1337	670	1573	1337	0	1789	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			134			113		46				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2036			1955			343			764	
Travel Time (s)		46.3			44.4			7.8			17.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	108	511	134	132	538	113	111	80	122	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	511	134	132	538	113	0	313	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.22	1.22	1.17	1.22	1.22	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Minimum Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	20.0				
Total Split (%)	69.2%	69.2%	69.2%	69.2%	69.2%	69.2%	30.8%	30.8%				
Maximum Green (s)	41.0	41.0	41.0	41.0	41.0	41.0	15.0	15.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		5.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	31.0	31.0	31.0	31.0	31.0	31.0	5.0	5.0				
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0				
Act Effct Green (s)	41.0	41.0	41.0	41.0	41.0	41.0		15.0				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	20.0
Total Split (s)	20.0
Total Split (%)	31%
Maximum Green (s)	15.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	5.0
Flash Dont Walk (s)	10.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.23				
v/c Ratio	0.27	0.52	0.15	0.31	0.54	0.13		0.70				
Control Delay	7.5	8.9	1.5	8.0	9.3	1.5		29.5				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0				
Total Delay	7.5	8.9	1.5	8.0	9.3	1.5		29.5				
LOS	A	A	A	A	A	A		C				
Approach Delay		7.4			7.9			29.5				
Approach LOS		A			A			C				
Stops (vph)	44	244	10	55	264	9		218				
Fuel Used(gal)	2	10	2	2	10	2		4				
CO Emissions (g/hr)	139	681	145	166	701	118		261				
NOx Emissions (g/hr)	27	133	28	32	136	23		51				
VOC Emissions (g/hr)	32	158	34	39	162	27		60				
Dilemma Vehicles (#)	0	0	0	0	0	0		0				
Queue Length 50th (ft)	16	95	0	21	102	0		97				
Queue Length 95th (ft)	40	161	16	49	175	14		#199				
Internal Link Dist (ft)		1956			1875			263			684	
Turn Bay Length (ft)	60		70	60		80						
Base Capacity (vph)	404	992	892	422	992	885		448				
Starvation Cap Reductn	0	0	0	0	0	0		0				
Spillback Cap Reductn	0	0	0	0	0	0		0				
Storage Cap Reductn	0	0	0	0	0	0		0				
Reduced v/c Ratio	0.27	0.52	0.15	0.31	0.54	0.13		0.70				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:Hold, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.70
Intersection Signal Delay: 11.3 Intersection LOS: B
Intersection Capacity Utilization 61.9% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1017: Normal Avenue & 103rd Street

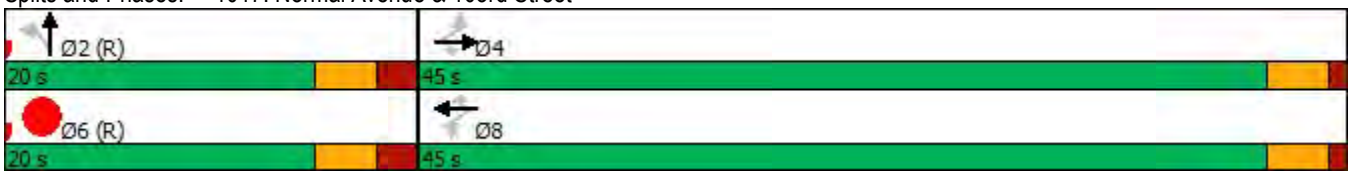

Lane Group	Ø6
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	540	89	90	611	45	52	105	100	70	305	65
Future Volume (vph)	34	540	89	90	611	45	52	105	100	70	305	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	11	11	10	11	11	12	11	12	12	15	12
Storage Length (ft)	58		200	58		75	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	100			90			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.99		0.99	1.00			0.99	0.93		0.98	
Frt		0.979			0.990				0.850		0.980	
Flt Protected	0.950			0.950				0.984			0.992	
Satd. Flow (prot)	1596	1645	0	1596	1702	0	0	1701	1515	0	1890	0
Flt Permitted	0.254			0.273				0.718			0.922	
Satd. Flow (perm)	424	1645	0	456	1702	0	0	1233	1415	0	1746	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			8				105		12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1955			674			5189			1320	
Travel Time (s)		44.4			15.3			117.9			30.0	
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	4		2			1						3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Adj. Flow (vph)	36	568	94	95	643	47	55	111	105	74	321	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	662	0	95	690	0	0	166	105	0	463	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.12	1.12	1.17	1.12	1.12	1.07	1.12	1.07	1.07	0.95	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (s)	47.0	47.0		47.0	47.0		28.0	28.0	28.0	28.0	28.0	
Total Split (%)	62.7%	62.7%		62.7%	62.7%		37.3%	37.3%	37.3%	37.3%	37.3%	
Maximum Green (s)	43.0	43.0		43.0	43.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	33.0	33.0		33.0	33.0		13.0	13.0	13.0	13.0	13.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	43.0	43.0		43.0	43.0			24.0	24.0		24.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57			0.32	0.32		0.32	
v/c Ratio	0.15	0.70		0.36	0.70			0.42	0.20		0.82	
Control Delay	9.4	15.9		13.7	16.3			24.1	5.3		36.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	9.4	15.9		13.7	16.3			24.1	5.3		36.9	
LOS	A	B		B	B			C	A		D	
Approach Delay		15.6			16.0			16.8			36.9	
Approach LOS		B			B			B			D	
Stops (vph)	17	424		49	453			122	17		366	
Fuel Used(gal)	1	14		1	8			8	4		10	
CO Emissions (g/hr)	47	976		70	568			564	307		689	
NOx Emissions (g/hr)	9	190		14	110			110	60		134	
VOC Emissions (g/hr)	11	226		16	132			131	71		160	
Dilemma Vehicles (#)	0	0		0	0			0	0		0	
Queue Length 50th (ft)	7	193		22	207			60	0		191	
Queue Length 95th (ft)	22	317		56	334			115	32		#347	
Internal Link Dist (ft)		1875			594			5109			1240	
Turn Bay Length (ft)	58			58					100			
Base Capacity (vph)	243	951		261	979			394	524		566	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.15	0.70		0.36	0.70			0.42	0.20		0.82	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 20.3 Intersection LOS: C
Intersection Capacity Utilization 91.6% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1018: Wentworth Avenue & 103rd Street

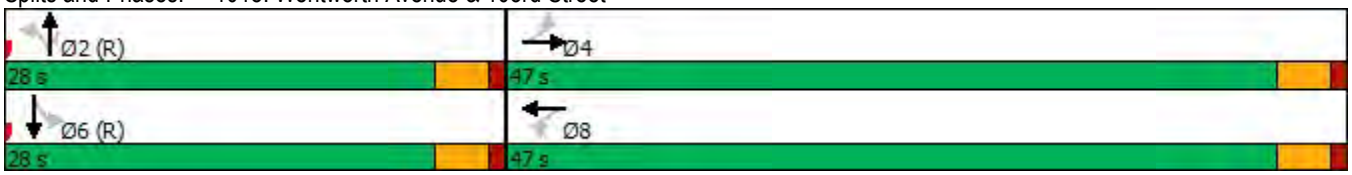

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	288	135	144	283	131	75	615	77	114	955	70
Future Volume (vph)	105	288	135	144	283	131	75	615	77	114	955	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	9	10	10	9
Storage Length (ft)	0		0	0		0	115		90	115		120
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			80			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		0.99			0.99		1.00		0.98	1.00		0.96
Frt		0.962			0.965				0.850			0.850
Flt Protected		0.990			0.987		0.950			0.950		
Satd. Flow (prot)	0	2944	0	0	2935	0	1565	3069	1350	1565	3099	1350
Flt Permitted		0.668			0.698		0.133			0.306		
Satd. Flow (perm)	0	1982	0	0	2070	0	218	3069	1326	503	3099	1298
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		69			51				103			103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		667			375			2662			5304	
Travel Time (s)		15.2			8.5			60.5			120.5	
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	2					1						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Adj. Flow (vph)	108	297	139	148	292	135	77	634	79	118	985	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	544	0	0	575	0	77	634	79	118	985	72
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.22	1.17	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Minimum Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (s)	8.0	40.0		32.0	32.0		8.0	37.0	37.0	8.0	37.0	37.0
Total Split (%)	9.4%	47.1%		37.6%	37.6%		9.4%	43.5%	43.5%	9.4%	43.5%	43.5%
Maximum Green (s)	5.0	35.0		27.0	27.0		5.0	33.0	33.0	5.0	33.0	33.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)		-1.0			-1.0		1.0	-0.5	0.0	1.0	-0.5	0.0
Total Lost Time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lead/Lag	Lead			Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Walk Time (s)		12.0		4.0	4.0			19.0	19.0		19.0	19.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		23.0		23.0	23.0			14.0	14.0		14.0	14.0
Pedestrian Calls (#/hr)		0		0	0			0	0		0	0
Act Effct Green (s)		36.0			28.0		37.0	33.5	33.0	37.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.44	0.39	0.39	0.44	0.39	0.39
v/c Ratio		0.59			0.80		0.49	0.52	0.14	0.44	0.81	0.13
Control Delay		18.6			33.9		28.7	14.7	1.1	19.0	29.2	2.3
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		18.6			33.9		28.7	14.7	1.1	19.0	29.2	2.3
LOS		B			C		C	B	A	B	C	A
Approach Delay		18.6			33.9			14.7			26.6	
Approach LOS		B			C			B			C	
Stops (vph)		311			445		51	269	4	70	813	5
Fuel Used(gal)		6			15		2	16	2	6	50	3
CO Emissions (g/hr)		452			1039		159	1125	114	387	3472	207
NOx Emissions (g/hr)		88			202		31	219	22	75	676	40
VOC Emissions (g/hr)		105			241		37	261	27	90	805	48
Dilemma Vehicles (#)		0			0		0	0	0	0	0	0
Queue Length 50th (ft)		90			133		19	83	0	34	240	0
Queue Length 95th (ft)		132			#221		m56	113	m3	64	321	15
Internal Link Dist (ft)		587			295			2582			5224	
Turn Bay Length (ft)							115		90	115		120
Base Capacity (vph)		924			716		158	1209	577	268	1221	566
Starvation Cap Reductn		0			0		0	0	0	0	0	0
Spillback Cap Reductn		0			0		0	0	0	0	0	0
Storage Cap Reductn		0			0		0	0	0	0	0	0
Reduced v/c Ratio		0.59			0.80		0.49	0.52	0.14	0.44	0.81	0.13

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 48 (56%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 23.5 Intersection LOS: C
Intersection Capacity Utilization 99.2% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1034: Halsted Street & 111th Street

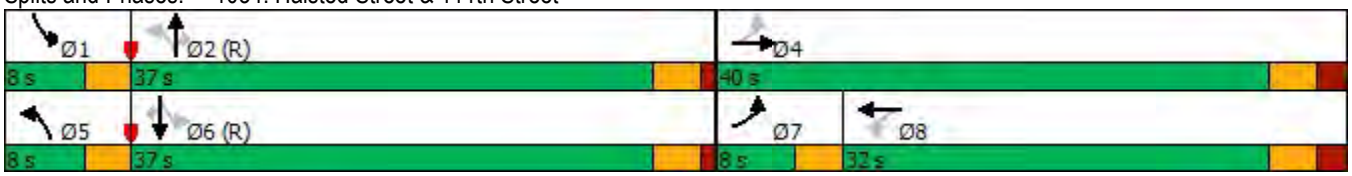

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	439	0	0	431	95	65	55	48	0	0	0
Future Volume (vph)	105	439	0	0	431	95	65	55	48	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.976			0.961				
Flt Protected		0.990						0.981				
Satd. Flow (prot)	0	1730	0	0	1706	0	0	1648	0	0	0	0
Flt Permitted		0.780						0.981				
Satd. Flow (perm)	0	1363	0	0	1706	0	0	1648	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					31			31				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1591			2004			794			646	
Travel Time (s)		36.2			45.5			18.0			14.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	113	472	0	0	463	102	70	59	52	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	585	0	0	565	0	0	181	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4						2					
Minimum Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (s)	43.0	43.0			43.0		22.0	22.0				
Total Split (%)	66.2%	66.2%			66.2%		33.8%	33.8%				
Maximum Green (s)	39.0	39.0			39.0		18.0	18.0				
Yellow Time (s)	3.0	3.0			3.0		3.0	3.0				
All-Red Time (s)	1.0	1.0			1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.0			4.0			4.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	32.0	32.0			32.0		10.0	10.0				
Flash Dont Walk (s)	7.0	7.0			7.0		8.0	8.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		39.0			39.0			18.0				
Actuated g/C Ratio		0.60			0.60			0.28				
v/c Ratio		0.72			0.55			0.38				
Control Delay		15.4			4.9			18.4				
Queue Delay		0.0			0.0			0.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		15.4			4.9			18.4				
LOS		B			A			B				
Approach Delay		15.4			4.9			18.4				
Approach LOS		B			A			B				
Stops (vph)		376			83			110				
Fuel Used(gal)		12			9			2				
CO Emissions (g/hr)		847			642			159				
NOx Emissions (g/hr)		165			125			31				
VOC Emissions (g/hr)		196			149			37				
Dilemma Vehicles (#)		0			0			0				
Queue Length 50th (ft)		142			38			47				
Queue Length 95th (ft)		264			49			97				
Internal Link Dist (ft)		1511			1924			714			566	
Turn Bay Length (ft)												
Base Capacity (vph)		817			1036			478				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.72			0.55			0.38				

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 16 (25%), Referenced to phase 2:NBTL and 6:, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 11.4	Intersection LOS: B
Intersection Capacity Utilization 80.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1035: Normal Avenue & 111th Street

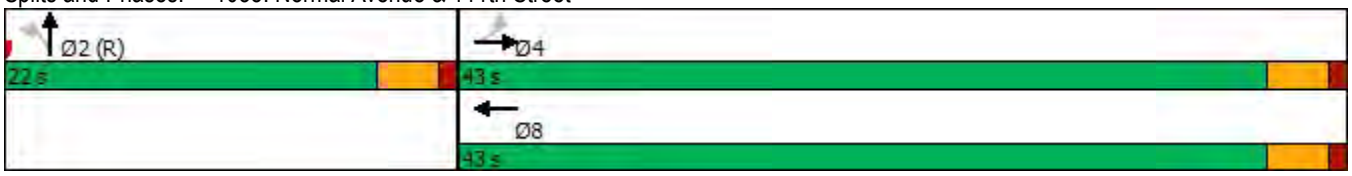

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	452	48	45	426	55	38	125	40	70	195	59
Future Volume (vph)	31	452	48	45	426	55	38	125	40	70	195	59
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	11	11	12	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00			0.98			0.98	
Frt		0.988			0.986			0.970			0.973	
Flt Protected		0.997			0.996			0.991			0.989	
Satd. Flow (prot)	0	1954	0	0	1944	0	0	3103	0	0	3101	0
Flt Permitted		0.954			0.931			0.860			0.848	
Satd. Flow (perm)	0	1869	0	0	1816	0	0	2671	0	0	2646	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			12			43			51	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2004			892			179			181	
Travel Time (s)		45.5			20.3			4.1			4.1	
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	1		2			3	1		2			4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Adj. Flow (vph)	33	481	51	48	453	59	40	133	43	74	207	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	565	0	0	560	0	0	216	0	0	344	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.12	1.12	1.07	1.12	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (s)	34.0	34.0		34.0	34.0		31.0	31.0		31.0	31.0	
Total Split (%)	52.3%	52.3%		52.3%	52.3%		47.7%	47.7%		47.7%	47.7%	
Maximum Green (s)	30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	21.0	21.0		21.0	21.0		19.0	19.0		19.0	19.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		30.0			30.0			27.0			27.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
v/c Ratio		0.65			0.66			0.19			0.30	
Control Delay		20.7			9.1			9.8			11.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		20.7			9.1			9.8			11.6	
LOS		C			A			A			B	
Approach Delay		20.7			9.1			9.8			11.6	
Approach LOS		C			A			A			B	
Stops (vph)		361			165			163			173	
Fuel Used(gal)		13			7			6			15	
CO Emissions (g/hr)		876			507			385			1066	
NOx Emissions (g/hr)		170			99			75			207	
VOC Emissions (g/hr)		203			118			89			247	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		169			64			15			38	
Queue Length 95th (ft)		267			79			m21			65	
Internal Link Dist (ft)		1924			812			99			101	
Turn Bay Length (ft)												
Base Capacity (vph)		868			844			1134			1128	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.65			0.66			0.19			0.30	

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 13.6	Intersection LOS: B
Intersection Capacity Utilization 97.8%	ICU Level of Service F
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1036: Wentworth Avenue & 111th Street

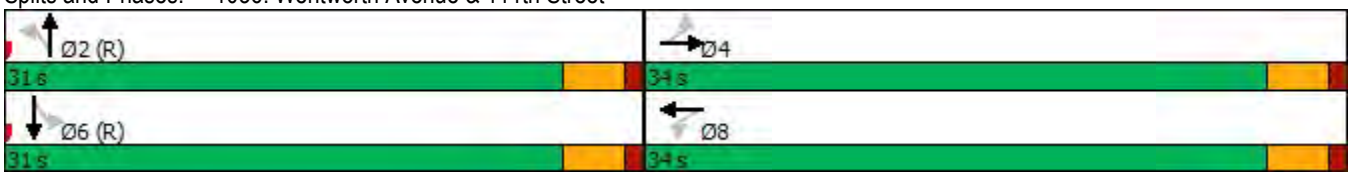

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	388	68	90	519	95	63	285	130	85	235	69
Future Volume (vph)	61	388	68	90	519	95	63	285	130	85	235	69
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	9	10	10	9	10	10	12	10	10	12
Storage Length (ft)	70		0	60		0	70		70	80		75
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	115			90			80			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.98	1.00		0.99	0.99		0.99	1.00	
Frt		0.978			0.977			0.953			0.966	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1520	3015	0	1596	3078	0	1596	2961	0	1596	3069	0
Flt Permitted	0.291			0.408			0.556			0.490		
Satd. Flow (perm)	463	3015	0	671	3078	0	929	2961	0	818	3069	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			35			138			73	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		418			546			2651			289	
Travel Time (s)		9.5			12.4			60.3			6.6	
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)	1					1			1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Adj. Flow (vph)	65	413	72	96	552	101	67	303	138	90	250	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	485	0	96	653	0	67	441	0	90	323	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.22	1.17	1.17	1.22	1.17	1.17	1.07	1.17	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (s)	26.0	26.0		26.0	26.0		39.0	39.0		39.0	39.0	
Total Split (%)	40.0%	40.0%		40.0%	40.0%		60.0%	60.0%		60.0%	60.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		9.0	9.0		22.0	22.0		22.0	22.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
v/c Ratio	0.42	0.47		0.42	0.61		0.13	0.27		0.20	0.19	
Control Delay	19.6	11.6		23.0	19.4		6.8	4.4		9.8	7.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.6	11.6		23.0	19.4		6.8	4.4		9.8	7.8	
LOS	B	B		C	B		A	A		A	A	
Approach Delay		12.6			19.9			4.7			8.2	
Approach LOS		B			B			A			A	
Stops (vph)	52	370		78	517		30	134		47	142	
Fuel Used(gal)	1	8		1	8		2	10		8	27	
CO Emissions (g/hr)	81	544		86	552		109	677		525	1858	
NOx Emissions (g/hr)	16	106		17	107		21	132		102	362	
VOC Emissions (g/hr)	19	126		20	128		25	157		122	431	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	19	72		33	121		8	13		38	62	
Queue Length 95th (ft)	m31	89		m78	176		m21	36		m37	m58	
Internal Link Dist (ft)		338			466			2571			209	
Turn Bay Length (ft)	70			60			70			80		
Base Capacity (vph)	156	1042		227	1064		500	1658		440	1686	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.42	0.47		0.42	0.61		0.13	0.27		0.20	0.19	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 12.4 Intersection LOS: B
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1037: State Street & 111th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	409	108	95	442	55	58	260	65	60	350	84
Future Volume (vph)	81	409	108	95	442	55	58	260	65	60	350	84
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	9	10	9	9	10	12	12	10	12	12	10	12
Storage Length (ft)	60		0	75		77	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.99	1.00		1.00	1.00			0.98			0.98	
Frt		0.969			0.983			0.975			0.975	
Flt Protected	0.950			0.950				0.992			0.994	
Satd. Flow (prot)	1539	3007	0	1438	3071	0	0	2894	0	0	2904	0
Flt Permitted	0.423			0.410				0.823			0.859	
Satd. Flow (perm)	678	3007	0	618	3071	0	0	2385	0	0	2503	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		70			29			44			44	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		546			221			277			684	
Travel Time (s)		12.4			5.0			6.3			15.5	
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Adj. Flow (vph)	86	435	115	101	470	59	62	277	69	64	372	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	550	0	101	529	0	0	408	0	0	525	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.22	1.17	1.22	1.22	1.17	1.07	1.07	1.17	1.07	1.07	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	31.0	31.0		31.0	31.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	20.0	20.0		20.0	20.0		14.0	14.0		14.0	14.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		12.0	12.0		12.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
v/c Ratio	0.27	0.37		0.34	0.36			0.42			0.51	
Control Delay	18.4	16.3		14.9	10.9			10.8			15.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	18.4	16.3		14.9	10.9			10.8			15.5	
LOS	B	B		B	B			B			B	
Approach Delay		16.6			11.6			10.8			15.5	
Approach LOS		B			B			B			B	
Stops (vph)	65	434		60	275			261			326	
Fuel Used(gal)	1	6		1	5			10			6	
CO Emissions (g/hr)	70	441		76	353			719			419	
NOx Emissions (g/hr)	14	86		15	69			140			82	
VOC Emissions (g/hr)	16	102		18	82			167			97	
Dilemma Vehicles (#)	0	0		0	0			0			0	
Queue Length 50th (ft)	27	100		23	61			25			72	
Queue Length 95th (ft)	57	101		58	93			66			114	
Internal Link Dist (ft)		466			141			197			604	
Turn Bay Length (ft)	60			75								
Base Capacity (vph)	323	1470		294	1479			980			1027	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.27	0.37		0.34	0.36			0.42			0.51	

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 48 (74%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1038: Michigan Avenue & 111th Street

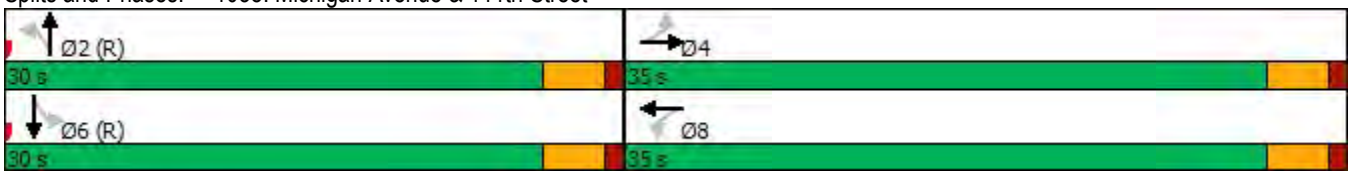

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	262	110	206	440	86	120	525	66	86	855	141
Future Volume (vph)	139	262	110	206	440	86	120	525	66	86	855	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	12	10	10	12	9	14	16	9	14	16
Storage Length (ft)	120		115	60		58	165		165	110		80
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			60			90			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		0.99	1.00		1.00	1.00		0.99	1.00	
Frt		0.956			0.975			0.983			0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	2985	0	1580	3036	0	1509	3450	0	1524	3467	0
Flt Permitted	0.325			0.453			0.133			0.305		
Satd. Flow (perm)	531	2985	0	747	3036	0	211	3450	0	486	3467	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		81			29			18			24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			564			2655			2662	
Travel Time (s)		30.3			12.8			60.3			60.5	
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Confl. Bikes (#/hr)										1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Adj. Flow (vph)	146	276	116	217	463	91	126	553	69	91	900	148
Shared Lane Traffic (%)												
Lane Group Flow (vph)	146	392	0	217	554	0	126	622	0	91	1048	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.07	1.17	1.17	1.07	1.22	0.99	0.91	1.22	0.99	0.91
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	8.0	32.0		8.0	32.0		10.0	35.0		10.0	35.0	
Total Split (s)	8.0	32.0		8.0	32.0		10.0	35.0		10.0	35.0	
Total Split (%)	9.4%	37.6%		9.4%	37.6%		11.8%	41.2%		11.8%	41.2%	
Maximum Green (s)	5.0	27.0		5.0	27.0		7.0	31.0		7.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0		1.0	-1.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Walk Time (s)		7.0			7.0			19.0			19.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		20.0			20.0			12.0			12.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	32.0	28.0		32.0	28.0		37.0	31.0		37.0	31.0	
Actuated g/C Ratio	0.38	0.33		0.38	0.33		0.44	0.36		0.44	0.36	
v/c Ratio	0.59	0.38		0.68	0.54		0.69	0.49		0.32	0.82	
Control Delay	28.6	18.3		32.1	24.4		35.0	21.8		20.1	30.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	28.6	18.3		32.1	24.4		35.0	21.8		20.1	30.7	
LOS	C	B		C	C		C	C		C	C	
Approach Delay		21.1			26.5			24.1			29.9	
Approach LOS		C			C			C			C	
Stops (vph)	103	217		164	394		63	426		51	770	
Fuel Used(gal)	3	6		9	21		4	17		2	31	
CO Emissions (g/hr)	197	451		603	1472		258	1203		169	2178	
NOx Emissions (g/hr)	38	88		117	286		50	234		33	424	
VOC Emissions (g/hr)	46	104		140	341		60	279		39	505	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	48	64		75	118		36	128		29	202	
Queue Length 95th (ft)	88	103		#140	169		#101	178		m41	271	
Internal Link Dist (ft)		1251			484			2575			2582	
Turn Bay Length (ft)	120			60			165			110		
Base Capacity (vph)	248	1037		320	1019		183	1269		284	1279	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.59	0.38		0.68	0.54		0.69	0.49		0.32	0.82	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 5 (6%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 85
Control Type: Pretimed
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 26.2 Intersection LOS: C
Intersection Capacity Utilization 84.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1049: Halsted Street & 115th Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	384	40	59	533	30	35	105	48	45	160	85
Future Volume (vph)	60	384	40	59	533	30	35	105	48	45	160	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	11	12	11	11	12	10	10	12	10	10
Storage Length (ft)	0		80	0		0	0		30	0		30
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.993			0.995			0.988			0.989	
Satd. Flow (prot)	0	1675	1479	0	1701	1479	0	1660	1428	0	1649	1428
Flt Permitted		0.685			0.910			0.903			0.919	
Satd. Flow (perm)	0	1155	1417	0	1554	1431	0	1517	1406	0	1531	1398
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			39			32			51			86
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3405			1340			2669			2478	
Travel Time (s)		77.4			30.5			60.7			56.3	
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)			1			1			1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Adj. Flow (vph)	63	404	42	62	561	32	37	111	51	47	168	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	467	42	0	623	32	0	148	51	0	215	89
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.12	1.07	1.12	1.12	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	31.0	31.0	31.0	31.0	31.0	31.0
Total Split (%)	52.3%	52.3%	52.3%	52.3%	52.3%	52.3%	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	27.0	27.0	27.0	27.0	27.0	27.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	19.0	19.0	19.0	19.0	19.0	19.0	16.0	16.0	16.0	16.0	16.0	16.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
v/c Ratio		0.88	0.06		0.87	0.05		0.23	0.08		0.34	0.14
Control Delay		36.9	4.2		28.7	3.4		14.2	4.3		14.2	2.3
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		36.9	4.2		28.7	3.4		14.2	4.3		14.2	2.3
LOS		D	A		C	A		B	A		B	A
Approach Delay		34.2			27.5			11.6			10.7	
Approach LOS		C			C			B			B	
Stops (vph)		351	10		482	5		99	16		160	19
Fuel Used(gal)		19	1		12	0		4	1		6	2
CO Emissions (g/hr)		1329	93		861	25		272	79		399	133
NOx Emissions (g/hr)		259	18		167	5		53	15		78	26
VOC Emissions (g/hr)		308	22		199	6		63	18		92	31
Dilemma Vehicles (#)		0	0		0	0		0	0		0	0
Queue Length 50th (ft)		158	1		236	1		39	1		74	1
Queue Length 95th (ft)		#333	15		#376	5		m78	m10		112	m6
Internal Link Dist (ft)		3325			1260			2589			2398	
Turn Bay Length (ft)			80						30			30
Base Capacity (vph)		533	675		717	677		630	613		635	630
Starvation Cap Reductn		0	0		0	0		0	0		0	0
Spillback Cap Reductn		0	0		0	0		0	0		0	0
Storage Cap Reductn		0	0		0	0		0	0		0	0
Reduced v/c Ratio		0.88	0.06		0.87	0.05		0.23	0.08		0.34	0.14

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 24.6 Intersection LOS: C
Intersection Capacity Utilization 106.2% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1050: Wentworth Avenue & 115th Street

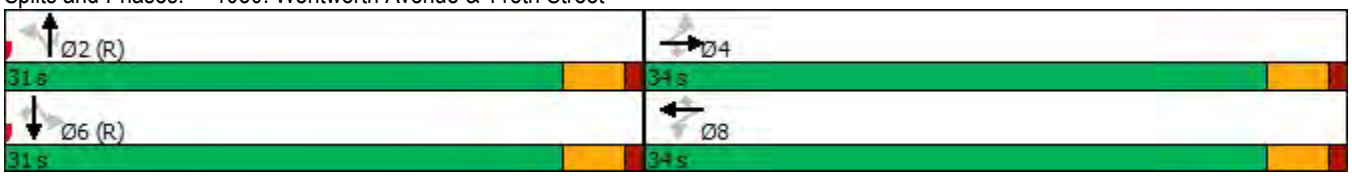

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	385	37	59	305	40	92	135	83	115	225	70
Future Volume (vph)	95	385	37	59	305	40	92	135	83	115	225	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	10	10	10	10	10	10
Storage Length (ft)	80		0	55		75	45		50	55		260
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	90			95			110			95		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.983			0.943			0.965	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1550	1631	1386	1550	3046	0	1550	2922	0	1550	2991	0
Flt Permitted	0.950			0.520			0.560			0.606		
Satd. Flow (perm)	1550	1631	1386	848	3046	0	913	2922	0	988	2991	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1340			559			516			2651	
Travel Time (s)		30.5			12.7			11.7			60.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	102	414	40	63	328	43	99	145	89	124	242	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	414	40	63	371	0	99	234	0	124	317	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases			4	8			2			6		
Minimum Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (s)	10.0	35.0	35.0	25.0	25.0		30.0	30.0		30.0	30.0	
Total Split (%)	15.4%	53.8%	53.8%	38.5%	38.5%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?												
Walk Time (s)		8.0	8.0	8.0	8.0		13.0	13.0		13.0	13.0	
Flash Dont Walk (s)		13.0	13.0	13.0	13.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0	0	
Act Effct Green (s)	7.0	31.0	31.0	21.0	21.0		26.0	26.0		26.0	26.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.11	0.48	0.48	0.32	0.32		0.40	0.40		0.40	0.40	
v/c Ratio	0.61	0.53	0.06	0.23	0.38		0.27	0.20		0.31	0.27	
Control Delay	44.8	7.4	4.8	14.0	13.5		14.7	12.4		17.9	15.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	44.8	7.4	4.8	14.0	13.5		14.7	12.4		17.9	15.6	
LOS	D	A	A	B	B		B	B		B	B	
Approach Delay		14.1			13.6			13.1			16.2	
Approach LOS		B			B			B			B	
Stops (vph)	80	132	8	23	138		60	136		93	229	
Fuel Used(gal)	2	5	0	1	3		3	6		3	8	
CO Emissions (g/hr)	161	373	33	39	225		177	409		231	580	
NOx Emissions (g/hr)	31	73	6	8	44		34	80		45	113	
VOC Emissions (g/hr)	37	86	8	9	52		41	95		54	134	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	34	34	3	11	33		26	27		62	77	
Queue Length 95th (ft)	m46	m45	m5	m19	43		m54	m47		108	91	
Internal Link Dist (ft)		1260			479			436			2571	
Turn Bay Length (ft)	80			55			45			55		
Base Capacity (vph)	166	777	661	273	984		365	1168		395	1196	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.61	0.53	0.06	0.23	0.38		0.27	0.20		0.31	0.27	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 14.3	Intersection LOS: B
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1051: State Street & 115th Street

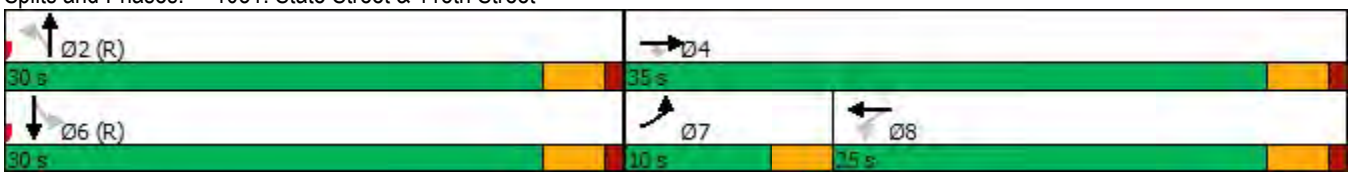

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	354	93	220	366	70	32	310	25	70	340	66
Future Volume (vph)	81	354	93	220	366	70	32	310	25	70	340	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	10	10	12	10	10
Storage Length (ft)	55		120	95		75	0		85	0		90
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	75			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.995			0.992	
Satd. Flow (prot)	1550	1631	1386	1550	1631	1386	0	1623	1386	0	1618	1386
Flt Permitted	0.529			0.950				0.913			0.802	
Satd. Flow (perm)	863	1631	1386	1550	1631	1386	0	1489	1386	0	1308	1386
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			75			101			185
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		559			386			1340			2394	
Travel Time (s)		12.7			8.8			30.5			54.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	87	381	100	237	394	75	34	333	27	75	366	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	381	100	237	394	75	0	367	27	0	441	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	NA
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4			8	2		2	6		
Minimum Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	
Total Split (%)	36.9%	36.9%	36.9%	13.8%	50.8%	50.8%	44.6%	44.6%	44.6%	44.6%	44.6%	
Maximum Green (s)	20.0	20.0	20.0	6.0	29.0	29.0	24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		5.0	5.0		5.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0	9.0		18.0	18.0	12.0	12.0	12.0	12.0	12.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	12.0	12.0	12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0	0	
Act Effct Green (s)	20.0	20.0	20.0	6.0	29.0	29.0		24.0	24.0		24.0	0.0

Lane Group	Ø12
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	12
Permitted Phases	
Minimum Split (s)	3.0
Total Split (s)	3.0
Total Split (%)	5%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.31	0.31	0.31	0.09	0.45	0.45		0.37	0.37		0.37	0.00
v/c Ratio	0.33	0.76	0.20	1.66	0.54	0.11		0.67	0.05		0.91	0.38
Control Delay	18.8	27.7	3.3	334.5	16.9	6.7		16.9	0.6		42.3	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	18.8	27.7	3.3	334.5	16.9	6.7		16.9	0.6		42.3	6.6
LOS	B	C	A	F	B	A		B	A		D	A
Approach Delay		22.0			122.4			15.8			37.4	
Approach LOS		C			F			B			D	
Stops (vph)	46	269	14	171	205	19		267	2		363	8
Fuel Used(gal)	1	5	1	17	5	1		24	2		14	2
CO Emissions (g/hr)	64	351	38	1205	321	43		1677	110		984	105
NOx Emissions (g/hr)	12	68	7	235	62	8		326	21		191	21
VOC Emissions (g/hr)	15	81	9	279	74	10		389	26		228	24
Dilemma Vehicles (#)	0	0	0	0	0	0		0	0		0	0
Queue Length 50th (ft)	24	105	6	~149	104	5		107	0		158	1
Queue Length 95th (ft)	44	175	14	m#163	m111	m6		m174	m0		#348	12
Internal Link Dist (ft)		479			306			1260			2314	
Turn Bay Length (ft)	55		120	95		75			85			90
Base Capacity (vph)	265	501	507	143	727	659		549	575		482	185
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	0
Reduced v/c Ratio	0.33	0.76	0.20	1.66	0.54	0.11		0.67	0.05		0.91	0.38

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 1.66
Intersection Signal Delay: 57.0 Intersection LOS: E
Intersection Capacity Utilization 89.6% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1052: Michigan Avenue & 115th Street

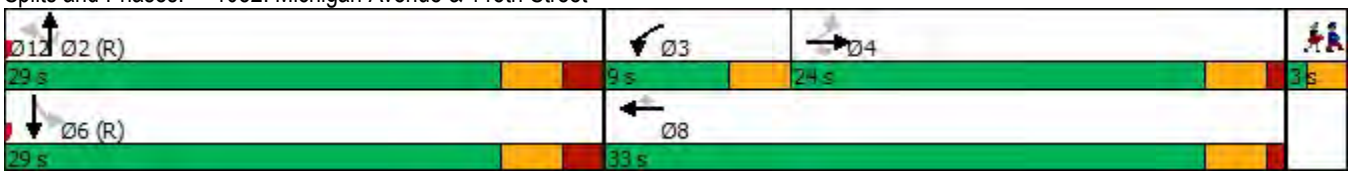

Lane Group	Ø12
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	396	33	80	664	80	62	130	195	0	0	0
Future Volume (vph)	20	396	33	80	664	80	62	130	195	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	12	12	10	15	10
Storage Length (ft)	0		95	0		80	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.932				
Flt Protected		0.998			0.995			0.992				
Satd. Flow (prot)	0	1628	1386	0	1623	1386	0	1616	0	0	0	0
Flt Permitted		0.952			0.908			0.992				
Satd. Flow (perm)	0	1553	1386	0	1481	1386	0	1616	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			35			56		81				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		384			636			791			721	
Travel Time (s)		8.7			14.5			18.0			16.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	22	426	35	86	714	86	67	140	210	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	448	35	0	800	86	0	417	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.07	1.07	1.17	0.95	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2				
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru				
Leading Detector (ft)	20	100	20	20	100	20	20	100				
Trailing Detector (ft)	0	0	0	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0	0	0	0				
Detector 1 Size(ft)	20	6	20	20	6	20	20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8			2				
Permitted Phases	4		4	8		8	2					
Detector Phase	4	4	4	8	8	8	2	2				
Switch Phase												
Minimum Initial (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Minimum Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	24.0	24.0				
Total Split (%)	63.1%	63.1%	63.1%	63.1%	63.1%	63.1%	36.9%	36.9%				
Maximum Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0				
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0				
Total Lost Time (s)		5.0	5.0		5.0	5.0		4.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	8.0	8.0				
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None				
Walk Time (s)	28.0	28.0	28.0	28.0	28.0	28.0	10.0	10.0				
Flash Dont Walk (s)	8.0	8.0	8.0	8.0	8.0	8.0	10.0	10.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	30	30				
Act Effct Green (s)		36.7	36.7		36.7	36.7		19.3				
Actuated g/C Ratio		0.56	0.56		0.56	0.56		0.30				
v/c Ratio		0.51	0.04		0.96	0.11		0.78				
Control Delay		17.9	8.2		39.1	3.7		28.5				
Queue Delay		0.0	0.0		0.0	0.0		0.0				
Total Delay		17.9	8.2		39.1	3.7		28.5				
LOS		B	A		D	A		C				
Approach Delay		17.2			35.7			28.5				
Approach LOS		B			D			C				
90th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
90th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
70th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
70th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
50th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
50th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
30th %ile Green (s)	36.0	36.0	36.0	36.0	36.0	36.0	20.0	20.0				
30th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Max	Max				
10th %ile Green (s)	39.6	39.6	39.6	39.6	39.6	39.6	16.4	16.4				
10th %ile Term Code	Coord	Coord	Coord	Coord	Coord	Coord	Gap	Gap				
Stops (vph)		287	18		565	18		273				
Fuel Used(gal)		6	0		17	1		6				
CO Emissions (g/hr)		392	25		1168	69		430				
NOx Emissions (g/hr)		76	5		227	13		84				
VOC Emissions (g/hr)		91	6		271	16		100				
Dilemma Vehicles (#)		0	0		0	0		0				
Queue Length 50th (ft)		143	5		279	5		118				
Queue Length 95th (ft)		m187	m5		#526	22		#250				
Internal Link Dist (ft)		304			556			711			641	
Turn Bay Length (ft)			95			80						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		877	798		836	807		553				
Starvation Cap Reductn		0	0		0	0		0				
Spillback Cap Reductn		0	0		0	0		0				
Storage Cap Reductn		0	0		0	0		0				
Reduced v/c Ratio		0.51	0.04		0.96	0.11		0.75				

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 25 (38%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 29.0 Intersection LOS: C
Intersection Capacity Utilization 100.0% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1053: Indiana Avenue & 115th Street

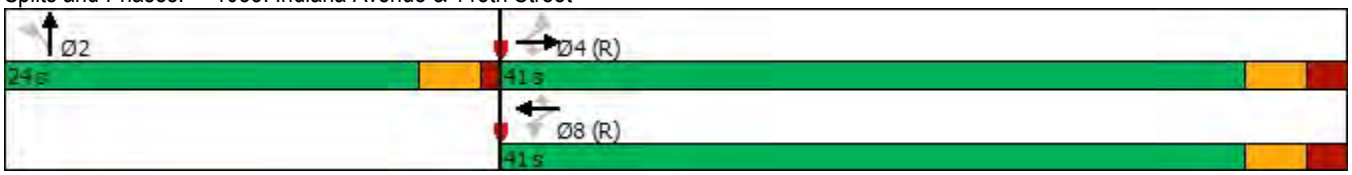

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	97	490	638	45	140	191
Future Volume (vph)	97	490	638	45	140	191
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	14	16	12	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.991			0.850
Flt Protected		0.992			0.950	
Satd. Flow (prot)	0	1858	1985	0	1596	1428
Flt Permitted		0.992			0.950	
Satd. Flow (perm)	0	1858	1985	0	1596	1428
Link Speed (mph)		30	30		30	
Link Distance (ft)		683	263		1350	
Travel Time (s)		15.5	6.0		30.7	
Confl. Peds. (#/hr)	17			17	6	5
Confl. Bikes (#/hr)				3	2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	2%	2%	0%	0%	0%
Adj. Flow (vph)	110	557	725	51	159	217
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	667	776	0	159	217
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.07	0.99	0.91	1.07	1.17	1.17
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 90.3%		ICU Level of Service E	
Analysis Period (min) 15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Traffic Volume (vph)	97	490	638	45	140	191
Future Volume (vph)	97	490	638	45	140	191
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	110	557	725	51	159	217

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total (vph)	667	776	159	217
Volume Left (vph)	110	0	159	0
Volume Right (vph)	0	51	0	217
Hadj (s)	0.08	-0.01	0.50	-0.70
Departure Headway (s)	6.2	6.1	8.1	6.9
Degree Utilization, x	1.15	1.32	0.36	0.41
Capacity (veh/h)	574	599	441	518
Control Delay (s)	108.0	173.9	14.3	13.5
Approach Delay (s)	108.0	173.9	13.8	
Approach LOS	F	F	B	

Intersection Summary			
Delay	116.7		
Level of Service	F		
Intersection Capacity Utilization	90.3%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	828	0	0	702	5	35				
Future Volume (vph)	828	0	0	702	5	35				
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800				
Lane Width (ft)	10	12	12	10	16	12				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Frt					0.881					
Flt Protected					0.994					
Satd. Flow (prot)	1631	1748	0	1468	1734	0				
Flt Permitted					0.994					
Satd. Flow (perm)	1631	1748	0	1468	1734	0				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)					38					
Link Speed (mph)	30			30	30					
Link Distance (ft)	105			1228	505					
Travel Time (s)	2.4			27.9	11.5					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%				
Parking (#/hr)				0						
Adj. Flow (vph)	890	0	0	755	5	38				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	890	0	0	755	43	0				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			0	16					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.17	1.07	1.07	1.33	0.91	1.07				
Turning Speed (mph)		9	15		15	9				
Turn Type	NA	Perm		NA	Prot					
Protected Phases	6 4			4	3		1	2	6	8
Permitted Phases		6 4	4							
Minimum Split (s)			16.0	16.0	18.0		20.0	12.0	32.0	35.0
Total Split (s)			35.0	35.0	18.0		20.0	12.0	32.0	35.0
Total Split (%)			41.2%	41.2%	21.2%		24%	14%	38%	41%
Maximum Green (s)			31.0	31.0	14.0		15.0	9.0	27.0	31.0
Yellow Time (s)			3.0	3.0	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)			1.0	1.0	1.0		2.0	0.0	2.0	1.0
Lost Time Adjust (s)				0.0	0.0					
Total Lost Time (s)				4.0	4.0					
Lead/Lag							Lag	Lead		
Lead-Lag Optimize?										
Walk Time (s)					2.0				14.0	18.0
Flash Dont Walk (s)					12.0				13.0	13.0
Pedestrian Calls (#/hr)					0				0	0
Act Effct Green (s)	62.0			31.0	14.0					
Actuated g/C Ratio	0.73			0.36	0.16					
v/c Ratio	0.75			1.41	0.14					

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Control Delay	7.7			221.9	13.2					
Queue Delay	5.2			0.9	0.0					
Total Delay	12.9			222.8	13.2					
LOS	B			F	B					
Approach Delay	12.9			222.8	13.3					
Approach LOS	B			F	B					
Stops (vph)	285			543	14					
Fuel Used(gal)	4			48	0					
CO Emissions (g/hr)	248			3378	24					
NOx Emissions (g/hr)	48			657	5					
VOC Emissions (g/hr)	57			783	6					
Dilemma Vehicles (#)	0			0	0					
Queue Length 50th (ft)	144			~549	2					
Queue Length 95th (ft)	174			#761	30					
Internal Link Dist (ft)	25			1148	425					
Turn Bay Length (ft)										
Base Capacity (vph)	1189			535	317					
Starvation Cap Reductn	236			0	0					
Spillback Cap Reductn	0			55	0					
Storage Cap Reductn	0			0	0					
Reduced v/c Ratio	0.93			1.57	0.14					

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 105	
Control Type: Pretimed	
Maximum v/c Ratio: 1.41	
Intersection Signal Delay: 106.8	Intersection LOS: F
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1055: Cottage Grove Avenue & 115th Street

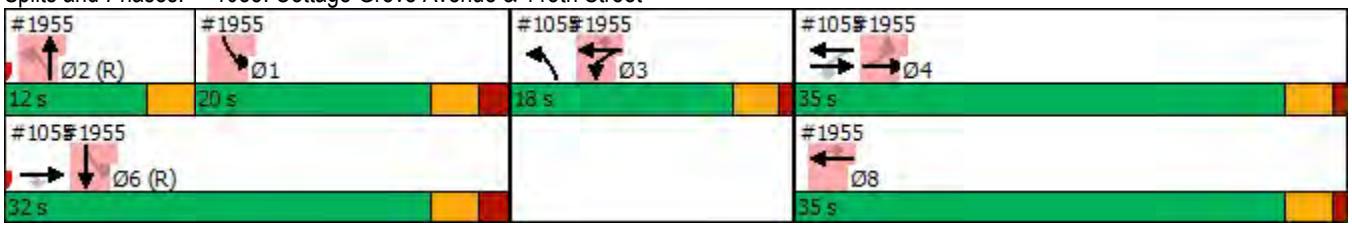

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	255	698	30	397	0	0	0	0	20	10	280
Future Volume (vph)	0	255	698	30	397	0	0	0	0	20	10	280
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	16	12	12	12	12	12	12	15	12	12	16	12
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.890										0.850
Flt Protected					0.996						0.968	
Satd. Flow (prot)	0	3022	0	0	3366	0	0	0	0	0	1975	1500
Flt Permitted					0.996						0.968	
Satd. Flow (perm)	0	3022	0	0	3366	0	0	0	0	0	1975	1500
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1260			277			633			783	
Travel Time (s)		28.6			6.3			14.4			17.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	4%	1%	0%	0%	0%	0%	0%	0%	2%
Adj. Flow (vph)	0	271	743	32	422	0	0	0	0	21	11	298
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1014	0	0	454	0	0	0	0	0	32	298
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.91	1.07	1.07	1.07	1.07	1.07	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 45.7%	ICU Level of Service A
Analysis Period (min) 15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	255	698	30	397	0	0	0	0	20	10	280
Future Volume (Veh/h)	0	255	698	30	397	0	0	0	0	20	10	280
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	271	743	32	422	0	0	0	0	21	11	298
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	422			271			923	1128	507	622	757	211
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	422			271			923	1128	507	622	757	211
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	94	97	62
cM capacity (veh/h)	1148			1275			136	201	516	368	331	794

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	181	833	173	281	32	298
Volume Left	0	0	32	0	21	0
Volume Right	0	743	0	0	0	298
cSH	1700	1700	1275	1700	354	794
Volume to Capacity	0.11	0.49	0.03	0.17	0.09	0.38
Queue Length 95th (ft)	0	0	2	0	7	44
Control Delay (s)	0.0	0.0	1.6	0.0	16.2	12.2
Lane LOS			A		C	B
Approach Delay (s)	0.0		0.6		12.6	
Approach LOS					B	

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	275	0	427	0	0	0
Future Volume (vph)	275	0	427	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3221	0	1660	0	0	0
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3221	0	1660	0	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	277			605	530	
Travel Time (s)	6.3			13.8	12.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	296	0	459	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	296	0	459	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	275	0	427	0	0	0
Future Volume (vph)	275	0	427	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	296	0	459	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	148	148	459
Volume Left (vph)	148	148	459
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.3	6.3	5.0
Degree Utilization, x	0.26	0.26	0.64
Capacity (veh/h)	544	545	697
Control Delay (s)	10.3	10.3	16.3
Approach Delay (s)	10.3		16.3
Approach LOS	B		C

Intersection Summary			
Delay	14.0		
Level of Service	B		
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	313	160	106	324	75	115	561	76	120	1021	150
Future Volume (vph)	165	313	160	106	324	75	115	561	76	120	1021	150
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	14	12	10	11	12	9	10	12
Storage Length (ft)	140		0	60		0	120		0	115		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	195			95			95			90		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99		0.98	1.00	0.99		0.99	1.00		0.99	0.99	
Frt			0.850		0.972			0.982			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1580	1600	1400	1596	1793	0	1580	3122	0	1539	3002	0
Flt Permitted	0.248			0.407			0.123			0.289		
Satd. Flow (perm)	408	1600	1372	681	1793	0	203	3122	0	466	3002	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			163		13			19			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		752			3955			5338			2655	
Travel Time (s)		17.1			89.9			121.3			60.3	
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)						3	1		2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Adj. Flow (vph)	168	319	163	108	331	77	117	572	78	122	1042	153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	319	163	108	408	0	117	650	0	122	1195	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	0.99	1.07	1.17	1.12	1.07	1.22	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	4.0	4.0	7.0	4.0		7.0	18.0		7.0	18.0	
Minimum Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (%)	11.1%	35.6%	35.6%	11.1%	35.6%		11.1%	42.2%		11.1%	42.2%	
Maximum Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0	0.0	1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	C-Max		None	C-Max	
Walk Time (s)		4.0	4.0		4.0			18.0			18.0	
Flash Dont Walk (s)		23.0	23.0		23.0			16.0			16.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	34.8	30.0	29.0	34.0	27.0		40.0	34.0		40.0	34.0	
Actuated g/C Ratio	0.39	0.33	0.32	0.38	0.30		0.44	0.38		0.44	0.38	
v/c Ratio	0.71	0.60	0.30	0.34	0.75		0.64	0.55		0.44	1.04	
Control Delay	37.6	31.6	5.6	19.7	37.4		31.3	23.4		18.5	66.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	37.6	31.6	5.6	19.7	37.4		31.3	23.4		18.5	66.7	
LOS	D	C	A	B	D		C	C		B	E	
Approach Delay		26.6			33.7			24.6			62.2	
Approach LOS		C			C			C			E	
90th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
90th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
70th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
50th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
30th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		7.0	34.0		7.0	34.0	
10th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Max	Coord		Max	Coord	
Stops (vph)	107	261	22	68	340		61	467		68	994	
Fuel Used(gal)	3	5	1	4	17		6	32		3	46	
CO Emissions (g/hr)	197	370	87	284	1206		409	2245		231	3189	
NOx Emissions (g/hr)	38	72	17	55	235		80	437		45	621	
VOC Emissions (g/hr)	46	86	20	66	280		95	520		54	739	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	60	155	0	37	202		35	145		37	~387	
Queue Length 95th (ft)	#133	248	44	71	#319		#91	199		69	#518	
Internal Link Dist (ft)		672			3875			5258			2575	
Turn Bay Length (ft)	140			60			120			115		
Base Capacity (vph)	236	533	552	318	547		182	1191		278	1147	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.71	0.60	0.30	0.34	0.75		0.64	0.55		0.44	1.04	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 41.7 Intersection LOS: D
Intersection Capacity Utilization 89.2% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1060: Halsted Street & 119th Street

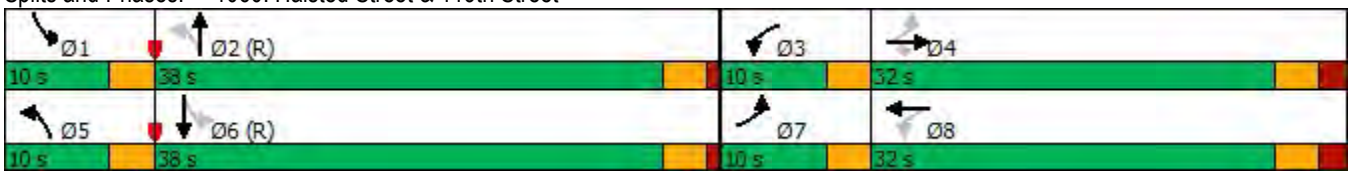

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	390	75	28	435	25	45	72	27	25	118	80
Future Volume (vph)	45	390	75	28	435	25	45	72	27	25	118	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	10	10	10	10	12	15	12	12	16	12
Storage Length (ft)	0		105	0		75	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.97		0.99			0.99	
Frt			0.850			0.850		0.974			0.952	
Flt Protected		0.995			0.997			0.985			0.995	
Satd. Flow (prot)	0	1681	1428	0	1629	1428	0	1891	0	0	1882	0
Flt Permitted		0.923			0.962			0.872			0.966	
Satd. Flow (perm)	0	1558	1369	0	1571	1381	0	1671	0	0	1826	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			23		22			53	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3955			1331			2677			2669	
Travel Time (s)		89.9			30.3			60.8			60.7	
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	1		1			1	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Adj. Flow (vph)	49	429	82	31	478	27	49	79	30	27	130	88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	478	82	0	509	27	0	158	0	0	245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.17	1.17	1.17	1.17	1.07	0.95	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Minimum Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%	53.8%	53.8%	53.8%	53.8%	46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	32.0	27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	22.0	22.0	22.0	22.0	22.0	22.0	17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
v/c Ratio		0.62	0.11		0.66	0.04		0.22			0.31	
Control Delay		16.6	2.9		18.0	5.0		11.5			9.0	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		16.6	2.9		18.0	5.0		11.5			9.0	
LOS		B	A		B	A		B			A	
Approach Delay		14.6			17.3			11.5			9.0	
Approach LOS		B			B			B			A	
Stops (vph)		309	11		357	6		77			169	
Fuel Used(gal)		17	2		8	0		4			6	
CO Emissions (g/hr)		1160	169		592	22		263			418	
NOx Emissions (g/hr)		226	33		115	4		51			81	
VOC Emissions (g/hr)		269	39		137	5		61			97	
Dilemma Vehicles (#)		0	0		0	0		0			0	
Queue Length 50th (ft)		130	0		147	2		33			22	
Queue Length 95th (ft)		221	19		265	m7		68			m36	
Internal Link Dist (ft)		3875			1251			2597			2589	
Turn Bay Length (ft)			105			75						
Base Capacity (vph)		767	715		773	691		706			789	
Starvation Cap Reductn		0	0		0	0		0			0	
Spillback Cap Reductn		0	0		0	0		0			0	
Storage Cap Reductn		0	0		0	0		0			0	
Reduced v/c Ratio		0.62	0.11		0.66	0.04		0.22			0.31	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 32 (49%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 14.3 Intersection LOS: B
Intersection Capacity Utilization 85.8% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1061: Wentworth Avenue & 119th Street

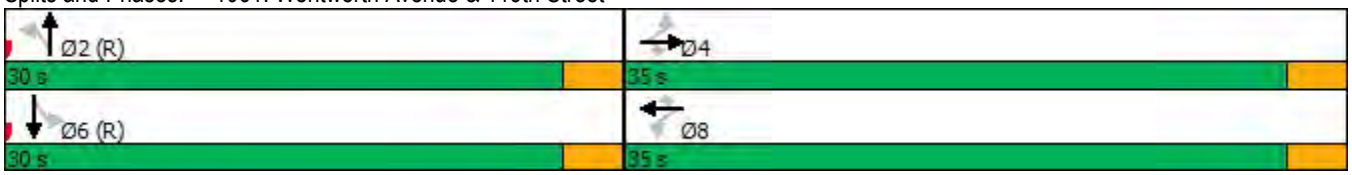

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	235	50	15	245	10	40	123	20	15	210	195
Future Volume (vph)	88	235	50	15	245	10	40	123	20	15	210	195
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	12	10	10	12	10	10	12	16	12
Storage Length (ft)	0		70	0		215	0		75	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.94		1.00	0.95		1.00	0.97		0.99	
Frt			0.850			0.850			0.850		0.937	
Flt Protected		0.987			0.997			0.988			0.998	
Satd. Flow (prot)	0	1634	1428	0	1614	1428	0	1600	1428	0	1870	0
Flt Permitted		0.818			0.971			0.850			0.989	
Satd. Flow (perm)	0	1348	1347	0	1570	1360	0	1376	1390	0	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50			34			34		94	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			477			2671			2164	
Travel Time (s)		30.3			10.8			60.7			49.2	
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	1		1	1		1			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Adj. Flow (vph)	92	245	52	16	255	10	42	128	21	16	219	203
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	337	52	0	271	10	0	170	21	0	438	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	43.1%	43.1%	43.1%	43.1%	43.1%	43.1%	56.9%	56.9%	56.9%	56.9%	56.9%	
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0	23.0	32.0	32.0	32.0	32.0	32.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	14.0	14.0	14.0	14.0	14.0	14.0	23.0	23.0	23.0	23.0	23.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
v/c Ratio		0.71	0.10		0.49	0.02		0.25	0.03		0.46	
Control Delay		18.5	1.9		20.1	1.2		1.8	0.7		10.1	
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Delay		18.5	1.9		20.1	1.2		1.8	0.7		10.1	
LOS		B	A		C	A		A	A		B	
Approach Delay		16.3			19.4			1.7			10.1	
Approach LOS		B			B			A			B	
Stops (vph)		271	12		198	1		40	3		304	
Fuel Used(gal)		6	1		3	0		7	1		11	
CO Emissions (g/hr)		425	42		218	3		496	60		791	
NOx Emissions (g/hr)		83	8		42	1		96	12		154	
VOC Emissions (g/hr)		98	10		51	1		115	14		183	
Dilemma Vehicles (#)		0	0		0	0		0	0		0	
Queue Length 50th (ft)		120	3		82	0		10	0		187	
Queue Length 95th (ft)		#231	m4		146	3		m10	m0		253	
Internal Link Dist (ft)		1251			397			2591			2084	
Turn Bay Length (ft)			70			215			75			
Base Capacity (vph)		476	508		555	503		677	701		959	
Starvation Cap Reductn		0	0		0	0		0	0		0	
Spillback Cap Reductn		0	0		0	0		0	0		0	
Storage Cap Reductn		0	0		0	0		0	0		0	
Reduced v/c Ratio		0.71	0.10		0.49	0.02		0.25	0.03		0.46	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 12.7 Intersection LOS: B
Intersection Capacity Utilization 88.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1062: State Street & 119th Street

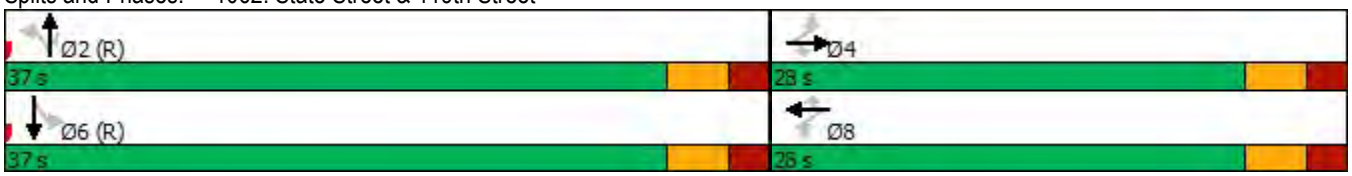

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1099	365	379	1100	0	0	0	0	651	360	425
Future Volume (vph)	0	1099	365	379	1100	0	0	0	0	651	360	425
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	14
Storage Length (ft)	0		85	216		0	0		0	360		360
Storage Lanes	0		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.86	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.963									0.980	0.850
Flt Protected				0.950						0.950	0.981	
Satd. Flow (prot)	0	4569	0	1676	3320	0	0	0	0	1541	2911	1442
Flt Permitted				0.082						0.950	0.981	
Satd. Flow (perm)	0	4569	0	145	3320	0	0	0	0	1541	2911	1442
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		75									12	103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1359			322			590			708	
Travel Time (s)		30.9			7.3			13.4			16.1	
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Adj. Flow (vph)	0	1121	372	387	1122	0	0	0	0	664	367	434
Shared Lane Traffic (%)										43%		23%
Lane Group Flow (vph)	0	1493	0	387	1122	0	0	0	0	378	753	334
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			34			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1					1	1	1
Detector Template												
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		50		50	50					50	50	50
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		15.0		3.0	15.0					8.0	8.0	8.0
Minimum Split (s)		41.5		39.0	80.5					34.5	34.5	34.5
Total Split (s)		41.5		39.0	80.5					34.5	34.5	34.5
Total Split (%)		36.1%		33.9%	70.0%					30.0%	30.0%	30.0%
Maximum Green (s)		35.5		34.5	74.5					28.5	28.5	28.5
Yellow Time (s)		4.5		3.5	4.5					4.5	4.5	4.5
All-Red Time (s)		1.5		1.0	1.5					1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)		7.0		3.5	7.0					3.0	3.0	3.0
Minimum Gap (s)		3.5		0.2	3.5					0.2	0.2	0.2
Time Before Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Time To Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Recall Mode		C-Max		None	C-Max					None	None	None
Walk Time (s)										1.5	1.5	1.5
Flash Dont Walk (s)										27.0	27.0	27.0
Pedestrian Calls (#/hr)										0	0	0
Act Effct Green (s)		44.1		76.0	74.5					28.5	28.5	28.5
Actuated g/C Ratio		0.38		0.66	0.65					0.25	0.25	0.25
v/c Ratio		0.83		0.88	0.52					0.99	1.03	0.77
Control Delay		36.5		35.7	23.0					88.1	83.7	40.6
Queue Delay		0.1		10.8	51.0					0.0	0.0	0.0
Total Delay		36.6		46.4	74.0					88.1	83.7	40.6
LOS		D		D	E					F	F	D
Approach Delay		36.6			66.9						75.0	
Approach LOS		D			E						E	
90th %ile Green (s)		35.5		34.5	74.5					28.5	28.5	28.5
90th %ile Term Code		Coord		Max	Coord					Max	Max	Max
70th %ile Green (s)		39.3		30.7	74.5					28.5	28.5	28.5
70th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
50th %ile Green (s)		43.6		26.4	74.5					28.5	28.5	28.5
50th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
30th %ile Green (s)		47.9		22.1	74.5					28.5	28.5	28.5
30th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
10th %ile Green (s)		54.2		15.8	74.5					28.5	28.5	28.5
10th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
Stops (vph)		1163		329	950					321	640	211
Fuel Used(gal)		33		6	13					10	20	6
CO Emissions (g/hr)		2292		386	921					731	1411	397
NOx Emissions (g/hr)		446		75	179					142	275	77
VOC Emissions (g/hr)		531		89	213					169	327	92
Dilemma Vehicles (#)		0		0	0					0	0	0
Queue Length 50th (ft)		348		224	377					307	~344	179
Queue Length 95th (ft)		#513		m274	m443					#525	#482	#329
Internal Link Dist (ft)		1279			242			510			628	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)				216						360		360
Base Capacity (vph)		1798		555	2150					381	730	434
Starvation Cap Reductn		0		141	1318					0	0	0
Spillback Cap Reductn		24		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.84		0.93	1.35					0.99	1.03	0.77

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 85 (74%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 59.5 Intersection LOS: E
Intersection Capacity Utilization 116.6% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1064: S Paulina St & 127th Street

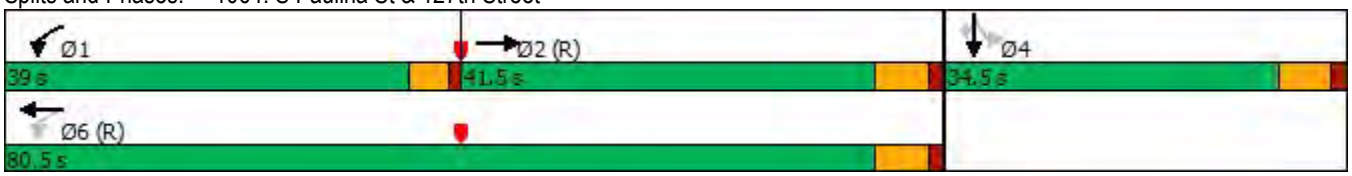

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	430	1320	0	0	1068	339	410	340	301	0	0	0
Future Volume (vph)	430	1320	0	0	1068	339	410	340	301	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	216		216	0		130	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				1.00							
Frt					0.964			0.930				
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3252	3353	0	0	4636	0	1676	3120	0	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3247	3353	0	0	4636	0	1676	3120	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					86							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			336			554			548	
Travel Time (s)		7.3			7.6			12.6			12.5	
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)			1			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Adj. Flow (vph)	453	1389	0	0	1124	357	432	358	317	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	453	1389	0	0	1481	0	432	675	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1		1	1				
Detector Template												
Leading Detector (ft)	50	50			50		50	50				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	50	50			50		50	50				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0			15.0		10.0	10.0				
Minimum Split (s)	26.5	80.5			54.0		34.5	34.5				
Total Split (s)	26.5	80.5			54.0		34.5	34.5				
Total Split (%)	23.0%	70.0%			47.0%		30.0%	30.0%				
Maximum Green (s)	20.5	74.5			48.0		28.5	28.5				
Yellow Time (s)	4.5	4.5			4.5		4.5	4.5				
All-Red Time (s)	1.5	1.5			1.5		1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0			7.0		5.0	5.0				
Minimum Gap (s)	0.2	3.5			3.5		0.2	0.2				
Time Before Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Time To Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Recall Mode	None	C-Max			C-Max		None	None				
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							21.5	21.5				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	19.5	74.5			49.0		28.5	28.5				
Actuated g/C Ratio	0.17	0.65			0.43		0.25	0.25				
v/c Ratio	0.82	0.64			0.73		1.04	0.87				
Control Delay	53.4	2.9			23.5		97.9	55.1				
Queue Delay	0.4	2.8			4.5		21.8	0.0				
Total Delay	53.8	5.7			28.0		119.8	55.1				
LOS	D	A			C		F	E				
Approach Delay		17.6			28.0			80.3				
Approach LOS		B			C			F				
90th %ile Green (s)	20.5	74.5			48.0		28.5	28.5				
90th %ile Term Code	Max	Coord			Coord		Max	Max				
70th %ile Green (s)	20.5	74.5			48.0		28.5	28.5				
70th %ile Term Code	Max	Coord			Coord		Max	Max				
50th %ile Green (s)	20.5	74.5			48.0		28.5	28.5				
50th %ile Term Code	Max	Coord			Coord		Max	Max				
30th %ile Green (s)	19.6	74.5			48.9		28.5	28.5				
30th %ile Term Code	Gap	Coord			Coord		Max	Max				
10th %ile Green (s)	16.5	74.5			52.0		28.5	28.5				
10th %ile Term Code	Gap	Coord			Coord		Max	Max				
Stops (vph)	375	292			661		348	582				
Fuel Used(gal)	8	6			14		12	13				
CO Emissions (g/hr)	547	399			983		830	921				
NOx Emissions (g/hr)	106	78			191		161	179				
VOC Emissions (g/hr)	127	93			228		192	213				
Dilemma Vehicles (#)	0	0			0		0	0				
Queue Length 50th (ft)	142	11			197		~346	253				
Queue Length 95th (ft)	m168	m12			m255		#545	#354				
Internal Link Dist (ft)		242			256			474			468	
Turn Bay Length (ft)	216											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	579	2172			2024		415	773				
Starvation Cap Reductn	11	644			297		0	0				
Spillback Cap Reductn	0	133			464		40	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.80	0.91			0.95		1.15	0.87				

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 36.7 Intersection LOS: D
Intersection Capacity Utilization 116.6% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1065: Marshfield Ave & 127th Street

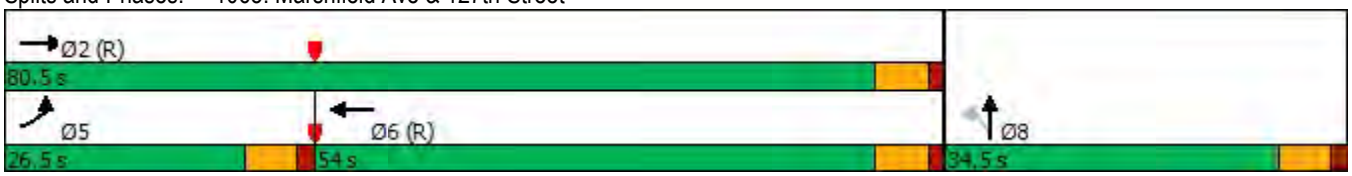

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	731	465	120	766	68	285	225	85	96	205	155
Future Volume (vph)	155	731	465	120	766	68	285	225	85	96	205	155
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	11	12	12	10	12	13	10	10	10
Storage Length (ft)	120		0	85		0	240		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			120			125			140		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.97	0.99	1.00		1.00	0.99		0.99	0.99	
Frt			0.850		0.988			0.959			0.935	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3386	1337	1605	3282	0	1580	3216	0	1550	2945	0
Flt Permitted	0.109			0.347			0.298			0.553		
Satd. Flow (perm)	179	3386	1292	583	3282	0	493	3216	0	894	2945	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			384		8			50			165	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		336			5379			1555			925	
Travel Time (s)		7.6			122.3			35.3			21.0	
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Adj. Flow (vph)	165	778	495	128	815	72	303	239	90	102	218	165
Shared Lane Traffic (%)												
Lane Group Flow (vph)	165	778	495	128	887	0	303	329	0	102	383	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.07	1.22	1.12	1.07	1.07	1.17	1.07	1.03	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	15.0	44.0	20.5	12.5	41.5		20.5	43.5		15.0	38.0	
Total Split (s)	15.0	44.0	20.5	12.5	41.5		20.5	43.5		15.0	38.0	
Total Split (%)	13.0%	38.3%	17.8%	10.9%	36.1%		17.8%	37.8%		13.0%	33.0%	
Maximum Green (s)	10.5	38.0	16.0	8.0	35.5		16.0	37.5		10.5	32.0	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	0.2	4.0	0.2	0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	25.0	0.0	0.0	25.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Recall Mode	Max	C-Max	None	None	C-Max		None	None		None	None	
Walk Time (s)		14.0			13.0			5.0			5.0	
Flash Dont Walk (s)		22.0			22.0			26.0			26.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	63.9	48.2	65.7	47.1	35.5		41.7	26.2		30.8	19.8	
Actuated g/C Ratio	0.56	0.42	0.57	0.41	0.31		0.36	0.23		0.27	0.17	
v/c Ratio	0.44	0.55	0.55	0.39	0.87		0.92	0.43		0.35	0.60	
Control Delay	18.0	22.1	6.2	18.2	47.9		59.0	30.1		27.9	27.9	
Queue Delay	0.0	1.1	0.2	0.0	0.2		0.0	0.0		0.0	0.0	
Total Delay	18.0	23.2	6.4	18.2	48.1		59.0	30.1		27.9	27.9	
LOS	B	C	A	B	D		E	C		C	C	
Approach Delay		16.8			44.3			44.0			27.9	
Approach LOS		B			D			D			C	
90th %ile Green (s)	16.4	38.0	16.0	13.9	35.5		16.0	31.6		10.5	26.1	
90th %ile Term Code	MaxR	Coord	Max	Max	Coord		Max	Hold		Max	Gap	
70th %ile Green (s)	20.4	44.5	16.0	11.4	35.5		16.0	27.6		10.5	22.1	
70th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Max	Gap	
50th %ile Green (s)	23.6	49.3	16.0	9.8	35.5		16.0	24.4		10.5	18.9	
50th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Max	Gap	
30th %ile Green (s)	25.8	52.8	16.0	8.5	35.5		16.0	23.5		9.2	16.7	
30th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Gap	Gap	
10th %ile Green (s)	27.8	56.5	15.7	6.8	35.5		15.7	23.7		7.0	15.0	
10th %ile Term Code	MaxR	Coord	Gap	Gap	Coord		Gap	Hold		Gap	Min	
Stops (vph)	77	542	164	69	745		233	250		70	186	
Fuel Used(gal)	1	8	3	6	47		8	7		2	6	
CO Emissions (g/hr)	98	573	190	409	3301		571	491		114	396	
NOx Emissions (g/hr)	19	111	37	80	642		111	96		22	77	
VOC Emissions (g/hr)	23	133	44	95	765		132	114		26	92	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	41	231	118	42	323		196	101		52	78	
Queue Length 95th (ft)	m113	m310	m168	85	#433		#262	137		84	121	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		256			5299			1475			845	
Turn Bay Length (ft)	120			85			240			120		
Base Capacity (vph)	374	1419	909	331	1018		330	1082		306	938	
Starvation Cap Reductn	0	387	72	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	6		0	0		0	1	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.44	0.75	0.59	0.39	0.88		0.92	0.30		0.33	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 15 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 31.0 Intersection LOS: C
Intersection Capacity Utilization 88.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1066: S Ashland & 127th Street

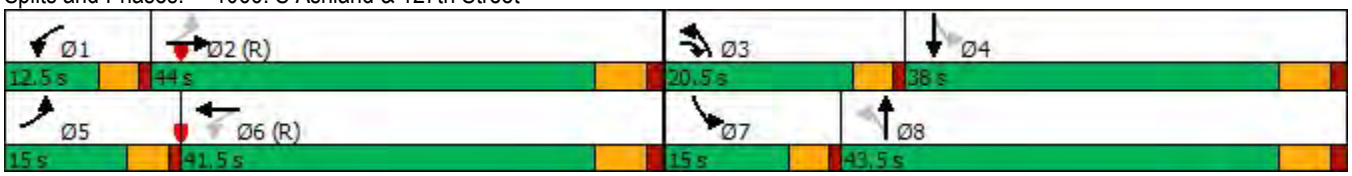

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	249	465	79	240	110	460	430	101	260	515	70
Future Volume (vph)	60	249	465	79	240	110	460	430	101	260	515	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	11	12	12	12	12	12
Storage Length (ft)	85		0	140		0	140		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	55			135			115			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	0.99		1.00	0.99		1.00				1.00	
Frt		0.902			0.953			0.971			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	2993	0	1710	3202	0	1621	3294	0	1693	3294	0
Flt Permitted	0.474			0.167			0.206			0.432		
Satd. Flow (perm)	847	2993	0	300	3202	0	351	3294	0	770	3294	0
Right Turn on Red			No			Yes			Yes			No
Satd. Flow (RTOR)					63			29				
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		542			3053			918			1555	
Travel Time (s)		10.6			59.5			17.9			30.3	
Confl. Peds. (#/hr)	12		3	3		12	5					5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Adj. Flow (vph)	66	274	511	87	264	121	505	473	111	286	566	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	785	0	87	385	0	505	584	0	286	643	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.12	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	15.0	32.5		19.5	37.0		25.0	50.5		12.5	38.0	
Total Split (s)	15.0	32.5		19.5	37.0		25.0	50.5		12.5	38.0	
Total Split (%)	13.0%	28.3%		17.0%	32.2%		21.7%	43.9%		10.9%	33.0%	
Maximum Green (s)	11.0	26.5		15.5	31.0		21.0	44.5		8.5	32.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	1.0	1.5		1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Minimum Gap (s)	0.2	4.0		0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Time To Reduce (s)	0.0	18.0		0.0	18.0		0.0	25.0		0.0	25.0	
Recall Mode	None	Max		None	Max		None	C-Max		None	C-Max	
Walk Time (s)					6.0						4.0	
Flash Dont Walk (s)					25.0						28.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)	43.9	34.6		45.7	35.4		59.0	44.5		42.5	32.0	
Actuated g/C Ratio	0.38	0.30		0.40	0.31		0.51	0.39		0.37	0.28	
v/c Ratio	0.17	1.15dr		0.37	0.37		1.23	0.45		0.81	0.70	
Control Delay	21.7	51.3		25.3	28.1		147.1	26.2		42.0	41.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.7	51.3		25.3	28.1		147.1	26.2		42.0	41.9	
LOS	C	D		C	C		F	C		D	D	
Approach Delay		49.0			27.5			82.2			41.9	
Approach LOS		D			C			F			D	
90th %ile Green (s)	11.0	29.4		12.6	31.0		21.0	44.5		8.5	32.0	
90th %ile Term Code	Max	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	9.7	31.3		10.7	32.3		21.0	44.5		8.5	32.0	
70th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	8.6	32.5		9.5	33.4		21.0	44.5		8.5	32.0	
50th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.6	33.6		8.4	34.4		21.0	44.5		8.5	32.0	
30th %ile Term Code	Gap	MaxR		Gap	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	0.0	46.0		0.0	46.0		21.0	44.5		8.5	32.0	
10th %ile Term Code	Skip	MaxR		Skip	MaxR		Max	Coord		Max	Coord	
Stops (vph)	37	604		47	227		263	364		205	497	
Fuel Used(gal)	1	15		4	18		19	9		7	15	
CO Emissions (g/hr)	54	1034		277	1248		1314	635		467	1069	
NOx Emissions (g/hr)	11	201		54	243		256	124		91	208	
VOC Emissions (g/hr)	13	240		64	289		305	147		108	248	
Dilemma Vehicles (#)	0	29		0	15		0	23		0	29	
Queue Length 50th (ft)	29	297		39	99		~371	158		106	208	
Queue Length 95th (ft)	58	#451		73	149		#585	209		#217	284	
Internal Link Dist (ft)		462			2973			838			1475	
Turn Bay Length (ft)	85			140			140			150		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	416	899		315	1029		411	1292		352	916	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.16	0.87		0.28	0.37		1.23	0.45		0.81	0.70	

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 5 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.23
Intersection Signal Delay: 54.8 Intersection LOS: D
Intersection Capacity Utilization 99.6% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 1067: S Ashland & Vermont St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	632	145	15	574	85	120	330	10	195	595	180
Future Volume (vph)	110	632	145	15	574	85	120	330	10	195	595	180
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	11	12	11	12	12	11	11	12
Storage Length (ft)	0		0	0		0	135		0	130		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			100			105		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	0.99	
Frt		0.975			0.981			0.995			0.965	
Flt Protected		0.994			0.999		0.950			0.950		
Satd. Flow (prot)	0	3138	0	0	3156	0	1559	3337	0	1637	3082	0
Flt Permitted		0.666			0.922		0.159			0.534		
Satd. Flow (perm)	0	2102	0	0	2913	0	261	3337	0	918	3082	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			19			4			47	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5379			1323			450			5338	
Travel Time (s)		122.3			30.1			10.2			121.3	
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Adj. Flow (vph)	118	680	156	16	617	91	129	355	11	210	640	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	954	0	0	724	0	129	366	0	210	834	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.07	1.07	1.12	1.07	1.12	1.07	1.07	1.12	1.12	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	15.0		15.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	8.0	37.0		21.0	21.0		8.0	31.0		8.0	21.0	
Total Split (s)	10.0	40.0		30.0	30.0		15.0	33.0		12.0	30.0	
Total Split (%)	11.8%	47.1%		35.3%	35.3%		17.6%	38.8%		14.1%	35.3%	
Maximum Green (s)	6.5	34.0		24.0	24.0		11.5	27.0		8.5	24.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Time To Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		9.0						7.0				
Flash Dont Walk (s)		22.0						18.0				
Pedestrian Calls (#/hr)		2						4				
Act Effct Green (s)		34.0			34.0		37.3	25.2		34.9	24.0	
Actuated g/C Ratio		0.41			0.41		0.45	0.30		0.42	0.29	
v/c Ratio		1.09			0.60		0.48	0.36		0.46	0.90	
Control Delay		82.0			21.6		18.8	23.5		17.3	42.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		82.0			21.6		18.8	23.5		17.3	42.1	
LOS		F			C		B	C		B	D	
Approach Delay		82.0			21.6			22.3			37.1	
Approach LOS		F			C			C			D	
90th %ile Green (s)	0.0	34.0		34.0	34.0		11.5	27.0		8.5	24.0	
90th %ile Term Code	Skip	Max		Hold	Hold		Max	Hold		Max	Max	
70th %ile Green (s)	0.0	34.0		34.0	34.0		11.4	26.9		8.5	24.0	
70th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Max	Max	
50th %ile Green (s)	0.0	34.0		34.0	34.0		10.0	25.5		8.5	24.0	
50th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Max	Max	
30th %ile Green (s)	0.0	34.0		34.0	34.0		8.6	24.1		8.5	24.0	
30th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Max	Max	
10th %ile Green (s)	0.0	34.0		34.0	34.0		6.6	22.6		8.0	24.0	
10th %ile Term Code	Skip	Max		Hold	Hold		Gap	Hold		Gap	Max	
Stops (vph)		709			496		65	251		124	643	
Fuel Used(gal)		56			13		1	4		9	43	
CO Emissions (g/hr)		3909			883		87	294		663	2971	
NOx Emissions (g/hr)		761			172		17	57		129	578	
VOC Emissions (g/hr)		906			205		20	68		154	689	
Dilemma Vehicles (#)		0			0		0	0		0	0	
Queue Length 50th (ft)		~295			148		37	77		63	209	
Queue Length 95th (ft)		#428			213		69	114		107	#333	
Internal Link Dist (ft)		5299			1243			370			5258	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)							135			130		
Base Capacity (vph)		879			1203		302	1087		460	923	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		1.09			0.60		0.43	0.34		0.46	0.90	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 83.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 44.7 Intersection LOS: D
Intersection Capacity Utilization 95.8% ICU Level of Service F
Analysis Period (min) 15
90th %ile Actuated Cycle: 85
70th %ile Actuated Cycle: 84.9
50th %ile Actuated Cycle: 83.5
30th %ile Actuated Cycle: 82.1
10th %ile Actuated Cycle: 80.1
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1068: Halsted Street & 127th Street

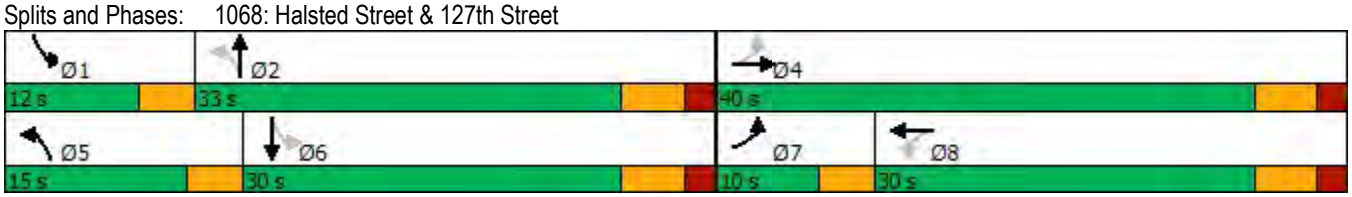

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	257	170	113	224	30	80	515	91	35	680	70
Future Volume (vph)	85	257	170	113	224	30	80	515	91	35	680	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Storage Length (ft)	60		0	55		0	105		0	90		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			55			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	0.99		0.99	1.00		1.00	1.00		1.00	1.00	
Frt		0.940			0.982			0.977			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	1888	0	1613	2000	0	1676	3218	0	1437	3270	0
Flt Permitted	0.530			0.305			0.282			0.361		
Satd. Flow (perm)	952	1888	0	514	2000	0	497	3218	0	545	3270	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		58			12			42			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2456			1385			1856			450	
Travel Time (s)		55.8			31.5			42.2			10.2	
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	4					2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Adj. Flow (vph)	92	279	185	123	243	33	87	560	99	38	739	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	464	0	123	276	0	87	659	0	38	815	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Minimum Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (s)	29.0	29.0		29.0	29.0		36.0	36.0		36.0	36.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%		55.4%	55.4%		55.4%	55.4%	
Maximum Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0		17.0	17.0		17.0	17.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	19.0	19.0		19.0	19.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
v/c Ratio	0.26	0.63		0.65	0.37		0.37	0.42		0.15	0.52	
Control Delay	16.9	19.3		28.2	19.5		16.5	11.4		11.4	12.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.9	19.3		28.2	19.5		16.5	11.4		11.4	12.9	
LOS	B	B		C	B		B	B		B	B	
Approach Delay		18.9			22.2			12.0			12.9	
Approach LOS		B			C			B			B	
Stops (vph)	58	301		104	238		52	347		21	475	
Fuel Used(gal)	4	22		2	5		2	12		0	7	
CO Emissions (g/hr)	298	1516		171	354		120	845		22	505	
NOx Emissions (g/hr)	58	295		33	69		23	164		4	98	
VOC Emissions (g/hr)	69	351		40	82		28	196		5	117	
Dilemma Vehicles (#)	0	0		0	0		0	0		0	0	
Queue Length 50th (ft)	25	128		54	114		21	78		8	107	
Queue Length 95th (ft)	57	219		m45	m91		55	116		24	153	
Internal Link Dist (ft)		2376			1305			1776			370	
Turn Bay Length (ft)	60			55			105			90		
Base Capacity (vph)	351	733		189	746		237	1556		259	1571	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.26	0.63		0.65	0.37		0.37	0.42		0.15	0.52	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 57 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 15.4 Intersection LOS: B
Intersection Capacity Utilization 79.8% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1069: Halsted Street & Vermont St

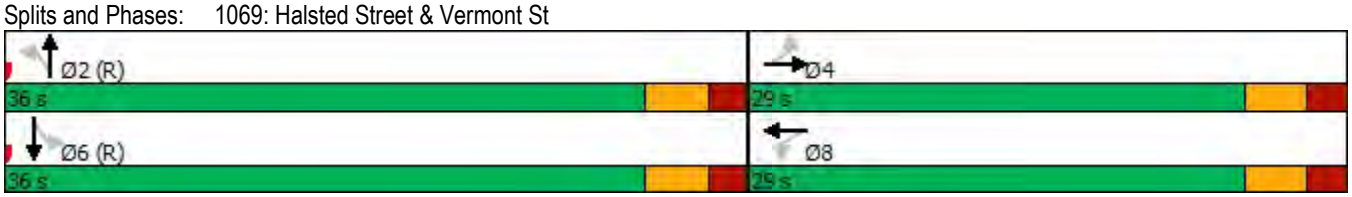

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	807	316	704	20	5	10	10	50	10	0	5
Future Volume (vph)	5	807	316	704	20	5	10	10	50	10	0	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	10	10	12	12	16	12	12	16	12
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00				0.99			0.98	
Frt				0.997				0.910			0.930	
Flt Protected				0.985				0.990			0.977	
Satd. Flow (prot)	0	3161	0	3090	0	0	0	1817	0	0	1816	0
Flt Permitted		0.944		0.568				0.952			0.893	
Satd. Flow (perm)	0	2984	0	1781	0	0	0	1744	0	0	1658	0
Right Turn on Red					No				No			
Satd. Flow (RTOR)												
Link Speed (mph)		30		30				30			30	
Link Distance (ft)		1323		3930				1256			658	
Travel Time (s)		30.1		89.3				28.5			15.0	
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)			1						2			2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	897	351	782	22	6	11	11	56	11	0	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	903	0	1155	0	0	0	84	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right
Median Width(ft)		0		0				0			0	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.17	1.17	1.07	1.07	0.91	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		15		9	15	15		9	15		9
Turn Type	Perm	NA	custom	NA		Perm	Perm	NA		Perm	NA	
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7			2	2			6		
Minimum Split (s)	23.0	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0	
Total Split (s)	23.0	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0	
Total Split (%)	35.4%	35.4%	13.8%	49.2%		27.7%	27.7%	27.7%		27.7%	27.7%	
Maximum Green (s)	18.0	18.0	6.0	27.0		14.0	14.0	14.0		14.0	14.0	
Yellow Time (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	0.0	2.0		1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0				0.0			0.0	
Total Lost Time (s)		5.0		5.0				4.0			4.0	
Lead/Lag	Lag	Lag	Lead									
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		18.0		5.0	5.0	5.0				
Flash Dont Walk (s)	9.0	9.0		9.0		9.0	9.0	9.0				
Pedestrian Calls (#/hr)	0	0		0		0	0	0				
Act Effct Green (s)		18.0		27.0				14.0			14.0	

Lane Group	SBR2	NEL	NER
Lane Configurations			
Traffic Volume (vph)	5	5	313
Future Volume (vph)	5	5	313
Ideal Flow (vphpl)	1800	1800	1800
Lane Width (ft)	12	12	12
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt		0.867	
Flt Protected		0.999	
Satd. Flow (prot)	0	1559	0
Flt Permitted		0.999	
Satd. Flow (perm)	0	1559	0
Right Turn on Red	No		
Satd. Flow (RTOR)			
Link Speed (mph)		30	
Link Distance (ft)		1385	
Travel Time (s)		31.5	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%
Adj. Flow (vph)	6	6	348
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	354	0
Enter Blocked Intersection	No	No	No
Lane Alignment	Right	Left	Right
Median Width(ft)		24	
Link Offset(ft)		0	
Crosswalk Width(ft)		16	
Two way Left Turn Lane			
Headway Factor	1.07	1.07	1.07
Turning Speed (mph)	9	15	9
Turn Type		Prot	
Protected Phases		3	
Permitted Phases			
Minimum Split (s)		15.0	
Total Split (s)		15.0	
Total Split (%)		23.1%	
Maximum Green (s)		10.0	
Yellow Time (s)		3.0	
All-Red Time (s)		2.0	
Lost Time Adjust (s)		0.0	
Total Lost Time (s)		5.0	
Lead/Lag			
Lead-Lag Optimize?			
Walk Time (s)			
Flash Dont Walk (s)			
Pedestrian Calls (#/hr)			
Act Effct Green (s)		10.0	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
v/c Ratio		1.09		1.70dl				0.22			0.06	
Control Delay		85.7		208.1				22.9			21.0	
Queue Delay		0.0		0.0				0.0			0.0	
Total Delay		85.7		208.1				22.9			21.0	
LOS		F		F				C			C	
Approach Delay		85.7		208.1				22.9			21.0	
Approach LOS		F		F				C			C	
Stops (vph)		678		614				61			19	
Fuel Used(gal)		26		79				1			0	
CO Emissions (g/hr)		1840		5545				100			21	
NOx Emissions (g/hr)		358		1079				20			4	
VOC Emissions (g/hr)		426		1285				23			5	
Dilemma Vehicles (#)		0		0				0			0	
Queue Length 50th (ft)		~218		~345				28			7	
Queue Length 95th (ft)		#326		#444				61			24	
Internal Link Dist (ft)		1243		3850				1176			578	
Turn Bay Length (ft)												
Base Capacity (vph)		826		820				375			357	
Starvation Cap Reductn		0		0				0			0	
Spillback Cap Reductn		0		0				0			0	
Storage Cap Reductn		0		0				0			0	
Reduced v/c Ratio		1.09		1.41				0.22			0.06	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.48
Intersection Signal Delay: 163.6 Intersection LOS: F
Intersection Capacity Utilization 102.9% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1070: S Wallance St & 127th Street

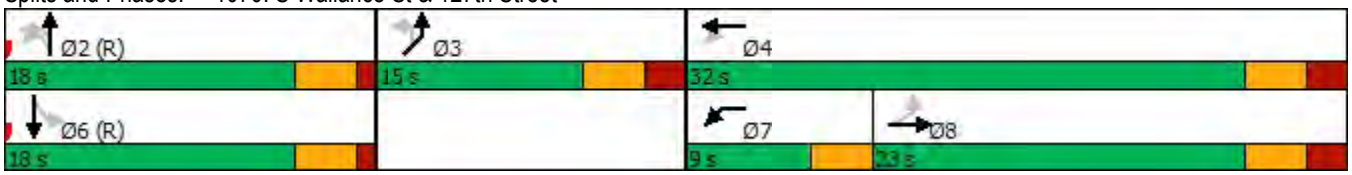

Lane Group	SBR2	NEL	NER
Actuated g/C Ratio		0.15	
v/c Ratio		1.48	
Control Delay		259.4	
Queue Delay		0.0	
Total Delay		259.4	
LOS		F	
Approach Delay		259.4	
Approach LOS		F	
Stops (vph)		238	
Fuel Used(gal)		22	
CO Emissions (g/hr)		1510	
NOx Emissions (g/hr)		294	
VOC Emissions (g/hr)		350	
Dilemma Vehicles (#)		0	
Queue Length 50th (ft)		~193	
Queue Length 95th (ft)		#348	
Internal Link Dist (ft)		1305	
Turn Bay Length (ft)			
Base Capacity (vph)		239	
Starvation Cap Reductn		0	
Spillback Cap Reductn		0	
Storage Cap Reductn		0	
Reduced v/c Ratio		1.48	

Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	290	897	831	70	95	230
Future Volume (vph)	290	897	831	70	95	230
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	150
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.988			0.850
Flt Protected		0.988			0.950	
Satd. Flow (prot)	0	3062	3062	0	1550	1386
Flt Permitted		0.568			0.950	
Satd. Flow (perm)	0	1760	3062	0	1550	1386
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			25			162
Link Speed (mph)		30	20		30	
Link Distance (ft)		3930	637		2686	
Travel Time (s)		89.3	21.7		61.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	312	965	894	75	102	247
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1277	969	0	102	247
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (%)	67.7%	67.7%	67.7%		32.3%	32.3%
Maximum Green (s)	40.0	40.0	40.0		17.0	17.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			30.0			
Flash Dont Walk (s)			10.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		40.0	40.0		17.0	17.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.62	0.62		0.26	0.26
v/c Ratio		1.24dl	0.51		0.25	0.51
Control Delay		101.4	8.1		25.8	15.9
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		101.4	8.1		25.8	15.9
LOS		F	A		C	B
Approach Delay		101.4	8.1		18.8	
Approach LOS		F	A		B	
Stops (vph)		1045	364		75	168
Fuel Used(gal)		67	8		5	11
CO Emissions (g/hr)		4662	542		341	788
NOx Emissions (g/hr)		907	105		66	153
VOC Emissions (g/hr)		1080	126		79	183
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		~350	91		40	46
Queue Length 95th (ft)		m#268	101		72	96
Internal Link Dist (ft)		3850	557		2606	
Turn Bay Length (ft)						150
Base Capacity (vph)		1083	1893		405	482
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		1.18	0.51		0.25	0.51

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 43 (66%), Referenced to phase 2: and 6:SBL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 55.4	Intersection LOS: E
Intersection Capacity Utilization 92.6%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1071: 127th Street & State Street

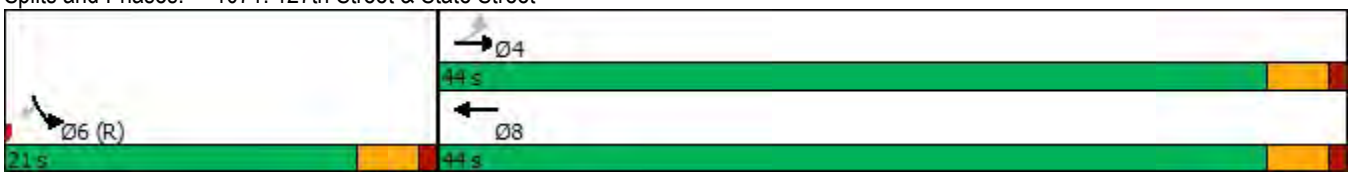

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	90	902	801	178	306	100
Future Volume (vph)	90	902	801	178	306	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	30
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			0.99
Frt			0.973			0.850
Flt Protected		0.995			0.950	
Satd. Flow (prot)	0	3117	2990	0	1506	1360
Flt Permitted		0.710			0.950	
Satd. Flow (perm)	0	2224	2990	0	1506	1343
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			61			62
Link Speed (mph)		30	30		30	
Link Distance (ft)		637	664		6686	
Travel Time (s)		14.5	15.1		152.0	
Confl. Peds. (#/hr)	2			2		1
Confl. Bikes (#/hr)	1					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Adj. Flow (vph)	98	980	871	193	333	109
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1078	1064	0	333	109
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	38.0	38.0	38.0		27.0	27.0
Total Split (s)	38.0	38.0	38.0		27.0	27.0
Total Split (%)	58.5%	58.5%	58.5%		41.5%	41.5%
Maximum Green (s)	34.0	34.0	34.0		23.0	23.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			21.0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)			13.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
v/c Ratio		0.93	0.67		0.63	0.21
Control Delay		19.8	15.5		25.4	13.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		19.8	15.5		25.4	13.4
LOS		B	B		C	B
Approach Delay		19.8	15.5		22.5	
Approach LOS		B	B		C	
Stops (vph)		640	555		255	70
Fuel Used(gal)		12	26		22	7
CO Emissions (g/hr)		870	1819		1548	484
NOx Emissions (g/hr)		169	354		301	94
VOC Emissions (g/hr)		202	422		359	112
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		155	105		128	10
Queue Length 95th (ft)		m136	175		m124	m10
Internal Link Dist (ft)		557	584		6606	
Turn Bay Length (ft)						30
Base Capacity (vph)		1163	1593		532	515
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.93	0.67		0.63	0.21

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 35 (54%), Referenced to phase 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 18.5	Intersection LOS: B
Intersection Capacity Utilization 87.6%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1072: 127th Street & Michigan Avenue

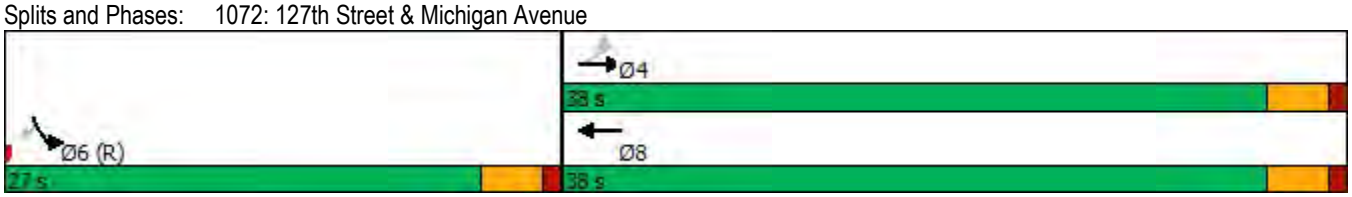

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	728	275	187	823	200	62
Future Volume (vph)	728	275	187	823	200	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	12	12	10	10
Storage Length (ft)		100	105		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor						0.99
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1706	1450	1676	3288	1492	1428
Flt Permitted			0.129		0.950	
Satd. Flow (perm)	1706	1450	228	3288	1492	1410
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						68
Link Speed (mph)	30			35	30	
Link Distance (ft)	163			5343	2671	
Travel Time (s)	3.7			104.1	60.7	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Adj. Flow (vph)	800	302	205	904	220	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	800	302	205	904	220	68
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.12	1.12	1.07	1.07	1.17	1.17
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm
Protected Phases	4	2		8	2	
Permitted Phases		4	8			2
Minimum Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (%)	55.4%	44.6%	55.4%	55.4%	44.6%	44.6%
Maximum Green (s)	31.0	24.0	31.0	31.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	17.0	5.0			5.0	5.0
Flash Dont Walk (s)	14.0	19.0			19.0	19.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Pedestrian Calls (#/hr)	0	0			0	0
Act Effct Green (s)	31.0	65.0	31.0	31.0	24.0	24.0
Actuated g/C Ratio	0.48	1.00	0.48	0.48	0.37	0.37
v/c Ratio	0.98	0.21	1.90	0.58	0.40	0.12
Control Delay	44.3	0.2	457.1	14.1	17.9	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	0.2	457.1	14.1	17.9	4.7
LOS	D	A	F	B	B	A
Approach Delay	32.2			96.0	14.8	
Approach LOS	C			F	B	
Stops (vph)	613	0	138	558	143	13
Fuel Used(gal)	25	6	26	38	6	1
CO Emissions (g/hr)	1729	391	1793	2678	397	99
NOx Emissions (g/hr)	336	76	349	521	77	19
VOC Emissions (g/hr)	401	91	416	621	92	23
Dilemma Vehicles (#)	0	0	0	64	0	0
Queue Length 50th (ft)	323	0	~128	127	63	0
Queue Length 95th (ft)	m#415	m0	#207	180	116	22
Internal Link Dist (ft)	83			5263	2591	
Turn Bay Length (ft)		100	105			
Base Capacity (vph)	813	1450	108	1568	550	563
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.21	1.90	0.58	0.40	0.12

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.90
Intersection Signal Delay: 58.5 Intersection LOS: E
Intersection Capacity Utilization 98.8% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1073: Indiana Ave & 130th Street

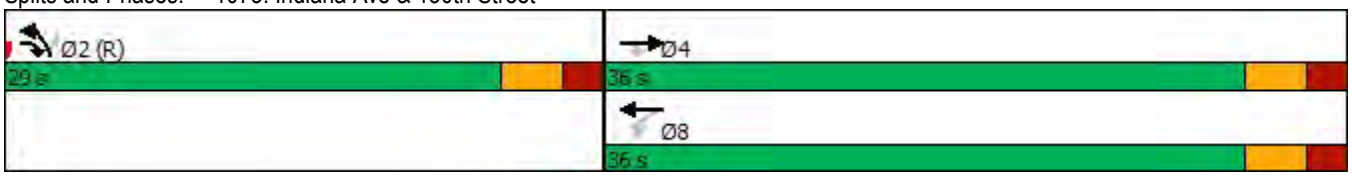

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	598	0	0	632	45	5	5	35	200	0	131
Future Volume (vph)	52	598	0	0	632	45	5	5	35	200	0	131
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	9	12	12	12	11	15	11
Storage Length (ft)	0		30	0		50	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99				0.80		0.97			0.98	
Frt						0.850		0.897			0.946	
Flt Protected		0.996						0.994			0.971	
Satd. Flow (prot)	0	3150	0	0	1663	1337	0	1520	0	0	1730	0
Flt Permitted		0.846						0.970			0.820	
Satd. Flow (perm)	0	2662	0	0	1663	1071	0	1482	0	0	1454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						64		39			64	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			105			169			1380	
Travel Time (s)		5.2			2.4			3.8			31.4	
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1			1		1						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Adj. Flow (vph)	58	664	0	0	702	50	6	6	39	222	0	146
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	722	0	0	702	50	0	51	0	0	368	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.07	1.07	1.17	1.22	1.07	1.07	1.07	1.12	0.95	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	3 8			2		1	6	
Permitted Phases	4				3	3 8	2	2		6		
Minimum Split (s)	16.0	16.0		18.0			12.0	12.0		20.0	32.0	
Total Split (s)	35.0	35.0		18.0			12.0	12.0		20.0	32.0	
Total Split (%)	41.2%	41.2%		21.2%			14.1%	14.1%		23.5%	37.6%	
Maximum Green (s)	31.0	31.0		14.0			9.0	9.0		15.0	27.0	
Yellow Time (s)	3.0	3.0		3.0			3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0			0.0	0.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						3.0			5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?												
Walk Time (s)				2.0							14.0	

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Minimum Split (s)	35.0
Total Split (s)	35.0
Total Split (%)	41%
Maximum Green (s)	31.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	18.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)				12.0							13.0	
Pedestrian Calls (#/hr)				0							0	
Act Effct Green (s)		31.0			49.0	49.0		9.0			27.0	
Actuated g/C Ratio		0.36			0.58	0.58		0.11			0.32	
v/c Ratio		0.74			0.73	0.08		0.27			0.66	
Control Delay		29.2			12.5	0.2		19.5			27.8	
Queue Delay		1.9			53.2	8.6		0.0			0.0	
Total Delay		31.1			65.7	8.8		19.5			27.8	
LOS		C			E	A		B			C	
Approach Delay		31.1			61.9			19.5			27.8	
Approach LOS		C			E			B			C	
Stops (vph)		550			148	0		19			232	
Fuel Used(gal)		9			3	0		0			7	
CO Emissions (g/hr)		657			206	3		24			470	
NOx Emissions (g/hr)		128			40	1		5			91	
VOC Emissions (g/hr)		152			48	1		6			109	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		173			84	0		6			136	
Queue Length 95th (ft)		242			m23	m1		38			229	
Internal Link Dist (ft)		148			25			89			1300	
Turn Bay Length (ft)						50						
Base Capacity (vph)		970			958	644		191			554	
Starvation Cap Reductn		0			454	559		0			0	
Spillback Cap Reductn		122			0	0		1			2	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.85			1.39	0.59		0.27			0.67	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Pretimed
Maximum v/c Ratio: 1.41
Intersection Signal Delay: 42.4 Intersection LOS: D
Intersection Capacity Utilization 92.4% ICU Level of Service F
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1955: 115th Street & Cottage Grove Avenue

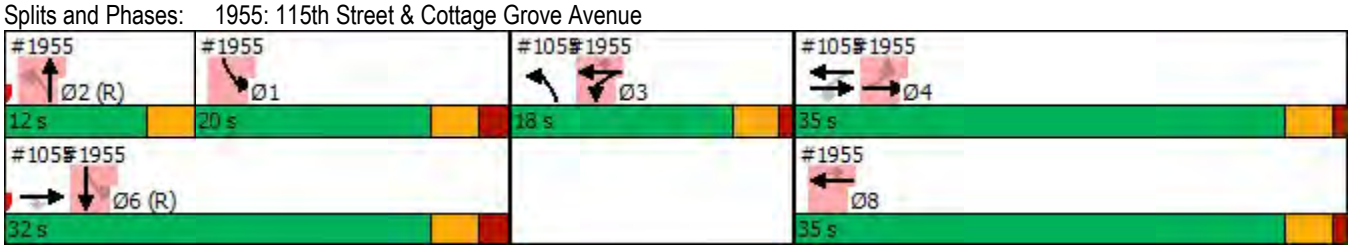

Lane Group	Ø8
Flash Dont Walk (s)	13.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB 130th Street Entrance Ramp to EB I-94	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Deceleration Length (LA),ft	1610	310
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	777	318
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	5.50	7.60
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.948	0.929
Flow Rate (v_i),pc/h	911	380
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.20	0.19

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.397
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	43.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	49.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	911	Ramp Junction Speed (S), mi/h	43.8
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	10.4
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.3

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	750	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	169	365	0	290
Peak Hour Factor (PHF)	0.90	0.90	0.90	0.90
Total Trucks, %	5.50	15.40	0.00	7.10
Heavy Vehicle Adjustment Factor (f_{HV})	0.948	0.867	1.000	0.934
Flow Rate (v_i), pc/h	198	468	0	345
Weaving Flow Rate (v_W), pc/h	813	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	198	Density-Based Capacity (c_{IWL}), pc/h/ln		1371
Total Flow Rate (v), pc/h	1011	Demand Flow-Based Capacity (c_{IW}), pc/h		2985
Volume Ratio (VR)	0.804	Weaving Segment Capacity (c_W), veh/h		2484
Minimum Lane Change Rate (LC_{MIN}), lc/h	813	Adjusted Weaving Area Capacity, pc/h		2743
Maximum Weaving Length (L_{MAX}), ft	11590	Volume-to-Capacity Ratio (v/c)		0.37

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	10	Average Weaving Speed (S_W), mi/h	38.7
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	62	Average Non-Weaving Speed (S_{NW}), mi/h	36.7
Weaving Lane Change Rate (LC_W), lc/h	863	Average Speed (S), mi/h	38.3
Weaving Lane Change Rate (LC_{All}), lc/h	925	Density (D), pc/mi/ln	13.2
Weaving Intensity Factor (W)	0.267	Level of Service (LOS)	B

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB I-94 Exit Ramp to EB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	940	325
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	529	535
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	14.00	40.30
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.877	0.713
Flow Rate (vi),pc/h	670	834
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.33	0.42

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.313
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	45.0
Flow in Lanes 1 and 2 (v12), pc/h	670	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	1504	Average Density (D), pc/mi/ln	17.1
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	14.9

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HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB 130th Street Entrance Ramp to WB I-94	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1885	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1127	380
Peak Hour Factor (PHF)	0.95	0.90
Total Trucks, %	30.20	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.768	0.901
Flow Rate (vi),pc/h	1545	469
Capacity (c), pc/h	4500	2100
Volume-to-Capacity Ratio (v/c)	0.34	0.22

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.340
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	44.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	1545	Ramp Junction Speed (S), mi/h	44.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	17.6
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	12.8

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - WB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	570	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	347	463	0	400
Peak Hour Factor (PHF)	0.95	0.90	0.90	0.90
Total Trucks, %	30.20	11.70	0.00	43.60
Heavy Vehicle Adjustment Factor (f_{HV})	0.768	0.895	1.000	0.696
Flow Rate (v_i), pc/h	476	575	0	639
Weaving Flow Rate (v_W), pc/h	1214	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	476	Density-Based Capacity (c_{IWL}), pc/h/ln		1442
Total Flow Rate (v), pc/h	1690	Demand Flow-Based Capacity (c_{IW}), pc/h		3343
Volume Ratio (VR)	0.718	Weaving Segment Capacity (c_W), veh/h		2260
Minimum Lane Change Rate (LC_{MIN}), lc/h	1214	Adjusted Weaving Area Capacity, pc/h		2884
Maximum Weaving Length (L_{MAX}), ft	10484	Volume-to-Capacity Ratio (v/c)		0.59

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	18	Average Weaving Speed (S_W), mi/h	36.0
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	22	Average Non-Weaving Speed (S_{NW}), mi/h	32.2
Weaving Lane Change Rate (LC_W), lc/h	1253	Average Speed (S), mi/h	34.8
Weaving Lane Change Rate (LC_{All}), lc/h	1275	Density (D), pc/mi/ln	24.3
Weaving Intensity Factor (W)	0.427	Level of Service (LOS)	C

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	AM Peak
Project Description	Red Line Extension - EB I-94 Exit Ramp to WB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	850	340
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	810	330
Peak Hour Factor (PHF)	0.95	0.90
Total Trucks, %	7.90	4.70
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.927	0.955
Flow Rate (v_i),pc/h	920	384
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.29	0.19

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.308
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	45.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	920	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1304	Average Density (D), pc/mi/ln	14.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.4

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HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB 130th Street Entrance Ramp to EB I-94	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Deceleration Length (LA),ft	1610	310
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (V_i)	1330	611
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	1.60	3.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.984	0.971
Flow Rate (v_i),pc/h	1502	699
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.33	0.35

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O)	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.426
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	43.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	49.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	1502	Ramp Junction Speed (S), mi/h	43.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	17.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	14.4

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	750	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	379	475	0	340
Peak Hour Factor (PHF)	0.90	0.95	0.90	0.90
Total Trucks, %	1.60	2.70	0.00	3.20
Heavy Vehicle Adjustment Factor (f_{HV})	0.984	0.974	1.000	0.969
Flow Rate (v_i), pc/h	428	513	0	390
Weaving Flow Rate (v_W), pc/h	903	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	428	Density-Based Capacity (c_{IWL}), pc/h/ln		1494
Total Flow Rate (v), pc/h	1331	Demand Flow-Based Capacity (c_{IW}), pc/h		3540
Volume Ratio (VR)	0.678	Weaving Segment Capacity (c_W), veh/h		2915
Minimum Lane Change Rate (LC_{MIN}), lc/h	903	Adjusted Weaving Area Capacity, pc/h		2988
Maximum Weaving Length (L_{MAX}), ft	9980	Volume-to-Capacity Ratio (v/c)		0.45

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	22	Average Weaving Speed (S_W), mi/h	38.1
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	109	Average Non-Weaving Speed (S_{NW}), mi/h	35.3
Weaving Lane Change Rate (LC_W), lc/h	953	Average Speed (S), mi/h	37.2
Weaving Lane Change Rate (LC_{All}), lc/h	1062	Density (D), pc/mi/ln	17.9
Weaving Intensity Factor (W)	0.297	Level of Service (LOS)	B

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB I-94 Exit Ramp to EB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	940	325
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	854	755
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	1.30	6.20
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.987	0.942
Flow Rate (vi),pc/h	961	891
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.41	0.45

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.320
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	44.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	45.0
Flow in Lanes 1 and 2 (v12), pc/h	961	Ramp Junction Speed (S), mi/h	44.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	1852	Average Density (D), pc/mi/ln	21.0
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.5

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HCS7 Freeway Diverge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB 130th Street Entrance Ramp to WB I-94	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	45.0
Segment Length (L) / Deceleration Length (LA),ft	1885	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	1452	495
Peak Hour Factor (PHF)	0.90	0.90
Total Trucks, %	9.60	2.50
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.912	0.976
Flow Rate (vi),pc/h	1769	564
Capacity (c), pc/h	4500	2100
Volume-to-Capacity Ratio (v/c)	0.39	0.27

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.349
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	44.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	49.4
Flow in Lanes 1 and 2 (v12), pc/h	1769	Ramp Junction Speed (S), mi/h	44.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	20.1
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	14.7

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HCS7 Freeway Weaving Report

Project Information

Analyst	TranSmart	Date	9/28/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - WB Weaving Segment	Unit	United States Customary

Geometric Data

Number of Lanes (N), ln	2	Segment Type	Freeway
Segment Length (L_S), ft	570	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.67	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	172	380	0	785
Peak Hour Factor (PHF)	0.90	0.90	0.90	0.90
Total Trucks, %	9.60	5.00	0.00	6.70
Heavy Vehicle Adjustment Factor (f_{HV})	0.912	0.952	1.000	0.937
Flow Rate (v_i), pc/h	210	444	0	931
Weaving Flow Rate (v_W), pc/h	1375	Freeway Max Capacity (c_{IFL}), pc/h/ln		2200
Non-Weaving Flow Rate (v_{NW}), pc/h	210	Density-Based Capacity (c_{IWL}), pc/h/ln		1292
Total Flow Rate (v), pc/h	1585	Demand Flow-Based Capacity (c_{IW}), pc/h		2765
Volume Ratio (VR)	0.868	Weaving Segment Capacity (c_W), veh/h		2424
Minimum Lane Change Rate (LC_{MIN}), lc/h	1375	Adjusted Weaving Area Capacity, pc/h		2585
Maximum Weaving Length (L_{MAX}), ft	12435	Volume-to-Capacity Ratio (v/c)		0.61

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	8	Average Weaving Speed (S_W), mi/h	35.5
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	0	Average Non-Weaving Speed (S_{NW}), mi/h	31.3
Weaving Lane Change Rate (LC_W), lc/h	1414	Average Speed (S), mi/h	34.9
Weaving Lane Change Rate (LC_{All}), lc/h	1414	Density (D), pc/mi/ln	22.7
Weaving Intensity Factor (W)	0.463	Level of Service (LOS)	C

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HCS7 Freeway Merge Report

Project Information			
Analyst	TranSmart	Date	9/24/2020
Agency	CTA	Analysis Year	Build
Jurisdiction	Cook County	Time Period Analyzed	PM Peak
Project Description	Red Line Extension - EB I-94 Exit Ramp to WB 130th Street	Unit	United States Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	45.0	40.0
Segment Length (L) / Acceleration Length (LA),ft	850	340
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity		
Demand Volume (Vi)	552	325
Peak Hour Factor (PHF)	0.90	0.95
Total Trucks, %	1.80	2.70
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.982	0.974
Flow Rate (vi),pc/h	625	351
Capacity (c), pc/h	4500	2000
Volume-to-Capacity Ratio (v/c)	0.22	0.18

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.304
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	44.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	45.0
Flow in Lanes 1 and 2 (v12), pc/h	625	Ramp Junction Speed (S), mi/h	44.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	976	Average Density (D), pc/mi/ln	11.1
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	10.9

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Attachment D

2050 Build Condition (Mitigated)

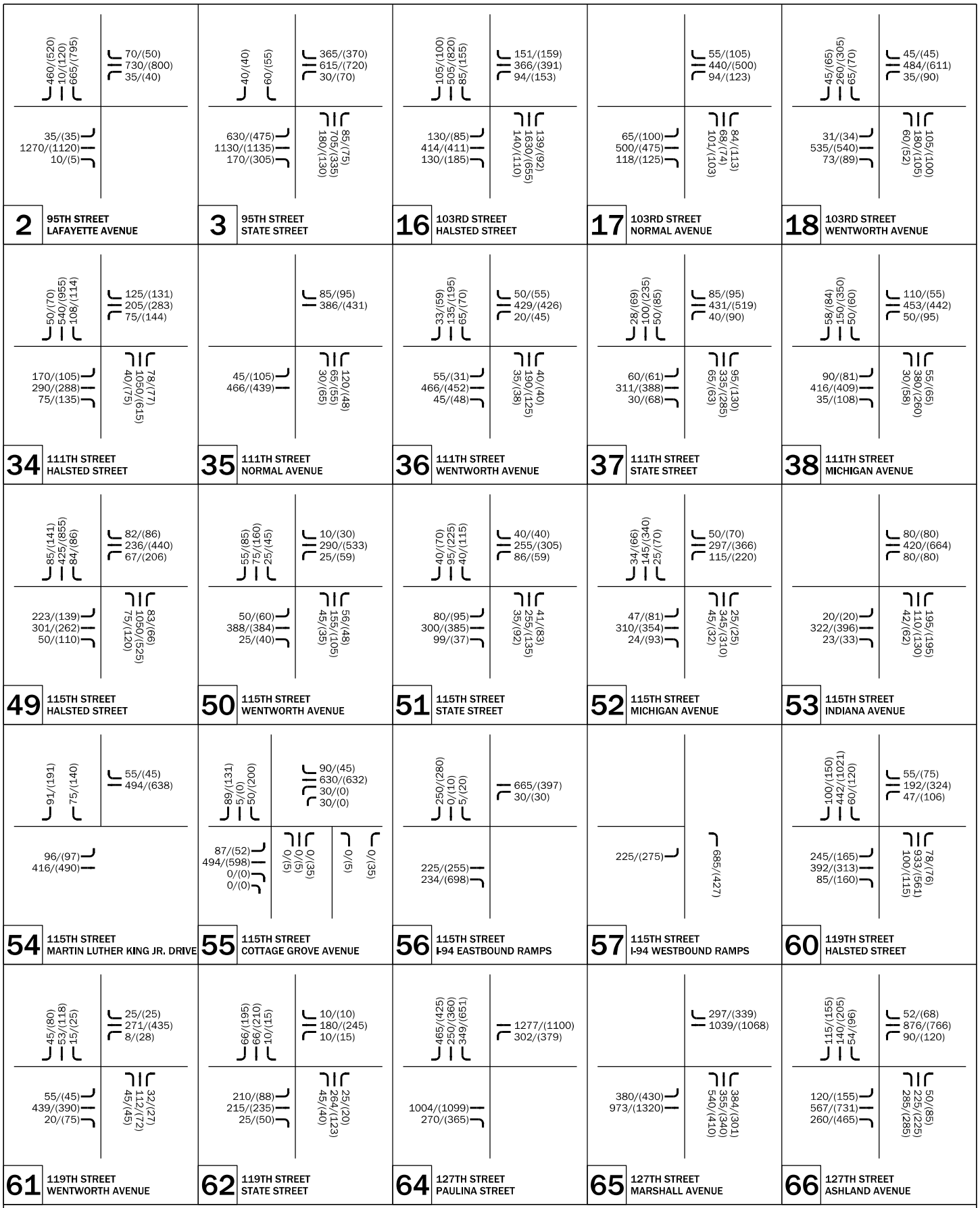

BUILD (2050) INTERSECTION TRAFFIC VOLUMES (MITIGATED)

PAGE 1 OF 2

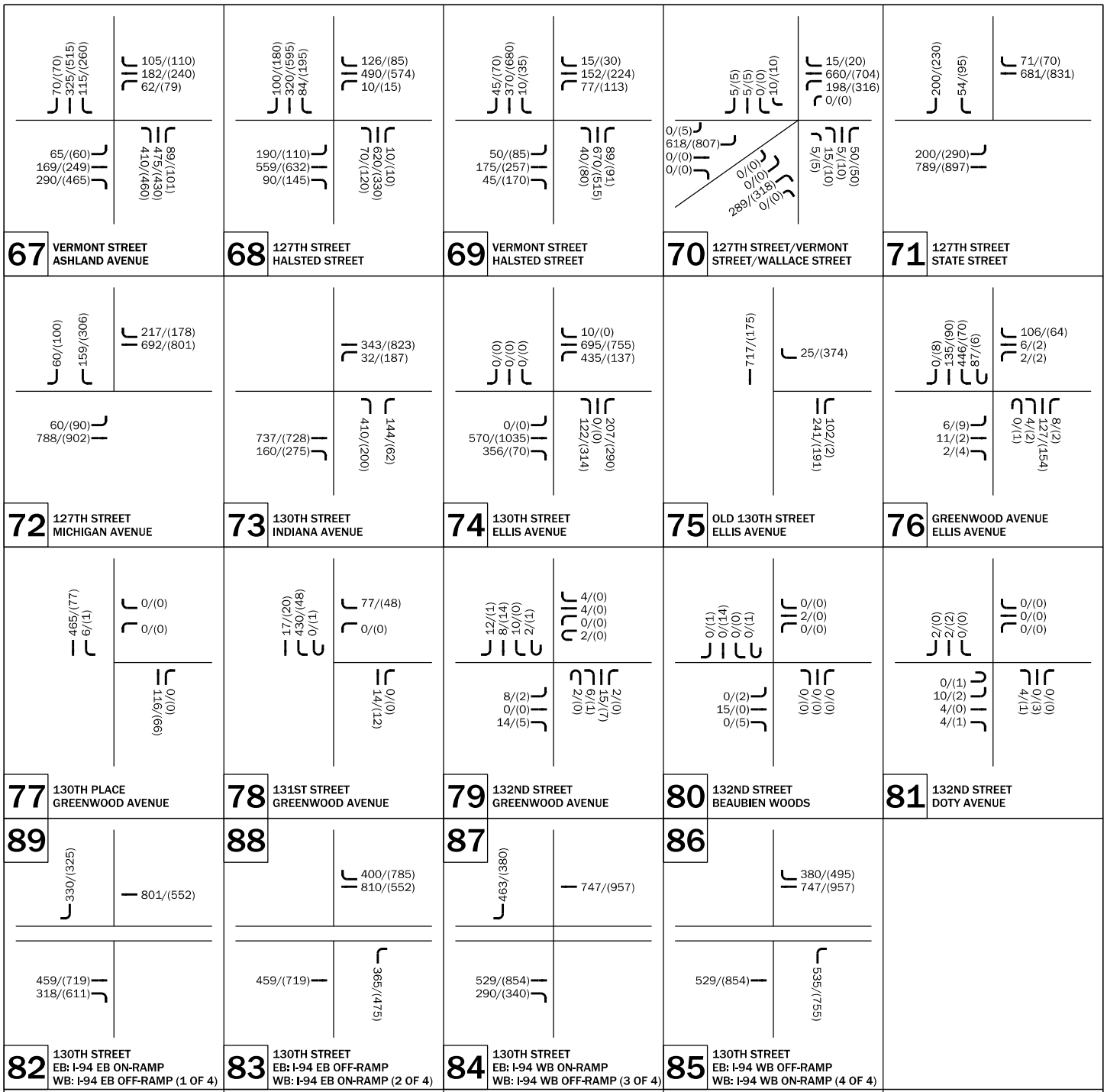

BUILD (2050) INTERSECTION TRAFFIC VOLUMES (MITIGATED)

PAGE 2 OF 2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	570	356	435	695	10	122	0	207	0	0	0
Future Volume (vph)	0	570	356	435	695	10	122	0	207	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	13	12	12	12	12	12	12	12	16	12
Storage Length (ft)	175		295	370		170	0		0	0		0
Storage Lanes	1		1	1		1	1		0	0		0
Taper Length (ft)	209			155			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1800	3109	1520	1644	3138	1366	1449	1443	0	0	2040	0
Flt Permitted				0.356			0.757					
Satd. Flow (perm)	1800	3109	1520	616	3138	1366	1155	1443	0	0	2040	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		5340			1172			141			331	
Travel Time (s)		104.0			22.8			3.2			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Adj. Flow (vph)	0	594	371	453	724	10	127	0	216	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	594	371	453	724	10	127	216	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.03	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA				
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	43.0	43.0	43.0	7.0	43.0	43.0	6.0	6.0		6.0	6.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	47.0	47.0	47.0	10.0	47.0	47.0	10.0	10.0		10.0	10.0	
Total Split (s)	47.0	47.0	47.0	10.0	57.0	57.0	28.0	28.0		28.0	28.0	
Total Split (%)	55.3%	55.3%	55.3%	11.8%	67.1%	67.1%	32.9%	32.9%		32.9%	32.9%	
Maximum Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0		24.0	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0			4.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0		6.0	6.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)		43.4	43.4	58.1	57.1	57.1	19.9	19.9				
Actuated g/C Ratio		0.51	0.51	0.68	0.67	0.67	0.23	0.23				
v/c Ratio		0.37	0.48	0.82	0.34	0.01	0.47	0.64				
Control Delay		13.5	16.2	25.6	7.0	5.9	32.9	37.6				
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Delay		13.5	16.2	25.6	7.0	5.9	32.9	37.6				
LOS		B	B	C	A	A	C	D				
Approach Delay		14.6			14.1			35.9				
Approach LOS		B			B			D				
90th %ile Green (s)	43.0	43.0	43.0	7.0	53.0	53.0	24.0	24.0		24.0	24.0	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max		Hold	Hold	
70th %ile Green (s)	43.0	43.0	43.0	7.2	53.2	53.2	23.8	23.8		23.8	23.8	
70th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap		Hold	Hold	
50th %ile Green (s)	43.0	43.0	43.0	10.6	56.6	56.6	20.4	20.4		20.4	20.4	
50th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap		Hold	Hold	
30th %ile Green (s)	43.0	43.0	43.0	13.3	59.3	59.3	17.7	17.7		17.7	17.7	
30th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Gap	Gap		Hold	Hold	
10th %ile Green (s)	45.0	45.0	45.0	15.4	63.4	63.4	13.6	13.6		13.6	13.6	
10th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
Stops (vph)		327	223	160	280	5	104	184				
Fuel Used(gal)		26	17	8	10	0	2	3				
CO Emissions (g/hr)		1818	1159	551	710	11	107	198				
NOx Emissions (g/hr)		354	225	107	138	2	21	38				
VOC Emissions (g/hr)		421	269	128	165	2	25	46				
Dilemma Vehicles (#)		34	0	0	41	0	0	0				
Queue Length 50th (ft)		96	123	93	77	2	60	107				
Queue Length 95th (ft)		134	197	#274	122	7	m106	m170				
Internal Link Dist (ft)		5260			1092			61			251	
Turn Bay Length (ft)			295	370		170						
Base Capacity (vph)		1587	775	550	2108	917	326	407				
Starvation Cap Reductn		0	0	0	0	0	0	0				
Spillback Cap Reductn		0	0	0	0	0	0	0				
Storage Cap Reductn		0	0	0	0	0	0	0				
Reduced v/c Ratio		0.37	0.48	0.82	0.34	0.01	0.39	0.53				

Intersection Summary	
Area Type:	Other

Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 95.2%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Ellis Avenue & 130th Street

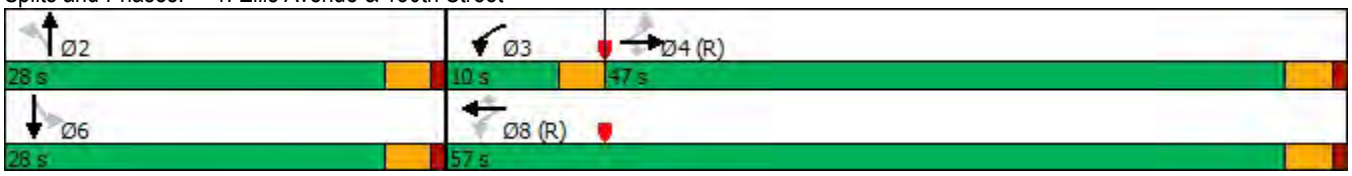

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	570	356	435	695	10	122	0	207	0	0	0
Future Volume (veh/h)	0	570	356	435	695	10	122	0	207	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1800	1660	1814	1744	1674	1632	1547	1800	1716	396	1872	1800
Adj Flow Rate, veh/h	0	594	371	453	724	10	127	0	216	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	10	4	4	9	12	18	0	6	100	0	0
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	85	1893	923	512	2284	993	361	0	286	0	351	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.60	0.60	0.08	0.72	0.72	0.19	0.00	0.19	0.00	0.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	8.6	9.5	28.2	4.7	3.4	32.8	0.0	46.2	0.0	0.0	0.0
Ln Grp LOS	A	A	A	C	A	A	C	A	D	A	A	A
Approach Vol, veh/h		965			1187			343			0	
Approach Delay, s/veh		8.9			13.7			41.2			0.0	
Approach LOS		A			B			D				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		6.0	1.2	5.0		8.0		3.0
Phs Duration (G+Y+Rc), s		20.0	10.0	55.0		20.0		65.0
Change Period (Y+Rc), s		4.0	3.0	4.0		4.0		4.0
Max Green (Gmax), s		24.0	7.0	43.0		24.0		53.0
Max Allow Headway (MAH), s		7.5	4.3	4.4		0.0		4.2
Max Q Clear (g_c+I1), s		13.4	9.0	12.8		0.0		9.1
Green Ext Time (g_e), s		2.6	0.0	5.0		0.0		3.8
Prob of Phs Call (p_c)		1.00	1.00	1.00		0.00		1.00
Prob of Max Out (p_x)		0.56	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1474	1661	734		0		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3153		1872		3180

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1525		1537		0		1383

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		LL (Pr/Pm)		L				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	127	453	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1474	1661	734	0	0	0	0
Q Serve Time (g_s), s	0.0	6.5	7.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.5	7.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1474	573	734	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	16.0	53.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.0	43.2	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	6.5	43.2	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	16.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	361	512	85	0	0	0	0
V/C Ratio (X)	0.00	0.35	0.88	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	501	512	85	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	30.7	11.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	16.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.8	28.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.3	3.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	2.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.71	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.5	9.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.45	0.64	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	2	0	1	0	2
Grp Vol (v), veh/h	0	0	0	594	0	0	0	724
Grp Sat Flow (s), veh/h/ln	0	0	0	1577	0	1872	0	1590
Q Serve Time (g_s), s	0.0	0.0	0.0	7.9	0.0	0.0	0.0	7.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.9	0.0	0.0	0.0	7.1
Lane Grp Cap (c), veh/h	0	0	0	1893	0	351	0	2284
V/C Ratio (X)	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.32
Avail Cap (c_a), veh/h	0	0	0	1893	0	529	0	2284
Upstream Filter (I)	0.00	0.00	0.00	0.46	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.4	0.0	0.0	0.0	4.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	8.6	0.0	0.0	0.0	4.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.3	0.0	0.0	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.72	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	4.1	0.0	0.0	0.0	3.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R				R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	216	0	371	0	0	0	10
Grp Sat Flow (s), veh/h/ln	0	1525	0	1537	0	0	0	1383
Q Serve Time (g_s), s	0.0	11.4	0.0	10.8	0.0	0.0	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	11.4	0.0	10.8	0.0	0.0	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	286	0	923	0	0	0	993
V/C Ratio (X)	0.00	0.75	0.00	0.40	0.00	0.00	0.00	0.01
Avail Cap (c_a), veh/h	0	431	0	923	0	0	0	993
Upstream Filter (I)	0.00	1.00	0.00	0.46	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.7	0.0	8.9	0.0	0.0	0.0	3.4
Incr Delay (d2), s/veh	0.0	13.5	0.0	0.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	46.2	0.0	9.5	0.0	0.0	0.0	3.4
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	3.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.62	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	5.2	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	4.28	0.00	0.46	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	414	130	94	366	151	140	1630	139	85	505	105
Future Volume (vph)	130	414	130	94	366	151	140	1630	139	85	505	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	10	10	9	9	10	9
Storage Length (ft)	60		260	55		260	92		130	115		130
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99	0.99		0.99	0.98		0.99		0.97			0.96
Frt		0.964			0.956				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	1877	0	1710	1814	0	1506	3099	1324	1425	2956	1324
Flt Permitted	0.114			0.114			0.376			0.089		
Satd. Flow (perm)	191	1877	0	203	1814	0	590	3099	1283	134	2956	1265
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			21				83			113
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		663			2036			5304			1099	
Travel Time (s)		15.1			46.3			120.5			25.0	
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Adj. Flow (vph)	140	445	140	101	394	162	151	1753	149	91	543	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	140	585	0	101	556	0	151	1753	149	91	543	113
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.17	1.17	1.22	1.22	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		4.0	11.0		5.0	31.0	31.0	5.0	31.0	31.0
Minimum Split (s)	13.0	47.0		8.0	34.0		8.0	46.0	46.0	8.0	46.0	46.0
Total Split (s)	9.0	40.0		9.0	40.0		7.0	49.0	49.0	7.0	49.0	49.0
Total Split (%)	8.6%	38.1%		8.6%	38.1%		6.7%	46.7%	46.7%	6.7%	46.7%	46.7%
Maximum Green (s)	6.0	35.0		6.0	35.0		4.0	45.0	45.0	4.0	45.0	45.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max		None	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		24.0			11.0			31.0	31.0		31.0	31.0
Flash Dont Walk (s)		18.0			18.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0			0			0	0		0	0
Act Effct Green (s)	43.0	35.0		43.0	35.0		50.0	45.0	45.0	50.0	45.0	45.0
Actuated g/C Ratio	0.41	0.33		0.41	0.33		0.48	0.43	0.43	0.48	0.43	0.43
v/c Ratio	0.88	0.92		0.60	0.90		0.48	1.32	0.25	0.81	0.43	0.19
Control Delay	69.3	54.4		33.6	51.6		21.7	177.6	10.1	66.0	22.3	4.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.3	54.4		33.6	51.6		21.7	177.6	10.1	66.0	22.3	4.3
LOS	E	D		C	D		C	F	B	E	C	A
Approach Delay		57.3			48.9			154.0			24.9	
Approach LOS		E			D			F			C	
90th %ile Green (s)	6.0	35.0		6.0	35.0		4.0	45.0	45.0	4.0	45.0	45.0
90th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	6.0	35.0		6.0	35.0		4.0	45.0	45.0	4.0	45.0	45.0
70th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	6.0	35.0		6.0	35.0		4.0	45.0	45.0	4.0	45.0	45.0
50th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	6.0	35.0		6.0	35.0		4.0	45.0	45.0	4.0	45.0	45.0
30th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	6.0	35.0		6.0	35.0		4.0	45.0	45.0	4.0	45.0	45.0
10th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
Stops (vph)	72	466		57	439		86	1282	42	40	340	13
Fuel Used(gal)	3	11		2	16		7	133	6	2	9	1
CO Emissions (g/hr)	203	798		171	1123		481	9327	438	146	594	74
NOx Emissions (g/hr)	39	155		33	219		94	1815	85	28	116	14
VOC Emissions (g/hr)	47	185		40	260		112	2162	101	34	138	17
Dilemma Vehicles (#)	0	0		0	0		0	0	0	0	0	0
Queue Length 50th (ft)	56	367		40	342		54	~804	26	31	131	0
Queue Length 95th (ft)	#162	#581		#79	#548		92	#942	68	#98	177	33
Internal Link Dist (ft)		583			1956			5224			1019	
Turn Bay Length (ft)	60			55			92		130	115		130
Base Capacity (vph)	159	636		169	618		315	1328	597	112	1266	606
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.92		0.60	0.90		0.48	1.32	0.25	0.81	0.43	0.19

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.32
Intersection Signal Delay: 97.7 Intersection LOS: F
Intersection Capacity Utilization 107.2% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1016: Halsted Street & 103rd Street

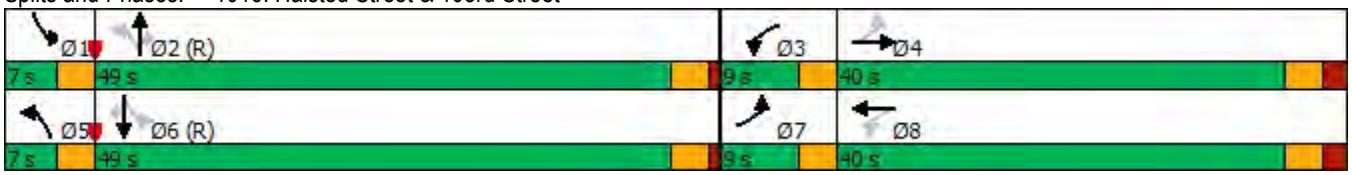

Min green cannot be greater than Max Green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	310	24	115	297	50	45	345	25	25	145	34
Future Volume (vph)	47	310	24	115	297	50	45	345	25	25	145	34
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	10	10	12	10	10
Storage Length (ft)	55		120	95		75	0		85	0		90
Storage Lanes	1		1	1		1	0		1	0		1
Taper Length (ft)	75			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.994			0.993	
Satd. Flow (prot)	1520	1600	1360	1520	1600	1360	0	1590	1360	0	1589	1360
Flt Permitted	0.567			0.950				0.946			0.911	
Satd. Flow (perm)	907	1600	1360	1520	1600	1360	0	1514	1360	0	1458	1360
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			67			101			101
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		559			386			1340			2394	
Travel Time (s)		12.7			8.8			30.5			54.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	51	333	26	124	319	54	48	371	27	27	156	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	333	26	124	319	54	0	419	27	0	183	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4			8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (%)	36.9%	36.9%	36.9%	13.8%	50.8%	50.8%	44.6%	44.6%	44.6%	44.6%	44.6%	44.6%
Maximum Green (s)	20.0	20.0	20.0	6.0	29.0	29.0	24.0	24.0	24.0	24.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		5.0	5.0		5.0	5.0
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0	9.0		18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	12.0	12.0	12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	20.0	20.0	20.0	6.0	29.0	29.0		24.0	24.0		24.0	24.0

Lane Group	Ø12
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	12
Permitted Phases	
Minimum Split (s)	3.0
Total Split (s)	3.0
Total Split (%)	5%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.31	0.31	0.31	0.09	0.45	0.45		0.37	0.37		0.37	0.37
v/c Ratio	0.18	0.68	0.05	0.89	0.45	0.08		0.75	0.05		0.34	0.07
Control Delay	14.1	20.2	0.2	82.9	14.5	5.1		22.3	0.4		15.2	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	14.1	20.2	0.2	82.9	14.5	5.1		22.3	0.4		15.2	2.3
LOS	B	C	A	F	B	A		C	A		B	A
Approach Delay		18.2			30.5			21.0			13.0	
Approach LOS		B			C			C			B	
Stops (vph)	19	168	0	97	140	10		311	1		111	5
Fuel Used(gal)	0	4	0	3	3	0		28	2		5	1
CO Emissions (g/hr)	31	248	7	221	240	28		1950	110		327	53
NOx Emissions (g/hr)	6	48	1	43	47	6		379	21		64	10
VOC Emissions (g/hr)	7	58	2	51	56	7		452	25		76	12
Dilemma Vehicles (#)	0	0	0	0	0	0		0	0		0	0
Queue Length 50th (ft)	9	58	0	55	58	0		134	0		51	0
Queue Length 95th (ft)	23	102	m0	m#106	m125	m8		#274	m0		80	3
Internal Link Dist (ft)		479			306			1260			2314	
Turn Bay Length (ft)	55		120	95		75			85			90
Base Capacity (vph)	279	492	499	140	713	643		559	565		538	565
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	0
Reduced v/c Ratio	0.18	0.68	0.05	0.89	0.45	0.08		0.75	0.05		0.34	0.07

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 22.1 Intersection LOS: C
Intersection Capacity Utilization 70.3% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1052: Michigan Avenue & 115th Street

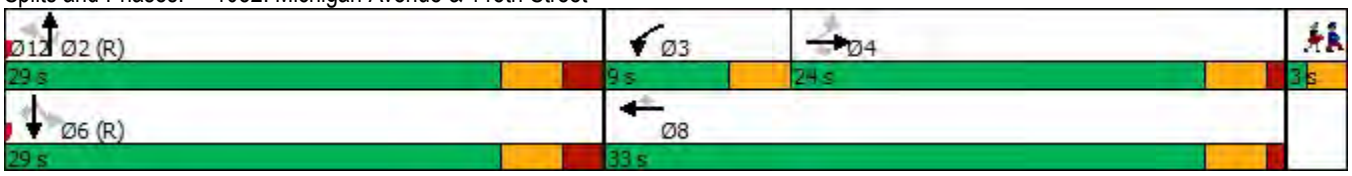

Lane Group	Ø12
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	544	0	30	750	0	0				
Future Volume (vph)	544	0	30	750	0	0				
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800				
Lane Width (ft)	10	12	12	10	16	12				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Frt										
Flt Protected				0.998						
Satd. Flow (prot)	1600	1714	0	1437	1943	0				
Flt Permitted				0.965						
Satd. Flow (perm)	1600	1714	0	1390	1943	0				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)										
Link Speed (mph)	30			30	30					
Link Distance (ft)	105			1228	505					
Travel Time (s)	2.4			27.9	11.5					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%				
Parking (#/hr)				0						
Adj. Flow (vph)	585	0	32	806	0	0				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	585	0	0	838	0	0				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			0	16					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.17	1.07	1.07	1.33	0.91	1.07				
Turning Speed (mph)		9	15		15	9				
Turn Type	NA	Perm	Perm	NA	Prot					
Protected Phases	6 4			4	3		1	2	6	8
Permitted Phases		6 4	4							
Minimum Split (s)			16.0	16.0	18.0		20.0	12.0	32.0	35.0
Total Split (s)			35.0	35.0	18.0		20.0	12.0	32.0	35.0
Total Split (%)			41.2%	41.2%	21.2%		24%	14%	38%	41%
Maximum Green (s)			31.0	31.0	14.0		15.0	9.0	27.0	31.0
Yellow Time (s)			3.0	3.0	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)			1.0	1.0	1.0		2.0	0.0	2.0	1.0
Lost Time Adjust (s)				0.0	0.0					
Total Lost Time (s)				4.0	4.0					
Lead/Lag							Lag	Lead		
Lead-Lag Optimize?										
Walk Time (s)					2.0				14.0	18.0
Flash Dont Walk (s)					12.0				13.0	13.0
Pedestrian Calls (#/hr)					0				0	0
Act Effct Green (s)	62.0			31.0						
Actuated g/C Ratio	0.73			0.36						
v/c Ratio	0.50			1.66						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Control Delay	3.5			328.2						
Queue Delay	3.0			1.8						
Total Delay	6.5			330.0						
LOS	A			F						
Approach Delay	6.5			330.0						
Approach LOS	A			F						
Stops (vph)	97			574						
Fuel Used(gal)	1			70						
CO Emissions (g/hr)	95			4916						
NOx Emissions (g/hr)	19			956						
VOC Emissions (g/hr)	22			1139						
Dilemma Vehicles (#)	0			0						
Queue Length 50th (ft)	42			~658						
Queue Length 95th (ft)	m67			#878						
Internal Link Dist (ft)	25			1148	425					
Turn Bay Length (ft)										
Base Capacity (vph)	1167			506						
Starvation Cap Reductn	459			0						
Spillback Cap Reductn	0			93						
Storage Cap Reductn	0			0						
Reduced v/c Ratio	0.83			2.03						

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 135	
Control Type: Pretimed	
Maximum v/c Ratio: 1.66	
Intersection Signal Delay: 197.0	Intersection LOS: F
Intersection Capacity Utilization 70.7%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1055: Cottage Grove Avenue & 115th Street

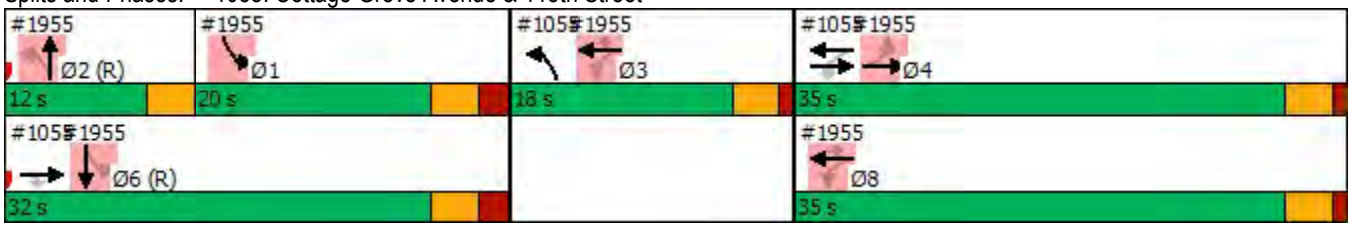

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	392	85	47	192	55	100	933	78	60	442	100
Future Volume (vph)	245	392	85	47	192	55	100	933	78	60	442	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	14	12	10	11	12	9	10	12
Storage Length (ft)	140		0	60		0	120		0	115		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	195			95			95			90		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.98		0.99	1.00	0.99		0.98	1.00		1.00	0.99	
Frt			0.850		0.967			0.988			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1550	1556	1347	1596	1725	0	1535	3090	0	1509	2871	0
Flt Permitted	0.445			0.337			0.354			0.120		
Satd. Flow (perm)	711	1556	1327	565	1725	0	559	3090	0	190	2871	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87		16			11			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		946			3955			5338			2655	
Travel Time (s)		21.5			89.9			121.3			60.3	
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Adj. Flow (vph)	250	400	87	48	196	56	102	952	80	61	451	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	250	400	87	48	252	0	102	1032	0	61	553	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	0.99	1.07	1.17	1.12	1.07	1.22	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	4.0	4.0	7.0	4.0		7.0	18.0		7.0	18.0	
Minimum Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (%)	11.1%	35.6%	35.6%	11.1%	35.6%		11.1%	42.2%		11.1%	42.2%	
Maximum Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0	0.0	1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	C-Max		None	C-Max	
Walk Time (s)		4.0	4.0		4.0			18.0			18.0	
Flash Dont Walk (s)		23.0	23.0		23.0			16.0			16.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	35.6	32.0	31.0	34.0	27.0		40.8	36.0		40.8	36.0	
Actuated g/C Ratio	0.40	0.36	0.34	0.38	0.30		0.45	0.40		0.45	0.40	
v/c Ratio	0.74	0.72	0.17	0.17	0.48		0.32	0.83		0.35	0.47	
Control Delay	36.6	36.0	6.4	17.2	27.6		15.7	32.1		18.2	20.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.6	36.0	6.4	17.2	27.6		15.7	32.1		18.2	20.9	
LOS	D	D	A	B	C		B	C		B	C	
Approach Delay		32.7			26.0			30.6			20.6	
Approach LOS		C			C			C			C	
90th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
90th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
70th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	7.0	27.0	27.0	7.0	27.0		7.0	34.0		7.0	34.0	
50th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
30th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		7.0	34.0		7.0	34.0	
30th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Max	Coord		Max	Coord	
10th %ile Green (s)	7.0	37.0	37.0	0.0	27.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Max	MaxR	MaxR	Skip	MaxR		Skip	Coord		Skip	Coord	
Stops (vph)	184	322	15	29	184		55	849		31	369	
Fuel Used(gal)	5	8	1	2	10		5	53		2	16	
CO Emissions (g/hr)	325	527	57	124	701		334	3730		114	1088	
NOx Emissions (g/hr)	63	103	11	24	136		65	726		22	212	
VOC Emissions (g/hr)	75	122	13	29	162		78	865		26	252	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	95	209	0	16	109		30	279		18	116	
Queue Length 95th (ft)	#192	#365	33	37	181		59	#402		39	165	
Internal Link Dist (ft)		866			3875			5258			2575	
Turn Bay Length (ft)	140			60			120			115		
Base Capacity (vph)	337	553	514	282	528		318	1242		174	1169	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.74	0.72	0.17	0.17	0.48		0.32	0.83		0.35	0.47	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 28.5 Intersection LOS: C
Intersection Capacity Utilization 86.7% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1060: Halsted Street & 119th Street

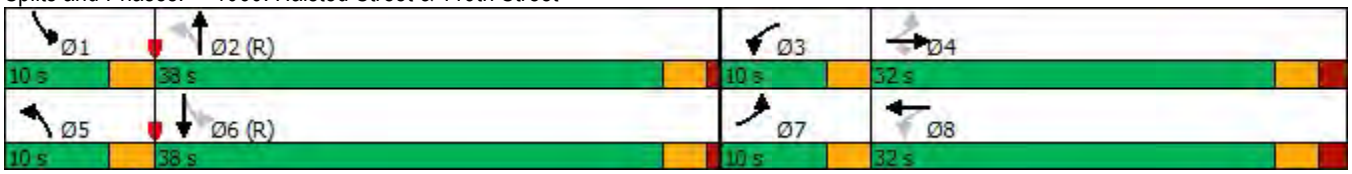

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	392	85	47	192	55	100	933	78	60	442	100
Future Volume (veh/h)	245	392	85	47	192	55	100	933	78	60	442	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.97	0.99		0.97	0.98		0.93	0.99		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1758	1688	1716	1800	1770	1730	1744	1730	1646	1701	1716	1674
Adj Flow Rate, veh/h	250	400	87	48	196	56	102	952	80	61	451	102
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	8	6	0	7	5	4	5	11	2	6	9
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	374	565	456	250	394	112	380	1203	101	217	999	224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.33	0.32	0.04	0.30	0.30	0.06	0.39	0.39	0.05	0.38	0.38
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.5	33.5	22.9	22.6	0.0	29.1	16.5	30.3	30.2	19.8	22.8	23.0
Ln Grp LOS	C	C	C	C	A	C	B	C	C	B	C	C
Approach Vol, veh/h		737			300			1134			614	
Approach Delay, s/veh		31.5			28.1			29.0			22.6	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	8.5	39.5	7.9	34.1	9.5	38.5	10.0	32.0
Change Period (Y+Rc), s	3.0	4.0	3.0	5.0	3.0	4.0	3.0	5.0
Max Green (Gmax), s	7.0	34.0	7.0	27.0	7.0	34.0	7.0	27.0
Max Allow Headway (MAH), s	4.4	4.3	4.4	4.4	4.4	4.4	4.4	4.4
Max Q Clear (g_c+I1), s	4.0	26.8	3.7	20.6	5.3	13.8	8.0	13.1
Green Ext Time (g_e), s	0.0	2.9	0.0	1.2	0.0	2.3	0.0	0.8
Prob of Phs Call (p_c)	0.78	1.00	0.70	1.00	0.92	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1620	1714	1661	1674

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3047	1688	2603	1312

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	256	1410	582	375

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	61	0	48	0	102	0	250	0
Grp Sat Flow (s), veh/h/ln	1620	0	1714	0	1661	0	1674	0
Q Serve Time (g_s), s	2.0	0.0	1.7	0.0	3.3	0.0	6.0	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	1.7	0.0	3.3	0.0	6.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	520	0	912	0	823	0	1098	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	33.5	0.0	26.0	0.0	33.5	0.0	26.1	0.0
Perm LT Serve Time (g_u), s	9.8	0.0	9.5	0.0	21.8	0.0	14.9	0.0
Perm LT Q Serve Time (g_ps), s	3.2	0.0	0.9	0.0	1.7	0.0	10.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	217	0	250	0	380	0	374	0
V/C Ratio (X)	0.28	0.00	0.19	0.00	0.27	0.00	0.67	0.00
Avail Cap (c_a), veh/h	244	0	291	0	390	0	374	0
Upstream Filter (I)	0.93	0.00	0.92	0.00	0.64	0.00	1.00	0.00
Uniform Delay (d1), s/veh	19.2	0.0	22.2	0.0	16.3	0.0	27.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.3	0.0	0.2	0.0	4.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	19.8	0.0	22.6	0.0	16.5	0.0	31.5	0.0
1st-Term Q (Q1), veh/ln	0.7	0.0	0.7	0.0	1.2	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.4	0.0	1.3	0.0	2.2	0.0	4.8	0.0
%ile Storage Ratio (RQ%)	0.31	0.00	0.53	0.00	0.48	0.00	0.88	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	513	0	400	0	281	0	0
Grp Sat Flow (s), veh/h/ln	0	1643	0	1688	0	1630	0	0
Q Serve Time (g_s), s	0.0	24.8	0.0	18.6	0.0	11.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.8	0.0	18.6	0.0	11.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	649	0	565	0	626	0	0
V/C Ratio (X)	0.00	0.79	0.00	0.71	0.00	0.45	0.00	0.00
Avail Cap (c_a), veh/h	0	649	0	565	0	626	0	0
Upstream Filter (I)	0.00	0.64	0.00	1.00	0.00	0.93	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	26.1	0.0	20.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.3	0.0	7.3	0.0	2.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.3	0.0	33.5	0.0	22.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.1	0.0	7.2	0.0	4.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	1.2	0.0	0.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.41	0.00	1.57	0.00	1.74	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	14.5	0.0	13.1	0.0	8.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.39	0.00	0.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	519	0	87	0	272	0	252
Grp Sat Flow (s), veh/h/ln	0	1660	0	1410	0	1556	0	1687
Q Serve Time (g_s), s	0.0	24.8	0.0	4.0	0.0	11.8	0.0	11.1
Cycle Q Clear Time (g_c), s	0.0	24.8	0.0	4.0	0.0	11.8	0.0	11.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	1.00	0.00	0.37	0.00	0.22
Lane Grp Cap (c), veh/h	0	655	0	456	0	597	0	506
V/C Ratio (X)	0.00	0.79	0.00	0.19	0.00	0.46	0.00	0.50
Avail Cap (c_a), veh/h	0	655	0	456	0	597	0	506
Upstream Filter (I)	0.00	0.64	0.00	1.00	0.00	0.93	0.00	0.92
Uniform Delay (d1), s/veh	0.0	24.0	0.0	22.0	0.0	20.7	0.0	25.9
Incr Delay (d2), s/veh	0.0	6.3	0.0	0.9	0.0	2.3	0.0	3.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.2	0.0	22.9	0.0	23.0	0.0	29.1
1st-Term Q (Q1), veh/ln	0.0	9.2	0.0	1.3	0.0	4.1	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.1	0.0	0.4	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.41	0.00	1.80	0.00	1.74	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	14.6	0.0	2.5	0.0	7.9	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.07	0.00	0.08	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		28.2						
HCM 6th LOS		C						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	215	25	10	180	10	45	264	25	10	66	66
Future Volume (vph)	210	215	25	10	180	10	45	264	25	10	66	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	12	10	10	12	10	10	12	16	12
Storage Length (ft)	0		70	0		215	0		75	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.95		1.00	0.96		1.00	0.96		0.99	
Frt			0.850			0.850			0.850		0.937	
Flt Protected		0.976			0.997			0.993			0.997	
Satd. Flow (prot)	0	1568	1360	0	1494	1428	0	1640	1347	0	1815	0
Flt Permitted		0.740			0.976			0.941			0.975	
Satd. Flow (perm)	0	1181	1295	0	1462	1373	0	1553	1294	0	1774	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			29			29			29		69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			477			2671			2164	
Travel Time (s)		30.3			10.8			60.7			49.2	
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Adj. Flow (vph)	219	224	26	10	188	10	47	275	26	10	69	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	443	26	0	198	10	0	322	26	0	148	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (s)	38.0	38.0	38.0	38.0	38.0	38.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	50.7%	50.7%	50.7%	50.7%	50.7%	50.7%	49.3%	49.3%	49.3%	49.3%	49.3%	
Maximum Green (s)	33.0	33.0	33.0	33.0	33.0	33.0	32.0	32.0	32.0	32.0	32.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	14.0	14.0	14.0	14.0	14.0	14.0	23.0	23.0	23.0	23.0	23.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)		33.0	33.0		33.0	33.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.44	0.44		0.44	0.44		0.43	0.43		0.43	
v/c Ratio		0.85	0.04		0.31	0.02		0.49	0.05		0.19	
Control Delay		37.4	4.8		15.3	1.6		18.7	5.1		8.2	
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Delay		37.4	4.8		15.3	1.6		18.7	5.1		8.2	
LOS		D	A		B	A		B	A		A	
Approach Delay		35.6			14.6			17.7			8.2	
Approach LOS		D			B			B			A	
Stops (vph)		346	7		118	1		215	7		48	
Fuel Used(gal)		10	0		2	0		15	1		3	
CO Emissions (g/hr)		668	23		136	3		1067	77		242	
NOx Emissions (g/hr)		130	4		27	1		208	15		47	
VOC Emissions (g/hr)		155	5		32	1		247	18		56	
Dilemma Vehicles (#)		0	0		0	0		0	0		0	
Queue Length 50th (ft)		177	0		57	0		105	0		21	
Queue Length 95th (ft)		#351	12		103	3		175	13		54	
Internal Link Dist (ft)		1251			397			2591			2084	
Turn Bay Length (ft)			70			215			75			
Base Capacity (vph)		519	586		643	620		662	568		796	
Starvation Cap Reductn		0	0		0	0		0	0		0	
Spillback Cap Reductn		0	0		0	0		0	0		0	
Storage Cap Reductn		0	0		0	0		0	0		0	
Reduced v/c Ratio		0.85	0.04		0.31	0.02		0.49	0.05		0.19	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 23.1 Intersection LOS: C
Intersection Capacity Utilization 90.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1062: State Street & 119th Street

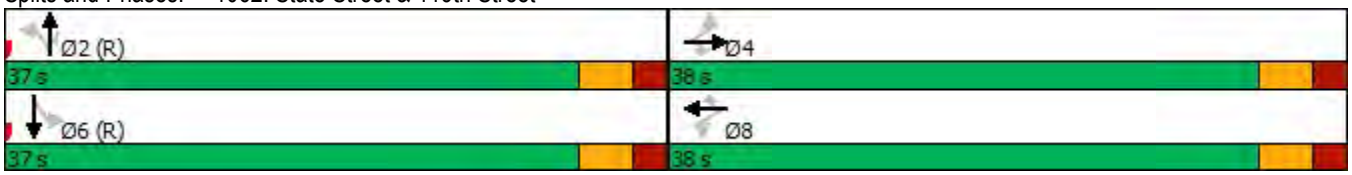

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	215	25	10	180	10	45	264	25	10	66	66
Future Volume (veh/h)	210	215	25	10	180	10	45	264	25	10	66	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	1.00		0.96	0.98		0.96	0.99		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1800	1674	1730	1337	1646	1800	1716	1786	1716	1800	1872	1688
Adj Flow Rate, veh/h	219	224	26	10	188	10	47	275	26	10	69	69
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	9	5	33	11	0	6	1	6	0	0	8
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	72	9	619	50	474	645	124	662	595	71	359	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.43	0.43	0.43	0.43	0.43	0.43
Unsig. Movement Delay												
Ln Grp Delay, s/veh	2078.8	0.0	12.1	16.3	0.0	11.9	16.6	0.0	12.7	14.1	0.0	0.0
Ln Grp LOS	F	A	B	B	A	B	B	A	B	B	A	A
Approach Vol, veh/h		469			208			348			148	
Approach Delay, s/veh		1964.3			16.1			16.3			14.1	
Approach LOS		F			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		7.0		7.0		8.0		7.0
Phs Duration (G+Y+Rc), s		37.0		38.0		37.0		38.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		32.0		33.0		32.0		33.0
Max Allow Headway (MAH), s		4.4		4.6		4.5		4.4
Max Q Clear (g_c+I1), s		11.5		35.0		6.1		35.0
Green Ext Time (g_e), s		1.4		0.0		0.6		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		163		0		46		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1552		21		842		1078
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1395		1408		776		1465
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L+T		L+T		L+T+R		L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	322	0	443	0	148	0	198
Grp Sat Flow (s), veh/h/ln	0	1715	0	21	0	1663	0	1078
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.5	0.0	33.0	0.0	4.1	0.0	33.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1251	0	1203	0	1083	0	1148
Shared LT Sat Flow (s_sh), veh/h/ln	0	1769	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.0	0.0	33.0	0.0	32.0	0.0	33.0
Perm LT Serve Time (g_u), s	0.0	27.9	0.0	0.0	0.0	22.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	10.8	0.0	0.4	0.0	18.6	0.0	21.6
Serve Time pre Blk (g_fs), s	0.0	9.5	0.0	0.4	0.0	4.1	0.0	5.7
Prop LT Inside Lane (P_L)	0.00	0.15	0.00	0.49	0.00	0.07	0.00	0.05
Lane Grp Cap (c), veh/h	0	787	0	81	0	761	0	525
V/C Ratio (X)	0.00	0.41	0.00	5.48	0.00	0.19	0.00	0.38
Avail Cap (c_a), veh/h	0	787	0	81	0	761	0	525
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	33.8	0.0	13.5	0.0	14.2
Incr Delay (d2), s/veh	0.0	1.6	0.0	2045.0	0.0	0.6	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.6	0.0	2078.8	0.0	14.1	0.0	16.3
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	1.4	0.0	1.5	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	45.9	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.75	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.0	0.0	83.0	0.0	2.9	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	1.75	0.00	0.03	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	90.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R				R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	26	0	26	0	0	0	10
Grp Sat Flow (s), veh/h/ln	0	1395	0	1408	0	0	0	1465
Q Serve Time (g_s), s	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.3
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.47	0.00	1.00
Lane Grp Cap (c), veh/h	0	595	0	619	0	0	0	645
V/C Ratio (X)	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.02
Avail Cap (c_a), veh/h	0	595	0	619	0	0	0	645
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.6	0.0	12.0	0.0	0.0	0.0	11.8
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.7	0.0	12.1	0.0	0.0	0.0	11.9
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.17	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		794.8						
HCM 6th LOS		F						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1004	270	302	1277	0	0	0	0	349	250	465
Future Volume (vph)	0	1004	270	302	1277	0	0	0	0	349	250	465
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	14
Storage Length (ft)	0		85	216		0	0		0	360		360
Storage Lanes	0		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.86	0.91
Ped Bike Factor		1.00		1.00							0.99	0.99
Frt		0.968									0.940	0.850
Flt Protected				0.950						0.950	0.993	
Satd. Flow (prot)	0	4305	0	1644	3226	0	0	0	0	1468	2714	1375
Flt Permitted				0.125						0.950	0.993	
Satd. Flow (perm)	0	4305	0	216	3226	0	0	0	0	1468	2714	1356
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		76									70	78
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1359			322			474			954	
Travel Time (s)		30.9			7.3			10.8			21.7	
Confl. Peds. (#/hr)	6		4	4		6	2					2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Adj. Flow (vph)	0	1024	276	308	1303	0	0	0	0	356	255	474
Shared Lane Traffic (%)										21%		47%
Lane Group Flow (vph)	0	1300	0	308	1303	0	0	0	0	281	553	251
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			34			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1					1	1	1
Detector Template												
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		50		50	50					50	50	50
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Detector Phase		2		1	6					4	4	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)		15.0		3.0	15.0					8.0	8.0	8.0
Minimum Split (s)		46.0		24.0	70.0					35.0	35.0	35.0
Total Split (s)		47.0		26.0	73.0					32.0	32.0	32.0
Total Split (%)		44.8%		24.8%	69.5%					30.5%	30.5%	30.5%
Maximum Green (s)		41.0		21.5	67.0					26.0	26.0	26.0
Yellow Time (s)		4.5		3.5	4.5					4.5	4.5	4.5
All-Red Time (s)		1.5		1.0	1.5					1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)		7.0		3.5	7.0					3.0	3.0	3.0
Minimum Gap (s)		3.5		0.2	3.5					0.2	0.2	0.2
Time Before Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Time To Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Recall Mode		C-Max		None	C-Max					None	None	None
Walk Time (s)										2.0	2.0	2.0
Flash Dont Walk (s)										27.0	27.0	27.0
Pedestrian Calls (#/hr)										0	0	0
Act Effct Green (s)		46.9		70.5	69.0					24.0	24.0	24.0
Actuated g/C Ratio		0.45		0.67	0.66					0.23	0.23	0.23
v/c Ratio		0.66		0.80	0.62					0.84	0.82	0.68
Control Delay		24.7		29.0	19.5					60.4	44.1	34.7
Queue Delay		0.0		4.1	49.7					0.0	0.0	0.0
Total Delay		24.7		33.1	69.2					60.4	44.1	34.7
LOS		C		C	E					E	D	C
Approach Delay		24.7			62.3						46.1	
Approach LOS		C			E						D	
90th %ile Green (s)		41.0		21.5	67.0					26.0	26.0	26.0
90th %ile Term Code		Coord		Max	Coord					Max	Max	Max
70th %ile Green (s)		41.0		21.5	67.0					26.0	26.0	26.0
70th %ile Term Code		Coord		Max	Coord					Max	Max	Max
50th %ile Green (s)		42.9		19.6	67.0					26.0	26.0	26.0
50th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
30th %ile Green (s)		49.0		15.6	69.1					23.9	23.9	23.9
30th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
10th %ile Green (s)		60.4		9.8	74.7					18.3	18.3	18.3
10th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
Stops (vph)		936		245	921					248	444	157
Fuel Used(gal)		25		4	13					7	11	4
CO Emissions (g/hr)		1753		272	934					475	793	310
NOx Emissions (g/hr)		341		53	182					92	154	60
VOC Emissions (g/hr)		406		63	216					110	184	72
Dilemma Vehicles (#)		0		0	0					0	0	0
Queue Length 50th (ft)		248		166	373					193	176	114
Queue Length 95th (ft)		314		m179	m408					#334	248	213
Internal Link Dist (ft)		1279			242			394			874	
Turn Bay Length (ft)				216						360		360

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		1963		437	2118					363	724	394
Starvation Cap Reductn		0		70	1082					0	0	0
Spillback Cap Reductn		0		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.66		0.84	1.26					0.77	0.76	0.64

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 89 (85%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 45.7 Intersection LOS: D
Intersection Capacity Utilization 115.3% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1064: S Paulina ST & 127th Street

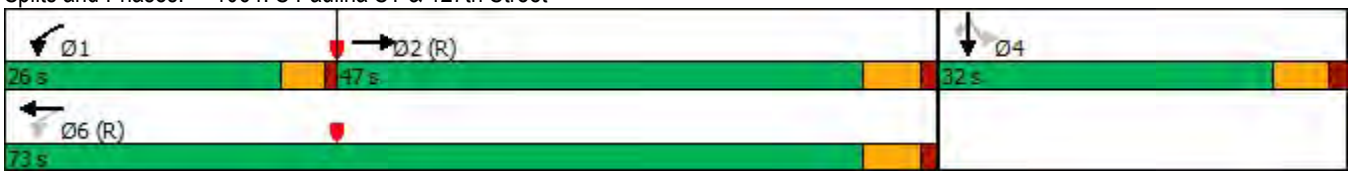

HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	973	0	0	1039	297	540	355	384	0	0	0
Future Volume (vph)	380	973	0	0	1039	297	540	355	384	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	216		216	0		130	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				1.00							
Frt					0.967			0.922				
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3016	3138	0	0	4486	0	1644	3031	0	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3013	3138	0	0	4486	0	1644	3031	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					72							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			336			554			548	
Travel Time (s)		7.3			7.6			12.6			12.5	
Confl. Peds. (#/hr)	4					4						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Adj. Flow (vph)	400	1024	0	0	1094	313	568	374	404	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	400	1024	0	0	1407	0	568	778	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1		1	1				
Detector Template												
Leading Detector (ft)	50	50			50		50	50				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	50	50			50		50	50				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	3.0	15.0			15.0		10.0	10.0				
Minimum Split (s)	27.5	70.5			43.0		34.5	34.5				
Total Split (s)	27.0	66.0			39.0		39.0	39.0				
Total Split (%)	25.7%	62.9%			37.1%		37.1%	37.1%				
Maximum Green (s)	21.0	60.0			33.0		33.0	33.0				
Yellow Time (s)	4.5	4.5			4.5		4.5	4.5				
All-Red Time (s)	1.5	1.5			1.5		1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0			7.0		5.0	5.0				
Minimum Gap (s)	0.2	3.5			3.5		0.2	0.2				
Time Before Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Time To Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Recall Mode	None	C-Max			C-Max		None	None				
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							21.5	21.5				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	18.7	60.0			35.3		33.0	33.0				
Actuated g/C Ratio	0.18	0.57			0.34		0.31	0.31				
v/c Ratio	0.75	0.57			0.90		1.10	0.88dr				
Control Delay	54.0	11.8			40.1		105.3	41.5				
Queue Delay	0.0	0.7			6.8		7.2	0.0				
Total Delay	54.0	12.5			46.9		112.5	41.5				
LOS	D	B			D		F	D				
Approach Delay		24.1			46.9			71.5				
Approach LOS		C			D			E				
90th %ile Green (s)	21.0	60.0			33.0		33.0	33.0				
90th %ile Term Code	Max	Coord			Coord		Max	Max				
70th %ile Green (s)	21.0	60.0			33.0		33.0	33.0				
70th %ile Term Code	Max	Coord			Coord		Max	Max				
50th %ile Green (s)	19.5	60.0			34.5		33.0	33.0				
50th %ile Term Code	Gap	Coord			Coord		Max	Max				
30th %ile Green (s)	17.4	60.0			36.6		33.0	33.0				
30th %ile Term Code	Gap	Coord			Coord		Max	Max				
10th %ile Green (s)	14.4	60.0			39.6		33.0	33.0				
10th %ile Term Code	Gap	Coord			Coord		Max	Max				
Stops (vph)	311	361			869		451	658				
Fuel Used(gal)	7	7			19		16	13				
CO Emissions (g/hr)	479	474			1344		1146	914				
NOx Emissions (g/hr)	93	92			261		223	178				
VOC Emissions (g/hr)	111	110			311		266	212				
Dilemma Vehicles (#)	0	0			0		0	0				
Queue Length 50th (ft)	114	102			230		~435	252				
Queue Length 95th (ft)	m162	121			m#397		#645	329				
Internal Link Dist (ft)		242			256			474			468	
Turn Bay Length (ft)	216											
Base Capacity (vph)	603	1793			1557		516	952				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	396			127		0	0				
Spillback Cap Reductn	0	65			31		257	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.66	0.73			0.98		2.19	0.82				

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 7 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 47.1 Intersection LOS: D
Intersection Capacity Utilization 115.3% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 1065: Marshfield Ave & 127th Street

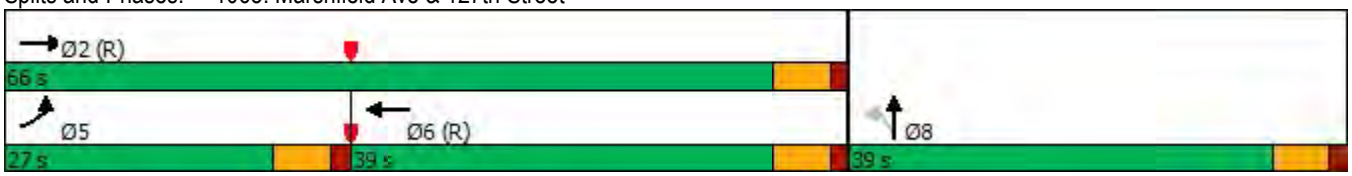

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	380	973	0	0	1039	297	540	355	384	0	0	0
Future Volume (veh/h)	380	973	0	0	1039	297	540	355	384	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1660	1674	0	0	1716	1744	1744	1758	1730			
Adj Flow Rate, veh/h	400	1024	0	0	1094	313	568	374	404			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	10	9	0	0	6	4	4	3	5			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	476	1817	0	0	1298	371	522	525	468			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Prop Arrive On Green	0.21	0.76	0.00	0.00	0.72	0.72	0.31	0.31	0.31			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	46.3	7.9	0.0	0.0	15.7	18.7	101.5	37.4	50.2			
Ln Grp LOS	D	A	A	A	B	B	F	D	D			
Approach Vol, veh/h		1424			1407			1346				
Approach Delay, s/veh		18.7			16.7			68.3				
Approach LOS		B			B			E				

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2	8		5	6					
Case No			4.0	10.0		2.0	8.0					
Phs Duration (G+Y+Rc), s			66.0	39.0		22.3	43.7					
Change Period (Y+Rc), s			6.0	6.0		6.0	6.0					
Max Green (Gmax), s			60.0	33.0		21.0	33.0					
Max Allow Headway (MAH), s			8.3	6.4		4.9	8.4					
Max Q Clear (g_c+I1), s			16.2	35.0		15.2	24.7					
Green Ext Time (g_e), s			23.4	0.0		1.1	7.5					
Prob of Phs Call (p_c)			1.00	1.00		1.00	1.00					
Prob of Max Out (p_x)			0.00	1.00		0.71	0.00					
Left-Turn Movement Data												
Assigned Mvmt				3		5	1					
Mvmt Sat Flow, veh/h				1661		3066	0					
Through Movement Data												
Assigned Mvmt			2	8			6					
Mvmt Sat Flow, veh/h			3264	1670			3769					
Right-Turn Movement Data												
Assigned Mvmt			12	18			16					
Mvmt Sat Flow, veh/h			0	1490			1034					
Left Lane Group Data												
Assigned Mvmt		0	0	3	0	5	1	0	0			
Lane Assignment				L		L (Prot)						

Lanes in Grp	0	0	1	0	2	0	0	0
Grp Vol (v), veh/h	0	0	568	0	400	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1661	0	1533	0	0	0
Q Serve Time (g_s), s	0.0	0.0	33.0	0.0	13.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	33.0	0.0	13.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1661	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	37.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	522	0	476	0	0	0
V/C Ratio (X)	0.00	0.00	1.09	0.00	0.84	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	522	0	613	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.66	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	36.0	0.0	40.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	65.5	0.0	5.9	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	101.5	0.0	46.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	13.0	0.0	4.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	9.5	0.0	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.42	0.00	1.59	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	32.0	0.0	8.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.68	0.00	0.79	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	11.5	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	2	0	0
Grp Vol (v), veh/h	0	1024	374	0	0	945	0	0
Grp Sat Flow (s), veh/h/ln	0	1590	1670	0	0	1561	0	0
Q Serve Time (g_s), s	0.0	14.2	20.8	0.0	0.0	22.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.2	20.8	0.0	0.0	22.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1817	525	0	0	1121	0	0
V/C Ratio (X)	0.00	0.56	0.71	0.00	0.00	0.84	0.00	0.00
Avail Cap (c_a), veh/h	0	1817	525	0	0	1121	0	0
Upstream Filter (I)	0.00	0.66	1.00	0.00	0.00	0.37	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.1	31.8	0.0	0.0	12.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	5.6	0.0	0.0	3.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.9	37.4	0.0	0.0	15.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.4	8.2	0.0	0.0	3.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.8	0.0	0.0	0.5	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	1.54	0.00	0.00	1.48	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	6.1	14.0	0.0	0.0	6.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.60	0.73	0.00	0.00	0.74	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment			T+R			T+R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	404	0	0	462	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1490	0	0	1526	0	0
Q Serve Time (g_s), s	0.0	0.0	26.8	0.0	0.0	22.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	26.8	0.0	0.0	22.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	0.00	0.00	0.68	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	468	0	0	548	0	0
V/C Ratio (X)	0.00	0.00	0.86	0.00	0.00	0.84	0.00	0.00
Avail Cap (c_a), veh/h	0	0	468	0	0	548	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.37	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.9	0.0	0.0	12.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	16.3	0.0	0.0	6.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	50.2	0.0	0.0	18.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.5	0.0	0.0	3.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.1	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.48	0.00	0.00	1.46	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	17.2	0.0	0.0	6.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.89	0.00	0.00	0.79	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	567	260	90	876	52	285	225	50	54	140	115
Future Volume (vph)	120	567	260	90	876	52	285	225	50	54	140	115
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	11	12	12	10	12	13	10	10	10
Storage Length (ft)	120		0	85		0	240		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			120			125			140		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00	1.00		0.99	1.00		1.00	0.99	
Frt			0.850		0.992			0.973			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3167	1311	1605	3232	0	1451	3226	0	1550	2789	0
Flt Permitted	0.103			0.407			0.421			0.573		
Satd. Flow (perm)	170	3167	1282	685	3232	0	639	3226	0	931	2789	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			277		6			26			122	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		336			5379			1555			925	
Travel Time (s)		7.6			122.3			35.3			21.0	
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Adj. Flow (vph)	128	603	277	96	932	55	303	239	53	57	149	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	603	277	96	987	0	303	292	0	57	271	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.07	1.22	1.12	1.07	1.07	1.17	1.07	1.03	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	13.5	42.0	12.5	12.5	41.0		12.5	38.0		12.5	38.0	
Total Split (s)	13.5	42.0	26.0	12.5	41.0		26.0	38.0		12.5	24.5	
Total Split (%)	12.9%	40.0%	24.8%	11.9%	39.0%		24.8%	36.2%		11.9%	23.3%	
Maximum Green (s)	9.0	36.0	21.5	8.0	35.0		21.5	32.0		8.0	18.5	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	0.2	4.0	0.2	0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	25.0	0.0	0.0	25.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Recall Mode	Max	C-Max	None	None	C-Max		None	None		None	None	
Walk Time (s)		14.0			13.0			5.0			5.0	
Flash Dont Walk (s)		22.0			22.0			26.0			26.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	52.5	42.3	63.5	44.3	35.0		42.0	30.7		25.0	16.2	
Actuated g/C Ratio	0.50	0.40	0.60	0.42	0.33		0.40	0.29		0.24	0.15	
v/c Ratio	0.50	0.47	0.31	0.27	0.91		0.74	0.30		0.22	0.51	
Control Delay	22.8	26.7	4.5	16.7	47.1		30.1	22.8		22.0	25.3	
Queue Delay	0.0	0.5	0.1	0.0	9.8		0.7	0.0		0.0	0.2	
Total Delay	22.8	27.2	4.6	16.7	56.9		30.8	22.8		22.0	25.5	
LOS	C	C	A	B	E		C	C		C	C	
Approach Delay		20.4			53.4			26.9			24.9	
Approach LOS		C			D			C			C	
90th %ile Green (s)	9.0	36.0	21.5	8.0	35.0		21.5	32.0		8.0	18.5	
90th %ile Term Code	MaxR	Coord	Max	Max	Coord		Max	Hold		Max	Max	
70th %ile Green (s)	9.8	36.0	21.5	8.8	35.0		21.5	31.2		8.0	17.7	
70th %ile Term Code	MaxR	Coord	Max	Max	Coord		Max	Hold		Max	Gap	
50th %ile Green (s)	12.5	38.8	21.5	8.7	35.0		21.5	28.7		7.8	15.0	
50th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Gap	Min	
30th %ile Green (s)	14.8	42.2	19.2	7.6	35.0		19.2	27.3		6.9	15.0	
30th %ile Term Code	MaxR	Coord	Gap	Gap	Coord		Gap	Hold		Gap	Min	
10th %ile Green (s)	19.1	58.6	14.9	0.0	35.0		14.9	34.4		0.0	15.0	
10th %ile Term Code	MaxR	Coord	Gap	Skip	Coord		Gap	Hold		Skip	Min	
Stops (vph)	75	503	93	50	826		229	221		40	126	
Fuel Used(gal)	1	7	1	4	52		6	6		1	4	
CO Emissions (g/hr)	90	513	100	304	3661		452	407		60	269	
NOx Emissions (g/hr)	17	100	19	59	712		88	79		12	52	
VOC Emissions (g/hr)	21	119	23	71	849		105	94		14	62	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	44	208	36	32	330		169	83		23	48	
Queue Length 95th (ft)	m#88	m268	m66	65	#457		251	122		47	87	
Internal Link Dist (ft)		256			5299			1475			845	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	120			85			240			120		
Base Capacity (vph)	258	1276	907	365	1081		421	1016		275	591	
Starvation Cap Reductn	0	306	118	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	89		17	0		0	38	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.50	0.62	0.35	0.26	0.99		0.75	0.29		0.21	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 16 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 34.0 Intersection LOS: C
Intersection Capacity Utilization 86.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1066: S Ashland & 127th Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	567	260	90	876	52	285	225	50	54	140	115
Future Volume (veh/h)	120	567	260	90	876	52	285	225	50	54	140	115
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.98
Parking Bus Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1772	1688	1730	1758	1730	1758	1660	1758	1843	1758	1702	1744
Adj Flow Rate, veh/h	128	603	277	96	932	55	303	239	53	57	149	122
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	8	5	3	5	3	10	3	2	3	7	4
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	288	1356	785	388	1222	72	413	784	170	294	262	198
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.85	0.85	0.05	0.39	0.39	0.06	0.09	0.09	0.04	0.15	0.15
Unsig. Movement Delay												
Ln Grp Delay, s/veh	21.9	5.9	3.5	17.9	35.6	35.4	37.5	39.1	39.3	36.0	50.6	54.2
Ln Grp LOS	C	A	A	B	D	D	D	D	D	D	D	D
Approach Vol, veh/h		1008			1083			595			328	
Approach Delay, s/veh		7.3			33.9			38.3			49.5	
Approach LOS		A			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	9.8	50.4	23.0	21.8	13.5	46.7	8.6	36.2
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green (Gmax), s	8.0	36.0	21.5	18.5	9.0	35.0	8.0	32.0
Max Allow Headway (MAH), s	4.4	8.4	4.4	8.5	4.4	8.3	4.4	8.4
Max Q Clear (g_c+I1), s	5.6	6.9	18.1	11.1	6.4	29.0	5.0	10.8
Green Ext Time (g_e), s	0.1	15.2	0.4	1.8	0.1	4.7	0.0	3.8
Prob of Phs Call (p_c)	0.94	1.00	1.00	1.00	1.00	1.00	0.81	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.10

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1674		1581		1688		1674

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			3207		1738		3152		2723

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			1308		1316		186		592

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	96	0	303	0	128	0	57	0
Grp Sat Flow (s), veh/h/ln	1674	0	1581	0	1688	0	1674	0
Q Serve Time (g_s), s	3.6	0.0	16.1	0.0	4.4	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	3.6	0.0	16.1	0.0	4.4	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	624	0	1030	0	570	0	1066	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	40.7	0.0	17.8	0.0	41.9	0.0	15.8	0.0
Perm LT Serve Time (g_u), s	39.5	0.0	6.7	0.0	13.7	0.0	15.8	0.0
Perm LT Q Serve Time (g_ps), s	0.2	0.0	5.6	0.0	7.2	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	388	0	413	0	288	0	294	0
V/C Ratio (X)	0.25	0.00	0.73	0.00	0.45	0.00	0.19	0.00
Avail Cap (c_a), veh/h	431	0	458	0	288	0	357	0
Upstream Filter (I)	0.90	0.00	0.88	0.00	0.80	0.00	1.00	0.00
Uniform Delay (d1), s/veh	17.6	0.0	32.7	0.0	18.0	0.0	35.7	0.0
Incr Delay (d2), s/veh	0.3	0.0	4.8	0.0	4.0	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.9	0.0	37.5	0.0	21.9	0.0	36.0	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	6.7	0.0	1.5	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.57	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.5	0.0	11.4	0.0	3.3	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	0.76	0.00	1.29	0.00	0.69	0.00	0.48	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	603	0	138	0	486	0	145
Grp Sat Flow (s), veh/h/ln	0	1603	0	1617	0	1643	0	1670
Q Serve Time (g_s), s	0.0	4.9	0.0	8.3	0.0	27.0	0.0	8.5
Cycle Q Clear Time (g_c), s	0.0	4.9	0.0	8.3	0.0	27.0	0.0	8.5
Lane Grp Cap (c), veh/h	0	1356	0	244	0	637	0	481
V/C Ratio (X)	0.00	0.44	0.00	0.57	0.00	0.76	0.00	0.30
Avail Cap (c_a), veh/h	0	1356	0	285	0	637	0	509
Upstream Filter (I)	0.00	0.80	0.00	1.00	0.00	0.90	0.00	0.88
Uniform Delay (d1), s/veh	0.0	5.1	0.0	41.4	0.0	28.0	0.0	37.7
Incr Delay (d2), s/veh	0.0	0.8	0.0	9.2	0.0	7.6	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.9	0.0	50.6	0.0	35.6	0.0	39.1
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	3.3	0.0	10.3	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	1.4	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.46	0.00	1.78
%ile Back of Q (95%), veh/ln	0.0	2.4	0.0	7.0	0.0	17.0	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.21	0.00	0.08	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	277	0	133	0	501	0	147
Grp Sat Flow (s), veh/h/ln	0	1308	0	1437	0	1694	0	1645
Q Serve Time (g_s), s	0.0	4.1	0.0	9.1	0.0	27.0	0.0	8.8
Cycle Q Clear Time (g_c), s	0.0	4.1	0.0	9.1	0.0	27.0	0.0	8.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1319.3	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	18.5	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.92	0.00	0.11	0.00	0.36
Lane Grp Cap (c), veh/h	0	785	0	216	0	657	0	473
V/C Ratio (X)	0.00	0.35	0.00	0.62	0.00	0.76	0.00	0.31
Avail Cap (c_a), veh/h	0	785	0	253	0	657	0	501
Upstream Filter (I)	0.00	0.80	0.00	1.00	0.00	0.90	0.00	0.88
Uniform Delay (d1), s/veh	0.0	2.5	0.0	41.7	0.0	28.0	0.0	37.8
Incr Delay (d2), s/veh	0.0	1.0	0.0	12.4	0.0	7.4	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.5	0.0	54.2	0.0	35.4	0.0	39.3
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	3.2	0.0	10.7	0.0	3.8
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.7	0.0	1.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.45	0.00	1.77
%ile Back of Q (95%), veh/ln	0.0	1.6	0.0	7.1	0.0	17.4	0.0	7.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.22	0.00	0.09	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	559	90	10	490	126	70	620	10	84	320	100
Future Volume (vph)	190	559	90	10	490	126	70	620	10	84	320	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	11	12	11	12	12	11	11	12
Storage Length (ft)	0		0	0		0	135		0	130		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			100			105		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		0.99	1.00		0.99	0.99	
Frt		0.984			0.970			0.998			0.964	
Flt Protected		0.989			0.999		0.950			0.950		
Satd. Flow (prot)	0	3011	0	0	2991	0	1545	3288	0	1559	2994	0
Flt Permitted		0.641			0.937		0.372			0.273		
Satd. Flow (perm)	0	1950	0	0	2805	0	602	3288	0	446	2994	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			43			2			45	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5379			1323			450			5338	
Travel Time (s)		122.3			30.1			10.2			121.3	
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Adj. Flow (vph)	204	601	97	11	527	135	75	667	11	90	344	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	902	0	0	673	0	75	678	0	90	452	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.07	1.07	1.12	1.07	1.12	1.07	1.07	1.12	1.12	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0		15.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	37.0		21.0	21.0		6.5	31.0		6.5	21.0	
Total Split (s)	6.5	51.0		44.5	44.5		10.0	32.0		7.0	29.0	
Total Split (%)	7.2%	56.7%		49.4%	49.4%		11.1%	35.6%		7.8%	32.2%	
Maximum Green (s)	3.0	45.0		38.5	38.5		6.5	26.0		3.5	23.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Time To Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		9.0						7.0				
Flash Dont Walk (s)		22.0						18.0				
Pedestrian Calls (#/hr)		11						14				
Act Effct Green (s)		43.6			43.6		32.5	25.0		27.9	22.7	
Actuated g/C Ratio		0.51			0.51		0.38	0.29		0.32	0.26	
v/c Ratio		0.90			0.47		0.25	0.71		0.48	0.55	
Control Delay		34.0			14.5		19.8	32.6		28.7	28.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		34.0			14.5		19.8	32.6		28.7	28.3	
LOS		C			B		B	C		C	C	
Approach Delay		34.0			14.5			31.3			28.4	
Approach LOS		C			B			C			C	
90th %ile Green (s)	0.0	45.0		45.0	45.0		6.5	26.0		3.5	23.0	
90th %ile Term Code	Skip	Max		Hold	Hold		Max	Max		Max	Max	
70th %ile Green (s)	0.0	45.0		45.0	45.0		6.5	26.0		3.5	23.0	
70th %ile Term Code	Skip	Max		Hold	Hold		Max	Max		Max	Max	
50th %ile Green (s)	0.0	45.0		45.0	45.0		6.5	26.0		3.5	23.0	
50th %ile Term Code	Skip	Max		Hold	Hold		Max	Max		Max	Hold	
30th %ile Green (s)	0.0	45.0		45.0	45.0		6.5	26.0		3.5	23.0	
30th %ile Term Code	Skip	Max		Hold	Hold		Max	Max		Max	Hold	
10th %ile Green (s)	0.0	37.4		37.4	37.4		0.0	20.9		0.0	20.9	
10th %ile Term Code	Skip	Gap		Hold	Hold		Skip	Gap		Skip	Hold	
Stops (vph)		673			358		42	543		63	316	
Fuel Used(gal)		45			10		1	9		4	22	
CO Emissions (g/hr)		3126			719		53	657		303	1513	
NOx Emissions (g/hr)		608			140		10	128		59	294	
VOC Emissions (g/hr)		724			167		12	152		70	351	
Dilemma Vehicles (#)		0			0		0	0		0	0	
Queue Length 50th (ft)		233			116		27	180		32	105	
Queue Length 95th (ft)		#375			163		56	244		64	155	
Internal Link Dist (ft)		5299			1243			370			5258	
Turn Bay Length (ft)							135			130		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		1039			1450		299	1004		189	840	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.87			0.46		0.25	0.68		0.48	0.54	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 86.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 27.7 Intersection LOS: C
Intersection Capacity Utilization 87.1% ICU Level of Service E
Analysis Period (min) 15
90th %ile Actuated Cycle: 90
70th %ile Actuated Cycle: 90
50th %ile Actuated Cycle: 90
30th %ile Actuated Cycle: 90
10th %ile Actuated Cycle: 70.3
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1068: Halsted Street & 127th Street

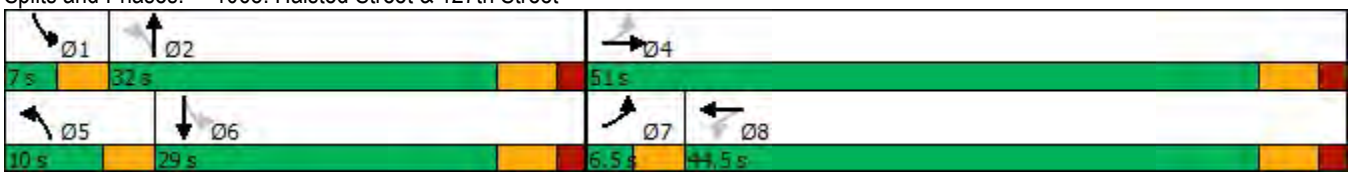

HCM 6th Edition methodology does not support a perm + prot left-turn type from a shared lane. Left-turn bay is needed for phases 7.

Lane Group	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	618	198	660	15	5	15	5	50	10	0	5	5
Future Volume (vph)	618	198	660	15	5	15	5	50	10	0	5	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	12	14	14	12	12	16	12	12
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00			0.99				0.99		
Frt			0.997				0.865			0.930		
Flt Protected		0.950				0.950				0.977		
Satd. Flow (prot)	2956	1478	1581	0	0	1722	1589	0	0	1826	0	0
Flt Permitted		0.257				0.742				0.896		
Satd. Flow (perm)	2956	398	1581	0	0	1338	1589	0	0	1675	0	0
Right Turn on Red				No				No				No
Satd. Flow (RTOR)												
Link Speed (mph)	30		30				30			30		
Link Distance (ft)	1323		3930				1256			658		
Travel Time (s)	30.1		89.3				28.5			15.0		
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Adj. Flow (vph)	687	220	733	17	6	17	6	56	11	0	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	687	220	750	0	0	23	62	0	0	23	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)	10		10				14			0		
Link Offset(ft)	0		0				0			0		
Crosswalk Width(ft)	16		16				16			16		
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.07	0.99	0.99	1.07	1.07	0.91	1.07	1.07
Turning Speed (mph)		15		9	15	15		9	15		9	9
Turn Type	NA	custom	NA		Perm	Perm	NA		Perm	NA		
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7			2	2			6			
Minimum Split (s)	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0		
Total Split (s)	38.0	32.0	70.0		20.0	20.0	20.0		20.0	20.0		
Total Split (%)	42.2%	35.6%	77.8%		22.2%	22.2%	22.2%		22.2%	22.2%		
Maximum Green (s)	33.0	29.0	65.0		16.0	16.0	16.0		16.0	16.0		
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0		
All-Red Time (s)	2.0	0.0	2.0		1.0	1.0	1.0		1.0	1.0		
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			0.0		
Total Lost Time (s)	5.0	3.0	5.0			4.0	4.0			4.0		
Lead/Lag	Lag	Lead										
Lead-Lag Optimize?												
Walk Time (s)	9.0		18.0		5.0	5.0	5.0					
Flash Dont Walk (s)	9.0		9.0		9.0	9.0	9.0					
Pedestrian Calls (#/hr)	0		0		0	0	0					
Act Effct Green (s)	33.0	67.0	65.0			16.0	16.0			16.0		

Lane Group	NER
Lane Configurations	
Traffic Volume (vph)	289
Future Volume (vph)	289
Ideal Flow (vphpl)	1800
Lane Width (ft)	14
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.865
Flt Protected	
Satd. Flow (prot)	1524
Flt Permitted	
Satd. Flow (perm)	1524
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Heavy Vehicles (%)	9%
Adj. Flow (vph)	321
Shared Lane Traffic (%)	
Lane Group Flow (vph)	321
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	0.99
Turning Speed (mph)	9
Turn Type	Over
Protected Phases	7
Permitted Phases	
Minimum Split (s)	9.0
Total Split (s)	32.0
Total Split (%)	35.6%
Maximum Green (s)	29.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	29.0

Lane Group	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Actuated g/C Ratio	0.37	0.74	0.72			0.18	0.18			0.18		
v/c Ratio	0.63	0.34	0.66			0.10	0.22			0.08		
Control Delay	26.8	5.0	10.1			32.3	34.1			31.8		
Queue Delay	0.0	0.0	0.0			0.0	0.0			0.0		
Total Delay	26.8	5.0	10.1			32.3	34.1			31.8		
LOS	C	A	B			C	C			C		
Approach Delay	26.8		8.9				33.6			31.8		
Approach LOS	C		A				C			C		
Stops (vph)	493	55	339			19	48			19		
Fuel Used(gal)	12	7	24			0	1			0		
CO Emissions (g/hr)	871	459	1673			31	84			24		
NOx Emissions (g/hr)	170	89	326			6	16			5		
VOC Emissions (g/hr)	202	106	388			7	19			6		
Dilemma Vehicles (#)	0	0	0			0	0			0		
Queue Length 50th (ft)	166	31	189			11	31			11		
Queue Length 95th (ft)	227	52	301			33	67			33		
Internal Link Dist (ft)	1243		3850				1176			578		
Turn Bay Length (ft)												
Base Capacity (vph)	1083	644	1141			237	282			297		
Starvation Cap Reductn	0	0	0			0	0			0		
Spillback Cap Reductn	0	0	0			0	0			0		
Storage Cap Reductn	0	0	0			0	0			0		
Reduced v/c Ratio	0.63	0.34	0.66			0.10	0.22			0.08		

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 19.9 Intersection LOS: B
Intersection Capacity Utilization 79.0% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1070: Vermont St & S Wallance St & 127th Street

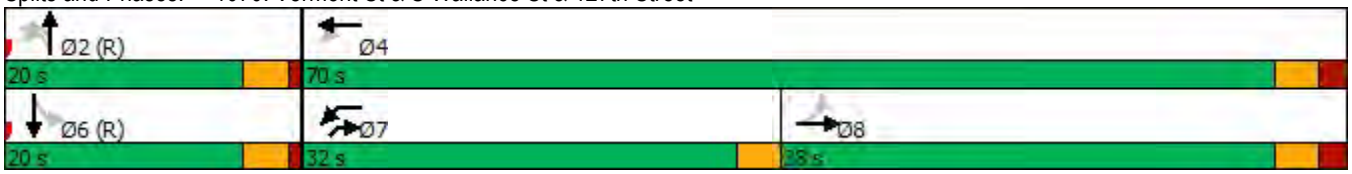

Lane Group	NER
Actuated g/C Ratio	0.32
v/c Ratio	0.65
Control Delay	33.7
Queue Delay	0.0
Total Delay	33.7
LOS	C
Approach Delay	
Approach LOS	
Stops (vph)	245
Fuel Used(gal)	6
CO Emissions (g/hr)	451
NOx Emissions (g/hr)	88
VOC Emissions (g/hr)	105
Dilemma Vehicles (#)	0
Queue Length 50th (ft)	155
Queue Length 95th (ft)	249
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	491
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.65

Intersection Summary

HCM 6th Edition methodology does not support more than 4 approaches.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	200	789	681	71	54	200
Future Volume (vph)	200	789	681	71	54	200
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	150
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.986			0.850
Flt Protected		0.990			0.950	
Satd. Flow (prot)	0	3010	2997	0	1520	1360
Flt Permitted		0.628			0.950	
Satd. Flow (perm)	0	1909	2997	0	1520	1360
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			31			215
Link Speed (mph)		30	30		30	
Link Distance (ft)		3930	637		2686	
Travel Time (s)		89.3	14.5		61.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	215	848	732	76	58	215
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1063	808	0	58	215
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (%)	67.7%	67.7%	67.7%		32.3%	32.3%
Maximum Green (s)	40.0	40.0	40.0		17.0	17.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			30.0			
Flash Dont Walk (s)			10.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		40.0	40.0		17.0	17.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.62	0.62		0.26	0.26
v/c Ratio		0.91	0.44		0.15	0.42
Control Delay		24.4	4.9		19.7	6.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		24.4	4.9		19.7	6.1
LOS		C	A		B	A
Approach Delay		24.4	4.9		9.0	
Approach LOS		C	A		A	
Stops (vph)		740	170		42	31
Fuel Used(gal)		39	5		3	9
CO Emissions (g/hr)		2748	379		189	613
NOx Emissions (g/hr)		535	74		37	119
VOC Emissions (g/hr)		637	88		44	142
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		167	42		18	0
Queue Length 95th (ft)		#325	56		44	46
Internal Link Dist (ft)		3850	557		2606	
Turn Bay Length (ft)						150
Base Capacity (vph)		1174	1856		397	514
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.91	0.44		0.15	0.42

Intersection Summary	
Area Type: Other	
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 43 (66%), Referenced to phase 2: and 6:SBL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 15.1	Intersection LOS: B
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1071: 127th Street & State Street

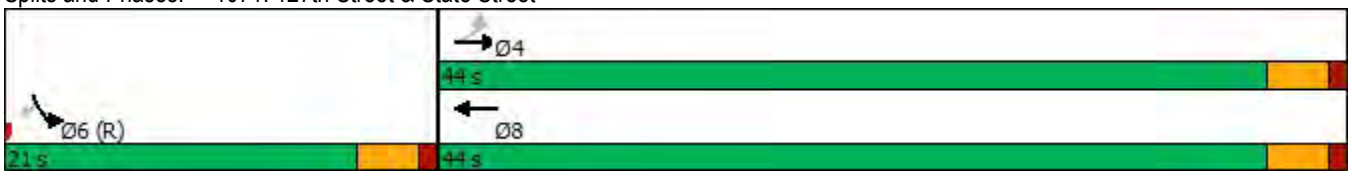

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	200	789	681	71	54	200
Future Volume (veh/h)	200	789	681	71	54	200
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1730	1730	1730	1730	1730	1730
Adj Flow Rate, veh/h	215	848	732	76	58	215
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	5	5	5
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	357	1263	1849	192	431	383
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.62	0.62	1.00	1.00	0.26	0.26
Unsig. Movement Delay						
Ln Grp Delay, s/veh	12.3	12.1	1.2	1.1	19.0	26.6
Ln Grp LOS	B	B	A	A	B	C
Approach Vol, veh/h		1063	808		273	
Approach Delay, s/veh		12.2	1.2		25.0	
Approach LOS		B	A		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4				8
Case No	9.0			8.0				8.0
Phs Duration (G+Y+Rc), s	21.0			44.0				44.0
Change Period (Y+Rc), s	4.0			4.0				4.0
Max Green (Gmax), s	17.0			40.0				40.0
Max Allow Headway (MAH), s	4.0			5.8				5.3
Max Q Clear (g_c+I1), s	10.2			20.4				2.0
Green Ext Time (g_e), s	0.5			8.5				6.0
Prob of Phs Call (p_c)	1.00			1.00				1.00
Prob of Max Out (p_x)	0.00			0.00				0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7				3
Mvmt Sat Flow, veh/h	1647			447				0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			2131				3092

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1466			0				312

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	0	0	0	3
Lane Assignment	L			L+T				

Lanes in Grp	1	0	0	1	0	0	0	0
Grp Vol (v), veh/h	58	0	0	444	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1647	0	0	1003	0	0	0	0
Q Serve Time (g_s), s	1.8	0.0	0.0	16.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	1.8	0.0	0.0	18.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1647	0	0	685	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	40.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	431	0	0	700	0	0	0	0
V/C Ratio (X)	0.13	0.00	0.00	0.63	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	431	0	0	700	0	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	18.4	0.0	0.0	7.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	4.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	19.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	0.0	3.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	0.00	0.00	0.00	1.00
%ile Back of Q (95%), veh/ln	1.3	0.0	0.0	6.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.01	0.00	0.00	0.05	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	619	0	0	0	400
Grp Sat Flow (s), veh/h/ln	0	0	0	1495	0	0	0	1643
Q Serve Time (g_s), s	0.0	0.0	0.0	17.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.7	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	920	0	0	0	1011
V/C Ratio (X)	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.40
Avail Cap (c_a), veh/h	0	0	0	920	0	0	0	1011
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.9	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.1	0.0	0.0	0.0	1.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.71	0.00	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							T+R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	215	0	0	0	0	0	0	408
Grp Sat Flow (s), veh/h/ln	1466	0	0	0	0	0	0	1674
Q Serve Time (g_s), s	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
Lane Grp Cap (c), veh/h	383	0	0	0	0	0	0	1030
V/C Ratio (X)	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Avail Cap (c_a), veh/h	383	0	0	0	0	0	0	1030
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	20.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.8	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.6	0.0	0.0	0.0	0.0	0.0	0.0	1.1
1st-Term Q (Q1), veh/ln	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.00	0.00	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.6
%ile Storage Ratio (RQ%)	1.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	737	160	32	343	410	144
Future Volume (vph)	737	160	32	343	410	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	12	12	10	10
Storage Length (ft)		100	105		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor		0.97	1.00			0.98
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1568	1382	1660	3196	1565	1400
Flt Permitted			0.160		0.950	
Satd. Flow (perm)	1568	1344	279	3196	1565	1371
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						158
Link Speed (mph)	30			35	30	
Link Distance (ft)	163			5340	2671	
Travel Time (s)	3.7			104.0	60.7	
Confl. Peds. (#/hr)		4	4			8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Adj. Flow (vph)	810	176	35	377	451	158
Shared Lane Traffic (%)						
Lane Group Flow (vph)	810	176	35	377	451	158
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.12	1.12	1.07	1.07	1.17	1.17
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm
Protected Phases	4	2		8	2	
Permitted Phases		4	8			2
Minimum Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (s)	55.0	35.0	55.0	55.0	35.0	35.0
Total Split (%)	61.1%	38.9%	61.1%	61.1%	38.9%	38.9%
Maximum Green (s)	50.0	30.0	50.0	50.0	30.0	30.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	17.0	5.0			5.0	5.0
Flash Dont Walk (s)	14.0	19.0			19.0	19.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Pedestrian Calls (#/hr)	0	0			0	0
Act Effct Green (s)	50.0	80.0	50.0	50.0	30.0	30.0
Actuated g/C Ratio	0.56	0.89	0.56	0.56	0.33	0.33
v/c Ratio	0.93	0.15	0.23	0.21	0.87	0.28
Control Delay	37.8	0.6	14.8	10.5	47.0	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.8	0.6	14.8	10.5	47.0	5.2
LOS	D	A	B	B	D	A
Approach Delay	31.1			10.8	36.1	
Approach LOS	C			B	D	
Stops (vph)	595	11	18	162	354	19
Fuel Used(gal)	24	3	1	15	14	3
CO Emissions (g/hr)	1672	233	102	1061	1008	228
NOx Emissions (g/hr)	325	45	20	206	196	44
VOC Emissions (g/hr)	387	54	24	246	234	53
Dilemma Vehicles (#)	0	0	0	19	0	0
Queue Length 50th (ft)	396	0	10	53	238	0
Queue Length 95th (ft)	#669	0	30	77	#411	41
Internal Link Dist (ft)	83			5260	2591	
Turn Bay Length (ft)		100	105			
Base Capacity (vph)	871	1207	155	1775	521	562
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.15	0.23	0.21	0.87	0.28

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 28.5 Intersection LOS: C
Intersection Capacity Utilization 73.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1073: Indiana Ave & 130th Street

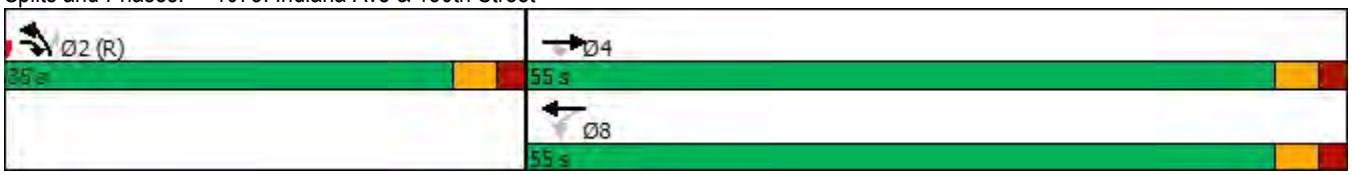

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	737	160	32	343	410	144
Future Volume (veh/h)	737	160	32	343	410	144
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1646	1702	1758	1702	1772	1772
Adj Flow Rate, veh/h	810	176	35	377	451	158
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	7	3	7	2	2
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	914	1279	151	1796	563	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.56	0.56	0.56	0.56	0.33	0.33
Unsig. Movement Delay						
Ln Grp Delay, s/veh	29.8	0.9	40.3	10.3	38.8	24.0
Ln Grp LOS	C	A	D	B	D	C
Approach Vol, veh/h	986			412	609	
Approach Delay, s/veh	24.7			12.9	34.9	
Approach LOS	C			B	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Case No		9.0		7.0				6.0
Phs Duration (G+Y+Rc), s		35.0		55.0				55.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green (Gmax), s		30.0		50.0				50.0
Max Allow Headway (MAH), s		4.5		4.4				4.6
Max Q Clear (g_c+I1), s		23.9		40.8				46.0
Green Ext Time (g_e), s		1.5		3.5				0.8
Prob of Phs Call (p_c)		1.00		1.00				1.00
Prob of Max Out (p_x)		0.00		0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7				3
Mvmt Sat Flow, veh/h		1688		0				566
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		1646				3318
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1502		1437				0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	0	0	3
Lane Assignment		L						L

Lanes in Grp	0	1	0	0	0	0	0	1
Grp Vol (v), veh/h	0	451	0	0	0	0	0	35
Grp Sat Flow (s), veh/h/ln	0	1688	0	0	0	0	0	566
Q Serve Time (g_s), s	0.0	21.9	0.0	0.0	0.0	0.0	0.0	5.2
Cycle Q Clear Time (g_c), s	0.0	21.9	0.0	0.0	0.0	0.0	0.0	44.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1688	0	0	0	0	0	566
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Time to First Blk (g_f), s	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	563	0	0	0	0	0	151
V/C Ratio (X)	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.23
Avail Cap (c_a), veh/h	0	563	0	0	0	0	0	151
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.3	0.0	0.0	0.0	0.0	0.0	36.7
Incr Delay (d2), s/veh	0.0	11.5	0.0	0.0	0.0	0.0	0.0	3.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.8	0.0	0.0	0.0	0.0	0.0	40.3
1st-Term Q (Q1), veh/ln	0.0	8.5	0.0	0.0	0.0	0.0	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.51	0.00	1.00	0.00	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	15.5	0.0	0.0	0.0	0.0	0.0	1.5
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	810	0	0	0	377
Grp Sat Flow (s), veh/h/ln	0	0	0	1646	0	0	0	1617
Q Serve Time (g_s), s	0.0	0.0	0.0	38.8	0.0	0.0	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	38.8	0.0	0.0	0.0	5.3
Lane Grp Cap (c), veh/h	0	0	0	914	0	0	0	1796
V/C Ratio (X)	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.21
Avail Cap (c_a), veh/h	0	0	0	914	0	0	0	1796
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.5	0.0	0.0	0.0	10.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	29.8	0.0	0.0	0.0	10.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	13.1	0.0	0.0	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.41	0.00	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	22.8	0.0	0.0	0.0	3.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	6.09	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	158	0	176	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1502	0	1437	0	0	0	0
Q Serve Time (g_s), s	0.0	7.1	0.0	1.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.1	0.0	1.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1442.1	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	501	0	1279	0	0	0	0
V/C Ratio (X)	0.00	0.32	0.00	0.14	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	501	0	1279	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.4	0.0	0.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.0	0.0	0.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	1.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	0.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	4.8	0.0	3.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.82	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		25.4						
HCM 6th LOS		C						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	494	0	30	630	90	0	0	0	50	5	89
Future Volume (vph)	87	494	0	30	630	90	0	0	0	50	5	89
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	9	12	12	12	11	15	11
Storage Length (ft)	0		30	0		50	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00				0.88					0.96	
Frt						0.850					0.917	
Flt Protected		0.993			0.998						0.983	
Satd. Flow (prot)	0	3073	0	0	1615	1377	0	1800	0	0	1579	0
Flt Permitted		0.742			0.822						0.929	
Satd. Flow (perm)	0	2285	0	0	1330	1213	0	1800	0	0	1486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						100					99	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			105			169			1380	
Travel Time (s)		5.2			2.4			3.8			31.4	
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Adj. Flow (vph)	97	549	0	33	700	100	0	0	0	56	6	99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	646	0	0	733	100	0	0	0	0	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.07	1.07	1.17	1.22	1.07	1.07	1.07	1.12	0.95	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA	Perm				pm+pt	NA	
Protected Phases		4			3 8			2		1	6	
Permitted Phases	4			3 8	3	3 8	2	2		6		
Minimum Split (s)	16.0	16.0					12.0	12.0		20.0	32.0	
Total Split (s)	35.0	35.0					12.0	12.0		20.0	32.0	
Total Split (%)	41.2%	41.2%					14.1%	14.1%		23.5%	37.6%	
Maximum Green (s)	31.0	31.0					9.0	9.0		15.0	27.0	
Yellow Time (s)	3.0	3.0					3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0					0.0	0.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						3.0			5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?												
Walk Time (s)											14.0	

Lane Group	Ø3	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Width (ft)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Turn Type		
Protected Phases	3	8
Permitted Phases		
Minimum Split (s)	18.0	35.0
Total Split (s)	18.0	35.0
Total Split (%)	21%	41%
Maximum Green (s)	14.0	31.0
Yellow Time (s)	3.0	3.0
All-Red Time (s)	1.0	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Walk Time (s)	2.0	18.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)											13.0	
Pedestrian Calls (#/hr)											0	
Act Effct Green (s)		31.0			49.0	49.0					27.0	
Actuated g/C Ratio		0.36			0.58	0.58					0.32	
v/c Ratio		0.78			0.96	0.13					0.29	
Control Delay		31.7			25.2	0.3					10.9	
Queue Delay		1.0			45.3	27.3					0.0	
Total Delay		32.7			70.5	27.6					10.9	
LOS		C			E	C					B	
Approach Delay		32.7			65.4						10.9	
Approach LOS		C			E						B	
Stops (vph)		496			212	1					46	
Fuel Used(gal)		9			5	0					2	
CO Emissions (g/hr)		609			356	6					149	
NOx Emissions (g/hr)		118			69	1					29	
VOC Emissions (g/hr)		141			83	1					35	
Dilemma Vehicles (#)		0			0	0					0	
Queue Length 50th (ft)		157			168	0					23	
Queue Length 95th (ft)		227			m24	m0					68	
Internal Link Dist (ft)		148			25			89			1300	
Turn Bay Length (ft)						50						
Base Capacity (vph)		833			766	741					555	
Starvation Cap Reductn		0			312	630					0	
Spillback Cap Reductn		53			0	0					2	
Storage Cap Reductn		0			0	0					0	
Reduced v/c Ratio		0.83			1.61	0.90					0.29	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 135
Control Type: Pretimed
Maximum v/c Ratio: 1.66
Intersection Signal Delay: 47.1 Intersection LOS: D
Intersection Capacity Utilization 87.2% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1955: 115th Street & Cottage Grove Avenue

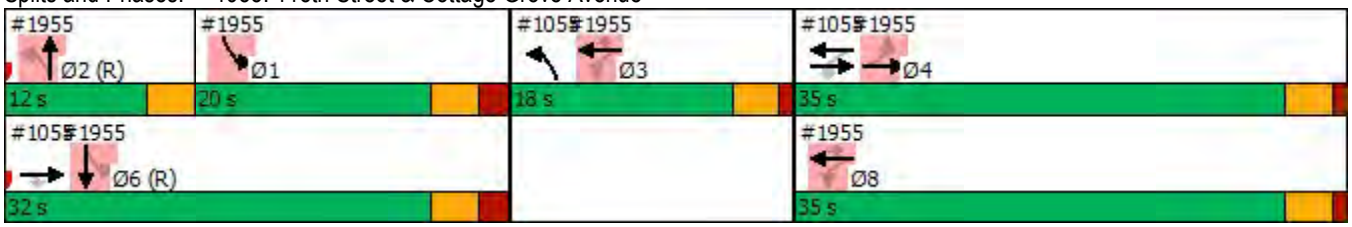

Lane Group	Ø3	Ø8
Flash Dont Walk (s)	12.0	13.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1035	70	137	755	0	314	0	290	0	0	0
Future Volume (vph)	0	1035	70	137	755	0	314	0	290	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	13	12	12	12	12	12	12	12	16	12
Storage Length (ft)	175		295	370		170	0		0	0		0
Storage Lanes	1		1	1		1	1		0	0		0
Taper Length (ft)	209			155			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850					0.850				
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1800	3320	1581	1644	3320	1800	1710	1500	0	0	2040	0
Flt Permitted				0.130			0.757					
Satd. Flow (perm)	1800	3320	1581	225	3320	1800	1363	1500	0	0	2040	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		5343			1170			134			331	
Travel Time (s)		104.1			22.8			3.0			7.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	0	1078	73	143	786	0	327	0	302	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1078	73	143	786	0	327	302	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.03	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA				
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	33.0	33.0	33.0	7.0	43.0	43.0	6.0	6.0		6.0	6.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	37.0	37.0	37.0	10.0	47.0	47.0	10.0	10.0		10.0	10.0	
Total Split (s)	37.0	37.0	37.0	10.0	47.0	47.0	38.0	38.0		38.0	38.0	
Total Split (%)	43.5%	43.5%	43.5%	11.8%	55.3%	55.3%	44.7%	44.7%		44.7%	44.7%	
Maximum Green (s)	33.0	33.0	33.0	7.0	43.0	43.0	34.0	34.0		34.0	34.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0			4.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0		6.0	6.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)		37.7	37.7	49.4	48.4		28.6	28.6				
Actuated g/C Ratio		0.44	0.44	0.58	0.57		0.34	0.34				
v/c Ratio		0.73	0.10	0.55	0.42		0.71	0.60				
Control Delay		24.6	16.6	19.0	12.2		33.1	27.8				
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0				
Total Delay		24.6	16.6	19.0	12.2		33.1	27.8				
LOS		C	B	B	B		C	C				
Approach Delay		24.1			13.2			30.5				
Approach LOS		C			B			C				
90th %ile Green (s)	33.0	33.0	33.0	7.0	43.0	43.0	34.0	34.0		34.0	34.0	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max		Hold	Hold	
70th %ile Green (s)	33.0	33.0	33.0	7.0	43.0	43.0	34.0	34.0		34.0	34.0	
70th %ile Term Code	Coord	Coord	Coord	Max	Coord	Coord	Max	Max		Hold	Hold	
50th %ile Green (s)	34.6	34.6	34.6	9.3	46.9	46.9	30.1	30.1		30.1	30.1	
50th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
30th %ile Green (s)	40.1	40.1	40.1	8.0	51.1	51.1	25.9	25.9		25.9	25.9	
30th %ile Term Code	Coord	Coord	Coord	Gap	Coord	Coord	Gap	Gap		Hold	Hold	
10th %ile Green (s)	48.0	48.0	48.0	7.0	58.0	58.0	19.0	19.0		19.0	19.0	
10th %ile Term Code	Coord	Coord	Coord	Min	Coord	Coord	Gap	Gap		Hold	Hold	
Stops (vph)		823	42	65	413		262	228				
Fuel Used(gal)		51	3	2	13		4	3				
CO Emissions (g/hr)		3586	227	168	883		272	224				
NOx Emissions (g/hr)		698	44	33	172		53	44				
VOC Emissions (g/hr)		831	53	39	205		63	52				
Dilemma Vehicles (#)		60	0	0	44		0	0				
Queue Length 50th (ft)		259	24	34	121		146	129				
Queue Length 95th (ft)		353	52	#86	182		224	194				
Internal Link Dist (ft)		5263			1090			54			251	
Turn Bay Length (ft)			295	370								
Base Capacity (vph)		1473	701	258	1890		545	600				
Starvation Cap Reductn		0	0	0	0		0	0				
Spillback Cap Reductn		0	0	0	0		0	0				
Storage Cap Reductn		0	0	0	0		0	0				
Reduced v/c Ratio		0.73	0.10	0.55	0.42		0.60	0.50				

Intersection Summary	
Area Type:	Other

Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 21.9	Intersection LOS: C
Intersection Capacity Utilization 92.3%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Ellis Avenue & 130th Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1035	70	137	755	0	314	0	290	0	0	0
Future Volume (veh/h)	0	1035	70	137	755	0	314	0	290	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1800	1758	1872	1744	1758	1800	1800	1800	1772	1800	1872	1800
Adj Flow Rate, veh/h	0	1078	73	143	786	0	327	0	302	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	0	4	3	0	0	0	2	0	0	0
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	85	1713	814	352	2096	957	562	0	424	0	521	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.51	0.51	0.08	0.63	0.00	0.28	0.00	0.28	0.00	0.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	16.0	10.7	11.6	8.2	0.0	30.8	0.0	35.4	0.0	0.0	0.0
Ln Grp LOS	A	B	B	B	A	A	C	A	D	A	A	A
Approach Vol, veh/h		1151			929			629			0	
Approach Delay, s/veh		15.7			8.7			33.0			0.0	
Approach LOS		B			A			C				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		6.0	1.2	5.0		8.0		3.0
Phs Duration (G+Y+Rc), s		27.6	9.8	47.6		27.6		57.4
Change Period (Y+Rc), s		4.0	3.0	4.0		4.0		4.0
Max Green (Gmax), s		34.0	7.0	33.0		34.0		43.0
Max Allow Headway (MAH), s		7.5	4.3	4.2		0.0		4.2
Max Q Clear (g_c+I1), s		17.1	5.1	21.7		0.0		11.7
Green Ext Time (g_e), s		6.5	0.1	4.5		0.0		4.0
Prob of Phs Call (p_c)		1.00	0.97	1.00		0.00		1.00
Prob of Max Out (p_x)		0.40	1.00	0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1714	1661	700		0		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		0		3340		1872		3340

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1525		1586		0		1525

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		LL (Pr/Pm)		L				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	327	143	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1714	1661	700	0	0	0	0
Q Serve Time (g_s), s	0.0	14.5	3.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.5	3.1	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1714	481	700	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	23.6	45.6	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	23.6	23.9	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	14.5	9.2	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	23.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	562	352	85	0	0	0	0
V/C Ratio (X)	0.00	0.58	0.41	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	770	356	85	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	27.4	10.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.4	0.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.8	11.6	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.7	0.9	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.3	1.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	3.13	0.07	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	2	0	1	0	2
Grp Vol (v), veh/h	0	0	0	1078	0	0	0	786
Grp Sat Flow (s), veh/h/ln	0	0	0	1670	0	1872	0	1670
Q Serve Time (g_s), s	0.0	0.0	0.0	19.7	0.0	0.0	0.0	9.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.7	0.0	0.0	0.0	9.7
Lane Grp Cap (c), veh/h	0	0	0	1713	0	521	0	2096
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.37
Avail Cap (c_a), veh/h	0	0	0	1713	0	749	0	2096
Upstream Filter (I)	0.00	0.00	0.00	0.64	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.9	0.0	0.0	0.0	7.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	16.0	0.0	0.0	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.7	0.0	0.0	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.0	0.0	0.0	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R				R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	302	0	73	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1525	0	1586	0	0	0	1525
Q Serve Time (g_s), s	0.0	15.1	0.0	2.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.1	0.0	2.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	424	0	814	0	0	0	957
V/C Ratio (X)	0.00	0.71	0.00	0.09	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	610	0	814	0	0	0	957
Upstream Filter (I)	0.00	1.00	0.00	0.64	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	27.6	0.0	10.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.8	0.0	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.4	0.0	10.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	0.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.2	0.0	0.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	3.12	0.00	0.06	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		17.3						
HCM 6th LOS		B						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	411	185	153	391	159	110	655	92	155	820	100
Future Volume (vph)	85	411	185	153	391	159	110	655	92	155	820	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	16	12	12	16	12	10	10	9	9	10	9
Storage Length (ft)	60		260	55		260	92		130	115		130
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	90			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99	0.99		0.99	0.99		0.99		0.95	0.99		0.94
Frt		0.953			0.957				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1676	1879	0	1676	1880	0	1550	3040	1363	1509	3069	1337
Flt Permitted	0.119			0.105			0.179			0.266		
Satd. Flow (perm)	209	1879	0	184	1880	0	289	3040	1296	418	3069	1251
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			22				93			83
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		663			2036			5304			668	
Travel Time (s)		15.1			46.3			120.5			15.2	
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)						1				1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Adj. Flow (vph)	91	442	199	165	420	171	118	704	99	167	882	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	641	0	165	591	0	118	704	99	167	882	108
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	0.91	1.07	1.07	0.91	1.07	1.17	1.17	1.22	1.22	1.17	1.22
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		4.0	11.0		5.0	31.0	31.0	5.0	31.0	31.0
Minimum Split (s)	13.0	47.0		8.0	34.0		8.0	46.0	46.0	8.0	46.0	46.0
Total Split (s)	10.0	43.0		10.0	43.0		7.0	45.0	45.0	7.0	45.0	45.0
Total Split (%)	9.5%	41.0%		9.5%	41.0%		6.7%	42.9%	42.9%	6.7%	42.9%	42.9%
Maximum Green (s)	7.0	38.0		7.0	38.0		4.0	41.0	41.0	4.0	41.0	41.0
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max		None	Max		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		24.0			11.0			31.0	31.0		31.0	31.0
Flash Dont Walk (s)		18.0			18.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0			0			0	0		0	0
Act Effct Green (s)	47.0	38.0		47.0	38.0		46.0	41.0	41.0	46.0	41.0	41.0
Actuated g/C Ratio	0.45	0.36		0.45	0.36		0.44	0.39	0.39	0.44	0.39	0.39
v/c Ratio	0.48	0.92		0.91	0.85		0.68	0.59	0.18	0.75	0.74	0.20
Control Delay	23.9	51.6		69.6	43.2		40.1	27.9	5.8	43.0	31.9	8.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.9	51.6		69.6	43.2		40.1	27.9	5.8	43.0	31.9	8.0
LOS	C	D		E	D		D	C	A	D	C	A
Approach Delay		48.2			49.0			27.1			31.3	
Approach LOS		D			D			C			C	
90th %ile Green (s)	7.0	38.0		7.0	38.0		4.0	41.0	41.0	4.0	41.0	41.0
90th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	7.0	38.0		7.0	38.0		4.0	41.0	41.0	4.0	41.0	41.0
70th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	7.0	38.0		7.0	38.0		4.0	41.0	41.0	4.0	41.0	41.0
50th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	7.0	38.0		7.0	38.0		4.0	41.0	41.0	4.0	41.0	41.0
30th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	7.0	38.0		7.0	38.0		4.0	41.0	41.0	4.0	41.0	41.0
10th %ile Term Code	MaxR	Ped		Max	MaxR		Max	Coord	Coord	Max	Coord	Coord
Stops (vph)	46	503		78	464		65	503	14	99	683	22
Fuel Used(gal)	1	12		5	16		6	34	4	3	13	1
CO Emissions (g/hr)	77	847		351	1128		406	2348	279	190	935	56
NOx Emissions (g/hr)	15	165		68	219		79	457	54	37	182	11
VOC Emissions (g/hr)	18	196		81	261		94	544	65	44	217	13
Dilemma Vehicles (#)	0	0		0	0		0	0	0	0	0	0
Queue Length 50th (ft)	33	395		62	350		44	194	2	65	262	10
Queue Length 95th (ft)	62	#622		#188	#547		#100	255	36	#140	338	46
Internal Link Dist (ft)		583			1956			5224			588	
Turn Bay Length (ft)	60			55			92		130	115		130
Base Capacity (vph)	191	695		181	694		174	1187	562	224	1198	539
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.92		0.91	0.85		0.68	0.59	0.18	0.75	0.74	0.20

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 37.4 Intersection LOS: D
Intersection Capacity Utilization 103.1% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1016: Halsted Street & 103rd Street

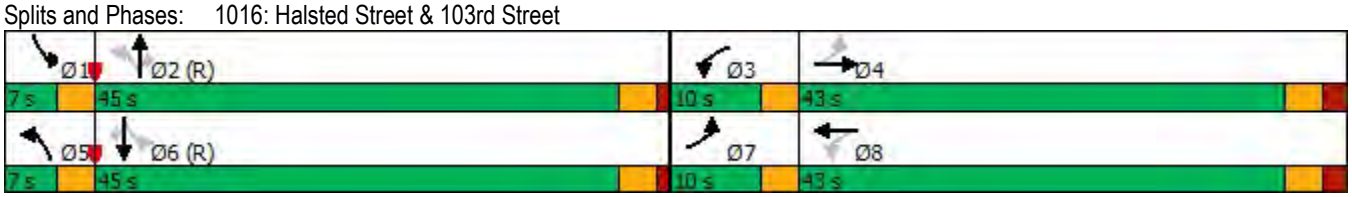

Min green cannot be greater than Max Green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	354	93	220	366	70	32	310	25	70	340	66
Future Volume (vph)	81	354	93	220	366	70	32	310	25	70	340	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10	12	10	10	12	10	10
Storage Length (ft)	55		120	95		75	0		85	0		90
Storage Lanes	1		1	1		1	0		1	0		0
Taper Length (ft)	75			95			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.995			0.992	
Satd. Flow (prot)	1550	1631	1386	1550	1631	1386	0	1623	1386	0	1618	1386
Flt Permitted	0.529			0.950				0.934			0.808	
Satd. Flow (perm)	863	1631	1386	1550	1631	1386	0	1523	1386	0	1318	1386
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			95			62			82			82
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		559			386			1340			2394	
Travel Time (s)		12.7			8.8			30.5			54.4	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	87	381	100	237	394	75	34	333	27	75	366	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	381	100	237	394	75	0	367	27	0	441	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4			8	2		2	6		6
Minimum Split (s)	24.0	24.0	24.0	9.0	33.0	33.0	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (s)	24.0	24.0	24.0	16.0	40.0	40.0	37.0	37.0	37.0	37.0	37.0	37.0
Total Split (%)	30.0%	30.0%	30.0%	20.0%	50.0%	50.0%	46.3%	46.3%	46.3%	46.3%	46.3%	46.3%
Maximum Green (s)	20.0	20.0	20.0	13.0	36.0	36.0	32.0	32.0	32.0	32.0	32.0	32.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	4.0		5.0	5.0		5.0	5.0
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0	9.0		18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	12.0	12.0	12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	20.0	20.0	20.0	13.0	36.0	36.0		32.0	32.0		32.0	32.0

Lane Group	Ø12
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	12
Permitted Phases	
Minimum Split (s)	3.0
Total Split (s)	3.0
Total Split (%)	4%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.25	0.25	0.25	0.16	0.45	0.45		0.40	0.40		0.40	0.40
v/c Ratio	0.40	0.94	0.24	0.94	0.54	0.11		0.60	0.04		0.84	0.12
Control Delay	31.8	63.1	7.8	80.4	19.4	5.2		24.1	0.1		38.2	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	31.8	63.1	7.8	80.4	19.4	5.2		24.1	0.1		38.2	3.8
LOS	C	E	A	F	B	A		C	A		D	A
Approach Delay		48.6			38.4			22.5			33.4	
Approach LOS		D			D			C			C	
Stops (vph)	68	300	20	184	259	15		263	0		340	8
Fuel Used(gal)	1	8	1	6	5	1		24	2		14	1
CO Emissions (g/hr)	88	541	46	415	354	40		1710	109		951	103
NOx Emissions (g/hr)	17	105	9	81	69	8		333	21		185	20
VOC Emissions (g/hr)	20	125	11	96	82	9		396	25		220	24
Dilemma Vehicles (#)	0	0	0	0	0	0		0	0		0	0
Queue Length 50th (ft)	36	186	2	118	137	3		141	0		193	0
Queue Length 95th (ft)	80	#351	38	#254	221	26		230	0		#362	20
Internal Link Dist (ft)		479			306			1260			2314	
Turn Bay Length (ft)	55		120	95		75			85			90
Base Capacity (vph)	215	407	417	251	733	657		609	603		527	603
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	0
Reduced v/c Ratio	0.40	0.94	0.24	0.94	0.54	0.11		0.60	0.04		0.84	0.12

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 37.0 Intersection LOS: D
Intersection Capacity Utilization 89.6% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1052: Michigan Avenue & 115th Street

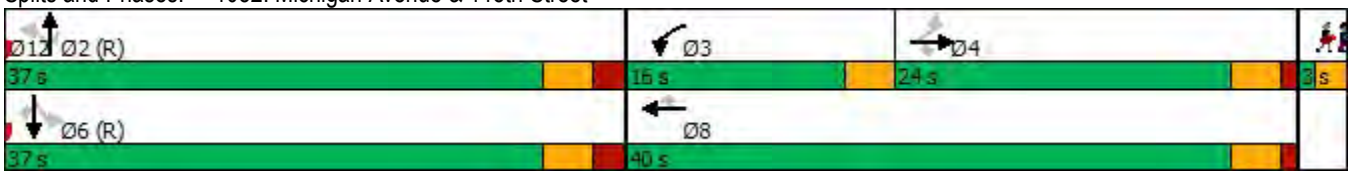

Lane Group	Ø12
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	828	0	0	702	5	35				
Future Volume (vph)	828	0	0	702	5	35				
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800				
Lane Width (ft)	10	12	12	10	16	12				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Frt					0.881					
Flt Protected					0.994					
Satd. Flow (prot)	1631	1748	0	1468	1734	0				
Flt Permitted					0.994					
Satd. Flow (perm)	1631	1748	0	1468	1734	0				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)					38					
Link Speed (mph)	30			30	30					
Link Distance (ft)	105			1228	505					
Travel Time (s)	2.4			27.9	11.5					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%				
Parking (#/hr)				0						
Adj. Flow (vph)	890	0	0	755	5	38				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	890	0	0	755	43	0				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			0	16					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.17	1.07	1.07	1.33	0.91	1.07				
Turning Speed (mph)		9	15		15	9				
Turn Type	NA	Perm		NA	Prot					
Protected Phases	6 4			4	3		1	2	6	8
Permitted Phases		6 4	4							
Minimum Split (s)			16.0	16.0	18.0		20.0	12.0	32.0	35.0
Total Split (s)			35.0	35.0	18.0		20.0	12.0	32.0	35.0
Total Split (%)			41.2%	41.2%	21.2%		24%	14%	38%	41%
Maximum Green (s)			31.0	31.0	14.0		15.0	9.0	27.0	31.0
Yellow Time (s)			3.0	3.0	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)			1.0	1.0	1.0		2.0	0.0	2.0	1.0
Lost Time Adjust (s)				0.0	0.0					
Total Lost Time (s)				4.0	4.0					
Lead/Lag							Lag	Lead		
Lead-Lag Optimize?										
Walk Time (s)					2.0				14.0	18.0
Flash Dont Walk (s)					12.0				13.0	13.0
Pedestrian Calls (#/hr)					0				0	0
Act Effct Green (s)	62.0			31.0	14.0					
Actuated g/C Ratio	0.73			0.36	0.16					
v/c Ratio	0.75			1.41	0.14					

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø2	Ø6	Ø8
Control Delay	7.7			221.9	13.2					
Queue Delay	5.2			0.9	0.0					
Total Delay	12.9			222.8	13.2					
LOS	B			F	B					
Approach Delay	12.9			222.8	13.3					
Approach LOS	B			F	B					
Stops (vph)	285			543	14					
Fuel Used(gal)	4			48	0					
CO Emissions (g/hr)	248			3378	24					
NOx Emissions (g/hr)	48			657	5					
VOC Emissions (g/hr)	57			783	6					
Dilemma Vehicles (#)	0			0	0					
Queue Length 50th (ft)	144			~549	2					
Queue Length 95th (ft)	174			#761	30					
Internal Link Dist (ft)	25			1148	425					
Turn Bay Length (ft)										
Base Capacity (vph)	1189			535	317					
Starvation Cap Reductn	236			0	0					
Spillback Cap Reductn	0			55	0					
Storage Cap Reductn	0			0	0					
Reduced v/c Ratio	0.93			1.57	0.14					

Intersection Summary	
Area Type:	Other
Cycle Length: 85	
Actuated Cycle Length: 85	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 105	
Control Type: Pretimed	
Maximum v/c Ratio: 1.41	
Intersection Signal Delay: 106.8	Intersection LOS: F
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1055: Cottage Grove Avenue & 115th Street

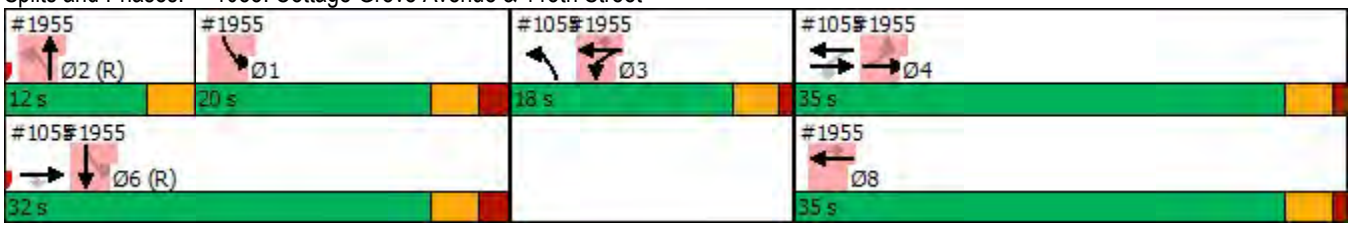

HCM 6th Edition methodology does not support clustered intersections.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	313	160	106	324	75	115	561	76	120	1021	150
Future Volume (vph)	165	313	160	106	324	75	115	561	76	120	1021	150
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	14	12	10	11	12	9	10	12
Storage Length (ft)	140		0	60		0	120		0	115		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	195			95			95			90		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99		0.98	1.00	0.99		0.99	1.00		0.99	0.99	
Frt			0.850		0.972			0.982			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1580	1600	1400	1596	1792	0	1580	3122	0	1539	2999	0
Flt Permitted	0.186			0.343			0.100			0.291		
Satd. Flow (perm)	306	1600	1371	574	1792	0	165	3122	0	469	2999	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			163		11			18			20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		752			3955			5338			2655	
Travel Time (s)		17.1			89.9			121.3			60.3	
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)						3	1		2			1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Adj. Flow (vph)	168	319	163	108	331	77	117	572	78	122	1042	153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	319	163	108	408	0	117	650	0	122	1195	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.17	1.17	1.17	0.99	1.07	1.17	1.12	1.07	1.22	1.17	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	4.0	4.0	7.0	4.0		7.0	18.0		7.0	18.0	
Minimum Split (s)	10.0	32.0	32.0	10.0	32.0		10.0	38.0		10.0	38.0	
Total Split (s)	11.0	33.0	33.0	10.0	32.0		10.0	44.0		13.0	47.0	
Total Split (%)	11.0%	33.0%	33.0%	10.0%	32.0%		10.0%	44.0%		13.0%	47.0%	
Maximum Green (s)	8.0	28.0	28.0	7.0	27.0		7.0	40.0		10.0	43.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0		0.0	1.0		0.0	1.0	
Lost Time Adjust (s)	1.0	-1.0	0.0	1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max		None	C-Max		None	C-Max	
Walk Time (s)		4.0	4.0		4.0			18.0			18.0	
Flash Dont Walk (s)		23.0	23.0		23.0			16.0			16.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	36.0	29.0	28.0	34.0	27.0		47.0	41.0		51.0	43.0	
Actuated g/C Ratio	0.36	0.29	0.28	0.34	0.27		0.47	0.41		0.51	0.43	
v/c Ratio	0.84	0.69	0.33	0.42	0.83		0.72	0.50		0.38	0.92	
Control Delay	59.0	40.4	6.4	26.1	49.5		42.4	23.1		15.6	39.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	59.0	40.4	6.4	26.1	49.5		42.4	23.1		15.6	39.1	
LOS	E	D	A	C	D		D	C		B	D	
Approach Delay		36.7			44.6			26.1			36.9	
Approach LOS		D			D			C			D	
90th %ile Green (s)	8.0	28.0	28.0	7.0	27.0		7.0	40.0		10.0	43.0	
90th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
70th %ile Green (s)	8.0	28.0	28.0	7.0	27.0		7.0	40.0		10.0	43.0	
70th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Max	Coord	
50th %ile Green (s)	8.0	28.0	28.0	7.0	27.0		7.0	40.5		9.5	43.0	
50th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Gap	Coord	
30th %ile Green (s)	8.0	28.0	28.0	7.0	27.0		7.0	41.7		8.3	43.0	
30th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Gap	Coord	
10th %ile Green (s)	8.0	28.0	28.0	7.0	27.0		7.0	43.0		7.0	43.0	
10th %ile Term Code	Max	MaxR	MaxR	Max	MaxR		Max	Coord		Min	Coord	
Stops (vph)	105	275	22	74	346		59	447		58	1008	
Fuel Used(gal)	4	6	1	4	18		6	32		3	39	
CO Emissions (g/hr)	247	414	89	296	1278		427	2236		223	2735	
NOx Emissions (g/hr)	48	81	17	58	249		83	435		43	532	
VOC Emissions (g/hr)	57	96	21	69	296		99	518		52	634	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	72	180	0	44	239		36	155		38	363	
Queue Length 95th (ft)	#160	279	48	82	#396		#118	211		69	#510	
Internal Link Dist (ft)		672			3875			5258			2575	
Turn Bay Length (ft)	140			60			120			115		
Base Capacity (vph)	199	464	501	256	491		162	1291		340	1300	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.84	0.69	0.33	0.42	0.83		0.72	0.50		0.36	0.92	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 35.5 Intersection LOS: D
Intersection Capacity Utilization 89.2% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1060: Halsted Street & 119th Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	313	160	106	324	75	115	561	76	120	1021	150
Future Volume (veh/h)	165	313	160	106	324	75	115	561	76	120	1021	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.97	0.99		0.96	1.00		0.91	0.98		0.91
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1786	1730	1772	1800	1814	1800	1786	1744	1800	1728	1758	1758
Adj Flow Rate, veh/h	168	319	163	108	331	77	117	572	78	122	1042	153
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	5	2	0	4	0	1	4	0	0	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	226	508	413	273	380	88	217	1250	170	377	1247	183
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.29	0.28	0.06	0.27	0.27	0.06	0.43	0.43	0.06	0.43	0.43
Unsig. Movement Delay												
Ln Grp Delay, s/veh	41.2	36.4	31.7	26.8	0.0	49.3	23.8	22.0	22.1	16.0	31.1	31.4
Ln Grp LOS	D	D	C	C	A	D	C	C	C	B	C	C
Approach Vol, veh/h		650			516			767			1317	
Approach Delay, s/veh		36.5			44.6			22.3			29.8	
Approach LOS		D			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	9.8	47.2	9.7	33.3	9.7	47.3	11.0	32.0
Change Period (Y+Rc), s	3.0	4.0	3.0	5.0	3.0	4.0	3.0	5.0
Max Green (Gmax), s	10.0	40.0	7.0	28.0	7.0	43.0	8.0	27.0
Max Allow Headway (MAH), s	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Max Q Clear (g_c+I1), s	6.2	16.1	6.6	18.0	5.8	34.2	9.0	24.4
Green Ext Time (g_e), s	0.1	2.8	0.0	1.5	0.0	3.9	0.0	0.5
Prob of Phs Call (p_c)	0.97	1.00	0.95	1.00	0.96	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1646	1714	1701	1701

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	2892	1730	2882	1409

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	393	1457	422	328

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	122	0	108	0	117	0	168	0
Grp Sat Flow (s), veh/h/ln	1646	0	1714	0	1701	0	1701	0
Q Serve Time (g_s), s	4.2	0.0	4.6	0.0	3.8	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	4.2	0.0	4.6	0.0	3.8	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	747	0	917	0	471	0	975	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	42.2	0.0	26.0	0.0	42.2	0.0	26.0	0.0
Perm LT Serve Time (g_u), s	28.2	0.0	11.4	0.0	10.0	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	2.7	0.0	2.0	0.0	10.0	0.0	3.6	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	377	0	273	0	217	0	226	0
V/C Ratio (X)	0.32	0.00	0.40	0.00	0.54	0.00	0.74	0.00
Avail Cap (c_a), veh/h	431	0	279	0	221	0	226	0
Upstream Filter (I)	0.51	0.00	0.70	0.00	0.94	0.00	1.00	0.00
Uniform Delay (d1), s/veh	15.8	0.0	26.1	0.0	21.4	0.0	28.7	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.7	0.0	2.4	0.0	12.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.0	0.0	26.8	0.0	23.8	0.0	41.2	0.0
1st-Term Q (Q1), veh/ln	1.5	0.0	1.9	0.0	1.4	0.0	2.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.1	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.5	0.0	1.9	0.0	1.6	0.0	3.7	0.0
%ile Storage Ratio (RQ%)	0.34	0.00	0.79	0.00	0.33	0.00	0.67	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	327	0	319	0	603	0	0
Grp Sat Flow (s), veh/h/ln	0	1657	0	1730	0	1670	0	0
Q Serve Time (g_s), s	0.0	13.9	0.0	16.0	0.0	32.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.9	0.0	16.0	0.0	32.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	716	0	508	0	723	0	0
V/C Ratio (X)	0.00	0.46	0.00	0.63	0.00	0.83	0.00	0.00
Avail Cap (c_a), veh/h	0	716	0	508	0	723	0	0
Upstream Filter (I)	0.00	0.94	0.00	1.00	0.00	0.51	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.1	0.0	30.6	0.0	25.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	5.8	0.0	5.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.0	0.0	36.4	0.0	31.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	6.5	0.0	12.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.8	0.0	1.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.6	0.0	7.4	0.0	13.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.27	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	323	0	163	0	592	0	408
Grp Sat Flow (s), veh/h/ln	0	1628	0	1457	0	1634	0	1736
Q Serve Time (g_s), s	0.0	14.1	0.0	9.0	0.0	32.2	0.0	22.4
Cycle Q Clear Time (g_c), s	0.0	14.1	0.0	9.0	0.0	32.2	0.0	22.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.24	0.00	1.00	0.00	0.26	0.00	0.19
Lane Grp Cap (c), veh/h	0	704	0	413	0	707	0	469
V/C Ratio (X)	0.00	0.46	0.00	0.39	0.00	0.84	0.00	0.87
Avail Cap (c_a), veh/h	0	704	0	413	0	707	0	469
Upstream Filter (I)	0.00	0.94	0.00	1.00	0.00	0.51	0.00	0.70
Uniform Delay (d1), s/veh	0.0	20.1	0.0	28.9	0.0	25.2	0.0	34.8
Incr Delay (d2), s/veh	0.0	2.0	0.0	2.8	0.0	6.2	0.0	14.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.1	0.0	31.7	0.0	31.4	0.0	49.3
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	3.1	0.0	12.0	0.0	9.3
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.3	0.0	1.2	0.0	1.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.6	0.0	3.4	0.0	13.2	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.12	0.00	0.13	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		31.7						
HCM 6th LOS		C						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	235	50	15	245	10	40	123	20	15	210	195
Future Volume (vph)	88	235	50	15	245	10	40	123	20	15	210	195
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	12	10	10	12	10	10	12	16	12
Storage Length (ft)	0		70	0		215	0		75	0		0
Storage Lanes	0		1	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	0.94		1.00	0.95		1.00	0.97		0.99	
Frt			0.850			0.850			0.850		0.937	
Flt Protected		0.987			0.997			0.988			0.998	
Satd. Flow (prot)	0	1634	1428	0	1614	1428	0	1600	1428	0	1870	0
Flt Permitted		0.818			0.971			0.850			0.989	
Satd. Flow (perm)	0	1348	1347	0	1570	1360	0	1376	1390	0	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			50			34			34		94	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1331			477			2671			2164	
Travel Time (s)		30.3			10.8			60.7			49.2	
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	1		1	1		1			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Adj. Flow (vph)	92	245	52	16	255	10	42	128	21	16	219	203
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	337	52	0	271	10	0	170	21	0	438	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.07	1.17	1.17	1.07	1.17	1.17	1.07	0.91	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Minimum Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (s)	28.0	28.0	28.0	28.0	28.0	28.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	43.1%	43.1%	43.1%	43.1%	43.1%	43.1%	56.9%	56.9%	56.9%	56.9%	56.9%	
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0	23.0	32.0	32.0	32.0	32.0	32.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	14.0	14.0	14.0	14.0	14.0	14.0	23.0	23.0	23.0	23.0	23.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	
Act Effct Green (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
v/c Ratio		0.71	0.10		0.49	0.02		0.25	0.03		0.46	
Control Delay		18.5	1.9		20.1	1.2		10.8	2.5		10.2	
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Total Delay		18.5	1.9		20.1	1.2		10.8	2.5		10.2	
LOS		B	A		C	A		B	A		B	
Approach Delay		16.3			19.4			9.9			10.2	
Approach LOS		B			B			A			B	
Stops (vph)		271	12		198	1		89	3		304	
Fuel Used(gal)		6	1		3	0		8	1		11	
CO Emissions (g/hr)		425	42		218	3		535	60		792	
NOx Emissions (g/hr)		83	8		42	1		104	12		154	
VOC Emissions (g/hr)		98	10		51	1		124	14		183	
Dilemma Vehicles (#)		0	0		0	0		0	0		0	
Queue Length 50th (ft)		120	3		82	0		36	0		187	
Queue Length 95th (ft)		#231	m4		146	3		71	7		253	
Internal Link Dist (ft)		1251			397			2591			2084	
Turn Bay Length (ft)			70			215			75			
Base Capacity (vph)		476	508		555	503		677	701		959	
Starvation Cap Reductn		0	0		0	0		0	0		0	
Spillback Cap Reductn		0	0		0	0		0	0		0	
Storage Cap Reductn		0	0		0	0		0	0		0	
Reduced v/c Ratio		0.71	0.10		0.49	0.02		0.25	0.03		0.46	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 14.0 Intersection LOS: B
Intersection Capacity Utilization 88.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1062: State Street & 119th Street

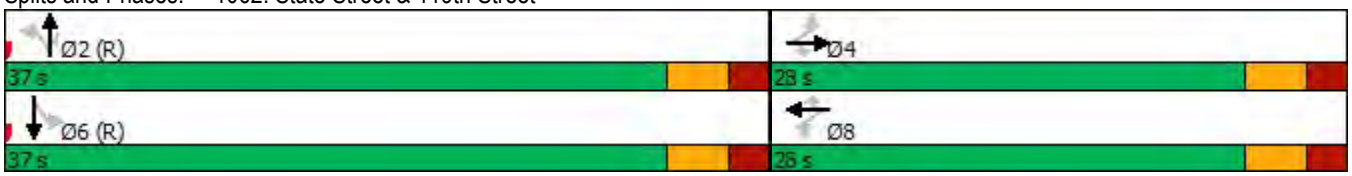

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	235	50	15	245	10	40	123	20	15	210	195
Future Volume (veh/h)	88	235	50	15	245	10	40	123	20	15	210	195
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.94	0.99		0.94	1.00		0.97	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1800	1772	1800	1800	1744	1800	1800	1730	1800	1800	1872	1772
Adj Flow Rate, veh/h	92	245	52	16	255	10	42	128	21	16	219	203
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	0	0	4	0	0	5	0	0	0	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	71	122	509	59	376	510	213	599	731	69	441	391
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.12	0.12	0.35	0.35	0.35	0.49	0.49	0.49	0.49	0.49	0.49
Unsig. Movement Delay												
Ln Grp Delay, s/veh	386.5	0.0	19.9	23.3	0.0	13.7	9.9	0.0	8.6	13.1	0.0	0.0
Ln Grp LOS	F	A	B	C	A	B	A	A	A	B	A	A
Approach Vol, veh/h		389			281			191			438	
Approach Delay, s/veh		337.5			23.0			9.7			13.1	
Approach LOS		F			C			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		7.0		7.0		8.0		7.0
Phs Duration (G+Y+Rc), s		37.0		28.0		37.0		28.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		32.0		23.0		32.0		23.0
Max Allow Headway (MAH), s		4.6		4.5		4.5		4.4
Max Q Clear (g_c+I1), s		5.6		25.0		13.3		25.0
Green Ext Time (g_e), s		0.8		0.0		1.9		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		292		0		24		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1217		344		895		1062
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1485		1439		794		1441
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L+T		L+T		L+T+R		L+T

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	170	0	337	0	438	0	271
Grp Sat Flow (s), veh/h/ln	0	1509	0	344	0	1713	0	1062
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	23.0	0.0	11.3	0.0	23.0
Perm LT Sat Flow (s_l), veh/h/ln	0	978	0	1118	0	1252	0	1087
Shared LT Sat Flow (s_sh), veh/h/ln	0	1559	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.0	0.0	23.0	0.0	32.0	0.0	23.0
Perm LT Serve Time (g_u), s	0.0	20.7	0.0	0.0	0.0	28.4	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	6.0	0.0	4.5	0.0	19.6	0.0	14.0
Serve Time pre Blk (g_fs), s	0.0	3.6	0.0	4.5	0.0	11.3	0.0	7.7
Prop LT Inside Lane (P_L)	0.00	0.25	0.00	0.27	0.00	0.04	0.00	0.06
Lane Grp Cap (c), veh/h	0	812	0	192	0	901	0	435
V/C Ratio (X)	0.00	0.21	0.00	1.75	0.00	0.49	0.00	0.62
Avail Cap (c_a), veh/h	0	812	0	192	0	901	0	435
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.3	0.0	27.1	0.0	11.2	0.0	16.7
Incr Delay (d2), s/veh	0.0	0.6	0.0	359.5	0.0	1.9	0.0	6.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.9	0.0	386.5	0.0	13.1	0.0	23.3
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	3.3	0.0	3.7	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	19.2	0.0	0.5	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.3	0.0	22.5	0.0	4.2	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.45	0.00	0.05	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	36.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R				R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	21	0	52	0	0	0	10
Grp Sat Flow (s), veh/h/ln	0	1485	0	1439	0	0	0	1441
Q Serve Time (g_s), s	0.0	0.5	0.0	2.1	0.0	0.0	0.0	0.3
Cycle Q Clear Time (g_c), s	0.0	0.5	0.0	2.1	0.0	0.0	0.0	0.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.46	0.00	1.00
Lane Grp Cap (c), veh/h	0	731	0	509	0	0	0	510
V/C Ratio (X)	0.00	0.03	0.00	0.10	0.00	0.00	0.00	0.02
Avail Cap (c_a), veh/h	0	731	0	509	0	0	0	510
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.5	0.0	19.5	0.0	0.0	0.0	13.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.6	0.0	19.9	0.0	0.0	0.0	13.7
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.7	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.7	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.25	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		111.9						
HCM 6th LOS		F						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1099	365	379	1100	0	0	0	0	651	360	425
Future Volume (vph)	0	1099	365	379	1100	0	0	0	0	651	360	425
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	14
Storage Length (ft)	0		85	216		0	0		0	360		360
Storage Lanes	0		0	0		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.86	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.963									0.980	0.850
Flt Protected				0.950						0.950	0.981	
Satd. Flow (prot)	0	4565	0	1676	3320	0	0	0	0	1541	2911	1442
Flt Permitted				0.088						0.950	0.981	
Satd. Flow (perm)	0	4565	0	155	3320	0	0	0	0	1541	2911	1442
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		68									13	88
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1359			322			590			708	
Travel Time (s)		30.9			7.3			13.4			16.1	
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Adj. Flow (vph)	0	1121	372	387	1122	0	0	0	0	664	367	434
Shared Lane Traffic (%)										43%		23%
Lane Group Flow (vph)	0	1493	0	387	1122	0	0	0	0	378	753	334
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			34			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1		1	1					1	1	1
Detector Template												
Leading Detector (ft)		50		50	50					50	50	50
Trailing Detector (ft)		0		0	0					0	0	0
Detector 1 Position(ft)		0		0	0					0	0	0
Detector 1 Size(ft)		50		50	50					50	50	50
Detector 1 Type		Cl+Ex		Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0		0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0		0.0	0.0					0.0	0.0	0.0
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		2		1	6					4	4	4
Switch Phase												
Minimum Initial (s)		15.0		3.0	15.0					8.0	8.0	8.0
Minimum Split (s)		41.5		39.0	80.5					34.5	34.5	34.5
Total Split (s)		33.0		43.0	76.0					39.0	39.0	39.0
Total Split (%)		28.7%		37.4%	66.1%					33.9%	33.9%	33.9%
Maximum Green (s)		27.0		38.5	70.0					33.0	33.0	33.0
Yellow Time (s)		4.5		3.5	4.5					4.5	4.5	4.5
All-Red Time (s)		1.5		1.0	1.5					1.5	1.5	1.5
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)		7.0		3.5	7.0					3.0	3.0	3.0
Minimum Gap (s)		3.5		0.2	3.5					0.2	0.2	0.2
Time Before Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Time To Reduce (s)		20.0		0.0	20.0					0.0	0.0	0.0
Recall Mode		C-Max		None	C-Max					None	None	None
Walk Time (s)										1.5	1.5	1.5
Flash Dont Walk (s)										27.0	27.0	27.0
Pedestrian Calls (#/hr)										0	0	0
Act Effct Green (s)		41.0		72.2	70.7					32.3	32.3	32.3
Actuated g/C Ratio		0.36		0.63	0.61					0.28	0.28	0.28
v/c Ratio		0.89		0.90	0.55					0.87	0.91	0.71
Control Delay		42.8		37.7	21.0					61.1	55.6	36.4
Queue Delay		3.4		3.2	50.5					0.0	0.0	0.0
Total Delay		46.2		40.8	71.5					61.1	55.6	36.4
LOS		D		D	E					E	E	D
Approach Delay		46.2			63.7						52.6	
Approach LOS		D			E						D	
90th %ile Green (s)		29.3		36.2	70.0					33.0	33.0	33.0
90th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
70th %ile Green (s)		35.6		29.9	70.0					33.0	33.0	33.0
70th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
50th %ile Green (s)		40.1		25.4	70.0					33.0	33.0	33.0
50th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
30th %ile Green (s)		44.7		20.8	70.0					33.0	33.0	33.0
30th %ile Term Code		Coord		Gap	Coord					Max	Max	Max
10th %ile Green (s)		55.2		13.8	73.5					29.5	29.5	29.5
10th %ile Term Code		Coord		Gap	Coord					Gap	Gap	Gap
Stops (vph)		1118		335	916					330	662	222
Fuel Used(gal)		34		6	13					8	16	5
CO Emissions (g/hr)		2406		399	876					592	1124	381
NOx Emissions (g/hr)		468		78	171					115	219	74
VOC Emissions (g/hr)		558		92	203					137	261	88
Dilemma Vehicles (#)		0		0	0					0	0	0
Queue Length 50th (ft)		369		232	369					291	305	180
Queue Length 95th (ft)		#586		m283	m447					#474	#429	302
Internal Link Dist (ft)		1279			242			510			628	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)				216						360		360
Base Capacity (vph)		1670		606	2040					442	844	476
Starvation Cap Reductn		0		131	1135					0	0	0
Spillback Cap Reductn		111		0	0					0	0	0
Storage Cap Reductn		0		0	0					0	0	0
Reduced v/c Ratio		0.96		0.81	1.24					0.86	0.89	0.70

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 85 (74%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 54.2 Intersection LOS: D
Intersection Capacity Utilization 116.6% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1064: S Paulina St & 127th Street

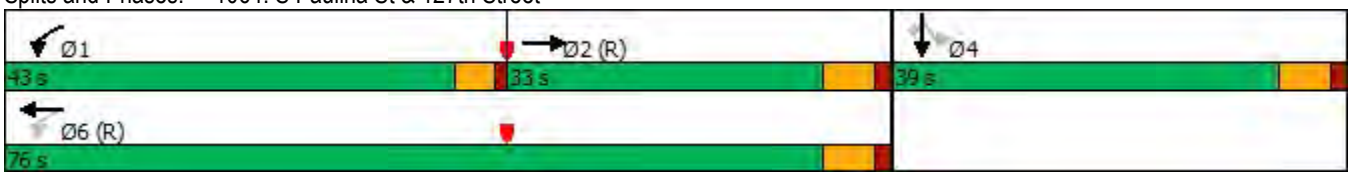

HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	430	1320	0	0	1068	339	410	340	301	0	0	0
Future Volume (vph)	430	1320	0	0	1068	339	410	340	301	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (ft)	216		216	0		130	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00				1.00							
Frt					0.964			0.930				
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3252	3353	0	0	4635	0	1676	3120	0	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3247	3353	0	0	4635	0	1676	3120	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)					82							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		322			336			554			548	
Travel Time (s)		7.3			7.6			12.6			12.5	
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)			1			1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Adj. Flow (vph)	453	1389	0	0	1124	357	432	358	317	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	453	1389	0	0	1481	0	432	675	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		34			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1		1	1				
Detector Template												
Leading Detector (ft)	50	50			50		50	50				
Trailing Detector (ft)	0	0			0		0	0				
Detector 1 Position(ft)	0	0			0		0	0				
Detector 1 Size(ft)	50	50			50		50	50				
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0			0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0			0.0		0.0	0.0				
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			8				
Permitted Phases							8					
Detector Phase	5	2			6		8	8				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	3.0	15.0			15.0		10.0	10.0				
Minimum Split (s)	26.5	80.5			54.0		34.5	34.5				
Total Split (s)	25.0	76.0			51.0		39.0	39.0				
Total Split (%)	21.7%	66.1%			44.3%		33.9%	33.9%				
Maximum Green (s)	19.0	70.0			45.0		33.0	33.0				
Yellow Time (s)	4.5	4.5			4.5		4.5	4.5				
All-Red Time (s)	1.5	1.5			1.5		1.5	1.5				
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0				
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0				
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.5	7.0			7.0		5.0	5.0				
Minimum Gap (s)	0.2	3.5			3.5		0.2	0.2				
Time Before Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Time To Reduce (s)	0.0	20.0			20.0		0.0	0.0				
Recall Mode	None	C-Max			C-Max		None	None				
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							21.5	21.5				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	18.6	70.2			45.6		32.8	32.8				
Actuated g/C Ratio	0.16	0.61			0.40		0.29	0.29				
v/c Ratio	0.86	0.68			0.78		0.91	0.76				
Control Delay	54.1	6.6			28.7		63.7	43.9				
Queue Delay	0.0	14.1			18.4		7.3	0.0				
Total Delay	54.1	20.7			47.1		71.0	43.9				
LOS	D	C			D		E	D				
Approach Delay		28.9			47.1			54.5				
Approach LOS		C			D			D				
90th %ile Green (s)	19.0	70.0			45.0		33.0	33.0				
90th %ile Term Code	Max	Coord			Coord		Max	Max				
70th %ile Green (s)	19.0	70.0			45.0		33.0	33.0				
70th %ile Term Code	Max	Coord			Coord		Max	Max				
50th %ile Green (s)	19.0	70.0			45.0		33.0	33.0				
50th %ile Term Code	Max	Coord			Coord		Max	Max				
30th %ile Green (s)	19.0	70.0			45.0		33.0	33.0				
30th %ile Term Code	Max	Coord			Coord		Max	Max				
10th %ile Green (s)	16.9	71.0			48.1		32.0	32.0				
10th %ile Term Code	Gap	Coord			Coord		Gap	Gap				
Stops (vph)	379	689			757		363	573				
Fuel Used(gal)	8	9			16		9	12				
CO Emissions (g/hr)	553	622			1125		636	815				
NOx Emissions (g/hr)	108	121			219		124	159				
VOC Emissions (g/hr)	128	144			261		147	189				
Dilemma Vehicles (#)	0	0			0		0	0				
Queue Length 50th (ft)	149	266			224		307	239				
Queue Length 95th (ft)	m166	m15			m281		#494	310				
Internal Link Dist (ft)		242			256			474			468	
Turn Bay Length (ft)	216											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	537	2046			1888		480	895				
Starvation Cap Reductn	0	665			261		0	0				
Spillback Cap Reductn	0	127			441		31	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.84	1.01			1.02		0.96	0.75				

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 41.4 Intersection LOS: D
Intersection Capacity Utilization 116.6% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1065: Marshfield Ave & 127th Street

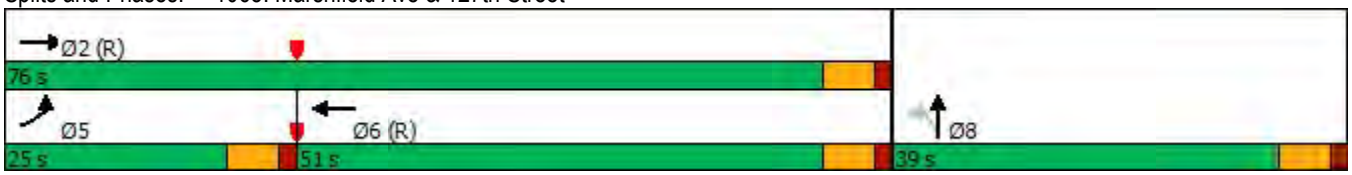

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	430	1320	0	0	1068	339	410	340	301	0	0	0
Future Volume (veh/h)	430	1320	0	0	1068	339	410	340	301	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1772	1772	0	0	1772	1786	1772	1786	1758			
Adj Flow Rate, veh/h	453	1389	0	0	1124	357	432	358	317			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	1	2	1	3			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	514	2069	0	0	1466	466	474	482	421			
HCM Platoon Ratio	0.67	0.67	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Prop Arrive On Green	0.11	0.41	0.00	0.00	0.81	0.81	0.28	0.28	0.28			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	56.3	25.0	0.0	0.0	9.7	11.4	62.0	44.8	46.3			
Ln Grp LOS	E	C	A	A	A	B	E	D	D			
Approach Vol, veh/h		1842			1481			1107				
Approach Delay, s/veh		32.7			10.3			51.9				
Approach LOS		C			B			D				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8		5	6		
Case No		4.0	10.0		2.0	8.0		
Phs Duration (G+Y+Rc), s		76.7	38.3		24.1	52.6		
Change Period (Y+Rc), s		6.0	6.0		6.0	6.0		
Max Green (Gmax), s		70.0	33.0		19.0	45.0		
Max Allow Headway (MAH), s		8.3	6.4		4.9	8.4		
Max Q Clear (g_c+I1), s		40.6	30.4		17.7	19.9		
Green Ext Time (g_e), s		23.6	1.9		0.4	20.9		
Prob of Phs Call (p_c)		1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)		0.00	1.00		1.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt			3		5	1		
Mvmt Sat Flow, veh/h			1688		3274	0		

Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3455	1715			3776		

Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		0	1498			1149		

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	0	0
Lane Assignment			L		L (Prot)			

Lanes in Grp	0	0	1	0	2	0	0	0
Grp Vol (v), veh/h	0	0	432	0	453	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1688	0	1637	0	0	0
Q Serve Time (g_s), s	0.0	0.0	28.4	0.0	15.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	28.4	0.0	15.7	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1688	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	46.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	474	0	514	0	0	0
V/C Ratio (X)	0.00	0.00	0.91	0.00	0.88	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	484	0	541	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.33	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	39.9	0.0	50.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	22.1	0.0	5.9	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	62.0	0.0	56.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	11.7	0.0	6.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.9	0.0	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	14.6	0.0	7.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.75	0.00	0.66	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	2	0	0
Grp Vol (v), veh/h	0	1389	354	0	0	1002	0	0
Grp Sat Flow (s), veh/h/ln	0	1683	1697	0	0	1612	0	0
Q Serve Time (g_s), s	0.0	38.6	21.8	0.0	0.0	17.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	38.6	21.8	0.0	0.0	17.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2069	477	0	0	1307	0	0
V/C Ratio (X)	0.00	0.67	0.74	0.00	0.00	0.77	0.00	0.00
Avail Cap (c_a), veh/h	0	2069	487	0	0	1307	0	0
Upstream Filter (I)	0.00	0.33	1.00	0.00	0.00	0.35	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.4	37.5	0.0	0.0	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	7.2	0.0	0.0	1.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.0	44.8	0.0	0.0	9.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	16.2	9.0	0.0	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	1.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	16.4	9.9	0.0	0.0	3.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.52	0.51	0.00	0.00	0.36	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment			T+R			T+R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	321	0	0	479	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1516	0	0	1541	0	0
Q Serve Time (g_s), s	0.0	0.0	22.2	0.0	0.0	17.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	22.2	0.0	0.0	17.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.99	0.00	0.00	0.75	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	426	0	0	625	0	0
V/C Ratio (X)	0.00	0.00	0.75	0.00	0.00	0.77	0.00	0.00
Avail Cap (c_a), veh/h	0	0	435	0	0	625	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.35	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	37.7	0.0	0.0	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	8.6	0.0	0.0	3.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	46.3	0.0	0.0	11.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.2	0.0	0.0	2.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.0	0.0	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	9.2	0.0	0.0	3.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.47	0.00	0.00	0.37	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		30.0						
HCM 6th LOS		C						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	731	465	120	766	68	285	225	85	96	205	155
Future Volume (vph)	155	731	465	120	766	68	285	225	85	96	205	155
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	11	12	12	10	12	13	10	10	10
Storage Length (ft)	120		0	85		0	240		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			120			125			140		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.97	0.99	1.00		1.00	0.99		0.99	0.99	
Frt			0.850		0.988			0.959			0.935	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1565	3386	1337	1605	3282	0	1580	3216	0	1550	2945	0
Flt Permitted	0.109			0.347			0.298			0.553		
Satd. Flow (perm)	179	3386	1292	583	3282	0	493	3216	0	894	2945	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			384		8			50			165	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		336			5379			1555			925	
Travel Time (s)		7.6			122.3			35.3			21.0	
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Adj. Flow (vph)	165	778	495	128	815	72	303	239	90	102	218	165
Shared Lane Traffic (%)												
Lane Group Flow (vph)	165	778	495	128	887	0	303	329	0	102	383	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.17	1.07	1.22	1.12	1.07	1.07	1.17	1.07	1.03	1.17	1.17	1.17
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	3	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	15.0	44.0	20.5	12.5	41.5		20.5	43.5		15.0	38.0	
Total Split (s)	15.0	44.0	20.5	12.5	41.5		20.5	43.5		15.0	38.0	
Total Split (%)	13.0%	38.3%	17.8%	10.9%	36.1%		17.8%	37.8%		13.0%	33.0%	
Maximum Green (s)	10.5	38.0	16.0	8.0	35.5		16.0	37.5		10.5	32.0	
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	0.2	4.0	0.2	0.2	4.0		0.2	4.0		0.2	4.0	
Time Before Reduce (s)	0.0	25.0	0.0	0.0	25.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	15.0	0.0	0.0	15.0		0.0	0.0		0.0	0.0	
Recall Mode	Max	C-Max	None	None	C-Max		None	None		None	None	
Walk Time (s)		14.0			13.0			5.0			5.0	
Flash Dont Walk (s)		22.0			22.0			26.0			26.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	63.9	48.2	65.7	47.1	35.5		41.7	26.2		30.8	19.8	
Actuated g/C Ratio	0.56	0.42	0.57	0.41	0.31		0.36	0.23		0.27	0.17	
v/c Ratio	0.44	0.55	0.55	0.39	0.87		0.92	0.43		0.35	0.60	
Control Delay	16.4	20.0	7.2	18.2	47.9		60.2	29.8		27.9	27.9	
Queue Delay	0.0	1.1	0.3	0.0	0.2		2.6	0.0		0.0	0.1	
Total Delay	16.4	21.2	7.4	18.2	48.1		62.8	29.8		27.9	28.0	
LOS	B	C	A	B	D		E	C		C	C	
Approach Delay		15.9			44.3			45.6			28.0	
Approach LOS		B			D			D			C	
90th %ile Green (s)	16.4	38.0	16.0	13.9	35.5		16.0	31.6		10.5	26.1	
90th %ile Term Code	MaxR	Coord	Max	Max	Coord		Max	Hold		Max	Gap	
70th %ile Green (s)	20.4	44.5	16.0	11.4	35.5		16.0	27.6		10.5	22.1	
70th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Max	Gap	
50th %ile Green (s)	23.6	49.3	16.0	9.8	35.5		16.0	24.4		10.5	18.9	
50th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Max	Gap	
30th %ile Green (s)	25.8	52.8	16.0	8.5	35.5		16.0	23.5		9.2	16.7	
30th %ile Term Code	MaxR	Coord	Max	Gap	Coord		Max	Hold		Gap	Gap	
10th %ile Green (s)	27.8	56.5	15.7	6.8	35.5		15.7	23.7		7.0	15.0	
10th %ile Term Code	MaxR	Coord	Gap	Gap	Coord		Gap	Hold		Gap	Min	
Stops (vph)	80	549	193	69	745		244	286		70	186	
Fuel Used(gal)	1	8	3	6	47		8	7		2	6	
CO Emissions (g/hr)	96	555	207	409	3301		580	503		114	396	
NOx Emissions (g/hr)	19	108	40	80	642		113	98		22	77	
VOC Emissions (g/hr)	22	129	48	95	765		134	117		26	92	
Dilemma Vehicles (#)	0	0	0	0	0		0	0		0	0	
Queue Length 50th (ft)	26	226	131	42	323		204	105		52	78	
Queue Length 95th (ft)	m108	328	246	85	#433		#317	153		84	121	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		256			5299			1475			845	
Turn Bay Length (ft)	120			85			240			120		
Base Capacity (vph)	374	1419	909	331	1018		330	1082		306	938	
Starvation Cap Reductn	0	387	82	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	7		7	0		0	42	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.44	0.75	0.60	0.39	0.88		0.94	0.30		0.33	0.43	

Intersection Summary

Area Type: Other
Cycle Length: 115
Actuated Cycle Length: 115
Offset: 15 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 30.9 Intersection LOS: C
Intersection Capacity Utilization 88.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1066: S Ashland & 127th Street

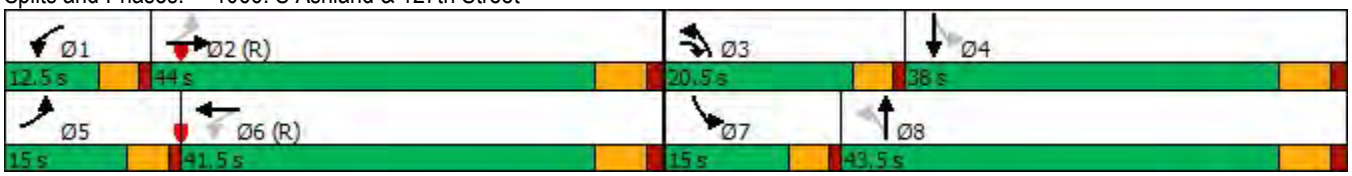

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	731	465	120	766	68	285	225	85	96	205	155
Future Volume (veh/h)	155	731	465	120	766	68	285	225	85	96	205	155
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	0.99		0.97	0.99		0.98
Parking Bus Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1772	1786	1758	1758	1758	1800	1786	1786	1843	1758	1800	1786
Adj Flow Rate, veh/h	165	778	495	128	815	72	303	239	90	102	218	165
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	1	3	3	3	0	1	1	2	3	0	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	320	1406	733	314	1194	105	390	671	245	356	380	273
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.18	0.83	0.83	0.06	0.39	0.39	0.05	0.09	0.09	0.06	0.20	0.20
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.8	7.6	8.2	19.8	34.2	34.1	42.0	44.4	44.9	33.6	48.1	50.3
Ln Grp LOS	C	A	A	B	C	C	D	D	D	C	D	D
Approach Vol, veh/h		1438			1015			632			485	
Approach Delay, s/veh		9.5			32.4			43.4			45.9	
Approach LOS		A			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	11.7	53.6	20.5	29.2	15.0	50.3	11.8	37.9
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green (Gmax), s	8.0	38.0	16.0	32.0	10.5	35.5	10.5	37.5
Max Allow Headway (MAH), s	4.4	8.4	4.4	8.5	4.4	8.3	4.4	8.4
Max Q Clear (g_c+I1), s	7.3	24.7	17.5	14.7	8.5	27.2	7.5	13.0
Green Ext Time (g_e), s	0.0	11.1	0.0	4.7	0.1	5.9	0.1	4.7
Prob of Phs Call (p_c)	0.98	1.00	1.00	1.00	1.00	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.30	0.00	0.00	1.00	0.08

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1674		1701		1688		1674

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			3393		1884		3099		2416

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			1318		1354		274		881

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	128	0	303	0	165	0	102	0
Grp Sat Flow (s), veh/h/ln	1674	0	1701	0	1688	0	1674	0
Q Serve Time (g_s), s	5.3	0.0	15.5	0.0	6.5	0.0	5.5	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	15.5	0.0	6.5	0.0	5.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	430	0	1001	0	625	0	1031	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	44.3	0.0	25.2	0.0	45.1	0.0	23.2	0.0
Perm LT Serve Time (g_u), s	39.3	0.0	10.4	0.0	19.1	0.0	20.9	0.0
Perm LT Q Serve Time (g_ps), s	2.1	0.0	7.4	0.0	8.1	0.0	0.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	314	0	390	0	320	0	356	0
V/C Ratio (X)	0.41	0.00	0.78	0.00	0.51	0.00	0.29	0.00
Avail Cap (c_a), veh/h	326	0	390	0	320	0	403	0
Upstream Filter (I)	0.81	0.00	0.91	0.00	0.68	0.00	1.00	0.00
Uniform Delay (d1), s/veh	19.2	0.0	33.3	0.0	18.8	0.0	33.1	0.0
Incr Delay (d2), s/veh	0.7	0.0	8.7	0.0	4.0	0.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	19.8	0.0	42.0	0.0	22.8	0.0	33.6	0.0
1st-Term Q (Q1), veh/ln	2.0	0.0	7.0	0.0	2.2	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.9	0.0	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.1	0.0	7.9	0.0	2.6	0.0	2.3	0.0
%ile Storage Ratio (RQ%)	0.63	0.00	0.83	0.00	0.54	0.00	0.49	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	778	0	197	0	439	0	165
Grp Sat Flow (s), veh/h/ln	0	1697	0	1710	0	1670	0	1697
Q Serve Time (g_s), s	0.0	8.3	0.0	11.9	0.0	25.2	0.0	10.5
Cycle Q Clear Time (g_c), s	0.0	8.3	0.0	11.9	0.0	25.2	0.0	10.5
Lane Grp Cap (c), veh/h	0	1406	0	345	0	643	0	471
V/C Ratio (X)	0.00	0.55	0.00	0.57	0.00	0.68	0.00	0.35
Avail Cap (c_a), veh/h	0	1406	0	476	0	643	0	553
Upstream Filter (I)	0.00	0.68	0.00	1.00	0.00	0.81	0.00	0.91
Uniform Delay (d1), s/veh	0.0	6.5	0.0	41.4	0.0	29.5	0.0	42.5
Incr Delay (d2), s/veh	0.0	1.1	0.0	6.7	0.0	4.7	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.6	0.0	48.1	0.0	34.2	0.0	44.4
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	5.0	0.0	10.0	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.8	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	5.7	0.0	10.8	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.16	0.00	0.05	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	495	0	186	0	448	0	164
Grp Sat Flow (s), veh/h/ln	0	1318	0	1527	0	1703	0	1600
Q Serve Time (g_s), s	0.0	22.7	0.0	12.7	0.0	25.2	0.0	11.0
Cycle Q Clear Time (g_c), s	0.0	22.7	0.0	12.7	0.0	25.2	0.0	11.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1340.8	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.89	0.00	0.16	0.00	0.55
Lane Grp Cap (c), veh/h	0	733	0	308	0	656	0	444
V/C Ratio (X)	0.00	0.68	0.00	0.60	0.00	0.68	0.00	0.37
Avail Cap (c_a), veh/h	0	733	0	425	0	656	0	522
Upstream Filter (I)	0.00	0.68	0.00	1.00	0.00	0.81	0.00	0.91
Uniform Delay (d1), s/veh	0.0	4.8	0.0	41.7	0.0	29.5	0.0	42.7
Incr Delay (d2), s/veh	0.0	3.4	0.0	8.5	0.0	4.6	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.2	0.0	50.3	0.0	34.1	0.0	44.9
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	4.8	0.0	10.2	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.7	0.0	0.8	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.5	0.0	5.5	0.0	11.0	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.16	0.00	0.05	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		27.0						
HCM 6th LOS		C						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	632	145	15	574	85	120	330	10	195	595	180
Future Volume (vph)	110	632	145	15	574	85	120	330	10	195	595	180
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	11	12	12	11	12	11	12	12	11	11	12
Storage Length (ft)	0		0	0		0	135		0	130		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			100			105		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.975			0.981			0.995			0.965	
Flt Protected		0.994			0.999		0.950			0.950		
Satd. Flow (prot)	0	3138	0	0	3156	0	1559	3337	0	1637	3082	0
Flt Permitted		0.685			0.923		0.160			0.504		
Satd. Flow (perm)	0	2162	0	0	2916	0	262	3337	0	866	3082	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			21			3			45	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		5379			1323			450			5338	
Travel Time (s)		122.3			30.1			10.2			121.3	
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Adj. Flow (vph)	118	680	156	16	617	91	129	355	11	210	640	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	954	0	0	724	0	129	366	0	210	834	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.12	1.07	1.07	1.12	1.07	1.12	1.07	1.07	1.12	1.12	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	15.0		15.0	15.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	8.0	37.0		21.0	21.0		8.0	31.0		8.0	21.0	
Total Split (s)	8.0	49.0		41.0	41.0		8.0	33.0		8.0	33.0	
Total Split (%)	8.9%	54.4%		45.6%	45.6%		8.9%	36.7%		8.9%	36.7%	
Maximum Green (s)	4.5	43.0		35.0	35.0		4.5	27.0		4.5	27.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Minimum Gap (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Time To Reduce (s)	0.0	20.0		20.0	20.0		0.0	24.0		0.0	24.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		9.0						7.0				
Flash Dont Walk (s)		22.0						18.0				
Pedestrian Calls (#/hr)		2						4				
Act Effct Green (s)		42.7			42.7		34.0	27.0		34.0	27.0	
Actuated g/C Ratio		0.48			0.48		0.38	0.30		0.38	0.30	
v/c Ratio		0.91			0.52		0.79	0.36		0.57	0.87	
Control Delay		35.4			17.4		53.6	25.7		26.9	39.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		35.4			17.4		53.6	25.7		26.9	39.5	
LOS		D			B		D	C		C	D	
Approach Delay		35.4			17.4			33.0			37.0	
Approach LOS		D			B			C			D	
90th %ile Green (s)	0.0	43.0		43.0	43.0		4.5	27.0		4.5	27.0	
90th %ile Term Code	Skip	Max		Hold	Hold		Max	Hold		Max	Max	
70th %ile Green (s)	0.0	43.0		43.0	43.0		4.5	27.0		4.5	27.0	
70th %ile Term Code	Skip	Max		Hold	Hold		Max	Hold		Max	Max	
50th %ile Green (s)	0.0	43.0		43.0	43.0		4.5	27.0		4.5	27.0	
50th %ile Term Code	Skip	Max		Hold	Hold		Max	Hold		Max	Max	
30th %ile Green (s)	0.0	43.0		43.0	43.0		4.5	27.0		4.5	27.0	
30th %ile Term Code	Skip	Max		Hold	Hold		Max	Hold		Max	Max	
10th %ile Green (s)	0.0	41.4		41.4	41.4		4.5	27.0		4.5	27.0	
10th %ile Term Code	Skip	Gap		Hold	Hold		Max	Hold		Max	Max	
Stops (vph)		728			433		73	255		152	655	
Fuel Used(gal)		48			12		2	4		10	42	
CO Emissions (g/hr)		3328			820		149	306		701	2947	
NOx Emissions (g/hr)		647			159		29	60		136	573	
VOC Emissions (g/hr)		771			190		35	71		162	683	
Dilemma Vehicles (#)		0			0		0	0		0	0	
Queue Length 50th (ft)		245			139		45	84		78	224	
Queue Length 95th (ft)		#386			191		#121	124		131	#332	
Internal Link Dist (ft)		5299			1243			370			5258	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)							135			130		
Base Capacity (vph)		1055			1398		164	1007		366	959	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.90			0.52		0.79	0.36		0.57	0.87	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 89.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 31.5	Intersection LOS: C
Intersection Capacity Utilization 95.8%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 90	
70th %ile Actuated Cycle: 90	
50th %ile Actuated Cycle: 90	
30th %ile Actuated Cycle: 90	
10th %ile Actuated Cycle: 88.4	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1068: Halsted Street & 127th Street

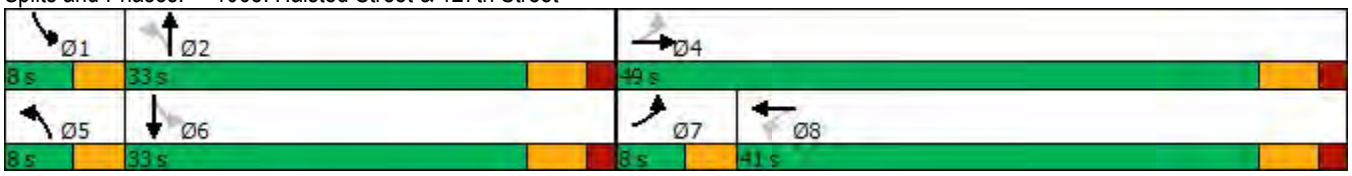

HCM 6th Edition methodology does not support a perm + prot left-turn type from a shared lane. Left-turn bay is needed for phases 7.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	807	316	704	20	5	10	10	50	10	0	5
Future Volume (vph)	5	807	316	704	20	5	10	10	50	10	0	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	10	10	10	12	14	14	12	12	16	12
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00	1.00	1.00			0.99	0.98			0.98	
Frt				0.996				0.875			0.930	
Flt Protected			0.950				0.950				0.977	
Satd. Flow (prot)	0	3161	1565	1653	0	0	1824	1654	0	0	1812	0
Flt Permitted		0.950	0.175				0.742				0.895	
Satd. Flow (perm)	0	3002	288	1653	0	0	1406	1654	0	0	1657	0
Right Turn on Red					No				No			
Satd. Flow (RTOR)												
Link Speed (mph)		30		30				30			30	
Link Distance (ft)		1323		3930				1256			658	
Travel Time (s)		30.1		89.3				28.5			15.0	
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)			1						2			2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	897	351	782	22	6	11	11	56	11	0	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	903	351	804	0	0	17	67	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Left	Right	Left	Left	Left	Right	Left	Left	Right
Median Width(ft)		10		10				14			0	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.17	1.17	1.17	1.07	0.99	0.99	1.07	1.07	0.91	1.07
Turning Speed (mph)	15		15		9	15	15		9	15		9
Turn Type	Perm	NA	custom	NA		Perm	Perm	NA		Perm	NA	
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7			2	2			6		
Minimum Split (s)	23.0	23.0	9.0	32.0		18.0	18.0	18.0		18.0	18.0	
Total Split (s)	41.0	41.0	29.0	70.0		20.0	20.0	20.0		20.0	20.0	
Total Split (%)	45.6%	45.6%	32.2%	77.8%		22.2%	22.2%	22.2%		22.2%	22.2%	
Maximum Green (s)	36.0	36.0	26.0	65.0		16.0	16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	0.0	2.0		1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0			0.0	0.0			0.0	
Total Lost Time (s)		5.0	3.0	5.0			4.0	4.0			4.0	
Lead/Lag	Lag	Lag	Lead									
Lead-Lag Optimize?												
Walk Time (s)	9.0	9.0		18.0		5.0	5.0	5.0				
Flash Dont Walk (s)	9.0	9.0		9.0		9.0	9.0	9.0				
Pedestrian Calls (#/hr)	0	0		0		0	0	0				
Act Effct Green (s)		36.0	67.0	65.0			16.0	16.0			16.0	

Lane Group	SBR2	NER
Lane Configurations		
Traffic Volume (vph)	5	318
Future Volume (vph)	5	318
Ideal Flow (vphpl)	1800	1800
Lane Width (ft)	12	14
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		0.865
Flt Protected		
Satd. Flow (prot)	0	1661
Flt Permitted		
Satd. Flow (perm)	0	1661
Right Turn on Red	No	
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.90	0.90
Heavy Vehicles (%)	0%	0%
Adj. Flow (vph)	6	353
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	353
Enter Blocked Intersection	No	No
Lane Alignment	Right	Right
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor	1.07	0.99
Turning Speed (mph)	9	9
Turn Type		Over
Protected Phases		7
Permitted Phases		
Minimum Split (s)		9.0
Total Split (s)		29.0
Total Split (%)		32.2%
Maximum Green (s)		26.0
Yellow Time (s)		3.0
All-Red Time (s)		0.0
Lost Time Adjust (s)		0.0
Total Lost Time (s)		3.0
Lead/Lag		Lead
Lead-Lag Optimize?		
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		26.0

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.40	0.74	0.72			0.18	0.18			0.18	
v/c Ratio		0.75	0.60	0.67			0.07	0.23			0.08	
Control Delay		28.0	10.3	7.7			31.7	34.1			31.8	
Queue Delay		0.0	0.0	0.0			0.0	0.0			0.0	
Total Delay		28.0	10.3	7.7			31.7	34.1			31.8	
LOS		C	B	A			C	C			C	
Approach Delay		28.0		8.5				33.6			31.8	
Approach LOS		C		A				C			C	
Stops (vph)		676	131	375			14	50			19	
Fuel Used(gal)		17	11	25			0	1			0	
CO Emissions (g/hr)		1172	774	1775			22	90			24	
NOx Emissions (g/hr)		228	151	345			4	17			5	
VOC Emissions (g/hr)		272	179	411			5	21			6	
Dilemma Vehicles (#)		0	0	0			0	0			0	
Queue Length 50th (ft)		226	28	220			8	33			11	
Queue Length 95th (ft)		302	125	381			27	71			33	
Internal Link Dist (ft)		1243		3850				1176			578	
Turn Bay Length (ft)												
Base Capacity (vph)		1200	583	1193			249	294			294	
Starvation Cap Reductn		0	0	0			0	0			0	
Spillback Cap Reductn		0	0	0			0	0			0	
Storage Cap Reductn		0	0	0			0	0			0	
Reduced v/c Ratio		0.75	0.60	0.67			0.07	0.23			0.08	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 20.9	Intersection LOS: C
Intersection Capacity Utilization 87.4%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1070: Vermont St & S Wallance St & 127th Street

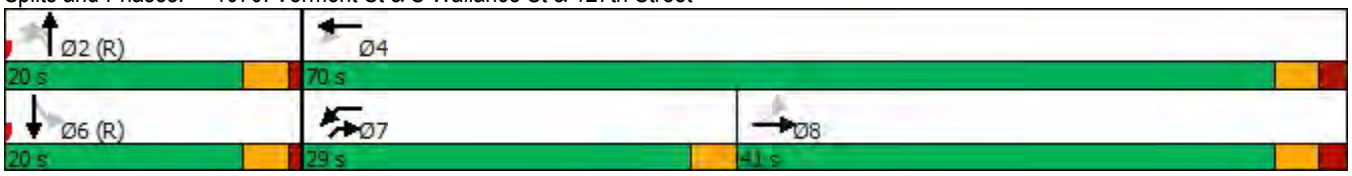

Lane Group	SBR2	NER
Actuated g/C Ratio		0.29
v/c Ratio		0.74
Control Delay		39.7
Queue Delay		0.0
Total Delay		39.7
LOS		D
Approach Delay		
Approach LOS		
Stops (vph)		277
Fuel Used(gal)		8
CO Emissions (g/hr)		527
NOx Emissions (g/hr)		102
VOC Emissions (g/hr)		122
Dilemma Vehicles (#)		0
Queue Length 50th (ft)		181
Queue Length 95th (ft)		#303
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		479
Starvation Cap Reductn		0
Spillback Cap Reductn		0
Storage Cap Reductn		0
Reduced v/c Ratio		0.74

Intersection Summary

HCM 6th Edition methodology does not support more than 4 approaches.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	290	897	831	70	95	230
Future Volume (vph)	290	897	831	70	95	230
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	10	10	10	10	10
Storage Length (ft)	0			0	0	150
Storage Lanes	0			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.988			0.850
Flt Protected		0.988			0.950	
Satd. Flow (prot)	0	3062	3062	0	1550	1386
Flt Permitted		0.572			0.950	
Satd. Flow (perm)	0	1773	3062	0	1550	1386
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26			222
Link Speed (mph)		30	20		30	
Link Distance (ft)		3930	637		2686	
Travel Time (s)		89.3	21.7		61.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	312	965	894	75	102	247
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1277	969	0	102	247
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		10	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.17	1.17	1.17	1.17	1.17	1.17
Turning Speed (mph)	15			9	15	9
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Minimum Split (s)	44.0	44.0	44.0		21.0	21.0
Total Split (s)	70.0	70.0	70.0		20.0	20.0
Total Split (%)	77.8%	77.8%	77.8%		22.2%	22.2%
Maximum Green (s)	66.0	66.0	66.0		16.0	16.0
Yellow Time (s)	3.0	3.0	3.0		3.0	3.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			30.0			
Flash Dont Walk (s)			10.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)		66.0	66.0		16.0	16.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.73	0.73		0.18	0.18
v/c Ratio		0.98	0.43		0.37	0.58
Control Delay		29.0	5.2		37.1	12.5
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		29.0	5.2		37.1	12.5
LOS		C	A		D	B
Approach Delay		29.0	5.2		19.7	
Approach LOS		C	A		B	
Stops (vph)		741	306		82	47
Fuel Used(gal)		48	7		5	10
CO Emissions (g/hr)		3321	496		359	731
NOx Emissions (g/hr)		646	96		70	142
VOC Emissions (g/hr)		770	115		83	169
Dilemma Vehicles (#)		0	0		0	0
Queue Length 50th (ft)		170	90		52	12
Queue Length 95th (ft)		#540	120		100	83
Internal Link Dist (ft)		3850	557		2606	
Turn Bay Length (ft)						150
Base Capacity (vph)		1300	2252		275	428
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.98	0.43		0.37	0.58

Intersection Summary	
Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 18.9	Intersection LOS: B
Intersection Capacity Utilization 92.6%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1071: 127th Street & State Street

HCM 6th Edition methodology supports speed limit in the range of 25 to 55 mph.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	728	275	187	823	200	62
Future Volume (vph)	728	275	187	823	200	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width (ft)	11	11	12	12	10	10
Storage Length (ft)		100	105		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Ped Bike Factor						0.99
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1706	1450	1676	3288	1492	1428
Flt Permitted			0.219		0.950	
Satd. Flow (perm)	1706	1450	386	3288	1492	1409
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						68
Link Speed (mph)	30			35	30	
Link Distance (ft)	163			5343	2671	
Travel Time (s)	3.7			104.1	60.7	
Confl. Peds. (#/hr)						1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Adj. Flow (vph)	800	302	205	904	220	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	800	302	205	904	220	68
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.12	1.12	1.07	1.07	1.17	1.17
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm
Protected Phases	4	2		8	2	
Permitted Phases		4	8			2
Minimum Split (s)	36.0	29.0	36.0	36.0	29.0	29.0
Total Split (s)	61.0	29.0	61.0	61.0	29.0	29.0
Total Split (%)	67.8%	32.2%	67.8%	67.8%	32.2%	32.2%
Maximum Green (s)	56.0	24.0	56.0	56.0	24.0	24.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	17.0	5.0			5.0	5.0
Flash Dont Walk (s)	14.0	19.0			19.0	19.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Pedestrian Calls (#/hr)	0	0			0	0
Act Effct Green (s)	56.0	90.0	56.0	56.0	24.0	24.0
Actuated g/C Ratio	0.62	1.00	0.62	0.62	0.27	0.27
v/c Ratio	0.75	0.21	0.85	0.44	0.55	0.16
Control Delay	17.9	0.3	48.7	9.7	34.7	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.9	0.3	48.7	9.7	34.7	7.8
LOS	B	A	D	A	C	A
Approach Delay	13.1			16.9	28.3	
Approach LOS	B			B	C	
Stops (vph)	507	0	134	400	170	13
Fuel Used(gal)	20	6	10	36	7	1
CO Emissions (g/hr)	1414	391	704	2543	455	102
NOx Emissions (g/hr)	275	76	137	495	89	20
VOC Emissions (g/hr)	328	91	163	589	106	24
Dilemma Vehicles (#)	0	0	0	46	0	0
Queue Length 50th (ft)	293	0	85	127	108	0
Queue Length 95th (ft)	454	0	#238	167	182	31
Internal Link Dist (ft)	83			5263	2591	
Turn Bay Length (ft)		100	105			
Base Capacity (vph)	1061	1450	240	2045	397	425
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.21	0.85	0.44	0.55	0.16

Intersection Summary	
Area Type: Other	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 16.5	Intersection LOS: B
Intersection Capacity Utilization 98.8%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1073: Indiana Ave & 130th Street

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	728	275	187	823	200	62
Future Volume (veh/h)	728	275	187	823	200	62
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1772	1772	1772	1744	1702	1800
Adj Flow Rate, veh/h	800	302	205	904	220	68
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	4	7	0
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	1103	1335	239	2062	432	407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.62	0.62	0.62	0.62	0.27	0.27
Unsig. Movement Delay						
Ln Grp Delay, s/veh	15.9	1.1	64.7	9.5	32.2	26.2
Ln Grp LOS	B	A	E	A	C	C
Approach Vol, veh/h	1102			1109	288	
Approach Delay, s/veh	11.8			19.7	30.8	
Approach LOS	B			B	C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Case No		9.0		7.0				6.0
Phs Duration (G+Y+Rc), s		29.0		61.0				61.0
Change Period (Y+Rc), s		5.0		5.0				5.0
Max Green (Gmax), s		24.0		56.0				56.0
Max Allow Headway (MAH), s		4.5		4.4				5.0
Max Q Clear (g_c+I1), s		12.4		30.0				58.0
Green Ext Time (g_e), s		0.9		6.0				0.0
Prob of Phs Call (p_c)		1.00		1.00				1.00
Prob of Max Out (p_x)		0.00		0.00				0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7				3
Mvmt Sat Flow, veh/h		1621		0				512
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		0		1772				3400
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		1525		1502				0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	0	0	3
Lane Assignment		L						L

Lanes in Grp	0	1	0	0	0	0	0	1
Grp Vol (v), veh/h	0	220	0	0	0	0	0	205
Grp Sat Flow (s), veh/h/ln	0	1621	0	0	0	0	0	512
Q Serve Time (g_s), s	0.0	10.4	0.0	0.0	0.0	0.0	0.0	28.0
Cycle Q Clear Time (g_c), s	0.0	10.4	0.0	0.0	0.0	0.0	0.0	56.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1621	0	0	0	0	0	512
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0
Time to First Blk (g_f), s	0.0	0.0	0.0	56.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	432	0	0	0	0	0	239
V/C Ratio (X)	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.86
Avail Cap (c_a), veh/h	0	432	0	0	0	0	0	239
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.0	0.0	0.0	0.0	0.0	0.0	34.1
Incr Delay (d2), s/veh	0.0	4.2	0.0	0.0	0.0	0.0	0.0	30.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	0.0	0.0	0.0	0.0	0.0	64.7
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	0.0	0.0	0.0	0.0	4.5
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.0	0.0	2.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.4	0.0	0.0	0.0	0.0	0.0	6.5
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.00	0.00	1.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	2
Grp Vol (v), veh/h	0	0	0	800	0	0	0	904
Grp Sat Flow (s), veh/h/ln	0	0	0	1772	0	0	0	1657
Q Serve Time (g_s), s	0.0	0.0	0.0	28.0	0.0	0.0	0.0	12.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	28.0	0.0	0.0	0.0	12.8
Lane Grp Cap (c), veh/h	0	0	0	1103	0	0	0	2062
V/C Ratio (X)	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.44
Avail Cap (c_a), veh/h	0	0	0	1103	0	0	0	2062
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.7	0.0	0.0	0.0	8.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.9	0.0	0.0	0.0	9.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.6	0.0	0.0	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.8	0.0	0.0	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.70	0.00	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	68	0	302	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1525	0	1502	0	0	0	0
Q Serve Time (g_s), s	0.0	3.1	0.0	2.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.1	0.0	2.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1501.6	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	407	0	1335	0	0	0	0
V/C Ratio (X)	0.00	0.17	0.00	0.23	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	407	0	1335	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.3	0.0	0.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.2	0.0	1.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	2.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.2	0.0	2.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.67	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		17.5						
HCM 6th LOS		B						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	598	0	0	632	45	5	5	35	200	0	131
Future Volume (vph)	52	598	0	0	632	45	5	5	35	200	0	131
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	10	12	12	10	9	12	12	12	11	15	11
Storage Length (ft)	0		30	0		50	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99				0.80		0.97			0.98	
Frt						0.850		0.897			0.946	
Flt Protected		0.996						0.994			0.971	
Satd. Flow (prot)	0	3150	0	0	1663	1337	0	1520	0	0	1730	0
Flt Permitted		0.846						0.970			0.820	
Satd. Flow (perm)	0	2662	0	0	1663	1071	0	1482	0	0	1454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						64		39			64	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		228			105			169			1380	
Travel Time (s)		5.2			2.4			3.8			31.4	
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1			1		1						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Adj. Flow (vph)	58	664	0	0	702	50	6	6	39	222	0	146
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	722	0	0	702	50	0	51	0	0	368	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.07	1.17	1.07	1.07	1.17	1.22	1.07	1.07	1.07	1.12	0.95	1.12
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA			NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	3 8			2		1	6	
Permitted Phases	4				3	3 8	2	2		6		
Minimum Split (s)	16.0	16.0		18.0			12.0	12.0		20.0	32.0	
Total Split (s)	35.0	35.0		18.0			12.0	12.0		20.0	32.0	
Total Split (%)	41.2%	41.2%		21.2%			14.1%	14.1%		23.5%	37.6%	
Maximum Green (s)	31.0	31.0		14.0			9.0	9.0		15.0	27.0	
Yellow Time (s)	3.0	3.0		3.0			3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0			0.0	0.0		2.0	2.0	
Lost Time Adjust (s)		0.0						0.0			0.0	
Total Lost Time (s)		4.0						3.0			5.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?												
Walk Time (s)				2.0							14.0	

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Minimum Split (s)	35.0
Total Split (s)	35.0
Total Split (%)	41%
Maximum Green (s)	31.0
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Walk Time (s)	18.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)				12.0							13.0	
Pedestrian Calls (#/hr)				0							0	
Act Effct Green (s)		31.0			49.0	49.0		9.0			27.0	
Actuated g/C Ratio		0.36			0.58	0.58		0.11			0.32	
v/c Ratio		0.74			0.73	0.08		0.27			0.66	
Control Delay		29.2			12.5	0.2		19.5			27.8	
Queue Delay		1.9			53.2	8.6		0.0			0.0	
Total Delay		31.1			65.7	8.8		19.5			27.8	
LOS		C			E	A		B			C	
Approach Delay		31.1			61.9			19.5			27.8	
Approach LOS		C			E			B			C	
Stops (vph)		550			148	0		19			232	
Fuel Used(gal)		9			3	0		0			7	
CO Emissions (g/hr)		657			206	3		24			470	
NOx Emissions (g/hr)		128			40	1		5			91	
VOC Emissions (g/hr)		152			48	1		6			109	
Dilemma Vehicles (#)		0			0	0		0			0	
Queue Length 50th (ft)		173			84	0		6			136	
Queue Length 95th (ft)		242			m23	m1		38			229	
Internal Link Dist (ft)		148			25			89			1300	
Turn Bay Length (ft)						50						
Base Capacity (vph)		970			958	644		191			554	
Starvation Cap Reductn		0			454	559		0			0	
Spillback Cap Reductn		122			0	0		1			2	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.85			1.39	0.59		0.27			0.67	

Intersection Summary

Area Type: Other
Cycle Length: 85
Actuated Cycle Length: 85
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 105
Control Type: Pretimed
Maximum v/c Ratio: 1.41
Intersection Signal Delay: 42.4 Intersection LOS: D
Intersection Capacity Utilization 92.4% ICU Level of Service F
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1955: 115th Street & Cottage Grove Avenue

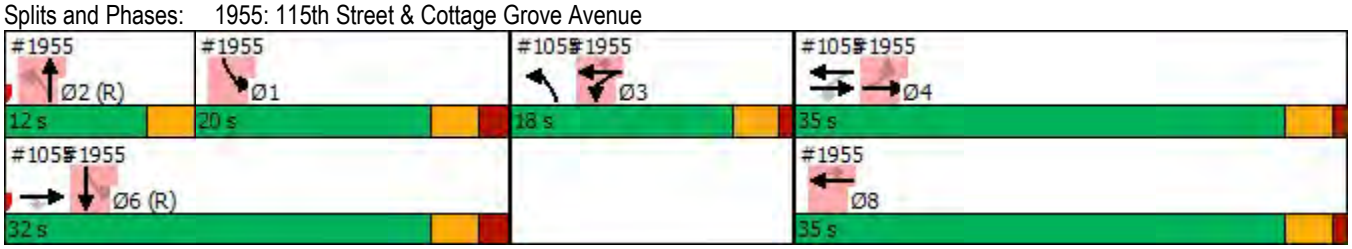

Lane Group	Ø8
Flash Dont Walk (s)	13.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

HCM 6th Edition methodology does not support clustered intersections.

Appendix H

Transportation Technical Memorandum

- Draft EIS Appendix H, Transportation Technical Memorandum, July 2015
  - Appendix A, Existing Conditions
  - Appendix B, No Build Alternative
  - Appendix C, Bus Rapid Transit Alternative
  - Appendix D, Union Pacific Railroad (UPRR) Rail Alternative - Right-of-Way Option
  - Appendix E, Halsted Rail Alternative
  - Appendix F, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Transportation
Technical Memorandum

October 14, 2013
Updated July 27, 2015

Prepared for:
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cta

Table of Contents

Section 1 Summary 1-1

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-2
3.3 Area of Potential Impact 3-4
3.4 Methods 3-6

Section 4 Affected Environment 4-1

4.1 Public Transportation 4-1
4.2 Traffic 4-10
4.3 Freight Transportation 4-17
4.4 Bicycle Facilities 4-19
4.5 Pedestrians 4-21
4.6 Parking 4-23

Section 5 Impacts and Mitigations 5-1

5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-6
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-20
5.4 Union Pacific Railroad Rail Alternative - East Option 5-38
5.5 Union Pacific Railroad Rail Alternative - West Option 5-45
5.6 Halsted Rail Alternative 5-51

Section 6 Impacts Remaining After Mitigation 6-1

6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-2
6.5 Union Pacific Railroad Rail Alternative - West Option 6-2
6.6 Halsted Rail Alternative 6-2

Section 7 References 7-1

Appendices

Appendix A: Existing Conditions

- Existing (2012) Intersection Lane Geometry Figures
- Existing (2012) Intersection Traffic Volume Figures
- Existing Traffic Counts (provided by CDOT/IDOT)
- Existing Traffic Counts (collected by RWA)
- Existing (2012) Intersection Level of Service Reports

Appendix B: No Build

- No Build (2026) Intersection Lane Geometry Figures
- No Build (2026) Intersection Traffic Volume Figures
- No Build (2026) Intersection Level of Service Reports
- No Build (2030) Intersection Lane Geometry Figures
- No Build (2030) Intersection Traffic Volume Figures
- No Build (2030) Intersection Level of Service Reports

Appendix C: BRT Alternative

- BRT Alternative Project Traffic Estimates
- BRT Alternative (2026) Intersection Lane Geometry Figures
- BRT Alternative (2026) Intersection Traffic Volume Figures
- BRT Alternative (2026) Intersection Level of Service Reports
- BRT Alternative (2030) Intersection Lane Geometry Figures
- BRT Alternative (2030) Intersection Traffic Volume Figures
- BRT Alternative (2030) Intersection Level of Service Reports
- BRT Alternative Mitigated (2030) Intersection Lane Geometry Figures
- BRT Alternative Mitigated (2030) Intersection Traffic Volume Figures
- BRT Alternative Mitigated (2030) Intersection Level of Service Reports

Appendix D: UPRR Rail Alternative - Right-of-Way Option

- UPRR Right-of-Way Option Alternative Project Traffic Estimates
- UPRR Right-of-Way Option Alternative (2026) Intersection Lane Geometry Figures
- UPRR Right-of-Way Option Alternative (2026) Intersection Traffic Volume Figures
- UPRR Right-of-Way Option Alternative (2026) Intersection Level of Service Reports
- UPRR Right-of-Way Option Alternative (2030) Intersection Lane Geometry Figures
- UPRR Right-of-Way Option Alternative (2030) Intersection Traffic Volume Figures
- UPRR Right-of-Way Option Alternative (2030) Intersection Level of Service Reports
- UPRR Right-of-Way Option Alternative Mitigated (2030) Intersection Lane Geometry Figures
- UPRR Right-of-Way Option Alternative Mitigated (2030) Intersection Traffic Volume Figures
- UPRR Right-of-Way Option Alternative Mitigated (2030) Intersection Level of Service Reports

Appendix E: Halsted Rail Alternative

- Halsted Rail Alternative Project Traffic Estimates
- Halsted Rail Alternative (2026) Intersection Lane Geometry Figures
- Halsted Rail Alternative (2026) Intersection Traffic Volume Figures
- Halsted Rail Alternative (2026) Intersection Level of Service Reports
- Halsted Rail Alternative (2030) Intersection Lane Geometry Figures
- Halsted Rail Alternative (2030) Intersection Traffic Volume Figures
- Halsted Rail Alternative (2030) Intersection Level of Service Reports
- Halsted Rail Alternative Mitigated (2030) Intersection Lane Geometry Figures
- Halsted Rail Alternative Mitigated (2030) Intersection Traffic Volume Figures
- Halsted Rail Alternative Mitigated (2030) Intersection Level of Service Reports

Appendix F: 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Alternatives 2-2
Figure 3-1: Area of Potential Impact 3-5
Figure 3-2: Area of Potential Impact Study Intersections 3-12
Figure 3-3: Area of Potential Impact Study Intersection Traffic Counts 3-13
Figure 4-1: Existing Public Transportation Services 4-5
Figure 4-2: Signalized and Unsignalized Intersections within the Area of Potential Impact 4-14
Figure 4-3: Existing (2010) Congestion (Volume/Capacity Ratio) Map 4-15
Figure 4-4: 2030 No Build Congestion (Volume/Capacity Ratio) Map 4-16
Figure 4-5: Freight Railroads within the Area of Potential Impact 4-18
Figure 4-6: Existing and Recommended Bicycle Facilities within the Area of Potential Impact 4-20
Figure 5-1: Bus Rapid Transit Alternative 5-7
Figure 5-2: Union Pacific Railroad Rail Alternative 5-21
Figure 5-3: Halsted Rail Alternative 5-53

Tables

Table 1-1: Summary of Mitigated Intersections within the Area of Potential Impact for the Build Alternatives 1-3
Table 3-1: Area of Potential Impact Study Intersections 3-8
Table 4-1: Existing Bus Route Information within the Area of Potential Impact 4-3
Table 4-2: Existing CTA Bus Service Hours and Peak Headways 4-4
Table 4-3: Metra Boardings and Parking by Station 4-10
Table 4-4: Existing (2012) Intersection Level of Service 4-11
Table 4-5: Existing Train Volumes (2009) 4-19
Table 4-6: Existing On-Street Parking 4-23
Table 5-1: No Build (2026 and 2030) Intersection Level of Service 5-2
Table 5-2: Forecasted Train Volumes (2029 No Build) 5-5
Table 5-3: Bus Services for the Bus Rapid Transit Alternative 5-6
Table 5-4: Bus Rapid Transit Alternative (2026 and 2030) Intersection Level of Service 5-9
Table 5-5: Mitigation Measures for the Bus Rapid Transit Alternative (2030) Conditions 5-12
Table 5-6: Bus Rapid Transit Alternative Mitigated (2030) Intersection Level of Service 5-13
Table 5-7: Bus Rapid Transit Alternative Park & Ride Facilities 5-18
Table 5-8: Union Pacific Railroad Rail Alternative Right-of-Way Option (2026 and 2030) Intersection Level of Service 5-25
Table 5-9: Mitigation Measures for the Union Pacific Railroad Rail Alternative Right-of-Way Option (2030) Conditions 5-28
Table 5-10: Union Pacific Railroad Rail Alternative Right-of-Way Option Mitigated Alternative (2030) Intersection Level of Service 5-29
Table 5-11: Segment UA Proposed Park & Ride Facilities 5-34

Table 5-12: Segment UB Proposed Park & Ride Facilities 5-35
Table 5-13: Union Pacific Railroad Rail Alternative East Option Park & Ride Facilities..... 5-42
Table 5-14: Existing and Forecast Train Volumes for Union Pacific Railroad South of 86th Street..... 5-45
Table 5-15: Union Pacific Railroad Rail Alternative West Option Park & Ride Facilities..... 5-48
Table 5-16: Halsted Rail Alternative (2026 and 2030) Intersection Level of Service 5-55
Table 5-17: Mitigation Measures for the Halsted Rail Alternative (2030) Conditions 5-58
Table 5-18: Halsted Rail Alternative Mitigated (2030) Intersection Level of Service 5-59
Table 5-19: Halsted Rail Alternative Park & Ride Facilities Segment UA..... 5-64
Table 5-20: Halsted Rail Alternative Park & Ride Facilities Segment UB..... 5-64

Abbreviations

ADA	Americans with Disabilities Act
API	area of potential impact
BRT	Bus Rapid Transit
CCHD	Cook County Highway Department
CDOT	Chicago Department of Transportation
CIP	CREATE 75th Street Corridor Improvement Project
CN/ME	Canadian National/Metra Electric District
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CREATE	Chicago Region Environmental and Transportation Efficiency
CSS & SBRR	Chicago South Shore & South Bend Railroad
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
GIS	Geographic Information System
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt
LOS	level of service
ME	Metra Electric
MWRD	Metropolitan Water Reclamation District
NEPA	National Environmental Policy Act
NICTD	Northern Indiana Commuter Transportation District
NS	Norfolk Southern
Pace	Pace Suburban Bus Service
RI	Metra Rock Island
RLE	Red Line Extension
ROW	right-of-way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
UPRR	Union Pacific Railroad

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on transportation facilities that include public transportation, vehicular and freight traffic, bicycle, pedestrians, and parking.

Impacts on the transportation facilities were identified based on the predicted changes from the existing conditions to the horizon year of 2030, using the regional travel demand model. The impacts on transportation facilities were evaluated through a combination of qualitative and quantitative analysis. Section 3 presents the specific methods used to determine impacts. The following paragraphs describe the impacts and proposed mitigation measures for each alternative.

People using public transportation would benefit from the extension of the Red Line south from the 95th Street Terminal. Various bus routes within the project area would be rerouted to complement the rail alternatives and provide a means for connectivity to the expanded service. The extension of the Red Line would provide an alternative mode of travel to reach downtown Chicago (and destinations between downtown Chicago and 95th Street) for people south of the 95th Street Terminal. There would be no permanent adverse impacts on public transportation services for any of the alternatives. Temporary construction impacts on public transportation, including intermittent delays and detours, would occur.

The traffic analysis consisted of analyzing 76 intersections within the area of potential impact (API). Table 1-1 provides a summary of the intersections that would require mitigation measures to minimize the level of impact from any of the build alternatives. At intersections where adverse impacts are expected, potential mitigation measures have been identified to offset the portion of the level of service (LOS) deterioration that is attributable to the RLE Project. After mitigation, there would be no adverse permanent impacts from any of the build alternatives. The minimum acceptable LOS for roadway intersections is “D” for urban areas. Temporary construction impacts on traffic would occur during construction activities. The temporary impacts would be mitigated by following the applicable federal, state, and local requirements for construction activities.

There would be no permanent impacts on freight transportation due to the implementation of any of the build alternatives. There would be temporary impacts due to the construction of Union Pacific Railroad (UPRR) Rail and Halsted Rail Alternatives due to temporary closures of the roadways or highways to erect the aerial structures and superstructures. Railroad flagging would be included where any construction crosses or is adjacent to railroad operations.

There would be no adverse permanent impacts on pedestrians after mitigation for any of the build alternatives. Mitigation measures for pedestrians include the addition of traffic signal or pedestrian refuge islands and/or other pedestrian crossing treatments at the Kensington Avenue stop for the BRT Alternative. Mitigation measures for the UPRR Alternative alignment include

pedestrian crosswalks and/or pedestrian crossing gates at the at-grade railroad crossings near the proposed UPRR Alternative alignment.

Bicycle facilities would not be affected by the implementation of the project alternatives. There would be temporary construction impacts on bicycle facilities for the Halsted Rail Alternative.

There would be no permanent impacts on parking. Minor parking impacts would occur during construction activities for the Halsted Rail Alternative.

Only the UPRR East Option and UPRR West Option have potential for cumulative impacts. With both the UPRR East Option and UPRR West Option, freight traffic would remain on the existing UPRR tracks. Although the project would not increase the number of freight trains, with increased traffic bound for stations (including bus traffic, bicyclists, and pedestrians), delays at the at-grade crossings may increase.

Updated July 27, 2015
In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix F of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix F supersedes information presented in other chapters of this technical memorandum.

Table 1-1: Summary of Mitigated Intersections within the Area of Potential Impact for the Build Alternatives

ID	Intersection	Existing (2012)		2030 Baseline		2030 BRT Mitigated		2030 UPRR Mitigated		2030 Halsted Mitigated	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
		LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS
14	103rd Street and Vincennes Avenue and Beverly Avenue	D	F	E	F	NA	NA	NA	NA	E	F
16	103rd Street and Halsted Street	E	D	F	D	NA	NA	F	C	F	D
41	111th Street and Cottage Grove Avenue	B	C	C	D	C	C	C	C	C	C
42	111th Street and Ellis Avenue	C	B	C	C	C	C	NA	NA	NA	NA
52	115th Street and Michigan Avenue	B	C	B	D	C	D	B	C	NA	NA
54	115th Street and Martin Luther King Drive	D	F	D	F	D	F	D	F	D	F
55a	115th Street and Cottage Grove Avenue	C	C	D	C	C	D	B	C	D	C
55b	115th Street and Cottage Grove Avenue East	D	C	E	C	C	B	C	B	B	C
59	119th Street and Ashland Avenue	D	F	D	F	NA	NA	D	F	D	F
60	119th Street and Halsted Street	C	C	C	C	NA	NA	NA	NA	D	D
61	119th Street and Wentworth Avenue	B	B	B	B	NA	NA	B	B	NA	NA
62	119th Street and State Street	B	B	B	B	C	B	C	B	NA	NA
63	119th Street and Michigan Avenue	A	A	A	A	NA	NA	C	B	NA	NA
64	127th Street and Paulina Street	C	C	C	C	NA	NA	B	C	B	C
65	127th Street and Marshfield Avenue	C	B	C	C	C	C	C	C	D	D

ID	Intersection	Existing (2012)		2030 Baseline		2030 BRT Mitigated		2030 UPRR Mitigated		2030 Halsted Mitigated	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
		LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS
66	127th Street and Ashland Avenue	C	C	C	C	NA	NA	C	C	C	D
67	Ashland Avenue and Vermont Avenue	C	C	C	C	C	C	C	C	C	C
68	127th Street and Halsted Street	C	C	C	C	C	C	C	D	C	D
69	Vermont Avenue and Halsted Street	B	B	B	B	NA	NA	NA	NA	D	D
70	127th Street and Vermont Avenue and Wallace Street	C	D	D	D	C	C	C	D	C	C
71	127th Street and State Street	A	B	B	B	C	C	B	C	D	B
72	127th Street and Michigan Avenue	A	B	A	B	NA	NA	B	C	B	C
73	130th Street and Indiana Avenue	B	C	C	C	D	C	D	D	C	D
74	130th Street and Ellis Avenue	A	A	A	A	NA	NA	B	B	NA	NA

Notes: BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad, LOS = level of service, NA = Not applicable. Intersection did not require mitigation.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- Bus Rapid Transit (BRT) Alternative
- UPRR Rail Alternative
  - Right-of-Way (ROW) Option
  - East Option
  - West Option
- Halsted Rail Alternative

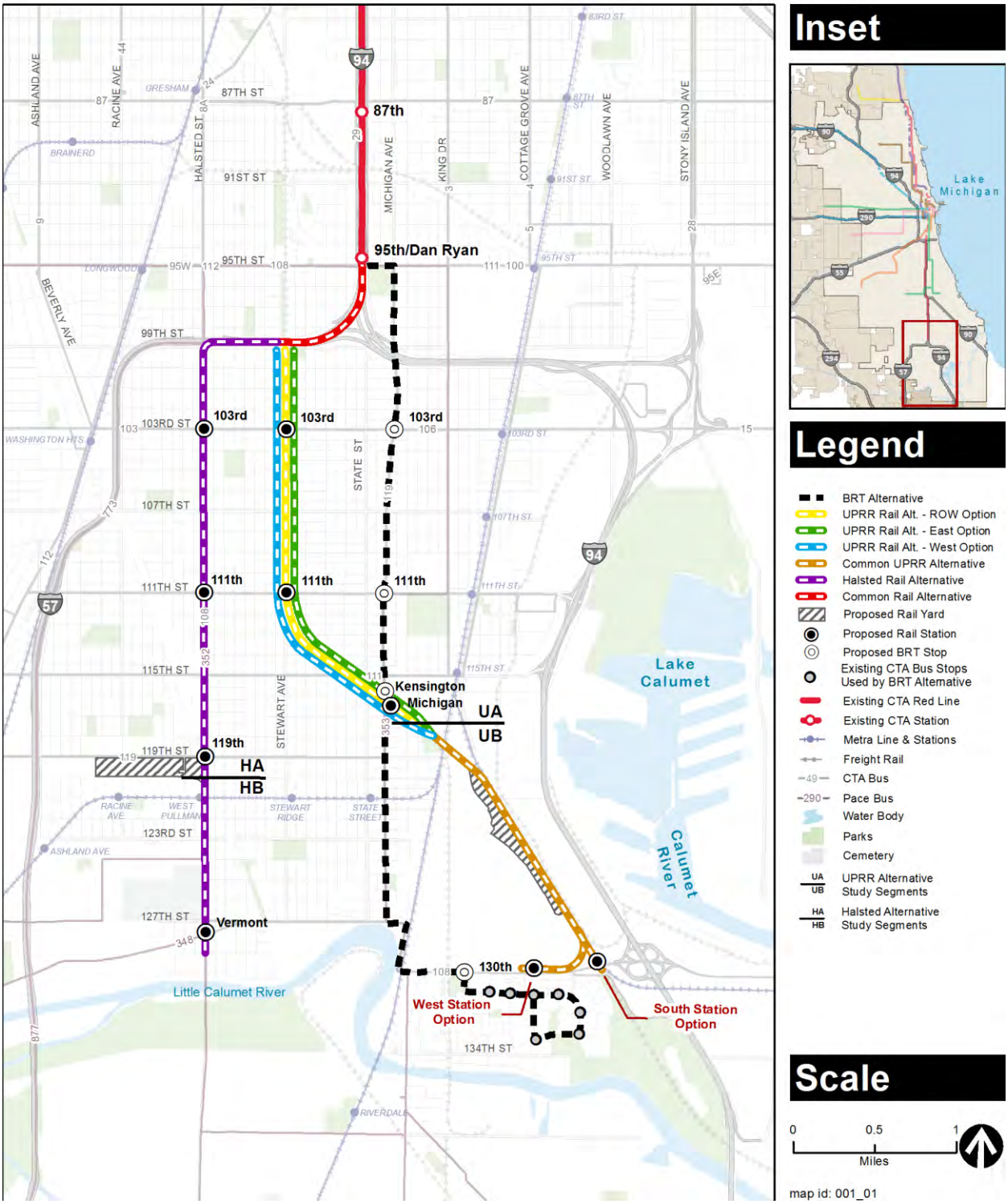

Figure 2-1: Red Line Extension Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program which includes the improvements to 95th Street Terminal. The Transportation Improvement Program projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed

to be the same as for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail service to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

This section describes the process used to conduct a qualitative and quantitative analysis of potential temporary, permanent, and cumulative transportation effects that could result from the construction and operation of the project alternatives.

3.1 Regulatory Framework

Future transit improvements along the project corridor could be financed with a mix of local, state, and federal funds. Accordingly, this transportation analysis was executed in compliance with current Federal Transit Administration (FTA) guidelines, NEPA regulations, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requirements, as detailed below.

3.1.1 Federal

NEPA requires that federal agencies consider environmental impacts before taking actions that could affect the human environment. Transportation, including public transit, traffic, parking, and bicycle and pedestrian transportation are elements typically assessed in NEPA documentation.

Applicable federal regulation for the analysis of transportation impacts also includes the SAFETEA-LU Public Law 109-59, August 10, 2005. The SAFETEA-LU focuses on reducing traffic congestion, increasing intermodal connectivity, and protecting the environment; SAFETEA-LU gives state and local transportation decision-makers more flexibility over previous legislation for solving transportation problems in their communities (Federal Highway Administration 2005).

3.1.2 State

Illinois state law does not require additional transportation environmental analysis to be performed for proposed projects subject to NEPA.

3.1.3 Local

The City of Chicago, Cook County, and the Village of Calumet Park do not require additional transportation environmental analyses to be performed for proposed projects subject to NEPA. The following local resources were used to understand the regional and local transportation network near the project area.

The CMAP is the planning organization for the Chicago region. CMAP has prepared the *GO TO 2040* Regional Plan (2010) that provides strategies for the regional transportation network. In addition, the City of Chicago and Cook County have developed their own strategies and planning activities for their transportation network.

3.2 Impact Analysis Thresholds

The transportation analysis included both quantitative and qualitative analysis of impacts based on a future baseline year of 2030. The traffic analysis also included quantitative analysis of impacts based on a future construction year of 2026. Where quantitative analyses were performed, accepted impact analysis thresholds were developed with CTA, Chicago Department of Transportation (CDOT), Illinois Department of Transportation (IDOT), and Cook County Highway Department (CCHD). The thresholds were used to establish the level of impact. Thresholds for qualitative analysis were determined based on professional judgment, with potential impacts being generally evaluated at three levels: low, moderate, and high.

3.2.1 Public Transportation

For the purpose of this EIS, a public transportation impact (rail or bus service) would be adverse if it would result in negative changes associated with the following:

- Geographic areas of service and routing
- Travel time
- Frequency and hours of service
- Transit patronage and demand, including transit mode share
- Station/stop access and circulation
- Traffic around stations/stops

Impacts may be positive or negative in nature, and the amount of change would determine whether the impacts would be low, moderate, or high. The determination of low, moderate, or high impacts was based on professional judgment. Moderate to high negative impacts would be considered adverse and substantially adverse, respectively.

3.2.2 Traffic

For the purpose of this EIS, a traffic (passenger or freight vehicle) impact would be substantial (impacts may be positive or negative in nature) if it were to result in a degradation (following mitigation) in peak-hour LOS at any intersection within the API (defined in Section 3.3) which leads to:

- A change in traffic distribution and local circulation patterns
- A change in vehicle occupancy levels
- A change in road capacity
- A change in road traffic volumes

The LOS for roadway intersections typically ranges from A to F (Transportation Research Board 2010) and LOSs are defined for this EIS as follows:

- LOS A represents virtually free flow of traffic with no congestion or delay.
- LOS B represents stable traffic flow, but other vehicles in the flow are noticeable.
- LOS C represents stable flow, but marks the beginning of the range where individual vehicles become substantially affected by interactions with other vehicles in the traffic stream.
- LOS D represents high density of traffic but stable flow.
- LOS E represents operating conditions at or near capacity level. All speeds are reduced to a low but relatively uniform flow.
- LOS F represents a breakdown in the operating conditions resulting in substantial congestion and delay.

A change in intersection LOS (with mitigation) from LOS A, B, C, or D to LOS E or F would result in an adverse or substantially adverse impact, respectively. If an intersection operates with LOS E or F for the No Build Alternative and would remain LOS E or F with a build alternative, no impact results.

3.2.3 Freight Transportation

The freight transportation analysis included a qualitative discussion of impacts on freight rail traffic specific to the build alternatives that involve the UPRR and Canadian National (CN) Railroad ROWs. The qualitative analysis broadly discusses the potential impacts and summarizes the coordination activities conducted with UPRR and CN.

3.2.4 Bicycle

For the purpose of this EIS, a bicycle impact would be adverse if it were to result in a disruption of existing or planned bicycle pathways or bicycle parking facilities.

3.2.5 Pedestrians

For the purpose of this EIS, a pedestrian impact would be adverse if it were to result in the following:

- Disruption of existing or planned pedestrian pathway
- Limited pedestrian access to proposed station entrances
- Existence of non-ADA (Americans with Disabilities Act) compliant pedestrian pathways to proposed station entrances

3.2.6 Parking

Potential parking impacts include changes in parking supply as a result of transit facility construction/service expansion, addition of park & ride facilities, and removal of existing parking spaces. Recent criteria regarding parking impacts were not available; however, guidance regarding parking impacts is provided in the United States Department of Transportation, Urban Mass Transportation Administration (now FTA) Circular C 5620.1 "Guidelines for Preparing Environmental Assessments," dated October 16, 1979. The FTA circular was used as guidance for determining the potential for impacts and the intensity of those impacts. For the purpose of this EIS, a parking impact would be adverse if it were to result in the following:

- Reduction in parking spaces by 10 to 50 spaces. (A reduction by 50 or more parking spaces would be a substantially adverse impact.)
- Substantial reduction in accommodation for future programs requiring parking spaces, such as car sharing.
- Reduction in frequently used existing transit parking and park & ride capacity.
- Inadequate parking capacity for proposed transit service.

3.3 Area of Potential Impact

The project area used in the Alternatives Analysis is situated 11 miles south of the downtown Chicago (commonly referred to as the "Loop") and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway traverse the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The Red Line currently terminates at the 95th Street Terminal. Figure 3-1 shows the API.

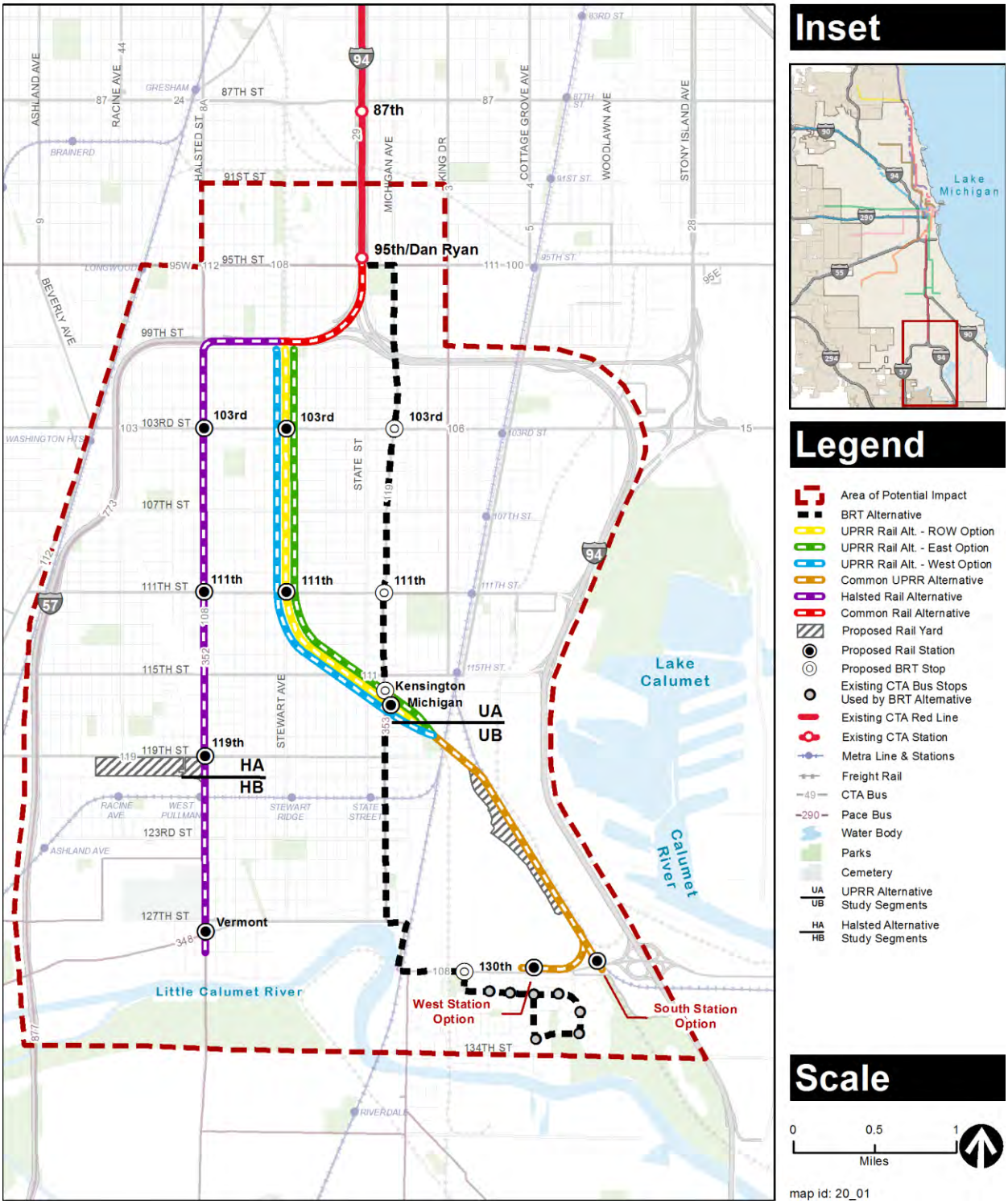

Figure 3-1: Area of Potential Impact

The API boundaries are as follows:

- On the north by 91st Street (four blocks north of the existing 95th Street Terminal);
- On the south by a varying boundary that includes Jackson Street/134th Street (four blocks south of both the UPRR Rail Alternative and Halsted Rail Alternative) station locations;
- On the east by a varying boundary that includes Martin Luther King Drive, Michigan Avenue, and I-94 (from the north to south);
- On the west by a varying boundary that includes Halsted Street, South Vincennes Avenue, and I-57 (from north to south).

The API interfaces with the CTA rail Red Line, Metra commuter rail lines, Pace bus routes, and numerous CTA bus routes. The project area also includes the 98th Street Yard and Shop, which is south of 95th Street and has a capacity of 234 rail cars.

The alternative alignments run through a number of neighborhoods in the southern section of the City of Chicago and the Village of Calumet Park. Community areas in the City of Chicago that may be affected by the improvements include Washington Heights, Morgan Park, Roseland, Pullman, West Pullman, and Riverdale.

3.4 Methods

Transportation data used in the analysis of transportation impacts was collected from the following state and local agencies:

- CTA
- CDOT
- CMAP
- CCHD
- IDOT
- Metra Commuter Rail
- Northern Indiana Commuter Transportation District (NICTD)
- Pace Suburban Bus Service
- Regional Transportation Authority
- UPRR

3.4.1 Public Transportation

A description of the existing conditions within the API was developed for the public transportation environment (rail and bus services) by compiling and reviewing CTA rail, CTA bus, Metra commuter rail, and Pace bus service data. The following public transportation data was compiled and reviewed for this purpose:

- Geographic areas of service and routes
- Travel time
- Frequency and hours of service
- Ridership levels
- Transit mode share
- Station/stop locations

Project horizon year (2030) ridership estimates were projected using the Chicago New Starts forecasting model, which was developed in coordination with CMAP. CTA developed bus service plans for each build alternative that realign existing bus services to serve each alternative.

3.4.2 Traffic

Seventy-six study intersections were identified for traffic analysis within the API, as listed in Table 3-1 and presented on Figure 3-2. Existing traffic count data from CDOT, CMAP, and IDOT along with new manual traffic counts were compiled to develop peak-hour turning movements to understand the existing traffic conditions within the project area, as shown on Figure 3-3. At several minor intersections, counts were not conducted. Volumes were estimated, per CDOT direction, using counts at adjacent intersections along with simple distribution assumptions. Intersections with estimated turning movement volumes are indicated on Figure 3-3. The following traffic data was compiled and reviewed for this purpose:

- Traffic distribution and local circulation patterns
- Vehicle occupancy levels
- Road capacity levels
- Road peak-hour traffic volumes
- Intersection lane geometry and traffic signal timing plans
- Planned roadway improvements

The above data was used to calculate intersection LOS, using Synchro 7 isolated intersection analysis. Peak-hour traffic volumes and lane geometry used for the intersection LOS analysis are included in Appendix A.

Table 3-1: Area of Potential Impact Study Intersections

Intersection ID	Intersection	Control Type	Jurisdiction	Freeway Ramp
1	95th Street and Wentworth Avenue	Signalized	IDOT/CDOT	No
2	95th Street and Lafayette Avenue	Signalized	IDOT/CDOT	Yes
3	95th Street and State Street	Signalized	IDOT/CDOT	Yes
4	95th Street and Michigan Avenue	Signalized	IDOT/CDOT	No
5	98th Place and Halsted Street	Signalized	IDOT/CDOT	Yes
6	99th Street and Halsted Street	Signalized	IDOT/CDOT	Yes
7	98th Place and Wentworth Avenue	Signalized	IDOT/CDOT	Yes
8	99th Street and Wentworth Avenue	Signalized	IDOT/CDOT	No
9	99th Street and State Street	Signalized	CDOT	No
10	99th Street and Michigan Avenue	Signalized	IDOT/CDOT	Yes
11	99th Place and Martin Luther King Drive	Signalized	IDOT/CCHD	No
12	100th Street and Martin Luther King Drive	Signalized	CCHD/CDOT	No
13	100th Street and Cottage Grove Avenue	Unsignalized	CCHD/CDOT	No
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	CCHD/CDOT	No
15	103rd Street and Morgan Street	Signalized	CCHD/CDOT	No
16	103rd Street and Halsted Street	Signalized	IDOT/CCHD	No
17	103rd Street and Normal Avenue	Signalized	CCHD/CDOT	No
18	103rd Street and Wentworth Avenue	Signalized	CCHD/CDOT	No

Intersection ID	Intersection	Control Type	Jurisdiction	Freeway Ramp
19	103rd Street and State Street	Signalized	CCHD/CDOT	No
20	103rd Street and Michigan Avenue	Signalized	CCHD/CDOT	No
21	103rd Street and Martin Luther King Drive	Signalized	CCHD/CDOT	No
22	103rd Street and Cottage Grove Avenue	Signalized	CCHD/CDOT	No
23	103rd Street and Woodlawn Avenue	Signalized	IDOT/CDOT	No
24	107th Street and Halsted Street	Signalized	IDOT/CDOT	No
25	107th Street and Wentworth Avenue	Signalized	CDOT	No
26	107th Street and State Street	Signalized	CDOT	No
27	107th Street and Michigan Avenue	Signalized	CDOT	No
28	107th Street and Martin Luther King Drive	Signalized	CCHD/CDOT	No
29	107th Street and Cottage Grove Avenue	Signalized	CCHD/CDOT	No
30	111th Street and Marshfield Avenue	Signalized	IDOT/CDOT	Yes
31	111th Street and Hamlet Avenue	Signalized	IDOT	Yes
32	112th Place and Marshfield Avenue	Signalized	IDOT/CDOT	Yes
33	112th Place and Hamlet Avenue	Signalized	IDOT/CDOT	Yes
34	111th Street and Halsted Street	Signalized	IDOT/CCHD	No
35	111th Street and Normal Avenue	Signalized	CCHD/CDOT	No
36	111th Street and Wentworth Avenue	Signalized	CCHD/CDOT	No
37	111th Street and State Street	Signalized	CCHD/CDOT	No
38	111th Street and Michigan Avenue	Signalized	CCHD/CDOT	No
39	111th Street and Indiana Avenue	Signalized	CCHD/CDOT	No

Intersection ID	Intersection	Control Type	Jurisdiction	Freeway Ramp
40	111th Street and Martin Luther King Drive	Signalized	CCHD	No
41	111th Street and Cottage Grove Avenue	Signalized	IDOT/CCHD	No
42a	111th Street and Langley Avenue	Signalized	CCHD	No
42b	111th Street and Ellis Avenue	Signalized	CCHD	No
43	111th Street and Doty Avenue	Signalized	IDOT/CDOT	No
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	IDOT	Yes
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	IDOT	Yes
46	115th Street and Marshfield Avenue	Signalized	CDOT	No
47	115th Street and Ashland Avenue	Signalized	IDOT/CDOT	No
48	115th Street and Racine Avenue	Signalized	IDOT/CDOT	No
49	115th Street and Halsted Street	Signalized	IDOT	No
50	115th Street and Wentworth Avenue	Signalized	CDOT	No
51	115th Street and State Street	Signalized	CCHD/CDOT	No
52	115th Street and Michigan Avenue	Signalized	CCHD/CDOT	No
53	115th Street and Indiana Avenue	Signalized	CCHD/CDOT	No
54	115th Street and Martin Luther King Drive	Unsignalized	CCHD	No
55a	115th Street and Cottage Grove Avenue	Signalized	CCHD/CDOT	No
55b	115th Street and Cottage Grove Avenue East	Signalized	CCHD/CDOT	No
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	IDOT	Yes
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	IDOT	Yes

Intersection ID	Intersection	Control Type	Jurisdiction	Freeway Ramp
58	119th Street and Marshfield Avenue	Signalized	IDOT/CDOT	Yes
59	119th Street and Ashland Avenue	Signalized	IDOT/CDOT	Yes
60	119th Street and Halsted Street	Signalized	IDOT/CDOT	No
61	119th Street and Wentworth Avenue	Signalized	CDOT	No
62	119th Street and State Street	Signalized	IDOT/CCHD/ CDOT	No
63	119th Street and Michigan Avenue	Signalized	CDOT	No
64	127th Street and Paulina Street	Signalized	IDOT	Yes
65	127th Street and Marshfield Avenue	Signalized	IDOT	Yes
66	127th Street and Ashland Avenue	Signalized	IDOT	No
67	Ashland Avenue and Vermont Avenue	Signalized	IDOT	No
68	127th Street and Halsted Street	Signalized	IDOT	No
69	Vermont Avenue and Halsted Street	Signalized	IDOT	No
70	127th Street and Vermont Avenue and Wallace Street	Signalized	IDOT/CDOT	No
71	127th Street and State Street	Signalized	IDOT	No
72	127th Street and Michigan Avenue	Signalized	IDOT/CDOT	No
73	130th Street and Indiana Avenue	Signalized	IDOT	No
74	130th Street and Ellis Avenue	Signalized	IDOT/CDOT	No

Note: IDOT - Illinois Department of Transportation; CCHD - Cook County Highway Department; CDOT - Chicago Department of Transportation

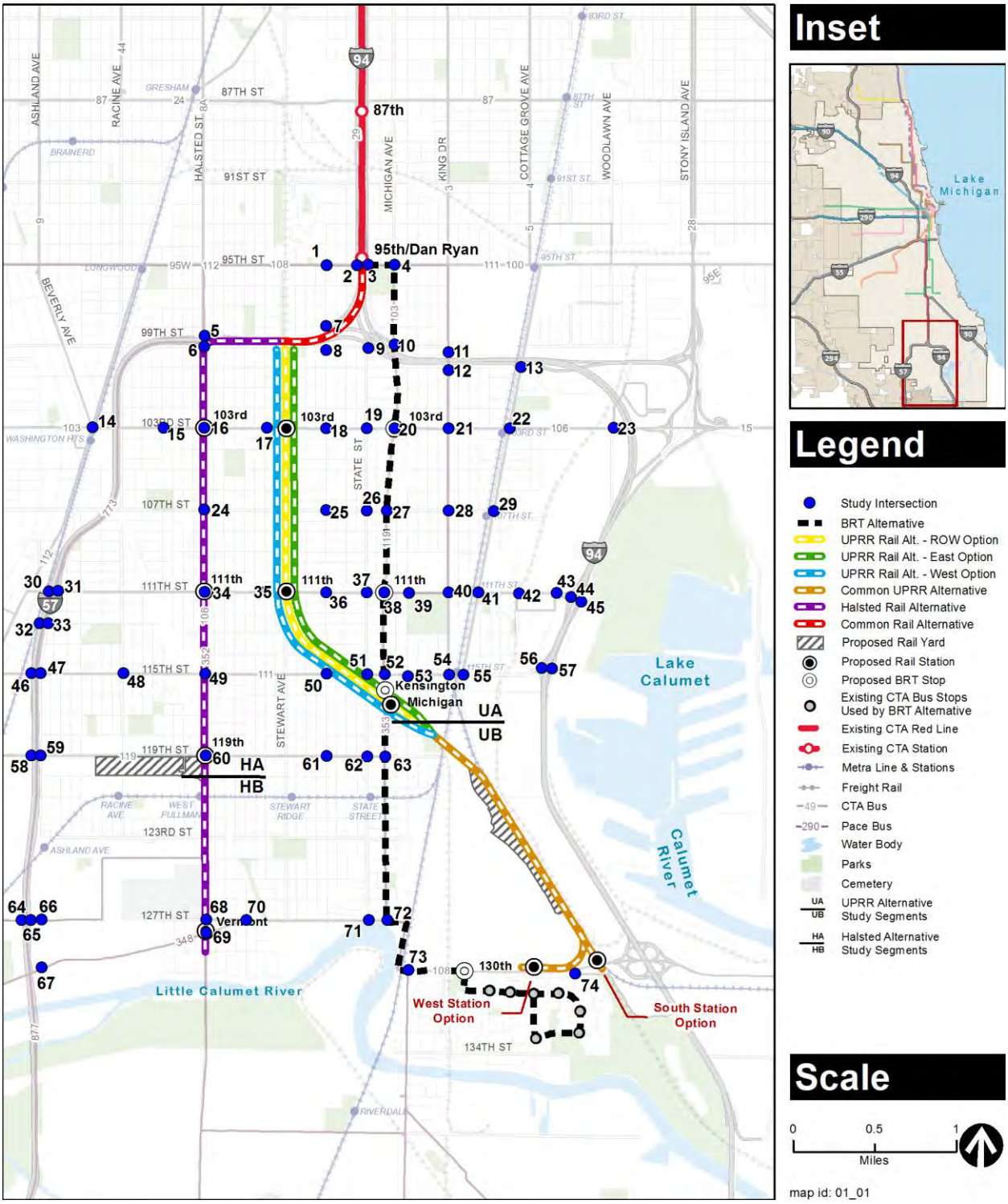

Figure 3-2: Area of Potential Impact Study Intersections

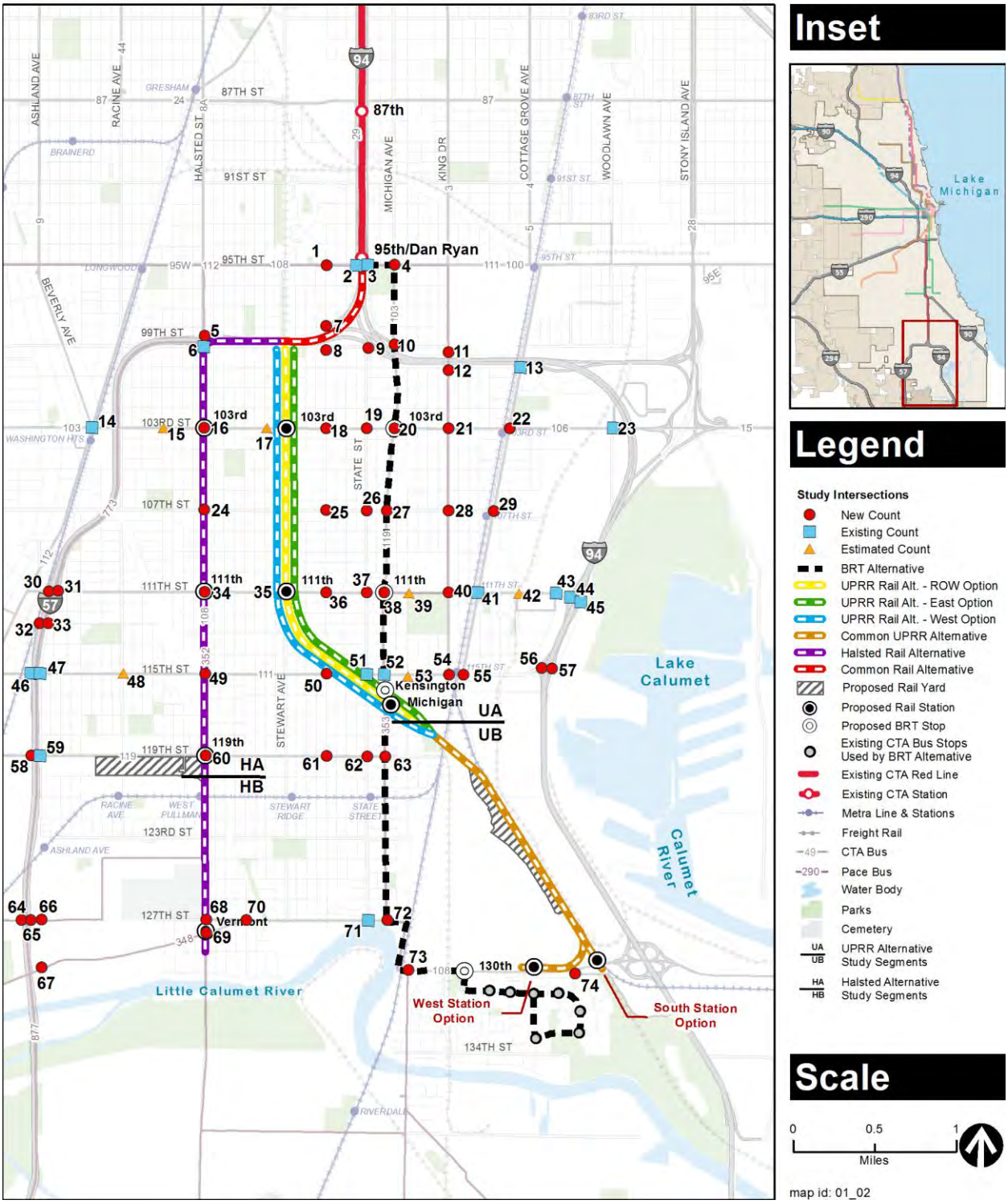

Figure 3-3: Area of Potential Impact Study Intersection Traffic Counts

One future base year model run was performed to simulate project horizon year (2030) conditions without the project (i.e., the No Build Alternative). Data from CMAP's 2030 regional travel demand model was used to develop "no-project" intersection-level traffic projections. These "no-project" traffic projections accounted for the background growth in traffic due to additional regional and subregional land use development and population growth. To simulate project construction year (2026) conditions without the project, background traffic growth was interpolated between existing year (2012) and horizon year (2030) No Build Alternative conditions. The No Build Alternative traffic projections served as the baseline for evaluating the future "with project," (i.e., the build alternatives). The future build alternative conditions included the introduction of park & ride automobile trips to the proposed stations and an overall decrease in project area traffic as a result of trip diversions to transit. Existing and planned lane geometry and traffic signal timing plans were used for the analysis of No Build Alternative and build alternative conditions.

Using Institute of Transportation Engineers trip generation rates (Volume 2, Transit Station with Parking) and trip distribution assumptions from the RLE Alternatives Analysis Traffic Impacts Reports (CTA 2009b and CTA 2009c), the build alternative-generated trips were manually added to the No Build Alternative traffic projections to develop the build alternative traffic volumes. The build alternative intersection LOS analysis was conducted for the study intersections for each alternative. Appendix A includes the build alternative trip generation and trip distribution assumptions used for the intersection LOS analysis.

3.4.3 Freight Transportation

Coordination was conducted with the UPRR regarding the build alternatives that would directly affect the UPRR ROW. Through the coordination process, potential impacts were identified and are qualitatively discussed and presented in this technical memorandum.

3.4.4 Bicycle Facilities

A description of the existing conditions (the affected environment) for bicycles was developed by reviewing the existing and proposed bicycle facilities for the City of Chicago and the *Chicago Streets for Cycling Plan 2020* (City of Chicago 2012c). IDOT's 2012 bicycle map was also used to develop the description of existing conditions for bicycle facilities.

The existing and proposed bicycle facilities were plotted on maps showing the build alternatives. The relationship of the bicycle facilities to the proposed stations in each build alternative was evaluated. The proposed CTA stations would include bicycle parking. The analysis also included an assessment of whether the proposed station locations would conform to the objectives of the bicycle plans for an area within a ½-mile radius of the stations.

3.4.5 Pedestrians

A description of the existing conditions (the affected environment) for pedestrians was developed by compiling and reviewing data from aerial images, Chicago GIS data, and the *Chicago Pedestrian Plan (*City of Chicago 2012b). Pedestrian facilities within immediate area of the

proposed station locations were reviewed for ADA accessibility and conformity to transit station planning.

3.4.6 Parking

A description of the existing parking conditions (the affected environment) was developed through field observations, community resources, and aerial imagery. Using the No Build Alternative as the baseline, an analysis was conducted to determine the extent to which the proposed alternatives would affect on-street parking and parking facilities (off-street) through construction limit encroachment or displacement.

Parking capacity near each of the proposed stations and at the park & ride facilities was reviewed for potential impacts on the surrounding neighborhoods.

Section 4
Affected Environment

This section describes the existing conditions of the transportation facilities within the API. The API includes transit facilities, including rail and bus, expressways, regional arterials, truck routes, intermodal connectors, secondary arterials, local streets, and bicycle and pedestrian facilities. Expressways within the API include I-57 and I-94. Halsted Street is the only north-south arterial road that crosses the Calumet-Sag Channel.

The CTA Red Line service currently ends at the 95th Street Terminal. Customers accessing the station by bus experience measurable delays resulting from poor performance of the roadway network. Difficulty reaching the station by alternative modes of transportation isolates residents and results in lengthy travel times by both auto and transit to jobs north of 95th Street, including the major employment centers in downtown Chicago. According to the American Community Survey the average travel time to work for residents within the project area is 39 minutes. The average commute time in the Chicago region[1] is 32 minutes. The existing travel time from 130th Street to the 95th Street Terminal is 33 minutes and 32 minutes from the 95th Street Terminal to Clark/Division (AECOM 2009). The limited transit services in the project area and complex transfers to reach the 95th Street Terminal make commute times to downtown Chicago area more than an hour for some residents. Many of the residents, 10 percent in 2010, do not own a car and depend on transit for mobility (American Community Survey 2010). The home-based work transit mode share was 25 percent in 2010 (American Community Survey 2010).

Substantial expressway congestion occurs within and surrounding the API. The expressway network was at or over capacity during the morning peak periods in 2010 and congestion is expected to worsen by 2030. (See Figure 4-3 and Figure 4-4.) Arterial street reliability is compromised by delays from at-grade freight railroad crossings, affecting travel times to the 95th Street Terminal. Short traffic delays are experienced due to the Metra Electric (ME) District commuter trains that operate at-grade and cross several arterials in the API.

The following sections provide additional details on the existing conditions for each transportation mode within the API.

4.1 Public Transportation

The existing public transportation systems in use within the API are CTA rail service, CTA bus routes, Pace bus routes, and commuter rail service provided by Metra. The following public transportation services are within the API:

[1] The Chicago region is the seven county area for which CMAP provides regional planning. The counties include Cook, DuPage, Lake, Kane, Kendall, McHenry, and Will counties.

- CTA Red Line
- CTA bus routes: #3, #8A, #9, #28, #29, #34, #95E, #95W, #100, #103, #106, #108, #111, #112, #115, #119, #N5
- Pace bus routes: #348, #352, #353, #359, #381
- Metra: ME District Mainline, ME District Blue Island Branch, RI District Mainline

Figure 4-1 shows the existing bus routes provided by CTA and Pace. The Metra routes and station locations are also shown on Figure 4-1. The following sections provide a more detailed description of the existing public transportation services.

NICTD trains pass through the API but NICTD has no stops within the API.

4.1.1 CTA Rail Service

CTA currently provides rail service within the northern boundary of the API. The Red Line 95th Street Terminal is the only CTA rail station within the API. The 95th Street Terminal is the southernmost CTA rail station. A total of 18 bus routes serve the terminal, many of which serve residents living within the boundaries of the API. The 2012 average weekday ridership for this station was approximately 13,390 based on the *October 2012 Monthly Ridership Report* (CTA 2012). Travel time from 95th Street Terminal to Clark/Division is 33 minutes. The frequency of service during peak periods is 5 minutes, and service is provided around the clock.

4.1.2 CTA and Pace Bus Services

CTA and Pace bus services are provided on east/west and north/south thoroughfares in the API, with 16 CTA and 6 Pace bus routes operating within the API (not including night bus routes). Of those bus routes, 18 serve the 95th Street Terminal on the Red Line. Table 4-1 provides a summary of the existing bus routes within the API. Table 4-1 also indicates which routes serve the 95th Street Terminal. Two columns of ridership data are presented: average weekday for the calendar year 2012 and maximum average monthly weekday ridership for the 12 months from May, 2012 to April, 2013. (Starting in May, 2013, the Red Line Reconstruction project changed ridership patterns into the 95th Street Terminal.) In December, 2012, CTA split the #111 into two routes: the #111 111th/King Drive and the #115 Pullman/115th, both of which serve the 95th Street Terminal. Ridership data for these two routes is only provided starting in January, 2013, the first full month following the route split. Table 4-2 provides weekday hours of service and headways (time between buses) in peak hours for CTA bus service.

Table 4-1: Existing Bus Route Information within the Area of Potential Impact

Route Number and Name	2012 Average Weekday Ridership	Maximum Monthly Average Weekday Ridership (May 2012 to April 2013)	Serves 95th Street Terminal
#3 King Drive	22,418	24,205	N
#8A South Halsted	4,042	4,416	N
#9 Ashland	31,565	33,689	Y
#28 Stony Island	5,251	8,290	N
#29 State	15,212	16,341	Y
#34 South Michigan	6,198	6,648	Y
#95E 93rd/95th	4,904	5,489	Y
#95W West 95th	4,730	5,037	Y
#100 Jeffery Manor Express	950	1,195	Y
#103 West 103rd	3,484	3,920	Y
#106 East 103rd	2,259	2,883	Y
#108 Halsted/95th	2,050	2,373	Y
#111 111th/King Drive		3,847	Y
#112 Vincennes/111th	3,008	3,441	Y
#115 Pullman/115th		3,765	Y
#119 Michigan/119th	5,928	6,388	Y
#348 Harvey - Riverdale - Blue Island	368	480	N
#352 Halsted	6,294	6,913	Y
#353 95th - Riverdale-Homewood	2,874	3,193	Y
#359 Robbins/South Kedzie Avenue	1,590	1,778	Y
#381 95th Street	3,464	4,189	Y
#395 CTA 95th – UPS	442	506	Y

Notes:
- Only months since January 2013 are shown for #111 and #115 due to route change in December 2012.
- Maximum monthly average weekday ridership is based on the 12-month period from May 2012 to April 2013. In May 2013, Red Line (Dan Ryan) reconstruction changed ridership patterns during construction.
- #9 Ashland serves the 95th Street Terminal only with the Night Owl Service.
- Night service route #N5 is not included in the above table.
- Service to the 95th Street Terminal is based on route maps current as of July 31, 2013.
- Source: May 2012 to April 2013 CTA Ridership Reports and RTAMS Pace Ridership dataset.

Table 4-2: Existing CTA Bus Service Hours and Peak Headways

Route Number and Name	Weekday Hours of Service	Headway in Peak Hours (minutes)
#3 King Drive	4:45a-11:05p	3-4
#8A South Halsted	6:00a-8:40p	5-10
#9 Ashland	24 hours	6-10
#28 Stony Island	5:40a-10:10p	6-13
#29 State	4:00a-12:30a	9-10
#34 South Michigan	24 hours	12
#95E 93rd/95th	4:50a-12:10a	10
#95W West 95th	4:30a-12:25a	18-20
#100 Jeffery Manor Express	Peak Periods Only	16-20
#103 West 103rd	4:35a-11:20p	15
#106 East 103rd	4:45a-10:30p	14-20
#108 Halsted/95th	4:10a-12:55a	11
#111 111th/King Drive	4:35a-11:05p	10-15
#112 Vincennes/111th	4:30a-10:20p	10-15
#115 Pullman/115th	4:25a-11:15p	11-14
#119 Michigan/119th	4:00a-1:00a	12

Notes:

- Service to the 95th Street Terminal is based on route maps current as of July 31, 2013.

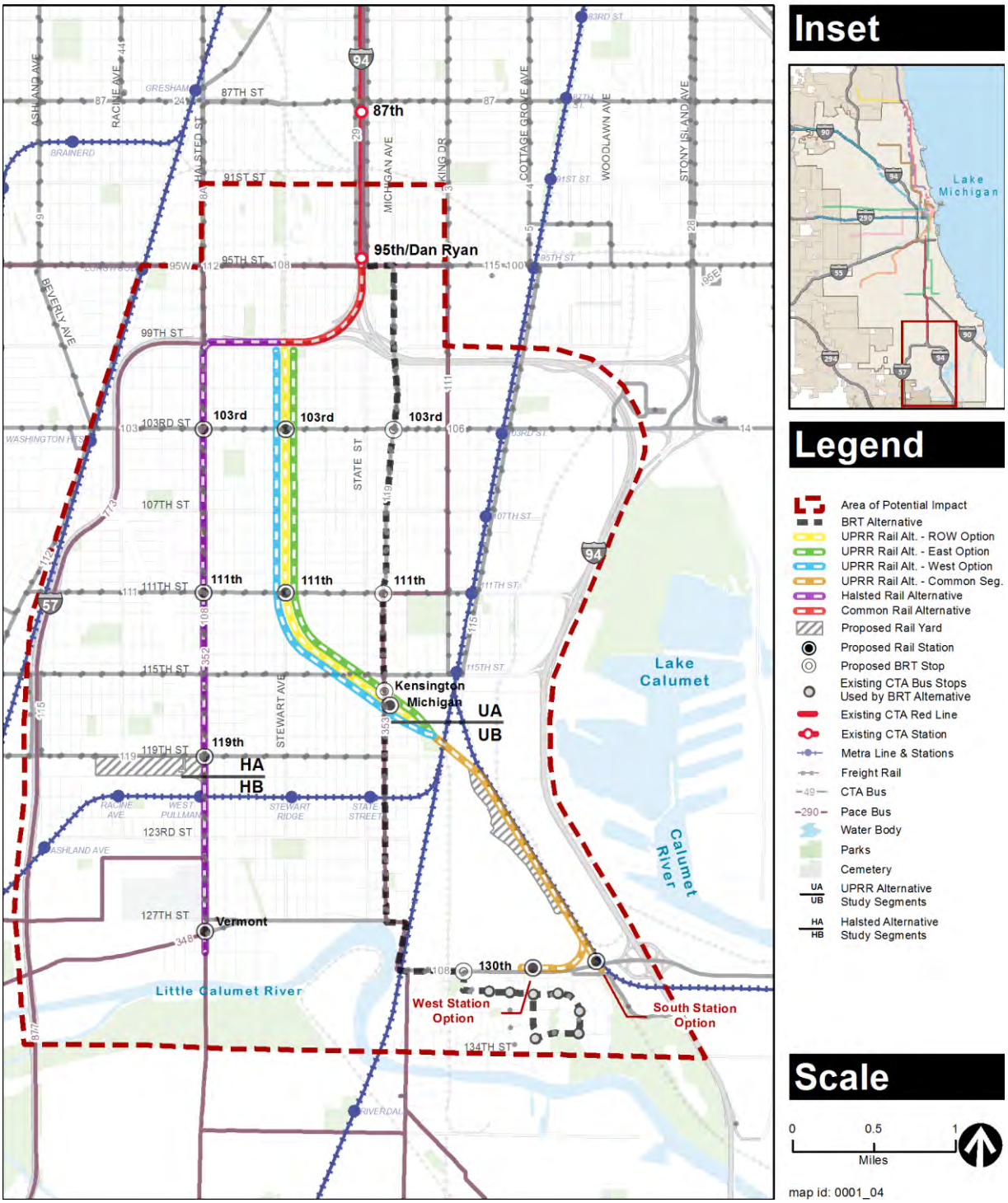

Figure 4-1: Existing Public Transportation Services

4.1.2.1 Bus Rapid Transit Alternative

The existing bus services in the vicinity of the proposed stops of the BRT Alternative are provided below.

103rd Street Stop

Bus routes #34, #103, #106, and #119 currently stop at 103rd Street and Michigan Avenue. The existing stops are at the northeast corner of the intersection for the northbound direction and at the northwest corner of the intersection for the southbound direction. Both locations do not have any existing bus shelters. The ME District station, 103rd/Rosemoor Park & Ride, is a few blocks east of Michigan Avenue.

111th Street Stop

Bus routes #34, #111, and #119 stop at 111th Street. The bus route has an existing stop at the southwest corner of the intersection of 111th Street and Michigan Avenue in the eastbound direction and the northwest corner of the intersection in the westbound direction. There are no existing bus shelters.

Kensington Avenue Stop

Bus routes #34 and #119 stop at Kensington Avenue and Michigan Avenue. The existing stops are at the southeast corner of Kensington Avenue and Michigan Avenue in the northbound direction and on the west side of Michigan Avenue in the southbound direction. There is an existing bus shelter on the west side of Michigan Avenue but none in the northbound direction.

130th Street Stop

CTA Bus route #34 operates from the 95th Street Terminal to 130th Street, looping around the Altgeld Gardens neighborhood. This bus serves Harlan High School, Roseland Hospital, Carver Military Academy, and residents of the Altgeld Gardens neighborhood. There are no bus shelters at the existing bus stop locations.

4.1.2.2 Union Pacific Railroad Rail Alternative

The existing bus services in the vicinity of the proposed station areas for all options of the UPRR Alternative are provided below. Due to the proximity of UPRR Alternative option alignments, the existing bus services would be the same for each option. Since there are no existing bus stops at the at-grade UPRR crossings, there are no bus shelters at the station locations for this alternative.

103rd Street Station

Currently, CTA bus route #103 accommodates passengers from Pulaski Road to the 95th Street Terminal. This bus route operates west of Michigan Avenue and serves Harlan High School, Julian High School, St. Xavier University, Mother McAuley High School and Brother Rice High School. This route also crosses the Metra Rock Island (RI) District line at two stations: 103rd Street - Washington Heights and 103rd Street – Beverly Hills. The RI District line is on the edge of the

API. There are existing bus stops at 103rd Street and Michigan Avenue. The northbound bus stops at the northeast corner of the intersection and the southbound bus stops at the northwest corner of the intersection. CTA route #106 provides service west of Michigan Avenue on 103rd Street from 95th Street Terminal to Stony Island Avenue. This bus route serves Olive Harvey College, Corliss High School, and Harlan High School. CTA route #106 also crosses near the 103rd/Rosemoor ME District station.

111th Street Station

The 111th/King Drive CTA route #111 provides service from 95th Street Terminal to 111th Street. This serves Gwendolyn Brooks High School. The bus route has an existing stop at the southwest corner of the intersection of 111th Street and Michigan Avenue in the eastbound direction and the northwest corner of the intersection in the westbound direction.

Michigan Avenue Station

The CTA route #111 has an existing stop at the southwest corner of the intersection of 115th Street and Michigan Avenue in the eastbound direction and the northeast corner of the intersection in the westbound direction.

CTA route #119 operates from Western Avenue to Michigan Avenue on 119th Street, then Michigan Avenue to 95th Street Terminal. This route serves Roseland Hospital and Harlan High School. The existing bus stops at 119th Street and Michigan Avenue are at the northeast corner for the northbound direction and at the northwest corner for the southbound direction. The route also has a stop near the RI District 119th Street station. Pace bus route #353 provides additional service along Michigan Avenue between 111th and 127th Streets.

130th Street Station

CTA Bus route #34 operates from the 95th Street Terminal to 130th Street, looping around the Altgeld Gardens neighborhood. This bus serves Harlan High School, Roseland Hospital, Carver Military Academy, and residents of the Altgeld Gardens neighborhood. There are no bus shelters at the existing bus stop locations.

4.1.2.3 Halsted Rail Alternative

CTA route #8A runs north/south on Halsted Street from 95th Street Terminal to 127th Street and Vermont Street. Existing bus stops along Halsted Street include 103rd Street, 111th Street, 115th Street, 119th Street and Vermont Avenue.

CTA route #108 runs north/south on Halsted Street from the 95th Street Terminal to 127th Street and then continues east on 127th Street. This route is similar to the #8A route and has bus stops at the same locations as listed above for route #8A.

103rd Street Station

Currently, CTA bus route #103 accommodates passengers from Pulaski Road to the 95th Street Terminal. This bus route operates west of Michigan Avenue and serves Harlan High School, Julian High School, St. Xavier University, Mother McAuley High School, and Brother Rice High School. 103rd Street and Halsted bus stop locations are at the southwest corner of the intersection for the eastbound direction, and the westbound direction bus stop locations are at the northwest corner of the intersection. These bus stop locations do not have bus shelters.

111th Street Station

The 111th/King Drive CTA route #111 provides service from the 95th Street Terminal to 111th Street. This route serves Gwendolyn Brooks High School. The bus route has an existing bus shelter at the southeast corner of the intersection of 111th Street and Halsted Street for the eastbound direction and the northeast corner of the intersection for the westbound direction. These bus stops have shelters.

119th Street Station

CTA route #119 operates from Western Avenue to Michigan Avenue on 119th Street, then Michigan Avenue to the 95th Street Terminal. This route serves Roseland Hospital and Harlan High School. The existing bus stops at 119th Street and Halsted Street are at the northwest corner of the intersection for the westbound direction and at the southwest corner of the intersection for the eastbound direction. The eastbound #119 stop and southbound #8A stop have shelters.

The Pace bus route #352 is a north/south bus route from the 95th Street Terminal to Pace Chicago Heights Transportation Center. The route serves St. James Hospital, Prairie State College, and the Illinois Department of Human Services.

Vermont Avenue Station

Pace bus route #348 is an east/west route that stops at Vermont Street and Halsted Street. These stops do not have shelters.

4.1.3 Commuter Rail Service

Metra provides commuter rail service within the API. The NICTD South Shore line used to provide limited commuter rail service to the Kensington/115th Street station until early 2012 when service was discontinued at this station. Metra commuter rail service in the API includes the ME District Mainline, the ME District Blue Island Branch, and the RI District Mainline. There are a total of eleven commuter rail stations within the API. Figure 4-1 shows the location of the stations along the ME District and RI District lines. Stations within the API are listed below:

ME District Mainline

- 103rd Street (Rosemoor)
- 107th Street

- 111th Street (Pullman)
- Kensington/115th Street

ME District Blue Island Branch

- State Street
- Stewart Ridge
- West Pullman
- Racine Avenue
- Ashland Avenue

RI District Mainline

- 95th Street/Longwood
- 103rd Street/Washington Heights

The Kensington/115th Street station provides connecting service to CTA route #111 and Pace route #353, with park & ride facilities. The Kensington/115th Street station is served by 19 inbound trains between 6:00 AM and 9:00 AM on a typical weekday. The other ME District mainline stations within the API are served by four to five inbound trains during the morning peak period. The five stations in the API on the Blue Island Branch of the ME District are served by six inbound trains in the morning peak period (between 6:00 and 9:00 AM). The two stations in the API on the RI District Mainline are served by three inbound trains in the morning peak period. Approximately two-thirds of the Metra stations have available parking. Table 4-3 presents a summary of the 2006 daily boardings and the 2012 parking statistics at the Metra stations within the API.

Table 4-3: Metra Boardings and Parking by Station

Line/Station	2006 Daily Boardings	Parking Available?	Spaces Available (2012)	Parking Utilization Rate (2012)
Metra Electric District Mainline				
103rd Street (Rosemoor)	70	Y	38	5%
107th Street	34	N	-	-
111th Street (Pullman)	27	N	-	-
Kensington/115th Street	1,577	Y	402	90%
Metra Electric District Blue Island Branch				
State Street	85	N	-	-
Stewart Ridge	61	N	-	-
West Pullman	24	Y	27	0%
Racine Avenue	53	Y	29	24%
Ashland Avenue	165	Y	90	52%
Metra Rock Island Mainline				
95th Street/Longwood	147	Y	104	51%
103rd Street/ Washington Heights	249*	Y	267	30%

Source: Regional Transportation Authority Mapping & Statistics
*2002 Boardings. Boardings for 2006 at 103rd Street/Washington Heights were not available.

4.2 Traffic

There are numerous Interstate, regional, and local roadways that provide multiple parallel north/south and east/west routes for automobile travel within the API, including the following:

East/West
- 95th Street
- 99th Street
- 103rd Street
- 107th Street
- 111th Street
- 115th Street
- 119th Street
- 127th Street
- 130th Street

North/South
- Interstate 57
- Halsted Street
- Wentworth Avenue
- State Street
- Michigan Avenue
- Indiana Avenue
- Martin Luther King Drive
- Cottage Grove Avenue
- Interstate 94 (Dan Ryan Expressway/Bishop Ford Freeway)

Table 3-1 identifies whether an intersection is signalized or unsignalized and indicates what agency has jurisdiction over the intersection. Figure 4-2 shows the signalized and unsignalized intersections within the project area. The existing traffic data can be found in Appendix A, Existing Conditions. Existing intersection lane geometry and traffic volumes (2012) for the intersections are on pages A-1 through A-6. The existing traffic counts are on pages A-7 through A-415. The capacity analysis for each intersection is on pages A-416 through A-571.

Table 4-4 presents a summary of the existing (2012) conditions. Under existing (2012) conditions, most of the study intersections within the API operate at LOS "D" or better in both the AM and PM peak hours. Under existing (2012) conditions, the following intersections operate at LOS "E" or "F" in either or both the AM and PM peak hours:

- 98th Place and Halsted Street - AM LOS = F; PM LOS = F
- 103rd Street and Vincennes Avenue and Beverly Avenue - PM LOS = F
- 103rd Street and Halsted Street - AM LOS = E
- 107th Street and Halsted Street - AM LOS = F
- 115th Street and Martin Luther King Drive - PM LOS = F
- 119th Street and Ashland Avenue - PM LOS = F

For a graphic depiction of existing congestion within the API, refer to Figure 4-3 and Figure 4-4 which show estimated congestion based on volume-to-capacity ratios for 2010 and 2030.

Table 4-4: Existing (2012) Intersection Level of Service

ID	Intersection	Control Type	AM Peak-Hour LOS	PM Peak-Hour LOS
1	95th Street and Wentworth Avenue	Signalized	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D
3	95th Street and State Street	Signalized	C	C
4	95th Street and Michigan Avenue	Signalized	B	B
5	98th Place and Halsted Street	Signalized	**F**	**F**
6	99th Street and Halsted Street	Signalized	C	D
7	98th Place and Wentworth Avenue	Signalized	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B
9	99th Street and State Street	Signalized	A	B
10	99th Street and Michigan Avenue	Signalized	B	B
11	99th Place and Martin Luther King Drive	Signalized	B	B
12	100th Street and Martin Luther King Drive	Signalized	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	B
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	D	**F**
15	103rd Street and Morgan Street	Signalized	B	B
16	103rd Street and Halsted Street	Signalized	**E**	D
17	103rd Street and Normal Avenue	Signalized	B	B
18	103rd Street and Wentworth Avenue	Signalized	B	B

ID	Intersection	Control Type	AM Peak-Hour LOS	PM Peak-Hour LOS
19	103rd Street and State Street	Signalized	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A
24	107th Street and Halsted Street	Signalized	**F**	C
25	107th Street and Wentworth Avenue	Signalized	B	B
26	107th Street and State Street	Signalized	A	A
27	107th Street and Michigan Avenue	Signalized	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B
29	107th Street and Cottage Grove Avenue	Signalized	B	B
30	111th Street and Marshfield Avenue	Signalized	C	C
31	111th Street and Hamlet Avenue	Signalized	C	C
32	112th Place and Marshfield Avenue	Signalized	C	C
33	112th Place and Hamlet Avenue	Signalized	D	C
34	111th Street and Halsted Street	Signalized	C	C
35	111th Street and Normal Avenue	Signalized	A	A
36	111th Street and Wentworth Avenue	Signalized	A	A
37	111th Street and State Street	Signalized	A	B
38	111th Street and Michigan Avenue	Signalized	B	B
39	111th Street and Indiana Avenue	Signalized	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A
41	111th Street and Cottage Grove Avenue	Signalized	B	C
42a	111th Street and Langley Avenue	Signalized	B	C
42b	111th Street and Ellis Avenue	Signalized	C	B
43	111th Street and Doty Avenue	Signalized	C	C
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	C	B
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	C	B
46	115th Street and Marshfield Avenue	Signalized	B	B
47	115th Street and Ashland Avenue	Signalized	B	B
48	115th Street and Racine Avenue	Signalized	B	C
49	115th Street and Halsted Street	Signalized	C	C

ID	Intersection	Control Type	AM Peak-Hour LOS	PM Peak-Hour LOS
50	115th Street and Wentworth Avenue	Signalized	B	B
51	115th Street and State Street	Signalized	B	B
52	115th Street and Michigan Avenue	Signalized	B	C
53	115th Street and Indiana Avenue	Signalized	B	B
54	115th Street and Martin Luther King Drive	Unsignalized	D	**F**
55a	115th Street and Cottage Grove Avenue	Signalized	C	C
55b	115th Street and Cottage Grove Avenue East	Signalized	D	C
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	C	B
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	B
58	119th Street and Marshfield Avenue	Signalized	D	D
59	119th Street and Ashland Avenue	Signalized	D	**F**
60	119th Street and Halsted Street	Signalized	C	C
61	119th Street and Wentworth Avenue	Signalized	B	B
62	119th Street and State Street	Signalized	B	B
63	119th Street and Michigan Avenue	Signalized	A	A
64	127th Street and Paulina Street	Signalized	C	C
65	127th Street and Marshfield Avenue	Signalized	C	B
66	127th Street and Ashland Avenue	Signalized	C	C
67	Ashland Avenue and Vermont Avenue	Signalized	C	C
68	127th Street and Halsted Street	Signalized	C	C
69	Vermont Avenue and Halsted Street	Signalized	B	B
70	127th Street and Vermont Avenue and Wallace Street	Signalized	C	D
71	127th Street and State Street	Signalized	A	B
72	127th Street and Michigan Avenue	Signalized	A	B
73	130th Street and Indiana Avenue	Signalized	B	C
74	130th Street and Ellis Avenue	Signalized	A	A

Notes:
LOS = level of service
Signalized intersection LOS reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. LOS “E” and “F” are shown in bold.

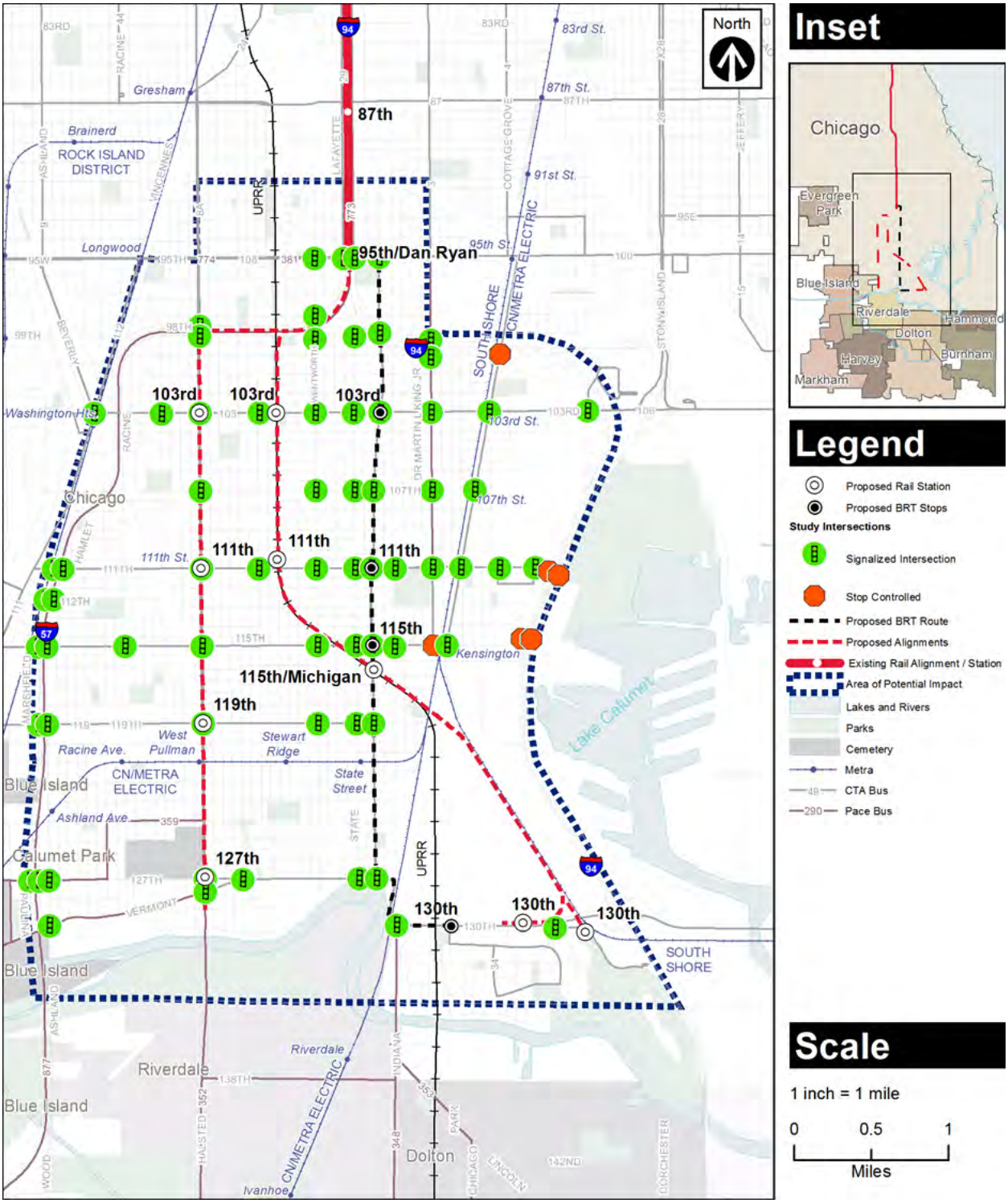

Figure 4-2: Signalized and Unsignalized Intersections within the Area of Potential Impact

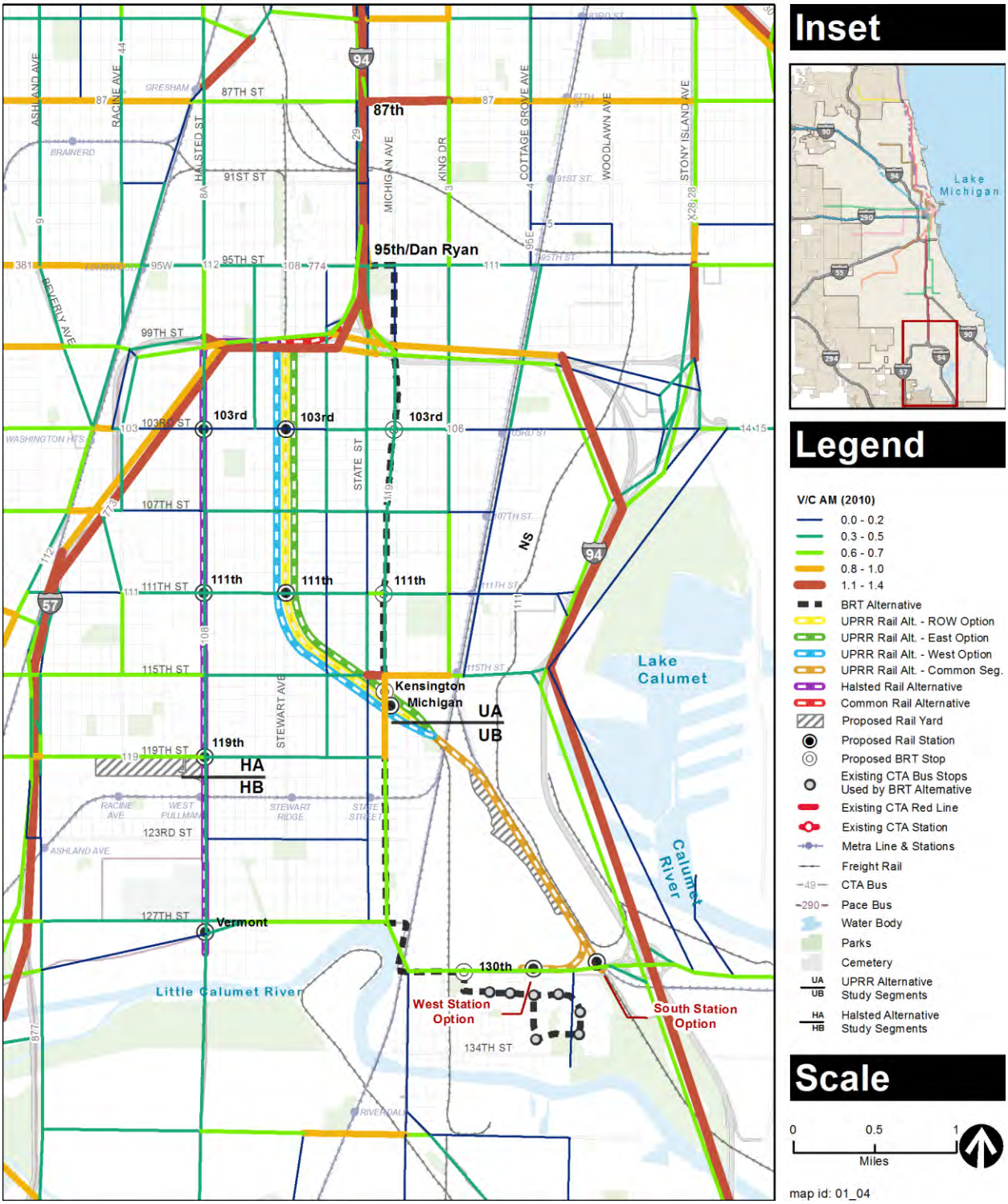

Figure 4-3: Existing (2010) Congestion (Volume/Capacity Ratio) Map

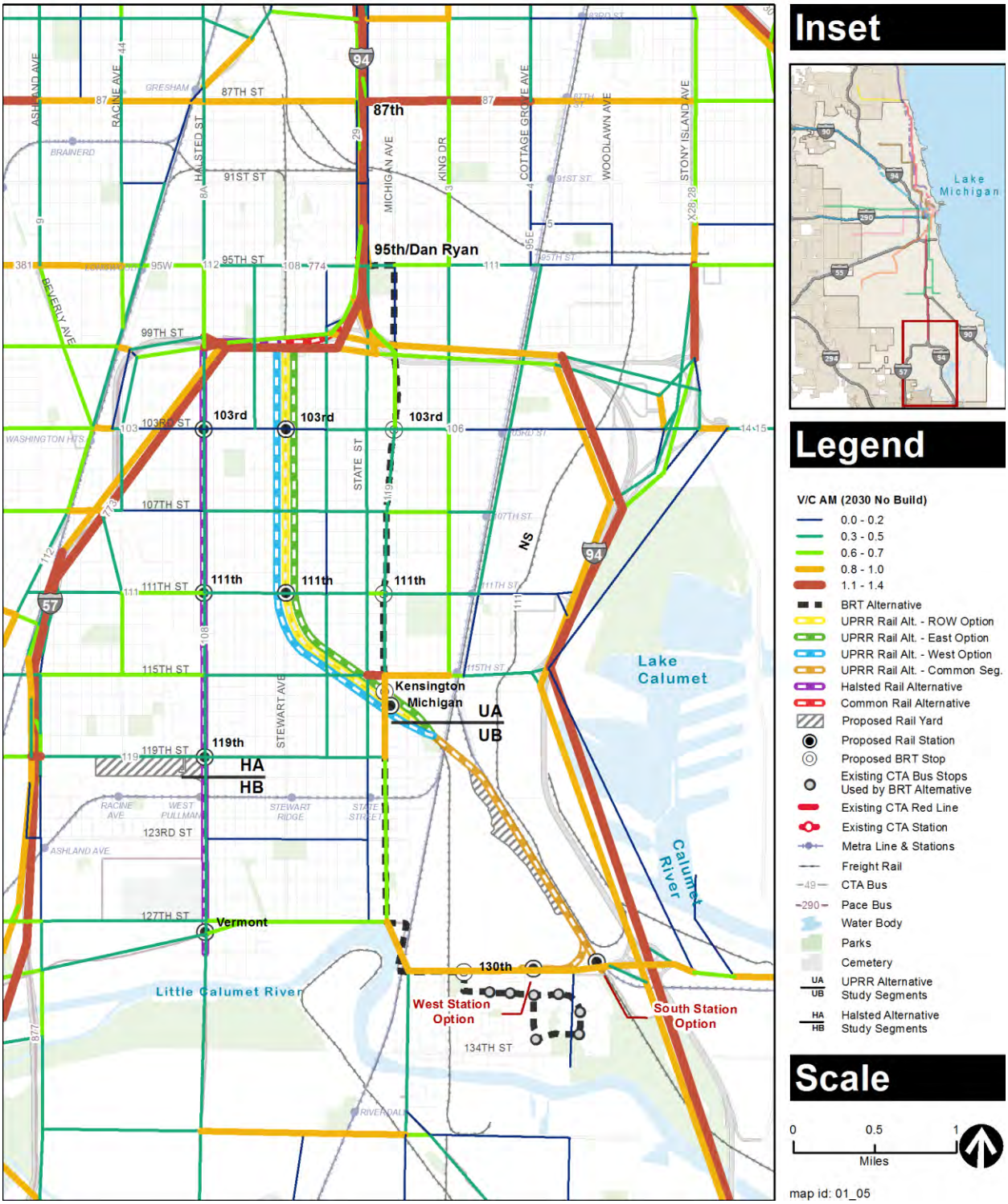

Figure 4-4: 2030 No Build Congestion (Volume/Capacity Ratio) Map

4.3 Freight Transportation

Nearly 500 freight trains per day operate in the Chicago region (Chicago Metropolis 2020). In 2007, regional rail tonnage was estimated at more than 631 million tons, with about 24,000 trailers and containers and about 16,800 carload units moving into, out of, or through the region daily (CMAP 2012). The following active freight train tracks run through the API:

- UPRR Railroad
- CN/Metra Electric Railroad
- NICTD Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR)
- Norfolk Southern (NS) Railroad
- Indiana Harbor Belt (IHB) Railroad

The UPRR tracks run north/south from the 80th Street junction past the Cal-Sag Channel/Little Calumet River and continue south outside of the API. At the 80th Street junction, near 80th Street and Wallace Avenue, the UPRR tracks converge with RI District, NS, and Belt Railway of Chicago tracks. The UPRR tracks cross over the CN/Metra tracks near 119th Street with a flyover.

The CN freight tracks are west of Cottage Grove Avenue. South of 115th Street, the CN tracks are west of the Metropolitan Water Reclamation District (MWRD) facilities. At 127th Street, the tracks run east of Indiana Avenue and continue south. These tracks carry both passenger and freight trains.

The NICTD/CSS & SBRR tracks run west of Cottage Grove Avenue from Kensington Avenue. This line converges with the CN/Metra tracks between 115th Street and Kensington Avenue. The line continues south between the MWRD facilities and then heads east once the tracks cross under the 130th Street/I-94 Interchange. These tracks carry both passenger and freight trains.

The NS freight tracks are east of the NICTD/CSS & SBRR tracks.

The IHB tracks are west of the NICTD/CSS & SBRR tracks and east of the CN/Metra Tracks.

Figure 4-5 shows the location of the freight railroads within the API.

Table 4-5 lists the existing volumes of passenger and freight trains that pass through the API.

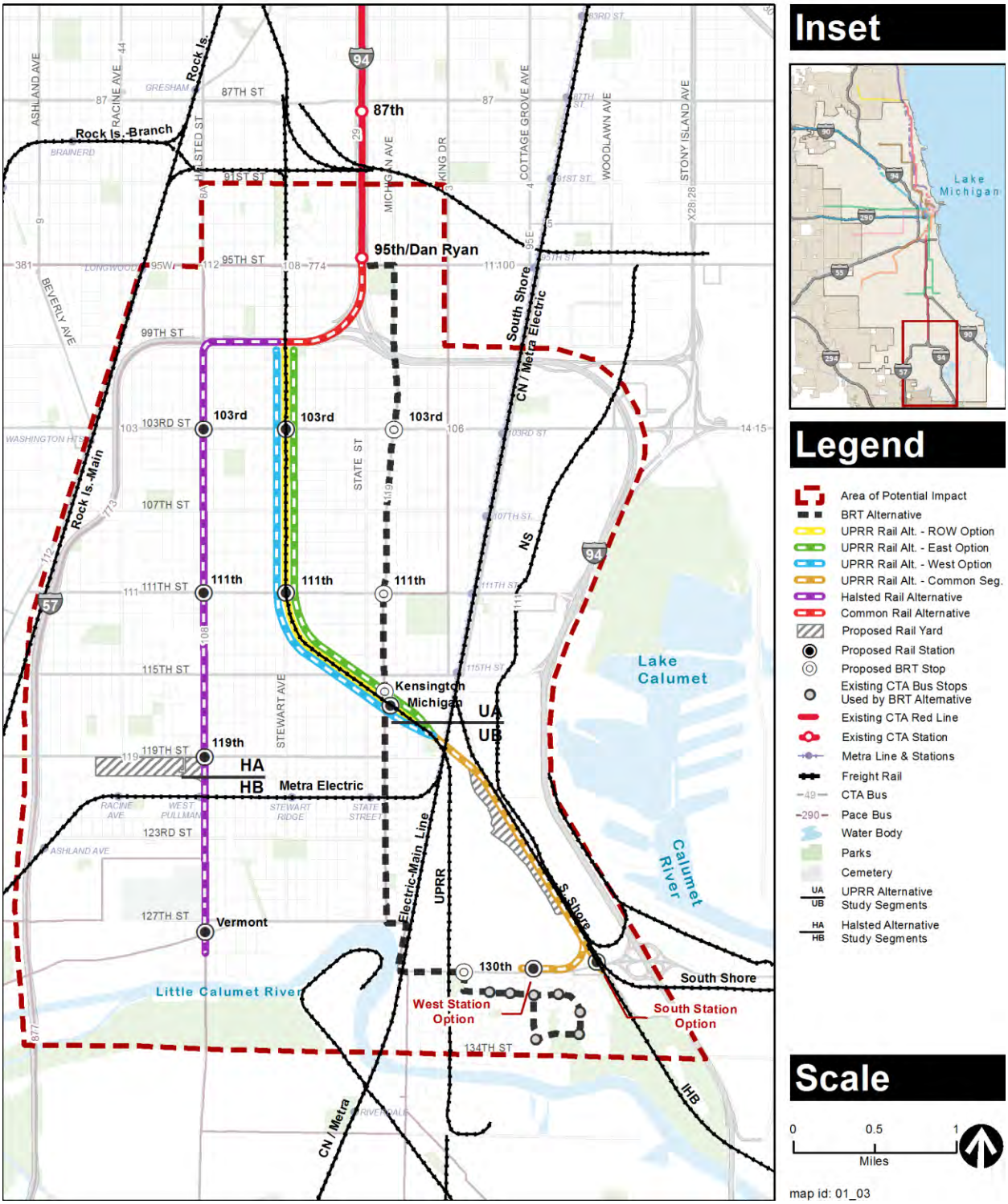

Figure 4-5: Freight Railroads within the Area of Potential Impact

Table 4-5: Existing Train Volumes (2009)

Location	Peak Day	Passenger	Freight	Total
BRC/NS/UP, 75th St. Wye to 80th St. Jct.	Friday	2	62	64
BRC/UP, 80th St. Jct. to 86th Street	Friday	2	41	43
UP, South of 86th Street	Friday	2	24*	26
NS, 80th St Jct. to State St.	Saturday	0	16	16
BRC, 86th St. to State St.	Saturday	0	17	17
BRC/NS, East of State St.	Saturday	0	33	33

Source: CREATE 75th Street CIP Train Model volumes from the Chicago Transportation Coordination Office
Notes: NS = Norfolk Southern; UP = Union Pacific; BRC = Belt Railway Company; Jct. = junction
*On May 15, 2009, UPRR directly reported to CTA that freight volume was 27 trains in the peak day rather than the 24 trains in the peak day used in the CREATE model.

4.4 Bicycle Facilities

The City of Chicago is known as a bicycle-friendly community. Chicago's vision is to make bicycling an integral part of daily life (City of Chicago 2006). Chicago has 117 miles of on-street bike lanes and more than 30 miles of marked lanes on the City streets (City of Chicago 2012c). The *Chicago Streets for Cycling Plan 2020* network consists of 645 miles of on-street bike routes. These routes include Neighborhood Bike Routes, Crosstown Bike Routes and Spoke Routes. The *Chicago Streets for Cycling Plan 2020* will guide the development of a citywide network of innovative bikeways. The existing bike facilities within ½ mile of the alternatives were identified and are shown on Figure 4-6. Bike facilities recommended in the *Chicago Bike 2015 Plan* and pertinent recommended bike routes from the *Chicago Streets for Cycling Plan 2020* are also shown on the figure.

Only one off-street bike trail passes through the project area. Major Taylor Trail is an off-street bike trail that runs through the project area and is intersected by Halsted Street north of the intersection of 119th Street and Halsted Street. There are no other marked bike lanes within the roadway along or crossing the alternative alignments.

The 95th Street Terminal has indoor bicycle parking facilities.

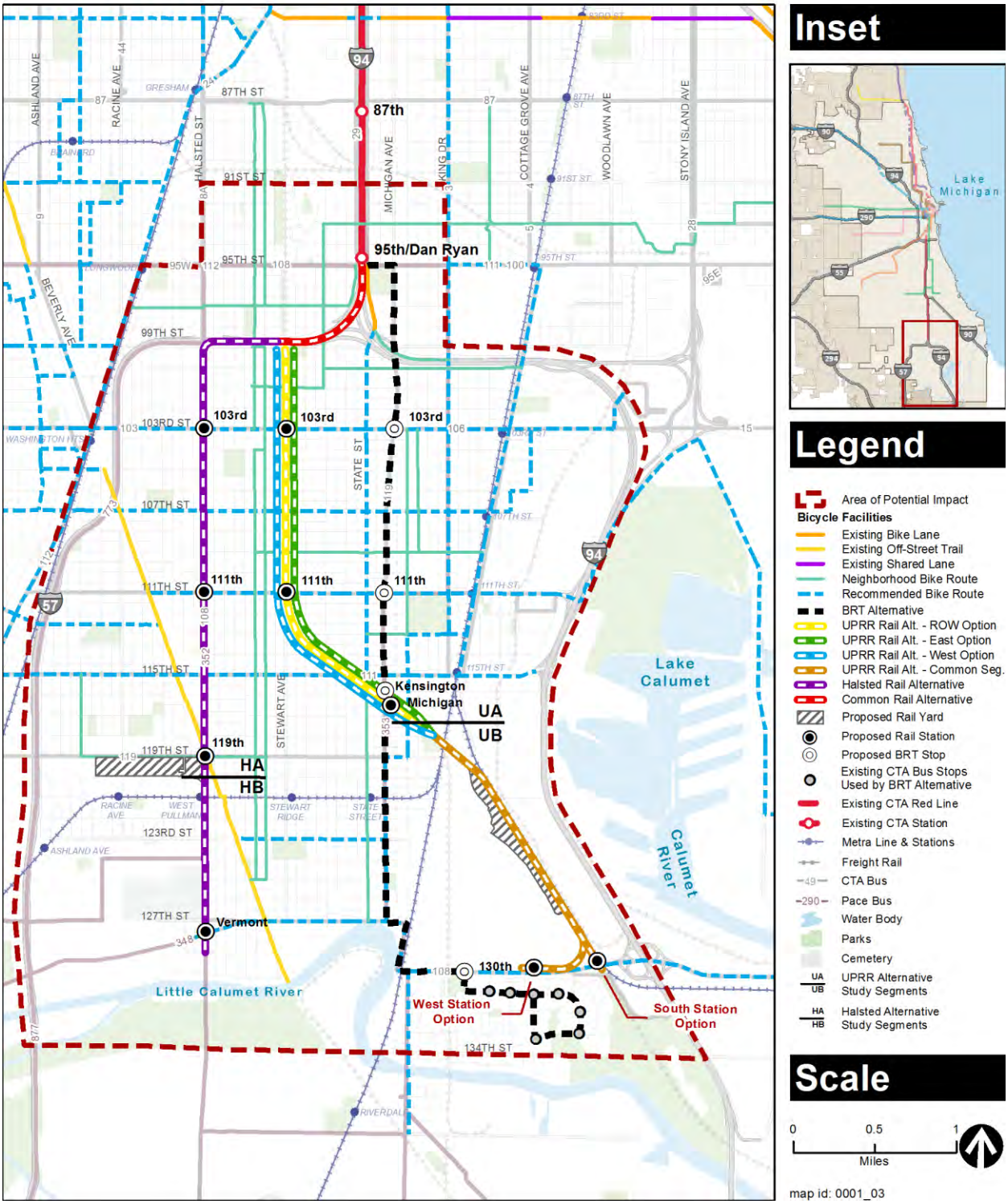

Figure 4-6: Existing and Recommended Bicycle Facilities within the Area of Potential Impact

4.5 Pedestrians

The API for the RLE Project is an urban area with residential and commercial land uses. The sidewalk system within the API is extensive, with sidewalks on both sides of most of the arterial and collector roads. Sidewalks were reviewed qualitatively within the API. The width of sidewalks varies in the API with arterial streets having a standard 6-foot-wide sidewalk. Collector streets have sidewalks that are approximately 12 to 17 feet wide. These widths are average widths; sidewalk widths vary along most streets within the API.

Along the BRT Alternative, sidewalks are present at the 103rd Street, 111th Street, and Kensington Avenue stops.

- At Michigan Avenue and 103rd Street, sidewalks are approximately 8 feet wide along Michigan Avenue and vary from 6 to 8 feet wide along 103rd Street. The sidewalks are directly in back of the curb. Although ramps are present, all ramps are based on older standards which do not comply with current ADA practice. Crossing the street is controlled by pedestrian signals.

- At Michigan Avenue and 111th Street, sidewalks on all four legs vary from approximately 12 to 16 feet in width, all directly in back of the curb. All ramps in the four quadrants appear to be ADA-compliant.[2] Crossing the street is controlled by pedestrian signals.

- At Michigan Avenue and Kensington Avenue, the sidewalks along Michigan Avenue vary between approximately 10 and 12 feet in width and are directly behind the curb. Along Kensington Avenue, the width varies from approximately 6 to 8 feet and, away from the intersection, are separated from the street by a grassy boulevard. Ramps are not ADA-compliant at this intersection. This intersection is uncontrolled (with a stop sign on Kensington Avenue).

- At the proposed 130th Street stop location, no sidewalks are present along 130th Street. Six-foot wide sidewalks run along both sides of Eberhart Avenue separated from the street by a grassy boulevard. The ramps at Eberhart Avenue are not ADA-compliant. This intersection is uncontrolled (with a stop sign on Eberhart Avenue).

Near the proposed stations for the UPRR Rail Alternative options, sidewalks are present along 103rd Street, 111th Street, and Michigan Avenue.

- Where 103rd Street crosses the existing UPRR tracks, sidewalks run on both sides of 103rd Street and are approximately 6 feet wide. Along Eggleston Avenue, immediately to the west of the tracks and north of 103rd Street, a single sidewalk runs along the west side of

[2] All assessment of ADA compliance in this section is based on visual inspection only, examining the configuration of the ramp and presence of tactile warning. Field survey and measurement for precise slopes and other compliance features was not conducted.

the road. The ramp at the corner of 103rd Street and Eggleston Avenue (in the northwest quadrant) is ADA-compliant.

- At 111th Street, sidewalks are on both sides of the road and are approximately 6 feet wide. While ramps are present at the nearby intersections, the ramps do not meet all current ADA standards.

- At Michigan Avenue, sidewalks are on both sides of the road and are approximately 12 feet wide. Ramps are present at the nearby corners, but the ramps do not meet current ADA standards.

- There are no sidewalks along 130th Street at the locations of the 130th Street South and West Station Options.

For the Halsted Rail Alternative, sidewalks are present along 103rd, 111th, and 119th Streets near their intersections with Halsted Street. Sidewalks are present along both sides of Halsted Street except on the west side between 124th and 127th Streets.

- In the vicinity of 103rd Street, sidewalks along Halsted Street are generally 14 to 16 feet wide. Sidewalks along 103rd Street are approximately 9 to 11 feet wide. ADA-compliant ramps are present on all but the northeast corner of the 103rd Street and Halsted Street intersection.

- At 111th Street, sidewalks along Halsted Street are 13 to 17 feet wide. Sidewalks on 111th Street are approximately 11 to 13 feet wide. Only the ramps on the east side of Halsted Street are ADA-compliant.

- At 119th Street, sidewalks along Halsted Street are approximately 16 feet wide at the intersection, but narrow to 6 feet wide north of the intersection. Sidewalks along 119th Street vary from 12 to 19 feet wide. The sidewalk on the south side of 119th Street ends at the alley west of Halsted Street. Only the ramps on the west side of Halsted Street are ADA-compliant.

- Vermont Avenue has sidewalks (6 to 10 feet wide) at the immediate vicinity of its intersection with Halsted Street but the sidewalk does not continue after the alley on the northeast leg of the intersection. Sidewalks on Halsted Street vary from 13 to 17 feet wide. No ramps at this intersection meet the newest ADA standards.

In order to remain compliant with current ADA codes, the City of Chicago is continually updating intersection curb ramps to make the city accessible to everyone. There are curb ramps to allow for wheelchair accessibility at most of the intersections within the API. Most of these curb ramps are not compliant with current ADA standards, which require detectable warning tiles for the visually impaired.

The Chicago Department of Transportation is implementing its *Chicago Pedestrian Plan*. Some of the goals of the plan are to increase pedestrian safety, identify and eliminate gaps and barriers in the pedestrian network, increase the amount and quality of pedestrian space, and increase the number of pedestrian trips for enjoyment, school, work, and daily errands.

4.6 Parking

The existing parking facilities were identified by field observation, aerial imagery, or through published information regarding parking facilities from the City of Chicago. Most of the streets in the API have on-street parking. Table 4-6 is a summary of the on-street parking along some of the major roadways along the alternative alignments. On-street parking is allowed (as posted) on most of the local streets not listed in this table. There is currently no park & ride facility at the existing 95th Street Terminal.

Table 4-6: Existing On-Street Parking

Street	Roadway Functional Class	On-Street Parking
95th Street	other principal arterial	No
99th Street	local road or street	Yes
103rd Street	minor arterial	Yes
107th Street	major collector	No
111th Street	minor arterial	Yes
115th Street	major collector	Yes
Halsted Street	minor arterial	Yes
Wentworth Avenue	major collector	Yes
State Street	minor arterial	Yes
Michigan Avenue	major collector	Yes
Indiana Avenue	minor arterial	No
130th Street	other principal arterial	No

A permit or fee is not required to park on the streets within the API. There are no existing off-street surface parking lots or parking garages that are used for public parking within the API. Many of the commercial and retail buildings within the API have plenty of parking available either through on-street or parking lots associated with the buildings.

Section 5
Impacts and Mitigations

This section describes the transportation impacts for each of the four alternatives under consideration for the RLE Project. The impacts are discussed in three categories for each alternative: permanent impacts, construction impacts, and cumulative impacts. Permanent impacts occur after the project is fully constructed and operational. Construction impacts refer to impacts that occur during the construction phase of the project and are temporary in nature. Cumulative impacts result from the incremental impact of the alternative combined with other past, present and reasonably foreseeable future actions. Where applicable, potential mitigation measures are also presented.

5.1 No Build Alternative

5.1.1 Permanent Impacts and Mitigations - No Build Alternative

5.1.1.1 Public Transportation

The No Build Alternative would not have any impacts on existing bus or rail transit conditions within the API. The existing services would continue to operate under the same conditions as they do today.

5.1.1.2 Traffic

Under No Build (2026) conditions, 88 percent of the study intersections within the API would operate at LOS “D” or better in both the AM and PM peak hours, as shown in Table 5-1. Appendix B contains the No Build traffic data used in the traffic impact analysis. Under No Build (2026) conditions, there would be nine intersections that would operate at LOS “E” or “F” in either or both the AM and PM peak hours. The nine intersections that would operate at LOS “E” or “F” are shown in bold in Table 5-1.

Under No Build (2030) conditions, 87 percent of the study intersections within the API would operate at LOS “D” or better in both the AM and PM peak hours, as shown in Table 5-1. See Appendix B for the No Build traffic data. Under No Build (2030) conditions, there would be ten intersections that would operate at LOS “E” or “F” in either or both the AM and PM peak hours. The ten intersections are shown in bold in Table 5-1.

Table 5-1: No Build (2026 and 2030) Intersection Level of Service

ID	Intersection	Control Type	2026 No Build Alternative		2030 No Build Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
1	95th Street and Wentworth Avenue	Signalized	B	B	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	D	C
4	95th Street and Michigan Avenue	Signalized	B	B	B	B
5	98th Place and Halsted Street	Signalized	**F**	**F**	**F**	**F**
6	99th Street and Halsted Street	Signalized	D	D	D	D
7	98th Place and Wentworth Avenue	Signalized	B	B	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B	B	B
9	99th Street and State Street	Signalized	A	B	A	B
10	99th Street and Michigan Avenue	Signalized	C	B	C	B
11	99th Place and Martin Luther King Drive	Signalized	B	B	B	B
12	100th Street and Martin Luther King Drive	Signalized	B	A	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	B	A	C
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	**E**	**F**	**E**	**F**
15	103rd Street and Morgan Street	Signalized	B	B	B	B
16	103rd Street and Halsted Street	Signalized	**F**	D	**F**	D
17	103rd Street and Normal Avenue	Signalized	B	B	B	B
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
19	103rd Street and State Street	Signalized	B	B	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A	A	A
24	107th Street and Halsted Street	Signalized	**F**	C	**F**	C
25	107th Street and Wentworth Avenue	Signalized	B	B	B	B
26	107th Street and State Street	Signalized	A	A	A	A
27	107th Street and Michigan Avenue	Signalized	B	B	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B	B	B
29	107th Street and Cottage Grove Avenue	Signalized	B	B	B	B

ID	Intersection	Control Type	2026 No Build Alternative		2030 No Build Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
30	111th Street and Marshfield Avenue	Signalized	C	C	C	C
31	111th Street and Hamlet Avenue	Signalized	D	D	D	D
32	112th Place and Marshfield Avenue	Signalized	B	C	B	C
33	112th Place and Hamlet Avenue	Signalized	**E**	C	**E**	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	A	B	A
36	111th Street and Wentworth Avenue	Signalized	A	A	B	A
37	111th Street and State Street	Signalized	A	B	A	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
39	111th Street and Indiana Avenue	Signalized	B	B	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A	B	A
41	111th Street and Cottage Grove Avenue	Signalized	C	D	C	D
42a	111th Street and Langley Avenue	Signalized	B	C	B	C
42b	111th Street and Ellis Avenue	Signalized	C	C	C	C
43	111th Street and Doty Avenue	Signalized	C	C	C	C
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	D	C	**E**	C
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	**E**	B	**E**	B
46	115th Street and Marshfield Avenue	Signalized	B	B	B	B
47	115th Street and Ashland Avenue	Signalized	B	B	B	B
48	115th Street and Racine Avenue	Signalized	B	C	B	C
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	B	D	B	D
53	115th Street and Indiana Avenue	Signalized	B	B	B	B
54	115th Street and Martin Luther King Drive	Unsignalized	D	**F**	D	**F**
55a	115th Street and Cottage Grove Avenue	Signalized	D	C	D	C
55b	115th Street and Cottage Grove Avenue East	Signalized	**E**	C	**E**	C
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	D	C	D	C

ID	Intersection	Control Type	2026 No Build Alternative		2030 No Build Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	B	D	C
58	119th Street and Marshfield Avenue	Signalized	D	D	D	D
59	119th Street and Ashland Avenue	Signalized	D	**F**	D	**F**
60	119th Street and Halsted Street	Signalized	C	C	C	C
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	B	B	B	B
63	119th Street and Michigan Avenue	Signalized	A	A	A	A
64	127th Street and Paulina Street	Signalized	C	C	C	C
65	127th Street and Marshfield Avenue	Signalized	C	C	C	C
66	127th Street and Ashland Avenue	Signalized	C	C	C	C
67	Ashland Avenue and Vermont Avenue	Signalized	C	C	C	C
68	127th Street and Halsted Street	Signalized	C	C	C	C
69	Vermont Avenue and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Avenue and Wallace Street	Signalized	C	D	D	D
71	127th Street and State Street	Signalized	B	B	B	B
72	127th Street and Michigan Avenue	Signalized	A	B	A	B
73	130th Street and Indiana Avenue	Signalized	C	C	C	C
74	130th Street and Ellis Avenue	Signalized	A	A	A	A

Notes:
LOS = level of service
Signalized intersection LOS reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. LOS "E" and "F" are shown in bold.

5.1.1.3 Freight Transportation

Rail tonnage moving to, from, and through the Chicago region is expected to increase by more than 60 percent by 2040 (CMAP 2010b). Tonnage carried by truck in the Chicago region may grow by more than 70 percent (CMAP 2010b). Table 5-2 shows the forecasted freight rail volumes for 2029 developed by the Chicago Transportation Coordination Office.[3] These forecasts are not available beyond the year 2029. The No Build Alternative would not have any impacts on the freight transportation within the API.

[3] The Chicago Transportation Coordination Office was established in 1999 to develop managerial solutions wherever possible to railroad operating problems in Chicago, to work with public agencies on the public impacts of rail service, and to assist in continuing the capital planning process. The coordination efforts by the Chicago Transportation Coordination Office were a forerunner to the coordination established in the CREATE program in 2003. Still playing a

Table 5-2: Forecasted Train Volumes (2029 No Build)

Location	Peak Day	Passenger	Freight	Total
BRC/NS/UP, 75th St. Wye to 80th St. Jct.	Thursday	4	77	81
BRC/UP, 80th St. Jct. to 86th Street	Friday	4	51	55
UP, South of 86th Street	Friday	4	23	27
NS, 80th St Jct. to State St.	Saturday	0	22	22
BRC, 86th St. to State St.	Saturday	0	28	28
BRC/NS, East of State St.	Saturday	0	50	50

Source: CREATE 75th Street CIP Train Model volumes from the Chicago Transportation Coordination Office
Notes: NS = Norfolk Southern; UP = Union Pacific; BRC = Belt Railway Company

5.1.1.4 Bicycle Facilities

The No Build Alternative would not have any impacts on existing bike routes or recommended bike routes within the API. Recommended bicycle routes from the *Streets for Cycling Plan 2020* are shown on Figure 4-6.

5.1.1.5 Pedestrians

The No Build Alternative would not upgrade any intersections that currently do not meet the ADA accessibility code except as upgraded as part of the Chicago ADA Sidewalk Ramp Program. The conditions under the No Build Alternative would be the same as the existing conditions.

5.1.1.6 Parking

Under the No Build Alternative parking facilities are expected to remain the same as under existing conditions.

5.1.2 Construction Impacts and Mitigations - No Build Alternative

The only construction activities associated with this alternative would be the already funded and committed roadway and public transportation projects in the API, plus typical repairs required to keep roadways, intersections, and transit service operational.

5.1.3 Cumulative Impacts and Mitigations - No Build Alternative

There would be no cumulative impacts associated with the No Build Alternative. However, the No-Build Alternative would not realize the economic benefits from transportation improvements as the other build alternatives.

vital role today, the Chicago Transportation Coordination Office focuses on process improvements and enhanced communication to help trains flow better through the region (while CREATE focuses on capital projects).

5.2 Bus Rapid Transit Alternative

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.1.1 Public Transportation

The BRT Alternative would provide an enhanced bus route with transit signal priority along the existing #34 South Michigan bus route. Figure 5-1 shows the proposed alignment of the BRT Alternative. The anticipated overall runtime from 130th Street to the 95th Street Terminal and the wait time at 130th Street would decrease. The headway for the route #34 would be changed to 12 minutes due to the addition of the enhanced bus route. The BRT Alternative would have 4-minute headways from 6:00 AM to 8:00 PM and 15-minute headways at all other times of service. The BRT Alternative would add 250 bus runs along the BRT Alternative alignment relative to existing conditions. Table 5-3 summarizes the additional bus service for the BRT Alternative. No other changes to existing bus routes would be made with the BRT Alternative.

Table 5-3: Bus Services for the Bus Rapid Transit Alternative

	Headway (minutes)		Bus Runs		
	6 AM-8 PM	Rest of Day	6 AM-8 PM	Rest of Day	Total
Weekday	4	15	210	40	250
Weekend	15	15	56	40	96

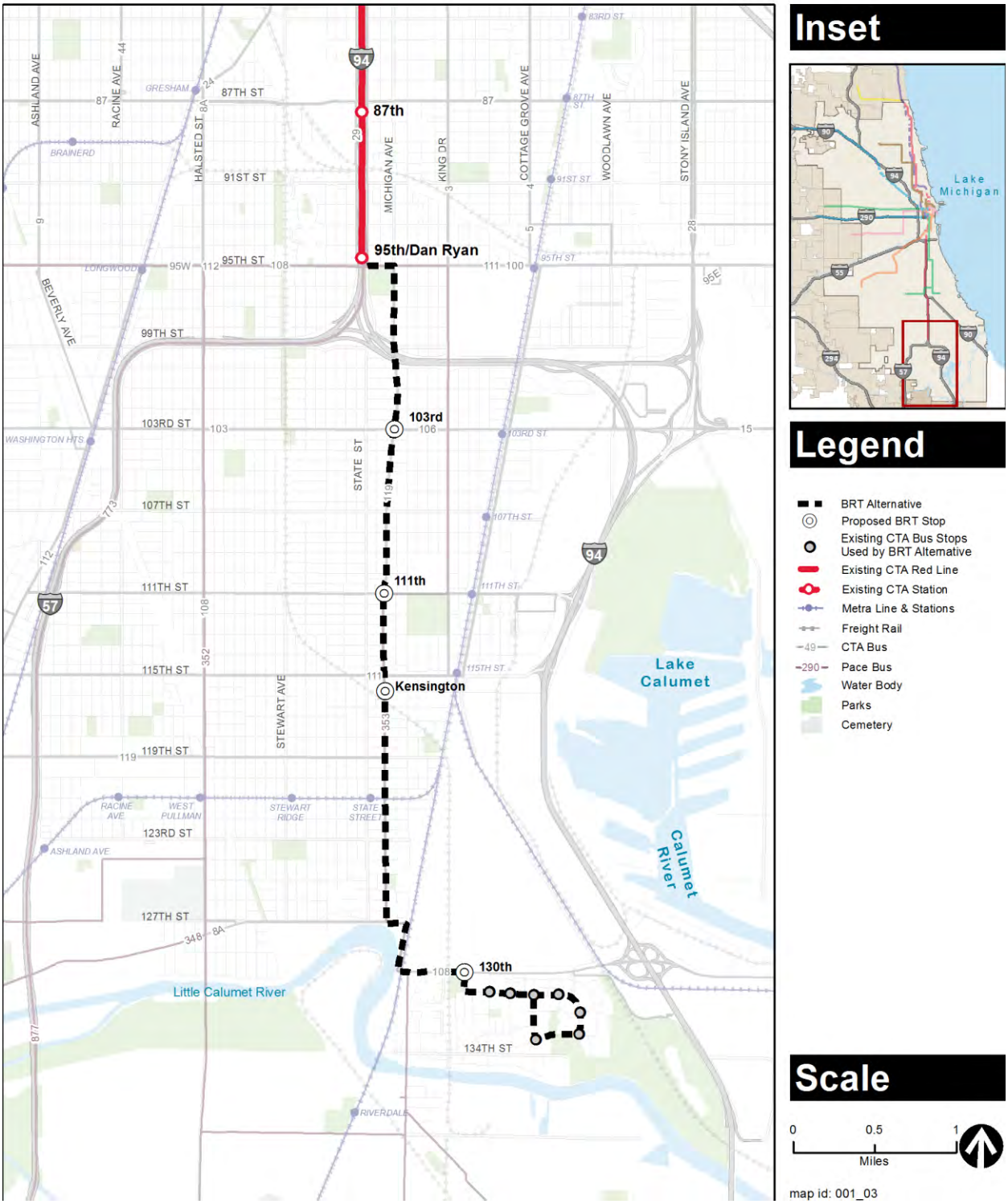

Figure 5-1: Bus Rapid Transit Alternative

The BRT Alternative would have positive impacts on public transportation service. The transportation model indicates 374 new daily riders for the BRT Alternative and total project weekday boardings of 3,190 (AECOM 2009). The additional services would reduce travel times for passengers compared to existing conditions. (Average existing travel time for existing #34 between 7 AM and 9 AM from 131st Street/Eberhart is 28 minutes. Expected travel time for the BRT Alternative from 130th Street to the 95th Street Terminal is 23 minutes. Average wait time for the existing #34 between 7 AM and 9 AM is 5 minutes, or half the average headway of 10 minutes. The expected average wait time for the BRT Alternative is two minutes, or half the average headway of four minutes during the entire 6 AM to 8 PM time period.) The transportation model indicates an average "user benefit" of 9 minutes per boarding for the BRT Alternative (AECOM 2009). In addition to benefits for passengers making use of the BRT Alternative, passengers using the local #34 would likely experience benefits. With fewer boardings on the local #34, dwell time would be decreased, marginally improving end-to-end run times. Also, with a shift in passengers to the BRT Alternative, peak-hour local buses would be less crowded. (In peak hours, the existing #34 buses run at or near capacity.)

5.2.1.2 Traffic

Under BRT Alternative (2026) conditions, most of the study intersections within the API would operate at an acceptable LOS (LOS "D" or better) in both the AM and PM peak hours, as shown in Table 5-4. The traffic data and Synchro results are in Appendix C for the BRT Alternative. All changes in traffic volumes are related to access to parking at BRT stations. Under BRT Alternative (2026) conditions, there would be 15 intersections that would operate at an unacceptable LOS (LOS "E" or "F") in either or both the AM and PM peak hours. Of those 15 intersections, 7 would operate at conditions worse than the No Build conditions. The intersections that would operate at worse than the No Build conditions are shown in bold in Table 5-4 and are listed below:

- 115th Street and Michigan Avenue (ID #52) - **AM LOS = E; PM LOS = F**
- 115th Street and Cottage Grove Avenue (ID #55a) - **AM LOS = E; PM LOS = F**
- 115th Street and Cottage Grove Avenue East (ID # 55b) - **AM LOS = F**
- 119th Street and State Street (ID #62) - **PM LOS = E**
- 127th Street and Halsted Street (ID #68) - **PM LOS = E**
- 127th Street and Vermont Avenue and Wallace Street (ID #70) - **AM LOS = F; PM LOS = F**
- 130th Street and Indiana Avenue (ID #73)– **AM LOS = E; PM LOS = F**

Under BRT Alternative (2030) conditions, most of the study intersections within the API would operate at LOS "D" or better in both the AM and PM peak hours, as shown in Table 5-4. Under BRT Alternative (2030) conditions, there would be 17 intersections that would operate at LOS "E" or "F" in either or both the AM and PM peak hours. Of the 17 intersections, 10 would operate at

worse than the No Build conditions. The 10 intersections that would operate at worse than the No Build conditions are the following, and are shown in bold text in Table 5-4:

- 103rd Street and Halsted Street (ID #16) - AM LOS = F; **PM LOS = E**
- 111th Street and Cottage Grove Avenue (ID #41) - **PM LOS = E**
- 115th Street and Michigan Avenue (ID #52) - **AM LOS = E; PM LOS = F**
- 115th Street and Martin Luther King Drive (ID #54) - **AM LOS = E**; PM LOS = F
- 115th Street and Cottage Grove Avenue (ID #55a) - **AM LOS = E; PM LOS = F**
- 115th Street and Cottage Grove Avenue East (ID #55b) - **AM LOS = F**
- 119th Street and State Street (ID #62) - **PM LOS = E**
- 127th Street and Halsted Street (ID #68) - **PM LOS = E**
- 127th Street and Vermont Avenue and Wallace Street (ID #70) - **AM LOS = F; PM LOS = F**
- 130th Street and Indiana Avenue (ID # 73) - **AM LOS = E; PM LOS = F**

Table 5-4: Bus Rapid Transit Alternative (2026 and 2030) Intersection Level of Service

ID	Intersection	Control Type	2026 BRT Alternative		2030 BRT Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
1	95th Street and Wentworth Avenue	Signalized	B	B	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	D	C
4	95th Street and Michigan Avenue	Signalized	B	B	B	B
5	98th Place and Halsted Street	Signalized	**F**	**F**	**F**	**F**
6	99th Street and Halsted Street	Signalized	D	C	D	C
7	98th Place and Wentworth Avenue	Signalized	B	B	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B	B	B
9	99th Street and State Street	Signalized	A	B	A	B
10	99th Street and Michigan Avenue	Signalized	C	B	C	B
11	99th Place and Martin Luther King Drive	Signalized	B	B	B	B
12	100th Street and Martin Luther King Drive	Signalized	B	A	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	C	A	C

ID	Intersection	Control Type	2026 BRT Alternative		2030 BRT Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	**E**	**F**	**E**	**F**
15	103rd Street and Morgan Street	Signalized	B	B	B	B
16	103rd Street and Halsted Street	Signalized	**F**	D	**F**	**E**
17	103rd Street and Normal Avenue	Signalized	B	B	B	B
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
19	103rd Street and State Street	Signalized	B	B	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A	A	A
24	107th Street and Halsted Street	Signalized	**F**	C	**F**	C
25	107th Street and Wentworth Avenue	Signalized	B	B	B	B
26	107th Street and State Street	Signalized	A	B	A	B
27	107th Street and Michigan Avenue	Signalized	B	B	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B	B	B
29	107th Street and Cottage Grove Avenue	Signalized	B	B	B	B
30	111th Street and Marshfield Avenue	Signalized	C	C	C	C
31	111th Street and Hamlet Avenue	Signalized	D	D	D	D
32	112th Place and Marshfield Avenue	Signalized	B	C	C	C
33	112th Place and Hamlet Avenue	Signalized	**E**	C	**E**	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	B	B	B
36	111th Street and Wentworth Avenue	Signalized	B	A	B	A
37	111th Street and State Street	Signalized	B	B	B	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
39	111th Street and Indiana Avenue	Signalized	B	B	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A	B	A
41	111th Street and Cottage Grove Avenue	Signalized	C	D	C	**E**
42a	111th Street and Langley Avenue	Signalized	B	C	B	C
42b	111th Street and Ellis Avenue	Signalized	C	C	D	D
43	111th Street and Doty Avenue	Signalized	C	C	C	C
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	D	C	**E**	C

ID	Intersection	Control Type	2026 BRT Alternative		2030 BRT Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	**E**	C	**E**	C
46	115th Street and Marshfield Avenue	Signalized	B	B	B	B
47	115th Street and Ashland Avenue	Signalized	B	B	B	B
48	115th Street and Racine Avenue	Signalized	B	D	B	D
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	**E**	**F**	**E**	**F**
53	115th Street and Indiana Avenue	Signalized	B	B	B	C
54	115th Street and Martin Luther King Drive	Unsignalized	D	**F**	**E**	**F**
55a	115th Street and Cottage Grove Avenue	Signalized	**E**	**F**	**E**	**F**
55b	115th Street and Cottage Grove Avenue East	Signalized	**F**	D	**F**	D
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	D	C	D	C
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	C	D	C
58	119th Street and Marshfield Avenue	Signalized	D	D	D	D
59	119th Street and Ashland Avenue	Signalized	D	**F**	D	**F**
60	119th Street and Halsted Street	Signalized	C	C	C	C
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	C	**E**	C	**E**
63	119th Street and Michigan Avenue	Signalized	B	B	B	B
64	127th Street and Paulina Street	Signalized	C	C	C	C
65	127th Street and Marshfield Avenue	Signalized	C	C	C	C
66	127th Street and Ashland Avenue	Signalized	C	C	C	C
67	Ashland Avenue and Vermont Avenue	Signalized	C	C	C	C
68	127th Street and Halsted Street	Signalized	D	**E**	D	**E**
69	Vermont Avenue and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Avenue and Wallace Street	Signalized	**F**	**F**	**F**	**F**
71	127th Street and State Street	Signalized	B	D	B	D

ID	Intersection	Control Type	2026 BRT Alternative		2030 BRT Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
72	127th Street and Michigan Avenue	Signalized	A	C	A	C
73	130th Street and Indiana Avenue	Signalized	**E**	**F**	**E**	**F**
74	130th Street and Ellis Avenue	Signalized	A	B	A	B

Notes:
BRT = Bus Rapid Transit.
Signalized intersection level of service (LOS) reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. Intersections with LOS "E" or "F" that would be worse than the No Build conditions shown in bold.

Mitigation measures to reduce or minimize the impacts were evaluated using Synchro for the transportation network surrounding the BRT Alternative alignment. Mitigation measures for intersections near the affected intersection may also be necessary to provide better flow of traffic; therefore, the mitigation measures include the affected intersections as well as adjacent or nearby intersections. Table 5-5 lists the mitigation measures that would address impacts on the study intersections under BRT Alternative (2030) conditions. At intersections where adverse impacts are expected, potential mitigation measures have been identified to offset the portion of the LOS deterioration attributable to the BRT Alternative.

Table 5-5: Mitigation Measures for the Bus Rapid Transit Alternative (2030) Conditions

ID	Intersection	Mitigation Measure
41	111th Street and Cottage Grove Avenue	PM: Optimize cycle length/splits.
42	111th Street and Ellis Avenue	AM/PM: Optimize cycle length/splits.
52	115th Street and Michigan Avenue	AM/PM: Optimize cycle length/splits.
54	115th Street and Martin Luther King Drive	Remove on-street parking lane for additional through eastbound/westbound lane on 115th Street.
55a	115th Street and Cottage Grove Avenue	AM/PM: Optimize cycle length/splits.
55b	115th Street and Cottage Grove Avenue East	AM/PM: Optimize cycle length/splits.
62	119th Street and State Street	PM: Optimize cycle length/splits.
65	127th Street and Marshfield Avenue	AM: Optimize cycle length/splits.
68	127th Street and Halsted Street	AM/PM: Optimize cycle length/splits.

ID	Intersection	Mitigation Measure
70	127th Street and Vermont Avenue and Wallace Street	Change westbound through/left to dedicated westbound left turn lane. Restrict northeast bound to northbound movement. Actuate signal. Optimize cycle length/splits.
71	127th Street and State Street	PM: Optimize cycle length/splits.
73	130th Street and Indiana Avenue	AM/PM: Add northbound right turn lane. Optimize cycle length/splits.

Under BRT Alternative mitigated (2030) conditions, most of the study intersections within the API would operate at LOS "D" or better in both the AM and PM peak hours, as shown in Table 5-6. Under BRT Alternative (2030) mitigated conditions, some intersections would operate at LOS "E" or "F;" however, these intersections would be no worse than No Build (2030) conditions. Mitigated conditions would not result in additional intersections with unacceptable LOS. As such, there would be no adverse permanent traffic impacts for this alternative. LOS D is considered to be acceptable for urban areas.

Table 5-6: Bus Rapid Transit Alternative Mitigated (2030) Intersection Level of Service

ID	Intersection	Control Type	2030 No Build Alternative		2030 BRT Alternative Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
1	95th Street and Wentworth Avenue	Signalized	B	B	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	D	C
4	95th Street and Michigan Avenue	Signalized	B	B	B	B
5	98th Place and Halsted Street	Signalized	**F**	**F**	**F**	**F**
6	99th Street and Halsted Street	Signalized	D	D	D	C
7	98th Place and Wentworth Avenue	Signalized	B	B	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B	B	B
9	99th Street and State Street	Signalized	A	B	A	B
10	99th Street and Michigan Avenue	Signalized	C	B	C	B
11	99th Place and Martin Luther King Drive	Signalized	B	B	B	B
12	100th Street and Martin Luther King Drive	Signalized	B	A	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	C	A	C
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	**E**	**F**	**E**	**F**
15	103rd Street and Morgan Street	Signalized	B	B	B	B
16	103rd Street and Halsted Street	Signalized	**F**	D	**F**	D

ID	Intersection	Control Type	2030 No Build Alternative		2030 BRT Alternative Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
17	103rd Street and Normal Avenue	Signalized	B	B	B	B
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
19	103rd Street and State Street	Signalized	B	B	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A	A	A
24	107th Street and Halsted Street	Signalized	**F**	C	**F**	C
25	107th Street and Wentworth Avenue	Signalized	B	B	B	B
26	107th Street and State Street	Signalized	A	A	A	B
27	107th Street and Michigan Avenue	Signalized	B	B	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B	B	B
29	107th Street and Cottage Grove Avenue	Signalized	B	B	B	B
30	111th Street and Marshfield Avenue	Signalized	C	C	C	C
31	111th Street and Hamlet Avenue	Signalized	D	D	D	D
32	112th Place and Marshfield Avenue	Signalized	B	C	C	C
33	112th Place and Hamlet Avenue	Signalized	**E**	C	**E**	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	A	B	B
36	111th Street and Wentworth Avenue	Signalized	B	A	B	A
37	111th Street and State Street	Signalized	A	B	B	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
39	111th Street and Indiana Avenue	Signalized	B	B	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A	B	A
41	111th Street and Cottage Grove Avenue	Signalized	C	D	C	C
42a	111th Street and Langley Avenue	Signalized	B	C	B	D
42b	111th Street and Ellis Avenue	Signalized	C	C	C	C
43	111th Street and Doty Avenue	Signalized	C	C	C	C
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	**E**	C	**E**	C
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	**E**	B	**E**	C
46	115th Street and Marshfield Avenue	Signalized	B	B	B	B
47	115th Street and Ashland Avenue	Signalized	B	B	B	B

ID	Intersection	Control Type	2030 No Build Alternative		2030 BRT Alternative Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
48	115th Street and Racine Avenue	Signalized	B	C	B	D
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	B	D	C	D
53	115th Street and Indiana Avenue	Signalized	B	B	B	C
54	115th Street and Martin Luther King Drive	Unsignalized	D	**F**	D	**F**
55a	115th Street and Cottage Grove Avenue	Signalized	D	C	C	D
55b	115th Street and Cottage Grove Avenue East	Signalized	**E**	C	C	B
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	D	C	D	C
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	C	D	C
58	119th Street and Marshfield Avenue	Signalized	D	D	D	D
59	119th Street and Ashland Avenue	Signalized	D	**F**	D	**F**
60	119th Street and Halsted Street	Signalized	C	C	C	C
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	B	B	C	B
63	119th Street and Michigan Avenue	Signalized	A	A	B	B
64	127th Street and Paulina Street	Signalized	C	C	B	C
65	127th Street and Marshfield Avenue	Signalized	C	C	C	C
66	127th Street and Ashland Avenue	Signalized	C	C	C	D
67	Ashland Avenue and Vermont Avenue	Signalized	C	C	C	C
68	127th Street and Halsted Street	Signalized	C	C	C	C
69	Vermont Avenue and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Avenue and Wallace Street	Signalized	D	D	C	C
71	127th Street and State Street	Signalized	B	B	C	C
72	127th Street and Michigan Avenue	Signalized	A	B	B	C
73	130th Street and Indiana Avenue	Signalized	C	C	D	C
74	130th Street and Ellis Avenue	Signalized	A	A	A	B

Notes:
BRT = Bus Rapid Transit
Signalized intersection level of service (LOS) reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. LOS “E” and “F” are shown in bold.

The BRT Alternative includes Transit Signal Priority (TSP). TSP is an operational strategy that is applied to reduce the delay transit vehicles experience at traffic signals. TSP involves communication between buses and traffic signals so that a signal can alter its timing to give priority to transit operations. Priority may be accomplished through a number of methods, such as extending the duration of the green signal for the bus or providing an earlier red signal for side-street traffic. TSP is different from signal preemption, which interrupts the normal signal cycle to accommodate special events (e.g., a train approaching a railroad grade crossing adjacent to a signal or an emergency vehicle responding to a call). With preemption, certain signal phases may be skipped for the intersecting streets.

With TSP, however, the transit detection system communicates a priority request to the traffic signal that may or may not be granted. The TSP communication can fall in four categories:

1. If the bus will pass through a green signal with no alteration of the timing, then no change is made to the timing.

2. If the bus will be stopped at a red signal regardless of an alteration of the timing, then no change is made to the timing.

3. If the transit detection system calculates that keeping the signal green for a few more seconds (as determined by the priority algorithm) will allow the bus to clear the intersection, then the duration of the green signal is extended by a few seconds. "Green time" is reallocated for the benefit of the transit vehicle for this particular signal cycle.

4. If the transit detection system calculates that the bus will just catch the tail end of a red signal, the side street may be given a shorter green signal so that the BRT vehicle may be given an early green signal. Again, "green time" is reallocated for the benefit of the transit vehicle. Note that minimum side-street green times and minimum pedestrian crossing times are always checked in the priority algorithm.

In categories 3 and 4 when a request is granted, the traffic signal timing is altered to serve the priority request without disrupting coordination. In this situation, the normal signal operations process and overall signal cycle are maintained. With TSP, side-street phases would not be skipped, although the timing of the side-street phases will be altered in order to benefit the transit vehicle.

Because of the reallocation of green time, there is potential for additional delays to cross-street traffic. This potential is limited, based on the TSP algorithm to be developed in the design phase. Reallocation of green time typically occurs in less than ten percent of signal cycles because of the algorithm, constraints related to minimum green times, and granting of the TSP request only when the BRT vehicle is behind schedule. For another comparable study (Columbia Pike in Arlington, Virginia), there was only a one percent increase in overall delay with the use of TSP. Because the potential for change in delay (and level of service associated with delay) is small, and because the TSP algorithm is typically developed in the design phase (with refinement during operation), TSP impacts were not included in the traffic analysis for intersections within API.

5.2.1.3 Freight Transportation

There is an existing grade separation between the UPRR and the BRT Alternative on Michigan Avenue. The increase in bus service would therefore not affect the freight rail operations on the UPRR. The CN is separated from vehicular traffic with a grade separation structure at 130th and Indiana Avenue. The CN freight operations would not be affected.

The BRT Alternative would not affect freight transportation. Michigan Avenue is not a designated truck route; therefore, impacts on freight truck traffic would be minimal.

5.2.1.4 Bicycle Facilities

The City of Chicago has recommended a bike route along Michigan Avenue from 119th Street to 127th Street; however, the *Chicago Streets for Cycling Plan 2020* does not indicate a bike route along Michigan Avenue at this location. The *Streets for Cycling Plan 2020* has a recommended neighborhood bike route on State Street, west of Michigan Avenue at this location. Because the *Chicago Streets for Cycling Plan 2020* was adopted by the City of Chicago, it is assumed that the preferred route would be along State Street. There would be no impacts on bicycle facilities from the BRT Alternative.

5.2.1.5 Pedestrians

Pedestrian crossings are uncontrolled at the intersection of Kensington Street and Michigan Avenue. The proposed park & ride facility would have 1,000 spaces at this location. Due to the large number of potential riders, there would be a large number of passengers crossing Michigan Avenue at an unprotected location. There are existing crosswalks that could be improved to mitigate the potential impacts. Mitigation measures could include a public awareness campaign of pedestrian crosswalks, pedestrian refuge islands with signage, or signalization of the intersection.

Implementing the BRT Alternative would result in beneficial impacts by upgrading intersections with ADA-compliant curb ramps and replacing deteriorated sidewalks at bus stop locations with improved bus shelters. Improved bus shelters would be added to provide pedestrians protection from weather conditions. Proposed parking lots would have convenient and safe access to stop locations. Pedestrian access would benefit at the Eberhart Avenue stop with a new traffic signal, marked crosswalks, and ADA-compliant curb ramps. These improvements would provide access for all users and increase pedestrian safety.

5.2.1.6 Parking

Four park & ride locations are proposed with this alternative. The park & ride facilities would expand the reach of the BRT Alternative ridership, while providing enough parking capacity to prevent spillover parking into the surrounding neighborhoods. Table 5-7 lists the parking facility locations and capacity.

Table 5-7: Bus Rapid Transit Alternative Park & Ride Facilities

Location	Description	Parking Spaces Horizon Year (2030)
103rd Street	Surface Parking Lot	200
111th Street	Surface Parking Lot	200
Kensington Avenue	Three-Story Parking Garage	1,000
130th Street	Three-Story Parking Garage	1,400
Total		2,800

103rd Street

The BRT Alternative would stop in the same location that the existing CTA route #34 stops. Because there is already a no parking zone in the area of the bus lane, there would be no impact on any on-street parking at this stop. No off-street parking would be affected.

111th Street

The BRT Alternative would stop in the same location that the existing CTA route #34 stops in the farside configuration in the northbound direction and in the nearside configuration in the southbound direction. Because there is already a no parking zone in the area of the bus lane there would be no impact on any on-street parking at this stop. There is a proposed nearside configuration in the northbound direction, which is not currently a location of an existing bus stop. This configuration would eliminate approximately two to three on-street parking spaces. No off-street parking would be affected.

Kensington Avenue

The BRT Alternative would stop in the same location that the existing CTA route #34 stops. Because there is already a no parking zone in the area of the bus lane there would be no impact on any on-street parking at this stop. No off-street parking would be affected.

130th Street

There would be no impact on any on-street or off-street parking at this location.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.2.1 Public Transportation

The BRT Alternative would include construction of improved bus shelters at four locations, four park & ride parking lots or parking structures, and one proposed traffic signal. Existing traffic signals would be reprioritized. The construction activities associated with this alternative would temporarily affect the physical capacity of roadways and intersections, although construction zones at BRT stops typically occupy only one lane and are less than 200 feet in length. This may lead to increased travel times, a possible shift in traffic volumes, and the need to temporarily reroute bus transit service and move stop locations. Bus stops for routes along Michigan Avenue

(#34, #103, #106, and #119) will have changes in stops as construction progresses along the corridor. Bus stops for routes intersecting Michigan Avenue (#111 and #115) will require changes only when construction activities are in the vicinity of the applicable intersection. With adherence to local, state, and federal construction and temporary traffic management programs, as well as public transportation management guidelines, no lasting adverse impacts from the BRT Alternative would result.

5.2.2.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections. Construction of BRT stops typically create only minor construction impacts since the work zones at BRT stops occupy only one lane and are less than 200 feet in length. This may lead to increased travel times and possible shift in traffic volumes and traffic patterns during construction. Detours to other nearby streets are not anticipated for BRT stop construction.

Adherence to local, state, and federal construction and temporary traffic management guidelines would result in no lasting adverse traffic impacts from the BRT Alternative.

5.2.2.3 Freight Transportation

Construction of the proposed parking lot northeast of the UPRR tracks may require some temporary scheduled track closures. Construction activities would be phased to ensure that impacts on freight trains are minimized.

5.2.2.4 Bicycle Facilities

Temporary construction impacts for bicycle facilities associated with the BRT Alternative may occur in locations where new bus shelters and surface parking lots are proposed. Some construction activities may reduce the capacity of the roadway due to maintenance of traffic during construction activities. This may lead to increased travel times for bicyclists. There are no existing or recommended routes along Michigan Avenue, which is the proposed alignment of the BRT Alternative.

5.2.2.5 Pedestrians

Temporary construction impacts for pedestrians associated with the BRT Alternative would occur in locations of the four upgraded bus shelters and park & ride lots or structures. Some construction activities may result in a temporary sidewalk closure on one side of the street.

5.2.2.6 Parking

On-street parking along the roadways would be temporarily affected for construction of park & ride lots or structures and bus shelters due to maintenance of traffic during construction activities.

5.2.3 Cumulative Impacts and Mitigations - Bus Rapid Transit Alternative

There would be no cumulative impacts due to the BRT Alternative.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The Union Pacific Railroad (UPRR) Rail Alternative Right-of-Way (ROW) Option would include construction of an elevated structure heading south from 95th Street along I-57 until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would then turn south along the UPRR corridor to approximately 111th Street, where it would turn southeast. East of Prairie Avenue, the alignment would cross over the CN/ME tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the NICTD/CSS & SBRR ROW using a portion of the IHB alignment to terminate at 130th Street. Four stations would be included at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. CTA tracks would be placed in the UPRR ROW. CDOT is preparing the Far South Railroad Relocation Feasibility Study (FSRRFS). The study examines a possible project to move the existing freight operations out of the UPRR corridor, leaving the corridor vacant. The CTA would implement the ROW Option only if this separate project occurs prior to RLE. If the relocation project does not occur, then the CTA would need to choose either the East Option or West Option in order to pursue the UPRR Rail Alternative.

Figure 5-2 shows the UPRR ROW Option. The impact analysis was conducted for two segments within the UPRR Rail Alternative options. Segments UA and UB are shown on Figure 5-2. (Segment UB is the same for the three UPRR options, although impacts are not the same across all categories.) Because the traffic analysis was conducted on a regional basis, the traffic discussion was not divided into segments.

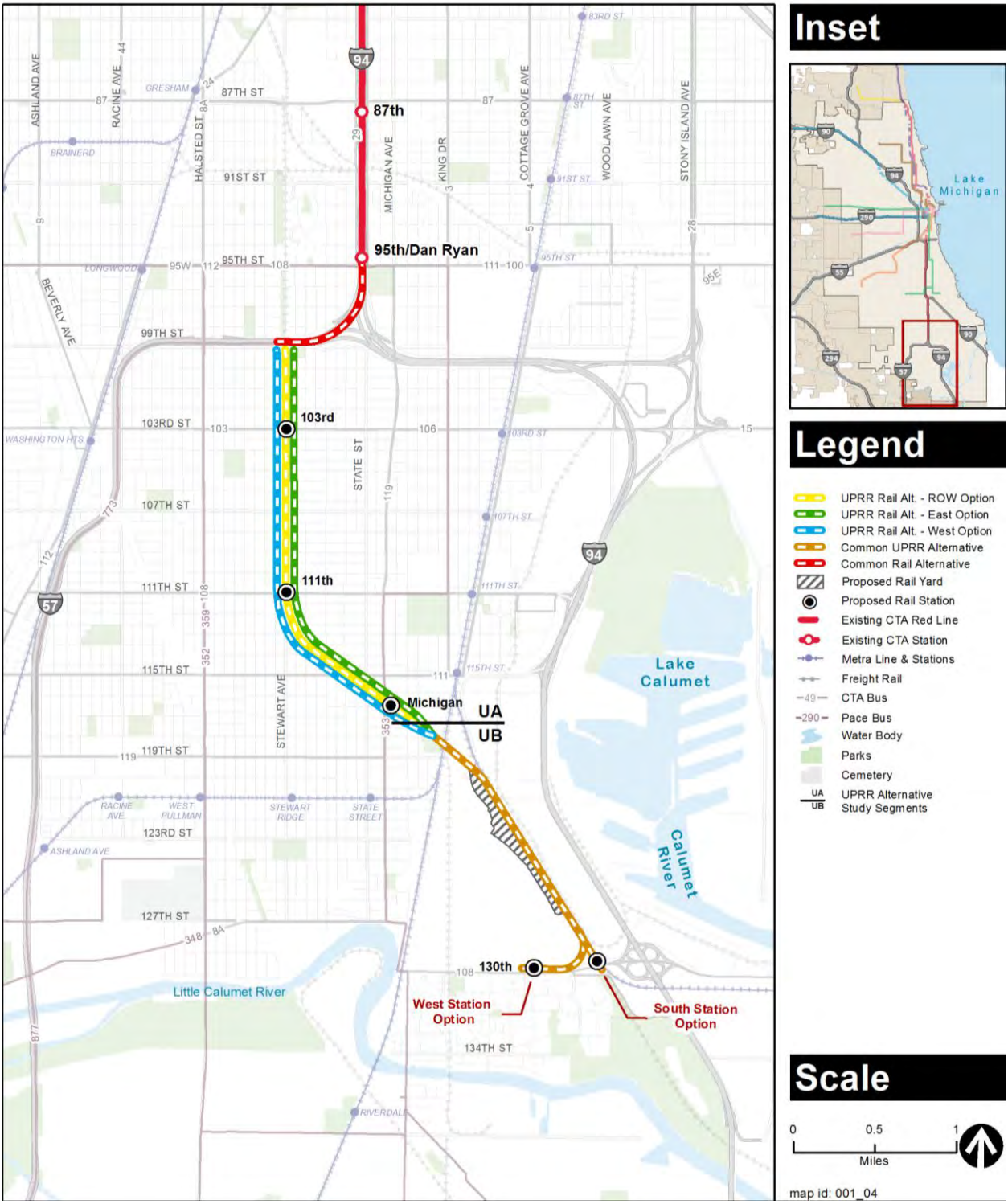

Figure 5-2: Union Pacific Railroad Rail Alternative

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1.1 Public Transportation

Currently the 95th Street Terminal is the southern terminus of the Red Line. Many of the existing bus routes within the project area terminate at this location. From this station, passengers continue to travel north on the Red Line or connect to a different bus route. With the expansion of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations. Passengers would benefit from reduced travel times to connecting rail service, further south of the 95th Street Terminal. The transportation modeling indicates approximately 4,050 new riders for the UPRR Rail Alternative and total project weekday boardings of 41,500 (AECOM 2009).

The following describes changes to existing bus routes as a result of the UPRR ROW Option:

Segment UA

- CTA route #9 Ashland would terminate at the 103rd Street station, allowing passengers to continue to travel south of 104th Street, where the existing route #9 currently terminates. A proposed bus turnaround would be included in the surface parking lot.
- CTA route #103 West 103rd and #106 East 103rd would be combined into one route operating between a west terminal at Pulaski Road and an east terminal at Stony Island Avenue. This change would reduce the number of bus routes that terminate at 95th Street while still providing service to the proposed Red Line. This route would serve transit users east and west of the proposed UPRR Rail Alternative alignment.
- The CTA route #108 Halsted/95th would be eliminated because the addition of the rail extension would reduce the need for this express bus service.
- CTA routes #112 Vincennes/111th and #111 111th/King Drive would be restructured to simplify route paths and better serve the new alignment. Route #111 would operate on 111th Street between 111th Street/Pulaski Road and 111th Street/Corliss Avenue, serving the new 111th Street station. A new CTA route #115 would operate as a two-directional loop on 115th Street, Cottage Grove Avenue, 95th Street, and Vincennes Avenue. CTA route #112 would be eliminated.
- CTA route #119 Michigan/119th would stop at the Michigan Avenue station. This route provides service to transit users west of the proposed UPRR Rail Alternative alignment.

Segment UB

- Pace route #348 would terminate at 130th Street/I-94, extending the route from its current southern turnaround location at 136th Street/Indiana Avenue. CTA route #30 South Chicago would terminate at the 130th Street station from its current terminal at 130th Street/Exchange Avenue. Pace route #353, rather than run on the expressway to the 95th Street Terminal, would provide passengers a transfer at the 130th Street station.
- Pace routes #352 and #359 would terminate at the 111th Street station instead of 95th Street.

"User benefit" is a measure of travel time improvement for each person boarding the system. This measure indicates the overall reduction in travel time including travel to the station, wait time, transfer time, and on-transit time. For the UPRR Alternative, the average user benefit per boarding passenger would be 10 minutes (AECOM 2009). Public transportation would be restructured to supplement the UPRR Alternative, allowing patrons reduced travel times to the Loop. The congestion at 95th Street Terminal would be reduced by minimizing the number of bus transfers patrons need because they would be able to transfer to or directly board at the proposed stations.

There would be no adverse impacts on public transportation from the UPRR ROW Option. Public transportation would benefit from the UPRR ROW Option.

5.3.1.2 Traffic

Under UPRR ROW Option (2026) conditions, most of the study intersections within the API would operate at LOS "D" or better in both the AM and PM peak hours, as shown in Table 5-8. The traffic data and Synchro results are in Appendix D for the UPRR ROW Option. All increases in traffic volumes are related to vehicle access to park & ride facilities at stations. Under UPRR ROW Option (2026) conditions, there would be 18 intersections that would operate at an unacceptable LOS (LOS "E" or "F") in either or both the AM and PM peak hours. Of those 18 intersections, 11 would operate at conditions worse than the No Build conditions. The intersections that would operate at worse than the No Build conditions are shown in bold in Table 5-8 and are listed below:

- 103rd Street and Halsted Street - AM LOS = F; **PM LOS = E**
- 115th Street and Michigan Avenue - **AM LOS = F; PM LOS = E**
- 115th Street and Cottage Grove Avenue - **AM LOS = F; PM LOS = F**
- 115th Street and Cottage Grove Avenue East - **AM LOS = E**
- 119th Street and Wentworth Avenue - **PM LOS = E**
- 119th Street and State Street - **AM LOS = F; PM LOS = F**
- 119th Street and Michigan Avenue - **AM LOS = E**
- 127th Street and Halsted Street - **AM LOS = E; PM LOS = F**
- 127th Street and Vermont Avenue and Wallace Street - **AM LOS = F; PM LOS = F**
- 127th Street and State Street - **PM LOS = E**
- 130th Street and Indiana Avenue - **AM LOS = F; PM LOS = F**

Under UPRR ROW Option (2030) conditions, most of the study intersections within the API would operate at LOS "D" or better in both the AM and PM peak hours, as shown in Table 5-8. Under UPRR ROW Option (2030) conditions, there would be 21 intersections operating at LOS "E" or "F" in either or both the AM and PM peak hours. Of the 21 intersections, 15 would operate at worse than the No Build conditions. The following 15 intersections would operate at worse than the No Build conditions (shown in bold text in Table 5-8):

- 103rd Street and Halsted Street - AM LOS = F; **PM LOS = E**
- 111th Street and Cottage Grove Avenue - **PM LOS = E**
- 115th Street and Michigan Avenue - **AM LOS = F; PM LOS = E**
- 115th Street and Martin Luther King Drive - **AM LOS = E**; PM LOS = F
- 115th Street and Cottage Grove Avenue - **PM LOS = F**
- 115th Street and Cottage Grove Avenue East - **AM LOS = F**
- 119th Street and Ashland Avenue - **AM LOS = E**; PM LOS = F
- 119th Street and Wentworth Avenue - **PM LOS = F**
- 119th Street and State Street - **AM LOS = F; PM LOS = F**
- 119th Street and Michigan Avenue - **AM LOS = E**
- 127th Street and Halsted Street - **AM LOS = E; PM LOS = F**
- 127th Street and Vermont Avenue and Wallace Street - **AM LOS = F; PM LOS = F**
- 127th Street and State Street - **AM LOS = E; PM LOS = E**
- 130th Street and Indiana Avenue - **AM LOS = F; PM LOS = F**
- 130th Street and Ellis Avenue - **PM LOS = E**

Table 5-8: Union Pacific Railroad Rail Alternative Right-of-Way Option (2026 and 2030) Intersection Level of Service

ID	Intersection	Control Type	2026 UPRR ROW Option		2030 UPRR ROW Option	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
1	95th Street and Wentworth Avenue	Signalized	B	B	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	D	C
4	95th Street and Michigan Avenue	Signalized	B	B	B	B
5	98th Place and Halsted Street	Signalized	F	F	F	F
6	99th Street and Halsted Street	Signalized	D	C	D	C
7	98th Place and Wentworth Avenue	Signalized	B	B	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B	B	B
9	99th Street and State Street	Signalized	A	B	A	B
10	99th Street and Michigan Avenue	Signalized	C	B	C	B
11	99th Place and Martin Luther King Drive	Signalized	B	B	B	B
12	100th Street and Martin Luther King Drive	Signalized	B	A	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	C	A	C
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	E	F	E	F
15	103rd Street and Morgan Street	Signalized	B	B	B	B
16	103rd Street and Halsted Street	Signalized	F	**E**	F	**E**
17	103rd Street and Normal Avenue	Signalized	B	B	B	C
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
19	103rd Street and State Street	Signalized	B	B	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A	A	A
24	107th Street and Halsted Street	Signalized	F	C	F	C
25	107th Street and Wentworth Avenue	Signalized	B	B	B	B
26	107th Street and State Street	Signalized	A	B	A	A
27	107th Street and Michigan Avenue	Signalized	B	B	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B	B	B
29	107th Street and Cottage Grove Avenue	Signalized	B	B	B	B
30	111th Street and Marshfield Avenue	Signalized	C	C	C	C

ID	Intersection	Control Type	2026 UPRR ROW Option		2030 UPRR ROW Option	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
31	111th Street and Hamlet Avenue	Signalized	D	D	D	D
32	112th Place and Marshfield Avenue	Signalized	B	C	C	C
33	112th Place and Hamlet Avenue	Signalized	E	C	E	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	B	B	B
36	111th Street and Wentworth Avenue	Signalized	B	A	B	A
37	111th Street and State Street	Signalized	A	B	A	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
39	111th Street and Indiana Avenue	Signalized	B	B	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A	B	A
41	111th Street and Cottage Grove Avenue	Signalized	C	D	C	**E**
42a	111th Street and Langley Avenue	Signalized	B	C	B	C
42b	111th Street and Ellis Avenue	Signalized	C	C	D	D
43	111th Street and Doty Avenue	Signalized	C	C	C	C
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	D	C	E	C
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	E	C	E	C
46	115th Street and Marshfield Avenue	Signalized	B	B	B	B
47	115th Street and Ashland Avenue	Signalized	B	B	B	B
48	115th Street and Racine Avenue	Signalized	B	C	B	C
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	**F**	**E**	**F**	**E**
53	115th Street and Indiana Avenue	Signalized	B	B	B	C
54	115th Street and Martin Luther King Drive	Unsignalized	D	F	**E**	F
55a	115th Street and Cottage Grove Avenue	Signalized	**F**	**F**	D	**F**
55b	115th Street and Cottage Grove Avenue East	Signalized	**E**	D	**F**	D
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	D	C	D	C
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	C	D	C
58	119th Street and Marshfield Avenue	Signalized	D	D	D	D
59	119th Street and Ashland Avenue	Signalized	D	F	**E**	F
60	119th Street and Halsted Street	Signalized	C	D	C	D

ID	Intersection	Control Type	2026 UPRR ROW Option		2030 UPRR ROW Option	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
61	119th Street and Wentworth Avenue	Signalized	B	**E**	B	**F**
62	119th Street and State Street	Signalized	**F**	**F**	**F**	**F**
63	119th Street and Michigan Avenue	Signalized	**E**	B	**E**	B
64	127th Street and Paulina Street	Signalized	C	D	C	D
65	127th Street and Marshfield Avenue	Signalized	D	C	D	C
66	127th Street and Ashland Avenue	Signalized	C	D	C	D
67	Ashland Avenue and Vermont Avenue	Signalized	C	C	C	C
68	127th Street and Halsted Street	Signalized	**E**	**F**	**E**	**F**
69	Vermont Avenue and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Avenue and Wallace Street	Signalized	**F**	**F**	**F**	**F**
71	127th Street and State Street	Signalized	D	**E**	**E**	**E**
72	127th Street and Michigan Avenue	Signalized	A	D	B	D
73	130th Street and Indiana Avenue	Signalized	**F**	**F**	**F**	**F**
74	130th Street and Ellis Avenue	Signalized	A	D	B	**E**

Notes:
UPRR = Union Pacific Railroad, LOS = level of service
Signalized intersection LOS reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. LOS "E" and "F" are shown in bold.

Mitigation measures to reduce or minimize the impacts were evaluated for the transportation network surrounding the UPRR ROW Option. Mitigation measures for intersections near the affected intersection may also be necessary to provide better flow of traffic; therefore, the provided mitigation measures include the affected intersections as well as adjacent or nearby intersections. Table 5-9 lists the mitigation measures that would address impacts on the study intersections under UPRR ROW Option (2030) conditions. At intersections where adverse impacts are expected, potential mitigation measures have been identified to offset the portion of the LOS deterioration attributable to the RLE Project.

Table 5-9: Mitigation Measures for the Union Pacific Railroad Rail Alternative Right-of-Way Option (2030) Conditions

ID	Intersection	Mitigation Measure
16	103rd Street and Halsted Street	PM: Optimize cycle length/splits.
41	111th Street and Cottage Grove Avenue	PM: Optimize splits.
52	115th Street and Michigan Avenue	AM: Optimize splits. PM: Optimize cycle length/splits.
54	115th Street and Martin Luther King Drive	Remove on-street parking lane for additional through eastbound/westbound lane on 115th Street.
55a	115th Street and Cottage Grove Avenue	AM/PM: Optimize Cycle length. Optimize PM splits.
55b	115th Street and Cottage Grove Avenue East	AM/PM: Optimize Cycle length. Optimize PM splits.
59	119th Street and Ashland Avenue	PM: Optimize splits
61	119th Street and Wentworth Avenue	PM: Optimize splits
62	119th Street and State Street	AM/PM: Optimize splits.
63	119th Street and Michigan Avenue	AM: Optimize splits.
64	127th Street and Paulina Street	AM/PM: Optimize cycle length/splits.
65	127th Street and Marshfield Avenue	AM/PM: Optimize cycle length/splits.
66	127th Street and Ashland Avenue	AM/PM: Optimize cycle length/splits.
68	127th Street and Halsted Street	AM/PM: Optimize cycle length and splits.
70	127th Street and Vermont Avenue and Wallace Street	Add additional northeast right turn lane. Change westbound through/left to dedicated westbound left turn lane. Restrict northeast bound to northbound movement. Actuate signal. Optimize cycle length/splits.
71	127th Street and State Street	AM/PM: Optimize cycle length/splits
72	127th Street and Michigan Avenue	PM: Optimize cycle length/splits
73	130th Street and Indiana Avenue	AM/PM: Add northbound right turn lane. Optimize cycle length/splits
74	130th Street and Ellis Avenue	PM: Optimize splits

Under UPRR ROW Option mitigated (2030) conditions, most of the study intersections within the API would operate at LOS "D" or better in both the AM and PM peak hours, as shown in Table 5-10. Under UPRR ROW Option mitigated (2030) conditions, some intersections would operate at LOS "E" or "F;" however, these intersections would be no worse than No Build (2030) conditions. Mitigated conditions would not result in additional intersections with unacceptable LOS. As such, there would be no adverse permanent traffic impacts for this alternative. Coordination regarding LOS thresholds was conducted with IDOT and CDOT. LOS D is considered to be acceptable for urban areas.

Table 5-10: Union Pacific Railroad Rail Alternative Right-of-Way Option Mitigated Alternative (2030) Intersection Level of Service

ID	Intersection	Control Type	2030 No Build Alternative		2030 UPRR ROW Option Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
1	95th Street and Wentworth Avenue	Signalized	B	B	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	D	C
4	95th Street and Michigan Avenue	Signalized	B	B	B	B
5	98th Place and Halsted Street	Signalized	**F**	**F**	**F**	**F**
6	99th Street and Halsted Street	Signalized	D	D	D	C
7	98th Place and Wentworth Avenue	Signalized	B	B	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B	B	B
9	99th Street and State Street	Signalized	A	B	A	B
10	99th Street and Michigan Avenue	Signalized	C	B	C	B
11	99th Place and Martin Luther King Drive	Signalized	B	B	B	B
12	100th Street and Martin Luther King Drive	Signalized	B	A	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	C	A	C
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	**E**	**F**	**E**	**F**
15	103rd Street and Morgan Street	Signalized	B	B	B	B
16	103rd Street and Halsted Street	Signalized	**F**	D	**F**	C
17	103rd Street and Normal Avenue	Signalized	B	B	B	C
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
19	103rd Street and State Street	Signalized	B	B	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A	A	A
24	107th Street and Halsted Street	Signalized	**F**	C	**F**	C
25	107th Street and Wentworth Avenue	Signalized	B	B	B	B
26	107th Street and State Street	Signalized	A	A	A	A
27	107th Street and Michigan Avenue	Signalized	B	B	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B	B	B

ID	Intersection	Control Type	2030 No Build Alternative		2030 UPRR ROW Option Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
29	107th Street and Cottage Grove Avenue	Signalized	B	B	B	B
30	111th Street and Marshfield Avenue	Signalized	C	C	C	C
31	111th Street and Hamlet Avenue	Signalized	D	D	D	D
32	112th Place and Marshfield Avenue	Signalized	B	C	C	C
33	112th Place and Hamlet Avenue	Signalized	**E**	C	**E**	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	A	B	B
36	111th Street and Wentworth Avenue	Signalized	B	A	B	A
37	111th Street and State Street	Signalized	A	B	B	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
39	111th Street and Indiana Avenue	Signalized	B	B	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A	B	A
41	111th Street and Cottage Grove Avenue	Signalized	C	D	C	C
42a	111th Street and Langley Avenue	Signalized	B	C	B	C
42b	111th Street and Ellis Avenue	Signalized	C	C	D	D
43	111th Street and Doty Avenue	Signalized	C	C	C	C
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	**E**	C	**E**	C
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	**E**	B	**E**	C
46	115th Street and Marshfield Avenue	Signalized	B	B	B	B
47	115th Street and Ashland Avenue	Signalized	B	B	B	B
48	115th Street and Racine Avenue	Signalized	B	C	B	C
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	B	D	B	C
53	115th Street and Indiana Avenue	Signalized	B	B	B	C
54	115th Street and Martin Luther King Drive	Unsignalized	D	**F**	D	**F**
55a	115th Street and Cottage Grove Avenue	Signalized	D	C	B	C
55b	115th Street and Cottage Grove Avenue East	Signalized	**E**	C	C	B

ID	Intersection	Control Type	2030 No Build Alternative		2030 UPRR ROW Option Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	D	C	D	C
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	C	D	C
58	119th Street and Marshfield Avenue	Signalized	D	D	D	D
59	119th Street and Ashland Avenue	Signalized	D	**F**	D	**F**
60	119th Street and Halsted Street	Signalized	C	C	C	D
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	B	B	C	B
63	119th Street and Michigan Avenue	Signalized	A	A	C	B
64	127th Street and Paulina Street	Signalized	C	C	B	C
65	127th Street and Marshfield Avenue	Signalized	C	C	C	C
66	127th Street and Ashland Avenue	Signalized	C	C	C	C
67	Ashland Avenue and Vermont Avenue	Signalized	C	C	C	C
68	127th Street and Halsted Street	Signalized	C	C	C	D
69	Vermont Avenue and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Avenue and Wallace Street	Signalized	D	D	C	D
71	127th Street and State Street	Signalized	B	B	B	C
72	127th Street and Michigan Avenue	Signalized	A	B	B	C
73	130th Street and Indiana Avenue	Signalized	C	C	D	D
74	130th Street and Ellis Avenue	Signalized	A	A	B	B

Notes:
UPRR = Union Pacific Railroad, ROW = right-of=way, LOS = level of service
Signalized intersection LOS reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. LOS "E" and "F" are shown in bold.

5.3.1.3 Freight Transportation

Rail

As part of the UPRR ROW Option the UPRR trains would be relocated to another corridor as part of a separate, earlier project that may occur regardless of the RLE implementation; therefore, no adverse permanent impacts would result from by UPRR operations. There would be no adverse permanent impacts on the CN or IHB freight operations.

Truck

The biggest challenge to the trucking industry is highway congestion, according to the *GO TO 2040 Regional Plan*. Congestion data prepared by CMAP shows that on several corridors where

truck volumes are over 10,000 per day, congestion during morning peak periods increases travel times an average of 60 percent. The 130th Street station park & ride facility may divert motorists from I-94 commuting into the city during these peak periods. With the extension of the Red Line to 130th Street, the regional vehicle-miles traveled would be reduced by 0.02 percent, removing some motorists from the surrounding roadways (CMAP 2012b).

5.3.1.4 Bicycle Facilities

Under the UPRR ROW Option there would be no adverse permanent impacts on existing or recommended bike routes. Recommended bike routes along 103rd, 107th, 111th, and 115th Streets have the potential to be used by bicyclists to access the RLE (see Figure 4-6). The stations for the UPRR Alternative would have bicycle parking to accommodate bicyclists. This alternative would create easy and efficient transit connections to the RLE and the larger network of CTA stops and stations for bicyclists.

5.3.1.5 Pedestrians

The UPRR ROW Option would provide pedestrians with more choices, flexibility, and potentially reduced travel times as compared to other UPRR options. Under this option the existing at-grade crossings at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street would no longer be active railroad crossings. This change would improve pedestrian safety at the 103rd Street, 111th Street, and Michigan Avenue stations as compared to other UPRR options.

Implementing the UPRR ROW Option would result in beneficial impacts at stations by upgrading intersections with ADA-compliant curb ramps and replacing deteriorated sidewalks. These improvements would provide access for all users and increase pedestrian safety.

Segment UA

103rd Street Station

Existing striped crosswalks at Eggleston Avenue and 103rd Street and Harvard Avenue and 103rd Street could be used to access the station and the surface parking lots. These crosswalks would be improved with the construction of the proposed surface lots. Entrances to the station would be near the surface parking lots, allowing for a direct route from the platform to the parking lot, allowing users to avoid crossing 103rd Street. The entrance to the parking lot east of the station would be in the southeast corner of the parking lot. The parking lot on the south side of 103rd Street would have an entrance at the intersection of 103rd Street and Eggleston Avenue, allowing cars to leave the parking lot farther away from the station, where the majority of pedestrian traffic would occur. All of these improvements would contribute to convenient, safe, and secure access for all users.

111th Street Station

Because the majority of the existing properties adjacent to the existing railroad tracks are undeveloped, sidewalks would need to be provided for pedestrian access to the primary and

auxiliary entrances of the proposed station. Existing striped crosswalks are not close to the location of the proposed station's primary entrance. The surface parking lots would be on the east and west side of the station, allowing for a direct route from the platform to the parking lot, in which users could avoid crossing 111th Street. The east surface parking lot would have an entrance at the southeast corner of the lot and the west surface parking lot would have an entrance along Eggleston Avenue. Both of these entrances would be away from the proposed station location where the majority of pedestrian traffic would occur. Eggleston Avenue is currently a dead-end street and has little traffic. The majority of traffic on the street would occur from the surface parking lot. All of these improvements would contribute to convenient, safe, and secure access for all users.

Potential pedestrian conflicts with vehicular traffic would be mitigated through the addition of a striped crosswalk on 111th Street at the location of the primary entrance due to the tendency of pedestrians to cross at the entrance/exit of the station.

Michigan Avenue Station

The existing pedestrian access on 116th Street east of Michigan Avenue would be improved with the construction of the surface lot and the auxiliary station entrance. The existing viaduct and existing sidewalks would be replaced, providing a continuous ADA-accessible route east and west of the station and sidewalk connectivity to the existing homes east of the station on 116th Street. The parking garage would be located close to the primary entrance of the proposed station, allowing commuters who park in this garage to avoid crossing Michigan Avenue or 116th Street. Parking lot entrances would be on State Street and 116th Street, which are a good distance from the station, where pedestrian traffic would be concentrated. The surface parking lot would be near the auxiliary entrance of the station. Commuters would have a direct route from the surface lot to the platform without any need to cross 116th Street.

Segment UB

130th Street Station

- South Station Option: The existing parcels in the location of the proposed station are currently undeveloped land. Proposed sidewalks along 130th Street and Ellis Avenue, as well as striped crosswalks at the intersection of 130th Street and Ellis Avenue, would provide a safe pedestrian access for the Altgeld Gardens neighborhood residents. The auxiliary entrance would also provide direct access to the Altgeld Gardens neighborhood by eliminating the need to cross 130th Street. It would also provide access to students and faculty at the Carver Military Academy High School, east of the station on Doty Avenue.

- West Station Option: Part of the proposed station improvements include sidewalks along 130th Street and Evans Avenue, a proposed traffic signal, and marked crosswalks. These improvements would provide a continuous ADA-accessible route from the Altgeld Gardens neighborhood to the station.

There would be no adverse impacts on pedestrians from the UPRR ROW Option.

5.3.1.6 Parking

The UPRR ROW Option alignment is within the existing ROW of the UPRR. On-street parking restrictions already exist at the railroad crossings. There would be no impact on on-street parking due to the proposed stations. Existing bus stops are on 103rd Street and 111th Street at the location of the proposed stations. These existing stops already have a no parking zone in the locations of the existing bus lanes, so there would be no impact on on-street parking due to bus stop locations. There are two existing bus stops on Michigan Avenue from Kensington Avenue to 116th Street. These existing bus stop locations could serve the proposed station; therefore, no on-street parking would be affected by adding bus stop locations.

Each of the proposed stations would have surface parking lots and/or parking garages, which would expand the reach of the RLE and provide an opportunity for users to access the station by car. Users may benefit from reduced travel time and reduced travel cost by riding the Red Line. Another benefit would be that motorists could be diverted from congested sections of roadway. Sufficient parking capacity would be provided in all locations to avoid spillover parking into the residential areas near the station locations. Table 5-11 presents a summary of the proposed parking for each of the stations.

Segment UA

Table 5-11: Segment UA Proposed Park & Ride Facilities

Station	Parking Type	Capacity	Location	Description
103rd Street	Surface lot	100	East of station, North side of 103rd Street	Bus turnaround within the lot for route #9
	Surface lot	100	Adjacent to station on the south side of 103rd Street	
111th Street	Surface lot	100	East of station. North side of 111th Street	
	Surface lot	100	West of station. North side of 111th Street	Bus turnaround within the lot for route #352
Michigan Avenue	Three-Story Parking Garage	750	Southwest of station	Parking garage with ground level available for retail and/or community facilities. Bus turnaround on the ground level for route #119 and #359
	Surface lot	250	Located northeast of the station.	

Segment UB

130th Street Station

There would be no adverse impact on any existing off-street or on-street parking as a result of the South Station Option or the West Station Option. Each of the station options would include a bus terminal with four bus bays and an overhead canopy. A park & ride facility with 2,300 parking spaces would be constructed by 2030 for the South Station Option. The West Station Option would include a park & ride facility with 1,950 parking spaces plus a surface lot with 350 parking spaces. The park & ride facility would be near the I-94 Bishop Ford Freeway and 130th Street interchange. This facility would expand the reach of the RLE to the south suburban and northwest Indiana automobile commuters. These commuters could benefit from decreased travel times and cost by riding the Red Line and avoiding congestion and travel delays on the Dan Ryan Expressway. See Table 5-12 for summary of proposed parking options for the 130th Street station.

Table 5-12: Segment UB Proposed Park & Ride Facilities

Station	Parking Type	Capacity	Location	Description
130th Street South Station Option	Seven-Story Parking Garage	2,300	North of 130th Street adjacent to the NICTD/CSS & SBRR tracks	Bus terminals with 4 bus bays and an overhead canopy
130th Street West Station Option	Four-Story Parking Garage	1,950	North of 130th Street	Bus terminals with 4 bus bays and an overhead canopy
	Surface lot	350		

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.2.1 Public Transportation

Bus Transit

The construction activities associated with the UPRR ROW Option would temporarily affect the physical capacity of roadways and intersections requiring detours. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for bus transit users. Bus stop locations may be eliminated or relocated temporarily and buses rerouted during construction activities. Bus stops for routes intersecting the UPRR Alternative (#34, #103, #111, and #115) will have changes only when construction activities are in the vicinity of the applicable crossing. With adherence to local, state, and federal construction and temporary traffic and public transportation management guidelines, no adverse construction impacts from the UPRR ROW Option would result.

Commuter Rail

The UPRR ROW Option would consist of new construction of dual-track, elevated structure within the UPRR ROW, branching off and running along the east side of the corridor and over

existing CN/ME tracks. Construction at the CN/ME crossing would be phased to minimize the impacts on Metra operations. This impact is expected only in segment UB.

During new track roadbed construction for the 120th Street yard and shop and the new access road for the existing MWRD facility, construction over and adjacent to the NICTD/CSS & SBRR ROW would occur. Flagging operations and scheduled track closures would occur during these construction activities. Construction would be phased to minimize the impacts on passenger trains.

5.3.2.2 Traffic

Construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections. This may lead to increased travel times, possible shift in traffic volumes, and the need to reroute traffic patterns during construction. On the local streets, steel beam placement across a street would require temporary shutdown of traffic across the crossing. Detours would be to adjacent parallel streets with existing crossings of the UPRR tracks.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required at nighttime, per IDOT approval, typically at times of low traffic volume. Proposed structure construction would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57. With adherence to local, state, and federal construction and temporary traffic management guidelines, no lasting adverse traffic impacts would result from the UPRR ROW Option.

5.3.2.3 Freight Transportation

Segment UA

Rail

The UPRR ROW Option would consist of new construction of a dual-track, elevated structure within the UPRR corridor, branching off and running along the east side of the corridor and over existing CN/ME tracks. There would be no impact on the UPRR operations due to construction activities because UPRR trains would be relocated to another corridor as part of a separate, earlier project.

Truck

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown (typically no more than 15-minute increments) of all traffic would be required at nighttime, per IDOT approval. Proposed structure construction would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-57.[4]

Segment UB

Construction at the CN/ME crossing would be phased to minimize the impacts on CN and Metra operations. Railroad flagging and scheduled track closures would be needed to construct the crossing.

During new track roadbed construction for the 120th Street yard and shop and the new access road for the existing MWRD facility, construction over and adjacent to the NICTD/CSS & SBRR ROW would occur. Flagging operations and scheduled track closures would also occur during these construction activities. Construction would be phased to minimize impacts on freight operations.

A portion of the new track alignment would be constructed over IHB tracks north of 130th Place. Construction activities would be coordinated with IHB railroad to ensure that no construction activities would affect freight operations.

5.3.2.4 Bicycle Facilities

Bicyclists using recommended low traffic residential streets such as 103rd Street, 111th Street, or 115th Street may incur increased travel times due to detours or increase vehicular traffic due to construction activities.

5.3.2.5 Pedestrians

Due to the construction of the aerial structure and stations, sidewalks would need to be temporarily closed during these construction activities. Increased travel distance and time may be incurred due to pedestrian traffic reroutes.

[4] Per IDOT Average Daily Truck Traffic maps, an average of 5,700 trucks per day travel along I-57 just east of Halsted Street. Based on time-of-day truck distribution, less than one percent of this daily average travel during each hour between midnight and 4:00 AM weekdays.

5.3.2.6 Parking

On-street parking would be temporarily affected during construction of the aerial structure and stations. Construction of park & ride lots would also contribute to temporary on-street parking loss due to maintenance of traffic during construction activities.

5.3.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

There would be no adverse cumulative impacts due to the implementation of the UPRR ROW Option. Cumulative benefits, related to the earlier project to remove UPRR trains from the corridor, include decreased delay for vehicles and buses at at-grade railroad crossings and increased pedestrian safety at the crossings.

5.3.4 120th Street Yard and Shop

A 270-car yard and shop facility would be constructed on a combination of industrial/vacant land to the east of the CN/ME tracks and west of the NICTD/CSS & SBRR tracks at approximately 120th Street and Cottage Grove Avenue. The yard would be entirely at grade. A nominal amount of parking for employees would be included at the yard. A substation is tentatively proposed for a location within the 120th Street yard, west of the existing railroad tracks and east of the proposed shop facility.

5.3.4.1 Permanent Impacts and Mitigations

Under the UPRR ROW Option there would be no permanent impacts on bicycle or pedestrians because the existing site is a combination of industrial and vacant land. Pedestrian access by the general public would be restricted and discouraged. Because of the location of the yard, no public transportation or parking facilities would be affected by this alternative. Some proposed parking would be provided for yard employees.

5.3.4.2 Construction Impacts and Mitigations

During new track roadbed construction for the 120th Street yard and shop and the new access road for the existing MWRD facility, construction over and adjacent to the NICTD/CSS & SBRR ROW would occur. Flagging operations and scheduled track closures would also occur during these construction activities. Construction would be phased to minimize impacts on MWRD operations and NICTD/CSS & SBRR operations.

5.4 Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative East Option would include construction of an elevated structure following an alignment similar to that of the UPRR ROW Option. The difference is that CTA tracks would be placed immediately adjacent to and east of the UPRR ROW Option alignment. Four stations would be included at 103rd Street, 111th Street, Michigan Avenue, and 130th Street.

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.1.1 Public Transportation

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.1.1 for permanent impacts on public transportation in Segments UA and UB.

5.4.1.2 Traffic

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.1.2 for permanent traffic impacts. Delays waiting for freight trains to pass through at-grade crossings would be similar to the No Build Alternative.

5.4.1.3 Freight Transportation

Rail

As part of the East Option, the UPRR tracks would continue to be operational. Because the proposed track would be elevated, there would be no permanent impacts on the UPRR freight train operations. Future freight train movements on the UPRR track may increase, causing additional delays to motorists at at-grade crossings; however, freight train movements typically occur during off-peak traffic travel times.

Truck

The East Option would have a similar impact on freight truck operations as the UPRR ROW Option. Because the proposed track would be elevated, there would be no impact on truck routes. The 130th Street station park & ride facility may divert motorists from I-94 commuting into the city during these peak periods. This may help alleviate congestion on the expressway, reducing freight truck travel times and cost.

5.4.1.4 Bicycle Facilities

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.1.4 for permanent impacts on bicyclists.

5.4.1.5 Pedestrians

The East Option would provide pedestrians with more mode choices, flexibility, and potentially reduced travel times as compared to the No Build Alternative. This option alignment is east of the existing UPRR tracks. The existing at-grade crossings at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street would remain.

Implementing the East Option would result in beneficial impacts at stations by upgrading intersections with ADA-compliant curb ramps and replacing deteriorated sidewalks. These improvements would provide access for all users and increase pedestrian safety.

Segment UA

103rd Street Station

Existing striped crosswalks at Eggleston Avenue and 103rd Street, and Harvard Avenue and 103rd Street, could be used to access the station and the surface parking lots. These crosswalks would be improved with the construction of the proposed surface lots. Entrances to the station would be near the surface parking lots, allowing for a direct route from the platform to the parking lot. The location of the surface lot west of the UPRR tracks would require pedestrians to cross the tracks to access the station. Existing railroad crossing signals with road gates and railroad crossing pavement markings are at the crossing on 103rd Street. Pedestrian gates would need to be installed to prevent pedestrians from crossing the active UPRR tracks during freight movements. The parking lot on the south side of 103rd Street would have an entrance at the intersection of 103rd and Eggleston Avenue, allowing cars to leave the parking lot farther away from the station, where the majority of pedestrian traffic would occur. The entrance to the parking lot east of the proposed station would be in the southeast corner of the parking lot. All of these improvements would contribute to convenient, safe, and secure access for all users.

There would be no adverse impacts on pedestrians after mitigating for pedestrian crossing gates at 103rd street.

111th Street Station

Because the majority of the properties adjacent to the existing railroad tracks are currently undeveloped, proposed sidewalks would need to be provided for pedestrian access to the primary and auxiliary entrances of the station. Existing striped crosswalks are not close to the proposed primary entrance of the station. The surface parking lots would be on the east and west sides of the station, allowing for a direct route from the platform to the parking lot in which users could avoid crossing 111th Street. The location of the surface lot west of the UPRR tracks would require pedestrians to cross the tracks to access the station. Existing railroad crossing signals with road gates and railroad crossing pavement markings are at the crossing on 111th Street. The east surface parking lot would have an entrance at the southeast corner of the lot and the west surface parking lot would have an entrance along Eggleston Avenue. Both of these entrances would be away from the proposed station location, where the majority of pedestrian traffic would occur. Eggleston Avenue north of 11th Street is a dead-end street less than one block in length. The majority of traffic on the street would occur from the surface parking lot. All of these improvements would contribute to convenient, safe, and secure access for all users.

There would be no adverse impacts after mitigating for the pedestrian crossing gates at 111th Street and providing striped crosswalks.

Michigan Avenue Station

The existing pedestrian access on 116th Street east of Michigan Avenue would be improved with the construction of the surface lot and the auxiliary station entrance. The sidewalk under and adjacent to the existing viaduct for the UPRR tracks would be replaced, providing a continuous

ADA-accessible route east and west of the station and sidewalk connectivity to the existing residential homes east of the station on 116th Street. The parking garage would be close to the primary entrance of the station, allowing commuters who park in this garage to avoid crossing Michigan Avenue or 116th Street. Pedestrians would not have to cross the UPRR tracks on 116th Street or Michigan Avenue, because the tracks would be elevated. There would be an entrance on State Street and 116th Street, which would be a good distance from the station, where pedestrian traffic would be concentrated. The surface parking lot would be near the auxiliary entrance of the station. Commuters would have a direct route from the surface lot to the platform without any need to cross 116th Street.

Segment UB

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.1.5 for permanent impacts on Segment UB.

5.4.1.6 Parking

Each of the station locations would have surface parking lots and/or parking garages. These parking facilities would expand the reach of the RLE and provide an opportunity for users to access the station by car. These users may benefit from reduced travel time and reduced travel cost. Another benefit would be that motorists could be diverted from congested sections of roadway. Sufficient parking capacity would be provided in all locations to avoid spillover parking into the residential areas near the station locations. Table 5-13 presents a summary of the proposed parking for each of the stations.

Segment UA

Table 5-13: Union Pacific Railroad Rail Alternative East Option Park & Ride Facilities

Station	Parking Type	Capacity	Location	Description
103rd Street	Surface Lot	75	East of proposed station, North side of 103rd Street	Bus turnaround within the lot for route #9
	Surface Lot	125	West of proposed station on the south side of 103rd Street	
111th Street	Surface Lot	55	East of proposed station. North side of 110th Place	
	Surface Lot	145	West of proposed station. North side of 111th Street	Bus turnaround within the lot for route #352
Michigan Avenue	Three-Story Parking Garage	825	Southwest of proposed station	Parking garage with ground level available for retail and/or community facilities. Bus turnaround on the ground level for route #119 and #359
	Surface Lot	175	Located northeast of the station.	

Segment UB

130th Street Station

The 130th Street South Station Option and West Station Option would be the same for all of the UPRR Rail Alternatives. Refer to Section 5.3.1.6, for permanent impacts on Segment UB Parking Facilities.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.2.1 Public Transportation

Bus Transit

- The construction activities associated with the East Option would temporarily affect the physical capacity of roadways and intersections requiring detours. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for bus transit users. Bus stop locations may be eliminated or relocated temporarily and buses rerouted during construction activities. With adherence to local, state, and federal construction and temporary traffic and public transportation management guidelines, no adverse impacts would result from the East Option.

Commuter Rail

Segment UA

The East Option would consist of new construction of dual-track, elevated structure immediately adjacent to and east of the UPRR ROW, branching off and running along the east side of the corridor and over existing CN/ME tracks.

Segment UB

Refer to Section 5.3.2.1 for construction impacts on Segment UB.

5.4.2.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections. This may lead to increased travel times, possible shift in traffic volumes, and the need to reroute traffic patterns during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

The East Option alignment curves over I-57 and runs parallel to the UPRR tracks. Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Temporary shutdown of other traffic lanes (for work in the adjacent median) would occur at nighttime and low traffic volume intervals per IDOT approval. Proposed structure construction would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

With adherence to local, state, and federal construction and temporary traffic management guidelines, no lasting adverse traffic impacts would result from the East Option.

5.4.2.3 Freight Transportation

Segment UA

Rail

The East Option would consist of new construction of dual-track, elevated structure immediately adjacent to and east of the UPRR ROW, branching off and running along the east side of the corridor and over existing CN/ME tracks. The East Option would require construction activities to occur while UPRR tracks are operational. The work would be sequenced along the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Signal devices would need to be moved

or temporary signals installed to replace existing signals during construction of viaducts for the following at-grade crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street.

Truck

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-94.

The East Option alignment curves over I-57 and runs parallel to the UPRR tracks. Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Temporary shutdown of other traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Proposed structure construction would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-57.

Segment UB

Refer to Section 5.3.2.3 for construction impacts on Segment UB related to freight transportation.

5.4.2.4 Bicycle Facilities

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.2.4 for construction impacts on bicyclists.

5.4.2.5 Pedestrians

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.2.5 for construction impacts on pedestrians.

5.4.2.6 Parking

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.2.6 for construction impacts on parking facilities.

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.3.1 Segment UA

Freight Transportation

The Chicago Region Environmental and Transportation Efficiency (CREATE) Program 75th Street Corridor Improvement Project (CIP) consists of the following improvements:

- Reconfiguring the Belt Railway of Chicago main tracks between the Dan Ryan and Belt Junction, where there are existing conflicts between the freight railroads and Metra SouthWest Service.
- Reconfiguring and building a third Belt Railway Company main track, and constructing a flyover to connect the Metra SouthWest Service to the RI District Line in the vicinity of 74th Street and Normal Avenue and 75th Street and Parnell Avenue.
- Constructing a bridge that substantially reduces conflicts between CSX and Belt Railway Company, Metra (Rock Island District) and NS.
- Road-rail grade separation of 71st Street and CSX freight line north of project boundary

The corridor improvements would be north of the proposed UPRR Rail Alternative alignments. Table 5-14 summarizes the CIP train model volumes based on the above improvements for the UPRR.

Table 5-14: Existing and Forecast Train Volumes for Union Pacific Railroad South of 86th Street

	Peak Day	Passenger	Freight	Total
Existing Volumes (2009)	Friday	2	24	26
Forecast Volumes (2029 No Build)	Friday	4	23	27
Forecast Volumes (2029 Build Alternative)	Saturday	4	44	48

Source: CREATE 75th Street Corridor Improvement Project train model. In this table, "No Build" and "Build Alternative" refer to the CREATE Project.

Freight volumes would increase substantially by the forecasted 2029 build year. Because the UPRR tracks would remain in the East Option, freight trains may have potential impacts on pedestrian and vehicular traffic near the proposed stations. This could affect travel times for bus transit servicing the station and increase delays for commuters who choose to park & ride.

5.4.3.2 Segment UB

There would be no adverse cumulative impacts on Segment UB of the East Option.

5.5 Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative West Option would include construction of an elevated structure following a similar alignment to the UPRR ROW Option. The difference is that CTA tracks would be placed immediately adjacent to and west of the UPRR ROW. Four stations would be included at 103rd Street, 111th Street, Michigan Avenue, and 130th Street.

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.1.1 Public Transportation

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.1.1 for permanent impacts on public transportation in Segment UA and Segment UB.

5.5.1.2 Traffic

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.1.2 for permanent traffic impacts. Delays waiting for freight trains to pass through the at-grade crossings would be similar to the No Build Alternative. (The UPRR West Option would not receive the same benefit as the UPRR ROW Option with regard to removal of delay due to freight trains on the UPRR tracks.)

5.5.1.3 Freight Transportation

Rail

As part of the West Option, the UPRR tracks would continue to be operational. Because the proposed rail would be elevated, there would be no permanent impacts on the UPRR train operations.

Truck

The West Option would have a similar impact on freight truck operations as the East Option. Because the track would be elevated, there would be no impact on truck routes. The 130th Street station park & ride facility may divert motorists from I-94 commuting into the city during these peak periods. This may help alleviate congestion on the expressway, reducing freight truck travel times and cost.

5.5.1.4 Bicycle Facilities

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.1.4 for permanent impacts on bicyclists in Segment UA and Segment UB.

5.5.1.5 Pedestrians

The West Option would provide pedestrians with more choices, flexibility, and potentially reduced travel times as compared to No Build. The existing at-grade crossings at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street would remain. All parking facilities for each station would be west of the UPRR tracks. Commuters who park & ride would not have to cross the UPRR tracks. Railroad crossing signals with road gates and railroad crossing pavement markings exist at all existing at-grade crossings. Some pedestrians traveling from the east would need to cross the UPRR tracks to access the station; therefore, during the design phase, additional pedestrian control devices, such as increased lighting and gates at the sidewalk, would be considered to improve pedestrian safety at the crossings. All railroad track crossings would be ADA-compliant.

Implementing the West Option would result in beneficial impacts at stations by upgrading intersections with ADA-compliant curb ramps and replacing deteriorated sidewalks. These improvements would provide access for all users and increase pedestrian safety.

Segment UA

103rd Street Station

Existing striped crosswalks at Eggleston Avenue and 103rd Street, and Harvard Avenue and 103rd Street, could be used to access the station. These crosswalks would be improved with the construction of the proposed bus turnaround and station. The auxiliary entrance to the station would be within the surface parking lot, allowing for a direct route from the platform to the parking lot. The parking lot on the south side of 103rd Street would have an entrance at 103rd Place, allowing cars to leave the parking lot farther away from the station, where the majority of pedestrian traffic would occur. All of these improvements would contribute to convenient, safe, and secure access for all users.

111th Street Station

Because the majority of the existing properties adjacent to the existing railroad tracks are undeveloped, proposed sidewalks would need to be provided for pedestrian access to the primary and auxiliary entrances of the proposed station. Existing striped crosswalks are not close to the location of the primary entrance of the station. It would be beneficial to add a striped crosswalk on 111th Street at the location of the primary entrance, as this is likely to be the area that passengers would cross to access the south side of 111th Street. The surface parking lot would be on the west side of the station, which would allow for a direct route from the platform to the parking lot in which users could avoid crossing 111th Street. The west surface parking lot would have an entrance at Eggleston Avenue. This entrance would be away from the proposed station location, where the majority of pedestrian traffic would occur. Eggleston Avenue is currently a dead-end street and has little traffic. The majority of traffic on the street would occur from the surface parking lot. All of these improvements would contribute to convenient, safe, and secure access for all users.

Michigan Avenue Station

The existing pedestrian access on 116th Street east of Michigan Avenue would be improved with the construction of the station. The sidewalk under and adjacent to the existing viaduct for the UPRR tracks would be replaced, providing a continuous ADA-accessible route east of the station and sidewalk connectivity to the existing residential homes east of the station on 116th Street. The parking garage would be close to the primary entrance of the station. Commuters who park in this garage would not have to cross Michigan Avenue or 116th Street. There would be an entrance on State Street and 116th Street, which are a good distance from the station, where pedestrian traffic would be concentrated.

Segment UB

The UPRR Rail Alternative option alignments are in similar locations. See Section 5.3.1.5 for permanent impacts on Segment UB.

5.5.1.6 Parking

Each of the station locations would have surface parking lots and/or parking garages. These parking facilities would expand the reach of the RLE and provide an opportunity for commuters to access the station by car. These commuters may benefit from reduced travel time and reduced travel cost by riding the Red Line. Another benefit would be that motorists could be diverted from congested sections of roadway. Sufficient parking capacity would be provided in all locations to avoid spillover parking into the residential areas near the station locations. Table 5-15 provides a summary of the proposed parking for each of the stations.

Segment UA

Table 5-15: Union Pacific Railroad Rail Alternative West Option Park & Ride Facilities

Station	Parking Type	Capacity	Location	Description
103rd Street	Surface Lot	200	North of 104th Street adjacent to proposed station	Bus turnaround east of proposed station and north of 103rd Street for route #9. No parking provided.
111th Street	Surface Lot	200	West of proposed station. North side of 111th Street	Bus turnaround within the lot for route #352
Michigan Avenue	Five-Story Parking Garage	1000	Southwest of proposed station	Parking garage with ground level available for retail and/or community facilities. Bus turnaround on the ground level for route #119 and #359

Segment UB

130th Street Station

The 130th Street South Station Option and West Station Option would be the same for all of the UPRR Rail Alternatives. Refer to Section 5.3.1.6, for permanent impacts on segment UB parking facilities.

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.2.1 Public Transportation

Bus Transit

The construction activities associated with the West Option would temporarily affect the physical capacity of roadways and intersections requiring detours. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for bus transit users. Bus stop locations may be eliminated or relocated temporarily and buses rerouted during construction

activities. With adherence to local, state, and federal construction and temporary traffic and public transportation management guidelines, no adverse impacts would result from the West Option.

Commuter Rail

Segment UA

The West Option would consist of new construction of dual-track, elevated structure immediately adjacent to and east of the UPRR ROW, branching off and running along the east side of the corridor and over existing CN/ME tracks.

Segment UB

Refer to Section 5.3.2.1 for construction impacts on Segment UB.

5.5.2.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections. This may lead to increased travel times and possible shift in traffic volumes and the need to reroute traffic patterns during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Temporary shutdown of other traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Proposed structure construction would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

With adherence to local, state, and federal construction and temporary traffic management guidelines, no adverse traffic impacts would result from the West Option.

5.5.2.3 Freight Transportation

Segment UA

Rail

The West Option would consist of new construction of dual-track, elevated structure crossing over the UPRR at Fernwood Parkway just south of I-57 and continuing immediately adjacent to and west of the UPRR ROW, crossing over the UPRR tracks again at Prairie Avenue and running

along the east side of the corridor and over existing CN/ME tracks. The West Option would require the construction activities to occur while UPRR tracks are operational. This alternative would have two additional crossings over the active UPRR tracks at Fernwood Parkway and Prairie Avenue that the East option would not have. Construction at this crossing would be phased to minimize impacts on UPRR freight operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Signal devices would need to be moved or temporary signals installed to replace existing signals during construction of viaducts for the following at-grade crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street. Construction activities would be phased to reduce construction impacts on the UPRR operations as much as possible.

Truck

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Temporary shutdown of other traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Proposed structure construction would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-57.

Segment UB

Refer to Section 5.3.2.3 for construction impacts on Segment UB related to freight transportation.

5.5.2.4 Bicycle Facilities

The UPRR Rail Alternative options would have similar alignments. See Section 5.3.2.4 for construction impacts on bicyclists.

5.5.2.5 Pedestrians

The UPRR Rail Alternative options would have similar alignments. See Section 5.3.2.5 for construction impacts on pedestrians.

5.5.2.6 Parking

The UPRR Rail Alternative options would have similar alignments. See Section 5.3.2.6 for construction impacts on parking facilities.

5.5.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

See Section 5.4.3 for cumulative impacts on freight transportation. Because the UPRR tracks would still be in operation under both the East and West Options, the impacts would be the same under the East and West Options.

5.6 Halsted Rail Alternative

The proposed Halsted Rail Alternative is a 5-mile extension of the existing Red Line. It would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. It would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. Four stations would be at 103rd Street, 111th Street, 119th Street, and Vermont Avenue.

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

Figure 5-3 shows the Halsted Rail Alternative. The impact analysis was conducted for two segments within the Halsted Rail Alternative. Segments HA and HB are shown on Figure 5-3. Because the traffic analysis was conducted on a regional basis, the traffic discussion was not divided into segments.

5.6.1.1 Public Transportation

Currently the 95th Street Terminal is the southern terminus of the Red Line. Many of the existing bus routes within the project area terminate at this location. From this station, passengers continue to travel north on the Red Line or connect to a different bus route. With the expansion of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations. Passengers would benefit from reduced travel times to connecting rail service, further south of the 95th Street Terminal. The transportation model indicates approximately 5,980 new riders for the Halsted Rail Alternative and total project weekday boardings of 35,300 (AECOM 2009).

The following describes changes to existing bus routes as a result of the Halsted Rail Alternative:

Segment HA

- CTA route #9 Ashland would terminate at the 103rd Street station, allowing passengers to continue to travel south of 104th Street where the existing route #9 currently terminates.
- CTA route #103 West 103rd and #106 East 103rd would be combined into one route operating between a west terminal at Pulaski Road and an east terminal at Stony Island Avenue. This change would reduce the number of bus routes that terminate at 95th Street while still providing service to the Red Line.
- The CTA route #108 Halsted/95th would be eliminated because the rail extension would replace this bus route.

- Routes #112 Vincennes/111th and #111 111th/King Drive would be reconstructed to simplify route paths and better serve the new alignment. Route #111 would operate on 111th Street between 111th Street/Pulaski Road and 111th Street/Corliss Avenue, serving the new 111th Street station. A new route #115 would operate as a two-directional loop on 115th Street, Cottage Grove Avenue, 95th Street, and Vincennes Avenue. Route #112 would be eliminated.

- Route# 119 Michigan Avenue/119th Street would terminate at the 119th Street station.

Segment HB

- Pace route #348 would terminate at the Vermont Avenue station.

- Pace route #352 Halsted would terminate at the Vermont Avenue station. Route #359 Robbins/South Kedzie would terminate at the 119th Street station instead of the 95th Street Terminal.

"User benefit" is a measure of travel time improvement for each person boarding the system. This measure indicates the overall reduction in travel time including travel to the station, wait time, transfer time, and on-transit time. For the Halsted Rail Alternative, the average user benefit per boarding passenger would be 14 minutes (AECOM 2009). With expansion of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations. Passengers would benefit from reduced travel times to connecting rail service, further south of the 95th Street Terminal. Congestion at 95th Street Terminal would be reduced as fewer buses would be routed to the 95th Street Terminal for transfers to the Red Line. There would be no adverse impacts on public transportation from the Halsted Rail Alternative.

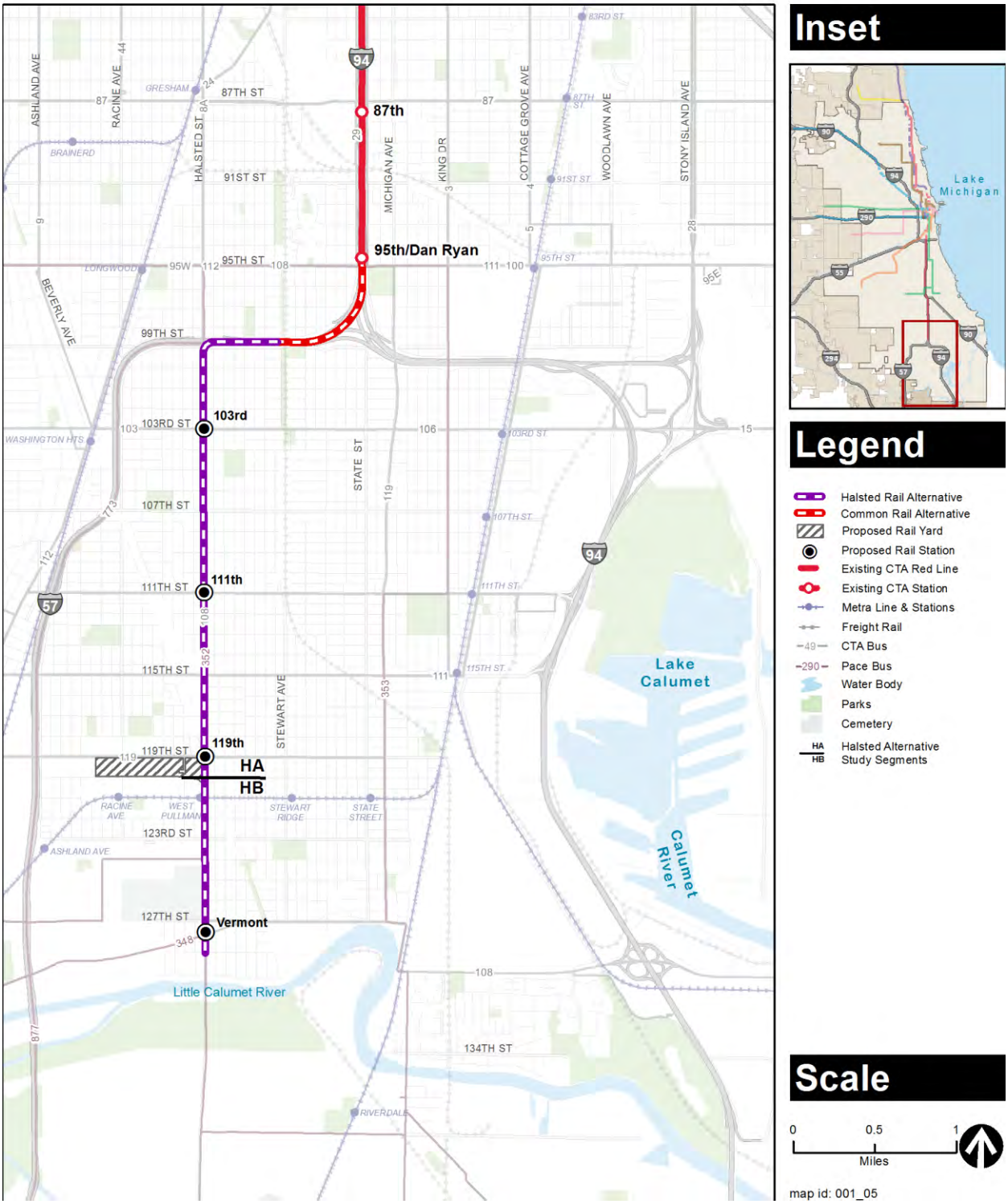

Figure 5-3: Halsted Rail Alternative

5.6.1.2 Traffic

Under Halsted Rail Alternative (2026) conditions, 75 percent of the study intersections within the API would operate at LOS "D" or better in both the AM and PM peak hours, as shown in Table 5-16. Appendix E contains the traffic data and Synchro results for the Halsted Rail Alternative. All increases in traffic volumes are related to vehicle access to park & ride facilities at stations. Under Halsted Rail Alternative (2026) conditions, 19 of the 76 study intersections would operate at an unacceptable LOS (LOS "E" or "F") in either or both the AM and PM peak hours. Of those 19 intersections, 13 would operate at conditions worse than the No Build conditions. The intersections that operate at worse than the No Build conditions are shown in bold in Table 5-16 and are listed below:

- 103rd Street and Halsted Street - AM LOS = F; **PM LOS = E**
- 115th Street and Cottage Grove Avenue East - **AM LOS = F**
- 119th Street and Ashland Avenue - **AM LOS = E**; PM LOS = F
- 119th Street and Halsted Street - **PM LOS = E**
- 127th Street and Paulina Street - **PM LOS = E**
- 127th Street and Marshfield Avenue - **AM LOS = E**
- 127th Street and Ashland Avenue - **PM LOS = F**
- 127th Street and Halsted Street - **AM LOS = F; PM LOS = F**
- Vermont Avenue and Halsted Street - **AM LOS = F; PM LOS = F**
- 127th Street and Vermont Avenue and Wallace Street - **AM LOS = F; PM LOS = F**
- 127th Street and State Street - **PM LOS = F**
- 127th Street and Michigan Avenue - **PM LOS = F**
- 130th Street and Indiana Avenue - **PM LOS = F**

Under Halsted Rail Alternative (2030) conditions, most of the study intersections within the API would operate at LOS "D" or better in both the AM and PM peak hours, as shown in Table 5-16. Under Halsted Rail Alternative (2030) conditions, there would be 22 intersections that would operate at LOS "E" or "F" in either or both the AM and PM peak hours. Of the 22 intersections, 15 would operate at worse than the No Build conditions. The 15 intersections that would operate at worse than the No Build conditions are shown in Table 5-16 in bold text and are listed below:

- 103rd Street and Halsted Street - AM LOS = F; **PM LOS = F**
- 111th Street and Cottage Grove Avenue - **PM LOS = E**

- 115th Street and Cottage Grove Avenue– **AM LOS = E**
- 115th Street and Cottage Grove Avenue East - **AM LOS = F**
- 119th Street and Ashland Avenue - **AM LOS = E**; PM LOS = F
- 119th Street and Halsted Street - **PM LOS = E**
- 127th Street and Paulina Street - **PM LOS = E**
- 127th Street and Marshfield Avenue - **AM LOS = F**
- 127th Street and Ashland Avenue - **PM LOS = F**
- 127th Street and Halsted Street - **AM LOS = F; PM LOS = F**
- Vermont Avenue and Halsted Street - **AM LOS = F; PM LOS = F**
- 127th Street and Vermont Avenue and Wallace Street - **AM LOS = F; PM LOS = F**
- 127th Street and State Street - **PM LOS = F**
- 127th Street and Michigan Avenue - **PM LOS = F**
- 130th Street and Indiana Avenue - **PM LOS = F**

Table 5-16: Halsted Rail Alternative (2026 and 2030) Intersection Level of Service

ID	Intersection	Control Type	2026 Halsted Rail Alternative		2030 Halsted Rail Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
1	95th Street and Wentworth Avenue	Signalized	B	B	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	D	C
4	95th Street and Michigan Avenue	Signalized	B	B	B	B
5	98th Place and Halsted Street	Signalized	F	F	F	F
6	99th Street and Halsted Street	Signalized	D	C	D	C
7	98th Place and Wentworth Avenue	Signalized	B	B	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B	B	B
9	99th Street and State Street	Signalized	A	B	A	B
10	99th Street and Michigan Avenue	Signalized	C	B	C	B
11	99th Place and Martin Luther King Drive	Signalized	B	B	B	B

ID	Intersection	Control Type	2026 Halsted Rail Alternative		2030 Halsted Rail Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
12	100th Street and Martin Luther King Drive	Signalized	B	A	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	C	A	C
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	E	F	E	F
15	103rd Street and Morgan Street	Signalized	B	B	B	B
16	103rd Street and Halsted Street	Signalized	F	**E**	F	**F**
17	103rd Street and Normal Avenue	Signalized	B	B	B	C
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
19	103rd Street and State Street	Signalized	B	B	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A	A	A
24	107th Street and Halsted Street	Signalized	F	C	F	C
25	107th Street and Wentworth Avenue	Signalized	B	B	B	B
26	107th Street and State Street	Signalized	A	A	A	A
27	107th Street and Michigan Avenue	Signalized	B	B	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B	B	B
29	107th Street and Cottage Grove Avenue	Signalized	B	B	B	B
30	111th Street and Marshfield Avenue	Signalized	C	C	C	C
31	111th Street and Hamlet Avenue	Signalized	D	D	D	D
32	112th Place and Marshfield Avenue	Signalized	C	C	C	C
33	112th Place and Hamlet Avenue	Signalized	E	C	E	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	B	B	B
36	111th Street and Wentworth Avenue	Signalized	B	A	B	A
37	111th Street and State Street	Signalized	A	B	A	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
39	111th Street and Indiana Avenue	Signalized	B	B	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A	B	A

ID	Intersection	Control Type	2026 Halsted Rail Alternative		2030 Halsted Rail Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
41	111th Street and Cottage Grove Avenue	Signalized	C	D	C	**E**
42a	111th Street and Langley Avenue	Signalized	B	C	B	C
42b	111th Street and Ellis Avenue	Signalized	C	C	D	C
43	111th Street and Doty Avenue	Signalized	C	C	C	C
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	D	C	E	C
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	E	C	E	C
46	115th Street and Marshfield Avenue	Signalized	B	B	B	B
47	115th Street and Ashland Avenue	Signalized	B	B	B	B
48	115th Street and Racine Avenue	Signalized	B	C	B	C
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	B	D	B	D
53	115th Street and Indiana Avenue	Signalized	B	B	B	B
54	115th Street and Martin Luther King Drive	Unsignalized	D	F	D	F
55a	115th Street and Cottage Grove Avenue	Signalized	D	D	**E**	D
55b	115th Street and Cottage Grove Avenue East	Signalized	**F**	D	**F**	D
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	D	C	D	C
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	C	D	C
58	119th Street and Marshfield Avenue	Signalized	D	D	D	D
59	119th Street and Ashland Avenue	Signalized	**E**	F	**E**	F
60	119th Street and Halsted Street	Signalized	C	**E**	D	**E**
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	B	C	B	C
63	119th Street and Michigan Avenue	Signalized	A	A	A	A
64	127th Street and Paulina Street	Signalized	C	**E**	C	**E**
65	127th Street and Marshfield Avenue	Signalized	**E**	C	**F**	D
66	127th Street and Ashland Avenue	Signalized	C	**F**	D	**F**
67	Ashland Avenue and Vermont Avenue	Signalized	C	C	C	C

ID	Intersection	Control Type	2026 Halsted Rail Alternative		2030 Halsted Rail Alternative	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
68	127th Street and Halsted Street	Signalized	**F**	**F**	**F**	**F**
69	Vermont Avenue and Halsted Street	Signalized	**F**	**F**	**F**	**F**
70	127th Street and Vermont Avenue and Wallace Street	Signalized	**F**	**F**	**F**	**F**
71	127th Street and State Street	Signalized	C	**F**	C	**F**
72	127th Street and Michigan Avenue	Signalized	B	**F**	B	**F**
73	130th Street and Indiana Avenue	Signalized	D	**F**	D	**F**
74	130th Street and Ellis Avenue	Signalized	B	B	B	B

Notes:
LOS = level of service
Signalized intersection LOS reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. LOS "E" and "F" are shown in bold.

Mitigation measures to reduce or minimize the impacts were evaluated for the transportation network surrounding the Halsted Rail Alternative. Mitigation measures for intersections near the affected intersection may also be necessary to provide better flow of traffic; therefore, the mitigation measures include the affected intersections as well as adjacent or nearby intersections. Table 5-17 lists the mitigation measures that would address impacts on the study intersections under Halsted Rail Alternative (2030) conditions:

Table 5-17: Mitigation Measures for the Halsted Rail Alternative (2030) Conditions

ID	Intersection	Mitigation Measure
14	103rd Street and Vincennes Avenue and Beverly Avenue	PM: Optimize cycle length/splits.
16	103rd Street and Halsted Street	AM/PM: Optimize cycle length/splits.
41	111th Street and Cottage Grove Avenue	PM: Optimize splits.
55a	115th Street and Cottage Grove Avenue	AM/PM: Increase cycle length, Optimize splits
55b	115th Street and Cottage Grove Avenue East	AM/PM: Increase cycle length, Optimize splits
59	119th Street and Ashland Avenue	PM: Optimize splits.
60	119th Street and Halsted Street	PM: Optimize splits
64	127th Street and Paulina Street	AM: Decrease cycle length. Optimize splits. PM: Increase cycle length. Optimize splits. Add westbound turn lane take from eastbound turn lane in other direction. There does appear to be sufficient width on bridge to have double left turns in both directions.
65	127th Street and Marshfield Avenue	AM: Decrease cycle length. Optimize splits. PM: Increase cycle length. Optimize splits.

ID	Intersection	Mitigation Measure
66	127th Street and Ashland Avenue	AM: Decrease cycle length. Optimize splits. PM: Increase cycle length. Optimize splits.
68	127th Street and Halsted Street	Add eastbound left turn lane. Add northbound left turn lane (remove parking). AM: Optimize cycle length. PM: Increase cycle length. Optimize splits. Actuate and coordinate signal.
69	Vermont Avenue and Halsted Street	Add eastbound right turn lane. Add westbound left turn lane. Add southbound right turn lane. Increase cycle length. Optimize splits. Actuate and coordinate signal.
70	127th Street and Vermont Avenue and Wallace Street	Add additional NE right turn lane. Change westbound through/left to dedicated westbound left turn lane. Restrict northeast bound to northbound movement. Actuate signal. Optimize cycle length/splits.
71	127th Street and State Street	Add eastbound left turn lane.
72	127th Street and Michigan Avenue	PM: Increase cycle length. Optimize splits.
73	130th Street and Indiana Avenue	Add northbound right turn lane. PM: Increase cycle length. Optimize splits.

Under Halsted Rail mitigated (2030) conditions, most of the study intersections within the API would operate at LOS "D" or better in both the AM and PM peak hours, as shown in Table 5-18. Under Halsted Rail mitigated (2030) conditions, some intersections would operate at "E" or "F;" however, these intersections would be no worse than No Build (2030) conditions. Mitigated conditions would not result in additional intersections with unacceptable LOS. As such, there would be no adverse permanent traffic impacts for this alternative. LOS D is considered to be acceptable for an urban area.

Table 5-18: Halsted Rail Alternative Mitigated (2030) Intersection Level of Service

ID	Intersection	Control Type	2030 No Build Alternative		2030 Halsted Rail Alternative Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
1	95th Street and Wentworth Avenue	Signalized	B	B	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D	D	D
3	95th Street and State Street	Signalized	D	C	D	C
4	95th Street and Michigan Avenue	Signalized	B	B	B	B
5	98th Place and Halsted Street	Signalized	**F**	**F**	**F**	**F**
6	99th Street and Halsted Street	Signalized	D	D	D	C
7	98th Place and Wentworth Avenue	Signalized	B	B	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B	B	B
9	99th Street and State Street	Signalized	A	B	A	B
10	99th Street and Michigan Avenue	Signalized	C	B	C	B
11	99th Place and Martin Luther King Drive	Signalized	B	B	B	B

ID	Intersection	Control Type	2030 No Build Alternative		2030 Halsted Rail Alternative Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
12	100th Street and Martin Luther King Drive	Signalized	B	A	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	C	A	C
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	**E**	**F**	**E**	**F**
15	103rd Street and Morgan Street	Signalized	B	B	B	B
16	103rd Street and Halsted Street	Signalized	**F**	D	**F**	C
17	103rd Street and Normal Avenue	Signalized	B	B	B	C
18	103rd Street and Wentworth Avenue	Signalized	B	B	B	B
19	103rd Street and State Street	Signalized	B	B	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A	A	A
24	107th Street and Halsted Street	Signalized	**F**	C	**F**	C
25	107th Street and Wentworth Avenue	Signalized	B	B	B	B
26	107th Street and State Street	Signalized	A	A	A	A
27	107th Street and Michigan Avenue	Signalized	B	B	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B	B	B
29	107th Street and Cottage Grove Avenue	Signalized	B	B	B	B
30	111th Street and Marshfield Avenue	Signalized	C	C	C	C
31	111th Street and Hamlet Avenue	Signalized	D	D	D	D
32	112th Place and Marshfield Avenue	Signalized	B	C	C	C
33	112th Place and Hamlet Avenue	Signalized	**E**	C	**E**	C
34	111th Street and Halsted Street	Signalized	C	C	C	C
35	111th Street and Normal Avenue	Signalized	B	A	B	B
36	111th Street and Wentworth Avenue	Signalized	B	A	B	A
37	111th Street and State Street	Signalized	A	B	B	B
38	111th Street and Michigan Avenue	Signalized	B	B	B	B
39	111th Street and Indiana Avenue	Signalized	B	B	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A	B	A
41	111th Street and Cottage Grove Avenue	Signalized	C	D	C	C
42a	111th Street and Langley Avenue	Signalized	B	C	B	C

ID	Intersection	Control Type	2030 No Build Alternative		2030 Halsted Rail Alternative Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
42b	111th Street and Ellis Avenue	Signalized	C	C	D	D
43	111th Street and Doty Avenue	Signalized	C	C	C	C
44	111th Street and Bishop Ford eastbound Ramps	Unsignalized	**E**	C	**E**	C
45	111th Street and Bishop Ford westbound Ramps	Unsignalized	**E**	B	**E**	C
46	115th Street and Marshfield Avenue	Signalized	B	B	B	B
47	115th Street and Ashland Avenue	Signalized	B	B	B	B
48	115th Street and Racine Avenue	Signalized	B	C	B	C
49	115th Street and Halsted Street	Signalized	C	C	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B	B	B
51	115th Street and State Street	Signalized	B	B	B	B
52	115th Street and Michigan Avenue	Signalized	B	D	B	C
53	115th Street and Indiana Avenue	Signalized	B	B	B	C
54	115th Street and Martin Luther King Drive	Unsignalized	D	**F**	D	**F**
55a	115th Street and Cottage Grove Avenue	Signalized	D	C	B	D
55b	115th Street and Cottage Grove Avenue East	Signalized	**E**	C	C	B
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	D	C	D	C
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	C	D	C
58	119th Street and Marshfield Avenue	Signalized	D	D	D	D
59	119th Street and Ashland Avenue	Signalized	D	**F**	D	**F**
60	119th Street and Halsted Street	Signalized	C	C	C	D
61	119th Street and Wentworth Avenue	Signalized	B	B	B	B
62	119th Street and State Street	Signalized	B	B	C	B
63	119th Street and Michigan Avenue	Signalized	A	A	C	B
64	127th Street and Paulina Street	Signalized	C	C	C	C
65	127th Street and Marshfield Avenue	Signalized	C	C	C	C
66	127th Street and Ashland Avenue	Signalized	C	C	C	C
67	Ashland Avenue and Vermont Avenue	Signalized	C	C	C	C
68	127th Street and Halsted Street	Signalized	C	C	C	D
69	Vermont Avenue and Halsted Street	Signalized	B	B	B	B
70	127th Street and Vermont Avenue and Wallace Street	Signalized	D	D	C	D
71	127th Street and State Street	Signalized	B	B	B	C
72	127th Street and Michigan Avenue	Signalized	A	B	B	C

ID	Intersection	Control Type	2030 No Build Alternative		2030 Halsted Rail Alternative Mitigated	
			AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
73	130th Street and Indiana Avenue	Signalized	C	C	D	D
74	130th Street and Ellis Avenue	Signalized	A	A	B	B

Notes:
LOS = level of service
Signalized intersection LOS reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. LOS "E" and "F" are shown in bold.

5.6.1.3 Freight Transportation

Rail

The Halsted Rail Alternative alignment crosses over the UPRR at Fernwood Parkway and I-57. Because this would be an aerial structure, there would be no permanent impact on UPRR freight operations.

Truck

Because the rail line would be elevated, there would be no impacts on freight truck traffic on Halsted Street. The minimum clearance between the aerial structure and the roadway is 14 feet 9 inches, the minimum clearance required for local roadways.

5.6.1.4 Bicycle Facilities

The existing off-street bike trail, Major Taylor Trail, runs north/south from 83rd Street to the Cal-Sag Channel. The trail is divided by Halsted Street at 119th Street. Currently, the portion of the trail west of Halsted Street ends at the existing sidewalk north of the 119th Street and Halsted Street intersection. Bike riders must use approximately 170 feet of existing sidewalk along the west side of Halsted Street to access the intersection of 119th Street and Halsted Street. The existing crosswalks are used to cross to the continuation of the bike trail east of Halsted Street near the southeast corner of the intersection. Because the Halsted Rail Alternative would use an elevated structure, the existing trail would not be permanently affected by the operation of the station. Careful attention to the entrance location and location of the stair/escalator would be made to ensure that there would be no disconnect created in the existing bike route. Enough space would be provided to avoid a conflict with bicycle and pedestrian traffic.

Due to the close proximity of the existing off-street bike trail and Halsted Street, bicyclists would easily be able to access the Red Line. Bicyclists would have the option to park & ride or to bring their bicycles on the trains. Bicyclists are currently restricted from bringing bicycles onto trains during weekday rush periods, which would increase the need for bicycle parking at stations for weekday work commuters.

5.6.1.5 Pedestrians

The Halsted Rail Alternative would provide pedestrians with more choices, flexibility and potentially reduced travel times as compared to No Build. Implementing the Halsted Rail Alternative would result in beneficial impacts at stations by upgrading intersections with ADA-compliant curb ramps and replacing deteriorated sidewalks. These improvements would provide access for all users and increase pedestrian safety.

Segment HA

103rd Street Station

The curb ramps and sidewalks would be improved with the construction of the proposed surface lots and aerial structure. Entrances to the station would be near the surface parking lot, allowing for a direct route from the platform to the parking lot. The entrance to the parking lot would be on the north side of 103rd Street and west of the proposed station, allowing cars to leave the parking lot farther away from the station, where the majority of pedestrian traffic would occur. All of these improvements would contribute to convenient, safe, and secure access for all users.

111th Street Station

The curb ramps and sidewalks would be improved with the construction of the proposed surface lots and aerial structure. The surface parking lot would be west of the station, allowing for a direct route from the platform to the parking lot. The parking lot entrances would be located on 111th Street and Green Street, a safe distance from the majority of pedestrian traffic. All of these improvements would contribute to convenient, safe, and secure access for all users.

119th Street Station

The curb ramps and sidewalks would be improved with the construction of the proposed surface lots and aerial structure. The surface parking lot would be at the southwest corner of the intersection, which is south of the station. Access to the station would require the crossing of 119th Street and/or Halsted Street. Because the intersection is signalized and has marked cross walks, pedestrians would have a safe route between the parking lot and the platform. The parking lot entrances would be located at 119th Street and Green Street, a safe distance from the majority of pedestrian traffic. All of these improvements would contribute to convenient, safe, and secure access for all users.

Segment HB

Vermont Avenue Station

The curb ramps (including the intersections of Halsted Street with 128th Street and with Vermont Avenue) and sidewalks would be improved with the construction of the aerial structure, the Vermont Avenue station, the proposed surface lot to the east of Halsted Street, and the parking structure to the west of Halsted Street. Bus bays for connecting CTA and Pace buses would be included at the station. These improvements would contribute to convenient, safe, and secure access for all users.

5.6.1.6 Parking

Each of the station locations would have surface parking lots and/or parking garages. These parking facilities would expand the reach of the RLE and provide an opportunity for commuters to access the station by car. These users may benefit from reduced travel time and reduced travel cost by riding the Red Line. Another benefit would be that motorists could be diverted from congested sections of roadway. Sufficient parking capacity would be provided in all locations to avoid spillover parking into the residential areas near the station locations. Table 5-19 presents a summary of the proposed parking for each of the stations.

Segment HA

Table 5-19: Halsted Rail Alternative Park & Ride Facilities Segment UA

Station	Parking Type	Capacity	Location	Description
103rd Street	Surface lot	200	North of 103rd Street west of proposed station	Bus turnaround East of proposed station and north of 103rd for route #9. No parking provided.
111th Street	Surface lot	200	North of 111th Street west of proposed station	Bus turnaround within the lot for route #352
119th Street	Surface lot	1,000	South of 119th Street west of proposed station	Bus turnaround within the lot for route #359

Segment HB

The park & ride facility at Vermont Avenue station would be near the I-57 Expressway and 127th Street interchange. It would be just over 3 miles from the I-94 Bishop Ford Freeway and 130th Street interchange. This facility would expand the reach of the RLE to the south suburban and northwest Indiana automobile commuters. These commuters could benefit from decreases in travel times and cost by riding the Red Line and avoiding congestion and travel delays on the Dan Ryan Expressway and I-57 Expressway. Table 5-20 presents a summary of the parking for the Vermont Avenue station.

Table 5-20: Halsted Rail Alternative Park & Ride Facilities Segment UB

Station	Parking Type	Capacity	Location	Description
Vermont Avenue	7 Story Parking Garage	2,000	West of proposed station	Parking garage with ground level available for retail and/or community facilities. Bus bays located on Halsted for route #8A, #348 and #352

On-street parking is provided all along Halsted Street with parking restrictions at locations of bus stops, fire hydrants, and driveway entrances. On-street parking is allowed from I-57 to 129th Street. Permits are not required for on-street parking. The straddle bent beam column locations would decrease the number of on-street parking spots on Halsted Street. Bump-outs in the

concrete sidewalk would provide protection to the columns and allow for parking in the current parking lane between column spans. The adverse impact on on-street parking would be minimal.

The mitigation measure to expand the left-turn lane for the intersection of 127th Street and Halsted Street may require the removal of on-street parking to accommodate the left turn and shift the intersection back to a typical alignment. The removal of these spaces would not be adverse. Parking is available on adjacent streets (and at the Vermont Avenue parking garage). The frequency of driveways near this intersection limits the parking availability and current use of the street for parking.

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

5.6.2.1 Public Transportation

The construction activities associated with the Halsted Rail Alternative would temporarily affect the physical capacity of roadways and intersections requiring detours. Superstructure erection would require temporary shutdown of all traffic on Halsted Street. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for bus transit users. Bus stop locations may be eliminated or relocated temporarily and buses rerouted during construction activities. Bus stops for routes along Halsted Street (#8A, #108, and Pace #352) will have changes in stops as construction work progresses along the corridor. Bus stops for routes intersecting with Halsted Street (#103, #111, #115, #119, and Pace #348) will have changes only when construction activities are in the vicinity of the applicable intersection. With adherence to local, state, and federal construction and temporary traffic and public transportation management guidelines, no adverse construction impacts would result from the Halsted Rail Alternative.

The ME Blue Island line crosses Halsted Street between 120th Street and 122nd Street. The West Pullman Station is west of Halsted Street. Construction of the aerial structure would require temporary scheduled track closures. Construction would be phased to minimize impacts on Metra operations.

5.6.2.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections. This may lead to increased travel times, possible shift in traffic volumes, and the need to reroute traffic patterns during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Proposed structure construction

would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

The construction activities associated with the Halsted Rail Alternative would temporarily affect the physical capacity of roadways and intersections. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for traffic using Halsted Street. Steel beam placement transverse to Halsted Street or across intersections would require temporary shutdown of all traffic on Halsted Street and/or the intersecting street. Beam placement is typically done during late night hours to minimize traffic impacts. Temporary traffic stoppage usually occurs in 15-minute intervals as beams are lifted off trucks and secured in position. Marked alternate routes would likely include Vincennes Road on the west and Wentworth Avenue on the east, although local drivers will likely use nearby streets. With adherence to local, state, and federal construction and temporary traffic management guidelines, no adverse traffic impacts would result from the Halsted Rail Alternative.

5.6.2.3 Freight Transportation

Rail

There would be no construction impacts on rail freight transportation, because no freight train tracks are near or cross the Halsted Rail Alternative alignment.

Truck

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-94.

The Halsted Rail Alternative alignment crosses over the UPRR at Fernwood Parkway and I-57. Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Proposed structure construction would be sequenced to minimally affect traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times for shipping routes that include this portion of I-57.

The construction activities associated with the Halsted Rail Alternative would temporarily affect the physical capacity of roadways and intersections requiring detours. Superstructure erection would require temporary shutdown of all traffic on Halsted Street. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for freight trucks using Halsted Street.

5.6.2.4 Bicycle

Portions of the Major Taylor Trail would need to be closed temporarily during the construction of the 119th Street station and the aerial structure. Bicycle travel times may increase due to detours or shifting of routes.

5.6.2.5 Pedestrian

Due to the construction of the aerial structure and stations sidewalks would need to be temporarily closed. Increased travel distance and time may be incurred due to pedestrian traffic reroutes.

5.6.2.6 Parking

On-street parking would be temporarily affected during construction of the aerial structure and stations. Parking would potentially be eliminated from Halsted Street during construction to increase traffic flow. Construction of park & ride lots would also contribute to temporary on-street parking loss due to maintenance of traffic during construction activities.

5.6.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative

There would be no adverse cumulative impacts for the Halsted Rail Alternative.

5.6.4 119th Street Yard and Shop

The 119th Street yard and shop would be located south of the 119th Street station and north of Vermont Avenue station to the west of Halsted Street. The parcel on which the yard and shop would be constructed is west of the park & ride facility location at the 119th Street station. Track height would transition from elevated at station height to at-grade between Halsted Street and Morgan Street, through the proposed park & ride facility. The yard would be entirely at grade.

5.6.4.1 Permanent Impacts and Mitigations

Under the Halsted Rail Alternative there would be no adverse permanent impacts on bicycle or pedestrian access. Pedestrian access by the general public would be restricted and discouraged. Existing sidewalks within the ROW of 119th Street, 120th Street, and Peoria Street would remain. Because of the location of the yard no public transportation would be affected. Existing on-street parking on Peoria Street would not be affected. Some parking would be provided for yard employees.

5.6.4.2 Construction Impacts and Mitigations

The construction activities associated with the 119th Street yard and shop would temporarily affect the physical capacity of roadways and intersections requiring detours at 120th Street and Halsted Street. Superstructure erection would require temporary shutdown of all traffic on Halsted Street. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for bus transit users. Bus stop locations may be eliminated or relocated temporarily and buses rerouted during construction activities. Lane closure on 119th Street and 120th Street may occur due to maintenance of traffic activities during construction. With adherence to local, state, and federal construction and temporary traffic and public transportation

management guidelines, no adverse construction impacts would result from the Halsted Rail Alternative.

Section 6
Impacts Remaining After Mitigation

Impacts can be adverse or beneficial. In the category of transportation, as summarized for each alternative below, there would be no adverse impacts after mitigation. The project will provide transportation benefits by improving travel times and transit access. Existing average travel times to work are higher in the RLE API than many other parts of Chicago. Within the API, some sections (particularly along 130th Street) are somewhat isolated from transit access. Benefits which directly address needs within the API are summarized below for each alternative.

6.1 No Build Alternative

There would be no impacts for the No Build Alternative.

6.2 Bus Rapid Transit Alternative

After mitigation, there would be no adverse impacts on transportation facilities.

Benefits of the BRT Alternative include:

- more frequent service throughout the day along the BRT alignment (4 minutes versus existing 12 minutes);
- approximately 3 minutes faster travel time from 130th Street to the 95th Street Terminal compared to existing bus service; and
- routing of service along and south of 130th Street to areas currently isolated from transportation connectivity.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

Benefits applicable to all options for the UPRR Alternative include:

- an average "user benefit" (a measure of the combined time savings of travel time to stations, wait time at stations, transfer time, and on-transit time) of 12 minutes per boarding; and
- direct rail service (without requiring one or more bus transfers) from 130th Street, an area currently isolated from transportation connectivity.

6.3.1 Segment UA

After mitigation, there would be no adverse impacts on transportation facilities.

6.3.2 Segment UB

After mitigation, there would be no adverse impacts on transportation facilities.

6.3.3 120th Street Yard and Shop

There would be no impacts on transportation facilities from the 120th Street yard and shop.

6.4 Union Pacific Railroad Rail Alternative - East Option

6.4.1 Segment UA

After mitigation, there would be no adverse impacts on transportation facilities.

6.4.2 Segment UB

After mitigation, there would be no adverse impacts on transportation facilities.

6.4.3 120th Street Yard and Shop

There would be no impacts on transportation facilities from the 120th Street yard and shop

6.5 Union Pacific Railroad Rail Alternative - West Option

6.5.1 Segment UA

After mitigation, there would be no adverse impacts on transportation facilities.

6.5.2 Segment UB

After mitigation, there would be no adverse impacts on transportation facilities.

6.5.3 120th Street Yard and Shop

There would be no impacts on transportation facilities.

6.6 Halsted Rail Alternative

Benefits for the Halsted Rail Alternative include:

- an average "user benefit" of 14 minutes per boarding (which is a savings in travel time to stations, wait time, transfer time, and on-transit time); and
- direct rail service from the area surrounding Halsted Street. (Note that the area surrounding Halsted Street and Vermont Avenue currently has among the longest travel times to work in Chicago, ranging from 45 to 60 minutes.)

6.6.1 Segment HA

After mitigation, there would be no adverse impacts on transportation facilities.

6.6.2 Segment HB

After mitigation, there would be no adverse impacts on transportation facilities.

6.6.3 119th Street Yard and Shop

There would be no impacts on transportation facilities.

Section 7
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Appendix A
Existing Conditions

Red Line Extension Traffic Methodology

Existing Volumes

Intersection turning movement volumes were taken from two sources, existing counts from other studies and new counts conducted for this study. Adjustments were made when appropriate to match existing count volumes to volumes gathered from new counts. For locations with adjacent signalized intersections, such as frontage road intersection pairs along the interstates, counts were balanced to reflect more accurate traffic flow patterns.

Peak hour time periods used in this analysis are between 7:30 and 8:30 A.M. and 5:00 and 6:00 P.M. Peak hour factors for each individual intersection were used based on the existing 15-minute peak volume distributions.

There were several minor intersections where turning movement counts were not conducted. Turning movement volumes were estimated using adjacent intersection volume counts as approach and departure volumes and then applying a simple distribution assumption to generate turning movement volumes.

2026 and 2030 Base Volumes

Growth rates for 2030 traffic volumes were calculated from CMAP regional AM and PM peak models for existing, 2030 without-project, and 2030 with-project. To account for growth in the traffic between existing and future scenarios, existing intersection turning movement volumes for each intersection approach were adjusted based on the proportional change of volume between the corresponding CMAP model links. For intersection approaches without corresponding CMAP model links, the proportional change for these approaches was taken from the approaches at the same intersection that did have corresponding CMAP links. A floor of 1.0 and a ceiling of 1.3 were applied to the proportional changes. To estimate 2026 volumes, a simple linear growth rate from existing to 2030 base volumes was assumed.

2026 and 2030 With-Project Volumes

Trip generation rates from the ITE Trip Generation Manual are used to estimate the number of AM and PM peak traffic entering and exiting the park and ride locations for each project scenario based on the number of parking spaces that are to be constructed for the corresponding year of analysis. The project trips are then distributed across the transportation network based on an assumed distribution pattern.
The project traffic was added to the 2026 and 2030 base volumes to get the 2026 and 2030 with-project traffic for each project scenario.

Future peak hour factors (PHF) of 0.9 were used for all intersections with existing PHFs of 0.9 or less. A PHF of 0.95 was used for all intersections with existing PHFs of 0.9 to 0.95. If the existing peak hour factor was greater than 0.95, then the existing PHF was used as the future PHF.

Synchro Analysis and Mitigation

An analysis of each year and each project scenario was performed using Synchro 7. The results of the Synchro analysis were used to determine which intersections were impacted by each project scenario. Potential mitigation for impacted intersections included signal modifications, such as optimization or actuation; additional lanes or lane configuration modifications within existing pavement; and as a last resort, adding turn lanes that would require pavement widening.

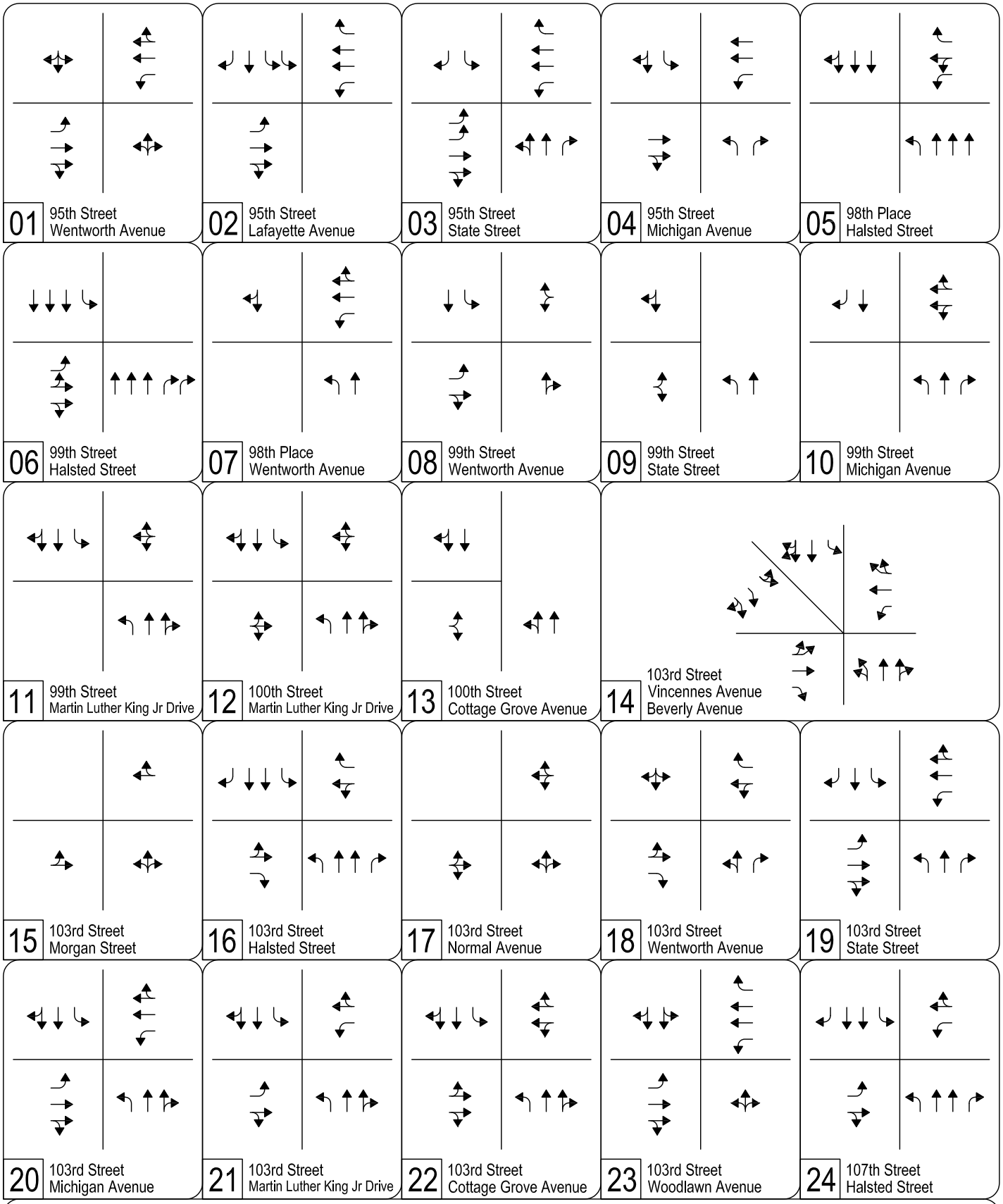

Existing (2012) Intersection Lane Geometry

Page 1 of 3

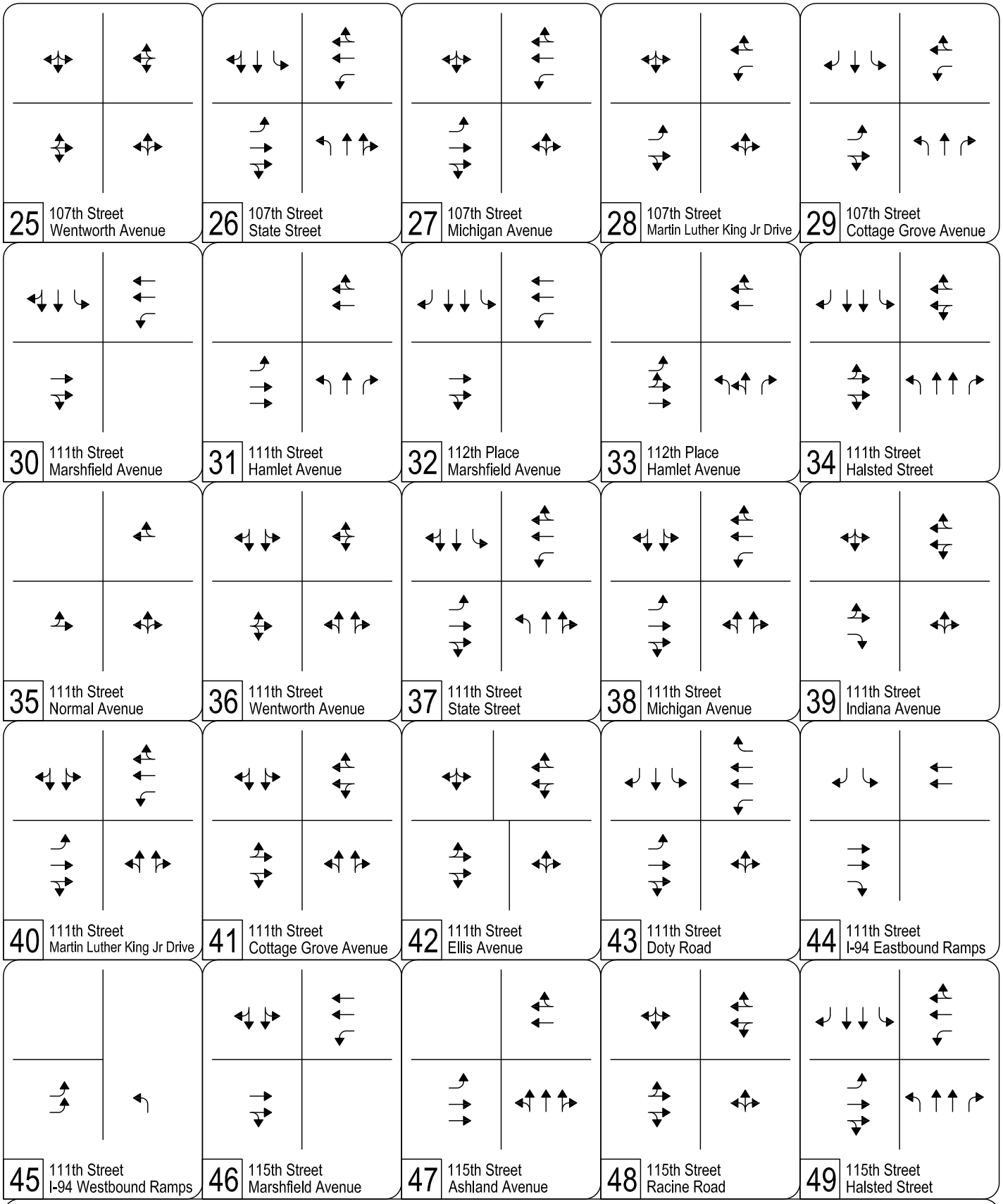

Existing (2012) Intersection Lane Geometry

Page 2 of 3

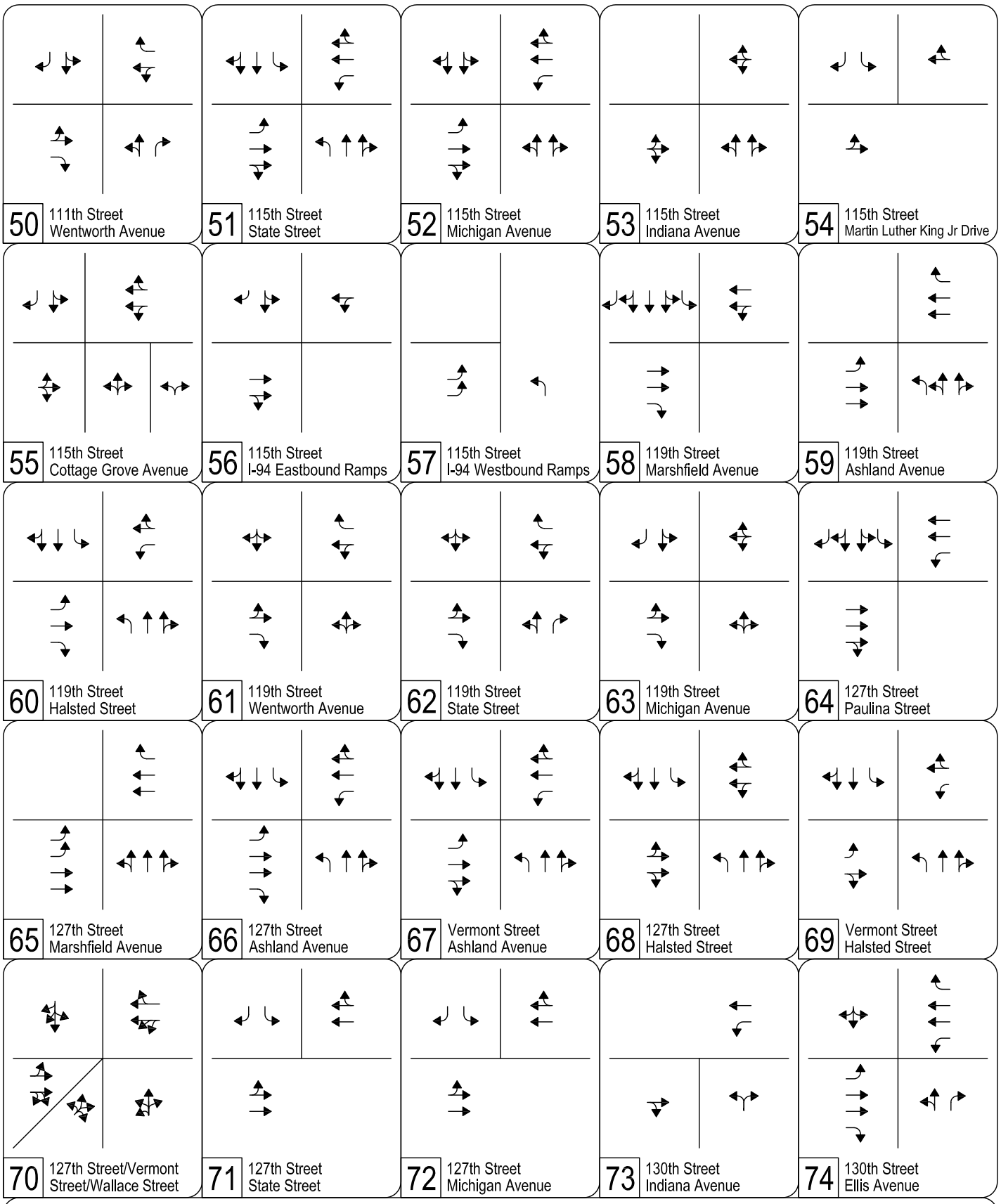

Existing (2012) Intersection Lane Geometry

Page 3 of 3

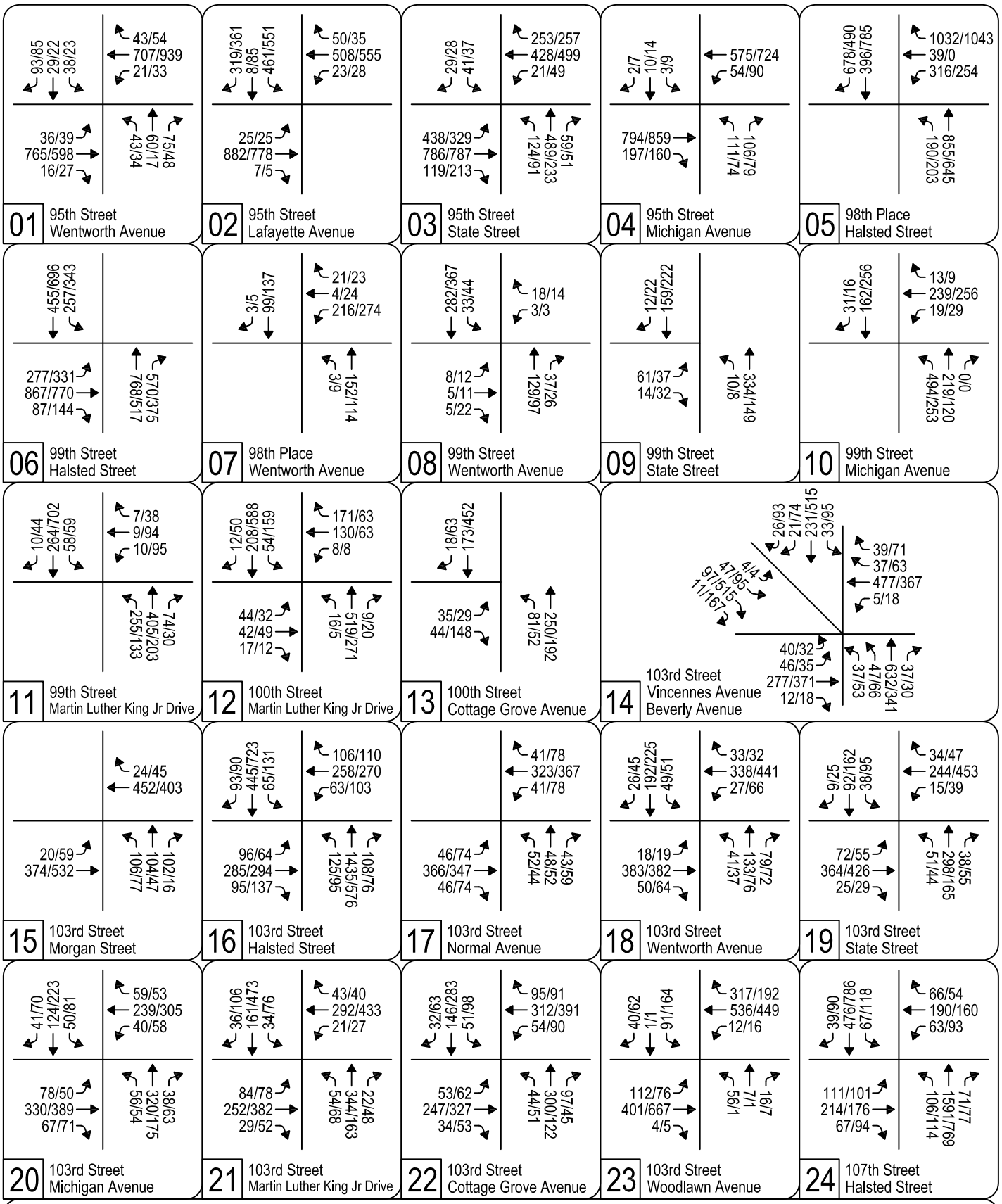

Existing (2012) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

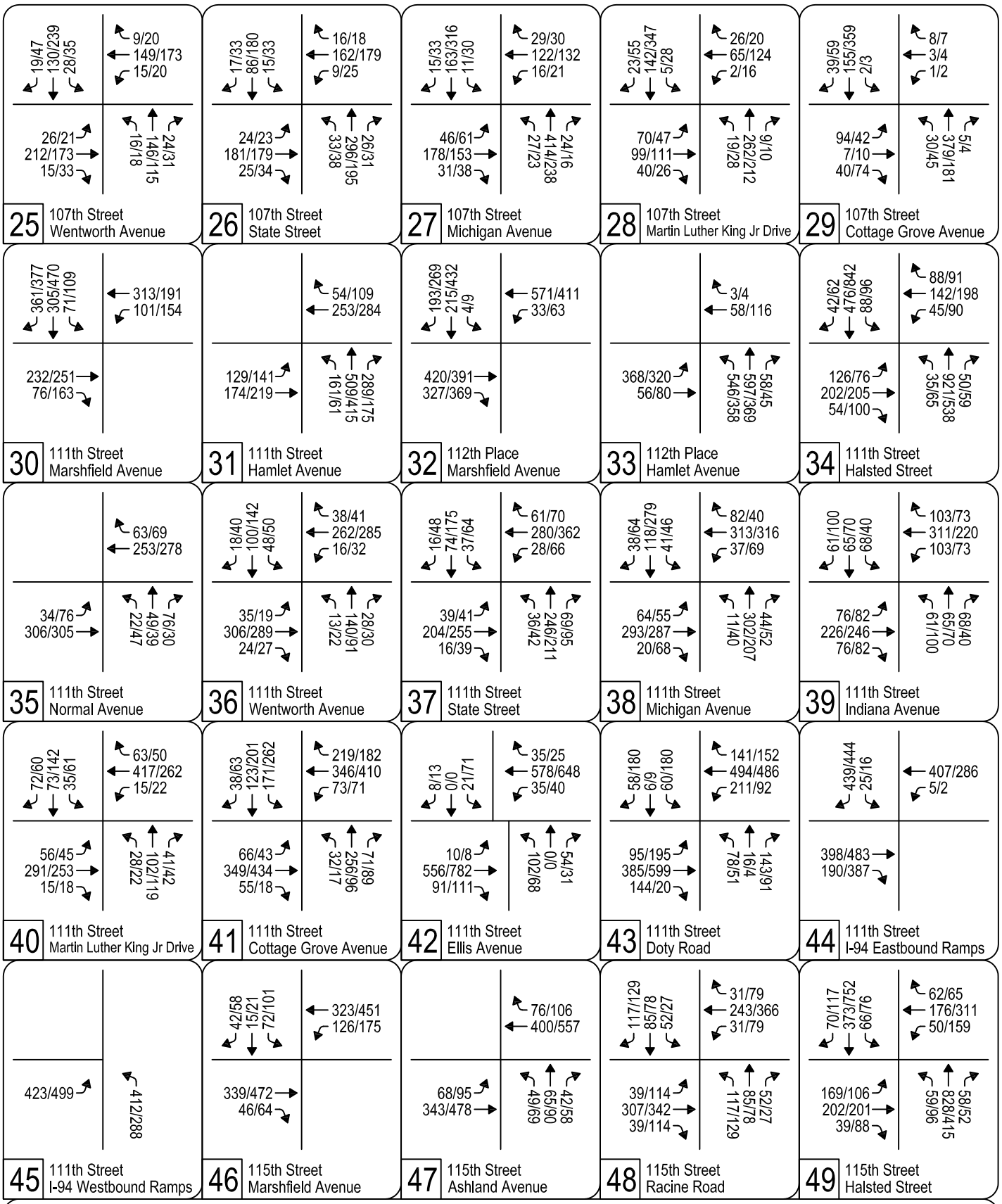

Existing (2012) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

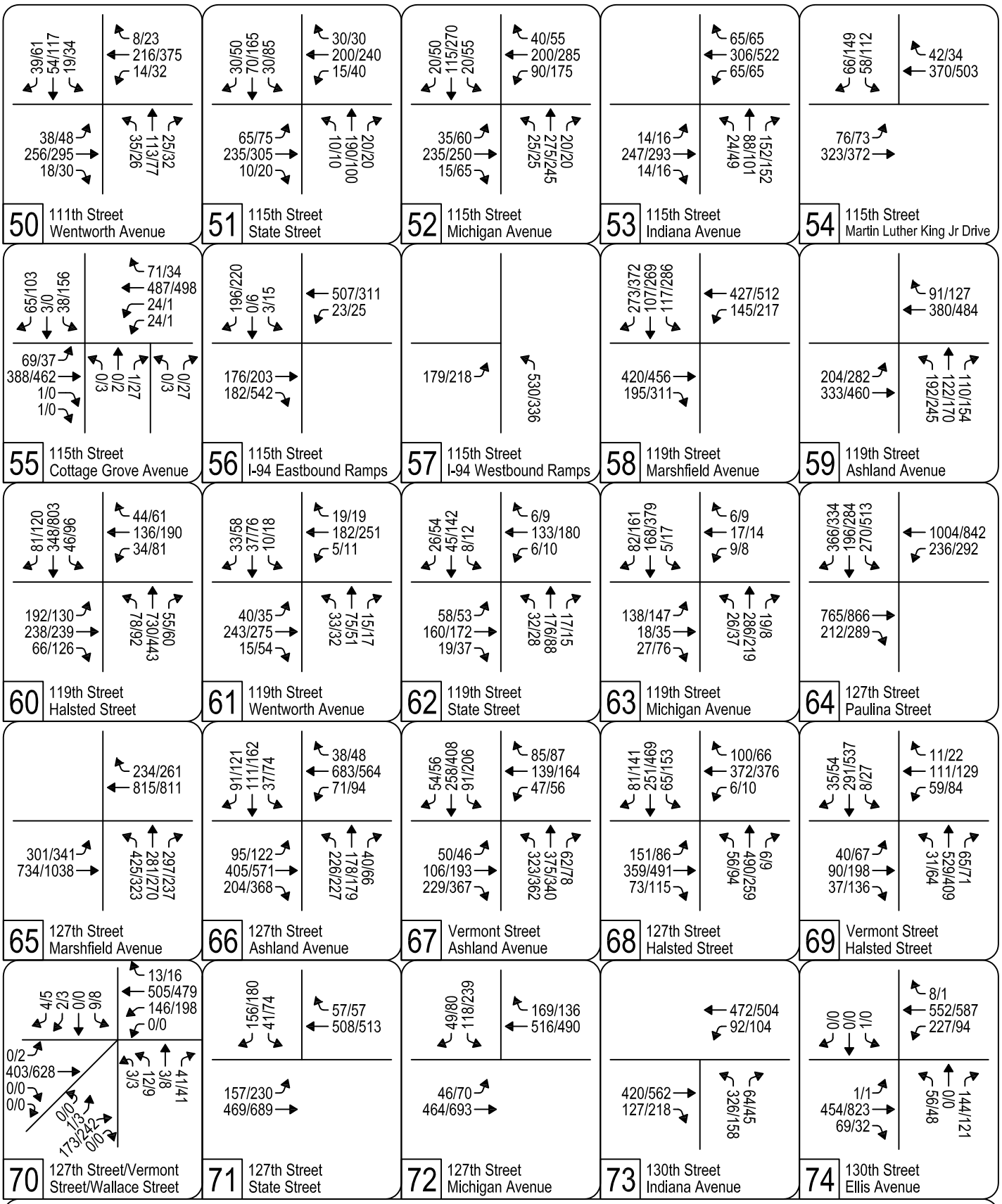

Existing (2012) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

Fish Transportation Group
801 South Blvd Suite 5
Oak Park, IL 60302

Chicago
Halsted & 99th Street
Combined (All Vechiles + Peds)

File Name : Halsted & 99th St
Site Code : 00002423
Start Date : 9/23/2008
Page No : 1

Groups Printed- Cars - Heavy - Semi

	Halsted From North (SB)				99th Street From East (WB)				Halsted From South (NB)				99th Street From West (EB)				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	78	84	0	0	0	0	0	0	0	190	106	5	78	258	6	0	805
07:15 AM	105	86	0	0	0	0	0	0	0	219	138	1	81	244	4	1	879
07:30 AM	93	118	0	1	0	0	0	0	0	194	150	11	71	205	9	1	853
07:45 AM	62	143	0	1	0	0	0	0	0	243	155	0	70	212	16	2	904
Total	338	431	0	2	0	0	0	0	0	846	549	17	300	919	35	4	3441
08:00 AM	97	150	0	0	0	0	0	2	0	156	135	2	68	258	19	0	887
08:15 AM	68	156	0	2	0	0	0	1	0	211	130	1	81	192	43	1	886
08:30 AM	76	138	0	0	0	0	0	1	0	173	142	21	81	191	26	0	849
08:45 AM	68	160	0	0	0	0	0	0	0	137	90	0	96	215	18	0	784
Total	309	604	0	2	0	0	0	4	0	677	497	24	326	856	106	1	3406
*** BREAK ***																	
04:00 PM	64	112	0	2	0	0	0	1	0	150	98	1	62	160	32	5	687
04:15 PM	78	132	0	3	0	0	0	0	0	114	64	0	86	226	32	1	736
04:30 PM	69	171	0	4	0	0	0	0	0	161	104	2	103	210	27	2	853
04:45 PM	79	135	0	3	0	0	0	0	0	85	76	0	53	183	26	0	640
Total	290	550	0	12	0	0	0	1	0	510	342	3	304	779	117	8	2916
05:00 PM	80	150	0	0	0	0	0	0	0	147	97	0	83	177	27	1	762
05:15 PM	54	140	0	3	0	0	0	0	0	138	99	0	93	208	42	2	779
05:30 PM	84	159	0	3	0	0	0	0	0	129	79	1	108	202	46	1	812
05:45 PM	96	189	0	0	0	0	0	0	0	159	100	0	82	183	29	2	840
Total	314	638	0	6	0	0	0	0	0	573	375	1	366	770	144	6	3193
06:00 PM	80	186	0	1	0	0	0	0	0	128	96	0	62	185	31	4	773
06:15 PM	73	161	0	1	0	0	0	1	0	121	104	0	88	163	31	1	744
06:30 PM	86	128	0	0	0	0	0	3	0	115	86	2	79	159	22	1	681
06:45 PM	88	140	0	1	0	0	0	1	0	125	100	2	81	195	30	4	767
Total	327	615	0	3	0	0	0	5	0	489	386	4	310	702	114	10	2965
Grand Total	1578	2838	0	25	0	0	0	10	0	3095	2149	49	1606	4026	516	29	15921
Apprch %	35.5	63.9	0	0.6	0	0	0	100	0	58.5	40.6	0.9	26	65.2	8.4	0.5	
Total %	9.9	17.8	0	0.2	0	0	0	0.1	0	19.4	13.5	0.3	10.1	25.3	3.2	0.2	
Cars	1463	2676	0	21	0	0	0	8	0	2943	2068	49	1505	3993	511	29	15266
% Cars	92.7	94.3	0	84	0	0	0	80	0	95.1	96.2	100	93.7	99.2	99	100	95.9
Heavy	95	97	0	0	0	0	0	0	0	113	65	0	81	6	3	0	460
% Heavy	6	3.4	0	0	0	0	0	0	0	3.7	3	0	5	0.1	0.6	0	2.9
Semi	20	65	0	4	0	0	0	2	0	39	16	0	20	27	2	0	195
% Semi	1.3	2.3	0	16	0	0	0	20	0	1.3	0.7	0	1.2	0.7	0.4	0	1.2

Fish Transportation Group
801 South Blvd Suite 5
Oak Park, IL 60302

Chicago
Halsted & 99th Street
Combined (All Vechiles + Peds)

File Name : Halsted & 99th St
Site Code : 00002423
Start Date : 9/23/2008
Page No : 2

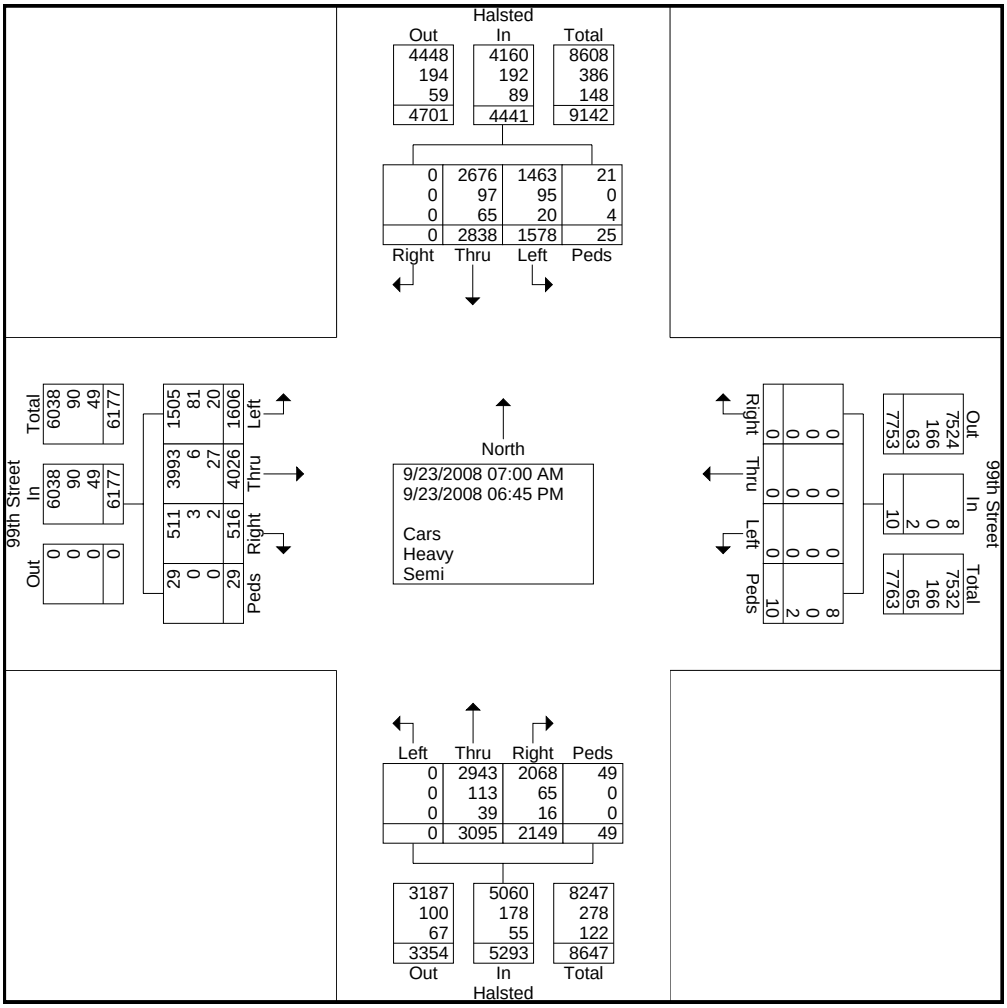

Fish Transportation Group
801 South Blvd Suite 5
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Chicago
Halsted & 99th Street
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File Name : Halsted & 99th St
Site Code : 00002423
Start Date : 9/23/2008
Page No : 3

	Halsted From North (SB)					99th Street From East (WB)					Halsted From South (NB)					99th Street From West (EB)					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	93	118	0	1	212	0	0	0	0	0	0	194	150	11	355	71	205	9	1	286	853
07:45 AM	62	143	0	1	206	0	0	0	0	0	0	243	155	0	398	70	212	16	2	300	904
08:00 AM	97	150	0	0	247	0	0	0	2	2	0	156	135	2	293	68	258	19	0	345	887
08:15 AM	68	156	0	2	226	0	0	0	1	1	0	211	130	1	342	81	192	43	1	317	886
Total Volume	320	567	0	4	891	0	0	0	3	3	0	804	570	14	1388	290	867	87	4	1248	3530
% App. Total	35.9	63.6	0	0.4		0	0	0	100		0	57.9	41.1	1		23.2	69.5	7	0.3		
PHF	.825	.909	.000	.500	.902	.000	.000	.000	.375	.375	.000	.827	.919	.318	.872	.895	.840	.506	.500	.904	.976

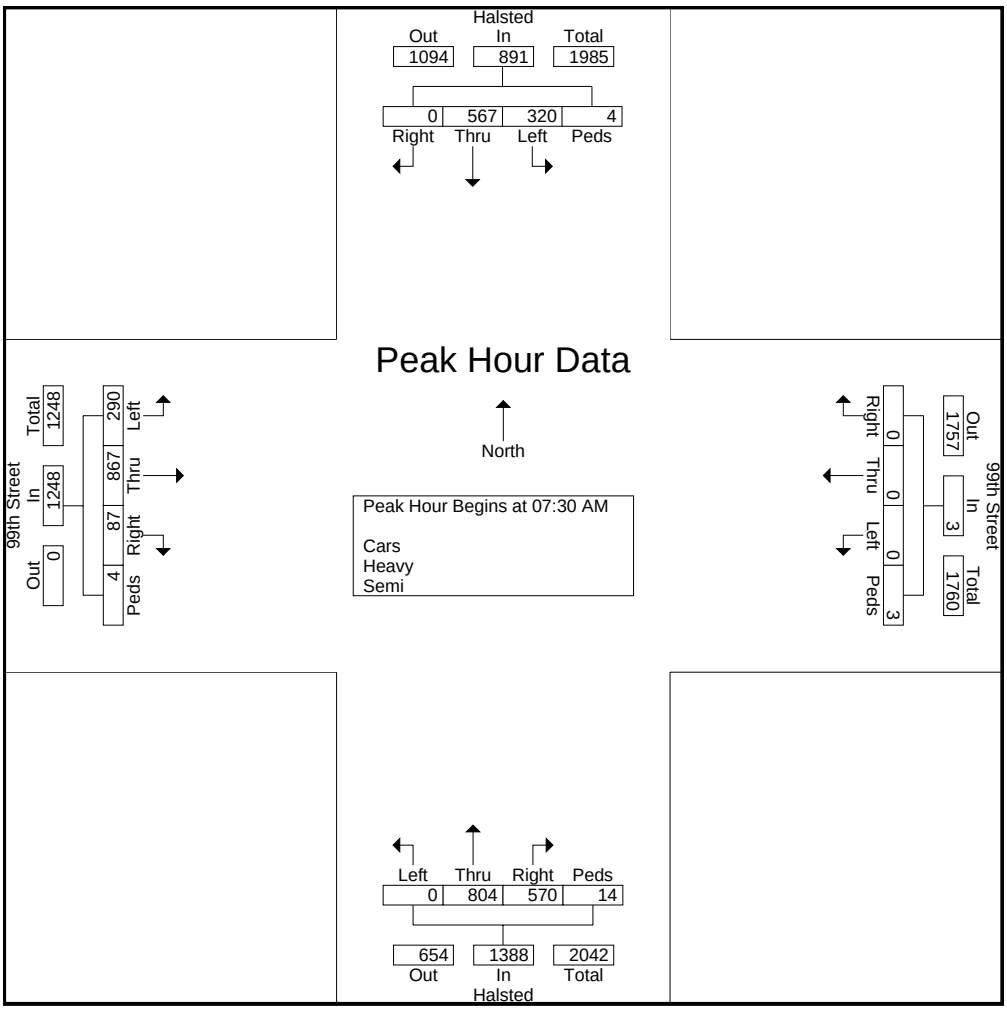

Fish Transportation Group
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Oak Park, IL 60302

Chicago
Halsted & 99th Street
Combined (All Vechiles + Peds)

File Name : Halsted & 99th St
Site Code : 00002423
Start Date : 9/23/2008
Page No : 4

	Halsted From North (SB)					99th Street From East (WB)					Halsted From South (NB)					99th Street From West (EB)					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:15 PM																					
05:15 PM	54	140	0	3	197	0	0	0	0	0	0	138	99	0	237	93	208	42	2	345	779
05:30 PM	84	159	0	3	246	0	0	0	0	0	0	129	79	1	209	108	202	46	1	357	812
05:45 PM	96	189	0	0	285	0	0	0	0	0	0	159	100	0	259	82	183	29	2	296	840
06:00 PM	80	186	0	1	267	0	0	0	0	0	0	128	96	0	224	62	185	31	4	282	773
Total Volume	314	674	0	7	995	0	0	0	0	0	0	554	374	1	929	345	778	148	9	1280	3204
% App. Total	31.6	67.7	0	0.7		0	0	0	0		0	59.6	40.3	0.1		27	60.8	11.6	0.7		
PHF	.818	.892	.000	.583	.873	.000	.000	.000	.000	.000	.000	.871	.935	.250	.897	.799	.935	.804	.563	.896	.954

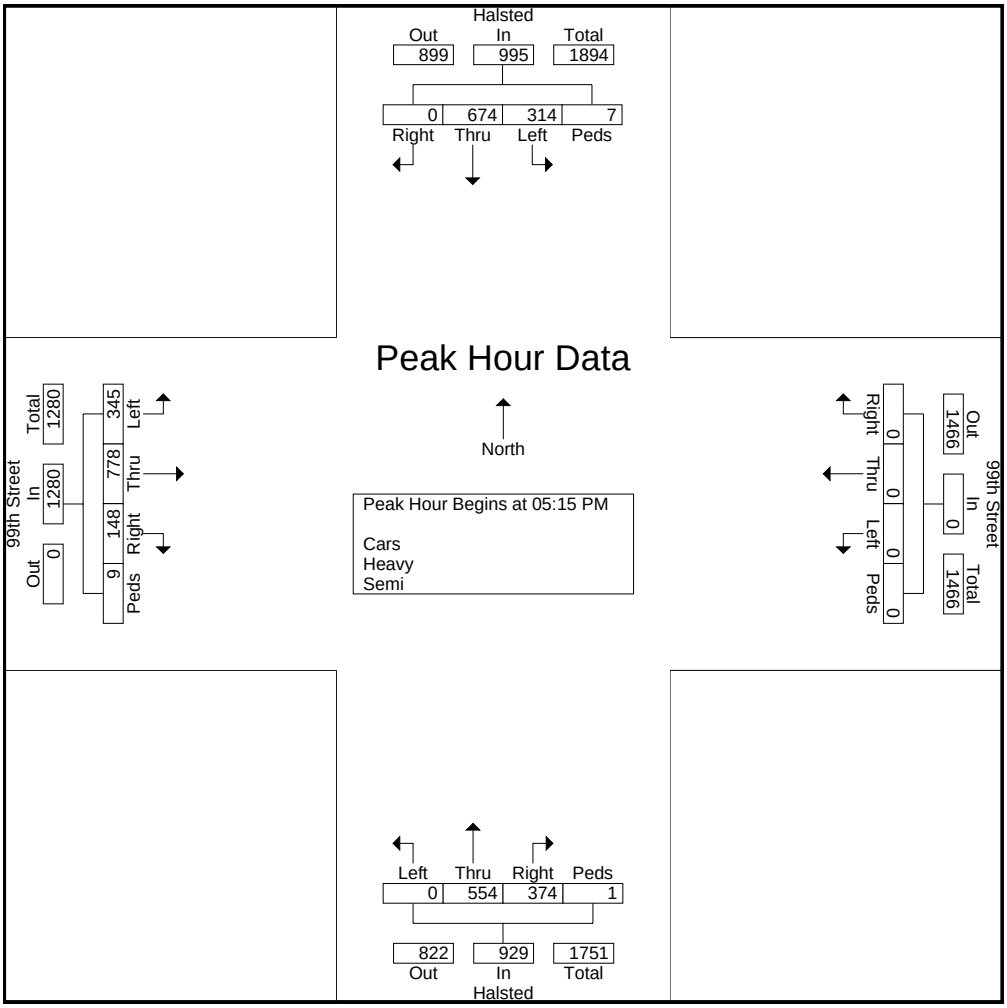

Cottage Grove Ave. & 100th St.
City: **Chicago**
County: **Cook**
District: **1**

Summary
State Of Illinois
Department of Transportation
Bureau of Traffic
Summary of Traffic Survey

Dates: 7/25/2008 **(AM)**
7/21/2008 **(PM)**

Route	Traffic From: N				Traffic From: S				TOTAL	Traffic From:				Traffic From: W				TOTAL	GRAND
	Cottage Grove				**Cottage Grove**				NORTH	**100th St.**				**100th St.**				EAST	TOTAL
	Going				Going					Going				Going					
Start Hour		S	W	TOTAL	W	N		TOTAL	SOUTH	S	W	N	TOTAL	N		S	TOTAL	WEST	
6:00	0	56	16	72	72	152	0	224	**296**	0	0	0	0	16	0	19	35	**35**	**331**
7:00	0	128	22	150	68	285	0	353	**503**	0	0	0	0	25	0	27	52	**52**	**555**
8:00	0	173	18	191	81	250	0	331	**522**	0	0	0	0	35	0	44	79	**79**	**601**
9:00	0	147	22	169	60	200	0	260	**429**	0	0	0	0	29	0	45	74	**74**	**503**
10:00	0	161	32	193	47	219	0	266	**459**	0	0	0	0	36	0	49	85	**85**	**544**
11:00	0	144	32	176	47	183	0	230	**406**	0	0	0	0	38	0	28	66	**66**	**472**
12:00	0	212	60	272	59	205	0	264	**536**	0	0	0	0	31	0	72	103	**103**	**639**
13:00	0	219	48	267	57	203	0	260	**527**	0	0	0	0	35	0	73	108	**108**	**635**
14:00	0	267	48	315	55	191	0	246	**561**	0	0	0	0	24	0	72	96	**96**	**657**
15:00	0	287	50	337	53	217	0	270	**607**	0	0	0	0	19	0	60	79	**79**	**686**
16:00	0	391	62	453	51	220	0	271	**724**	0	0	0	0	17	0	105	122	**122**	**846**
17:00	0	452	63	515	52	192	0	244	**759**	0	0	0	0	29	0	148	177	**177**	**936**

Property of Illinois Department of Transportation
Traffic Report 4 leg Version 2.5

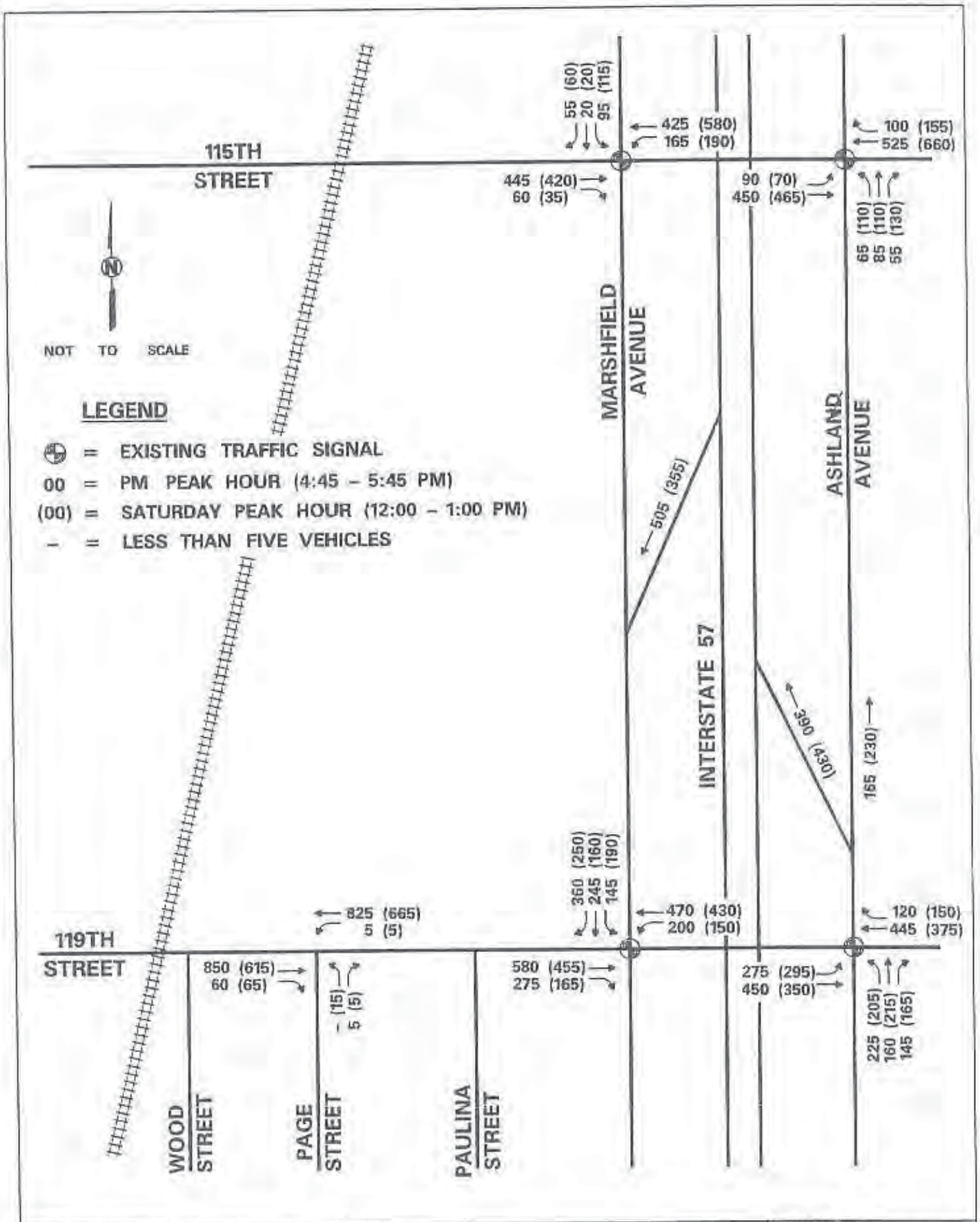

PROJECT:	TITLE:	PROJECT NO: 05-402
PROPOSED SHOPPING CENTER CHICAGO, ILLINOIS	EXISTING PEAK HOUR VOLUMES	KLOA
		FIGURE NO: 2

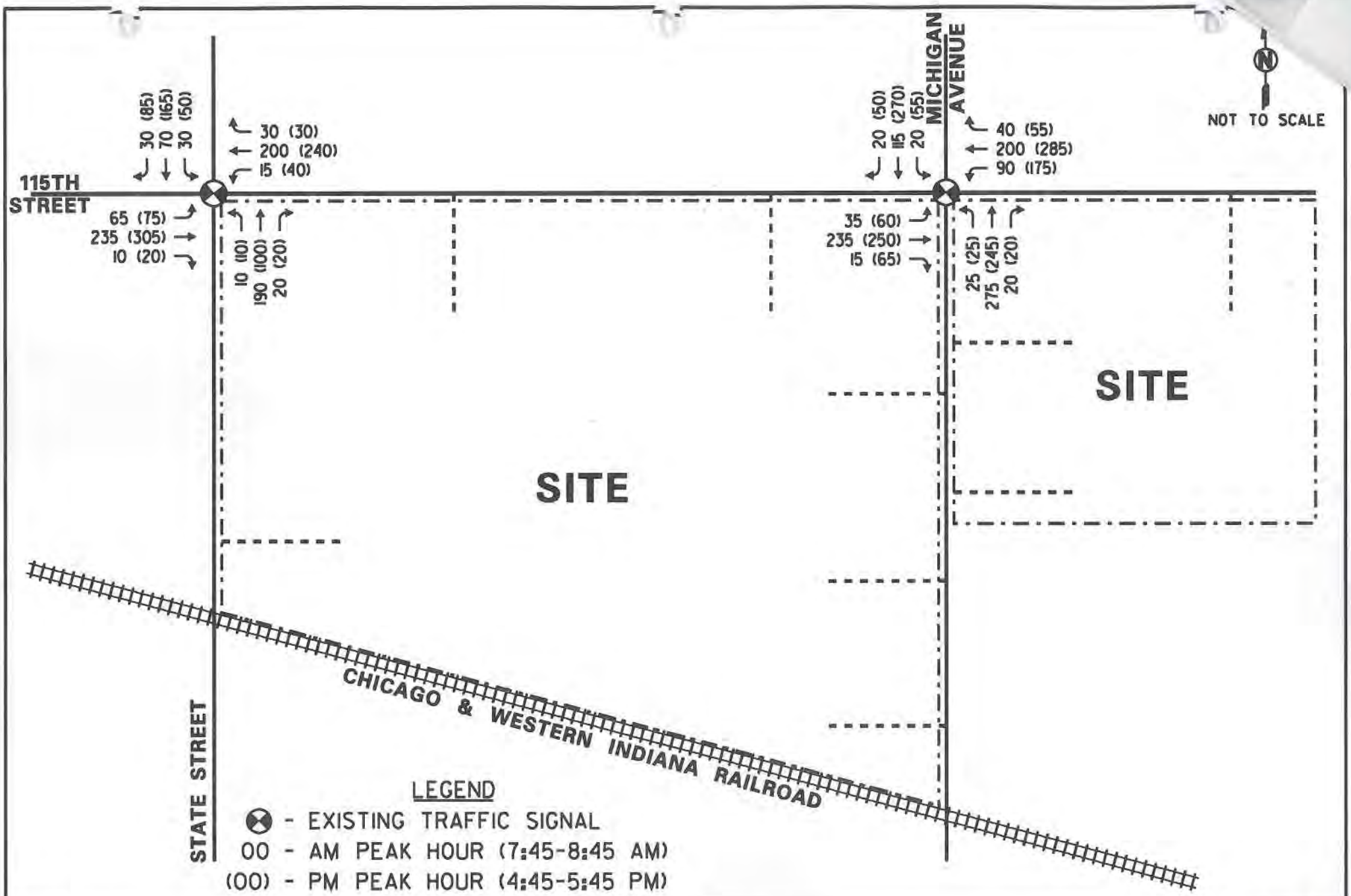

PROJECT:	TITLE:	PROJECT NO: 08-293
PROPOSED ROSELAND PLAZA CHICAGO, ILLINOIS	EXISTING PEAK HOUR TRAFFIC VOLUMES	KLOA
		FIGURE NO: 2

Fish Transportation Group

801 South Blvd Suite 5
Oak Park,IL 60302

Chicago
Vincennes - 103rd St - Beverly
Combined (All Vehicles + Pedestrians)

File Name : Vincennes - Beverly & 103rd Rpt
Site Code : 00002244
Start Date : 12/20/2006
Page No : 1

Groups Printed- Cars - Single - Multi

	Vincennes From North				103rd St From East				Vincennes From South				103rd St From West				Beverly From Northwest				
Start Time	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Int. Total
07:00 AM	3	6	26	5	1	14	60	1	0	5	93	12	0	2	44	25	0	5	22	9	333
07:15 AM	1	6	25	1	1	8	104	1	0	11	154	8	0	0	59	22	2	2	20	8	433
07:30 AM	1	6	37	6	1	18	98	1	0	1	101	14	0	0	41	17	1	4	19	10	376
07:45 AM	2	16	53	6	0	14	124	2	0	11	222	20	0	3	91	28	2	3	23	13	633
Total	7	34	141	18	3	54	386	5	0	28	570	54	0	5	235	92	5	14	84	40	1775
08:00 AM	2	13	58	4	4	34	139	1	0	15	167	13	0	9	102	26	1	3	26	14	631
08:15 AM	0	12	83	17	1	10	116	1	0	10	142	37	0	0	43	15	0	1	29	10	527
08:30 AM	1	6	68	5	1	13	119	5	0	7	127	47	0	0	52	13	1	3	30	11	509
08:45 AM	1	15	66	7	2	15	113	5	0	8	138	19	0	4	82	21	0	7	35	18	556
Total	4	46	275	33	8	72	487	12	0	40	574	116	0	13	279	75	2	14	120	53	2223
*** BREAK ***																					
04:00 PM	42	31	98	21	2	19	61	4	0	3	67	20	0	3	50	9	42	31	98	21	622
04:15 PM	16	34	172	15	3	25	112	7	0	9	92	34	0	8	87	14	16	34	172	15	865
04:30 PM	0	24	171	26	2	33	127	6	0	3	114	32	0	7	115	12	0	24	171	26	893
04:45 PM	12	54	171	26	0	38	107	2	0	14	82	26	0	7	105	26	12	54	171	26	933
Total	70	143	612	88	7	115	407	19	0	29	355	112	0	25	357	61	70	143	612	88	3313
05:00 PM	3	39	104	16	3	37	94	4	0	7	84	25	0	6	106	20	3	39	104	16	710
05:15 PM	6	40	126	26	0	24	81	5	0	7	86	40	0	3	87	23	6	40	126	26	752
05:30 PM	11	48	157	35	0	45	115	4	0	8	88	29	0	3	89	10	11	48	157	35	893
05:45 PM	5	40	128	18	0	28	77	5	0	8	83	25	0	6	89	14	5	40	128	18	717
Total	25	167	515	95	3	134	367	18	0	30	341	119	0	18	371	67	25	167	515	95	3072
Grand Total	106	390	1543	234	21	375	1647	54	0	127	1840	401	0	61	1242	295	102	338	1331	276	10383
Apprch %	4.7	17.2	67.9	10.3	1	17.9	78.5	2.6	0	5.4	77.7	16.9	0	3.8	77.7	18.5	5	16.5	65	13.5	
Total %	1	3.8	14.9	2.3	0.2	3.6	15.9	0.5	0	1.2	17.7	3.9	0	0.6	12	2.8	1	3.3	12.8	2.7	
Cars	106	386	1504	232	21	370	1581	53	0	124	1777	393	0	59	1196	275	102	335	1295	275	10084
% Cars	100	99	97.5	99.1	100	98.7	96	98.1	0	97.6	96.6	98	0	96.7	96.3	93.2	100	99.1	97.3	99.6	97.1
Single	0	4	36	1	0	2	62	1	0	3	60	6	0	2	45	20	0	3	33	1	279
% Single	0	1	2.3	0.4	0	0.5	3.8	1.9	0	2.4	3.3	1.5	0	3.3	3.6	6.8	0	0.9	2.5	0.4	2.7
Multi	0	0	3	1	0	3	4	0	0	0	3	2	0	0	1	0	0	0	3	0	20
% Multi	0	0	0.2	0.4	0	0.8	0.2	0	0	0	0.2	0.5	0	0	0.1	0	0	0	0.2	0	0.2

Fish Transportation Group

801 South Blvd Suite 5
Oak Park,IL 60302

Chicago
Vincennes - 103rd St - Beverly
Combined (All Vehicles + Pedestrians)

File Name : Vincennes - Beverly & 103rd Rpt
Site Code : 00002244
Start Date : 12/20/2006
Page No : 2

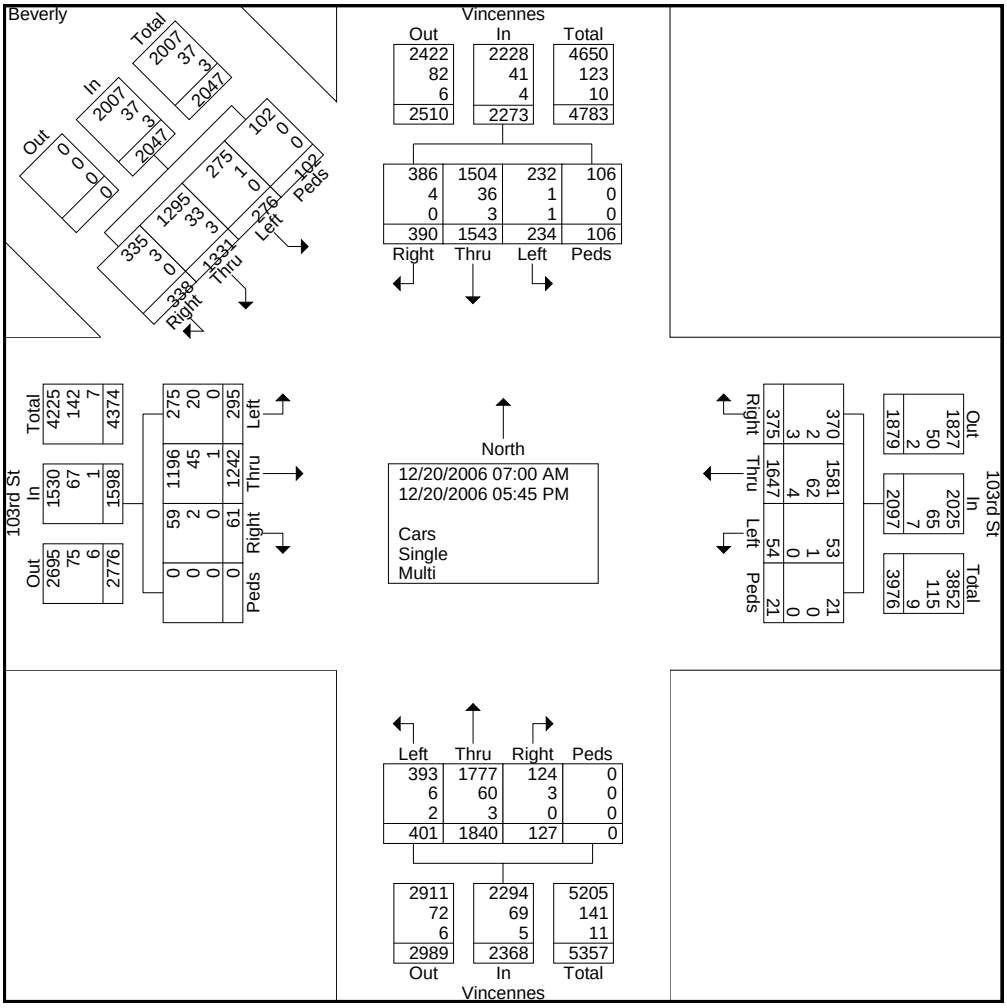

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801 South Blvd Suite 5
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Chicago
Vincennes - 103rd St - Beverly
Combined (All Vehicles + Pedestrians)

File Name : Vincennes - Beverly & 103rd Rpt
Site Code : 00002244
Start Date : 12/20/2006
Page No : 3

	Vincennes From North					103rd St From East					Vincennes From South					103rd St From West					Beverly From Northwest					
Start Time	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:45 AM																										
07:45 AM	2	16	53	6	77	0	14	124	2	140	0	11	222	20	253	0	3	91	28	122	2	3	23	13	41	633
08:00 AM	2	13	58	4	77	4	34	139	1	178	0	15	167	13	195	0	9	102	26	137	1	3	26	14	44	631
08:15 AM	0	12	83	17	112	1	10	116	1	128	0	10	142	37	189	0	0	43	15	58	0	1	29	10	40	527
08:30 AM	1	6	68	5	80	1	13	119	5	138	0	7	127	47	181	0	0	52	13	65	1	3	30	11	45	509
Total Volume	5	47	262	32	346	6	71	498	9	584	0	43	658	117	818	0	12	288	82	382	4	10	108	48	170	2300
% App. Total	1.4	13.6	75.7	9.2		1	12.2	85.3	1.5		0	5.3	80.4	14.3		0	3.1	75.4	21.5		2.4	5.9	63.5	28.2		
PHF	.625	.734	.789	.471	.772	.375	.522	.896	.450	.820	.000	.717	.741	.622	.808	.000	.333	.706	.732	.697	.500	.833	.900	.857	.944	.908

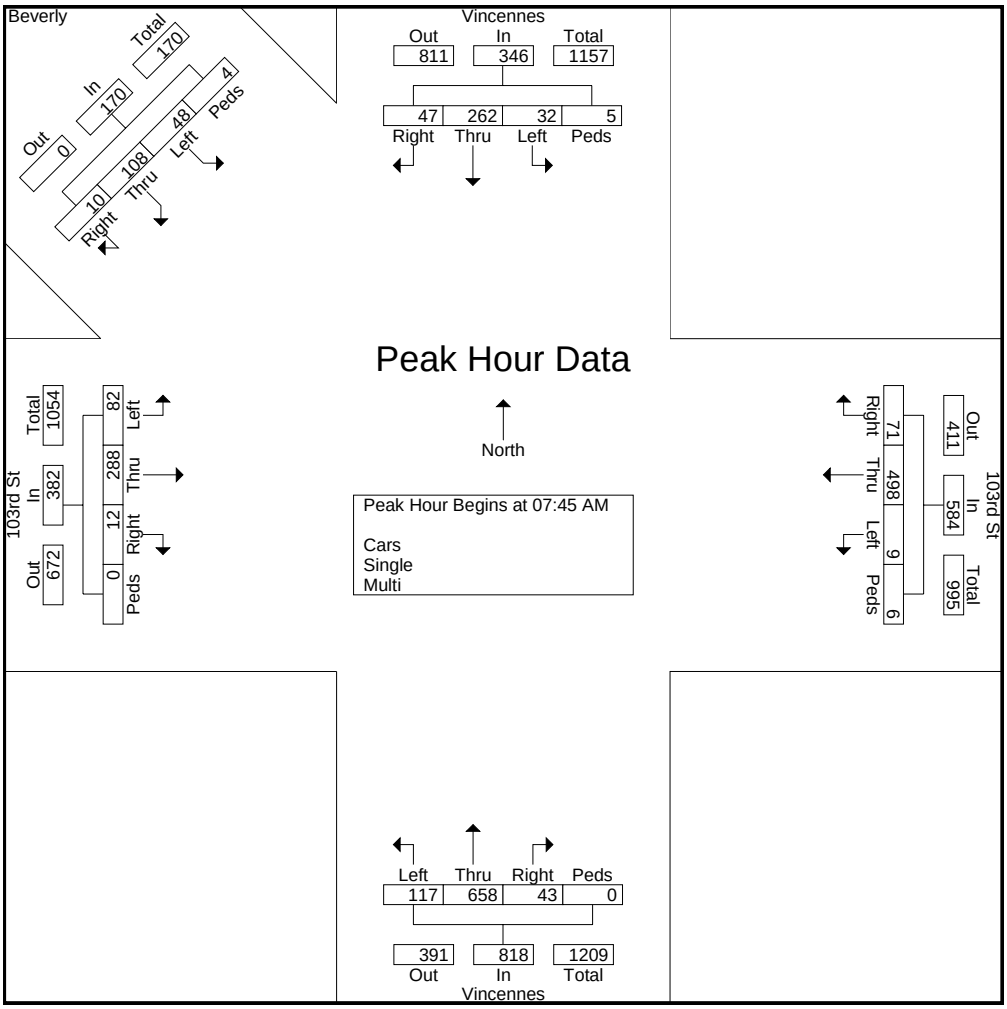

Fish Transportation Group

801 South Blvd Suite 5
Oak Park,IL 60302

Chicago
Vincennes - 103rd St - Beverly
Combined (All Vehicles + Pedestrians)

File Name : Vincennes - Beverly & 103rd Rpt
Site Code : 00002244
Start Date : 12/20/2006
Page No : 4

	Vincennes From North					103rd St From East					Vincennes From South					103rd St From West					Beverly From Northwest					
Start Time	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 10:00 AM																										
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

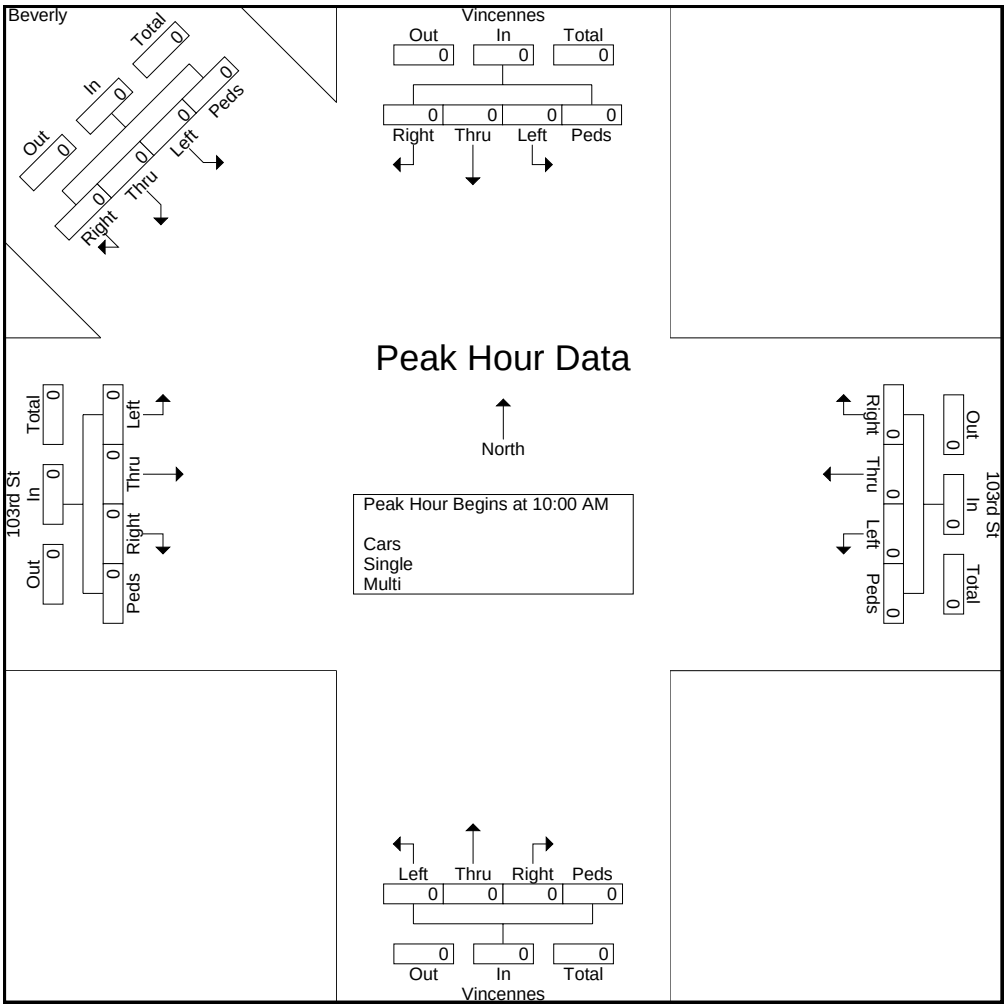

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Oak Park,IL 60302

Chicago
Vincennes - 103rd St - Beverly
Combined (All Vehicles + Pedestrians)

File Name : Vincennes - Beverly & 103rd Rpt
Site Code : 00002244
Start Date : 12/20/2006
Page No : 5

	Vincennes From North					103rd St From East					Vincennes From South					103rd St From West					Beverly From Northwest					
Start Time	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 04:15 PM																										
04:15 PM	16	34	172	15	237	3	25	112	7	147	0	9	92	34	135	0	8	87	14	109	16	34	172	15	237	865
04:30 PM	0	24	171	26	221	2	33	127	6	168	0	3	114	32	149	0	7	115	12	134	0	24	171	26	221	893
04:45 PM	12	54	171	26	263	0	38	107	2	147	0	14	82	26	122	0	7	105	26	138	12	54	171	26	263	933
05:00 PM	3	39	104	16	162	3	37	94	4	138	0	7	84	25	116	0	6	106	20	132	3	39	104	16	162	710
Total Volume	31	151	618	83	883	8	133	440	19	600	0	33	372	117	522	0	28	413	72	513	31	151	618	83	883	3401
% App. Total	3.5	17.1	70	9.4		1.3	22.2	73.3	3.2		0	6.3	71.3	22.4		0	5.5	80.5	14		3.5	17.1	70	9.4		
PHF	.484	.699	.898	.798	.839	.667	.875	.866	.679	.893	.000	.589	.816	.860	.876	.000	.875	.898	.692	.929	.484	.699	.898	.798	.839	.911

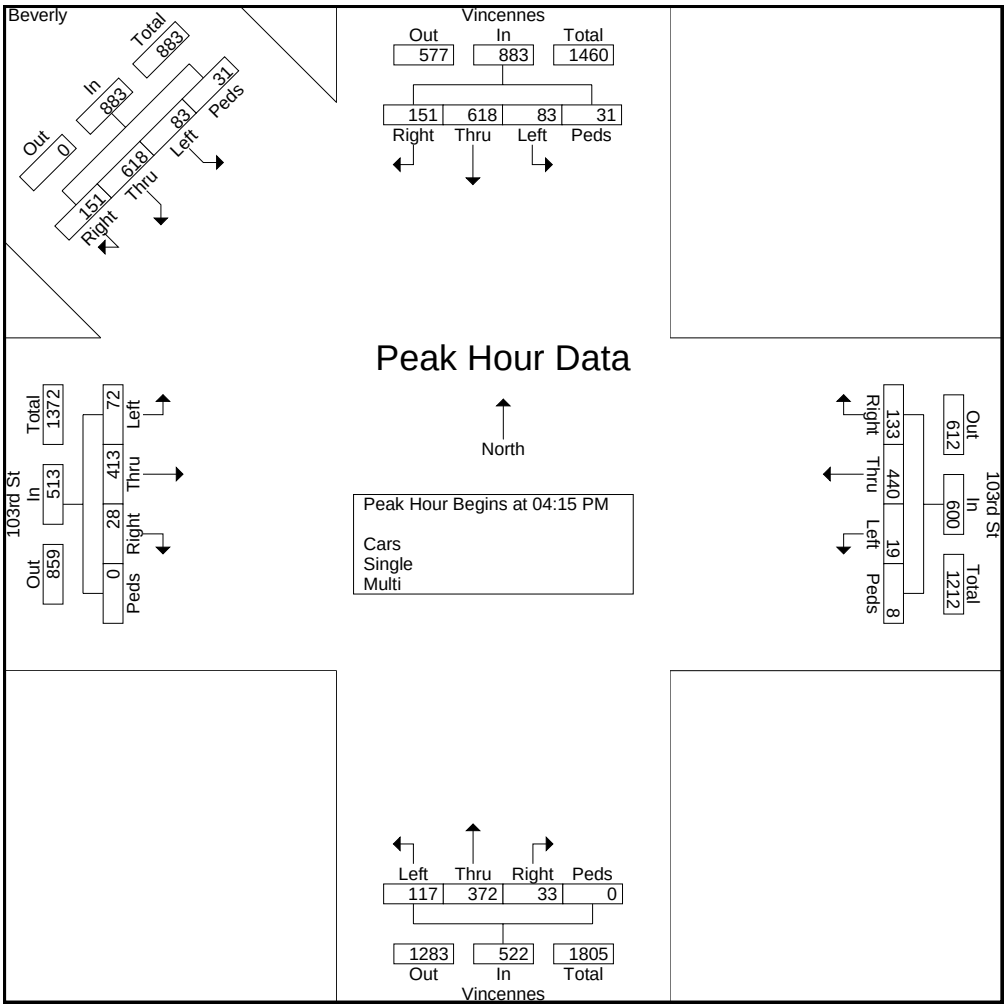

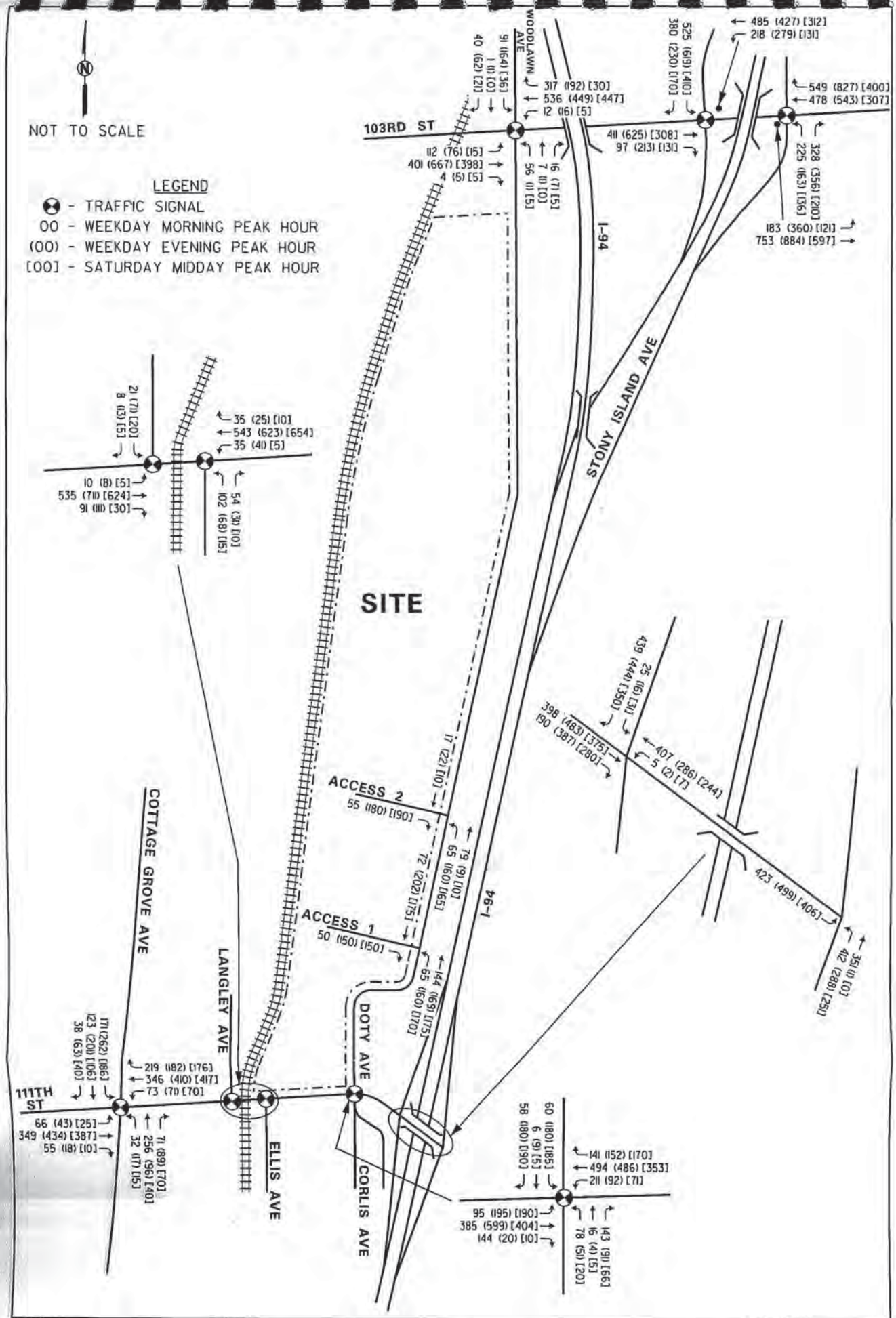

PROJECT:	TITLE:	PROJECT NO: 10-075
PULLMAN REDEVELOPMENT PROJECT CHICAGO, ILLINOIS	YEAR 2012 - PHASE I TOTAL PEAK HOUR VOLUMES (WAL-MART STORE ONLY)	KLOA FIGURE NO: 9

Regina Webster & Associates, Inc.
8619 West Bryn Mawr Avenue, Suite 602, Chicago, Illinois 60631
773-283-2600 Fax: 773-283-2602
www.RWAengineers.com

100th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 1

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				100th St From East				Martin Luther King Dr From South				100th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	3	24	7	34	27	28	2	57	0	73	3	76	2	5	4	11	178
07:15 AM	2	39	5	46	30	27	0	57	2	110	3	115	2	6	6	14	232
07:30 AM	2	47	13	62	39	37	2	78	4	118	4	126	2	3	6	11	277
07:45 AM	1	45	10	56	52	40	3	95	1	132	3	136	5	13	11	29	316
Total	8	155	35	198	148	132	7	287	7	433	13	453	11	27	27	65	1003
08:00 AM	3	47	15	65	41	32	3	76	1	142	4	147	7	12	14	33	321
08:15 AM	5	54	12	71	39	21	0	60	3	125	5	133	3	14	13	30	294
08:30 AM	7	67	11	85	42	24	0	66	3	125	1	129	1	15	15	31	311
08:45 AM	1	87	24	112	47	34	2	83	2	125	1	128	3	14	33	50	373
Total	16	255	62	333	169	111	5	285	9	517	11	537	14	55	75	144	1299
Grand Total	24	410	97	531	317	243	12	572	16	950	24	990	25	82	102	209	2302
Apprch %	4.5	77.2	18.3		55.4	42.5	2.1		1.6	96	2.4		12	39.2	48.8		
Total %	1	17.8	4.2	23.1	13.8	10.6	0.5	24.8	0.7	41.3	1	43	1.1	3.6	4.4	9.1	
PC	24	390	94	508	313	236	11	560	16	920	24	960	25	80	101	206	2234
% PC	100	95.1	96.9	95.7	98.7	97.1	91.7	97.9	100	96.8	100	97	100	97.6	99	98.6	97
SU	0	19	3	22	4	7	1	12	0	28	0	28	0	2	1	3	65
% SU	0	4.6	3.1	4.1	1.3	2.9	8.3	2.1	0	2.9	0	2.8	0	2.4	1	1.4	2.8
MU	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
% MU	0	0.2	0	0.2	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.1

	Martin Luther King Dr From North				100th St From East				Martin Luther King Dr From South				100th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	47	15	65	41	32	**3**	76	1	**142**	4	**147**	**7**	12	14	33	321
08:15 AM	5	54	12	71	39	21	0	60	**3**	125	**5**	133	3	14	13	30	294
08:30 AM	**7**	67	11	85	42	24	0	66	3	125	1	129	1	**15**	15	31	311
08:45 AM	1	**87**	**24**	**112**	**47**	**34**	2	**83**	2	125	1	128	3	14	**33**	**50**	**373**
Total Volume	16	255	62	333	169	111	5	285	9	517	11	537	14	55	75	144	1299
% App. Total	4.8	76.6	18.6		59.3	38.9	1.8		1.7	96.3	2		9.7	38.2	52.1		
PHF	.571	.733	.646	.743	.899	.816	.417	.858	.750	.910	.550	.913	.500	.917	.568	.720	.871

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100th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 2

Groups Printed- SU

	Martin Luther King Dr From North				100th St From East				Martin Luther King Dr From South				100th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	0	1	0	1	0	1	0	5	0	5	0	0	0	0	7
07:15 AM	0	4	0	4	0	0	0	0	0	5	0	5	0	1	0	1	10
07:30 AM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
07:45 AM	0	1	1	2	0	2	0	2	0	7	0	7	0	0	0	0	11
Total	0	10	1	11	0	3	0	3	0	18	0	18	0	1	0	1	33
08:00 AM	0	1	0	1	1	1	1	3	0	4	0	4	0	0	0	0	8
08:15 AM	0	3	1	4	2	0	0	2	0	0	0	0	0	0	0	0	6
08:30 AM	0	2	0	2	0	1	0	1	0	4	0	4	0	0	1	1	8
08:45 AM	0	3	1	4	1	2	0	3	0	2	0	2	0	1	0	1	10
Total	0	9	2	11	4	4	1	9	0	10	0	10	0	1	1	2	32
Grand Total	0	19	3	22	4	7	1	12	0	28	0	28	0	2	1	3	65
Apprch %	0	86.4	13.6		33.3	58.3	8.3		0	100	0		0	66.7	33.3		
Total %	0	29.2	4.6	33.8	6.2	10.8	1.5	18.5	0	43.1	0	43.1	0	3.1	1.5	4.6	

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100th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 3

Groups Printed- MU

	Martin Luther King Dr From North				100th St From East				Martin Luther King Dr From South				100th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	33.3	0	33.3	0	0	0	0	0	66.7	0	66.7	0	0	0	0	

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100th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 4

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			100th St Crossing East Leg			Martin Luther King Dr Crossing South Leg			100th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	2	2	0	2	2	0	0	0	0	0	0	4
07:15 AM	0	0	0	0	2	2	0	3	3	0	1	1	6
07:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	2	2	0	6	6	0	3	3	0	1	1	12
08:00 AM	0	0	0	0	2	2	0	0	0	0	0	0	2
08:15 AM	0	0	0	0	2	2	1	0	1	0	0	0	3
08:30 AM	0	1	1	1	4	5	0	0	0	0	0	0	6
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	1	8	9	1	0	1	0	0	0	11
Grand Total	0	3	3	1	14	15	1	3	4	0	1	1	23
Apprch %	0	100		6.7	93.3		25	75		0	100		
Total %	0	13	13	4.3	60.9	65.2	4.3	13	17.4	0	4.3	4.3	

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100th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 5

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				100th St From East				Martin Luther King Dr From South				100th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	8	154	33	195	11	12	0	23	5	69	0	74	5	13	14	32	324
04:15 PM	14	145	33	192	15	19	0	34	7	77	2	86	2	8	9	19	331
04:30 PM	4	137	26	167	20	15	1	36	3	73	0	76	2	24	7	33	312
04:45 PM	14	152	30	196	16	17	0	33	5	77	3	85	1	12	11	24	338
Total	40	588	122	750	62	63	1	126	20	296	5	321	10	57	41	108	1305
05:00 PM	12	160	45	217	20	14	1	35	7	53	0	60	6	11	10	27	339
05:15 PM	14	145	26	185	15	23	2	40	3	74	1	78	1	9	6	16	319
05:30 PM	9	103	39	151	11	14	3	28	7	67	0	74	3	17	9	29	282
05:45 PM	7	88	24	119	15	12	2	29	3	67	4	74	2	12	6	20	242
Total	42	496	134	672	61	63	8	132	20	261	5	286	12	49	31	92	1182
Grand Total	82	1084	256	1422	123	126	9	258	40	557	10	607	22	106	72	200	2487
Apprch %	5.8	76.2	18		47.7	48.8	3.5		6.6	91.8	1.6		11	53	36		
Total %	3.3	43.6	10.3	57.2	4.9	5.1	0.4	10.4	1.6	22.4	0.4	24.4	0.9	4.3	2.9	8	
PC	82	1071	256	1409	123	123	9	255	40	545	10	595	22	105	72	199	2458
% PC	100	98.8	100	99.1	100	97.6	100	98.8	100	97.8	100	98	100	99.1	100	99.5	98.8
SU	0	9	0	9	0	2	0	2	0	12	0	12	0	0	0	0	23
% SU	0	0.8	0	0.6	0	1.6	0	0.8	0	2.2	0	2	0	0	0	0	0.9
MU	0	4	0	4	0	1	0	1	0	0	0	0	0	1	0	1	6
% MU	0	0.4	0	0.3	0	0.8	0	0.4	0	0	0	0	0	0.9	0	0.5	0.2

	Martin Luther King Dr From North				100th St From East				Martin Luther King Dr From South				100th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**14**	145	33	192	15	**19**	0	34	**7**	**77**	2	**86**	2	8	9	19	331
04:30 PM	4	137	26	167	**20**	15	**1**	**36**	3	73	0	76	2	**24**	7	**33**	312
04:45 PM	14	152	30	196	16	17	0	33	5	77	**3**	85	1	12	**11**	24	338
05:00 PM	12	**160**	**45**	**217**	20	14	1	35	7	53	0	60	**6**	11	10	27	**339**
Total Volume	44	594	134	772	71	65	2	138	22	280	5	307	11	55	37	103	1320
% App. Total	5.7	76.9	17.4		51.4	47.1	1.4		7.2	91.2	1.6		10.7	53.4	35.9		
PHF	.786	.928	.744	.889	.888	.855	.500	.958	.786	.909	.417	.892	.458	.573	.841	.780	.973

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100th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 6

Groups Printed- SU

	Martin Luther King Dr From North				100th St From East				Martin Luther King Dr From South				100th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
04:45 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Total	0	5	0	5	0	1	0	1	0	5	0	5	0	0	0	0	11
05:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	1	0	1	0	1	0	1	0	3	0	3	0	0	0	0	5
05:30 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	4	0	4	0	1	0	1	0	7	0	7	0	0	0	0	12
Grand Total	0	9	0	9	0	2	0	2	0	12	0	12	0	0	0	0	23
Apprch %	0	100	0		0	100	0		0	100	0		0	0	0		
Total %	0	39.1	0	39.1	0	8.7	0	8.7	0	52.2	0	52.2	0	0	0	0	

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100th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 7

Groups Printed- MU

	Martin Luther King Dr From North				100th St From East				Martin Luther King Dr From South				100th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	1	0	1	0	0	0	0	0	1	0	1	4
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	4	0	4	0	1	0	1	0	0	0	0	0	1	0	1	6
Apprch %	0	100	0		0	100	0		0	0	0		0	100	0		
Total %	0	66.7	0	66.7	0	16.7	0	16.7	0	0	0	0	0	16.7	0	16.7	

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100th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 8

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			100th St Crossing East Leg			Martin Luther King Dr Crossing South Leg			100th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	1	1	0	0	0	0	0	0	0	1	1	2
04:15 PM	0	2	2	0	1	1	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	3	3	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	3	3	0	5	5	0	0	0	0	1	1	9
05:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	1	0	1	3	0	3	4
05:30 PM	0	2	2	0	4	4	0	0	0	0	1	1	7
05:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	2	2	0	6	6	1	0	1	3	1	4	13
Grand Total	0	5	5	0	11	11	1	0	1	3	2	5	22
Apprch %	0	100		0	100		100	0		60	40		
Total %	0	22.7	22.7	0	50	50	4.5	0	4.5	13.6	9.1	22.7	

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103rd St & Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 1

Groups Printed- PC - SU - MU

	Michigan Ave From North				103rd St From East				Michigan Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	6	16	4	26	14	37	2	53	7	67	8	82	11	31	20	62	223
07:15 AM	8	31	3	42	10	60	13	83	10	85	12	107	9	48	11	68	300
07:30 AM	7	24	7	38	18	52	11	81	10	101	8	119	10	70	17	97	335
07:45 AM	14	36	11	61	11	65	8	84	12	65	10	87	23	80	17	120	352
Total	35	107	25	167	53	214	34	301	39	318	38	395	53	229	65	347	1210
08:00 AM	12	37	17	66	16	61	12	89	6	83	18	107	18	87	17	122	384
08:15 AM	8	27	15	50	14	61	9	84	10	71	20	101	16	93	27	136	371
08:30 AM	12	33	10	55	15	53	8	76	12	80	14	106	12	101	21	134	371
08:45 AM	14	34	22	70	18	69	7	94	18	62	16	96	16	98	11	125	385
Total	46	131	64	241	63	244	36	343	46	296	68	410	62	379	76	517	1511
Grand Total	81	238	89	408	116	458	70	644	85	614	106	805	115	608	141	864	2721
Apprch %	19.9	58.3	21.8		18	71.1	10.9		10.6	76.3	13.2		13.3	70.4	16.3		
Total %	3	8.7	3.3	15	4.3	16.8	2.6	23.7	3.1	22.6	3.9	29.6	4.2	22.3	5.2	31.8	
PC	69	211	78	358	101	436	64	601	79	571	105	755	111	572	129	812	2526
% PC	85.2	88.7	87.6	87.7	87.1	95.2	91.4	93.3	92.9	93	99.1	93.8	96.5	94.1	91.5	94	92.8
SU	12	27	11	50	15	19	5	39	5	42	1	48	4	30	12	46	183
% SU	14.8	11.3	12.4	12.3	12.9	4.1	7.1	6.1	5.9	6.8	0.9	6	3.5	4.9	8.5	5.3	6.7
MU	0	0	0	0	0	3	1	4	1	1	0	2	0	6	0	6	12
% MU	0	0	0	0	0	0.7	1.4	0.6	1.2	0.2	0	0.2	0	1	0	0.7	0.4

	Michigan Ave From North				103rd St From East				Michigan Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	12	**37**	17	66	16	61	**12**	89	6	**83**	18	**107**	**18**	87	17	122	384
08:15 AM	8	27	15	50	14	61	9	84	10	71	**20**	101	16	93	**27**	**136**	371
08:30 AM	12	33	10	55	15	53	8	76	12	80	14	106	12	**101**	21	134	371
08:45 AM	**14**	34	**22**	**70**	**18**	**69**	7	**94**	**18**	62	16	96	16	98	11	125	**385**
Total Volume	46	131	64	241	63	244	36	343	46	296	68	410	62	379	76	517	1511
% App. Total	19.1	54.4	26.6		18.4	71.1	10.5		11.2	72.2	16.6		12	73.3	14.7		
PHF	.821	.885	.727	.861	.875	.884	.750	.912	.639	.892	.850	.958	.861	.938	.704	.950	.981

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103rd St & Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 2

Groups Printed- SU

	Michigan Ave From North				103rd St From East				Michigan Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	3	1	5	2	3	0	5	0	10	0	10	0	1	2	3	23
07:15 AM	1	4	1	6	4	1	2	7	0	6	0	6	0	3	2	5	24
07:30 AM	4	3	1	8	0	4	0	4	0	4	0	4	1	5	1	7	23
07:45 AM	2	4	2	8	2	2	0	4	1	5	0	6	1	2	1	4	22
Total	8	14	5	27	8	10	2	20	1	25	0	26	2	11	6	19	92
08:00 AM	1	3	1	5	1	3	0	4	2	2	1	5	0	3	1	4	18
08:15 AM	1	4	1	6	1	2	0	3	2	7	0	9	1	4	1	6	24
08:30 AM	1	2	1	4	1	1	2	4	0	3	0	3	1	6	3	10	21
08:45 AM	1	4	3	8	4	3	1	8	0	5	0	5	0	6	1	7	28
Total	4	13	6	23	7	9	3	19	4	17	1	22	2	19	6	27	91
Grand Total	12	27	11	50	15	19	5	39	5	42	1	48	4	30	12	46	183
Apprch %	24	54	22		38.5	48.7	12.8		10.4	87.5	2.1		8.7	65.2	26.1		
Total %	6.6	14.8	6	27.3	8.2	10.4	2.7	21.3	2.7	23	0.5	26.2	2.2	16.4	6.6	25.1	

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103rd St & Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 3

Groups Printed- MU

	Michigan Ave From North				103rd St From East				Michigan Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	1	0	1	1	0	0	1	0	1	0	1	3
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
08:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	1	3	0	1	0	1	0	5	0	5	9
Grand Total	0	0	0	0	0	3	1	4	1	1	0	2	0	6	0	6	12
Apprch %	0	0	0		0	75	25		50	50	0		0	100	0		
Total %	0	0	0	0	0	25	8.3	33.3	8.3	8.3	0	16.7	0	50	0	50	

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103rd St & Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds + Bikes
Site Code : 00000000
Start Date : 5/2/2012
Page No : 4

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			103rd St Crossing East Leg			Michigan Ave Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	28	28	0	14	14	0	3	3	0	9	9	54
07:15 AM	0	32	32	0	23	23	0	6	6	0	2	2	63
07:30 AM	0	21	21	0	11	11	0	1	1	0	7	7	40
07:45 AM	0	36	36	0	5	5	0	1	1	0	7	7	49
Total	0	117	117	0	53	53	0	11	11	0	25	25	206
08:00 AM	0	23	23	0	2	2	0	2	2	0	7	7	34
08:15 AM	0	18	18	0	34	34	0	6	6	0	7	7	65
08:30 AM	0	43	43	0	21	21	0	2	2	0	8	8	74
08:45 AM	0	35	35	0	9	9	0	7	7	0	8	8	59
Total	0	119	119	0	66	66	0	17	17	0	30	30	232
Grand Total	0	236	236	0	119	119	0	28	28	0	55	55	438
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	53.9	53.9	0	27.2	27.2	0	6.4	6.4	0	12.6	12.6	

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103rd St & Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 5

Groups Printed- PC - SU - MU

	Michigan Ave From North				103rd St From East				Michigan Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	16	71	12	99	11	68	13	92	13	55	11	79	14	74	15	103	373
04:15 PM	20	47	12	79	19	79	17	115	10	49	8	67	26	73	14	113	374
04:30 PM	16	69	19	104	15	71	16	102	10	40	14	64	26	98	13	137	407
04:45 PM	10	54	16	80	20	63	9	92	7	40	16	63	30	111	14	155	390
Total	62	241	59	362	65	281	55	401	40	184	49	273	96	356	56	508	1544
05:00 PM	22	50	23	95	17	85	12	114	10	43	15	68	13	109	12	134	411
05:15 PM	17	50	18	85	14	72	14	100	17	38	12	67	20	102	18	140	392
05:30 PM	15	54	20	89	14	79	14	107	17	50	14	81	21	89	10	120	397
05:45 PM	16	69	20	105	8	69	18	95	19	44	13	76	17	89	10	116	392
Total	70	223	81	374	53	305	58	416	63	175	54	292	71	389	50	510	1592
Grand Total	132	464	140	736	118	586	113	817	103	359	103	565	167	745	106	1018	3136
Apprch %	17.9	63	19		14.4	71.7	13.8		18.2	63.5	18.2		16.4	73.2	10.4		
Total %	4.2	14.8	4.5	23.5	3.8	18.7	3.6	26.1	3.3	11.4	3.3	18	5.3	23.8	3.4	32.5	
PC	120	441	133	694	108	580	113	801	102	335	102	539	167	738	91	996	3030
% PC	90.9	95	95	94.3	91.5	99	100	98	99	93.3	99	95.4	100	99.1	85.8	97.8	96.6
SU	12	23	7	42	10	6	0	16	1	24	1	26	0	6	14	20	104
% SU	9.1	5	5	5.7	8.5	1	0	2	1	6.7	1	4.6	0	0.8	13.2	2	3.3
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9	0.2	0.1

	Michigan Ave From North				103rd St From East				Michigan Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	16	**69**	19	**104**	15	71	**16**	102	10	40	14	64	26	98	13	137	407
04:45 PM	10	54	16	80	**20**	63	9	92	7	40	**16**	63	**30**	**111**	14	**155**	390
05:00 PM	**22**	50	**23**	95	17	**85**	12	**114**	10	**43**	15	**68**	13	109	12	134	**411**
05:15 PM	17	50	18	85	14	72	14	100	**17**	38	12	67	20	102	**18**	140	392
Total Volume	65	223	76	364	66	291	51	408	44	161	57	262	89	420	57	566	1600
% App. Total	17.9	61.3	20.9		16.2	71.3	12.5		16.8	61.5	21.8		15.7	74.2	10.1		
PHF	.739	.808	.826	.875	.825	.856	.797	.895	.647	.936	.891	.963	.742	.946	.792	.913	.973

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103rd St & Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 6

Groups Printed- SU

	Michigan Ave From North				103rd St From East				Michigan Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	2	4	0	6	1	2	0	3	0	3	0	3	0	0	3	3	15
04:15 PM	3	0	0	3	1	0	0	1	0	3	0	3	0	0	1	1	8
04:30 PM	1	3	2	6	1	1	0	2	0	2	0	2	0	0	1	1	11
04:45 PM	1	5	1	7	2	0	0	2	0	2	1	3	0	2	2	4	16
Total	7	12	3	22	5	3	0	8	0	10	1	11	0	2	7	9	50
05:00 PM	1	3	1	5	1	1	0	2	0	4	0	4	0	0	1	1	12
05:15 PM	1	3	1	5	1	0	0	1	1	2	0	3	0	0	3	3	12
05:30 PM	2	3	1	6	1	2	0	3	0	5	0	5	0	3	1	4	18
05:45 PM	1	2	1	4	2	0	0	2	0	3	0	3	0	1	2	3	12
Total	5	11	4	20	5	3	0	8	1	14	0	15	0	4	7	11	54
Grand Total	12	23	7	42	10	6	0	16	1	24	1	26	0	6	14	20	104
Apprch %	28.6	54.8	16.7		62.5	37.5	0		3.8	92.3	3.8		0	30	70		
Total %	11.5	22.1	6.7	40.4	9.6	5.8	0	15.4	1	23.1	1	25	0	5.8	13.5	19.2	

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103rd St & Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 7

Groups Printed- MU

	Michigan Ave From North				103rd St From East				Michigan Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Apprch %	0	0	0		0	0	0		0	0	0		0	50	50		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	100	

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103rd St & Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds + Bikes
Site Code : 00000000
Start Date : 5/2/2012
Page No : 8

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			103rd St Crossing East Leg			Michigan Ave Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	48	48	0	23	23	0	19	19	0	0	0	90
04:15 PM	0	39	39	0	23	23	0	22	22	0	4	4	88
04:30 PM	0	27	27	0	6	6	0	27	27	0	8	8	68
04:45 PM	0	35	35	0	20	20	0	18	18	0	11	11	84
Total	0	149	149	0	72	72	0	86	86	0	23	23	330
05:00 PM	0	25	25	1	8	9	0	26	26	0	5	5	65
05:15 PM	0	36	36	0	14	14	0	30	30	0	2	2	82
05:30 PM	0	23	23	0	12	12	0	21	21	0	7	7	63
05:45 PM	0	28	28	0	19	19	0	22	22	0	9	9	78
Total	0	112	112	1	53	54	0	99	99	0	23	23	288
Grand Total	0	261	261	1	125	126	0	185	185	0	46	46	618
Apprch %	0	100		0.8	99.2		0	100		0	100		
Total %	0	42.2	42.2	0.2	20.2	20.4	0	29.9	29.9	0	7.4	7.4	

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103rd St and Cottage Grove Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 1

Groups Printed- PC - SU - MU

	Cottage Grove Ave From North				103rd St From East				Cottage Grove Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	11	23	5	39	19	57	2	78	17	48	9	74	3	37	4	44	235
07:15 AM	6	24	12	42	14	90	12	116	14	71	15	100	8	42	13	63	321
07:30 AM	10	33	6	49	19	59	15	93	26	65	8	99	9	41	13	63	304
07:45 AM	7	44	21	72	25	90	17	132	32	97	17	146	12	65	15	92	442
Total	34	124	44	202	77	296	46	419	89	281	49	419	32	185	45	262	1302
08:00 AM	6	39	11	56	17	76	9	102	25	78	12	115	8	74	16	98	371
08:15 AM	9	30	13	52	34	87	13	134	14	60	7	81	5	67	9	81	348
08:30 AM	9	38	12	59	17	81	10	108	22	93	4	119	13	80	4	97	383
08:45 AM	11	54	11	76	26	100	14	140	22	70	9	101	10	71	9	90	407
Total	35	161	47	243	94	344	46	484	83	301	32	416	36	292	38	366	1509
Grand Total	69	285	91	445	171	640	92	903	172	582	81	835	68	477	83	628	2811
Apprch %	15.5	64	20.4		18.9	70.9	10.2		20.6	69.7	9.7		10.8	76	13.2		
Total %	2.5	10.1	3.2	15.8	6.1	22.8	3.3	32.1	6.1	20.7	2.9	29.7	2.4	17	3	22.3	
PC	66	268	89	423	160	584	74	818	166	552	79	797	65	438	76	579	2617
% PC	95.7	94	97.8	95.1	93.6	91.2	80.4	90.6	96.5	94.8	97.5	95.4	95.6	91.8	91.6	92.2	93.1
SU	3	17	2	22	7	40	13	60	5	29	1	35	3	38	6	47	164
% SU	4.3	6	2.2	4.9	4.1	6.2	14.1	6.6	2.9	5	1.2	4.2	4.4	8	7.2	7.5	5.8
MU	0	0	0	0	4	16	5	25	1	1	1	3	0	1	1	2	30
% MU	0	0	0	0	2.3	2.5	5.4	2.8	0.6	0.2	1.2	0.4	0	0.2	1.2	0.3	1.1

	Cottage Grove Ave From North				103rd St From East				Cottage Grove Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	7	**44**	**21**	**72**	25	**90**	**17**	132	**32**	**97**	**17**	**146**	12	65	15	92	**442**
08:00 AM	6	39	11	56	17	76	9	102	25	78	12	115	8	74	**16**	**98**	371
08:15 AM	**9**	30	13	52	**34**	87	13	**134**	14	60	7	81	5	67	9	81	348
08:30 AM	9	38	12	59	17	81	10	108	22	93	4	119	**13**	**80**	4	97	383
Total Volume	31	151	57	239	93	334	49	476	93	328	40	461	38	286	44	368	1544
% App. Total	13	63.2	23.8		19.5	70.2	10.3		20.2	71.1	8.7		10.3	77.7	12		
PHF	.861	.858	.679	.830	.684	.928	.721	.888	.727	.845	.588	.789	.731	.894	.688	.939	.873

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103rd St and Cottage Grove Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 2

Groups Printed- SU

	Cottage Grove Ave From North				103rd St From East				Cottage Grove Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	0	1	1	12	1	14	1	2	1	4	1	4	1	6	25
07:15 AM	0	1	1	2	0	7	1	8	1	2	0	3	0	4	1	5	18
07:30 AM	2	1	0	3	1	2	5	8	1	2	0	3	0	6	1	7	21
07:45 AM	0	1	0	1	0	4	0	4	0	5	0	5	0	5	0	5	15
Total	2	4	1	7	2	25	7	34	3	11	1	15	1	19	3	23	79
08:00 AM	0	3	0	3	0	5	1	6	0	3	0	3	0	3	2	5	17
08:15 AM	1	3	0	4	4	3	3	10	1	1	0	2	0	8	1	9	25
08:30 AM	0	2	0	2	1	3	1	5	0	2	0	2	1	5	0	6	15
08:45 AM	0	5	1	6	0	4	1	5	1	12	0	13	1	3	0	4	28
Total	1	13	1	15	5	15	6	26	2	18	0	20	2	19	3	24	85
Grand Total	3	17	2	22	7	40	13	60	5	29	1	35	3	38	6	47	164
Apprch %	13.6	77.3	9.1		11.7	66.7	21.7		14.3	82.9	2.9		6.4	80.9	12.8		
Total %	1.8	10.4	1.2	13.4	4.3	24.4	7.9	36.6	3	17.7	0.6	21.3	1.8	23.2	3.7	28.7	

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103rd St and Cottage Grove Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 3

Groups Printed- MU

	Cottage Grove Ave From North				103rd St From East				Cottage Grove Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	1	3	1	5	0	1	0	1	0	1	0	1	7
07:30 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	1	2	3	6	0	0	0	0	0	0	0	0	6
Total	0	0	0	0	2	7	5	14	1	1	0	2	0	1	0	1	17
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	2	0	2	0	0	1	1	0	0	1	1	4
08:30 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	0	0	0	4
08:45 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	0	0	0	4
Total	0	0	0	0	2	9	0	11	0	0	1	1	0	0	1	1	13
Grand Total	0	0	0	0	4	16	5	25	1	1	1	3	0	1	1	2	30
Apprch %	0	0	0		16	64	20		33.3	33.3	33.3		0	50	50		
Total %	0	0	0	0	13.3	53.3	16.7	83.3	3.3	3.3	3.3	10	0	3.3	3.3	6.7	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/8/2012
Page No : 4

Groups Printed- Peds & Bikes

	Cottage Grove Ave Crossing North Leg			103rd St Crossing East Leg			Cottage Grove Ave Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	3	3	0	2	2	0	2	2	0	2	2	9
07:15 AM	0	2	2	0	8	8	0	1	1	0	0	0	11
07:30 AM	0	4	4	0	3	3	0	1	1	0	4	4	12
07:45 AM	2	2	4	2	6	8	0	6	6	0	0	0	18
Total	2	11	13	2	19	21	0	10	10	0	6	6	50
08:00 AM	0	6	6	0	6	6	0	3	3	0	1	1	16
08:15 AM	0	8	8	0	18	18	0	6	6	0	0	0	32
08:30 AM	0	11	11	0	5	5	0	10	10	0	11	11	37
08:45 AM	0	18	18	0	11	11	0	10	10	0	1	1	40
Total	0	43	43	0	40	40	0	29	29	0	13	13	125
Grand Total	2	54	56	2	59	61	0	39	39	0	19	19	175
Apprch %	3.6	96.4		3.3	96.7		0	100		0	100		
Total %	1.1	30.9	32	1.1	33.7	34.9	0	22.3	22.3	0	10.9	10.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 5

Groups Printed- PC - SU - MU

	Cottage Grove Ave From North				103rd St From East				Cottage Grove Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	18	70	21	109	35	145	24	204	11	29	18	58	18	69	14	101	472
04:15 PM	11	46	24	81	18	83	13	114	19	38	15	72	15	72	19	106	373
04:30 PM	12	65	27	104	29	118	14	161	15	40	7	62	17	88	9	114	441
04:45 PM	18	76	33	127	28	72	20	120	12	31	9	52	15	84	18	117	416
Total	59	257	105	421	110	418	71	599	57	138	49	244	65	313	60	438	1702
05:00 PM	21	62	22	105	26	101	29	156	15	29	10	54	13	79	15	107	422
05:15 PM	11	86	28	125	22	97	18	137	10	44	21	75	18	82	14	114	451
05:30 PM	10	79	23	112	17	89	13	119	8	25	13	46	10	87	18	115	392
05:45 PM	21	56	25	102	26	104	30	160	12	24	7	43	12	79	15	106	411
Total	63	283	98	444	91	391	90	572	45	122	51	218	53	327	62	442	1676
Grand Total	122	540	203	865	201	809	161	1171	102	260	100	462	118	640	122	880	3378
Apprch %	14.1	62.4	23.5		17.2	69.1	13.7		22.1	56.3	21.6		13.4	72.7	13.9		
Total %	3.6	16	6	25.6	6	23.9	4.8	34.7	3	7.7	3	13.7	3.5	18.9	3.6	26.1	
PC	120	522	200	842	200	788	155	1143	101	252	99	452	117	619	122	858	3295
% PC	98.4	96.7	98.5	97.3	99.5	97.4	96.3	97.6	99	96.9	99	97.8	99.2	96.7	100	97.5	97.5
SU	2	18	3	23	1	13	5	19	1	7	1	9	1	21	0	22	73
% SU	1.6	3.3	1.5	2.7	0.5	1.6	3.1	1.6	1	2.7	1	1.9	0.8	3.3	0	2.5	2.2
MU	0	0	0	0	0	8	1	9	0	1	0	1	0	0	0	0	10
% MU	0	0	0	0	0	1	0.6	0.8	0	0.4	0	0.2	0	0	0	0	0.3

	Cottage Grove Ave From North				103rd St From East				Cottage Grove Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	7	**44**	**21**	**72**	25	**90**	**17**	132	**32**	**97**	**17**	**146**	12	65	15	92	**442**
08:00 AM	6	39	11	56	17	76	9	102	25	78	12	115	8	74	**16**	**98**	371
08:15 AM	**9**	30	13	52	**34**	87	13	**134**	14	60	7	81	5	67	9	81	348
08:30 AM	9	38	12	59	17	81	10	108	22	93	4	119	**13**	**80**	4	97	383
Total Volume	31	151	57	239	93	334	49	476	93	328	40	461	38	286	44	368	1544
% App. Total	13	63.2	23.8		19.5	70.2	10.3		20.2	71.1	8.7		10.3	77.7	12		
PHF	.861	.858	.679	.830	.684	.928	.721	.888	.727	.845	.588	.789	.731	.894	.688	.939	.873

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103rd St and Cottage Grove Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 6

Groups Printed- SU

	Cottage Grove Ave From North				103rd St From East				Cottage Grove Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	3	0	3	0	2	3	5	0	1	1	2	1	4	0	5	15
04:15 PM	0	4	0	4	1	2	0	3	0	3	0	3	0	1	0	1	11
04:30 PM	0	3	0	3	0	2	0	2	1	1	0	2	0	3	0	3	10
04:45 PM	0	2	1	3	0	1	1	2	0	1	0	1	0	2	0	2	8
Total	0	12	1	13	1	7	4	12	1	6	1	8	1	10	0	11	44
05:00 PM	0	2	0	2	0	2	1	3	0	1	0	1	0	2	0	2	8
05:15 PM	2	2	0	4	0	1	0	1	0	0	0	0	0	2	0	2	7
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
05:45 PM	0	2	2	4	0	1	0	1	0	0	0	0	0	5	0	5	10
Total	2	6	2	10	0	6	1	7	0	1	0	1	0	11	0	11	29
Grand Total	2	18	3	23	1	13	5	19	1	7	1	9	1	21	0	22	73
Apprch %	8.7	78.3	13		5.3	68.4	26.3		11.1	77.8	11.1		4.5	95.5	0		
Total %	2.7	24.7	4.1	31.5	1.4	17.8	6.8	26	1.4	9.6	1.4	12.3	1.4	28.8	0	30.1	

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103rd St and Cottage Grove Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 7

Groups Printed- MU

	Cottage Grove Ave From North				103rd St From East				Cottage Grove Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	5	0	5	0	1	0	1	0	0	0	0	6
05:00 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	4
Grand Total	0	0	0	0	0	8	1	9	0	1	0	1	0	0	0	0	10
Apprch %	0	0	0		0	88.9	11.1		0	100	0		0	0	0		
Total %	0	0	0	0	0	80	10	90	0	10	0	10	0	0	0	0	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/8/2012
Page No : 8

Groups Printed- Peds & Bikes

	Cottage Grove Ave Crossing North Leg			103rd St Crossing East Leg			Cottage Grove Ave Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	1	46	47	0	20	20	0	65	65	0	13	13	145
04:15 PM	0	8	8	1	7	8	3	15	18	0	1	1	35
04:30 PM	0	9	9	0	5	5	2	11	13	0	0	0	27
04:45 PM	2	14	16	0	3	3	0	5	5	0	2	2	26
Total	3	77	80	1	35	36	5	96	101	0	16	16	233
05:00 PM	0	11	11	0	5	5	0	11	11	0	0	0	27
05:15 PM	0	4	4	0	2	2	0	5	5	0	0	0	11
05:30 PM	1	6	7	0	10	10	0	6	6	0	1	1	24
05:45 PM	2	2	4	0	3	3	0	8	8	0	0	0	15
Total	3	23	26	0	20	20	0	30	30	0	1	1	77
Grand Total	6	100	106	1	55	56	5	126	131	0	17	17	310
Apprch %	5.7	94.3		1.8	98.2		3.8	96.2		0	100		
Total %	1.9	32.3	34.2	0.3	17.7	18.1	1.6	40.6	42.3	0	5.5	5.5	

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103rd St and Halsted St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/2/2012
Page No : 1

Groups Printed- PC - SU - MU

	Halsted St From North				103rd St From East				Halsted St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	6	75	10	91	13	42	13	68	10	270	21	301	10	22	17	49	509
07:15 AM	17	80	15	112	24	60	11	95	16	244	24	284	11	43	21	75	566
07:30 AM	15	91	21	127	28	53	8	89	17	357	34	408	20	58	18	96	720
07:45 AM	25	114	10	149	24	75	16	115	30	384	39	453	19	69	27	115	832
Total	63	360	56	479	89	230	48	367	73	1255	118	1446	60	192	83	335	2627
08:00 AM	23	109	15	147	27	66	13	106	33	385	28	446	34	82	29	145	844
08:15 AM	30	131	19	180	27	64	26	117	28	309	24	361	22	76	22	120	778
08:30 AM	17	120	20	157	24	63	12	99	21	266	22	309	19	85	16	120	685
08:45 AM	19	111	38	168	14	52	13	79	21	233	20	274	29	53	17	99	620
Total	89	471	92	652	92	245	64	401	103	1193	94	1390	104	296	84	484	2927
Grand Total	152	831	148	1131	181	475	112	768	176	2448	212	2836	164	488	167	819	5554
Apprch %	13.4	73.5	13.1		23.6	61.8	14.6		6.2	86.3	7.5		20	59.6	20.4		
Total %	2.7	15	2.7	20.4	3.3	8.6	2	13.8	3.2	44.1	3.8	51.1	3	8.8	3	14.7	
PC	145	759	138	1042	173	444	111	728	169	2344	201	2714	156	465	158	779	5263
% PC	95.4	91.3	93.2	92.1	95.6	93.5	99.1	94.8	96	95.8	94.8	95.7	95.1	95.3	94.6	95.1	94.8
SU	7	67	7	81	7	30	1	38	5	97	11	113	7	23	9	39	271
% SU	4.6	8.1	4.7	7.2	3.9	6.3	0.9	4.9	2.8	4	5.2	4	4.3	4.7	5.4	4.8	4.9
MU	0	5	3	8	1	1	0	2	2	7	0	9	1	0	0	1	20
% MU	0	0.6	2	0.7	0.6	0.2	0	0.3	1.1	0.3	0	0.3	0.6	0	0	0.1	0.4

	Halsted St From North				103rd St From East				Halsted St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	15	91	**21**	127	**28**	53	8	89	17	357	34	408	20	58	18	96	720
07:45 AM	25	114	10	149	24	**75**	16	115	30	384	**39**	**453**	19	69	27	115	832
08:00 AM	23	109	15	147	27	66	13	106	**33**	**385**	28	446	**34**	**82**	**29**	**145**	**844**
08:15 AM	**30**	**131**	19	**180**	27	64	**26**	**117**	28	309	24	361	22	76	22	120	778
Total Volume	93	445	65	603	106	258	63	427	108	1435	125	1668	95	285	96	476	3174
% App. Total	15.4	73.8	10.8		24.8	60.4	14.8		6.5	86	7.5		20	59.9	20.2		
PHF	.775	.849	.774	.838	.946	.860	.606	.912	.818	.932	.801	.921	.699	.869	.828	.821	.940

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103rd St and Halsted St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/2/2012
Page No : 2

Groups Printed- SU

	Halsted St From North				103rd St From East				Halsted St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	13	0	14	1	3	0	4	0	20	2	22	0	1	0	1	41
07:15 AM	0	6	1	7	2	4	0	6	0	14	1	15	2	3	1	6	34
07:30 AM	1	6	2	9	2	1	0	3	0	14	0	14	1	2	0	3	29
07:45 AM	2	8	1	11	0	6	0	6	2	13	4	19	0	4	2	6	42
Total	4	33	4	41	5	14	0	19	2	61	7	70	3	10	3	16	146
08:00 AM	1	5	0	6	1	4	0	5	0	10	0	10	1	2	2	5	26
08:15 AM	0	12	0	12	1	4	0	5	1	7	3	11	1	3	2	6	34
08:30 AM	1	10	0	11	0	5	1	6	2	8	0	10	2	3	2	7	34
08:45 AM	1	7	3	11	0	3	0	3	0	11	1	12	0	5	0	5	31
Total	3	34	3	40	2	16	1	19	3	36	4	43	4	13	6	23	125
Grand Total	7	67	7	81	7	30	1	38	5	97	11	113	7	23	9	39	271
Apprch %	8.6	82.7	8.6		18.4	78.9	2.6		4.4	85.8	9.7		17.9	59	23.1		
Total %	2.6	24.7	2.6	29.9	2.6	11.1	0.4	14	1.8	35.8	4.1	41.7	2.6	8.5	3.3	14.4	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/2/2012
Page No : 3

Groups Printed- MU

	Halsted St From North				103rd St From East				Halsted St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:30 AM	0	2	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	1	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	0	3	1	4	1	0	0	1	0	4	0	4	0	0	0	0	9
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	2	0	1	0	1	1	0	0	1	0	0	0	0	4
08:30 AM	0	0	1	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:45 AM	0	1	0	1	0	0	0	0	1	1	0	2	1	0	0	1	4
Total	0	2	2	4	0	1	0	1	2	3	0	5	1	0	0	1	11
Grand Total	0	5	3	8	1	1	0	2	2	7	0	9	1	0	0	1	20
Apprch %	0	62.5	37.5		50	50	0		22.2	77.8	0		100	0	0		
Total %	0	25	15	40	5	5	0	10	10	35	0	45	5	0	0	5	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 4

Groups Printed- Peds & Bikes

	Halsted St Crossing North Leg			103rd St Crossing East Leg			Halsted St Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	10	10	0	2	2	0	1	1	0	1	1	14
07:15 AM	0	12	12	0	0	0	0	8	8	0	0	0	20
07:30 AM	0	11	11	0	0	0	0	15	15	0	4	4	30
07:45 AM	0	6	6	0	3	3	0	13	13	0	8	8	30
Total	0	39	39	0	5	5	0	37	37	0	13	13	94
08:00 AM	0	22	22	0	3	3	0	5	5	0	5	5	35
08:15 AM	0	3	3	1	2	3	0	6	6	0	3	3	15
08:30 AM	0	7	7	0	5	5	0	6	6	0	2	2	20
08:45 AM	0	3	3	0	4	4	0	4	4	0	5	5	16
Total	0	35	35	1	14	15	0	21	21	0	15	15	86
Grand Total	0	74	74	1	19	20	0	58	58	0	28	28	180
Apprch %	0	100		5	95		0	100		0	100		
Total %	0	41.1	41.1	0.6	10.6	11.1	0	32.2	32.2	0	15.6	15.6	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/2/2012
Page No : 5

Groups Printed- PC - SU - MU

	Halsted St From North				103rd St From East				Halsted St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	26	149	33	208	18	54	22	94	17	166	19	202	30	62	18	110	614
04:15 PM	43	126	35	204	25	58	23	106	27	133	23	183	45	96	21	162	655
04:30 PM	16	194	19	229	20	66	17	103	21	155	24	200	32	77	16	125	657
04:45 PM	15	166	30	211	22	64	29	115	21	150	19	190	24	56	20	100	616
Total	100	635	117	852	85	242	91	418	86	604	85	775	131	291	75	497	2542
05:00 PM	20	150	32	202	27	75	26	128	18	141	27	186	45	86	16	147	663
05:15 PM	28	213	33	274	29	75	32	136	14	150	24	188	31	71	19	121	719
05:30 PM	13	184	32	229	25	69	20	114	22	133	19	174	32	69	20	121	638
05:45 PM	29	176	34	239	29	51	25	105	22	152	25	199	29	68	9	106	649
Total	90	723	131	944	110	270	103	483	76	576	95	747	137	294	64	495	2669
Grand Total	190	1358	248	1796	195	512	194	901	162	1180	180	1522	268	585	139	992	5211
Apprch %	10.6	75.6	13.8		21.6	56.8	21.5		10.6	77.5	11.8		27	59	14		
Total %	3.6	26.1	4.8	34.5	3.7	9.8	3.7	17.3	3.1	22.6	3.5	29.2	5.1	11.2	2.7	19	
PC	185	1300	245	1730	190	493	190	873	159	1121	174	1454	265	571	136	972	5029
% PC	97.4	95.7	98.8	96.3	97.4	96.3	97.9	96.9	98.1	95	96.7	95.5	98.9	97.6	97.8	98	96.5
SU	5	57	2	64	5	19	4	28	3	58	6	67	3	13	3	19	178
% SU	2.6	4.2	0.8	3.6	2.6	3.7	2.1	3.1	1.9	4.9	3.3	4.4	1.1	2.2	2.2	1.9	3.4
MU	0	1	1	2	0	0	0	0	0	1	0	1	0	1	0	1	4
% MU	0	0.1	0.4	0.1	0	0	0	0	0	0.1	0	0.1	0	0.2	0	0.1	0.1

	Halsted St From North				103rd St From East				Halsted St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	15	91	**21**	127	**28**	53	8	89	17	357	34	408	20	58	18	96	720
07:45 AM	25	114	10	149	24	**75**	16	115	30	384	**39**	**453**	19	69	27	115	832
08:00 AM	23	109	15	147	27	66	13	106	**33**	**385**	28	446	**34**	**82**	**29**	**145**	**844**
08:15 AM	**30**	**131**	19	**180**	27	64	**26**	**117**	28	309	24	361	22	76	22	120	778
Total Volume	93	445	65	603	106	258	63	427	108	1435	125	1668	95	285	96	476	3174
% App. Total	15.4	73.8	10.8		24.8	60.4	14.8		6.5	86	7.5		20	59.9	20.2		
PHF	.775	.849	.774	.838	.946	.860	.606	.912	.818	.932	.801	.921	.699	.869	.828	.821	.940

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/2/2012
Page No : 6

Groups Printed- SU

	Halsted St From North				103rd St From East				Halsted St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	6	0	6	1	3	0	4	1	9	1	11	0	3	1	4	25
04:15 PM	1	9	0	10	1	5	1	7	1	9	1	11	0	1	0	1	29
04:30 PM	1	8	0	9	0	1	1	2	0	7	0	7	0	2	0	2	20
04:45 PM	0	5	1	6	1	3	0	4	0	7	1	8	0	1	1	2	20
Total	2	28	1	31	3	12	2	17	2	32	3	37	0	7	2	9	94
05:00 PM	1	7	0	8	2	2	0	4	0	6	2	8	1	1	0	2	22
05:15 PM	0	9	0	9	0	1	0	1	0	5	0	5	1	2	1	4	19
05:30 PM	1	8	1	10	0	1	1	2	1	7	1	9	0	1	0	1	22
05:45 PM	1	5	0	6	0	3	1	4	0	8	0	8	1	2	0	3	21
Total	3	29	1	33	2	7	2	11	1	26	3	30	3	6	1	10	84
Grand Total	5	57	2	64	5	19	4	28	3	58	6	67	3	13	3	19	178
Apprch %	7.8	89.1	3.1		17.9	67.9	14.3		4.5	86.6	9		15.8	68.4	15.8		
Total %	2.8	32	1.1	36	2.8	10.7	2.2	15.7	1.7	32.6	3.4	37.6	1.7	7.3	1.7	10.7	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/2/2012
Page No : 7

Groups Printed- MU

	Halsted St From North				103rd St From East				Halsted St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	1	0	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	2	0	0	0	0	0	0	0	0	0	1	0	1	3
Grand Total	0	1	1	2	0	0	0	0	0	1	0	1	0	1	0	1	4
Apprch %	0	50	50		0	0	0		0	100	0		0	100	0		
Total %	0	25	25	50	0	0	0	0	0	25	0	25	0	25	0	25	

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103rd St and Halsted St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 8

Groups Printed- Peds & Bikes

	Halsted St Crossing North Leg			103rd St Crossing East Leg			Halsted St Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	5	5	0	1	1	0	9	9	0	7	7	22
04:15 PM	0	12	12	1	3	4	0	12	12	0	4	4	32
04:30 PM	0	7	7	1	11	12	0	4	4	0	14	14	37
04:45 PM	1	2	3	1	6	7	0	2	2	0	8	8	20
Total	1	26	27	3	21	24	0	27	27	0	33	33	111
05:00 PM	0	2	2	0	6	6	0	14	14	0	5	5	27
05:15 PM	1	8	9	0	3	3	0	9	9	0	5	5	26
05:30 PM	0	2	2	0	9	9	0	14	14	0	12	12	37
05:45 PM	0	12	12	0	6	6	0	8	8	0	14	14	40
Total	1	24	25	0	24	24	0	45	45	0	36	36	130
Grand Total	2	50	52	3	45	48	0	72	72	0	69	69	241
Apprch %	3.8	96.2		6.2	93.8		0	100		0	100		
Total %	0.8	20.7	21.6	1.2	18.7	19.9	0	29.9	29.9	0	28.6	28.6	

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103rd St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 1

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				103rd St From East				Martin Luther King Dr From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	6	10	3	19	5	70	3	78	1	41	12	54	5	43	12	60	211
07:15 AM	13	21	2	36	9	67	3	79	6	84	9	99	4	39	25	68	282
07:30 AM	13	22	9	44	1	76	3	80	4	81	12	97	7	57	16	80	301
07:45 AM	12	56	4	72	18	66	4	88	7	95	17	119	12	48	16	76	355
Total	44	109	18	171	33	279	13	325	18	301	50	369	28	187	69	284	1149
08:00 AM	8	38	13	59	8	69	8	85	6	102	10	118	5	72	30	107	369
08:15 AM	3	45	8	56	16	81	6	103	5	66	15	86	5	75	22	102	347
08:30 AM	14	49	16	79	7	99	8	114	4	80	15	99	3	76	25	104	396
08:45 AM	9	46	13	68	8	88	7	103	5	86	11	102	10	73	22	105	378
Total	34	178	50	262	39	337	29	405	20	334	51	405	23	296	99	418	1490
Grand Total	78	287	68	433	72	616	42	730	38	635	101	774	51	483	168	702	2639
Apprch %	18	66.3	15.7		9.9	84.4	5.8		4.9	82	13		7.3	68.8	23.9		
Total %	3	10.9	2.6	16.4	2.7	23.3	1.6	27.7	1.4	24.1	3.8	29.3	1.9	18.3	6.4	26.6	
PC	76	268	64	408	70	570	42	682	37	616	99	752	48	444	163	655	2497
% PC	97.4	93.4	94.1	94.2	97.2	92.5	100	93.4	97.4	97	98	97.2	94.1	91.9	97	93.3	94.6
SU	2	17	4	23	2	41	0	43	1	19	1	21	3	37	5	45	132
% SU	2.6	5.9	5.9	5.3	2.8	6.7	0	5.9	2.6	3	1	2.7	5.9	7.7	3	6.4	5
MU	0	2	0	2	0	5	0	5	0	0	1	1	0	2	0	2	10
% MU	0	0.7	0	0.5	0	0.8	0	0.7	0	0	1	0.1	0	0.4	0	0.3	0.4

	Martin Luther King Dr From North				103rd St From East				Martin Luther King Dr From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	8	38	13	59	8	69	**8**	85	**6**	**102**	10	**118**	5	72	**30**	**107**	369
08:15 AM	3	45	8	56	**16**	81	6	103	5	66	**15**	86	5	75	22	102	347
08:30 AM	**14**	**49**	**16**	**79**	7	**99**	8	**114**	4	80	15	99	3	**76**	25	104	**396**
08:45 AM	9	46	13	68	8	88	7	103	5	86	11	102	**10**	73	22	105	378
Total Volume	34	178	50	262	39	337	29	405	20	334	51	405	23	296	99	418	1490
% App. Total	13	67.9	19.1		9.6	83.2	7.2		4.9	82.5	12.6		5.5	70.8	23.7		
PHF	.607	.908	.781	.829	.609	.851	.906	.888	.833	.819	.850	.858	.575	.974	.825	.977	.941

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103rd St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 2

Groups Printed- SU

	Martin Luther King Dr From North				103rd St From East				Martin Luther King Dr From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	2	0	2	0	7	0	7	0	3	0	3	0	4	1	5	17
07:15 AM	0	1	0	1	0	4	0	4	1	1	0	2	0	3	1	4	11
07:30 AM	2	3	2	7	0	6	0	6	0	4	0	4	0	3	1	4	21
07:45 AM	0	4	0	4	2	4	0	6	0	1	0	1	2	3	1	6	17
Total	2	10	2	14	2	21	0	23	1	9	0	10	2	13	4	19	66
08:00 AM	0	1	2	3	0	3	0	3	0	5	0	5	1	9	1	11	22
08:15 AM	0	2	0	2	0	9	0	9	0	0	0	0	0	4	0	4	15
08:30 AM	0	2	0	2	0	1	0	1	0	2	1	3	0	6	0	6	12
08:45 AM	0	2	0	2	0	7	0	7	0	3	0	3	0	5	0	5	17
Total	0	7	2	9	0	20	0	20	0	10	1	11	1	24	1	26	66
Grand Total	2	17	4	23	2	41	0	43	1	19	1	21	3	37	5	45	132
Apprch %	8.7	73.9	17.4		4.7	95.3	0		4.8	90.5	4.8		6.7	82.2	11.1		
Total %	1.5	12.9	3	17.4	1.5	31.1	0	32.6	0.8	14.4	0.8	15.9	2.3	28	3.8	34.1	

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103rd St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 3

Groups Printed- MU

	Martin Luther King Dr From North				103rd St From East				Martin Luther King Dr From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	0	1	1	0	0	0	0	3
08:00 AM	0	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	2	0	2	0	3	0	3	0	0	0	0	0	2	0	2	7
Grand Total	0	2	0	2	0	5	0	5	0	0	1	1	0	2	0	2	10
Apprch %	0	100	0		0	100	0		0	0	100		0	100	0		
Total %	0	20	0	20	0	50	0	50	0	0	10	10	0	20	0	20	

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103rd St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/7/2012
Page No : 4

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			103rd St Crossing East Leg			Martin Luther King Dr Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	2	2	0	4	4	0	2	2	8
07:15 AM	0	1	1	0	0	0	1	3	4	0	4	4	9
07:30 AM	0	2	2	0	3	3	0	1	1	0	3	3	9
07:45 AM	0	0	0	1	4	5	0	7	7	0	0	0	12
Total	0	3	3	1	9	10	1	15	16	0	9	9	38
08:00 AM	0	3	3	0	1	1	1	8	9	0	5	5	18
08:15 AM	1	2	3	0	0	0	1	7	8	1	2	3	14
08:30 AM	0	6	6	0	0	0	1	27	28	1	8	9	43
08:45 AM	0	0	0	0	0	0	0	6	6	0	3	3	9
Total	1	11	12	0	1	1	3	48	51	2	18	20	84
Grand Total	1	14	15	1	10	11	4	63	67	2	27	29	122
Apprch %	6.7	93.3		9.1	90.9		6	94		6.9	93.1		
Total %	0.8	11.5	12.3	0.8	8.2	9	3.3	51.6	54.9	1.6	22.1	23.8	

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103rd St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 5

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				103rd St From East				Martin Luther King Dr From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	25	100	28	153	23	98	8	129	7	37	18	62	10	104	20	134	478
04:15 PM	27	121	20	168	6	108	12	126	14	45	20	79	11	105	23	139	512
04:30 PM	30	83	18	131	7	102	12	121	6	39	22	67	13	87	26	126	445
04:45 PM	21	82	27	130	14	107	11	132	10	45	14	69	15	71	14	100	431
Total	103	386	93	582	50	415	43	508	37	166	74	277	49	367	83	499	1866
05:00 PM	41	130	23	194	6	87	9	102	13	48	13	74	8	93	20	121	491
05:15 PM	26	114	22	162	23	109	9	141	11	43	15	69	15	98	28	141	513
05:30 PM	24	119	16	159	7	116	8	131	14	36	24	74	11	84	12	107	471
05:45 PM	15	110	15	140	4	121	1	126	10	36	16	62	18	107	18	143	471
Total	106	473	76	655	40	433	27	500	48	163	68	279	52	382	78	512	1946
Grand Total	209	859	169	1237	90	848	70	1008	85	329	142	556	101	749	161	1011	3812
Apprch %	16.9	69.4	13.7		8.9	84.1	6.9		15.3	59.2	25.5		10	74.1	15.9		
Total %	5.5	22.5	4.4	32.5	2.4	22.2	1.8	26.4	2.2	8.6	3.7	14.6	2.6	19.6	4.2	26.5	
PC	207	836	165	1208	84	830	68	982	84	316	142	542	101	727	161	989	3721
% PC	99	97.3	97.6	97.7	93.3	97.9	97.1	97.4	98.8	96	100	97.5	100	97.1	100	97.8	97.6
SU	2	12	2	16	3	9	1	13	1	12	0	13	0	19	0	19	61
% SU	1	1.4	1.2	1.3	3.3	1.1	1.4	1.3	1.2	3.6	0	2.3	0	2.5	0	1.9	1.6
MU	0	11	2	13	3	9	1	13	0	1	0	1	0	3	0	3	30
% MU	0	1.3	1.2	1.1	3.3	1.1	1.4	1.3	0	0.3	0	0.2	0	0.4	0	0.3	0.8

	Martin Luther King Dr From North				103rd St From East				Martin Luther King Dr From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**41**	**130**	**23**	**194**	6	87	**9**	102	13	**48**	13	**74**	8	93	20	121	491
05:15 PM	26	114	22	162	**23**	109	9	**141**	11	43	15	69	15	98	**28**	141	**513**
05:30 PM	24	119	16	159	7	116	8	131	**14**	36	**24**	74	11	84	12	107	471
05:45 PM	15	110	15	140	4	**121**	1	126	10	36	16	62	**18**	**107**	18	**143**	471
Total Volume	106	473	76	655	40	433	27	500	48	163	68	279	52	382	78	512	1946
% App. Total	16.2	72.2	11.6		8	86.6	5.4		17.2	58.4	24.4		10.2	74.6	15.2		
PHF	.646	.910	.826	.844	.435	.895	.750	.887	.857	.849	.708	.943	.722	.893	.696	.895	.948

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103rd St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 6

Groups Printed- SU

	Martin Luther King Dr From North				103rd St From East				Martin Luther King Dr From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	3	2	5	3	0	0	3	0	3	0	3	0	2	0	2	13
04:15 PM	0	3	0	3	0	2	0	2	0	2	0	2	0	5	0	5	12
04:30 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	2	0	2	5
04:45 PM	1	0	0	1	0	2	0	2	1	2	0	3	0	3	0	3	9
Total	1	8	2	11	3	5	0	8	1	7	0	8	0	12	0	12	39
05:00 PM	1	1	0	2	0	0	0	0	0	1	0	1	0	2	0	2	5
05:15 PM	0	1	0	1	0	1	0	1	0	1	0	1	0	3	0	3	6
05:30 PM	0	1	0	1	0	2	1	3	0	0	0	0	0	1	0	1	5
05:45 PM	0	1	0	1	0	1	0	1	0	3	0	3	0	1	0	1	6
Total	1	4	0	5	0	4	1	5	0	5	0	5	0	7	0	7	22
Grand Total	2	12	2	16	3	9	1	13	1	12	0	13	0	19	0	19	61
Apprch %	12.5	75	12.5		23.1	69.2	7.7		7.7	92.3	0		0	100	0		
Total %	3.3	19.7	3.3	26.2	4.9	14.8	1.6	21.3	1.6	19.7	0	21.3	0	31.1	0	31.1	

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103rd St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 7

Groups Printed- MU

	Martin Luther King Dr From North				103rd St From East				Martin Luther King Dr From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	3	2	5	3	0	0	3	0	1	0	1	0	0	0	0	9
04:15 PM	0	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4
04:30 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	7	2	9	3	5	0	8	0	1	0	1	0	1	0	1	19
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:30 PM	0	1	0	1	0	2	1	3	0	0	0	0	0	0	0	0	4
05:45 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Total	0	4	0	4	0	4	1	5	0	0	0	0	0	2	0	2	11
Grand Total	0	11	2	13	3	9	1	13	0	1	0	1	0	3	0	3	30
Apprch %	0	84.6	15.4		23.1	69.2	7.7		0	100	0		0	100	0		
Total %	0	36.7	6.7	43.3	10	30	3.3	43.3	0	3.3	0	3.3	0	10	0	10	

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103rd St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/7/2012

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			103rd St Crossing East Leg			Martin Luther King Dr Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	4	4	0	4	4	5	42	47	0	7	7	62
04:15 PM	0	5	5	0	9	9	0	24	24	0	10	10	48
04:30 PM	0	5	5	0	1	1	2	12	14	2	12	14	34
04:45 PM	1	10	11	0	2	2	0	22	22	0	7	7	42
Total	1	24	25	0	16	16	7	100	107	2	36	38	186
05:00 PM	0	2	2	0	5	5	0	23	23	0	13	13	43
05:15 PM	0	10	10	0	3	3	0	22	22	1	14	15	50
05:30 PM	1	1	2	0	0	0	1	20	21	1	6	7	30
05:45 PM	1	8	9	0	0	0	2	30	32	0	3	3	44
Total	2	21	23	0	8	8	3	95	98	2	36	38	167
Grand Total	3	45	48	0	24	24	10	195	205	4	72	76	353
Apprch %	6.2	93.8		0	100		4.9	95.1		5.3	94.7		
Total %	0.8	12.7	13.6	0	6.8	6.8	2.8	55.2	58.1	1.1	20.4	21.5	

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103rd St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 1

Groups Printed- PC - SU - MU

	State St From North				103rd St From East				State St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	3	13	3	19	2	38	2	42	10	64	4	78	5	50	21	76	215
07:15 AM	1	7	9	17	7	51	1	59	4	66	8	78	7	53	8	68	222
07:30 AM	2	16	8	26	11	55	4	70	12	73	19	104	6	85	14	105	305
07:45 AM	2	24	7	33	10	69	3	82	8	93	9	110	5	101	32	138	363
Total	8	60	27	95	30	213	10	253	34	296	40	370	23	289	75	387	1105
08:00 AM	4	30	10	44	7	65	2	74	8	63	10	81	7	80	15	102	301
08:15 AM	1	22	13	36	6	55	6	67	10	69	13	92	7	98	11	116	311
08:30 AM	3	24	7	34	3	75	4	82	13	56	10	79	9	93	16	118	313
08:45 AM	1	32	10	43	3	54	4	61	7	67	16	90	7	90	15	112	306
Total	9	108	40	157	19	249	16	284	38	255	49	342	30	361	57	448	1231
Grand Total	17	168	67	252	49	462	26	537	72	551	89	712	53	650	132	835	2336
Apprch %	6.7	66.7	26.6		9.1	86	4.8		10.1	77.4	12.5		6.3	77.8	15.8		
Total %	0.7	7.2	2.9	10.8	2.1	19.8	1.1	23	3.1	23.6	3.8	30.5	2.3	27.8	5.7	35.7	
PC	15	157	63	235	46	425	24	495	68	536	87	691	51	612	124	787	2208
% PC	88.2	93.5	94	93.3	93.9	92	92.3	92.2	94.4	97.3	97.8	97.1	96.2	94.2	93.9	94.3	94.5
SU	2	10	4	16	3	35	2	40	4	14	2	20	2	36	7	45	121
% SU	11.8	6	6	6.3	6.1	7.6	7.7	7.4	5.6	2.5	2.2	2.8	3.8	5.5	5.3	5.4	5.2
MU	0	1	0	1	0	2	0	2	0	1	0	1	0	2	1	3	7
% MU	0	0.6	0	0.4	0	0.4	0	0.4	0	0.2	0	0.1	0	0.3	0.8	0.4	0.3

	State St From North				103rd St From East				State St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	2	24	7	33	**10**	69	3	**82**	8	**93**	9	**110**	5	**101**	**32**	**138**	**363**
08:00 AM	**4**	**30**	10	**44**	7	65	2	74	8	63	10	81	7	80	15	102	301
08:15 AM	1	22	**13**	36	6	55	**6**	67	10	69	**13**	92	7	98	11	116	311
08:30 AM	3	24	7	34	3	**75**	4	82	**13**	56	10	79	**9**	93	16	118	313
Total Volume	10	100	37	147	26	264	15	305	39	281	42	362	28	372	74	474	1288
% App. Total	6.8	68	25.2		8.5	86.6	4.9		10.8	77.6	11.6		5.9	78.5	15.6		
PHF	.625	.833	.712	.835	.650	.880	.625	.930	.750	.755	.808	.823	.778	.921	.578	.859	.887

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103rd St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 2

Groups Printed- SU

	State St From North				103rd St From East				State St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	1	2	1	3	0	4	1	2	0	3	0	5	1	6	15
07:15 AM	0	1	0	1	0	5	0	5	0	3	0	3	0	2	0	2	11
07:30 AM	0	0	0	0	0	5	1	6	1	2	0	3	0	4	1	5	14
07:45 AM	1	1	0	2	0	4	1	5	1	0	2	3	0	9	3	12	22
Total	1	3	1	5	1	17	2	20	3	7	2	12	0	20	5	25	62
08:00 AM	1	3	1	5	1	4	0	5	0	3	0	3	0	4	1	5	18
08:15 AM	0	3	1	4	0	4	0	4	1	1	0	2	0	4	0	4	14
08:30 AM	0	0	0	0	1	9	0	10	0	1	0	1	1	4	1	6	17
08:45 AM	0	1	1	2	0	1	0	1	0	2	0	2	1	4	0	5	10
Total	1	7	3	11	2	18	0	20	1	7	0	8	2	16	2	20	59
Grand Total	2	10	4	16	3	35	2	40	4	14	2	20	2	36	7	45	121
Apprch %	12.5	62.5	25		7.5	87.5	5		20	70	10		4.4	80	15.6		
Total %	1.7	8.3	3.3	13.2	2.5	28.9	1.7	33.1	3.3	11.6	1.7	16.5	1.7	29.8	5.8	37.2	

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103rd St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 3

Groups Printed- MU

	State St From North				103rd St From East				State St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	3	4
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
Grand Total	0	1	0	1	0	2	0	2	0	1	0	1	0	2	1	3	7
Apprch %	0	100	0		0	100	0		0	100	0		0	66.7	33.3		
Total %	0	14.3	0	14.3	0	28.6	0	28.6	0	14.3	0	14.3	0	28.6	14.3	42.9	

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103rd St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 4

Groups Printed- Peds & Bikes

	State St Crossing North Leg			103rd St Crossing East Leg			State St Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	1	4	5	0	0	0	0	2	2	0	1	1	8
07:15 AM	0	3	3	0	0	0	0	3	3	0	0	0	6
07:30 AM	0	2	2	0	0	0	0	0	0	0	1	1	3
07:45 AM	0	7	7	0	4	4	0	8	8	0	0	0	19
Total	1	16	17	0	4	4	0	13	13	0	2	2	36
08:00 AM	0	5	5	0	1	1	0	0	0	0	0	0	6
08:15 AM	0	2	2	0	0	0	0	1	1	0	0	0	3
08:30 AM	1	3	4	0	0	0	0	2	2	0	10	10	16
08:45 AM	0	3	3	0	0	0	0	0	0	0	12	12	15
Total	1	13	14	0	1	1	0	3	3	0	22	22	40
Grand Total	2	29	31	0	5	5	0	16	16	0	24	24	76
Apprch %	6.5	93.5		0	100		0	100		0	100		
Total %	2.6	38.2	40.8	0	6.6	6.6	0	21.1	21.1	0	31.6	31.6	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 5

Groups Printed- PC - SU - MU

	State St From North				103rd St From East				State St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	8	49	32	89	11	83	9	103	11	25	13	49	5	96	12	113	354
04:15 PM	6	47	22	75	15	122	9	146	17	47	11	75	16	118	11	145	441
04:30 PM	6	34	19	59	12	109	6	127	21	40	13	74	21	101	8	130	390
04:45 PM	4	24	11	39	17	119	5	141	20	41	15	76	11	98	11	120	376
Total	24	154	84	262	55	433	29	517	69	153	52	274	53	413	42	508	1561
05:00 PM	5	31	22	58	15	143	14	172	17	34	11	62	7	103	15	125	417
05:15 PM	9	50	20	79	14	119	12	145	18	46	8	72	5	84	14	103	399
05:30 PM	9	33	26	68	6	104	8	118	13	50	10	73	4	146	14	164	423
05:45 PM	2	48	27	77	12	87	5	104	7	35	15	57	13	93	12	118	356
Total	25	162	95	282	47	453	39	539	55	165	44	264	29	426	55	510	1595
Grand Total	49	316	179	544	102	886	68	1056	124	318	96	538	82	839	97	1018	3156
Apprch %	9	58.1	32.9		9.7	83.9	6.4		23	59.1	17.8		8.1	82.4	9.5		
Total %	1.6	10	5.7	17.2	3.2	28.1	2.2	33.5	3.9	10.1	3	17	2.6	26.6	3.1	32.3	
PC	47	313	175	535	101	870	68	1039	122	314	96	532	80	821	95	996	3102
% PC	95.9	99.1	97.8	98.3	99	98.2	100	98.4	98.4	98.7	100	98.9	97.6	97.9	97.9	97.8	98.3
SU	2	3	4	9	1	15	0	16	2	4	0	6	2	18	2	22	53
% SU	4.1	0.9	2.2	1.7	1	1.7	0	1.5	1.6	1.3	0	1.1	2.4	2.1	2.1	2.2	1.7
MU	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% MU	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0

	State St From North				103rd St From East				State St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**6**	**47**	**22**	**75**	15	122	9	146	17	**47**	11	75	16	**118**	11	**145**	**441**
04:30 PM	6	34	19	59	12	109	6	127	**21**	40	13	74	**21**	101	8	130	390
04:45 PM	4	24	11	39	**17**	119	5	141	20	41	**15**	**76**	11	98	11	120	376
05:00 PM	5	31	22	58	15	**143**	**14**	**172**	17	34	11	62	7	103	**15**	125	417
Total Volume	21	136	74	231	59	493	34	586	75	162	50	287	55	420	45	520	1624
% App. Total	9.1	58.9	32		10.1	84.1	5.8		26.1	56.4	17.4		10.6	80.8	8.7		
PHF	.875	.723	.841	.770	.868	.862	.607	.852	.893	.862	.833	.944	.655	.890	.750	.897	.921

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103rd St and State St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 6

Groups Printed- SU

	State St From North				103rd St From East				State St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	2	0	1	3	1	3	0	4	1	1	0	2	0	2	0	2	11
04:15 PM	0	1	1	2	0	1	0	1	0	1	0	1	0	2	1	3	7
04:30 PM	0	1	0	1	0	2	0	2	0	1	0	1	1	2	0	3	7
04:45 PM	0	1	1	2	0	3	0	3	0	0	0	0	0	1	0	1	6
Total	2	3	3	8	1	9	0	10	1	3	0	4	1	7	1	9	31
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
05:15 PM	0	0	0	0	0	2	0	2	0	1	0	1	1	3	0	4	7
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
05:45 PM	0	0	1	1	0	1	0	1	1	0	0	1	0	4	1	5	8
Total	0	0	1	1	0	6	0	6	1	1	0	2	1	11	1	13	22
Grand Total	2	3	4	9	1	15	0	16	2	4	0	6	2	18	2	22	53
Apprch %	22.2	33.3	44.4		6.2	93.8	0		33.3	66.7	0		9.1	81.8	9.1		
Total %	3.8	5.7	7.5	17	1.9	28.3	0	30.2	3.8	7.5	0	11.3	3.8	34	3.8	41.5	

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103rd St and State St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 7

Groups Printed- MU

	State St From North				103rd St From East				State St From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	

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103rd St and State St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 8

Groups Printed- Peds & Bikes

	State St Crossing North Leg			103rd St Crossing East Leg			State St Crossing South Leg			103rd St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	9	9	0	0	0	0	5	5	0	7	7	21
04:15 PM	0	16	16	0	4	4	0	0	0	0	4	4	24
04:30 PM	0	14	14	0	4	4	0	1	1	0	3	3	22
04:45 PM	0	14	14	1	4	5	0	0	0	0	0	0	19
Total	0	53	53	1	12	13	0	6	6	0	14	14	86
05:00 PM	0	14	14	0	8	8	0	0	0	0	4	4	26
05:15 PM	0	14	14	0	0	0	0	1	1	0	2	2	17
05:30 PM	0	18	18	0	2	2	0	0	0	0	3	3	23
05:45 PM	0	5	5	0	3	3	0	2	2	0	4	4	14
Total	0	51	51	0	13	13	0	3	3	0	13	13	80
Grand Total	0	104	104	1	25	26	0	9	9	0	27	27	166
Apprch %	0	100		3.8	96.2		0	100		0	100		
Total %	0	62.7	62.7	0.6	15.1	15.7	0	5.4	5.4	0	16.3	16.3	

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103rd St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 1

Groups Printed- PC - SU - MU

	Wentworth Ave From North				103rd St From East				Wentworth Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	5	26	6	37	4	59	6	69	14	24	5	43	5	47	1	53	202
07:15 AM	3	33	7	43	4	75	6	85	15	27	8	50	8	54	5	67	245
07:30 AM	6	44	7	57	7	58	6	71	16	37	13	66	15	85	3	103	297
07:45 AM	6	49	13	68	10	94	8	112	18	39	10	67	12	102	4	118	365
Total	20	152	33	205	25	286	26	337	63	127	36	226	40	288	13	341	1109
08:00 AM	2	48	14	64	9	93	5	107	29	32	9	70	14	106	7	127	368
08:15 AM	12	51	15	78	7	93	8	108	16	25	9	50	9	90	4	103	339
08:30 AM	8	43	7	58	10	78	7	95	36	28	8	72	11	106	3	120	345
08:45 AM	5	40	15	60	9	88	2	99	17	34	10	61	10	79	3	92	312
Total	27	182	51	260	35	352	22	409	98	119	36	253	44	381	17	442	1364
Grand Total	47	334	84	465	60	638	48	746	161	246	72	479	84	669	30	783	2473
Apprch %	10.1	71.8	18.1		8	85.5	6.4		33.6	51.4	15		10.7	85.4	3.8		
Total %	1.9	13.5	3.4	18.8	2.4	25.8	1.9	30.2	6.5	9.9	2.9	19.4	3.4	27.1	1.2	31.7	
PC	44	315	78	437	57	609	42	708	160	237	71	468	73	630	29	732	2345
% PC	93.6	94.3	92.9	94	95	95.5	87.5	94.9	99.4	96.3	98.6	97.7	86.9	94.2	96.7	93.5	94.8
SU	3	19	6	28	3	27	6	36	1	8	1	10	11	33	0	44	118
% SU	6.4	5.7	7.1	6	5	4.2	12.5	4.8	0.6	3.3	1.4	2.1	13.1	4.9	0	5.6	4.8
MU	0	0	0	0	0	2	0	2	0	1	0	1	0	6	1	7	10
% MU	0	0	0	0	0	0.3	0	0.3	0	0.4	0	0.2	0	0.9	3.3	0.9	0.4

	Wentworth Ave From North				103rd St From East				Wentworth Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	6	49	13	68	**10**	**94**	**8**	**112**	18	**39**	**10**	67	12	102	4	118	365
08:00 AM	2	48	14	64	9	93	5	107	29	32	9	70	**14**	**106**	**7**	**127**	**368**
08:15 AM	**12**	**51**	**15**	**78**	7	93	8	108	16	25	9	50	9	90	4	103	339
08:30 AM	8	43	7	58	10	78	7	95	**36**	28	8	**72**	11	106	3	120	345
Total Volume	28	191	49	268	36	358	28	422	99	124	36	259	46	404	18	468	1417
% App. Total	10.4	71.3	18.3		8.5	84.8	6.6		38.2	47.9	13.9		9.8	86.3	3.8		
PHF	.583	.936	.817	.859	.900	.952	.875	.942	.688	.795	.900	.899	.821	.953	.643	.921	.963

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103rd St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 2

Groups Printed- SU

	Wentworth Ave From North				103rd St From East				Wentworth Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	0	0	1	0	5	1	6	0	1	0	1	1	0	0	1	9
07:15 AM	0	1	0	1	0	2	0	2	0	1	0	1	1	1	0	2	6
07:30 AM	1	3	1	5	0	4	1	5	1	0	0	1	1	6	0	7	18
07:45 AM	0	2	1	3	1	2	3	6	0	0	0	0	2	7	0	9	18
Total	2	6	2	10	1	13	5	19	1	2	0	3	5	14	0	19	51
08:00 AM	0	7	0	7	2	4	0	6	0	2	0	2	3	4	0	7	22
08:15 AM	1	1	3	5	0	5	1	6	0	1	1	2	1	2	0	3	16
08:30 AM	0	3	1	4	0	3	0	3	0	3	0	3	0	8	0	8	18
08:45 AM	0	2	0	2	0	2	0	2	0	0	0	0	2	5	0	7	11
Total	1	13	4	18	2	14	1	17	0	6	1	7	6	19	0	25	67
Grand Total	3	19	6	28	3	27	6	36	1	8	1	10	11	33	0	44	118
Apprch %	10.7	67.9	21.4		8.3	75	16.7		10	80	10		25	75	0		
Total %	2.5	16.1	5.1	23.7	2.5	22.9	5.1	30.5	0.8	6.8	0.8	8.5	9.3	28	0	37.3	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 3

Groups Printed- MU

	Wentworth Ave From North				103rd St From East				Wentworth Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	1	1	2	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	1	0	1	0	2	1	3	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
Grand Total	0	0	0	0	0	2	0	2	0	1	0	1	0	6	1	7	10
Apprch %	0	0	0		0	100	0		0	100	0		0	85.7	14.3		
Total %	0	0	0	0	0	20	0	20	0	10	0	10	0	60	10	70	

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103rd St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM PEDS
Site Code : 00000000
Start Date : 5/2/2012
Page No : 4

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			103rd St Crossing East Leg			Wentworth Ave Crossing South Leg			103rd St Crossing West Leg			
Start Time	Left	Peds	App. Total	Left	Peds	App. Total	Left	Peds	App. Total	Left	Peds	App. Total	Int. Total
07:00 AM	0	8	8	0	4	4	0	3	3	0	5	5	20
07:15 AM	0	4	4	0	1	1	0	5	5	1	12	13	23
07:30 AM	2	6	8	0	2	2	0	5	5	0	8	8	23
07:45 AM	2	5	7	0	1	1	0	3	3	0	25	25	36
Total	4	23	27	0	8	8	0	16	16	1	50	51	102
08:00 AM	0	17	17	0	1	1	0	4	4	0	20	20	42
08:15 AM	0	5	5	0	1	1	0	3	3	0	15	15	24
08:30 AM	0	3	3	0	1	1	0	4	4	0	10	10	18
08:45 AM	0	10	10	0	5	5	0	3	3	0	3	3	21
Total	0	35	35	0	8	8	0	14	14	0	48	48	105
Grand Total	4	58	62	0	16	16	0	30	30	1	98	99	207
Apprch %	6.5	93.5		0	100		0	100		1	99		
Total %	1.9	28	30	0	7.7	7.7	0	14.5	14.5	0.5	47.3	47.8	

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103rd St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 5

Groups Printed- PC - SU - MU

	Wentworth Ave From North				103rd St From East				Wentworth Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	13	37	12	62	8	95	9	112	16	24	12	52	17	79	2	98	324
04:15 PM	13	51	13	77	8	106	13	127	27	22	7	56	9	116	6	131	391
04:30 PM	5	61	9	75	8	93	10	111	16	19	12	47	12	85	6	103	336
04:45 PM	4	68	12	84	8	99	13	120	16	26	14	56	15	92	7	114	374
Total	35	217	46	298	32	393	45	470	75	91	45	211	53	372	21	446	1425
05:00 PM	13	60	10	83	9	117	21	147	18	17	8	43	13	101	6	120	393
05:15 PM	10	54	12	76	5	129	13	147	19	18	11	48	19	101	8	128	399
05:30 PM	11	55	13	79	12	96	12	120	17	26	5	48	20	91	2	113	360
05:45 PM	11	56	16	83	6	99	20	125	18	15	13	46	12	89	3	104	358
Total	45	225	51	321	32	441	66	539	72	76	37	185	64	382	19	465	1510
Grand Total	80	442	97	619	64	834	111	1009	147	167	82	396	117	754	40	911	2935
Apprch %	12.9	71.4	15.7		6.3	82.7	11		37.1	42.2	20.7		12.8	82.8	4.4		
Total %	2.7	15.1	3.3	21.1	2.2	28.4	3.8	34.4	5	5.7	2.8	13.5	4	25.7	1.4	31	
PC	78	437	96	611	64	813	110	987	145	165	82	392	114	733	39	886	2876
% PC	97.5	98.9	99	98.7	100	97.5	99.1	97.8	98.6	98.8	100	99	97.4	97.2	97.5	97.3	98
SU	2	4	1	7	0	21	1	22	2	2	0	4	3	20	1	24	57
% SU	2.5	0.9	1	1.1	0	2.5	0.9	2.2	1.4	1.2	0	1	2.6	2.7	2.5	2.6	1.9
MU	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
% MU	0	0.2	0	0.2	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0.1

	Wentworth Ave From North				103rd St From East				Wentworth Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	6	49	13	68	**10**	**94**	**8**	**112**	18	**39**	**10**	67	12	102	4	118	365
08:00 AM	2	48	14	64	9	93	5	107	29	32	9	70	**14**	**106**	**7**	**127**	**368**
08:15 AM	**12**	**51**	**15**	**78**	7	93	8	108	16	25	9	50	9	90	4	103	339
08:30 AM	8	43	7	58	10	78	7	95	**36**	28	8	**72**	11	106	3	120	345
Total Volume	28	191	49	268	36	358	28	422	99	124	36	259	46	404	18	468	1417
% App. Total	10.4	71.3	18.3		8.5	84.8	6.6		38.2	47.9	13.9		9.8	86.3	3.8		
PHF	.583	.936	.817	.859	.900	.952	.875	.942	.688	.795	.900	.899	.821	.953	.643	.921	.963

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103rd St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 6

Groups Printed- SU

	Wentworth Ave From North				103rd St From East				Wentworth Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	2	1	1	4	0	4	0	4	0	1	0	1	1	3	0	4	13
04:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	3
04:45 PM	0	0	0	0	0	4	1	5	1	0	0	1	0	3	0	3	9
Total	2	1	1	4	0	15	1	16	1	1	0	2	1	9	1	11	33
05:00 PM	0	0	0	0	0	2	0	2	1	0	0	1	1	1	0	2	5
05:15 PM	0	2	0	2	0	1	0	1	0	1	0	1	0	2	0	2	6
05:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	1	6	0	7	9
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	3	0	3	0	6	0	6	1	1	0	2	2	11	0	13	24
Grand Total	2	4	1	7	0	21	1	22	2	2	0	4	3	20	1	24	57
Apprch %	28.6	57.1	14.3		0	95.5	4.5		50	50	0		12.5	83.3	4.2		
Total %	3.5	7	1.8	12.3	0	36.8	1.8	38.6	3.5	3.5	0	7	5.3	35.1	1.8	42.1	

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103rd St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM No Peds
Site Code : 00000000
Start Date : 5/2/2012
Page No : 7

Groups Printed- MU

	Wentworth Ave From North				103rd St From East				Wentworth Ave From South				103rd St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Apprch %	0	100	0		0	0	0		0	0	0		0	100	0		
Total %	0	50	0	50	0	0	0	0	0	0	0	0	0	50	0	50	

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103rd St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM PEDS
Site Code : 00000000
Start Date : 5/2/2012
Page No : 8

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			103rd St Crossing East Leg			Wentworth Ave Crossing South Leg			103rd St Crossing West Leg			
Start Time	Left	Peds	App. Total	Left	Peds	App. Total	Left	Peds	App. Total	Left	Peds	App. Total	Int. Total
04:00 PM	0	9	9	0	3	3	0	17	17	2	10	12	41
04:15 PM	0	3	3	0	0	0	0	4	4	1	17	18	25
04:30 PM	0	4	4	0	1	1	0	6	6	0	9	9	20
04:45 PM	0	16	16	0	0	0	0	22	22	1	35	36	74
Total	0	32	32	0	4	4	0	49	49	4	71	75	160
05:00 PM	0	4	4	0	8	8	0	1	1	2	18	20	33
05:15 PM	0	6	6	0	6	6	2	9	11	1	7	8	31
05:30 PM	0	6	6	0	10	10	0	4	4	0	6	6	26
05:45 PM	1	9	10	0	6	6	0	5	5	0	5	5	26
Total	1	25	26	0	30	30	2	19	21	3	36	39	116
Grand Total	1	57	58	0	34	34	2	68	70	7	107	114	276
Apprch %	1.7	98.3		0	100		2.9	97.1		6.1	93.9		
Total %	0.4	20.7	21	0	12.3	12.3	0.7	24.6	25.4	2.5	38.8	41.3	

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107th St and Cottage Grove Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 1

Groups Printed- PC - SU - MU

	Cottage Grove Ave From North				107th St From East				Cottage Grove Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	5	28	2	35	3	1	0	4	0	43	3	46	3	0	17	20	105
07:15 AM	9	26	2	37	3	3	1	7	0	67	5	72	7	0	24	31	147
07:30 AM	12	37	0	49	1	1	0	2	1	71	7	79	11	2	17	30	160
07:45 AM	10	45	0	55	4	2	0	6	2	113	4	119	15	1	26	42	222
Total	36	136	4	176	11	7	1	19	3	294	19	316	36	3	84	123	634
08:00 AM	8	40	1	49	2	0	0	2	1	99	5	105	6	1	29	36	192
08:15 AM	9	33	1	43	1	0	1	2	1	96	14	111	8	3	22	33	189
08:30 AM	20	44	2	66	0	0	1	1	2	101	10	113	3	4	15	22	202
08:45 AM	18	72	1	91	2	4	0	6	3	101	16	120	9	2	33	44	261
Total	55	189	5	249	5	4	2	11	7	397	45	449	26	10	99	135	844
Grand Total	91	325	9	425	16	11	3	30	10	691	64	765	62	13	183	258	1478
Apprch %	21.4	76.5	2.1		53.3	36.7	10		1.3	90.3	8.4		24	5	70.9		
Total %	6.2	22	0.6	28.8	1.1	0.7	0.2	2	0.7	46.8	4.3	51.8	4.2	0.9	12.4	17.5	
PC	80	305	8	393	15	8	3	26	9	659	61	729	60	11	175	246	1394
% PC	87.9	93.8	88.9	92.5	93.8	72.7	100	86.7	90	95.4	95.3	95.3	96.8	84.6	95.6	95.3	94.3
SU	11	20	0	31	1	2	0	3	0	27	2	29	2	2	8	12	75
% SU	12.1	6.2	0	7.3	6.2	18.2	0	10	0	3.9	3.1	3.8	3.2	15.4	4.4	4.7	5.1
MU	0	0	1	1	0	1	0	1	1	5	1	7	0	0	0	0	9
% MU	0	0	11.1	0.2	0	9.1	0	3.3	10	0.7	1.6	0.9	0	0	0	0	0.6

	Cottage Grove Ave From North				107th St From East				Cottage Grove Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	8	40	1	49	**2**	0	0	2	1	99	5	105	6	1	29	36	192
08:15 AM	9	33	1	43	1	0	**1**	2	1	96	14	111	8	3	22	33	189
08:30 AM	**20**	44	**2**	66	0	0	1	1	2	**101**	10	113	3	**4**	15	22	202
08:45 AM	18	**72**	1	**91**	2	**4**	0	**6**	**3**	101	**16**	**120**	**9**	2	**33**	**44**	**261**
Total Volume	55	189	5	249	5	4	2	11	7	397	45	449	26	10	99	135	844
% App. Total	22.1	75.9	2		45.5	36.4	18.2		1.6	88.4	10		19.3	7.4	73.3		
PHF	.688	.656	.625	.684	.625	.250	.500	.458	.583	.983	.703	.935	.722	.625	.750	.767	.808

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107th St and Cottage Grove Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 2

Groups Printed- SU

	Cottage Grove Ave From North				107th St From East				Cottage Grove Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	2	0	3	0	0	0	0	0	2	0	2	0	0	1	1	6
07:15 AM	2	1	0	3	0	1	0	1	0	3	0	3	0	0	2	2	9
07:30 AM	0	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1	5
07:45 AM	0	4	0	4	1	1	0	2	0	3	1	4	1	0	1	2	12
Total	3	9	0	12	1	2	0	3	0	10	1	11	2	0	4	6	32
08:00 AM	1	2	0	3	0	0	0	0	0	1	0	1	0	0	1	1	5
08:15 AM	1	3	0	4	0	0	0	0	0	5	0	5	0	1	3	4	13
08:30 AM	3	4	0	7	0	0	0	0	0	3	1	4	0	1	0	1	12
08:45 AM	3	2	0	5	0	0	0	0	0	8	0	8	0	0	0	0	13
Total	8	11	0	19	0	0	0	0	0	17	1	18	0	2	4	6	43
Grand Total	11	20	0	31	1	2	0	3	0	27	2	29	2	2	8	12	75
Apprch %	35.5	64.5	0		33.3	66.7	0		0	93.1	6.9		16.7	16.7	66.7		
Total %	14.7	26.7	0	41.3	1.3	2.7	0	4	0	36	2.7	38.7	2.7	2.7	10.7	16	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 3

Groups Printed- MU

	Cottage Grove Ave From North				107th St From East				Cottage Grove Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	0	1	1	0	1	0	1	0	3	0	3	0	0	0	0	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	1	2	1	4	0	0	0	0	4
Grand Total	0	0	1	1	0	1	0	1	1	5	1	7	0	0	0	0	9
Apprch %	0	0	100		0	100	0		14.3	71.4	14.3		0	0	0		
Total %	0	0	11.1	11.1	0	11.1	0	11.1	11.1	55.6	11.1	77.8	0	0	0	0	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/9/2012
Page No : 4

Groups Printed- Peds & Bikes

	Cottage Grove Ave Crossing North Leg			107th St Crossing East Leg			Cottage Grove Ave Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	3	3	0	1	1	0	2	2	0	0	0	6
07:15 AM	0	1	1	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	2	2	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	1	1	0	2	2	0	0	0	0	0	0	3
Total	0	7	7	0	3	3	0	2	2	0	0	0	12
08:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	2
08:15 AM	0	4	4	0	4	4	0	0	0	0	1	1	9
08:30 AM	0	5	5	0	1	1	0	0	0	0	0	0	6
08:45 AM	0	8	8	0	0	0	0	1	1	0	1	1	10
Total	0	19	19	0	5	5	0	1	1	0	2	2	27
Grand Total	0	26	26	0	8	8	0	3	3	0	2	2	39
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	66.7	66.7	0	20.5	20.5	0	7.7	7.7	0	5.1	5.1	

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107th St and Cottage Grove Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 5

Groups Printed- PC - SU - MU

	Cottage Grove Ave From North				107th St From East				Cottage Grove Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	12	91	4	107	5	2	0	7	1	48	20	69	16	0	9	25	208
04:15 PM	11	80	1	92	2	5	0	7	3	47	22	72	19	3	15	37	208
04:30 PM	12	78	2	92	1	1	1	3	2	39	7	48	16	3	16	35	178
04:45 PM	9	106	3	118	8	0	1	9	2	52	12	66	9	2	12	23	216
Total	44	355	10	409	16	8	2	26	8	186	61	255	60	8	52	120	810
05:00 PM	14	105	0	119	3	0	1	4	2	53	8	63	25	2	12	39	225
05:15 PM	21	107	1	129	0	2	1	3	0	48	15	63	11	3	6	20	215
05:30 PM	11	72	0	83	2	2	0	4	1	36	12	49	12	5	9	26	162
05:45 PM	13	75	2	90	2	0	0	2	1	44	10	55	26	0	15	41	188
Total	59	359	3	421	7	4	2	13	4	181	45	230	74	10	42	126	790
Grand Total	103	714	13	830	23	12	4	39	12	367	106	485	134	18	94	246	1600
Apprch %	12.4	86	1.6		59	30.8	10.3		2.5	75.7	21.9		54.5	7.3	38.2		
Total %	6.4	44.6	0.8	51.9	1.4	0.8	0.2	2.4	0.8	22.9	6.6	30.3	8.4	1.1	5.9	15.4	
PC	103	696	12	811	20	11	4	35	12	354	105	471	132	16	94	242	1559
% PC	100	97.5	92.3	97.7	87	91.7	100	89.7	100	96.5	99.1	97.1	98.5	88.9	100	98.4	97.4
SU	0	18	1	19	3	1	0	4	0	12	1	13	2	2	0	4	40
% SU	0	2.5	7.7	2.3	13	8.3	0	10.3	0	3.3	0.9	2.7	1.5	11.1	0	1.6	2.5
MU	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% MU	0	0	0	0	0	0	0	0	0	0.3	0	0.2	0	0	0	0	0.1

	Cottage Grove Ave From North				107th St From East				Cottage Grove Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	8	40	1	49	**2**	0	0	2	1	99	5	105	6	1	29	36	192
08:15 AM	9	33	1	43	1	0	**1**	2	1	96	14	111	8	3	22	33	189
08:30 AM	**20**	44	**2**	66	0	0	1	1	2	**101**	10	113	3	**4**	15	22	202
08:45 AM	18	**72**	1	**91**	2	**4**	0	**6**	**3**	101	**16**	**120**	**9**	2	**33**	**44**	**261**
Total Volume	55	189	5	249	5	4	2	11	7	397	45	449	26	10	99	135	844
% App. Total	22.1	75.9	2		45.5	36.4	18.2		1.6	88.4	10		19.3	7.4	73.3		
PHF	.688	.656	.625	.684	.625	.250	.500	.458	.583	.983	.703	.935	.722	.625	.750	.767	.808

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107th St and Cottage Grove Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 6

Groups Printed- SU

	Cottage Grove Ave From North				107th St From East				Cottage Grove Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	3	1	4	0	0	0	0	0	1	1	2	0	0	0	0	6
04:15 PM	0	2	0	2	0	1	0	1	0	4	0	4	0	0	0	0	7
04:30 PM	0	4	0	4	0	0	0	0	0	0	0	0	1	2	0	3	7
04:45 PM	0	1	0	1	3	0	0	3	0	3	0	3	0	0	0	0	7
Total	0	10	1	11	3	1	0	4	0	8	1	9	1	2	0	3	27
05:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
05:45 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total	0	8	0	8	0	0	0	0	0	4	0	4	1	0	0	1	13
Grand Total	0	18	1	19	3	1	0	4	0	12	1	13	2	2	0	4	40
Apprch %	0	94.7	5.3		75	25	0		0	92.3	7.7		50	50	0		
Total %	0	45	2.5	47.5	7.5	2.5	0	10	0	30	2.5	32.5	5	5	0	10	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 7

Groups Printed- MU

	Cottage Grove Ave From North				107th St From East				Cottage Grove Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Apprch %	0	0	0		0	0	0		0	100	0		0	0	0		
Total %	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/9/2012
Page No : 8

Groups Printed- Peds & Bikes

	Cottage Grove Ave Crossing North Leg			107th St Crossing East Leg			Cottage Grove Ave Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	2	2	0	0	0	0	1	1	0	1	1	4
04:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	5	5	0	2	2	0	2	2	0	0	0	9
04:45 PM	0	0	0	0	0	0	0	2	2	0	0	0	2
Total	0	8	8	0	2	2	0	5	5	0	1	1	16
05:00 PM	0	3	3	0	0	0	0	1	1	0	2	2	6
05:15 PM	0	2	2	0	0	0	0	1	1	0	0	0	3
05:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	2	2	0	1	1	3
Total	0	5	5	0	0	0	0	5	5	0	3	3	13
Grand Total	0	13	13	0	2	2	0	10	10	0	4	4	29
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	44.8	44.8	0	6.9	6.9	0	34.5	34.5	0	13.8	13.8	

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107th St and Halsted St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 1

Groups Printed- PC - SU - MU

	Halsted St From North				107th St From East				Halsted St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	5	77	11	93	7	23	18	48	13	256	16	285	10	20	22	52	478
07:15 AM	7	79	7	93	20	35	8	63	12	352	23	387	12	25	25	62	605
07:30 AM	9	99	16	124	16	63	13	92	14	403	23	440	16	55	31	102	758
07:45 AM	5	134	10	149	20	42	17	79	17	456	26	499	17	70	31	118	845
Total	26	389	44	459	63	163	56	282	56	1467	88	1611	55	170	109	334	2686
08:00 AM	9	123	22	154	17	45	14	76	14	366	37	417	22	47	30	99	746
08:15 AM	16	120	19	155	13	40	19	72	26	366	20	412	12	42	19	73	712
08:30 AM	19	119	18	156	15	29	10	54	21	335	23	379	14	39	23	76	665
08:45 AM	14	119	26	159	7	49	15	71	17	259	29	305	11	42	22	75	610
Total	58	481	85	624	52	163	58	273	78	1326	109	1513	59	170	94	323	2733
Grand Total	84	870	129	1083	115	326	114	555	134	2793	197	3124	114	340	203	657	5419
Apprch %	7.8	80.3	11.9		20.7	58.7	20.5		4.3	89.4	6.3		17.4	51.8	30.9		
Total %	1.6	16.1	2.4	20	2.1	6	2.1	10.2	2.5	51.5	3.6	57.6	2.1	6.3	3.7	12.1	
PC	77	803	121	1001	114	321	109	544	127	2678	193	2998	108	330	198	636	5179
% PC	91.7	92.3	93.8	92.4	99.1	98.5	95.6	98	94.8	95.9	98	96	94.7	97.1	97.5	96.8	95.6
SU	7	65	8	80	1	5	4	10	7	100	4	111	6	10	5	21	222
% SU	8.3	7.5	6.2	7.4	0.9	1.5	3.5	1.8	5.2	3.6	2	3.6	5.3	2.9	2.5	3.2	4.1
MU	0	2	0	2	0	0	1	1	0	15	0	15	0	0	0	0	18
% MU	0	0.2	0	0.2	0	0	0.9	0.2	0	0.5	0	0.5	0	0	0	0	0.3

	Halsted St From North				107th St From East				Halsted St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	9	99	16	124	16	**63**	13	**92**	14	403	23	440	16	55	**31**	102	758
07:45 AM	5	**134**	10	149	**20**	42	17	79	17	**456**	26	**499**	17	**70**	31	**118**	**845**
08:00 AM	9	123	**22**	154	17	45	14	76	14	366	**37**	417	**22**	47	30	99	746
08:15 AM	**16**	120	19	**155**	13	40	**19**	72	**26**	366	20	412	12	42	19	73	712
Total Volume	39	476	67	582	66	190	63	319	71	1591	106	1768	67	214	111	392	3061
% App. Total	6.7	81.8	11.5		20.7	59.6	19.7		4	90	6		17.1	54.6	28.3		
PHF	.609	.888	.761	.939	.825	.754	.829	.867	.683	.872	.716	.886	.761	.764	.895	.831	.906

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107th St and Halsted St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 2

Groups Printed- SU

	Halsted St From North				107th St From East				Halsted St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	9	3	13	0	0	2	2	2	14	0	16	1	3	1	5	36
07:15 AM	2	11	1	14	0	0	0	0	0	16	1	17	1	0	1	2	33
07:30 AM	1	10	0	11	0	0	0	0	0	10	1	11	1	1	1	3	25
07:45 AM	0	8	0	8	1	1	0	2	1	12	0	13	2	3	2	7	30
Total	4	38	4	46	1	1	2	4	3	52	2	57	5	7	5	17	124
08:00 AM	0	7	2	9	0	1	0	1	0	15	1	16	0	0	0	0	26
08:15 AM	0	6	2	8	0	0	1	1	2	11	1	14	0	2	0	2	25
08:30 AM	1	7	0	8	0	1	0	1	1	12	0	13	0	1	0	1	23
08:45 AM	2	7	0	9	0	2	1	3	1	10	0	11	1	0	0	1	24
Total	3	27	4	34	0	4	2	6	4	48	2	54	1	3	0	4	98
Grand Total	7	65	8	80	1	5	4	10	7	100	4	111	6	10	5	21	222
Apprch %	8.8	81.2	10		10	50	40		6.3	90.1	3.6		28.6	47.6	23.8		
Total %	3.2	29.3	3.6	36	0.5	2.3	1.8	4.5	3.2	45	1.8	50	2.7	4.5	2.3	9.5	

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107th St and Halsted St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 3

Groups Printed- MU

	Halsted St From North				107th St From East				Halsted St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	1	1	0	3	0	3	0	0	0	0	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	1	1	0	7	0	7	0	0	0	0	9
08:00 AM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	1	0	1	0	0	0	0	0	8	0	8	0	0	0	0	9
Grand Total	0	2	0	2	0	0	1	1	0	15	0	15	0	0	0	0	18
Apprch %	0	100	0		0	0	100		0	100	0		0	0	0		
Total %	0	11.1	0	11.1	0	0	5.6	5.6	0	83.3	0	83.3	0	0	0	0	

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File Name : AM + PM PEDS
Site Code : 00000000
Start Date : 5/3/2012
Page No : 4

Groups Printed- Peds & Bikes

	Halsted St Crossing North Leg			107th St Crossing East Leg			Halsted St Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	1	2	3	0	0	0	0	0	0	3
07:15 AM	0	2	2	1	10	11	2	3	5	0	4	4	22
07:30 AM	0	3	3	0	1	1	0	3	3	0	1	1	8
07:45 AM	0	0	0	1	5	6	0	2	2	0	2	2	10
Total	0	5	5	3	18	21	2	8	10	0	7	7	43
08:00 AM	0	0	0	0	4	4	0	0	0	0	3	3	7
08:15 AM	0	1	1	0	6	6	0	4	4	0	0	0	11
08:30 AM	0	1	1	0	1	1	0	1	1	0	6	6	9
08:45 AM	0	5	5	0	3	3	0	3	3	0	2	2	13
Total	0	7	7	0	14	14	0	8	8	0	11	11	40
Grand Total	0	12	12	3	32	35	2	16	18	0	18	18	83
Apprch %	0	100		8.6	91.4		11.1	88.9		0	100		
Total %	0	14.5	14.5	3.6	38.6	42.2	2.4	19.3	21.7	0	21.7	21.7	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 5

Groups Printed- PC - SU - MU

	Halsted St From North				107th St From East				Halsted St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	31	201	27	259	14	38	18	70	15	192	21	228	21	35	18	74	631
04:15 PM	32	187	33	252	11	37	25	73	15	162	27	204	21	38	20	79	608
04:30 PM	22	194	24	240	14	34	33	81	19	170	22	211	16	47	20	83	615
04:45 PM	28	217	22	267	13	38	18	69	15	201	17	233	20	34	20	74	643
Total	113	799	106	1018	52	147	94	293	64	725	87	876	78	154	78	310	2497
05:00 PM	23	167	30	220	14	45	22	81	21	181	32	234	18	49	25	92	627
05:15 PM	20	223	20	263	7	41	22	70	16	213	30	259	20	41	19	80	672
05:30 PM	20	217	36	273	16	36	22	74	22	189	30	241	36	36	32	104	692
05:45 PM	27	179	32	238	17	38	27	82	18	186	22	226	20	50	25	95	641
Total	90	786	118	994	54	160	93	307	77	769	114	960	94	176	101	371	2632
Grand Total	203	1585	224	2012	106	307	187	600	141	1494	201	1836	172	330	179	681	5129
Apprch %	10.1	78.8	11.1		17.7	51.2	31.2		7.7	81.4	10.9		25.3	48.5	26.3		
Total %	4	30.9	4.4	39.2	2.1	6	3.6	11.7	2.7	29.1	3.9	35.8	3.4	6.4	3.5	13.3	
PC	198	1527	223	1948	105	305	185	595	141	1433	197	1771	169	325	175	669	4983
% PC	97.5	96.3	99.6	96.8	99.1	99.3	98.9	99.2	100	95.9	98	96.5	98.3	98.5	97.8	98.2	97.2
SU	4	56	1	61	1	2	2	5	0	59	4	63	3	5	3	11	140
% SU	2	3.5	0.4	3	0.9	0.7	1.1	0.8	0	3.9	2	3.4	1.7	1.5	1.7	1.6	2.7
MU	1	2	0	3	0	0	0	0	0	2	0	2	0	0	1	1	6
% MU	0.5	0.1	0	0.1	0	0	0	0	0	0.1	0	0.1	0	0	0.6	0.1	0.1

	Halsted St From North				107th St From East				Halsted St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	9	99	16	124	16	**63**	13	**92**	14	403	23	440	16	55	**31**	102	758
07:45 AM	5	**134**	10	149	**20**	42	17	79	17	**456**	26	**499**	17	**70**	31	**118**	**845**
08:00 AM	9	123	**22**	154	17	45	14	76	14	366	**37**	417	**22**	47	30	99	746
08:15 AM	**16**	120	19	**155**	13	40	**19**	72	**26**	366	20	412	12	42	19	73	712
Total Volume	39	476	67	582	66	190	63	319	71	1591	106	1768	67	214	111	392	3061
% App. Total	6.7	81.8	11.5		20.7	59.6	19.7		4	90	6		17.1	54.6	28.3		
PHF	.609	.888	.761	.939	.825	.754	.829	.867	.683	.872	.716	.886	.761	.764	.895	.831	.906

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 6

Groups Printed- SU

	Halsted St From North				107th St From East				Halsted St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	1	10	0	11	0	0	0	0	0	8	1	9	1	0	1	2	22
04:15 PM	2	8	0	10	0	0	0	0	0	12	0	12	0	1	0	1	23
04:30 PM	0	5	0	5	0	0	0	0	0	4	0	4	0	3	0	3	12
04:45 PM	1	10	0	11	0	0	0	0	0	6	0	6	1	0	1	2	19
Total	4	33	0	37	0	0	0	0	0	30	1	31	2	4	2	8	76
05:00 PM	0	5	0	5	0	0	2	2	0	8	0	8	1	0	0	1	16
05:15 PM	0	7	0	7	0	0	0	0	0	9	0	9	0	1	1	2	18
05:30 PM	0	5	1	6	1	2	0	3	0	8	2	10	0	0	0	0	19
05:45 PM	0	6	0	6	0	0	0	0	0	4	1	5	0	0	0	0	11
Total	0	23	1	24	1	2	2	5	0	29	3	32	1	1	1	3	64
Grand Total	4	56	1	61	1	2	2	5	0	59	4	63	3	5	3	11	140
Apprch %	6.6	91.8	1.6		20	40	40		0	93.7	6.3		27.3	45.5	27.3		
Total %	2.9	40	0.7	43.6	0.7	1.4	1.4	3.6	0	42.1	2.9	45	2.1	3.6	2.1	7.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 7

Groups Printed- MU

	Halsted St From North				107th St From East				Halsted St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	1	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
Grand Total	1	2	0	3	0	0	0	0	0	2	0	2	0	0	1	1	6
Apprch %	33.3	66.7	0		0	0	0		0	100	0		0	0	100		
Total %	16.7	33.3	0	50	0	0	0	0	0	33.3	0	33.3	0	0	16.7	16.7	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM PEDS
Site Code : 00000000
Start Date : 5/3/2012
Page No : 8

Groups Printed- Peds & Bikes

	Halsted St Crossing North Leg			107th St Crossing East Leg			Halsted St Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	3	3	1	2	3	0	3	3	1	4	5	14
04:15 PM	1	1	2	3	2	5	0	1	1	0	2	2	10
04:30 PM	0	3	3	0	2	2	0	10	10	0	4	4	19
04:45 PM	0	4	4	0	2	2	1	2	3	0	1	1	10
Total	1	11	12	4	8	12	1	16	17	1	11	12	53
05:00 PM	0	1	1	1	2	3	0	1	1	1	5	6	11
05:15 PM	2	2	4	0	1	1	0	1	1	1	2	3	9
05:30 PM	0	0	0	0	3	3	0	6	6	0	4	4	13
05:45 PM	0	7	7	0	1	1	0	5	5	0	7	7	20
Total	2	10	12	1	7	8	0	13	13	2	18	20	53
Grand Total	3	21	24	5	15	20	1	29	30	3	29	32	106
Apprch %	12.5	87.5		25	75		3.3	96.7		9.4	90.6		
Total %	2.8	19.8	22.6	4.7	14.2	18.9	0.9	27.4	28.3	2.8	27.4	30.2	

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107th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 1

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				107th St From East				Martin Luther King Dr From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	3	20	2	25	4	20	2	26	3	44	4	51	4	14	4	22	124
07:15 AM	8	23	4	35	5	18	0	23	2	65	6	73	2	19	5	26	157
07:30 AM	11	40	3	54	7	20	0	27	1	78	8	87	16	25	18	59	227
07:45 AM	4	40	1	45	6	13	0	19	3	72	4	79	14	31	14	59	202
Total	26	123	10	159	22	71	2	95	9	259	22	290	36	89	41	166	710
08:00 AM	4	27	1	32	7	14	1	22	4	61	4	69	6	20	19	45	168
08:15 AM	4	35	0	39	6	18	1	25	1	51	3	55	4	23	19	46	165
08:30 AM	2	30	6	38	8	29	6	43	5	87	10	102	9	31	10	50	233
08:45 AM	5	37	2	44	5	31	3	39	9	51	4	64	9	58	8	75	222
Total	15	129	9	153	26	92	11	129	19	250	21	290	28	132	56	216	788
Grand Total	41	252	19	312	48	163	13	224	28	509	43	580	64	221	97	382	1498
Apprch %	13.1	80.8	6.1		21.4	72.8	5.8		4.8	87.8	7.4		16.8	57.9	25.4		
Total %	2.7	16.8	1.3	20.8	3.2	10.9	0.9	15	1.9	34	2.9	38.7	4.3	14.8	6.5	25.5	
PC	41	240	19	300	44	155	12	211	26	494	41	561	62	215	95	372	1444
% PC	100	95.2	100	96.2	91.7	95.1	92.3	94.2	92.9	97.1	95.3	96.7	96.9	97.3	97.9	97.4	96.4
SU	0	12	0	12	4	8	1	13	2	15	2	19	0	6	2	8	52
% SU	0	4.8	0	3.8	8.3	4.9	7.7	5.8	7.1	2.9	4.7	3.3	0	2.7	2.1	2.1	3.5
MU	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% MU	0	0	0	0	0	0	0	0	0	0	0	0	3.1	0	0	0.5	0.1

	Martin Luther King Dr From North				107th St From East				Martin Luther King Dr From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	4	27	1	32	7	14	1	22	4	61	4	69	6	20	**19**	45	168
08:15 AM	4	35	0	39	6	18	1	25	1	51	3	55	4	23	19	46	165
08:30 AM	2	30	**6**	38	**8**	29	**6**	**43**	5	**87**	**10**	**102**	**9**	31	10	50	**233**
08:45 AM	**5**	**37**	2	**44**	5	**31**	3	39	**9**	51	4	64	9	**58**	8	**75**	222
Total Volume	15	129	9	153	26	92	11	129	19	250	21	290	28	132	56	216	788
% App. Total	9.8	84.3	5.9		20.2	71.3	8.5		6.6	86.2	7.2		13	61.1	25.9		
PHF	.750	.872	.375	.869	.813	.742	.458	.750	.528	.718	.525	.711	.778	.569	.737	.720	.845

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107th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 2

Groups Printed- SU

	Martin Luther King Dr From North				107th St From East				Martin Luther King Dr From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	2	1	2	0	3	0	1	0	1	6
07:15 AM	0	1	0	1	0	1	0	1	0	2	0	2	0	0	0	0	4
07:30 AM	0	1	0	1	0	1	0	1	0	5	0	5	0	1	1	2	9
07:45 AM	0	3	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
Total	0	5	0	5	1	4	0	5	1	9	0	10	0	2	1	3	23
08:00 AM	0	1	0	1	0	0	0	0	0	3	0	3	0	1	1	2	6
08:15 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	1	0	1	4
08:30 AM	0	2	0	2	2	1	1	4	1	3	2	6	0	1	0	1	13
08:45 AM	0	3	0	3	1	1	0	2	0	0	0	0	0	1	0	1	6
Total	0	7	0	7	3	4	1	8	1	6	2	9	0	4	1	5	29
Grand Total	0	12	0	12	4	8	1	13	2	15	2	19	0	6	2	8	52
Apprch %	0	100	0		30.8	61.5	7.7		10.5	78.9	10.5		0	75	25		
Total %	0	23.1	0	23.1	7.7	15.4	1.9	25	3.8	28.8	3.8	36.5	0	11.5	3.8	15.4	

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 3

Groups Printed- MU

	Martin Luther King Dr From North				107th St From East				Martin Luther King Dr From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Apprch %	0	0	0		0	0	0		0	0	0		100	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	100	

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107th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/6/2012
Page No : 4

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			107th St Crossing East Leg			Martin Luther King Dr Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	0	2	2	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	2	2	0	1	1	0	0	0	3
07:45 AM	0	0	0	0	2	2	0	2	2	0	1	1	5
Total	0	1	1	0	4	4	0	5	5	0	1	1	11
08:00 AM	0	0	0	0	1	1	0	5	5	0	0	0	6
08:15 AM	0	0	0	0	3	3	0	0	0	0	0	0	3
08:30 AM	0	1	1	0	1	1	0	0	0	0	0	0	2
08:45 AM	0	18	18	0	2	2	0	8	8	0	0	0	28
Total	0	19	19	0	7	7	0	13	13	0	0	0	39
Grand Total	0	20	20	0	11	11	0	18	18	0	1	1	50
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	40	40	0	22	22	0	36	36	0	2	2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 5

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				107th St From East				Martin Luther King Dr From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	10	73	1	84	5	22	4	31	2	27	0	29	2	30	9	41	185
04:15 PM	8	85	3	96	7	20	3	30	4	42	1	47	9	20	11	40	213
04:30 PM	18	83	7	108	5	14	2	21	5	47	5	57	5	19	12	36	222
04:45 PM	15	73	8	96	9	19	2	30	5	45	8	58	3	27	10	40	224
Total	51	314	19	384	26	75	11	112	16	161	14	191	19	96	42	157	844
05:00 PM	19	69	11	99	4	27	5	36	2	64	5	71	11	25	8	44	250
05:15 PM	14	129	6	149	7	32	3	42	2	44	8	54	6	37	8	51	296
05:30 PM	13	82	4	99	7	39	2	48	4	57	8	69	7	30	15	52	268
05:45 PM	9	67	7	83	2	26	6	34	2	47	7	56	2	19	16	37	210
Total	55	347	28	430	20	124	16	160	10	212	28	250	26	111	47	184	1024
Grand Total	106	661	47	814	46	199	27	272	26	373	42	441	45	207	89	341	1868
Apprch %	13	81.2	5.8		16.9	73.2	9.9		5.9	84.6	9.5		13.2	60.7	26.1		
Total %	5.7	35.4	2.5	43.6	2.5	10.7	1.4	14.6	1.4	20	2.2	23.6	2.4	11.1	4.8	18.3	
PC	106	650	47	803	45	196	27	268	26	363	42	431	45	207	87	339	1841
% PC	100	98.3	100	98.6	97.8	98.5	100	98.5	100	97.3	100	97.7	100	100	97.8	99.4	98.6
SU	0	10	0	10	1	3	0	4	0	9	0	9	0	0	1	1	24
% SU	0	1.5	0	1.2	2.2	1.5	0	1.5	0	2.4	0	2	0	0	1.1	0.3	1.3
MU	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
% MU	0	0.2	0	0.1	0	0	0	0	0	0.3	0	0.2	0	0	1.1	0.3	0.2

	Martin Luther King Dr From North				107th St From East				Martin Luther King Dr From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	15	73	8	96	**9**	19	2	30	**5**	45	**8**	58	3	27	10	40	224
05:00 PM	**19**	69	**11**	99	4	27	**5**	36	2	**64**	5	**71**	**11**	25	8	44	250
05:15 PM	14	**129**	6	**149**	7	32	3	42	2	44	8	54	6	**37**	8	51	**296**
05:30 PM	13	82	4	99	7	**39**	2	**48**	4	57	8	69	7	30	**15**	**52**	268
Total Volume	61	353	29	443	27	117	12	156	13	210	29	252	27	119	41	187	1038
% App. Total	13.8	79.7	6.5		17.3	75	7.7		5.2	83.3	11.5		14.4	63.6	21.9		
PHF	.803	.684	.659	.743	.750	.750	.600	.813	.650	.820	.906	.887	.614	.804	.683	.899	.877

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107th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 6

Groups Printed- SU

	Martin Luther King Dr From North				107th St From East				Martin Luther King Dr From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	3	0	3	0	1	0	1	0	1	0	1	0	0	1	1	6
04:15 PM	0	1	0	1	1	1	0	2	0	1	0	1	0	0	0	0	4
04:30 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
04:45 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	0	7	0	7	1	2	0	3	0	5	0	5	0	0	1	1	16
05:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
05:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	3	0	3	0	1	0	1	0	4	0	4	0	0	0	0	8
Grand Total	0	10	0	10	1	3	0	4	0	9	0	9	0	0	1	1	24
Apprch %	0	100	0		25	75	0		0	100	0		0	0	100		
Total %	0	41.7	0	41.7	4.2	12.5	0	16.7	0	37.5	0	37.5	0	0	4.2	4.2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 7

Groups Printed- MU

	Martin Luther King Dr From North				107th St From East				Martin Luther King Dr From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
Apprch %	0	100	0		0	0	0		0	100	0		0	0	100		
Total %	0	33.3	0	33.3	0	0	0	0	0	33.3	0	33.3	0	0	33.3	33.3	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/6/2012
Page No : 8

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			107th St Crossing East Leg			Martin Luther King Dr Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	1	1	0	0	0	0	0	0	0	1	1	2
04:15 PM	0	1	1	0	0	0	0	2	2	0	2	2	5
04:30 PM	0	0	0	0	4	4	0	0	0	0	1	1	5
04:45 PM	0	1	1	0	0	0	0	1	1	0	0	0	2
Total	0	3	3	0	4	4	0	3	3	0	4	4	14
05:00 PM	0	1	1	0	1	1	0	1	1	0	1	1	4
05:15 PM	0	0	0	0	2	2	0	3	3	0	0	0	5
05:30 PM	0	0	0	0	1	1	0	5	5	0	0	0	6
05:45 PM	0	0	0	0	1	1	0	1	1	0	1	1	3
Total	0	1	1	0	5	5	0	10	10	0	2	2	18
Grand Total	0	4	4	0	9	9	0	13	13	0	6	6	32
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	12.5	12.5	0	28.1	28.1	0	40.6	40.6	0	18.8	18.8	

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107th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 1

Groups Printed- PC - SU - MU

	Michigan Ave From North				107th St From East				Michigan Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	24	0	25	10	19	3	32	2	87	6	95	5	16	7	28	180
07:15 AM	6	31	0	37	5	31	6	42	2	91	10	103	4	31	18	53	235
07:30 AM	3	30	5	38	4	29	1	34	4	88	5	97	6	36	12	54	223
07:45 AM	3	57	0	60	14	28	5	47	7	108	7	122	10	45	17	72	301
Total	13	142	5	160	33	107	15	155	15	374	28	417	25	128	54	207	939
08:00 AM	4	43	3	50	6	27	4	37	5	114	8	127	6	52	10	68	282
08:15 AM	5	33	3	41	5	38	6	49	8	104	7	119	9	45	7	61	270
08:30 AM	6	27	2	35	6	32	3	41	3	79	5	87	7	38	12	57	220
08:45 AM	4	25	2	31	11	32	8	51	11	91	8	110	11	58	15	84	276
Total	19	128	10	157	28	129	21	178	27	388	28	443	33	193	44	270	1048
Grand Total	32	270	15	317	61	236	36	333	42	762	56	860	58	321	98	477	1987
Apprch %	10.1	85.2	4.7		18.3	70.9	10.8		4.9	88.6	6.5		12.2	67.3	20.5		
Total %	1.6	13.6	0.8	16	3.1	11.9	1.8	16.8	2.1	38.3	2.8	43.3	2.9	16.2	4.9	24	
PC	32	239	15	286	61	226	35	322	41	703	53	797	55	310	91	456	1861
% PC	100	88.5	100	90.2	100	95.8	97.2	96.7	97.6	92.3	94.6	92.7	94.8	96.6	92.9	95.6	93.7
SU	0	27	0	27	0	10	1	11	1	50	3	54	3	11	6	20	112
% SU	0	10	0	8.5	0	4.2	2.8	3.3	2.4	6.6	5.4	6.3	5.2	3.4	6.1	4.2	5.6
MU	0	4	0	4	0	0	0	0	0	9	0	9	0	0	1	1	14
% MU	0	1.5	0	1.3	0	0	0	0	0	1.2	0	1	0	0	1	0.2	0.7

	Michigan Ave From North				107th St From East				Michigan Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	3	30	**5**	38	4	29	1	34	4	88	5	97	6	36	12	54	223
07:45 AM	3	**57**	0	**60**	**14**	28	5	47	7	108	7	122	**10**	45	**17**	**72**	**301**
08:00 AM	4	43	3	50	6	27	4	37	5	**114**	**8**	**127**	6	**52**	10	68	282
08:15 AM	**5**	33	3	41	5	**38**	**6**	**49**	**8**	104	7	119	9	45	7	61	270
Total Volume	15	163	11	189	29	122	16	167	24	414	27	465	31	178	46	255	1076
% App. Total	7.9	86.2	5.8		17.4	73.1	9.6		5.2	89	5.8		12.2	69.8	18		
PHF	.750	.715	.550	.788	.518	.803	.667	.852	.750	.908	.844	.915	.775	.856	.676	.885	.894

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107th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 2

Groups Printed- SU

	Michigan Ave From North				107th St From East				Michigan Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	4	0	4	0	1	0	1	0	8	1	9	0	2	1	3	17
07:15 AM	0	1	0	1	0	1	1	2	0	6	1	7	0	1	1	2	12
07:30 AM	0	3	0	3	0	2	0	2	1	5	0	6	1	1	1	3	14
07:45 AM	0	6	0	6	0	0	0	0	0	9	0	9	0	3	0	3	18
Total	0	14	0	14	0	4	1	5	1	28	2	31	1	7	3	11	61
08:00 AM	0	6	0	6	0	2	0	2	0	4	0	4	0	1	0	1	13
08:15 AM	0	3	0	3	0	1	0	1	0	10	0	10	2	2	0	4	18
08:30 AM	0	1	0	1	0	2	0	2	0	5	0	5	0	1	2	3	11
08:45 AM	0	3	0	3	0	1	0	1	0	3	1	4	0	0	1	1	9
Total	0	13	0	13	0	6	0	6	0	22	1	23	2	4	3	9	51
Grand Total	0	27	0	27	0	10	1	11	1	50	3	54	3	11	6	20	112
Apprch %	0	100	0		0	90.9	9.1		1.9	92.6	5.6		15	55	30		
Total %	0	24.1	0	24.1	0	8.9	0.9	9.8	0.9	44.6	2.7	48.2	2.7	9.8	5.4	17.9	

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107th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 3

Groups Printed- MU

	Michigan Ave From North				107th St From East				Michigan Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	4	0	4	0	0	0	0	0	2	0	2	0	0	1	1	7
08:00 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
08:15 AM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	7
Grand Total	0	4	0	4	0	0	0	0	0	9	0	9	0	0	1	1	14
Apprch %	0	100	0		0	0	0		0	100	0		0	0	100		
Total %	0	28.6	0	28.6	0	0	0	0	0	64.3	0	64.3	0	0	7.1	7.1	

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/9/2012
Page No : 4

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			107th St Crossing East Leg			Michigan Ave Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	3	3	0	1	1	0	11	11	0	7	7	22
07:15 AM	0	3	3	0	2	2	0	9	9	0	1	1	15
07:30 AM	0	2	2	1	1	2	0	9	9	0	5	5	18
07:45 AM	0	3	3	1	2	3	0	3	3	0	3	3	12
Total	0	11	11	2	6	8	0	32	32	0	16	16	67
08:00 AM	0	0	0	0	2	2	0	8	8	0	6	6	16
08:15 AM	0	5	5	0	5	5	0	9	9	0	3	3	22
08:30 AM	0	16	16	0	6	6	0	0	0	0	12	12	34
08:45 AM	0	4	4	0	3	3	0	3	3	0	3	3	13
Total	0	25	25	0	16	16	0	20	20	0	24	24	85
Grand Total	0	36	36	2	22	24	0	52	52	0	40	40	152
Apprch %	0	100		8.3	91.7		0	100		0	100		
Total %	0	23.7	23.7	1.3	14.5	15.8	0	34.2	34.2	0	26.3	26.3	

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107th St and Michigan Ave
Chicago, IL
4:00PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 5

Groups Printed- PC - SU - MU

	Michigan Ave From North				107th St From East				Michigan Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	10	66	4	80	5	39	4	48	3	72	3	78	17	45	19	81	287
04:15 PM	11	60	8	79	10	26	9	45	6	64	8	78	11	41	13	65	267
04:30 PM	3	76	3	82	5	37	4	46	8	66	14	88	13	51	15	79	295
04:45 PM	6	74	4	84	8	21	5	34	12	67	12	91	11	43	13	67	276
Total	30	276	19	325	28	123	22	173	29	269	37	335	52	180	60	292	1125
05:00 PM	9	73	9	91	13	29	8	50	4	65	8	77	14	33	14	61	279
05:15 PM	8	87	6	101	6	35	5	46	2	61	6	69	10	29	14	53	269
05:30 PM	10	77	8	95	4	39	5	48	3	57	4	64	7	39	15	61	268
05:45 PM	6	79	7	92	7	29	3	39	7	55	5	67	7	52	18	77	275
Total	33	316	30	379	30	132	21	183	16	238	23	277	38	153	61	252	1091
Grand Total	63	592	49	704	58	255	43	356	45	507	60	612	90	333	121	544	2216
Apprch %	8.9	84.1	7		16.3	71.6	12.1		7.4	82.8	9.8		16.5	61.2	22.2		
Total %	2.8	26.7	2.2	31.8	2.6	11.5	1.9	16.1	2	22.9	2.7	27.6	4.1	15	5.5	24.5	
PC	63	565	49	677	56	252	43	351	44	480	58	582	90	331	119	540	2150
% PC	100	95.4	100	96.2	96.6	98.8	100	98.6	97.8	94.7	96.7	95.1	100	99.4	98.3	99.3	97
SU	0	27	0	27	2	3	0	5	1	27	2	30	0	2	2	4	66
% SU	0	4.6	0	3.8	3.4	1.2	0	1.4	2.2	5.3	3.3	4.9	0	0.6	1.7	0.7	3
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Michigan Ave From North				107th St From East				Michigan Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	3	30	**5**	38	4	29	1	34	4	88	5	97	6	36	12	54	223
07:45 AM	3	**57**	0	**60**	**14**	28	5	47	7	108	7	122	**10**	45	**17**	**72**	**301**
08:00 AM	4	43	3	50	6	27	4	37	5	**114**	**8**	**127**	6	**52**	10	68	282
08:15 AM	**5**	33	3	41	5	**38**	**6**	**49**	**8**	104	7	119	9	45	7	61	270
Total Volume	15	163	11	189	29	122	16	167	24	414	27	465	31	178	46	255	1076
% App. Total	7.9	86.2	5.8		17.4	73.1	9.6		5.2	89	5.8		12.2	69.8	18		
PHF	.750	.715	.550	.788	.518	.803	.667	.852	.750	.908	.844	.915	.775	.856	.676	.885	.894

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107th St and Michigan Ave
Chicago, IL
4:00PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 6

Groups Printed- SU

	Michigan Ave From North				107th St From East				Michigan Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	6	0	6	0	2	0	2	0	3	0	3	0	0	1	1	12
04:15 PM	0	2	0	2	1	0	0	1	0	4	0	4	0	0	0	0	7
04:30 PM	0	2	0	2	0	0	0	0	0	6	0	6	0	1	0	1	9
04:45 PM	0	5	0	5	0	0	0	0	1	2	1	4	0	0	0	0	9
Total	0	15	0	15	1	2	0	3	1	15	1	17	0	1	1	2	37
05:00 PM	0	3	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
05:15 PM	0	1	0	1	1	1	0	2	0	5	0	5	0	0	1	1	9
05:30 PM	0	4	0	4	0	0	0	0	0	3	0	3	0	1	0	1	8
05:45 PM	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	7
Total	0	12	0	12	1	1	0	2	0	12	1	13	0	1	1	2	29
Grand Total	0	27	0	27	2	3	0	5	1	27	2	30	0	2	2	4	66
Apprch %	0	100	0		40	60	0		3.3	90	6.7		0	50	50		
Total %	0	40.9	0	40.9	3	4.5	0	7.6	1.5	40.9	3	45.5	0	3	3	6.1	

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Chicago, IL
4:00PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 7

Groups Printed- MU

	Michigan Ave From North				107th St From East				Michigan Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

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107th St and Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/9/2012
Page No : 8

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			107th St Crossing East Leg			Michigan Ave Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	9	9	0	2	2	0	7	7	0	7	7	25
04:15 PM	0	8	8	1	5	6	0	4	4	0	10	10	28
04:30 PM	0	0	0	0	7	7	0	5	5	0	10	10	22
04:45 PM	0	1	1	1	2	3	0	6	6	0	4	4	14
Total	0	18	18	2	16	18	0	22	22	0	31	31	89
05:00 PM	0	5	5	0	2	2	0	5	5	0	4	4	16
05:15 PM	0	1	1	0	2	2	0	1	1	0	3	3	7
05:30 PM	0	3	3	0	2	2	0	8	8	0	15	15	28
05:45 PM	0	2	2	0	1	1	0	3	3	0	4	4	10
Total	0	11	11	0	7	7	0	17	17	0	26	26	61
Grand Total	0	29	29	2	23	25	0	39	39	0	57	57	150
Apprch %	0	100		8	92		0	100		0	100		
Total %	0	19.3	19.3	1.3	15.3	16.7	0	26	26	0	38	38	

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107th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 1

Groups Printed- PC - SU - MU

	State St From North				107th St From East				State St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	9	0	11	1	19	2	22	4	68	7	79	3	25	7	35	147
07:15 AM	2	15	6	23	3	34	3	40	9	60	5	74	3	26	8	37	174
07:30 AM	5	18	1	24	3	39	2	44	4	63	7	74	3	44	6	53	195
07:45 AM	3	25	1	29	7	41	2	50	5	73	4	82	8	57	4	69	230
Total	12	67	8	87	14	133	9	156	22	264	23	309	17	152	25	194	746
08:00 AM	6	16	5	27	3	37	0	40	6	66	13	85	9	36	5	50	202
08:15 AM	3	27	8	38	3	45	5	53	11	94	9	114	5	44	9	58	263
08:30 AM	4	23	2	29	3	60	5	68	6	72	8	86	7	30	11	48	231
08:45 AM	7	31	4	42	5	56	6	67	3	69	10	82	6	56	15	77	268
Total	20	97	19	136	14	198	16	228	26	301	40	367	27	166	40	233	964
Grand Total	32	164	27	223	28	331	25	384	48	565	63	676	44	318	65	427	1710
Apprch %	14.3	73.5	12.1		7.3	86.2	6.5		7.1	83.6	9.3		10.3	74.5	15.2		
Total %	1.9	9.6	1.6	13	1.6	19.4	1.5	22.5	2.8	33	3.7	39.5	2.6	18.6	3.8	25	
PC	31	150	25	206	26	324	23	373	47	550	60	657	43	304	63	410	1646
% PC	96.9	91.5	92.6	92.4	92.9	97.9	92	97.1	97.9	97.3	95.2	97.2	97.7	95.6	96.9	96	96.3
SU	1	13	2	16	2	7	2	11	1	12	3	16	1	14	2	17	60
% SU	3.1	7.9	7.4	7.2	7.1	2.1	8	2.9	2.1	2.1	4.8	2.4	2.3	4.4	3.1	4	3.5
MU	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
% MU	0	0.6	0	0.4	0	0	0	0	0	0.5	0	0.4	0	0	0	0	0.2

	State St From North				107th St From East				State St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	6	16	5	27	3	37	0	40	6	66	**13**	85	**9**	36	5	50	202
08:15 AM	3	27	**8**	38	3	45	5	53	**11**	**94**	9	**114**	5	44	9	58	263
08:30 AM	4	23	2	29	3	**60**	5	**68**	6	72	8	86	7	30	11	48	231
08:45 AM	**7**	**31**	4	**42**	**5**	56	**6**	67	3	69	10	82	6	**56**	**15**	**77**	**268**
Total Volume	20	97	19	136	14	198	16	228	26	301	40	367	27	166	40	233	964
% App. Total	14.7	71.3	14		6.1	86.8	7		7.1	82	10.9		11.6	71.2	17.2		
PHF	.714	.782	.594	.810	.700	.825	.667	.838	.591	.801	.769	.805	.750	.741	.667	.756	.899

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107th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 2

Groups Printed- SU

	State St From North				107th St From East				State St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	4	0	4	0	2	1	3	8
07:15 AM	0	0	0	0	0	0	0	0	1	2	0	3	0	2	0	2	5
07:30 AM	0	0	1	1	0	1	1	2	0	1	0	1	0	3	0	3	7
07:45 AM	0	4	0	4	0	1	1	2	0	1	0	1	0	1	0	1	8
Total	0	5	1	6	0	2	2	4	1	8	0	9	0	8	1	9	28
08:00 AM	0	0	0	0	1	2	0	3	0	1	1	2	0	2	0	2	7
08:15 AM	1	3	0	4	0	0	0	0	0	0	0	0	0	1	1	2	6
08:30 AM	0	1	1	2	0	2	0	2	0	1	1	2	0	0	0	0	6
08:45 AM	0	4	0	4	1	1	0	2	0	2	1	3	1	3	0	4	13
Total	1	8	1	10	2	5	0	7	0	4	3	7	1	6	1	8	32
Grand Total	1	13	2	16	2	7	2	11	1	12	3	16	1	14	2	17	60
Apprch %	6.2	81.2	12.5		18.2	63.6	18.2		6.2	75	18.8		5.9	82.4	11.8		
Total %	1.7	21.7	3.3	26.7	3.3	11.7	3.3	18.3	1.7	20	5	26.7	1.7	23.3	3.3	28.3	

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107th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 3

Groups Printed- MU

	State St From North				107th St From East				State St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	25	0	25	0	0	0	0	0	75	0	75	0	0	0	0	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/12/2012
Page No : 4

Groups Printed- Peds & Bikes

	State St Crossing North Leg			107th St Crossing East Leg			State St Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	2	0	2	7	1	8	6	0	6	16
07:15 AM	6	5	11	3	2	5	5	8	13	8	2	10	39
07:30 AM	0	2	2	1	0	1	7	2	9	6	4	10	22
07:45 AM	1	9	10	1	0	1	4	3	7	4	5	9	27
Total	7	16	23	7	2	9	23	14	37	24	11	35	104
08:00 AM	5	12	17	0	0	0	12	0	12	5	3	8	37
08:15 AM	8	12	20	5	0	5	9	1	10	8	6	14	49
08:30 AM	1	4	5	5	0	5	7	1	8	11	0	11	29
08:45 AM	4	1	5	6	0	6	9	5	14	15	3	18	43
Total	18	29	47	16	0	16	37	7	44	39	12	51	158
Grand Total	25	45	70	23	2	25	60	21	81	63	23	86	262
Apprch %	35.7	64.3		92	8		74.1	25.9		73.3	26.7		
Total %	9.5	17.2	26.7	8.8	0.8	9.5	22.9	8	30.9	24	8.8	32.8	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 5

Groups Printed- PC - SU - MU

	State St From North				107th St From East				State St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	5	49	5	59	8	39	6	53	11	49	9	69	7	33	7	47	228
04:15 PM	5	50	7	62	4	46	7	57	9	42	12	63	8	44	8	60	242
04:30 PM	5	50	8	63	7	35	4	46	17	55	9	81	11	48	4	63	253
04:45 PM	6	36	6	48	6	52	12	70	9	43	13	65	9	47	6	62	245
Total	21	185	26	232	25	172	29	226	46	189	43	278	35	172	25	232	968
05:00 PM	7	41	8	56	4	37	10	51	6	49	11	66	10	43	0	53	226
05:15 PM	5	47	11	63	6	49	2	57	8	42	8	58	6	39	8	53	231
05:30 PM	12	41	8	61	3	45	5	53	8	39	10	57	11	57	7	75	246
05:45 PM	9	51	6	66	5	48	8	61	9	65	9	83	7	40	8	55	265
Total	33	180	33	246	18	179	25	222	31	195	38	264	34	179	23	236	968
Grand Total	54	365	59	478	43	351	54	448	77	384	81	542	69	351	48	468	1936
Apprch %	11.3	76.4	12.3		9.6	78.3	12.1		14.2	70.8	14.9		14.7	75	10.3		
Total %	2.8	18.9	3	24.7	2.2	18.1	2.8	23.1	4	19.8	4.2	28	3.6	18.1	2.5	24.2	
PC	52	357	56	465	43	349	54	446	77	383	79	539	69	347	47	463	1913
% PC	96.3	97.8	94.9	97.3	100	99.4	100	99.6	100	99.7	97.5	99.4	100	98.9	97.9	98.9	98.8
SU	2	8	3	13	0	1	0	1	0	1	2	3	0	4	1	5	22
% SU	3.7	2.2	5.1	2.7	0	0.3	0	0.2	0	0.3	2.5	0.6	0	1.1	2.1	1.1	1.1
MU	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% MU	0	0	0	0	0	0.3	0	0.2	0	0	0	0	0	0	0	0	0.1

	State St From North				107th St From East				State St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	5	49	5	59	**8**	39	6	53	11	49	9	69	7	33	7	47	228
04:15 PM	5	**50**	7	62	4	46	7	57	9	42	12	63	8	44	**8**	60	242
04:30 PM	5	50	**8**	**63**	7	35	4	46	**17**	**55**	9	**81**	**11**	**48**	4	**63**	**253**
04:45 PM	**6**	36	6	48	6	**52**	**12**	**70**	9	43	**13**	65	9	47	6	62	245
Total Volume	21	185	26	232	25	172	29	226	46	189	43	278	35	172	25	232	968
% App. Total	9.1	79.7	11.2		11.1	76.1	12.8		16.5	68	15.5		15.1	74.1	10.8		
PHF	.875	.925	.813	.921	.781	.827	.604	.807	.676	.859	.827	.858	.795	.896	.781	.921	.957

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107th St and State St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 6

Groups Printed- SU

	State St From North				107th St From East				State St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:45 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	2	0	2	5
Total	2	6	2	10	0	1	0	1	0	1	0	1	0	2	0	2	14
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	2	1	3	0	0	0	0	0	0	2	2	0	2	1	3	8
Grand Total	2	8	3	13	0	1	0	1	0	1	2	3	0	4	1	5	22
Apprch %	15.4	61.5	23.1		0	100	0		0	33.3	66.7		0	80	20		
Total %	9.1	36.4	13.6	59.1	0	4.5	0	4.5	0	4.5	9.1	13.6	0	18.2	4.5	22.7	

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Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 7

Groups Printed- MU

	State St From North				107th St From East				State St From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	

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Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/12/2012
Page No : 8

Groups Printed- Peds & Bikes

	State St Crossing North Leg			107th St Crossing East Leg			State St Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	4	4	8	6	0	6	9	10	19	7	1	8	41
04:15 PM	7	5	12	7	0	7	12	0	12	8	1	9	40
04:30 PM	8	10	18	4	0	4	9	3	12	4	0	4	38
04:45 PM	5	4	9	12	0	12	13	0	13	6	3	9	43
Total	24	23	47	29	0	29	43	13	56	25	5	30	162
05:00 PM	8	5	13	10	0	10	11	4	15	0	0	0	38
05:15 PM	10	5	15	2	0	2	8	4	12	7	2	9	38
05:30 PM	8	4	12	5	0	5	8	4	12	7	0	7	36
05:45 PM	6	6	12	8	0	8	9	5	14	8	0	8	42
Total	32	20	52	25	0	25	36	17	53	22	2	24	154
Grand Total	56	43	99	54	0	54	79	30	109	47	7	54	316
Apprch %	56.6	43.4		100	0		72.5	27.5		87	13		
Total %	17.7	13.6	31.3	17.1	0	17.1	25	9.5	34.5	14.9	2.2	17.1	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 1

Groups Printed- PC - SU - MU

	Wentworth Ave From North				107th St From East				Wentworth Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	5	24	2	31	3	28	1	32	5	20	7	32	2	41	6	49	144
07:15 AM	3	21	3	27	0	34	2	36	3	32	3	38	1	33	9	43	144
07:30 AM	4	19	5	28	4	39	3	46	6	42	2	50	0	66	6	72	196
07:45 AM	5	37	7	49	1	40	2	43	6	43	3	52	2	49	8	59	203
Total	17	101	17	135	8	141	8	157	20	137	15	172	5	189	29	223	687
08:00 AM	3	40	7	50	3	36	5	44	5	35	7	47	7	46	9	62	203
08:15 AM	7	34	9	50	1	34	5	40	7	26	4	37	6	51	3	60	187
08:30 AM	10	28	3	41	1	35	3	39	7	31	2	40	4	40	11	55	175
08:45 AM	5	37	6	48	3	33	5	41	8	38	7	53	6	50	6	62	204
Total	25	139	25	189	8	138	18	164	27	130	20	177	23	187	29	239	769
Grand Total	42	240	42	324	16	279	26	321	47	267	35	349	28	376	58	462	1456
Apprch %	13	74.1	13		5	86.9	8.1		13.5	76.5	10		6.1	81.4	12.6		
Total %	2.9	16.5	2.9	22.3	1.1	19.2	1.8	22	3.2	18.3	2.4	24	1.9	25.8	4	31.7	
PC	40	231	42	313	16	275	22	313	42	251	32	325	27	367	54	448	1399
% PC	95.2	96.2	100	96.6	100	98.6	84.6	97.5	89.4	94	91.4	93.1	96.4	97.6	93.1	97	96.1
SU	2	8	0	10	0	3	4	7	5	15	3	23	1	9	4	14	54
% SU	4.8	3.3	0	3.1	0	1.1	15.4	2.2	10.6	5.6	8.6	6.6	3.6	2.4	6.9	3	3.7
MU	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
% MU	0	0.4	0	0.3	0	0.4	0	0.3	0	0.4	0	0.3	0	0	0	0	0.2

	Wentworth Ave From North				107th St From East				Wentworth Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	19	5	28	**4**	39	3	**46**	6	42	2	50	0	**66**	6	**72**	196
07:45 AM	5	37	7	49	1	**40**	2	43	6	**43**	3	**52**	2	49	8	59	**203**
08:00 AM	3	**40**	7	**50**	3	36	**5**	44	5	35	**7**	47	**7**	46	**9**	62	203
08:15 AM	**7**	34	**9**	50	1	34	5	40	**7**	26	4	37	6	51	3	60	187
Total Volume	19	130	28	177	9	149	15	173	24	146	16	186	15	212	26	253	789
% App. Total	10.7	73.4	15.8		5.2	86.1	8.7		12.9	78.5	8.6		5.9	83.8	10.3		
PHF	.679	.813	.778	.885	.563	.931	.750	.940	.857	.849	.571	.894	.536	.803	.722	.878	.972

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 2

Groups Printed- SU

	Wentworth Ave From North				107th St From East				Wentworth Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	1	0	2	0	0	0	0	1	2	0	3	1	2	2	5	10
07:15 AM	0	1	0	1	0	1	0	1	2	4	0	6	0	1	0	1	9
07:30 AM	0	0	0	0	0	1	1	2	0	1	0	1	0	1	1	2	5
07:45 AM	0	1	0	1	0	0	0	0	1	3	1	5	0	1	0	1	7
Total	1	3	0	4	0	2	1	3	4	10	1	15	1	5	3	9	31
08:00 AM	0	2	0	2	0	1	0	1	0	1	0	1	0	1	0	1	5
08:15 AM	1	0	0	1	0	0	2	2	1	0	1	2	0	1	0	1	6
08:30 AM	0	1	0	1	0	0	1	1	0	3	1	4	0	1	1	2	8
08:45 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	1	0	1	4
Total	1	5	0	6	0	1	3	4	1	5	2	8	0	4	1	5	23
Grand Total	2	8	0	10	0	3	4	7	5	15	3	23	1	9	4	14	54
Apprch %	20	80	0		0	42.9	57.1		21.7	65.2	13		7.1	64.3	28.6		
Total %	3.7	14.8	0	18.5	0	5.6	7.4	13	9.3	27.8	5.6	42.6	1.9	16.7	7.4	25.9	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 3

Groups Printed- MU

	Wentworth Ave From North				107th St From East				Wentworth Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
Apprch %	0	100	0		0	100	0		0	100	0		0	0	0		
Total %	0	33.3	0	33.3	0	33.3	0	33.3	0	33.3	0	33.3	0	0	0	0	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/7/2012
Page No : 4

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			107th St Crossing East Leg			Wentworth Ave Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	2	2	0	1	1	0	2	2	6
07:15 AM	0	0	0	0	2	2	0	1	1	0	1	1	4
07:30 AM	0	2	2	0	7	7	2	1	3	0	0	0	12
07:45 AM	0	1	1	0	1	1	0	2	2	0	0	0	4
Total	0	4	4	0	12	12	2	5	7	0	3	3	26
08:00 AM	0	2	2	0	3	3	0	1	1	0	1	1	7
08:15 AM	0	0	0	0	23	23	1	7	8	0	6	6	37
08:30 AM	0	1	1	0	7	7	1	8	9	0	4	4	21
08:45 AM	0	2	2	0	7	7	0	4	4	0	1	1	14
Total	0	5	5	0	40	40	2	20	22	0	12	12	79
Grand Total	0	9	9	0	52	52	4	25	29	0	15	15	105
Apprch %	0	100		0	100		13.8	86.2		0	100		
Total %	0	8.6	8.6	0	49.5	49.5	3.8	23.8	27.6	0	14.3	14.3	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 5

Groups Printed- PC - SU - MU

	Wentworth Ave From North				107th St From East				Wentworth Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	6	59	5	70	1	37	4	42	9	35	6	50	8	50	5	63	225
04:15 PM	11	51	6	68	4	45	4	53	9	23	3	35	6	52	9	67	223
04:30 PM	11	49	8	68	5	25	6	36	7	16	6	29	4	39	4	47	180
04:45 PM	5	51	0	56	5	43	6	54	2	30	5	37	5	47	11	63	210
Total	33	210	19	262	15	150	20	185	27	104	20	151	23	188	29	240	838
05:00 PM	19	59	7	85	6	36	3	45	8	28	4	40	5	47	8	60	230
05:15 PM	8	67	9	84	4	44	3	51	7	32	3	42	15	49	5	69	246
05:30 PM	11	60	9	80	4	43	7	54	11	28	6	45	8	41	5	54	233
05:45 PM	9	53	10	72	6	50	7	63	5	27	5	37	5	36	3	44	216
Total	47	239	35	321	20	173	20	213	31	115	18	164	33	173	21	227	925
Grand Total	80	449	54	583	35	323	40	398	58	219	38	315	56	361	50	467	1763
Apprch %	13.7	77	9.3		8.8	81.2	10.1		18.4	69.5	12.1		12	77.3	10.7		
Total %	4.5	25.5	3.1	33.1	2	18.3	2.3	22.6	3.3	12.4	2.2	17.9	3.2	20.5	2.8	26.5	
PC	80	444	54	578	35	321	39	395	58	214	35	307	53	360	50	463	1743
% PC	100	98.9	100	99.1	100	99.4	97.5	99.2	100	97.7	92.1	97.5	94.6	99.7	100	99.1	98.9
SU	0	5	0	5	0	2	1	3	0	5	3	8	3	1	0	4	20
% SU	0	1.1	0	0.9	0	0.6	2.5	0.8	0	2.3	7.9	2.5	5.4	0.3	0	0.9	1.1
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Wentworth Ave From North				107th St From East				Wentworth Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**19**	59	7	**85**	**6**	36	3	45	8	28	4	40	5	47	**8**	60	230
05:15 PM	8	**67**	9	84	4	44	3	51	7	**32**	3	42	**15**	**49**	5	**69**	**246**
05:30 PM	11	60	9	80	4	43	**7**	54	**11**	28	**6**	**45**	8	41	5	54	233
05:45 PM	9	53	**10**	72	6	**50**	7	**63**	5	27	5	37	5	36	3	44	216
Total Volume	47	239	35	321	20	173	20	213	31	115	18	164	33	173	21	227	925
% App. Total	14.6	74.5	10.9		9.4	81.2	9.4		18.9	70.1	11		14.5	76.2	9.3		
PHF	.618	.892	.875	.944	.833	.865	.714	.845	.705	.898	.750	.911	.550	.883	.656	.822	.940

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4:00 PM - 6:00 PM
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File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 6

Groups Printed- SU

	Wentworth Ave From North				107th St From East				Wentworth Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
04:15 PM	0	1	0	1	0	1	0	1	0	1	1	2	1	0	0	1	5
04:30 PM	0	2	0	2	0	0	0	0	0	1	2	3	1	0	0	1	6
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	5	0	5	0	1	0	1	0	3	3	6	3	0	0	3	15
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	1	1	2	0	2	0	2	0	1	0	1	5
Grand Total	0	5	0	5	0	2	1	3	0	5	3	8	3	1	0	4	20
Apprch %	0	100	0		0	66.7	33.3		0	62.5	37.5		75	25	0		
Total %	0	25	0	25	0	10	5	15	0	25	15	40	15	5	0	20	

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107th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 7

Groups Printed- MU

	Wentworth Ave From North				107th St From East				Wentworth Ave From South				107th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

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107th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/7/2012
Page No : 8

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			107th St Crossing East Leg			Wentworth Ave Crossing South Leg			107th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	1	1	0	8	8	0	7	7	16
04:15 PM	0	9	9	1	14	15	2	12	14	0	9	9	47
04:30 PM	0	8	8	0	18	18	0	5	5	0	0	0	31
04:45 PM	0	3	3	2	3	5	0	14	14	0	9	9	31
Total	0	20	20	3	36	39	2	39	41	0	25	25	125
05:00 PM	0	10	10	0	8	8	1	13	14	0	5	5	37
05:15 PM	0	5	5	0	0	0	1	6	7	1	3	4	16
05:30 PM	0	2	2	4	8	12	1	9	10	0	3	3	27
05:45 PM	0	1	1	0	3	3	3	6	9	0	5	5	18
Total	0	18	18	4	19	23	6	34	40	1	16	17	98
Grand Total	0	38	38	7	55	62	8	73	81	1	41	42	223
Apprch %	0	100		11.3	88.7		9.9	90.1		2.4	97.6		
Total %	0	17	17	3.1	24.7	27.8	3.6	32.7	36.3	0.4	18.4	18.8	

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111th St and Halsted Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 1

Groups Printed- PC - SU - MU

	Halsted Ave From North				111th St From East				Halsted Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	11	61	14	86	23	24	5	52	8	198	6	212	6	27	24	57	407
07:15 AM	3	88	10	101	10	28	8	46	5	224	7	236	14	32	29	75	458
07:30 AM	8	108	19	135	19	29	10	58	17	271	7	295	6	47	45	98	586
07:45 AM	15	113	18	146	25	33	14	72	10	253	13	276	14	45	35	94	588
Total	37	370	61	468	77	114	37	228	40	946	33	1019	40	151	133	324	2039
08:00 AM	5	146	25	176	24	44	12	80	18	202	9	229	20	45	21	86	571
08:15 AM	14	109	26	149	20	36	9	65	5	195	6	206	14	65	25	104	524
08:30 AM	9	91	22	122	13	24	14	51	9	164	12	185	16	34	15	65	423
08:45 AM	5	113	31	149	18	39	11	68	14	159	17	190	18	51	16	85	492
Total	33	459	104	596	75	143	46	264	46	720	44	810	68	195	77	340	2010
Grand Total	70	829	165	1064	152	257	83	492	86	1666	77	1829	108	346	210	664	4049
Apprch %	6.6	77.9	15.5		30.9	52.2	16.9		4.7	91.1	4.2		16.3	52.1	31.6		
Total %	1.7	20.5	4.1	26.3	3.8	6.3	2	12.2	2.1	41.1	1.9	45.2	2.7	8.5	5.2	16.4	
PC	65	764	156	985	147	236	77	460	85	1598	74	1757	104	325	194	623	3825
% PC	92.9	92.2	94.5	92.6	96.7	91.8	92.8	93.5	98.8	95.9	96.1	96.1	96.3	93.9	92.4	93.8	94.5
SU	5	63	9	77	5	21	6	32	1	64	3	68	4	20	15	39	216
% SU	7.1	7.6	5.5	7.2	3.3	8.2	7.2	6.5	1.2	3.8	3.9	3.7	3.7	5.8	7.1	5.9	5.3
MU	0	2	0	2	0	0	0	0	0	4	0	4	0	1	1	2	8
% MU	0	0.2	0	0.2	0	0	0	0	0	0.2	0	0.2	0	0.3	0.5	0.3	0.2

	Halsted Ave From North				111th St From East				Halsted Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	8	108	19	135	19	29	10	58	17	**271**	7	**295**	6	47	**45**	98	586
07:45 AM	**15**	113	18	146	**25**	33	**14**	72	10	253	**13**	276	14	45	35	94	**588**
08:00 AM	5	**146**	25	**176**	24	**44**	12	**80**	**18**	202	9	229	**20**	45	21	86	571
08:15 AM	14	109	**26**	149	20	36	9	65	5	195	6	206	14	**65**	25	**104**	524
Total Volume	42	476	88	606	88	142	45	275	50	921	35	1006	54	202	126	382	2269
% App. Total	6.9	78.5	14.5		32	51.6	16.4		5	91.6	3.5		14.1	52.9	33		
PHF	.700	.815	.846	.861	.880	.807	.804	.859	.694	.850	.673	.853	.675	.777	.700	.918	.965

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 2

Groups Printed- SU

	Halsted Ave From North				111th St From East				Halsted Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	6	2	9	1	3	0	4	0	7	0	7	1	1	3	5	25
07:15 AM	1	5	0	6	0	2	0	2	0	11	0	11	1	1	1	3	22
07:30 AM	1	8	1	10	2	3	0	5	0	8	0	8	0	3	3	6	29
07:45 AM	1	10	0	11	1	2	1	4	0	10	2	12	0	5	6	11	38
Total	4	29	3	36	4	10	1	15	0	36	2	38	2	10	13	25	114
08:00 AM	0	10	1	11	0	1	3	4	0	10	0	10	0	2	1	3	28
08:15 AM	0	11	1	12	1	4	0	5	0	4	0	4	2	3	1	6	27
08:30 AM	1	8	0	9	0	2	2	4	1	9	0	10	0	0	0	0	23
08:45 AM	0	5	4	9	0	4	0	4	0	5	1	6	0	5	0	5	24
Total	1	34	6	41	1	11	5	17	1	28	1	30	2	10	2	14	102
Grand Total	5	63	9	77	5	21	6	32	1	64	3	68	4	20	15	39	216
Apprch %	6.5	81.8	11.7		15.6	65.6	18.8		1.5	94.1	4.4		10.3	51.3	38.5		
Total %	2.3	29.2	4.2	35.6	2.3	9.7	2.8	14.8	0.5	29.6	1.4	31.5	1.9	9.3	6.9	18.1	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 3

Groups Printed- MU

	Halsted Ave From North				111th St From East				Halsted Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Total	0	1	0	1	0	0	0	0	0	3	0	3	0	1	1	2	6
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	0	2	0	2	0	0	0	0	0	4	0	4	0	1	1	2	8
Apprch %	0	100	0		0	0	0		0	100	0		0	50	50		
Total %	0	25	0	25	0	0	0	0	0	50	0	50	0	12.5	12.5	25	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/8/2012
Page No : 4

Groups Printed- Peds & Bikes

	Halsted Ave Crossing North Leg			111th St Crossing East Leg			Halsted Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	12	12	0	8	8	1	8	9	1	5	6	35
07:15 AM	0	16	16	0	4	4	0	18	18	0	11	11	49
07:30 AM	1	9	10	0	2	2	0	7	7	0	12	12	31
07:45 AM	1	19	20	0	2	2	0	9	9	0	8	8	39
Total	2	56	58	0	16	16	1	42	43	1	36	37	154
08:00 AM	0	16	16	0	4	4	0	2	2	0	2	2	24
08:15 AM	0	5	5	0	0	0	0	2	2	0	4	4	11
08:30 AM	0	20	20	1	8	9	0	7	7	1	4	5	41
08:45 AM	2	9	11	0	2	2	0	3	3	1	7	8	24
Total	2	50	52	1	14	15	0	14	14	2	17	19	100
Grand Total	4	106	110	1	30	31	1	56	57	3	53	56	254
Apprch %	3.6	96.4		3.2	96.8		1.8	98.2		5.4	94.6		
Total %	1.6	41.7	43.3	0.4	11.8	12.2	0.4	22	22.4	1.2	20.9	22	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 5

Groups Printed- PC - SU - MU

	Halsted Ave From North				111th St From East				Halsted Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	21	225	29	275	14	49	18	81	13	139	13	165	34	57	11	102	623
04:15 PM	13	174	25	212	26	50	24	100	15	125	17	157	19	37	17	73	542
04:30 PM	13	207	28	248	21	47	27	95	12	137	21	170	31	47	23	101	614
04:45 PM	10	194	32	236	25	49	24	98	19	137	12	168	22	34	29	85	587
Total	57	800	114	971	86	195	93	374	59	538	63	660	106	175	80	361	2366
05:00 PM	18	217	19	254	17	55	23	95	14	147	14	175	24	52	22	98	622
05:15 PM	20	217	23	260	23	50	28	101	12	129	12	153	33	54	18	105	619
05:30 PM	9	181	25	215	22	53	13	88	23	134	18	175	23	47	20	90	568
05:45 PM	15	227	29	271	29	40	26	95	10	128	21	159	20	52	16	88	613
Total	62	842	96	1000	91	198	90	379	59	538	65	662	100	205	76	381	2422
Grand Total	119	1642	210	1971	177	393	183	753	118	1076	128	1322	206	380	156	742	4788
Apprch %	6	83.3	10.7		23.5	52.2	24.3		8.9	81.4	9.7		27.8	51.2	21		
Total %	2.5	34.3	4.4	41.2	3.7	8.2	3.8	15.7	2.5	22.5	2.7	27.6	4.3	7.9	3.3	15.5	
PC	116	1587	208	1911	173	377	180	730	117	1029	125	1271	203	361	155	719	4631
% PC	97.5	96.7	99	97	97.7	95.9	98.4	96.9	99.2	95.6	97.7	96.1	98.5	95	99.4	96.9	96.7
SU	3	52	2	57	4	14	2	20	0	42	2	44	3	19	0	22	143
% SU	2.5	3.2	1	2.9	2.3	3.6	1.1	2.7	0	3.9	1.6	3.3	1.5	5	0	3	3
MU	0	3	0	3	0	2	1	3	1	5	1	7	0	0	1	1	14
% MU	0	0.2	0	0.2	0	0.5	0.5	0.4	0.8	0.5	0.8	0.5	0	0	0.6	0.1	0.3

	Halsted Ave From North				111th St From East				Halsted Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	8	108	19	135	19	29	10	58	17	**271**	7	**295**	6	47	**45**	98	586
07:45 AM	**15**	113	18	146	**25**	33	**14**	72	10	253	**13**	276	14	45	35	94	**588**
08:00 AM	5	**146**	25	**176**	24	**44**	12	**80**	**18**	202	9	229	**20**	45	21	86	571
08:15 AM	14	109	**26**	149	20	36	9	65	5	195	6	206	14	**65**	25	**104**	524
Total Volume	42	476	88	606	88	142	45	275	50	921	35	1006	54	202	126	382	2269
% App. Total	6.9	78.5	14.5		32	51.6	16.4		5	91.6	3.5		14.1	52.9	33		
PHF	.700	.815	.846	.861	.880	.807	.804	.859	.694	.850	.673	.853	.675	.777	.700	.918	.965

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111th St and Halsted Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 6

Groups Printed- SU

	Halsted Ave From North				111th St From East				Halsted Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	1	10	0	11	0	2	1	3	0	5	0	5	1	4	0	5	24
04:15 PM	0	5	0	5	0	5	1	6	0	6	1	7	0	2	0	2	20
04:30 PM	0	10	0	10	0	1	0	1	0	5	0	5	1	3	0	4	20
04:45 PM	1	6	0	7	1	1	0	2	0	6	0	6	1	1	0	2	17
Total	2	31	0	33	1	9	2	12	0	22	1	23	3	10	0	13	81
05:00 PM	0	7	0	7	0	1	0	1	0	5	0	5	0	3	0	3	16
05:15 PM	1	6	0	7	0	1	0	1	0	6	0	6	0	3	0	3	17
05:30 PM	0	3	2	5	0	1	0	1	0	1	1	2	0	0	0	0	8
05:45 PM	0	5	0	5	3	2	0	5	0	8	0	8	0	3	0	3	21
Total	1	21	2	24	3	5	0	8	0	20	1	21	0	9	0	9	62
Grand Total	3	52	2	57	4	14	2	20	0	42	2	44	3	19	0	22	143
Apprch %	5.3	91.2	3.5		20	70	10		0	95.5	4.5		13.6	86.4	0		
Total %	2.1	36.4	1.4	39.9	2.8	9.8	1.4	14	0	29.4	1.4	30.8	2.1	13.3	0	15.4	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 7

Groups Printed- MU

	Halsted Ave From North				111th St From East				Halsted Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
04:15 PM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
04:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	1	0	1	0	4	1	5	0	0	0	0	8
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	3
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	1	0	1	0	1	1	2	1	1	0	2	0	0	1	1	6
Grand Total	0	3	0	3	0	2	1	3	1	5	1	7	0	0	1	1	14
Apprch %	0	100	0		0	66.7	33.3		14.3	71.4	14.3		0	0	100		
Total %	0	21.4	0	21.4	0	14.3	7.1	21.4	7.1	35.7	7.1	50	0	0	7.1	7.1	

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111th St and Halsted Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/8/2012
Page No : 8

Groups Printed- Peds & Bikes

	Halsted Ave Crossing North Leg			111th St Crossing East Leg			Halsted Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	18	18	0	6	6	0	9	9	0	13	13	46
04:15 PM	0	5	5	0	8	8	1	11	12	1	6	7	32
04:30 PM	0	20	20	0	3	3	2	19	21	2	9	11	55
04:45 PM	3	17	20	0	1	1	0	4	4	0	4	4	29
Total	3	60	63	0	18	18	3	43	46	3	32	35	162
05:00 PM	0	5	5	0	2	2	0	7	7	0	7	7	21
05:15 PM	0	10	10	0	4	4	0	12	12	1	10	11	37
05:30 PM	1	7	8	0	0	0	0	4	4	0	8	8	20
05:45 PM	0	13	13	0	2	2	0	7	7	0	9	9	31
Total	1	35	36	0	8	8	0	30	30	1	34	35	109
Grand Total	4	95	99	0	26	26	3	73	76	4	66	70	271
Apprch %	4	96		0	100		3.9	96.1		5.7	94.3		
Total %	1.5	35.1	36.5	0	9.6	9.6	1.1	26.9	28	1.5	24.4	25.8	

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111th St and Hamlet Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 1

Groups Printed- PC - SU - MU

	Hamlet Ave From North				111th St From East				Hamlet Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	16	27	0	43	37	139	36	212	0	27	48	75	330
07:15 AM	0	0	0	0	18	62	0	80	36	131	45	212	0	24	40	64	356
07:30 AM	0	0	0	0	21	60	0	81	59	123	37	219	0	42	46	88	388
07:45 AM	0	0	0	0	12	51	0	63	71	143	58	272	0	46	43	89	424
Total	0	0	0	0	67	200	0	267	203	536	176	915	0	139	177	316	1498
08:00 AM	0	0	0	0	14	94	0	108	88	122	43	253	0	43	26	69	430
08:15 AM	0	0	0	0	7	65	0	72	71	121	34	226	0	54	23	77	375
08:30 AM	0	0	0	0	10	56	0	66	61	123	24	208	0	66	27	93	367
08:45 AM	0	0	0	0	23	71	0	94	55	123	14	192	0	61	21	82	368
Total	0	0	0	0	54	286	0	340	275	489	115	879	0	224	97	321	1540
Grand Total	0	0	0	0	121	486	0	607	478	1025	291	1794	0	363	274	637	3038
Apprch %	0	0	0		19.9	80.1	0		26.6	57.1	16.2		0	57	43		
Total %	0	0	0	0	4	16	0	20	15.7	33.7	9.6	59.1	0	11.9	9	21	
PC	0	0	0	0	110	457	0	567	465	1013	286	1764	0	320	266	586	2917
% PC	0	0	0	0	90.9	94	0	93.4	97.3	98.8	98.3	98.3	0	88.2	97.1	92	96
SU	0	0	0	0	11	28	0	39	11	9	4	24	0	42	8	50	113
% SU	0	0	0	0	9.1	5.8	0	6.4	2.3	0.9	1.4	1.3	0	11.6	2.9	7.8	3.7
MU	0	0	0	0	0	1	0	1	2	3	1	6	0	1	0	1	8
% MU	0	0	0	0	0	0.2	0	0.2	0.4	0.3	0.3	0.3	0	0.3	0	0.2	0.3

	Hamlet Ave From North				111th St From East				Hamlet Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	**21**	60	0	81	59	123	37	219	0	42	**46**	88	388
07:45 AM	0	0	0	0	12	51	0	63	71	**143**	**58**	**272**	0	46	43	**89**	424
08:00 AM	0	0	0	0	14	**94**	0	**108**	**88**	122	43	253	0	43	26	69	**430**
08:15 AM	0	0	0	0	7	65	0	72	71	121	34	226	0	**54**	23	77	375
Total Volume	0	0	0	0	54	270	0	324	289	509	172	970	0	185	138	323	1617
% App. Total	0	0	0		16.7	83.3	0		29.8	52.5	17.7		0	57.3	42.7		
PHF	.000	.000	.000	.000	.643	.718	.000	.750	.821	.890	.741	.892	.000	.856	.750	.907	.940

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111th St and Hamlet Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 2

Groups Printed- SU

	Hamlet Ave From North				111th St From East				Hamlet Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	4	2	0	6	0	0	0	0	0	0	1	1	7
07:15 AM	0	0	0	0	3	7	0	10	1	1	2	4	0	4	2	6	20
07:30 AM	0	0	0	0	0	3	0	3	3	2	0	5	0	6	1	7	15
07:45 AM	0	0	0	0	0	1	0	1	1	1	1	3	0	5	0	5	9
Total	0	0	0	0	7	13	0	20	5	4	3	12	0	15	4	19	51
08:00 AM	0	0	0	0	2	5	0	7	3	0	0	3	0	4	1	5	15
08:15 AM	0	0	0	0	0	4	0	4	1	0	0	1	0	6	1	7	12
08:30 AM	0	0	0	0	1	4	0	5	1	3	0	4	0	10	2	12	21
08:45 AM	0	0	0	0	1	2	0	3	1	2	1	4	0	7	0	7	14
Total	0	0	0	0	4	15	0	19	6	5	1	12	0	27	4	31	62
Grand Total	0	0	0	0	11	28	0	39	11	9	4	24	0	42	8	50	113
Apprch %	0	0	0		28.2	71.8	0		45.8	37.5	16.7		0	84	16		
Total %	0	0	0	0	9.7	24.8	0	34.5	9.7	8	3.5	21.2	0	37.2	7.1	44.2	

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111th St and Hamlet Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 3

Groups Printed- MU

	Hamlet Ave From North				111th St From East				Hamlet Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
08:00 AM	0	0	0	0	0	1	0	1	1	0	1	2	0	0	0	0	3
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
Total	0	0	0	0	0	1	0	1	2	2	1	5	0	0	0	0	6
Grand Total	0	0	0	0	0	1	0	1	2	3	1	6	0	1	0	1	8
Apprch %	0	0	0		0	100	0		33.3	50	16.7		0	100	0		
Total %	0	0	0	0	0	12.5	0	12.5	25	37.5	12.5	75	0	12.5	0	12.5	

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111th St and Hamlet Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 4

Groups Printed- Peds & Bikes

	Hamlet Ave Crossing North Leg			111th St Crossing East Leg			Hamlet Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	0	1	1	0	0	0	2
07:15 AM	0	7	7	0	0	0	0	2	2	0	0	0	9
07:30 AM	1	4	5	1	0	1	0	4	4	0	0	0	10
07:45 AM	0	5	5	0	0	0	0	0	0	0	0	0	5
Total	1	17	18	1	0	1	0	7	7	0	0	0	26
08:00 AM	0	1	1	0	1	1	0	4	4	0	0	0	6
08:15 AM	0	4	4	0	0	0	0	8	8	0	0	0	12
08:30 AM	0	3	3	0	0	0	0	11	11	0	0	0	14
08:45 AM	0	3	3	0	3	3	0	3	3	0	0	0	9
Total	0	11	11	0	4	4	0	26	26	0	0	0	41
Grand Total	1	28	29	1	4	5	0	33	33	0	0	0	67
Apprch %	3.4	96.6		20	80		0	100		0	0		
Total %	1.5	41.8	43.3	1.5	6	7.5	0	49.3	49.3	0	0	0	

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111th St and Hamlet Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 5

Groups Printed- PC - SU - MU

	Hamlet Ave From North				111th St From East				Hamlet Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	18	74	0	92	47	95	20	162	0	54	25	79	333
04:15 PM	0	0	0	0	31	86	0	117	41	105	16	162	0	76	46	122	401
04:30 PM	0	0	0	0	23	73	0	96	45	113	21	179	0	54	31	85	360
04:45 PM	0	0	0	0	19	52	0	71	44	88	16	148	0	46	29	75	294
Total	0	0	0	0	91	285	0	376	177	401	73	651	0	230	131	361	1388
05:00 PM	0	0	0	0	31	62	0	93	41	90	8	139	0	52	45	97	329
05:15 PM	0	0	0	0	33	75	0	108	36	108	20	164	0	68	33	101	373
05:30 PM	0	0	0	0	20	70	0	90	50	89	10	149	0	56	27	83	322
05:45 PM	0	0	0	0	25	70	0	95	48	128	22	198	0	56	44	100	393
Total	0	0	0	0	109	277	0	386	175	415	60	650	0	232	149	381	1417
Grand Total	0	0	0	0	200	562	0	762	352	816	133	1301	0	462	280	742	2805
Apprch %	0	0	0		26.2	73.8	0		27.1	62.7	10.2		0	62.3	37.7		
Total %	0	0	0	0	7.1	20	0	27.2	12.5	29.1	4.7	46.4	0	16.5	10	26.5	
PC	0	0	0	0	197	550	0	747	351	807	133	1291	0	408	274	682	2720
% PC	0	0	0	0	98.5	97.9	0	98	99.7	98.9	100	99.2	0	88.3	97.9	91.9	97
SU	0	0	0	0	3	12	0	15	1	8	0	9	0	54	6	60	84
% SU	0	0	0	0	1.5	2.1	0	2	0.3	1	0	0.7	0	11.7	2.1	8.1	3
MU	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% MU	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0

	Hamlet Ave From North				111th St From East				Hamlet Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	31	62	0	93	41	90	8	139	0	52	**45**	97	329
05:15 PM	0	0	0	0	**33**	**75**	0	**108**	36	108	20	164	0	**68**	33	**101**	373
05:30 PM	0	0	0	0	20	70	0	90	**50**	89	10	149	0	56	27	83	322
05:45 PM	0	0	0	0	25	70	0	95	48	**128**	**22**	**198**	0	56	44	100	**393**
Total Volume	0	0	0	0	109	277	0	386	175	415	60	650	0	232	149	381	1417
% App. Total	0	0	0		28.2	71.8	0		26.9	63.8	9.2		0	60.9	39.1		
PHF	.000	.000	.000	.000	.826	.923	.000	.894	.875	.811	.682	.821	.000	.853	.828	.943	.901

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111th St and Hamlet Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 6

Groups Printed- SU

	Hamlet Ave From North				111th St From East				Hamlet Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	1	2	0	3	0	7	1	8	11
04:15 PM	0	0	0	0	2	2	0	4	0	1	0	1	0	11	0	11	16
04:30 PM	0	0	0	0	0	2	0	2	0	1	0	1	0	13	2	15	18
04:45 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	6	0	6	8
Total	0	0	0	0	2	5	0	7	1	5	0	6	0	37	3	40	53
05:00 PM	0	0	0	0	1	3	0	4	0	0	0	0	0	5	1	6	10
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
05:45 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	3	2	5	8
Total	0	0	0	0	1	7	0	8	0	3	0	3	0	17	3	20	31
Grand Total	0	0	0	0	3	12	0	15	1	8	0	9	0	54	6	60	84
Apprch %	0	0	0		20	80	0		11.1	88.9	0		0	90	10		
Total %	0	0	0	0	3.6	14.3	0	17.9	1.2	9.5	0	10.7	0	64.3	7.1	71.4	

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111th St and Hamlet Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 7

Groups Printed- MU

	Hamlet Ave From North				111th St From East				Hamlet Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Apprch %	0	0	0		0	0	0		0	100	0		0	0	0		
Total %	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 8

Groups Printed- Peds & Bikes

	Hamlet Ave Crossing North Leg			111th St Crossing East Leg			Hamlet Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	6	7	0	0	0	7
04:15 PM	0	3	3	0	0	0	0	0	0	0	0	0	3
04:30 PM	1	1	2	0	0	0	0	0	0	0	0	0	2
04:45 PM	1	1	2	1	0	1	0	2	2	0	0	0	5
Total	2	5	7	1	0	1	1	8	9	0	0	0	17
05:00 PM	1	0	1	0	0	0	0	6	6	0	0	0	7
05:15 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
05:30 PM	2	4	6	0	1	1	0	6	6	0	0	0	13
05:45 PM	0	5	5	0	0	0	0	0	0	0	0	0	5
Total	3	9	12	0	1	1	0	13	13	0	0	0	26
Grand Total	5	14	19	1	1	2	1	21	22	0	0	0	43
Apprch %	26.3	73.7		50	50		4.5	95.5		0	0		
Total %	11.6	32.6	44.2	2.3	2.3	4.7	2.3	48.8	51.2	0	0	0	

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773-283-2600 Fax: 773-283-2602
www.RWAengineers.com

111th St and Marshfield Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 1

Groups Printed- PC - SU - MU

	Marshfield Ave From North				111th St From East				Marshfield Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	60	58	7	125	0	38	10	48	0	0	0	0	11	75	0	86	259
07:15 AM	92	76	11	179	0	73	20	93	0	0	0	0	15	63	0	78	350
07:30 AM	117	82	13	212	0	61	21	82	0	0	0	0	15	60	0	75	369
07:45 AM	108	80	18	206	0	86	21	107	0	0	0	0	16	60	0	76	389
Total	377	296	49	722	0	258	72	330	0	0	0	0	57	258	0	315	1367
08:00 AM	64	61	18	143	0	78	20	98	0	0	0	0	25	43	0	68	309
08:15 AM	72	82	17	171	0	67	32	99	0	0	0	0	20	53	0	73	343
08:30 AM	47	62	23	132	0	76	30	106	0	0	0	0	17	44	0	61	299
08:45 AM	67	68	32	167	0	64	28	92	0	0	0	0	10	51	0	61	320
Total	250	273	90	613	0	285	110	395	0	0	0	0	72	191	0	263	1271
Grand Total	627	569	139	1335	0	543	182	725	0	0	0	0	129	449	0	578	2638
Apprch %	47	42.6	10.4		0	74.9	25.1		0	0	0		22.3	77.7	0		
Total %	23.8	21.6	5.3	50.6	0	20.6	6.9	27.5	0	0	0	0	4.9	17	0	21.9	
PC	604	555	125	1284	0	512	174	686	0	0	0	0	125	418	0	543	2513
% PC	96.3	97.5	89.9	96.2	0	94.3	95.6	94.6	0	0	0	0	96.9	93.1	0	93.9	95.3
SU	19	12	14	45	0	29	8	37	0	0	0	0	4	30	0	34	116
% SU	3	2.1	10.1	3.4	0	5.3	4.4	5.1	0	0	0	0	3.1	6.7	0	5.9	4.4
MU	4	2	0	6	0	2	0	2	0	0	0	0	0	1	0	1	9
% MU	0.6	0.4	0	0.4	0	0.4	0	0.3	0	0	0	0	0	0.2	0	0.2	0.3

	Marshfield Ave From North				111th St From East				Marshfield Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	92	76	11	179	0	73	20	93	0	0	0	0	15	**63**	0	**78**	350
07:30 AM	**117**	**82**	13	**212**	0	61	**21**	82	0	0	0	0	15	60	0	75	369
07:45 AM	108	80	**18**	206	0	**86**	21	**107**	0	0	0	0	16	60	0	76	**389**
08:00 AM	64	61	18	143	0	78	20	98	0	0	0	0	**25**	43	0	68	309
Total Volume	381	299	60	740	0	298	82	380	0	0	0	0	71	226	0	297	1417
% App. Total	51.5	40.4	8.1		0	78.4	21.6		0	0	0		23.9	76.1	0		
PHF	.814	.912	.833	.873	.000	.866	.976	.888	.000	.000	.000	.000	.710	.897	.000	.952	.911

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File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 2

Groups Printed- SU

	Marshfield Ave From North				111th St From East				Marshfield Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	1	0	2	0	4	0	4	0	0	0	0	0	1	0	1	7
07:15 AM	2	0	1	3	0	3	0	3	0	0	0	0	0	5	0	5	11
07:30 AM	2	2	1	5	0	3	2	5	0	0	0	0	0	7	0	7	17
07:45 AM	5	2	0	7	0	5	1	6	0	0	0	0	1	4	0	5	18
Total	10	5	2	17	0	15	3	18	0	0	0	0	1	17	0	18	53
08:00 AM	1	2	1	4	0	3	0	3	0	0	0	0	2	2	0	4	11
08:15 AM	4	0	1	5	0	2	2	4	0	0	0	0	0	5	0	5	14
08:30 AM	2	1	4	7	0	5	1	6	0	0	0	0	0	3	0	3	16
08:45 AM	2	4	6	12	0	4	2	6	0	0	0	0	1	3	0	4	22
Total	9	7	12	28	0	14	5	19	0	0	0	0	3	13	0	16	63
Grand Total	19	12	14	45	0	29	8	37	0	0	0	0	4	30	0	34	116
Apprch %	42.2	26.7	31.1		0	78.4	21.6		0	0	0		11.8	88.2	0		
Total %	16.4	10.3	12.1	38.8	0	25	6.9	31.9	0	0	0	0	3.4	25.9	0	29.3	

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File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 3

Groups Printed- MU

	Marshfield Ave From North				111th St From East				Marshfield Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	0	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	2	0	3	0	1	0	1	0	0	0	0	0	1	0	1	5
Grand Total	4	2	0	6	0	2	0	2	0	0	0	0	0	1	0	1	9
Apprch %	66.7	33.3	0		0	100	0		0	0	0		0	100	0		
Total %	44.4	22.2	0	66.7	0	22.2	0	22.2	0	0	0	0	0	11.1	0	11.1	

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File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/30/2012
Page No : 4

Groups Printed- Peds & Bikes

	Marshfield Ave Crossing North Leg			111th St Crossing East Leg			Marshfield Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	7	7	0	0	0	0	0	0	0	0	0	7
07:15 AM	0	12	12	0	0	0	0	2	2	0	0	0	14
07:30 AM	0	3	3	0	0	0	0	3	3	0	0	0	6
07:45 AM	0	4	4	0	0	0	1	3	4	0	0	0	8
Total	0	26	26	0	0	0	1	8	9	0	0	0	35
08:00 AM	0	3	3	0	0	0	0	13	13	0	8	8	24
08:15 AM	0	4	4	0	0	0	0	13	13	0	6	6	23
08:30 AM	0	11	11	0	0	0	2	3	5	0	2	2	18
08:45 AM	1	3	4	0	0	0	0	1	1	0	1	1	6
Total	1	21	22	0	0	0	2	30	32	0	17	17	71
Grand Total	1	47	48	0	0	0	3	38	41	0	17	17	106
Apprch %	2.1	97.9		0	0		7.3	92.7		0	100		
Total %	0.9	44.3	45.3	0	0	0	2.8	35.8	38.7	0	16	16	

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111th St and Marshfield Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 5

Groups Printed- PC - SU - MU

	Marshfield Ave From North				111th St From East				Marshfield Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	135	135	41	311	0	44	28	72	0	0	0	0	32	52	0	84	467
04:15 PM	91	101	30	222	0	60	46	106	0	0	0	0	34	66	0	100	428
04:30 PM	102	107	34	243	0	66	44	110	0	0	0	0	37	54	0	91	444
04:45 PM	85	127	36	248	0	45	23	68	0	0	0	0	28	66	0	94	410
Total	413	470	141	1024	0	215	141	356	0	0	0	0	131	238	0	369	1749
05:00 PM	100	124	35	259	0	47	38	85	0	0	0	0	54	55	0	109	453
05:15 PM	93	137	25	255	0	50	34	84	0	0	0	0	36	69	0	105	444
05:30 PM	78	99	22	199	0	60	42	102	0	0	0	0	35	65	0	100	401
05:45 PM	106	110	21	237	0	38	44	82	0	0	0	0	38	46	0	84	403
Total	377	470	103	950	0	195	158	353	0	0	0	0	163	235	0	398	1701
Grand Total	790	940	244	1974	0	410	299	709	0	0	0	0	294	473	0	767	3450
Apprch %	40	47.6	12.4		0	57.8	42.2		0	0	0		38.3	61.7	0		
Total %	22.9	27.2	7.1	57.2	0	11.9	8.7	20.6	0	0	0	0	8.5	13.7	0	22.2	
PC	779	928	200	1907	0	395	292	687	0	0	0	0	292	451	0	743	3337
% PC	98.6	98.7	82	96.6	0	96.3	97.7	96.9	0	0	0	0	99.3	95.3	0	96.9	96.7
SU	10	12	44	66	0	14	7	21	0	0	0	0	2	22	0	24	111
% SU	1.3	1.3	18	3.3	0	3.4	2.3	3	0	0	0	0	0.7	4.7	0	3.1	3.2
MU	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
% MU	0.1	0	0	0.1	0	0.2	0	0.1	0	0	0	0	0	0	0	0	0.1

	Marshfield Ave From North				111th St From East				Marshfield Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**102**	107	34	243	0	**66**	**44**	**110**	0	0	0	0	37	54	0	91	444
04:45 PM	85	127	**36**	248	0	45	23	68	0	0	0	0	28	66	0	94	410
05:00 PM	100	124	35	**259**	0	47	38	85	0	0	0	0	**54**	55	0	**109**	**453**
05:15 PM	93	**137**	25	255	0	50	34	84	0	0	0	0	36	**69**	0	105	444
Total Volume	380	495	130	1005	0	208	139	347	0	0	0	0	155	244	0	399	1751
% App. Total	37.8	49.3	12.9		0	59.9	40.1		0	0	0		38.8	61.2	0		
PHF	.931	.903	.903	.970	.000	.788	.790	.789	.000	.000	.000	.000	.718	.884	.000	.915	.966

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4:00 PM - 6:00 PM
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File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 6

Groups Printed- SU

	Marshfield Ave From North				111th St From East				Marshfield Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	6	2	7	15	0	2	0	2	0	0	0	0	0	4	0	4	21
04:15 PM	2	0	10	12	0	3	2	5	0	0	0	0	0	4	0	4	21
04:30 PM	0	2	8	10	0	1	3	4	0	0	0	0	0	3	0	3	17
04:45 PM	0	0	9	9	0	2	0	2	0	0	0	0	0	2	0	2	13
Total	8	4	34	46	0	8	5	13	0	0	0	0	0	13	0	13	72
05:00 PM	0	0	4	4	0	2	1	3	0	0	0	0	2	4	0	6	13
05:15 PM	1	4	4	9	0	2	1	3	0	0	0	0	0	2	0	2	14
05:30 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	2	0	2	5
05:45 PM	1	2	2	5	0	1	0	1	0	0	0	0	0	1	0	1	7
Total	2	8	10	20	0	6	2	8	0	0	0	0	2	9	0	11	39
Grand Total	10	12	44	66	0	14	7	21	0	0	0	0	2	22	0	24	111
Apprch %	15.2	18.2	66.7		0	66.7	33.3		0	0	0		8.3	91.7	0		
Total %	9	10.8	39.6	59.5	0	12.6	6.3	18.9	0	0	0	0	1.8	19.8	0	21.6	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 7

Groups Printed- MU

	Marshfield Ave From North				111th St From East				Marshfield Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Apprch %	100	0	0		0	100	0		0	0	0		0	0	0		
Total %	50	0	0	50	0	50	0	50	0	0	0	0	0	0	0	0	

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Page No : 8

Groups Printed- Peds & Bikes

	Marshfield Ave Crossing North Leg			111th St Crossing East Leg			Marshfield Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	2	2	0	0	0	1	0	1	0	0	0	3
04:15 PM	0	3	3	0	0	0	0	2	2	0	1	1	6
04:30 PM	0	2	2	0	0	0	0	5	5	0	0	0	7
04:45 PM	0	2	2	0	0	0	0	1	1	0	0	0	3
Total	0	9	9	0	0	0	1	8	9	0	1	1	19
05:00 PM	0	2	2	0	0	0	0	2	2	0	1	1	5
05:15 PM	0	15	15	0	0	0	0	0	0	0	0	0	15
05:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
05:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	1
Total	0	18	18	0	0	0	0	3	3	0	1	1	22
Grand Total	0	27	27	0	0	0	1	11	12	0	2	2	41
Apprch %	0	100		0	0		8.3	91.7		0	100		
Total %	0	65.9	65.9	0	0	0	2.4	26.8	29.3	0	4.9	4.9	

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111th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 1

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				111th St From East				Martin Luther King Dr From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	6	11	7	24	9	36	0	45	5	24	2	31	3	24	8	35	135
07:15 AM	9	14	4	27	20	56	1	77	4	12	4	20	3	58	7	68	192
07:30 AM	18	19	9	46	15	73	2	90	14	28	4	46	1	61	14	76	258
07:45 AM	24	9	11	44	17	132	4	153	11	27	12	50	4	65	15	84	331
Total	57	53	31	141	61	297	7	365	34	91	22	147	11	208	44	263	916
08:00 AM	21	25	5	51	19	118	7	144	10	25	4	39	5	85	20	110	344
08:15 AM	9	20	10	39	12	94	2	108	6	22	8	36	5	80	7	92	275
08:30 AM	11	18	5	34	15	85	5	105	14	30	8	52	4	59	15	78	269
08:45 AM	6	20	13	39	12	87	3	102	11	32	4	47	7	54	19	80	268
Total	47	83	33	163	58	384	17	459	41	109	24	174	21	278	61	360	1156
Grand Total	104	136	64	304	119	681	24	824	75	200	46	321	32	486	105	623	2072
Apprch %	34.2	44.7	21.1		14.4	82.6	2.9		23.4	62.3	14.3		5.1	78	16.9		
Total %	5	6.6	3.1	14.7	5.7	32.9	1.2	39.8	3.6	9.7	2.2	15.5	1.5	23.5	5.1	30.1	
PC	92	133	63	288	117	652	24	793	62	194	46	302	32	458	95	585	1968
% PC	88.5	97.8	98.4	94.7	98.3	95.7	100	96.2	82.7	97	100	94.1	100	94.2	90.5	93.9	95
SU	12	3	1	16	2	29	0	31	13	6	0	19	0	25	10	35	101
% SU	11.5	2.2	1.6	5.3	1.7	4.3	0	3.8	17.3	3	0	5.9	0	5.1	9.5	5.6	4.9
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0.5	0.1

	Martin Luther King Dr From North				111th St From East				Martin Luther King Dr From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**24**	9	**11**	44	17	**132**	4	**153**	11	27	**12**	50	4	65	15	84	331
08:00 AM	21	**25**	5	**51**	**19**	118	**7**	144	10	25	4	39	**5**	**85**	**20**	**110**	**344**
08:15 AM	9	20	10	39	12	94	2	108	6	22	8	36	5	80	7	92	275
08:30 AM	11	18	5	34	15	85	5	105	**14**	**30**	8	**52**	4	59	15	78	269
Total Volume	65	72	31	168	63	429	18	510	41	104	32	177	18	289	57	364	1219
% App. Total	38.7	42.9	18.5		12.4	84.1	3.5		23.2	58.8	18.1		4.9	79.4	15.7		
PHF	.677	.720	.705	.824	.829	.813	.643	.833	.732	.867	.667	.851	.900	.850	.713	.827	.886

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111th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 2

Groups Printed- SU

	Martin Luther King Dr From North				111th St From East				Martin Luther King Dr From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	0	1	3	1	1	0	2	2	1	0	3	0	1	2	3	11
07:15 AM	2	1	0	3	0	4	0	4	0	1	0	1	0	6	1	7	15
07:30 AM	1	1	0	2	1	5	0	6	4	1	0	5	0	3	1	4	17
07:45 AM	1	1	0	2	0	3	0	3	2	0	0	2	0	3	1	4	11
Total	6	3	1	10	2	13	0	15	8	3	0	11	0	13	5	18	54
08:00 AM	3	0	0	3	0	5	0	5	1	0	0	1	0	3	1	4	13
08:15 AM	1	0	0	1	0	5	0	5	2	2	0	4	0	3	1	4	14
08:30 AM	1	0	0	1	0	3	0	3	1	1	0	2	0	3	2	5	11
08:45 AM	1	0	0	1	0	3	0	3	1	0	0	1	0	3	1	4	9
Total	6	0	0	6	0	16	0	16	5	3	0	8	0	12	5	17	47
Grand Total	12	3	1	16	2	29	0	31	13	6	0	19	0	25	10	35	101
Apprch %	75	18.8	6.2		6.5	93.5	0		68.4	31.6	0		0	71.4	28.6		
Total %	11.9	3	1	15.8	2	28.7	0	30.7	12.9	5.9	0	18.8	0	24.8	9.9	34.7	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 3

Groups Printed- MU

	Martin Luther King Dr From North				111th St From East				Martin Luther King Dr From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
Apprch %	0	0	0		0	0	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	

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111th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/12/2012
Page No : 4

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			111th St Crossing East Leg			Martin Luther King Dr Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	4	4	0	1	1	1	6	7	2	2	4	16
07:15 AM	0	4	4	0	2	2	0	5	5	0	1	1	12
07:30 AM	0	6	6	0	1	1	0	16	16	0	7	7	30
07:45 AM	0	6	6	0	0	0	0	7	7	0	8	8	21
Total	0	20	20	0	4	4	1	34	35	2	18	20	79
08:00 AM	0	6	6	0	1	1	0	9	9	0	0	0	16
08:15 AM	0	4	4	0	1	1	2	8	10	1	3	4	19
08:30 AM	0	5	5	0	2	2	0	6	6	0	0	0	13
08:45 AM	0	2	2	0	5	5	0	9	9	0	2	2	18
Total	0	17	17	0	9	9	2	32	34	1	5	6	66
Grand Total	0	37	37	0	13	13	3	66	69	3	23	26	145
Apprch %	0	100		0	100		4.3	95.7		11.5	88.5		
Total %	0	25.5	25.5	0	9	9	2.1	45.5	47.6	2.1	15.9	17.9	

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111th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 5

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				111th St From East				Martin Luther King Dr From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	20	28	13	61	9	76	5	90	14	27	2	43	1	71	14	86	280
04:15 PM	21	34	12	67	6	70	3	79	11	21	4	36	1	73	14	88	270
04:30 PM	9	41	17	67	15	59	5	79	8	18	4	30	3	80	13	96	272
04:45 PM	14	34	19	67	10	67	6	83	15	27	6	48	3	76	14	93	291
Total	64	137	61	262	40	272	19	331	48	93	16	157	8	300	55	363	1113
05:00 PM	17	31	18	66	12	70	5	87	9	19	6	34	7	61	7	75	262
05:15 PM	17	28	12	57	12	73	4	89	9	44	7	60	4	63	17	84	290
05:30 PM	19	53	13	85	15	66	9	90	10	26	4	40	2	62	9	73	288
05:45 PM	7	30	18	55	11	53	4	68	14	30	5	49	5	67	12	84	256
Total	60	142	61	263	50	262	22	334	42	119	22	183	18	253	45	316	1096
Grand Total	124	279	122	525	90	534	41	665	90	212	38	340	26	553	100	679	2209
Apprch %	23.6	53.1	23.2		13.5	80.3	6.2		26.5	62.4	11.2		3.8	81.4	14.7		
Total %	5.6	12.6	5.5	23.8	4.1	24.2	1.9	30.1	4.1	9.6	1.7	15.4	1.2	25	4.5	30.7	
PC	113	279	122	514	89	517	41	647	82	211	38	331	26	533	92	651	2143
% PC	91.1	100	100	97.9	98.9	96.8	100	97.3	91.1	99.5	100	97.4	100	96.4	92	95.9	97
SU	11	0	0	11	1	17	0	18	8	1	0	9	0	20	8	28	66
% SU	8.9	0	0	2.1	1.1	3.2	0	2.7	8.9	0.5	0	2.6	0	3.6	8	4.1	3
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Martin Luther King Dr From North				111th St From East				Martin Luther King Dr From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	14	34	**19**	67	10	67	6	83	**15**	27	6	48	3	**76**	14	**93**	**291**
05:00 PM	17	31	18	66	12	70	5	87	9	19	6	34	**7**	61	7	75	262
05:15 PM	17	28	12	57	12	**73**	4	89	9	**44**	**7**	**60**	4	63	**17**	84	290
05:30 PM	**19**	**53**	13	**85**	**15**	66	**9**	**90**	10	26	4	40	2	62	9	73	288
Total Volume	67	146	62	275	49	276	24	349	43	116	23	182	16	262	47	325	1131
% App. Total	24.4	53.1	22.5		14	79.1	6.9		23.6	63.7	12.6		4.9	80.6	14.5		
PHF	.882	.689	.816	.809	.817	.945	.667	.969	.717	.659	.821	.758	.571	.862	.691	.874	.972

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111th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 6

Groups Printed- SU

	Martin Luther King Dr From North				111th St From East				Martin Luther King Dr From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	2	0	0	2	0	2	0	2	0	0	0	0	0	2	1	3	7
04:15 PM	2	0	0	2	1	2	0	3	2	0	0	2	0	5	1	6	13
04:30 PM	1	0	0	1	0	1	0	1	1	0	0	1	0	1	1	2	5
04:45 PM	1	0	0	1	0	4	0	4	1	0	0	1	0	3	1	4	10
Total	6	0	0	6	1	9	0	10	4	0	0	4	0	11	4	15	35
05:00 PM	2	0	0	2	0	2	0	2	1	0	0	1	0	3	1	4	9
05:15 PM	1	0	0	1	0	2	0	2	1	1	0	2	0	0	2	2	7
05:30 PM	1	0	0	1	0	3	0	3	1	0	0	1	0	4	1	5	10
05:45 PM	1	0	0	1	0	1	0	1	1	0	0	1	0	2	0	2	5
Total	5	0	0	5	0	8	0	8	4	1	0	5	0	9	4	13	31
Grand Total	11	0	0	11	1	17	0	18	8	1	0	9	0	20	8	28	66
Apprch %	100	0	0		5.6	94.4	0		88.9	11.1	0		0	71.4	28.6		
Total %	16.7	0	0	16.7	1.5	25.8	0	27.3	12.1	1.5	0	13.6	0	30.3	12.1	42.4	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 7

Groups Printed- MU

	Martin Luther King Dr From North				111th St From East				Martin Luther King Dr From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

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11th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/12/2012
Page No : 8

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			111th St Crossing East Leg			Martin Luther King Dr Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	6	6	0	2	2	0	16	16	0	5	5	29
04:15 PM	0	14	14	0	6	6	0	20	20	0	6	6	46
04:30 PM	0	3	3	0	3	3	0	15	15	0	0	0	21
04:45 PM	0	7	7	0	3	3	2	25	27	0	2	2	39
Total	0	30	30	0	14	14	2	76	78	0	13	13	135
05:00 PM	0	7	7	0	7	7	0	3	3	0	2	2	19
05:15 PM	0	6	6	0	25	25	0	15	15	0	1	1	47
05:30 PM	0	1	1	0	2	2	3	16	19	1	6	7	29
05:45 PM	0	10	10	0	2	2	1	13	14	0	0	0	26
Total	0	24	24	0	36	36	4	47	51	1	9	10	121
Grand Total	0	54	54	0	50	50	6	123	129	1	22	23	256
Apprch %	0	100		0	100		4.7	95.3		4.3	95.7		
Total %	0	21.1	21.1	0	19.5	19.5	2.3	48	50.4	0.4	8.6	9	

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111th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 1

Groups Printed- PC - SU - MU

	Michigan Ave From North				111th St From East				Michigan Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	10	20	5	35	8	32	5	45	3	57	1	61	4	37	9	50	191
07:15 AM	7	23	5	35	22	46	8	76	7	65	2	74	5	56	11	72	257
07:30 AM	9	24	12	45	15	50	11	76	14	60	3	77	6	67	18	91	289
07:45 AM	10	29	10	49	30	85	8	123	11	81	2	94	3	78	17	98	364
Total	36	96	32	164	75	213	32	320	35	263	8	306	18	238	55	311	1101
08:00 AM	8	33	12	53	22	92	11	125	14	82	5	101	4	80	14	98	377
08:15 AM	11	32	7	50	15	86	7	108	5	79	1	85	7	68	15	90	333
08:30 AM	12	30	7	49	12	55	3	70	3	56	6	65	11	89	11	111	295
08:45 AM	8	41	13	62	20	81	12	113	8	49	6	63	12	58	14	84	322
Total	39	136	39	214	69	314	33	416	30	266	18	314	34	295	54	383	1327
Grand Total	75	232	71	378	144	527	65	736	65	529	26	620	52	533	109	694	2428
Apprch %	19.8	61.4	18.8		19.6	71.6	8.8		10.5	85.3	4.2		7.5	76.8	15.7		
Total %	3.1	9.6	2.9	15.6	5.9	21.7	2.7	30.3	2.7	21.8	1.1	25.5	2.1	22	4.5	28.6	
PC	71	202	68	341	141	497	55	693	49	481	25	555	51	503	104	658	2247
% PC	94.7	87.1	95.8	90.2	97.9	94.3	84.6	94.2	75.4	90.9	96.2	89.5	98.1	94.4	95.4	94.8	92.5
SU	4	30	3	37	3	29	10	42	16	47	1	64	1	30	3	34	177
% SU	5.3	12.9	4.2	9.8	2.1	5.5	15.4	5.7	24.6	8.9	3.8	10.3	1.9	5.6	2.8	4.9	7.3
MU	0	0	0	0	0	1	0	1	0	1	0	1	0	0	2	2	4
% MU	0	0	0	0	0	0.2	0	0.1	0	0.2	0	0.2	0	0	1.8	0.3	0.2

	Michigan Ave From North				111th St From East				Michigan Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	10	29	10	49	**30**	85	8	123	11	81	2	94	3	78	**17**	98	364
08:00 AM	8	**33**	**12**	**53**	22	**92**	**11**	**125**	**14**	**82**	5	**101**	4	80	14	98	**377**
08:15 AM	11	32	7	50	15	86	7	108	5	79	1	85	7	68	15	90	333
08:30 AM	**12**	30	7	49	12	55	3	70	3	56	**6**	65	**11**	**89**	11	**111**	295
Total Volume	41	124	36	201	79	318	29	426	33	298	14	345	25	315	57	397	1369
% App. Total	20.4	61.7	17.9		18.5	74.6	6.8		9.6	86.4	4.1		6.3	79.3	14.4		
PHF	.854	.939	.750	.948	.658	.864	.659	.852	.589	.909	.583	.854	.568	.885	.838	.894	.908

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111th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 2

Groups Printed- SU

	Michigan Ave From North				111th St From East				Michigan Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	4	0	4	2	2	1	5	1	5	0	6	0	4	0	4	19
07:15 AM	0	2	1	3	0	2	1	3	1	8	0	9	0	4	0	4	19
07:30 AM	0	5	1	6	0	5	1	6	5	4	0	9	0	2	1	3	24
07:45 AM	0	5	0	5	0	7	1	8	1	9	0	10	0	2	0	2	25
Total	0	16	2	18	2	16	4	22	8	26	0	34	0	12	1	13	87
08:00 AM	2	4	0	6	0	4	2	6	2	7	0	9	0	8	0	8	29
08:15 AM	0	4	1	5	1	3	1	5	1	6	0	7	0	3	2	5	22
08:30 AM	2	3	0	5	0	5	1	6	2	5	1	8	1	5	0	6	25
08:45 AM	0	3	0	3	0	1	2	3	3	3	0	6	0	2	0	2	14
Total	4	14	1	19	1	13	6	20	8	21	1	30	1	18	2	21	90
Grand Total	4	30	3	37	3	29	10	42	16	47	1	64	1	30	3	34	177
Apprch %	10.8	81.1	8.1		7.1	69	23.8		25	73.4	1.6		2.9	88.2	8.8		
Total %	2.3	16.9	1.7	20.9	1.7	16.4	5.6	23.7	9	26.6	0.6	36.2	0.6	16.9	1.7	19.2	

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111th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 3

Groups Printed- MU

	Michigan Ave From North				111th St From East				Michigan Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	1	0	1	0	1	0	1	0	0	1	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	0	0	1	0	1	0	1	0	1	0	0	2	2	4
Apprch %	0	0	0		0	100	0		0	100	0		0	0	100		
Total %	0	0	0	0	0	25	0	25	0	25	0	25	0	0	50	50	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/10/2012
Page No : 4

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			111th St Crossing East Leg			Michigan Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	18	18	0	9	9	2	1	3	0	7	7	37
07:15 AM	0	22	22	1	7	8	0	8	8	0	9	9	47
07:30 AM	0	5	5	0	7	7	0	12	12	0	21	21	45
07:45 AM	0	14	14	0	4	4	0	10	10	0	8	8	36
Total	0	59	59	1	27	28	2	31	33	0	45	45	165
08:00 AM	0	23	23	0	13	13	0	11	11	0	16	16	63
08:15 AM	0	11	11	0	4	4	0	1	1	0	22	22	38
08:30 AM	0	18	18	1	7	8	0	2	2	0	17	17	45
08:45 AM	0	9	9	0	3	3	0	0	0	0	21	21	33
Total	0	61	61	1	27	28	0	14	14	0	76	76	179
Grand Total	0	120	120	2	54	56	2	45	47	0	121	121	344
Apprch %	0	100		3.6	96.4		4.3	95.7		0	100		
Total %	0	34.9	34.9	0.6	15.7	16.3	0.6	13.1	13.7	0	35.2	35.2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 5

Groups Printed- PC - SU - MU

	Michigan Ave From North				111th St From East				Michigan Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	25	60	16	101	9	78	13	100	12	48	9	69	16	70	20	106	376
04:15 PM	20	63	18	101	9	66	8	83	9	74	5	88	25	75	19	119	391
04:30 PM	24	69	13	106	13	56	15	84	19	61	7	87	27	84	17	128	405
04:45 PM	21	59	9	89	6	79	20	105	8	54	7	69	13	66	15	94	357
Total	90	251	56	397	37	279	56	372	48	237	28	313	81	295	71	447	1529
05:00 PM	16	65	15	96	9	70	16	95	10	58	9	77	19	59	11	89	357
05:15 PM	12	85	10	107	9	83	18	110	20	48	10	78	20	74	6	100	395
05:30 PM	20	68	9	97	11	86	17	114	10	48	17	75	15	76	26	117	403
05:45 PM	16	61	12	89	11	77	18	106	12	53	4	69	14	78	12	104	368
Total	64	279	46	389	40	316	69	425	52	207	40	299	68	287	55	410	1523
Grand Total	154	530	102	786	77	595	125	797	100	444	68	612	149	582	126	857	3052
Apprch %	19.6	67.4	13		9.7	74.7	15.7		16.3	72.5	11.1		17.4	67.9	14.7		
Total %	5	17.4	3.3	25.8	2.5	19.5	4.1	26.1	3.3	14.5	2.2	20.1	4.9	19.1	4.1	28.1	
PC	150	503	101	754	77	575	114	766	90	421	67	578	148	561	124	833	2931
% PC	97.4	94.9	99	95.9	100	96.6	91.2	96.1	90	94.8	98.5	94.4	99.3	96.4	98.4	97.2	96
SU	4	27	1	32	0	20	11	31	9	23	1	33	1	21	2	24	120
% SU	2.6	5.1	1	4.1	0	3.4	8.8	3.9	9	5.2	1.5	5.4	0.7	3.6	1.6	2.8	3.9
MU	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
% MU	0	0	0	0	0	0	0	0	1	0	0	0.2	0	0	0	0	0

	Michigan Ave From North				111th St From East				Michigan Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**25**	60	16	101	9	78	13	100	12	48	**9**	69	16	70	**20**	106	376
04:15 PM	20	63	**18**	101	9	66	8	83	9	**74**	5	**88**	25	75	19	119	391
04:30 PM	24	**69**	13	**106**	**13**	56	15	84	**19**	61	7	87	**27**	**84**	17	**128**	**405**
04:45 PM	21	59	9	89	6	**79**	**20**	**105**	8	54	7	69	13	66	15	94	357
Total Volume	90	251	56	397	37	279	56	372	48	237	28	313	81	295	71	447	1529
% App. Total	22.7	63.2	14.1		9.9	75	15.1		15.3	75.7	8.9		18.1	66	15.9		
PHF	.900	.909	.778	.936	.712	.883	.700	.886	.632	.801	.778	.889	.750	.878	.888	.873	.944

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 6

Groups Printed- SU

	Michigan Ave From North				111th St From East				Michigan Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	4	0	4	0	4	2	6	1	1	0	2	0	2	1	3	15
04:15 PM	0	3	0	3	0	4	1	5	0	5	1	6	0	5	1	6	20
04:30 PM	0	1	0	1	0	2	1	3	2	2	0	4	1	3	0	4	12
04:45 PM	1	5	0	6	0	4	2	6	1	3	0	4	0	3	0	3	19
Total	1	13	0	14	0	14	6	20	4	11	1	16	1	13	2	16	66
05:00 PM	1	4	0	5	0	1	2	3	1	3	0	4	0	2	0	2	14
05:15 PM	2	3	1	6	0	1	1	2	1	5	0	6	0	1	0	1	15
05:30 PM	0	4	0	4	0	3	1	4	2	2	0	4	0	2	0	2	14
05:45 PM	0	3	0	3	0	1	1	2	1	2	0	3	0	3	0	3	11
Total	3	14	1	18	0	6	5	11	5	12	0	17	0	8	0	8	54
Grand Total	4	27	1	32	0	20	11	31	9	23	1	33	1	21	2	24	120
Apprch %	12.5	84.4	3.1		0	64.5	35.5		27.3	69.7	3		4.2	87.5	8.3		
Total %	3.3	22.5	0.8	26.7	0	16.7	9.2	25.8	7.5	19.2	0.8	27.5	0.8	17.5	1.7	20	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 7

Groups Printed- MU

	Michigan Ave From North				111th St From East				Michigan Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Apprch %	0	0	0		0	0	0		100	0	0		0	0	0		
Total %	0	0	0	0	0	0	0	0	100	0	0	100	0	0	0	0	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/10/2012
Page No : 8

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			111th St Crossing East Leg			Michigan Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	8	8	0	19	19	0	11	11	0	31	31	69
04:15 PM	0	15	15	0	7	7	0	5	5	0	40	40	67
04:30 PM	0	23	23	1	11	12	0	1	1	0	30	30	66
04:45 PM	0	7	7	0	5	5	0	0	0	0	37	37	49
Total	0	53	53	1	42	43	0	17	17	0	138	138	251
05:00 PM	0	14	14	0	12	12	0	0	0	0	32	32	58
05:15 PM	0	3	3	1	15	16	0	2	2	0	30	30	51
05:30 PM	0	13	13	0	13	13	0	5	5	0	25	25	56
05:45 PM	0	8	8	0	13	13	0	10	10	0	38	38	69
Total	0	38	38	1	53	54	0	17	17	0	125	125	234
Grand Total	0	91	91	2	95	97	0	34	34	0	263	263	485
Apprch %	0	100		2.1	97.9		0	100		0	100		
Total %	0	18.8	18.8	0.4	19.6	20	0	7	7	0	54.2	54.2	

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111th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 1

Groups Printed- PC - SU - MU

	State St From North				111th St From East				State St From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	3	11	7	21	3	62	2	67	14	49	4	67	5	31	7	43	198
07:15 AM	3	14	8	25	9	49	7	65	14	52	9	75	5	40	4	49	214
07:30 AM	3	11	6	20	18	59	5	82	24	55	4	83	6	49	15	70	255
07:45 AM	7	14	12	33	10	77	4	91	15	78	10	103	5	64	13	82	309
Total	16	50	33	99	40	247	18	305	67	234	27	328	21	184	39	244	976
08:00 AM	6	24	7	37	14	78	10	102	19	62	11	92	4	49	6	59	290
08:15 AM	0	25	12	37	19	66	9	94	11	51	11	73	1	42	5	48	252
08:30 AM	4	31	8	43	22	61	7	90	24	60	7	91	6	55	11	72	296
08:45 AM	2	29	8	39	9	67	5	81	20	59	12	91	6	70	8	84	295
Total	12	109	35	156	64	272	31	367	74	232	41	347	17	216	30	263	1133
Grand Total	28	159	68	255	104	519	49	672	141	466	68	675	38	400	69	507	2109
Apprch %	11	62.4	26.7		15.5	77.2	7.3		20.9	69	10.1		7.5	78.9	13.6		
Total %	1.3	7.5	3.2	12.1	4.9	24.6	2.3	31.9	6.7	22.1	3.2	32	1.8	19	3.3	24	
PC	25	153	67	245	101	489	47	637	135	454	65	654	34	369	63	466	2002
% PC	89.3	96.2	98.5	96.1	97.1	94.2	95.9	94.8	95.7	97.4	95.6	96.9	89.5	92.2	91.3	91.9	94.9
SU	3	6	1	10	3	26	2	31	6	12	3	21	4	29	5	38	100
% SU	10.7	3.8	1.5	3.9	2.9	5	4.1	4.6	4.3	2.6	4.4	3.1	10.5	7.2	7.2	7.5	4.7
MU	0	0	0	0	0	4	0	4	0	0	0	0	0	2	1	3	7
% MU	0	0	0	0	0	0.8	0	0.6	0	0	0	0	0	0.5	1.4	0.6	0.3

	State St From North				111th St From East				State St From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**7**	14	**12**	33	10	77	4	91	15	**78**	10	**103**	5	**64**	**13**	**82**	**309**
08:00 AM	6	24	7	37	14	**78**	**10**	**102**	19	62	**11**	92	4	49	6	59	290
08:15 AM	0	25	12	37	19	66	9	94	11	51	11	73	1	42	5	48	252
08:30 AM	4	**31**	8	**43**	**22**	61	7	90	**24**	60	7	91	**6**	55	11	72	296
Total Volume	17	94	39	150	65	282	30	377	69	251	39	359	16	210	35	261	1147
% App. Total	11.3	62.7	26		17.2	74.8	8		19.2	69.9	10.9		6.1	80.5	13.4		
PHF	.607	.758	.813	.872	.739	.904	.750	.924	.719	.804	.886	.871	.667	.820	.673	.796	.928

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 2

Groups Printed- SU

	State St From North				111th St From East				State St From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	4	0	4	1	3	0	4	1	4	2	7	15
07:15 AM	1	1	1	3	1	3	0	4	0	1	1	2	1	3	1	5	14
07:30 AM	0	0	0	0	1	6	0	7	1	1	0	2	1	3	1	5	14
07:45 AM	0	0	0	0	0	3	0	3	0	2	0	2	1	2	0	3	8
Total	1	1	1	3	2	16	0	18	2	7	1	10	4	12	4	20	51
08:00 AM	2	2	0	4	0	4	0	4	0	0	1	1	0	4	1	5	14
08:15 AM	0	1	0	1	0	4	0	4	1	0	1	2	0	4	0	4	11
08:30 AM	0	2	0	2	1	1	1	3	3	3	0	6	0	3	0	3	14
08:45 AM	0	0	0	0	0	1	1	2	0	2	0	2	0	6	0	6	10
Total	2	5	0	7	1	10	2	13	4	5	2	11	0	17	1	18	49
Grand Total	3	6	1	10	3	26	2	31	6	12	3	21	4	29	5	38	100
Apprch %	30	60	10		9.7	83.9	6.5		28.6	57.1	14.3		10.5	76.3	13.2		
Total %	3	6	1	10	3	26	2	31	6	12	3	21	4	29	5	38	

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 3

Groups Printed- MU

	State St From North				111th St From East				State St From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	0	1	1	4
Grand Total	0	0	0	0	0	4	0	4	0	0	0	0	0	2	1	3	7
Apprch %	0	0	0		0	100	0		0	0	0		0	66.7	33.3		
Total %	0	0	0	0	0	57.1	0	57.1	0	0	0	0	0	28.6	14.3	42.9	

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111th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/6/2012
Page No : 4

Groups Printed- Peds & Bikes

	State St Crossing North Leg			111th St Crossing East Leg			State St Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	4	4	0	3	3	1	1	2	0	2	2	11
07:15 AM	1	5	6	0	3	3	0	5	5	0	3	3	17
07:30 AM	0	9	9	0	2	2	0	4	4	0	2	2	17
07:45 AM	0	6	6	1	0	1	0	2	2	0	2	2	11
Total	1	24	25	1	8	9	1	12	13	0	9	9	56
08:00 AM	0	6	6	0	1	1	0	5	5	0	5	5	17
08:15 AM	1	4	5	0	1	1	0	3	3	0	3	3	12
08:30 AM	0	9	9	1	4	5	0	6	6	0	3	3	23
08:45 AM	0	9	9	0	4	4	0	8	8	0	4	4	25
Total	1	28	29	1	10	11	0	22	22	0	15	15	77
Grand Total	2	52	54	2	18	20	1	34	35	0	24	24	133
Apprch %	3.7	96.3		10	90		2.9	97.1		0	100		
Total %	1.5	39.1	40.6	1.5	13.5	15	0.8	25.6	26.3	0	18	18	

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111th St and State St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 5

Groups Printed- PC - SU - MU

	State St From North				111th St From East				State St From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	14	34	18	66	16	61	21	98	34	52	10	96	9	90	15	114	374
04:15 PM	8	42	23	73	15	65	18	98	20	56	13	89	7	77	14	98	358
04:30 PM	6	47	17	70	11	74	19	104	19	54	9	82	15	52	23	90	346
04:45 PM	12	47	19	78	15	75	21	111	25	34	11	70	7	60	13	80	339
Total	40	170	77	287	57	275	79	411	98	196	43	337	38	279	65	382	1417
05:00 PM	11	53	15	79	18	84	20	122	21	62	13	96	12	62	11	85	382
05:15 PM	11	44	11	66	14	75	17	106	25	54	10	89	7	61	11	79	340
05:30 PM	13	39	20	72	23	107	16	146	17	49	9	75	11	75	10	96	389
05:45 PM	13	39	18	70	15	96	13	124	32	46	10	88	9	57	9	75	357
Total	48	175	64	287	70	362	66	498	95	211	42	348	39	255	41	335	1468
Grand Total	88	345	141	574	127	637	145	909	193	407	85	685	77	534	106	717	2885
Apprch %	15.3	60.1	24.6		14	70.1	16		28.2	59.4	12.4		10.7	74.5	14.8		
Total %	3.1	12	4.9	19.9	4.4	22.1	5	31.5	6.7	14.1	2.9	23.7	2.7	18.5	3.7	24.9	
PC	87	344	141	572	127	622	145	894	188	403	85	676	76	519	102	697	2839
% PC	98.9	99.7	100	99.7	100	97.6	100	98.3	97.4	99	100	98.7	98.7	97.2	96.2	97.2	98.4
SU	1	1	0	2	0	15	0	15	5	4	0	9	1	15	3	19	45
% SU	1.1	0.3	0	0.3	0	2.4	0	1.7	2.6	1	0	1.3	1.3	2.8	2.8	2.6	1.6
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0.1	0

	State St From North				111th St From East				State St From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	11	**53**	15	**79**	18	84	**20**	122	21	**62**	**13**	**96**	**12**	62	**11**	85	382
05:15 PM	11	44	11	66	14	75	17	106	25	54	10	89	7	61	11	79	340
05:30 PM	**13**	39	**20**	72	**23**	**107**	16	**146**	17	49	9	75	11	**75**	10	**96**	**389**
05:45 PM	13	39	18	70	15	96	13	124	**32**	46	10	88	9	57	9	75	357
Total Volume	48	175	64	287	70	362	66	498	95	211	42	348	39	255	41	335	1468
% App. Total	16.7	61	22.3		14.1	72.7	13.3		27.3	60.6	12.1		11.6	76.1	12.2		
PHF	.923	.825	.800	.908	.761	.846	.825	.853	.742	.851	.808	.906	.813	.850	.932	.872	.943

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111th St and State St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 6

Groups Printed- SU

	State St From North				111th St From East				State St From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	3	0	3	1	0	0	1	1	2	0	3	8
04:15 PM	0	0	0	0	0	3	0	3	1	0	0	1	0	2	1	3	7
04:30 PM	1	0	0	1	0	3	0	3	1	0	0	1	0	2	1	3	8
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	1	1	0	2	0	10	0	10	3	0	0	3	1	7	2	10	25
05:00 PM	0	0	0	0	0	1	0	1	1	3	0	4	0	2	0	2	7
05:15 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	4	0	4	7
05:30 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	1	1	2	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	5	0	5	2	4	0	6	0	8	1	9	20
Grand Total	1	1	0	2	0	15	0	15	5	4	0	9	1	15	3	19	45
Apprch %	50	50	0		0	100	0		55.6	44.4	0		5.3	78.9	15.8		
Total %	2.2	2.2	0	4.4	0	33.3	0	33.3	11.1	8.9	0	20	2.2	33.3	6.7	42.2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 7

Groups Printed- MU

	State St From North				111th St From East				State St From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Apprch %	0	0	0		0	0	0		0	0	0		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/6/2012
Page No : 8

Groups Printed- Peds & Bikes

	State St Crossing North Leg			111th St Crossing East Leg			State St Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	14	14	0	1	1	4	6	10	1	7	8	33
04:15 PM	0	16	16	0	4	4	1	12	13	0	4	4	37
04:30 PM	2	12	14	0	11	11	0	11	11	1	2	3	39
04:45 PM	0	6	6	0	2	2	0	13	13	3	6	9	30
Total	2	48	50	0	18	18	5	42	47	5	19	24	139
05:00 PM	0	8	8	1	5	6	0	6	6	1	5	6	26
05:15 PM	0	5	5	2	7	9	0	12	12	0	3	3	29
05:30 PM	0	3	3	0	5	5	0	6	6	0	6	6	20
05:45 PM	0	4	4	0	3	3	0	7	7	0	2	2	16
Total	0	20	20	3	20	23	0	31	31	1	16	17	91
Grand Total	2	68	70	3	38	41	5	73	78	6	35	41	230
Apprch %	2.9	97.1		7.3	92.7		6.4	93.6		14.6	85.4		
Total %	0.9	29.6	30.4	1.3	16.5	17.8	2.2	31.7	33.9	2.6	15.2	17.8	

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111th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 1

Groups Printed- PC - SU - MU

	Wentworth Ave From North				111th St From East				Wentworth Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	6	15	3	24	8	31	5	44	10	21	3	34	1	45	4	50	152
07:15 AM	4	16	8	28	2	48	5	55	3	29	6	38	1	55	6	62	183
07:30 AM	4	23	9	36	10	49	1	60	8	33	3	44	7	90	4	101	241
07:45 AM	6	19	11	36	10	68	5	83	10	33	4	47	6	56	12	74	240
Total	20	73	31	124	30	196	16	242	31	116	16	163	15	246	26	287	816
08:00 AM	3	29	11	43	10	68	2	80	4	29	3	36	6	81	5	92	251
08:15 AM	5	29	17	51	8	77	8	93	6	45	3	54	5	79	14	98	296
08:30 AM	12	23	16	51	7	59	2	68	5	25	7	37	10	86	6	102	258
08:45 AM	4	26	12	42	10	97	5	112	11	25	9	45	5	69	10	84	283
Total	24	107	56	187	35	301	17	353	26	124	22	172	26	315	35	376	1088
Grand Total	44	180	87	311	65	497	33	595	57	240	38	335	41	561	61	663	1904
Apprch %	14.1	57.9	28		10.9	83.5	5.5		17	71.6	11.3		6.2	84.6	9.2		
Total %	2.3	9.5	4.6	16.3	3.4	26.1	1.7	31.2	3	12.6	2	17.6	2.2	29.5	3.2	34.8	
PC	42	175	83	300	60	458	30	548	56	227	37	320	40	524	56	620	1788
% PC	95.5	97.2	95.4	96.5	92.3	92.2	90.9	92.1	98.2	94.6	97.4	95.5	97.6	93.4	91.8	93.5	93.9
SU	2	5	3	10	5	38	3	46	1	12	1	14	1	35	4	40	110
% SU	4.5	2.8	3.4	3.2	7.7	7.6	9.1	7.7	1.8	5	2.6	4.2	2.4	6.2	6.6	6	5.8
MU	0	0	1	1	0	1	0	1	0	1	0	1	0	2	1	3	6
% MU	0	0	1.1	0.3	0	0.2	0	0.2	0	0.4	0	0.3	0	0.4	1.6	0.5	0.3

	Wentworth Ave From North				111th St From East				Wentworth Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	**29**	11	43	**10**	68	2	80	4	29	3	36	6	81	5	92	251
08:15 AM	5	29	**17**	**51**	8	77	**8**	93	6	**45**	3	**54**	5	79	**14**	98	**296**
08:30 AM	**12**	23	16	51	7	59	2	68	5	25	7	37	**10**	**86**	6	**102**	258
08:45 AM	4	26	12	42	10	**97**	5	**112**	**11**	25	**9**	45	5	69	10	84	283
Total Volume	24	107	56	187	35	301	17	353	26	124	22	172	26	315	35	376	1088
% App. Total	12.8	57.2	29.9		9.9	85.3	4.8		15.1	72.1	12.8		6.9	83.8	9.3		
PHF	.500	.922	.824	.917	.875	.776	.531	.788	.591	.689	.611	.796	.650	.916	.625	.922	.919

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111th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 2

Groups Printed- SU

	Wentworth Ave From North				111th St From East				Wentworth Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	1	4	0	1	0	1	0	3	1	4	9
07:15 AM	0	0	1	1	0	3	0	3	0	5	0	5	0	5	1	6	15
07:30 AM	0	1	0	1	0	4	0	4	1	0	0	1	0	5	0	5	11
07:45 AM	0	1	1	2	1	6	2	9	0	1	0	1	1	4	0	5	17
Total	0	2	2	4	1	16	3	20	1	7	0	8	1	17	2	20	52
08:00 AM	1	2	0	3	3	6	0	9	0	1	0	1	0	5	0	5	18
08:15 AM	0	0	0	0	1	4	0	5	0	2	0	2	0	4	0	4	11
08:30 AM	1	1	1	3	0	4	0	4	0	1	0	1	0	5	0	5	13
08:45 AM	0	0	0	0	0	8	0	8	0	1	1	2	0	4	2	6	16
Total	2	3	1	6	4	22	0	26	0	5	1	6	0	18	2	20	58
Grand Total	2	5	3	10	5	38	3	46	1	12	1	14	1	35	4	40	110
Apprch %	20	50	30		10.9	82.6	6.5		7.1	85.7	7.1		2.5	87.5	10		
Total %	1.8	4.5	2.7	9.1	4.5	34.5	2.7	41.8	0.9	10.9	0.9	12.7	0.9	31.8	3.6	36.4	

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111th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 3

Groups Printed- MU

	Wentworth Ave From North				111th St From East				Wentworth Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
07:45 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Total	0	0	1	1	0	1	0	1	0	1	0	1	0	2	0	2	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	1	1	0	1	0	1	0	1	0	1	0	2	1	3	6
Apprch %	0	0	100		0	100	0		0	100	0		0	66.7	33.3		
Total %	0	0	16.7	16.7	0	16.7	0	16.7	0	16.7	0	16.7	0	33.3	16.7	50	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/16/2012
Page No : 4

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			111th St Crossing East Leg			Wentworth Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	2	2	0	2	2	0	4	4	0	4	4	12
07:15 AM	0	3	3	0	2	2	0	3	3	0	5	5	13
07:30 AM	0	7	7	0	0	0	0	1	1	0	8	8	16
07:45 AM	0	6	6	0	3	3	0	6	6	0	1	1	16
Total	0	18	18	0	7	7	0	14	14	0	18	18	57
08:00 AM	1	11	12	0	4	4	0	2	2	0	14	14	32
08:15 AM	0	5	5	0	7	7	0	7	7	1	5	6	25
08:30 AM	0	5	5	0	2	2	0	7	7	0	1	1	15
08:45 AM	0	1	1	0	3	3	0	1	1	0	4	4	9
Total	1	22	23	0	16	16	0	17	17	1	24	25	81
Grand Total	1	40	41	0	23	23	0	31	31	1	42	43	138
Apprch %	2.4	97.6		0	100		0	100		2.3	97.7		
Total %	0.7	29	29.7	0	16.7	16.7	0	22.5	22.5	0.7	30.4	31.2	

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111th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 5

Groups Printed- PC - SU - MU

	Wentworth Ave From North				111th St From East				Wentworth Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	11	42	9	62	14	70	12	96	8	27	4	39	3	78	11	92	289
04:15 PM	4	40	16	60	7	77	12	96	7	19	7	33	6	73	7	86	275
04:30 PM	6	36	10	52	3	63	10	76	7	26	9	42	10	69	8	87	257
04:45 PM	5	48	14	67	12	68	11	91	8	19	4	31	11	56	6	73	262
Total	26	166	49	241	36	278	45	359	30	91	24	145	30	276	32	338	1083
05:00 PM	12	31	12	55	13	80	14	107	7	20	3	30	6	55	1	62	254
05:15 PM	10	35	14	59	9	73	8	90	10	23	4	37	10	78	10	98	284
05:30 PM	10	34	17	61	13	65	5	83	2	26	7	35	4	77	7	88	267
05:45 PM	8	42	7	57	6	67	5	78	11	22	8	41	7	79	1	87	263
Total	40	142	50	232	41	285	32	358	30	91	22	143	27	289	19	335	1068
Grand Total	66	308	99	473	77	563	77	717	60	182	46	288	57	565	51	673	2151
Apprch %	14	65.1	20.9		10.7	78.5	10.7		20.8	63.2	16		8.5	84	7.6		
Total %	3.1	14.3	4.6	22	3.6	26.2	3.6	33.3	2.8	8.5	2.1	13.4	2.6	26.3	2.4	31.3	
PC	65	306	97	468	75	543	76	694	58	181	46	285	56	547	50	653	2100
% PC	98.5	99.4	98	98.9	97.4	96.4	98.7	96.8	96.7	99.5	100	99	98.2	96.8	98	97	97.6
SU	1	2	2	5	2	20	1	23	2	1	0	3	1	17	0	18	49
% SU	1.5	0.6	2	1.1	2.6	3.6	1.3	3.2	3.3	0.5	0	1	1.8	3	0	2.7	2.3
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2	0.3	0.1

	Wentworth Ave From North				111th St From East				Wentworth Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**11**	42	9	62	**14**	70	**12**	**96**	**8**	**27**	4	39	3	**78**	**11**	**92**	**289**
04:15 PM	4	40	**16**	60	7	**77**	12	96	7	19	7	33	6	73	7	86	275
04:30 PM	6	36	10	52	3	63	10	76	7	26	**9**	**42**	10	69	8	87	257
04:45 PM	5	**48**	14	**67**	12	68	11	91	8	19	4	31	**11**	56	6	73	262
Total Volume	26	166	49	241	36	278	45	359	30	91	24	145	30	276	32	338	1083
% App. Total	10.8	68.9	20.3		10	77.4	12.5		20.7	62.8	16.6		8.9	81.7	9.5		
PHF	.591	.865	.766	.899	.643	.903	.938	.935	.938	.843	.667	.863	.682	.885	.727	.918	.937

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Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 6

Groups Printed- SU

	Wentworth Ave From North				111th St From East				Wentworth Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	1	0	0	1	1	3	0	4	0	0	0	0	0	4	0	4	9
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:30 PM	0	1	0	1	1	5	0	6	0	0	0	0	0	2	0	2	9
04:45 PM	0	1	0	1	0	3	0	3	0	1	0	1	1	2	0	3	8
Total	1	2	0	3	2	12	0	14	0	1	0	1	1	10	0	11	29
05:00 PM	0	0	1	1	0	4	1	5	0	0	0	0	0	3	0	3	9
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
05:30 PM	0	0	1	1	0	1	0	1	2	0	0	2	0	1	0	1	5
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	2	2	0	8	1	9	2	0	0	2	0	7	0	7	20
Grand Total	1	2	2	5	2	20	1	23	2	1	0	3	1	17	0	18	49
Apprch %	20	40	40		8.7	87	4.3		66.7	33.3	0		5.6	94.4	0		
Total %	2	4.1	4.1	10.2	4.1	40.8	2	46.9	4.1	2	0	6.1	2	34.7	0	36.7	

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Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 7

Groups Printed- MU

	Wentworth Ave From North				111th St From East				Wentworth Ave From South				111th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Apprch %	0	0	0		0	0	0		0	0	0		0	50	50		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	100	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/16/2012
Page No : 8

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			111th St Crossing East Leg			Wentworth Ave Crossing South Leg			111th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	1	2	3	0	2	2	0	1	1	6
04:15 PM	0	2	2	0	4	4	0	5	5	0	21	21	32
04:30 PM	0	3	3	0	8	8	0	6	6	0	6	6	23
04:45 PM	0	14	14	0	3	3	0	7	7	2	5	7	31
Total	0	19	19	1	17	18	0	20	20	2	33	35	92
05:00 PM	2	10	12	2	8	10	1	6	7	1	18	19	48
05:15 PM	0	6	6	0	3	3	0	2	2	0	5	5	16
05:30 PM	0	8	8	0	10	10	0	8	8	0	13	13	39
05:45 PM	1	8	9	0	3	3	1	9	10	3	23	26	48
Total	3	32	35	2	24	26	2	25	27	4	59	63	151
Grand Total	3	51	54	3	41	44	2	45	47	6	92	98	243
Apprch %	5.6	94.4		6.8	93.2		4.3	95.7		6.1	93.9		
Total %	1.2	21	22.2	1.2	16.9	18.1	0.8	18.5	19.3	2.5	37.9	40.3	

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112th Pl and Hamlet St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 1

Groups Printed- PC - SU - MU

	Hamlet St From North				112th Pl From East				Hamlet St From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	2	12	0	14	4	94	81	179	0	10	102	112	305
07:15 AM	0	0	0	0	1	18	0	19	8	135	112	255	0	8	111	119	393
07:30 AM	0	0	0	0	1	15	0	16	13	128	148	289	0	8	91	99	404
07:45 AM	0	0	0	0	0	16	0	16	11	155	131	297	0	19	81	100	413
Total	0	0	0	0	4	61	0	65	36	512	472	1020	0	45	385	430	1515
08:00 AM	0	0	0	0	1	12	0	13	13	156	109	278	0	13	101	114	405
08:15 AM	0	0	0	0	1	13	0	14	21	158	143	322	0	13	75	88	424
08:30 AM	0	0	0	0	1	10	0	11	16	110	99	225	0	10	100	110	346
08:45 AM	0	0	0	0	0	26	0	26	12	95	115	222	0	11	92	103	351
Total	0	0	0	0	3	61	0	64	62	519	466	1047	0	47	368	415	1526
Grand Total	0	0	0	0	7	122	0	129	98	1031	938	2067	0	92	753	845	3041
Apprch %	0	0	0		5.4	94.6	0		4.7	49.9	45.4		0	10.9	89.1		
Total %	0	0	0	0	0.2	4	0	4.2	3.2	33.9	30.8	68	0	3	24.8	27.8	
PC	0	0	0	0	7	119	0	126	97	1010	921	2028	0	90	734	824	2978
% PC	0	0	0	0	100	97.5	0	97.7	99	98	98.2	98.1	0	97.8	97.5	97.5	97.9
SU	0	0	0	0	0	3	0	3	1	19	12	32	0	2	11	13	48
% SU	0	0	0	0	0	2.5	0	2.3	1	1.8	1.3	1.5	0	2.2	1.5	1.5	1.6
MU	0	0	0	0	0	0	0	0	0	2	5	7	0	0	8	8	15
% MU	0	0	0	0	0	0	0	0	0	0.2	0.5	0.3	0	0	1.1	0.9	0.5

	Hamlet St From North				112th Pl From East				Hamlet St From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	**1**	15	0	**16**	13	128	**148**	289	0	8	91	99	404
07:45 AM	0	0	0	0	0	**16**	0	16	11	155	131	297	0	**19**	81	100	413
08:00 AM	0	0	0	0	1	12	0	13	13	156	109	278	0	13	**101**	**114**	405
08:15 AM	0	0	0	0	1	13	0	14	**21**	**158**	143	**322**	0	13	75	88	**424**
Total Volume	0	0	0	0	3	56	0	59	58	597	531	1186	0	53	348	401	1646
% App. Total	0	0	0		5.1	94.9	0		4.9	50.3	44.8		0	13.2	86.8		
PHF	.000	.000	.000	.000	.750	.875	.000	.922	.690	.945	.897	.921	.000	.697	.861	.879	.971

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 2

Groups Printed- SU

	Hamlet St From North				112th Pl From East				Hamlet St From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	2	2	4	0	1	1	2	7
07:15 AM	0	0	0	0	0	1	0	1	0	2	5	7	0	0	2	2	10
07:30 AM	0	0	0	0	0	1	0	1	0	3	0	3	0	1	0	1	5
07:45 AM	0	0	0	0	0	0	0	0	1	4	2	7	0	0	1	1	8
Total	0	0	0	0	0	3	0	3	1	11	9	21	0	2	4	6	30
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	3	4
08:30 AM	0	0	0	0	0	0	0	0	0	4	2	6	0	0	2	2	8
08:45 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	1	1	4
Total	0	0	0	0	0	0	0	0	0	8	3	11	0	0	7	7	18
Grand Total	0	0	0	0	0	3	0	3	1	19	12	32	0	2	11	13	48
Apprch %	0	0	0		0	100	0		3.1	59.4	37.5		0	15.4	84.6		
Total %	0	0	0	0	0	6.2	0	6.2	2.1	39.6	25	66.7	0	4.2	22.9	27.1	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 3

Groups Printed- MU

	Hamlet St From North				112th Pl From East				Hamlet St From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	1	1	2	0	0	1	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	3
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	3
08:30 AM	0	0	0	0	0	0	0	0	0	1	2	3	0	0	3	3	6
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	4	5	0	0	7	7	12
Grand Total	0	0	0	0	0	0	0	0	0	2	5	7	0	0	8	8	15
Apprch %	0	0	0		0	0	0		0	28.6	71.4		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	13.3	33.3	46.7	0	0	53.3	53.3	

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Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/7/2012
Page No : 4

Groups Printed- Peds & Bikes

	Hamlet St Crossing North Leg			112th Pl Crossing East Leg			Hamlet St Crossing South Leg			112th Pl Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	3	3	0	0	0	0	0	0	0	0	0	3
07:15 AM	0	12	12	0	0	0	0	0	0	0	0	0	12
07:30 AM	0	6	6	1	2	3	0	2	2	0	0	0	11
07:45 AM	1	8	9	0	0	0	0	0	0	0	0	0	9
Total	1	29	30	1	2	3	0	2	2	0	0	0	35
08:00 AM	0	6	6	0	0	0	0	0	0	0	0	0	6
08:15 AM	2	10	12	1	2	3	0	0	0	0	0	0	15
08:30 AM	0	4	4	0	1	1	0	2	2	0	0	0	7
08:45 AM	0	12	12	0	0	0	0	0	0	0	0	0	12
Total	2	32	34	1	3	4	0	2	2	0	0	0	40
Grand Total	3	61	64	2	5	7	0	4	4	0	0	0	75
Apprch %	4.7	95.3		28.6	71.4		0	100		0	0		
Total %	4	81.3	85.3	2.7	6.7	9.3	0	5.3	5.3	0	0	0	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 5

Groups Printed- PC - SU - MU

	Hamlet St From North				112th Pl From East				Hamlet St From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	17	0	17	10	93	90	193	0	14	80	94	304
04:15 PM	0	0	0	0	0	15	0	15	9	92	83	184	0	24	86	110	309
04:30 PM	0	0	0	0	0	15	0	15	12	84	115	211	0	26	76	102	328
04:45 PM	0	0	0	0	1	18	0	19	18	88	102	208	0	25	75	100	327
Total	0	0	0	0	1	65	0	66	49	357	390	796	0	89	317	406	1268
05:00 PM	0	0	0	0	2	36	0	38	10	76	79	165	0	24	80	104	307
05:15 PM	0	0	0	0	2	22	0	24	15	99	85	199	0	27	74	101	324
05:30 PM	0	0	0	0	0	22	0	22	11	97	104	212	0	16	86	102	336
05:45 PM	0	0	0	0	0	38	0	38	9	97	100	206	0	15	87	102	346
Total	0	0	0	0	4	118	0	122	45	369	368	782	0	82	327	409	1313
Grand Total	0	0	0	0	5	183	0	188	94	726	758	1578	0	171	644	815	2581
Apprch %	0	0	0		2.7	97.3	0		6	46	48		0	21	79		
Total %	0	0	0	0	0.2	7.1	0	7.3	3.6	28.1	29.4	61.1	0	6.6	25	31.6	
PC	0	0	0	0	5	181	0	186	93	719	750	1562	0	168	634	802	2550
% PC	0	0	0	0	100	98.9	0	98.9	98.9	99	98.9	99	0	98.2	98.4	98.4	98.8
SU	0	0	0	0	0	2	0	2	1	4	5	10	0	3	9	12	24
% SU	0	0	0	0	0	1.1	0	1.1	1.1	0.6	0.7	0.6	0	1.8	1.4	1.5	0.9
MU	0	0	0	0	0	0	0	0	0	3	3	6	0	0	1	1	7
% MU	0	0	0	0	0	0	0	0	0	0.4	0.4	0.4	0	0	0.2	0.1	0.3

	Hamlet St From North				112th Pl From East				Hamlet St From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	**2**	36	0	**38**	10	76	79	165	0	24	80	**104**	307
05:15 PM	0	0	0	0	2	22	0	24	**15**	**99**	85	199	0	**27**	74	101	324
05:30 PM	0	0	0	0	0	22	0	22	11	97	**104**	**212**	0	16	86	102	336
05:45 PM	0	0	0	0	0	**38**	0	38	9	97	100	206	0	15	**87**	102	**346**
Total Volume	0	0	0	0	4	118	0	122	45	369	368	782	0	82	327	409	1313
% App. Total	0	0	0		3.3	96.7	0		5.8	47.2	47.1		0	20	80		
PHF	.000	.000	.000	.000	.500	.776	.000	.803	.750	.932	.885	.922	.000	.759	.940	.983	.949

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112th Pl and Hamlet St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 6

Groups Printed- SU

	Hamlet St From North				112th Pl From East				Hamlet St From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	1	1	4
04:15 PM	0	0	0	0	0	1	0	1	0	2	1	3	0	1	3	4	8
04:30 PM	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	2	0	2	1	4	2	7	0	2	4	6	15
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	3	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	3	3	0	1	5	6	9
Grand Total	0	0	0	0	0	2	0	2	1	4	5	10	0	3	9	12	24
Apprch %	0	0	0		0	100	0		10	40	50		0	25	75		
Total %	0	0	0	0	0	8.3	0	8.3	4.2	16.7	20.8	41.7	0	12.5	37.5	50	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/7/2012
Page No : 7

Groups Printed- MU

	Hamlet St From North				112th Pl From East				Hamlet St From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	1	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	1	2	0	0	1	1	3
Grand Total	0	0	0	0	0	0	0	0	0	3	3	6	0	0	1	1	7
Apprch %	0	0	0		0	0	0		0	50	50		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	42.9	42.9	85.7	0	0	14.3	14.3	

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Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/7/2012
Page No : 8

Groups Printed- Peds & Bikes

	Hamlet St Crossing North Leg			112th Pl Crossing East Leg			Hamlet St Crossing South Leg			112th Pl Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	2	2	1	0	1	1	0	1	0	0	0	4
04:15 PM	0	3	3	1	1	2	0	1	1	0	0	0	6
04:30 PM	0	2	2	0	1	1	0	0	0	0	0	0	3
04:45 PM	0	2	2	0	0	0	0	0	0	0	0	0	2
Total	0	9	9	2	2	4	1	1	2	0	0	0	15
05:00 PM	1	4	5	1	3	4	0	4	4	0	0	0	13
05:15 PM	0	5	5	0	4	4	0	1	1	0	0	0	10
05:30 PM	0	2	2	1	1	2	0	1	1	0	0	0	5
05:45 PM	0	2	2	0	0	0	0	0	0	0	0	0	2
Total	1	13	14	2	8	10	0	6	6	0	0	0	30
Grand Total	1	22	23	4	10	14	1	7	8	0	0	0	45
Apprch %	4.3	95.7		28.6	71.4		12.5	87.5		0	0		
Total %	2.2	48.9	51.1	8.9	22.2	31.1	2.2	15.6	17.8	0	0	0	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 1

Groups Printed- PC - SU - MU

	Marshfield Ave From North				112th Pl From East				Marshfield Ave From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	29	37	0	66	0	83	4	87	0	0	0	0	37	108	0	145	298
07:15 AM	48	35	1	84	0	99	5	104	0	0	0	0	63	108	0	171	359
07:30 AM	65	51	1	117	0	148	8	156	0	0	0	0	81	109	0	190	463
07:45 AM	47	54	0	101	0	136	4	140	0	0	0	0	82	135	0	217	458
Total	189	177	2	368	0	466	21	487	0	0	0	0	263	460	0	723	1578
08:00 AM	40	54	1	95	0	149	10	159	0	0	0	0	67	91	0	158	412
08:15 AM	41	56	2	99	0	153	12	165	0	0	0	0	97	107	0	204	468
08:30 AM	38	60	1	99	0	126	7	133	0	0	0	0	80	101	0	181	413
08:45 AM	37	66	3	106	0	152	14	166	0	0	0	0	74	94	0	168	440
Total	156	236	7	399	0	580	43	623	0	0	0	0	318	393	0	711	1733
Grand Total	345	413	9	767	0	1046	64	1110	0	0	0	0	581	853	0	1434	3311
Apprch %	45	53.8	1.2		0	94.2	5.8		0	0	0		40.5	59.5	0		
Total %	10.4	12.5	0.3	23.2	0	31.6	1.9	33.5	0	0	0	0	17.5	25.8	0	43.3	
PC	326	405	9	740	0	1023	62	1085	0	0	0	0	570	829	0	1399	3224
% PC	94.5	98.1	100	96.5	0	97.8	96.9	97.7	0	0	0	0	98.1	97.2	0	97.6	97.4
SU	14	5	0	19	0	21	2	23	0	0	0	0	9	16	0	25	67
% SU	4.1	1.2	0	2.5	0	2	3.1	2.1	0	0	0	0	1.5	1.9	0	1.7	2
MU	5	3	0	8	0	2	0	2	0	0	0	0	2	8	0	10	20
% MU	1.4	0.7	0	1	0	0.2	0	0.2	0	0	0	0	0.3	0.9	0	0.7	0.6

	Marshfield Ave From North				112th Pl From East				Marshfield Ave From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**65**	51	1	**117**	0	148	8	156	0	0	0	0	81	109	0	190	463
07:45 AM	47	54	0	101	0	136	4	140	0	0	0	0	82	**135**	0	**217**	458
08:00 AM	40	54	1	95	0	149	10	159	0	0	0	0	67	91	0	158	412
08:15 AM	41	**56**	**2**	99	0	**153**	**12**	**165**	0	0	0	0	**97**	107	0	204	**468**
Total Volume	193	215	4	412	0	586	34	620	0	0	0	0	327	442	0	769	1801
% App. Total	46.8	52.2	1		0	94.5	5.5		0	0	0		42.5	57.5	0		
PHF	.742	.960	.500	.880	.000	.958	.708	.939	.000	.000	.000	.000	.843	.819	.000	.886	.962

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 2

Groups Printed- SU

	Marshfield Ave From North				112th Pl From East				Marshfield Ave From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	1	0	3	0	2	0	2	0	0	0	0	0	4	0	4	9
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	1	1	0	2	7
07:30 AM	2	0	0	2	0	1	1	2	0	0	0	0	1	0	0	1	5
07:45 AM	4	0	0	4	0	0	0	0	0	0	0	0	3	3	0	6	10
Total	8	1	0	9	0	8	1	9	0	0	0	0	5	8	0	13	31
08:00 AM	1	1	0	2	0	3	0	3	0	0	0	0	0	0	0	0	5
08:15 AM	2	0	0	2	0	3	1	4	0	0	0	0	0	2	0	2	8
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	3	3	0	6	9
08:45 AM	3	3	0	6	0	4	0	4	0	0	0	0	1	3	0	4	14
Total	6	4	0	10	0	13	1	14	0	0	0	0	4	8	0	12	36
Grand Total	14	5	0	19	0	21	2	23	0	0	0	0	9	16	0	25	67
Apprch %	73.7	26.3	0		0	91.3	8.7		0	0	0		36	64	0		
Total %	20.9	7.5	0	28.4	0	31.3	3	34.3	0	0	0	0	13.4	23.9	0	37.3	

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 3

Groups Printed- MU

	Marshfield Ave From North				112th Pl From East				Marshfield Ave From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
07:15 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	3	1	0	4	0	0	0	0	0	0	0	0	2	4	0	6	10
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:15 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	1	1	0	2	0	1	0	1	0	0	0	0	0	1	0	1	4
Total	2	2	0	4	0	2	0	2	0	0	0	0	0	4	0	4	10
Grand Total	5	3	0	8	0	2	0	2	0	0	0	0	2	8	0	10	20
Apprch %	62.5	37.5	0		0	100	0		0	0	0		20	80	0		
Total %	25	15	0	40	0	10	0	10	0	0	0	0	10	40	0	50	

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/6/2012
Page No : 4

Groups Printed- Peds & Bikes

	Marshfield Ave Crossing North Leg			112th Pl Crossing East Leg			Marshfield Ave Crossing South Leg			112th Pl Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	4	0	4	0	0	0	0	0	0	5
07:15 AM	1	5	6	5	0	5	0	0	0	0	0	0	11
07:30 AM	1	12	13	7	0	7	0	1	1	0	0	0	21
07:45 AM	0	5	5	4	0	4	0	2	2	0	0	0	11
Total	2	23	25	20	0	20	0	3	3	0	0	0	48
08:00 AM	1	4	5	10	0	10	0	0	0	0	0	0	15
08:15 AM	2	1	3	11	0	11	0	0	0	0	0	0	14
08:30 AM	1	6	7	7	0	7	0	0	0	0	0	0	14
08:45 AM	3	10	13	14	0	14	0	0	0	0	0	0	27
Total	7	21	28	42	0	42	0	0	0	0	0	0	70
Grand Total	9	44	53	62	0	62	0	3	3	0	0	0	118
Apprch %	17	83		100	0		0	100		0	0		
Total %	7.6	37.3	44.9	52.5	0	52.5	0	2.5	2.5	0	0	0	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 5

Groups Printed- PC - SU - MU

	Marshfield Ave From North				112th Pl From East				Marshfield Ave From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	86	93	1	180	0	84	9	93	0	0	0	0	80	94	0	174	447
04:15 PM	71	113	1	185	0	99	11	110	0	0	0	0	97	99	0	196	491
04:30 PM	79	81	3	163	0	125	17	142	0	0	0	0	89	90	0	179	484
04:45 PM	85	105	2	192	0	96	7	103	0	0	0	0	90	113	0	203	498
Total	321	392	7	720	0	404	44	448	0	0	0	0	356	396	0	752	1920
05:00 PM	80	89	3	172	0	86	15	101	0	0	0	0	92	86	0	178	451
05:15 PM	54	99	0	153	0	112	20	132	0	0	0	0	101	104	0	205	490
05:30 PM	72	131	4	207	0	122	14	136	0	0	0	0	90	100	0	190	533
05:45 PM	63	113	2	178	0	80	12	92	0	0	0	0	86	92	0	178	448
Total	269	432	9	710	0	400	61	461	0	0	0	0	369	382	0	751	1922
Grand Total	590	824	16	1430	0	804	105	909	0	0	0	0	725	778	0	1503	3842
Apprch %	41.3	57.6	1.1		0	88.4	11.6		0	0	0		48.2	51.8	0		
Total %	15.4	21.4	0.4	37.2	0	20.9	2.7	23.7	0	0	0	0	18.9	20.2	0	39.1	
PC	584	822	16	1422	0	802	104	906	0	0	0	0	714	768	0	1482	3810
% PC	99	99.8	100	99.4	0	99.8	99	99.7	0	0	0	0	98.5	98.7	0	98.6	99.2
SU	6	2	0	8	0	1	1	2	0	0	0	0	8	10	0	18	28
% SU	1	0.2	0	0.6	0	0.1	1	0.2	0	0	0	0	1.1	1.3	0	1.2	0.7
MU	0	0	0	0	0	1	0	1	0	0	0	0	3	0	0	3	4
% MU	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0.4	0	0	0.2	0.1

	Marshfield Ave From North				112th Pl From East				Marshfield Ave From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**85**	105	2	192	0	96	7	103	0	0	0	0	90	**113**	0	203	498
05:00 PM	80	89	3	172	0	86	15	101	0	0	0	0	92	86	0	178	451
05:15 PM	54	99	0	153	0	112	**20**	132	0	0	0	0	**101**	104	0	**205**	490
05:30 PM	72	**131**	**4**	**207**	0	**122**	14	**136**	0	0	0	0	90	100	0	190	**533**
Total Volume	291	424	9	724	0	416	56	472	0	0	0	0	373	403	0	776	1972
% App. Total	40.2	58.6	1.2		0	88.1	11.9		0	0	0		48.1	51.9	0		
PHF	.856	.809	.563	.874	.000	.852	.700	.868	.000	.000	.000	.000	.923	.892	.000	.946	.925

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 6

Groups Printed- SU

	Marshfield Ave From North				112th Pl From East				Marshfield Ave From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	3	0	0	3	0	1	0	1	0	0	0	0	2	1	0	3	7
04:15 PM	2	1	0	3	0	0	1	1	0	0	0	0	0	2	0	2	6
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	5	1	0	6	0	1	1	2	0	0	0	0	2	6	0	8	16
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	5	5
05:15 PM	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	1	1	0	2	0	0	0	0	0	0	0	0	6	4	0	10	12
Grand Total	6	2	0	8	0	1	1	2	0	0	0	0	8	10	0	18	28
Apprch %	75	25	0		0	50	50		0	0	0		44.4	55.6	0		
Total %	21.4	7.1	0	28.6	0	3.6	3.6	7.1	0	0	0	0	28.6	35.7	0	64.3	

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112th Pl and Marshfield Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 7

Groups Printed- MU

	Marshfield Ave From North				112th Pl From East				Marshfield Ave From South				112th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	3	0	0	3	4
Apprch %	0	0	0		0	100	0		0	0	0		100	0	0		
Total %	0	0	0	0	0	25	0	25	0	0	0	0	75	0	0	75	

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112th Pl and Marshfield Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/6/2012
Page No : 8

Groups Printed- Peds & Bikes

	Marshfield Ave Crossing North Leg			112th Pl Crossing East Leg			Marshfield Ave Crossing South Leg			112th Pl Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	1	9	10	9	0	9	0	1	1	0	0	0	20
04:15 PM	1	3	4	10	0	10	0	0	0	0	0	0	14
04:30 PM	3	0	3	17	0	17	0	3	3	0	0	0	23
04:45 PM	2	5	7	7	0	7	0	1	1	0	1	1	16
Total	7	17	24	43	0	43	0	5	5	0	1	1	73
05:00 PM	3	3	6	15	0	15	0	2	2	0	0	0	23
05:15 PM	0	1	1	20	0	20	0	0	0	0	0	0	21
05:30 PM	4	2	6	14	0	14	0	5	5	0	0	0	25
05:45 PM	2	2	4	12	0	12	0	1	1	0	3	3	20
Total	9	8	17	61	0	61	0	8	8	0	3	3	89
Grand Total	16	25	41	104	0	104	0	13	13	0	4	4	162
Apprch %	39	61		100	0		0	100		0	100		
Total %	9.9	15.4	25.3	64.2	0	64.2	0	8	8	0	2.5	2.5	

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115th St and Bishop Ford Fwy
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 1

Groups Printed- PC - SU - MU

	Bishop Ford Fwy From North				115th St From East				Bishop Ford Fwy From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	48	0	0	48	0	101	9	110	0	0	0	0	39	22	0	61	219
07:15 AM	47	0	1	48	0	115	2	117	0	0	0	0	42	43	0	85	250
07:30 AM	48	0	2	50	0	117	9	126	0	0	0	0	55	44	0	99	275
07:45 AM	56	0	0	56	0	155	7	162	0	0	0	0	51	49	0	100	318
Total	199	0	3	202	0	488	27	515	0	0	0	0	187	158	0	345	1062
08:00 AM	48	0	0	48	0	112	4	116	0	0	0	0	37	49	0	86	250
08:15 AM	44	0	1	45	0	123	3	126	0	0	0	0	39	34	0	73	244
08:30 AM	52	0	0	52	0	115	6	121	0	0	0	0	54	38	0	92	265
08:45 AM	57	0	0	57	0	93	2	95	0	0	0	0	45	40	0	85	237
Total	201	0	1	202	0	443	15	458	0	0	0	0	175	161	0	336	996
Grand Total	400	0	4	404	0	931	42	973	0	0	0	0	362	319	0	681	2058
Apprch %	99	0	1		0	95.7	4.3		0	0	0		53.2	46.8	0		
Total %	19.4	0	0.2	19.6	0	45.2	2	47.3	0	0	0	0	17.6	15.5	0	33.1	
PC	388	0	4	392	0	893	14	907	0	0	0	0	336	307	0	643	1942
% PC	97	0	100	97	0	95.9	33.3	93.2	0	0	0	0	92.8	96.2	0	94.4	94.4
SU	10	0	0	10	0	9	5	14	0	0	0	0	6	6	0	12	36
% SU	2.5	0	0	2.5	0	1	11.9	1.4	0	0	0	0	1.7	1.9	0	1.8	1.7
MU	2	0	0	2	0	29	23	52	0	0	0	0	20	6	0	26	80
% MU	0.5	0	0	0.5	0	3.1	54.8	5.3	0	0	0	0	5.5	1.9	0	3.8	3.9

	Bishop Ford Fwy From North				115th St From East				Bishop Ford Fwy From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	47	0	1	48	0	115	2	117	0	0	0	0	42	43	0	85	250
07:30 AM	48	0	**2**	50	0	117	**9**	126	0	0	0	0	**55**	44	0	99	275
07:45 AM	**56**	0	0	**56**	0	**155**	7	**162**	0	0	0	0	51	**49**	0	**100**	**318**
08:00 AM	48	0	0	48	0	112	4	116	0	0	0	0	37	49	0	86	250
Total Volume	199	0	3	202	0	499	22	521	0	0	0	0	185	185	0	370	1093
% App. Total	98.5	0	1.5		0	95.8	4.2		0	0	0		50	50	0		
PHF	.888	.000	.375	.902	.000	.805	.611	.804	.000	.000	.000	.000	.841	.944	.000	.925	.859

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115th St and Bishop Ford Fwy
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 2

Groups Printed- SU

	Bishop Ford Fwy From North				115th St From East				Bishop Ford Fwy From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	0	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
07:15 AM	3	0	0	3	0	1	1	2	0	0	0	0	0	0	0	0	5
07:30 AM	2	0	0	2	0	2	1	3	0	0	0	0	0	0	0	0	5
07:45 AM	1	0	0	1	0	0	1	1	0	0	0	0	2	2	0	4	6
Total	8	0	0	8	0	4	3	7	0	0	0	0	2	2	0	4	19
08:00 AM	1	0	0	1	0	1	0	1	0	0	0	0	1	0	0	1	3
08:15 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
08:30 AM	0	0	0	0	0	0	2	2	0	0	0	0	1	2	0	3	5
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	2	2	0	4	6
Total	2	0	0	2	0	5	2	7	0	0	0	0	4	4	0	8	17
Grand Total	10	0	0	10	0	9	5	14	0	0	0	0	6	6	0	12	36
Apprch %	100	0	0		0	64.3	35.7		0	0	0		50	50	0		
Total %	27.8	0	0	27.8	0	25	13.9	38.9	0	0	0	0	16.7	16.7	0	33.3	

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115th St and Bishop Ford Fwy
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 3

Groups Printed- MU

	Bishop Ford Fwy From North				115th St From East				Bishop Ford Fwy From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	5	4	9	0	0	0	0	6	0	0	6	15
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	3	2	0	5	6
07:30 AM	0	0	0	0	0	3	5	8	0	0	0	0	1	0	0	1	9
07:45 AM	2	0	0	2	0	6	5	11	0	0	0	0	2	0	0	2	15
Total	2	0	0	2	0	15	14	29	0	0	0	0	12	2	0	14	45
08:00 AM	0	0	0	0	0	4	3	7	0	0	0	0	2	3	0	5	12
08:15 AM	0	0	0	0	0	2	1	3	0	0	0	0	1	0	0	1	4
08:30 AM	0	0	0	0	0	5	3	8	0	0	0	0	2	0	0	2	10
08:45 AM	0	0	0	0	0	3	2	5	0	0	0	0	3	1	0	4	9
Total	0	0	0	0	0	14	9	23	0	0	0	0	8	4	0	12	35
Grand Total	2	0	0	2	0	29	23	52	0	0	0	0	20	6	0	26	80
Apprch %	100	0	0		0	55.8	44.2		0	0	0		76.9	23.1	0		
Total %	2.5	0	0	2.5	0	36.2	28.8	65	0	0	0	0	25	7.5	0	32.5	

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115th St and Bishop Ford Fwy
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 4

Groups Printed- PC - SU - MU

	Bishop Ford Fwy From North				115th St From East				Bishop Ford Fwy From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	40	2	0	42	0	56	19	75	0	0	0	0	80	43	0	123	240
04:15 PM	49	7	4	60	0	59	18	77	0	0	0	0	116	54	0	170	307
04:30 PM	66	1	3	70	0	65	8	73	0	0	0	0	140	44	0	184	327
04:45 PM	46	1	6	53	0	81	8	89	0	0	0	0	83	53	0	136	278
Total	201	11	13	225	0	261	53	314	0	0	0	0	419	194	0	613	1152
05:00 PM	49	0	0	49	0	88	12	100	0	0	0	0	159	45	0	204	353
05:15 PM	46	1	4	51	0	73	7	80	0	0	0	0	129	53	0	182	313
05:30 PM	52	3	3	58	0	73	2	75	0	0	0	0	128	53	0	181	314
05:45 PM	73	2	8	83	0	77	4	81	0	0	0	0	126	52	0	178	342
Total	220	6	15	241	0	311	25	336	0	0	0	0	542	203	0	745	1322
Grand Total	421	17	28	466	0	572	78	650	0	0	0	0	961	397	0	1358	2474
Apprch %	90.3	3.6	6		0	88	12		0	0	0		70.8	29.2	0		
Total %	17	0.7	1.1	18.8	0	23.1	3.2	26.3	0	0	0	0	38.8	16	0	54.9	
PC	412	17	27	456	0	558	72	630	0	0	0	0	953	392	0	1345	2431
% PC	97.9	100	96.4	97.9	0	97.6	92.3	96.9	0	0	0	0	99.2	98.7	0	99	98.3
SU	7	0	1	8	0	5	1	6	0	0	0	0	5	3	0	8	22
% SU	1.7	0	3.6	1.7	0	0.9	1.3	0.9	0	0	0	0	0.5	0.8	0	0.6	0.9
MU	2	0	0	2	0	9	5	14	0	0	0	0	3	2	0	5	21
% MU	0.5	0	0	0.4	0	1.6	6.4	2.2	0	0	0	0	0.3	0.5	0	0.4	0.8

	Bishop Ford Fwy From North				115th St From East				Bishop Ford Fwy From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	49	0	0	49	0	**88**	**12**	**100**	0	0	0	0	**159**	45	0	**204**	**353**
05:15 PM	46	1	4	51	0	73	7	80	0	0	0	0	129	**53**	0	182	313
05:30 PM	52	**3**	3	58	0	73	2	75	0	0	0	0	128	53	0	181	314
05:45 PM	**73**	2	**8**	**83**	0	77	4	81	0	0	0	0	126	52	0	178	342
Total Volume	220	6	15	241	0	311	25	336	0	0	0	0	542	203	0	745	1322
% App. Total	91.3	2.5	6.2		0	92.6	7.4		0	0	0		72.8	27.2	0		
PHF	.753	.500	.469	.726	.000	.884	.521	.840	.000	.000	.000	.000	.852	.958	.000	.913	.936

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115th St and Bishop Ford Fwy
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 5

Groups Printed- SU

	Bishop Ford Fwy From North				115th St From East				Bishop Ford Fwy From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	3
04:30 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	3	0	1	4	0	1	0	1	0	0	0	0	1	0	0	1	6
Total	5	0	1	6	0	3	0	3	0	0	0	0	2	3	0	5	14
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:15 PM	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	2	3
05:30 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
05:45 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total	2	0	0	2	0	2	1	3	0	0	0	0	3	0	0	3	8
Grand Total	7	0	1	8	0	5	1	6	0	0	0	0	5	3	0	8	22
Apprch %	87.5	0	12.5		0	83.3	16.7		0	0	0		62.5	37.5	0		
Total %	31.8	0	4.5	36.4	0	22.7	4.5	27.3	0	0	0	0	22.7	13.6	0	36.4	

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115th St and Bishop Ford Fwy
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/6/2012
Page No : 6

Groups Printed- MU

	Bishop Ford Fwy From North				115th St From East				Bishop Ford Fwy From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	4
04:15 PM	0	0	0	0	0	1	2	3	0	0	0	0	1	0	0	1	4
04:30 PM	0	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	4
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	1	1	0	2	4
Total	0	0	0	0	0	8	5	13	0	0	0	0	2	1	0	3	16
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																	
05:45 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Total	2	0	0	2	0	1	0	1	0	0	0	0	1	1	0	2	5
Grand Total	2	0	0	2	0	9	5	14	0	0	0	0	3	2	0	5	21
Apprch %	100	0	0		0	64.3	35.7		0	0	0		60	40	0		
Total %	9.5	0	0	9.5	0	42.9	23.8	66.7	0	0	0	0	14.3	9.5	0	23.8	

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115th St and Cottage Grove Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 1

Groups Printed- PC - SU - MU

	Cottage Grove Ave From North				115th St From East				Cottage Grove Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	15	1	7	23	6	82	16	104	1	0	0	1	2	57	6	65	193
07:15 AM	11	0	3	14	19	124	19	162	0	0	0	0	1	84	19	104	280
07:30 AM	14	1	7	22	14	92	16	122	1	0	0	1	1	96	13	110	255
07:45 AM	25	1	13	39	20	138	15	173	0	0	0	0	0	112	20	132	344
Total	65	3	30	98	59	436	66	561	2	0	0	2	4	349	58	411	1072
08:00 AM	15	0	10	25	15	141	9	165	0	0	0	0	1	99	20	120	310
08:15 AM	11	1	8	20	22	116	7	145	0	0	0	0	0	81	16	97	262
08:30 AM	12	0	6	18	29	143	2	174	0	0	1	1	0	77	14	91	284
08:45 AM	28	0	14	42	15	122	1	138	0	0	0	0	0	87	21	108	288
Total	66	1	38	105	81	522	19	622	0	0	1	1	1	344	71	416	1144
Grand Total	131	4	68	203	140	958	85	1183	2	0	1	3	5	693	129	827	2216
Apprch %	64.5	2	33.5		11.8	81	7.2		66.7	0	33.3		0.6	83.8	15.6		
Total %	5.9	0.2	3.1	9.2	6.3	43.2	3.8	53.4	0.1	0	0	0.1	0.2	31.3	5.8	37.3	
PC	117	4	64	185	139	923	85	1147	2	0	1	3	5	672	124	801	2136
% PC	89.3	100	94.1	91.1	99.3	96.3	100	97	100	0	100	100	100	97	96.1	96.9	96.4
SU	14	0	2	16	1	30	0	31	0	0	0	0	0	21	5	26	73
% SU	10.7	0	2.9	7.9	0.7	3.1	0	2.6	0	0	0	0	0	3	3.9	3.1	3.3
MU	0	0	2	2	0	5	0	5	0	0	0	0	0	0	0	0	7
% MU	0	0	2.9	1	0	0.5	0	0.4	0	0	0	0	0	0	0	0	0.3

	Cottage Grove Ave From North				115th St From East				Cottage Grove Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**25**	**1**	**13**	**39**	20	138	**15**	173	0	0	0	0	0	**112**	**20**	**132**	**344**
08:00 AM	15	0	10	25	15	141	9	165	0	0	0	0	**1**	99	20	120	310
08:15 AM	11	1	8	20	22	116	7	145	0	0	0	0	0	81	16	97	262
08:30 AM	12	0	6	18	**29**	**143**	2	**174**	0	0	**1**	**1**	0	77	14	91	284
Total Volume	63	2	37	102	86	538	33	657	0	0	1	1	1	369	70	440	1200
% App. Total	61.8	2	36.3		13.1	81.9	5		0	0	100		0.2	83.9	15.9		
PHF	.630	.500	.712	.654	.741	.941	.550	.944	.000	.000	.250	.250	.250	.824	.875	.833	.872

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115th St and Cottage Grove Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 2

Groups Printed- SU

	Cottage Grove Ave From North				115th St From East				Cottage Grove Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	0	1	2	0	4	0	4	0	0	0	0	0	1	0	1	7
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	1	5	9
07:30 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	3	1	4	6
07:45 AM	2	0	1	3	0	8	0	8	0	0	0	0	0	1	0	1	12
Total	4	0	2	6	0	17	0	17	0	0	0	0	0	9	2	11	34
08:00 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	3	0	3	5
08:15 AM	3	0	0	3	0	4	0	4	0	0	0	0	0	5	2	7	14
08:30 AM	2	0	0	2	1	3	0	4	0	0	0	0	0	2	1	3	9
08:45 AM	4	0	0	4	0	5	0	5	0	0	0	0	0	2	0	2	11
Total	10	0	0	10	1	13	0	14	0	0	0	0	0	12	3	15	39
Grand Total	14	0	2	16	1	30	0	31	0	0	0	0	0	21	5	26	73
Apprch %	87.5	0	12.5		3.2	96.8	0		0	0	0		0	80.8	19.2		
Total %	19.2	0	2.7	21.9	1.4	41.1	0	42.5	0	0	0	0	0	28.8	6.8	35.6	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 3

Groups Printed- MU

	Cottage Grove Ave From North				115th St From East				Cottage Grove Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	0	0	0	3
Total	0	0	1	1	0	5	0	5	0	0	0	0	0	0	0	0	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	2	2	0	5	0	5	0	0	0	0	0	0	0	0	7
Apprch %	0	0	100		0	100	0		0	0	0		0	0	0		
Total %	0	0	28.6	28.6	0	71.4	0	71.4	0	0	0	0	0	0	0	0	

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115th St and Cottage Grove Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/10/2012
Page No : 4

Groups Printed- Peds & Bikes

	Cottage Grove Ave Crossing North Leg			115th St Crossing East Leg			Cottage Grove Ave Crossing South Leg			115th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	8	8	0	0	0	0	0	0	0	7	7	15
07:15 AM	0	10	10	0	3	3	0	2	2	0	5	5	20
07:30 AM	0	5	5	0	8	8	0	9	9	0	9	9	31
07:45 AM	0	7	7	0	1	1	1	0	1	0	10	10	19
Total	0	30	30	0	12	12	1	11	12	0	31	31	85
08:00 AM	0	15	15	0	4	4	0	4	4	0	4	4	27
08:15 AM	1	6	7	0	0	0	0	0	0	0	6	6	13
08:30 AM	0	9	9	0	1	1	0	0	0	0	0	0	10
08:45 AM	0	5	5	0	4	4	0	0	0	0	4	4	13
Total	1	35	36	0	9	9	0	4	4	0	14	14	63
Grand Total	1	65	66	0	21	21	1	15	16	0	45	45	148
Apprch %	1.5	98.5		0	100		6.2	93.8		0	100		
Total %	0.7	43.9	44.6	0	14.2	14.2	0.7	10.1	10.8	0	30.4	30.4	

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115th St and Cottage Grove Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 5

Groups Printed- PC - SU - MU

	Cottage Grove Ave From North				115th St From East				Cottage Grove Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	22	0	18	40	15	96	0	111	1	0	0	1	1	94	11	106	258
04:15 PM	19	0	31	50	10	133	0	143	3	0	0	3	0	95	10	105	301
04:30 PM	26	0	17	43	10	139	0	149	11	0	0	11	0	113	12	125	328
04:45 PM	36	0	44	80	10	171	0	181	2	0	2	4	0	126	11	137	402
Total	103	0	110	213	45	539	0	584	17	0	2	19	1	428	44	473	1289
05:00 PM	20	0	37	57	6	128	0	134	21	0	2	23	0	108	6	114	328
05:15 PM	38	0	44	82	12	166	2	180	14	0	2	16	0	105	13	118	396
05:30 PM	21	0	37	58	9	178	0	187	9	0	0	9	0	105	10	115	369
05:45 PM	24	0	38	62	7	188	0	195	9	2	1	12	0	144	8	152	421
Total	103	0	156	259	34	660	2	696	53	2	5	60	0	462	37	499	1514
Grand Total	206	0	266	472	79	1199	2	1280	70	2	7	79	1	890	81	972	2803
Apprch %	43.6	0	56.4		6.2	93.7	0.2		88.6	2.5	8.9		0.1	91.6	8.3		
Total %	7.3	0	9.5	16.8	2.8	42.8	0.1	45.7	2.5	0.1	0.2	2.8	0	31.8	2.9	34.7	
PC	191	0	262	453	78	1188	2	1268	70	2	6	78	1	877	81	959	2758
% PC	92.7	0	98.5	96	98.7	99.1	100	99.1	100	100	85.7	98.7	100	98.5	100	98.7	98.4
SU	15	0	3	18	0	10	0	10	0	0	1	1	0	12	0	12	41
% SU	7.3	0	1.1	3.8	0	0.8	0	0.8	0	0	14.3	1.3	0	1.3	0	1.2	1.5
MU	0	0	1	1	1	1	0	2	0	0	0	0	0	1	0	1	4
% MU	0	0	0.4	0.2	1.3	0.1	0	0.2	0	0	0	0	0	0.1	0	0.1	0.1

	Cottage Grove Ave From North				115th St From East				Cottage Grove Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	20	0	37	57	6	128	0	134	**21**	0	**2**	**23**	0	108	6	114	328
05:15 PM	**38**	0	**44**	**82**	**12**	166	**2**	180	14	0	2	16	0	105	**13**	118	396
05:30 PM	21	0	37	58	9	178	0	187	9	0	0	9	0	105	10	115	369
05:45 PM	24	0	38	62	7	**188**	0	**195**	9	**2**	1	12	0	**144**	8	**152**	**421**
Total Volume	103	0	156	259	34	660	2	696	53	2	5	60	0	462	37	499	1514
% App. Total	39.8	0	60.2		4.9	94.8	0.3		88.3	3.3	8.3		0	92.6	7.4		
PHF	.678	.000	.886	.790	.708	.878	.250	.892	.631	.250	.625	.652	.000	.802	.712	.821	.899

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115th St and Cottage Grove Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 6

Groups Printed- SU

	Cottage Grove Ave From North				115th St From East				Cottage Grove Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	3	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
04:30 PM	2	0	0	2	0	2	0	2	0	0	0	0	0	4	0	4	8
04:45 PM	1	0	1	2	0	2	0	2	0	0	0	0	0	1	0	1	5
Total	8	0	3	11	0	4	0	4	0	0	0	0	0	6	0	6	21
05:00 PM	3	0	0	3	0	1	0	1	0	0	0	0	0	2	0	2	6
05:15 PM	2	0	0	2	0	1	0	1	0	0	1	1	0	2	0	2	6
05:30 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:45 PM	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
Total	7	0	0	7	0	6	0	6	0	0	1	1	0	6	0	6	20
Grand Total	15	0	3	18	0	10	0	10	0	0	1	1	0	12	0	12	41
Apprch %	83.3	0	16.7		0	100	0		0	0	100		0	100	0		
Total %	36.6	0	7.3	43.9	0	24.4	0	24.4	0	0	2.4	2.4	0	29.3	0	29.3	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 7

Groups Printed- MU

	Cottage Grove Ave From North				115th St From East				Cottage Grove Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2
Grand Total	0	0	1	1	1	1	0	2	0	0	0	0	0	1	0	1	4
Apprch %	0	0	100		50	50	0		0	0	0		0	100	0		
Total %	0	0	25	25	25	25	0	50	0	0	0	0	0	25	0	25	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/10/2012
Page No : 8

Groups Printed- Peds & Bikes

	Cottage Grove Ave Crossing North Leg			115th St Crossing East Leg			Cottage Grove Ave Crossing South Leg			115th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	2	2	0	1	1	0	0	0	0	0	0	3
04:15 PM	0	10	10	0	0	0	0	1	1	0	0	0	11
04:30 PM	0	5	5	0	0	0	0	10	10	0	4	4	19
04:45 PM	0	5	5	0	0	0	0	0	0	0	0	0	5
Total	0	22	22	0	1	1	0	11	11	0	4	4	38
05:00 PM	0	17	17	0	0	0	0	15	15	0	5	5	37
05:15 PM	0	8	8	0	1	1	0	11	11	0	2	2	22
05:30 PM	1	18	19	0	0	0	0	9	9	0	4	4	32
05:45 PM	0	17	17	0	9	9	0	9	9	0	3	3	38
Total	1	60	61	0	10	10	0	44	44	0	14	14	129
Grand Total	1	82	83	0	11	11	0	55	55	0	18	18	167
Apprch %	1.2	98.8		0	100		0	100		0	100		
Total %	0.6	49.1	49.7	0	6.6	6.6	0	32.9	32.9	0	10.8	10.8	

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115th St and Halsted St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 1

Groups Printed- PC - SU - MU

	Halsted St From North				115th St From East				Halsted St From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	11	59	5	75	17	30	8	55	9	185	7	201	7	46	21	74	405
07:15 AM	21	62	8	91	24	52	8	84	7	201	9	217	4	38	30	72	464
07:30 AM	15	77	14	106	15	48	11	74	10	189	19	218	6	44	42	92	490
07:45 AM	24	76	20	120	18	44	14	76	15	246	8	269	14	55	55	124	589
Total	71	274	47	392	74	174	41	289	41	821	43	905	31	183	148	362	1948
08:00 AM	10	104	16	130	15	54	12	81	9	184	14	207	11	44	30	85	503
08:15 AM	21	116	16	153	14	30	13	57	24	209	18	251	8	59	42	109	570
08:30 AM	18	96	18	132	26	41	12	79	16	172	9	197	11	47	30	88	496
08:45 AM	25	81	18	124	13	44	12	69	16	161	19	196	21	40	37	98	487
Total	74	397	68	539	68	169	49	286	65	726	60	851	51	190	139	380	2056
Grand Total	145	671	115	931	142	343	90	575	106	1547	103	1756	82	373	287	742	4004
Apprch %	15.6	72.1	12.4		24.7	59.7	15.7		6	88.1	5.9		11.1	50.3	38.7		
Total %	3.6	16.8	2.9	23.3	3.5	8.6	2.2	14.4	2.6	38.6	2.6	43.9	2	9.3	7.2	18.5	
PC	139	619	112	870	135	323	89	547	104	1471	100	1675	80	355	282	717	3809
% PC	95.9	92.3	97.4	93.4	95.1	94.2	98.9	95.1	98.1	95.1	97.1	95.4	97.6	95.2	98.3	96.6	95.1
SU	6	48	3	57	7	20	1	28	2	64	3	69	2	18	4	24	178
% SU	4.1	7.2	2.6	6.1	4.9	5.8	1.1	4.9	1.9	4.1	2.9	3.9	2.4	4.8	1.4	3.2	4.4
MU	0	4	0	4	0	0	0	0	0	12	0	12	0	0	1	1	17
% MU	0	0.6	0	0.4	0	0	0	0	0	0.8	0	0.7	0	0	0.3	0.1	0.4

	Halsted St From North				115th St From East				Halsted St From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**24**	76	**20**	120	18	44	**14**	76	15	**246**	8	**269**	**14**	55	**55**	**124**	**589**
08:00 AM	10	104	16	130	15	**54**	12	**81**	9	184	14	207	11	44	30	85	503
08:15 AM	21	**116**	16	**153**	14	30	13	57	**24**	209	**18**	251	8	**59**	42	109	570
08:30 AM	18	96	18	132	**26**	41	12	79	16	172	9	197	11	47	30	88	496
Total Volume	73	392	70	535	73	169	51	293	64	811	49	924	44	205	157	406	2158
% App. Total	13.6	73.3	13.1		24.9	57.7	17.4		6.9	87.8	5.3		10.8	50.5	38.7		
PHF	.760	.845	.875	.874	.702	.782	.911	.904	.667	.824	.681	.859	.786	.869	.714	.819	.916

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115th St and Halsted St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 2

Groups Printed- SU

	Halsted St From North				115th St From East				Halsted St From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	5	0	5	2	4	0	6	0	11	0	11	1	3	0	4	26
07:15 AM	0	8	0	8	0	3	1	4	0	3	1	4	0	2	0	2	18
07:30 AM	1	4	1	6	0	2	0	2	0	3	0	3	0	4	2	6	17
07:45 AM	1	6	0	7	0	2	0	2	0	10	1	11	0	2	1	3	23
Total	2	23	1	26	2	11	1	14	0	27	2	29	1	11	3	15	84
08:00 AM	0	2	0	2	0	5	0	5	0	11	1	12	0	1	0	1	20
08:15 AM	1	7	1	9	1	1	0	2	0	10	0	10	0	1	1	2	23
08:30 AM	3	8	1	12	3	2	0	5	2	7	0	9	0	3	0	3	29
08:45 AM	0	8	0	8	1	1	0	2	0	9	0	9	1	2	0	3	22
Total	4	25	2	31	5	9	0	14	2	37	1	40	1	7	1	9	94
Grand Total	6	48	3	57	7	20	1	28	2	64	3	69	2	18	4	24	178
Apprch %	10.5	84.2	5.3		25	71.4	3.6		2.9	92.8	4.3		8.3	75	16.7		
Total %	3.4	27	1.7	32	3.9	11.2	0.6	15.7	1.1	36	1.7	38.8	1.1	10.1	2.2	13.5	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 3

Groups Printed- MU

	Halsted St From North				115th St From East				Halsted St From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	1	1	4
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	2	0	2	0	0	0	0	0	7	0	7	0	0	1	1	10
08:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	0	2	0	2	0	0	0	0	0	5	0	5	0	0	0	0	7
Grand Total	0	4	0	4	0	0	0	0	0	12	0	12	0	0	1	1	17
Apprch %	0	100	0		0	0	0		0	100	0		0	0	100		
Total %	0	23.5	0	23.5	0	0	0	0	0	70.6	0	70.6	0	0	5.9	5.9	

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/9/2012
Page No : 4

Groups Printed- Peds & Bikes

	Halsted St Crossing North Leg			115th St Crossing East Leg			Halsted St Crossing South Leg			115th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	1	7	8	0	7	7	0	3	3	0	8	8	26
07:15 AM	0	9	9	0	4	4	0	1	1	0	12	12	26
07:30 AM	0	7	7	0	4	4	0	2	2	0	9	9	22
07:45 AM	0	3	3	0	0	0	0	1	1	0	9	9	13
Total	1	26	27	0	15	15	0	7	7	0	38	38	87
08:00 AM	0	1	1	0	6	6	0	2	2	0	7	7	16
08:15 AM	0	20	20	1	2	3	0	2	2	0	12	12	37
08:30 AM	0	13	13	0	8	8	0	4	4	0	9	9	34
08:45 AM	0	13	13	0	1	1	0	2	2	0	13	13	29
Total	0	47	47	1	17	18	0	10	10	0	41	41	116
Grand Total	1	73	74	1	32	33	0	17	17	0	79	79	203
Apprch %	1.4	98.6		3	97		0	100		0	100		
Total %	0.5	36	36.5	0.5	15.8	16.3	0	8.4	8.4	0	38.9	38.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 5

Groups Printed- PC - SU - MU

	Halsted St From North				115th St From East				Halsted St From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	32	170	22	224	14	53	27	94	12	109	19	140	15	51	22	88	546
04:15 PM	24	143	29	196	11	52	24	87	20	122	21	163	27	59	19	105	551
04:30 PM	37	166	15	218	26	64	28	118	17	98	21	136	26	60	30	116	588
04:45 PM	32	163	28	223	16	55	31	102	13	118	32	163	35	34	23	92	580
Total	125	642	94	861	67	224	110	401	62	447	93	602	103	204	94	401	2265
05:00 PM	24	166	13	203	20	72	41	133	13	102	23	138	21	56	22	99	573
05:15 PM	36	190	18	244	16	77	36	129	12	100	20	132	23	43	30	96	601
05:30 PM	25	201	20	246	18	77	37	132	12	116	25	153	27	51	34	112	643
05:45 PM	32	195	25	252	11	85	45	141	15	97	28	140	17	51	20	88	621
Total	117	752	76	945	65	311	159	535	52	415	96	563	88	201	106	395	2438
Grand Total	242	1394	170	1806	132	535	269	936	114	862	189	1165	191	405	200	796	4703
Apprch %	13.4	77.2	9.4		14.1	57.2	28.7		9.8	74	16.2		24	50.9	25.1		
Total %	5.1	29.6	3.6	38.4	2.8	11.4	5.7	19.9	2.4	18.3	4	24.8	4.1	8.6	4.3	16.9	
PC	240	1347	166	1753	130	521	267	918	112	823	184	1119	188	395	198	781	4571
% PC	99.2	96.6	97.6	97.1	98.5	97.4	99.3	98.1	98.2	95.5	97.4	96.1	98.4	97.5	99	98.1	97.2
SU	2	45	3	50	2	14	2	18	2	37	5	44	2	10	2	14	126
% SU	0.8	3.2	1.8	2.8	1.5	2.6	0.7	1.9	1.8	4.3	2.6	3.8	1	2.5	1	1.8	2.7
MU	0	2	1	3	0	0	0	0	0	2	0	2	1	0	0	1	6
% MU	0	0.1	0.6	0.2	0	0	0	0	0	0.2	0	0.2	0.5	0	0	0.1	0.1

	Halsted St From North				115th St From East				Halsted St From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	24	166	13	203	**20**	72	41	133	13	102	23	138	21	**56**	22	99	573
05:15 PM	**36**	190	18	244	16	77	36	129	12	100	20	132	23	43	30	96	601
05:30 PM	25	**201**	20	246	18	77	37	132	12	**116**	25	**153**	**27**	51	**34**	**112**	**643**
05:45 PM	32	195	**25**	**252**	11	**85**	**45**	**141**	**15**	97	**28**	140	17	51	20	88	621
Total Volume	117	752	76	945	65	311	159	535	52	415	96	563	88	201	106	395	2438
% App. Total	12.4	79.6	8		12.1	58.1	29.7		9.2	73.7	17.1		22.3	50.9	26.8		
PHF	.813	.935	.760	.938	.813	.915	.883	.949	.867	.894	.857	.920	.815	.897	.779	.882	.948

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 6

Groups Printed- SU

	Halsted St From North				115th St From East				Halsted St From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	2	6	0	8	0	2	0	2	0	6	0	6	0	3	0	3	19
04:15 PM	0	5	2	7	0	2	1	3	0	3	1	4	1	0	0	1	15
04:30 PM	0	6	0	6	1	3	0	4	0	5	1	6	1	1	0	2	18
04:45 PM	0	6	0	6	0	1	0	1	2	7	1	10	0	2	0	2	19
Total	2	23	2	27	1	8	1	10	2	21	3	26	2	6	0	8	71
05:00 PM	0	6	1	7	0	0	0	0	0	6	1	7	0	2	0	2	16
05:15 PM	0	7	0	7	0	3	0	3	0	4	0	4	0	0	1	1	15
05:30 PM	0	4	0	4	1	2	0	3	0	1	1	2	0	2	0	2	11
05:45 PM	0	5	0	5	0	1	1	2	0	5	0	5	0	0	1	1	13
Total	0	22	1	23	1	6	1	8	0	16	2	18	0	4	2	6	55
Grand Total	2	45	3	50	2	14	2	18	2	37	5	44	2	10	2	14	126
Apprch %	4	90	6		11.1	77.8	11.1		4.5	84.1	11.4		14.3	71.4	14.3		
Total %	1.6	35.7	2.4	39.7	1.6	11.1	1.6	14.3	1.6	29.4	4	34.9	1.6	7.9	1.6	11.1	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/9/2012
Page No : 7

Groups Printed- MU

	Halsted St From North				115th St From East				Halsted St From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	1	0	1	1	0	0	1	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Grand Total	0	2	1	3	0	0	0	0	0	2	0	2	1	0	0	1	6
Apprch %	0	66.7	33.3		0	0	0		0	100	0		100	0	0		
Total %	0	33.3	16.7	50	0	0	0	0	0	33.3	0	33.3	16.7	0	0	16.7	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/9/2012
Page No : 8

Groups Printed- Peds & Bikes

	Halsted St Crossing North Leg			115th St Crossing East Leg			Halsted St Crossing South Leg			115th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	1	7	8	1	16	17	0	0	0	0	4	4	29
04:15 PM	0	2	2	1	7	8	0	10	10	0	7	7	27
04:30 PM	0	14	14	1	5	6	1	7	8	0	7	7	35
04:45 PM	0	8	8	0	1	1	0	6	6	0	1	1	16
Total	1	31	32	3	29	32	1	23	24	0	19	19	107
05:00 PM	0	3	3	0	13	13	0	10	10	0	5	5	31
05:15 PM	0	9	9	0	2	2	0	2	2	0	4	4	17
05:30 PM	0	4	4	0	5	5	0	3	3	0	4	4	16
05:45 PM	0	3	3	0	5	5	0	1	1	0	9	9	18
Total	0	19	19	0	25	25	0	16	16	0	22	22	82
Grand Total	1	50	51	3	54	57	1	39	40	0	41	41	189
Apprch %	2	98		5.3	94.7		2.5	97.5		0	100		
Total %	0.5	26.5	27	1.6	28.6	30.2	0.5	20.6	21.2	0	21.7	21.7	

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115th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 1

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				115th St From East				Martin Luther King Dr From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	8	0	13	21	9	68	0	77	0	0	0	0	0	62	19	81	179
07:15 AM	9	0	11	20	5	82	0	87	0	0	0	0	0	76	15	91	198
07:30 AM	9	0	16	25	9	74	0	83	0	0	0	0	0	77	14	91	199
07:45 AM	14	0	14	28	7	102	0	109	0	0	0	0	0	93	27	120	257
Total	40	0	54	94	30	326	0	356	0	0	0	0	0	308	75	383	833
08:00 AM	21	0	15	36	13	96	0	109	0	0	0	0	0	81	19	100	245
08:15 AM	22	0	13	35	13	98	0	111	0	0	0	0	0	72	16	88	234
08:30 AM	14	0	11	25	9	123	0	132	0	0	0	0	0	89	18	107	264
08:45 AM	21	0	5	26	8	124	0	132	0	0	0	0	0	92	30	122	280
Total	78	0	44	122	43	441	0	484	0	0	0	0	0	334	83	417	1023
Grand Total	118	0	98	216	73	767	0	840	0	0	0	0	0	642	158	800	1856
Apprch %	54.6	0	45.4		8.7	91.3	0		0	0	0		0	80.2	19.8		
Total %	6.4	0	5.3	11.6	3.9	41.3	0	45.3	0	0	0	0	0	34.6	8.5	43.1	
PC	116	0	97	213	71	729	0	800	0	0	0	0	0	621	144	765	1778
% PC	98.3	0	99	98.6	97.3	95	0	95.2	0	0	0	0	0	96.7	91.1	95.6	95.8
SU	2	0	1	3	2	36	0	38	0	0	0	0	0	21	14	35	76
% SU	1.7	0	1	1.4	2.7	4.7	0	4.5	0	0	0	0	0	3.3	8.9	4.4	4.1
MU	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
% MU	0	0	0	0	0	0.3	0	0.2	0	0	0	0	0	0	0	0	0.1

	Martin Luther King Dr From North				115th St From East				Martin Luther King Dr From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	21	0	**15**	**36**	**13**	96	0	109	0	0	0	0	0	81	19	100	245
08:15 AM	**22**	0	13	35	13	98	0	111	0	0	0	0	0	72	16	88	234
08:30 AM	14	0	11	25	9	123	0	**132**	0	0	0	0	0	89	18	107	264
08:45 AM	21	0	5	26	8	**124**	0	132	0	0	0	0	0	**92**	**30**	**122**	**280**
Total Volume	78	0	44	122	43	441	0	484	0	0	0	0	0	334	83	417	1023
% App. Total	63.9	0	36.1		8.9	91.1	0		0	0	0		0	80.1	19.9		
PHF	.886	.000	.733	.847	.827	.889	.000	.917	.000	.000	.000	.000	.000	.908	.692	.855	.913

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115th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 2

Groups Printed- SU

	Martin Luther King Dr From North				115th St From East				Martin Luther King Dr From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	1	2	3	7
07:15 AM	1	0	0	1	0	9	0	9	0	0	0	0	0	4	1	5	15
07:30 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	4	3	7	10
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	1	3	8
Total	1	0	1	2	1	19	0	20	0	0	0	0	0	11	7	18	40
08:00 AM	1	0	0	1	0	6	0	6	0	0	0	0	0	2	2	4	11
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	3	5	9
08:30 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	4	1	5	9
08:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	1	3	7
Total	1	0	0	1	1	17	0	18	0	0	0	0	0	10	7	17	36
Grand Total	2	0	1	3	2	36	0	38	0	0	0	0	0	21	14	35	76
Apprch %	66.7	0	33.3		5.3	94.7	0		0	0	0		0	60	40		
Total %	2.6	0	1.3	3.9	2.6	47.4	0	50	0	0	0	0	0	27.6	18.4	46.1	

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115th St and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 3

Groups Printed- MU

	Martin Luther King Dr From North				115th St From East				Martin Luther King Dr From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Ped
Site Code : 00000000
Start Date : 6/12/2012
Page No : 4

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			115th St Crossing East Leg			Martin Luther King Dr Crossing South Leg			115th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	3	3	0	0	0	0	3	3	0	0	0	6
07:15 AM	0	1	1	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	7	7	0	0	0	0	6	6	0	2	2	15
07:45 AM	0	6	6	1	2	3	2	3	5	0	1	1	15
Total	0	17	17	1	2	3	2	12	14	0	3	3	37
08:00 AM	0	5	5	0	2	2	0	3	3	0	0	0	10
08:15 AM	0	3	3	1	1	2	0	7	7	0	0	0	12
08:30 AM	0	8	8	0	3	3	0	6	6	0	3	3	20
08:45 AM	0	8	8	0	0	0	0	2	2	0	2	2	12
Total	0	24	24	1	6	7	0	18	18	0	5	5	54
Grand Total	0	41	41	2	8	10	2	30	32	0	8	8	91
Apprch %	0	100		20	80		6.2	93.8		0	100		
Total %	0	45.1	45.1	2.2	8.8	11	2.2	33	35.2	0	8.8	8.8	

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115th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 5

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				115th St From East				Martin Luther King Dr From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	20	0	12	32	9	92	0	101	0	0	0	0	0	96	26	122	255
04:15 PM	38	0	21	59	6	112	0	118	0	0	0	0	0	93	15	108	285
04:30 PM	30	0	24	54	5	104	0	109	0	0	0	0	0	86	17	103	266
04:45 PM	33	0	10	43	3	84	0	87	0	0	0	0	0	58	21	79	209
Total	121	0	67	188	23	392	0	415	0	0	0	0	0	333	79	412	1015
05:00 PM	27	0	26	53	8	103	0	111	0	0	0	0	0	94	19	113	277
05:15 PM	36	0	21	57	6	103	0	109	0	0	0	0	0	87	23	110	276
05:30 PM	54	0	30	84	12	128	0	140	0	0	0	0	0	96	14	110	334
05:45 PM	32	0	35	67	8	99	0	107	0	0	0	0	0	95	17	112	286
Total	149	0	112	261	34	433	0	467	0	0	0	0	0	372	73	445	1173
Grand Total	270	0	179	449	57	825	0	882	0	0	0	0	0	705	152	857	2188
Apprch %	60.1	0	39.9		6.5	93.5	0		0	0	0		0	82.3	17.7		
Total %	12.3	0	8.2	20.5	2.6	37.7	0	40.3	0	0	0	0	0	32.2	6.9	39.2	
PC	270	0	179	449	57	800	0	857	0	0	0	0	0	695	144	839	2145
% PC	100	0	100	100	100	97	0	97.2	0	0	0	0	0	98.6	94.7	97.9	98
SU	0	0	0	0	0	24	0	24	0	0	0	0	0	10	8	18	42
% SU	0	0	0	0	0	2.9	0	2.7	0	0	0	0	0	1.4	5.3	2.1	1.9
MU	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% MU	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0

	Martin Luther King Dr From North				115th St From East				Martin Luther King Dr From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	27	0	26	53	8	103	0	111	0	0	0	0	0	94	19	**113**	277
05:15 PM	36	0	21	57	6	103	0	109	0	0	0	0	0	87	**23**	110	276
05:30 PM	**54**	0	30	**84**	**12**	**128**	0	**140**	0	0	0	0	0	**96**	14	110	**334**
05:45 PM	32	0	**35**	67	8	99	0	107	0	0	0	0	0	95	17	112	286
Total Volume	149	0	112	261	34	433	0	467	0	0	0	0	0	372	73	445	1173
% App. Total	57.1	0	42.9		7.3	92.7	0		0	0	0		0	83.6	16.4		
PHF	.690	.000	.800	.777	.708	.846	.000	.834	.000	.000	.000	.000	.000	.969	.793	.985	.878

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115th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 6

Groups Printed- SU

	Martin Luther King Dr From North				115th St From East				Martin Luther King Dr From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
04:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	2	4	9
04:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	1	2	6
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
Total	0	0	0	0	0	14	0	14	0	0	0	0	0	4	4	8	22
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	1	3	8
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1	3	4
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	3
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	1	3	5
Total	0	0	0	0	0	10	0	10	0	0	0	0	0	6	4	10	20
Grand Total	0	0	0	0	0	24	0	24	0	0	0	0	0	10	8	18	42
Apprch %	0	0	0		0	100	0		0	0	0		0	55.6	44.4		
Total %	0	0	0	0	0	57.1	0	57.1	0	0	0	0	0	23.8	19	42.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 7

Groups Printed- MU

	Martin Luther King Dr From North				115th St From East				Martin Luther King Dr From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	

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115th St and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Ped
Site Code : 00000000
Start Date : 6/12/2012
Page No : 8

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			115th St Crossing East Leg			Martin Luther King Dr Crossing South Leg			115th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	1	1	0	3	3	0	0	0	4
04:15 PM	0	4	4	0	0	0	0	0	0	0	1	1	5
04:30 PM	0	7	7	0	0	0	0	1	1	0	0	0	8
04:45 PM	0	7	7	0	0	0	0	0	0	1	1	2	9
Total	0	18	18	0	1	1	0	4	4	1	2	3	26
05:00 PM	0	2	2	0	3	3	0	6	6	0	0	0	11
05:15 PM	2	11	13	0	0	0	0	2	2	0	4	4	19
05:30 PM	1	3	4	1	2	3	0	1	1	0	1	1	9
05:45 PM	0	1	1	0	1	1	0	4	4	0	0	0	6
Total	3	17	20	1	6	7	0	13	13	0	5	5	45
Grand Total	3	35	38	1	7	8	0	17	17	1	7	8	71
Apprch %	7.9	92.1		12.5	87.5		0	100		12.5	87.5		
Total %	4.2	49.3	53.5	1.4	9.9	11.3	0	23.9	23.9	1.4	9.9	11.3	

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115th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 1

Groups Printed- PC - SU - MU

	Wentworth Ave From North				115th St From East				Wentworth Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	7	11	4	22	2	41	2	45	10	32	5	47	2	55	6	63	177
07:15 AM	9	17	3	29	3	64	3	70	8	17	10	35	4	48	7	59	193
07:30 AM	10	18	3	31	0	60	2	62	8	32	6	46	4	62	7	73	212
07:45 AM	15	12	7	34	2	49	3	54	9	23	15	47	6	76	13	95	230
Total	41	58	17	116	7	214	10	231	35	104	36	175	16	241	33	290	812
08:00 AM	8	15	7	30	1	54	5	60	4	26	6	36	5	71	9	85	211
08:15 AM	6	9	2	17	5	53	4	62	4	32	8	44	3	47	9	59	182
08:30 AM	10	18	4	32	5	53	6	64	10	23	12	45	3	61	7	71	212
08:45 AM	11	17	5	33	7	86	6	99	7	17	9	33	4	67	9	80	245
Total	35	59	18	112	18	246	21	285	25	98	35	158	15	246	34	295	850
Grand Total	76	117	35	228	25	460	31	516	60	202	71	333	31	487	67	585	1662
Apprch %	33.3	51.3	15.4		4.8	89.1	6		18	60.7	21.3		5.3	83.2	11.5		
Total %	4.6	7	2.1	13.7	1.5	27.7	1.9	31	3.6	12.2	4.3	20	1.9	29.3	4	35.2	
PC	73	110	33	216	22	438	29	489	57	199	69	325	30	467	64	561	1591
% PC	96.1	94	94.3	94.7	88	95.2	93.5	94.8	95	98.5	97.2	97.6	96.8	95.9	95.5	95.9	95.7
SU	3	7	2	12	3	19	2	24	3	3	2	8	1	20	3	24	68
% SU	3.9	6	5.7	5.3	12	4.1	6.5	4.7	5	1.5	2.8	2.4	3.2	4.1	4.5	4.1	4.1
MU	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
% MU	0	0	0	0	0	0.7	0	0.6	0	0	0	0	0	0	0	0	0.2

	Wentworth Ave From North				115th St From East				Wentworth Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	8	15	**7**	30	1	54	5	60	4	26	6	36	**5**	**71**	**9**	**85**	211
08:15 AM	6	9	2	17	5	53	4	62	4	**32**	8	44	3	47	9	59	182
08:30 AM	10	**18**	4	32	5	53	**6**	64	**10**	23	**12**	**45**	3	61	7	71	212
08:45 AM	**11**	17	5	**33**	**7**	**86**	6	**99**	7	17	9	33	4	67	9	80	**245**
Total Volume	35	59	18	112	18	246	21	285	25	98	35	158	15	246	34	295	850
% App. Total	31.2	52.7	16.1		6.3	86.3	7.4		15.8	62	22.2		5.1	83.4	11.5		
PHF	.795	.819	.643	.848	.643	.715	.875	.720	.625	.766	.729	.878	.750	.866	.944	.868	.867

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115th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 2

Groups Printed- SU

	Wentworth Ave From North				115th St From East				Wentworth Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	1	0	2	0	2	0	2	0	0	0	0	0	3	0	3	7
07:15 AM	0	1	0	1	1	4	0	5	1	1	0	2	0	1	1	2	10
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
07:45 AM	1	0	0	1	0	3	0	3	0	0	0	0	0	2	0	2	6
Total	2	2	0	4	1	9	0	10	1	1	0	2	0	10	1	11	27
08:00 AM	1	2	0	3	0	2	1	3	1	0	2	3	1	3	0	4	13
08:15 AM	0	1	0	1	1	1	0	2	0	1	0	1	0	3	2	5	9
08:30 AM	0	1	0	1	1	5	0	6	1	1	0	2	0	1	0	1	10
08:45 AM	0	1	2	3	0	2	1	3	0	0	0	0	0	3	0	3	9
Total	1	5	2	8	2	10	2	14	2	2	2	6	1	10	2	13	41
Grand Total	3	7	2	12	3	19	2	24	3	3	2	8	1	20	3	24	68
Apprch %	25	58.3	16.7		12.5	79.2	8.3		37.5	37.5	25		4.2	83.3	12.5		
Total %	4.4	10.3	2.9	17.6	4.4	27.9	2.9	35.3	4.4	4.4	2.9	11.8	1.5	29.4	4.4	35.3	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 3

Groups Printed- MU

	Wentworth Ave From North				115th St From East				Wentworth Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	

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115th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/17/2012
Page No : 4

Groups Printed- Peds and Bikes

	Wentworth Ave Crossing North Leg			115th St Crossing East Leg			Wentworth Ave Crossing South Leg			115th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	0	6	6	0	1	1	8
07:15 AM	1	1	2	0	1	1	0	4	4	0	3	3	10
07:30 AM	0	0	0	0	0	0	0	1	1	0	4	4	5
07:45 AM	0	2	2	0	0	0	0	1	1	0	1	1	4
Total	1	4	5	0	1	1	0	12	12	0	9	9	27
08:00 AM	0	2	2	0	0	0	0	4	4	0	1	1	7
08:15 AM	0	1	1	0	1	1	0	15	15	0	3	3	20
08:30 AM	1	2	3	2	5	7	0	4	4	0	0	0	14
08:45 AM	1	3	4	0	2	2	0	5	5	0	0	0	11
Total	2	8	10	2	8	10	0	28	28	0	4	4	52
Grand Total	3	12	15	2	9	11	0	40	40	0	13	13	79
Apprch %	20	80		18.2	81.8		0	100		0	100		
Total %	3.8	15.2	19	2.5	11.4	13.9	0	50.6	50.6	0	16.5	16.5	

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115th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 5

Groups Printed- PC - SU - MU

	Wentworth Ave From North				115th St From East				Wentworth Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	12	30	4	46	5	76	10	91	6	18	5	29	3	80	9	92	258
04:15 PM	19	25	2	46	1	48	2	51	6	24	9	39	7	77	8	92	228
04:30 PM	15	31	9	55	6	126	11	143	3	20	4	27	13	69	12	94	319
04:45 PM	13	35	10	58	3	77	5	85	6	15	5	26	6	74	14	94	263
Total	59	121	25	205	15	327	28	370	21	77	23	121	29	300	43	372	1068
05:00 PM	25	30	10	65	8	100	11	119	6	16	5	27	5	66	12	83	294
05:15 PM	11	18	12	41	6	102	5	113	8	15	6	29	11	72	11	94	277
05:30 PM	13	41	7	61	4	85	4	93	6	25	8	39	4	67	11	82	275
05:45 PM	12	28	5	45	5	88	12	105	12	21	7	40	10	90	14	114	304
Total	61	117	34	212	23	375	32	430	32	77	26	135	30	295	48	373	1150
Grand Total	120	238	59	417	38	702	60	800	53	154	49	256	59	595	91	745	2218
Apprch %	28.8	57.1	14.1		4.8	87.8	7.5		20.7	60.2	19.1		7.9	79.9	12.2		
Total %	5.4	10.7	2.7	18.8	1.7	31.7	2.7	36.1	2.4	6.9	2.2	11.5	2.7	26.8	4.1	33.6	
PC	120	237	58	415	38	692	60	790	52	153	49	254	58	582	89	729	2188
% PC	100	99.6	98.3	99.5	100	98.6	100	98.8	98.1	99.4	100	99.2	98.3	97.8	97.8	97.9	98.6
SU	0	1	1	2	0	10	0	10	1	1	0	2	1	13	2	16	30
% SU	0	0.4	1.7	0.5	0	1.4	0	1.2	1.9	0.6	0	0.8	1.7	2.2	2.2	2.1	1.4
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Wentworth Ave From North				115th St From East				Wentworth Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	15	31	9	55	6	**126**	**11**	**143**	3	**20**	4	27	**13**	69	12	**94**	**319**
04:45 PM	13	**35**	10	58	3	77	5	85	6	15	5	26	6	**74**	**14**	94	263
05:00 PM	**25**	30	10	**65**	**8**	100	11	119	6	16	5	27	5	66	12	83	294
05:15 PM	11	18	**12**	41	6	102	5	113	**8**	15	**6**	**29**	11	72	11	94	277
Total Volume	64	114	41	219	23	405	32	460	23	66	20	109	35	281	49	365	1153
% App. Total	29.2	52.1	18.7		5	88	7		21.1	60.6	18.3		9.6	77	13.4		
PHF	.640	.814	.854	.842	.719	.804	.727	.804	.719	.825	.833	.940	.673	.949	.875	.971	.904

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115th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 6

Groups Printed- SU

	Wentworth Ave From North				115th St From East				Wentworth Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
04:30 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	1	3
04:45 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total	0	0	1	1	0	4	0	4	1	1	0	2	1	5	0	6	13
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	1	5	7
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	1	3	5
05:45 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Total	0	1	0	1	0	6	0	6	0	0	0	0	0	8	2	10	17
Grand Total	0	1	1	2	0	10	0	10	1	1	0	2	1	13	2	16	30
Apprch %	0	50	50		0	100	0		50	50	0		6.2	81.2	12.5		
Total %	0	3.3	3.3	6.7	0	33.3	0	33.3	3.3	3.3	0	6.7	3.3	43.3	6.7	53.3	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 7

Groups Printed- MU

	Wentworth Ave From North				115th St From East				Wentworth Ave From South				115th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/17/2012
Page No : 8

Groups Printed- Peds and Bikes

	Wentworth Ave Crossing North Leg			115th St Crossing East Leg			Wentworth Ave Crossing South Leg			115th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	6	6	0	2	2	0	6	6	0	1	1	15
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	5	5	0	4	4	0	6	6	1	4	5	20
04:45 PM	0	0	0	0	0	0	0	5	5	0	2	2	7
Total	0	11	11	0	6	6	0	17	17	1	7	8	42
05:00 PM	0	3	3	0	1	1	1	5	6	0	0	0	10
05:15 PM	0	2	2	1	3	4	0	4	4	0	0	0	10
05:30 PM	1	2	3	0	0	0	0	5	5	0	1	1	9
05:45 PM	0	4	4	0	0	0	0	6	6	0	0	0	10
Total	1	11	12	1	4	5	1	20	21	0	1	1	39
Grand Total	1	22	23	1	10	11	1	37	38	1	8	9	81
Apprch %	4.3	95.7		9.1	90.9		2.6	97.4		11.1	88.9		
Total %	1.2	27.2	28.4	1.2	12.3	13.6	1.2	45.7	46.9	1.2	9.9	11.1	

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119th St and Halsted Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 1

Groups Printed- PC - SU - MU

	Halsted Ave From North				119th St From East				Halsted Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	12	47	8	67	19	27	3	49	7	195	13	215	10	38	23	71	402
07:15 AM	14	47	6	67	19	40	2	61	7	205	23	235	10	39	33	82	445
07:30 AM	14	71	8	93	10	31	10	51	16	203	9	228	16	53	44	113	485
07:45 AM	22	88	12	122	13	43	8	64	17	195	25	237	15	70	46	131	554
Total	62	253	34	349	61	141	23	225	47	798	70	915	51	200	146	397	1886
08:00 AM	21	92	15	128	9	26	11	46	10	180	17	207	21	57	50	128	509
08:15 AM	24	97	11	132	12	36	5	53	12	152	27	191	14	58	52	124	500
08:30 AM	24	76	15	115	13	30	10	53	7	155	16	178	19	52	34	105	451
08:45 AM	18	107	11	136	11	35	4	50	9	108	25	142	17	53	32	102	430
Total	87	372	52	511	45	127	30	202	38	595	85	718	71	220	168	459	1890
Grand Total	149	625	86	860	106	268	53	427	85	1393	155	1633	122	420	314	856	3776
Apprch %	17.3	72.7	10		24.8	62.8	12.4		5.2	85.3	9.5		14.3	49.1	36.7		
Total %	3.9	16.6	2.3	22.8	2.8	7.1	1.4	11.3	2.3	36.9	4.1	43.2	3.2	11.1	8.3	22.7	
PC	136	583	83	802	101	252	52	405	77	1332	148	1557	116	386	302	804	3568
% PC	91.3	93.3	96.5	93.3	95.3	94	98.1	94.8	90.6	95.6	95.5	95.3	95.1	91.9	96.2	93.9	94.5
SU	12	39	3	54	5	15	1	21	7	57	6	70	6	33	11	50	195
% SU	8.1	6.2	3.5	6.3	4.7	5.6	1.9	4.9	8.2	4.1	3.9	4.3	4.9	7.9	3.5	5.8	5.2
MU	1	3	0	4	0	1	0	1	1	4	1	6	0	1	1	2	13
% MU	0.7	0.5	0	0.5	0	0.4	0	0.2	1.2	0.3	0.6	0.4	0	0.2	0.3	0.2	0.3

	Halsted Ave From North				119th St From East				Halsted Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	14	71	8	93	10	31	10	51	16	**203**	9	228	16	53	44	113	485
07:45 AM	22	88	12	122	**13**	**43**	8	**64**	**17**	195	25	**237**	15	**70**	46	**131**	**554**
08:00 AM	21	92	**15**	128	9	26	**11**	46	10	180	17	207	**21**	57	50	128	509
08:15 AM	**24**	**97**	11	**132**	12	36	5	53	12	152	**27**	191	14	58	**52**	124	500
Total Volume	81	348	46	475	44	136	34	214	55	730	78	863	66	238	192	496	2048
% App. Total	17.1	73.3	9.7		20.6	63.6	15.9		6.4	84.6	9		13.3	48	38.7		
PHF	.844	.897	.767	.900	.846	.791	.773	.836	.809	.899	.722	.910	.786	.850	.923	.947	.924

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 2

Groups Printed- SU

	Halsted Ave From North				119th St From East				Halsted Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	5	1	8	2	2	1	5	1	6	0	7	1	4	0	5	25
07:15 AM	1	5	0	6	1	3	0	4	0	7	0	7	1	3	2	6	23
07:30 AM	1	5	1	7	0	0	0	0	1	10	1	12	1	6	3	10	29
07:45 AM	1	8	0	9	0	3	0	3	1	10	0	11	1	5	2	8	31
Total	5	23	2	30	3	8	1	12	3	33	1	37	4	18	7	29	108
08:00 AM	2	2	0	4	1	2	0	3	2	8	1	11	2	6	0	8	26
08:15 AM	2	4	0	6	1	3	0	4	2	7	1	10	0	2	1	3	23
08:30 AM	2	4	1	7	0	2	0	2	0	7	2	9	0	5	2	7	25
08:45 AM	1	6	0	7	0	0	0	0	0	2	1	3	0	2	1	3	13
Total	7	16	1	24	2	7	0	9	4	24	5	33	2	15	4	21	87
Grand Total	12	39	3	54	5	15	1	21	7	57	6	70	6	33	11	50	195
Apprch %	22.2	72.2	5.6		23.8	71.4	4.8		10	81.4	8.6		12	66	22		
Total %	6.2	20	1.5	27.7	2.6	7.7	0.5	10.8	3.6	29.2	3.1	35.9	3.1	16.9	5.6	25.6	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 3

Groups Printed- MU

	Halsted Ave From North				119th St From East				Halsted Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	1	2	0	3	0	1	0	1	4
07:15 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	1	1	3
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	2	0	0	0	0	1	3	1	5	0	1	1	2	9
08:00 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	2	0	1	0	1	0	1	0	1	0	0	0	0	4
Grand Total	1	3	0	4	0	1	0	1	1	4	1	6	0	1	1	2	13
Apprch %	25	75	0		0	100	0		16.7	66.7	16.7		0	50	50		
Total %	7.7	23.1	0	30.8	0	7.7	0	7.7	7.7	30.8	7.7	46.2	0	7.7	7.7	15.4	

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7:00 AM - 9:00 AM
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File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/10/2012
Page No : 4

Groups Printed- Peds & Bikes

	Halsted Ave Crossing North Leg			119th St Crossing East Leg			Halsted Ave Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	1	13	14	0	0	0	0	0	0	0	10	10	24
07:15 AM	0	4	4	1	2	3	0	1	1	1	1	2	10
07:30 AM	0	4	4	0	4	4	0	0	0	0	9	9	17
07:45 AM	0	14	14	0	2	2	0	2	2	0	16	16	34
Total	1	35	36	1	8	9	0	3	3	1	36	37	85
08:00 AM	0	6	6	0	1	1	0	1	1	1	5	6	14
08:15 AM	0	9	9	0	1	1	0	0	0	0	12	12	22
08:30 AM	0	1	1	0	0	0	0	0	0	0	5	5	6
08:45 AM	1	5	6	0	1	1	0	2	2	1	2	3	12
Total	1	21	22	0	3	3	0	3	3	2	24	26	54
Grand Total	2	56	58	1	11	12	0	6	6	3	60	63	139
Apprch %	3.4	96.6		8.3	91.7		0	100		4.8	95.2		
Total %	1.4	40.3	41.7	0.7	7.9	8.6	0	4.3	4.3	2.2	43.2	45.3	

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119th St and Halsted Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 5

Groups Printed- PC - SU - MU

	Halsted Ave From North				119th St From East				Halsted Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	24	141	25	190	19	49	10	78	19	117	24	160	27	64	30	121	549
04:15 PM	34	139	29	202	21	41	16	78	20	98	34	152	30	57	32	119	551
04:30 PM	39	202	39	280	18	38	16	72	15	129	24	168	27	69	38	134	654
04:45 PM	36	179	25	240	16	50	7	73	14	127	28	169	19	50	21	90	572
Total	133	661	118	912	74	178	49	301	68	471	110	649	103	240	121	464	2326
05:00 PM	31	199	22	252	19	51	21	91	13	106	21	140	28	55	48	131	614
05:15 PM	36	216	22	274	11	39	19	69	21	126	18	165	34	58	24	116	624
05:30 PM	26	202	20	248	9	45	21	75	12	110	31	153	37	60	25	122	598
05:45 PM	27	186	32	245	22	55	20	97	14	101	22	137	27	66	33	126	605
Total	120	803	96	1019	61	190	81	332	60	443	92	595	126	239	130	495	2441
Grand Total	253	1464	214	1931	135	368	130	633	128	914	202	1244	229	479	251	959	4767
Apprch %	13.1	75.8	11.1		21.3	58.1	20.5		10.3	73.5	16.2		23.9	49.9	26.2		
Total %	5.3	30.7	4.5	40.5	2.8	7.7	2.7	13.3	2.7	19.2	4.2	26.1	4.8	10	5.3	20.1	
PC	241	1422	213	1876	132	351	126	609	127	876	200	1203	225	463	250	938	4626
% PC	95.3	97.1	99.5	97.2	97.8	95.4	96.9	96.2	99.2	95.8	99	96.7	98.3	96.7	99.6	97.8	97
SU	11	40	1	52	3	17	4	24	1	37	1	39	4	16	1	21	136
% SU	4.3	2.7	0.5	2.7	2.2	4.6	3.1	3.8	0.8	4	0.5	3.1	1.7	3.3	0.4	2.2	2.9
MU	1	2	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
% MU	0.4	0.1	0	0.2	0	0	0	0	0	0.1	0.5	0.2	0	0	0	0	0.1

	Halsted Ave From North				119th St From East				Halsted Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**39**	202	**39**	**280**	18	38	16	72	15	**129**	24	168	27	**69**	38	**134**	**654**
04:45 PM	36	179	25	240	16	50	7	73	14	127	**28**	**169**	19	50	21	90	572
05:00 PM	31	199	22	252	**19**	**51**	**21**	**91**	13	106	21	140	28	55	**48**	131	614
05:15 PM	36	**216**	22	274	11	39	19	69	**21**	126	18	165	**34**	58	24	116	624
Total Volume	142	796	108	1046	64	178	63	305	63	488	91	642	108	232	131	471	2464
% App. Total	13.6	76.1	10.3		21	58.4	20.7		9.8	76	14.2		22.9	49.3	27.8		
PHF	.910	.921	.692	.934	.842	.873	.750	.838	.750	.946	.813	.950	.794	.841	.682	.879	.942

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4:00 PM - 6:00 PM
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File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 6

Groups Printed- SU

	Halsted Ave From North				119th St From East				Halsted Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	1	3	0	4	2	3	2	7	1	4	0	5	1	2	0	3	19
04:15 PM	1	6	1	8	1	4	1	6	0	5	1	6	0	1	0	1	21
04:30 PM	3	3	0	6	0	1	1	2	0	6	0	6	1	1	0	2	16
04:45 PM	2	7	0	9	0	2	0	2	0	4	0	4	0	1	0	1	16
Total	7	19	1	27	3	10	4	17	1	19	1	21	2	5	0	7	72
05:00 PM	1	6	0	7	0	0	0	0	0	2	0	2	0	3	1	4	13
05:15 PM	1	7	0	8	0	3	0	3	0	9	0	9	1	1	0	2	22
05:30 PM	0	2	0	2	0	3	0	3	0	1	0	1	1	2	0	3	9
05:45 PM	2	6	0	8	0	1	0	1	0	6	0	6	0	5	0	5	20
Total	4	21	0	25	0	7	0	7	0	18	0	18	2	11	1	14	64
Grand Total	11	40	1	52	3	17	4	24	1	37	1	39	4	16	1	21	136
Apprch %	21.2	76.9	1.9		12.5	70.8	16.7		2.6	94.9	2.6		19	76.2	4.8		
Total %	8.1	29.4	0.7	38.2	2.2	12.5	2.9	17.6	0.7	27.2	0.7	28.7	2.9	11.8	0.7	15.4	

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File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 7

Groups Printed- MU

	Halsted Ave From North				119th St From East				Halsted Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	1	1	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:00 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Grand Total	1	2	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
Apprch %	33.3	66.7	0		0	0	0		0	50	50		0	0	0		
Total %	20	40	0	60	0	0	0	0	0	20	20	40	0	0	0	0	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/10/2012
Page No : 8

Groups Printed- Peds & Bikes

	Halsted Ave Crossing North Leg			119th St Crossing East Leg			Halsted Ave Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	6	6	1	3	4	0	2	2	0	2	2	14
04:15 PM	0	4	4	0	2	2	0	2	2	0	8	8	16
04:30 PM	0	2	2	0	4	4	0	2	2	1	25	26	34
04:45 PM	1	8	9	3	5	8	0	5	5	1	12	13	35
Total	1	20	21	4	14	18	0	11	11	2	47	49	99
05:00 PM	0	6	6	0	4	4	0	1	1	0	5	5	16
05:15 PM	0	7	7	0	2	2	0	1	1	0	16	16	26
05:30 PM	0	2	2	0	4	4	0	3	3	0	9	9	18
05:45 PM	3	13	16	2	1	3	0	3	3	1	29	30	52
Total	3	28	31	2	11	13	0	8	8	1	59	60	112
Grand Total	4	48	52	6	25	31	0	19	19	3	106	109	211
Apprch %	7.7	92.3		19.4	80.6		0	100		2.8	97.2		
Total %	1.9	22.7	24.6	2.8	11.8	14.7	0	9	9	1.4	50.2	51.7	

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119th St and Marshfield Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 1

Groups Printed- PC - SU - MU

	Marshfield Ave From North				119th St From East				Marshfield Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	48	18	8	74	0	99	28	127	0	0	0	0	14	61	0	75	276
07:15 AM	65	23	11	99	0	108	30	138	0	0	0	0	28	78	0	106	343
07:30 AM	71	27	15	113	0	118	35	153	0	0	0	0	36	98	0	134	400
07:45 AM	76	30	20	126	0	125	37	162	0	0	0	0	59	118	0	177	465
Total	260	98	54	412	0	450	130	580	0	0	0	0	137	355	0	492	1484
08:00 AM	59	23	45	127	0	115	53	168	0	0	0	0	62	97	0	159	454
08:15 AM	67	27	34	128	0	115	36	151	0	0	0	0	38	95	0	133	412
08:30 AM	55	30	54	139	0	131	32	163	0	0	0	0	35	136	0	171	473
08:45 AM	67	37	32	136	0	96	32	128	0	0	0	0	43	103	0	146	410
Total	248	117	165	530	0	457	153	610	0	0	0	0	178	431	0	609	1749
Grand Total	508	215	219	942	0	907	283	1190	0	0	0	0	315	786	0	1101	3233
Apprch %	53.9	22.8	23.2		0	76.2	23.8		0	0	0		28.6	71.4	0		
Total %	15.7	6.7	6.8	29.1	0	28.1	8.8	36.8	0	0	0	0	9.7	24.3	0	34.1	
PC	498	211	216	925	0	877	277	1154	0	0	0	0	288	724	0	1012	3091
% PC	98	98.1	98.6	98.2	0	96.7	97.9	97	0	0	0	0	91.4	92.1	0	91.9	95.6
SU	9	3	3	15	0	21	6	27	0	0	0	0	12	38	0	50	92
% SU	1.8	1.4	1.4	1.6	0	2.3	2.1	2.3	0	0	0	0	3.8	4.8	0	4.5	2.8
MU	1	1	0	2	0	9	0	9	0	0	0	0	15	24	0	39	50
% MU	0.2	0.5	0	0.2	0	1	0	0.8	0	0	0	0	4.8	3.1	0	3.5	1.5

	Marshfield Ave From North				119th St From East				Marshfield Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**76**	**30**	20	126	0	125	37	162	0	0	0	0	59	118	0	**177**	465
08:00 AM	59	23	45	127	0	115	**53**	**168**	0	0	0	0	**62**	97	0	159	454
08:15 AM	67	27	34	128	0	115	36	151	0	0	0	0	38	95	0	133	412
08:30 AM	55	30	**54**	**139**	0	**131**	32	163	0	0	0	0	35	**136**	0	171	**473**
Total Volume	257	110	153	520	0	486	158	644	0	0	0	0	194	446	0	640	1804
% App. Total	49.4	21.2	29.4		0	75.5	24.5		0	0	0		30.3	69.7	0		
PHF	.845	.917	.708	.935	.000	.927	.745	.958	.000	.000	.000	.000	.782	.820	.000	.904	.953

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119th St and Marshfield Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 2

Groups Printed- SU

	Marshfield Ave From North				119th St From East				Marshfield Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	1	1	1	3	0	4	1	5	0	0	0	0	0	11	0	11	19
Total	1	1	1	3	0	4	1	5	0	0	0	0	0	12	0	12	20
08:00 AM	3	0	1	4	0	4	2	6	0	0	0	0	5	8	0	13	23
08:15 AM	2	0	0	2	0	2	0	2	0	0	0	0	0	6	0	6	10
08:30 AM	0	0	0	0	0	6	1	7	0	0	0	0	5	9	0	14	21
08:45 AM	3	2	1	6	0	5	2	7	0	0	0	0	2	3	0	5	18
Total	8	2	2	12	0	17	5	22	0	0	0	0	12	26	0	38	72
Grand Total	9	3	3	15	0	21	6	27	0	0	0	0	12	38	0	50	92
Apprch %	60	20	20		0	77.8	22.2		0	0	0		24	76	0		
Total %	9.8	3.3	3.3	16.3	0	22.8	6.5	29.3	0	0	0	0	13	41.3	0	54.3	

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7:00 AM - 9:00 AM
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File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 3

Groups Printed- MU

	Marshfield Ave From North				119th St From East				Marshfield Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	3	0	3	0	0	0	0	5	6	0	11	15
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	7	7
Total	0	1	0	1	0	3	0	3	0	0	0	0	7	11	0	18	22
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	4	0	9	9
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
08:30 AM	1	0	0	1	0	1	0	1	0	0	0	0	2	4	0	6	8
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	2	0	3	4
Total	1	0	0	1	0	6	0	6	0	0	0	0	8	13	0	21	28
Grand Total	1	1	0	2	0	9	0	9	0	0	0	0	15	24	0	39	50
Apprch %	50	50	0		0	100	0		0	0	0		38.5	61.5	0		
Total %	2	2	0	4	0	18	0	18	0	0	0	0	30	48	0	78	

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Site Code : 00000000
Start Date : 5/10/2012
Page No : 4

Groups Printed- Peds & Bikes

	Marshfield Ave Crossing North Leg			119th St Crossing East Leg			Marshfield Ave Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	4	4	0	0	0	0	0	0	0	0	0	4
Total	0	4	4	0	0	0	0	0	0	0	0	0	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	0	0	0	0	3	3	0	0	0	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	3	3	3
08:45 AM	0	0	0	0	0	0	0	1	1	0	0	0	1
Total	0	1	1	0	0	0	0	4	4	0	3	3	8
Grand Total	0	5	5	0	0	0	0	4	4	0	3	3	12
Apprch %	0	100		0	0		0	100		0	100		
Total %	0	41.7	41.7	0	0	0	0	33.3	33.3	0	25	25	

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4:00 Pm - 6:00 PM
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File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 5

Groups Printed- PC - SU - MU

	Marshfield Ave From North				119th St From East				Marshfield Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	121	57	71	249	0	149	39	188	0	0	0	0	90	120	0	210	647
04:15 PM	103	69	58	230	0	138	58	196	0	0	0	0	71	128	0	199	625
04:30 PM	86	55	57	198	0	140	54	194	0	0	0	0	79	99	0	178	570
04:45 PM	96	63	53	212	0	114	70	184	0	0	0	0	77	91	0	168	564
Total	406	244	239	889	0	541	221	762	0	0	0	0	317	438	0	755	2406
05:00 PM	103	60	74	237	0	155	59	214	0	0	0	0	86	111	0	197	648
05:15 PM	77	65	71	213	0	136	55	191	0	0	0	0	74	91	0	165	569
05:30 PM	96	81	59	236	0	146	49	195	0	0	0	0	74	115	0	189	620
05:45 PM	104	59	72	235	0	129	47	176	0	0	0	0	78	105	0	183	594
Total	380	265	276	921	0	566	210	776	0	0	0	0	312	422	0	734	2431
Grand Total	786	509	515	1810	0	1107	431	1538	0	0	0	0	629	860	0	1489	4837
Apprch %	43.4	28.1	28.5		0	72	28		0	0	0		42.2	57.8	0		
Total %	16.2	10.5	10.6	37.4	0	22.9	8.9	31.8	0	0	0	0	13	17.8	0	30.8	
PC	780	504	513	1797	0	1090	426	1516	0	0	0	0	598	829	0	1427	4740
% PC	99.2	99	99.6	99.3	0	98.5	98.8	98.6	0	0	0	0	95.1	96.4	0	95.8	98
SU	4	4	2	10	0	14	4	18	0	0	0	0	18	21	0	39	67
% SU	0.5	0.8	0.4	0.6	0	1.3	0.9	1.2	0	0	0	0	2.9	2.4	0	2.6	1.4
MU	2	1	0	3	0	3	1	4	0	0	0	0	13	10	0	23	30
% MU	0.3	0.2	0	0.2	0	0.3	0.2	0.3	0	0	0	0	2.1	1.2	0	1.5	0.6

	Marshfield Ave From North				119th St From East				Marshfield Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	103	60	**74**	**237**	0	**155**	**59**	**214**	0	0	0	0	**86**	111	0	**197**	**648**
05:15 PM	77	65	71	213	0	136	55	191	0	0	0	0	74	91	0	165	569
05:30 PM	96	**81**	59	236	0	146	49	195	0	0	0	0	74	**115**	0	189	620
05:45 PM	**104**	59	72	235	0	129	47	176	0	0	0	0	78	105	0	183	594
Total Volume	380	265	276	921	0	566	210	776	0	0	0	0	312	422	0	734	2431
% App. Total	41.3	28.8	30		0	72.9	27.1		0	0	0		42.5	57.5	0		
PHF	.913	.818	.932	.972	.000	.913	.890	.907	.000	.000	.000	.000	.907	.917	.000	.931	.938

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119th St and Marshfield Ave
Chicago, IL
4:00 Pm - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 6

Groups Printed- SU

	Marshfield Ave From North				119th St From East				Marshfield Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	1	2	0	0	0	0	3	2	0	5	7
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	1	3	0	4	6
04:30 PM	1	0	0	1	0	2	1	3	0	0	0	0	3	4	0	7	11
04:45 PM	1	1	0	2	0	0	1	1	0	0	0	0	1	0	0	1	4
Total	2	1	0	3	0	5	3	8	0	0	0	0	8	9	0	17	28
05:00 PM	0	1	0	1	0	2	1	3	0	0	0	0	3	3	0	6	10
05:15 PM	1	1	1	3	0	4	0	4	0	0	0	0	3	0	0	3	10
05:30 PM	1	0	1	2	0	2	0	2	0	0	0	0	1	2	0	3	7
05:45 PM	0	1	0	1	0	1	0	1	0	0	0	0	3	7	0	10	12
Total	2	3	2	7	0	9	1	10	0	0	0	0	10	12	0	22	39
Grand Total	4	4	2	10	0	14	4	18	0	0	0	0	18	21	0	39	67
Apprch %	40	40	20		0	77.8	22.2		0	0	0		46.2	53.8	0		
Total %	6	6	3	14.9	0	20.9	6	26.9	0	0	0	0	26.9	31.3	0	58.2	

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Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/10/2012
Page No : 7

Groups Printed- MU

	Marshfield Ave From North				119th St From East				Marshfield Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	2	0	2	4
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
04:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	3	2	0	5	6
Total	2	1	0	3	0	0	0	0	0	0	0	0	5	4	0	9	12
05:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	2	3
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	1	1	0	2	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	7	7
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	3
Total	0	0	0	0	0	3	1	4	0	0	0	0	8	6	0	14	18
Grand Total	2	1	0	3	0	3	1	4	0	0	0	0	13	10	0	23	30
Apprch %	66.7	33.3	0		0	75	25		0	0	0		56.5	43.5	0		
Total %	6.7	3.3	0	10	0	10	3.3	13.3	0	0	0	0	43.3	33.3	0	76.7	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/10/2012
Page No : 8

Groups Printed- Peds & Bikes

	Marshfield Ave Crossing North Leg			119th St Crossing East Leg			Marshfield Ave Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	8	8	0	0	0	0	0	0	0	0	0	8
04:15 PM	0	3	3	0	0	0	0	4	4	0	0	0	7
04:30 PM	2	3	5	0	0	0	0	1	1	0	0	0	6
04:45 PM	0	2	2	0	0	0	0	8	8	0	0	0	10
Total	2	16	18	0	0	0	0	13	13	0	0	0	31
05:00 PM	0	0	0	0	0	0	0	5	5	0	0	0	5
05:15 PM	0	2	2	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	1	1	0	0	0	0	1	1	0	0	0	2
05:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	1
Total	0	4	4	0	0	0	0	6	6	0	0	0	10
Grand Total	2	20	22	0	0	0	0	19	19	0	0	0	41
Apprch %	9.1	90.9		0	0		0	100		0	0		
Total %	4.9	48.8	53.7	0	0	0	0	46.3	46.3	0	0	0	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/15/2012
Page No : 1

Groups Printed- PC - SU - MU

	Michigan Ave From North				119th St From East				Michigan Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	19	28	0	47	2	1	0	3	4	56	5	65	5	2	32	39	154
07:15 AM	22	23	1	46	1	6	1	8	3	70	7	80	6	3	31	40	174
07:30 AM	21	36	0	57	2	4	3	9	4	78	4	86	7	6	35	48	200
07:45 AM	16	53	4	73	4	5	3	12	8	70	7	85	6	6	42	54	224
Total	78	140	5	223	9	16	7	32	19	274	23	316	24	17	140	181	752
08:00 AM	26	36	0	62	0	5	1	6	5	73	10	88	9	3	30	42	198
08:15 AM	19	43	1	63	0	3	2	5	2	65	5	72	5	3	31	39	179
08:30 AM	19	41	0	60	1	4	0	5	2	74	8	84	17	6	29	52	201
08:45 AM	23	48	5	76	3	6	1	10	2	71	12	85	14	7	34	55	226
Total	87	168	6	261	4	18	4	26	11	283	35	329	45	19	124	188	804
Grand Total	165	308	11	484	13	34	11	58	30	557	58	645	69	36	264	369	1556
Apprch %	34.1	63.6	2.3		22.4	58.6	19		4.7	86.4	9		18.7	9.8	71.5		
Total %	10.6	19.8	0.7	31.1	0.8	2.2	0.7	3.7	1.9	35.8	3.7	41.5	4.4	2.3	17	23.7	
PC	147	283	11	441	13	34	11	58	29	542	58	629	66	35	237	338	1466
% PC	89.1	91.9	100	91.1	100	100	100	100	96.7	97.3	100	97.5	95.7	97.2	89.8	91.6	94.2
SU	17	25	0	42	0	0	0	0	1	15	0	16	3	0	25	28	86
% SU	10.3	8.1	0	8.7	0	0	0	0	3.3	2.7	0	2.5	4.3	0	9.5	7.6	5.5
MU	1	0	0	1	0	0	0	0	0	0	0	0	0	1	2	3	4
% MU	0.6	0	0	0.2	0	0	0	0	0	0	0	0	0	2.8	0.8	0.8	0.3

	Michigan Ave From North				119th St From East				Michigan Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**26**	36	0	62	0	5	1	6	**5**	73	10	**88**	9	3	30	42	198
08:15 AM	19	43	1	63	0	3	**2**	5	2	65	5	72	5	3	31	39	179
08:30 AM	19	41	0	60	1	4	0	5	2	**74**	8	84	**17**	6	29	52	201
08:45 AM	23	**48**	**5**	**76**	**3**	**6**	1	**10**	2	71	**12**	85	14	**7**	**34**	**55**	**226**
Total Volume	87	168	6	261	4	18	4	26	11	283	35	329	45	19	124	188	804
% App. Total	33.3	64.4	2.3		15.4	69.2	15.4		3.3	86	10.6		23.9	10.1	66		
PHF	.837	.875	.300	.859	.333	.750	.500	.650	.550	.956	.729	.935	.662	.679	.912	.855	.889

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119th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/15/2012
Page No : 2

Groups Printed- SU

	Michigan Ave From North				119th St From East				Michigan Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	4	2	0	6	0	0	0	0	1	1	0	2	0	0	3	3	11
07:15 AM	2	2	0	4	0	0	0	0	0	3	0	3	0	0	6	6	13
07:30 AM	2	3	0	5	0	0	0	0	0	1	0	1	0	0	3	3	9
07:45 AM	2	5	0	7	0	0	0	0	0	1	0	1	2	0	4	6	14
Total	10	12	0	22	0	0	0	0	1	6	0	7	2	0	16	18	47
08:00 AM	1	3	0	4	0	0	0	0	0	1	0	1	0	0	2	2	7
08:15 AM	2	4	0	6	0	0	0	0	0	4	0	4	0	0	3	3	13
08:30 AM	1	4	0	5	0	0	0	0	0	3	0	3	1	0	2	3	11
08:45 AM	3	2	0	5	0	0	0	0	0	1	0	1	0	0	2	2	8
Total	7	13	0	20	0	0	0	0	0	9	0	9	1	0	9	10	39
Grand Total	17	25	0	42	0	0	0	0	1	15	0	16	3	0	25	28	86
Apprch %	40.5	59.5	0		0	0	0		6.2	93.8	0		10.7	0	89.3		
Total %	19.8	29.1	0	48.8	0	0	0	0	1.2	17.4	0	18.6	3.5	0	29.1	32.6	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/15/2012
Page No : 3

Groups Printed- MU

	Michigan Ave From North				119th St From East				Michigan Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	1	2	3	4
Grand Total	1	0	0	1	0	0	0	0	0	0	0	0	0	1	2	3	4
Apprch %	100	0	0		0	0	0		0	0	0		0	33.3	66.7		
Total %	25	0	0	25	0	0	0	0	0	0	0	0	0	25	50	75	

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7:00 AM - 9:00 AM
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File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/15/2012
Page No : 4

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			119th St Crossing East Leg			Michigan Ave Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	10	10	0	3	3	0	1	1	0	4	4	18
07:15 AM	0	8	8	0	4	4	0	0	0	0	6	6	18
07:30 AM	1	6	7	0	4	4	0	1	1	0	4	4	16
07:45 AM	0	11	11	0	2	2	0	2	2	0	6	6	21
Total	1	35	36	0	13	13	0	4	4	0	20	20	73
08:00 AM	0	14	14	0	8	8	0	7	7	0	9	9	38
08:15 AM	0	18	18	0	3	3	0	12	12	0	15	15	48
08:30 AM	0	9	9	0	8	8	0	22	22	0	13	13	52
08:45 AM	0	10	10	0	3	3	0	6	6	0	11	11	30
Total	0	51	51	0	22	22	0	47	47	0	48	48	168
Grand Total	1	86	87	0	35	35	0	51	51	0	68	68	241
Apprch %	1.1	98.9		0	100		0	100		0	100		
Total %	0.4	35.7	36.1	0	14.5	14.5	0	21.2	21.2	0	28.2	28.2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/15/2012
Page No : 5

Groups Printed- PC - SU - MU

	Michigan Ave From North				119th St From East				Michigan Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	35	73	3	111	0	5	1	6	1	57	7	65	18	8	26	52	234
04:15 PM	32	79	4	115	4	2	1	7	7	60	11	78	10	8	35	53	253
04:30 PM	32	89	2	123	5	4	1	10	3	57	9	69	21	8	28	57	259
04:45 PM	32	67	2	101	2	4	4	10	3	62	12	77	25	6	31	62	250
Total	131	308	11	450	11	15	7	33	14	236	39	289	74	30	120	224	996
05:00 PM	45	94	4	143	3	6	1	10	2	50	10	62	17	13	31	61	276
05:15 PM	46	91	5	142	1	3	3	7	2	51	8	61	22	7	42	71	281
05:30 PM	30	98	2	130	3	1	1	5	3	57	6	66	17	6	36	59	260
05:45 PM	40	96	6	142	2	4	3	9	1	61	13	75	20	9	38	67	293
Total	161	379	17	557	9	14	8	31	8	219	37	264	76	35	147	258	1110
Grand Total	292	687	28	1007	20	29	15	64	22	455	76	553	150	65	267	482	2106
Apprch %	29	68.2	2.8		31.2	45.3	23.4		4	82.3	13.7		31.1	13.5	55.4		
Total %	13.9	32.6	1.3	47.8	0.9	1.4	0.7	3	1	21.6	3.6	26.3	7.1	3.1	12.7	22.9	
PC	278	660	28	966	19	29	15	63	22	447	76	545	148	64	254	466	2040
% PC	95.2	96.1	100	95.9	95	100	100	98.4	100	98.2	100	98.6	98.7	98.5	95.1	96.7	96.9
SU	14	27	0	41	1	0	0	1	0	8	0	8	2	1	13	16	66
% SU	4.8	3.9	0	4.1	5	0	0	1.6	0	1.8	0	1.4	1.3	1.5	4.9	3.3	3.1
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Michigan Ave From North				119th St From East				Michigan Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	45	94	4	**143**	**3**	**6**	1	**10**	2	50	10	62	17	**13**	31	61	276
05:15 PM	**46**	91	5	142	1	3	**3**	7	2	51	8	61	**22**	7	**42**	**71**	281
05:30 PM	30	**98**	2	130	3	1	1	5	**3**	57	6	66	17	6	36	59	260
05:45 PM	40	96	**6**	142	2	4	3	9	1	**61**	**13**	**75**	20	9	38	67	**293**
Total Volume	161	379	17	557	9	14	8	31	8	219	37	264	76	35	147	258	1110
% App. Total	28.9	68	3.1		29	45.2	25.8		3	83	14		29.5	13.6	57		
PHF	.875	.967	.708	.974	.750	.583	.667	.775	.667	.898	.712	.880	.864	.673	.875	.908	.947

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4:00 PM - 6:00 PM
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Start Date : 5/15/2012
Page No : 6

Groups Printed- SU

	Michigan Ave From North				119th St From East				Michigan Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	3	4	0	7	0	0	0	0	0	1	0	1	0	0	2	2	10
04:15 PM	1	3	0	4	1	0	0	1	0	1	0	1	0	0	1	1	7
04:30 PM	2	4	0	6	0	0	0	0	0	1	0	1	0	1	1	2	9
04:45 PM	1	4	0	5	0	0	0	0	0	3	0	3	1	0	3	4	12
Total	7	15	0	22	1	0	0	1	0	6	0	6	1	1	7	9	38
05:00 PM	1	3	0	4	0	0	0	0	0	0	0	0	0	0	1	1	5
05:15 PM	2	4	0	6	0	0	0	0	0	0	0	0	1	0	2	3	9
05:30 PM	1	3	0	4	0	0	0	0	0	1	0	1	0	0	1	1	6
05:45 PM	3	2	0	5	0	0	0	0	0	1	0	1	0	0	2	2	8
Total	7	12	0	19	0	0	0	0	0	2	0	2	1	0	6	7	28
Grand Total	14	27	0	41	1	0	0	1	0	8	0	8	2	1	13	16	66
Apprch %	34.1	65.9	0		100	0	0		0	100	0		12.5	6.2	81.2		
Total %	21.2	40.9	0	62.1	1.5	0	0	1.5	0	12.1	0	12.1	3	1.5	19.7	24.2	

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119th St and Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/15/2012
Page No : 7

Groups Printed- MU

	Michigan Ave From North				119th St From East				Michigan Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

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119th St and Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/15/2012
Page No : 8

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			119th St Crossing East Leg			Michigan Ave Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	17	17	0	12	12	0	9	9	0	15	15	53
04:15 PM	0	20	20	0	3	3	0	5	5	0	24	24	52
04:30 PM	0	14	14	0	8	8	0	9	9	0	21	21	52
04:45 PM	0	13	13	0	9	9	0	9	9	1	13	14	45
Total	0	64	64	0	32	32	0	32	32	1	73	74	202
05:00 PM	0	9	9	0	10	10	0	16	16	1	12	13	48
05:15 PM	0	12	12	0	24	24	0	16	16	0	13	13	65
05:30 PM	0	8	8	0	6	6	0	9	9	1	7	8	31
05:45 PM	0	8	8	0	14	14	0	12	12	0	7	7	41
Total	0	37	37	0	54	54	0	53	53	2	39	41	185
Grand Total	0	101	101	0	86	86	0	85	85	3	112	115	387
Apprch %	0	100		0	100		0	100		2.6	97.4		
Total %	0	26.1	26.1	0	22.2	22.2	0	22	22	0.8	28.9	29.7	

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119th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 1

Groups Printed- PC - SU - MU

	State St From North				119th St From East				State St From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	5	4	1	10	1	18	1	20	3	32	5	40	3	29	14	46	116
07:15 AM	12	12	1	25	0	29	0	29	8	33	8	49	10	29	18	57	160
07:30 AM	4	6	5	15	1	23	1	25	4	46	8	58	5	41	11	57	155
07:45 AM	6	15	1	22	3	34	2	39	5	55	8	68	3	38	15	56	185
Total	27	37	8	72	5	104	4	113	20	166	29	215	21	137	58	216	616
08:00 AM	11	10	1	22	1	38	2	41	3	39	6	48	4	43	17	64	175
08:15 AM	5	14	1	20	1	38	1	40	5	36	10	51	7	38	15	60	171
08:30 AM	9	18	3	30	2	47	2	51	10	35	13	58	9	35	16	60	199
08:45 AM	11	18	1	30	2	36	1	39	2	41	8	51	8	35	17	60	180
Total	36	60	6	102	6	159	6	171	20	151	37	208	28	151	65	244	725
Grand Total	63	97	14	174	11	263	10	284	40	317	66	423	49	288	123	460	1341
Apprch %	36.2	55.7	8		3.9	92.6	3.5		9.5	74.9	15.6		10.7	62.6	26.7		
Total %	4.7	7.2	1	13	0.8	19.6	0.7	21.2	3	23.6	4.9	31.5	3.7	21.5	9.2	34.3	
PC	59	95	14	168	11	238	8	257	38	312	63	413	46	265	118	429	1267
% PC	93.7	97.9	100	96.6	100	90.5	80	90.5	95	98.4	95.5	97.6	93.9	92	95.9	93.3	94.5
SU	4	2	0	6	0	24	2	26	2	5	3	10	3	22	5	30	72
% SU	6.3	2.1	0	3.4	0	9.1	20	9.2	5	1.6	4.5	2.4	6.1	7.6	4.1	6.5	5.4
MU	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% MU	0	0	0	0	0	0.4	0	0.4	0	0	0	0	0	0.3	0	0.2	0.1

	State St From North				119th St From East				State St From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	6	15	1	22	**3**	34	**2**	39	5	**55**	8	**68**	3	38	15	56	185
08:00 AM	**11**	10	1	22	1	38	2	41	3	39	6	48	4	**43**	**17**	**64**	175
08:15 AM	5	14	1	20	1	38	1	40	5	36	10	51	7	38	15	60	171
08:30 AM	9	**18**	**3**	**30**	2	**47**	2	**51**	**10**	35	**13**	58	**9**	35	16	60	**199**
Total Volume	31	57	6	94	7	157	7	171	23	165	37	225	23	154	63	240	730
% App. Total	33	60.6	6.4		4.1	91.8	4.1		10.2	73.3	16.4		9.6	64.2	26.2		
PHF	.705	.792	.500	.783	.583	.835	.875	.838	.575	.750	.712	.827	.639	.895	.926	.938	.917

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119th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 2

Groups Printed- SU

	State St From North				119th St From East				State St From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	4	6	9
07:15 AM	1	0	0	1	0	2	0	2	1	1	1	3	1	1	0	2	8
07:30 AM	1	0	0	1	0	4	0	4	0	1	0	1	0	3	0	3	9
07:45 AM	1	0	0	1	0	4	1	5	0	1	0	1	1	5	0	6	13
Total	3	0	0	3	0	13	1	14	1	3	1	5	2	11	4	17	39
08:00 AM	0	0	0	0	0	2	1	3	1	0	0	1	0	3	0	3	7
08:15 AM	0	0	0	0	0	3	0	3	0	0	2	2	0	4	0	4	9
08:30 AM	0	0	0	0	0	1	0	1	0	2	0	2	0	2	0	2	5
08:45 AM	1	2	0	3	0	5	0	5	0	0	0	0	1	2	1	4	12
Total	1	2	0	3	0	11	1	12	1	2	2	5	1	11	1	13	33
Grand Total	4	2	0	6	0	24	2	26	2	5	3	10	3	22	5	30	72
Apprch %	66.7	33.3	0		0	92.3	7.7		20	50	30		10	73.3	16.7		
Total %	5.6	2.8	0	8.3	0	33.3	2.8	36.1	2.8	6.9	4.2	13.9	4.2	30.6	6.9	41.7	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 3

Groups Printed- MU

	State St From North				119th St From East				State St From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	50	0	50	0	0	0	0	0	50	0	50	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/12/2012
Page No : 4

Groups Printed- Peds & Bikes

	State St Crossing North Leg			119th St Crossing East Leg			State St Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	1	0	1	0	0	0	2
07:15 AM	0	4	4	0	1	1	0	6	6	0	0	0	11
07:30 AM	1	2	3	0	4	4	0	6	6	0	2	2	15
07:45 AM	0	2	2	0	2	2	1	4	5	1	0	1	10
Total	1	9	10	0	7	7	2	16	18	1	2	3	38
08:00 AM	0	5	5	0	2	2	0	4	4	0	1	1	12
08:15 AM	0	2	2	0	9	9	0	3	3	0	1	1	15
08:30 AM	0	12	12	0	4	4	0	9	9	0	5	5	30
08:45 AM	0	7	7	1	1	2	0	3	3	0	0	0	12
Total	0	26	26	1	16	17	0	19	19	0	7	7	69
Grand Total	1	35	36	1	23	24	2	35	37	1	9	10	107
Apprch %	2.8	97.2		4.2	95.8		5.4	94.6		10	90		
Total %	0.9	32.7	33.6	0.9	21.5	22.4	1.9	32.7	34.6	0.9	8.4	9.3	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 5

Groups Printed- PC - SU - MU

	State St From North				119th St From East				State St From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	15	36	5	56	2	41	2	45	3	37	6	46	8	41	13	62	209
04:15 PM	15	39	3	57	4	34	2	40	3	27	7	37	13	46	14	73	207
04:30 PM	11	34	4	49	3	49	4	56	2	16	4	22	11	49	7	67	194
04:45 PM	11	46	2	59	0	35	2	37	3	23	9	35	14	54	15	83	214
Total	52	155	14	221	9	159	10	178	11	103	26	140	46	190	49	285	824
05:00 PM	12	40	1	53	2	49	1	52	1	31	8	40	4	47	12	63	208
05:15 PM	10	36	4	50	5	53	4	62	2	14	7	23	10	48	11	69	204
05:30 PM	14	41	6	61	1	47	0	48	5	22	6	33	10	38	19	67	209
05:45 PM	18	25	1	44	1	31	5	37	7	21	7	35	13	39	11	63	179
Total	54	142	12	208	9	180	10	199	15	88	28	131	37	172	53	262	800
Grand Total	106	297	26	429	18	339	20	377	26	191	54	271	83	362	102	547	1624
Apprch %	24.7	69.2	6.1		4.8	89.9	5.3		9.6	70.5	19.9		15.2	66.2	18.6		
Total %	6.5	18.3	1.6	26.4	1.1	20.9	1.2	23.2	1.6	11.8	3.3	16.7	5.1	22.3	6.3	33.7	
PC	103	296	26	425	18	325	20	363	26	185	54	265	82	352	102	536	1589
% PC	97.2	99.7	100	99.1	100	95.9	100	96.3	100	96.9	100	97.8	98.8	97.2	100	98	97.8
SU	3	1	0	4	0	14	0	14	0	5	0	5	1	10	0	11	34
% SU	2.8	0.3	0	0.9	0	4.1	0	3.7	0	2.6	0	1.8	1.2	2.8	0	2	2.1
MU	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% MU	0	0	0	0	0	0	0	0	0	0.5	0	0.4	0	0	0	0	0.1

	State St From North				119th St From East				State St From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	11	**46**	2	59	0	35	2	37	3	23	**9**	35	**14**	**54**	15	**83**	**214**
05:00 PM	12	40	1	53	2	49	1	52	1	**31**	8	**40**	4	47	12	63	208
05:15 PM	10	36	4	50	**5**	**53**	**4**	**62**	2	14	7	23	10	48	11	69	204
05:30 PM	**14**	41	**6**	**61**	1	47	0	48	**5**	22	6	33	10	38	**19**	67	209
Total Volume	47	163	13	223	8	184	7	199	11	90	30	131	38	187	57	282	835
% App. Total	21.1	73.1	5.8		4	92.5	3.5		8.4	68.7	22.9		13.5	66.3	20.2		
PHF	.839	.886	.542	.914	.400	.868	.438	.802	.550	.726	.833	.819	.679	.866	.750	.849	.975

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 6

Groups Printed- SU

	State St From North				119th St From East				State St From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	3	0	3	0	1	0	1	0	2	0	2	6
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0	2	3
04:30 PM	2	0	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5
04:45 PM	0	1	0	1	0	1	0	1	0	1	0	1	0	2	0	2	5
Total	2	1	0	3	0	7	0	7	0	2	0	2	1	6	0	7	19
05:00 PM	1	0	0	1	0	2	0	2	0	1	0	1	0	1	0	1	5
05:15 PM	0	0	0	0	0	1	0	1	0	2	0	2	0	1	0	1	4
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	1	0	0	1	0	7	0	7	0	3	0	3	0	4	0	4	15
Grand Total	3	1	0	4	0	14	0	14	0	5	0	5	1	10	0	11	34
Apprch %	75	25	0		0	100	0		0	100	0		9.1	90.9	0		
Total %	8.8	2.9	0	11.8	0	41.2	0	41.2	0	14.7	0	14.7	2.9	29.4	0	32.4	

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119th St and State St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/12/2012
Page No : 7

Groups Printed- MU

	State St From North				119th St From East				State St From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Apprch %	0	0	0		0	0	0		0	100	0		0	0	0		
Total %	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	

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119th St and State St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/12/2012
Page No : 8

Groups Printed- Peds & Bikes

	State St Crossing North Leg			119th St Crossing East Leg			State St Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	2	7	9	0	3	3	0	6	6	0	3	3	21
04:15 PM	1	4	5	0	0	0	0	3	3	1	0	1	9
04:30 PM	1	3	4	0	4	4	1	5	6	1	0	1	15
04:45 PM	0	4	4	1	0	1	0	6	6	0	0	0	11
Total	4	18	22	1	7	8	1	20	21	2	3	5	56
05:00 PM	0	7	7	0	1	1	0	3	3	0	2	2	13
05:15 PM	0	3	3	1	0	1	0	7	7	0	0	0	11
05:30 PM	0	1	1	0	2	2	1	8	9	0	0	0	12
05:45 PM	1	8	9	0	3	3	1	7	8	0	1	1	21
Total	1	19	20	1	6	7	2	25	27	0	3	3	57
Grand Total	5	37	42	2	13	15	3	45	48	2	6	8	113
Apprch %	11.9	88.1		13.3	86.7		6.2	93.8		25	75		
Total %	4.4	32.7	37.2	1.8	11.5	13.3	2.7	39.8	42.5	1.8	5.3	7.1	

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119th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 1

Groups Printed- PC - SU - MU

	Wentworth Ave From North				119th St From East				Wentworth Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	5	2	3	10	4	27	1	32	1	10	7	18	7	39	3	49	109
07:15 AM	9	8	4	21	1	40	0	41	6	26	4	36	2	45	7	54	152
07:30 AM	4	6	0	10	5	34	1	40	6	19	6	31	2	62	11	75	156
07:45 AM	11	10	0	21	11	47	1	59	4	23	9	36	3	61	11	75	191
Total	29	26	7	62	21	148	3	172	17	78	26	121	14	207	32	253	608
08:00 AM	9	9	5	23	2	59	2	63	3	18	4	25	4	61	8	73	184
08:15 AM	9	12	5	26	1	42	1	44	2	15	14	31	6	59	10	75	176
08:30 AM	9	10	3	22	2	53	0	55	2	19	9	30	5	58	12	75	182
08:45 AM	14	8	3	25	3	53	4	60	4	21	9	34	4	49	8	61	180
Total	41	39	16	96	8	207	7	222	11	73	36	120	19	227	38	284	722
Grand Total	70	65	23	158	29	355	10	394	28	151	62	241	33	434	70	537	1330
Apprch %	44.3	41.1	14.6		7.4	90.1	2.5		11.6	62.7	25.7		6.1	80.8	13		
Total %	5.3	4.9	1.7	11.9	2.2	26.7	0.8	29.6	2.1	11.4	4.7	18.1	2.5	32.6	5.3	40.4	
PC	69	64	22	155	26	333	10	369	28	150	61	239	32	405	70	507	1270
% PC	98.6	98.5	95.7	98.1	89.7	93.8	100	93.7	100	99.3	98.4	99.2	97	93.3	100	94.4	95.5
SU	1	1	1	3	3	21	0	24	0	1	1	2	1	27	0	28	57
% SU	1.4	1.5	4.3	1.9	10.3	5.9	0	6.1	0	0.7	1.6	0.8	3	6.2	0	5.2	4.3
MU	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
% MU	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0	0.5	0	0.4	0.2

	Wentworth Ave From North				119th St From East				Wentworth Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**11**	10	0	21	**11**	47	1	59	**4**	**23**	9	**36**	3	**61**	11	**75**	**191**
08:00 AM	9	9	**5**	23	2	**59**	**2**	**63**	3	18	4	25	4	61	8	73	184
08:15 AM	9	**12**	5	**26**	1	42	1	44	2	15	**14**	31	**6**	59	10	75	176
08:30 AM	9	10	3	22	2	53	0	55	2	19	9	30	5	58	**12**	75	182
Total Volume	38	41	13	92	16	201	4	221	11	75	36	122	18	239	41	298	733
% App. Total	41.3	44.6	14.1		7.2	91	1.8		9	61.5	29.5		6	80.2	13.8		
PHF	.864	.854	.650	.885	.364	.852	.500	.877	.688	.815	.643	.847	.750	.980	.854	.993	.959

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119th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 2

Groups Printed- SU

	Wentworth Ave From North				119th St From East				Wentworth Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	0	1	0	1	1	3	0	4	8
07:15 AM	0	1	0	1	0	4	0	4	0	0	0	0	0	3	0	3	8
07:30 AM	1	0	0	1	1	2	0	3	0	0	0	0	0	4	0	4	8
07:45 AM	0	0	0	0	1	3	0	4	0	0	0	0	0	6	0	6	10
Total	1	1	0	2	2	12	0	14	0	1	0	1	1	16	0	17	34
08:00 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	3	0	3	5
08:15 AM	0	0	1	1	0	2	0	2	0	0	0	0	0	3	0	3	6
08:30 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	4	0	4	8
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
Total	0	0	1	1	1	9	0	10	0	0	1	1	0	11	0	11	23
Grand Total	1	1	1	3	3	21	0	24	0	1	1	2	1	27	0	28	57
Apprch %	33.3	33.3	33.3		12.5	87.5	0		0	50	50		3.6	96.4	0		
Total %	1.8	1.8	1.8	5.3	5.3	36.8	0	42.1	0	1.8	1.8	3.5	1.8	47.4	0	49.1	

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119th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 3

Groups Printed- MU

	Wentworth Ave From North				119th St From East				Wentworth Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	33.3	0	33.3	0	0	0	0	0	66.7	0	66.7	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 4

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			119th St Crossing East Leg			Wentworth Ave Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	3	3	0	1	1	5
07:15 AM	0	0	0	0	1	1	0	8	8	0	1	1	10
07:30 AM	0	1	1	0	1	1	1	6	7	0	2	2	11
07:45 AM	0	1	1	1	0	1	0	2	2	0	0	0	4
Total	0	2	2	1	3	4	1	19	20	0	4	4	30
08:00 AM	1	1	2	0	4	4	0	1	1	0	1	1	8
08:15 AM	0	3	3	0	3	3	0	2	2	0	1	1	9
08:30 AM	0	4	4	0	0	0	0	8	8	0	0	0	12
08:45 AM	1	1	2	0	1	1	0	8	8	0	3	3	14
Total	2	9	11	0	8	8	0	19	19	0	5	5	43
Grand Total	2	11	13	1	11	12	1	38	39	0	9	9	73
Apprch %	15.4	84.6		8.3	91.7		2.6	97.4		0	100		
Total %	2.7	15.1	17.8	1.4	15.1	16.4	1.4	52.1	53.4	0	12.3	12.3	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 5

Groups Printed- PC - SU - MU

	Wentworth Ave From North				119th St From East				Wentworth Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	15	17	1	33	5	53	4	62	4	13	2	19	8	59	6	73	187
04:15 PM	9	8	4	21	5	61	3	69	1	9	8	18	7	78	12	97	205
04:30 PM	11	14	2	27	3	67	1	71	8	12	5	25	11	64	15	90	213
04:45 PM	9	27	11	47	4	62	2	68	4	10	6	20	9	61	8	78	213
Total	44	66	18	128	17	243	10	270	17	44	21	82	35	262	41	338	818
05:00 PM	13	20	6	39	4	67	4	75	3	16	11	30	18	74	11	103	247
05:15 PM	15	19	6	40	8	55	2	65	2	9	9	20	14	77	11	102	227
05:30 PM	18	12	3	33	5	76	2	83	7	12	6	25	11	53	7	71	212
05:45 PM	12	25	3	40	2	53	3	58	5	14	6	25	11	71	6	88	211
Total	58	76	18	152	19	251	11	281	17	51	32	100	54	275	35	364	897
Grand Total	102	142	36	280	36	494	21	551	34	95	53	182	89	537	76	702	1715
Apprch %	36.4	50.7	12.9		6.5	89.7	3.8		18.7	52.2	29.1		12.7	76.5	10.8		
Total %	5.9	8.3	2.1	16.3	2.1	28.8	1.2	32.1	2	5.5	3.1	10.6	5.2	31.3	4.4	40.9	
PC	99	140	36	275	36	475	21	532	34	94	53	181	88	524	75	687	1675
% PC	97.1	98.6	100	98.2	100	96.2	100	96.6	100	98.9	100	99.5	98.9	97.6	98.7	97.9	97.7
SU	3	2	0	5	0	18	0	18	0	1	0	1	1	12	1	14	38
% SU	2.9	1.4	0	1.8	0	3.6	0	3.3	0	1.1	0	0.5	1.1	2.2	1.3	2	2.2
MU	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% MU	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0	0.2	0	0.1	0.1

	Wentworth Ave From North				119th St From East				Wentworth Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	11	14	2	27	3	**67**	1	71	**8**	12	5	25	11	64	**15**	90	213
04:45 PM	9	**27**	**11**	**47**	4	62	2	68	4	10	6	20	9	61	8	78	213
05:00 PM	13	20	6	39	4	67	**4**	**75**	3	**16**	**11**	**30**	**18**	74	11	**103**	**247**
05:15 PM	**15**	19	6	40	**8**	55	2	65	2	9	9	20	14	**77**	11	102	227
Total Volume	48	80	25	153	19	251	9	279	17	47	31	95	52	276	45	373	900
% App. Total	31.4	52.3	16.3		6.8	90	3.2		17.9	49.5	32.6		13.9	74	12.1		
PHF	.800	.741	.568	.814	.594	.937	.563	.930	.531	.734	.705	.792	.722	.896	.750	.905	.911

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119th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 6

Groups Printed- SU

	Wentworth Ave From North				119th St From East				Wentworth Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	1	1	0	2	0	4	0	4	0	1	0	1	0	2	0	2	9
04:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	1	3	0	4	7
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	1	1	0	2	0	10	0	10	0	1	0	1	1	6	0	7	20
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	2	1	3	5
05:15 PM	0	1	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:45 PM	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
Total	2	1	0	3	0	8	0	8	0	0	0	0	0	6	1	7	18
Grand Total	3	2	0	5	0	18	0	18	0	1	0	1	1	12	1	14	38
Apprch %	60	40	0		0	100	0		0	100	0		7.1	85.7	7.1		
Total %	7.9	5.3	0	13.2	0	47.4	0	47.4	0	2.6	0	2.6	2.6	31.6	2.6	36.8	

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119th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 7

Groups Printed- MU

	Wentworth Ave From North				119th St From East				Wentworth Ave From South				119th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	50	0	50	0	0	0	0	0	50	0	50	

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119th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 8

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			119th St Crossing East Leg			Wentworth Ave Crossing South Leg			119th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	6	6	0	4	4	0	0	0	0	3	3	13
04:15 PM	0	2	2	0	5	5	1	12	13	0	0	0	20
04:30 PM	0	4	4	0	5	5	1	8	9	0	6	6	24
04:45 PM	0	3	3	1	3	4	0	4	4	0	1	1	12
Total	0	15	15	1	17	18	2	24	26	0	10	10	69
05:00 PM	0	1	1	0	0	0	0	6	6	0	0	0	7
05:15 PM	0	4	4	0	1	1	0	6	6	0	3	3	14
05:30 PM	0	7	7	0	0	0	2	2	4	0	1	1	12
05:45 PM	1	0	1	1	1	2	0	6	6	0	4	4	13
Total	1	12	13	1	2	3	2	20	22	0	8	8	46
Grand Total	1	27	28	2	19	21	4	44	48	0	18	18	115
Apprch %	3.6	96.4		9.5	90.5		8.3	91.7		0	100		
Total %	0.9	23.5	24.3	1.7	16.5	18.3	3.5	38.3	41.7	0	15.7	15.7	

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127th St and Ashland Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 1

Groups Printed- PC - SU - MU

	Ashland Ave From North				127th St From East				Ashland Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	14	19	7	40	6	130	18	154	13	35	60	108	45	89	35	169	471
07:15 AM	23	17	7	47	16	153	15	184	11	45	62	118	51	124	32	207	556
07:30 AM	21	18	5	44	9	182	12	203	12	47	57	116	52	119	26	197	560
07:45 AM	31	32	9	72	6	183	23	212	5	38	51	94	36	94	29	159	537
Total	89	86	28	203	37	648	68	753	41	165	230	436	184	426	122	732	2124
08:00 AM	18	29	8	55	13	145	18	176	7	43	51	101	57	77	21	155	487
08:15 AM	21	32	15	68	10	173	18	201	16	50	67	133	59	115	19	193	595
08:30 AM	23	29	10	62	5	179	31	215	15	30	38	83	62	129	16	207	567
08:45 AM	23	22	8	53	12	145	25	182	12	37	65	114	56	98	20	174	523
Total	85	112	41	238	40	642	92	774	50	160	221	431	234	419	76	729	2172
Grand Total	174	198	69	441	77	1290	160	1527	91	325	451	867	418	845	198	1461	4296
Apprch %	39.5	44.9	15.6		5	84.5	10.5		10.5	37.5	52		28.6	57.8	13.6		
Total %	4.1	4.6	1.6	10.3	1.8	30	3.7	35.5	2.1	7.6	10.5	20.2	9.7	19.7	4.6	34	
PC	165	184	67	416	73	1226	157	1456	84	310	406	800	392	780	192	1364	4036
% PC	94.8	92.9	97.1	94.3	94.8	95	98.1	95.4	92.3	95.4	90	92.3	93.8	92.3	97	93.4	93.9
SU	7	11	2	20	4	42	2	48	7	13	34	54	21	37	5	63	185
% SU	4	5.6	2.9	4.5	5.2	3.3	1.2	3.1	7.7	4	7.5	6.2	5	4.4	2.5	4.3	4.3
MU	2	3	0	5	0	22	1	23	0	2	11	13	5	28	1	34	75
% MU	1.1	1.5	0	1.1	0	1.7	0.6	1.5	0	0.6	2.4	1.5	1.2	3.3	0.5	2.3	1.7

	Ashland Ave From North				127th St From East				Ashland Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**31**	**32**	9	**72**	6	**183**	23	212	5	38	51	94	36	94	**29**	159	537
08:00 AM	18	29	8	55	**13**	145	18	176	7	43	51	101	57	77	21	155	487
08:15 AM	21	32	**15**	68	10	173	18	201	**16**	**50**	**67**	**133**	59	115	19	193	**595**
08:30 AM	23	29	10	62	5	179	**31**	**215**	15	30	38	83	**62**	**129**	16	**207**	567
Total Volume	93	122	42	257	34	680	90	804	43	161	207	411	214	415	85	714	2186
% App. Total	36.2	47.5	16.3		4.2	84.6	11.2		10.5	39.2	50.4		30	58.1	11.9		
PHF	.750	.953	.700	.892	.654	.929	.726	.935	.672	.805	.772	.773	.863	.804	.733	.862	.918

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 2

Groups Printed- SU

	Ashland Ave From North				127th St From East				Ashland Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	5	1	6	3	3	2	8	3	6	0	9	23
07:15 AM	3	1	0	4	0	6	0	6	2	4	9	15	3	7	0	10	35
07:30 AM	0	0	0	0	0	8	0	8	1	0	3	4	5	7	0	12	24
07:45 AM	1	5	0	6	0	4	0	4	0	3	2	5	0	2	1	3	18
Total	4	6	0	10	0	23	1	24	6	10	16	32	11	22	1	34	100
08:00 AM	0	2	0	2	1	4	1	6	0	0	4	4	3	2	0	5	17
08:15 AM	2	0	1	3	0	5	0	5	0	1	6	7	1	6	0	7	22
08:30 AM	1	1	1	3	0	6	0	6	0	0	3	3	2	4	1	7	19
08:45 AM	0	2	0	2	3	4	0	7	1	2	5	8	4	3	3	10	27
Total	3	5	2	10	4	19	1	24	1	3	18	22	10	15	4	29	85
Grand Total	7	11	2	20	4	42	2	48	7	13	34	54	21	37	5	63	185
Apprch %	35	55	10		8.3	87.5	4.2		13	24.1	63		33.3	58.7	7.9		
Total %	3.8	5.9	1.1	10.8	2.2	22.7	1.1	25.9	3.8	7	18.4	29.2	11.4	20	2.7	34.1	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 3

Groups Printed- MU

	Ashland Ave From North				127th St From East				Ashland Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	4	0	4	0	1	1	2	1	2	0	3	9
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	2	1	3	0	4	6
07:30 AM	0	1	0	1	0	5	1	6	0	0	3	3	1	7	0	8	18
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	1	4	7
Total	0	1	0	1	0	12	1	13	0	1	6	7	3	15	1	19	40
08:00 AM	0	0	0	0	0	3	0	3	0	0	2	2	0	4	0	4	9
08:15 AM	1	0	0	1	0	0	0	0	0	1	2	3	1	2	0	3	7
08:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:45 AM	1	2	0	3	0	3	0	3	0	0	1	1	1	5	0	6	13
Total	2	2	0	4	0	10	0	10	0	1	5	6	2	13	0	15	35
Grand Total	2	3	0	5	0	22	1	23	0	2	11	13	5	28	1	34	75
Apprch %	40	60	0		0	95.7	4.3		0	15.4	84.6		14.7	82.4	2.9		
Total %	2.7	4	0	6.7	0	29.3	1.3	30.7	0	2.7	14.7	17.3	6.7	37.3	1.3	45.3	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/23/2012
Page No : 4

Groups Printed- Peds & Bikes

	Ashland Ave Crossing North Leg			127th St Crossing East Leg			Ashland Ave Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	3	3	0	1	1	4
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	1	0	2	2	0	2	2	0	2	2	7
07:45 AM	0	0	0	0	1	1	0	2	2	0	2	2	5
Total	0	1	1	0	3	3	0	7	7	0	5	5	16
08:00 AM	0	0	0	0	3	3	0	4	4	0	1	1	8
08:15 AM	0	2	2	0	0	0	0	4	4	0	4	4	10
08:30 AM	0	1	1	0	0	0	0	0	0	0	3	3	4
08:45 AM	0	2	2	0	3	3	0	3	3	0	0	0	8
Total	0	5	5	0	6	6	0	11	11	0	8	8	30
Grand Total	0	6	6	0	9	9	0	18	18	0	13	13	46
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	13	13	0	19.6	19.6	0	39.1	39.1	0	28.3	28.3	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 5

Groups Printed- PC - SU - MU

	Ashland Ave From North				127th St From East				Ashland Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	31	48	20	99	14	170	26	210	14	56	70	140	90	153	36	279	728
04:15 PM	18	50	13	81	17	193	22	232	15	43	79	137	98	165	20	283	733
04:30 PM	20	27	22	69	9	173	20	202	21	38	74	133	93	156	20	269	673
04:45 PM	19	28	14	61	16	164	28	208	20	40	49	109	116	161	38	315	693
Total	88	153	69	310	56	700	96	852	70	177	272	519	397	635	114	1146	2827
05:00 PM	23	39	19	81	11	157	33	201	11	37	52	100	80	146	25	251	633
05:15 PM	34	42	17	93	9	136	26	171	23	42	56	121	114	164	27	305	690
05:30 PM	31	44	23	98	14	149	19	182	12	43	56	111	90	146	31	267	658
05:45 PM	33	37	15	85	14	122	16	152	20	57	63	140	84	115	39	238	615
Total	121	162	74	357	48	564	94	706	66	179	227	472	368	571	122	1061	2596
Grand Total	209	315	143	667	104	1264	190	1558	136	356	499	991	765	1206	236	2207	5423
Apprch %	31.3	47.2	21.4		6.7	81.1	12.2		13.7	35.9	50.4		34.7	54.6	10.7		
Total %	3.9	5.8	2.6	12.3	1.9	23.3	3.5	28.7	2.5	6.6	9.2	18.3	14.1	22.2	4.4	40.7	
PC	208	314	141	663	102	1227	187	1516	133	350	489	972	745	1189	230	2164	5315
% PC	99.5	99.7	98.6	99.4	98.1	97.1	98.4	97.3	97.8	98.3	98	98.1	97.4	98.6	97.5	98.1	98
SU	0	1	2	3	1	29	3	33	2	4	7	13	13	8	3	24	73
% SU	0	0.3	1.4	0.4	1	2.3	1.6	2.1	1.5	1.1	1.4	1.3	1.7	0.7	1.3	1.1	1.3
MU	1	0	0	1	1	8	0	9	1	2	3	6	7	9	3	19	35
% MU	0.5	0	0	0.1	1	0.6	0	0.6	0.7	0.6	0.6	0.6	0.9	0.7	1.3	0.9	0.6

	Ashland Ave From North				127th St From East				Ashland Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**31**	48	20	**99**	14	170	26	210	14	**56**	70	**140**	90	153	36	279	728
04:15 PM	18	**50**	13	81	**17**	**193**	22	**232**	15	43	**79**	137	98	**165**	20	283	**733**
04:30 PM	20	27	**22**	69	9	173	20	202	**21**	38	74	133	93	156	20	269	673
04:45 PM	19	28	14	61	16	164	**28**	208	20	40	49	109	**116**	161	**38**	**315**	693
Total Volume	88	153	69	310	56	700	96	852	70	177	272	519	397	635	114	1146	2827
% App. Total	28.4	49.4	22.3		6.6	82.2	11.3		13.5	34.1	52.4		34.6	55.4	9.9		
PHF	.710	.765	.784	.783	.824	.907	.857	.918	.833	.790	.861	.927	.856	.962	.750	.910	.964

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 6

Groups Printed- SU

	Ashland Ave From North				127th St From East				Ashland Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	3	0	3	1	2	1	4	2	3	1	6	14
04:15 PM	0	0	0	0	1	6	0	7	0	1	1	2	1	0	0	1	10
04:30 PM	0	0	0	0	0	4	0	4	0	0	1	1	3	1	1	5	10
04:45 PM	0	0	0	0	0	2	0	2	0	1	1	2	1	1	0	2	6
Total	0	1	0	1	1	15	0	16	1	4	4	9	7	5	2	14	40
05:00 PM	0	0	0	0	0	4	3	7	0	0	3	3	2	2	0	4	14
05:15 PM	0	0	1	1	0	3	0	3	1	0	0	1	0	0	0	0	5
05:30 PM	0	0	0	0	0	6	0	6	0	0	0	0	3	1	1	5	11
05:45 PM	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	1	3
Total	0	0	2	2	0	14	3	17	1	0	3	4	6	3	1	10	33
Grand Total	0	1	2	3	1	29	3	33	2	4	7	13	13	8	3	24	73
Apprch %	0	33.3	66.7		3	87.9	9.1		15.4	30.8	53.8		54.2	33.3	12.5		
Total %	0	1.4	2.7	4.1	1.4	39.7	4.1	45.2	2.7	5.5	9.6	17.8	17.8	11	4.1	32.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 7

Groups Printed- MU

	Ashland Ave From North				127th St From East				Ashland Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	1	0	2	3	0	0	1	1	5
04:15 PM	0	0	0	0	0	2	0	2	0	1	1	2	0	1	1	2	6
04:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	1	2	0	3	5
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	2	3	0	5	6
Total	0	0	0	0	1	5	0	6	1	1	3	5	3	6	2	11	22
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
05:30 PM	0	0	0	0	0	1	0	1	0	1	0	1	2	1	0	3	5
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	2	3
Total	1	0	0	1	0	3	0	3	0	1	0	1	4	3	1	8	13
Grand Total	1	0	0	1	1	8	0	9	1	2	3	6	7	9	3	19	35
Apprch %	100	0	0		11.1	88.9	0		16.7	33.3	50		36.8	47.4	15.8		
Total %	2.9	0	0	2.9	2.9	22.9	0	25.7	2.9	5.7	8.6	17.1	20	25.7	8.6	54.3	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/23/2012
Page No : 8

Groups Printed- Peds & Bikes

	Ashland Ave Crossing North Leg			127th St Crossing East Leg			Ashland Ave Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	4	4	0	3	3	0	5	5	0	1	1	13
04:15 PM	0	3	3	0	6	6	0	13	13	0	1	1	23
04:30 PM	1	2	3	0	0	0	0	4	4	0	6	6	13
04:45 PM	0	1	1	0	0	0	0	4	4	0	2	2	7
Total	1	10	11	0	9	9	0	26	26	0	10	10	56
05:00 PM	0	0	0	0	3	3	0	5	5	0	3	3	11
05:15 PM	0	2	2	0	4	4	0	4	4	0	1	1	11
05:30 PM	0	3	3	0	2	2	0	3	3	0	0	0	8
05:45 PM	0	6	6	1	3	4	0	11	11	0	4	4	25
Total	0	11	11	1	12	13	0	23	23	0	8	8	55
Grand Total	1	21	22	1	21	22	0	49	49	0	18	18	111
Apprch %	4.5	95.5		4.5	95.5		0	100		0	100		
Total %	0.9	18.9	19.8	0.9	18.9	19.8	0	44.1	44.1	0	16.2	16.2	

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127th St and Halsted Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 1

Groups Printed- PC - SU - MU

	Halsted Ave From North				127th St From East				Halsted Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	19	33	17	69	18	77	1	96	2	107	26	135	12	61	20	93	393
07:15 AM	19	45	14	78	21	84	0	105	0	127	13	140	10	95	50	155	478
07:30 AM	20	52	15	87	23	106	0	129	3	120	14	137	20	74	46	140	493
07:45 AM	23	57	15	95	25	102	1	128	1	141	11	153	29	115	52	196	572
Total	81	187	61	329	87	369	2	458	6	495	64	565	71	345	168	584	1936
08:00 AM	20	72	22	114	20	87	3	110	1	97	15	113	14	99	25	138	475
08:15 AM	18	70	13	101	32	77	2	111	1	132	16	149	10	71	28	109	470
08:30 AM	37	69	18	124	29	70	4	103	2	104	16	122	12	92	16	120	469
08:45 AM	22	90	14	126	20	72	0	92	9	111	16	136	13	84	26	123	477
Total	97	301	67	465	101	306	9	416	13	444	63	520	49	346	95	490	1891
Grand Total	178	488	128	794	188	675	11	874	19	939	127	1085	120	691	263	1074	3827
Apprch %	22.4	61.5	16.1		21.5	77.2	1.3		1.8	86.5	11.7		11.2	64.3	24.5		
Total %	4.7	12.8	3.3	20.7	4.9	17.6	0.3	22.8	0.5	24.5	3.3	28.4	3.1	18.1	6.9	28.1	
PC	173	451	121	745	173	639	5	817	12	900	118	1030	103	649	253	1005	3597
% PC	97.2	92.4	94.5	93.8	92	94.7	45.5	93.5	63.2	95.8	92.9	94.9	85.8	93.9	96.2	93.6	94
SU	4	35	5	44	13	22	1	36	0	31	7	38	8	24	7	39	157
% SU	2.2	7.2	3.9	5.5	6.9	3.3	9.1	4.1	0	3.3	5.5	3.5	6.7	3.5	2.7	3.6	4.1
MU	1	2	2	5	2	14	5	21	7	8	2	17	9	18	3	30	73
% MU	0.6	0.4	1.6	0.6	1.1	2.1	45.5	2.4	36.8	0.9	1.6	1.6	7.5	2.6	1.1	2.8	1.9

	Halsted Ave From North				127th St From East				Halsted Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	19	45	14	78	21	84	0	105	0	127	13	140	10	95	50	155	478
07:30 AM	20	52	15	87	23	**106**	0	**129**	**3**	120	14	137	20	74	46	140	493
07:45 AM	**23**	57	15	95	**25**	102	1	128	1	**141**	11	**153**	**29**	**115**	**52**	**196**	**572**
08:00 AM	20	**72**	**22**	**114**	20	87	**3**	110	1	97	**15**	113	14	99	25	138	475
Total Volume	82	226	66	374	89	379	4	472	5	485	53	543	73	383	173	629	2018
% App. Total	21.9	60.4	17.6		18.9	80.3	0.8		0.9	89.3	9.8		11.6	60.9	27.5		
PHF	.891	.785	.750	.820	.890	.894	.333	.915	.417	.860	.883	.887	.629	.833	.832	.802	.882

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127th St and Halsted Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 2

Groups Printed- SU

	Halsted Ave From North				127th St From East				Halsted Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	2	1	3	1	2	0	3	0	6	2	8	0	5	1	6	20
07:15 AM	1	5	1	7	4	2	0	6	0	3	2	5	1	2	1	4	22
07:30 AM	1	4	0	5	1	2	0	3	0	5	0	5	2	0	1	3	16
07:45 AM	0	4	1	5	1	5	0	6	0	2	1	3	3	3	1	7	21
Total	2	15	3	20	7	11	0	18	0	16	5	21	6	10	4	20	79
08:00 AM	0	4	1	5	2	4	0	6	0	3	1	4	2	5	0	7	22
08:15 AM	1	5	0	6	2	4	1	7	0	5	0	5	0	3	0	3	21
08:30 AM	1	5	0	6	1	2	0	3	0	3	0	3	0	3	0	3	15
08:45 AM	0	6	1	7	1	1	0	2	0	4	1	5	0	3	3	6	20
Total	2	20	2	24	6	11	1	18	0	15	2	17	2	14	3	19	78
Grand Total	4	35	5	44	13	22	1	36	0	31	7	38	8	24	7	39	157
Apprch %	9.1	79.5	11.4		36.1	61.1	2.8		0	81.6	18.4		20.5	61.5	17.9		
Total %	2.5	22.3	3.2	28	8.3	14	0.6	22.9	0	19.7	4.5	24.2	5.1	15.3	4.5	24.8	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 3

Groups Printed- MU

	Halsted Ave From North				127th St From East				Halsted Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	1	1	1	1	0	2	1	2	0	3	6
07:15 AM	1	0	0	1	1	4	0	5	0	2	0	2	1	0	1	2	10
07:30 AM	0	0	0	0	0	1	0	1	2	0	1	3	2	3	1	6	10
07:45 AM	0	0	0	0	0	2	0	2	1	1	0	2	2	5	0	7	11
Total	1	0	0	1	1	7	1	9	4	4	1	9	6	10	2	18	37
08:00 AM	0	1	1	2	0	4	1	5	0	1	0	1	1	0	1	2	10
08:15 AM	0	0	1	1	0	0	1	1	0	0	1	1	1	3	0	4	7
08:30 AM	0	0	0	0	1	2	2	5	0	2	0	2	0	3	0	3	10
08:45 AM	0	1	0	1	0	1	0	1	3	1	0	4	1	2	0	3	9
Total	0	2	2	4	1	7	4	12	3	4	1	8	3	8	1	12	36
Grand Total	1	2	2	5	2	14	5	21	7	8	2	17	9	18	3	30	73
Apprch %	20	40	40		9.5	66.7	23.8		41.2	47.1	11.8		30	60	10		
Total %	1.4	2.7	2.7	6.8	2.7	19.2	6.8	28.8	9.6	11	2.7	23.3	12.3	24.7	4.1	41.1	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/16/2012
Page No : 4

Groups Printed- Peds & Bikes

	Halsted Ave Crossing North Leg			127th St Crossing East Leg			Halsted Ave Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	6	6	0	3	3	0	3	3	13
07:15 AM	0	0	0	0	3	3	0	1	1	0	2	2	6
07:30 AM	0	4	4	0	2	2	0	3	3	0	4	4	13
07:45 AM	0	2	2	0	4	4	0	0	0	0	2	2	8
Total	0	7	7	0	15	15	0	7	7	0	11	11	40
08:00 AM	0	1	1	0	4	4	0	4	4	0	3	3	12
08:15 AM	0	2	2	0	4	4	0	4	4	0	2	2	12
08:30 AM	0	1	1	0	3	3	0	2	2	0	2	2	8
08:45 AM	0	3	3	0	3	3	0	2	2	0	4	4	12
Total	0	7	7	0	14	14	0	12	12	0	11	11	44
Grand Total	0	14	14	0	29	29	0	19	19	0	22	22	84
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	16.7	16.7	0	34.5	34.5	0	22.6	22.6	0	26.2	26.2	

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127th St and Halsted Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 5

Groups Printed- PC - SU - MU

	Halsted Ave From North				127th St From East				Halsted Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	38	106	23	167	23	101	6	130	3	84	25	112	18	108	24	150	559
04:15 PM	33	114	38	185	18	76	3	97	3	78	23	104	27	121	33	181	567
04:30 PM	47	113	34	194	13	67	2	82	3	61	19	83	31	127	43	201	560
04:45 PM	34	125	33	192	8	84	1	93	1	60	12	73	31	101	27	159	517
Total	152	458	128	738	62	328	12	402	10	283	79	372	107	457	127	691	2203
05:00 PM	34	104	38	176	11	77	2	90	2	54	26	82	18	125	18	161	509
05:15 PM	47	120	39	206	16	114	2	132	3	73	20	96	22	138	17	177	611
05:30 PM	27	126	37	190	16	97	3	116	1	50	26	77	40	123	30	193	576
05:45 PM	33	119	39	191	23	88	3	114	3	82	22	107	35	105	21	161	573
Total	141	469	153	763	66	376	10	452	9	259	94	362	115	491	86	692	2269
Grand Total	293	927	281	1501	128	704	22	854	19	542	173	734	222	948	213	1383	4472
Apprch %	19.5	61.8	18.7		15	82.4	2.6		2.6	73.8	23.6		16.1	68.5	15.4		
Total %	6.6	20.7	6.3	33.6	2.9	15.7	0.5	19.1	0.4	12.1	3.9	16.4	5	21.2	4.8	30.9	
PC	285	893	277	1455	115	691	22	828	19	531	160	710	209	923	210	1342	4335
% PC	97.3	96.3	98.6	96.9	89.8	98.2	100	97	100	98	92.5	96.7	94.1	97.4	98.6	97	96.9
SU	8	32	3	43	13	8	0	21	0	9	4	13	8	16	3	27	104
% SU	2.7	3.5	1.1	2.9	10.2	1.1	0	2.5	0	1.7	2.3	1.8	3.6	1.7	1.4	2	2.3
MU	0	2	1	3	0	5	0	5	0	2	9	11	5	9	0	14	33
% MU	0	0.2	0.4	0.2	0	0.7	0	0.6	0	0.4	5.2	1.5	2.3	0.9	0	1	0.7

	Halsted Ave From North				127th St From East				Halsted Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	34	104	38	176	11	77	2	90	2	54	**26**	82	18	125	18	161	509
05:15 PM	**47**	120	**39**	**206**	16	**114**	2	**132**	**3**	73	20	96	22	**138**	17	177	**611**
05:30 PM	27	**126**	37	190	16	97	**3**	116	1	50	26	77	**40**	123	**30**	**193**	576
05:45 PM	33	119	39	191	**23**	88	3	114	3	**82**	22	**107**	35	105	21	161	573
Total Volume	141	469	153	763	66	376	10	452	9	259	94	362	115	491	86	692	2269
% App. Total	18.5	61.5	20.1		14.6	83.2	2.2		2.5	71.5	26		16.6	71	12.4		
PHF	.750	.931	.981	.926	.717	.825	.833	.856	.750	.790	.904	.846	.719	.889	.717	.896	.928

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127th St and Halsted Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 6

Groups Printed- SU

	Halsted Ave From North				127th St From East				Halsted Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	2	5	2	9	2	1	0	3	0	2	2	4	0	2	2	4	20
04:15 PM	0	3	0	3	2	0	0	2	0	2	0	2	3	2	0	5	12
04:30 PM	2	2	1	5	4	0	0	4	0	0	0	0	2	2	0	4	13
04:45 PM	0	6	0	6	1	2	0	3	0	0	0	0	1	2	0	3	12
Total	4	16	3	23	9	3	0	12	0	4	2	6	6	8	2	16	57
05:00 PM	1	4	0	5	1	3	0	4	0	2	1	3	0	1	0	1	13
05:15 PM	1	5	0	6	1	1	0	2	0	1	0	1	1	2	0	3	12
05:30 PM	0	5	0	5	1	1	0	2	0	2	0	2	0	2	1	3	12
05:45 PM	2	2	0	4	1	0	0	1	0	0	1	1	1	3	0	4	10
Total	4	16	0	20	4	5	0	9	0	5	2	7	2	8	1	11	47
Grand Total	8	32	3	43	13	8	0	21	0	9	4	13	8	16	3	27	104
Apprch %	18.6	74.4	7		61.9	38.1	0		0	69.2	30.8		29.6	59.3	11.1		
Total %	7.7	30.8	2.9	41.3	12.5	7.7	0	20.2	0	8.7	3.8	12.5	7.7	15.4	2.9	26	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/16/2012
Page No : 7

Groups Printed- MU

	Halsted Ave From North				127th St From East				Halsted Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	1	2	3	1	0	0	1	5
04:15 PM	0	0	0	0	0	2	0	2	0	0	1	1	0	4	0	4	7
04:30 PM	0	0	0	0	0	0	0	0	0	1	2	3	1	2	0	3	6
04:45 PM	0	2	0	2	0	1	0	1	0	0	0	0	3	1	0	4	7
Total	0	2	0	2	0	4	0	4	0	2	5	7	5	7	0	12	25
05:00 PM	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	1	0	1	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	1	1	0	1	0	1	0	0	4	4	0	2	0	2	8
Grand Total	0	2	1	3	0	5	0	5	0	2	9	11	5	9	0	14	33
Apprch %	0	66.7	33.3		0	100	0		0	18.2	81.8		35.7	64.3	0		
Total %	0	6.1	3	9.1	0	15.2	0	15.2	0	6.1	27.3	33.3	15.2	27.3	0	42.4	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/16/2012
Page No : 8

Groups Printed- Peds & Bikes

	Halsted Ave Crossing North Leg			127th St Crossing East Leg			Halsted Ave Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	11	11	1	2	3	0	1	1	15
04:15 PM	0	3	3	0	1	1	0	3	3	0	10	10	17
04:30 PM	0	2	2	1	3	4	0	3	3	0	4	4	13
04:45 PM	2	1	3	0	5	5	1	0	1	2	8	10	19
Total	2	6	8	1	20	21	2	8	10	2	23	25	64
05:00 PM	0	0	0	0	1	1	0	0	0	0	3	3	4
05:15 PM	0	4	4	0	1	1	0	0	0	2	1	3	8
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	0	0	2	2	0	2	2	0	3	3	7
Total	0	4	4	0	4	4	0	2	2	2	8	10	20
Grand Total	2	10	12	1	24	25	2	10	12	4	31	35	84
Apprch %	16.7	83.3		4	96		16.7	83.3		11.4	88.6		
Total %	2.4	11.9	14.3	1.2	28.6	29.8	2.4	11.9	14.3	4.8	36.9	41.7	

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127th St and Marshfield Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 1

Groups Printed- PC - SU - MU

	Marshfield Ave From North				127th St From East				Marshfield Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	61	118	0	179	70	77	105	252	0	151	84	235	666
07:15 AM	0	0	0	0	61	148	0	209	83	76	109	268	0	162	81	243	720
07:30 AM	0	0	0	0	64	156	0	220	100	72	131	303	0	160	73	233	756
07:45 AM	0	0	0	0	53	162	0	215	75	77	132	284	0	191	87	278	777
Total	0	0	0	0	239	584	0	823	328	302	477	1107	0	664	325	989	2919
08:00 AM	0	0	0	0	62	139	0	201	60	64	97	221	0	225	73	298	720
08:15 AM	0	0	0	0	55	138	0	193	62	68	94	224	0	159	69	228	645
08:30 AM	0	0	0	0	59	169	0	228	45	64	66	175	0	177	94	271	674
08:45 AM	0	0	0	0	61	170	0	231	50	73	82	205	0	173	70	243	679
Total	0	0	0	0	237	616	0	853	217	269	339	825	0	734	306	1040	2718
Grand Total	0	0	0	0	476	1200	0	1676	545	571	816	1932	0	1398	631	2029	5637
Apprch %	0	0	0		28.4	71.6	0		28.2	29.6	42.2		0	68.9	31.1		
Total %	0	0	0	0	8.4	21.3	0	29.7	9.7	10.1	14.5	34.3	0	24.8	11.2	36	
PC	0	0	0	0	456	1094	0	1550	519	554	777	1850	0	1283	564	1847	5247
% PC	0	0	0	0	95.8	91.2	0	92.5	95.2	97	95.2	95.8	0	91.8	89.4	91	93.1
SU	0	0	0	0	12	73	0	85	16	15	17	48	0	83	52	135	268
% SU	0	0	0	0	2.5	6.1	0	5.1	2.9	2.6	2.1	2.5	0	5.9	8.2	6.7	4.8
MU	0	0	0	0	8	33	0	41	10	2	22	34	0	32	15	47	122
% MU	0	0	0	0	1.7	2.8	0	2.4	1.8	0.4	2.7	1.8	0	2.3	2.4	2.3	2.2

	Marshfield Ave From North				127th St From East				Marshfield Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	61	148	0	209	83	76	109	268	0	162	81	243	720
07:30 AM	0	0	0	0	**64**	156	0	**220**	**100**	72	131	**303**	0	160	73	233	756
07:45 AM	0	0	0	0	53	**162**	0	215	75	**77**	**132**	284	0	191	**87**	278	**777**
08:00 AM	0	0	0	0	62	139	0	201	60	64	97	221	0	**225**	73	**298**	720
Total Volume	0	0	0	0	240	605	0	845	318	289	469	1076	0	738	314	1052	2973
% App. Total	0	0	0		28.4	71.6	0		29.6	26.9	43.6		0	70.2	29.8		
PHF	.000	.000	.000	.000	.938	.934	.000	.960	.795	.938	.888	.888	.000	.820	.902	.883	.957

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127th St and Marshfield Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 2

Groups Printed- SU

	Marshfield Ave From North				127th St From East				Marshfield Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	2	7	0	9	1	2	4	7	0	9	10	19	35
07:15 AM	0	0	0	0	4	14	0	18	2	0	1	3	0	5	9	14	35
07:30 AM	0	0	0	0	1	5	0	6	5	4	7	16	0	15	9	24	46
07:45 AM	0	0	0	0	0	7	0	7	1	2	2	5	0	12	10	22	34
Total	0	0	0	0	7	33	0	40	9	8	14	31	0	41	38	79	150
08:00 AM	0	0	0	0	3	10	0	13	1	1	0	2	0	11	3	14	29
08:15 AM	0	0	0	0	0	6	0	6	1	1	1	3	0	9	1	10	19
08:30 AM	0	0	0	0	1	14	0	15	1	1	0	2	0	12	6	18	35
08:45 AM	0	0	0	0	1	10	0	11	4	4	2	10	0	10	4	14	35
Total	0	0	0	0	5	40	0	45	7	7	3	17	0	42	14	56	118
Grand Total	0	0	0	0	12	73	0	85	16	15	17	48	0	83	52	135	268
Apprch %	0	0	0		14.1	85.9	0		33.3	31.2	35.4		0	61.5	38.5		
Total %	0	0	0	0	4.5	27.2	0	31.7	6	5.6	6.3	17.9	0	31	19.4	50.4	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 3

Groups Printed- MU

	Marshfield Ave From North				127th St From East				Marshfield Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	2	1	0	5	6	0	1	3	4	12
07:15 AM	0	0	0	0	1	4	0	5	1	0	2	3	0	4	1	5	13
07:30 AM	0	0	0	0	0	4	0	4	2	0	4	6	0	3	2	5	15
07:45 AM	0	0	0	0	2	0	0	2	4	0	2	6	0	5	1	6	14
Total	0	0	0	0	4	9	0	13	8	0	13	21	0	13	7	20	54
08:00 AM	0	0	0	0	1	6	0	7	1	0	2	3	0	6	2	8	18
08:15 AM	0	0	0	0	2	7	0	9	0	1	1	2	0	4	1	5	16
08:30 AM	0	0	0	0	0	3	0	3	1	1	2	4	0	4	3	7	14
08:45 AM	0	0	0	0	1	8	0	9	0	0	4	4	0	5	2	7	20
Total	0	0	0	0	4	24	0	28	2	2	9	13	0	19	8	27	68
Grand Total	0	0	0	0	8	33	0	41	10	2	22	34	0	32	15	47	122
Apprch %	0	0	0		19.5	80.5	0		29.4	5.9	64.7		0	68.1	31.9		
Total %	0	0	0	0	6.6	27	0	33.6	8.2	1.6	18	27.9	0	26.2	12.3	38.5	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/22/2012
Page No : 4

Groups Printed- Peds & Bikes

	Marshfield Ave Crossing North Leg			127th St Crossing East Leg			Marshfield Ave Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	1	1	0	0	0	2
07:15 AM	0	1	1	0	0	0	0	1	1	0	0	0	2
07:30 AM	0	3	3	0	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	4	0	1	1	0	2	2	0	0	0	7
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	1	1	0	1	1	0	1	1	0	0	0	3
08:45 AM	0	3	3	0	0	0	0	2	2	0	0	0	5
Total	0	5	5	0	1	1	0	3	3	0	0	0	9
Grand Total	0	9	9	0	2	2	0	5	5	0	0	0	16
Apprch %	0	100		0	100		0	100		0	0		
Total %	0	56.2	56.2	0	12.5	12.5	0	31.2	31.2	0	0	0	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 5

Groups Printed- PC - SU - MU

	Marshfield Ave From North				127th St From East				Marshfield Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	57	157	0	214	62	70	74	206	0	247	83	330	750
04:15 PM	0	0	0	0	66	176	0	242	68	66	67	201	0	256	94	350	793
04:30 PM	0	0	0	0	63	160	0	223	54	63	83	200	0	280	105	385	808
04:45 PM	0	0	0	0	82	207	0	289	52	68	74	194	0	243	95	338	821
Total	0	0	0	0	268	700	0	968	236	267	298	801	0	1026	377	1403	3172
05:00 PM	0	0	0	0	70	176	0	246	60	67	79	206	0	265	69	334	786
05:15 PM	0	0	0	0	67	172	0	239	67	62	83	212	0	254	101	355	806
05:30 PM	0	0	0	0	58	124	0	182	62	70	96	228	0	229	79	308	718
05:45 PM	0	0	0	0	66	182	0	248	48	71	62	181	0	248	78	326	755
Total	0	0	0	0	261	654	0	915	237	270	320	827	0	996	327	1323	3065
Grand Total	0	0	0	0	529	1354	0	1883	473	537	618	1628	0	2022	704	2726	6237
Apprch %	0	0	0		28.1	71.9	0		29.1	33	38		0	74.2	25.8		
Total %	0	0	0	0	8.5	21.7	0	30.2	7.6	8.6	9.9	26.1	0	32.4	11.3	43.7	
PC	0	0	0	0	518	1312	0	1830	458	526	607	1591	0	1968	674	2642	6063
% PC	0	0	0	0	97.9	96.9	0	97.2	96.8	98	98.2	97.7	0	97.3	95.7	96.9	97.2
SU	0	0	0	0	6	27	0	33	6	5	6	17	0	31	11	42	92
% SU	0	0	0	0	1.1	2	0	1.8	1.3	0.9	1	1	0	1.5	1.6	1.5	1.5
MU	0	0	0	0	5	15	0	20	9	6	5	20	0	23	19	42	82
% MU	0	0	0	0	0.9	1.1	0	1.1	1.9	1.1	0.8	1.2	0	1.1	2.7	1.5	1.3

	Marshfield Ave From North				127th St From East				Marshfield Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	63	160	0	223	54	63	**83**	200	0	**280**	**105**	**385**	808
04:45 PM	0	0	0	0	**82**	**207**	0	**289**	52	**68**	74	194	0	243	95	338	**821**
05:00 PM	0	0	0	0	70	176	0	246	60	67	79	206	0	265	69	334	786
05:15 PM	0	0	0	0	67	172	0	239	**67**	62	83	**212**	0	254	101	355	806
Total Volume	0	0	0	0	282	715	0	997	233	260	319	812	0	1042	370	1412	3221
% App. Total	0	0	0		28.3	71.7	0		28.7	32	39.3		0	73.8	26.2		
PHF	.000	.000	.000	.000	.860	.864	.000	.862	.869	.956	.961	.958	.000	.930	.881	.917	.981

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127th St and Marshfield Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 6

Groups Printed- SU

	Marshfield Ave From North				127th St From East				Marshfield Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	6	0	6	0	0	1	1	0	5	1	6	13
04:15 PM	0	0	0	0	3	3	0	6	0	0	0	0	0	5	2	7	13
04:30 PM	0	0	0	0	0	4	0	4	1	1	0	2	0	4	1	5	11
04:45 PM	0	0	0	0	1	5	0	6	2	1	3	6	0	5	5	10	22
Total	0	0	0	0	4	18	0	22	3	2	4	9	0	19	9	28	59
05:00 PM	0	0	0	0	1	0	0	1	1	0	2	3	0	3	0	3	7
05:15 PM	0	0	0	0	1	4	0	5	1	1	0	2	0	4	1	5	12
05:30 PM	0	0	0	0	0	1	0	1	1	2	0	3	0	2	0	2	6
05:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	1	4	8
Total	0	0	0	0	2	9	0	11	3	3	2	8	0	12	2	14	33
Grand Total	0	0	0	0	6	27	0	33	6	5	6	17	0	31	11	42	92
Apprch %	0	0	0		18.2	81.8	0		35.3	29.4	35.3		0	73.8	26.2		
Total %	0	0	0	0	6.5	29.3	0	35.9	6.5	5.4	6.5	18.5	0	33.7	12	45.7	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 7

Groups Printed- MU

	Marshfield Ave From North				127th St From East				Marshfield Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	1	0	0	1	0	1	1	2	0	4	5	9	12
04:15 PM	0	0	0	0	1	5	0	6	3	2	0	5	0	2	3	5	16
04:30 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	2	7	9	12
04:45 PM	0	0	0	0	1	2	0	3	2	2	0	4	0	2	0	2	9
Total	0	0	0	0	4	9	0	13	5	5	1	11	0	10	15	25	49
05:00 PM	0	0	0	0	0	4	0	4	0	0	1	1	0	5	0	5	10
05:15 PM	0	0	0	0	1	1	0	2	0	0	2	2	0	4	1	5	9
05:30 PM	0	0	0	0	0	1	0	1	3	1	1	5	0	2	0	2	8
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	2	3	5	6
Total	0	0	0	0	1	6	0	7	4	1	4	9	0	13	4	17	33
Grand Total	0	0	0	0	5	15	0	20	9	6	5	20	0	23	19	42	82
Apprch %	0	0	0		25	75	0		45	30	25		0	54.8	45.2		
Total %	0	0	0	0	6.1	18.3	0	24.4	11	7.3	6.1	24.4	0	28	23.2	51.2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/22/2012
Page No : 8

Groups Printed- Peds & Bikes

	Marshfield Ave Crossing North Leg			127th St Crossing East Leg			Marshfield Ave Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	1
04:15 PM	1	2	3	0	0	0	0	1	1	0	0	0	4
04:30 PM	0	3	3	0	2	2	1	0	1	0	0	0	6
04:45 PM	1	2	3	0	0	0	0	2	2	0	0	0	5
Total	2	8	10	0	2	2	1	3	4	0	0	0	16
05:00 PM	0	4	4	0	0	0	0	1	1	0	0	0	5
05:15 PM	1	0	1	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	1	2	3	0	0	0	3
05:45 PM	0	3	3	0	0	0	0	2	2	0	0	0	5
Total	1	7	8	0	0	0	1	5	6	0	0	0	14
Grand Total	3	15	18	0	2	2	2	8	10	0	0	0	30
Apprch %	16.7	83.3		0	100		20	80		0	0		
Total %	10	50	60	0	6.7	6.7	6.7	26.7	33.3	0	0	0	

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127th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 1

Groups Printed- PC - SU - MU

	Michigan Ave From North				127th St From East				Michigan Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	6	0	15	21	28	108	0	136	0	0	0	0	0	106	6	112	269
07:15 AM	16	0	28	44	35	114	0	149	0	0	0	0	0	116	17	133	326
07:30 AM	11	0	31	42	40	122	0	162	0	0	0	0	0	121	9	130	334
07:45 AM	15	0	34	49	40	136	0	176	0	0	0	0	0	128	12	140	365
Total	48	0	108	156	143	480	0	623	0	0	0	0	0	471	44	515	1294
08:00 AM	11	0	31	42	45	124	0	169	0	0	0	0	0	113	13	126	337
08:15 AM	12	0	22	34	44	134	0	178	0	0	0	0	0	102	12	114	326
08:30 AM	6	0	34	40	45	117	0	162	0	0	0	0	0	121	16	137	339
08:45 AM	18	0	30	48	46	150	0	196	0	0	0	0	0	106	13	119	363
Total	47	0	117	164	180	525	0	705	0	0	0	0	0	442	54	496	1365
Grand Total	95	0	225	320	323	1005	0	1328	0	0	0	0	0	913	98	1011	2659
Apprch %	29.7	0	70.3		24.3	75.7	0		0	0	0		0	90.3	9.7		
Total %	3.6	0	8.5	12	12.1	37.8	0	49.9	0	0	0	0	0	34.3	3.7	38	
PC	92	0	203	295	285	916	0	1201	0	0	0	0	0	824	95	919	2415
% PC	96.8	0	90.2	92.2	88.2	91.1	0	90.4	0	0	0	0	0	90.3	96.9	90.9	90.8
SU	3	0	22	25	38	52	0	90	0	0	0	0	0	45	3	48	163
% SU	3.2	0	9.8	7.8	11.8	5.2	0	6.8	0	0	0	0	0	4.9	3.1	4.7	6.1
MU	0	0	0	0	0	37	0	37	0	0	0	0	0	44	0	44	81
% MU	0	0	0	0	0	3.7	0	2.8	0	0	0	0	0	4.8	0	4.4	3

	Michigan Ave From North				127th St From East				Michigan Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**15**	0	**34**	**49**	40	**136**	0	176	0	0	0	0	0	**128**	12	**140**	**365**
08:00 AM	11	0	31	42	**45**	124	0	169	0	0	0	0	0	113	13	126	337
08:15 AM	12	0	22	34	44	134	0	**178**	0	0	0	0	0	102	12	114	326
08:30 AM	6	0	34	40	45	117	0	162	0	0	0	0	0	121	**16**	137	339
Total Volume	44	0	121	165	174	511	0	685	0	0	0	0	0	464	53	517	1367
% App. Total	26.7	0	73.3		25.4	74.6	0		0	0	0		0	89.7	10.3		
PHF	.733	.000	.890	.842	.967	.939	.000	.962	.000	.000	.000	.000	.000	.906	.828	.923	.936

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127th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 2

Groups Printed- SU

	Michigan Ave From North				127th St From East				Michigan Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	4	4	5	4	0	9	0	0	0	0	0	6	1	7	20
07:15 AM	0	0	2	2	6	9	0	15	0	0	0	0	0	11	0	11	28
07:30 AM	1	0	3	4	4	4	0	8	0	0	0	0	0	7	0	7	19
07:45 AM	0	0	2	2	4	4	0	8	0	0	0	0	0	3	0	3	13
Total	1	0	11	12	19	21	0	40	0	0	0	0	0	27	1	28	80
08:00 AM	1	0	5	6	5	8	0	13	0	0	0	0	0	3	1	4	23
08:15 AM	0	0	1	1	7	9	0	16	0	0	0	0	0	4	1	5	22
08:30 AM	1	0	3	4	3	7	0	10	0	0	0	0	0	4	0	4	18
08:45 AM	0	0	2	2	4	7	0	11	0	0	0	0	0	7	0	7	20
Total	2	0	11	13	19	31	0	50	0	0	0	0	0	18	2	20	83
Grand Total	3	0	22	25	38	52	0	90	0	0	0	0	0	45	3	48	163
Apprch %	12	0	88		42.2	57.8	0		0	0	0		0	93.8	6.2		
Total %	1.8	0	13.5	15.3	23.3	31.9	0	55.2	0	0	0	0	0	27.6	1.8	29.4	

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127th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 3

Groups Printed- MU

	Michigan Ave From North				127th St From East				Michigan Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	6	0	6	10
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
07:30 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	12
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	7	0	7	9
Total	0	0	0	0	0	17	0	17	0	0	0	0	0	22	0	22	39
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	7	0	7	9
08:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	13
08:30 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
08:45 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	12
Total	0	0	0	0	0	20	0	20	0	0	0	0	0	22	0	22	42
Grand Total	0	0	0	0	0	37	0	37	0	0	0	0	0	44	0	44	81
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	45.7	0	45.7	0	0	0	0	0	54.3	0	54.3	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/17/2012
Page No : 4

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			127th St Crossing East Leg			Michigan Ave Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	1	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	1
07:45 AM	1	0	1	0	0	0	0	0	0	0	0	0	1
Total	1	2	3	0	0	0	0	0	0	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	2	2	0	0	0	0	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	2	0	0	0	0	0	0	0	0	0	2
Grand Total	1	4	5	0	0	0	0	0	0	0	0	0	5
Apprch %	20	80		0	0		0	0		0	0		
Total %	20	80	100	0	0	0	0	0	0	0	0	0	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 5

Groups Printed- PC - SU - MU

	Michigan Ave From North				127th St From East				Michigan Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	12	0	45	57	43	127	0	170	0	0	0	0	0	159	16	175	402
04:15 PM	26	0	59	85	47	127	0	174	0	0	0	0	0	164	20	184	443
04:30 PM	32	0	52	84	23	99	0	122	0	0	0	0	0	159	17	176	382
04:45 PM	26	0	48	74	37	194	0	231	0	0	0	0	0	185	16	201	506
Total	96	0	204	300	150	547	0	697	0	0	0	0	0	667	69	736	1733
05:00 PM	17	0	50	67	38	137	0	175	0	0	0	0	0	155	15	170	412
05:15 PM	26	0	73	99	30	116	0	146	0	0	0	0	0	186	20	206	451
05:30 PM	19	0	60	79	32	97	0	129	0	0	0	0	0	157	18	175	383
05:45 PM	18	0	56	74	36	140	0	176	0	0	0	0	0	195	17	212	462
Total	80	0	239	319	136	490	0	626	0	0	0	0	0	693	70	763	1708
Grand Total	176	0	443	619	286	1037	0	1323	0	0	0	0	0	1360	139	1499	3441
Apprch %	28.4	0	71.6		21.6	78.4	0		0	0	0		0	90.7	9.3		
Total %	5.1	0	12.9	18	8.3	30.1	0	38.4	0	0	0	0	0	39.5	4	43.6	
PC	172	0	416	588	261	1010	0	1271	0	0	0	0	0	1328	138	1466	3325
% PC	97.7	0	93.9	95	91.3	97.4	0	96.1	0	0	0	0	0	97.6	99.3	97.8	96.6
SU	4	0	27	31	25	18	0	43	0	0	0	0	0	18	1	19	93
% SU	2.3	0	6.1	5	8.7	1.7	0	3.3	0	0	0	0	0	1.3	0.7	1.3	2.7
MU	0	0	0	0	0	9	0	9	0	0	0	0	0	14	0	14	23
% MU	0	0	0	0	0	0.9	0	0.7	0	0	0	0	0	1	0	0.9	0.7

	Michigan Ave From North				127th St From East				Michigan Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**26**	0	48	74	37	**194**	0	**231**	0	0	0	0	0	185	16	201	**506**
05:00 PM	17	0	50	67	**38**	137	0	175	0	0	0	0	0	155	15	170	412
05:15 PM	26	0	**73**	**99**	30	116	0	146	0	0	0	0	0	**186**	**20**	**206**	451
05:30 PM	19	0	60	79	32	97	0	129	0	0	0	0	0	157	18	175	383
Total Volume	88	0	231	319	137	544	0	681	0	0	0	0	0	683	69	752	1752
% App. Total	27.6	0	72.4		20.1	79.9	0		0	0	0		0	90.8	9.2		
PHF	.846	.000	.791	.806	.901	.701	.000	.737	.000	.000	.000	.000	.000	.918	.863	.913	.866

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 6

Groups Printed- SU

	Michigan Ave From North				127th St From East				Michigan Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	4	4	5	2	0	7	0	0	0	0	0	1	0	1	12
04:15 PM	0	0	3	3	3	4	0	7	0	0	0	0	0	6	0	6	16
04:30 PM	0	0	3	3	4	3	0	7	0	0	0	0	0	2	0	2	12
04:45 PM	0	0	3	3	0	1	0	1	0	0	0	0	0	1	0	1	5
Total	0	0	13	13	12	10	0	22	0	0	0	0	0	10	0	10	45
05:00 PM	2	0	6	8	5	1	0	6	0	0	0	0	0	4	0	4	18
05:15 PM	0	0	3	3	1	2	0	3	0	0	0	0	0	1	1	2	8
05:30 PM	2	0	4	6	3	1	0	4	0	0	0	0	0	3	0	3	13
05:45 PM	0	0	1	1	4	4	0	8	0	0	0	0	0	0	0	0	9
Total	4	0	14	18	13	8	0	21	0	0	0	0	0	8	1	9	48
Grand Total	4	0	27	31	25	18	0	43	0	0	0	0	0	18	1	19	93
Apprch %	12.9	0	87.1		58.1	41.9	0		0	0	0		0	94.7	5.3		
Total %	4.3	0	29	33.3	26.9	19.4	0	46.2	0	0	0	0	0	19.4	1.1	20.4	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 7

Groups Printed- MU

	Michigan Ave From North				127th St From East				Michigan Ave From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	10	0	10	15
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
Grand Total	0	0	0	0	0	9	0	9	0	0	0	0	0	14	0	14	23
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	39.1	0	39.1	0	0	0	0	0	60.9	0	60.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/17/2012
Page No : 8

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			127th St Crossing East Leg			Michigan Ave Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	2	2	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	2	2	0	0	0	0	0	0	0	1	1	3
Grand Total	0	3	3	0	0	0	0	0	0	0	1	1	4
Apprch %	0	100		0	0		0	0		0	100		
Total %	0	75	75	0	0	0	0	0	0	0	25	25	

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127th St and Paulina St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 1

Groups Printed- PC - SU - MU

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	72	34	55	161	0	187	52	239	0	0	0	0	42	211	0	253	653
07:15 AM	80	56	76	212	0	299	57	356	0	0	0	0	51	300	0	351	919
07:30 AM	112	58	120	290	0	306	60	366	0	0	0	0	61	368	0	429	1085
07:45 AM	117	85	110	312	0	324	72	396	0	0	0	0	66	377	0	443	1151
Total	381	233	361	975	0	1116	241	1357	0	0	0	0	220	1256	0	1476	3808
08:00 AM	67	46	116	229	0	217	48	265	0	0	0	0	57	418	0	475	969
08:15 AM	86	52	145	283	0	217	77	294	0	0	0	0	30	381	0	411	988
08:30 AM	69	55	112	236	0	217	54	271	0	0	0	0	48	404	0	452	959
08:45 AM	80	49	178	307	0	211	63	274	0	0	0	0	25	268	0	293	874
Total	302	202	551	1055	0	862	242	1104	0	0	0	0	160	1471	0	1631	3790
Grand Total	683	435	912	2030	0	1978	483	2461	0	0	0	0	380	2727	0	3107	7598
Apprch %	33.6	21.4	44.9		0	80.4	19.6		0	0	0		12.2	87.8	0		
Total %	9	5.7	12	26.7	0	26	6.4	32.4	0	0	0	0	5	35.9	0	40.9	
PC	629	418	878	1925	0	1871	442	2313	0	0	0	0	358	2587	0	2945	7183
% PC	92.1	96.1	96.3	94.8	0	94.6	91.5	94	0	0	0	0	94.2	94.9	0	94.8	94.5
SU	32	11	25	68	0	71	15	86	0	0	0	0	11	89	0	100	254
% SU	4.7	2.5	2.7	3.3	0	3.6	3.1	3.5	0	0	0	0	2.9	3.3	0	3.2	3.3
MU	22	6	9	37	0	36	26	62	0	0	0	0	11	51	0	62	161
% MU	3.2	1.4	1	1.8	0	1.8	5.4	2.5	0	0	0	0	2.9	1.9	0	2	2.1

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	112	58	120	290	0	306	60	366	0	0	0	0	61	368	0	429	1085
07:45 AM	**117**	**85**	110	**312**	0	**324**	72	**396**	0	0	0	0	**66**	377	0	443	**1151**
08:00 AM	67	46	116	229	0	217	48	265	0	0	0	0	57	**418**	0	**475**	969
08:15 AM	86	52	**145**	283	0	217	**77**	294	0	0	0	0	30	381	0	411	988
Total Volume	382	241	491	1114	0	1064	257	1321	0	0	0	0	214	1544	0	1758	4193
% App. Total	34.3	21.6	44.1		0	80.5	19.5		0	0	0		12.2	87.8	0		
PHF	.816	.709	.847	.893	.000	.821	.834	.834	.000	.000	.000	.000	.811	.923	.000	.925	.911

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 2

Groups Printed- SU

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	3	0	0	3	0	10	2	12	0	0	0	0	2	18	0	20	35
07:15 AM	3	3	1	7	0	12	1	13	0	0	0	0	1	5	0	6	26
07:30 AM	3	2	5	10	0	9	0	9	0	0	0	0	4	19	0	23	42
07:45 AM	3	3	3	9	0	8	4	12	0	0	0	0	1	14	0	15	36
Total	12	8	9	29	0	39	7	46	0	0	0	0	8	56	0	64	139
08:00 AM	3	1	2	6	0	9	1	10	0	0	0	0	0	10	0	10	26
08:15 AM	4	1	1	6	0	5	1	6	0	0	0	0	1	6	0	7	19
08:30 AM	4	1	4	9	0	11	4	15	0	0	0	0	1	10	0	11	35
08:45 AM	9	0	9	18	0	7	2	9	0	0	0	0	1	7	0	8	35
Total	20	3	16	39	0	32	8	40	0	0	0	0	3	33	0	36	115
Grand Total	32	11	25	68	0	71	15	86	0	0	0	0	11	89	0	100	254
Apprch %	47.1	16.2	36.8		0	82.6	17.4		0	0	0		11	89	0		
Total %	12.6	4.3	9.8	26.8	0	28	5.9	33.9	0	0	0	0	4.3	35	0	39.4	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 3

Groups Printed- MU

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	0	1	3	0	5	0	5	0	0	0	0	1	3	0	4	12
07:15 AM	1	0	0	1	0	6	2	8	0	0	0	0	4	10	0	14	23
07:30 AM	6	1	1	8	0	5	5	10	0	0	0	0	4	5	0	9	27
07:45 AM	5	1	1	7	0	1	0	1	0	0	0	0	1	10	0	11	19
Total	14	2	3	19	0	17	7	24	0	0	0	0	10	28	0	38	81
08:00 AM	2	0	0	2	0	5	4	9	0	0	0	0	1	7	0	8	19
08:15 AM	0	0	2	2	0	3	6	9	0	0	0	0	0	4	0	4	15
08:30 AM	3	0	2	5	0	3	2	5	0	0	0	0	0	5	0	5	15
08:45 AM	3	4	2	9	0	8	7	15	0	0	0	0	0	7	0	7	31
Total	8	4	6	18	0	19	19	38	0	0	0	0	1	23	0	24	80
Grand Total	22	6	9	37	0	36	26	62	0	0	0	0	11	51	0	62	161
Apprch %	59.5	16.2	24.3		0	58.1	41.9		0	0	0		17.7	82.3	0		
Total %	13.7	3.7	5.6	23	0	22.4	16.1	38.5	0	0	0	0	6.8	31.7	0	38.5	

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127th St and Paulina St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/22/2012
Page No : 4

Groups Printed- Peds & Bikes

	Paulina St Crossing North Leg			127th St Crossing East Leg			Paulina St Crossing South Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	0	2	2	0	0	0	3
07:15 AM	0	2	2	0	0	0	0	0	0	0	0	0	2
07:30 AM	0	3	3	0	0	0	0	2	2	0	4	4	9
07:45 AM	0	1	1	0	0	0	0	1	1	0	1	1	3
Total	0	7	7	0	0	0	0	5	5	0	5	5	17
08:00 AM	0	5	5	0	0	0	0	2	2	0	3	3	10
08:15 AM	0	1	1	0	1	1	0	0	0	0	0	0	2
08:30 AM	0	2	2	0	1	1	0	4	4	0	0	0	7
08:45 AM	0	4	4	0	0	0	0	5	5	0	0	0	9
Total	0	12	12	0	2	2	0	11	11	0	3	3	28
Grand Total	0	19	19	0	2	2	0	16	16	0	8	8	45
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	42.2	42.2	0	4.4	4.4	0	35.6	35.6	0	17.8	17.8	

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127th St and Paulina St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 5

Groups Printed- PC - SU - MU

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	139	70	286	495	0	173	66	239	0	0	0	0	156	557	0	713	1447
04:15 PM	94	79	260	433	0	187	56	243	0	0	0	0	135	402	0	537	1213
04:30 PM	107	78	304	489	0	192	61	253	0	0	0	0	145	608	0	753	1495
04:45 PM	136	64	267	467	0	242	78	320	0	0	0	0	122	575	0	697	1484
Total	476	291	1117	1884	0	794	261	1055	0	0	0	0	558	2142	0	2700	5639
05:00 PM	128	113	295	536	7	187	87	281	0	0	0	0	132	539	0	671	1488
05:15 PM	123	100	333	556	0	226	77	303	0	0	0	0	102	502	0	604	1463
05:30 PM	108	101	321	530	0	163	72	235	0	0	0	0	135	465	0	600	1365
05:45 PM	118	89	201	408	0	253	60	313	0	0	0	0	61	448	0	509	1230
Total	477	403	1150	2030	7	829	296	1132	0	0	0	0	430	1954	0	2384	5546
Grand Total	953	694	2267	3914	7	1623	557	2187	0	0	0	0	988	4096	0	5084	11185
Apprch %	24.3	17.7	57.9		0.3	74.2	25.5		0	0	0		19.4	80.6	0		
Total %	8.5	6.2	20.3	35	0.1	14.5	5	19.6	0	0	0	0	8.8	36.6	0	45.5	
PC	918	682	2253	3853	7	1575	548	2130	0	0	0	0	969	4016	0	4985	10968
% PC	96.3	98.3	99.4	98.4	100	97	98.4	97.4	0	0	0	0	98.1	98	0	98.1	98.1
SU	25	8	6	39	0	33	5	38	0	0	0	0	8	32	0	40	117
% SU	2.6	1.2	0.3	1	0	2	0.9	1.7	0	0	0	0	0.8	0.8	0	0.8	1
MU	10	4	8	22	0	15	4	19	0	0	0	0	11	48	0	59	100
% MU	1	0.6	0.4	0.6	0	0.9	0.7	0.9	0	0	0	0	1.1	1.2	0	1.2	0.9

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	107	78	304	489	0	192	61	253	0	0	0	0	**145**	**608**	0	**753**	**1495**
04:45 PM	**136**	64	267	467	0	**242**	78	**320**	0	0	0	0	122	575	0	697	1484
05:00 PM	128	**113**	295	536	**7**	187	**87**	281	0	0	0	0	132	539	0	671	1488
05:15 PM	123	100	**333**	**556**	0	226	77	303	0	0	0	0	102	502	0	604	1463
Total Volume	494	355	1199	2048	7	847	303	1157	0	0	0	0	501	2224	0	2725	5930
% App. Total	24.1	17.3	58.5		0.6	73.2	26.2		0	0	0		18.4	81.6	0		
PHF	.908	.785	.900	.921	.250	.875	.871	.904	.000	.000	.000	.000	.864	.914	.000	.905	.992

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127th St and Paulina St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 6

Groups Printed- SU

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	10	3	1	14	0	7	2	9	0	0	0	0	0	5	0	5	28
04:15 PM	6	1	0	7	0	6	0	6	0	0	0	0	0	4	0	4	17
04:30 PM	3	1	2	6	0	3	0	3	0	0	0	0	0	3	0	3	12
04:45 PM	1	0	1	2	0	6	1	7	0	0	0	0	0	9	0	9	18
Total	20	5	4	29	0	22	3	25	0	0	0	0	0	21	0	21	75
05:00 PM	2	2	1	5	0	4	0	4	0	0	0	0	7	2	0	9	18
05:15 PM	0	1	0	1	0	3	2	5	0	0	0	0	1	4	0	5	11
05:30 PM	2	0	0	2	0	1	0	1	0	0	0	0	0	2	0	2	5
05:45 PM	1	0	1	2	0	3	0	3	0	0	0	0	0	3	0	3	8
Total	5	3	2	10	0	11	2	13	0	0	0	0	8	11	0	19	42
Grand Total	25	8	6	39	0	33	5	38	0	0	0	0	8	32	0	40	117
Apprch %	64.1	20.5	15.4		0	86.8	13.2		0	0	0		20	80	0		
Total %	21.4	6.8	5.1	33.3	0	28.2	4.3	32.5	0	0	0	0	6.8	27.4	0	34.2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 7

Groups Printed- MU

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	4	4	3	11	0	1	1	2	0	0	0	0	6	10	0	16	29
04:15 PM	0	0	4	4	0	2	0	2	0	0	0	0	0	7	0	7	13
04:30 PM	2	0	1	3	0	2	0	2	0	0	0	0	2	7	0	9	14
04:45 PM	1	0	0	1	0	1	2	3	0	0	0	0	2	2	0	4	8
Total	7	4	8	19	0	6	3	9	0	0	0	0	10	26	0	36	64
05:00 PM	1	0	0	1	0	4	1	5	0	0	0	0	1	5	0	6	12
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	8	0	8	11
05:30 PM	2	0	0	2	0	2	0	2	0	0	0	0	0	4	0	4	8
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	5
Total	3	0	0	3	0	9	1	10	0	0	0	0	1	22	0	23	36
Grand Total	10	4	8	22	0	15	4	19	0	0	0	0	11	48	0	59	100
Apprch %	45.5	18.2	36.4		0	78.9	21.1		0	0	0		18.6	81.4	0		
Total %	10	4	8	22	0	15	4	19	0	0	0	0	11	48	0	59	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 8

Groups Printed- PC - SU - MU

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	139	70	286	495	0	173	66	239	0	0	0	0	156	557	0	713	1447
04:15 PM	94	79	260	433	0	187	56	243	0	0	0	0	135	402	0	537	1213
04:30 PM	107	78	304	489	0	192	61	253	0	0	0	0	145	608	0	753	1495
04:45 PM	136	64	267	467	0	242	78	320	0	0	0	0	122	575	0	697	1484
Total	476	291	1117	1884	0	794	261	1055	0	0	0	0	558	2142	0	2700	5639
05:00 PM	128	113	295	536	0	187	87	274	0	0	0	0	132	539	0	671	1481
05:15 PM	123	100	333	556	0	226	77	303	0	0	0	0	102	502	0	604	1463
05:30 PM	108	101	321	530	0	163	72	235	0	0	0	0	135	465	0	600	1365
05:45 PM	118	89	201	408	0	253	60	313	0	0	0	0	61	448	0	509	1230
Total	477	403	1150	2030	0	829	296	1125	0	0	0	0	430	1954	0	2384	5539
Grand Total	953	694	2267	3914	0	1623	557	2180	0	0	0	0	988	4096	0	5084	11178
Apprch %	24.3	17.7	57.9		0	74.4	25.6		0	0	0		19.4	80.6	0		
Total %	8.5	6.2	20.3	35	0	14.5	5	19.5	0	0	0	0	8.8	36.6	0	45.5	
PC	918	682	2253	3853	0	1575	548	2123	0	0	0	0	969	4016	0	4985	10961
% PC	96.3	98.3	99.4	98.4	0	97	98.4	97.4	0	0	0	0	98.1	98	0	98.1	98.1
SU	25	8	6	39	0	33	5	38	0	0	0	0	8	32	0	40	117
% SU	2.6	1.2	0.3	1	0	2	0.9	1.7	0	0	0	0	0.8	0.8	0	0.8	1
MU	10	4	8	22	0	15	4	19	0	0	0	0	11	48	0	59	100
% MU	1	0.6	0.4	0.6	0	0.9	0.7	0.9	0	0	0	0	1.1	1.2	0	1.2	0.9

	Paulina St From North				127th St From East				Paulina St From South				127th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	107	78	304	489	0	192	61	253	0	0	0	0	**145**	**608**	0	**753**	**1495**
04:45 PM	**136**	64	267	467	0	**242**	78	**320**	0	0	0	0	122	575	0	697	1484
05:00 PM	128	**113**	295	536	0	187	**87**	274	0	0	0	0	132	539	0	671	1481
05:15 PM	123	100	**333**	**556**	0	226	77	303	0	0	0	0	102	502	0	604	1463
Total Volume	494	355	1199	2048	0	847	303	1150	0	0	0	0	501	2224	0	2725	5923
% App. Total	24.1	17.3	58.5		0	73.7	26.3		0	0	0		18.4	81.6	0		
PHF	.908	.785	.900	.921	.000	.875	.871	.898	.000	.000	.000	.000	.864	.914	.000	.905	.990

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127th St, Wallace St and Vermont Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : FINAL COMB
Site Code : 00000000
Start Date : 5/23/2012
Page No : 1

Groups Printed- PC - SU - MU

	Wallace St From North					127th St From East					Wallace St From South					Vermont Ave From Southwest					127th St From West						
Start Time	Right	Bear Right	Thru	Left	App. Total	Right	Thru	Bear Left	Left	App. Total	Right	Thru	Left	Hard Left	App. Total	Hard Right	Bear Right	Bear Left	Hard Left	App. Total	Hard Right	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	3	1	0	1	5	1	91	37	0	129	8	1	2	0	11	0	32	0	0	32	0	0	63	0	0	63	240
07:15 AM	0	0	0	0	0	0	114	36	0	150	10	1	4	0	15	0	50	1	0	51	0	0	100	0	0	100	316
07:30 AM	1	0	0	1	2	1	139	45	0	185	13	0	3	0	16	0	50	0	0	50	0	0	95	0	0	95	348
07:45 AM	1	1	0	2	4	6	138	37	0	181	14	2	1	2	19	0	43	0	0	43	0	0	94	0	1	95	342
Total	5	2	0	4	11	8	482	155	0	645	45	4	10	2	61	0	175	1	0	176	0	0	352	0	1	353	1246
08:00 AM	1	0	0	1	2	3	133	38	0	174	8	0	3	1	12	0	43	1	0	44	0	0	89	0	0	89	321
08:15 AM	1	1	0	5	7	3	95	26	0	124	6	1	5	0	12	0	37	0	0	37	0	0	125	0	2	127	307
08:30 AM	2	0	0	1	3	3	116	43	0	162	9	1	5	0	15	0	51	0	0	51	0	0	97	1	4	102	333
08:45 AM	3	0	0	3	6	1	102	28	0	131	8	0	4	1	13	0	38	0	0	38	0	0	68	0	4	72	260
Total	7	1	0	10	18	10	446	135	0	591	31	2	17	2	52	0	169	1	0	170	0	0	379	1	10	390	1221
Grand Total	12	3	0	14	29	18	928	290	0	1236	76	6	27	4	113	0	344	2	0	346	0	0	731	1	11	743	2467
Apprch %	41.4	10.3	0	48.3		1.5	75.1	23.5	0		67.3	5.3	23.9	3.5		0	99.4	0.6	0		0	0	98.4	0.1	1.5		
Total %	0.5	0.1	0	0.6	1.2	0.7	37.6	11.8	0	50.1	3.1	0.2	1.1	0.2	4.6	0	13.9	0.1	0	14	0	0	29.6	0	0.4	30.1	
PC	12	3	0	14	29	18	872	266	0	1156	73	6	26	4	109	0	316	2	0	318	0	0	674	1	11	686	2298
% PC	100	100	0	100	100	100	94	91.7	0	93.5	96.1	100	96.3	100	96.5	0	91.9	100	0	91.9	0	0	92.2	100	100	92.3	93.1
SU	0	0	0	0	0	0	27	21	0	48	3	0	1	0	4	0	22	0	0	22	0	0	28	0	0	28	102
% SU	0	0	0	0	0	0	2.9	7.2	0	3.9	3.9	0	3.7	0	3.5	0	6.4	0	0	6.4	0	0	3.8	0	0	3.8	4.1
MU	0	0	0	0	0	0	29	3	0	32	0	0	0	0	0	0	6	0	0	6	0	0	29	0	0	29	67
% MU	0	0	0	0	0	0	3.1	1	0	2.6	0	0	0	0	0	0	1.7	0	0	1.7	0	0	4	0	0	3.9	2.7

	Wallace St From North					127th St From East					Wallace St From South					Vermont Ave From Southwest					127th St From West						
Start Time	Right	Bear Right	Thru	Left	App. Total	Right	Thru	Bear Left	Left	App. Total	Right	Thru	Left	Hard Left	App. Total	Hard Right	Bear Right	Bear Left	Hard Left	App. Total	Hard Right	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																											
Peak Hour for Entire Intersection Begins at 07:15 AM																											
07:15 AM	0	0	0	0	0	0	114	36	0	150	10	1	**4**	0	15	0	**50**	**1**	0	**51**	0	0	**100**	0	0	**100**	316
07:30 AM	**1**	0	0	1	2	1	**139**	**45**	0	**185**	13	0	3	0	16	0	50	0	0	50	0	0	95	0	0	95	**348**
07:45 AM	1	**1**	0	**2**	**4**	**6**	138	37	0	181	**14**	**2**	1	**2**	**19**	0	43	0	0	43	0	0	94	0	**1**	95	342
08:00 AM	1	0	0	1	2	3	133	38	0	174	8	0	3	1	12	0	43	1	0	44	0	0	89	0	0	89	321
Total Volume	3	1	0	4	8	10	524	156	0	690	45	3	11	3	62	0	186	2	0	188	0	0	378	0	1	379	1327
% App. Total	37.5	12.5	0	50		1.4	75.9	22.6	0		72.6	4.8	17.7	4.8		0	98.9	1.1	0		0	0	99.7	0	0.3		
PHF	.750	.250	.000	.500	.500	.417	.942	.867	.000	.932	.804	.375	.688	.375	.816	.000	.930	.500	.000	.922	.000	.000	.945	.000	.250	.948	.953

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127th St, Wallce St and Vemont Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : FINAL COMB
Site Code : 00000000
Start Date : 5/23/2012
Page No : 2

Groups Printed- SU

	Wallace St From North					127th St From East					Wallace St From South					Vermont Ave From Southwest					127th St From West						
Start Time	Right	Bear Right	Thru	Left	App. Total	Right	Thru	Bear Left	Left	App. Total	Right	Thru	Left	Hard Left	App. Total	Hard Right	Bear Right	Bear Left	Hard Left	App. Total	Hard Right	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	0	6	0	0	6	0	0	5	0	0	5	15
07:15 AM	0	0	0	0	0	0	5	2	0	7	0	0	0	0	0	0	1	0	0	1	0	0	4	0	0	4	12
07:30 AM	0	0	0	0	0	0	4	3	0	7	0	0	0	0	0	0	6	0	0	6	0	0	4	0	0	4	17
07:45 AM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	5	0	0	5	0	0	6	0	0	6	14
Total	0	0	0	0	0	0	13	8	0	21	0	0	0	0	0	0	18	0	0	18	0	0	19	0	0	19	58
08:00 AM	0	0	0	0	0	0	9	4	0	13	1	0	0	0	1	0	1	0	0	1	0	0	3	0	0	3	18
08:15 AM	0	0	0	0	0	0	1	1	0	2	1	0	1	0	2	0	2	0	0	2	0	0	2	0	0	2	8
08:30 AM	0	0	0	0	0	0	4	7	0	11	0	0	0	0	0	0	1	0	0	1	0	0	3	0	0	3	15
08:45 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	3
Total	0	0	0	0	0	0	14	13	0	27	3	0	1	0	4	0	4	0	0	4	0	0	9	0	0	9	44
Grand Total	0	0	0	0	0	0	27	21	0	48	3	0	1	0	4	0	22	0	0	22	0	0	28	0	0	28	102
Apprch %	0	0	0	0		0	56.2	43.8	0		75	0	25	0		0	100	0	0		0	0	100	0	0		
Total %	0	0	0	0	0	0	26.5	20.6	0	47.1	2.9	0	1	0	3.9	0	21.6	0	0	21.6	0	0	27.5	0	0	27.5	

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127th St, Wallce St and Vemont Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : FINAL COMB
Site Code : 00000000
Start Date : 5/23/2012
Page No : 3

Groups Printed- MU

	Wallace St From North					127th St From East					Wallace St From South					Vermont Ave From Southwest					127th St From West						
Start Time	Right	Bear Right	Thru	Left	App. Total	Right	Thru	Bear Left	Left	App. Total	Right	Thru	Left	Hard Left	App. Total	Hard Right	Bear Right	Bear Left	Hard Left	App. Total	Hard Right	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	13
07:30 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	12
07:45 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	9
Total	0	0	0	0	0	0	19	1	0	20	0	0	0	0	0	0	1	0	0	1	0	0	16	0	0	16	37
08:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	7	0	0	7	11
08:15 AM	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5
08:30 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	3	0	0	3	8
08:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	2	0	0	2	6
Total	0	0	0	0	0	0	10	2	0	12	0	0	0	0	0	0	5	0	0	5	0	0	13	0	0	13	30
Grand Total	0	0	0	0	0	0	29	3	0	32	0	0	0	0	0	0	6	0	0	6	0	0	29	0	0	29	67
Apprch %	0	0	0	0		0	90.6	9.4	0		0	0	0	0		0	100	0	0		0	0	100	0	0		
Total %	0	0	0	0	0	0	43.3	4.5	0	47.8	0	0	0	0	0	0	9	0	0	9	0	0	43.3	0	0	43.3	

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127th St, Wallce St and Vemont Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/23/2012
Page No : 4

Groups Printed- Peds & Bikes

	Wallace St Crossing North Leg			127th St Crossing East Leg			Wallace St Crossing South Leg			Vermont Ave Crossing Southwest Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	2	2	0	0	0	0	2	2	0	0	0	0	0	0	4
07:15 AM	0	2	2	0	1	1	0	5	5	0	0	0	0	0	0	8
07:30 AM	0	2	2	0	0	0	1	3	4	0	0	0	0	0	0	6
07:45 AM	0	1	1	0	0	0	0	1	1	0	0	0	0	1	1	3
Total	0	7	7	0	1	1	1	11	12	0	0	0	0	1	1	21
08:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	2	2	0	0	0	0	3	3	0	0	0	0	2	2	7
08:30 AM	0	5	5	0	4	4	0	6	6	0	0	0	0	4	4	19
08:45 AM	1	2	3	0	1	1	0	5	5	0	0	0	0	4	4	13
Total	1	10	11	0	5	5	0	14	14	0	0	0	0	10	10	40
Grand Total	1	17	18	0	6	6	1	25	26	0	0	0	0	11	11	61
Apprch %	5.6	94.4		0	100		3.8	96.2		0	0		0	100		
Total %	1.6	27.9	29.5	0	9.8	9.8	1.6	41	42.6	0	0	0	0	18	18	

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127th St, Wallace St and Vermont Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : FINAL COMB
Site Code : 00000000
Start Date : 5/23/2012
Page No : 5

Groups Printed- PC - SU - MU

	Wallace St From North					127th St From East					Wallace St From South					Vermont Ave From Southwest					127th St From West						
Start Time	Right	Bear Right	Thru	Left	App. Total	Right	Thru	Bear Left	Left	App. Total	Right	Thru	Left	Hard Left	App. Total	Hard Right	Bear Right	Bear Left	Hard Left	App. Total	Hard Right	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	0	0	3	4	7	145	48	0	200	4	2	2	0	8	0	62	0	0	62	0	0	138	1	0	139	413
04:15 PM	4	0	0	2	6	4	141	44	0	189	3	1	2	0	6	0	52	2	0	54	0	0	146	1	0	147	402
04:30 PM	3	1	0	0	4	1	130	50	0	181	8	1	3	2	14	0	60	1	1	62	0	0	140	2	0	142	403
04:45 PM	1	0	0	4	5	4	131	56	0	191	8	0	3	0	11	0	44	0	0	44	0	0	158	0	0	158	409
Total	9	1	0	9	19	16	547	198	0	761	23	4	10	2	39	0	218	3	1	222	0	0	582	4	0	586	1627
05:00 PM	1	1	0	2	4	0	119	47	0	166	10	1	1	1	13	0	61	0	0	61	0	0	163	1	0	164	408
05:15 PM	1	1	0	2	4	5	132	49	0	186	12	4	2	1	19	0	67	1	0	68	0	0	168	0	1	169	446
05:30 PM	2	0	0	2	4	7	115	49	0	171	9	1	3	1	14	0	51	1	0	52	0	0	175	0	2	177	418
05:45 PM	1	1	0	2	4	4	113	53	0	170	10	2	3	0	15	0	63	1	0	64	0	0	122	1	6	129	382
Total	5	3	0	8	16	16	479	198	0	693	41	8	9	3	61	0	242	3	0	245	0	0	628	2	9	639	1654
Grand Total	14	4	0	17	35	32	1026	396	0	1454	64	12	19	5	100	0	460	6	1	467	0	0	1210	6	9	1225	3281
Apprch %	40	11.4	0	48.6		2.2	70.6	27.2	0		64	12	19	5		0	98.5	1.3	0.2		0	0	98.8	0.5	0.7		
Total %	0.4	0.1	0	0.5	1.1	1	31.3	12.1	0	44.3	2	0.4	0.6	0.2	3	0	14	0.2	0	14.2	0	0	36.9	0.2	0.3	37.3	
PC	14	4	0	17	35	31	1003	382	0	1416	63	12	18	5	98	0	454	6	1	461	0	0	1187	5	7	1199	3209
% PC	100	100	0	100	100	96.9	97.8	96.5	0	97.4	98.4	100	94.7	100	98	0	98.7	100	100	98.7	0	0	98.1	83.3	77.8	97.9	97.8
SU	0	0	0	0	0	1	13	7	0	21	1	0	1	0	2	0	4	0	0	4	0	0	14	1	2	17	44
% SU	0	0	0	0	0	3.1	1.3	1.8	0	1.4	1.6	0	5.3	0	2	0	0.9	0	0	0.9	0	0	1.2	16.7	22.2	1.4	1.3
MU	0	0	0	0	0	0	10	7	0	17	0	0	0	0	0	0	2	0	0	2	0	0	9	0	0	9	28
% MU	0	0	0	0	0	0	1	1.8	0	1.2	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0.7	0	0	0.7	0.9

	Wallace St From North					127th St From East					Wallace St From South					Vermont Ave From Southwest					127th St From West						
Start Time	Right	Bear Right	Thru	Left	App. Total	Right	Thru	Bear Left	Left	App. Total	Right	Thru	Left	Hard Left	App. Total	Hard Right	Bear Right	Bear Left	Hard Left	App. Total	Hard Right	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																											
Peak Hour for Entire Intersection Begins at 04:45 PM																											
04:45 PM	1	0	0	**4**	**5**	4	131	**56**	0	**191**	8	0	**3**	0	11	0	44	0	0	44	0	0	158	0	0	158	409
05:00 PM	1	**1**	0	2	4	0	119	47	0	166	10	1	1	**1**	13	0	61	0	0	61	0	0	163	**1**	0	164	408
05:15 PM	1	1	0	2	4	5	**132**	49	0	186	**12**	**4**	2	1	**19**	0	**67**	**1**	0	**68**	0	0	168	0	1	169	**446**
05:30 PM	**2**	0	0	2	4	**7**	115	49	0	171	9	1	3	1	14	0	51	1	0	52	0	0	**175**	0	**2**	**177**	418
Total Volume	5	2	0	10	17	16	497	201	0	714	39	6	9	3	57	0	223	2	0	225	0	0	664	1	3	668	1681
% App. Total	29.4	11.8	0	58.8		2.2	69.6	28.2	0		68.4	10.5	15.8	5.3		0	99.1	0.9	0		0	0	99.4	0.1	0.4		
PHF	.625	.500	.000	.625	.850	.571	.941	.897	.000	.935	.813	.375	.750	.750	.750	.000	.832	.500	.000	.827	.000	.000	.949	.250	.375	.944	.942

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127th St, Wallce St and Vemont Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : FINAL COMB
Site Code : 00000000
Start Date : 5/23/2012
Page No : 6

Groups Printed- SU

	Wallace St From North					127th St From East					Wallace St From South					Vermont Ave From Southwest					127th St From West						
Start Time	Right	Bear Right	Thru	Left	App. Total	Right	Thru	Bear Left	Left	App. Total	Right	Thru	Left	Hard Left	App. Total	Hard Right	Bear Right	Bear Left	Hard Left	App. Total	Hard Right	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	3	0	0	3	5
04:15 PM	0	0	0	0	0	0	7	2	0	9	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	11
04:30 PM	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	2	8
04:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	2	0	0	2	0	0	2	0	0	2	6
Total	0	0	0	0	0	0	12	4	0	16	1	0	1	0	2	0	3	0	0	3	0	0	8	1	0	9	30
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
05:15 PM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	0	0	2	0	1	3	6
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:45 PM	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	5
Total	0	0	0	0	0	1	1	3	0	5	0	0	0	0	0	0	1	0	0	1	0	0	6	0	2	8	14
Grand Total	0	0	0	0	0	1	13	7	0	21	1	0	1	0	2	0	4	0	0	4	0	0	14	1	2	17	44
Apprch %	0	0	0	0		4.8	61.9	33.3	0		50	0	50	0		0	100	0	0		0	0	82.4	5.9	11.8		
Total %	0	0	0	0	0	2.3	29.5	15.9	0	47.7	2.3	0	2.3	0	4.5	0	9.1	0	0	9.1	0	0	31.8	2.3	4.5	38.6	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : FINAL COMB
Site Code : 00000000
Start Date : 5/23/2012
Page No : 7

Groups Printed- MU

	Wallace St From North					127th St From East					Wallace St From South					Vermont Ave From Southwest					127th St From West						
Start Time	Right	Bear Right	Thru	Left	App. Total	Right	Thru	Bear Left	Left	App. Total	Right	Thru	Left	Hard Left	App. Total	Hard Right	Bear Right	Bear Left	Hard Left	App. Total	Hard Right	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	2	0	0	2	5
04:15 PM	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	7
04:30 PM	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	5
04:45 PM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4
Total	0	0	0	0	0	0	7	6	0	13	0	0	0	0	0	0	2	0	0	2	0	0	6	0	0	6	21
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3
05:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	7
Grand Total	0	0	0	0	0	0	10	7	0	17	0	0	0	0	0	0	2	0	0	2	0	0	9	0	0	9	28
Apprch %	0	0	0	0		0	58.8	41.2	0		0	0	0	0		0	100	0	0		0	0	100	0	0		
Total %	0	0	0	0	0	0	35.7	25	0	60.7	0	0	0	0	0	0	7.1	0	0	7.1	0	0	32.1	0	0	32.1	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/23/2012
Page No : 8

Groups Printed- Peds & Bikes

	Wallace St Crossing North Leg			127th St Crossing East Leg			Wallace St Crossing South Leg			Vermont Ave Crossing Southwest Leg			127th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	1	1	2	0	0	0	0	3	3	0	0	0	0	0	0	5
04:15 PM	0	2	2	0	0	0	1	1	2	0	0	0	0	0	0	4
04:30 PM	0	2	2	0	0	0	0	2	2	0	0	0	0	0	0	4
04:45 PM	0	2	2	0	0	0	0	1	1	0	0	0	0	0	0	3
Total	1	7	8	0	0	0	1	7	8	0	0	0	0	0	0	16
05:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	5	5	2	2	4	0	2	2	0	0	0	1	0	1	12
05:30 PM	0	0	0	0	0	0	0	2	2	0	0	0	0	2	2	4
05:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	5	6	7
Total	0	7	7	2	2	4	0	4	4	0	0	0	2	7	9	24
Grand Total	1	14	15	2	2	4	1	11	12	0	0	0	2	7	9	40
Apprch %	6.7	93.3		50	50		8.3	91.7		0	0		22.2	77.8		
Total %	2.5	35	37.5	5	5	10	2.5	27.5	30	0	0	0	5	17.5	22.5	

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130th St and Ellis Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 1

Groups Printed- PC - SU - MU

	Water Treatment Plant Entrance From North				130th St From East				Ellis Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	133	41	174	12	0	8	20	8	81	0	89	283
07:15 AM	0	0	0	0	0	140	44	184	24	0	8	32	8	114	0	122	338
07:30 AM	0	0	0	0	0	147	58	205	31	0	17	48	22	127	0	149	402
07:45 AM	0	0	0	0	7	146	89	242	59	0	18	77	20	118	0	138	457
Total	0	0	0	0	7	566	232	805	126	0	51	177	58	440	0	498	1480
08:00 AM	0	0	0	0	0	150	52	202	31	0	14	45	19	107	0	126	373
08:15 AM	0	0	1	1	1	109	28	138	23	0	7	30	8	102	1	111	280
08:30 AM	0	0	1	1	0	111	34	145	27	0	8	35	6	125	0	131	312
08:45 AM	0	0	0	0	0	138	46	184	28	0	10	38	9	113	1	123	345
Total	0	0	2	2	1	508	160	669	109	0	39	148	42	447	2	491	1310
Grand Total	0	0	2	2	8	1074	392	1474	235	0	90	325	100	887	2	989	2790
Apprch %	0	0	100		0.5	72.9	26.6		72.3	0	27.7		10.1	89.7	0.2		
Total %	0	0	0.1	0.1	0.3	38.5	14.1	52.8	8.4	0	3.2	11.6	3.6	31.8	0.1	35.4	
PC	0	0	1	1	7	980	375	1362	224	0	73	297	96	807	1	904	2564
% PC	0	0	50	50	87.5	91.2	95.7	92.4	95.3	0	81.1	91.4	96	91	50	91.4	91.9
SU	0	0	0	0	0	50	15	65	10	0	17	27	4	43	1	48	140
% SU	0	0	0	0	0	4.7	3.8	4.4	4.3	0	18.9	8.3	4	4.8	50	4.9	5
MU	0	0	1	1	1	44	2	47	1	0	0	1	0	37	0	37	86
% MU	0	0	50	50	12.5	4.1	0.5	3.2	0.4	0	0	0.3	0	4.2	0	3.7	3.1

	Water Treatment Plant Entrance From North				130th St From East				Ellis Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	140	44	184	24	0	8	32	8	114	0	122	338
07:30 AM	0	0	0	0	0	147	58	205	31	0	17	48	**22**	**127**	0	**149**	402
07:45 AM	0	0	0	0	**7**	146	**89**	**242**	**59**	0	**18**	**77**	20	118	0	138	**457**
08:00 AM	0	0	0	0	0	**150**	52	202	31	0	14	45	19	107	0	126	373
Total Volume	0	0	0	0	7	583	243	833	145	0	57	202	69	466	0	535	1570
% App. Total	0	0	0		0.8	70	29.2		71.8	0	28.2		12.9	87.1	0		
PHF	.000	.000	.000	.000	.250	.972	.683	.861	.614	.000	.792	.656	.784	.917	.000	.898	.859

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130th St and Ellis Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 2

Groups Printed- SU

	Water Treatment Plant Entrance From North				130th St From East				Ellis Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	5	2	7	0	0	4	4	1	6	0	7	18
07:15 AM	0	0	0	0	0	6	3	9	1	0	3	4	0	10	0	10	23
07:30 AM	0	0	0	0	0	8	4	12	3	0	5	8	3	4	0	7	27
07:45 AM	0	0	0	0	0	5	1	6	3	0	2	5	0	7	0	7	18
Total	0	0	0	0	0	24	10	34	7	0	14	21	4	27	0	31	86
08:00 AM	0	0	0	0	0	9	3	12	0	0	3	3	0	6	0	6	21
08:15 AM	0	0	0	0	0	3	0	3	2	0	0	2	0	3	0	3	8
08:30 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	5	0	5	13
08:45 AM	0	0	0	0	0	6	2	8	1	0	0	1	0	2	1	3	12
Total	0	0	0	0	0	26	5	31	3	0	3	6	0	16	1	17	54
Grand Total	0	0	0	0	0	50	15	65	10	0	17	27	4	43	1	48	140
Apprch %	0	0	0		0	76.9	23.1		37	0	63		8.3	89.6	2.1		
Total %	0	0	0	0	0	35.7	10.7	46.4	7.1	0	12.1	19.3	2.9	30.7	0.7	34.3	

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Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 3

Groups Printed- MU

	Water Treatment Plant Entrance From North				130th St From East				Ellis Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	4	1	5	0	0	0	0	0	3	0	3	8
07:15 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	1	0	1	9
07:30 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	8	0	8	13
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
Total	0	0	0	0	0	22	1	23	0	0	0	0	0	15	0	15	38
08:00 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	10	0	10	16
08:15 AM	0	0	1	1	1	6	0	7	0	0	0	0	0	6	0	6	14
08:30 AM	0	0	0	0	0	7	1	8	0	0	0	0	0	3	0	3	11
08:45 AM	0	0	0	0	0	3	0	3	1	0	0	1	0	3	0	3	7
Total	0	0	1	1	1	22	1	24	1	0	0	1	0	22	0	22	48
Grand Total	0	0	1	1	1	44	2	47	1	0	0	1	0	37	0	37	86
Apprch %	0	0	100		2.1	93.6	4.3		100	0	0		0	100	0		
Total %	0	0	1.2	1.2	1.2	51.2	2.3	54.7	1.2	0	0	1.2	0	43	0	43	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 4

Groups Printed- PC - SU - MU

	Water Treatment Plant Entrance From North				130th St From East				Ellis Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	134	24	158	37	0	14	51	11	223	0	234	443
04:15 PM	0	0	0	0	1	151	27	179	33	0	13	46	12	167	0	179	404
04:30 PM	0	0	0	0	0	160	26	186	33	0	8	41	5	218	0	223	450
04:45 PM	0	0	1	1	1	144	18	163	36	0	8	44	10	176	0	186	394
Total	0	0	1	1	2	589	95	686	139	0	43	182	38	784	0	822	1691
05:00 PM	0	0	0	0	0	164	25	189	33	0	7	40	9	192	1	202	431
05:15 PM	0	0	0	0	1	132	18	151	23	0	13	36	10	209	0	219	406
05:30 PM	0	0	0	0	0	141	26	167	32	0	20	52	6	218	0	224	443
05:45 PM	0	0	0	0	0	150	25	175	33	0	8	41	7	204	0	211	427
Total	0	0	0	0	1	587	94	682	121	0	48	169	32	823	1	856	1707
Grand Total	0	0	1	1	3	1176	189	1368	260	0	91	351	70	1607	1	1678	3398
Apprch %	0	0	100		0.2	86	13.8		74.1	0	25.9		4.2	95.8	0.1		
Total %	0	0	0	0	0.1	34.6	5.6	40.3	7.7	0	2.7	10.3	2.1	47.3	0	49.4	
PC	0	0	1	1	1	1135	184	1320	256	0	90	346	69	1571	1	1641	3308
% PC	0	0	100	100	33.3	96.5	97.4	96.5	98.5	0	98.9	98.6	98.6	97.8	100	97.8	97.4
SU	0	0	0	0	1	21	4	26	4	0	1	5	1	25	0	26	57
% SU	0	0	0	0	33.3	1.8	2.1	1.9	1.5	0	1.1	1.4	1.4	1.6	0	1.5	1.7
MU	0	0	0	0	1	20	1	22	0	0	0	0	0	11	0	11	33
% MU	0	0	0	0	33.3	1.7	0.5	1.6	0	0	0	0	0	0.7	0	0.7	1

	Water Treatment Plant Entrance From North				130th St From East				Ellis Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	**164**	25	**189**	**33**	0	7	40	9	192	**1**	202	431
05:15 PM	0	0	0	0	**1**	132	18	151	23	0	13	36	**10**	209	0	219	406
05:30 PM	0	0	0	0	0	141	**26**	167	32	0	**20**	**52**	6	**218**	0	**224**	**443**
05:45 PM	0	0	0	0	0	150	25	175	33	0	8	41	7	204	0	211	427
Total Volume	0	0	0	0	1	587	94	682	121	0	48	169	32	823	1	856	1707
% App. Total	0	0	0		0.1	86.1	13.8		71.6	0	28.4		3.7	96.1	0.1		
PHF	.000	.000	.000	.000	.250	.895	.904	.902	.917	.000	.600	.813	.800	.944	.250	.955	.963

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 5

Groups Printed- SU

	Water Treatment Plant Entrance From North				130th St From East				Ellis Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	4	1	5	0	0	1	1	0	3	0	3	9
04:15 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	2	0	2	5
04:30 PM	0	0	0	0	0	3	0	3	1	0	0	1	0	2	0	2	6
04:45 PM	0	0	0	0	1	3	0	4	0	0	0	0	1	3	0	4	8
Total	0	0	0	0	1	12	1	14	2	0	1	3	1	10	0	11	28
05:00 PM	0	0	0	0	0	2	2	4	2	0	0	2	0	4	0	4	10
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
05:45 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	2	0	2	6
Total	0	0	0	0	0	9	3	12	2	0	0	2	0	15	0	15	29
Grand Total	0	0	0	0	1	21	4	26	4	0	1	5	1	25	0	26	57
Apprch %	0	0	0		3.8	80.8	15.4		80	0	20		3.8	96.2	0		
Total %	0	0	0	0	1.8	36.8	7	45.6	7	0	1.8	8.8	1.8	43.9	0	45.6	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/23/2012
Page No : 6

Groups Printed- MU

	Water Treatment Plant Entrance From North				130th St From East				Ellis Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
04:15 PM	0	0	0	0	1	3	0	4	0	0	0	0	0	0	0	0	4
04:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	12	0	13	0	0	0	0	0	3	0	3	16
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:30 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	2	0	2	4
05:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total	0	0	0	0	0	8	1	9	0	0	0	0	0	8	0	8	17
Grand Total	0	0	0	0	1	20	1	22	0	0	0	0	0	11	0	11	33
Apprch %	0	0	0		4.5	90.9	4.5		0	0	0		0	100	0		
Total %	0	0	0	0	3	60.6	3	66.7	0	0	0	0	0	33.3	0	33.3	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 1

Groups Printed- PC - SU - MU

	Indiana Ave From North				130th St From East				Indiana Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	88	12	100	16	0	49	65	23	96	0	119	284
07:15 AM	0	0	0	0	0	101	18	119	11	0	58	69	20	104	0	124	312
07:30 AM	0	0	0	0	0	99	22	121	16	0	58	74	21	136	0	157	352
07:45 AM	0	0	0	0	0	138	26	164	20	0	120	140	22	100	0	122	426
Total	0	0	0	0	0	426	78	504	63	0	285	348	86	436	0	522	1374
08:00 AM	0	0	0	0	0	106	22	128	12	0	83	95	49	95	0	144	367
08:15 AM	0	0	0	0	0	129	22	151	16	0	65	81	35	89	0	124	356
08:30 AM	0	0	0	0	0	131	26	157	30	0	26	56	22	95	0	117	330
08:45 AM	0	0	0	0	0	109	33	142	27	0	63	90	40	92	0	132	364
Total	0	0	0	0	0	475	103	578	85	0	237	322	146	371	0	517	1417
Grand Total	0	0	0	0	0	901	181	1082	148	0	522	670	232	807	0	1039	2791
Apprch %	0	0	0		0	83.3	16.7		22.1	0	77.9		22.3	77.7	0		
Total %	0	0	0	0	0	32.3	6.5	38.8	5.3	0	18.7	24	8.3	28.9	0	37.2	
PC	0	0	0	0	0	827	163	990	139	0	505	644	216	723	0	939	2573
% PC	0	0	0	0	0	91.8	90.1	91.5	93.9	0	96.7	96.1	93.1	89.6	0	90.4	92.2
SU	0	0	0	0	0	48	15	63	5	0	14	19	15	55	0	70	152
% SU	0	0	0	0	0	5.3	8.3	5.8	3.4	0	2.7	2.8	6.5	6.8	0	6.7	5.4
MU	0	0	0	0	0	26	3	29	4	0	3	7	1	29	0	30	66
% MU	0	0	0	0	0	2.9	1.7	2.7	2.7	0	0.6	1	0.4	3.6	0	2.9	2.4

	Indiana Ave From North				130th St From East				Indiana Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	99	22	121	16	0	58	74	21	**136**	0	**157**	352
07:45 AM	0	0	0	0	0	**138**	**26**	**164**	**20**	0	**120**	**140**	22	100	0	122	**426**
08:00 AM	0	0	0	0	0	106	22	128	12	0	83	95	**49**	95	0	144	367
08:15 AM	0	0	0	0	0	129	22	151	16	0	65	81	35	89	0	124	356
Total Volume	0	0	0	0	0	472	92	564	64	0	326	390	127	420	0	547	1501
% App. Total	0	0	0		0	83.7	16.3		16.4	0	83.6		23.2	76.8	0		
PHF	.000	.000	.000	.000	.000	.855	.885	.860	.800	.000	.679	.696	.648	.772	.000	.871	.881

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 2

Groups Printed- SU

	Indiana Ave From North				130th St From East				Indiana Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	1	4	1	0	2	3	3	5	0	8	15
07:15 AM	0	0	0	0	0	9	5	14	0	0	3	3	1	11	0	12	29
07:30 AM	0	0	0	0	0	8	1	9	0	0	0	0	2	5	0	7	16
07:45 AM	0	0	0	0	0	6	1	7	0	0	2	2	0	10	0	10	19
Total	0	0	0	0	0	26	8	34	1	0	7	8	6	31	0	37	79
08:00 AM	0	0	0	0	0	3	1	4	0	0	1	1	5	7	0	12	17
08:15 AM	0	0	0	0	0	7	0	7	1	0	3	4	1	9	0	10	21
08:30 AM	0	0	0	0	0	6	3	9	1	0	1	2	2	4	0	6	17
08:45 AM	0	0	0	0	0	6	3	9	2	0	2	4	1	4	0	5	18
Total	0	0	0	0	0	22	7	29	4	0	7	11	9	24	0	33	73
Grand Total	0	0	0	0	0	48	15	63	5	0	14	19	15	55	0	70	152
Apprch %	0	0	0		0	76.2	23.8		26.3	0	73.7		21.4	78.6	0		
Total %	0	0	0	0	0	31.6	9.9	41.4	3.3	0	9.2	12.5	9.9	36.2	0	46.1	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 3

Groups Printed- MU

	Indiana Ave From North				130th St From East				Indiana Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
07:15 AM	0	0	0	0	0	5	0	5	1	0	0	1	0	3	0	3	9
07:30 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	1	0	1	5
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
Total	0	0	0	0	0	16	0	16	1	0	1	2	0	14	0	14	32
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
08:30 AM	0	0	0	0	0	3	0	3	1	0	2	3	0	5	0	5	11
08:45 AM	0	0	0	0	0	4	3	7	2	0	0	2	0	4	0	4	13
Total	0	0	0	0	0	10	3	13	3	0	2	5	1	15	0	16	34
Grand Total	0	0	0	0	0	26	3	29	4	0	3	7	1	29	0	30	66
Apprch %	0	0	0		0	89.7	10.3		57.1	0	42.9		3.3	96.7	0		
Total %	0	0	0	0	0	39.4	4.5	43.9	6.1	0	4.5	10.6	1.5	43.9	0	45.5	

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130th St and Indiana Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/3/2012
Page No : 4

Groups Printed- Peds & Bikes

	Indiana Ave Crossing North Leg			130th St Crossing East Leg			Indiana Ave Crossing South Leg			130th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	4	4	0	2	2	0	0	0	6
Total	0	0	0	0	4	4	0	2	2	0	0	0	6
08:00 AM	0	0	0	0	3	3	0	2	2	0	0	0	5
08:15 AM	0	0	0	0	1	1	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	1	1	0	1	1	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	4	4	0	3	3	0	1	1	8
Grand Total	0	0	0	0	8	8	0	5	5	0	1	1	14
Apprch %	0	0		0	100		0	100		0	100		
Total %	0	0	0	0	57.1	57.1	0	35.7	35.7	0	7.1	7.1	

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130th St and Indiana Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 5

Groups Printed- PC - SU - MU

	Indiana Ave From North				130th St From East				Indiana Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	126	34	160	48	0	26	74	58	149	0	207	441
04:15 PM	0	0	0	0	0	126	28	154	20	0	49	69	53	150	0	203	426
04:30 PM	0	0	0	0	0	125	23	148	10	0	44	54	30	146	0	176	378
04:45 PM	0	0	0	0	0	147	21	168	22	0	51	73	48	163	0	211	452
Total	0	0	0	0	0	524	106	630	100	0	170	270	189	608	0	797	1697
05:00 PM	0	0	0	0	0	149	22	171	10	0	38	48	54	145	0	199	418
05:15 PM	0	0	0	0	0	129	26	155	15	0	52	67	63	152	0	215	437
05:30 PM	0	0	0	0	0	132	29	161	11	0	31	42	52	149	0	201	404
05:45 PM	0	0	0	0	0	94	27	121	9	0	37	46	49	116	0	165	332
Total	0	0	0	0	0	504	104	608	45	0	158	203	218	562	0	780	1591
Grand Total	0	0	0	0	0	1028	210	1238	145	0	328	473	407	1170	0	1577	3288
Apprch %	0	0	0		0	83	17		30.7	0	69.3		25.8	74.2	0		
Total %	0	0	0	0	0	31.3	6.4	37.7	4.4	0	10	14.4	12.4	35.6	0	48	
PC	0	0	0	0	0	981	206	1187	143	0	312	455	397	1140	0	1537	3179
% PC	0	0	0	0	0	95.4	98.1	95.9	98.6	0	95.1	96.2	97.5	97.4	0	97.5	96.7
SU	0	0	0	0	0	36	2	38	2	0	16	18	10	21	0	31	87
% SU	0	0	0	0	0	3.5	1	3.1	1.4	0	4.9	3.8	2.5	1.8	0	2	2.6
MU	0	0	0	0	0	11	2	13	0	0	0	0	0	9	0	9	22
% MU	0	0	0	0	0	1.1	1	1.1	0	0	0	0	0	0.8	0	0.6	0.7

	Indiana Ave From North				130th St From East				Indiana Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	147	21	168	**22**	0	51	**73**	48	**163**	0	211	**452**
05:00 PM	0	0	0	0	0	**149**	22	**171**	10	0	38	48	54	145	0	199	418
05:15 PM	0	0	0	0	0	129	26	155	15	0	**52**	67	**63**	152	0	**215**	437
05:30 PM	0	0	0	0	0	132	**29**	161	11	0	31	42	52	149	0	201	404
Total Volume	0	0	0	0	0	557	98	655	58	0	172	230	217	609	0	826	1711
% App. Total	0	0	0		0	85	15		25.2	0	74.8		26.3	73.7	0		
PHF	.000	.000	.000	.000	.000	.935	.845	.958	.659	.000	.827	.788	.861	.934	.000	.960	.946

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130th St and Indiana Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 6

Groups Printed- SU

	Indiana Ave From North				130th St From East				Indiana Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	6	0	6	0	0	1	1	1	2	0	3	10
04:15 PM	0	0	0	0	0	5	1	6	2	0	2	4	2	3	0	5	15
04:30 PM	0	0	0	0	0	4	0	4	0	0	1	1	3	3	0	6	11
04:45 PM	0	0	0	0	0	7	0	7	0	0	1	1	0	4	0	4	12
Total	0	0	0	0	0	22	1	23	2	0	5	7	6	12	0	18	48
05:00 PM	0	0	0	0	0	4	0	4	0	0	1	1	2	0	0	2	7
05:15 PM	0	0	0	0	0	3	0	3	0	0	5	5	0	3	0	3	11
05:30 PM	0	0	0	0	0	2	1	3	0	0	3	3	1	3	0	4	10
05:45 PM	0	0	0	0	0	5	0	5	0	0	2	2	1	3	0	4	11
Total	0	0	0	0	0	14	1	15	0	0	11	11	4	9	0	13	39
Grand Total	0	0	0	0	0	36	2	38	2	0	16	18	10	21	0	31	87
Apprch %	0	0	0		0	94.7	5.3		11.1	0	88.9		32.3	67.7	0		
Total %	0	0	0	0	0	41.4	2.3	43.7	2.3	0	18.4	20.7	11.5	24.1	0	35.6	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/3/2012
Page No : 7

Groups Printed- MU

	Indiana Ave From North				130th St From East				Indiana Ave From South				130th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:15 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	3
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total	0	0	0	0	0	6	1	7	0	0	0	0	0	6	0	6	13
05:00 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	5	1	6	0	0	0	0	0	3	0	3	9
Grand Total	0	0	0	0	0	11	2	13	0	0	0	0	0	9	0	9	22
Apprch %	0	0	0		0	84.6	15.4		0	0	0		0	100	0		
Total %	0	0	0	0	0	50	9.1	59.1	0	0	0	0	0	40.9	0	40.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/3/2012
Page No : 8

Groups Printed- Peds & Bikes

	Indiana Ave Crossing North Leg			130th St Crossing East Leg			Indiana Ave Crossing South Leg			130th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	3	3	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	3	3	0	0	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	0	0	0	1
Grand Total	0	0	0	0	4	4	0	0	0	0	0	0	4
Apprch %	0	0		0	100		0	0		0	0		
Total %	0	0	0	0	100	100	0	0	0	0	0	0	

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95th St & Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM no ped
Site Code : 00000000
Start Date : 4/26/2012
Page No : 1

Groups Printed- PC - SU - MU

	Michigan Ave From North				95th St From East				Michigan Ave From South				95th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	2	3	5	0	112	12	124	20	0	31	51	37	131	0	168	348
07:15 AM	1	1	1	3	0	164	24	188	19	0	33	52	66	154	0	220	463
07:30 AM	1	3	1	5	0	137	18	155	36	0	41	77	73	212	0	285	522
07:45 AM	0	5	1	6	0	145	12	157	28	0	26	54	47	179	0	226	443
Total	2	11	6	19	0	558	66	624	103	0	131	234	223	676	0	899	1776
08:00 AM	1	0	0	1	0	140	17	157	23	0	21	44	33	207	0	240	442
08:15 AM	0	2	1	3	0	153	7	160	19	0	23	42	44	196	0	240	445
08:30 AM	0	1	0	1	0	150	10	160	18	0	19	37	33	219	0	252	450
08:45 AM	1	0	1	2	0	135	13	148	16	0	16	32	32	213	0	245	427
Total	2	3	2	7	0	578	47	625	76	0	79	155	142	835	0	977	1764
Grand Total	4	14	8	26	0	1136	113	1249	179	0	210	389	365	1511	0	1876	3540
Apprch %	15.4	53.8	30.8		0	91	9		46	0	54		19.5	80.5	0		
Total %	0.1	0.4	0.2	0.7	0	32.1	3.2	35.3	5.1	0	5.9	11	10.3	42.7	0	53	
PC	4	14	7	25	0	1034	111	1145	174	0	158	332	310	1401	0	1711	3213
% PC	100	100	87.5	96.2	0	91	98.2	91.7	97.2	0	75.2	85.3	84.9	92.7	0	91.2	90.8
SU	0	0	1	1	0	81	2	83	5	0	52	57	55	97	0	152	293
% SU	0	0	12.5	3.8	0	7.1	1.8	6.6	2.8	0	24.8	14.7	15.1	6.4	0	8.1	8.3
MU	0	0	0	0	0	21	0	21	0	0	0	0	0	13	0	13	34
% MU	0	0	0	0	0	1.8	0	1.7	0	0	0	0	0	0.9	0	0.7	1

	Michigan Ave From North				95th St From East				Michigan Ave From South				95th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	1	**1**	3	0	**164**	**24**	**188**	19	0	33	52	66	154	0	220	463
07:30 AM	1	3	1	5	0	137	18	155	**36**	0	**41**	**77**	**73**	**212**	0	**285**	**522**
07:45 AM	0	**5**	1	**6**	0	145	12	157	28	0	26	54	47	179	0	226	443
08:00 AM	1	0	0	1	0	140	17	157	23	0	21	44	33	207	0	240	442
Total Volume	3	9	3	15	0	586	71	657	106	0	121	227	219	752	0	971	1870
% App. Total	20	60	20		0	89.2	10.8		46.7	0	53.3		22.6	77.4	0		
PHF	.750	.450	.750	.625	.000	.893	.740	.874	.736	.000	.738	.737	.750	.887	.000	.852	.896

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95th St & Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM no ped
Site Code : 00000000
Start Date : 4/26/2012
Page No : 2

Groups Printed- SU

	Michigan Ave From North				95th St From East				Michigan Ave From South				95th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	6	2	8	0	0	6	6	9	20	0	29	43
07:15 AM	0	0	1	1	0	11	0	11	1	0	8	9	7	13	0	20	41
07:30 AM	0	0	0	0	0	13	0	13	1	0	9	10	6	11	0	17	40
07:45 AM	0	0	0	0	0	18	0	18	0	0	5	5	6	16	0	22	45
Total	0	0	1	1	0	48	2	50	2	0	28	30	28	60	0	88	169
08:00 AM	0	0	0	0	0	8	0	8	0	0	6	6	8	9	0	17	31
08:15 AM	0	0	0	0	0	12	0	12	1	0	6	7	8	8	0	16	35
08:30 AM	0	0	0	0	0	8	0	8	2	0	7	9	5	12	0	17	34
08:45 AM	0	0	0	0	0	5	0	5	0	0	5	5	6	8	0	14	24
Total	0	0	0	0	0	33	0	33	3	0	24	27	27	37	0	64	124
Grand Total	0	0	1	1	0	81	2	83	5	0	52	57	55	97	0	152	293
Apprch %	0	0	100		0	97.6	2.4		8.8	0	91.2		36.2	63.8	0		
Total %	0	0	0.3	0.3	0	27.6	0.7	28.3	1.7	0	17.7	19.5	18.8	33.1	0	51.9	

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95th St & Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM no ped
Site Code : 00000000
Start Date : 4/26/2012
Page No : 3

Groups Printed- MU

	Michigan Ave From North				95th St From East				Michigan Ave From South				95th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	11	0	11	0	0	0	0	0	4	0	4	15
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
08:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total	0	0	0	0	0	10	0	10	0	0	0	0	0	9	0	9	19
Grand Total	0	0	0	0	0	21	0	21	0	0	0	0	0	13	0	13	34
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	61.8	0	61.8	0	0	0	0	0	38.2	0	38.2	

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95th & Michigan
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM peds
Site Code : 00000000
Start Date : 4/26/2012
Page No : 4

Groups Printed- Bikes & Peds

	Michigan Ave Crossing North Leg			95th St Crossing East Leg			Michigan Ave Crossing South Leg			95th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	14	14	0	1	1	1	5	6	0	0	0	21
07:15 AM	0	17	17	0	5	5	0	4	4	0	0	0	26
07:30 AM	0	21	21	0	2	2	0	0	0	0	0	0	23
07:45 AM	0	8	8	0	5	5	0	2	2	0	0	0	15
Total	0	60	60	0	13	13	1	11	12	0	0	0	85
08:00 AM	0	12	12	0	3	3	0	13	13	0	0	0	28
08:15 AM	0	8	8	0	2	2	0	0	0	0	0	0	10
08:30 AM	0	11	11	0	7	7	0	1	1	0	0	0	19
08:45 AM	0	9	9	0	3	3	0	7	7	0	0	0	19
Total	0	40	40	0	15	15	0	21	21	0	0	0	76
Grand Total	0	100	100	0	28	28	1	32	33	0	0	0	161
Apprch %	0	100		0	100		3	97		0	0		
Total %	0	62.1	62.1	0	17.4	17.4	0.6	19.9	20.5	0	0	0	

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95th St & Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no ped
Site Code : 00000000
Start Date : 4/26/2012
Page No : 5

Groups Printed- PC - SU - MU

	Michigan Ave From North				95th St From East				Michigan Ave From South				95th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	1	1	0	193	22	215	20	0	28	48	34	214	0	248	512
04:15 PM	1	5	2	8	0	153	18	171	20	0	24	44	30	199	0	229	452
04:30 PM	2	6	2	10	0	153	16	169	19	0	15	34	42	188	0	230	443
04:45 PM	0	5	3	8	0	193	19	212	12	0	16	28	32	214	0	246	494
Total	3	16	8	27	0	692	75	767	71	0	83	154	138	815	0	953	1901
05:00 PM	3	0	3	6	0	193	21	214	16	0	20	36	55	182	0	237	493
05:15 PM	0	7	1	8	0	196	23	219	23	0	13	36	35	197	0	232	495
05:30 PM	2	4	3	9	0	172	19	191	18	0	26	44	32	248	0	280	524
05:45 PM	2	3	2	7	0	163	27	190	22	0	15	37	38	232	0	270	504
Total	7	14	9	30	0	724	90	814	79	0	74	153	160	859	0	1019	2016
Grand Total	10	30	17	57	0	1416	165	1581	150	0	157	307	298	1674	0	1972	3917
Apprch %	17.5	52.6	29.8		0	89.6	10.4		48.9	0	51.1		15.1	84.9	0		
Total %	0.3	0.8	0.4	1.5	0	36.2	4.2	40.4	3.8	0	4	7.8	7.6	42.7	0	50.3	
PC	10	30	16	56	0	1339	165	1504	148	0	121	269	261	1627	0	1888	3717
% PC	100	100	94.1	98.2	0	94.6	100	95.1	98.7	0	77.1	87.6	87.6	97.2	0	95.7	94.9
SU	0	0	1	1	0	72	0	72	1	0	36	37	37	41	0	78	188
% SU	0	0	5.9	1.8	0	5.1	0	4.6	0.7	0	22.9	12.1	12.4	2.4	0	4	4.8
MU	0	0	0	0	0	5	0	5	1	0	0	1	0	6	0	6	12
% MU	0	0	0	0	0	0.4	0	0.3	0.7	0	0	0.3	0	0.4	0	0.3	0.3

	Michigan Ave From North				95th St From East				Michigan Ave From South				95th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**3**	0	**3**	6	0	193	21	214	16	0	20	36	**55**	182	0	237	493
05:15 PM	0	**7**	1	8	0	**196**	23	**219**	**23**	0	13	36	35	197	0	232	495
05:30 PM	2	4	3	**9**	0	172	19	191	18	0	**26**	**44**	32	**248**	0	**280**	**524**
05:45 PM	2	3	2	7	0	163	**27**	190	22	0	15	37	38	232	0	270	504
Total Volume	7	14	9	30	0	724	90	814	79	0	74	153	160	859	0	1019	2016
% App. Total	23.3	46.7	30		0	88.9	11.1		51.6	0	48.4		15.7	84.3	0		
PHF	.583	.500	.750	.833	.000	.923	.833	.929	.859	.000	.712	.869	.727	.866	.000	.910	.962

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95th St & Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no ped
Site Code : 00000000
Start Date : 4/26/2012
Page No : 6

Groups Printed- SU

	Michigan Ave From North				95th St From East				Michigan Ave From South				95th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	13	0	13	0	0	5	5	5	7	0	12	30
04:15 PM	0	0	1	1	0	9	0	9	0	0	6	6	5	5	0	10	26
04:30 PM	0	0	0	0	0	7	0	7	0	0	5	5	4	6	0	10	22
04:45 PM	0	0	0	0	0	10	0	10	0	0	6	6	6	4	0	10	26
Total	0	0	1	1	0	39	0	39	0	0	22	22	20	22	0	42	104
05:00 PM	0	0	0	0	0	7	0	7	0	0	4	4	5	6	0	11	22
05:15 PM	0	0	0	0	0	7	0	7	1	0	2	3	4	3	0	7	17
05:30 PM	0	0	0	0	0	9	0	9	0	0	6	6	4	6	0	10	25
05:45 PM	0	0	0	0	0	10	0	10	0	0	2	2	4	4	0	8	20
Total	0	0	0	0	0	33	0	33	1	0	14	15	17	19	0	36	84
Grand Total	0	0	1	1	0	72	0	72	1	0	36	37	37	41	0	78	188
Apprch %	0	0	100		0	100	0		2.7	0	97.3		47.4	52.6	0		
Total %	0	0	0.5	0.5	0	38.3	0	38.3	0.5	0	19.1	19.7	19.7	21.8	0	41.5	

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95th St & Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no ped
Site Code : 00000000
Start Date : 4/26/2012
Page No : 7

Groups Printed- MU

	Michigan Ave From North				95th St From East				Michigan Ave From South				95th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	6	0	6	10
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
Grand Total	0	0	0	0	0	5	0	5	1	0	0	1	0	6	0	6	12
Apprch %	0	0	0		0	100	0		100	0	0		0	100	0		
Total %	0	0	0	0	0	41.7	0	41.7	8.3	0	0	8.3	0	50	0	50	

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Michigan Ave & 95th St
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM Peds
Site Code : 00000000
Start Date : 4/26/2012

Groups Printed- Bikes & Peds

	Michigan Ave Crossing North Leg			95th St Crossing East Leg			Michigan Ave Crossing South Leg			95th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	BIkes	Peds	App. Total	Int. Total
04:00 PM	0	9	9	0	3	3	0	8	8	0	5	5	25
04:15 PM	0	19	19	0	1	1	0	6	6	0	8	8	34
04:30 PM	0	16	16	0	1	1	0	4	4	0	9	9	30
04:45 PM	0	16	16	0	3	3	0	4	4	0	8	8	31
Total	0	60	60	0	8	8	0	22	22	0	30	30	120
05:00 PM	0	26	26	0	2	2	0	6	6	0	13	13	47
05:15 PM	0	16	16	0	3	3	1	3	4	0	1	1	24
05:30 PM	0	18	18	0	5	5	0	4	4	0	16	16	43
05:45 PM	0	7	7	0	2	2	0	6	6	0	8	8	23
Total	0	67	67	0	12	12	1	19	20	0	38	38	137
Grand Total	0	127	127	0	20	20	1	41	42	0	68	68	257
Apprch %	0	100		0	100		2.4	97.6		0	100		
Total %	0	49.4	49.4	0	7.8	7.8	0.4	16	16.3	0	26.5	26.5	

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95TH ST & WENTWORTH AVE
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM no peds
Site Code : 00000000
Start Date : 4/25/2012
Page No : 1

Groups Printed- PC - SU - MU

	WENTWORTH AVE From North				95TH ST From East				WENTWORTH AVE From South				95TH ST From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	8	2	2	12	2	127	7	136	13	10	6	29	0	149	4	153	330
07:15 AM	14	2	4	20	1	140	3	144	20	13	12	45	1	148	5	154	363
07:30 AM	22	6	9	37	11	174	4	189	23	17	12	52	1	175	16	192	470
07:45 AM	26	8	12	46	12	188	5	205	25	18	17	60	2	201	9	212	523
Total	70	18	27	115	26	629	19	674	81	58	47	186	4	673	34	711	1686
08:00 AM	27	6	10	43	11	193	6	210	14	15	8	37	5	221	5	231	521
08:15 AM	18	9	7	34	9	152	6	167	13	10	6	29	8	168	6	182	412
08:30 AM	23	3	5	31	9	163	3	175	23	7	11	41	4	194	14	212	459
08:45 AM	16	5	5	26	11	180	9	200	12	11	14	37	8	195	13	216	479
Total	84	23	27	134	40	688	24	752	62	43	39	144	25	778	38	841	1871
Grand Total	154	41	54	249	66	1317	43	1426	143	101	86	330	29	1451	72	1552	3557
Apprch %	61.8	16.5	21.7		4.6	92.4	3		43.3	30.6	26.1		1.9	93.5	4.6		
Total %	4.3	1.2	1.5	7	1.9	37	1.2	40.1	4	2.8	2.4	9.3	0.8	40.8	2	43.6	
PC	148	38	49	235	65	1205	43	1313	139	88	84	311	29	1340	66	1435	3294
% PC	96.1	92.7	90.7	94.4	98.5	91.5	100	92.1	97.2	87.1	97.7	94.2	100	92.4	91.7	92.5	92.6
SU	6	3	5	14	1	94	0	95	4	13	2	19	0	97	6	103	231
% SU	3.9	7.3	9.3	5.6	1.5	7.1	0	6.7	2.8	12.9	2.3	5.8	0	6.7	8.3	6.6	6.5
MU	0	0	0	0	0	18	0	18	0	0	0	0	0	14	0	14	32
% MU	0	0	0	0	0	1.4	0	1.3	0	0	0	0	0	1	0	0.9	0.9

	WENTWORTH AVE From North				95TH ST From East				WENTWORTH AVE From South				95TH ST From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	22	6	9	37	11	174	4	189	23	17	12	52	1	175	**16**	192	470
07:45 AM	26	8	**12**	**46**	**12**	188	5	205	**25**	**18**	**17**	**60**	2	201	9	212	**523**
08:00 AM	**27**	6	10	43	11	**193**	**6**	**210**	14	15	8	37	5	**221**	5	**231**	521
08:15 AM	18	**9**	7	34	9	152	6	167	13	10	6	29	**8**	168	6	182	412
Total Volume	93	29	38	160	43	707	21	771	75	60	43	178	16	765	36	817	1926
% App. Total	58.1	18.1	23.8		5.6	91.7	2.7		42.1	33.7	24.2		2	93.6	4.4		
PHF	.861	.806	.792	.870	.896	.916	.875	.918	.750	.833	.632	.742	.500	.865	.563	.884	.921

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95TH ST & WENTWORTH AVE
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM no peds
Site Code : 00000000
Start Date : 4/25/2012
Page No : 2

Groups Printed- SU

	WENTWORTH AVE From North				95TH ST From East				WENTWORTH AVE From South				95TH ST From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	9	0	9	1	3	0	4	0	10	0	10	23
07:15 AM	1	0	1	2	0	15	0	15	0	3	0	3	0	11	0	11	31
07:30 AM	0	0	0	0	0	14	0	14	1	0	0	1	0	18	2	20	35
07:45 AM	0	1	1	2	0	7	0	7	1	1	0	2	0	9	2	11	22
Total	1	1	2	4	0	45	0	45	3	7	0	10	0	48	4	52	111
08:00 AM	3	1	0	4	1	12	0	13	0	2	1	3	0	13	0	13	33
08:15 AM	0	0	1	1	0	8	0	8	1	1	0	2	0	7	0	7	18
08:30 AM	1	0	1	2	0	15	0	15	0	1	1	2	0	15	1	16	35
08:45 AM	1	1	1	3	0	14	0	14	0	2	0	2	0	14	1	15	34
Total	5	2	3	10	1	49	0	50	1	6	2	9	0	49	2	51	120
Grand Total	6	3	5	14	1	94	0	95	4	13	2	19	0	97	6	103	231
Apprch %	42.9	21.4	35.7		1.1	98.9	0		21.1	68.4	10.5		0	94.2	5.8		
Total %	2.6	1.3	2.2	6.1	0.4	40.7	0	41.1	1.7	5.6	0.9	8.2	0	42	2.6	44.6	

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95TH ST & WENTWORTH AVE
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM no peds
Site Code : 00000000
Start Date : 4/25/2012
Page No : 3

Groups Printed- MU

	WENTWORTH AVE From North				95TH ST From East				WENTWORTH AVE From South				95TH ST From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	5	0	5	9
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	7	0	7	0	0	0	0	0	2	0	2	9
08:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
Total	0	0	0	0	0	14	0	14	0	0	0	0	0	9	0	9	23
Grand Total	0	0	0	0	0	18	0	18	0	0	0	0	0	14	0	14	32
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	56.2	0	56.2	0	0	0	0	0	43.8	0	43.8	

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95TH AND WENTWORTH AVE
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM peds
Site Code : 00000000
Start Date : 4/25/2012
Page No : 4

Groups Printed- Peds & Bikes

	WENTWORTH AVE Crossing North Leg			95TH ST Crossing East Leg			WENTWORTH AVE Crossing South Leg			95TH ST Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	6	6	0	0	0	0	0	0	0	0	0	6
07:15 AM	0	10	10	0	0	0	0	1	1	0	0	0	11
07:30 AM	0	7	7	0	0	0	1	1	2	0	0	0	9
07:45 AM	0	13	13	0	0	0	0	4	4	0	1	1	18
Total	0	36	36	0	0	0	1	6	7	0	1	1	44
08:00 AM	0	23	23	0	3	3	0	4	4	0	2	2	32
08:15 AM	1	18	19	0	2	2	0	2	2	0	0	0	23
08:30 AM	0	16	16	0	4	4	0	1	1	0	1	1	22
08:45 AM	0	9	9	0	1	1	0	0	0	0	0	0	10
Total	1	66	67	0	10	10	0	7	7	0	3	3	87
Grand Total	1	102	103	0	10	10	1	13	14	0	4	4	131
Apprch %	1	99		0	100		7.1	92.9		0	100		
Total %	0.8	77.9	78.6	0	7.6	7.6	0.8	9.9	10.7	0	3.1	3.1	

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95TH ST AND WENTWORTH AVE
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no peds
Site Code : 00000000
Start Date : 4/25/2012
Page No : 5

Groups Printed- PC - SU - MU

	WENTWORTH AVE From North				95TH ST From East				WENTWORTH AVE From South				95TH ST From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	17	10	8	35	7	207	9	223	15	9	10	34	9	190	3	202	494
04:15 PM	19	11	4	34	9	213	2	224	12	9	6	27	5	168	6	179	464
04:30 PM	17	10	2	29	7	187	7	201	14	8	8	30	10	169	12	191	451
04:45 PM	16	13	6	35	6	192	10	208	8	7	8	23	12	175	10	197	463
Total	69	44	20	133	29	799	28	856	49	33	32	114	36	702	31	769	1872
05:00 PM	21	5	7	33	13	218	10	241	17	6	11	34	9	168	12	189	497
05:15 PM	19	8	6	33	14	241	8	263	5	5	6	16	2	118	7	127	439
05:30 PM	21	5	4	30	21	215	9	245	14	4	10	28	9	177	11	197	500
05:45 PM	24	4	6	34	6	265	6	277	12	2	7	21	7	135	9	151	483
Total	85	22	23	130	54	939	33	1026	48	17	34	99	27	598	39	664	1919
06:00 PM	20	3	3	26	5	238	5	248	8	1	8	17	5	113	6	124	415
Grand Total	174	69	46	289	88	1976	66	2130	105	51	74	230	68	1413	76	1557	4206
Apprch %	60.2	23.9	15.9		4.1	92.8	3.1		45.7	22.2	32.2		4.4	90.8	4.9		
Total %	4.1	1.6	1.1	6.9	2.1	47	1.6	50.6	2.5	1.2	1.8	5.5	1.6	33.6	1.8	37	
PC	174	68	45	287	87	1875	64	2026	103	50	74	227	67	1342	75	1484	4024
% PC	100	98.6	97.8	99.3	98.9	94.9	97	95.1	98.1	98	100	98.7	98.5	95	98.7	95.3	95.7
SU	0	1	1	2	1	84	2	87	2	1	0	3	1	67	1	69	161
% SU	0	1.4	2.2	0.7	1.1	4.3	3	4.1	1.9	2	0	1.3	1.5	4.7	1.3	4.4	3.8
MU	0	0	0	0	0	17	0	17	0	0	0	0	0	4	0	4	21
% MU	0	0	0	0	0	0.9	0	0.8	0	0	0	0	0	0.3	0	0.3	0.5

	WENTWORTH AVE From North				95TH ST From East				WENTWORTH AVE From South				95TH ST From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	21	5	**7**	33	13	218	**10**	241	**17**	**6**	**11**	**34**	**9**	168	**12**	189	497
05:15 PM	19	**8**	6	33	14	241	8	263	5	5	6	16	2	118	7	127	439
05:30 PM	21	5	4	30	**21**	215	9	245	14	4	10	28	9	**177**	11	**197**	**500**
05:45 PM	**24**	4	6	**34**	6	**265**	6	**277**	12	2	7	21	7	135	9	151	483
Total Volume	85	22	23	130	54	939	33	1026	48	17	34	99	27	598	39	664	1919
% App. Total	65.4	16.9	17.7		5.3	91.5	3.2		48.5	17.2	34.3		4.1	90.1	5.9		
PHF	.885	.688	.821	.956	.643	.886	.825	.926	.706	.708	.773	.728	.750	.845	.813	.843	.960

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95TH ST AND WENTWORTH AVE
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no peds
Site Code : 00000000
Start Date : 4/25/2012
Page No : 6

Groups Printed- SU

	WENTWORTH AVE From North				95TH ST From East				WENTWORTH AVE From South				95TH ST From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	12	1	13	1	0	0	1	0	8	0	8	23
04:15 PM	0	0	1	1	0	16	0	16	0	1	0	1	0	6	1	7	25
04:30 PM	0	0	0	0	0	10	1	11	1	0	0	1	1	12	0	13	25
04:45 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	9	0	9	15
Total	0	1	1	2	0	44	2	46	2	1	0	3	1	35	1	37	88
05:00 PM	0	0	0	0	0	11	0	11	0	0	0	0	0	6	0	6	17
05:15 PM	0	0	0	0	0	9	0	9	0	0	0	0	0	6	0	6	15
05:30 PM	0	0	0	0	1	9	0	10	0	0	0	0	0	9	0	9	19
05:45 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	7	0	7	13
Total	0	0	0	0	1	35	0	36	0	0	0	0	0	28	0	28	64
06:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	9
Grand Total	0	1	1	2	1	84	2	87	2	1	0	3	1	67	1	69	161
Apprch %	0	50	50		1.1	96.6	2.3		66.7	33.3	0		1.4	97.1	1.4		
Total %	0	0.6	0.6	1.2	0.6	52.2	1.2	54	1.2	0.6	0	1.9	0.6	41.6	0.6	42.9	

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95TH ST AND WENTWORTH AVE
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no peds
Site Code : 00000000
Start Date : 4/25/2012
Page No : 7

Groups Printed- MU

	WENTWORTH AVE From North				95TH ST From East				WENTWORTH AVE From South				95TH ST From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
04:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	11	0	11	0	0	0	0	0	1	0	1	12
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
06:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Grand Total	0	0	0	0	0	17	0	17	0	0	0	0	0	4	0	4	21
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	81	0	81	0	0	0	0	0	19	0	19	

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95TH ST AND WENTWORTH AVE
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM peds
Site Code : 00000000
Start Date : 4/25/2012
Page No : 8

Groups Printed- Peds & Bikes

	WENTWORTH AVE Crossing North Leg			95TH ST Crossing East Leg			WENTWORTH AVE Crossing South Leg			95TH ST Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	1	12	13	0	4	4	0	3	3	0	0	0	20
04:15 PM	0	12	12	0	8	8	0	13	13	0	0	0	33
04:30 PM	1	21	22	0	0	0	0	0	0	0	2	2	24
04:45 PM	0	28	28	0	0	0	0	1	1	0	2	2	31
Total	2	73	75	0	12	12	0	17	17	0	4	4	108
05:00 PM	2	31	33	1	6	7	0	7	7	0	3	3	50
05:15 PM	1	50	51	0	9	9	0	7	7	0	8	8	75
05:30 PM	1	28	29	0	1	1	0	1	1	0	3	3	34
05:45 PM	1	36	37	1	3	4	0	1	1	0	3	3	45
Total	5	145	150	2	19	21	0	16	16	0	17	17	204
06:00 PM	1	28	29	1	1	2	0	1	1	0	2	2	34
Grand Total	8	246	254	3	32	35	0	34	34	0	23	23	346
Apprch %	3.1	96.9		8.6	91.4		0	100		0	100		
Total %	2.3	71.1	73.4	0.9	9.2	10.1	0	9.8	9.8	0	6.6	6.6	

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98TH PL AND HALSTED ST
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : am no peds
Site Code : 00000000
Start Date : 4/26/2012
Page No : 1

Groups Printed- PC - SU - MU

	HALSTED ST From North				98TH PL From East				HALSTED ST From South				98TH PL From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	97	37	0	134	189	7	56	252	0	143	28	171	0	0	0	0	557
07:15 AM	133	56	0	189	206	7	42	255	0	183	43	226	0	0	0	0	670
07:30 AM	154	67	0	221	278	16	61	355	0	192	53	245	0	0	0	0	821
07:45 AM	196	89	0	285	252	9	45	306	0	203	46	249	0	0	0	0	840
Total	580	249	0	829	925	39	204	1168	0	721	170	891	0	0	0	0	2888
08:00 AM	145	78	0	223	277	8	81	366	0	216	36	252	0	0	0	0	841
08:15 AM	183	65	0	248	225	6	51	282	0	203	46	249	0	0	0	0	779
08:30 AM	160	52	0	212	212	6	53	271	0	221	28	249	0	0	0	0	732
08:45 AM	131	82	0	213	217	7	59	283	0	164	40	204	0	0	0	0	700
Total	619	277	0	896	931	27	244	1202	0	804	150	954	0	0	0	0	3052
Grand Total	1199	526	0	1725	1856	66	448	2370	0	1525	320	1845	0	0	0	0	5940
Apprch %	69.5	30.5	0		78.3	2.8	18.9		0	82.7	17.3		0	0	0		
Total %	20.2	8.9	0	29	31.2	1.1	7.5	39.9	0	25.7	5.4	31.1	0	0	0	0	
PC	1101	505	0	1606	1814	62	429	2305	0	1437	306	1743	0	0	0	0	5654
% PC	91.8	96	0	93.1	97.7	93.9	95.8	97.3	0	94.2	95.6	94.5	0	0	0	0	95.2
SU	78	14	0	92	26	3	19	48	0	76	13	89	0	0	0	0	229
% SU	6.5	2.7	0	5.3	1.4	4.5	4.2	2	0	5	4.1	4.8	0	0	0	0	3.9
MU	20	7	0	27	16	1	0	17	0	12	1	13	0	0	0	0	57
% MU	1.7	1.3	0	1.6	0.9	1.5	0	0.7	0	0.8	0.3	0.7	0	0	0	0	1

	HALSTED ST From North				98TH PL From East				HALSTED ST From South				98TH PL From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	154	67	0	221	**278**	**16**	61	355	0	192	**53**	245	0	0	0	0	821
07:45 AM	**196**	**89**	0	**285**	252	9	45	306	0	203	46	249	0	0	0	0	840
08:00 AM	145	78	0	223	277	8	**81**	**366**	0	**216**	36	**252**	0	0	0	0	**841**
08:15 AM	183	65	0	248	225	6	51	282	0	203	46	249	0	0	0	0	779
Total Volume	678	299	0	977	1032	39	238	1309	0	814	181	995	0	0	0	0	3281
% App. Total	69.4	30.6	0		78.8	3	18.2		0	81.8	18.2		0	0	0		
PHF	.865	.840	.000	.857	.928	.609	.735	.894	.000	.942	.854	.987	.000	.000	.000	.000	.975

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98TH PL AND HALSTED ST
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : am no peds
Site Code : 00000000
Start Date : 4/26/2012
Page No : 2

Groups Printed- SU

	HALSTED ST From North				98TH PL From East				HALSTED ST From South				98TH PL From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	14	1	0	15	2	0	2	4	0	15	2	17	0	0	0	0	36
07:15 AM	6	0	0	6	3	1	2	6	0	11	3	14	0	0	0	0	26
07:30 AM	11	1	0	12	7	1	1	9	0	9	1	10	0	0	0	0	31
07:45 AM	11	3	0	14	2	0	2	4	0	7	0	7	0	0	0	0	25
Total	42	5	0	47	14	2	7	23	0	42	6	48	0	0	0	0	118
08:00 AM	8	0	0	8	2	0	5	7	0	9	1	10	0	0	0	0	25
08:15 AM	14	3	0	17	3	0	0	3	0	9	4	13	0	0	0	0	33
08:30 AM	8	2	0	10	5	0	3	8	0	11	0	11	0	0	0	0	29
08:45 AM	6	4	0	10	2	1	4	7	0	5	2	7	0	0	0	0	24
Total	36	9	0	45	12	1	12	25	0	34	7	41	0	0	0	0	111
Grand Total	78	14	0	92	26	3	19	48	0	76	13	89	0	0	0	0	229
Apprch %	84.8	15.2	0		54.2	6.2	39.6		0	85.4	14.6		0	0	0		
Total %	34.1	6.1	0	40.2	11.4	1.3	8.3	21	0	33.2	5.7	38.9	0	0	0	0	

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98TH PL AND HALSTED ST
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : am no peds
Site Code : 00000000
Start Date : 4/26/2012
Page No : 3

Groups Printed- MU

	HALSTED ST From North				98TH PL From East				HALSTED ST From South				98TH PL From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	1	0	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
07:15 AM	3	0	0	3	3	0	0	3	0	3	1	4	0	0	0	0	10
07:30 AM	0	4	0	4	2	0	0	2	0	1	0	1	0	0	0	0	7
07:45 AM	3	1	0	4	3	1	0	4	0	2	0	2	0	0	0	0	10
Total	7	5	0	12	10	1	0	11	0	6	1	7	0	0	0	0	30
08:00 AM	3	1	0	4	2	0	0	2	0	2	0	2	0	0	0	0	8
08:15 AM	2	1	0	3	1	0	0	1	0	0	0	0	0	0	0	0	4
08:30 AM	3	0	0	3	2	0	0	2	0	3	0	3	0	0	0	0	8
08:45 AM	5	0	0	5	1	0	0	1	0	1	0	1	0	0	0	0	7
Total	13	2	0	15	6	0	0	6	0	6	0	6	0	0	0	0	27
Grand Total	20	7	0	27	16	1	0	17	0	12	1	13	0	0	0	0	57
Apprch %	74.1	25.9	0		94.1	5.9	0		0	92.3	7.7		0	0	0		
Total %	35.1	12.3	0	47.4	28.1	1.8	0	29.8	0	21.1	1.8	22.8	0	0	0	0	

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98TH PL AND HALSTED ST
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM Peds
Site Code : 00000000
Start Date : 4/26/2012
Page No : 4

Groups Printed- Peds & Bikes

	HALSTED ST Crossing North Leg			98TH PL Crossing East Leg			HALSTED ST Crossing South Leg			98TH PL Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	2	2	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	3	3	0	0	0	0	3	3	6
07:30 AM	0	0	0	0	1	1	0	0	0	0	3	3	4
07:45 AM	0	1	1	0	3	3	0	0	0	0	4	4	8
Total	0	1	1	0	9	9	0	0	0	0	10	10	20
08:00 AM	0	1	1	0	3	3	0	0	0	0	0	0	4
08:15 AM	0	0	0	0	1	1	0	0	0	0	5	5	6
08:30 AM	0	5	5	0	0	0	0	0	0	1	0	1	6
08:45 AM	0	3	3	0	2	2	0	0	0	0	5	5	10
Total	0	9	9	0	6	6	0	0	0	1	10	11	26
Grand Total	0	10	10	0	15	15	0	0	0	1	20	21	46
Apprch %	0	100		0	100		0	0		4.8	95.2		
Total %	0	21.7	21.7	0	32.6	32.6	0	0	0	2.2	43.5	45.7	

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98TH PL AND HALSTED ST
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no peds
Site Code : 00000000
Start Date : 4/26/2012
Page No : 5

Groups Printed- PC - SU - MU

	HALSTED ST From North				98TH PL From East				HALSTED ST From South				98TH PL From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	111	193	0	304	226	0	69	295	0	160	53	213	0	0	0	0	812
04:15 PM	83	162	0	245	307	0	98	405	0	125	55	180	0	0	0	0	830
04:30 PM	126	175	0	301	213	0	66	279	0	134	42	176	0	0	0	0	756
04:45 PM	86	213	0	299	289	0	80	369	0	134	33	167	0	0	0	0	835
Total	406	743	0	1149	1035	0	313	1348	0	553	183	736	0	0	0	0	3233
05:00 PM	106	205	0	311	278	0	70	348	0	145	34	179	0	0	0	0	838
05:15 PM	133	193	0	326	236	0	66	302	0	147	53	200	0	0	0	0	828
05:30 PM	128	229	0	357	264	0	73	337	0	145	45	190	0	0	0	0	884
05:45 PM	123	224	0	347	265	0	66	331	0	139	49	188	0	0	0	0	866
Total	490	851	0	1341	1043	0	275	1318	0	576	181	757	0	0	0	0	3416
Grand Total	896	1594	0	2490	2078	0	588	2666	0	1129	364	1493	0	0	0	0	6649
Apprch %	36	64	0		77.9	0	22.1		0	75.6	24.4		0	0	0		
Total %	13.5	24	0	37.4	31.3	0	8.8	40.1	0	17	5.5	22.5	0	0	0	0	
PC	874	1514	0	2388	2053	0	575	2628	0	1070	350	1420	0	0	0	0	6436
% PC	97.5	95	0	95.9	98.8	0	97.8	98.6	0	94.8	96.2	95.1	0	0	0	0	96.8
SU	16	63	0	79	10	0	11	21	0	53	9	62	0	0	0	0	162
% SU	1.8	4	0	3.2	0.5	0	1.9	0.8	0	4.7	2.5	4.2	0	0	0	0	2.4
MU	6	17	0	23	15	0	2	17	0	6	5	11	0	0	0	0	51
% MU	0.7	1.1	0	0.9	0.7	0	0.3	0.6	0	0.5	1.4	0.7	0	0	0	0	0.8

	HALSTED ST From North				98TH PL From East				HALSTED ST From South				98TH PL From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	106	205	0	311	**278**	0	70	**348**	0	145	34	179	0	0	0	0	838
05:15 PM	**133**	193	0	326	236	0	66	302	0	**147**	**53**	**200**	0	0	0	0	828
05:30 PM	128	**229**	0	**357**	264	0	**73**	337	0	145	45	190	0	0	0	0	**884**
05:45 PM	123	224	0	347	265	0	66	331	0	139	49	188	0	0	0	0	866
Total Volume	490	851	0	1341	1043	0	275	1318	0	576	181	757	0	0	0	0	3416
% App. Total	36.5	63.5	0		79.1	0	20.9		0	76.1	23.9		0	0	0		
PHF	.921	.929	.000	.939	.938	.000	.942	.947	.000	.980	.854	.946	.000	.000	.000	.000	.966

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98TH PL AND HALSTED ST
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no peds
Site Code : 00000000
Start Date : 4/26/2012
Page No : 6

Groups Printed- SU

	HALSTED ST From North				98TH PL From East				HALSTED ST From South				98TH PL From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	3	9	0	12	3	0	2	5	0	7	2	9	0	0	0	0	26
04:15 PM	1	8	0	9	3	0	2	5	0	8	0	8	0	0	0	0	22
04:30 PM	3	9	0	12	1	0	0	1	0	3	2	5	0	0	0	0	18
04:45 PM	3	6	0	9	1	0	2	3	0	8	0	8	0	0	0	0	20
Total	10	32	0	42	8	0	6	14	0	26	4	30	0	0	0	0	86
05:00 PM	1	9	0	10	1	0	0	1	0	8	2	10	0	0	0	0	21
05:15 PM	3	6	0	9	1	0	1	2	0	9	1	10	0	0	0	0	21
05:30 PM	2	9	0	11	0	0	1	1	0	3	2	5	0	0	0	0	17
05:45 PM	0	7	0	7	0	0	3	3	0	7	0	7	0	0	0	0	17
Total	6	31	0	37	2	0	5	7	0	27	5	32	0	0	0	0	76
Grand Total	16	63	0	79	10	0	11	21	0	53	9	62	0	0	0	0	162
Apprch %	20.3	79.7	0		47.6	0	52.4		0	85.5	14.5		0	0	0		
Total %	9.9	38.9	0	48.8	6.2	0	6.8	13	0	32.7	5.6	38.3	0	0	0	0	

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98TH PL AND HALSTED ST
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM no peds
Site Code : 00000000
Start Date : 4/26/2012
Page No : 7

Groups Printed- MU

	HALSTED ST From North				98TH PL From East				HALSTED ST From South				98TH PL From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	2	2	0	4	5	0	1	6	0	0	1	1	0	0	0	0	11
04:15 PM	1	1	0	2	1	0	0	1	0	1	0	1	0	0	0	0	4
04:30 PM	1	3	0	4	7	0	1	8	0	0	1	1	0	0	0	0	13
04:45 PM	1	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	5	10	0	15	13	0	2	15	0	1	2	3	0	0	0	0	33
05:00 PM	1	2	0	3	2	0	0	2	0	2	0	2	0	0	0	0	7
05:15 PM	0	3	0	3	0	0	0	0	0	0	1	1	0	0	0	0	4
05:30 PM	0	1	0	1	0	0	0	0	0	2	1	3	0	0	0	0	4
05:45 PM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
Total	1	7	0	8	2	0	0	2	0	5	3	8	0	0	0	0	18
Grand Total	6	17	0	23	15	0	2	17	0	6	5	11	0	0	0	0	51
Apprch %	26.1	73.9	0		88.2	0	11.8		0	54.5	45.5		0	0	0		
Total %	11.8	33.3	0	45.1	29.4	0	3.9	33.3	0	11.8	9.8	21.6	0	0	0	0	

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98TH PL AND HALSTED ST
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : PM Peds
Site Code : 00000000
Start Date : 4/26/2012

Groups Printed- Peds & Bikes

	HALSTED ST Crossing North Leg			98TH PL Crossing East Leg			HALSTED ST Crossing South Leg			98TH PL Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	1	1	0	0	0	0	0	0	0	4	4	5
04:15 PM	0	0	0	0	1	1	0	0	0	0	4	4	5
04:30 PM	0	2	2	0	0	0	0	0	0	0	2	2	4
04:45 PM	0	1	1	0	3	3	0	0	0	1	5	6	10
Total	0	4	4	0	4	4	0	0	0	1	15	16	24
05:00 PM	0	0	0	0	0	0	0	0	0	0	3	3	3
05:15 PM	0	2	2	0	3	3	0	0	0	0	4	4	9
05:30 PM	0	0	0	0	0	0	0	0	0	0	7	7	7
05:45 PM	0	0	0	0	0	0	0	0	0	0	4	4	4
Total	0	2	2	0	3	3	0	0	0	0	18	18	23
Grand Total	0	6	6	0	7	7	0	0	0	1	33	34	47
Apprch %	0	100		0	100		0	0		2.9	97.1		
Total %	0	12.8	12.8	0	14.9	14.9	0	0	0	2.1	70.2	72.3	

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98th Pl and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 1

Groups Printed- PC - SU - MU

	Wentworth Ave From North				98th Pl From East				Wentworth Ave From South				98th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	10	0	10	3	2	36	41	0	29	0	29	0	0	0	0	80
07:15 AM	0	18	0	18	1	0	30	31	0	41	3	44	0	0	0	0	93
07:30 AM	0	22	0	22	2	1	49	52	0	38	0	38	0	0	0	0	112
07:45 AM	1	20	0	21	6	0	58	64	0	38	0	38	0	0	0	0	123
Total	1	70	0	71	12	3	173	188	0	146	3	149	0	0	0	0	408
08:00 AM	1	32	0	33	8	3	65	76	0	58	3	61	0	0	0	0	170
08:15 AM	1	29	0	30	5	0	55	60	0	31	0	31	0	0	0	0	121
08:30 AM	0	24	0	24	4	0	57	61	0	35	0	35	0	0	0	0	120
08:45 AM	0	15	0	15	5	4	69	78	0	17	2	19	0	0	0	0	112
Total	2	100	0	102	22	7	246	275	0	141	5	146	0	0	0	0	523
Grand Total	3	170	0	173	34	10	419	463	0	287	8	295	0	0	0	0	931
Apprch %	1.7	98.3	0		7.3	2.2	90.5		0	97.3	2.7		0	0	0		
Total %	0.3	18.3	0	18.6	3.7	1.1	45	49.7	0	30.8	0.9	31.7	0	0	0	0	
PC	2	166	0	168	31	9	391	431	0	275	7	282	0	0	0	0	881
% PC	66.7	97.6	0	97.1	91.2	90	93.3	93.1	0	95.8	87.5	95.6	0	0	0	0	94.6
SU	1	4	0	5	3	1	25	29	0	12	1	13	0	0	0	0	47
% SU	33.3	2.4	0	2.9	8.8	10	6	6.3	0	4.2	12.5	4.4	0	0	0	0	5
MU	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
% MU	0	0	0	0	0	0	0.7	0.6	0	0	0	0	0	0	0	0	0.3

	Wentworth Ave From North				98th Pl From East				Wentworth Ave From South				98th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**1**	20	0	21	6	0	58	64	0	38	0	38	0	0	0	0	123
08:00 AM	1	**32**	0	**33**	**8**	**3**	**65**	**76**	0	**58**	**3**	**61**	0	0	0	0	**170**
08:15 AM	1	29	0	30	5	0	55	60	0	31	0	31	0	0	0	0	121
08:30 AM	0	24	0	24	4	0	57	61	0	35	0	35	0	0	0	0	120
Total Volume	3	105	0	108	23	3	235	261	0	162	3	165	0	0	0	0	534
% App. Total	2.8	97.2	0		8.8	1.1	90		0	98.2	1.8		0	0	0		
PHF	.750	.820	.000	.818	.719	.250	.904	.859	.000	.698	.250	.676	.000	.000	.000	.000	.785

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98th Pl and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 2

Groups Printed- SU

	Wentworth Ave From North				98th Pl From East				Wentworth Ave From South				98th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	1	0	4	5	0	3	0	3	0	0	0	0	8
07:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
07:45 AM	0	1	0	1	0	0	5	5	0	0	0	0	0	0	0	0	6
Total	0	1	0	1	1	0	12	13	0	5	0	5	0	0	0	0	19
08:00 AM	1	2	0	3	1	1	4	6	0	3	1	4	0	0	0	0	13
08:15 AM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
08:30 AM	0	0	0	0	0	0	1	1	0	4	0	4	0	0	0	0	5
08:45 AM	0	1	0	1	1	0	5	6	0	0	0	0	0	0	0	0	7
Total	1	3	0	4	2	1	13	16	0	7	1	8	0	0	0	0	28
Grand Total	1	4	0	5	3	1	25	29	0	12	1	13	0	0	0	0	47
Apprch %	20	80	0		10.3	3.4	86.2		0	92.3	7.7		0	0	0		
Total %	2.1	8.5	0	10.6	6.4	2.1	53.2	61.7	0	25.5	2.1	27.7	0	0	0	0	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 3

Groups Printed- MU

	Wentworth Ave From North				98th Pl From East				Wentworth Ave From South				98th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2
Grand Total	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
Apprch %	0	0	0		0	0	100		0	0	0		0	0	0		
Total %	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	

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98th Pl and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/30/2012
Page No : 4

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			98th Pl Crossing East Leg			Wentworth Ave Crossing South Leg			98th Pl Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	1	1	0	0	0	0	0	0	1
07:30 AM	0	2	2	0	0	0	0	0	0	0	2	2	4
07:45 AM	0	0	0	0	0	0	0	2	2	0	1	1	3
Total	0	2	2	0	1	1	0	2	2	0	3	3	8
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	1	0	0	0	0	1	1	0	0	0	2
08:45 AM	0	1	1	0	0	0	0	0	0	0	2	2	3
Total	0	2	2	0	0	0	0	1	1	0	2	2	5
Grand Total	0	4	4	0	1	1	0	3	3	0	5	5	13
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	30.8	30.8	0	7.7	7.7	0	23.1	23.1	0	38.5	38.5	

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98th Pl and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 5

Groups Printed- PC - SU - MU

	Wentworth Ave From North				98th Pl From East				Wentworth Ave From South				98th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	1	29	0	30	9	7	72	88	0	26	3	29	0	0	0	0	147
04:15 PM	1	38	0	39	6	11	68	85	0	29	1	30	0	0	0	0	154
04:30 PM	4	35	0	39	7	2	66	75	0	25	1	26	0	0	0	0	140
04:45 PM	1	26	0	27	7	4	74	85	0	16	1	17	0	0	0	0	129
Total	7	128	0	135	29	24	280	333	0	96	6	102	0	0	0	0	570
05:00 PM	0	30	0	30	11	2	72	85	0	17	2	19	0	0	0	0	134
05:15 PM	1	37	0	38	5	5	56	66	0	36	3	39	0	0	0	0	143
05:30 PM	2	37	0	39	3	7	71	81	0	24	0	24	0	0	0	0	144
05:45 PM	2	32	0	34	4	10	72	86	0	27	3	30	0	0	0	0	150
Total	5	136	0	141	23	24	271	318	0	104	8	112	0	0	0	0	571
Grand Total	12	264	0	276	52	48	551	651	0	200	14	214	0	0	0	0	1141
Apprch %	4.3	95.7	0		8	7.4	84.6		0	93.5	6.5		0	0	0		
Total %	1.1	23.1	0	24.2	4.6	4.2	48.3	57.1	0	17.5	1.2	18.8	0	0	0	0	
PC	12	257	0	269	52	47	541	640	0	195	14	209	0	0	0	0	1118
% PC	100	97.3	0	97.5	100	97.9	98.2	98.3	0	97.5	100	97.7	0	0	0	0	98
SU	0	7	0	7	0	1	9	10	0	5	0	5	0	0	0	0	22
% SU	0	2.7	0	2.5	0	2.1	1.6	1.5	0	2.5	0	2.3	0	0	0	0	1.9
MU	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
% MU	0	0	0	0	0	0	0.2	0.2	0	0	0	0	0	0	0	0	0.1

	Wentworth Ave From North				98th Pl From East				Wentworth Ave From South				98th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	30	0	30	**11**	2	**72**	85	0	17	2	19	0	0	0	0	134
05:15 PM	1	**37**	0	38	5	5	56	66	0	**36**	**3**	**39**	0	0	0	0	143
05:30 PM	**2**	37	0	**39**	3	7	71	81	0	24	0	24	0	0	0	0	144
05:45 PM	2	32	0	34	4	**10**	72	**86**	0	27	3	30	0	0	0	0	**150**
Total Volume	5	136	0	141	23	24	271	318	0	104	8	112	0	0	0	0	571
% App. Total	3.5	96.5	0		7.2	7.5	85.2		0	92.9	7.1		0	0	0		
PHF	.625	.919	.000	.904	.523	.600	.941	.924	.000	.722	.667	.718	.000	.000	.000	.000	.952

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 6

Groups Printed- SU

	Wentworth Ave From North				98th Pl From East				Wentworth Ave From South				98th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	4
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	1	0	1	0	0	3	3	0	0	0	0	0	0	0	0	4
Total	0	2	0	2	0	1	7	8	0	1	0	1	0	0	0	0	11
05:00 PM	0	3	0	3	0	0	1	1	0	2	0	2	0	0	0	0	6
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
Total	0	5	0	5	0	0	2	2	0	4	0	4	0	0	0	0	11
Grand Total	0	7	0	7	0	1	9	10	0	5	0	5	0	0	0	0	22
Apprch %	0	100	0		0	10	90		0	100	0		0	0	0		
Total %	0	31.8	0	31.8	0	4.5	40.9	45.5	0	22.7	0	22.7	0	0	0	0	

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98th Pl and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 7

Groups Printed- MU

	Wentworth Ave From North				98th Pl From East				Wentworth Ave From South				98th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0		0	0	100		0	0	0		0	0	0		
Total %	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	

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98th Pl and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/30/2012
Page No : 8

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			98th Pl Crossing East Leg			Wentworth Ave Crossing South Leg			98th Pl Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	1	1	0	3	3	4
04:30 PM	0	0	0	0	0	0	1	1	2	0	5	5	7
04:45 PM	0	1	1	0	1	1	0	0	0	0	0	0	2
Total	0	1	1	0	1	1	1	2	3	0	8	8	13
05:00 PM	0	0	0	0	0	0	0	1	1	0	0	0	1
05:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	1
05:30 PM	0	1	1	0	2	2	0	0	0	0	0	0	3
05:45 PM	0	1	1	1	3	4	0	1	1	0	0	0	6
Total	0	2	2	1	6	7	0	2	2	0	0	0	11
Grand Total	0	3	3	1	7	8	1	4	5	0	8	8	24
Apprch %	0	100		12.5	87.5		20	80		0	100		
Total %	0	12.5	12.5	4.2	29.2	33.3	4.2	16.7	20.8	0	33.3	33.3	

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99th Pl and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 1

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				99th Pl From East				Martin Luther King Dr From South				99th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	5	45	4	54	0	3	2	5	8	66	51	125	0	0	0	0	184
07:15 AM	4	57	3	64	0	1	2	3	6	78	64	148	0	0	0	0	215
07:30 AM	0	53	8	61	2	2	3	7	5	85	71	161	0	0	0	0	229
07:45 AM	4	92	15	111	1	3	3	7	23	121	65	209	0	0	0	0	327
Total	13	247	30	290	3	9	10	22	42	350	251	643	0	0	0	0	955
08:00 AM	4	69	12	85	1	1	1	3	15	104	69	188	0	0	0	0	276
08:15 AM	2	69	23	94	3	3	4	10	31	96	51	178	0	0	0	0	282
08:30 AM	7	58	20	85	0	0	8	8	22	90	59	171	0	0	0	0	264
08:45 AM	3	111	27	141	4	4	2	10	29	85	57	171	0	0	0	0	322
Total	16	307	82	405	8	8	15	31	97	375	236	708	0	0	0	0	1144
Grand Total	29	554	112	695	11	17	25	53	139	725	487	1351	0	0	0	0	2099
Apprch %	4.2	79.7	16.1		20.8	32.1	47.2		10.3	53.7	36		0	0	0		
Total %	1.4	26.4	5.3	33.1	0.5	0.8	1.2	2.5	6.6	34.5	23.2	64.4	0	0	0	0	
PC	27	526	112	665	11	16	25	52	138	700	476	1314	0	0	0	0	2031
% PC	93.1	94.9	100	95.7	100	94.1	100	98.1	99.3	96.6	97.7	97.3	0	0	0	0	96.8
SU	2	26	0	28	0	1	0	1	1	25	11	37	0	0	0	0	66
% SU	6.9	4.7	0	4	0	5.9	0	1.9	0.7	3.4	2.3	2.7	0	0	0	0	3.1
MU	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% MU	0	0.4	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0.1

	Martin Luther King Dr From North				99th Pl From East				Martin Luther King Dr From South				99th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	4	**92**	15	**111**	1	**3**	3	7	23	**121**	65	**209**	0	0	0	0	**327**
08:00 AM	4	69	12	85	1	1	1	3	15	104	**69**	188	0	0	0	0	276
08:15 AM	2	69	**23**	94	**3**	3	4	**10**	**31**	96	51	178	0	0	0	0	282
08:30 AM	**7**	58	20	85	0	0	**8**	8	22	90	59	171	0	0	0	0	264
Total Volume	17	288	70	375	5	7	16	28	91	411	244	746	0	0	0	0	1149
% App. Total	4.5	76.8	18.7		17.9	25	57.1		12.2	55.1	32.7		0	0	0		
PHF	.607	.783	.761	.845	.417	.583	.500	.700	.734	.849	.884	.892	.000	.000	.000	.000	.878

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99th Pl and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 2

Groups Printed- SU

	Martin Luther King Dr From North				99th Pl From East				Martin Luther King Dr From South				99th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	2	0	4	0	0	0	0	0	6	0	6	0	0	0	0	10
07:15 AM	0	4	0	4	0	0	0	0	1	2	2	5	0	0	0	0	9
07:30 AM	0	1	0	1	0	1	0	1	0	3	2	5	0	0	0	0	7
07:45 AM	0	8	0	8	0	0	0	0	0	5	0	5	0	0	0	0	13
Total	2	15	0	17	0	1	0	1	1	16	4	21	0	0	0	0	39
08:00 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
08:15 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
08:30 AM	0	3	0	3	0	0	0	0	0	3	3	6	0	0	0	0	9
08:45 AM	0	3	0	3	0	0	0	0	0	2	4	6	0	0	0	0	9
Total	0	11	0	11	0	0	0	0	0	9	7	16	0	0	0	0	27
Grand Total	2	26	0	28	0	1	0	1	1	25	11	37	0	0	0	0	66
Apprch %	7.1	92.9	0		0	100	0		2.7	67.6	29.7		0	0	0		
Total %	3	39.4	0	42.4	0	1.5	0	1.5	1.5	37.9	16.7	56.1	0	0	0	0	

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99th Pl and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 3

Groups Printed- MU

	Martin Luther King Dr From North				99th Pl From East				Martin Luther King Dr From South				99th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

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99th Pl and Martin Luther King Dr
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/30/2012
Page No : 4

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			99th Pl Crossing East Leg			Martin Luther King Dr Crossing South Leg			99th Pl Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	1	1	0	0	0	0	1	1	2
07:30 AM	0	0	0	0	8	8	0	0	0	0	1	1	9
07:45 AM	0	0	0	0	1	1	0	0	0	0	1	1	2
Total	0	0	0	0	10	10	0	0	0	0	3	3	13
08:00 AM	0	2	2	1	9	10	0	0	0	0	0	0	12
08:15 AM	0	0	0	0	2	2	0	0	0	0	4	4	6
08:30 AM	0	0	0	0	2	2	0	0	0	0	3	3	5
08:45 AM	0	0	0	0	1	1	1	0	1	0	1	1	3
Total	0	2	2	1	14	15	1	0	1	0	8	8	26
Grand Total	0	2	2	1	24	25	1	0	1	0	11	11	39
Apprch %	0	100		4	96		100	0		0	100		
Total %	0	5.1	5.1	2.6	61.5	64.1	2.6	0	2.6	0	28.2	28.2	

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99th Pl and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 5

Groups Printed- PC - SU - MU

	Martin Luther King Dr From North				99th Pl From East				Martin Luther King Dr From South				99th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	13	163	18	194	10	19	23	52	13	68	49	130	0	0	0	0	376
04:15 PM	16	206	6	228	10	19	21	50	17	61	23	101	0	0	0	0	379
04:30 PM	12	176	16	204	13	22	25	60	14	71	25	110	0	0	0	0	374
04:45 PM	9	272	33	314	9	20	12	41	19	67	33	119	0	0	0	0	474
Total	50	817	73	940	42	80	81	203	63	267	130	460	0	0	0	0	1603
05:00 PM	6	232	19	257	17	32	40	89	14	63	31	108	0	0	0	0	454
05:15 PM	21	192	19	232	7	31	37	75	8	43	44	95	0	0	0	0	402
05:30 PM	7	201	7	215	6	21	20	47	3	54	33	90	0	0	0	0	352
05:45 PM	10	187	14	211	8	10	13	31	6	50	30	86	0	0	0	0	328
Total	44	812	59	915	38	94	110	242	31	210	138	379	0	0	0	0	1536
Grand Total	94	1629	132	1855	80	174	191	445	94	477	268	839	0	0	0	0	3139
Apprch %	5.1	87.8	7.1		18	39.1	42.9		11.2	56.9	31.9		0	0	0		
Total %	3	51.9	4.2	59.1	2.5	5.5	6.1	14.2	3	15.2	8.5	26.7	0	0	0	0	
PC	94	1614	132	1840	80	174	191	445	93	467	268	828	0	0	0	0	3113
% PC	100	99.1	100	99.2	100	100	100	100	98.9	97.9	100	98.7	0	0	0	0	99.2
SU	0	14	0	14	0	0	0	0	1	10	0	11	0	0	0	0	25
% SU	0	0.9	0	0.8	0	0	0	0	1.1	2.1	0	1.3	0	0	0	0	0.8
MU	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% MU	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0

	Martin Luther King Dr From North				99th Pl From East				Martin Luther King Dr From South				99th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	12	176	16	204	13	22	25	60	14	**71**	25	110	0	0	0	0	374
04:45 PM	9	**272**	**33**	**314**	9	20	12	41	**19**	67	33	**119**	0	0	0	0	**474**
05:00 PM	6	232	19	257	**17**	**32**	**40**	**89**	14	63	31	108	0	0	0	0	454
05:15 PM	**21**	192	19	232	7	31	37	75	8	43	**44**	95	0	0	0	0	402
Total Volume	48	872	87	1007	46	105	114	265	55	244	133	432	0	0	0	0	1704
% App. Total	4.8	86.6	8.6		17.4	39.6	43		12.7	56.5	30.8		0	0	0		
PHF	.571	.801	.659	.802	.676	.820	.713	.744	.724	.859	.756	.908	.000	.000	.000	.000	.899

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99th Pl and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 6

Groups Printed- SU

	Martin Luther King Dr From North				99th Pl From East				Martin Luther King Dr From South				99th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
04:15 PM	0	3	0	3	0	0	0	0	1	1	0	2	0	0	0	0	5
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
Total	0	9	0	9	0	0	0	0	1	5	0	6	0	0	0	0	15
05:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	10
Grand Total	0	14	0	14	0	0	0	0	1	10	0	11	0	0	0	0	25
Apprch %	0	100	0		0	0	0		9.1	90.9	0		0	0	0		
Total %	0	56	0	56	0	0	0	0	4	40	0	44	0	0	0	0	

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99th Pl and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 7

Groups Printed- MU

	Martin Luther King Dr From North				99th Pl From East				Martin Luther King Dr From South				99th Pl From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

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99th Pl and Martin Luther King Dr
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/30/2012
Page No : 8

Groups Printed- Peds & Bikes

	Martin Luther King Dr Crossing North Leg			99th Pl Crossing East Leg			Martin Luther King Dr Crossing South Leg			99th Pl Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	1	1	0	0	0	3	1	4	5
04:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	2
04:30 PM	0	0	0	0	1	1	0	0	0	0	1	1	2
04:45 PM	0	0	0	1	2	3	0	0	0	0	7	7	10
Total	0	0	0	1	4	5	0	0	0	3	11	14	19
05:00 PM	0	0	0	0	0	0	0	0	0	0	2	2	2
05:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	3	3	0	0	0	0	1	1	4
05:45 PM	0	0	0	0	1	1	0	0	0	0	2	2	3
Total	0	0	0	0	5	5	0	0	0	0	5	5	10
Grand Total	0	0	0	1	9	10	0	0	0	3	16	19	29
Apprch %	0	0		10	90		0	0		15.8	84.2		
Total %	0	0	0	3.4	31	34.5	0	0	0	10.3	55.2	65.5	

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99th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 1

Groups Printed- PC - SU - MU

	Michigan Ave From North				99th St From East				Michigan Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	2	22	0	24	2	61	2	65	0	28	122	150	0	0	0	0	239
07:15 AM	6	28	0	34	5	74	0	79	0	42	144	186	0	0	0	0	299
07:30 AM	12	31	0	43	2	61	5	68	0	50	129	179	0	0	0	0	290
07:45 AM	9	47	0	56	4	61	2	67	0	73	137	210	0	0	0	0	333
Total	29	128	0	157	13	257	9	279	0	193	532	725	0	0	0	0	1161
08:00 AM	5	37	0	42	5	64	4	73	0	60	130	190	0	0	0	0	305
08:15 AM	5	47	0	52	2	53	8	63	0	36	98	134	0	0	0	0	249
08:30 AM	2	36	0	38	2	31	7	40	0	36	87	123	0	0	0	0	201
08:45 AM	1	47	0	48	3	50	13	66	0	42	94	136	0	0	0	0	250
Total	13	167	0	180	12	198	32	242	0	174	409	583	0	0	0	0	1005
Grand Total	42	295	0	337	25	455	41	521	0	367	941	1308	0	0	0	0	2166
Apprch %	12.5	87.5	0		4.8	87.3	7.9		0	28.1	71.9		0	0	0		
Total %	1.9	13.6	0	15.6	1.2	21	1.9	24.1	0	16.9	43.4	60.4	0	0	0	0	
PC	39	244	0	283	25	445	39	509	0	311	907	1218	0	0	0	0	2010
% PC	92.9	82.7	0	84	100	97.8	95.1	97.7	0	84.7	96.4	93.1	0	0	0	0	92.8
SU	3	51	0	54	0	10	2	12	0	55	31	86	0	0	0	0	152
% SU	7.1	17.3	0	16	0	2.2	4.9	2.3	0	15	3.3	6.6	0	0	0	0	7
MU	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	4
% MU	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0	0	0	0	0.2

	Michigan Ave From North				99th St From East				Michigan Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	6	28	0	34	**5**	**74**	0	**79**	0	42	**144**	186	0	0	0	0	299
07:30 AM	**12**	31	0	43	2	61	**5**	68	0	50	129	179	0	0	0	0	290
07:45 AM	9	**47**	0	**56**	4	61	2	67	0	**73**	137	**210**	0	0	0	0	**333**
08:00 AM	5	37	0	42	5	64	4	73	0	60	130	190	0	0	0	0	305
Total Volume	32	143	0	175	16	260	11	287	0	225	540	765	0	0	0	0	1227
% App. Total	18.3	81.7	0		5.6	90.6	3.8		0	29.4	70.6		0	0	0		
PHF	.667	.761	.000	.781	.800	.878	.550	.908	.000	.771	.938	.911	.000	.000	.000	.000	.921

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99th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 2

Groups Printed- SU

	Michigan Ave From North				99th St From East				Michigan Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	6	0	6	0	2	0	2	0	8	6	14	0	0	0	0	22
07:15 AM	0	6	0	6	0	1	0	1	0	8	4	12	0	0	0	0	19
07:30 AM	1	7	0	8	0	1	0	1	0	5	3	8	0	0	0	0	17
07:45 AM	0	8	0	8	0	1	1	2	0	9	4	13	0	0	0	0	23
Total	1	27	0	28	0	5	1	6	0	30	17	47	0	0	0	0	81
08:00 AM	1	7	0	8	0	1	0	1	0	5	3	8	0	0	0	0	17
08:15 AM	1	4	0	5	0	1	1	2	0	9	2	11	0	0	0	0	18
08:30 AM	0	6	0	6	0	0	0	0	0	5	1	6	0	0	0	0	12
08:45 AM	0	7	0	7	0	3	0	3	0	6	8	14	0	0	0	0	24
Total	2	24	0	26	0	5	1	6	0	25	14	39	0	0	0	0	71
Grand Total	3	51	0	54	0	10	2	12	0	55	31	86	0	0	0	0	152
Apprch %	5.6	94.4	0		0	83.3	16.7		0	64	36		0	0	0		
Total %	2	33.6	0	35.5	0	6.6	1.3	7.9	0	36.2	20.4	56.6	0	0	0	0	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 3

Groups Printed- MU

	Michigan Ave From North				99th St From East				Michigan Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
Grand Total	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	4
Apprch %	0	0	0		0	0	0		0	25	75		0	0	0		
Total %	0	0	0	0	0	0	0	0	0	25	75	100	0	0	0	0	

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99th St and Michigan Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/8/2012
Page No : 4

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			99th St Crossing East Leg			Michigan Ave Crossing South Leg			99th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	5	5	0	0	0	0	0	0	5
07:15 AM	0	0	0	0	3	3	0	0	0	0	0	0	3
07:30 AM	0	0	0	0	4	4	0	0	0	0	0	0	4
07:45 AM	0	0	0	0	13	13	0	0	0	0	0	0	13
Total	0	0	0	0	25	25	0	0	0	0	0	0	25
08:00 AM	0	0	0	0	11	11	0	0	0	0	0	0	11
08:15 AM	0	0	0	0	2	2	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	4	4	0	0	0	0	0	0	4
08:45 AM	0	4	4	0	0	0	0	0	0	0	0	0	4
Total	0	4	4	0	17	17	0	0	0	0	0	0	21
Grand Total	0	4	4	0	42	42	0	0	0	0	0	0	46
Apprch %	0	100		0	100		0	0		0	0		
Total %	0	8.7	8.7	0	91.3	91.3	0	0	0	0	0	0	

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99th St and Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 5

Groups Printed- PC - SU - MU

	Michigan Ave From North				99th St From East				Michigan Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	9	82	0	91	1	58	8	67	0	27	52	79	0	0	0	0	237
04:15 PM	2	72	0	74	1	41	12	54	0	33	78	111	0	0	0	0	239
04:30 PM	9	71	0	80	2	42	5	49	0	42	68	110	0	0	0	0	239
04:45 PM	1	71	0	72	1	38	6	45	0	33	70	103	0	0	0	0	220
Total	21	296	0	317	5	179	31	215	0	135	268	403	0	0	0	0	935
05:00 PM	4	66	0	70	2	60	6	68	0	33	69	102	0	0	0	0	240
05:15 PM	2	66	0	68	0	81	7	88	0	32	60	92	0	0	0	0	248
05:30 PM	5	57	0	62	4	64	8	76	0	23	58	81	0	0	0	0	219
05:45 PM	5	67	0	72	3	51	8	62	0	32	66	98	0	0	0	0	232
Total	16	256	0	272	9	256	29	294	0	120	253	373	0	0	0	0	939
Grand Total	37	552	0	589	14	435	60	509	0	255	521	776	0	0	0	0	1874
Apprch %	6.3	93.7	0		2.8	85.5	11.8		0	32.9	67.1		0	0	0		
Total %	2	29.5	0	31.4	0.7	23.2	3.2	27.2	0	13.6	27.8	41.4	0	0	0	0	
PC	37	513	0	550	14	427	60	501	0	210	514	724	0	0	0	0	1775
% PC	100	92.9	0	93.4	100	98.2	100	98.4	0	82.4	98.7	93.3	0	0	0	0	94.7
SU	0	39	0	39	0	8	0	8	0	45	7	52	0	0	0	0	99
% SU	0	7.1	0	6.6	0	1.8	0	1.6	0	17.6	1.3	6.7	0	0	0	0	5.3
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Michigan Ave From North				99th St From East				Michigan Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	6	28	0	34	**5**	**74**	0	**79**	0	42	**144**	186	0	0	0	0	299
07:30 AM	**12**	31	0	43	2	61	**5**	68	0	50	129	179	0	0	0	0	290
07:45 AM	9	**47**	0	**56**	4	61	2	67	0	**73**	137	**210**	0	0	0	0	**333**
08:00 AM	5	37	0	42	5	64	4	73	0	60	130	190	0	0	0	0	305
Total Volume	32	143	0	175	16	260	11	287	0	225	540	765	0	0	0	0	1227
% App. Total	18.3	81.7	0		5.6	90.6	3.8		0	29.4	70.6		0	0	0		
PHF	.667	.761	.000	.781	.800	.878	.550	.908	.000	.771	.938	.911	.000	.000	.000	.000	.921

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99th St and Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 6

Groups Printed- SU

	Michigan Ave From North				99th St From East				Michigan Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	4	0	4	0	1	0	1	0	5	0	5	0	0	0	0	10
04:15 PM	0	5	0	5	0	1	0	1	0	7	2	9	0	0	0	0	15
04:30 PM	0	6	0	6	0	0	0	0	0	6	1	7	0	0	0	0	13
04:45 PM	0	5	0	5	0	2	0	2	0	6	2	8	0	0	0	0	15
Total	0	20	0	20	0	4	0	4	0	24	5	29	0	0	0	0	53
05:00 PM	0	6	0	6	0	1	0	1	0	5	1	6	0	0	0	0	13
05:15 PM	0	4	0	4	0	1	0	1	0	6	1	7	0	0	0	0	12
05:30 PM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
05:45 PM	0	6	0	6	0	2	0	2	0	7	0	7	0	0	0	0	15
Total	0	19	0	19	0	4	0	4	0	21	2	23	0	0	0	0	46
Grand Total	0	39	0	39	0	8	0	8	0	45	7	52	0	0	0	0	99
Apprch %	0	100	0		0	100	0		0	86.5	13.5		0	0	0		
Total %	0	39.4	0	39.4	0	8.1	0	8.1	0	45.5	7.1	52.5	0	0	0	0	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/8/2012
Page No : 7

Groups Printed- MU

	Michigan Ave From North				99th St From East				Michigan Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

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99th St and Michigan Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/8/2012
Page No : 8

Groups Printed- Peds & Bikes

	Michigan Ave Crossing North Leg			99th St Crossing East Leg			Michigan Ave Crossing South Leg			99th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	3	3	0	0	0	0	0	0	3
04:15 PM	0	1	1	0	5	5	0	0	0	0	0	0	6
04:30 PM	0	1	1	0	3	3	0	0	0	0	0	0	4
04:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	2	2	0	12	12	0	0	0	0	0	0	14
05:00 PM	0	0	0	0	4	4	0	0	0	0	0	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	1	0	1	1	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	5	5	0	0	0	0	0	0	6
Grand Total	0	3	3	0	17	17	0	0	0	0	0	0	20
Apprch %	0	100		0	100		0	0		0	0		
Total %	0	15	15	0	85	85	0	0	0	0	0	0	

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99th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 1

Groups Printed- PC - SU - MU

	State St From North				99th St From East				State St From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	27	0	27	0	0	0	0	0	70	0	70	4	0	11	15	112
07:15 AM	0	27	0	27	0	0	0	0	0	71	0	71	5	0	11	16	114
07:30 AM	4	26	0	30	0	0	0	0	0	83	2	85	2	0	9	11	126
07:45 AM	0	56	0	56	0	0	0	0	0	92	3	95	0	0	15	15	166
Total	4	136	0	140	0	0	0	0	0	316	5	321	11	0	46	57	518
08:00 AM	3	34	0	37	0	0	0	0	0	72	3	75	7	0	18	25	137
08:15 AM	5	43	0	48	0	0	0	0	0	87	2	89	5	0	19	24	161
08:30 AM	2	39	0	41	0	0	0	0	0	66	1	67	8	0	5	13	121
08:45 AM	0	54	0	54	0	0	0	0	0	74	2	76	6	0	11	17	147
Total	10	170	0	180	0	0	0	0	0	299	8	307	26	0	53	79	566
Grand Total	14	306	0	320	0	0	0	0	0	615	13	628	37	0	99	136	1084
Apprch %	4.4	95.6	0		0	0	0		0	97.9	2.1		27.2	0	72.8		
Total %	1.3	28.2	0	29.5	0	0	0	0	0	56.7	1.2	57.9	3.4	0	9.1	12.5	
PC	14	296	0	310	0	0	0	0	0	601	13	614	35	0	98	133	1057
% PC	100	96.7	0	96.9	0	0	0	0	0	97.7	100	97.8	94.6	0	99	97.8	97.5
SU	0	9	0	9	0	0	0	0	0	12	0	12	2	0	1	3	24
% SU	0	2.9	0	2.8	0	0	0	0	0	2	0	1.9	5.4	0	1	2.2	2.2
MU	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
% MU	0	0.3	0	0.3	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0.3

	State St From North				99th St From East				State St From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	26	0	30	0	0	0	0	0	83	2	85	2	0	9	11	126
07:45 AM	0	**56**	0	**56**	0	0	0	0	0	**92**	**3**	**95**	0	0	15	15	**166**
08:00 AM	3	34	0	37	0	0	0	0	0	72	3	75	**7**	0	18	**25**	137
08:15 AM	**5**	43	0	48	0	0	0	0	0	87	2	89	5	0	**19**	24	161
Total Volume	12	159	0	171	0	0	0	0	0	334	10	344	14	0	61	75	590
% App. Total	7	93	0		0	0	0		0	97.1	2.9		18.7	0	81.3		
PHF	.600	.710	.000	.763	.000	.000	.000	.000	.000	.908	.833	.905	.500	.000	.803	.750	.889

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99th St and State St
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 2

Groups Printed- SU

	State St From North				99th St From East				State St From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	5	0	5	0	0	0	0	0	3	0	3	1	0	0	1	9
07:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	0	6	0	6	0	0	0	0	0	8	0	8	1	0	1	2	16
08:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	1	3
Total	0	3	0	3	0	0	0	0	0	4	0	4	1	0	0	1	8
Grand Total	0	9	0	9	0	0	0	0	0	12	0	12	2	0	1	3	24
Apprch %	0	100	0		0	0	0		0	100	0		66.7	0	33.3		
Total %	0	37.5	0	37.5	0	0	0	0	0	50	0	50	8.3	0	4.2	12.5	

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Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 3

Groups Printed- MU

	State St From North				99th St From East				State St From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	33.3	0	33.3	0	0	0	0	0	66.7	0	66.7	0	0	0	0	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/30/2012
Page No : 4

Groups Printed- Peds & Bikes

	State St Crossing North Leg			99th St Crossing East Leg			State St Crossing South Leg			99th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	1	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	1	1	0	0	0	1
Total	0	0	0	0	0	0	0	3	3	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	1	0	0	0	0	0	0	0	3	3	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	0	3	3	4
Grand Total	0	1	1	0	0	0	0	3	3	0	3	3	7
Apprch %	0	100		0	0		0	100		0	100		
Total %	0	14.3	14.3	0	0	0	0	42.9	42.9	0	42.9	42.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 5

Groups Printed- PC - SU - MU

	State St From North				99th St From East				State St From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	2	47	0	49	0	0	0	0	0	43	5	48	6	0	16	22	119
04:15 PM	1	63	0	64	0	0	0	0	0	46	4	50	6	0	9	15	129
04:30 PM	2	44	0	46	0	0	0	0	0	44	2	46	6	0	6	12	104
04:45 PM	4	49	0	53	0	0	0	0	0	50	1	51	8	0	8	16	120
Total	9	203	0	212	0	0	0	0	0	183	12	195	26	0	39	65	472
05:00 PM	4	42	0	46	0	0	0	0	0	43	0	43	5	0	13	18	107
05:15 PM	3	57	0	60	0	0	0	0	0	28	3	31	5	0	5	10	101
05:30 PM	12	72	0	84	0	0	0	0	0	44	1	45	8	0	8	16	145
05:45 PM	3	51	0	54	0	0	0	0	0	34	4	38	14	0	11	25	117
Total	22	222	0	244	0	0	0	0	0	149	8	157	32	0	37	69	470
Grand Total	31	425	0	456	0	0	0	0	0	332	20	352	58	0	76	134	942
Apprch %	6.8	93.2	0		0	0	0		0	94.3	5.7		43.3	0	56.7		
Total %	3.3	45.1	0	48.4	0	0	0	0	0	35.2	2.1	37.4	6.2	0	8.1	14.2	
PC	31	423	0	454	0	0	0	0	0	327	20	347	57	0	76	133	934
% PC	100	99.5	0	99.6	0	0	0	0	0	98.5	100	98.6	98.3	0	100	99.3	99.2
SU	0	2	0	2	0	0	0	0	0	5	0	5	1	0	0	1	8
% SU	0	0.5	0	0.4	0	0	0	0	0	1.5	0	1.4	1.7	0	0	0.7	0.8
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	State St From North				99th St From East				State St From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	4	49	0	53	0	0	0	0	0	**50**	1	**51**	**8**	0	8	16	120
05:00 PM	4	42	0	46	0	0	0	0	0	43	0	43	5	0	**13**	**18**	107
05:15 PM	3	57	0	60	0	0	0	0	0	28	**3**	31	5	0	5	10	101
05:30 PM	**12**	**72**	0	**84**	0	0	0	0	0	44	1	45	8	0	8	16	**145**
Total Volume	23	220	0	243	0	0	0	0	0	165	5	170	26	0	34	60	473
% App. Total	9.5	90.5	0		0	0	0		0	97.1	2.9		43.3	0	56.7		
PHF	.479	.764	.000	.723	.000	.000	.000	.000	.000	.825	.417	.833	.813	.000	.654	.833	.816

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 6

Groups Printed- SU

	State St From North				99th St From East				State St From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	2	0	2	0	0	0	0	0	4	0	4	1	0	0	1	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	2	0	2	0	0	0	0	0	5	0	5	1	0	0	1	8
Apprch %	0	100	0		0	0	0		0	100	0		100	0	0		
Total %	0	25	0	25	0	0	0	0	0	62.5	0	62.5	12.5	0	0	12.5	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/30/2012
Page No : 7

Groups Printed- MU

	State St From North				99th St From East				State St From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/30/2012
Page No : 8

Groups Printed- Peds & Bikes

	State St Crossing North Leg			99th St Crossing East Leg			State St Crossing South Leg			99th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	2	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	2	2
Grand Total	0	0	0	0	0	0	0	0	0	0	3	3	3
Apprch %	0	0		0	0		0	0		0	100		
Total %	0	0	0	0	0	0	0	0	0	0	100	100	

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99th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 1

Groups Printed- PC - SU - MU

	Wentworth Ave From North				99th St From East				Wentworth Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	49	2	51	0	0	0	0	9	17	0	26	0	0	4	4	81
07:15 AM	0	57	3	60	2	0	0	2	6	41	0	47	3	3	2	8	117
07:30 AM	0	60	5	65	3	0	0	3	6	32	0	38	0	1	3	4	110
07:45 AM	0	71	6	77	4	0	2	6	12	32	0	44	3	2	2	7	134
Total	0	237	16	253	9	0	2	11	33	122	0	155	6	6	11	23	442
08:00 AM	0	67	13	80	5	0	1	6	5	29	0	34	2	1	2	5	125
08:15 AM	0	70	7	77	4	0	0	4	14	23	0	37	0	1	0	1	119
08:30 AM	0	64	8	72	1	0	0	1	12	32	0	44	3	3	3	9	126
08:45 AM	0	69	12	81	5	0	2	7	6	29	0	35	2	3	2	7	130
Total	0	270	40	310	15	0	3	18	37	113	0	150	7	8	7	22	500
Grand Total	0	507	56	563	24	0	5	29	70	235	0	305	13	14	18	45	942
Apprch %	0	90.1	9.9		82.8	0	17.2		23	77	0		28.9	31.1	40		
Total %	0	53.8	5.9	59.8	2.5	0	0.5	3.1	7.4	24.9	0	32.4	1.4	1.5	1.9	4.8	
PC	0	481	55	536	24	0	4	28	69	223	0	292	13	13	18	44	900
% PC	0	94.9	98.2	95.2	100	0	80	96.6	98.6	94.9	0	95.7	100	92.9	100	97.8	95.5
SU	0	25	1	26	0	0	1	1	1	12	0	13	0	1	0	1	41
% SU	0	4.9	1.8	4.6	0	0	20	3.4	1.4	5.1	0	4.3	0	7.1	0	2.2	4.4
MU	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% MU	0	0.2	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0.1

	Wentworth Ave From North				99th St From East				Wentworth Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**71**	6	77	4	0	**2**	**6**	12	**32**	0	**44**	**3**	2	2	7	**134**
08:00 AM	0	67	**13**	**80**	**5**	0	1	6	5	29	0	34	2	1	2	5	125
08:15 AM	0	70	7	77	4	0	0	4	**14**	23	0	37	0	1	0	1	119
08:30 AM	0	64	8	72	1	0	0	1	12	32	0	44	3	**3**	**3**	**9**	126
Total Volume	0	272	34	306	14	0	3	17	43	116	0	159	8	7	7	22	504
% App. Total	0	88.9	11.1		82.4	0	17.6		27	73	0		36.4	31.8	31.8		
PHF	.000	.958	.654	.956	.700	.000	.375	.708	.768	.906	.000	.903	.667	.583	.583	.611	.940

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99th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 2

Groups Printed- SU

	Wentworth Ave From North				99th St From East				Wentworth Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	7
07:15 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	1	0	1	4
07:30 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
07:45 AM	0	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	0	13	0	13	0	0	0	0	0	6	0	6	0	1	0	1	20
08:00 AM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
08:15 AM	0	3	0	3	0	0	0	0	1	1	0	2	0	0	0	0	5
08:30 AM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
08:45 AM	0	2	1	3	0	0	1	1	0	0	0	0	0	0	0	0	4
Total	0	12	1	13	0	0	1	1	1	6	0	7	0	0	0	0	21
Grand Total	0	25	1	26	0	0	1	1	1	12	0	13	0	1	0	1	41
Apprch %	0	96.2	3.8		0	0	100		7.7	92.3	0		0	100	0		
Total %	0	61	2.4	63.4	0	0	2.4	2.4	2.4	29.3	0	31.7	0	2.4	0	2.4	

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99th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 3

Groups Printed- MU

	Wentworth Ave From North				99th St From East				Wentworth Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

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99th St and Wentworth Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 4

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			99th St Crossing East Leg			Wentworth Ave Crossing South Leg			99th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	6	6	0	0	0	6
07:30 AM	0	0	0	0	0	0	0	2	2	0	2	2	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	8	8	0	3	3	11
08:00 AM	0	0	0	0	1	1	0	1	1	0	1	1	3
08:15 AM	0	0	0	0	1	1	0	0	0	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	1	1	0	1	1	2
08:45 AM	0	4	4	0	4	4	0	0	0	0	1	1	9
Total	0	4	4	0	6	6	0	2	2	0	4	4	16
Grand Total	0	4	4	0	6	6	0	10	10	0	7	7	27
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	14.8	14.8	0	22.2	22.2	0	37	37	0	25.9	25.9	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 5

Groups Printed- PC - SU - MU

	Wentworth Ave From North				99th St From East				Wentworth Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	83	15	98	2	0	0	2	4	16	0	20	3	2	1	6	126
04:15 PM	0	87	14	101	3	0	0	3	8	21	0	29	4	1	1	6	139
04:30 PM	0	87	6	93	1	0	1	2	8	20	0	28	7	0	5	12	135
04:45 PM	0	83	13	96	2	0	2	4	6	18	0	24	5	5	2	12	136
Total	0	340	48	388	8	0	3	11	26	75	0	101	19	8	9	36	536
05:00 PM	0	97	9	106	4	0	1	5	6	32	0	38	4	4	3	11	160
05:15 PM	0	84	9	93	3	0	0	3	6	24	0	30	5	2	4	11	137
05:30 PM	0	107	13	120	4	0	1	5	6	28	0	34	8	2	6	16	175
05:45 PM	0	82	13	95	4	0	1	5	8	22	0	30	5	3	0	8	138
Total	0	370	44	414	15	0	3	18	26	106	0	132	22	11	13	46	610
Grand Total	0	710	92	802	23	0	6	29	52	181	0	233	41	19	22	82	1146
Apprch %	0	88.5	11.5		79.3	0	20.7		22.3	77.7	0		50	23.2	26.8		
Total %	0	62	8	70	2	0	0.5	2.5	4.5	15.8	0	20.3	3.6	1.7	1.9	7.2	
PC	0	706	92	798	23	0	6	29	52	179	0	231	41	19	22	82	1140
% PC	0	99.4	100	99.5	100	0	100	100	100	98.9	0	99.1	100	100	100	100	99.5
SU	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
% SU	0	0.6	0	0.5	0	0	0	0	0	1.1	0	0.9	0	0	0	0	0.5
MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% MU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Wentworth Ave From North				99th St From East				Wentworth Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	97	9	106	**4**	0	**1**	**5**	6	**32**	0	**38**	4	**4**	3	11	160
05:15 PM	0	84	9	93	3	0	0	3	6	24	0	30	5	2	4	11	137
05:30 PM	0	**107**	**13**	**120**	4	0	1	5	6	28	0	34	**8**	2	**6**	**16**	**175**
05:45 PM	0	82	13	95	4	0	1	5	**8**	22	0	30	5	3	0	8	138
Total Volume	0	370	44	414	15	0	3	18	26	106	0	132	22	11	13	46	610
% App. Total	0	89.4	10.6		83.3	0	16.7		19.7	80.3	0		47.8	23.9	28.3		
PHF	.000	.864	.846	.863	.938	.000	.750	.900	.813	.828	.000	.868	.688	.688	.542	.719	.871

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99th St and Wentworth Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 6

Groups Printed- SU

	Wentworth Ave From North				99th St From East				Wentworth Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	66.7	0	66.7	0	0	0	0	0	33.3	0	33.3	0	0	0	0	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 6/5/2012
Page No : 7

Groups Printed- MU

	Wentworth Ave From North				99th St From East				Wentworth Ave From South				99th St From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 6/5/2012
Page No : 8

Groups Printed- Peds & Bikes

	Wentworth Ave Crossing North Leg			99th St Crossing East Leg			Wentworth Ave Crossing South Leg			99th St Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	3	3	0	7	7	0	2	2	12
04:15 PM	0	0	0	1	2	3	0	4	4	0	3	3	10
04:30 PM	0	0	0	0	5	5	1	1	2	0	0	0	7
04:45 PM	0	0	0	1	1	2	0	1	1	0	0	0	3
Total	0	0	0	2	11	13	1	13	14	0	5	5	32
05:00 PM	0	1	1	2	2	4	0	5	5	0	0	0	10
05:15 PM	0	0	0	0	4	4	0	1	1	1	1	2	7
05:30 PM	0	0	0	0	1	1	2	4	6	0	0	0	7
05:45 PM	0	0	0	0	3	3	0	1	1	0	0	0	4
Total	0	1	1	2	10	12	2	11	13	1	1	2	28
Grand Total	0	1	1	4	21	25	3	24	27	1	6	7	60
Apprch %	0	100		16	84		11.1	88.9		14.3	85.7		
Total %	0	1.7	1.7	6.7	35	41.7	5	40	45	1.7	10	11.7	

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Ashland Ave and Vermont Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 1

Groups Printed- PC - SU - MU

	Ashland Ave From North				Vermont Ave From East				Ashland Ave From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	5	50	14	69	14	25	11	50	10	65	75	150	47	19	12	78	347
07:15 AM	8	56	22	86	10	24	6	40	12	81	93	186	41	16	4	61	373
07:30 AM	11	50	14	75	17	26	7	50	14	94	81	189	55	28	9	92	406
07:45 AM	21	62	26	109	29	48	14	91	16	101	78	195	59	20	11	90	485
Total	45	218	76	339	70	123	38	231	52	341	327	720	202	83	36	321	1611
08:00 AM	11	79	27	117	22	34	13	69	19	97	76	192	52	33	21	106	484
08:15 AM	11	67	24	102	17	31	13	61	13	83	88	184	63	25	9	97	444
08:30 AM	13	45	24	82	22	32	15	69	16	79	86	181	72	15	7	94	426
08:45 AM	11	87	24	122	18	27	17	62	14	82	75	171	47	16	9	72	427
Total	46	278	99	423	79	124	58	261	62	341	325	728	234	89	46	369	1781
Grand Total	91	496	175	762	149	247	96	492	114	682	652	1448	436	172	82	690	3392
Apprch %	11.9	65.1	23		30.3	50.2	19.5		7.9	47.1	45		63.2	24.9	11.9		
Total %	2.7	14.6	5.2	22.5	4.4	7.3	2.8	14.5	3.4	20.1	19.2	42.7	12.9	5.1	2.4	20.3	
PC	91	475	170	736	138	232	84	454	109	640	615	1364	414	165	77	656	3210
% PC	100	95.8	97.1	96.6	92.6	93.9	87.5	92.3	95.6	93.8	94.3	94.2	95	95.9	93.9	95.1	94.6
SU	0	17	4	21	8	13	8	29	5	30	34	69	20	7	5	32	151
% SU	0	3.4	2.3	2.8	5.4	5.3	8.3	5.9	4.4	4.4	5.2	4.8	4.6	4.1	6.1	4.6	4.5
MU	0	4	1	5	3	2	4	9	0	12	3	15	2	0	0	2	31
% MU	0	0.8	0.6	0.7	2	0.8	4.2	1.8	0	1.8	0.5	1	0.5	0	0	0.3	0.9

	Ashland Ave From North				Vermont Ave From East				Ashland Ave From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**21**	62	26	109	**29**	**48**	14	**91**	16	**101**	78	**195**	59	20	11	90	**485**
08:00 AM	11	**79**	**27**	**117**	22	34	13	69	**19**	97	76	192	52	**33**	**21**	**106**	484
08:15 AM	11	67	24	102	17	31	13	61	13	83	**88**	184	63	25	9	97	444
08:30 AM	13	45	24	82	22	32	**15**	69	16	79	86	181	**72**	15	7	94	426
Total Volume	56	253	101	410	90	145	55	290	64	360	328	752	246	93	48	387	1839
% App. Total	13.7	61.7	24.6		31	50	19		8.5	47.9	43.6		63.6	24	12.4		
PHF	.667	.801	.935	.876	.776	.755	.917	.797	.842	.891	.932	.964	.854	.705	.571	.913	.948

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 2

Groups Printed- SU

	Ashland Ave From North				Vermont Ave From East				Ashland Ave From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	2	0	2	2	2	1	5	2	5	3	10	1	1	1	3	20
07:15 AM	0	0	1	1	2	0	0	2	0	5	12	17	4	0	1	5	25
07:30 AM	0	3	0	3	0	1	0	1	0	2	5	7	4	3	0	7	18
07:45 AM	0	2	0	2	1	3	4	8	2	5	2	9	2	0	0	2	21
Total	0	7	1	8	5	6	5	16	4	17	22	43	11	4	2	17	84
08:00 AM	0	3	1	4	0	1	0	1	1	6	3	10	1	2	2	5	20
08:15 AM	0	1	1	2	1	2	0	3	0	1	1	2	4	0	0	4	11
08:30 AM	0	0	0	0	1	0	2	3	0	4	3	7	3	0	1	4	14
08:45 AM	0	6	1	7	1	4	1	6	0	2	5	7	1	1	0	2	22
Total	0	10	3	13	3	7	3	13	1	13	12	26	9	3	3	15	67
Grand Total	0	17	4	21	8	13	8	29	5	30	34	69	20	7	5	32	151
Apprch %	0	81	19		27.6	44.8	27.6		7.2	43.5	49.3		62.5	21.9	15.6		
Total %	0	11.3	2.6	13.9	5.3	8.6	5.3	19.2	3.3	19.9	22.5	45.7	13.2	4.6	3.3	21.2	

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Ashland Ave and Vermont Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 3

Groups Printed- MU

	Ashland Ave From North				Vermont Ave From East				Ashland Ave From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
07:15 AM	0	2	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
07:45 AM	0	0	0	0	2	0	1	3	0	3	0	3	0	0	0	0	6
Total	0	3	0	3	3	0	2	5	0	5	1	6	0	0	0	0	14
08:00 AM	0	0	0	0	0	1	1	2	0	1	1	2	1	0	0	1	5
08:15 AM	0	0	1	1	0	0	0	0	0	3	0	3	1	0	0	1	5
08:30 AM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
08:45 AM	0	1	0	1	0	1	1	2	0	1	0	1	0	0	0	0	4
Total	0	1	1	2	0	2	2	4	0	7	2	9	2	0	0	2	17
Grand Total	0	4	1	5	3	2	4	9	0	12	3	15	2	0	0	2	31
Apprch %	0	80	20		33.3	22.2	44.4		0	80	20		100	0	0		
Total %	0	12.9	3.2	16.1	9.7	6.5	12.9	29	0	38.7	9.7	48.4	6.5	0	0	6.5	

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7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/22/2012
Page No : 4

Groups Printed- Peds & Bikes

	Ashland Ave Crossing North Leg			Vermont Ave Crossing East Leg			Ashland Ave Crossing South Leg			Vermont Ave Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	0	0	0	0	1	1	2
07:15 AM	0	4	4	0	0	0	0	0	0	0	0	0	4
07:30 AM	0	5	5	0	1	1	0	0	0	0	1	1	7
07:45 AM	0	5	5	0	1	1	0	0	0	0	0	0	6
Total	0	15	15	0	2	2	0	0	0	0	2	2	19
08:00 AM	0	6	6	0	0	0	0	0	0	0	0	0	6
08:15 AM	0	4	4	0	0	0	0	0	0	0	0	0	4
08:30 AM	0	2	2	0	0	0	0	1	1	0	0	0	3
08:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	1
Total	0	13	13	0	0	0	0	1	1	0	0	0	14
Grand Total	0	28	28	0	2	2	0	1	1	0	2	2	33
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	84.8	84.8	0	6.1	6.1	0	3	3	0	6.1	6.1	

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Ashland Ave and Vermont Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 5

Groups Printed- PC - SU - MU

	Ashland Ave From North				Vermont Ave From East				Ashland Ave From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	16	110	42	168	28	38	17	83	16	84	99	199	70	23	9	102	552
04:15 PM	18	107	50	175	18	40	15	73	15	84	80	179	84	47	14	145	572
04:30 PM	14	94	53	161	24	35	8	67	16	105	92	213	85	32	10	127	568
04:45 PM	17	101	31	149	18	34	17	69	11	86	83	180	63	35	14	112	510
Total	65	412	176	653	88	147	57	292	58	359	354	771	302	137	47	486	2202
05:00 PM	14	99	52	165	32	41	20	93	23	86	83	192	127	53	18	198	648
05:15 PM	21	115	53	189	9	43	8	60	16	84	102	202	86	48	10	144	595
05:30 PM	12	97	47	156	25	39	5	69	22	70	90	182	88	52	8	148	555
05:45 PM	9	97	54	160	21	41	23	85	17	100	87	204	66	40	10	116	565
Total	56	408	206	670	87	164	56	307	78	340	362	780	367	193	46	606	2363
Grand Total	121	820	382	1323	175	311	113	599	136	699	716	1551	669	330	93	1092	4565
Apprch %	9.1	62	28.9		29.2	51.9	18.9		8.8	45.1	46.2		61.3	30.2	8.5		
Total %	2.7	18	8.4	29	3.8	6.8	2.5	13.1	3	15.3	15.7	34	14.7	7.2	2	23.9	
PC	120	801	379	1300	172	309	112	593	135	683	702	1520	657	324	91	1072	4485
% PC	99.2	97.7	99.2	98.3	98.3	99.4	99.1	99	99.3	97.7	98	98	98.2	98.2	97.8	98.2	98.2
SU	1	12	2	15	1	2	1	4	1	12	10	23	8	6	2	16	58
% SU	0.8	1.5	0.5	1.1	0.6	0.6	0.9	0.7	0.7	1.7	1.4	1.5	1.2	1.8	2.2	1.5	1.3
MU	0	7	1	8	2	0	0	2	0	4	4	8	4	0	0	4	22
% MU	0	0.9	0.3	0.6	1.1	0	0	0.3	0	0.6	0.6	0.5	0.6	0	0	0.4	0.5

	Ashland Ave From North				Vermont Ave From East				Ashland Ave From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	14	99	52	165	**32**	41	20	**93**	**23**	86	83	192	**127**	**53**	**18**	**198**	**648**
05:15 PM	**21**	**115**	53	**189**	9	**43**	8	60	16	84	**102**	202	86	48	10	144	595
05:30 PM	12	97	47	156	25	39	5	69	22	70	90	182	88	52	8	148	555
05:45 PM	9	97	**54**	160	21	41	**23**	85	17	**100**	87	**204**	66	40	10	116	565
Total Volume	56	408	206	670	87	164	56	307	78	340	362	780	367	193	46	606	2363
% App. Total	8.4	60.9	30.7		28.3	53.4	18.2		10	43.6	46.4		60.6	31.8	7.6		
PHF	.667	.887	.954	.886	.680	.953	.609	.825	.848	.850	.887	.956	.722	.910	.639	.765	.912

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Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 6

Groups Printed- SU

	Ashland Ave From North				Vermont Ave From East				Ashland Ave From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	3	3	6	1	0	1	2	10
04:15 PM	0	0	0	0	0	1	0	1	0	2	2	4	1	1	1	3	8
04:30 PM	0	2	0	2	0	0	1	1	1	2	1	4	1	2	0	3	10
04:45 PM	1	3	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
Total	1	7	0	8	0	1	1	2	1	9	6	16	3	3	2	8	34
05:00 PM	0	3	2	5	0	0	0	0	0	0	0	0	4	1	0	5	10
05:15 PM	0	0	0	0	0	1	0	1	0	2	2	4	1	0	0	1	6
05:30 PM	0	2	0	2	1	0	0	1	0	0	2	2	0	1	0	1	6
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
Total	0	5	2	7	1	1	0	2	0	3	4	7	5	3	0	8	24
Grand Total	1	12	2	15	1	2	1	4	1	12	10	23	8	6	2	16	58
Apprch %	6.7	80	13.3		25	50	25		4.3	52.2	43.5		50	37.5	12.5		
Total %	1.7	20.7	3.4	25.9	1.7	3.4	1.7	6.9	1.7	20.7	17.2	39.7	13.8	10.3	3.4	27.6	

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4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/22/2012
Page No : 7

Groups Printed- MU

	Ashland Ave From North				Vermont Ave From East				Ashland Ave From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	2	0	2	1	0	0	1	0	0	0	0	1	0	0	1	4
04:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:45 PM	0	1	0	1	1	0	0	1	0	2	1	3	0	0	0	0	5
Total	0	5	0	5	2	0	0	2	0	3	2	5	1	0	0	1	13
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:45 PM	0	1	0	1	0	0	0	0	0	1	2	3	0	0	0	0	4
Total	0	2	1	3	0	0	0	0	0	1	2	3	3	0	0	3	9
Grand Total	0	7	1	8	2	0	0	2	0	4	4	8	4	0	0	4	22
Apprch %	0	87.5	12.5		100	0	0		0	50	50		100	0	0		
Total %	0	31.8	4.5	36.4	9.1	0	0	9.1	0	18.2	18.2	36.4	18.2	0	0	18.2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/22/2012
Page No : 8

Groups Printed- Peds & Bikes

	Ashland Ave Crossing North Leg			Vermont Ave Crossing East Leg			Ashland Ave Crossing South Leg			Vermont Ave Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	7	7	0	4	4	0	5	5	0	3	3	19
04:15 PM	0	8	8	0	0	0	0	4	4	0	3	3	15
04:30 PM	0	3	3	0	0	0	0	3	3	0	1	1	7
04:45 PM	0	0	0	0	0	0	0	3	3	0	2	2	5
Total	0	18	18	0	4	4	0	15	15	0	9	9	46
05:00 PM	0	4	4	0	0	0	0	0	0	0	1	1	5
05:15 PM	0	0	0	0	0	0	0	2	2	0	2	2	4
05:30 PM	0	3	3	0	0	0	0	1	1	0	2	2	6
05:45 PM	0	5	5	0	0	0	0	0	0	0	0	0	5
Total	0	12	12	0	0	0	0	3	3	0	5	5	20
Grand Total	0	30	30	0	4	4	0	18	18	0	14	14	66
Apprch %	0	100		0	100		0	100		0	100		
Total %	0	45.5	45.5	0	6.1	6.1	0	27.3	27.3	0	21.2	21.2	

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Halsted St and Vermont Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 1

Groups Printed- PC - SU - MU

	Halsted St From North				Vermont Ave From East				Halsted St From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	4	53	3	60	1	16	11	28	17	146	6	169	11	26	9	46	303
07:15 AM	4	53	5	62	2	18	18	38	20	157	3	180	6	19	4	29	309
07:30 AM	7	74	1	82	4	26	11	41	20	146	5	171	9	19	15	43	337
07:45 AM	9	66	3	78	4	33	15	52	24	130	7	161	6	20	9	35	326
Total	24	246	12	282	11	93	55	159	81	579	21	681	32	84	37	153	1275
08:00 AM	10	71	2	83	0	32	21	53	13	126	11	150	11	19	4	34	320
08:15 AM	9	80	2	91	3	20	12	35	8	127	8	143	11	32	12	55	324
08:30 AM	8	71	0	79	4	22	13	39	29	118	13	160	6	31	9	46	324
08:45 AM	9	87	5	101	2	31	9	42	11	111	12	134	7	19	7	33	310
Total	36	309	9	354	9	105	55	169	61	482	44	587	35	101	32	168	1278
Grand Total	60	555	21	636	20	198	110	328	142	1061	65	1268	67	185	69	321	2553
Apprch %	9.4	87.3	3.3		6.1	60.4	33.5		11.2	83.7	5.1		20.9	57.6	21.5		
Total %	2.4	21.7	0.8	24.9	0.8	7.8	4.3	12.8	5.6	41.6	2.5	49.7	2.6	7.2	2.7	12.6	
PC	58	516	12	586	20	191	103	314	129	1015	61	1205	63	176	68	307	2412
% PC	96.7	93	57.1	92.1	100	96.5	93.6	95.7	90.8	95.7	93.8	95	94	95.1	98.6	95.6	94.5
SU	2	26	9	37	0	5	3	8	3	36	4	43	4	6	1	11	99
% SU	3.3	4.7	42.9	5.8	0	2.5	2.7	2.4	2.1	3.4	6.2	3.4	6	3.2	1.4	3.4	3.9
MU	0	13	0	13	0	2	4	6	10	10	0	20	0	3	0	3	42
% MU	0	2.3	0	2	0	1	3.6	1.8	7	0.9	0	1.6	0	1.6	0	0.9	1.6

	Halsted St From North				Vermont Ave From East				Halsted St From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	7	74	1	82	**4**	26	11	41	20	**146**	5	**171**	9	19	**15**	43	**337**
07:45 AM	9	66	**3**	78	4	**33**	15	52	**24**	130	7	161	6	20	9	35	326
08:00 AM	**10**	71	2	83	0	32	**21**	**53**	13	126	**11**	150	**11**	19	4	34	320
08:15 AM	9	**80**	2	**91**	3	20	12	35	8	127	8	143	11	**32**	12	**55**	324
Total Volume	35	291	8	334	11	111	59	181	65	529	31	625	37	90	40	167	1307
% App. Total	10.5	87.1	2.4		6.1	61.3	32.6		10.4	84.6	5		22.2	53.9	24		
PHF	.875	.909	.667	.918	.688	.841	.702	.854	.677	.906	.705	.914	.841	.703	.667	.759	.970

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Halsted St and Vermont Ave
Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 2

Groups Printed- SU

	Halsted St From North				Vermont Ave From East				Halsted St From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	4	1	5	0	0	0	0	1	7	1	9	0	0	0	0	14
07:15 AM	0	5	2	7	0	0	0	0	2	6	0	8	0	1	0	1	16
07:30 AM	1	2	1	4	0	1	0	1	0	8	0	8	1	0	1	2	15
07:45 AM	0	2	1	3	0	1	0	1	0	3	0	3	0	1	0	1	8
Total	1	13	5	19	0	2	0	2	3	24	1	28	1	2	1	4	53
08:00 AM	1	3	1	5	0	0	0	0	0	1	1	2	0	0	0	0	7
08:15 AM	0	5	1	6	0	0	0	0	0	3	0	3	1	2	0	3	12
08:30 AM	0	2	0	2	0	1	3	4	0	7	1	8	1	1	0	2	16
08:45 AM	0	3	2	5	0	2	0	2	0	1	1	2	1	1	0	2	11
Total	1	13	4	18	0	3	3	6	0	12	3	15	3	4	0	7	46
Grand Total	2	26	9	37	0	5	3	8	3	36	4	43	4	6	1	11	99
Apprch %	5.4	70.3	24.3		0	62.5	37.5		7	83.7	9.3		36.4	54.5	9.1		
Total %	2	26.3	9.1	37.4	0	5.1	3	8.1	3	36.4	4	43.4	4	6.1	1	11.1	

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Chicago, IL
7:00 AM - 9:00 AM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 3

Groups Printed- MU

	Halsted St From North				Vermont Ave From East				Halsted St From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	2	0	0	2	0	2	0	2	5
07:15 AM	0	4	0	4	0	0	1	1	0	2	0	2	0	0	0	0	7
07:30 AM	0	1	0	1	0	0	1	1	1	2	0	3	0	0	0	0	5
07:45 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
Total	0	6	0	6	0	1	2	3	3	5	0	8	0	2	0	2	19
08:00 AM	0	1	0	1	0	1	1	2	4	1	0	5	0	0	0	0	8
08:15 AM	0	2	0	2	0	0	1	1	0	1	0	1	0	1	0	1	5
08:30 AM	0	2	0	2	0	0	0	0	2	0	0	2	0	0	0	0	4
08:45 AM	0	2	0	2	0	0	0	0	1	3	0	4	0	0	0	0	6
Total	0	7	0	7	0	1	2	3	7	5	0	12	0	1	0	1	23
Grand Total	0	13	0	13	0	2	4	6	10	10	0	20	0	3	0	3	42
Apprch %	0	100	0		0	33.3	66.7		50	50	0		0	100	0		
Total %	0	31	0	31	0	4.8	9.5	14.3	23.8	23.8	0	47.6	0	7.1	0	7.1	

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Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/17/2012
Page No : 4

Groups Printed- Peds & Bikes

	Halsted St Crossing North Leg			Vermont Ave Crossing East Leg			Halsted St Crossing South Leg			Vermont Ave Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	0	1	1	0	2	2	4
07:15 AM	0	4	4	0	1	1	0	2	2	0	0	0	7
07:30 AM	0	1	1	0	1	1	0	0	0	0	0	0	2
07:45 AM	0	1	1	0	2	2	0	3	3	0	0	0	6
Total	0	7	7	0	4	4	0	6	6	0	2	2	19
08:00 AM	0	5	5	0	3	3	3	7	10	0	3	3	21
08:15 AM	0	3	3	0	0	0	1	6	7	0	1	1	11
08:30 AM	0	3	3	0	7	7	1	11	12	0	5	5	27
08:45 AM	0	0	0	0	5	5	0	7	7	0	0	0	12
Total	0	11	11	0	15	15	5	31	36	0	9	9	71
Grand Total	0	18	18	0	19	19	5	37	42	0	11	11	90
Apprch %	0	100		0	100		11.9	88.1		0	100		
Total %	0	20	20	0	21.1	21.1	5.6	41.1	46.7	0	12.2	12.2	

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Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 5

Groups Printed- PC - SU - MU

	Halsted St From North				Vermont Ave From East				Halsted St From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	14	125	7	146	4	23	16	43	22	117	16	155	11	34	8	53	397
04:15 PM	14	128	6	148	6	31	19	56	19	119	19	157	15	51	15	81	442
04:30 PM	13	138	5	156	3	27	20	50	18	122	9	149	14	48	17	79	434
04:45 PM	21	130	7	158	3	44	24	71	13	95	12	120	14	43	19	76	425
Total	62	521	25	608	16	125	79	220	72	453	56	581	54	176	59	289	1698
05:00 PM	21	116	10	147	6	25	18	49	15	99	11	125	24	46	17	87	408
05:15 PM	13	130	4	147	8	37	24	69	20	104	21	145	68	44	13	125	486
05:30 PM	11	157	8	176	4	31	18	53	22	100	16	138	21	53	17	91	458
05:45 PM	9	134	5	148	4	36	24	64	14	106	16	136	23	55	20	98	446
Total	54	537	27	618	22	129	84	235	71	409	64	544	136	198	67	401	1798
Grand Total	116	1058	52	1226	38	254	163	455	143	862	120	1125	190	374	126	690	3496
Apprch %	9.5	86.3	4.2		8.4	55.8	35.8		12.7	76.6	10.7		27.5	54.2	18.3		
Total %	3.3	30.3	1.5	35.1	1.1	7.3	4.7	13	4.1	24.7	3.4	32.2	5.4	10.7	3.6	19.7	
PC	115	1027	42	1184	38	252	157	447	137	833	117	1087	188	371	125	684	3402
% PC	99.1	97.1	80.8	96.6	100	99.2	96.3	98.2	95.8	96.6	97.5	96.6	98.9	99.2	99.2	99.1	97.3
SU	1	25	10	36	0	2	4	6	3	24	2	29	2	3	1	6	77
% SU	0.9	2.4	19.2	2.9	0	0.8	2.5	1.3	2.1	2.8	1.7	2.6	1.1	0.8	0.8	0.9	2.2
MU	0	6	0	6	0	0	2	2	3	5	1	9	0	0	0	0	17
% MU	0	0.6	0	0.5	0	0	1.2	0.4	2.1	0.6	0.8	0.8	0	0	0	0	0.5

	Halsted St From North				Vermont Ave From East				Halsted St From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**21**	116	**10**	147	6	25	18	49	15	99	11	125	24	46	17	87	408
05:15 PM	13	130	4	147	**8**	**37**	**24**	**69**	20	104	**21**	**145**	**68**	44	13	**125**	**486**
05:30 PM	11	**157**	8	**176**	4	31	18	53	**22**	100	16	138	21	53	17	91	458
05:45 PM	9	134	5	148	4	36	24	64	14	**106**	16	136	23	**55**	**20**	98	446
Total Volume	54	537	27	618	22	129	84	235	71	409	64	544	136	198	67	401	1798
% App. Total	8.7	86.9	4.4		9.4	54.9	35.7		13.1	75.2	11.8		33.9	49.4	16.7		
PHF	.643	.855	.675	.878	.688	.872	.875	.851	.807	.965	.762	.938	.500	.900	.838	.802	.925

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Halsted St and Vermont Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 6

Groups Printed- SU

	Halsted St From North				Vermont Ave From East				Halsted St From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	6	1	7	0	0	0	0	0	8	0	8	0	0	0	0	15
04:15 PM	0	3	2	5	0	1	0	1	0	3	1	4	0	1	0	1	11
04:30 PM	0	1	1	2	0	1	1	2	0	2	0	2	0	1	1	2	8
04:45 PM	0	3	1	4	0	0	0	0	0	1	0	1	1	1	0	2	7
Total	0	13	5	18	0	2	1	3	0	14	1	15	1	3	1	5	41
05:00 PM	0	2	1	3	0	0	2	2	0	2	0	2	0	0	0	0	7
05:15 PM	1	0	2	3	0	0	1	1	0	4	1	5	0	0	0	0	9
05:30 PM	0	7	0	7	0	0	0	0	3	2	0	5	0	0	0	0	12
05:45 PM	0	3	2	5	0	0	0	0	0	2	0	2	1	0	0	1	8
Total	1	12	5	18	0	0	3	3	3	10	1	14	1	0	0	1	36
Grand Total	1	25	10	36	0	2	4	6	3	24	2	29	2	3	1	6	77
Apprch %	2.8	69.4	27.8		0	33.3	66.7		10.3	82.8	6.9		33.3	50	16.7		
Total %	1.3	32.5	13	46.8	0	2.6	5.2	7.8	3.9	31.2	2.6	37.7	2.6	3.9	1.3	7.8	

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Halsted St and Vermont Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM
Site Code : 00000000
Start Date : 5/17/2012
Page No : 7

Groups Printed- MU

	Halsted St From North				Vermont Ave From East				Halsted St From South				Vermont Ave From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	2	2	0	4	0	0	0	0	6
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	3	0	0	0	0	2	3	1	6	0	0	0	0	9
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	2	2	1	2	0	3	0	0	0	0	5
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	0	0	2	2	1	2	0	3	0	0	0	0	8
Grand Total	0	6	0	6	0	0	2	2	3	5	1	9	0	0	0	0	17
Apprch %	0	100	0		0	0	100		33.3	55.6	11.1		0	0	0		
Total %	0	35.3	0	35.3	0	0	11.8	11.8	17.6	29.4	5.9	52.9	0	0	0	0	

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Halsted St and Vermont Ave
Chicago, IL
4:00 PM - 6:00 PM
Sunny, Dry

File Name : AM + PM Peds
Site Code : 00000000
Start Date : 5/17/2012
Page No : 8

Groups Printed- Peds & Bikes

	Halsted St Crossing North Leg			Vermont Ave Crossing East Leg			Halsted St Crossing South Leg			Vermont Ave Crossing West Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
04:00 PM	0	3	3	1	2	3	0	2	2	0	6	6	14
04:15 PM	0	3	3	0	0	0	0	3	3	0	7	7	13
04:30 PM	0	2	2	1	11	12	0	8	8	0	2	2	24
04:45 PM	0	0	0	0	1	1	0	11	11	0	0	0	12
Total	0	8	8	2	14	16	0	24	24	0	15	15	63
05:00 PM	0	3	3	0	0	0	0	3	3	1	1	2	8
05:15 PM	0	0	0	1	0	1	1	8	9	1	0	1	11
05:30 PM	0	0	0	1	2	3	0	9	9	0	1	1	13
05:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	3	3	2	3	5	1	20	21	2	2	4	33
Grand Total	0	11	11	4	17	21	1	44	45	2	17	19	96
Apprch %	0	100		19	81		2.2	97.8		10.5	89.5		
Total %	0	11.5	11.5	4.2	17.7	21.9	1	45.8	46.9	2.1	17.7	19.8	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	765	16	21	707	43	43	60	75	38	29	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.98	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1412	2976		1591	2978			1752			1663	
Flt Permitted	0.30	1.00		0.29	1.00			0.90			0.90	
Satd. Flow (perm)	448	2976		481	2978			1600			1520	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	38	797	17	22	736	45	45	62	78	40	30	97
RTOR Reduction (vph)	0	2	0	0	7	0	0	40	0	0	63	0
Lane Group Flow (vph)	38	812	0	22	774	0	0	145	0	0	104	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	234	1557		252	1558			566			538	
v/s Ratio Prot		c0.27			0.26							
v/s Ratio Perm	0.08			0.05				c0.09			0.07	
v/c Ratio	0.16	0.52		0.09	0.50			0.26			0.19	
Uniform Delay, d1	8.1	10.2		7.7	10.0			14.9			14.6	
Progression Factor	1.00	1.00		0.75	1.01			1.00			1.00	
Incremental Delay, d2	1.5	1.3		0.6	1.0			1.1			0.8	
Delay (s)	9.6	11.4		6.5	11.1			16.0			15.4	
Level of Service	A	B		A	B			B			B	
Approach Delay (s)		11.3			11.0			16.0			15.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	882	7	23	508	50	0	0	0	461	8	319
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.90	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	770	3284		1710	3138	512				3100	1440	1399
Flt Permitted	0.45	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	363	3284		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	27	948	8	25	546	54	0	0	0	496	9	343
RTOR Reduction (vph)	0	1	0	0	0	24	0	0	0	0	0	175
Lane Group Flow (vph)	27	955	0	25	546	30	0	0	0	496	9	168
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	164	1086		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.29		0.01	c0.17					c0.16	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.12
v/c Ratio	0.16	0.88		0.04	0.31	0.11				0.69	0.03	0.52
Uniform Delay, d1	31.4	41.1		15.1	15.1	13.3				45.8	38.7	43.7
Progression Factor	0.81	0.84		0.33	0.64	1.54				1.00	1.00	1.00
Incremental Delay, d2	1.9	9.3		0.1	0.3	0.5				5.5	0.2	5.9
Delay (s)	27.6	43.6		5.0	10.0	21.0				51.3	38.9	49.5
Level of Service	C	D		A	B	C				D	D	D
Approach Delay (s)		43.2			10.8			0.0			50.4	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	438	786	119	21	428	253	124	489	59	41	0	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3106		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3106		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	466	836	127	22	455	269	132	520	63	44	0	31
RTOR Reduction (vph)	0	9	0	0	0	170	0	0	25	0	0	29
Lane Group Flow (vph)	466	954	0	22	455	99	0	652	38	44	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1553		108	697	225		762	327	53		45
v/s Ratio Prot	0.15	c0.31		0.01	c0.16			c0.20		c0.05		
v/s Ratio Perm						0.11			0.03			0.00
v/c Ratio	0.44	0.61		0.20	0.65	0.44		0.86	0.12	0.83		0.04
Uniform Delay, d1	34.1	23.5		57.1	44.6	42.1		47.9	39.5	60.3		57.4
Progression Factor	0.73	0.17		1.00	1.00	1.00		0.94	0.88	1.00		1.00
Incremental Delay, d2	0.7	1.0		4.2	4.7	6.2		11.6	0.7	65.2		0.4
Delay (s)	25.5	5.0		61.3	49.4	48.3		56.6	35.7	125.5		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		11.7			49.3			54.8			97.5	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	33.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	794	197	54	575	0	111	0	106	3	10	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.97	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1649	3005		1390		1465	1803	1930	
Flt Permitted		1.00		0.22	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		375	3005		1097		1465	1803	1930	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	827	205	56	599	0	116	0	110	3	10	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	75	0	1	0
Lane Group Flow (vph)	0	1010	0	56	599	0	116	0	35	3	11	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		225	1803		351		469	577	618	
v/s Ratio Prot		c0.35			0.20						0.01	
v/s Ratio Perm				0.15			c0.11		0.02	0.00		
v/c Ratio		0.59		0.25	0.33		0.33		0.08	0.01	0.02	
Uniform Delay, d1		12.4		9.4	10.0		25.9		23.7	23.2	23.2	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.5		2.6	0.5		2.5		0.3	0.0	0.1	
Delay (s)		13.9		12.0	10.5		28.4		24.0	23.2	23.3	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		13.9			10.6			26.2			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	14.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	316	39	1032	190	855	0	0	396	678
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.97	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3922	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3922	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	326	40	1064	196	881	0	0	408	699
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	326	40	1064	196	881	0	0	1107	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1158	
v/s Ratio Prot							c0.13	0.20			c0.28	
v/s Ratio Perm				0.21	0.02	c0.72						
v/c Ratio				0.72	0.08	2.52	0.42	0.32			1.74dr	
Uniform Delay, d1				33.2	26.7	37.5	29.1	9.1			36.3	
Progression Factor				1.00	1.00	1.00	0.64	2.30			1.00	
Incremental Delay, d2				9.7	0.3	688.9	2.0	0.2			17.8	
Delay (s)				42.9	27.1	726.4	20.6	21.1			54.1	
Level of Service				D	C	F	C	C			D	
Approach Delay (s)		0.0			551.0			21.0			54.1	
Approach LOS		A			F			C			D	

Intersection Summary			
HCM Average Control Delay	240.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	277	867	87	0	0	0	0	768	570	257	455	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3186						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3186						4368	2187	1583	4636	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	292	913	92	0	0	0	0	808	600	271	479	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	263	1027	0	0	0	0	0	808	600	271	479	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1032						1165	583	467	2737	
v/s Ratio Prot								0.18		c0.17	0.10	
v/s Ratio Perm	0.18	0.32							c0.27			
v/c Ratio	0.54	1.00						0.69	1.03	0.58	0.18	
Uniform Delay, d1	29.1	35.4						34.6	38.5	31.5	9.8	
Progression Factor	1.00	1.00						0.45	0.47	1.06	0.44	
Incremental Delay, d2	4.3	26.9						0.3	19.7	2.7	0.1	
Delay (s)	33.4	62.4						15.8	37.9	36.2	4.4	
Level of Service	C	E						B	D	D	A	
Approach Delay (s)		56.5			0.0			25.2			15.9	
Approach LOS		E			A			C			B	

Intersection Summary			
HCM Average Control Delay	34.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	216	4	21	3	152	0	0	99	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1956	
Flt Permitted				0.95	1.00		0.60	1.00			1.00	
Satd. Flow (perm)				1578	2709		812	1882			1956	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	227	4	22	3	160	0	0	104	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	227	8	0	3	160	0	0	106	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		517	1107			1059	
v/s Ratio Prot					0.00		0.00	c0.09			0.05	
v/s Ratio Perm				c0.14			0.00					
v/c Ratio				0.45	0.01		0.01	0.14			0.10	
Uniform Delay, d1				23.1	19.8		9.7	7.9			9.5	
Progression Factor				1.00	1.00		1.01	1.18			1.00	
Incremental Delay, d2				2.9	0.0		0.0	0.3			0.2	
Delay (s)				26.1	19.9		9.8	9.5			9.6	
Level of Service				C	B		A	A			A	
Approach Delay (s)		0.0			25.4			9.5			9.6	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	3	0	18	0	129	37	33	282	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.88			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1577			1686		1595	1755	
Flt Permitted	0.74	1.00			0.99			1.00		0.60	1.00	
Satd. Flow (perm)	1513	1809			1564			1686		1012	1755	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	9	6	6	3	0	21	0	148	43	38	324	0
RTOR Reduction (vph)	0	4	0	0	14	0	0	12	0	0	0	0
Lane Group Flow (vph)	9	8	0	0	10	0	0	179	0	38	324	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	481	575			497			793		643	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.02			0.23		0.06	0.31	
Uniform Delay, d1	19.9	19.9			19.9			13.3		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		0.92	0.83	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.8	
Delay (s)	20.0	19.9			20.0			14.0		8.0	8.1	
Level of Service	B	B			B			B		A	A	
Approach Delay (s)		19.9			20.0			14.0			8.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	61	14	10	334	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.98		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1791		1767	1765	1634	
Flt Permitted	0.96		0.63	1.00	1.00	
Satd. Flow (perm)	1791		1164	1765	1634	
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	75	17	12	412	196	15
RTOR Reduction (vph)	12	0	0	0	4	0
Lane Group Flow (vph)	80	0	12	412	207	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	579		645	978	905	
v/s Ratio Prot	c0.04			c0.23	0.13	
v/s Ratio Perm			0.01			
v/c Ratio	0.14		0.02	0.42	0.23	
Uniform Delay, d1	15.6		6.5	8.4	7.4	
Progression Factor	1.00		0.31	0.55	1.17	
Incremental Delay, d2	0.5		0.0	1.2	0.6	
Delay (s)	16.1		2.1	5.9	9.2	
Level of Service	B		A	A	A	
Approach Delay (s)	16.1			5.8	9.2	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	8.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	19	239	13	494	219	0	0	162	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3739		1660	1752			1603	1298
Flt Permitted					1.00		0.62	1.00			1.00	1.00
Satd. Flow (perm)					3739		1081	1752			1603	1298
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	20	252	14	520	231	0	0	171	33
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	18
Lane Group Flow (vph)	0	0	0	0	282	0	520	231	0	0	171	15
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1144		717	1051			717	580
v/s Ratio Prot					c0.08		c0.09	0.13			0.11	
v/s Ratio Perm							c0.35					0.01
v/c Ratio					0.25		0.73	0.22			0.24	0.03
Uniform Delay, d1					22.1		14.0	7.8			14.5	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.5		6.3	0.5			0.8	0.1
Delay (s)					22.7		20.3	8.3			15.3	13.2
Level of Service					C		C	A			B	B
Approach Delay (s)		0.0			22.7			16.6			15.0	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	10	9	7	255	405	74	58	264	10
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.97		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1798		1691	3237		1705	3351	
Flt Permitted					0.98		0.55	1.00		0.39	1.00	
Satd. Flow (perm)					1798		982	3237		696	3351	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	0	0	12	11	8	300	476	87	68	311	12
RTOR Reduction (vph)	0	0	0	0	6	0	0	20	0	0	4	0
Lane Group Flow (vph)	0	0	0	0	25	0	300	543	0	68	319	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					551		603	1467		475	1519	
v/s Ratio Prot					c0.01		c0.05	0.17		0.01	0.10	
v/s Ratio Perm							c0.23			0.06		
v/c Ratio					0.05		0.50	0.37		0.14	0.21	
Uniform Delay, d1					18.3		11.2	13.5		10.6	12.4	
Progression Factor					1.00		0.74	0.74		1.00	1.00	
Incremental Delay, d2					0.2		2.8	0.7		0.6	0.3	
Delay (s)					18.4		11.1	10.6		11.2	12.7	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.4			10.8			12.4	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	42	17	8	130	171	16	519	9	54	208	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1948			1626		1596	3233		1641	3131	
Flt Permitted		0.77			0.99		0.60	1.00		0.39	1.00	
Satd. Flow (perm)		1527			1619		1000	3233		675	3131	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	51	48	20	9	149	197	18	597	10	62	239	14
RTOR Reduction (vph)	0	10	0	0	60	0	0	2	0	0	6	0
Lane Group Flow (vph)	0	109	0	0	295	0	18	605	0	62	247	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		509			540		560	1810		378	1753	
v/s Ratio Prot								c0.19			0.08	
v/s Ratio Perm		0.07			c0.18		0.02			0.09		
v/c Ratio		0.21			0.55		0.03	0.33		0.16	0.14	
Uniform Delay, d1		17.9			20.4		7.4	8.9		8.0	7.9	
Progression Factor		1.00			1.00		1.00	1.00		0.14	0.06	
Incremental Delay, d2		1.0			3.9		0.1	0.5		0.9	0.2	
Delay (s)		18.9			24.3		7.5	9.4		2.0	0.6	
Level of Service		B			C		A	A		A	A	
Approach Delay (s)		18.9			24.3			9.4			0.9	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	35	44	81	250	173	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	38	47	87	269	186	19

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	85	177	179	124	81
Volume Left (vph)	38	87	0	0	0
Volume Right (vph)	47	0	0	0	19
Hadj (s)	-0.16	0.33	0.09	0.08	-0.08
Departure Headway (s)	5.0	5.2	5.0	5.1	5.0
Degree Utilization, x	0.12	0.26	0.25	0.18	0.11
Capacity (veh/h)	665	671	703	676	700
Control Delay (s)	8.6	8.9	8.4	8.1	7.4
Approach Delay (s)	8.6	8.6		7.8	
Approach LOS	A	A		A	

Intersection Summary			
Delay	8.4		
HCM Level of Service	A		
Intersection Capacity Utilization	30.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	40	46	277	12	5	477	37	39	37	47	632	37
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3292	
Flt Permitted		0.11	1.00	1.00	0.57	1.00	1.00			0.47	1.00	
Satd. Flow (perm)		187	1731	1530	1022	1731	1487			851	3292	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	46	53	318	14	6	548	43	45	43	54	726	43
RTOR Reduction (vph)	0	0	0	7	0	0	31	0	0	0	4	0
Lane Group Flow (vph)	0	99	318	7	6	548	57	0	0	97	765	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	311	528	453			203	784	
v/s Ratio Prot		0.05	c0.18			c0.32					c0.23	
v/s Ratio Perm		0.12		0.00	0.01		0.04			0.11		
v/c Ratio		0.35	0.39	0.01	0.02	1.04	0.13			0.48	0.98	
Uniform Delay, d1		20.4	17.6	14.5	25.5	36.5	26.4			34.4	39.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.4	1.4	0.0	0.1	49.3	0.6			7.9	26.8	
Delay (s)		23.8	19.0	14.5	25.6	85.8	27.0			42.2	66.5	
Level of Service		C	B	B	C	F	C			D	E	
Approach Delay (s)			20.0			77.2					63.8	
Approach LOS			B			E					E	

Intersection Summary			
HCM Average Control Delay	54.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	33	231	21	26	4	47	97	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.97				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3279				1710	2622	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3279				1710	2622	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	38	266	24	30	5	54	111	13
RTOR Reduction (vph)	0	8	0	0	0	0	8	0
Lane Group Flow (vph)	38	312	0	0	0	59	117	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.10				0.03		
v/s Ratio Perm	0.13						c0.04	
v/c Ratio	0.56	0.41				0.21	0.27	
Uniform Delay, d1	35.5	34.1				37.8	38.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	29.2	1.6				1.6	1.5	
Delay (s)	64.7	35.7				39.4	39.6	
Level of Service	E	D				D	D	
Approach Delay (s)		38.8				39.6		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	374	0	0	452	24	106	104	102	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1930			1772				
Flt Permitted		0.97			1.00			0.98				
Satd. Flow (perm)		1603			1930			1772				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	22	402	0	0	486	26	114	112	110	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	424	0	0	512	0	0	336	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		765			920			709				
v/s Ratio Prot					c0.27							
v/s Ratio Perm		0.26						0.19				
v/c Ratio		0.55			0.56			0.47				
Uniform Delay, d1		12.1			12.1			14.4				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		2.9			2.4			2.3				
Delay (s)		15.0			14.5			16.7				
Level of Service		B			B			B				
Approach Delay (s)		15.0			14.5			16.7			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	285	95	63	258	106	125	1435	108	65	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1920	1426		1922	1396	1501	3099	1284	1425	2956	1265
Flt Permitted		0.69	1.00		0.72	1.00	0.39	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1342	1426		1404	1396	617	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	103	306	102	68	277	114	134	1543	116	70	478	100
RTOR Reduction (vph)	0	0	60	0	0	67	0	0	29	0	0	60
Lane Group Flow (vph)	0	409	42	0	345	47	134	1543	87	70	478	40
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	53.0	44.4	44.4	49.0	42.4	42.4
Effective Green, g (s)		43.0	43.0		43.0	43.0	53.0	44.4	44.4	49.0	42.4	42.4
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.50	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		550	584		575	572	384	1310	543	147	1194	511
v/s Ratio Prot							c0.03	c0.50		c0.03	0.16	
v/s Ratio Perm		c0.30	0.03		0.25	0.03	0.15		0.07	0.19		0.03
v/c Ratio		0.74	0.07		0.60	0.08	0.35	1.18	0.16	0.48	0.40	0.08
Uniform Delay, d1		26.3	18.9		24.3	18.9	14.5	30.3	18.8	23.1	22.3	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.07	0.82	0.55
Incremental Delay, d2		5.4	0.2		4.6	0.3	0.6	88.3	0.6	2.4	1.0	0.3
Delay (s)		31.7	19.1		28.8	19.2	15.1	118.6	19.4	27.0	19.3	10.8
Level of Service		C	B		C	B	B	F	B	C	B	B
Approach Delay (s)		29.2			26.5			104.4			18.8	
Approach LOS		C			C			F			B	

Intersection Summary			
HCM Average Control Delay	66.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	98.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	366	46	41	323	41	52	48	43	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			0.99			0.98				
Satd. Flow (prot)		1627			1626			1777				
Flt Permitted		0.93			0.93			0.98				
Satd. Flow (perm)		1524			1516			1777				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	49	394	49	44	347	44	56	52	46	0	0	0
RTOR Reduction (vph)	0	6	0	0	6	0	0	23	0	0	0	0
Lane Group Flow (vph)	0	486	0	0	429	0	0	131	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		891			886			519				
v/s Ratio Prot												
v/s Ratio Perm		c0.32			0.28			0.07				
v/c Ratio		0.55			0.48			0.25				
Uniform Delay, d1		8.2			7.8			17.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		2.4			1.9			1.2				
Delay (s)		10.6			9.7			18.7				
Level of Service		B			A			B				
Approach Delay (s)		10.6			9.7			18.7			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	383	50	27	338	33	41	133	79	49	192	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.99	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1634	1288		1663	1490		1776	
Flt Permitted		0.98	1.00		0.96	1.00		0.89	1.00		0.92	
Satd. Flow (perm)		1624	1255		1572	1288		1505	1490		1642	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	19	403	53	28	356	35	43	140	83	52	202	27
RTOR Reduction (vph)	0	0	23	0	0	15	0	0	56	0	5	0
Lane Group Flow (vph)	0	422	30	0	384	20	0	183	27	0	276	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		931	720		901	738		482	477		525	
v/s Ratio Prot												
v/s Ratio Perm		c0.26	0.02		0.24	0.02		0.12	0.02		c0.17	
v/c Ratio		0.45	0.04		0.43	0.03		0.38	0.06		0.52	
Uniform Delay, d1		9.2	7.0		9.0	6.9		19.7	17.7		20.8	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		1.6	0.1		1.5	0.1		2.3	0.2		3.7	
Delay (s)		10.8	7.1		10.5	7.0		22.0	17.9		24.6	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		10.4			10.2			20.7			24.6	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	72	364	25	15	244	34	51	298	38	38	92	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1461	2989		1458	3528		1534	1647	1301	1517	1541	1156
Flt Permitted	0.57	1.00		0.50	1.00		0.69	1.00	1.00	0.47	1.00	1.00
Satd. Flow (perm)	878	2989		765	3528		1120	1647	1301	756	1541	1156
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	77	387	27	16	260	36	54	317	40	40	98	10
RTOR Reduction (vph)	0	8	0	0	17	0	0	0	22	0	0	6
Lane Group Flow (vph)	77	406	0	16	279	0	54	317	18	40	98	4
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	419	1426		365	1683		448	659	520	302	616	462
v/s Ratio Prot		c0.14			0.08			c0.19			0.06	
v/s Ratio Perm	0.09			0.02			0.05		0.01	0.05		0.00
v/c Ratio	0.18	0.28		0.04	0.17		0.12	0.48	0.03	0.13	0.16	0.01
Uniform Delay, d1	9.7	10.3		9.1	9.7		12.3	14.5	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.77	0.87	0.57	0.51	0.50	0.26
Incremental Delay, d2	1.0	0.5		0.2	0.2		0.5	2.5	0.1	0.9	0.5	0.0
Delay (s)	10.7	10.8		9.3	9.9		10.0	15.1	6.9	7.1	6.9	3.1
Level of Service	B	B		A	A		B	B	A	A	A	A
Approach Delay (s)		10.8			9.8			13.6			6.7	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	330	67	40	239	59	56	320	38	50	124	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.99	1.00		0.98	1.00		0.96	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1459	3058		1587	3000		1540	3022		1397	2790	
Flt Permitted	0.56	1.00		0.49	1.00		0.64	1.00		0.51	1.00	
Satd. Flow (perm)	868	3058		824	3000		1044	3022		749	2790	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	80	340	69	41	246	61	58	330	39	52	128	42
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	25	0
Lane Group Flow (vph)	80	409	0	41	307	0	58	357	0	52	145	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	417	1468		396	1440		432	1249		310	1153	
v/s Ratio Prot		c0.13			0.10			c0.12			0.05	
v/s Ratio Perm	0.09			0.05			0.06			0.07		
v/c Ratio	0.19	0.28		0.10	0.21		0.13	0.29		0.17	0.13	
Uniform Delay, d1	11.2	11.7		10.7	11.3		13.7	14.6		13.9	13.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	0.5		0.5	0.3		0.6	0.6		1.2	0.2	
Delay (s)	12.2	12.2		11.2	11.6		14.3	15.2		15.0	13.8	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.2			11.6			15.1			14.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	252	29	21	292	43	54	344	22	34	161	36
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1575		1470	1840		1532	3072		1371	2892	
Flt Permitted	0.49	1.00		0.55	1.00		0.62	1.00		0.49	1.00	
Satd. Flow (perm)	787	1575		852	1840		1003	3072		711	2892	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	88	265	31	22	307	45	57	362	23	36	169	38
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	88	296	0	22	352	0	57	385	0	36	207	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	481	737		421	792		345	730		221	633	
v/s Ratio Prot	c0.01	0.19		0.00	c0.19		c0.01	c0.13		0.01	0.07	
v/s Ratio Perm	0.09			0.02			0.04			0.04		
v/c Ratio	0.18	0.40		0.05	0.44		0.17	0.53		0.16	0.33	
Uniform Delay, d1	11.9	14.8		12.9	17.0		21.1	28.2		24.2	27.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	1.6		0.1	1.8		0.2	2.7		0.3	1.4	
Delay (s)	12.1	16.4		13.0	18.8		21.4	31.0		24.6	29.3	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		15.4			18.5			29.7			28.6	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	247	34	54	312	95	44	300	97	51	146	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3492			2910		1614	3156		1577	2926	
Flt Permitted		0.82			0.87		0.63	1.00		0.47	1.00	
Satd. Flow (perm)		2902			2546		1073	3156		785	2926	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	57	266	37	58	335	102	47	323	104	55	157	34
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	360	0	0	495	0	47	427	0	55	191	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1316			1154		472	1389		345	1287	
v/s Ratio Prot								c0.14			0.07	
v/s Ratio Perm		0.12			c0.19		0.04			0.07		
v/c Ratio		0.27			0.43		0.10	0.31		0.16	0.15	
Uniform Delay, d1		12.8			13.9		12.3	13.6		12.6	12.6	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			1.2		0.4	0.6		1.0	0.2	
Delay (s)		13.3			15.1		12.7	14.2		13.6	12.8	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		13.3			15.1			14.0			13.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	401	4	12	536	317	56	7	16	91	1	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3144		1629	3257	1457		1611			3106	
Flt Permitted	0.43	1.00		0.50	1.00	1.00		0.72			0.78	
Satd. Flow (perm)	721	3144		856	3257	1457		1197			2522	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	120	431	4	13	576	341	60	8	17	98	1	43
RTOR Reduction (vph)	0	1	0	0	0	102	0	14	0	0	35	0
Lane Group Flow (vph)	120	434	0	13	576	239	0	71	0	0	107	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.9	46.9		46.9	46.9	46.9		11.9			11.9	
Effective Green, g (s)	46.9	46.9		46.9	46.9	46.9		11.9			11.9	
Actuated g/C Ratio	0.70	0.70		0.70	0.70	0.70		0.18			0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	506	2207		601	2287	1023		213			449	
v/s Ratio Prot		0.14			c0.18							
v/s Ratio Perm	0.17			0.02		0.16		c0.06			0.04	
v/c Ratio	0.24	0.20		0.02	0.25	0.23		0.33			0.24	
Uniform Delay, d1	3.6	3.4		3.0	3.6	3.5		24.0			23.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.1	0.2		0.1	0.3	0.5		3.9			1.2	
Delay (s)	4.7	3.6		3.1	3.9	4.1		27.9			24.7	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		3.9			3.9			27.9			24.7	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	67	63	190	66	106	1591	71	67	476	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1505		1547	1589		1493	3069	1271	1452	2983	1301
Flt Permitted	0.38	1.00		0.34	1.00		0.41	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	625	1505		547	1589		636	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	71	66	200	69	112	1675	75	71	501	41
RTOR Reduction (vph)	0	13	0	0	15	0	0	0	18	0	0	24
Lane Group Flow (vph)	117	283	0	66	254	0	112	1675	57	71	501	17
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	256	390		238	411		360	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.02	c0.55		c0.03	0.17	
v/s Ratio Perm	0.11			0.07			0.12		0.04	0.16		0.01
v/c Ratio	0.46	0.72		0.28	0.62		0.31	1.33	0.11	0.41	0.41	0.03
Uniform Delay, d1	22.5	28.7		21.8	27.8		13.0	25.0	15.4	18.1	17.7	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.62	0.69	0.46	1.00	1.00	1.00
Incremental Delay, d2	5.8	11.1		2.9	6.8		2.0	151.4	0.4	6.9	1.0	0.1
Delay (s)	28.3	39.9		24.7	34.6		10.1	168.6	7.4	25.0	18.7	15.0
Level of Service	C	D		C	C		B	F	A	C	B	B
Approach Delay (s)		36.6			32.7			152.6			19.2	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	99.9	HCM Level of Service	F
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	212	15	15	149	9	16	146	24	28	130	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1851			1846			1901			1931	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1791			1795			1860			1835	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	28	226	16	16	159	10	17	155	26	30	138	20
RTOR Reduction (vph)	0	4	0	0	3	0	0	9	0	0	6	0
Lane Group Flow (vph)	0	266	0	0	182	0	0	189	0	0	182	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		744			746			858			847	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.10			0.10	
v/c Ratio		0.36			0.24			0.22			0.21	
Uniform Delay, d1		13.0			12.4			10.5			10.5	
Progression Factor		1.00			0.55			1.07			1.00	
Incremental Delay, d2		1.3			0.8			0.6			0.6	
Delay (s)		14.4			7.6			11.8			11.0	
Level of Service		B			A			B			B	
Approach Delay (s)		14.4			7.6			11.8			11.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	25	9	162	16	33	296	26	15	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	3013		1302	3048		1529	3092		1492	2867	
Flt Permitted	0.63	1.00		0.61	1.00		0.68	1.00		0.54	1.00	
Satd. Flow (perm)	969	3013		837	3048		1094	3092		848	2867	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	26	199	27	10	178	18	36	325	29	16	95	19
RTOR Reduction (vph)	0	16	0	0	12	0	0	10	0	0	8	0
Lane Group Flow (vph)	26	210	0	10	184	0	36	344	0	16	106	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	283	881		245	891		640	1808		496	1676	
v/s Ratio Prot		c0.07			0.06			c0.11			0.04	
v/s Ratio Perm	0.03			0.01			0.03			0.02		
v/c Ratio	0.09	0.24		0.04	0.21		0.06	0.19		0.03	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.8	6.3		5.7	5.8	
Progression Factor	0.69	0.70		0.77	0.76		0.92	0.93		0.47	0.43	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.2		0.1	0.1	
Delay (s)	12.2	12.9		13.1	13.7		5.5	6.1		2.8	2.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		12.8			13.7			6.1			2.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	31	16	122	29	27	414	24	11	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	2960		1514	2884			1878			1806	
Flt Permitted	0.65	1.00		0.62	1.00			0.98			0.97	
Satd. Flow (perm)	1071	2960		985	2884			1843			1763	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	47	182	32	16	124	30	28	422	24	11	166	15
RTOR Reduction (vph)	0	19	0	0	18	0	0	3	0	0	5	0
Lane Group Flow (vph)	47	195	0	16	136	0	0	471	0	0	187	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	428	1184		394	1154			879			841	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.04			0.02				c0.26			0.11	
v/c Ratio	0.11	0.16		0.04	0.12			0.54			0.22	
Uniform Delay, d1	12.2	12.5		11.9	12.3			11.9			9.9	
Progression Factor	1.00	0.90		0.87	0.88			1.06			1.00	
Incremental Delay, d2	0.5	0.3		0.2	0.2			2.3			0.6	
Delay (s)	12.8	11.6		10.6	11.0			14.9			10.6	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		11.8			11.0			14.9			10.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	99	40	2	65	26	19	262	9	5	142	23
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.96			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1889		1586	1873			1971			1931	
Flt Permitted	0.69	1.00		0.64	1.00			0.98			0.99	
Satd. Flow (perm)	1163	1889		1068	1873			1935			1918	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	81	115	47	2	76	30	22	305	10	6	165	27
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	81	162	0	2	106	0	0	337	0	0	198	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	358	581		329	576			1101			1092	
v/s Ratio Prot		c0.09			0.06							
v/s Ratio Perm	0.07			0.00				c0.17			0.10	
v/c Ratio	0.23	0.28		0.01	0.18			0.31			0.18	
Uniform Delay, d1	16.7	17.0		15.6	16.5			7.3			6.7	
Progression Factor	0.85	0.83		0.92	0.90			0.91			1.00	
Incremental Delay, d2	1.4	1.2		0.0	0.7			0.7			0.4	
Delay (s)	15.6	15.3		14.4	15.6			7.3			7.1	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		15.4			15.6			7.3			7.1	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	7	40	1	3	8	30	379	5	2	155	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1674		1710	1401		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.72	1.00		0.65	1.00	1.00	0.46	1.00	1.00
Satd. Flow (perm)	1265	1674		1300	1401		1014	1631	1392	793	1907	1427
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	107	8	45	1	3	9	34	431	6	2	176	44
RTOR Reduction (vph)	0	33	0	0	7	0	0	0	2	0	0	18
Lane Group Flow (vph)	107	20	0	1	5	0	34	431	4	2	176	26
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	350	464		360	388		608	979	835	476	1144	856
v/s Ratio Prot		0.01			0.00			c0.26			0.09	
v/s Ratio Perm	c0.08			0.00			0.03		0.00	0.00		0.02
v/c Ratio	0.31	0.04		0.00	0.01		0.06	0.44	0.00	0.00	0.15	0.03
Uniform Delay, d1	18.6	17.2		17.0	17.1		5.4	7.1	5.2	5.2	5.7	5.3
Progression Factor	1.52	2.41		1.00	1.00		0.90	0.91	0.89	1.00	1.00	1.00
Incremental Delay, d2	2.2	0.2		0.0	0.1		0.2	1.3	0.0	0.0	0.3	0.1
Delay (s)	30.5	41.6		17.0	17.1		5.0	7.7	4.6	5.2	6.0	5.4
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		34.1			17.1			7.5			5.9	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	232	76	101	313	0	0	0	0	71	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		0.99	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2823		1620	3288					1574	2906	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2823		855	3288					1574	2906	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	247	81	107	333	0	0	0	0	76	324	384
RTOR Reduction (vph)	0	31	0	0	0	0	0	0	0	0	216	0
Lane Group Flow (vph)	0	297	0	107	333	0	0	0	0	76	492	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		932		655	1940					504	930	
v/s Ratio Prot		c0.11		0.04	c0.10					0.05	c0.17	
v/s Ratio Perm				0.05								
v/c Ratio		0.32		0.16	0.17					0.15	0.53	
Uniform Delay, d1		25.1		10.4	9.4					24.3	27.8	
Progression Factor		1.00		1.88	1.97					1.00	1.00	
Incremental Delay, d2		0.9		0.5	0.2					0.6	2.2	
Delay (s)		26.0		20.0	18.6					24.9	30.0	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.0			18.9			0.0			29.5	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	174	0	0	253	54	161	509	289	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1671	3054			2832		1750	1782	1514			
Flt Permitted	0.42	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	744	3054			2832		1750	1782	1514			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	143	193	0	0	281	60	179	566	321	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	215	0	0	0
Lane Group Flow (vph)	143	193	0	0	323	0	179	566	106	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	708	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.11		0.10	c0.32				
v/s Ratio Perm	0.04								0.07			
v/c Ratio	0.20	0.11			0.54		0.31	0.96	0.21			
Uniform Delay, d1	11.7	9.4			35.2		25.0	32.9	24.1			
Progression Factor	0.28	0.28			1.00		0.75	0.79	1.87			
Incremental Delay, d2	0.6	0.1			3.5		1.0	23.4	0.7			
Delay (s)	3.9	2.8			38.7		19.7	49.3	45.8			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		3.2			38.7			43.3			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	34.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	420	327	33	571	0	0	0	0	4	215	193
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3113		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.18	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3113		312	3273					1596	3160	1443
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	467	363	37	634	0	0	0	0	4	239	214
RTOR Reduction (vph)	0	141	0	0	0	0	0	0	0	0	0	141
Lane Group Flow (vph)	0	689	0	37	634	0	0	0	0	4	239	73
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1121		403	1898					543	1074	491
v/s Ratio Prot		c0.22		0.02	c0.19					0.00	c0.08	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.61		0.09	0.33					0.01	0.22	0.15
Uniform Delay, d1		26.3		12.3	10.9					21.8	23.6	22.9
Progression Factor		1.00		0.57	0.73					0.78	0.82	1.04
Incremental Delay, d2		2.5		0.2	0.2					0.0	0.4	0.6
Delay (s)		28.8		7.3	8.2					17.0	19.8	24.4
Level of Service		C		A	A					B	B	C
Approach Delay (s)		28.8			8.1			0.0			21.9	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	368	56	0	0	58	3	546	597	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3042			3099		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1084	2341			3099		1555	1637	1500			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	387	59	0	0	61	3	575	628	61	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	193	253	0	0	61	0	575	628	23	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1446			465		575	606	555			
v/s Ratio Prot	c0.10	0.06			0.02		0.37	c0.38	0.02			
v/s Ratio Perm	c0.04	0.03										
v/c Ratio	0.28	0.17			0.13		1.00	1.04	0.04			
Uniform Delay, d1	13.9	13.2			36.9		31.5	31.5	20.1			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		37.5	46.3	0.1			
Delay (s)	4.1	3.5			37.4		69.0	77.8	20.3			
Level of Service	A	A			D		E	E	C			
Approach Delay (s)		3.7			37.4			71.0			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	52.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	126	202	54	45	142	88	35	921	50	88	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		0.99			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2832			2768		1447	3069	1336	1494	2956	1270
Flt Permitted		0.73			0.84		0.40	1.00	1.00	0.15	1.00	1.00
Satd. Flow (perm)		2093			2348		605	3069	1336	233	2956	1270
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	130	208	56	46	146	91	36	949	52	91	491	43
RTOR Reduction (vph)	0	16	0	0	61	0	0	0	24	0	0	26
Lane Group Flow (vph)	0	378	0	0	222	0	36	949	28	91	491	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		939			773		296	1210	519	158	1165	493
v/s Ratio Prot		c0.03					0.01	c0.31		c0.03	0.17	
v/s Ratio Perm		0.14			0.09		0.05		0.02	0.22		0.01
v/c Ratio		0.40			0.29		0.12	0.78	0.05	0.58	0.42	0.03
Uniform Delay, d1		17.0			21.1		14.6	22.6	16.2	17.0	18.7	16.1
Progression Factor		1.00			1.00		1.16	0.77	1.21	1.81	1.66	3.17
Incremental Delay, d2		1.3			0.9		0.6	3.9	0.1	13.3	1.0	0.1
Delay (s)		18.3			22.0		17.6	21.2	19.8	44.0	32.0	51.3
Level of Service		B			C		B	C	B	D	C	D
Approach Delay (s)		18.3			22.0			21.0			35.1	
Approach LOS		B			C			C			D	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	306	0	0	253	63	22	49	76	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.93				
Flt Protected		0.99			1.00			0.99				
Satd. Flow (prot)		1706			1668			1583				
Flt Permitted		0.95			1.00			0.99				
Satd. Flow (perm)		1623			1668			1583				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	37	329	0	0	272	68	24	53	82	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	53	0	0	0	0
Lane Group Flow (vph)	0	366	0	0	326	0	0	106	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		849			872			560				
v/s Ratio Prot					0.20							
v/s Ratio Perm		c0.23						0.07				
v/c Ratio		0.43			0.37			0.19				
Uniform Delay, d1		9.5			9.2			14.5				
Progression Factor		1.00			0.45			1.00				
Incremental Delay, d2		1.6			1.2			0.7				
Delay (s)		11.1			5.3			15.3				
Level of Service		B			A			B				
Approach Delay (s)		11.1			5.3			15.3			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	306	24	16	262	38	13	140	28	48	100	18
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.98			0.98			0.98	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		1886			1833			3185			3152	
Flt Permitted		0.95			0.98			0.94			0.85	
Satd. Flow (perm)		1797			1794			2991			2705	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	37	326	26	17	279	40	14	149	30	51	106	19
RTOR Reduction (vph)	0	4	0	0	8	0	0	18	0	0	11	0
Lane Group Flow (vph)	0	385	0	0	328	0	0	175	0	0	165	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		829			828			1242			1124	
v/s Ratio Prot												
v/s Ratio Perm		c0.21			0.18			0.06			c0.06	
v/c Ratio		0.46			0.40			0.14			0.15	
Uniform Delay, d1		12.0			11.5			11.8			11.8	
Progression Factor		0.61			0.45			0.85			0.57	
Incremental Delay, d2		1.7			1.4			0.2			0.3	
Delay (s)		9.1			6.6			10.2			7.0	
Level of Service		A			A			B			A	
Approach Delay (s)		9.1			6.6			10.2			7.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	8.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	204	16	28	280	61	36	246	69	37	74	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1500	2936		1582	2932		1497	3034		1594	2938	
Flt Permitted	0.51	1.00		0.61	1.00		0.69	1.00		0.55	1.00	
Satd. Flow (perm)	803	2936		1009	2932		1090	3034		923	2938	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	41	217	17	30	298	65	38	262	73	39	79	17
RTOR Reduction (vph)	0	9	0	0	28	0	0	34	0	0	8	0
Lane Group Flow (vph)	41	225	0	30	335	0	38	301	0	39	88	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	272	994		342	992		587	1634		497	1582	
v/s Ratio Prot		0.08			c0.11			c0.10			0.03	
v/s Ratio Perm	0.05			0.03			0.03			0.04		
v/c Ratio	0.15	0.23		0.09	0.34		0.06	0.18		0.08	0.06	
Uniform Delay, d1	15.0	15.4		14.7	16.1		7.2	7.7		7.2	7.1	
Progression Factor	0.66	0.64		0.74	0.73		0.68	0.71		1.27	1.28	
Incremental Delay, d2	1.1	0.5		0.5	0.9		0.2	0.2		0.3	0.1	
Delay (s)	11.0	10.4		11.4	12.6		5.1	5.7		9.5	9.2	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		10.5			12.5			5.7			9.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	293	20	37	313	82	11	302	44	41	118	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.98			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1381	3014		1332	3523			3432			3309	
Flt Permitted	0.49	1.00		0.55	1.00			0.95			0.84	
Satd. Flow (perm)	718	3014		772	3523			3252			2811	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	68	312	21	39	333	87	12	321	47	44	126	40
RTOR Reduction (vph)	0	7	0	0	36	0	0	17	0	0	24	0
Lane Group Flow (vph)	68	326	0	39	384	0	0	363	0	0	186	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	342	1437		368	1680			1301			1124	
v/s Ratio Prot		0.11			c0.11							
v/s Ratio Perm	0.09			0.05				c0.11			0.07	
v/c Ratio	0.20	0.23		0.11	0.23			0.28			0.17	
Uniform Delay, d1	9.8	10.0		9.4	10.0			13.2			12.5	
Progression Factor	1.59	1.63		0.74	0.68			0.53			0.64	
Incremental Delay, d2	1.3	0.4		0.5	0.3			0.5			0.3	
Delay (s)	16.9	16.6		7.5	7.1			7.5			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		16.7			7.1			7.5			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	226	76	103	311	103	61	65	68	68	65	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1636	1409		3024			1822			1828	
Flt Permitted		0.78	1.00		0.81			0.86			0.84	
Satd. Flow (perm)		1286	1409		2480			1590			1571	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	82	243	82	111	334	111	66	70	73	73	70	66
RTOR Reduction (vph)	0	0	39	0	34	0	0	30	0	0	26	0
Lane Group Flow (vph)	0	325	43	0	522	0	0	179	0	0	183	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		673	737		1297			514			508	
v/s Ratio Prot												
v/s Ratio Perm		c0.25	0.03		0.21			0.11			c0.12	
v/c Ratio		0.48	0.06		0.40			0.35			0.36	
Uniform Delay, d1		9.9	7.6		9.4			16.8			16.9	
Progression Factor		2.13	5.31		0.34			1.00			1.00	
Incremental Delay, d2		2.4	0.1		0.9			1.9			2.0	
Delay (s)		23.5	40.6		4.0			18.6			18.8	
Level of Service		C	D		A			B			B	
Approach Delay (s)		26.9			4.0			18.6			18.8	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	291	15	15	417	63	28	102	41	35	73	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.96			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1474	3019		1568	2999			3444			3420	
Flt Permitted	0.42	1.00		0.55	1.00			0.90			0.89	
Satd. Flow (perm)	655	3019		915	2999			3123			3063	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	60	310	16	16	444	67	30	109	44	37	78	77
RTOR Reduction (vph)	0	6	0	0	18	0	0	24	0	0	43	0
Lane Group Flow (vph)	60	320	0	16	493	0	0	159	0	0	149	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	282	1300		394	1292			1393			1367	
v/s Ratio Prot		0.11			c0.16							
v/s Ratio Perm	0.09			0.02				c0.05			0.05	
v/c Ratio	0.21	0.25		0.04	0.38			0.11			0.11	
Uniform Delay, d1	11.6	11.8		10.7	12.6			10.5			10.5	
Progression Factor	1.09	1.09		0.83	0.73			1.01			0.75	
Incremental Delay, d2	1.6	0.4		0.2	0.8			0.2			0.2	
Delay (s)	14.2	13.2		9.1	10.0			10.7			8.0	
Level of Service	B	B		A	B			B			A	
Approach Delay (s)		13.4			10.0			10.7			8.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	349	55	73	346	219	32	256	71	171	123	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			1.00			0.97	
Satd. Flow (prot)		3178			3072			3147			3121	
Flt Permitted		0.77			0.83			0.91			0.67	
Satd. Flow (perm)		2479			2572			2881			2129	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	71	375	59	78	372	235	34	275	76	184	132	41
RTOR Reduction (vph)	0	16	0	0	103	0	0	33	0	0	15	0
Lane Group Flow (vph)	0	489	0	0	582	0	0	352	0	0	342	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		992			1029			1310			655	
v/s Ratio Prot								c0.02				
v/s Ratio Perm		0.20			c0.23			0.10			c0.16	
v/c Ratio		0.49			0.57			0.27			0.52	
Uniform Delay, d1		14.6			15.1			11.3			18.6	
Progression Factor		1.85			1.00			1.00			0.87	
Incremental Delay, d2		1.7			2.2			0.5			3.0	
Delay (s)		28.7			17.4			11.8			19.2	
Level of Service		C			B			B			B	
Approach Delay (s)		28.7			17.4			11.8			19.2	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	556	91	35	578	0	102	0	54	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2976			3031			1583				
Flt Permitted		1.00			0.88			0.80				
Satd. Flow (perm)		2976			2666			1311				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	598	98	38	622	0	110	0	58	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	678	0	0	660	0	0	147	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1918			978			233				
v/s Ratio Prot		c0.23										
v/s Ratio Perm					c0.25			c0.11				
v/c Ratio		0.35			0.67			0.63				
Uniform Delay, d1		7.4			24.0			34.3				
Progression Factor		0.00			1.47			1.00				
Incremental Delay, d2		0.4			3.6			12.2				
Delay (s)		0.4			38.9			46.5				
Level of Service		A			D			D				
Approach Delay (s)		0.4			38.9			46.5			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	22.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1043: 111th Street & Doty Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	385	144	211	494	141	78	16	143	60	6	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1756		1629	1714	1457
Flt Permitted	0.45	1.00		0.35	1.00	1.00		0.89		0.42	1.00	1.00
Satd. Flow (perm)	723	3020		599	3257	1457		1584		715	1714	1457
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	102	414	155	227	531	152	84	17	154	65	6	62
RTOR Reduction (vph)	0	37	0	0	0	68	0	78	0	0	0	38
Lane Group Flow (vph)	102	532	0	227	531	84	0	177	0	65	6	24
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	45.7	38.2		52.3	41.8	49.9		16.6		27.7	27.7	35.2
Effective Green, g (s)	45.7	38.2		52.3	41.8	49.9		16.6		27.7	27.7	35.2
Actuated g/C Ratio	0.51	0.42		0.58	0.46	0.55		0.18		0.31	0.31	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	434	1282		475	1513	808		292		302	528	570
v/s Ratio Prot	0.02	0.18		c0.06	0.16	0.01				c0.02	0.00	0.00
v/s Ratio Perm	0.10			c0.22		0.05		c0.11		0.05		0.01
v/c Ratio	0.24	0.42		0.48	0.35	0.10		0.61		0.22	0.01	0.04
Uniform Delay, d1	11.7	18.1		9.7	15.4	9.5		33.7		23.6	21.6	17.0
Progression Factor	1.94	1.70		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.9		1.0	0.6	0.1		4.1		0.4	0.0	0.0
Delay (s)	23.0	31.7		10.8	16.1	9.5		37.8		24.0	21.7	17.0
Level of Service	C	C		B	B	A		D		C	C	B
Approach Delay (s)		30.4			13.7			37.8			20.6	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	23.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
1044: 111th Street & Bishop Ford Freeway EB Ramps

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	398	190	5	407	0	0	0	0	25	0	439
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	428	204	5	438	0	0	0	0	27	0	472
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	438			428			658	876	214	662	876	219
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	438			428			658	876	214	662	876	219
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	92	100	39
cM capacity (veh/h)	1098			1107			134	279	782	340	279	776

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	214	214	204	151	292	27	472
Volume Left	0	0	0	5	0	27	0
Volume Right	0	0	204	0	0	0	472
cSH	1700	1700	1700	1107	1700	340	776
Volume to Capacity	0.13	0.13	0.12	0.00	0.17	0.08	0.61
Queue Length 95th (ft)	0	0	0	0	0	6	105
Control Delay (s)	0.0	0.0	0.0	0.3	0.0	16.5	16.6
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		16.6	
Approach LOS						C	

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	423	0	412	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	455	0	443	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	227	227	443
Volume Left (vph)	227	227	443
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.4	6.4	5.4
Degree Utilization, x	0.40	0.40	0.66
Capacity (veh/h)	545	546	646
Control Delay (s)	12.4	12.4	18.4
Approach Delay (s)	12.4		18.4
Approach LOS	B		C

Intersection Summary			
Delay	15.4		
HCM Level of Service	C		
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	339	46	126	323	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3093		1574	3149						3014	
Flt Permitted		1.00		0.46	1.00						0.97	
Satd. Flow (perm)		3093		763	3149						3014	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	365	49	135	347	0	0	0	0	77	16	45
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	402	0	135	347	0	0	0	0	0	107	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1310		535	1815						957	
v/s Ratio Prot		c0.13		c0.03	0.11						c0.04	
v/s Ratio Perm				0.12								
v/c Ratio		0.31		0.25	0.19						0.11	
Uniform Delay, d1		16.2		11.1	8.6						20.5	
Progression Factor		1.00		0.27	0.25						1.00	
Incremental Delay, d2		0.6		1.1	0.2						0.2	
Delay (s)		16.8		4.1	2.4						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		16.8			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	343	0	0	400	76	49	65	42	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3073			4422				
Flt Permitted	0.39	1.00			1.00			0.98				
Satd. Flow (perm)	673	3257			3073			4422				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	73	369	0	0	430	82	53	70	45	0	0	0
RTOR Reduction (vph)	0	0	0	0	19	0	0	31	0	0	0	0
Lane Group Flow (vph)	73	369	0	0	493	0	0	137	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	493	1839			1265			1405				
v/s Ratio Prot	0.02	c0.11			c0.16			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.15	0.20			0.39			0.10				
Uniform Delay, d1	11.9	9.1			17.5			20.4				
Progression Factor	0.34	0.34			1.00			1.00				
Incremental Delay, d2	0.6	0.2			0.9			0.1				
Delay (s)	4.6	3.3			18.4			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.5			18.4			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	307	39	31	243	31	117	85	52	52	85	117
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.98			0.98			0.97			0.94	
Flt Protected		0.99			0.99			0.98			0.99	
Satd. Flow (prot)		2979			2979			1792			1750	
Flt Permitted		0.89			0.89			0.76			0.89	
Satd. Flow (perm)		2663			2652			1390			1579	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	42	330	42	33	261	33	126	91	56	56	91	126
RTOR Reduction (vph)	0	13	0	0	13	0	0	14	0	0	48	0
Lane Group Flow (vph)	0	401	0	0	314	0	0	259	0	0	225	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		942			938			684			777	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.12			c0.19			0.14	
v/c Ratio		0.43			0.33			0.38			0.29	
Uniform Delay, d1		16.0			15.4			10.3			9.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.4			1.0			1.6			0.9	
Delay (s)		17.4			16.4			11.9			10.7	
Level of Service		B			B			B			B	
Approach Delay (s)		17.4			16.4			11.9			10.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	202	39	50	176	62	59	828	58	66	373	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	3005		1592	3512		1484	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.58	1.00		0.48	1.00	1.00	0.19	1.00	1.00
Satd. Flow (perm)	954	3005		975	3512		743	3040	1347	291	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	213	41	53	185	65	62	872	61	69	393	74
RTOR Reduction (vph)	0	19	0	0	41	0	0	0	37	0	0	45
Lane Group Flow (vph)	178	235	0	53	209	0	62	872	24	69	393	29
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	990		373	1157		350	1180	523	180	1169	493
v/s Ratio Prot	c0.02	0.08		0.01	0.06		0.01	c0.29		c0.02	0.13	
v/s Ratio Perm	c0.15			0.04			0.07		0.02	0.14		0.02
v/c Ratio	0.49	0.24		0.14	0.18		0.18	0.74	0.05	0.38	0.34	0.06
Uniform Delay, d1	20.6	20.7		18.4	20.3		14.8	22.3	16.2	16.1	18.3	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.55	0.60	0.84
Incremental Delay, d2	4.6	0.6		0.8	0.3		1.1	4.2	0.2	5.6	0.7	0.2
Delay (s)	25.2	21.3		19.2	20.7		15.9	26.5	16.4	30.6	11.7	13.8
Level of Service	C	C		B	C		B	C	B	C	B	B
Approach Delay (s)		22.9			20.4			25.2			14.4	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	21.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	256	18	14	216	8	35	113	25	19	54	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1929	1382		1950	1331		1970	1452		1928	1430
Flt Permitted		0.94	1.00		0.98	1.00		0.93	1.00		0.93	1.00
Satd. Flow (perm)		1829	1382		1910	1331		1861	1452		1814	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	269	19	15	227	8	37	119	26	20	57	41
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	24
Lane Group Flow (vph)	0	309	9	0	242	4	0	156	11	0	77	17
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		844	638		882	614		773	603		754	594
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.13	0.00		c0.08	0.01		0.04	0.01
v/c Ratio		0.37	0.01		0.27	0.01		0.20	0.02		0.10	0.03
Uniform Delay, d1		11.3	9.5		10.8	9.4		12.1	11.2		11.6	11.2
Progression Factor		1.00	1.00		0.46	0.36		1.37	1.84		0.89	0.78
Incremental Delay, d2		1.2	0.0		0.8	0.0		0.6	0.1		0.3	0.1
Delay (s)		12.6	9.5		5.8	3.4		17.2	20.6		10.6	8.8
Level of Service		B	A		A	A		B	C		B	A
Approach Delay (s)		12.4			5.7			17.7			10.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	235	10	15	200	30	10	190	20	30	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3021		1520	2981		1520	2996		1520	2904	
Flt Permitted	0.95	1.00		0.59	1.00		0.68	1.00		0.61	1.00	
Satd. Flow (perm)	1520	3021		942	2981		1095	2996		977	2904	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	70	253	11	16	215	32	11	204	22	32	75	32
RTOR Reduction (vph)	0	5	0	0	18	0	0	12	0	0	19	0
Lane Group Flow (vph)	70	259	0	16	229	0	11	214	0	32	88	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1487		319	1009		455	1244		406	1206	
v/s Ratio Prot	c0.05	0.09			c0.08			c0.07			0.03	
v/s Ratio Perm				0.02			0.01			0.03		
v/c Ratio	0.43	0.17		0.05	0.23		0.02	0.17		0.08	0.07	
Uniform Delay, d1	27.1	9.2		14.5	15.4		11.2	12.0		11.5	11.5	
Progression Factor	0.82	0.38		0.82	0.74		0.64	0.72		1.15	1.21	
Incremental Delay, d2	7.7	0.2		0.3	0.5		0.1	0.3		0.4	0.1	
Delay (s)	30.0	3.7		12.2	11.9		7.3	8.8		13.6	14.0	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		9.2			11.9			8.8			13.9	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	235	15	90	200	40	25	275	20	20	115	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.99		1.00	0.97			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1520	3013		1520	2964			3213			3172	
Flt Permitted	0.59	1.00		0.95	1.00			0.93			0.90	
Satd. Flow (perm)	948	3013		1520	2964			2993			2867	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	38	253	16	97	215	43	27	296	22	22	124	22
RTOR Reduction (vph)	0	7	0	0	24	0	0	7	0	0	14	0
Lane Group Flow (vph)	38	262	0	97	234	0	0	338	0	0	154	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	292	927		140	1322			1151			1103	
v/s Ratio Prot		c0.09		c0.06	0.08							
v/s Ratio Perm	0.04							c0.11			0.05	
v/c Ratio	0.13	0.28		0.69	0.18			0.29			0.14	
Uniform Delay, d1	16.2	17.1		28.6	10.8			13.9			13.0	
Progression Factor	0.60	0.59		1.36	0.92			0.62			0.80	
Incremental Delay, d2	0.9	0.8		22.3	0.3			0.6			0.3	
Delay (s)	10.7	10.8		61.2	10.3			9.3			10.6	
Level of Service	B	B		E	B			A			B	
Approach Delay (s)		10.8			24.2			9.3			10.6	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM Average Control Delay	14.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	247	14	65	306	65	24	88	152	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.91				
Flt Protected		1.00			0.99			1.00				
Satd. Flow (prot)		1585			1556			3161				
Flt Permitted		0.98			0.92			1.00				
Satd. Flow (perm)		1551			1437			3161				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	15	266	15	70	329	70	26	95	163	0	0	0
RTOR Reduction (vph)	0	2	0	0	8	0	0	127	0	0	0	0
Lane Group Flow (vph)	0	294	0	0	461	0	0	157	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		42.8			42.8			14.2				
Effective Green, g (s)		42.8			42.8			14.2				
Actuated g/C Ratio		0.66			0.66			0.22				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		1021			946			691				
v/s Ratio Prot												
v/s Ratio Perm		0.19			c0.32			0.05				
v/c Ratio		0.29			0.49			0.23				
Uniform Delay, d1		4.7			5.6			20.9				
Progression Factor		2.04			1.00			1.00				
Incremental Delay, d2		0.7			1.8			0.7				
Delay (s)		10.2			7.4			21.6				
Level of Service		B			A			C				
Approach Delay (s)		10.2			7.4			21.6			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	76	323	370	42	58	66
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	86	367	420	48	66	75
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.87				0.87	0.87
vC, conflicting volume	489				1010	468
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	338				937	314
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	91				71	88
cM capacity (veh/h)	1001				229	620

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	453	468	66	75
Volume Left	86	0	66	0
Volume Right	0	48	0	75
cSH	1001	1700	229	620
Volume to Capacity	0.09	0.28	0.29	0.12
Queue Length 95th (ft)	7	0	29	10
Control Delay (s)	2.5	0.0	27.0	11.6
Lane LOS	A		D	B
Approach Delay (s)	2.5	0.0	18.8	
Approach LOS			C	

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	426	1	24	582	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1667		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	458	1	26	626	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	459	0	0	652	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			608		
v/s Ratio Prot	c0.27					
v/s Ratio Perm				c0.39		
v/c Ratio	0.39			1.07		
Uniform Delay, d1	5.4			27.0		
Progression Factor	0.02			1.00		
Incremental Delay, d2	0.4			57.4		
Delay (s)	0.5			84.4		
Level of Service	A			F		
Approach Delay (s)	0.5			84.4	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	49.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
1056: 115th Street & Bishop Ford Fwy

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	176	182	23	507	0	0	0	0	3	0	196
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	187	194	24	539	0	0	0	0	3	0	209
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	539			187			872	872	190	682	776	539
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	539			187			872	872	190	682	776	539
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	99	100	57
cM capacity (veh/h)	1039			1005			138	284	825	334	323	481

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	125	256	564	3	209
Volume Left	0	0	24	3	0
Volume Right	0	194	0	0	209
cSH	1700	1700	1005	334	481
Volume to Capacity	0.07	0.15	0.02	0.01	0.43
Queue Length 95th (ft)	0	0	2	1	54
Control Delay (s)	0.0	0.0	0.7	15.9	18.1
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.7	18.0	
Approach LOS				C	

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	179	0	530	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	192	0	570	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	96	96	570
Volume Left (vph)	96	96	570
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.6	6.6	4.8
Degree Utilization, x	0.18	0.18	0.76
Capacity (veh/h)	513	513	737
Control Delay (s)	9.8	9.8	21.1
Approach Delay (s)	9.8		21.1
Approach LOS	A		C

Intersection Summary			
Delay	18.2		
HCM Level of Service	C		
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	420	195	145	427	0	0	0	0	117	107	273
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3693	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3693	1122
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	447	207	154	454	0	0	0	0	124	114	290
RTOR Reduction (vph)	0	0	153	0	0	0	0	0	0	0	99	87
Lane Group Flow (vph)	0	447	54	0	608	0	0	0	0	68	216	58
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.7	39.7		73.7					18.8	18.8	64.5
Effective Green, g (s)		39.7	39.7		73.7					18.8	18.8	64.5
Actuated g/C Ratio		0.25	0.25		0.46					0.12	0.12	0.40
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		739	298		1553					158	434	452
v/s Ratio Prot		c0.15			c0.18					0.05	c0.06	
v/s Ratio Perm			0.04									0.05
v/c Ratio		0.60	0.18		0.39					0.43	0.50	0.13
Uniform Delay, d1		53.2	47.3		28.4					65.6	66.2	30.1
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		3.7	1.3		0.1					1.9	0.9	0.1
Delay (s)		56.9	48.7		0.6					67.5	67.1	30.2
Level of Service		E	D		A					E	E	C
Approach Delay (s)		54.3			0.6			0.0			57.0	
Approach LOS		D			A			A			E	

Intersection Summary			
HCM Average Control Delay	36.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.8
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	204	333	0	0	380	91	192	122	110	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	3008				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	3008				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	219	358	0	0	409	98	206	131	118	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	79	0	52	0	0	0	0
Lane Group Flow (vph)	219	358	0	0	409	19	154	249	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	78.3	78.3			30.8	30.8	24.1	24.1				
Effective Green, g (s)	78.3	78.3			30.8	30.8	24.1	24.1				
Actuated g/C Ratio	0.49	0.49			0.19	0.19	0.15	0.15				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	770	1647			606	280	231	453				
v/s Ratio Prot	c0.14	0.11			c0.13		c0.10	0.08				
v/s Ratio Perm						0.01						
v/c Ratio	0.28	0.22			0.67	0.07	0.67	0.55				
Uniform Delay, d1	24.2	23.3			60.0	52.8	64.2	62.9				
Progression Factor	0.04	0.04			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			3.0	0.1	7.1	1.4				
Delay (s)	1.1	1.0			62.9	53.0	71.2	64.4				
Level of Service	A	A			E	D	E	E				
Approach Delay (s)		1.1			61.0			66.7			0.0	
Approach LOS		A			E			E			A	

Intersection Summary			
HCM Average Control Delay	40.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.8
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	192	238	66	34	136	44	78	730	55	46	348	81
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1535	1556	1328	1594	1718		1520	2990		1508	2869	
Flt Permitted	0.54	1.00	1.00	0.56	1.00		0.42	1.00		0.23	1.00	
Satd. Flow (perm)	866	1556	1328	939	1718		669	2990		369	2869	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	196	243	67	35	139	45	80	745	56	47	355	83
RTOR Reduction (vph)	0	0	44	0	12	0	0	6	0	0	22	0
Lane Group Flow (vph)	196	243	23	35	172	0	80	795	0	47	416	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		41.5	36.0		38.7	34.6	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		39.5	36.0		36.7	34.6	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.44	0.40		0.41	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	391	554	458	338	538		335	1191		189	1098	
v/s Ratio Prot	c0.03	0.16		0.00	0.10		c0.01	c0.27		0.01	0.14	
v/s Ratio Perm	c0.17		0.02	0.03			0.09			0.09		
v/c Ratio	0.50	0.44	0.05	0.10	0.32		0.24	0.67		0.25	0.38	
Uniform Delay, d1	19.8	22.2	19.7	20.4	23.7		15.3	22.3		17.2	20.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	2.5	0.2	0.1	1.6		0.4	3.0		0.7	1.0	
Delay (s)	20.8	24.7	19.9	20.5	25.3		15.7	25.3		17.9	21.1	
Level of Service	C	C	B	C	C		B	C		B	C	
Approach Delay (s)		22.6			24.5			24.4			20.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	243	15	5	182	19	33	75	15	10	37	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.94	
Flt Protected		0.99	1.00		1.00	1.00		0.99			0.99	
Satd. Flow (prot)		1910	1482		1600	1198		1913			1848	
Flt Permitted		0.94	1.00		0.99	1.00		0.93			0.97	
Satd. Flow (perm)		1815	1482		1592	1198		1800			1812	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	44	267	16	5	200	21	36	82	16	11	41	36
RTOR Reduction (vph)	0	0	8	0	0	11	0	8	0	0	21	0
Lane Group Flow (vph)	0	311	8	0	205	10	0	126	0	0	67	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		894	730		784	590		748			753	
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.13	0.01		c0.07			0.04	
v/c Ratio		0.35	0.01		0.26	0.02		0.17			0.09	
Uniform Delay, d1		10.1	8.4		9.6	8.4		11.9			11.5	
Progression Factor		1.00	1.00		2.02	2.98		1.00			1.51	
Incremental Delay, d2		1.1	0.0		0.8	0.1		0.5			0.2	
Delay (s)		11.2	8.4		20.2	25.3		12.4			17.7	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		11.0			20.7			12.4			17.7	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	160	19	6	133	6	32	176	17	8	45	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1663	1392		1604	1497		1754	1390		1652	
Flt Permitted		0.89	1.00		0.99	1.00		0.96	1.00		0.97	
Satd. Flow (perm)		1496	1392		1588	1497		1690	1390		1618	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	60	167	20	6	139	6	33	183	18	8	47	27
RTOR Reduction (vph)	0	0	13	0	0	4	0	0	9	0	14	0
Lane Group Flow (vph)	0	227	7	0	145	2	0	216	9	0	68	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		529	493		562	530		832	684		797	
v/s Ratio Prot												
v/s Ratio Perm		c0.15	0.01		0.09	0.00		c0.13	0.01		0.04	
v/c Ratio		0.43	0.01		0.26	0.00		0.26	0.01		0.09	
Uniform Delay, d1		16.0	13.6		14.9	13.6		9.6	8.4		8.7	
Progression Factor		1.98	3.07		0.92	0.91		0.39	0.40		0.99	
Incremental Delay, d2		2.4	0.1		1.1	0.0		0.7	0.0		0.2	
Delay (s)		34.1	42.0		14.8	12.4		4.4	3.4		8.8	
Level of Service		C	D		B	B		A	A		A	
Approach Delay (s)		34.8			14.7			4.3			8.8	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	18	27	9	17	6	26	286	19	5	168	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.99			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.98			0.99			1.00	0.85
Flt Protected		0.96	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1770	1390		1815			1974			1873	1328
Flt Permitted		0.76	1.00		0.94			0.97			0.99	1.00
Satd. Flow (perm)		1413	1390		1726			1931			1862	1328
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	145	19	28	9	18	6	27	301	20	5	177	86
RTOR Reduction (vph)	0	0	16	0	4	0	0	4	0	0	0	44
Lane Group Flow (vph)	0	164	12	0	29	0	0	344	0	0	182	42
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		631	577		451			951			917	654
v/s Ratio Prot		c0.03										
v/s Ratio Perm		0.08	0.01		0.02			c0.18			0.10	0.03
v/c Ratio		0.26	0.02		0.06			0.36			0.20	0.06
Uniform Delay, d1		12.5	11.2		18.0			10.2			9.3	8.7
Progression Factor		0.48	0.67		1.00			0.55			0.46	0.33
Incremental Delay, d2		0.9	0.1		0.3			1.0			0.5	0.2
Delay (s)		6.9	7.6		18.3			6.7			4.8	3.0
Level of Service		A	A		B			A			A	A
Approach Delay (s)		7.0			18.3			6.7			4.2	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	765	212	236	1004	0	0	0	0	270	196	366
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4303		1589	3226					1419	2712	1355
Flt Permitted		1.00		0.22	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4303		366	3226					1419	2712	1355
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	781	216	241	1024	0	0	0	0	276	200	373
RTOR Reduction (vph)	0	38	0	0	0	0	0	0	0	0	87	90
Lane Group Flow (vph)	0	959	0	241	1024	0	0	0	0	221	343	108
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		53.0		70.3	70.3					22.7	22.7	22.7
Effective Green, g (s)		53.0		70.3	70.3					22.7	22.7	22.7
Actuated g/C Ratio		0.50		0.67	0.67					0.22	0.22	0.22
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		2172		394	2160					307	586	293
v/s Ratio Prot		0.22		c0.07	0.32							
v/s Ratio Perm				c0.33						c0.16	0.13	0.08
v/c Ratio		0.44		0.61	0.47					0.72	0.59	0.37
Uniform Delay, d1		16.6		8.1	8.4					38.2	36.9	35.0
Progression Factor		1.00		1.62	1.58					1.00	1.00	1.00
Incremental Delay, d2		0.7		2.1	0.5					8.1	1.6	0.9
Delay (s)		17.2		15.3	13.8					46.3	38.5	36.0
Level of Service		B		B	B					D	D	D
Approach Delay (s)		17.2			14.1			0.0			40.0	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM Average Control Delay	22.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	301	734	0	0	815	234	425	281	297	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.99		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1450		4421				
Flt Permitted	0.21	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	633	3138			3119	1450		4421				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	317	773	0	0	858	246	447	296	313	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	107	0	72	0	0	0	0
Lane Group Flow (vph)	317	773	0	0	858	139	0	984	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	63.5	63.5			46.4	46.4		29.5				
Effective Green, g (s)	63.5	63.5			46.4	46.4		29.5				
Actuated g/C Ratio	0.60	0.60			0.44	0.44		0.28				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	624	1898			1378	641		1242				
v/s Ratio Prot	c0.05	0.25			c0.28							
v/s Ratio Perm	0.25					0.10		0.22				
v/c Ratio	0.51	0.41			0.62	0.22		0.79				
Uniform Delay, d1	11.9	10.9			22.6	18.1		34.9				
Progression Factor	0.93	1.03			0.90	1.16		1.00				
Incremental Delay, d2	0.7	0.6			1.6	0.6		4.1				
Delay (s)	11.7	11.8			21.9	21.6		39.0				
Level of Service	B	B			C	C		D				
Approach Delay (s)		11.8			21.8			39.0			0.0	
Approach LOS		B			C			D			A	

Intersection Summary			
HCM Average Control Delay	24.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1066: 127th Street & S Ashland

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	405	204	71	683	38	226	178	40	37	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1292	1601	3232		1446	3007		1544	2782	
Flt Permitted	0.17	1.00	1.00	0.50	1.00		0.52	1.00		0.61	1.00	
Satd. Flow (perm)	284	3061	1292	844	3232		787	3007		987	2782	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	101	431	217	76	727	40	240	189	43	39	118	97
RTOR Reduction (vph)	0	0	90	0	4	0	0	21	0	0	80	0
Lane Group Flow (vph)	101	431	127	76	763	0	240	211	0	39	135	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	61.7	51.9	61.6	38.4	32.1		31.3	22.8		23.1	18.1	
Effective Green, g (s)	61.7	51.9	61.6	38.4	32.1		31.3	22.8		23.1	18.1	
Actuated g/C Ratio	0.59	0.49	0.59	0.37	0.31		0.30	0.22		0.22	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	485	1513	758	354	988		295	653		244	480	
v/s Ratio Prot	c0.05	c0.14	0.02	0.01	c0.24		c0.08	0.07		0.01	0.05	
v/s Ratio Perm	0.07		0.08	0.07			c0.17			0.03		
v/c Ratio	0.21	0.28	0.17	0.21	0.77		0.81	0.32		0.16	0.28	
Uniform Delay, d1	11.5	15.6	9.9	22.2	33.1		32.6	34.6		32.8	37.8	
Progression Factor	0.84	0.95	2.07	1.00	1.00		0.90	0.84		1.00	1.00	
Incremental Delay, d2	0.8	0.4	0.1	0.3	5.8		15.1	1.0		0.3	1.1	
Delay (s)	10.5	15.3	20.7	22.5	39.0		44.5	30.0		33.1	38.9	
Level of Service	B	B	C	C	D		D	C		C	D	
Approach Delay (s)		16.2			37.5			37.4			38.0	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM Average Control Delay	30.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	106	229	47	139	85	323	375	62	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.94		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1632	2807		1463	3016		1589	3257		1549	3136	
Flt Permitted	0.60	1.00		0.47	1.00		0.45	1.00		0.48	1.00	
Satd. Flow (perm)	1029	2807		728	3016		750	3257		779	3136	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	55	116	252	52	153	93	355	412	68	100	284	59
RTOR Reduction (vph)	0	183	0	0	67	0	0	13	0	0	16	0
Lane Group Flow (vph)	55	185	0	52	179	0	355	467	0	100	327	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.7	28.9		35.9	29.0		53.2	41.9		38.3	31.0	
Effective Green, g (s)	35.7	28.9		35.9	29.0		53.2	41.9		38.3	31.0	
Actuated g/C Ratio	0.34	0.28		0.34	0.28		0.51	0.40		0.36	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	389	773		297	833		525	1300		338	926	
v/s Ratio Prot	0.01	c0.07		c0.01	0.06		c0.12	0.14		0.02	0.10	
v/s Ratio Perm	0.04			0.05			c0.23			0.09		
v/c Ratio	0.14	0.24		0.18	0.21		0.68	0.36		0.30	0.35	
Uniform Delay, d1	23.7	29.5		23.6	29.2		16.8	22.1		22.6	29.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.01	0.90	
Incremental Delay, d2	0.2	0.7		0.3	0.6		3.6	0.8		0.6	1.0	
Delay (s)	23.9	30.3		24.0	29.8		20.3	22.9		23.5	27.2	
Level of Service	C	C		C	C		C	C		C	C	
Approach Delay (s)		29.4			28.8			21.8			26.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	25.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	151	359	73	6	372	100	56	490	6	65	251	81
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2889			2888		1435	3187		1450	2789	
Flt Permitted		0.61			0.95		0.51	1.00		0.37	1.00	
Satd. Flow (perm)		1772			2739		776	3187		569	2789	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	162	386	78	6	400	108	60	527	6	70	270	87
RTOR Reduction (vph)	0	17	0	0	37	0	0	1	0	0	48	0
Lane Group Flow (vph)	0	609	0	0	477	0	60	532	0	70	309	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		805			801		351	1079		282	944	
v/s Ratio Prot		c0.05					0.01	c0.17		c0.02	0.11	
v/s Ratio Perm		c0.27			0.17		0.06			0.08		
v/c Ratio		0.76			0.60		0.17	0.49		0.25	0.33	
Uniform Delay, d1		16.2			19.7		12.2	17.1		12.4	16.0	
Progression Factor		1.00			1.62		0.80	0.67		1.00	1.00	
Incremental Delay, d2		6.6			1.9		1.0	1.5		2.1	0.9	
Delay (s)		22.8			33.8		10.8	12.9		14.5	16.9	
Level of Service		C			C		B	B		B	B	
Approach Delay (s)		22.8			33.8			12.7			16.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	21.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	90	37	59	111	11	31	529	65	8	291	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1665	1856		1611	1938		1658	3211		1137	3196	
Flt Permitted	0.67	1.00		0.67	1.00		0.54	1.00		0.37	1.00	
Satd. Flow (perm)	1178	1856		1134	1938		942	3211		441	3196	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	98	40	64	121	12	34	575	71	9	316	38
RTOR Reduction (vph)	0	23	0	0	6	0	0	15	0	0	14	0
Lane Group Flow (vph)	43	115	0	64	127	0	34	631	0	9	340	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	435	685		419	716		449	1531		210	1524	
v/s Ratio Prot		0.06			c0.07			c0.20			0.11	
v/s Ratio Perm	0.04			0.06			0.04			0.02		
v/c Ratio	0.10	0.17		0.15	0.18		0.08	0.41		0.04	0.22	
Uniform Delay, d1	13.4	13.8		13.7	13.8		9.2	11.1		9.1	10.0	
Progression Factor	1.00	1.00		1.77	1.85		1.00	1.00		0.59	0.61	
Incremental Delay, d2	0.5	0.5		0.6	0.4		0.3	0.8		0.4	0.3	
Delay (s)	13.9	14.3		24.8	25.9		9.6	11.9		5.7	6.4	
Level of Service	B	B		C	C		A	B		A	A	
Approach Delay (s)		14.2			25.6			11.8			6.4	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	403	146	505	13	3	12	3	41	9	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			0.99		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.90			0.95		
Flt Protected	1.00		0.99				0.99			0.97		
Satd. Flow (prot)	2956		2958				1732			1859		
Flt Permitted	1.00		0.67				0.95			0.88		
Satd. Flow (perm)	2956		1999				1657			1681		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	448	162	561	14	3	13	3	46	10	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	36	0	0	3	0	0
Lane Group Flow (vph)	448	0	735	0	0	0	29	0	0	13	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom			Perm	Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7			2	2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		919				357			362		
v/s Ratio Prot	0.15		c0.07									
v/s Ratio Perm			c0.26				c0.02			0.01		
v/c Ratio	0.55		0.80				0.08			0.04		
Uniform Delay, d1	20.0		16.6				20.4			20.2		
Progression Factor	1.32		0.84				1.00			1.00		
Incremental Delay, d2	1.9		7.0				0.4			0.2		
Delay (s)	28.4		21.0				20.8			20.3		
Level of Service	C		C				C			C		
Approach Delay (s)	28.4		21.0				20.8			20.3		
Approach LOS	C		C				C			C		

Intersection Summary			
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	173
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1430	
Flt Permitted	1.00	
Satd. Flow (perm)	1430	
Peak-hour factor, PHF	0.90	0.90
Adj. Flow (vph)	1	192
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	193	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.13	
v/s Ratio Perm		
v/c Ratio	0.88	
Uniform Delay, d1	26.9	
Progression Factor	1.11	
Incremental Delay, d2	35.1	
Delay (s)	64.8	
Level of Service	E	
Approach Delay (s)	64.8	
Approach LOS	E	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	157	469	508	57	41	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3217	3208		1629	1457
Flt Permitted		0.69	1.00		0.95	1.00
Satd. Flow (perm)		2253	3208		1629	1457
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	169	504	546	61	44	168
RTOR Reduction (vph)	0	0	13	0	0	124
Lane Group Flow (vph)	0	673	594	0	44	44
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1386	1974		426	381
v/s Ratio Prot			0.19		0.03	
v/s Ratio Perm		c0.30				c0.03
v/c Ratio		0.49	0.30		0.10	0.12
Uniform Delay, d1		6.9	5.9		18.2	18.3
Progression Factor		1.21	1.38		0.92	0.78
Incremental Delay, d2		1.0	0.4		0.5	0.6
Delay (s)		9.3	8.5		17.2	14.9
Level of Service		A	A		B	B
Approach Delay (s)		9.3	8.5		15.4	
Approach LOS		A	A		B	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	46	464	516	169	118	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2927	2905		1464	1373
Flt Permitted		0.85	1.00		0.95	1.00
Satd. Flow (perm)		2501	2905		1464	1373
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	504	561	184	128	53
RTOR Reduction (vph)	0	0	49	0	0	38
Lane Group Flow (vph)	0	554	696	0	128	15
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1462	1698		428	401
v/s Ratio Prot			c0.24		c0.09	
v/s Ratio Perm		0.22				0.01
v/c Ratio		0.38	0.41		0.30	0.04
Uniform Delay, d1		7.2	7.4		17.8	16.5
Progression Factor		0.21	0.54		0.87	0.99
Incremental Delay, d2		0.7	0.6		1.8	0.2
Delay (s)		2.2	4.6		17.2	16.5
Level of Service		A	A		B	B
Approach Delay (s)		2.2	4.6		17.0	
Approach LOS		A	A		B	

Intersection Summary			
HCM Average Control Delay	5.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	420	127	92	472	326	64
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.98	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2214		1768	2436	1817	
Flt Permitted	1.00		0.27	1.00	0.96	
Satd. Flow (perm)	2214		496	2436	1817	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	462	140	101	519	358	70
RTOR Reduction (vph)	17	0	0	0	11	0
Lane Group Flow (vph)	585	0	101	519	417	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1056		237	1162	671	
v/s Ratio Prot	c0.26			0.21	c0.23	
v/s Ratio Perm			0.20			
v/c Ratio	0.55		0.43	0.45	0.62	
Uniform Delay, d1	12.1		11.2	11.3	16.8	
Progression Factor	1.20		1.00	1.00	1.00	
Incremental Delay, d2	2.0		5.5	1.2	4.3	
Delay (s)	16.5		16.7	12.5	21.1	
Level of Service	B		B	B	C	
Approach Delay (s)	16.5			13.2	21.1	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
1074: 130th Street & Ellis Ave

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	454	69	227	552	8	56	0	144	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.44	1.00	1.00	0.45	1.00	1.00		0.76	1.00		0.72	
Satd. Flow (perm)	863	3213	1422	748	3138	1366		1309	1443		734	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	473	72	236	575	8	58	0	150	1	0	0
RTOR Reduction (vph)	0	0	26	0	0	2	0	0	134	0	0	0
Lane Group Flow (vph)	1	473	46	236	575	6	0	58	16	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	53.9	53.9	53.9	67.7	67.7	67.7		9.3	9.3		9.3	
Effective Green, g (s)	53.9	53.9	53.9	67.7	67.7	67.7		9.3	9.3		9.3	
Actuated g/C Ratio	0.63	0.63	0.63	0.80	0.80	0.80		0.11	0.11		0.11	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	547	2037	902	703	2499	1088		143	158		80	
v/s Ratio Prot		0.15		c0.04	0.18							
v/s Ratio Perm	0.00		0.03	c0.22		0.00		c0.04	0.01		0.00	
v/c Ratio	0.00	0.23	0.05	0.34	0.23	0.01		0.41	0.10		0.01	
Uniform Delay, d1	5.7	6.7	5.9	2.2	2.2	1.8		35.3	34.1		33.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.3	0.1	0.3	0.0	0.0		1.9	0.3		0.1	
Delay (s)	5.7	6.9	6.0	2.5	2.2	1.8		37.2	34.4		33.8	
Level of Service	A	A	A	A	A	A		D	C		C	
Approach Delay (s)		6.8			2.3			35.2			33.8	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM Average Control Delay	8.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	10	626	645	35	21	8
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3016		1486	
Flt Permitted		0.94	1.00		0.97	
Satd. Flow (perm)		2858	3016		1486	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	673	694	38	23	9
RTOR Reduction (vph)	0	0	4	0	8	0
Lane Group Flow (vph)	0	684	728	0	24	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1048	2145		116	
v/s Ratio Prot			c0.24		c0.02	
v/s Ratio Perm		c0.24				
v/c Ratio		0.65	0.34		0.20	
Uniform Delay, d1		23.7	4.9		38.9	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		3.2	0.3		3.9	
Delay (s)		26.9	0.3		42.8	
Level of Service		C	A		D	
Approach Delay (s)		26.9	0.3		42.8	
Approach LOS		C	A		D	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	388	1	24	487	71	0	0	1	38	3	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.96	1.00
Satd. Flow (prot)		1729			3229			1432			1611	1282
Flt Permitted		0.82			0.94			1.00			0.96	1.00
Satd. Flow (perm)		1435			3030			1432			1619	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	77	431	1	27	541	79	0	0	1	42	3	72
RTOR Reduction (vph)	0	0	0	0	13	0	0	1	0	0	0	48
Lane Group Flow (vph)	0	509	0	0	634	0	0	0	0	0	45	24
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		523			1637			152			475	422
v/s Ratio Prot					c0.06			0.00			c0.02	
v/s Ratio Perm		c0.35			0.14						c0.01	0.02
v/c Ratio		0.97			0.39			0.00			0.09	0.06
Uniform Delay, d1		26.6			11.8			34.0			21.8	19.5
Progression Factor		1.00			1.38			1.00			1.00	1.00
Incremental Delay, d2		33.3			0.1			0.0			0.4	0.3
Delay (s)		59.9			16.4			34.0			22.2	19.7
Level of Service		E			B			C			C	B
Approach Delay (s)		59.9			16.4			34.0			20.7	
Approach LOS		E			B			C			C	

Intersection Summary			
HCM Average Control Delay	34.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	27	33	939	54	34	17	48	23	22	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.93			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1551	3022		1587	3021			1787			1701	
Flt Permitted	0.20	1.00		0.37	1.00			0.89			0.95	
Satd. Flow (perm)	327	3022		610	3021			1614			1628	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	41	623	28	34	978	56	35	18	50	24	23	89
RTOR Reduction (vph)	0	5	0	0	6	0	0	32	0	0	27	0
Lane Group Flow (vph)	41	646	0	34	1028	0	0	71	0	0	109	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	171	1581		319	1580			571			576	
v/s Ratio Prot		0.21			c0.34							
v/s Ratio Perm	0.13			0.06				0.04			c0.07	
v/c Ratio	0.24	0.41		0.11	0.65			0.12			0.19	
Uniform Delay, d1	8.5	9.4		7.8	11.2			14.2			14.5	
Progression Factor	1.00	1.00		0.72	1.29			1.00			1.00	
Incremental Delay, d2	3.3	0.8		0.6	1.9			0.4			0.7	
Delay (s)	11.7	10.2		6.3	16.3			14.6			15.3	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.3			16.0			14.6			15.3	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	778	5	28	555	35	0	0	0	551	85	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	780	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	350	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	27	837	5	30	597	38	0	0	0	592	91	388
RTOR Reduction (vph)	0	0	0	0	0	17	0	0	0	0	0	172
Lane Group Flow (vph)	27	842	0	30	597	21	0	0	0	592	91	216
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	162	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.19					c0.18	0.05	
v/s Ratio Perm	0.04			0.01		0.04						0.15
v/c Ratio	0.17	0.75		0.05	0.33	0.07				0.78	0.23	0.63
Uniform Delay, d1	31.5	38.8		15.2	15.3	13.0				46.9	40.6	45.0
Progression Factor	0.84	0.86		0.37	0.77	1.35				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.6		0.1	0.4	0.4				7.8	1.3	8.6
Delay (s)	28.6	37.8		5.8	12.2	17.9				54.8	41.9	53.7
Level of Service	C	D		A	B	B				D	D	D
Approach Delay (s)		37.5			12.2			0.0			53.3	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	329	787	213	49	499	257	91	233	51	37	0	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3262		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3262		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	350	837	227	52	531	273	97	248	54	39	0	30
RTOR Reduction (vph)	0	18	0	0	0	206	0	0	42	0	0	28
Lane Group Flow (vph)	350	1046	0	52	531	67	0	345	12	39	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1706		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.32		0.03	c0.17			c0.10		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.31	0.61		0.50	0.69	0.27		0.49	0.04	0.74		0.04
Uniform Delay, d1	31.8	21.8		59.0	44.5	39.5		44.7	40.4	60.0		57.4
Progression Factor	0.92	0.16		1.00	1.00	1.00		0.95	1.01	1.00		1.00
Incremental Delay, d2	0.5	1.0		15.7	5.0	2.6		2.4	0.3	41.0		0.4
Delay (s)	29.8	4.6		74.8	49.4	42.1		44.6	41.2	100.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		10.8			48.6			44.2			82.2	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	29.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	859	160	90	724	0	74	0	79	9	14	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1648	3149		1387		1451	1803	1857	
Flt Permitted		1.00		0.21	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		358	3149		1085		1451	1803	1857	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	895	167	94	754	0	77	0	82	9	15	7
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	56	0	5	0
Lane Group Flow (vph)	0	1047	0	94	754	0	77	0	26	9	17	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		215	1889		347		464	577	594	
v/s Ratio Prot		c0.35			0.24						0.01	
v/s Ratio Perm				0.26			c0.07		0.02	0.00		
v/c Ratio		0.58		0.44	0.40		0.22		0.06	0.02	0.03	
Uniform Delay, d1		12.3		10.8	10.5		24.9		23.5	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.4		6.3	0.6		1.5		0.2	0.0	0.1	
Delay (s)		13.7		17.2	11.2		26.4		23.8	23.3	23.4	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		13.7			11.8			25.0			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	254	0	1043	203	645	0	0	785	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4269	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4269	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	262	0	1075	209	665	0	0	809	505
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	262	0	1075	209	665	0	0	1314	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1260	
v/s Ratio Prot				0.17		c0.70	c0.14	0.15			c0.31	
v/s Ratio Perm												
v/c Ratio				0.58		2.46	0.45	0.24			1.17dr	
Uniform Delay, d1				31.4		37.5	29.4	8.6			37.0	
Progression Factor				1.00		1.00	0.62	2.01			1.00	
Incremental Delay, d2				5.2		663.8	2.6	0.2			37.3	
Delay (s)				36.6		701.3	20.8	17.4			74.3	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			571.1			18.2			74.3	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	248.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	331	770	144	0	0	0	0	517	375	343	696	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3156						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3156						4368	2244	1598	4680	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	348	811	152	0	0	0	0	544	395	361	733	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	313	985	0	0	0	0	0	544	395	361	733	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.12		c0.23	0.16	
v/s Ratio Perm	0.21	0.31							c0.18			
v/c Ratio	0.64	0.96						0.47	0.66	0.76	0.27	
Uniform Delay, d1	30.3	34.9						32.2	34.3	33.7	10.4	
Progression Factor	1.00	1.00						1.14	1.14	0.84	0.16	
Incremental Delay, d2	6.3	20.7						1.2	5.2	4.7	0.1	
Delay (s)	36.6	55.6						38.0	44.4	33.1	1.8	
Level of Service	D	E						D	D	C	A	
Approach Delay (s)		51.1			0.0			40.7			12.1	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	35.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	274	24	23	9	114	0	0	137	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3133		1710	1846			1955	
Flt Permitted				0.95	1.00		0.56	1.00			1.00	
Satd. Flow (perm)				1688	3133		1011	1846			1955	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	288	25	24	9	120	0	0	144	5
RTOR Reduction (vph)	0	0	0	0	16	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	288	33	0	9	120	0	0	148	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		652	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.07			c0.08	
v/s Ratio Perm				c0.17			0.01					
v/c Ratio				0.54	0.03		0.01	0.11			0.14	
Uniform Delay, d1				23.9	20.0		10.2	7.7			9.7	
Progression Factor				1.00	1.00		1.07	1.16			1.00	
Incremental Delay, d2				3.8	0.1		0.0	0.2			0.3	
Delay (s)				27.7	20.1		10.9	9.1			10.0	
Level of Service				C	C		B	A			A	
Approach Delay (s)		0.0			26.6			9.3			10.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	18.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	1.0
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	22	3	0	14	0	97	26	44	367	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.89			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1739			1550			1723		1589	1860	
Flt Permitted	0.75	1.00			0.98			1.00		0.65	1.00	
Satd. Flow (perm)	1517	1739			1533			1723		1094	1860	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	14	13	25	3	0	16	0	111	30	51	422	0
RTOR Reduction (vph)	0	17	0	0	11	0	0	12	0	0	0	0
Lane Group Flow (vph)	14	21	0	0	8	0	0	129	0	51	422	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	552			487			811		684	1094	
v/s Ratio Prot		c0.01						0.08		0.01	c0.23	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.16		0.07	0.39	
Uniform Delay, d1	20.0	20.0			19.9			12.9		7.9	9.3	
Progression Factor	1.00	1.00			1.00			1.00		0.97	0.86	
Incremental Delay, d2	0.1	0.1			0.1			0.4		0.2	1.0	
Delay (s)	20.1	20.2			20.0			13.3		7.9	9.0	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			13.3			8.9	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	37	32	8	149	222	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1753		1765	1782	1656	
Flt Permitted	0.97		0.55	1.00	1.00	
Satd. Flow (perm)	1753		1017	1782	1656	
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	46	40	10	184	274	27
RTOR Reduction (vph)	27	0	0	0	5	0
Lane Group Flow (vph)	59	0	10	184	296	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		563	987	917	
v/s Ratio Prot	c0.03			0.10	c0.18	
v/s Ratio Perm			0.01			
v/c Ratio	0.10		0.02	0.19	0.32	
Uniform Delay, d1	15.4		6.5	7.2	7.9	
Progression Factor	1.00		0.46	0.58	1.46	
Incremental Delay, d2	0.4		0.1	0.4	0.8	
Delay (s)	15.8		3.0	4.6	12.3	
Level of Service	B		A	A	B	
Approach Delay (s)	15.8			4.5	12.3	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	24.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	29	256	9	253	120	0	0	256	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3772		1693	1678			1738	1428
Flt Permitted					1.00		0.52	1.00			1.00	1.00
Satd. Flow (perm)					3772		922	1678			1738	1428
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	31	269	9	266	126	0	0	269	17
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	9
Lane Group Flow (vph)	0	0	0	0	306	0	266	126	0	0	269	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		644	1007			777	638
v/s Ratio Prot					c0.08		c0.05	0.08			0.15	
v/s Ratio Perm							c0.20					0.01
v/c Ratio					0.27		0.41	0.13			0.35	0.01
Uniform Delay, d1					22.3		12.1	7.4			15.4	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.0	0.3			1.2	0.0
Delay (s)					22.8		14.1	7.6			16.6	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			22.8			12.0			16.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	95	94	38	133	203	30	59	702	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3286		1707	3467	
Flt Permitted					0.98		0.23	1.00		0.58	1.00	
Satd. Flow (perm)					1896		408	3286		1048	3467	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	0	0	112	111	45	156	239	35	69	826	52
RTOR Reduction (vph)	0	0	0	0	10	0	0	15	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	258	0	156	259	0	69	872	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		345	1490		634	1572	
v/s Ratio Prot					c0.14		c0.04	0.08		0.01	c0.25	
v/s Ratio Perm							0.21			0.05		
v/c Ratio					0.44		0.45	0.17		0.11	0.55	
Uniform Delay, d1					20.9		17.8	12.2		8.2	15.0	
Progression Factor					1.00		0.81	0.81		1.00	1.00	
Incremental Delay, d2					2.5		4.2	0.3		0.3	1.4	
Delay (s)					23.3		18.6	10.1		8.6	16.4	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			23.3			13.2			15.8	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	12	8	63	63	5	271	20	159	588	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1966			1654		1596	3177		1704	3232	
Flt Permitted		0.88			0.99		0.33	1.00		0.55	1.00	
Satd. Flow (perm)		1761			1638		552	3177		987	3232	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	37	56	14	9	72	72	6	311	23	183	676	57
RTOR Reduction (vph)	0	7	0	0	43	0	0	7	0	0	8	0
Lane Group Flow (vph)	0	100	0	0	110	0	6	327	0	183	725	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		587			546		309	1779		553	1810	
v/s Ratio Prot								0.10			c0.22	
v/s Ratio Perm		0.06			c0.07		0.01			0.19		
v/c Ratio		0.17			0.20		0.02	0.18		0.33	0.40	
Uniform Delay, d1		17.7			17.9		7.3	8.1		8.9	9.4	
Progression Factor		1.00			1.00		1.00	1.00		0.26	0.25	
Incremental Delay, d2		0.6			0.8		0.1	0.2		1.4	0.6	
Delay (s)		18.3			18.7		7.5	8.3		3.7	2.9	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.3			18.7			8.3			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	29	148	52	192	452	63
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	31	159	56	206	486	68

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	190	125	138	324	230
Volume Left (vph)	31	56	0	0	0
Volume Right (vph)	159	0	0	0	68
Hadj (s)	-0.42	0.28	0.05	0.05	-0.16
Departure Headway (s)	5.2	5.9	5.7	5.4	5.2
Degree Utilization, x	0.28	0.21	0.22	0.49	0.33
Capacity (veh/h)	637	580	602	647	672
Control Delay (s)	10.2	9.3	9.1	12.2	9.5
Approach Delay (s)	10.2	9.2		11.1	
Approach LOS	B	A		B	

Intersection Summary			
Delay	10.4		
HCM Level of Service	B		
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	371	18	18	367	63	71	53	66	341	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1611	1731	1530	1710	1731	1421			1710	3252	
Flt Permitted		0.14	1.00	1.00	0.51	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	925	1731	1421			257	3252	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	37	40	426	21	21	422	72	82	61	76	392	34
RTOR Reduction (vph)	0	0	0	12	0	0	39	0	0	0	6	0
Lane Group Flow (vph)	0	77	426	9	21	422	115	0	0	137	420	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		302	725	641	220	412	338			69	867	
v/s Ratio Prot		0.04	c0.25			c0.24					0.13	
v/s Ratio Perm		0.07		0.01	0.02		0.08			c0.53		
v/c Ratio		0.25	0.59	0.01	0.10	1.02	0.34			1.99	0.48	
Uniform Delay, d1		21.5	23.5	17.8	31.2	40.0	33.2			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		2.0	3.5	0.0	0.9	50.7	2.7			491.0	1.9	
Delay (s)		23.5	27.0	17.9	32.0	90.7	35.9			529.5	34.4	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			26.1			74.5					154.8	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	116.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	95	515	74	93	4	95	515	167
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3245				1710	2633	
Flt Permitted	0.38	1.00				0.95	1.00	
Satd. Flow (perm)	675	3245				1710	2633	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	109	592	85	107	5	109	592	192
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	109	772	0	0	0	114	758	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	177	850				334	514	
v/s Ratio Prot		0.24				0.07		
v/s Ratio Perm	0.16						c0.29	
v/c Ratio	0.62	0.91				0.34	1.48	
Uniform Delay, d1	34.1	37.5				36.4	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	15.0	15.3				2.8	224.2	
Delay (s)	49.1	52.8				39.2	266.5	
Level of Service	D	D				D	F	
Approach Delay (s)		52.4				237.6		
Approach LOS		D				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	532	0	0	403	45	77	47	16	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1954			1842				
Flt Permitted		0.92			1.00			0.97				
Satd. Flow (perm)		1557			1954			1842				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	63	572	0	0	433	48	83	51	17	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	635	0	0	481	0	0	151	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		958			1202			482				
v/s Ratio Prot					0.25							
v/s Ratio Perm		c0.41						0.08				
v/c Ratio		0.66			0.40			0.31				
Uniform Delay, d1		8.1			6.4			19.3				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		3.6			1.0			1.7				
Delay (s)		11.7			7.4			21.0				
Level of Service		B			A			C				
Approach Delay (s)		11.7			7.4			21.0			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	294	137	103	270	110	95	576	76	131	723	90
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1981	1434		1944	1444	1546	3040	1296	1505	3069	1252
Flt Permitted		0.54	1.00		0.78	1.00	0.24	1.00	1.00	0.32	1.00	1.00
Satd. Flow (perm)		1077	1434		1541	1444	391	3040	1296	503	3069	1252
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	69	316	147	111	290	118	102	619	82	141	777	97
RTOR Reduction (vph)	0	0	87	0	0	84	0	0	49	0	0	50
Lane Group Flow (vph)	0	385	60	0	401	34	102	619	33	141	777	47
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.4	42.4	51.4	42.8	42.8
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.4	42.4	51.4	42.8	42.8
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		527	587		440	413	279	1228	523	328	1251	510
v/s Ratio Prot		c0.07					0.03	0.20		c0.04	c0.25	
v/s Ratio Perm		0.23	0.04		c0.26	0.02	0.15		0.03	0.18		0.04
v/c Ratio		0.73	0.10		0.91	0.08	0.37	0.50	0.06	0.43	0.62	0.09
Uniform Delay, d1		26.1	19.1		36.2	27.4	16.2	23.4	19.2	15.7	24.7	19.1
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.79	1.58	2.83
Incremental Delay, d2		8.6	0.4		25.6	0.4	0.8	1.5	0.2	0.9	2.2	0.3
Delay (s)		34.8	19.5		61.8	27.8	17.0	24.9	19.4	29.0	41.2	54.4
Level of Service		C	B		E	C	B	C	B	C	D	D
Approach Delay (s)		30.5			54.1			23.3			40.8	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM Average Control Delay	36.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	347	74	78	367	78	44	52	59	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1643			1643			1798				
Flt Permitted		0.86			0.87			0.99				
Satd. Flow (perm)		1430			1437			1798				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	80	373	80	84	395	84	47	56	63	0	0	0
RTOR Reduction (vph)	0	10	0	0	10	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	523	0	0	553	0	0	132	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		880			884			470				
v/s Ratio Prot												
v/s Ratio Perm		0.37			c0.38			0.07				
v/c Ratio		0.59			0.63			0.28				
Uniform Delay, d1		7.6			7.8			19.1				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		3.0			3.3			1.5				
Delay (s)		10.5			11.2			20.6				
Level of Service		B			B			C				
Approach Delay (s)		10.5			11.2			20.6			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	382	64	66	441	32	37	76	72	51	225	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1687	1382		1712	1417		1685	1455		1886	
Flt Permitted		0.97	1.00		0.90	1.00		0.85	1.00		0.94	
Satd. Flow (perm)		1641	1382		1558	1417		1449	1455		1781	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	20	402	67	69	464	34	39	80	76	54	237	47
RTOR Reduction (vph)	0	0	29	0	0	12	0	0	52	0	7	0
Lane Group Flow (vph)	0	422	38	0	533	22	0	119	24	0	331	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		941	792		893	812		464	466		570	
v/s Ratio Prot												
v/s Ratio Perm		0.26	0.03		c0.34	0.02		0.08	0.02		c0.19	
v/c Ratio		0.45	0.05		0.60	0.03		0.26	0.05		0.58	
Uniform Delay, d1		9.2	7.0		10.4	6.9		18.9	17.6		21.3	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		1.5	0.1		2.9	0.1		1.3	0.2		4.3	
Delay (s)		10.7	7.1		13.3	7.0		20.2	17.8		25.6	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		10.2			12.9			19.3			25.6	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	426	29	39	453	47	44	165	55	95	162	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1526	3067		1651	3728		1584	1663	1370	1568	1680	1397
Flt Permitted	0.42	1.00		0.45	1.00		0.65	1.00	1.00	0.64	1.00	1.00
Satd. Flow (perm)	677	3067		785	3728		1076	1663	1370	1057	1680	1397
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	59	453	31	41	482	50	47	176	59	101	172	27
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	35	0	0	16
Lane Group Flow (vph)	59	476	0	41	520	0	47	176	24	101	172	11
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	323	1463		374	1778		430	665	548	423	672	559
v/s Ratio Prot		c0.16			0.14			c0.11			0.10	
v/s Ratio Perm	0.09			0.05			0.04		0.02	0.10		0.01
v/c Ratio	0.18	0.33		0.11	0.29		0.11	0.26	0.04	0.24	0.26	0.02
Uniform Delay, d1	9.7	10.5		9.4	10.3		12.2	13.1	11.9	12.9	13.0	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.88	0.94	0.88	0.54	0.54	0.29
Incremental Delay, d2	1.2	0.6		0.6	0.4		0.5	1.0	0.1	1.3	0.9	0.1
Delay (s)	11.0	11.1		10.0	10.8		11.3	13.3	10.6	8.3	8.0	3.4
Level of Service	B	B		A	B		B	B	B	A	A	A
Approach Delay (s)		11.1			10.7			12.4			7.7	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	389	71	58	305	53	54	175	63	81	223	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.95	1.00		0.99	1.00		0.95	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1319	3143		1513	3125		1579	2917		1451	3002	
Flt Permitted	0.52	1.00		0.45	1.00		0.56	1.00		0.60	1.00	
Satd. Flow (perm)	724	3143		717	3125		935	2917		916	3002	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	52	401	73	60	314	55	56	180	65	84	230	72
RTOR Reduction (vph)	0	0	0	0	0	0	0	38	0	0	40	0
Lane Group Flow (vph)	52	474	0	60	369	0	56	207	0	84	262	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	348	1509		344	1500		386	1206		379	1241	
v/s Ratio Prot		c0.15			0.12			0.07			0.09	
v/s Ratio Perm	0.07			0.08			0.06			c0.09		
v/c Ratio	0.15	0.31		0.17	0.25		0.15	0.17		0.22	0.21	
Uniform Delay, d1	10.9	11.9		11.1	11.5		13.7	13.9		14.2	14.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	0.5		1.1	0.4		0.8	0.3		1.3	0.4	
Delay (s)	11.8	12.5		12.2	11.9		14.5	14.2		15.6	14.5	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.4			11.9			14.3			14.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	382	52	27	433	40	68	163	48	76	473	106
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.98	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1594	1654		1362	1973		1534	2997		1534	3015	
Flt Permitted	0.34	1.00		0.39	1.00		0.28	1.00		0.61	1.00	
Satd. Flow (perm)	577	1654		554	1973		446	2997		989	3015	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	82	402	55	28	456	42	72	172	51	80	498	112
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	82	457	0	28	498	0	72	223	0	80	610	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	46.4	41.2		40.0	38.0		25.8	21.2		25.8	21.2	
Effective Green, g (s)	46.4	39.2		40.0	36.0		25.8	19.2		25.8	19.2	
Actuated g/C Ratio	0.55	0.46		0.47	0.42		0.30	0.23		0.30	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	377	763		280	836		194	677		330	681	
v/s Ratio Prot	c0.01	c0.28		0.00	0.25		c0.02	0.07		0.01	c0.20	
v/s Ratio Perm	0.11			0.04			0.09			0.06		
v/c Ratio	0.22	0.60		0.10	0.60		0.37	0.33		0.24	0.90	
Uniform Delay, d1	16.6	17.0		17.6	18.9		29.1	27.5		22.4	31.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	3.5		0.2	3.1		1.2	1.3		0.4	16.7	
Delay (s)	16.9	20.5		17.7	22.0		30.3	28.8		22.8	48.7	
Level of Service	B	C		B	C		C	C		C	D	
Approach Delay (s)		20.0			21.8			29.2			45.7	
Approach LOS		B			C			C			D	

Intersection Summary			
HCM Average Control Delay	30.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	327	53	90	391	91	51	122	45	98	283	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3681			3130		1652	3236		1548	3026	
Flt Permitted		0.80			0.80		0.51	1.00		0.64	1.00	
Satd. Flow (perm)		2979			2521		891	3236		1041	3026	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	67	352	57	97	420	98	55	131	48	105	304	68
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	476	0	0	615	0	55	179	0	105	372	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1350			1143		392	1424		458	1331	
v/s Ratio Prot								0.06			c0.12	
v/s Ratio Perm		0.16			c0.24		0.06			0.10		
v/c Ratio		0.35			0.54		0.14	0.13		0.23	0.28	
Uniform Delay, d1		13.3			14.8		12.5	12.4		13.1	13.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.7			1.8		0.7	0.2		1.2	0.5	
Delay (s)		14.1			16.6		13.3	12.6		14.2	13.9	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.1			16.6			12.8			14.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	667	5	16	449	192	1	1	7	164	1	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1551			3175	
Flt Permitted	0.48	1.00		0.36	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	804	3206		622	3320	1485		1523			2544	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	82	717	5	17	483	206	1	1	8	176	1	67
RTOR Reduction (vph)	0	0	0	0	0	72	0	6	0	0	51	0
Lane Group Flow (vph)	82	722	0	17	483	134	0	4	0	0	193	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	523	2086		405	2160	966		360			601	
v/s Ratio Prot		c0.23			0.15							
v/s Ratio Perm	0.10			0.03		0.09		0.00			c0.08	
v/c Ratio	0.16	0.35		0.04	0.22	0.14		0.01			0.32	
Uniform Delay, d1	4.8	5.6		4.4	5.0	4.7		20.7			22.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	0.6	0.5		0.2	0.2	0.3		0.1			1.3	
Delay (s)	5.4	6.0		4.6	5.3	5.0		20.7			23.6	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.0			5.2			20.7			23.6	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	70.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	176	94	93	160	54	114	769	77	118	786	90
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1506		1561	1586		1493	3069	1337	1523	3099	1318
Flt Permitted	0.46	1.00		0.36	1.00		0.22	1.00	1.00	0.23	1.00	1.00
Satd. Flow (perm)	761	1506		587	1586		347	3069	1337	368	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	106	185	99	98	168	57	120	809	81	124	827	95
RTOR Reduction (vph)	0	23	0	0	14	0	0	0	40	0	0	46
Lane Group Flow (vph)	106	261	0	98	211	0	120	809	41	124	827	49
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	289	390		248	410		244	1264	551	255	1276	543
v/s Ratio Prot	0.03	c0.17		c0.03	0.13		c0.03	0.26		0.03	c0.27	
v/s Ratio Perm	0.09			0.09			0.20		0.03	0.19		0.04
v/c Ratio	0.37	0.67		0.40	0.51		0.49	0.64	0.07	0.49	0.65	0.09
Uniform Delay, d1	22.1	28.2		22.2	26.9		14.0	20.0	15.2	14.0	20.1	15.3
Progression Factor	1.00	1.00		1.00	1.00		0.62	0.79	0.57	1.00	1.00	1.00
Incremental Delay, d2	3.6	8.8		4.7	4.6		6.7	2.4	0.3	6.5	2.6	0.3
Delay (s)	25.7	37.1		26.9	31.5		15.4	18.1	8.8	20.5	22.6	15.6
Level of Service	C	D		C	C		B	B	A	C	C	B
Approach Delay (s)		34.0			30.1			17.1			21.7	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	22.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	173	33	20	173	20	18	115	31	35	239	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.97			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1840			1852			1938			1976	
Flt Permitted		0.97			0.97			0.95			0.96	
Satd. Flow (perm)		1786			1795			1858			1905	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	22	184	35	21	184	21	19	122	33	37	254	50
RTOR Reduction (vph)	0	9	0	0	6	0	0	13	0	0	10	0
Lane Group Flow (vph)	0	232	0	0	220	0	0	161	0	0	331	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		742			746			858			879	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.09			c0.17	
v/c Ratio		0.31			0.30			0.19			0.38	
Uniform Delay, d1		12.8			12.7			10.3			11.4	
Progression Factor		1.00			0.60			1.20			1.00	
Incremental Delay, d2		1.1			1.0			0.5			1.2	
Delay (s)		13.9			8.6			12.9			12.6	
Level of Service		B			A			B			B	
Approach Delay (s)		13.9			8.6			12.9			12.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	179	34	25	179	18	38	195	31	33	180	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3063		1576	3121		1518	3117		1550	3075	
Flt Permitted	0.62	1.00		0.61	1.00		0.61	1.00		0.60	1.00	
Satd. Flow (perm)	970	3063		1005	3121		968	3117		975	3075	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	25	197	37	27	197	20	42	214	34	36	198	36
RTOR Reduction (vph)	0	24	0	0	12	0	0	14	0	0	15	0
Lane Group Flow (vph)	25	210	0	27	205	0	42	234	0	36	219	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	284	895		294	912		566	1822		570	1798	
v/s Ratio Prot		c0.07			0.07			c0.08			0.07	
v/s Ratio Perm	0.03			0.03			0.04			0.04		
v/c Ratio	0.09	0.23		0.09	0.22		0.07	0.13		0.06	0.12	
Uniform Delay, d1	16.7	17.5		16.7	17.4		5.9	6.1		5.8	6.0	
Progression Factor	0.86	0.87		0.83	0.83		1.14	1.11		0.48	0.45	
Incremental Delay, d2	0.6	0.6		0.6	0.6		0.3	0.1		0.2	0.1	
Delay (s)	15.0	15.8		14.5	15.0		6.9	6.9		3.0	2.9	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		15.7			15.0			6.9			2.9	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	153	38	21	132	30	23	238	16	30	316	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1554	3057		1524	2940			1923			1938	
Flt Permitted	0.65	1.00		0.63	1.00			0.96			0.96	
Satd. Flow (perm)	1058	3057		1009	2940			1851			1874	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	62	156	39	21	135	31	23	243	16	31	322	34
RTOR Reduction (vph)	0	23	0	0	19	0	0	3	0	0	5	0
Lane Group Flow (vph)	62	172	0	21	147	0	0	279	0	0	382	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	423	1223		404	1176			883			894	
v/s Ratio Prot		0.06			0.05							
v/s Ratio Perm	c0.06			0.02				0.15			c0.20	
v/c Ratio	0.15	0.14		0.05	0.13			0.32			0.43	
Uniform Delay, d1	12.4	12.4		11.9	12.3			10.5			11.2	
Progression Factor	0.98	0.91		0.78	0.77			0.95			1.00	
Incremental Delay, d2	0.7	0.2		0.2	0.2			0.9			1.5	
Delay (s)	12.9	11.5		9.5	9.7			10.8			12.7	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		11.8			9.7			10.8			12.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	26	16	124	20	28	212	10	28	347	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1974		1584	1977			1982			1979	
Flt Permitted	0.63	1.00		0.64	1.00			0.93			0.97	
Satd. Flow (perm)	1099	1974		1074	1977			1848			1924	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	55	129	30	19	144	23	33	247	12	33	403	64
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	55	159	0	19	167	0	0	292	0	0	500	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	338	607		330	608			1052			1095	
v/s Ratio Prot		0.08			c0.08							
v/s Ratio Perm	0.05			0.02				0.16			c0.26	
v/c Ratio	0.16	0.26		0.06	0.27			0.28			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.0			7.2			8.1	
Progression Factor	0.79	0.78		0.92	0.91			0.99			1.00	
Incremental Delay, d2	1.0	1.0		0.3	1.1			0.7			1.4	
Delay (s)	14.0	14.3		15.0	16.6			7.7			9.5	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.2			16.4			7.7			9.5	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	10	74	2	4	7	45	181	4	3	359	59
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1727		1702	1819		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.70	1.00		0.47	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	1336	1727		1246	1819		795	1647	1428	1094	2000	1496
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	48	11	84	2	5	8	51	206	5	3	408	67
RTOR Reduction (vph)	0	61	0	0	6	0	0	0	2	0	0	27
Lane Group Flow (vph)	48	34	0	2	7	0	51	206	3	3	408	40
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	370	478		345	504		477	988	857	656	1200	898
v/s Ratio Prot		0.02			0.00			0.13			c0.20	
v/s Ratio Perm	c0.04			0.00			0.06		0.00	0.00		0.03
v/c Ratio	0.13	0.07		0.01	0.01		0.11	0.21	0.00	0.00	0.34	0.04
Uniform Delay, d1	17.6	17.3		17.0	17.1		5.6	5.9	5.2	5.2	6.5	5.3
Progression Factor	1.44	2.79		1.00	1.00		0.69	0.66	0.67	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.3		0.0	0.1		0.4	0.4	0.0	0.0	0.8	0.1
Delay (s)	26.0	48.7		17.1	17.1		4.2	4.3	3.5	5.2	7.3	5.4
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		41.1			17.1			4.3			7.0	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	251	163	154	191	0	0	0	0	109	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2904		1693	3288					1503	3021	
Flt Permitted		1.00		0.40	1.00					0.95	1.00	
Satd. Flow (perm)		2904		719	3288					1503	3021	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	267	173	164	203	0	0	0	0	116	500	401
RTOR Reduction (vph)	0	104	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	337	0	164	203	0	0	0	0	116	760	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		565	1805					545	1096	
v/s Ratio Prot		c0.12		c0.06	0.06					0.08	c0.25	
v/s Ratio Perm				0.09								
v/c Ratio		0.36		0.29	0.11					0.21	0.69	
Uniform Delay, d1		26.4		13.3	11.1					22.4	27.7	
Progression Factor		1.00		2.23	2.17					1.00	1.00	
Incremental Delay, d2		1.1		1.1	0.1					0.9	3.6	
Delay (s)		27.5		30.7	24.1					23.3	31.3	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.5			27.1			0.0			30.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	219	0	0	284	109	61	415	175	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2847		1767	1782	1560			
Flt Permitted	0.36	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	637	3196			2847		1767	1782	1560			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	157	243	0	0	316	121	68	461	194	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	0	137	0	0	0
Lane Group Flow (vph)	157	243	0	0	398	0	68	461	57	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	704	1974			726		520	524	459			
v/s Ratio Prot	c0.07	0.08			c0.14		0.04	c0.26				
v/s Ratio Perm	0.06								0.04			
v/c Ratio	0.22	0.12			0.55		0.13	0.88	0.12			
Uniform Delay, d1	10.3	8.1			32.9		26.4	34.3	26.4			
Progression Factor	0.44	0.45			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.1			3.0		0.5	18.7	0.6			
Delay (s)	5.3	3.8			35.9		26.9	53.0	26.9			
Level of Service	A	A			D		C	D	C			
Approach Delay (s)		4.3			35.9			43.5			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	31.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	391	369	63	411	0	0	0	0	9	432	269
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3096		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.18	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3096		318	3306					1596	3192	1530
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	434	410	70	457	0	0	0	0	10	480	299
RTOR Reduction (vph)	0	172	0	0	0	0	0	0	0	0	0	197
Lane Group Flow (vph)	0	672	0	70	457	0	0	0	0	10	480	102
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		422	1917					543	1085	520
v/s Ratio Prot		c0.22		0.03	c0.14					0.01	c0.15	0.07
v/s Ratio Perm				0.06								
v/c Ratio		0.60		0.17	0.24					0.02	0.44	0.20
Uniform Delay, d1		26.2		12.7	10.2					21.9	25.6	23.3
Progression Factor		1.00		1.05	1.25					1.00	1.00	1.00
Incremental Delay, d2		2.4		0.7	0.3					0.1	1.3	0.8
Delay (s)		28.6		14.0	13.0					22.0	26.9	24.2
Level of Service		C		B	B					C	C	C
Approach Delay (s)		28.6			13.1			0.0			25.8	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	23.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	320	80	0	0	116	4	358	369	45	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3109			3173		1555	1653	1530			
Flt Permitted	0.67	0.73			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1039	2346			3173		1555	1653	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	337	84	0	0	122	4	377	388	47	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	30	0	0	0
Lane Group Flow (vph)	168	253	0	0	123	0	377	388	17	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	685	1471			476		575	612	566			
v/s Ratio Prot	c0.09	0.06			c0.04		c0.24	0.23	0.01			
v/s Ratio Perm	0.04	0.03										
v/c Ratio	0.25	0.17			0.26		0.66	0.63	0.03			
Uniform Delay, d1	13.6	13.2			37.6		26.2	25.9	20.1			
Progression Factor	0.29	0.31			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.3		5.7	4.9	0.1			
Delay (s)	4.6	4.2			38.9		31.9	30.9	20.2			
Level of Service	A	A			D		C	C	C			
Approach Delay (s)		4.4			38.9			30.8			0.0	
Approach LOS		A			D			C			A	

Intersection Summary			
HCM Average Control Delay	23.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	205	100	90	198	91	65	538	59	96	842	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2934			2924		1508	3069	1309	1507	3099	1298
Flt Permitted		0.80			0.77		0.18	1.00	1.00	0.35	1.00	1.00
Satd. Flow (perm)		2384			2271		291	3069	1309	562	3099	1298
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	78	211	103	93	204	94	67	555	61	99	868	64
RTOR Reduction (vph)	0	42	0	0	36	0	0	0	37	0	0	33
Lane Group Flow (vph)	0	350	0	0	355	0	67	555	24	99	868	31
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		1049			748		181	1210	508	282	1221	504
v/s Ratio Prot		c0.02					c0.02	0.18		0.02	c0.28	
v/s Ratio Perm		0.12			c0.16		0.14		0.02	0.13		0.02
v/c Ratio		0.33			0.48		0.37	0.46	0.05	0.35	0.71	0.06
Uniform Delay, d1		16.4			22.7		16.1	19.0	16.2	15.4	21.7	16.3
Progression Factor		1.00			1.00		1.05	0.70	0.47	1.09	1.19	1.91
Incremental Delay, d2		0.9			2.2		5.5	1.2	0.2	2.7	2.8	0.2
Delay (s)		17.3			24.8		22.5	14.5	7.8	19.5	28.5	31.3
Level of Service		B			C		C	B	A	B	C	C
Approach Delay (s)		17.3			24.8			14.7			27.8	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	22.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	305	0	0	278	69	47	39	30	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.97				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1730			1701			1653				
Flt Permitted		0.87			1.00			0.98				
Satd. Flow (perm)		1518			1701			1653				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	82	328	0	0	299	74	51	42	32	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	19	0	0	0	0
Lane Group Flow (vph)	0	410	0	0	359	0	0	106	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		887			994			483				
v/s Ratio Prot					0.21							
v/s Ratio Perm		c0.27						0.06				
v/c Ratio		0.46			0.36			0.22				
Uniform Delay, d1		7.7			7.1			17.4				
Progression Factor		1.00			0.49			1.00				
Incremental Delay, d2		1.7			1.0			1.0				
Delay (s)		9.4			4.4			18.4				
Level of Service		A			A			B				
Approach Delay (s)		9.4			4.4			18.4			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	289	27	32	285	41	22	91	30	50	142	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			0.99	
Frt		0.99			0.98			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1955			1938			2969			2985	
Flt Permitted		0.97			0.95			0.90			0.87	
Satd. Flow (perm)		1907			1852			2698			2637	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	20	307	29	34	303	44	23	97	32	53	151	43
RTOR Reduction (vph)	0	5	0	0	7	0	0	19	0	0	25	0
Lane Group Flow (vph)	0	351	0	0	374	0	0	133	0	0	222	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		880			855			1121			1095	
v/s Ratio Prot												
v/s Ratio Perm		0.18			c0.20			0.05			c0.08	
v/c Ratio		0.40			0.44			0.12			0.20	
Uniform Delay, d1		11.6			11.8			11.7			12.1	
Progression Factor		0.57			0.45			1.25			0.45	
Incremental Delay, d2		1.2			1.5			0.2			0.4	
Delay (s)		7.8			6.9			14.8			5.8	
Level of Service		A			A			B			A	
Approach Delay (s)		7.8			6.9			14.8			5.8	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	255	39	66	362	70	42	211	95	64	175	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1507	3034		1568	3074		1586	2961		1585	3075	
Flt Permitted	0.43	1.00		0.55	1.00		0.60	1.00		0.56	1.00	
Satd. Flow (perm)	680	3034		914	3074		1009	2961		926	3075	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	44	271	41	70	385	74	45	224	101	68	186	51
RTOR Reduction (vph)	0	19	0	0	24	0	0	47	0	0	24	0
Lane Group Flow (vph)	44	293	0	70	435	0	45	278	0	68	213	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	230	1027		309	1040		543	1594		499	1656	
v/s Ratio Prot		0.10			c0.14			c0.09			0.07	
v/s Ratio Perm	0.06			0.08			0.04			0.07		
v/c Ratio	0.19	0.29		0.23	0.42		0.08	0.17		0.14	0.13	
Uniform Delay, d1	15.2	15.7		15.4	16.6		7.2	7.6		7.5	7.4	
Progression Factor	0.73	0.70		0.95	0.96		0.83	0.81		1.13	1.14	
Incremental Delay, d2	1.8	0.7		1.7	1.2		0.3	0.2		0.6	0.2	
Delay (s)	12.8	11.8		16.4	17.1		6.3	6.5		9.0	8.7	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		11.9			17.0			6.4			8.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	287	68	69	316	40	40	207	52	46	279	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1503	3014		1429	3719			3486			3519	
Flt Permitted	0.52	1.00		0.52	1.00			0.87			0.88	
Satd. Flow (perm)	827	3014		789	3719			3043			3131	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	59	305	72	73	336	43	43	220	55	49	297	68
RTOR Reduction (vph)	0	32	0	0	15	0	0	27	0	0	25	0
Lane Group Flow (vph)	59	345	0	73	364	0	0	291	0	0	389	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	394	1437		376	1774			1217			1252	
v/s Ratio Prot		c0.11			0.10							
v/s Ratio Perm	0.07			0.09				0.10			c0.12	
v/c Ratio	0.15	0.24		0.19	0.21			0.24			0.31	
Uniform Delay, d1	9.6	10.0		9.8	9.9			12.9			13.4	
Progression Factor	1.59	1.75		1.18	1.18			0.46			0.68	
Incremental Delay, d2	0.8	0.4		1.1	0.2			0.5			0.6	
Delay (s)	16.0	17.9		12.7	11.9			6.4			9.7	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.7			12.0			6.4			9.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	246	82	73	220	73	100	70	40	40	70	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1669	1436		3084			1885			1835	
Flt Permitted		0.82	1.00		0.82			0.75			0.91	
Satd. Flow (perm)		1385	1436		2565			1438			1679	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	88	265	88	78	237	78	108	75	43	43	75	108
RTOR Reduction (vph)	0	0	42	0	33	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	353	46	0	360	0	0	213	0	0	175	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		724	751		1342			465			542	
v/s Ratio Prot												
v/s Ratio Perm		c0.25	0.03		0.14			c0.15			0.10	
v/c Ratio		0.49	0.06		0.27			0.46			0.32	
Uniform Delay, d1		9.9	7.6		8.6			17.5			16.6	
Progression Factor		1.83	4.35		0.56			1.00			1.00	
Incremental Delay, d2		2.3	0.2		0.5			3.2			1.6	
Delay (s)		20.5	33.4		5.3			20.7			18.2	
Level of Service		C	C		A			C			B	
Approach Delay (s)		23.1			5.3			20.7			18.2	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	253	18	22	262	50	22	119	42	61	142	60
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.98	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1440	3038		1563	3017			3580			3601	
Flt Permitted	0.55	1.00		0.58	1.00			0.91			0.85	
Satd. Flow (perm)	836	3038		947	3017			3272			3104	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	48	269	19	23	279	53	23	127	45	65	151	64
RTOR Reduction (vph)	0	8	0	0	24	0	0	26	0	0	37	0
Lane Group Flow (vph)	48	280	0	23	308	0	0	169	0	0	243	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	386	1402		437	1392			1359			1289	
v/s Ratio Prot		0.09			c0.10							
v/s Ratio Perm	0.06			0.02				0.05			c0.08	
v/c Ratio	0.12	0.20		0.05	0.22			0.12			0.19	
Uniform Delay, d1	10.0	10.4		9.7	10.5			11.7			12.0	
Progression Factor	0.72	0.73		0.59	0.47			1.06			0.39	
Incremental Delay, d2	0.6	0.3		0.2	0.3			0.2			0.3	
Delay (s)	7.8	7.9		5.9	5.2			12.6			5.0	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		7.9			5.3			12.6			5.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1041: 111th Street & Cottage Grove Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	434	18	71	410	182	17	96	89	262	201	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3288			3167			3087			3181	
Flt Permitted		0.85			0.83			0.93			0.73	
Satd. Flow (perm)		2798			2654			2888			2376	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	46	467	19	76	441	196	18	103	96	282	216	68
RTOR Reduction (vph)	0	4	0	0	61	0	0	52	0	0	16	0
Lane Group Flow (vph)	0	528	0	0	652	0	0	165	0	0	550	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		1076			1021			1364			621	
v/s Ratio Prot								c0.02				
v/s Ratio Perm		0.19			c0.25			0.04			c0.23	
v/c Ratio		0.49			0.64			0.12			0.95dl	
Uniform Delay, d1		15.2			16.3			10.0			23.1	
Progression Factor		1.49			1.00			1.00			0.80	
Incremental Delay, d2		1.6			3.1			0.2			16.5	
Delay (s)		24.2			19.4			10.2			35.0	
Level of Service		C			B			B			D	
Approach Delay (s)		24.2			19.4			10.2			35.0	
Approach LOS		C			B			B			D	

Intersection Summary			
HCM Average Control Delay	24.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	782	111	40	648	0	68	0	31	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3041			3090			1618				
Flt Permitted		1.00			0.84			0.79				
Satd. Flow (perm)		3041			2600			1329				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	841	119	43	697	0	73	0	33	0	0	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	945	0	0	740	0	0	88	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1960			953			236				
v/s Ratio Prot		c0.31										
v/s Ratio Perm					c0.28			c0.07				
v/c Ratio		0.48			0.78			0.37				
Uniform Delay, d1		8.3			25.2			32.6				
Progression Factor		0.00			1.30			1.00				
Incremental Delay, d2		0.5			6.0			4.5				
Delay (s)		0.5			38.8			37.0				
Level of Service		A			D			D				
Approach Delay (s)		0.5			38.8			37.0			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	599	20	92	486	152	51	4	91	180	9	180
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3194		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.39	1.00		0.39	1.00	1.00		0.88		0.46	1.00	1.00
Satd. Flow (perm)	636	3194		681	3320	1485		1596		797	1748	1485
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	210	644	22	99	523	163	55	4	98	194	10	194
RTOR Reduction (vph)	0	2	0	0	0	70	0	87	0	0	0	118
Lane Group Flow (vph)	210	664	0	99	523	93	0	70	0	194	10	76
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	56.7	46.4		49.1	41.8	51.6		10.5		23.3	23.3	35.2
Effective Green, g (s)	56.7	46.4		49.1	41.8	51.6		10.5		23.3	23.3	35.2
Actuated g/C Ratio	0.63	0.52		0.55	0.46	0.57		0.12		0.26	0.26	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	522	1647		451	1542	851		186		300	453	581
v/s Ratio Prot	c0.05	c0.21		0.02	0.16	0.01				c0.07	0.01	0.02
v/s Ratio Perm	0.20			0.10		0.05		0.04		c0.10		0.03
v/c Ratio	0.40	0.40		0.22	0.34	0.11		0.38		0.65	0.02	0.13
Uniform Delay, d1	7.5	13.3		9.9	15.3	8.7		36.7		28.5	24.9	17.6
Progression Factor	2.52	1.99		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	0.7		0.3	0.6	0.1		1.8		4.7	0.0	0.1
Delay (s)	19.4	27.2		10.2	15.9	8.8		38.5		33.3	24.9	17.7
Level of Service	B	C		B	B	A		D		C	C	B
Approach Delay (s)		25.4			13.7			38.5			25.5	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	22.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
1044: 111th Street & Bishop Ford Freeway EB Ramps

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	483	387	2	286	0	0	0	0	16	0	444
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	519	416	2	308	0	0	0	0	17	0	477
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	308			519			677	831	260	572	831	154
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	308			519			677	831	260	572	831	154
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	96	100	45
cM capacity (veh/h)	1243			1036			150	301	736	401	301	862

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	260	260	416	105	205	17	477
Volume Left	0	0	0	2	0	17	0
Volume Right	0	0	416	0	0	0	477
cSH	1700	1700	1700	1036	1700	401	862
Volume to Capacity	0.15	0.15	0.24	0.00	0.12	0.04	0.55
Queue Length 95th (ft)	0	0	0	0	0	3	87
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	14.4	14.2
Lane LOS				A		B	B
Approach Delay (s)	0.0			0.1		14.2	
Approach LOS						B	

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	499	0	288	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	537	0	310	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	268	268	310
Volume Left (vph)	268	268	310
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.0	6.0	5.4
Degree Utilization, x	0.44	0.44	0.47
Capacity (veh/h)	587	590	639
Control Delay (s)	12.4	12.4	13.2
Approach Delay (s)	12.4		13.2
Approach LOS	B		B

Intersection Summary			
Delay	12.7		
HCM Level of Service	B		
Intersection Capacity Utilization	38.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	472	64	175	451	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3152		1605	3210						3075	
Flt Permitted		1.00		0.36	1.00						0.97	
Satd. Flow (perm)		3152		604	3210						3075	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	508	69	188	485	0	0	0	0	109	23	62
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	0	0	42	0
Lane Group Flow (vph)	0	564	0	188	485	0	0	0	0	0	152	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		466	1850						977	
v/s Ratio Prot		c0.18		c0.05	0.15						c0.05	
v/s Ratio Perm				0.19								
v/c Ratio		0.42		0.40	0.26						0.16	
Uniform Delay, d1		17.2		14.6	9.0						20.8	
Progression Factor		1.00		0.36	0.23						1.00	
Incremental Delay, d2		1.0		2.3	0.3						0.3	
Delay (s)		18.2		7.6	2.4						21.2	
Level of Service		B		A	A						C	
Approach Delay (s)		18.2			3.8			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	478	0	0	557	106	69	90	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1660	3320			3133			4509				
Flt Permitted	0.28	1.00			1.00			0.98				
Satd. Flow (perm)	487	3320			3133			4509				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	102	514	0	0	599	114	74	97	62	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	42	0	0	0	0
Lane Group Flow (vph)	102	514	0	0	695	0	0	191	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	413	1875			1290			1432				
v/s Ratio Prot	0.03	c0.15			c0.22			c0.04				
v/s Ratio Perm	0.11											
v/c Ratio	0.25	0.27			0.54			0.13				
Uniform Delay, d1	15.5	9.5			18.9			20.7				
Progression Factor	0.35	0.32			1.00			1.00				
Incremental Delay, d2	1.3	0.3			1.6			0.2				
Delay (s)	6.8	3.4			20.5			20.9				
Level of Service	A	A			C			C				
Approach Delay (s)		3.9			20.5			20.9			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	342	114	79	366	79	129	78	27	27	78	129
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2976			3006			1842			1769	
Flt Permitted		0.68			0.74			0.73			0.95	
Satd. Flow (perm)		2050			2242			1387			1691	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	123	368	123	85	394	85	139	84	29	29	84	139
RTOR Reduction (vph)	0	34	0	0	22	0	0	7	0	0	68	0
Lane Group Flow (vph)	0	580	0	0	542	0	0	245	0	0	184	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		725			793			683			832	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.24			c0.18			0.11	
v/c Ratio		0.80			0.68			0.36			0.22	
Uniform Delay, d1		18.9			17.9			10.2			9.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		9.0			4.7			1.5			0.6	
Delay (s)		27.9			22.6			11.6			10.0	
Level of Service		C			C			B			B	
Approach Delay (s)		27.9			22.6			11.6			10.0	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	201	88	159	311	65	96	415	52	76	752	117
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2980		1573	3683		1508	3069	1333	1518	3099	1336
Flt Permitted	0.45	1.00		0.53	1.00		0.21	1.00	1.00	0.43	1.00	1.00
Satd. Flow (perm)	739	2980		880	3683		330	3069	1333	692	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	212	93	167	327	68	101	437	55	80	792	123
RTOR Reduction (vph)	0	58	0	0	21	0	0	0	35	0	0	78
Lane Group Flow (vph)	112	247	0	167	374	0	101	437	20	80	792	45
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	982		343	1213		223	1119	486	351	1130	487
v/s Ratio Prot	0.02	0.08		c0.02	0.10		c0.03	0.14		0.02	c0.26	
v/s Ratio Perm	0.11			c0.15			0.16		0.02	0.08		0.03
v/c Ratio	0.37	0.25		0.49	0.31		0.45	0.39	0.04	0.23	0.70	0.09
Uniform Delay, d1	19.4	20.8		20.7	21.3		16.2	20.0	17.4	15.0	23.0	17.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.47	1.07	2.37
Incremental Delay, d2	3.6	0.6		4.9	0.7		6.5	1.0	0.2	1.1	2.7	0.3
Delay (s)	23.0	21.5		25.5	21.9		22.7	21.0	17.6	23.1	27.4	42.3
Level of Service	C	C		C	C		C	C	B	C	C	D
Approach Delay (s)		21.9			23.0			21.0			28.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	295	30	32	375	23	26	77	32	34	117	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1962	1466		1993	1480		2015	1506		2001	1511
Flt Permitted		0.90	1.00		0.96	1.00		0.92	1.00		0.93	1.00
Satd. Flow (perm)		1787	1466		1912	1480		1882	1506		1884	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	311	32	34	395	24	27	81	34	36	123	64
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	20	0	0	37
Lane Group Flow (vph)	0	362	15	0	429	11	0	108	14	0	159	27
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		825	677		882	683		782	626		783	628
v/s Ratio Prot												
v/s Ratio Perm		0.20	0.01		c0.22	0.01		0.06	0.01		c0.08	0.02
v/c Ratio		0.44	0.02		0.49	0.02		0.14	0.02		0.20	0.04
Uniform Delay, d1		11.8	9.5		12.2	9.5		11.8	11.2		12.1	11.3
Progression Factor		1.00	1.00		0.62	0.51		1.26	1.61		0.97	0.84
Incremental Delay, d2		1.7	0.1		1.9	0.0		0.4	0.1		0.6	0.1
Delay (s)		13.5	9.6		9.4	4.9		15.2	18.1		12.3	9.6
Level of Service		B	A		A	A		B	B		B	A
Approach Delay (s)		13.2			9.2			15.9			11.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	305	20	40	240	30	10	100	20	85	165	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3070		1550	3048		1550	3020		1550	2990	
Flt Permitted	0.95	1.00		0.54	1.00		0.61	1.00		0.67	1.00	
Satd. Flow (perm)	1550	3070		884	3048		991	3020		1092	2990	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	81	328	22	43	258	32	11	108	22	91	177	54
RTOR Reduction (vph)	0	8	0	0	15	0	0	13	0	0	32	0
Lane Group Flow (vph)	81	342	0	43	275	0	11	117	0	91	199	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1511		299	1032		412	1254		454	1242	
v/s Ratio Prot	c0.05	0.11			c0.09			0.04			0.07	
v/s Ratio Perm				0.05			0.01			c0.08		
v/c Ratio	0.49	0.23		0.14	0.27		0.03	0.09		0.20	0.16	
Uniform Delay, d1	27.3	9.4		15.0	15.6		11.2	11.6		12.1	11.9	
Progression Factor	0.92	0.50		0.81	0.77		0.98	1.04		1.17	1.18	
Incremental Delay, d2	9.3	0.3		1.0	0.6		0.1	0.1		1.0	0.3	
Delay (s)	34.5	5.0		13.0	12.7		11.1	12.2		15.1	14.3	
Level of Service	C	A		B	B		B	B		B	B	
Approach Delay (s)		10.6			12.7			12.1			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	250	65	175	285	55	25	245	20	55	270	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1550	3003		1550	3024			3271			3230	
Flt Permitted	0.53	1.00		0.95	1.00			0.91			0.87	
Satd. Flow (perm)	871	3003		1550	3024			2974			2815	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	269	70	188	306	59	27	263	22	59	290	54
RTOR Reduction (vph)	0	36	0	0	24	0	0	9	0	0	19	0
Lane Group Flow (vph)	65	303	0	188	341	0	0	303	0	0	384	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	268	924		143	1349			1144			1083	
v/s Ratio Prot		c0.10		c0.12	0.11							
v/s Ratio Perm	0.07							0.10			c0.14	
v/c Ratio	0.24	0.33		1.31	0.25			0.27			0.35	
Uniform Delay, d1	16.8	17.3		29.5	11.2			13.7			14.3	
Progression Factor	0.64	0.59		1.31	1.08			0.79			0.75	
Incremental Delay, d2	2.1	0.9		172.6	0.3			0.6			0.9	
Delay (s)	12.9	11.1		211.2	12.4			11.4			11.6	
Level of Service	B	B		F	B			B			B	
Approach Delay (s)		11.4			80.0			11.4			11.6	
Approach LOS		B			E			B			B	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	293	16	65	522	65	49	101	152	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.99			0.92				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1616			1601			3249				
Flt Permitted		0.97			0.94			0.99				
Satd. Flow (perm)		1564			1505			3249				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	17	315	17	70	561	70	53	109	163	0	0	0
RTOR Reduction (vph)	0	3	0	0	5	0	0	125	0	0	0	0
Lane Group Flow (vph)	0	346	0	0	696	0	0	200	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.7			41.7			15.3				
Effective Green, g (s)		41.7			41.7			15.3				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		1003			966			765				
v/s Ratio Prot												
v/s Ratio Perm		0.22			c0.46			0.06				
v/c Ratio		0.35			0.72			0.26				
Uniform Delay, d1		5.4			7.8			20.2				
Progression Factor		1.64			1.00			1.00				
Incremental Delay, d2		0.9			4.6			0.8				
Delay (s)		9.7			12.4			21.0				
Level of Service		A			B			C				
Approach Delay (s)		9.7			12.4			21.0			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	73	372	503	34	112	149
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	83	423	572	39	127	169
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.85				0.85	0.85
vC, conflicting volume	627				1203	613
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	473				1150	456
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	91				24	67
cM capacity (veh/h)	901				168	508

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	506	610	127	169
Volume Left	83	0	127	0
Volume Right	0	39	0	169
cSH	901	1700	168	508
Volume to Capacity	0.09	0.36	0.76	0.33
Queue Length 95th (ft)	8	0	121	36
Control Delay (s)	2.5	0.0	73.7	15.6
Lane LOS	A		F	C
Approach Delay (s)	2.5	0.0	40.5	
Approach LOS			E	

Intersection Summary			
Average Delay	9.4		
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	645	0	1	530	3	27
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1527	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1746	1527	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	694	0	1	570	3	29
RTOR Reduction (vph)	0	0	0	0	24	0
Lane Group Flow (vph)	694	0	0	571	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	252	
v/s Ratio Prot	c0.40				c0.01	
v/s Ratio Perm				c0.33		
v/c Ratio	0.57			0.90	0.03	
Uniform Delay, d1	6.6			25.5	29.8	
Progression Factor	0.08			1.00	1.00	
Incremental Delay, d2	1.3			17.7	0.2	
Delay (s)	1.8			43.2	30.0	
Level of Service	A			D	C	
Approach Delay (s)	1.8			43.2	30.0	
Approach LOS	A			D	C	

Intersection Summary			
HCM Average Control Delay	20.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
1056: 115th Street & Bishop Ford Fwy

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	203	542	25	311	0	0	0	0	15	6	220
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	216	577	27	331	0	0	0	0	16	6	234
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	331			216			891	888	396	492	600	331
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	331			216			891	888	396	492	600	331
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	97	98	65
cM capacity (veh/h)	1240			1337			151	279	609	457	409	665

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	144	649	357	22	234
Volume Left	0	0	27	16	0
Volume Right	0	577	0	0	234
cSH	1700	1700	1337	442	665
Volume to Capacity	0.08	0.38	0.02	0.05	0.35
Queue Length 95th (ft)	0	0	2	4	40
Control Delay (s)	0.0	0.0	0.8	13.6	13.3
Lane LOS			A	B	B
Approach Delay (s)	0.0		0.8	13.3	
Approach LOS				B	

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	218	0	336	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	234	0	361	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	117	117	361
Volume Left (vph)	117	117	361
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.0	6.0	4.8
Degree Utilization, x	0.20	0.20	0.48
Capacity (veh/h)	570	572	729
Control Delay (s)	9.2	9.2	12.2
Approach Delay (s)	9.2		12.2
Approach LOS	A		B

Intersection Summary			
Delay	11.1		
HCM Level of Service	B		
Intersection Capacity Utilization	32.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	456	311	217	512	0	0	0	0	286	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.97		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1215		3424					1359	3807	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1215		3424					1359	3807	1133
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	485	331	231	545	0	0	0	0	304	286	396
RTOR Reduction (vph)	0	0	228	0	0	0	0	0	0	0	53	114
Lane Group Flow (vph)	0	485	103	0	776	0	0	0	0	167	568	84
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		38.9	38.9		68.3					23.0	23.0	67.9
Effective Green, g (s)		38.9	38.9		68.3					23.0	23.0	67.9
Actuated g/C Ratio		0.24	0.24		0.43					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		773	295		1462					195	547	481
v/s Ratio Prot		c0.15			c0.23					0.12	c0.15	
v/s Ratio Perm			0.08									0.07
v/c Ratio		0.63	0.35		0.53					0.86	1.04	0.17
Uniform Delay, d1		54.1	50.1		34.0					66.9	68.5	28.6
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		3.8	3.2		0.1					28.9	48.7	0.2
Delay (s)		57.9	53.3		0.7					95.8	117.2	28.8
Level of Service		E	D		A					F	F	C
Approach Delay (s)		56.1			0.7			0.0			95.9	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	54.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.8
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	282	460	0	0	484	127	245	170	154	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3063				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3063				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	303	495	0	0	520	137	263	183	166	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	92	0	66	0	0	0	0
Lane Group Flow (vph)	303	495	0	0	520	45	208	338	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	83.7	83.7			35.2	35.2	14.1	14.1				
Effective Green, g (s)	83.7	83.7			35.2	35.2	14.1	14.1				
Actuated g/C Ratio	0.52	0.52			0.22	0.22	0.09	0.09				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	840	1795			706	327	138	270				
v/s Ratio Prot	c0.19	0.14			c0.16		c0.13	0.11				
v/s Ratio Perm						0.03						
v/c Ratio	0.36	0.28			0.74	0.14	1.51	1.25				
Uniform Delay, d1	22.4	21.3			58.1	50.2	73.0	73.0				
Progression Factor	0.02	0.03			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			4.0	0.2	262.0	140.6				
Delay (s)	0.7	0.6			62.1	50.4	335.0	213.6				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		0.6			59.7			254.8			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	94.7	HCM Level of Service	F
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	130	239	126	81	190	61	92	443	60	96	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1571	1600	1373	1592	1778		1578	3015		1536	3001	
Flt Permitted	0.46	1.00	1.00	0.52	1.00		0.15	1.00		0.38	1.00	
Satd. Flow (perm)	758	1600	1373	875	1778		246	3015		618	3001	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	133	244	129	83	194	62	94	452	61	98	819	122
RTOR Reduction (vph)	0	0	87	0	12	0	0	12	0	0	13	0
Lane Group Flow (vph)	133	244	42	83	244	0	94	501	0	98	928	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.3	29.3	29.3	33.3	27.8		39.6	34.1		39.6	34.1	
Effective Green, g (s)	34.3	30.3	29.3	31.3	27.8		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.38	0.34	0.33	0.35	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	345	542	450	342	553		171	1150		306	1145	
v/s Ratio Prot	c0.03	c0.15		0.01	0.14		c0.03	0.17		0.02	c0.31	
v/s Ratio Perm	0.12		0.03	0.07			0.20			0.12		
v/c Ratio	0.39	0.45	0.09	0.24	0.44		0.55	0.44		0.32	0.81	
Uniform Delay, d1	18.8	23.1	20.8	20.0	24.6		17.9	20.5		16.2	24.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	2.7	0.4	0.4	2.5		3.6	1.2		0.6	6.3	
Delay (s)	19.6	25.7	21.3	20.4	27.1		21.5	21.7		16.9	31.0	
Level of Service	B	C	C	C	C		C	C		B	C	
Approach Delay (s)		23.0			25.5			21.7			29.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	275	54	11	251	19	32	51	17	18	76	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.95	
Flt Protected		0.99	1.00		1.00	1.00		0.98			0.99	
Satd. Flow (prot)		1968	1467		1629	1381		1892			1871	
Flt Permitted		0.95	1.00		0.99	1.00		0.90			0.97	
Satd. Flow (perm)		1877	1467		1609	1381		1730			1827	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	38	302	59	12	276	21	35	56	19	20	84	64
RTOR Reduction (vph)	0	0	30	0	0	11	0	11	0	0	34	0
Lane Group Flow (vph)	0	340	29	0	288	10	0	99	0	0	134	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		924	722		792	680		719			759	
v/s Ratio Prot												
v/s Ratio Perm		c0.18	0.02		0.18	0.01		0.06			c0.07	
v/c Ratio		0.37	0.04		0.36	0.02		0.14			0.18	
Uniform Delay, d1		10.2	8.5		10.2	8.4		11.8			12.0	
Progression Factor		1.00	1.00		1.98	2.85		1.00			1.96	
Incremental Delay, d2		1.1	0.1		1.3	0.0		0.4			0.5	
Delay (s)		11.4	8.7		21.4	24.1		12.2			23.9	
Level of Service		B	A		C	C		B			C	
Approach Delay (s)		11.0			21.6			12.2			23.9	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	172	37	10	180	9	28	88	15	12	142	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1747	1443		1728	1487		1713	1489		1712	
Flt Permitted		0.89	1.00		0.98	1.00		0.91	1.00		0.99	
Satd. Flow (perm)		1571	1443		1702	1487		1581	1489		1694	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	55	179	39	10	188	9	29	92	16	12	148	56
RTOR Reduction (vph)	0	0	25	0	0	6	0	0	8	0	19	0
Lane Group Flow (vph)	0	234	14	0	198	3	0	121	8	0	197	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		556	511		602	526		778	733		834	
v/s Ratio Prot												
v/s Ratio Perm		c0.15	0.01		0.12	0.00		0.08	0.01		c0.12	
v/c Ratio		0.42	0.03		0.33	0.01		0.16	0.01		0.24	
Uniform Delay, d1		15.9	13.7		15.4	13.6		9.1	8.4		9.5	
Progression Factor		1.95	3.44		0.97	0.99		0.21	0.26		1.08	
Incremental Delay, d2		2.2	0.1		1.4	0.0		0.3	0.0		0.7	
Delay (s)		33.3	47.3		16.3	13.5		2.3	2.2		10.9	
Level of Service		C	D		B	B		A	A		B	
Approach Delay (s)		35.3			16.2			2.3			10.9	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	18.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	147	35	76	8	14	9	37	219	8	17	379	161
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1871	1440		1776			1992			1976	1382
Flt Permitted		0.78	1.00		0.94			0.92			0.98	1.00
Satd. Flow (perm)		1509	1440		1693			1845			1950	1382
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	155	37	80	8	15	9	39	231	8	18	399	169
RTOR Reduction (vph)	0	0	47	0	7	0	0	2	0	0	0	86
Lane Group Flow (vph)	0	192	33	0	25	0	0	276	0	0	417	83
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		671	598		443			908			960	680
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.08	0.02		0.01			0.15			c0.21	0.06
v/c Ratio		0.29	0.06		0.06			0.30			0.43	0.12
Uniform Delay, d1		12.6	11.4		18.0			9.9			10.7	8.9
Progression Factor		0.57	0.58		1.00			0.62			0.53	0.27
Incremental Delay, d2		1.0	0.2		0.2			0.8			1.1	0.3
Delay (s)		8.2	6.8		18.2			6.9			6.7	2.7
Level of Service		A	A		B			A			A	A
Approach Delay (s)		7.8			18.2			6.9			5.6	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	866	289	292	842	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4570		1620	3320					1489	2913	1442
Flt Permitted		1.00		0.15	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4570		255	3320					1489	2913	1442
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	884	295	298	859	0	0	0	0	523	290	341
RTOR Reduction (vph)	0	42	0	0	0	0	0	0	0	0	9	135
Lane Group Flow (vph)	0	1137	0	298	859	0	0	0	0	298	584	128
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		50.4		75.2	75.2					27.8	27.8	27.8
Effective Green, g (s)		50.4		75.2	75.2					27.8	27.8	27.8
Actuated g/C Ratio		0.44		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		2003		408	2171					360	704	349
v/s Ratio Prot		0.25		c0.13	0.26							
v/s Ratio Perm				c0.35						0.20	0.20	0.09
v/c Ratio		0.57		0.73	0.40					0.83	0.83	0.37
Uniform Delay, d1		24.2		17.7	9.3					41.3	41.4	36.3
Progression Factor		1.00		1.32	1.20					1.00	1.00	1.00
Incremental Delay, d2		1.2		5.6	0.4					14.8	8.2	0.8
Delay (s)		25.3		28.9	11.6					56.1	49.6	37.1
Level of Service		C		C	B					E	D	D
Approach Delay (s)		25.3			16.1			0.0			48.4	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	29.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1038	0	0	811	261	323	270	237	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3143	3353			3241	1490		4525				
Flt Permitted	0.23	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	755	3353			3241	1490		4525				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1093	0	0	854	275	340	284	249	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	112	0	63	0	0	0	0
Lane Group Flow (vph)	359	1093	0	0	854	163	0	810	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	73.9	73.9			56.5	56.5		29.1				
Effective Green, g (s)	73.9	73.9			56.5	56.5		29.1				
Actuated g/C Ratio	0.64	0.64			0.49	0.49		0.25				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	722	2155			1592	732		1145				
v/s Ratio Prot	0.05	c0.33			c0.26							
v/s Ratio Perm	0.27					0.11		0.18				
v/c Ratio	0.50	0.51			0.54	0.22		0.71				
Uniform Delay, d1	10.7	10.9			20.2	16.7		39.1				
Progression Factor	0.30	0.32			1.02	1.21		1.00				
Incremental Delay, d2	0.5	0.7			1.1	0.6		2.5				
Delay (s)	3.7	4.1			21.8	20.8		41.6				
Level of Service	A	A			C	C		D				
Approach Delay (s)		4.0			21.5			41.6			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM Average Control Delay	19.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	571	368	94	564	48	227	179	66	74	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1564	3273	1313	1600	3279		1578	3002		1540	2940	
Flt Permitted	0.21	1.00	1.00	0.42	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	344	3273	1313	711	3279		648	3002		958	2940	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	130	607	391	100	600	51	241	190	70	79	172	129
RTOR Reduction (vph)	0	0	157	0	6	0	0	38	0	0	108	0
Lane Group Flow (vph)	130	607	234	100	645	0	241	222	0	79	193	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.7	52.4	68.9	40.6	31.8		38.3	26.8		26.3	18.3	
Effective Green, g (s)	64.7	52.4	68.9	40.6	31.8		38.3	26.8		26.3	18.3	
Actuated g/C Ratio	0.56	0.46	0.60	0.35	0.28		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	505	1491	787	319	907		349	700		260	468	
v/s Ratio Prot	0.07	c0.19	0.04	c0.02	c0.20		c0.10	0.07		0.02	0.07	
v/s Ratio Perm	0.08		0.14	0.09			c0.13			0.05		
v/c Ratio	0.26	0.41	0.30	0.31	0.71		0.69	0.32		0.30	0.41	
Uniform Delay, d1	13.6	20.9	11.2	25.7	37.5		30.5	36.5		36.1	43.5	
Progression Factor	0.68	0.86	4.05	1.00	1.00		0.81	0.88		1.00	1.00	
Incremental Delay, d2	1.1	0.7	0.2	0.6	4.7		5.6	0.9		0.7	2.1	
Delay (s)	10.3	18.7	45.8	26.2	42.2		30.4	33.0		36.7	45.6	
Level of Service	B	B	D	C	D		C	C		D	D	
Approach Delay (s)		27.1			40.1			31.8			43.7	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM Average Control Delay	33.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	67.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	193	367	56	164	87	362	340	78	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.95		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1704	2894		1653	3183		1620	3407		1580	3183	
Flt Permitted	0.58	1.00		0.28	1.00		0.30	1.00		0.49	1.00	
Satd. Flow (perm)	1034	2894		485	3183		512	3407		810	3183	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	51	212	403	62	180	96	398	374	86	226	448	62
RTOR Reduction (vph)	0	269	0	0	58	0	0	17	0	0	9	0
Lane Group Flow (vph)	51	346	0	62	218	0	398	443	0	226	501	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	42.2	35.4		43.4	36.0		56.2	44.2		39.7	31.7	
Effective Green, g (s)	42.2	35.4		43.4	36.0		56.2	44.2		39.7	31.7	
Actuated g/C Ratio	0.37	0.31		0.38	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	419	891		258	996		448	1309		333	877	
v/s Ratio Prot	0.01	c0.12		c0.02	0.07		c0.16	0.13		0.05	0.16	
v/s Ratio Perm	0.04			0.08			c0.28			0.19		
v/c Ratio	0.12	0.39		0.24	0.22		0.89	0.34		0.68	0.57	
Uniform Delay, d1	23.8	31.3		23.8	29.1		21.3	25.1		29.5	35.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.98	
Incremental Delay, d2	0.2	1.3		0.6	0.5		19.2	0.7		5.4	2.6	
Delay (s)	23.9	32.6		24.4	29.6		40.5	25.8		34.9	37.8	
Level of Service	C	C		C	C		D	C		C	D	
Approach Delay (s)		31.9			28.7			32.6			36.9	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	33.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	491	115	10	376	66	94	259	9	153	469	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.98		1.00	0.99		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3029			3034		1451	3225		1522	2871	
Flt Permitted		0.74			0.93		0.31	1.00		0.58	1.00	
Satd. Flow (perm)		2268			2838		468	3225		922	2871	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	92	528	124	11	404	71	101	278	10	165	504	152
RTOR Reduction (vph)	0	26	0	0	21	0	0	4	0	0	44	0
Lane Group Flow (vph)	0	718	0	0	465	0	101	284	0	165	612	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		919			742		262	1191		434	1060	
v/s Ratio Prot		c0.05					c0.02	0.09		0.02	c0.21	
v/s Ratio Perm		c0.25			0.16		0.14			0.14		
v/c Ratio		0.78			0.63		0.39	0.24		0.38	0.58	
Uniform Delay, d1		17.6			21.2		11.6	14.2		11.8	16.4	
Progression Factor		1.00			1.52		0.71	0.61		1.00	1.00	
Incremental Delay, d2		6.6			1.4		4.1	0.5		2.5	2.3	
Delay (s)		24.2			33.7		12.4	9.1		14.3	18.7	
Level of Service		C			C		B	A		B	B	
Approach Delay (s)		24.2			33.7			9.9			17.9	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM Average Control Delay	21.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	198	136	84	129	22	64	409	71	27	537	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.98		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1707	1885		1599	1991		1676	3221		1435	3273	
Flt Permitted	0.65	1.00		0.42	1.00		0.37	1.00		0.44	1.00	
Satd. Flow (perm)	1174	1885		712	1991		652	3221		668	3273	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	215	148	91	140	24	70	445	77	29	584	59
RTOR Reduction (vph)	0	38	0	0	9	0	0	21	0	0	12	0
Lane Group Flow (vph)	73	325	0	91	155	0	70	501	0	29	631	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	433	696		263	735		311	1536		319	1561	
v/s Ratio Prot		c0.17			0.08			0.16			c0.19	
v/s Ratio Perm	0.06			0.13			0.11			0.04		
v/c Ratio	0.17	0.47		0.35	0.21		0.23	0.33		0.09	0.40	
Uniform Delay, d1	13.8	15.6		14.8	14.0		10.0	10.5		9.3	11.0	
Progression Factor	1.00	1.00		1.35	1.37		1.00	1.00		0.86	0.75	
Incremental Delay, d2	0.8	2.2		1.9	0.3		1.7	0.6		0.5	0.6	
Delay (s)	14.6	17.9		21.9	19.5		11.6	11.1		8.4	8.9	
Level of Service	B	B		C	B		B	B		A	A	
Approach Delay (s)		17.3			20.4			11.2			8.9	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	628	198	479	16	3	9	8	41	8	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.98	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.93	
Flt Protected		1.00		0.99				0.99			0.98	
Satd. Flow (prot)		3160		3090				1812			1817	
Flt Permitted		0.95		0.55				0.96			0.90	
Satd. Flow (perm)		3011		1730				1754			1673	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	698	220	532	18	3	10	9	46	9	0	3
RTOR Reduction (vph)	0	0	0	2	0	0	0	36	0	0	5	0
Lane Group Flow (vph)	0	700	0	768	0	0	0	32	0	0	13	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom			Perm	Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7			2	2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		834		844				378			360	
v/s Ratio Prot				c0.08								
v/s Ratio Perm		0.23		c0.29				c0.02			0.01	
v/c Ratio		0.84		1.02dl				0.08			0.04	
Uniform Delay, d1		22.1		17.9				20.4			20.2	
Progression Factor		1.47		0.92				1.00			1.00	
Incremental Delay, d2		7.4		15.1				0.4			0.2	
Delay (s)		40.0		31.6				20.8			20.4	
Level of Service		D		C				C			C	
Approach Delay (s)		40.0		31.6				20.8			20.4	
Approach LOS		D		C				C			C	

Intersection Summary			
HCM Average Control Delay	47.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	242
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1559	
Flt Permitted		1.00	
Satd. Flow (perm)		1559	
Peak-hour factor, PHF	0.90	0.90	0.90
Adj. Flow (vph)	6	3	269
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	272	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.17	
v/s Ratio Perm			
v/c Ratio		1.13	
Uniform Delay, d1		27.5	
Progression Factor		0.85	
Incremental Delay, d2		96.6	
Delay (s)		120.1	
Level of Service		F	
Approach Delay (s)		120.1	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	230	689	513	57	74	180
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.99		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3279	3271		1660	1485
Flt Permitted		0.67	1.00		0.95	1.00
Satd. Flow (perm)		2208	3271		1660	1485
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	247	741	552	61	80	194
RTOR Reduction (vph)	0	0	13	0	0	143
Lane Group Flow (vph)	0	988	600	0	80	51
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1359	2013		434	388
v/s Ratio Prot			0.18		c0.05	
v/s Ratio Perm		c0.45				0.03
v/c Ratio		0.73	0.30		0.18	0.13
Uniform Delay, d1		8.7	5.9		18.6	18.4
Progression Factor		1.30	1.33		1.19	1.93
Incremental Delay, d2		1.6	0.4		0.9	0.7
Delay (s)		12.8	8.2		23.0	36.1
Level of Service		B	A		C	D
Approach Delay (s)		12.8	8.2		32.3	
Approach LOS		B	A		C	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	70	693	490	136	239	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3118	3068		1506	1343
Flt Permitted		0.83	1.00		0.95	1.00
Satd. Flow (perm)		2612	3068		1506	1343
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	753	533	148	260	87
RTOR Reduction (vph)	0	0	39	0	0	56
Lane Group Flow (vph)	0	829	642	0	260	31
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1366	1605		533	475
v/s Ratio Prot			0.21		c0.17	
v/s Ratio Perm		c0.32				0.02
v/c Ratio		0.61	0.40		0.49	0.06
Uniform Delay, d1		10.8	9.3		16.4	13.9
Progression Factor		1.00	1.04		1.60	3.14
Incremental Delay, d2		1.5	0.7		3.0	0.2
Delay (s)		12.3	10.5		29.2	43.9
Level of Service		B	B		C	D
Approach Delay (s)		12.3	10.5		32.9	
Approach LOS		B	B		C	

Intersection Summary			
HCM Average Control Delay	15.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	562	218	104	504	158	45
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.96		1.00	1.00	0.97	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2387		1788	2506	1748	
Flt Permitted	1.00		0.13	1.00	0.96	
Satd. Flow (perm)	2387		243	2506	1748	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	618	240	114	554	174	49
RTOR Reduction (vph)	21	0	0	0	16	0
Lane Group Flow (vph)	837	0	114	554	207	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1138		116	1195	645	
v/s Ratio Prot	0.35			0.22	c0.12	
v/s Ratio Perm			c0.47			
v/c Ratio	0.74		0.98	0.46	0.32	
Uniform Delay, d1	13.7		16.7	11.4	14.7	
Progression Factor	1.28		1.00	1.00	1.00	
Incremental Delay, d2	3.5		79.1	1.3	1.3	
Delay (s)	21.0		95.8	12.7	16.0	
Level of Service	C		F	B	B	
Approach Delay (s)	21.0			26.9	16.0	
Approach LOS	C			C	B	

Intersection Summary			
HCM Average Control Delay	22.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	823	32	94	587	1	48	0	121	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.42	1.00	1.00	0.28	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	833	3431	1479	470	3320	1530		1545	1500			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	857	33	98	611	1	50	0	126	0	0	0
RTOR Reduction (vph)	0	0	11	0	0	0	0	0	114	0	0	0
Lane Group Flow (vph)	1	857	22	98	611	1	0	50	12	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	55.8	55.8	55.8	68.7	68.7	68.7		8.3	8.3			
Effective Green, g (s)	55.8	55.8	55.8	68.7	68.7	68.7		8.3	8.3			
Actuated g/C Ratio	0.66	0.66	0.66	0.81	0.81	0.81		0.10	0.10			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	547	2252	971	510	2683	1237		151	146			
v/s Ratio Prot		c0.25		0.02	c0.18							
v/s Ratio Perm	0.00		0.01	0.13		0.00		c0.03	0.01			
v/c Ratio	0.00	0.38	0.02	0.19	0.23	0.00		0.33	0.08			
Uniform Delay, d1	5.0	6.7	5.1	2.2	1.9	1.6		35.8	34.9			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	0.5	0.0	0.2	0.0	0.0		1.3	0.2			
Delay (s)	5.0	7.2	5.1	2.4	2.0	1.6		37.1	35.1			
Level of Service	A	A	A	A	A	A		D	D			
Approach Delay (s)		7.1			2.0			35.7			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM Average Control Delay	7.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	8	822	691	25	71	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3097	3083		1532	
Flt Permitted		0.95	1.00		0.96	
Satd. Flow (perm)		2931	3083		1532	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	9	884	743	27	76	14
RTOR Reduction (vph)	0	0	3	0	7	0
Lane Group Flow (vph)	0	893	767	0	83	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1075	2192		119	
v/s Ratio Prot			c0.25		c0.05	
v/s Ratio Perm		c0.30				
v/c Ratio		0.83	0.35		0.69	
Uniform Delay, d1		26.0	5.0		40.5	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		7.5	0.3		28.5	
Delay (s)		33.4	0.3		68.9	
Level of Service		C	A		E	
Approach Delay (s)		33.4	0.3		68.9	
Approach LOS		C	A		E	

Intersection Summary			
HCM Average Control Delay	20.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	462	0	1	498	34	3	2	27	156	0	103
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		1.00			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1774			3339			1466			1669	1348
Flt Permitted		0.93			0.95			0.97			0.89	1.00
Satd. Flow (perm)		1649			3189			1435			1556	1348
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	513	0	1	553	38	3	2	30	173	0	114
RTOR Reduction (vph)	0	0	0	0	6	0	0	27	0	0	0	76
Lane Group Flow (vph)	0	554	0	0	586	0	0	8	0	0	173	38
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		601			1713			152			479	444
v/s Ratio Prot					c0.06						c0.07	
v/s Ratio Perm		c0.34			0.12			0.01			c0.04	0.03
v/c Ratio		0.92			0.34			0.05			0.36	0.08
Uniform Delay, d1		25.8			11.5			34.2			23.7	19.7
Progression Factor		1.00			0.91			1.00			1.00	1.00
Incremental Delay, d2		21.8			0.3			0.7			2.1	0.4
Delay (s)		47.6			10.7			34.8			25.8	20.0
Level of Service		D			B			C			C	C
Approach Delay (s)		47.6			10.7			34.8			23.5	
Approach LOS		D			B			C			C	

Intersection Summary			
HCM Average Control Delay	27.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Appendix B
No Build Alternative

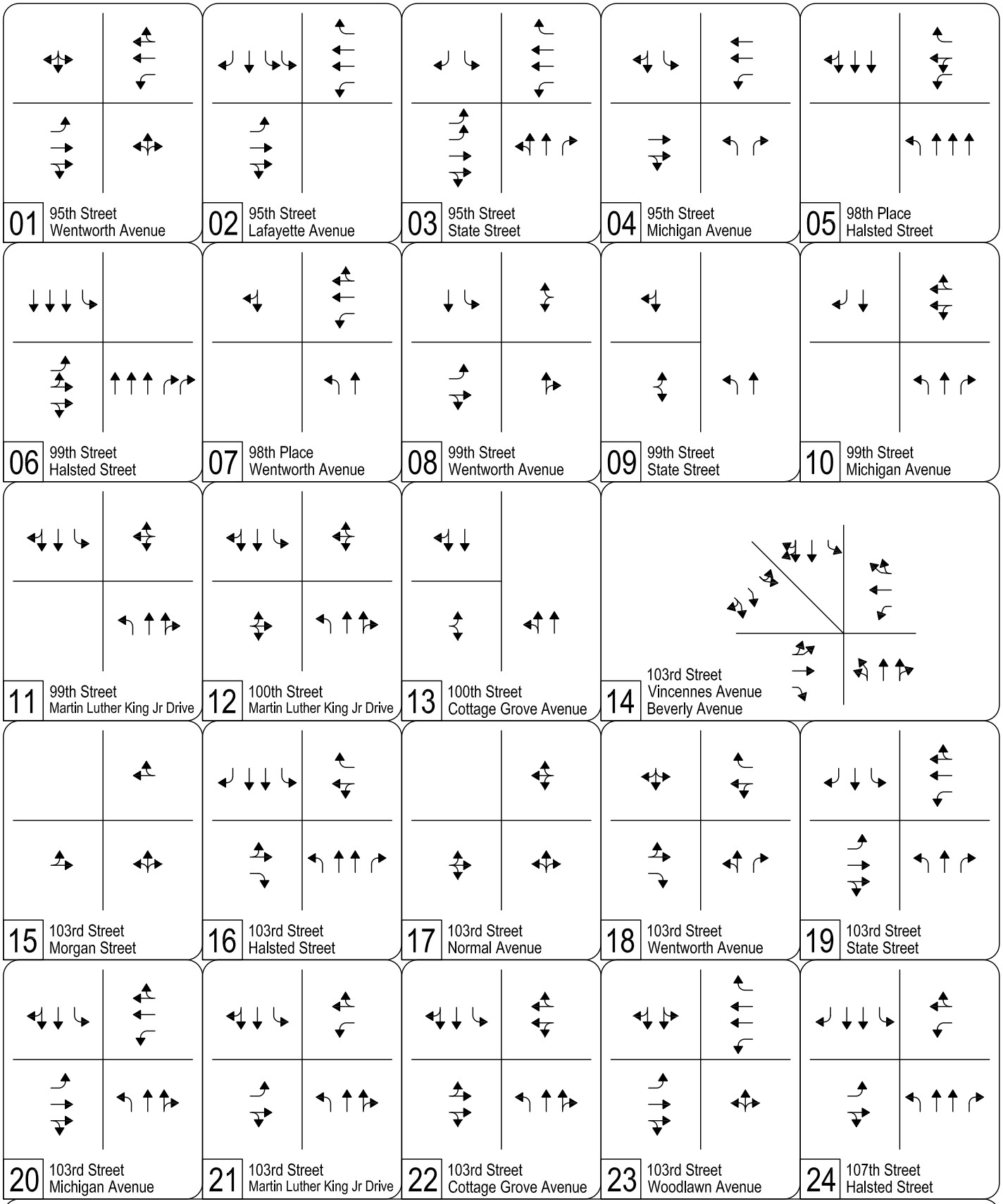

No Build (2026) Intersection Lane Geometry

Page 1 of 3

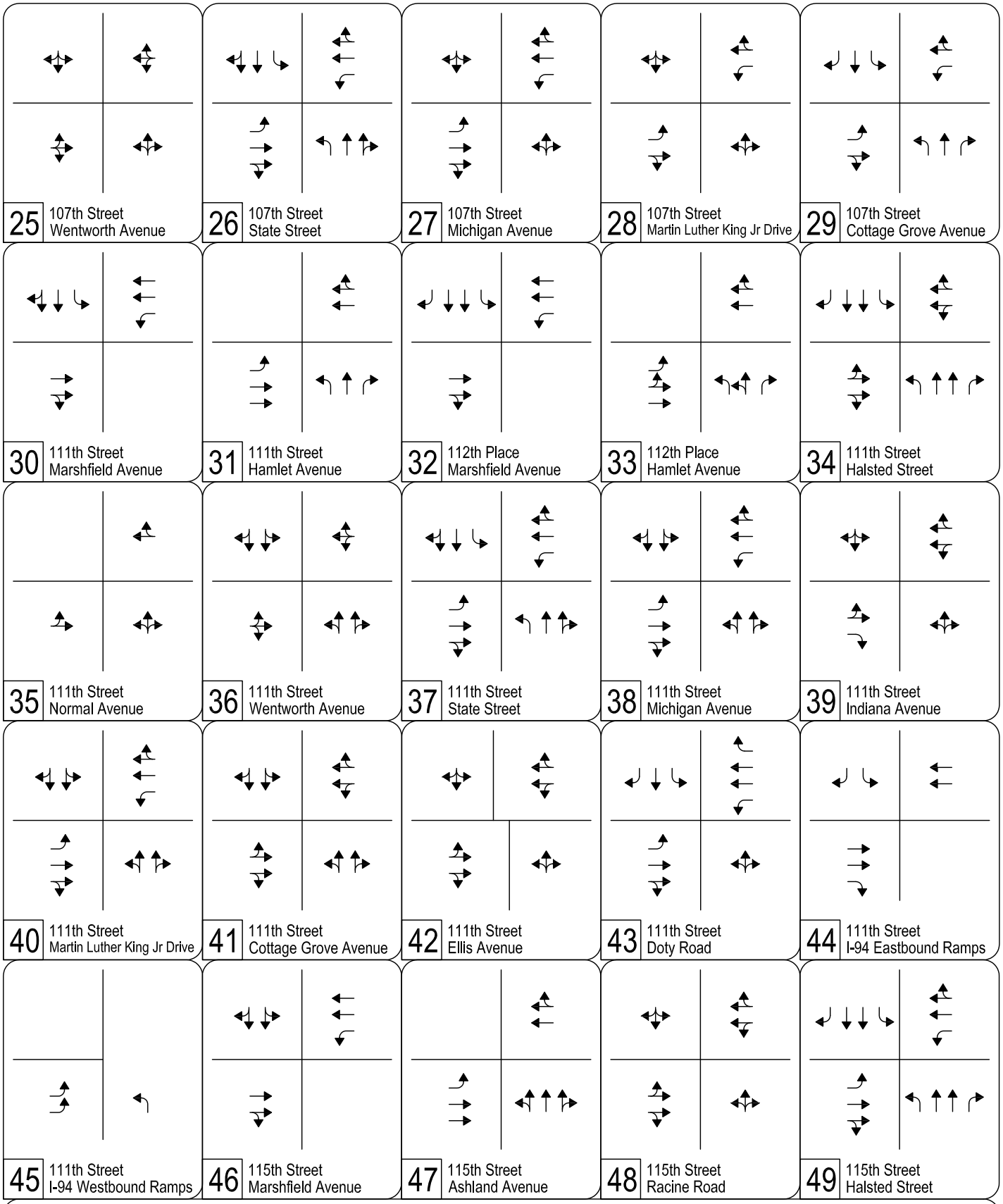

No Build (2026) Intersection Lane Geometry

Page 2 of 3

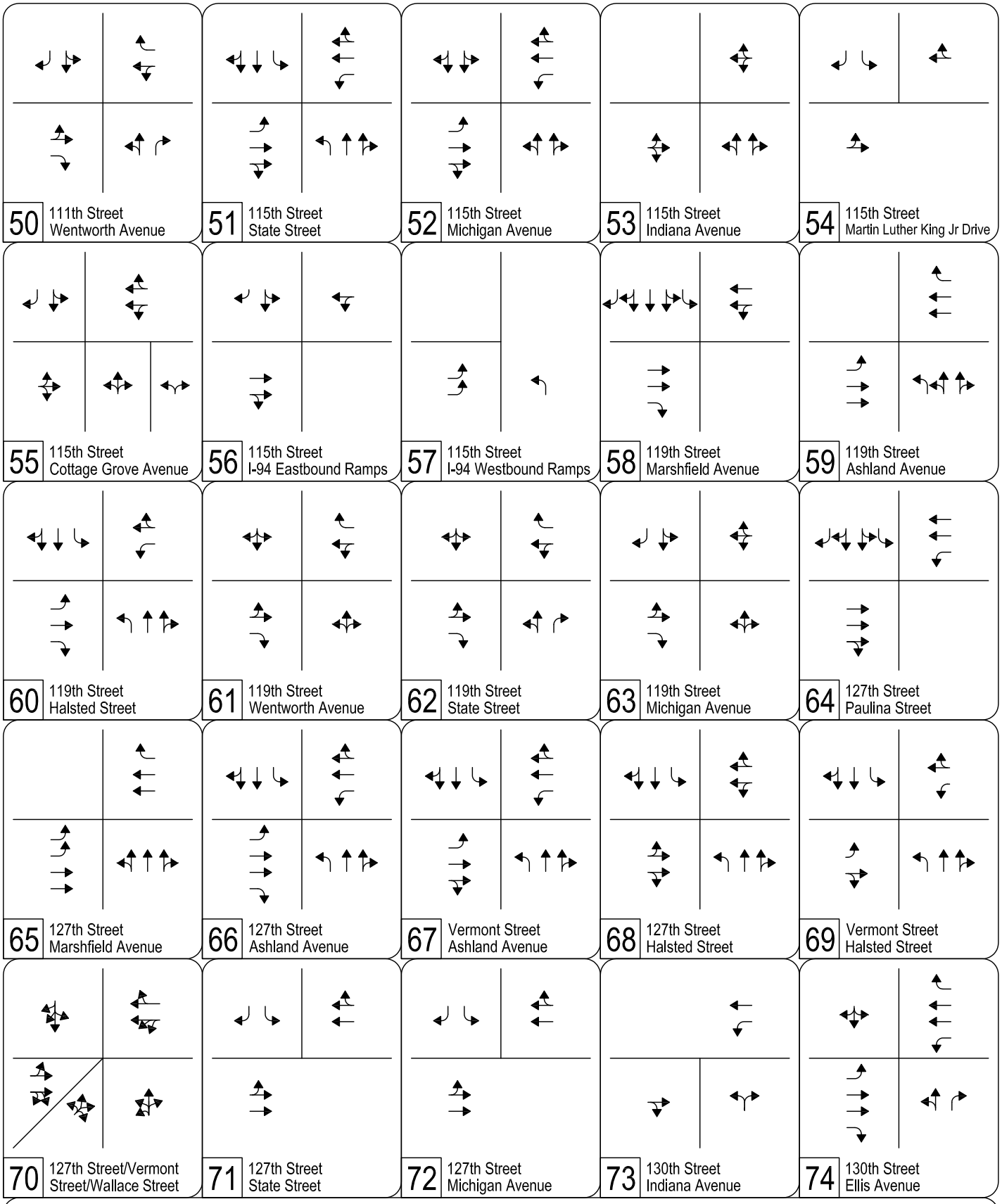

No Build (2026) Intersection Lane Geometry

Page 3 of 3

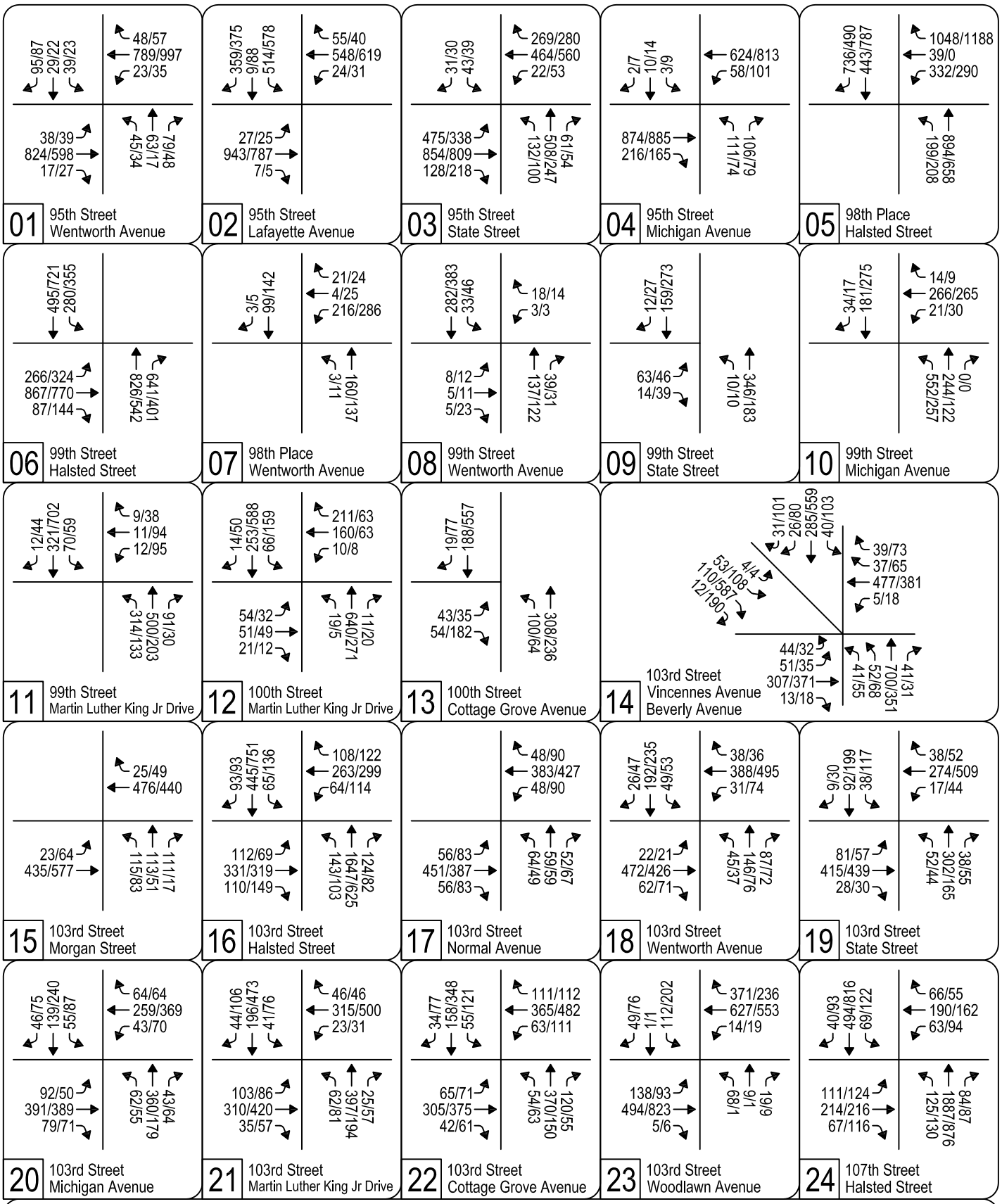

No Build (2026) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

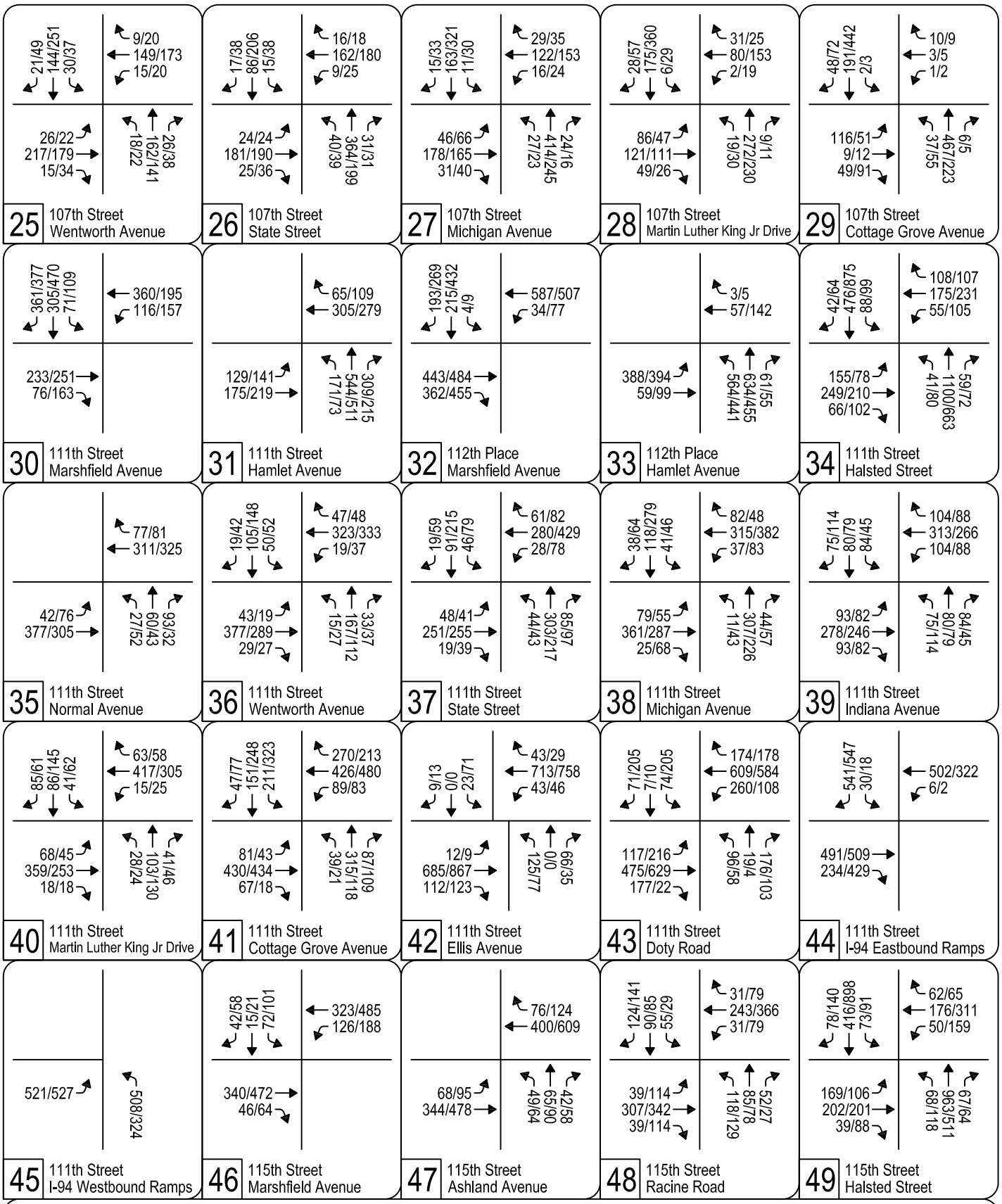

No Build (2026) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

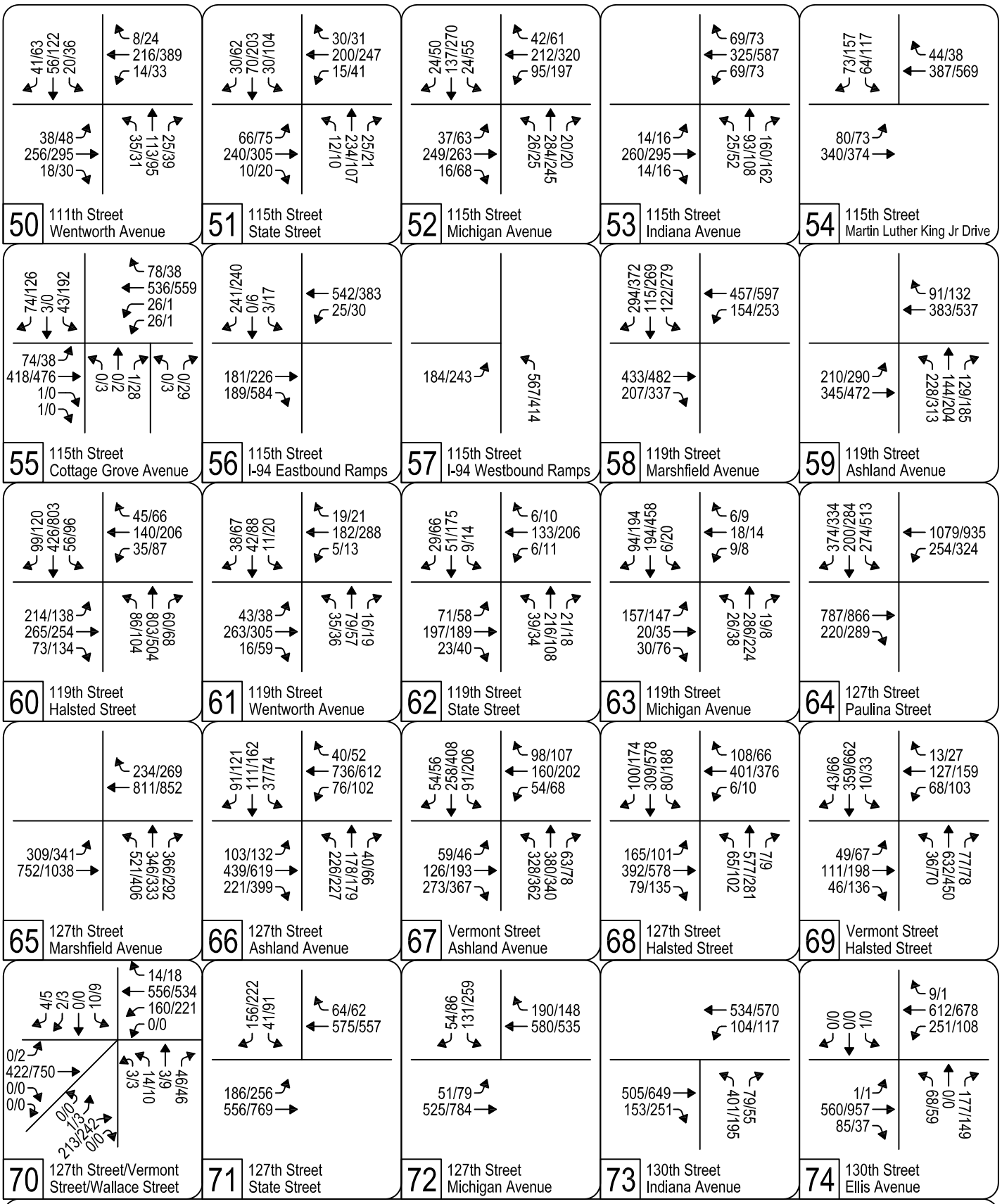

No Build (2026) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	824	17	23	789	48	45	63	79	39	29	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.98	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1416	2976		1592	2978			1752			1663	
Flt Permitted	0.26	1.00		0.26	1.00			0.90			0.90	
Satd. Flow (perm)	384	2976		430	2978			1598			1515	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	867	18	24	831	51	47	66	83	41	31	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	41	0	0	63	0
Lane Group Flow (vph)	40	883	0	24	875	0	0	155	0	0	109	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	201	1557		225	1558			565			536	
v/s Ratio Prot		c0.30			0.29							
v/s Ratio Perm	0.10			0.06				c0.10			0.07	
v/c Ratio	0.20	0.57		0.11	0.56			0.27			0.20	
Uniform Delay, d1	8.3	10.5		7.8	10.5			15.0			14.6	
Progression Factor	1.00	1.00		0.81	1.13			1.00			1.00	
Incremental Delay, d2	2.2	1.5		0.8	1.3			1.2			0.9	
Delay (s)	10.5	12.0		7.2	13.1			16.2			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		11.9			12.9			16.2			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	943	7	24	548	55	0	0	0	514	9	359
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	776	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	355	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	993	7	25	577	58	0	0	0	541	9	378
RTOR Reduction (vph)	0	1	0	0	0	25	0	0	0	0	0	172
Lane Group Flow (vph)	28	999	0	25	577	33	0	0	0	541	9	206
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	163	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.30		0.01	c0.18					c0.17	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.15
v/c Ratio	0.17	0.92		0.04	0.33	0.11				0.76	0.03	0.64
Uniform Delay, d1	31.6	41.8		15.1	15.3	13.3				46.6	38.7	45.1
Progression Factor	0.80	0.82		0.30	0.63	1.55				1.00	1.00	1.00
Incremental Delay, d2	2.0	12.2		0.1	0.3	0.5				7.3	0.2	9.2
Delay (s)	27.3	46.7		4.6	10.0	21.2				53.9	38.9	54.3
Level of Service	C	D		A	A	C				D	D	D
Approach Delay (s)		46.2			10.8			0.0			54.0	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	40.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	475	854	128	22	464	269	132	508	61	43	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	500	899	135	23	488	283	139	535	64	45	0	33
RTOR Reduction (vph)	0	9	0	0	0	161	0	0	25	0	0	31
Lane Group Flow (vph)	500	1026	0	23	488	122	0	674	39	45	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1554		108	697	225		762	327	53		45
v/s Ratio Prot	0.16	c0.33		0.01	c0.17			c0.20		c0.05		
v/s Ratio Perm						0.13			0.03			0.00
v/c Ratio	0.47	0.66		0.21	0.70	0.54		0.88	0.12	0.85		0.05
Uniform Delay, d1	34.5	24.3		57.2	45.3	43.3		48.3	39.5	60.4		57.4
Progression Factor	0.75	0.19		1.00	1.00	1.00		0.95	0.90	1.00		1.00
Incremental Delay, d2	0.7	1.1		4.5	5.8	9.0		14.1	0.7	70.0		0.4
Delay (s)	26.6	5.7		61.6	51.0	52.3		59.8	36.2	130.4		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		12.5			51.8			57.7			99.7	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	35.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	874	216	58	624	0	111	0	106	3	10	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.98	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1650	3005		1390		1465	1803	1934	
Flt Permitted		1.00		0.16	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		283	3005		1096		1465	1803	1934	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	971	240	64	693	0	123	0	118	3	11	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	80	0	1	0
Lane Group Flow (vph)	0	1189	0	64	693	0	123	0	38	3	12	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		170	1803		351		469	577	619	
v/s Ratio Prot		c0.42			0.23						0.01	
v/s Ratio Perm				0.23			c0.11		0.03	0.00		
v/c Ratio		0.69		0.38	0.38		0.35		0.08	0.01	0.02	
Uniform Delay, d1		13.7		10.3	10.4		26.0		23.7	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.3		6.3	0.6		2.7		0.3	0.0	0.1	
Delay (s)		16.0		16.6	11.0		28.8		24.1	23.2	23.3	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.0			11.5			26.5			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	332	39	1048	199	894	0	0	443	736
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3928	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3928	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	339	40	1069	203	912	0	0	452	751
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	339	40	1069	203	912	0	0	1203	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1160	
v/s Ratio Prot							c0.13	0.21			c0.31	
v/s Ratio Perm				0.22	0.02	c0.72						
v/c Ratio				0.75	0.08	2.53	0.43	0.33			1.87dr	
Uniform Delay, d1				33.5	26.7	37.5	29.2	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.65	2.37			1.00	
Incremental Delay, d2				11.1	0.3	694.2	2.0	0.2			36.5	
Delay (s)				44.6	27.1	731.7	21.2	21.9			73.5	
Level of Service				D	C	F	C	C			E	
Approach Delay (s)		0.0			551.4			21.8			73.5	
Approach LOS		A			F			C			E	

Intersection Summary			
HCM Average Control Delay	241.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.4%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	266	867	87	0	0	0	0	826	641	280	495	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3186						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3186						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	274	894	90	0	0	0	0	852	661	289	510	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	247	1004	0	0	0	0	0	852	661	289	510	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1032						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.18	0.11	
v/s Ratio Perm	0.16	0.32							c0.30			
v/c Ratio	0.51	0.97						0.73	1.13	0.62	0.19	
Uniform Delay, d1	28.7	35.0						35.1	38.5	31.9	9.9	
Progression Factor	1.00	1.00						0.44	0.47	1.06	0.44	
Incremental Delay, d2	3.8	22.2						0.4	62.5	2.5	0.1	
Delay (s)	32.5	57.3						15.7	80.4	36.4	4.4	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		52.4			0.0			44.0			16.0	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	40.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	216	4	21	3	160	0	0	99	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1958	
Flt Permitted				0.95	1.00		0.59	1.00			1.00	
Satd. Flow (perm)				1578	2709		805	1882			1958	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	240	4	23	3	178	0	0	110	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	240	9	0	3	178	0	0	112	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		513	1107			1060	
v/s Ratio Prot					0.00		0.00	c0.09			0.06	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.16			0.11	
Uniform Delay, d1				23.3	19.9		9.7	8.0			9.5	
Progression Factor				1.00	1.00		1.04	1.18			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.6	19.9		10.1	9.7			9.7	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			25.9			9.7			9.7	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	3	0	18	0	137	39	33	282	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.88			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1578			1687		1595	1755	
Flt Permitted	0.74	1.00			0.98			1.00		0.61	1.00	
Satd. Flow (perm)	1516	1809			1565			1687		1022	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	3	0	19	0	144	41	35	297	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	9	0	0	173	0	35	297	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	575			497			794		648	1032	
v/s Ratio Prot		0.00						0.10		0.00	c0.17	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.02			0.22		0.05	0.29	
Uniform Delay, d1	19.9	19.9			19.9			13.3		8.4	8.7	
Progression Factor	1.00	1.00			1.00			1.00		0.92	0.84	
Incremental Delay, d2	0.1	0.0			0.1			0.6		0.2	0.7	
Delay (s)	20.0	19.9			20.0			13.9		7.9	7.9	
Level of Service	B	B			B			B		A	A	
Approach Delay (s)		19.9			20.0			13.9			7.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	14	10	346	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1791		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1791		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	16	11	384	177	13
RTOR Reduction (vph)	11	0	0	0	4	0
Lane Group Flow (vph)	75	0	11	384	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	579		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.39	0.21	
Uniform Delay, d1	15.5		6.5	8.3	7.3	
Progression Factor	1.00		0.32	0.51	1.17	
Incremental Delay, d2	0.5		0.0	1.1	0.5	
Delay (s)	16.0		2.1	5.3	9.0	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.2	9.0	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	21	266	14	552	244	0	0	181	34
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3741		1660	1752			1603	1298
Flt Permitted					1.00		0.59	1.00			1.00	1.00
Satd. Flow (perm)					3741		1025	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	23	296	16	613	271	0	0	201	38
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	0	331	0	613	271	0	0	201	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1144		690	1051			717	580
v/s Ratio Prot					c0.09		c0.10	0.15			0.13	
v/s Ratio Perm							c0.43					0.01
v/c Ratio					0.29		0.89	0.26			0.28	0.03
Uniform Delay, d1					22.5		16.6	8.0			14.9	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		15.8	0.6			1.0	0.1
Delay (s)					23.1		32.4	8.6			15.8	13.3
Level of Service					C		C	A			B	B
Approach Delay (s)		0.0			23.1			25.1			15.4	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	12	11	9	314	500	91	70	321	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.96		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1794		1691	3237		1707	3352	
Flt Permitted					0.98		0.52	1.00		0.33	1.00	
Satd. Flow (perm)					1794		919	3237		600	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	13	12	10	349	556	101	78	357	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	28	0	349	637	0	78	367	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					550		574	1467		431	1520	
v/s Ratio Prot					c0.02		c0.06	0.20		0.02	0.11	
v/s Ratio Perm							c0.28			0.08		
v/c Ratio					0.05		0.61	0.43		0.18	0.24	
Uniform Delay, d1					18.3		12.9	14.0		11.8	12.6	
Progression Factor					1.00		0.71	0.73		1.00	1.00	
Incremental Delay, d2					0.2		4.4	0.9		0.9	0.4	
Delay (s)					18.5		13.6	11.0		12.7	13.0	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.5			11.9			12.9	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	51	21	10	160	211	19	640	11	66	253	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1949			1626		1596	3232		1641	3131	
Flt Permitted		0.71			0.99		0.58	1.00		0.35	1.00	
Satd. Flow (perm)		1411			1617		973	3232		606	3131	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	54	22	11	168	222	20	674	12	69	266	15
RTOR Reduction (vph)	0	9	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	124	0	0	342	0	20	684	0	69	276	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		470			539		545	1810		339	1753	
v/s Ratio Prot								c0.21			0.09	
v/s Ratio Perm		0.09			c0.21		0.02			0.11		
v/c Ratio		0.26			0.63		0.04	0.38		0.20	0.16	
Uniform Delay, d1		18.3			21.1		7.4	9.2		8.2	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.15	0.05	
Incremental Delay, d2		1.4			5.6		0.1	0.6		1.3	0.2	
Delay (s)		19.6			26.7		7.5	9.8		2.5	0.6	
Level of Service		B			C		A	A		A	A	
Approach Delay (s)		19.6			26.7			9.7			1.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	43	54	100	308	188	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	48	60	111	342	209	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	108	225	228	139	91
Volume Left (vph)	48	111	0	0	0
Volume Right (vph)	60	0	0	0	21
Hadj (s)	-0.16	0.33	0.09	0.09	-0.08
Departure Headway (s)	5.2	5.4	5.1	5.3	5.2
Degree Utilization, x	0.16	0.34	0.32	0.21	0.13
Capacity (veh/h)	635	657	688	648	668
Control Delay (s)	9.2	9.8	9.3	8.5	7.8
Approach Delay (s)	9.2	9.6		8.2	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.1		
HCM Level of Service	A		
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	44	51	307	13	5	477	37	39	41	52	700	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3292	
Flt Permitted		0.11	1.00	1.00	0.56	1.00	1.00			0.41	1.00	
Satd. Flow (perm)		187	1731	1530	1000	1731	1487			737	3292	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	57	341	14	6	530	41	43	46	58	778	46
RTOR Reduction (vph)	0	0	0	7	0	0	30	0	0	0	4	0
Lane Group Flow (vph)	0	106	341	7	6	530	54	0	0	104	820	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	305	528	453			175	784	
v/s Ratio Prot		0.05	c0.20			c0.31					c0.25	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.14		
v/c Ratio		0.38	0.41	0.01	0.02	1.00	0.12			0.59	1.05	
Uniform Delay, d1		20.1	17.9	14.5	25.5	36.5	26.3			35.5	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.8	1.5	0.0	0.1	40.1	0.5			14.0	44.9	
Delay (s)		24.0	19.5	14.5	25.6	76.6	26.9			49.5	84.9	
Level of Service		C	B	B	C	E	C			D	F	
Approach Delay (s)			20.4			69.4					80.9	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	58.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	40	285	26	31	4	53	110	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.98				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3280				1710	2622	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3280				1710	2622	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	44	317	29	34	4	59	122	13
RTOR Reduction (vph)	0	7	0	0	0	0	7	0
Lane Group Flow (vph)	44	373	0	0	0	63	128	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.11				0.04		
v/s Ratio Perm	0.15						c0.05	
v/c Ratio	0.65	0.49				0.22	0.29	
Uniform Delay, d1	36.3	34.8				37.9	38.3	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	39.0	2.2				1.8	1.7	
Delay (s)	75.3	37.0				39.6	40.0	
Level of Service	E	D				D	D	
Approach Delay (s)		41.0				39.9		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	435	0	0	476	25	115	113	111	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1930			1773				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1596			1930			1773				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	483	0	0	529	28	128	126	123	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	509	0	0	557	0	0	377	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		761			920			709				
v/s Ratio Prot					0.29							
v/s Ratio Perm		c0.32						0.21				
v/c Ratio		0.67			0.61			0.53				
Uniform Delay, d1		13.1			12.5			14.9				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		4.6			3.0			2.8				
Delay (s)		17.7			15.5			17.7				
Level of Service		B			B			B				
Approach Delay (s)		17.7			15.5			17.7			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	16.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	331	110	64	263	108	143	1647	124	65	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1919	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.67	1.00		0.65	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1293	1426		1267	1396	625	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	118	348	116	67	277	114	151	1734	131	68	468	98
RTOR Reduction (vph)	0	0	68	0	0	67	0	0	29	0	0	59
Lane Group Flow (vph)	0	466	48	0	344	47	151	1734	102	68	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	53.1	44.4	44.4	48.9	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	53.1	44.4	44.4	48.9	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.51	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		530	584		519	572	389	1310	543	147	1191	510
v/s Ratio Prot							c0.03	c0.56		c0.03	0.16	
v/s Ratio Perm		c0.36	0.03		0.27	0.03	0.16		0.08	0.19		0.03
v/c Ratio		0.88	0.08		0.66	0.08	0.39	1.32	0.19	0.46	0.39	0.08
Uniform Delay, d1		28.6	18.9		25.1	18.9	14.6	30.3	19.0	23.1	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.09	0.78	0.45
Incremental Delay, d2		15.3	0.3		6.5	0.3	0.6	151.1	0.8	2.2	0.9	0.3
Delay (s)		43.9	19.2		31.7	19.2	15.3	181.4	19.8	27.3	18.3	9.0
Level of Service		D	B		C	B	B	F	B	C	B	A
Approach Delay (s)		39.0			28.6			158.4			17.8	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	99.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	108.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	451	56	48	383	48	64	59	52	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1627			1627			1778				
Flt Permitted		0.92			0.91			0.98				
Satd. Flow (perm)		1496			1484			1778				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	501	62	53	426	53	71	66	58	0	0	0
RTOR Reduction (vph)	0	6	0	0	6	0	0	23	0	0	0	0
Lane Group Flow (vph)	0	619	0	0	526	0	0	172	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		875			868			520				
v/s Ratio Prot												
v/s Ratio Perm		c0.41			0.35			0.10				
v/c Ratio		0.71			0.61			0.33				
Uniform Delay, d1		9.6			8.7			18.0				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		4.8			3.1			1.7				
Delay (s)		14.4			11.8			19.7				
Level of Service		B			B			B				
Approach Delay (s)		14.4			11.8			19.7			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	472	62	31	388	38	45	146	87	49	192	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.99	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1634	1288		1663	1490		1776	
Flt Permitted		0.97	1.00		0.95	1.00		0.89	1.00		0.91	
Satd. Flow (perm)		1618	1255		1552	1288		1499	1490		1636	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	23	497	65	33	408	40	47	154	92	52	202	27
RTOR Reduction (vph)	0	0	28	0	0	17	0	0	63	0	5	0
Lane Group Flow (vph)	0	520	37	0	441	23	0	201	29	0	276	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		928	720		890	738		480	477		524	
v/s Ratio Prot												
v/s Ratio Perm		c0.32	0.03		0.28	0.02		0.13	0.02		c0.17	
v/c Ratio		0.56	0.05		0.50	0.03		0.42	0.06		0.53	
Uniform Delay, d1		10.1	7.0		9.5	7.0		20.0	17.7		20.8	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		2.4	0.1		2.0	0.1		2.7	0.2		3.7	
Delay (s)		12.5	7.2		11.5	7.0		22.7	17.9		24.6	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		11.9			11.1			21.2			24.6	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	415	28	17	274	38	52	302	38	38	92	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1462	2990		1459	3528		1534	1647	1301	1517	1541	1156
Flt Permitted	0.54	1.00		0.45	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	838	2990		685	3528		1116	1647	1301	722	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	90	461	31	19	304	42	58	336	42	42	102	10
RTOR Reduction (vph)	0	7	0	0	17	0	0	0	22	0	0	6
Lane Group Flow (vph)	90	485	0	19	329	0	58	336	20	42	102	4
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	400	1426		327	1683		446	659	520	289	616	462
v/s Ratio Prot		c0.16			0.09			c0.20			0.07	
v/s Ratio Perm	0.11			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.23	0.34		0.06	0.20		0.13	0.51	0.04	0.15	0.17	0.01
Uniform Delay, d1	10.0	10.6		9.1	9.8		12.3	14.7	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.64	0.78	0.37	0.52	0.52	0.28
Incremental Delay, d2	1.3	0.6		0.3	0.3		0.6	2.8	0.1	1.0	0.6	0.0
Delay (s)	11.3	11.3		9.5	10.1		8.5	14.2	4.5	7.5	7.1	3.4
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.3			10.0			12.5			7.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	391	79	43	259	64	62	360	43	55	139	46
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.99	1.00		0.98	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1462	3059		1588	3001		1540	3021		1402	2789	
Flt Permitted	0.54	1.00		0.44	1.00		0.63	1.00		0.47	1.00	
Satd. Flow (perm)	835	3059		730	3001		1021	3021		691	2789	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	97	412	83	45	273	67	65	379	45	58	146	48
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	28	0
Lane Group Flow (vph)	97	495	0	45	340	0	65	412	0	58	166	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	401	1468		350	1440		422	1249		286	1153	
v/s Ratio Prot		c0.16			0.11			c0.14			0.06	
v/s Ratio Perm	0.12			0.06			0.06			0.08		
v/c Ratio	0.24	0.34		0.13	0.24		0.15	0.33		0.20	0.14	
Uniform Delay, d1	11.5	12.1		10.8	11.4		13.8	14.9		14.1	13.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	0.6		0.8	0.4		0.8	0.7		1.6	0.3	
Delay (s)	12.9	12.7		11.6	11.8		14.6	15.6		15.7	14.0	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.7			11.8			15.5			14.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	103	310	35	23	315	46	62	397	25	41	196	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1473	1841		1533	3073		1372	2892	
Flt Permitted	0.46	1.00		0.48	1.00		0.60	1.00		0.43	1.00	
Satd. Flow (perm)	742	1576		748	1841		961	3073		622	2892	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	108	326	37	24	332	48	65	418	26	43	206	46
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	108	363	0	24	380	0	65	444	0	43	252	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	459	738		374	793		334	730		199	633	
v/s Ratio Prot	c0.01	c0.23		0.00	0.21		c0.01	c0.14		0.01	0.09	
v/s Ratio Perm	0.12			0.03			0.05			0.05		
v/c Ratio	0.24	0.49		0.06	0.48		0.19	0.61		0.22	0.40	
Uniform Delay, d1	13.0	15.6		14.4	17.4		21.4	28.9		25.7	28.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.3		0.1	2.1		0.3	3.7		0.5	1.9	
Delay (s)	13.2	18.0		14.5	19.4		21.7	32.6		26.2	30.3	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		16.9			19.1			31.2			29.7	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	305	42	63	365	111	54	370	120	55	158	34
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3493			2911		1614	3156		1580	2926	
Flt Permitted		0.79			0.85		0.62	1.00		0.40	1.00	
Satd. Flow (perm)		2786			2478		1049	3156		658	2926	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	339	47	70	406	123	60	411	133	61	176	38
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	458	0	0	599	0	60	544	0	61	214	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1263			1123		462	1389		290	1287	
v/s Ratio Prot								c0.17			0.07	
v/s Ratio Perm		0.16			c0.24		0.06			0.09		
v/c Ratio		0.36			0.53		0.13	0.39		0.21	0.17	
Uniform Delay, d1		13.4			14.8		12.5	14.2		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8			1.8		0.6	0.8		1.6	0.3	
Delay (s)		14.2			16.6		13.1	15.0		14.6	13.0	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.2			16.6			14.8			13.3	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	494	5	14	627	371	68	9	19	112	1	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3143		1629	3257	1457		1612			3106	
Flt Permitted	0.37	1.00		0.44	1.00	1.00		0.70			0.75	
Satd. Flow (perm)	609	3143		749	3257	1457		1174			2411	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	153	549	6	16	697	412	76	10	21	124	1	54
RTOR Reduction (vph)	0	1	0	0	0	143	0	12	0	0	41	0
Lane Group Flow (vph)	153	554	0	16	697	269	0	95	0	0	138	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.4			16.4	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.4			16.4	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.23			0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	398	2054		489	2128	952		273			562	
v/s Ratio Prot		0.18			0.21							
v/s Ratio Perm	c0.25			0.02		0.18		c0.08			0.06	
v/c Ratio	0.38	0.27		0.03	0.33	0.28		0.35			0.24	
Uniform Delay, d1	5.6	5.1		4.3	5.4	5.2		22.5			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	2.8	0.3		0.1	0.4	0.7		3.3			1.0	
Delay (s)	8.4	5.5		4.4	5.8	5.9		25.8			22.9	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.1			5.8			25.8			22.9	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	70.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	67	63	190	66	125	1887	84	69	494	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1505		1547	1589		1493	3069	1271	1452	2983	1301
Flt Permitted	0.38	1.00		0.34	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	625	1505		547	1589		617	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	71	66	200	69	132	1986	88	73	520	42
RTOR Reduction (vph)	0	13	0	0	15	0	0	0	18	0	0	25
Lane Group Flow (vph)	117	283	0	66	254	0	132	1986	70	73	520	17
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	256	390		238	411		352	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.03	c0.65		c0.03	0.17	
v/s Ratio Perm	0.11			0.07			0.15		0.06	0.17		0.01
v/c Ratio	0.46	0.72		0.28	0.62		0.38	1.57	0.13	0.42	0.42	0.03
Uniform Delay, d1	22.5	28.7		21.8	27.8		13.2	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.70	0.48	1.00	1.00	1.00
Incremental Delay, d2	5.8	11.1		2.9	6.8		2.6	260.3	0.4	7.3	1.1	0.1
Delay (s)	28.3	39.9		24.7	34.6		10.7	277.7	7.9	25.4	18.9	15.0
Level of Service	C	D		C	C		B	F	A	C	B	B
Approach Delay (s)		36.6			32.7			250.9			19.4	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	164.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	217	15	15	149	9	18	162	26	30	144	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1852			1848			1902			1931	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1795			1800			1856			1832	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	224	15	15	154	9	19	167	27	31	148	22
RTOR Reduction (vph)	0	4	0	0	3	0	0	8	0	0	7	0
Lane Group Flow (vph)	0	262	0	0	175	0	0	205	0	0	194	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		746			748			857			846	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.11			0.11	
v/c Ratio		0.35			0.23			0.24			0.23	
Uniform Delay, d1		13.0			12.3			10.6			10.5	
Progression Factor		1.00			0.59			1.07			1.00	
Incremental Delay, d2		1.3			0.7			0.6			0.6	
Delay (s)		14.3			8.0			12.0			11.2	
Level of Service		B			A			B			B	
Approach Delay (s)		14.3			8.0			12.0			11.2	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	25	9	162	16	40	364	31	15	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	3012		1302	3049		1529	3094		1492	2868	
Flt Permitted	0.63	1.00		0.61	1.00		0.68	1.00		0.50	1.00	
Satd. Flow (perm)	967	3012		835	3049		1093	3094		781	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	28	10	180	18	44	404	34	17	96	19
RTOR Reduction (vph)	0	17	0	0	11	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	212	0	10	187	0	44	428	0	17	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	283	880		244	891		639	1809		457	1677	
v/s Ratio Prot		c0.07			0.06			c0.14			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.24		0.04	0.21		0.07	0.24		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.8	6.5		5.7	5.8	
Progression Factor	0.71	0.72		0.74	0.72		0.89	0.94		0.50	0.46	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.6	13.2		12.5	13.0		5.4	6.4		3.0	2.7	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.2			13.0			6.3			2.8	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	8.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	31	16	122	29	27	414	24	11	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	2962		1515	2886			1878			1805	
Flt Permitted	0.65	1.00		0.61	1.00			0.98			0.97	
Satd. Flow (perm)	1057	2962		968	2886			1840			1758	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	34	18	136	32	30	460	27	12	181	17
RTOR Reduction (vph)	0	20	0	0	19	0	0	3	0	0	5	0
Lane Group Flow (vph)	51	212	0	18	149	0	0	514	0	0	205	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	423	1185		387	1154			878			838	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.28			0.12	
v/c Ratio	0.12	0.18		0.05	0.13			0.59			0.24	
Uniform Delay, d1	12.3	12.6		11.9	12.3			12.3			10.1	
Progression Factor	1.00	0.91		0.87	0.88			1.02			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			2.8			0.7	
Delay (s)	12.9	11.7		10.6	11.1			15.4			10.8	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		11.9			11.1			15.4			10.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	121	49	2	80	31	19	272	9	6	175	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.96			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1890		1587	1874			1971			1932	
Flt Permitted	0.68	1.00		0.60	1.00			0.98			0.99	
Satd. Flow (perm)	1145	1890		1001	1874			1934			1918	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	134	54	2	89	34	21	302	10	7	194	31
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	96	188	0	2	123	0	0	333	0	0	232	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	352	582		308	577			1101			1092	
v/s Ratio Prot		c0.10			0.07							
v/s Ratio Perm	0.08			0.00				c0.17			0.12	
v/c Ratio	0.27	0.32		0.01	0.21			0.30			0.21	
Uniform Delay, d1	17.0	17.3		15.6	16.7			7.3			6.9	
Progression Factor	0.89	0.88		0.87	0.92			0.92			1.00	
Incremental Delay, d2	1.9	1.5		0.0	0.8			0.7			0.4	
Delay (s)	17.0	16.6		13.6	16.2			7.4			7.3	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		16.7			16.1			7.4			7.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	9	49	1	3	10	37	467	6	2	191	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1675		1710	1413		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.72	1.00		0.63	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1262	1675		1288	1413		981	1631	1392	682	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	129	10	54	1	3	11	41	519	7	2	212	53
RTOR Reduction (vph)	0	39	0	0	8	0	0	0	3	0	0	21
Lane Group Flow (vph)	129	25	0	1	6	0	41	519	4	2	212	32
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	464		357	391		589	979	835	409	1144	856
v/s Ratio Prot		0.01			0.00			c0.32			0.11	
v/s Ratio Perm	c0.10			0.00			0.04		0.00	0.00		0.02
v/c Ratio	0.37	0.05		0.00	0.02		0.07	0.53	0.01	0.00	0.19	0.04
Uniform Delay, d1	18.9	17.2		17.0	17.1		5.4	7.6	5.2	5.2	5.9	5.3
Progression Factor	1.49	2.40		1.00	1.00		1.12	1.05	1.29	1.00	1.00	1.00
Incremental Delay, d2	2.9	0.2		0.0	0.1		0.2	1.6	0.0	0.0	0.4	0.1
Delay (s)	31.1	41.6		17.0	17.1		6.2	9.7	6.8	5.2	6.2	5.4
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		34.6			17.1			9.4			6.0	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	233	76	116	360	0	0	0	0	71	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		0.99	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2824		1620	3288					1574	2907	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2824		860	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	245	80	122	379	0	0	0	0	75	321	380
RTOR Reduction (vph)	0	31	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	294	0	122	379	0	0	0	0	75	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		932		656	1940					504	930	
v/s Ratio Prot		c0.10		0.04	c0.12					0.05	c0.17	
v/s Ratio Perm				0.06								
v/c Ratio		0.31		0.19	0.20					0.15	0.52	
Uniform Delay, d1		25.0		10.5	9.5					24.3	27.8	
Progression Factor		1.00		1.94	2.05					1.00	1.00	
Incremental Delay, d2		0.9		0.5	0.2					0.6	2.1	
Delay (s)		25.9		20.9	19.6					24.9	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		25.9			19.9			0.0			29.4	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	175	0	0	305	65	171	544	309	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1672	3054			2832		1750	1782	1514			
Flt Permitted	0.37	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	650	3054			2832		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	184	0	0	321	68	180	573	325	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	218	0	0	0
Lane Group Flow (vph)	136	184	0	0	371	0	180	573	107	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	688	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.13		0.10	c0.32				
v/s Ratio Perm	0.04								0.07			
v/c Ratio	0.20	0.10			0.62		0.31	0.97	0.21			
Uniform Delay, d1	11.7	9.4			35.9		25.0	33.1	24.2			
Progression Factor	0.25	0.25			1.00		0.74	0.78	1.91			
Incremental Delay, d2	0.6	0.1			4.9		0.9	24.4	0.6			
Delay (s)	3.6	2.5			40.8		19.4	50.3	46.8			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		3.0			40.8			44.1			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	36.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	443	362	34	587	0	0	0	0	4	215	193
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3106		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.18	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3106		305	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	461	377	35	611	0	0	0	0	4	224	201
RTOR Reduction (vph)	0	148	0	0	0	0	0	0	0	0	0	133
Lane Group Flow (vph)	0	690	0	35	611	0	0	0	0	4	224	68
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1118		400	1898					543	1074	491
v/s Ratio Prot		c0.22		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.62		0.09	0.32					0.01	0.21	0.14
Uniform Delay, d1		26.3		12.3	10.8					21.8	23.4	22.9
Progression Factor		1.00		0.55	0.69					0.74	0.80	0.95
Incremental Delay, d2		2.6		0.2	0.2					0.0	0.4	0.5
Delay (s)		28.9		6.9	7.6					16.2	19.1	22.2
Level of Service		C		A	A					B	B	C
Approach Delay (s)		28.9			7.6			0.0			20.5	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	388	59	0	0	57	3	564	634	61	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3042			3098		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1086	2344			3098		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	400	61	0	0	59	3	581	654	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	200	261	0	0	59	0	581	654	25	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	683	1447			465		575	606	555			
v/s Ratio Prot	c0.11	0.06			0.02		0.37	c0.40	0.02			
v/s Ratio Perm	c0.04	0.03										
v/c Ratio	0.29	0.18			0.13		1.01	1.08	0.04			
Uniform Delay, d1	13.9	13.2			36.8		31.5	31.5	20.2			
Progression Factor	0.25	0.26			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		40.1	59.8	0.2			
Delay (s)	4.2	3.6			37.4		71.6	91.3	20.3			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.9			37.4			79.0			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	58.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	249	66	55	175	108	41	1100	59	88	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2835			2770		1447	3069	1336	1494	2956	1270
Flt Permitted		0.67			0.81		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1945			2269		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	259	69	57	182	112	43	1146	61	92	496	44
RTOR Reduction (vph)	0	16	0	0	65	0	0	0	24	0	0	27
Lane Group Flow (vph)	0	473	0	0	286	0	43	1146	37	92	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		887			747		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.37		c0.03	0.17	
v/s Ratio Perm		0.19			0.13		0.06		0.03	0.24		0.01
v/c Ratio		0.53			0.38		0.15	0.95	0.07	0.64	0.43	0.03
Uniform Delay, d1		18.2			21.9		14.7	24.9	16.4	18.5	18.7	16.1
Progression Factor		1.00			1.00		1.31	0.84	1.39	1.85	1.66	3.22
Incremental Delay, d2		2.3			1.5		0.6	11.2	0.2	18.2	1.0	0.1
Delay (s)		20.5			23.4		19.9	32.2	22.9	52.3	32.2	52.0
Level of Service		C			C		B	C	C	D	C	D
Approach Delay (s)		20.5			23.4			31.3			36.5	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	29.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	377	0	0	311	77	27	60	93	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.93				
Flt Protected		0.99			1.00			0.99				
Satd. Flow (prot)		1706			1668			1583				
Flt Permitted		0.93			1.00			0.99				
Satd. Flow (perm)		1597			1668			1583				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	47	419	0	0	346	86	30	67	103	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	59	0	0	0	0
Lane Group Flow (vph)	0	466	0	0	418	0	0	141	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		835			872			560				
v/s Ratio Prot					0.25							
v/s Ratio Perm		c0.29						0.09				
v/c Ratio		0.56			0.48			0.25				
Uniform Delay, d1		10.4			9.9			14.9				
Progression Factor		1.00			0.47			1.00				
Incremental Delay, d2		2.7			1.7			1.1				
Delay (s)		13.1			6.4			16.0				
Level of Service		B			A			B				
Approach Delay (s)		13.1			6.4			16.0			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	377	29	19	323	47	15	167	33	50	105	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.98			0.98			0.98	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		1887			1833			3186			3153	
Flt Permitted		0.93			0.97			0.93			0.83	
Satd. Flow (perm)		1768			1782			2985			2659	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	48	419	32	21	359	52	17	186	37	56	117	21
RTOR Reduction (vph)	0	4	0	0	8	0	0	22	0	0	12	0
Lane Group Flow (vph)	0	495	0	0	424	0	0	218	0	0	182	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		816			822			1240			1105	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.24			c0.07			0.07	
v/c Ratio		0.61			0.52			0.18			0.16	
Uniform Delay, d1		13.1			12.4			12.0			11.9	
Progression Factor		0.60			0.54			0.88			0.55	
Incremental Delay, d2		2.9			2.3			0.3			0.3	
Delay (s)		10.8			9.0			10.9			6.9	
Level of Service		B			A			B			A	
Approach Delay (s)		10.8			9.0			10.9			6.9	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	251	19	28	280	61	44	303	85	46	91	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1501	2937		1583	2932		1497	3034		1594	2941	
Flt Permitted	0.49	1.00		0.57	1.00		0.67	1.00		0.50	1.00	
Satd. Flow (perm)	781	2937		942	2932		1063	3034		833	2941	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	279	21	31	311	68	49	337	94	51	101	21
RTOR Reduction (vph)	0	9	0	0	28	0	0	39	0	0	10	0
Lane Group Flow (vph)	53	291	0	31	351	0	49	392	0	51	112	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	264	994		319	992		572	1634		449	1584	
v/s Ratio Prot		0.10			c0.12			c0.13			0.04	
v/s Ratio Perm	0.07			0.03			0.05			0.06		
v/c Ratio	0.20	0.29		0.10	0.35		0.09	0.24		0.11	0.07	
Uniform Delay, d1	15.3	15.8		14.7	16.2		7.3	7.9		7.4	7.2	
Progression Factor	0.61	0.59		0.77	0.78		0.65	0.69		1.22	1.22	
Incremental Delay, d2	1.5	0.6		0.6	1.0		0.3	0.3		0.5	0.1	
Delay (s)	10.8	10.0		12.0	13.5		5.0	5.8		9.5	8.8	
Level of Service	B	A		B	B		A	A		A	A	
Approach Delay (s)		10.1			13.4			5.7			9.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	361	25	37	315	82	11	307	44	41	118	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.98			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1381	3014		1334	3524			3435			3308	
Flt Permitted	0.50	1.00		0.50	1.00			0.95			0.84	
Satd. Flow (perm)	720	3014		707	3524			3255			2815	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	83	380	26	39	332	86	12	323	46	43	124	40
RTOR Reduction (vph)	0	8	0	0	36	0	0	16	0	0	24	0
Lane Group Flow (vph)	83	398	0	39	382	0	0	365	0	0	183	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	343	1437		337	1681			1302			1126	
v/s Ratio Prot		c0.13			0.11							
v/s Ratio Perm	0.12			0.06				c0.11			0.07	
v/c Ratio	0.24	0.28		0.12	0.23			0.28			0.16	
Uniform Delay, d1	10.1	10.2		9.4	10.0			13.2			12.5	
Progression Factor	1.59	1.63		0.81	0.79			0.52			0.64	
Incremental Delay, d2	1.6	0.5		0.6	0.3			0.5			0.3	
Delay (s)	17.6	17.2		8.2	8.1			7.4			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		17.2			8.1			7.4			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	278	93	104	313	104	75	80	84	84	80	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3024			1822			1829	
Flt Permitted		0.76	1.00		0.77			0.82			0.79	
Satd. Flow (perm)		1254	1409		2353			1523			1476	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	103	309	103	116	348	116	83	89	93	93	89	83
RTOR Reduction (vph)	0	0	49	0	34	0	0	30	0	0	25	0
Lane Group Flow (vph)	0	412	54	0	546	0	0	235	0	0	240	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		656	737		1231			492			477	
v/s Ratio Prot												
v/s Ratio Perm		c0.33	0.04		0.23			0.15			c0.16	
v/c Ratio		0.63	0.07		0.44			0.48			0.50	
Uniform Delay, d1		11.0	7.7		9.6			17.6			17.8	
Progression Factor		2.04	5.53		0.37			1.00			1.00	
Incremental Delay, d2		4.4	0.2		1.1			3.3			3.8	
Delay (s)		26.9	42.7		4.7			20.9			21.5	
Level of Service		C	D		A			C			C	
Approach Delay (s)		30.0			4.7			20.9			21.5	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	359	18	15	417	63	28	103	41	41	86	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.96			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1474	3019		1572	2999			3444			3422	
Flt Permitted	0.41	1.00		0.49	1.00			0.89			0.88	
Satd. Flow (perm)	633	3019		804	2999			3102			3035	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	399	20	17	463	70	31	114	46	46	96	94
RTOR Reduction (vph)	0	6	0	0	18	0	0	25	0	0	52	0
Lane Group Flow (vph)	76	413	0	17	515	0	0	166	0	0	184	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	273	1300		346	1292			1384			1354	
v/s Ratio Prot		0.14			c0.17							
v/s Ratio Perm	0.12			0.02				0.05			c0.06	
v/c Ratio	0.28	0.32		0.05	0.40			0.12			0.14	
Uniform Delay, d1	12.0	12.2		10.8	12.7			10.5			10.6	
Progression Factor	1.02	1.04		1.10	0.92			1.01			0.72	
Incremental Delay, d2	2.1	0.5		0.2	0.5			0.2			0.2	
Delay (s)	14.3	13.2		12.0	12.2			10.8			7.9	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.4			12.2			10.8			7.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	430	67	89	426	270	39	315	87	211	151	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			1.00			0.97	
Satd. Flow (prot)		3179			3072			3147			3121	
Flt Permitted		0.66			0.76			0.90			0.64	
Satd. Flow (perm)		2125			2352			2831			2036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	90	478	74	99	473	300	43	350	97	234	168	52
RTOR Reduction (vph)	0	16	0	0	104	0	0	33	0	0	15	0
Lane Group Flow (vph)	0	626	0	0	768	0	0	457	0	0	439	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		850			941			1292			626	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.29			c0.33			0.13			c0.22	
v/c Ratio		0.74			0.82			0.35			0.88dl	
Uniform Delay, d1		16.6			17.4			11.8			19.9	
Progression Factor		1.76			1.00			1.00			0.89	
Incremental Delay, d2		5.6			7.7			0.8			6.4	
Delay (s)		34.7			25.1			12.6			24.1	
Level of Service		C			C			B			C	
Approach Delay (s)		34.7			25.1			12.6			24.1	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	24.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	685	112	43	713	0	125	0	66	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2976			3031			1583				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2976			2566			1311				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	761	124	48	792	0	139	0	73	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	867	0	0	840	0	0	191	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1918			941			233				
v/s Ratio Prot		c0.29										
v/s Ratio Perm					c0.33			c0.15				
v/c Ratio		0.45			0.89			0.82				
Uniform Delay, d1		8.0			26.8			35.6				
Progression Factor		0.00			1.57			1.00				
Incremental Delay, d2		0.4			11.4			26.3				
Delay (s)		0.5			53.6			61.9				
Level of Service		A			D			E				
Approach Delay (s)		0.5			53.6			61.9			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	30.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	475	177	260	609	174	96	19	176	74	7	71
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1755		1629	1714	1457
Flt Permitted	0.34	1.00		0.23	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	536	3020		402	3257	1457		1582		692	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	130	528	197	289	677	193	107	21	196	82	8	79
RTOR Reduction (vph)	0	40	0	0	0	97	0	75	0	0	0	43
Lane Group Flow (vph)	130	685	0	289	677	96	0	249	0	82	8	36
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	42.0	32.7		48.4	36.1	44.7		20.0		31.6	31.6	40.9
Effective Green, g (s)	42.0	32.7		48.4	36.1	44.7		20.0		31.6	31.6	40.9
Actuated g/C Ratio	0.47	0.36		0.54	0.40	0.50		0.22		0.35	0.35	0.45
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	352	1097		389	1306	724		352		333	602	662
v/s Ratio Prot	0.04	0.23		c0.10	0.21	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.13			c0.29		0.05		c0.16		0.06		0.02
v/c Ratio	0.37	0.62		0.74	0.52	0.13		0.71		0.25	0.01	0.05
Uniform Delay, d1	14.2	23.6		13.5	20.4	12.2		32.3		21.5	19.0	13.7
Progression Factor	1.92	1.62		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	0.8	2.5		8.0	1.5	0.1		6.8		0.4	0.0	0.0
Delay (s)	28.0	40.7		21.5	21.9	12.3		39.1		21.9	19.0	13.8
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		38.7			20.2			39.1			18.0	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	491	234	6	502	0	0	0	0	30	0	541
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	546	260	7	558	0	0	0	0	33	0	601
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	558			546			838	1117	273	844	1117	279
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	558			546			838	1117	273	844	1117	279
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	87	100	15
cM capacity (veh/h)	989			999			39	200	716	250	200	709

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	273	273	260	193	372	33	601
Volume Left	0	0	0	7	0	33	0
Volume Right	0	0	260	0	0	0	601
cSH	1700	1700	1700	999	1700	250	709
Volume to Capacity	0.16	0.16	0.15	0.01	0.22	0.13	0.85
Queue Length 95th (ft)	0	0	0	1	0	11	243
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	21.6	31.5
Lane LOS				A		C	D
Approach Delay (s)	0.0			0.1		31.0	
Approach LOS						D	

Intersection Summary			
Average Delay	9.9		
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	521	0	508	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	579	0	564	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	289	289	564
Volume Left (vph)	289	289	564
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	5.7
Degree Utilization, x	0.55	0.55	0.89
Capacity (veh/h)	515	505	627
Control Delay (s)	16.6	16.6	38.0
Approach Delay (s)	16.6		38.0
Approach LOS	C		E

Intersection Summary			
Delay	27.2		
HCM Level of Service	D		
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	340	46	126	323	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3092		1574	3149						3014	
Flt Permitted		1.00		0.45	1.00						0.97	
Satd. Flow (perm)		3092		746	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	378	51	140	359	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	417	0	140	359	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1310		527	1815						957	
v/s Ratio Prot		c0.13		c0.03	0.11						c0.04	
v/s Ratio Perm				0.12								
v/c Ratio		0.32		0.27	0.20						0.12	
Uniform Delay, d1		16.3		11.3	8.6						20.6	
Progression Factor		1.00		0.27	0.25						1.00	
Incremental Delay, d2		0.6		1.2	0.2						0.2	
Delay (s)		17.0		4.2	2.4						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.0			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	344	0	0	400	76	49	65	42	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3073			4420				
Flt Permitted	0.38	1.00			1.00			0.98				
Satd. Flow (perm)	656	3257			3073			4420				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	382	0	0	444	84	54	72	47	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	32	0	0	0	0
Lane Group Flow (vph)	76	382	0	0	510	0	0	141	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	485	1839			1265			1404				
v/s Ratio Prot	0.02	c0.12			c0.17			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.21			0.40			0.10				
Uniform Delay, d1	12.1	9.1			17.6			20.4				
Progression Factor	0.34	0.33			1.00			1.00				
Incremental Delay, d2	0.7	0.2			1.0			0.1				
Delay (s)	4.7	3.3			18.6			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.5			18.6			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	307	39	31	243	31	118	85	52	55	90	124
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.98			0.98			0.97			0.94	
Flt Protected		0.99			0.99			0.98			0.99	
Satd. Flow (prot)		2979			2979			1792			1750	
Flt Permitted		0.89			0.88			0.75			0.89	
Satd. Flow (perm)		2659			2645			1376			1571	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	341	43	34	270	34	131	94	58	61	100	138
RTOR Reduction (vph)	0	13	0	0	13	0	0	14	0	0	48	0
Lane Group Flow (vph)	0	414	0	0	325	0	0	269	0	0	251	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		941			936			677			773	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.12			c0.20			0.16	
v/c Ratio		0.44			0.35			0.40			0.33	
Uniform Delay, d1		16.1			15.5			10.4			10.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.5			1.0			1.7			1.1	
Delay (s)		17.6			16.5			12.2			11.1	
Level of Service		B			B			B			B	
Approach Delay (s)		17.6			16.5			12.2			11.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	202	39	50	176	62	68	963	67	73	416	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	3005		1592	3512		1486	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.58	1.00		0.44	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	954	3005		975	3512		690	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	213	41	53	185	65	72	1014	71	77	438	82
RTOR Reduction (vph)	0	19	0	0	41	0	0	0	43	0	0	50
Lane Group Flow (vph)	178	235	0	53	209	0	72	1014	28	77	438	32
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	990		373	1157		330	1180	523	144	1169	493
v/s Ratio Prot	c0.02	0.08		0.01	0.06		0.01	c0.33		c0.03	0.15	
v/s Ratio Perm	c0.15			0.04			0.08		0.02	0.20		0.03
v/c Ratio	0.49	0.24		0.14	0.18		0.22	0.86	0.05	0.53	0.37	0.06
Uniform Delay, d1	20.6	20.7		18.4	20.3		14.9	23.9	16.2	17.2	18.6	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	2.06	0.61	0.84
Incremental Delay, d2	4.6	0.6		0.8	0.3		1.5	8.2	0.2	12.4	0.8	0.2
Delay (s)	25.2	21.3		19.2	20.7		16.4	32.1	16.4	47.8	12.2	13.9
Level of Service	C	C		B	C		B	C	B	D	B	B
Approach Delay (s)		22.9			20.4			30.2			17.0	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	256	18	14	216	8	35	113	25	20	56	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1929	1382		1950	1331		1970	1452		1928	1430
Flt Permitted		0.94	1.00		0.98	1.00		0.93	1.00		0.93	1.00
Satd. Flow (perm)		1829	1382		1910	1331		1860	1452		1810	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	269	19	15	227	8	37	119	26	21	59	43
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	25
Lane Group Flow (vph)	0	309	9	0	242	4	0	156	11	0	80	18
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		844	638		882	614		773	603		752	594
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.13	0.00		c0.08	0.01		0.04	0.01
v/c Ratio		0.37	0.01		0.27	0.01		0.20	0.02		0.11	0.03
Uniform Delay, d1		11.3	9.5		10.8	9.4		12.1	11.2		11.6	11.2
Progression Factor		1.00	1.00		0.47	0.37		1.38	1.86		0.93	0.82
Incremental Delay, d2		1.2	0.0		0.8	0.0		0.6	0.1		0.3	0.1
Delay (s)		12.6	9.5		5.8	3.5		17.3	20.9		11.0	9.3
Level of Service		B	A		A	A		B	C		B	A
Approach Delay (s)		12.4			5.7			17.8			10.4	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	240	10	15	200	30	12	234	25	30	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3022		1520	2981		1520	2996		1520	2904	
Flt Permitted	0.95	1.00		0.58	1.00		0.68	1.00		0.56	1.00	
Satd. Flow (perm)	1520	3022		929	2981		1091	2996		904	2904	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	267	11	17	222	33	13	260	28	33	78	33
RTOR Reduction (vph)	0	5	0	0	18	0	0	12	0	0	19	0
Lane Group Flow (vph)	73	273	0	17	237	0	13	276	0	33	92	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1488		314	1009		453	1244		376	1206	
v/s Ratio Prot	c0.05	0.09			c0.08			c0.09			0.03	
v/s Ratio Perm				0.02			0.01			0.04		
v/c Ratio	0.45	0.18		0.05	0.24		0.03	0.22		0.09	0.08	
Uniform Delay, d1	27.2	9.2		14.5	15.5		11.2	12.2		11.5	11.5	
Progression Factor	0.83	0.41		0.82	0.75		0.59	0.66		1.09	1.13	
Incremental Delay, d2	8.3	0.3		0.3	0.5		0.1	0.4		0.5	0.1	
Delay (s)	30.8	4.1		12.3	12.2		6.7	8.5		13.1	13.1	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		9.6			12.2			8.4			13.1	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	35.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	249	16	95	212	42	26	284	20	24	137	24
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1520	3012		1520	2964			3215			3172	
Flt Permitted	0.58	1.00		0.95	1.00			0.92			0.89	
Satd. Flow (perm)	925	3012		1520	2964			2981			2842	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	277	18	106	236	47	29	316	22	27	152	27
RTOR Reduction (vph)	0	8	0	0	25	0	0	7	0	0	17	0
Lane Group Flow (vph)	41	287	0	106	258	0	0	360	0	0	189	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	285	927		140	1322			1147			1093	
v/s Ratio Prot		c0.10		c0.07	0.09							
v/s Ratio Perm	0.04							c0.12			0.07	
v/c Ratio	0.14	0.31		0.76	0.19			0.31			0.17	
Uniform Delay, d1	16.3	17.2		28.8	10.9			14.0			13.2	
Progression Factor	0.61	0.60		1.35	0.97			0.70			0.76	
Incremental Delay, d2	1.1	0.9		27.5	0.3			0.7			0.3	
Delay (s)	11.0	11.2		66.3	10.8			10.4			10.4	
Level of Service	B	B		E	B			B			B	
Approach Delay (s)		11.1			25.9			10.4			10.4	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	260	14	69	325	69	25	93	160	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.91				
Flt Protected		1.00			0.99			1.00				
Satd. Flow (prot)		1585			1556			3160				
Flt Permitted		0.97			0.91			1.00				
Satd. Flow (perm)		1548			1426			3160				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	289	16	77	361	77	28	103	178	0	0	0
RTOR Reduction (vph)	0	2	0	0	8	0	0	139	0	0	0	0
Lane Group Flow (vph)	0	319	0	0	507	0	0	170	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		42.6			42.6			14.4				
Effective Green, g (s)		42.6			42.6			14.4				
Actuated g/C Ratio		0.66			0.66			0.22				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		1015			935			700				
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.36			0.05				
v/c Ratio		0.31			0.54			0.24				
Uniform Delay, d1		4.9			6.0			20.8				
Progression Factor		2.05			1.00			1.00				
Incremental Delay, d2		0.8			2.3			0.8				
Delay (s)		10.8			8.2			21.6				
Level of Service		B			A			C				
Approach Delay (s)		10.8			8.2			21.6			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	80	340	387	44	64	73
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	84	358	407	46	67	77
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.87				0.87	0.87
vC, conflicting volume	475				983	455
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	323				906	300
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	92				72	88
cM capacity (veh/h)	1015				240	633

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	442	454	67	77
Volume Left	84	0	67	0
Volume Right	0	46	0	77
cSH	1015	1700	240	633
Volume to Capacity	0.08	0.27	0.28	0.12
Queue Length 95th (ft)	7	0	28	10
Control Delay (s)	2.4	0.0	25.8	11.5
Lane LOS	A		D	B
Approach Delay (s)	2.4	0.0	18.2	
Approach LOS			C	

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	461	1	16	630	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1712		
Flt Permitted	1.00			0.98		
Satd. Flow (perm)	1714			1685		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	512	1	18	700	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	513	0	0	718	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			615		
v/s Ratio Prot	c0.30					
v/s Ratio Perm				c0.43		
v/c Ratio	0.43			1.17		
Uniform Delay, d1	5.7			27.0		
Progression Factor	0.04			1.00		
Incremental Delay, d2	0.3			92.1		
Delay (s)	0.5			119.1		
Level of Service	A			F		
Approach Delay (s)	0.5			119.1	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	69.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
1056: 115th Street & Bishop Ford Fwy

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	181	189	25	542	0	0	0	0	3	0	241
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	201	210	28	602	0	0	0	0	3	0	268
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	602			201			964	964	206	758	859	602
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	602			201			964	964	206	758	859	602
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	39
cM capacity (veh/h)	985			989			81	250	807	293	288	438

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	134	277	630	3	268
Volume Left	0	0	28	3	0
Volume Right	0	210	0	0	268
cSH	1700	1700	989	293	438
Volume to Capacity	0.08	0.16	0.03	0.01	0.61
Queue Length 95th (ft)	0	0	2	1	100
Control Delay (s)	0.0	0.0	0.7	17.4	25.3
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	25.3	
Approach LOS				D	

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	184	0	567	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	204	0	630	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	102	102	630
Volume Left (vph)	102	102	630
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.7	6.7	4.8
Degree Utilization, x	0.19	0.19	0.85
Capacity (veh/h)	511	511	735
Control Delay (s)	10.1	10.1	28.3
Approach Delay (s)	10.1		28.3
Approach LOS	B		D

Intersection Summary			
Delay	23.8		
HCM Level of Service	C		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	433	207	154	457	0	0	0	0	122	115	294
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3692	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3692	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	456	218	162	481	0	0	0	0	128	121	309
RTOR Reduction (vph)	0	0	159	0	0	0	0	0	0	0	102	92
Lane Group Flow (vph)	0	456	59	0	643	0	0	0	0	70	232	62
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.2	39.2		73.6					19.3	19.3	64.5
Effective Green, g (s)		39.2	39.2		73.6					19.3	19.3	64.5
Actuated g/C Ratio		0.25	0.25		0.46					0.12	0.12	0.40
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		730	294		1551					162	445	452
v/s Ratio Prot		c0.15			c0.19					0.05	c0.06	
v/s Ratio Perm			0.05									0.06
v/c Ratio		0.62	0.20		0.41					0.43	0.52	0.14
Uniform Delay, d1		53.8	47.9		28.8					65.3	66.0	30.2
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		4.0	1.5		0.1					1.8	1.1	0.1
Delay (s)		57.9	49.5		0.6					67.1	67.1	30.3
Level of Service		E	D		A					E	E	C
Approach Delay (s)		55.1			0.6			0.0			57.0	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	37.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.9
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	345	0	0	383	91	228	144	129	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	3009				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	3009				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	233	383	0	0	426	101	253	160	143	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	81	0	52	0	0	0	0
Lane Group Flow (vph)	233	383	0	0	426	20	190	314	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	78.4	78.4			32.2	32.2	22.6	22.6				
Effective Green, g (s)	78.4	78.4			32.2	32.2	22.6	22.6				
Actuated g/C Ratio	0.49	0.49			0.20	0.20	0.14	0.14				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	771	1649			634	293	216	425				
v/s Ratio Prot	c0.15	0.11			c0.14		c0.12	0.10				
v/s Ratio Perm						0.01						
v/c Ratio	0.30	0.23			0.67	0.07	0.88	0.74				
Uniform Delay, d1	24.4	23.5			59.0	51.8	67.4	65.9				
Progression Factor	0.07	0.08			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			2.8	0.1	30.8	6.6				
Delay (s)	2.0	1.9			61.8	51.9	98.1	72.5				
Level of Service	A	A			E	D	F	E				
Approach Delay (s)		1.9			59.9			81.3			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	45.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.8
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	265	73	35	140	45	86	803	60	56	426	99
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1536	1556	1328	1595	1719		1524	2990		1508	2869	
Flt Permitted	0.52	1.00	1.00	0.51	1.00		0.35	1.00		0.16	1.00	
Satd. Flow (perm)	846	1556	1328	854	1719		569	2990		255	2869	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	225	279	77	37	147	47	91	845	63	59	448	104
RTOR Reduction (vph)	0	0	50	0	12	0	0	6	0	0	22	0
Lane Group Flow (vph)	225	279	27	37	182	0	91	902	0	59	530	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		39.6	34.1		39.6	34.1	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	387	557	461	314	541		286	1134		169	1088	
v/s Ratio Prot	c0.04	0.18		0.00	0.11		0.02	c0.30		c0.02	0.18	
v/s Ratio Perm	c0.20		0.02	0.04			0.12			0.13		
v/c Ratio	0.58	0.50	0.06	0.12	0.34		0.32	0.80		0.35	0.49	
Uniform Delay, d1	20.6	22.6	19.6	20.2	23.6		16.5	24.8		17.5	21.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.2	3.2	0.2	0.2	1.7		0.6	5.8		1.3	1.6	
Delay (s)	22.9	25.8	19.8	20.4	25.3		17.1	30.6		18.7	22.8	
Level of Service	C	C	B	C	C		B	C		B	C	
Approach Delay (s)		23.8			24.5			29.4			22.4	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	263	16	5	182	19	35	79	16	11	42	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.94	
Flt Protected		0.99	1.00		1.00	1.00		0.99			0.99	
Satd. Flow (prot)		1910	1482		1600	1198		1912			1846	
Flt Permitted		0.94	1.00		0.99	1.00		0.93			0.97	
Satd. Flow (perm)		1817	1482		1592	1198		1794			1807	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	277	17	5	192	20	37	83	17	12	44	40
RTOR Reduction (vph)	0	0	9	0	0	10	0	8	0	0	23	0
Lane Group Flow (vph)	0	322	8	0	197	10	0	129	0	0	73	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		895	730		784	590		745			751	
v/s Ratio Prot												
v/s Ratio Perm		c0.18	0.01		0.12	0.01		c0.07			0.04	
v/c Ratio		0.36	0.01		0.25	0.02		0.17			0.10	
Uniform Delay, d1		10.2	8.4		9.6	8.4		12.0			11.6	
Progression Factor		1.00	1.00		2.02	2.97		1.00			1.55	
Incremental Delay, d2		1.1	0.0		0.8	0.1		0.5			0.3	
Delay (s)		11.3	8.5		20.0	25.1		12.5			18.2	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		11.2			20.5			12.5			18.2	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	197	23	6	133	6	39	216	21	9	51	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1663	1392		1604	1497		1754	1390		1652	
Flt Permitted		0.88	1.00		0.99	1.00		0.95	1.00		0.97	
Satd. Flow (perm)		1483	1392		1585	1497		1681	1390		1612	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	207	24	6	140	6	41	227	22	9	54	31
RTOR Reduction (vph)	0	0	16	0	0	4	0	0	11	0	16	0
Lane Group Flow (vph)	0	282	8	0	146	2	0	268	11	0	78	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		525	493		561	530		828	684		794	
v/s Ratio Prot												
v/s Ratio Perm		c0.19	0.01		0.09	0.00		c0.16	0.01		0.05	
v/c Ratio		0.54	0.02		0.26	0.00		0.32	0.02		0.10	
Uniform Delay, d1		16.8	13.7		14.9	13.6		10.0	8.4		8.8	
Progression Factor		1.94	3.17		0.92	0.92		0.32	0.32		1.03	
Incremental Delay, d2		3.7	0.1		1.1	0.0		0.9	0.0		0.2	
Delay (s)		36.3	43.3		14.8	12.6		4.1	2.7		9.3	
Level of Service		D	D		B	B		A	A		A	
Approach Delay (s)		36.9			14.7			4.0			9.3	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	18.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	157	20	30	9	18	6	26	286	19	6	194	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.99			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.97			0.99			1.00	0.85
Flt Protected		0.96	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1768	1390		1813			1974			1873	1328
Flt Permitted		0.80	1.00		0.93			0.97			0.99	1.00
Satd. Flow (perm)		1474	1390		1713			1924			1858	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	174	22	33	10	20	7	29	318	21	7	216	104
RTOR Reduction (vph)	0	0	19	0	5	0	0	4	0	0	0	53
Lane Group Flow (vph)	0	196	14	0	32	0	0	364	0	0	223	51
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		648	577		448			947			915	654
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.09	0.01		0.02			c0.19			0.12	0.04
v/c Ratio		0.30	0.02		0.07			0.38			0.24	0.08
Uniform Delay, d1		12.7	11.2		18.1			10.3			9.5	8.7
Progression Factor		0.70	1.15		1.00			0.55			0.49	0.34
Incremental Delay, d2		1.1	0.1		0.3			1.1			0.6	0.2
Delay (s)		9.9	13.0		18.4			6.8			5.3	3.2
Level of Service		A	B		B			A			A	A
Approach Delay (s)		10.4			18.4			6.8			4.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	787	220	254	1079	0	0	0	0	274	200	374
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4302		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.20	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4302		327	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	828	232	267	1136	0	0	0	0	288	211	394
RTOR Reduction (vph)	0	40	0	0	0	0	0	0	0	0	69	69
Lane Group Flow (vph)	0	1020	0	267	1136	0	0	0	0	233	382	140
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		50.9		69.3	69.3					23.7	23.7	23.7
Effective Green, g (s)		50.9		69.3	69.3					23.7	23.7	23.7
Actuated g/C Ratio		0.48		0.66	0.66					0.23	0.23	0.23
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		2085		383	2129					320	612	306
v/s Ratio Prot		0.24		c0.09	0.35							
v/s Ratio Perm				c0.37						c0.16	0.14	0.10
v/c Ratio		0.49		0.70	0.53					0.73	0.62	0.46
Uniform Delay, d1		18.3		9.5	9.4					37.7	36.6	35.1
Progression Factor		1.00		1.38	1.53					1.00	1.00	1.00
Incremental Delay, d2		0.8		3.6	0.6					8.3	2.1	1.3
Delay (s)		19.1		16.7	14.9					46.0	38.7	36.4
Level of Service		B		B	B					D	D	D
Approach Delay (s)		19.1			15.3			0.0			40.1	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	96.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	309	752	0	0	811	234	521	346	366	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.99		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1449		4421				
Flt Permitted	0.20	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	617	3138			3119	1449		4421				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	325	792	0	0	854	246	548	364	385	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	111	0	71	0	0	0	0
Lane Group Flow (vph)	325	792	0	0	854	135	0	1226	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	62.2	62.2			44.9	44.9		30.8				
Effective Green, g (s)	62.2	62.2			44.9	44.9		30.8				
Actuated g/C Ratio	0.59	0.59			0.43	0.43		0.29				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	613	1859			1334	620		1297				
v/s Ratio Prot	c0.06	0.25			c0.27							
v/s Ratio Perm	0.26					0.09		0.28				
v/c Ratio	0.53	0.43			0.64	0.22		0.99dl				
Uniform Delay, d1	12.6	11.7			23.7	19.0		36.3				
Progression Factor	0.74	0.87			0.93	1.37		1.00				
Incremental Delay, d2	0.9	0.6			1.6	0.5		14.3				
Delay (s)	10.3	10.8			23.7	26.5		50.6				
Level of Service	B	B			C	C		D				
Approach Delay (s)		10.6			24.3			50.6			0.0	
Approach LOS		B			C			D			A	

Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	96.2%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	103	439	221	76	736	40	226	178	40	37	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1601	3233		1446	3008		1544	2782	
Flt Permitted	0.15	1.00	1.00	0.49	1.00		0.52	1.00		0.61	1.00	
Satd. Flow (perm)	250	3061	1291	820	3233		789	3008		990	2782	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	108	462	233	80	775	42	238	187	42	39	117	96
RTOR Reduction (vph)	0	0	97	0	4	0	0	20	0	0	79	0
Lane Group Flow (vph)	108	462	136	80	813	0	238	209	0	39	134	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	61.9	52.0	61.5	39.1	32.7		31.1	22.6		23.1	18.1	
Effective Green, g (s)	61.9	52.0	61.5	39.1	32.7		31.1	22.6		23.1	18.1	
Actuated g/C Ratio	0.59	0.50	0.59	0.37	0.31		0.30	0.22		0.22	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	469	1516	756	353	1007		293	647		244	480	
v/s Ratio Prot	c0.06	c0.15	0.02	0.01	c0.25		c0.07	0.07		0.01	0.05	
v/s Ratio Perm	0.08		0.09	0.07			c0.17			0.03		
v/c Ratio	0.23	0.30	0.18	0.23	0.81		0.81	0.32		0.16	0.28	
Uniform Delay, d1	11.9	15.8	10.1	21.8	33.3		32.8	34.7		32.8	37.8	
Progression Factor	0.92	1.00	2.24	1.00	1.00		0.91	0.85		1.00	1.00	
Incremental Delay, d2	0.9	0.4	0.1	0.3	6.9		15.1	1.0		0.3	1.1	
Delay (s)	11.9	16.2	22.7	22.1	40.2		45.1	30.7		33.1	38.9	
Level of Service	B	B	C	C	D		D	C		C	D	
Approach Delay (s)		17.5			38.6			38.0			38.0	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	126	273	54	160	98	328	380	63	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.94		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1633	2808		1463	3015		1589	3257		1549	3135	
Flt Permitted	0.57	1.00		0.42	1.00		0.46	1.00		0.48	1.00	
Satd. Flow (perm)	986	2808		653	3015		772	3257		790	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	133	287	57	168	103	345	400	66	96	272	57
RTOR Reduction (vph)	0	208	0	0	75	0	0	13	0	0	17	0
Lane Group Flow (vph)	62	212	0	57	196	0	345	453	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.8	28.8		35.8	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.8	28.8		35.8	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	379	770		277	827		530	1300		343	935	
v/s Ratio Prot	0.01	c0.08		c0.01	0.07		c0.11	0.14		0.02	0.10	
v/s Ratio Perm	0.04			0.06			c0.22			0.08		
v/c Ratio	0.16	0.27		0.21	0.24		0.65	0.35		0.28	0.33	
Uniform Delay, d1	23.7	29.9		23.8	29.6		16.6	22.0		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.99	0.87	
Incremental Delay, d2	0.2	0.9		0.4	0.7		3.0	0.7		0.5	0.9	
Delay (s)	23.9	30.8		24.3	30.3		19.6	22.8		22.8	26.0	
Level of Service	C	C		C	C		B	C		C	C	
Approach Delay (s)		29.9			29.2			21.4			25.3	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	25.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1068: 127th Street & Halsted Street

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	392	79	6	401	108	65	577	7	80	309	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2890			2887		1436	3185		1450	2788	
Flt Permitted		0.58			0.95		0.43	1.00		0.29	1.00	
Satd. Flow (perm)		1703			2733		654	3185		448	2788	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	183	436	88	7	446	120	72	641	8	89	343	111
RTOR Reduction (vph)	0	17	0	0	37	0	0	1	0	0	48	0
Lane Group Flow (vph)	0	690	0	0	536	0	72	648	0	89	406	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		780			799		310	1078		241	944	
v/s Ratio Prot		c0.05					0.01	c0.20		c0.02	0.15	
v/s Ratio Perm		c0.31			0.20		0.08			0.13		
v/c Ratio		0.88			0.67		0.23	0.60		0.37	0.43	
Uniform Delay, d1		17.6			20.2		12.4	17.9		12.8	16.6	
Progression Factor		1.00			1.58		0.88	0.69		1.00	1.00	
Incremental Delay, d2		14.0			2.3		1.6	2.3		4.3	1.4	
Delay (s)		31.5			34.4		12.5	14.6		17.1	18.1	
Level of Service		C			C		B	B		B	B	
Approach Delay (s)		31.5			34.4			14.4			17.9	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	24.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	111	46	68	127	13	36	632	77	10	359	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1665	1856		1612	1938		1658	3213		1138	3197	
Flt Permitted	0.67	1.00		0.66	1.00		0.51	1.00		0.32	1.00	
Satd. Flow (perm)	1166	1856		1111	1938		889	3213		386	3197	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	51	114	47	70	131	13	37	652	79	10	370	44
RTOR Reduction (vph)	0	23	0	0	6	0	0	14	0	0	14	0
Lane Group Flow (vph)	51	138	0	70	138	0	37	717	0	10	400	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	431	685		410	716		424	1532		184	1525	
v/s Ratio Prot		c0.07			0.07			c0.22			0.13	
v/s Ratio Perm	0.04			0.06			0.04			0.03		
v/c Ratio	0.12	0.20		0.17	0.19		0.09	0.47		0.05	0.26	
Uniform Delay, d1	13.5	14.0		13.8	13.9		9.3	11.4		9.1	10.2	
Progression Factor	1.00	1.00		1.73	1.80		1.00	1.00		0.50	0.51	
Incremental Delay, d2	0.6	0.7		0.7	0.4		0.4	1.0		0.5	0.4	
Delay (s)	14.1	14.6		24.5	25.4		9.7	12.5		5.1	5.6	
Level of Service	B	B		C	C		A	B		A	A	
Approach Delay (s)		14.5			25.1			12.3			5.5	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	422	160	556	14	3	14	3	46	10	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			0.99		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.95		
Flt Protected	1.00		0.99				0.99			0.97		
Satd. Flow (prot)	2956		2958				1732			1864		
Flt Permitted	1.00		0.67				0.94			0.87		
Satd. Flow (perm)	2956		2007				1650			1672		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	444	168	585	15	3	15	3	48	11	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	444	0	766	0	0	0	31	0	0	14	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom			Perm	Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7			2	2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		921				355			360		
v/s Ratio Prot	0.15		c0.08									
v/s Ratio Perm			c0.27				c0.02			0.01		
v/c Ratio	0.54		0.83				0.09			0.04		
Uniform Delay, d1	20.0		17.0				20.4			20.2		
Progression Factor	1.33		0.76				1.00			1.00		
Incremental Delay, d2	1.5		8.3				0.5			0.2		
Delay (s)	28.1		21.2				20.9			20.4		
Level of Service	C		C				C			C		
Approach Delay (s)	28.1		21.2				20.9			20.4		
Approach LOS	C		C				C			C		

Intersection Summary			
HCM Average Control Delay	34.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	213
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1430	
Flt Permitted	1.00	
Satd. Flow (perm)	1430	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1	224
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	225	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.16	
v/s Ratio Perm		
v/c Ratio	1.02	
Uniform Delay, d1	27.5	
Progression Factor	1.08	
Incremental Delay, d2	65.9	
Delay (s)	95.6	
Level of Service	F	
Approach Delay (s)	95.6	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	186	556	575	64	41	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3217	3208		1629	1457
Flt Permitted		0.64	1.00		0.95	1.00
Satd. Flow (perm)		2071	3208		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	207	618	639	71	46	173
RTOR Reduction (vph)	0	0	13	0	0	128
Lane Group Flow (vph)	0	825	697	0	46	45
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1274	1974		426	381
v/s Ratio Prot			0.22		0.03	
v/s Ratio Perm		c0.40				c0.03
v/c Ratio		0.65	0.35		0.11	0.12
Uniform Delay, d1		8.0	6.1		18.2	18.3
Progression Factor		1.40	1.25		0.93	0.86
Incremental Delay, d2		2.1	0.5		0.5	0.6
Delay (s)		13.3	8.2		17.5	16.3
Level of Service		B	A		B	B
Approach Delay (s)		13.3	8.2		16.6	
Approach LOS		B	A		B	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	51	525	580	190	131	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2927	2906		1464	1373
Flt Permitted		0.84	1.00		0.95	1.00
Satd. Flow (perm)		2467	2906		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	54	553	611	200	138	57
RTOR Reduction (vph)	0	0	49	0	0	40
Lane Group Flow (vph)	0	607	762	0	138	17
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1442	1699		428	401
v/s Ratio Prot			c0.26		c0.09	
v/s Ratio Perm		0.25				0.01
v/c Ratio		0.42	0.45		0.32	0.04
Uniform Delay, d1		7.4	7.6		18.0	16.5
Progression Factor		0.49	0.53		0.94	1.18
Incremental Delay, d2		0.7	0.7		2.0	0.2
Delay (s)		4.4	4.7		18.9	19.6
Level of Service		A	A		B	B
Approach Delay (s)		4.4	4.7		19.1	
Approach LOS		A	A		B	

Intersection Summary			
HCM Average Control Delay	6.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	505	153	104	534	401	79
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.98	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2214		1769	2436	1816	
Flt Permitted	1.00		0.16	1.00	0.96	
Satd. Flow (perm)	2214		297	2436	1816	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	561	170	116	593	446	88
RTOR Reduction (vph)	17	0	0	0	11	0
Lane Group Flow (vph)	714	0	116	593	523	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1056		142	1162	671	
v/s Ratio Prot	0.32			0.24	c0.29	
v/s Ratio Perm			c0.39			
v/c Ratio	0.68		0.82	0.51	0.78	
Uniform Delay, d1	13.1		14.6	11.8	18.2	
Progression Factor	1.23		1.00	1.00	1.00	
Incremental Delay, d2	3.3		38.5	1.6	8.7	
Delay (s)	19.4		53.1	13.4	26.9	
Level of Service	B		D	B	C	
Approach Delay (s)	19.4			19.9	26.9	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	21.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	560	85	251	612	9	68	0	177	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.39	1.00	1.00	0.37	1.00	1.00		0.76	1.00		0.71	
Satd. Flow (perm)	778	3213	1422	614	3138	1366		1309	1443		722	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	622	94	279	680	10	76	0	197	1	0	0
RTOR Reduction (vph)	0	0	37	0	0	2	0	0	173	0	0	0
Lane Group Flow (vph)	1	622	57	279	680	8	0	76	24	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	51.5	51.5	51.5	66.6	66.6	66.6		10.4	10.4		10.4	
Effective Green, g (s)	51.5	51.5	51.5	66.6	66.6	66.6		10.4	10.4		10.4	
Actuated g/C Ratio	0.61	0.61	0.61	0.78	0.78	0.78		0.12	0.12		0.12	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	471	1947	862	620	2459	1070		160	177		88	
v/s Ratio Prot		0.19		c0.06	0.22							
v/s Ratio Perm	0.00		0.04	c0.29		0.01		c0.06	0.02		0.00	
v/c Ratio	0.00	0.32	0.07	0.45	0.28	0.01		0.47	0.14		0.01	
Uniform Delay, d1	6.6	8.2	6.9	2.8	2.5	2.0		34.8	33.3		32.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.4	0.1	0.5	0.1	0.0		2.2	0.4		0.1	
Delay (s)	6.6	8.6	7.0	3.3	2.6	2.0		37.0	33.6		32.8	
Level of Service	A	A	A	A	A	A		D	C		C	
Approach Delay (s)		8.4			2.8			34.6			32.8	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	12	774	795	43	23	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3016		1486	
Flt Permitted		0.94	1.00		0.97	
Satd. Flow (perm)		2843	3016		1486	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	860	883	48	26	10
RTOR Reduction (vph)	0	0	4	0	9	0
Lane Group Flow (vph)	0	873	927	0	27	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1042	2145		116	
v/s Ratio Prot			c0.31		c0.02	
v/s Ratio Perm		c0.31				
v/c Ratio		0.84	0.43		0.23	
Uniform Delay, d1		26.1	5.4		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		8.0	0.3		4.6	
Delay (s)		34.1	0.3		43.6	
Level of Service		C	A		D	
Approach Delay (s)		34.1	0.3		43.6	
Approach LOS		C	A		D	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	418	1	16	536	78	0	0	1	43	3	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.96	1.00
Satd. Flow (prot)		1729			3229			1432			1610	1282
Flt Permitted		0.81			0.95			1.00			0.94	1.00
Satd. Flow (perm)		1411			3063			1432			1581	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	464	1	18	596	87	0	0	1	48	3	82
RTOR Reduction (vph)	0	0	0	0	13	0	0	1	0	0	0	55
Lane Group Flow (vph)	0	547	0	0	688	0	0	0	0	0	51	27
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		515			1649			152			470	422
v/s Ratio Prot					c0.07			0.00			c0.02	
v/s Ratio Perm		c0.39			0.15						c0.01	0.02
v/c Ratio		1.06			0.42			0.00			0.11	0.06
Uniform Delay, d1		27.0			12.1			34.0			21.9	19.5
Progression Factor		1.00			1.67			1.00			1.00	1.00
Incremental Delay, d2		57.2			0.1			0.0			0.5	0.3
Delay (s)		84.2			20.2			34.0			22.3	19.8
Level of Service		F			C			C			C	B
Approach Delay (s)		84.2			20.2			34.0			20.8	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM Average Control Delay	45.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	27	35	997	57	34	17	48	23	22	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.93			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1555	3022		1587	3022			1787			1700	
Flt Permitted	0.18	1.00		0.37	1.00			0.89			0.95	
Satd. Flow (perm)	292	3022		610	3022			1613			1628	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	41	623	28	36	1039	59	35	18	50	24	23	91
RTOR Reduction (vph)	0	5	0	0	6	0	0	32	0	0	23	0
Lane Group Flow (vph)	41	646	0	36	1092	0	0	71	0	0	115	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	153	1581		319	1581			571			576	
v/s Ratio Prot		0.21			c0.36							
v/s Ratio Perm	0.14			0.06				0.04			c0.07	
v/c Ratio	0.27	0.41		0.11	0.69			0.12			0.20	
Uniform Delay, d1	8.6	9.4		7.9	11.6			14.2			14.6	
Progression Factor	1.00	1.00		0.70	1.37			1.00			1.00	
Incremental Delay, d2	4.3	0.8		0.6	2.2			0.4			0.8	
Delay (s)	12.8	10.2		6.1	18.1			14.6			15.4	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.3			17.7			14.6			15.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	787	5	31	619	40	0	0	0	578	88	375
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.92	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	790	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	336	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	828	5	33	652	42	0	0	0	608	93	395
RTOR Reduction (vph)	0	0	0	0	0	18	0	0	0	0	0	168
Lane Group Flow (vph)	26	833	0	33	652	24	0	0	0	608	93	227
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	160	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.20					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.05						0.15
v/c Ratio	0.16	0.75		0.05	0.36	0.08				0.80	0.23	0.66
Uniform Delay, d1	31.6	38.6		15.2	15.7	13.1				47.2	40.6	45.4
Progression Factor	0.84	0.86		0.34	0.75	1.27				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.4				8.8	1.4	9.8
Delay (s)	28.6	37.4		5.2	12.2	17.0				56.0	42.0	55.2
Level of Service	C	D		A	B	B				E	D	E
Approach Delay (s)		37.2			12.1			0.0			54.5	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	338	809	218	53	560	280	100	247	54	39	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3263		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3263		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	356	852	229	56	589	295	105	260	57	41	0	32
RTOR Reduction (vph)	0	18	0	0	0	222	0	0	42	0	0	30
Lane Group Flow (vph)	356	1063	0	56	589	73	0	365	15	41	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1707		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.32	0.62		0.53	0.76	0.29		0.51	0.05	0.77		0.04
Uniform Delay, d1	31.9	21.9		59.2	45.5	39.8		45.0	40.5	60.1		57.4
Progression Factor	0.94	0.17		1.00	1.00	1.00		0.94	1.00	1.00		1.00
Incremental Delay, d2	0.5	1.1		18.0	7.0	2.9		2.6	0.3	49.7		0.4
Delay (s)	30.5	4.7		77.2	52.5	42.7		45.1	40.7	109.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		11.1			50.9			44.5			87.0	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	885	165	101	813	0	74	0	79	9	14	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1648	3149		1387		1451	1803	1857	
Flt Permitted		1.00		0.20	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		341	3149		1085		1451	1803	1857	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	922	172	105	847	0	77	0	82	9	15	7
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	56	0	5	0
Lane Group Flow (vph)	0	1079	0	105	847	0	77	0	26	9	17	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		205	1889		347		464	577	594	
v/s Ratio Prot		c0.36			0.27						0.01	
v/s Ratio Perm				0.31			c0.07		0.02	0.00		
v/c Ratio		0.60		0.51	0.45		0.22		0.06	0.02	0.03	
Uniform Delay, d1		12.5		11.5	10.9		24.9		23.5	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.5		8.9	0.8		1.5		0.2	0.0	0.1	
Delay (s)		14.0		20.4	11.7		26.4		23.8	23.3	23.4	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		14.0			12.7			25.0			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	14.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	0	1188	208	658	0	0	787	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4269	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4269	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	299	0	1225	214	678	0	0	811	505
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	299	0	1225	214	678	0	0	1316	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1260	
v/s Ratio Prot				0.19		c0.80	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.66		2.80	0.46	0.25			1.17dr	
Uniform Delay, d1				32.4		37.5	29.5	8.6			37.0	
Progression Factor				1.00		1.00	0.63	2.06			1.00	
Incremental Delay, d2				7.2		817.8	2.7	0.2			37.8	
Delay (s)				39.6		855.3	21.3	17.8			74.8	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			695.3			18.7			74.8	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	314.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	324	770	144	0	0	0	0	542	401	355	721	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3157						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3157						4368	2244	1598	4680	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	341	811	152	0	0	0	0	571	422	374	759	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	307	984	0	0	0	0	0	571	422	374	759	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.13		c0.23	0.16	
v/s Ratio Perm	0.20	0.31							c0.19			
v/c Ratio	0.63	0.96						0.49	0.71	0.79	0.27	
Uniform Delay, d1	30.1	34.9						32.5	34.8	34.0	10.5	
Progression Factor	1.00	1.00						1.14	1.14	0.86	0.22	
Incremental Delay, d2	6.0	20.5						1.3	6.3	5.2	0.1	
Delay (s)	36.1	55.4						38.3	45.8	34.6	2.4	
Level of Service	D	E						D	D	C	A	
Approach Delay (s)		50.9			0.0			41.5			13.0	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	35.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	286	25	24	11	137	0	0	142	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3133		1710	1846			1955	
Flt Permitted				0.95	1.00		0.56	1.00			1.00	
Satd. Flow (perm)				1688	3133		1003	1846			1955	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	301	26	25	12	144	0	0	149	5
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	301	34	0	12	144	0	0	153	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		648	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.08			c0.08	
v/s Ratio Perm				c0.18			0.01					
v/c Ratio				0.56	0.03		0.02	0.13			0.14	
Uniform Delay, d1				24.1	20.0		10.3	7.8			9.7	
Progression Factor				1.00	1.00		1.06	1.18			1.00	
Incremental Delay, d2				4.2	0.1		0.1	0.3			0.3	
Delay (s)				28.3	20.1		11.0	9.5			10.0	
Level of Service				C	C		B	A			A	
Approach Delay (s)		0.0			27.1			9.6			10.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	1.0
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	3	0	14	0	122	31	46	383	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.89			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1729			1550			1726		1590	1860	
Flt Permitted	0.75	1.00			0.98			1.00		0.62	1.00	
Satd. Flow (perm)	1517	1729			1533			1726		1044	1860	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	12	26	3	0	16	0	136	34	51	426	0
RTOR Reduction (vph)	0	18	0	0	11	0	0	11	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	8	0	0	159	0	51	426	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	549			487			812		659	1094	
v/s Ratio Prot		c0.01						0.09		0.01	c0.23	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.20		0.08	0.39	
Uniform Delay, d1	20.0	20.0			19.9			13.1		8.3	9.3	
Progression Factor	1.00	1.00			1.00			1.00		0.96	0.85	
Incremental Delay, d2	0.1	0.1			0.1			0.5		0.2	1.0	
Delay (s)	20.1	20.1			20.0			13.7		8.2	8.9	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			13.7			8.8	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	46	39	10	183	273	27
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1754		1765	1782	1656	
Flt Permitted	0.97		0.52	1.00	1.00	
Satd. Flow (perm)	1754		966	1782	1656	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	43	11	203	303	30
RTOR Reduction (vph)	29	0	0	0	5	0
Lane Group Flow (vph)	65	0	11	203	328	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	567		535	987	917	
v/s Ratio Prot	c0.04			0.11	c0.20	
v/s Ratio Perm			0.01			
v/c Ratio	0.11		0.02	0.21	0.36	
Uniform Delay, d1	15.5		6.5	7.3	8.1	
Progression Factor	1.00		0.46	0.60	1.44	
Incremental Delay, d2	0.4		0.1	0.5	0.9	
Delay (s)	15.9		3.1	4.8	12.6	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			4.7	12.6	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	28.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	30	265	9	257	122	0	0	275	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3772		1693	1678			1738	1428
Flt Permitted					1.00		0.50	1.00			1.00	1.00
Satd. Flow (perm)					3772		887	1678			1738	1428
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	32	279	9	271	128	0	0	289	18
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	0	0	0	318	0	271	128	0	0	289	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		627	1007			777	638
v/s Ratio Prot					c0.08		c0.05	0.08			0.17	
v/s Ratio Perm							c0.21					0.01
v/c Ratio					0.28		0.43	0.13			0.37	0.01
Uniform Delay, d1					22.4		12.7	7.4			15.6	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.2	0.3			1.4	0.0
Delay (s)					23.0		14.9	7.6			17.0	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.0			12.6			16.7	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	95	94	38	133	203	30	59	702	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3286		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.59	1.00	
Satd. Flow (perm)					1896		447	3286		1063	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	106	104	42	148	226	33	66	780	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	15	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	242	0	148	244	0	66	823	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1490		641	1572	
v/s Ratio Prot					c0.13		c0.04	0.07		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.16		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.1		8.2	14.7	
Progression Factor					1.00		0.83	0.80		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.2		0.3	1.3	
Delay (s)					22.9		17.0	9.9		8.5	15.9	
Level of Service					C		B	A		A	B	
Approach Delay (s)		0.0			22.9			12.5			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	12	8	63	63	5	271	20	159	588	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1967			1654		1595	3178		1704	3231	
Flt Permitted		0.88			0.99		0.34	1.00		0.56	1.00	
Satd. Flow (perm)		1765			1638		571	3178		998	3231	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	54	13	9	70	70	6	301	22	177	653	56
RTOR Reduction (vph)	0	7	0	0	43	0	0	7	0	0	8	0
Lane Group Flow (vph)	0	96	0	0	106	0	6	316	0	177	701	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		588			546		320	1780		559	1809	
v/s Ratio Prot								0.10			c0.22	
v/s Ratio Perm		0.05			c0.06		0.01			0.18		
v/c Ratio		0.16			0.19		0.02	0.18		0.32	0.39	
Uniform Delay, d1		17.6			17.8		7.3	8.1		8.8	9.3	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.8		0.1	0.2		1.3	0.5	
Delay (s)		18.2			18.6		7.4	8.3		3.7	2.9	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.2			18.6			8.3			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	35	182	64	236	557	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	37	192	67	248	586	81

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	228	150	166	391	276
Volume Left (vph)	37	67	0	0	0
Volume Right (vph)	192	0	0	0	81
Hadj (s)	-0.42	0.28	0.05	0.05	-0.15
Departure Headway (s)	5.5	6.3	6.1	5.7	5.5
Degree Utilization, x	0.35	0.26	0.28	0.62	0.42
Capacity (veh/h)	607	548	568	620	642
Control Delay (s)	11.5	10.3	10.2	16.2	11.2
Approach Delay (s)	11.5	10.3		14.1	
Approach LOS	B	B		B	

Intersection Summary			
Delay	12.6		
HCM Level of Service	B		
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	371	18	18	381	65	73	55	68	351	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1421			1710	3252	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	937	1731	1421			257	3252	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	412	20	20	423	72	81	61	76	390	34
RTOR Reduction (vph)	0	0	0	12	0	0	39	0	0	0	6	0
Lane Group Flow (vph)	0	75	412	8	20	423	114	0	0	137	418	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		303	725	641	223	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.24					0.13	
v/s Ratio Perm		0.07		0.01	0.02		0.08			c0.53		
v/c Ratio		0.25	0.57	0.01	0.09	1.03	0.34			1.99	0.48	
Uniform Delay, d1		21.5	23.3	17.8	31.1	40.0	33.1			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	3.2	0.0	0.8	51.3	2.7			491.0	1.9	
Delay (s)		23.4	26.5	17.9	31.9	91.3	35.8			529.5	34.3	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.7			75.1					155.2	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	137.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	100.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	103	559	80	101	4	108	587	190
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.38	1.00				0.95	1.00	
Satd. Flow (perm)	678	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	114	621	89	112	4	120	652	211
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	114	810	0	0	0	124	837	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	178	850				334	514	
v/s Ratio Prot		0.25				0.07		
v/s Ratio Perm	0.17						c0.32	
v/c Ratio	0.64	0.95				0.37	1.63	
Uniform Delay, d1	34.4	38.1				36.7	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	16.4	21.4				3.1	291.8	
Delay (s)	50.7	59.5				39.8	334.0	
Level of Service	D	E				D	F	
Approach Delay (s)		58.4				297.1		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	577	0	0	440	49	83	51	17	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1954			1843				
Flt Permitted		0.92			1.00			0.97				
Satd. Flow (perm)		1547			1954			1843				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	67	607	0	0	463	52	87	54	18	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	674	0	0	515	0	0	159	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		952			1202			482				
v/s Ratio Prot					0.26							
v/s Ratio Perm		c0.44						0.09				
v/c Ratio		0.71			0.43			0.33				
Uniform Delay, d1		8.5			6.5			19.4				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		4.4			1.1			1.8				
Delay (s)		13.0			7.6			21.2				
Level of Service		B			A			C				
Approach Delay (s)		13.0			7.6			21.2			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	319	149	114	299	122	103	625	82	136	751	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1981	1434		1945	1444	1546	3040	1296	1505	3069	1252
Flt Permitted		0.46	1.00		0.75	1.00	0.23	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)		918	1434		1485	1444	379	3040	1296	468	3069	1252
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	73	336	157	120	315	128	108	658	86	143	791	98
RTOR Reduction (vph)	0	0	93	0	0	91	0	0	51	0	0	49
Lane Group Flow (vph)	0	409	64	0	435	37	108	658	35	143	791	49
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		477	587		424	413	275	1225	522	315	1248	509
v/s Ratio Prot		c0.08					0.03	0.22		c0.04	c0.26	
v/s Ratio Perm		0.27	0.04		c0.29	0.03	0.16		0.03	0.18		0.04
v/c Ratio		0.86	0.11		1.03	0.09	0.39	0.54	0.07	0.45	0.63	0.10
Uniform Delay, d1		28.2	19.2		37.5	27.5	16.4	23.9	19.2	15.9	24.9	19.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.75	1.55	2.68
Incremental Delay, d2		17.8	0.4		50.5	0.4	0.9	1.7	0.2	1.0	2.4	0.4
Delay (s)		46.0	19.5		88.0	27.9	17.3	25.6	19.5	28.9	41.1	52.0
Level of Service		D	B		F	C	B	C	B	C	D	D
Approach Delay (s)		38.6			74.3			23.9			40.4	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM Average Control Delay	41.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	387	83	90	427	90	49	59	67	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1643			1643			1797				
Flt Permitted		0.85			0.85			0.99				
Satd. Flow (perm)		1401			1415			1797				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	407	87	95	449	95	52	62	71	0	0	0
RTOR Reduction (vph)	0	10	0	0	10	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	571	0	0	629	0	0	150	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		862			871			470				
v/s Ratio Prot												
v/s Ratio Perm		0.41			c0.44			0.08				
v/c Ratio		0.66			0.72			0.32				
Uniform Delay, d1		8.1			8.7			19.3				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		4.0			5.2			1.8				
Delay (s)		12.1			13.8			21.1				
Level of Service		B			B			C				
Approach Delay (s)		12.1			13.8			21.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	426	71	74	495	36	37	76	72	53	235	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1687	1382		1712	1417		1686	1455		1886	
Flt Permitted		0.97	1.00		0.89	1.00		0.84	1.00		0.94	
Satd. Flow (perm)		1634	1382		1537	1417		1436	1455		1780	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	448	75	78	521	38	39	80	76	56	247	49
RTOR Reduction (vph)	0	0	32	0	0	12	0	0	52	0	7	0
Lane Group Flow (vph)	0	470	43	0	599	26	0	119	24	0	345	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		937	792		881	812		460	466		570	
v/s Ratio Prot												
v/s Ratio Perm		0.29	0.03		c0.39	0.02		0.08	0.02		c0.19	
v/c Ratio		0.50	0.05		0.68	0.03		0.26	0.05		0.60	
Uniform Delay, d1		9.6	7.0		11.2	7.0		18.9	17.6		21.5	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		1.9	0.1		4.2	0.1		1.4	0.2		4.7	
Delay (s)		11.5	7.2		15.4	7.0		20.3	17.8		26.2	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		10.9			14.9			19.3			26.2	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	439	30	44	509	52	44	165	55	117	199	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1530	3066		1651	3729		1585	1663	1370	1568	1680	1397
Flt Permitted	0.39	1.00		0.44	1.00		0.60	1.00	1.00	0.64	1.00	1.00
Satd. Flow (perm)	621	3066		773	3729		1001	1663	1370	1061	1680	1397
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	462	32	46	536	55	46	174	58	123	209	32
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	35	0	0	19
Lane Group Flow (vph)	60	486	0	46	579	0	46	174	23	123	209	13
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	296	1462		369	1778		400	665	548	424	672	559
v/s Ratio Prot		c0.16			0.16			0.10			c0.12	
v/s Ratio Perm	0.10			0.06			0.05		0.02	0.12		0.01
v/c Ratio	0.20	0.33		0.12	0.33		0.12	0.26	0.04	0.29	0.31	0.02
Uniform Delay, d1	9.8	10.6		9.5	10.5		12.3	13.1	11.9	13.2	13.4	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.87	0.92	0.81	0.56	0.56	0.25
Incremental Delay, d2	1.5	0.6		0.7	0.5		0.6	1.0	0.1	1.7	1.2	0.1
Delay (s)	11.4	11.2		10.1	11.0		11.2	13.0	9.8	9.1	8.7	3.1
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.2			11.0			12.1			8.3	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	389	71	70	369	64	55	179	64	87	240	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.95	1.00		0.99	1.00		0.95	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1325	3143		1513	3126		1579	2918		1451	3002	
Flt Permitted	0.47	1.00		0.45	1.00		0.54	1.00		0.60	1.00	
Satd. Flow (perm)	654	3143		717	3126		906	2918		911	3002	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	52	401	73	72	380	66	57	185	66	90	247	77
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	39	0
Lane Group Flow (vph)	52	474	0	72	446	0	57	212	0	90	285	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	314	1509		344	1500		374	1206		377	1241	
v/s Ratio Prot		c0.15			0.14			0.07			0.09	
v/s Ratio Perm	0.08			0.10			0.06			c0.10		
v/c Ratio	0.17	0.31		0.21	0.30		0.15	0.18		0.24	0.23	
Uniform Delay, d1	11.0	11.9		11.3	11.8		13.8	13.9		14.3	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.5		1.4	0.5		0.9	0.3		1.5	0.4	
Delay (s)	12.1	12.5		12.7	12.3		14.6	14.2		15.8	14.7	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.5			12.4			14.3			14.9	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1021: 103rd Street & Martin Luther King Jr Drive

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	420	57	31	500	46	81	194	57	76	473	106
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1594	1654		1367	1974		1534	2998		1534	3016	
Flt Permitted	0.27	1.00		0.33	1.00		0.28	1.00		0.59	1.00	
Satd. Flow (perm)	446	1654		482	1974		457	2998		951	3016	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	91	442	60	33	526	48	85	204	60	80	498	112
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	91	502	0	33	574	0	85	264	0	80	610	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	44.0	39.4		40.8	37.8		26.6	21.8		26.6	21.8	
Effective Green, g (s)	44.0	37.4		40.8	35.8		26.6	19.8		26.6	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	293	728		263	831		204	698		331	703	
v/s Ratio Prot	c0.02	c0.30		0.00	0.29		c0.02	0.09		0.01	c0.20	
v/s Ratio Perm	0.14			0.06			0.11			0.06		
v/c Ratio	0.31	0.69		0.13	0.69		0.42	0.38		0.24	0.87	
Uniform Delay, d1	21.8	19.1		19.1	20.1		28.9	27.4		21.9	31.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	5.3		0.2	4.7		1.4	1.6		0.4	13.7	
Delay (s)	22.4	24.4		19.3	24.8		30.3	29.0		22.3	45.0	
Level of Service	C	C		B	C		C	C		C	D	
Approach Delay (s)		24.1			24.5			29.3			42.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	30.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	375	61	111	482	112	63	150	55	121	348	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3681			3130		1652	3236		1549	3027	
Flt Permitted		0.76			0.76		0.46	1.00		0.62	1.00	
Satd. Flow (perm)		2811			2400		798	3236		1005	3027	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	395	64	117	507	118	66	158	58	127	366	81
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	534	0	0	742	0	66	216	0	127	447	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1274			1088		351	1424		442	1332	
v/s Ratio Prot								0.07			c0.15	
v/s Ratio Perm		0.19			c0.31		0.08			0.13		
v/c Ratio		0.42			0.68		0.19	0.15		0.29	0.34	
Uniform Delay, d1		13.8			16.2		12.8	12.6		13.5	13.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.0			3.5		1.2	0.2		1.6	0.7	
Delay (s)		14.9			19.7		14.0	12.8		15.1	14.5	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.9			19.7			13.1			14.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	16.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	823	6	19	553	236	1	1	9	202	1	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1548			3176	
Flt Permitted	0.42	1.00		0.29	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	710	3206		508	3320	1485		1520			2538	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	98	866	6	20	582	248	1	1	9	213	1	80
RTOR Reduction (vph)	0	0	0	0	0	89	0	7	0	0	53	0
Lane Group Flow (vph)	98	872	0	20	582	159	0	4	0	0	241	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		18.0			18.0	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		18.0			18.0	
Actuated g/C Ratio	0.64	0.64		0.64	0.64	0.64		0.25			0.25	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	454	2050		325	2123	949		379			634	
v/s Ratio Prot		c0.27			0.18							
v/s Ratio Perm	0.14			0.04		0.11		0.00			c0.09	
v/c Ratio	0.22	0.43		0.06	0.27	0.17		0.01			0.38	
Uniform Delay, d1	5.4	6.4		4.9	5.7	5.2		20.4			22.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.1	0.6		0.4	0.3	0.4		0.1			1.6	
Delay (s)	6.5	7.1		5.2	6.0	5.6		20.4			24.0	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		7.0			5.9			20.4			24.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	72.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	124	216	116	94	162	55	130	876	87	122	816	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1506		1563	1586		1493	3069	1337	1523	3099	1318
Flt Permitted	0.46	1.00		0.24	1.00		0.21	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	749	1506		401	1586		323	3069	1337	285	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	131	227	122	99	171	58	137	922	92	128	859	98
RTOR Reduction (vph)	0	23	0	0	14	0	0	0	40	0	0	46
Lane Group Flow (vph)	131	326	0	99	215	0	137	922	52	128	859	52
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	286	390		205	410		235	1264	551	222	1276	543
v/s Ratio Prot	0.03	c0.22		c0.03	0.14		c0.04	c0.30		0.04	0.28	
v/s Ratio Perm	0.11			0.11			0.23		0.04	0.23		0.04
v/c Ratio	0.46	0.84		0.48	0.52		0.58	0.73	0.09	0.58	0.67	0.10
Uniform Delay, d1	22.5	29.8		22.7	27.0		14.4	21.0	15.3	14.7	20.3	15.3
Progression Factor	1.00	1.00		1.00	1.00		0.63	0.79	0.52	1.00	1.00	1.00
Incremental Delay, d2	5.2	18.8		7.9	4.7		9.4	3.5	0.3	10.5	2.9	0.4
Delay (s)	27.7	48.5		30.6	31.7		18.6	20.0	8.3	25.1	23.2	15.7
Level of Service	C	D		C	C		B	B	A	C	C	B
Approach Delay (s)		42.9			31.4			18.9			22.7	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	179	34	20	173	20	22	141	38	37	251	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.97			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1839			1851			1938			1976	
Flt Permitted		0.97			0.96			0.95			0.95	
Satd. Flow (perm)		1784			1794			1849			1895	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	23	188	36	21	182	21	23	148	40	39	264	52
RTOR Reduction (vph)	0	9	0	0	6	0	0	13	0	0	10	0
Lane Group Flow (vph)	0	238	0	0	218	0	0	198	0	0	345	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		741			745			853			875	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.11			c0.18	
v/c Ratio		0.32			0.29			0.23			0.39	
Uniform Delay, d1		12.8			12.6			10.6			11.5	
Progression Factor		1.00			0.65			1.16			1.00	
Incremental Delay, d2		1.1			1.0			0.6			1.3	
Delay (s)		14.0			9.2			12.9			12.9	
Level of Service		B			A			B			B	
Approach Delay (s)		14.0			9.2			12.9			12.9	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	190	36	25	180	18	39	199	31	38	206	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1495	3062		1576	3122		1518	3118		1550	3074	
Flt Permitted	0.62	1.00		0.60	1.00		0.59	1.00		0.60	1.00	
Satd. Flow (perm)	978	3062		1002	3122		947	3118		981	3074	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	25	200	38	26	189	19	41	209	33	40	217	40
RTOR Reduction (vph)	0	24	0	0	12	0	0	14	0	0	17	0
Lane Group Flow (vph)	25	214	0	26	196	0	41	228	0	40	240	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	286	895		293	913		554	1823		574	1797	
v/s Ratio Prot		c0.07			0.06			0.07			c0.08	
v/s Ratio Perm	0.03			0.03			0.04			0.04		
v/c Ratio	0.09	0.24		0.09	0.21		0.07	0.13		0.07	0.13	
Uniform Delay, d1	16.7	17.5		16.7	17.4		5.9	6.1		5.8	6.1	
Progression Factor	0.89	0.91		0.75	0.74		1.23	1.22		0.40	0.36	
Incremental Delay, d2	0.6	0.6		0.6	0.5		0.3	0.1		0.2	0.2	
Delay (s)	15.4	16.5		13.1	13.3		7.5	7.5		2.6	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		16.4			13.3			7.5			2.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	165	40	24	153	35	23	245	16	30	321	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	3059		1524	2940			1923			1938	
Flt Permitted	0.63	1.00		0.62	1.00			0.96			0.96	
Satd. Flow (perm)	1033	3059		996	2940			1852			1874	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	67	168	41	24	156	36	23	250	16	31	328	34
RTOR Reduction (vph)	0	25	0	0	22	0	0	3	0	0	5	0
Lane Group Flow (vph)	67	184	0	24	170	0	0	286	0	0	388	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	413	1224		398	1176			883			894	
v/s Ratio Prot		0.06			0.06							
v/s Ratio Perm	c0.06			0.02				0.15			c0.21	
v/c Ratio	0.16	0.15		0.06	0.14			0.32			0.43	
Uniform Delay, d1	12.5	12.5		12.0	12.4			10.5			11.2	
Progression Factor	0.98	0.91		0.77	0.76			0.98			1.00	
Incremental Delay, d2	0.8	0.3		0.3	0.2			1.0			1.5	
Delay (s)	13.1	11.6		9.5	9.7			11.2			12.7	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		12.0			9.7			11.2			12.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	26	19	153	25	30	230	11	29	360	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1973		1583	1976			1983			1979	
Flt Permitted	0.58	1.00		0.66	1.00			0.93			0.97	
Satd. Flow (perm)	1015	1973		1092	1976			1853			1925	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	29	21	170	28	33	256	12	32	400	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	152	0	21	198	0	0	301	0	0	495	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	312	607		336	608			1055			1096	
v/s Ratio Prot		0.08			c0.10							
v/s Ratio Perm	0.05			0.02				0.16			c0.26	
v/c Ratio	0.17	0.25		0.06	0.33			0.29			0.45	
Uniform Delay, d1	16.4	16.9		15.9	17.3			7.2			8.1	
Progression Factor	0.80	0.78		0.92	0.92			0.97			1.00	
Incremental Delay, d2	1.1	1.0		0.4	1.4			0.7			1.3	
Delay (s)	14.3	14.2		14.9	17.3			7.7			9.5	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.2			17.1			7.7			9.5	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	12	91	2	5	9	55	223	5	3	442	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1726		1702	1815		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.41	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1333	1726		1225	1815		693	1647	1428	1049	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	13	101	2	6	10	61	248	6	3	491	80
RTOR Reduction (vph)	0	73	0	0	7	0	0	0	2	0	0	28
Lane Group Flow (vph)	57	41	0	2	9	0	61	248	4	3	491	52
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		339	503		416	988	857	629	1200	898
v/s Ratio Prot		0.02			0.00			0.15			c0.25	
v/s Ratio Perm	c0.04			0.00			0.09		0.00	0.00		0.04
v/c Ratio	0.15	0.09		0.01	0.02		0.15	0.25	0.00	0.00	0.41	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.7	6.1	5.2	5.2	6.9	5.4
Progression Factor	1.43	2.88		1.00	1.00		0.79	0.73	0.87	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.3		0.0	0.1		0.6	0.5	0.0	0.0	1.0	0.1
Delay (s)	26.3	50.5		17.1	17.1		5.1	5.0	4.6	5.2	7.9	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		42.5			17.1			5.0			7.6	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	251	163	157	195	0	0	0	0	109	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2904		1693	3288					1503	3021	
Flt Permitted		1.00		0.41	1.00					0.95	1.00	
Satd. Flow (perm)		2904		725	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	264	172	165	205	0	0	0	0	115	495	397
RTOR Reduction (vph)	0	106	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	330	0	165	205	0	0	0	0	115	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		567	1805					545	1096	
v/s Ratio Prot		c0.11		c0.06	0.06					0.08	c0.25	
v/s Ratio Perm				0.09								
v/c Ratio		0.35		0.29	0.11					0.21	0.68	
Uniform Delay, d1		26.3		13.3	11.1					22.4	27.6	
Progression Factor		1.00		2.17	2.12					1.00	1.00	
Incremental Delay, d2		1.0		1.2	0.1					0.9	3.5	
Delay (s)		27.4		30.0	23.5					23.3	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.4			26.4			0.0			30.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	28.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	219	0	0	279	109	73	511	215	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2844		1767	1782	1560			
Flt Permitted	0.39	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	683	3196			2844		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	231	0	0	294	115	77	538	226	0	0	0
RTOR Reduction (vph)	0	0	0	0	40	0	0	0	160	0	0	0
Lane Group Flow (vph)	148	231	0	0	369	0	77	538	66	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	716	1974			725		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.13		0.04	c0.30				
v/s Ratio Perm	0.05								0.04			
v/c Ratio	0.21	0.12			0.51		0.15	1.03	0.14			
Uniform Delay, d1	10.2	8.0			32.5		26.6	36.0	26.5			
Progression Factor	0.43	0.44			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			2.5		0.6	46.3	0.7			
Delay (s)	5.0	3.6			35.1		27.2	82.3	27.2			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.2			35.1			62.4			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	42.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	484	455	77	507	0	0	0	0	9	432	269
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3097		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3097		203	3306					1596	3192	1530
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	509	479	81	534	0	0	0	0	9	455	283
RTOR Reduction (vph)	0	171	0	0	0	0	0	0	0	0	0	187
Lane Group Flow (vph)	0	817	0	81	534	0	0	0	0	9	455	96
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		381	1917					543	1085	520
v/s Ratio Prot		c0.26		0.04	c0.16					0.01	c0.14	0.06
v/s Ratio Perm				0.08								
v/c Ratio		0.73		0.21	0.28					0.02	0.42	0.19
Uniform Delay, d1		27.8		14.0	10.5					21.9	25.4	23.2
Progression Factor		1.00		1.02	1.19					1.00	1.00	1.00
Incremental Delay, d2		4.3		0.9	0.3					0.1	1.2	0.8
Delay (s)		32.1		15.1	12.8					22.0	26.6	24.0
Level of Service		C		B	B					C	C	C
Approach Delay (s)		32.1			13.1			0.0			25.6	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	394	99	0	0	142	5	441	455	55	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3109			3172		1555	1653	1530			
Flt Permitted	0.65	0.72			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1011	2310			3172		1555	1653	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	415	104	0	0	149	5	464	479	58	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	37	0	0	0
Lane Group Flow (vph)	207	312	0	0	151	0	464	479	21	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	680	1466			476		575	612	566			
v/s Ratio Prot	c0.11	0.08			c0.05		c0.30	0.29	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.30	0.21			0.32		0.81	0.78	0.04			
Uniform Delay, d1	14.0	13.5			37.9		28.3	27.9	20.1			
Progression Factor	0.25	0.26			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.8		11.6	9.6	0.1			
Delay (s)	4.3	3.8			39.7		39.8	37.6	20.3			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		4.0			39.7			37.6			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	27.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	210	102	105	231	107	80	663	72	99	875	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2936			2923		1508	3069	1309	1508	3099	1298
Flt Permitted		0.77			0.76		0.17	1.00	1.00	0.28	1.00	1.00
Satd. Flow (perm)		2281			2240		267	3069	1309	439	3099	1298
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	80	216	105	108	238	110	82	684	74	102	902	66
RTOR Reduction (vph)	0	42	0	0	36	0	0	0	45	0	0	33
Lane Group Flow (vph)	0	359	0	0	420	0	82	684	29	102	902	33
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		1012			738		171	1210	508	236	1221	504
v/s Ratio Prot		c0.03					c0.02	0.22		0.02	c0.29	
v/s Ratio Perm		0.13			c0.19		0.18		0.02	0.16		0.03
v/c Ratio		0.35			0.57		0.48	0.57	0.06	0.43	0.74	0.07
Uniform Delay, d1		16.6			23.5		16.5	20.1	16.3	15.8	22.0	16.3
Progression Factor		1.00			1.00		1.30	0.68	0.54	1.10	1.17	1.79
Incremental Delay, d2		1.0			3.2		8.8	1.8	0.2	4.2	3.0	0.2
Delay (s)		17.6			26.7		30.3	15.4	9.0	21.5	28.8	29.5
Level of Service		B			C		C	B	A	C	C	C
Approach Delay (s)		17.6			26.7			16.3			28.1	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	305	0	0	325	81	52	43	32	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.97				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1730			1701			1654				
Flt Permitted		0.86			1.00			0.98				
Satd. Flow (perm)		1500			1701			1654				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	80	321	0	0	342	85	55	45	34	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	19	0	0	0	0
Lane Group Flow (vph)	0	401	0	0	413	0	0	115	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		877			994			483				
v/s Ratio Prot					0.24							
v/s Ratio Perm		c0.27						0.07				
v/c Ratio		0.46			0.42			0.24				
Uniform Delay, d1		7.7			7.4			17.5				
Progression Factor		1.00			0.62			1.00				
Incremental Delay, d2		1.7			1.2			1.2				
Delay (s)		9.4			5.7			18.7				
Level of Service		A			A			B				
Approach Delay (s)		9.4			5.7			18.7			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	289	27	37	333	48	27	112	37	52	148	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.98			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1956			1939			2969			2987	
Flt Permitted		0.97			0.95			0.90			0.87	
Satd. Flow (perm)		1901			1849			2681			2614	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	20	304	28	39	351	51	28	118	39	55	156	44
RTOR Reduction (vph)	0	5	0	0	7	0	0	23	0	0	26	0
Lane Group Flow (vph)	0	347	0	0	434	0	0	162	0	0	229	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		877			853			1114			1086	
v/s Ratio Prot												
v/s Ratio Perm		0.18			c0.23			0.06			c0.09	
v/c Ratio		0.40			0.51			0.15			0.21	
Uniform Delay, d1		11.5			12.3			11.8			12.2	
Progression Factor		0.58			0.42			1.10			0.43	
Incremental Delay, d2		1.2			2.0			0.3			0.4	
Delay (s)		7.9			7.2			13.3			5.7	
Level of Service		A			A			B			A	
Approach Delay (s)		7.9			7.2			13.3			5.7	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	255	39	78	429	82	43	217	97	79	215	59
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1508	3033		1568	3075		1586	2962		1585	3075	
Flt Permitted	0.37	1.00		0.56	1.00		0.58	1.00		0.55	1.00	
Satd. Flow (perm)	586	3033		919	3075		961	2962		922	3075	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	43	268	41	82	452	86	45	228	102	83	226	62
RTOR Reduction (vph)	0	19	0	0	24	0	0	47	0	0	29	0
Lane Group Flow (vph)	43	290	0	82	514	0	45	283	0	83	259	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	198	1027		311	1041		517	1595		496	1656	
v/s Ratio Prot		0.10			c0.17			c0.10			0.08	
v/s Ratio Perm	0.07			0.09			0.05			0.09		
v/c Ratio	0.22	0.28		0.26	0.49		0.09	0.18		0.17	0.16	
Uniform Delay, d1	15.4	15.7		15.6	17.1		7.3	7.7		7.6	7.6	
Progression Factor	0.78	0.75		0.92	0.93		0.83	0.81		1.09	1.09	
Incremental Delay, d2	2.4	0.7		2.0	1.6		0.3	0.2		0.7	0.2	
Delay (s)	14.3	12.4		16.4	17.4		6.3	6.5		9.0	8.4	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		12.7			17.3			6.4			8.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	287	68	83	382	48	43	226	57	46	279	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1507	3013		1429	3719			3485			3520	
Flt Permitted	0.47	1.00		0.53	1.00			0.87			0.88	
Satd. Flow (perm)	748	3013		792	3719			3045			3123	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	302	72	87	402	51	45	238	60	48	294	67
RTOR Reduction (vph)	0	32	0	0	15	0	0	28	0	0	25	0
Lane Group Flow (vph)	58	342	0	87	438	0	0	315	0	0	384	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	357	1437		378	1774			1218			1249	
v/s Ratio Prot		0.11			c0.12							
v/s Ratio Perm	0.08			0.11				0.10			c0.12	
v/c Ratio	0.16	0.24		0.23	0.25			0.26			0.31	
Uniform Delay, d1	9.6	10.0		10.0	10.1			13.1			13.3	
Progression Factor	1.53	1.68		1.14	1.13			0.47			0.68	
Incremental Delay, d2	1.0	0.4		1.3	0.3			0.5			0.6	
Delay (s)	15.7	17.2		12.7	11.7			6.6			9.7	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.0			11.9			6.6			9.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	246	82	88	266	88	114	79	45	45	79	114
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1669	1436		3083			1885			1835	
Flt Permitted		0.80	1.00		0.82			0.71			0.91	
Satd. Flow (perm)		1352	1436		2540			1363			1681	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	86	259	86	93	280	93	120	83	47	47	83	120
RTOR Reduction (vph)	0	0	41	0	34	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	345	45	0	432	0	0	237	0	0	199	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		707	751		1329			440			543	
v/s Ratio Prot												
v/s Ratio Perm		c0.26	0.03		0.17			c0.17			0.12	
v/c Ratio		0.49	0.06		0.33			0.54			0.37	
Uniform Delay, d1		9.9	7.6		8.9			18.0			16.9	
Progression Factor		1.83	4.37		0.52			1.00			1.00	
Incremental Delay, d2		2.4	0.1		0.6			4.7			1.9	
Delay (s)		20.5	33.5		5.3			22.7			18.8	
Level of Service		C	C		A			C			B	
Approach Delay (s)		23.1			5.3			22.7			18.8	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	253	18	25	305	58	24	130	46	62	145	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.98	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1442	3037		1563	3017			3582			3604	
Flt Permitted	0.52	1.00		0.58	1.00			0.91			0.85	
Satd. Flow (perm)	787	3037		949	3017			3266			3096	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	47	266	19	26	321	61	25	137	48	65	153	64
RTOR Reduction (vph)	0	8	0	0	24	0	0	28	0	0	37	0
Lane Group Flow (vph)	47	277	0	26	358	0	0	182	0	0	245	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	363	1402		438	1392			1357			1286	
v/s Ratio Prot		0.09			c0.12							
v/s Ratio Perm	0.06			0.03				0.06			c0.08	
v/c Ratio	0.13	0.20		0.06	0.26			0.13			0.19	
Uniform Delay, d1	10.0	10.4		9.7	10.7			11.8			12.1	
Progression Factor	0.77	0.78		0.75	0.58			1.06			0.40	
Incremental Delay, d2	0.7	0.3		0.2	0.3			0.2			0.3	
Delay (s)	8.3	8.3		7.4	6.5			12.7			5.2	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		8.3			6.5			12.7			5.2	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	434	18	83	480	213	21	118	109	323	248	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3288			3167			3088			3182	
Flt Permitted		0.82			0.83			0.92			0.71	
Satd. Flow (perm)		2716			2640			2852			2325	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	457	19	87	505	224	22	124	115	340	261	81
RTOR Reduction (vph)	0	4	0	0	60	0	0	62	0	0	16	0
Lane Group Flow (vph)	0	517	0	0	756	0	0	199	0	0	666	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		1045			1015			1353			608	
v/s Ratio Prot								c0.02				
v/s Ratio Perm		0.19			c0.29			0.05			c0.29	
v/c Ratio		0.49			0.74			0.15			1.19dl	
Uniform Delay, d1		15.2			17.2			10.1			24.0	
Progression Factor		1.49			1.00			1.00			0.80	
Incremental Delay, d2		1.7			5.0			0.2			64.5	
Delay (s)		24.3			22.2			10.3			83.6	
Level of Service		C			C			B			F	
Approach Delay (s)		24.3			22.2			10.3			83.6	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	39.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	867	123	46	758	0	77	0	35	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3041			3090			1618				
Flt Permitted		1.00			0.82			0.79				
Satd. Flow (perm)		3041			2552			1330				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	913	129	48	798	0	81	0	37	0	0	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	1027	0	0	846	0	0	100	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1960			936			236				
v/s Ratio Prot		c0.34										
v/s Ratio Perm					c0.33			c0.08				
v/c Ratio		0.52			0.90			0.42				
Uniform Delay, d1		8.6			27.0			32.9				
Progression Factor		0.06			1.35			1.00				
Incremental Delay, d2		0.4			13.1			5.5				
Delay (s)		0.9			49.6			38.4				
Level of Service		A			D			D				
Approach Delay (s)		0.9			49.6			38.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	23.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	216	629	22	108	584	178	58	4	103	205	10	205
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3194		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.33	1.00		0.38	1.00	1.00		0.88		0.44	1.00	1.00
Satd. Flow (perm)	544	3194		662	3320	1485		1594		769	1748	1485
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	227	662	23	114	615	187	61	4	108	216	11	216
RTOR Reduction (vph)	0	2	0	0	0	82	0	92	0	0	0	128
Lane Group Flow (vph)	227	683	0	114	615	105	0	81	0	216	11	88
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	56.0	45.4		48.1	40.5	50.5		11.0		24.0	24.0	36.5
Effective Green, g (s)	56.0	45.4		48.1	40.5	50.5		11.0		24.0	24.0	36.5
Actuated g/C Ratio	0.62	0.50		0.53	0.45	0.56		0.12		0.27	0.27	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	478	1611		438	1494	833		195		304	466	602
v/s Ratio Prot	c0.07	0.21		0.02	0.19	0.01				c0.08	0.01	0.02
v/s Ratio Perm	c0.23			0.12		0.06		0.05		c0.11		0.04
v/c Ratio	0.47	0.42		0.26	0.41	0.13		0.41		0.71	0.02	0.15
Uniform Delay, d1	8.2	14.1		10.5	16.7	9.3		36.5		28.4	24.4	16.9
Progression Factor	2.60	1.95		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	0.9	0.7		0.4	0.8	0.1		1.9		7.6	0.0	0.2
Delay (s)	22.1	28.2		10.9	17.5	9.4		38.5		36.0	24.4	17.1
Level of Service	C	C		B	B	A		D		D	C	B
Approach Delay (s)		26.7			15.1			38.5			26.5	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	509	429	2	322	0	0	0	0	18	0	547
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	536	452	2	339	0	0	0	0	19	0	576
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	339			536			709	879	268	611	879	169
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	339			536			709	879	268	611	879	169
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	95	100	32
cM capacity (veh/h)	1210			1021			101	282	727	375	282	842

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	268	268	452	115	226	19	576
Volume Left	0	0	0	2	0	19	0
Volume Right	0	0	452	0	0	0	576
cSH	1700	1700	1700	1021	1700	375	842
Volume to Capacity	0.16	0.16	0.27	0.00	0.13	0.05	0.68
Queue Length 95th (ft)	0	0	0	0	0	4	139
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	15.1	18.0
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		17.9	
Approach LOS						C	

Intersection Summary			
Average Delay	5.5		
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	527	0	324	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	555	0	341	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	277	277	341
Volume Left (vph)	277	277	341
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.1	6.1	5.5
Degree Utilization, x	0.47	0.47	0.52
Capacity (veh/h)	577	579	636
Control Delay (s)	13.1	13.1	14.3
Approach Delay (s)	13.1		14.3
Approach LOS	B		B

Intersection Summary			
Delay	13.5		
HCM Level of Service	B		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Signalized Intersection Capacity Analysis
1046: 115th Street & Marshield Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	472	64	188	485	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3153		1605	3210						3073	
Flt Permitted		1.00		0.36	1.00						0.97	
Satd. Flow (perm)		3153		617	3210						3073	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	497	67	198	511	0	0	0	0	106	22	61
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	42	0
Lane Group Flow (vph)	0	552	0	198	511	0	0	0	0	0	147	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		472	1850						976	
v/s Ratio Prot		0.18		c0.05	0.16						c0.05	
v/s Ratio Perm				c0.19								
v/c Ratio		0.41		0.42	0.28						0.15	
Uniform Delay, d1		17.1		14.6	9.1						20.8	
Progression Factor		1.00		0.33	0.20						1.00	
Incremental Delay, d2		0.9		2.3	0.3						0.3	
Delay (s)		18.1		7.1	2.1						21.1	
Level of Service		B		A	A						C	
Approach Delay (s)		18.1			3.5			0.0			21.1	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	478	0	0	609	124	64	90	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.97			0.96				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1660	3320			3128			4507				
Flt Permitted	0.25	1.00			1.00			0.99				
Satd. Flow (perm)	436	3320			3128			4507				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	503	0	0	641	131	67	95	61	0	0	0
RTOR Reduction (vph)	0	0	0	0	20	0	0	42	0	0	0	0
Lane Group Flow (vph)	100	503	0	0	752	0	0	181	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	390	1875			1288			1432				
v/s Ratio Prot	0.03	c0.15			c0.24			c0.04				
v/s Ratio Perm	0.11											
v/c Ratio	0.26	0.27			0.58			0.13				
Uniform Delay, d1	16.5	9.5			19.4			20.6				
Progression Factor	0.38	0.32			1.00			1.00				
Incremental Delay, d2	1.5	0.3			1.9			0.2				
Delay (s)	7.8	3.3			21.3			20.8				
Level of Service	A	A			C			C				
Approach Delay (s)		4.1			21.3			20.8			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	14.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	342	114	79	366	79	129	78	27	29	85	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2976			3006			1842			1769	
Flt Permitted		0.69			0.75			0.73			0.95	
Satd. Flow (perm)		2070			2273			1379			1690	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	120	360	120	83	385	83	136	82	28	31	89	148
RTOR Reduction (vph)	0	34	0	0	22	0	0	7	0	0	69	0
Lane Group Flow (vph)	0	566	0	0	529	0	0	239	0	0	199	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		732			804			679			832	
v/s Ratio Prot												
v/s Ratio Perm		c0.27			0.23			c0.17			0.12	
v/c Ratio		0.77			0.66			0.35			0.24	
Uniform Delay, d1		18.7			17.7			10.1			9.5	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		7.8			4.2			1.4			0.7	
Delay (s)		26.5			21.9			11.6			10.2	
Level of Service		C			C			B			B	
Approach Delay (s)		26.5			21.9			11.6			10.2	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	201	88	159	311	65	118	511	64	91	898	140
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2980		1573	3683		1508	3069	1333	1520	3099	1336
Flt Permitted	0.45	1.00		0.53	1.00		0.14	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	739	2980		880	3683		214	3069	1333	576	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	212	93	167	327	68	124	538	67	96	945	147
RTOR Reduction (vph)	0	58	0	0	21	0	0	0	43	0	0	93
Lane Group Flow (vph)	112	247	0	167	374	0	124	538	24	96	945	54
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	982		343	1213		182	1119	486	311	1130	487
v/s Ratio Prot	0.02	0.08		c0.02	0.10		c0.05	0.18		0.02	c0.30	
v/s Ratio Perm	0.11			c0.15			0.24		0.02	0.11		0.04
v/c Ratio	0.37	0.25		0.49	0.31		0.68	0.48	0.05	0.31	0.84	0.11
Uniform Delay, d1	19.4	20.8		20.7	21.3		17.6	20.8	17.5	15.3	24.7	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.43	1.05	2.41
Incremental Delay, d2	3.6	0.6		4.9	0.7		18.7	1.5	0.2	1.9	5.7	0.3
Delay (s)	23.0	21.5		25.5	21.9		36.3	22.3	17.7	23.9	31.7	43.5
Level of Service	C	C		C	C		D	C	B	C	C	D
Approach Delay (s)		21.9			23.0			24.2			32.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	295	30	33	389	24	31	95	39	36	122	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1962	1466		1993	1480		2015	1506		2000	1511
Flt Permitted		0.90	1.00		0.96	1.00		0.92	1.00		0.92	1.00
Satd. Flow (perm)		1782	1466		1912	1480		1869	1506		1870	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	311	32	35	409	25	33	100	41	38	128	66
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	24	0	0	39
Lane Group Flow (vph)	0	362	15	0	444	12	0	133	17	0	166	27
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		822	677		882	683		776	626		777	628
v/s Ratio Prot												
v/s Ratio Perm		0.20	0.01		c0.23	0.01		0.07	0.01		c0.09	0.02
v/c Ratio		0.44	0.02		0.50	0.02		0.17	0.03		0.21	0.04
Uniform Delay, d1		11.8	9.5		12.3	9.5		12.0	11.2		12.2	11.3
Progression Factor		1.00	1.00		0.65	0.58		1.22	1.56		0.97	0.84
Incremental Delay, d2		1.7	0.1		2.0	0.0		0.5	0.1		0.6	0.1
Delay (s)		13.5	9.6		10.0	5.6		15.1	17.6		12.5	9.7
Level of Service		B	A		A	A		B	B		B	A
Approach Delay (s)		13.2			9.8			15.7			11.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	305	20	41	247	31	10	107	21	104	203	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3070		1550	3047		1550	3023		1550	2991	
Flt Permitted	0.95	1.00		0.55	1.00		0.57	1.00		0.67	1.00	
Satd. Flow (perm)	1550	3070		891	3047		933	3023		1087	2991	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	321	21	43	260	33	11	113	22	109	214	65
RTOR Reduction (vph)	0	7	0	0	15	0	0	13	0	0	38	0
Lane Group Flow (vph)	79	335	0	43	278	0	11	122	0	109	241	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1511		302	1031		388	1256		452	1242	
v/s Ratio Prot	c0.05	0.11			c0.09			0.04			0.08	
v/s Ratio Perm				0.05			0.01			c0.10		
v/c Ratio	0.47	0.22		0.14	0.27		0.03	0.10		0.24	0.19	
Uniform Delay, d1	27.3	9.4		14.9	15.7		11.2	11.6		12.3	12.1	
Progression Factor	0.92	0.50		0.77	0.74		0.89	0.94		1.12	1.12	
Incremental Delay, d2	8.9	0.3		1.0	0.6		0.1	0.2		1.3	0.3	
Delay (s)	34.1	5.0		12.4	12.2		10.2	11.0		15.1	13.8	
Level of Service	C	A		B	B		B	B		B	B	
Approach Delay (s)		10.5			12.3			10.9			14.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	63	263	68	197	320	61	25	245	20	55	270	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1550	3003		1550	3025			3272			3230	
Flt Permitted	0.52	1.00		0.95	1.00			0.91			0.87	
Satd. Flow (perm)	841	3003		1550	3025			2982			2820	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	66	277	72	207	337	64	26	258	21	58	284	53
RTOR Reduction (vph)	0	35	0	0	24	0	0	9	0	0	19	0
Lane Group Flow (vph)	66	314	0	207	377	0	0	296	0	0	376	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	259	924		143	1350			1147			1085	
v/s Ratio Prot		c0.10		c0.13	0.12							
v/s Ratio Perm	0.08							0.10			c0.13	
v/c Ratio	0.25	0.34		1.45	0.28			0.26			0.35	
Uniform Delay, d1	16.9	17.4		29.5	11.4			13.7			14.2	
Progression Factor	0.65	0.61		1.29	1.13			0.76			0.73	
Incremental Delay, d2	2.3	1.0		224.5	0.3			0.5			0.9	
Delay (s)	13.3	11.5		262.6	13.2			11.0			11.3	
Level of Service	B	B		F	B			B			B	
Approach Delay (s)		11.8			98.1			11.0			11.3	
Approach LOS		B			F			B			B	

Intersection Summary			
HCM Average Control Delay	42.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	295	16	73	587	73	52	108	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.99			0.92				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1616			1601			3248				
Flt Permitted		0.96			0.93			0.99				
Satd. Flow (perm)		1557			1503			3248				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	311	17	77	618	77	55	114	171	0	0	0
RTOR Reduction (vph)	0	3	0	0	5	0	0	130	0	0	0	0
Lane Group Flow (vph)	0	342	0	0	767	0	0	210	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.6			41.6			15.4				
Effective Green, g (s)		41.6			41.6			15.4				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		996			962			770				
v/s Ratio Prot												
v/s Ratio Perm		0.22			c0.51			0.06				
v/c Ratio		0.34			0.80			0.27				
Uniform Delay, d1		5.4			8.6			20.2				
Progression Factor		1.59			1.00			1.00				
Incremental Delay, d2		0.9			6.8			0.8				
Delay (s)		9.5			15.4			21.0				
Level of Service		A			B			C				
Approach Delay (s)		9.5			15.4			21.0			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	73	374	569	38	117	157
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	81	416	632	42	130	174
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	691				1254	675
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	532				1206	512
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				14	62
cM capacity (veh/h)	842				152	464

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	497	674	130	174
Volume Left	81	0	130	0
Volume Right	0	42	0	174
cSH	842	1700	152	464
Volume to Capacity	0.10	0.40	0.86	0.38
Queue Length 95th (ft)	8	0	144	43
Control Delay (s)	2.6	0.0	97.4	17.4
Lane LOS	A		F	C
Approach Delay (s)	2.6	0.0	51.5	
Approach LOS			F	

Intersection Summary			
Average Delay	11.5		
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	664	0	1	595	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1526	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1526	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	699	0	1	626	3	31
RTOR Reduction (vph)	0	0	0	0	26	0
Lane Group Flow (vph)	699	0	0	627	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	251	
v/s Ratio Prot	c0.40				c0.01	
v/s Ratio Perm				0.36		
v/c Ratio	0.58			0.98	0.03	
Uniform Delay, d1	6.6			26.8	29.8	
Progression Factor	0.06			1.00	1.00	
Incremental Delay, d2	1.3			32.0	0.2	
Delay (s)	1.7			58.8	30.1	
Level of Service	A			E	C	
Approach Delay (s)	1.7			58.8	30.1	
Approach LOS	A			E	C	

Intersection Summary			
HCM Average Control Delay	28.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	226	584	30	383	0	0	0	0	17	6	240
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	238	615	32	403	0	0	0	0	18	6	253
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	403			238			1015	1012	426	585	704	403
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	403			238			1015	1012	426	585	704	403
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	95	98	58
cM capacity (veh/h)	1166			1312			109	235	582	391	355	597

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	159	694	435	24	253
Volume Left	0	0	32	18	0
Volume Right	0	615	0	0	253
cSH	1700	1700	1312	381	597
Volume to Capacity	0.09	0.41	0.02	0.06	0.42
Queue Length 95th (ft)	0	0	2	5	52
Control Delay (s)	0.0	0.0	0.8	15.1	15.4
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.8	15.4	
Approach LOS				C	

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	243	0	414	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	256	0	436	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	128	128	436
Volume Left (vph)	128	128	436
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.2	6.2	4.9
Degree Utilization, x	0.22	0.22	0.59
Capacity (veh/h)	550	551	721
Control Delay (s)	9.8	9.8	14.7
Approach Delay (s)	9.8		14.7
Approach LOS	A		B

Intersection Summary			
Delay	12.9		
HCM Level of Service	B		
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	482	337	253	597	0	0	0	0	279	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3424					1359	3806	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3424					1359	3806	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	507	355	266	628	0	0	0	0	294	283	392
RTOR Reduction (vph)	0	0	234	0	0	0	0	0	0	0	53	113
Lane Group Flow (vph)	0	507	121	0	894	0	0	0	0	162	558	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		38.9	38.9		68.3					23.0	23.0	67.9
Effective Green, g (s)		38.9	38.9		68.3					23.0	23.0	67.9
Actuated g/C Ratio		0.24	0.24		0.43					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		773	300		1462					195	547	481
v/s Ratio Prot		c0.16			c0.26					0.12	c0.15	
v/s Ratio Perm			0.10									0.07
v/c Ratio		0.66	0.40		0.61					0.83	1.02	0.17
Uniform Delay, d1		54.5	50.8		35.6					66.6	68.5	28.6
Progression Factor		1.00	1.00		0.04					1.00	1.00	1.00
Incremental Delay, d2		4.3	4.0		0.1					24.9	43.6	0.2
Delay (s)		58.8	54.8		1.6					91.5	112.1	28.8
Level of Service		E	D		A					F	F	C
Approach Delay (s)		57.2			1.6			0.0			91.8	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	51.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.8
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	290	472	0	0	537	132	313	204	185	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3065				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3065				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	305	497	0	0	565	139	329	215	195	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	86	0	59	0	0	0	0
Lane Group Flow (vph)	305	497	0	0	565	53	250	430	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	83.7	83.7			36.6	36.6	12.7	12.7				
Effective Green, g (s)	83.7	83.7			36.6	36.6	12.7	12.7				
Actuated g/C Ratio	0.52	0.52			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	840	1795			734	340	124	243				
v/s Ratio Prot	c0.19	0.14			c0.18		c0.16	0.14				
v/s Ratio Perm						0.04						
v/c Ratio	0.36	0.28			0.77	0.16	2.02	1.77				
Uniform Delay, d1	22.5	21.3			57.8	49.4	73.7	73.7				
Progression Factor	0.01	0.02			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			4.9	0.2	484.4	362.7				
Delay (s)	0.5	0.4			62.6	49.6	558.1	436.4				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		0.4			60.1			477.5			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	176.2	HCM Level of Service	F
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	254	134	87	206	66	104	504	68	96	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1572	1600	1373	1593	1778		1578	3016		1537	3001	
Flt Permitted	0.43	1.00	1.00	0.50	1.00		0.15	1.00		0.34	1.00	
Satd. Flow (perm)	710	1600	1373	838	1778		246	3016		544	3001	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	141	259	137	89	210	67	106	514	69	98	819	122
RTOR Reduction (vph)	0	0	92	0	12	0	0	12	0	0	13	0
Lane Group Flow (vph)	141	259	45	89	265	0	106	571	0	98	928	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.3	29.3	29.3	33.3	27.8		39.6	34.1		39.6	34.1	
Effective Green, g (s)	34.3	30.3	29.3	31.3	27.8		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.38	0.34	0.33	0.35	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	330	542	450	331	553		171	1150		279	1145	
v/s Ratio Prot	c0.03	c0.16		0.01	0.15		c0.03	0.19		0.02	c0.31	
v/s Ratio Perm	0.14		0.03	0.08			0.23			0.13		
v/c Ratio	0.43	0.48	0.10	0.27	0.48		0.62	0.50		0.35	0.81	
Uniform Delay, d1	19.0	23.3	20.9	20.1	24.9		18.1	21.1		16.4	24.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	3.0	0.4	0.4	2.9		6.5	1.5		0.8	6.3	
Delay (s)	19.9	26.3	21.3	20.6	27.9		24.7	22.6		17.1	31.0	
Level of Service	B	C	C	C	C		C	C		B	C	
Approach Delay (s)		23.4			26.1			23.0			29.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	26.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	305	59	13	288	21	36	57	19	20	88	67
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.95	
Flt Protected		0.99	1.00		1.00	1.00		0.98			0.99	
Satd. Flow (prot)		1968	1467		1629	1381		1892			1870	
Flt Permitted		0.95	1.00		0.98	1.00		0.89			0.97	
Satd. Flow (perm)		1870	1467		1605	1381		1716			1827	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	321	62	14	303	22	38	60	20	21	93	71
RTOR Reduction (vph)	0	0	31	0	0	11	0	11	0	0	34	0
Lane Group Flow (vph)	0	361	31	0	317	11	0	107	0	0	151	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		921	722		790	680		713			759	
v/s Ratio Prot												
v/s Ratio Perm		0.19	0.02		c0.20	0.01		0.06			c0.08	
v/c Ratio		0.39	0.04		0.40	0.02		0.15			0.20	
Uniform Delay, d1		10.4	8.6		10.4	8.4		11.8			12.1	
Progression Factor		1.00	1.00		1.95	2.83		1.00			1.96	
Incremental Delay, d2		1.3	0.1		1.5	0.0		0.4			0.6	
Delay (s)		11.6	8.7		21.8	24.0		12.3			24.3	
Level of Service		B	A		C	C		B			C	
Approach Delay (s)		11.2			22.0			12.3			24.3	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	189	40	11	206	10	34	108	18	14	175	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1748	1443		1728	1487		1713	1489		1712	
Flt Permitted		0.88	1.00		0.98	1.00		0.90	1.00		0.98	
Satd. Flow (perm)		1555	1443		1701	1487		1555	1489		1690	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	60	197	42	11	215	10	35	112	19	15	182	69
RTOR Reduction (vph)	0	0	27	0	0	6	0	0	10	0	19	0
Lane Group Flow (vph)	0	257	15	0	226	4	0	147	9	0	247	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		550	511		602	526		766	733		832	
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.13	0.00		0.09	0.01		c0.15	
v/c Ratio		0.47	0.03		0.38	0.01		0.19	0.01		0.30	
Uniform Delay, d1		16.3	13.7		15.6	13.6		9.3	8.4		9.8	
Progression Factor		1.93	3.45		0.96	0.97		0.20	0.25		1.02	
Incremental Delay, d2		2.7	0.1		1.7	0.0		0.4	0.0		0.9	
Delay (s)		34.0	47.4		16.7	13.1		2.2	2.1		10.9	
Level of Service		C	D		B	B		A	A		B	
Approach Delay (s)		35.9			16.6			2.2			10.9	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	18.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	147	35	76	8	14	9	38	224	8	20	458	194
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1871	1440		1776			1993			1976	1382
Flt Permitted		0.78	1.00		0.94			0.91			0.98	1.00
Satd. Flow (perm)		1509	1440		1693			1820			1948	1382
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	155	37	80	8	15	9	40	236	8	21	482	204
RTOR Reduction (vph)	0	0	47	0	7	0	0	2	0	0	0	90
Lane Group Flow (vph)	0	192	33	0	25	0	0	282	0	0	503	114
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		671	598		443			896			959	680
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.08	0.02		0.01			0.16			c0.26	0.08
v/c Ratio		0.29	0.06		0.06			0.32			0.52	0.17
Uniform Delay, d1		12.6	11.4		18.0			9.9			11.3	9.1
Progression Factor		0.63	0.77		1.00			0.61			0.62	0.22
Incremental Delay, d2		1.0	0.2		0.2			0.8			1.6	0.4
Delay (s)		8.9	8.9		18.2			6.9			8.6	2.5
Level of Service		A	A		B			A			A	A
Approach Delay (s)		8.9			18.2			6.9			6.9	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	866	289	324	935	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4569		1620	3320					1489	2913	1442
Flt Permitted		1.00		0.14	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4569		242	3320					1489	2913	1442
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	884	295	331	954	0	0	0	0	523	290	341
RTOR Reduction (vph)	0	44	0	0	0	0	0	0	0	0	9	111
Lane Group Flow (vph)	0	1135	0	331	954	0	0	0	0	298	584	152
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		47.8		75.2	75.2					27.8	27.8	27.8
Effective Green, g (s)		47.8		75.2	75.2					27.8	27.8	27.8
Actuated g/C Ratio		0.42		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1899		433	2171					360	704	349
v/s Ratio Prot		0.25		c0.15	0.29							
v/s Ratio Perm				c0.35						0.20	0.20	0.11
v/c Ratio		0.60		0.76	0.44					0.83	0.83	0.44
Uniform Delay, d1		26.1		21.5	9.7					41.3	41.4	37.0
Progression Factor		1.00		1.09	1.51					1.00	1.00	1.00
Incremental Delay, d2		1.4		6.0	0.5					14.8	8.2	1.0
Delay (s)		27.5		29.5	15.1					56.1	49.6	38.0
Level of Service		C		C	B					E	D	D
Approach Delay (s)		27.5			18.8			0.0			48.6	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	31.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1038	0	0	852	269	406	333	292	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4526				
Flt Permitted	0.20	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	647	3353			3241	1489		4526				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1093	0	0	897	283	427	351	307	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	99	0	59	0	0	0	0
Lane Group Flow (vph)	359	1093	0	0	897	184	0	1026	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	70.0	70.0			52.2	52.2		33.0				
Effective Green, g (s)	70.0	70.0			52.2	52.2		33.0				
Actuated g/C Ratio	0.61	0.61			0.45	0.45		0.29				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	650	2041			1471	676		1299				
v/s Ratio Prot	0.06	c0.33			c0.28							
v/s Ratio Perm	0.28					0.12		0.23				
v/c Ratio	0.55	0.54			0.61	0.27		0.79				
Uniform Delay, d1	13.2	13.1			23.7	19.6		37.8				
Progression Factor	0.48	0.30			0.97	1.10		1.00				
Incremental Delay, d2	0.8	0.8			1.6	0.8		3.8				
Delay (s)	7.2	4.6			24.5	22.3		41.6				
Level of Service	A	A			C	C		D				
Approach Delay (s)		5.3			24.0			41.6			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM Average Control Delay	21.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	619	399	102	612	52	227	179	66	74	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1564	3273	1313	1600	3283		1578	3002		1540	2941	
Flt Permitted	0.19	1.00	1.00	0.40	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	308	3273	1313	681	3283		652	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	139	652	420	107	644	55	239	188	69	78	171	127
RTOR Reduction (vph)	0	0	169	0	6	0	0	38	0	0	107	0
Lane Group Flow (vph)	139	652	251	107	693	0	239	219	0	78	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	65.0	52.5	68.8	41.7	32.7		38.0	26.6		26.1	18.2	
Effective Green, g (s)	65.0	52.5	68.8	41.7	32.7		38.0	26.6		26.1	18.2	
Actuated g/C Ratio	0.57	0.46	0.60	0.36	0.28		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	489	1494	786	319	934		347	694		258	465	
v/s Ratio Prot	0.07	c0.20	0.05	c0.03	c0.21		c0.10	0.07		0.02	0.06	
v/s Ratio Perm	0.09		0.15	0.10			c0.13			0.05		
v/c Ratio	0.28	0.44	0.32	0.34	0.74		0.69	0.32		0.30	0.41	
Uniform Delay, d1	13.9	21.2	11.5	25.0	37.3		30.6	36.7		36.2	43.6	
Progression Factor	0.67	0.82	2.95	1.00	1.00		0.85	0.93		1.00	1.00	
Incremental Delay, d2	1.2	0.8	0.2	0.6	5.3		5.4	0.9		0.7	2.1	
Delay (s)	10.5	18.3	34.1	25.7	42.6		31.6	34.9		36.9	45.7	
Level of Service	B	B	C	C	D		C	C		D	D	
Approach Delay (s)		22.9			40.4			33.3			43.8	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM Average Control Delay	32.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	193	367	68	202	107	362	340	78	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.95		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1705	2894		1653	3184		1620	3407		1580	3183	
Flt Permitted	0.54	1.00		0.29	1.00		0.32	1.00		0.50	1.00	
Satd. Flow (perm)	961	2894		504	3184		544	3407		826	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	203	386	72	213	113	381	358	82	217	429	59
RTOR Reduction (vph)	0	269	0	0	56	0	0	17	0	0	9	0
Lane Group Flow (vph)	48	320	0	72	270	0	381	423	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	41.7	35.0		43.9	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	41.7	35.0		43.9	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.36	0.30		0.38	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	392	881		270	999		454	1309		340	888	
v/s Ratio Prot	0.01	c0.11		c0.02	0.08		c0.15	0.12		0.04	0.15	
v/s Ratio Perm	0.04			0.08			c0.26			0.18		
v/c Ratio	0.12	0.36		0.27	0.27		0.84	0.32		0.64	0.54	
Uniform Delay, d1	24.0	31.3		23.6	29.6		20.8	24.9		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.98	
Incremental Delay, d2	0.2	1.2		0.6	0.7		13.1	0.7		3.9	2.2	
Delay (s)	24.2	32.5		24.3	30.2		33.9	25.5		32.6	36.5	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		31.8			29.2			29.4			35.3	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	578	135	10	376	66	102	281	9	188	578	174
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.98		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3029			3035		1451	3227		1522	2872	
Flt Permitted		0.72			0.93		0.23	1.00		0.57	1.00	
Satd. Flow (perm)		2209			2826		351	3227		906	2872	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	106	608	142	11	396	69	107	296	9	198	608	183
RTOR Reduction (vph)	0	25	0	0	21	0	0	3	0	0	44	0
Lane Group Flow (vph)	0	831	0	0	455	0	107	302	0	198	747	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		900			739		219	1192		428	1060	
v/s Ratio Prot		c0.06					c0.03	0.09		0.03	c0.26	
v/s Ratio Perm		c0.30			0.16		0.18			0.17		
v/c Ratio		0.92			0.62		0.49	0.25		0.46	0.71	
Uniform Delay, d1		19.1			21.1		12.0	14.3		12.2	17.5	
Progression Factor		1.00			1.51		0.95	0.59		1.00	1.00	
Incremental Delay, d2		16.3			1.0		7.3	0.5		3.6	3.9	
Delay (s)		35.4			33.0		18.8	9.0		15.8	21.4	
Level of Service		D			C		B	A		B	C	
Approach Delay (s)		35.4			33.0			11.5			20.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	25.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	198	136	103	159	27	70	450	78	33	662	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.98		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1707	1885		1599	1992		1676	3221		1435	3274	
Flt Permitted	0.64	1.00		0.44	1.00		0.31	1.00		0.42	1.00	
Satd. Flow (perm)	1141	1885		736	1992		538	3221		636	3274	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	71	208	143	108	167	28	74	474	82	35	697	69
RTOR Reduction (vph)	0	38	0	0	9	0	0	21	0	0	12	0
Lane Group Flow (vph)	71	313	0	108	186	0	74	535	0	35	754	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	421	696		272	736		257	1536		303	1561	
v/s Ratio Prot		c0.17			0.09			0.17			c0.23	
v/s Ratio Perm	0.06			0.15			0.14			0.06		
v/c Ratio	0.17	0.45		0.40	0.25		0.29	0.35		0.12	0.48	
Uniform Delay, d1	13.8	15.5		15.2	14.3		10.3	10.7		9.4	11.6	
Progression Factor	1.00	1.00		1.31	1.33		1.00	1.00		1.07	0.88	
Incremental Delay, d2	0.9	2.1		2.6	0.5		2.8	0.6		0.5	0.7	
Delay (s)	14.7	17.6		22.5	19.4		13.1	11.3		10.6	10.9	
Level of Service	B	B		C	B		B	B		B	B	
Approach Delay (s)		17.1			20.5			11.5			10.9	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	750	221	534	18	3	10	9	46	9	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.98	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.94	
Flt Protected		1.00		0.99				0.99			0.97	
Satd. Flow (prot)		3160		3090				1811			1824	
Flt Permitted		0.95		0.56				0.96			0.89	
Satd. Flow (perm)		3012		1746				1750			1672	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	789	233	562	19	3	11	9	48	9	0	3
RTOR Reduction (vph)	0	0	0	2	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	791	0	812	0	0	0	33	0	0	13	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom			Perm	Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7			2	2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		834		849				377			360	
v/s Ratio Prot				c0.09								
v/s Ratio Perm		0.26		c0.31				c0.02			0.01	
v/c Ratio		0.95		1.11dl				0.09			0.04	
Uniform Delay, d1		23.0		18.4				20.4			20.2	
Progression Factor		1.45		0.89				1.00			1.00	
Incremental Delay, d2		14.0		21.2				0.5			0.2	
Delay (s)		47.5		37.7				20.9			20.4	
Level of Service		D		D				C			C	
Approach Delay (s)		47.5		37.7				20.9			20.4	
Approach LOS		D		D				C			C	

Intersection Summary			
HCM Average Control Delay	49.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	242
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1559	
Flt Permitted		1.00	
Satd. Flow (perm)		1559	
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	5	3	255
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	258	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.17	
v/s Ratio Perm			
v/c Ratio		1.07	
Uniform Delay, d1		27.5	
Progression Factor		0.87	
Incremental Delay, d2		77.3	
Delay (s)		101.2	
Level of Service		F	
Approach Delay (s)		101.2	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	256	769	557	62	91	222
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.99		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3279	3271		1660	1485
Flt Permitted		0.65	1.00		0.95	1.00
Satd. Flow (perm)		2168	3271		1660	1485
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	269	809	586	65	96	234
RTOR Reduction (vph)	0	0	13	0	0	173
Lane Group Flow (vph)	0	1078	638	0	96	61
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1334	2013		434	388
v/s Ratio Prot			0.20		c0.06	
v/s Ratio Perm		c0.50				0.04
v/c Ratio		0.81	0.32		0.22	0.16
Uniform Delay, d1		9.6	6.0		18.8	18.5
Progression Factor		1.22	1.24		1.27	2.35
Incremental Delay, d2		1.9	0.4		1.2	0.9
Delay (s)		13.6	7.8		25.1	44.3
Level of Service		B	A		C	D
Approach Delay (s)		13.6	7.8		38.7	
Approach LOS		B	A		D	

Intersection Summary			
HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	79	784	535	148	259	86
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3118	3069		1506	1343
Flt Permitted		0.82	1.00		0.95	1.00
Satd. Flow (perm)		2578	3069		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	83	825	563	156	273	91
RTOR Reduction (vph)	0	0	39	0	0	59
Lane Group Flow (vph)	0	908	680	0	273	32
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1348	1605		533	475
v/s Ratio Prot			0.22		c0.18	
v/s Ratio Perm		c0.35				0.02
v/c Ratio		0.67	0.42		0.51	0.07
Uniform Delay, d1		11.4	9.5		16.6	13.9
Progression Factor		1.05	1.09		1.64	3.32
Incremental Delay, d2		1.8	0.7		3.2	0.2
Delay (s)		13.8	11.1		30.4	46.4
Level of Service		B	B		C	D
Approach Delay (s)		13.8	11.1		34.4	
Approach LOS		B	B		C	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	649	251	117	570	195	55
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.96		1.00	1.00	0.97	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2387		1788	2506	1748	
Flt Permitted	1.00		0.13	1.00	0.96	
Satd. Flow (perm)	2387		243	2506	1748	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	683	264	123	600	205	58
RTOR Reduction (vph)	21	0	0	0	16	0
Lane Group Flow (vph)	926	0	123	600	247	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1138		116	1195	645	
v/s Ratio Prot	0.39			0.24	c0.14	
v/s Ratio Perm			c0.51			
v/c Ratio	0.81		1.06	0.50	0.38	
Uniform Delay, d1	14.5		17.0	11.7	15.1	
Progression Factor	1.33		1.00	1.00	1.00	
Incremental Delay, d2	5.0		100.7	1.5	1.7	
Delay (s)	24.4		117.7	13.2	16.8	
Level of Service	C		F	B	B	
Approach Delay (s)	24.4			31.0	16.8	
Approach LOS	C			C	B	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	957	37	108	678	1	59	0	149	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.38	1.00	1.00	0.23	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	759	3431	1479	380	3320	1530		1545	1500			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	997	39	112	706	1	61	0	155	0	0	0
RTOR Reduction (vph)	0	0	14	0	0	0	0	0	139	0	0	0
Lane Group Flow (vph)	1	997	25	112	706	1	0	61	16	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	53.7	53.7	53.7	68.1	68.1	68.1		8.9	8.9			
Effective Green, g (s)	53.7	53.7	53.7	68.1	68.1	68.1		8.9	8.9			
Actuated g/C Ratio	0.63	0.63	0.63	0.80	0.80	0.80		0.10	0.10			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	480	2168	934	467	2660	1226		162	157			
v/s Ratio Prot		c0.29		0.03	c0.21							
v/s Ratio Perm	0.00		0.02	0.16		0.00		c0.04	0.01			
v/c Ratio	0.00	0.46	0.03	0.24	0.27	0.00		0.38	0.10			
Uniform Delay, d1	5.8	8.1	5.9	2.9	2.1	1.7		35.5	34.4			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	0.7	0.1	0.3	0.1	0.0		1.5	0.3			
Delay (s)	5.8	8.8	5.9	3.2	2.2	1.7		36.9	34.7			
Level of Service	A	A	A	A	A	A		D	C			
Approach Delay (s)		8.7			2.3			35.4			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	9	918	807	29	71	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3098	3083		1532	
Flt Permitted		0.95	1.00		0.96	
Satd. Flow (perm)		2929	3083		1532	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	966	849	31	75	14
RTOR Reduction (vph)	0	0	3	0	7	0
Lane Group Flow (vph)	0	975	877	0	82	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1074	2192		119	
v/s Ratio Prot			c0.28		c0.05	
v/s Ratio Perm		c0.33				
v/c Ratio		0.91	0.40		0.69	
Uniform Delay, d1		27.1	5.2		40.4	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		12.6	0.3		27.6	
Delay (s)		39.7	0.3		68.1	
Level of Service		D	A		E	
Approach Delay (s)		39.7	0.3		68.1	
Approach LOS		D	A		E	

Intersection Summary			
HCM Average Control Delay	23.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	476	0	1	559	38	3	2	28	192	0	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		1.00			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1774			3340			1467			1669	1348
Flt Permitted		0.92			0.95			0.97			0.89	1.00
Satd. Flow (perm)		1643			3190			1432			1568	1348
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	501	0	1	588	40	3	2	29	202	0	133
RTOR Reduction (vph)	0	0	0	0	6	0	0	26	0	0	0	89
Lane Group Flow (vph)	0	541	0	0	623	0	0	8	0	0	202	44
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		599			1714			152			480	444
v/s Ratio Prot					c0.06						c0.08	
v/s Ratio Perm		c0.33			0.13			0.01			c0.04	0.03
v/c Ratio		0.90			0.36			0.05			0.42	0.10
Uniform Delay, d1		25.6			11.7			34.2			24.2	19.8
Progression Factor		1.00			1.11			1.00			1.00	1.00
Incremental Delay, d2		19.4			0.2			0.7			2.7	0.4
Delay (s)		45.0			13.1			34.8			26.9	20.2
Level of Service		D			B			C			C	C
Approach Delay (s)		45.0			13.1			34.8			24.2	
Approach LOS		D			B			C			C	

Intersection Summary			
HCM Average Control Delay	27.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

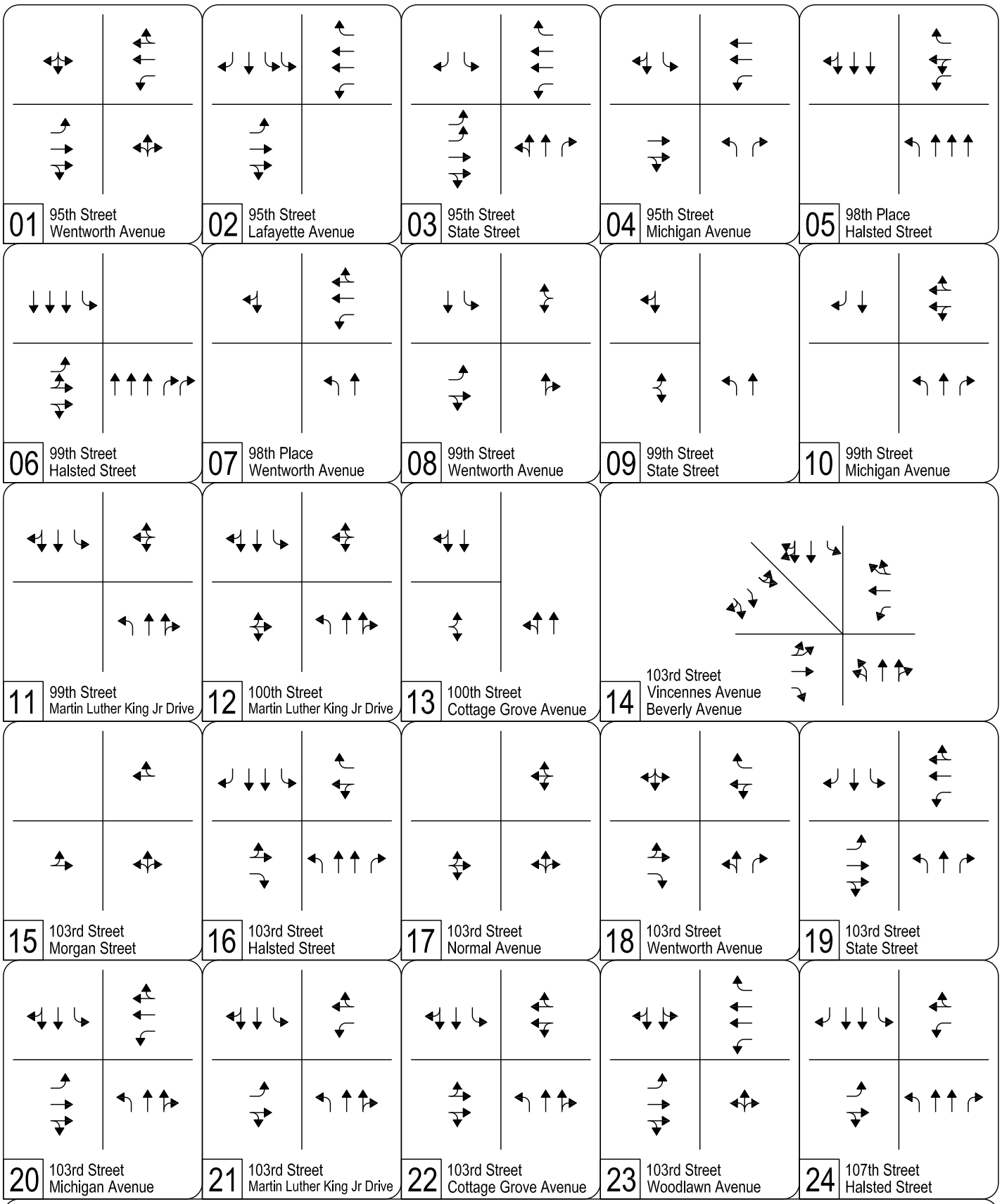

No Build (2030) Intersection Lane Geometry

Page 1 of 3

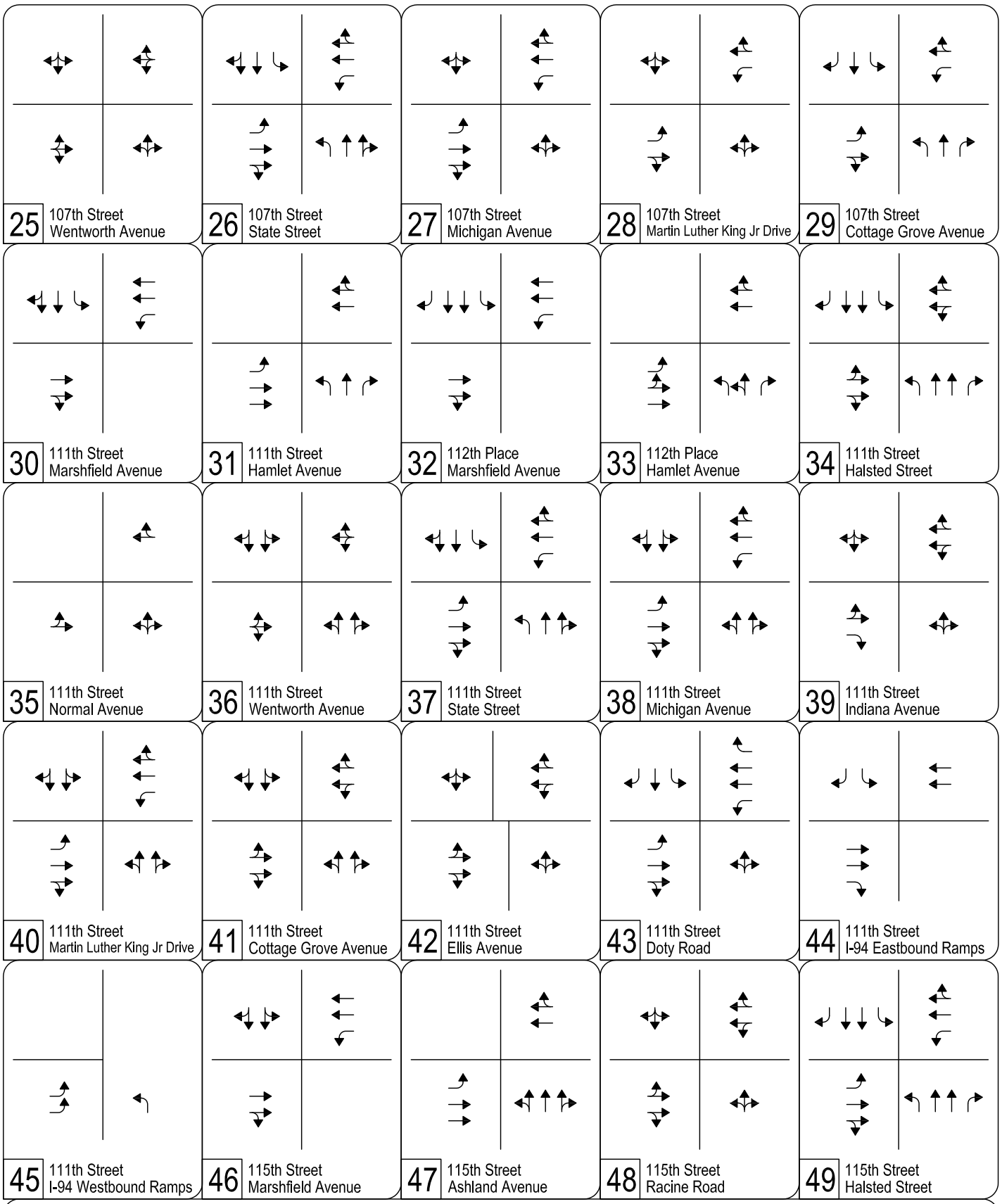

No Build (2030) Intersection Lane Geometry

Page 2 of 3

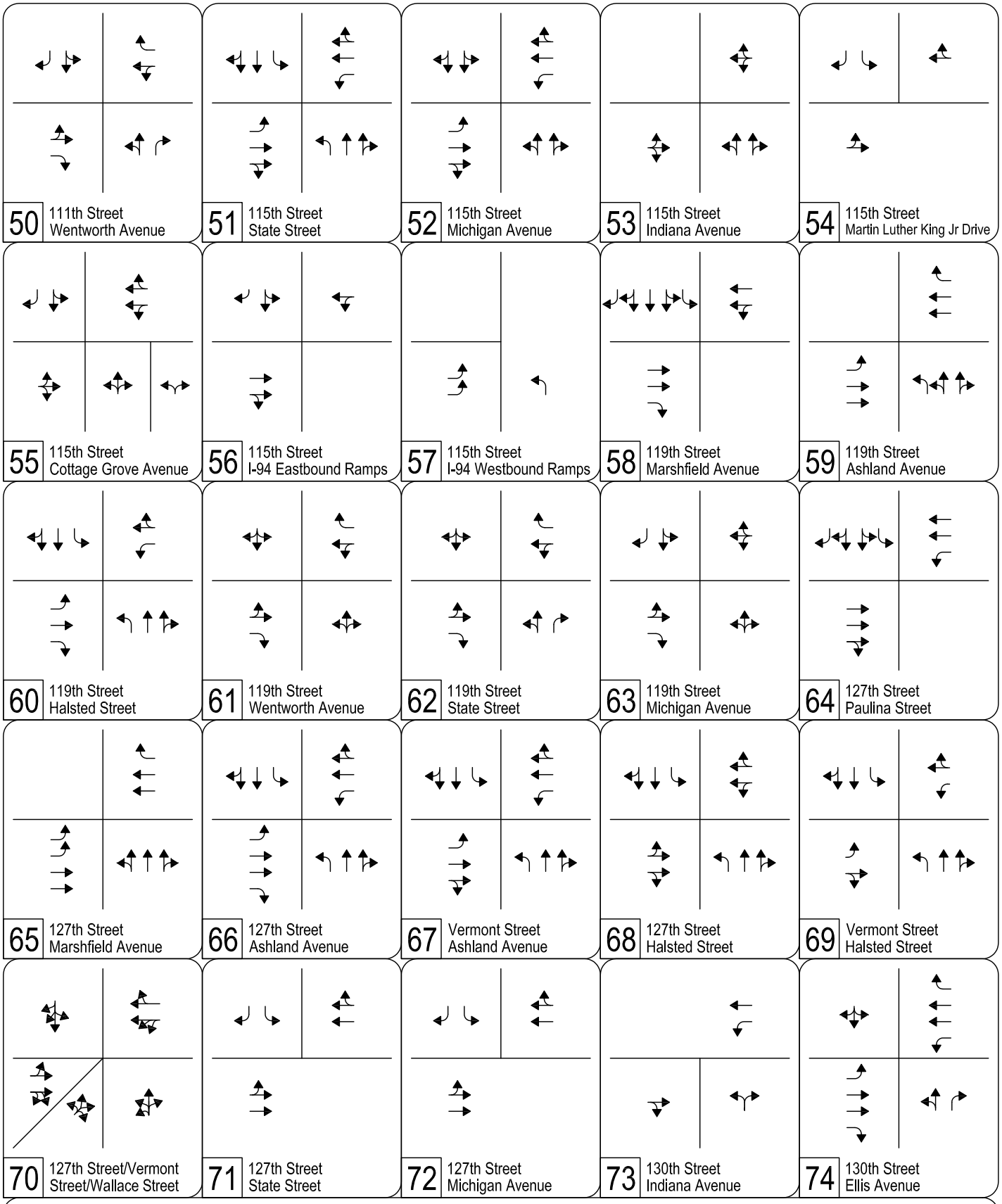

No Build (2030) Intersection Lane Geometry

Page 3 of 3

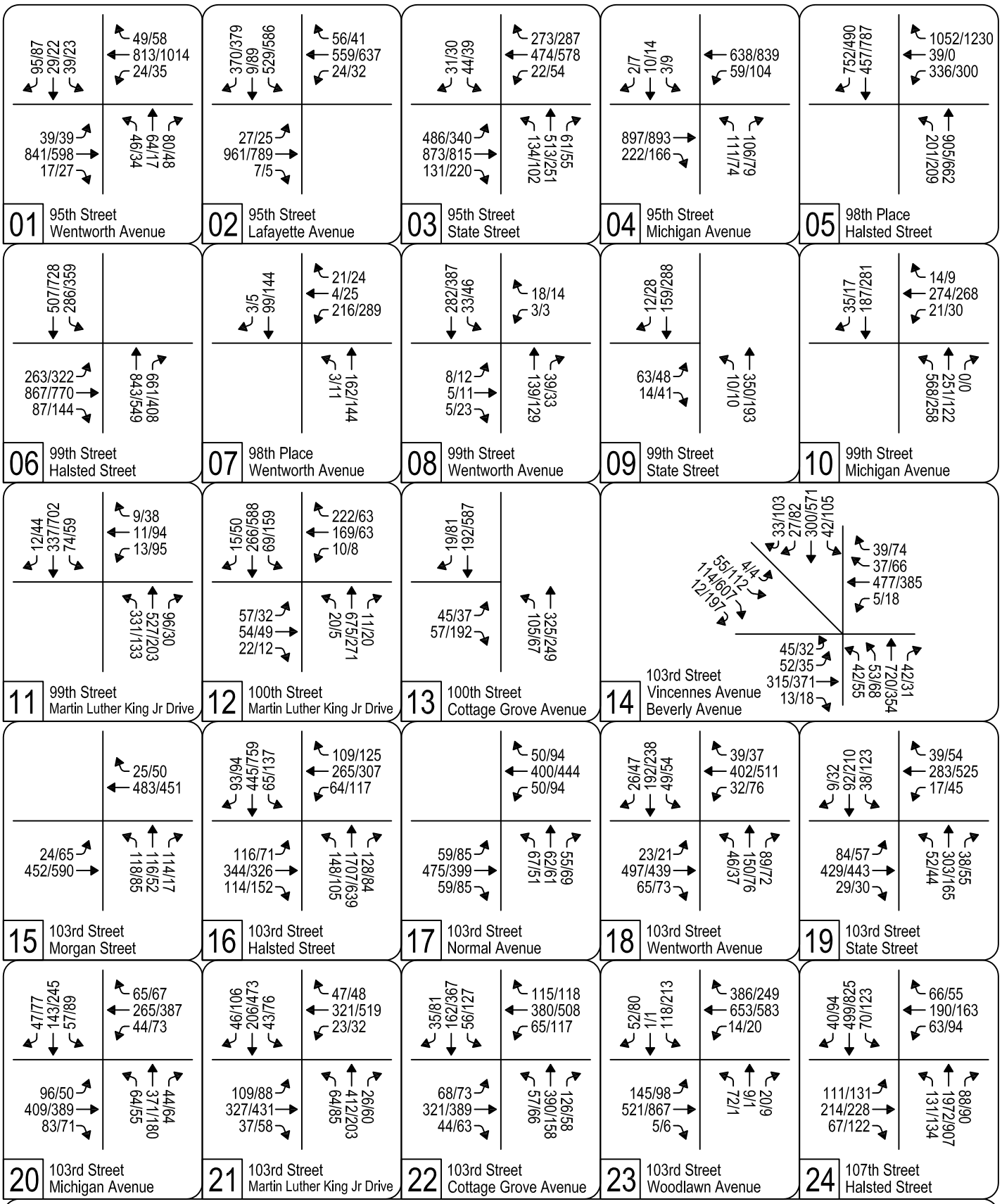

No Build (2030) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

25 107th Street / Wentworth Avenue
21/50 148/255 31/37
9/20 149/173 15/20
26/22 218/181 15/34
27/40 166/149 18/23

26 107th Street / State Street
17/39 86/214 15/39
16/18 162/180 9/25
24/24 181/193 25/36
33/31 384/200 42/39

27 107th Street / Michigan Avenue
15/33 163/322 11/30
29/36 122/159 16/25
46/67 178/168 31/41
24/16 414/247 27/23

28 107th Street / Martin Luther King Jr Drive
29/57 184/364 6/29
33/26 84/161 2/20
90/47 127/111 51/26
9/11 275/235 19/31

29 107th Street / Cottage Grove Avenue
50/76 201/466 2/3
10/9 3/5 1/2
122/54 9/13 52/96
6/5 492/235 39/58

30 111th Street / Marshfield Avenue
361/377 305/470 71/109
374/196 120/158
233/251 76/163

31 111th Street / Hamlet Avenue
68/109 320/277
129/141 175/219
315/227 554/539 174/77

32 112th Place / Marshfield Avenue
193/269 215/432 4/9
592/534 34/81
450/510 372/479

33 112th Place / Hamlet Avenue
3/5 57/150
394/415 60/104
62/58 644/479 569/465

34 111th Street / Halsted Street
42/65 476/884 88/100
114/111 184/241 58/109
163/78 262/211 70/103
62/76 1151/699 43/84

35 111th Street / Normal Avenue
81/84 328/339
44/76 397/305
98/33 63/44 28/53

36 111th Street / Wentworth Avenue
19/42 107/150 51/53
49/50 340/347 20/39
45/19 397/289 31/27
35/39 175/118 16/28

37 111th Street / State Street
20/62 96/227 48/83
61/86 280/448 28/81
50/41 265/255 20/39
89/98 319/219 46/43

38 111th Street / Michigan Avenue
38/64 118/279 41/46
82/50 316/401 37/87
83/55 380/287 26/68
44/58 308/231 11/44

39 111th Street / Indiana Avenue
79/118 84/82 88/47
104/92 314/279 104/92
98/82 293/246 98/82
88/47 84/82 79/118

40 111th Street / Martin Luther King Jr Drive
89/61 90/146 43/62
63/60 417/317 15/26
72/45 378/253 19/18
41/47 103/133 28/24

41 111th Street / Cottage Grove Avenue
49/81 159/261 222/340
284/222 449/500 94/86
85/43 453/434 71/18
92/115 332/124 41/22

42 111th Street / Ellis Avenue
9/13 0/0 24/71
45/30 751/790 45/48
13/9 722/891 118/126
70/36 0/0 132/80

43 111th Street / Doty Road
75/212 7/10 78/212
183/185 642/612 274/112
123/222 501/638 187/22
185/107 20/4 101/60

44 111th Street / I-94 Eastbound Ramps
570/577 32/19
529/332 6/2
517/516 247/441

45 111th Street / I-94 Westbound Ramps
549/535
535/334

46 115th Street / Marshfield Avenue
42/58 15/21 72/101
323/495 126/192
340/472 46/64

47 115th Street / Ashland Avenue
76/129 400/624
68/95 344/478
42/58 65/90 49/63

48 115th Street / Racine Road
126/144 91/87 56/30
31/79 243/366 31/79
39/114 307/342 39/114
52/27 85/78 118/129

49 115th Street / Halsted Street
80/146 428/940 75/95
62/65 176/311 50/159
169/106 202/201 39/88
70/67 1001/539 71/124

No Build (2030) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

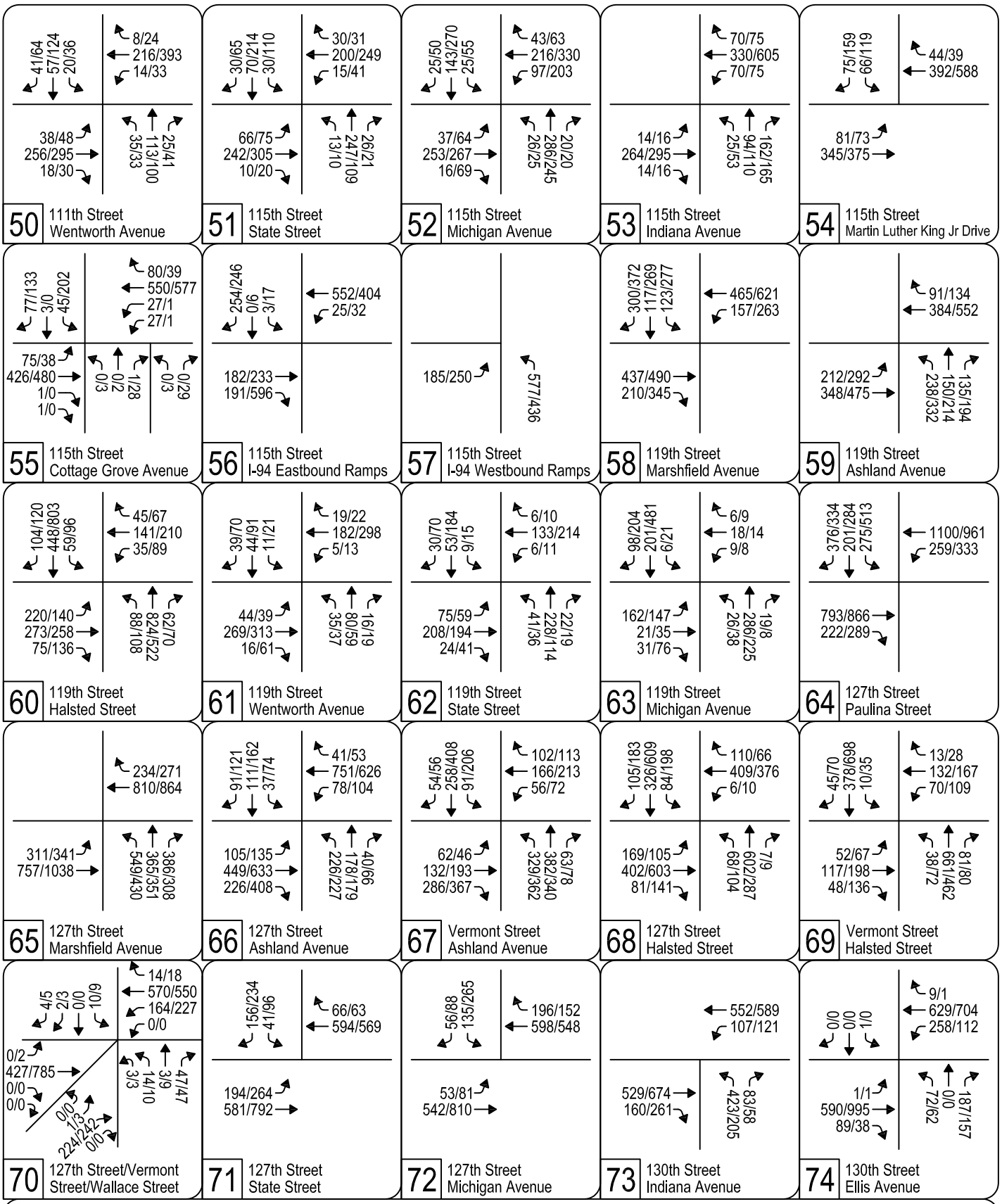

No Build (2030) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	841	17	24	813	49	46	64	80	39	29	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1417	2976		1592	2979			1752			1663	
Flt Permitted	0.25	1.00		0.25	1.00			0.90			0.90	
Satd. Flow (perm)	369	2976		418	2979			1596			1514	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	885	18	25	856	52	48	67	84	41	31	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	41	0	0	59	0
Lane Group Flow (vph)	41	901	0	25	901	0	0	158	0	0	113	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	193	1557		219	1558			565			536	
v/s Ratio Prot		c0.30			0.30							
v/s Ratio Perm	0.11			0.06				c0.10			0.07	
v/c Ratio	0.21	0.58		0.11	0.58			0.28			0.21	
Uniform Delay, d1	8.3	10.6		7.9	10.6			15.1			14.7	
Progression Factor	1.00	1.00		0.83	1.16			1.00			1.00	
Incremental Delay, d2	2.5	1.6		0.9	1.4			1.2			0.9	
Delay (s)	10.8	12.2		7.5	13.7			16.3			15.6	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.1			13.5			16.3			15.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	961	7	24	559	56	0	0	0	529	9	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	778	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	352	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1012	7	25	588	59	0	0	0	557	9	389
RTOR Reduction (vph)	0	1	0	0	0	26	0	0	0	0	0	172
Lane Group Flow (vph)	28	1018	0	25	588	33	0	0	0	557	9	217
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	162	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.31		0.01	c0.19					c0.18	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.16
v/c Ratio	0.17	0.94		0.04	0.33	0.12				0.78	0.03	0.67
Uniform Delay, d1	31.6	42.2		15.1	15.4	13.4				46.9	38.7	45.5
Progression Factor	0.80	0.82		0.29	0.63	1.53				1.00	1.00	1.00
Incremental Delay, d2	2.0	14.1		0.1	0.3	0.5				8.2	0.2	10.7
Delay (s)	27.4	48.8		4.5	10.0	20.9				55.1	38.9	56.2
Level of Service	C	D		A	A	C				E	D	E
Approach Delay (s)		48.2			10.7			0.0			55.4	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	486	873	131	22	474	273	134	513	61	44	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	512	919	138	23	499	287	141	540	64	46	0	33
RTOR Reduction (vph)	0	9	0	0	0	158	0	0	25	0	0	31
Lane Group Flow (vph)	512	1049	0	23	499	129	0	681	39	46	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1554		108	697	225		762	327	53		45
v/s Ratio Prot	0.16	c0.34		0.01	c0.17			c0.21		c0.05		
v/s Ratio Perm						0.14			0.03			0.00
v/c Ratio	0.49	0.67		0.21	0.72	0.57		0.89	0.12	0.87		0.05
Uniform Delay, d1	34.7	24.5		57.2	45.5	43.6		48.5	39.5	60.5		57.4
Progression Factor	0.75	0.20		1.00	1.00	1.00		0.95	0.89	1.00		1.00
Incremental Delay, d2	0.7	1.1		4.5	6.2	10.1		14.9	0.7	76.0		0.4
Delay (s)	26.9	6.0		61.6	51.7	53.8		60.7	36.1	136.5		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		12.8			52.7			58.6			103.6	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	35.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	897	222	59	638	0	111	0	106	3	10	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.98	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1650	3005		1390		1465	1803	1934	
Flt Permitted		1.00		0.15	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		267	3005		1096		1465	1803	1934	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	997	247	66	709	0	123	0	118	3	11	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	77	0	1	0
Lane Group Flow (vph)	0	1222	0	66	709	0	123	0	41	3	12	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		160	1803		351		469	577	619	
v/s Ratio Prot		c0.43			0.24						0.01	
v/s Ratio Perm				0.25			c0.11		0.03	0.00		
v/c Ratio		0.71		0.41	0.39		0.35		0.09	0.01	0.02	
Uniform Delay, d1		14.0		10.6	10.5		26.0		23.8	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.5		7.7	0.6		2.7		0.4	0.0	0.1	
Delay (s)		16.5		18.3	11.1		28.8		24.2	23.2	23.3	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.5			11.7			26.5			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	336	39	1052	201	905	0	0	457	752
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3930	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3930	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	343	40	1073	205	923	0	0	466	767
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	343	40	1073	205	923	0	0	1233	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1160	
v/s Ratio Prot							c0.13	0.21			c0.31	
v/s Ratio Perm				0.22	0.02	c0.73						
v/c Ratio				0.76	0.08	2.54	0.43	0.34			1.91dr	
Uniform Delay, d1				33.6	26.7	37.5	29.2	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.38			1.00	
Incremental Delay, d2				11.6	0.3	698.4	2.0	0.2			44.9	
Delay (s)				45.2	27.1	735.9	21.2	22.1			81.9	
Level of Service				D	C	F	C	C			F	
Approach Delay (s)		0.0			553.8			21.9			81.9	
Approach LOS		A			F			C			F	

Intersection Summary			
HCM Average Control Delay	244.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	867	87	0	0	0	0	843	661	286	507	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3186						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3186						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	271	894	90	0	0	0	0	869	681	295	523	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	244	1004	0	0	0	0	0	869	681	295	523	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1032						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.19	0.11	
v/s Ratio Perm	0.16	0.32							c0.31			
v/c Ratio	0.50	0.97						0.75	1.17	0.63	0.19	
Uniform Delay, d1	28.7	35.0						35.2	38.5	32.1	9.9	
Progression Factor	1.00	1.00						0.44	0.46	1.06	0.44	
Incremental Delay, d2	3.7	22.2						0.4	77.5	2.4	0.1	
Delay (s)	32.4	57.3						15.7	95.3	36.5	4.4	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		52.4			0.0			50.7			16.0	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	43.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	216	4	21	3	162	0	0	99	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1958	
Flt Permitted				0.95	1.00		0.59	1.00			1.00	
Satd. Flow (perm)				1578	2709		805	1882			1958	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	240	4	23	3	180	0	0	110	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	240	9	0	3	180	0	0	112	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		513	1107			1060	
v/s Ratio Prot					0.00		0.00	c0.10			0.06	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.16			0.11	
Uniform Delay, d1				23.3	19.9		9.7	8.0			9.5	
Progression Factor				1.00	1.00		1.04	1.19			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.6	19.9		10.1	9.8			9.7	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			25.9			9.8			9.7	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	3	0	18	0	139	39	33	282	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.88			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1578			1688		1595	1755	
Flt Permitted	0.74	1.00			0.98			1.00		0.61	1.00	
Satd. Flow (perm)	1516	1809			1565			1688		1019	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	3	0	19	0	146	41	35	297	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	9	0	0	175	0	35	297	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	575			497			794		647	1032	
v/s Ratio Prot		0.00						0.10		0.00	c0.17	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.02			0.22		0.05	0.29	
Uniform Delay, d1	19.9	19.9			19.9			13.3		8.4	8.7	
Progression Factor	1.00	1.00			1.00			1.00		0.92	0.84	
Incremental Delay, d2	0.1	0.0			0.1			0.6		0.2	0.7	
Delay (s)	20.0	19.9			20.0			13.9		7.9	7.9	
Level of Service	B	B			B			B		A	A	
Approach Delay (s)		19.9			20.0			13.9			7.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	14	10	350	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1791		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1791		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	16	11	389	177	13
RTOR Reduction (vph)	11	0	0	0	4	0
Lane Group Flow (vph)	75	0	11	389	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	579		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.40	0.21	
Uniform Delay, d1	15.5		6.5	8.3	7.3	
Progression Factor	1.00		0.32	0.51	1.16	
Incremental Delay, d2	0.5		0.0	1.1	0.4	
Delay (s)	16.0		2.1	5.4	8.9	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.3	8.9	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	21	274	14	568	251	0	0	187	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3742		1660	1752			1603	1298
Flt Permitted					1.00		0.58	1.00			1.00	1.00
Satd. Flow (perm)					3742		1013	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	23	304	16	631	279	0	0	208	39
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	0	0	0	339	0	631	279	0	0	208	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1145		684	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.16			0.13	
v/s Ratio Perm							c0.45					0.01
v/c Ratio					0.30		0.92	0.27			0.29	0.03
Uniform Delay, d1					22.5		16.9	8.1			14.9	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.7		19.9	0.6			1.0	0.1
Delay (s)					23.2		36.8	8.7			16.0	13.3
Level of Service					C		D	A			B	B
Approach Delay (s)		0.0			23.2			28.2			15.5	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	13	11	9	331	527	96	74	337	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.96		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1796		1692	3237		1707	3352	
Flt Permitted					0.98		0.50	1.00		0.31	1.00	
Satd. Flow (perm)					1796		897	3237		566	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	14	12	10	368	586	107	82	374	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	29	0	368	673	0	82	384	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					551		565	1467		416	1520	
v/s Ratio Prot					c0.02		c0.06	0.21		0.02	0.11	
v/s Ratio Perm							c0.30			0.09		
v/c Ratio					0.05		0.65	0.46		0.20	0.25	
Uniform Delay, d1					18.3		13.7	14.2		12.3	12.7	
Progression Factor					1.00		0.69	0.74		1.00	1.00	
Incremental Delay, d2					0.2		5.3	0.9		1.1	0.4	
Delay (s)					18.5		14.7	11.4		13.4	13.1	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.5			12.6			13.1	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	54	22	10	169	222	20	675	11	69	266	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1949			1627		1596	3233		1641	3131	
Flt Permitted		0.68			0.99		0.57	1.00		0.33	1.00	
Satd. Flow (perm)		1354			1618		959	3233		576	3131	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	57	23	11	178	234	21	711	12	73	280	16
RTOR Reduction (vph)	0	9	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	131	0	0	364	0	21	721	0	73	291	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		451			539		537	1810		323	1753	
v/s Ratio Prot								c0.22			0.09	
v/s Ratio Perm		0.10			c0.22		0.02			0.13		
v/c Ratio		0.29			0.67		0.04	0.40		0.23	0.17	
Uniform Delay, d1		18.4			21.5		7.4	9.3		8.3	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.17	0.06	
Incremental Delay, d2		1.6			6.6		0.1	0.7		1.6	0.2	
Delay (s)		20.1			28.1		7.6	10.0		3.0	0.7	
Level of Service		C			C		A	B		A	A	
Approach Delay (s)		20.1			28.1			9.9			1.1	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	45	57	105	325	192	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	63	117	361	213	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	113	237	241	142	92
Volume Left (vph)	50	117	0	0	0
Volume Right (vph)	63	0	0	0	21
Hadj (s)	-0.16	0.33	0.08	0.09	-0.08
Departure Headway (s)	5.3	5.4	5.1	5.4	5.2
Degree Utilization, x	0.17	0.35	0.34	0.21	0.13
Capacity (veh/h)	629	654	684	641	660
Control Delay (s)	9.3	10.1	9.6	8.7	7.8
Approach Delay (s)	9.3	9.9		8.3	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.4		
HCM Level of Service	A		
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	45	52	315	13	5	477	37	39	42	53	720	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3292	
Flt Permitted		0.11	1.00	1.00	0.55	1.00	1.00			0.39	1.00	
Satd. Flow (perm)		187	1731	1530	992	1731	1487			700	3292	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	58	350	14	6	530	41	43	47	59	800	47
RTOR Reduction (vph)	0	0	0	7	0	0	30	0	0	0	4	0
Lane Group Flow (vph)	0	108	350	7	6	530	54	0	0	106	843	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	302	528	453			167	784	
v/s Ratio Prot		0.05	c0.20			c0.31					c0.26	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.15		
v/c Ratio		0.38	0.42	0.01	0.02	1.00	0.12			0.63	1.08	
Uniform Delay, d1		20.2	18.1	14.5	25.5	36.5	26.3			35.9	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.9	1.6	0.0	0.1	40.1	0.5			17.0	54.4	
Delay (s)		24.1	19.7	14.5	25.7	76.6	26.9			52.9	94.4	
Level of Service		C	B	B	C	E	C			D	F	
Approach Delay (s)			20.5			69.4					89.8	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	61.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	42	300	27	33	4	55	114	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.97				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3279				1710	2621	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3279				1710	2621	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	47	333	30	37	4	61	127	13
RTOR Reduction (vph)	0	8	0	0	0	0	7	0
Lane Group Flow (vph)	47	392	0	0	0	65	133	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.12				0.04		
v/s Ratio Perm	0.16						c0.05	
v/c Ratio	0.69	0.51				0.23	0.31	
Uniform Delay, d1	36.8	35.1				37.9	38.4	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	44.8	2.4				1.9	1.8	
Delay (s)	81.6	37.5				39.8	40.2	
Level of Service	F	D				D	D	
Approach Delay (s)		42.1				40.1		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	452	0	0	483	25	118	116	114	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1930			1772				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1594			1930			1772				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	502	0	0	537	28	131	129	127	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	529	0	0	565	0	0	387	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		760			920			709				
v/s Ratio Prot					0.29							
v/s Ratio Perm		c0.33						0.22				
v/c Ratio		0.70			0.61			0.55				
Uniform Delay, d1		13.3			12.6			15.0				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		5.2			3.1			3.0				
Delay (s)		18.5			15.6			18.0				
Level of Service		B			B			B				
Approach Delay (s)		18.5			15.6			18.0			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	344	114	64	265	109	148	1707	128	65	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1920	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.66	1.00		0.63	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1278	1426		1221	1396	625	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	362	120	67	279	115	156	1797	135	68	468	98
RTOR Reduction (vph)	0	0	71	0	0	68	0	0	29	0	0	59
Lane Group Flow (vph)	0	484	49	0	346	47	156	1797	106	68	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	53.1	44.4	44.4	48.9	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	53.1	44.4	44.4	48.9	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.51	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		523	584		500	572	389	1310	543	147	1191	510
v/s Ratio Prot							c0.03	c0.58		c0.03	0.16	
v/s Ratio Perm		c0.38	0.03		0.28	0.03	0.17		0.08	0.19		0.03
v/c Ratio		0.93	0.08		0.69	0.08	0.40	1.37	0.19	0.46	0.39	0.08
Uniform Delay, d1		29.5	19.0		25.5	18.9	14.7	30.3	19.1	23.1	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.09	0.77	0.42
Incremental Delay, d2		22.4	0.3		7.7	0.3	0.7	172.2	0.8	2.2	0.9	0.3
Delay (s)		51.8	19.2		33.2	19.2	15.4	202.5	19.9	27.4	18.0	8.5
Level of Service		D	B		C	B	B	F	B	C	B	A
Approach Delay (s)		45.4			29.7			176.7			17.5	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	111.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	111.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	475	59	50	400	50	67	62	55	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			0.99			0.98				
Satd. Flow (prot)		1627			1626			1777				
Flt Permitted		0.91			0.90			0.98				
Satd. Flow (perm)		1487			1472			1777				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	528	66	56	444	56	74	69	61	0	0	0
RTOR Reduction (vph)	0	6	0	0	6	0	0	23	0	0	0	0
Lane Group Flow (vph)	0	654	0	0	550	0	0	181	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		869			861			519				
v/s Ratio Prot												
v/s Ratio Perm		c0.44			0.37			0.10				
v/c Ratio		0.75			0.64			0.35				
Uniform Delay, d1		10.0			8.9			18.1				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.0			3.6			1.8				
Delay (s)		16.0			12.6			20.0				
Level of Service		B			B			B				
Approach Delay (s)		16.0			12.6			20.0			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	497	65	32	402	39	46	150	89	49	192	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.99	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1634	1288		1663	1490		1776	
Flt Permitted		0.97	1.00		0.94	1.00		0.89	1.00		0.91	
Satd. Flow (perm)		1616	1255		1548	1288		1497	1490		1634	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	24	523	68	34	423	41	48	158	94	52	202	27
RTOR Reduction (vph)	0	0	29	0	0	17	0	0	64	0	5	0
Lane Group Flow (vph)	0	547	39	0	457	24	0	206	30	0	276	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		927	720		888	738		479	477		523	
v/s Ratio Prot												
v/s Ratio Perm		c0.34	0.03		0.30	0.02		0.14	0.02		c0.17	
v/c Ratio		0.59	0.05		0.51	0.03		0.43	0.06		0.53	
Uniform Delay, d1		10.3	7.0		9.7	7.0		20.1	17.7		20.9	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		2.8	0.1		2.1	0.1		2.8	0.3		3.8	
Delay (s)		13.1	7.2		11.8	7.0		22.9	18.0		24.6	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		12.4			11.4			21.4			24.6	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	429	29	17	283	39	52	303	38	38	92	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1463	2990		1459	3528		1534	1647	1301	1517	1541	1156
Flt Permitted	0.54	1.00		0.44	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	829	2990		669	3528		1116	1647	1301	720	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	477	32	19	314	43	58	337	42	42	102	10
RTOR Reduction (vph)	0	7	0	0	16	0	0	0	22	0	0	6
Lane Group Flow (vph)	93	502	0	19	341	0	58	337	20	42	102	4
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	395	1426		319	1683		446	659	520	288	616	462
v/s Ratio Prot		c0.17			0.10			c0.20			0.07	
v/s Ratio Perm	0.11			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.24	0.35		0.06	0.20		0.13	0.51	0.04	0.15	0.17	0.01
Uniform Delay, d1	10.0	10.7		9.2	9.8		12.3	14.7	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.76	0.33	0.51	0.52	0.28
Incremental Delay, d2	1.4	0.7		0.4	0.3		0.6	2.8	0.1	1.1	0.6	0.0
Delay (s)	11.4	11.4		9.5	10.1		8.2	13.9	4.1	7.4	7.1	3.3
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.4			10.1			12.2			7.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	409	83	44	265	65	64	371	44	57	143	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.98	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1463	3059		1588	3002		1541	3022		1403	2791	
Flt Permitted	0.54	1.00		0.42	1.00		0.63	1.00		0.46	1.00	
Satd. Flow (perm)	828	3059		707	3002		1015	3022		678	2791	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	101	431	87	46	279	68	67	391	46	60	151	49
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	29	0
Lane Group Flow (vph)	101	518	0	46	347	0	67	425	0	60	171	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	397	1468		339	1441		420	1249		280	1154	
v/s Ratio Prot		c0.17			0.12			c0.14			0.06	
v/s Ratio Perm	0.12			0.07			0.07			0.09		
v/c Ratio	0.25	0.35		0.14	0.24		0.16	0.34		0.21	0.15	
Uniform Delay, d1	11.6	12.2		10.8	11.5		13.8	15.0		14.2	13.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.7		0.8	0.4		0.8	0.7		1.7	0.3	
Delay (s)	13.1	12.9		11.7	11.9		14.6	15.8		15.9	14.0	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.9			11.8			15.6			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	109	327	37	23	321	47	64	412	26	43	206	46
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1473	1841		1533	3073		1372	2893	
Flt Permitted	0.45	1.00		0.46	1.00		0.59	1.00		0.41	1.00	
Satd. Flow (perm)	731	1576		717	1841		949	3073		597	2893	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	115	344	39	24	338	49	67	434	27	45	217	48
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	115	383	0	24	387	0	67	461	0	45	265	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	453	738		360	793		331	730		193	633	
v/s Ratio Prot	c0.02	c0.24		0.00	0.21		c0.01	c0.15		0.01	0.09	
v/s Ratio Perm	0.12			0.03			0.05			0.06		
v/c Ratio	0.25	0.52		0.07	0.49		0.20	0.63		0.23	0.42	
Uniform Delay, d1	13.3	15.9		14.9	17.4		21.4	29.1		26.1	28.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.6		0.1	2.1		0.3	4.1		0.6	2.0	
Delay (s)	13.6	18.5		15.0	19.6		21.7	33.2		26.8	30.6	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		17.3			19.3			31.7			30.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	321	44	65	380	115	57	390	126	56	162	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3493			2911		1614	3156		1581	2925	
Flt Permitted		0.78			0.84		0.61	1.00		0.38	1.00	
Satd. Flow (perm)		2757			2464		1044	3156		628	2925	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	357	49	72	422	128	63	433	140	62	180	39
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	482	0	0	622	0	63	573	0	62	219	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1250			1117		459	1389		276	1287	
v/s Ratio Prot								c0.18			0.07	
v/s Ratio Perm		0.17			c0.25		0.06			0.10		
v/c Ratio		0.39			0.56		0.14	0.41		0.22	0.17	
Uniform Delay, d1		13.6			15.0		12.5	14.4		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9			2.0		0.6	0.9		1.9	0.3	
Delay (s)		14.5			17.0		13.1	15.3		14.9	13.0	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.5			17.0			15.1			13.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	521	5	14	653	386	72	9	20	118	1	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3144		1629	3257	1457		1611			3105	
Flt Permitted	0.35	1.00		0.42	1.00	1.00		0.69			0.75	
Satd. Flow (perm)	587	3144		722	3257	1457		1158			2398	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	579	6	16	726	429	80	10	22	131	1	58
RTOR Reduction (vph)	0	1	0	0	0	150	0	12	0	0	44	0
Lane Group Flow (vph)	161	584	0	16	726	279	0	100	0	0	146	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	382	2046		470	2119	948		274			566	
v/s Ratio Prot		0.19			0.22							
v/s Ratio Perm	c0.27			0.02		0.19		c0.09			0.06	
v/c Ratio	0.42	0.29		0.03	0.34	0.29		0.36			0.26	
Uniform Delay, d1	5.9	5.3		4.4	5.6	5.3		22.6			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	3.4	0.4		0.1	0.4	0.8		3.5			1.0	
Delay (s)	9.3	5.7		4.5	6.0	6.1		26.1			23.0	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.4			6.0			26.1			23.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	70.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	67	63	190	66	131	1972	88	70	499	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1505		1547	1589		1493	3069	1271	1452	2983	1301
Flt Permitted	0.38	1.00		0.34	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	625	1505		547	1589		612	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	71	66	200	69	138	2076	93	74	525	42
RTOR Reduction (vph)	0	13	0	0	15	0	0	0	18	0	0	25
Lane Group Flow (vph)	117	283	0	66	254	0	138	2076	75	74	525	17
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	256	390		238	411		350	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.03	c0.68		c0.03	0.18	
v/s Ratio Perm	0.11			0.07			0.16		0.06	0.17		0.01
v/c Ratio	0.46	0.72		0.28	0.62		0.39	1.64	0.14	0.43	0.43	0.03
Uniform Delay, d1	22.5	28.7		21.8	27.8		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.70	0.49	1.00	1.00	1.00
Incremental Delay, d2	5.8	11.1		2.9	6.8		2.7	292.0	0.5	7.4	1.1	0.1
Delay (s)	28.3	39.9		24.7	34.6		10.8	309.5	8.1	25.6	18.9	15.0
Level of Service	C	D		C	C		B	F	A	C	B	B
Approach Delay (s)		36.6			32.7			279.5			19.4	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	184.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	218	15	15	149	9	18	166	27	31	148	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1852			1848			1902			1932	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1796			1800			1856			1830	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	225	15	15	154	9	19	171	28	32	153	22
RTOR Reduction (vph)	0	4	0	0	3	0	0	8	0	0	6	0
Lane Group Flow (vph)	0	263	0	0	175	0	0	210	0	0	201	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		746			748			857			845	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.11			0.11	
v/c Ratio		0.35			0.23			0.24			0.24	
Uniform Delay, d1		13.0			12.3			10.6			10.6	
Progression Factor		1.00			0.62			1.08			1.00	
Incremental Delay, d2		1.3			0.7			0.7			0.7	
Delay (s)		14.3			8.3			12.1			11.2	
Level of Service		B			A			B			B	
Approach Delay (s)		14.3			8.3			12.1			11.2	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	25	9	162	16	42	384	33	15	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	3012		1302	3049		1529	3093		1492	2868	
Flt Permitted	0.63	1.00		0.61	1.00		0.68	1.00		0.48	1.00	
Satd. Flow (perm)	967	3012		835	3049		1093	3093		757	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	28	10	180	18	47	427	37	17	96	19
RTOR Reduction (vph)	0	17	0	0	11	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	212	0	10	187	0	47	454	0	17	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	283	880		244	891		639	1808		443	1677	
v/s Ratio Prot		c0.07			0.06			c0.15			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.24		0.04	0.21		0.07	0.25		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.9	6.6		5.7	5.8	
Progression Factor	0.72	0.73		0.72	0.71		0.89	0.93		0.49	0.44	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.8	13.4		12.2	12.9		5.4	6.4		3.0	2.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.3			12.9			6.3			2.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	8.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	31	16	122	29	27	414	24	11	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	2962		1515	2886			1878			1805	
Flt Permitted	0.65	1.00		0.61	1.00			0.98			0.97	
Satd. Flow (perm)	1057	2962		968	2886			1840			1758	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	34	18	136	32	30	460	27	12	181	17
RTOR Reduction (vph)	0	20	0	0	19	0	0	3	0	0	5	0
Lane Group Flow (vph)	51	212	0	18	149	0	0	514	0	0	205	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	423	1185		387	1154			878			838	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.28			0.12	
v/c Ratio	0.12	0.18		0.05	0.13			0.59			0.24	
Uniform Delay, d1	12.3	12.6		11.9	12.3			12.3			10.1	
Progression Factor	0.99	0.90		0.86	0.88			1.01			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			2.8			0.7	
Delay (s)	12.8	11.7		10.5	11.1			15.2			10.8	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		11.9			11.0			15.2			10.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	127	51	2	84	33	19	275	9	6	184	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.96			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1890		1587	1873			1971			1933	
Flt Permitted	0.67	1.00		0.58	1.00			0.98			0.99	
Satd. Flow (perm)	1138	1890		975	1873			1933			1919	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	141	57	2	93	37	21	306	10	7	204	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	100	198	0	2	130	0	0	337	0	0	243	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	350	582		300	576			1100			1092	
v/s Ratio Prot		c0.10			0.07							
v/s Ratio Perm	0.09			0.00				c0.17			0.13	
v/c Ratio	0.29	0.34		0.01	0.23			0.31			0.22	
Uniform Delay, d1	17.1	17.4		15.6	16.7			7.3			6.9	
Progression Factor	0.90	0.88		0.85	0.92			0.93			1.00	
Incremental Delay, d2	2.0	1.6		0.0	0.9			0.7			0.5	
Delay (s)	17.3	16.9		13.4	16.3			7.5			7.4	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.1			16.2			7.5			7.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	9	52	1	3	10	39	492	6	2	201	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1673		1710	1413		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.62	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1262	1673		1283	1413		971	1631	1392	648	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	136	10	58	1	3	11	43	547	7	2	223	56
RTOR Reduction (vph)	0	42	0	0	8	0	0	0	3	0	0	22
Lane Group Flow (vph)	136	26	0	1	6	0	43	547	4	2	223	34
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		355	391		583	979	835	389	1144	856
v/s Ratio Prot		0.02			0.00			c0.34			0.12	
v/s Ratio Perm	c0.11			0.00			0.04		0.00	0.00		0.02
v/c Ratio	0.39	0.06		0.00	0.02		0.07	0.56	0.01	0.01	0.19	0.04
Uniform Delay, d1	19.0	17.3		17.0	17.1		5.4	7.8	5.2	5.2	5.9	5.3
Progression Factor	1.48	2.42		1.00	1.00		1.17	1.10	1.34	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.2		0.0	0.1		0.2	1.7	0.0	0.0	0.4	0.1
Delay (s)	31.4	42.1		17.0	17.1		6.6	10.3	7.0	5.2	6.3	5.4
Level of Service	C	D		B	B		A	B	A	A	A	A
Approach Delay (s)		34.9			17.1			10.0			6.1	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	233	76	120	374	0	0	0	0	71	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		0.99	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2824		1620	3288					1574	2907	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2824		860	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	245	80	126	394	0	0	0	0	75	321	380
RTOR Reduction (vph)	0	31	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	294	0	126	394	0	0	0	0	75	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		932		656	1940					504	930	
v/s Ratio Prot		c0.10		0.04	c0.12					0.05	c0.17	
v/s Ratio Perm				0.06								
v/c Ratio		0.31		0.19	0.20					0.15	0.52	
Uniform Delay, d1		25.0		10.5	9.5					24.3	27.8	
Progression Factor		1.00		1.94	2.06					1.00	1.00	
Incremental Delay, d2		0.9		0.6	0.2					0.6	2.1	
Delay (s)		25.9		21.0	19.8					24.9	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		25.9			20.1			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	175	0	0	320	68	174	554	315	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2831		1750	1782	1514			
Flt Permitted	0.35	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	612	3054			2831		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	184	0	0	337	72	183	583	332	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	222	0	0	0
Lane Group Flow (vph)	136	184	0	0	391	0	183	583	110	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	681	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.14		0.10	c0.33				
v/s Ratio Perm	0.04								0.07			
v/c Ratio	0.20	0.10			0.66		0.32	0.99	0.22			
Uniform Delay, d1	11.8	9.4			36.2		25.1	33.4	24.2			
Progression Factor	0.25	0.25			1.00		0.75	0.79	1.93			
Incremental Delay, d2	0.6	0.1			5.6		0.9	27.7	0.6			
Delay (s)	3.6	2.5			41.8		19.7	54.1	47.2			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		3.0			41.8			46.3			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	450	372	34	592	0	0	0	0	4	215	193
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3105		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.17	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3105		290	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	469	388	35	617	0	0	0	0	4	224	201
RTOR Reduction (vph)	0	150	0	0	0	0	0	0	0	0	0	133
Lane Group Flow (vph)	0	707	0	35	617	0	0	0	0	4	224	68
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1118		395	1898					543	1074	491
v/s Ratio Prot		c0.23		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.63		0.09	0.33					0.01	0.21	0.14
Uniform Delay, d1		26.5		12.4	10.9					21.8	23.4	22.9
Progression Factor		1.00		0.55	0.69					0.74	0.79	0.93
Incremental Delay, d2		2.7		0.2	0.2					0.0	0.4	0.5
Delay (s)		29.2		7.0	7.6					16.1	18.9	21.8
Level of Service		C		A	A					B	B	C
Approach Delay (s)		29.2			7.6			0.0			20.2	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	394	60	0	0	57	3	569	644	62	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3042			3098		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1086	2344			3098		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	406	62	0	0	59	3	587	664	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	203	265	0	0	59	0	587	664	26	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	683	1447			465		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.38	c0.41	0.02			
v/s Ratio Perm	c0.04	0.03										
v/c Ratio	0.30	0.18			0.13		1.02	1.10	0.05			
Uniform Delay, d1	14.0	13.2			36.8		31.5	31.5	20.2			
Progression Factor	0.24	0.26			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		42.9	65.4	0.2			
Delay (s)	4.2	3.6			37.4		74.4	96.9	20.3			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.9			37.4			83.2			0.0	
Approach LOS		A			D			F			A	

Intersection Summary			
HCM Average Control Delay	61.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	163	262	70	58	184	114	43	1151	62	88	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2835			2770		1447	3069	1336	1494	2956	1270
Flt Permitted		0.66			0.80		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1916			2247		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	170	273	73	60	192	119	45	1199	65	92	496	44
RTOR Reduction (vph)	0	16	0	0	66	0	0	0	24	0	0	27
Lane Group Flow (vph)	0	500	0	0	305	0	45	1199	41	92	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		876			740		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.39		c0.03	0.17	
v/s Ratio Perm		0.20			0.14		0.06		0.03	0.24		0.01
v/c Ratio		0.57			0.41		0.15	0.99	0.08	0.64	0.43	0.03
Uniform Delay, d1		18.6			22.1		14.7	25.6	16.4	19.0	18.7	16.1
Progression Factor		1.00			1.00		1.33	0.86	1.42	1.86	1.67	3.21
Incremental Delay, d2		2.7			1.7		0.6	17.7	0.2	18.1	1.0	0.1
Delay (s)		21.3			23.8		20.3	39.8	23.4	53.3	32.3	51.8
Level of Service		C			C		C	D	C	D	C	D
Approach Delay (s)		21.3			23.8			38.3			36.7	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	32.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	397	0	0	328	81	28	63	98	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1706			1668			1582				
Flt Permitted		0.93			1.00			0.99				
Satd. Flow (perm)		1592			1668			1582				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	441	0	0	364	90	31	70	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	60	0	0	0	0
Lane Group Flow (vph)	0	490	0	0	440	0	0	150	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		833			872			560				
v/s Ratio Prot					0.26							
v/s Ratio Perm		c0.31						0.09				
v/c Ratio		0.59			0.50			0.27				
Uniform Delay, d1		10.7			10.0			15.0				
Progression Factor		1.00			0.50			1.00				
Incremental Delay, d2		3.0			1.9			1.2				
Delay (s)		13.7			6.9			16.2				
Level of Service		B			A			B				
Approach Delay (s)		13.7			6.9			16.2			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	397	31	20	340	49	16	175	35	51	107	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.98			0.98			0.98	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		1887			1833			3185			3154	
Flt Permitted		0.93			0.97			0.93			0.83	
Satd. Flow (perm)		1763			1780			2981			2649	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	441	34	22	378	54	18	194	39	57	119	21
RTOR Reduction (vph)	0	4	0	0	8	0	0	23	0	0	12	0
Lane Group Flow (vph)	0	521	0	0	446	0	0	228	0	0	185	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		814			822			1238			1100	
v/s Ratio Prot												
v/s Ratio Perm		c0.30			0.25			c0.08			0.07	
v/c Ratio		0.64			0.54			0.18			0.17	
Uniform Delay, d1		13.4			12.6			12.0			11.9	
Progression Factor		0.62			0.57			0.89			0.53	
Incremental Delay, d2		3.3			2.5			0.3			0.3	
Delay (s)		11.6			9.7			11.0			6.6	
Level of Service		B			A			B			A	
Approach Delay (s)		11.6			9.7			11.0			6.6	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	265	20	28	280	61	46	319	89	48	96	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1501	2938		1583	2932		1497	3034		1594	2943	
Flt Permitted	0.49	1.00		0.55	1.00		0.67	1.00		0.48	1.00	
Satd. Flow (perm)	781	2938		917	2932		1056	3034		809	2943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	294	22	31	311	68	51	354	99	53	107	22
RTOR Reduction (vph)	0	9	0	0	28	0	0	39	0	0	10	0
Lane Group Flow (vph)	56	307	0	31	351	0	51	414	0	53	119	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	264	994		310	992		569	1634		436	1585	
v/s Ratio Prot		0.10			c0.12			c0.14			0.04	
v/s Ratio Perm	0.07			0.03			0.05			0.07		
v/c Ratio	0.21	0.31		0.10	0.35		0.09	0.25		0.12	0.07	
Uniform Delay, d1	15.3	15.9		14.7	16.2		7.3	8.0		7.4	7.2	
Progression Factor	0.60	0.58		0.78	0.78		0.64	0.68		1.21	1.21	
Incremental Delay, d2	1.5	0.7		0.6	1.0		0.3	0.4		0.6	0.1	
Delay (s)	10.7	9.9		12.1	13.7		5.0	5.8		9.5	8.8	
Level of Service	B	A		B	B		A	A		A	A	
Approach Delay (s)		10.0			13.5			5.7			9.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	380	26	37	316	82	11	308	44	41	118	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.98			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1381	3014		1334	3524			3436			3308	
Flt Permitted	0.49	1.00		0.49	1.00			0.95			0.84	
Satd. Flow (perm)	719	3014		687	3524			3255			2814	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	400	27	39	333	86	12	324	46	43	124	40
RTOR Reduction (vph)	0	7	0	0	35	0	0	16	0	0	24	0
Lane Group Flow (vph)	87	420	0	39	384	0	0	366	0	0	183	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	343	1437		328	1681			1302			1126	
v/s Ratio Prot		c0.14			0.11							
v/s Ratio Perm	0.12			0.06				c0.11			0.07	
v/c Ratio	0.25	0.29		0.12	0.23			0.28			0.16	
Uniform Delay, d1	10.1	10.3		9.4	10.0			13.2			12.5	
Progression Factor	1.58	1.62		0.83	0.81			0.52			0.64	
Incremental Delay, d2	1.7	0.5		0.7	0.3			0.5			0.3	
Delay (s)	17.7	17.3		8.4	8.4			7.3			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		17.4			8.4			7.3			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	293	98	104	314	104	79	84	88	88	84	79
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3024			1822			1828	
Flt Permitted		0.75	1.00		0.76			0.81			0.78	
Satd. Flow (perm)		1247	1409		2316			1497			1448	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	326	109	116	349	116	88	93	98	98	93	88
RTOR Reduction (vph)	0	0	52	0	34	0	0	30	0	0	26	0
Lane Group Flow (vph)	0	435	57	0	547	0	0	249	0	0	253	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		652	737		1211			484			468	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.04		0.24			0.17			c0.17	
v/c Ratio		0.67	0.08		0.45			0.51			0.54	
Uniform Delay, d1		11.4	7.7		9.7			17.9			18.0	
Progression Factor		2.01	5.61		0.39			1.00			1.00	
Incremental Delay, d2		5.2	0.2		1.2			3.9			4.4	
Delay (s)		28.1	43.4		4.9			21.7			22.5	
Level of Service		C	D		A			C			C	
Approach Delay (s)		31.2			4.9			21.7			22.5	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	72	378	19	15	417	63	28	103	41	43	90	89
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.96			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1474	3019		1573	2999			3444			3420	
Flt Permitted	0.41	1.00		0.47	1.00			0.89			0.88	
Satd. Flow (perm)	633	3019		778	2999			3097			3029	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	80	420	21	17	463	70	31	114	46	48	100	99
RTOR Reduction (vph)	0	6	0	0	18	0	0	25	0	0	55	0
Lane Group Flow (vph)	80	435	0	17	515	0	0	166	0	0	192	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	273	1300		335	1292			1382			1351	
v/s Ratio Prot		0.14			c0.17							
v/s Ratio Perm	0.13			0.02				0.05			c0.06	
v/c Ratio	0.29	0.33		0.05	0.40			0.12			0.14	
Uniform Delay, d1	12.1	12.3		10.8	12.7			10.5			10.6	
Progression Factor	1.00	1.02		1.14	0.98			1.00			0.71	
Incremental Delay, d2	2.1	0.5		0.1	0.5			0.2			0.2	
Delay (s)	14.1	13.2		12.4	12.9			10.7			7.8	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.3			12.9			10.7			7.8	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	453	71	94	449	284	41	332	92	222	159	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			1.00			0.97	
Satd. Flow (prot)		3178			3072			3147			3121	
Flt Permitted		0.64			0.74			0.89			0.63	
Satd. Flow (perm)		2051			2284			2813			2013	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	503	79	104	499	316	46	369	102	247	177	54
RTOR Reduction (vph)	0	16	0	0	104	0	0	33	0	0	15	0
Lane Group Flow (vph)	0	660	0	0	815	0	0	484	0	0	463	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		820			914			1286			619	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.32			c0.36			0.13			c0.23	
v/c Ratio		0.81			0.89			0.38			0.96dl	
Uniform Delay, d1		17.3			18.2			12.0			20.2	
Progression Factor		1.74			1.00			1.00			0.89	
Incremental Delay, d2		8.2			12.8			0.8			8.0	
Delay (s)		38.1			31.0			12.8			26.0	
Level of Service		D			C			B			C	
Approach Delay (s)		38.1			31.0			12.8			26.0	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	28.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	722	118	45	751	0	132	0	70	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2976			3031			1582				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2976			2542			1311				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	802	131	50	834	0	147	0	78	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	915	0	0	884	0	0	204	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1918			932			233				
v/s Ratio Prot		c0.31										
v/s Ratio Perm					c0.35			c0.16				
v/c Ratio		0.48			0.95			0.87				
Uniform Delay, d1		8.2			27.7			36.0				
Progression Factor		0.04			1.57			1.00				
Incremental Delay, d2		0.4			17.4			33.6				
Delay (s)		0.7			60.9			69.6				
Level of Service		A			E			E				
Approach Delay (s)		0.7			60.9			69.6			0.0	
Approach LOS		A			E			E			A	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	123	501	187	274	642	183	101	20	185	78	7	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1755		1629	1714	1457
Flt Permitted	0.32	1.00		0.20	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	516	3020		342	3257	1457		1582		685	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	137	557	208	304	713	203	112	22	206	87	8	83
RTOR Reduction (vph)	0	42	0	0	0	104	0	75	0	0	0	45
Lane Group Flow (vph)	137	723	0	304	713	99	0	265	0	87	8	38
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	40.1	30.7		47.8	35.4	44.0		20.6		32.2	32.2	41.6
Effective Green, g (s)	40.1	30.7		47.8	35.4	44.0		20.6		32.2	32.2	41.6
Actuated g/C Ratio	0.45	0.34		0.53	0.39	0.49		0.23		0.36	0.36	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	335	1030		383	1281	712		362		335	613	673
v/s Ratio Prot	0.04	0.24		c0.12	0.22	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.17		0.07		0.02
v/c Ratio	0.41	0.70		0.79	0.56	0.14		0.73		0.26	0.01	0.06
Uniform Delay, d1	15.4	25.7		14.6	21.2	12.6		32.1		21.3	18.6	13.4
Progression Factor	1.90	1.58		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	3.6		11.4	1.7	0.1		7.9		0.4	0.0	0.0
Delay (s)	30.2	44.3		26.0	23.0	12.7		40.1		21.7	18.7	13.4
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		42.1			22.0			40.1			17.7	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	517	247	6	529	0	0	0	0	32	0	570
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	574	274	7	588	0	0	0	0	36	0	633
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	588			574			882	1176	287	888	1176	294
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	588			574			882	1176	287	888	1176	294
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	85	100	9
cM capacity (veh/h)	963			974			20	184	701	232	184	694

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	287	287	274	203	392	36	633
Volume Left	0	0	0	7	0	36	0
Volume Right	0	0	274	0	0	0	633
cSH	1700	1700	1700	974	1700	232	694
Volume to Capacity	0.17	0.17	0.16	0.01	0.23	0.15	0.91
Queue Length 95th (ft)	0	0	0	1	0	13	302
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	23.3	40.8
Lane LOS				A		C	E
Approach Delay (s)	0.0			0.1		39.9	
Approach LOS						E	

Intersection Summary			
Average Delay	12.7		
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	549	0	535	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	610	0	594	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	305	305	594
Volume Left (vph)	305	305	594
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.9	6.9	5.8
Degree Utilization, x	0.59	0.59	0.95
Capacity (veh/h)	500	499	618
Control Delay (s)	18.2	18.2	48.3
Approach Delay (s)	18.2		48.3
Approach LOS	C		E

Intersection Summary			
Delay	33.1		
HCM Level of Service	D		
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	340	46	126	323	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3092		1574	3149						3014	
Flt Permitted		1.00		0.45	1.00						0.97	
Satd. Flow (perm)		3092		746	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	378	51	140	359	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	417	0	140	359	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1310		527	1815						957	
v/s Ratio Prot		c0.13		c0.03	0.11						c0.04	
v/s Ratio Perm				0.12								
v/c Ratio		0.32		0.27	0.20						0.12	
Uniform Delay, d1		16.3		11.3	8.6						20.6	
Progression Factor		1.00		0.27	0.25						1.00	
Incremental Delay, d2		0.6		1.2	0.2						0.2	
Delay (s)		17.0		4.2	2.4						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.0			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	344	0	0	400	76	49	65	42	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3073			4420				
Flt Permitted	0.38	1.00			1.00			0.98				
Satd. Flow (perm)	656	3257			3073			4420				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	382	0	0	444	84	54	72	47	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	32	0	0	0	0
Lane Group Flow (vph)	76	382	0	0	510	0	0	141	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	485	1839			1265			1404				
v/s Ratio Prot	0.02	c0.12			c0.17			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.21			0.40			0.10				
Uniform Delay, d1	12.1	9.1			17.6			20.4				
Progression Factor	0.34	0.33			1.00			1.00				
Incremental Delay, d2	0.7	0.2			1.0			0.1				
Delay (s)	4.7	3.3			18.6			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.5			18.6			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	307	39	31	243	31	118	85	52	56	91	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.98			0.98			0.97			0.94	
Flt Protected		0.99			0.99			0.98			0.99	
Satd. Flow (prot)		2979			2979			1792			1750	
Flt Permitted		0.89			0.88			0.75			0.89	
Satd. Flow (perm)		2659			2645			1373			1569	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	341	43	34	270	34	131	94	58	62	101	140
RTOR Reduction (vph)	0	13	0	0	13	0	0	14	0	0	48	0
Lane Group Flow (vph)	0	414	0	0	325	0	0	269	0	0	255	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		941			936			676			772	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.12			c0.20			0.16	
v/c Ratio		0.44			0.35			0.40			0.33	
Uniform Delay, d1		16.1			15.5			10.4			10.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.5			1.0			1.7			1.1	
Delay (s)		17.6			16.5			12.2			11.2	
Level of Service		B			B			B			B	
Approach Delay (s)		17.6			16.5			12.2			11.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	202	39	50	176	62	71	1001	70	75	428	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	3005		1592	3512		1486	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.58	1.00		0.43	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	954	3005		975	3512		675	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	213	41	53	185	65	75	1054	74	79	451	84
RTOR Reduction (vph)	0	19	0	0	41	0	0	0	44	0	0	51
Lane Group Flow (vph)	178	235	0	53	209	0	75	1054	30	79	451	33
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	990		373	1157		324	1180	523	144	1169	493
v/s Ratio Prot	c0.02	0.08		0.01	0.06		0.01	c0.35		c0.03	0.15	
v/s Ratio Perm	c0.15			0.04			0.09		0.02	0.21		0.03
v/c Ratio	0.49	0.24		0.14	0.18		0.23	0.89	0.06	0.55	0.39	0.07
Uniform Delay, d1	20.6	20.7		18.4	20.3		15.0	24.3	16.3	17.5	18.7	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	2.05	0.61	0.83
Incremental Delay, d2	4.6	0.6		0.8	0.3		1.7	10.5	0.2	13.0	0.9	0.2
Delay (s)	25.2	21.3		19.2	20.7		16.6	34.8	16.5	48.9	12.2	13.7
Level of Service	C	C		B	C		B	C	B	D	B	B
Approach Delay (s)		22.9			20.4			32.6			17.1	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	256	18	14	216	8	35	113	25	20	57	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1929	1382		1950	1331		1970	1452		1928	1430
Flt Permitted		0.94	1.00		0.98	1.00		0.93	1.00		0.93	1.00
Satd. Flow (perm)		1829	1382		1910	1331		1860	1452		1811	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	269	19	15	227	8	37	119	26	21	60	43
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	25
Lane Group Flow (vph)	0	309	9	0	242	4	0	156	11	0	81	18
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		844	638		882	614		773	603		752	594
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.13	0.00		c0.08	0.01		0.04	0.01
v/c Ratio		0.37	0.01		0.27	0.01		0.20	0.02		0.11	0.03
Uniform Delay, d1		11.3	9.5		10.8	9.4		12.1	11.2		11.6	11.2
Progression Factor		1.00	1.00		0.48	0.39		1.38	1.85		0.94	0.85
Incremental Delay, d2		1.2	0.0		0.8	0.0		0.6	0.1		0.3	0.1
Delay (s)		12.6	9.5		5.9	3.7		17.3	20.8		11.2	9.6
Level of Service		B	A		A	A		B	C		B	A
Approach Delay (s)		12.4			5.8			17.8			10.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	242	10	15	200	30	13	247	26	30	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3022		1520	2981		1520	2996		1520	2904	
Flt Permitted	0.95	1.00		0.58	1.00		0.68	1.00		0.55	1.00	
Satd. Flow (perm)	1520	3022		928	2981		1091	2996		884	2904	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	269	11	17	222	33	14	274	29	33	78	33
RTOR Reduction (vph)	0	5	0	0	18	0	0	12	0	0	19	0
Lane Group Flow (vph)	73	275	0	17	237	0	14	291	0	33	92	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1488		314	1009		453	1244		367	1206	
v/s Ratio Prot	c0.05	0.09			c0.08			c0.10			0.03	
v/s Ratio Perm				0.02			0.01			0.04		
v/c Ratio	0.45	0.19		0.05	0.24		0.03	0.23		0.09	0.08	
Uniform Delay, d1	27.2	9.2		14.5	15.5		11.3	12.3		11.5	11.5	
Progression Factor	0.83	0.42		0.83	0.75		0.58	0.65		1.08	1.11	
Incremental Delay, d2	8.3	0.3		0.3	0.5		0.1	0.4		0.5	0.1	
Delay (s)	30.9	4.1		12.4	12.2		6.7	8.4		13.0	12.8	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		9.7			12.2			8.3			12.9	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	253	16	97	216	43	26	286	20	25	143	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.99		1.00	0.97			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1520	3013		1520	2964			3215			3173	
Flt Permitted	0.58	1.00		0.95	1.00			0.92			0.89	
Satd. Flow (perm)	921	3013		1520	2964			2980			2839	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	281	18	108	240	48	29	318	22	28	159	28
RTOR Reduction (vph)	0	7	0	0	25	0	0	7	0	0	17	0
Lane Group Flow (vph)	41	292	0	108	263	0	0	362	0	0	198	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	283	927		140	1322			1146			1092	
v/s Ratio Prot		c0.10		c0.07	0.09							
v/s Ratio Perm	0.04							c0.12			0.07	
v/c Ratio	0.14	0.32		0.77	0.20			0.32			0.18	
Uniform Delay, d1	16.3	17.2		28.8	10.9			14.0			13.2	
Progression Factor	0.61	0.60		1.35	0.97			0.72			0.76	
Incremental Delay, d2	1.1	0.9		28.9	0.3			0.7			0.4	
Delay (s)	11.0	11.2		67.9	10.9			10.7			10.4	
Level of Service	B	B		E	B			B			B	
Approach Delay (s)		11.2			26.4			10.7			10.4	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	264	14	70	330	70	25	94	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.91				
Flt Protected		1.00			0.99			1.00				
Satd. Flow (prot)		1585			1556			3159				
Flt Permitted		0.97			0.91			1.00				
Satd. Flow (perm)		1548			1425			3159				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	293	16	78	367	78	28	104	180	0	0	0
RTOR Reduction (vph)	0	2	0	0	8	0	0	140	0	0	0	0
Lane Group Flow (vph)	0	323	0	0	515	0	0	172	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		42.4			42.4			14.6				
Effective Green, g (s)		42.4			42.4			14.6				
Actuated g/C Ratio		0.65			0.65			0.22				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		1010			930			710				
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.36			0.05				
v/c Ratio		0.32			0.55			0.24				
Uniform Delay, d1		5.0			6.2			20.7				
Progression Factor		2.07			1.00			1.00				
Incremental Delay, d2		0.8			2.4			0.8				
Delay (s)		11.1			8.5			21.4				
Level of Service		B			A			C				
Approach Delay (s)		11.1			8.5			21.4			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	81	345	392	44	66	75
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	85	363	413	46	69	79
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.87				0.87	0.87
vC, conflicting volume	480				995	460
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	325				919	302
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	92				70	87
cM capacity (veh/h)	1010				235	629

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	448	459	69	79
Volume Left	85	0	69	0
Volume Right	0	46	0	79
cSH	1010	1700	235	629
Volume to Capacity	0.08	0.27	0.30	0.13
Queue Length 95th (ft)	7	0	30	11
Control Delay (s)	2.5	0.0	26.7	11.5
Lane LOS	A		D	B
Approach Delay (s)	2.5	0.0	18.6	
Approach LOS			C	

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	471	1	14	644	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1712		
Flt Permitted	1.00			0.99		
Satd. Flow (perm)	1714			1690		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	523	1	16	716	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	524	0	0	732	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			616		
v/s Ratio Prot	c0.31					
v/s Ratio Perm				c0.43		
v/c Ratio	0.44			1.19		
Uniform Delay, d1	5.7			27.0		
Progression Factor	0.05			1.00		
Incremental Delay, d2	0.3			100.3		
Delay (s)	0.6			127.3		
Level of Service	A			F		
Approach Delay (s)	0.6			127.3	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	74.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	182	191	25	552	0	0	0	0	3	0	254
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	202	212	28	613	0	0	0	0	3	0	282
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	613			202			977	977	207	770	871	613
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	613			202			977	977	207	770	871	613
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	34
cM capacity (veh/h)	976			988			70	246	805	287	283	430

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	135	280	641	3	282
Volume Left	0	0	28	3	0
Volume Right	0	212	0	0	282
cSH	1700	1700	988	287	430
Volume to Capacity	0.08	0.16	0.03	0.01	0.66
Queue Length 95th (ft)	0	0	2	1	115
Control Delay (s)	0.0	0.0	0.7	17.7	27.9
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	27.8	
Approach LOS				D	

Intersection Summary			
Average Delay	6.3		
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	185	0	577	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	206	0	641	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	103	103	641
Volume Left (vph)	103	103	641
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.8
Degree Utilization, x	0.19	0.19	0.86
Capacity (veh/h)	511	511	735
Control Delay (s)	10.2	10.2	30.0
Approach Delay (s)	10.2		30.0
Approach LOS	B		D

Intersection Summary			
Delay	25.2		
HCM Level of Service	D		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	437	210	157	465	0	0	0	0	123	117	300
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3691	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3691	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	460	221	165	489	0	0	0	0	129	123	316
RTOR Reduction (vph)	0	0	160	0	0	0	0	0	0	0	101	94
Lane Group Flow (vph)	0	460	61	0	654	0	0	0	0	71	238	64
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.2	39.2		73.3					19.6	19.6	64.8
Effective Green, g (s)		39.2	39.2		73.3					19.6	19.6	64.8
Actuated g/C Ratio		0.25	0.25		0.46					0.12	0.12	0.40
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		730	294		1545					165	452	454
v/s Ratio Prot		c0.15			c0.19					0.05	c0.06	
v/s Ratio Perm			0.05									0.06
v/c Ratio		0.63	0.21		0.42					0.43	0.53	0.14
Uniform Delay, d1		53.9	48.0		29.1					65.0	65.8	30.0
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		4.1	1.6		0.1					1.8	1.1	0.1
Delay (s)		58.0	49.6		0.7					66.8	67.0	30.2
Level of Service		E	D		A					E	E	C
Approach Delay (s)		55.3			0.7			0.0			56.7	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	36.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.9
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	212	348	0	0	384	91	238	150	135	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	3009				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	3009				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	236	387	0	0	427	101	264	167	150	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	81	0	53	0	0	0	0
Lane Group Flow (vph)	236	387	0	0	427	20	198	330	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	78.7	78.7			32.3	32.3	22.2	22.2				
Effective Green, g (s)	78.7	78.7			32.3	32.3	22.2	22.2				
Actuated g/C Ratio	0.49	0.49			0.20	0.20	0.14	0.14				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	774	1656			636	294	212	417				
v/s Ratio Prot	c0.15	0.11			c0.14		c0.13	0.11				
v/s Ratio Perm						0.01						
v/c Ratio	0.30	0.23			0.67	0.07	0.93	0.79				
Uniform Delay, d1	24.3	23.3			59.0	51.7	68.2	66.7				
Progression Factor	0.07	0.08			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			2.8	0.1	43.4	9.9				
Delay (s)	2.0	1.9			61.7	51.8	111.5	76.6				
Level of Service	A	A			E	D	F	E				
Approach Delay (s)		1.9			59.8			88.5			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	48.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.8
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	220	273	75	35	141	45	88	824	62	59	448	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1536	1556	1328	1595	1719		1525	2990		1509	2870	
Flt Permitted	0.52	1.00	1.00	0.50	1.00		0.34	1.00		0.15	1.00	
Satd. Flow (perm)	844	1556	1328	835	1719		539	2990		238	2870	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	287	79	37	148	47	93	867	65	62	472	109
RTOR Reduction (vph)	0	0	52	0	12	0	0	6	0	0	22	0
Lane Group Flow (vph)	232	287	27	37	183	0	93	926	0	62	559	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		39.6	34.1		39.6	34.1	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	386	557	461	309	541		275	1134		163	1089	
v/s Ratio Prot	c0.04	0.18		0.00	0.11		0.02	c0.31		c0.02	0.19	
v/s Ratio Perm	c0.20		0.02	0.04			0.12			0.14		
v/c Ratio	0.60	0.52	0.06	0.12	0.34		0.34	0.82		0.38	0.51	
Uniform Delay, d1	20.9	22.7	19.6	20.3	23.6		16.6	25.1		17.7	21.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.6	3.4	0.2	0.2	1.7		0.7	6.5		1.5	1.7	
Delay (s)	23.5	26.1	19.8	20.4	25.3		17.3	31.6		19.2	23.2	
Level of Service	C	C	B	C	C		B	C		B	C	
Approach Delay (s)		24.3			24.5			30.3			22.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	26.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	269	16	5	182	19	35	80	16	11	44	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.94	
Flt Protected		0.99	1.00		1.00	1.00		0.99			0.99	
Satd. Flow (prot)		1910	1482		1600	1198		1912			1848	
Flt Permitted		0.94	1.00		0.99	1.00		0.93			0.97	
Satd. Flow (perm)		1816	1482		1592	1198		1794			1810	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	283	17	5	192	20	37	84	17	12	46	41
RTOR Reduction (vph)	0	0	9	0	0	10	0	8	0	0	24	0
Lane Group Flow (vph)	0	329	8	0	197	10	0	130	0	0	75	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		894	730		784	590		745			752	
v/s Ratio Prot												
v/s Ratio Perm		c0.18	0.01		0.12	0.01		c0.07			0.04	
v/c Ratio		0.37	0.01		0.25	0.02		0.18			0.10	
Uniform Delay, d1		10.2	8.4		9.6	8.4		12.0			11.6	
Progression Factor		1.00	1.00		2.00	2.96		1.00			1.55	
Incremental Delay, d2		1.2	0.0		0.8	0.1		0.5			0.3	
Delay (s)		11.4	8.5		19.9	25.0		12.5			18.2	
Level of Service		B	A		B	C		B			B	
Approach Delay (s)		11.3			20.4			12.5			18.2	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	208	24	6	133	6	41	228	22	9	53	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1663	1392		1604	1497		1755	1390		1653	
Flt Permitted		0.88	1.00		0.99	1.00		0.95	1.00		0.97	
Satd. Flow (perm)		1481	1392		1585	1497		1680	1390		1612	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	219	25	6	140	6	43	240	23	9	56	32
RTOR Reduction (vph)	0	0	16	0	0	4	0	0	12	0	16	0
Lane Group Flow (vph)	0	298	9	0	146	2	0	283	11	0	81	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		524	493		561	530		827	684		794	
v/s Ratio Prot												
v/s Ratio Perm		c0.20	0.01		0.09	0.00		c0.17	0.01		0.05	
v/c Ratio		0.57	0.02		0.26	0.00		0.34	0.02		0.10	
Uniform Delay, d1		17.0	13.7		14.9	13.6		10.1	8.4		8.8	
Progression Factor		1.90	3.09		0.92	0.93		0.32	0.30		1.02	
Incremental Delay, d2		4.2	0.1		1.1	0.0		0.9	0.0		0.3	
Delay (s)		36.6	42.2		14.9	12.7		4.1	2.5		9.3	
Level of Service		D	D		B	B		A	A		A	
Approach Delay (s)		37.0			14.8			4.0			9.3	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	162	21	31	9	18	6	26	286	19	6	201	98
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.99			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.97			0.99			1.00	0.85
Flt Protected		0.96	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1768	1390		1813			1974			1873	1328
Flt Permitted		0.80	1.00		0.93			0.97			0.99	1.00
Satd. Flow (perm)		1475	1390		1711			1923			1859	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	180	23	34	10	20	7	29	318	21	7	223	109
RTOR Reduction (vph)	0	0	20	0	5	0	0	4	0	0	0	55
Lane Group Flow (vph)	0	203	14	0	32	0	0	364	0	0	230	54
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		649	577		447			947			915	654
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.09	0.01		0.02			c0.19			0.12	0.04
v/c Ratio		0.31	0.02		0.07			0.38			0.25	0.08
Uniform Delay, d1		12.8	11.2		18.1			10.3			9.6	8.7
Progression Factor		0.77	1.28		1.00			0.54			0.49	0.34
Incremental Delay, d2		1.1	0.1		0.3			1.1			0.6	0.2
Delay (s)		10.9	14.4		18.4			6.7			5.3	3.2
Level of Service		B	B		B			A			A	A
Approach Delay (s)		11.4			18.4			6.7			4.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	793	222	259	1100	0	0	0	0	275	201	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4302		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.19	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4302		322	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	835	234	273	1158	0	0	0	0	289	212	396
RTOR Reduction (vph)	0	40	0	0	0	0	0	0	0	0	66	66
Lane Group Flow (vph)	0	1029	0	273	1158	0	0	0	0	234	387	144
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		50.6		69.3	69.3					23.7	23.7	23.7
Effective Green, g (s)		50.6		69.3	69.3					23.7	23.7	23.7
Actuated g/C Ratio		0.48		0.66	0.66					0.23	0.23	0.23
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		2073		384	2129					320	612	306
v/s Ratio Prot		0.24		c0.10	0.36							
v/s Ratio Perm				c0.37						c0.16	0.14	0.11
v/c Ratio		0.50		0.71	0.54					0.73	0.63	0.47
Uniform Delay, d1		18.5		9.8	9.5					37.7	36.7	35.2
Progression Factor		1.00		1.35	1.53					1.00	1.00	1.00
Incremental Delay, d2		0.9		3.8	0.6					8.6	2.2	1.4
Delay (s)		19.4		17.0	15.1					46.3	39.0	36.6
Level of Service		B		B	B					D	D	D
Approach Delay (s)		19.4			15.5			0.0			40.3	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM Average Control Delay	23.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	757	0	0	810	234	549	365	386	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.99		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1449		4421				
Flt Permitted	0.20	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	617	3138			3119	1449		4421				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	327	797	0	0	853	246	578	384	406	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	111	0	71	0	0	0	0
Lane Group Flow (vph)	327	797	0	0	853	135	0	1297	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	62.2	62.2			44.8	44.8		30.8				
Effective Green, g (s)	62.2	62.2			44.8	44.8		30.8				
Actuated g/C Ratio	0.59	0.59			0.43	0.43		0.29				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	615	1859			1331	618		1297				
v/s Ratio Prot	c0.06	0.25			c0.27							
v/s Ratio Perm	0.26					0.09		0.29				
v/c Ratio	0.53	0.43			0.64	0.22		1.05dl				
Uniform Delay, d1	12.6	11.7			23.8	19.0		37.1				
Progression Factor	0.72	0.86			0.96	1.43		1.00				
Incremental Delay, d2	0.9	0.6			1.6	0.5		25.1				
Delay (s)	10.0	10.6			24.3	27.8		62.2				
Level of Service	B	B			C	C		E				
Approach Delay (s)		10.5			25.0			62.2			0.0	
Approach LOS		B			C			E			A	

Intersection Summary			
HCM Average Control Delay	34.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	449	226	78	751	41	226	178	40	37	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1601	3233		1446	3008		1544	2782	
Flt Permitted	0.14	1.00	1.00	0.48	1.00		0.52	1.00		0.61	1.00	
Satd. Flow (perm)	238	3061	1291	811	3233		789	3008		990	2782	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	473	238	82	791	43	238	187	42	39	117	96
RTOR Reduction (vph)	0	0	99	0	4	0	0	20	0	0	79	0
Lane Group Flow (vph)	111	473	139	82	830	0	238	209	0	39	134	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	61.9	51.9	61.4	39.3	32.8		31.1	22.6		23.1	18.1	
Effective Green, g (s)	61.9	51.9	61.4	39.3	32.8		31.1	22.6		23.1	18.1	
Actuated g/C Ratio	0.59	0.49	0.58	0.37	0.31		0.30	0.22		0.22	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	464	1513	755	352	1010		293	647		244	480	
v/s Ratio Prot	c0.06	c0.15	0.02	0.01	c0.26		c0.07	0.07		0.01	0.05	
v/s Ratio Perm	0.08		0.09	0.07			c0.17			0.03		
v/c Ratio	0.24	0.31	0.18	0.23	0.82		0.81	0.32		0.16	0.28	
Uniform Delay, d1	12.1	15.9	10.1	21.7	33.4		32.8	34.7		32.8	37.8	
Progression Factor	0.94	1.02	2.33	1.00	1.00		0.92	0.86		1.00	1.00	
Incremental Delay, d2	1.0	0.4	0.1	0.3	7.5		15.1	1.0		0.3	1.1	
Delay (s)	12.4	16.7	23.7	22.0	40.9		45.2	30.9		33.1	38.9	
Level of Service	B	B	C	C	D		D	C		C	D	
Approach Delay (s)		18.1			39.2			38.2			38.0	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM Average Control Delay	31.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	132	286	56	166	102	329	382	63	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.94		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1634	2807		1463	3015		1589	3257		1549	3135	
Flt Permitted	0.56	1.00		0.41	1.00		0.46	1.00		0.48	1.00	
Satd. Flow (perm)	966	2807		625	3015		772	3257		788	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	139	301	59	175	107	346	402	66	96	272	57
RTOR Reduction (vph)	0	218	0	0	78	0	0	12	0	0	17	0
Lane Group Flow (vph)	65	222	0	59	204	0	346	456	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.8	28.8		35.8	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.8	28.8		35.8	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	374	770		269	827		530	1300		343	935	
v/s Ratio Prot	0.01	c0.08		c0.01	0.07		c0.11	0.14		0.02	0.10	
v/s Ratio Perm	0.05			0.06			c0.22			0.08		
v/c Ratio	0.17	0.29		0.22	0.25		0.65	0.35		0.28	0.33	
Uniform Delay, d1	23.8	30.0		23.9	29.7		16.6	22.0		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.99	0.87	
Incremental Delay, d2	0.3	0.9		0.5	0.7		3.0	0.7		0.5	0.9	
Delay (s)	24.0	31.0		24.4	30.4		19.6	22.8		22.8	26.0	
Level of Service	C	C		C	C		B	C		C	C	
Approach Delay (s)		30.1			29.3			21.4			25.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	25.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	402	81	6	409	110	68	602	7	84	326	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2890			2888		1436	3186		1451	2788	
Flt Permitted		0.58			0.95		0.41	1.00		0.28	1.00	
Satd. Flow (perm)		1692			2733		624	3186		421	2788	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	188	447	90	7	454	122	76	669	8	93	362	117
RTOR Reduction (vph)	0	17	0	0	37	0	0	1	0	0	48	0
Lane Group Flow (vph)	0	708	0	0	546	0	76	676	0	93	431	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		777			799		300	1078		232	944	
v/s Ratio Prot		c0.06					0.02	c0.21		c0.02	0.15	
v/s Ratio Perm		c0.32			0.20		0.09			0.14		
v/c Ratio		0.91			0.68		0.25	0.63		0.40	0.46	
Uniform Delay, d1		17.9			20.3		12.4	18.1		12.9	16.8	
Progression Factor		1.00			1.57		0.92	0.71		1.00	1.00	
Incremental Delay, d2		16.8			2.3		1.8	2.5		5.1	1.6	
Delay (s)		34.6			34.3		13.2	15.3		18.0	18.4	
Level of Service		C			C		B	B		B	B	
Approach Delay (s)		34.6			34.3			15.1			18.3	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	117	48	70	132	13	38	661	81	10	378	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1665	1857		1612	1939		1658	3211		1138	3197	
Flt Permitted	0.66	1.00		0.65	1.00		0.50	1.00		0.31	1.00	
Satd. Flow (perm)	1161	1857		1102	1939		870	3211		366	3197	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	54	121	49	72	136	13	39	681	84	10	390	46
RTOR Reduction (vph)	0	23	0	0	5	0	0	15	0	0	14	0
Lane Group Flow (vph)	54	147	0	72	144	0	39	750	0	10	422	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	429	686		407	716		415	1531		175	1525	
v/s Ratio Prot		c0.08			0.07			c0.23			0.13	
v/s Ratio Perm	0.05			0.07			0.04			0.03		
v/c Ratio	0.13	0.21		0.18	0.20		0.09	0.49		0.06	0.28	
Uniform Delay, d1	13.6	14.0		13.8	14.0		9.3	11.6		9.1	10.2	
Progression Factor	1.00	1.00		1.72	1.77		1.00	1.00		0.49	0.49	
Incremental Delay, d2	0.6	0.7		0.7	0.4		0.4	1.1		0.5	0.4	
Delay (s)	14.2	14.8		24.4	25.2		9.8	12.7		5.0	5.4	
Level of Service	B	B		C	C		A	B		A	A	
Approach Delay (s)		14.6			24.9			12.6			5.4	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	427	164	570	14	3	14	3	47	10	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			0.99		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.95		
Flt Protected	1.00		0.99				0.99			0.97		
Satd. Flow (prot)	2956		2958				1732			1864		
Flt Permitted	1.00		0.67				0.94			0.87		
Satd. Flow (perm)	2956		1998				1650			1671		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	449	173	600	15	3	15	3	49	11	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	449	0	786	0	0	0	32	0	0	14	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom			Perm	Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7			2	2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		919				355			360		
v/s Ratio Prot	0.15		c0.08									
v/s Ratio Perm			c0.28				c0.02			0.01		
v/c Ratio	0.55		0.85				0.09			0.04		
Uniform Delay, d1	20.0		17.2				20.4			20.2		
Progression Factor	1.33		0.75				1.00			1.00		
Incremental Delay, d2	1.4		9.6				0.5			0.2		
Delay (s)	28.2		22.4				20.9			20.4		
Level of Service	C		C				C			C		
Approach Delay (s)	28.2		22.4				20.9			20.4		
Approach LOS	C		C				C			C		

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	224
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1430	
Flt Permitted	1.00	
Satd. Flow (perm)	1430	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1	236
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	237	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.17	
v/s Ratio Perm		
v/c Ratio	1.08	
Uniform Delay, d1	27.5	
Progression Factor	1.07	
Incremental Delay, d2	81.8	
Delay (s)	111.3	
Level of Service	F	
Approach Delay (s)	111.3	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	194	581	594	66	41	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.99		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3217	3208		1629	1457
Flt Permitted		0.63	1.00		0.95	1.00
Satd. Flow (perm)		2042	3208		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	216	646	660	73	46	173
RTOR Reduction (vph)	0	0	13	0	0	128
Lane Group Flow (vph)	0	862	720	0	46	45
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1257	1974		426	381
v/s Ratio Prot			0.22		0.03	
v/s Ratio Perm		c0.42				c0.03
v/c Ratio		0.69	0.36		0.11	0.12
Uniform Delay, d1		8.3	6.2		18.2	18.3
Progression Factor		1.43	1.23		0.93	0.87
Incremental Delay, d2		2.5	0.5		0.5	0.6
Delay (s)		14.3	8.1		17.6	16.5
Level of Service		B	A		B	B
Approach Delay (s)		14.3	8.1		16.7	
Approach LOS		B	A		B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	542	598	196	135	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2927	2906		1464	1373
Flt Permitted		0.83	1.00		0.95	1.00
Satd. Flow (perm)		2451	2906		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	571	629	206	142	59
RTOR Reduction (vph)	0	0	49	0	0	42
Lane Group Flow (vph)	0	627	786	0	142	17
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1433	1699		428	401
v/s Ratio Prot			c0.27		c0.10	
v/s Ratio Perm		0.26				0.01
v/c Ratio		0.44	0.46		0.33	0.04
Uniform Delay, d1		7.5	7.7		18.0	16.5
Progression Factor		0.57	0.54		0.96	1.22
Incremental Delay, d2		0.7	0.7		2.0	0.2
Delay (s)		5.0	4.8		19.4	20.4
Level of Service		A	A		B	C
Approach Delay (s)		5.0	4.8		19.6	
Approach LOS		A	A		B	

Intersection Summary			
HCM Average Control Delay	6.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	529	160	107	552	423	83
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.98	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2214		1769	2436	1817	
Flt Permitted	1.00		0.13	1.00	0.96	
Satd. Flow (perm)	2214		244	2436	1817	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	588	178	119	613	470	92
RTOR Reduction (vph)	17	0	0	0	11	0
Lane Group Flow (vph)	749	0	119	613	551	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1056		116	1162	671	
v/s Ratio Prot	0.34			0.25	c0.30	
v/s Ratio Perm			c0.49			
v/c Ratio	0.71		1.03	0.53	0.82	
Uniform Delay, d1	13.4		17.0	11.9	18.6	
Progression Factor	1.25		1.00	1.00	1.00	
Incremental Delay, d2	3.8		90.7	1.7	10.9	
Delay (s)	20.6		107.7	13.6	29.4	
Level of Service	C		F	B	C	
Approach Delay (s)	20.6			28.9	29.4	
Approach LOS	C			C	C	

Intersection Summary			
HCM Average Control Delay	25.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	590	89	258	629	9	72	0	187	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.39	1.00	1.00	0.35	1.00	1.00		0.76	1.00		0.70	
Satd. Flow (perm)	764	3213	1422	584	3138	1366		1309	1443		719	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	656	99	287	699	10	80	0	208	1	0	0
RTOR Reduction (vph)	0	0	40	0	0	2	0	0	182	0	0	0
Lane Group Flow (vph)	1	656	59	287	699	8	0	80	26	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	50.8	50.8	50.8	66.4	66.4	66.4		10.6	10.6		10.6	
Effective Green, g (s)	50.8	50.8	50.8	66.4	66.4	66.4		10.6	10.6		10.6	
Actuated g/C Ratio	0.60	0.60	0.60	0.78	0.78	0.78		0.12	0.12		0.12	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	457	1920	850	605	2451	1067		163	180		90	
v/s Ratio Prot		0.20		c0.07	0.22							
v/s Ratio Perm	0.00		0.04	c0.30		0.01		c0.06	0.02		0.00	
v/c Ratio	0.00	0.34	0.07	0.47	0.29	0.01		0.49	0.14		0.01	
Uniform Delay, d1	6.9	8.6	7.2	3.0	2.6	2.0		34.7	33.2		32.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.5	0.2	0.6	0.1	0.0		2.3	0.4		0.0	
Delay (s)	6.9	9.1	7.3	3.6	2.7	2.1		37.0	33.5		32.7	
Level of Service	A	A	A	A	A	A		D	C		C	
Approach Delay (s)		8.9			2.9			34.5			32.7	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	13	816	838	45	24	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3038	3017		1487	
Flt Permitted		0.93	1.00		0.96	
Satd. Flow (perm)		2835	3017		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	907	931	50	27	10
RTOR Reduction (vph)	0	0	4	0	9	0
Lane Group Flow (vph)	0	921	977	0	28	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1040	2145		116	
v/s Ratio Prot			c0.32		c0.02	
v/s Ratio Perm		c0.32				
v/c Ratio		0.89	0.46		0.24	
Uniform Delay, d1		26.7	5.6		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		11.0	0.2		4.8	
Delay (s)		37.8	0.3		43.8	
Level of Service		D	A		D	
Approach Delay (s)		37.8	0.3		43.8	
Approach LOS		D	A		D	

Intersection Summary			
HCM Average Control Delay	18.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	426	1	14	550	80	0	0	1	45	3	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1729			3229			1432			1610	1282
Flt Permitted		0.81			0.95			1.00			0.93	1.00
Satd. Flow (perm)		1405			3069			1432			1569	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	473	1	16	611	89	0	0	1	50	3	86
RTOR Reduction (vph)	0	0	0	0	13	0	0	1	0	0	0	58
Lane Group Flow (vph)	0	557	0	0	703	0	0	0	0	0	53	28
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		512			1651			152			469	422
v/s Ratio Prot					c0.07			0.00			c0.02	
v/s Ratio Perm		c0.40			0.16						c0.01	0.02
v/c Ratio		1.09			0.43			0.00			0.11	0.07
Uniform Delay, d1		27.0			12.1			34.0			21.9	19.5
Progression Factor		1.00			1.73			1.00			1.00	1.00
Incremental Delay, d2		65.7			0.1			0.0			0.5	0.3
Delay (s)		92.7			21.0			34.0			22.4	19.9
Level of Service		F			C			C			C	B
Approach Delay (s)		92.7			21.0			34.0			20.8	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM Average Control Delay	49.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	27	35	1014	58	34	17	48	23	22	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.93			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1557	3022		1587	3022			1787			1700	
Flt Permitted	0.17	1.00		0.37	1.00			0.89			0.95	
Satd. Flow (perm)	283	3022		610	3022			1613			1628	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	41	623	28	36	1056	60	35	18	50	24	23	91
RTOR Reduction (vph)	0	5	0	0	6	0	0	32	0	0	22	0
Lane Group Flow (vph)	41	646	0	36	1110	0	0	71	0	0	116	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	148	1581		319	1581			571			576	
v/s Ratio Prot		0.21			c0.37							
v/s Ratio Perm	0.14			0.06				0.04			c0.07	
v/c Ratio	0.28	0.41		0.11	0.70			0.12			0.20	
Uniform Delay, d1	8.6	9.4		7.9	11.7			14.2			14.6	
Progression Factor	1.00	1.00		0.69	1.41			1.00			1.00	
Incremental Delay, d2	4.6	0.8		0.6	2.3			0.4			0.8	
Delay (s)	13.2	10.2		6.1	18.8			14.6			15.4	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.4			14.6			15.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	789	5	32	637	41	0	0	0	586	89	379
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.93	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	793	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	331	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	831	5	34	671	43	0	0	0	617	94	399
RTOR Reduction (vph)	0	0	0	0	0	19	0	0	0	0	0	166
Lane Group Flow (vph)	26	836	0	34	671	24	0	0	0	617	94	233
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	159	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.21					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.05						0.16
v/c Ratio	0.16	0.75		0.05	0.37	0.08				0.81	0.24	0.68
Uniform Delay, d1	31.6	38.7		15.2	15.8	13.1				47.4	40.7	45.6
Progression Factor	0.84	0.86		0.33	0.75	1.24				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.4				9.3	1.4	10.5
Delay (s)	28.6	37.5		5.1	12.2	16.6				56.7	42.1	56.1
Level of Service	C	D		A	B	B				E	D	E
Approach Delay (s)		37.3			12.2			0.0			55.2	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	815	220	54	578	287	102	251	55	39	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3262		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3262		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	358	858	232	57	608	302	107	264	58	41	0	32
RTOR Reduction (vph)	0	18	0	0	0	228	0	0	42	0	0	30
Lane Group Flow (vph)	358	1072	0	57	608	74	0	371	16	41	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1706		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.32	0.63		0.54	0.79	0.30		0.52	0.06	0.77		0.04
Uniform Delay, d1	31.9	22.0		59.2	45.8	39.8		45.1	40.5	60.1		57.4
Progression Factor	0.95	0.16		1.00	1.00	1.00		0.94	0.99	1.00		1.00
Incremental Delay, d2	0.5	1.1		18.7	8.0	3.0		2.7	0.4	49.7		0.4
Delay (s)	30.7	4.7		77.9	53.8	42.8		45.2	40.3	109.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		11.1			51.8			44.5			87.0	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	893	166	104	839	0	74	0	79	9	14	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1648	3149		1387		1451	1803	1857	
Flt Permitted		1.00		0.19	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		336	3149		1085		1451	1803	1857	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	930	173	108	874	0	77	0	82	9	15	7
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	56	0	5	0
Lane Group Flow (vph)	0	1088	0	108	874	0	77	0	26	9	17	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		202	1889		347		464	577	594	
v/s Ratio Prot		c0.36			0.28						0.01	
v/s Ratio Perm				0.32			c0.07		0.02	0.00		
v/c Ratio		0.61		0.53	0.46		0.22		0.06	0.02	0.03	
Uniform Delay, d1		12.6		11.8	11.1		24.9		23.5	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.5		9.8	0.8		1.5		0.2	0.0	0.1	
Delay (s)		14.1		21.6	11.9		26.4		23.8	23.3	23.4	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		14.1			13.0			25.0			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	300	0	1230	209	662	0	0	787	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4269	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4269	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	309	0	1268	215	682	0	0	811	505
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	309	0	1268	215	682	0	0	1316	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1260	
v/s Ratio Prot				0.20		c0.83	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.68		2.90	0.46	0.25			1.17dr	
Uniform Delay, d1				32.6		37.5	29.5	8.6			37.0	
Progression Factor				1.00		1.00	0.63	2.07			1.00	
Incremental Delay, d2				7.9		862.0	2.7	0.2			37.8	
Delay (s)				40.6		899.5	21.4	18.0			74.8	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			731.2			18.8			74.8	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	334.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.6%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	322	770	144	0	0	0	0	549	408	359	728	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3157						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3157						4368	2244	1598	4680	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	339	811	152	0	0	0	0	578	429	378	766	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	305	984	0	0	0	0	0	578	429	378	766	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.13		c0.24	0.16	
v/s Ratio Perm	0.20	0.31							c0.19			
v/c Ratio	0.62	0.96						0.50	0.72	0.80	0.28	
Uniform Delay, d1	30.1	34.9						32.5	34.9	34.2	10.5	
Progression Factor	1.00	1.00						1.14	1.14	0.87	0.23	
Incremental Delay, d2	5.9	20.5						1.4	6.5	5.4	0.1	
Delay (s)	36.0	55.4						38.4	46.2	35.0	2.5	
Level of Service	D	E						D	D	D	A	
Approach Delay (s)		50.9			0.0			41.7			13.3	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	35.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	289	25	24	11	144	0	0	144	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3133		1710	1846			1956	
Flt Permitted				0.95	1.00		0.55	1.00			1.00	
Satd. Flow (perm)				1688	3133		998	1846			1956	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	304	26	25	12	152	0	0	152	5
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	304	34	0	12	152	0	0	156	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		646	1086			1059	
v/s Ratio Prot					0.01		0.00	c0.08			c0.08	
v/s Ratio Perm				c0.18			0.01					
v/c Ratio				0.57	0.03		0.02	0.14			0.15	
Uniform Delay, d1				24.1	20.0		10.3	7.9			9.7	
Progression Factor				1.00	1.00		1.06	1.18			1.00	
Incremental Delay, d2				4.3	0.1		0.1	0.3			0.3	
Delay (s)				28.4	20.1		11.0	9.5			10.0	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			27.2			9.6			10.0	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	1.0
Intersection Capacity Utilization	36.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	3	0	14	0	129	33	46	387	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.89			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1729			1550			1725		1590	1860	
Flt Permitted	0.75	1.00			0.98			1.00		0.61	1.00	
Satd. Flow (perm)	1517	1729			1533			1725		1027	1860	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	12	26	3	0	16	0	143	37	51	430	0
RTOR Reduction (vph)	0	18	0	0	11	0	0	11	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	8	0	0	169	0	51	430	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	549			487			812		650	1094	
v/s Ratio Prot		c0.01						0.10		0.01	c0.23	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.21		0.08	0.39	
Uniform Delay, d1	20.0	20.0			19.9			13.2		8.5	9.4	
Progression Factor	1.00	1.00			1.00			1.00		0.96	0.85	
Incremental Delay, d2	0.1	0.1			0.1			0.6		0.2	1.0	
Delay (s)	20.1	20.1			20.0			13.8		8.3	9.0	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			13.8			8.9	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	48	41	10	193	288	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1753		1765	1782	1657	
Flt Permitted	0.97		0.50	1.00	1.00	
Satd. Flow (perm)	1753		937	1782	1657	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	46	11	214	320	31
RTOR Reduction (vph)	31	0	0	0	5	0
Lane Group Flow (vph)	68	0	11	214	346	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		519	987	918	
v/s Ratio Prot	c0.04			0.12	c0.21	
v/s Ratio Perm			0.01			
v/c Ratio	0.12		0.02	0.22	0.38	
Uniform Delay, d1	15.5		6.5	7.4	8.2	
Progression Factor	1.00		0.46	0.61	1.43	
Incremental Delay, d2	0.4		0.1	0.5	1.0	
Delay (s)	15.9		3.1	5.0	12.7	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			4.9	12.7	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	29.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	30	268	9	258	122	0	0	281	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3773		1693	1678			1738	1428
Flt Permitted					1.00		0.49	1.00			1.00	1.00
Satd. Flow (perm)					3773		875	1678			1738	1428
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	32	282	9	272	128	0	0	296	18
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	0	0	0	321	0	272	128	0	0	296	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		621	1007			777	638
v/s Ratio Prot					c0.09		c0.05	0.08			0.17	
v/s Ratio Perm							c0.21					0.01
v/c Ratio					0.28		0.44	0.13			0.38	0.01
Uniform Delay, d1					22.4		12.9	7.4			15.7	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.2	0.3			1.4	0.0
Delay (s)					23.0		15.2	7.6			17.1	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.0			12.8			16.9	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	95	94	38	133	203	30	59	702	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3286		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.59	1.00	
Satd. Flow (perm)					1896		447	3286		1063	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	106	104	42	148	226	33	66	780	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	15	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	242	0	148	244	0	66	823	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1490		641	1572	
v/s Ratio Prot					c0.13		c0.04	0.07		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.16		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.1		8.2	14.7	
Progression Factor					1.00		0.83	0.80		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.2		0.3	1.3	
Delay (s)					22.9		17.0	9.9		8.5	15.9	
Level of Service					C		B	A		A	B	
Approach Delay (s)		0.0			22.9			12.5			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	12	8	63	63	5	271	20	159	588	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1967			1654		1595	3178		1704	3231	
Flt Permitted		0.88			0.99		0.34	1.00		0.56	1.00	
Satd. Flow (perm)		1765			1638		571	3178		998	3231	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	54	13	9	70	70	6	301	22	177	653	56
RTOR Reduction (vph)	0	7	0	0	43	0	0	7	0	0	8	0
Lane Group Flow (vph)	0	96	0	0	106	0	6	316	0	177	701	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		588			546		320	1780		559	1809	
v/s Ratio Prot								0.10			c0.22	
v/s Ratio Perm		0.05			c0.06		0.01			0.18		
v/c Ratio		0.16			0.19		0.02	0.18		0.32	0.39	
Uniform Delay, d1		17.6			17.8		7.3	8.1		8.8	9.3	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.8		0.1	0.2		1.3	0.5	
Delay (s)		18.2			18.6		7.4	8.3		3.7	2.9	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.2			18.6			8.3			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	37	192	67	249	587	81
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	39	202	71	262	618	85

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	241	158	175	412	291
Volume Left (vph)	39	71	0	0	0
Volume Right (vph)	202	0	0	0	85
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.6	6.4	6.2	5.8	5.6
Degree Utilization, x	0.38	0.28	0.30	0.66	0.45
Capacity (veh/h)	600	538	557	612	633
Control Delay (s)	12.0	10.7	10.6	18.0	11.8
Approach Delay (s)	12.0	10.7		15.5	
Approach LOS	B	B		C	

Intersection Summary			
Delay	13.6		
HCM Level of Service	B		
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	371	18	18	385	66	74	55	68	354	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1611	1731	1530	1710	1731	1421			1710	3253	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	937	1731	1421			257	3253	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	412	20	20	428	73	82	61	76	393	34
RTOR Reduction (vph)	0	0	0	12	0	0	39	0	0	0	6	0
Lane Group Flow (vph)	0	75	412	8	20	428	116	0	0	137	421	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		302	725	641	223	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.25					0.13	
v/s Ratio Perm		0.07		0.01	0.02		0.08			c0.53		
v/c Ratio		0.25	0.57	0.01	0.09	1.04	0.34			1.99	0.49	
Uniform Delay, d1		21.6	23.3	17.8	31.1	40.0	33.2			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		2.0	3.2	0.0	0.8	54.8	2.8			491.0	1.9	
Delay (s)		23.5	26.5	17.9	31.9	94.8	36.0			529.5	34.4	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.7			77.6					154.6	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	145.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.42		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	105	571	82	103	4	112	607	197
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.38	1.00				0.95	1.00	
Satd. Flow (perm)	674	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	634	91	114	4	124	674	219
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	117	827	0	0	0	128	867	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	177	850				334	514	
v/s Ratio Prot		0.25				0.07		
v/s Ratio Perm	0.17						c0.33	
v/c Ratio	0.66	0.97				0.38	1.69	
Uniform Delay, d1	34.6	38.4				36.8	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	17.8	25.0				3.3	317.6	
Delay (s)	52.4	63.4				40.1	359.9	
Level of Service	D	E				D	F	
Approach Delay (s)		62.0				319.8		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	590	0	0	451	50	85	52	17	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1954			1843				
Flt Permitted		0.91			1.00			0.97				
Satd. Flow (perm)		1544			1954			1843				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	68	621	0	0	475	53	89	55	18	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	689	0	0	528	0	0	162	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		950			1202			482				
v/s Ratio Prot					0.27							
v/s Ratio Perm		c0.45						0.09				
v/c Ratio		0.73			0.44			0.34				
Uniform Delay, d1		8.7			6.6			19.4				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		4.8			1.2			1.9				
Delay (s)		13.5			7.8			21.3				
Level of Service		B			A			C				
Approach Delay (s)		13.5			7.8			21.3			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	326	152	117	307	125	105	639	84	137	759	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1981	1434		1945	1444	1546	3040	1296	1506	3069	1252
Flt Permitted		0.43	1.00		0.73	1.00	0.23	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)		860	1434		1445	1444	373	3040	1296	455	3069	1252
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	343	160	123	323	132	111	673	88	144	799	99
RTOR Reduction (vph)	0	0	94	0	0	94	0	0	53	0	0	49
Lane Group Flow (vph)	0	418	66	0	446	38	111	673	35	144	799	50
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		459	587		413	413	272	1225	522	310	1248	509
v/s Ratio Prot		c0.09					0.03	0.22		c0.04	c0.26	
v/s Ratio Perm		0.29	0.05		c0.31	0.03	0.16		0.03	0.19		0.04
v/c Ratio		0.91	0.11		1.08	0.09	0.41	0.55	0.07	0.46	0.64	0.10
Uniform Delay, d1		29.2	19.2		37.5	27.5	16.4	24.0	19.2	16.0	25.0	19.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.75	1.54	2.62
Incremental Delay, d2		24.7	0.4		67.4	0.4	1.0	1.8	0.3	1.1	2.4	0.4
Delay (s)		53.9	19.6		104.9	27.9	17.4	25.8	19.5	29.0	41.0	50.9
Level of Service		D	B		F	C	B	C	B	C	D	D
Approach Delay (s)		44.4			87.3			24.1			40.2	
Approach LOS		D			F			C			D	

Intersection Summary			
HCM Average Control Delay	45.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	399	85	94	444	94	51	61	69	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1643			1643			1798				
Flt Permitted		0.84			0.85			0.99				
Satd. Flow (perm)		1392			1406			1798				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	89	420	89	99	467	99	54	64	73	0	0	0
RTOR Reduction (vph)	0	10	0	0	10	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	588	0	0	655	0	0	157	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		857			865			470				
v/s Ratio Prot												
v/s Ratio Perm		0.42			c0.47			0.09				
v/c Ratio		0.69			0.76			0.33				
Uniform Delay, d1		8.3			9.0			19.4				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		4.5			6.2			1.9				
Delay (s)		12.8			15.2			21.3				
Level of Service		B			B			C				
Approach Delay (s)		12.8			15.2			21.3			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	439	73	76	511	37	37	76	72	54	238	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1687	1382		1712	1417		1686	1455		1887	
Flt Permitted		0.97	1.00		0.89	1.00		0.84	1.00		0.94	
Satd. Flow (perm)		1634	1382		1533	1417		1432	1455		1779	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	462	77	80	538	39	39	80	76	57	251	49
RTOR Reduction (vph)	0	0	33	0	0	12	0	0	52	0	7	0
Lane Group Flow (vph)	0	484	44	0	618	27	0	119	24	0	350	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		937	792		879	812		458	466		569	
v/s Ratio Prot												
v/s Ratio Perm		0.30	0.03		c0.40	0.02		0.08	0.02		c0.20	
v/c Ratio		0.52	0.06		0.70	0.03		0.26	0.05		0.61	
Uniform Delay, d1		9.7	7.1		11.4	7.0		18.9	17.6		21.6	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		2.0	0.1		4.7	0.1		1.4	0.2		4.9	
Delay (s)		11.7	7.2		16.1	7.0		20.3	17.8		26.5	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		11.1			15.6			19.3			26.5	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	16.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	443	30	45	525	54	44	165	55	123	210	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1531	3066		1651	3728		1585	1663	1370	1568	1680	1397
Flt Permitted	0.38	1.00		0.44	1.00		0.59	1.00	1.00	0.64	1.00	1.00
Satd. Flow (perm)	604	3066		769	3728		977	1663	1370	1061	1680	1397
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	466	32	47	553	57	46	174	58	129	221	34
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	35	0	0	20
Lane Group Flow (vph)	60	490	0	47	598	0	46	174	23	129	221	14
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	288	1462		367	1778		391	665	548	424	672	559
v/s Ratio Prot		0.16			c0.16			0.10			c0.13	
v/s Ratio Perm	0.10			0.06			0.05		0.02	0.12		0.01
v/c Ratio	0.21	0.34		0.13	0.34		0.12	0.26	0.04	0.30	0.33	0.02
Uniform Delay, d1	9.9	10.6		9.5	10.6		12.3	13.1	11.9	13.3	13.5	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.86	0.91	0.80	0.55	0.56	0.25
Incremental Delay, d2	1.6	0.6		0.7	0.5		0.6	1.0	0.1	1.8	1.3	0.1
Delay (s)	11.5	11.2		10.2	11.1		11.2	12.9	9.6	9.1	8.8	3.0
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.2			11.0			11.9			8.4	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	389	71	73	387	67	55	180	64	89	245	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.95	1.00		0.99	1.00		0.95	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1327	3143		1513	3126		1579	2919		1451	3002	
Flt Permitted	0.45	1.00		0.45	1.00		0.54	1.00		0.60	1.00	
Satd. Flow (perm)	634	3143		717	3126		895	2919		910	3002	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	52	401	73	75	399	69	57	186	66	92	253	79
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	39	0
Lane Group Flow (vph)	52	474	0	75	468	0	57	213	0	92	293	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	304	1509		344	1500		370	1207		376	1241	
v/s Ratio Prot		c0.15			0.15			0.07			0.10	
v/s Ratio Perm	0.08			0.10			0.06			c0.10		
v/c Ratio	0.17	0.31		0.22	0.31		0.15	0.18		0.24	0.24	
Uniform Delay, d1	11.0	11.9		11.3	11.9		13.8	13.9		14.4	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	0.5		1.5	0.5		0.9	0.3		1.5	0.4	
Delay (s)	12.3	12.5		12.8	12.5		14.7	14.2		15.9	14.7	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.5			12.5			14.3			15.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	431	58	32	519	48	85	203	60	76	473	106
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1595	1654		1369	1973		1534	2998		1535	3016	
Flt Permitted	0.24	1.00		0.32	1.00		0.28	1.00		0.58	1.00	
Satd. Flow (perm)	411	1654		464	1973		457	2998		939	3016	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	93	454	61	34	546	51	89	214	63	80	498	112
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	93	515	0	34	597	0	89	277	0	80	610	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	44.0	39.4		40.8	37.8		26.6	21.8		26.6	21.8	
Effective Green, g (s)	44.0	37.4		40.8	35.8		26.6	19.8		26.6	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	277	728		255	831		204	698		328	703	
v/s Ratio Prot	c0.02	c0.31		0.00	0.30		c0.02	0.09		0.01	c0.20	
v/s Ratio Perm	0.16			0.06			0.11			0.06		
v/c Ratio	0.34	0.71		0.13	0.72		0.44	0.40		0.24	0.87	
Uniform Delay, d1	23.0	19.4		19.6	20.4		29.1	27.6		21.9	31.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	5.7		0.2	5.3		1.5	1.7		0.4	13.7	
Delay (s)	23.7	25.1		19.8	25.7		30.6	29.2		22.3	45.0	
Level of Service	C	C		B	C		C	C		C	D	
Approach Delay (s)		24.9			25.4			29.6			42.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	73	389	63	117	508	118	66	158	58	127	367	81
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3682			3131		1652	3236		1549	3028	
Flt Permitted		0.74			0.75		0.44	1.00		0.61	1.00	
Satd. Flow (perm)		2746			2356		769	3236		995	3028	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	77	409	66	123	535	124	69	166	61	134	386	85
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	552	0	0	782	0	69	227	0	134	471	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1245			1068		338	1424		438	1332	
v/s Ratio Prot								0.07			c0.16	
v/s Ratio Perm		0.20			c0.33		0.09			0.13		
v/c Ratio		0.44			0.73		0.20	0.16		0.31	0.35	
Uniform Delay, d1		14.0			16.8		12.9	12.6		13.6	13.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.1			4.4		1.4	0.2		1.8	0.7	
Delay (s)		15.2			21.2		14.3	12.9		15.4	14.7	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		15.2			21.2			13.2			14.8	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	867	6	20	583	249	1	1	9	213	1	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3207		1660	3320	1485		1548			3176	
Flt Permitted	0.40	1.00		0.27	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	680	3207		475	3320	1485		1520			2537	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	913	6	21	614	262	1	1	9	224	1	84
RTOR Reduction (vph)	0	0	0	0	0	96	0	7	0	0	53	0
Lane Group Flow (vph)	103	919	0	21	614	166	0	4	0	0	256	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		18.6			18.6	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		18.6			18.6	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	431	2034		301	2105	942		389			649	
v/s Ratio Prot		c0.29			0.18							
v/s Ratio Perm	0.15			0.04		0.11		0.00			c0.10	
v/c Ratio	0.24	0.45		0.07	0.29	0.18		0.01			0.39	
Uniform Delay, d1	5.7	6.8		5.1	6.0	5.5		20.2			22.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.3	0.7		0.4	0.4	0.4		0.0			1.7	
Delay (s)	7.0	7.5		5.5	6.3	5.9		20.2			24.1	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		7.5			6.2			20.2			24.1	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	72.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	131	228	122	94	163	55	134	907	90	123	825	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1506		1563	1586		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.21	1.00		0.20	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	746	1506		348	1586		317	3069	1337	263	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	240	128	99	172	58	141	955	95	129	868	99
RTOR Reduction (vph)	0	22	0	0	14	0	0	0	40	0	0	46
Lane Group Flow (vph)	138	346	0	99	216	0	141	955	55	129	868	53
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	286	390		192	410		232	1264	551	213	1276	543
v/s Ratio Prot	0.03	c0.23		c0.04	0.14		c0.04	c0.31		0.04	0.28	
v/s Ratio Perm	0.11			0.12			0.24		0.04	0.24		0.04
v/c Ratio	0.48	0.89		0.52	0.53		0.61	0.76	0.10	0.61	0.68	0.10
Uniform Delay, d1	22.6	30.3		22.8	27.0		14.5	21.3	15.3	14.9	20.4	15.3
Progression Factor	1.00	1.00		1.00	1.00		0.64	0.79	0.52	1.00	1.00	1.00
Incremental Delay, d2	5.7	24.4		9.6	4.8		10.3	3.9	0.3	12.1	2.9	0.4
Delay (s)	28.4	54.7		32.4	31.8		19.6	20.7	8.3	27.1	23.4	15.7
Level of Service	C	D		C	C		B	C	A	C	C	B
Approach Delay (s)		47.5			32.0			19.6			23.1	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	26.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	181	34	20	173	20	23	149	40	37	255	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.97			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1840			1851			1939			1976	
Flt Permitted		0.97			0.96			0.95			0.95	
Satd. Flow (perm)		1785			1793			1848			1893	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	23	191	36	21	182	21	24	157	42	39	268	53
RTOR Reduction (vph)	0	9	0	0	6	0	0	13	0	0	10	0
Lane Group Flow (vph)	0	241	0	0	218	0	0	210	0	0	350	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		741			745			853			874	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.11			c0.19	
v/c Ratio		0.32			0.29			0.25			0.40	
Uniform Delay, d1		12.8			12.6			10.6			11.6	
Progression Factor		1.00			0.65			1.15			1.00	
Incremental Delay, d2		1.2			1.0			0.7			1.4	
Delay (s)		14.0			9.3			12.9			12.9	
Level of Service		B			A			B			B	
Approach Delay (s)		14.0			9.3			12.9			12.9	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	193	36	25	180	18	39	200	31	39	214	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1495	3063		1576	3122		1518	3118		1550	3075	
Flt Permitted	0.62	1.00		0.60	1.00		0.59	1.00		0.60	1.00	
Satd. Flow (perm)	978	3063		999	3122		939	3118		979	3075	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	25	203	38	26	189	19	41	211	33	41	225	41
RTOR Reduction (vph)	0	23	0	0	12	0	0	14	0	0	17	0
Lane Group Flow (vph)	25	218	0	26	196	0	41	230	0	41	249	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	286	895		292	913		549	1823		572	1798	
v/s Ratio Prot		c0.07			0.06			0.07			c0.08	
v/s Ratio Perm	0.03			0.03			0.04			0.04		
v/c Ratio	0.09	0.24		0.09	0.21		0.07	0.13		0.07	0.14	
Uniform Delay, d1	16.7	17.5		16.7	17.4		5.9	6.1		5.9	6.1	
Progression Factor	0.89	0.91		0.73	0.72		1.25	1.26		0.38	0.34	
Incremental Delay, d2	0.6	0.6		0.6	0.5		0.3	0.1		0.2	0.2	
Delay (s)	15.4	16.6		12.8	13.0		7.6	7.7		2.4	2.2	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		16.5			13.0			7.7			2.2	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	168	41	25	159	36	23	247	16	30	322	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	3058		1524	2941			1923			1938	
Flt Permitted	0.63	1.00		0.62	1.00			0.96			0.96	
Satd. Flow (perm)	1026	3058		992	2941			1853			1874	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	68	171	42	26	162	37	23	252	16	31	329	34
RTOR Reduction (vph)	0	25	0	0	22	0	0	3	0	0	5	0
Lane Group Flow (vph)	68	188	0	26	177	0	0	288	0	0	389	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	410	1223		397	1176			884			894	
v/s Ratio Prot		0.06			0.06							
v/s Ratio Perm	c0.07			0.03				0.16			c0.21	
v/c Ratio	0.17	0.15		0.07	0.15			0.33			0.43	
Uniform Delay, d1	12.5	12.5		12.0	12.4			10.5			11.2	
Progression Factor	1.01	0.94		0.77	0.76			0.99			1.00	
Incremental Delay, d2	0.9	0.3		0.3	0.3			1.0			1.5	
Delay (s)	13.5	12.0		9.5	9.7			11.3			12.8	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		12.4			9.7			11.3			12.8	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	26	20	161	26	31	235	11	29	364	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1973		1583	1977			1983			1979	
Flt Permitted	0.57	1.00		0.66	1.00			0.93			0.97	
Satd. Flow (perm)	989	1973		1092	1977			1850			1925	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	29	22	179	29	34	261	12	32	404	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	152	0	22	208	0	0	307	0	0	499	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	304	607		336	608			1053			1096	
v/s Ratio Prot		0.08			c0.11							
v/s Ratio Perm	0.05			0.02				0.17			c0.26	
v/c Ratio	0.17	0.25		0.07	0.34			0.29			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.4			7.2			8.1	
Progression Factor	0.81	0.79		0.93	0.92			0.97			1.00	
Incremental Delay, d2	1.2	1.0		0.4	1.5			0.7			1.4	
Delay (s)	14.5	14.3		15.1	17.6			7.7			9.5	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.4			17.3			7.7			9.5	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	13	96	2	5	9	58	235	5	3	466	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1727		1702	1815		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.39	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1333	1727		1217	1815		660	1647	1428	1030	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	14	107	2	6	10	64	261	6	3	518	84
RTOR Reduction (vph)	0	77	0	0	7	0	0	0	2	0	0	28
Lane Group Flow (vph)	60	44	0	2	9	0	64	261	4	3	518	56
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		337	503		396	988	857	618	1200	898
v/s Ratio Prot		0.03			0.00			0.16			c0.26	
v/s Ratio Perm	c0.05			0.00			0.10		0.00	0.00		0.04
v/c Ratio	0.16	0.09		0.01	0.02		0.16	0.26	0.00	0.00	0.43	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.8	6.2	5.2	5.2	7.0	5.4
Progression Factor	1.41	2.79		1.00	1.00		0.79	0.73	0.88	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.4		0.0	0.1		0.7	0.5	0.0	0.0	1.1	0.1
Delay (s)	26.0	49.0		17.1	17.1		5.2	5.1	4.6	5.2	8.2	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		41.4			17.1			5.1			7.8	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	251	163	158	196	0	0	0	0	109	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2904		1693	3288					1503	3021	
Flt Permitted		1.00		0.41	1.00					0.95	1.00	
Satd. Flow (perm)		2904		725	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	264	172	166	206	0	0	0	0	115	495	397
RTOR Reduction (vph)	0	106	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	330	0	166	206	0	0	0	0	115	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		567	1805					545	1096	
v/s Ratio Prot		c0.11		c0.06	0.06					0.08	c0.25	
v/s Ratio Perm				0.09								
v/c Ratio		0.35		0.29	0.11					0.21	0.68	
Uniform Delay, d1		26.3		13.3	11.1					22.4	27.6	
Progression Factor		1.00		2.14	2.09					1.00	1.00	
Incremental Delay, d2		1.0		1.2	0.1					0.9	3.5	
Delay (s)		27.4		29.6	23.2					23.3	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.4			26.1			0.0			30.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	28.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	219	0	0	277	109	77	539	227	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2844		1767	1782	1560			
Flt Permitted	0.39	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	686	3196			2844		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	231	0	0	292	115	81	567	239	0	0	0
RTOR Reduction (vph)	0	0	0	0	41	0	0	0	164	0	0	0
Lane Group Flow (vph)	148	231	0	0	366	0	81	567	75	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	716	1974			725		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.13		0.05	c0.32				
v/s Ratio Perm	0.05								0.05			
v/c Ratio	0.21	0.12			0.50		0.16	1.08	0.16			
Uniform Delay, d1	10.2	8.0			32.5		26.6	36.0	26.7			
Progression Factor	0.43	0.44			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			2.5		0.6	63.3	0.8			
Delay (s)	5.0	3.6			35.0		27.3	99.3	27.5			
Level of Service	A	A			C		C	F	C			
Approach Delay (s)		4.2			35.0			73.4			0.0	
Approach LOS		A			C			E			A	

Intersection Summary			
HCM Average Control Delay	48.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	510	479	81	534	0	0	0	0	9	432	269
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3097		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3097		200	3306					1596	3192	1530
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	537	504	85	562	0	0	0	0	9	455	283
RTOR Reduction (vph)	0	170	0	0	0	0	0	0	0	0	0	187
Lane Group Flow (vph)	0	871	0	85	562	0	0	0	0	9	455	96
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		380	1917					543	1085	520
v/s Ratio Prot		c0.28		0.04	c0.17					0.01	c0.14	0.06
v/s Ratio Perm				0.08								
v/c Ratio		0.78		0.22	0.29					0.02	0.42	0.19
Uniform Delay, d1		28.5		14.5	10.6					21.9	25.4	23.2
Progression Factor		1.00		1.01	1.18					1.00	1.00	1.00
Incremental Delay, d2		5.5		0.9	0.3					0.1	1.2	0.8
Delay (s)		34.0		15.5	12.8					22.0	26.6	24.0
Level of Service		C		B	B					C	C	C
Approach Delay (s)		34.0			13.2			0.0			25.6	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	104	0	0	150	5	465	479	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3109			3174		1555	1653	1530			
Flt Permitted	0.64	0.71			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	986	2282			3174		1555	1653	1530			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	437	109	0	0	158	5	489	504	61	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	218	328	0	0	160	0	489	504	23	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	677	1462			476		575	612	566			
v/s Ratio Prot	c0.12	0.08			c0.05		c0.31	0.30	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.32	0.22			0.34		0.85	0.82	0.04			
Uniform Delay, d1	14.1	13.6			38.0		29.0	28.5	20.1			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.9		14.6	11.9	0.1			
Delay (s)	4.1	3.6			40.0		43.6	40.5	20.3			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		3.8			40.0			40.7			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	29.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	211	103	109	241	111	84	699	76	100	884	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2936			2924		1508	3069	1309	1508	3099	1298
Flt Permitted		0.76			0.75		0.16	1.00	1.00	0.26	1.00	1.00
Satd. Flow (perm)		2259			2233		261	3069	1309	407	3099	1298
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	80	218	106	112	248	114	87	721	78	103	911	67
RTOR Reduction (vph)	0	42	0	0	36	0	0	0	48	0	0	33
Lane Group Flow (vph)	0	362	0	0	438	0	87	721	30	103	911	34
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		1005			736		169	1210	508	224	1221	504
v/s Ratio Prot		c0.03					c0.02	0.23		0.02	c0.29	
v/s Ratio Perm		0.13			c0.20		0.19		0.02	0.17		0.03
v/c Ratio		0.36			0.60		0.51	0.60	0.06	0.46	0.75	0.07
Uniform Delay, d1		16.7			23.8		16.6	20.4	16.3	15.9	22.1	16.3
Progression Factor		1.00			1.00		1.35	0.68	0.62	1.11	1.17	1.76
Incremental Delay, d2		1.0			3.5		10.1	2.0	0.2	4.8	3.0	0.2
Delay (s)		17.7			27.3		32.5	15.9	10.3	22.4	28.8	28.9
Level of Service		B			C		C	B	B	C	C	C
Approach Delay (s)		17.7			27.3			17.1			28.2	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	305	0	0	339	84	53	44	33	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.97				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1730			1701			1654				
Flt Permitted		0.85			1.00			0.98				
Satd. Flow (perm)		1493			1701			1654				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	80	321	0	0	357	88	56	46	35	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	19	0	0	0	0
Lane Group Flow (vph)	0	401	0	0	431	0	0	118	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		873			994			483				
v/s Ratio Prot					0.25							
v/s Ratio Perm		c0.27						0.07				
v/c Ratio		0.46			0.43			0.24				
Uniform Delay, d1		7.7			7.5			17.5				
Progression Factor		1.00			0.65			1.00				
Incremental Delay, d2		1.7			1.2			1.2				
Delay (s)		9.4			6.1			18.7				
Level of Service		A			A			B				
Approach Delay (s)		9.4			6.1			18.7			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	289	27	39	347	50	28	118	39	53	150	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.98			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1956			1938			2969			2988	
Flt Permitted		0.97			0.95			0.90			0.86	
Satd. Flow (perm)		1899			1846			2679			2606	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	20	304	28	41	365	53	29	124	41	56	158	44
RTOR Reduction (vph)	0	5	0	0	7	0	0	24	0	0	26	0
Lane Group Flow (vph)	0	347	0	0	452	0	0	170	0	0	232	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		876			852			1113			1082	
v/s Ratio Prot												
v/s Ratio Perm		0.18			c0.24			0.06			c0.09	
v/c Ratio		0.40			0.53			0.15			0.21	
Uniform Delay, d1		11.5			12.5			11.9			12.2	
Progression Factor		0.58			0.41			1.06			0.43	
Incremental Delay, d2		1.2			2.1			0.3			0.4	
Delay (s)		7.9			7.3			12.9			5.6	
Level of Service		A			A			B			A	
Approach Delay (s)		7.9			7.3			12.9			5.6	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	255	39	81	448	86	43	219	98	83	227	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	3033		1568	3074		1587	2962		1585	3076	
Flt Permitted	0.35	1.00		0.56	1.00		0.57	1.00		0.55	1.00	
Satd. Flow (perm)	558	3033		919	3074		946	2962		918	3076	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	43	268	41	85	472	91	45	231	103	87	239	65
RTOR Reduction (vph)	0	19	0	0	24	0	0	48	0	0	30	0
Lane Group Flow (vph)	43	290	0	85	539	0	45	286	0	87	274	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	189	1027		311	1040		509	1595		494	1656	
v/s Ratio Prot		0.10			c0.18			c0.10			0.09	
v/s Ratio Perm	0.08			0.09			0.05			0.09		
v/c Ratio	0.23	0.28		0.27	0.52		0.09	0.18		0.18	0.17	
Uniform Delay, d1	15.4	15.7		15.7	17.2		7.3	7.7		7.6	7.6	
Progression Factor	0.79	0.76		0.91	0.92		0.82	0.81		1.07	1.07	
Incremental Delay, d2	2.7	0.7		2.1	1.8		0.3	0.2		0.8	0.2	
Delay (s)	14.8	12.6		16.4	17.7		6.3	6.4		9.0	8.4	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		12.9			17.5			6.4			8.5	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	287	68	87	401	50	44	231	58	46	279	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1508	3013		1429	3720			3485			3521	
Flt Permitted	0.46	1.00		0.53	1.00			0.87			0.88	
Satd. Flow (perm)	726	3013		792	3720			3042			3120	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	302	72	92	422	53	46	243	61	48	294	67
RTOR Reduction (vph)	0	32	0	0	15	0	0	28	0	0	25	0
Lane Group Flow (vph)	58	342	0	92	460	0	0	322	0	0	384	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	346	1437		378	1774			1217			1248	
v/s Ratio Prot		0.11			c0.12							
v/s Ratio Perm	0.08			0.12				0.11			c0.12	
v/c Ratio	0.17	0.24		0.24	0.26			0.26			0.31	
Uniform Delay, d1	9.7	10.0		10.1	10.1			13.1			13.3	
Progression Factor	1.52	1.66		1.12	1.12			0.47			0.68	
Incremental Delay, d2	1.0	0.4		1.4	0.3			0.5			0.6	
Delay (s)	15.8	17.0		12.7	11.7			6.7			9.7	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		16.8			11.9			6.7			9.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	246	82	92	279	92	118	82	47	47	82	118
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1669	1436		3083			1885			1835	
Flt Permitted		0.79	1.00		0.81			0.69			0.91	
Satd. Flow (perm)		1342	1436		2535			1338			1680	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	86	259	86	97	294	97	124	86	49	49	86	124
RTOR Reduction (vph)	0	0	41	0	33	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	345	45	0	455	0	0	246	0	0	208	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		702	751		1326			432			543	
v/s Ratio Prot												
v/s Ratio Perm		c0.26	0.03		0.18			c0.18			0.12	
v/c Ratio		0.49	0.06		0.34			0.57			0.38	
Uniform Delay, d1		10.0	7.6		9.0			18.3			17.0	
Progression Factor		1.82	4.36		0.51			1.00			1.00	
Incremental Delay, d2		2.4	0.1		0.7			5.4			2.0	
Delay (s)		20.5	33.4		5.3			23.6			19.0	
Level of Service		C	C		A			C			B	
Approach Delay (s)		23.1			5.3			23.6			19.0	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	253	18	26	317	60	24	133	47	62	146	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1443	3037		1563	3017			3582			3605	
Flt Permitted	0.51	1.00		0.58	1.00			0.91			0.85	
Satd. Flow (perm)	771	3037		949	3017			3268			3094	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	47	266	19	27	334	63	25	140	49	65	154	64
RTOR Reduction (vph)	0	8	0	0	24	0	0	29	0	0	37	0
Lane Group Flow (vph)	47	277	0	27	373	0	0	185	0	0	246	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	356	1402		438	1392			1357			1285	
v/s Ratio Prot		0.09			c0.12							
v/s Ratio Perm	0.06			0.03				0.06			c0.08	
v/c Ratio	0.13	0.20		0.06	0.27			0.14			0.19	
Uniform Delay, d1	10.0	10.4		9.7	10.8			11.8			12.1	
Progression Factor	0.78	0.79		0.77	0.60			1.06			0.40	
Incremental Delay, d2	0.7	0.3		0.1	0.3			0.2			0.3	
Delay (s)	8.5	8.5		7.6	6.7			12.7			5.2	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		8.5			6.8			12.7			5.2	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	434	18	86	500	222	22	124	115	340	261	81
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3288			3167			3088			3182	
Flt Permitted		0.81			0.83			0.92			0.71	
Satd. Flow (perm)		2668			2627			2843			2309	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	457	19	91	526	234	23	131	121	358	275	85
RTOR Reduction (vph)	0	4	0	0	60	0	0	65	0	0	16	0
Lane Group Flow (vph)	0	517	0	0	791	0	0	210	0	0	702	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		1026			1010			1350			604	
v/s Ratio Prot								c0.02				
v/s Ratio Perm		0.19			c0.30			0.05			c0.30	
v/c Ratio		0.50			0.78			0.16			1.27dl	
Uniform Delay, d1		15.3			17.6			10.2			24.0	
Progression Factor		1.49			1.00			1.00			0.79	
Incremental Delay, d2		1.8			6.1			0.2			89.5	
Delay (s)		24.5			23.7			10.4			108.4	
Level of Service		C			C			B			F	
Approach Delay (s)		24.5			23.7			10.4			108.4	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	48.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	891	126	48	790	0	80	0	36	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3041			3090			1618				
Flt Permitted		1.00			0.81			0.79				
Satd. Flow (perm)		3041			2522			1329				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	938	133	51	832	0	84	0	38	0	0	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	1056	0	0	883	0	0	104	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1960			925			236				
v/s Ratio Prot		c0.35										
v/s Ratio Perm					c0.35			c0.08				
v/c Ratio		0.54			0.95			0.44				
Uniform Delay, d1		8.7			27.8			33.0				
Progression Factor		0.08			1.40			1.00				
Incremental Delay, d2		0.4			19.6			5.9				
Delay (s)		1.1			58.4			38.9				
Level of Service		A			E			D				
Approach Delay (s)		1.1			58.4			38.9			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	27.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	222	638	22	112	612	185	60	4	107	212	10	212
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3194		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.31	1.00		0.36	1.00	1.00		0.88		0.43	1.00	1.00
Satd. Flow (perm)	513	3194		626	3320	1485		1594		758	1748	1485
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	234	672	23	118	644	195	63	4	113	223	11	223
RTOR Reduction (vph)	0	2	0	0	0	88	0	94	0	0	0	130
Lane Group Flow (vph)	234	693	0	118	644	107	0	86	0	223	11	93
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	55.7	43.5		48.8	39.6	49.6		11.3		24.3	24.3	37.4
Effective Green, g (s)	55.7	43.5		48.8	39.6	49.6		11.3		24.3	24.3	37.4
Actuated g/C Ratio	0.62	0.48		0.54	0.44	0.55		0.13		0.27	0.27	0.42
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	468	1544		445	1461	818		200		305	472	617
v/s Ratio Prot	c0.07	0.22		0.03	0.19	0.01				c0.08	0.01	0.02
v/s Ratio Perm	c0.24			0.12		0.06		0.05		c0.12		0.04
v/c Ratio	0.50	0.45		0.27	0.44	0.13		0.43		0.73	0.02	0.15
Uniform Delay, d1	8.5	15.3		10.2	17.5	9.8		36.4		28.5	24.1	16.4
Progression Factor	2.64	1.92		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.8		0.4	1.0	0.1		2.0		8.7	0.0	0.2
Delay (s)	23.5	30.3		10.6	18.5	9.8		38.4		37.2	24.2	16.5
Level of Service	C	C		B	B	A		D		D	C	B
Approach Delay (s)		28.6			15.8			38.4			26.8	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	24.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	516	441	2	332	0	0	0	0	19	0	577
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	543	464	2	349	0	0	0	0	20	0	607
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	349			543			722	897	272	625	897	175
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	349			543			722	897	272	625	897	175
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	95	100	27
cM capacity (veh/h)	1199			1015			85	276	723	366	276	835

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	272	272	464	119	233	20	607
Volume Left	0	0	0	2	0	20	0
Volume Right	0	0	464	0	0	0	607
cSH	1700	1700	1700	1015	1700	366	835
Volume to Capacity	0.16	0.16	0.27	0.00	0.14	0.05	0.73
Queue Length 95th (ft)	0	0	0	0	0	4	163
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	15.4	19.9
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		19.7	
Approach LOS						C	

Intersection Summary			
Average Delay	6.2		
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	535	0	334	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	563	0	352	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	282	282	352
Volume Left (vph)	282	282	352
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.1	6.1	5.5
Degree Utilization, x	0.48	0.48	0.54
Capacity (veh/h)	574	576	624
Control Delay (s)	13.3	13.3	14.7
Approach Delay (s)	13.3		14.7
Approach LOS	B		B

Intersection Summary			
Delay	13.9		
HCM Level of Service	B		
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	472	64	192	495	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3153		1605	3210						3073	
Flt Permitted		1.00		0.36	1.00						0.97	
Satd. Flow (perm)		3153		617	3210						3073	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	497	67	202	521	0	0	0	0	106	22	61
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	42	0
Lane Group Flow (vph)	0	552	0	202	521	0	0	0	0	0	147	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		472	1850						976	
v/s Ratio Prot		0.18		c0.05	0.16						c0.05	
v/s Ratio Perm				c0.20								
v/c Ratio		0.41		0.43	0.28						0.15	
Uniform Delay, d1		17.1		14.7	9.1						20.8	
Progression Factor		1.00		0.33	0.19						1.00	
Incremental Delay, d2		0.9		2.4	0.3						0.3	
Delay (s)		18.1		7.2	2.1						21.1	
Level of Service		B		A	A						C	
Approach Delay (s)		18.1			3.5			0.0			21.1	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	478	0	0	624	129	63	90	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.97			0.96				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1660	3320			3127			4507				
Flt Permitted	0.24	1.00			1.00			0.99				
Satd. Flow (perm)	419	3320			3127			4507				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	503	0	0	657	136	66	95	61	0	0	0
RTOR Reduction (vph)	0	0	0	0	21	0	0	42	0	0	0	0
Lane Group Flow (vph)	100	503	0	0	772	0	0	180	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	383	1875			1288			1432				
v/s Ratio Prot	0.03	c0.15			c0.25			c0.04				
v/s Ratio Perm	0.12											
v/c Ratio	0.26	0.27			0.60			0.13				
Uniform Delay, d1	16.9	9.5			19.5			20.6				
Progression Factor	0.39	0.32			1.00			1.00				
Incremental Delay, d2	1.6	0.3			2.1			0.2				
Delay (s)	8.2	3.3			21.6			20.8				
Level of Service	A	A			C			C				
Approach Delay (s)		4.1			21.6			20.8			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	342	114	79	366	79	129	78	27	30	87	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2976			3006			1842			1769	
Flt Permitted		0.69			0.75			0.73			0.95	
Satd. Flow (perm)		2070			2273			1374			1689	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	120	360	120	83	385	83	136	82	28	32	92	152
RTOR Reduction (vph)	0	34	0	0	22	0	0	7	0	0	68	0
Lane Group Flow (vph)	0	566	0	0	529	0	0	239	0	0	208	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		732			804			676			832	
v/s Ratio Prot												
v/s Ratio Perm		c0.27			0.23			c0.17			0.12	
v/c Ratio		0.77			0.66			0.35			0.25	
Uniform Delay, d1		18.7			17.7			10.1			9.6	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		7.8			4.2			1.4			0.7	
Delay (s)		26.5			21.9			11.6			10.3	
Level of Service		C			C			B			B	
Approach Delay (s)		26.5			21.9			11.6			10.3	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	201	88	159	311	65	124	539	67	95	940	146
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2980		1573	3683		1508	3069	1333	1520	3099	1336
Flt Permitted	0.45	1.00		0.53	1.00		0.13	1.00	1.00	0.34	1.00	1.00
Satd. Flow (perm)	739	2980		880	3683		212	3069	1333	545	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	212	93	167	327	68	131	567	71	100	989	154
RTOR Reduction (vph)	0	58	0	0	21	0	0	0	45	0	0	98
Lane Group Flow (vph)	112	247	0	167	374	0	131	567	26	100	989	56
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	982		343	1213		181	1119	486	300	1130	487
v/s Ratio Prot	0.02	0.08		c0.02	0.10		c0.05	0.18		0.02	c0.32	
v/s Ratio Perm	0.11			c0.15			0.26		0.02	0.12		0.04
v/c Ratio	0.37	0.25		0.49	0.31		0.72	0.51	0.05	0.33	0.88	0.12
Uniform Delay, d1	19.4	20.8		20.7	21.3		18.0	21.0	17.5	15.4	25.2	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.42	1.04	2.39
Incremental Delay, d2	3.6	0.6		4.9	0.7		22.1	1.6	0.2	2.3	7.6	0.4
Delay (s)	23.0	21.5		25.5	21.9		40.1	22.7	17.7	24.2	33.9	43.2
Level of Service	C	C		C	C		D	C	B	C	C	D
Approach Delay (s)		21.9			23.0			25.2			34.3	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	295	30	33	393	24	33	100	41	36	124	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1962	1466		1993	1480		2015	1506		2001	1511
Flt Permitted		0.90	1.00		0.96	1.00		0.91	1.00		0.92	1.00
Satd. Flow (perm)		1781	1466		1913	1480		1863	1506		1870	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	311	32	35	414	25	35	105	43	38	131	67
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	25	0	0	39
Lane Group Flow (vph)	0	362	15	0	449	12	0	140	18	0	169	28
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		822	677		883	683		774	626		777	628
v/s Ratio Prot												
v/s Ratio Perm		0.20	0.01		c0.23	0.01		0.08	0.01		c0.09	0.02
v/c Ratio		0.44	0.02		0.51	0.02		0.18	0.03		0.22	0.04
Uniform Delay, d1		11.8	9.5		12.3	9.5		12.0	11.2		12.2	11.3
Progression Factor		1.00	1.00		0.66	0.59		1.21	1.56		0.98	0.83
Incremental Delay, d2		1.7	0.1		2.1	0.0		0.5	0.1		0.6	0.1
Delay (s)		13.5	9.6		10.1	5.7		15.1	17.6		12.6	9.5
Level of Service		B	A		B	A		B	B		B	A
Approach Delay (s)		13.2			9.9			15.7			11.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	305	20	41	249	31	10	109	21	110	214	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3070		1550	3047		1550	3024		1550	2991	
Flt Permitted	0.95	1.00		0.55	1.00		0.56	1.00		0.67	1.00	
Satd. Flow (perm)	1550	3070		891	3047		915	3024		1085	2991	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	321	21	43	262	33	11	115	22	116	225	68
RTOR Reduction (vph)	0	7	0	0	15	0	0	13	0	0	40	0
Lane Group Flow (vph)	79	335	0	43	280	0	11	124	0	116	253	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1511		302	1031		380	1256		451	1242	
v/s Ratio Prot	c0.05	0.11			c0.09			0.04			0.08	
v/s Ratio Perm				0.05			0.01			c0.11		
v/c Ratio	0.47	0.22		0.14	0.27		0.03	0.10		0.26	0.20	
Uniform Delay, d1	27.3	9.4		14.9	15.7		11.2	11.6		12.4	12.1	
Progression Factor	0.92	0.50		0.76	0.73		0.86	0.90		1.10	1.10	
Incremental Delay, d2	8.9	0.3		1.0	0.6		0.1	0.2		1.4	0.4	
Delay (s)	34.0	5.1		12.3	12.1		9.8	10.6		15.1	13.7	
Level of Service	C	A		B	B		A	B		B	B	
Approach Delay (s)		10.5			12.1			10.5			14.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	38.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	267	69	203	330	63	25	245	20	55	270	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1550	3003		1550	3025			3272			3230	
Flt Permitted	0.51	1.00		0.95	1.00			0.91			0.87	
Satd. Flow (perm)	832	3003		1550	3025			2982			2820	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	67	281	73	214	347	66	26	258	21	58	284	53
RTOR Reduction (vph)	0	36	0	0	24	0	0	9	0	0	19	0
Lane Group Flow (vph)	67	318	0	214	389	0	0	296	0	0	376	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	256	924		143	1350			1147			1085	
v/s Ratio Prot		c0.11		c0.14	0.13							
v/s Ratio Perm	0.08							0.10			c0.13	
v/c Ratio	0.26	0.34		1.50	0.29			0.26			0.35	
Uniform Delay, d1	16.9	17.4		29.5	11.4			13.7			14.2	
Progression Factor	0.65	0.62		1.29	1.14			0.76			0.73	
Incremental Delay, d2	2.4	1.0		244.3	0.3			0.5			0.9	
Delay (s)	13.5	11.7		282.2	13.4			10.9			11.2	
Level of Service	B	B		F	B			B			B	
Approach Delay (s)		12.0			105.1			10.9			11.2	
Approach LOS		B			F			B			B	

Intersection Summary			
HCM Average Control Delay	45.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	295	16	75	605	75	53	110	165	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.99			0.92				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1616			1601			3248				
Flt Permitted		0.96			0.93			0.99				
Satd. Flow (perm)		1556			1502			3248				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	311	17	79	637	79	56	116	174	0	0	0
RTOR Reduction (vph)	0	3	0	0	5	0	0	133	0	0	0	0
Lane Group Flow (vph)	0	342	0	0	790	0	0	213	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.6			41.6			15.4				
Effective Green, g (s)		41.6			41.6			15.4				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		996			961			770				
v/s Ratio Prot												
v/s Ratio Perm		0.22			c0.53			0.07				
v/c Ratio		0.34			0.82			0.28				
Uniform Delay, d1		5.4			8.9			20.3				
Progression Factor		1.59			1.00			1.00				
Incremental Delay, d2		0.9			7.9			0.8				
Delay (s)		9.5			16.8			21.1				
Level of Service		A			B			C				
Approach Delay (s)		9.5			16.8			21.1			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	16.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	73	375	588	39	119	159
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	81	417	653	43	132	177
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.83				0.83	0.83
vC, conflicting volume	714				1277	697
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	551				1231	531
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				9	61
cM capacity (veh/h)	822				145	450

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	498	697	132	177
Volume Left	81	0	132	0
Volume Right	0	43	0	177
cSH	822	1700	145	450
Volume to Capacity	0.10	0.41	0.91	0.39
Queue Length 95th (ft)	8	0	157	46
Control Delay (s)	2.7	0.0	112.8	18.1
Lane LOS	A		F	C
Approach Delay (s)	2.7	0.0	58.6	
Approach LOS			F	

Intersection Summary			
Average Delay	12.9		
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	670	0	1	614	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1526	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1526	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	705	0	1	646	3	31
RTOR Reduction (vph)	0	0	0	0	26	0
Lane Group Flow (vph)	705	0	0	647	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	251	
v/s Ratio Prot	c0.40				c0.01	
v/s Ratio Perm				0.37		
v/c Ratio	0.58			1.02	0.03	
Uniform Delay, d1	6.7			27.0	29.8	
Progression Factor	0.06			1.00	1.00	
Incremental Delay, d2	1.3			39.6	0.2	
Delay (s)	1.7			66.6	30.1	
Level of Service	A			E	C	
Approach Delay (s)	1.7			66.6	30.1	
Approach LOS	A			E	C	

Intersection Summary			
HCM Average Control Delay	32.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	233	596	32	404	0	0	0	0	17	6	246
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	245	627	34	425	0	0	0	0	18	6	259
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	425			245			1055	1052	436	615	738	425
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	425			245			1055	1052	436	615	738	425
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	95	98	55
cM capacity (veh/h)	1145			1303			97	223	574	372	339	577

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	164	709	459	24	259
Volume Left	0	0	34	18	0
Volume Right	0	627	0	0	259
cSH	1700	1700	1303	363	577
Volume to Capacity	0.10	0.42	0.03	0.07	0.45
Queue Length 95th (ft)	0	0	2	5	58
Control Delay (s)	0.0	0.0	0.8	15.6	16.2
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.8	16.2	
Approach LOS				C	

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	250	0	436	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	263	0	459	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	132	132	459
Volume Left (vph)	132	132	459
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.3	6.3	4.9
Degree Utilization, x	0.23	0.23	0.63
Capacity (veh/h)	544	545	708
Control Delay (s)	9.9	9.9	15.8
Approach Delay (s)	9.9		15.8
Approach LOS	A		C

Intersection Summary			
Delay	13.6		
HCM Level of Service	B		
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	490	345	263	621	0	0	0	0	277	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3424					1359	3806	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3424					1359	3806	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	516	363	277	654	0	0	0	0	292	283	392
RTOR Reduction (vph)	0	0	234	0	0	0	0	0	0	0	54	113
Lane Group Flow (vph)	0	516	129	0	931	0	0	0	0	161	556	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		68.2					23.0	23.0	68.0
Effective Green, g (s)		39.0	39.0		68.2					23.0	23.0	68.0
Actuated g/C Ratio		0.24	0.24		0.43					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		775	300		1459					195	547	482
v/s Ratio Prot		c0.16			c0.27					0.12	c0.15	
v/s Ratio Perm			0.10									0.07
v/c Ratio		0.67	0.43		0.64					0.83	1.02	0.17
Uniform Delay, d1		54.6	51.1		36.2					66.6	68.5	28.5
Progression Factor		1.00	1.00		0.06					1.00	1.00	1.00
Incremental Delay, d2		4.5	4.4		0.1					23.9	42.7	0.2
Delay (s)		59.1	55.5		2.4					90.4	111.2	28.7
Level of Service		E	E		A					F	F	C
Approach Delay (s)		57.6			2.4			0.0			91.0	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	50.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.8
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	475	0	0	552	134	332	214	194	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3065				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3065				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	307	500	0	0	581	141	349	225	204	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	84	0	59	0	0	0	0
Lane Group Flow (vph)	307	500	0	0	581	57	265	454	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	83.8	83.8			37.0	37.0	12.2	12.2				
Effective Green, g (s)	83.8	83.8			37.0	37.0	12.2	12.2				
Actuated g/C Ratio	0.52	0.52			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	841	1797			742	343	119	234				
v/s Ratio Prot	c0.19	0.15			c0.18		c0.17	0.15				
v/s Ratio Perm						0.04						
v/c Ratio	0.37	0.28			0.78	0.17	2.23	1.94				
Uniform Delay, d1	22.4	21.2			57.7	49.2	73.9	73.9				
Progression Factor	0.01	0.02			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			5.4	0.2	578.3	438.2				
Delay (s)	0.5	0.4			63.1	49.4	652.2	512.1				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		0.4			60.5			559.8			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	207.9	HCM Level of Service	F
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	258	136	89	210	67	108	522	70	96	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1572	1600	1373	1593	1778		1578	3016		1537	3001	
Flt Permitted	0.42	1.00	1.00	0.49	1.00		0.15	1.00		0.32	1.00	
Satd. Flow (perm)	698	1600	1373	828	1778		246	3016		522	3001	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	143	263	139	91	214	68	110	533	71	98	819	122
RTOR Reduction (vph)	0	0	93	0	12	0	0	11	0	0	13	0
Lane Group Flow (vph)	143	263	46	91	270	0	110	593	0	98	928	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.3	29.3	29.3	33.3	27.8		39.6	34.1		39.6	34.1	
Effective Green, g (s)	34.3	30.3	29.3	31.3	27.8		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.38	0.34	0.33	0.35	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	326	542	450	328	553		171	1150		271	1145	
v/s Ratio Prot	c0.03	c0.16		0.01	0.15		c0.03	0.20		0.02	c0.31	
v/s Ratio Perm	0.14		0.03	0.08			0.24			0.13		
v/c Ratio	0.44	0.49	0.10	0.28	0.49		0.64	0.52		0.36	0.81	
Uniform Delay, d1	19.1	23.4	20.9	20.2	25.0		18.2	21.3		16.4	24.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	3.1	0.5	0.5	3.1		8.0	1.7		0.8	6.3	
Delay (s)	20.0	26.5	21.3	20.6	28.1		26.2	22.9		17.3	31.0	
Level of Service	C	C	C	C	C		C	C		B	C	
Approach Delay (s)		23.5			26.3			23.4			29.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	26.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	313	61	13	298	22	37	59	19	21	91	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.95	
Flt Protected		0.99	1.00		1.00	1.00		0.98			0.99	
Satd. Flow (prot)		1968	1467		1629	1381		1894			1870	
Flt Permitted		0.94	1.00		0.98	1.00		0.89			0.97	
Satd. Flow (perm)		1867	1467		1605	1381		1712			1824	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	329	64	14	314	23	39	62	20	22	96	74
RTOR Reduction (vph)	0	0	32	0	0	12	0	11	0	0	34	0
Lane Group Flow (vph)	0	370	32	0	328	11	0	110	0	0	158	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		919	722		790	680		711			758	
v/s Ratio Prot												
v/s Ratio Perm		0.20	0.02		c0.20	0.01		0.06			c0.09	
v/c Ratio		0.40	0.04		0.42	0.02		0.15			0.21	
Uniform Delay, d1		10.4	8.6		10.5	8.4		11.9			12.2	
Progression Factor		1.00	1.00		1.93	2.82		1.00			1.95	
Incremental Delay, d2		1.3	0.1		1.5	0.0		0.5			0.6	
Delay (s)		11.8	8.7		21.9	23.9		12.3			24.4	
Level of Service		B	A		C	C		B			C	
Approach Delay (s)		11.3			22.0			12.3			24.4	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	17.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	194	41	11	214	10	36	114	19	15	184	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1748	1443		1728	1487		1713	1489		1712	
Flt Permitted		0.88	1.00		0.98	1.00		0.89	1.00		0.98	
Satd. Flow (perm)		1552	1443		1701	1487		1542	1489		1689	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	61	202	43	11	223	10	38	119	20	16	192	73
RTOR Reduction (vph)	0	0	28	0	0	6	0	0	10	0	19	0
Lane Group Flow (vph)	0	263	15	0	234	4	0	157	10	0	262	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		549	511		602	526		759	733		832	
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.14	0.00		0.10	0.01		c0.15	
v/c Ratio		0.48	0.03		0.39	0.01		0.21	0.01		0.31	
Uniform Delay, d1		16.3	13.7		15.7	13.6		9.3	8.4		9.9	
Progression Factor		1.92	3.44		0.96	0.95		0.19	0.24		1.00	
Incremental Delay, d2		2.8	0.1		1.8	0.0		0.4	0.0		1.0	
Delay (s)		34.2	47.3		16.9	12.9		2.2	2.1		10.9	
Level of Service		C	D		B	B		A	A		B	
Approach Delay (s)		36.0			16.7			2.2			10.9	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	147	35	76	8	14	9	38	225	8	21	481	204
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1871	1440		1776			1993			1976	1382
Flt Permitted		0.78	1.00		0.94			0.90			0.98	1.00
Satd. Flow (perm)		1509	1440		1693			1814			1948	1382
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	155	37	80	8	15	9	40	237	8	22	506	215
RTOR Reduction (vph)	0	0	47	0	7	0	0	2	0	0	0	90
Lane Group Flow (vph)	0	192	33	0	25	0	0	283	0	0	528	125
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		671	598		443			893			959	680
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.08	0.02		0.01			0.16			c0.27	0.09
v/c Ratio		0.29	0.06		0.06			0.32			0.55	0.18
Uniform Delay, d1		12.6	11.4		18.0			9.9			11.5	9.2
Progression Factor		0.64	0.82		1.00			0.60			0.64	0.23
Incremental Delay, d2		1.0	0.2		0.2			0.8			1.8	0.5
Delay (s)		9.0	9.5		18.2			6.8			9.2	2.6
Level of Service		A	A		B			A			A	A
Approach Delay (s)		9.2			18.2			6.8			7.3	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	866	289	333	961	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4569		1620	3320					1489	2913	1442
Flt Permitted		1.00		0.14	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4569		238	3320					1489	2913	1442
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	884	295	340	981	0	0	0	0	523	290	341
RTOR Reduction (vph)	0	44	0	0	0	0	0	0	0	0	9	105
Lane Group Flow (vph)	0	1135	0	340	981	0	0	0	0	298	584	158
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		47.1		75.2	75.2					27.8	27.8	27.8
Effective Green, g (s)		47.1		75.2	75.2					27.8	27.8	27.8
Actuated g/C Ratio		0.41		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1871		439	2171					360	704	349
v/s Ratio Prot		0.25		c0.16	0.30							
v/s Ratio Perm				c0.35						0.20	0.20	0.11
v/c Ratio		0.61		0.77	0.45					0.83	0.83	0.45
Uniform Delay, d1		26.7		22.4	9.8					41.3	41.4	37.1
Progression Factor		1.00		1.05	1.59					1.00	1.00	1.00
Incremental Delay, d2		1.5		6.2	0.5					14.8	8.2	1.1
Delay (s)		28.1		29.6	16.0					56.1	49.6	38.2
Level of Service		C		C	B					E	D	D
Approach Delay (s)		28.1			19.5			0.0			48.7	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	31.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1038	0	0	864	271	430	351	308	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4526				
Flt Permitted	0.19	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	615	3353			3241	1489		4526				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1093	0	0	909	285	453	369	324	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	95	0	58	0	0	0	0
Lane Group Flow (vph)	359	1093	0	0	909	190	0	1088	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	68.8	68.8			50.9	50.9		34.2				
Effective Green, g (s)	68.8	68.8			50.9	50.9		34.2				
Actuated g/C Ratio	0.60	0.60			0.44	0.44		0.30				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	630	2006			1434	659		1346				
v/s Ratio Prot	0.06	c0.33			c0.28							
v/s Ratio Perm	0.28					0.13		0.24				
v/c Ratio	0.57	0.54			0.63	0.29		0.81				
Uniform Delay, d1	14.1	13.8			24.8	20.5		37.4				
Progression Factor	0.64	0.32			0.94	1.07		1.00				
Incremental Delay, d2	1.0	0.8			1.8	0.9		4.2				
Delay (s)	10.0	5.1			25.1	22.8		41.6				
Level of Service	A	A			C	C		D				
Approach Delay (s)		6.3			24.5			41.6			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM Average Control Delay	22.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	633	408	104	626	53	227	179	66	74	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1564	3273	1313	1600	3283		1578	3002		1540	2941	
Flt Permitted	0.18	1.00	1.00	0.40	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	296	3273	1313	671	3283		652	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	142	666	429	109	659	56	239	188	69	78	171	127
RTOR Reduction (vph)	0	0	173	0	6	0	0	38	0	0	107	0
Lane Group Flow (vph)	142	666	256	109	709	0	239	219	0	78	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.9	52.3	68.7	42.0	32.9		38.1	26.7		26.1	18.2	
Effective Green, g (s)	64.9	52.3	68.7	42.0	32.9		38.1	26.7		26.1	18.2	
Actuated g/C Ratio	0.56	0.45	0.60	0.37	0.29		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	481	1489	784	319	939		348	697		258	465	
v/s Ratio Prot	0.07	c0.20	0.05	c0.03	c0.22		c0.10	0.07		0.02	0.06	
v/s Ratio Perm	0.09		0.15	0.10			c0.13			0.05		
v/c Ratio	0.30	0.45	0.33	0.34	0.76		0.69	0.31		0.30	0.41	
Uniform Delay, d1	14.1	21.5	11.6	24.9	37.4		30.6	36.6		36.2	43.6	
Progression Factor	0.67	0.81	2.63	1.00	1.00		0.86	0.94		1.00	1.00	
Incremental Delay, d2	1.3	0.8	0.2	0.6	5.6		5.4	0.9		0.7	2.1	
Delay (s)	10.8	18.1	30.6	25.5	43.0		31.8	35.1		36.9	45.7	
Level of Service	B	B	C	C	D		C	D		D	D	
Approach Delay (s)		21.6			40.7			33.5			43.8	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM Average Control Delay	31.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	193	367	72	213	113	362	340	78	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.95		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1705	2894		1653	3184		1620	3407		1580	3183	
Flt Permitted	0.52	1.00		0.29	1.00		0.32	1.00		0.50	1.00	
Satd. Flow (perm)	934	2894		502	3184		544	3407		826	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	203	386	76	224	119	381	358	82	217	429	59
RTOR Reduction (vph)	0	269	0	0	56	0	0	17	0	0	9	0
Lane Group Flow (vph)	48	320	0	76	287	0	381	423	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	41.6	34.9		44.0	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	41.6	34.9		44.0	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.36	0.30		0.38	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	383	878		271	999		454	1309		340	888	
v/s Ratio Prot	0.01	c0.11		c0.02	0.09		c0.15	0.12		0.04	0.15	
v/s Ratio Perm	0.04			0.09			c0.26			0.18		
v/c Ratio	0.13	0.36		0.28	0.29		0.84	0.32		0.64	0.54	
Uniform Delay, d1	24.1	31.4		23.7	29.7		20.8	24.9		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.99	0.98	
Incremental Delay, d2	0.2	1.2		0.7	0.7		13.1	0.7		3.8	2.2	
Delay (s)	24.3	32.5		24.3	30.5		33.9	25.5		32.3	36.6	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		31.9			29.4			29.4			35.3	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	603	141	10	376	66	104	287	9	198	609	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.98		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3029			3035		1452	3228		1522	2872	
Flt Permitted		0.72			0.93		0.21	1.00		0.56	1.00	
Satd. Flow (perm)		2185			2822		318	3228		898	2872	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	635	148	11	396	69	109	302	9	208	641	193
RTOR Reduction (vph)	0	25	0	0	21	0	0	3	0	0	44	0
Lane Group Flow (vph)	0	869	0	0	455	0	109	308	0	208	790	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		892			738		207	1192		425	1060	
v/s Ratio Prot		c0.06					c0.03	0.10		0.03	c0.28	
v/s Ratio Perm		c0.31			0.16		0.19			0.18		
v/c Ratio		0.97			0.62		0.53	0.26		0.49	0.75	
Uniform Delay, d1		19.7			21.1		12.2	14.3		12.4	17.8	
Progression Factor		1.00			1.51		1.06	0.59		1.00	1.00	
Incremental Delay, d2		24.5			0.4		8.9	0.5		4.0	4.8	
Delay (s)		44.1			32.2		21.9	8.9		16.4	22.6	
Level of Service		D			C		C	A		B	C	
Approach Delay (s)		44.1			32.2			12.3			21.4	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	198	136	109	167	28	72	462	80	35	698	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.98		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1707	1885		1599	1993		1676	3221		1435	3273	
Flt Permitted	0.62	1.00		0.44	1.00		0.28	1.00		0.41	1.00	
Satd. Flow (perm)	1118	1885		736	1993		502	3221		623	3273	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	71	208	143	115	176	29	76	486	84	37	735	74
RTOR Reduction (vph)	0	38	0	0	9	0	0	21	0	0	12	0
Lane Group Flow (vph)	71	313	0	115	196	0	76	549	0	37	797	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	413	696		272	736		239	1536		297	1561	
v/s Ratio Prot		c0.17			0.10			0.17			c0.24	
v/s Ratio Perm	0.06			0.16			0.15			0.06		
v/c Ratio	0.17	0.45		0.42	0.27		0.32	0.36		0.12	0.51	
Uniform Delay, d1	13.8	15.5		15.3	14.3		10.5	10.7		9.5	11.8	
Progression Factor	1.00	1.00		1.30	1.31		1.00	1.00		1.12	0.91	
Incremental Delay, d2	0.9	2.1		3.0	0.5		3.5	0.6		0.6	0.8	
Delay (s)	14.7	17.6		22.9	19.4		14.0	11.4		11.1	11.5	
Level of Service	B	B		C	B		B	B		B	B	
Approach Delay (s)		17.1			20.7			11.7			11.5	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	785	227	550	18	3	10	9	47	9	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.98	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.94	
Flt Protected		1.00		0.99				0.99			0.97	
Satd. Flow (prot)		3160		3091				1810			1824	
Flt Permitted		0.95		0.56				0.96			0.89	
Satd. Flow (perm)		3012		1753				1750			1671	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	826	239	579	19	3	11	9	49	9	0	3
RTOR Reduction (vph)	0	0	0	2	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	828	0	835	0	0	0	34	0	0	13	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom			Perm	Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7			2	2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		834		852				377			360	
v/s Ratio Prot				c0.09								
v/s Ratio Perm		0.27		c0.32				c0.02			0.01	
v/c Ratio		0.99		1.14dl				0.09			0.04	
Uniform Delay, d1		23.4		18.7				20.4			20.2	
Progression Factor		1.45		0.88				1.00			1.00	
Incremental Delay, d2		20.4		25.5				0.5			0.2	
Delay (s)		54.3		41.9				20.9			20.4	
Level of Service		D		D				C			C	
Approach Delay (s)		54.3		41.9				20.9			20.4	
Approach LOS		D		D				C			C	

Intersection Summary			
HCM Average Control Delay	53.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	242
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1559	
Flt Permitted		1.00	
Satd. Flow (perm)		1559	
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	5	3	255
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	258	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.17	
v/s Ratio Perm			
v/c Ratio		1.07	
Uniform Delay, d1		27.5	
Progression Factor		0.87	
Incremental Delay, d2		77.3	
Delay (s)		101.4	
Level of Service		F	
Approach Delay (s)		101.4	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	264	792	569	63	96	234
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.99		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3279	3271		1660	1485
Flt Permitted		0.65	1.00		0.95	1.00
Satd. Flow (perm)		2152	3271		1660	1485
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	278	834	599	66	101	246
RTOR Reduction (vph)	0	0	13	0	0	182
Lane Group Flow (vph)	0	1112	652	0	101	64
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1324	2013		434	388
v/s Ratio Prot			0.20		c0.06	
v/s Ratio Perm		c0.52				0.04
v/c Ratio		0.84	0.32		0.23	0.17
Uniform Delay, d1		10.0	6.0		18.9	18.5
Progression Factor		1.20	1.19		1.29	2.46
Incremental Delay, d2		2.0	0.4		1.2	0.9
Delay (s)		13.9	7.5		25.6	46.4
Level of Service		B	A		C	D
Approach Delay (s)		13.9	7.5		40.4	
Approach LOS		B	A		D	

Intersection Summary			
HCM Average Control Delay	16.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	81	810	548	152	265	88
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3118	3068		1506	1343
Flt Permitted		0.82	1.00		0.95	1.00
Satd. Flow (perm)		2567	3068		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	85	853	577	160	279	93
RTOR Reduction (vph)	0	0	39	0	0	60
Lane Group Flow (vph)	0	938	698	0	279	33
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1343	1605		533	475
v/s Ratio Prot			0.23		c0.19	
v/s Ratio Perm		c0.37				0.02
v/c Ratio		0.70	0.44		0.52	0.07
Uniform Delay, d1		11.6	9.6		16.7	13.9
Progression Factor		1.08	1.11		1.65	3.36
Incremental Delay, d2		1.9	0.8		3.2	0.3
Delay (s)		14.5	11.4		30.8	46.9
Level of Service		B	B		C	D
Approach Delay (s)		14.5	11.4		34.8	
Approach LOS		B	B		C	

Intersection Summary			
HCM Average Control Delay	17.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	674	261	121	589	205	58
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.96		1.00	1.00	0.97	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2387		1788	2506	1748	
Flt Permitted	1.00		0.13	1.00	0.96	
Satd. Flow (perm)	2387		243	2506	1748	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	709	275	127	620	216	61
RTOR Reduction (vph)	21	0	0	0	16	0
Lane Group Flow (vph)	963	0	127	620	261	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1138		116	1195	645	
v/s Ratio Prot	0.40			0.25	c0.15	
v/s Ratio Perm			c0.52			
v/c Ratio	0.85		1.09	0.52	0.41	
Uniform Delay, d1	14.9		17.0	11.8	15.2	
Progression Factor	1.34		1.00	1.00	1.00	
Incremental Delay, d2	6.0		111.3	1.6	1.9	
Delay (s)	25.9		128.3	13.4	17.1	
Level of Service	C		F	B	B	
Approach Delay (s)	25.9			33.0	17.1	
Approach LOS	C			C	B	

Intersection Summary			
HCM Average Control Delay	27.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	995	38	112	704	1	62	0	157	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.37	1.00	1.00	0.21	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	739	3431	1479	356	3320	1530		1545	1500			
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	1036	40	117	733	1	65	0	164	0	0	0
RTOR Reduction (vph)	0	0	15	0	0	0	0	0	146	0	0	0
Lane Group Flow (vph)	1	1036	25	117	733	1	0	65	18	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	53.0	53.0	53.0	67.9	67.9	67.9		9.1	9.1			
Effective Green, g (s)	53.0	53.0	53.0	67.9	67.9	67.9		9.1	9.1			
Actuated g/C Ratio	0.62	0.62	0.62	0.80	0.80	0.80		0.11	0.11			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	461	2139	922	457	2652	1222		165	161			
v/s Ratio Prot		c0.30		0.04	c0.22							
v/s Ratio Perm	0.00		0.02	0.17		0.00		c0.04	0.01			
v/c Ratio	0.00	0.48	0.03	0.26	0.28	0.00		0.39	0.11			
Uniform Delay, d1	6.0	8.6	6.1	3.2	2.2	1.7		35.4	34.3			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	0.8	0.1	0.3	0.1	0.0		1.6	0.3			
Delay (s)	6.0	9.4	6.2	3.5	2.3	1.7		36.9	34.6			
Level of Service	A	A	A	A	A	A		D	C			
Approach Delay (s)		9.3			2.4			35.3			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	9	946	840	30	71	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3098	3083		1532	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2928	3083		1532	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	996	884	32	75	14
RTOR Reduction (vph)	0	0	3	0	7	0
Lane Group Flow (vph)	0	1005	913	0	82	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1074	2192		119	
v/s Ratio Prot			c0.30		c0.05	
v/s Ratio Perm		c0.34				
v/c Ratio		0.94	0.42		0.69	
Uniform Delay, d1		27.5	5.3		40.4	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		15.8	0.2		27.6	
Delay (s)		43.3	0.3		68.1	
Level of Service		D	A		E	
Approach Delay (s)		43.3	0.3		68.1	
Approach LOS		D	A		E	

Intersection Summary			
HCM Average Control Delay	24.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	480	0	1	577	39	3	2	28	202	0	133
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		1.00			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1774			3340			1467			1669	1348
Flt Permitted		0.92			0.95			0.93			0.89	1.00
Satd. Flow (perm)		1640			3190			1369			1568	1348
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	505	0	1	607	41	3	2	29	213	0	140
RTOR Reduction (vph)	0	0	0	0	6	0	0	26	0	0	0	94
Lane Group Flow (vph)	0	545	0	0	643	0	0	8	0	0	213	46
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		598			1714			145			480	444
v/s Ratio Prot					c0.06						c0.08	
v/s Ratio Perm		c0.33			0.14			0.01			c0.05	0.03
v/c Ratio		0.91			0.38			0.06			0.44	0.10
Uniform Delay, d1		25.7			11.7			34.2			24.4	19.8
Progression Factor		1.00			1.19			1.00			1.00	1.00
Incremental Delay, d2		20.5			0.1			0.7			3.0	0.5
Delay (s)		46.2			14.0			34.9			27.3	20.3
Level of Service		D			B			C			C	C
Approach Delay (s)		46.2			14.0			34.9			24.5	
Approach LOS		D			B			C			C	

Intersection Summary			
HCM Average Control Delay	27.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix C
Bus Rapid Transit (BRT) Alternative

BRT Alternative Project Traffic Estimates

ITE Land Use	Unit	Trip Generation Rate			Peak Hour Direction			
		Daily	AM Peak Hour	PM Peak Hour	AM In	AM Out	PM In	PM Out
Light Rail with Park and Ride	Parking Spaces	2.51	1.07	1.24	80%	20%	20%	80%

BRT Alternative Park and Ride Facilities		Estimated Project Traffic						
Location	Parking Spaces	Daily	AM In	AM Out	AM Total	PM In	PM Out	PM Total
103rd Street	200	502	171	43	214	50	198	248
111th Street	200	502	171	43	214	50	198	248
Kensington Avenue	1,000	2,510	856	214	1,070	248	992	1,240
130th Street	1,400	3,514	1,198	300	1,498	347	1,389	1,736
Total	**2,800**	**7,028**	**2,396**	**600**	**2,996**	**695**	**2,777**	**3,472**

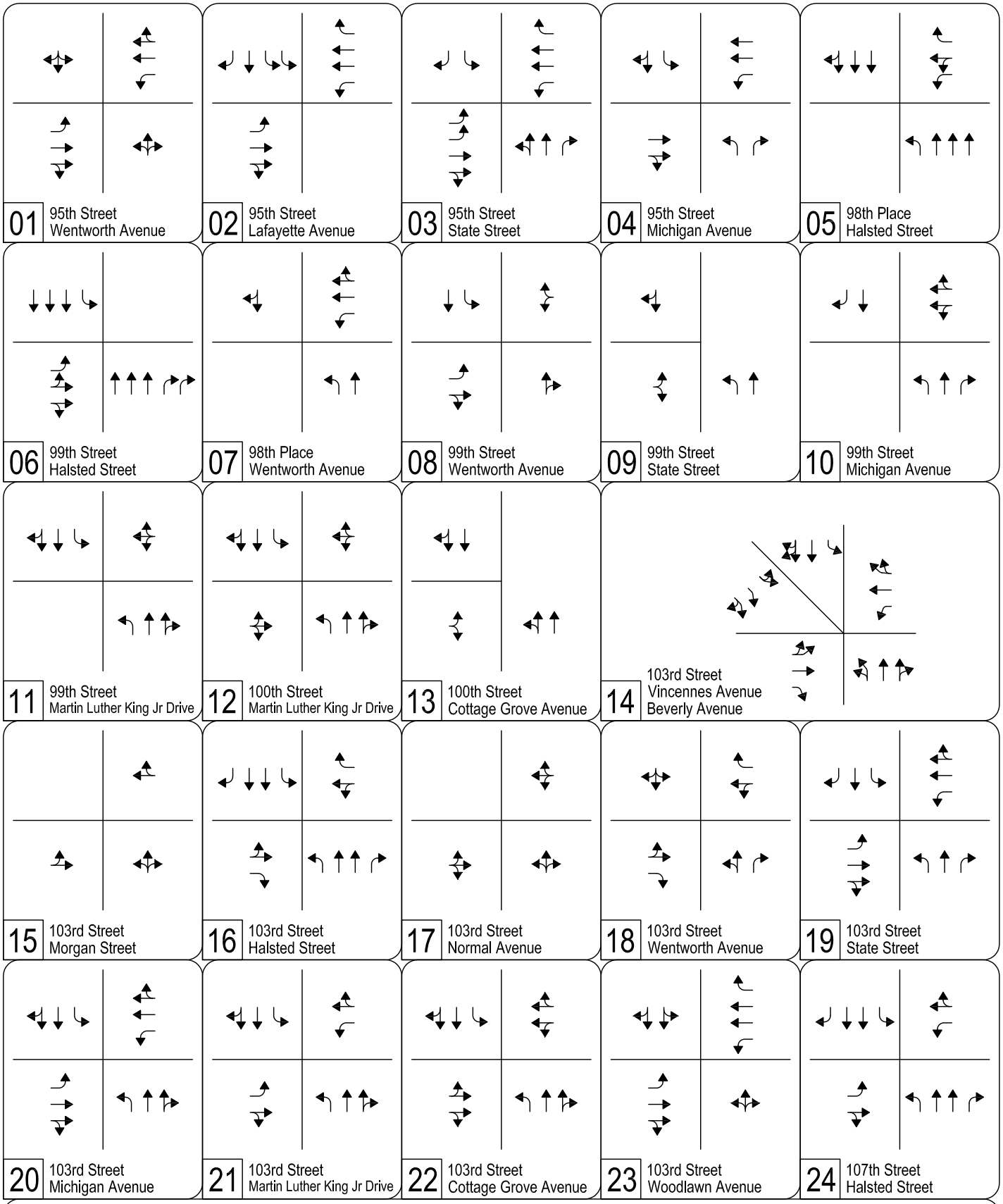

BRT Alternative (2026) Intersection Lane Geometry

Page 1 of 3

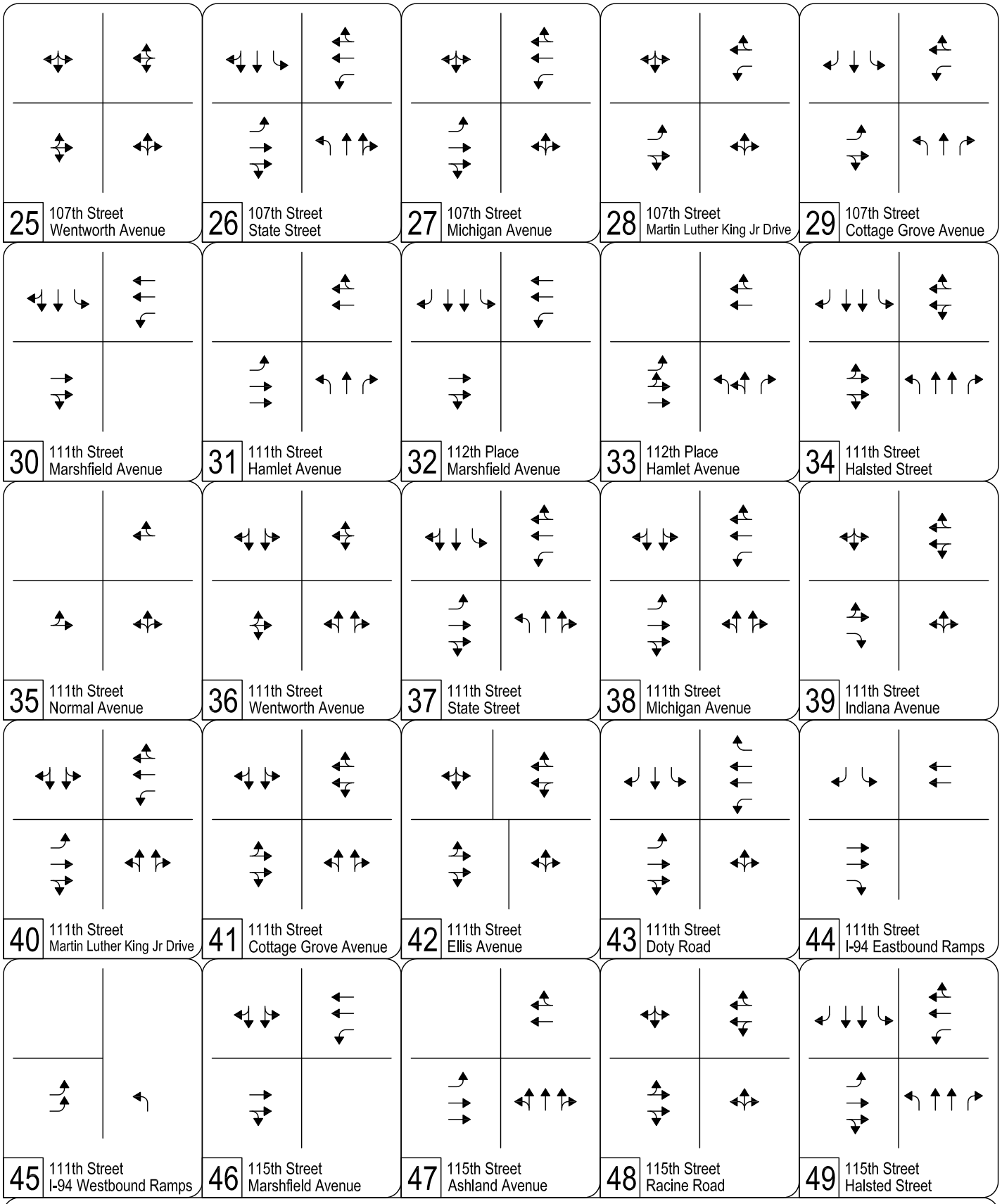

BRT Alternative (2026) Intersection Lane Geometry

Page 2 of 3

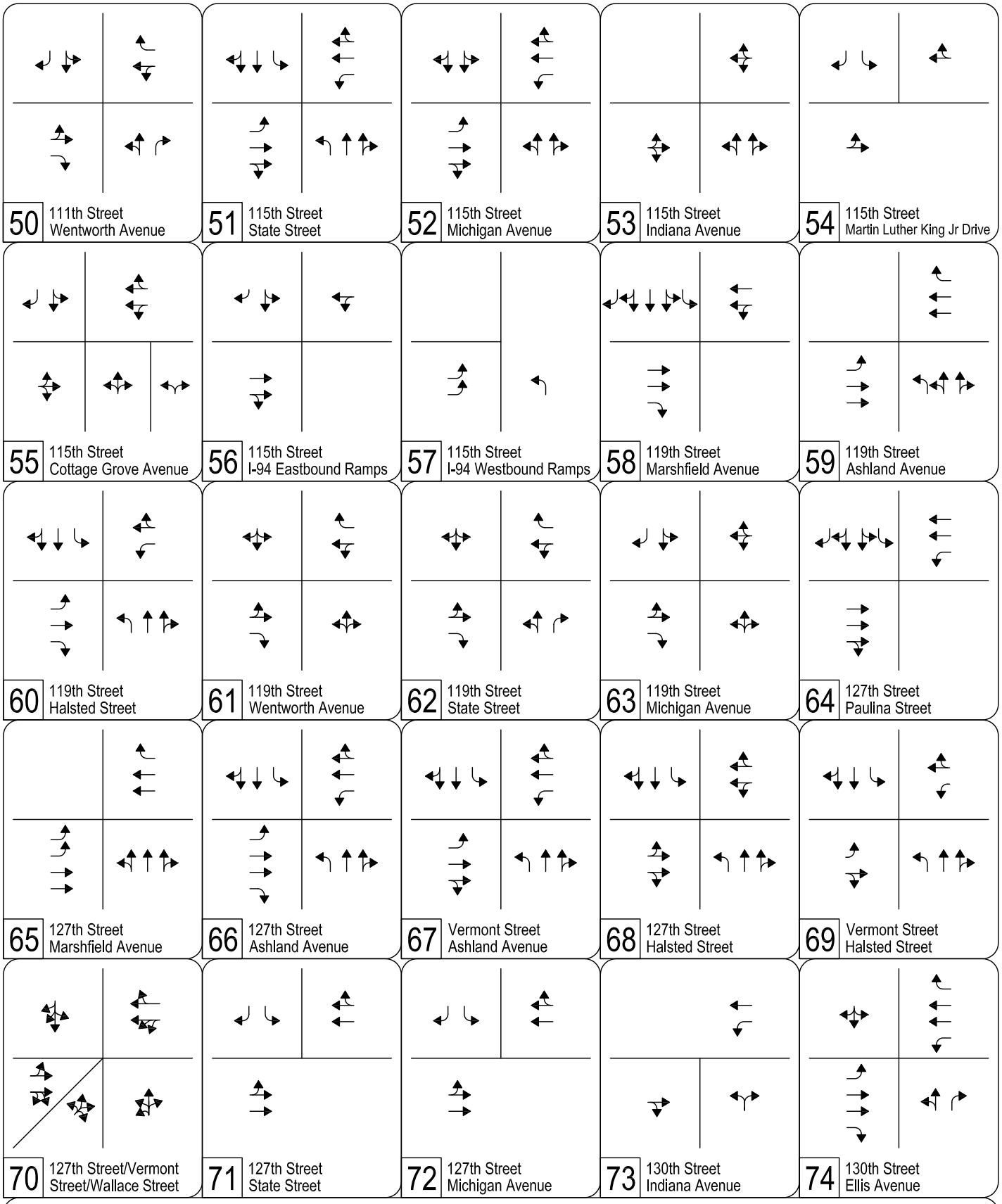

BRT Alternative (2026) Intersection Lane Geometry

Page 3 of 3

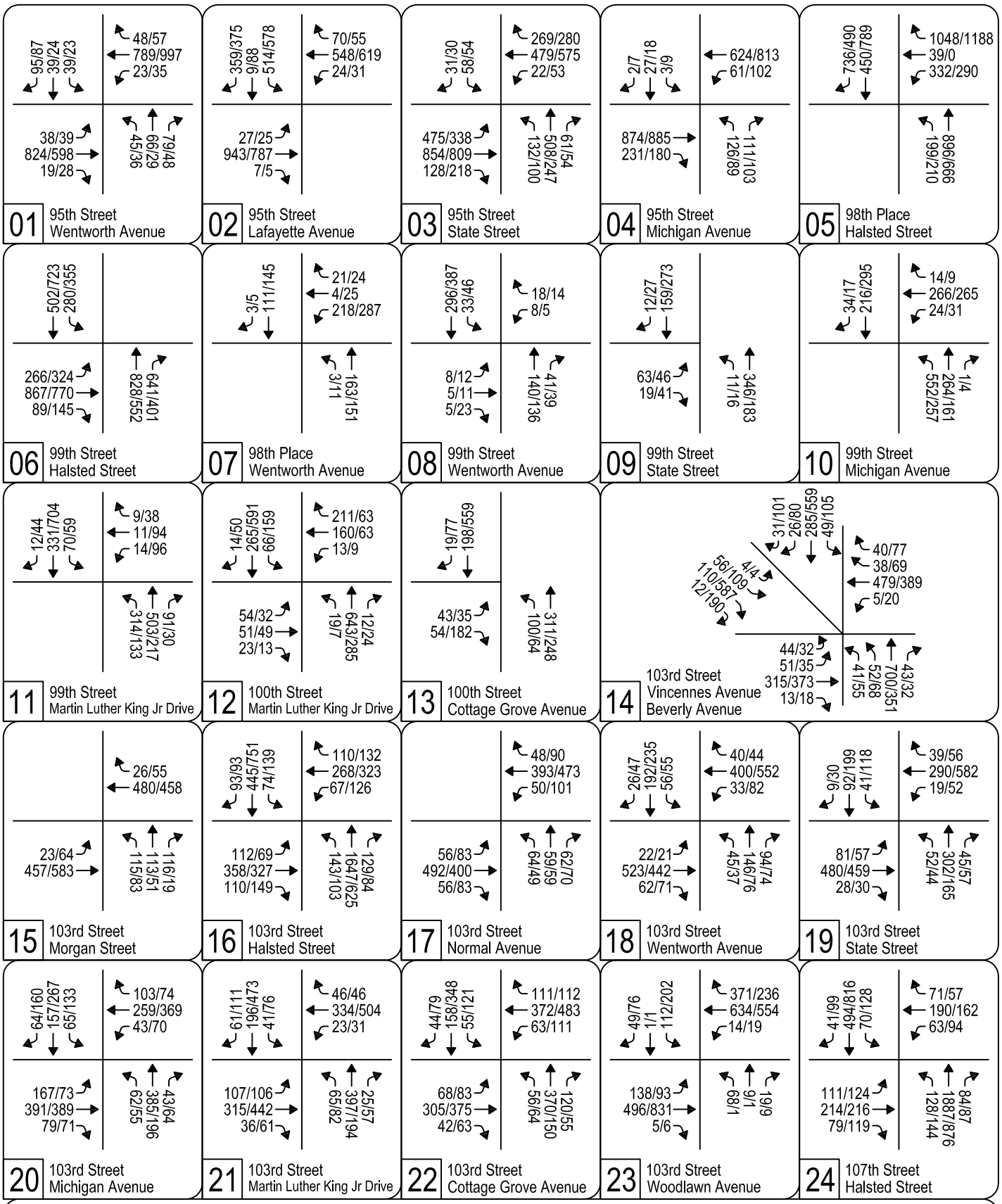

BRT Alternative (2026) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

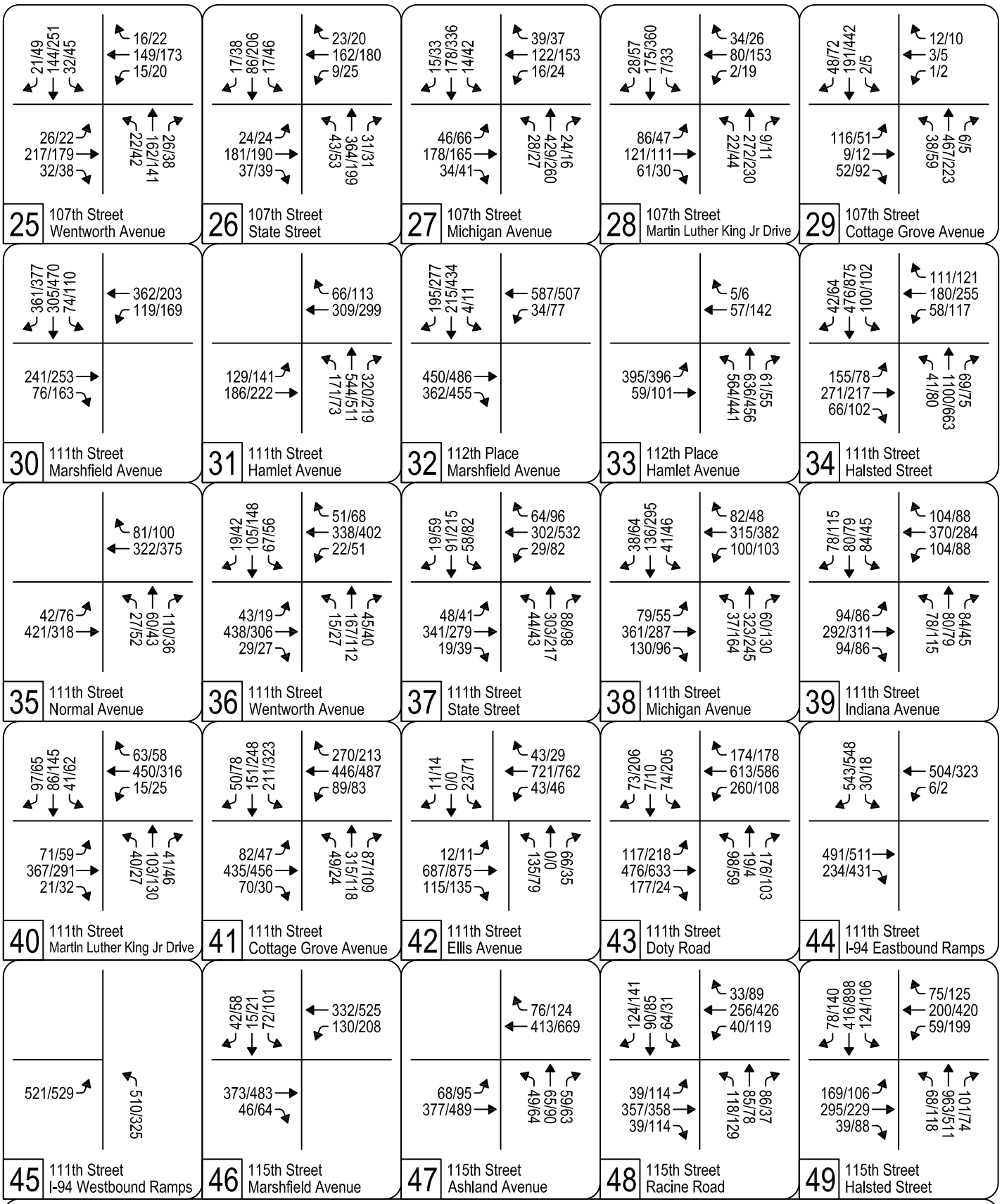

BRT Alternative (2026) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

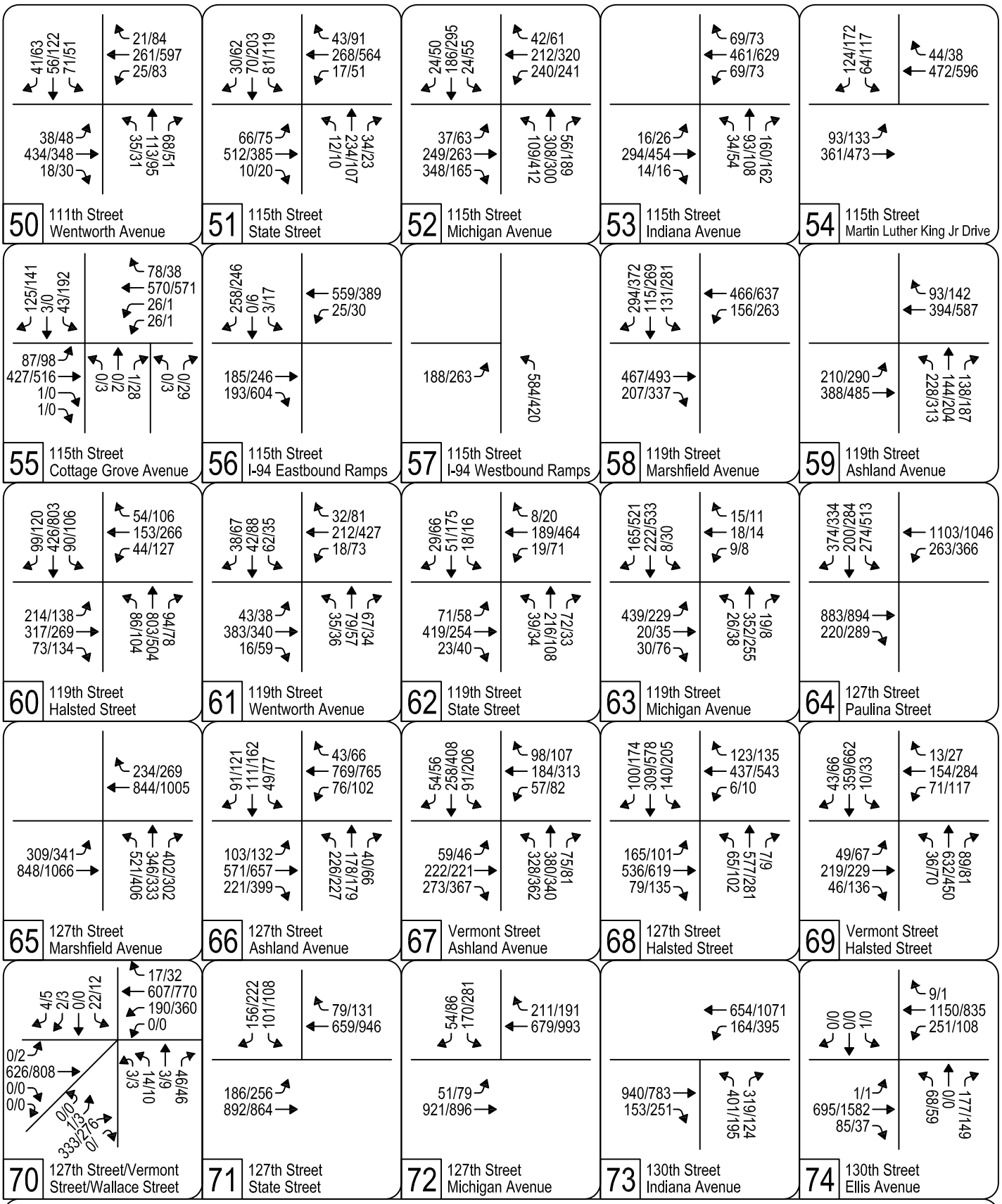

BRT Alternative (2026) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	824	19	23	789	48	45	66	79	39	39	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.98	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1416	2975		1592	2978			1753			1670	
Flt Permitted	0.26	1.00		0.26	1.00			0.90			0.90	
Satd. Flow (perm)	384	2975		429	2978			1597			1527	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	867	20	24	831	51	47	69	83	41	41	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	63	0
Lane Group Flow (vph)	40	885	0	24	875	0	0	160	0	0	119	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	201	1556		224	1558			565			540	
v/s Ratio Prot		c0.30			0.29							
v/s Ratio Perm	0.10			0.06				c0.10			0.08	
v/c Ratio	0.20	0.57		0.11	0.56			0.28			0.22	
Uniform Delay, d1	8.3	10.5		7.8	10.5			15.1			14.7	
Progression Factor	1.00	1.00		0.81	1.13			1.00			1.00	
Incremental Delay, d2	2.2	1.5		0.8	1.3			1.2			0.9	
Delay (s)	10.5	12.0		7.2	13.1			16.3			15.7	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.0			12.9			16.3			15.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	943	7	24	548	70	0	0	0	514	9	359
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	776	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	355	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	993	7	25	577	74	0	0	0	541	9	378
RTOR Reduction (vph)	0	1	0	0	0	32	0	0	0	0	0	172
Lane Group Flow (vph)	28	999	0	25	577	42	0	0	0	541	9	206
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	163	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.30		0.01	c0.18					c0.17	0.01	
v/s Ratio Perm	0.04			0.01		0.08						0.15
v/c Ratio	0.17	0.92		0.04	0.33	0.14				0.76	0.03	0.64
Uniform Delay, d1	31.6	41.8		15.1	15.3	13.6				46.6	38.7	45.1
Progression Factor	0.80	0.82		0.29	0.62	1.95				1.00	1.00	1.00
Incremental Delay, d2	2.0	12.2		0.1	0.3	0.7				7.3	0.2	9.2
Delay (s)	27.2	46.7		4.5	9.8	27.2				53.9	38.9	54.3
Level of Service	C	D		A	A	C				D	D	D
Approach Delay (s)		46.2			11.5			0.0			54.0	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	40.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	475	854	128	22	479	269	132	508	61	58	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.95	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1419	855		738
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1419	855		738
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	500	899	135	23	504	283	139	535	64	61	0	33
RTOR Reduction (vph)	0	9	0	0	0	161	0	0	25	0	0	30
Lane Group Flow (vph)	500	1025	0	23	504	122	0	674	39	61	0	3
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	40.0	62.0		9.0	31.0	31.0		31.0	31.0	10.0		10.0
Effective Green, g (s)	40.0	62.0		9.0	31.0	31.0		31.0	31.0	10.0		10.0
Actuated g/C Ratio	0.31	0.48		0.07	0.24	0.24		0.24	0.24	0.08		0.08
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	982	1482		108	697	225		787	338	66		57
v/s Ratio Prot	0.16	c0.33		0.01	c0.17			c0.20		c0.07		
v/s Ratio Perm						0.13			0.03			0.00
v/c Ratio	0.51	0.69		0.21	0.72	0.54		0.86	0.11	0.92		0.04
Uniform Delay, d1	36.9	26.5		57.2	45.6	43.3		47.4	38.8	59.6		55.6
Progression Factor	0.75	0.21		1.00	1.00	1.00		0.94	0.89	1.00		1.00
Incremental Delay, d2	0.9	1.3		4.5	6.4	9.0		11.4	0.7	83.9		0.3
Delay (s)	28.5	6.9		61.6	52.0	52.3		56.2	35.3	143.5		55.9
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		13.9			52.3			54.4			112.7	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	36.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	874	231	61	624	0	126	0	111	3	27	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2852		1650	3005		1390		1465	1803	1961	
Flt Permitted		1.00		0.16	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2852		275	3005		1078		1465	1803	1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	971	257	68	693	0	140	0	123	3	30	2
RTOR Reduction (vph)	0	24	0	0	0	0	0	0	82	0	1	0
Lane Group Flow (vph)	0	1204	0	68	693	0	140	0	41	3	31	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1711		165	1803		345		469	577	628	
v/s Ratio Prot		c0.42			0.23						0.02	
v/s Ratio Perm				0.25			c0.13		0.03	0.00		
v/c Ratio		0.70		0.41	0.38		0.41		0.09	0.01	0.05	
Uniform Delay, d1		13.8		10.6	10.4		26.6		23.8	23.2	23.5	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.5		7.4	0.6		3.5		0.4	0.0	0.1	
Delay (s)		16.3		18.1	11.0		30.1		24.2	23.2	23.6	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.3			11.6			27.3			23.6	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	332	39	1048	199	896	0	0	450	736
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3931	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3931	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	339	40	1069	203	914	0	0	459	751
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	339	40	1069	203	914	0	0	1210	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1161	
v/s Ratio Prot							c0.13	0.21			c0.31	
v/s Ratio Perm				0.22	0.02	c0.72						
v/c Ratio				0.75	0.08	2.53	0.43	0.33			1.87dr	
Uniform Delay, d1				33.5	26.7	37.5	29.2	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.65	2.37			1.00	
Incremental Delay, d2				11.1	0.3	694.2	2.0	0.2			38.1	
Delay (s)				44.6	27.1	731.7	21.2	21.9			75.1	
Level of Service				D	C	F	C	C			E	
Approach Delay (s)		0.0			551.4			21.8			75.1	
Approach LOS		A			F			C			E	

Intersection Summary			
HCM Average Control Delay	242.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	266	867	89	0	0	0	0	828	641	280	502	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3185						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3185						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	274	894	92	0	0	0	0	854	661	289	518	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	247	1006	0	0	0	0	0	854	661	289	518	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.18	0.11	
v/s Ratio Perm	0.16	0.32							c0.30			
v/c Ratio	0.51	0.98						0.73	1.13	0.62	0.19	
Uniform Delay, d1	28.7	35.1						35.1	38.5	31.9	9.9	
Progression Factor	1.00	1.00						0.44	0.46	1.06	0.43	
Incremental Delay, d2	3.8	22.8						0.4	62.5	2.5	0.1	
Delay (s)	32.5	57.9						15.7	80.3	36.4	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		52.9			0.0			43.9			15.8	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	40.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	163	0	0	111	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1960	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		788	1882			1960	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	181	0	0	123	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	181	0	0	125	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		504	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.06	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.16			0.12	
Uniform Delay, d1				23.4	19.9		9.9	8.0			9.6	
Progression Factor				1.00	1.00		1.06	1.18			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.5	9.7			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.8			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	8	0	18	0	140	41	33	296	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.91			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1603			1686		1595	1755	
Flt Permitted	0.74	1.00			0.96			1.00		0.60	1.00	
Satd. Flow (perm)	1509	1809			1558			1686		1013	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	8	0	19	0	147	43	35	312	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	14	0	0	178	0	35	312	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	479	575			495			793		644	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.03			0.22		0.05	0.30	
Uniform Delay, d1	19.9	19.9			20.0			13.3		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		0.99	0.90	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.1			14.0		8.6	8.6	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.1			14.0			8.6	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	19	11	346	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1782		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1782		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	21	12	384	177	13
RTOR Reduction (vph)	14	0	0	0	4	0
Lane Group Flow (vph)	77	0	12	384	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	576		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.39	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.31	0.51	1.13	
Incremental Delay, d2	0.5		0.0	1.1	0.4	
Delay (s)	16.0		2.1	5.3	8.7	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.2	8.7	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	24	266	14	552	264	1	0	216	34
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3735		1660	1752			1603	1298
Flt Permitted					1.00		0.55	1.00			1.00	1.00
Satd. Flow (perm)					3735		955	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	27	296	16	613	293	1	0	240	38
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	0	335	0	613	294	0	0	240	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1142		656	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.17			0.15	
v/s Ratio Perm							c0.45					0.01
v/c Ratio					0.29		0.93	0.28			0.33	0.03
Uniform Delay, d1					22.5		17.5	8.2			15.3	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.7		22.3	0.7			1.3	0.1
Delay (s)					23.1		39.8	8.8			16.5	13.3
Level of Service					C		D	A			B	B
Approach Delay (s)		0.0			23.1			29.8			16.1	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	14	11	9	314	503	91	70	331	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.96		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1801		1692	3238		1707	3352	
Flt Permitted					0.98		0.51	1.00		0.33	1.00	
Satd. Flow (perm)					1801		905	3238		597	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	16	12	10	349	559	101	78	368	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	31	0	349	640	0	78	378	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					552		568	1468		430	1520	
v/s Ratio Prot					c0.02		c0.06	0.20		0.02	0.11	
v/s Ratio Perm							c0.28			0.08		
v/c Ratio					0.06		0.61	0.44		0.18	0.25	
Uniform Delay, d1					18.3		13.1	14.0		11.8	12.6	
Progression Factor					1.00		0.71	0.73		1.00	1.00	
Incremental Delay, d2					0.2		4.5	0.9		0.9	0.4	
Delay (s)					18.5		13.9	11.1		12.8	13.0	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.5			12.0			13.0	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	51	23	13	160	211	19	643	12	66	265	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1945			1625		1596	3232		1641	3132	
Flt Permitted		0.71			0.99		0.57	1.00		0.35	1.00	
Satd. Flow (perm)		1411			1612		961	3232		603	3132	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	54	24	14	168	222	20	677	13	69	279	15
RTOR Reduction (vph)	0	11	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	124	0	0	345	0	20	688	0	69	289	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		470			537		538	1810		338	1754	
v/s Ratio Prot								c0.21			0.09	
v/s Ratio Perm		0.09			c0.21		0.02			0.11		
v/c Ratio		0.26			0.64		0.04	0.38		0.20	0.16	
Uniform Delay, d1		18.3			21.2		7.4	9.2		8.2	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.16	0.07	
Incremental Delay, d2		1.4			5.8		0.1	0.6		1.3	0.2	
Delay (s)		19.7			27.0		7.5	9.8		2.6	0.8	
Level of Service		B			C		A	A		A	A	
Approach Delay (s)		19.7			27.0			9.8			1.1	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	43	54	100	311	198	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	48	60	111	346	220	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	108	226	230	147	94
Volume Left (vph)	48	111	0	0	0
Volume Right (vph)	60	0	0	0	21
Hadj (s)	-0.16	0.33	0.08	0.09	-0.07
Departure Headway (s)	5.2	5.4	5.1	5.4	5.2
Degree Utilization, x	0.16	0.34	0.33	0.22	0.14
Capacity (veh/h)	631	655	686	647	666
Control Delay (s)	9.2	9.9	9.4	8.6	7.8
Approach Delay (s)	9.2	9.6		8.3	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.2		
HCM Level of Service	A		
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	44	51	315	13	5	479	38	40	41	52	700	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3291	
Flt Permitted		0.11	1.00	1.00	0.55	1.00	1.00			0.41	1.00	
Satd. Flow (perm)		187	1731	1530	992	1731	1487			737	3291	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	57	350	14	6	532	42	44	46	58	778	48
RTOR Reduction (vph)	0	0	0	7	0	0	31	0	0	0	5	0
Lane Group Flow (vph)	0	106	350	7	6	532	55	0	0	104	821	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	302	528	453			175	784	
v/s Ratio Prot		0.05	c0.20			c0.31					c0.25	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.14		
v/c Ratio		0.38	0.42	0.01	0.02	1.01	0.12			0.59	1.05	
Uniform Delay, d1		20.2	18.1	14.5	25.5	36.5	26.4			35.5	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.8	1.6	0.0	0.1	41.1	0.6			14.0	45.4	
Delay (s)		24.0	19.7	14.5	25.7	77.6	26.9			49.5	85.4	
Level of Service		C	B	B	C	E	C			D	F	
Approach Delay (s)			20.5			70.1					81.3	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	58.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	49	285	26	31	4	56	110	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.98				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3280				1710	2622	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3280				1710	2622	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	54	317	29	34	4	62	122	13
RTOR Reduction (vph)	0	7	0	0	0	0	7	0
Lane Group Flow (vph)	54	373	0	0	0	66	128	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.11				0.04		
v/s Ratio Perm	0.18						c0.05	
v/c Ratio	0.79	0.49				0.23	0.29	
Uniform Delay, d1	37.9	34.8				37.9	38.3	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	61.4	2.2				1.9	1.7	
Delay (s)	99.3	37.0				39.8	40.0	
Level of Service	F	D				D	D	
Approach Delay (s)		44.8				40.0		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	457	0	0	480	26	115	113	116	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1929			1770				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1598			1929			1770				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	508	0	0	533	29	128	126	129	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	534	0	0	562	0	0	383	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		762			920			708				
v/s Ratio Prot					0.29							
v/s Ratio Perm		c0.33						0.22				
v/c Ratio		0.70			0.61			0.54				
Uniform Delay, d1		13.4			12.5			14.9				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		5.3			3.0			3.0				
Delay (s)		18.7			15.6			17.9				
Level of Service		B			B			B				
Approach Delay (s)		18.7			15.6			17.9			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	358	110	67	268	110	143	1647	129	74	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1922	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.66	1.00		0.60	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1286	1426		1161	1396	627	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	118	377	116	71	282	116	151	1734	136	78	468	98
RTOR Reduction (vph)	0	0	68	0	0	68	0	0	31	0	0	59
Lane Group Flow (vph)	0	495	48	0	353	48	151	1734	105	78	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	53.0	44.3	44.3	49.0	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	53.0	44.3	44.3	49.0	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.50	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		527	584		475	572	389	1307	542	148	1191	510
v/s Ratio Prot							c0.03	c0.56		c0.03	0.16	
v/s Ratio Perm		c0.38	0.03		0.30	0.03	0.16		0.08	0.21		0.03
v/c Ratio		0.94	0.08		0.74	0.08	0.39	1.33	0.19	0.53	0.39	0.08
Uniform Delay, d1		29.7	18.9		26.3	18.9	14.7	30.4	19.1	23.2	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.14	0.78	0.44
Incremental Delay, d2		24.7	0.3		10.1	0.3	0.6	152.4	0.8	3.3	0.9	0.3
Delay (s)		54.4	19.2		36.4	19.2	15.3	182.8	19.9	29.7	18.2	8.8
Level of Service		D	B		D	B	B	F	B	C	B	A
Approach Delay (s)		47.7			32.2			159.3			18.2	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	100.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	110.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	492	56	50	393	48	64	59	62	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.95				
Flt Protected		1.00			0.99			0.98				
Satd. Flow (prot)		1629			1627			1770				
Flt Permitted		0.92			0.90			0.98				
Satd. Flow (perm)		1503			1468			1770				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	547	62	56	437	53	71	66	69	0	0	0
RTOR Reduction (vph)	0	6	0	0	6	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	665	0	0	540	0	0	178	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		879			858			517				
v/s Ratio Prot												
v/s Ratio Perm		c0.44			0.37			0.10				
v/c Ratio		0.76			0.63			0.35				
Uniform Delay, d1		10.1			8.9			18.1				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.0			3.5			1.8				
Delay (s)		16.1			12.4			19.9				
Level of Service		B			B			B				
Approach Delay (s)		16.1			12.4			19.9			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	523	62	33	400	40	45	146	94	56	192	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.99	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1633	1288		1663	1490		1774	
Flt Permitted		0.98	1.00		0.94	1.00		0.89	1.00		0.90	
Satd. Flow (perm)		1620	1255		1540	1288		1495	1490		1615	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	23	551	65	35	421	42	47	154	99	59	202	27
RTOR Reduction (vph)	0	0	28	0	0	17	0	0	67	0	5	0
Lane Group Flow (vph)	0	574	37	0	456	25	0	201	32	0	283	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		929	720		883	738		478	477		517	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.03		0.30	0.02		0.13	0.02		c0.18	
v/c Ratio		0.62	0.05		0.52	0.03		0.42	0.07		0.55	
Uniform Delay, d1		10.6	7.0		9.7	7.0		20.0	17.7		21.0	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.1	0.1		2.2	0.1		2.7	0.3		4.1	
Delay (s)		13.6	7.2		11.9	7.0		22.7	18.0		25.2	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.0			11.4			21.2			25.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	480	28	19	290	39	52	302	45	41	92	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1463	2993		1459	3530		1534	1647	1301	1517	1541	1156
Flt Permitted	0.53	1.00		0.40	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	821	2993		617	3530		1116	1647	1301	722	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	90	533	31	21	322	43	58	336	50	46	102	10
RTOR Reduction (vph)	0	6	0	0	16	0	0	0	26	0	0	6
Lane Group Flow (vph)	90	558	0	21	349	0	58	336	24	46	102	4
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	392	1427		294	1684		446	659	520	289	616	462
v/s Ratio Prot		c0.19			0.10			c0.20			0.07	
v/s Ratio Perm	0.11			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.23	0.39		0.07	0.21		0.13	0.51	0.05	0.16	0.17	0.01
Uniform Delay, d1	10.0	10.9		9.2	9.9		12.3	14.7	11.9	12.5	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.65	0.79	0.39	0.56	0.55	0.31
Incremental Delay, d2	1.4	0.8		0.5	0.3		0.6	2.8	0.2	1.2	0.6	0.0
Delay (s)	11.3	11.7		9.7	10.1		8.6	14.3	4.8	8.1	7.5	3.6
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.7			10.1			12.5			7.4	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	167	391	79	43	259	103	62	385	43	65	157	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.99	1.00		0.99	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.96		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1466	3059		1588	2937		1542	3027		1404	2759	
Flt Permitted	0.51	1.00		0.44	1.00		0.61	1.00		0.45	1.00	
Satd. Flow (perm)	792	3059		730	2937		985	3027		665	2759	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	176	412	83	45	273	108	65	405	45	68	165	67
RTOR Reduction (vph)	0	0	0	0	0	0	0	11	0	0	39	0
Lane Group Flow (vph)	176	495	0	45	381	0	65	439	0	68	193	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	380	1468		350	1410		407	1251		275	1140	
v/s Ratio Prot		0.16			0.13			c0.14			0.07	
v/s Ratio Perm	c0.22			0.06			0.07			0.10		
v/c Ratio	0.46	0.34		0.13	0.27		0.16	0.35		0.25	0.17	
Uniform Delay, d1	13.0	12.1		10.8	11.7		13.8	15.1		14.4	13.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.0	0.6		0.8	0.5		0.8	0.8		2.1	0.3	
Delay (s)	17.1	12.7		11.6	12.1		14.7	15.9		16.5	14.2	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		13.9			12.1			15.7			14.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	107	315	36	23	334	46	65	397	25	41	196	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1473	1842		1533	3073		1372	2865	
Flt Permitted	0.44	1.00		0.48	1.00		0.59	1.00		0.43	1.00	
Satd. Flow (perm)	711	1576		737	1842		945	3073		622	2865	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	113	332	38	24	352	48	68	418	26	43	206	64
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	113	370	0	24	400	0	68	444	0	43	270	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	443	738		369	793		330	730		199	627	
v/s Ratio Prot	c0.02	c0.23		0.00	0.22		c0.01	c0.14		0.01	0.09	
v/s Ratio Perm	0.13			0.03			0.05			0.05		
v/c Ratio	0.26	0.50		0.07	0.50		0.21	0.61		0.22	0.43	
Uniform Delay, d1	13.6	15.7		14.6	17.6		21.5	28.9		25.7	28.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.4		0.1	2.3		0.3	3.7		0.5	2.2	
Delay (s)	13.9	18.1		14.7	19.9		21.8	32.6		26.2	30.8	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		17.2			19.6			31.2			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	305	42	63	372	111	56	370	120	55	158	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3492			2913		1614	3156		1580	2900	
Flt Permitted		0.78			0.85		0.61	1.00		0.40	1.00	
Satd. Flow (perm)		2753			2480		1038	3156		658	2900	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	339	47	70	413	123	62	411	133	61	176	49
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	462	0	0	606	0	62	544	0	61	225	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1248			1124		457	1389		290	1276	
v/s Ratio Prot								c0.17			0.08	
v/s Ratio Perm		0.17			c0.24		0.06			0.09		
v/c Ratio		0.37			0.54		0.14	0.39		0.21	0.18	
Uniform Delay, d1		13.5			14.8		12.5	14.2		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8			1.9		0.6	0.8		1.6	0.3	
Delay (s)		14.3			16.7		13.1	15.0		14.6	13.1	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.3			16.7			14.8			13.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	496	5	14	634	371	68	9	19	112	1	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3143		1629	3257	1457		1612			3106	
Flt Permitted	0.36	1.00		0.44	1.00	1.00		0.70			0.75	
Satd. Flow (perm)	604	3143		748	3257	1457		1174			2411	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	153	551	6	16	704	412	76	10	21	124	1	54
RTOR Reduction (vph)	0	1	0	0	0	143	0	12	0	0	41	0
Lane Group Flow (vph)	153	556	0	16	704	269	0	95	0	0	138	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.4			16.4	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.4			16.4	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.23			0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	395	2054		489	2128	952		273			562	
v/s Ratio Prot		0.18			0.22							
v/s Ratio Perm	c0.25			0.02		0.18		c0.08			0.06	
v/c Ratio	0.39	0.27		0.03	0.33	0.28		0.35			0.24	
Uniform Delay, d1	5.7	5.1		4.3	5.4	5.2		22.5			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	2.9	0.3		0.1	0.4	0.7		3.3			1.0	
Delay (s)	8.5	5.5		4.4	5.8	5.9		25.8			22.9	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.1			5.8			25.8			22.9	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	70.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	79	63	190	71	128	1887	84	70	494	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1496		1547	1584		1493	3069	1271	1452	2983	1301
Flt Permitted	0.37	1.00		0.31	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	608	1496		513	1584		617	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	83	66	200	75	135	1986	88	74	520	43
RTOR Reduction (vph)	0	16	0	0	16	0	0	0	18	0	0	25
Lane Group Flow (vph)	117	292	0	66	259	0	135	1986	70	74	520	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	252	387		230	410		352	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.20		0.02	0.16		0.03	c0.65		c0.03	0.17	
v/s Ratio Perm	0.11			0.07			0.15		0.06	0.17		0.01
v/c Ratio	0.46	0.76		0.29	0.63		0.38	1.57	0.13	0.43	0.42	0.03
Uniform Delay, d1	22.5	29.0		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.70	0.49	1.00	1.00	1.00
Incremental Delay, d2	6.0	12.9		3.1	7.2		2.6	260.3	0.4	7.4	1.1	0.1
Delay (s)	28.6	41.9		25.0	35.2		10.8	277.9	8.0	25.6	18.9	15.0
Level of Service	C	D		C	D		B	F	A	C	B	B
Approach Delay (s)		38.2			33.2			250.8			19.4	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	164.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	217	32	15	149	16	22	162	26	32	144	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.99	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1836			1839			1899			1930	
Flt Permitted		0.97			0.97			0.96			0.94	
Satd. Flow (perm)		1782			1792			1839			1823	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	224	33	15	154	16	23	167	27	33	148	22
RTOR Reduction (vph)	0	7	0	0	5	0	0	8	0	0	7	0
Lane Group Flow (vph)	0	277	0	0	180	0	0	209	0	0	196	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		740			744			849			841	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.10			c0.11			0.11	
v/c Ratio		0.37			0.24			0.25			0.23	
Uniform Delay, d1		13.2			12.3			10.6			10.6	
Progression Factor		1.00			0.64			1.12			1.00	
Incremental Delay, d2		1.4			0.8			0.7			0.6	
Delay (s)		14.6			8.7			12.5			11.2	
Level of Service		B			A			B			B	
Approach Delay (s)		14.6			8.7			12.5			11.2	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	37	9	162	23	43	364	31	17	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1466	2989		1302	3018		1529	3094		1492	2868	
Flt Permitted	0.62	1.00		0.60	1.00		0.68	1.00		0.50	1.00	
Satd. Flow (perm)	960	2989		825	3018		1093	3094		781	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	41	10	180	26	48	404	34	19	96	19
RTOR Reduction (vph)	0	26	0	0	18	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	216	0	10	188	0	48	428	0	19	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	281	874		241	882		639	1809		457	1677	
v/s Ratio Prot		c0.07			0.06			c0.14			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.25		0.04	0.21		0.08	0.24		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.4		5.9	6.5		5.7	5.8	
Progression Factor	0.72	0.72		0.76	0.74		0.93	0.96		0.51	0.45	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.7	13.3		12.9	13.4		5.7	6.6		3.1	2.7	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.2			13.4			6.5			2.8	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	39	28	429	24	14	178	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2866			1878			1807	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1046	2952		965	2866			1838			1742	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	43	31	477	27	16	198	17
RTOR Reduction (vph)	0	23	0	0	26	0	0	3	0	0	4	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	532	0	0	227	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	418	1181		386	1146			877			831	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.29			0.13	
v/c Ratio	0.12	0.18		0.05	0.13			0.61			0.27	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.5			10.2	
Progression Factor	1.03	0.93		0.88	0.88			0.99			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			3.0			0.8	
Delay (s)	13.2	12.1		10.7	11.1			15.4			11.0	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.3			11.1			15.4			11.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	121	61	2	80	34	22	272	9	7	175	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.96			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1874		1587	1870			1970			1932	
Flt Permitted	0.68	1.00		0.58	1.00			0.97			0.99	
Satd. Flow (perm)	1141	1874		965	1870			1926			1915	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	134	68	2	89	38	24	302	10	8	194	31
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	96	202	0	2	127	0	0	336	0	0	233	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	351	577		297	575			1096			1090	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.08			0.00				c0.17			0.12	
v/c Ratio	0.27	0.35		0.01	0.22			0.31			0.21	
Uniform Delay, d1	17.0	17.5		15.6	16.7			7.3			6.9	
Progression Factor	0.91	0.90		0.87	0.92			0.98			1.00	
Incremental Delay, d2	1.9	1.7		0.0	0.9			0.7			0.4	
Delay (s)	17.3	17.3		13.7	16.3			7.9			7.3	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.3			16.2			7.9			7.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	9	52	1	3	12	38	467	6	2	191	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1673		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.63	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1260	1673		1283	1422		981	1631	1392	682	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	129	10	58	1	3	13	42	519	7	2	212	53
RTOR Reduction (vph)	0	42	0	0	9	0	0	0	3	0	0	21
Lane Group Flow (vph)	129	26	0	1	7	0	42	519	4	2	212	32
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		355	394		589	979	835	409	1144	856
v/s Ratio Prot		0.02			0.00			c0.32			0.11	
v/s Ratio Perm	c0.10			0.00			0.04		0.00	0.00		0.02
v/c Ratio	0.37	0.06		0.00	0.02		0.07	0.53	0.01	0.00	0.19	0.04
Uniform Delay, d1	18.9	17.3		17.0	17.1		5.4	7.6	5.2	5.2	5.9	5.3
Progression Factor	1.47	2.38		1.00	1.00		1.14	1.07	1.32	1.00	1.00	1.00
Incremental Delay, d2	2.9	0.2		0.0	0.1		0.2	1.6	0.0	0.0	0.4	0.1
Delay (s)	30.7	41.2		17.0	17.1		6.4	9.8	6.9	5.2	6.2	5.4
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		34.3			17.1			9.5			6.0	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	241	76	119	362	0	0	0	0	74	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2826		1621	3288					1574	2907	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2826		846	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	254	80	125	381	0	0	0	0	78	321	380
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	304	0	125	381	0	0	0	0	78	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		933		652	1940					504	930	
v/s Ratio Prot		c0.11		0.04	c0.12					0.05	c0.17	
v/s Ratio Perm				0.06								
v/c Ratio		0.33		0.19	0.20					0.15	0.52	
Uniform Delay, d1		25.1		10.6	9.5					24.3	27.8	
Progression Factor		1.00		1.94	2.04					1.00	1.00	
Incremental Delay, d2		0.9		0.6	0.2					0.7	2.1	
Delay (s)		26.1		21.0	19.6					25.0	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.1			20.0			0.0			29.4	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	186	0	0	309	66	171	544	320	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2832		1750	1782	1514			
Flt Permitted	0.36	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	641	3054			2832		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	196	0	0	325	69	180	573	337	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	226	0	0	0
Lane Group Flow (vph)	136	196	0	0	376	0	180	573	111	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	687	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.13		0.10	c0.32				
v/s Ratio Perm	0.04								0.07			
v/c Ratio	0.20	0.11			0.63		0.31	0.97	0.22			
Uniform Delay, d1	11.7	9.4			36.0		25.0	33.1	24.2			
Progression Factor	0.24	0.25			1.00		0.74	0.79	1.92			
Incremental Delay, d2	0.6	0.1			5.0		0.9	24.4	0.7			
Delay (s)	3.5	2.5			41.0		19.5	50.4	47.2			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			41.0			44.3			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	36.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	450	362	34	587	0	0	0	0	4	215	195
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3109		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.18	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3109		299	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	469	377	35	611	0	0	0	0	4	224	203
RTOR Reduction (vph)	0	146	0	0	0	0	0	0	0	0	0	134
Lane Group Flow (vph)	0	700	0	35	611	0	0	0	0	4	224	69
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1119		398	1898					543	1074	491
v/s Ratio Prot		c0.23		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.63		0.09	0.32					0.01	0.21	0.14
Uniform Delay, d1		26.4		12.4	10.8					21.8	23.4	22.9
Progression Factor		1.00		0.55	0.68					0.74	0.79	0.94
Incremental Delay, d2		2.6		0.2	0.2					0.0	0.4	0.5
Delay (s)		29.1		6.9	7.6					16.1	19.0	22.0
Level of Service		C		A	A					B	B	C
Approach Delay (s)		29.1			7.5			0.0			20.4	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	395	59	0	0	57	5	564	636	61	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3042			3079		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1084	2339			3079		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	407	61	0	0	59	5	581	656	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	38	0	0	0
Lane Group Flow (vph)	203	265	0	0	60	0	581	656	25	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1446			462		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.37	c0.40	0.02			
v/s Ratio Perm	c0.04	0.03										
v/c Ratio	0.30	0.18			0.13		1.01	1.08	0.05			
Uniform Delay, d1	14.0	13.2			36.8		31.5	31.5	20.2			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		40.1	60.9	0.2			
Delay (s)	4.2	3.6			37.4		71.6	92.4	20.3			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.8			37.4			79.6			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	58.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	271	66	58	180	111	41	1100	69	100	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2842			2770		1447	3069	1336	1494	2956	1270
Flt Permitted		0.67			0.80		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1943			2244		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	282	69	60	188	116	43	1146	72	104	496	44
RTOR Reduction (vph)	0	14	0	0	64	0	0	0	28	0	0	27
Lane Group Flow (vph)	0	498	0	0	300	0	43	1146	44	104	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		886			739		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.37		c0.03	0.17	
v/s Ratio Perm		0.20			0.13		0.06		0.03	0.27		0.01
v/c Ratio		0.56			0.41		0.15	0.95	0.08	0.72	0.43	0.03
Uniform Delay, d1		18.5			22.1		14.7	24.9	16.4	18.7	18.7	16.1
Progression Factor		1.00			1.00		1.30	0.85	1.38	1.82	1.63	3.12
Incremental Delay, d2		2.6			1.7		0.6	11.2	0.2	24.7	1.0	0.1
Delay (s)		21.1			23.7		19.8	32.3	22.9	58.6	31.6	50.4
Level of Service		C			C		B	C	C	E	C	D
Approach Delay (s)		21.1			23.7			31.3			37.3	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	29.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	421	0	0	322	81	27	60	110	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.92				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1706			1668			1575				
Flt Permitted		0.94			1.00			0.99				
Satd. Flow (perm)		1604			1668			1575				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	47	468	0	0	358	90	30	67	122	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	70	0	0	0	0
Lane Group Flow (vph)	0	515	0	0	434	0	0	149	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		839			872			557				
v/s Ratio Prot					0.26							
v/s Ratio Perm		c0.32						0.09				
v/c Ratio		0.61			0.50			0.27				
Uniform Delay, d1		10.9			10.0			15.0				
Progression Factor		1.00			0.54			1.00				
Incremental Delay, d2		3.3			1.8			1.2				
Delay (s)		14.2			7.2			16.2				
Level of Service		B			A			B				
Approach Delay (s)		14.2			7.2			16.2			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	438	29	22	338	51	15	167	45	67	105	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.98			0.97			0.99	
Flt Protected		1.00			1.00			1.00			0.98	
Satd. Flow (prot)		1889			1831			3160			3148	
Flt Permitted		0.94			0.96			0.93			0.80	
Satd. Flow (perm)		1778			1766			2961			2549	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	48	487	32	24	376	57	17	186	50	74	117	21
RTOR Reduction (vph)	0	3	0	0	8	0	0	29	0	0	12	0
Lane Group Flow (vph)	0	564	0	0	449	0	0	224	0	0	200	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		821			815			1230			1059	
v/s Ratio Prot												
v/s Ratio Perm		c0.32			0.25			0.08			c0.08	
v/c Ratio		0.69			0.55			0.18			0.19	
Uniform Delay, d1		13.8			12.6			12.0			12.1	
Progression Factor		0.63			0.51			0.94			0.72	
Incremental Delay, d2		3.9			2.6			0.3			0.4	
Delay (s)		12.6			9.0			11.6			9.1	
Level of Service		B			A			B			A	
Approach Delay (s)		12.6			9.0			11.6			9.1	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	341	19	29	302	64	44	303	88	58	91	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1502	2949		1585	2934		1497	3030		1594	2941	
Flt Permitted	0.47	1.00		0.48	1.00		0.67	1.00		0.49	1.00	
Satd. Flow (perm)	744	2949		795	2934		1063	3030		829	2941	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	379	21	32	336	71	49	337	98	64	101	21
RTOR Reduction (vph)	0	6	0	0	28	0	0	42	0	0	10	0
Lane Group Flow (vph)	53	394	0	32	379	0	49	393	0	64	112	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	252	998		269	993		572	1632		446	1584	
v/s Ratio Prot		c0.13			0.13			c0.13			0.04	
v/s Ratio Perm	0.07			0.04			0.05			0.08		
v/c Ratio	0.21	0.39		0.12	0.38		0.09	0.24		0.14	0.07	
Uniform Delay, d1	15.3	16.4		14.8	16.3		7.3	8.0		7.5	7.2	
Progression Factor	0.63	0.63		0.85	0.85		0.72	0.74		1.36	1.36	
Incremental Delay, d2	1.5	1.0		0.9	1.1		0.3	0.3		0.7	0.1	
Delay (s)	11.2	11.3		13.4	14.9		5.5	6.2		10.8	9.9	
Level of Service	B	B		B	B		A	A		B	A	
Approach Delay (s)		11.3			14.8			6.1			10.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	361	130	100	315	82	37	323	60	41	136	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1381	2931		1336	3524			3413			3314	
Flt Permitted	0.50	1.00		0.43	1.00			0.91			0.84	
Satd. Flow (perm)	720	2931		605	3524			3133			2806	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	83	380	137	105	332	86	39	340	63	43	143	40
RTOR Reduction (vph)	0	56	0	0	36	0	0	20	0	0	24	0
Lane Group Flow (vph)	83	461	0	105	382	0	0	422	0	0	202	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	343	1398		289	1681			1253			1122	
v/s Ratio Prot		0.16			0.11							
v/s Ratio Perm	0.12			c0.17				c0.13			0.07	
v/c Ratio	0.24	0.33		0.36	0.23			0.34			0.18	
Uniform Delay, d1	10.1	10.6		10.8	10.0			13.5			12.6	
Progression Factor	1.67	1.90		0.76	0.70			0.52			0.64	
Incremental Delay, d2	1.6	0.6		3.1	0.3			0.7			0.3	
Delay (s)	18.4	20.6		11.2	7.3			7.6			8.4	
Level of Service	B	C		B	A			A			A	
Approach Delay (s)		20.3			8.1			7.6			8.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	292	94	104	370	104	78	80	84	84	80	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3036			1823			1826	
Flt Permitted		0.74	1.00		0.77			0.81			0.79	
Satd. Flow (perm)		1230	1409		2365			1503			1474	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	104	324	104	116	411	116	87	89	93	93	89	87
RTOR Reduction (vph)	0	0	50	0	29	0	0	29	0	0	26	0
Lane Group Flow (vph)	0	428	54	0	614	0	0	240	0	0	243	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		643	737		1237			486			476	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.04		0.26			0.16			c0.16	
v/c Ratio		0.67	0.07		0.50			0.49			0.51	
Uniform Delay, d1		11.3	7.7		10.0			17.7			17.8	
Progression Factor		1.75	4.51		0.42			1.00			1.00	
Incremental Delay, d2		5.2	0.2		1.3			3.6			3.9	
Delay (s)		25.1	34.8		5.5			21.3			21.7	
Level of Service		C	C		A			C			C	
Approach Delay (s)		27.0			5.5			21.3			21.7	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	367	21	15	450	63	40	103	41	41	86	97
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3017		1572	3003			3457			3397	
Flt Permitted	0.38	1.00		0.48	1.00			0.86			0.88	
Satd. Flow (perm)	597	3017		790	3003			3016			3015	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	79	408	23	17	500	70	44	114	46	46	96	108
RTOR Reduction (vph)	0	6	0	0	17	0	0	25	0	0	60	0
Lane Group Flow (vph)	79	425	0	17	553	0	0	179	0	0	190	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	257	1300		340	1294			1346			1345	
v/s Ratio Prot		0.14			c0.18							
v/s Ratio Perm	0.13			0.02				0.06			c0.06	
v/c Ratio	0.31	0.33		0.05	0.43			0.13			0.14	
Uniform Delay, d1	12.1	12.3		10.8	12.9			10.6			10.6	
Progression Factor	0.98	1.00		1.12	0.95			1.04			0.85	
Incremental Delay, d2	2.4	0.5		0.2	0.6			0.2			0.2	
Delay (s)	14.3	12.8		12.2	12.8			11.3			9.3	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.0			12.8			11.3			9.3	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	435	70	89	446	270	49	315	87	211	151	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3076			3146			3118	
Flt Permitted		0.65			0.76			0.87			0.63	
Satd. Flow (perm)		2093			2349			2766			2027	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	91	483	78	99	496	300	54	350	97	234	168	56
RTOR Reduction (vph)	0	16	0	0	97	0	0	32	0	0	17	0
Lane Group Flow (vph)	0	636	0	0	798	0	0	469	0	0	441	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		837			940			1269			624	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.30			c0.34			0.13			c0.22	
v/c Ratio		0.76			0.85			0.37			0.89dl	
Uniform Delay, d1		16.8			17.7			11.9			19.9	
Progression Factor		1.75			1.00			1.00			0.89	
Incremental Delay, d2		6.3			9.4			0.8			6.6	
Delay (s)		35.7			27.1			12.8			24.3	
Level of Service		D			C			B			C	
Approach Delay (s)		35.7			27.1			12.8			24.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	26.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	687	115	43	721	0	135	0	66	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2974			3031			1585				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2974			2566			1307				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	763	128	48	801	0	150	0	73	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	873	0	0	849	0	0	203	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1917			941			232				
v/s Ratio Prot		c0.29										
v/s Ratio Perm					c0.33			c0.16				
v/c Ratio		0.46			0.90			0.88				
Uniform Delay, d1		8.1			27.0			36.0				
Progression Factor		0.01			1.57			1.00				
Incremental Delay, d2		0.4			12.2			34.1				
Delay (s)		0.5			54.5			70.1				
Level of Service		A			D			E				
Approach Delay (s)		0.5			54.5			70.1			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	31.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	476	177	260	613	174	98	19	176	74	7	73
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1756		1629	1714	1457
Flt Permitted	0.33	1.00		0.23	1.00	1.00		0.89		0.41	1.00	1.00
Satd. Flow (perm)	529	3020		400	3257	1457		1581		698	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	130	529	197	289	681	193	109	21	196	82	8	81
RTOR Reduction (vph)	0	40	0	0	0	98	0	74	0	0	0	44
Lane Group Flow (vph)	130	686	0	289	681	95	0	252	0	82	8	37
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	41.9	32.6		48.2	35.9	44.5		20.2		31.8	31.8	41.1
Effective Green, g (s)	41.9	32.6		48.2	35.9	44.5		20.2		31.8	31.8	41.1
Actuated g/C Ratio	0.47	0.36		0.54	0.40	0.49		0.22		0.35	0.35	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	349	1094		386	1299	720		355		336	606	665
v/s Ratio Prot	0.04	0.23		c0.10	0.21	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.16		0.06		0.02
v/c Ratio	0.37	0.63		0.75	0.52	0.13		0.71		0.24	0.01	0.06
Uniform Delay, d1	14.2	23.7		13.6	20.6	12.3		32.2		21.4	18.9	13.6
Progression Factor	1.92	1.62		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	0.8	2.5		8.2	1.5	0.1		7.0		0.4	0.0	0.0
Delay (s)	28.2	40.7		21.9	22.1	12.4		39.2		21.8	18.9	13.7
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		38.8			20.4			39.2			17.8	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	28.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	491	234	6	504	0	0	0	0	30	0	543
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	546	260	7	560	0	0	0	0	33	0	603
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	560			546			839	1119	273	846	1119	280
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	560			546			839	1119	273	846	1119	280
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	87	100	15
cM capacity (veh/h)	987			999			37	200	716	249	200	708

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	273	273	260	193	373	33	603
Volume Left	0	0	0	7	0	33	0
Volume Right	0	0	260	0	0	0	603
cSH	1700	1700	1700	999	1700	249	708
Volume to Capacity	0.16	0.16	0.15	0.01	0.22	0.13	0.85
Queue Length 95th (ft)	0	0	0	1	0	11	246
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	21.7	32.1
Lane LOS				A		C	D
Approach Delay (s)	0.0			0.1		31.5	
Approach LOS						D	

Intersection Summary			
Average Delay	10.0		
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	521	0	510	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	579	0	567	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	289	289	567
Volume Left (vph)	289	289	567
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	5.7
Degree Utilization, x	0.55	0.55	0.90
Capacity (veh/h)	514	505	627
Control Delay (s)	16.7	16.7	38.6
Approach Delay (s)	16.7		38.6
Approach LOS	C		E

Intersection Summary			
Delay	27.5		
HCM Level of Service	D		
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	373	46	130	332	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3097		1574	3149						3014	
Flt Permitted		1.00		0.43	1.00						0.97	
Satd. Flow (perm)		3097		706	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	414	51	144	369	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	454	0	144	369	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1312		509	1815						957	
v/s Ratio Prot		c0.15		c0.03	0.12						c0.04	
v/s Ratio Perm				0.13								
v/c Ratio		0.35		0.28	0.20						0.12	
Uniform Delay, d1		16.5		11.9	8.6						20.6	
Progression Factor		1.00		0.28	0.23						1.00	
Incremental Delay, d2		0.7		1.3	0.2						0.2	
Delay (s)		17.3		4.6	2.2						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.3			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	377	0	0	413	76	49	65	59	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.95				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1629	3257			3076			4377				
Flt Permitted	0.37	1.00			1.00			0.99				
Satd. Flow (perm)	640	3257			3076			4377				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	419	0	0	459	84	54	72	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	45	0	0	0	0
Lane Group Flow (vph)	76	419	0	0	525	0	0	147	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	478	1839			1267			1390				
v/s Ratio Prot	0.02	c0.13			c0.17			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.23			0.41			0.11				
Uniform Delay, d1	12.3	9.2			17.7			20.5				
Progression Factor	0.31	0.30			1.00			1.00				
Incremental Delay, d2	0.7	0.3			1.0			0.2				
Delay (s)	4.5	3.1			18.7			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.3			18.7			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	357	39	40	256	33	118	85	86	64	90	124
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			0.98			0.96			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2986			2976			1773			1752	
Flt Permitted		0.89			0.85			0.77			0.86	
Satd. Flow (perm)		2673			2560			1390			1527	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	397	43	44	284	37	131	94	96	71	100	138
RTOR Reduction (vph)	0	11	0	0	13	0	0	24	0	0	45	0
Lane Group Flow (vph)	0	472	0	0	352	0	0	297	0	0	264	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		946			906			684			752	
v/s Ratio Prot												
v/s Ratio Perm		c0.18			0.14			c0.21			0.17	
v/c Ratio		0.50			0.39			0.43			0.35	
Uniform Delay, d1		16.5			15.7			10.7			10.1	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.9			1.3			2.0			1.3	
Delay (s)		18.4			17.0			12.7			11.4	
Level of Service		B			B			B			B	
Approach Delay (s)		18.4			17.0			12.7			11.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	295	39	59	200	75	68	963	101	124	416	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1551	3023		1593	3505		1486	3040	1347	1494	3011	1271
Flt Permitted	0.55	1.00		0.49	1.00		0.44	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	891	3023		819	3505		690	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	311	41	62	211	79	72	1014	106	131	438	82
RTOR Reduction (vph)	0	12	0	0	45	0	0	0	65	0	0	50
Lane Group Flow (vph)	178	340	0	62	245	0	72	1014	41	131	438	32
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	346	996		325	1155		330	1180	523	144	1169	493
v/s Ratio Prot	c0.02	0.11		0.01	0.07		0.01	0.33		c0.04	0.15	
v/s Ratio Perm	c0.16			0.06			0.08		0.03	c0.34		0.03
v/c Ratio	0.51	0.34		0.19	0.21		0.22	0.86	0.08	0.91	0.37	0.06
Uniform Delay, d1	20.9	21.5		18.6	20.5		14.9	23.9	16.4	20.5	18.6	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	2.21	0.62	0.82
Incremental Delay, d2	5.4	0.9		1.3	0.4		1.5	8.2	0.3	51.3	0.8	0.2
Delay (s)	26.3	22.5		19.9	21.0		16.4	32.1	16.7	96.4	12.4	13.5
Level of Service	C	C		B	C		B	C	B	F	B	B
Approach Delay (s)		23.8			20.8			29.8			29.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	434	18	25	261	21	35	113	68	71	56	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.97	1.00
Satd. Flow (prot)		1935	1382		1947	1331		1970	1452		1933	1430
Flt Permitted		0.96	1.00		0.95	1.00		0.92	1.00		0.79	1.00
Satd. Flow (perm)		1860	1382		1848	1331		1839	1452		1579	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	457	19	26	275	22	37	119	72	75	59	43
RTOR Reduction (vph)	0	0	10	0	0	12	0	0	42	0	0	25
Lane Group Flow (vph)	0	497	9	0	301	10	0	156	30	0	134	18
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		858	638		853	614		764	603		656	594
v/s Ratio Prot												
v/s Ratio Perm		c0.27	0.01		0.16	0.01		0.08	0.02		c0.08	0.01
v/c Ratio		0.58	0.01		0.35	0.02		0.20	0.05		0.20	0.03
Uniform Delay, d1		12.9	9.5		11.3	9.5		12.1	11.3		12.1	11.2
Progression Factor		1.00	1.00		0.38	0.15		1.18	1.64		0.98	0.82
Incremental Delay, d2		2.8	0.0		1.1	0.0		0.6	0.2		0.7	0.1
Delay (s)		15.7	9.5		5.3	1.5		14.9	18.8		12.5	9.3
Level of Service		B	A		A	A		B	B		B	A
Approach Delay (s)		15.5			5.1			16.1			11.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	512	10	17	268	43	12	234	34	81	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3031		1520	2977		1520	2982		1520	2904	
Flt Permitted	0.95	1.00		0.43	1.00		0.68	1.00		0.56	1.00	
Satd. Flow (perm)	1520	3031		694	2977		1091	2982		891	2904	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	569	11	19	298	48	13	260	38	90	78	33
RTOR Reduction (vph)	0	2	0	0	20	0	0	18	0	0	19	0
Lane Group Flow (vph)	73	578	0	19	326	0	13	280	0	90	92	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1492		235	1008		453	1239		370	1206	
v/s Ratio Prot	c0.05	c0.19			0.11			0.09			0.03	
v/s Ratio Perm				0.03			0.01			c0.10		
v/c Ratio	0.45	0.39		0.08	0.32		0.03	0.23		0.24	0.08	
Uniform Delay, d1	27.2	10.4		14.6	16.0		11.2	12.3		12.4	11.5	
Progression Factor	1.07	0.60		0.92	0.93		0.55	0.58		1.12	1.10	
Incremental Delay, d2	7.8	0.7		0.7	0.8		0.1	0.4		1.6	0.1	
Delay (s)	36.9	6.9		14.0	15.7		6.2	7.5		15.4	12.8	
Level of Service	D	A		B	B		A	A		B	B	
Approach Delay (s)		10.3			15.6			7.4			14.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	249	348	240	212	42	109	308	56	24	186	24
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.91		1.00	0.98			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1520	2774		1520	2964			3163			3190	
Flt Permitted	0.58	1.00		0.95	1.00			0.81			0.89	
Satd. Flow (perm)	925	2774		1520	2964			2584			2839	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	277	387	267	236	47	121	342	62	27	207	27
RTOR Reduction (vph)	0	268	0	0	25	0	0	16	0	0	14	0
Lane Group Flow (vph)	41	396	0	267	258	0	0	509	0	0	247	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	285	854		140	1322			994			1092	
v/s Ratio Prot		c0.14		c0.18	0.09							
v/s Ratio Perm	0.04							c0.20			0.09	
v/c Ratio	0.14	0.46		1.91	0.19			0.51			0.23	
Uniform Delay, d1	16.3	18.2		29.5	10.9			15.3			13.5	
Progression Factor	0.63	0.27		1.32	1.10			1.08			0.57	
Incremental Delay, d2	1.0	1.7		426.9	0.2			1.4			0.5	
Delay (s)	11.3	6.6		465.9	12.3			18.0			8.1	
Level of Service	B	A		F	B			B			A	
Approach Delay (s)		6.9			232.5			18.0			8.1	
Approach LOS		A			F			B			A	

Intersection Summary			
HCM Average Control Delay	70.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	294	14	69	461	69	34	93	160	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1586			1566			3165				
Flt Permitted		0.97			0.92			0.99				
Satd. Flow (perm)		1535			1453			3165				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	327	16	77	512	77	38	103	178	0	0	0
RTOR Reduction (vph)	0	2	0	0	6	0	0	137	0	0	0	0
Lane Group Flow (vph)	0	359	0	0	660	0	0	182	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		989			937			735				
v/s Ratio Prot												
v/s Ratio Perm		0.23			c0.45			0.06				
v/c Ratio		0.36			0.70			0.25				
Uniform Delay, d1		5.4			7.5			20.3				
Progression Factor		1.89			1.00			1.00				
Incremental Delay, d2		0.9			4.4			0.8				
Delay (s)		11.0			11.9			21.1				
Level of Service		B			B			C				
Approach Delay (s)		11.0			11.9			21.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	93	361	472	44	64	124
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	98	380	497	46	67	131
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.85				0.85	0.85
vC, conflicting volume	564				1122	544
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	399				1055	375
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	89				64	77
cM capacity (veh/h)	928				186	560

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	478	543	67	131
Volume Left	98	0	67	0
Volume Right	0	46	0	131
cSH	928	1700	186	560
Volume to Capacity	0.11	0.32	0.36	0.23
Queue Length 95th (ft)	9	0	39	22
Control Delay (s)	2.9	0.0	34.9	13.4
Lane LOS	A		D	B
Approach Delay (s)	2.9	0.0	20.7	
Approach LOS			C	

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	468	1	26	674	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1663		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	520	1	29	749	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	521	0	0	778	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			607		
v/s Ratio Prot	c0.30					
v/s Ratio Perm				c0.47		
v/c Ratio	0.44			1.28		
Uniform Delay, d1	5.7			27.0		
Progression Factor	0.06			1.00		
Incremental Delay, d2	0.1			139.1		
Delay (s)	0.4			166.1		
Level of Service	A			F		
Approach Delay (s)	0.4			166.1	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	99.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	185	193	25	559	0	0	0	0	3	0	258
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	206	214	28	621	0	0	0	0	3	0	287
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	621			206			989	989	210	779	882	621
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	621			206			989	989	210	779	882	621
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	33
cM capacity (veh/h)	969			984			65	242	802	283	279	425

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	137	283	649	3	287
Volume Left	0	0	28	3	0
Volume Right	0	214	0	0	287
cSH	1700	1700	984	283	425
Volume to Capacity	0.08	0.17	0.03	0.01	0.67
Queue Length 95th (ft)	0	0	2	1	121
Control Delay (s)	0.0	0.0	0.7	17.9	29.3
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	29.1	
Approach LOS				D	

Intersection Summary			
Average Delay	6.6		
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	188	0	584	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	209	0	649	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	104	104	649
Volume Left (vph)	104	104	649
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.9
Degree Utilization, x	0.20	0.20	0.88
Capacity (veh/h)	511	512	734
Control Delay (s)	10.3	10.3	31.8
Approach Delay (s)	10.3		31.8
Approach LOS	B		D

Intersection Summary			
Delay	26.5		
HCM Level of Service	D		
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	467	207	156	466	0	0	0	0	131	115	294
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3693	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3693	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	492	218	164	491	0	0	0	0	138	121	309
RTOR Reduction (vph)	0	0	147	0	0	0	0	0	0	0	99	92
Lane Group Flow (vph)	0	492	71	0	655	0	0	0	0	76	239	62
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.1	39.1		73.1					19.7	19.7	64.8
Effective Green, g (s)		39.1	39.1		73.1					19.7	19.7	64.8
Actuated g/C Ratio		0.24	0.24		0.46					0.12	0.12	0.40
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		728	294		1541					166	455	454
v/s Ratio Prot		c0.17			c0.19					0.06	c0.06	
v/s Ratio Perm			0.06									0.06
v/c Ratio		0.68	0.24		0.43					0.46	0.53	0.14
Uniform Delay, d1		54.7	48.5		29.3					65.2	65.8	30.0
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		5.0	1.9		0.1					2.0	1.1	0.1
Delay (s)		59.7	50.5		0.7					67.2	66.9	30.1
Level of Service		E	D		A					E	E	C
Approach Delay (s)		56.9			0.7			0.0			56.9	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	37.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.1
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	388	0	0	394	93	228	144	138	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	3002				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	3002				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	233	431	0	0	438	103	253	160	153	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	82	0	62	0	0	0	0
Lane Group Flow (vph)	233	431	0	0	438	21	192	312	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	78.9	78.9			32.6	32.6	21.7	21.7				
Effective Green, g (s)	78.9	78.9			32.6	32.6	21.7	21.7				
Actuated g/C Ratio	0.49	0.49			0.20	0.20	0.14	0.14				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	776	1660			642	297	208	407				
v/s Ratio Prot	c0.15	0.13			c0.14		c0.13	0.10				
v/s Ratio Perm						0.01						
v/c Ratio	0.30	0.26			0.68	0.07	0.92	0.77				
Uniform Delay, d1	24.1	23.6			58.9	51.5	68.3	66.7				
Progression Factor	0.07	0.07			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			3.0	0.1	41.3	8.4				
Delay (s)	1.9	1.8			61.9	51.6	109.6	75.1				
Level of Service	A	A			E	D	F	E				
Approach Delay (s)		1.8			59.9			86.8			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	46.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.8
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	317	73	44	153	54	86	803	94	90	426	99
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1538	1556	1328	1595	1713		1524	2965		1509	2869	
Flt Permitted	0.49	1.00	1.00	0.43	1.00		0.35	1.00		0.14	1.00	
Satd. Flow (perm)	794	1556	1328	724	1713		569	2965		230	2869	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	225	334	77	46	161	57	91	845	99	95	448	104
RTOR Reduction (vph)	0	0	50	0	14	0	0	10	0	0	22	0
Lane Group Flow (vph)	225	334	27	46	204	0	91	934	0	95	530	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		39.6	34.1		39.6	34.1	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	369	557	461	275	539		286	1125		160	1088	
v/s Ratio Prot	c0.04	c0.21		0.01	0.12		0.02	c0.32		c0.03	0.18	
v/s Ratio Perm	0.20		0.02	0.05			0.12			0.22		
v/c Ratio	0.61	0.60	0.06	0.17	0.38		0.32	0.83		0.59	0.49	
Uniform Delay, d1	21.0	23.6	19.6	20.5	24.0		16.5	25.3		18.3	21.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.9	4.7	0.2	0.3	2.0		0.6	7.2		5.8	1.6	
Delay (s)	23.9	28.3	19.8	20.8	26.0		17.1	32.4		24.1	22.8	
Level of Service	C	C	B	C	C		B	C		C	C	
Approach Delay (s)		25.7			25.1			31.1			23.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	383	16	18	212	32	35	79	67	62	42	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.95			0.96	
Flt Protected		1.00	1.00		1.00	1.00		0.99			0.98	
Satd. Flow (prot)		1909	1482		1599	1198		1840			1812	
Flt Permitted		0.96	1.00		0.96	1.00		0.94			0.83	
Satd. Flow (perm)		1832	1482		1544	1198		1741			1544	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	403	17	19	223	34	37	83	71	65	44	40
RTOR Reduction (vph)	0	0	9	0	0	17	0	33	0	0	20	0
Lane Group Flow (vph)	0	448	8	0	242	17	0	158	0	0	129	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		902	730		760	590		723			641	
v/s Ratio Prot												
v/s Ratio Perm		c0.24	0.01		0.16	0.01		c0.09			0.08	
v/c Ratio		0.50	0.01		0.32	0.03		0.22			0.20	
Uniform Delay, d1		11.1	8.4		9.9	8.5		12.2			12.1	
Progression Factor		1.00	1.00		2.06	3.36		1.00			1.42	
Incremental Delay, d2		2.0	0.0		1.0	0.1		0.7			0.7	
Delay (s)		13.0	8.5		21.5	28.6		12.9			17.9	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		12.9			22.4			12.9			17.9	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	419	23	19	189	8	39	216	72	18	51	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1658	1392		1584	1497		1754	1390		1656	
Flt Permitted		0.92	1.00		0.85	1.00		0.95	1.00		0.93	
Satd. Flow (perm)		1531	1392		1352	1497		1679	1390		1560	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	441	24	20	199	8	41	227	76	19	54	31
RTOR Reduction (vph)	0	0	10	0	0	5	0	0	39	0	16	0
Lane Group Flow (vph)	0	516	14	0	219	3	0	268	37	0	88	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		542	493		478	530		827	684		768	
v/s Ratio Prot												
v/s Ratio Perm		c0.34	0.01		0.16	0.00		c0.16	0.03		0.06	
v/c Ratio		0.95	0.03		0.46	0.01		0.32	0.05		0.11	
Uniform Delay, d1		20.5	13.7		16.2	13.6		10.0	8.6		8.9	
Progression Factor		1.61	2.00		0.94	0.90		0.33	0.34		1.15	
Incremental Delay, d2		26.9	0.1		3.1	0.0		0.8	0.1		0.3	
Delay (s)		60.0	27.5		18.2	12.3		4.1	3.0		10.5	
Level of Service		E	C		B	B		A	A		B	
Approach Delay (s)		58.5			18.0			3.9			10.5	
Approach LOS		E			B			A			B	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	439	20	30	9	18	15	26	352	19	8	222	165
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.98			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.95			0.99			1.00	0.85
Flt Protected		0.95	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1754	1390		1758			1979			1873	1328
Flt Permitted		0.73	1.00		0.91			0.97			0.99	1.00
Satd. Flow (perm)		1337	1390		1609			1933			1852	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	488	22	33	10	20	17	29	391	21	9	247	183
RTOR Reduction (vph)	0	0	15	0	13	0	0	3	0	0	0	93
Lane Group Flow (vph)	0	510	18	0	34	0	0	438	0	0	256	90
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		607	577		421			952			912	654
v/s Ratio Prot		c0.10										
v/s Ratio Perm		0.25	0.01		0.02			c0.23			0.14	0.07
v/c Ratio		0.84	0.03		0.08			0.46			0.28	0.14
Uniform Delay, d1		17.1	11.3		18.1			10.8			9.7	9.0
Progression Factor		1.03	1.64		1.00			0.58			0.84	1.15
Incremental Delay, d2		8.2	0.1		0.4			1.5			0.3	0.2
Delay (s)		25.7	18.5		18.5			7.8			8.4	10.5
Level of Service		C	B		B			A			A	B
Approach Delay (s)		25.2			18.5			7.8			9.3	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	883	220	263	1103	0	0	0	0	274	200	374
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4313		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.17	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4313		277	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	929	232	277	1161	0	0	0	0	288	211	394
RTOR Reduction (vph)	0	35	0	0	0	0	0	0	0	0	65	65
Lane Group Flow (vph)	0	1126	0	277	1161	0	0	0	0	233	386	144
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		49.9		69.4	69.4					23.6	23.6	23.6
Effective Green, g (s)		49.9		69.4	69.4					23.6	23.6	23.6
Actuated g/C Ratio		0.48		0.66	0.66					0.22	0.22	0.22
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		2050		371	2132					319	609	305
v/s Ratio Prot		0.26		c0.11	0.36							
v/s Ratio Perm				c0.39						c0.16	0.14	0.11
v/c Ratio		0.55		0.75	0.54					0.73	0.63	0.47
Uniform Delay, d1		19.6		11.3	9.4					37.7	36.8	35.3
Progression Factor		1.00		1.18	1.62					1.00	1.00	1.00
Incremental Delay, d2		1.1		5.0	0.6					8.6	2.3	1.4
Delay (s)		20.6		18.3	15.9					46.3	39.1	36.7
Level of Service		C		B	B					D	D	D
Approach Delay (s)		20.6			16.3			0.0			40.4	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	309	848	0	0	844	234	521	346	402	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.99		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1449		4408				
Flt Permitted	0.19	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	579	3138			3119	1449		4408				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	325	893	0	0	888	246	548	364	423	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	106	0	78	0	0	0	0
Lane Group Flow (vph)	325	893	0	0	888	140	0	1257	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	62.5	62.5			45.1	45.1		30.5				
Effective Green, g (s)	62.5	62.5			45.1	45.1		30.5				
Actuated g/C Ratio	0.60	0.60			0.43	0.43		0.29				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	598	1868			1340	622		1280				
v/s Ratio Prot	0.06	c0.28			c0.28							
v/s Ratio Perm	0.26					0.10		0.29				
v/c Ratio	0.54	0.48			0.66	0.22		0.98				
Uniform Delay, d1	12.8	12.0			23.9	18.9		37.0				
Progression Factor	0.72	0.86			0.95	1.43		1.00				
Incremental Delay, d2	0.9	0.7			1.7	0.5		21.0				
Delay (s)	10.2	11.1			24.4	27.6		57.9				
Level of Service	B	B			C	C		E				
Approach Delay (s)		10.8			25.1			57.9			0.0	
Approach LOS		B			C			E			A	

Intersection Summary			
HCM Average Control Delay	32.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	103	571	221	76	769	43	226	178	40	49	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1602	3232		1446	3007		1544	2782	
Flt Permitted	0.14	1.00	1.00	0.42	1.00		0.53	1.00		0.61	1.00	
Satd. Flow (perm)	234	3061	1291	716	3232		807	3007		990	2782	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	108	601	233	80	809	45	238	187	42	52	117	96
RTOR Reduction (vph)	0	0	95	0	4	0	0	21	0	0	80	0
Lane Group Flow (vph)	108	601	138	80	850	0	238	208	0	52	133	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	62.5	52.6	62.1	40.1	33.7		29.9	20.4		24.1	17.5	
Effective Green, g (s)	62.5	52.6	62.1	40.1	33.7		29.9	20.4		24.1	17.5	
Actuated g/C Ratio	0.60	0.50	0.59	0.38	0.32		0.28	0.19		0.23	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	460	1533	764	327	1037		288	584		262	464	
v/s Ratio Prot	c0.06	c0.20	0.02	0.01	c0.26		c0.07	0.07		0.01	0.05	
v/s Ratio Perm	0.08		0.09	0.08			c0.16			0.03		
v/c Ratio	0.23	0.39	0.18	0.24	0.82		0.83	0.36		0.20	0.29	
Uniform Delay, d1	11.9	16.3	9.8	21.1	32.8		33.7	36.6		32.3	38.3	
Progression Factor	0.89	0.99	1.92	1.00	1.00		0.93	0.88		1.00	1.00	
Incremental Delay, d2	0.9	0.6	0.1	0.4	7.2		16.8	1.3		0.4	1.2	
Delay (s)	11.5	16.7	18.9	21.5	40.1		48.2	33.5		32.6	39.5	
Level of Service	B	B	B	C	D		D	C		C	D	
Approach Delay (s)		16.7			38.5			41.0			38.2	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	222	273	57	184	98	328	380	75	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.95		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1634	2873		1463	3033		1589	3244		1549	3135	
Flt Permitted	0.55	1.00		0.33	1.00		0.46	1.00		0.48	1.00	
Satd. Flow (perm)	942	2873		515	3033		772	3244		780	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	234	287	60	194	103	345	400	79	96	272	57
RTOR Reduction (vph)	0	206	0	0	64	0	0	15	0	0	17	0
Lane Group Flow (vph)	62	315	0	60	233	0	345	464	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	366	785		240	832		530	1295		340	935	
v/s Ratio Prot	0.01	c0.11		c0.02	0.08		c0.11	0.14		0.02	0.10	
v/s Ratio Perm	0.05			0.07			c0.22			0.08		
v/c Ratio	0.17	0.40		0.25	0.28		0.65	0.36		0.28	0.33	
Uniform Delay, d1	23.8	31.1		24.0	30.0		16.6	22.1		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.03	0.91	
Incremental Delay, d2	0.3	1.5		0.6	0.8		3.0	0.8		0.5	0.9	
Delay (s)	24.0	32.7		24.7	30.8		19.6	22.9		23.5	26.9	
Level of Service	C	C		C	C		B	C		C	C	
Approach Delay (s)		31.8			29.8			21.5			26.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	26.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	536	79	6	437	123	65	577	7	140	309	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2912			2885		1436	3185		1450	2788	
Flt Permitted		0.58			0.94		0.43	1.00		0.29	1.00	
Satd. Flow (perm)		1692			2727		654	3185		448	2788	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	183	596	88	7	486	137	72	641	8	156	343	111
RTOR Reduction (vph)	0	13	0	0	39	0	0	1	0	0	48	0
Lane Group Flow (vph)	0	854	0	0	591	0	72	648	0	156	406	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		778			797		310	1078		241	944	
v/s Ratio Prot		c0.07					0.01	0.20		c0.04	0.15	
v/s Ratio Perm		c0.39			0.22		0.08			c0.22		
v/c Ratio		1.10			0.74		0.23	0.60		0.65	0.43	
Uniform Delay, d1		19.0			20.8		12.4	17.9		14.3	16.6	
Progression Factor		1.00			1.54		0.89	0.70		1.00	1.00	
Incremental Delay, d2		62.1			0.6		1.6	2.3		12.7	1.4	
Delay (s)		81.1			32.6		12.6	14.7		27.0	18.1	
Level of Service		F			C		B	B		C	B	
Approach Delay (s)		81.1			32.6			14.5			20.3	
Approach LOS		F			C			B			C	

Intersection Summary			
HCM Average Control Delay	40.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	219	46	71	154	13	36	632	89	10	359	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	1899		1615	1942		1658	3202		1138	3197	
Flt Permitted	0.65	1.00		0.53	1.00		0.51	1.00		0.32	1.00	
Satd. Flow (perm)	1137	1899		908	1942		889	3202		379	3197	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	51	226	47	73	159	13	37	652	92	10	370	44
RTOR Reduction (vph)	0	11	0	0	4	0	0	17	0	0	14	0
Lane Group Flow (vph)	51	262	0	73	168	0	37	727	0	10	400	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	420	701		335	717		424	1527		181	1525	
v/s Ratio Prot		c0.14			0.09			c0.23			0.13	
v/s Ratio Perm	0.04			0.08			0.04			0.03		
v/c Ratio	0.12	0.37		0.22	0.23		0.09	0.48		0.06	0.26	
Uniform Delay, d1	13.5	15.0		14.1	14.2		9.3	11.5		9.1	10.2	
Progression Factor	1.00	1.00		1.73	1.78		1.00	1.00		0.50	0.50	
Incremental Delay, d2	0.6	1.5		0.6	0.3		0.4	1.1		0.5	0.3	
Delay (s)	14.1	16.5		25.0	25.5		9.7	12.6		5.0	5.4	
Level of Service	B	B		C	C		A	B		A	A	
Approach Delay (s)		16.1			25.3			12.4			5.4	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	626	190	607	17	3	14	3	46	22	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			0.99		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.97		
Flt Protected	1.00		0.99				0.99			0.96		
Satd. Flow (prot)	2956		2955				1732			1897		
Flt Permitted	1.00		0.57				0.94			0.81		
Satd. Flow (perm)	2956		1703				1646			1604		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	659	200	639	18	3	15	3	48	23	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	659	0	855	0	0	0	31	0	0	26	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom				Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7				2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		823				355			345		
v/s Ratio Prot	0.22		c0.10									
v/s Ratio Perm			c0.34				c0.02			0.02		
v/c Ratio	0.80		1.04				0.09			0.07		
Uniform Delay, d1	21.9		19.0				20.4			20.3		
Progression Factor	1.28		0.77				1.00			1.00		
Incremental Delay, d2	2.0		40.7				0.5			0.4		
Delay (s)	30.0		55.3				20.9			20.8		
Level of Service	C		E				C			C		
Approach Delay (s)	30.0		55.3				20.9			20.8		
Approach LOS	C		E				C			C		

Intersection Summary			
HCM Average Control Delay	91.4	HCM Level of Service	F
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	333
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1429	
Flt Permitted	1.00	
Satd. Flow (perm)	1429	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1	351
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	352	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.25	
v/s Ratio Perm		
v/c Ratio	1.60	
Uniform Delay, d1	27.5	
Progression Factor	0.89	
Incremental Delay, d2	289.2	
Delay (s)	313.7	
Level of Service	F	
Approach Delay (s)	313.7	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	186	892	659	79	101	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3229	3205		1629	1457
Flt Permitted		0.64	1.00		0.95	1.00
Satd. Flow (perm)		2097	3205		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	207	991	732	88	112	173
RTOR Reduction (vph)	0	0	14	0	0	128
Lane Group Flow (vph)	0	1198	806	0	112	45
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1290	1972		426	381
v/s Ratio Prot			0.25		c0.07	
v/s Ratio Perm		c0.57				0.03
v/c Ratio		0.93	0.41		0.26	0.12
Uniform Delay, d1		11.2	6.4		19.0	18.3
Progression Factor		1.42	1.33		0.93	0.90
Incremental Delay, d2		5.8	0.6		1.5	0.6
Delay (s)		21.8	9.1		19.2	17.2
Level of Service		C	A		B	B
Approach Delay (s)		21.8	9.1		18.0	
Approach LOS		C	A		B	

Intersection Summary			
HCM Average Control Delay	16.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	51	921	679	211	170	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2912		1464	1373
Flt Permitted		0.86	1.00		0.95	1.00
Satd. Flow (perm)		2531	2912		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	54	969	715	222	179	57
RTOR Reduction (vph)	0	0	45	0	0	40
Lane Group Flow (vph)	0	1023	892	0	179	17
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1480	1702		428	401
v/s Ratio Prot			0.31		c0.12	
v/s Ratio Perm		c0.40				0.01
v/c Ratio		0.69	0.52		0.42	0.04
Uniform Delay, d1		9.4	8.1		18.5	16.5
Progression Factor		0.84	0.59		1.00	1.44
Incremental Delay, d2		1.3	0.7		2.9	0.2
Delay (s)		9.2	5.5		21.6	23.9
Level of Service		A	A		C	C
Approach Delay (s)		9.2	5.5		22.1	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	940	153	164	654	401	319
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.98		1.00	1.00	0.94	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	2240		1770	2436	1761	
Flt Permitted	1.00		0.13	1.00	0.97	
Satd. Flow (perm)	2240		240	2436	1761	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	959	156	167	667	409	326
RTOR Reduction (vph)	9	0	0	0	44	0
Lane Group Flow (vph)	1106	0	167	667	691	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1068		114	1162	650	
v/s Ratio Prot	0.49			0.27	c0.39	
v/s Ratio Perm			c0.69			
v/c Ratio	1.04		1.46	0.57	1.06	
Uniform Delay, d1	17.0		17.0	12.2	20.5	
Progression Factor	1.47		1.00	1.00	1.00	
Incremental Delay, d2	33.7		250.7	2.1	53.2	
Delay (s)	58.7		267.7	14.3	73.7	
Level of Service	E		F	B	E	
Approach Delay (s)	58.7			65.1	73.7	
Approach LOS	E			E	E	

Intersection Summary			
HCM Average Control Delay	64.8	HCM Level of Service	E
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	115.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	695	85	251	1150	9	68	0	177	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.22	1.00	1.00	0.28	1.00	1.00		0.76	1.00		0.71	
Satd. Flow (perm)	430	3213	1422	472	3138	1366		1309	1443		722	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	772	94	279	1278	10	76	0	197	1	0	0
RTOR Reduction (vph)	0	0	43	0	0	2	0	0	173	0	0	0
Lane Group Flow (vph)	1	772	51	279	1278	8	0	76	24	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	45.7	45.7	45.7	66.6	66.6	66.6		10.4	10.4		10.4	
Effective Green, g (s)	45.7	45.7	45.7	66.6	66.6	66.6		10.4	10.4		10.4	
Actuated g/C Ratio	0.54	0.54	0.54	0.78	0.78	0.78		0.12	0.12		0.12	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	231	1727	765	605	2459	1070		160	177		88	
v/s Ratio Prot		0.24		0.10	c0.41							
v/s Ratio Perm	0.00		0.04	0.26		0.01		c0.06	0.02		0.00	
v/c Ratio	0.00	0.45	0.07	0.46	0.52	0.01		0.47	0.14		0.01	
Uniform Delay, d1	9.1	12.0	9.4	3.6	3.4	2.0		34.8	33.3		32.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.8	0.2	0.6	0.2	0.0		2.2	0.4		0.1	
Delay (s)	9.1	12.8	9.6	4.2	3.5	2.0		37.0	33.6		32.8	
Level of Service	A	B	A	A	A	A		D	C		C	
Approach Delay (s)		12.4			3.6			34.6			32.8	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	12	778	813	43	23	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3017		1481	
Flt Permitted		0.93	1.00		0.97	
Satd. Flow (perm)		2842	3017		1481	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	864	903	48	26	12
RTOR Reduction (vph)	0	0	4	0	11	0
Lane Group Flow (vph)	0	877	947	0	27	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1042	2145		115	
v/s Ratio Prot			c0.31		c0.02	
v/s Ratio Perm		c0.31				
v/c Ratio		0.84	0.44		0.23	
Uniform Delay, d1		26.1	5.5		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		8.2	0.3		4.7	
Delay (s)		34.3	0.3		43.7	
Level of Service		C	A		D	
Approach Delay (s)		34.3	0.3		43.7	
Approach LOS		C	A		D	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	87	427	1	26	570	78	0	0	1	43	3	125
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.96	1.00
Satd. Flow (prot)		1727			3232			1432			1610	1282
Flt Permitted		0.77			0.93			1.00			0.94	1.00
Satd. Flow (perm)		1340			3026			1432			1581	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	97	474	1	29	633	87	0	0	1	48	3	139
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	93
Lane Group Flow (vph)	0	572	0	0	737	0	0	0	0	0	51	46
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		489			1636			152			470	422
v/s Ratio Prot					c0.07			0.00			0.02	
v/s Ratio Perm		c0.43			0.16						0.01	c0.04
v/c Ratio		1.17			0.45			0.00			0.11	0.11
Uniform Delay, d1		27.0			12.4			34.0			21.9	19.8
Progression Factor		1.00			1.82			1.00			1.00	1.00
Incremental Delay, d2		96.5			0.1			0.0			0.5	0.5
Delay (s)		123.5			22.6			34.0			22.3	20.3
Level of Service		F			C			C			C	C
Approach Delay (s)		123.5			22.6			34.0			20.9	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM Average Control Delay	60.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	997	57	36	29	48	23	24	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.94			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1556	3022		1587	3021			1808			1703	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	286	3022		604	3021			1636			1627	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1049	60	38	31	51	24	25	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	22	0
Lane Group Flow (vph)	41	653	0	37	1103	0	0	87	0	0	119	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	150	1581		316	1580			579			576	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.14			0.06				0.05			c0.07	
v/c Ratio	0.27	0.41		0.12	0.70			0.15			0.21	
Uniform Delay, d1	8.6	9.4		7.9	11.6			14.3			14.6	
Progression Factor	1.00	1.00		0.70	1.38			1.00			1.00	
Incremental Delay, d2	4.5	0.8		0.7	2.3			0.5			0.8	
Delay (s)	13.1	10.2		6.2	18.4			14.9			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.0			14.9			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	787	5	31	619	55	0	0	0	578	88	375
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.92	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	790	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	336	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	828	5	33	652	58	0	0	0	608	93	395
RTOR Reduction (vph)	0	0	0	0	0	25	0	0	0	0	0	168
Lane Group Flow (vph)	26	833	0	33	652	33	0	0	0	608	93	227
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	160	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.20					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.06						0.15
v/c Ratio	0.16	0.75		0.05	0.36	0.11				0.80	0.23	0.66
Uniform Delay, d1	31.6	38.6		15.2	15.7	13.3				47.2	40.6	45.4
Progression Factor	0.85	0.86		0.33	0.74	1.70				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.5				8.8	1.4	9.8
Delay (s)	28.9	37.4		5.1	12.0	23.1				56.0	42.0	55.2
Level of Service	C	D		A	B	C				E	D	E
Approach Delay (s)		37.2			12.6			0.0			54.5	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	37.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	338	809	218	53	575	280	100	247	54	54	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3263		1710	3138	1018		3301	1363	855		738
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3263		1710	3138	1018		3301	1363	855		738
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	356	852	229	56	605	295	105	260	57	57	0	32
RTOR Reduction (vph)	0	19	0	0	0	222	0	0	41	0	0	30
Lane Group Flow (vph)	356	1063	0	56	605	73	0	365	16	57	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	41.0	65.0		8.0	32.0	32.0		29.0	29.0	10.0		10.0
Effective Green, g (s)	41.0	65.0		8.0	32.0	32.0		29.0	29.0	10.0		10.0
Actuated g/C Ratio	0.32	0.50		0.06	0.25	0.25		0.22	0.22	0.08		0.08
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1036	1632		105	772	251		736	304	66		57
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.07		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.34	0.65		0.53	0.78	0.29		0.50	0.05	0.86		0.04
Uniform Delay, d1	34.2	24.1		59.2	45.8	39.8		44.1	39.7	59.3		55.6
Progression Factor	0.93	0.18		1.00	1.00	1.00		0.95	1.00	1.00		1.00
Incremental Delay, d2	0.6	1.3		18.0	7.8	2.9		2.4	0.3	65.1		0.3
Delay (s)	32.5	5.7		77.2	53.6	42.7		44.2	40.1	124.4		55.9
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		12.3			51.6			43.7			99.8	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	32.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	885	180	102	813	0	89	0	103	9	18	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.96	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2987		1649	3149		1388		1451	1803	1870	
Flt Permitted		1.00		0.17	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2987		296	3149		1079		1451	1803	1870	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	983	200	113	903	0	99	0	114	10	20	8
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	78	0	5	0
Lane Group Flow (vph)	0	1166	0	113	903	0	99	0	36	10	23	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1792		178	1889		345		464	577	598	
v/s Ratio Prot		c0.39			0.29						0.01	
v/s Ratio Perm				0.38			c0.09		0.03	0.01		
v/c Ratio		0.65		0.63	0.48		0.29		0.08	0.02	0.04	
Uniform Delay, d1		13.1		12.9	11.2		25.5		23.7	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.8		16.0	0.9		2.1		0.3	0.1	0.1	
Delay (s)		15.0		28.9	12.1		27.5		24.0	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		15.0			14.0			25.7			23.5	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	0	1188	210	666	0	0	789	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4270	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4270	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	296	0	1212	214	680	0	0	805	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	296	0	1212	214	680	0	0	1305	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.19		c0.79	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.65		2.77	0.46	0.25			1.16dr	
Uniform Delay, d1				32.3		37.5	29.5	8.6			37.0	
Progression Factor				1.00		1.00	0.63	2.08			1.00	
Incremental Delay, d2				7.0		804.4	2.7	0.2			34.8	
Delay (s)				39.3		841.9	21.4	18.0			71.8	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			684.4			18.8			71.8	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	308.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.40		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	324	770	145	0	0	0	0	552	401	355	723	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3157						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3157						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	334	794	149	0	0	0	0	569	413	366	745	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	301	962	0	0	0	0	0	569	413	366	745	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.13		c0.23	0.16	
v/s Ratio Perm	0.20	0.30							c0.18			
v/c Ratio	0.62	0.94						0.49	0.69	0.78	0.27	
Uniform Delay, d1	30.0	34.5						32.5	34.6	33.8	10.5	
Progression Factor	1.00	1.00						1.14	1.14	0.86	0.21	
Incremental Delay, d2	5.7	17.2						1.3	5.8	4.7	0.1	
Delay (s)	35.7	51.7						38.4	45.3	33.7	2.3	
Level of Service	D	D						D	D	C	A	
Approach Delay (s)		48.0			0.0			41.3			12.6	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	287	25	24	11	151	0	0	145	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.55	1.00			1.00	
Satd. Flow (perm)				1688	3132		982	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	319	28	27	12	168	0	0	161	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	319	37	0	12	168	0	0	166	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		638	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.09			c0.08	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.15			0.16	
Uniform Delay, d1				24.4	20.0		10.5	7.9			9.8	
Progression Factor				1.00	1.00		1.05	1.18			1.00	
Incremental Delay, d2				4.8	0.1		0.1	0.3			0.3	
Delay (s)				29.2	20.1		11.1	9.7			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			27.9			9.7			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	1.0
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	5	0	14	0	136	39	46	387	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1565			1720		1590	1860	
Flt Permitted	0.74	1.00			0.97			1.00		0.61	1.00	
Satd. Flow (perm)	1516	1735			1531			1720		1021	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	5	0	15	0	143	41	48	407	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	12	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	10	0	0	172	0	48	407	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	551			486			809		647	1094	
v/s Ratio Prot		c0.01						0.10		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.21		0.07	0.37	
Uniform Delay, d1	20.0	20.0			19.9			13.2		8.5	9.2	
Progression Factor	1.00	1.00			1.00			1.00		0.96	0.86	
Incremental Delay, d2	0.1	0.1			0.1			0.6		0.2	0.9	
Delay (s)	20.1	20.1			20.0			13.8		8.4	8.8	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			13.8			8.8	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	46	41	16	183	273	27
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1751		1765	1782	1656	
Flt Permitted	0.97		0.52	1.00	1.00	
Satd. Flow (perm)	1751		966	1782	1656	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	46	18	203	303	30
RTOR Reduction (vph)	31	0	0	0	5	0
Lane Group Flow (vph)	66	0	18	203	328	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		535	987	917	
v/s Ratio Prot	c0.04			0.11	c0.20	
v/s Ratio Perm			0.02			
v/c Ratio	0.12		0.03	0.21	0.36	
Uniform Delay, d1	15.5		6.6	7.3	8.1	
Progression Factor	1.00		0.54	0.64	1.41	
Incremental Delay, d2	0.4		0.1	0.5	0.9	
Delay (s)	15.9		3.7	5.1	12.3	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			5.0	12.3	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	28.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	265	9	257	161	4	0	295	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3771		1693	1677			1738	1428
Flt Permitted					0.99		0.46	1.00			1.00	1.00
Satd. Flow (perm)					3771		820	1677			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	294	10	286	179	4	0	328	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	1	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	335	0	286	182	0	0	328	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1153		595	1006			777	638
v/s Ratio Prot					c0.09		c0.06	0.11			0.19	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.48	0.18			0.42	0.01
Uniform Delay, d1					22.5		14.2	7.6			16.0	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.8	0.4			1.7	0.0
Delay (s)					23.1		16.9	8.0			17.7	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.5			17.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	96	94	38	133	217	30	59	704	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3290		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.58	1.00	
Satd. Flow (perm)					1896		446	3290		1048	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	107	104	42	148	241	33	66	782	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	243	0	148	260	0	66	825	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1491		634	1572	
v/s Ratio Prot					c0.13		c0.04	0.08		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.17		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.2		8.2	14.7	
Progression Factor					1.00		0.83	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.3		0.3	1.3	
Delay (s)					22.9		17.0	10.3		8.6	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.6			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	285	24	159	591	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3174		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		598	3174		996	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	300	25	167	622	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	8	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	317	0	167	667	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		335	1777		558	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.18		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.1		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.3		3.6	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.3			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	35	182	64	248	559	77
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	202	71	276	621	86

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	241	163	184	414	293
Volume Left (vph)	39	71	0	0	0
Volume Right (vph)	202	0	0	0	86
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.7	6.4	6.2	5.8	5.6
Degree Utilization, x	0.38	0.29	0.32	0.67	0.45
Capacity (veh/h)	596	538	557	609	630
Control Delay (s)	12.1	10.8	10.9	18.4	11.9
Approach Delay (s)	12.1	10.8		15.7	
Approach LOS	B	B		C	

Intersection Summary			
Delay	13.7		
HCM Level of Service	B		
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	373	18	20	389	69	77	55	68	351	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1421			1710	3250	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	936	1731	1421			257	3250	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	414	20	22	432	77	86	61	76	390	36
RTOR Reduction (vph)	0	0	0	12	0	0	38	0	0	0	7	0
Lane Group Flow (vph)	0	75	414	8	22	432	125	0	0	137	419	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		303	725	641	223	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.25					0.13	
v/s Ratio Perm		0.07		0.01	0.02		0.09			c0.53		
v/c Ratio		0.25	0.57	0.01	0.10	1.05	0.37			1.99	0.48	
Uniform Delay, d1		21.6	23.3	17.8	31.2	40.0	33.4			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	3.3	0.0	0.9	57.6	3.1			491.0	1.9	
Delay (s)		23.5	26.5	17.9	32.1	97.6	36.5			529.5	34.3	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.8			79.1					154.8	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	137.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	101.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	105	559	80	101	4	109	587	190
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.38	1.00				0.95	1.00	
Satd. Flow (perm)	675	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	621	89	112	4	121	652	211
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	117	810	0	0	0	125	837	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	177	850				334	514	
v/s Ratio Prot		0.25				0.07		
v/s Ratio Perm	0.17						c0.32	
v/c Ratio	0.66	0.95				0.37	1.63	
Uniform Delay, d1	34.6	38.1				36.7	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	17.8	21.4				3.2	291.8	
Delay (s)	52.4	59.5				39.9	334.0	
Level of Service	D	E				D	F	
Approach Delay (s)		58.6				296.8		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	583	0	0	458	55	83	51	19	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1952			1840				
Flt Permitted		0.91			1.00			0.97				
Satd. Flow (perm)		1533			1952			1840				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	71	648	0	0	509	61	92	57	21	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	719	0	0	570	0	0	170	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		943			1201			481				
v/s Ratio Prot					0.29							
v/s Ratio Perm		c0.47						0.09				
v/c Ratio		0.76			0.47			0.35				
Uniform Delay, d1		9.1			6.8			19.5				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		5.8			1.3			2.0				
Delay (s)		14.9			8.1			21.6				
Level of Service		B			A			C				
Approach Delay (s)		14.9			8.1			21.6			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	327	149	126	323	132	103	625	84	139	751	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1982	1434		1944	1444	1546	3040	1296	1505	3069	1252
Flt Permitted		0.39	1.00		0.72	1.00	0.23	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)		773	1434		1416	1444	379	3040	1296	468	3069	1252
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	73	344	157	133	340	139	108	658	88	146	791	98
RTOR Reduction (vph)	0	0	93	0	0	99	0	0	53	0	0	49
Lane Group Flow (vph)	0	417	64	0	473	40	108	658	35	146	791	49
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		432	587		405	413	275	1225	522	315	1248	509
v/s Ratio Prot		c0.09					0.03	0.22		c0.04	c0.26	
v/s Ratio Perm		0.30	0.04		c0.33	0.03	0.16		0.03	0.19		0.04
v/c Ratio		0.97	0.11		1.17	0.10	0.39	0.54	0.07	0.46	0.63	0.10
Uniform Delay, d1		30.3	19.2		37.5	27.5	16.4	23.9	19.2	15.9	24.9	19.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.76	1.56	2.69
Incremental Delay, d2		35.4	0.4		99.1	0.5	0.9	1.7	0.3	1.0	2.4	0.4
Delay (s)		65.7	19.5		136.6	28.0	17.3	25.6	19.5	29.1	41.1	52.2
Level of Service		E	B		F	C	B	C	B	C	D	D
Approach Delay (s)		53.1			112.0			23.9			40.5	
Approach LOS		D			F			C			D	

Intersection Summary			
HCM Average Control Delay	52.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	400	83	101	473	90	49	59	70	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1644			1646			1796				
Flt Permitted		0.83			0.84			0.99				
Satd. Flow (perm)		1378			1397			1796				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	92	444	92	112	526	100	54	66	78	0	0	0
RTOR Reduction (vph)	0	10	0	0	9	0	0	36	0	0	0	0
Lane Group Flow (vph)	0	618	0	0	729	0	0	162	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		848			860			470				
v/s Ratio Prot												
v/s Ratio Perm		0.45			c0.52			0.09				
v/c Ratio		0.73			0.85			0.34				
Uniform Delay, d1		8.7			10.1			19.5				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		5.5			10.2			2.0				
Delay (s)		14.2			20.2			21.5				
Level of Service		B			C			C				
Approach Delay (s)		14.2			20.2			21.5			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	18.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	442	71	82	552	44	37	76	74	55	235	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1687	1382		1712	1417		1686	1455		1886	
Flt Permitted		0.96	1.00		0.89	1.00		0.84	1.00		0.93	
Satd. Flow (perm)		1630	1382		1528	1417		1435	1455		1775	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	465	75	86	581	46	39	80	78	58	247	49
RTOR Reduction (vph)	0	0	32	0	0	13	0	0	53	0	7	0
Lane Group Flow (vph)	0	487	43	0	667	33	0	119	25	0	347	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		935	792		876	812		459	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.30	0.03		c0.44	0.02		0.08	0.02		c0.20	
v/c Ratio		0.52	0.05		0.76	0.04		0.26	0.05		0.61	
Uniform Delay, d1		9.7	7.0		12.1	7.0		18.9	17.6		21.5	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		2.1	0.1		6.2	0.1		1.4	0.2		4.8	
Delay (s)		11.8	7.2		18.3	7.1		20.3	17.9		26.4	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		11.2			17.6			19.3			26.4	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	17.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	459	30	52	582	56	44	165	57	118	199	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1536	3068		1652	3733		1585	1663	1370	1568	1680	1397
Flt Permitted	0.32	1.00		0.41	1.00		0.59	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	520	3068		720	3733		977	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	63	510	33	58	647	62	49	183	63	131	221	33
RTOR Reduction (vph)	0	7	0	0	11	0	0	0	38	0	0	20
Lane Group Flow (vph)	63	536	0	58	698	0	49	183	25	131	221	13
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	248	1463		343	1780		391	665	548	417	672	559
v/s Ratio Prot		0.17			c0.19			0.11			c0.13	
v/s Ratio Perm	0.12			0.08			0.05		0.02	0.13		0.01
v/c Ratio	0.25	0.37		0.17	0.39		0.13	0.28	0.05	0.31	0.33	0.02
Uniform Delay, d1	10.1	10.8		9.7	10.9		12.3	13.1	11.9	13.4	13.5	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.84	0.91	0.75	0.59	0.59	0.28
Incremental Delay, d2	2.5	0.7		1.1	0.7		0.7	1.0	0.2	1.9	1.3	0.1
Delay (s)	12.6	11.5		10.7	11.6		11.0	13.0	9.1	9.8	9.2	3.4
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.6			11.5			11.8			8.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	73	389	71	70	369	74	55	196	64	133	267	160
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1327	3142		1515	3107		1582	2928		1453	2920	
Flt Permitted	0.46	1.00		0.44	1.00		0.45	1.00		0.58	1.00	
Satd. Flow (perm)	636	3142		708	3107		750	2928		893	2920	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	77	409	75	74	388	78	58	206	67	140	281	168
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	99	0
Lane Group Flow (vph)	77	484	0	74	466	0	58	234	0	140	350	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	305	1508		340	1491		310	1210		369	1207	
v/s Ratio Prot		c0.15			0.15			0.08			0.12	
v/s Ratio Perm	0.12			0.10			0.08			c0.16		
v/c Ratio	0.25	0.32		0.22	0.31		0.19	0.19		0.38	0.29	
Uniform Delay, d1	11.5	12.0		11.3	11.9		14.0	14.0		15.3	14.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.0	0.6		1.5	0.5		1.3	0.4		3.0	0.6	
Delay (s)	13.5	12.5		12.8	12.5		15.3	14.4		18.3	15.3	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.7			12.5			14.5			16.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	442	61	31	504	46	82	194	57	76	473	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1594	1653		1370	1974		1534	2998		1534	3011	
Flt Permitted	0.26	1.00		0.31	1.00		0.28	1.00		0.59	1.00	
Satd. Flow (perm)	439	1653		446	1974		450	2998		951	3011	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	465	64	33	531	48	86	204	60	80	498	117
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	112	529	0	33	579	0	86	264	0	80	615	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	44.0	39.4		40.8	37.8		26.6	21.8		26.6	21.8	
Effective Green, g (s)	44.0	37.4		40.8	35.8		26.6	19.8		26.6	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	290	727		247	831		202	698		331	701	
v/s Ratio Prot	c0.02	c0.32		0.00	0.29		c0.02	0.09		0.01	c0.20	
v/s Ratio Perm	0.18			0.06			0.11			0.06		
v/c Ratio	0.39	0.73		0.13	0.70		0.43	0.38		0.24	0.88	
Uniform Delay, d1	22.7	19.6		20.1	20.2		29.1	27.4		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	6.3		0.2	4.8		1.4	1.6		0.4	14.5	
Delay (s)	23.6	25.9		20.4	25.0		30.5	29.0		22.3	46.0	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		25.5			24.7			29.4			43.2	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	375	63	111	483	112	64	150	55	121	348	79
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3679			3131		1652	3237		1549	3025	
Flt Permitted		0.70			0.74		0.44	1.00		0.61	1.00	
Satd. Flow (perm)		2597			2323		765	3237		994	3025	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	92	417	70	123	537	124	71	167	61	134	387	88
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	784	0	71	228	0	134	475	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1177			1053		337	1424		437	1331	
v/s Ratio Prot								0.07			c0.16	
v/s Ratio Perm		0.22			c0.34		0.09			0.13		
v/c Ratio		0.49			0.74		0.21	0.16		0.31	0.36	
Uniform Delay, d1		14.4			16.9		13.0	12.7		13.6	14.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.5			4.8		1.4	0.2		1.8	0.7	
Delay (s)		15.9			21.7		14.4	12.9		15.4	14.7	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		15.9			21.7			13.2			14.9	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	831	6	19	554	236	1	1	9	202	1	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.40	1.00		0.27	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	679	3206		468	3320	1485		1519			2535	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	103	923	7	21	616	262	1	1	10	224	1	84
RTOR Reduction (vph)	0	0	0	0	0	96	0	7	0	0	53	0
Lane Group Flow (vph)	103	930	0	21	616	166	0	5	0	0	256	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		18.6			18.6	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		18.6			18.6	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	431	2033		297	2105	942		389			649	
v/s Ratio Prot		c0.29			0.19							
v/s Ratio Perm	0.15			0.04		0.11		0.00			c0.10	
v/c Ratio	0.24	0.46		0.07	0.29	0.18		0.01			0.39	
Uniform Delay, d1	5.7	6.9		5.1	6.0	5.5		20.2			22.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.3	0.7		0.5	0.4	0.4		0.1			1.7	
Delay (s)	7.0	7.6		5.6	6.3	5.9		20.2			24.1	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		7.5			6.2			20.2			24.1	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	72.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	124	216	119	94	162	57	144	876	87	128	816	99
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1504		1563	1584		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.24	1.00		0.21	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	743	1504		393	1584		323	3069	1337	285	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	131	227	125	99	171	60	152	922	92	135	859	104
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	49
Lane Group Flow (vph)	131	329	0	99	216	0	152	922	52	135	859	55
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	285	389		203	410		235	1264	551	222	1276	543
v/s Ratio Prot	0.03	c0.22		c0.03	0.14		c0.05	c0.30		0.04	0.28	
v/s Ratio Perm	0.11			0.11			0.26		0.04	0.24		0.04
v/c Ratio	0.46	0.85		0.49	0.53		0.65	0.73	0.09	0.61	0.67	0.10
Uniform Delay, d1	22.5	29.9		22.7	27.0		14.6	21.0	15.3	14.8	20.3	15.3
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.81	0.55	1.00	1.00	1.00
Incremental Delay, d2	5.3	19.8		8.2	4.8		11.9	3.4	0.3	11.8	2.9	0.4
Delay (s)	27.8	49.6		30.9	31.8		21.8	20.5	8.8	26.6	23.2	15.7
Level of Service	C	D		C	C		C	C	A	C	C	B
Approach Delay (s)		43.7			31.5			19.8			22.9	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	25.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	179	38	20	173	22	42	141	38	45	251	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1835			1848			1937			1975	
Flt Permitted		0.97			0.96			0.90			0.94	
Satd. Flow (perm)		1780			1790			1753			1871	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	185	39	21	178	23	43	145	39	46	259	51
RTOR Reduction (vph)	0	11	0	0	6	0	0	11	0	0	9	0
Lane Group Flow (vph)	0	236	0	0	216	0	0	216	0	0	347	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		739			744			809			864	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.12			c0.19	
v/c Ratio		0.32			0.29			0.27			0.40	
Uniform Delay, d1		12.8			12.6			10.7			11.6	
Progression Factor		1.00			0.73			1.29			1.00	
Incremental Delay, d2		1.1			1.0			0.8			1.4	
Delay (s)		14.0			10.2			14.6			13.0	
Level of Service		B			B			B			B	
Approach Delay (s)		14.0			10.2			14.6			13.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	190	39	25	180	20	53	199	31	46	206	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3056		1576	3116		1518	3119		1550	3075	
Flt Permitted	0.61	1.00		0.59	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	965	3056		987	3116		935	3119		969	3075	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	211	43	28	200	22	59	221	34	51	229	42
RTOR Reduction (vph)	0	26	0	0	13	0	0	14	0	0	17	0
Lane Group Flow (vph)	27	228	0	28	209	0	59	241	0	51	254	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	893		289	911		547	1823		566	1798	
v/s Ratio Prot		c0.07			0.07			0.08			c0.08	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.26		0.10	0.23		0.11	0.13		0.09	0.14	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.93	0.96		0.77	0.77		1.39	1.42		0.41	0.36	
Incremental Delay, d2	0.6	0.7		0.7	0.6		0.4	0.1		0.3	0.2	
Delay (s)	16.3	17.5		13.6	14.1		8.7	8.8		2.7	2.4	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.4			14.0			8.8			2.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	165	41	24	153	37	27	260	16	42	336	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1555	3056		1525	2936			1923			1939	
Flt Permitted	0.62	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1014	3056		977	2936			1824			1832	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	183	46	27	170	41	30	289	18	47	373	37
RTOR Reduction (vph)	0	28	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	73	201	0	27	186	0	0	334	0	0	452	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	406	1222		391	1174			870			874	
v/s Ratio Prot		0.07			0.06							
v/s Ratio Perm	c0.07			0.03				0.18			c0.25	
v/c Ratio	0.18	0.16		0.07	0.16			0.38			0.52	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.9			11.8	
Progression Factor	1.02	0.97		0.77	0.76			1.07			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.2	
Delay (s)	13.9	12.4		9.6	9.8			12.8			14.0	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		12.8			9.7			12.8			14.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	30	19	153	26	44	230	11	33	360	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1966		1584	1975			1981			1979	
Flt Permitted	0.58	1.00		0.65	1.00			0.89			0.96	
Satd. Flow (perm)	1013	1966		1082	1975			1777			1911	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	33	21	170	29	49	256	12	37	400	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	156	0	21	199	0	0	317	0	0	500	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	312	605		333	608			1012			1088	
v/s Ratio Prot		0.08			c0.10							
v/s Ratio Perm	0.05			0.02				0.18			c0.26	
v/c Ratio	0.17	0.26		0.06	0.33			0.31			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.3			7.3			8.2	
Progression Factor	0.83	0.81		0.92	0.93			1.00			1.00	
Incremental Delay, d2	1.1	1.0		0.4	1.4			0.8			1.4	
Delay (s)	14.7	14.6		15.0	17.6			8.2			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.7			17.3			8.2			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	12	92	2	5	10	59	223	5	5	442	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1726		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.41	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1332	1726		1224	1808		693	1647	1428	1049	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	13	102	2	6	11	66	248	6	6	491	80
RTOR Reduction (vph)	0	74	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	57	41	0	2	9	0	66	248	4	6	491	52
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		339	501		416	988	857	629	1200	898
v/s Ratio Prot		0.02			0.01			0.15			c0.25	
v/s Ratio Perm	c0.04			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.15	0.09		0.01	0.02		0.16	0.25	0.00	0.01	0.41	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.7	6.1	5.2	5.2	6.9	5.4
Progression Factor	1.40	2.81		1.00	1.00		0.80	0.75	0.93	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.3		0.0	0.1		0.6	0.5	0.0	0.0	1.0	0.1
Delay (s)	25.8	49.2		17.1	17.1		5.2	5.1	4.9	5.3	7.9	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		41.5			17.1			5.1			7.6	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	253	163	169	203	0	0	0	0	110	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.41	1.00					0.95	1.00	
Satd. Flow (perm)		2905		722	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	266	172	178	214	0	0	0	0	116	495	397
RTOR Reduction (vph)	0	103	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	335	0	178	214	0	0	0	0	116	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		566	1805					545	1096	
v/s Ratio Prot		c0.12		c0.06	0.07					0.08	c0.25	
v/s Ratio Perm				0.10								
v/c Ratio		0.36		0.31	0.12					0.21	0.68	
Uniform Delay, d1		26.4		13.4	11.1					22.4	27.6	
Progression Factor		1.00		2.20	2.14					1.00	1.00	
Incremental Delay, d2		1.1		1.3	0.1					0.9	3.5	
Delay (s)		27.4		30.7	23.8					23.3	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.4			27.0			0.0			30.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	222	0	0	299	113	73	511	219	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2848		1767	1782	1560			
Flt Permitted	0.36	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	642	3196			2848		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	234	0	0	315	119	77	538	231	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	0	163	0	0	0
Lane Group Flow (vph)	148	234	0	0	395	0	77	538	68	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	705	1974			726		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.14		0.04	c0.30				
v/s Ratio Perm	0.05								0.04			
v/c Ratio	0.21	0.12			0.54		0.15	1.03	0.15			
Uniform Delay, d1	10.2	8.0			32.9		26.6	36.0	26.6			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			2.9		0.6	46.3	0.7			
Delay (s)	4.9	3.6			35.8		27.2	82.3	27.2			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			35.8			62.3			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	42.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	486	455	77	507	0	0	0	0	11	434	277
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3097		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.12	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3097		209	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	506	474	80	528	0	0	0	0	11	452	289
RTOR Reduction (vph)	0	169	0	0	0	0	0	0	0	0	0	191
Lane Group Flow (vph)	0	811	0	80	528	0	0	0	0	11	452	98
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		383	1917					543	1085	520
v/s Ratio Prot		c0.26		0.04	c0.16					0.01	c0.14	0.06
v/s Ratio Perm				0.08								
v/c Ratio		0.73		0.21	0.28					0.02	0.42	0.19
Uniform Delay, d1		27.7		13.9	10.5					21.9	25.4	23.3
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		4.2		0.9	0.3					0.1	1.2	0.8
Delay (s)		31.9		15.0	12.8					22.0	26.6	24.1
Level of Service		C		B	B					C	C	C
Approach Delay (s)		31.9			13.1			0.0			25.5	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	396	101	0	0	142	6	441	456	55	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3110			3168		1555	1653	1530			
Flt Permitted	0.66	0.72			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1014	2316			3168		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	408	104	0	0	146	6	455	470	57	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	36	0	0	0
Lane Group Flow (vph)	204	308	0	0	149	0	455	470	21	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	681	1467			475		575	612	566			
v/s Ratio Prot	c0.11	0.08			c0.05		c0.29	0.28	0.01			
v/s Ratio Perm	0.04	0.03										
v/c Ratio	0.30	0.21			0.31		0.79	0.77	0.04			
Uniform Delay, d1	13.9	13.4			37.9		28.1	27.7	20.1			
Progression Factor	0.25	0.26			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.7		10.7	9.0	0.1			
Delay (s)	4.3	3.8			39.6		38.7	36.7	20.2			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		4.0			39.6			36.7			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	26.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	217	102	117	255	121	80	663	75	102	875	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2939			2921		1508	3069	1309	1508	3099	1298
Flt Permitted		0.74			0.75		0.16	1.00	1.00	0.27	1.00	1.00
Satd. Flow (perm)		2205			2207		261	3069	1309	433	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	226	106	122	266	126	83	691	78	106	911	67
RTOR Reduction (vph)	0	40	0	0	37	0	0	0	48	0	0	33
Lane Group Flow (vph)	0	373	0	0	477	0	83	691	30	106	911	34
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		986			727		169	1210	508	234	1221	504
v/s Ratio Prot		c0.03					c0.02	0.23		0.02	c0.29	
v/s Ratio Perm		0.13			c0.22		0.18		0.02	0.17		0.03
v/c Ratio		0.38			0.66		0.49	0.57	0.06	0.45	0.75	0.07
Uniform Delay, d1		16.8			24.4		16.6	20.1	16.3	15.8	22.1	16.3
Progression Factor		1.00			1.00		1.27	0.69	0.53	1.11	1.17	1.77
Incremental Delay, d2		1.1			4.6		9.1	1.8	0.2	4.6	3.1	0.2
Delay (s)		17.9			29.0		30.0	15.6	8.9	22.1	28.9	29.1
Level of Service		B			C		C	B	A	C	C	C
Approach Delay (s)		17.9			29.0			16.4			28.3	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	23.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	318	0	0	375	100	52	43	36	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.96				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1731			1698			1650				
Flt Permitted		0.84			1.00			0.98				
Satd. Flow (perm)		1465			1698			1650				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	353	0	0	417	111	58	48	40	0	0	0
RTOR Reduction (vph)	0	0	0	0	15	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	437	0	0	513	0	0	125	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		856			993			482				
v/s Ratio Prot					c0.30							
v/s Ratio Perm		0.30						0.08				
v/c Ratio		0.51			0.52			0.26				
Uniform Delay, d1		8.0			8.0			17.6				
Progression Factor		1.00			0.98			1.00				
Incremental Delay, d2		2.2			1.5			1.3				
Delay (s)		10.2			9.4			18.9				
Level of Service		B			A			B				
Approach Delay (s)		10.2			9.4			18.9			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	306	27	51	402	68	27	112	40	56	148	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.98			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1957			1933			2960			2983	
Flt Permitted		0.96			0.93			0.89			0.85	
Satd. Flow (perm)		1889			1811			2661			2580	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	21	340	30	57	447	76	30	124	44	62	164	47
RTOR Reduction (vph)	0	5	0	0	9	0	0	26	0	0	27	0
Lane Group Flow (vph)	0	386	0	0	571	0	0	172	0	0	246	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		872			836			1105			1072	
v/s Ratio Prot												
v/s Ratio Perm		0.20			c0.32			0.06			c0.10	
v/c Ratio		0.44			0.68			0.16			0.23	
Uniform Delay, d1		11.8			13.8			11.9			12.3	
Progression Factor		0.57			0.36			1.29			0.46	
Incremental Delay, d2		1.4			3.7			0.3			0.5	
Delay (s)		8.2			8.7			15.6			6.2	
Level of Service		A			A			B			A	
Approach Delay (s)		8.2			8.7			15.6			6.2	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	279	39	82	532	96	43	217	98	82	215	59
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1511	3039		1570	3078		1587	2961		1585	3074	
Flt Permitted	0.26	1.00		0.52	1.00		0.57	1.00		0.54	1.00	
Satd. Flow (perm)	418	3039		854	3078		945	2961		904	3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	46	310	43	91	591	107	48	241	109	91	239	66
RTOR Reduction (vph)	0	17	0	0	22	0	0	50	0	0	30	0
Lane Group Flow (vph)	46	336	0	91	676	0	48	300	0	91	275	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	141	1029		289	1042		509	1594		487	1655	
v/s Ratio Prot		0.11			c0.22			c0.10			0.09	
v/s Ratio Perm	0.11			0.11			0.05			0.10		
v/c Ratio	0.33	0.33		0.31	0.65		0.09	0.19		0.19	0.17	
Uniform Delay, d1	16.0	16.0		15.9	18.2		7.3	7.7		7.7	7.6	
Progression Factor	0.79	0.75		1.12	1.13		1.12	1.26		1.10	1.10	
Incremental Delay, d2	5.7	0.8		2.8	3.0		0.4	0.3		0.8	0.2	
Delay (s)	18.4	12.8		20.7	23.6		8.5	10.0		9.3	8.6	
Level of Service	B	B		C	C		A	A		A	A	
Approach Delay (s)		13.4			23.3			9.8			8.8	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	287	96	103	382	48	164	245	130	46	295	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.98			1.00	
Frt	1.00	0.96		1.00	0.98			0.96			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1507	2988		1430	3719			3403			3530	
Flt Permitted	0.47	1.00		0.51	1.00			0.69			0.85	
Satd. Flow (perm)	748	2988		761	3719			2397			3030	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	302	101	108	402	51	173	258	137	48	311	67
RTOR Reduction (vph)	0	50	0	0	15	0	0	47	0	0	23	0
Lane Group Flow (vph)	58	353	0	108	438	0	0	521	0	0	403	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	357	1425		363	1774			959			1212	
v/s Ratio Prot		0.12			0.12							
v/s Ratio Perm	0.08			c0.14				c0.22			0.13	
v/c Ratio	0.16	0.25		0.30	0.25			0.54			0.33	
Uniform Delay, d1	9.6	10.1		10.4	10.1			15.0			13.5	
Progression Factor	1.55	1.81		1.10	1.09			1.07			0.76	
Incremental Delay, d2	0.9	0.4		1.9	0.3			1.3			0.7	
Delay (s)	15.9	18.6		13.3	11.3			17.4			10.9	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		18.3			11.7			17.4			10.9	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	311	86	88	284	88	115	79	45	45	79	115
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1671	1436		3088			1885			1835	
Flt Permitted		0.80	1.00		0.78			0.68			0.91	
Satd. Flow (perm)		1356	1436		2443			1320			1679	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	346	96	98	316	98	128	88	50	50	88	128
RTOR Reduction (vph)	0	0	46	0	32	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	442	50	0	480	0	0	253	0	0	215	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		709	751		1278			426			542	
v/s Ratio Prot												
v/s Ratio Perm		c0.33	0.03		0.20			c0.19			0.13	
v/c Ratio		0.62	0.07		0.38			0.59			0.40	
Uniform Delay, d1		11.0	7.7		9.2			18.4			17.1	
Progression Factor		1.41	3.20		0.54			1.00			1.00	
Incremental Delay, d2		3.9	0.2		0.8			6.0			2.2	
Delay (s)		19.4	24.7		5.8			24.4			19.2	
Level of Service		B	C		A			C			B	
Approach Delay (s)		20.4			5.8			24.4			19.2	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	16.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	291	32	25	316	58	27	130	46	62	145	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.98			0.97			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1443	3021		1566	3020			3582			3594	
Flt Permitted	0.49	1.00		0.54	1.00			0.89			0.84	
Satd. Flow (perm)	752	3021		883	3020			3226			3068	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	323	36	28	351	64	30	144	51	69	161	72
RTOR Reduction (vph)	0	13	0	0	23	0	0	30	0	0	42	0
Lane Group Flow (vph)	66	346	0	28	392	0	0	195	0	0	260	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	347	1394		408	1394			1340			1274	
v/s Ratio Prot		0.11			c0.13							
v/s Ratio Perm	0.09			0.03				0.06			c0.08	
v/c Ratio	0.19	0.25		0.07	0.28			0.15			0.20	
Uniform Delay, d1	10.3	10.6		9.7	10.8			11.8			12.1	
Progression Factor	0.63	0.63		0.83	0.66			0.95			0.41	
Incremental Delay, d2	1.0	0.3		0.2	0.2			0.2			0.3	
Delay (s)	7.5	7.0		8.2	7.4			11.4			5.3	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		7.1			7.4			11.4			5.3	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	456	30	83	487	213	24	118	109	323	248	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3278			3168			3089			3181	
Flt Permitted		0.78			0.79			0.90			0.71	
Satd. Flow (perm)		2560			2523			2807			2305	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	507	33	92	541	237	27	131	121	359	276	87
RTOR Reduction (vph)	0	7	0	0	60	0	0	65	0	0	16	0
Lane Group Flow (vph)	0	585	0	0	810	0	0	214	0	0	706	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		985			970			1339			603	
v/s Ratio Prot								c0.02				
v/s Ratio Perm		0.23			c0.32			0.05			c0.31	
v/c Ratio		0.59			0.84			0.16			1.28dl	
Uniform Delay, d1		16.0			18.1			10.2			24.0	
Progression Factor		1.47			1.00			1.00			0.81	
Incremental Delay, d2		2.6			8.5			0.3			93.0	
Delay (s)		26.1			26.6			10.4			112.4	
Level of Service		C			C			B			F	
Approach Delay (s)		26.1			26.6			10.4			112.4	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	49.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	875	135	46	762	0	79	0	35	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3037			3090			1619				
Flt Permitted		1.00			0.81			0.79				
Satd. Flow (perm)		3037			2504			1329				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	972	150	51	847	0	88	0	39	0	0	0
RTOR Reduction (vph)	0	17	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	1105	0	0	898	0	0	109	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1957			918			236				
v/s Ratio Prot		c0.36										
v/s Ratio Perm					c0.36			c0.08				
v/c Ratio		0.56			0.98			0.46				
Uniform Delay, d1		8.9			28.1			33.1				
Progression Factor		0.13			1.42			1.00				
Incremental Delay, d2		0.3			23.9			6.4				
Delay (s)		1.5			63.8			39.5				
Level of Service		A			E			D				
Approach Delay (s)		1.5			63.8			39.5			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	29.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	218	633	24	108	586	178	59	4	103	205	10	206
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3192		1660	3320	1485		1783		1660	1748	1485
Flt Permitted	0.31	1.00		0.34	1.00	1.00		0.88		0.44	1.00	1.00
Satd. Flow (perm)	502	3192		593	3320	1485		1591		773	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	242	703	27	120	651	198	66	4	114	228	11	229
RTOR Reduction (vph)	0	2	0	0	0	90	0	89	0	0	0	132
Lane Group Flow (vph)	242	728	0	120	651	108	0	95	0	228	11	97
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	55.2	43.0		48.1	38.9	48.9		11.8		24.8	24.8	38.1
Effective Green, g (s)	55.2	43.0		48.1	38.9	48.9		11.8		24.8	24.8	38.1
Actuated g/C Ratio	0.61	0.48		0.53	0.43	0.54		0.13		0.28	0.28	0.42
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	463	1525		426	1435	807		209		312	482	629
v/s Ratio Prot	c0.08	0.23		0.03	0.20	0.01				c0.08	0.01	0.02
v/s Ratio Perm	c0.24			0.12		0.06		0.06		c0.12		0.04
v/c Ratio	0.52	0.48		0.28	0.45	0.13		0.45		0.73	0.02	0.15
Uniform Delay, d1	8.9	15.9		10.6	18.0	10.1		36.1		28.4	23.8	16.0
Progression Factor	2.60	1.89		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.2	0.9		0.5	1.0	0.1		2.1		8.5	0.0	0.2
Delay (s)	24.2	30.9		11.1	19.1	10.2		38.2		36.9	23.8	16.2
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		29.2			16.3			38.2			26.4	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	511	431	2	323	0	0	0	0	18	0	548
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	568	479	2	359	0	0	0	0	20	0	609
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	359			568			752	931	284	647	931	179
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	359			568			752	931	284	647	931	179
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	27
cM capacity (veh/h)	1189			994			79	263	710	353	263	829

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	284	284	479	122	239	20	609
Volume Left	0	0	0	2	0	20	0
Volume Right	0	0	479	0	0	0	609
cSH	1700	1700	1700	994	1700	353	829
Volume to Capacity	0.17	0.17	0.28	0.00	0.14	0.06	0.73
Queue Length 95th (ft)	0	0	0	0	0	4	167
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	15.8	20.3
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		20.2	
Approach LOS						C	

Intersection Summary			
Average Delay	6.2		
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	529	0	325	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	588	0	361	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	294	294	361
Volume Left (vph)	294	294	361
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.1	6.1	5.6
Degree Utilization, x	0.50	0.50	0.56
Capacity (veh/h)	571	573	620
Control Delay (s)	13.9	13.9	15.3
Approach Delay (s)	13.9		15.3
Approach LOS	B		C

Intersection Summary			
Delay	14.5		
HCM Level of Service	B		
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	483	64	208	525	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3153		1605	3210						3074	
Flt Permitted		1.00		0.34	1.00						0.97	
Satd. Flow (perm)		3153		574	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	537	71	231	583	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	596	0	231	583	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		452	1850						976	
v/s Ratio Prot		0.19		c0.06	0.18						c0.05	
v/s Ratio Perm				c0.23								
v/c Ratio		0.45		0.51	0.32						0.16	
Uniform Delay, d1		17.4		16.5	9.3						20.8	
Progression Factor		1.00		0.37	0.17						1.00	
Incremental Delay, d2		1.1		3.2	0.3						0.3	
Delay (s)		18.5		9.2	2.0						21.2	
Level of Service		B		A	A						C	
Approach Delay (s)		18.5			4.0			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	489	0	0	669	124	64	90	63	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1660	3320			3134			4497				
Flt Permitted	0.20	1.00			1.00			0.99				
Satd. Flow (perm)	351	3320			3134			4497				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	543	0	0	743	138	71	100	70	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	48	0	0	0	0
Lane Group Flow (vph)	106	543	0	0	863	0	0	193	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	352	1875			1290			1428				
v/s Ratio Prot	0.04	c0.16			c0.28			c0.04				
v/s Ratio Perm	0.13											
v/c Ratio	0.30	0.29			0.67			0.14				
Uniform Delay, d1	19.1	9.6			20.3			20.7				
Progression Factor	0.44	0.31			1.00			1.00				
Incremental Delay, d2	2.0	0.4			2.8			0.2				
Delay (s)	10.4	3.3			23.1			20.9				
Level of Service	B	A			C			C				
Approach Delay (s)		4.5			23.1			20.9			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	358	114	119	426	89	129	78	37	31	85	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2979			3005			1835			1769	
Flt Permitted		0.62			0.65			0.73			0.94	
Satd. Flow (perm)		1874			1968			1369			1680	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	398	127	132	473	99	143	87	41	34	94	157
RTOR Reduction (vph)	0	32	0	0	20	0	0	10	0	0	68	0
Lane Group Flow (vph)	0	620	0	0	684	0	0	261	0	0	217	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		663			696			674			827	
v/s Ratio Prot												
v/s Ratio Perm		0.33			c0.35			c0.19			0.13	
v/c Ratio		0.93			0.98			0.39			0.26	
Uniform Delay, d1		20.3			20.8			10.4			9.6	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		22.2			30.2			1.7			0.8	
Delay (s)		42.4			51.0			12.0			10.4	
Level of Service		D			D			B			B	
Approach Delay (s)		42.4			51.0			12.0			10.4	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM Average Control Delay	36.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	229	88	199	420	125	118	511	74	106	898	140
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1562	2993		1574	3644		1508	3069	1333	1520	3099	1336
Flt Permitted	0.31	1.00		0.50	1.00		0.14	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	510	2993		836	3644		214	3069	1333	576	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	241	93	209	442	132	124	538	78	112	945	147
RTOR Reduction (vph)	0	48	0	0	33	0	0	0	50	0	0	93
Lane Group Flow (vph)	112	286	0	209	541	0	124	538	28	112	945	54
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	230	986		330	1200		182	1119	486	311	1130	487
v/s Ratio Prot	0.02	0.10		c0.03	0.15		c0.05	0.18		0.03	c0.30	
v/s Ratio Perm	0.15			c0.19			0.24		0.02	0.13		0.04
v/c Ratio	0.49	0.29		0.63	0.45		0.68	0.48	0.06	0.36	0.84	0.11
Uniform Delay, d1	19.9	21.1		22.2	22.4		17.6	20.8	17.5	15.5	24.7	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.41	1.06	2.39
Incremental Delay, d2	7.2	0.7		8.9	1.2		18.7	1.5	0.2	2.4	5.6	0.3
Delay (s)	27.1	21.9		31.2	23.7		36.3	22.3	17.8	24.3	31.7	43.0
Level of Service	C	C		C	C		D	C	B	C	C	D
Approach Delay (s)		23.2			25.7			24.1			32.3	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	348	30	83	597	84	31	95	51	51	122	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1965	1466		1990	1480		2015	1506		1995	1511
Flt Permitted		0.61	1.00		0.87	1.00		0.91	1.00		0.89	1.00
Satd. Flow (perm)		1199	1466		1749	1480		1863	1506		1809	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	366	32	87	628	88	33	100	54	54	128	66
RTOR Reduction (vph)	0	0	17	0	0	47	0	0	32	0	0	39
Lane Group Flow (vph)	0	417	15	0	715	41	0	133	22	0	182	27
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		553	677		807	683		774	626		751	628
v/s Ratio Prot												
v/s Ratio Perm		0.35	0.01		c0.41	0.03		0.07	0.01		c0.10	0.02
v/c Ratio		0.75	0.02		0.89	0.06		0.17	0.04		0.24	0.04
Uniform Delay, d1		14.5	9.5		15.9	9.7		12.0	11.3		12.4	11.3
Progression Factor		1.00	1.00		0.45	0.05		1.09	1.29		1.03	0.89
Incremental Delay, d2		9.2	0.1		11.8	0.1		0.5	0.1		0.7	0.1
Delay (s)		23.7	9.6		18.9	0.6		13.5	14.6		13.5	10.2
Level of Service		C	A		B	A		B	B		B	B
Approach Delay (s)		22.7			16.9			13.8			12.6	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	17.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	385	20	51	564	91	10	107	23	119	203	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3076		1550	3035		1550	3016		1550	2990	
Flt Permitted	0.95	1.00		0.49	1.00		0.56	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3076		802	3035		912	3016		1077	2990	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	428	22	57	627	101	11	119	26	132	226	69
RTOR Reduction (vph)	0	6	0	0	20	0	0	15	0	0	40	0
Lane Group Flow (vph)	83	444	0	57	708	0	11	130	0	132	255	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1514		271	1027		379	1253		447	1242	
v/s Ratio Prot	c0.05	0.14			c0.23			0.04			0.09	
v/s Ratio Perm				0.07			0.01			c0.12		
v/c Ratio	0.50	0.29		0.21	0.69		0.03	0.10		0.30	0.21	
Uniform Delay, d1	27.3	9.8		15.3	18.6		11.2	11.6		12.7	12.1	
Progression Factor	1.16	0.56		0.92	0.97		0.85	0.86		1.12	1.12	
Incremental Delay, d2	8.6	0.4		1.0	2.2		0.1	0.2		1.7	0.4	
Delay (s)	40.5	5.9		15.2	20.2		9.7	10.1		15.9	13.9	
Level of Service	D	A		B	C		A	B		B	B	
Approach Delay (s)		11.3			19.8			10.1			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	63	263	165	241	320	61	412	300	189	55	295	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.94		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1550	2920		1550	3024			3144			3236	
Flt Permitted	0.50	1.00		0.95	1.00			0.64			0.68	
Satd. Flow (perm)	823	2920		1550	3024			2049			2229	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	292	183	268	356	68	458	333	210	61	328	56
RTOR Reduction (vph)	0	127	0	0	24	0	0	37	0	0	17	0
Lane Group Flow (vph)	70	348	0	268	400	0	0	964	0	0	428	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	253	898		143	1349			788			857	
v/s Ratio Prot		c0.12		c0.17	0.13							
v/s Ratio Perm	0.09							c0.47			0.19	
v/c Ratio	0.28	0.39		1.87	0.30			1.34dl			0.50	
Uniform Delay, d1	17.0	17.7		29.5	11.5			20.0			15.2	
Progression Factor	0.81	0.68		1.28	1.17			1.03			0.69	
Incremental Delay, d2	2.6	1.2		405.6	0.3			111.6			2.0	
Delay (s)	16.5	13.2		443.3	13.7			132.3			12.6	
Level of Service	B	B		F	B			F			B	
Approach Delay (s)		13.6			180.1			132.3			12.6	
Approach LOS		B			F			F			B	

Intersection Summary			
HCM Average Control Delay	100.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	454	16	73	629	73	54	108	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		1.00			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1620			1603			3249				
Flt Permitted		0.94			0.91			0.99				
Satd. Flow (perm)		1532			1466			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	504	18	81	699	81	60	120	180	0	0	0
RTOR Reduction (vph)	0	1	0	0	5	0	0	137	0	0	0	0
Lane Group Flow (vph)	0	550	0	0	856	0	0	223	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		978			936			775				
v/s Ratio Prot												
v/s Ratio Perm		0.36			c0.58			0.07				
v/c Ratio		0.56			0.91			0.29				
Uniform Delay, d1		6.6			10.2			20.2				
Progression Factor		1.06			1.00			1.00				
Incremental Delay, d2		1.5			14.9			0.9				
Delay (s)		8.5			25.1			21.1				
Level of Service		A			C			C				
Approach Delay (s)		8.5			25.1			21.1			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	133	473	596	38	117	172
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	140	498	627	40	123	181
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.83				0.83	0.83
vC, conflicting volume	684				1448	669
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	522				1438	504
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	83				0	61
cM capacity (veh/h)	848				101	469

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	638	667	123	181
Volume Left	140	0	123	0
Volume Right	0	40	0	181
cSH	848	1700	101	469
Volume to Capacity	0.17	0.39	1.22	0.39
Queue Length 95th (ft)	15	0	207	45
Control Delay (s)	4.0	0.0	236.8	17.4
Lane LOS	A		F	C
Approach Delay (s)	4.0	0.0	106.2	
Approach LOS			F	

Intersection Summary			
Average Delay	21.7		
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	704	0	1	607	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1746	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	782	0	1	674	3	32
RTOR Reduction (vph)	0	0	0	0	27	0
Lane Group Flow (vph)	782	0	0	675	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	251	
v/s Ratio Prot	c0.45				c0.01	
v/s Ratio Perm				c0.39		
v/c Ratio	0.64			1.06	0.03	
Uniform Delay, d1	7.2			27.0	29.8	
Progression Factor	0.12			1.00	1.00	
Incremental Delay, d2	0.2			52.5	0.2	
Delay (s)	1.1			79.5	30.1	
Level of Service	A			E	C	
Approach Delay (s)	1.1			79.5	30.1	
Approach LOS	A			E	C	

Intersection Summary			
HCM Average Control Delay	37.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	246	604	30	389	0	0	0	0	17	6	246
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	273	671	33	432	0	0	0	0	19	7	273
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	432			273			1111	1108	472	636	772	432
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	432			273			1111	1108	472	636	772	432
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	95	98	52
cM capacity (veh/h)	1138			1272			84	206	544	360	324	571

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	182	762	466	26	273
Volume Left	0	0	33	19	0
Volume Right	0	671	0	0	273
cSH	1700	1700	1272	349	571
Volume to Capacity	0.11	0.45	0.03	0.07	0.48
Queue Length 95th (ft)	0	0	2	6	64
Control Delay (s)	0.0	0.0	0.8	16.1	16.9
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.8	16.9	
Approach LOS				C	

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	263	0	420	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	292	0	467	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	146	146	467
Volume Left (vph)	146	146	467
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.3	6.3	5.0
Degree Utilization, x	0.26	0.26	0.65
Capacity (veh/h)	542	543	699
Control Delay (s)	10.3	10.3	16.6
Approach Delay (s)	10.3		16.6
Approach LOS	B		C

Intersection Summary			
Delay	14.2		
HCM Level of Service	B		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	493	337	263	637	0	0	0	0	281	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3425					1359	3806	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3425					1359	3806	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	519	355	277	671	0	0	0	0	296	283	392
RTOR Reduction (vph)	0	0	228	0	0	0	0	0	0	0	53	113
Lane Group Flow (vph)	0	519	127	0	948	0	0	0	0	163	559	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		68.1					23.0	23.0	68.0
Effective Green, g (s)		39.0	39.0		68.1					23.0	23.0	68.0
Actuated g/C Ratio		0.24	0.24		0.43					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		775	300		1458					195	547	482
v/s Ratio Prot		c0.16			c0.28					0.12	c0.15	
v/s Ratio Perm			0.10									0.07
v/c Ratio		0.67	0.42		0.65					0.84	1.02	0.17
Uniform Delay, d1		54.7	51.0		36.5					66.7	68.5	28.5
Progression Factor		1.00	1.00		0.04					1.00	1.00	1.00
Incremental Delay, d2		4.6	4.3		0.1					25.5	44.1	0.2
Delay (s)		59.2	55.3		1.5					92.1	112.6	28.7
Level of Service		E	E		A					F	F	C
Approach Delay (s)		57.6			1.5			0.0			92.2	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	50.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.9
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	290	485	0	0	587	142	313	204	187	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3064				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3064				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	322	539	0	0	652	158	348	227	208	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	84	0	61	0	0	0	0
Lane Group Flow (vph)	322	539	0	0	652	74	264	458	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	83.9	83.9			37.1	37.1	12.0	12.0				
Effective Green, g (s)	83.9	83.9			37.1	37.1	12.0	12.0				
Actuated g/C Ratio	0.52	0.52			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	842	1799			744	344	117	230				
v/s Ratio Prot	c0.20	0.16			c0.20		c0.17	0.15				
v/s Ratio Perm						0.05						
v/c Ratio	0.38	0.30			0.88	0.22	2.26	1.99				
Uniform Delay, d1	22.6	21.5			59.2	49.7	74.0	74.0				
Progression Factor	0.06	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			11.3	0.3	591.8	461.2				
Delay (s)	1.5	1.3			70.5	50.0	665.8	535.2				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.4			66.5			579.2			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	207.3	HCM Level of Service	F
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	269	134	127	266	106	104	504	78	106	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1576	1600	1372	1594	1766		1578	3009		1537	3001	
Flt Permitted	0.28	1.00	1.00	0.42	1.00		0.14	1.00		0.32	1.00	
Satd. Flow (perm)	470	1600	1372	708	1766		229	3009		516	3001	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	145	283	141	134	280	112	109	531	82	112	845	126
RTOR Reduction (vph)	0	0	98	0	16	0	0	14	0	0	13	0
Lane Group Flow (vph)	145	283	43	134	376	0	109	599	0	112	958	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	34.1	27.1	27.1	34.1	27.1		39.6	34.1		39.6	34.1	
Effective Green, g (s)	32.1	28.1	27.1	32.1	27.1		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.36	0.32	0.31	0.36	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	245	507	419	316	540		166	1157		271	1154	
v/s Ratio Prot	c0.04	0.18		0.03	c0.21		c0.03	0.20		0.02	c0.32	
v/s Ratio Perm	0.17		0.03	0.12			0.25			0.15		
v/c Ratio	0.59	0.56	0.10	0.42	0.70		0.66	0.52		0.41	0.83	
Uniform Delay, d1	20.9	25.1	22.1	20.1	27.2		18.1	21.0		16.3	24.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.8	4.4	0.5	0.9	7.3		9.0	1.7		1.0	7.0	
Delay (s)	24.7	29.5	22.6	21.0	34.4		27.1	22.6		17.3	31.7	
Level of Service	C	C	C	C	C		C	C		B	C	
Approach Delay (s)		26.6			31.0			23.3			30.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	88.7	Sum of lost time (s)	17.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	340	59	73	427	81	36	57	34	35	88	67
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.96			0.95	
Flt Protected		0.99	1.00		0.99	1.00		0.99			0.99	
Satd. Flow (prot)		1970	1467		1624	1381		1866			1876	
Flt Permitted		0.93	1.00		0.90	1.00		0.90			0.94	
Satd. Flow (perm)		1837	1467		1469	1381		1703			1783	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	358	62	77	449	85	38	60	36	37	93	71
RTOR Reduction (vph)	0	0	31	0	0	36	0	20	0	0	30	0
Lane Group Flow (vph)	0	398	31	0	526	49	0	114	0	0	171	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		904	722		723	680		707			741	
v/s Ratio Prot												
v/s Ratio Perm		0.22	0.02		c0.36	0.04		0.07			c0.10	
v/c Ratio		0.44	0.04		0.73	0.07		0.16			0.23	
Uniform Delay, d1		10.7	8.6		13.1	8.7		11.9			12.3	
Progression Factor		1.00	1.00		1.92	3.36		1.00			1.45	
Incremental Delay, d2		1.6	0.1		2.7	0.1		0.5			0.7	
Delay (s)		12.3	8.7		27.7	29.3		12.4			18.5	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		11.8			27.9			12.4			18.5	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	254	40	71	464	20	34	108	33	16	175	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.97	
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1753	1443		1724	1487		1713	1489		1713	
Flt Permitted		0.49	1.00		0.86	1.00		0.89	1.00		0.98	
Satd. Flow (perm)		863	1443		1486	1487		1551	1489		1687	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	61	267	42	75	488	21	36	114	35	17	184	69
RTOR Reduction (vph)	0	0	27	0	0	8	0	0	18	0	19	0
Lane Group Flow (vph)	0	328	15	0	563	13	0	150	17	0	251	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		305	511		526	526		764	733		831	
v/s Ratio Prot												
v/s Ratio Perm		c0.38	0.01		0.38	0.01		0.10	0.01		c0.15	
v/c Ratio		1.08	0.03		1.07	0.02		0.20	0.02		0.30	
Uniform Delay, d1		21.0	13.7		21.0	13.7		9.3	8.5		9.8	
Progression Factor		1.74	3.12		0.97	0.87		0.17	0.23		1.12	
Incremental Delay, d2		71.3	0.1		55.1	0.1		0.2	0.0		0.9	
Delay (s)		107.7	42.9		75.5	12.0		1.7	2.0		11.9	
Level of Service		F	D		E	B		A	A		B	
Approach Delay (s)		100.4			73.2			1.8			11.9	
Approach LOS		F			E			A			B	

Intersection Summary			
HCM Average Control Delay	59.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	229	35	76	8	14	11	38	255	8	30	533	521
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1860	1440		1765			1996			1975	1382
Flt Permitted		0.76	1.00		0.93			0.85			0.97	1.00
Satd. Flow (perm)		1468	1440		1657			1698			1928	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	254	39	84	9	16	12	42	283	9	33	592	579
RTOR Reduction (vph)	0	0	49	0	9	0	0	2	0	0	0	205
Lane Group Flow (vph)	0	293	35	0	28	0	0	332	0	0	625	374
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		658	598		433			836			949	680
v/s Ratio Prot		c0.05										
v/s Ratio Perm		0.13	0.02		0.02			0.20			c0.32	0.27
v/c Ratio		0.45	0.06		0.06			0.40			0.66	0.55
Uniform Delay, d1		13.6	11.4		18.0			10.4			12.4	11.5
Progression Factor		1.13	1.96		1.00			0.51			0.74	0.83
Incremental Delay, d2		1.3	0.1		0.3			1.0			2.8	2.5
Delay (s)		16.8	22.4		18.3			6.4			12.0	12.0
Level of Service		B	C		B			A			B	B
Approach Delay (s)		18.0			18.3			6.4			12.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	894	289	366	1046	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4573		1621	3320					1489	2913	1442
Flt Permitted		1.00		0.11	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4573		193	3320					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	941	304	385	1101	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	45	0	0	0	0	0	0	0	0	9	81
Lane Group Flow (vph)	0	1200	0	385	1101	0	0	0	0	308	603	190
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		44.0		74.9	74.9					28.1	28.1	28.1
Effective Green, g (s)		44.0		74.9	74.9					28.1	28.1	28.1
Actuated g/C Ratio		0.38		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1750		454	2162					364	712	352
v/s Ratio Prot		0.26		c0.19	0.33							
v/s Ratio Perm				c0.36						0.21	0.21	0.13
v/c Ratio		0.69		0.85	0.51					0.85	0.85	0.54
Uniform Delay, d1		29.7		28.5	10.5					41.4	41.4	37.8
Progression Factor		1.00		0.89	1.67					1.00	1.00	1.00
Incremental Delay, d2		2.2		9.6	0.6					16.7	9.4	1.9
Delay (s)		31.9		35.0	18.0					58.1	50.8	39.7
Level of Service		C		D	B					E	D	D
Approach Delay (s)		31.9			22.4			0.0			50.2	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM Average Control Delay	33.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1066	0	0	1005	269	406	333	302	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4521				
Flt Permitted	0.14	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	479	3353			3241	1489		4521				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1122	0	0	1058	283	427	351	318	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	91	0	62	0	0	0	0
Lane Group Flow (vph)	359	1122	0	0	1058	192	0	1034	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	71.5	71.5			53.4	53.4		31.5				
Effective Green, g (s)	71.5	71.5			53.4	53.4		31.5				
Actuated g/C Ratio	0.62	0.62			0.46	0.46		0.27				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	578	2085			1505	691		1238				
v/s Ratio Prot	0.07	c0.33			c0.33							
v/s Ratio Perm	0.32					0.13		0.23				
v/c Ratio	0.62	0.54			0.70	0.28		0.83				
Uniform Delay, d1	14.8	12.4			24.5	18.9		39.3				
Progression Factor	1.25	0.17			0.99	1.28		1.00				
Incremental Delay, d2	1.4	0.7			2.0	0.7		5.6				
Delay (s)	19.9	2.7			26.3	25.0		44.9				
Level of Service	B	A			C	C		D				
Approach Delay (s)		6.9			26.1			44.9			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM Average Control Delay	24.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	657	399	102	765	66	227	179	66	77	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1313	1601	3283		1578	3002		1540	2941	
Flt Permitted	0.11	1.00	1.00	0.39	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	180	3273	1313	655	3283		652	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	139	692	420	107	805	69	239	188	69	81	171	127
RTOR Reduction (vph)	0	0	169	0	6	0	0	38	0	0	107	0
Lane Group Flow (vph)	139	692	251	107	868	0	239	219	0	81	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.9	52.4	68.8	43.4	34.4		38.1	26.6		26.2	18.2	
Effective Green, g (s)	64.9	52.4	68.8	43.4	34.4		38.1	26.6		26.2	18.2	
Actuated g/C Ratio	0.56	0.46	0.60	0.38	0.30		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	427	1491	786	321	982		348	694		259	465	
v/s Ratio Prot	c0.08	c0.21	0.05	0.03	c0.26		c0.10	0.07		0.02	0.06	
v/s Ratio Perm	0.11		0.15	0.10			c0.13			0.05		
v/c Ratio	0.33	0.46	0.32	0.33	0.88		0.69	0.32		0.31	0.41	
Uniform Delay, d1	15.7	21.6	11.5	23.9	38.4		30.6	36.7		36.2	43.6	
Progression Factor	0.80	0.80	2.43	1.00	1.00		0.97	1.01		1.00	1.00	
Incremental Delay, d2	1.6	0.8	0.2	0.6	11.5		5.3	0.9		0.7	2.1	
Delay (s)	14.2	18.2	28.0	24.5	49.9		34.9	37.8		36.9	45.7	
Level of Service	B	B	C	C	D		C	D		D	D	
Approach Delay (s)		21.0			47.1			36.4			43.8	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	34.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	221	367	82	313	107	362	340	81	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.96		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1706	2911		1653	3237		1620	3405		1580	3183	
Flt Permitted	0.44	1.00		0.26	1.00		0.32	1.00		0.50	1.00	
Satd. Flow (perm)	784	2911		457	3237		544	3405		824	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	233	386	86	329	113	381	358	85	217	429	59
RTOR Reduction (vph)	0	237	0	0	27	0	0	18	0	0	9	0
Lane Group Flow (vph)	48	382	0	86	415	0	381	425	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	41.2	34.5		44.4	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	41.2	34.5		44.4	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.36	0.30		0.39	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	335	873		263	1016		454	1309		340	888	
v/s Ratio Prot	0.01	c0.13		c0.02	0.13		c0.15	0.12		0.04	0.15	
v/s Ratio Perm	0.04			0.10			c0.26			0.18		
v/c Ratio	0.14	0.44		0.33	0.41		0.84	0.32		0.64	0.54	
Uniform Delay, d1	24.4	32.4		23.7	31.0		20.8	24.9		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.99	0.97	
Incremental Delay, d2	0.2	1.6		0.9	1.2		13.1	0.7		3.9	2.2	
Delay (s)	24.7	34.0		24.6	32.3		33.9	25.6		32.2	36.4	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		33.3			31.0			29.4			35.1	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	32.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	619	135	10	543	135	102	281	9	205	578	174
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3034			3003		1452	3227		1522	2872	
Flt Permitted		0.59			0.94		0.21	1.00		0.55	1.00	
Satd. Flow (perm)		1799			2815		317	3227		883	2872	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	112	688	150	11	603	150	113	312	10	228	642	193
RTOR Reduction (vph)	0	24	0	0	33	0	0	4	0	0	44	0
Lane Group Flow (vph)	0	926	0	0	731	0	113	318	0	228	791	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		768			736		206	1192		420	1060	
v/s Ratio Prot		c0.07					c0.03	0.10		0.03	c0.28	
v/s Ratio Perm		c0.39			0.26		0.20			0.20		
v/c Ratio		1.21			0.99		0.55	0.27		0.54	0.75	
Uniform Delay, d1		20.0			23.9		12.3	14.3		12.7	17.9	
Progression Factor		1.00			1.46		1.05	0.59		1.00	1.00	
Incremental Delay, d2		104.7			8.4		9.7	0.5		5.0	4.8	
Delay (s)		124.7			43.5		22.6	8.9		17.7	22.7	
Level of Service		F			D		C	A		B	C	
Approach Delay (s)		124.7			43.5			12.5			21.6	
Approach LOS		F			D			B			C	

Intersection Summary			
HCM Average Control Delay	56.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	229	136	117	284	27	70	450	81	33	662	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	1899		1600	2011		1676	3217		1435	3274	
Flt Permitted	0.47	1.00		0.41	1.00		0.31	1.00		0.43	1.00	
Satd. Flow (perm)	852	1899		686	2011		552	3217		643	3274	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	236	140	121	293	28	72	464	84	34	682	68
RTOR Reduction (vph)	0	33	0	0	5	0	0	23	0	0	12	0
Lane Group Flow (vph)	69	343	0	121	316	0	72	525	0	34	738	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	315	701		253	743		263	1534		307	1561	
v/s Ratio Prot		c0.18			0.16			0.16			c0.23	
v/s Ratio Perm	0.08			0.18			0.13			0.05		
v/c Ratio	0.22	0.49		0.48	0.43		0.27	0.34		0.11	0.47	
Uniform Delay, d1	14.1	15.8		15.7	15.3		10.2	10.6		9.4	11.5	
Progression Factor	1.00	1.00		1.33	1.34		1.00	1.00		1.14	0.92	
Incremental Delay, d2	1.6	2.4		0.6	0.2		2.6	0.6		0.4	0.5	
Delay (s)	15.7	18.2		21.5	20.7		12.8	11.2		11.1	11.1	
Level of Service	B	B		C	C		B	B		B	B	
Approach Delay (s)		17.8			20.9			11.4			11.1	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	14.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	808	360	770	32	3	10	9	46	12	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.99	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.95	
Flt Protected		1.00		0.98				0.99			0.97	
Satd. Flow (prot)		3160		3083				1811			1846	
Flt Permitted		0.95		0.57				0.96			0.87	
Satd. Flow (perm)		3008		1770				1749			1650	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	851	379	811	34	3	11	9	48	13	0	3
RTOR Reduction (vph)	0	0	0	3	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	853	0	1221	0	0	0	33	0	0	17	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom				Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7				2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		833		856				377			355	
v/s Ratio Prot				c0.13								
v/s Ratio Perm		0.28		c0.46				c0.02			0.01	
v/c Ratio		1.02		1.80dl				0.09			0.05	
Uniform Delay, d1		23.5		19.0				20.4			20.2	
Progression Factor		1.41		0.68				1.00			1.00	
Incremental Delay, d2		16.3		197.5				0.5			0.3	
Delay (s)		49.5		210.5				20.9			20.5	
Level of Service		D		F				C			C	
Approach Delay (s)		49.5		210.5				20.9			20.5	
Approach LOS		D		F				C			C	

Intersection Summary			
HCM Average Control Delay	140.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	105.6%	ICU Level of Service	G
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	276
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1559	
Flt Permitted		1.00	
Satd. Flow (perm)		1559	
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	5	3	291
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	294	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.19	
v/s Ratio Perm			
v/c Ratio		1.23	
Uniform Delay, d1		27.5	
Progression Factor		0.85	
Incremental Delay, d2		130.3	
Delay (s)		153.6	
Level of Service		F	
Approach Delay (s)		153.6	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	256	864	946	131	108	222
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3283	3260		1660	1485
Flt Permitted		0.53	1.00		0.95	1.00
Satd. Flow (perm)		1759	3260		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	284	960	1051	146	120	247
RTOR Reduction (vph)	0	0	17	0	0	84
Lane Group Flow (vph)	0	1244	1180	0	120	163
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1082	2006		434	388
v/s Ratio Prot			0.36		0.07	
v/s Ratio Perm		c0.71				c0.11
v/c Ratio		1.46dl	0.59		0.28	0.42
Uniform Delay, d1		12.5	7.5		19.1	19.9
Progression Factor		1.26	0.71		1.12	1.19
Incremental Delay, d2		70.3	0.9		1.5	3.1
Delay (s)		86.0	6.3		22.9	26.7
Level of Service		F	A		C	C
Approach Delay (s)		86.0	6.3		25.5	
Approach LOS		F	A		C	

Intersection Summary			
HCM Average Control Delay	44.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	79	896	993	191	281	86
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3119	3112		1506	1343
Flt Permitted		0.69	1.00		0.95	1.00
Satd. Flow (perm)		2172	3112		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	83	943	1045	201	296	91
RTOR Reduction (vph)	0	0	24	0	0	48
Lane Group Flow (vph)	0	1026	1222	0	296	43
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1136	1628		533	475
v/s Ratio Prot			0.39		c0.20	
v/s Ratio Perm		c0.47				0.03
v/c Ratio		0.90	0.75		0.56	0.09
Uniform Delay, d1		14.0	12.2		16.9	14.0
Progression Factor		1.12	1.52		1.73	2.91
Incremental Delay, d2		1.3	1.6		3.4	0.3
Delay (s)		17.0	20.1		32.5	41.1
Level of Service		B	C		C	D
Approach Delay (s)		17.0	20.1		34.5	
Approach LOS		B	C		C	

Intersection Summary			
HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	783	251	395	1071	195	124
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.95	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	2399		1788	2506	1737	
Flt Permitted	1.00		0.13	1.00	0.97	
Satd. Flow (perm)	2399		243	2506	1737	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	799	256	403	1093	199	127
RTOR Reduction (vph)	18	0	0	0	35	0
Lane Group Flow (vph)	1037	0	403	1093	291	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1144		116	1195	641	
v/s Ratio Prot	0.43			0.44	c0.17	
v/s Ratio Perm			c1.66			
v/c Ratio	0.91		3.47	0.91	0.45	
Uniform Delay, d1	15.7		17.0	15.8	15.5	
Progression Factor	1.43		1.00	1.00	1.00	
Incremental Delay, d2	7.1		1134.7	12.2	2.3	
Delay (s)	29.5		1151.7	28.0	17.8	
Level of Service	C		F	C	B	
Approach Delay (s)	29.5			330.7	17.8	
Approach LOS	C			F	B	

Intersection Summary			
HCM Average Control Delay	184.8	HCM Level of Service	F
HCM Volume to Capacity ratio	2.16		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1582	37	108	835	1	59	0	149	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.31	1.00	1.00	0.07	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	610	3431	1479	125	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1758	41	120	928	1	66	0	166	0	0	0
RTOR Reduction (vph)	0	0	12	0	0	0	0	0	144	0	0	0
Lane Group Flow (vph)	1	1758	29	120	928	1	0	66	22	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	50.4	50.4	50.4	67.9	67.9	67.9		9.1	9.1			
Effective Green, g (s)	50.4	50.4	50.4	67.9	67.9	67.9		9.1	9.1			
Actuated g/C Ratio	0.59	0.59	0.59	0.80	0.80	0.80		0.11	0.11			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	362	2034	877	350	2652	1222		165	161			
v/s Ratio Prot		c0.51		0.06	c0.28							
v/s Ratio Perm	0.00		0.02	0.22		0.00		c0.04	0.01			
v/c Ratio	0.00	0.86	0.03	0.34	0.35	0.00		0.40	0.14			
Uniform Delay, d1	7.1	14.4	7.2	12.8	2.4	1.7		35.4	34.4			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	5.2	0.1	0.6	0.1	0.0		1.6	0.4			
Delay (s)	7.1	19.6	7.3	13.4	2.5	1.7		37.0	34.8			
Level of Service	A	B	A	B	A	A		D	C			
Approach Delay (s)		19.4			3.7			35.4			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	11	938	813	29	71	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3097	3083		1530	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2913	3083		1530	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1042	903	32	79	16
RTOR Reduction (vph)	0	0	3	0	8	0
Lane Group Flow (vph)	0	1054	932	0	87	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1068	2192		119	
v/s Ratio Prot			c0.30		c0.06	
v/s Ratio Perm		c0.36				
v/c Ratio		0.99	0.43		0.73	
Uniform Delay, d1		28.3	5.4		40.6	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		24.6	0.2		32.1	
Delay (s)		52.9	0.3		72.7	
Level of Service		D	A		E	
Approach Delay (s)		52.9	0.3		72.7	
Approach LOS		D	A		E	

Intersection Summary			
HCM Average Control Delay	30.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	516	0	1	571	38	3	2	28	192	0	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1765			3341			1467			1670	1348
Flt Permitted		0.79			0.95			0.93			0.88	1.00
Satd. Flow (perm)		1409			3191			1370			1545	1348
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	573	0	1	634	42	3	2	31	213	0	157
RTOR Reduction (vph)	0	0	0	0	6	0	0	28	0	0	0	105
Lane Group Flow (vph)	0	682	0	0	671	0	0	8	0	0	213	52
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		514			1714			145			478	444
v/s Ratio Prot					c0.06						c0.08	
v/s Ratio Perm		c0.48			0.14			0.01			c0.05	0.04
v/c Ratio		1.33			0.39			0.06			0.45	0.12
Uniform Delay, d1		27.0			11.9			34.2			24.4	19.9
Progression Factor		1.00			1.31			1.00			1.00	1.00
Incremental Delay, d2		160.1			0.1			0.8			3.0	0.5
Delay (s)		187.1			15.6			34.9			27.4	20.4
Level of Service		F			B			C			C	C
Approach Delay (s)		187.1			15.6			34.9			24.4	
Approach LOS		F			B			C			C	

Intersection Summary			
HCM Average Control Delay	84.1	HCM Level of Service	F
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

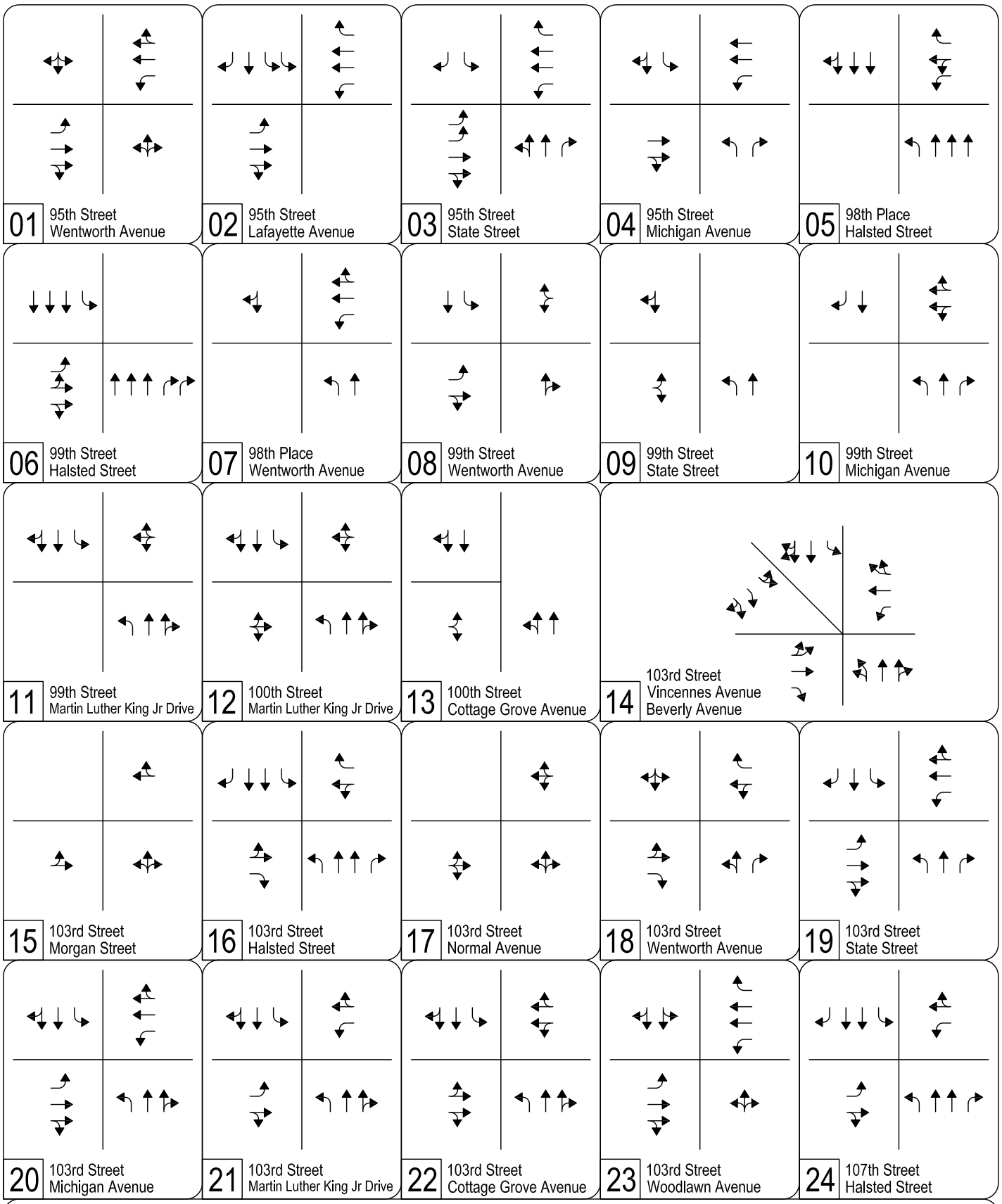

BRT Alternative (2030) Intersection Lane Geometry

Page 1 of 3

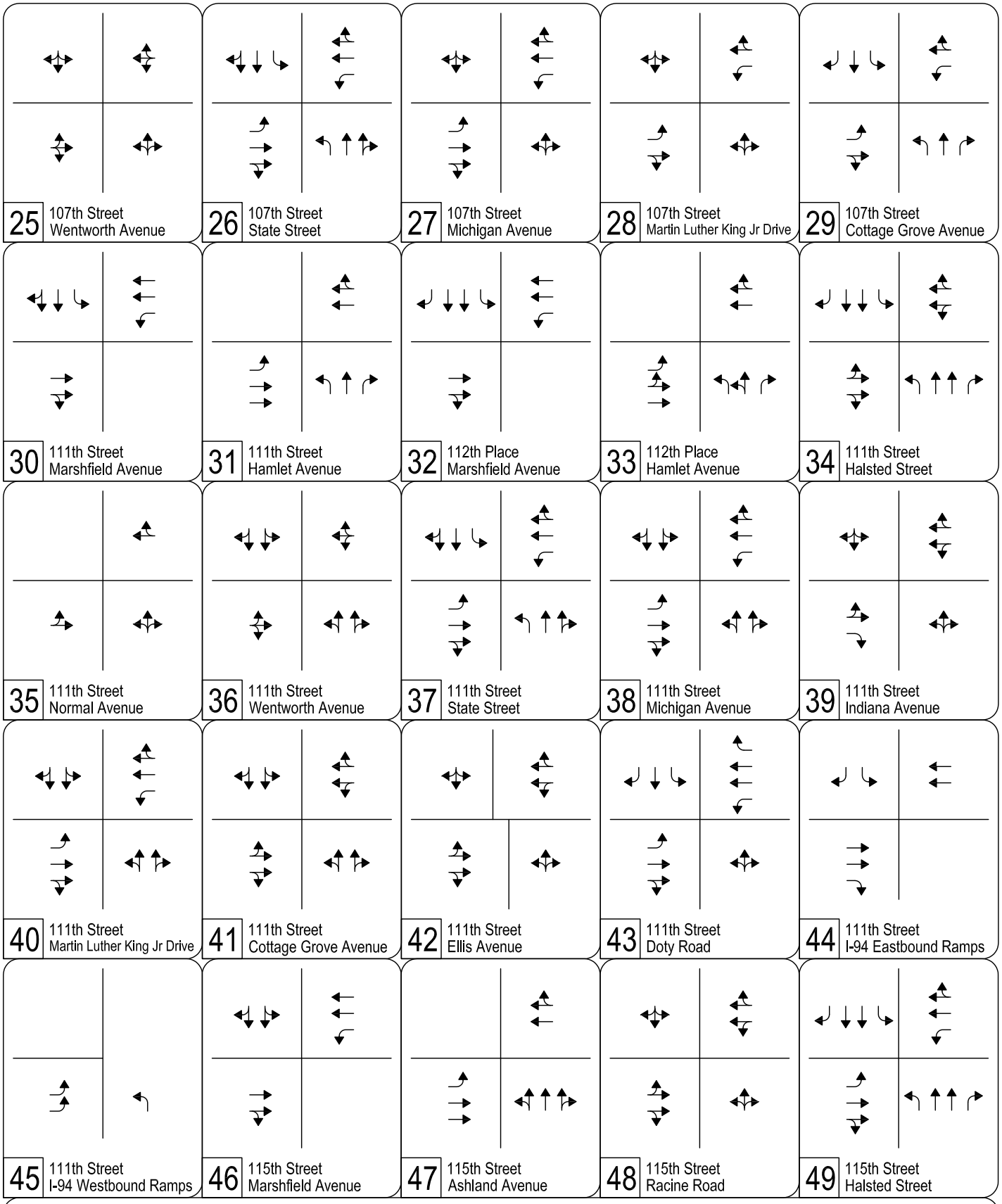

BRT Alternative (2030) Intersection Lane Geometry

Page 2 of 3

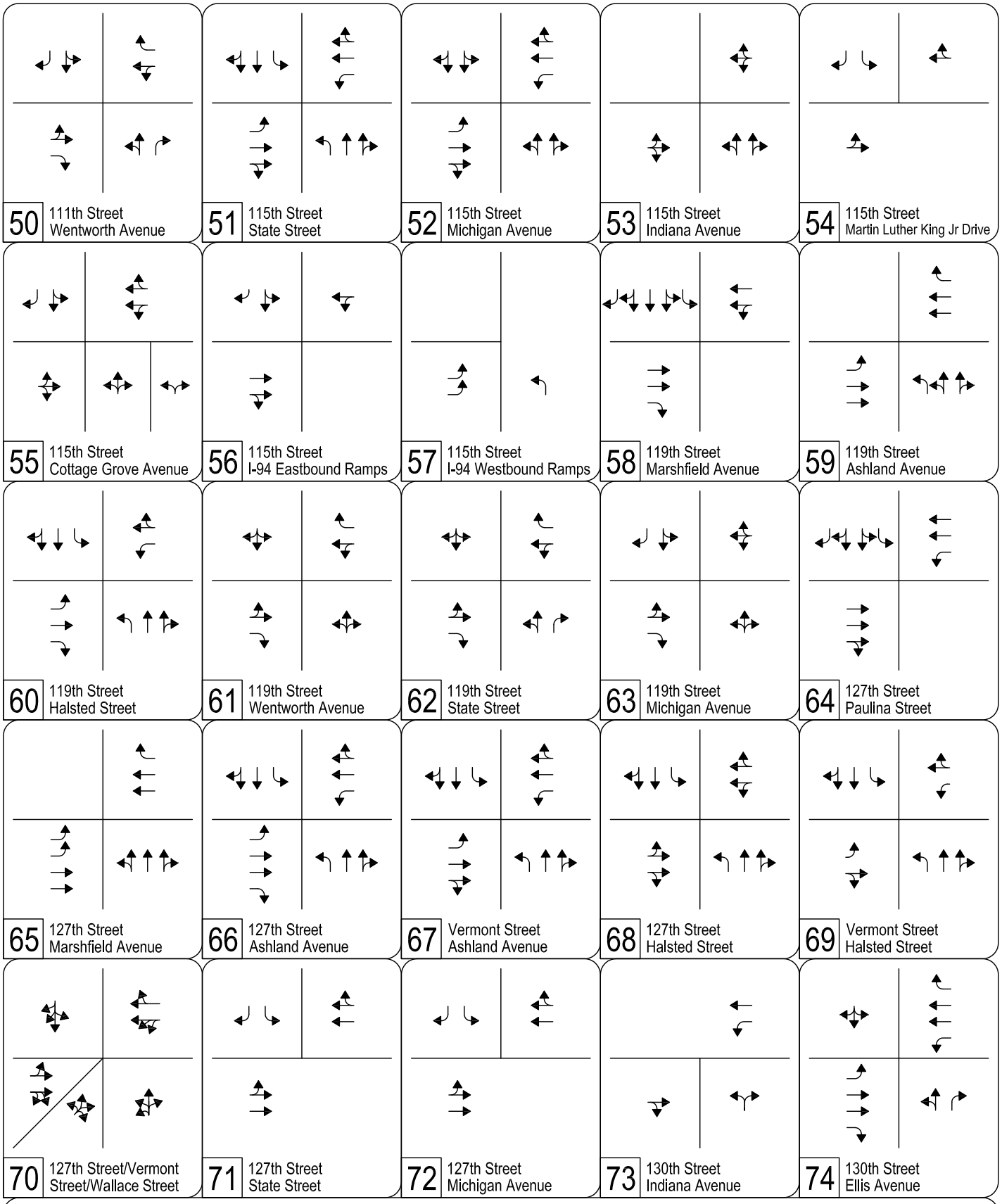

BRT Alternative (2030) Intersection Lane Geometry

Page 3 of 3

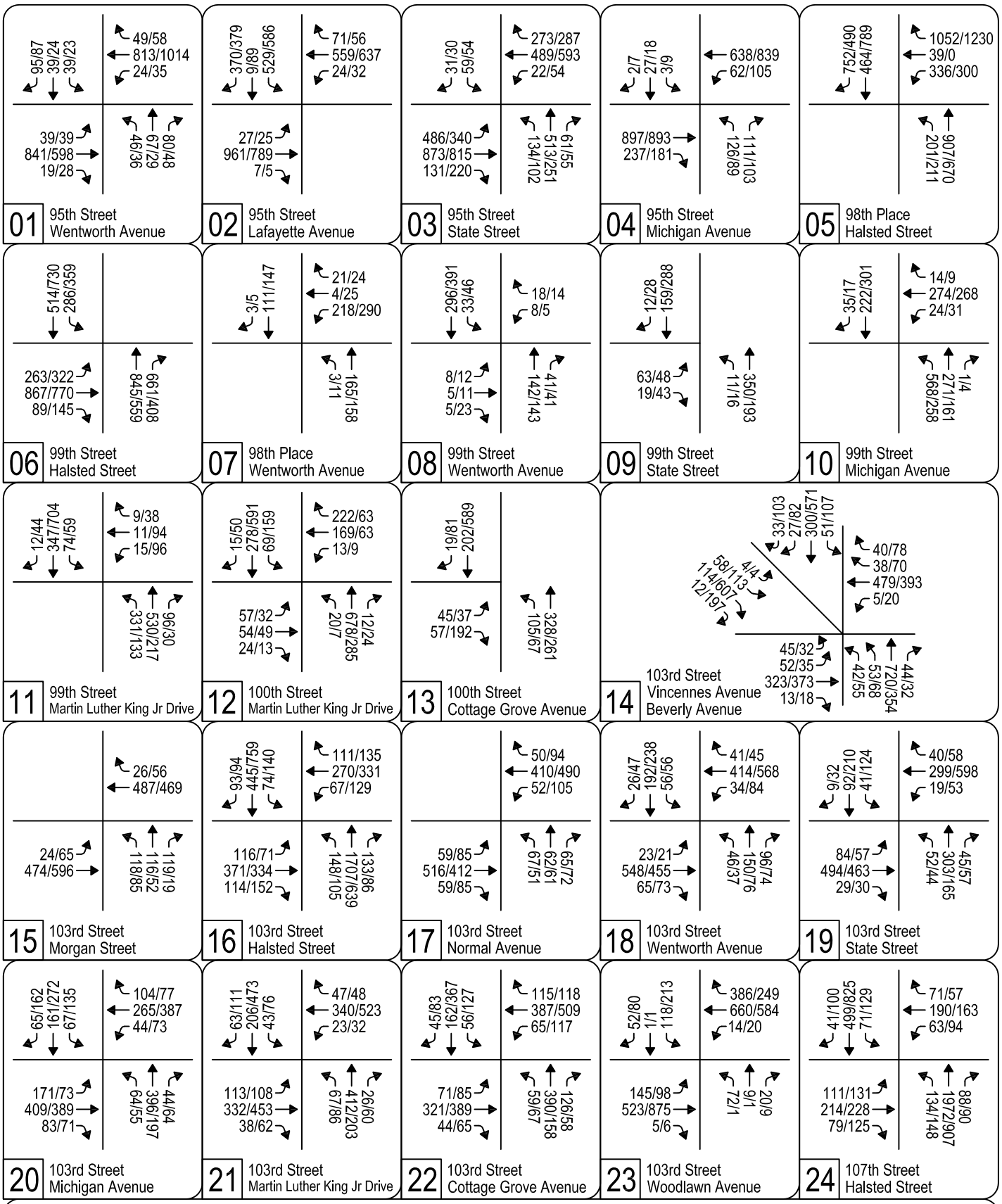

BRT Alternative (2030) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

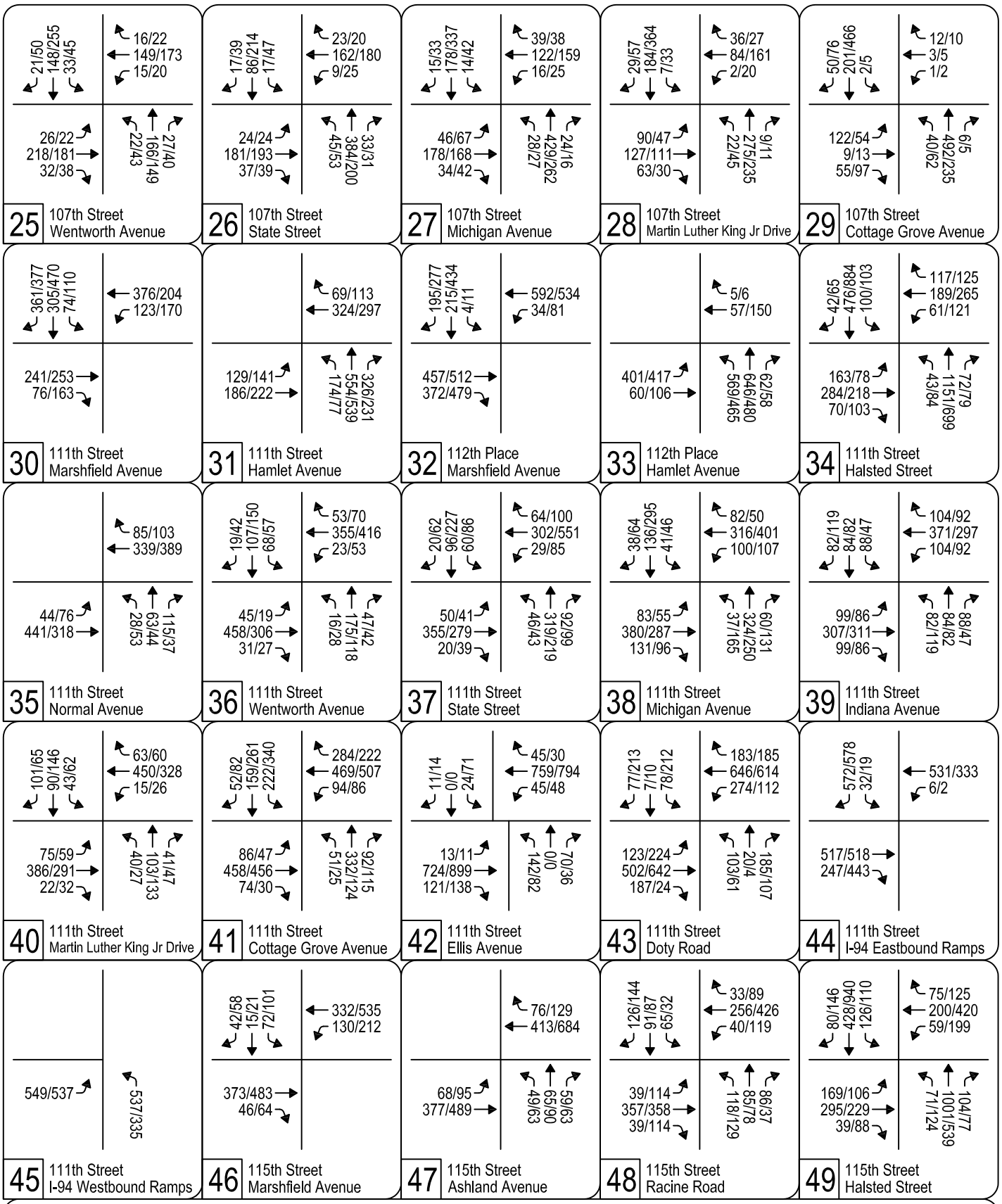

BRT Alternative (2030) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

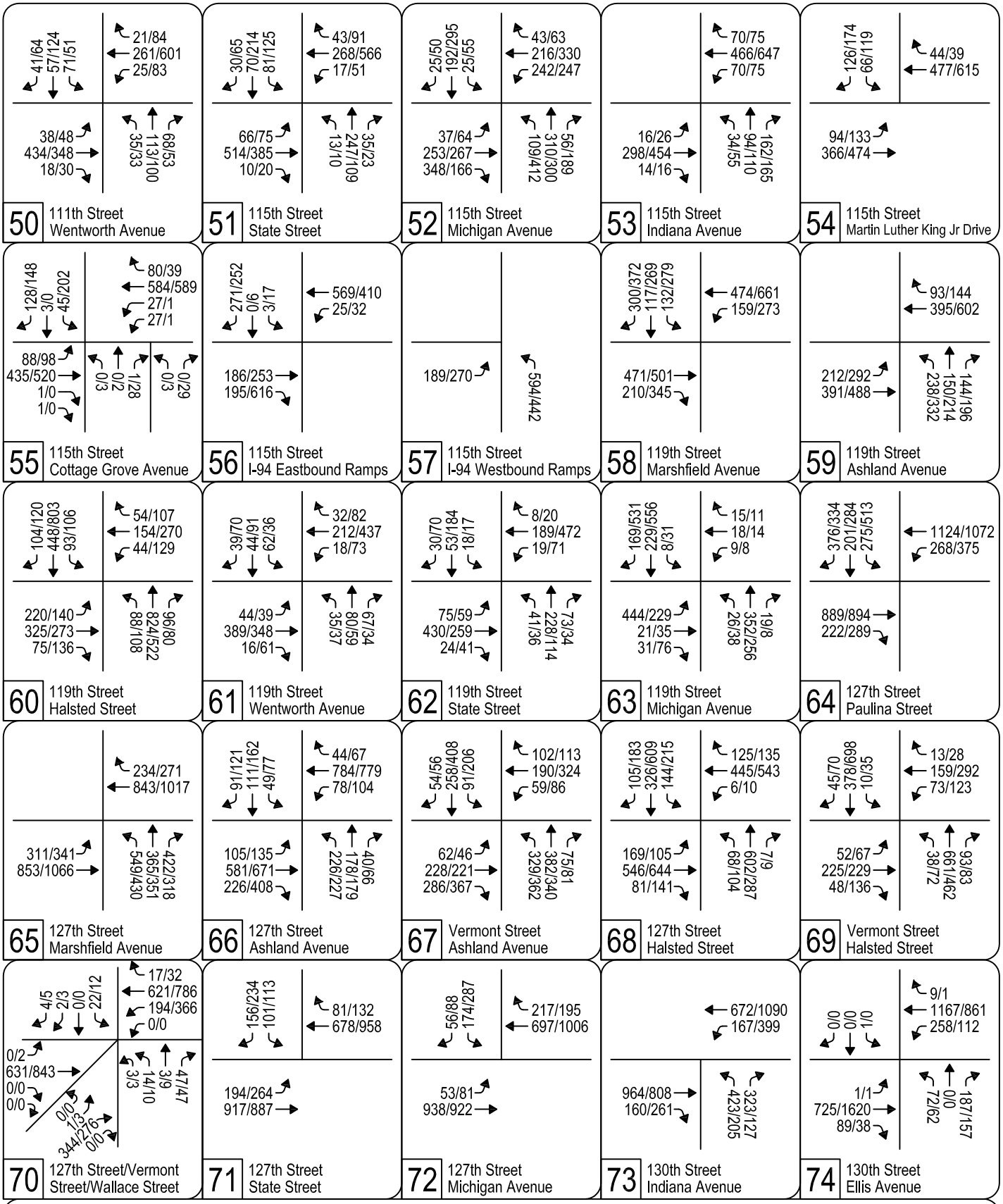

BRT Alternative (2030) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	841	19	24	813	49	46	67	80	39	39	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1417	2976		1592	2979			1754			1670	
Flt Permitted	0.25	1.00		0.25	1.00			0.90			0.90	
Satd. Flow (perm)	369	2976		417	2979			1596			1526	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	885	20	25	856	52	48	71	84	41	41	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	59	0
Lane Group Flow (vph)	41	903	0	25	901	0	0	164	0	0	123	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	193	1557		218	1558			565			540	
v/s Ratio Prot		c0.30			0.30							
v/s Ratio Perm	0.11			0.06				c0.10			0.08	
v/c Ratio	0.21	0.58		0.11	0.58			0.29			0.23	
Uniform Delay, d1	8.3	10.6		7.9	10.6			15.1			14.8	
Progression Factor	1.00	1.00		0.83	1.16			1.00			1.00	
Incremental Delay, d2	2.5	1.6		0.9	1.4			1.3			1.0	
Delay (s)	10.8	12.2		7.5	13.7			16.4			15.7	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.1			13.5			16.4			15.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	961	7	24	559	71	0	0	0	529	9	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	778	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	352	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1012	7	25	588	75	0	0	0	557	9	389
RTOR Reduction (vph)	0	1	0	0	0	33	0	0	0	0	0	172
Lane Group Flow (vph)	28	1018	0	25	588	42	0	0	0	557	9	217
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	162	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.31		0.01	c0.19					c0.18	0.01	
v/s Ratio Perm	0.04			0.01		0.08						0.16
v/c Ratio	0.17	0.94		0.04	0.33	0.15				0.78	0.03	0.67
Uniform Delay, d1	31.6	42.2		15.1	15.4	13.6				46.9	38.7	45.5
Progression Factor	0.80	0.82		0.29	0.62	1.93				1.00	1.00	1.00
Incremental Delay, d2	2.0	14.1		0.1	0.3	0.7				8.2	0.2	10.7
Delay (s)	27.1	48.9		4.4	9.8	26.9				55.1	38.9	56.2
Level of Service	C	D		A	A	C				E	D	E
Approach Delay (s)		48.3			11.5			0.0			55.4	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	486	873	131	22	489	273	134	513	61	59	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.95	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1419	855		738
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1419	855		738
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	512	919	138	23	515	287	141	540	64	62	0	33
RTOR Reduction (vph)	0	9	0	0	0	158	0	0	25	0	0	30
Lane Group Flow (vph)	512	1048	0	23	515	129	0	681	39	62	0	3
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	40.0	62.0		9.0	31.0	31.0		31.0	31.0	10.0		10.0
Effective Green, g (s)	40.0	62.0		9.0	31.0	31.0		31.0	31.0	10.0		10.0
Actuated g/C Ratio	0.31	0.48		0.07	0.24	0.24		0.24	0.24	0.08		0.08
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	982	1482		108	697	225		787	338	66		57
v/s Ratio Prot	0.16	c0.34		0.01	c0.18			c0.21		c0.07		
v/s Ratio Perm						0.14			0.03			0.00
v/c Ratio	0.52	0.71		0.21	0.74	0.57		0.87	0.11	0.94		0.04
Uniform Delay, d1	37.1	26.8		57.2	45.8	43.6		47.5	38.8	59.7		55.6
Progression Factor	0.75	0.22		1.00	1.00	1.00		0.94	0.89	1.00		1.00
Incremental Delay, d2	0.9	1.3		4.5	6.9	10.1		12.1	0.7	88.5		0.3
Delay (s)	28.8	7.1		61.6	52.7	53.8		56.9	35.2	148.2		55.9
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		14.2			53.3			55.0			116.1	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	36.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	897	237	62	638	0	126	0	111	3	27	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2852		1650	3005		1390		1465	1803	1961	
Flt Permitted		1.00		0.15	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2852		260	3005		1078		1465	1803	1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	997	263	69	709	0	140	0	123	3	30	2
RTOR Reduction (vph)	0	24	0	0	0	0	0	0	77	0	1	0
Lane Group Flow (vph)	0	1236	0	69	709	0	140	0	46	3	31	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1711		156	1803		345		469	577	628	
v/s Ratio Prot		c0.43			0.24						0.02	
v/s Ratio Perm				0.27			c0.13		0.03	0.00		
v/c Ratio		0.72		0.44	0.39		0.41		0.10	0.01	0.05	
Uniform Delay, d1		14.1		10.9	10.5		26.6		23.9	23.2	23.5	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.7		8.8	0.6		3.5		0.4	0.0	0.1	
Delay (s)		16.8		19.7	11.1		30.1		24.3	23.2	23.6	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.8			11.9			27.4			23.6	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	336	39	1052	201	907	0	0	464	752
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3933	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3933	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	343	40	1073	205	926	0	0	473	767
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	343	40	1073	205	926	0	0	1240	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1161	
v/s Ratio Prot							c0.13	0.21			c0.32	
v/s Ratio Perm				0.22	0.02	c0.73						
v/c Ratio				0.76	0.08	2.54	0.43	0.34			1.91dr	
Uniform Delay, d1				33.6	26.7	37.5	29.2	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.38			1.00	
Incremental Delay, d2				11.6	0.3	698.4	2.0	0.2			46.6	
Delay (s)				45.2	27.1	735.9	21.2	22.1			83.6	
Level of Service				D	C	F	C	C			F	
Approach Delay (s)		0.0			553.8			21.9			83.6	
Approach LOS		A			F			C			F	

Intersection Summary			
HCM Average Control Delay	244.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	867	89	0	0	0	0	845	661	286	514	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3185						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3185						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	271	894	92	0	0	0	0	871	681	295	530	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	244	1006	0	0	0	0	0	871	681	295	530	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.19	0.11	
v/s Ratio Perm	0.16	0.32							c0.31			
v/c Ratio	0.50	0.98						0.75	1.17	0.63	0.19	
Uniform Delay, d1	28.7	35.1						35.3	38.5	32.1	9.9	
Progression Factor	1.00	1.00						0.43	0.46	1.06	0.43	
Incremental Delay, d2	3.7	22.8						0.4	77.5	2.4	0.1	
Delay (s)	32.4	57.9						15.7	95.2	36.4	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		52.9			0.0			50.6			15.8	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	43.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	165	0	0	111	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1960	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		788	1882			1960	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	183	0	0	123	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	183	0	0	125	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		504	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.06	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.17			0.12	
Uniform Delay, d1				23.4	19.9		9.9	8.0			9.6	
Progression Factor				1.00	1.00		1.06	1.19			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.5	9.8			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.8			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	8	0	18	0	142	41	33	296	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.91			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1603			1686		1595	1755	
Flt Permitted	0.74	1.00			0.96			1.00		0.60	1.00	
Satd. Flow (perm)	1509	1809			1558			1686		1010	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	8	0	19	0	149	43	35	312	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	14	0	0	180	0	35	312	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	479	575			495			793		642	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.03			0.23		0.05	0.30	
Uniform Delay, d1	19.9	19.9			20.0			13.3		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		0.99	0.90	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.1			14.0		8.6	8.6	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.1			14.0			8.6	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	19	11	350	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1782		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1782		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	21	12	389	177	13
RTOR Reduction (vph)	14	0	0	0	4	0
Lane Group Flow (vph)	77	0	12	389	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	576		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.40	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.31	0.51	1.12	
Incremental Delay, d2	0.5		0.0	1.1	0.4	
Delay (s)	16.0		2.1	5.4	8.6	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.3	8.6	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	24	274	14	568	271	1	0	222	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3737		1660	1752			1603	1298
Flt Permitted					1.00		0.54	1.00			1.00	1.00
Satd. Flow (perm)					3737		943	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	27	304	16	631	301	1	0	247	39
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	0	0	0	343	0	631	302	0	0	247	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1143		650	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.17			0.15	
v/s Ratio Perm							c0.47					0.01
v/c Ratio					0.30		0.97	0.29			0.34	0.03
Uniform Delay, d1					22.5		17.9	8.2			15.4	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.7		28.8	0.7			1.3	0.1
Delay (s)					23.2		46.7	8.9			16.7	13.3
Level of Service					C		D	A			B	B
Approach Delay (s)		0.0			23.2			34.5			16.2	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	28.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	15	11	9	331	530	96	74	347	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.97		1.00	0.98		1.00	1.00	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1803		1692	3237		1707	3353	
Flt Permitted					0.98		0.50	1.00		0.31	1.00	
Satd. Flow (perm)					1803		882	3237		563	3353	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	17	12	10	368	589	107	82	386	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	32	0	368	676	0	82	396	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					553		558	1467		415	1520	
v/s Ratio Prot					c0.02		c0.06	0.21		0.02	0.12	
v/s Ratio Perm							c0.30			0.09		
v/c Ratio					0.06		0.66	0.46		0.20	0.26	
Uniform Delay, d1					18.4		13.9	14.2		12.4	12.7	
Progression Factor					1.00		0.69	0.74		1.00	1.00	
Incremental Delay, d2					0.2		5.5	1.0		1.1	0.4	
Delay (s)					18.6		15.1	11.4		13.4	13.1	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.6			12.7			13.2	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	54	24	13	169	222	20	678	12	69	278	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1946			1626		1596	3232		1641	3132	
Flt Permitted		0.68			0.99		0.56	1.00		0.33	1.00	
Satd. Flow (perm)		1354			1613		947	3232		573	3132	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	57	25	14	178	234	21	714	13	73	293	16
RTOR Reduction (vph)	0	10	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	132	0	0	367	0	21	725	0	73	304	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		451			538		530	1810		321	1754	
v/s Ratio Prot								c0.22			0.10	
v/s Ratio Perm		0.10			c0.23		0.02			0.13		
v/c Ratio		0.29			0.68		0.04	0.40		0.23	0.17	
Uniform Delay, d1		18.5			21.6		7.4	9.4		8.3	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.17	0.07	
Incremental Delay, d2		1.6			6.9		0.1	0.7		1.6	0.2	
Delay (s)		20.1			28.4		7.6	10.0		3.0	0.8	
Level of Service		C			C		A	B		A	A	
Approach Delay (s)		20.1			28.4			10.0			1.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	45	57	105	328	202	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	63	117	364	224	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	113	238	243	150	96
Volume Left (vph)	50	117	0	0	0
Volume Right (vph)	63	0	0	0	21
Hadj (s)	-0.16	0.33	0.09	0.09	-0.07
Departure Headway (s)	5.3	5.4	5.2	5.4	5.2
Degree Utilization, x	0.17	0.36	0.35	0.22	0.14
Capacity (veh/h)	624	652	683	641	659
Control Delay (s)	9.3	10.2	9.7	8.8	7.9
Approach Delay (s)	9.3	9.9		8.4	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.4		
HCM Level of Service	A		
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	45	52	323	13	5	479	38	40	42	53	720	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3291	
Flt Permitted		0.11	1.00	1.00	0.55	1.00	1.00			0.39	1.00	
Satd. Flow (perm)		187	1731	1530	984	1731	1487			700	3291	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	58	359	14	6	532	42	44	47	59	800	49
RTOR Reduction (vph)	0	0	0	7	0	0	31	0	0	0	5	0
Lane Group Flow (vph)	0	108	359	7	6	532	55	0	0	106	844	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	300	528	453			167	784	
v/s Ratio Prot		0.05	c0.21			c0.31					c0.26	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.15		
v/c Ratio		0.38	0.44	0.01	0.02	1.01	0.12			0.63	1.08	
Uniform Delay, d1		20.2	18.2	14.5	25.5	36.5	26.4			35.9	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.9	1.7	0.0	0.1	41.1	0.6			17.0	54.9	
Delay (s)		24.1	19.9	14.5	25.7	77.6	26.9			52.9	94.9	
Level of Service		C	B	B	C	E	C			D	F	
Approach Delay (s)			20.7			70.1					90.3	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	62.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	51	300	27	33	4	58	114	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.97				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3279				1710	2621	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3279				1710	2621	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	333	30	37	4	64	127	13
RTOR Reduction (vph)	0	8	0	0	0	0	7	0
Lane Group Flow (vph)	57	392	0	0	0	68	133	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.12				0.04		
v/s Ratio Perm	0.19						c0.05	
v/c Ratio	0.84	0.51				0.24	0.31	
Uniform Delay, d1	38.4	35.1				38.0	38.4	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	69.9	2.4				2.0	1.8	
Delay (s)	108.3	37.5				39.9	40.2	
Level of Service	F	D				D	D	
Approach Delay (s)		46.3				40.1		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	474	0	0	487	26	118	116	119	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1930			1770				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1596			1930			1770				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	527	0	0	541	29	131	129	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	554	0	0	570	0	0	392	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		761			920			708				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.35						0.22				
v/c Ratio		0.73			0.62			0.55				
Uniform Delay, d1		13.6			12.6			15.0				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.0			3.1			3.1				
Delay (s)		19.7			15.8			18.1				
Level of Service		B			B			B				
Approach Delay (s)		19.7			15.8			18.1			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	371	114	67	270	111	148	1707	133	74	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1922	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.65	1.00		0.57	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1270	1426		1113	1396	627	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	391	120	71	284	117	156	1797	140	78	468	98
RTOR Reduction (vph)	0	0	71	0	0	69	0	0	30	0	0	59
Lane Group Flow (vph)	0	513	49	0	355	48	156	1797	110	78	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	53.0	44.3	44.3	49.0	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	53.0	44.3	44.3	49.0	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.50	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		520	584		456	572	389	1307	542	148	1191	510
v/s Ratio Prot							c0.03	c0.58		c0.03	0.16	
v/s Ratio Perm		c0.40	0.03		0.32	0.03	0.17		0.09	0.21		0.03
v/c Ratio		0.99	0.08		0.78	0.08	0.40	1.37	0.20	0.53	0.39	0.08
Uniform Delay, d1		30.7	19.0		26.9	19.0	14.7	30.4	19.2	23.2	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.15	0.76	0.42
Incremental Delay, d2		35.7	0.3		12.3	0.3	0.7	173.6	0.8	3.3	0.9	0.3
Delay (s)		66.4	19.2		39.2	19.2	15.4	204.0	20.0	29.9	17.9	8.3
Level of Service		E	B		D	B	B	F	C	C	B	A
Approach Delay (s)		57.4			34.3			177.6			17.9	
Approach LOS		E			C			F			B	

Intersection Summary			
HCM Average Control Delay	113.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	113.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	516	59	52	410	50	67	62	65	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.95				
Flt Protected		1.00			0.99			0.98				
Satd. Flow (prot)		1629			1627			1770				
Flt Permitted		0.91			0.89			0.98				
Satd. Flow (perm)		1494			1459			1770				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	573	66	58	456	56	74	69	72	0	0	0
RTOR Reduction (vph)	0	6	0	0	6	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	699	0	0	564	0	0	187	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		873			853			517				
v/s Ratio Prot												
v/s Ratio Perm		c0.47			0.39			0.11				
v/c Ratio		0.80			0.66			0.36				
Uniform Delay, d1		10.5			9.1			18.2				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.6			4.0			2.0				
Delay (s)		18.2			13.1			20.2				
Level of Service		B			B			C				
Approach Delay (s)		18.2			13.1			20.2			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	548	65	34	414	41	46	150	96	56	192	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.99	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1634	1288		1663	1490		1775	
Flt Permitted		0.98	1.00		0.94	1.00		0.89	1.00		0.90	
Satd. Flow (perm)		1619	1255		1536	1288		1493	1490		1613	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	24	577	68	36	436	43	48	158	101	59	202	27
RTOR Reduction (vph)	0	0	29	0	0	17	0	0	69	0	5	0
Lane Group Flow (vph)	0	601	39	0	472	26	0	206	32	0	283	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		928	720		881	738		478	477		516	
v/s Ratio Prot												
v/s Ratio Perm		c0.37	0.03		0.31	0.02		0.14	0.02		c0.18	
v/c Ratio		0.65	0.05		0.54	0.03		0.43	0.07		0.55	
Uniform Delay, d1		10.9	7.0		9.9	7.0		20.1	17.7		21.0	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.5	0.1		2.3	0.1		2.8	0.3		4.2	
Delay (s)		14.3	7.2		12.2	7.1		22.9	18.0		25.2	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.6			11.8			21.3			25.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	494	29	19	299	40	52	303	45	41	92	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1463	2993		1459	3530		1534	1647	1301	1517	1541	1156
Flt Permitted	0.53	1.00		0.39	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	809	2993		602	3530		1116	1647	1301	720	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	549	32	21	332	44	58	337	50	46	102	10
RTOR Reduction (vph)	0	6	0	0	16	0	0	0	26	0	0	6
Lane Group Flow (vph)	93	575	0	21	360	0	58	337	24	46	102	4
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	386	1427		287	1684		446	659	520	288	616	462
v/s Ratio Prot		c0.19			0.10			c0.20			0.07	
v/s Ratio Perm	0.11			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.24	0.40		0.07	0.21		0.13	0.51	0.05	0.16	0.17	0.01
Uniform Delay, d1	10.0	11.0		9.2	9.9		12.3	14.7	11.9	12.5	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.63	0.77	0.35	0.55	0.55	0.31
Incremental Delay, d2	1.5	0.8		0.5	0.3		0.6	2.8	0.2	1.2	0.6	0.0
Delay (s)	11.5	11.9		9.7	10.2		8.3	14.0	4.3	8.1	7.5	3.7
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.8			10.2			12.2			7.4	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	171	409	83	44	265	104	64	396	44	67	161	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.99	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.96		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1466	3059		1588	2939		1542	3028		1405	2760	
Flt Permitted	0.51	1.00		0.42	1.00		0.60	1.00		0.44	1.00	
Satd. Flow (perm)	784	3059		707	2939		981	3028		652	2760	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	180	431	87	46	279	109	67	417	46	71	169	68
RTOR Reduction (vph)	0	0	0	0	0	0	0	11	0	0	40	0
Lane Group Flow (vph)	180	518	0	46	388	0	67	452	0	71	197	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	376	1468		339	1411		405	1252		269	1141	
v/s Ratio Prot		0.17			0.13			c0.15			0.07	
v/s Ratio Perm	c0.23			0.07			0.07			0.11		
v/c Ratio	0.48	0.35		0.14	0.27		0.17	0.36		0.26	0.17	
Uniform Delay, d1	13.2	12.2		10.8	11.7		13.9	15.2		14.5	13.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.3	0.7		0.8	0.5		0.9	0.8		2.4	0.3	
Delay (s)	17.5	12.9		11.7	12.2		14.7	16.0		16.9	14.2	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		14.1			12.1			15.8			14.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	113	332	38	23	340	47	67	412	26	43	206	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1474	1842		1534	3073		1372	2867	
Flt Permitted	0.43	1.00		0.46	1.00		0.58	1.00		0.41	1.00	
Satd. Flow (perm)	700	1576		708	1842		933	3073		597	2867	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	119	349	40	24	358	49	71	434	27	45	217	66
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	119	389	0	24	407	0	71	461	0	45	283	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	438	738		356	793		327	730		193	627	
v/s Ratio Prot	c0.02	c0.25		0.00	0.22		c0.01	c0.15		0.01	0.10	
v/s Ratio Perm	0.13			0.03			0.06			0.06		
v/c Ratio	0.27	0.53		0.07	0.51		0.22	0.63		0.23	0.45	
Uniform Delay, d1	14.0	16.0		15.1	17.7		21.6	29.1		26.1	28.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.7		0.1	2.4		0.3	4.1		0.6	2.3	
Delay (s)	14.3	18.6		15.1	20.1		21.9	33.2		26.8	31.1	
Level of Service	B	B		B	C		C	C		C	C	
Approach Delay (s)		17.6			19.8			31.7			30.5	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	321	44	65	387	115	59	390	126	56	162	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3492			2914		1614	3156		1581	2901	
Flt Permitted		0.78			0.84		0.61	1.00		0.38	1.00	
Satd. Flow (perm)		2730			2467		1034	3156		628	2901	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	79	357	49	72	430	128	66	433	140	62	180	50
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	485	0	0	630	0	66	573	0	62	230	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1238			1118		455	1389		276	1276	
v/s Ratio Prot								c0.18			0.08	
v/s Ratio Perm		0.18			c0.26		0.06			0.10		
v/c Ratio		0.39			0.56		0.15	0.41		0.22	0.18	
Uniform Delay, d1		13.6			15.1		12.6	14.4		13.0	12.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9			2.1		0.7	0.9		1.9	0.3	
Delay (s)		14.6			17.1		13.2	15.3		14.9	13.1	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.6			17.1			15.1			13.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	523	5	14	660	386	72	9	20	118	1	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3144		1629	3257	1457		1611			3105	
Flt Permitted	0.35	1.00		0.42	1.00	1.00		0.69			0.75	
Satd. Flow (perm)	582	3144		720	3257	1457		1158			2398	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	581	6	16	733	429	80	10	22	131	1	58
RTOR Reduction (vph)	0	1	0	0	0	150	0	12	0	0	44	0
Lane Group Flow (vph)	161	586	0	16	733	279	0	100	0	0	146	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	379	2046		468	2119	948		274			566	
v/s Ratio Prot		0.19			0.23							
v/s Ratio Perm	c0.28			0.02		0.19		c0.09			0.06	
v/c Ratio	0.42	0.29		0.03	0.35	0.29		0.36			0.26	
Uniform Delay, d1	6.0	5.3		4.4	5.6	5.3		22.6			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	3.5	0.4		0.1	0.4	0.8		3.5			1.0	
Delay (s)	9.4	5.7		4.5	6.0	6.1		26.1			23.0	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.5			6.0			26.1			23.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	70.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	79	63	190	71	134	1972	88	71	499	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1496		1547	1584		1493	3069	1271	1452	2983	1301
Flt Permitted	0.37	1.00		0.31	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	608	1496		513	1584		612	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	83	66	200	75	141	2076	93	75	525	43
RTOR Reduction (vph)	0	16	0	0	16	0	0	0	18	0	0	25
Lane Group Flow (vph)	117	292	0	66	259	0	141	2076	75	75	525	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	252	387		230	410		350	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.20		0.02	0.16		0.03	c0.68		c0.03	0.18	
v/s Ratio Perm	0.11			0.07			0.16		0.06	0.17		0.01
v/c Ratio	0.46	0.76		0.29	0.63		0.40	1.64	0.14	0.43	0.43	0.03
Uniform Delay, d1	22.5	29.0		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.70	0.49	1.00	1.00	1.00
Incremental Delay, d2	6.0	12.9		3.1	7.2		2.8	292.0	0.5	7.6	1.1	0.1
Delay (s)	28.6	41.9		25.0	35.2		11.0	309.6	8.1	25.7	18.9	15.0
Level of Service	C	D		C	D		B	F	A	C	B	B
Approach Delay (s)		38.2			33.2			279.3			19.5	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	184.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	218	32	15	149	16	22	166	27	33	148	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.99	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1837			1839			1899			1931	
Flt Permitted		0.97			0.97			0.96			0.94	
Satd. Flow (perm)		1782			1791			1840			1822	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	225	33	15	154	16	23	171	28	34	153	22
RTOR Reduction (vph)	0	7	0	0	5	0	0	8	0	0	6	0
Lane Group Flow (vph)	0	278	0	0	180	0	0	214	0	0	203	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		740			744			849			841	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.10			c0.12			0.11	
v/c Ratio		0.38			0.24			0.25			0.24	
Uniform Delay, d1		13.2			12.3			10.7			10.6	
Progression Factor		1.00			0.66			1.11			1.00	
Incremental Delay, d2		1.5			0.8			0.7			0.7	
Delay (s)		14.6			9.0			12.5			11.3	
Level of Service		B			A			B			B	
Approach Delay (s)		14.6			9.0			12.5			11.3	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	37	9	162	23	45	384	33	17	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1466	2989		1302	3018		1529	3093		1492	2868	
Flt Permitted	0.62	1.00		0.60	1.00		0.68	1.00		0.48	1.00	
Satd. Flow (perm)	960	2989		825	3018		1093	3093		757	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	41	10	180	26	50	427	37	19	96	19
RTOR Reduction (vph)	0	26	0	0	18	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	216	0	10	188	0	50	454	0	19	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	281	874		241	882		639	1808		443	1677	
v/s Ratio Prot		c0.07			0.06			c0.15			0.04	
v/s Ratio Perm	0.03			0.01			0.05			0.03		
v/c Ratio	0.10	0.25		0.04	0.21		0.08	0.25		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.4		5.9	6.6		5.8	5.8	
Progression Factor	0.73	0.73		0.76	0.74		0.92	0.95		0.52	0.46	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.8	13.5		12.8	13.4		5.6	6.6		3.1	2.8	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.4			13.4			6.5			2.8	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	39	28	429	24	14	178	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2866			1878			1807	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1046	2952		965	2866			1838			1742	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	43	31	477	27	16	198	17
RTOR Reduction (vph)	0	23	0	0	26	0	0	3	0	0	4	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	532	0	0	227	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	418	1181		386	1146			877			831	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.29			0.13	
v/c Ratio	0.12	0.18		0.05	0.13			0.61			0.27	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.5			10.2	
Progression Factor	1.02	0.93		0.85	0.87			0.98			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			3.0			0.8	
Delay (s)	13.1	12.1		10.4	11.0			15.3			11.0	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.3			11.0			15.3			11.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	127	63	2	84	36	22	275	9	7	184	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.95			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1876		1587	1870			1971			1933	
Flt Permitted	0.67	1.00		0.56	1.00			0.97			0.99	
Satd. Flow (perm)	1135	1876		942	1870			1925			1916	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	141	70	2	93	40	24	306	10	8	204	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	100	211	0	2	133	0	0	340	0	0	244	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	349	577		290	575			1096			1091	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.09			0.00				c0.18			0.13	
v/c Ratio	0.29	0.37		0.01	0.23			0.31			0.22	
Uniform Delay, d1	17.1	17.6		15.6	16.8			7.3			6.9	
Progression Factor	0.91	0.90		0.89	0.92			0.99			1.00	
Incremental Delay, d2	2.0	1.8		0.0	0.9			0.7			0.5	
Delay (s)	17.6	17.6		14.0	16.4			8.0			7.4	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.6			16.3			8.0			7.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	9	55	1	3	12	40	492	6	2	201	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1672		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.62	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1260	1672		1279	1422		971	1631	1392	648	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	136	10	61	1	3	13	44	547	7	2	223	56
RTOR Reduction (vph)	0	44	0	0	9	0	0	0	3	0	0	22
Lane Group Flow (vph)	136	27	0	1	7	0	44	547	4	2	223	34
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		354	394		583	979	835	389	1144	856
v/s Ratio Prot		0.02			0.00			c0.34			0.12	
v/s Ratio Perm	c0.11			0.00			0.05		0.00	0.00		0.02
v/c Ratio	0.39	0.06		0.00	0.02		0.08	0.56	0.01	0.01	0.19	0.04
Uniform Delay, d1	19.0	17.3		17.0	17.1		5.4	7.8	5.2	5.2	5.9	5.3
Progression Factor	1.46	2.41		1.00	1.00		1.17	1.10	1.33	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.2		0.0	0.1		0.2	1.7	0.0	0.0	0.4	0.1
Delay (s)	31.0	41.8		17.0	17.1		6.5	10.3	6.9	5.2	6.3	5.4
Level of Service	C	D		B	B		A	B	A	A	A	A
Approach Delay (s)		34.7			17.1			10.0			6.1	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	241	76	123	376	0	0	0	0	74	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2826		1621	3288					1574	2907	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2826		846	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	254	80	129	396	0	0	0	0	78	321	380
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	304	0	129	396	0	0	0	0	78	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		933		652	1940					504	930	
v/s Ratio Prot		c0.11		0.05	c0.12					0.05	c0.17	
v/s Ratio Perm				0.07								
v/c Ratio		0.33		0.20	0.20					0.15	0.52	
Uniform Delay, d1		25.1		10.6	9.6					24.3	27.8	
Progression Factor		1.00		1.95	2.06					1.00	1.00	
Incremental Delay, d2		0.9		0.6	0.2					0.7	2.1	
Delay (s)		26.1		21.2	19.8					25.0	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.1			20.2			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	186	0	0	324	69	174	554	326	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2831		1750	1782	1514			
Flt Permitted	0.34	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	603	3054			2831		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	196	0	0	341	73	183	583	343	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	230	0	0	0
Lane Group Flow (vph)	136	196	0	0	396	0	183	583	113	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	679	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.14		0.10	c0.33				
v/s Ratio Perm	0.04								0.07			
v/c Ratio	0.20	0.11			0.67		0.32	0.99	0.23			
Uniform Delay, d1	11.8	9.4			36.3		25.1	33.4	24.3			
Progression Factor	0.24	0.25			1.00		0.75	0.79	1.93			
Incremental Delay, d2	0.6	0.1			5.8		0.9	27.7	0.7			
Delay (s)	3.5	2.5			42.1		19.8	54.1	47.6			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			42.1			46.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	37.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	457	372	34	592	0	0	0	0	4	215	195
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3107		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.17	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3107		284	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	476	388	35	617	0	0	0	0	4	224	203
RTOR Reduction (vph)	0	147	0	0	0	0	0	0	0	0	0	134
Lane Group Flow (vph)	0	717	0	35	617	0	0	0	0	4	224	69
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1119		393	1898					543	1074	491
v/s Ratio Prot		c0.23		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.64		0.09	0.33					0.01	0.21	0.14
Uniform Delay, d1		26.6		12.5	10.9					21.8	23.4	22.9
Progression Factor		1.00		0.54	0.68					0.73	0.79	0.92
Incremental Delay, d2		2.8		0.2	0.2					0.0	0.4	0.5
Delay (s)		29.4		6.9	7.6					16.0	18.9	21.5
Level of Service		C		A	A					B	B	C
Approach Delay (s)		29.4			7.5			0.0			20.1	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	401	60	0	0	57	5	569	646	62	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3042			3079		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1084	2339			3079		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	413	62	0	0	59	5	587	666	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	38	0	0	0
Lane Group Flow (vph)	206	269	0	0	60	0	587	666	26	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1446			462		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.38	c0.41	0.02			
v/s Ratio Perm	c0.05	0.03										
v/c Ratio	0.30	0.19			0.13		1.02	1.10	0.05			
Uniform Delay, d1	14.0	13.3			36.8		31.5	31.5	20.2			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		42.9	66.6	0.2			
Delay (s)	4.1	3.5			37.4		74.4	98.1	20.4			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.8			37.4			83.8			0.0	
Approach LOS		A			D			F			A	

Intersection Summary			
HCM Average Control Delay	61.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	163	284	70	61	189	117	43	1151	72	100	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2842			2770		1447	3069	1336	1494	2956	1270
Flt Permitted		0.66			0.79		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1916			2214		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	170	296	73	64	197	122	45	1199	75	104	496	44
RTOR Reduction (vph)	0	14	0	0	64	0	0	0	28	0	0	27
Lane Group Flow (vph)	0	525	0	0	319	0	45	1199	47	104	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		877			729		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.39		c0.03	0.17	
v/s Ratio Perm		0.21			0.14		0.06		0.04	0.27		0.01
v/c Ratio		0.60			0.44		0.15	0.99	0.09	0.72	0.43	0.03
Uniform Delay, d1		18.9			22.3		14.7	25.6	16.5	19.2	18.7	16.1
Progression Factor		1.00			1.00		1.32	0.86	1.42	1.82	1.63	3.13
Incremental Delay, d2		3.0			1.9		0.6	17.7	0.2	24.6	1.0	0.1
Delay (s)		21.9			24.2		20.2	39.8	23.6	59.5	31.7	50.7
Level of Service		C			C		C	D	C	E	C	D
Approach Delay (s)		21.9			24.2			38.2			37.5	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	33.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	441	0	0	339	85	28	63	115	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.92				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1707			1668			1574				
Flt Permitted		0.93			1.00			0.99				
Satd. Flow (perm)		1599			1668			1574				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	490	0	0	377	94	31	70	128	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	70	0	0	0	0
Lane Group Flow (vph)	0	539	0	0	457	0	0	159	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		836			872			557				
v/s Ratio Prot					0.27							
v/s Ratio Perm		c0.34						0.10				
v/c Ratio		0.64			0.52			0.28				
Uniform Delay, d1		11.2			10.2			15.1				
Progression Factor		1.00			0.56			1.00				
Incremental Delay, d2		3.8			2.0			1.3				
Delay (s)		15.0			7.7			16.4				
Level of Service		B			A			B				
Approach Delay (s)		15.0			7.7			16.4			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	458	31	23	355	53	16	175	47	68	107	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.98			0.97			0.99	
Flt Protected		1.00			1.00			1.00			0.98	
Satd. Flow (prot)		1889			1831			3160			3149	
Flt Permitted		0.93			0.96			0.93			0.79	
Satd. Flow (perm)		1773			1759			2958			2534	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	509	34	26	394	59	18	194	52	76	119	21
RTOR Reduction (vph)	0	3	0	0	8	0	0	30	0	0	12	0
Lane Group Flow (vph)	0	590	0	0	471	0	0	234	0	0	204	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		818			812			1229			1053	
v/s Ratio Prot												
v/s Ratio Perm		c0.33			0.27			0.08			c0.08	
v/c Ratio		0.72			0.58			0.19			0.19	
Uniform Delay, d1		14.1			12.9			12.1			12.1	
Progression Factor		0.65			0.55			0.94			0.70	
Incremental Delay, d2		4.5			2.9			0.3			0.4	
Delay (s)		13.6			10.0			11.7			8.9	
Level of Service		B			A			B			A	
Approach Delay (s)		13.6			10.0			11.7			8.9	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	355	20	29	302	64	46	319	92	60	96	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1502	2948		1585	2934		1497	3031		1594	2943	
Flt Permitted	0.47	1.00		0.46	1.00		0.67	1.00		0.48	1.00	
Satd. Flow (perm)	744	2948		773	2934		1056	3031		806	2943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	394	22	32	336	71	51	354	102	67	107	22
RTOR Reduction (vph)	0	6	0	0	28	0	0	41	0	0	10	0
Lane Group Flow (vph)	56	410	0	32	379	0	51	415	0	67	119	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	252	998		262	993		569	1632		434	1585	
v/s Ratio Prot		c0.14			0.13			c0.14			0.04	
v/s Ratio Perm	0.08			0.04			0.05			0.08		
v/c Ratio	0.22	0.41		0.12	0.38		0.09	0.25		0.15	0.07	
Uniform Delay, d1	15.4	16.5		14.8	16.3		7.3	8.0		7.6	7.2	
Progression Factor	0.63	0.62		0.86	0.85		0.71	0.73		1.34	1.35	
Incremental Delay, d2	1.6	1.0		0.9	1.1		0.3	0.4		0.8	0.1	
Delay (s)	11.2	11.3		13.6	15.1		5.5	6.2		10.9	9.8	
Level of Service	B	B		B	B		A	A		B	A	
Approach Delay (s)		11.3			15.0			6.1			10.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	380	131	100	316	82	37	324	60	41	136	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1381	2934		1337	3524			3413			3314	
Flt Permitted	0.49	1.00		0.42	1.00			0.91			0.84	
Satd. Flow (perm)	719	2934		587	3524			3134			2805	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	400	138	105	333	86	39	341	63	43	143	40
RTOR Reduction (vph)	0	53	0	0	35	0	0	20	0	0	24	0
Lane Group Flow (vph)	87	485	0	105	384	0	0	423	0	0	202	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	343	1399		280	1681			1254			1122	
v/s Ratio Prot		0.17			0.11							
v/s Ratio Perm	0.12			c0.18				c0.13			0.07	
v/c Ratio	0.25	0.35		0.38	0.23			0.34			0.18	
Uniform Delay, d1	10.1	10.7		10.8	10.0			13.5			12.6	
Progression Factor	1.65	1.85		0.77	0.72			0.51			0.64	
Incremental Delay, d2	1.7	0.7		3.3	0.3			0.7			0.3	
Delay (s)	18.4	20.4		11.6	7.4			7.6			8.4	
Level of Service	B	C		B	A			A			A	
Approach Delay (s)		20.1			8.3			7.6			8.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	307	99	104	371	104	82	84	88	88	84	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3036			1822			1826	
Flt Permitted		0.74	1.00		0.76			0.80			0.78	
Satd. Flow (perm)		1223	1409		2327			1482			1447	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	110	341	110	116	412	116	91	93	98	98	93	91
RTOR Reduction (vph)	0	0	52	0	29	0	0	30	0	0	26	0
Lane Group Flow (vph)	0	451	58	0	615	0	0	252	0	0	256	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		640	737		1217			479			467	
v/s Ratio Prot												
v/s Ratio Perm		c0.37	0.04		0.26			0.17			c0.18	
v/c Ratio		0.70	0.08		0.51			0.53			0.55	
Uniform Delay, d1		11.7	7.7		10.1			17.9			18.1	
Progression Factor		1.75	4.62		0.43			1.00			1.00	
Incremental Delay, d2		6.2	0.2		1.4			4.1			4.6	
Delay (s)		26.7	35.8		5.7			22.0			22.6	
Level of Service		C	D		A			C			C	
Approach Delay (s)		28.5			5.7			22.0			22.6	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	386	22	15	450	63	40	103	41	43	90	101
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3017		1573	3003			3457			3397	
Flt Permitted	0.38	1.00		0.46	1.00			0.86			0.88	
Satd. Flow (perm)	597	3017		764	3003			3010			3010	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	429	24	17	500	70	44	114	46	48	100	112
RTOR Reduction (vph)	0	6	0	0	17	0	0	25	0	0	62	0
Lane Group Flow (vph)	83	447	0	17	553	0	0	179	0	0	198	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	257	1300		329	1294			1343			1343	
v/s Ratio Prot		0.15			c0.18							
v/s Ratio Perm	0.14			0.02				0.06			c0.07	
v/c Ratio	0.32	0.34		0.05	0.43			0.13			0.15	
Uniform Delay, d1	12.2	12.4		10.8	12.9			10.6			10.7	
Progression Factor	0.96	0.99		1.14	1.00			1.04			0.83	
Incremental Delay, d2	2.5	0.5		0.1	0.5			0.2			0.2	
Delay (s)	14.3	12.7		12.4	13.3			11.2			9.1	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.0			13.3			11.2			9.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	458	74	94	469	284	51	332	92	222	159	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3076			3146			3118	
Flt Permitted		0.63			0.74			0.87			0.63	
Satd. Flow (perm)		2014			2279			2748			2005	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	509	82	104	521	316	57	369	102	247	177	58
RTOR Reduction (vph)	0	16	0	0	98	0	0	32	0	0	17	0
Lane Group Flow (vph)	0	671	0	0	843	0	0	496	0	0	465	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		806			912			1263			617	
v/s Ratio Prot								c0.04				
v/s Ratio Perm		0.33			c0.37			0.14			c0.23	
v/c Ratio		0.83			0.92			0.39			0.96dl	
Uniform Delay, d1		17.5			18.6			12.1			20.3	
Progression Factor		1.73			1.00			1.00			0.89	
Incremental Delay, d2		9.7			16.3			0.9			8.3	
Delay (s)		40.0			34.9			13.0			26.4	
Level of Service		D			C			B			C	
Approach Delay (s)		40.0			34.9			13.0			26.4	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	30.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	724	121	45	759	0	142	0	70	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2975			3032			1585				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2975			2542			1308				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	804	134	50	843	0	158	0	78	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	920	0	0	893	0	0	216	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1917			932			233				
v/s Ratio Prot		c0.31										
v/s Ratio Perm					c0.35			c0.17				
v/c Ratio		0.48			0.96			0.93				
Uniform Delay, d1		8.2			27.8			36.4				
Progression Factor		0.04			1.57			1.00				
Incremental Delay, d2		0.4			18.9			42.9				
Delay (s)		0.8			62.5			79.3				
Level of Service		A			E			E				
Approach Delay (s)		0.8			62.5			79.3			0.0	
Approach LOS		A			E			E			A	

Intersection Summary			
HCM Average Control Delay	36.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	123	502	187	274	646	183	103	20	185	78	7	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1756		1629	1714	1457
Flt Permitted	0.32	1.00		0.20	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	508	3020		340	3257	1457		1581		690	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	137	558	208	304	718	203	114	22	206	87	8	86
RTOR Reduction (vph)	0	42	0	0	0	104	0	74	0	0	0	46
Lane Group Flow (vph)	137	724	0	304	718	99	0	268	0	87	8	40
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	40.0	30.6		47.6	35.2	43.8		20.8		32.4	32.4	41.8
Effective Green, g (s)	40.0	30.6		47.6	35.2	43.8		20.8		32.4	32.4	41.8
Actuated g/C Ratio	0.44	0.34		0.53	0.39	0.49		0.23		0.36	0.36	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	331	1027		380	1274	709		365		338	617	677
v/s Ratio Prot	0.04	0.24		c0.12	0.22	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.17		0.07		0.02
v/c Ratio	0.41	0.71		0.80	0.56	0.14		0.73		0.26	0.01	0.06
Uniform Delay, d1	15.4	25.8		14.8	21.4	12.7		32.0		21.2	18.5	13.3
Progression Factor	1.90	1.58		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	3.7		12.0	1.8	0.1		8.0		0.4	0.0	0.1
Delay (s)	30.4	44.4		26.8	23.2	12.8		40.0		21.6	18.5	13.3
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		42.3			22.4			40.0			17.5	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	517	247	6	531	0	0	0	0	32	0	572
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	574	274	7	590	0	0	0	0	36	0	636
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	590			574			883	1178	287	891	1178	295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	590			574			883	1178	287	891	1178	295
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	85	100	8
cM capacity (veh/h)	961			974			19	184	701	231	184	692

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	287	287	274	203	393	36	636
Volume Left	0	0	0	7	0	36	0
Volume Right	0	0	274	0	0	0	636
cSH	1700	1700	1700	974	1700	231	692
Volume to Capacity	0.17	0.17	0.16	0.01	0.23	0.15	0.92
Queue Length 95th (ft)	0	0	0	1	0	13	307
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	23.4	41.6
Lane LOS				A		C	E
Approach Delay (s)	0.0			0.1		40.6	
Approach LOS						E	

Intersection Summary			
Average Delay	12.9		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	549	0	537	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	610	0	597	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	305	305	597
Volume Left (vph)	305	305	597
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	7.0	7.0	5.8
Degree Utilization, x	0.59	0.59	0.95
Capacity (veh/h)	499	499	618
Control Delay (s)	18.2	18.2	49.1
Approach Delay (s)	18.2		49.1
Approach LOS	C		E

Intersection Summary			
Delay	33.5		
HCM Level of Service	D		
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	373	46	130	332	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3097		1574	3149						3014	
Flt Permitted		1.00		0.43	1.00						0.97	
Satd. Flow (perm)		3097		706	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	414	51	144	369	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	454	0	144	369	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1312		509	1815						957	
v/s Ratio Prot		c0.15		c0.03	0.12						c0.04	
v/s Ratio Perm				0.13								
v/c Ratio		0.35		0.28	0.20						0.12	
Uniform Delay, d1		16.5		11.9	8.6						20.6	
Progression Factor		1.00		0.28	0.23						1.00	
Incremental Delay, d2		0.7		1.3	0.2						0.2	
Delay (s)		17.3		4.6	2.2						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.3			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	377	0	0	413	76	49	65	59	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.95				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1629	3257			3076			4377				
Flt Permitted	0.37	1.00			1.00			0.99				
Satd. Flow (perm)	640	3257			3076			4377				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	419	0	0	459	84	54	72	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	45	0	0	0	0
Lane Group Flow (vph)	76	419	0	0	525	0	0	147	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	478	1839			1267			1390				
v/s Ratio Prot	0.02	c0.13			c0.17			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.23			0.41			0.11				
Uniform Delay, d1	12.3	9.2			17.7			20.5				
Progression Factor	0.31	0.30			1.00			1.00				
Incremental Delay, d2	0.7	0.3			1.0			0.2				
Delay (s)	4.5	3.1			18.7			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.3			18.7			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	357	39	40	256	33	118	85	86	65	91	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			0.98			0.96			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2986			2976			1773			1752	
Flt Permitted		0.89			0.85			0.77			0.86	
Satd. Flow (perm)		2673			2560			1387			1526	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	397	43	44	284	37	131	94	96	72	101	140
RTOR Reduction (vph)	0	11	0	0	13	0	0	24	0	0	45	0
Lane Group Flow (vph)	0	472	0	0	352	0	0	297	0	0	268	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		946			906			683			751	
v/s Ratio Prot												
v/s Ratio Perm		c0.18			0.14			c0.21			0.18	
v/c Ratio		0.50			0.39			0.44			0.36	
Uniform Delay, d1		16.5			15.7			10.7			10.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.9			1.3			2.0			1.3	
Delay (s)		18.4			17.0			12.7			11.5	
Level of Service		B			B			B			B	
Approach Delay (s)		18.4			17.0			12.7			11.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	295	39	59	200	75	71	1001	104	126	428	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1551	3023		1593	3505		1486	3040	1347	1494	3011	1271
Flt Permitted	0.55	1.00		0.49	1.00		0.43	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	891	3023		819	3505		675	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	311	41	62	211	79	75	1054	109	133	451	84
RTOR Reduction (vph)	0	12	0	0	45	0	0	0	65	0	0	51
Lane Group Flow (vph)	178	340	0	62	245	0	75	1054	44	133	451	33
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	346	996		325	1155		324	1180	523	144	1169	493
v/s Ratio Prot	c0.02	0.11		0.01	0.07		0.01	c0.35		c0.04	0.15	
v/s Ratio Perm	c0.16			0.06			0.09		0.03	0.35		0.03
v/c Ratio	0.51	0.34		0.19	0.21		0.23	0.89	0.08	0.92	0.39	0.07
Uniform Delay, d1	20.9	21.5		18.6	20.5		15.0	24.3	16.4	21.1	18.7	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	2.17	0.62	0.80
Incremental Delay, d2	5.4	0.9		1.3	0.4		1.7	10.5	0.3	54.0	0.9	0.2
Delay (s)	26.3	22.5		19.9	21.0		16.6	34.8	16.8	99.7	12.6	13.3
Level of Service	C	C		B	C		B	C	B	F	B	B
Approach Delay (s)		23.8			20.8			32.1			30.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	434	18	25	261	21	35	113	68	71	57	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.97	1.00
Satd. Flow (prot)		1935	1382		1947	1331		1970	1452		1933	1430
Flt Permitted		0.96	1.00		0.95	1.00		0.92	1.00		0.80	1.00
Satd. Flow (perm)		1860	1382		1848	1331		1839	1452		1581	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	457	19	26	275	22	37	119	72	75	60	43
RTOR Reduction (vph)	0	0	10	0	0	12	0	0	42	0	0	25
Lane Group Flow (vph)	0	497	9	0	301	10	0	156	30	0	135	18
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		858	638		853	614		764	603		657	594
v/s Ratio Prot												
v/s Ratio Perm		c0.27	0.01		0.16	0.01		0.08	0.02		c0.09	0.01
v/c Ratio		0.58	0.01		0.35	0.02		0.20	0.05		0.21	0.03
Uniform Delay, d1		12.9	9.5		11.3	9.5		12.1	11.3		12.1	11.2
Progression Factor		1.00	1.00		0.38	0.16		1.18	1.66		0.99	0.83
Incremental Delay, d2		2.8	0.0		1.1	0.0		0.6	0.2		0.7	0.1
Delay (s)		15.7	9.5		5.4	1.6		14.9	18.9		12.7	9.4
Level of Service		B	A		A	A		B	B		B	A
Approach Delay (s)		15.5			5.1			16.2			11.9	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	514	10	17	268	43	13	247	35	81	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3031		1520	2977		1520	2983		1520	2904	
Flt Permitted	0.95	1.00		0.43	1.00		0.68	1.00		0.54	1.00	
Satd. Flow (perm)	1520	3031		692	2977		1091	2983		871	2904	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	571	11	19	298	48	14	274	39	90	78	33
RTOR Reduction (vph)	0	2	0	0	20	0	0	17	0	0	19	0
Lane Group Flow (vph)	73	580	0	19	326	0	14	296	0	90	92	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1492		234	1008		453	1239		362	1206	
v/s Ratio Prot	c0.05	c0.19			0.11			0.10			0.03	
v/s Ratio Perm				0.03			0.01			c0.10		
v/c Ratio	0.45	0.39		0.08	0.32		0.03	0.24		0.25	0.08	
Uniform Delay, d1	27.2	10.4		14.6	16.0		11.3	12.3		12.4	11.5	
Progression Factor	1.07	0.60		0.91	0.93		0.54	0.57		1.11	1.08	
Incremental Delay, d2	7.8	0.7		0.7	0.8		0.1	0.4		1.6	0.1	
Delay (s)	36.9	6.9		14.0	15.6		6.2	7.4		15.4	12.5	
Level of Service	D	A		B	B		A	A		B	B	
Approach Delay (s)		10.3			15.5			7.4			13.8	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	253	348	242	216	43	109	310	56	25	192	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.91		1.00	0.97			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1520	2776		1520	2964			3163			3190	
Flt Permitted	0.58	1.00		0.95	1.00			0.81			0.88	
Satd. Flow (perm)	921	2776		1520	2964			2578			2834	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	281	387	269	240	48	121	344	62	28	213	28
RTOR Reduction (vph)	0	268	0	0	25	0	0	16	0	0	14	0
Lane Group Flow (vph)	41	400	0	269	263	0	0	511	0	0	255	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	283	854		140	1322			992			1090	
v/s Ratio Prot		c0.14		c0.18	0.09							
v/s Ratio Perm	0.04							c0.20			0.09	
v/c Ratio	0.14	0.47		1.92	0.20			0.52			0.23	
Uniform Delay, d1	16.3	18.2		29.5	10.9			15.3			13.5	
Progression Factor	0.63	0.27		1.32	1.10			1.09			0.56	
Incremental Delay, d2	1.0	1.8		433.0	0.2			1.4			0.5	
Delay (s)	11.3	6.7		472.0	12.3			18.2			8.1	
Level of Service	B	A		F	B			B			A	
Approach Delay (s)		6.9			234.3			18.2			8.1	
Approach LOS		A			F			B			A	

Intersection Summary			
HCM Average Control Delay	71.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	298	14	70	466	70	34	94	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1587			1566			3164				
Flt Permitted		0.97			0.92			0.99				
Satd. Flow (perm)		1535			1451			3164				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	331	16	78	518	78	38	104	180	0	0	0
RTOR Reduction (vph)	0	2	0	0	6	0	0	138	0	0	0	0
Lane Group Flow (vph)	0	363	0	0	668	0	0	184	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		989			935			735				
v/s Ratio Prot												
v/s Ratio Perm		0.24			c0.46			0.06				
v/c Ratio		0.37			0.71			0.25				
Uniform Delay, d1		5.4			7.6			20.3				
Progression Factor		1.89			1.00			1.00				
Incremental Delay, d2		0.9			4.6			0.8				
Delay (s)		11.0			12.3			21.1				
Level of Service		B			B			C				
Approach Delay (s)		11.0			12.3			21.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	94	366	477	44	66	126
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	99	385	502	46	69	133
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.85				0.85	0.85
vC, conflicting volume	569				1134	549
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	401				1068	377
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	89				62	76
cM capacity (veh/h)	922				182	557

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	484	548	69	133
Volume Left	99	0	69	0
Volume Right	0	46	0	133
cSH	922	1700	182	557
Volume to Capacity	0.11	0.32	0.38	0.24
Queue Length 95th (ft)	9	0	42	23
Control Delay (s)	2.9	0.0	36.6	13.5
Lane LOS	A		E	B
Approach Delay (s)	2.9	0.0	21.4	
Approach LOS			C	

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	477	1	27	691	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1661		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	530	1	30	768	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	531	0	0	798	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			606		
v/s Ratio Prot	c0.31					
v/s Ratio Perm				c0.48		
v/c Ratio	0.45			1.32		
Uniform Delay, d1	5.8			27.0		
Progression Factor	0.07			1.00		
Incremental Delay, d2	0.1			154.0		
Delay (s)	0.5			181.0		
Level of Service	A			F		
Approach Delay (s)	0.5			181.0	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	108.9	HCM Level of Service	F
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	186	195	25	569	0	0	0	0	3	0	271
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	207	217	28	632	0	0	0	0	3	0	301
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	632			207			1003	1003	212	791	894	632
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	632			207			1003	1003	212	791	894	632
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	28
cM capacity (veh/h)	960			983			55	237	800	278	274	418

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	138	286	660	3	301
Volume Left	0	0	28	3	0
Volume Right	0	217	0	0	301
cSH	1700	1700	983	278	418
Volume to Capacity	0.08	0.17	0.03	0.01	0.72
Queue Length 95th (ft)	0	0	2	1	140
Control Delay (s)	0.0	0.0	0.7	18.1	32.8
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	32.7	
Approach LOS				D	

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	189	0	594	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	210	0	660	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	105	105	660
Volume Left (vph)	105	105	660
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.9
Degree Utilization, x	0.20	0.20	0.89
Capacity (veh/h)	511	512	734
Control Delay (s)	10.3	10.3	33.9
Approach Delay (s)	10.3		33.9
Approach LOS	B		D

Intersection Summary			
Delay	28.2		
HCM Level of Service	D		
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	471	210	159	474	0	0	0	0	132	117	300
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3693	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3693	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	496	221	167	499	0	0	0	0	139	123	316
RTOR Reduction (vph)	0	0	149	0	0	0	0	0	0	0	98	94
Lane Group Flow (vph)	0	496	72	0	666	0	0	0	0	76	246	64
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.1	39.1		72.6					20.2	20.2	65.3
Effective Green, g (s)		39.1	39.1		72.6					20.2	20.2	65.3
Actuated g/C Ratio		0.24	0.24		0.45					0.13	0.13	0.41
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		728	294		1530					170	466	458
v/s Ratio Prot		c0.17			c0.20					0.06	c0.07	
v/s Ratio Perm			0.06									0.06
v/c Ratio		0.68	0.25		0.44					0.45	0.53	0.14
Uniform Delay, d1		54.8	48.6		29.7					64.7	65.4	29.7
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		5.1	2.0		0.1					1.9	1.1	0.1
Delay (s)		59.9	50.6		0.7					66.6	66.5	29.9
Level of Service		E	D		A					E	E	C
Approach Delay (s)		57.0			0.7			0.0			56.5	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.1
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	212	391	0	0	395	93	238	150	144	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	3001				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	3001				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	236	434	0	0	439	103	264	167	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	82	0	63	0	0	0	0
Lane Group Flow (vph)	236	434	0	0	439	21	201	327	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	79.4	79.4			32.7	32.7	21.0	21.0				
Effective Green, g (s)	79.4	79.4			32.7	32.7	21.0	21.0				
Actuated g/C Ratio	0.50	0.50			0.20	0.20	0.13	0.13				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	781	1670			644	298	201	394				
v/s Ratio Prot	c0.15	0.13			c0.14		c0.13	0.11				
v/s Ratio Perm						0.01						
v/c Ratio	0.30	0.26			0.68	0.07	1.00	0.83				
Uniform Delay, d1	23.9	23.3			58.8	51.4	69.5	67.8				
Progression Factor	0.07	0.07			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			3.0	0.1	63.5	13.8				
Delay (s)	1.8	1.8			61.8	51.5	133.0	81.6				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.8			59.9			99.1			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	51.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.9
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	220	325	75	44	154	54	88	824	96	93	448	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1538	1556	1328	1595	1713		1525	2965		1509	2870	
Flt Permitted	0.49	1.00	1.00	0.42	1.00		0.34	1.00		0.13	1.00	
Satd. Flow (perm)	791	1556	1328	706	1713		539	2965		214	2870	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	342	79	46	162	57	93	867	101	98	472	109
RTOR Reduction (vph)	0	0	52	0	14	0	0	10	0	0	22	0
Lane Group Flow (vph)	232	342	27	46	205	0	93	958	0	98	559	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		39.6	34.1		39.6	34.1	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	368	557	461	269	539		275	1125		154	1089	
v/s Ratio Prot	c0.04	c0.22		0.01	0.12		0.02	c0.32		c0.03	0.19	
v/s Ratio Perm	0.21		0.02	0.05			0.12			0.23		
v/c Ratio	0.63	0.61	0.06	0.17	0.38		0.34	0.85		0.64	0.51	
Uniform Delay, d1	21.3	23.7	19.6	20.5	24.0		16.6	25.6		18.6	21.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.5	5.0	0.2	0.3	2.0		0.7	8.2		8.3	1.7	
Delay (s)	24.8	28.7	19.8	20.8	26.0		17.3	33.8		26.9	23.2	
Level of Service	C	C	B	C	C		B	C		C	C	
Approach Delay (s)		26.3			25.1			32.3			23.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	389	16	18	212	32	35	80	67	62	44	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.95			0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99			0.98	
Satd. Flow (prot)		1909	1482		1599	1198		1841			1814	
Flt Permitted		0.95	1.00		0.96	1.00		0.94			0.84	
Satd. Flow (perm)		1831	1482		1543	1198		1741			1549	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	409	17	19	223	34	37	84	71	65	46	41
RTOR Reduction (vph)	0	0	8	0	0	17	0	33	0	0	20	0
Lane Group Flow (vph)	0	455	9	0	242	17	0	159	0	0	132	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		901	730		760	590		723			643	
v/s Ratio Prot												
v/s Ratio Perm		c0.25	0.01		0.16	0.01		c0.09			0.08	
v/c Ratio		0.50	0.01		0.32	0.03		0.22			0.20	
Uniform Delay, d1		11.1	8.4		9.9	8.5		12.2			12.1	
Progression Factor		1.00	1.00		2.04	3.33		1.00			1.42	
Incremental Delay, d2		2.0	0.0		1.0	0.1		0.7			0.7	
Delay (s)		13.2	8.5		21.3	28.4		12.9			17.9	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		13.0			22.2			12.9			17.9	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	430	24	19	189	8	41	228	73	18	53	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1658	1392		1584	1497		1755	1390		1656	
Flt Permitted		0.91	1.00		0.82	1.00		0.95	1.00		0.93	
Satd. Flow (perm)		1527	1392		1304	1497		1677	1390		1559	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	453	25	20	199	8	43	240	77	19	56	32
RTOR Reduction (vph)	0	0	10	0	0	5	0	0	39	0	16	0
Lane Group Flow (vph)	0	532	15	0	219	3	0	283	38	0	91	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		540	493		461	530		826	684		768	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.01		0.17	0.00		c0.17	0.03		0.06	
v/c Ratio		0.99	0.03		0.48	0.01		0.34	0.06		0.12	
Uniform Delay, d1		20.8	13.7		16.3	13.6		10.1	8.6		8.9	
Progression Factor		1.60	1.95		0.93	0.91		0.34	0.33		1.15	
Incremental Delay, d2		33.7	0.1		3.4	0.0		0.8	0.1		0.3	
Delay (s)		67.0	26.8		18.6	12.3		4.2	2.9		10.5	
Level of Service		E	C		B	B		A	A		B	
Approach Delay (s)		65.2			18.4			3.9			10.5	
Approach LOS		E			B			A			B	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	444	21	31	9	18	15	26	352	19	8	229	169
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.98			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.95			0.99			1.00	0.85
Flt Protected		0.95	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1754	1390		1758			1979			1873	1328
Flt Permitted		0.73	1.00		0.90			0.97			0.99	1.00
Satd. Flow (perm)		1338	1390		1608			1932			1852	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	493	23	34	10	20	17	29	391	21	9	254	188
RTOR Reduction (vph)	0	0	15	0	13	0	0	3	0	0	0	95
Lane Group Flow (vph)	0	516	19	0	34	0	0	438	0	0	263	93
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		607	577		421			951			912	654
v/s Ratio Prot		c0.10										
v/s Ratio Perm		0.25	0.01		0.02			c0.23			0.14	0.07
v/c Ratio		0.85	0.03		0.08			0.46			0.29	0.14
Uniform Delay, d1		17.2	11.3		18.1			10.8			9.8	9.0
Progression Factor		1.05	1.65		1.00			0.57			0.83	1.12
Incremental Delay, d2		7.9	0.1		0.4			1.5			0.3	0.2
Delay (s)		26.0	18.6		18.5			7.7			8.4	10.3
Level of Service		C	B		B			A			A	B
Approach Delay (s)		25.5			18.5			7.7			9.2	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	889	222	268	1124	0	0	0	0	275	201	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4313		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.16	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4313		272	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	936	234	282	1183	0	0	0	0	289	212	396
RTOR Reduction (vph)	0	35	0	0	0	0	0	0	0	0	62	62
Lane Group Flow (vph)	0	1135	0	282	1183	0	0	0	0	234	391	148
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		49.5		69.3	69.3					23.7	23.7	23.7
Effective Green, g (s)		49.5		69.3	69.3					23.7	23.7	23.7
Actuated g/C Ratio		0.47		0.66	0.66					0.23	0.23	0.23
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		2033		371	2129					320	612	306
v/s Ratio Prot		0.26		c0.11	0.37							
v/s Ratio Perm				c0.39						c0.16	0.14	0.11
v/c Ratio		0.56		0.76	0.56					0.73	0.64	0.48
Uniform Delay, d1		19.9		12.6	9.6					37.7	36.8	35.3
Progression Factor		1.00		1.13	1.61					1.00	1.00	1.00
Incremental Delay, d2		1.1		5.3	0.6					8.6	2.3	1.4
Delay (s)		21.0		19.5	16.0					46.3	39.1	36.8
Level of Service		C		B	B					D	D	D
Approach Delay (s)		21.0			16.7			0.0			40.4	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	24.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	853	0	0	843	234	549	365	422	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.99		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1449		4409				
Flt Permitted	0.19	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	580	3138			3119	1449		4409				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	327	898	0	0	887	246	578	384	444	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	106	0	78	0	0	0	0
Lane Group Flow (vph)	327	898	0	0	887	140	0	1328	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	62.5	62.5			45.1	45.1		30.5				
Effective Green, g (s)	62.5	62.5			45.1	45.1		30.5				
Actuated g/C Ratio	0.60	0.60			0.43	0.43		0.29				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	599	1868			1340	622		1281				
v/s Ratio Prot	0.06	c0.29			c0.28							
v/s Ratio Perm	0.27					0.10		0.30				
v/c Ratio	0.55	0.48			0.66	0.22		1.04				
Uniform Delay, d1	12.8	12.0			23.9	18.9		37.2				
Progression Factor	0.68	0.82			0.97	1.49		1.00				
Incremental Delay, d2	0.9	0.7			1.6	0.5		35.1				
Delay (s)	9.6	10.6			24.8	28.7		72.4				
Level of Service	A	B			C	C		E				
Approach Delay (s)		10.4			25.7			72.4			0.0	
Approach LOS		B			C			E			A	

Intersection Summary			
HCM Average Control Delay	38.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	581	226	78	784	44	226	178	40	49	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1602	3232		1446	3007		1544	2782	
Flt Permitted	0.14	1.00	1.00	0.42	1.00		0.53	1.00		0.61	1.00	
Satd. Flow (perm)	224	3061	1291	709	3232		811	3007		990	2782	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	612	238	82	825	46	238	187	42	52	117	96
RTOR Reduction (vph)	0	0	97	0	4	0	0	21	0	0	80	0
Lane Group Flow (vph)	111	612	141	82	867	0	238	208	0	52	133	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	62.6	52.6	62.0	40.4	33.9		29.7	20.3		24.1	17.5	
Effective Green, g (s)	62.6	52.6	62.0	40.4	33.9		29.7	20.3		24.1	17.5	
Actuated g/C Ratio	0.60	0.50	0.59	0.38	0.32		0.28	0.19		0.23	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	455	1533	762	328	1043		286	581		262	464	
v/s Ratio Prot	c0.06	c0.20	0.02	0.02	c0.27		c0.07	0.07		0.01	0.05	
v/s Ratio Perm	0.09		0.09	0.08			c0.16			0.03		
v/c Ratio	0.24	0.40	0.18	0.25	0.83		0.83	0.36		0.20	0.29	
Uniform Delay, d1	12.1	16.3	9.9	20.9	32.9		33.9	36.7		32.3	38.3	
Progression Factor	0.91	1.01	2.01	1.00	1.00		0.94	0.88		1.00	1.00	
Incremental Delay, d2	1.0	0.6	0.1	0.4	7.7		17.7	1.3		0.4	1.2	
Delay (s)	11.9	17.1	19.9	21.3	40.6		49.5	33.8		32.6	39.5	
Level of Service	B	B	B	C	D		D	C		C	D	
Approach Delay (s)		17.2			39.0			41.8			38.2	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM Average Control Delay	31.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	228	286	59	190	102	329	382	75	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.95		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1635	2871		1463	3032		1589	3245		1549	3135	
Flt Permitted	0.54	1.00		0.32	1.00		0.46	1.00		0.48	1.00	
Satd. Flow (perm)	924	2871		490	3032		772	3245		778	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	240	301	62	200	107	346	402	79	96	272	57
RTOR Reduction (vph)	0	206	0	0	64	0	0	15	0	0	17	0
Lane Group Flow (vph)	65	335	0	62	243	0	346	466	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	362	785		233	832		530	1295		340	935	
v/s Ratio Prot	0.01	c0.12		c0.02	0.08		c0.11	0.14		0.02	0.10	
v/s Ratio Perm	0.05			0.07			c0.22			0.08		
v/c Ratio	0.18	0.43		0.27	0.29		0.65	0.36		0.28	0.33	
Uniform Delay, d1	23.8	31.4		24.1	30.1		16.6	22.1		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.02	0.90	
Incremental Delay, d2	0.3	1.7		0.7	0.9		3.0	0.8		0.5	0.9	
Delay (s)	24.1	33.1		24.8	30.9		19.6	22.9		23.5	26.8	
Level of Service	C	C		C	C		B	C		C	C	
Approach Delay (s)		32.1			29.9			21.5			26.1	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	26.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	546	81	6	445	125	68	602	7	144	326	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2912			2885		1436	3186		1451	2788	
Flt Permitted		0.57			0.94		0.41	1.00		0.28	1.00	
Satd. Flow (perm)		1680			2727		624	3186		421	2788	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	188	607	90	7	494	139	76	669	8	160	362	117
RTOR Reduction (vph)	0	13	0	0	39	0	0	1	0	0	48	0
Lane Group Flow (vph)	0	872	0	0	601	0	76	676	0	160	431	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		774			797		300	1078		232	944	
v/s Ratio Prot		c0.07					0.02	0.21		c0.04	0.15	
v/s Ratio Perm		c0.40			0.22		0.09			c0.23		
v/c Ratio		1.13			0.75		0.25	0.63		0.69	0.46	
Uniform Delay, d1		19.0			20.9		12.4	18.1		14.6	16.8	
Progression Factor		1.00			1.54		0.94	0.72		1.00	1.00	
Incremental Delay, d2		72.9			0.6		1.8	2.5		15.5	1.6	
Delay (s)		91.9			32.7		13.5	15.5		30.1	18.4	
Level of Service		F			C		B	B		C	B	
Approach Delay (s)		91.9			32.7			15.3			21.3	
Approach LOS		F			C			B			C	

Intersection Summary			
HCM Average Control Delay	43.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	225	48	73	159	13	38	661	93	10	378	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	1898		1615	1943		1658	3202		1138	3197	
Flt Permitted	0.65	1.00		0.52	1.00		0.50	1.00		0.30	1.00	
Satd. Flow (perm)	1132	1898		891	1943		870	3202		359	3197	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	54	232	49	75	164	13	39	681	96	10	390	46
RTOR Reduction (vph)	0	12	0	0	4	0	0	17	0	0	14	0
Lane Group Flow (vph)	54	269	0	75	173	0	39	760	0	10	422	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	418	701		329	717		415	1527		171	1525	
v/s Ratio Prot		c0.14			0.09			c0.24			0.13	
v/s Ratio Perm	0.05			0.08			0.04			0.03		
v/c Ratio	0.13	0.38		0.23	0.24		0.09	0.50		0.06	0.28	
Uniform Delay, d1	13.6	15.1		14.1	14.2		9.3	11.7		9.1	10.2	
Progression Factor	1.00	1.00		1.73	1.77		1.00	1.00		0.48	0.48	
Incremental Delay, d2	0.6	1.6		0.7	0.3		0.4	1.2		0.5	0.4	
Delay (s)	14.2	16.7		25.1	25.4		9.8	12.8		4.9	5.3	
Level of Service	B	B		C	C		A	B		A	A	
Approach Delay (s)		16.3			25.3			12.7			5.3	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	631	194	621	17	3	14	3	47	22	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			0.99		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.97		
Flt Protected	1.00		0.99				0.99			0.96		
Satd. Flow (prot)	2956		2955				1732			1897		
Flt Permitted	1.00		0.57				0.94			0.81		
Satd. Flow (perm)	2956		1698				1646			1603		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	664	204	654	18	3	15	3	49	23	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	664	0	874	0	0	0	32	0	0	26	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom				Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7				2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		821				355			345		
v/s Ratio Prot	0.22		c0.10									
v/s Ratio Perm			c0.34				c0.02			0.02		
v/c Ratio	0.81		1.06				0.09			0.07		
Uniform Delay, d1	21.9		19.0				20.4			20.3		
Progression Factor	1.28		0.75				1.00			1.00		
Incremental Delay, d2	0.8		48.8				0.5			0.4		
Delay (s)	28.9		63.1				20.9			20.8		
Level of Service	C		E				C			C		
Approach Delay (s)	28.9		63.1				20.9			20.8		
Approach LOS	C		E				C			C		

Intersection Summary			
HCM Average Control Delay	99.0	HCM Level of Service	F
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	344
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1429	
Flt Permitted	1.00	
Satd. Flow (perm)	1429	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1	362
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	363	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.25	
v/s Ratio Perm		
v/c Ratio	1.65	
Uniform Delay, d1	27.5	
Progression Factor	0.89	
Incremental Delay, d2	310.9	
Delay (s)	335.3	
Level of Service	F	
Approach Delay (s)	335.3	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	194	917	678	81	101	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3229	3205		1629	1457
Flt Permitted		0.63	1.00		0.95	1.00
Satd. Flow (perm)		2062	3205		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	216	1019	753	90	112	173
RTOR Reduction (vph)	0	0	14	0	0	128
Lane Group Flow (vph)	0	1235	829	0	112	45
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1269	1972		426	381
v/s Ratio Prot			0.26		c0.07	
v/s Ratio Perm		c0.60				0.03
v/c Ratio		0.97	0.42		0.26	0.12
Uniform Delay, d1		12.0	6.5		19.0	18.3
Progression Factor		1.43	1.29		0.93	0.91
Incremental Delay, d2		10.2	0.6		1.5	0.6
Delay (s)		27.3	8.9		19.1	17.3
Level of Service		C	A		B	B
Approach Delay (s)		27.3	8.9		18.0	
Approach LOS		C	A		B	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	938	697	217	174	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2912		1464	1373
Flt Permitted		0.86	1.00		0.95	1.00
Satd. Flow (perm)		2514	2912		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	987	734	228	183	59
RTOR Reduction (vph)	0	0	45	0	0	42
Lane Group Flow (vph)	0	1043	917	0	183	17
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1470	1702		428	401
v/s Ratio Prot			0.31		c0.12	
v/s Ratio Perm		c0.41				0.01
v/c Ratio		0.71	0.54		0.43	0.04
Uniform Delay, d1		9.6	8.2		18.6	16.5
Progression Factor		0.87	0.61		1.01	1.47
Incremental Delay, d2		1.2	0.7		3.0	0.2
Delay (s)		9.6	5.7		21.9	24.5
Level of Service		A	A		C	C
Approach Delay (s)		9.6	5.7		22.5	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	964	160	167	672	423	323
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.98		1.00	1.00	0.94	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	2239		1770	2436	1763	
Flt Permitted	1.00		0.13	1.00	0.97	
Satd. Flow (perm)	2239		240	2436	1763	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	984	163	170	686	432	330
RTOR Reduction (vph)	9	0	0	0	42	0
Lane Group Flow (vph)	1138	0	170	686	720	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1068		114	1162	651	
v/s Ratio Prot	0.51			0.28	c0.41	
v/s Ratio Perm			c0.71			
v/c Ratio	1.07		1.49	0.59	1.11	
Uniform Delay, d1	17.0		17.0	12.4	20.5	
Progression Factor	1.48		1.00	1.00	1.00	
Incremental Delay, d2	43.2		261.6	2.2	67.8	
Delay (s)	68.4		278.6	14.6	88.3	
Level of Service	E		F	B	F	
Approach Delay (s)	68.4			67.0	88.3	
Approach LOS	E			E	F	

Intersection Summary			
HCM Average Control Delay	73.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	118.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	725	89	258	1167	9	72	0	187	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.21	1.00	1.00	0.27	1.00	1.00		0.76	1.00		0.70	
Satd. Flow (perm)	422	3213	1422	448	3138	1366		1309	1443		719	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	806	99	287	1297	10	80	0	208	1	0	0
RTOR Reduction (vph)	0	0	46	0	0	2	0	0	182	0	0	0
Lane Group Flow (vph)	1	806	53	287	1297	8	0	80	26	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	45.6	45.6	45.6	66.4	66.4	66.4		10.6	10.6		10.6	
Effective Green, g (s)	45.6	45.6	45.6	66.4	66.4	66.4		10.6	10.6		10.6	
Actuated g/C Ratio	0.54	0.54	0.54	0.78	0.78	0.78		0.12	0.12		0.12	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	226	1724	763	589	2451	1067		163	180		90	
v/s Ratio Prot		0.25		0.10	c0.41							
v/s Ratio Perm	0.00		0.04	0.28		0.01		c0.06	0.02		0.00	
v/c Ratio	0.00	0.47	0.07	0.49	0.53	0.01		0.49	0.14		0.01	
Uniform Delay, d1	9.2	12.2	9.5	3.9	3.5	2.0		34.7	33.2		32.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.9	0.2	0.6	0.2	0.0		2.3	0.4		0.0	
Delay (s)	9.2	13.1	9.7	4.6	3.7	2.1		37.0	33.5		32.7	
Level of Service	A	B	A	A	A	A		D	C		C	
Approach Delay (s)		12.7			3.8			34.5			32.7	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	13	820	856	45	24	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3017		1482	
Flt Permitted		0.93	1.00		0.97	
Satd. Flow (perm)		2834	3017		1482	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	911	951	50	27	12
RTOR Reduction (vph)	0	0	4	0	11	0
Lane Group Flow (vph)	0	925	997	0	28	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1039	2145		115	
v/s Ratio Prot			c0.33		c0.02	
v/s Ratio Perm		c0.33				
v/c Ratio		0.89	0.46		0.24	
Uniform Delay, d1		26.8	5.6		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		11.4	0.2		4.9	
Delay (s)		38.2	0.2		44.0	
Level of Service		D	A		D	
Approach Delay (s)		38.2	0.2		44.0	
Approach LOS		D	A		D	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	435	1	27	584	80	0	0	1	45	3	128
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1727			3232			1432			1610	1282
Flt Permitted		0.77			0.93			1.00			0.93	1.00
Satd. Flow (perm)		1333			3022			1432			1569	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	98	483	1	30	649	89	0	0	1	50	3	142
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	95
Lane Group Flow (vph)	0	582	0	0	756	0	0	0	0	0	53	47
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		486			1634			152			469	422
v/s Ratio Prot					c0.08			0.00			0.02	
v/s Ratio Perm		c0.44			0.17						0.01	c0.04
v/c Ratio		1.20			0.46			0.00			0.11	0.11
Uniform Delay, d1		27.0			12.5			34.0			21.9	19.8
Progression Factor		1.00			1.88			1.00			1.00	1.00
Incremental Delay, d2		107.5			0.1			0.0			0.5	0.5
Delay (s)		134.5			23.5			34.0			22.4	20.4
Level of Service		F			C			C			C	C
Approach Delay (s)		134.5			23.5			34.0			20.9	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM Average Control Delay	64.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	1014	58	36	29	48	23	24	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.94			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1557	3022		1587	3021			1808			1703	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	277	3022		604	3021			1636			1627	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1067	61	38	31	51	24	25	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	21	0
Lane Group Flow (vph)	41	653	0	37	1122	0	0	87	0	0	120	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	145	1581		316	1580			579			576	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.15			0.06				0.05			c0.07	
v/c Ratio	0.28	0.41		0.12	0.71			0.15			0.21	
Uniform Delay, d1	8.7	9.4		7.9	11.8			14.3			14.6	
Progression Factor	1.00	1.00		0.69	1.41			1.00			1.00	
Incremental Delay, d2	4.8	0.8		0.7	2.4			0.5			0.8	
Delay (s)	13.5	10.2		6.1	19.1			14.9			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.7			14.9			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	789	5	32	637	56	0	0	0	586	89	379
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.93	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	793	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	331	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	831	5	34	671	59	0	0	0	617	94	399
RTOR Reduction (vph)	0	0	0	0	0	26	0	0	0	0	0	166
Lane Group Flow (vph)	26	836	0	34	671	33	0	0	0	617	94	233
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	159	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.21					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.06						0.16
v/c Ratio	0.16	0.75		0.05	0.37	0.11				0.81	0.24	0.68
Uniform Delay, d1	31.6	38.7		15.2	15.8	13.4				47.4	40.7	45.6
Progression Factor	0.85	0.86		0.32	0.75	1.68				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.5				9.3	1.4	10.5
Delay (s)	28.9	37.5		5.0	12.1	22.9				56.7	42.1	56.1
Level of Service	C	D		A	B	C				E	D	E
Approach Delay (s)		37.3			12.6			0.0			55.2	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	815	220	54	593	287	102	251	55	54	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3262		1710	3138	1018		3301	1363	855		738
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3262		1710	3138	1018		3301	1363	855		738
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	358	858	232	57	624	302	107	264	58	57	0	32
RTOR Reduction (vph)	0	19	0	0	0	228	0	0	41	0	0	30
Lane Group Flow (vph)	358	1071	0	57	624	74	0	371	17	57	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	41.0	65.0		8.0	32.0	32.0		29.0	29.0	10.0		10.0
Effective Green, g (s)	41.0	65.0		8.0	32.0	32.0		29.0	29.0	10.0		10.0
Actuated g/C Ratio	0.32	0.50		0.06	0.25	0.25		0.22	0.22	0.08		0.08
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1036	1631		105	772	251		736	304	66		57
v/s Ratio Prot	0.11	c0.33		0.03	c0.20			c0.11		c0.07		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.35	0.66		0.54	0.81	0.30		0.50	0.06	0.86		0.04
Uniform Delay, d1	34.2	24.2		59.2	46.1	39.8		44.2	39.7	59.3		55.6
Progression Factor	0.94	0.18		1.00	1.00	1.00		0.95	0.99	1.00		1.00
Incremental Delay, d2	0.6	1.3		18.7	8.9	3.0		2.5	0.3	65.1		0.3
Delay (s)	32.7	5.7		77.9	55.0	42.8		44.3	39.7	124.4		55.9
Level of Service	C	A		E	E	D		D	D	F		E
Approach Delay (s)		12.4			52.6			43.7			99.8	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	33.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	893	181	105	839	0	89	0	103	9	18	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.96	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2987		1649	3149		1388		1451	1803	1870	
Flt Permitted		1.00		0.17	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2987		291	3149		1079		1451	1803	1870	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	992	201	117	932	0	99	0	114	10	20	8
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	77	0	5	0
Lane Group Flow (vph)	0	1176	0	117	932	0	99	0	37	10	23	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1792		175	1889		345		464	577	598	
v/s Ratio Prot		0.39			0.30						0.01	
v/s Ratio Perm				c0.40			c0.09		0.03	0.01		
v/c Ratio		0.66		0.67	0.49		0.29		0.08	0.02	0.04	
Uniform Delay, d1		13.2		13.4	11.4		25.5		23.7	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.9		18.5	0.9		2.1		0.3	0.1	0.1	
Delay (s)		15.1		31.8	12.3		27.5		24.1	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		15.1			14.5			25.7			23.5	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	300	0	1230	211	670	0	0	789	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4270	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4270	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	306	0	1255	215	684	0	0	805	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	306	0	1255	215	684	0	0	1305	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.20		c0.82	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.67		2.87	0.46	0.25			1.16dr	
Uniform Delay, d1				32.5		37.5	29.5	8.6			37.0	
Progression Factor				1.00		1.00	0.64	2.09			1.00	
Incremental Delay, d2				7.7		848.6	2.7	0.2			34.8	
Delay (s)				40.3		886.1	21.5	18.2			71.8	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			720.3			19.0			71.8	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	328.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	322	770	145	0	0	0	0	559	408	359	730	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3157						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3157						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	332	794	149	0	0	0	0	576	421	370	753	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	299	962	0	0	0	0	0	576	421	370	753	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.13		c0.23	0.16	
v/s Ratio Perm	0.20	0.30							c0.19			
v/c Ratio	0.61	0.94						0.49	0.70	0.78	0.27	
Uniform Delay, d1	29.9	34.5						32.5	34.8	33.9	10.5	
Progression Factor	1.00	1.00						1.14	1.14	0.86	0.22	
Incremental Delay, d2	5.6	17.2						1.3	6.1	4.9	0.1	
Delay (s)	35.5	51.7						38.4	45.6	34.1	2.4	
Level of Service	D	D						D	D	C	A	
Approach Delay (s)		47.9			0.0			41.4			12.9	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	25	24	11	158	0	0	147	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.54	1.00			1.00	
Satd. Flow (perm)				1688	3132		979	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	322	28	27	12	176	0	0	163	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	322	37	0	12	176	0	0	168	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		636	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.10			0.09	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.16			0.16	
Uniform Delay, d1				24.5	20.0		10.5	8.0			9.8	
Progression Factor				1.00	1.00		1.04	1.18			1.00	
Incremental Delay, d2				4.9	0.1		0.1	0.3			0.3	
Delay (s)				29.4	20.1		11.0	9.7			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			28.0			9.8			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	5	0	14	0	143	41	46	391	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1565			1720		1590	1860	
Flt Permitted	0.74	1.00			0.97			1.00		0.60	1.00	
Satd. Flow (perm)	1516	1735			1531			1720		1004	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	5	0	15	0	151	43	48	412	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	12	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	10	0	0	182	0	48	412	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	551			486			809		639	1094	
v/s Ratio Prot		c0.01						0.11		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.22		0.08	0.38	
Uniform Delay, d1	20.0	20.0			19.9			13.3		8.6	9.3	
Progression Factor	1.00	1.00			1.00			1.00		0.97	0.86	
Incremental Delay, d2	0.1	0.1			0.1			0.6		0.2	0.9	
Delay (s)	20.1	20.1			20.0			14.0		8.5	8.9	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			14.0			8.8	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	48	43	16	193	288	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1751		1765	1782	1657	
Flt Permitted	0.97		0.50	1.00	1.00	
Satd. Flow (perm)	1751		937	1782	1657	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	48	18	214	320	31
RTOR Reduction (vph)	32	0	0	0	5	0
Lane Group Flow (vph)	69	0	18	214	346	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		519	987	918	
v/s Ratio Prot	c0.04			0.12	c0.21	
v/s Ratio Perm			0.02			
v/c Ratio	0.12		0.03	0.22	0.38	
Uniform Delay, d1	15.5		6.6	7.4	8.2	
Progression Factor	1.00		0.56	0.66	1.40	
Incremental Delay, d2	0.4		0.1	0.5	1.0	
Delay (s)	15.9		3.8	5.4	12.4	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			5.2	12.4	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	30.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	268	9	258	161	4	0	301	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3772		1693	1677			1738	1428
Flt Permitted					1.00		0.45	1.00			1.00	1.00
Satd. Flow (perm)					3772		809	1677			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	298	10	287	179	4	0	334	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	1	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	339	0	287	182	0	0	334	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		589	1006			777	638
v/s Ratio Prot					c0.09		c0.06	0.11			0.19	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.49	0.18			0.43	0.01
Uniform Delay, d1					22.5		14.4	7.6			16.1	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.9	0.4			1.7	0.0
Delay (s)					23.1		17.2	8.0			17.8	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.7			17.6	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	96	94	38	133	217	30	59	704	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3290		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.58	1.00	
Satd. Flow (perm)					1896		446	3290		1048	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	107	104	42	148	241	33	66	782	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	243	0	148	260	0	66	825	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1491		634	1572	
v/s Ratio Prot					c0.13		c0.04	0.08		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.17		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.2		8.2	14.7	
Progression Factor					1.00		0.83	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.3		0.3	1.3	
Delay (s)					22.9		17.0	10.3		8.6	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.6			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	285	24	159	591	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3174		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		598	3174		996	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	300	25	167	622	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	8	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	317	0	167	667	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		335	1777		558	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.18		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.1		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.3		3.6	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.3			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	37	192	67	261	589	81
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	41	213	74	290	654	90

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	254	171	193	436	308
Volume Left (vph)	41	74	0	0	0
Volume Right (vph)	213	0	0	0	90
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.8	6.6	6.3	5.9	5.7
Degree Utilization, x	0.41	0.31	0.34	0.71	0.49
Capacity (veh/h)	589	528	546	601	620
Control Delay (s)	12.7	11.3	11.4	21.0	12.8
Approach Delay (s)	12.7	11.3		17.6	
Approach LOS	B	B		C	

Intersection Summary			
Delay	15.0		
HCM Level of Service	C		
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	373	18	20	393	70	78	55	68	354	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1421			1710	3251	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	936	1731	1421			257	3251	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	414	20	22	437	78	87	61	76	393	36
RTOR Reduction (vph)	0	0	0	12	0	0	38	0	0	0	7	0
Lane Group Flow (vph)	0	75	414	8	22	437	127	0	0	137	422	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		303	725	641	223	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.25					0.13	
v/s Ratio Perm		0.07		0.01	0.02		0.09			c0.53		
v/c Ratio		0.25	0.57	0.01	0.10	1.06	0.38			1.99	0.49	
Uniform Delay, d1		21.6	23.3	17.8	31.2	40.0	33.5			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	3.3	0.0	0.9	61.3	3.2			491.0	2.0	
Delay (s)		23.5	26.5	17.9	32.1	101.3	36.6			529.5	34.4	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.8			81.8					154.2	
Approach LOS			C			F					F	

Intersection Summary			
HCM Average Control Delay	146.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	103.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	107	571	82	103	4	113	607	197
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.37	1.00				0.95	1.00	
Satd. Flow (perm)	670	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	119	634	91	114	4	126	674	219
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	119	827	0	0	0	130	867	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	175	850				334	514	
v/s Ratio Prot		0.25				0.08		
v/s Ratio Perm	0.18						c0.33	
v/c Ratio	0.68	0.97				0.39	1.69	
Uniform Delay, d1	34.8	38.4				36.8	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	19.3	25.0				3.4	317.6	
Delay (s)	54.1	63.4				40.2	359.9	
Level of Service	D	E				D	F	
Approach Delay (s)		62.2				319.3		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	596	0	0	469	56	85	52	19	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1952			1841				
Flt Permitted		0.91			1.00			0.97				
Satd. Flow (perm)		1530			1952			1841				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	662	0	0	521	62	94	58	21	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	734	0	0	583	0	0	173	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		942			1201			481				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.48						0.09				
v/c Ratio		0.78			0.49			0.36				
Uniform Delay, d1		9.2			6.9			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.3			1.4			2.1				
Delay (s)		15.6			8.3			21.7				
Level of Service		B			A			C				
Approach Delay (s)		15.6			8.3			21.7			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	334	152	129	331	135	105	639	86	140	759	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1982	1434		1945	1444	1546	3040	1296	1506	3069	1252
Flt Permitted		0.36	1.00		0.70	1.00	0.23	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)		714	1434		1380	1444	373	3040	1296	455	3069	1252
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	352	160	136	348	142	111	673	91	147	799	99
RTOR Reduction (vph)	0	0	94	0	0	101	0	0	54	0	0	49
Lane Group Flow (vph)	0	427	66	0	484	41	111	673	37	147	799	50
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		413	587		394	413	272	1225	522	310	1248	509
v/s Ratio Prot		c0.10					0.03	0.22		c0.04	c0.26	
v/s Ratio Perm		0.32	0.05		c0.35	0.03	0.16		0.03	0.19		0.04
v/c Ratio		1.03	0.11		1.23	0.10	0.41	0.55	0.07	0.47	0.64	0.10
Uniform Delay, d1		31.0	19.2		37.5	27.6	16.4	24.0	19.3	16.0	25.0	19.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.74	1.54	2.62
Incremental Delay, d2		53.3	0.4		123.3	0.5	1.0	1.8	0.3	1.1	2.4	0.4
Delay (s)		84.3	19.6		160.8	28.0	17.4	25.8	19.5	29.0	41.0	50.9
Level of Service		F	B		F	C	B	C	B	C	D	D
Approach Delay (s)		66.7			130.7			24.1			40.3	
Approach LOS		E			F			C			D	

Intersection Summary			
HCM Average Control Delay	58.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	90.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	412	85	105	490	94	51	61	72	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1644			1646			1796				
Flt Permitted		0.83			0.84			0.99				
Satd. Flow (perm)		1375			1390			1796				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	458	94	117	544	104	57	68	80	0	0	0
RTOR Reduction (vph)	0	10	0	0	9	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	636	0	0	756	0	0	170	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		846			855			470				
v/s Ratio Prot												
v/s Ratio Perm		0.46			c0.54			0.09				
v/c Ratio		0.75			0.88			0.36				
Uniform Delay, d1		9.0			10.5			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.1			12.9			2.1				
Delay (s)		15.1			23.5			21.7				
Level of Service		B			C			C				
Approach Delay (s)		15.1			23.5			21.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	455	73	84	568	45	37	76	74	56	238	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1687	1382		1712	1417		1686	1455		1886	
Flt Permitted		0.96	1.00		0.88	1.00		0.83	1.00		0.93	
Satd. Flow (perm)		1630	1382		1519	1417		1430	1455		1775	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	479	77	88	598	47	39	80	78	59	251	49
RTOR Reduction (vph)	0	0	33	0	0	13	0	0	53	0	7	0
Lane Group Flow (vph)	0	501	44	0	686	34	0	119	25	0	352	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		935	792		871	812		458	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.31	0.03		c0.45	0.02		0.08	0.02		c0.20	
v/c Ratio		0.54	0.06		0.79	0.04		0.26	0.05		0.62	
Uniform Delay, d1		9.9	7.1		12.4	7.0		18.9	17.6		21.6	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		2.2	0.1		7.1	0.1		1.4	0.2		5.0	
Delay (s)		12.1	7.2		19.6	7.1		20.3	17.9		26.6	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		11.4			18.8			19.3			26.6	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	99.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	463	30	53	598	58	44	165	57	124	210	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1537	3068		1652	3732		1585	1663	1370	1568	1680	1397
Flt Permitted	0.31	1.00		0.41	1.00		0.57	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	505	3068		716	3732		953	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	63	514	33	59	664	64	49	183	63	138	233	36
RTOR Reduction (vph)	0	7	0	0	11	0	0	0	38	0	0	22
Lane Group Flow (vph)	63	540	0	59	717	0	49	183	25	138	233	14
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	241	1463		341	1780		381	665	548	417	672	559
v/s Ratio Prot		0.18			c0.19			0.11			c0.14	
v/s Ratio Perm	0.12			0.08			0.05		0.02	0.13		0.01
v/c Ratio	0.26	0.37		0.17	0.40		0.13	0.28	0.05	0.33	0.35	0.03
Uniform Delay, d1	10.2	10.8		9.7	11.0		12.3	13.1	11.9	13.5	13.6	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.82	0.89	0.71	0.58	0.59	0.26
Incremental Delay, d2	2.6	0.7		1.1	0.7		0.7	1.0	0.2	2.0	1.4	0.1
Delay (s)	12.8	11.5		10.8	11.7		10.9	12.7	8.6	9.9	9.3	3.1
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.6			11.6			11.5			9.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	73	389	71	73	387	77	55	197	64	135	272	162
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1329	3142		1515	3108		1583	2928		1453	2920	
Flt Permitted	0.44	1.00		0.44	1.00		0.44	1.00		0.58	1.00	
Satd. Flow (perm)	617	3142		708	3108		741	2928		892	2920	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	77	409	75	77	407	81	58	207	67	142	286	171
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	100	0
Lane Group Flow (vph)	77	484	0	77	488	0	58	235	0	142	357	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	296	1508		340	1492		306	1210		369	1207	
v/s Ratio Prot		0.15			c0.16			0.08			0.12	
v/s Ratio Perm	0.12			0.11			0.08			c0.16		
v/c Ratio	0.26	0.32		0.23	0.33		0.19	0.19		0.38	0.30	
Uniform Delay, d1	11.6	12.0		11.4	12.0		14.0	14.0		15.3	14.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	0.6		1.5	0.6		1.4	0.4		3.0	0.6	
Delay (s)	13.7	12.5		12.9	12.6		15.4	14.4		18.4	15.3	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.7			12.7			14.6			16.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	453	62	32	523	48	86	203	60	76	473	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1595	1653		1371	1973		1534	2998		1535	3011	
Flt Permitted	0.24	1.00		0.30	1.00		0.28	1.00		0.58	1.00	
Satd. Flow (perm)	402	1653		427	1973		450	2998		939	3011	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	114	477	65	34	551	51	91	214	63	80	498	117
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	114	542	0	34	602	0	91	277	0	80	615	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	43.9	39.3		40.7	37.7		26.7	21.8		26.7	21.8	
Effective Green, g (s)	43.9	37.3		40.7	35.7		26.7	19.8		26.7	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	272	725		238	829		204	698		329	701	
v/s Ratio Prot	c0.02	c0.33		0.01	0.31		c0.03	0.09		0.01	c0.20	
v/s Ratio Perm	0.19			0.06			0.11			0.06		
v/c Ratio	0.42	0.75		0.14	0.73		0.45	0.40		0.24	0.88	
Uniform Delay, d1	24.1	19.9		20.7	20.6		29.2	27.6		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	6.9		0.3	5.5		1.6	1.7		0.4	14.5	
Delay (s)	25.2	26.8		21.0	26.1		30.8	29.2		22.2	46.0	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		26.6			25.8			29.6			43.2	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	389	65	117	509	118	67	158	58	127	367	83
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3680			3131		1652	3237		1549	3026	
Flt Permitted		0.68			0.72		0.42	1.00		0.60	1.00	
Satd. Flow (perm)		2535			2275		736	3237		983	3026	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	432	72	130	566	131	74	176	64	141	408	92
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	598	0	0	827	0	74	240	0	141	500	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1149			1031		324	1424		433	1331	
v/s Ratio Prot								0.07			c0.17	
v/s Ratio Perm		0.24			c0.36		0.10			0.14		
v/c Ratio		0.52			0.80		0.23	0.17		0.33	0.38	
Uniform Delay, d1		14.7			17.6		13.1	12.7		13.7	14.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.7			6.6		1.6	0.3		2.0	0.8	
Delay (s)		16.4			24.2		14.7	13.0		15.7	14.9	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		16.4			24.2			13.4			15.1	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	875	6	20	584	249	1	1	9	213	1	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.38	1.00		0.25	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	648	3206		433	3320	1485		1519			2533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	972	7	22	649	277	1	1	10	237	1	89
RTOR Reduction (vph)	0	0	0	0	0	103	0	7	0	0	52	0
Lane Group Flow (vph)	109	979	0	22	649	174	0	5	0	0	275	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	406	2008		271	2080	930		402			671	
v/s Ratio Prot		c0.31			0.20							
v/s Ratio Perm	0.17			0.05		0.12		0.00			c0.11	
v/c Ratio	0.27	0.49		0.08	0.31	0.19		0.01			0.41	
Uniform Delay, d1	6.2	7.4		5.4	6.4	5.8		19.9			22.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.6	0.8		0.6	0.4	0.4		0.0			1.7	
Delay (s)	7.8	8.2		6.0	6.8	6.3		20.0			24.0	
Level of Service	A	A		A	A	A		B			C	
Approach Delay (s)		8.2			6.6			20.0			24.0	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	73.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	131	228	125	94	163	57	148	907	90	129	825	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1504		1563	1584		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.20	1.00		0.20	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	740	1504		337	1584		317	3069	1337	263	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	240	132	99	172	60	156	955	95	136	868	105
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	49
Lane Group Flow (vph)	138	349	0	99	217	0	156	955	55	136	868	56
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	284	389		190	410		232	1264	551	213	1276	543
v/s Ratio Prot	0.03	c0.23		c0.04	0.14		c0.05	c0.31		0.05	0.28	
v/s Ratio Perm	0.11			0.12			0.27		0.04	0.26		0.04
v/c Ratio	0.49	0.90		0.52	0.53		0.67	0.76	0.10	0.64	0.68	0.10
Uniform Delay, d1	22.7	30.4		22.9	27.1		14.7	21.3	15.3	15.0	20.4	15.4
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.82	0.55	1.00	1.00	1.00
Incremental Delay, d2	5.8	25.9		9.9	4.8		13.2	3.8	0.3	13.8	2.9	0.4
Delay (s)	28.5	56.3		32.7	31.9		23.0	21.2	8.7	28.8	23.4	15.7
Level of Service	C	E		C	C		C	C	A	C	C	B
Approach Delay (s)		48.8			32.1			20.5			23.3	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	181	38	20	173	22	43	149	40	45	255	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1835			1848			1937			1975	
Flt Permitted		0.97			0.96			0.90			0.94	
Satd. Flow (perm)		1781			1790			1755			1869	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	187	39	21	178	23	44	154	41	46	263	52
RTOR Reduction (vph)	0	11	0	0	6	0	0	11	0	0	9	0
Lane Group Flow (vph)	0	238	0	0	216	0	0	228	0	0	352	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		740			744			810			863	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.13			c0.19	
v/c Ratio		0.32			0.29			0.28			0.41	
Uniform Delay, d1		12.8			12.6			10.8			11.6	
Progression Factor		1.00			0.74			1.28			1.00	
Incremental Delay, d2		1.2			1.0			0.8			1.4	
Delay (s)		14.0			10.3			14.6			13.0	
Level of Service		B			B			B			B	
Approach Delay (s)		14.0			10.3			14.6			13.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	193	39	25	180	20	53	200	31	47	214	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3057		1577	3116		1518	3119		1550	3076	
Flt Permitted	0.61	1.00		0.59	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	965	3057		984	3116		926	3119		968	3076	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	214	43	28	200	22	59	222	34	52	238	43
RTOR Reduction (vph)	0	26	0	0	13	0	0	14	0	0	18	0
Lane Group Flow (vph)	27	231	0	28	209	0	59	242	0	52	263	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	894		288	911		541	1823		566	1798	
v/s Ratio Prot		c0.08			0.07			0.08			c0.09	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.26		0.10	0.23		0.11	0.13		0.09	0.15	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.93	0.96		0.75	0.75		1.40	1.44		0.39	0.34	
Incremental Delay, d2	0.6	0.7		0.7	0.6		0.4	0.1		0.3	0.2	
Delay (s)	16.3	17.6		13.2	13.6		8.8	8.9		2.7	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.5			13.5			8.9			2.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	168	42	25	159	38	27	262	16	42	337	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1555	3056		1525	2937			1923			1939	
Flt Permitted	0.61	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1007	3056		973	2937			1825			1832	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	74	187	47	28	177	42	30	291	18	47	374	37
RTOR Reduction (vph)	0	28	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	74	206	0	28	194	0	0	336	0	0	453	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	403	1222		389	1175			870			874	
v/s Ratio Prot		0.07			0.07							
v/s Ratio Perm	c0.07			0.03				0.18			c0.25	
v/c Ratio	0.18	0.17		0.07	0.16			0.39			0.52	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.9			11.8	
Progression Factor	1.04	0.98		0.78	0.76			1.08			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.2	
Delay (s)	14.1	12.6		9.7	9.8			12.9			14.0	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		13.0			9.8			12.9			14.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	30	20	161	27	45	235	11	33	364	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1966		1584	1975			1981			1979	
Flt Permitted	0.57	1.00		0.65	1.00			0.89			0.96	
Satd. Flow (perm)	986	1966		1082	1975			1774			1911	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	33	22	179	30	50	261	12	37	404	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	156	0	22	209	0	0	323	0	0	504	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	303	605		333	608			1010			1088	
v/s Ratio Prot		0.08			c0.11							
v/s Ratio Perm	0.05			0.02				0.18			c0.26	
v/c Ratio	0.17	0.26		0.07	0.34			0.32			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.4			7.4			8.2	
Progression Factor	0.84	0.81		0.93	0.93			0.99			1.00	
Incremental Delay, d2	1.2	1.0		0.4	1.5			0.8			1.4	
Delay (s)	15.0	14.8		15.1	17.8			8.1			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.8			17.5			8.1			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	13	97	2	5	10	62	235	5	5	466	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1727		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.39	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1332	1727		1216	1808		660	1647	1428	1030	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	14	108	2	6	11	69	261	6	6	518	84
RTOR Reduction (vph)	0	78	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	60	44	0	2	9	0	69	261	4	6	518	56
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		337	501		396	988	857	618	1200	898
v/s Ratio Prot		0.03			0.01			0.16			c0.26	
v/s Ratio Perm	c0.05			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.16	0.09		0.01	0.02		0.17	0.26	0.00	0.01	0.43	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.8	6.2	5.2	5.2	7.0	5.4
Progression Factor	1.38	2.73		1.00	1.00		0.82	0.77	0.97	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.4		0.0	0.1		0.7	0.5	0.0	0.0	1.1	0.1
Delay (s)	25.5	47.9		17.1	17.1		5.5	5.3	5.0	5.3	8.2	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		40.5			17.1			5.3			7.8	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	253	163	170	204	0	0	0	0	110	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.41	1.00					0.95	1.00	
Satd. Flow (perm)		2905		722	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	266	172	179	215	0	0	0	0	116	495	397
RTOR Reduction (vph)	0	103	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	335	0	179	215	0	0	0	0	116	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		566	1805					545	1096	
v/s Ratio Prot		c0.12		c0.06	0.07					0.08	c0.25	
v/s Ratio Perm				0.10								
v/c Ratio		0.36		0.32	0.12					0.21	0.68	
Uniform Delay, d1		26.4		13.4	11.1					22.4	27.6	
Progression Factor		1.00		2.18	2.12					1.00	1.00	
Incremental Delay, d2		1.1		1.3	0.1					0.9	3.5	
Delay (s)		27.4		30.5	23.6					23.3	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.4			26.7			0.0			30.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	222	0	0	297	113	77	539	231	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2847		1767	1782	1560			
Flt Permitted	0.37	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	645	3196			2847		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	234	0	0	313	119	81	567	243	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	0	167	0	0	0
Lane Group Flow (vph)	148	234	0	0	393	0	81	567	76	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	706	1974			726		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.14		0.05	c0.32				
v/s Ratio Perm	0.05								0.05			
v/c Ratio	0.21	0.12			0.54		0.16	1.08	0.17			
Uniform Delay, d1	10.2	8.0			32.8		26.6	36.0	26.7			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			2.9		0.6	63.3	0.8			
Delay (s)	4.9	3.6			35.7		27.3	99.3	27.5			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			35.7			73.2			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	48.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	512	479	81	534	0	0	0	0	11	434	277
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3098		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3098		200	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	533	499	84	556	0	0	0	0	11	452	289
RTOR Reduction (vph)	0	170	0	0	0	0	0	0	0	0	0	191
Lane Group Flow (vph)	0	862	0	84	556	0	0	0	0	11	452	98
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		380	1917					543	1085	520
v/s Ratio Prot		c0.28		0.04	c0.17					0.01	c0.14	0.06
v/s Ratio Perm				0.08								
v/c Ratio		0.77		0.22	0.29					0.02	0.42	0.19
Uniform Delay, d1		28.4		14.4	10.6					21.9	25.4	23.3
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		5.2		0.9	0.3					0.1	1.2	0.8
Delay (s)		33.6		15.5	12.9					22.0	26.6	24.1
Level of Service		C		B	B					C	C	C
Approach Delay (s)		33.6			13.2			0.0			25.5	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	417	106	0	0	150	6	465	480	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3110			3170		1555	1653	1530			
Flt Permitted	0.64	0.71			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	992	2291			3170		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	430	109	0	0	155	6	479	495	60	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	215	324	0	0	158	0	479	495	22	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	678	1463			476		575	612	566			
v/s Ratio Prot	c0.11	0.08			c0.05		c0.31	0.30	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.32	0.22			0.33		0.83	0.81	0.04			
Uniform Delay, d1	14.1	13.5			38.0		28.7	28.3	20.1			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.9		13.3	11.0	0.1			
Delay (s)	4.2	3.6			39.9		42.0	39.3	20.3			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		3.8			39.9			39.5			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	218	103	121	265	125	84	699	79	103	884	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2939			2922		1508	3069	1309	1508	3099	1298
Flt Permitted		0.74			0.75		0.16	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		2182			2204		254	3069	1309	401	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	227	107	126	276	130	88	728	82	107	921	68
RTOR Reduction (vph)	0	41	0	0	37	0	0	0	50	0	0	33
Lane Group Flow (vph)	0	374	0	0	495	0	88	728	32	107	921	35
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		978			726		167	1210	508	222	1221	504
v/s Ratio Prot		c0.03					c0.02	0.24		0.02	c0.30	
v/s Ratio Perm		0.14			c0.22		0.20		0.02	0.18		0.03
v/c Ratio		0.38			0.68		0.53	0.60	0.06	0.48	0.75	0.07
Uniform Delay, d1		16.9			24.6		16.7	20.5	16.3	16.0	22.2	16.3
Progression Factor		1.00			1.00		1.32	0.69	0.61	1.11	1.16	1.74
Incremental Delay, d2		1.1			5.1		10.4	2.0	0.2	5.3	3.1	0.2
Delay (s)		18.0			29.8		32.4	16.2	10.1	23.0	29.0	28.6
Level of Service		B			C		C	B	B	C	C	C
Approach Delay (s)		18.0			29.8			17.2			28.4	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	23.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	318	0	0	389	103	53	44	37	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.96				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1731			1698			1650				
Flt Permitted		0.83			1.00			0.98				
Satd. Flow (perm)		1458			1698			1650				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	353	0	0	432	114	59	49	41	0	0	0
RTOR Reduction (vph)	0	0	0	0	15	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	437	0	0	531	0	0	128	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		852			993			482				
v/s Ratio Prot					c0.31							
v/s Ratio Perm		0.30						0.08				
v/c Ratio		0.51			0.54			0.27				
Uniform Delay, d1		8.0			8.2			17.6				
Progression Factor		1.00			0.99			1.00				
Incremental Delay, d2		2.2			1.6			1.3				
Delay (s)		10.2			9.7			19.0				
Level of Service		B			A			B				
Approach Delay (s)		10.2			9.7			19.0			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	306	27	53	416	70	28	118	42	57	150	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.98			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1957			1933			2959			2985	
Flt Permitted		0.96			0.93			0.89			0.85	
Satd. Flow (perm)		1887			1810			2658			2572	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	21	340	30	59	462	78	31	131	47	63	167	47
RTOR Reduction (vph)	0	5	0	0	8	0	0	27	0	0	26	0
Lane Group Flow (vph)	0	386	0	0	591	0	0	182	0	0	251	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		871			835			1104			1068	
v/s Ratio Prot												
v/s Ratio Perm		0.20			c0.33			0.07			c0.10	
v/c Ratio		0.44			0.71			0.16			0.23	
Uniform Delay, d1		11.8			14.0			11.9			12.3	
Progression Factor		0.57			0.37			1.27			0.46	
Incremental Delay, d2		1.4			4.1			0.3			0.5	
Delay (s)		8.2			9.3			15.4			6.1	
Level of Service		A			A			B			A	
Approach Delay (s)		8.2			9.3			15.4			6.1	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	279	39	85	551	100	43	219	99	86	227	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1512	3039		1570	3078		1587	2961		1585	3075	
Flt Permitted	0.25	1.00		0.52	1.00		0.56	1.00		0.54	1.00	
Satd. Flow (perm)	395	3039		854	3078		931	2961		902	3075	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	46	310	43	94	612	111	48	243	110	96	252	69
RTOR Reduction (vph)	0	17	0	0	22	0	0	51	0	0	32	0
Lane Group Flow (vph)	46	336	0	94	701	0	48	302	0	96	289	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	134	1029		289	1042		501	1594		486	1656	
v/s Ratio Prot		0.11			c0.23			0.10			0.09	
v/s Ratio Perm	0.12			0.11			0.05			c0.11		
v/c Ratio	0.34	0.33		0.33	0.67		0.10	0.19		0.20	0.17	
Uniform Delay, d1	16.1	16.0		16.0	18.4		7.3	7.7		7.7	7.6	
Progression Factor	0.82	0.76		1.11	1.12		1.11	1.25		1.08	1.08	
Incremental Delay, d2	6.4	0.8		2.9	3.4		0.4	0.3		0.9	0.2	
Delay (s)	19.6	13.0		20.6	23.9		8.5	9.9		9.3	8.5	
Level of Service	B	B		C	C		A	A		A	A	
Approach Delay (s)		13.8			23.5			9.7			8.6	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	287	96	107	401	50	165	250	131	46	295	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.98			1.00	
Frt	1.00	0.96		1.00	0.98			0.96			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1508	2988		1430	3720			3405			3530	
Flt Permitted	0.46	1.00		0.51	1.00			0.69			0.85	
Satd. Flow (perm)	726	2988		761	3720			2401			3027	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	302	101	113	422	53	174	263	138	48	311	67
RTOR Reduction (vph)	0	50	0	0	15	0	0	46	0	0	23	0
Lane Group Flow (vph)	58	353	0	113	460	0	0	529	0	0	403	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	346	1425		363	1774			960			1211	
v/s Ratio Prot		0.12			0.12							
v/s Ratio Perm	0.08			c0.15				c0.22			0.13	
v/c Ratio	0.17	0.25		0.31	0.26			0.55			0.33	
Uniform Delay, d1	9.7	10.1		10.4	10.1			15.0			13.5	
Progression Factor	1.54	1.77		1.09	1.07			1.07			0.76	
Incremental Delay, d2	1.0	0.4		2.0	0.3			1.4			0.7	
Delay (s)	15.9	18.3		13.3	11.2			17.5			10.9	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		18.0			11.6			17.5			10.9	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	311	86	92	297	92	119	82	47	47	82	119
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1671	1436		3088			1885			1835	
Flt Permitted		0.80	1.00		0.78			0.68			0.90	
Satd. Flow (perm)		1346	1436		2425			1305			1674	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	346	96	102	330	102	132	91	52	52	91	132
RTOR Reduction (vph)	0	0	46	0	31	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	442	50	0	503	0	0	262	0	0	224	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		704	751		1268			422			541	
v/s Ratio Prot												
v/s Ratio Perm		c0.33	0.03		0.21			c0.20			0.13	
v/c Ratio		0.63	0.07		0.40			0.62			0.41	
Uniform Delay, d1		11.0	7.7		9.3			18.6			17.2	
Progression Factor		1.41	3.20		0.52			1.00			1.00	
Incremental Delay, d2		4.0	0.2		0.9			6.7			2.3	
Delay (s)		19.6	24.7		5.8			25.4			19.5	
Level of Service		B	C		A			C			B	
Approach Delay (s)		20.5			5.8			25.4			19.5	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	291	32	26	328	60	27	133	47	62	146	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.98			0.97			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1444	3021		1566	3019			3583			3595	
Flt Permitted	0.48	1.00		0.54	1.00			0.90			0.84	
Satd. Flow (perm)	735	3021		883	3019			3230			3066	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	323	36	29	364	67	30	148	52	69	162	72
RTOR Reduction (vph)	0	13	0	0	23	0	0	30	0	0	42	0
Lane Group Flow (vph)	66	346	0	29	408	0	0	200	0	0	261	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	339	1394		408	1393			1342			1274	
v/s Ratio Prot		0.11			c0.14							
v/s Ratio Perm	0.09			0.03				0.06			c0.09	
v/c Ratio	0.19	0.25		0.07	0.29			0.15			0.20	
Uniform Delay, d1	10.4	10.6		9.7	10.9			11.8			12.1	
Progression Factor	0.65	0.64		0.86	0.70			0.95			0.41	
Incremental Delay, d2	1.0	0.3		0.1	0.2			0.2			0.3	
Delay (s)	7.7	7.2		8.5	7.8			11.5			5.3	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		7.3			7.8			11.5			5.3	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	456	30	86	507	222	25	124	115	340	261	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3278			3168			3089			3181	
Flt Permitted		0.76			0.79			0.90			0.70	
Satd. Flow (perm)		2512			2502			2796			2288	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	507	33	96	563	247	28	138	128	378	290	91
RTOR Reduction (vph)	0	7	0	0	60	0	0	69	0	0	16	0
Lane Group Flow (vph)	0	585	0	0	846	0	0	225	0	0	743	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		966			962			1336			598	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.23			c0.34			0.05			c0.32	
v/c Ratio		0.61			0.88			0.17			1.36dl	
Uniform Delay, d1		16.0			18.6			10.2			24.0	
Progression Factor		1.47			1.00			1.00			0.80	
Incremental Delay, d2		2.8			11.3			0.3			122.2	
Delay (s)		26.4			29.9			10.5			141.4	
Level of Service		C			C			B			F	
Approach Delay (s)		26.4			29.9			10.5			141.4	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	60.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	899	138	48	794	0	82	0	36	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3037			3090			1619				
Flt Permitted		1.00			0.80			0.79				
Satd. Flow (perm)		3037			2483			1328				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	999	153	53	882	0	91	0	40	0	0	0
RTOR Reduction (vph)	0	17	0	0	0	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	1135	0	0	935	0	0	114	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1957			910			236				
v/s Ratio Prot		c0.37										
v/s Ratio Perm					c0.38			c0.09				
v/c Ratio		0.58			1.03			0.48				
Uniform Delay, d1		9.1			28.5			33.3				
Progression Factor		0.16			1.43			1.00				
Incremental Delay, d2		0.3			35.8			6.9				
Delay (s)		1.8			76.7			40.2				
Level of Service		A			E			D				
Approach Delay (s)		1.8			76.7			40.2			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	35.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	224	642	24	112	614	185	61	4	107	212	10	213
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3192		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.29	1.00		0.33	1.00	1.00		0.88		0.44	1.00	1.00
Satd. Flow (perm)	471	3192		583	3320	1485		1592		763	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	249	713	27	124	682	206	68	4	119	236	11	237
RTOR Reduction (vph)	0	2	0	0	0	96	0	90	0	0	0	135
Lane Group Flow (vph)	249	738	0	124	682	110	0	101	0	236	11	102
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	54.9	42.5		47.6	38.2	48.2		12.1		25.1	25.1	38.8
Effective Green, g (s)	54.9	42.5		47.6	38.2	48.2		12.1		25.1	25.1	38.8
Actuated g/C Ratio	0.61	0.47		0.53	0.42	0.54		0.13		0.28	0.28	0.43
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	452	1507		421	1409	795		214		312	487	640
v/s Ratio Prot	c0.08	0.23		0.03	0.21	0.02				c0.08	0.01	0.02
v/s Ratio Perm	c0.25			0.13		0.06		0.06		c0.13		0.04
v/c Ratio	0.55	0.49		0.29	0.48	0.14		0.47		0.76	0.02	0.16
Uniform Delay, d1	9.2	16.3		10.9	18.8	10.5		36.0		28.6	23.5	15.6
Progression Factor	2.63	1.86		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.5	1.0		0.5	1.2	0.1		2.2		10.0	0.0	0.2
Delay (s)	25.8	31.3		11.4	20.0	10.6		38.2		38.6	23.6	15.8
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		29.9			17.0			38.2			27.1	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	443	2	333	0	0	0	0	19	0	578
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	492	2	370	0	0	0	0	21	0	642
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	370			576			765	950	288	662	950	185
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	370			576			765	950	288	662	950	185
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	22
cM capacity (veh/h)	1178			987			64	256	706	345	256	823

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	492	126	247	21	642
Volume Left	0	0	0	2	0	21	0
Volume Right	0	0	492	0	0	0	642
cSH	1700	1700	1700	987	1700	345	823
Volume to Capacity	0.17	0.17	0.29	0.00	0.15	0.06	0.78
Queue Length 95th (ft)	0	0	0	0	0	5	198
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	16.1	23.1
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		22.8	
Approach LOS						C	

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	537	0	335	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	597	0	372	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	298	298	372
Volume Left (vph)	298	298	372
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.2	6.2	5.6
Degree Utilization, x	0.51	0.51	0.58
Capacity (veh/h)	568	570	619
Control Delay (s)	14.3	14.3	16.0
Approach Delay (s)	14.3		16.0
Approach LOS	B		C

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	483	64	212	535	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3153		1605	3210						3074	
Flt Permitted		1.00		0.34	1.00						0.97	
Satd. Flow (perm)		3153		574	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	537	71	236	594	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	596	0	236	594	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		452	1850						976	
v/s Ratio Prot		0.19		c0.06	0.19						c0.05	
v/s Ratio Perm				c0.24								
v/c Ratio		0.45		0.52	0.32						0.16	
Uniform Delay, d1		17.4		16.7	9.4						20.8	
Progression Factor		1.00		0.36	0.17						1.00	
Incremental Delay, d2		1.1		3.3	0.3						0.3	
Delay (s)		18.5		9.3	1.9						21.2	
Level of Service		B		A	A						C	
Approach Delay (s)		18.5			4.0			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	489	0	0	684	129	63	90	63	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1660	3320			3133			4497				
Flt Permitted	0.19	1.00			1.00			0.99				
Satd. Flow (perm)	335	3320			3133			4497				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	543	0	0	760	143	70	100	70	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	48	0	0	0	0
Lane Group Flow (vph)	106	543	0	0	885	0	0	192	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	345	1875			1290			1428				
v/s Ratio Prot	0.04	c0.16			c0.28			c0.04				
v/s Ratio Perm	0.14											
v/c Ratio	0.31	0.29			0.69			0.13				
Uniform Delay, d1	19.6	9.6			20.5			20.7				
Progression Factor	0.46	0.31			1.00			1.00				
Incremental Delay, d2	2.1	0.4			3.0			0.2				
Delay (s)	11.1	3.3			23.5			20.9				
Level of Service	B	A			C			C				
Approach Delay (s)		4.6			23.5			20.9			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	358	114	119	426	89	129	78	37	32	87	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2979			3005			1835			1770	
Flt Permitted		0.62			0.65			0.72			0.94	
Satd. Flow (perm)		1874			1968			1361			1676	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	398	127	132	473	99	143	87	41	36	97	160
RTOR Reduction (vph)	0	32	0	0	20	0	0	10	0	0	67	0
Lane Group Flow (vph)	0	620	0	0	684	0	0	261	0	0	226	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		663			696			670			825	
v/s Ratio Prot												
v/s Ratio Perm		0.33			c0.35			c0.19			0.14	
v/c Ratio		0.93			0.98			0.39			0.27	
Uniform Delay, d1		20.3			20.8			10.4			9.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		22.2			30.2			1.7			0.8	
Delay (s)		42.4			51.0			12.1			10.5	
Level of Service		D			D			B			B	
Approach Delay (s)		42.4			51.0			12.1			10.5	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM Average Control Delay	36.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	229	88	199	420	125	124	539	77	110	940	146
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1562	2993		1574	3644		1508	3069	1333	1520	3099	1336
Flt Permitted	0.31	1.00		0.50	1.00		0.13	1.00	1.00	0.34	1.00	1.00
Satd. Flow (perm)	510	2993		836	3644		212	3069	1333	545	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	241	93	209	442	132	131	567	81	116	989	154
RTOR Reduction (vph)	0	48	0	0	33	0	0	0	51	0	0	98
Lane Group Flow (vph)	112	286	0	209	541	0	131	567	30	116	989	56
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	230	986		330	1200		181	1119	486	300	1130	487
v/s Ratio Prot	0.02	0.10		c0.03	0.15		c0.05	0.18		0.03	c0.32	
v/s Ratio Perm	0.15			c0.19			0.26		0.02	0.14		0.04
v/c Ratio	0.49	0.29		0.63	0.45		0.72	0.51	0.06	0.39	0.88	0.12
Uniform Delay, d1	19.9	21.1		22.2	22.4		18.0	21.0	17.5	15.6	25.2	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.40	1.05	2.37
Incremental Delay, d2	7.2	0.7		8.9	1.2		22.1	1.6	0.2	2.8	7.4	0.4
Delay (s)	27.1	21.9		31.2	23.7		40.1	22.7	17.8	24.6	33.8	42.7
Level of Service	C	C		C	C		D	C	B	C	C	D
Approach Delay (s)		23.2			25.7			25.1			34.1	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	348	30	83	601	84	33	100	53	51	124	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1965	1466		1990	1480		2015	1506		1995	1511
Flt Permitted		0.60	1.00		0.87	1.00		0.91	1.00		0.89	1.00
Satd. Flow (perm)		1184	1466		1750	1480		1857	1506		1809	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	366	32	87	633	88	35	105	56	54	131	67
RTOR Reduction (vph)	0	0	17	0	0	47	0	0	33	0	0	39
Lane Group Flow (vph)	0	417	15	0	720	41	0	140	23	0	185	28
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		546	677		808	683		771	626		751	628
v/s Ratio Prot												
v/s Ratio Perm		0.35	0.01		c0.41	0.03		0.08	0.02		c0.10	0.02
v/c Ratio		0.76	0.02		0.89	0.06		0.18	0.04		0.25	0.04
Uniform Delay, d1		14.6	9.5		16.0	9.7		12.0	11.3		12.4	11.3
Progression Factor		1.00	1.00		0.44	0.05		1.09	1.31		1.03	0.89
Incremental Delay, d2		9.8	0.1		12.2	0.1		0.5	0.1		0.7	0.1
Delay (s)		24.3	9.6		19.3	0.7		13.6	14.9		13.5	10.2
Level of Service		C	A		B	A		B	B		B	B
Approach Delay (s)		23.3			17.2			14.0			12.6	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	385	20	51	566	91	10	109	23	125	214	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3076		1550	3035		1550	3017		1550	2991	
Flt Permitted	0.95	1.00		0.49	1.00		0.55	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3076		802	3035		892	3017		1074	2991	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	428	22	57	629	101	11	121	26	139	238	72
RTOR Reduction (vph)	0	6	0	0	20	0	0	15	0	0	42	0
Lane Group Flow (vph)	83	444	0	57	710	0	11	132	0	139	268	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1514		271	1027		371	1253		446	1242	
v/s Ratio Prot	c0.05	0.14			c0.23			0.04			0.09	
v/s Ratio Perm				0.07			0.01			c0.13		
v/c Ratio	0.50	0.29		0.21	0.69		0.03	0.11		0.31	0.22	
Uniform Delay, d1	27.3	9.8		15.3	18.6		11.2	11.6		12.8	12.2	
Progression Factor	1.16	0.56		0.92	0.96		0.83	0.83		1.11	1.10	
Incremental Delay, d2	8.6	0.4		1.0	2.2		0.1	0.2		1.8	0.4	
Delay (s)	40.4	5.9		15.1	20.1		9.5	9.8		15.9	13.8	
Level of Service	D	A		B	C		A	A		B	B	
Approach Delay (s)		11.3			19.7			9.8			14.4	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	15.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	267	166	247	330	63	412	300	189	55	295	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.94		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1550	2921		1550	3025			3144			3236	
Flt Permitted	0.50	1.00		0.95	1.00			0.64			0.68	
Satd. Flow (perm)	813	2921		1550	3025			2049			2229	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	71	297	184	274	367	70	458	333	210	61	328	56
RTOR Reduction (vph)	0	127	0	0	24	0	0	37	0	0	17	0
Lane Group Flow (vph)	71	354	0	274	413	0	0	964	0	0	428	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	250	899		143	1350			788			857	
v/s Ratio Prot		c0.12		c0.18	0.14							
v/s Ratio Perm	0.09							c0.47			0.19	
v/c Ratio	0.28	0.39		1.92	0.31			1.34dl			0.50	
Uniform Delay, d1	17.1	17.7		29.5	11.5			20.0			15.2	
Progression Factor	0.81	0.68		1.27	1.18			1.03			0.69	
Incremental Delay, d2	2.8	1.3		423.2	0.2			111.6			2.0	
Delay (s)	16.6	13.3		460.7	13.8			132.3			12.5	
Level of Service	B	B		F	B			F			B	
Approach Delay (s)		13.7			186.1			132.3			12.5	
Approach LOS		B			F			F			B	

Intersection Summary			
HCM Average Control Delay	102.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	454	16	75	647	75	55	110	165	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		1.00			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1620			1603			3249				
Flt Permitted		0.94			0.91			0.99				
Satd. Flow (perm)		1529			1466			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	504	18	83	719	83	61	122	183	0	0	0
RTOR Reduction (vph)	0	1	0	0	5	0	0	139	0	0	0	0
Lane Group Flow (vph)	0	550	0	0	880	0	0	227	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		976			936			775				
v/s Ratio Prot												
v/s Ratio Perm		0.36			c0.60			0.07				
v/c Ratio		0.56			0.94			0.29				
Uniform Delay, d1		6.6			10.6			20.3				
Progression Factor		1.06			1.00			1.00				
Incremental Delay, d2		1.5			18.1			0.9				
Delay (s)		8.5			28.8			21.2				
Level of Service		A			C			C				
Approach Delay (s)		8.5			28.8			21.2			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	133	474	615	39	119	174
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	140	499	647	41	125	183
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.83				0.83	0.83
vC, conflicting volume	705				1470	690
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	540				1464	521
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	83				0	60
cM capacity (veh/h)	829				97	455

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	639	688	125	183
Volume Left	140	0	125	0
Volume Right	0	41	0	183
cSH	829	1700	97	455
Volume to Capacity	0.17	0.40	1.30	0.40
Queue Length 95th (ft)	15	0	222	48
Control Delay (s)	4.1	0.0	271.4	18.1
Lane LOS	A		F	C
Approach Delay (s)	4.1	0.0	121.0	
Approach LOS			F	

Intersection Summary			
Average Delay	24.4		
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	710	0	1	626	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	789	0	1	696	3	32
RTOR Reduction (vph)	0	0	0	0	27	0
Lane Group Flow (vph)	789	0	0	697	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	251	
v/s Ratio Prot	c0.45				c0.01	
v/s Ratio Perm				0.40		
v/c Ratio	0.65			1.09	0.03	
Uniform Delay, d1	7.2			27.0	29.8	
Progression Factor	0.12			1.00	1.00	
Incremental Delay, d2	0.2			64.1	0.2	
Delay (s)	1.1			91.1	30.1	
Level of Service	A			F	C	
Approach Delay (s)	1.1			91.1	30.1	
Approach LOS	A			F	C	

Intersection Summary			
HCM Average Control Delay	43.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	253	616	32	410	0	0	0	0	17	6	252
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	281	684	36	456	0	0	0	0	19	7	280
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	456			281			1153	1150	483	667	808	456
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	456			281			1153	1150	483	667	808	456
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	94	98	49
cM capacity (veh/h)	1116			1264			73	194	535	341	308	552

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	187	778	491	26	280
Volume Left	0	0	36	19	0
Volume Right	0	684	0	0	280
cSH	1700	1700	1264	332	552
Volume to Capacity	0.11	0.46	0.03	0.08	0.51
Queue Length 95th (ft)	0	0	2	6	71
Control Delay (s)	0.0	0.0	0.9	16.8	18.1
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.9	17.9	
Approach LOS				C	

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	270	0	442	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	300	0	491	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	150	150	491
Volume Left (vph)	150	150	491
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.4	6.4	5.0
Degree Utilization, x	0.27	0.27	0.68
Capacity (veh/h)	536	536	697
Control Delay (s)	10.5	10.5	18.1
Approach Delay (s)	10.5		18.1
Approach LOS	B		C

Intersection Summary			
Delay	15.2		
HCM Level of Service	C		
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	501	345	273	661	0	0	0	0	279	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3425					1359	3806	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3425					1359	3806	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	527	363	287	696	0	0	0	0	294	283	392
RTOR Reduction (vph)	0	0	230	0	0	0	0	0	0	0	53	113
Lane Group Flow (vph)	0	527	133	0	983	0	0	0	0	162	558	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		68.1					23.0	23.0	68.0
Effective Green, g (s)		39.0	39.0		68.1					23.0	23.0	68.0
Actuated g/C Ratio		0.24	0.24		0.43					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		775	300		1458					195	547	482
v/s Ratio Prot		c0.17			c0.29					0.12	c0.15	
v/s Ratio Perm			0.11									0.07
v/c Ratio		0.68	0.44		0.67					0.83	1.02	0.17
Uniform Delay, d1		54.8	51.3		37.0					66.6	68.5	28.5
Progression Factor		1.00	1.00		0.06					1.00	1.00	1.00
Incremental Delay, d2		4.8	4.7		0.1					24.9	43.6	0.2
Delay (s)		59.6	56.0		2.3					91.5	112.1	28.7
Level of Service		E	E		A					F	F	C
Approach Delay (s)		58.1			2.3			0.0			91.8	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	50.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.9
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	488	0	0	602	144	332	214	196	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3064				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3064				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	324	542	0	0	669	160	369	238	218	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	82	0	60	0	0	0	0
Lane Group Flow (vph)	324	542	0	0	669	78	280	485	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	83.9	83.9			37.1	37.1	12.0	12.0				
Effective Green, g (s)	83.9	83.9			37.1	37.1	12.0	12.0				
Actuated g/C Ratio	0.52	0.52			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	842	1799			744	344	117	230				
v/s Ratio Prot	c0.20	0.16			c0.21		c0.18	0.16				
v/s Ratio Perm						0.05						
v/c Ratio	0.38	0.30			0.90	0.23	2.39	2.11				
Uniform Delay, d1	22.7	21.5			59.6	49.8	74.0	74.0				
Progression Factor	0.06	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			13.7	0.3	652.3	513.1				
Delay (s)	1.4	1.3			73.3	50.2	726.3	587.1				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.4			68.8			634.4			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	230.8	HCM Level of Service	F
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	273	136	129	270	107	108	522	80	106	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1576	1600	1372	1594	1766		1578	3009		1537	3001	
Flt Permitted	0.26	1.00	1.00	0.41	1.00		0.13	1.00		0.33	1.00	
Satd. Flow (perm)	438	1600	1372	683	1766		216	3009		527	3001	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	287	143	136	284	113	114	549	84	112	845	126
RTOR Reduction (vph)	0	0	100	0	16	0	0	13	0	0	13	0
Lane Group Flow (vph)	147	287	43	136	381	0	114	620	0	112	958	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	34.0	27.0	27.0	34.0	27.0		43.0	36.0		40.2	34.6	
Effective Green, g (s)	32.0	28.0	27.0	32.0	27.0		41.0	36.0		38.2	34.6	
Actuated g/C Ratio	0.35	0.31	0.30	0.35	0.30		0.45	0.40		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	230	494	409	302	526		188	1196		273	1146	
v/s Ratio Prot	c0.04	0.18		0.03	c0.22		c0.04	0.21		0.02	c0.32	
v/s Ratio Perm	0.18		0.03	0.13			0.23			0.15		
v/c Ratio	0.64	0.58	0.10	0.45	0.72		0.61	0.52		0.41	0.84	
Uniform Delay, d1	22.1	26.4	23.0	21.1	28.5		17.4	20.7		16.7	25.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.7	4.9	0.5	1.1	8.4		5.4	1.6		1.0	7.3	
Delay (s)	27.8	31.3	23.5	22.2	36.9		22.8	22.3		17.7	32.7	
Level of Service	C	C	C	C	D		C	C		B	C	
Approach Delay (s)		28.5			33.1			22.4			31.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	348	61	73	437	82	37	59	34	36	91	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.96			0.95	
Flt Protected		0.99	1.00		0.99	1.00		0.99			0.99	
Satd. Flow (prot)		1970	1467		1624	1381		1868			1875	
Flt Permitted		0.93	1.00		0.90	1.00		0.90			0.94	
Satd. Flow (perm)		1833	1467		1470	1381		1700			1781	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	366	64	77	460	86	39	62	36	38	96	74
RTOR Reduction (vph)	0	0	32	0	0	36	0	20	0	0	30	0
Lane Group Flow (vph)	0	407	32	0	537	50	0	117	0	0	178	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		902	722		724	680		706			740	
v/s Ratio Prot												
v/s Ratio Perm		0.22	0.02		c0.37	0.04		0.07			c0.10	
v/c Ratio		0.45	0.04		0.74	0.07		0.17			0.24	
Uniform Delay, d1		10.8	8.6		13.2	8.7		11.9			12.3	
Progression Factor		1.00	1.00		1.90	3.28		1.00			1.46	
Incremental Delay, d2		1.6	0.1		2.5	0.1		0.5			0.7	
Delay (s)		12.4	8.7		27.6	28.6		12.4			18.7	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		11.9			27.8			12.4			18.7	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	259	41	71	472	20	36	114	34	17	184	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.97	
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1753	1443		1724	1487		1713	1489		1712	
Flt Permitted		0.47	1.00		0.85	1.00		0.89	1.00		0.98	
Satd. Flow (perm)		829	1443		1470	1487		1541	1489		1685	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	273	43	75	497	21	38	120	36	18	194	74
RTOR Reduction (vph)	0	0	28	0	0	8	0	0	18	0	19	0
Lane Group Flow (vph)	0	335	15	0	572	13	0	158	18	0	267	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		293	511		520	526		759	733		830	
v/s Ratio Prot												
v/s Ratio Perm		c0.40	0.01		0.39	0.01		0.10	0.01		c0.16	
v/c Ratio		1.14	0.03		1.10	0.02		0.21	0.02		0.32	
Uniform Delay, d1		21.0	13.7		21.0	13.7		9.3	8.5		10.0	
Progression Factor		1.73	3.11		0.97	0.87		0.17	0.23		1.09	
Incremental Delay, d2		95.3	0.1		65.2	0.1		0.2	0.0		1.0	
Delay (s)		131.6	42.7		85.6	12.0		1.7	2.0		11.9	
Level of Service		F	D		F	B		A	A		B	
Approach Delay (s)		121.5			83.0			1.7			11.9	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM Average Control Delay	68.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	229	35	76	8	14	11	38	256	8	31	556	531
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1860	1440		1765			1996			1975	1382
Flt Permitted		0.76	1.00		0.93			0.81			0.97	1.00
Satd. Flow (perm)		1468	1440		1657			1631			1928	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	254	39	84	9	16	12	42	284	9	34	618	590
RTOR Reduction (vph)	0	0	49	0	9	0	0	2	0	0	0	201
Lane Group Flow (vph)	0	293	35	0	28	0	0	333	0	0	652	389
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		658	598		433			803			949	680
v/s Ratio Prot		c0.05										
v/s Ratio Perm		0.13	0.02		0.02			0.20			c0.34	0.28
v/c Ratio		0.45	0.06		0.06			0.42			0.69	0.57
Uniform Delay, d1		13.6	11.4		18.0			10.5			12.7	11.7
Progression Factor		1.15	1.99		1.00			0.51			0.76	0.84
Incremental Delay, d2		1.1	0.1		0.3			1.1			3.2	2.7
Delay (s)		16.8	22.8		18.3			6.4			12.7	12.5
Level of Service		B	C		B			A			B	B
Approach Delay (s)		18.1			18.3			6.4			12.6	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	894	289	375	1072	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4573		1621	3320					1489	2913	1442
Flt Permitted		1.00		0.11	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4573		190	3320					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	941	304	395	1128	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	45	0	0	0	0	0	0	0	0	9	76
Lane Group Flow (vph)	0	1200	0	395	1128	0	0	0	0	308	603	195
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		43.5		74.9	74.9					28.1	28.1	28.1
Effective Green, g (s)		43.5		74.9	74.9					28.1	28.1	28.1
Actuated g/C Ratio		0.38		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1730		458	2162					364	712	352
v/s Ratio Prot		0.26		c0.20	0.34							
v/s Ratio Perm				c0.36						0.21	0.21	0.14
v/c Ratio		0.69		0.86	0.52					0.85	0.85	0.55
Uniform Delay, d1		30.1		29.1	10.6					41.4	41.4	38.0
Progression Factor		1.00		0.86	1.69					1.00	1.00	1.00
Incremental Delay, d2		2.3		10.4	0.6					16.7	9.4	2.1
Delay (s)		32.4		35.5	18.5					58.1	50.8	40.0
Level of Service		C		D	B					E	D	D
Approach Delay (s)		32.4			22.9			0.0			50.2	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	105.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1066	0	0	1017	271	430	351	318	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4521				
Flt Permitted	0.14	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	460	3353			3241	1489		4521				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1122	0	0	1071	285	453	369	335	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	85	0	62	0	0	0	0
Lane Group Flow (vph)	359	1122	0	0	1071	200	0	1095	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	71.2	71.2			53.0	53.0		31.8				
Effective Green, g (s)	71.2	71.2			53.0	53.0		31.8				
Actuated g/C Ratio	0.62	0.62			0.46	0.46		0.28				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	570	2076			1494	686		1250				
v/s Ratio Prot	0.07	c0.33			c0.33							
v/s Ratio Perm	0.32					0.13		0.24				
v/c Ratio	0.63	0.54			0.72	0.29		0.88				
Uniform Delay, d1	15.3	12.5			25.0	19.3		39.7				
Progression Factor	1.32	0.17			0.98	1.25		1.00				
Incremental Delay, d2	1.5	0.7			2.2	0.8		7.7				
Delay (s)	21.6	2.8			26.6	25.0		47.4				
Level of Service	C	A			C	C		D				
Approach Delay (s)		7.4			26.3			47.4			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	105.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	671	408	104	779	67	227	179	66	77	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1313	1601	3282		1578	3002		1540	2941	
Flt Permitted	0.11	1.00	1.00	0.38	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	174	3273	1313	646	3282		652	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	142	706	429	109	820	71	239	188	69	81	171	127
RTOR Reduction (vph)	0	0	173	0	6	0	0	38	0	0	107	0
Lane Group Flow (vph)	142	706	256	109	885	0	239	219	0	81	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.9	52.3	68.7	43.4	34.3		38.1	26.6		26.2	18.2	
Effective Green, g (s)	64.9	52.3	68.7	43.4	34.3		38.1	26.6		26.2	18.2	
Actuated g/C Ratio	0.56	0.45	0.60	0.38	0.30		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	426	1489	784	319	979		348	694		259	465	
v/s Ratio Prot	c0.08	c0.22	0.05	0.03	c0.27		c0.10	0.07		0.02	0.06	
v/s Ratio Perm	0.11		0.15	0.10			c0.13			0.05		
v/c Ratio	0.33	0.47	0.33	0.34	0.90		0.69	0.32		0.31	0.41	
Uniform Delay, d1	15.9	21.8	11.6	23.9	38.8		30.6	36.7		36.2	43.6	
Progression Factor	0.81	0.81	2.26	1.00	1.00		0.98	1.02		1.00	1.00	
Incremental Delay, d2	1.7	0.9	0.2	0.6	13.3		5.3	0.9		0.7	2.1	
Delay (s)	14.5	18.5	26.4	24.6	52.1		35.3	38.2		36.9	45.7	
Level of Service	B	B	C	C	D		D	D		D	D	
Approach Delay (s)		20.7			49.1			36.8			43.8	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	35.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	221	367	86	324	113	362	340	81	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.96		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1706	2910		1653	3235		1620	3405		1580	3183	
Flt Permitted	0.44	1.00		0.24	1.00		0.32	1.00		0.50	1.00	
Satd. Flow (perm)	794	2910		417	3235		544	3405		824	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	233	386	91	341	119	381	358	85	217	429	59
RTOR Reduction (vph)	0	242	0	0	28	0	0	18	0	0	9	0
Lane Group Flow (vph)	48	377	0	91	432	0	381	425	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	39.6	32.9		46.0	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	39.6	32.9		46.0	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.34	0.29		0.40	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	327	833		273	1016		454	1309		340	888	
v/s Ratio Prot	0.01	0.13		c0.03	c0.13		c0.15	0.12		0.04	0.15	
v/s Ratio Perm	0.04			0.10			c0.26			0.18		
v/c Ratio	0.15	0.45		0.33	0.43		0.84	0.32		0.64	0.54	
Uniform Delay, d1	25.5	33.7		23.1	31.2		20.8	24.9		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.98	0.97	
Incremental Delay, d2	0.2	1.8		0.9	1.3		13.1	0.7		3.8	2.2	
Delay (s)	25.7	35.4		23.9	32.5		33.9	25.6		32.1	36.2	
Level of Service	C	D		C	C		C	C		C	D	
Approach Delay (s)		34.7			31.1			29.4			34.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	32.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	644	141	10	543	135	104	287	9	215	609	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3034			3003		1452	3227		1522	2872	
Flt Permitted		0.58			0.94		0.19	1.00		0.54	1.00	
Satd. Flow (perm)		1777			2812		284	3227		873	2872	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	716	157	11	603	150	116	319	10	239	677	203
RTOR Reduction (vph)	0	24	0	0	33	0	0	3	0	0	44	0
Lane Group Flow (vph)	0	966	0	0	731	0	116	326	0	239	836	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		761			735		194	1192		416	1060	
v/s Ratio Prot		c0.08					c0.04	0.10		0.04	c0.29	
v/s Ratio Perm		c0.41			0.26		0.22			0.21		
v/c Ratio		1.27			0.99		0.60	0.27		0.57	0.79	
Uniform Delay, d1		20.0			24.0		12.5	14.4		13.0	18.2	
Progression Factor		1.00			1.46		1.21	0.58		1.00	1.00	
Incremental Delay, d2		131.5			8.7		12.3	0.5		5.7	6.0	
Delay (s)		151.5			43.8		27.4	8.9		18.6	24.2	
Level of Service		F			D		C	A		B	C	
Approach Delay (s)		151.5			43.8			13.7			23.0	
Approach LOS		F			D			B			C	

Intersection Summary			
HCM Average Control Delay	64.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	229	136	123	292	28	72	462	83	35	698	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	1899		1600	2011		1676	3218		1435	3274	
Flt Permitted	0.46	1.00		0.41	1.00		0.29	1.00		0.42	1.00	
Satd. Flow (perm)	832	1899		686	2011		516	3218		630	3274	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	236	140	127	301	29	74	476	86	36	720	72
RTOR Reduction (vph)	0	33	0	0	5	0	0	22	0	0	12	0
Lane Group Flow (vph)	69	343	0	127	325	0	74	540	0	36	780	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	307	701		253	743		246	1535		300	1561	
v/s Ratio Prot		0.18			0.16			0.17			c0.24	
v/s Ratio Perm	0.08			c0.19			0.14			0.06		
v/c Ratio	0.22	0.49		0.50	0.44		0.30	0.35		0.12	0.50	
Uniform Delay, d1	14.1	15.8		15.9	15.4		10.4	10.7		9.4	11.7	
Progression Factor	1.00	1.00		1.33	1.33		1.00	1.00		1.18	0.96	
Incremental Delay, d2	1.7	2.4		0.6	0.2		3.1	0.6		0.4	0.5	
Delay (s)	15.8	18.2		21.7	20.7		13.5	11.3		11.5	11.7	
Level of Service	B	B		C	C		B	B		B	B	
Approach Delay (s)		17.8			21.0			11.6			11.7	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	14.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	843	366	786	32	3	10	9	47	12	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.99	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.95	
Flt Protected		1.00		0.98				0.99			0.97	
Satd. Flow (prot)		3160		3083				1810			1846	
Flt Permitted		0.95		0.57				0.96			0.87	
Satd. Flow (perm)		3008		1778				1749			1649	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	887	385	827	34	3	11	9	49	13	0	3
RTOR Reduction (vph)	0	0	0	3	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	889	0	1243	0	0	0	34	0	0	17	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom				Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7				2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		833		859				377			355	
v/s Ratio Prot				c0.13								
v/s Ratio Perm		0.30		c0.47				c0.02			0.01	
v/c Ratio		1.07		1.83dl				0.09			0.05	
Uniform Delay, d1		23.5		19.0				20.4			20.2	
Progression Factor		1.41		0.69				1.00			1.00	
Incremental Delay, d2		33.1		206.6				0.5			0.3	
Delay (s)		66.2		219.6				20.9			20.5	
Level of Service		E		F				C			C	
Approach Delay (s)		66.2		219.6				20.9			20.5	
Approach LOS		E		F				C			C	

Intersection Summary			
HCM Average Control Delay	150.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	276
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1559	
Flt Permitted		1.00	
Satd. Flow (perm)		1559	
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	5	3	291
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	294	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.19	
v/s Ratio Perm			
v/c Ratio		1.23	
Uniform Delay, d1		27.5	
Progression Factor		0.85	
Incremental Delay, d2		130.3	
Delay (s)		153.7	
Level of Service		F	
Approach Delay (s)		153.7	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	264	887	958	132	113	234
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3283	3260		1660	1485
Flt Permitted		0.53	1.00		0.95	1.00
Satd. Flow (perm)		1751	3260		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	293	986	1064	147	126	260
RTOR Reduction (vph)	0	0	17	0	0	82
Lane Group Flow (vph)	0	1279	1194	0	126	178
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1078	2006		434	388
v/s Ratio Prot			0.37		0.08	
v/s Ratio Perm		c0.73				c0.12
v/c Ratio		1.54dl	0.60		0.29	0.46
Uniform Delay, d1		12.5	7.6		19.2	20.1
Progression Factor		1.24	0.69		1.14	1.21
Incremental Delay, d2		84.9	0.9		1.6	3.6
Delay (s)		100.3	6.2		23.4	28.0
Level of Service		F	A		C	C
Approach Delay (s)		100.3	6.2		26.5	
Approach LOS		F	A		C	

Intersection Summary			
HCM Average Control Delay	50.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	81	922	1006	195	287	88
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3119	3112		1506	1343
Flt Permitted		0.68	1.00		0.95	1.00
Satd. Flow (perm)		2145	3112		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	85	971	1059	205	302	93
RTOR Reduction (vph)	0	0	25	0	0	47
Lane Group Flow (vph)	0	1056	1239	0	302	46
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1122	1628		533	475
v/s Ratio Prot			0.40		c0.20	
v/s Ratio Perm		c0.49				0.03
v/c Ratio		0.94	0.76		0.57	0.10
Uniform Delay, d1		14.6	12.3		17.0	14.0
Progression Factor		1.12	1.51		1.73	2.83
Incremental Delay, d2		2.1	1.7		3.4	0.3
Delay (s)		18.4	20.2		32.8	40.1
Level of Service		B	C		C	D
Approach Delay (s)		18.4	20.2		34.5	
Approach LOS		B	C		C	

Intersection Summary			
HCM Average Control Delay	21.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	808	261	399	1090	205	127
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.95	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	2399		1788	2506	1737	
Flt Permitted	1.00		0.13	1.00	0.97	
Satd. Flow (perm)	2399		243	2506	1737	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	824	266	407	1112	209	130
RTOR Reduction (vph)	18	0	0	0	35	0
Lane Group Flow (vph)	1072	0	407	1112	304	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1144		116	1195	641	
v/s Ratio Prot	0.45			0.44	c0.18	
v/s Ratio Perm			c1.68			
v/c Ratio	0.94		3.51	0.93	0.47	
Uniform Delay, d1	16.1		17.0	16.0	15.7	
Progression Factor	1.43		1.00	1.00	1.00	
Incremental Delay, d2	8.8		1150.2	14.0	2.5	
Delay (s)	31.8		1167.2	29.9	18.2	
Level of Service	C		F	C	B	
Approach Delay (s)	31.8			334.7	18.2	
Approach LOS	C			F	B	

Intersection Summary			
HCM Average Control Delay	186.3	HCM Level of Service	F
HCM Volume to Capacity ratio	2.19		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1620	38	112	861	1	62	0	157	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.30	1.00	1.00	0.08	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	592	3431	1479	126	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1800	42	124	957	1	69	0	174	0	0	0
RTOR Reduction (vph)	0	0	12	0	0	0	0	0	142	0	0	0
Lane Group Flow (vph)	1	1800	30	124	957	1	0	69	32	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	50.1	50.1	50.1	67.7	67.7	67.7		9.3	9.3			
Effective Green, g (s)	50.1	50.1	50.1	67.7	67.7	67.7		9.3	9.3			
Actuated g/C Ratio	0.59	0.59	0.59	0.80	0.80	0.80		0.11	0.11			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	349	2022	872	352	2644	1219		169	164			
v/s Ratio Prot		c0.52		0.06	c0.29							
v/s Ratio Perm	0.00		0.02	0.22		0.00		c0.04	0.02			
v/c Ratio	0.00	0.89	0.03	0.35	0.36	0.00		0.41	0.19			
Uniform Delay, d1	7.2	15.1	7.3	13.6	2.5	1.8		35.3	34.4			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	6.4	0.1	0.6	0.1	0.0		1.6	0.6			
Delay (s)	7.2	21.5	7.4	14.2	2.6	1.8		36.9	35.0			
Level of Service	A	C	A	B	A	A		D	D			
Approach Delay (s)		21.1			3.9			35.5			0.0	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	11	966	846	30	71	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3097	3083		1530	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2912	3083		1530	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1073	940	33	79	16
RTOR Reduction (vph)	0	0	3	0	8	0
Lane Group Flow (vph)	0	1085	970	0	87	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1068	2192		119	
v/s Ratio Prot			c0.31		c0.06	
v/s Ratio Perm		c0.37				
v/c Ratio		1.02	0.44		0.73	
Uniform Delay, d1		28.5	5.5		40.6	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		31.6	0.2		32.1	
Delay (s)		60.1	0.2		72.7	
Level of Service		E	A		E	
Approach Delay (s)		60.1	0.2		72.7	
Approach LOS		E	A		E	

Intersection Summary			
HCM Average Control Delay	33.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	520	0	1	589	39	3	2	28	202	0	148
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1766			3341			1467			1670	1348
Flt Permitted		0.79			0.95			0.88			0.88	1.00
Satd. Flow (perm)		1402			3191			1296			1545	1348
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	578	0	1	654	43	3	2	31	224	0	164
RTOR Reduction (vph)	0	0	0	0	6	0	0	28	0	0	0	110
Lane Group Flow (vph)	0	687	0	0	692	0	0	8	0	0	224	54
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		511			1714			137			478	444
v/s Ratio Prot					c0.07						c0.09	
v/s Ratio Perm		c0.49			0.15			0.01			c0.05	0.04
v/c Ratio		1.34			0.40			0.06			0.47	0.12
Uniform Delay, d1		27.0			12.0			34.2			24.6	19.9
Progression Factor		1.00			1.40			1.00			1.00	1.00
Incremental Delay, d2		167.7			0.1			0.8			3.3	0.6
Delay (s)		194.7			16.8			35.0			27.8	20.5
Level of Service		F			B			D			C	C
Approach Delay (s)		194.7			16.8			35.0			24.7	
Approach LOS		F			B			D			C	

Intersection Summary			
HCM Average Control Delay	86.4	HCM Level of Service	F
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

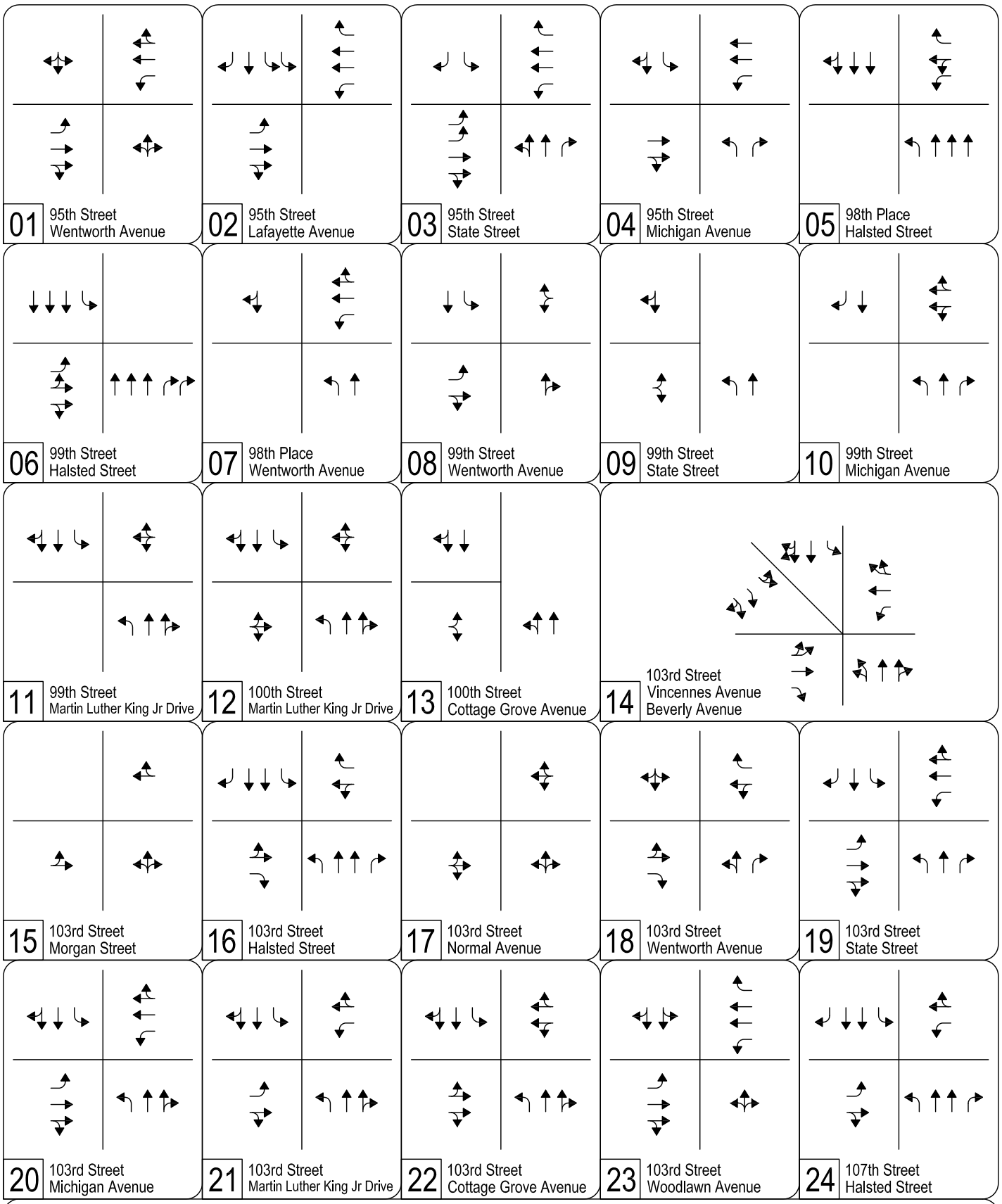

BRT Alternative Mitigated (2030) Intersection Lane Geometry

Page 1 of 3

Legend: Existing Added Removed

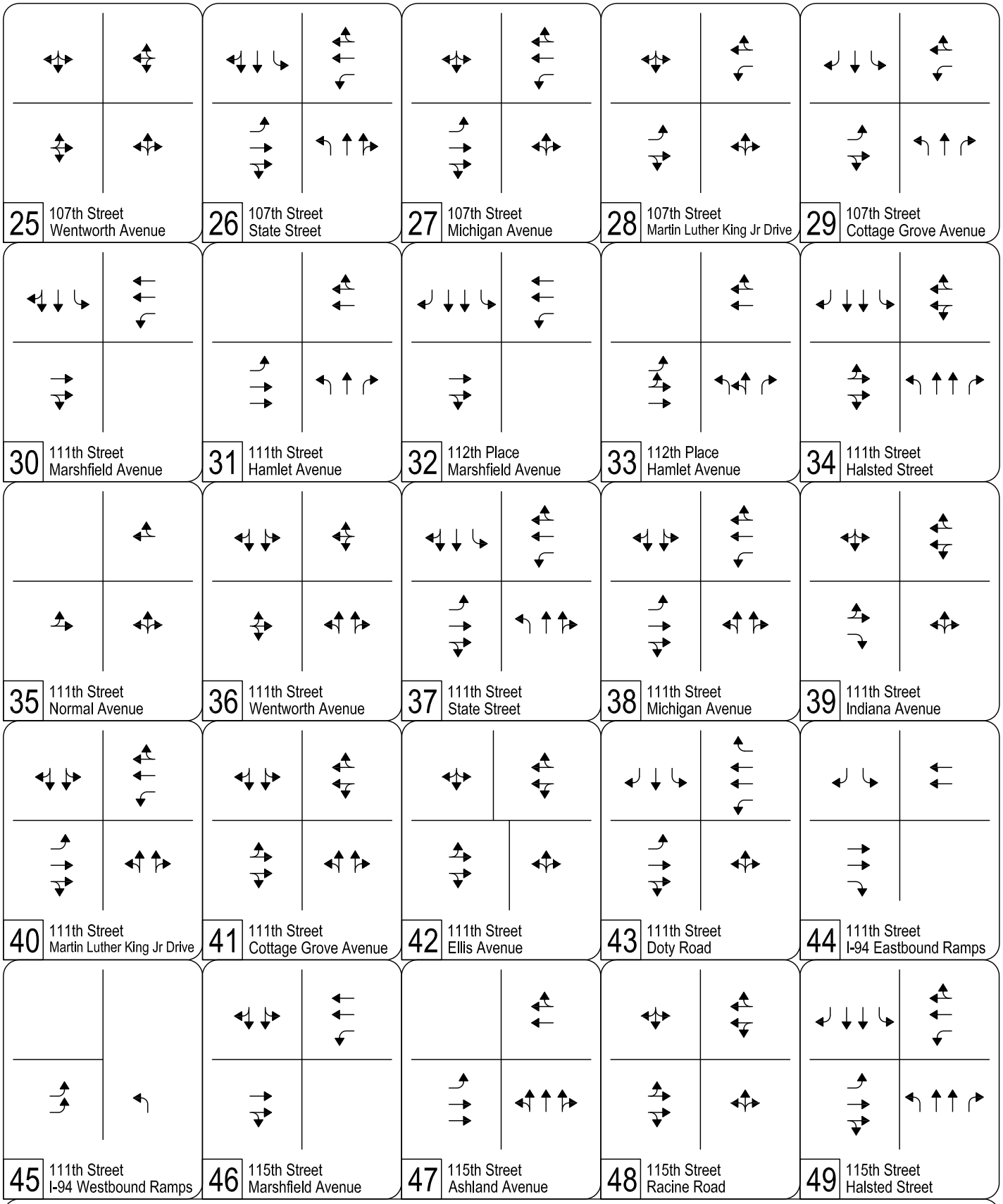

BRT Alternative Mitigated (2030) Intersection Lane Geometry

Page 2 of 3

Legend: Existing Added Removed

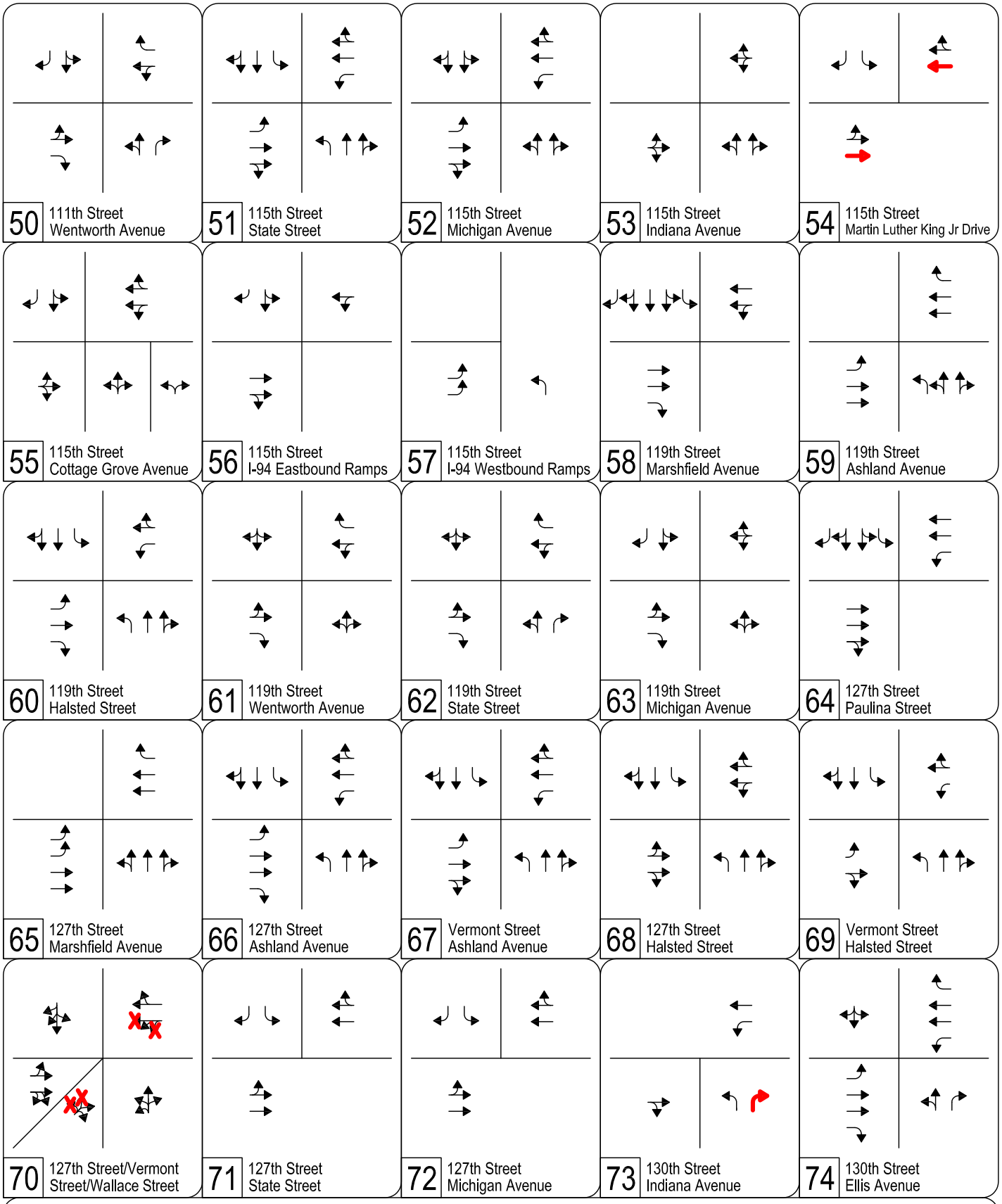

BRT Alternative Mitigated (2030) Intersection Lane Geometry

Page 3 of 3

Legend: Existing Added Removed

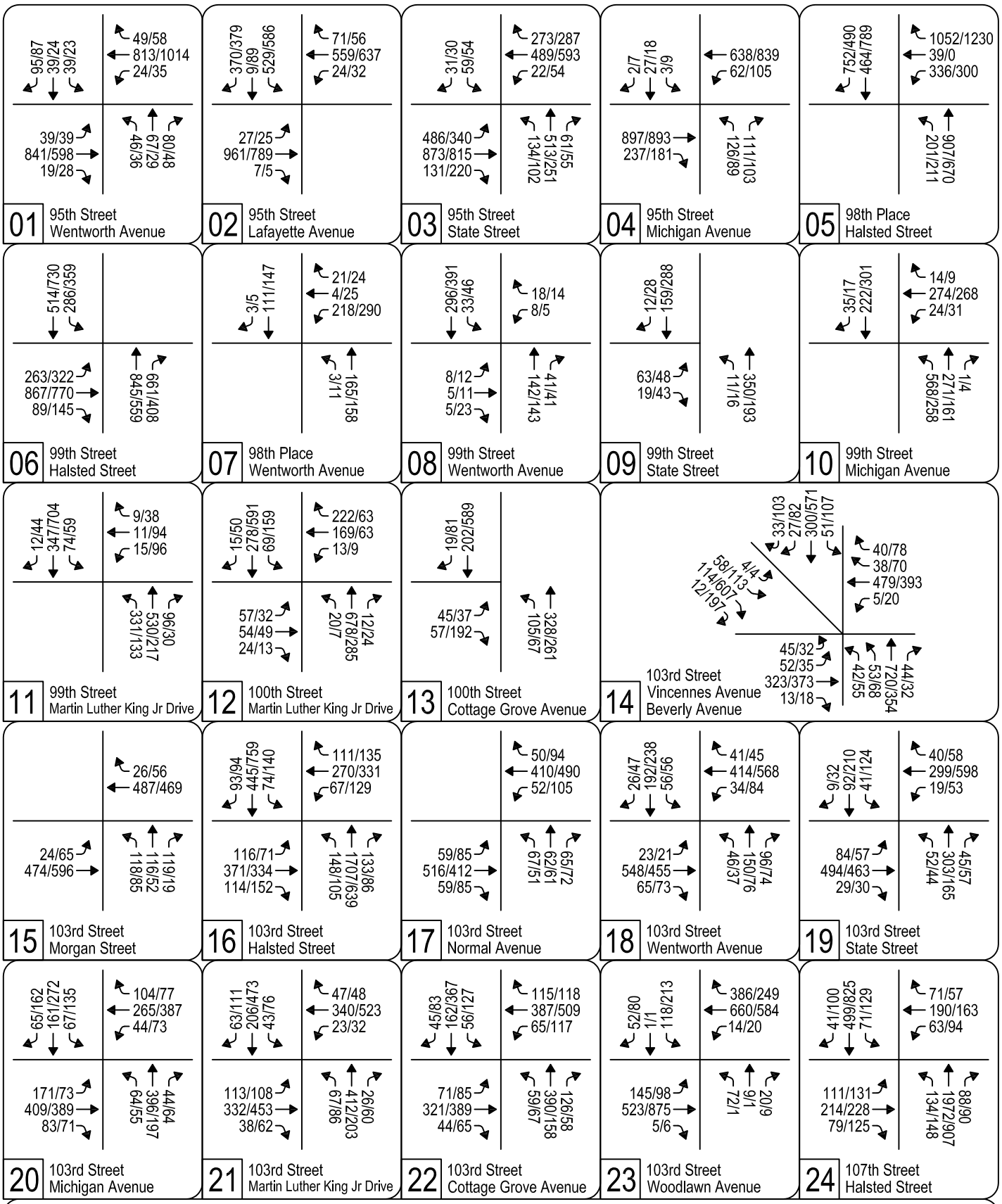

BRT Alternative Mitigated (2030) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

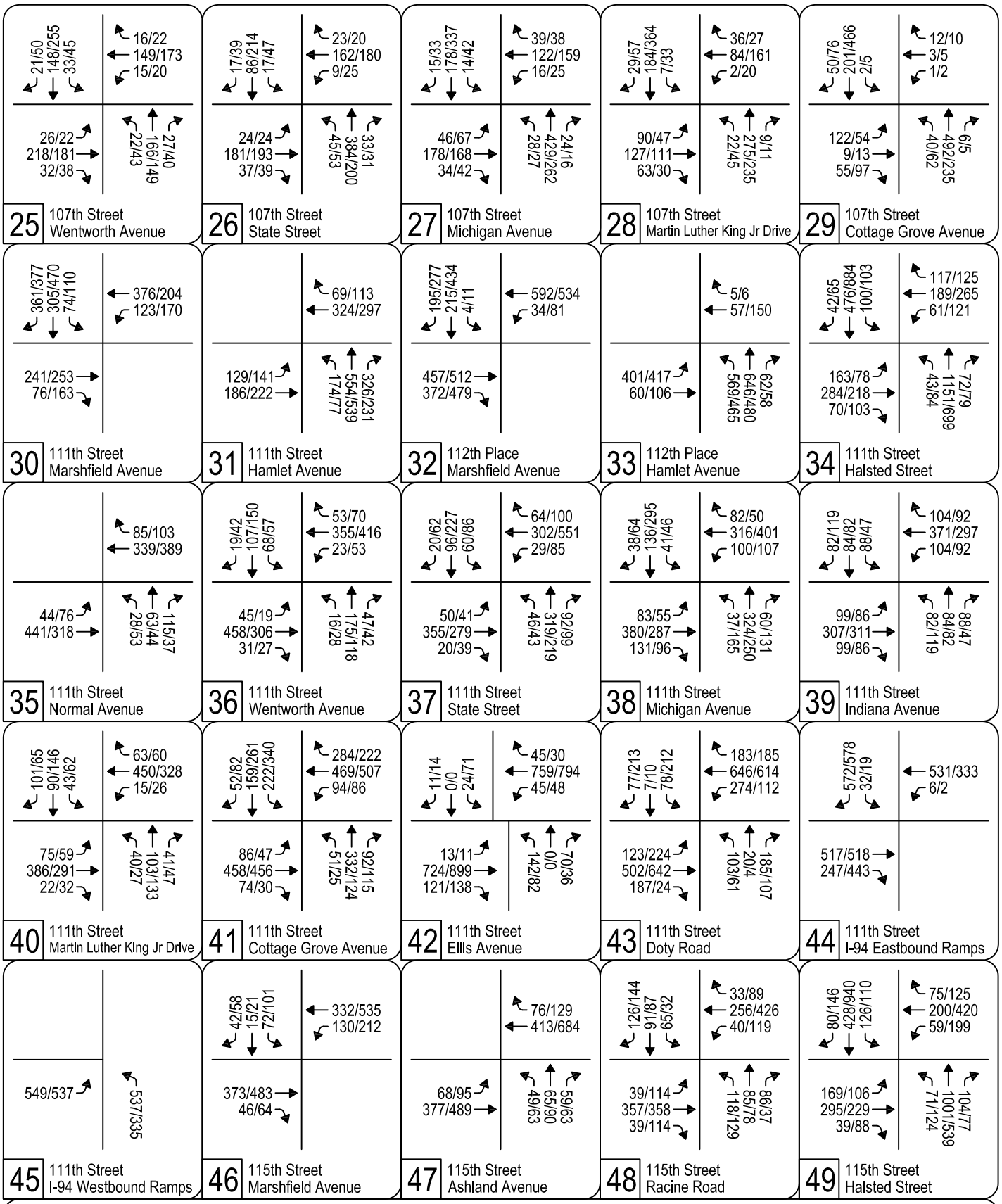

BRT Alternative Mitigated (2030) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

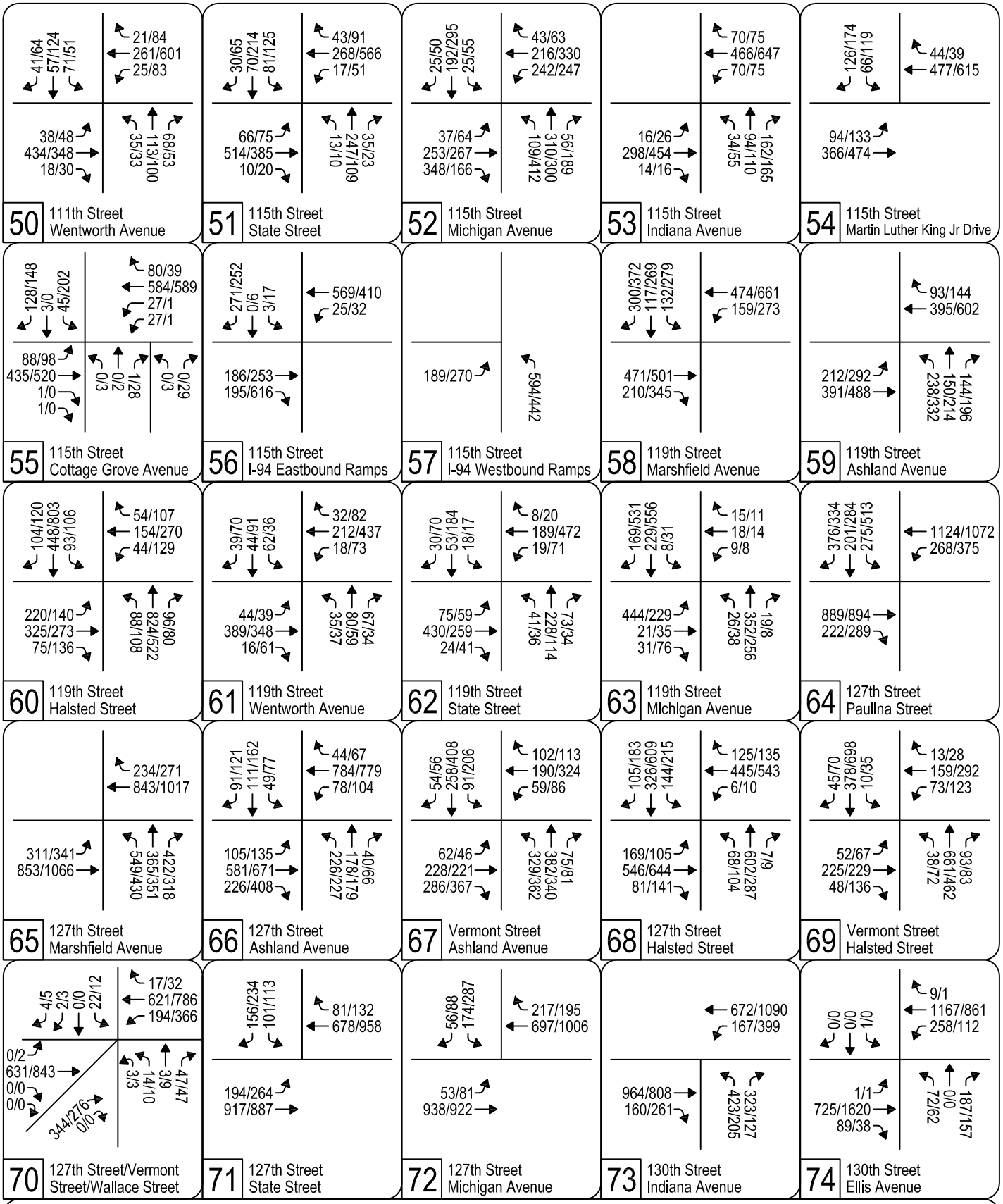

BRT Alternative Mitigated (2030) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	841	19	24	813	49	46	67	80	39	39	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1417	2976		1592	2979			1754			1670	
Flt Permitted	0.25	1.00		0.25	1.00			0.90			0.90	
Satd. Flow (perm)	369	2976		417	2979			1596			1526	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	885	20	25	856	52	48	71	84	41	41	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	59	0
Lane Group Flow (vph)	41	903	0	25	901	0	0	164	0	0	123	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	193	1557		218	1558			565			540	
v/s Ratio Prot		c0.30			0.30							
v/s Ratio Perm	0.11			0.06				c0.10			0.08	
v/c Ratio	0.21	0.58		0.11	0.58			0.29			0.23	
Uniform Delay, d1	8.3	10.6		7.9	10.6			15.1			14.8	
Progression Factor	1.00	1.00		0.83	1.16			1.00			1.00	
Incremental Delay, d2	2.5	1.6		0.9	1.4			1.3			1.0	
Delay (s)	10.8	12.2		7.5	13.7			16.4			15.7	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.1			13.5			16.4			15.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	961	7	24	559	71	0	0	0	529	9	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	778	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	352	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1012	7	25	588	75	0	0	0	557	9	389
RTOR Reduction (vph)	0	1	0	0	0	33	0	0	0	0	0	172
Lane Group Flow (vph)	28	1018	0	25	588	42	0	0	0	557	9	217
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	162	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.31		0.01	c0.19					c0.18	0.01	
v/s Ratio Perm	0.04			0.01		0.08						0.16
v/c Ratio	0.17	0.94		0.04	0.33	0.15				0.78	0.03	0.67
Uniform Delay, d1	31.6	42.2		15.1	15.4	13.6				46.9	38.7	45.5
Progression Factor	0.80	0.82		0.29	0.62	1.93				1.00	1.00	1.00
Incremental Delay, d2	2.0	14.1		0.1	0.3	0.7				8.2	0.2	10.7
Delay (s)	27.1	48.9		4.4	9.8	26.9				55.1	38.9	56.2
Level of Service	C	D		A	A	C				E	D	E
Approach Delay (s)		48.3			11.5			0.0			55.4	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	486	873	131	22	489	273	134	513	61	59	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.95	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1419	855		738
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1419	855		738
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	512	919	138	23	515	287	141	540	64	62	0	33
RTOR Reduction (vph)	0	9	0	0	0	158	0	0	25	0	0	30
Lane Group Flow (vph)	512	1048	0	23	515	129	0	681	39	62	0	3
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	40.0	62.0		9.0	31.0	31.0		31.0	31.0	10.0		10.0
Effective Green, g (s)	40.0	62.0		9.0	31.0	31.0		31.0	31.0	10.0		10.0
Actuated g/C Ratio	0.31	0.48		0.07	0.24	0.24		0.24	0.24	0.08		0.08
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	982	1482		108	697	225		787	338	66		57
v/s Ratio Prot	0.16	c0.34		0.01	c0.18			c0.21		c0.07		
v/s Ratio Perm						0.14			0.03			0.00
v/c Ratio	0.52	0.71		0.21	0.74	0.57		0.87	0.11	0.94		0.04
Uniform Delay, d1	37.1	26.8		57.2	45.8	43.6		47.5	38.8	59.7		55.6
Progression Factor	0.75	0.22		1.00	1.00	1.00		0.94	0.89	1.00		1.00
Incremental Delay, d2	0.9	1.3		4.5	6.9	10.1		12.1	0.7	88.5		0.3
Delay (s)	28.8	7.1		61.6	52.7	53.8		56.9	35.2	148.2		55.9
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		14.2			53.3			55.0			116.1	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	36.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	897	237	62	638	0	126	0	111	3	27	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2852		1650	3005		1390		1465	1803	1961	
Flt Permitted		1.00		0.15	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2852		260	3005		1078		1465	1803	1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	997	263	69	709	0	140	0	123	3	30	2
RTOR Reduction (vph)	0	24	0	0	0	0	0	0	77	0	1	0
Lane Group Flow (vph)	0	1236	0	69	709	0	140	0	46	3	31	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1711		156	1803		345		469	577	628	
v/s Ratio Prot		c0.43			0.24						0.02	
v/s Ratio Perm				0.27			c0.13		0.03	0.00		
v/c Ratio		0.72		0.44	0.39		0.41		0.10	0.01	0.05	
Uniform Delay, d1		14.1		10.9	10.5		26.6		23.9	23.2	23.5	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.7		8.8	0.6		3.5		0.4	0.0	0.1	
Delay (s)		16.8		19.7	11.1		30.1		24.3	23.2	23.6	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.8			11.9			27.4			23.6	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	336	39	1052	201	907	0	0	464	752
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3933	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3933	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	343	40	1073	205	926	0	0	473	767
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	343	40	1073	205	926	0	0	1240	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1161	
v/s Ratio Prot							c0.13	0.21			c0.32	
v/s Ratio Perm				0.22	0.02	c0.73						
v/c Ratio				0.76	0.08	2.54	0.43	0.34			1.91dr	
Uniform Delay, d1				33.6	26.7	37.5	29.2	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.38			1.00	
Incremental Delay, d2				11.6	0.3	698.4	2.0	0.2			46.6	
Delay (s)				45.2	27.1	735.9	21.2	22.1			83.6	
Level of Service				D	C	F	C	C			F	
Approach Delay (s)		0.0			553.8			21.9			83.6	
Approach LOS		A			F			C			F	

Intersection Summary			
HCM Average Control Delay	244.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	867	89	0	0	0	0	845	661	286	514	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3185						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3185						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	271	894	92	0	0	0	0	871	681	295	530	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	244	1006	0	0	0	0	0	871	681	295	530	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.19	0.11	
v/s Ratio Perm	0.16	0.32							c0.31			
v/c Ratio	0.50	0.98						0.75	1.17	0.63	0.19	
Uniform Delay, d1	28.7	35.1						35.3	38.5	32.1	9.9	
Progression Factor	1.00	1.00						0.43	0.46	1.06	0.43	
Incremental Delay, d2	3.7	22.8						0.4	77.5	2.4	0.1	
Delay (s)	32.4	57.9						15.7	95.2	36.4	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		52.9			0.0			50.6			15.8	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	43.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	165	0	0	111	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1960	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		788	1882			1960	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	183	0	0	123	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	183	0	0	125	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		504	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.06	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.17			0.12	
Uniform Delay, d1				23.4	19.9		9.9	8.0			9.6	
Progression Factor				1.00	1.00		1.06	1.19			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.5	9.8			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.8			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	8	0	18	0	142	41	33	296	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.91			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1603			1686		1595	1755	
Flt Permitted	0.74	1.00			0.96			1.00		0.60	1.00	
Satd. Flow (perm)	1509	1809			1558			1686		1010	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	8	0	19	0	149	43	35	312	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	14	0	0	180	0	35	312	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	479	575			495			793		642	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.03			0.23		0.05	0.30	
Uniform Delay, d1	19.9	19.9			20.0			13.3		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		0.99	0.90	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.1			14.0		8.6	8.6	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.1			14.0			8.6	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	19	11	350	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1782		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1782		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	21	12	389	177	13
RTOR Reduction (vph)	14	0	0	0	4	0
Lane Group Flow (vph)	77	0	12	389	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	576		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.40	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.31	0.51	1.12	
Incremental Delay, d2	0.5		0.0	1.1	0.4	
Delay (s)	16.0		2.1	5.4	8.6	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.3	8.6	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	24	274	14	568	271	1	0	222	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3737		1660	1752			1603	1298
Flt Permitted					1.00		0.54	1.00			1.00	1.00
Satd. Flow (perm)					3737		943	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	27	304	16	631	301	1	0	247	39
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	0	0	0	343	0	631	302	0	0	247	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1143		650	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.17			0.15	
v/s Ratio Perm							c0.47					0.01
v/c Ratio					0.30		0.97	0.29			0.34	0.03
Uniform Delay, d1					22.5		17.9	8.2			15.4	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.7		28.8	0.7			1.3	0.1
Delay (s)					23.2		46.7	8.9			16.7	13.3
Level of Service					C		D	A			B	B
Approach Delay (s)		0.0			23.2			34.5			16.2	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	28.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	15	11	9	331	530	96	74	347	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.97		1.00	0.98		1.00	1.00	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1803		1692	3237		1707	3353	
Flt Permitted					0.98		0.50	1.00		0.31	1.00	
Satd. Flow (perm)					1803		882	3237		563	3353	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	17	12	10	368	589	107	82	386	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	32	0	368	676	0	82	396	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					553		558	1467		415	1520	
v/s Ratio Prot					c0.02		c0.06	0.21		0.02	0.12	
v/s Ratio Perm							c0.30			0.09		
v/c Ratio					0.06		0.66	0.46		0.20	0.26	
Uniform Delay, d1					18.4		13.9	14.2		12.4	12.7	
Progression Factor					1.00		0.69	0.74		1.00	1.00	
Incremental Delay, d2					0.2		5.5	1.0		1.1	0.4	
Delay (s)					18.6		15.1	11.4		13.4	13.1	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.6			12.7			13.2	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	54	24	13	169	222	20	678	12	69	278	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1946			1626		1596	3232		1641	3132	
Flt Permitted		0.68			0.99		0.56	1.00		0.33	1.00	
Satd. Flow (perm)		1354			1613		947	3232		573	3132	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	57	25	14	178	234	21	714	13	73	293	16
RTOR Reduction (vph)	0	10	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	132	0	0	367	0	21	725	0	73	304	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		451			538		530	1810		321	1754	
v/s Ratio Prot								c0.22			0.10	
v/s Ratio Perm		0.10			c0.23		0.02			0.13		
v/c Ratio		0.29			0.68		0.04	0.40		0.23	0.17	
Uniform Delay, d1		18.5			21.6		7.4	9.4		8.3	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.17	0.07	
Incremental Delay, d2		1.6			6.9		0.1	0.7		1.6	0.2	
Delay (s)		20.1			28.4		7.6	10.0		3.0	0.8	
Level of Service		C			C		A	B		A	A	
Approach Delay (s)		20.1			28.4			10.0			1.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	45	57	105	328	202	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	63	117	364	224	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	113	238	243	150	96
Volume Left (vph)	50	117	0	0	0
Volume Right (vph)	63	0	0	0	21
Hadj (s)	-0.16	0.33	0.09	0.09	-0.07
Departure Headway (s)	5.3	5.4	5.2	5.4	5.2
Degree Utilization, x	0.17	0.36	0.35	0.22	0.14
Capacity (veh/h)	624	652	683	641	659
Control Delay (s)	9.3	10.2	9.7	8.8	7.9
Approach Delay (s)	9.3	9.9		8.4	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.4		
HCM Level of Service	A		
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	45	52	323	13	5	479	38	40	42	53	720	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3291	
Flt Permitted		0.11	1.00	1.00	0.55	1.00	1.00			0.39	1.00	
Satd. Flow (perm)		187	1731	1530	984	1731	1487			700	3291	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	58	359	14	6	532	42	44	47	59	800	49
RTOR Reduction (vph)	0	0	0	7	0	0	31	0	0	0	5	0
Lane Group Flow (vph)	0	108	359	7	6	532	55	0	0	106	844	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	300	528	453			167	784	
v/s Ratio Prot		0.05	c0.21			c0.31					c0.26	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.15		
v/c Ratio		0.38	0.44	0.01	0.02	1.01	0.12			0.63	1.08	
Uniform Delay, d1		20.2	18.2	14.5	25.5	36.5	26.4			35.9	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.9	1.7	0.0	0.1	41.1	0.6			17.0	54.9	
Delay (s)		24.1	19.9	14.5	25.7	77.6	26.9			52.9	94.9	
Level of Service		C	B	B	C	E	C			D	F	
Approach Delay (s)			20.7			70.1					90.3	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	62.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	51	300	27	33	4	58	114	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.97				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3279				1710	2621	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3279				1710	2621	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	333	30	37	4	64	127	13
RTOR Reduction (vph)	0	8	0	0	0	0	7	0
Lane Group Flow (vph)	57	392	0	0	0	68	133	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.12				0.04		
v/s Ratio Perm	0.19						c0.05	
v/c Ratio	0.84	0.51				0.24	0.31	
Uniform Delay, d1	38.4	35.1				38.0	38.4	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	69.9	2.4				2.0	1.8	
Delay (s)	108.3	37.5				39.9	40.2	
Level of Service	F	D				D	D	
Approach Delay (s)		46.3				40.1		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	474	0	0	487	26	118	116	119	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1930			1770				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1596			1930			1770				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	527	0	0	541	29	131	129	132	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	554	0	0	570	0	0	392	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		761			920			708				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.35						0.22				
v/c Ratio		0.73			0.62			0.55				
Uniform Delay, d1		13.6			12.6			15.0				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.0			3.1			3.1				
Delay (s)		19.7			15.8			18.1				
Level of Service		B			B			B				
Approach Delay (s)		19.7			15.8			18.1			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	371	114	67	270	111	148	1707	133	74	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1922	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.65	1.00		0.57	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1270	1426		1113	1396	627	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	391	120	71	284	117	156	1797	140	78	468	98
RTOR Reduction (vph)	0	0	71	0	0	69	0	0	30	0	0	59
Lane Group Flow (vph)	0	513	49	0	355	48	156	1797	110	78	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	53.0	44.3	44.3	49.0	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	53.0	44.3	44.3	49.0	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.50	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		520	584		456	572	389	1307	542	148	1191	510
v/s Ratio Prot							c0.03	c0.58		c0.03	0.16	
v/s Ratio Perm		c0.40	0.03		0.32	0.03	0.17		0.09	0.21		0.03
v/c Ratio		0.99	0.08		0.78	0.08	0.40	1.37	0.20	0.53	0.39	0.08
Uniform Delay, d1		30.7	19.0		26.9	19.0	14.7	30.4	19.2	23.2	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.15	0.76	0.42
Incremental Delay, d2		35.7	0.3		12.3	0.3	0.7	173.6	0.8	3.3	0.9	0.3
Delay (s)		66.4	19.2		39.2	19.2	15.4	204.0	20.0	29.9	17.9	8.3
Level of Service		E	B		D	B	B	F	C	C	B	A
Approach Delay (s)		57.4			34.3			177.6			17.9	
Approach LOS		E			C			F			B	

Intersection Summary			
HCM Average Control Delay	113.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	113.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	516	59	52	410	50	67	62	65	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.95				
Flt Protected		1.00			0.99			0.98				
Satd. Flow (prot)		1629			1627			1770				
Flt Permitted		0.91			0.89			0.98				
Satd. Flow (perm)		1494			1459			1770				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	573	66	58	456	56	74	69	72	0	0	0
RTOR Reduction (vph)	0	6	0	0	6	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	699	0	0	564	0	0	187	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		873			853			517				
v/s Ratio Prot												
v/s Ratio Perm		c0.47			0.39			0.11				
v/c Ratio		0.80			0.66			0.36				
Uniform Delay, d1		10.5			9.1			18.2				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.6			4.0			2.0				
Delay (s)		18.2			13.1			20.2				
Level of Service		B			B			C				
Approach Delay (s)		18.2			13.1			20.2			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	548	65	34	414	41	46	150	96	56	192	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.99	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1634	1288		1663	1490		1775	
Flt Permitted		0.98	1.00		0.94	1.00		0.89	1.00		0.90	
Satd. Flow (perm)		1619	1255		1536	1288		1493	1490		1613	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	24	577	68	36	436	43	48	158	101	59	202	27
RTOR Reduction (vph)	0	0	29	0	0	17	0	0	69	0	5	0
Lane Group Flow (vph)	0	601	39	0	472	26	0	206	32	0	283	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		928	720		881	738		478	477		516	
v/s Ratio Prot												
v/s Ratio Perm		c0.37	0.03		0.31	0.02		0.14	0.02		c0.18	
v/c Ratio		0.65	0.05		0.54	0.03		0.43	0.07		0.55	
Uniform Delay, d1		10.9	7.0		9.9	7.0		20.1	17.7		21.0	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.5	0.1		2.3	0.1		2.8	0.3		4.2	
Delay (s)		14.3	7.2		12.2	7.1		22.9	18.0		25.2	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.6			11.8			21.3			25.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	494	29	19	299	40	52	303	45	41	92	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1463	2993		1459	3530		1534	1647	1301	1517	1541	1156
Flt Permitted	0.53	1.00		0.39	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	809	2993		602	3530		1116	1647	1301	720	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	549	32	21	332	44	58	337	50	46	102	10
RTOR Reduction (vph)	0	6	0	0	16	0	0	0	26	0	0	6
Lane Group Flow (vph)	93	575	0	21	360	0	58	337	24	46	102	4
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	386	1427		287	1684		446	659	520	288	616	462
v/s Ratio Prot		c0.19			0.10			c0.20			0.07	
v/s Ratio Perm	0.11			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.24	0.40		0.07	0.21		0.13	0.51	0.05	0.16	0.17	0.01
Uniform Delay, d1	10.0	11.0		9.2	9.9		12.3	14.7	11.9	12.5	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.63	0.77	0.35	0.55	0.55	0.31
Incremental Delay, d2	1.5	0.8		0.5	0.3		0.6	2.8	0.2	1.2	0.6	0.0
Delay (s)	11.5	11.9		9.7	10.2		8.3	14.0	4.3	8.1	7.5	3.7
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.8			10.2			12.2			7.4	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	171	409	83	44	265	104	64	396	44	67	161	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.99	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.96		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1466	3059		1588	2939		1542	3028		1405	2760	
Flt Permitted	0.51	1.00		0.42	1.00		0.60	1.00		0.44	1.00	
Satd. Flow (perm)	784	3059		707	2939		981	3028		652	2760	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	180	431	87	46	279	109	67	417	46	71	169	68
RTOR Reduction (vph)	0	0	0	0	0	0	0	11	0	0	40	0
Lane Group Flow (vph)	180	518	0	46	388	0	67	452	0	71	197	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	376	1468		339	1411		405	1252		269	1141	
v/s Ratio Prot		0.17			0.13			c0.15			0.07	
v/s Ratio Perm	c0.23			0.07			0.07			0.11		
v/c Ratio	0.48	0.35		0.14	0.27		0.17	0.36		0.26	0.17	
Uniform Delay, d1	13.2	12.2		10.8	11.7		13.9	15.2		14.5	13.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.3	0.7		0.8	0.5		0.9	0.8		2.4	0.3	
Delay (s)	17.5	12.9		11.7	12.2		14.7	16.0		16.9	14.2	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		14.1			12.1			15.8			14.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	113	332	38	23	340	47	67	412	26	43	206	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1474	1842		1534	3073		1372	2867	
Flt Permitted	0.43	1.00		0.46	1.00		0.58	1.00		0.41	1.00	
Satd. Flow (perm)	700	1576		708	1842		933	3073		597	2867	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	119	349	40	24	358	49	71	434	27	45	217	66
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	119	389	0	24	407	0	71	461	0	45	283	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	438	738		356	793		327	730		193	627	
v/s Ratio Prot	c0.02	c0.25		0.00	0.22		c0.01	c0.15		0.01	0.10	
v/s Ratio Perm	0.13			0.03			0.06			0.06		
v/c Ratio	0.27	0.53		0.07	0.51		0.22	0.63		0.23	0.45	
Uniform Delay, d1	14.0	16.0		15.1	17.7		21.6	29.1		26.1	28.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.7		0.1	2.4		0.3	4.1		0.6	2.3	
Delay (s)	14.3	18.6		15.1	20.1		21.9	33.2		26.8	31.1	
Level of Service	B	B		B	C		C	C		C	C	
Approach Delay (s)		17.6			19.8			31.7			30.5	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	321	44	65	387	115	59	390	126	56	162	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3492			2914		1614	3156		1581	2901	
Flt Permitted		0.78			0.84		0.61	1.00		0.38	1.00	
Satd. Flow (perm)		2730			2467		1034	3156		628	2901	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	79	357	49	72	430	128	66	433	140	62	180	50
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	485	0	0	630	0	66	573	0	62	230	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1238			1118		455	1389		276	1276	
v/s Ratio Prot								c0.18			0.08	
v/s Ratio Perm		0.18			c0.26		0.06			0.10		
v/c Ratio		0.39			0.56		0.15	0.41		0.22	0.18	
Uniform Delay, d1		13.6			15.1		12.6	14.4		13.0	12.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9			2.1		0.7	0.9		1.9	0.3	
Delay (s)		14.6			17.1		13.2	15.3		14.9	13.1	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.6			17.1			15.1			13.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1023: 103rd Street & Woodlawn Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	523	5	14	660	386	72	9	20	118	1	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3144		1629	3257	1457		1611			3105	
Flt Permitted	0.35	1.00		0.42	1.00	1.00		0.69			0.75	
Satd. Flow (perm)	582	3144		720	3257	1457		1158			2398	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	581	6	16	733	429	80	10	22	131	1	58
RTOR Reduction (vph)	0	1	0	0	0	150	0	12	0	0	44	0
Lane Group Flow (vph)	161	586	0	16	733	279	0	100	0	0	146	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	379	2046		468	2119	948		274			566	
v/s Ratio Prot		0.19			0.23							
v/s Ratio Perm	c0.28			0.02		0.19		c0.09			0.06	
v/c Ratio	0.42	0.29		0.03	0.35	0.29		0.36			0.26	
Uniform Delay, d1	6.0	5.3		4.4	5.6	5.3		22.6			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	3.5	0.4		0.1	0.4	0.8		3.5			1.0	
Delay (s)	9.4	5.7		4.5	6.0	6.1		26.1			23.0	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.5			6.0			26.1			23.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	70.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	79	63	190	71	134	1972	88	71	499	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1496		1547	1584		1493	3069	1271	1452	2983	1301
Flt Permitted	0.37	1.00		0.31	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	608	1496		513	1584		612	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	83	66	200	75	141	2076	93	75	525	43
RTOR Reduction (vph)	0	16	0	0	16	0	0	0	18	0	0	25
Lane Group Flow (vph)	117	292	0	66	259	0	141	2076	75	75	525	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	252	387		230	410		350	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.20		0.02	0.16		0.03	c0.68		c0.03	0.18	
v/s Ratio Perm	0.11			0.07			0.16		0.06	0.17		0.01
v/c Ratio	0.46	0.76		0.29	0.63		0.40	1.64	0.14	0.43	0.43	0.03
Uniform Delay, d1	22.5	29.0		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.70	0.49	1.00	1.00	1.00
Incremental Delay, d2	6.0	12.9		3.1	7.2		2.8	292.0	0.5	7.6	1.1	0.1
Delay (s)	28.6	41.9		25.0	35.2		11.0	309.6	8.1	25.7	18.9	15.0
Level of Service	C	D		C	D		B	F	A	C	B	B
Approach Delay (s)		38.2			33.2			279.3			19.5	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	184.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	218	32	15	149	16	22	166	27	33	148	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.99	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1837			1839			1899			1931	
Flt Permitted		0.97			0.97			0.96			0.94	
Satd. Flow (perm)		1782			1791			1840			1822	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	225	33	15	154	16	23	171	28	34	153	22
RTOR Reduction (vph)	0	7	0	0	5	0	0	8	0	0	6	0
Lane Group Flow (vph)	0	278	0	0	180	0	0	214	0	0	203	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		740			744			849			841	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.10			c0.12			0.11	
v/c Ratio		0.38			0.24			0.25			0.24	
Uniform Delay, d1		13.2			12.3			10.7			10.6	
Progression Factor		1.00			0.66			1.11			1.00	
Incremental Delay, d2		1.5			0.8			0.7			0.7	
Delay (s)		14.6			9.0			12.5			11.3	
Level of Service		B			A			B			B	
Approach Delay (s)		14.6			9.0			12.5			11.3	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	37	9	162	23	45	384	33	17	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1466	2989		1302	3018		1529	3093		1492	2868	
Flt Permitted	0.62	1.00		0.60	1.00		0.68	1.00		0.48	1.00	
Satd. Flow (perm)	960	2989		825	3018		1093	3093		757	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	41	10	180	26	50	427	37	19	96	19
RTOR Reduction (vph)	0	26	0	0	18	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	216	0	10	188	0	50	454	0	19	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	281	874		241	882		639	1808		443	1677	
v/s Ratio Prot		c0.07			0.06			c0.15			0.04	
v/s Ratio Perm	0.03			0.01			0.05			0.03		
v/c Ratio	0.10	0.25		0.04	0.21		0.08	0.25		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.4		5.9	6.6		5.8	5.8	
Progression Factor	0.73	0.73		0.76	0.74		0.91	0.95		0.52	0.46	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.8	13.5		12.8	13.4		5.6	6.6		3.1	2.8	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.4			13.4			6.5			2.8	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	39	28	429	24	14	178	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2866			1878			1807	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1046	2952		965	2866			1838			1742	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	43	31	477	27	16	198	17
RTOR Reduction (vph)	0	23	0	0	26	0	0	3	0	0	4	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	532	0	0	227	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	418	1181		386	1146			877			831	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.29			0.13	
v/c Ratio	0.12	0.18		0.05	0.13			0.61			0.27	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.5			10.2	
Progression Factor	1.02	0.93		0.85	0.87			1.26			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			3.0			0.8	
Delay (s)	13.1	12.1		10.3	11.0			18.8			11.0	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.3			10.9			18.8			11.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	127	63	2	84	36	22	275	9	7	184	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.95			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1876		1587	1870			1971			1933	
Flt Permitted	0.67	1.00		0.56	1.00			0.97			0.99	
Satd. Flow (perm)	1135	1876		942	1870			1925			1916	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	141	70	2	93	40	24	306	10	8	204	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	100	211	0	2	133	0	0	340	0	0	244	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	349	577		290	575			1096			1091	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.09			0.00				c0.18			0.13	
v/c Ratio	0.29	0.37		0.01	0.23			0.31			0.22	
Uniform Delay, d1	17.1	17.6		15.6	16.8			7.3			6.9	
Progression Factor	0.91	0.90		0.89	0.92			0.98			1.00	
Incremental Delay, d2	2.0	1.8		0.0	0.9			0.7			0.5	
Delay (s)	17.6	17.6		14.0	16.4			7.9			7.4	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.6			16.3			7.9			7.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	9	55	1	3	12	40	492	6	2	201	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1672		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.62	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1260	1672		1279	1422		971	1631	1392	648	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	136	10	61	1	3	13	44	547	7	2	223	56
RTOR Reduction (vph)	0	44	0	0	9	0	0	0	3	0	0	22
Lane Group Flow (vph)	136	27	0	1	7	0	44	547	4	2	223	34
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		354	394		583	979	835	389	1144	856
v/s Ratio Prot		0.02			0.00			c0.34			0.12	
v/s Ratio Perm	c0.11			0.00			0.05		0.00	0.00		0.02
v/c Ratio	0.39	0.06		0.00	0.02		0.08	0.56	0.01	0.01	0.19	0.04
Uniform Delay, d1	19.0	17.3		17.0	17.1		5.4	7.8	5.2	5.2	5.9	5.3
Progression Factor	1.46	2.40		1.00	1.00		1.17	1.10	1.33	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.2		0.0	0.1		0.2	1.7	0.0	0.0	0.4	0.1
Delay (s)	31.0	41.8		17.0	17.1		6.5	10.3	6.9	5.2	6.3	5.4
Level of Service	C	D		B	B		A	B	A	A	A	A
Approach Delay (s)		34.7			17.1			10.0			6.1	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	241	76	123	376	0	0	0	0	74	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2826		1621	3288					1574	2907	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2826		846	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	254	80	129	396	0	0	0	0	78	321	380
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	304	0	129	396	0	0	0	0	78	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		933		652	1940					504	930	
v/s Ratio Prot		c0.11		0.05	c0.12					0.05	c0.17	
v/s Ratio Perm				0.07								
v/c Ratio		0.33		0.20	0.20					0.15	0.52	
Uniform Delay, d1		25.1		10.6	9.6					24.3	27.8	
Progression Factor		1.00		1.95	2.06					1.00	1.00	
Incremental Delay, d2		0.9		0.6	0.2					0.7	2.1	
Delay (s)		26.1		21.2	19.8					25.0	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.1			20.2			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	186	0	0	324	69	174	554	326	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2831		1750	1782	1514			
Flt Permitted	0.34	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	603	3054			2831		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	196	0	0	341	73	183	583	343	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	230	0	0	0
Lane Group Flow (vph)	136	196	0	0	396	0	183	583	113	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	679	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.14		0.10	c0.33				
v/s Ratio Perm	0.04								0.07			
v/c Ratio	0.20	0.11			0.67		0.32	0.99	0.23			
Uniform Delay, d1	11.8	9.4			36.3		25.1	33.4	24.3			
Progression Factor	0.24	0.25			1.00		0.75	0.79	1.93			
Incremental Delay, d2	0.6	0.1			5.8		0.9	27.7	0.7			
Delay (s)	3.5	2.5			42.1		19.8	54.1	47.6			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			42.1			46.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	37.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	457	372	34	592	0	0	0	0	4	215	195
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3107		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.17	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3107		284	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	476	388	35	617	0	0	0	0	4	224	203
RTOR Reduction (vph)	0	147	0	0	0	0	0	0	0	0	0	134
Lane Group Flow (vph)	0	717	0	35	617	0	0	0	0	4	224	69
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1119		393	1898					543	1074	491
v/s Ratio Prot		c0.23		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.64		0.09	0.33					0.01	0.21	0.14
Uniform Delay, d1		26.6		12.5	10.9					21.8	23.4	22.9
Progression Factor		1.00		0.54	0.68					0.73	0.79	0.92
Incremental Delay, d2		2.8		0.2	0.2					0.0	0.4	0.5
Delay (s)		29.4		6.9	7.6					16.0	18.9	21.5
Level of Service		C		A	A					B	B	C
Approach Delay (s)		29.4			7.5			0.0			20.1	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	401	60	0	0	57	5	569	646	62	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3042			3079		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1084	2339			3079		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	413	62	0	0	59	5	587	666	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	38	0	0	0
Lane Group Flow (vph)	206	269	0	0	60	0	587	666	26	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1446			462		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.38	c0.41	0.02			
v/s Ratio Perm	c0.05	0.03										
v/c Ratio	0.30	0.19			0.13		1.02	1.10	0.05			
Uniform Delay, d1	14.0	13.3			36.8		31.5	31.5	20.2			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		42.9	66.6	0.2			
Delay (s)	4.1	3.5			37.4		74.4	98.1	20.4			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.8			37.4			83.8			0.0	
Approach LOS		A			D			F			A	

Intersection Summary			
HCM Average Control Delay	61.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	163	284	70	61	189	117	43	1151	72	100	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2842			2770		1447	3069	1336	1494	2956	1270
Flt Permitted		0.66			0.79		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1916			2214		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	170	296	73	64	197	122	45	1199	75	104	496	44
RTOR Reduction (vph)	0	14	0	0	64	0	0	0	28	0	0	27
Lane Group Flow (vph)	0	525	0	0	319	0	45	1199	47	104	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		877			729		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.39		c0.03	0.17	
v/s Ratio Perm		0.21			0.14		0.06		0.04	0.27		0.01
v/c Ratio		0.60			0.44		0.15	0.99	0.09	0.72	0.43	0.03
Uniform Delay, d1		18.9			22.3		14.7	25.6	16.5	19.2	18.7	16.1
Progression Factor		1.00			1.00		1.32	0.86	1.42	1.82	1.63	3.13
Incremental Delay, d2		3.0			1.9		0.6	17.7	0.2	24.6	1.0	0.1
Delay (s)		21.9			24.2		20.2	39.8	23.6	59.5	31.7	50.7
Level of Service		C			C		C	D	C	E	C	D
Approach Delay (s)		21.9			24.2			38.2			37.5	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	33.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	441	0	0	339	85	28	63	115	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.92				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1707			1668			1574				
Flt Permitted		0.93			1.00			0.99				
Satd. Flow (perm)		1599			1668			1574				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	490	0	0	377	94	31	70	128	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	70	0	0	0	0
Lane Group Flow (vph)	0	539	0	0	457	0	0	159	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		836			872			557				
v/s Ratio Prot					0.27							
v/s Ratio Perm		c0.34						0.10				
v/c Ratio		0.64			0.52			0.28				
Uniform Delay, d1		11.2			10.2			15.1				
Progression Factor		1.00			0.56			1.00				
Incremental Delay, d2		3.8			2.0			1.3				
Delay (s)		15.0			7.7			16.4				
Level of Service		B			A			B				
Approach Delay (s)		15.0			7.7			16.4			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	458	31	23	355	53	16	175	47	68	107	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.98			0.97			0.99	
Flt Protected		1.00			1.00			1.00			0.98	
Satd. Flow (prot)		1889			1831			3160			3149	
Flt Permitted		0.93			0.96			0.93			0.79	
Satd. Flow (perm)		1773			1759			2958			2534	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	509	34	26	394	59	18	194	52	76	119	21
RTOR Reduction (vph)	0	3	0	0	8	0	0	30	0	0	12	0
Lane Group Flow (vph)	0	590	0	0	471	0	0	234	0	0	204	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		818			812			1229			1053	
v/s Ratio Prot												
v/s Ratio Perm		c0.33			0.27			0.08			c0.08	
v/c Ratio		0.72			0.58			0.19			0.19	
Uniform Delay, d1		14.1			12.9			12.1			12.1	
Progression Factor		0.65			0.55			0.95			0.70	
Incremental Delay, d2		4.5			2.9			0.3			0.4	
Delay (s)		13.6			10.0			11.8			8.9	
Level of Service		B			A			B			A	
Approach Delay (s)		13.6			10.0			11.8			8.9	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	355	20	29	302	64	46	319	92	60	96	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1502	2948		1585	2934		1497	3031		1594	2943	
Flt Permitted	0.47	1.00		0.46	1.00		0.67	1.00		0.48	1.00	
Satd. Flow (perm)	744	2948		773	2934		1056	3031		806	2943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	394	22	32	336	71	51	354	102	67	107	22
RTOR Reduction (vph)	0	6	0	0	28	0	0	41	0	0	10	0
Lane Group Flow (vph)	56	410	0	32	379	0	51	415	0	67	119	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	252	998		262	993		569	1632		434	1585	
v/s Ratio Prot		c0.14			0.13			c0.14			0.04	
v/s Ratio Perm	0.08			0.04			0.05			0.08		
v/c Ratio	0.22	0.41		0.12	0.38		0.09	0.25		0.15	0.07	
Uniform Delay, d1	15.4	16.5		14.8	16.3		7.3	8.0		7.6	7.2	
Progression Factor	0.63	0.62		0.88	0.89		0.71	0.73		1.34	1.35	
Incremental Delay, d2	1.6	1.0		0.9	1.1		0.3	0.4		0.8	0.1	
Delay (s)	11.2	11.3		14.1	15.6		5.5	6.2		10.9	9.8	
Level of Service	B	B		B	B		A	A		B	A	
Approach Delay (s)		11.3			15.5			6.2			10.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	380	131	100	316	82	37	324	60	41	136	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1381	2934		1337	3524			3413			3314	
Flt Permitted	0.49	1.00		0.42	1.00			0.91			0.84	
Satd. Flow (perm)	719	2934		587	3524			3134			2805	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	400	138	105	333	86	39	341	63	43	143	40
RTOR Reduction (vph)	0	53	0	0	35	0	0	20	0	0	24	0
Lane Group Flow (vph)	87	485	0	105	384	0	0	423	0	0	202	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	343	1399		280	1681			1254			1122	
v/s Ratio Prot		0.17			0.11							
v/s Ratio Perm	0.12			c0.18				c0.13			0.07	
v/c Ratio	0.25	0.35		0.38	0.23			0.34			0.18	
Uniform Delay, d1	10.1	10.7		10.8	10.0			13.5			12.6	
Progression Factor	1.65	1.85		0.77	0.72			1.00			0.64	
Incremental Delay, d2	1.7	0.7		3.3	0.3			0.7			0.3	
Delay (s)	18.4	20.4		11.6	7.4			14.3			8.4	
Level of Service	B	C		B	A			B			A	
Approach Delay (s)		20.1			8.3			14.3			8.4	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	307	99	104	371	104	82	84	88	88	84	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3036			1822			1826	
Flt Permitted		0.74	1.00		0.76			0.80			0.78	
Satd. Flow (perm)		1223	1409		2327			1482			1447	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	110	341	110	116	412	116	91	93	98	98	93	91
RTOR Reduction (vph)	0	0	52	0	29	0	0	30	0	0	26	0
Lane Group Flow (vph)	0	451	58	0	615	0	0	252	0	0	256	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		640	737		1217			479			467	
v/s Ratio Prot												
v/s Ratio Perm		c0.37	0.04		0.26			0.17			c0.18	
v/c Ratio		0.70	0.08		0.51			0.53			0.55	
Uniform Delay, d1		11.7	7.7		10.1			17.9			18.1	
Progression Factor		1.78	4.62		0.43			1.00			1.00	
Incremental Delay, d2		6.2	0.2		1.4			4.1			4.6	
Delay (s)		27.1	35.8		5.7			22.0			22.6	
Level of Service		C	D		A			C			C	
Approach Delay (s)		28.8			5.7			22.0			22.6	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	386	22	15	450	63	40	103	41	43	90	101
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3017		1573	3003			3457			3397	
Flt Permitted	0.38	1.00		0.46	1.00			0.86			0.88	
Satd. Flow (perm)	597	3017		764	3003			3010			3010	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	429	24	17	500	70	44	114	46	48	100	112
RTOR Reduction (vph)	0	6	0	0	17	0	0	25	0	0	62	0
Lane Group Flow (vph)	83	447	0	17	553	0	0	179	0	0	198	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	257	1300		329	1294			1343			1343	
v/s Ratio Prot		0.15			c0.18							
v/s Ratio Perm	0.14			0.02				0.06			c0.07	
v/c Ratio	0.32	0.34		0.05	0.43			0.13			0.15	
Uniform Delay, d1	12.2	12.4		10.8	12.9			10.6			10.7	
Progression Factor	0.96	0.99		1.14	1.00			0.98			0.83	
Incremental Delay, d2	2.5	0.5		0.1	0.5			0.2			0.2	
Delay (s)	14.3	12.8		12.4	13.3			10.6			9.1	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.0			13.3			10.6			9.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	458	74	94	469	284	51	332	92	222	159	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3076			3146			3118	
Flt Permitted		0.63			0.74			0.87			0.63	
Satd. Flow (perm)		2014			2279			2748			2005	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	509	82	104	521	316	57	369	102	247	177	58
RTOR Reduction (vph)	0	16	0	0	98	0	0	32	0	0	17	0
Lane Group Flow (vph)	0	671	0	0	843	0	0	496	0	0	465	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		806			912			1263			617	
v/s Ratio Prot								c0.04				
v/s Ratio Perm		0.33			c0.37			0.14			c0.23	
v/c Ratio		0.83			0.92			0.39			0.96dl	
Uniform Delay, d1		17.5			18.6			12.1			20.3	
Progression Factor		1.73			1.00			1.00			0.89	
Incremental Delay, d2		9.7			16.3			0.9			8.3	
Delay (s)		40.0			34.9			13.0			26.4	
Level of Service		D			C			B			C	
Approach Delay (s)		40.0			34.9			13.0			26.4	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	30.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	724	121	45	759	0	142	0	70	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2975			3032			1585				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2975			2542			1308				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	804	134	50	843	0	158	0	78	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	920	0	0	893	0	0	216	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		63.0			33.0			18.0				
Effective Green, g (s)		56.0			33.0			18.0				
Actuated g/C Ratio		0.62			0.37			0.20				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1851			932			262				
v/s Ratio Prot		c0.31										
v/s Ratio Perm					c0.35			c0.17				
v/c Ratio		0.50			0.96			0.82				
Uniform Delay, d1		9.3			27.8			34.5				
Progression Factor		0.04			1.57			1.00				
Incremental Delay, d2		0.4			18.9			24.6				
Delay (s)		0.8			62.5			59.1				
Level of Service		A			E			E				
Approach Delay (s)		0.8			62.5			59.1			0.0	
Approach LOS		A			E			E			A	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	123	502	187	274	646	183	103	20	185	78	7	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1756		1629	1714	1457
Flt Permitted	0.32	1.00		0.20	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	508	3020		340	3257	1457		1581		690	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	137	558	208	304	718	203	114	22	206	87	8	86
RTOR Reduction (vph)	0	42	0	0	0	104	0	74	0	0	0	46
Lane Group Flow (vph)	137	724	0	304	718	99	0	268	0	87	8	40
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	40.0	30.6		47.6	35.2	43.8		20.8		32.4	32.4	41.8
Effective Green, g (s)	40.0	30.6		47.6	35.2	43.8		20.8		32.4	32.4	41.8
Actuated g/C Ratio	0.44	0.34		0.53	0.39	0.49		0.23		0.36	0.36	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	331	1027		380	1274	709		365		338	617	677
v/s Ratio Prot	0.04	0.24		c0.12	0.22	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.17		0.07		0.02
v/c Ratio	0.41	0.71		0.80	0.56	0.14		0.73		0.26	0.01	0.06
Uniform Delay, d1	15.4	25.8		14.8	21.4	12.7		32.0		21.2	18.5	13.3
Progression Factor	1.91	1.58		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	3.6		12.0	1.8	0.1		8.0		0.4	0.0	0.1
Delay (s)	30.5	44.5		26.8	23.2	12.8		40.0		21.6	18.5	13.3
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		42.4			22.4			40.0			17.5	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	517	247	6	531	0	0	0	0	32	0	572
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	574	274	7	590	0	0	0	0	36	0	636
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	590			574			883	1178	287	891	1178	295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	590			574			883	1178	287	891	1178	295
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	85	100	8
cM capacity (veh/h)	961			974			19	184	701	231	184	692

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	287	287	274	203	393	36	636
Volume Left	0	0	0	7	0	36	0
Volume Right	0	0	274	0	0	0	636
cSH	1700	1700	1700	974	1700	231	692
Volume to Capacity	0.17	0.17	0.16	0.01	0.23	0.15	0.92
Queue Length 95th (ft)	0	0	0	1	0	13	307
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	23.4	41.6
Lane LOS				A		C	E
Approach Delay (s)	0.0			0.1		40.6	
Approach LOS						E	

Intersection Summary			
Average Delay	12.9		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	549	0	537	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	610	0	597	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	305	305	597
Volume Left (vph)	305	305	597
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	7.0	7.0	5.8
Degree Utilization, x	0.59	0.59	0.95
Capacity (veh/h)	499	499	618
Control Delay (s)	18.2	18.2	49.1
Approach Delay (s)	18.2		49.1
Approach LOS	C		E

Intersection Summary			
Delay	33.5		
HCM Level of Service	D		
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	373	46	130	332	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3097		1574	3149						3014	
Flt Permitted		1.00		0.43	1.00						0.97	
Satd. Flow (perm)		3097		706	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	414	51	144	369	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	454	0	144	369	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1312		509	1815						957	
v/s Ratio Prot		c0.15		c0.03	0.12						c0.04	
v/s Ratio Perm				0.13								
v/c Ratio		0.35		0.28	0.20						0.12	
Uniform Delay, d1		16.5		11.9	8.6						20.6	
Progression Factor		1.00		0.28	0.23						1.00	
Incremental Delay, d2		0.7		1.3	0.2						0.2	
Delay (s)		17.3		4.6	2.2						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.3			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	377	0	0	413	76	49	65	59	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.95				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1629	3257			3076			4377				
Flt Permitted	0.37	1.00			1.00			0.99				
Satd. Flow (perm)	640	3257			3076			4377				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	419	0	0	459	84	54	72	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	45	0	0	0	0
Lane Group Flow (vph)	76	419	0	0	525	0	0	147	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	478	1839			1267			1390				
v/s Ratio Prot	0.02	c0.13			c0.17			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.23			0.41			0.11				
Uniform Delay, d1	12.3	9.2			17.7			20.5				
Progression Factor	0.31	0.30			1.00			1.00				
Incremental Delay, d2	0.7	0.3			1.0			0.2				
Delay (s)	4.5	3.1			18.7			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.3			18.7			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	357	39	40	256	33	118	85	86	65	91	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			0.98			0.96			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2986			2976			1773			1752	
Flt Permitted		0.89			0.85			0.77			0.86	
Satd. Flow (perm)		2673			2560			1387			1526	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	397	43	44	284	37	131	94	96	72	101	140
RTOR Reduction (vph)	0	11	0	0	13	0	0	24	0	0	45	0
Lane Group Flow (vph)	0	472	0	0	352	0	0	297	0	0	268	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		946			906			683			751	
v/s Ratio Prot												
v/s Ratio Perm		c0.18			0.14			c0.21			0.18	
v/c Ratio		0.50			0.39			0.44			0.36	
Uniform Delay, d1		16.5			15.7			10.7			10.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.9			1.3			2.0			1.3	
Delay (s)		18.4			17.0			12.7			11.5	
Level of Service		B			B			B			B	
Approach Delay (s)		18.4			17.0			12.7			11.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	295	39	59	200	75	71	1001	104	126	428	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1551	3023		1593	3505		1486	3040	1347	1494	3011	1271
Flt Permitted	0.55	1.00		0.49	1.00		0.43	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	891	3023		819	3505		675	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	311	41	62	211	79	75	1054	109	133	451	84
RTOR Reduction (vph)	0	12	0	0	45	0	0	0	65	0	0	51
Lane Group Flow (vph)	178	340	0	62	245	0	75	1054	44	133	451	33
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	346	996		325	1155		324	1180	523	144	1169	493
v/s Ratio Prot	c0.02	0.11		0.01	0.07		0.01	c0.35		c0.04	0.15	
v/s Ratio Perm	c0.16			0.06			0.09		0.03	0.35		0.03
v/c Ratio	0.51	0.34		0.19	0.21		0.23	0.89	0.08	0.92	0.39	0.07
Uniform Delay, d1	20.9	21.5		18.6	20.5		15.0	24.3	16.4	21.1	18.7	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	2.17	0.62	0.80
Incremental Delay, d2	5.4	0.9		1.3	0.4		1.7	10.5	0.3	54.0	0.9	0.2
Delay (s)	26.3	22.5		19.9	21.0		16.6	34.8	16.8	99.7	12.6	13.3
Level of Service	C	C		B	C		B	C	B	F	B	B
Approach Delay (s)		23.8			20.8			32.1			30.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	434	18	25	261	21	35	113	68	71	57	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.97	1.00
Satd. Flow (prot)		1935	1382		1947	1331		1970	1452		1933	1430
Flt Permitted		0.96	1.00		0.95	1.00		0.92	1.00		0.80	1.00
Satd. Flow (perm)		1860	1382		1848	1331		1839	1452		1581	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	457	19	26	275	22	37	119	72	75	60	43
RTOR Reduction (vph)	0	0	10	0	0	12	0	0	42	0	0	25
Lane Group Flow (vph)	0	497	9	0	301	10	0	156	30	0	135	18
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		858	638		853	614		764	603		657	594
v/s Ratio Prot												
v/s Ratio Perm		c0.27	0.01		0.16	0.01		0.08	0.02		c0.09	0.01
v/c Ratio		0.58	0.01		0.35	0.02		0.20	0.05		0.21	0.03
Uniform Delay, d1		12.9	9.5		11.3	9.5		12.1	11.3		12.1	11.2
Progression Factor		1.00	1.00		0.38	0.16		1.18	1.66		0.99	0.83
Incremental Delay, d2		2.8	0.0		1.1	0.0		0.6	0.2		0.7	0.1
Delay (s)		15.7	9.5		5.3	1.6		14.9	18.9		12.7	9.4
Level of Service		B	A		A	A		B	B		B	A
Approach Delay (s)		15.5			5.1			16.2			11.9	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
1051: 115th Street & State Street

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	514	10	17	268	43	13	247	35	81	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3031		1520	2977		1520	2983		1520	2904	
Flt Permitted	0.95	1.00		0.43	1.00		0.68	1.00		0.54	1.00	
Satd. Flow (perm)	1520	3031		692	2977		1091	2983		871	2904	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	571	11	19	298	48	14	274	39	90	78	33
RTOR Reduction (vph)	0	2	0	0	20	0	0	17	0	0	19	0
Lane Group Flow (vph)	73	580	0	19	326	0	14	296	0	90	92	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1492		234	1008		453	1239		362	1206	
v/s Ratio Prot	c0.05	c0.19			0.11			0.10			0.03	
v/s Ratio Perm				0.03			0.01			c0.10		
v/c Ratio	0.45	0.39		0.08	0.32		0.03	0.24		0.25	0.08	
Uniform Delay, d1	27.2	10.4		14.6	16.0		11.3	12.3		12.4	11.5	
Progression Factor	1.07	0.60		1.00	1.00		0.54	0.56		1.12	1.08	
Incremental Delay, d2	7.8	0.7		0.7	0.9		0.1	0.4		1.6	0.1	
Delay (s)	36.9	6.9		15.3	16.8		6.2	7.3		15.5	12.5	
Level of Service	D	A		B	B		A	A		B	B	
Approach Delay (s)		10.3			16.7			7.3			13.8	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	253	348	242	216	43	109	310	56	25	192	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.91		1.00	0.97			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1520	2776		1520	2964			3163			3190	
Flt Permitted	0.58	1.00		0.95	1.00			0.80			0.88	
Satd. Flow (perm)	921	2776		1520	2964			2565			2816	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	281	387	269	240	48	121	344	62	28	213	28
RTOR Reduction (vph)	0	270	0	0	22	0	0	17	0	0	15	0
Lane Group Flow (vph)	41	398	0	269	266	0	0	510	0	0	254	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	15.0	15.0		14.0	32.0			17.0			17.0	
Effective Green, g (s)	15.0	15.0		14.0	32.0			17.0			17.0	
Actuated g/C Ratio	0.25	0.25		0.23	0.53			0.28			0.28	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	230	694		355	1581			727			798	
v/s Ratio Prot		c0.14		c0.18	0.09							
v/s Ratio Perm	0.04							c0.20			0.09	
v/c Ratio	0.18	0.57		0.76	0.17			0.70			0.32	
Uniform Delay, d1	17.7	19.7		21.4	7.2			19.2			16.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.7	3.4		14.0	0.2			5.6			1.0	
Delay (s)	19.4	23.1		35.5	7.4			24.8			18.0	
Level of Service	B	C		D	A			C			B	
Approach Delay (s)		22.9			21.0			24.8			18.0	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	22.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	298	14	70	466	70	34	94	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1587			1566			3164				
Flt Permitted		0.97			0.92			0.99				
Satd. Flow (perm)		1535			1451			3164				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	331	16	78	518	78	38	104	180	0	0	0
RTOR Reduction (vph)	0	2	0	0	6	0	0	138	0	0	0	0
Lane Group Flow (vph)	0	363	0	0	668	0	0	184	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		989			935			735				
v/s Ratio Prot												
v/s Ratio Perm		0.24			c0.46			0.06				
v/c Ratio		0.37			0.71			0.25				
Uniform Delay, d1		5.4			7.6			20.3				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		1.1			4.6			0.8				
Delay (s)		6.4			12.3			21.1				
Level of Service		A			B			C				
Approach Delay (s)		6.4			12.3			21.1			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	94	366	477	44	66	126
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	99	385	502	46	69	133
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked						
vC, conflicting volume	569				942	298
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	569				942	298
tC, single (s)	4.3				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	89				70	81
cM capacity (veh/h)	920				229	686

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	227	257	335	214	69	133
Volume Left	99	0	0	0	69	0
Volume Right	0	0	0	46	0	133
cSH	920	1700	1700	1700	229	686
Volume to Capacity	0.11	0.15	0.20	0.13	0.30	0.19
Queue Length 95th (ft)	9	0	0	0	31	18
Control Delay (s)	4.7	0.0	0.0	0.0	27.5	11.5
Lane LOS	A				D	B
Approach Delay (s)	2.2		0.0		17.0	
Approach LOS					C	

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	477	1	27	691	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1664		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	530	1	30	768	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	531	0	0	798	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	74.0			44.0		
Effective Green, g (s)	70.0			44.0		
Actuated g/C Ratio	0.78			0.49		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1333			814		
v/s Ratio Prot	c0.31					
v/s Ratio Perm				c0.48		
v/c Ratio	0.40			0.98		
Uniform Delay, d1	3.2			22.6		
Progression Factor	0.03			1.00		
Incremental Delay, d2	0.5			27.1		
Delay (s)	0.6			49.7		
Level of Service	A			D		
Approach Delay (s)	0.6			49.7	0.0	
Approach LOS	A			D	A	

Intersection Summary			
HCM Average Control Delay	30.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	186	195	25	569	0	0	0	0	3	0	271
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	207	217	28	632	0	0	0	0	3	0	301
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	632			207			1003	1003	212	791	894	632
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	632			207			1003	1003	212	791	894	632
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	28
cM capacity (veh/h)	960			983			55	237	800	278	274	418

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	138	286	660	3	301
Volume Left	0	0	28	3	0
Volume Right	0	217	0	0	301
cSH	1700	1700	983	278	418
Volume to Capacity	0.08	0.17	0.03	0.01	0.72
Queue Length 95th (ft)	0	0	2	1	140
Control Delay (s)	0.0	0.0	0.7	18.1	32.8
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	32.7	
Approach LOS				D	

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	189	0	594	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	210	0	660	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	105	105	660
Volume Left (vph)	105	105	660
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.9
Degree Utilization, x	0.20	0.20	0.89
Capacity (veh/h)	511	512	734
Control Delay (s)	10.3	10.3	33.9
Approach Delay (s)	10.3		33.9
Approach LOS	B		D

Intersection Summary			
Delay	28.2		
HCM Level of Service	D		
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	471	210	159	474	0	0	0	0	132	117	300
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3693	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3693	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	496	221	167	499	0	0	0	0	139	123	316
RTOR Reduction (vph)	0	0	149	0	0	0	0	0	0	0	98	94
Lane Group Flow (vph)	0	496	72	0	666	0	0	0	0	76	246	64
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.1	39.1		72.6					20.2	20.2	65.3
Effective Green, g (s)		39.1	39.1		72.6					20.2	20.2	65.3
Actuated g/C Ratio		0.24	0.24		0.45					0.13	0.13	0.41
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		728	294		1530					170	466	458
v/s Ratio Prot		c0.17			c0.20					0.06	c0.07	
v/s Ratio Perm			0.06									0.06
v/c Ratio		0.68	0.25		0.44					0.45	0.53	0.14
Uniform Delay, d1		54.8	48.6		29.7					64.7	65.4	29.7
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		5.1	2.0		0.1					1.9	1.1	0.1
Delay (s)		59.9	50.6		0.7					66.6	66.5	29.9
Level of Service		E	D		A					E	E	C
Approach Delay (s)		57.0			0.7			0.0			56.5	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.1
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	212	391	0	0	395	93	238	150	144	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	3001				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	3001				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	236	434	0	0	439	103	264	167	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	82	0	63	0	0	0	0
Lane Group Flow (vph)	236	434	0	0	439	21	201	327	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	79.4	79.4			32.7	32.7	21.0	21.0				
Effective Green, g (s)	79.4	79.4			32.7	32.7	21.0	21.0				
Actuated g/C Ratio	0.50	0.50			0.20	0.20	0.13	0.13				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	781	1670			644	298	201	394				
v/s Ratio Prot	c0.15	0.13			c0.14		c0.13	0.11				
v/s Ratio Perm						0.01						
v/c Ratio	0.30	0.26			0.68	0.07	1.00	0.83				
Uniform Delay, d1	23.9	23.3			58.8	51.4	69.5	67.8				
Progression Factor	0.07	0.07			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			3.0	0.1	63.5	13.8				
Delay (s)	1.8	1.8			61.8	51.5	133.0	81.6				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.8			59.9			99.1			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	51.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.9
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	220	325	75	44	154	54	88	824	96	93	448	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1538	1556	1328	1595	1713		1525	2965		1509	2870	
Flt Permitted	0.49	1.00	1.00	0.42	1.00		0.34	1.00		0.13	1.00	
Satd. Flow (perm)	791	1556	1328	706	1713		539	2965		214	2870	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	342	79	46	162	57	93	867	101	98	472	109
RTOR Reduction (vph)	0	0	52	0	14	0	0	10	0	0	22	0
Lane Group Flow (vph)	232	342	27	46	205	0	93	958	0	98	559	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		39.6	34.1		39.6	34.1	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	368	557	461	269	539		275	1125		154	1089	
v/s Ratio Prot	c0.04	c0.22		0.01	0.12		0.02	c0.32		c0.03	0.19	
v/s Ratio Perm	0.21		0.02	0.05			0.12			0.23		
v/c Ratio	0.63	0.61	0.06	0.17	0.38		0.34	0.85		0.64	0.51	
Uniform Delay, d1	21.3	23.7	19.6	20.5	24.0		16.6	25.6		18.6	21.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.5	5.0	0.2	0.3	2.0		0.7	8.2		8.3	1.7	
Delay (s)	24.8	28.7	19.8	20.8	26.0		17.3	33.8		26.9	23.2	
Level of Service	C	C	B	C	C		B	C		C	C	
Approach Delay (s)		26.3			25.1			32.3			23.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	389	16	18	212	32	35	80	67	62	44	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.95			0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99			0.98	
Satd. Flow (prot)		1909	1482		1599	1198		1841			1814	
Flt Permitted		0.95	1.00		0.96	1.00		0.94			0.84	
Satd. Flow (perm)		1831	1482		1543	1198		1741			1549	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	409	17	19	223	34	37	84	71	65	46	41
RTOR Reduction (vph)	0	0	8	0	0	17	0	33	0	0	20	0
Lane Group Flow (vph)	0	455	9	0	242	17	0	159	0	0	132	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		901	730		760	590		723			643	
v/s Ratio Prot												
v/s Ratio Perm		c0.25	0.01		0.16	0.01		c0.09			0.08	
v/c Ratio		0.50	0.01		0.32	0.03		0.22			0.20	
Uniform Delay, d1		11.1	8.4		9.9	8.5		12.2			12.1	
Progression Factor		1.00	1.00		2.04	3.30		1.00			1.42	
Incremental Delay, d2		2.0	0.0		1.0	0.1		0.7			0.7	
Delay (s)		13.2	8.5		21.3	28.1		12.9			17.9	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		13.0			22.1			12.9			17.9	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	430	24	19	189	8	41	228	73	18	53	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1658	1392		1584	1497		1755	1390		1656	
Flt Permitted		0.91	1.00		0.82	1.00		0.95	1.00		0.93	
Satd. Flow (perm)		1527	1392		1304	1497		1677	1390		1559	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	453	25	20	199	8	43	240	77	19	56	32
RTOR Reduction (vph)	0	0	10	0	0	5	0	0	39	0	16	0
Lane Group Flow (vph)	0	532	15	0	219	3	0	283	38	0	91	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		540	493		461	530		826	684		768	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.01		0.17	0.00		c0.17	0.03		0.06	
v/c Ratio		0.99	0.03		0.48	0.01		0.34	0.06		0.12	
Uniform Delay, d1		20.8	13.7		16.3	13.6		10.1	8.6		8.9	
Progression Factor		1.60	1.95		1.05	1.10		0.30	0.27		1.17	
Incremental Delay, d2		33.7	0.1		3.4	0.0		0.8	0.1		0.3	
Delay (s)		67.0	26.8		20.6	15.0		3.9	2.5		10.7	
Level of Service		E	C		C	B		A	A		B	
Approach Delay (s)		65.2			20.4			3.6			10.7	
Approach LOS		E			C			A			B	

Intersection Summary			
HCM Average Control Delay	34.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	444	21	31	9	18	15	26	352	19	8	229	169
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.98			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.95			0.99			1.00	0.85
Flt Protected		0.95	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1754	1390		1758			1979			1873	1328
Flt Permitted		0.73	1.00		0.90			0.97			0.99	1.00
Satd. Flow (perm)		1338	1390		1608			1932			1852	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	493	23	34	10	20	17	29	391	21	9	254	188
RTOR Reduction (vph)	0	0	15	0	13	0	0	3	0	0	0	95
Lane Group Flow (vph)	0	516	19	0	34	0	0	438	0	0	263	93
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		607	577		421			951			912	654
v/s Ratio Prot		c0.10										
v/s Ratio Perm		0.25	0.01		0.02			c0.23			0.14	0.07
v/c Ratio		0.85	0.03		0.08			0.46			0.29	0.14
Uniform Delay, d1		17.2	11.3		18.1			10.8			9.8	9.0
Progression Factor		1.05	1.62		1.00			0.62			1.00	1.00
Incremental Delay, d2		7.9	0.1		0.4			1.5			0.8	0.5
Delay (s)		25.9	18.3		18.5			8.2			10.6	9.5
Level of Service		C	B		B			A			B	A
Approach Delay (s)		25.4			18.5			8.2			10.1	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	889	222	268	1124	0	0	0	0	275	201	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4313		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.18	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4313		309	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	936	234	282	1183	0	0	0	0	289	212	396
RTOR Reduction (vph)	0	42	0	0	0	0	0	0	0	0	56	56
Lane Group Flow (vph)	0	1128	0	282	1183	0	0	0	0	234	397	154
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		41.2		58.9	57.4					20.6	20.6	20.6
Effective Green, g (s)		41.2		58.9	57.4					20.6	20.6	20.6
Actuated g/C Ratio		0.46		0.65	0.64					0.23	0.23	0.23
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1974		369	2057					325	621	310
v/s Ratio Prot		0.26		c0.10	0.37							
v/s Ratio Perm				c0.40						c0.16	0.15	0.11
v/c Ratio		0.57		0.76	0.58					0.72	0.64	0.50
Uniform Delay, d1		17.9		18.6	9.3					32.0	31.3	30.2
Progression Factor		1.00		0.71	0.66					1.00	1.00	1.00
Incremental Delay, d2		1.2		5.6	0.7					7.7	2.3	1.5
Delay (s)		19.1		18.7	6.9					39.7	33.6	31.7
Level of Service		B		B	A					D	C	C
Approach Delay (s)		19.1			9.2			0.0			34.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	853	0	0	843	234	549	365	422	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1449		4409				
Flt Permitted	0.16	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	489	3138			3119	1449		4409				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	327	898	0	0	887	246	578	384	444	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	138	0	73	0	0	0	0
Lane Group Flow (vph)	327	898	0	0	887	108	0	1333	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	46.4	46.4			33.4	33.4		31.6				
Effective Green, g (s)	46.4	46.4			33.4	33.4		31.6				
Actuated g/C Ratio	0.52	0.52			0.37	0.37		0.35				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	441	1618			1157	538		1548				
v/s Ratio Prot	0.06	c0.29			0.28							
v/s Ratio Perm	c0.32					0.07		0.30				
v/c Ratio	0.74	0.56			0.77	0.20		0.89dl				
Uniform Delay, d1	15.2	14.8			24.9	19.2		27.2				
Progression Factor	1.35	0.59			0.47	0.23		1.00				
Incremental Delay, d2	5.6	1.1			3.8	0.6		5.6				
Delay (s)	26.2	9.9			15.4	5.0		32.8				
Level of Service	C	A			B	A		C				
Approach Delay (s)		14.2			13.2			32.8			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	20.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	581	226	78	784	44	226	178	40	49	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1293	1603	3232		1447	3009		1544	2784	
Flt Permitted	0.20	1.00	1.00	0.34	1.00		0.51	1.00		0.61	1.00	
Satd. Flow (perm)	328	3061	1293	579	3232		780	3009		990	2784	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	612	238	82	825	46	238	187	42	52	117	96
RTOR Reduction (vph)	0	0	114	0	4	0	0	22	0	0	78	0
Lane Group Flow (vph)	111	612	124	82	867	0	238	207	0	52	135	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	43.7	34.7	46.8	40.3	33.0		32.5	26.3		19.6	16.9	
Effective Green, g (s)	43.7	34.7	46.8	40.3	33.0		32.5	26.3		19.6	16.9	
Actuated g/C Ratio	0.49	0.39	0.52	0.45	0.37		0.36	0.29		0.22	0.19	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	283	1180	672	342	1185		371	879		232	523	
v/s Ratio Prot	c0.04	0.20	0.02	0.02	c0.27		c0.09	0.07		0.01	0.05	
v/s Ratio Perm	0.15		0.07	0.09			c0.15			0.04		
v/c Ratio	0.39	0.52	0.18	0.24	0.73		0.64	0.24		0.22	0.26	
Uniform Delay, d1	25.0	21.2	11.5	19.5	24.7		22.1	24.2		28.5	31.2	
Progression Factor	0.89	0.54	0.43	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.1	1.2	0.1	0.4	4.0		3.8	0.5		0.5	0.9	
Delay (s)	25.2	12.7	5.0	19.9	28.7		25.8	24.7		29.0	32.1	
Level of Service	C	B	A	B	C		C	C		C	C	
Approach Delay (s)		12.2			27.9			25.3			31.5	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM Average Control Delay	22.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.5
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	228	286	59	190	102	329	382	75	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.95		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1635	2871		1463	3032		1589	3245		1549	3135	
Flt Permitted	0.54	1.00		0.32	1.00		0.46	1.00		0.48	1.00	
Satd. Flow (perm)	924	2871		490	3032		772	3245		778	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	240	301	62	200	107	346	402	79	96	272	57
RTOR Reduction (vph)	0	206	0	0	64	0	0	15	0	0	17	0
Lane Group Flow (vph)	65	335	0	62	243	0	346	466	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	362	785		233	832		530	1295		340	935	
v/s Ratio Prot	0.01	c0.12		c0.02	0.08		c0.11	0.14		0.02	0.10	
v/s Ratio Perm	0.05			0.07			c0.22			0.08		
v/c Ratio	0.18	0.43		0.27	0.29		0.65	0.36		0.28	0.33	
Uniform Delay, d1	23.8	31.4		24.1	30.1		16.6	22.1		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	1.7		0.7	0.9		3.0	0.8		0.5	1.0	
Delay (s)	24.1	33.1		24.8	30.9		19.6	22.9		22.9	29.7	
Level of Service	C	C		C	C		B	C		C	C	
Approach Delay (s)		32.1			29.9			21.5			28.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	546	81	6	445	125	68	602	7	144	326	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2912			2887		1437	3186		1451	2787	
Flt Permitted		0.60			0.95		0.33	1.00		0.25	1.00	
Satd. Flow (perm)		1766			2732		495	3186		389	2787	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	188	607	90	7	494	139	76	669	8	160	362	117
RTOR Reduction (vph)	0	12	0	0	34	0	0	1	0	0	42	0
Lane Group Flow (vph)	0	873	0	0	606	0	76	676	0	160	437	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		37.0			29.0		28.0	22.0		24.0	20.0	
Effective Green, g (s)		37.0			29.0		28.0	22.0		24.0	20.0	
Actuated g/C Ratio		0.49			0.39		0.37	0.29		0.32	0.27	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		932			1056		260	935		181	743	
v/s Ratio Prot		c0.05					c0.02	0.21		c0.05	0.16	
v/s Ratio Perm		c0.41			0.22		0.09			c0.24		
v/c Ratio		0.94			0.57		0.29	0.72		0.88	0.59	
Uniform Delay, d1		17.9			18.1		15.9	23.8		22.9	23.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		17.7			2.3		2.8	4.8		42.0	3.4	
Delay (s)		35.6			20.4		18.7	28.6		64.9	27.3	
Level of Service		D			C		B	C		E	C	
Approach Delay (s)		35.6			20.4			27.6			36.7	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	30.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	225	48	73	159	13	38	661	93	10	378	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	1898		1615	1943		1658	3202		1138	3197	
Flt Permitted	0.65	1.00		0.52	1.00		0.50	1.00		0.30	1.00	
Satd. Flow (perm)	1132	1898		891	1943		870	3202		359	3197	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	54	232	49	75	164	13	39	681	96	10	390	46
RTOR Reduction (vph)	0	12	0	0	4	0	0	17	0	0	14	0
Lane Group Flow (vph)	54	269	0	75	173	0	39	760	0	10	422	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	418	701		329	717		415	1527		171	1525	
v/s Ratio Prot		c0.14			0.09			c0.24			0.13	
v/s Ratio Perm	0.05			0.08			0.04			0.03		
v/c Ratio	0.13	0.38		0.23	0.24		0.09	0.50		0.06	0.28	
Uniform Delay, d1	13.6	15.1		14.1	14.2		9.3	11.7		9.1	10.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	1.6		1.6	0.8		0.4	1.2		0.7	0.5	
Delay (s)	14.2	16.7		15.7	15.0		9.8	12.8		9.8	10.7	
Level of Service	B	B		B	B		A	B		A	B	
Approach Delay (s)		16.3			15.2			12.7			10.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	631	194	621	17	3	14	3	47	22	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0	4.0	5.0				4.0			4.0		
Lane Util. Factor	0.95	1.00	1.00				1.00			1.00		
Frpb, ped/bikes	1.00	1.00	1.00				1.00			0.99		
Flpb, ped/bikes	1.00	1.00	1.00				1.00			1.00		
Frt	1.00	1.00	1.00				0.91			0.97		
Flt Protected	1.00	0.95	1.00				0.99			0.96		
Satd. Flow (prot)	2956	1477	1580				1732			1897		
Flt Permitted	1.00	0.21	1.00				0.94			0.82		
Satd. Flow (perm)	2956	327	1580				1652			1622		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	664	204	654	18	3	15	3	49	23	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	37	0	0	3	0	0
Lane Group Flow (vph)	664	204	670	0	0	0	33	0	0	26	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		pm+pt			Perm	Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4			2	2			6			
Actuated Green, G (s)	15.0	36.0	36.0				15.0			15.0		
Effective Green, g (s)	15.0	36.0	36.0				15.0			15.0		
Actuated g/C Ratio	0.25	0.60	0.60				0.25			0.25		
Clearance Time (s)	5.0	4.0	5.0				4.0			4.0		
Lane Grp Cap (vph)	739	522	948				413			406		
v/s Ratio Prot	c0.22	0.11	0.42									
v/s Ratio Perm		0.12					c0.02			0.02		
v/c Ratio	0.90	0.39	0.71				0.08			0.06		
Uniform Delay, d1	21.8	6.7	8.3				17.2			17.1		
Progression Factor	1.00	1.00	1.00				1.00			1.00		
Incremental Delay, d2	16.0	2.2	4.4				0.4			0.3		
Delay (s)	37.7	8.9	12.8				17.6			17.5		
Level of Service	D	A	B				B			B		
Approach Delay (s)	37.7		11.9				17.6			17.5		
Approach LOS	D		B				B			B		

Intersection Summary			
HCM Average Control Delay	26.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NER
Lane Configurations	
Volume (vph)	344
Ideal Flow (vphpl)	1800
Lane Width	12
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.86
Flt Protected	1.00
Satd. Flow (prot)	1428
Flt Permitted	1.00
Satd. Flow (perm)	1428
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	362
RTOR Reduction (vph)	0
Lane Group Flow (vph)	362
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	9%
Turn Type	Over
Protected Phases	7
Permitted Phases	
Actuated Green, G (s)	17.0
Effective Green, g (s)	17.0
Actuated g/C Ratio	0.28
Clearance Time (s)	4.0
Lane Grp Cap (vph)	405
v/s Ratio Prot	c0.25
v/s Ratio Perm	
v/c Ratio	0.89
Uniform Delay, d1	20.6
Progression Factor	1.00
Incremental Delay, d2	24.7
Delay (s)	45.3
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	194	917	678	81	101	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3229	3205		1629	1457
Flt Permitted		0.63	1.00		0.95	1.00
Satd. Flow (perm)		2062	3205		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	216	1019	753	90	112	173
RTOR Reduction (vph)	0	0	14	0	0	128
Lane Group Flow (vph)	0	1235	829	0	112	45
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1269	1972		426	381
v/s Ratio Prot			0.26		c0.07	
v/s Ratio Perm		c0.60				0.03
v/c Ratio		0.97	0.42		0.26	0.12
Uniform Delay, d1		12.0	6.5		19.0	18.3
Progression Factor		1.00	0.66		0.92	0.91
Incremental Delay, d2		19.6	0.6		1.5	0.6
Delay (s)		31.6	4.9		19.1	17.3
Level of Service		C	A		B	B
Approach Delay (s)		31.6	4.9		18.0	
Approach LOS		C	A		B	

Intersection Summary			
HCM Average Control Delay	20.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	938	697	217	174	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	0.99		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.96		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2912		1464	1373
Flt Permitted		0.86	1.00		0.95	1.00
Satd. Flow (perm)		2514	2912		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	987	734	228	183	59
RTOR Reduction (vph)	0	0	45	0	0	42
Lane Group Flow (vph)	0	1043	917	0	183	17
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1470	1702		428	401
v/s Ratio Prot			0.31		c0.12	
v/s Ratio Perm		c0.41				0.01
v/c Ratio		0.71	0.54		0.43	0.04
Uniform Delay, d1		9.6	8.2		18.6	16.5
Progression Factor		0.89	1.00		1.12	1.82
Incremental Delay, d2		1.2	1.2		3.0	0.2
Delay (s)		9.7	9.4		23.9	30.2
Level of Service		A	A		C	C
Approach Delay (s)		9.7	9.4		25.4	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	964	160	167	672	423	323
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		3.0	5.0	5.0	5.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	2239		1771	2436	1844	1469
Flt Permitted	1.00		0.08	1.00	0.95	1.00
Satd. Flow (perm)	2239		149	2436	1844	1469
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	984	163	170	686	432	330
RTOR Reduction (vph)	7	0	0	0	0	147
Lane Group Flow (vph)	1140	0	170	686	432	183
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	2	
Permitted Phases			8			2
Actuated Green, G (s)	47.0		56.0	56.0	24.0	24.0
Effective Green, g (s)	47.0		56.0	56.0	24.0	24.0
Actuated g/C Ratio	0.52		0.62	0.62	0.27	0.27
Clearance Time (s)	5.0		3.0	5.0	5.0	5.0
Lane Grp Cap (vph)	1169		201	1516	492	392
v/s Ratio Prot	c0.51		c0.06	0.28	c0.23	
v/s Ratio Perm			0.47			0.12
v/c Ratio	0.98		0.85	0.45	0.88	0.47
Uniform Delay, d1	20.9		22.6	8.9	31.6	27.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	21.1		33.2	1.0	19.4	3.9
Delay (s)	42.0		55.8	9.9	51.0	31.6
Level of Service	D		E	A	D	C
Approach Delay (s)	42.0			19.0	42.6	
Approach LOS	D			B	D	

Intersection Summary			
HCM Average Control Delay	35.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	96.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
1074: 130th Street & Ellis Ave

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	725	89	258	1167	9	72	0	187	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.21	1.00	1.00	0.27	1.00	1.00		0.76	1.00		0.70	
Satd. Flow (perm)	422	3213	1422	448	3138	1366		1309	1443		719	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	806	99	287	1297	10	80	0	208	1	0	0
RTOR Reduction (vph)	0	0	46	0	0	2	0	0	182	0	0	0
Lane Group Flow (vph)	1	806	53	287	1297	8	0	80	26	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	45.6	45.6	45.6	66.4	66.4	66.4		10.6	10.6		10.6	
Effective Green, g (s)	45.6	45.6	45.6	66.4	66.4	66.4		10.6	10.6		10.6	
Actuated g/C Ratio	0.54	0.54	0.54	0.78	0.78	0.78		0.12	0.12		0.12	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	226	1724	763	589	2451	1067		163	180		90	
v/s Ratio Prot		0.25		0.10	c0.41							
v/s Ratio Perm	0.00		0.04	0.28		0.01		c0.06	0.02		0.00	
v/c Ratio	0.00	0.47	0.07	0.49	0.53	0.01		0.49	0.14		0.01	
Uniform Delay, d1	9.2	12.2	9.5	3.9	3.5	2.0		34.7	33.2		32.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.9	0.2	0.6	0.2	0.0		2.3	0.4		0.0	
Delay (s)	9.2	13.1	9.7	4.6	3.7	2.1		37.0	33.5		32.7	
Level of Service	A	B	A	A	A	A		D	C		C	
Approach Delay (s)		12.7			3.8			34.5			32.7	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	13	820	856	45	24	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3017		1482	
Flt Permitted		0.93	1.00		0.97	
Satd. Flow (perm)		2834	3017		1482	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	911	951	50	27	12
RTOR Reduction (vph)	0	0	4	0	11	0
Lane Group Flow (vph)	0	925	997	0	28	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	66.0		7.0	
Effective Green, g (s)		33.0	66.0		7.0	
Actuated g/C Ratio		0.37	0.73		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1039	2212		115	
v/s Ratio Prot			c0.33		c0.02	
v/s Ratio Perm		c0.33				
v/c Ratio		0.89	0.45		0.24	
Uniform Delay, d1		26.8	4.8		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		11.4	0.2		4.9	
Delay (s)		38.2	0.2		44.0	
Level of Service		D	A		D	
Approach Delay (s)		38.2	0.2		44.0	
Approach LOS		D	A		D	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	435	1	27	584	80	0	0	1	45	3	128
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1728			3233			1427			1606	1277
Flt Permitted		0.77			0.92			1.00			0.90	1.00
Satd. Flow (perm)		1345			2996			1427			1513	1277
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	98	483	1	30	649	89	0	0	1	50	3	142
RTOR Reduction (vph)	0	0	0	0	11	0	0	1	0	0	0	101
Lane Group Flow (vph)	0	582	0	0	757	0	0	0	0	0	53	41
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		44.0			52.0			9.0			23.0	26.0
Effective Green, g (s)		44.0			52.0			9.0			23.0	26.0
Actuated g/C Ratio		0.49			0.58			0.10			0.26	0.29
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		658			1752			143			401	369
v/s Ratio Prot					c0.04			0.00			c0.02	
v/s Ratio Perm		c0.43			0.21						c0.01	0.03
v/c Ratio		0.88			0.43			0.00			0.13	0.11
Uniform Delay, d1		20.7			10.7			36.5			25.8	23.5
Progression Factor		1.00			0.92			1.00			1.00	1.00
Incremental Delay, d2		16.0			0.2			0.0			0.7	0.6
Delay (s)		36.7			10.1			36.5			26.5	24.1
Level of Service		D			B			D			C	C
Approach Delay (s)		36.7			10.1			36.5			24.8	
Approach LOS		D			B			D			C	

Intersection Summary			
HCM Average Control Delay	22.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	1014	58	36	29	48	23	24	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.94			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1557	3022		1587	3021			1808			1703	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	277	3022		604	3021			1636			1627	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1067	61	38	31	51	24	25	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	21	0
Lane Group Flow (vph)	41	653	0	37	1122	0	0	87	0	0	120	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	145	1581		316	1580			579			576	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.15			0.06				0.05			c0.07	
v/c Ratio	0.28	0.41		0.12	0.71			0.15			0.21	
Uniform Delay, d1	8.7	9.4		7.9	11.8			14.3			14.6	
Progression Factor	1.00	1.00		0.69	1.41			1.00			1.00	
Incremental Delay, d2	4.8	0.8		0.7	2.4			0.5			0.8	
Delay (s)	13.5	10.2		6.1	19.1			14.9			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.7			14.9			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	789	5	32	637	56	0	0	0	586	89	379
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.93	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	793	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	331	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	831	5	34	671	59	0	0	0	617	94	399
RTOR Reduction (vph)	0	0	0	0	0	26	0	0	0	0	0	166
Lane Group Flow (vph)	26	836	0	34	671	33	0	0	0	617	94	233
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	159	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.21					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.06						0.16
v/c Ratio	0.16	0.75		0.05	0.37	0.11				0.81	0.24	0.68
Uniform Delay, d1	31.6	38.7		15.2	15.8	13.4				47.4	40.7	45.6
Progression Factor	0.85	0.86		0.32	0.75	1.68				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.5				9.3	1.4	10.5
Delay (s)	28.9	37.5		5.0	12.1	22.9				56.7	42.1	56.1
Level of Service	C	D		A	B	C				E	D	E
Approach Delay (s)		37.3			12.6			0.0			55.2	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	815	220	54	593	287	102	251	55	54	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3262		1710	3138	1018		3301	1363	855		738
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3262		1710	3138	1018		3301	1363	855		738
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	358	858	232	57	624	302	107	264	58	57	0	32
RTOR Reduction (vph)	0	19	0	0	0	228	0	0	41	0	0	30
Lane Group Flow (vph)	358	1071	0	57	624	74	0	371	17	57	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	41.0	65.0		8.0	32.0	32.0		29.0	29.0	10.0		10.0
Effective Green, g (s)	41.0	65.0		8.0	32.0	32.0		29.0	29.0	10.0		10.0
Actuated g/C Ratio	0.32	0.50		0.06	0.25	0.25		0.22	0.22	0.08		0.08
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1036	1631		105	772	251		736	304	66		57
v/s Ratio Prot	0.11	c0.33		0.03	c0.20			c0.11		c0.07		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.35	0.66		0.54	0.81	0.30		0.50	0.06	0.86		0.04
Uniform Delay, d1	34.2	24.2		59.2	46.1	39.8		44.2	39.7	59.3		55.6
Progression Factor	0.94	0.18		1.00	1.00	1.00		0.95	0.99	1.00		1.00
Incremental Delay, d2	0.6	1.3		18.7	8.9	3.0		2.5	0.3	65.1		0.3
Delay (s)	32.7	5.7		77.9	55.0	42.8		44.3	39.7	124.4		55.9
Level of Service	C	A		E	E	D		D	D	F		E
Approach Delay (s)		12.4			52.6			43.7			99.8	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	33.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	893	181	105	839	0	89	0	103	9	18	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.96	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2987		1649	3149		1388		1451	1803	1870	
Flt Permitted		1.00		0.17	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2987		291	3149		1079		1451	1803	1870	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	992	201	117	932	0	99	0	114	10	20	8
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	77	0	5	0
Lane Group Flow (vph)	0	1176	0	117	932	0	99	0	37	10	23	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1792		175	1889		345		464	577	598	
v/s Ratio Prot		0.39			0.30						0.01	
v/s Ratio Perm				c0.40			c0.09		0.03	0.01		
v/c Ratio		0.66		0.67	0.49		0.29		0.08	0.02	0.04	
Uniform Delay, d1		13.2		13.4	11.4		25.5		23.7	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.9		18.5	0.9		2.1		0.3	0.1	0.1	
Delay (s)		15.1		31.8	12.3		27.5		24.1	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		15.1			14.5			25.7			23.5	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	300	0	1230	211	670	0	0	789	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4270	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4270	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	306	0	1255	215	684	0	0	805	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	306	0	1255	215	684	0	0	1305	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.20		c0.82	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.67		2.87	0.46	0.25			1.16dr	
Uniform Delay, d1				32.5		37.5	29.5	8.6			37.0	
Progression Factor				1.00		1.00	0.64	2.09			1.00	
Incremental Delay, d2				7.7		848.6	2.7	0.2			34.8	
Delay (s)				40.3		886.1	21.6	18.2			71.8	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			720.3			19.0			71.8	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	328.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	322	770	145	0	0	0	0	559	408	359	730	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3157						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3157						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	332	794	149	0	0	0	0	576	421	370	753	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	299	962	0	0	0	0	0	576	421	370	753	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.13		c0.23	0.16	
v/s Ratio Perm	0.20	0.30							c0.19			
v/c Ratio	0.61	0.94						0.49	0.70	0.78	0.27	
Uniform Delay, d1	29.9	34.5						32.5	34.8	33.9	10.5	
Progression Factor	1.00	1.00						1.17	1.17	0.86	0.22	
Incremental Delay, d2	5.6	17.2						1.3	5.8	4.9	0.1	
Delay (s)	35.5	51.7						39.4	46.4	34.1	2.4	
Level of Service	D	D						D	D	C	A	
Approach Delay (s)		47.9			0.0			42.3			12.9	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	34.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	25	24	11	158	0	0	147	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.54	1.00			1.00	
Satd. Flow (perm)				1688	3132		979	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	322	28	27	12	176	0	0	163	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	322	37	0	12	176	0	0	168	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		636	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.10			0.09	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.16			0.16	
Uniform Delay, d1				24.5	20.0		10.5	8.0			9.8	
Progression Factor				1.00	1.00		1.04	1.18			1.00	
Incremental Delay, d2				4.9	0.1		0.1	0.3			0.3	
Delay (s)				29.4	20.1		11.0	9.7			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			28.0			9.8			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	5	0	14	0	143	41	46	391	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1565			1720		1590	1860	
Flt Permitted	0.74	1.00			0.97			1.00		0.60	1.00	
Satd. Flow (perm)	1516	1735			1531			1720		1004	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	5	0	15	0	151	43	48	412	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	12	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	10	0	0	182	0	48	412	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	551			486			809		639	1094	
v/s Ratio Prot		c0.01						0.11		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.22		0.08	0.38	
Uniform Delay, d1	20.0	20.0			19.9			13.3		8.6	9.3	
Progression Factor	1.00	1.00			1.00			1.00		0.97	0.86	
Incremental Delay, d2	0.1	0.1			0.1			0.6		0.2	0.9	
Delay (s)	20.1	20.1			20.0			14.0		8.5	8.9	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			14.0			8.8	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	48	43	16	193	288	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1751		1765	1782	1657	
Flt Permitted	0.97		0.50	1.00	1.00	
Satd. Flow (perm)	1751		937	1782	1657	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	48	18	214	320	31
RTOR Reduction (vph)	32	0	0	0	5	0
Lane Group Flow (vph)	69	0	18	214	346	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		519	987	918	
v/s Ratio Prot	c0.04			0.12	c0.21	
v/s Ratio Perm			0.02			
v/c Ratio	0.12		0.03	0.22	0.38	
Uniform Delay, d1	15.5		6.6	7.4	8.2	
Progression Factor	1.00		0.56	0.66	1.40	
Incremental Delay, d2	0.4		0.1	0.5	1.0	
Delay (s)	15.9		3.8	5.4	12.4	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			5.2	12.4	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	30.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	268	9	258	161	4	0	301	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3772		1693	1677			1738	1428
Flt Permitted					1.00		0.45	1.00			1.00	1.00
Satd. Flow (perm)					3772		809	1677			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	298	10	287	179	4	0	334	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	1	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	339	0	287	182	0	0	334	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		589	1006			777	638
v/s Ratio Prot					c0.09		c0.06	0.11			0.19	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.49	0.18			0.43	0.01
Uniform Delay, d1					22.5		14.4	7.6			16.1	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.9	0.4			1.7	0.0
Delay (s)					23.1		17.2	8.0			17.8	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.7			17.6	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	96	94	38	133	217	30	59	704	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3290		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.58	1.00	
Satd. Flow (perm)					1896		446	3290		1048	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	107	104	42	148	241	33	66	782	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	14	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	243	0	148	260	0	66	825	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1491		634	1572	
v/s Ratio Prot					c0.13		c0.04	0.08		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.17		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.2		8.2	14.7	
Progression Factor					1.00		0.83	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.3		0.3	1.3	
Delay (s)					22.9		17.0	10.3		8.6	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.6			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	285	24	159	591	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3174		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		598	3174		996	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	300	25	167	622	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	8	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	317	0	167	667	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		335	1777		558	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.18		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.1		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.3		3.6	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.3			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	37	192	67	261	589	81
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	41	213	74	290	654	90

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	254	171	193	436	308
Volume Left (vph)	41	74	0	0	0
Volume Right (vph)	213	0	0	0	90
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.8	6.6	6.3	5.9	5.7
Degree Utilization, x	0.41	0.31	0.34	0.71	0.49
Capacity (veh/h)	589	528	546	601	620
Control Delay (s)	12.7	11.3	11.4	21.0	12.8
Approach Delay (s)	12.7	11.3		17.6	
Approach LOS	B	B		C	

Intersection Summary			
Delay	15.0		
HCM Level of Service	C		
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	373	18	20	393	70	78	55	68	354	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1611	1731	1530	1710	1731	1421			1710	3251	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	936	1731	1421			257	3251	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	414	20	22	437	78	87	61	76	393	36
RTOR Reduction (vph)	0	0	0	12	0	0	38	0	0	0	7	0
Lane Group Flow (vph)	0	75	414	8	22	437	127	0	0	137	422	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		302	725	641	223	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.25					0.13	
v/s Ratio Perm		0.07		0.01	0.02		0.09			c0.53		
v/c Ratio		0.25	0.57	0.01	0.10	1.06	0.38			1.99	0.49	
Uniform Delay, d1		21.6	23.3	17.8	31.2	40.0	33.5			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		2.0	3.3	0.0	0.9	61.3	3.2			491.0	2.0	
Delay (s)		23.5	26.5	17.9	32.1	101.3	36.6			529.5	34.4	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.8			81.8					154.2	
Approach LOS			C			F					F	

Intersection Summary			
HCM Average Control Delay	146.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	103.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	107	571	82	103	4	113	607	197
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.37	1.00				0.95	1.00	
Satd. Flow (perm)	670	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	119	634	91	114	4	126	674	219
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	119	827	0	0	0	130	867	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	175	850				334	514	
v/s Ratio Prot		0.25				0.08		
v/s Ratio Perm	0.18						c0.33	
v/c Ratio	0.68	0.97				0.39	1.69	
Uniform Delay, d1	34.8	38.4				36.8	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	19.3	25.0				3.4	317.6	
Delay (s)	54.1	63.4				40.2	359.9	
Level of Service	D	E				D	F	
Approach Delay (s)		62.2				319.3		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	596	0	0	469	56	85	52	19	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1952			1841				
Flt Permitted		0.91			1.00			0.97				
Satd. Flow (perm)		1530			1952			1841				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	662	0	0	521	62	94	58	21	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	734	0	0	583	0	0	173	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		942			1201			481				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.48						0.09				
v/c Ratio		0.78			0.49			0.36				
Uniform Delay, d1		9.2			6.9			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.3			1.4			2.1				
Delay (s)		15.6			8.3			21.7				
Level of Service		B			A			C				
Approach Delay (s)		15.6			8.3			21.7			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	334	152	129	331	135	105	639	86	140	759	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97	1.00	1.00	0.94	1.00	1.00	0.93
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1981	1443		1949	1457	1547	3040	1285	1506	3069	1239
Flt Permitted		0.65	1.00		0.73	1.00	0.19	1.00	1.00	0.22	1.00	1.00
Satd. Flow (perm)		1292	1443		1439	1457	305	3040	1285	347	3069	1239
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	352	160	136	348	142	111	673	91	147	799	99
RTOR Reduction (vph)	0	0	79	0	0	81	0	0	55	0	0	50
Lane Group Flow (vph)	0	427	81	0	484	61	111	673	36	147	799	49
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		53.0	53.0		45.0	45.0	39.0	33.0	33.0	43.0	35.0	35.0
Effective Green, g (s)		53.0	53.0		45.0	45.0	39.0	33.0	33.0	43.0	35.0	35.0
Actuated g/C Ratio		0.50	0.50		0.43	0.43	0.37	0.31	0.31	0.41	0.33	0.33
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		685	728		617	624	184	955	404	230	1023	413
v/s Ratio Prot		c0.03					0.03	0.22		c0.05	c0.26	
v/s Ratio Perm		0.29	0.06		c0.34	0.04	0.19		0.03	0.21		0.04
v/c Ratio		0.62	0.11		0.78	0.10	0.60	0.70	0.09	0.64	0.78	0.12
Uniform Delay, d1		18.8	13.6		25.8	17.9	23.7	31.7	25.4	21.8	31.5	24.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.51	1.35	2.10
Incremental Delay, d2		4.2	0.3		9.7	0.3	5.5	4.4	0.4	5.5	5.7	0.6
Delay (s)		23.0	13.9		35.5	18.2	29.2	36.1	25.8	38.5	48.2	51.5
Level of Service		C	B		D	B	C	D	C	D	D	D
Approach Delay (s)		20.6			31.6			34.1			47.1	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	35.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	90.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	412	85	105	490	94	51	61	72	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1644			1646			1796				
Flt Permitted		0.83			0.84			0.99				
Satd. Flow (perm)		1375			1390			1796				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	458	94	117	544	104	57	68	80	0	0	0
RTOR Reduction (vph)	0	10	0	0	9	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	636	0	0	756	0	0	170	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		846			855			470				
v/s Ratio Prot												
v/s Ratio Perm		0.46			c0.54			0.09				
v/c Ratio		0.75			0.88			0.36				
Uniform Delay, d1		9.0			10.5			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.1			12.9			2.1				
Delay (s)		15.1			23.5			21.7				
Level of Service		B			C			C				
Approach Delay (s)		15.1			23.5			21.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	455	73	84	568	45	37	76	74	56	238	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1687	1382		1712	1417		1686	1455		1886	
Flt Permitted		0.96	1.00		0.88	1.00		0.83	1.00		0.93	
Satd. Flow (perm)		1630	1382		1519	1417		1430	1455		1775	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	479	77	88	598	47	39	80	78	59	251	49
RTOR Reduction (vph)	0	0	33	0	0	13	0	0	53	0	7	0
Lane Group Flow (vph)	0	501	44	0	686	34	0	119	25	0	352	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		935	792		871	812		458	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.31	0.03		c0.45	0.02		0.08	0.02		c0.20	
v/c Ratio		0.54	0.06		0.79	0.04		0.26	0.05		0.62	
Uniform Delay, d1		9.9	7.1		12.4	7.0		18.9	17.6		21.6	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		2.2	0.1		7.1	0.1		1.4	0.2		5.0	
Delay (s)		12.1	7.2		19.6	7.1		20.3	17.9		26.6	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		11.4			18.8			19.3			26.6	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	99.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	463	30	53	598	58	44	165	57	124	210	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1537	3068		1652	3732		1585	1663	1370	1568	1680	1397
Flt Permitted	0.31	1.00		0.41	1.00		0.57	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	505	3068		716	3732		953	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	63	514	33	59	664	64	49	183	63	138	233	36
RTOR Reduction (vph)	0	7	0	0	11	0	0	0	38	0	0	22
Lane Group Flow (vph)	63	540	0	59	717	0	49	183	25	138	233	14
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	241	1463		341	1780		381	665	548	417	672	559
v/s Ratio Prot		0.18			c0.19			0.11			c0.14	
v/s Ratio Perm	0.12			0.08			0.05		0.02	0.13		0.01
v/c Ratio	0.26	0.37		0.17	0.40		0.13	0.28	0.05	0.33	0.35	0.03
Uniform Delay, d1	10.2	10.8		9.7	11.0		12.3	13.1	11.9	13.5	13.6	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.82	0.89	0.70	0.58	0.59	0.26
Incremental Delay, d2	2.6	0.7		1.1	0.7		0.7	1.0	0.2	2.0	1.4	0.1
Delay (s)	12.8	11.5		10.8	11.7		10.8	12.7	8.6	9.9	9.3	3.1
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.6			11.6			11.5			9.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	73	389	71	73	387	77	55	197	64	135	272	162
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1329	3142		1515	3108		1583	2928		1453	2920	
Flt Permitted	0.44	1.00		0.44	1.00		0.44	1.00		0.58	1.00	
Satd. Flow (perm)	617	3142		708	3108		741	2928		892	2920	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	77	409	75	77	407	81	58	207	67	142	286	171
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	100	0
Lane Group Flow (vph)	77	484	0	77	488	0	58	235	0	142	357	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	296	1508		340	1492		306	1210		369	1207	
v/s Ratio Prot		0.15			c0.16			0.08			0.12	
v/s Ratio Perm	0.12			0.11			0.08			c0.16		
v/c Ratio	0.26	0.32		0.23	0.33		0.19	0.19		0.38	0.30	
Uniform Delay, d1	11.6	12.0		11.4	12.0		14.0	14.0		15.3	14.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	0.6		1.5	0.6		1.4	0.4		3.0	0.6	
Delay (s)	13.7	12.5		12.9	12.6		15.4	14.4		18.4	15.3	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.7			12.7			14.6			16.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1021: 103rd Street & Martin Luther King Jr Drive

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	453	62	32	523	48	86	203	60	76	473	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1595	1653		1371	1973		1534	2998		1535	3011	
Flt Permitted	0.24	1.00		0.30	1.00		0.28	1.00		0.58	1.00	
Satd. Flow (perm)	402	1653		427	1973		450	2998		939	3011	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	114	477	65	34	551	51	91	214	63	80	498	117
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	114	542	0	34	602	0	91	277	0	80	615	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	43.9	39.3		40.7	37.7		26.7	21.8		26.7	21.8	
Effective Green, g (s)	43.9	37.3		40.7	35.7		26.7	19.8		26.7	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	272	725		238	829		204	698		329	701	
v/s Ratio Prot	c0.02	c0.33		0.01	0.31		c0.03	0.09		0.01	c0.20	
v/s Ratio Perm	0.19			0.06			0.11			0.06		
v/c Ratio	0.42	0.75		0.14	0.73		0.45	0.40		0.24	0.88	
Uniform Delay, d1	24.1	19.9		20.7	20.6		29.2	27.6		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	6.9		0.3	5.5		1.6	1.7		0.4	14.5	
Delay (s)	25.2	26.8		21.0	26.1		30.8	29.2		22.2	46.0	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		26.6			25.8			29.6			43.2	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	389	65	117	509	118	67	158	58	127	367	83
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3680			3131		1652	3237		1549	3026	
Flt Permitted		0.68			0.72		0.42	1.00		0.60	1.00	
Satd. Flow (perm)		2535			2275		736	3237		983	3026	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	432	72	130	566	131	74	176	64	141	408	92
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	598	0	0	827	0	74	240	0	141	500	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1149			1031		324	1424		433	1331	
v/s Ratio Prot								0.07			c0.17	
v/s Ratio Perm		0.24			c0.36		0.10			0.14		
v/c Ratio		0.52			0.80		0.23	0.17		0.33	0.38	
Uniform Delay, d1		14.7			17.6		13.1	12.7		13.7	14.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.7			6.6		1.6	0.3		2.0	0.8	
Delay (s)		16.4			24.2		14.7	13.0		15.7	14.9	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		16.4			24.2			13.4			15.1	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	875	6	20	584	249	1	1	9	213	1	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.38	1.00		0.25	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	648	3206		433	3320	1485		1519			2533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	972	7	22	649	277	1	1	10	237	1	89
RTOR Reduction (vph)	0	0	0	0	0	103	0	7	0	0	52	0
Lane Group Flow (vph)	109	979	0	22	649	174	0	5	0	0	275	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	406	2008		271	2080	930		402			671	
v/s Ratio Prot		c0.31			0.20							
v/s Ratio Perm	0.17			0.05		0.12		0.00			c0.11	
v/c Ratio	0.27	0.49		0.08	0.31	0.19		0.01			0.41	
Uniform Delay, d1	6.2	7.4		5.4	6.4	5.8		19.9			22.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.6	0.8		0.6	0.4	0.4		0.0			1.7	
Delay (s)	7.8	8.2		6.0	6.8	6.3		20.0			24.0	
Level of Service	A	A		A	A	A		B			C	
Approach Delay (s)		8.2			6.6			20.0			24.0	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	73.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	131	228	125	94	163	57	148	907	90	129	825	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1504		1563	1584		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.20	1.00		0.20	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	740	1504		337	1584		317	3069	1337	263	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	240	132	99	172	60	156	955	95	136	868	105
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	49
Lane Group Flow (vph)	138	349	0	99	217	0	156	955	55	136	868	56
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	284	389		190	410		232	1264	551	213	1276	543
v/s Ratio Prot	0.03	c0.23		c0.04	0.14		c0.05	c0.31		0.05	0.28	
v/s Ratio Perm	0.11			0.12			0.27		0.04	0.26		0.04
v/c Ratio	0.49	0.90		0.52	0.53		0.67	0.76	0.10	0.64	0.68	0.10
Uniform Delay, d1	22.7	30.4		22.9	27.1		14.7	21.3	15.3	15.0	20.4	15.4
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.82	0.55	1.00	1.00	1.00
Incremental Delay, d2	5.8	25.9		9.9	4.8		13.2	3.8	0.3	13.8	2.9	0.4
Delay (s)	28.5	56.3		32.7	31.9		23.0	21.2	8.7	28.8	23.4	15.7
Level of Service	C	E		C	C		C	C	A	C	C	B
Approach Delay (s)		48.8			32.1			20.5			23.3	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	181	38	20	173	22	43	149	40	45	255	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1835			1848			1937			1975	
Flt Permitted		0.97			0.96			0.90			0.94	
Satd. Flow (perm)		1781			1790			1755			1869	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	187	39	21	178	23	44	154	41	46	263	52
RTOR Reduction (vph)	0	11	0	0	6	0	0	11	0	0	9	0
Lane Group Flow (vph)	0	238	0	0	216	0	0	228	0	0	352	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		740			744			810			863	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.13			c0.19	
v/c Ratio		0.32			0.29			0.28			0.41	
Uniform Delay, d1		12.8			12.6			10.8			11.6	
Progression Factor		1.00			0.73			1.27			1.00	
Incremental Delay, d2		1.2			1.0			0.8			1.4	
Delay (s)		14.0			10.2			14.5			13.0	
Level of Service		B			B			B			B	
Approach Delay (s)		14.0			10.2			14.5			13.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	193	39	25	180	20	53	200	31	47	214	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3057		1577	3116		1518	3119		1550	3076	
Flt Permitted	0.61	1.00		0.59	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	965	3057		984	3116		926	3119		968	3076	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	214	43	28	200	22	59	222	34	52	238	43
RTOR Reduction (vph)	0	26	0	0	13	0	0	14	0	0	18	0
Lane Group Flow (vph)	27	231	0	28	209	0	59	242	0	52	263	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	894		288	911		541	1823		566	1798	
v/s Ratio Prot		c0.08			0.07			0.08			c0.09	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.26		0.10	0.23		0.11	0.13		0.09	0.15	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.93	0.96		0.74	0.73		1.40	1.44		0.39	0.34	
Incremental Delay, d2	0.6	0.7		0.7	0.6		0.4	0.1		0.3	0.2	
Delay (s)	16.3	17.6		13.0	13.3		8.8	8.9		2.7	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.5			13.3			8.9			2.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	168	42	25	159	38	27	262	16	42	337	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1555	3056		1525	2937			1923			1939	
Flt Permitted	0.61	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1007	3056		973	2937			1825			1832	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	74	187	47	28	177	42	30	291	18	47	374	37
RTOR Reduction (vph)	0	28	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	74	206	0	28	194	0	0	336	0	0	453	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	403	1222		389	1175			870			874	
v/s Ratio Prot		0.07			0.07							
v/s Ratio Perm	c0.07			0.03				0.18			c0.25	
v/c Ratio	0.18	0.17		0.07	0.16			0.39			0.52	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.9			11.8	
Progression Factor	1.03	0.98		0.80	0.80			1.12			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.2	
Delay (s)	14.1	12.6		10.0	10.3			13.3			14.0	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		13.0			10.3			13.3			14.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	30	20	161	27	45	235	11	33	364	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1966		1584	1975			1981			1979	
Flt Permitted	0.57	1.00		0.65	1.00			0.89			0.96	
Satd. Flow (perm)	986	1966		1082	1975			1774			1911	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	33	22	179	30	50	261	12	37	404	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	156	0	22	209	0	0	323	0	0	504	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	303	605		333	608			1010			1088	
v/s Ratio Prot		0.08			c0.11							
v/s Ratio Perm	0.05			0.02				0.18			c0.26	
v/c Ratio	0.17	0.26		0.07	0.34			0.32			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.4			7.4			8.2	
Progression Factor	0.84	0.81		0.84	0.88			0.80			1.00	
Incremental Delay, d2	1.2	1.0		0.4	1.5			0.8			1.4	
Delay (s)	15.0	14.8		13.8	16.8			6.7			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.8			16.5			6.7			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	13	97	2	5	10	62	235	5	5	466	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1727		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.39	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1332	1727		1216	1808		660	1647	1428	1030	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	14	108	2	6	11	69	261	6	6	518	84
RTOR Reduction (vph)	0	78	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	60	44	0	2	9	0	69	261	4	6	518	56
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		337	501		396	988	857	618	1200	898
v/s Ratio Prot		0.03			0.01			0.16			c0.26	
v/s Ratio Perm	c0.05			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.16	0.09		0.01	0.02		0.17	0.26	0.00	0.01	0.43	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.8	6.2	5.2	5.2	7.0	5.4
Progression Factor	1.39	2.72		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.4		0.0	0.1		1.0	0.7	0.0	0.0	1.1	0.1
Delay (s)	25.7	47.8		17.1	17.1		6.8	6.8	5.2	5.3	8.2	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		40.5			17.1			6.8			7.8	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	253	163	170	204	0	0	0	0	110	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.41	1.00					0.95	1.00	
Satd. Flow (perm)		2905		722	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	266	172	179	215	0	0	0	0	116	495	397
RTOR Reduction (vph)	0	103	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	335	0	179	215	0	0	0	0	116	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		566	1805					545	1096	
v/s Ratio Prot		c0.12		c0.06	0.07					0.08	c0.25	
v/s Ratio Perm				0.10								
v/c Ratio		0.36		0.32	0.12					0.21	0.68	
Uniform Delay, d1		26.4		13.4	11.1					22.4	27.6	
Progression Factor		1.00		2.18	2.12					1.00	1.00	
Incremental Delay, d2		1.1		1.3	0.1					0.9	3.5	
Delay (s)		27.4		30.5	23.6					23.3	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.4			26.7			0.0			30.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	222	0	0	297	113	77	539	231	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2847		1767	1782	1560			
Flt Permitted	0.37	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	645	3196			2847		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	234	0	0	313	119	81	567	243	0	0	0
RTOR Reduction (vph)	0	0	0	0	39	0	0	0	167	0	0	0
Lane Group Flow (vph)	148	234	0	0	393	0	81	567	76	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	706	1974			726		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.14		0.05	c0.32				
v/s Ratio Perm	0.05								0.05			
v/c Ratio	0.21	0.12			0.54		0.16	1.08	0.17			
Uniform Delay, d1	10.2	8.0			32.8		26.6	36.0	26.7			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			2.9		0.6	63.3	0.8			
Delay (s)	4.9	3.6			35.7		27.3	99.3	27.5			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			35.7			73.2			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	48.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	512	479	81	534	0	0	0	0	11	434	277
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3098		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3098		200	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	533	499	84	556	0	0	0	0	11	452	289
RTOR Reduction (vph)	0	170	0	0	0	0	0	0	0	0	0	191
Lane Group Flow (vph)	0	862	0	84	556	0	0	0	0	11	452	98
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		380	1917					543	1085	520
v/s Ratio Prot		c0.28		0.04	c0.17					0.01	c0.14	0.06
v/s Ratio Perm				0.08								
v/c Ratio		0.77		0.22	0.29					0.02	0.42	0.19
Uniform Delay, d1		28.4		14.4	10.6					21.9	25.4	23.3
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		5.2		0.9	0.3					0.1	1.2	0.8
Delay (s)		33.6		15.5	12.9					22.0	26.6	24.1
Level of Service		C		B	B					C	C	C
Approach Delay (s)		33.6			13.2			0.0			25.5	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	417	106	0	0	150	6	465	480	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3110			3170		1555	1653	1530			
Flt Permitted	0.64	0.71			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	992	2291			3170		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	430	109	0	0	155	6	479	495	60	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	215	324	0	0	158	0	479	495	22	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	678	1463			476		575	612	566			
v/s Ratio Prot	c0.11	0.08			c0.05		c0.31	0.30	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.32	0.22			0.33		0.83	0.81	0.04			
Uniform Delay, d1	14.1	13.5			38.0		28.7	28.3	20.1			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.9		13.3	11.0	0.1			
Delay (s)	4.2	3.6			39.9		42.0	39.3	20.3			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		3.8			39.9			39.5			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	218	103	121	265	125	84	699	79	103	884	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2939			2922		1508	3069	1309	1508	3099	1298
Flt Permitted		0.74			0.75		0.16	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		2182			2204		254	3069	1309	401	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	227	107	126	276	130	88	728	82	107	921	68
RTOR Reduction (vph)	0	41	0	0	37	0	0	0	50	0	0	33
Lane Group Flow (vph)	0	374	0	0	495	0	88	728	32	107	921	35
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		978			726		167	1210	508	222	1221	504
v/s Ratio Prot		c0.03					c0.02	0.24		0.02	c0.30	
v/s Ratio Perm		0.14			c0.22		0.20		0.02	0.18		0.03
v/c Ratio		0.38			0.68		0.53	0.60	0.06	0.48	0.75	0.07
Uniform Delay, d1		16.9			24.6		16.7	20.5	16.3	16.0	22.2	16.3
Progression Factor		1.00			1.00		1.32	0.69	0.61	1.11	1.16	1.74
Incremental Delay, d2		1.1			5.1		10.4	2.0	0.2	5.3	3.1	0.2
Delay (s)		18.0			29.8		32.4	16.2	10.1	23.0	29.0	28.6
Level of Service		B			C		C	B	B	C	C	C
Approach Delay (s)		18.0			29.8			17.2			28.4	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	23.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	318	0	0	389	103	53	44	37	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.96				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1731			1698			1650				
Flt Permitted		0.83			1.00			0.98				
Satd. Flow (perm)		1458			1698			1650				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	353	0	0	432	114	59	49	41	0	0	0
RTOR Reduction (vph)	0	0	0	0	15	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	437	0	0	531	0	0	128	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		852			993			482				
v/s Ratio Prot					c0.31							
v/s Ratio Perm		0.30						0.08				
v/c Ratio		0.51			0.54			0.27				
Uniform Delay, d1		8.0			8.2			17.6				
Progression Factor		1.00			0.99			1.00				
Incremental Delay, d2		2.2			1.6			1.3				
Delay (s)		10.2			9.7			19.0				
Level of Service		B			A			B				
Approach Delay (s)		10.2			9.7			19.0			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	306	27	53	416	70	28	118	42	57	150	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.98			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1957			1933			2959			2985	
Flt Permitted		0.96			0.93			0.89			0.85	
Satd. Flow (perm)		1887			1810			2658			2572	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	21	340	30	59	462	78	31	131	47	63	167	47
RTOR Reduction (vph)	0	5	0	0	8	0	0	27	0	0	26	0
Lane Group Flow (vph)	0	386	0	0	591	0	0	182	0	0	251	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		871			835			1104			1068	
v/s Ratio Prot												
v/s Ratio Perm		0.20			c0.33			0.07			c0.10	
v/c Ratio		0.44			0.71			0.16			0.23	
Uniform Delay, d1		11.8			14.0			11.9			12.3	
Progression Factor		0.57			0.37			1.24			0.46	
Incremental Delay, d2		1.4			4.1			0.3			0.5	
Delay (s)		8.2			9.3			15.1			6.1	
Level of Service		A			A			B			A	
Approach Delay (s)		8.2			9.3			15.1			6.1	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1037: 111th Street & State Street

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	279	39	85	551	100	43	219	99	86	227	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1512	3039		1570	3078		1587	2961		1585	3075	
Flt Permitted	0.25	1.00		0.52	1.00		0.56	1.00		0.54	1.00	
Satd. Flow (perm)	395	3039		854	3078		931	2961		902	3075	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	46	310	43	94	612	111	48	243	110	96	252	69
RTOR Reduction (vph)	0	17	0	0	22	0	0	51	0	0	32	0
Lane Group Flow (vph)	46	336	0	94	701	0	48	302	0	96	289	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	134	1029		289	1042		501	1594		486	1656	
v/s Ratio Prot		0.11			c0.23			0.10			0.09	
v/s Ratio Perm	0.12			0.11			0.05			c0.11		
v/c Ratio	0.34	0.33		0.33	0.67		0.10	0.19		0.20	0.17	
Uniform Delay, d1	16.1	16.0		16.0	18.4		7.3	7.7		7.7	7.6	
Progression Factor	0.81	0.76		1.16	1.18		1.11	1.24		1.08	1.08	
Incremental Delay, d2	6.4	0.8		2.9	3.4		0.4	0.3		0.9	0.2	
Delay (s)	19.5	13.0		21.4	25.1		8.5	9.8		9.3	8.5	
Level of Service	B	B		C	C		A	A		A	A	
Approach Delay (s)		13.7			24.6			9.7			8.6	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	287	96	107	401	50	165	250	131	46	295	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.98			1.00	
Frt	1.00	0.96		1.00	0.98			0.96			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1508	2988		1430	3720			3405			3530	
Flt Permitted	0.46	1.00		0.51	1.00			0.69			0.85	
Satd. Flow (perm)	726	2988		761	3720			2401			3027	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	58	302	101	113	422	53	174	263	138	48	311	67
RTOR Reduction (vph)	0	50	0	0	15	0	0	46	0	0	23	0
Lane Group Flow (vph)	58	353	0	113	460	0	0	529	0	0	403	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	346	1425		363	1774			960			1211	
v/s Ratio Prot		0.12			0.12							
v/s Ratio Perm	0.08			c0.15				c0.22			0.13	
v/c Ratio	0.17	0.25		0.31	0.26			0.55			0.33	
Uniform Delay, d1	9.7	10.1		10.4	10.1			15.0			13.5	
Progression Factor	1.54	1.77		1.09	1.06			1.00			0.76	
Incremental Delay, d2	1.0	0.4		2.0	0.3			2.3			0.7	
Delay (s)	15.9	18.3		13.4	11.1			17.3			10.9	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		18.0			11.5			17.3			10.9	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	311	86	92	297	92	119	82	47	47	82	119
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1671	1436		3088			1885			1835	
Flt Permitted		0.80	1.00		0.78			0.68			0.90	
Satd. Flow (perm)		1346	1436		2425			1305			1674	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	346	96	102	330	102	132	91	52	52	91	132
RTOR Reduction (vph)	0	0	46	0	31	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	442	50	0	503	0	0	262	0	0	224	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		704	751		1268			422			541	
v/s Ratio Prot												
v/s Ratio Perm		c0.33	0.03		0.21			c0.20			0.13	
v/c Ratio		0.63	0.07		0.40			0.62			0.41	
Uniform Delay, d1		11.0	7.7		9.3			18.6			17.2	
Progression Factor		1.41	3.19		0.53			1.00			1.00	
Incremental Delay, d2		4.0	0.2		0.9			6.7			2.3	
Delay (s)		19.6	24.6		5.9			25.4			19.5	
Level of Service		B	C		A			C			B	
Approach Delay (s)		20.5			5.9			25.4			19.5	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	291	32	26	328	60	27	133	47	62	146	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.98			0.97			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1444	3021		1566	3019			3583			3595	
Flt Permitted	0.48	1.00		0.54	1.00			0.90			0.84	
Satd. Flow (perm)	735	3021		883	3019			3230			3066	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	323	36	29	364	67	30	148	52	69	162	72
RTOR Reduction (vph)	0	13	0	0	23	0	0	30	0	0	42	0
Lane Group Flow (vph)	66	346	0	29	408	0	0	200	0	0	261	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	339	1394		408	1393			1342			1274	
v/s Ratio Prot		0.11			c0.14							
v/s Ratio Perm	0.09			0.03				0.06			c0.09	
v/c Ratio	0.19	0.25		0.07	0.29			0.15			0.20	
Uniform Delay, d1	10.4	10.6		9.7	10.9			11.8			12.1	
Progression Factor	0.65	0.64		1.00	1.00			0.93			0.41	
Incremental Delay, d2	1.0	0.3		0.3	0.5			0.2			0.3	
Delay (s)	7.7	7.2		10.1	11.4			11.3			5.3	
Level of Service	A	A		B	B			B			A	
Approach Delay (s)		7.3			11.3			11.3			5.3	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM Average Control Delay	8.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	456	30	86	507	222	25	124	115	340	261	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3278			3168			3089			3181	
Flt Permitted		0.75			0.77			0.87			0.69	
Satd. Flow (perm)		2472			2447			2703			2253	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	507	33	96	563	247	28	138	128	378	290	91
RTOR Reduction (vph)	0	5	0	0	49	0	0	67	0	0	13	0
Lane Group Flow (vph)	0	587	0	0	857	0	0	227	0	0	746	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		32.0			32.0			38.0			30.0	
Effective Green, g (s)		32.0			32.0			38.0			30.0	
Actuated g/C Ratio		0.40			0.40			0.48			0.38	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		989			979			1308			845	
v/s Ratio Prot								c0.01				
v/s Ratio Perm		0.24			c0.35			0.07			c0.33	
v/c Ratio		0.59			0.88			0.17			0.97dl	
Uniform Delay, d1		18.9			22.2			12.0			23.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		2.6			10.9			0.3			12.9	
Delay (s)		21.5			33.0			12.3			36.2	
Level of Service		C			C			B			D	
Approach Delay (s)		21.5			33.0			12.3			36.2	
Approach LOS		C			C			B			D	

Intersection Summary			
HCM Average Control Delay	28.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	899	138	48	794	0	82	0	36	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3037			3090			1619				
Flt Permitted		1.00			0.80			0.79				
Satd. Flow (perm)		3037			2483			1328				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	999	153	53	882	0	91	0	40	0	0	0
RTOR Reduction (vph)	0	17	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	1135	0	0	935	0	0	113	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		67.0			33.0			14.0				
Effective Green, g (s)		60.0			33.0			14.0				
Actuated g/C Ratio		0.67			0.37			0.16				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		2025			910			207				
v/s Ratio Prot		c0.37										
v/s Ratio Perm					c0.38			c0.09				
v/c Ratio		0.56			1.03			0.55				
Uniform Delay, d1		8.0			28.5			35.1				
Progression Factor		0.20			1.35			1.00				
Incremental Delay, d2		0.1			35.8			10.0				
Delay (s)		1.7			74.3			45.1				
Level of Service		A			E			D				
Approach Delay (s)		1.7			74.3			45.1			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	34.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1043: 111th Street & Doty Road

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	224	642	24	112	614	185	61	4	107	212	10	213
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3192		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.29	1.00		0.33	1.00	1.00		0.88		0.44	1.00	1.00
Satd. Flow (perm)	471	3192		583	3320	1485		1592		763	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	249	713	27	124	682	206	68	4	119	236	11	237
RTOR Reduction (vph)	0	2	0	0	0	96	0	90	0	0	0	135
Lane Group Flow (vph)	249	738	0	124	682	110	0	101	0	236	11	102
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	54.9	42.5		47.6	38.2	48.2		12.1		25.1	25.1	38.8
Effective Green, g (s)	54.9	42.5		47.6	38.2	48.2		12.1		25.1	25.1	38.8
Actuated g/C Ratio	0.61	0.47		0.53	0.42	0.54		0.13		0.28	0.28	0.43
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	452	1507		421	1409	795		214		312	487	640
v/s Ratio Prot	c0.08	0.23		0.03	0.21	0.02				c0.08	0.01	0.02
v/s Ratio Perm	c0.25			0.13		0.06		0.06		c0.13		0.04
v/c Ratio	0.55	0.49		0.29	0.48	0.14		0.47		0.76	0.02	0.16
Uniform Delay, d1	9.2	16.3		10.9	18.8	10.5		36.0		28.6	23.5	15.6
Progression Factor	2.70	2.08		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	1.0		0.5	1.2	0.1		2.2		10.0	0.0	0.2
Delay (s)	26.5	34.8		11.4	20.0	10.6		38.2		38.6	23.6	15.8
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		32.7			17.0			38.2			27.1	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	26.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	443	2	333	0	0	0	0	19	0	578
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	492	2	370	0	0	0	0	21	0	642
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	370			576			765	950	288	662	950	185
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	370			576			765	950	288	662	950	185
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	22
cM capacity (veh/h)	1178			987			64	256	706	345	256	823

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	492	126	247	21	642
Volume Left	0	0	0	2	0	21	0
Volume Right	0	0	492	0	0	0	642
cSH	1700	1700	1700	987	1700	345	823
Volume to Capacity	0.17	0.17	0.29	0.00	0.15	0.06	0.78
Queue Length 95th (ft)	0	0	0	0	0	5	198
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	16.1	23.1
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		22.8	
Approach LOS						C	

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	537	0	335	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	597	0	372	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	298	298	372
Volume Left (vph)	298	298	372
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.2	6.2	5.6
Degree Utilization, x	0.51	0.51	0.58
Capacity (veh/h)	568	570	619
Control Delay (s)	14.3	14.3	16.0
Approach Delay (s)	14.3		16.0
Approach LOS	B		C

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	483	64	212	535	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3153		1605	3210						3074	
Flt Permitted		1.00		0.34	1.00						0.97	
Satd. Flow (perm)		3153		574	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	537	71	236	594	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	596	0	236	594	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		452	1850						976	
v/s Ratio Prot		0.19		c0.06	0.19						c0.05	
v/s Ratio Perm				c0.24								
v/c Ratio		0.45		0.52	0.32						0.16	
Uniform Delay, d1		17.4		16.7	9.4						20.8	
Progression Factor		1.00		0.36	0.17						1.00	
Incremental Delay, d2		1.1		3.3	0.3						0.3	
Delay (s)		18.5		9.3	1.9						21.2	
Level of Service		B		A	A						C	
Approach Delay (s)		18.5			4.0			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	489	0	0	684	129	63	90	63	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1660	3320			3133			4497				
Flt Permitted	0.19	1.00			1.00			0.99				
Satd. Flow (perm)	335	3320			3133			4497				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	543	0	0	760	143	70	100	70	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	48	0	0	0	0
Lane Group Flow (vph)	106	543	0	0	885	0	0	192	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	345	1875			1290			1428				
v/s Ratio Prot	0.04	c0.16			c0.28			c0.04				
v/s Ratio Perm	0.14											
v/c Ratio	0.31	0.29			0.69			0.13				
Uniform Delay, d1	19.6	9.6			20.5			20.7				
Progression Factor	0.46	0.31			1.00			1.00				
Incremental Delay, d2	2.1	0.4			3.0			0.2				
Delay (s)	11.1	3.3			23.5			20.9				
Level of Service	B	A			C			C				
Approach Delay (s)		4.6			23.5			20.9			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	358	114	119	426	89	129	78	37	32	87	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2979			3005			1835			1770	
Flt Permitted		0.62			0.65			0.72			0.94	
Satd. Flow (perm)		1874			1968			1361			1676	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	398	127	132	473	99	143	87	41	36	97	160
RTOR Reduction (vph)	0	32	0	0	20	0	0	10	0	0	67	0
Lane Group Flow (vph)	0	620	0	0	684	0	0	261	0	0	226	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		663			696			670			825	
v/s Ratio Prot												
v/s Ratio Perm		0.33			c0.35			c0.19			0.14	
v/c Ratio		0.93			0.98			0.39			0.27	
Uniform Delay, d1		20.3			20.8			10.4			9.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		22.2			30.2			1.7			0.8	
Delay (s)		42.4			51.0			12.1			10.5	
Level of Service		D			D			B			B	
Approach Delay (s)		42.4			51.0			12.1			10.5	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM Average Control Delay	36.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	229	88	199	420	125	124	539	77	110	940	146
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1562	2993		1574	3644		1508	3069	1333	1520	3099	1336
Flt Permitted	0.31	1.00		0.50	1.00		0.13	1.00	1.00	0.34	1.00	1.00
Satd. Flow (perm)	510	2993		836	3644		212	3069	1333	545	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	241	93	209	442	132	131	567	81	116	989	154
RTOR Reduction (vph)	0	48	0	0	33	0	0	0	51	0	0	98
Lane Group Flow (vph)	112	286	0	209	541	0	131	567	30	116	989	56
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	230	986		330	1200		181	1119	486	300	1130	487
v/s Ratio Prot	0.02	0.10		c0.03	0.15		c0.05	0.18		0.03	c0.32	
v/s Ratio Perm	0.15			c0.19			0.26		0.02	0.14		0.04
v/c Ratio	0.49	0.29		0.63	0.45		0.72	0.51	0.06	0.39	0.88	0.12
Uniform Delay, d1	19.9	21.1		22.2	22.4		18.0	21.0	17.5	15.6	25.2	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.40	1.05	2.37
Incremental Delay, d2	7.2	0.7		8.9	1.2		22.1	1.6	0.2	2.8	7.4	0.4
Delay (s)	27.1	21.9		31.2	23.7		40.1	22.7	17.8	24.6	33.8	42.7
Level of Service	C	C		C	C		D	C	B	C	C	D
Approach Delay (s)		23.2			25.7			25.1			34.1	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	348	30	83	601	84	33	100	53	51	124	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1965	1466		1990	1480		2015	1506		1995	1511
Flt Permitted		0.60	1.00		0.87	1.00		0.91	1.00		0.89	1.00
Satd. Flow (perm)		1184	1466		1750	1480		1857	1506		1809	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	366	32	87	633	88	35	105	56	54	131	67
RTOR Reduction (vph)	0	0	17	0	0	47	0	0	33	0	0	39
Lane Group Flow (vph)	0	417	15	0	720	41	0	140	23	0	185	28
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		546	677		808	683		771	626		751	628
v/s Ratio Prot												
v/s Ratio Perm		0.35	0.01		c0.41	0.03		0.08	0.02		c0.10	0.02
v/c Ratio		0.76	0.02		0.89	0.06		0.18	0.04		0.25	0.04
Uniform Delay, d1		14.6	9.5		16.0	9.7		12.0	11.3		12.4	11.3
Progression Factor		1.00	1.00		0.44	0.05		1.05	1.21		1.03	0.89
Incremental Delay, d2		9.8	0.1		12.2	0.1		0.5	0.1		0.7	0.1
Delay (s)		24.3	9.6		19.2	0.7		13.1	13.7		13.5	10.2
Level of Service		C	A		B	A		B	B		B	B
Approach Delay (s)		23.3			17.2			13.3			12.6	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	17.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	385	20	51	566	91	10	109	23	125	214	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3076		1550	3035		1550	3017		1550	2991	
Flt Permitted	0.95	1.00		0.49	1.00		0.55	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3076		802	3035		892	3017		1074	2991	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	428	22	57	629	101	11	121	26	139	238	72
RTOR Reduction (vph)	0	6	0	0	20	0	0	15	0	0	42	0
Lane Group Flow (vph)	83	444	0	57	710	0	11	132	0	139	268	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1514		271	1027		371	1253		446	1242	
v/s Ratio Prot	c0.05	0.14			c0.23			0.04			0.09	
v/s Ratio Perm				0.07			0.01			c0.13		
v/c Ratio	0.50	0.29		0.21	0.69		0.03	0.11		0.31	0.22	
Uniform Delay, d1	27.3	9.8		15.3	18.6		11.2	11.6		12.8	12.2	
Progression Factor	1.16	0.56		1.00	1.00		1.00	1.00		1.11	1.10	
Incremental Delay, d2	8.6	0.4		1.8	3.8		0.1	0.2		1.8	0.4	
Delay (s)	40.3	5.9		17.1	22.4		11.4	11.8		15.9	13.8	
Level of Service	D	A		B	C		B	B		B	B	
Approach Delay (s)		11.2			22.0			11.8			14.4	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	267	166	247	330	63	412	300	189	55	295	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.94		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1550	2921		1550	3025			3144			3236	
Flt Permitted	0.50	1.00		0.95	1.00			0.63			0.71	
Satd. Flow (perm)	813	2921		1550	3025			2030			2306	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	71	297	184	274	367	70	458	333	210	61	328	56
RTOR Reduction (vph)	0	107	0	0	18	0	0	27	0	0	13	0
Lane Group Flow (vph)	71	374	0	274	419	0	0	974	0	0	432	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	15.0	15.0		17.0	35.0			44.0			44.0	
Effective Green, g (s)	15.0	15.0		17.0	35.0			44.0			44.0	
Actuated g/C Ratio	0.17	0.17		0.19	0.39			0.49			0.49	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	136	487		293	1176			992			1127	
v/s Ratio Prot		c0.13		c0.18	0.14							
v/s Ratio Perm	0.09							c0.48			0.19	
v/c Ratio	0.52	0.77		0.94	0.36			1.09dl			0.38	
Uniform Delay, d1	34.2	35.8		36.0	19.5			22.6			14.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	13.6	11.1		38.3	0.8			24.6			1.0	
Delay (s)	47.8	46.9		74.3	20.4			47.2			15.5	
Level of Service	D	D		E	C			D			B	
Approach Delay (s)		47.1			41.1			47.2			15.5	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM Average Control Delay	40.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	454	16	75	647	75	55	110	165	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		1.00			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1620			1603			3249				
Flt Permitted		0.94			0.91			0.99				
Satd. Flow (perm)		1529			1466			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	504	18	83	719	83	61	122	183	0	0	0
RTOR Reduction (vph)	0	1	0	0	5	0	0	139	0	0	0	0
Lane Group Flow (vph)	0	550	0	0	880	0	0	227	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		976			936			775				
v/s Ratio Prot												
v/s Ratio Perm		0.36			c0.60			0.07				
v/c Ratio		0.56			0.94			0.29				
Uniform Delay, d1		6.6			10.6			20.3				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		2.3			18.1			0.9				
Delay (s)		9.0			28.8			21.2				
Level of Service		A			C			C				
Approach Delay (s)		9.0			28.8			21.2			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	21.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	133	474	615	39	119	174
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	140	499	647	41	125	183
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.94				0.94	0.94
vC, conflicting volume	705				1220	366
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	571				1116	212
tC, single (s)	4.2				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	85				22	75
cM capacity (veh/h)	912				161	742

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	306	333	432	257	125	183
Volume Left	140	0	0	0	125	0
Volume Right	0	0	0	41	0	183
cSH	912	1700	1700	1700	161	742
Volume to Capacity	0.15	0.20	0.25	0.15	0.78	0.25
Queue Length 95th (ft)	14	0	0	0	125	24
Control Delay (s)	5.3	0.0	0.0	0.0	79.4	11.4
Lane LOS	A				F	B
Approach Delay (s)	2.5		0.0		39.1	
Approach LOS					E	

Intersection Summary			
Average Delay	8.4		
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	710	0	1	626	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	789	0	1	696	3	32
RTOR Reduction (vph)	0	0	0	0	28	0
Lane Group Flow (vph)	789	0	0	697	7	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	70.0			40.0	12.0	
Effective Green, g (s)	66.0			40.0	12.0	
Actuated g/C Ratio	0.73			0.44	0.13	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1282			776	203	
v/s Ratio Prot	c0.45				c0.00	
v/s Ratio Perm				0.40		
v/c Ratio	0.62			0.90	0.04	
Uniform Delay, d1	5.8			23.1	34.0	
Progression Factor	0.05			1.00	1.00	
Incremental Delay, d2	0.9			15.3	0.3	
Delay (s)	1.2			38.5	34.3	
Level of Service	A			D	C	
Approach Delay (s)	1.2			38.5	34.3	
Approach LOS	A			D	C	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	253	616	32	410	0	0	0	0	17	6	252
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	281	684	36	456	0	0	0	0	19	7	280
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	456			281			1153	1150	483	667	808	456
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	456			281			1153	1150	483	667	808	456
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	94	98	49
cM capacity (veh/h)	1116			1264			73	194	535	341	308	552

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	187	778	491	26	280
Volume Left	0	0	36	19	0
Volume Right	0	684	0	0	280
cSH	1700	1700	1264	332	552
Volume to Capacity	0.11	0.46	0.03	0.08	0.51
Queue Length 95th (ft)	0	0	2	6	71
Control Delay (s)	0.0	0.0	0.9	16.8	18.1
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.9	17.9	
Approach LOS				C	

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	270	0	442	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	300	0	491	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	150	150	491
Volume Left (vph)	150	150	491
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.4	6.4	5.0
Degree Utilization, x	0.27	0.27	0.68
Capacity (veh/h)	536	536	697
Control Delay (s)	10.5	10.5	18.1
Approach Delay (s)	10.5		18.1
Approach LOS	B		C

Intersection Summary			
Delay	15.2		
HCM Level of Service	C		
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	501	345	273	661	0	0	0	0	279	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3425					1359	3806	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3425					1359	3806	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	527	363	287	696	0	0	0	0	294	283	392
RTOR Reduction (vph)	0	0	230	0	0	0	0	0	0	0	53	113
Lane Group Flow (vph)	0	527	133	0	983	0	0	0	0	162	558	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		68.1					23.0	23.0	68.0
Effective Green, g (s)		39.0	39.0		68.1					23.0	23.0	68.0
Actuated g/C Ratio		0.24	0.24		0.43					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		775	300		1458					195	547	482
v/s Ratio Prot		c0.17			c0.29					0.12	c0.15	
v/s Ratio Perm			0.11									0.07
v/c Ratio		0.68	0.44		0.67					0.83	1.02	0.17
Uniform Delay, d1		54.8	51.3		37.0					66.6	68.5	28.5
Progression Factor		1.00	1.00		0.06					1.00	1.00	1.00
Incremental Delay, d2		4.8	4.7		0.1					24.9	43.6	0.2
Delay (s)		59.6	56.0		2.3					91.5	112.1	28.7
Level of Service		E	E		A					F	F	C
Approach Delay (s)		58.1			2.3			0.0			91.8	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	50.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.9
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	488	0	0	602	144	332	214	196	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3064				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3064				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	324	542	0	0	669	160	369	238	218	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	82	0	60	0	0	0	0
Lane Group Flow (vph)	324	542	0	0	669	78	280	485	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	83.9	83.9			37.1	37.1	12.0	12.0				
Effective Green, g (s)	83.9	83.9			37.1	37.1	12.0	12.0				
Actuated g/C Ratio	0.52	0.52			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	842	1799			744	344	117	230				
v/s Ratio Prot	c0.20	0.16			c0.21		c0.18	0.16				
v/s Ratio Perm						0.05						
v/c Ratio	0.38	0.30			0.90	0.23	2.39	2.11				
Uniform Delay, d1	22.7	21.5			59.6	49.8	74.0	74.0				
Progression Factor	0.06	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			13.7	0.3	652.3	513.1				
Delay (s)	1.4	1.3			73.3	50.2	726.3	587.1				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.4			68.8			634.4			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	230.8	HCM Level of Service	F
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	273	136	129	270	107	108	522	80	106	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1576	1600	1372	1594	1766		1578	3009		1537	3001	
Flt Permitted	0.26	1.00	1.00	0.41	1.00		0.13	1.00		0.33	1.00	
Satd. Flow (perm)	438	1600	1372	683	1766		216	3009		527	3001	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	287	143	136	284	113	114	549	84	112	845	126
RTOR Reduction (vph)	0	0	100	0	16	0	0	13	0	0	13	0
Lane Group Flow (vph)	147	287	43	136	381	0	114	620	0	112	958	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	34.0	27.0	27.0	34.0	27.0		43.0	36.0		40.2	34.6	
Effective Green, g (s)	32.0	28.0	27.0	32.0	27.0		41.0	36.0		38.2	34.6	
Actuated g/C Ratio	0.35	0.31	0.30	0.35	0.30		0.45	0.40		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	230	494	409	302	526		188	1196		273	1146	
v/s Ratio Prot	c0.04	0.18		0.03	c0.22		c0.04	0.21		0.02	c0.32	
v/s Ratio Perm	0.18		0.03	0.13			0.23			0.15		
v/c Ratio	0.64	0.58	0.10	0.45	0.72		0.61	0.52		0.41	0.84	
Uniform Delay, d1	22.1	26.4	23.0	21.1	28.5		17.4	20.7		16.7	25.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.7	4.9	0.5	1.1	8.4		5.4	1.6		1.0	7.3	
Delay (s)	27.8	31.3	23.5	22.2	36.9		22.8	22.3		17.7	32.7	
Level of Service	C	C	C	C	D		C	C		B	C	
Approach Delay (s)		28.5			33.1			22.4			31.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	348	61	73	437	82	37	59	34	36	91	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.96			0.95	
Flt Protected		0.99	1.00		0.99	1.00		0.99			0.99	
Satd. Flow (prot)		1970	1467		1624	1381		1868			1875	
Flt Permitted		0.93	1.00		0.90	1.00		0.90			0.94	
Satd. Flow (perm)		1833	1467		1470	1381		1700			1781	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	366	64	77	460	86	39	62	36	38	96	74
RTOR Reduction (vph)	0	0	32	0	0	36	0	20	0	0	30	0
Lane Group Flow (vph)	0	407	32	0	537	50	0	117	0	0	178	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		902	722		724	680		706			740	
v/s Ratio Prot												
v/s Ratio Perm		0.22	0.02		c0.37	0.04		0.07			c0.10	
v/c Ratio		0.45	0.04		0.74	0.07		0.17			0.24	
Uniform Delay, d1		10.8	8.6		13.2	8.7		11.9			12.3	
Progression Factor		1.00	1.00		1.00	1.00		1.00			1.46	
Incremental Delay, d2		1.6	0.1		6.7	0.2		0.5			0.7	
Delay (s)		12.4	8.7		19.9	8.9		12.4			18.7	
Level of Service		B	A		B	A		B			B	
Approach Delay (s)		11.9			18.4			12.4			18.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1062: 119th Street & State Street

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	259	41	71	472	20	36	114	34	17	184	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.95		1.00	0.98		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.97	
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1753	1459		1725	1493		1712	1482		1711	
Flt Permitted		0.84	1.00		0.91	1.00		0.89	1.00		0.97	
Satd. Flow (perm)		1479	1459		1584	1493		1543	1482		1672	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	273	43	75	497	21	38	120	36	18	194	74
RTOR Reduction (vph)	0	0	22	0	0	11	0	0	26	0	28	0
Lane Group Flow (vph)	0	335	21	0	572	10	0	158	10	0	258	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		22.0	22.0		22.0	22.0		13.0	13.0		13.0	
Effective Green, g (s)		22.0	22.0		22.0	22.0		13.0	13.0		13.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.29	0.29		0.29	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		723	713		774	730		446	428		483	
v/s Ratio Prot												
v/s Ratio Perm		0.23	0.01		c0.36	0.01		0.10	0.01		c0.15	
v/c Ratio		0.46	0.03		0.74	0.01		0.35	0.02		0.53	
Uniform Delay, d1		7.6	6.0		9.2	5.9		12.7	11.5		13.5	
Progression Factor		1.00	1.00		1.00	1.00		1.14	1.46		1.00	
Incremental Delay, d2		2.1	0.1		6.3	0.0		1.2	0.1		4.2	
Delay (s)		9.7	6.0		15.5	6.0		15.7	16.8		17.7	
Level of Service		A	A		B	A		B	B		B	
Approach Delay (s)		9.3			15.1			15.9			17.7	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	45.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	229	35	76	8	14	11	38	256	8	31	556	531
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1860	1440		1765			1996			1975	1382
Flt Permitted		0.76	1.00		0.93			0.81			0.97	1.00
Satd. Flow (perm)		1468	1440		1657			1631			1928	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	254	39	84	9	16	12	42	284	9	34	618	590
RTOR Reduction (vph)	0	0	49	0	9	0	0	2	0	0	0	201
Lane Group Flow (vph)	0	293	35	0	28	0	0	333	0	0	652	389
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		658	598		433			803			949	680
v/s Ratio Prot		c0.05										
v/s Ratio Perm		0.13	0.02		0.02			0.20			c0.34	0.28
v/c Ratio		0.45	0.06		0.06			0.42			0.69	0.57
Uniform Delay, d1		13.6	11.4		18.0			10.5			12.7	11.7
Progression Factor		1.00	1.00		1.00			0.51			1.00	1.00
Incremental Delay, d2		2.2	0.2		0.3			1.1			4.0	3.5
Delay (s)		15.8	11.6		18.3			6.5			16.7	15.2
Level of Service		B	B		B			A			B	B
Approach Delay (s)		14.9			18.3			6.5			16.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1064: 127th Street & S Paulina St

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	894	289	375	1072	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4573		1621	3320					1489	2913	1442
Flt Permitted		1.00		0.11	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4573		190	3320					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	941	304	395	1128	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	45	0	0	0	0	0	0	0	0	9	76
Lane Group Flow (vph)	0	1200	0	395	1128	0	0	0	0	308	603	195
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		43.5		74.9	74.9					28.1	28.1	28.1
Effective Green, g (s)		43.5		74.9	74.9					28.1	28.1	28.1
Actuated g/C Ratio		0.38		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1730		458	2162					364	712	352
v/s Ratio Prot		0.26		c0.20	0.34							
v/s Ratio Perm				c0.36						0.21	0.21	0.14
v/c Ratio		0.69		0.86	0.52					0.85	0.85	0.55
Uniform Delay, d1		30.1		29.1	10.6					41.4	41.4	38.0
Progression Factor		1.00		0.86	1.69					1.00	1.00	1.00
Incremental Delay, d2		2.3		10.4	0.6					16.7	9.4	2.1
Delay (s)		32.4		35.5	18.5					58.1	50.8	40.0
Level of Service		C		D	B					E	D	D
Approach Delay (s)		32.4			22.9			0.0			50.2	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	105.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1066	0	0	1017	271	430	351	318	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4521				
Flt Permitted	0.14	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	460	3353			3241	1489		4521				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1122	0	0	1071	285	453	369	335	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	85	0	62	0	0	0	0
Lane Group Flow (vph)	359	1122	0	0	1071	200	0	1095	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	71.2	71.2			53.0	53.0		31.8				
Effective Green, g (s)	71.2	71.2			53.0	53.0		31.8				
Actuated g/C Ratio	0.62	0.62			0.46	0.46		0.28				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	570	2076			1494	686		1250				
v/s Ratio Prot	0.07	c0.33			c0.33							
v/s Ratio Perm	0.32					0.13		0.24				
v/c Ratio	0.63	0.54			0.72	0.29		0.88				
Uniform Delay, d1	15.3	12.5			25.0	19.3		39.7				
Progression Factor	1.32	0.17			0.98	1.25		1.00				
Incremental Delay, d2	1.5	0.7			2.2	0.8		7.7				
Delay (s)	21.6	2.8			26.6	25.0		47.4				
Level of Service	C	A			C	C		D				
Approach Delay (s)		7.4			26.3			47.4			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	105.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	671	408	104	779	67	227	179	66	77	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1313	1601	3282		1578	3002		1540	2941	
Flt Permitted	0.11	1.00	1.00	0.38	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	174	3273	1313	646	3282		652	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	142	706	429	109	820	71	239	188	69	81	171	127
RTOR Reduction (vph)	0	0	173	0	6	0	0	38	0	0	107	0
Lane Group Flow (vph)	142	706	256	109	885	0	239	219	0	81	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.9	52.3	68.7	43.4	34.3		38.1	26.6		26.2	18.2	
Effective Green, g (s)	64.9	52.3	68.7	43.4	34.3		38.1	26.6		26.2	18.2	
Actuated g/C Ratio	0.56	0.45	0.60	0.38	0.30		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	426	1489	784	319	979		348	694		259	465	
v/s Ratio Prot	c0.08	c0.22	0.05	0.03	c0.27		c0.10	0.07		0.02	0.06	
v/s Ratio Perm	0.11		0.15	0.10			c0.13			0.05		
v/c Ratio	0.33	0.47	0.33	0.34	0.90		0.69	0.32		0.31	0.41	
Uniform Delay, d1	15.9	21.8	11.6	23.9	38.8		30.6	36.7		36.2	43.6	
Progression Factor	0.81	0.81	2.26	1.00	1.00		0.98	1.02		1.00	1.00	
Incremental Delay, d2	1.7	0.9	0.2	0.6	13.3		5.3	0.9		0.7	2.1	
Delay (s)	14.5	18.5	26.4	24.6	52.1		35.3	38.2		36.9	45.7	
Level of Service	B	B	C	C	D		D	D		D	D	
Approach Delay (s)		20.7			49.1			36.8			43.8	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	35.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	221	367	86	324	113	362	340	81	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.96		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1706	2910		1653	3235		1620	3405		1580	3183	
Flt Permitted	0.44	1.00		0.24	1.00		0.32	1.00		0.50	1.00	
Satd. Flow (perm)	794	2910		417	3235		544	3405		824	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	233	386	91	341	119	381	358	85	217	429	59
RTOR Reduction (vph)	0	242	0	0	28	0	0	18	0	0	9	0
Lane Group Flow (vph)	48	377	0	91	432	0	381	425	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	39.6	32.9		46.0	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	39.6	32.9		46.0	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.34	0.29		0.40	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	327	833		273	1016		454	1309		340	888	
v/s Ratio Prot	0.01	0.13		c0.03	c0.13		c0.15	0.12		0.04	0.15	
v/s Ratio Perm	0.04			0.10			c0.26			0.18		
v/c Ratio	0.15	0.45		0.33	0.43		0.84	0.32		0.64	0.54	
Uniform Delay, d1	25.5	33.7		23.1	31.2		20.8	24.9		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.98	0.97	
Incremental Delay, d2	0.2	1.8		0.9	1.3		13.1	0.7		3.8	2.2	
Delay (s)	25.7	35.4		23.9	32.5		33.9	25.6		32.1	36.2	
Level of Service	C	D		C	C		C	C		C	D	
Approach Delay (s)		34.7			31.1			29.4			34.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	32.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	644	141	10	543	135	104	287	9	215	609	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.97		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3034			3004		1452	3227		1523	2871	
Flt Permitted		0.65			0.94		0.17	1.00		0.47	1.00	
Satd. Flow (perm)		1996			2820		255	3227		751	2871	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	716	157	11	603	150	116	319	10	239	677	203
RTOR Reduction (vph)	0	19	0	0	27	0	0	3	0	0	35	0
Lane Group Flow (vph)	0	971	0	0	737	0	116	326	0	239	845	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		39.0			31.0		27.0	24.0		31.0	26.0	
Effective Green, g (s)		39.0			31.0		27.0	24.0		31.0	26.0	
Actuated g/C Ratio		0.49			0.39		0.34	0.30		0.39	0.32	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		1025			1093		131	968		339	933	
v/s Ratio Prot		c0.05					0.03	0.10		c0.04	c0.29	
v/s Ratio Perm		c0.41			0.26		0.27			0.23		
v/c Ratio		0.95			0.67		0.89	0.34		0.71	0.91	
Uniform Delay, d1		19.5			20.3		24.5	21.8		20.0	25.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		17.9			3.3		52.6	0.9		11.7	13.9	
Delay (s)		37.4			23.6		77.1	22.7		31.7	39.8	
Level of Service		D			C		E	C		C	D	
Approach Delay (s)		37.4			23.6			36.9			38.0	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	229	136	123	292	28	72	462	83	35	698	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	1899		1600	2011		1676	3218		1435	3274	
Flt Permitted	0.46	1.00		0.41	1.00		0.29	1.00		0.42	1.00	
Satd. Flow (perm)	832	1899		686	2011		516	3218		630	3274	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	236	140	127	301	29	74	476	86	36	720	72
RTOR Reduction (vph)	0	33	0	0	5	0	0	22	0	0	12	0
Lane Group Flow (vph)	69	343	0	127	325	0	74	540	0	36	780	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	307	701		253	743		246	1535		300	1561	
v/s Ratio Prot		0.18			0.16			0.17			c0.24	
v/s Ratio Perm	0.08			c0.19			0.14			0.06		
v/c Ratio	0.22	0.49		0.50	0.44		0.30	0.35		0.12	0.50	
Uniform Delay, d1	14.1	15.8		15.9	15.4		10.4	10.7		9.4	11.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	2.4		7.0	1.9		3.1	0.6		0.8	1.1	
Delay (s)	15.8	18.2		22.8	17.3		13.5	11.3		10.2	12.8	
Level of Service	B	B		C	B		B	B		B	B	
Approach Delay (s)		17.8			18.8			11.6			12.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	843	366	786	32	3	10	9	47	12	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0	4.0	5.0				4.0			4.0	
Lane Util. Factor		0.95	1.00	1.00				1.00			1.00	
Frpb, ped/bikes		1.00	1.00	1.00				0.99			0.99	
Flpb, ped/bikes		1.00	1.00	1.00				1.00			1.00	
Frt		1.00	1.00	0.99				0.91			0.95	
Flt Protected		1.00	0.95	1.00				0.99			0.97	
Satd. Flow (prot)		3160	1565	1649				1811			1847	
Flt Permitted		0.95	0.17	1.00				0.96			0.87	
Satd. Flow (perm)		3013	274	1649				1751			1656	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	887	385	827	34	3	11	9	49	13	0	3
RTOR Reduction (vph)	0	0	0	2	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	889	385	859	0	0	0	34	0	0	17	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		pm+pt			Perm	Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4			2	2			6		
Actuated Green, G (s)		20.0	37.0	37.0				14.0			14.0	
Effective Green, g (s)		20.0	37.0	37.0				14.0			14.0	
Actuated g/C Ratio		0.33	0.62	0.62				0.23			0.23	
Clearance Time (s)		5.0	4.0	5.0				4.0			4.0	
Lane Grp Cap (vph)		1004	449	1017				409			386	
v/s Ratio Prot			0.19	c0.52								
v/s Ratio Perm		0.30	c0.34					c0.02			0.01	
v/c Ratio		0.89	0.86	0.84				0.08			0.04	
Uniform Delay, d1		18.9	12.7	9.2				18.0			17.8	
Progression Factor		1.00	1.00	1.00				1.00			1.00	
Incremental Delay, d2		11.4	18.7	8.6				0.4			0.2	
Delay (s)		30.3	31.4	17.8				18.4			18.0	
Level of Service		C	C	B				B			B	
Approach Delay (s)		30.3		22.0				18.4			18.0	
Approach LOS		C		C				B			B	

Intersection Summary			
HCM Average Control Delay	27.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR2	NER
Lane Configurations		
Volume (vph)	5	276
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)		4.0
Lane Util. Factor		1.00
Frpb, ped/bikes		1.00
Flpb, ped/bikes		1.00
Frt		0.86
Flt Protected		1.00
Satd. Flow (prot)		1557
Flt Permitted		1.00
Satd. Flow (perm)		1557
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	5	291
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	0	291
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	0%
Turn Type		Over
Protected Phases		7
Permitted Phases		
Actuated Green, G (s)		13.0
Effective Green, g (s)		13.0
Actuated g/C Ratio		0.22
Clearance Time (s)		4.0
Lane Grp Cap (vph)		337
v/s Ratio Prot		0.19
v/s Ratio Perm		
v/c Ratio		0.86
Uniform Delay, d1		22.6
Progression Factor		1.00
Incremental Delay, d2		24.2
Delay (s)		46.9
Level of Service		D
Approach Delay (s)		
Approach LOS		

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	264	887	958	132	113	234
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3283	3260		1660	1485
Flt Permitted		0.53	1.00		0.95	1.00
Satd. Flow (perm)		1774	3260		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	293	986	1064	147	126	260
RTOR Reduction (vph)	0	0	12	0	0	139
Lane Group Flow (vph)	0	1279	1199	0	126	121
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		67.0	67.0		15.0	15.0
Effective Green, g (s)		67.0	67.0		15.0	15.0
Actuated g/C Ratio		0.74	0.74		0.17	0.17
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1321	2427		277	248
v/s Ratio Prot			0.37		0.08	
v/s Ratio Perm		c0.72				c0.08
v/c Ratio		1.11dl	0.49		0.45	0.49
Uniform Delay, d1		10.5	4.6		33.8	34.0
Progression Factor		1.00	1.00		0.99	1.05
Incremental Delay, d2		18.2	0.7		4.9	6.2
Delay (s)		28.8	5.4		38.4	41.9
Level of Service		C	A		D	D
Approach Delay (s)		28.8	5.4		40.8	
Approach LOS		C	A		D	

Intersection Summary			
HCM Average Control Delay	20.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	81	922	1006	195	287	88
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3119	3112		1506	1343
Flt Permitted		0.68	1.00		0.95	1.00
Satd. Flow (perm)		2145	3112		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	85	971	1059	205	302	93
RTOR Reduction (vph)	0	0	25	0	0	47
Lane Group Flow (vph)	0	1056	1239	0	302	46
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1122	1628		533	475
v/s Ratio Prot			0.40		c0.20	
v/s Ratio Perm		c0.49				0.03
v/c Ratio		0.94	0.76		0.57	0.10
Uniform Delay, d1		14.6	12.3		17.0	14.0
Progression Factor		1.00	1.00		1.81	3.00
Incremental Delay, d2		16.0	3.4		3.4	0.3
Delay (s)		30.6	15.7		34.1	42.4
Level of Service		C	B		C	D
Approach Delay (s)		30.6	15.7		36.0	
Approach LOS		C	B		D	

Intersection Summary			
HCM Average Control Delay	24.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	808	261	399	1090	205	127
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		3.0	5.0	5.0	5.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	2399		1788	2506	1758	1509
Flt Permitted	1.00		0.09	1.00	0.95	1.00
Satd. Flow (perm)	2399		163	2506	1758	1509
Peak-hour factor, PHF	0.98	0.98	0.90	0.90	0.98	0.98
Adj. Flow (vph)	824	266	443	1211	209	130
RTOR Reduction (vph)	11	0	0	0	0	107
Lane Group Flow (vph)	1079	0	443	1211	209	23
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	2	
Permitted Phases			8			2
Actuated Green, G (s)	43.1		66.1	66.1	16.1	16.1
Effective Green, g (s)	43.1		66.1	66.1	16.1	16.1
Actuated g/C Ratio	0.47		0.72	0.72	0.17	0.17
Clearance Time (s)	5.0		3.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1121		469	1797	307	264
v/s Ratio Prot	0.45		c0.20	0.48	c0.12	
v/s Ratio Perm			c0.47			0.02
v/c Ratio	0.96		0.94	0.67	0.68	0.09
Uniform Delay, d1	23.8		28.5	7.1	35.6	31.9
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	18.5		27.9	1.0	6.1	0.1
Delay (s)	42.3		56.4	8.2	41.7	32.0
Level of Service	D		E	A	D	C
Approach Delay (s)	42.3			21.1	38.0	
Approach LOS	D			C	D	

Intersection Summary			
HCM Average Control Delay	30.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	92.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1620	38	112	861	1	62	0	157	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.30	1.00	1.00	0.08	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	592	3431	1479	126	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1800	42	124	957	1	69	0	174	0	0	0
RTOR Reduction (vph)	0	0	12	0	0	0	0	0	142	0	0	0
Lane Group Flow (vph)	1	1800	30	124	957	1	0	69	32	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	50.1	50.1	50.1	67.7	67.7	67.7		9.3	9.3			
Effective Green, g (s)	50.1	50.1	50.1	67.7	67.7	67.7		9.3	9.3			
Actuated g/C Ratio	0.59	0.59	0.59	0.80	0.80	0.80		0.11	0.11			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	349	2022	872	352	2644	1219		169	164			
v/s Ratio Prot		c0.52		0.06	c0.29							
v/s Ratio Perm	0.00		0.02	0.22		0.00		c0.04	0.02			
v/c Ratio	0.00	0.89	0.03	0.35	0.36	0.00		0.41	0.19			
Uniform Delay, d1	7.2	15.1	7.3	13.6	2.5	1.8		35.3	34.4			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	6.4	0.1	0.6	0.1	0.0		1.6	0.6			
Delay (s)	7.2	21.5	7.4	14.2	2.6	1.8		36.9	35.0			
Level of Service	A	C	A	B	A	A		D	D			
Approach Delay (s)		21.1			3.9			35.5			0.0	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	11	966	846	30	71	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3097	3083		1530	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2912	3083		1530	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1073	940	33	79	16
RTOR Reduction (vph)	0	0	3	0	8	0
Lane Group Flow (vph)	0	1085	970	0	87	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	61.0		4.0	
Effective Green, g (s)		33.0	61.0		4.0	
Actuated g/C Ratio		0.37	0.68		0.04	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1068	2090		68	
v/s Ratio Prot			c0.31		c0.06	
v/s Ratio Perm		c0.37				
v/c Ratio		1.02	0.46		1.28	
Uniform Delay, d1		28.5	6.8		43.0	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		31.6	0.2		203.3	
Delay (s)		60.1	0.2		246.3	
Level of Service		E	A		F	
Approach Delay (s)		60.1	0.2		246.3	
Approach LOS		E	A		F	

Intersection Summary			
HCM Average Control Delay	41.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	520	0	1	589	39	3	2	28	202	0	148
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.97
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1767			3342			1463			1667	1346
Flt Permitted		0.79			0.95			0.77			0.86	1.00
Satd. Flow (perm)		1410			3192			1132			1515	1346
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	578	0	1	654	43	3	2	31	224	0	164
RTOR Reduction (vph)	0	0	0	0	5	0	0	28	0	0	0	117
Lane Group Flow (vph)	0	687	0	0	693	0	0	8	0	0	224	47
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		40.0			52.0			9.0			23.0	26.0
Effective Green, g (s)		40.0			52.0			9.0			23.0	26.0
Actuated g/C Ratio		0.44			0.58			0.10			0.26	0.29
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		627			1864			113			411	389
v/s Ratio Prot					c0.05						c0.08	
v/s Ratio Perm		c0.49			0.17			0.01			c0.05	0.04
v/c Ratio		1.10			0.37			0.07			0.55	0.12
Uniform Delay, d1		25.0			10.2			36.7			29.0	23.6
Progression Factor		1.00			0.89			1.00			1.00	1.00
Incremental Delay, d2		64.9			0.2			1.2			5.1	0.6
Delay (s)		89.9			9.4			37.9			34.1	24.2
Level of Service		F			A			D			C	C
Approach Delay (s)		89.9			9.4			37.9			29.9	
Approach LOS		F			A			D			C	

Intersection Summary			
HCM Average Control Delay	44.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix D
Union Pacific Railroad (UPRR) Rail Alternative - Right-of-Way Option

UPRR Right-of-Way Option Alternative Project Traffic Estimates

ITE Land Use	Unit	Trip Generation Rate			Peak Hour Direction			
		Daily	AM Peak Hour	PM Peak Hour	AM In	AM Out	PM In	PM Out
Light Rail with Park and Ride	Parking Spaces	2.51	1.07	1.24	80%	20%	20%	80%

UPRR ROW Alternative Park and Ride Facilities		Estimated Project Traffic						
Location	Parking Spaces	Daily	AM In	AM Out	AM Total	PM In	PM Out	PM Total
103rd Street	200	502	171	43	214	50	198	248
111th Street	200	502	171	43	214	50	198	248
Michigan Avenue	1,000	2,510	856	214	1,070	248	992	1,240
130th Street	2,300	5,773	1,969	492	2,461	570	2,282	2,852
Total	**3,700**	**9,287**	**3,167**	**792**	**3,959**	**918**	**3,670**	**4,588**

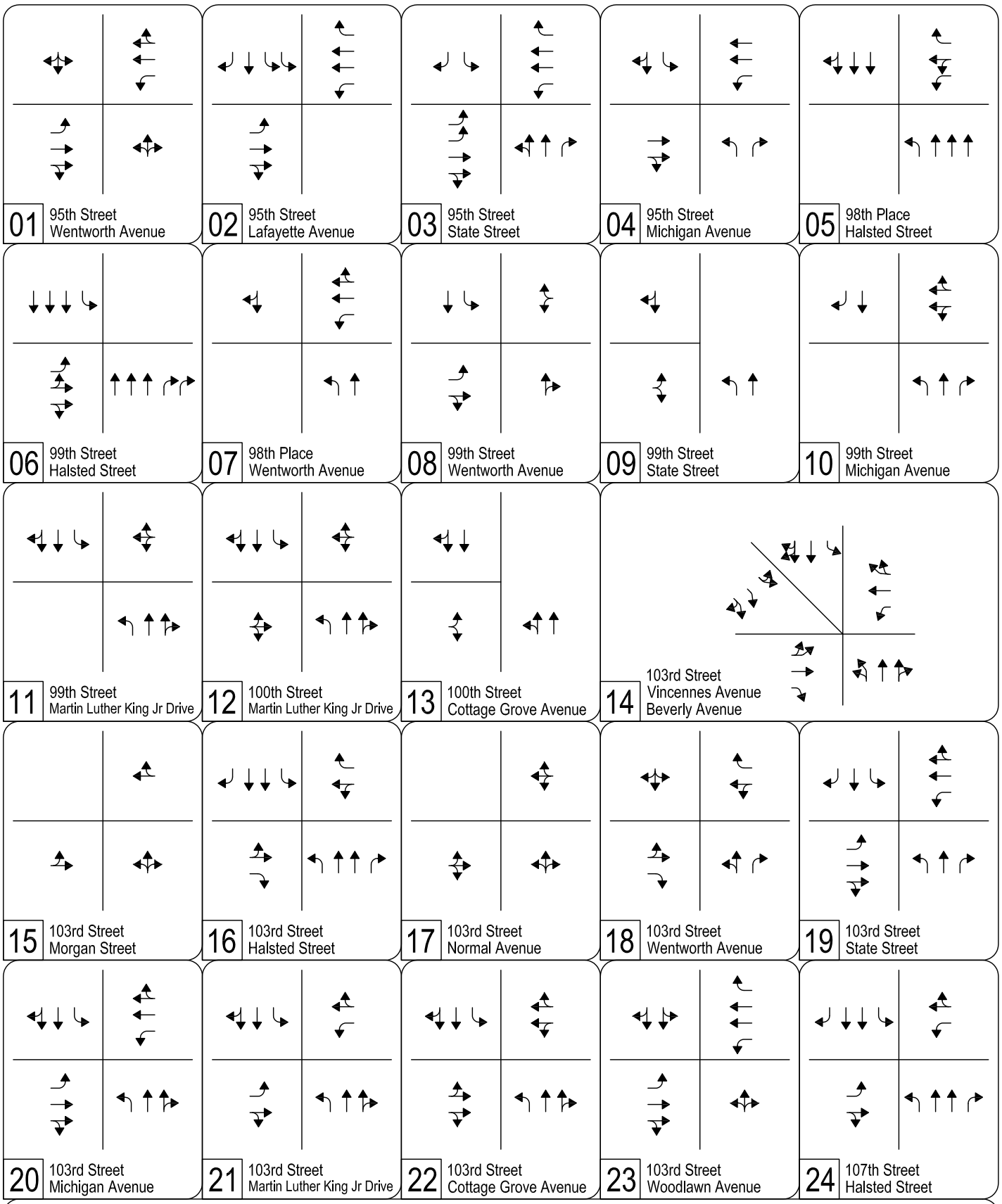

UPRR ROW Option Alternative (2026) Intersection Lane Geometry

Page 1 of 3

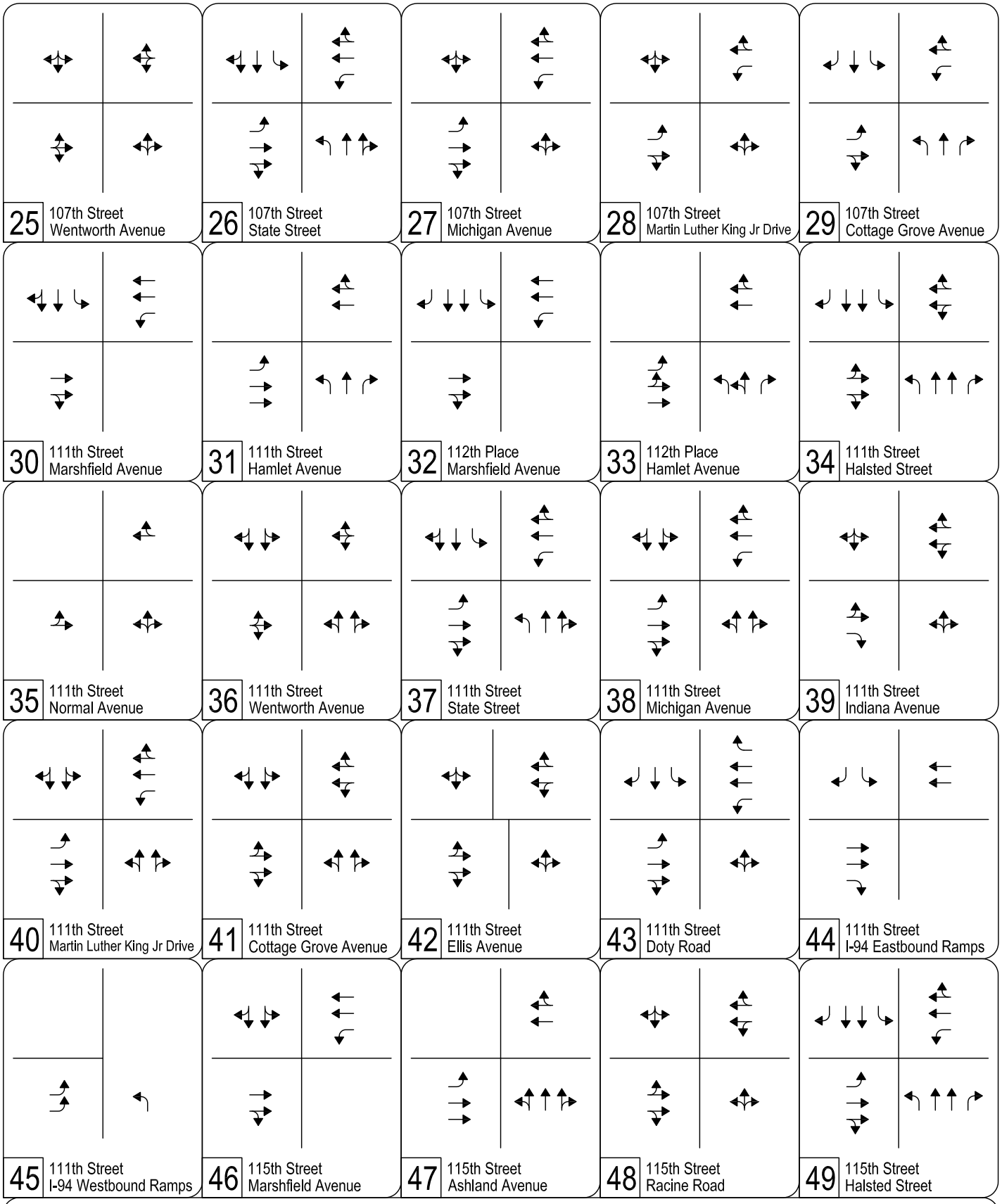

UPRR ROW Option Alternative (2026) Intersection Lane Geometry

Page 2 of 3

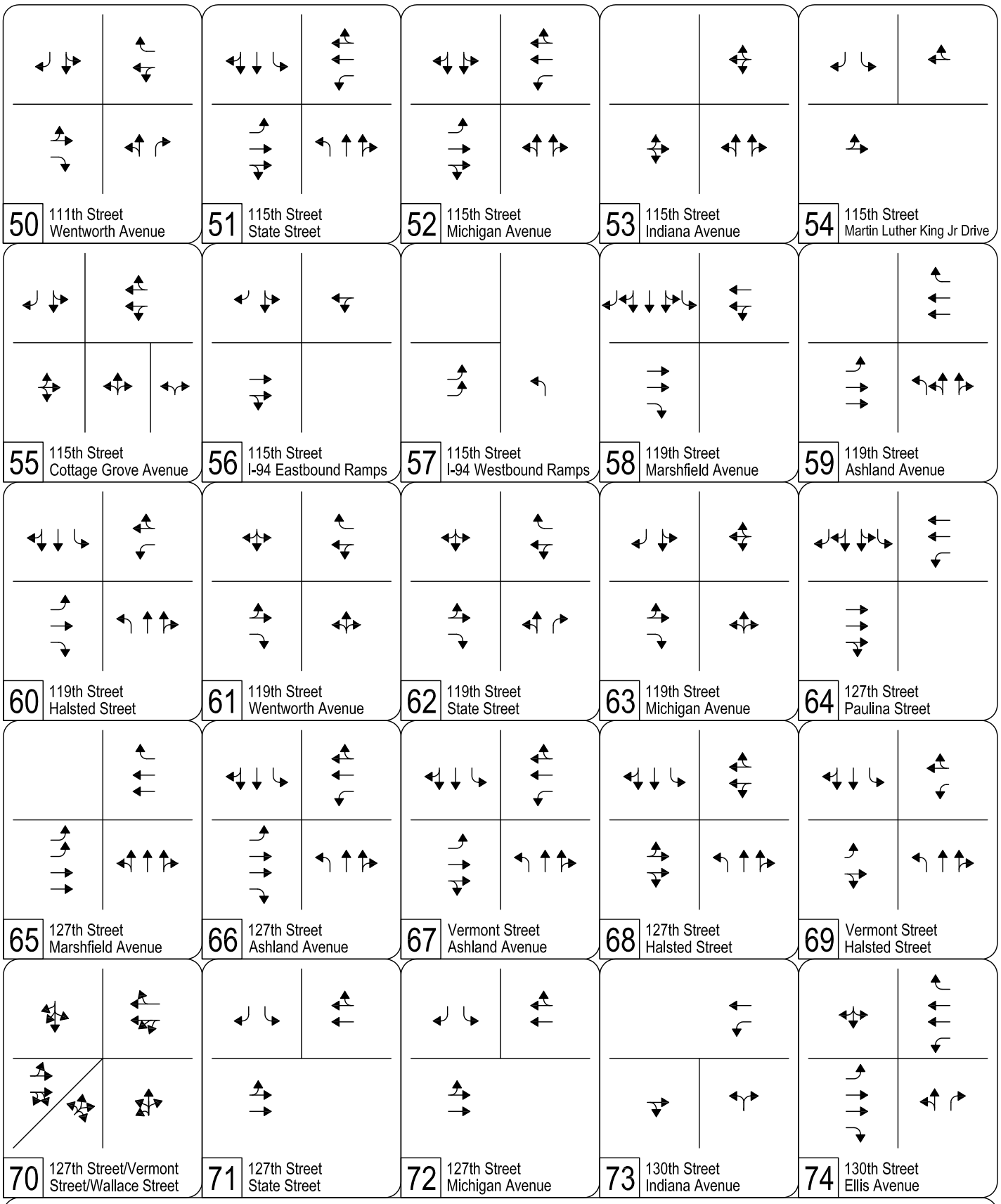

UPRR ROW Option Alternative (2026) Intersection Lane Geometry

Page 3 of 3

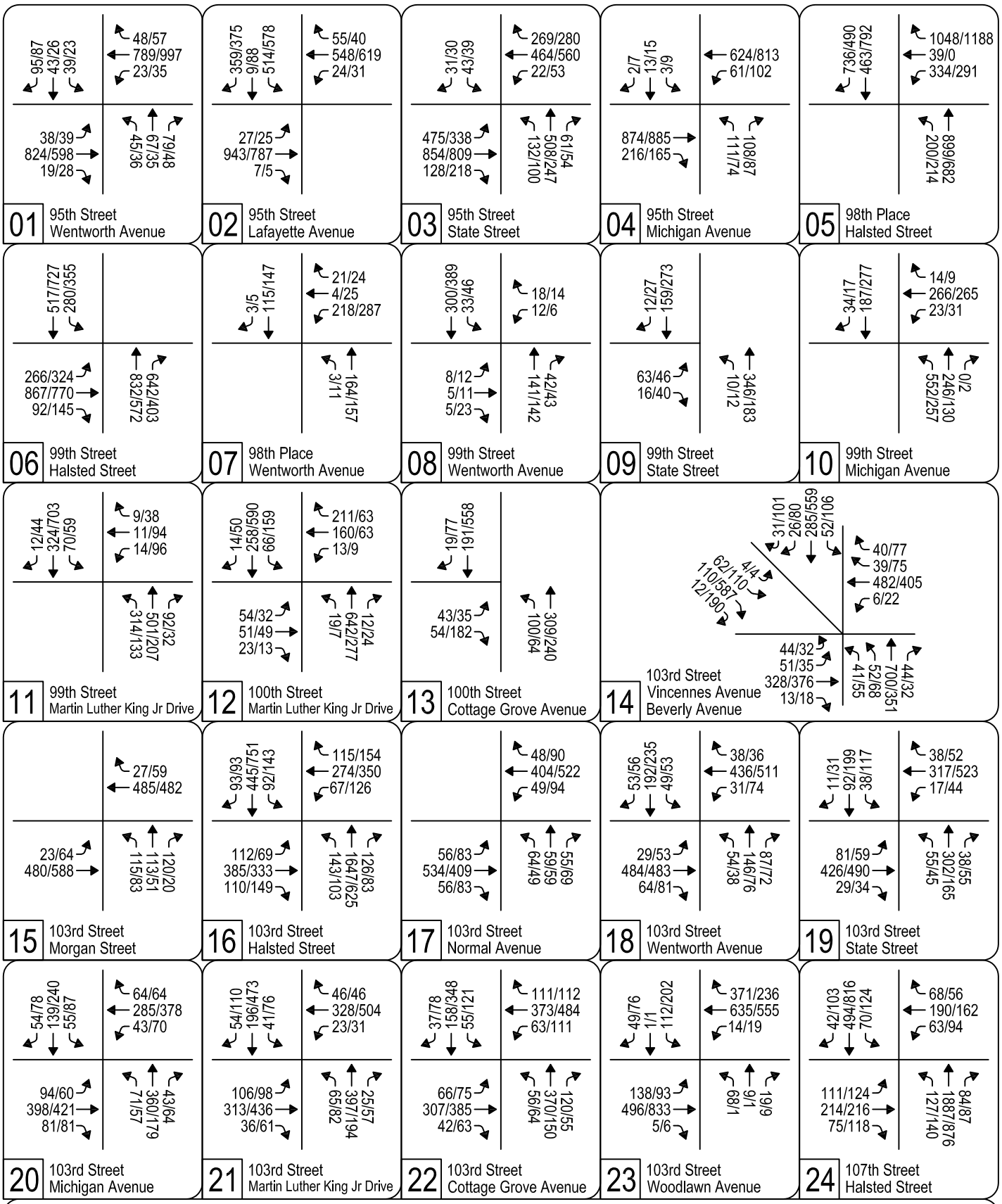

UPRR ROW Option Alternative (2026) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

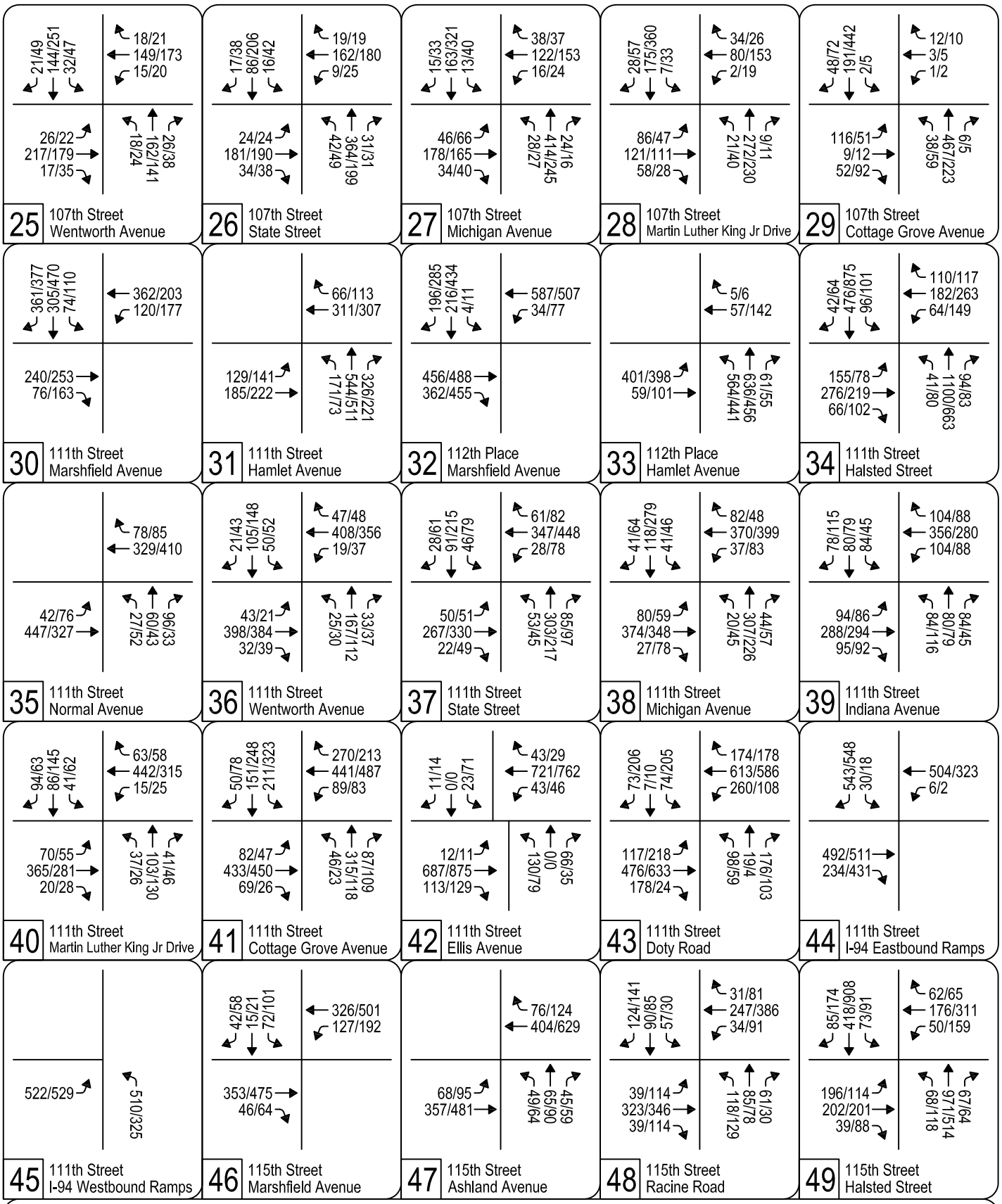

UPRR ROW Option Alternative (2026) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

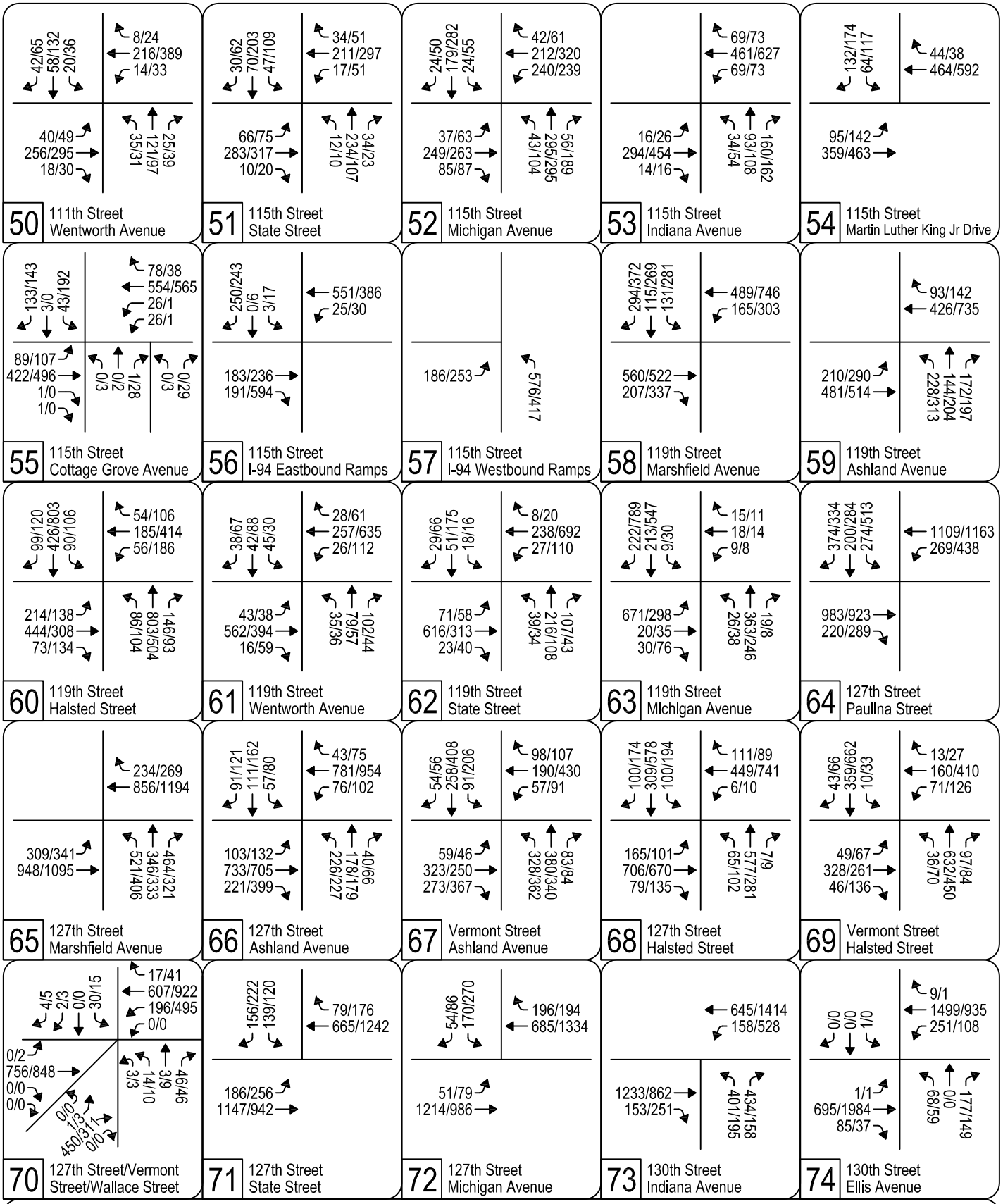

UPRR ROW Option Alternative (2026) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	824	19	23	789	48	45	67	79	39	43	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.98	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1416	2975		1592	2978			1754			1673	
Flt Permitted	0.26	1.00		0.26	1.00			0.90			0.91	
Satd. Flow (perm)	384	2975		429	2978			1598			1532	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	867	20	24	831	51	47	71	83	41	45	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	63	0
Lane Group Flow (vph)	40	885	0	24	875	0	0	162	0	0	123	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	201	1556		224	1558			565			542	
v/s Ratio Prot		c0.30			0.29							
v/s Ratio Perm	0.10			0.06				c0.10			0.08	
v/c Ratio	0.20	0.57		0.11	0.56			0.29			0.23	
Uniform Delay, d1	8.3	10.5		7.8	10.5			15.1			14.8	
Progression Factor	1.00	1.00		0.82	1.13			1.00			1.00	
Incremental Delay, d2	2.2	1.5		0.8	1.3			1.3			1.0	
Delay (s)	10.5	12.0		7.2	13.1			16.4			15.7	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.0			12.9			16.4			15.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	943	7	24	548	55	0	0	0	514	9	359
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	776	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	355	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	993	7	25	577	58	0	0	0	541	9	378
RTOR Reduction (vph)	0	1	0	0	0	25	0	0	0	0	0	172
Lane Group Flow (vph)	28	999	0	25	577	33	0	0	0	541	9	206
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	163	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.30		0.01	c0.18					c0.17	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.15
v/c Ratio	0.17	0.92		0.04	0.33	0.11				0.76	0.03	0.64
Uniform Delay, d1	31.6	41.8		15.1	15.3	13.3				46.6	38.7	45.1
Progression Factor	0.80	0.83		0.30	0.63	1.55				1.00	1.00	1.00
Incremental Delay, d2	2.0	12.2		0.1	0.3	0.5				7.3	0.2	9.2
Delay (s)	27.2	46.8		4.6	10.0	21.2				53.9	38.9	54.3
Level of Service	C	D		A	A	C				D	D	D
Approach Delay (s)		46.2			10.8			0.0			54.0	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	40.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	475	854	128	22	464	269	132	508	61	43	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	500	899	135	23	488	283	139	535	64	45	0	33
RTOR Reduction (vph)	0	9	0	0	0	161	0	0	25	0	0	31
Lane Group Flow (vph)	500	1026	0	23	488	122	0	674	39	45	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1554		108	697	225		762	327	53		45
v/s Ratio Prot	0.16	c0.33		0.01	c0.17			c0.20		c0.05		
v/s Ratio Perm						0.13			0.03			0.00
v/c Ratio	0.47	0.66		0.21	0.70	0.54		0.88	0.12	0.85		0.05
Uniform Delay, d1	34.5	24.3		57.2	45.3	43.3		48.3	39.5	60.4		57.4
Progression Factor	0.75	0.19		1.00	1.00	1.00		0.95	0.90	1.00		1.00
Incremental Delay, d2	0.7	1.1		4.5	5.8	9.0		14.1	0.7	70.0		0.4
Delay (s)	26.6	5.7		61.6	51.0	52.3		59.8	36.3	130.4		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		12.5			51.8			57.7			99.7	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	35.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	874	216	61	624	0	111	0	108	3	13	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.98	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1650	3005		1390		1465	1803	1943	
Flt Permitted		1.00		0.16	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		283	3005		1093		1465	1803	1943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	971	240	68	693	0	123	0	120	3	14	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	82	0	1	0
Lane Group Flow (vph)	0	1189	0	68	693	0	123	0	38	3	15	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		170	1803		350		469	577	622	
v/s Ratio Prot		c0.42			0.23						0.01	
v/s Ratio Perm				0.24			c0.11		0.03	0.00		
v/c Ratio		0.69		0.40	0.38		0.35		0.08	0.01	0.02	
Uniform Delay, d1		13.7		10.5	10.4		26.0		23.7	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.3		6.9	0.6		2.8		0.3	0.0	0.1	
Delay (s)		16.0		17.4	11.0		28.8		24.1	23.2	23.4	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.0			11.6			26.5			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	334	39	1048	200	899	0	0	463	736
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3938	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3938	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	341	40	1069	204	917	0	0	472	751
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	341	40	1069	204	917	0	0	1223	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1163	
v/s Ratio Prot							c0.13	0.21			c0.31	
v/s Ratio Perm				0.22	0.02	c0.72						
v/c Ratio				0.76	0.08	2.53	0.43	0.33			1.87dr	
Uniform Delay, d1				33.6	26.7	37.5	29.2	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.37			1.00	
Incremental Delay, d2				11.3	0.3	694.2	2.0	0.2			41.1	
Delay (s)				44.9	27.1	731.7	21.2	21.9			78.1	
Level of Service				D	C	F	C	C			E	
Approach Delay (s)		0.0			550.8			21.8			78.1	
Approach LOS		A			F			C			E	

Intersection Summary			
HCM Average Control Delay	242.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	266	867	92	0	0	0	0	832	642	280	517	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3184						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3184						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	274	894	95	0	0	0	0	858	662	289	533	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	247	1009	0	0	0	0	0	858	662	289	533	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.18	0.11	
v/s Ratio Perm	0.16	0.32							c0.30			
v/c Ratio	0.51	0.98						0.74	1.14	0.62	0.19	
Uniform Delay, d1	28.7	35.1						35.1	38.5	31.9	9.9	
Progression Factor	1.00	1.00						0.44	0.46	1.06	0.43	
Incremental Delay, d2	3.8	23.4						0.4	63.2	2.4	0.1	
Delay (s)	32.5	58.5						15.7	81.1	36.1	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		53.4			0.0			44.2			15.5	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	40.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	164	0	0	115	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1961	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		782	1882			1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	182	0	0	128	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	182	0	0	130	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		501	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.07	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.16			0.12	
Uniform Delay, d1				23.4	19.9		10.0	8.0			9.6	
Progression Factor				1.00	1.00		1.05	1.18			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.5	9.7			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.7			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	12	0	18	0	141	42	33	300	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.92			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.98			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1620			1685		1595	1755	
Flt Permitted	0.74	1.00			0.93			1.00		0.60	1.00	
Satd. Flow (perm)	1502	1809			1543			1685		1010	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	13	0	19	0	148	44	35	316	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	13	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	19	0	0	179	0	35	316	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	477	575			490			793		642	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.04			0.23		0.05	0.31	
Uniform Delay, d1	19.9	19.9			20.0			13.3		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		1.01	0.92	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.2			14.0		8.7	8.9	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.2			14.0			8.8	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	16	10	346	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1787		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1787		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	18	11	384	177	13
RTOR Reduction (vph)	12	0	0	0	4	0
Lane Group Flow (vph)	76	0	11	384	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	577		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.39	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.32	0.51	1.17	
Incremental Delay, d2	0.5		0.0	1.1	0.5	
Delay (s)	16.0		2.1	5.3	9.0	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.2	9.0	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	23	266	14	552	246	0	0	187	34
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3737		1660	1752			1603	1298
Flt Permitted					1.00		0.58	1.00			1.00	1.00
Satd. Flow (perm)					3737		1013	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	26	296	16	613	273	0	0	208	38
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	0	334	0	613	273	0	0	208	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1143		684	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.16			0.13	
v/s Ratio Perm							c0.43					0.01
v/c Ratio					0.29		0.90	0.26			0.29	0.03
Uniform Delay, d1					22.5		16.8	8.1			14.9	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		16.7	0.6			1.0	0.1
Delay (s)					23.1		33.5	8.7			16.0	13.3
Level of Service					C		C	A			B	B
Approach Delay (s)		0.0			23.1			25.9			15.5	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	23.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	14	11	9	314	501	92	70	324	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.96		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1801		1691	3237		1707	3352	
Flt Permitted					0.98		0.51	1.00		0.33	1.00	
Satd. Flow (perm)					1801		915	3237		598	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	16	12	10	349	557	102	78	360	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	31	0	349	639	0	78	370	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					552		573	1467		430	1520	
v/s Ratio Prot					c0.02		c0.06	0.20		0.02	0.11	
v/s Ratio Perm							c0.28			0.08		
v/c Ratio					0.06		0.61	0.44		0.18	0.24	
Uniform Delay, d1					18.3		13.0	14.0		11.8	12.6	
Progression Factor					1.00		0.71	0.73		1.00	1.00	
Incremental Delay, d2					0.2		4.4	0.9		0.9	0.4	
Delay (s)					18.5		13.6	11.1		12.8	13.0	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.5			11.9			12.9	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	51	23	13	160	211	19	642	12	66	258	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1945			1625		1596	3232		1641	3132	
Flt Permitted		0.71			0.99		0.58	1.00		0.35	1.00	
Satd. Flow (perm)		1411			1612		968	3232		604	3132	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	54	24	14	168	222	20	676	13	69	272	15
RTOR Reduction (vph)	0	11	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	124	0	0	345	0	20	687	0	69	282	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		470			537		542	1810		338	1754	
v/s Ratio Prot								c0.21			0.09	
v/s Ratio Perm		0.09			c0.21		0.02			0.11		
v/c Ratio		0.26			0.64		0.04	0.38		0.20	0.16	
Uniform Delay, d1		18.3			21.2		7.4	9.2		8.2	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.16	0.07	
Incremental Delay, d2		1.4			5.8		0.1	0.6		1.3	0.2	
Delay (s)		19.7			27.0		7.5	9.8		2.7	0.8	
Level of Service		B			C		A	A		A	A	
Approach Delay (s)		19.7			27.0			9.8			1.1	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	43	54	100	309	191	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	48	60	111	343	212	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	108	226	229	141	92
Volume Left (vph)	48	111	0	0	0
Volume Right (vph)	60	0	0	0	21
Hadj (s)	-0.16	0.33	0.09	0.08	-0.08
Departure Headway (s)	5.2	5.4	5.1	5.3	5.2
Degree Utilization, x	0.16	0.34	0.33	0.21	0.13
Capacity (veh/h)	634	657	687	648	667
Control Delay (s)	9.2	9.9	9.4	8.6	7.8
Approach Delay (s)	9.2	9.6		8.3	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.2		
HCM Level of Service	A		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	44	51	328	13	6	482	39	40	41	52	700	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3290	
Flt Permitted		0.11	1.00	1.00	0.54	1.00	1.00			0.41	1.00	
Satd. Flow (perm)		187	1731	1530	980	1731	1487			737	3290	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	57	364	14	7	536	43	44	46	58	778	49
RTOR Reduction (vph)	0	0	0	7	0	0	31	0	0	0	5	0
Lane Group Flow (vph)	0	106	364	7	7	536	56	0	0	104	822	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	299	528	453			175	783	
v/s Ratio Prot		0.05	c0.21			c0.31					c0.25	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.14		
v/c Ratio		0.38	0.44	0.01	0.02	1.02	0.12			0.59	1.05	
Uniform Delay, d1		20.2	18.2	14.5	25.6	36.5	26.4			35.5	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.8	1.7	0.0	0.1	43.0	0.6			14.0	46.2	
Delay (s)		24.1	20.0	14.5	25.7	79.5	26.9			49.5	86.2	
Level of Service		C	B	B	C	E	C			D	F	
Approach Delay (s)			20.7			71.7					82.1	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	59.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	52	285	26	31	4	62	110	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.98				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3280				1710	2622	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3280				1710	2622	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	317	29	34	4	69	122	13
RTOR Reduction (vph)	0	7	0	0	0	0	7	0
Lane Group Flow (vph)	58	373	0	0	0	73	128	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.11				0.04		
v/s Ratio Perm	0.20						c0.05	
v/c Ratio	0.85	0.49				0.26	0.29	
Uniform Delay, d1	38.5	34.8				38.1	38.3	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	73.0	2.2				2.2	1.7	
Delay (s)	111.5	37.0				40.2	40.0	
Level of Service	F	D				D	D	
Approach Delay (s)		46.9				40.1		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	480	0	0	485	27	115	113	120	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1929			1769				
Flt Permitted		0.97			1.00			0.98				
Satd. Flow (perm)		1600			1929			1769				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	533	0	0	539	30	128	126	133	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	559	0	0	569	0	0	387	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		763			920			708				
v/s Ratio Prot					0.29							
v/s Ratio Perm		c0.35						0.22				
v/c Ratio		0.73			0.62			0.55				
Uniform Delay, d1		13.7			12.6			15.0				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.2			3.1			3.0				
Delay (s)		19.8			15.7			18.0				
Level of Service		B			B			B				
Approach Delay (s)		19.8			15.7			18.0			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	385	110	67	274	115	143	1647	126	92	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1924	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.66	1.00		0.56	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1284	1426		1088	1396	631	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	118	405	116	71	288	121	151	1734	133	97	468	98
RTOR Reduction (vph)	0	0	68	0	0	71	0	0	30	0	0	59
Lane Group Flow (vph)	0	523	48	0	359	50	151	1734	103	97	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	52.7	44.0	44.0	49.3	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	52.7	44.0	44.0	49.3	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.50	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		526	584		446	572	389	1299	538	152	1191	510
v/s Ratio Prot							c0.03	c0.56		c0.04	0.16	
v/s Ratio Perm		c0.41	0.03		0.33	0.04	0.16		0.08	0.26		0.03
v/c Ratio		0.99	0.08		0.80	0.09	0.39	1.33	0.19	0.64	0.39	0.08
Uniform Delay, d1		30.9	18.9		27.3	19.0	14.8	30.5	19.3	23.3	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.23	0.77	0.42
Incremental Delay, d2		37.6	0.3		14.3	0.3	0.6	156.0	0.8	8.3	0.9	0.3
Delay (s)		68.4	19.2		41.6	19.3	15.5	186.5	20.0	36.9	18.0	8.4
Level of Service		E	B		D	B	B	F	C	D	B	A
Approach Delay (s)		59.5			36.0			162.8			19.4	
Approach LOS		E			D			F			B	

Intersection Summary			
HCM Average Control Delay	104.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	113.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	534	56	49	404	48	64	59	55	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1631			1628			1775				
Flt Permitted		0.92			0.90			0.98				
Satd. Flow (perm)		1510			1468			1775				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	593	62	54	449	53	71	66	61	0	0	0
RTOR Reduction (vph)	0	5	0	0	6	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	712	0	0	550	0	0	173	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		883			858			519				
v/s Ratio Prot												
v/s Ratio Perm		c0.47			0.37			0.10				
v/c Ratio		0.81			0.64			0.33				
Uniform Delay, d1		10.6			9.0			18.0				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.8			3.7			1.7				
Delay (s)		18.4			12.6			19.8				
Level of Service		B			B			B				
Approach Delay (s)		18.4			12.6			19.8			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	484	64	31	436	38	54	146	87	49	192	53
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.98	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1636	1288		1658	1490		1738	
Flt Permitted		0.96	1.00		0.95	1.00		0.84	1.00		0.92	
Satd. Flow (perm)		1595	1255		1560	1288		1419	1490		1609	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	31	509	67	33	459	40	57	154	92	52	202	56
RTOR Reduction (vph)	0	0	29	0	0	16	0	0	63	0	11	0
Lane Group Flow (vph)	0	540	38	0	492	24	0	211	29	0	299	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		914	720		894	738		454	477		515	
v/s Ratio Prot												
v/s Ratio Perm		c0.34	0.03		0.32	0.02		0.15	0.02		c0.19	
v/c Ratio		0.59	0.05		0.55	0.03		0.46	0.06		0.58	
Uniform Delay, d1		10.3	7.0		10.0	7.0		20.4	17.7		21.3	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		2.8	0.1		2.4	0.1		3.4	0.2		4.7	
Delay (s)		13.1	7.2		12.4	7.0		23.8	17.9		26.0	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		12.5			12.0			22.0			26.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	426	29	17	317	38	55	302	38	38	92	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1464	2990		1459	3535		1534	1647	1301	1517	1541	1156
Flt Permitted	0.51	1.00		0.44	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	789	2990		673	3535		1116	1647	1301	722	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	90	473	32	19	352	42	61	336	42	42	102	12
RTOR Reduction (vph)	0	7	0	0	14	0	0	0	22	0	0	7
Lane Group Flow (vph)	90	498	0	19	380	0	61	336	20	42	102	5
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	376	1426		321	1686		446	659	520	289	616	462
v/s Ratio Prot		c0.17			0.11			c0.20			0.07	
v/s Ratio Perm	0.11			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.24	0.35		0.06	0.23		0.14	0.51	0.04	0.15	0.17	0.01
Uniform Delay, d1	10.0	10.7		9.2	10.0		12.4	14.7	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.62	0.76	0.33	0.53	0.54	0.28
Incremental Delay, d2	1.5	0.7		0.4	0.3		0.6	2.8	0.1	1.0	0.6	0.0
Delay (s)	11.5	11.3		9.5	10.3		8.3	13.9	4.1	7.7	7.3	3.4
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.4			10.2			12.2			7.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	398	81	43	285	64	71	360	43	55	139	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.98	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	3058		1588	3012		1541	3021		1402	2764	
Flt Permitted	0.52	1.00		0.43	1.00		0.62	1.00		0.47	1.00	
Satd. Flow (perm)	806	3058		721	3012		1013	3021		691	2764	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	99	419	85	45	300	67	75	379	45	58	146	57
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	33	0
Lane Group Flow (vph)	99	504	0	45	367	0	75	412	0	58	170	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	387	1468		346	1446		419	1249		286	1142	
v/s Ratio Prot		c0.16			0.12			c0.14			0.06	
v/s Ratio Perm	0.12			0.06			0.07			0.08		
v/c Ratio	0.26	0.34		0.13	0.25		0.18	0.33		0.20	0.15	
Uniform Delay, d1	11.6	12.1		10.8	11.5		13.9	14.9		14.1	13.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.6		0.8	0.4		0.9	0.7		1.6	0.3	
Delay (s)	13.2	12.8		11.6	12.0		14.9	15.6		15.7	14.0	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.8			11.9			15.5			14.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	313	36	23	328	46	65	397	25	41	196	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1473	1842		1533	3073		1372	2875	
Flt Permitted	0.45	1.00		0.48	1.00		0.59	1.00		0.43	1.00	
Satd. Flow (perm)	722	1576		742	1842		951	3073		622	2875	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	329	38	24	345	48	68	418	26	43	206	57
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	112	367	0	24	393	0	68	444	0	43	263	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	449	738		372	793		331	730		199	629	
v/s Ratio Prot	c0.02	c0.23		0.00	0.21		c0.01	c0.14		0.01	0.09	
v/s Ratio Perm	0.12			0.03			0.05			0.05		
v/c Ratio	0.25	0.50		0.06	0.50		0.21	0.61		0.22	0.42	
Uniform Delay, d1	13.4	15.7		14.5	17.5		21.5	28.9		25.7	28.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.4		0.1	2.2		0.3	3.7		0.5	2.0	
Delay (s)	13.7	18.1		14.6	19.7		21.8	32.6		26.2	30.6	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		17.0			19.4			31.2			30.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	307	42	63	373	111	56	370	120	55	158	37
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3493			2913		1614	3156		1580	2919	
Flt Permitted		0.79			0.85		0.62	1.00		0.40	1.00	
Satd. Flow (perm)		2775			2481		1046	3156		658	2919	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	341	47	70	414	123	62	411	133	61	176	41
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	461	0	0	607	0	62	544	0	61	217	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1258			1125		460	1389		290	1284	
v/s Ratio Prot								c0.17			0.07	
v/s Ratio Perm		0.17			c0.24		0.06			0.09		
v/c Ratio		0.37			0.54		0.13	0.39		0.21	0.17	
Uniform Delay, d1		13.4			14.8		12.5	14.2		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8			1.9		0.6	0.8		1.6	0.3	
Delay (s)		14.3			16.7		13.1	15.0		14.6	13.0	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.3			16.7			14.8			13.3	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	496	5	14	635	371	68	9	19	112	1	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3143		1629	3257	1457		1612			3106	
Flt Permitted	0.36	1.00		0.44	1.00	1.00		0.70			0.75	
Satd. Flow (perm)	603	3143		748	3257	1457		1174			2411	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	153	551	6	16	706	412	76	10	21	124	1	54
RTOR Reduction (vph)	0	1	0	0	0	143	0	12	0	0	41	0
Lane Group Flow (vph)	153	556	0	16	706	269	0	95	0	0	138	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.4			16.4	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.4			16.4	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.23			0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	394	2054		489	2128	952		273			562	
v/s Ratio Prot		0.18			0.22							
v/s Ratio Perm	c0.25			0.02		0.18		c0.08			0.06	
v/c Ratio	0.39	0.27		0.03	0.33	0.28		0.35			0.24	
Uniform Delay, d1	5.7	5.1		4.3	5.4	5.2		22.5			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	2.9	0.3		0.1	0.4	0.7		3.3			1.0	
Delay (s)	8.5	5.5		4.4	5.8	5.9		25.8			22.9	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.1			5.8			25.8			22.9	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	70.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	75	63	190	68	127	1887	84	70	494	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1499		1547	1586		1493	3069	1271	1452	2983	1301
Flt Permitted	0.38	1.00		0.32	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	617	1499		524	1586		617	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	79	66	200	72	134	1986	88	74	520	44
RTOR Reduction (vph)	0	15	0	0	16	0	0	0	18	0	0	26
Lane Group Flow (vph)	117	289	0	66	256	0	134	1986	70	74	520	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	254	388		232	410		352	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.03	c0.65		c0.03	0.17	
v/s Ratio Perm	0.11			0.07			0.15		0.06	0.17		0.01
v/c Ratio	0.46	0.75		0.28	0.63		0.38	1.57	0.13	0.43	0.42	0.03
Uniform Delay, d1	22.5	28.9		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.62	0.71	0.49	1.00	1.00	1.00
Incremental Delay, d2	5.9	12.3		3.1	7.0		2.6	260.3	0.4	7.4	1.1	0.1
Delay (s)	28.4	41.2		24.9	34.9		10.8	277.9	8.0	25.6	18.9	15.0
Level of Service	C	D		C	C		B	F	A	C	B	B
Approach Delay (s)		37.6			32.9			250.9			19.4	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	164.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	217	17	15	149	18	18	162	26	32	144	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		1850			1836			1902			1930	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1791			1791			1856			1824	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	224	18	15	154	19	19	167	27	33	148	22
RTOR Reduction (vph)	0	4	0	0	6	0	0	8	0	0	7	0
Lane Group Flow (vph)	0	265	0	0	182	0	0	205	0	0	196	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		744			744			857			842	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.11			0.11	
v/c Ratio		0.36			0.24			0.24			0.23	
Uniform Delay, d1		13.0			12.4			10.6			10.6	
Progression Factor		1.00			0.62			1.05			1.00	
Incremental Delay, d2		1.3			0.8			0.6			0.6	
Delay (s)		14.4			8.5			11.8			11.2	
Level of Service		B			A			B			B	
Approach Delay (s)		14.4			8.5			11.8			11.2	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	34	9	162	19	42	364	31	16	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	2994		1302	3037		1529	3094		1492	2868	
Flt Permitted	0.63	1.00		0.60	1.00		0.68	1.00		0.50	1.00	
Satd. Flow (perm)	965	2994		827	3037		1093	3094		781	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	38	10	180	21	47	404	34	18	96	19
RTOR Reduction (vph)	0	24	0	0	13	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	215	0	10	188	0	47	428	0	18	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	875		242	888		639	1809		457	1677	
v/s Ratio Prot		c0.07			0.06			c0.14			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.25		0.04	0.21		0.07	0.24		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.9	6.5		5.7	5.8	
Progression Factor	0.72	0.72		0.75	0.74		0.96	0.99		0.49	0.44	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.7	13.3		12.7	13.4		5.8	6.7		3.0	2.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.3			13.4			6.6			2.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	38	28	414	24	13	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2868			1878			1807	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1047	2952		965	2868			1839			1749	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	42	31	460	27	14	181	17
RTOR Reduction (vph)	0	23	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	515	0	0	207	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	419	1181		386	1147			877			834	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.28			0.12	
v/c Ratio	0.12	0.18		0.05	0.13			0.59			0.25	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.4			10.1	
Progression Factor	1.01	0.92		0.88	0.88			0.96			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			2.8			0.7	
Delay (s)	13.0	11.9		10.7	11.1			14.7			10.8	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.1			11.1			14.7			10.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	121	58	2	80	34	21	272	9	7	175	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.96			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1878		1587	1870			1971			1932	
Flt Permitted	0.68	1.00		0.58	1.00			0.98			0.99	
Satd. Flow (perm)	1141	1878		975	1870			1929			1915	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	134	64	2	89	38	23	302	10	8	194	31
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	96	198	0	2	127	0	0	335	0	0	233	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	351	578		300	575			1098			1090	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.08			0.00				c0.17			0.12	
v/c Ratio	0.27	0.34		0.01	0.22			0.31			0.21	
Uniform Delay, d1	17.0	17.4		15.6	16.7			7.3			6.9	
Progression Factor	0.90	0.89		0.87	0.92			0.95			1.00	
Incremental Delay, d2	1.9	1.6		0.0	0.9			0.7			0.4	
Delay (s)	17.2	17.1		13.7	16.2			7.7			7.3	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.1			16.2			7.7			7.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	9	52	1	3	12	38	467	6	2	191	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1673		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.63	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1260	1673		1283	1422		981	1631	1392	682	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	129	10	58	1	3	13	42	519	7	2	212	53
RTOR Reduction (vph)	0	42	0	0	9	0	0	0	3	0	0	21
Lane Group Flow (vph)	129	26	0	1	7	0	42	519	4	2	212	32
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		355	394		589	979	835	409	1144	856
v/s Ratio Prot		0.02			0.00			c0.32			0.11	
v/s Ratio Perm	c0.10			0.00			0.04		0.00	0.00		0.02
v/c Ratio	0.37	0.06		0.00	0.02		0.07	0.53	0.01	0.00	0.19	0.04
Uniform Delay, d1	18.9	17.3		17.0	17.1		5.4	7.6	5.2	5.2	5.9	5.3
Progression Factor	1.47	2.38		1.00	1.00		1.13	1.07	1.31	1.00	1.00	1.00
Incremental Delay, d2	2.9	0.2		0.0	0.1		0.2	1.6	0.0	0.0	0.4	0.1
Delay (s)	30.8	41.3		17.0	17.1		6.3	9.8	6.8	5.2	6.2	5.4
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		34.4			17.1			9.5			6.0	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	240	76	120	362	0	0	0	0	74	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2826		1621	3288					1574	2907	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2826		848	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	253	80	126	381	0	0	0	0	78	321	380
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	303	0	126	381	0	0	0	0	78	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		933		653	1940					504	930	
v/s Ratio Prot		c0.11		0.04	c0.12					0.05	c0.17	
v/s Ratio Perm				0.06								
v/c Ratio		0.32		0.19	0.20					0.15	0.52	
Uniform Delay, d1		25.1		10.6	9.5					24.3	27.8	
Progression Factor		1.00		1.95	2.05					1.00	1.00	
Incremental Delay, d2		0.9		0.6	0.2					0.7	2.1	
Delay (s)		26.1		21.1	19.7					25.0	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.1			20.0			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	185	0	0	311	66	171	544	326	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2832		1750	1782	1514			
Flt Permitted	0.36	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	637	3054			2832		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	195	0	0	327	69	180	573	343	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	230	0	0	0
Lane Group Flow (vph)	136	195	0	0	378	0	180	573	113	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	686	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.13		0.10	c0.32				
v/s Ratio Perm	0.04								0.07			
v/c Ratio	0.20	0.11			0.64		0.31	0.97	0.23			
Uniform Delay, d1	11.8	9.4			36.0		25.0	33.1	24.3			
Progression Factor	0.24	0.25			1.00		0.75	0.78	1.92			
Incremental Delay, d2	0.6	0.1			5.1		0.9	24.5	0.7			
Delay (s)	3.5	2.5			41.1		19.6	50.4	47.4			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			41.1			44.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	36.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	456	362	34	587	0	0	0	0	4	216	196
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3110		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.17	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3110		294	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	475	377	35	611	0	0	0	0	4	225	204
RTOR Reduction (vph)	0	143	0	0	0	0	0	0	0	0	0	135
Lane Group Flow (vph)	0	709	0	35	611	0	0	0	0	4	225	69
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1120		396	1898					543	1074	491
v/s Ratio Prot		c0.23		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.63		0.09	0.32					0.01	0.21	0.14
Uniform Delay, d1		26.5		12.4	10.8					21.8	23.5	22.9
Progression Factor		1.00		0.55	0.68					0.74	0.79	0.94
Incremental Delay, d2		2.7		0.2	0.2					0.0	0.4	0.5
Delay (s)		29.3		7.0	7.6					16.1	19.0	22.0
Level of Service		C		A	A					B	B	C
Approach Delay (s)		29.3			7.5			0.0			20.4	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	401	59	0	0	57	5	564	636	61	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3041			3079		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1084	2338			3079		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	413	61	0	0	59	5	581	656	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	38	0	0	0
Lane Group Flow (vph)	206	268	0	0	60	0	581	656	25	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1445			462		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.37	c0.40	0.02			
v/s Ratio Perm	c0.05	0.03										
v/c Ratio	0.30	0.19			0.13		1.01	1.08	0.05			
Uniform Delay, d1	14.0	13.3			36.8		31.5	31.5	20.2			
Progression Factor	0.23	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		40.1	60.9	0.2			
Delay (s)	4.1	3.5			37.4		71.6	92.4	20.3			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.7			37.4			79.6			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	58.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	276	66	64	182	110	41	1100	94	96	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2844			2772		1447	3069	1336	1494	2956	1270
Flt Permitted		0.67			0.79		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1936			2201		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	288	69	67	190	115	43	1146	98	100	496	44
RTOR Reduction (vph)	0	14	0	0	60	0	0	0	39	0	0	27
Lane Group Flow (vph)	0	504	0	0	312	0	43	1146	59	100	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		884			725		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.37		c0.03	0.17	
v/s Ratio Perm		0.20			c0.14		0.06		0.04	0.26		0.01
v/c Ratio		0.57			0.43		0.15	0.95	0.11	0.69	0.43	0.03
Uniform Delay, d1		18.6			22.3		14.7	24.9	16.6	18.6	18.7	16.1
Progression Factor		1.00			1.00		1.30	0.86	1.39	1.83	1.64	3.16
Incremental Delay, d2		2.7			1.9		0.6	11.0	0.3	22.3	1.0	0.1
Delay (s)		21.3			24.1		19.7	32.3	23.4	56.4	31.8	51.0
Level of Service		C			C		B	C	C	E	C	D
Approach Delay (s)		21.3			24.1			31.2			37.0	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	447	0	0	329	78	27	60	96	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1707			1670			1581				
Flt Permitted		0.94			1.00			0.99				
Satd. Flow (perm)		1609			1670			1581				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	47	497	0	0	366	87	30	67	107	0	0	0
RTOR Reduction (vph)	0	0	0	0	13	0	0	61	0	0	0	0
Lane Group Flow (vph)	0	544	0	0	440	0	0	143	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		842			874			559				
v/s Ratio Prot					0.26							
v/s Ratio Perm		c0.34						0.09				
v/c Ratio		0.65			0.50			0.26				
Uniform Delay, d1		11.2			10.0			14.9				
Progression Factor		1.00			0.64			1.00				
Incremental Delay, d2		3.8			1.7			1.1				
Delay (s)		15.0			8.1			16.0				
Level of Service		B			A			B				
Approach Delay (s)		15.0			8.1			16.0			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	398	32	19	408	47	25	167	33	50	105	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1886			1843			3185			3147	
Flt Permitted		0.93			0.97			0.91			0.83	
Satd. Flow (perm)		1760			1798			2931			2649	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	48	442	36	21	453	52	28	186	37	56	117	23
RTOR Reduction (vph)	0	4	0	0	6	0	0	22	0	0	13	0
Lane Group Flow (vph)	0	522	0	0	520	0	0	229	0	0	183	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		812			830			1217			1100	
v/s Ratio Prot												
v/s Ratio Perm		c0.30			0.29			c0.08			0.07	
v/c Ratio		0.64			0.63			0.19			0.17	
Uniform Delay, d1		13.4			13.3			12.1			11.9	
Progression Factor		0.65			0.52			0.86			0.57	
Incremental Delay, d2		3.2			3.4			0.3			0.3	
Delay (s)		11.8			10.3			10.7			7.1	
Level of Service		B			B			B			A	
Approach Delay (s)		11.8			10.3			10.7			7.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	267	22	28	347	61	53	303	85	46	91	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1503	2934		1583	2945		1497	3034		1594	2896	
Flt Permitted	0.43	1.00		0.55	1.00		0.67	1.00		0.50	1.00	
Satd. Flow (perm)	684	2934		910	2945		1053	3034		833	2896	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	297	24	31	386	68	59	337	94	51	101	31
RTOR Reduction (vph)	0	9	0	0	22	0	0	39	0	0	14	0
Lane Group Flow (vph)	56	312	0	31	432	0	59	392	0	51	118	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	232	993		308	997		567	1634		449	1559	
v/s Ratio Prot		0.11			c0.15			c0.13			0.04	
v/s Ratio Perm	0.08			0.03			0.06			0.06		
v/c Ratio	0.24	0.31		0.10	0.43		0.10	0.24		0.11	0.08	
Uniform Delay, d1	15.5	15.9		14.7	16.7		7.3	7.9		7.4	7.2	
Progression Factor	0.59	0.56		0.77	0.78		0.68	0.68		1.32	1.37	
Incremental Delay, d2	2.0	0.7		0.6	1.3		0.4	0.3		0.5	0.1	
Delay (s)	11.1	9.6		11.9	14.4		5.4	5.7		10.3	10.0	
Level of Service	B	A		B	B		A	A		B	A	
Approach Delay (s)		9.8			14.2			5.7			10.1	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	374	27	37	370	82	20	307	44	41	118	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1385	3013		1334	3540			3438			3303	
Flt Permitted	0.46	1.00		0.49	1.00			0.94			0.84	
Satd. Flow (perm)	667	3013		692	3540			3226			2809	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	394	28	39	389	86	21	323	46	43	124	43
RTOR Reduction (vph)	0	8	0	0	29	0	0	16	0	0	26	0
Lane Group Flow (vph)	84	414	0	39	446	0	0	374	0	0	184	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	318	1437		330	1688			1290			1124	
v/s Ratio Prot		c0.14			0.13							
v/s Ratio Perm	0.13			0.06				c0.12			0.07	
v/c Ratio	0.26	0.29		0.12	0.26			0.29			0.16	
Uniform Delay, d1	10.2	10.3		9.4	10.2			13.2			12.5	
Progression Factor	1.60	1.64		0.77	0.75			0.36			0.64	
Incremental Delay, d2	2.0	0.5		0.6	0.3			0.5			0.3	
Delay (s)	18.3	17.4		7.9	8.0			5.3			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		17.6			8.0			5.3			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	288	95	104	356	104	84	80	84	84	80	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3033			1823			1826	
Flt Permitted		0.75	1.00		0.77			0.80			0.79	
Satd. Flow (perm)		1235	1409		2363			1480			1469	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	104	320	106	116	396	116	93	89	93	93	89	87
RTOR Reduction (vph)	0	0	51	0	30	0	0	28	0	0	26	0
Lane Group Flow (vph)	0	424	55	0	598	0	0	247	0	0	243	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		646	737		1236			478			475	
v/s Ratio Prot												
v/s Ratio Perm		c0.34	0.04		0.25			c0.17			0.17	
v/c Ratio		0.66	0.08		0.48			0.52			0.51	
Uniform Delay, d1		11.3	7.7		9.9			17.9			17.8	
Progression Factor		2.03	5.66		0.40			1.00			1.00	
Incremental Delay, d2		5.0	0.2		1.3			3.9			3.9	
Delay (s)		27.9	43.8		5.3			21.8			21.7	
Level of Service		C	D		A			C			C	
Approach Delay (s)		31.1			5.3			21.8			21.7	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	365	20	15	442	63	37	103	41	41	86	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3018		1572	3002			3454			3404	
Flt Permitted	0.39	1.00		0.48	1.00			0.87			0.88	
Satd. Flow (perm)	606	3018		793	3002			3037			3020	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	78	406	22	17	491	70	41	114	46	46	96	104
RTOR Reduction (vph)	0	6	0	0	17	0	0	25	0	0	58	0
Lane Group Flow (vph)	78	422	0	17	544	0	0	176	0	0	188	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	261	1300		342	1293			1355			1347	
v/s Ratio Prot		0.14			c0.18							
v/s Ratio Perm	0.13			0.02				0.06			c0.06	
v/c Ratio	0.30	0.32		0.05	0.42			0.13			0.14	
Uniform Delay, d1	12.1	12.2		10.8	12.9			10.6			10.6	
Progression Factor	0.99	1.01		1.12	0.94			0.99			0.81	
Incremental Delay, d2	2.3	0.5		0.2	0.6			0.2			0.2	
Delay (s)	14.2	12.9		12.2	12.7			10.7			8.9	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.1			12.6			10.7			8.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	433	69	89	441	270	46	315	87	211	151	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3075			3146			3118	
Flt Permitted		0.66			0.76			0.88			0.63	
Satd. Flow (perm)		2099			2351			2784			2030	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	91	481	77	99	490	300	51	350	97	234	168	56
RTOR Reduction (vph)	0	16	0	0	99	0	0	33	0	0	17	0
Lane Group Flow (vph)	0	633	0	0	790	0	0	465	0	0	441	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		840			940			1276			625	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.30			c0.34			0.13			c0.22	
v/c Ratio		0.75			0.84			0.36			0.88dl	
Uniform Delay, d1		16.7			17.6			11.9			19.9	
Progression Factor		1.76			1.00			1.00			0.89	
Incremental Delay, d2		6.1			9.0			0.8			6.6	
Delay (s)		35.5			26.6			12.7			24.3	
Level of Service		D			C			B			C	
Approach Delay (s)		35.5			26.6			12.7			24.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	687	113	43	721	0	130	0	66	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2975			3031			1584				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2975			2567			1309				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	763	126	48	801	0	144	0	73	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	871	0	0	849	0	0	196	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1917			941			233				
v/s Ratio Prot		c0.29										
v/s Ratio Perm					c0.33			c0.15				
v/c Ratio		0.45			0.90			0.84				
Uniform Delay, d1		8.0			27.0			35.8				
Progression Factor		0.01			1.57			1.00				
Incremental Delay, d2		0.4			12.2			29.3				
Delay (s)		0.5			54.5			65.1				
Level of Service		A			D			E				
Approach Delay (s)		0.5			54.5			65.1			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	476	178	260	613	174	98	19	176	74	7	73
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1756		1629	1714	1457
Flt Permitted	0.33	1.00		0.23	1.00	1.00		0.89		0.41	1.00	1.00
Satd. Flow (perm)	529	3020		400	3257	1457		1581		698	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	130	529	198	289	681	193	109	21	196	82	8	81
RTOR Reduction (vph)	0	40	0	0	0	98	0	74	0	0	0	44
Lane Group Flow (vph)	130	687	0	289	681	95	0	252	0	82	8	37
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	41.9	32.6		48.2	35.9	44.5		20.2		31.8	31.8	41.1
Effective Green, g (s)	41.9	32.6		48.2	35.9	44.5		20.2		31.8	31.8	41.1
Actuated g/C Ratio	0.47	0.36		0.54	0.40	0.49		0.22		0.35	0.35	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	349	1094		386	1299	720		355		336	606	665
v/s Ratio Prot	0.04	0.23		c0.10	0.21	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.16		0.06		0.02
v/c Ratio	0.37	0.63		0.75	0.52	0.13		0.71		0.24	0.01	0.06
Uniform Delay, d1	14.2	23.7		13.6	20.6	12.3		32.2		21.4	18.9	13.6
Progression Factor	1.92	1.62		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	0.8	2.5		8.2	1.5	0.1		7.0		0.4	0.0	0.0
Delay (s)	28.1	40.8		21.9	22.1	12.4		39.2		21.8	18.9	13.7
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		38.9			20.4			39.2			17.8	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	492	234	6	504	0	0	0	0	30	0	543
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	547	260	7	560	0	0	0	0	33	0	603
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	560			547			840	1120	273	847	1120	280
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	560			547			840	1120	273	847	1120	280
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	87	100	15
cM capacity (veh/h)	987			998			37	199	715	249	199	708

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	273	273	260	193	373	33	603
Volume Left	0	0	0	7	0	33	0
Volume Right	0	0	260	0	0	0	603
cSH	1700	1700	1700	998	1700	249	708
Volume to Capacity	0.16	0.16	0.15	0.01	0.22	0.13	0.85
Queue Length 95th (ft)	0	0	0	1	0	11	246
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	21.7	32.1
Lane LOS				A		C	D
Approach Delay (s)	0.0			0.1		31.5	
Approach LOS						D	

Intersection Summary			
Average Delay	10.0		
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	522	0	510	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	580	0	567	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	290	290	567
Volume Left (vph)	290	290	567
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	5.7
Degree Utilization, x	0.55	0.55	0.90
Capacity (veh/h)	514	505	627
Control Delay (s)	16.7	16.7	38.6
Approach Delay (s)	16.7		38.6
Approach LOS	C		E

Intersection Summary			
Delay	27.5		
HCM Level of Service	D		
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	353	46	127	326	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3094		1574	3149						3014	
Flt Permitted		1.00		0.44	1.00						0.97	
Satd. Flow (perm)		3094		730	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	392	51	141	362	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	431	0	141	362	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1310		520	1815						957	
v/s Ratio Prot		c0.14		c0.03	0.11						c0.04	
v/s Ratio Perm				0.12								
v/c Ratio		0.33		0.27	0.20						0.12	
Uniform Delay, d1		16.4		11.5	8.6						20.6	
Progression Factor		1.00		0.27	0.24						1.00	
Incremental Delay, d2		0.7		1.2	0.2						0.2	
Delay (s)		17.1		4.4	2.3						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.1			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	357	0	0	404	76	49	65	45	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3074			4413				
Flt Permitted	0.38	1.00			1.00			0.98				
Satd. Flow (perm)	650	3257			3074			4413				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	397	0	0	449	84	54	72	50	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	34	0	0	0	0
Lane Group Flow (vph)	76	397	0	0	515	0	0	142	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	482	1839			1266			1402				
v/s Ratio Prot	0.02	c0.12			c0.17			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.22			0.41			0.10				
Uniform Delay, d1	12.2	9.2			17.7			20.4				
Progression Factor	0.33	0.32			1.00			1.00				
Incremental Delay, d2	0.7	0.3			1.0			0.1				
Delay (s)	4.6	3.2			18.6			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.5			18.6			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	323	39	34	247	31	118	85	61	57	90	124
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			0.99			0.97			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2982			2979			1787			1751	
Flt Permitted		0.89			0.87			0.76			0.88	
Satd. Flow (perm)		2664			2613			1380			1562	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	359	43	38	274	34	131	94	68	63	100	138
RTOR Reduction (vph)	0	12	0	0	13	0	0	17	0	0	47	0
Lane Group Flow (vph)	0	433	0	0	333	0	0	276	0	0	254	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		943			925			679			769	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.13			c0.20			0.16	
v/c Ratio		0.46			0.36			0.41			0.33	
Uniform Delay, d1		16.2			15.6			10.5			10.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.6			1.1			1.8			1.2	
Delay (s)		17.8			16.6			12.3			11.2	
Level of Service		B			B			B			B	
Approach Delay (s)		17.8			16.6			12.3			11.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	202	39	50	176	62	68	971	67	73	418	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	3005		1592	3512		1486	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.58	1.00		0.44	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	954	3005		975	3512		688	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	206	213	41	53	185	65	72	1022	71	77	440	89
RTOR Reduction (vph)	0	19	0	0	41	0	0	0	43	0	0	54
Lane Group Flow (vph)	206	235	0	53	209	0	72	1022	28	77	440	35
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	990		373	1157		329	1180	523	144	1169	493
v/s Ratio Prot	c0.03	0.08		0.01	0.06		0.01	c0.34		c0.03	0.15	
v/s Ratio Perm	c0.17			0.04			0.08		0.02	0.20		0.03
v/c Ratio	0.56	0.24		0.14	0.18		0.22	0.87	0.05	0.53	0.38	0.07
Uniform Delay, d1	21.3	20.7		18.4	20.3		14.9	24.0	16.2	17.2	18.6	16.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	2.00	0.61	0.82
Incremental Delay, d2	6.2	0.6		0.8	0.3		1.5	8.6	0.2	12.3	0.8	0.3
Delay (s)	27.5	21.3		19.2	20.7		16.5	32.6	16.4	46.8	12.2	13.7
Level of Service	C	C		B	C		B	C	B	D	B	B
Approach Delay (s)		24.1			20.4			30.6			16.8	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	24.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	256	18	14	216	8	35	121	25	20	58	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1929	1382		1950	1331		1973	1452		1928	1430
Flt Permitted		0.94	1.00		0.98	1.00		0.94	1.00		0.93	1.00
Satd. Flow (perm)		1823	1382		1910	1331		1866	1452		1810	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	269	19	15	227	8	37	127	26	21	61	44
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	26
Lane Group Flow (vph)	0	311	9	0	242	4	0	164	11	0	82	18
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		841	638		882	614		775	603		752	594
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.13	0.00		c0.09	0.01		0.05	0.01
v/c Ratio		0.37	0.01		0.27	0.01		0.21	0.02		0.11	0.03
Uniform Delay, d1		11.4	9.5		10.8	9.4		12.2	11.2		11.6	11.3
Progression Factor		1.00	1.00		0.46	0.35		1.17	1.42		0.94	0.84
Incremental Delay, d2		1.3	0.0		0.8	0.0		0.6	0.1		0.3	0.1
Delay (s)		12.6	9.5		5.7	3.4		14.8	16.0		11.2	9.5
Level of Service		B	A		A	A		B	B		B	A
Approach Delay (s)		12.4			5.6			15.0			10.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	283	10	17	211	34	12	234	34	47	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3025		1520	2976		1520	2982		1520	2904	
Flt Permitted	0.95	1.00		0.56	1.00		0.68	1.00		0.56	1.00	
Satd. Flow (perm)	1520	3025		888	2976		1091	2982		891	2904	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	314	11	19	234	38	13	260	38	52	78	33
RTOR Reduction (vph)	0	4	0	0	20	0	0	18	0	0	19	0
Lane Group Flow (vph)	73	321	0	19	252	0	13	280	0	52	92	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1489		301	1007		453	1239		370	1206	
v/s Ratio Prot	c0.05	0.11			c0.08			c0.09			0.03	
v/s Ratio Perm				0.02			0.01			0.06		
v/c Ratio	0.45	0.22		0.06	0.25		0.03	0.23		0.14	0.08	
Uniform Delay, d1	27.2	9.4		14.5	15.5		11.2	12.3		11.8	11.5	
Progression Factor	0.85	0.48		0.86	0.83		0.54	0.56		1.16	1.17	
Incremental Delay, d2	8.3	0.3		0.4	0.6		0.1	0.4		0.8	0.1	
Delay (s)	31.6	4.8		12.8	13.5		6.2	7.2		14.4	13.6	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		9.7			13.4			7.2			13.8	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	249	85	240	212	42	43	295	56	24	179	24
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.96		1.00	0.98			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1520	2924		1520	2964			3171			3188	
Flt Permitted	0.58	1.00		0.95	1.00			0.90			0.89	
Satd. Flow (perm)	925	2924		1520	2964			2860			2861	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	277	94	267	236	47	48	328	62	27	199	27
RTOR Reduction (vph)	0	51	0	0	25	0	0	20	0	0	14	0
Lane Group Flow (vph)	41	320	0	267	258	0	0	418	0	0	239	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	285	900		140	1322			1100			1100	
v/s Ratio Prot		c0.11		c0.18	0.09							
v/s Ratio Perm	0.04							c0.15			0.08	
v/c Ratio	0.14	0.36		1.91	0.19			0.38			0.22	
Uniform Delay, d1	16.3	17.5		29.5	10.9			14.4			13.4	
Progression Factor	0.64	0.55		1.32	1.10			1.26			0.81	
Incremental Delay, d2	1.0	1.1		426.9	0.2			0.2			0.5	
Delay (s)	11.5	10.7		465.9	12.3			18.4			11.4	
Level of Service	B	B		F	B			B			B	
Approach Delay (s)		10.8			232.5			18.4			11.4	
Approach LOS		B			F			B			B	

Intersection Summary			
HCM Average Control Delay	86.7	HCM Level of Service	F
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	294	14	69	461	69	34	93	160	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1586			1566			3165				
Flt Permitted		0.97			0.92			0.99				
Satd. Flow (perm)		1535			1453			3165				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	327	16	77	512	77	38	103	178	0	0	0
RTOR Reduction (vph)	0	2	0	0	6	0	0	137	0	0	0	0
Lane Group Flow (vph)	0	359	0	0	660	0	0	182	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		989			937			735				
v/s Ratio Prot												
v/s Ratio Perm		0.23			c0.45			0.06				
v/c Ratio		0.36			0.70			0.25				
Uniform Delay, d1		5.4			7.5			20.3				
Progression Factor		1.68			1.00			1.00				
Incremental Delay, d2		1.0			4.4			0.8				
Delay (s)		10.0			11.9			21.1				
Level of Service		A			B			C				
Approach Delay (s)		10.0			11.9			21.1			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	95	359	464	44	64	132
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	100	378	488	46	67	139
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.86				0.86	0.86
vC, conflicting volume	556				1115	536
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	398				1051	374
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	89				64	75
cM capacity (veh/h)	936				188	565

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	478	535	67	139
Volume Left	100	0	67	0
Volume Right	0	46	0	139
cSH	936	1700	188	565
Volume to Capacity	0.11	0.31	0.36	0.25
Queue Length 95th (ft)	9	0	38	24
Control Delay (s)	3.0	0.0	34.4	13.4
Lane LOS	A		D	B
Approach Delay (s)	3.0	0.0	20.3	
Approach LOS			C	

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	463	1	26	658	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1663		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	514	1	29	731	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	515	0	0	760	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			607		
v/s Ratio Prot	c0.30					
v/s Ratio Perm				c0.46		
v/c Ratio	0.43			1.25		
Uniform Delay, d1	5.7			27.0		
Progression Factor	0.05			1.00		
Incremental Delay, d2	0.1			126.6		
Delay (s)	0.4			153.6		
Level of Service	A			F		
Approach Delay (s)	0.4			153.6	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	91.7	HCM Level of Service	F
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	183	191	25	551	0	0	0	0	3	0	250
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	203	212	28	612	0	0	0	0	3	0	278
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	612			203			977	977	208	769	871	612
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	612			203			977	977	208	769	871	612
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	36
cM capacity (veh/h)	977			986			72	246	805	288	283	431

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	136	280	640	3	278
Volume Left	0	0	28	3	0
Volume Right	0	212	0	0	278
cSH	1700	1700	986	288	431
Volume to Capacity	0.08	0.16	0.03	0.01	0.64
Queue Length 95th (ft)	0	0	2	1	110
Control Delay (s)	0.0	0.0	0.7	17.7	27.3
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	27.2	
Approach LOS				D	

Intersection Summary			
Average Delay	6.1		
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	186	0	576	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	207	0	640	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	103	103	640
Volume Left (vph)	103	103	640
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.8
Degree Utilization, x	0.19	0.19	0.86
Capacity (veh/h)	511	512	734
Control Delay (s)	10.2	10.2	29.9
Approach Delay (s)	10.2		29.9
Approach LOS	B		D

Intersection Summary			
Delay	25.1		
HCM Level of Service	D		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	560	207	165	489	0	0	0	0	131	115	294
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3693	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3693	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	589	218	174	515	0	0	0	0	138	121	309
RTOR Reduction (vph)	0	0	123	0	0	0	0	0	0	0	99	91
Lane Group Flow (vph)	0	589	95	0	689	0	0	0	0	76	239	63
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		71.5					20.3	20.3	65.3
Effective Green, g (s)		39.0	39.0		71.5					20.3	20.3	65.3
Actuated g/C Ratio		0.24	0.24		0.45					0.13	0.13	0.41
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		726	293		1507					171	469	458
v/s Ratio Prot		c0.20			c0.20					0.06	c0.06	
v/s Ratio Perm			0.08									0.06
v/c Ratio		0.81	0.32		0.46					0.44	0.51	0.14
Uniform Delay, d1		57.0	49.7		30.8					64.6	65.2	29.7
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		9.6	2.9		0.1					1.8	0.9	0.1
Delay (s)		66.6	52.6		0.7					66.5	66.1	29.8
Level of Service		E	D		A					E	E	C
Approach Delay (s)		62.8			0.7			0.0			56.3	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	40.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.2
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	481	0	0	426	93	228	144	172	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.93				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	2974				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	2974				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	233	534	0	0	473	103	253	160	191	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	77	0	100	0	0	0	0
Lane Group Flow (vph)	233	534	0	0	473	26	207	297	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	80.5	80.5			33.5	33.5	19.1	19.1				
Effective Green, g (s)	80.5	80.5			33.5	33.5	19.1	19.1				
Actuated g/C Ratio	0.50	0.50			0.21	0.21	0.12	0.12				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	792	1694			659	305	183	355				
v/s Ratio Prot	0.15	c0.16			c0.15		c0.14	0.10				
v/s Ratio Perm						0.02						
v/c Ratio	0.29	0.32			0.72	0.08	1.13	0.84				
Uniform Delay, d1	23.2	23.5			58.9	50.9	70.5	68.9				
Progression Factor	0.07	0.07			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.1	0.1			3.7	0.1	106.2	15.7				
Delay (s)	1.7	1.7			62.6	51.0	176.6	84.6				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.7			60.5			116.2			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	54.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.9
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	444	73	56	185	54	86	803	146	90	426	99
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1538	1556	1327	1596	1724		1524	2930		1509	2870	
Flt Permitted	0.46	1.00	1.00	0.21	1.00		0.36	1.00		0.12	1.00	
Satd. Flow (perm)	751	1556	1327	360	1724		571	2930		197	2870	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	225	467	77	59	195	57	91	845	154	95	448	104
RTOR Reduction (vph)	0	0	52	0	12	0	0	17	0	0	22	0
Lane Group Flow (vph)	225	467	25	59	240	0	91	982	0	95	530	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.3	29.3	29.3	33.3	27.8		39.6	34.1		39.6	34.1	
Effective Green, g (s)	34.3	30.3	29.3	31.3	27.8		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.38	0.34	0.33	0.35	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	341	527	435	188	536		288	1118		149	1095	
v/s Ratio Prot	c0.04	c0.30		0.02	0.14		0.02	c0.34		c0.03	0.18	
v/s Ratio Perm	0.21		0.02	0.09			0.12			0.24		
v/c Ratio	0.66	0.89	0.06	0.31	0.45		0.32	0.88		0.64	0.48	
Uniform Delay, d1	22.4	27.9	20.6	21.0	24.7		16.2	25.7		18.5	21.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.6	19.3	0.3	1.0	2.7		0.6	9.9		8.6	1.5	
Delay (s)	27.0	47.2	20.8	22.0	27.4		16.9	35.6		27.2	22.5	
Level of Service	C	D	C	C	C		B	D		C	C	
Approach Delay (s)		38.7			26.3			34.0			23.2	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	32.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	562	16	26	257	28	35	79	102	45	42	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.94			0.96	
Flt Protected		1.00	1.00		1.00	1.00		0.99			0.98	
Satd. Flow (prot)		1908	1482		1599	1198		1812			1821	
Flt Permitted		0.96	1.00		0.93	1.00		0.95			0.86	
Satd. Flow (perm)		1845	1482		1500	1198		1732			1599	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	592	17	27	271	29	37	83	107	47	44	40
RTOR Reduction (vph)	0	0	6	0	0	15	0	49	0	0	23	0
Lane Group Flow (vph)	0	637	11	0	298	14	0	178	0	0	108	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		908	730		738	590		719			664	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.01		0.20	0.01		c0.10			0.07	
v/c Ratio		0.70	0.01		0.40	0.02		0.25			0.16	
Uniform Delay, d1		12.8	8.4		10.5	8.5		12.4			11.9	
Progression Factor		1.00	1.00		1.91	2.84		1.00			1.35	
Incremental Delay, d2		4.5	0.0		0.1	0.0		0.8			0.5	
Delay (s)		17.3	8.5		20.1	24.1		13.2			16.6	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		17.1			20.5			13.2			16.6	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	616	23	27	238	8	39	216	107	18	51	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1392		1581	1497		1754	1390		1656	
Flt Permitted		0.93	1.00		0.35	1.00		0.95	1.00		0.93	
Satd. Flow (perm)		1549	1392		562	1497		1679	1390		1560	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	648	24	28	251	8	41	227	113	19	54	31
RTOR Reduction (vph)	0	0	7	0	0	5	0	0	43	0	16	0
Lane Group Flow (vph)	0	723	17	0	279	3	0	268	70	0	88	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		548	493		199	530		827	684		768	
v/s Ratio Prot												
v/s Ratio Perm		0.47	0.01		c0.50	0.00		c0.16	0.05		0.06	
v/c Ratio		1.32	0.03		1.40	0.01		0.32	0.10		0.11	
Uniform Delay, d1		21.0	13.7		21.0	13.6		10.0	8.8		8.9	
Progression Factor		1.60	1.78		0.80	0.79		0.39	0.26		1.09	
Incremental Delay, d2		153.8	0.1		207.4	0.0		0.7	0.2		0.3	
Delay (s)		187.4	24.6		224.1	10.8		4.6	2.5		9.9	
Level of Service		F	C		F	B		A	A		A	
Approach Delay (s)		182.2			218.2			4.0			9.9	
Approach LOS		F			F			A			A	

Intersection Summary			
HCM Average Control Delay	132.5	HCM Level of Service	F
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	671	20	30	9	18	15	26	363	19	9	213	222
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.98			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.95			0.99			1.00	0.85
Flt Protected		0.95	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1750	1390		1761			1979			1873	1328
Flt Permitted		0.72	1.00		0.64			0.97			0.98	1.00
Satd. Flow (perm)		1330	1390		1140			1935			1847	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	746	22	33	10	20	17	29	403	21	10	237	247
RTOR Reduction (vph)	0	0	9	0	13	0	0	3	0	0	0	125
Lane Group Flow (vph)	0	768	24	0	34	0	0	450	0	0	247	122
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		604	577		298			953			909	654
v/s Ratio Prot		c0.16										
v/s Ratio Perm		0.37	0.02		0.03			c0.23			0.13	0.09
v/c Ratio		1.27	0.04		0.12			0.47			0.27	0.19
Uniform Delay, d1		19.0	11.3		18.3			10.9			9.7	9.2
Progression Factor		1.13	1.50		1.00			0.60			0.52	1.01
Incremental Delay, d2		123.4	0.0		0.8			1.6			0.1	0.1
Delay (s)		144.9	17.0		19.1			8.2			5.1	9.4
Level of Service		F	B		B			A			A	A
Approach Delay (s)		139.7			19.1			8.2			7.3	
Approach LOS		F			B			A			A	

Intersection Summary			
HCM Average Control Delay	66.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	983	220	269	1109	0	0	0	0	274	200	374
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4322		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.14	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4322		228	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1035	232	283	1167	0	0	0	0	288	211	394
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	64	64
Lane Group Flow (vph)	0	1237	0	283	1167	0	0	0	0	233	387	145
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		48.4		69.4	69.4					23.6	23.6	23.6
Effective Green, g (s)		48.4		69.4	69.4					23.6	23.6	23.6
Actuated g/C Ratio		0.46		0.66	0.66					0.22	0.22	0.22
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1992		365	2132					319	609	305
v/s Ratio Prot		0.29		c0.12	0.36							
v/s Ratio Perm				c0.39						c0.16	0.14	0.11
v/c Ratio		0.62		0.78	0.55					0.73	0.63	0.47
Uniform Delay, d1		21.4		18.0	9.5					37.7	36.8	35.3
Progression Factor		1.00		0.97	1.65					1.00	1.00	1.00
Incremental Delay, d2		1.5		6.0	0.6					8.6	2.3	1.4
Delay (s)		22.8		23.5	16.1					46.3	39.1	36.7
Level of Service		C		C	B					D	D	D
Approach Delay (s)		22.8			17.6			0.0			40.4	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	103.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	309	948	0	0	856	234	521	346	464	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.99		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1449		4388				
Flt Permitted	0.19	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	568	3138			3119	1449		4388				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	325	998	0	0	901	246	548	364	488	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	104	0	90	0	0	0	0
Lane Group Flow (vph)	325	998	0	0	901	142	0	1310	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	62.8	62.8			45.4	45.4		30.2				
Effective Green, g (s)	62.8	62.8			45.4	45.4		30.2				
Actuated g/C Ratio	0.60	0.60			0.43	0.43		0.29				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	595	1877			1349	627		1262				
v/s Ratio Prot	0.06	c0.32			c0.29							
v/s Ratio Perm	0.27					0.10		0.30				
v/c Ratio	0.55	0.53			0.67	0.23		1.04				
Uniform Delay, d1	12.8	12.4			23.8	18.7		37.4				
Progression Factor	0.66	0.83			0.95	1.45		1.00				
Incremental Delay, d2	0.9	0.9			1.7	0.5		35.8				
Delay (s)	9.4	11.1			24.3	27.7		73.2				
Level of Service	A	B			C	C		E				
Approach Delay (s)		10.7			25.0			73.2			0.0	
Approach LOS		B			C			E			A	

Intersection Summary			
HCM Average Control Delay	37.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	103.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	103	733	221	76	781	43	226	178	40	57	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1603	3233		1446	3007		1544	2782	
Flt Permitted	0.14	1.00	1.00	0.36	1.00		0.53	1.00		0.61	1.00	
Satd. Flow (perm)	227	3061	1291	606	3233		811	3007		990	2782	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	108	772	233	80	822	45	238	187	42	60	117	96
RTOR Reduction (vph)	0	0	95	0	4	0	0	21	0	0	80	0
Lane Group Flow (vph)	108	772	138	80	863	0	238	208	0	60	133	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	62.5	52.6	62.1	40.3	33.9		29.8	20.3		24.2	17.5	
Effective Green, g (s)	62.5	52.6	62.1	40.3	33.9		29.8	20.3		24.2	17.5	
Actuated g/C Ratio	0.60	0.50	0.59	0.38	0.32		0.28	0.19		0.23	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	455	1533	764	293	1044		288	581		264	464	
v/s Ratio Prot	c0.06	c0.25	0.02	0.02	c0.27		c0.07	0.07		0.01	0.05	
v/s Ratio Perm	0.08		0.09	0.09			c0.16			0.04		
v/c Ratio	0.24	0.50	0.18	0.27	0.83		0.83	0.36		0.23	0.29	
Uniform Delay, d1	12.0	17.5	9.8	21.0	32.8		33.7	36.7		32.3	38.3	
Progression Factor	0.90	1.00	1.68	1.00	1.00		0.94	0.89		1.00	1.00	
Incremental Delay, d2	0.9	0.8	0.1	0.5	7.5		16.7	1.3		0.4	1.2	
Delay (s)	11.7	18.4	16.6	21.5	40.3		48.5	33.8		32.8	39.5	
Level of Service	B	B	B	C	D		D	C		C	D	
Approach Delay (s)		17.4			38.7			41.3			38.0	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM Average Control Delay	30.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	323	273	57	190	98	328	380	83	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.95		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1635	2920		1463	3037		1589	3237		1549	3135	
Flt Permitted	0.54	1.00		0.25	1.00		0.46	1.00		0.47	1.00	
Satd. Flow (perm)	931	2920		389	3037		772	3237		774	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	340	287	60	200	103	345	400	87	96	272	57
RTOR Reduction (vph)	0	139	0	0	60	0	0	17	0	0	17	0
Lane Group Flow (vph)	62	488	0	60	243	0	345	470	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	363	798		206	833		530	1292		338	935	
v/s Ratio Prot	0.01	c0.17		c0.02	0.08		c0.11	0.15		0.02	0.10	
v/s Ratio Perm	0.05			0.08			c0.22			0.08		
v/c Ratio	0.17	0.61		0.29	0.29		0.65	0.36		0.28	0.33	
Uniform Delay, d1	23.8	33.3		24.4	30.1		16.6	22.2		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.06	0.94	
Incremental Delay, d2	0.3	3.5		0.9	0.9		3.0	0.8		0.5	0.9	
Delay (s)	24.0	36.8		25.3	30.9		19.6	23.0		24.2	27.8	
Level of Service	C	D		C	C		B	C		C	C	
Approach Delay (s)		35.6			30.0			21.6			27.0	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	706	79	6	449	111	65	577	7	100	309	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.99			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2929			2896		1436	3185		1450	2788	
Flt Permitted		0.59			0.94		0.43	1.00		0.29	1.00	
Satd. Flow (perm)		1740			2729		654	3185		448	2788	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	183	784	88	7	499	123	72	641	8	111	343	111
RTOR Reduction (vph)	0	11	0	0	33	0	0	1	0	0	48	0
Lane Group Flow (vph)	0	1044	0	0	596	0	72	648	0	111	406	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		796			798		310	1078		241	944	
v/s Ratio Prot		c0.08					0.01	c0.20		c0.03	0.15	
v/s Ratio Perm		c0.46			0.22		0.08			0.16		
v/c Ratio		1.31			0.75		0.23	0.60		0.46	0.43	
Uniform Delay, d1		19.0			20.8		12.4	17.9		13.0	16.6	
Progression Factor		1.00			1.52		0.90	0.71		1.00	1.00	
Incremental Delay, d2		149.4			0.6		1.6	2.3		6.2	1.4	
Delay (s)		168.4			32.3		12.8	14.9		19.2	18.1	
Level of Service		F			C		B	B		B	B	
Approach Delay (s)		168.4			32.3			14.6			18.3	
Approach LOS		F			C			B			B	

Intersection Summary			
HCM Average Control Delay	73.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	328	46	71	160	13	36	632	97	10	359	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	1917		1618	1943		1658	3195		1138	3197	
Flt Permitted	0.64	1.00		0.40	1.00		0.51	1.00		0.31	1.00	
Satd. Flow (perm)	1131	1917		676	1943		889	3195		374	3197	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	51	338	47	73	165	13	37	652	100	10	370	44
RTOR Reduction (vph)	0	8	0	0	4	0	0	19	0	0	14	0
Lane Group Flow (vph)	51	377	0	73	174	0	37	733	0	10	400	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	418	708		250	717		424	1524		178	1525	
v/s Ratio Prot		c0.20			0.09			c0.23			0.13	
v/s Ratio Perm	0.05			0.11			0.04			0.03		
v/c Ratio	0.12	0.53		0.29	0.24		0.09	0.48		0.06	0.26	
Uniform Delay, d1	13.5	16.1		14.5	14.2		9.3	11.5		9.1	10.2	
Progression Factor	1.00	1.00		1.73	1.78		1.00	1.00		0.50	0.49	
Incremental Delay, d2	0.6	2.9		1.1	0.3		0.4	1.1		0.5	0.3	
Delay (s)	14.1	19.0		26.2	25.6		9.7	12.6		5.0	5.3	
Level of Service	B	B		C	C		A	B		A	A	
Approach Delay (s)		18.4			25.8			12.5			5.3	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	756	196	607	17	3	14	3	46	30	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			1.00		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.98		
Flt Protected	1.00		0.99				0.99			0.96		
Satd. Flow (prot)	2956		2954				1732			1908		
Flt Permitted	1.00		0.55				0.94			0.79		
Satd. Flow (perm)	2956		1639				1643			1563		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	796	206	639	18	3	15	3	48	32	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	796	0	861	0	0	0	31	0	0	35	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom				Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7				2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		802				354			337		
v/s Ratio Prot	0.27		c0.10									
v/s Ratio Perm			c0.35				0.02			c0.02		
v/c Ratio	0.97		1.07				0.09			0.10		
Uniform Delay, d1	23.2		19.0				20.4			20.5		
Progression Factor	1.35		0.76				1.00			1.00		
Incremental Delay, d2	4.9		52.3				0.5			0.6		
Delay (s)	36.2		66.7				20.9			21.1		
Level of Service	D		E				C			C		
Approach Delay (s)	36.2		66.7				20.9			21.1		
Approach LOS	D		E				C			C		

Intersection Summary			
HCM Average Control Delay	157.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	450
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1429	
Flt Permitted	1.00	
Satd. Flow (perm)	1429	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1	474
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	475	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.33	
v/s Ratio Perm		
v/c Ratio	2.16	
Uniform Delay, d1	27.5	
Progression Factor	0.78	
Incremental Delay, d2	534.8	
Delay (s)	556.2	
Level of Service	F	
Approach Delay (s)	556.2	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	186	1147	665	79	139	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3235	3205		1629	1457
Flt Permitted		0.67	1.00		0.95	1.00
Satd. Flow (perm)		2166	3205		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	207	1274	739	88	154	173
RTOR Reduction (vph)	0	0	14	0	0	128
Lane Group Flow (vph)	0	1481	813	0	154	45
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1333	1972		426	381
v/s Ratio Prot			0.25		c0.09	
v/s Ratio Perm		c0.68				0.03
v/c Ratio		1.11	0.41		0.36	0.12
Uniform Delay, d1		12.5	6.4		19.6	18.3
Progression Factor		1.45	1.31		0.90	0.81
Incremental Delay, d2		51.2	0.6		2.4	0.6
Delay (s)		69.3	9.0		20.1	15.5
Level of Service		E	A		C	B
Approach Delay (s)		69.3	9.0		17.7	
Approach LOS		E	A		B	

Intersection Summary			
HCM Average Control Delay	43.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	51	1214	685	196	170	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2921		1464	1373
Flt Permitted		0.88	1.00		0.95	1.00
Satd. Flow (perm)		2581	2921		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	54	1278	721	206	179	57
RTOR Reduction (vph)	0	0	40	0	0	40
Lane Group Flow (vph)	0	1332	887	0	179	17
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1509	1708		428	401
v/s Ratio Prot			0.30		c0.12	
v/s Ratio Perm		c0.52				0.01
v/c Ratio		0.88	0.52		0.42	0.04
Uniform Delay, d1		11.6	8.1		18.5	16.5
Progression Factor		0.89	0.56		0.94	1.37
Incremental Delay, d2		0.8	0.6		2.9	0.2
Delay (s)		11.1	5.1		20.4	22.7
Level of Service		B	A		C	C
Approach Delay (s)		11.1	5.1		20.9	
Approach LOS		B	A		C	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1233	153	158	645	401	434
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.99		1.00	1.00	0.93	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	2248		1770	2436	1746	
Flt Permitted	1.00		0.13	1.00	0.98	
Satd. Flow (perm)	2248		240	2436	1746	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1258	156	161	658	409	443
RTOR Reduction (vph)	7	0	0	0	19	0
Lane Group Flow (vph)	1407	0	161	658	833	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1072		114	1162	645	
v/s Ratio Prot	0.63			0.27	c0.48	
v/s Ratio Perm			c0.67			
v/c Ratio	1.31		1.41	0.57	1.29	
Uniform Delay, d1	17.0		17.0	12.2	20.5	
Progression Factor	1.56		1.00	1.00	1.00	
Incremental Delay, d2	144.4		229.3	2.0	142.6	
Delay (s)	170.8		246.3	14.2	163.1	
Level of Service	F		F	B	F	
Approach Delay (s)	170.8			59.8	163.1	
Approach LOS	F			E	F	

Intersection Summary			
HCM Average Control Delay	139.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	135.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	695	85	251	1499	9	68	0	177	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.15	1.00	1.00	0.27	1.00	1.00		0.76	1.00		0.71	
Satd. Flow (perm)	290	3213	1422	459	3138	1366		1309	1443		722	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	772	94	279	1666	10	76	0	197	1	0	0
RTOR Reduction (vph)	0	0	46	0	0	2	0	0	173	0	0	0
Lane Group Flow (vph)	1	772	48	279	1666	8	0	76	24	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	43.7	43.7	43.7	66.6	66.6	66.6		10.4	10.4		10.4	
Effective Green, g (s)	43.7	43.7	43.7	66.6	66.6	66.6		10.4	10.4		10.4	
Actuated g/C Ratio	0.51	0.51	0.51	0.78	0.78	0.78		0.12	0.12		0.12	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	149	1652	731	624	2459	1070		160	177		88	
v/s Ratio Prot		0.24		0.10	c0.53							
v/s Ratio Perm	0.00		0.03	0.25		0.01		c0.06	0.02		0.00	
v/c Ratio	0.01	0.47	0.07	0.45	0.68	0.01		0.47	0.14		0.01	
Uniform Delay, d1	10.1	13.2	10.4	3.8	4.2	2.0		34.8	33.3		32.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.1	1.0	0.2	0.5	0.8	0.0		2.2	0.4		0.1	
Delay (s)	10.1	14.2	10.6	4.3	5.0	2.0		37.0	33.6		32.8	
Level of Service	B	B	B	A	A	A		D	C		C	
Approach Delay (s)		13.8			4.9			34.6			32.8	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	12	777	808	43	23	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3017		1481	
Flt Permitted		0.93	1.00		0.97	
Satd. Flow (perm)		2842	3017		1481	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	863	898	48	26	12
RTOR Reduction (vph)	0	0	4	0	11	0
Lane Group Flow (vph)	0	876	942	0	27	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1042	2145		115	
v/s Ratio Prot			c0.31		c0.02	
v/s Ratio Perm		c0.31				
v/c Ratio		0.84	0.44		0.23	
Uniform Delay, d1		26.1	5.5		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		8.2	0.3		4.7	
Delay (s)		34.3	0.3		43.7	
Level of Service		C	A		D	
Approach Delay (s)		34.3	0.3		43.7	
Approach LOS		C	A		D	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	89	422	1	26	554	78	0	0	1	43	3	133
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.96	1.00
Satd. Flow (prot)		1726			3231			1432			1610	1282
Flt Permitted		0.77			0.93			1.00			0.94	1.00
Satd. Flow (perm)		1338			3023			1432			1581	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	99	469	1	29	616	87	0	0	1	48	3	148
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	99
Lane Group Flow (vph)	0	569	0	0	720	0	0	0	0	0	51	49
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		488			1635			152			470	422
v/s Ratio Prot					c0.07			0.00			0.02	
v/s Ratio Perm		c0.43			0.16						0.01	c0.04
v/c Ratio		1.17			0.44			0.00			0.11	0.12
Uniform Delay, d1		27.0			12.3			34.0			21.9	19.9
Progression Factor		1.00			1.76			1.00			1.00	1.00
Incremental Delay, d2		95.1			0.1			0.0			0.5	0.6
Delay (s)		122.1			21.7			34.0			22.3	20.4
Level of Service		F			C			C			C	C
Approach Delay (s)		122.1			21.7			34.0			20.9	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM Average Control Delay	59.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	997	57	36	35	48	23	26	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.95			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1556	3022		1587	3021			1816			1706	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	286	3022		604	3021			1649			1630	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1049	60	38	37	51	24	27	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	22	0
Lane Group Flow (vph)	41	653	0	37	1103	0	0	93	0	0	121	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	150	1581		316	1580			583			577	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.14			0.06				0.06			c0.07	
v/c Ratio	0.27	0.41		0.12	0.70			0.16			0.21	
Uniform Delay, d1	8.6	9.4		7.9	11.6			14.4			14.7	
Progression Factor	1.00	1.00		0.70	1.38			1.00			1.00	
Incremental Delay, d2	4.5	0.8		0.7	2.3			0.6			0.8	
Delay (s)	13.1	10.2		6.2	18.4			15.0			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.0			15.0			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	787	5	31	619	40	0	0	0	578	88	375
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.92	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	790	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	336	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	828	5	33	652	42	0	0	0	608	93	395
RTOR Reduction (vph)	0	0	0	0	0	18	0	0	0	0	0	168
Lane Group Flow (vph)	26	833	0	33	652	24	0	0	0	608	93	227
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	160	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.20					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.05						0.15
v/c Ratio	0.16	0.75		0.05	0.36	0.08				0.80	0.23	0.66
Uniform Delay, d1	31.6	38.6		15.2	15.7	13.1				47.2	40.6	45.4
Progression Factor	0.85	0.86		0.34	0.75	1.27				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.4				8.8	1.4	9.8
Delay (s)	28.9	37.4		5.2	12.2	17.0				56.0	42.0	55.2
Level of Service	C	D		A	B	B				E	D	E
Approach Delay (s)		37.2			12.1			0.0			54.5	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	338	809	218	53	560	280	100	247	54	39	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3263		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3263		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	356	852	229	56	589	295	105	260	57	41	0	32
RTOR Reduction (vph)	0	18	0	0	0	222	0	0	42	0	0	30
Lane Group Flow (vph)	356	1063	0	56	589	73	0	365	15	41	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1707		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.32	0.62		0.53	0.76	0.29		0.51	0.05	0.77		0.04
Uniform Delay, d1	31.9	21.9		59.2	45.5	39.8		45.0	40.5	60.1		57.4
Progression Factor	0.94	0.17		1.00	1.00	1.00		0.95	1.00	1.00		1.00
Incremental Delay, d2	0.5	1.1		18.0	7.0	2.9		2.6	0.3	49.7		0.4
Delay (s)	30.5	4.7		77.2	52.5	42.7		45.3	41.0	109.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		11.1			50.9			44.7			87.0	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	885	165	102	813	0	74	0	87	9	15	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.98	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1649	3149		1388		1451	1803	1857	
Flt Permitted		1.00		0.18	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		304	3149		1082		1451	1803	1857	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	983	183	113	903	0	82	0	97	10	17	8
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	66	0	5	0
Lane Group Flow (vph)	0	1151	0	113	903	0	82	0	31	10	20	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		182	1889		346		464	577	594	
v/s Ratio Prot		c0.38			0.29						0.01	
v/s Ratio Perm				0.37			c0.08		0.02	0.01		
v/c Ratio		0.64		0.62	0.48		0.24		0.07	0.02	0.03	
Uniform Delay, d1		13.0		12.7	11.2		25.0		23.6	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.8		14.9	0.9		1.6		0.3	0.1	0.1	
Delay (s)		14.7		27.6	12.1		26.6		23.9	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		14.7			13.8			25.2			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	291	0	1188	214	682	0	0	792	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4271	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4271	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	297	0	1212	218	696	0	0	808	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	297	0	1212	218	696	0	0	1308	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.19		c0.79	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.65		2.77	0.47	0.26			1.16dr	
Uniform Delay, d1				32.3		37.5	29.6	8.6			37.0	
Progression Factor				1.00		1.00	0.64	2.10			1.00	
Incremental Delay, d2				7.1		804.4	2.8	0.2			35.5	
Delay (s)				39.4		841.9	21.7	18.3			72.5	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			684.0			19.1			72.5	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	306.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.40		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.3%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	324	770	145	0	0	0	0	572	403	355	727	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3157						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3157						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	334	794	149	0	0	0	0	590	415	366	749	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	301	962	0	0	0	0	0	590	415	366	749	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.14		c0.23	0.16	
v/s Ratio Perm	0.20	0.30							c0.18			
v/c Ratio	0.62	0.94						0.51	0.69	0.78	0.27	
Uniform Delay, d1	30.0	34.5						32.6	34.6	33.8	10.5	
Progression Factor	1.00	1.00						1.14	1.14	0.86	0.21	
Incremental Delay, d2	5.7	17.2						1.4	5.8	4.6	0.1	
Delay (s)	35.7	51.7						38.5	45.2	33.7	2.3	
Level of Service	D	D						D	D	C	A	
Approach Delay (s)		48.0			0.0			41.3			12.6	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	287	25	24	11	157	0	0	147	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.54	1.00			1.00	
Satd. Flow (perm)				1688	3132		979	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	319	28	27	12	174	0	0	163	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	319	37	0	12	174	0	0	168	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		636	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.09			0.09	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.16			0.16	
Uniform Delay, d1				24.4	20.0		10.5	8.0			9.8	
Progression Factor				1.00	1.00		1.05	1.17			1.00	
Incremental Delay, d2				4.8	0.1		0.1	0.3			0.3	
Delay (s)				29.2	20.1		11.1	9.6			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			27.9			9.7			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	6	0	14	0	142	43	46	389	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1571			1718		1590	1860	
Flt Permitted	0.74	1.00			0.96			1.00		0.60	1.00	
Satd. Flow (perm)	1515	1735			1529			1718		1004	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	6	0	15	0	149	45	48	409	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	13	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	11	0	0	181	0	48	409	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	481	551			486			808		639	1094	
v/s Ratio Prot		c0.01						0.11		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.22		0.08	0.37	
Uniform Delay, d1	20.0	20.0			19.9			13.3		8.6	9.2	
Progression Factor	1.00	1.00			1.00			1.00		0.97	0.87	
Incremental Delay, d2	0.1	0.1			0.1			0.6		0.2	0.9	
Delay (s)	20.1	20.1			20.0			14.0		8.6	8.9	
Level of Service	C	C			C			B		A	A	
Approach Delay (s)		20.1			20.0			14.0			8.9	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	46	40	12	183	273	27
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1753		1765	1782	1656	
Flt Permitted	0.97		0.52	1.00	1.00	
Satd. Flow (perm)	1753		966	1782	1656	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	44	13	203	303	30
RTOR Reduction (vph)	30	0	0	0	5	0
Lane Group Flow (vph)	65	0	13	203	328	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		535	987	917	
v/s Ratio Prot	c0.04			0.11	c0.20	
v/s Ratio Perm			0.01			
v/c Ratio	0.12		0.02	0.21	0.36	
Uniform Delay, d1	15.5		6.6	7.3	8.1	
Progression Factor	1.00		0.49	0.61	1.44	
Incremental Delay, d2	0.4		0.1	0.5	0.9	
Delay (s)	15.9		3.3	4.9	12.6	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			4.8	12.6	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	28.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	265	9	257	130	2	0	277	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3771		1693	1677			1738	1428
Flt Permitted					0.99		0.48	1.00			1.00	1.00
Satd. Flow (perm)					3771		854	1677			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	294	10	286	144	2	0	308	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	335	0	286	146	0	0	308	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1153		611	1006			777	638
v/s Ratio Prot					c0.09		c0.06	0.09			0.18	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.47	0.14			0.40	0.01
Uniform Delay, d1					22.5		13.5	7.4			15.8	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.6	0.3			1.5	0.0
Delay (s)					23.1		16.1	7.7			17.3	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.3			17.1	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	96	94	38	133	207	32	59	703	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3282		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.59	1.00	
Satd. Flow (perm)					1896		446	3282		1056	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	107	104	42	148	230	36	66	781	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	16	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	243	0	148	250	0	66	824	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1488		638	1572	
v/s Ratio Prot					c0.13		c0.04	0.08		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.17		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.1		8.2	14.7	
Progression Factor					1.00		0.83	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.2		0.3	1.3	
Delay (s)					22.9		17.0	10.2		8.5	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.7			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	277	24	159	590	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3173		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		599	3173		1004	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	292	25	167	621	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	8	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	309	0	167	666	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		335	1777		562	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.17		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.0		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.3		3.5	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.2			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	35	182	64	240	558	77
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	202	71	267	620	86

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	241	160	178	413	292
Volume Left (vph)	39	71	0	0	0
Volume Right (vph)	202	0	0	0	86
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.7	6.4	6.2	5.8	5.6
Degree Utilization, x	0.38	0.29	0.31	0.66	0.45
Capacity (veh/h)	598	538	557	611	632
Control Delay (s)	12.1	10.8	10.7	18.2	11.9
Approach Delay (s)	12.1	10.7		15.6	
Approach LOS	B	B		C	

Intersection Summary			
Delay	13.7		
HCM Level of Service	B		
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	376	18	22	405	75	77	55	68	351	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1421			1710	3250	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	932	1731	1421			257	3250	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	418	20	24	450	83	86	61	76	390	36
RTOR Reduction (vph)	0	0	0	12	0	0	36	0	0	0	7	0
Lane Group Flow (vph)	0	75	418	8	24	450	133	0	0	137	419	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		303	725	641	222	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.26					0.13	
v/s Ratio Perm		0.07		0.01	0.03		0.09			c0.53		
v/c Ratio		0.25	0.58	0.01	0.11	1.09	0.39			1.99	0.48	
Uniform Delay, d1		21.6	23.4	17.8	31.3	40.0	33.6			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	3.3	0.0	1.0	71.5	3.4			491.0	1.9	
Delay (s)		23.5	26.7	17.9	32.3	111.5	37.1			529.5	34.3	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.9			89.0					154.8	
Approach LOS			C			F					F	

Intersection Summary			
HCM Average Control Delay	138.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	102.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	106	559	80	101	4	110	587	190
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.38	1.00				0.95	1.00	
Satd. Flow (perm)	675	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	118	621	89	112	4	122	652	211
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	118	810	0	0	0	126	837	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	177	850				334	514	
v/s Ratio Prot		0.25				0.07		
v/s Ratio Perm	0.17						c0.32	
v/c Ratio	0.67	0.95				0.38	1.63	
Uniform Delay, d1	34.7	38.1				36.7	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	18.1	21.4				3.2	291.8	
Delay (s)	52.8	59.5				39.9	334.0	
Level of Service	D	E				D	F	
Approach Delay (s)		58.7				296.6		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	588	0	0	482	59	83	51	20	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1951			1839				
Flt Permitted		0.90			1.00			0.97				
Satd. Flow (perm)		1526			1951			1839				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	71	653	0	0	536	66	92	57	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	724	0	0	602	0	0	171	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		939			1201			481				
v/s Ratio Prot					0.31							
v/s Ratio Perm		c0.47						0.09				
v/c Ratio		0.77			0.50			0.36				
Uniform Delay, d1		9.1			7.0			19.5				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.1			1.5			2.0				
Delay (s)		15.2			8.4			21.6				
Level of Service		B			A			C				
Approach Delay (s)		15.2			8.4			21.6			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	333	149	126	350	154	103	625	83	143	751	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1982	1434		1947	1444	1546	3040	1296	1505	3069	1252
Flt Permitted		0.33	1.00		0.71	1.00	0.23	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)		662	1434		1410	1444	379	3040	1296	468	3069	1252
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	73	351	157	133	368	162	108	658	87	151	791	98
RTOR Reduction (vph)	0	0	93	0	0	116	0	0	52	0	0	49
Lane Group Flow (vph)	0	424	64	0	501	46	108	658	35	151	791	49
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		397	587		403	413	275	1225	522	315	1248	509
v/s Ratio Prot		c0.10					0.03	0.22		c0.04	c0.26	
v/s Ratio Perm		0.34	0.04		c0.36	0.03	0.16		0.03	0.20		0.04
v/c Ratio		1.07	0.11		1.24	0.11	0.39	0.54	0.07	0.48	0.63	0.10
Uniform Delay, d1		31.0	19.2		37.5	27.7	16.4	23.9	19.2	16.0	24.9	19.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.77	1.56	2.70
Incremental Delay, d2		64.4	0.4		128.8	0.5	0.9	1.7	0.2	1.1	2.4	0.4
Delay (s)		95.4	19.5		166.3	28.2	17.3	25.6	19.5	29.4	41.1	52.3
Level of Service		F	B		F	C	B	C	B	C	D	D
Approach Delay (s)		74.9			132.6			23.9			40.5	
Approach LOS		E			F			C			D	

Intersection Summary			
HCM Average Control Delay	61.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	409	83	94	522	90	49	59	69	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1645			1649			1796				
Flt Permitted		0.83			0.86			0.99				
Satd. Flow (perm)		1373			1422			1796				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	92	454	92	104	580	100	54	66	77	0	0	0
RTOR Reduction (vph)	0	9	0	0	8	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	629	0	0	776	0	0	162	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		845			875			470				
v/s Ratio Prot												
v/s Ratio Perm		0.46			c0.55			0.09				
v/c Ratio		0.74			0.89			0.34				
Uniform Delay, d1		8.9			10.6			19.5				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		5.9			12.9			2.0				
Delay (s)		14.8			23.4			21.5				
Level of Service		B			C			C				
Approach Delay (s)		14.8			23.4			21.5			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	483	81	74	511	36	38	76	72	53	235	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1685	1382		1713	1417		1685	1455		1877	
Flt Permitted		0.90	1.00		0.85	1.00		0.83	1.00		0.94	
Satd. Flow (perm)		1531	1382		1473	1417		1417	1455		1774	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	508	85	78	538	38	40	80	76	56	247	59
RTOR Reduction (vph)	0	0	36	0	0	12	0	0	52	0	10	0
Lane Group Flow (vph)	0	564	49	0	616	26	0	120	24	0	352	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		878	792		845	812		453	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.37	0.04		c0.42	0.02		0.08	0.02		c0.20	
v/c Ratio		0.64	0.06		0.73	0.03		0.26	0.05		0.62	
Uniform Delay, d1		10.8	7.1		11.7	7.0		18.9	17.6		21.6	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.6	0.1		5.5	0.1		1.4	0.2		5.0	
Delay (s)		14.4	7.2		17.2	7.0		20.4	17.8		26.7	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.5			16.6			19.4			26.7	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	99.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	490	34	44	523	52	45	165	55	117	199	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1532	3066		1652	3730		1585	1663	1370	1568	1680	1397
Flt Permitted	0.36	1.00		0.39	1.00		0.59	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	579	3066		680	3730		977	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	544	38	49	581	58	50	183	61	130	221	34
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	37	0	0	20
Lane Group Flow (vph)	66	574	0	49	627	0	50	183	24	130	221	14
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	276	1462		324	1779		391	665	548	417	672	559
v/s Ratio Prot		c0.19			0.17			0.11			c0.13	
v/s Ratio Perm	0.11			0.07			0.05		0.02	0.12		0.01
v/c Ratio	0.24	0.39		0.15	0.35		0.13	0.28	0.04	0.31	0.33	0.02
Uniform Delay, d1	10.0	10.9		9.6	10.7		12.3	13.1	11.9	13.4	13.5	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.86	0.91	0.79	0.59	0.59	0.27
Incremental Delay, d2	2.0	0.8		1.0	0.6		0.7	1.0	0.2	1.9	1.3	0.1
Delay (s)	12.1	11.7		10.6	11.2		11.2	13.0	9.6	9.8	9.3	3.3
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.8			11.2			12.0			8.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	421	81	70	378	64	57	179	64	87	240	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1327	3137		1520	3130		1579	2918		1452	2998	
Flt Permitted	0.46	1.00		0.42	1.00		0.54	1.00		0.59	1.00	
Satd. Flow (perm)	637	3137		667	3130		891	2918		908	2998	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	443	85	74	398	67	60	188	67	92	253	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	42	0
Lane Group Flow (vph)	63	528	0	74	465	0	60	216	0	92	293	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	306	1506		320	1502		368	1206		375	1239	
v/s Ratio Prot		c0.17			0.15			0.07			0.10	
v/s Ratio Perm	0.10			0.11			0.07			c0.10		
v/c Ratio	0.21	0.35		0.23	0.31		0.16	0.18		0.25	0.24	
Uniform Delay, d1	11.3	12.2		11.4	11.9		13.8	13.9		14.4	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.6		1.7	0.5		1.0	0.3		1.6	0.5	
Delay (s)	12.8	12.8		13.1	12.4		14.8	14.3		15.9	14.8	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.8			12.5			14.4			15.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	436	61	31	504	46	82	194	57	76	473	110
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1594	1652		1369	1974		1534	2998		1534	3012	
Flt Permitted	0.26	1.00		0.31	1.00		0.28	1.00		0.59	1.00	
Satd. Flow (perm)	439	1652		454	1974		451	2998		951	3012	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	459	64	33	531	48	86	204	60	80	498	116
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	103	523	0	33	579	0	86	264	0	80	614	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	44.0	39.4		40.8	37.8		26.6	21.8		26.6	21.8	
Effective Green, g (s)	44.0	37.4		40.8	35.8		26.6	19.8		26.6	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	290	727		250	831		202	698		331	702	
v/s Ratio Prot	c0.02	c0.32		0.00	0.29		c0.02	0.09		0.01	c0.20	
v/s Ratio Perm	0.16			0.06			0.11			0.06		
v/c Ratio	0.36	0.72		0.13	0.70		0.43	0.38		0.24	0.87	
Uniform Delay, d1	22.4	19.5		19.9	20.2		29.1	27.4		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	6.1		0.2	4.8		1.4	1.6		0.4	14.3	
Delay (s)	23.2	25.6		20.1	25.0		30.5	29.0		22.3	45.7	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		25.2			24.7			29.4			43.0	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	385	63	111	484	112	64	150	55	121	348	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3681			3131		1652	3237		1549	3026	
Flt Permitted		0.73			0.74		0.44	1.00		0.61	1.00	
Satd. Flow (perm)		2691			2321		766	3237		994	3026	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	428	70	123	538	124	71	167	61	134	387	87
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	581	0	0	785	0	71	228	0	134	474	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1220			1052		337	1424		437	1331	
v/s Ratio Prot								0.07			c0.16	
v/s Ratio Perm		0.22			c0.34		0.09			0.13		
v/c Ratio		0.48			0.75		0.21	0.16		0.31	0.36	
Uniform Delay, d1		14.3			16.9		13.0	12.7		13.6	13.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.3			4.8		1.4	0.2		1.8	0.7	
Delay (s)		15.6			21.8		14.4	12.9		15.4	14.7	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		15.6			21.8			13.2			14.8	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	833	6	19	555	236	1	1	9	202	1	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.40	1.00		0.27	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	678	3206		466	3320	1485		1519			2535	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	103	926	7	21	617	262	1	1	10	224	1	84
RTOR Reduction (vph)	0	0	0	0	0	96	0	7	0	0	53	0
Lane Group Flow (vph)	103	933	0	21	617	166	0	5	0	0	256	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		18.6			18.6	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		18.6			18.6	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	430	2033		295	2105	942		389			649	
v/s Ratio Prot		c0.29			0.19							
v/s Ratio Perm	0.15			0.05		0.11		0.00			c0.10	
v/c Ratio	0.24	0.46		0.07	0.29	0.18		0.01			0.39	
Uniform Delay, d1	5.7	6.9		5.1	6.0	5.5		20.2			22.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.3	0.7		0.5	0.4	0.4		0.1			1.7	
Delay (s)	7.1	7.6		5.6	6.3	5.9		20.2			24.1	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		7.6			6.2			20.2			24.1	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	72.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	124	216	118	94	162	56	140	876	87	124	816	103
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1505		1563	1585		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.24	1.00		0.21	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	746	1505		396	1585		323	3069	1337	285	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	131	227	124	99	171	59	147	922	92	131	859	108
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	51
Lane Group Flow (vph)	131	328	0	99	215	0	147	922	52	131	859	57
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	286	390		204	410		235	1264	551	222	1276	543
v/s Ratio Prot	0.03	c0.22		c0.03	0.14		c0.04	c0.30		0.04	0.28	
v/s Ratio Perm	0.11			0.11			0.25		0.04	0.24		0.04
v/c Ratio	0.46	0.84		0.49	0.52		0.63	0.73	0.09	0.59	0.67	0.11
Uniform Delay, d1	22.5	29.8		22.7	27.0		14.6	21.0	15.3	14.7	20.3	15.4
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.82	0.55	1.00	1.00	1.00
Incremental Delay, d2	5.2	19.2		8.0	4.7		10.9	3.4	0.3	11.0	2.9	0.4
Delay (s)	27.7	49.1		30.7	31.8		20.7	20.6	8.7	25.7	23.2	15.8
Level of Service	C	D		C	C		C	C	A	C	C	B
Approach Delay (s)		43.3			31.5			19.7			22.8	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	179	35	20	173	21	24	141	38	47	251	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.97			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1838			1849			1938			1974	
Flt Permitted		0.97			0.96			0.94			0.94	
Satd. Flow (perm)		1783			1791			1838			1870	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	185	36	21	178	22	25	145	39	48	259	51
RTOR Reduction (vph)	0	9	0	0	6	0	0	13	0	0	9	0
Lane Group Flow (vph)	0	235	0	0	215	0	0	196	0	0	349	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		741			744			848			863	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.11			c0.19	
v/c Ratio		0.32			0.29			0.23			0.40	
Uniform Delay, d1		12.8			12.6			10.5			11.6	
Progression Factor		1.00			0.69			1.18			1.00	
Incremental Delay, d2		1.1			1.0			0.6			1.4	
Delay (s)		13.9			9.7			13.1			13.0	
Level of Service		B			A			B			B	
Approach Delay (s)		13.9			9.7			13.1			13.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	190	38	25	180	19	49	199	31	42	206	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3058		1576	3119		1518	3119		1550	3075	
Flt Permitted	0.61	1.00		0.60	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	966	3058		987	3119		935	3119		969	3075	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	211	42	28	200	21	54	221	34	47	229	42
RTOR Reduction (vph)	0	25	0	0	12	0	0	14	0	0	17	0
Lane Group Flow (vph)	27	228	0	28	209	0	54	241	0	47	254	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	894		289	912		547	1823		566	1798	
v/s Ratio Prot		c0.07			0.07			0.08			c0.08	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.25		0.10	0.23		0.10	0.13		0.08	0.14	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.93	0.96		0.76	0.76		1.32	1.33		0.40	0.36	
Incremental Delay, d2	0.7	0.7		0.7	0.6		0.3	0.1		0.3	0.2	
Delay (s)	16.3	17.6		13.4	13.8		8.2	8.2		2.6	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.4			13.8			8.2			2.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	165	40	24	153	37	27	245	16	40	321	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	3060		1525	2936			1922			1938	
Flt Permitted	0.62	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1014	3060		979	2936			1822			1840	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	183	44	27	170	41	30	272	18	44	357	37
RTOR Reduction (vph)	0	26	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	73	201	0	27	186	0	0	317	0	0	433	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	406	1224		392	1174			869			878	
v/s Ratio Prot		0.07			0.06							
v/s Ratio Perm	c0.07			0.03				0.17			c0.24	
v/c Ratio	0.18	0.16		0.07	0.16			0.36			0.49	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.8			11.6	
Progression Factor	1.05	0.99		0.77	0.76			0.98			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.0	
Delay (s)	14.2	12.7		9.6	9.8			11.8			13.6	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		13.0			9.8			11.8			13.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	28	19	153	26	40	230	11	33	360	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1970		1584	1975			1981			1979	
Flt Permitted	0.58	1.00		0.65	1.00			0.90			0.96	
Satd. Flow (perm)	1013	1970		1087	1975			1800			1912	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	31	21	170	29	44	256	12	37	400	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	154	0	21	199	0	0	312	0	0	500	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	312	606		334	608			1025			1088	
v/s Ratio Prot		0.08			c0.10							
v/s Ratio Perm	0.05			0.02				0.17			c0.26	
v/c Ratio	0.17	0.25		0.06	0.33			0.30			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.3			7.3			8.2	
Progression Factor	0.82	0.81		0.93	0.93			0.98			1.00	
Incremental Delay, d2	1.1	1.0		0.4	1.4			0.8			1.4	
Delay (s)	14.7	14.6		15.1	17.5			7.9			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.6			17.3			7.9			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	12	92	2	5	10	59	223	5	5	442	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1726		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.41	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1332	1726		1224	1808		693	1647	1428	1049	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	13	102	2	6	11	66	248	6	6	491	80
RTOR Reduction (vph)	0	74	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	57	41	0	2	9	0	66	248	4	6	491	52
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		339	501		416	988	857	629	1200	898
v/s Ratio Prot		0.02			0.01			0.15			c0.25	
v/s Ratio Perm	c0.04			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.15	0.09		0.01	0.02		0.16	0.25	0.00	0.01	0.41	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.7	6.1	5.2	5.2	6.9	5.4
Progression Factor	1.41	2.82		1.00	1.00		0.80	0.75	0.92	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.3		0.0	0.1		0.6	0.5	0.0	0.0	1.0	0.1
Delay (s)	25.9	49.5		17.1	17.1		5.2	5.1	4.8	5.3	7.9	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		41.7			17.1			5.1			7.6	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	253	163	177	203	0	0	0	0	110	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.41	1.00					0.95	1.00	
Satd. Flow (perm)		2905		722	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	266	172	186	214	0	0	0	0	116	495	397
RTOR Reduction (vph)	0	103	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	335	0	186	214	0	0	0	0	116	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		566	1805					545	1096	
v/s Ratio Prot		c0.12		c0.06	0.07					0.08	c0.25	
v/s Ratio Perm				0.11								
v/c Ratio		0.36		0.33	0.12					0.21	0.68	
Uniform Delay, d1		26.4		13.5	11.1					22.4	27.6	
Progression Factor		1.00		2.22	2.15					1.00	1.00	
Incremental Delay, d2		1.1		1.4	0.1					0.9	3.5	
Delay (s)		27.4		31.2	23.9					23.3	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.4			27.3			0.0			30.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	28.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	222	0	0	307	113	73	511	221	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2850		1767	1782	1560			
Flt Permitted	0.36	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	629	3196			2850		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	234	0	0	323	119	77	538	233	0	0	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	164	0	0	0
Lane Group Flow (vph)	148	234	0	0	405	0	77	538	69	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	702	1974			726		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.14		0.04	c0.30				
v/s Ratio Perm	0.05								0.04			
v/c Ratio	0.21	0.12			0.56		0.15	1.03	0.15			
Uniform Delay, d1	10.3	8.0			33.0		26.6	36.0	26.6			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.1			3.1		0.6	46.3	0.7			
Delay (s)	4.9	3.6			36.1		27.2	82.3	27.3			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			36.1			62.2			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	42.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	488	455	77	507	0	0	0	0	11	434	285
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3098		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.12	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3098		207	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	508	474	80	528	0	0	0	0	11	452	297
RTOR Reduction (vph)	0	169	0	0	0	0	0	0	0	0	0	196
Lane Group Flow (vph)	0	813	0	80	528	0	0	0	0	11	452	101
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		382	1917					543	1085	520
v/s Ratio Prot		c0.26		0.04	c0.16					0.01	c0.14	0.07
v/s Ratio Perm				0.08								
v/c Ratio		0.73		0.21	0.28					0.02	0.42	0.19
Uniform Delay, d1		27.8		13.9	10.5					21.9	25.4	23.3
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		4.2		0.9	0.3					0.1	1.2	0.8
Delay (s)		32.0		15.0	12.8					22.0	26.6	24.2
Level of Service		C		B	B					C	C	C
Approach Delay (s)		32.0			13.1			0.0			25.5	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	398	101	0	0	142	6	441	456	55	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3110			3168		1555	1653	1530			
Flt Permitted	0.66	0.72			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1014	2315			3168		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	410	104	0	0	146	6	455	470	57	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	36	0	0	0
Lane Group Flow (vph)	205	309	0	0	149	0	455	470	21	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	681	1467			475		575	612	566			
v/s Ratio Prot	c0.11	0.08			c0.05		c0.29	0.28	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.30	0.21			0.31		0.79	0.77	0.04			
Uniform Delay, d1	14.0	13.4			37.9		28.1	27.7	20.1			
Progression Factor	0.25	0.26			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.7		10.7	9.0	0.1			
Delay (s)	4.3	3.8			39.6		38.7	36.7	20.2			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		4.0			39.6			36.7			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	26.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	219	102	149	263	117	80	663	83	101	875	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2940			2929		1508	3069	1309	1508	3099	1298
Flt Permitted		0.73			0.72		0.16	1.00	1.00	0.27	1.00	1.00
Satd. Flow (perm)		2159			2151		261	3069	1309	433	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	228	106	155	274	122	83	691	86	105	911	67
RTOR Reduction (vph)	0	40	0	0	31	0	0	0	53	0	0	33
Lane Group Flow (vph)	0	375	0	0	520	0	83	691	33	105	911	34
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		970			709		169	1210	508	234	1221	504
v/s Ratio Prot		c0.03					c0.02	0.23		0.02	c0.29	
v/s Ratio Perm		0.14			c0.24		0.18		0.03	0.17		0.03
v/c Ratio		0.39			0.73		0.49	0.57	0.07	0.45	0.75	0.07
Uniform Delay, d1		16.9			25.2		16.6	20.1	16.3	15.8	22.1	16.3
Progression Factor		1.00			1.00		1.31	0.68	0.54	1.11	1.17	1.77
Incremental Delay, d2		1.2			6.6		9.3	1.8	0.2	4.5	3.1	0.2
Delay (s)		18.0			31.8		30.9	15.6	9.1	22.0	28.9	29.2
Level of Service		B			C		C	B	A	C	C	C
Approach Delay (s)		18.0			31.8			16.5			28.3	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	24.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	327	0	0	410	85	52	43	33	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.98			0.97				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1731			1707			1653				
Flt Permitted		0.84			1.00			0.98				
Satd. Flow (perm)		1462			1707			1653				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	363	0	0	456	94	58	48	37	0	0	0
RTOR Reduction (vph)	0	0	0	0	11	0	0	19	0	0	0	0
Lane Group Flow (vph)	0	447	0	0	539	0	0	124	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		855			998			483				
v/s Ratio Prot					c0.32							
v/s Ratio Perm		0.31						0.07				
v/c Ratio		0.52			0.54			0.26				
Uniform Delay, d1		8.1			8.2			17.6				
Progression Factor		1.00			0.72			1.00				
Incremental Delay, d2		2.3			1.9			1.3				
Delay (s)		10.4			7.8			18.9				
Level of Service		B			A			B				
Approach Delay (s)		10.4			7.8			18.9			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	384	39	37	356	48	30	112	37	52	148	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.99			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1955			1941			2968			2983	
Flt Permitted		0.97			0.94			0.88			0.86	
Satd. Flow (perm)		1901			1828			2648			2598	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	23	427	43	41	396	53	33	124	41	58	164	48
RTOR Reduction (vph)	0	5	0	0	6	0	0	24	0	0	28	0
Lane Group Flow (vph)	0	488	0	0	484	0	0	174	0	0	242	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		877			844			1100			1079	
v/s Ratio Prot												
v/s Ratio Perm		0.26			c0.26			0.07			c0.09	
v/c Ratio		0.56			0.57			0.16			0.22	
Uniform Delay, d1		12.7			12.8			11.9			12.2	
Progression Factor		0.61			0.41			1.11			0.44	
Incremental Delay, d2		2.4			2.5			0.3			0.5	
Delay (s)		10.1			7.8			13.5			5.8	
Level of Service		B			A			B			A	
Approach Delay (s)		10.1			7.8			13.5			5.8	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	330	49	78	448	82	45	217	97	79	215	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	3036		1573	3078		1587	2962		1585	3071	
Flt Permitted	0.33	1.00		0.46	1.00		0.56	1.00		0.54	1.00	
Satd. Flow (perm)	529	3036		760	3078		944	2962		905	3071	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	367	54	87	498	91	50	241	108	88	239	68
RTOR Reduction (vph)	0	18	0	0	23	0	0	50	0	0	31	0
Lane Group Flow (vph)	57	403	0	87	566	0	50	299	0	88	276	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	179	1028		257	1042		508	1595		487	1654	
v/s Ratio Prot		0.13			c0.18			c0.10			0.09	
v/s Ratio Perm	0.11			0.11			0.05			0.10		
v/c Ratio	0.32	0.39		0.34	0.54		0.10	0.19		0.18	0.17	
Uniform Delay, d1	15.9	16.4		16.1	17.4		7.3	7.7		7.7	7.6	
Progression Factor	0.69	0.67		0.94	0.93		0.95	0.98		1.10	1.10	
Incremental Delay, d2	4.1	1.0		3.5	2.0		0.4	0.3		0.8	0.2	
Delay (s)	15.1	11.9		18.5	18.2		7.3	7.8		9.3	8.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		12.3			18.3			7.7			8.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	348	78	83	399	48	45	226	57	46	279	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1508	3018		1430	3722			3485			3521	
Flt Permitted	0.46	1.00		0.48	1.00			0.86			0.88	
Satd. Flow (perm)	730	3018		715	3722			3031			3122	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	366	82	87	420	51	47	238	60	48	294	67
RTOR Reduction (vph)	0	29	0	0	14	0	0	27	0	0	25	0
Lane Group Flow (vph)	62	419	0	87	457	0	0	318	0	0	384	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	348	1439		341	1775			1212			1249	
v/s Ratio Prot		c0.14			0.12							
v/s Ratio Perm	0.08			0.12				0.10			c0.12	
v/c Ratio	0.18	0.29		0.26	0.26			0.26			0.31	
Uniform Delay, d1	9.7	10.3		10.1	10.1			13.1			13.3	
Progression Factor	1.62	1.77		1.11	1.10			0.69			0.73	
Incremental Delay, d2	1.1	0.5		1.6	0.3			0.5			0.6	
Delay (s)	16.8	18.8		12.9	11.5			9.4			10.3	
Level of Service	B	B		B	B			A			B	
Approach Delay (s)		18.5			11.7			9.4			10.3	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	294	92	88	280	88	116	79	45	45	79	115
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1670	1436		3087			1885			1835	
Flt Permitted		0.80	1.00		0.79			0.68			0.91	
Satd. Flow (perm)		1347	1436		2471			1319			1679	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	327	102	98	311	98	129	88	50	50	88	128
RTOR Reduction (vph)	0	0	49	0	32	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	423	53	0	475	0	0	254	0	0	215	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		705	751		1293			426			542	
v/s Ratio Prot												
v/s Ratio Perm		c0.31	0.04		0.19			c0.19			0.13	
v/c Ratio		0.60	0.07		0.37			0.60			0.40	
Uniform Delay, d1		10.8	7.7		9.2			18.4			17.1	
Progression Factor		1.87	4.77		0.52			1.00			1.00	
Incremental Delay, d2		3.7	0.2		0.8			6.0			2.2	
Delay (s)		23.8	36.8		5.6			24.5			19.2	
Level of Service		C	D		A			C			B	
Approach Delay (s)		26.3			5.6			24.5			19.2	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	281	28	25	315	58	26	130	46	62	145	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1443	3026		1566	3019			3581			3598	
Flt Permitted	0.50	1.00		0.55	1.00			0.90			0.84	
Satd. Flow (perm)	753	3026		899	3019			3234			3071	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	312	31	28	350	64	29	144	51	69	161	70
RTOR Reduction (vph)	0	11	0	0	23	0	0	30	0	0	41	0
Lane Group Flow (vph)	61	332	0	28	391	0	0	194	0	0	259	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	348	1397		415	1393			1343			1276	
v/s Ratio Prot		0.11			c0.13							
v/s Ratio Perm	0.08			0.03				0.06			c0.08	
v/c Ratio	0.18	0.24		0.07	0.28			0.14			0.20	
Uniform Delay, d1	10.3	10.6		9.7	10.8			11.8			12.1	
Progression Factor	0.66	0.66		0.82	0.65			0.95			0.41	
Incremental Delay, d2	0.9	0.3		0.2	0.2			0.2			0.3	
Delay (s)	7.7	7.3		8.1	7.3			11.4			5.2	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		7.4			7.4			11.4			5.2	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	450	26	83	487	213	23	118	109	323	248	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3281			3168			3089			3181	
Flt Permitted		0.78			0.80			0.91			0.71	
Satd. Flow (perm)		2557			2539			2816			2306	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	500	29	92	541	237	26	131	121	359	276	87
RTOR Reduction (vph)	0	6	0	0	60	0	0	65	0	0	16	0
Lane Group Flow (vph)	0	575	0	0	810	0	0	213	0	0	706	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		983			977			1342			603	
v/s Ratio Prot								c0.02				
v/s Ratio Perm		0.23			c0.32			0.05			c0.31	
v/c Ratio		0.59			0.83			0.16			1.27dl	
Uniform Delay, d1		15.9			18.1			10.2			24.0	
Progression Factor		1.48			1.00			1.00			0.81	
Incremental Delay, d2		2.5			8.1			0.3			93.0	
Delay (s)		26.1			26.2			10.4			112.4	
Level of Service		C			C			B			F	
Approach Delay (s)		26.1			26.2			10.4			112.4	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	49.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	875	129	46	762	0	79	0	35	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3039			3090			1619				
Flt Permitted		1.00			0.81			0.79				
Satd. Flow (perm)		3039			2507			1329				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	972	143	51	847	0	88	0	39	0	0	0
RTOR Reduction (vph)	0	16	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	1099	0	0	898	0	0	109	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1958			919			236				
v/s Ratio Prot		c0.36										
v/s Ratio Perm					c0.36			c0.08				
v/c Ratio		0.56			0.98			0.46				
Uniform Delay, d1		8.9			28.1			33.1				
Progression Factor		0.12			1.42			1.00				
Incremental Delay, d2		0.3			23.6			6.4				
Delay (s)		1.4			63.5			39.5				
Level of Service		A			E			D				
Approach Delay (s)		1.4			63.5			39.5			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	218	633	24	108	586	178	59	4	103	205	10	206
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3192		1660	3320	1485		1783		1660	1748	1485
Flt Permitted	0.31	1.00		0.34	1.00	1.00		0.88		0.44	1.00	1.00
Satd. Flow (perm)	502	3192		593	3320	1485		1591		773	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	242	703	27	120	651	198	66	4	114	228	11	229
RTOR Reduction (vph)	0	2	0	0	0	90	0	89	0	0	0	132
Lane Group Flow (vph)	242	728	0	120	651	108	0	95	0	228	11	97
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	55.2	43.0		48.1	38.9	48.9		11.8		24.8	24.8	38.1
Effective Green, g (s)	55.2	43.0		48.1	38.9	48.9		11.8		24.8	24.8	38.1
Actuated g/C Ratio	0.61	0.48		0.53	0.43	0.54		0.13		0.28	0.28	0.42
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	463	1525		426	1435	807		209		312	482	629
v/s Ratio Prot	c0.08	0.23		0.03	0.20	0.01				c0.08	0.01	0.02
v/s Ratio Perm	c0.24			0.12		0.06		0.06		c0.12		0.04
v/c Ratio	0.52	0.48		0.28	0.45	0.13		0.45		0.73	0.02	0.15
Uniform Delay, d1	8.9	15.9		10.6	18.0	10.1		36.1		28.4	23.8	16.0
Progression Factor	2.61	1.89		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.2	0.9		0.5	1.0	0.1		2.1		8.5	0.0	0.2
Delay (s)	24.3	30.9		11.1	19.1	10.2		38.2		36.9	23.8	16.2
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		29.3			16.3			38.2			26.4	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	511	431	2	323	0	0	0	0	18	0	548
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	568	479	2	359	0	0	0	0	20	0	609
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	359			568			752	931	284	647	931	179
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	359			568			752	931	284	647	931	179
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	27
cM capacity (veh/h)	1189			994			79	263	710	353	263	829

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	284	284	479	122	239	20	609
Volume Left	0	0	0	2	0	20	0
Volume Right	0	0	479	0	0	0	609
cSH	1700	1700	1700	994	1700	353	829
Volume to Capacity	0.17	0.17	0.28	0.00	0.14	0.06	0.73
Queue Length 95th (ft)	0	0	0	0	0	4	167
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	15.8	20.3
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		20.2	
Approach LOS						C	

Intersection Summary			
Average Delay	6.2		
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	529	0	325	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	588	0	361	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	294	294	361
Volume Left (vph)	294	294	361
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.1	6.1	5.6
Degree Utilization, x	0.50	0.50	0.56
Capacity (veh/h)	571	573	620
Control Delay (s)	13.9	13.9	15.3
Approach Delay (s)	13.9		15.3
Approach LOS	B		C

Intersection Summary			
Delay	14.5		
HCM Level of Service	B		
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	475	64	192	501	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3153		1605	3210						3074	
Flt Permitted		1.00		0.34	1.00						0.97	
Satd. Flow (perm)		3153		582	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	528	71	213	557	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	587	0	213	557	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		456	1850						976	
v/s Ratio Prot		0.19		c0.05	0.17						c0.05	
v/s Ratio Perm				c0.21								
v/c Ratio		0.44		0.47	0.30						0.16	
Uniform Delay, d1		17.4		15.7	9.2						20.8	
Progression Factor		1.00		0.35	0.19						1.00	
Incremental Delay, d2		1.1		2.8	0.3						0.3	
Delay (s)		18.4		8.3	2.1						21.2	
Level of Service		B		A	A						C	
Approach Delay (s)		18.4			3.8			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	481	0	0	629	124	64	90	59	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1660	3320			3130			4504				
Flt Permitted	0.22	1.00			1.00			0.99				
Satd. Flow (perm)	384	3320			3130			4504				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	534	0	0	699	138	71	100	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	19	0	0	45	0	0	0	0
Lane Group Flow (vph)	106	534	0	0	818	0	0	192	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	367	1875			1289			1431				
v/s Ratio Prot	0.03	c0.16			c0.26			c0.04				
v/s Ratio Perm	0.13											
v/c Ratio	0.29	0.28			0.63			0.13				
Uniform Delay, d1	18.1	9.6			19.9			20.7				
Progression Factor	0.42	0.31			1.00			1.00				
Incremental Delay, d2	1.8	0.4			2.4			0.2				
Delay (s)	9.4	3.4			22.3			20.9				
Level of Service	A	A			C			C				
Approach Delay (s)		4.4			22.3			20.9			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	15.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	346	114	91	386	81	129	78	30	30	85	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2977			3007			1840			1769	
Flt Permitted		0.66			0.69			0.72			0.95	
Satd. Flow (perm)		1975			2105			1364			1684	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	384	127	101	429	90	143	87	33	33	94	157
RTOR Reduction (vph)	0	34	0	0	21	0	0	8	0	0	69	0
Lane Group Flow (vph)	0	604	0	0	599	0	0	255	0	0	215	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		699			745			672			829	
v/s Ratio Prot												
v/s Ratio Perm		c0.31			0.28			c0.19			0.13	
v/c Ratio		0.86			0.80			0.38			0.26	
Uniform Delay, d1		19.6			19.0			10.3			9.6	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		13.5			9.0			1.6			0.8	
Delay (s)		33.0			27.9			11.9			10.4	
Level of Service		C			C			B			B	
Approach Delay (s)		33.0			27.9			11.9			10.4	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	201	88	159	311	65	118	514	64	91	908	174
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2980		1573	3683		1508	3069	1333	1520	3099	1336
Flt Permitted	0.45	1.00		0.53	1.00		0.13	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	739	2980		880	3683		212	3069	1333	573	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	120	212	93	167	327	68	124	541	67	96	956	183
RTOR Reduction (vph)	0	58	0	0	21	0	0	0	43	0	0	116
Lane Group Flow (vph)	120	247	0	167	374	0	124	541	24	96	956	67
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	982		343	1213		181	1119	486	310	1130	487
v/s Ratio Prot	0.02	0.08		c0.02	0.10		c0.05	0.18		0.02	c0.31	
v/s Ratio Perm	0.12			c0.15			0.24		0.02	0.11		0.05
v/c Ratio	0.40	0.25		0.49	0.31		0.69	0.48	0.05	0.31	0.85	0.14
Uniform Delay, d1	19.7	20.8		20.7	21.3		17.7	20.8	17.5	15.3	24.8	18.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.39	1.05	2.38
Incremental Delay, d2	4.0	0.6		4.9	0.7		19.1	1.5	0.2	1.9	5.8	0.4
Delay (s)	23.7	21.5		25.5	21.9		36.7	22.3	17.7	23.2	31.8	43.4
Level of Service	C	C		C	C		D	C	B	C	C	D
Approach Delay (s)		22.1			23.0			24.3			32.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	295	30	33	389	24	31	97	39	36	132	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1962	1466		1993	1480		2015	1506		2002	1511
Flt Permitted		0.90	1.00		0.96	1.00		0.92	1.00		0.93	1.00
Satd. Flow (perm)		1778	1466		1912	1480		1867	1506		1878	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	311	32	35	409	25	33	102	41	38	139	68
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	24	0	0	40
Lane Group Flow (vph)	0	363	15	0	444	12	0	135	17	0	177	28
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		821	677		882	683		776	626		780	628
v/s Ratio Prot												
v/s Ratio Perm		0.20	0.01		c0.23	0.01		0.07	0.01		c0.09	0.02
v/c Ratio		0.44	0.02		0.50	0.02		0.17	0.03		0.23	0.04
Uniform Delay, d1		11.8	9.5		12.3	9.5		12.0	11.2		12.3	11.3
Progression Factor		1.00	1.00		0.54	0.40		1.04	1.19		1.05	0.97
Incremental Delay, d2		1.7	0.1		2.0	0.0		0.5	0.1		0.6	0.1
Delay (s)		13.6	9.6		8.6	3.9		12.9	13.5		13.5	11.1
Level of Service		B	A		A	A		B	B		B	B
Approach Delay (s)		13.2			8.4			13.0			12.8	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	317	20	51	297	51	10	107	23	109	203	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3072		1550	3031		1550	3016		1550	2990	
Flt Permitted	0.95	1.00		0.53	1.00		0.56	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3072		864	3031		912	3016		1077	2990	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	352	22	57	330	57	11	119	26	121	226	69
RTOR Reduction (vph)	0	7	0	0	21	0	0	15	0	0	40	0
Lane Group Flow (vph)	83	367	0	57	366	0	11	130	0	121	255	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1512		292	1026		379	1253		447	1242	
v/s Ratio Prot	c0.05	0.12			c0.12			0.04			0.09	
v/s Ratio Perm				0.07			0.01			c0.11		
v/c Ratio	0.50	0.24		0.20	0.36		0.03	0.10		0.27	0.21	
Uniform Delay, d1	27.3	9.5		15.2	16.2		11.2	11.6		12.5	12.1	
Progression Factor	0.93	0.55		0.83	0.83		0.87	0.86		1.14	1.14	
Incremental Delay, d2	9.8	0.4		1.4	0.9		0.0	0.0		1.5	0.4	
Delay (s)	35.2	5.6		14.0	14.4		9.8	10.0		15.7	14.2	
Level of Service	D	A		B	B		A	A		B	B	
Approach Delay (s)		11.0			14.3			10.0			14.6	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	63	263	87	239	320	61	104	295	189	55	282	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.96		1.00	0.98			0.95			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1550	2983		1550	3024			3133			3233	
Flt Permitted	0.50	1.00		0.95	1.00			0.79			0.81	
Satd. Flow (perm)	823	2983		1550	3024			2496			2628	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	292	97	266	356	68	116	328	210	61	313	56
RTOR Reduction (vph)	0	50	0	0	24	0	0	87	0	0	18	0
Lane Group Flow (vph)	70	339	0	266	400	0	0	567	0	0	412	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	253	918		143	1349			960			1011	
v/s Ratio Prot		c0.11		c0.17	0.13							
v/s Ratio Perm	0.09							c0.23			0.16	
v/c Ratio	0.28	0.37		1.86	0.30			0.59			0.41	
Uniform Delay, d1	17.0	17.6		29.5	11.5			15.9			14.6	
Progression Factor	0.65	0.59		1.28	1.17			1.23			0.70	
Incremental Delay, d2	2.7	1.1		399.5	0.3			2.4			1.2	
Delay (s)	13.7	11.6		437.2	13.7			21.9			11.5	
Level of Service	B	B		F	B			C			B	
Approach Delay (s)		11.9			176.9			21.9			11.5	
Approach LOS		B			F			C			B	

Intersection Summary			
HCM Average Control Delay	65.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	454	16	73	627	73	54	108	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		1.00			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1620			1603			3249				
Flt Permitted		0.94			0.91			0.99				
Satd. Flow (perm)		1532			1466			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	504	18	81	697	81	60	120	180	0	0	0
RTOR Reduction (vph)	0	1	0	0	5	0	0	137	0	0	0	0
Lane Group Flow (vph)	0	550	0	0	854	0	0	223	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		978			936			775				
v/s Ratio Prot												
v/s Ratio Perm		0.36			c0.58			0.07				
v/c Ratio		0.56			0.91			0.29				
Uniform Delay, d1		6.6			10.2			20.2				
Progression Factor		1.29			1.00			1.00				
Incremental Delay, d2		2.1			14.6			0.9				
Delay (s)		10.6			24.8			21.1				
Level of Service		B			C			C				
Approach Delay (s)		10.6			24.8			21.1			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	19.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	142	463	592	38	117	174
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	149	487	623	40	123	183
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	680				1452	665
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	520				1443	502
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	82				0	61
cM capacity (veh/h)	852				100	471

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	637	663	123	183
Volume Left	149	0	123	0
Volume Right	0	40	0	183
cSH	852	1700	100	471
Volume to Capacity	0.18	0.39	1.24	0.39
Queue Length 95th (ft)	16	0	211	45
Control Delay (s)	4.3	0.0	246.0	17.4
Lane LOS	A		F	C
Approach Delay (s)	4.3	0.0	109.3	
Approach LOS			F	

Intersection Summary			
Average Delay	22.5		
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	684	0	1	601	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	760	0	1	668	3	32
RTOR Reduction (vph)	0	0	0	0	27	0
Lane Group Flow (vph)	760	0	0	669	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	251	
v/s Ratio Prot	c0.43				c0.01	
v/s Ratio Perm				0.38		
v/c Ratio	0.63			1.05	0.03	
Uniform Delay, d1	7.0			27.0	29.8	
Progression Factor	0.10			1.00	1.00	
Incremental Delay, d2	0.2			49.6	0.2	
Delay (s)	0.9			76.6	30.1	
Level of Service	A			E	C	
Approach Delay (s)	0.9			76.6	30.1	
Approach LOS	A			E	C	

Intersection Summary			
HCM Average Control Delay	36.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	236	594	30	386	0	0	0	0	17	6	243
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	262	660	33	429	0	0	0	0	19	7	270
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	429			262			1091	1088	461	627	758	429
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	429			262			1091	1088	461	627	758	429
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	95	98	53
cM capacity (veh/h)	1141			1285			88	212	553	365	330	574

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	175	747	462	26	270
Volume Left	0	0	33	19	0
Volume Right	0	660	0	0	270
cSH	1700	1700	1285	355	574
Volume to Capacity	0.10	0.44	0.03	0.07	0.47
Queue Length 95th (ft)	0	0	2	6	62
Control Delay (s)	0.0	0.0	0.8	15.9	16.7
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.8	16.6	
Approach LOS				C	

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	253	0	417	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	281	0	463	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	141	141	463
Volume Left (vph)	141	141	463
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.3	6.3	5.0
Degree Utilization, x	0.25	0.25	0.64
Capacity (veh/h)	543	544	702
Control Delay (s)	10.1	10.1	16.3
Approach Delay (s)	10.1		16.3
Approach LOS	B		C

Intersection Summary			
Delay	14.0		
HCM Level of Service	B		
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	522	337	303	746	0	0	0	0	281	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3425					1359	3806	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3425					1359	3806	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	549	355	319	785	0	0	0	0	296	283	392
RTOR Reduction (vph)	0	0	216	0	0	0	0	0	0	0	53	113
Lane Group Flow (vph)	0	549	139	0	1104	0	0	0	0	163	559	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		67.6					23.0	23.0	68.0
Effective Green, g (s)		39.0	39.0		67.6					23.0	23.0	68.0
Actuated g/C Ratio		0.24	0.24		0.42					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		775	300		1447					195	547	482
v/s Ratio Prot		c0.17			c0.32					0.12	c0.15	
v/s Ratio Perm			0.11									0.07
v/c Ratio		0.71	0.46		0.76					0.84	1.02	0.17
Uniform Delay, d1		55.3	51.6		39.4					66.7	68.5	28.5
Progression Factor		1.00	1.00		0.07					1.00	1.00	1.00
Incremental Delay, d2		5.4	5.1		0.2					25.5	44.1	0.2
Delay (s)		60.7	56.7		3.1					92.1	112.6	28.7
Level of Service		E	E		A					F	F	C
Approach Delay (s)		59.1			3.1			0.0			92.2	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	49.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	32.4
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	290	514	0	0	735	142	313	204	197	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3058				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3058				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	322	571	0	0	817	158	348	227	219	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	67	0	72	0	0	0	0
Lane Group Flow (vph)	322	571	0	0	817	91	271	451	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	84.4	84.4			36.6	36.6	12.0	12.0				
Effective Green, g (s)	84.4	84.4			36.6	36.6	12.0	12.0				
Actuated g/C Ratio	0.53	0.53			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	847	1810			734	340	117	229				
v/s Ratio Prot	c0.20	0.17			c0.25		c0.17	0.15				
v/s Ratio Perm						0.06						
v/c Ratio	0.38	0.32			1.11	0.27	2.32	1.97				
Uniform Delay, d1	22.3	21.4			61.7	50.7	74.0	74.0				
Progression Factor	0.06	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			68.8	0.4	618.2	451.4				
Delay (s)	1.4	1.3			130.5	51.1	692.2	525.4				
Level of Service	A	A			F	D	F	F				
Approach Delay (s)		1.4			117.6			582.3			0.0	
Approach LOS		A			F			F			A	

Intersection Summary			
HCM Average Control Delay	217.2	HCM Level of Service	F
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	308	134	186	414	106	104	504	93	106	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1579	1600	1372	1594	1789		1578	2999		1537	3001	
Flt Permitted	0.15	1.00	1.00	0.36	1.00		0.14	1.00		0.31	1.00	
Satd. Flow (perm)	255	1600	1372	610	1789		229	2999		501	3001	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	145	324	141	196	436	112	109	531	98	112	845	126
RTOR Reduction (vph)	0	0	98	0	10	0	0	17	0	0	13	0
Lane Group Flow (vph)	145	324	43	196	538	0	109	612	0	112	958	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	34.1	27.1	27.1	34.1	27.1		39.6	34.1		39.6	34.1	
Effective Green, g (s)	32.1	28.1	27.1	32.1	27.1		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.36	0.32	0.31	0.36	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	182	507	419	287	547		166	1153		265	1154	
v/s Ratio Prot	c0.05	0.20		0.05	c0.30		c0.03	0.20		0.02	c0.32	
v/s Ratio Perm	0.23		0.03	0.20			0.25			0.16		
v/c Ratio	0.80	0.64	0.10	0.68	0.98		0.66	0.53		0.42	0.83	
Uniform Delay, d1	22.9	26.0	22.1	23.2	30.6		18.1	21.1		16.3	24.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	21.0	6.1	0.5	6.6	34.5		9.0	1.8		1.1	7.0	
Delay (s)	43.9	32.0	22.6	29.7	65.0		27.1	22.9		17.4	31.7	
Level of Service	D	C	C	C	E		C	C		B	C	
Approach Delay (s)		32.7			55.7			23.5			30.2	
Approach LOS		C			E			C			C	

Intersection Summary			
HCM Average Control Delay	35.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	88.7	Sum of lost time (s)	17.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	394	59	112	635	61	36	57	44	30	88	67
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.96			0.95	
Flt Protected		1.00	1.00		0.99	1.00		0.99			0.99	
Satd. Flow (prot)		1971	1467		1624	1381		1853			1874	
Flt Permitted		0.65	1.00		0.79	1.00		0.91			0.95	
Satd. Flow (perm)		1291	1467		1289	1381		1702			1794	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	415	62	118	668	64	38	60	46	32	93	71
RTOR Reduction (vph)	0	0	30	0	0	18	0	26	0	0	32	0
Lane Group Flow (vph)	0	455	32	0	786	46	0	118	0	0	164	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		636	722		635	680		707			745	
v/s Ratio Prot												
v/s Ratio Perm		0.35	0.02		c0.61	0.03		0.07			c0.09	
v/c Ratio		0.72	0.04		1.24	0.07		0.17			0.22	
Uniform Delay, d1		12.9	8.6		16.5	8.7		11.9			12.2	
Progression Factor		1.00	1.00		1.89	2.78		1.00			1.96	
Incremental Delay, d2		6.8	0.1		108.3	0.0		0.5			0.7	
Delay (s)		19.7	8.7		139.5	24.1		12.4			24.6	
Level of Service		B	A		F	C		B			C	
Approach Delay (s)		18.4			130.8			12.4			24.6	
Approach LOS		B			F			B			C	

Intersection Summary			
HCM Average Control Delay	74.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	313	40	110	692	20	34	108	43	16	175	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.97	
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1756	1443		1724	1487		1713	1489		1713	
Flt Permitted		0.18	1.00		0.66	1.00		0.89	1.00		0.98	
Satd. Flow (perm)		325	1443		1143	1487		1551	1489		1687	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	61	329	42	116	728	21	36	114	45	17	184	69
RTOR Reduction (vph)	0	0	24	0	0	6	0	0	23	0	19	0
Lane Group Flow (vph)	0	390	18	0	844	15	0	150	22	0	251	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		115	511		404	526		764	733		831	
v/s Ratio Prot												
v/s Ratio Perm		c1.20	0.01		0.74	0.01		0.10	0.01		c0.15	
v/c Ratio		3.39	0.04		2.09	0.03		0.20	0.03		0.30	
Uniform Delay, d1		21.0	13.7		21.0	13.7		9.3	8.5		9.8	
Progression Factor		1.65	2.43		0.98	0.85		0.16	0.22		1.09	
Incremental Delay, d2		1092.9	0.1		494.2	0.0		0.1	0.0		0.9	
Delay (s)		1127.5	33.4		514.8	11.7		1.5	1.9		11.6	
Level of Service		F	C		F	B		A	A		B	
Approach Delay (s)		1021.1			502.6			1.6			11.6	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM Average Control Delay	499.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	99.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	298	35	76	8	14	11	38	246	8	30	547	789
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1855	1440		1767			1995			1975	1382
Flt Permitted		0.75	1.00		0.92			0.82			0.97	1.00
Satd. Flow (perm)		1455	1440		1640			1653			1930	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	331	39	84	9	16	12	42	273	9	33	608	877
RTOR Reduction (vph)	0	0	49	0	9	0	0	2	0	0	0	303
Lane Group Flow (vph)	0	370	35	0	28	0	0	322	0	0	641	574
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		654	598		429			814			950	680
v/s Ratio Prot		c0.07										
v/s Ratio Perm		0.17	0.02		0.02			0.20			0.33	c0.42
v/c Ratio		0.57	0.06		0.07			0.40			0.67	0.84
Uniform Delay, d1		14.5	11.4		18.0			10.4			12.5	14.3
Progression Factor		1.18	1.96		1.00			0.41			0.76	1.13
Incremental Delay, d2		0.3	0.0		0.3			0.6			3.5	11.3
Delay (s)		17.4	22.3		18.3			4.9			13.0	27.5
Level of Service		B	C		B			A			B	C
Approach Delay (s)		18.3			18.3			4.9			21.4	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	923	289	438	1163	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4577		1621	3320					1489	2913	1442
Flt Permitted		1.00		0.09	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4577		155	3320					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	972	304	461	1224	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	47	0	0	0	0	0	0	0	0	9	62
Lane Group Flow (vph)	0	1229	0	461	1224	0	0	0	0	308	603	209
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		39.5		74.9	74.9					28.1	28.1	28.1
Effective Green, g (s)		39.5		74.9	74.9					28.1	28.1	28.1
Actuated g/C Ratio		0.34		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1572		495	2162					364	712	352
v/s Ratio Prot		0.27		c0.25	0.37							
v/s Ratio Perm				c0.36						0.21	0.21	0.14
v/c Ratio		0.78		0.93	0.57					0.85	0.85	0.59
Uniform Delay, d1		33.9		32.7	11.1					41.4	41.4	38.4
Progression Factor		1.00		0.78	2.03					1.00	1.00	1.00
Incremental Delay, d2		3.9		14.8	0.5					16.7	9.4	2.8
Delay (s)		37.8		40.3	23.0					58.1	50.8	41.2
Level of Service		D		D	C					E	D	D
Approach Delay (s)		37.8			27.7			0.0			50.5	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM Average Control Delay	37.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	110.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1095	0	0	1194	269	406	333	321	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4513				
Flt Permitted	0.09	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	289	3353			3241	1489		4513				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1153	0	0	1257	283	427	351	338	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	82	0	67	0	0	0	0
Lane Group Flow (vph)	359	1153	0	0	1257	201	0	1049	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	73.2	73.2			53.2	53.2		29.8				
Effective Green, g (s)	73.2	73.2			53.2	53.2		29.8				
Actuated g/C Ratio	0.64	0.64			0.46	0.46		0.26				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	532	2134			1499	689		1169				
v/s Ratio Prot	c0.08	0.34			c0.39							
v/s Ratio Perm	0.35					0.13		0.23				
v/c Ratio	0.67	0.54			0.84	0.29		0.90				
Uniform Delay, d1	23.8	11.6			27.1	19.2		41.1				
Progression Factor	1.51	0.14			0.87	1.15		1.00				
Incremental Delay, d2	2.0	0.6			3.2	0.6		9.8				
Delay (s)	38.0	2.1			26.9	22.6		50.9				
Level of Service	D	A			C	C		D				
Approach Delay (s)		10.7			26.1			50.9			0.0	
Approach LOS		B			C			D			A	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	110.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	705	399	102	954	75	227	179	66	80	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1313	1601	3286		1578	3002		1540	2941	
Flt Permitted	0.11	1.00	1.00	0.37	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	174	3273	1313	623	3286		652	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	139	742	420	107	1004	79	239	188	69	84	171	127
RTOR Reduction (vph)	0	0	169	0	5	0	0	38	0	0	107	0
Lane Group Flow (vph)	139	742	251	107	1078	0	239	219	0	84	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.9	52.4	68.8	43.4	34.4		38.1	26.5		26.3	18.2	
Effective Green, g (s)	64.9	52.4	68.8	43.4	34.4		38.1	26.5		26.3	18.2	
Actuated g/C Ratio	0.56	0.46	0.60	0.38	0.30		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	425	1491	786	312	983		348	692		261	465	
v/s Ratio Prot	c0.08	c0.23	0.05	0.03	c0.33		c0.10	0.07		0.02	0.06	
v/s Ratio Perm	0.11		0.15	0.10			c0.13			0.05		
v/c Ratio	0.33	0.50	0.32	0.34	1.10		0.69	0.32		0.32	0.41	
Uniform Delay, d1	17.4	22.0	11.5	23.9	40.3		30.6	36.7		36.2	43.6	
Progression Factor	0.77	0.74	1.65	1.00	1.00		1.02	1.04		1.00	1.00	
Incremental Delay, d2	1.6	0.9	0.2	0.7	58.9		5.3	0.9		0.7	2.1	
Delay (s)	15.1	17.3	19.1	24.5	99.2		36.5	39.2		36.9	45.7	
Level of Service	B	B	B	C	F		D	D		D	D	
Approach Delay (s)		17.7			92.5			37.9			43.7	
Approach LOS		B			F			D			D	

Intersection Summary			
HCM Average Control Delay	50.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	250	367	91	430	107	362	340	84	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	2926		1653	3269		1620	3402		1580	3183	
Flt Permitted	0.36	1.00		0.22	1.00		0.32	1.00		0.49	1.00	
Satd. Flow (perm)	639	2926		379	3269		544	3402		822	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	263	386	96	453	113	381	358	88	217	429	59
RTOR Reduction (vph)	0	215	0	0	18	0	0	19	0	0	9	0
Lane Group Flow (vph)	48	434	0	96	548	0	381	427	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	39.4	32.7		46.2	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	39.4	32.7		46.2	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.34	0.28		0.40	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	281	832		264	1026		454	1308		339	888	
v/s Ratio Prot	0.01	0.15		c0.03	c0.17		c0.15	0.13		0.04	0.15	
v/s Ratio Perm	0.05			0.11			c0.26			0.18		
v/c Ratio	0.17	0.52		0.36	0.53		0.84	0.33		0.64	0.54	
Uniform Delay, d1	25.7	34.6		23.2	32.5		20.8	24.9		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.96	
Incremental Delay, d2	0.3	2.3		1.0	2.0		13.1	0.7		4.0	2.2	
Delay (s)	26.1	36.9		24.3	34.5		33.9	25.6		32.7	36.1	
Level of Service	C	D		C	C		C	C		C	D	
Approach Delay (s)		36.2			33.0			29.4			35.1	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	33.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	670	135	10	741	89	102	281	9	194	578	174
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.98		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3040			3060		1452	3227		1522	2872	
Flt Permitted		0.53			0.94		0.21	1.00		0.55	1.00	
Satd. Flow (perm)		1620			2874		317	3227		883	2872	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	112	744	150	11	823	99	113	312	10	216	642	193
RTOR Reduction (vph)	0	22	0	0	14	0	0	4	0	0	44	0
Lane Group Flow (vph)	0	984	0	0	919	0	113	318	0	216	791	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		710			752		206	1192		420	1060	
v/s Ratio Prot		c0.09					c0.03	0.10		0.03	c0.28	
v/s Ratio Perm		c0.45			0.32		0.20			0.19		
v/c Ratio		1.39			1.22		0.55	0.27		0.51	0.75	
Uniform Delay, d1		20.0			24.0		12.3	14.3		12.5	17.9	
Progression Factor		1.00			1.42		1.03	0.57		1.00	1.00	
Incremental Delay, d2		182.2			101.1		9.6	0.5		4.4	4.8	
Delay (s)		202.2			135.3		22.2	8.7		17.0	22.7	
Level of Service		F			F		C	A		B	C	
Approach Delay (s)		202.2			135.3			12.2			21.5	
Approach LOS		F			F			B			C	

Intersection Summary			
HCM Average Control Delay	104.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	261	136	126	410	27	70	450	84	33	662	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	1910		1601	2019		1676	3214		1435	3274	
Flt Permitted	0.32	1.00		0.37	1.00		0.31	1.00		0.42	1.00	
Satd. Flow (perm)	576	1910		621	2019		552	3214		640	3274	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	269	140	130	423	28	72	464	87	34	682	68
RTOR Reduction (vph)	0	29	0	0	4	0	0	24	0	0	12	0
Lane Group Flow (vph)	69	380	0	130	447	0	72	527	0	34	738	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	213	705		229	745		263	1533		305	1561	
v/s Ratio Prot		0.20			c0.22			0.16			c0.23	
v/s Ratio Perm	0.12			0.21			0.13			0.05		
v/c Ratio	0.32	0.54		0.57	0.60		0.27	0.34		0.11	0.47	
Uniform Delay, d1	14.7	16.1		16.4	16.6		10.2	10.6		9.4	11.5	
Progression Factor	1.00	1.00		1.34	1.36		1.00	1.00		1.14	0.92	
Incremental Delay, d2	4.0	2.9		0.9	0.3		2.6	0.6		0.3	0.5	
Delay (s)	18.7	19.1		22.9	22.9		12.8	11.3		11.1	11.0	
Level of Service	B	B		C	C		B	B		B	B	
Approach Delay (s)		19.0			22.9			11.4			11.0	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	848	495	922	41	3	10	9	46	15	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.99	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.95	
Flt Protected		1.00		0.98				0.99			0.97	
Satd. Flow (prot)		3160		3077				1812			1858	
Flt Permitted		0.81		0.58				0.96			0.85	
Satd. Flow (perm)		2546		1799				1749			1633	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	893	521	971	43	3	11	9	48	16	0	3
RTOR Reduction (vph)	0	0	0	3	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	895	0	1532	0	0	0	33	0	0	20	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom				Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7				2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		705		865				377			352	
v/s Ratio Prot				c0.16								
v/s Ratio Perm		0.35		c0.57				c0.02			0.01	
v/c Ratio		1.27		2.48dl				0.09			0.06	
Uniform Delay, d1		23.5		19.0				20.4			20.3	
Progression Factor		1.42		0.61				1.00			1.00	
Incremental Delay, d2		122.3		350.1				0.5			0.3	
Delay (s)		155.7		361.7				20.9			20.6	
Level of Service		F		F				C			C	
Approach Delay (s)		155.7		361.7				20.9			20.6	
Approach LOS		F		F				C			C	

Intersection Summary			
HCM Average Control Delay	268.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	118.0%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	311
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1559	
Flt Permitted		1.00	
Satd. Flow (perm)		1559	
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	5	3	327
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	330	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.21	
v/s Ratio Perm			
v/c Ratio		1.38	
Uniform Delay, d1		27.5	
Progression Factor		0.83	
Incremental Delay, d2		190.6	
Delay (s)		213.5	
Level of Service		F	
Approach Delay (s)		213.5	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	256	942	1242	176	120	222
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3285	3258		1660	1485
Flt Permitted		0.51	1.00		0.95	1.00
Satd. Flow (perm)		1706	3258		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	284	1047	1380	196	133	247
RTOR Reduction (vph)	0	0	17	0	0	40
Lane Group Flow (vph)	0	1331	1559	0	133	207
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1050	2005		434	388
v/s Ratio Prot			0.48		0.08	
v/s Ratio Perm		c0.78				c0.14
v/c Ratio		2.63dl	0.78		0.31	0.53
Uniform Delay, d1		12.5	9.2		19.3	20.6
Progression Factor		1.27	0.61		1.03	1.01
Incremental Delay, d2		121.2	1.4		1.0	3.0
Delay (s)		137.0	7.0		21.0	23.7
Level of Service		F	A		C	C
Approach Delay (s)		137.0	7.0		22.8	
Approach LOS		F	A		C	

Intersection Summary			
HCM Average Control Delay	61.5	HCM Level of Service	E
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	79	986	1334	194	270	86
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3120	3139		1506	1343
Flt Permitted		0.61	1.00		0.95	1.00
Satd. Flow (perm)		1899	3139		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	83	1038	1404	204	284	91
RTOR Reduction (vph)	0	0	18	0	0	18
Lane Group Flow (vph)	0	1121	1590	0	284	73
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		993	1642		533	475
v/s Ratio Prot			0.51		c0.19	
v/s Ratio Perm		c0.59				0.05
v/c Ratio		1.13	0.97		0.53	0.15
Uniform Delay, d1		15.5	15.0		16.7	14.3
Progression Factor		1.10	1.48		1.75	2.06
Incremental Delay, d2		59.4	2.6		3.0	0.5
Delay (s)		76.5	24.7		32.3	30.1
Level of Service		E	C		C	C
Approach Delay (s)		76.5	24.7		31.8	
Approach LOS		E	C		C	

Intersection Summary			
HCM Average Control Delay	44.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	862	251	528	1414	195	158
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.94	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	2405		1788	2506	1733	
Flt Permitted	1.00		0.13	1.00	0.97	
Satd. Flow (perm)	2405		243	2506	1733	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	880	256	539	1443	199	161
RTOR Reduction (vph)	16	0	0	0	45	0
Lane Group Flow (vph)	1120	0	539	1443	315	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1147		116	1195	640	
v/s Ratio Prot	0.47			0.58	c0.18	
v/s Ratio Perm			c2.22			
v/c Ratio	0.98		4.65	1.21	0.49	
Uniform Delay, d1	16.6		17.0	17.0	15.8	
Progression Factor	1.46		1.00	1.00	1.00	
Incremental Delay, d2	4.2		1660.5	101.5	2.7	
Delay (s)	28.5		1677.5	118.5	18.5	
Level of Service	C		F	F	B	
Approach Delay (s)	28.5			542.4	18.5	
Approach LOS	C			F	B	

Intersection Summary			
HCM Average Control Delay	320.3	HCM Level of Service	F
HCM Volume to Capacity ratio	2.84		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	115.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1984	37	108	935	1	59	0	149	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.28	1.00	1.00	0.08	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	546	3431	1479	127	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	2204	41	120	1039	1	66	0	166	0	0	0
RTOR Reduction (vph)	0	0	10	0	0	0	0	0	138	0	0	0
Lane Group Flow (vph)	1	2204	31	120	1039	1	0	66	28	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	49.7	49.7	49.7	67.9	67.9	67.9		9.1	9.1			
Effective Green, g (s)	49.7	49.7	49.7	67.9	67.9	67.9		9.1	9.1			
Actuated g/C Ratio	0.58	0.58	0.58	0.80	0.80	0.80		0.11	0.11			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	319	2006	865	363	2652	1222		165	161			
v/s Ratio Prot		c0.64		0.06	c0.31							
v/s Ratio Perm	0.00		0.02	0.21		0.00		c0.04	0.02			
v/c Ratio	0.00	1.10	0.04	0.33	0.39	0.00		0.40	0.17			
Uniform Delay, d1	7.3	17.6	7.5	16.9	2.5	1.7		35.4	34.5			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	52.8	0.1	0.5	0.1	0.0		1.6	0.5			
Delay (s)	7.4	70.5	7.6	17.4	2.6	1.7		37.0	35.0			
Level of Service	A	E	A	B	A	A		D	D			
Approach Delay (s)		69.3			4.1			35.6			0.0	
Approach LOS		E			A			D			A	

Intersection Summary			
HCM Average Control Delay	46.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	11	932	813	29	71	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3097	3083		1530	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2913	3083		1530	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1036	903	32	79	16
RTOR Reduction (vph)	0	0	3	0	8	0
Lane Group Flow (vph)	0	1048	932	0	87	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1068	2192		119	
v/s Ratio Prot			c0.30		c0.06	
v/s Ratio Perm		c0.36				
v/c Ratio		0.98	0.43		0.73	
Uniform Delay, d1		28.2	5.4		40.6	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		23.4	0.2		32.1	
Delay (s)		51.6	0.3		72.7	
Level of Service		D	A		E	
Approach Delay (s)		51.6	0.3		72.7	
Approach LOS		D	A		E	

Intersection Summary			
HCM Average Control Delay	29.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	107	496	0	1	565	38	3	2	28	192	0	143
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1763			3340			1467			1670	1348
Flt Permitted		0.77			0.95			0.93			0.88	1.00
Satd. Flow (perm)		1373			3190			1370			1545	1348
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	119	551	0	1	628	42	3	2	31	213	0	159
RTOR Reduction (vph)	0	0	0	0	6	0	0	28	0	0	0	107
Lane Group Flow (vph)	0	670	0	0	665	0	0	8	0	0	213	52
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		501			1714			145			478	444
v/s Ratio Prot					c0.06						c0.08	
v/s Ratio Perm		c0.49			0.14			0.01			c0.05	0.04
v/c Ratio		1.34			0.39			0.06			0.45	0.12
Uniform Delay, d1		27.0			11.8			34.2			24.4	19.9
Progression Factor		1.00			1.28			1.00			1.00	1.00
Incremental Delay, d2		164.9			0.1			0.8			3.0	0.5
Delay (s)		191.9			15.3			34.9			27.4	20.4
Level of Service		F			B			C			C	C
Approach Delay (s)		191.9			15.3			34.9			24.4	
Approach LOS		F			B			C			C	

Intersection Summary			
HCM Average Control Delay	85.3	HCM Level of Service	F
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

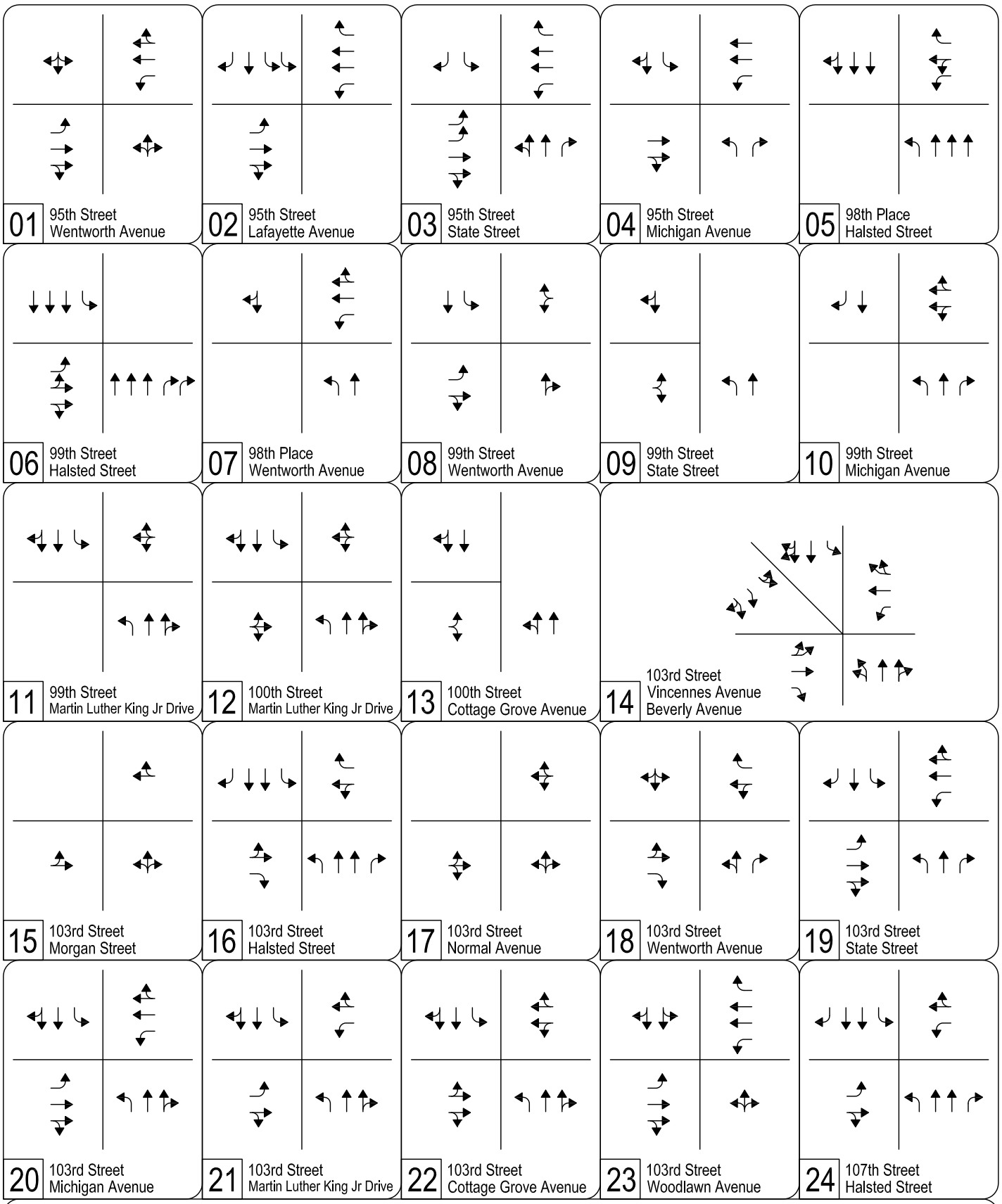

UPRR ROW Option Alternative (2030) Intersection Lane Geometry

Page 1 of 3

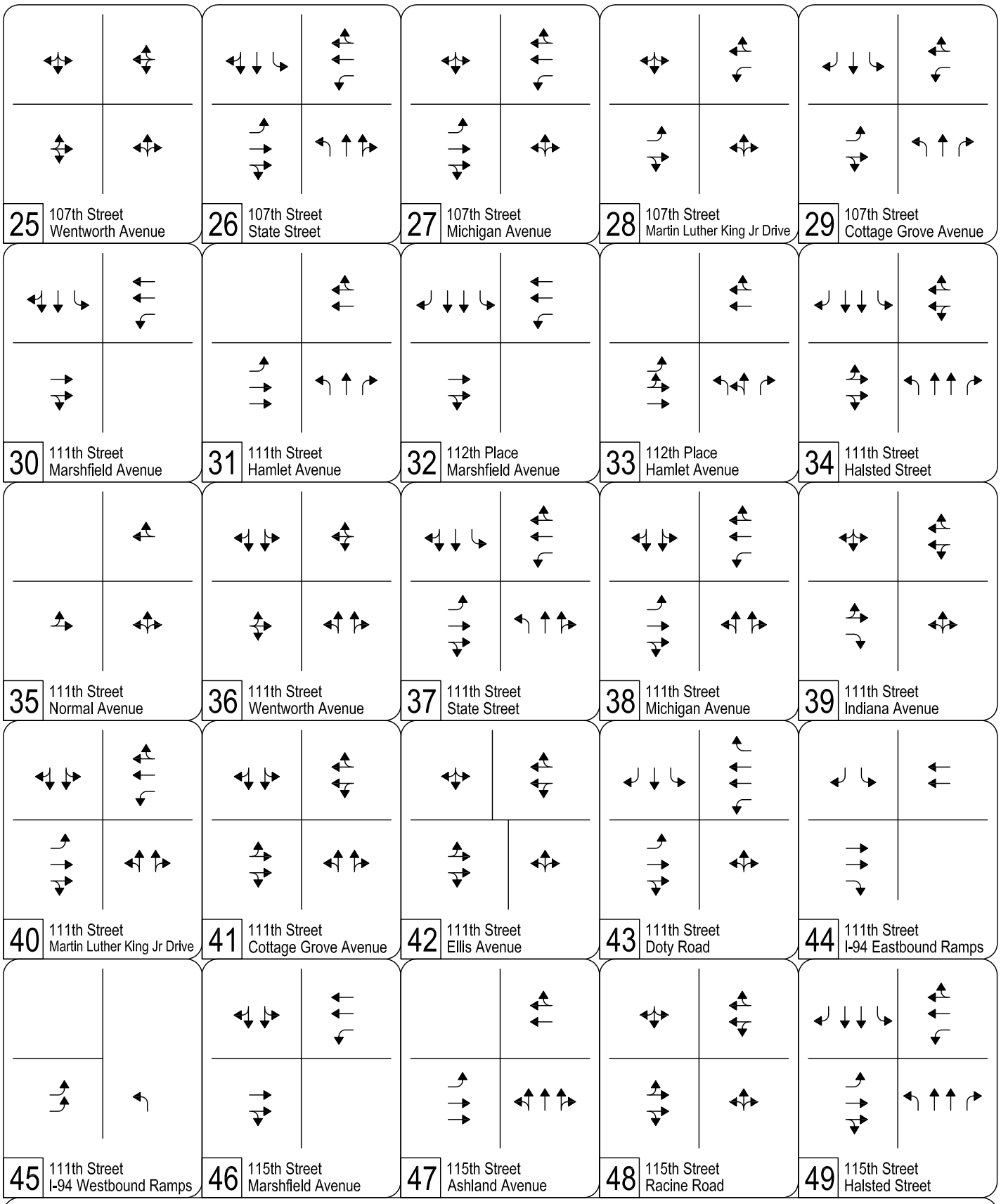

UPRR ROW Option Alternative (2030) Intersection Lane Geometry

Page 2 of 3

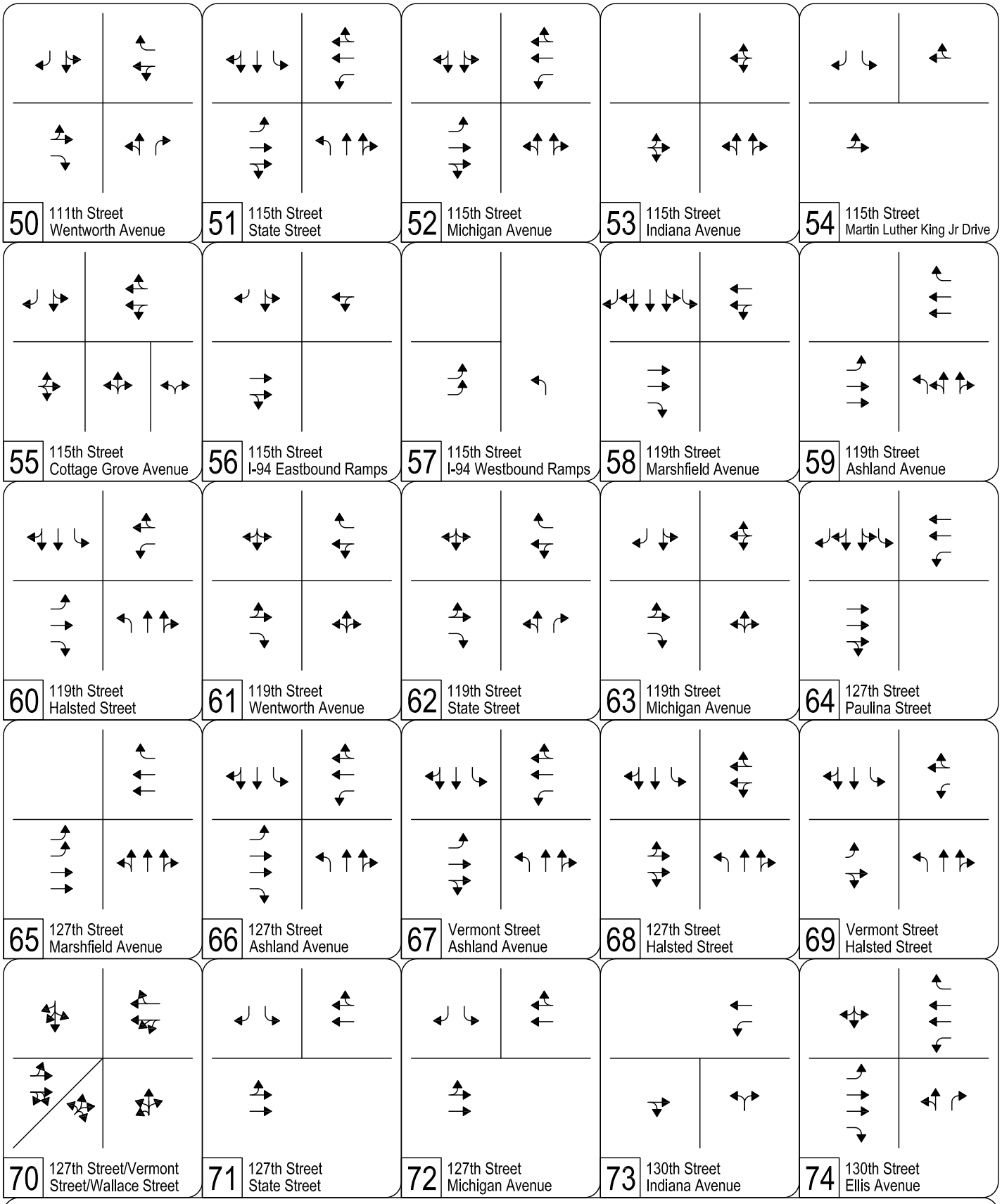

UPRR ROW Option Alternative (2030) Intersection Lane Geometry

Page 3 of 3

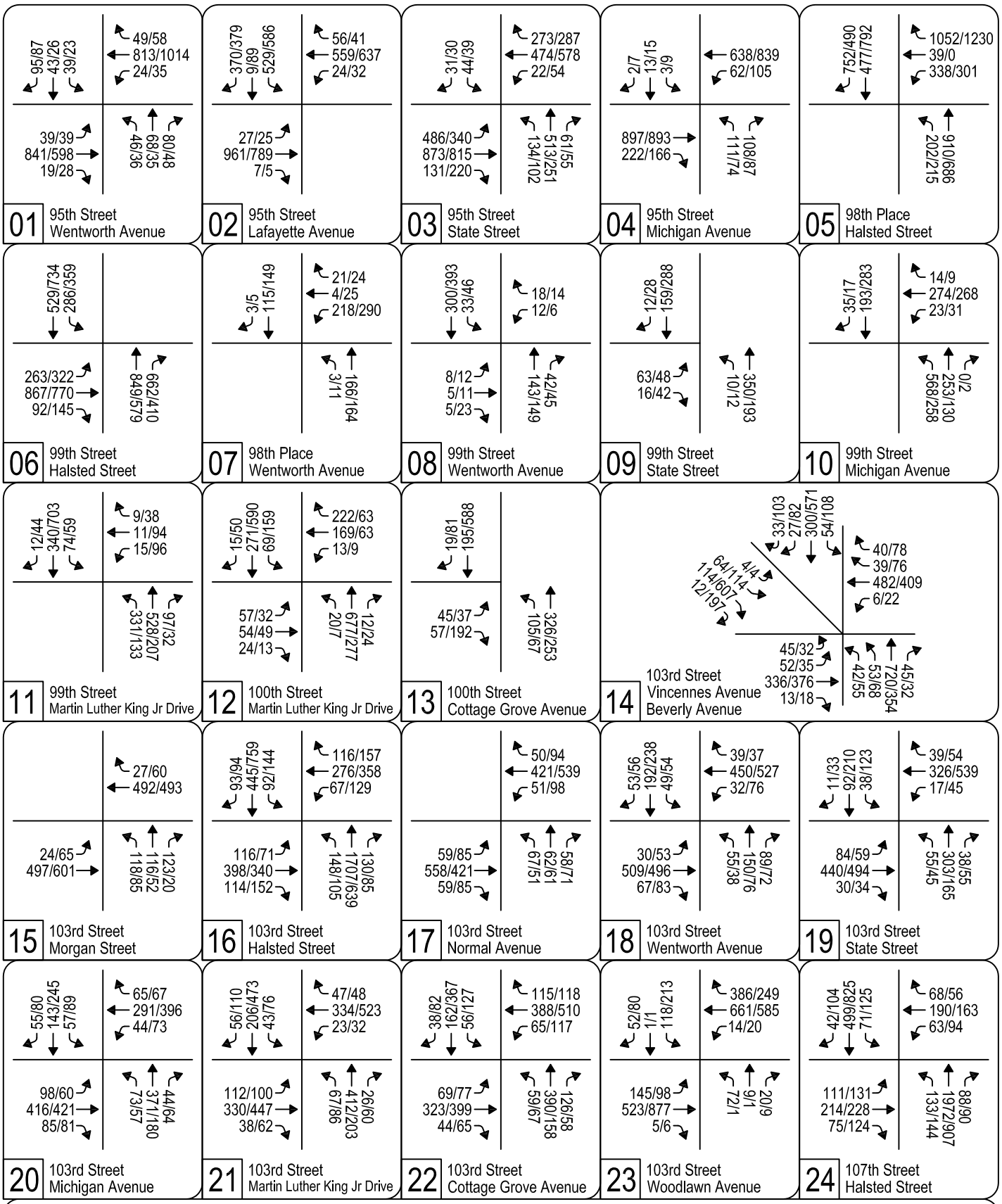

UPRR ROW Option Alternative (2030) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

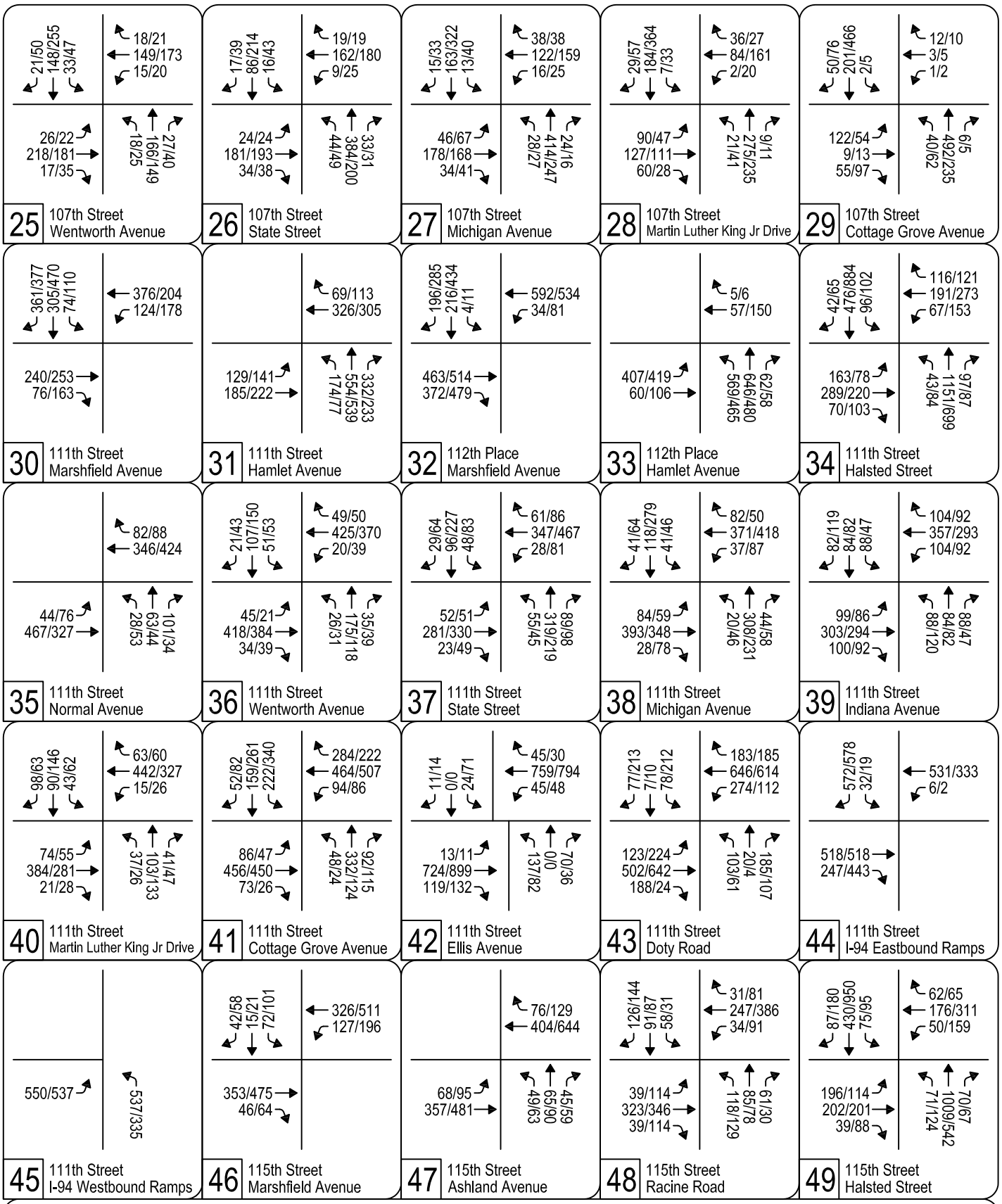

UPRR ROW Option Alternative (2030) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

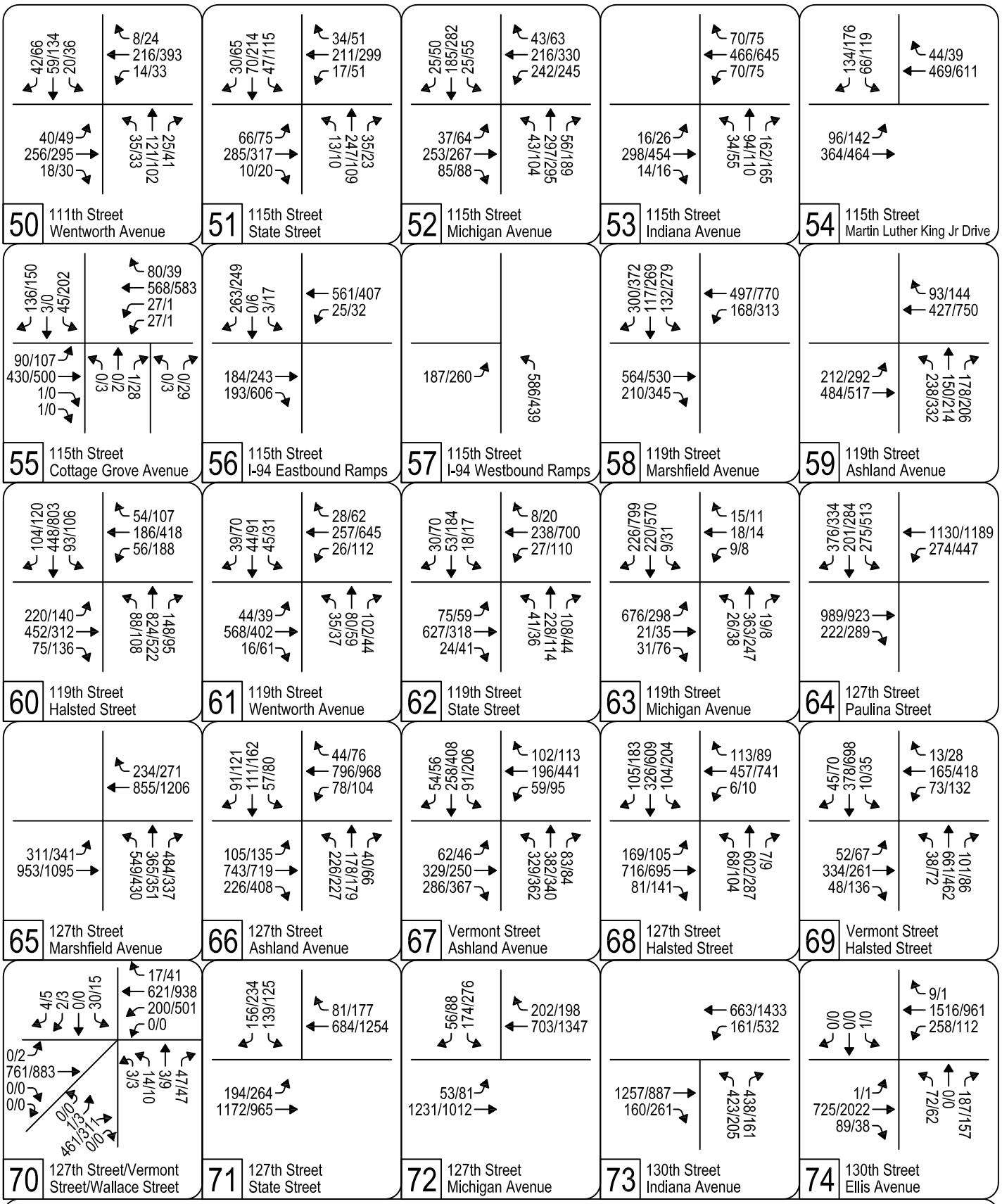

UPRR ROW Option Alternative (2030) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	841	19	24	813	49	46	68	80	39	43	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1417	2976		1592	2979			1755			1673	
Flt Permitted	0.25	1.00		0.25	1.00			0.90			0.91	
Satd. Flow (perm)	369	2976		417	2979			1596			1531	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	885	20	25	856	52	48	72	84	41	45	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	59	0
Lane Group Flow (vph)	41	903	0	25	901	0	0	165	0	0	127	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	193	1557		218	1558			565			542	
v/s Ratio Prot		c0.30			0.30							
v/s Ratio Perm	0.11			0.06				c0.10			0.08	
v/c Ratio	0.21	0.58		0.11	0.58			0.29			0.23	
Uniform Delay, d1	8.3	10.6		7.9	10.6			15.1			14.8	
Progression Factor	1.00	1.00		0.83	1.16			1.00			1.00	
Incremental Delay, d2	2.5	1.6		0.9	1.4			1.3			1.0	
Delay (s)	10.8	12.2		7.5	13.6			16.4			15.8	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.1			13.5			16.4			15.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	961	7	24	559	56	0	0	0	529	9	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	778	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	352	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1012	7	25	588	59	0	0	0	557	9	389
RTOR Reduction (vph)	0	1	0	0	0	26	0	0	0	0	0	172
Lane Group Flow (vph)	28	1018	0	25	588	33	0	0	0	557	9	217
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	162	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.31		0.01	c0.19					c0.18	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.16
v/c Ratio	0.17	0.94		0.04	0.33	0.12				0.78	0.03	0.67
Uniform Delay, d1	31.6	42.2		15.1	15.4	13.4				46.9	38.7	45.5
Progression Factor	0.80	0.82		0.29	0.63	1.53				1.00	1.00	1.00
Incremental Delay, d2	2.0	14.1		0.1	0.3	0.5				8.2	0.2	10.7
Delay (s)	27.2	48.9		4.5	10.0	20.9				55.1	38.9	56.2
Level of Service	C	D		A	A	C				E	D	E
Approach Delay (s)		48.3			10.7			0.0			55.4	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	486	873	131	22	474	273	134	513	61	44	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	512	919	138	23	499	287	141	540	64	46	0	33
RTOR Reduction (vph)	0	9	0	0	0	158	0	0	25	0	0	31
Lane Group Flow (vph)	512	1049	0	23	499	129	0	681	39	46	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1554		108	697	225		762	327	53		45
v/s Ratio Prot	0.16	c0.34		0.01	c0.17			c0.21		c0.05		
v/s Ratio Perm						0.14			0.03			0.00
v/c Ratio	0.49	0.67		0.21	0.72	0.57		0.89	0.12	0.87		0.05
Uniform Delay, d1	34.7	24.5		57.2	45.5	43.6		48.5	39.5	60.5		57.4
Progression Factor	0.75	0.20		1.00	1.00	1.00		0.95	0.90	1.00		1.00
Incremental Delay, d2	0.7	1.1		4.5	6.2	10.1		14.9	0.7	76.0		0.4
Delay (s)	26.9	6.0		61.6	51.7	53.8		60.7	36.2	136.5		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		12.8			52.7			58.6			103.6	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	35.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	897	222	62	638	0	111	0	108	3	13	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.98	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1650	3005		1390		1465	1803	1943	
Flt Permitted		1.00		0.15	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		267	3005		1093		1465	1803	1943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	997	247	69	709	0	123	0	120	3	14	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	77	0	1	0
Lane Group Flow (vph)	0	1222	0	69	709	0	123	0	43	3	15	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		160	1803		350		469	577	622	
v/s Ratio Prot		c0.43			0.24						0.01	
v/s Ratio Perm				0.26			c0.11		0.03	0.00		
v/c Ratio		0.71		0.43	0.39		0.35		0.09	0.01	0.02	
Uniform Delay, d1		14.0		10.8	10.5		26.0		23.8	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.5		8.3	0.6		2.8		0.4	0.0	0.1	
Delay (s)		16.5		19.1	11.1		28.8		24.2	23.2	23.4	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.5			11.8			26.5			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	338	39	1052	202	910	0	0	477	752
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3940	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3940	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	345	40	1073	206	929	0	0	487	767
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	345	40	1073	206	929	0	0	1254	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1163	
v/s Ratio Prot							c0.13	0.21			c0.32	
v/s Ratio Perm				0.23	0.02	c0.73						
v/c Ratio				0.77	0.08	2.54	0.44	0.34			1.91dr	
Uniform Delay, d1				33.7	26.7	37.5	29.3	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.38			1.00	
Incremental Delay, d2				11.8	0.3	698.4	2.0	0.2			50.2	
Delay (s)				45.5	27.1	735.9	21.3	22.1			87.2	
Level of Service				D	C	F	C	C			F	
Approach Delay (s)		0.0			553.1			22.0			87.2	
Approach LOS		A			F			C			F	

Intersection Summary			
HCM Average Control Delay	244.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	867	92	0	0	0	0	849	662	286	529	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3184						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3184						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	271	894	95	0	0	0	0	875	682	295	545	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	244	1009	0	0	0	0	0	875	682	295	545	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.19	0.12	
v/s Ratio Perm	0.16	0.32							c0.31			
v/c Ratio	0.50	0.98						0.75	1.17	0.63	0.20	
Uniform Delay, d1	28.7	35.1						35.3	38.5	32.1	10.0	
Progression Factor	1.00	1.00						0.43	0.46	1.06	0.42	
Incremental Delay, d2	3.7	23.4						0.4	78.3	2.2	0.1	
Delay (s)	32.4	58.5						15.7	96.0	36.1	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		53.5			0.0			50.9			15.5	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	43.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	166	0	0	115	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1961	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		782	1882			1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	184	0	0	128	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	184	0	0	130	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		501	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.07	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.17			0.12	
Uniform Delay, d1				23.4	19.9		10.0	8.0			9.6	
Progression Factor				1.00	1.00		1.06	1.18			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.6	9.8			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.8			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	12	0	18	0	143	42	33	300	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.92			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.98			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1620			1686		1595	1755	
Flt Permitted	0.74	1.00			0.93			1.00		0.60	1.00	
Satd. Flow (perm)	1502	1809			1543			1686		1005	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	13	0	19	0	151	44	35	316	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	19	0	0	183	0	35	316	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	477	575			490			793		640	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.04			0.23		0.05	0.31	
Uniform Delay, d1	19.9	19.9			20.0			13.4		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		1.01	0.92	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.2			14.0		8.8	8.9	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.2			14.0			8.9	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	16	10	350	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1787		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1787		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	18	11	389	177	13
RTOR Reduction (vph)	12	0	0	0	4	0
Lane Group Flow (vph)	76	0	11	389	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	577		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.40	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.32	0.52	1.16	
Incremental Delay, d2	0.5		0.0	1.1	0.4	
Delay (s)	16.0		2.2	5.4	8.9	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.3	8.9	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	23	274	14	568	253	0	0	193	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3738		1660	1752			1603	1298
Flt Permitted					1.00		0.57	1.00			1.00	1.00
Satd. Flow (perm)					3738		1002	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	26	304	16	631	281	0	0	214	39
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	0	0	0	342	0	631	281	0	0	214	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1143		679	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.16			0.13	
v/s Ratio Perm							c0.45					0.01
v/c Ratio					0.30		0.93	0.27			0.30	0.03
Uniform Delay, d1					22.5		17.0	8.1			15.0	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.7		21.0	0.6			1.1	0.1
Delay (s)					23.2		38.0	8.7			16.1	13.3
Level of Service					C		D	A			B	B
Approach Delay (s)		0.0			23.2			29.0			15.6	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	15	11	9	331	528	97	74	340	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.97		1.00	0.98		1.00	1.00	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1803		1692	3236		1707	3352	
Flt Permitted					0.98		0.50	1.00		0.31	1.00	
Satd. Flow (perm)					1803		892	3236		564	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	17	12	10	368	587	108	82	378	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	32	0	368	675	0	82	388	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					553		562	1467		415	1520	
v/s Ratio Prot					c0.02		c0.06	0.21		0.02	0.12	
v/s Ratio Perm							c0.30			0.09		
v/c Ratio					0.06		0.65	0.46		0.20	0.26	
Uniform Delay, d1					18.4		13.8	14.2		12.4	12.7	
Progression Factor					1.00		0.69	0.74		1.00	1.00	
Incremental Delay, d2					0.2		5.4	0.9		1.1	0.4	
Delay (s)					18.6		14.9	11.4		13.4	13.1	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.6			12.6			13.1	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	54	24	13	169	222	20	677	12	69	271	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1946			1626		1596	3232		1641	3131	
Flt Permitted		0.68			0.99		0.57	1.00		0.33	1.00	
Satd. Flow (perm)		1354			1613		955	3232		574	3131	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	57	25	14	178	234	21	713	13	73	285	16
RTOR Reduction (vph)	0	10	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	132	0	0	367	0	21	724	0	73	296	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		451			538		535	1810		321	1753	
v/s Ratio Prot								c0.22			0.09	
v/s Ratio Perm		0.10			c0.23		0.02			0.13		
v/c Ratio		0.29			0.68		0.04	0.40		0.23	0.17	
Uniform Delay, d1		18.5			21.6		7.4	9.4		8.3	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.18	0.07	
Incremental Delay, d2		1.6			6.9		0.1	0.7		1.6	0.2	
Delay (s)		20.1			28.4		7.6	10.0		3.1	0.8	
Level of Service		C			C		A	B		A	A	
Approach Delay (s)		20.1			28.4			9.9			1.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	45	57	105	326	195	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	63	117	362	217	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	113	237	241	144	93
Volume Left (vph)	50	117	0	0	0
Volume Right (vph)	63	0	0	0	21
Hadj (s)	-0.16	0.33	0.08	0.09	-0.07
Departure Headway (s)	5.3	5.4	5.1	5.4	5.2
Degree Utilization, x	0.17	0.36	0.35	0.22	0.14
Capacity (veh/h)	628	653	684	641	660
Control Delay (s)	9.3	10.1	9.6	8.7	7.9
Approach Delay (s)	9.3	9.9		8.4	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.4		
HCM Level of Service	A		
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	45	52	336	13	6	482	39	40	42	53	720	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3290	
Flt Permitted		0.11	1.00	1.00	0.54	1.00	1.00			0.39	1.00	
Satd. Flow (perm)		187	1731	1530	971	1731	1487			700	3290	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	58	373	14	7	536	43	44	47	59	800	50
RTOR Reduction (vph)	0	0	0	7	0	0	31	0	0	0	5	0
Lane Group Flow (vph)	0	108	373	7	7	536	56	0	0	106	845	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	296	528	453			167	783	
v/s Ratio Prot		0.05	c0.22			c0.31					c0.26	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.15		
v/c Ratio		0.38	0.45	0.01	0.02	1.02	0.12			0.63	1.08	
Uniform Delay, d1		20.3	18.4	14.5	25.6	36.5	26.4			35.9	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.9	1.8	0.0	0.1	43.0	0.6			17.0	55.9	
Delay (s)		24.2	20.2	14.5	25.7	79.5	26.9			52.9	95.9	
Level of Service		C	C	B	C	E	C			D	F	
Approach Delay (s)			20.9			71.7					91.1	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	62.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	54	300	27	33	4	64	114	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.97				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3279				1710	2621	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3279				1710	2621	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	333	30	37	4	71	127	13
RTOR Reduction (vph)	0	8	0	0	0	0	7	0
Lane Group Flow (vph)	60	392	0	0	0	75	133	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.12				0.04		
v/s Ratio Perm	0.20						c0.05	
v/c Ratio	0.88	0.51				0.26	0.31	
Uniform Delay, d1	38.9	35.1				38.1	38.4	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	79.4	2.4				2.2	1.8	
Delay (s)	118.3	37.5				40.4	40.2	
Level of Service	F	D				D	D	
Approach Delay (s)		48.0				40.3		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	497	0	0	492	27	118	116	123	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1929			1769				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1598			1929			1769				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	552	0	0	547	30	131	129	137	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	577	0	0	397	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		762			920			708				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.36						0.22				
v/c Ratio		0.76			0.63			0.56				
Uniform Delay, d1		13.9			12.7			15.1				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.0			3.2			3.2				
Delay (s)		21.0			15.9			18.3				
Level of Service		C			B			B				
Approach Delay (s)		21.0			15.9			18.3			0.0	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	398	114	67	276	116	148	1707	130	92	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1924	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.65	1.00		0.54	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1265	1426		1040	1396	631	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	419	120	71	291	122	156	1797	137	97	468	98
RTOR Reduction (vph)	0	0	71	0	0	72	0	0	30	0	0	59
Lane Group Flow (vph)	0	541	49	0	362	50	156	1797	107	97	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	52.7	44.0	44.0	49.3	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	52.7	44.0	44.0	49.3	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.50	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		518	584		426	572	389	1299	538	152	1191	510
v/s Ratio Prot							c0.03	c0.58		c0.04	0.16	
v/s Ratio Perm		c0.43	0.03		0.35	0.04	0.17		0.08	0.26		0.03
v/c Ratio		1.04	0.08		0.85	0.09	0.40	1.38	0.20	0.64	0.39	0.08
Uniform Delay, d1		31.0	19.0		28.1	19.0	14.9	30.5	19.3	23.3	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.25	0.75	0.39
Incremental Delay, d2		51.6	0.3		18.7	0.3	0.7	177.4	0.8	8.2	0.9	0.3
Delay (s)		82.6	19.2		46.8	19.3	15.6	207.9	20.2	37.4	17.7	7.9
Level of Service		F	B		D	B	B	F	C	D	B	A
Approach Delay (s)		71.1			39.9			181.2			19.2	
Approach LOS		E			D			F			B	

Intersection Summary			
HCM Average Control Delay	117.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	116.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	558	59	51	421	50	67	62	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1630			1628			1775				
Flt Permitted		0.92			0.89			0.98				
Satd. Flow (perm)		1501			1455			1775				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	620	66	57	468	56	74	69	64	0	0	0
RTOR Reduction (vph)	0	5	0	0	6	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	747	0	0	575	0	0	182	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		878			851			519				
v/s Ratio Prot												
v/s Ratio Perm		c0.50			0.40			0.10				
v/c Ratio		0.85			0.68			0.35				
Uniform Delay, d1		11.2			9.3			18.1				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		10.1			4.3			1.9				
Delay (s)		21.3			13.6			20.0				
Level of Service		C			B			C				
Approach Delay (s)		21.3			13.6			20.0			0.0	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	509	67	32	450	39	55	150	89	49	192	53
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.98	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1636	1288		1658	1490		1738	
Flt Permitted		0.96	1.00		0.95	1.00		0.84	1.00		0.92	
Satd. Flow (perm)		1594	1255		1555	1288		1417	1490		1608	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	536	71	34	474	41	58	158	94	52	202	56
RTOR Reduction (vph)	0	0	30	0	0	15	0	0	64	0	11	0
Lane Group Flow (vph)	0	568	41	0	508	26	0	216	30	0	299	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		914	720		892	738		453	477		515	
v/s Ratio Prot												
v/s Ratio Perm		c0.36	0.03		0.33	0.02		0.15	0.02		c0.19	
v/c Ratio		0.62	0.06		0.57	0.03		0.48	0.06		0.58	
Uniform Delay, d1		10.6	7.1		10.1	7.0		20.5	17.7		21.3	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.2	0.1		2.6	0.1		3.6	0.3		4.7	
Delay (s)		13.8	7.2		12.8	7.1		24.0	18.0		26.0	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.0			12.3			22.2			26.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	440	30	17	326	39	55	303	38	38	92	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1464	2990		1459	3535		1534	1647	1301	1517	1541	1156
Flt Permitted	0.50	1.00		0.43	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	777	2990		656	3535		1116	1647	1301	720	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	489	33	19	362	43	61	337	42	42	102	12
RTOR Reduction (vph)	0	7	0	0	14	0	0	0	22	0	0	7
Lane Group Flow (vph)	93	515	0	19	391	0	61	337	20	42	102	5
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	371	1426		313	1686		446	659	520	288	616	462
v/s Ratio Prot		c0.17			0.11			c0.20			0.07	
v/s Ratio Perm	0.12			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.25	0.36		0.06	0.23		0.14	0.51	0.04	0.15	0.17	0.01
Uniform Delay, d1	10.1	10.7		9.2	10.0		12.4	14.7	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.60	0.74	0.30	0.53	0.54	0.28
Incremental Delay, d2	1.6	0.7		0.4	0.3		0.6	2.8	0.1	1.1	0.6	0.0
Delay (s)	11.7	11.5		9.5	10.3		8.0	13.7	3.7	7.7	7.3	3.4
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.5			10.3			11.9			7.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	416	85	44	291	65	73	371	44	57	143	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.98	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	3058		1588	3012		1541	3022		1403	2767	
Flt Permitted	0.52	1.00		0.42	1.00		0.62	1.00		0.46	1.00	
Satd. Flow (perm)	799	3058		697	3012		1007	3022		678	2767	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	438	89	46	306	68	77	391	46	60	151	58
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	34	0
Lane Group Flow (vph)	103	527	0	46	374	0	77	425	0	60	175	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	384	1468		335	1446		416	1249		280	1144	
v/s Ratio Prot		c0.17			0.12			c0.14			0.06	
v/s Ratio Perm	0.13			0.07			0.08			0.09		
v/c Ratio	0.27	0.36		0.14	0.26		0.19	0.34		0.21	0.15	
Uniform Delay, d1	11.6	12.3		10.9	11.6		14.0	15.0		14.2	13.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	0.7		0.9	0.4		1.0	0.7		1.7	0.3	
Delay (s)	13.3	12.9		11.7	12.0		15.0	15.8		15.9	14.1	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		13.0			12.0			15.6			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	330	38	23	334	47	67	412	26	43	206	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1474	1842		1533	3073		1372	2877	
Flt Permitted	0.44	1.00		0.46	1.00		0.58	1.00		0.41	1.00	
Satd. Flow (perm)	709	1576		711	1842		940	3073		597	2877	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	118	347	40	24	352	49	71	434	27	45	217	59
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	118	387	0	24	401	0	71	461	0	45	276	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	442	738		358	793		328	730		193	630	
v/s Ratio Prot	c0.02	c0.25		0.00	0.22		c0.01	c0.15		0.01	0.10	
v/s Ratio Perm	0.13			0.03			0.06			0.06		
v/c Ratio	0.27	0.52		0.07	0.51		0.22	0.63		0.23	0.44	
Uniform Delay, d1	13.8	15.9		15.0	17.6		21.6	29.1		26.1	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.7		0.1	2.3		0.3	4.1		0.6	2.2	
Delay (s)	14.1	18.6		15.1	19.9		21.9	33.2		26.8	30.9	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		17.5			19.6			31.7			30.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	323	44	65	388	115	59	390	126	56	162	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3493			2914		1614	3156		1581	2918	
Flt Permitted		0.78			0.84		0.61	1.00		0.38	1.00	
Satd. Flow (perm)		2745			2468		1041	3156		628	2918	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	77	359	49	72	431	128	66	433	140	62	180	42
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	485	0	0	631	0	66	573	0	62	222	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1244			1119		458	1389		276	1284	
v/s Ratio Prot								c0.18			0.08	
v/s Ratio Perm		0.18			c0.26		0.06			0.10		
v/c Ratio		0.39			0.56		0.14	0.41		0.22	0.17	
Uniform Delay, d1		13.6			15.1		12.6	14.4		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9			2.1		0.7	0.9		1.9	0.3	
Delay (s)		14.5			17.1		13.2	15.3		14.9	13.0	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.5			17.1			15.1			13.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	523	5	14	661	386	72	9	20	118	1	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3144		1629	3257	1457		1611			3105	
Flt Permitted	0.35	1.00		0.42	1.00	1.00		0.69			0.75	
Satd. Flow (perm)	581	3144		720	3257	1457		1158			2398	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	581	6	16	734	429	80	10	22	131	1	58
RTOR Reduction (vph)	0	1	0	0	0	150	0	12	0	0	44	0
Lane Group Flow (vph)	161	586	0	16	734	279	0	100	0	0	146	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	378	2046		468	2119	948		274			566	
v/s Ratio Prot		0.19			0.23							
v/s Ratio Perm	c0.28			0.02		0.19		c0.09			0.06	
v/c Ratio	0.43	0.29		0.03	0.35	0.29		0.36			0.26	
Uniform Delay, d1	6.0	5.3		4.4	5.6	5.3		22.6			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	3.5	0.4		0.1	0.4	0.8		3.5			1.0	
Delay (s)	9.5	5.7		4.5	6.0	6.1		26.1			23.0	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.5			6.0			26.1			23.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	70.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	75	63	190	68	133	1972	88	71	499	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1499		1547	1586		1493	3069	1271	1452	2983	1301
Flt Permitted	0.38	1.00		0.32	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	617	1499		524	1586		612	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	79	66	200	72	140	2076	93	75	525	44
RTOR Reduction (vph)	0	15	0	0	16	0	0	0	18	0	0	26
Lane Group Flow (vph)	117	289	0	66	256	0	140	2076	75	75	525	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	254	388		232	410		350	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.03	c0.68		c0.03	0.18	
v/s Ratio Perm	0.11			0.07			0.16		0.06	0.17		0.01
v/c Ratio	0.46	0.75		0.28	0.63		0.40	1.64	0.14	0.43	0.43	0.03
Uniform Delay, d1	22.5	28.9		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.71	0.49	1.00	1.00	1.00
Incremental Delay, d2	5.9	12.3		3.1	7.0		2.8	292.0	0.5	7.6	1.1	0.1
Delay (s)	28.4	41.2		24.9	34.9		10.9	309.7	8.1	25.7	18.9	15.0
Level of Service	C	D		C	C		B	F	A	C	B	B
Approach Delay (s)		37.6			32.9			279.4			19.5	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	184.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	218	17	15	149	18	18	166	27	33	148	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		1850			1836			1902			1931	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1792			1790			1856			1823	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	225	18	15	154	19	19	171	28	34	153	22
RTOR Reduction (vph)	0	4	0	0	6	0	0	8	0	0	6	0
Lane Group Flow (vph)	0	266	0	0	182	0	0	210	0	0	203	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		744			744			857			841	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.11			0.11	
v/c Ratio		0.36			0.24			0.24			0.24	
Uniform Delay, d1		13.0			12.4			10.6			10.6	
Progression Factor		1.00			0.64			1.05			1.00	
Incremental Delay, d2		1.3			0.8			0.6			0.7	
Delay (s)		14.4			8.7			11.8			11.3	
Level of Service		B			A			B			B	
Approach Delay (s)		14.4			8.7			11.8			11.3	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	34	9	162	19	44	384	33	16	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	2994		1302	3037		1529	3093		1492	2868	
Flt Permitted	0.63	1.00		0.60	1.00		0.68	1.00		0.48	1.00	
Satd. Flow (perm)	965	2994		827	3037		1093	3093		757	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	38	10	180	21	49	427	37	18	96	19
RTOR Reduction (vph)	0	24	0	0	13	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	215	0	10	188	0	49	454	0	18	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	875		242	888		639	1808		443	1677	
v/s Ratio Prot		c0.07			0.06			c0.15			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.25		0.04	0.21		0.08	0.25		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.9	6.6		5.7	5.8	
Progression Factor	0.73	0.73		0.75	0.74		0.94	0.97		0.49	0.44	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.9	13.5		12.6	13.4		5.7	6.7		3.0	2.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.4			13.3			6.6			2.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	38	28	414	24	13	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2868			1878			1807	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1047	2952		965	2868			1839			1749	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	42	31	460	27	14	181	17
RTOR Reduction (vph)	0	23	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	515	0	0	207	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	419	1181		386	1147			877			834	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.28			0.12	
v/c Ratio	0.12	0.18		0.05	0.13			0.59			0.25	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.4			10.1	
Progression Factor	1.02	0.92		0.86	0.88			0.95			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			2.8			0.7	
Delay (s)	13.1	12.0		10.5	11.1			14.5			10.8	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.2			11.0			14.5			10.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	127	60	2	84	36	21	275	9	7	184	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.95			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1879		1587	1870			1971			1933	
Flt Permitted	0.67	1.00		0.57	1.00			0.98			0.99	
Satd. Flow (perm)	1135	1879		950	1870			1928			1916	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	141	67	2	93	40	23	306	10	8	204	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	100	208	0	2	133	0	0	339	0	0	244	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	349	578		292	575			1097			1091	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.09			0.00				c0.18			0.13	
v/c Ratio	0.29	0.36		0.01	0.23			0.31			0.22	
Uniform Delay, d1	17.1	17.5		15.6	16.8			7.3			6.9	
Progression Factor	0.91	0.90		0.89	0.92			0.96			1.00	
Incremental Delay, d2	2.0	1.7		0.0	0.9			0.7			0.5	
Delay (s)	17.5	17.5		14.0	16.4			7.7			7.4	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.5			16.3			7.7			7.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	9	55	1	3	12	40	492	6	2	201	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1672		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.62	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1260	1672		1279	1422		971	1631	1392	648	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	136	10	61	1	3	13	44	547	7	2	223	56
RTOR Reduction (vph)	0	44	0	0	9	0	0	0	3	0	0	22
Lane Group Flow (vph)	136	27	0	1	7	0	44	547	4	2	223	34
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		354	394		583	979	835	389	1144	856
v/s Ratio Prot		0.02			0.00			c0.34			0.12	
v/s Ratio Perm	c0.11			0.00			0.05		0.00	0.00		0.02
v/c Ratio	0.39	0.06		0.00	0.02		0.08	0.56	0.01	0.01	0.19	0.04
Uniform Delay, d1	19.0	17.3		17.0	17.1		5.4	7.8	5.2	5.2	5.9	5.3
Progression Factor	1.47	2.42		1.00	1.00		1.17	1.10	1.32	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.2		0.0	0.1		0.2	1.7	0.0	0.0	0.4	0.1
Delay (s)	31.1	42.0		17.0	17.1		6.5	10.3	6.9	5.2	6.3	5.4
Level of Service	C	D		B	B		A	B	A	A	A	A
Approach Delay (s)		34.8			17.1			10.0			6.1	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	240	76	124	376	0	0	0	0	74	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2826		1621	3288					1574	2907	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2826		848	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	253	80	131	396	0	0	0	0	78	321	380
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	303	0	131	396	0	0	0	0	78	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		933		653	1940					504	930	
v/s Ratio Prot		c0.11		0.05	c0.12					0.05	c0.17	
v/s Ratio Perm				0.07								
v/c Ratio		0.32		0.20	0.20					0.15	0.52	
Uniform Delay, d1		25.1		10.6	9.6					24.3	27.8	
Progression Factor		1.00		1.95	2.06					1.00	1.00	
Incremental Delay, d2		0.9		0.6	0.2					0.7	2.1	
Delay (s)		26.1		21.2	19.8					25.0	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.1			20.2			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	185	0	0	326	69	174	554	332	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2832		1750	1782	1514			
Flt Permitted	0.34	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	599	3054			2832		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	195	0	0	343	73	183	583	349	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	234	0	0	0
Lane Group Flow (vph)	136	195	0	0	398	0	183	583	115	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	678	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.14		0.10	c0.33				
v/s Ratio Perm	0.04								0.08			
v/c Ratio	0.20	0.11			0.67		0.32	0.99	0.23			
Uniform Delay, d1	11.8	9.4			36.3		25.1	33.4	24.3			
Progression Factor	0.25	0.25			1.00		0.75	0.79	1.91			
Incremental Delay, d2	0.6	0.1			5.9		0.9	27.8	0.7			
Delay (s)	3.5	2.5			42.2		19.8	54.1	47.1			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			42.2			46.3			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	37.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	463	372	34	592	0	0	0	0	4	216	196
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3108		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.16	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3108		279	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	482	388	35	617	0	0	0	0	4	225	204
RTOR Reduction (vph)	0	145	0	0	0	0	0	0	0	0	0	135
Lane Group Flow (vph)	0	725	0	35	617	0	0	0	0	4	225	69
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1119		391	1898					543	1074	491
v/s Ratio Prot		c0.23		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.65		0.09	0.33					0.01	0.21	0.14
Uniform Delay, d1		26.7		12.5	10.9					21.8	23.5	22.9
Progression Factor		1.00		0.54	0.68					0.73	0.79	0.92
Incremental Delay, d2		2.9		0.2	0.2					0.0	0.4	0.5
Delay (s)		29.6		7.0	7.6					16.0	18.8	21.5
Level of Service		C		A	A					B	B	C
Approach Delay (s)		29.6			7.6			0.0			20.1	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	407	60	0	0	57	5	569	646	62	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3041			3079		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1084	2338			3079		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	420	62	0	0	59	5	587	666	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	38	0	0	0
Lane Group Flow (vph)	210	272	0	0	60	0	587	666	26	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1445			462		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.38	c0.41	0.02			
v/s Ratio Perm	c0.05	0.03										
v/c Ratio	0.31	0.19			0.13		1.02	1.10	0.05			
Uniform Delay, d1	14.0	13.3			36.8		31.5	31.5	20.2			
Progression Factor	0.23	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		42.9	66.6	0.2			
Delay (s)	4.1	3.5			37.4		74.4	98.1	20.4			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.8			37.4			83.8			0.0	
Approach LOS		A			D			F			A	

Intersection Summary			
HCM Average Control Delay	61.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	163	289	70	67	191	116	43	1151	97	96	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2843			2772		1447	3069	1336	1494	2956	1270
Flt Permitted		0.66			0.78		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1909			2178		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	170	301	73	70	199	121	45	1199	101	100	496	44
RTOR Reduction (vph)	0	14	0	0	61	0	0	0	38	0	0	27
Lane Group Flow (vph)	0	530	0	0	329	0	45	1199	63	100	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		874			717		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.39		c0.03	0.17	
v/s Ratio Perm		0.21			c0.15		0.06		0.05	0.26		0.01
v/c Ratio		0.61			0.46		0.15	0.99	0.12	0.69	0.43	0.03
Uniform Delay, d1		19.0			22.5		14.7	25.6	16.7	19.1	18.7	16.1
Progression Factor		1.00			1.00		1.32	0.87	1.41	1.83	1.64	3.16
Incremental Delay, d2		3.1			2.1		0.6	17.5	0.3	22.2	1.0	0.1
Delay (s)		22.1			24.6		20.1	39.9	23.8	57.2	31.8	51.1
Level of Service		C			C		C	D	C	E	C	D
Approach Delay (s)		22.1			24.6			38.0			37.1	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	33.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	467	0	0	346	82	28	63	101	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1707			1670			1581				
Flt Permitted		0.94			1.00			0.99				
Satd. Flow (perm)		1604			1670			1581				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	519	0	0	384	91	31	70	112	0	0	0
RTOR Reduction (vph)	0	0	0	0	13	0	0	61	0	0	0	0
Lane Group Flow (vph)	0	568	0	0	462	0	0	152	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		839			874			559				
v/s Ratio Prot					0.28							
v/s Ratio Perm		c0.35						0.10				
v/c Ratio		0.68			0.53			0.27				
Uniform Delay, d1		11.4			10.2			15.0				
Progression Factor		1.00			0.66			1.00				
Incremental Delay, d2		4.4			1.8			1.2				
Delay (s)		15.8			8.5			16.2				
Level of Service		B			A			B				
Approach Delay (s)		15.8			8.5			16.2			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	418	34	20	425	49	26	175	35	51	107	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1886			1843			3185			3148	
Flt Permitted		0.93			0.97			0.91			0.83	
Satd. Flow (perm)		1759			1795			2928			2639	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	464	38	22	472	54	29	194	39	57	119	23
RTOR Reduction (vph)	0	4	0	0	6	0	0	22	0	0	13	0
Lane Group Flow (vph)	0	548	0	0	542	0	0	240	0	0	186	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		812			828			1216			1096	
v/s Ratio Prot												
v/s Ratio Perm		c0.31			0.30			c0.08			0.07	
v/c Ratio		0.67			0.65			0.20			0.17	
Uniform Delay, d1		13.7			13.5			12.1			11.9	
Progression Factor		0.67			0.55			0.87			0.55	
Incremental Delay, d2		3.5			3.9			0.4			0.3	
Delay (s)		12.7			11.3			10.9			6.9	
Level of Service		B			B			B			A	
Approach Delay (s)		12.7			11.3			10.9			6.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	281	23	28	347	61	55	319	89	48	96	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1503	2933		1584	2945		1497	3034		1594	2899	
Flt Permitted	0.43	1.00		0.53	1.00		0.66	1.00		0.48	1.00	
Satd. Flow (perm)	684	2933		884	2945		1046	3034		809	2899	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	312	26	31	386	68	61	354	99	53	107	32
RTOR Reduction (vph)	0	9	0	0	22	0	0	39	0	0	15	0
Lane Group Flow (vph)	58	329	0	31	432	0	61	414	0	53	124	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	232	993		299	997		563	1634		436	1561	
v/s Ratio Prot		0.11			c0.15			c0.14			0.04	
v/s Ratio Perm	0.08			0.04			0.06			0.07		
v/c Ratio	0.25	0.33		0.10	0.43		0.11	0.25		0.12	0.08	
Uniform Delay, d1	15.5	16.0		14.7	16.7		7.4	8.0		7.4	7.2	
Progression Factor	0.58	0.55		0.76	0.79		0.68	0.68		1.30	1.35	
Incremental Delay, d2	2.1	0.7		0.7	1.3		0.4	0.4		0.6	0.1	
Delay (s)	11.1	9.6		11.9	14.5		5.4	5.8		10.2	9.8	
Level of Service	B	A		B	B		A	A		B	A	
Approach Delay (s)		9.8			14.3			5.7			9.9	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	393	28	37	371	82	20	308	44	41	118	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1385	3013		1335	3540			3438			3303	
Flt Permitted	0.46	1.00		0.48	1.00			0.94			0.84	
Satd. Flow (perm)	665	3013		672	3540			3226			2808	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	88	414	29	39	391	86	21	324	46	43	124	43
RTOR Reduction (vph)	0	8	0	0	29	0	0	16	0	0	26	0
Lane Group Flow (vph)	88	435	0	39	448	0	0	375	0	0	184	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	317	1437		320	1688			1290			1123	
v/s Ratio Prot		c0.14			0.13							
v/s Ratio Perm	0.13			0.06				c0.12			0.07	
v/c Ratio	0.28	0.30		0.12	0.27			0.29			0.16	
Uniform Delay, d1	10.2	10.4		9.4	10.2			13.2			12.5	
Progression Factor	1.59	1.63		0.78	0.77			0.36			0.64	
Incremental Delay, d2	2.1	0.5		0.7	0.3			0.5			0.3	
Delay (s)	18.4	17.5		8.1	8.1			5.3			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		17.7			8.1			5.3			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	303	100	104	357	104	88	84	88	88	84	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3034			1823			1826	
Flt Permitted		0.74	1.00		0.76			0.79			0.78	
Satd. Flow (perm)		1227	1409		2325			1456			1442	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	110	337	111	116	397	116	98	93	98	98	93	91
RTOR Reduction (vph)	0	0	53	0	30	0	0	28	0	0	26	0
Lane Group Flow (vph)	0	447	58	0	599	0	0	261	0	0	256	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		642	737		1216			470			466	
v/s Ratio Prot												
v/s Ratio Perm		c0.36	0.04		0.26			c0.18			0.18	
v/c Ratio		0.70	0.08		0.49			0.55			0.55	
Uniform Delay, d1		11.6	7.7		10.0			18.1			18.1	
Progression Factor		2.01	5.71		0.41			1.00			1.00	
Incremental Delay, d2		6.0	0.2		1.4			4.7			4.6	
Delay (s)		29.3	44.2		5.5			22.8			22.7	
Level of Service		C	D		A			C			C	
Approach Delay (s)		32.3			5.5			22.8			22.7	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	384	21	15	442	63	37	103	41	43	90	98
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3018		1573	3002			3454			3403	
Flt Permitted	0.39	1.00		0.46	1.00			0.87			0.88	
Satd. Flow (perm)	606	3018		768	3002			3030			3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	427	23	17	491	70	41	114	46	48	100	109
RTOR Reduction (vph)	0	6	0	0	17	0	0	25	0	0	60	0
Lane Group Flow (vph)	82	444	0	17	544	0	0	176	0	0	197	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	261	1300		331	1293			1352			1345	
v/s Ratio Prot		0.15			c0.18							
v/s Ratio Perm	0.14			0.02				0.06			c0.07	
v/c Ratio	0.31	0.34		0.05	0.42			0.13			0.15	
Uniform Delay, d1	12.2	12.3		10.8	12.9			10.6			10.7	
Progression Factor	0.97	1.00		1.15	0.99			0.99			0.80	
Incremental Delay, d2	2.4	0.5		0.1	0.5			0.2			0.2	
Delay (s)	14.2	12.8		12.5	13.2			10.7			8.8	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.0			13.2			10.7			8.8	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	456	73	94	464	284	48	332	92	222	159	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3075			3146			3118	
Flt Permitted		0.63			0.74			0.88			0.63	
Satd. Flow (perm)		2018			2281			2771			2008	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	507	81	104	516	316	53	369	102	247	177	58
RTOR Reduction (vph)	0	16	0	0	99	0	0	33	0	0	17	0
Lane Group Flow (vph)	0	668	0	0	837	0	0	491	0	0	465	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		807			912			1271			618	
v/s Ratio Prot								c0.04				
v/s Ratio Perm		0.33			c0.37			0.14			c0.23	
v/c Ratio		0.83			0.92			0.39			0.96dl	
Uniform Delay, d1		17.5			18.5			12.0			20.3	
Progression Factor		1.74			1.00			1.00			0.89	
Incremental Delay, d2		9.4			15.5			0.9			8.3	
Delay (s)		39.7			34.0			12.9			26.3	
Level of Service		D			C			B			C	
Approach Delay (s)		39.7			34.0			12.9			26.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	29.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	724	119	45	759	0	137	0	70	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2976			3032			1583				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2976			2543			1310				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	804	132	50	843	0	152	0	78	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	918	0	0	893	0	0	209	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1918			932			233				
v/s Ratio Prot		c0.31										
v/s Ratio Perm					c0.35			c0.16				
v/c Ratio		0.48			0.96			0.90				
Uniform Delay, d1		8.2			27.8			36.2				
Progression Factor		0.04			1.57			1.00				
Incremental Delay, d2		0.4			18.9			37.6				
Delay (s)		0.7			62.5			73.8				
Level of Service		A			E			E				
Approach Delay (s)		0.7			62.5			73.8			0.0	
Approach LOS		A			E			E			A	

Intersection Summary			
HCM Average Control Delay	35.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	123	502	188	274	646	183	103	20	185	78	7	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1756		1629	1714	1457
Flt Permitted	0.32	1.00		0.20	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	508	3020		339	3257	1457		1581		690	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	137	558	209	304	718	203	114	22	206	87	8	86
RTOR Reduction (vph)	0	42	0	0	0	104	0	74	0	0	0	46
Lane Group Flow (vph)	137	725	0	304	718	99	0	268	0	87	8	40
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	40.0	30.6		47.6	35.2	43.8		20.8		32.4	32.4	41.8
Effective Green, g (s)	40.0	30.6		47.6	35.2	43.8		20.8		32.4	32.4	41.8
Actuated g/C Ratio	0.44	0.34		0.53	0.39	0.49		0.23		0.36	0.36	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	331	1027		380	1274	709		365		338	617	677
v/s Ratio Prot	0.04	0.24		c0.12	0.22	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.17		0.07		0.02
v/c Ratio	0.41	0.71		0.80	0.56	0.14		0.73		0.26	0.01	0.06
Uniform Delay, d1	15.4	25.8		14.8	21.4	12.7		32.0		21.2	18.5	13.3
Progression Factor	1.91	1.58		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	3.7		12.0	1.8	0.1		8.0		0.4	0.0	0.1
Delay (s)	30.5	44.5		26.8	23.2	12.8		40.0		21.6	18.5	13.3
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		42.3			22.4			40.0			17.5	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	247	6	531	0	0	0	0	32	0	572
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	274	7	590	0	0	0	0	36	0	636
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	590			576			884	1179	288	891	1179	295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	590			576			884	1179	288	891	1179	295
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	85	100	8
cM capacity (veh/h)	961			973			19	184	700	231	184	692

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	274	203	393	36	636
Volume Left	0	0	0	7	0	36	0
Volume Right	0	0	274	0	0	0	636
cSH	1700	1700	1700	973	1700	231	692
Volume to Capacity	0.17	0.17	0.16	0.01	0.23	0.15	0.92
Queue Length 95th (ft)	0	0	0	1	0	13	307
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	23.4	41.6
Lane LOS				A		C	E
Approach Delay (s)	0.0			0.1		40.6	
Approach LOS						E	

Intersection Summary			
Average Delay	12.9		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	550	0	537	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	611	0	597	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	306	306	597
Volume Left (vph)	306	306	597
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	7.0	7.0	5.8
Degree Utilization, x	0.59	0.59	0.95
Capacity (veh/h)	513	513	618
Control Delay (s)	18.3	18.3	49.2
Approach Delay (s)	18.3		49.2
Approach LOS	C		E

Intersection Summary			
Delay	33.5		
HCM Level of Service	D		
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	353	46	127	326	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3094		1574	3149						3014	
Flt Permitted		1.00		0.44	1.00						0.97	
Satd. Flow (perm)		3094		730	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	392	51	141	362	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	431	0	141	362	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1310		520	1815						957	
v/s Ratio Prot		c0.14		c0.03	0.11						c0.04	
v/s Ratio Perm				0.12								
v/c Ratio		0.33		0.27	0.20						0.12	
Uniform Delay, d1		16.4		11.5	8.6						20.6	
Progression Factor		1.00		0.27	0.24						1.00	
Incremental Delay, d2		0.7		1.2	0.2						0.2	
Delay (s)		17.1		4.4	2.3						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.1			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	357	0	0	404	76	49	65	45	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3074			4413				
Flt Permitted	0.38	1.00			1.00			0.98				
Satd. Flow (perm)	650	3257			3074			4413				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	397	0	0	449	84	54	72	50	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	34	0	0	0	0
Lane Group Flow (vph)	76	397	0	0	515	0	0	142	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	482	1839			1266			1402				
v/s Ratio Prot	0.02	c0.12			c0.17			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.22			0.41			0.10				
Uniform Delay, d1	12.2	9.2			17.7			20.4				
Progression Factor	0.33	0.32			1.00			1.00				
Incremental Delay, d2	0.7	0.3			1.0			0.1				
Delay (s)	4.6	3.2			18.6			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.5			18.6			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	323	39	34	247	31	118	85	61	58	91	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			0.99			0.97			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2982			2979			1787			1750	
Flt Permitted		0.89			0.87			0.75			0.88	
Satd. Flow (perm)		2664			2613			1378			1560	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	359	43	38	274	34	131	94	68	64	101	140
RTOR Reduction (vph)	0	12	0	0	13	0	0	17	0	0	47	0
Lane Group Flow (vph)	0	433	0	0	333	0	0	276	0	0	258	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		943			925			678			768	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.13			c0.20			0.17	
v/c Ratio		0.46			0.36			0.41			0.34	
Uniform Delay, d1		16.2			15.6			10.5			10.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.6			1.1			1.8			1.2	
Delay (s)		17.8			16.6			12.3			11.2	
Level of Service		B			B			B			B	
Approach Delay (s)		17.8			16.6			12.3			11.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	202	39	50	176	62	71	1009	70	75	430	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	3005		1592	3512		1486	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.58	1.00		0.43	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	954	3005		975	3512		673	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	206	213	41	53	185	65	75	1062	74	79	453	92
RTOR Reduction (vph)	0	19	0	0	41	0	0	0	43	0	0	56
Lane Group Flow (vph)	206	235	0	53	209	0	75	1062	31	79	453	36
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	990		373	1157		323	1180	523	144	1169	493
v/s Ratio Prot	c0.03	0.08		0.01	0.06		0.01	c0.35		c0.03	0.15	
v/s Ratio Perm	c0.17			0.04			0.09		0.02	0.21		0.03
v/c Ratio	0.56	0.24		0.14	0.18		0.23	0.90	0.06	0.55	0.39	0.07
Uniform Delay, d1	21.3	20.7		18.4	20.3		15.0	24.4	16.3	17.5	18.7	16.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	2.00	0.61	0.80
Incremental Delay, d2	6.2	0.6		0.8	0.3		1.7	11.0	0.2	12.9	0.9	0.3
Delay (s)	27.5	21.3		19.2	20.7		16.7	35.5	16.5	47.9	12.3	13.4
Level of Service	C	C		B	C		B	D	B	D	B	B
Approach Delay (s)		24.1			20.4			33.1			16.9	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	26.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	256	18	14	216	8	35	121	25	20	59	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1929	1382		1950	1331		1973	1452		1928	1430
Flt Permitted		0.94	1.00		0.98	1.00		0.94	1.00		0.93	1.00
Satd. Flow (perm)		1823	1382		1910	1331		1866	1452		1811	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	269	19	15	227	8	37	127	26	21	62	44
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	26
Lane Group Flow (vph)	0	311	9	0	242	4	0	164	11	0	83	18
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		841	638		882	614		775	603		752	594
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.13	0.00		c0.09	0.01		0.05	0.01
v/c Ratio		0.37	0.01		0.27	0.01		0.21	0.02		0.11	0.03
Uniform Delay, d1		11.4	9.5		10.8	9.4		12.2	11.2		11.6	11.3
Progression Factor		1.00	1.00		0.46	0.37		1.16	1.42		0.95	0.86
Incremental Delay, d2		1.3	0.0		0.8	0.0		0.6	0.1		0.3	0.1
Delay (s)		12.6	9.5		5.8	3.5		14.8	15.9		11.3	9.8
Level of Service		B	A		A	A		B	B		B	A
Approach Delay (s)		12.4			5.7			14.9			10.8	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	285	10	17	211	34	13	247	35	47	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3025		1520	2976		1520	2983		1520	2904	
Flt Permitted	0.95	1.00		0.55	1.00		0.68	1.00		0.54	1.00	
Satd. Flow (perm)	1520	3025		886	2976		1091	2983		871	2904	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	317	11	19	234	38	14	274	39	52	78	33
RTOR Reduction (vph)	0	4	0	0	20	0	0	17	0	0	19	0
Lane Group Flow (vph)	73	324	0	19	252	0	14	296	0	52	92	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1489		300	1007		453	1239		362	1206	
v/s Ratio Prot	c0.05	0.11			c0.08			c0.10			0.03	
v/s Ratio Perm				0.02			0.01			0.06		
v/c Ratio	0.45	0.22		0.06	0.25		0.03	0.24		0.14	0.08	
Uniform Delay, d1	27.2	9.4		14.5	15.5		11.3	12.3		11.8	11.5	
Progression Factor	0.85	0.49		0.85	0.82		0.54	0.55		1.15	1.16	
Incremental Delay, d2	8.3	0.3		0.4	0.6		0.1	0.4		0.8	0.1	
Delay (s)	31.5	4.9		12.8	13.4		6.2	7.2		14.4	13.4	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		9.8			13.4			7.2			13.7	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	253	85	242	216	43	43	297	56	25	185	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.96		1.00	0.97			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1520	2926		1520	2964			3171			3188	
Flt Permitted	0.58	1.00		0.95	1.00			0.90			0.89	
Satd. Flow (perm)	921	2926		1520	2964			2857			2857	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	281	94	269	240	48	48	330	62	28	206	28
RTOR Reduction (vph)	0	51	0	0	25	0	0	20	0	0	14	0
Lane Group Flow (vph)	41	324	0	269	263	0	0	420	0	0	248	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	283	900		140	1322			1099			1099	
v/s Ratio Prot		c0.11		c0.18	0.09							
v/s Ratio Perm	0.04							c0.15			0.09	
v/c Ratio	0.14	0.36		1.92	0.20			0.38			0.23	
Uniform Delay, d1	16.3	17.5		29.5	10.9			14.4			13.5	
Progression Factor	0.64	0.55		1.32	1.10			1.26			0.81	
Incremental Delay, d2	1.1	1.1		433.0	0.2			0.2			0.5	
Delay (s)	11.5	10.7		472.0	12.3			18.4			11.4	
Level of Service	B	B		F	B			B			B	
Approach Delay (s)		10.8			234.3			18.4			11.4	
Approach LOS		B			F			B			B	

Intersection Summary			
HCM Average Control Delay	87.2	HCM Level of Service	F
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	298	14	70	466	70	34	94	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1587			1566			3164				
Flt Permitted		0.97			0.92			0.99				
Satd. Flow (perm)		1535			1451			3164				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	331	16	78	518	78	38	104	180	0	0	0
RTOR Reduction (vph)	0	2	0	0	6	0	0	138	0	0	0	0
Lane Group Flow (vph)	0	363	0	0	668	0	0	184	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		989			935			735				
v/s Ratio Prot												
v/s Ratio Perm		0.24			c0.46			0.06				
v/c Ratio		0.37			0.71			0.25				
Uniform Delay, d1		5.4			7.6			20.3				
Progression Factor		1.70			1.00			1.00				
Incremental Delay, d2		1.0			4.6			0.8				
Delay (s)		10.1			12.3			21.1				
Level of Service		B			B			C				
Approach Delay (s)		10.1			12.3			21.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	96	364	469	44	66	134
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	101	383	494	46	69	141
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.87				0.87	0.87
vC, conflicting volume	561				1128	541
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	419				1072	396
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	89				63	75
cM capacity (veh/h)	932				185	557

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	484	540	69	141
Volume Left	101	0	69	0
Volume Right	0	46	0	141
cSH	932	1700	185	557
Volume to Capacity	0.11	0.32	0.37	0.25
Queue Length 95th (ft)	9	0	40	25
Control Delay (s)	3.0	0.0	35.6	13.6
Lane LOS	A		E	B
Approach Delay (s)	3.0	0.0	20.9	
Approach LOS			C	

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	472	1	27	675	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1661		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	524	1	30	750	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	525	0	0	780	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			606		
v/s Ratio Prot	c0.31					
v/s Ratio Perm				c0.47		
v/c Ratio	0.44			1.29		
Uniform Delay, d1	5.7			27.0		
Progression Factor	0.06			1.00		
Incremental Delay, d2	0.1			141.4		
Delay (s)	0.4			168.4		
Level of Service	A			F		
Approach Delay (s)	0.4			168.4	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	100.8	HCM Level of Service	F
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	184	193	25	561	0	0	0	0	3	0	263
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	204	214	28	623	0	0	0	0	3	0	292
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	623			204			991	991	209	781	883	623
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	623			204			991	991	209	781	883	623
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	31
cM capacity (veh/h)	968			985			62	241	803	282	279	424

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	136	283	651	3	292
Volume Left	0	0	28	3	0
Volume Right	0	214	0	0	292
cSH	1700	1700	985	282	424
Volume to Capacity	0.08	0.17	0.03	0.01	0.69
Queue Length 95th (ft)	0	0	2	1	127
Control Delay (s)	0.0	0.0	0.7	17.9	30.3
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	30.2	
Approach LOS				D	

Intersection Summary			
Average Delay	6.9		
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	187	0	586	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	208	0	651	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	104	104	651
Volume Left (vph)	104	104	651
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.9
Degree Utilization, x	0.20	0.20	0.88
Capacity (veh/h)	511	512	734
Control Delay (s)	10.3	10.3	32.1
Approach Delay (s)	10.3		32.1
Approach LOS	B		D

Intersection Summary			
Delay	26.8		
HCM Level of Service	D		
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	564	210	168	497	0	0	0	0	132	117	300
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3693	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3693	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	594	221	177	523	0	0	0	0	139	123	316
RTOR Reduction (vph)	0	0	124	0	0	0	0	0	0	0	98	93
Lane Group Flow (vph)	0	594	97	0	700	0	0	0	0	76	246	65
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.1	39.1		71.1					20.4	20.4	65.5
Effective Green, g (s)		39.1	39.1		71.1					20.4	20.4	65.5
Actuated g/C Ratio		0.24	0.24		0.44					0.13	0.13	0.41
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		728	294		1498					172	471	459
v/s Ratio Prot		c0.20			c0.21					0.06	c0.07	
v/s Ratio Perm			0.08									0.06
v/c Ratio		0.82	0.33		0.47					0.44	0.52	0.14
Uniform Delay, d1		57.1	49.7		31.2					64.5	65.3	29.6
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		9.8	3.0		0.1					1.8	1.1	0.1
Delay (s)		66.9	52.7		0.7					66.3	66.3	29.8
Level of Service		E	D		A					E	E	C
Approach Delay (s)		63.0			0.7			0.0			56.3	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	40.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	31.4
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	212	484	0	0	427	93	238	150	178	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.93				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	2975				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	2975				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	236	538	0	0	474	103	264	167	198	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	77	0	99	0	0	0	0
Lane Group Flow (vph)	236	538	0	0	474	26	216	314	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	80.9	80.9			33.6	33.6	18.6	18.6				
Effective Green, g (s)	80.9	80.9			33.6	33.6	18.6	18.6				
Actuated g/C Ratio	0.51	0.51			0.21	0.21	0.12	0.12				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	796	1702			661	306	178	346				
v/s Ratio Prot	0.15	c0.16			c0.15		c0.14	0.11				
v/s Ratio Perm						0.02						
v/c Ratio	0.30	0.32			0.72	0.08	1.21	0.91				
Uniform Delay, d1	23.0	23.3			58.8	50.8	70.7	69.9				
Progression Factor	0.07	0.07			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.1	0.1			3.7	0.1	136.5	26.3				
Delay (s)	1.7	1.7			62.5	50.9	207.2	96.1				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.7			60.4			134.3			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	60.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.9
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	220	452	75	56	186	54	88	824	148	93	448	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1538	1556	1327	1596	1724		1525	2931		1509	2870	
Flt Permitted	0.46	1.00	1.00	0.20	1.00		0.34	1.00		0.12	1.00	
Satd. Flow (perm)	749	1556	1327	340	1724		542	2931		192	2870	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	476	79	59	196	57	93	867	156	98	472	109
RTOR Reduction (vph)	0	0	53	0	12	0	0	16	0	0	22	0
Lane Group Flow (vph)	232	476	26	59	241	0	93	1007	0	98	559	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.3	29.3	29.3	33.3	27.8		39.6	34.1		39.6	34.1	
Effective Green, g (s)	34.3	30.3	29.3	31.3	27.8		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.38	0.34	0.33	0.35	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	340	527	435	182	536		277	1118		147	1095	
v/s Ratio Prot	c0.05	c0.31		0.02	0.14		0.02	c0.34		c0.03	0.19	
v/s Ratio Perm	0.22		0.02	0.10			0.12			0.25		
v/c Ratio	0.68	0.90	0.06	0.32	0.45		0.34	0.90		0.67	0.51	
Uniform Delay, d1	22.7	28.2	20.6	21.1	24.7		16.3	26.1		18.8	21.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.6	21.4	0.3	1.0	2.7		0.7	11.6		10.9	1.7	
Delay (s)	28.3	49.5	20.9	22.1	27.4		17.0	37.6		29.6	22.9	
Level of Service	C	D	C	C	C		B	D		C	C	
Approach Delay (s)		40.4			26.4			35.9			23.9	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	33.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	568	16	26	257	28	35	80	102	45	44	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.94			0.96	
Flt Protected		1.00	1.00		1.00	1.00		0.99			0.98	
Satd. Flow (prot)		1908	1482		1599	1198		1812			1823	
Flt Permitted		0.96	1.00		0.93	1.00		0.95			0.86	
Satd. Flow (perm)		1844	1482		1499	1198		1732			1604	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	598	17	27	271	29	37	84	107	47	46	41
RTOR Reduction (vph)	0	0	6	0	0	15	0	49	0	0	24	0
Lane Group Flow (vph)	0	644	11	0	298	14	0	179	0	0	110	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		908	730		738	590		719			666	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.01		0.20	0.01		c0.10			0.07	
v/c Ratio		0.71	0.01		0.40	0.02		0.25			0.17	
Uniform Delay, d1		12.9	8.4		10.5	8.5		12.4			11.9	
Progression Factor		1.00	1.00		1.90	2.84		1.00			1.37	
Incremental Delay, d2		4.7	0.0		0.1	0.0		0.8			0.5	
Delay (s)		17.5	8.5		20.0	24.1		13.2			16.8	
Level of Service		B	A		C	C		B			B	
Approach Delay (s)		17.3			20.4			13.2			16.8	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	627	24	27	238	8	41	228	108	18	53	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1392		1581	1497		1755	1390		1656	
Flt Permitted		0.93	1.00		0.35	1.00		0.95	1.00		0.93	
Satd. Flow (perm)		1545	1392		562	1497		1677	1390		1559	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	660	25	28	251	8	43	240	114	19	56	32
RTOR Reduction (vph)	0	0	8	0	0	5	0	0	41	0	16	0
Lane Group Flow (vph)	0	739	17	0	279	3	0	283	73	0	91	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		547	493		199	530		826	684		768	
v/s Ratio Prot												
v/s Ratio Perm		0.48	0.01		c0.50	0.00		c0.17	0.05		0.06	
v/c Ratio		1.35	0.03		1.40	0.01		0.34	0.11		0.12	
Uniform Delay, d1		21.0	13.7		21.0	13.6		10.1	8.8		8.9	
Progression Factor		1.59	1.78		0.80	0.80		0.39	0.25		1.09	
Incremental Delay, d2		167.4	0.1		207.4	0.0		0.8	0.2		0.3	
Delay (s)		200.8	24.6		224.1	10.9		4.7	2.4		10.0	
Level of Service		F	C		F	B		A	A		A	
Approach Delay (s)		195.1			218.2			4.0			10.0	
Approach LOS		F			F			A			A	

Intersection Summary			
HCM Average Control Delay	137.8	HCM Level of Service	F
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	676	21	31	9	18	15	26	363	19	9	220	226
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.98			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.95			0.99			1.00	0.85
Flt Protected		0.95	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1750	1390		1761			1979			1873	1328
Flt Permitted		0.72	1.00		0.62			0.97			0.98	1.00
Satd. Flow (perm)		1330	1390		1111			1934			1848	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	751	23	34	10	20	17	29	403	21	10	244	251
RTOR Reduction (vph)	0	0	10	0	13	0	0	3	0	0	0	127
Lane Group Flow (vph)	0	774	24	0	34	0	0	450	0	0	254	124
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		604	577		291			952			910	654
v/s Ratio Prot		c0.16										
v/s Ratio Perm		0.37	0.02		0.03			c0.23			0.14	0.09
v/c Ratio		1.28	0.04		0.12			0.47			0.28	0.19
Uniform Delay, d1		19.0	11.3		18.3			10.9			9.7	9.2
Progression Factor		1.14	1.51		1.00			0.59			0.51	1.01
Incremental Delay, d2		127.9	0.0		0.8			1.6			0.1	0.1
Delay (s)		149.5	17.1		19.1			8.0			5.1	9.4
Level of Service		F	B		B			A			A	A
Approach Delay (s)		143.9			19.1			8.0			7.2	
Approach LOS		F			B			A			A	

Intersection Summary			
HCM Average Control Delay	68.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	989	222	274	1130	0	0	0	0	275	201	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4322		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.13	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4322		224	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1041	234	288	1189	0	0	0	0	289	212	396
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	61	61
Lane Group Flow (vph)	0	1245	0	288	1189	0	0	0	0	234	392	149
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		48.1		69.3	69.3					23.7	23.7	23.7
Effective Green, g (s)		48.1		69.3	69.3					23.7	23.7	23.7
Actuated g/C Ratio		0.46		0.66	0.66					0.23	0.23	0.23
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1980		365	2129					320	612	306
v/s Ratio Prot		0.29		c0.13	0.37							
v/s Ratio Perm				c0.40						c0.16	0.14	0.11
v/c Ratio		0.63		0.79	0.56					0.73	0.64	0.49
Uniform Delay, d1		21.7		19.0	9.6					37.7	36.8	35.4
Progression Factor		1.00		0.96	1.64					1.00	1.00	1.00
Incremental Delay, d2		1.5		6.1	0.6					8.6	2.4	1.4
Delay (s)		23.2		24.4	16.4					46.3	39.2	36.8
Level of Service		C		C	B					D	D	D
Approach Delay (s)		23.2			17.9			0.0			40.5	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	25.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	953	0	0	855	234	549	365	484	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.99		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1449		4390				
Flt Permitted	0.18	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	568	3138			3119	1449		4390				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	327	1003	0	0	900	246	578	384	509	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	105	0	88	0	0	0	0
Lane Group Flow (vph)	327	1003	0	0	900	141	0	1383	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	62.8	62.8			45.3	45.3		30.2				
Effective Green, g (s)	62.8	62.8			45.3	45.3		30.2				
Actuated g/C Ratio	0.60	0.60			0.43	0.43		0.29				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	597	1877			1346	625		1263				
v/s Ratio Prot	0.06	c0.32			c0.29							
v/s Ratio Perm	0.27					0.10		0.31				
v/c Ratio	0.55	0.53			0.67	0.23		1.09				
Uniform Delay, d1	12.8	12.5			23.9	18.8		37.4				
Progression Factor	0.61	0.77			0.97	1.49		1.00				
Incremental Delay, d2	0.9	0.9			1.6	0.5		55.3				
Delay (s)	8.7	10.5			24.7	28.5		92.7				
Level of Service	A	B			C	C		F				
Approach Delay (s)		10.1			25.5			92.7			0.0	
Approach LOS		B			C			F			A	

Intersection Summary			
HCM Average Control Delay	45.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	743	226	78	796	44	226	178	40	57	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1603	3232		1446	3007		1544	2782	
Flt Permitted	0.13	1.00	1.00	0.36	1.00		0.54	1.00		0.61	1.00	
Satd. Flow (perm)	217	3061	1291	600	3232		819	3007		990	2782	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	782	238	82	838	46	238	187	42	60	117	96
RTOR Reduction (vph)	0	0	97	0	4	0	0	21	0	0	80	0
Lane Group Flow (vph)	111	782	141	82	880	0	238	208	0	60	133	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	62.7	52.7	62.0	40.6	34.1		29.4	20.1		24.2	17.5	
Effective Green, g (s)	62.7	52.7	62.0	40.6	34.1		29.4	20.1		24.2	17.5	
Actuated g/C Ratio	0.60	0.50	0.59	0.39	0.32		0.28	0.19		0.23	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	452	1536	762	294	1050		285	576		264	464	
v/s Ratio Prot	c0.06	c0.26	0.02	0.02	c0.27		c0.07	0.07		0.01	0.05	
v/s Ratio Perm	0.09		0.09	0.09			c0.16			0.04		
v/c Ratio	0.25	0.51	0.18	0.28	0.84		0.84	0.36		0.23	0.29	
Uniform Delay, d1	12.1	17.5	9.9	20.8	32.9		34.1	36.9		32.3	38.3	
Progression Factor	0.92	1.02	1.77	1.00	1.00		0.94	0.89		1.00	1.00	
Incremental Delay, d2	0.9	0.8	0.1	0.5	8.0		18.0	1.3		0.4	1.2	
Delay (s)	12.0	18.7	17.5	21.3	40.9		50.2	34.1		32.8	39.5	
Level of Service	B	B	B	C	D		D	C		C	D	
Approach Delay (s)		17.8			39.2			42.3			38.0	
Approach LOS		B			D			D			D	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	329	286	59	196	102	329	382	83	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.95		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1635	2916		1463	3036		1589	3237		1549	3135	
Flt Permitted	0.53	1.00		0.24	1.00		0.46	1.00		0.47	1.00	
Satd. Flow (perm)	914	2916		367	3036		772	3237		772	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	346	301	62	206	107	346	402	87	96	272	57
RTOR Reduction (vph)	0	144	0	0	61	0	0	17	0	0	17	0
Lane Group Flow (vph)	65	503	0	62	252	0	346	472	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	359	797		200	833		530	1292		338	935	
v/s Ratio Prot	0.01	c0.17		c0.02	0.08		c0.11	0.15		0.02	0.10	
v/s Ratio Perm	0.05			0.09			c0.22			0.08		
v/c Ratio	0.18	0.63		0.31	0.30		0.65	0.36		0.28	0.33	
Uniform Delay, d1	23.8	33.5		24.5	30.2		16.6	22.2		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.06	0.93	
Incremental Delay, d2	0.3	3.8		1.0	0.9		3.0	0.8		0.5	0.9	
Delay (s)	24.1	37.3		25.5	31.1		19.6	23.0		24.2	27.8	
Level of Service	C	D		C	C		B	C		C	C	
Approach Delay (s)		36.1			30.2			21.6			27.0	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	716	81	6	457	113	68	602	7	104	326	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.99			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2929			2896		1436	3186		1451	2788	
Flt Permitted		0.58			0.94		0.41	1.00		0.28	1.00	
Satd. Flow (perm)		1724			2728		624	3186		421	2788	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	188	796	90	7	508	126	76	669	8	116	362	117
RTOR Reduction (vph)	0	11	0	0	33	0	0	1	0	0	48	0
Lane Group Flow (vph)	0	1063	0	0	608	0	76	676	0	116	431	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		790			797		300	1078		232	944	
v/s Ratio Prot		c0.08					0.02	c0.21		c0.03	0.15	
v/s Ratio Perm		c0.48			0.22		0.09			0.17		
v/c Ratio		1.35			0.76		0.25	0.63		0.50	0.46	
Uniform Delay, d1		19.0			20.9		12.4	18.1		13.1	16.8	
Progression Factor		1.00			1.52		0.95	0.73		1.00	1.00	
Incremental Delay, d2		164.2			0.6		1.8	2.5		7.5	1.6	
Delay (s)		183.2			32.5		13.6	15.6		20.6	18.4	
Level of Service		F			C		B	B		C	B	
Approach Delay (s)		183.2			32.5			15.4			18.8	
Approach LOS		F			C			B			B	

Intersection Summary			
HCM Average Control Delay	78.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	334	48	73	165	13	38	661	101	10	378	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	1916		1618	1943		1658	3196		1138	3197	
Flt Permitted	0.64	1.00		0.39	1.00		0.50	1.00		0.30	1.00	
Satd. Flow (perm)	1126	1916		660	1943		870	3196		354	3197	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	54	344	49	75	170	13	39	681	104	10	390	46
RTOR Reduction (vph)	0	8	0	0	4	0	0	19	0	0	14	0
Lane Group Flow (vph)	54	385	0	75	179	0	39	766	0	10	422	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	416	707		244	717		415	1524		169	1525	
v/s Ratio Prot		c0.20			0.09			c0.24			0.13	
v/s Ratio Perm	0.05			0.11			0.04			0.03		
v/c Ratio	0.13	0.54		0.31	0.25		0.09	0.50		0.06	0.28	
Uniform Delay, d1	13.6	16.2		14.6	14.2		9.3	11.7		9.2	10.2	
Progression Factor	1.00	1.00		1.74	1.78		1.00	1.00		0.48	0.47	
Incremental Delay, d2	0.6	3.0		1.1	0.3		0.4	1.2		0.5	0.3	
Delay (s)	14.2	19.2		26.4	25.6		9.8	12.9		4.9	5.2	
Level of Service	B	B		C	C		A	B		A	A	
Approach Delay (s)		18.6			25.8			12.7			5.2	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	761	200	621	17	3	14	3	47	30	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			1.00		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.98		
Flt Protected	1.00		0.99				0.99			0.96		
Satd. Flow (prot)	2956		2954				1732			1908		
Flt Permitted	1.00		0.55				0.94			0.79		
Satd. Flow (perm)	2956		1640				1643			1562		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	801	211	654	18	3	15	3	49	32	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	801	0	881	0	0	0	32	0	0	35	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom				Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7				2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		803				354			336		
v/s Ratio Prot	0.27		c0.10									
v/s Ratio Perm			c0.35				0.02			c0.02		
v/c Ratio	0.98		1.10				0.09			0.10		
Uniform Delay, d1	23.3		19.0				20.4			20.5		
Progression Factor	1.34		0.74				1.00			1.00		
Incremental Delay, d2	5.6		60.5				0.5			0.6		
Delay (s)	36.9		74.6				20.9			21.1		
Level of Service	D		E				C			C		
Approach Delay (s)	36.9		74.6				20.9			21.1		
Approach LOS	D		E				C			C		

Intersection Summary			
HCM Average Control Delay	166.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	106.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	461
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1429	
Flt Permitted	1.00	
Satd. Flow (perm)	1429	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1	485
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	486	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.34	
v/s Ratio Perm		
v/c Ratio	2.21	
Uniform Delay, d1	27.5	
Progression Factor	0.78	
Incremental Delay, d2	556.9	
Delay (s)	578.4	
Level of Service	F	
Approach Delay (s)	578.4	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	194	1172	684	81	139	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3234	3205		1629	1457
Flt Permitted		0.65	1.00		0.95	1.00
Satd. Flow (perm)		2129	3205		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	216	1302	760	90	154	173
RTOR Reduction (vph)	0	0	14	0	0	128
Lane Group Flow (vph)	0	1518	836	0	154	45
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1310	1972		426	381
v/s Ratio Prot			0.26		c0.09	
v/s Ratio Perm		c0.71				0.03
v/c Ratio		1.16	0.42		0.36	0.12
Uniform Delay, d1		12.5	6.5		19.6	18.3
Progression Factor		1.45	1.27		0.91	0.85
Incremental Delay, d2		72.3	0.6		2.4	0.6
Delay (s)		90.5	8.9		20.1	16.1
Level of Service		F	A		C	B
Approach Delay (s)		90.5	8.9		18.0	
Approach LOS		F	A		B	

Intersection Summary			
HCM Average Control Delay	56.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	1231	703	202	174	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2920		1464	1373
Flt Permitted		0.87	1.00		0.95	1.00
Satd. Flow (perm)		2566	2920		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	1296	740	213	183	59
RTOR Reduction (vph)	0	0	41	0	0	42
Lane Group Flow (vph)	0	1352	912	0	183	17
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1500	1707		428	401
v/s Ratio Prot			0.31		c0.12	
v/s Ratio Perm		c0.53				0.01
v/c Ratio		0.90	0.53		0.43	0.04
Uniform Delay, d1		11.9	8.2		18.6	16.5
Progression Factor		0.89	0.58		0.95	1.39
Incremental Delay, d2		1.0	0.6		3.0	0.2
Delay (s)		11.5	5.3		20.8	23.1
Level of Service		B	A		C	C
Approach Delay (s)		11.5	5.3		21.4	
Approach LOS		B	A		C	

Intersection Summary			
HCM Average Control Delay	10.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1257	160	161	663	423	438
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.98		1.00	1.00	0.93	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	2248		1770	2436	1748	
Flt Permitted	1.00		0.13	1.00	0.98	
Satd. Flow (perm)	2248		240	2436	1748	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1283	163	164	677	432	447
RTOR Reduction (vph)	7	0	0	0	18	0
Lane Group Flow (vph)	1439	0	164	677	861	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1072		114	1162	645	
v/s Ratio Prot	0.64			0.28	c0.49	
v/s Ratio Perm			c0.68			
v/c Ratio	1.34		1.44	0.58	1.34	
Uniform Delay, d1	17.0		17.0	12.3	20.5	
Progression Factor	1.55		1.00	1.00	1.00	
Incremental Delay, d2	157.4		240.0	2.1	161.3	
Delay (s)	183.8		257.0	14.5	181.8	
Level of Service	F		F	B	F	
Approach Delay (s)	183.8			61.7	181.8	
Approach LOS	F			E	F	

Intersection Summary			
HCM Average Control Delay	150.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	138.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	725	89	258	1516	9	72	0	187	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.14	1.00	1.00	0.26	1.00	1.00		0.76	1.00		0.70	
Satd. Flow (perm)	285	3213	1422	435	3138	1366		1309	1443		719	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	806	99	287	1684	10	80	0	208	1	0	0
RTOR Reduction (vph)	0	0	48	0	0	2	0	0	182	0	0	0
Lane Group Flow (vph)	1	806	51	287	1684	8	0	80	26	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	43.7	43.7	43.7	66.4	66.4	66.4		10.6	10.6		10.6	
Effective Green, g (s)	43.7	43.7	43.7	66.4	66.4	66.4		10.6	10.6		10.6	
Actuated g/C Ratio	0.51	0.51	0.51	0.78	0.78	0.78		0.12	0.12		0.12	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	147	1652	731	607	2451	1067		163	180		90	
v/s Ratio Prot		0.25		0.11	c0.54							
v/s Ratio Perm	0.00		0.04	0.26		0.01		c0.06	0.02		0.00	
v/c Ratio	0.01	0.49	0.07	0.47	0.69	0.01		0.49	0.14		0.01	
Uniform Delay, d1	10.1	13.4	10.4	4.1	4.4	2.0		34.7	33.2		32.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.1	1.0	0.2	0.6	0.8	0.0		2.3	0.4		0.0	
Delay (s)	10.2	14.4	10.6	4.7	5.2	2.1		37.0	33.5		32.7	
Level of Service	B	B	B	A	A	A		D	C		C	
Approach Delay (s)		14.0			5.1			34.5			32.7	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	13	819	851	45	24	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3017		1482	
Flt Permitted		0.93	1.00		0.97	
Satd. Flow (perm)		2834	3017		1482	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	910	946	50	27	12
RTOR Reduction (vph)	0	0	4	0	11	0
Lane Group Flow (vph)	0	924	992	0	28	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1039	2145		115	
v/s Ratio Prot			c0.33		c0.02	
v/s Ratio Perm		c0.33				
v/c Ratio		0.89	0.46		0.24	
Uniform Delay, d1		26.8	5.6		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		11.3	0.2		4.9	
Delay (s)		38.1	0.3		44.0	
Level of Service		D	A		D	
Approach Delay (s)		38.1	0.3		44.0	
Approach LOS		D	A		D	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	430	1	27	568	80	0	0	1	45	3	136
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1726			3232			1432			1610	1282
Flt Permitted		0.76			0.89			1.00			0.93	1.00
Satd. Flow (perm)		1331			2895			1432			1569	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	478	1	30	631	89	0	0	1	50	3	151
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	101
Lane Group Flow (vph)	0	579	0	0	738	0	0	0	0	0	53	50
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			custom			Perm			pm+pt		Perm
Protected Phases		4			3 4			1		2	1 2	
Permitted Phases	4			3	3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			49.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			49.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.58			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		485			1669			152			469	422
v/s Ratio Prot								0.00			0.02	
v/s Ratio Perm		c0.43			c0.25						0.01	c0.04
v/c Ratio		1.19			0.44			0.00			0.11	0.12
Uniform Delay, d1		27.0			10.2			34.0			21.9	19.9
Progression Factor		1.00			0.22			1.00			1.00	1.00
Incremental Delay, d2		106.0			0.1			0.0			0.5	0.6
Delay (s)		133.0			2.3			34.0			22.4	20.5
Level of Service		F			A			C			C	C
Approach Delay (s)		133.0			2.3			34.0			21.0	
Approach LOS		F			A			C			C	

Intersection Summary			
HCM Average Control Delay	54.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	1014	58	36	35	48	23	26	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.95			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1557	3022		1587	3021			1816			1706	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	277	3022		604	3021			1649			1630	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1067	61	38	37	51	24	27	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	21	0
Lane Group Flow (vph)	41	653	0	37	1122	0	0	93	0	0	122	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	145	1581		316	1580			583			577	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.15			0.06				0.06			c0.07	
v/c Ratio	0.28	0.41		0.12	0.71			0.16			0.21	
Uniform Delay, d1	8.7	9.4		7.9	11.8			14.4			14.7	
Progression Factor	1.00	1.00		0.70	1.41			1.00			1.00	
Incremental Delay, d2	4.8	0.8		0.7	2.4			0.6			0.8	
Delay (s)	13.5	10.2		6.2	19.1			15.0			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.6			15.0			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	789	5	32	637	41	0	0	0	586	89	379
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.93	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	793	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	331	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	831	5	34	671	43	0	0	0	617	94	399
RTOR Reduction (vph)	0	0	0	0	0	19	0	0	0	0	0	166
Lane Group Flow (vph)	26	836	0	34	671	24	0	0	0	617	94	233
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	159	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.21					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.05						0.16
v/c Ratio	0.16	0.75		0.05	0.37	0.08				0.81	0.24	0.68
Uniform Delay, d1	31.6	38.7		15.2	15.8	13.1				47.4	40.7	45.6
Progression Factor	0.85	0.86		0.33	0.75	1.24				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.4				9.3	1.4	10.5
Delay (s)	28.9	37.6		5.1	12.2	16.6				56.7	42.1	56.1
Level of Service	C	D		A	B	B				E	D	E
Approach Delay (s)		37.3			12.2			0.0			55.2	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	815	220	54	578	287	102	251	55	39	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3262		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3262		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	358	858	232	57	608	302	107	264	58	41	0	32
RTOR Reduction (vph)	0	18	0	0	0	228	0	0	42	0	0	30
Lane Group Flow (vph)	358	1072	0	57	608	74	0	371	16	41	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1706		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.32	0.63		0.54	0.79	0.30		0.52	0.06	0.77		0.04
Uniform Delay, d1	31.9	22.0		59.2	45.8	39.8		45.1	40.5	60.1		57.4
Progression Factor	0.95	0.16		1.00	1.00	1.00		0.94	0.99	1.00		1.00
Incremental Delay, d2	0.5	1.1		18.7	8.0	3.0		2.7	0.4	49.7		0.4
Delay (s)	30.7	4.7		77.9	53.8	42.8		45.3	40.6	109.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		11.1			51.8			44.7			87.0	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	893	166	105	839	0	74	0	87	9	15	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.98	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1649	3149		1388		1451	1803	1857	
Flt Permitted		1.00		0.17	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		299	3149		1082		1451	1803	1857	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	992	184	117	932	0	82	0	97	10	17	8
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	66	0	5	0
Lane Group Flow (vph)	0	1161	0	117	932	0	82	0	31	10	20	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		179	1889		346		464	577	594	
v/s Ratio Prot		0.39			0.30						0.01	
v/s Ratio Perm				c0.39			c0.08		0.02	0.01		
v/c Ratio		0.65		0.65	0.49		0.24		0.07	0.02	0.03	
Uniform Delay, d1		13.1		13.2	11.4		25.0		23.6	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.8		17.1	0.9		1.6		0.3	0.1	0.1	
Delay (s)		14.9		30.3	12.3		26.6		23.9	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		14.9			14.3			25.2			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	301	0	1230	215	686	0	0	792	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4271	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4271	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	307	0	1255	219	700	0	0	808	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	307	0	1255	219	700	0	0	1308	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.20		c0.82	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.67		2.87	0.47	0.26			1.16dr	
Uniform Delay, d1				32.6		37.5	29.6	8.6			37.0	
Progression Factor				1.00		1.00	0.64	2.11			1.00	
Incremental Delay, d2				7.8		848.6	2.8	0.2			35.5	
Delay (s)				40.4		886.1	21.8	18.4			72.5	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			719.9			19.2			72.5	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	326.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	322	770	145	0	0	0	0	579	410	359	734	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3157						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3157						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	332	794	149	0	0	0	0	597	423	370	757	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	299	962	0	0	0	0	0	597	423	370	757	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.14		c0.23	0.16	
v/s Ratio Perm	0.20	0.30							c0.19			
v/c Ratio	0.61	0.94						0.51	0.71	0.78	0.27	
Uniform Delay, d1	29.9	34.5						32.7	34.8	33.9	10.5	
Progression Factor	1.00	1.00						1.14	1.14	0.86	0.22	
Incremental Delay, d2	5.6	17.2						1.4	6.1	4.8	0.1	
Delay (s)	35.5	51.7						38.5	45.6	34.1	2.4	
Level of Service	D	D						D	D	C	A	
Approach Delay (s)		47.9			0.0			41.5			12.8	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	25	24	11	164	0	0	149	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.54	1.00			1.00	
Satd. Flow (perm)				1688	3132		974	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	322	28	27	12	182	0	0	166	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	322	37	0	12	182	0	0	171	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		634	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.10			0.09	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.17			0.16	
Uniform Delay, d1				24.5	20.0		10.5	8.0			9.8	
Progression Factor				1.00	1.00		1.04	1.18			1.00	
Incremental Delay, d2				4.9	0.1		0.1	0.3			0.3	
Delay (s)				29.4	20.1		11.0	9.7			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			28.0			9.8			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	6	0	14	0	149	45	46	393	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1571			1718		1590	1860	
Flt Permitted	0.74	1.00			0.96			1.00		0.59	1.00	
Satd. Flow (perm)	1515	1735			1529			1718		987	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	6	0	15	0	157	47	48	414	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	13	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	11	0	0	191	0	48	414	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	481	551			486			808		630	1094	
v/s Ratio Prot		c0.01						0.11		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.24		0.08	0.38	
Uniform Delay, d1	20.0	20.0			19.9			13.4		8.8	9.3	
Progression Factor	1.00	1.00			1.00			1.00		0.98	0.87	
Incremental Delay, d2	0.1	0.1			0.1			0.7		0.2	0.9	
Delay (s)	20.1	20.1			20.0			14.1		8.8	9.0	
Level of Service	C	C			C			B		A	A	
Approach Delay (s)		20.1			20.0			14.1			9.0	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	48	42	12	193	288	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1752		1765	1782	1657	
Flt Permitted	0.97		0.50	1.00	1.00	
Satd. Flow (perm)	1752		937	1782	1657	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	47	13	214	320	31
RTOR Reduction (vph)	32	0	0	0	5	0
Lane Group Flow (vph)	68	0	13	214	346	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		519	987	918	
v/s Ratio Prot	c0.04			0.12	c0.21	
v/s Ratio Perm			0.01			
v/c Ratio	0.12		0.03	0.22	0.38	
Uniform Delay, d1	15.5		6.6	7.4	8.2	
Progression Factor	1.00		0.51	0.63	1.43	
Incremental Delay, d2	0.4		0.1	0.5	1.0	
Delay (s)	15.9		3.4	5.1	12.7	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			5.0	12.7	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	30.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	268	9	258	130	2	0	283	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3772		1693	1677			1738	1428
Flt Permitted					1.00		0.47	1.00			1.00	1.00
Satd. Flow (perm)					3772		844	1677			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	298	10	287	144	2	0	314	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	339	0	287	146	0	0	314	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		606	1006			777	638
v/s Ratio Prot					c0.09		c0.06	0.09			0.18	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.47	0.14			0.40	0.01
Uniform Delay, d1					22.5		13.7	7.4			15.9	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.6	0.3			1.6	0.0
Delay (s)					23.1		16.4	7.7			17.4	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.5			17.2	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	96	94	38	133	207	32	59	703	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3282		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.59	1.00	
Satd. Flow (perm)					1896		446	3282		1056	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	107	104	42	148	230	36	66	781	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	16	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	243	0	148	250	0	66	824	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1488		638	1572	
v/s Ratio Prot					c0.13		c0.04	0.08		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.17		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.1		8.2	14.7	
Progression Factor					1.00		0.83	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.2		0.3	1.3	
Delay (s)					22.9		17.0	10.2		8.5	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.7			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	277	24	159	590	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3173		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		599	3173		1004	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	292	25	167	621	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	8	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	309	0	167	666	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		335	1777		562	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.17		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.0		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.3		3.5	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.2			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	37	192	67	253	588	81
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	41	213	74	281	653	90

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	254	168	187	436	308
Volume Left (vph)	41	74	0	0	0
Volume Right (vph)	213	0	0	0	90
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.8	6.6	6.3	5.9	5.7
Degree Utilization, x	0.41	0.31	0.33	0.71	0.48
Capacity (veh/h)	591	528	546	602	622
Control Delay (s)	12.6	11.2	11.2	20.8	12.7
Approach Delay (s)	12.6	11.2		17.4	
Approach LOS	B	B		C	

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	376	18	22	409	76	78	55	68	354	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1421			1710	3251	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	932	1731	1421			257	3251	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	418	20	24	454	84	87	61	76	393	36
RTOR Reduction (vph)	0	0	0	12	0	0	36	0	0	0	7	0
Lane Group Flow (vph)	0	75	418	8	24	454	135	0	0	137	422	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		303	725	641	222	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.26					0.13	
v/s Ratio Perm		0.07		0.01	0.03		0.10			c0.53		
v/c Ratio		0.25	0.58	0.01	0.11	1.10	0.40			1.99	0.49	
Uniform Delay, d1		21.6	23.4	17.8	31.3	40.0	33.7			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	3.3	0.0	1.0	74.8	3.5			491.0	2.0	
Delay (s)		23.5	26.7	17.9	32.3	114.8	37.2			529.5	34.4	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.9			91.3					154.2	
Approach LOS			C			F					F	

Intersection Summary			
HCM Average Control Delay	147.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	108	571	82	103	4	114	607	197
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.37	1.00				0.95	1.00	
Satd. Flow (perm)	670	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	120	634	91	114	4	127	674	219
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	120	827	0	0	0	131	867	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	175	850				334	514	
v/s Ratio Prot		0.25				0.08		
v/s Ratio Perm	0.18						c0.33	
v/c Ratio	0.69	0.97				0.39	1.69	
Uniform Delay, d1	34.9	38.4				36.8	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	19.7	25.0				3.4	317.6	
Delay (s)	54.6	63.4				40.3	359.9	
Level of Service	D	E				D	F	
Approach Delay (s)		62.3				319.0		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	601	0	0	493	60	85	52	20	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1951			1840				
Flt Permitted		0.90			1.00			0.97				
Satd. Flow (perm)		1524			1951			1840				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	668	0	0	548	67	94	58	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	740	0	0	615	0	0	174	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		938			1201			481				
v/s Ratio Prot					0.32							
v/s Ratio Perm		c0.49						0.09				
v/c Ratio		0.79			0.51			0.36				
Uniform Delay, d1		9.3			7.0			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.7			1.6			2.1				
Delay (s)		16.0			8.6			21.7				
Level of Service		B			A			C				
Approach Delay (s)		16.0			8.6			21.7			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	340	152	129	358	157	105	639	85	144	759	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1982	1434		1947	1444	1546	3040	1296	1506	3069	1252
Flt Permitted		0.30	1.00		0.70	1.00	0.23	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)		598	1434		1378	1444	373	3040	1296	455	3069	1252
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	358	160	136	377	165	111	673	89	152	799	99
RTOR Reduction (vph)	0	0	94	0	0	118	0	0	53	0	0	49
Lane Group Flow (vph)	0	433	66	0	513	47	111	673	36	152	799	50
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		377	587		394	413	272	1225	522	310	1248	509
v/s Ratio Prot		c0.11					0.03	0.22		c0.04	c0.26	
v/s Ratio Perm		0.36	0.05		c0.37	0.03	0.16		0.03	0.20		0.04
v/c Ratio		1.15	0.11		1.30	0.11	0.41	0.55	0.07	0.49	0.64	0.10
Uniform Delay, d1		31.0	19.2		37.5	27.7	16.4	24.0	19.3	16.1	25.0	19.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.75	1.55	2.62
Incremental Delay, d2		93.3	0.4		153.4	0.6	1.0	1.8	0.3	1.2	2.4	0.4
Delay (s)		124.3	19.6		190.9	28.2	17.4	25.8	19.5	29.4	41.1	50.9
Level of Service		F	B		F	C	B	C	B	C	D	D
Approach Delay (s)		96.0			151.3			24.1			40.3	
Approach LOS		F			F			C			D	

Intersection Summary			
HCM Average Control Delay	69.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	421	85	98	539	94	51	61	71	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1645			1649			1797				
Flt Permitted		0.83			0.85			0.99				
Satd. Flow (perm)		1367			1417			1797				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	468	94	109	599	104	57	68	79	0	0	0
RTOR Reduction (vph)	0	9	0	0	8	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	647	0	0	804	0	0	169	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		841			872			470				
v/s Ratio Prot												
v/s Ratio Perm		0.47			c0.57			0.09				
v/c Ratio		0.77			0.92			0.36				
Uniform Delay, d1		9.1			11.1			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.7			16.6			2.1				
Delay (s)		15.8			27.7			21.7				
Level of Service		B			C			C				
Approach Delay (s)		15.8			27.7			21.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	22.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	496	83	76	527	37	38	76	72	54	238	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1685	1382		1713	1417		1686	1455		1878	
Flt Permitted		0.89	1.00		0.84	1.00		0.82	1.00		0.94	
Satd. Flow (perm)		1504	1382		1442	1417		1412	1455		1774	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	522	87	80	555	39	40	80	76	57	251	59
RTOR Reduction (vph)	0	0	37	0	0	12	0	0	52	0	10	0
Lane Group Flow (vph)	0	578	50	0	635	27	0	120	24	0	357	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		862	792		827	812		452	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.38	0.04		c0.44	0.02		0.08	0.02		c0.20	
v/c Ratio		0.67	0.06		0.77	0.03		0.27	0.05		0.63	
Uniform Delay, d1		11.1	7.1		12.2	7.0		18.9	17.6		21.7	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		4.1	0.2		6.8	0.1		1.4	0.2		5.2	
Delay (s)		15.2	7.2		19.0	7.0		20.4	17.8		26.9	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		14.2			18.3			19.4			26.9	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	101.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	494	34	45	539	54	45	165	55	123	210	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1533	3066		1652	3730		1585	1663	1370	1568	1680	1397
Flt Permitted	0.35	1.00		0.39	1.00		0.57	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	562	3066		675	3730		953	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	549	38	50	599	60	50	183	61	137	233	37
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	37	0	0	22
Lane Group Flow (vph)	66	579	0	50	647	0	50	183	24	137	233	15
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	268	1462		322	1779		381	665	548	417	672	559
v/s Ratio Prot		c0.19			0.17			0.11			c0.14	
v/s Ratio Perm	0.12			0.07			0.05		0.02	0.13		0.01
v/c Ratio	0.25	0.40		0.16	0.36		0.13	0.28	0.04	0.33	0.35	0.03
Uniform Delay, d1	10.1	11.0		9.6	10.8		12.3	13.1	11.9	13.5	13.6	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.85	0.90	0.76	0.59	0.59	0.26
Incremental Delay, d2	2.2	0.8		1.0	0.6		0.7	1.0	0.2	2.0	1.4	0.1
Delay (s)	12.3	11.8		10.6	11.3		11.2	12.9	9.2	9.9	9.4	3.1
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.8			11.3			11.8			9.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	421	81	73	396	67	57	180	64	89	245	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1329	3137		1520	3128		1580	2919		1452	2997	
Flt Permitted	0.44	1.00		0.42	1.00		0.53	1.00		0.59	1.00	
Satd. Flow (perm)	617	3137		667	3128		882	2919		907	2997	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	443	85	77	417	71	60	189	67	94	258	84
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	42	0
Lane Group Flow (vph)	63	528	0	77	488	0	60	217	0	94	300	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	296	1506		320	1501		365	1207		375	1239	
v/s Ratio Prot		c0.17			0.16			0.07			0.10	
v/s Ratio Perm	0.10			0.12			0.07			c0.10		
v/c Ratio	0.21	0.35		0.24	0.33		0.16	0.18		0.25	0.24	
Uniform Delay, d1	11.3	12.2		11.5	12.0		13.8	13.9		14.4	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.6		1.8	0.6		1.0	0.3		1.6	0.5	
Delay (s)	12.9	12.8		13.2	12.6		14.8	14.3		16.0	14.8	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.8			12.7			14.4			15.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	447	62	32	523	48	86	203	60	76	473	110
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1595	1653		1371	1973		1534	2998		1535	3012	
Flt Permitted	0.24	1.00		0.30	1.00		0.28	1.00		0.58	1.00	
Satd. Flow (perm)	402	1653		435	1973		451	2998		939	3012	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	471	65	34	551	51	91	214	63	80	498	116
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	105	536	0	34	602	0	91	277	0	80	614	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	43.9	39.3		40.7	37.7		26.7	21.8		26.7	21.8	
Effective Green, g (s)	43.9	37.3		40.7	35.7		26.7	19.8		26.7	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	272	725		241	829		204	698		329	702	
v/s Ratio Prot	c0.02	c0.32		0.00	0.31		c0.03	0.09		0.01	c0.20	
v/s Ratio Perm	0.18			0.06			0.11			0.06		
v/c Ratio	0.39	0.74		0.14	0.73		0.45	0.40		0.24	0.87	
Uniform Delay, d1	23.8	19.8		20.5	20.6		29.2	27.6		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	6.7		0.3	5.5		1.6	1.7		0.4	14.3	
Delay (s)	24.7	26.5		20.8	26.1		30.8	29.2		22.2	45.7	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		26.2			25.8			29.6			43.0	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	77	399	65	117	510	118	67	158	58	127	367	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3681			3131		1652	3237		1549	3027	
Flt Permitted		0.71			0.72		0.42	1.00		0.60	1.00	
Satd. Flow (perm)		2616			2271		737	3237		983	3027	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	86	443	72	130	567	131	74	176	64	141	408	91
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	601	0	0	828	0	74	240	0	141	499	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1186			1030		324	1424		433	1332	
v/s Ratio Prot								0.07			c0.16	
v/s Ratio Perm		0.23			c0.36		0.10			0.14		
v/c Ratio		0.51			0.80		0.23	0.17		0.33	0.37	
Uniform Delay, d1		14.5			17.6		13.1	12.7		13.7	14.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.5			6.7		1.6	0.3		2.0	0.8	
Delay (s)		16.1			24.3		14.7	13.0		15.7	14.9	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		16.1			24.3			13.4			15.1	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	877	6	20	585	249	1	1	9	213	1	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.38	1.00		0.25	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	647	3206		432	3320	1485		1519			2533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	974	7	22	650	277	1	1	10	237	1	89
RTOR Reduction (vph)	0	0	0	0	0	103	0	7	0	0	52	0
Lane Group Flow (vph)	109	981	0	22	650	174	0	5	0	0	275	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	405	2008		271	2080	930		402			671	
v/s Ratio Prot		c0.31			0.20							
v/s Ratio Perm	0.17			0.05		0.12		0.00			c0.11	
v/c Ratio	0.27	0.49		0.08	0.31	0.19		0.01			0.41	
Uniform Delay, d1	6.2	7.4		5.4	6.4	5.8		19.9			22.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.6	0.9		0.6	0.4	0.4		0.0			1.7	
Delay (s)	7.8	8.3		6.0	6.8	6.3		20.0			24.0	
Level of Service	A	A		A	A	A		B			C	
Approach Delay (s)		8.2			6.6			20.0			24.0	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	73.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	131	228	124	94	163	56	144	907	90	125	825	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1505		1563	1585		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.21	1.00		0.20	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	743	1505		340	1585		317	3069	1337	263	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	240	131	99	172	59	152	955	95	132	868	109
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	51
Lane Group Flow (vph)	138	348	0	99	216	0	152	955	55	132	868	58
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	285	390		190	410		232	1264	551	213	1276	543
v/s Ratio Prot	0.03	c0.23		c0.04	0.14		c0.05	c0.31		0.04	0.28	
v/s Ratio Perm	0.11			0.12			0.26		0.04	0.25		0.04
v/c Ratio	0.48	0.89		0.52	0.53		0.66	0.76	0.10	0.62	0.68	0.11
Uniform Delay, d1	22.7	30.4		22.9	27.0		14.7	21.3	15.3	15.0	20.4	15.4
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.82	0.53	1.00	1.00	1.00
Incremental Delay, d2	5.8	25.2		9.9	4.8		12.2	3.8	0.3	12.8	2.9	0.4
Delay (s)	28.4	55.5		32.7	31.8		22.0	21.3	8.5	27.8	23.4	15.8
Level of Service	C	E		C	C		C	C	A	C	C	B
Approach Delay (s)		48.2			32.1			20.4			23.1	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	181	35	20	173	21	25	149	40	47	255	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.97			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1839			1849			1939			1974	
Flt Permitted		0.97			0.96			0.94			0.94	
Satd. Flow (perm)		1783			1791			1837			1868	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	187	36	21	178	22	26	154	41	48	263	52
RTOR Reduction (vph)	0	9	0	0	6	0	0	12	0	0	9	0
Lane Group Flow (vph)	0	237	0	0	215	0	0	209	0	0	354	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		741			744			848			862	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.11			c0.19	
v/c Ratio		0.32			0.29			0.25			0.41	
Uniform Delay, d1		12.8			12.6			10.6			11.6	
Progression Factor		1.00			0.70			1.18			1.00	
Incremental Delay, d2		1.1			1.0			0.7			1.4	
Delay (s)		13.9			9.8			13.2			13.1	
Level of Service		B			A			B			B	
Approach Delay (s)		13.9			9.8			13.2			13.1	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	193	38	25	180	19	49	200	31	43	214	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3059		1576	3119		1518	3119		1550	3076	
Flt Permitted	0.61	1.00		0.59	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	966	3059		985	3119		926	3119		968	3076	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	214	42	28	200	21	54	222	34	48	238	43
RTOR Reduction (vph)	0	25	0	0	12	0	0	14	0	0	18	0
Lane Group Flow (vph)	27	231	0	28	209	0	54	242	0	48	263	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	894		288	912		541	1823		566	1798	
v/s Ratio Prot		c0.08			0.07			0.08			c0.09	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.26		0.10	0.23		0.10	0.13		0.08	0.15	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.95	0.97		0.75	0.74		1.36	1.36		0.38	0.34	
Incremental Delay, d2	0.6	0.7		0.7	0.6		0.4	0.1		0.3	0.2	
Delay (s)	16.5	17.7		13.2	13.5		8.4	8.4		2.5	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.6			13.5			8.4			2.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	168	41	25	159	38	27	247	16	40	322	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	3058		1525	2937			1922			1938	
Flt Permitted	0.61	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1007	3058		974	2937			1823			1840	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	74	187	46	28	177	42	30	274	18	44	358	37
RTOR Reduction (vph)	0	28	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	74	205	0	28	194	0	0	319	0	0	434	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	403	1223		390	1175			869			878	
v/s Ratio Prot		0.07			0.07							
v/s Ratio Perm	c0.07			0.03				0.17			c0.24	
v/c Ratio	0.18	0.17		0.07	0.16			0.37			0.49	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.8			11.6	
Progression Factor	1.05	1.00		0.77	0.76			1.00			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.0	
Delay (s)	14.3	12.8		9.6	9.8			11.9			13.6	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		13.2			9.8			11.9			13.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	28	20	161	27	41	235	11	33	364	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1970		1584	1975			1981			1979	
Flt Permitted	0.57	1.00		0.65	1.00			0.90			0.96	
Satd. Flow (perm)	986	1970		1087	1975			1792			1912	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	31	22	179	30	46	261	12	37	404	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	154	0	22	209	0	0	319	0	0	504	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	303	606		334	608			1020			1088	
v/s Ratio Prot		0.08			c0.11							
v/s Ratio Perm	0.05			0.02				0.18			c0.26	
v/c Ratio	0.17	0.25		0.07	0.34			0.31			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.4			7.3			8.2	
Progression Factor	0.83	0.81		0.92	0.93			0.97			1.00	
Incremental Delay, d2	1.2	1.0		0.4	1.5			0.8			1.4	
Delay (s)	14.8	14.6		15.1	17.7			7.9			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.7			17.5			7.9			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	13	97	2	5	10	62	235	5	5	466	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1727		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.39	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1332	1727		1216	1808		660	1647	1428	1030	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	14	108	2	6	11	69	261	6	6	518	84
RTOR Reduction (vph)	0	78	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	60	44	0	2	9	0	69	261	4	6	518	56
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		337	501		396	988	857	618	1200	898
v/s Ratio Prot		0.03			0.01			0.16			c0.26	
v/s Ratio Perm	c0.05			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.16	0.09		0.01	0.02		0.17	0.26	0.00	0.01	0.43	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.8	6.2	5.2	5.2	7.0	5.4
Progression Factor	1.39	2.73		1.00	1.00		0.82	0.77	0.97	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.4		0.0	0.1		0.7	0.5	0.0	0.0	1.1	0.1
Delay (s)	25.6	48.1		17.1	17.1		5.5	5.3	5.1	5.3	8.2	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		40.7			17.1			5.3			7.8	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	253	163	178	204	0	0	0	0	110	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.41	1.00					0.95	1.00	
Satd. Flow (perm)		2905		722	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	266	172	187	215	0	0	0	0	116	495	397
RTOR Reduction (vph)	0	103	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	335	0	187	215	0	0	0	0	116	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		566	1805					545	1096	
v/s Ratio Prot		c0.12		c0.06	0.07					0.08	c0.25	
v/s Ratio Perm				0.11								
v/c Ratio		0.36		0.33	0.12					0.21	0.68	
Uniform Delay, d1		26.4		13.5	11.1					22.4	27.6	
Progression Factor		1.00		2.20	2.13					1.00	1.00	
Incremental Delay, d2		1.1		1.4	0.1					0.9	3.5	
Delay (s)		27.4		31.0	23.8					23.3	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.4			27.1			0.0			30.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	222	0	0	305	113	77	539	233	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2850		1767	1782	1560			
Flt Permitted	0.36	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	632	3196			2850		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	234	0	0	321	119	81	567	245	0	0	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	168	0	0	0
Lane Group Flow (vph)	148	234	0	0	403	0	81	567	77	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	703	1974			726		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.14		0.05	c0.32				
v/s Ratio Perm	0.05								0.05			
v/c Ratio	0.21	0.12			0.55		0.16	1.08	0.17			
Uniform Delay, d1	10.3	8.0			33.0		26.6	36.0	26.7			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			3.0		0.6	63.3	0.8			
Delay (s)	4.9	3.6			36.0		27.3	99.3	27.5			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			36.0			73.1			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	48.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	514	479	81	534	0	0	0	0	11	434	285
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3098		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3098		200	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	535	499	84	556	0	0	0	0	11	452	297
RTOR Reduction (vph)	0	168	0	0	0	0	0	0	0	0	0	196
Lane Group Flow (vph)	0	866	0	84	556	0	0	0	0	11	452	101
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		380	1917					543	1085	520
v/s Ratio Prot		c0.28		0.04	c0.17					0.01	c0.14	0.07
v/s Ratio Perm				0.08								
v/c Ratio		0.78		0.22	0.29					0.02	0.42	0.19
Uniform Delay, d1		28.4		14.4	10.6					21.9	25.4	23.3
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		5.3		0.9	0.3					0.1	1.2	0.8
Delay (s)		33.8		15.5	12.9					22.0	26.6	24.2
Level of Service		C		B	B					C	C	C
Approach Delay (s)		33.8			13.2			0.0			25.5	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	419	106	0	0	150	6	465	480	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3110			3170		1555	1653	1530			
Flt Permitted	0.64	0.71			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	992	2290			3170		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	432	109	0	0	155	6	479	495	60	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	216	325	0	0	158	0	479	495	22	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	678	1463			476		575	612	566			
v/s Ratio Prot	c0.11	0.08			c0.05		c0.31	0.30	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.32	0.22			0.33		0.83	0.81	0.04			
Uniform Delay, d1	14.1	13.5			38.0		28.7	28.3	20.1			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.9		13.3	11.0	0.1			
Delay (s)	4.1	3.6			39.9		42.0	39.3	20.3			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		3.8			39.9			39.5			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	220	103	153	273	121	84	699	87	102	884	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2940			2929		1508	3069	1309	1508	3099	1298
Flt Permitted		0.72			0.72		0.16	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		2137			2152		254	3069	1309	401	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	229	107	159	284	126	88	728	91	106	921	68
RTOR Reduction (vph)	0	40	0	0	31	0	0	0	56	0	0	33
Lane Group Flow (vph)	0	377	0	0	538	0	88	728	35	106	921	35
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		962			709		167	1210	508	222	1221	504
v/s Ratio Prot		c0.03					c0.02	0.24		0.02	c0.30	
v/s Ratio Perm		0.14			c0.25		0.20		0.03	0.18		0.03
v/c Ratio		0.39			0.76		0.53	0.60	0.07	0.48	0.75	0.07
Uniform Delay, d1		16.9			25.5		16.7	20.5	16.3	16.0	22.2	16.3
Progression Factor		1.00			1.00		1.36	0.69	0.62	1.11	1.16	1.74
Incremental Delay, d2		1.2			7.5		10.7	2.1	0.2	5.2	3.1	0.2
Delay (s)		18.1			33.0		33.5	16.2	10.4	22.9	29.0	28.6
Level of Service		B			C		C	B	B	C	C	C
Approach Delay (s)		18.1			33.0			17.3			28.4	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	327	0	0	424	88	53	44	34	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.98			0.96				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1731			1707			1653				
Flt Permitted		0.83			1.00			0.98				
Satd. Flow (perm)		1453			1707			1653				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	363	0	0	471	98	59	49	38	0	0	0
RTOR Reduction (vph)	0	0	0	0	12	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	447	0	0	557	0	0	126	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		849			998			483				
v/s Ratio Prot					c0.33							
v/s Ratio Perm		0.31						0.08				
v/c Ratio		0.53			0.56			0.26				
Uniform Delay, d1		8.1			8.3			17.6				
Progression Factor		1.00			0.76			1.00				
Incremental Delay, d2		2.3			2.0			1.3				
Delay (s)		10.4			8.3			18.9				
Level of Service		B			A			B				
Approach Delay (s)		10.4			8.3			18.9			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	384	39	39	370	50	31	118	39	53	150	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.99			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1955			1941			2969			2985	
Flt Permitted		0.97			0.94			0.88			0.86	
Satd. Flow (perm)		1900			1825			2647			2591	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	23	427	43	43	411	56	34	131	43	59	167	48
RTOR Reduction (vph)	0	5	0	0	7	0	0	25	0	0	27	0
Lane Group Flow (vph)	0	488	0	0	503	0	0	183	0	0	247	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		877			842			1100			1076	
v/s Ratio Prot												
v/s Ratio Perm		0.26			c0.28			0.07			c0.10	
v/c Ratio		0.56			0.60			0.17			0.23	
Uniform Delay, d1		12.7			13.0			11.9			12.3	
Progression Factor		0.61			0.40			1.08			0.43	
Incremental Delay, d2		2.4			2.8			0.3			0.5	
Delay (s)		10.1			8.0			13.2			5.8	
Level of Service		B			A			B			A	
Approach Delay (s)		10.1			8.0			13.2			5.8	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	330	49	81	467	86	45	219	98	83	227	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1510	3036		1573	3077		1587	2962		1585	3072	
Flt Permitted	0.32	1.00		0.46	1.00		0.56	1.00		0.54	1.00	
Satd. Flow (perm)	502	3036		760	3077		929	2962		903	3072	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	367	54	90	519	96	50	243	109	92	252	71
RTOR Reduction (vph)	0	18	0	0	23	0	0	50	0	0	33	0
Lane Group Flow (vph)	57	403	0	90	592	0	50	302	0	92	290	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	170	1028		257	1041		500	1595		486	1654	
v/s Ratio Prot		0.13			c0.19			0.10			0.09	
v/s Ratio Perm	0.11			0.12			0.05			c0.10		
v/c Ratio	0.34	0.39		0.35	0.57		0.10	0.19		0.19	0.18	
Uniform Delay, d1	16.0	16.4		16.1	17.6		7.3	7.7		7.7	7.6	
Progression Factor	0.70	0.67		0.93	0.93		0.95	0.97		1.08	1.08	
Incremental Delay, d2	4.6	1.0		3.7	2.2		0.4	0.3		0.9	0.2	
Delay (s)	15.9	12.0		18.7	18.5		7.3	7.7		9.2	8.5	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		12.5			18.5			7.7			8.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	348	78	87	418	50	46	231	58	46	279	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1509	3018		1430	3723			3485			3521	
Flt Permitted	0.45	1.00		0.48	1.00			0.86			0.88	
Satd. Flow (perm)	708	3018		715	3723			3028			3119	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	366	82	92	440	53	48	243	61	48	294	67
RTOR Reduction (vph)	0	29	0	0	14	0	0	27	0	0	25	0
Lane Group Flow (vph)	62	419	0	92	479	0	0	325	0	0	384	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	338	1439		341	1776			1211			1248	
v/s Ratio Prot		c0.14			0.13							
v/s Ratio Perm	0.09			0.13				0.11			c0.12	
v/c Ratio	0.18	0.29		0.27	0.27			0.27			0.31	
Uniform Delay, d1	9.7	10.3		10.2	10.2			13.1			13.3	
Progression Factor	1.61	1.75		1.09	1.09			0.69			0.73	
Incremental Delay, d2	1.1	0.5		1.7	0.3			0.5			0.6	
Delay (s)	16.8	18.6		12.9	11.4			9.5			10.4	
Level of Service	B	B		B	B			A			B	
Approach Delay (s)		18.4			11.6			9.5			10.4	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	294	92	92	293	92	120	82	47	47	82	119
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1670	1436		3087			1885			1835	
Flt Permitted		0.79	1.00		0.79			0.68			0.90	
Satd. Flow (perm)		1336	1436		2454			1303			1674	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	327	102	102	326	102	133	91	52	52	91	132
RTOR Reduction (vph)	0	0	49	0	32	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	423	53	0	498	0	0	263	0	0	224	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		699	751		1284			421			541	
v/s Ratio Prot												
v/s Ratio Perm		c0.32	0.04		0.20			c0.20			0.13	
v/c Ratio		0.61	0.07		0.39			0.63			0.41	
Uniform Delay, d1		10.8	7.7		9.3			18.7			17.2	
Progression Factor		1.86	4.76		0.51			1.00			1.00	
Incremental Delay, d2		3.8	0.2		0.9			6.8			2.3	
Delay (s)		23.9	36.7		5.6			25.5			19.5	
Level of Service		C	D		A			C			B	
Approach Delay (s)		26.4			5.6			25.5			19.5	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	281	28	26	327	60	26	133	47	62	146	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1444	3026		1566	3019			3582			3599	
Flt Permitted	0.48	1.00		0.55	1.00			0.90			0.84	
Satd. Flow (perm)	736	3026		899	3019			3238			3069	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	312	31	29	363	67	29	148	52	69	162	70
RTOR Reduction (vph)	0	11	0	0	23	0	0	30	0	0	41	0
Lane Group Flow (vph)	61	332	0	29	407	0	0	199	0	0	260	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	340	1397		415	1393			1345			1275	
v/s Ratio Prot		0.11			c0.13							
v/s Ratio Perm	0.08			0.03				0.06			c0.08	
v/c Ratio	0.18	0.24		0.07	0.29			0.15			0.20	
Uniform Delay, d1	10.3	10.6		9.7	10.9			11.8			12.1	
Progression Factor	0.67	0.68		0.86	0.69			0.95			0.41	
Incremental Delay, d2	0.9	0.3		0.1	0.2			0.2			0.3	
Delay (s)	7.8	7.5		8.5	7.8			11.4			5.3	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		7.5			7.8			11.4			5.3	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	450	26	86	507	222	24	124	115	340	261	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3281			3168			3089			3181	
Flt Permitted		0.76			0.79			0.90			0.70	
Satd. Flow (perm)		2509			2518			2805			2289	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	500	29	96	563	247	27	138	128	378	290	91
RTOR Reduction (vph)	0	6	0	0	60	0	0	69	0	0	16	0
Lane Group Flow (vph)	0	575	0	0	846	0	0	224	0	0	743	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		965			968			1338			599	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.23			c0.34			0.05			c0.32	
v/c Ratio		0.60			0.87			0.17			1.36dl	
Uniform Delay, d1		16.0			18.5			10.2			24.0	
Progression Factor		1.48			1.00			1.00			0.80	
Incremental Delay, d2		2.7			10.9			0.3			121.3	
Delay (s)		26.4			29.4			10.5			140.5	
Level of Service		C			C			B			F	
Approach Delay (s)		26.4			29.4			10.5			140.5	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	59.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	899	132	48	794	0	82	0	36	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3039			3090			1619				
Flt Permitted		1.00			0.80			0.79				
Satd. Flow (perm)		3039			2485			1328				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	999	147	53	882	0	91	0	40	0	0	0
RTOR Reduction (vph)	0	16	0	0	0	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	1130	0	0	935	0	0	114	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1958			911			236				
v/s Ratio Prot		c0.37										
v/s Ratio Perm					c0.38			c0.09				
v/c Ratio		0.58			1.03			0.48				
Uniform Delay, d1		9.1			28.5			33.3				
Progression Factor		0.16			1.43			1.00				
Incremental Delay, d2		0.3			35.5			6.9				
Delay (s)		1.7			76.4			40.2				
Level of Service		A			E			D				
Approach Delay (s)		1.7			76.4			40.2			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	35.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	224	642	24	112	614	185	61	4	107	212	10	213
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3192		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.29	1.00		0.33	1.00	1.00		0.88		0.44	1.00	1.00
Satd. Flow (perm)	471	3192		583	3320	1485		1592		763	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	249	713	27	124	682	206	68	4	119	236	11	237
RTOR Reduction (vph)	0	2	0	0	0	96	0	90	0	0	0	135
Lane Group Flow (vph)	249	738	0	124	682	110	0	101	0	236	11	102
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	54.9	42.5		47.6	38.2	48.2		12.1		25.1	25.1	38.8
Effective Green, g (s)	54.9	42.5		47.6	38.2	48.2		12.1		25.1	25.1	38.8
Actuated g/C Ratio	0.61	0.47		0.53	0.42	0.54		0.13		0.28	0.28	0.43
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	452	1507		421	1409	795		214		312	487	640
v/s Ratio Prot	c0.08	0.23		0.03	0.21	0.02				c0.08	0.01	0.02
v/s Ratio Perm	c0.25			0.13		0.06		0.06		c0.13		0.04
v/c Ratio	0.55	0.49		0.29	0.48	0.14		0.47		0.76	0.02	0.16
Uniform Delay, d1	9.2	16.3		10.9	18.8	10.5		36.0		28.6	23.5	15.6
Progression Factor	2.63	1.86		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.5	1.0		0.5	1.2	0.1		2.2		10.0	0.0	0.2
Delay (s)	25.9	31.3		11.4	20.0	10.6		38.2		38.6	23.6	15.8
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		30.0			17.0			38.2			27.1	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	443	2	333	0	0	0	0	19	0	578
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	492	2	370	0	0	0	0	21	0	642
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	370			576			765	950	288	662	950	185
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	370			576			765	950	288	662	950	185
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	22
cM capacity (veh/h)	1178			987			64	256	706	345	256	823

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	492	126	247	21	642
Volume Left	0	0	0	2	0	21	0
Volume Right	0	0	492	0	0	0	642
cSH	1700	1700	1700	987	1700	345	823
Volume to Capacity	0.17	0.17	0.29	0.00	0.15	0.06	0.78
Queue Length 95th (ft)	0	0	0	0	0	5	198
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	16.1	23.1
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		22.8	
Approach LOS						C	

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	537	0	335	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	597	0	372	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	298	298	372
Volume Left (vph)	298	298	372
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.2	6.2	5.6
Degree Utilization, x	0.51	0.51	0.58
Capacity (veh/h)	568	570	619
Control Delay (s)	14.3	14.3	16.0
Approach Delay (s)	14.3		16.0
Approach LOS	B		C

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	475	64	196	511	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3153		1605	3210						3074	
Flt Permitted		1.00		0.34	1.00						0.97	
Satd. Flow (perm)		3153		582	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	528	71	218	568	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	587	0	218	568	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		456	1850						976	
v/s Ratio Prot		0.19		c0.06	0.18						c0.05	
v/s Ratio Perm				c0.22								
v/c Ratio		0.44		0.48	0.31						0.16	
Uniform Delay, d1		17.4		15.9	9.3						20.8	
Progression Factor		1.00		0.35	0.18						1.00	
Incremental Delay, d2		1.1		2.8	0.3						0.3	
Delay (s)		18.4		8.4	2.0						21.2	
Level of Service		B		A	A						C	
Approach Delay (s)		18.4			3.8			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	481	0	0	644	129	63	90	59	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1660	3320			3130			4504				
Flt Permitted	0.21	1.00			1.00			0.99				
Satd. Flow (perm)	367	3320			3130			4504				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	534	0	0	716	143	70	100	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	19	0	0	45	0	0	0	0
Lane Group Flow (vph)	106	534	0	0	840	0	0	191	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	359	1875			1289			1431				
v/s Ratio Prot	0.03	c0.16			c0.27			c0.04				
v/s Ratio Perm	0.13											
v/c Ratio	0.30	0.28			0.65			0.13				
Uniform Delay, d1	18.6	9.6			20.1			20.7				
Progression Factor	0.43	0.31			1.00			1.00				
Incremental Delay, d2	1.9	0.4			2.6			0.2				
Delay (s)	9.9	3.4			22.7			20.9				
Level of Service	A	A			C			C				
Approach Delay (s)		4.4			22.7			20.9			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	346	114	91	386	81	129	78	30	31	87	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2977			3007			1840			1769	
Flt Permitted		0.66			0.69			0.72			0.95	
Satd. Flow (perm)		1975			2105			1358			1683	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	384	127	101	429	90	143	87	33	34	97	160
RTOR Reduction (vph)	0	34	0	0	21	0	0	8	0	0	68	0
Lane Group Flow (vph)	0	604	0	0	599	0	0	255	0	0	223	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		699			745			669			829	
v/s Ratio Prot												
v/s Ratio Perm		c0.31			0.28			c0.19			0.13	
v/c Ratio		0.86			0.80			0.38			0.27	
Uniform Delay, d1		19.6			19.0			10.3			9.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		13.5			9.0			1.6			0.8	
Delay (s)		33.0			27.9			12.0			10.5	
Level of Service		C			C			B			B	
Approach Delay (s)		33.0			27.9			12.0			10.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	201	88	159	311	65	124	542	67	95	950	180
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2980		1573	3683		1508	3069	1333	1520	3099	1336
Flt Permitted	0.45	1.00		0.53	1.00		0.13	1.00	1.00	0.34	1.00	1.00
Satd. Flow (perm)	739	2980		880	3683		212	3069	1333	541	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	120	212	93	167	327	68	131	571	71	100	1000	189
RTOR Reduction (vph)	0	58	0	0	21	0	0	0	45	0	0	120
Lane Group Flow (vph)	120	247	0	167	374	0	131	571	26	100	1000	69
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	982		343	1213		181	1119	486	298	1130	487
v/s Ratio Prot	0.02	0.08		c0.02	0.10		c0.05	0.19		0.02	c0.32	
v/s Ratio Perm	0.12			c0.15			0.26		0.02	0.12		0.05
v/c Ratio	0.40	0.25		0.49	0.31		0.72	0.51	0.05	0.34	0.88	0.14
Uniform Delay, d1	19.7	20.8		20.7	21.3		18.1	21.1	17.5	15.4	25.3	18.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.39	1.04	2.36
Incremental Delay, d2	4.0	0.6		4.9	0.7		22.1	1.7	0.2	2.2	7.8	0.4
Delay (s)	23.7	21.5		25.5	21.9		40.2	22.7	17.7	23.7	34.2	43.2
Level of Service	C	C		C	C		D	C	B	C	C	D
Approach Delay (s)		22.1			23.0			25.2			34.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	295	30	33	393	24	33	102	41	36	134	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1962	1466		1993	1480		2015	1506		2002	1511
Flt Permitted		0.90	1.00		0.96	1.00		0.91	1.00		0.93	1.00
Satd. Flow (perm)		1777	1466		1913	1480		1861	1506		1877	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	311	32	35	414	25	35	107	43	38	141	69
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	25	0	0	40
Lane Group Flow (vph)	0	363	15	0	449	12	0	142	18	0	179	29
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		820	677		883	683		773	626		780	628
v/s Ratio Prot												
v/s Ratio Perm		0.20	0.01		c0.23	0.01		0.08	0.01		c0.10	0.02
v/c Ratio		0.44	0.02		0.51	0.02		0.18	0.03		0.23	0.05
Uniform Delay, d1		11.8	9.5		12.3	9.5		12.0	11.2		12.3	11.3
Progression Factor		1.00	1.00		0.55	0.41		1.04	1.19		1.04	0.94
Incremental Delay, d2		1.7	0.1		2.0	0.0		0.5	0.1		0.7	0.1
Delay (s)		13.6	9.6		8.8	3.9		13.1	13.4		13.4	10.8
Level of Service		B	A		A	A		B	B		B	B
Approach Delay (s)		13.3			8.5			13.2			12.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	317	20	51	299	51	10	109	23	115	214	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3072		1550	3031		1550	3017		1550	2991	
Flt Permitted	0.95	1.00		0.53	1.00		0.55	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3072		864	3031		892	3017		1074	2991	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	352	22	57	332	57	11	121	26	128	238	72
RTOR Reduction (vph)	0	7	0	0	21	0	0	15	0	0	42	0
Lane Group Flow (vph)	83	367	0	57	368	0	11	132	0	128	268	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1512		292	1026		371	1253		446	1242	
v/s Ratio Prot	c0.05	0.12			c0.12			0.04			0.09	
v/s Ratio Perm				0.07			0.01			c0.12		
v/c Ratio	0.50	0.24		0.20	0.36		0.03	0.11		0.29	0.22	
Uniform Delay, d1	27.3	9.5		15.2	16.2		11.2	11.6		12.6	12.2	
Progression Factor	0.93	0.56		0.82	0.82		0.86	0.85		1.12	1.12	
Incremental Delay, d2	9.8	0.4		1.4	0.9		0.0	0.0		1.6	0.4	
Delay (s)	35.3	5.6		13.9	14.2		9.7	9.8		15.7	14.0	
Level of Service	D	A		B	B		A	A		B	B	
Approach Delay (s)		11.0			14.2			9.8			14.5	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	267	88	245	330	63	104	295	189	55	282	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.96		1.00	0.98			0.95			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1550	2984		1550	3025			3133			3233	
Flt Permitted	0.50	1.00		0.95	1.00			0.79			0.81	
Satd. Flow (perm)	813	2984		1550	3025			2496			2628	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	71	297	98	272	367	70	116	328	210	61	313	56
RTOR Reduction (vph)	0	49	0	0	24	0	0	87	0	0	18	0
Lane Group Flow (vph)	71	346	0	272	413	0	0	567	0	0	412	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	250	918		143	1350			960			1011	
v/s Ratio Prot		c0.12		c0.18	0.14							
v/s Ratio Perm	0.09							c0.23			0.16	
v/c Ratio	0.28	0.38		1.90	0.31			0.59			0.41	
Uniform Delay, d1	17.1	17.6		29.5	11.5			15.9			14.6	
Progression Factor	0.65	0.60		1.27	1.18			1.22			0.70	
Incremental Delay, d2	2.8	1.2		417.0	0.3			2.4			1.2	
Delay (s)	13.9	11.7		454.6	13.8			21.8			11.4	
Level of Service	B	B		F	B			C			B	
Approach Delay (s)		12.1			182.9			21.8			11.4	
Approach LOS		B			F			C			B	

Intersection Summary			
HCM Average Control Delay	68.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	454	16	75	645	75	55	110	165	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		1.00			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1620			1603			3249				
Flt Permitted		0.94			0.91			0.99				
Satd. Flow (perm)		1529			1465			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	504	18	83	717	83	61	122	183	0	0	0
RTOR Reduction (vph)	0	1	0	0	5	0	0	139	0	0	0	0
Lane Group Flow (vph)	0	550	0	0	878	0	0	227	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		976			935			775				
v/s Ratio Prot												
v/s Ratio Perm		0.36			c0.60			0.07				
v/c Ratio		0.56			0.94			0.29				
Uniform Delay, d1		6.6			10.6			20.3				
Progression Factor		1.30			1.00			1.00				
Incremental Delay, d2		2.1			18.0			0.9				
Delay (s)		10.7			28.6			21.2				
Level of Service		B			C			C				
Approach Delay (s)		10.7			28.6			21.2			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	21.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	142	464	611	39	119	176
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	149	488	643	41	125	185
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.83				0.83	0.83
vC, conflicting volume	701				1474	686
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	538				1469	519
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	82				0	60
cM capacity (veh/h)	833				95	458

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	638	684	125	185
Volume Left	149	0	125	0
Volume Right	0	41	0	185
cSH	833	1700	95	458
Volume to Capacity	0.18	0.40	1.32	0.40
Queue Length 95th (ft)	16	0	225	48
Control Delay (s)	4.4	0.0	281.6	18.1
Lane LOS	A		F	C
Approach Delay (s)	4.4	0.0	124.4	
Approach LOS			F	

Intersection Summary			
Average Delay	25.4		
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	690	0	1	620	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	767	0	1	689	3	32
RTOR Reduction (vph)	0	0	0	0	27	0
Lane Group Flow (vph)	767	0	0	690	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	251	
v/s Ratio Prot	c0.44				c0.01	
v/s Ratio Perm				0.40		
v/c Ratio	0.63			1.08	0.03	
Uniform Delay, d1	7.1			27.0	29.8	
Progression Factor	0.10			1.00	1.00	
Incremental Delay, d2	0.2			60.3	0.2	
Delay (s)	0.9			87.3	30.1	
Level of Service	A			F	C	
Approach Delay (s)	0.9			87.3	30.1	
Approach LOS	A			F	C	

Intersection Summary			
HCM Average Control Delay	41.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	243	606	32	407	0	0	0	0	17	6	249
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	270	673	36	452	0	0	0	0	19	7	277
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	452			270			1133	1130	472	658	793	452
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	452			270			1133	1130	472	658	793	452
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	95	98	50
cM capacity (veh/h)	1119			1276			77	200	544	346	314	555

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	180	763	488	26	277
Volume Left	0	0	36	19	0
Volume Right	0	673	0	0	277
cSH	1700	1700	1276	337	555
Volume to Capacity	0.11	0.45	0.03	0.08	0.50
Queue Length 95th (ft)	0	0	2	6	69
Control Delay (s)	0.0	0.0	0.9	16.6	17.8
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.9	17.7	
Approach LOS				C	

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	260	0	439	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	289	0	488	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	144	144	488
Volume Left (vph)	144	144	488
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.4	6.4	5.0
Degree Utilization, x	0.26	0.26	0.68
Capacity (veh/h)	536	537	701
Control Delay (s)	10.3	10.3	17.7
Approach Delay (s)	10.3		17.7
Approach LOS	B		C

Intersection Summary			
Delay	15.0		
HCM Level of Service	B		
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	530	345	313	770	0	0	0	0	279	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3425					1359	3806	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3425					1359	3806	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	558	363	329	811	0	0	0	0	294	283	392
RTOR Reduction (vph)	0	0	217	0	0	0	0	0	0	0	53	113
Lane Group Flow (vph)	0	558	146	0	1140	0	0	0	0	162	558	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		67.4					23.0	23.0	68.0
Effective Green, g (s)		39.0	39.0		67.4					23.0	23.0	68.0
Actuated g/C Ratio		0.24	0.24		0.42					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		775	300		1443					195	547	482
v/s Ratio Prot		c0.18			c0.33					0.12	c0.15	
v/s Ratio Perm			0.12									0.07
v/c Ratio		0.72	0.49		0.79					0.83	1.02	0.17
Uniform Delay, d1		55.5	51.9		40.2					66.6	68.5	28.5
Progression Factor		1.00	1.00		0.10					1.00	1.00	1.00
Incremental Delay, d2		5.7	5.6		0.3					24.9	43.6	0.2
Delay (s)		61.2	57.5		4.3					91.5	112.1	28.7
Level of Service		E	E		A					F	F	C
Approach Delay (s)		59.7			4.3			0.0			91.8	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	49.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	32.6
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	517	0	0	750	144	332	214	206	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3059				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3059				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	324	574	0	0	833	160	369	238	229	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	66	0	69	0	0	0	0
Lane Group Flow (vph)	324	574	0	0	833	94	284	483	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	84.6	84.6			36.4	36.4	12.0	12.0				
Effective Green, g (s)	84.6	84.6			36.4	36.4	12.0	12.0				
Actuated g/C Ratio	0.53	0.53			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	849	1814			730	338	117	229				
v/s Ratio Prot	c0.20	0.17			c0.26		c0.18	0.16				
v/s Ratio Perm						0.06						
v/c Ratio	0.38	0.32			1.14	0.28	2.43	2.11				
Uniform Delay, d1	22.3	21.3			61.8	50.9	74.0	74.0				
Progression Factor	0.05	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			79.4	0.4	667.5	512.9				
Delay (s)	1.4	1.3			141.2	51.4	741.5	586.9				
Level of Service	A	A			F	D	F	F				
Approach Delay (s)		1.3			126.8			639.4			0.0	
Approach LOS		A			F			F			A	

Intersection Summary			
HCM Average Control Delay	242.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	312	136	188	418	107	108	522	95	106	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1579	1600	1372	1594	1788		1578	3000		1537	3001	
Flt Permitted	0.15	1.00	1.00	0.35	1.00		0.13	1.00		0.32	1.00	
Satd. Flow (perm)	256	1600	1372	583	1788		216	3000		511	3001	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	328	143	198	440	113	114	549	100	112	845	126
RTOR Reduction (vph)	0	0	100	0	11	0	0	16	0	0	13	0
Lane Group Flow (vph)	147	328	43	198	542	0	114	633	0	112	958	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	34.0	27.0	27.0	34.0	27.0		43.0	36.0		40.2	34.6	
Effective Green, g (s)	32.0	28.0	27.0	32.0	27.0		41.0	36.0		38.2	34.6	
Actuated g/C Ratio	0.35	0.31	0.30	0.35	0.30		0.45	0.40		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	178	494	409	273	533		188	1192		268	1146	
v/s Ratio Prot	c0.05	0.20		0.05	c0.30		c0.04	0.21		0.02	c0.32	
v/s Ratio Perm	0.24		0.03	0.21			0.23			0.16		
v/c Ratio	0.83	0.66	0.10	0.73	1.02		0.61	0.53		0.42	0.84	
Uniform Delay, d1	23.9	27.2	23.0	24.8	31.8		17.4	20.8		16.7	25.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	25.7	6.9	0.5	9.2	43.5		5.4	1.7		1.1	7.3	
Delay (s)	49.6	34.1	23.5	34.0	75.3		22.8	22.5		17.8	32.7	
Level of Service	D	C	C	C	E		C	C		B	C	
Approach Delay (s)		35.3			64.4			22.6			31.2	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	402	61	112	645	62	37	59	44	31	91	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.96			0.95	
Flt Protected		1.00	1.00		0.99	1.00		0.99			0.99	
Satd. Flow (prot)		1971	1467		1624	1381		1855			1873	
Flt Permitted		0.63	1.00		0.78	1.00		0.90			0.95	
Satd. Flow (perm)		1245	1467		1276	1381		1699			1791	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	423	64	118	679	65	39	62	46	33	96	74
RTOR Reduction (vph)	0	0	30	0	0	18	0	25	0	0	32	0
Lane Group Flow (vph)	0	464	34	0	797	47	0	122	0	0	171	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		613	722		628	680		706			744	
v/s Ratio Prot												
v/s Ratio Perm		0.37	0.02		c0.62	0.03		0.07			c0.10	
v/c Ratio		0.76	0.05		1.27	0.07		0.17			0.23	
Uniform Delay, d1		13.4	8.6		16.5	8.7		12.0			12.3	
Progression Factor		1.00	1.00		1.88	2.75		1.00			1.95	
Incremental Delay, d2		8.5	0.1		122.3	0.0		0.5			0.7	
Delay (s)		21.8	8.7		153.4	23.8		12.5			24.6	
Level of Service		C	A		F	C		B			C	
Approach Delay (s)		20.2			143.6			12.5			24.6	
Approach LOS		C			F			B			C	

Intersection Summary			
HCM Average Control Delay	81.2	HCM Level of Service	F
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	318	41	110	700	20	36	114	44	17	184	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.97	
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1756	1443		1724	1487		1713	1489		1712	
Flt Permitted		0.18	1.00		0.65	1.00		0.89	1.00		0.98	
Satd. Flow (perm)		318	1443		1125	1487		1541	1489		1685	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	335	43	116	737	21	38	120	46	18	194	74
RTOR Reduction (vph)	0	0	24	0	0	5	0	0	23	0	19	0
Lane Group Flow (vph)	0	397	19	0	853	16	0	158	23	0	267	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		113	511		398	526		759	733		830	
v/s Ratio Prot												
v/s Ratio Perm		c1.25	0.01		0.76	0.01		0.10	0.02		c0.16	
v/c Ratio		3.51	0.04		2.14	0.03		0.21	0.03		0.32	
Uniform Delay, d1		21.0	13.8		21.0	13.7		9.3	8.5		10.0	
Progression Factor		1.63	2.35		0.98	0.86		0.16	0.22		1.07	
Incremental Delay, d2		1147.0	0.1		518.3	0.0		0.1	0.0		1.0	
Delay (s)		1181.3	32.5		538.8	11.8		1.5	1.9		11.6	
Level of Service		F	C		F	B		A	A		B	
Approach Delay (s)		1069.0			526.2			1.6			11.6	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM Average Control Delay	517.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	101.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	298	35	76	8	14	11	38	247	8	31	570	799
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1855	1440		1767			1995			1975	1382
Flt Permitted		0.75	1.00		0.92			0.79			0.97	1.00
Satd. Flow (perm)		1455	1440		1640			1587			1930	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	331	39	84	9	16	12	42	274	9	34	633	888
RTOR Reduction (vph)	0	0	49	0	9	0	0	2	0	0	0	295
Lane Group Flow (vph)	0	370	35	0	28	0	0	323	0	0	667	593
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		654	598		429			781			950	680
v/s Ratio Prot		c0.07										
v/s Ratio Perm		0.17	0.02		0.02			0.20			0.35	c0.43
v/c Ratio		0.57	0.06		0.07			0.41			0.70	0.87
Uniform Delay, d1		14.5	11.4		18.0			10.5			12.8	14.7
Progression Factor		1.18	1.99		1.00			0.41			0.76	1.11
Incremental Delay, d2		0.3	0.0		0.3			0.6			4.0	13.4
Delay (s)		17.5	22.7		18.3			4.9			13.7	29.7
Level of Service		B	C		B			A			B	C
Approach Delay (s)		18.5			18.3			4.9			22.9	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM Average Control Delay	19.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	923	289	447	1189	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4577		1621	3320					1489	2913	1442
Flt Permitted		1.00		0.09	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4577		157	3320					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	972	304	471	1252	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	47	0	0	0	0	0	0	0	0	9	58
Lane Group Flow (vph)	0	1229	0	471	1252	0	0	0	0	308	603	213
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		39.0		74.9	74.9					28.1	28.1	28.1
Effective Green, g (s)		39.0		74.9	74.9					28.1	28.1	28.1
Actuated g/C Ratio		0.34		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1552		502	2162					364	712	352
v/s Ratio Prot		0.27		c0.26	0.38							
v/s Ratio Perm				c0.36						0.21	0.21	0.15
v/c Ratio		0.79		0.94	0.58					0.85	0.85	0.60
Uniform Delay, d1		34.3		32.7	11.2					41.4	41.4	38.5
Progression Factor		1.00		0.77	2.00					1.00	1.00	1.00
Incremental Delay, d2		4.2		14.8	0.5					16.7	9.4	3.1
Delay (s)		38.6		40.1	22.9					58.1	50.8	41.6
Level of Service		D		D	C					E	D	D
Approach Delay (s)		38.6			27.6			0.0			50.6	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	111.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1095	0	0	1206	271	430	351	337	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4513				
Flt Permitted	0.08	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	280	3353			3241	1489		4513				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1153	0	0	1269	285	453	369	355	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	77	0	67	0	0	0	0
Lane Group Flow (vph)	359	1153	0	0	1269	208	0	1110	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	73.3	73.3			53.3	53.3		29.7				
Effective Green, g (s)	73.3	73.3			53.3	53.3		29.7				
Actuated g/C Ratio	0.64	0.64			0.46	0.46		0.26				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	527	2137			1502	690		1166				
v/s Ratio Prot	c0.08	0.34			c0.39							
v/s Ratio Perm	0.35					0.14		0.25				
v/c Ratio	0.68	0.54			0.84	0.30		0.95				
Uniform Delay, d1	24.7	11.5			27.2	19.2		41.9				
Progression Factor	1.52	0.13			0.87	1.12		1.00				
Incremental Delay, d2	2.1	0.6			3.2	0.6		16.4				
Delay (s)	39.5	2.0			26.8	22.2		58.4				
Level of Service	D	A			C	C		E				
Approach Delay (s)		10.9			26.0			58.4			0.0	
Approach LOS		B			C			E			A	

Intersection Summary			
HCM Average Control Delay	29.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	111.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	719	408	104	968	76	227	179	66	80	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1313	1601	3286		1578	3002		1540	2941	
Flt Permitted	0.11	1.00	1.00	0.36	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	174	3273	1313	614	3286		652	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	142	757	429	109	1019	80	239	188	69	84	171	127
RTOR Reduction (vph)	0	0	173	0	5	0	0	38	0	0	107	0
Lane Group Flow (vph)	142	757	256	109	1094	0	239	219	0	84	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.9	52.3	68.7	43.5	34.4		38.1	26.5		26.3	18.2	
Effective Green, g (s)	64.9	52.3	68.7	43.5	34.4		38.1	26.5		26.3	18.2	
Actuated g/C Ratio	0.56	0.45	0.60	0.38	0.30		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	425	1489	784	310	983		348	692		261	465	
v/s Ratio Prot	c0.08	c0.23	0.05	0.03	c0.33		c0.10	0.07		0.02	0.06	
v/s Ratio Perm	0.11		0.15	0.10			c0.13			0.05		
v/c Ratio	0.33	0.51	0.33	0.35	1.11		0.69	0.32		0.32	0.41	
Uniform Delay, d1	17.5	22.2	11.6	23.9	40.3		30.6	36.7		36.2	43.6	
Progression Factor	0.77	0.75	1.59	1.00	1.00		1.03	1.05		1.00	1.00	
Incremental Delay, d2	1.6	1.0	0.2	0.7	65.0		5.3	0.9		0.7	2.1	
Delay (s)	15.1	17.7	18.7	24.5	105.3		36.8	39.6		36.9	45.7	
Level of Service	B	B	B	C	F		D	D		D	D	
Approach Delay (s)		17.7			98.0			38.2			43.7	
Approach LOS		B			F			D			D	

Intersection Summary			
HCM Average Control Delay	52.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	250	367	95	441	113	362	340	84	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	2925		1653	3267		1620	3402		1580	3183	
Flt Permitted	0.34	1.00		0.22	1.00		0.32	1.00		0.49	1.00	
Satd. Flow (perm)	619	2925		375	3267		544	3402		822	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	263	386	100	464	119	381	358	88	217	429	59
RTOR Reduction (vph)	0	215	0	0	19	0	0	19	0	0	9	0
Lane Group Flow (vph)	48	434	0	100	564	0	381	427	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	39.2	32.5		46.4	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	39.2	32.5		46.4	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.34	0.28		0.40	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	274	827		266	1026		454	1308		339	888	
v/s Ratio Prot	0.01	0.15		c0.03	c0.17		c0.15	0.13		0.04	0.15	
v/s Ratio Perm	0.05			0.12			c0.26			0.18		
v/c Ratio	0.18	0.52		0.38	0.55		0.84	0.33		0.64	0.54	
Uniform Delay, d1	25.9	34.7		23.2	32.7		20.8	24.9		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.97	
Incremental Delay, d2	0.4	2.4		1.1	2.1		13.1	0.7		4.0	2.2	
Delay (s)	26.3	37.1		24.3	34.8		33.9	25.6		32.8	36.1	
Level of Service	C	D		C	C		C	C		C	D	
Approach Delay (s)		36.4			33.3			29.4			35.1	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	33.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	695	141	10	741	89	104	287	9	204	609	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.98		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3039			3060		1452	3227		1522	2872	
Flt Permitted		0.52			0.94		0.19	1.00		0.54	1.00	
Satd. Flow (perm)		1604			2872		284	3227		873	2872	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	772	157	11	823	99	116	319	10	227	677	203
RTOR Reduction (vph)	0	22	0	0	14	0	0	3	0	0	44	0
Lane Group Flow (vph)	0	1024	0	0	919	0	116	326	0	227	836	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		705			751		194	1192		416	1060	
v/s Ratio Prot		c0.09					c0.04	0.10		0.03	c0.29	
v/s Ratio Perm		c0.47			0.32		0.22			0.20		
v/c Ratio		1.45			1.22		0.60	0.27		0.55	0.79	
Uniform Delay, d1		20.0			24.0		12.5	14.4		12.7	18.2	
Progression Factor		1.00			1.42		1.18	0.57		1.00	1.00	
Incremental Delay, d2		211.4			101.8		12.2	0.5		5.1	6.0	
Delay (s)		231.4			136.0		27.0	8.7		17.8	24.2	
Level of Service		F			F		C	A		B	C	
Approach Delay (s)		231.4			136.0			13.5			22.9	
Approach LOS		F			F			B			C	

Intersection Summary			
HCM Average Control Delay	113.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	261	136	132	418	28	72	462	86	35	698	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	1910		1601	2019		1676	3215		1435	3274	
Flt Permitted	0.31	1.00		0.37	1.00		0.29	1.00		0.42	1.00	
Satd. Flow (perm)	557	1910		621	2019		516	3215		627	3274	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	269	140	136	431	29	74	476	89	36	720	72
RTOR Reduction (vph)	0	29	0	0	4	0	0	24	0	0	12	0
Lane Group Flow (vph)	69	380	0	136	456	0	74	541	0	36	780	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	206	705		229	745		246	1533		299	1561	
v/s Ratio Prot		0.20			c0.23			0.17			c0.24	
v/s Ratio Perm	0.12			0.22			0.14			0.06		
v/c Ratio	0.33	0.54		0.59	0.61		0.30	0.35		0.12	0.50	
Uniform Delay, d1	14.8	16.1		16.6	16.7		10.4	10.7		9.4	11.7	
Progression Factor	1.00	1.00		1.34	1.35		1.00	1.00		1.18	0.96	
Incremental Delay, d2	4.3	2.9		1.0	0.3		3.1	0.6		0.3	0.4	
Delay (s)	19.1	19.1		23.2	22.9		13.5	11.3		11.5	11.6	
Level of Service	B	B		C	C		B	B		B	B	
Approach Delay (s)		19.1			23.0			11.6			11.6	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	883	501	938	41	3	10	9	47	15	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.99	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.95	
Flt Protected		1.00		0.98				0.99			0.97	
Satd. Flow (prot)		3160		3077				1810			1858	
Flt Permitted		0.78		0.58				0.96			0.85	
Satd. Flow (perm)		2476		1809				1748			1633	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	929	527	987	43	3	11	9	49	16	0	3
RTOR Reduction (vph)	0	0	0	3	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	931	0	1554	0	0	0	34	0	0	20	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom				Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7				2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		686		868				376			352	
v/s Ratio Prot				c0.17								
v/s Ratio Perm		0.38		c0.58				c0.02			0.01	
v/c Ratio		1.36		2.51dl				0.09			0.06	
Uniform Delay, d1		23.5		19.0				20.4			20.3	
Progression Factor		1.42		0.62				1.00			1.00	
Incremental Delay, d2		161.6		358.6				0.5			0.3	
Delay (s)		194.9		370.4				20.9			20.6	
Level of Service		F		F				C			C	
Approach Delay (s)		194.9		370.4				20.9			20.6	
Approach LOS		F		F				C			C	

Intersection Summary			
HCM Average Control Delay	285.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	119.6%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	311
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1559	
Flt Permitted		1.00	
Satd. Flow (perm)		1559	
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	5	3	327
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	330	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.21	
v/s Ratio Perm			
v/c Ratio		1.38	
Uniform Delay, d1		27.5	
Progression Factor		0.84	
Incremental Delay, d2		190.6	
Delay (s)		213.6	
Level of Service		F	
Approach Delay (s)		213.6	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	264	965	1254	177	125	234
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3285	3259		1660	1485
Flt Permitted		0.51	1.00		0.95	1.00
Satd. Flow (perm)		1708	3259		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	293	1072	1393	197	139	260
RTOR Reduction (vph)	0	0	17	0	0	38
Lane Group Flow (vph)	0	1365	1573	0	139	222
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1051	2006		434	388
v/s Ratio Prot			0.48		0.08	
v/s Ratio Perm		c0.80				c0.15
v/c Ratio		2.71dl	0.78		0.32	0.57
Uniform Delay, d1		12.5	9.3		19.3	20.8
Progression Factor		1.24	0.60		1.06	1.03
Incremental Delay, d2		135.1	1.4		1.1	3.5
Delay (s)		150.7	7.0		21.5	25.0
Level of Service		F	A		C	C
Approach Delay (s)		150.7	7.0		23.8	
Approach LOS		F	A		C	

Intersection Summary			
HCM Average Control Delay	67.5	HCM Level of Service	E
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.1%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	81	1012	1347	198	276	88
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3120	3139		1506	1343
Flt Permitted		0.60	1.00		0.95	1.00
Satd. Flow (perm)		1875	3139		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	85	1065	1418	208	291	93
RTOR Reduction (vph)	0	0	18	0	0	17
Lane Group Flow (vph)	0	1150	1608	0	291	76
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		981	1642		533	475
v/s Ratio Prot			0.51		c0.19	
v/s Ratio Perm		c0.61				0.06
v/c Ratio		1.17	0.98		0.55	0.16
Uniform Delay, d1		15.5	15.2		16.8	14.4
Progression Factor		1.10	1.47		1.75	2.04
Incremental Delay, d2		78.6	3.4		3.1	0.6
Delay (s)		95.7	25.7		32.5	29.9
Level of Service		F	C		C	C
Approach Delay (s)		95.7	25.7		31.9	
Approach LOS		F	C		C	

Intersection Summary			
HCM Average Control Delay	51.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	887	261	532	1433	205	161
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.94	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	2404		1788	2506	1734	
Flt Permitted	1.00		0.13	1.00	0.97	
Satd. Flow (perm)	2404		243	2506	1734	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	905	266	543	1462	209	164
RTOR Reduction (vph)	16	0	0	0	44	0
Lane Group Flow (vph)	1155	0	543	1462	329	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1147		116	1195	640	
v/s Ratio Prot	0.48			0.58	c0.19	
v/s Ratio Perm			c2.24			
v/c Ratio	1.01		4.68	1.22	0.51	
Uniform Delay, d1	17.0		17.0	17.0	16.0	
Progression Factor	1.46		1.00	1.00	1.00	
Incremental Delay, d2	9.7		1676.0	108.2	2.9	
Delay (s)	34.5		1693.0	125.2	18.9	
Level of Service	C		F	F	B	
Approach Delay (s)	34.5			549.8	18.9	
Approach LOS	C			F	B	

Intersection Summary			
HCM Average Control Delay	324.0	HCM Level of Service	F
HCM Volume to Capacity ratio	2.87		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	117.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	2022	38	112	961	1	62	0	157	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.27	1.00	1.00	0.08	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	530	3431	1479	130	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	2247	42	124	1068	1	69	0	174	0	0	0
RTOR Reduction (vph)	0	0	10	0	0	0	0	0	138	0	0	0
Lane Group Flow (vph)	1	2247	32	124	1068	1	0	69	36	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	48.6	48.6	48.6	67.6	67.6	67.6		9.4	9.4			
Effective Green, g (s)	48.6	48.6	48.6	67.6	67.6	67.6		9.4	9.4			
Actuated g/C Ratio	0.57	0.57	0.57	0.80	0.80	0.80		0.11	0.11			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	303	1962	846	378	2640	1217		171	166			
v/s Ratio Prot		c0.65		0.06	c0.32							
v/s Ratio Perm	0.00		0.02	0.20		0.00		c0.04	0.02			
v/c Ratio	0.00	1.15	0.04	0.33	0.40	0.00		0.40	0.22			
Uniform Delay, d1	7.8	18.2	8.0	16.3	2.6	1.8		35.2	34.4			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	71.9	0.1	0.5	0.1	0.0		1.6	0.7			
Delay (s)	7.8	90.1	8.0	16.8	2.7	1.8		36.7	35.1			
Level of Service	A	F	A	B	A	A		D	D			
Approach Delay (s)		88.6			4.2			35.6			0.0	
Approach LOS		F			A			D			A	

Intersection Summary			
HCM Average Control Delay	58.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	11	960	846	30	71	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3097	3083		1530	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2912	3083		1530	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1067	940	33	79	16
RTOR Reduction (vph)	0	0	3	0	8	0
Lane Group Flow (vph)	0	1079	970	0	87	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1068	2192		119	
v/s Ratio Prot			c0.31		c0.06	
v/s Ratio Perm		c0.37				
v/c Ratio		1.01	0.44		0.73	
Uniform Delay, d1		28.5	5.5		40.6	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		30.1	0.2		32.1	
Delay (s)		58.6	0.2		72.7	
Level of Service		E	A		E	
Approach Delay (s)		58.6	0.2		72.7	
Approach LOS		E	A		E	

Intersection Summary			
HCM Average Control Delay	32.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	107	500	0	1	583	39	3	2	28	202	0	150
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1764			3341			1467			1670	1348
Flt Permitted		0.77			0.95			0.88			0.88	1.00
Satd. Flow (perm)		1365			3191			1296			1545	1348
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	119	556	0	1	648	43	3	2	31	224	0	167
RTOR Reduction (vph)	0	0	0	0	6	0	0	28	0	0	0	112
Lane Group Flow (vph)	0	675	0	0	686	0	0	8	0	0	224	55
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		498			1714			137			478	444
v/s Ratio Prot					c0.07						c0.09	
v/s Ratio Perm		c0.49			0.15			0.01			c0.05	0.04
v/c Ratio		1.36			0.40			0.06			0.47	0.12
Uniform Delay, d1		27.0			11.9			34.2			24.6	19.9
Progression Factor		1.00			1.37			1.00			1.00	1.00
Incremental Delay, d2		172.7			0.1			0.8			3.3	0.6
Delay (s)		199.7			16.5			35.0			27.8	20.5
Level of Service		F			B			D			C	C
Approach Delay (s)		199.7			16.5			35.0			24.7	
Approach LOS		F			B			D			C	

Intersection Summary			
HCM Average Control Delay	87.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

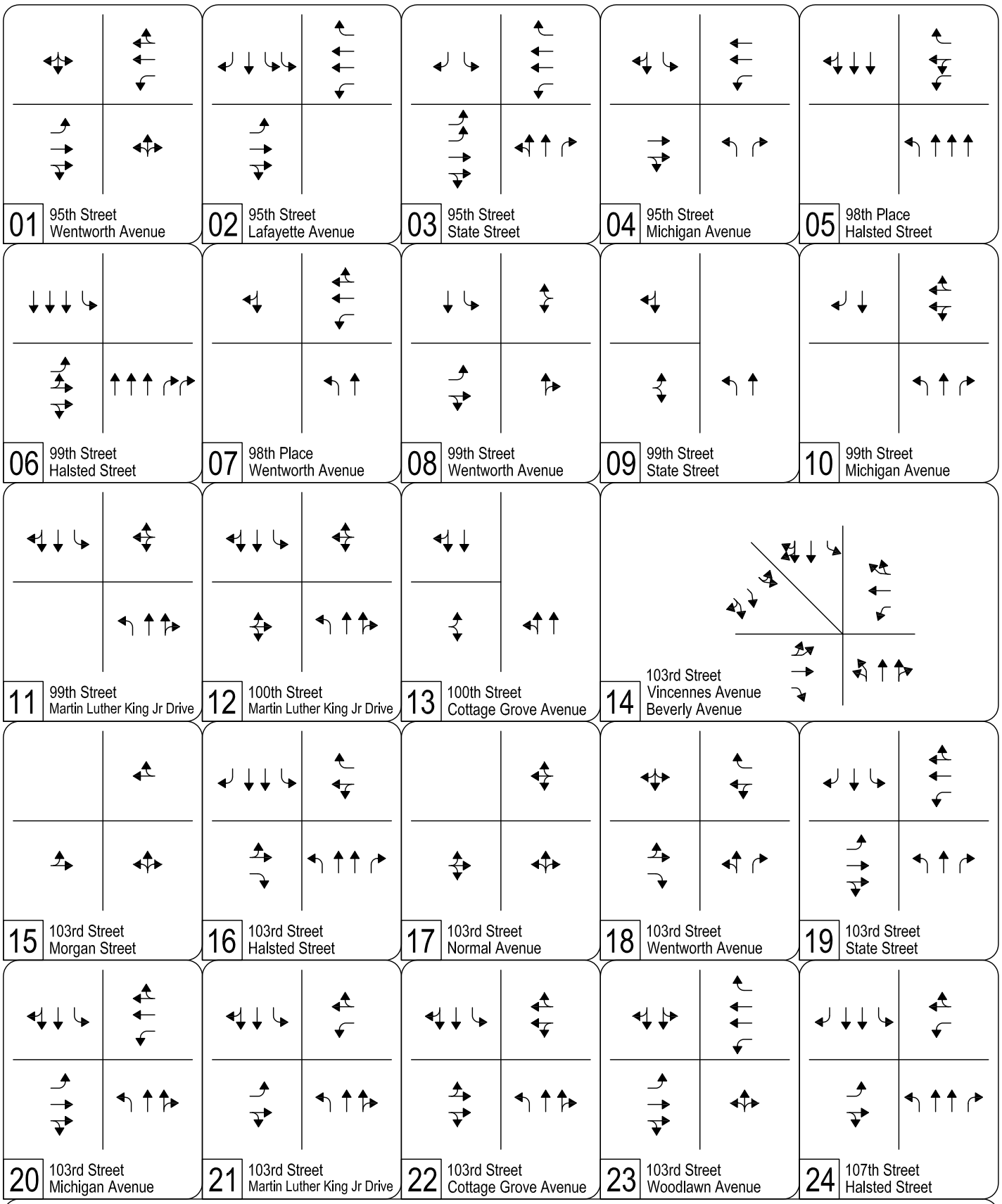

UPRR ROW Option Alternative Mitigated (2030) Intersection Lane Geometry

Page 1 of 3

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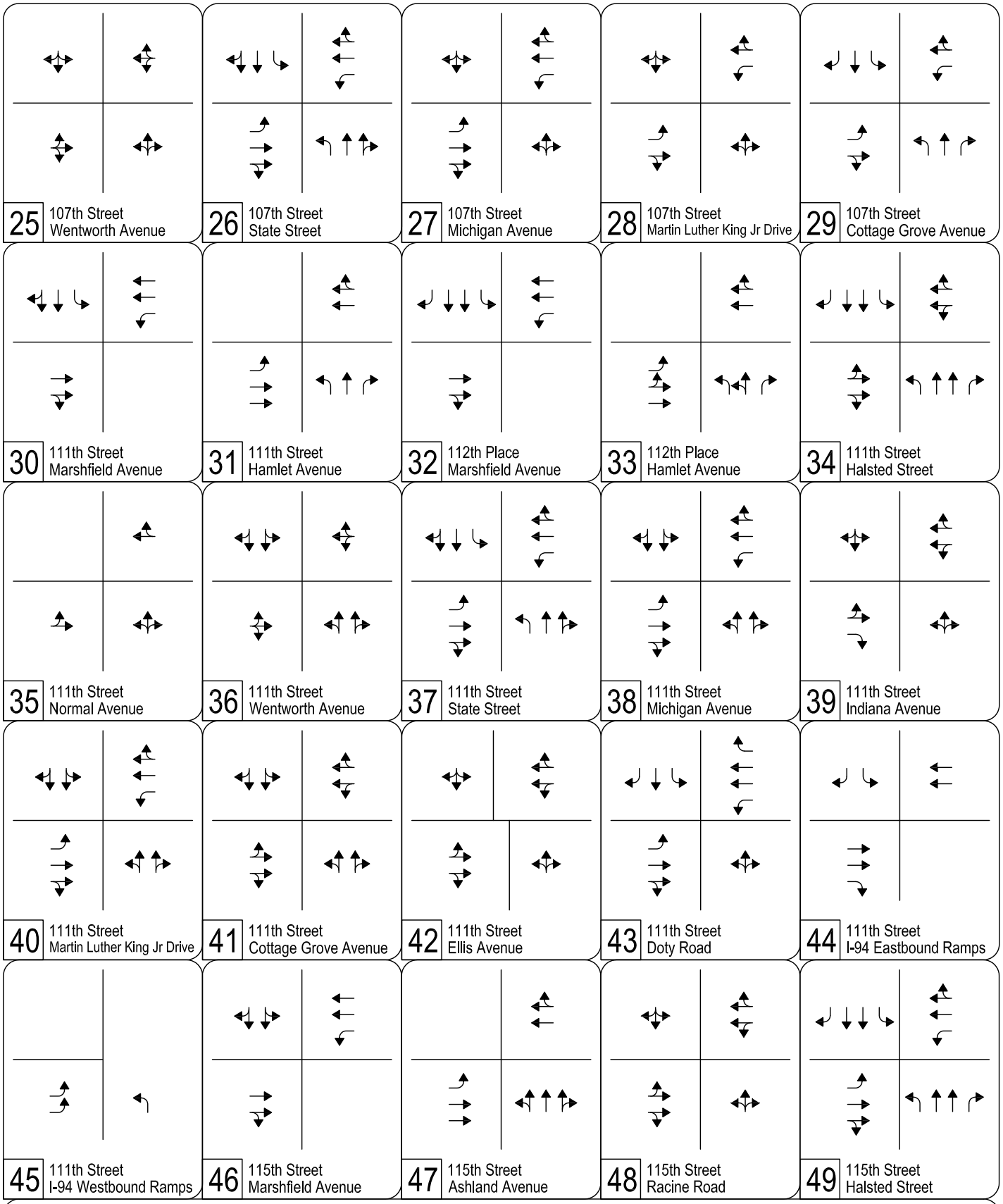

UPRR ROW Option Alternative Mitigated (2030) Intersection Lane Geometry

Page 2 of 3

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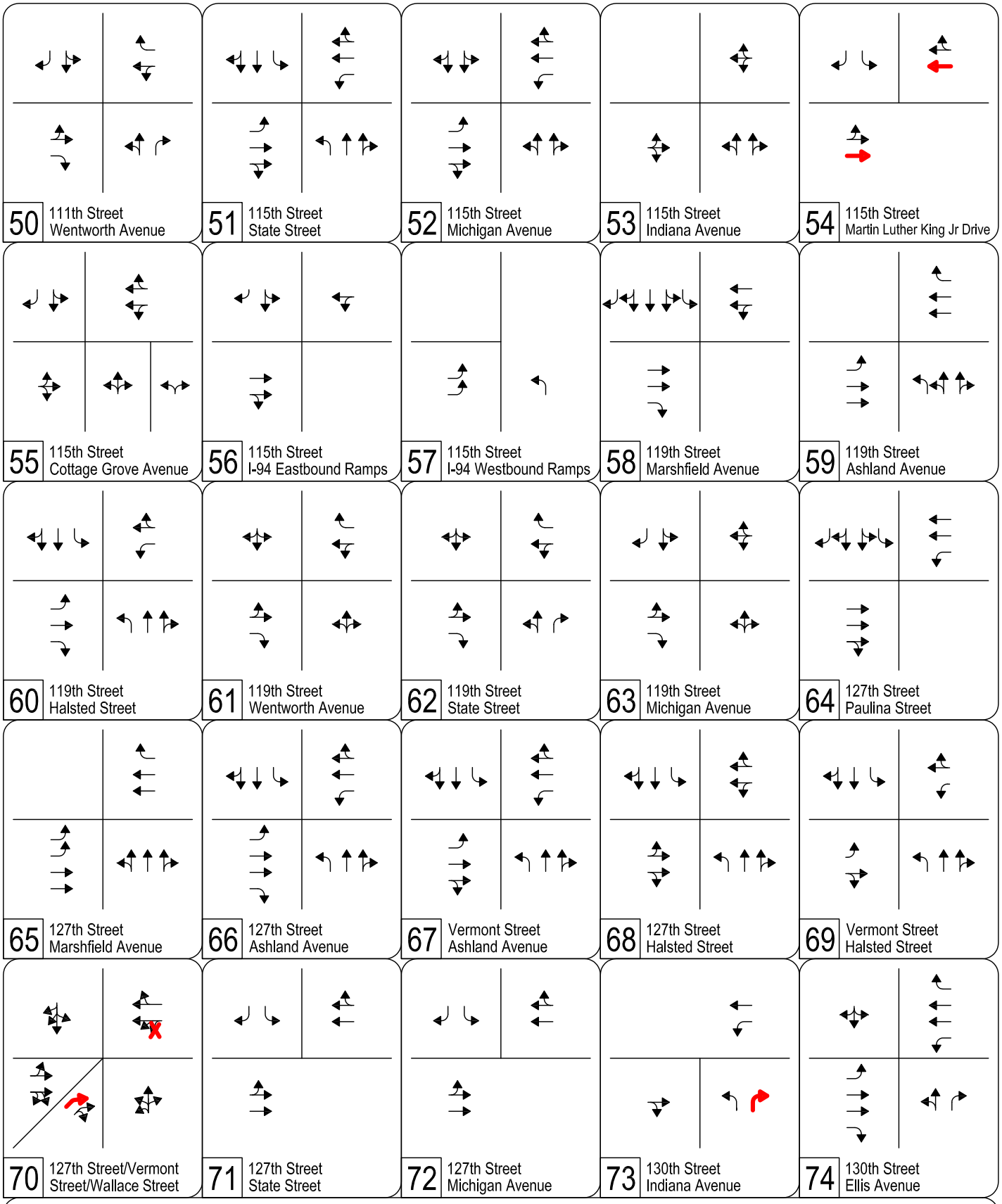

UPRR ROW Option Alternative Mitigated (2030) Intersection Lane Geometry

Page 3 of 3

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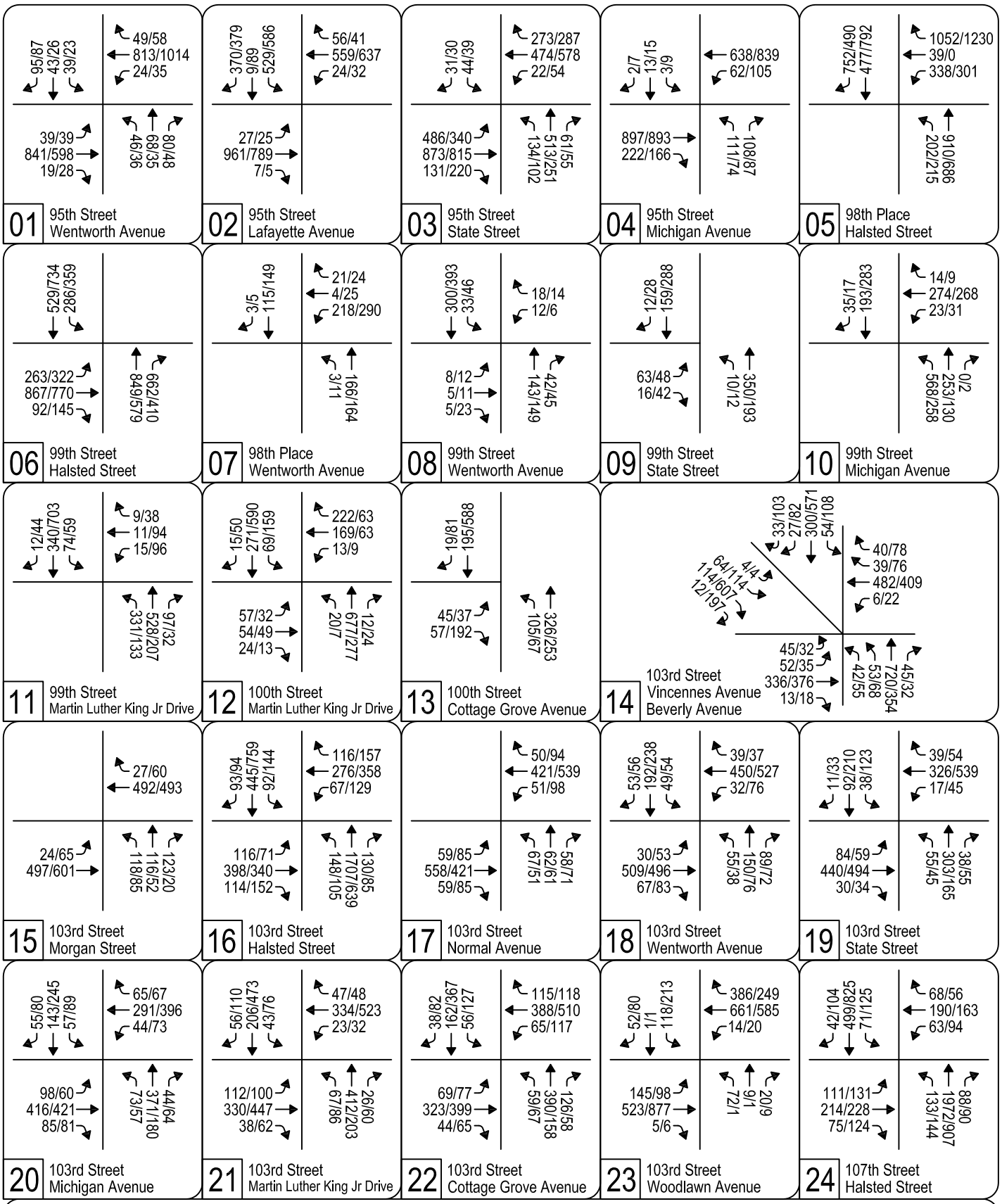

UPRR ROW Option Alternative Mitigated (2030) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

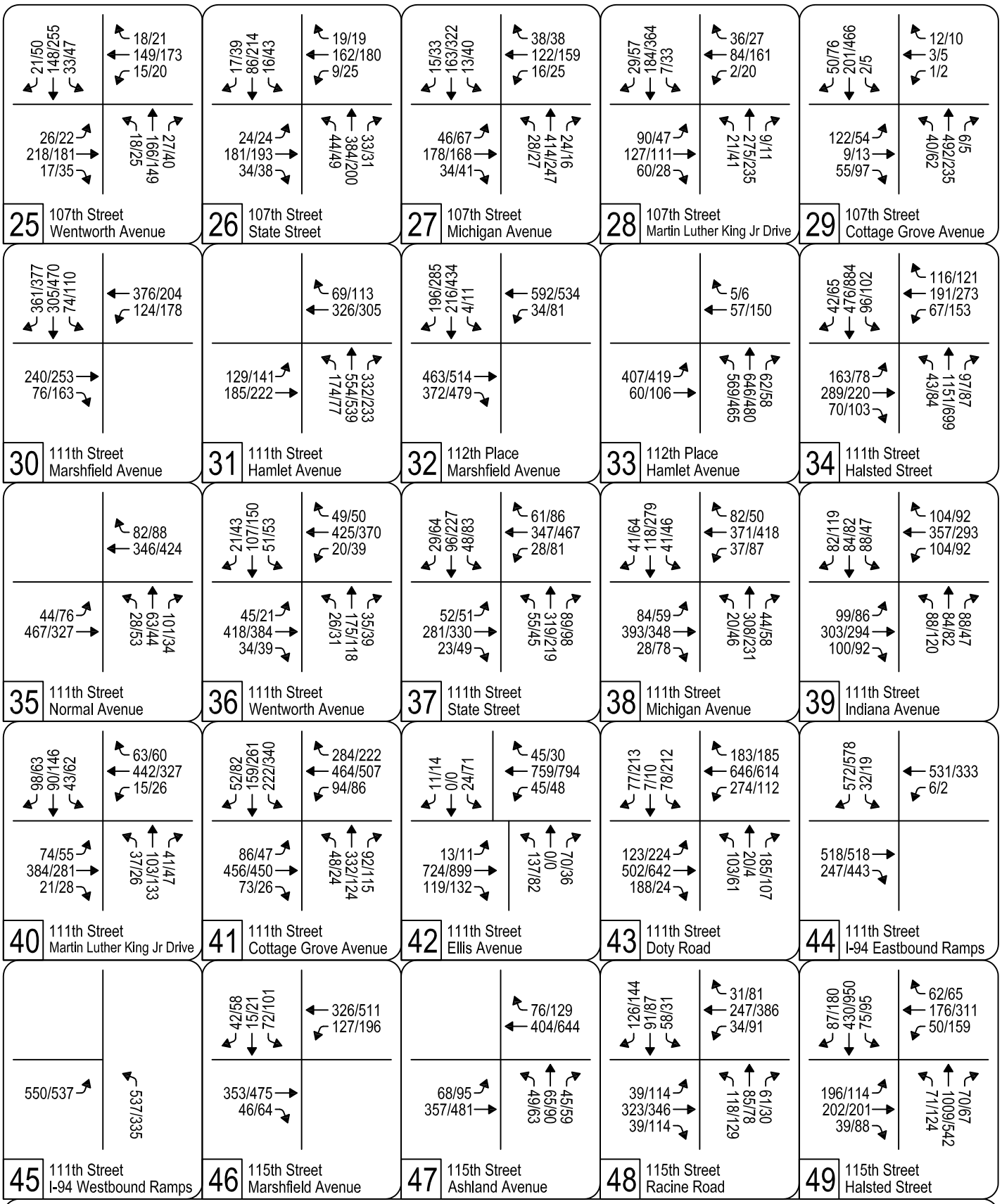

UPRR ROW Option Alternative Mitigated (2030) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

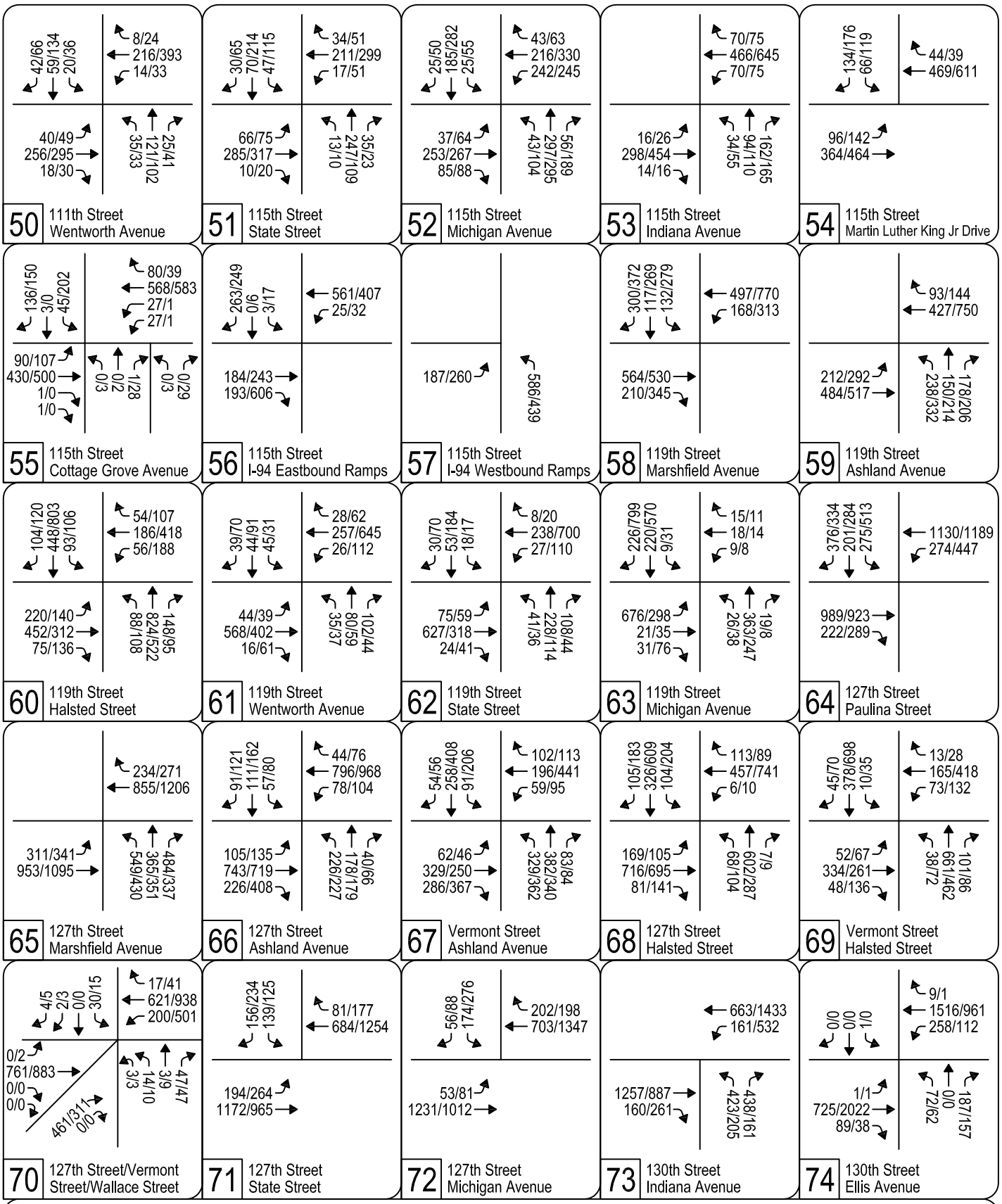

UPRR ROW Option Alternative Mitigated (2030) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	841	19	24	813	49	46	68	80	39	43	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1417	2976		1592	2979			1755			1673	
Flt Permitted	0.25	1.00		0.25	1.00			0.90			0.91	
Satd. Flow (perm)	369	2976		417	2979			1596			1531	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	885	20	25	856	52	48	72	84	41	45	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	59	0
Lane Group Flow (vph)	41	903	0	25	901	0	0	165	0	0	127	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	193	1557		218	1558			565			542	
v/s Ratio Prot		c0.30			0.30							
v/s Ratio Perm	0.11			0.06				c0.10			0.08	
v/c Ratio	0.21	0.58		0.11	0.58			0.29			0.23	
Uniform Delay, d1	8.3	10.6		7.9	10.6			15.1			14.8	
Progression Factor	1.00	1.00		0.83	1.16			1.00			1.00	
Incremental Delay, d2	2.5	1.6		0.9	1.4			1.3			1.0	
Delay (s)	10.8	12.2		7.5	13.6			16.4			15.8	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.1			13.5			16.4			15.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	961	7	24	559	56	0	0	0	529	9	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	778	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	352	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1012	7	25	588	59	0	0	0	557	9	389
RTOR Reduction (vph)	0	1	0	0	0	26	0	0	0	0	0	172
Lane Group Flow (vph)	28	1018	0	25	588	33	0	0	0	557	9	217
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	162	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.31		0.01	c0.19					c0.18	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.16
v/c Ratio	0.17	0.94		0.04	0.33	0.12				0.78	0.03	0.67
Uniform Delay, d1	31.6	42.2		15.1	15.4	13.4				46.9	38.7	45.5
Progression Factor	0.80	0.82		0.29	0.63	1.53				1.00	1.00	1.00
Incremental Delay, d2	2.0	14.1		0.1	0.3	0.5				8.2	0.2	10.7
Delay (s)	27.2	48.9		4.5	10.0	20.9				55.1	38.9	56.2
Level of Service	C	D		A	A	C				E	D	E
Approach Delay (s)		48.3			10.7			0.0			55.4	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	486	873	131	22	474	273	134	513	61	44	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	512	919	138	23	499	287	141	540	64	46	0	33
RTOR Reduction (vph)	0	9	0	0	0	158	0	0	25	0	0	31
Lane Group Flow (vph)	512	1049	0	23	499	129	0	681	39	46	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1554		108	697	225		762	327	53		45
v/s Ratio Prot	0.16	c0.34		0.01	c0.17			c0.21		c0.05		
v/s Ratio Perm						0.14			0.03			0.00
v/c Ratio	0.49	0.67		0.21	0.72	0.57		0.89	0.12	0.87		0.05
Uniform Delay, d1	34.7	24.5		57.2	45.5	43.6		48.5	39.5	60.5		57.4
Progression Factor	0.75	0.20		1.00	1.00	1.00		0.95	0.90	1.00		1.00
Incremental Delay, d2	0.7	1.1		4.5	6.2	10.1		14.9	0.7	76.0		0.4
Delay (s)	26.9	6.0		61.6	51.7	53.8		60.7	36.2	136.5		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		12.8			52.7			58.6			103.6	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	35.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	897	222	62	638	0	111	0	108	3	13	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.98	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1650	3005		1390		1465	1803	1943	
Flt Permitted		1.00		0.15	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		267	3005		1093		1465	1803	1943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	997	247	69	709	0	123	0	120	3	14	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	77	0	1	0
Lane Group Flow (vph)	0	1222	0	69	709	0	123	0	43	3	15	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		160	1803		350		469	577	622	
v/s Ratio Prot		c0.43			0.24						0.01	
v/s Ratio Perm				0.26			c0.11		0.03	0.00		
v/c Ratio		0.71		0.43	0.39		0.35		0.09	0.01	0.02	
Uniform Delay, d1		14.0		10.8	10.5		26.0		23.8	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.5		8.3	0.6		2.8		0.4	0.0	0.1	
Delay (s)		16.5		19.1	11.1		28.8		24.2	23.2	23.4	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.5			11.8			26.5			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	338	39	1052	202	910	0	0	477	752
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3940	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3940	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	345	40	1073	206	929	0	0	487	767
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	345	40	1073	206	929	0	0	1254	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1163	
v/s Ratio Prot							c0.13	0.21			c0.32	
v/s Ratio Perm				0.23	0.02	c0.73						
v/c Ratio				0.77	0.08	2.54	0.44	0.34			1.91dr	
Uniform Delay, d1				33.7	26.7	37.5	29.3	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.38			1.00	
Incremental Delay, d2				11.8	0.3	698.4	2.0	0.2			50.2	
Delay (s)				45.5	27.1	735.9	21.3	22.1			87.2	
Level of Service				D	C	F	C	C			F	
Approach Delay (s)		0.0			553.1			22.0			87.2	
Approach LOS		A			F			C			F	

Intersection Summary			
HCM Average Control Delay	244.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	867	92	0	0	0	0	849	662	286	529	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3184						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3184						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	271	894	95	0	0	0	0	875	682	295	545	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	244	1009	0	0	0	0	0	875	682	295	545	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.19	0.12	
v/s Ratio Perm	0.16	0.32							c0.31			
v/c Ratio	0.50	0.98						0.75	1.17	0.63	0.20	
Uniform Delay, d1	28.7	35.1						35.3	38.5	32.1	10.0	
Progression Factor	1.00	1.00						0.43	0.46	1.06	0.42	
Incremental Delay, d2	3.7	23.4						0.4	78.3	2.2	0.1	
Delay (s)	32.4	58.5						15.7	96.0	36.1	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		53.5			0.0			50.9			15.5	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	43.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	166	0	0	115	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1961	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		782	1882			1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	184	0	0	128	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	184	0	0	130	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		501	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.07	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.17			0.12	
Uniform Delay, d1				23.4	19.9		10.0	8.0			9.6	
Progression Factor				1.00	1.00		1.06	1.18			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.6	9.8			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.8			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	12	0	18	0	143	42	33	300	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.92			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.98			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1620			1686		1595	1755	
Flt Permitted	0.74	1.00			0.93			1.00		0.60	1.00	
Satd. Flow (perm)	1502	1809			1543			1686		1005	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	13	0	19	0	151	44	35	316	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	19	0	0	183	0	35	316	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	477	575			490			793		640	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.04			0.23		0.05	0.31	
Uniform Delay, d1	19.9	19.9			20.0			13.4		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		1.01	0.92	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.2			14.0		8.8	8.9	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.2			14.0			8.9	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	16	10	350	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1787		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1787		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	18	11	389	177	13
RTOR Reduction (vph)	12	0	0	0	4	0
Lane Group Flow (vph)	76	0	11	389	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	577		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.40	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.32	0.52	1.16	
Incremental Delay, d2	0.5		0.0	1.1	0.4	
Delay (s)	16.0		2.2	5.4	8.9	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.3	8.9	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	23	274	14	568	253	0	0	193	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3738		1660	1752			1603	1298
Flt Permitted					1.00		0.57	1.00			1.00	1.00
Satd. Flow (perm)					3738		1002	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	26	304	16	631	281	0	0	214	39
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	0	0	0	342	0	631	281	0	0	214	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1143		679	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.16			0.13	
v/s Ratio Perm							c0.45					0.01
v/c Ratio					0.30		0.93	0.27			0.30	0.03
Uniform Delay, d1					22.5		17.0	8.1			15.0	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.7		21.0	0.6			1.1	0.1
Delay (s)					23.2		38.0	8.7			16.1	13.3
Level of Service					C		D	A			B	B
Approach Delay (s)		0.0			23.2			29.0			15.6	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	15	11	9	331	528	97	74	340	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.97		1.00	0.98		1.00	1.00	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1803		1692	3236		1707	3352	
Flt Permitted					0.98		0.50	1.00		0.31	1.00	
Satd. Flow (perm)					1803		892	3236		564	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	17	12	10	368	587	108	82	378	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	32	0	368	675	0	82	388	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					553		562	1467		415	1520	
v/s Ratio Prot					c0.02		c0.06	0.21		0.02	0.12	
v/s Ratio Perm							c0.30			0.09		
v/c Ratio					0.06		0.65	0.46		0.20	0.26	
Uniform Delay, d1					18.4		13.8	14.2		12.4	12.7	
Progression Factor					1.00		0.69	0.74		1.00	1.00	
Incremental Delay, d2					0.2		5.4	0.9		1.1	0.4	
Delay (s)					18.6		14.9	11.4		13.4	13.1	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.6			12.6			13.1	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	54	24	13	169	222	20	677	12	69	271	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1946			1626		1596	3232		1641	3131	
Flt Permitted		0.68			0.99		0.57	1.00		0.33	1.00	
Satd. Flow (perm)		1354			1613		955	3232		574	3131	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	57	25	14	178	234	21	713	13	73	285	16
RTOR Reduction (vph)	0	10	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	132	0	0	367	0	21	724	0	73	296	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		451			538		535	1810		321	1753	
v/s Ratio Prot								c0.22			0.09	
v/s Ratio Perm		0.10			c0.23		0.02			0.13		
v/c Ratio		0.29			0.68		0.04	0.40		0.23	0.17	
Uniform Delay, d1		18.5			21.6		7.4	9.4		8.3	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.18	0.07	
Incremental Delay, d2		1.6			6.9		0.1	0.7		1.6	0.2	
Delay (s)		20.1			28.4		7.6	10.0		3.1	0.8	
Level of Service		C			C		A	B		A	A	
Approach Delay (s)		20.1			28.4			9.9			1.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	45	57	105	326	195	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	63	117	362	217	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	113	237	241	144	93
Volume Left (vph)	50	117	0	0	0
Volume Right (vph)	63	0	0	0	21
Hadj (s)	-0.16	0.33	0.08	0.09	-0.07
Departure Headway (s)	5.3	5.4	5.1	5.4	5.2
Degree Utilization, x	0.17	0.36	0.35	0.22	0.14
Capacity (veh/h)	628	653	684	641	660
Control Delay (s)	9.3	10.1	9.6	8.7	7.9
Approach Delay (s)	9.3	9.9		8.4	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.4		
HCM Level of Service	A		
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	45	52	336	13	6	482	39	40	42	53	720	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3290	
Flt Permitted		0.11	1.00	1.00	0.54	1.00	1.00			0.39	1.00	
Satd. Flow (perm)		187	1731	1530	971	1731	1487			700	3290	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	58	373	14	7	536	43	44	47	59	800	50
RTOR Reduction (vph)	0	0	0	7	0	0	31	0	0	0	5	0
Lane Group Flow (vph)	0	108	373	7	7	536	56	0	0	106	845	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	296	528	453			167	783	
v/s Ratio Prot		0.05	c0.22			c0.31					c0.26	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.15		
v/c Ratio		0.38	0.45	0.01	0.02	1.02	0.12			0.63	1.08	
Uniform Delay, d1		20.3	18.4	14.5	25.6	36.5	26.4			35.9	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.9	1.8	0.0	0.1	43.0	0.6			17.0	55.9	
Delay (s)		24.2	20.2	14.5	25.7	79.5	26.9			52.9	95.9	
Level of Service		C	C	B	C	E	C			D	F	
Approach Delay (s)			20.9			71.7					91.1	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	62.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	54	300	27	33	4	64	114	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.97				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3279				1710	2621	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3279				1710	2621	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	333	30	37	4	71	127	13
RTOR Reduction (vph)	0	8	0	0	0	0	7	0
Lane Group Flow (vph)	60	392	0	0	0	75	133	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.12				0.04		
v/s Ratio Perm	0.20						c0.05	
v/c Ratio	0.88	0.51				0.26	0.31	
Uniform Delay, d1	38.9	35.1				38.1	38.4	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	79.4	2.4				2.2	1.8	
Delay (s)	118.3	37.5				40.4	40.2	
Level of Service	F	D				D	D	
Approach Delay (s)		48.0				40.3		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	497	0	0	492	27	118	116	123	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1929			1769				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1598			1929			1769				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	552	0	0	547	30	131	129	137	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	579	0	0	577	0	0	397	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		762			920			708				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.36						0.22				
v/c Ratio		0.76			0.63			0.56				
Uniform Delay, d1		13.9			12.7			15.1				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.0			3.2			3.2				
Delay (s)		21.0			15.9			18.3				
Level of Service		C			B			B				
Approach Delay (s)		21.0			15.9			18.3			0.0	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	398	114	67	276	116	148	1707	130	92	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1924	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.65	1.00		0.54	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1265	1426		1040	1396	631	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	419	120	71	291	122	156	1797	137	97	468	98
RTOR Reduction (vph)	0	0	71	0	0	72	0	0	30	0	0	59
Lane Group Flow (vph)	0	541	49	0	362	50	156	1797	107	97	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	52.7	44.0	44.0	49.3	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	52.7	44.0	44.0	49.3	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.50	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		518	584		426	572	389	1299	538	152	1191	510
v/s Ratio Prot							c0.03	c0.58		c0.04	0.16	
v/s Ratio Perm		c0.43	0.03		0.35	0.04	0.17		0.08	0.26		0.03
v/c Ratio		1.04	0.08		0.85	0.09	0.40	1.38	0.20	0.64	0.39	0.08
Uniform Delay, d1		31.0	19.0		28.1	19.0	14.9	30.5	19.3	23.3	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.25	0.75	0.39
Incremental Delay, d2		51.6	0.3		18.7	0.3	0.7	177.4	0.8	8.2	0.9	0.3
Delay (s)		82.6	19.2		46.8	19.3	15.6	207.9	20.2	37.4	17.7	7.9
Level of Service		F	B		D	B	B	F	C	D	B	A
Approach Delay (s)		71.1			39.9			181.2			19.2	
Approach LOS		E			D			F			B	

Intersection Summary			
HCM Average Control Delay	117.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	116.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	558	59	51	421	50	67	62	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1630			1628			1775				
Flt Permitted		0.92			0.89			0.98				
Satd. Flow (perm)		1501			1455			1775				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	620	66	57	468	56	74	69	64	0	0	0
RTOR Reduction (vph)	0	5	0	0	6	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	747	0	0	575	0	0	182	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		878			851			519				
v/s Ratio Prot												
v/s Ratio Perm		c0.50			0.40			0.10				
v/c Ratio		0.85			0.68			0.35				
Uniform Delay, d1		11.2			9.3			18.1				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		10.1			4.3			1.9				
Delay (s)		21.3			13.6			20.0				
Level of Service		C			B			C				
Approach Delay (s)		21.3			13.6			20.0			0.0	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	509	67	32	450	39	55	150	89	49	192	53
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.98	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1636	1288		1658	1490		1738	
Flt Permitted		0.96	1.00		0.95	1.00		0.84	1.00		0.92	
Satd. Flow (perm)		1594	1255		1555	1288		1417	1490		1608	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	536	71	34	474	41	58	158	94	52	202	56
RTOR Reduction (vph)	0	0	30	0	0	15	0	0	64	0	11	0
Lane Group Flow (vph)	0	568	41	0	508	26	0	216	30	0	299	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		914	720		892	738		453	477		515	
v/s Ratio Prot												
v/s Ratio Perm		c0.36	0.03		0.33	0.02		0.15	0.02		c0.19	
v/c Ratio		0.62	0.06		0.57	0.03		0.48	0.06		0.58	
Uniform Delay, d1		10.6	7.1		10.1	7.0		20.5	17.7		21.3	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.2	0.1		2.6	0.1		3.6	0.3		4.7	
Delay (s)		13.8	7.2		12.8	7.1		24.0	18.0		26.0	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.0			12.3			22.2			26.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	440	30	17	326	39	55	303	38	38	92	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1464	2990		1459	3535		1534	1647	1301	1517	1541	1156
Flt Permitted	0.50	1.00		0.43	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	777	2990		656	3535		1116	1647	1301	720	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	489	33	19	362	43	61	337	42	42	102	12
RTOR Reduction (vph)	0	7	0	0	14	0	0	0	22	0	0	7
Lane Group Flow (vph)	93	515	0	19	391	0	61	337	20	42	102	5
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	371	1426		313	1686		446	659	520	288	616	462
v/s Ratio Prot		c0.17			0.11			c0.20			0.07	
v/s Ratio Perm	0.12			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.25	0.36		0.06	0.23		0.14	0.51	0.04	0.15	0.17	0.01
Uniform Delay, d1	10.1	10.7		9.2	10.0		12.4	14.7	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.60	0.75	0.30	0.53	0.54	0.28
Incremental Delay, d2	1.6	0.7		0.4	0.3		0.6	2.8	0.1	1.1	0.6	0.0
Delay (s)	11.7	11.5		9.5	10.3		8.0	13.7	3.7	7.7	7.3	3.4
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.5			10.3			12.0			7.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	416	85	44	291	65	73	371	44	57	143	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.98	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	3058		1588	3012		1541	3022		1403	2767	
Flt Permitted	0.52	1.00		0.42	1.00		0.62	1.00		0.46	1.00	
Satd. Flow (perm)	799	3058		697	3012		1007	3022		678	2767	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	438	89	46	306	68	77	391	46	60	151	58
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	34	0
Lane Group Flow (vph)	103	527	0	46	374	0	77	425	0	60	175	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	384	1468		335	1446		416	1249		280	1144	
v/s Ratio Prot		c0.17			0.12			c0.14			0.06	
v/s Ratio Perm	0.13			0.07			0.08			0.09		
v/c Ratio	0.27	0.36		0.14	0.26		0.19	0.34		0.21	0.15	
Uniform Delay, d1	11.6	12.3		10.9	11.6		14.0	15.0		14.2	13.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	0.7		0.9	0.4		1.0	0.7		1.7	0.3	
Delay (s)	13.3	12.9		11.7	12.0		15.0	15.8		15.9	14.1	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		13.0			12.0			15.6			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
1021: 103rd Street & Martin Luther King Jr Drive

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	330	38	23	334	47	67	412	26	43	206	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1474	1842		1533	3073		1372	2877	
Flt Permitted	0.44	1.00		0.46	1.00		0.58	1.00		0.41	1.00	
Satd. Flow (perm)	709	1576		711	1842		940	3073		597	2877	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	118	347	40	24	352	49	71	434	27	45	217	59
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	118	387	0	24	401	0	71	461	0	45	276	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	442	738		358	793		328	730		193	630	
v/s Ratio Prot	c0.02	c0.25		0.00	0.22		c0.01	c0.15		0.01	0.10	
v/s Ratio Perm	0.13			0.03			0.06			0.06		
v/c Ratio	0.27	0.52		0.07	0.51		0.22	0.63		0.23	0.44	
Uniform Delay, d1	13.8	15.9		15.0	17.6		21.6	29.1		26.1	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.7		0.1	2.3		0.3	4.1		0.6	2.2	
Delay (s)	14.1	18.6		15.1	19.9		21.9	33.2		26.8	30.9	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		17.5			19.6			31.7			30.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	323	44	65	388	115	59	390	126	56	162	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3493			2914		1614	3156		1581	2918	
Flt Permitted		0.78			0.84		0.61	1.00		0.38	1.00	
Satd. Flow (perm)		2745			2468		1041	3156		628	2918	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	77	359	49	72	431	128	66	433	140	62	180	42
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	485	0	0	631	0	66	573	0	62	222	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1244			1119		458	1389		276	1284	
v/s Ratio Prot								c0.18			0.08	
v/s Ratio Perm		0.18			c0.26		0.06			0.10		
v/c Ratio		0.39			0.56		0.14	0.41		0.22	0.17	
Uniform Delay, d1		13.6			15.1		12.6	14.4		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9			2.1		0.7	0.9		1.9	0.3	
Delay (s)		14.5			17.1		13.2	15.3		14.9	13.0	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.5			17.1			15.1			13.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	523	5	14	661	386	72	9	20	118	1	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3144		1629	3257	1457		1611			3105	
Flt Permitted	0.35	1.00		0.42	1.00	1.00		0.69			0.75	
Satd. Flow (perm)	581	3144		720	3257	1457		1158			2398	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	581	6	16	734	429	80	10	22	131	1	58
RTOR Reduction (vph)	0	1	0	0	0	150	0	12	0	0	44	0
Lane Group Flow (vph)	161	586	0	16	734	279	0	100	0	0	146	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	378	2046		468	2119	948		274			566	
v/s Ratio Prot		0.19			0.23							
v/s Ratio Perm	c0.28			0.02		0.19		c0.09			0.06	
v/c Ratio	0.43	0.29		0.03	0.35	0.29		0.36			0.26	
Uniform Delay, d1	6.0	5.3		4.4	5.6	5.3		22.6			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	3.5	0.4		0.1	0.4	0.8		3.5			1.0	
Delay (s)	9.5	5.7		4.5	6.0	6.1		26.1			23.0	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.5			6.0			26.1			23.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	70.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	75	63	190	68	133	1972	88	71	499	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1499		1547	1586		1493	3069	1271	1452	2983	1301
Flt Permitted	0.38	1.00		0.32	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	617	1499		524	1586		612	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	79	66	200	72	140	2076	93	75	525	44
RTOR Reduction (vph)	0	15	0	0	16	0	0	0	18	0	0	26
Lane Group Flow (vph)	117	289	0	66	256	0	140	2076	75	75	525	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	254	388		232	410		350	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.03	c0.68		c0.03	0.18	
v/s Ratio Perm	0.11			0.07			0.16		0.06	0.17		0.01
v/c Ratio	0.46	0.75		0.28	0.63		0.40	1.64	0.14	0.43	0.43	0.03
Uniform Delay, d1	22.5	28.9		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.71	0.49	1.00	1.00	1.00
Incremental Delay, d2	5.9	12.3		3.1	7.0		2.8	292.0	0.5	7.6	1.1	0.1
Delay (s)	28.4	41.2		24.9	34.9		10.9	309.7	8.1	25.7	18.9	15.0
Level of Service	C	D		C	C		B	F	A	C	B	B
Approach Delay (s)		37.6			32.9			279.4			19.5	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	184.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	218	17	15	149	18	18	166	27	33	148	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		1850			1836			1902			1931	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1792			1790			1856			1823	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	225	18	15	154	19	19	171	28	34	153	22
RTOR Reduction (vph)	0	4	0	0	6	0	0	8	0	0	6	0
Lane Group Flow (vph)	0	266	0	0	182	0	0	210	0	0	203	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		744			744			857			841	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.11			0.11	
v/c Ratio		0.36			0.24			0.24			0.24	
Uniform Delay, d1		13.0			12.4			10.6			10.6	
Progression Factor		1.00			0.64			1.04			1.00	
Incremental Delay, d2		1.3			0.8			0.6			0.7	
Delay (s)		14.4			8.7			11.7			11.3	
Level of Service		B			A			B			B	
Approach Delay (s)		14.4			8.7			11.7			11.3	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	34	9	162	19	44	384	33	16	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	2994		1302	3037		1529	3093		1492	2868	
Flt Permitted	0.63	1.00		0.60	1.00		0.68	1.00		0.48	1.00	
Satd. Flow (perm)	965	2994		827	3037		1093	3093		757	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	38	10	180	21	49	427	37	18	96	19
RTOR Reduction (vph)	0	24	0	0	13	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	215	0	10	188	0	49	454	0	18	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	875		242	888		639	1808		443	1677	
v/s Ratio Prot		c0.07			0.06			c0.15			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.25		0.04	0.21		0.08	0.25		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.9	6.6		5.7	5.8	
Progression Factor	0.73	0.73		0.75	0.74		0.94	1.00		0.49	0.44	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.9	13.5		12.6	13.4		5.7	6.9		3.0	2.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.4			13.3			6.8			2.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	38	28	414	24	13	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2868			1878			1807	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1047	2952		965	2868			1839			1749	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	42	31	460	27	14	181	17
RTOR Reduction (vph)	0	23	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	515	0	0	207	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	419	1181		386	1147			877			834	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.28			0.12	
v/c Ratio	0.12	0.18		0.05	0.13			0.59			0.25	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.4			10.1	
Progression Factor	1.02	0.93		0.86	0.87			0.92			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			2.8			0.7	
Delay (s)	13.1	12.0		10.5	11.0			14.1			10.8	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.2			11.0			14.1			10.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	127	60	2	84	36	21	275	9	7	184	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.95			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1879		1587	1870			1971			1933	
Flt Permitted	0.67	1.00		0.57	1.00			0.98			0.99	
Satd. Flow (perm)	1135	1879		950	1870			1928			1916	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	141	67	2	93	40	23	306	10	8	204	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	100	208	0	2	133	0	0	339	0	0	244	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	349	578		292	575			1097			1091	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.09			0.00				c0.18			0.13	
v/c Ratio	0.29	0.36		0.01	0.23			0.31			0.22	
Uniform Delay, d1	17.1	17.5		15.6	16.8			7.3			6.9	
Progression Factor	0.91	0.90		0.89	0.92			0.99			1.00	
Incremental Delay, d2	2.0	1.7		0.0	0.9			0.7			0.5	
Delay (s)	17.5	17.5		14.0	16.4			7.9			7.4	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.5			16.3			7.9			7.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	9	55	1	3	12	40	492	6	2	201	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1672		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.62	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1260	1672		1279	1422		971	1631	1392	648	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	136	10	61	1	3	13	44	547	7	2	223	56
RTOR Reduction (vph)	0	44	0	0	9	0	0	0	3	0	0	22
Lane Group Flow (vph)	136	27	0	1	7	0	44	547	4	2	223	34
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		354	394		583	979	835	389	1144	856
v/s Ratio Prot		0.02			0.00			c0.34			0.12	
v/s Ratio Perm	c0.11			0.00			0.05		0.00	0.00		0.02
v/c Ratio	0.39	0.06		0.00	0.02		0.08	0.56	0.01	0.01	0.19	0.04
Uniform Delay, d1	19.0	17.3		17.0	17.1		5.4	7.8	5.2	5.2	5.9	5.3
Progression Factor	1.46	2.42		1.00	1.00		1.17	1.10	1.32	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.2		0.0	0.1		0.2	1.7	0.0	0.0	0.4	0.1
Delay (s)	31.1	42.0		17.0	17.1		6.5	10.3	6.9	5.2	6.3	5.4
Level of Service	C	D		B	B		A	B	A	A	A	A
Approach Delay (s)		34.8			17.1			10.0			6.1	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	240	76	124	376	0	0	0	0	74	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2826		1621	3288					1574	2907	
Flt Permitted		1.00		0.50	1.00					0.95	1.00	
Satd. Flow (perm)		2826		848	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	253	80	131	396	0	0	0	0	78	321	380
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	303	0	131	396	0	0	0	0	78	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		933		653	1940					504	930	
v/s Ratio Prot		c0.11		0.05	c0.12					0.05	c0.17	
v/s Ratio Perm				0.07								
v/c Ratio		0.32		0.20	0.20					0.15	0.52	
Uniform Delay, d1		25.1		10.6	9.6					24.3	27.8	
Progression Factor		1.00		1.95	2.06					1.00	1.00	
Incremental Delay, d2		0.9		0.6	0.2					0.7	2.1	
Delay (s)		26.1		21.2	19.8					25.0	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.1			20.2			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	185	0	0	326	69	174	554	332	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2832		1750	1782	1514			
Flt Permitted	0.34	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	599	3054			2832		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	195	0	0	343	73	183	583	349	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	234	0	0	0
Lane Group Flow (vph)	136	195	0	0	398	0	183	583	115	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	678	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.06			c0.14		0.10	c0.33				
v/s Ratio Perm	0.04								0.08			
v/c Ratio	0.20	0.11			0.67		0.32	0.99	0.23			
Uniform Delay, d1	11.8	9.4			36.3		25.1	33.4	24.3			
Progression Factor	0.25	0.25			1.00		0.75	0.79	1.91			
Incremental Delay, d2	0.6	0.1			5.9		0.9	27.8	0.7			
Delay (s)	3.5	2.5			42.2		19.8	54.1	47.1			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			42.2			46.3			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	37.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	463	372	34	592	0	0	0	0	4	216	196
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3108		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.16	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3108		279	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	482	388	35	617	0	0	0	0	4	225	204
RTOR Reduction (vph)	0	145	0	0	0	0	0	0	0	0	0	135
Lane Group Flow (vph)	0	725	0	35	617	0	0	0	0	4	225	69
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1119		391	1898					543	1074	491
v/s Ratio Prot		c0.23		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.65		0.09	0.33					0.01	0.21	0.14
Uniform Delay, d1		26.7		12.5	10.9					21.8	23.5	22.9
Progression Factor		1.00		0.54	0.68					0.73	0.79	0.92
Incremental Delay, d2		2.9		0.2	0.2					0.0	0.4	0.5
Delay (s)		29.6		7.0	7.6					16.0	18.8	21.5
Level of Service		C		A	A					B	B	C
Approach Delay (s)		29.6			7.6			0.0			20.1	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	407	60	0	0	57	5	569	646	62	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3041			3079		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1084	2338			3079		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	420	62	0	0	59	5	587	666	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	38	0	0	0
Lane Group Flow (vph)	210	272	0	0	60	0	587	666	26	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1445			462		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.38	c0.41	0.02			
v/s Ratio Perm	c0.05	0.03										
v/c Ratio	0.31	0.19			0.13		1.02	1.10	0.05			
Uniform Delay, d1	14.0	13.3			36.8		31.5	31.5	20.2			
Progression Factor	0.23	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.2			0.6		42.9	66.6	0.2			
Delay (s)	4.1	3.5			37.4		74.4	98.1	20.4			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.8			37.4			83.8			0.0	
Approach LOS		A			D			F			A	

Intersection Summary			
HCM Average Control Delay	61.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	163	289	70	67	191	116	43	1151	97	96	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.98		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2843			2772		1447	3069	1336	1494	2956	1270
Flt Permitted		0.66			0.78		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1909			2178		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	170	301	73	70	199	121	45	1199	101	100	496	44
RTOR Reduction (vph)	0	14	0	0	61	0	0	0	38	0	0	27
Lane Group Flow (vph)	0	530	0	0	329	0	45	1199	63	100	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		874			717		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.39		c0.03	0.17	
v/s Ratio Perm		0.21			c0.15		0.06		0.05	0.26		0.01
v/c Ratio		0.61			0.46		0.15	0.99	0.12	0.69	0.43	0.03
Uniform Delay, d1		19.0			22.5		14.7	25.6	16.7	19.1	18.7	16.1
Progression Factor		1.00			1.00		1.32	0.87	1.41	1.83	1.64	3.16
Incremental Delay, d2		3.1			2.1		0.6	17.5	0.3	22.2	1.0	0.1
Delay (s)		22.1			24.6		20.1	39.9	23.8	57.2	31.8	51.1
Level of Service		C			C		C	D	C	E	C	D
Approach Delay (s)		22.1			24.6			38.0			37.1	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	33.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	467	0	0	346	82	28	63	101	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1707			1670			1581				
Flt Permitted		0.94			1.00			0.99				
Satd. Flow (perm)		1604			1670			1581				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	519	0	0	384	91	31	70	112	0	0	0
RTOR Reduction (vph)	0	0	0	0	13	0	0	61	0	0	0	0
Lane Group Flow (vph)	0	568	0	0	462	0	0	152	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		839			874			559				
v/s Ratio Prot					0.28							
v/s Ratio Perm		c0.35						0.10				
v/c Ratio		0.68			0.53			0.27				
Uniform Delay, d1		11.4			10.2			15.0				
Progression Factor		1.00			0.66			1.00				
Incremental Delay, d2		4.4			1.8			1.2				
Delay (s)		15.8			8.5			16.2				
Level of Service		B			A			B				
Approach Delay (s)		15.8			8.5			16.2			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	418	34	20	425	49	26	175	35	51	107	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1886			1843			3185			3148	
Flt Permitted		0.93			0.97			0.91			0.83	
Satd. Flow (perm)		1759			1795			2928			2639	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	464	38	22	472	54	29	194	39	57	119	23
RTOR Reduction (vph)	0	4	0	0	6	0	0	22	0	0	13	0
Lane Group Flow (vph)	0	548	0	0	542	0	0	240	0	0	186	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		812			828			1216			1096	
v/s Ratio Prot												
v/s Ratio Perm		c0.31			0.30			c0.08			0.07	
v/c Ratio		0.67			0.65			0.20			0.17	
Uniform Delay, d1		13.7			13.5			12.1			11.9	
Progression Factor		0.67			0.55			0.86			0.55	
Incremental Delay, d2		3.5			3.9			0.4			0.3	
Delay (s)		12.7			11.3			10.8			6.9	
Level of Service		B			B			B			A	
Approach Delay (s)		12.7			11.3			10.8			6.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	281	23	28	347	61	55	319	89	48	96	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1503	2933		1584	2945		1497	3034		1594	2899	
Flt Permitted	0.43	1.00		0.53	1.00		0.66	1.00		0.48	1.00	
Satd. Flow (perm)	684	2933		884	2945		1046	3034		809	2899	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	312	26	31	386	68	61	354	99	53	107	32
RTOR Reduction (vph)	0	9	0	0	22	0	0	39	0	0	15	0
Lane Group Flow (vph)	58	329	0	31	432	0	61	414	0	53	124	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	232	993		299	997		563	1634		436	1561	
v/s Ratio Prot		0.11			c0.15			c0.14			0.04	
v/s Ratio Perm	0.08			0.04			0.06			0.07		
v/c Ratio	0.25	0.33		0.10	0.43		0.11	0.25		0.12	0.08	
Uniform Delay, d1	15.5	16.0		14.7	16.7		7.4	8.0		7.4	7.2	
Progression Factor	0.58	0.55		0.76	0.79		0.70	0.75		1.30	1.35	
Incremental Delay, d2	2.1	0.7		0.7	1.3		0.4	0.4		0.6	0.1	
Delay (s)	11.0	9.6		11.9	14.4		5.5	6.3		10.2	9.8	
Level of Service	B	A		B	B		A	A		B	A	
Approach Delay (s)		9.8			14.3			6.2			9.9	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	393	28	37	371	82	20	308	44	41	118	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1385	3013		1335	3540			3438			3303	
Flt Permitted	0.46	1.00		0.48	1.00			0.94			0.84	
Satd. Flow (perm)	665	3013		672	3540			3226			2808	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	88	414	29	39	391	86	21	324	46	43	124	43
RTOR Reduction (vph)	0	8	0	0	29	0	0	16	0	0	26	0
Lane Group Flow (vph)	88	435	0	39	448	0	0	375	0	0	184	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	317	1437		320	1688			1290			1123	
v/s Ratio Prot		c0.14			0.13							
v/s Ratio Perm	0.13			0.06				c0.12			0.07	
v/c Ratio	0.28	0.30		0.12	0.27			0.29			0.16	
Uniform Delay, d1	10.2	10.4		9.4	10.2			13.2			12.5	
Progression Factor	1.59	1.64		0.78	0.77			0.23			0.64	
Incremental Delay, d2	2.1	0.5		0.7	0.3			0.5			0.3	
Delay (s)	18.5	17.6		8.1	8.1			3.6			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		17.7			8.1			3.6			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	303	100	104	357	104	88	84	88	88	84	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3034			1823			1826	
Flt Permitted		0.74	1.00		0.76			0.79			0.78	
Satd. Flow (perm)		1227	1409		2325			1456			1442	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	110	337	111	116	397	116	98	93	98	98	93	91
RTOR Reduction (vph)	0	0	53	0	30	0	0	28	0	0	26	0
Lane Group Flow (vph)	0	447	58	0	599	0	0	261	0	0	256	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		642	737		1216			470			466	
v/s Ratio Prot												
v/s Ratio Perm		c0.36	0.04		0.26			c0.18			0.18	
v/c Ratio		0.70	0.08		0.49			0.55			0.55	
Uniform Delay, d1		11.6	7.7		10.0			18.1			18.1	
Progression Factor		2.00	5.72		0.42			1.00			1.00	
Incremental Delay, d2		6.0	0.2		1.4			4.7			4.6	
Delay (s)		29.3	44.3		5.6			22.8			22.7	
Level of Service		C	D		A			C			C	
Approach Delay (s)		32.3			5.6			22.8			22.7	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	384	21	15	442	63	37	103	41	43	90	98
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3018		1573	3002			3454			3403	
Flt Permitted	0.39	1.00		0.46	1.00			0.87			0.88	
Satd. Flow (perm)	606	3018		768	3002			3030			3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	427	23	17	491	70	41	114	46	48	100	109
RTOR Reduction (vph)	0	6	0	0	17	0	0	25	0	0	60	0
Lane Group Flow (vph)	82	444	0	17	544	0	0	176	0	0	197	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	261	1300		331	1293			1352			1345	
v/s Ratio Prot		0.15			c0.18							
v/s Ratio Perm	0.14			0.02				0.06			c0.07	
v/c Ratio	0.31	0.34		0.05	0.42			0.13			0.15	
Uniform Delay, d1	12.2	12.3		10.8	12.9			10.6			10.7	
Progression Factor	0.97	1.00		1.15	0.99			1.05			0.80	
Incremental Delay, d2	2.4	0.5		0.1	0.5			0.2			0.2	
Delay (s)	14.1	12.9		12.5	13.2			11.3			8.8	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.0			13.2			11.3			8.8	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	456	73	94	464	284	48	332	92	222	159	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3075			3146			3118	
Flt Permitted		0.63			0.74			0.88			0.63	
Satd. Flow (perm)		2018			2281			2771			2008	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	507	81	104	516	316	53	369	102	247	177	58
RTOR Reduction (vph)	0	16	0	0	99	0	0	33	0	0	17	0
Lane Group Flow (vph)	0	668	0	0	837	0	0	491	0	0	465	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		807			912			1271			618	
v/s Ratio Prot								c0.04				
v/s Ratio Perm		0.33			c0.37			0.14			c0.23	
v/c Ratio		0.83			0.92			0.39			0.96dl	
Uniform Delay, d1		17.5			18.5			12.0			20.3	
Progression Factor		1.74			1.00			1.00			0.89	
Incremental Delay, d2		9.4			15.5			0.9			8.3	
Delay (s)		39.8			34.0			12.9			26.3	
Level of Service		D			C			B			C	
Approach Delay (s)		39.8			34.0			12.9			26.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	29.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	724	119	45	759	0	137	0	70	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2976			3032			1583				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2976			2543			1310				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	804	132	50	843	0	152	0	78	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	918	0	0	893	0	0	209	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1918			932			233				
v/s Ratio Prot		c0.31										
v/s Ratio Perm					c0.35			c0.16				
v/c Ratio		0.48			0.96			0.90				
Uniform Delay, d1		8.2			27.8			36.2				
Progression Factor		0.04			1.57			1.00				
Incremental Delay, d2		0.4			18.9			37.6				
Delay (s)		0.7			62.5			73.8				
Level of Service		A			E			E				
Approach Delay (s)		0.7			62.5			73.8			0.0	
Approach LOS		A			E			E			A	

Intersection Summary			
HCM Average Control Delay	35.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	123	502	188	274	646	183	103	20	185	78	7	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1756		1629	1714	1457
Flt Permitted	0.32	1.00		0.20	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	508	3020		339	3257	1457		1581		690	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	137	558	209	304	718	203	114	22	206	87	8	86
RTOR Reduction (vph)	0	42	0	0	0	104	0	74	0	0	0	46
Lane Group Flow (vph)	137	725	0	304	718	99	0	268	0	87	8	40
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	40.0	30.6		47.6	35.2	43.8		20.8		32.4	32.4	41.8
Effective Green, g (s)	40.0	30.6		47.6	35.2	43.8		20.8		32.4	32.4	41.8
Actuated g/C Ratio	0.44	0.34		0.53	0.39	0.49		0.23		0.36	0.36	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	331	1027		380	1274	709		365		338	617	677
v/s Ratio Prot	0.04	0.24		c0.12	0.22	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.17		0.07		0.02
v/c Ratio	0.41	0.71		0.80	0.56	0.14		0.73		0.26	0.01	0.06
Uniform Delay, d1	15.4	25.8		14.8	21.4	12.7		32.0		21.2	18.5	13.3
Progression Factor	1.91	1.58		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	3.7		12.0	1.8	0.1		8.0		0.4	0.0	0.1
Delay (s)	30.5	44.5		26.8	23.2	12.8		40.0		21.6	18.5	13.3
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		42.3			22.4			40.0			17.5	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
1044: 111th Street & Bishop Ford Freeway EB Ramps

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	247	6	531	0	0	0	0	32	0	572
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	274	7	590	0	0	0	0	36	0	636
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	590			576			884	1179	288	891	1179	295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	590			576			884	1179	288	891	1179	295
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	85	100	8
cM capacity (veh/h)	961			973			19	184	700	231	184	692

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	274	203	393	36	636
Volume Left	0	0	0	7	0	36	0
Volume Right	0	0	274	0	0	0	636
cSH	1700	1700	1700	973	1700	231	692
Volume to Capacity	0.17	0.17	0.16	0.01	0.23	0.15	0.92
Queue Length 95th (ft)	0	0	0	1	0	13	307
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	23.4	41.6
Lane LOS				A		C	E
Approach Delay (s)	0.0			0.1		40.6	
Approach LOS						E	

Intersection Summary			
Average Delay	12.9		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	550	0	537	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	611	0	597	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	306	306	597
Volume Left (vph)	306	306	597
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	7.0	7.0	5.8
Degree Utilization, x	0.59	0.59	0.95
Capacity (veh/h)	513	513	618
Control Delay (s)	18.3	18.3	49.2
Approach Delay (s)	18.3		49.2
Approach LOS	C		E

Intersection Summary			
Delay	33.5		
HCM Level of Service	D		
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	353	46	127	326	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3094		1574	3149						3014	
Flt Permitted		1.00		0.44	1.00						0.97	
Satd. Flow (perm)		3094		730	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	392	51	141	362	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	431	0	141	362	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1310		520	1815						957	
v/s Ratio Prot		c0.14		c0.03	0.11						c0.04	
v/s Ratio Perm				0.12								
v/c Ratio		0.33		0.27	0.20						0.12	
Uniform Delay, d1		16.4		11.5	8.6						20.6	
Progression Factor		1.00		0.27	0.24						1.00	
Incremental Delay, d2		0.7		1.2	0.2						0.2	
Delay (s)		17.1		4.4	2.3						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.1			2.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	357	0	0	404	76	49	65	45	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3074			4413				
Flt Permitted	0.38	1.00			1.00			0.98				
Satd. Flow (perm)	650	3257			3074			4413				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	397	0	0	449	84	54	72	50	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	34	0	0	0	0
Lane Group Flow (vph)	76	397	0	0	515	0	0	142	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	482	1839			1266			1402				
v/s Ratio Prot	0.02	c0.12			c0.17			c0.03				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.22			0.41			0.10				
Uniform Delay, d1	12.2	9.2			17.7			20.4				
Progression Factor	0.33	0.32			1.00			1.00				
Incremental Delay, d2	0.7	0.3			1.0			0.1				
Delay (s)	4.6	3.2			18.6			20.6				
Level of Service	A	A			B			C				
Approach Delay (s)		3.5			18.6			20.6			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	323	39	34	247	31	118	85	61	58	91	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			0.99			0.97			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2982			2979			1787			1750	
Flt Permitted		0.89			0.87			0.75			0.88	
Satd. Flow (perm)		2664			2613			1378			1560	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	359	43	38	274	34	131	94	68	64	101	140
RTOR Reduction (vph)	0	12	0	0	13	0	0	17	0	0	47	0
Lane Group Flow (vph)	0	433	0	0	333	0	0	276	0	0	258	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		943			925			678			768	
v/s Ratio Prot												
v/s Ratio Perm		c0.16			0.13			c0.20			0.17	
v/c Ratio		0.46			0.36			0.41			0.34	
Uniform Delay, d1		16.2			15.6			10.5			10.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.6			1.1			1.8			1.2	
Delay (s)		17.8			16.6			12.3			11.2	
Level of Service		B			B			B			B	
Approach Delay (s)		17.8			16.6			12.3			11.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	196	202	39	50	176	62	71	1009	70	75	430	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	3005		1592	3512		1486	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.58	1.00		0.43	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	954	3005		975	3512		673	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	206	213	41	53	185	65	75	1062	74	79	453	92
RTOR Reduction (vph)	0	19	0	0	41	0	0	0	43	0	0	56
Lane Group Flow (vph)	206	235	0	53	209	0	75	1062	31	79	453	36
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	990		373	1157		323	1180	523	144	1169	493
v/s Ratio Prot	c0.03	0.08		0.01	0.06		0.01	c0.35		c0.03	0.15	
v/s Ratio Perm	c0.17			0.04			0.09		0.02	0.21		0.03
v/c Ratio	0.56	0.24		0.14	0.18		0.23	0.90	0.06	0.55	0.39	0.07
Uniform Delay, d1	21.3	20.7		18.4	20.3		15.0	24.4	16.3	17.5	18.7	16.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	2.00	0.61	0.80
Incremental Delay, d2	6.2	0.6		0.8	0.3		1.7	11.0	0.2	12.9	0.9	0.3
Delay (s)	27.5	21.3		19.2	20.7		16.7	35.5	16.5	47.9	12.3	13.4
Level of Service	C	C		B	C		B	D	B	D	B	B
Approach Delay (s)		24.1			20.4			33.1			16.9	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	26.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	256	18	14	216	8	35	121	25	20	59	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1929	1382		1950	1331		1973	1452		1928	1430
Flt Permitted		0.94	1.00		0.98	1.00		0.94	1.00		0.93	1.00
Satd. Flow (perm)		1823	1382		1910	1331		1866	1452		1811	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	269	19	15	227	8	37	127	26	21	62	44
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	26
Lane Group Flow (vph)	0	311	9	0	242	4	0	164	11	0	83	18
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		841	638		882	614		775	603		752	594
v/s Ratio Prot												
v/s Ratio Perm		c0.17	0.01		0.13	0.00		c0.09	0.01		0.05	0.01
v/c Ratio		0.37	0.01		0.27	0.01		0.21	0.02		0.11	0.03
Uniform Delay, d1		11.4	9.5		10.8	9.4		12.2	11.2		11.6	11.3
Progression Factor		1.00	1.00		0.47	0.37		1.12	1.39		0.95	0.86
Incremental Delay, d2		1.3	0.0		0.8	0.0		0.6	0.1		0.3	0.1
Delay (s)		12.6	9.5		5.8	3.5		14.2	15.6		11.3	9.8
Level of Service		B	A		A	A		B	B		B	A
Approach Delay (s)		12.4			5.7			14.4			10.8	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	285	10	17	211	34	13	247	35	47	70	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3025		1520	2976		1520	2983		1520	2904	
Flt Permitted	0.95	1.00		0.55	1.00		0.68	1.00		0.54	1.00	
Satd. Flow (perm)	1520	3025		886	2976		1091	2983		871	2904	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	317	11	19	234	38	14	274	39	52	78	33
RTOR Reduction (vph)	0	4	0	0	20	0	0	17	0	0	19	0
Lane Group Flow (vph)	73	324	0	19	252	0	14	296	0	52	92	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1489		300	1007		453	1239		362	1206	
v/s Ratio Prot	c0.05	0.11			c0.08			c0.10			0.03	
v/s Ratio Perm				0.02			0.01			0.06		
v/c Ratio	0.45	0.22		0.06	0.25		0.03	0.24		0.14	0.08	
Uniform Delay, d1	27.2	9.4		14.5	15.5		11.3	12.3		11.8	11.5	
Progression Factor	0.85	0.48		1.01	1.00		0.45	0.45		1.15	1.16	
Incremental Delay, d2	8.3	0.3		0.4	0.6		0.1	0.3		0.8	0.1	
Delay (s)	31.5	4.9		15.1	16.2		5.1	5.8		14.4	13.4	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		9.7			16.1			5.8			13.7	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	253	85	242	216	43	43	297	56	25	185	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.96		1.00	0.97			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1520	2926		1520	2964			3171			3188	
Flt Permitted	0.58	1.00		0.95	1.00			0.89			0.88	
Satd. Flow (perm)	921	2926		1520	2964			2842			2834	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	41	281	94	269	240	48	48	330	62	28	206	28
RTOR Reduction (vph)	0	51	0	0	21	0	0	20	0	0	14	0
Lane Group Flow (vph)	41	324	0	269	267	0	0	420	0	0	248	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	15.0	15.0		19.0	37.0			17.0			17.0	
Effective Green, g (s)	15.0	15.0		19.0	37.0			17.0			17.0	
Actuated g/C Ratio	0.23	0.23		0.29	0.57			0.26			0.26	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	213	675		444	1687			743			741	
v/s Ratio Prot		c0.11		c0.18	0.09							
v/s Ratio Perm	0.04							c0.15			0.09	
v/c Ratio	0.19	0.48		0.61	0.16			0.57			0.33	
Uniform Delay, d1	20.1	21.6		19.8	6.6			20.8			19.4	
Progression Factor	0.64	0.60		1.47	1.29			1.03			0.76	
Incremental Delay, d2	2.0	2.4		4.4	0.1			1.5			1.2	
Delay (s)	14.8	15.3		33.4	8.7			23.0			16.0	
Level of Service	B	B		C	A			C			B	
Approach Delay (s)		15.2			20.6			23.0			16.0	
Approach LOS		B			C			C			B	

Intersection Summary			
HCM Average Control Delay	19.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	298	14	70	466	70	34	94	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1587			1566			3164				
Flt Permitted		0.97			0.92			0.99				
Satd. Flow (perm)		1535			1451			3164				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	331	16	78	518	78	38	104	180	0	0	0
RTOR Reduction (vph)	0	2	0	0	6	0	0	138	0	0	0	0
Lane Group Flow (vph)	0	363	0	0	668	0	0	184	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		989			935			735				
v/s Ratio Prot												
v/s Ratio Perm		0.24			c0.46			0.06				
v/c Ratio		0.37			0.71			0.25				
Uniform Delay, d1		5.4			7.6			20.3				
Progression Factor		2.77			1.00			1.00				
Incremental Delay, d2		0.9			4.6			0.8				
Delay (s)		15.8			12.3			21.1				
Level of Service		B			B			C				
Approach Delay (s)		15.8			12.3			21.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	96	364	469	44	66	134
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	101	383	494	46	69	141
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked						
vC, conflicting volume	561				937	294
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	561				937	294
tC, single (s)	4.3				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	89				70	80
cM capacity (veh/h)	927				230	690

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	229	255	329	211	69	141
Volume Left	101	0	0	0	69	0
Volume Right	0	0	0	46	0	141
cSH	927	1700	1700	1700	230	690
Volume to Capacity	0.11	0.15	0.19	0.12	0.30	0.20
Queue Length 95th (ft)	9	0	0	0	31	19
Control Delay (s)	4.8	0.0	0.0	0.0	27.3	11.6
Lane LOS	A				D	B
Approach Delay (s)	2.2		0.0		16.7	
Approach LOS					C	

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	472	1	27	675	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1663		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	524	1	30	750	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	525	0	0	780	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	73.0			43.0		
Effective Green, g (s)	69.0			43.0		
Actuated g/C Ratio	0.77			0.48		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1314			795		
v/s Ratio Prot	c0.31					
v/s Ratio Perm				c0.47		
v/c Ratio	0.40			0.98		
Uniform Delay, d1	3.5			23.1		
Progression Factor	0.03			1.00		
Incremental Delay, d2	0.5			27.7		
Delay (s)	0.6			50.8		
Level of Service	A			D		
Approach Delay (s)	0.6			50.8	0.0	
Approach LOS	A			D	A	

Intersection Summary			
HCM Average Control Delay	30.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	184	193	25	561	0	0	0	0	3	0	263
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	204	214	28	623	0	0	0	0	3	0	292
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	623			204			991	991	209	781	883	623
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	623			204			991	991	209	781	883	623
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	31
cM capacity (veh/h)	968			985			62	241	803	282	279	424

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	136	283	651	3	292
Volume Left	0	0	28	3	0
Volume Right	0	214	0	0	292
cSH	1700	1700	985	282	424
Volume to Capacity	0.08	0.17	0.03	0.01	0.69
Queue Length 95th (ft)	0	0	2	1	127
Control Delay (s)	0.0	0.0	0.7	17.9	30.3
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	30.2	
Approach LOS				D	

Intersection Summary			
Average Delay	6.9		
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	187	0	586	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	208	0	651	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	104	104	651
Volume Left (vph)	104	104	651
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.9
Degree Utilization, x	0.20	0.20	0.88
Capacity (veh/h)	511	512	734
Control Delay (s)	10.3	10.3	32.1
Approach Delay (s)	10.3		32.1
Approach LOS	B		D

Intersection Summary			
Delay	26.8		
HCM Level of Service	D		
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	564	210	168	497	0	0	0	0	132	117	300
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3693	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3693	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	594	221	177	523	0	0	0	0	139	123	316
RTOR Reduction (vph)	0	0	142	0	0	0	0	0	0	0	113	94
Lane Group Flow (vph)	0	594	79	0	700	0	0	0	0	76	231	64
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		31.0	31.0		62.6					19.5	19.5	56.5
Effective Green, g (s)		31.0	31.0		62.6					19.5	19.5	56.5
Actuated g/C Ratio		0.22	0.22		0.45					0.14	0.14	0.40
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		659	266		1508					187	514	453
v/s Ratio Prot		c0.20			c0.21					0.06	c0.06	
v/s Ratio Perm			0.07									0.06
v/c Ratio		0.90	0.30		0.46					0.41	0.45	0.14
Uniform Delay, d1		53.0	45.4		27.0					55.0	55.3	26.4
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		17.8	2.8		0.1					1.4	0.6	0.1
Delay (s)		70.8	48.3		0.6					56.4	56.0	26.5
Level of Service		E	D		A					E	E	C
Approach Delay (s)		64.7			0.6			0.0			48.0	
Approach LOS		E			A			A			D	

Intersection Summary			
HCM Average Control Delay	38.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	28.9
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	212	484	0	0	427	93	238	150	178	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.93				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1574	3366			3149	1457	1531	2975				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1574	3366			3149	1457	1531	2975				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	236	538	0	0	474	103	264	167	198	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	85	0	117	0	0	0	0
Lane Group Flow (vph)	236	538	0	0	474	18	216	296	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	69.4	69.4			24.7	24.7	19.9	19.9				
Effective Green, g (s)	69.4	69.4			24.7	24.7	19.9	19.9				
Actuated g/C Ratio	0.50	0.50			0.18	0.18	0.14	0.14				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	780	1669			556	257	218	423				
v/s Ratio Prot	0.15	c0.16			c0.15		c0.14	0.10				
v/s Ratio Perm						0.01						
v/c Ratio	0.30	0.32			0.85	0.07	0.99	0.70				
Uniform Delay, d1	20.9	21.2			55.9	48.1	60.0	57.2				
Progression Factor	0.07	0.07			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.1	0.1			12.0	0.1	58.2	5.2				
Delay (s)	1.7	1.6			67.9	48.2	118.1	62.4				
Level of Service	A	A			E	D	F	E				
Approach Delay (s)		1.6			64.4			81.5			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	45.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	220	452	75	56	186	54	88	824	148	93	448	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1538	1556	1327	1596	1724		1525	2931		1509	2870	
Flt Permitted	0.46	1.00	1.00	0.20	1.00		0.34	1.00		0.12	1.00	
Satd. Flow (perm)	749	1556	1327	340	1724		542	2931		192	2870	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	476	79	59	196	57	93	867	156	98	472	109
RTOR Reduction (vph)	0	0	53	0	12	0	0	16	0	0	22	0
Lane Group Flow (vph)	232	476	26	59	241	0	93	1007	0	98	559	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.3	29.3	29.3	33.3	27.8		39.6	34.1		39.6	34.1	
Effective Green, g (s)	34.3	30.3	29.3	31.3	27.8		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.38	0.34	0.33	0.35	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	340	527	435	182	536		277	1118		147	1095	
v/s Ratio Prot	c0.05	c0.31		0.02	0.14		0.02	c0.34		c0.03	0.19	
v/s Ratio Perm	0.22		0.02	0.10			0.12			0.25		
v/c Ratio	0.68	0.90	0.06	0.32	0.45		0.34	0.90		0.67	0.51	
Uniform Delay, d1	22.7	28.2	20.6	21.1	24.7		16.3	26.1		18.8	21.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.6	21.4	0.3	1.0	2.7		0.7	11.6		10.9	1.7	
Delay (s)	28.3	49.5	20.9	22.1	27.4		17.0	37.6		29.6	22.9	
Level of Service	C	D	C	C	C		B	D		C	C	
Approach Delay (s)		40.4			26.4			35.9			23.9	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	33.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	568	16	26	257	28	35	80	102	45	44	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.94			0.96	
Flt Protected		1.00	1.00		1.00	1.00		0.99			0.98	
Satd. Flow (prot)		1908	1482		1599	1198		1812			1823	
Flt Permitted		0.96	1.00		0.93	1.00		0.95			0.86	
Satd. Flow (perm)		1844	1482		1499	1198		1732			1604	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	598	17	27	271	29	37	84	107	47	46	41
RTOR Reduction (vph)	0	0	6	0	0	15	0	49	0	0	24	0
Lane Group Flow (vph)	0	644	11	0	298	14	0	179	0	0	110	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		908	730		738	590		719			666	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.01		0.20	0.01		c0.10			0.07	
v/c Ratio		0.71	0.01		0.40	0.02		0.25			0.17	
Uniform Delay, d1		12.9	8.4		10.5	8.5		12.4			11.9	
Progression Factor		1.00	1.00		0.67	0.46		1.00			1.37	
Incremental Delay, d2		4.7	0.0		1.6	0.1		0.8			0.5	
Delay (s)		17.5	8.5		8.5	4.0		13.2			16.8	
Level of Service		B	A		A	A		B			B	
Approach Delay (s)		17.3			8.1			13.2			16.8	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	14.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	627	24	27	238	8	41	228	108	18	53	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.98		1.00	0.95		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1657	1407		1581	1503		1754	1366		1651	
Flt Permitted		0.94	1.00		0.91	1.00		0.94	1.00		0.91	
Satd. Flow (perm)		1557	1407		1447	1503		1655	1366		1520	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	660	25	28	251	8	43	240	114	19	56	32
RTOR Reduction (vph)	0	0	8	0	0	3	0	0	67	0	23	0
Lane Group Flow (vph)	0	739	17	0	279	5	0	283	47	0	84	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		39.0	39.0		39.0	39.0		16.0	16.0		16.0	
Effective Green, g (s)		39.0	39.0		39.0	39.0		16.0	16.0		16.0	
Actuated g/C Ratio		0.60	0.60		0.60	0.60		0.25	0.25		0.25	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		934	844		868	902		407	336		374	
v/s Ratio Prot												
v/s Ratio Perm		c0.47	0.01		0.19	0.00		c0.17	0.03		0.06	
v/c Ratio		0.79	0.02		0.32	0.01		0.70	0.14		0.22	
Uniform Delay, d1		9.9	5.3		6.4	5.2		22.3	19.1		19.5	
Progression Factor		2.05	2.13		0.96	0.82		1.00	1.00		0.68	
Incremental Delay, d2		5.5	0.0		0.9	0.0		9.4	0.9		1.4	
Delay (s)		25.7	11.2		7.0	4.3		31.7	20.0		14.6	
Level of Service		C	B		A	A		C	B		B	
Approach Delay (s)		25.3			7.0			28.4			14.6	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	21.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	676	21	31	9	18	15	26	363	19	9	220	226
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.98		0.98			1.00			1.00	0.92
Flpb, ped/bikes		0.99	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.95			0.99			1.00	0.85
Flt Protected		0.95	1.00		0.99			1.00			1.00	1.00
Satd. Flow (prot)		1763	1398		1778			1976			1873	1296
Flt Permitted		0.72	1.00		0.90			0.97			0.99	1.00
Satd. Flow (perm)		1323	1398		1610			1926			1851	1296
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	751	23	34	10	20	17	29	403	21	10	244	251
RTOR Reduction (vph)	0	0	10	0	9	0	0	3	0	0	0	178
Lane Group Flow (vph)	0	774	24	0	38	0	0	450	0	0	254	73
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		40.0	40.0		32.0			19.0			19.0	19.0
Effective Green, g (s)		40.0	40.0		32.0			19.0			19.0	19.0
Actuated g/C Ratio		0.62	0.62		0.49			0.29			0.29	0.29
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		855	860		793			563			541	379
v/s Ratio Prot		c0.08										
v/s Ratio Perm		0.47	0.02		0.02			c0.23			0.14	0.06
v/c Ratio		0.91	0.03		0.05			0.80			0.47	0.19
Uniform Delay, d1		10.9	4.9		8.6			21.2			18.9	17.3
Progression Factor		0.59	1.03		1.00			1.00			1.19	2.16
Incremental Delay, d2		11.3	0.0		0.1			11.3			2.6	1.0
Delay (s)		17.7	5.1		8.7			32.6			25.0	38.2
Level of Service		B	A		A			C			C	D
Approach Delay (s)		17.2			8.7			32.6			31.6	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	24.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	989	222	274	1130	0	0	0	0	275	201	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4322		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.13	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4322		214	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1041	234	288	1189	0	0	0	0	289	212	396
RTOR Reduction (vph)	0	37	0	0	0	0	0	0	0	0	56	56
Lane Group Flow (vph)	0	1238	0	288	1189	0	0	0	0	234	397	154
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		38.9		57.4	57.4					20.6	20.6	20.6
Effective Green, g (s)		38.9		57.4	57.4					20.6	20.6	20.6
Actuated g/C Ratio		0.43		0.64	0.64					0.23	0.23	0.23
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1868		350	2057					325	621	310
v/s Ratio Prot		0.29		c0.13	0.37							
v/s Ratio Perm				c0.40						c0.16	0.15	0.11
v/c Ratio		0.66		0.82	0.58					0.72	0.64	0.50
Uniform Delay, d1		20.3		17.9	9.4					32.0	31.4	30.2
Progression Factor		1.00		1.50	0.23					1.00	1.00	1.00
Incremental Delay, d2		1.9		8.0	0.6					7.7	2.4	1.5
Delay (s)		22.2		35.0	2.8					39.7	33.7	31.7
Level of Service		C		C	A					D	C	C
Approach Delay (s)		22.2			9.1			0.0			34.8	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	953	0	0	855	234	549	365	484	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	2915	3138			3119	1449		4390				
Flt Permitted	0.19	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	595	3138			3119	1449		4390				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	327	1003	0	0	900	246	578	384	509	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	139	0	51	0	0	0	0
Lane Group Flow (vph)	327	1003	0	0	900	107	0	1420	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	45.5	45.5			32.0	32.0		32.5				
Effective Green, g (s)	45.5	45.5			32.0	32.0		32.5				
Actuated g/C Ratio	0.51	0.51			0.36	0.36		0.36				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	494	1586			1109	515		1585				
v/s Ratio Prot	0.06	c0.32			c0.29							
v/s Ratio Perm	0.28					0.07		0.32				
v/c Ratio	0.66	0.63			0.81	0.21		0.90				
Uniform Delay, d1	27.4	16.2			26.3	20.2		27.2				
Progression Factor	0.59	0.53			0.47	0.28		1.00				
Incremental Delay, d2	2.6	1.5			5.0	0.7		7.5				
Delay (s)	18.7	10.1			17.3	6.3		34.6				
Level of Service	B	B			B	A		C				
Approach Delay (s)		12.2			14.9			34.6			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	21.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	743	226	78	796	44	226	178	40	57	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1564	3061	1293	1604	3233		1447	3009		1544	2783	
Flt Permitted	0.28	1.00	1.00	0.18	1.00		0.51	1.00		0.61	1.00	
Satd. Flow (perm)	463	3061	1293	309	3233		775	3009		990	2783	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	782	238	82	838	46	238	187	42	60	117	96
RTOR Reduction (vph)	0	0	110	0	4	0	0	22	0	0	79	0
Lane Group Flow (vph)	111	782	128	82	880	0	238	207	0	60	134	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	38.9	36.4	48.5	33.9	33.9		31.8	24.7		19.8	16.2	
Effective Green, g (s)	38.9	36.4	48.5	33.9	33.9		31.8	24.7		19.8	16.2	
Actuated g/C Ratio	0.43	0.40	0.54	0.38	0.38		0.35	0.27		0.22	0.18	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	308	1238	697	207	1218		364	826		240	501	
v/s Ratio Prot	0.04	c0.26	0.02	0.03	c0.27		c0.09	0.07		0.01	0.05	
v/s Ratio Perm	0.12		0.07	0.12			c0.14			0.05		
v/c Ratio	0.36	0.63	0.18	0.40	0.72		0.65	0.25		0.25	0.27	
Uniform Delay, d1	21.2	21.4	10.6	19.6	24.0		22.6	25.4		28.5	31.8	
Progression Factor	0.67	0.67	0.56	0.87	0.94		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.2	1.7	0.1	1.2	3.5		4.2	0.6		0.5	1.0	
Delay (s)	16.5	16.0	6.0	18.2	26.2		26.8	26.0		29.0	32.8	
Level of Service	B	B	A	B	C		C	C		C	C	
Approach Delay (s)		14.0			25.6			26.4			32.0	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM Average Control Delay	21.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	9.5
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	329	286	59	196	102	329	382	83	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.95		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1635	2916		1463	3036		1589	3237		1549	3135	
Flt Permitted	0.53	1.00		0.24	1.00		0.46	1.00		0.47	1.00	
Satd. Flow (perm)	914	2916		367	3036		772	3237		772	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	346	301	62	206	107	346	402	87	96	272	57
RTOR Reduction (vph)	0	144	0	0	61	0	0	17	0	0	17	0
Lane Group Flow (vph)	65	503	0	62	252	0	346	472	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.7	28.7		35.9	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	359	797		200	833		530	1292		338	935	
v/s Ratio Prot	0.01	c0.17		c0.02	0.08		c0.11	0.15		0.02	0.10	
v/s Ratio Perm	0.05			0.09			c0.22			0.08		
v/c Ratio	0.18	0.63		0.31	0.30		0.65	0.36		0.28	0.33	
Uniform Delay, d1	23.8	33.5		24.5	30.2		16.6	22.2		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	3.8		1.0	0.9		3.0	0.8		0.5	1.0	
Delay (s)	24.1	37.3		25.5	31.1		19.6	23.0		22.9	29.7	
Level of Service	C	D		C	C		B	C		C	C	
Approach Delay (s)		36.1			30.2			21.6			28.2	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	716	81	6	457	113	68	602	7	104	326	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.99			0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2929			2898		1436	3186		1451	2786	
Flt Permitted		0.64			0.94		0.33	1.00		0.18	1.00	
Satd. Flow (perm)		1882			2736		506	3186		274	2786	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	188	796	90	7	508	126	76	669	8	116	362	117
RTOR Reduction (vph)	0	7	0	0	24	0	0	1	0	0	35	0
Lane Group Flow (vph)	0	1067	0	0	617	0	76	676	0	116	444	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		51.0			43.0		27.0	23.0		27.0	23.0	
Effective Green, g (s)		51.0			43.0		27.0	23.0		27.0	23.0	
Actuated g/C Ratio		0.57			0.48		0.30	0.26		0.30	0.26	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		1113			1307		193	814		135	712	
v/s Ratio Prot		c0.04					0.02	0.21		c0.04	0.16	
v/s Ratio Perm		c0.50			0.23		0.10			c0.22		
v/c Ratio		0.96			0.47		0.39	0.83		0.86	0.62	
Uniform Delay, d1		18.5			15.8		23.6	31.7		28.2	29.7	
Progression Factor		0.55			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		17.4			1.2		5.9	9.6		46.8	4.1	
Delay (s)		27.6			17.1		29.5	41.3		75.0	33.8	
Level of Service		C			B		C	D		E	C	
Approach Delay (s)		27.6			17.1			40.1			41.8	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM Average Control Delay	31.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	334	48	73	165	13	38	661	101	10	378	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	1916		1618	1943		1658	3200		1139	3197	
Flt Permitted	0.64	1.00		0.39	1.00		0.50	1.00		0.30	1.00	
Satd. Flow (perm)	1126	1916		660	1943		870	3200		355	3197	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	54	344	49	75	170	13	39	681	104	10	390	46
RTOR Reduction (vph)	0	8	0	0	4	0	0	19	0	0	14	0
Lane Group Flow (vph)	54	385	0	75	179	0	39	766	0	10	422	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	416	707		244	717		415	1526		169	1525	
v/s Ratio Prot		c0.20			0.09			c0.24			0.13	
v/s Ratio Perm	0.05			0.11			0.04			0.03		
v/c Ratio	0.13	0.54		0.31	0.25		0.09	0.50		0.06	0.28	
Uniform Delay, d1	13.6	16.2		14.6	14.2		9.3	11.7		9.2	10.2	
Progression Factor	1.00	1.00		1.33	1.36		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	3.0		2.2	0.6		0.4	1.2		0.7	0.5	
Delay (s)	14.2	19.2		21.5	19.9		9.8	12.9		9.8	10.7	
Level of Service	B	B		C	B		A	B		A	B	
Approach Delay (s)		18.6			20.4			12.7			10.7	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	14.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	761	200	621	17	3	14	3	47	30	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			1.00		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.98		
Flt Protected	1.00		0.99				0.99			0.96		
Satd. Flow (prot)	2956		2954				1732			1908		
Flt Permitted	1.00		0.51				0.94			0.79		
Satd. Flow (perm)	2956		1535				1643			1562		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	801	211	654	18	3	15	3	49	32	0	2	4
RTOR Reduction (vph)	0	0	2	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	801	0	881	0	0	0	32	0	0	35	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		Perm			Perm	Perm			Perm			
Protected Phases	8		4				2			6		
Permitted Phases		4			2	2			6			
Actuated Green, G (s)	21.3		42.0				14.0			14.0		
Effective Green, g (s)	21.3		42.0				14.0			14.0		
Actuated g/C Ratio	0.33		0.65				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	969		992				354			336		
v/s Ratio Prot	0.27											
v/s Ratio Perm			c0.57				0.02			c0.02		
v/c Ratio	0.83		1.94dl				0.09			0.10		
Uniform Delay, d1	20.1		9.5				20.4			20.5		
Progression Factor	1.00		1.00				1.00			1.00		
Incremental Delay, d2	8.0		11.7				0.5			0.6		
Delay (s)	28.2		21.2				20.9			21.1		
Level of Service	C		C				C			C		
Approach Delay (s)	28.2		21.2				20.9			21.1		
Approach LOS	C		C				C			C		

Intersection Summary			
HCM Average Control Delay	25.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	NER
Lane Configurations	
Volume (vph)	461
Ideal Flow (vphpl)	1800
Lane Width	12
Total Lost time (s)	5.0
Lane Util. Factor	0.88
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	2470
Flt Permitted	1.00
Satd. Flow (perm)	2470
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	485
RTOR Reduction (vph)	0
Lane Group Flow (vph)	485
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	9%
Turn Type	custom
Protected Phases	7
Permitted Phases	
Actuated Green, G (s)	15.7
Effective Green, g (s)	15.7
Actuated g/C Ratio	0.24
Clearance Time (s)	5.0
Lane Grp Cap (vph)	597
v/s Ratio Prot	0.20
v/s Ratio Perm	
v/c Ratio	0.81
Uniform Delay, d1	23.3
Progression Factor	0.85
Incremental Delay, d2	10.2
Delay (s)	30.1
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	194	1172	684	81	139	156
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3234	3205		1629	1457
Flt Permitted		0.66	1.00		0.95	1.00
Satd. Flow (perm)		2146	3205		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	216	1302	760	90	154	173
RTOR Reduction (vph)	0	0	10	0	0	144
Lane Group Flow (vph)	0	1518	840	0	154	29
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		67.0	67.0		15.0	15.0
Effective Green, g (s)		67.0	67.0		15.0	15.0
Actuated g/C Ratio		0.74	0.74		0.17	0.17
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1598	2386		272	243
v/s Ratio Prot			0.26		c0.09	
v/s Ratio Perm		c0.71				0.02
v/c Ratio		0.95	0.35		0.57	0.12
Uniform Delay, d1		10.0	4.0		34.5	31.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		13.4	0.4		8.3	1.0
Delay (s)		23.4	4.4		42.8	32.9
Level of Service		C	A		D	C
Approach Delay (s)		23.4	4.4		37.5	
Approach LOS		C	A		D	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	1231	703	202	174	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2920		1464	1373
Flt Permitted		0.88	1.00		0.95	1.00
Satd. Flow (perm)		2576	2920		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	1296	740	213	183	59
RTOR Reduction (vph)	0	0	44	0	0	45
Lane Group Flow (vph)	0	1352	909	0	183	14
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		14.0	14.0
Effective Green, g (s)		38.0	38.0		14.0	14.0
Actuated g/C Ratio		0.63	0.63		0.23	0.23
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1631	1849		342	320
v/s Ratio Prot			0.31		c0.12	
v/s Ratio Perm		c0.52				0.01
v/c Ratio		0.83	0.49		0.54	0.04
Uniform Delay, d1		8.5	5.9		20.1	17.8
Progression Factor		1.00	1.31		1.00	1.00
Incremental Delay, d2		5.0	0.7		5.9	0.3
Delay (s)		13.5	8.4		26.0	18.1
Level of Service		B	A		C	B
Approach Delay (s)		13.5	8.4		24.1	
Approach LOS		B	A		C	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1257	160	161	663	423	438
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		3.0	5.0	5.0	5.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	2248		1771	2436	1844	1500
Flt Permitted	1.00		0.05	1.00	0.95	1.00
Satd. Flow (perm)	2248		98	2436	1844	1500
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1283	163	164	677	432	447
RTOR Reduction (vph)	4	0	0	0	0	43
Lane Group Flow (vph)	1442	0	164	677	432	404
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			pm+pt			pt+ov
Protected Phases	4		3	8	2	2 3
Permitted Phases			8			
Actuated Green, G (s)	73.0		83.0	83.0	27.0	39.0
Effective Green, g (s)	73.0		83.0	83.0	27.0	39.0
Actuated g/C Ratio	0.61		0.69	0.69	0.22	0.32
Clearance Time (s)	5.0		3.0	5.0	5.0	
Lane Grp Cap (vph)	1368		165	1685	415	488
v/s Ratio Prot	c0.64		0.06	0.28	c0.23	c0.27
v/s Ratio Perm			0.63			
v/c Ratio	1.05		0.99	0.40	1.04	0.83
Uniform Delay, d1	23.5		40.4	7.9	46.5	37.4
Progression Factor	0.80		1.00	1.00	1.00	1.00
Incremental Delay, d2	34.8		68.5	0.7	55.2	14.8
Delay (s)	53.7		108.9	8.6	101.7	52.2
Level of Service	D		F	A	F	D
Approach Delay (s)	53.7			28.2	76.6	
Approach LOS	D			C	E	

Intersection Summary			
HCM Average Control Delay	53.3	HCM Level of Service	D
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	108.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	725	89	258	1516	9	72	0	187	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.14	1.00	1.00	0.26	1.00	1.00		0.76	1.00		0.70	
Satd. Flow (perm)	285	3213	1422	435	3138	1366		1309	1443		719	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	806	99	287	1684	10	80	0	208	1	0	0
RTOR Reduction (vph)	0	0	48	0	0	2	0	0	182	0	0	0
Lane Group Flow (vph)	1	806	51	287	1684	8	0	80	26	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	43.7	43.7	43.7	66.4	66.4	66.4		10.6	10.6		10.6	
Effective Green, g (s)	43.7	43.7	43.7	66.4	66.4	66.4		10.6	10.6		10.6	
Actuated g/C Ratio	0.51	0.51	0.51	0.78	0.78	0.78		0.12	0.12		0.12	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	147	1652	731	607	2451	1067		163	180		90	
v/s Ratio Prot		0.25		0.11	c0.54							
v/s Ratio Perm	0.00		0.04	0.26		0.01		c0.06	0.02		0.00	
v/c Ratio	0.01	0.49	0.07	0.47	0.69	0.01		0.49	0.14		0.01	
Uniform Delay, d1	10.1	13.4	10.4	4.1	4.4	2.0		34.7	33.2		32.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.1	1.0	0.2	0.6	0.8	0.0		2.3	0.4		0.0	
Delay (s)	10.2	14.4	10.6	4.7	5.2	2.1		37.0	33.5		32.7	
Level of Service	B	B	B	A	A	A		D	C		C	
Approach Delay (s)		14.0			5.1			34.5			32.7	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	13	819	851	45	24	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3017		1482	
Flt Permitted		0.93	1.00		0.97	
Satd. Flow (perm)		2834	3017		1482	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	910	946	50	27	12
RTOR Reduction (vph)	0	0	4	0	11	0
Lane Group Flow (vph)	0	924	992	0	28	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1039	2145		115	
v/s Ratio Prot			c0.33		c0.02	
v/s Ratio Perm		c0.33				
v/c Ratio		0.89	0.46		0.24	
Uniform Delay, d1		26.8	5.6		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		11.3	0.2		4.9	
Delay (s)		38.1	0.3		44.0	
Level of Service		D	A		D	
Approach Delay (s)		38.1	0.3		44.0	
Approach LOS		D	A		D	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	430	1	27	568	80	0	0	1	45	3	136
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1727			3232			1427			1606	1277
Flt Permitted		0.77			0.92			1.00			0.90	1.00
Satd. Flow (perm)		1343			2977			1427			1513	1277
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	478	1	30	631	89	0	0	1	50	3	151
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	107
Lane Group Flow (vph)	0	579	0	0	738	0	0	0	0	0	53	44
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			custom			Perm			pm+pt		Perm
Protected Phases		4			3 4			1		2	1 2	
Permitted Phases	4			3	3		1	1		1 2		1 2
Actuated Green, G (s)		43.0			56.0			9.0			23.0	26.0
Effective Green, g (s)		43.0			56.0			9.0			23.0	26.0
Actuated g/C Ratio		0.48			0.62			0.10			0.26	0.29
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		642			1852			143			401	369
v/s Ratio Prot								0.00			0.02	
v/s Ratio Perm		c0.43			c0.25						c0.01	c0.03
v/c Ratio		0.90			0.40			0.00			0.13	0.12
Uniform Delay, d1		21.6			8.5			36.5			25.8	23.6
Progression Factor		1.00			0.14			1.00			1.00	1.00
Incremental Delay, d2		18.2			0.2			0.0			0.7	0.7
Delay (s)		39.8			1.4			36.5			26.5	24.2
Level of Service		D			A			D			C	C
Approach Delay (s)		39.8			1.4			36.5			24.8	
Approach LOS		D			A			D			C	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	1014	58	36	35	48	23	26	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.95			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1557	3022		1587	3021			1816			1706	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	277	3022		604	3021			1649			1630	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1067	61	38	37	51	24	27	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	21	0
Lane Group Flow (vph)	41	653	0	37	1122	0	0	93	0	0	122	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	145	1581		316	1580			583			577	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.15			0.06				0.06			c0.07	
v/c Ratio	0.28	0.41		0.12	0.71			0.16			0.21	
Uniform Delay, d1	8.7	9.4		7.9	11.8			14.4			14.7	
Progression Factor	1.00	1.00		0.70	1.41			1.00			1.00	
Incremental Delay, d2	4.8	0.8		0.7	2.4			0.6			0.8	
Delay (s)	13.5	10.2		6.2	19.1			15.0			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.6			15.0			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	789	5	32	637	41	0	0	0	586	89	379
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.93	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	793	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	331	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	831	5	34	671	43	0	0	0	617	94	399
RTOR Reduction (vph)	0	0	0	0	0	19	0	0	0	0	0	166
Lane Group Flow (vph)	26	836	0	34	671	24	0	0	0	617	94	233
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	159	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.21					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.05						0.16
v/c Ratio	0.16	0.75		0.05	0.37	0.08				0.81	0.24	0.68
Uniform Delay, d1	31.6	38.7		15.2	15.8	13.1				47.4	40.7	45.6
Progression Factor	0.85	0.86		0.33	0.75	1.24				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.4				9.3	1.4	10.5
Delay (s)	28.9	37.6		5.1	12.2	16.6				56.7	42.1	56.1
Level of Service	C	D		A	B	B				E	D	E
Approach Delay (s)		37.3			12.2			0.0			55.2	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	815	220	54	578	287	102	251	55	39	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3262		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3262		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	358	858	232	57	608	302	107	264	58	41	0	32
RTOR Reduction (vph)	0	18	0	0	0	228	0	0	42	0	0	30
Lane Group Flow (vph)	358	1072	0	57	608	74	0	371	16	41	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1706		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.32	0.63		0.54	0.79	0.30		0.52	0.06	0.77		0.04
Uniform Delay, d1	31.9	22.0		59.2	45.8	39.8		45.1	40.5	60.1		57.4
Progression Factor	0.95	0.16		1.00	1.00	1.00		0.94	0.99	1.00		1.00
Incremental Delay, d2	0.5	1.1		18.7	8.0	3.0		2.7	0.4	49.7		0.4
Delay (s)	30.7	4.7		77.9	53.8	42.8		45.3	40.6	109.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		11.1			51.8			44.7			87.0	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	893	166	105	839	0	74	0	87	9	15	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.98	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1649	3149		1388		1451	1803	1857	
Flt Permitted		1.00		0.17	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		299	3149		1082		1451	1803	1857	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	992	184	117	932	0	82	0	97	10	17	8
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	66	0	5	0
Lane Group Flow (vph)	0	1161	0	117	932	0	82	0	31	10	20	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		179	1889		346		464	577	594	
v/s Ratio Prot		0.39			0.30						0.01	
v/s Ratio Perm				c0.39			c0.08		0.02	0.01		
v/c Ratio		0.65		0.65	0.49		0.24		0.07	0.02	0.03	
Uniform Delay, d1		13.1		13.2	11.4		25.0		23.6	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.8		17.1	0.9		1.6		0.3	0.1	0.1	
Delay (s)		14.9		30.3	12.3		26.6		23.9	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		14.9			14.3			25.2			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	301	0	1230	215	686	0	0	792	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4271	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4271	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	307	0	1255	219	700	0	0	808	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	307	0	1255	219	700	0	0	1308	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.20		c0.82	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.67		2.87	0.47	0.26			1.16dr	
Uniform Delay, d1				32.6		37.5	29.6	8.6			37.0	
Progression Factor				1.00		1.00	0.63	2.06			1.00	
Incremental Delay, d2				7.8		848.6	2.8	0.2			35.5	
Delay (s)				40.4		886.1	21.4	18.0			72.5	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			719.9			18.8			72.5	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	326.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	322	770	145	0	0	0	0	579	410	359	734	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3157						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3157						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	332	794	149	0	0	0	0	597	423	370	757	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	299	962	0	0	0	0	0	597	423	370	757	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.14		c0.23	0.16	
v/s Ratio Perm	0.20	0.30							c0.19			
v/c Ratio	0.61	0.94						0.51	0.71	0.78	0.27	
Uniform Delay, d1	29.9	34.5						32.7	34.8	33.9	10.5	
Progression Factor	1.00	1.00						1.00	1.00	0.86	0.22	
Incremental Delay, d2	5.6	17.2						1.6	6.9	4.8	0.1	
Delay (s)	35.5	51.7						34.3	41.7	34.1	2.4	
Level of Service	D	D						C	D	C	A	
Approach Delay (s)		47.9			0.0			37.4			12.8	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	33.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	25	24	11	164	0	0	149	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.54	1.00			1.00	
Satd. Flow (perm)				1688	3132		974	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	322	28	27	12	182	0	0	166	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	322	37	0	12	182	0	0	171	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		634	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.10			0.09	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.17			0.16	
Uniform Delay, d1				24.5	20.0		10.5	8.0			9.8	
Progression Factor				1.00	1.00		1.04	1.18			1.00	
Incremental Delay, d2				4.9	0.1		0.1	0.3			0.3	
Delay (s)				29.4	20.1		11.0	9.7			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			28.0			9.8			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	6	0	14	0	149	45	46	393	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1571			1718		1590	1860	
Flt Permitted	0.74	1.00			0.96			1.00		0.59	1.00	
Satd. Flow (perm)	1515	1735			1529			1718		987	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	6	0	15	0	157	47	48	414	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	13	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	11	0	0	191	0	48	414	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	481	551			486			808		630	1094	
v/s Ratio Prot		c0.01						0.11		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.24		0.08	0.38	
Uniform Delay, d1	20.0	20.0			19.9			13.4		8.8	9.3	
Progression Factor	1.00	1.00			1.00			1.00		0.98	0.87	
Incremental Delay, d2	0.1	0.1			0.1			0.7		0.2	0.9	
Delay (s)	20.1	20.1			20.0			14.1		8.8	9.0	
Level of Service	C	C			C			B		A	A	
Approach Delay (s)		20.1			20.0			14.1			9.0	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	48	42	12	193	288	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1752		1765	1782	1657	
Flt Permitted	0.97		0.50	1.00	1.00	
Satd. Flow (perm)	1752		937	1782	1657	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	47	13	214	320	31
RTOR Reduction (vph)	32	0	0	0	5	0
Lane Group Flow (vph)	68	0	13	214	346	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		519	987	918	
v/s Ratio Prot	c0.04			0.12	c0.21	
v/s Ratio Perm			0.01			
v/c Ratio	0.12		0.03	0.22	0.38	
Uniform Delay, d1	15.5		6.6	7.4	8.2	
Progression Factor	1.00		0.51	0.63	1.43	
Incremental Delay, d2	0.4		0.1	0.5	1.0	
Delay (s)	15.9		3.4	5.1	12.7	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			5.0	12.7	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	30.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	268	9	258	130	2	0	283	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3772		1693	1677			1738	1428
Flt Permitted					1.00		0.47	1.00			1.00	1.00
Satd. Flow (perm)					3772		844	1677			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	298	10	287	144	2	0	314	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	339	0	287	146	0	0	314	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		606	1006			777	638
v/s Ratio Prot					c0.09		c0.06	0.09			0.18	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.47	0.14			0.40	0.01
Uniform Delay, d1					22.5		13.7	7.4			15.9	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.6	0.3			1.6	0.0
Delay (s)					23.1		16.4	7.7			17.4	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.5			17.2	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	96	94	38	133	207	32	59	703	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3282		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.59	1.00	
Satd. Flow (perm)					1896		446	3282		1056	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	107	104	42	148	230	36	66	781	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	16	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	243	0	148	250	0	66	824	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1488		638	1572	
v/s Ratio Prot					c0.13		c0.04	0.08		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.17		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.1		8.2	14.7	
Progression Factor					1.00		0.83	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.2		0.3	1.3	
Delay (s)					22.9		17.0	10.2		8.5	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.7			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	277	24	159	590	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3173		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		599	3173		1004	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	292	25	167	621	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	8	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	309	0	167	666	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		335	1777		562	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.17		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.0		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.3		3.5	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.2			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	37	192	67	253	588	81
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	41	213	74	281	653	90

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	254	168	187	436	308
Volume Left (vph)	41	74	0	0	0
Volume Right (vph)	213	0	0	0	90
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.8	6.6	6.3	5.9	5.7
Degree Utilization, x	0.41	0.31	0.33	0.71	0.48
Capacity (veh/h)	591	528	546	602	622
Control Delay (s)	12.6	11.2	11.2	20.8	12.7
Approach Delay (s)	12.6	11.2		17.4	
Approach LOS	B	B		C	

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	376	18	22	409	76	78	55	68	354	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.92			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1412			1710	3251	
Flt Permitted		0.11	1.00	1.00	0.38	1.00	1.00			0.16	1.00	
Satd. Flow (perm)		191	1731	1530	692	1731	1412			295	3251	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	418	20	24	454	84	87	61	76	393	36
RTOR Reduction (vph)	0	0	0	13	0	0	25	0	0	0	5	0
Lane Group Flow (vph)	0	75	418	7	24	454	146	0	0	137	424	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			53.0	53.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			53.0	53.0	
Actuated g/C Ratio		0.33	0.33	0.33	0.21	0.21	0.21			0.35	0.35	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		201	577	510	148	369	301			104	1149	
v/s Ratio Prot		0.04	c0.24			c0.26					0.13	
v/s Ratio Perm		0.09		0.00	0.03		0.10			c0.46		
v/c Ratio		0.37	0.72	0.01	0.16	1.23	0.48			1.32	0.37	
Uniform Delay, d1		38.4	43.9	33.5	48.1	59.0	51.8			48.5	36.1	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		5.2	7.7	0.1	2.3	125.2	5.5			195.3	0.9	
Delay (s)		43.7	51.7	33.5	50.4	184.2	57.3			243.8	37.0	
Level of Service		D	D	C	D	F	E			F	D	
Approach Delay (s)			49.8			145.8					87.0	
Approach LOS			D			F					F	

Intersection Summary			
HCM Average Control Delay	123.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	108	571	82	103	4	114	607	197
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3246				1710	2633	
Flt Permitted	0.41	1.00				0.95	1.00	
Satd. Flow (perm)	732	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	120	634	91	114	4	127	674	219
RTOR Reduction (vph)	0	8	0	0	0	0	18	0
Lane Group Flow (vph)	120	831	0	0	0	131	875	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	52.5	52.5				34.5	34.5	
Effective Green, g (s)	52.5	52.5				34.5	34.5	
Actuated g/C Ratio	0.35	0.35				0.23	0.23	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	256	1136				393	606	
v/s Ratio Prot		0.26				0.08		
v/s Ratio Perm	0.16						c0.33	
v/c Ratio	0.47	0.73				0.33	1.44	
Uniform Delay, d1	37.9	42.6				48.2	57.8	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	6.1	4.2				2.3	208.6	
Delay (s)	44.0	46.7				50.4	266.4	
Level of Service	D	D				D	F	
Approach Delay (s)		46.4				238.8		
Approach LOS		D				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	601	0	0	493	60	85	52	20	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1951			1840				
Flt Permitted		0.90			1.00			0.97				
Satd. Flow (perm)		1524			1951			1840				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	668	0	0	548	67	94	58	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	740	0	0	615	0	0	174	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		938			1201			481				
v/s Ratio Prot					0.32							
v/s Ratio Perm		c0.49						0.09				
v/c Ratio		0.79			0.51			0.36				
Uniform Delay, d1		9.3			7.0			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.7			1.6			2.1				
Delay (s)		16.0			8.6			21.7				
Level of Service		B			A			C				
Approach Delay (s)		16.0			8.6			21.7			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	340	152	129	358	157	105	639	85	144	759	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97	1.00	1.00	0.94	1.00	1.00	0.92
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1982	1441		1949	1453	1546	3040	1280	1506	3069	1232
Flt Permitted		0.61	1.00		0.78	1.00	0.20	1.00	1.00	0.22	1.00	1.00
Satd. Flow (perm)		1210	1441		1537	1453	326	3040	1280	351	3069	1232
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	358	160	136	377	165	111	673	89	152	799	99
RTOR Reduction (vph)	0	0	82	0	0	104	0	0	64	0	0	69
Lane Group Flow (vph)	0	433	78	0	513	61	111	673	25	152	799	30
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		34.0	34.0		26.0	26.0	24.0	20.0	20.0	26.0	21.0	21.0
Effective Green, g (s)		34.0	34.0		26.0	26.0	24.0	20.0	20.0	26.0	21.0	21.0
Actuated g/C Ratio		0.49	0.49		0.37	0.37	0.34	0.29	0.29	0.37	0.30	0.30
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		643	700		571	540	181	869	366	213	921	370
v/s Ratio Prot		c0.05					0.03	0.22		c0.05	c0.26	
v/s Ratio Perm		0.28	0.05		c0.33	0.04	0.18		0.02	0.21		0.02
v/c Ratio		0.67	0.11		0.90	0.11	0.61	0.77	0.07	0.71	0.87	0.08
Uniform Delay, d1		13.8	9.8		20.8	14.4	17.1	22.9	18.2	16.2	23.2	17.6
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		5.6	0.3		19.5	0.4	6.0	6.7	0.4	10.8	10.8	0.4
Delay (s)		19.3	10.1		40.3	14.9	23.2	29.6	18.6	27.0	34.0	18.0
Level of Service		B	B		D	B	C	C	B	C	C	B
Approach Delay (s)		16.8			34.1			27.7			31.5	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	421	85	98	539	94	51	61	71	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1645			1649			1797				
Flt Permitted		0.83			0.85			0.99				
Satd. Flow (perm)		1367			1417			1797				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	468	94	109	599	104	57	68	79	0	0	0
RTOR Reduction (vph)	0	9	0	0	8	0	0	35	0	0	0	0
Lane Group Flow (vph)	0	647	0	0	804	0	0	169	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		841			872			470				
v/s Ratio Prot												
v/s Ratio Perm		0.47			c0.57			0.09				
v/c Ratio		0.77			0.92			0.36				
Uniform Delay, d1		9.1			11.1			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.7			16.6			2.1				
Delay (s)		15.8			27.7			21.7				
Level of Service		B			C			C				
Approach Delay (s)		15.8			27.7			21.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	22.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	496	83	76	527	37	38	76	72	54	238	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1685	1382		1713	1417		1686	1455		1878	
Flt Permitted		0.89	1.00		0.84	1.00		0.82	1.00		0.94	
Satd. Flow (perm)		1504	1382		1442	1417		1412	1455		1774	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	522	87	80	555	39	40	80	76	57	251	59
RTOR Reduction (vph)	0	0	37	0	0	12	0	0	52	0	10	0
Lane Group Flow (vph)	0	578	50	0	635	27	0	120	24	0	357	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		862	792		827	812		452	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.38	0.04		c0.44	0.02		0.08	0.02		c0.20	
v/c Ratio		0.67	0.06		0.77	0.03		0.27	0.05		0.63	
Uniform Delay, d1		11.1	7.1		12.2	7.0		18.9	17.6		21.7	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		4.1	0.2		6.8	0.1		1.4	0.2		5.2	
Delay (s)		15.2	7.2		19.0	7.0		20.4	17.8		26.9	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		14.2			18.3			19.4			26.9	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	101.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	494	34	45	539	54	45	165	55	123	210	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1533	3066		1652	3730		1585	1663	1370	1568	1680	1397
Flt Permitted	0.35	1.00		0.39	1.00		0.57	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	562	3066		675	3730		953	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	549	38	50	599	60	50	183	61	137	233	37
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	37	0	0	22
Lane Group Flow (vph)	66	579	0	50	647	0	50	183	24	137	233	15
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	268	1462		322	1779		381	665	548	417	672	559
v/s Ratio Prot		c0.19			0.17			0.11			c0.14	
v/s Ratio Perm	0.12			0.07			0.05		0.02	0.13		0.01
v/c Ratio	0.25	0.40		0.16	0.36		0.13	0.28	0.04	0.33	0.35	0.03
Uniform Delay, d1	10.1	11.0		9.6	10.8		12.3	13.1	11.9	13.5	13.6	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.85	0.90	0.75	0.59	0.59	0.26
Incremental Delay, d2	2.2	0.8		1.0	0.6		0.7	1.0	0.2	2.0	1.4	0.1
Delay (s)	12.3	11.8		10.6	11.3		11.1	12.9	9.1	9.9	9.4	3.1
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.8			11.3			11.8			9.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	421	81	73	396	67	57	180	64	89	245	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1329	3137		1520	3128		1580	2919		1452	2997	
Flt Permitted	0.44	1.00		0.42	1.00		0.53	1.00		0.59	1.00	
Satd. Flow (perm)	617	3137		667	3128		882	2919		907	2997	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	443	85	77	417	71	60	189	67	94	258	84
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	42	0
Lane Group Flow (vph)	63	528	0	77	488	0	60	217	0	94	300	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	296	1506		320	1501		365	1207		375	1239	
v/s Ratio Prot		c0.17			0.16			0.07			0.10	
v/s Ratio Perm	0.10			0.12			0.07			c0.10		
v/c Ratio	0.21	0.35		0.24	0.33		0.16	0.18		0.25	0.24	
Uniform Delay, d1	11.3	12.2		11.5	12.0		13.8	13.9		14.4	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.6		1.8	0.6		1.0	0.3		1.6	0.5	
Delay (s)	12.9	12.8		13.2	12.6		14.8	14.3		16.0	14.8	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.8			12.7			14.4			15.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	447	62	32	523	48	86	203	60	76	473	110
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1595	1653		1371	1973		1534	2998		1535	3012	
Flt Permitted	0.24	1.00		0.30	1.00		0.28	1.00		0.58	1.00	
Satd. Flow (perm)	402	1653		435	1973		451	2998		939	3012	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	471	65	34	551	51	91	214	63	80	498	116
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	105	536	0	34	602	0	91	277	0	80	614	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	43.9	39.3		40.7	37.7		26.7	21.8		26.7	21.8	
Effective Green, g (s)	43.9	37.3		40.7	35.7		26.7	19.8		26.7	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	272	725		241	829		204	698		329	702	
v/s Ratio Prot	c0.02	c0.32		0.00	0.31		c0.03	0.09		0.01	c0.20	
v/s Ratio Perm	0.18			0.06			0.11			0.06		
v/c Ratio	0.39	0.74		0.14	0.73		0.45	0.40		0.24	0.87	
Uniform Delay, d1	23.8	19.8		20.5	20.6		29.2	27.6		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	6.7		0.3	5.5		1.6	1.7		0.4	14.3	
Delay (s)	24.7	26.5		20.8	26.1		30.8	29.2		22.2	45.7	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		26.2			25.8			29.6			43.0	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	77	399	65	117	510	118	67	158	58	127	367	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3681			3131		1652	3237		1549	3027	
Flt Permitted		0.71			0.72		0.42	1.00		0.60	1.00	
Satd. Flow (perm)		2616			2271		737	3237		983	3027	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	86	443	72	130	567	131	74	176	64	141	408	91
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	601	0	0	828	0	74	240	0	141	499	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1186			1030		324	1424		433	1332	
v/s Ratio Prot								0.07			c0.16	
v/s Ratio Perm		0.23			c0.36		0.10			0.14		
v/c Ratio		0.51			0.80		0.23	0.17		0.33	0.37	
Uniform Delay, d1		14.5			17.6		13.1	12.7		13.7	14.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.5			6.7		1.6	0.3		2.0	0.8	
Delay (s)		16.1			24.3		14.7	13.0		15.7	14.9	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		16.1			24.3			13.4			15.1	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	877	6	20	585	249	1	1	9	213	1	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.38	1.00		0.25	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	647	3206		432	3320	1485		1519			2533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	974	7	22	650	277	1	1	10	237	1	89
RTOR Reduction (vph)	0	0	0	0	0	103	0	7	0	0	52	0
Lane Group Flow (vph)	109	981	0	22	650	174	0	5	0	0	275	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	405	2008		271	2080	930		402			671	
v/s Ratio Prot		c0.31			0.20							
v/s Ratio Perm	0.17			0.05		0.12		0.00			c0.11	
v/c Ratio	0.27	0.49		0.08	0.31	0.19		0.01			0.41	
Uniform Delay, d1	6.2	7.4		5.4	6.4	5.8		19.9			22.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.6	0.9		0.6	0.4	0.4		0.0			1.7	
Delay (s)	7.8	8.3		6.0	6.8	6.3		20.0			24.0	
Level of Service	A	A		A	A	A		B			C	
Approach Delay (s)		8.2			6.6			20.0			24.0	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	73.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	131	228	124	94	163	56	144	907	90	125	825	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1505		1563	1585		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.21	1.00		0.20	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	743	1505		340	1585		317	3069	1337	263	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	240	131	99	172	59	152	955	95	132	868	109
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	51
Lane Group Flow (vph)	138	348	0	99	216	0	152	955	55	132	868	58
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	285	390		190	410		232	1264	551	213	1276	543
v/s Ratio Prot	0.03	c0.23		c0.04	0.14		c0.05	c0.31		0.04	0.28	
v/s Ratio Perm	0.11			0.12			0.26		0.04	0.25		0.04
v/c Ratio	0.48	0.89		0.52	0.53		0.66	0.76	0.10	0.62	0.68	0.11
Uniform Delay, d1	22.7	30.4		22.9	27.0		14.7	21.3	15.3	15.0	20.4	15.4
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.82	0.53	1.00	1.00	1.00
Incremental Delay, d2	5.8	25.2		9.9	4.8		12.2	3.8	0.3	12.8	2.9	0.4
Delay (s)	28.4	55.5		32.7	31.8		22.0	21.3	8.5	27.8	23.4	15.8
Level of Service	C	E		C	C		C	C	A	C	C	B
Approach Delay (s)		48.2			32.1			20.4			23.1	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	181	35	20	173	21	25	149	40	47	255	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.97			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1839			1849			1939			1974	
Flt Permitted		0.97			0.96			0.94			0.94	
Satd. Flow (perm)		1783			1791			1837			1868	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	187	36	21	178	22	26	154	41	48	263	52
RTOR Reduction (vph)	0	9	0	0	6	0	0	12	0	0	9	0
Lane Group Flow (vph)	0	237	0	0	215	0	0	209	0	0	354	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		741			744			848			862	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.11			c0.19	
v/c Ratio		0.32			0.29			0.25			0.41	
Uniform Delay, d1		12.8			12.6			10.6			11.6	
Progression Factor		1.00			0.69			1.17			1.00	
Incremental Delay, d2		1.1			1.0			0.7			1.4	
Delay (s)		13.9			9.7			13.1			13.1	
Level of Service		B			A			B			B	
Approach Delay (s)		13.9			9.7			13.1			13.1	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	193	38	25	180	19	49	200	31	43	214	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3059		1576	3119		1518	3119		1550	3076	
Flt Permitted	0.61	1.00		0.59	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	966	3059		985	3119		926	3119		968	3076	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	214	42	28	200	21	54	222	34	48	238	43
RTOR Reduction (vph)	0	25	0	0	12	0	0	14	0	0	18	0
Lane Group Flow (vph)	27	231	0	28	209	0	54	242	0	48	263	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	894		288	912		541	1823		566	1798	
v/s Ratio Prot		c0.08			0.07			0.08			c0.09	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.26		0.10	0.23		0.10	0.13		0.08	0.15	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.94	0.97		0.73	0.73		1.36	1.37		0.38	0.34	
Incremental Delay, d2	0.6	0.7		0.7	0.6		0.4	0.1		0.3	0.2	
Delay (s)	16.4	17.7		12.9	13.3		8.4	8.5		2.5	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.6			13.3			8.4			2.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	168	41	25	159	38	27	247	16	40	322	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	3058		1525	2937			1922			1938	
Flt Permitted	0.61	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1007	3058		974	2937			1823			1840	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	74	187	46	28	177	42	30	274	18	44	358	37
RTOR Reduction (vph)	0	28	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	74	205	0	28	194	0	0	319	0	0	434	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	403	1223		390	1175			869			878	
v/s Ratio Prot		0.07			0.07							
v/s Ratio Perm	c0.07			0.03				0.17			c0.24	
v/c Ratio	0.18	0.17		0.07	0.16			0.37			0.49	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.8			11.6	
Progression Factor	1.05	1.00		0.79	0.79			1.23			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.0	
Delay (s)	14.2	12.8		9.9	10.2			14.4			13.6	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		13.2			10.1			14.4			13.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	28	20	161	27	41	235	11	33	364	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1970		1584	1975			1981			1979	
Flt Permitted	0.57	1.00		0.65	1.00			0.90			0.96	
Satd. Flow (perm)	986	1970		1087	1975			1792			1912	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	31	22	179	30	46	261	12	37	404	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	154	0	22	209	0	0	319	0	0	504	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	303	606		334	608			1020			1088	
v/s Ratio Prot		0.08			c0.11							
v/s Ratio Perm	0.05			0.02				0.18			c0.26	
v/c Ratio	0.17	0.25		0.07	0.34			0.31			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.4			7.3			8.2	
Progression Factor	0.83	0.81		0.96	0.99			0.84			1.00	
Incremental Delay, d2	1.2	1.0		0.4	1.5			0.8			1.4	
Delay (s)	14.8	14.6		15.6	18.7			6.9			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.7			18.4			6.9			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	13	97	2	5	10	62	235	5	5	466	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1727		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.39	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1332	1727		1216	1808		660	1647	1428	1030	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	14	108	2	6	11	69	261	6	6	518	84
RTOR Reduction (vph)	0	78	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	60	44	0	2	9	0	69	261	4	6	518	56
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		337	501		396	988	857	618	1200	898
v/s Ratio Prot		0.03			0.01			0.16			c0.26	
v/s Ratio Perm	c0.05			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.16	0.09		0.01	0.02		0.17	0.26	0.00	0.01	0.43	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.8	6.2	5.2	5.2	7.0	5.4
Progression Factor	1.39	2.73		1.00	1.00		1.20	1.12	1.49	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.4		0.0	0.1		0.7	0.5	0.0	0.0	1.1	0.1
Delay (s)	25.7	48.0		17.1	17.1		7.7	7.4	7.8	5.3	8.2	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		40.7			17.1			7.4			7.8	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	253	163	178	204	0	0	0	0	110	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.41	1.00					0.95	1.00	
Satd. Flow (perm)		2905		722	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	266	172	187	215	0	0	0	0	116	495	397
RTOR Reduction (vph)	0	103	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	335	0	187	215	0	0	0	0	116	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		566	1805					545	1096	
v/s Ratio Prot		c0.12		c0.06	0.07					0.08	c0.25	
v/s Ratio Perm				0.11								
v/c Ratio		0.36		0.33	0.12					0.21	0.68	
Uniform Delay, d1		26.4		13.5	11.1					22.4	27.6	
Progression Factor		1.00		2.20	2.13					1.00	1.00	
Incremental Delay, d2		1.1		1.4	0.1					0.9	3.5	
Delay (s)		27.4		31.0	23.8					23.3	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.4			27.1			0.0			30.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	222	0	0	305	113	77	539	233	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1674	3196			2850		1767	1782	1560			
Flt Permitted	0.36	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	632	3196			2850		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	234	0	0	321	119	81	567	245	0	0	0
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	168	0	0	0
Lane Group Flow (vph)	148	234	0	0	403	0	81	567	77	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	703	1974			726		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.14		0.05	c0.32				
v/s Ratio Perm	0.05								0.05			
v/c Ratio	0.21	0.12			0.55		0.16	1.08	0.17			
Uniform Delay, d1	10.3	8.0			33.0		26.6	36.0	26.7			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			3.0		0.6	63.3	0.8			
Delay (s)	4.9	3.6			36.0		27.3	99.3	27.5			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			36.0			73.1			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	48.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	514	479	81	534	0	0	0	0	11	434	285
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3098		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3098		200	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	535	499	84	556	0	0	0	0	11	452	297
RTOR Reduction (vph)	0	168	0	0	0	0	0	0	0	0	0	196
Lane Group Flow (vph)	0	866	0	84	556	0	0	0	0	11	452	101
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1115		380	1917					543	1085	520
v/s Ratio Prot		c0.28		0.04	c0.17					0.01	c0.14	0.07
v/s Ratio Perm				0.08								
v/c Ratio		0.78		0.22	0.29					0.02	0.42	0.19
Uniform Delay, d1		28.4		14.4	10.6					21.9	25.4	23.3
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		5.3		0.9	0.3					0.1	1.2	0.8
Delay (s)		33.8		15.5	12.9					22.0	26.6	24.2
Level of Service		C		B	B					C	C	C
Approach Delay (s)		33.8			13.2			0.0			25.5	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	419	106	0	0	150	6	465	480	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3110			3170		1555	1653	1530			
Flt Permitted	0.64	0.71			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	992	2290			3170		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	432	109	0	0	155	6	479	495	60	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	216	325	0	0	158	0	479	495	22	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	678	1463			476		575	612	566			
v/s Ratio Prot	c0.11	0.08			c0.05		c0.31	0.30	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.32	0.22			0.33		0.83	0.81	0.04			
Uniform Delay, d1	14.1	13.5			38.0		28.7	28.3	20.1			
Progression Factor	0.24	0.25			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.9		13.3	11.0	0.1			
Delay (s)	4.1	3.6			39.9		42.0	39.3	20.3			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		3.8			39.9			39.5			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	220	103	153	273	121	84	699	87	102	884	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.96			0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2940			2929		1508	3069	1309	1508	3099	1298
Flt Permitted		0.72			0.72		0.16	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		2137			2152		254	3069	1309	401	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	229	107	159	284	126	88	728	91	106	921	68
RTOR Reduction (vph)	0	40	0	0	31	0	0	0	56	0	0	33
Lane Group Flow (vph)	0	377	0	0	538	0	88	728	35	106	921	35
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		962			709		167	1210	508	222	1221	504
v/s Ratio Prot		c0.03					c0.02	0.24		0.02	c0.30	
v/s Ratio Perm		0.14			c0.25		0.20		0.03	0.18		0.03
v/c Ratio		0.39			0.76		0.53	0.60	0.07	0.48	0.75	0.07
Uniform Delay, d1		16.9			25.5		16.7	20.5	16.3	16.0	22.2	16.3
Progression Factor		1.00			1.00		1.36	0.69	0.62	1.11	1.16	1.74
Incremental Delay, d2		1.2			7.5		10.7	2.1	0.2	5.2	3.1	0.2
Delay (s)		18.1			33.0		33.5	16.2	10.4	22.9	29.0	28.6
Level of Service		B			C		C	B	B	C	C	C
Approach Delay (s)		18.1			33.0			17.3			28.4	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	327	0	0	424	88	53	44	34	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.98			0.96				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1731			1707			1653				
Flt Permitted		0.83			1.00			0.98				
Satd. Flow (perm)		1453			1707			1653				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	363	0	0	471	98	59	49	38	0	0	0
RTOR Reduction (vph)	0	0	0	0	12	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	447	0	0	557	0	0	126	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		849			998			483				
v/s Ratio Prot					c0.33							
v/s Ratio Perm		0.31						0.08				
v/c Ratio		0.53			0.56			0.26				
Uniform Delay, d1		8.1			8.3			17.6				
Progression Factor		1.00			0.76			1.00				
Incremental Delay, d2		2.3			2.0			1.3				
Delay (s)		10.4			8.3			18.9				
Level of Service		B			A			B				
Approach Delay (s)		10.4			8.3			18.9			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	384	39	39	370	50	31	118	39	53	150	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.99			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1955			1941			2969			2985	
Flt Permitted		0.97			0.94			0.88			0.86	
Satd. Flow (perm)		1900			1825			2647			2591	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	23	427	43	43	411	56	34	131	43	59	167	48
RTOR Reduction (vph)	0	5	0	0	7	0	0	25	0	0	27	0
Lane Group Flow (vph)	0	488	0	0	503	0	0	183	0	0	247	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		877			842			1100			1076	
v/s Ratio Prot												
v/s Ratio Perm		0.26			c0.28			0.07			c0.10	
v/c Ratio		0.56			0.60			0.17			0.23	
Uniform Delay, d1		12.7			13.0			11.9			12.3	
Progression Factor		0.61			0.40			1.07			0.43	
Incremental Delay, d2		2.4			2.8			0.3			0.5	
Delay (s)		10.1			8.0			13.1			5.8	
Level of Service		B			A			B			A	
Approach Delay (s)		10.1			8.0			13.1			5.8	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	330	49	81	467	86	45	219	98	83	227	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1510	3036		1573	3077		1587	2962		1585	3072	
Flt Permitted	0.32	1.00		0.46	1.00		0.56	1.00		0.54	1.00	
Satd. Flow (perm)	502	3036		760	3077		929	2962		903	3072	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	367	54	90	519	96	50	243	109	92	252	71
RTOR Reduction (vph)	0	18	0	0	23	0	0	50	0	0	33	0
Lane Group Flow (vph)	57	403	0	90	592	0	50	302	0	92	290	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	170	1028		257	1041		500	1595		486	1654	
v/s Ratio Prot		0.13			c0.19			0.10			0.09	
v/s Ratio Perm	0.11			0.12			0.05			c0.10		
v/c Ratio	0.34	0.39		0.35	0.57		0.10	0.19		0.19	0.18	
Uniform Delay, d1	16.0	16.4		16.1	17.6		7.3	7.7		7.7	7.6	
Progression Factor	0.71	0.67		0.97	0.97		0.95	0.98		1.08	1.08	
Incremental Delay, d2	4.6	1.0		3.7	2.2		0.4	0.3		0.9	0.2	
Delay (s)	16.0	12.0		19.3	19.2		7.3	7.8		9.2	8.5	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		12.5			19.2			7.7			8.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	348	78	87	418	50	46	231	58	46	279	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1509	3018		1430	3723			3485			3521	
Flt Permitted	0.45	1.00		0.48	1.00			0.86			0.88	
Satd. Flow (perm)	708	3018		715	3723			3028			3119	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	366	82	92	440	53	48	243	61	48	294	67
RTOR Reduction (vph)	0	29	0	0	14	0	0	27	0	0	25	0
Lane Group Flow (vph)	62	419	0	92	479	0	0	325	0	0	384	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	338	1439		341	1776			1211			1248	
v/s Ratio Prot		c0.14			0.13							
v/s Ratio Perm	0.09			0.13				0.11			c0.12	
v/c Ratio	0.18	0.29		0.27	0.27			0.27			0.31	
Uniform Delay, d1	9.7	10.3		10.2	10.2			13.1			13.3	
Progression Factor	1.61	1.76		1.11	1.10			1.00			0.74	
Incremental Delay, d2	1.1	0.5		1.7	0.3			0.5			0.6	
Delay (s)	16.8	18.6		13.0	11.5			13.7			10.4	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		18.4			11.8			13.7			10.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	294	92	92	293	92	120	82	47	47	82	119
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1670	1436		3087			1885			1835	
Flt Permitted		0.79	1.00		0.79			0.68			0.90	
Satd. Flow (perm)		1336	1436		2454			1303			1674	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	327	102	102	326	102	133	91	52	52	91	132
RTOR Reduction (vph)	0	0	49	0	32	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	423	53	0	498	0	0	263	0	0	224	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		699	751		1284			421			541	
v/s Ratio Prot												
v/s Ratio Perm		c0.32	0.04		0.20			c0.20			0.13	
v/c Ratio		0.61	0.07		0.39			0.63			0.41	
Uniform Delay, d1		10.8	7.7		9.3			18.7			17.2	
Progression Factor		1.87	4.74		0.53			1.00			1.00	
Incremental Delay, d2		3.8	0.2		0.9			6.8			2.3	
Delay (s)		24.0	36.6		5.8			25.5			19.5	
Level of Service		C	D		A			C			B	
Approach Delay (s)		26.5			5.8			25.5			19.5	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	281	28	26	327	60	26	133	47	62	146	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1444	3026		1566	3019			3582			3599	
Flt Permitted	0.48	1.00		0.55	1.00			0.90			0.84	
Satd. Flow (perm)	736	3026		899	3019			3238			3069	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	312	31	29	363	67	29	148	52	69	162	70
RTOR Reduction (vph)	0	11	0	0	23	0	0	30	0	0	41	0
Lane Group Flow (vph)	61	332	0	29	407	0	0	199	0	0	260	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	340	1397		415	1393			1345			1275	
v/s Ratio Prot		0.11			c0.13							
v/s Ratio Perm	0.08			0.03				0.06			c0.08	
v/c Ratio	0.18	0.24		0.07	0.29			0.15			0.20	
Uniform Delay, d1	10.3	10.6		9.7	10.9			11.8			12.1	
Progression Factor	0.67	0.68		1.31	1.20			0.93			0.41	
Incremental Delay, d2	0.9	0.3		0.1	0.2			0.2			0.3	
Delay (s)	7.8	7.5		12.9	13.3			11.2			5.4	
Level of Service	A	A		B	B			B			A	
Approach Delay (s)		7.5			13.3			11.2			5.4	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	450	26	86	507	222	24	124	115	340	261	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3281			3168			3089			3181	
Flt Permitted		0.75			0.78			0.88			0.70	
Satd. Flow (perm)		2462			2487			2739			2269	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	500	29	96	563	247	27	138	128	378	290	91
RTOR Reduction (vph)	0	6	0	0	59	0	0	67	0	0	16	0
Lane Group Flow (vph)	0	575	0	0	847	0	0	226	0	0	743	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		24.0			24.0			31.0			23.0	
Effective Green, g (s)		24.0			24.0			31.0			23.0	
Actuated g/C Ratio		0.37			0.37			0.48			0.35	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		909			918			1333			803	
v/s Ratio Prot								c0.01				
v/s Ratio Perm		0.23			c0.34			0.07			c0.33	
v/c Ratio		0.63			0.92			0.17			1.02dl	
Uniform Delay, d1		16.9			19.6			9.7			20.2	
Progression Factor		1.65			1.00			1.00			0.77	
Incremental Delay, d2		3.3			16.0			0.3			17.5	
Delay (s)		31.1			35.6			10.0			33.1	
Level of Service		C			D			A			C	
Approach Delay (s)		31.1			35.6			10.0			33.1	
Approach LOS		C			D			A			C	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	899	132	48	794	0	82	0	36	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3039			3090			1619				
Flt Permitted		1.00			0.80			0.79				
Satd. Flow (perm)		3039			2485			1328				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	999	147	53	882	0	91	0	40	0	0	0
RTOR Reduction (vph)	0	16	0	0	0	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	1130	0	0	935	0	0	114	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1958			911			236				
v/s Ratio Prot		c0.37										
v/s Ratio Perm					c0.38			c0.09				
v/c Ratio		0.58			1.03			0.48				
Uniform Delay, d1		9.1			28.5			33.3				
Progression Factor		0.16			1.43			1.00				
Incremental Delay, d2		0.3			35.5			6.9				
Delay (s)		1.7			76.4			40.2				
Level of Service		A			E			D				
Approach Delay (s)		1.7			76.4			40.2			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	35.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	224	642	24	112	614	185	61	4	107	212	10	213
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3192		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.29	1.00		0.33	1.00	1.00		0.88		0.44	1.00	1.00
Satd. Flow (perm)	471	3192		583	3320	1485		1592		763	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	249	713	27	124	682	206	68	4	119	236	11	237
RTOR Reduction (vph)	0	2	0	0	0	96	0	90	0	0	0	135
Lane Group Flow (vph)	249	738	0	124	682	110	0	101	0	236	11	102
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	54.9	42.5		47.6	38.2	48.2		12.1		25.1	25.1	38.8
Effective Green, g (s)	54.9	42.5		47.6	38.2	48.2		12.1		25.1	25.1	38.8
Actuated g/C Ratio	0.61	0.47		0.53	0.42	0.54		0.13		0.28	0.28	0.43
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	452	1507		421	1409	795		214		312	487	640
v/s Ratio Prot	c0.08	0.23		0.03	0.21	0.02				c0.08	0.01	0.02
v/s Ratio Perm	c0.25			0.13		0.06		0.06		c0.13		0.04
v/c Ratio	0.55	0.49		0.29	0.48	0.14		0.47		0.76	0.02	0.16
Uniform Delay, d1	9.2	16.3		10.9	18.8	10.5		36.0		28.6	23.5	15.6
Progression Factor	2.63	1.86		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.5	1.0		0.5	1.2	0.1		2.2		10.0	0.0	0.2
Delay (s)	25.9	31.3		11.4	20.0	10.6		38.2		38.6	23.6	15.8
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		30.0			17.0			38.2			27.1	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	443	2	333	0	0	0	0	19	0	578
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	492	2	370	0	0	0	0	21	0	642
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	370			576			765	950	288	662	950	185
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	370			576			765	950	288	662	950	185
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	22
cM capacity (veh/h)	1178			987			64	256	706	345	256	823

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	492	126	247	21	642
Volume Left	0	0	0	2	0	21	0
Volume Right	0	0	492	0	0	0	642
cSH	1700	1700	1700	987	1700	345	823
Volume to Capacity	0.17	0.17	0.29	0.00	0.15	0.06	0.78
Queue Length 95th (ft)	0	0	0	0	0	5	198
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	16.1	23.1
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		22.8	
Approach LOS						C	

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	537	0	335	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	597	0	372	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	298	298	372
Volume Left (vph)	298	298	372
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.2	6.2	5.6
Degree Utilization, x	0.51	0.51	0.58
Capacity (veh/h)	568	570	619
Control Delay (s)	14.3	14.3	16.0
Approach Delay (s)	14.3		16.0
Approach LOS	B		C

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	475	64	196	511	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3153		1605	3210						3074	
Flt Permitted		1.00		0.34	1.00						0.97	
Satd. Flow (perm)		3153		582	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	528	71	218	568	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	587	0	218	568	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1335		456	1850						976	
v/s Ratio Prot		0.19		c0.06	0.18						c0.05	
v/s Ratio Perm				c0.22								
v/c Ratio		0.44		0.48	0.31						0.16	
Uniform Delay, d1		17.4		15.9	9.3						20.8	
Progression Factor		1.00		0.35	0.18						1.00	
Incremental Delay, d2		1.1		2.8	0.3						0.3	
Delay (s)		18.4		8.4	2.0						21.2	
Level of Service		B		A	A						C	
Approach Delay (s)		18.4			3.8			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	481	0	0	644	129	63	90	59	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1660	3320			3130			4504				
Flt Permitted	0.21	1.00			1.00			0.99				
Satd. Flow (perm)	367	3320			3130			4504				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	534	0	0	716	143	70	100	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	19	0	0	45	0	0	0	0
Lane Group Flow (vph)	106	534	0	0	840	0	0	191	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	359	1875			1289			1431				
v/s Ratio Prot	0.03	c0.16			c0.27			c0.04				
v/s Ratio Perm	0.13											
v/c Ratio	0.30	0.28			0.65			0.13				
Uniform Delay, d1	18.6	9.6			20.1			20.7				
Progression Factor	0.43	0.31			1.00			1.00				
Incremental Delay, d2	1.9	0.4			2.6			0.2				
Delay (s)	9.9	3.4			22.7			20.9				
Level of Service	A	A			C			C				
Approach Delay (s)		4.4			22.7			20.9			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	346	114	91	386	81	129	78	30	31	87	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.98			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2977			3007			1840			1769	
Flt Permitted		0.66			0.69			0.72			0.95	
Satd. Flow (perm)		1975			2105			1358			1683	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	384	127	101	429	90	143	87	33	34	97	160
RTOR Reduction (vph)	0	34	0	0	21	0	0	8	0	0	68	0
Lane Group Flow (vph)	0	604	0	0	599	0	0	255	0	0	223	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		699			745			669			829	
v/s Ratio Prot												
v/s Ratio Perm		c0.31			0.28			c0.19			0.13	
v/c Ratio		0.86			0.80			0.38			0.27	
Uniform Delay, d1		19.6			19.0			10.3			9.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		13.5			9.0			1.6			0.8	
Delay (s)		33.0			27.9			12.0			10.5	
Level of Service		C			C			B			B	
Approach Delay (s)		33.0			27.9			12.0			10.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	201	88	159	311	65	124	542	67	95	950	180
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2980		1573	3683		1508	3069	1333	1520	3099	1336
Flt Permitted	0.45	1.00		0.53	1.00		0.13	1.00	1.00	0.34	1.00	1.00
Satd. Flow (perm)	739	2980		880	3683		212	3069	1333	541	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	120	212	93	167	327	68	131	571	71	100	1000	189
RTOR Reduction (vph)	0	58	0	0	21	0	0	0	45	0	0	120
Lane Group Flow (vph)	120	247	0	167	374	0	131	571	26	100	1000	69
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	982		343	1213		181	1119	486	298	1130	487
v/s Ratio Prot	0.02	0.08		c0.02	0.10		c0.05	0.19		0.02	c0.32	
v/s Ratio Perm	0.12			c0.15			0.26		0.02	0.12		0.05
v/c Ratio	0.40	0.25		0.49	0.31		0.72	0.51	0.05	0.34	0.88	0.14
Uniform Delay, d1	19.7	20.8		20.7	21.3		18.1	21.1	17.5	15.4	25.3	18.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.39	1.04	2.36
Incremental Delay, d2	4.0	0.6		4.9	0.7		22.1	1.7	0.2	2.2	7.8	0.4
Delay (s)	23.7	21.5		25.5	21.9		40.2	22.7	17.7	23.7	34.2	43.2
Level of Service	C	C		C	C		D	C	B	C	C	D
Approach Delay (s)		22.1			23.0			25.2			34.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	295	30	33	393	24	33	102	41	36	134	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1962	1466		1993	1480		2015	1506		2002	1511
Flt Permitted		0.90	1.00		0.96	1.00		0.91	1.00		0.93	1.00
Satd. Flow (perm)		1777	1466		1913	1480		1861	1506		1877	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	311	32	35	414	25	35	107	43	38	141	69
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	25	0	0	40
Lane Group Flow (vph)	0	363	15	0	449	12	0	142	18	0	179	29
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		820	677		883	683		773	626		780	628
v/s Ratio Prot												
v/s Ratio Perm		0.20	0.01		c0.23	0.01		0.08	0.01		c0.10	0.02
v/c Ratio		0.44	0.02		0.51	0.02		0.18	0.03		0.23	0.05
Uniform Delay, d1		11.8	9.5		12.3	9.5		12.0	11.2		12.3	11.3
Progression Factor		1.00	1.00		0.55	0.41		1.13	1.31		1.04	0.94
Incremental Delay, d2		1.7	0.1		2.0	0.0		0.5	0.1		0.7	0.1
Delay (s)		13.6	9.6		8.7	4.0		14.1	14.9		13.4	10.8
Level of Service		B	A		A	A		B	B		B	B
Approach Delay (s)		13.3			8.5			14.3			12.7	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	317	20	51	299	51	10	109	23	115	214	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3072		1550	3031		1550	3017		1550	2991	
Flt Permitted	0.95	1.00		0.53	1.00		0.55	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3072		864	3031		892	3017		1074	2991	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	352	22	57	332	57	11	121	26	128	238	72
RTOR Reduction (vph)	0	7	0	0	21	0	0	15	0	0	42	0
Lane Group Flow (vph)	83	367	0	57	368	0	11	132	0	128	268	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1512		292	1026		371	1253		446	1242	
v/s Ratio Prot	c0.05	0.12			c0.12			0.04			0.09	
v/s Ratio Perm				0.07			0.01			c0.12		
v/c Ratio	0.50	0.24		0.20	0.36		0.03	0.11		0.29	0.22	
Uniform Delay, d1	27.3	9.5		15.2	16.2		11.2	11.6		12.6	12.2	
Progression Factor	0.93	0.55		1.00	1.00		0.51	0.39		1.12	1.12	
Incremental Delay, d2	9.8	0.4		1.5	1.0		0.1	0.1		1.6	0.4	
Delay (s)	35.2	5.6		16.7	17.2		5.9	4.7		15.8	14.0	
Level of Service	D	A		B	B		A	A		B	B	
Approach Delay (s)		11.0			17.1			4.8			14.5	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	267	88	245	330	63	104	295	189	55	282	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.96		1.00	0.98			0.95			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1550	2984		1550	3025			3133			3233	
Flt Permitted	0.50	1.00		0.95	1.00			0.74			0.74	
Satd. Flow (perm)	813	2984		1550	3025			2347			2400	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	71	297	98	272	367	70	116	328	210	61	313	56
RTOR Reduction (vph)	0	53	0	0	26	0	0	94	0	0	20	0
Lane Group Flow (vph)	71	342	0	272	411	0	0	560	0	0	410	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	15.0	15.0		14.0	32.0			17.0			17.0	
Effective Green, g (s)	15.0	15.0		14.0	32.0			17.0			17.0	
Actuated g/C Ratio	0.25	0.25		0.23	0.53			0.28			0.28	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	203	746		362	1613			665			680	
v/s Ratio Prot		c0.11		c0.18	0.14							
v/s Ratio Perm	0.09							c0.24			0.17	
v/c Ratio	0.35	0.46		0.75	0.25			0.84			0.60	
Uniform Delay, d1	18.5	19.1		21.4	7.6			20.2			18.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	4.7	2.0		13.4	0.4			12.3			3.9	
Delay (s)	23.2	21.1		34.8	7.9			32.6			22.5	
Level of Service	C	C		C	A			C			C	
Approach Delay (s)		21.4			18.2			32.6			22.5	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	454	16	75	645	75	55	110	165	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		1.00			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1620			1603			3249				
Flt Permitted		0.94			0.91			0.99				
Satd. Flow (perm)		1529			1465			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	504	18	83	717	83	61	122	183	0	0	0
RTOR Reduction (vph)	0	1	0	0	5	0	0	139	0	0	0	0
Lane Group Flow (vph)	0	550	0	0	878	0	0	227	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		976			935			775				
v/s Ratio Prot												
v/s Ratio Perm		0.36			c0.60			0.07				
v/c Ratio		0.56			0.94			0.29				
Uniform Delay, d1		6.6			10.6			20.3				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		2.3			18.0			0.9				
Delay (s)		9.0			28.6			21.2				
Level of Service		A			C			C				
Approach Delay (s)		9.0			28.6			21.2			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	21.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	142	464	611	39	119	176
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	149	488	643	41	125	185
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.95				0.95	0.95
vC, conflicting volume	701				1230	364
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	586				1141	232
tC, single (s)	4.2				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	84				19	75
cM capacity (veh/h)	908				154	727

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	312	326	429	255	125	185
Volume Left	149	0	0	0	125	0
Volume Right	0	0	0	41	0	185
cSH	908	1700	1700	1700	154	727
Volume to Capacity	0.16	0.19	0.25	0.15	0.81	0.25
Queue Length 95th (ft)	15	0	0	0	132	25
Control Delay (s)	5.6	0.0	0.0	0.0	87.9	11.6
Lane LOS	A				F	B
Approach Delay (s)	2.7		0.0		42.4	
Approach LOS					E	

Intersection Summary			
Average Delay	9.1		
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	690	0	1	620	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	767	0	1	689	3	32
RTOR Reduction (vph)	0	0	0	0	28	0
Lane Group Flow (vph)	767	0	0	690	7	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	78.0			48.0	14.0	
Effective Green, g (s)	74.0			48.0	14.0	
Actuated g/C Ratio	0.74			0.48	0.14	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1294			839	214	
v/s Ratio Prot	c0.44				c0.00	
v/s Ratio Perm				0.40		
v/c Ratio	0.59			0.82	0.03	
Uniform Delay, d1	6.0			22.3	37.2	
Progression Factor	0.05			1.00	1.00	
Incremental Delay, d2	0.9			8.9	0.3	
Delay (s)	1.2			31.3	37.5	
Level of Service	A			C	D	
Approach Delay (s)	1.2			31.3	37.5	
Approach LOS	A			C	D	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	243	606	32	407	0	0	0	0	17	6	249
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	270	673	36	452	0	0	0	0	19	7	277
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	452			270			1133	1130	472	658	793	452
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	452			270			1133	1130	472	658	793	452
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	95	98	50
cM capacity (veh/h)	1119			1276			77	200	544	346	314	555

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	180	763	488	26	277
Volume Left	0	0	36	19	0
Volume Right	0	673	0	0	277
cSH	1700	1700	1276	337	555
Volume to Capacity	0.11	0.45	0.03	0.08	0.50
Queue Length 95th (ft)	0	0	2	6	69
Control Delay (s)	0.0	0.0	0.9	16.6	17.8
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.9	17.7	
Approach LOS				C	

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	260	0	439	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	289	0	488	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	144	144	488
Volume Left (vph)	144	144	488
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.4	6.4	5.0
Degree Utilization, x	0.26	0.26	0.68
Capacity (veh/h)	536	537	701
Control Delay (s)	10.3	10.3	17.7
Approach Delay (s)	10.3		17.7
Approach LOS	B		C

Intersection Summary			
Delay	15.0		
HCM Level of Service	B		
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	530	345	313	770	0	0	0	0	279	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1228		3425					1359	3806	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1228		3425					1359	3806	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	558	363	329	811	0	0	0	0	294	283	392
RTOR Reduction (vph)	0	0	217	0	0	0	0	0	0	0	53	112
Lane Group Flow (vph)	0	558	146	0	1140	0	0	0	0	162	558	84
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		27.0	27.0		75.1					31.4	31.4	64.4
Effective Green, g (s)		27.0	27.0		75.1					31.4	31.4	64.4
Actuated g/C Ratio		0.17	0.17		0.47					0.20	0.20	0.40
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		536	207		1608					267	747	456
v/s Ratio Prot		c0.18			c0.33					0.12	c0.15	
v/s Ratio Perm			0.12									0.07
v/c Ratio		1.04	0.71		0.71					0.61	0.75	0.18
Uniform Delay, d1		66.5	62.7		33.8					58.7	60.6	30.9
Progression Factor		1.00	1.00		0.04					1.00	1.00	1.00
Incremental Delay, d2		50.0	18.3		0.1					3.9	4.1	0.2
Delay (s)		116.5	81.1		1.6					62.5	64.6	31.1
Level of Service		F	F		A					E	E	C
Approach Delay (s)		102.5			1.6			0.0			57.5	
Approach LOS		F			A			A			E	

Intersection Summary			
HCM Average Control Delay	50.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	517	0	0	750	144	332	214	206	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3059				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3059				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	324	574	0	0	833	160	369	238	229	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	67	0	70	0	0	0	0
Lane Group Flow (vph)	324	574	0	0	833	93	284	482	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	76.9	76.9			35.1	35.1	22.0	22.0				
Effective Green, g (s)	76.9	76.9			35.1	35.1	22.0	22.0				
Actuated g/C Ratio	0.48	0.48			0.22	0.22	0.14	0.14				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	771	1649			704	326	215	421				
v/s Ratio Prot	c0.20	0.17			c0.26		c0.18	0.16				
v/s Ratio Perm						0.06						
v/c Ratio	0.42	0.35			1.18	0.28	1.32	1.15				
Uniform Delay, d1	27.0	25.9			62.5	52.0	69.0	69.0				
Progression Factor	0.05	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			96.6	0.5	173.2	89.9				
Delay (s)	1.7	1.5			159.0	52.5	242.2	158.9				
Level of Service	A	A			F	D	F	F				
Approach Delay (s)		1.6			141.8			187.2			0.0	
Approach LOS		A			F			F			A	

Intersection Summary			
HCM Average Control Delay	109.5	HCM Level of Service	F
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	312	136	188	418	107	108	522	95	106	803	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1579	1600	1372	1594	1788		1578	3000		1537	3001	
Flt Permitted	0.15	1.00	1.00	0.35	1.00		0.13	1.00		0.32	1.00	
Satd. Flow (perm)	256	1600	1372	583	1788		216	3000		511	3001	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	328	143	198	440	113	114	549	100	112	845	126
RTOR Reduction (vph)	0	0	100	0	11	0	0	16	0	0	13	0
Lane Group Flow (vph)	147	328	43	198	542	0	114	633	0	112	958	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	34.0	27.0	27.0	34.0	27.0		43.0	36.0		40.2	34.6	
Effective Green, g (s)	32.0	28.0	27.0	32.0	27.0		41.0	36.0		38.2	34.6	
Actuated g/C Ratio	0.35	0.31	0.30	0.35	0.30		0.45	0.40		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	178	494	409	273	533		188	1192		268	1146	
v/s Ratio Prot	c0.05	0.20		0.05	c0.30		c0.04	0.21		0.02	c0.32	
v/s Ratio Perm	0.24		0.03	0.21			0.23			0.16		
v/c Ratio	0.83	0.66	0.10	0.73	1.02		0.61	0.53		0.42	0.84	
Uniform Delay, d1	23.9	27.2	23.0	24.8	31.8		17.4	20.8		16.7	25.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	25.7	6.9	0.5	9.2	43.5		5.4	1.7		1.1	7.3	
Delay (s)	49.6	34.1	23.5	34.0	75.3		22.8	22.5		17.8	32.7	
Level of Service	D	C	C	C	E		C	C		B	C	
Approach Delay (s)		35.3			64.4			22.6			31.2	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	402	61	112	645	62	37	59	44	31	91	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.96			0.95	
Flt Protected		1.00	1.00		0.99	1.00		0.99			0.99	
Satd. Flow (prot)		1971	1476		1624	1387		1851			1867	
Flt Permitted		0.91	1.00		0.88	1.00		0.90			0.95	
Satd. Flow (perm)		1804	1476		1432	1387		1679			1783	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	423	64	118	679	65	39	62	46	33	96	74
RTOR Reduction (vph)	0	0	20	0	0	18	0	25	0	0	31	0
Lane Group Flow (vph)	0	464	44	0	797	47	0	122	0	0	172	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		45.0	45.0		45.0	45.0		14.0			14.0	
Effective Green, g (s)		45.0	45.0		45.0	45.0		14.0			14.0	
Actuated g/C Ratio		0.69	0.69		0.69	0.69		0.22			0.22	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		1249	1022		991	960		362			384	
v/s Ratio Prot												
v/s Ratio Perm		0.26	0.03		c0.56	0.03		0.07			c0.10	
v/c Ratio		0.37	0.04		0.80	0.05		0.34			0.45	
Uniform Delay, d1		4.1	3.2		6.9	3.2		21.6			22.1	
Progression Factor		1.00	1.00		0.65	1.36		1.00			1.49	
Incremental Delay, d2		0.8	0.1		3.8	0.1		2.5			3.7	
Delay (s)		5.0	3.3		8.4	4.4		24.1			36.7	
Level of Service		A	A		A	A		C			D	
Approach Delay (s)		4.8			8.1			24.1			36.7	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	318	41	110	700	20	36	114	44	17	184	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.97	
Flt Protected		0.99	1.00		0.99	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1756	1469		1726	1498		1712	1474		1709	
Flt Permitted		0.74	1.00		0.89	1.00		0.75	1.00		0.97	
Satd. Flow (perm)		1312	1469		1546	1498		1304	1474		1667	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	335	43	116	737	21	38	120	46	18	194	74
RTOR Reduction (vph)	0	0	15	0	0	5	0	0	37	0	19	0
Lane Group Flow (vph)	0	397	28	0	853	16	0	158	9	0	267	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		42.0	42.0		42.0	42.0		13.0	13.0		13.0	
Effective Green, g (s)		42.0	42.0		42.0	42.0		13.0	13.0		13.0	
Actuated g/C Ratio		0.65	0.65		0.65	0.65		0.20	0.20		0.20	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		848	949		999	968		261	295		333	
v/s Ratio Prot												
v/s Ratio Perm		0.30	0.02		c0.55	0.01		0.12	0.01		c0.16	
v/c Ratio		0.47	0.03		0.85	0.02		0.61	0.03		0.80	
Uniform Delay, d1		5.8	4.1		9.1	4.1		23.7	20.9		24.8	
Progression Factor		1.91	3.08		0.98	0.40		1.00	1.00		0.68	
Incremental Delay, d2		1.7	0.1		4.5	0.0		10.0	0.2		17.9	
Delay (s)		12.9	12.8		13.4	1.7		33.7	21.1		34.8	
Level of Service		B	B		B	A		C	C		C	
Approach Delay (s)		12.9			13.1			30.8			34.8	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	18.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	101.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	298	35	76	8	14	11	38	247	8	31	570	799
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.98			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1855	1440		1767			1995			1975	1382
Flt Permitted		0.75	1.00		0.92			0.79			0.97	1.00
Satd. Flow (perm)		1455	1440		1640			1587			1930	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	331	39	84	9	16	12	42	274	9	34	633	888
RTOR Reduction (vph)	0	0	49	0	9	0	0	2	0	0	0	295
Lane Group Flow (vph)	0	370	35	0	28	0	0	323	0	0	667	593
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		654	598		429			781			950	680
v/s Ratio Prot		c0.07										
v/s Ratio Perm		0.17	0.02		0.02			0.20			0.35	c0.43
v/c Ratio		0.57	0.06		0.07			0.41			0.70	0.87
Uniform Delay, d1		14.5	11.4		18.0			10.5			12.8	14.7
Progression Factor		0.51	0.15		1.00			0.74			1.00	1.00
Incremental Delay, d2		3.3	0.2		0.3			1.0			4.3	14.4
Delay (s)		10.6	1.9		18.3			8.9			17.1	29.1
Level of Service		B	A		B			A			B	C
Approach Delay (s)		9.0			18.3			8.9			24.0	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	923	289	447	1189	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4576		1621	3320					1489	2913	1442
Flt Permitted		1.00		0.12	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4576		198	3320					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	972	304	471	1252	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	62	0	0	0	0	0	0	0	0	12	44
Lane Group Flow (vph)	0	1215	0	471	1252	0	0	0	0	308	600	227
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		28.5		56.0	54.5					23.5	23.5	23.5
Effective Green, g (s)		28.5		56.0	54.5					23.5	23.5	23.5
Actuated g/C Ratio		0.32		0.62	0.61					0.26	0.26	0.26
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1449		463	2010					389	761	377
v/s Ratio Prot		0.27		c0.24	0.38							
v/s Ratio Perm				c0.39						c0.21	0.21	0.16
v/c Ratio		0.84		1.02	0.62					0.79	0.79	0.60
Uniform Delay, d1		28.6		25.4	11.2					31.0	30.9	29.2
Progression Factor		1.00		0.64	0.53					1.00	1.00	1.00
Incremental Delay, d2		5.9		32.3	0.7					10.8	5.6	2.9
Delay (s)		34.6		48.5	6.6					41.8	36.5	32.0
Level of Service		C		D	A					D	D	C
Approach Delay (s)		34.6			18.1			0.0			36.9	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	111.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1095	0	0	1206	271	430	351	337	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4513				
Flt Permitted	0.09	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	290	3353			3241	1489		4513				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1153	0	0	1269	285	453	369	355	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	86	0	57	0	0	0	0
Lane Group Flow (vph)	359	1153	0	0	1269	199	0	1120	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	52.7	52.7			39.7	39.7		25.3				
Effective Green, g (s)	52.7	52.7			39.7	39.7		25.3				
Actuated g/C Ratio	0.59	0.59			0.44	0.44		0.28				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	392	1963			1430	657		1269				
v/s Ratio Prot	c0.07	0.34			0.39							
v/s Ratio Perm	c0.47					0.13		0.25				
v/c Ratio	0.92	0.59			0.89	0.30		0.88				
Uniform Delay, d1	21.2	11.8			23.1	16.2		30.9				
Progression Factor	1.60	0.50			0.53	0.38		1.00				
Incremental Delay, d2	16.9	0.7			6.2	0.8		8.1				
Delay (s)	50.9	6.6			18.4	7.0		39.0				
Level of Service	D	A			B	A		D				
Approach Delay (s)		17.2			16.3			39.0			0.0	
Approach LOS		B			B			D			A	

Intersection Summary			
HCM Average Control Delay	22.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	111.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	719	408	104	968	76	227	179	66	80	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1310	1603	3286		1577	3003		1540	2944	
Flt Permitted	0.11	1.00	1.00	0.31	1.00		0.45	1.00		0.59	1.00	
Satd. Flow (perm)	174	3273	1310	524	3286		741	3003		961	2944	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	142	757	429	109	1019	80	239	188	69	84	171	127
RTOR Reduction (vph)	0	0	197	0	7	0	0	43	0	0	103	0
Lane Group Flow (vph)	142	757	232	109	1092	0	239	214	0	84	195	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	47.9	38.0	47.5	40.7	34.3		30.1	22.2		21.5	17.1	
Effective Green, g (s)	47.9	38.0	47.5	40.7	34.3		30.1	22.2		21.5	17.1	
Actuated g/C Ratio	0.53	0.42	0.53	0.45	0.38		0.33	0.25		0.24	0.19	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	249	1382	691	314	1252		336	741		258	559	
v/s Ratio Prot	c0.06	0.23	0.04	0.02	c0.33		c0.08	0.07		0.02	0.07	
v/s Ratio Perm	0.24		0.14	0.13			c0.16			0.06		
v/c Ratio	0.57	0.55	0.34	0.35	0.87		0.71	0.29		0.33	0.35	
Uniform Delay, d1	15.4	19.5	12.2	14.7	25.8		24.1	27.5		27.6	31.6	
Progression Factor	1.66	0.37	0.33	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.9	1.2	0.2	0.7	8.6		6.9	0.8		0.7	1.3	
Delay (s)	32.4	8.4	4.2	15.3	34.4		31.1	28.3		28.3	33.0	
Level of Service	C	A	A	B	C		C	C		C	C	
Approach Delay (s)		9.6			32.7			29.6			31.9	
Approach LOS		A			C			C			C	

Intersection Summary			
HCM Average Control Delay	23.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	250	367	95	441	113	362	340	84	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	2925		1653	3267		1620	3402		1580	3183	
Flt Permitted	0.34	1.00		0.22	1.00		0.32	1.00		0.49	1.00	
Satd. Flow (perm)	619	2925		375	3267		544	3402		822	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	263	386	100	464	119	381	358	88	217	429	59
RTOR Reduction (vph)	0	215	0	0	19	0	0	19	0	0	9	0
Lane Group Flow (vph)	48	434	0	100	564	0	381	427	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	39.2	32.5		46.4	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	39.2	32.5		46.4	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.34	0.28		0.40	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	274	827		266	1026		454	1308		339	888	
v/s Ratio Prot	0.01	0.15		c0.03	c0.17		c0.15	0.13		0.04	0.15	
v/s Ratio Perm	0.05			0.12			c0.26			0.18		
v/c Ratio	0.18	0.52		0.38	0.55		0.84	0.33		0.64	0.54	
Uniform Delay, d1	25.9	34.7		23.2	32.7		20.8	24.9		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	2.4		1.1	2.1		13.1	0.7		4.3	2.3	
Delay (s)	26.3	37.1		24.3	34.8		33.9	25.6		33.1	37.5	
Level of Service	C	D		C	C		C	C		C	D	
Approach Delay (s)		36.4			33.3			29.4			36.1	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	33.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	695	141	10	741	89	104	287	9	204	609	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.98		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3039			3061		1452	3227		1522	2871	
Flt Permitted		0.62			0.94		0.18	1.00		0.50	1.00	
Satd. Flow (perm)		1888			2880		278	3227		802	2871	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	772	157	11	823	99	116	319	10	227	677	203
RTOR Reduction (vph)	0	18	0	0	11	0	0	3	0	0	35	0
Lane Group Flow (vph)	0	1028	0	0	922	0	116	326	0	227	845	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		41.0			33.0		26.0	22.0		28.0	23.0	
Effective Green, g (s)		41.0			33.0		26.0	22.0		28.0	23.0	
Actuated g/C Ratio		0.51			0.41		0.32	0.28		0.35	0.29	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		1025			1188		149	887		326	825	
v/s Ratio Prot		c0.05					0.04	0.10		c0.04	c0.29	
v/s Ratio Perm		c0.46			0.32		0.21			0.20		
v/c Ratio		1.00			0.78		0.78	0.37		0.70	1.02	
Uniform Delay, d1		19.5			20.3		33.5	23.4		24.7	28.5	
Progression Factor		1.00			1.00		0.62	0.64		1.00	1.00	
Incremental Delay, d2		28.8			5.0		30.6	1.1		11.7	37.7	
Delay (s)		48.3			25.3		51.4	16.0		36.3	66.2	
Level of Service		D			C		D	B		D	E	
Approach Delay (s)		48.3			25.3			25.2			60.0	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM Average Control Delay	43.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	261	136	132	418	28	72	462	86	35	698	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1708	1912		1602	2019		1676	3219		1436	3274	
Flt Permitted	0.35	1.00		0.40	1.00		0.27	1.00		0.39	1.00	
Satd. Flow (perm)	628	1912		673	2019		469	3219		591	3274	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	269	140	136	431	29	74	476	89	36	720	72
RTOR Reduction (vph)	0	24	0	0	3	0	0	19	0	0	10	0
Lane Group Flow (vph)	69	385	0	136	457	0	74	546	0	36	782	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.0	35.0		35.0	35.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	35.0	35.0		35.0	35.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.44	0.44		0.44	0.44		0.44	0.44		0.44	0.44	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	275	837		294	883		205	1408		259	1432	
v/s Ratio Prot		0.20			c0.23			0.17			c0.24	
v/s Ratio Perm	0.11			0.20			0.16			0.06		
v/c Ratio	0.25	0.46		0.46	0.52		0.36	0.39		0.14	0.55	
Uniform Delay, d1	14.2	15.8		15.9	16.4		15.0	15.2		13.5	16.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.27	0.23	
Incremental Delay, d2	2.2	1.8		5.2	2.2		4.9	0.8		0.1	0.1	
Delay (s)	16.4	17.7		21.0	18.5		19.9	16.0		3.8	4.0	
Level of Service	B	B		C	B		B	B		A	A	
Approach Delay (s)		17.5			19.1			16.5			4.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	883	501	938	41	3	10	9	47	15	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.98			0.97	
Flpb, ped/bikes		1.00		1.00				0.99			1.00	
Frt		1.00		1.00				0.91			0.95	
Flt Protected		1.00		0.98				0.99			0.97	
Satd. Flow (prot)		3160		3078				1785			1819	
Flt Permitted		0.95		0.52				0.93			0.56	
Satd. Flow (perm)		3011		1617				1680			1060	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	929	527	987	43	3	11	9	49	16	0	3
RTOR Reduction (vph)	0	0	0	1	0	0	0	46	0	0	5	0
Lane Group Flow (vph)	0	931	0	1556	0	0	0	26	0	0	19	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		Perm			Perm	Perm			Perm		
Protected Phases		8		4				2			6	
Permitted Phases	8		4			2	2			6		
Actuated Green, G (s)		101.2		126.0				8.0			8.0	
Effective Green, g (s)		101.2		126.0				8.0			8.0	
Actuated g/C Ratio		0.71		0.88				0.06			0.06	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Vehicle Extension (s)		3.0		3.0				3.0			3.0	
Lane Grp Cap (vph)		2131		1425				94			59	
v/s Ratio Prot												
v/s Ratio Perm		0.31		c0.96				0.02			c0.02	
v/c Ratio		0.44		1.64dl				0.27			0.33	
Uniform Delay, d1		8.8		8.5				64.7			64.9	
Progression Factor		1.00		1.00				1.00			1.00	
Incremental Delay, d2		0.1		53.1				1.6			3.2	
Delay (s)		9.0		61.6				66.3			68.1	
Level of Service		A		E				E			E	
Approach Delay (s)		9.0		61.6				66.3			68.1	
Approach LOS		A		E				E			E	

Intersection Summary			
HCM Average Control Delay	45.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	143.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NER
Lane Configurations		
Volume (vph)	5	311
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)		3.0
Lane Util. Factor		0.88
Frpb, ped/bikes		1.00
Flpb, ped/bikes		1.00
Frt		0.85
Flt Protected		1.00
Satd. Flow (prot)		2693
Flt Permitted		1.00
Satd. Flow (perm)		2693
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	5	327
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	0	327
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	0%
Turn Type		custom
Protected Phases		7
Permitted Phases		
Actuated Green, G (s)		21.8
Effective Green, g (s)		21.8
Actuated g/C Ratio		0.15
Clearance Time (s)		3.0
Vehicle Extension (s)		3.0
Lane Grp Cap (vph)		411
v/s Ratio Prot		0.12
v/s Ratio Perm		
v/c Ratio		0.80
Uniform Delay, d1		58.5
Progression Factor		1.00
Incremental Delay, d2		10.2
Delay (s)		68.7
Level of Service		E
Approach Delay (s)		
Approach LOS		

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	264	965	1254	177	125	234
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3285	3259		1660	1485
Flt Permitted		0.49	1.00		0.95	1.00
Satd. Flow (perm)		1618	3259		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	293	1072	1393	197	139	260
RTOR Reduction (vph)	0	0	10	0	0	113
Lane Group Flow (vph)	0	1365	1580	0	139	147
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt					Perm
Protected Phases	7	4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		87.0	79.0		15.0	15.0
Effective Green, g (s)		87.0	79.0		15.0	15.0
Actuated g/C Ratio		0.79	0.72		0.14	0.14
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1340	2341		226	203
v/s Ratio Prot		c0.04	0.48		0.08	
v/s Ratio Perm		c0.77				c0.10
v/c Ratio		1.46dl	0.67		0.62	0.72
Uniform Delay, d1		11.5	8.5		44.8	45.5
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		29.4	1.6		11.9	20.0
Delay (s)		40.9	10.1		56.7	65.5
Level of Service		D	B		E	E
Approach Delay (s)		40.9	10.1		62.4	
Approach LOS		D	B		E	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.1%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	81	1012	1347	198	276	88
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3120	3139		1506	1342
Flt Permitted		0.66	1.00		0.95	1.00
Satd. Flow (perm)		2075	3139		1506	1342
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	85	1065	1418	208	291	93
RTOR Reduction (vph)	0	0	18	0	0	40
Lane Group Flow (vph)	0	1150	1608	0	291	53
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		41.0	41.0		16.0	16.0
Effective Green, g (s)		41.0	41.0		16.0	16.0
Actuated g/C Ratio		0.63	0.63		0.25	0.25
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1309	1980		371	330
v/s Ratio Prot			0.51		c0.19	
v/s Ratio Perm		c0.55				0.04
v/c Ratio		0.88	0.81		0.78	0.16
Uniform Delay, d1		9.9	9.1		22.9	19.2
Progression Factor		1.00	1.61		1.47	2.02
Incremental Delay, d2		8.6	2.3		12.2	0.8
Delay (s)		18.5	16.9		45.9	39.6
Level of Service		B	B		D	D
Approach Delay (s)		18.5	16.9		44.4	
Approach LOS		B	B		D	

Intersection Summary			
HCM Average Control Delay	20.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	887	261	532	1433	205	161
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		3.0	5.0	5.0	5.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	2404		1788	2506	1758	1530
Flt Permitted	1.00		0.06	1.00	0.95	1.00
Satd. Flow (perm)	2404		111	2506	1758	1530
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	905	266	543	1462	209	164
RTOR Reduction (vph)	8	0	0	0	0	56
Lane Group Flow (vph)	1163	0	543	1462	209	108
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			pm+pt			pt+ov
Protected Phases	4		3	8	2	2 3
Permitted Phases			8			
Actuated Green, G (s)	65.0		96.0	96.0	24.0	57.0
Effective Green, g (s)	65.0		96.0	96.0	24.0	57.0
Actuated g/C Ratio	0.50		0.74	0.74	0.18	0.44
Clearance Time (s)	5.0		3.0	5.0	5.0	
Lane Grp Cap (vph)	1202		443	1851	325	671
v/s Ratio Prot	0.48		c0.26	0.58	c0.12	0.07
v/s Ratio Perm			c0.64			
v/c Ratio	0.97		1.23	0.79	0.64	0.16
Uniform Delay, d1	31.5		44.5	10.7	49.0	22.1
Progression Factor	1.06		1.00	1.00	1.00	1.00
Incremental Delay, d2	11.9		120.2	3.5	9.4	0.5
Delay (s)	45.1		164.7	14.2	58.5	22.6
Level of Service	D		F	B	E	C
Approach Delay (s)	45.1			54.9	42.7	
Approach LOS	D			D	D	

Intersection Summary			
HCM Average Control Delay	50.4	HCM Level of Service	D
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	2022	38	112	961	1	62	0	157	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.27	1.00	1.00	0.06	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	530	3431	1479	105	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	2247	42	124	1068	1	69	0	174	0	0	0
RTOR Reduction (vph)	0	0	12	0	0	0	0	0	117	0	0	0
Lane Group Flow (vph)	1	2247	30	124	1068	1	0	69	57	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	61.0	61.0	61.0	71.0	71.0	71.0		6.0	6.0			
Effective Green, g (s)	61.0	61.0	61.0	71.0	71.0	71.0		6.0	6.0			
Actuated g/C Ratio	0.72	0.72	0.72	0.84	0.84	0.84		0.07	0.07			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	380	2462	1061	210	2773	1278		109	106			
v/s Ratio Prot		c0.65		c0.05	0.32							
v/s Ratio Perm	0.00		0.02	0.45		0.00		c0.04	0.04			
v/c Ratio	0.00	0.91	0.03	0.59	0.39	0.00		0.63	0.54			
Uniform Delay, d1	3.4	9.8	3.5	21.1	1.7	1.2		38.4	38.2			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	6.5	0.0	4.4	0.1	0.0		11.4	5.1			
Delay (s)	3.4	16.4	3.5	25.5	1.8	1.2		49.8	43.3			
Level of Service	A	B	A	C	A	A		D	D			
Approach Delay (s)		16.1			4.3			45.2			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	11	960	846	30	71	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3097	3083		1530	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2912	3083		1530	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1067	940	33	79	16
RTOR Reduction (vph)	0	0	3	0	8	0
Lane Group Flow (vph)	0	1079	970	0	87	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1068	2192		119	
v/s Ratio Prot			c0.31		c0.06	
v/s Ratio Perm		c0.37				
v/c Ratio		1.01	0.44		0.73	
Uniform Delay, d1		28.5	5.5		40.6	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		30.1	0.2		32.1	
Delay (s)		58.6	0.2		72.7	
Level of Service		E	A		E	
Approach Delay (s)		58.6	0.2		72.7	
Approach LOS		E	A		E	

Intersection Summary			
HCM Average Control Delay	32.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	107	500	0	1	583	39	3	2	28	202	0	150
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.97
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1765			3342			1456			1665	1344
Flt Permitted		0.77			0.95			0.61			0.83	1.00
Satd. Flow (perm)		1373			3192			895			1461	1344
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	119	556	0	1	648	43	3	2	31	224	0	167
RTOR Reduction (vph)	0	0	0	0	5	0	0	28	0	0	0	124
Lane Group Flow (vph)	0	675	0	0	687	0	0	8	0	0	224	43
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			pm+pt			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4			3 4	3		1	1		1 2		1 2
Actuated Green, G (s)		48.0			62.0			9.0			23.0	26.0
Effective Green, g (s)		48.0			62.0			9.0			23.0	26.0
Actuated g/C Ratio		0.48			0.62			0.09			0.23	0.26
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		659			2000			81			365	349
v/s Ratio Prot					c0.05						c0.09	
v/s Ratio Perm		c0.49			0.16			0.01			c0.06	0.03
v/c Ratio		1.02			0.34			0.10			0.61	0.12
Uniform Delay, d1		26.0			9.2			41.8			34.5	28.3
Progression Factor		1.00			0.13			1.00			1.00	1.00
Incremental Delay, d2		41.4			0.3			2.4			7.5	0.7
Delay (s)		67.4			1.4			44.1			42.0	29.0
Level of Service		E			A			D			D	C
Approach Delay (s)		67.4			1.4			44.1			36.5	
Approach LOS		E			A			D			D	

Intersection Summary			
HCM Average Control Delay	34.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix E
Halsted Rail Alternative

Halsted Rail Alternative Project Traffic Estimates

ITE Land Use	Unit	Trip Generation Rate			Peak Hour Direction			
		Daily	AM Peak Hour	PM Peak Hour	AM In	AM Out	PM In	PM Out
Light Rail with Park and Ride	Parking Spaces	2.51	1.07	1.24	80%	20%	20%	80%

Halsted Rail Alternative Park and Ride Facilities		Estimated Project Traffic						
Location	Parking Spaces	Daily	AM In	AM Out	AM Total	PM In	PM Out	PM Total
103rd Street	200	502	171	43	214	50	198	248
111th Street	200	502	171	43	214	50	198	248
119th Street	1,000	2,510	856	214	1,070	248	992	1,240
Vermont Avenue	2,300	5,773	1,969	492	2,461	570	2,282	2,852
Total	**3,700**	**9,287**	**3,167**	**792**	**3,959**	**918**	**3,670**	**4,588**

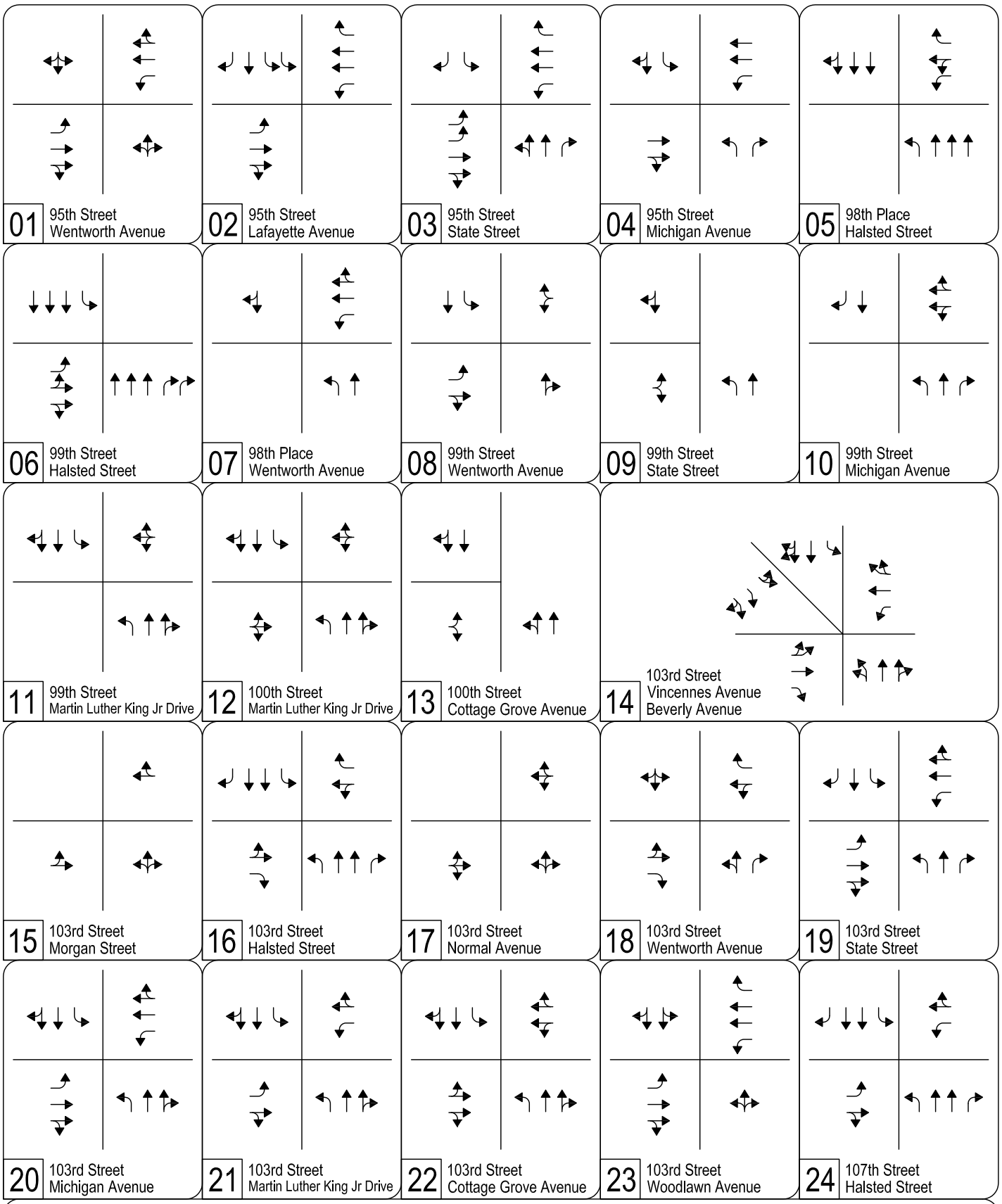

Halsted Rail Alternative (2026) Intersection Lane Geometry

Page 1 of 3

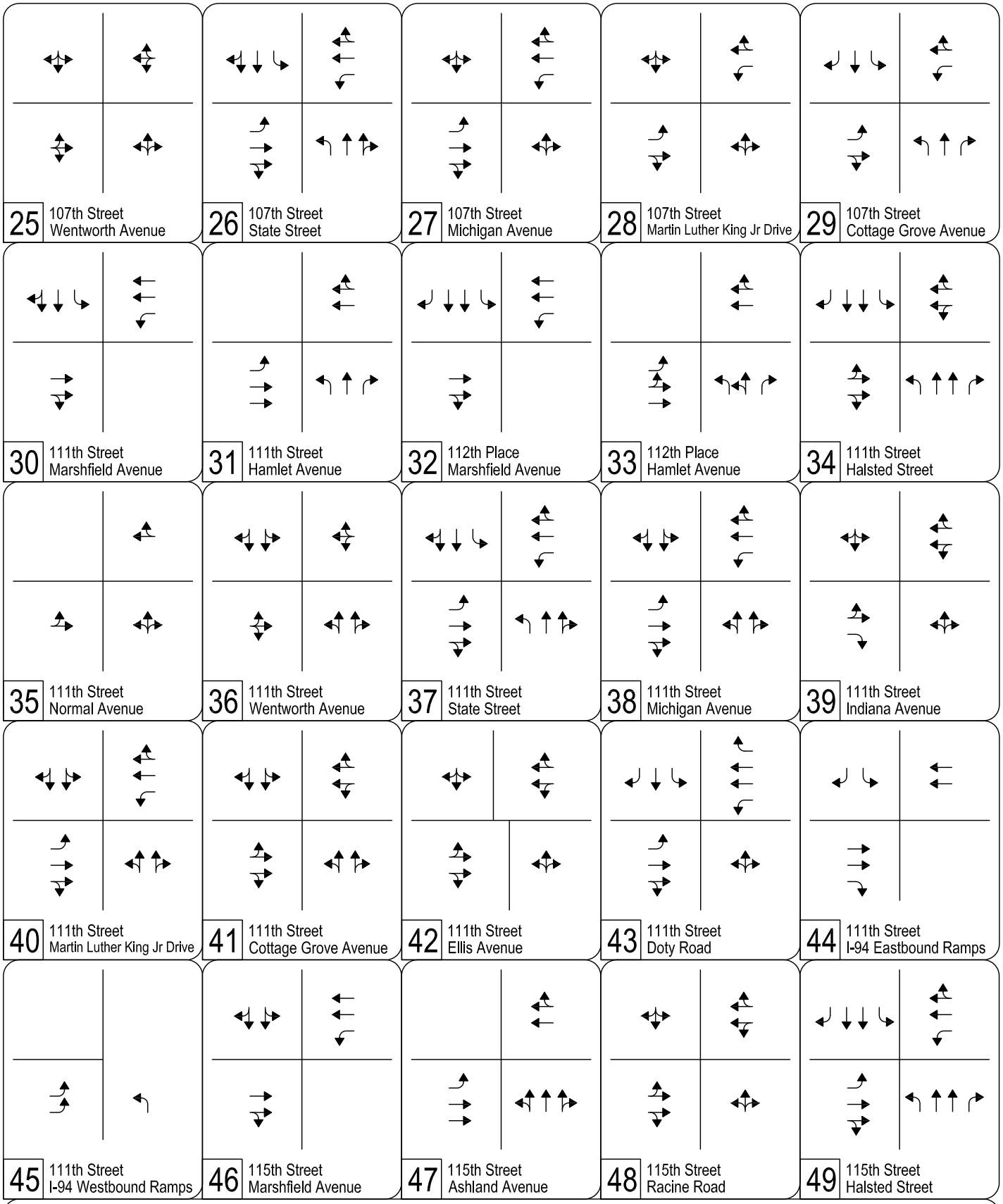

Halsted Rail Alternative (2026) Intersection Lane Geometry

Page 2 of 3

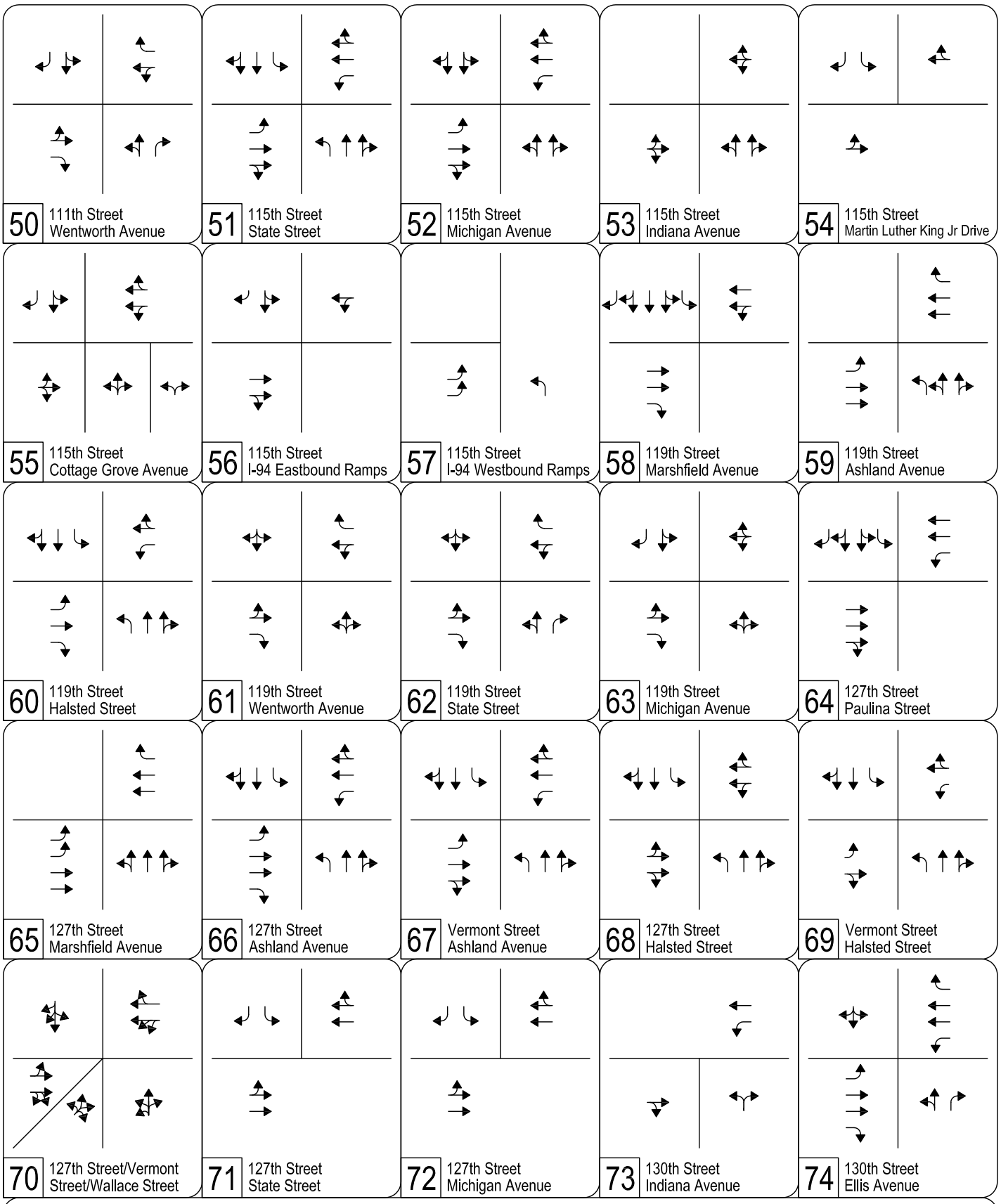

Halsted Rail Alternative (2026) Intersection Lane Geometry

Page 3 of 3

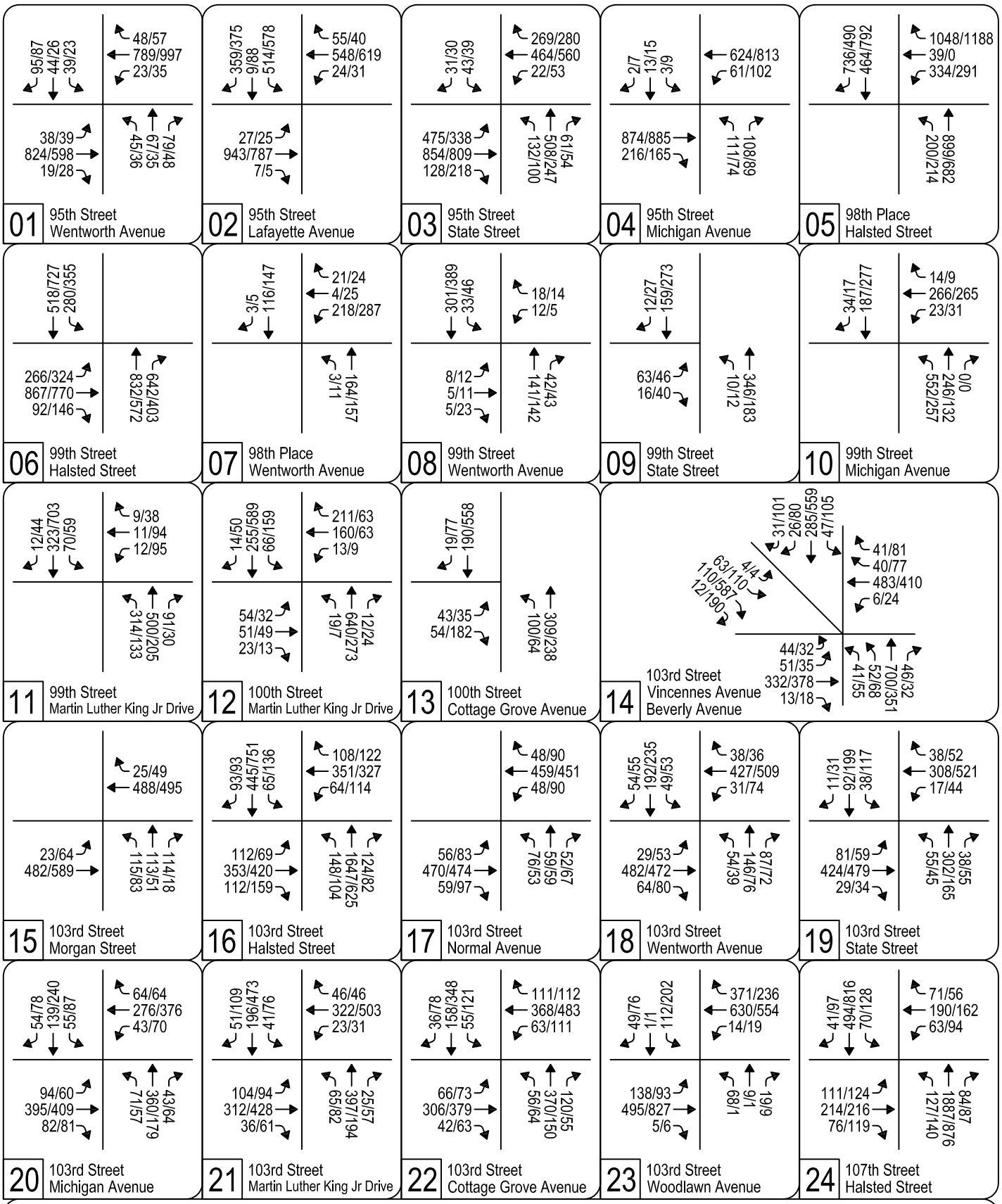

Halsted Rail Alternative (2026) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

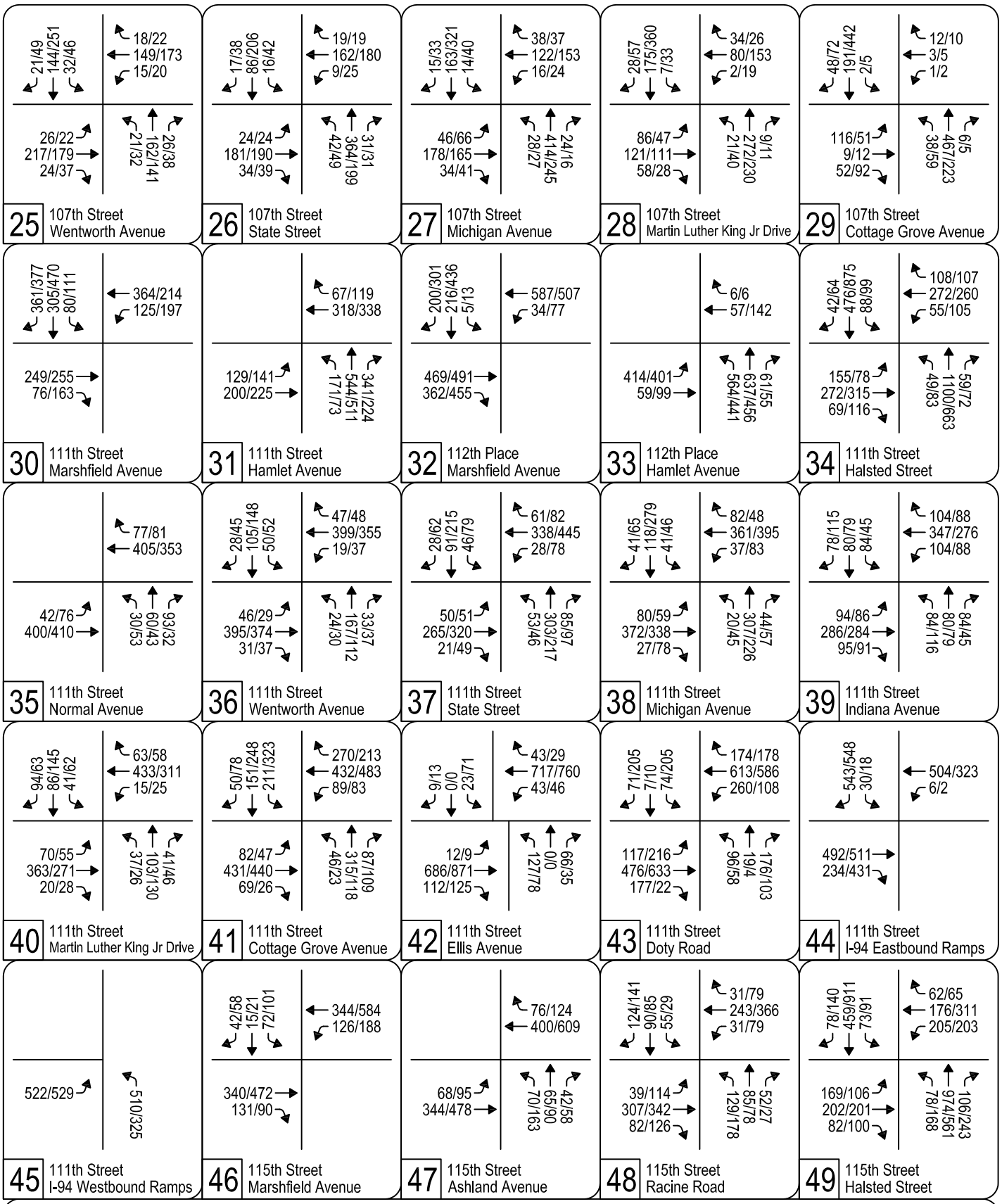

Halsted Rail Alternative (2026) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

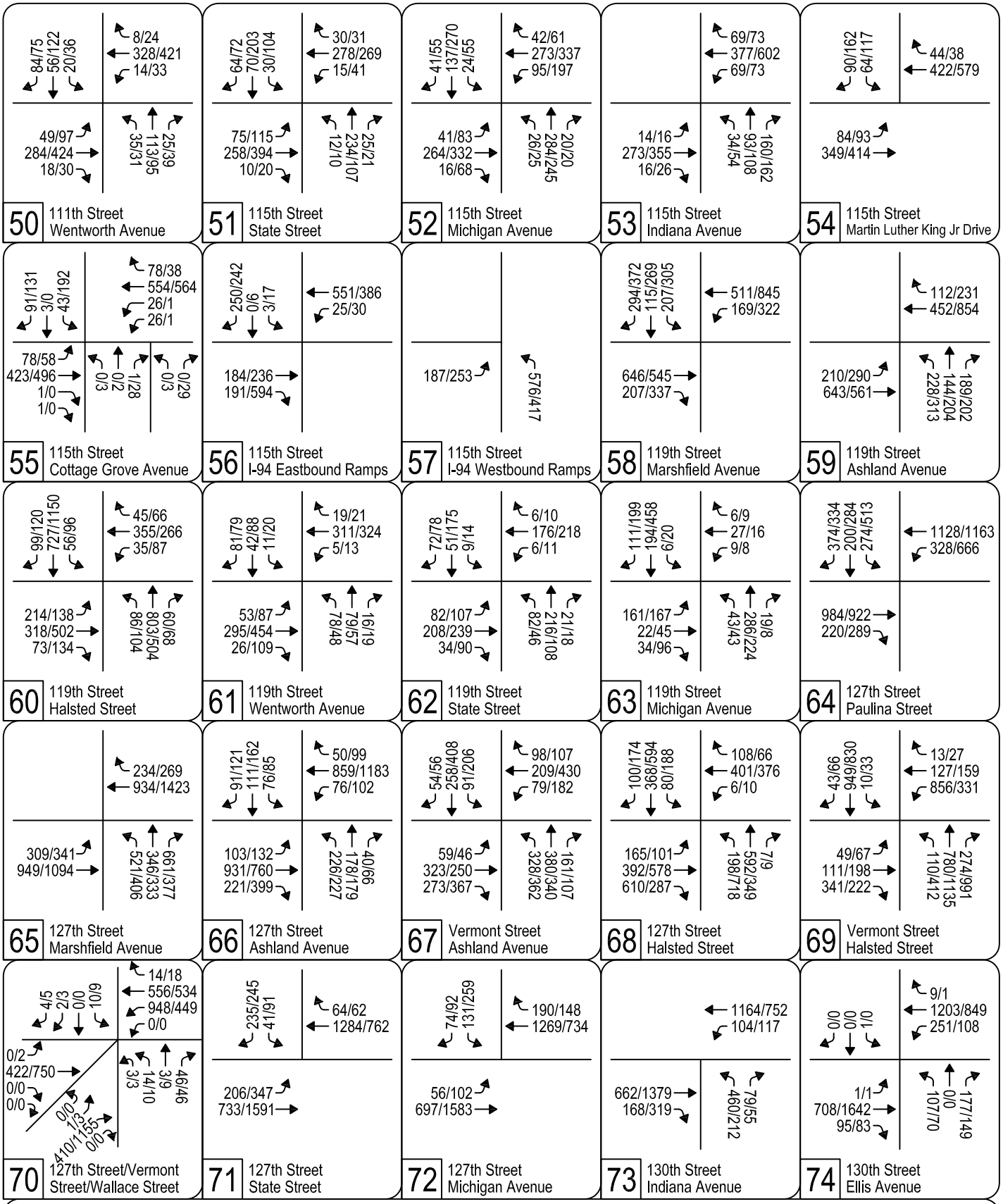

Halsted Rail Alternative (2026) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	824	19	23	789	48	45	67	79	39	44	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.98	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1416	2975		1592	2978			1754			1673	
Flt Permitted	0.26	1.00		0.26	1.00			0.90			0.91	
Satd. Flow (perm)	384	2975		429	2978			1597			1533	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	867	20	24	831	51	47	71	83	41	46	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	63	0
Lane Group Flow (vph)	40	885	0	24	875	0	0	162	0	0	124	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	201	1556		224	1558			565			542	
v/s Ratio Prot		c0.30			0.29							
v/s Ratio Perm	0.10			0.06				c0.10			0.08	
v/c Ratio	0.20	0.57		0.11	0.56			0.29			0.23	
Uniform Delay, d1	8.3	10.5		7.8	10.5			15.1			14.8	
Progression Factor	1.00	1.00		0.82	1.13			1.00			1.00	
Incremental Delay, d2	2.2	1.5		0.8	1.3			1.3			1.0	
Delay (s)	10.5	12.0		7.2	13.1			16.4			15.8	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.0			12.9			16.4			15.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	943	7	24	548	55	0	0	0	514	9	359
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	776	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	355	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	993	7	25	577	58	0	0	0	541	9	378
RTOR Reduction (vph)	0	1	0	0	0	25	0	0	0	0	0	172
Lane Group Flow (vph)	28	999	0	25	577	33	0	0	0	541	9	206
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	163	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.30		0.01	c0.18					c0.17	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.15
v/c Ratio	0.17	0.92		0.04	0.33	0.11				0.76	0.03	0.64
Uniform Delay, d1	31.6	41.8		15.1	15.3	13.3				46.6	38.7	45.1
Progression Factor	0.80	0.83		0.30	0.63	1.55				1.00	1.00	1.00
Incremental Delay, d2	2.0	12.2		0.1	0.3	0.5				7.3	0.2	9.2
Delay (s)	27.2	46.8		4.6	10.0	21.2				53.9	38.9	54.3
Level of Service	C	D		A	A	C				D	D	D
Approach Delay (s)		46.2			10.8			0.0			54.0	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	40.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	475	854	128	22	464	269	132	508	61	43	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	500	899	135	23	488	283	139	535	64	45	0	33
RTOR Reduction (vph)	0	9	0	0	0	161	0	0	25	0	0	31
Lane Group Flow (vph)	500	1026	0	23	488	122	0	674	39	45	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1554		108	697	225		762	327	53		45
v/s Ratio Prot	0.16	c0.33		0.01	c0.17			c0.20		c0.05		
v/s Ratio Perm						0.13			0.03			0.00
v/c Ratio	0.47	0.66		0.21	0.70	0.54		0.88	0.12	0.85		0.05
Uniform Delay, d1	34.5	24.3		57.2	45.3	43.3		48.3	39.5	60.4		57.4
Progression Factor	0.75	0.19		1.00	1.00	1.00		0.95	0.90	1.00		1.00
Incremental Delay, d2	0.7	1.1		4.5	5.8	9.0		14.1	0.7	70.0		0.4
Delay (s)	26.6	5.7		61.6	51.0	52.3		59.8	36.2	130.4		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		12.5			51.8			57.7			99.7	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	35.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	874	216	61	624	0	111	0	108	3	13	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.98	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1650	3005		1390		1465	1803	1943	
Flt Permitted		1.00		0.16	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		283	3005		1093		1465	1803	1943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	971	240	68	693	0	123	0	120	3	14	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	82	0	1	0
Lane Group Flow (vph)	0	1189	0	68	693	0	123	0	38	3	15	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		170	1803		350		469	577	622	
v/s Ratio Prot		c0.42			0.23						0.01	
v/s Ratio Perm				0.24			c0.11		0.03	0.00		
v/c Ratio		0.69		0.40	0.38		0.35		0.08	0.01	0.02	
Uniform Delay, d1		13.7		10.5	10.4		26.0		23.7	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.3		6.9	0.6		2.8		0.3	0.0	0.1	
Delay (s)		16.0		17.4	11.0		28.8		24.1	23.2	23.4	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.0			11.6			26.5			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	334	39	1048	200	899	0	0	464	736
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3938	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3938	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	341	40	1069	204	917	0	0	473	751
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	341	40	1069	204	917	0	0	1224	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1163	
v/s Ratio Prot							c0.13	0.21			c0.31	
v/s Ratio Perm				0.22	0.02	c0.72						
v/c Ratio				0.76	0.08	2.53	0.43	0.33			1.87dr	
Uniform Delay, d1				33.6	26.7	37.5	29.2	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.37			1.00	
Incremental Delay, d2				11.3	0.3	694.2	2.0	0.2			41.3	
Delay (s)				44.9	27.1	731.7	21.2	22.0			78.3	
Level of Service				D	C	F	C	C			E	
Approach Delay (s)		0.0			550.8			21.8			78.3	
Approach LOS		A			F			C			E	

Intersection Summary			
HCM Average Control Delay	242.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	266	867	92	0	0	0	0	832	642	280	518	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3184						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3184						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	274	894	95	0	0	0	0	858	662	289	534	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	247	1009	0	0	0	0	0	858	662	289	534	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.18	0.12	
v/s Ratio Perm	0.16	0.32							c0.30			
v/c Ratio	0.51	0.98						0.74	1.14	0.62	0.20	
Uniform Delay, d1	28.7	35.1						35.1	38.5	31.9	10.0	
Progression Factor	1.00	1.00						0.44	0.46	1.06	0.43	
Incremental Delay, d2	3.8	23.4						0.4	63.2	2.4	0.1	
Delay (s)	32.5	58.5						15.7	81.0	36.1	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		53.4			0.0			44.1			15.5	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	40.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	164	0	0	116	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1961	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		781	1882			1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	182	0	0	129	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	182	0	0	131	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		501	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.07	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.16			0.12	
Uniform Delay, d1				23.4	19.9		10.0	8.0			9.6	
Progression Factor				1.00	1.00		1.05	1.18			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.5	9.7			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.7			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	12	0	18	0	141	42	33	301	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.92			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.98			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1620			1685		1595	1755	
Flt Permitted	0.74	1.00			0.93			1.00		0.60	1.00	
Satd. Flow (perm)	1502	1809			1543			1685		1010	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	13	0	19	0	148	44	35	317	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	13	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	19	0	0	179	0	35	317	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	477	575			490			793		642	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.04			0.23		0.05	0.31	
Uniform Delay, d1	19.9	19.9			20.0			13.3		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		1.01	0.93	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.2			14.0		8.8	8.9	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.2			14.0			8.9	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	16	10	346	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1787		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1787		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	18	11	384	177	13
RTOR Reduction (vph)	12	0	0	0	4	0
Lane Group Flow (vph)	76	0	11	384	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	577		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.39	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.32	0.51	1.17	
Incremental Delay, d2	0.5		0.0	1.1	0.5	
Delay (s)	16.0		2.1	5.3	9.0	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.2	9.0	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	23	266	14	552	246	0	0	187	34
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3737		1660	1752			1603	1298
Flt Permitted					1.00		0.58	1.00			1.00	1.00
Satd. Flow (perm)					3737		1013	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	26	296	16	613	273	0	0	208	38
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	0	334	0	613	273	0	0	208	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1143		684	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.16			0.13	
v/s Ratio Perm							c0.43					0.01
v/c Ratio					0.29		0.90	0.26			0.29	0.03
Uniform Delay, d1					22.5		16.8	8.1			14.9	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		16.7	0.6			1.0	0.1
Delay (s)					23.1		33.5	8.7			16.0	13.3
Level of Service					C		C	A			B	B
Approach Delay (s)		0.0			23.1			25.9			15.5	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	23.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	12	11	9	314	500	91	70	323	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.96		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1794		1691	3237		1707	3352	
Flt Permitted					0.98		0.51	1.00		0.33	1.00	
Satd. Flow (perm)					1794		917	3237		600	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	13	12	10	349	556	101	78	359	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	28	0	349	637	0	78	369	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					550		574	1467		431	1520	
v/s Ratio Prot					c0.02		c0.06	0.20		0.02	0.11	
v/s Ratio Perm							c0.28			0.08		
v/c Ratio					0.05		0.61	0.43		0.18	0.24	
Uniform Delay, d1					18.3		13.0	14.0		11.8	12.6	
Progression Factor					1.00		0.71	0.73		1.00	1.00	
Incremental Delay, d2					0.2		4.4	0.9		0.9	0.4	
Delay (s)					18.5		13.6	11.0		12.7	13.0	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.5			11.9			12.9	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	51	23	13	160	211	19	640	12	66	255	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1945			1625		1596	3232		1641	3131	
Flt Permitted		0.71			0.99		0.58	1.00		0.35	1.00	
Satd. Flow (perm)		1411			1612		971	3232		605	3131	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	54	24	14	168	222	20	674	13	69	268	15
RTOR Reduction (vph)	0	11	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	124	0	0	345	0	20	685	0	69	278	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		470			537		544	1810		339	1753	
v/s Ratio Prot								c0.21			0.09	
v/s Ratio Perm		0.09			c0.21		0.02			0.11		
v/c Ratio		0.26			0.64		0.04	0.38		0.20	0.16	
Uniform Delay, d1		18.3			21.2		7.4	9.2		8.2	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.15	0.05	
Incremental Delay, d2		1.4			5.8		0.1	0.6		1.3	0.2	
Delay (s)		19.7			27.0		7.5	9.8		2.5	0.6	
Level of Service		B			C		A	A		A	A	
Approach Delay (s)		19.7			27.0			9.8			1.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	43	54	100	309	190	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	48	60	111	343	211	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	108	226	229	141	91
Volume Left (vph)	48	111	0	0	0
Volume Right (vph)	60	0	0	0	21
Hadj (s)	-0.16	0.33	0.09	0.08	-0.08
Departure Headway (s)	5.2	5.4	5.1	5.3	5.2
Degree Utilization, x	0.16	0.34	0.33	0.21	0.13
Capacity (veh/h)	634	657	688	648	667
Control Delay (s)	9.2	9.9	9.4	8.6	7.8
Approach Delay (s)	9.2	9.6		8.2	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.1		
HCM Level of Service	A		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	44	51	332	13	6	483	40	41	41	52	700	46
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3289	
Flt Permitted		0.11	1.00	1.00	0.54	1.00	1.00			0.41	1.00	
Satd. Flow (perm)		187	1731	1530	975	1731	1487			737	3289	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	57	369	14	7	537	44	46	46	58	778	51
RTOR Reduction (vph)	0	0	0	7	0	0	32	0	0	0	5	0
Lane Group Flow (vph)	0	106	369	7	7	537	58	0	0	104	824	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	297	528	453			175	783	
v/s Ratio Prot		0.05	c0.21			c0.31					c0.25	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.14		
v/c Ratio		0.38	0.45	0.01	0.02	1.02	0.13			0.59	1.05	
Uniform Delay, d1		20.3	18.3	14.5	25.6	36.5	26.4			35.5	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.8	1.8	0.0	0.1	43.5	0.6			14.0	47.0	
Delay (s)		24.1	20.1	14.5	25.7	80.0	27.0			49.5	87.0	
Level of Service		C	C	B	C	F	C			D	F	
Approach Delay (s)			20.8			71.9					82.8	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	59.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	47	285	26	31	4	63	110	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.98				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3280				1710	2622	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3280				1710	2622	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	317	29	34	4	70	122	13
RTOR Reduction (vph)	0	7	0	0	0	0	7	0
Lane Group Flow (vph)	52	373	0	0	0	74	128	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.11				0.04		
v/s Ratio Perm	0.18						c0.05	
v/c Ratio	0.76	0.49				0.26	0.29	
Uniform Delay, d1	37.6	34.8				38.1	38.3	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	56.2	2.2				2.2	1.7	
Delay (s)	93.8	37.0				40.3	40.0	
Level of Service	F	D				D	D	
Approach Delay (s)		43.9				40.1		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	482	0	0	488	25	115	113	114	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1930			1771				
Flt Permitted		0.97			1.00			0.98				
Satd. Flow (perm)		1600			1930			1771				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	536	0	0	542	28	128	126	127	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	562	0	0	570	0	0	381	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		763			920			708				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.35						0.22				
v/c Ratio		0.74			0.62			0.54				
Uniform Delay, d1		13.7			12.6			14.9				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.3			3.1			2.9				
Delay (s)		20.0			15.8			17.8				
Level of Service		B			B			B				
Approach Delay (s)		20.0			15.8			17.8			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	353	112	64	351	108	148	1647	124	65	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1923	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.56	1.00		0.64	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1081	1426		1239	1396	625	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	118	372	118	67	369	114	156	1734	131	68	468	98
RTOR Reduction (vph)	0	0	70	0	0	67	0	0	29	0	0	59
Lane Group Flow (vph)	0	490	48	0	436	47	156	1734	102	68	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	53.1	44.4	44.4	48.9	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	53.1	44.4	44.4	48.9	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.51	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		443	584		507	572	389	1310	543	147	1191	510
v/s Ratio Prot							c0.03	c0.56		c0.03	0.16	
v/s Ratio Perm		c0.45	0.03		0.35	0.03	0.17		0.08	0.19		0.03
v/c Ratio		1.11	0.08		0.86	0.08	0.40	1.32	0.19	0.46	0.39	0.08
Uniform Delay, d1		31.0	18.9		28.3	18.9	14.7	30.3	19.0	23.1	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.10	0.76	0.40
Incremental Delay, d2		74.8	0.3		17.1	0.3	0.7	151.1	0.8	2.2	0.9	0.3
Delay (s)		105.8	19.2		45.4	19.2	15.4	181.4	19.8	27.7	17.8	8.1
Level of Service		F	B		D	B	B	F	B	C	B	A
Approach Delay (s)		89.0			40.0			158.1			17.3	
Approach LOS		F			D			F			B	

Intersection Summary			
HCM Average Control Delay	106.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	114.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	470	59	48	459	48	76	59	52	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1627			1631			1779				
Flt Permitted		0.91			0.92			0.98				
Satd. Flow (perm)		1483			1500			1779				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	522	66	53	510	53	84	66	58	0	0	0
RTOR Reduction (vph)	0	6	0	0	5	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	644	0	0	611	0	0	187	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		867			877			520				
v/s Ratio Prot												
v/s Ratio Perm		c0.43			0.41			0.10				
v/c Ratio		0.74			0.70			0.36				
Uniform Delay, d1		9.9			9.5			18.2				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		5.7			4.6			1.9				
Delay (s)		15.6			14.0			20.1				
Level of Service		B			B			C				
Approach Delay (s)		15.6			14.0			20.1			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	482	64	31	427	38	54	146	87	49	192	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.98	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1636	1288		1658	1490		1737	
Flt Permitted		0.96	1.00		0.95	1.00		0.84	1.00		0.92	
Satd. Flow (perm)		1596	1255		1558	1288		1418	1490		1608	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	31	507	67	33	449	40	57	154	92	52	202	57
RTOR Reduction (vph)	0	0	29	0	0	16	0	0	63	0	11	0
Lane Group Flow (vph)	0	538	38	0	482	24	0	211	29	0	300	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		915	720		893	738		454	477		515	
v/s Ratio Prot												
v/s Ratio Perm		c0.34	0.03		0.31	0.02		0.15	0.02		c0.19	
v/c Ratio		0.59	0.05		0.54	0.03		0.46	0.06		0.58	
Uniform Delay, d1		10.3	7.0		9.9	7.0		20.4	17.7		21.3	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		2.8	0.1		2.3	0.1		3.4	0.2		4.8	
Delay (s)		13.1	7.2		12.2	7.0		23.8	17.9		26.1	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		12.4			11.8			22.0			26.1	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	424	29	17	308	38	55	302	38	38	92	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1463	2990		1459	3534		1534	1647	1301	1517	1541	1156
Flt Permitted	0.52	1.00		0.44	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	800	2990		674	3534		1116	1647	1301	722	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	90	471	32	19	342	42	61	336	42	42	102	12
RTOR Reduction (vph)	0	8	0	0	15	0	0	0	22	0	0	7
Lane Group Flow (vph)	90	495	0	19	369	0	61	336	20	42	102	5
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	382	1426		321	1685		446	659	520	289	616	462
v/s Ratio Prot		c0.17			0.10			c0.20			0.07	
v/s Ratio Perm	0.11			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.24	0.35		0.06	0.22		0.14	0.51	0.04	0.15	0.17	0.01
Uniform Delay, d1	10.0	10.7		9.2	9.9		12.4	14.7	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.62	0.76	0.34	0.53	0.54	0.28
Incremental Delay, d2	1.4	0.7		0.4	0.3		0.6	2.8	0.1	1.0	0.6	0.0
Delay (s)	11.5	11.3		9.5	10.2		8.3	13.9	4.2	7.7	7.3	3.4
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.3			10.2			12.2			7.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	395	82	43	276	64	71	360	43	55	139	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.98	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1464	3057		1588	3008		1541	3021		1402	2764	
Flt Permitted	0.53	1.00		0.43	1.00		0.62	1.00		0.47	1.00	
Satd. Flow (perm)	816	3057		723	3008		1013	3021		691	2764	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	99	416	86	45	291	67	75	379	45	58	146	57
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	33	0
Lane Group Flow (vph)	99	502	0	45	358	0	75	412	0	58	170	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	392	1467		347	1444		419	1249		286	1142	
v/s Ratio Prot		c0.16			0.12			c0.14			0.06	
v/s Ratio Perm	0.12			0.06			0.07			0.08		
v/c Ratio	0.25	0.34		0.13	0.25		0.18	0.33		0.20	0.15	
Uniform Delay, d1	11.5	12.1		10.8	11.5		13.9	14.9		14.1	13.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.6		0.8	0.4		0.9	0.7		1.6	0.3	
Delay (s)	13.1	12.8		11.6	11.9		14.9	15.6		15.7	14.0	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.8			11.9			15.5			14.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	104	312	36	23	322	46	65	397	25	41	196	51
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1575		1473	1841		1533	3073		1372	2880	
Flt Permitted	0.45	1.00		0.48	1.00		0.59	1.00		0.43	1.00	
Satd. Flow (perm)	731	1575		743	1841		954	3073		622	2880	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	109	328	38	24	339	48	68	418	26	43	206	54
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	109	366	0	24	387	0	68	444	0	43	260	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	453	737		372	793		332	730		199	630	
v/s Ratio Prot	c0.01	c0.23		0.00	0.21		c0.01	c0.14		0.01	0.09	
v/s Ratio Perm	0.12			0.03			0.05			0.05		
v/c Ratio	0.24	0.50		0.06	0.49		0.20	0.61		0.22	0.41	
Uniform Delay, d1	13.2	15.7		14.5	17.4		21.5	28.9		25.7	28.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.4		0.1	2.1		0.3	3.7		0.5	2.0	
Delay (s)	13.5	18.0		14.6	19.6		21.8	32.6		26.2	30.5	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		17.0			19.3			31.2			29.9	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	306	42	63	368	111	56	370	120	55	158	36
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3492			2912		1614	3156		1580	2921	
Flt Permitted		0.79			0.85		0.62	1.00		0.40	1.00	
Satd. Flow (perm)		2778			2478		1047	3156		658	2921	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	340	47	70	409	123	62	411	133	61	176	40
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	460	0	0	602	0	62	544	0	61	216	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1259			1123		461	1389		290	1285	
v/s Ratio Prot								c0.17			0.07	
v/s Ratio Perm		0.17			c0.24		0.06			0.09		
v/c Ratio		0.37			0.54		0.13	0.39		0.21	0.17	
Uniform Delay, d1		13.4			14.8		12.5	14.2		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8			1.8		0.6	0.8		1.6	0.3	
Delay (s)		14.3			16.6		13.1	15.0		14.6	13.0	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.3			16.6			14.8			13.3	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	495	5	14	630	371	68	9	19	112	1	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3143		1629	3257	1457		1612			3106	
Flt Permitted	0.37	1.00		0.44	1.00	1.00		0.70			0.75	
Satd. Flow (perm)	607	3143		749	3257	1457		1174			2411	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	153	550	6	16	700	412	76	10	21	124	1	54
RTOR Reduction (vph)	0	1	0	0	0	143	0	12	0	0	41	0
Lane Group Flow (vph)	153	555	0	16	700	269	0	95	0	0	138	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.4			16.4	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.4			16.4	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.23			0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	397	2054		489	2128	952		273			562	
v/s Ratio Prot		0.18			0.21							
v/s Ratio Perm	c0.25			0.02		0.18		c0.08			0.06	
v/c Ratio	0.39	0.27		0.03	0.33	0.28		0.35			0.24	
Uniform Delay, d1	5.7	5.1		4.3	5.4	5.2		22.5			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	2.8	0.3		0.1	0.4	0.7		3.3			1.0	
Delay (s)	8.5	5.5		4.4	5.8	5.9		25.8			22.9	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.1			5.8			25.8			22.9	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	70.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	76	63	190	71	127	1887	84	70	494	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1498		1547	1584		1493	3069	1271	1452	2983	1301
Flt Permitted	0.37	1.00		0.32	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	608	1498		521	1584		617	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	80	66	200	75	134	1986	88	74	520	43
RTOR Reduction (vph)	0	15	0	0	16	0	0	0	18	0	0	25
Lane Group Flow (vph)	117	290	0	66	259	0	134	1986	70	74	520	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	252	388		232	410		352	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.03	c0.65		c0.03	0.17	
v/s Ratio Perm	0.11			0.07			0.15		0.06	0.17		0.01
v/c Ratio	0.46	0.75		0.28	0.63		0.38	1.57	0.13	0.43	0.42	0.03
Uniform Delay, d1	22.5	29.0		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.62	0.71	0.49	1.00	1.00	1.00
Incremental Delay, d2	6.0	12.4		3.1	7.2		2.6	260.3	0.4	7.4	1.1	0.1
Delay (s)	28.6	41.4		24.9	35.2		10.8	278.0	8.0	25.6	18.9	15.0
Level of Service	C	D		C	D		B	F	A	C	B	B
Approach Delay (s)		37.8			33.2			251.0			19.4	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	164.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	217	24	15	149	18	21	162	26	32	144	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1843			1836			1900			1930	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1787			1790			1844			1824	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	224	25	15	154	19	22	167	27	33	148	22
RTOR Reduction (vph)	0	5	0	0	6	0	0	8	0	0	7	0
Lane Group Flow (vph)	0	271	0	0	182	0	0	208	0	0	196	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		742			744			851			842	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.11			0.11	
v/c Ratio		0.36			0.24			0.24			0.23	
Uniform Delay, d1		13.1			12.4			10.6			10.6	
Progression Factor		1.00			0.62			1.09			1.00	
Incremental Delay, d2		1.4			0.8			0.6			0.6	
Delay (s)		14.5			8.5			12.2			11.2	
Level of Service		B			A			B			B	
Approach Delay (s)		14.5			8.5			12.2			11.2	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	34	9	162	19	42	364	31	16	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	2994		1302	3037		1529	3094		1492	2868	
Flt Permitted	0.63	1.00		0.60	1.00		0.68	1.00		0.50	1.00	
Satd. Flow (perm)	965	2994		827	3037		1093	3094		781	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	38	10	180	21	47	404	34	18	96	19
RTOR Reduction (vph)	0	24	0	0	13	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	215	0	10	188	0	47	428	0	18	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	875		242	888		639	1809		457	1677	
v/s Ratio Prot		c0.07			0.06			c0.14			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.25		0.04	0.21		0.07	0.24		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.9	6.5		5.7	5.8	
Progression Factor	0.72	0.72		0.75	0.74		0.94	0.97		0.49	0.44	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.8	13.3		12.6	13.4		5.7	6.6		3.0	2.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.3			13.4			6.5			2.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	38	28	414	24	14	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2868			1878			1808	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1047	2952		965	2868			1838			1739	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	42	31	460	27	16	181	17
RTOR Reduction (vph)	0	23	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	515	0	0	209	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	419	1181		386	1147			877			829	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.28			0.12	
v/c Ratio	0.12	0.18		0.05	0.13			0.59			0.25	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.4			10.1	
Progression Factor	1.01	0.92		0.88	0.88			1.04			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			2.8			0.7	
Delay (s)	13.0	11.9		10.7	11.1			15.6			10.8	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.1			11.1			15.6			10.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	121	58	2	80	34	21	272	9	7	175	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.96			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1878		1587	1870			1971			1932	
Flt Permitted	0.68	1.00		0.58	1.00			0.98			0.99	
Satd. Flow (perm)	1141	1878		975	1870			1929			1915	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	134	64	2	89	38	23	302	10	8	194	31
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	96	198	0	2	127	0	0	335	0	0	233	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	351	578		300	575			1098			1090	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.08			0.00				c0.17			0.12	
v/c Ratio	0.27	0.34		0.01	0.22			0.31			0.21	
Uniform Delay, d1	17.0	17.4		15.6	16.7			7.3			6.9	
Progression Factor	0.90	0.89		0.89	0.92			0.94			1.00	
Incremental Delay, d2	1.9	1.6		0.0	0.9			0.7			0.4	
Delay (s)	17.1	17.0		13.9	16.3			7.6			7.3	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.1			16.2			7.6			7.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	9	52	1	3	12	38	467	6	2	191	48
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1673		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.63	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1260	1673		1283	1422		981	1631	1392	682	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	129	10	58	1	3	13	42	519	7	2	212	53
RTOR Reduction (vph)	0	42	0	0	9	0	0	0	3	0	0	21
Lane Group Flow (vph)	129	26	0	1	7	0	42	519	4	2	212	32
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		355	394		589	979	835	409	1144	856
v/s Ratio Prot		0.02			0.00			c0.32			0.11	
v/s Ratio Perm	c0.10			0.00			0.04		0.00	0.00		0.02
v/c Ratio	0.37	0.06		0.00	0.02		0.07	0.53	0.01	0.00	0.19	0.04
Uniform Delay, d1	18.9	17.3		17.0	17.1		5.4	7.6	5.2	5.2	5.9	5.3
Progression Factor	1.47	2.39		1.00	1.00		1.13	1.06	1.30	1.00	1.00	1.00
Incremental Delay, d2	2.9	0.2		0.0	0.1		0.2	1.6	0.0	0.0	0.4	0.1
Delay (s)	30.8	41.5		17.0	17.1		6.3	9.7	6.8	5.2	6.2	5.4
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		34.5			17.1			9.4			6.0	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	249	76	125	364	0	0	0	0	80	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2829		1621	3288					1574	2907	
Flt Permitted		1.00		0.49	1.00					0.95	1.00	
Satd. Flow (perm)		2829		835	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	262	80	132	383	0	0	0	0	84	321	380
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	313	0	132	383	0	0	0	0	84	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		934		648	1940					504	930	
v/s Ratio Prot		c0.11		c0.05	0.12					0.05	c0.17	
v/s Ratio Perm				0.07								
v/c Ratio		0.34		0.20	0.20					0.17	0.52	
Uniform Delay, d1		25.2		10.6	9.5					24.4	27.8	
Progression Factor		1.00		1.96	2.05					1.00	1.00	
Incremental Delay, d2		1.0		0.6	0.2					0.7	2.1	
Delay (s)		26.2		21.4	19.7					25.1	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.2			20.2			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	200	0	0	318	67	171	544	341	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2832		1750	1782	1514			
Flt Permitted	0.35	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	618	3054			2832		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	211	0	0	335	71	180	573	359	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	241	0	0	0
Lane Group Flow (vph)	136	211	0	0	388	0	180	573	118	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	682	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.07			c0.14		0.10	c0.32				
v/s Ratio Perm	0.04								0.08			
v/c Ratio	0.20	0.12			0.65		0.31	0.97	0.24			
Uniform Delay, d1	11.8	9.5			36.2		25.0	33.1	24.3			
Progression Factor	0.24	0.25			1.00		0.75	0.79	1.90			
Incremental Delay, d2	0.6	0.1			5.5		0.9	24.5	0.7			
Delay (s)	3.5	2.5			41.6		19.8	50.5	47.0			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			41.6			44.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	36.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	469	362	34	587	0	0	0	0	5	216	200
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3114		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.17	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3114		283	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	489	377	35	611	0	0	0	0	5	225	208
RTOR Reduction (vph)	0	140	0	0	0	0	0	0	0	0	0	137
Lane Group Flow (vph)	0	726	0	35	611	0	0	0	0	5	225	71
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1121		392	1898					543	1074	491
v/s Ratio Prot		c0.23		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.65		0.09	0.32					0.01	0.21	0.14
Uniform Delay, d1		26.7		12.5	10.8					21.8	23.5	22.9
Progression Factor		1.00		0.55	0.68					0.74	0.79	0.92
Incremental Delay, d2		2.9		0.2	0.2					0.0	0.4	0.6
Delay (s)		29.6		7.0	7.5					16.1	18.8	21.6
Level of Service		C		A	A					B	B	C
Approach Delay (s)		29.6			7.5			0.0			20.1	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM Average Control Delay	20.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	414	59	0	0	57	6	564	637	61	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3040			3070		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1083	2333			3070		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	427	61	0	0	59	6	581	657	63	0	0	0
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	38	0	0	0
Lane Group Flow (vph)	213	275	0	0	60	0	581	657	25	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1444			461		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.37	c0.40	0.02			
v/s Ratio Perm	c0.05	0.03										
v/c Ratio	0.31	0.19			0.13		1.01	1.08	0.05			
Uniform Delay, d1	14.1	13.3			36.8		31.5	31.5	20.2			
Progression Factor	0.23	0.24			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.9	0.2			0.6		40.1	61.5	0.2			
Delay (s)	4.1	3.4			37.4		71.6	93.0	20.3			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.7			37.4			79.9			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	58.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	272	69	55	272	108	49	1100	59	88	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2843			2817		1447	3069	1336	1494	2956	1270
Flt Permitted		0.63			0.83		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1827			2354		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	283	72	57	283	112	51	1146	61	92	496	44
RTOR Reduction (vph)	0	15	0	0	38	0	0	0	24	0	0	27
Lane Group Flow (vph)	0	501	0	0	414	0	51	1146	37	92	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		846			775		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.37		c0.03	0.17	
v/s Ratio Perm		0.21			c0.18		0.07		0.03	0.24		0.01
v/c Ratio		0.59			0.53		0.17	0.95	0.07	0.64	0.43	0.03
Uniform Delay, d1		18.9			23.2		14.8	24.9	16.4	18.5	18.7	16.1
Progression Factor		1.00			1.00		1.31	0.85	1.40	1.82	1.64	3.16
Incremental Delay, d2		3.0			2.6		0.8	11.0	0.2	18.1	1.0	0.1
Delay (s)		21.9			25.8		20.2	32.2	23.1	51.7	31.8	51.0
Level of Service		C			C		C	C	C	D	C	D
Approach Delay (s)		21.9			25.8			31.3			36.0	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	29.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	400	0	0	405	77	30	60	93	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.98			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1706			1677			1584				
Flt Permitted		0.92			1.00			0.99				
Satd. Flow (perm)		1583			1677			1584				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	47	444	0	0	450	86	33	67	103	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	57	0	0	0	0
Lane Group Flow (vph)	0	491	0	0	526	0	0	146	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		828			877			560				
v/s Ratio Prot					c0.31							
v/s Ratio Perm		0.31						0.09				
v/c Ratio		0.59			0.60			0.26				
Uniform Delay, d1		10.7			10.8			14.9				
Progression Factor		1.00			0.61			1.00				
Incremental Delay, d2		3.1			2.6			1.1				
Delay (s)		13.8			9.1			16.1				
Level of Service		B			A			B				
Approach Delay (s)		13.8			9.1			16.1			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	395	31	19	399	47	24	167	33	50	105	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1887			1842			3185			3125	
Flt Permitted		0.93			0.97			0.92			0.83	
Satd. Flow (perm)		1754			1797			2933			2640	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	439	34	21	443	52	27	186	37	56	117	31
RTOR Reduction (vph)	0	4	0	0	6	0	0	22	0	0	18	0
Lane Group Flow (vph)	0	520	0	0	510	0	0	228	0	0	186	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		810			829			1218			1097	
v/s Ratio Prot												
v/s Ratio Perm		c0.30			0.28			c0.08			0.07	
v/c Ratio		0.64			0.61			0.19			0.17	
Uniform Delay, d1		13.4			13.2			12.0			11.9	
Progression Factor		0.62			0.53			0.97			0.63	
Incremental Delay, d2		3.3			3.3			0.3			0.3	
Delay (s)		11.6			10.2			12.1			7.8	
Level of Service		B			B			B			A	
Approach Delay (s)		11.6			10.2			12.1			7.8	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	265	21	28	338	61	53	303	85	46	91	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1503	2936		1583	2944		1497	3034		1594	2896	
Flt Permitted	0.44	1.00		0.55	1.00		0.67	1.00		0.50	1.00	
Satd. Flow (perm)	697	2936		916	2944		1053	3034		833	2896	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	294	23	31	376	68	59	337	94	51	101	31
RTOR Reduction (vph)	0	9	0	0	22	0	0	39	0	0	14	0
Lane Group Flow (vph)	56	308	0	31	422	0	59	392	0	51	118	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	236	994		310	996		567	1634		449	1559	
v/s Ratio Prot		0.11			c0.14			c0.13			0.04	
v/s Ratio Perm	0.08			0.03			0.06			0.06		
v/c Ratio	0.24	0.31		0.10	0.42		0.10	0.24		0.11	0.08	
Uniform Delay, d1	15.5	15.9		14.7	16.6		7.3	7.9		7.4	7.2	
Progression Factor	0.59	0.56		0.77	0.79		0.64	0.62		1.33	1.37	
Incremental Delay, d2	2.0	0.7		0.6	1.3		0.4	0.3		0.5	0.1	
Delay (s)	11.0	9.6		12.0	14.4		5.0	5.3		10.3	10.0	
Level of Service	B	A		B	B		A	A		B	A	
Approach Delay (s)		9.8			14.3			5.2			10.1	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	372	27	37	361	82	20	307	44	41	118	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1384	3013		1334	3537			3438			3303	
Flt Permitted	0.46	1.00		0.49	1.00			0.94			0.84	
Satd. Flow (perm)	675	3013		694	3537			3226			2809	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	392	28	39	380	86	21	323	46	43	124	43
RTOR Reduction (vph)	0	8	0	0	30	0	0	16	0	0	26	0
Lane Group Flow (vph)	84	412	0	39	436	0	0	374	0	0	184	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	322	1437		331	1687			1290			1124	
v/s Ratio Prot		c0.14			0.12							
v/s Ratio Perm	0.12			0.06				c0.12			0.07	
v/c Ratio	0.26	0.29		0.12	0.26			0.29			0.16	
Uniform Delay, d1	10.2	10.3		9.4	10.1			13.2			12.5	
Progression Factor	1.61	1.65		0.79	0.77			0.51			0.64	
Incremental Delay, d2	1.9	0.5		0.6	0.3			0.6			0.3	
Delay (s)	18.3	17.5		8.0	8.1			7.3			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		17.6			8.1			7.3			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	286	95	104	347	104	84	80	84	84	80	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3031			1823			1826	
Flt Permitted		0.75	1.00		0.77			0.80			0.79	
Satd. Flow (perm)		1238	1409		2361			1480			1469	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	104	318	106	116	386	116	93	89	93	93	89	87
RTOR Reduction (vph)	0	0	51	0	31	0	0	28	0	0	26	0
Lane Group Flow (vph)	0	422	55	0	587	0	0	247	0	0	243	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		648	737		1235			478			475	
v/s Ratio Prot												
v/s Ratio Perm		c0.34	0.04		0.25			c0.17			0.17	
v/c Ratio		0.65	0.08		0.48			0.52			0.51	
Uniform Delay, d1		11.2	7.7		9.8			17.9			17.8	
Progression Factor		2.03	5.63		0.41			1.00			1.00	
Incremental Delay, d2		4.9	0.2		1.2			3.9			3.9	
Delay (s)		27.7	43.5		5.3			21.8			21.7	
Level of Service		C	D		A			C			C	
Approach Delay (s)		30.9			5.3			21.8			21.7	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	363	20	15	433	63	37	103	41	41	86	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3018		1572	3001			3454			3404	
Flt Permitted	0.40	1.00		0.48	1.00			0.87			0.88	
Satd. Flow (perm)	616	3018		797	3001			3037			3020	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	78	403	22	17	481	70	41	114	46	46	96	104
RTOR Reduction (vph)	0	6	0	0	18	0	0	25	0	0	58	0
Lane Group Flow (vph)	78	419	0	17	533	0	0	176	0	0	188	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	265	1300		343	1293			1355			1347	
v/s Ratio Prot		0.14			c0.18							
v/s Ratio Perm	0.13			0.02				0.06			c0.06	
v/c Ratio	0.29	0.32		0.05	0.41			0.13			0.14	
Uniform Delay, d1	12.1	12.2		10.8	12.8			10.6			10.6	
Progression Factor	0.99	1.02		1.12	0.93			0.99			0.81	
Incremental Delay, d2	2.2	0.5		0.2	0.6			0.2			0.2	
Delay (s)	14.2	12.9		12.2	12.5			10.7			8.8	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.1			12.4			10.7			8.8	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	431	69	89	432	270	46	315	87	211	151	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3073			3146			3118	
Flt Permitted		0.66			0.76			0.88			0.63	
Satd. Flow (perm)		2109			2348			2784			2030	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	91	479	77	99	480	300	51	350	97	234	168	56
RTOR Reduction (vph)	0	16	0	0	102	0	0	33	0	0	17	0
Lane Group Flow (vph)	0	631	0	0	777	0	0	465	0	0	441	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		844			939			1276			625	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.30			c0.33			0.13			c0.22	
v/c Ratio		0.75			0.83			0.36			0.88dl	
Uniform Delay, d1		16.7			17.5			11.9			19.9	
Progression Factor		1.75			1.00			1.00			0.89	
Incremental Delay, d2		5.9			8.3			0.8			6.6	
Delay (s)		35.2			25.8			12.7			24.3	
Level of Service		D			C			B			C	
Approach Delay (s)		35.2			25.8			12.7			24.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	25.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	686	112	43	717	0	127	0	66	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2976			3031			1583				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2976			2567			1310				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	762	124	48	797	0	141	0	73	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	868	0	0	845	0	0	193	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1918			941			233				
v/s Ratio Prot		c0.29										
v/s Ratio Perm					c0.33			c0.15				
v/c Ratio		0.45			0.90			0.83				
Uniform Delay, d1		8.0			26.9			35.7				
Progression Factor		0.00			1.57			1.00				
Incremental Delay, d2		0.4			11.8			27.7				
Delay (s)		0.5			54.1			63.4				
Level of Service		A			D			E				
Approach Delay (s)		0.5			54.1			63.4			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	30.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	476	177	260	613	174	96	19	176	74	7	71
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1755		1629	1714	1457
Flt Permitted	0.33	1.00		0.23	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	532	3020		402	3257	1457		1582		692	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	130	529	197	289	681	193	107	21	196	82	8	79
RTOR Reduction (vph)	0	40	0	0	0	97	0	75	0	0	0	43
Lane Group Flow (vph)	130	686	0	289	681	96	0	249	0	82	8	36
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	42.0	32.7		48.4	36.1	44.7		20.0		31.6	31.6	40.9
Effective Green, g (s)	42.0	32.7		48.4	36.1	44.7		20.0		31.6	31.6	40.9
Actuated g/C Ratio	0.47	0.36		0.54	0.40	0.50		0.22		0.35	0.35	0.45
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	350	1097		389	1306	724		352		333	602	662
v/s Ratio Prot	0.04	0.23		c0.10	0.21	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.13			c0.29		0.05		c0.16		0.06		0.02
v/c Ratio	0.37	0.63		0.74	0.52	0.13		0.71		0.25	0.01	0.05
Uniform Delay, d1	14.2	23.6		13.5	20.4	12.2		32.3		21.5	19.0	13.7
Progression Factor	1.92	1.62		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	0.8	2.5		8.0	1.5	0.1		6.8		0.4	0.0	0.0
Delay (s)	28.0	40.7		21.5	21.9	12.3		39.1		21.9	19.0	13.8
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		38.8			20.2			39.1			18.0	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	492	234	6	504	0	0	0	0	30	0	543
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	547	260	7	560	0	0	0	0	33	0	603
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	560			547			840	1120	273	847	1120	280
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	560			547			840	1120	273	847	1120	280
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	87	100	15
cM capacity (veh/h)	987			998			37	199	715	249	199	708

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	273	273	260	193	373	33	603
Volume Left	0	0	0	7	0	33	0
Volume Right	0	0	260	0	0	0	603
cSH	1700	1700	1700	998	1700	249	708
Volume to Capacity	0.16	0.16	0.15	0.01	0.22	0.13	0.85
Queue Length 95th (ft)	0	0	0	1	0	11	246
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	21.7	32.1
Lane LOS				A		C	D
Approach Delay (s)	0.0			0.1		31.5	
Approach LOS						D	

Intersection Summary			
Average Delay	10.0		
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	522	0	510	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	580	0	567	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	290	290	567
Volume Left (vph)	290	290	567
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	5.7
Degree Utilization, x	0.55	0.55	0.90
Capacity (veh/h)	514	505	627
Control Delay (s)	16.7	16.7	38.6
Approach Delay (s)	16.7		38.6
Approach LOS	C		E

Intersection Summary			
Delay	27.5		
HCM Level of Service	D		
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	340	131	126	344	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.96		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3017		1574	3149						3014	
Flt Permitted		1.00		0.39	1.00						0.97	
Satd. Flow (perm)		3017		645	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	378	146	140	382	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	48	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	476	0	140	382	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1278		481	1815						957	
v/s Ratio Prot		c0.16		c0.03	0.12						c0.04	
v/s Ratio Perm				0.13								
v/c Ratio		0.37		0.29	0.21						0.12	
Uniform Delay, d1		16.8		12.6	8.7						20.6	
Progression Factor		1.00		0.37	0.33						1.00	
Incremental Delay, d2		0.8		1.4	0.2						0.2	
Delay (s)		17.6		6.2	3.1						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.6			3.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	344	0	0	400	76	70	65	42	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3073			4425				
Flt Permitted	0.38	1.00			1.00			0.98				
Satd. Flow (perm)	656	3257			3073			4425				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	382	0	0	444	84	78	72	47	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	32	0	0	0	0
Lane Group Flow (vph)	76	382	0	0	510	0	0	165	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	485	1839			1265			1406				
v/s Ratio Prot	0.02	c0.12			c0.17			c0.04				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.21			0.40			0.12				
Uniform Delay, d1	12.1	9.1			17.6			20.6				
Progression Factor	0.41	0.42			1.00			1.00				
Incremental Delay, d2	0.7	0.2			1.0			0.2				
Delay (s)	5.7	4.1			18.6			20.7				
Level of Service	A	A			B			C				
Approach Delay (s)		4.3			18.6			20.7			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	307	82	31	243	31	129	85	52	55	90	124
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.97			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2939			2979			1792			1750	
Flt Permitted		0.89			0.88			0.74			0.89	
Satd. Flow (perm)		2639			2628			1351			1567	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	341	91	34	270	34	143	94	58	61	100	138
RTOR Reduction (vph)	0	32	0	0	13	0	0	14	0	0	48	0
Lane Group Flow (vph)	0	443	0	0	325	0	0	281	0	0	251	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		934			930			665			771	
v/s Ratio Prot												
v/s Ratio Perm		c0.17			0.12			c0.21			0.16	
v/c Ratio		0.47			0.35			0.42			0.33	
Uniform Delay, d1		16.3			15.5			10.6			10.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.7			1.0			2.0			1.1	
Delay (s)		18.0			16.5			12.5			11.1	
Level of Service		B			B			B			B	
Approach Delay (s)		18.0			16.5			12.5			11.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	202	82	205	176	62	78	974	106	73	459	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	2954		1593	3512		1487	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.54	1.00		0.41	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	954	2954		901	3512		640	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	213	86	216	185	65	82	1025	112	77	483	82
RTOR Reduction (vph)	0	52	0	0	41	0	0	0	69	0	0	50
Lane Group Flow (vph)	178	247	0	216	209	0	82	1025	43	77	483	32
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	973		351	1157		311	1180	523	144	1169	493
v/s Ratio Prot	0.02	0.08		c0.03	0.06		0.01	c0.34		c0.03	0.16	
v/s Ratio Perm	0.15			c0.19			0.10		0.03	0.20		0.03
v/c Ratio	0.49	0.25		0.62	0.18		0.26	0.87	0.08	0.53	0.41	0.06
Uniform Delay, d1	20.6	20.9		22.0	20.3		15.1	24.0	16.4	17.2	18.9	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.97	0.61	0.80
Incremental Delay, d2	4.6	0.6		7.8	0.3		2.1	8.8	0.3	12.3	1.0	0.2
Delay (s)	25.2	21.5		29.8	20.7		17.1	32.8	16.7	46.3	12.4	13.3
Level of Service	C	C		C	C		B	C	B	D	B	B
Approach Delay (s)		22.9			24.9			30.3			16.6	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	284	18	14	328	8	35	113	25	20	56	84
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1928	1382		1954	1331		1970	1452		1928	1430
Flt Permitted		0.91	1.00		0.98	1.00		0.93	1.00		0.93	1.00
Satd. Flow (perm)		1768	1382		1924	1331		1860	1452		1810	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	299	19	15	345	8	37	119	26	21	59	88
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	51
Lane Group Flow (vph)	0	351	9	0	360	4	0	156	11	0	80	37
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		816	638		888	614		773	603		752	594
v/s Ratio Prot												
v/s Ratio Perm		c0.20	0.01		0.19	0.00		c0.08	0.01		0.04	0.03
v/c Ratio		0.43	0.01		0.41	0.01		0.20	0.02		0.11	0.06
Uniform Delay, d1		11.8	9.5		11.6	9.4		12.1	11.2		11.6	11.4
Progression Factor		1.00	1.00		0.46	0.44		1.33	1.73		0.95	0.90
Incremental Delay, d2		1.7	0.0		1.3	0.0		0.6	0.1		0.3	0.2
Delay (s)		13.4	9.5		6.7	4.2		16.7	19.4		11.3	10.5
Level of Service		B	A		A	A		B	B		B	B
Approach Delay (s)		13.2			6.7			17.1			10.9	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	258	10	15	278	30	12	234	25	30	70	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3023		1520	2996		1520	2996		1520	2823	
Flt Permitted	0.95	1.00		0.57	1.00		0.66	1.00		0.56	1.00	
Satd. Flow (perm)	1520	3023		912	2996		1052	2996		904	2823	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	287	11	17	309	33	13	260	28	33	78	71
RTOR Reduction (vph)	0	4	0	0	13	0	0	12	0	0	42	0
Lane Group Flow (vph)	83	294	0	17	329	0	13	276	0	33	107	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1488		309	1014		437	1244		376	1173	
v/s Ratio Prot	c0.05	0.10			c0.11			c0.09			0.04	
v/s Ratio Perm				0.02			0.01			0.04		
v/c Ratio	0.51	0.20		0.06	0.32		0.03	0.22		0.09	0.09	
Uniform Delay, d1	27.4	9.3		14.5	16.0		11.2	12.2		11.5	11.5	
Progression Factor	0.90	0.37		0.81	0.74		0.63	0.66		1.10	1.22	
Incremental Delay, d2	10.3	0.3		0.3	0.8		0.1	0.4		0.5	0.2	
Delay (s)	34.9	3.7		12.1	12.7		7.2	8.5		13.2	14.2	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		10.5			12.6			8.4			14.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	264	16	95	273	42	26	284	20	24	137	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.99			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1520	3014		1520	2979			3215			3138	
Flt Permitted	0.54	1.00		0.95	1.00			0.92			0.89	
Satd. Flow (perm)	867	3014		1520	2979			2977			2824	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	46	293	18	106	303	47	29	316	22	27	152	46
RTOR Reduction (vph)	0	7	0	0	19	0	0	7	0	0	28	0
Lane Group Flow (vph)	46	304	0	106	331	0	0	360	0	0	197	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	267	927		140	1329			1145			1086	
v/s Ratio Prot		c0.10		c0.07	0.11							
v/s Ratio Perm	0.05							c0.12			0.07	
v/c Ratio	0.17	0.33		0.76	0.25			0.31			0.18	
Uniform Delay, d1	16.4	17.3		28.8	11.2			14.0			13.2	
Progression Factor	0.59	0.58		1.32	1.01			0.71			0.75	
Incremental Delay, d2	1.4	0.9		26.3	0.4			0.7			0.4	
Delay (s)	11.0	10.9		64.2	11.7			10.6			10.3	
Level of Service	B	B		E	B			B			B	
Approach Delay (s)		10.9			23.9			10.6			10.3	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	273	16	69	377	69	34	93	160	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1585			1560			3165				
Flt Permitted		0.97			0.92			0.99				
Satd. Flow (perm)		1545			1437			3165				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	303	18	77	419	77	38	103	178	0	0	0
RTOR Reduction (vph)	0	2	0	0	7	0	0	137	0	0	0	0
Lane Group Flow (vph)	0	335	0	0	566	0	0	182	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		996			926			735				
v/s Ratio Prot												
v/s Ratio Perm		0.22			c0.39			0.06				
v/c Ratio		0.34			0.61			0.25				
Uniform Delay, d1		5.2			6.8			20.3				
Progression Factor		2.07			1.00			1.00				
Incremental Delay, d2		0.9			3.0			0.8				
Delay (s)		11.7			9.8			21.1				
Level of Service		B			A			C				
Approach Delay (s)		11.7			9.8			21.1			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	84	349	422	44	64	90
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	88	367	444	46	67	95
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.86				0.86	0.86
vC, conflicting volume	512				1038	491
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	351				962	327
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	91				69	84
cM capacity (veh/h)	979				218	603

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	456	491	67	95
Volume Left	88	0	67	0
Volume Right	0	46	0	95
cSH	979	1700	218	603
Volume to Capacity	0.09	0.29	0.31	0.16
Queue Length 95th (ft)	7	0	32	14
Control Delay (s)	2.6	0.0	28.8	12.1
Lane LOS	A		D	B
Approach Delay (s)	2.6	0.0	19.0	
Approach LOS			C	

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	464	1	26	658	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1663		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	516	1	29	731	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	517	0	0	760	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			607		
v/s Ratio Prot	c0.30					
v/s Ratio Perm				c0.46		
v/c Ratio	0.43			1.25		
Uniform Delay, d1	5.7			27.0		
Progression Factor	0.05			1.00		
Incremental Delay, d2	0.1			126.6		
Delay (s)	0.4			153.6		
Level of Service	A			F		
Approach Delay (s)	0.4			153.6	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	91.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	184	191	25	551	0	0	0	0	3	0	250
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	204	212	28	612	0	0	0	0	3	0	278
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	612			204			978	978	208	770	872	612
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	612			204			978	978	208	770	872	612
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	36
cM capacity (veh/h)	977			985			72	245	804	287	283	431

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	136	280	640	3	278
Volume Left	0	0	28	3	0
Volume Right	0	212	0	0	278
cSH	1700	1700	985	287	431
Volume to Capacity	0.08	0.16	0.03	0.01	0.64
Queue Length 95th (ft)	0	0	2	1	110
Control Delay (s)	0.0	0.0	0.7	17.7	27.3
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	27.2	
Approach LOS				D	

Intersection Summary			
Average Delay	6.1		
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	187	0	576	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	208	0	640	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	104	104	640
Volume Left (vph)	104	104	640
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.8
Degree Utilization, x	0.20	0.20	0.86
Capacity (veh/h)	511	512	734
Control Delay (s)	10.2	10.2	30.0
Approach Delay (s)	10.2		30.0
Approach LOS	B		D

Intersection Summary			
Delay	25.1		
HCM Level of Service	D		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	646	207	169	511	0	0	0	0	207	115	294
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.94	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3705	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3705	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	680	218	178	538	0	0	0	0	218	121	309
RTOR Reduction (vph)	0	0	106	0	0	0	0	0	0	0	82	90
Lane Group Flow (vph)	0	680	112	0	716	0	0	0	0	120	292	64
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.2	39.2		68.3					21.8	21.8	67.0
Effective Green, g (s)		39.2	39.2		68.3					21.8	21.8	67.0
Actuated g/C Ratio		0.25	0.25		0.43					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		730	294		1439					183	505	470
v/s Ratio Prot		c0.23			c0.21					c0.09	0.08	
v/s Ratio Perm			0.09									0.06
v/c Ratio		0.93	0.38		0.50					0.66	0.58	0.14
Uniform Delay, d1		59.1	50.3		33.4					65.5	64.8	28.7
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		20.2	3.7		0.1					8.2	1.6	0.1
Delay (s)		79.3	54.0		0.7					73.7	66.4	28.8
Level of Service		E	D		A					E	E	C
Approach Delay (s)		73.2			0.7			0.0			58.8	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	46.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	32.7
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	643	0	0	452	112	228	144	189	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.92				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (prot)	1574	3366			3149	1457	1531	2961				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (perm)	1574	3366			3149	1457	1531	2961				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	233	714	0	0	502	124	253	160	210	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	88	0	118	0	0	0	0
Lane Group Flow (vph)	233	714	0	0	502	36	215	290	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	83.7	83.7			33.6	33.6	15.8	15.8				
Effective Green, g (s)	83.7	83.7			33.6	33.6	15.8	15.8				
Actuated g/C Ratio	0.52	0.52			0.21	0.21	0.10	0.10				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	823	1761			661	306	151	292				
v/s Ratio Prot	0.15	c0.21			c0.16		c0.14	0.10				
v/s Ratio Perm						0.02						
v/c Ratio	0.28	0.41			0.76	0.12	1.42	0.99				
Uniform Delay, d1	21.4	23.1			59.4	51.2	72.1	72.0				
Progression Factor	0.07	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.1	0.1			5.0	0.2	224.7	50.5				
Delay (s)	1.5	1.5			64.4	51.4	296.8	122.5				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.5			61.8			182.7			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	70.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.9
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	318	73	35	355	45	86	803	60	56	727	99
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1546	1556	1328	1595	1760		1532	2990		1508	2921	
Flt Permitted	0.23	1.00	1.00	0.43	1.00		0.18	1.00		0.16	1.00	
Satd. Flow (perm)	376	1556	1328	722	1760		288	2990		255	2921	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	225	335	77	37	374	47	91	845	63	59	765	104
RTOR Reduction (vph)	0	0	50	0	5	0	0	6	0	0	12	0
Lane Group Flow (vph)	225	335	27	37	416	0	91	902	0	59	857	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		39.6	34.1		39.6	34.1	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	229	557	461	274	554		183	1134		169	1108	
v/s Ratio Prot	c0.07	0.22		0.00	0.24		c0.02	c0.30		0.02	0.29	
v/s Ratio Perm	c0.33		0.02	0.04			0.18			0.13		
v/c Ratio	0.98	0.60	0.06	0.14	0.75		0.50	0.80		0.35	0.77	
Uniform Delay, d1	25.9	23.6	19.6	20.4	27.6		17.7	24.8		17.5	24.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	54.2	4.8	0.2	0.2	9.1		2.1	5.8		1.3	5.3	
Delay (s)	80.1	28.4	19.8	20.6	36.7		19.8	30.6		18.7	29.8	
Level of Service	F	C	B	C	D		B	C		B	C	
Approach Delay (s)		45.6			35.4			29.6			29.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	33.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	295	26	5	311	19	78	79	16	11	42	81
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.92	
Flt Protected		0.99	1.00		1.00	1.00		0.98			1.00	
Satd. Flow (prot)		1910	1482		1600	1198		1903			1790	
Flt Permitted		0.92	1.00		1.00	1.00		0.83			0.98	
Satd. Flow (perm)		1762	1482		1595	1198		1625			1759	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	311	27	5	327	20	82	83	17	12	44	85
RTOR Reduction (vph)	0	0	14	0	0	10	0	6	0	0	50	0
Lane Group Flow (vph)	0	367	13	0	332	10	0	176	0	0	91	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		867	730		785	590		675			731	
v/s Ratio Prot												
v/s Ratio Perm		c0.21	0.01		0.21	0.01		c0.11			0.05	
v/c Ratio		0.42	0.02		0.42	0.02		0.26			0.12	
Uniform Delay, d1		10.6	8.5		10.6	8.4		12.5			11.7	
Progression Factor		1.00	1.00		1.68	2.24		1.00			1.48	
Incremental Delay, d2		1.5	0.0		1.6	0.0		0.9			0.4	
Delay (s)		12.1	8.5		19.3	18.9		13.4			17.7	
Level of Service		B	A		B	B		B			B	
Approach Delay (s)		11.9			19.3			13.4			17.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	208	34	6	176	6	82	216	21	9	51	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.93	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1664	1392		1608	1497		1733	1390		1569	
Flt Permitted		0.86	1.00		0.99	1.00		0.88	1.00		0.98	
Satd. Flow (perm)		1443	1392		1593	1497		1551	1390		1540	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	86	219	36	6	185	6	86	227	22	9	54	76
RTOR Reduction (vph)	0	0	23	0	0	4	0	0	11	0	39	0
Lane Group Flow (vph)	0	305	13	0	191	2	0	313	11	0	100	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		511	493		564	530		764	684		758	
v/s Ratio Prot												
v/s Ratio Perm		c0.21	0.01		0.12	0.00		c0.20	0.01		0.07	
v/c Ratio		0.60	0.03		0.34	0.00		0.41	0.02		0.13	
Uniform Delay, d1		17.2	13.7		15.4	13.6		10.5	8.4		9.0	
Progression Factor		1.92	3.40		0.95	0.98		0.27	0.18		1.15	
Incremental Delay, d2		4.7	0.1		1.6	0.0		0.8	0.0		0.4	
Delay (s)		37.7	46.7		16.2	13.3		3.6	1.6		10.6	
Level of Service		D	D		B	B		A	A		B	
Approach Delay (s)		38.6			16.1			3.5			10.6	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	18.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	22	34	9	27	6	43	286	19	6	194	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.99			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.98			0.99			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1770	1390		1835			1970			1873	1328
Flt Permitted		0.79	1.00		0.94			0.95			0.99	1.00
Satd. Flow (perm)		1469	1390		1751			1876			1858	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	179	24	38	10	30	7	48	318	21	7	216	123
RTOR Reduction (vph)	0	0	22	0	5	0	0	3	0	0	0	62
Lane Group Flow (vph)	0	203	16	0	42	0	0	384	0	0	223	61
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		647	577		458			924			915	654
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.09	0.01		0.02			c0.20			0.12	0.05
v/c Ratio		0.31	0.03		0.09			0.42			0.24	0.09
Uniform Delay, d1		12.8	11.2		18.2			10.5			9.5	8.8
Progression Factor		0.80	1.38		1.00			0.45			0.53	0.31
Incremental Delay, d2		1.1	0.1		0.4			1.2			0.6	0.3
Delay (s)		11.3	15.6		18.6			5.9			5.7	3.0
Level of Service		B	B		B			A			A	A
Approach Delay (s)		12.0			18.6			5.9			4.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	984	220	328	1128	0	0	0	0	274	200	374
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4322		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.13	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4322		210	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1036	232	345	1187	0	0	0	0	288	211	394
RTOR Reduction (vph)	0	32	0	0	0	0	0	0	0	0	61	61
Lane Group Flow (vph)	0	1236	0	345	1187	0	0	0	0	233	390	148
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		44.8		69.4	69.4					23.6	23.6	23.6
Effective Green, g (s)		44.8		69.4	69.4					23.6	23.6	23.6
Actuated g/C Ratio		0.43		0.66	0.66					0.22	0.22	0.22
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1844		403	2132					319	609	305
v/s Ratio Prot		0.29		c0.16	0.37							
v/s Ratio Perm				c0.40						c0.16	0.14	0.11
v/c Ratio		0.67		0.86	0.56					0.73	0.64	0.48
Uniform Delay, d1		24.2		23.9	9.5					37.7	36.9	35.4
Progression Factor		1.00		0.88	1.68					1.00	1.00	1.00
Incremental Delay, d2		2.0		9.0	0.5					8.6	2.3	1.4
Delay (s)		26.1		30.0	16.5					46.3	39.2	36.8
Level of Service		C		C	B					D	D	D
Approach Delay (s)		26.1			19.6			0.0			40.5	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	26.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	108.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	309	949	0	0	934	234	521	346	661	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0			6.0				
Lane Util. Factor	0.97	0.95			0.91			0.91				
Frpb, ped/bikes	1.00	1.00			1.00			1.00				
Flpb, ped/bikes	1.00	1.00			1.00			1.00				
Frt	1.00	1.00			0.97			0.94				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	2915	3138			4350			4336				
Flt Permitted	0.13	1.00			1.00			0.98				
Satd. Flow (perm)	407	3138			4350			4336				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	325	999	0	0	983	246	548	364	696	0	0	0
RTOR Reduction (vph)	0	0	0	0	36	0	0	90	0	0	0	0
Lane Group Flow (vph)	325	999	0	0	1193	0	0	1518	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt						Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2						8					
Actuated Green, G (s)	63.6	63.6			45.5			29.4				
Effective Green, g (s)	63.6	63.6			45.5			29.4				
Actuated g/C Ratio	0.61	0.61			0.43			0.28				
Clearance Time (s)	6.0	6.0			6.0			6.0				
Vehicle Extension (s)	3.5	7.0			7.0			5.0				
Lane Grp Cap (vph)	536	1901			1885			1214				
v/s Ratio Prot	0.07	c0.32			0.27							
v/s Ratio Perm	c0.30							0.35				
v/c Ratio	0.61	0.53			0.63			1.38dr				
Uniform Delay, d1	12.9	12.0			23.2			37.8				
Progression Factor	0.64	0.65			1.01			1.00				
Incremental Delay, d2	1.5	0.8			0.9			119.7				
Delay (s)	9.7	8.6			24.3			157.5				
Level of Service	A	A			C			F				
Approach Delay (s)		8.8			24.3			157.5			0.0	
Approach LOS		A			C			F			A	

Intersection Summary			
HCM Average Control Delay	70.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	108.2%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	103	931	221	76	859	50	226	178	40	76	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1604	3231		1445	3007		1544	2782	
Flt Permitted	0.11	1.00	1.00	0.29	1.00		0.56	1.00		0.61	1.00	
Satd. Flow (perm)	174	3061	1291	494	3231		845	3007		990	2782	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	108	980	233	80	904	53	238	187	42	80	117	96
RTOR Reduction (vph)	0	0	96	0	4	0	0	21	0	0	80	0
Lane Group Flow (vph)	108	980	137	80	953	0	238	208	0	80	133	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	62.8	52.8	61.8	40.8	34.3		28.7	19.7		24.7	17.7	
Effective Green, g (s)	62.8	52.8	61.8	40.8	34.3		28.7	19.7		24.7	17.7	
Actuated g/C Ratio	0.60	0.50	0.59	0.39	0.33		0.27	0.19		0.24	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	435	1539	760	261	1055		282	564		270	469	
v/s Ratio Prot	0.06	c0.32	0.02	c0.02	c0.29		c0.07	0.07		0.02	0.05	
v/s Ratio Perm	0.09		0.09	0.10			c0.16			0.05		
v/c Ratio	0.25	0.64	0.18	0.31	0.90		0.84	0.37		0.30	0.28	
Uniform Delay, d1	12.9	19.1	9.9	20.7	33.8		34.6	37.2		32.4	38.1	
Progression Factor	1.05	1.19	2.47	1.00	1.00		0.95	0.90		1.00	1.00	
Incremental Delay, d2	0.8	1.1	0.1	0.7	12.4		19.0	1.4		0.6	1.2	
Delay (s)	14.2	23.8	24.6	21.3	46.2		52.1	34.9		33.0	39.3	
Level of Service	B	C	C	C	D		D	C		C	D	
Approach Delay (s)		23.2			44.3			43.7			37.6	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	34.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	323	273	79	209	98	328	380	161	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.95		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1635	2920		1463	3049		1589	3173		1549	3135	
Flt Permitted	0.53	1.00		0.25	1.00		0.46	1.00		0.44	1.00	
Satd. Flow (perm)	905	2920		381	3049		772	3173		714	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	340	287	83	220	103	345	400	169	96	272	57
RTOR Reduction (vph)	0	139	0	0	51	0	0	44	0	0	17	0
Lane Group Flow (vph)	62	488	0	83	272	0	345	525	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.4	28.4		36.2	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.4	28.4		36.2	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	354	790		208	836		530	1266		321	935	
v/s Ratio Prot	0.01	c0.17		c0.03	0.09		c0.11	0.17		0.02	0.10	
v/s Ratio Perm	0.05			0.11			c0.22			0.09		
v/c Ratio	0.18	0.62		0.40	0.33		0.65	0.41		0.30	0.33	
Uniform Delay, d1	24.0	33.5		24.6	30.4		16.6	22.7		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.03	0.90	
Incremental Delay, d2	0.3	3.6		1.5	1.0		3.0	1.0		0.6	0.9	
Delay (s)	24.3	37.1		26.1	31.4		19.6	23.7		23.6	26.8	
Level of Service	C	D		C	C		B	C		C	C	
Approach Delay (s)		36.0			30.3			22.2			26.1	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	392	610	6	401	108	198	592	7	80	368	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.92			0.97		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2584			2887		1436	3186		1451	2800	
Flt Permitted		0.63			0.94		0.38	1.00		0.28	1.00	
Satd. Flow (perm)		1631			2703		578	3186		432	2800	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	183	436	678	7	446	120	220	658	8	89	409	111
RTOR Reduction (vph)	0	200	0	0	37	0	0	1	0	0	38	0
Lane Group Flow (vph)	0	1097	0	0	536	0	220	665	0	89	482	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		736			790		284	1078		236	948	
v/s Ratio Prot		c0.09					c0.05	0.21		0.02	0.17	
v/s Ratio Perm		c0.53			0.20		c0.26			0.13		
v/c Ratio		1.49			0.68		0.77	0.62		0.38	0.51	
Uniform Delay, d1		19.0			20.3		16.0	18.0		12.8	17.2	
Progression Factor		1.00			1.51		1.10	0.99		1.00	1.00	
Incremental Delay, d2		228.0			0.4		14.4	2.0		4.5	1.9	
Delay (s)		247.0			31.2		32.0	19.8		17.4	19.1	
Level of Service		F			C		C	B		B	B	
Approach Delay (s)		247.0			31.2			22.8			18.9	
Approach LOS		F			C			C			B	

Intersection Summary			
HCM Average Control Delay	109.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	111	341	856	127	13	110	780	274	10	949	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	0.99		1.00	0.96		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1665	1691		1620	1938		1659	3108		1139	3233	
Flt Permitted	0.67	1.00		0.30	1.00		0.19	1.00		0.17	1.00	
Satd. Flow (perm)	1166	1691		517	1938		340	3108		205	3233	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	51	114	352	882	131	13	113	804	282	10	978	44
RTOR Reduction (vph)	0	44	0	0	6	0	0	54	0	0	5	0
Lane Group Flow (vph)	51	422	0	882	138	0	113	1032	0	10	1017	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	431	624		191	716		162	1482		98	1542	
v/s Ratio Prot		0.25			0.07			0.33			0.31	
v/s Ratio Perm	0.04			c1.71			c0.33			0.05		
v/c Ratio	0.12	0.68		4.62	0.19		0.70	0.70		0.10	0.66	
Uniform Delay, d1	13.5	17.2		20.5	13.9		13.3	13.3		9.3	13.0	
Progression Factor	1.00	1.00		1.74	1.94		1.00	1.00		0.99	0.97	
Incremental Delay, d2	0.6	5.8		1629.1	0.1		22.1	2.7		0.2	0.2	
Delay (s)	14.1	23.1		1664.7	27.0		35.4	16.0		9.4	12.8	
Level of Service	B	C		F	C		D	B		A	B	
Approach Delay (s)		22.2			1434.9			17.9			12.8	
Approach LOS		C			F			B			B	

Intersection Summary			
HCM Average Control Delay	402.3	HCM Level of Service	F
HCM Volume to Capacity ratio	2.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	131.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	422	948	556	14	3	14	3	46	10	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			0.99		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.95		
Flt Protected	1.00		0.97				0.99			0.97		
Satd. Flow (prot)	2956		2879				1732			1864		
Flt Permitted	1.00		0.59				0.94			0.87		
Satd. Flow (perm)	2956		1743				1650			1672		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	444	998	585	15	3	15	3	48	11	0	2	4
RTOR Reduction (vph)	0	0	1	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	444	0	1597	0	0	0	31	0	0	14	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom				Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7				2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		829				355			360		
v/s Ratio Prot	0.15		c0.18									
v/s Ratio Perm			c0.62				c0.02			0.01		
v/c Ratio	0.54		3.34dl				0.09			0.04		
Uniform Delay, d1	20.0		19.0				20.4			20.2		
Progression Factor	1.23		0.67				1.00			1.00		
Incremental Delay, d2	0.2		419.8				0.5			0.2		
Delay (s)	24.7		432.5				20.9			20.4		
Level of Service	C		F				C			C		
Approach Delay (s)	24.7		432.5				20.9			20.4		
Approach LOS	C		F				C			C		

Intersection Summary			
HCM Average Control Delay	356.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	124.8%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	410
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1429	
Flt Permitted	1.00	
Satd. Flow (perm)	1429	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1	432
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	433	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.30	
v/s Ratio Perm		
v/c Ratio	1.97	
Uniform Delay, d1	27.5	
Progression Factor	1.25	
Incremental Delay, d2	448.0	
Delay (s)	482.3	
Level of Service	F	
Approach Delay (s)	482.3	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	206	733	1284	64	41	235
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.99		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3222	3234		1629	1457
Flt Permitted		0.51	1.00		0.95	1.00
Satd. Flow (perm)		1670	3234		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	229	814	1427	71	46	261
RTOR Reduction (vph)	0	0	5	0	0	36
Lane Group Flow (vph)	0	1043	1493	0	46	225
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1028	1990		426	381
v/s Ratio Prot			0.46		0.03	
v/s Ratio Perm		c0.62				c0.15
v/c Ratio		2.04dl	0.75		0.11	0.59
Uniform Delay, d1		12.5	8.9		18.2	21.0
Progression Factor		1.78	0.89		0.99	0.97
Incremental Delay, d2		12.4	1.6		0.5	6.6
Delay (s)		34.6	9.5		18.6	26.8
Level of Service		C	A		B	C
Approach Delay (s)		34.6	9.5		25.6	
Approach LOS		C	A		C	

Intersection Summary			
HCM Average Control Delay	20.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	56	697	1269	190	131	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2979		1464	1373
Flt Permitted		0.72	1.00		0.95	1.00
Satd. Flow (perm)		2102	2979		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	59	734	1336	200	138	78
RTOR Reduction (vph)	0	0	18	0	0	36
Lane Group Flow (vph)	0	793	1518	0	138	42
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1229	1742		428	401
v/s Ratio Prot			c0.51		c0.09	
v/s Ratio Perm		0.38				0.03
v/c Ratio		0.65	0.87		0.32	0.10
Uniform Delay, d1		9.0	11.4		18.0	16.8
Progression Factor		0.92	1.03		0.94	1.01
Incremental Delay, d2		0.8	2.0		2.0	0.5
Delay (s)		9.0	13.8		18.9	17.5
Level of Service		A	B		B	B
Approach Delay (s)		9.0	13.8		18.4	
Approach LOS		A	B		B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	662	168	104	1164	460	79
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.98	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2223		1770	2436	1820	
Flt Permitted	1.00		0.13	1.00	0.96	
Satd. Flow (perm)	2223		240	2436	1820	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	676	171	106	1188	469	81
RTOR Reduction (vph)	14	0	0	0	9	0
Lane Group Flow (vph)	833	0	106	1188	541	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1060		114	1162	672	
v/s Ratio Prot	0.37			c0.49	c0.30	
v/s Ratio Perm			0.44			
v/c Ratio	0.79		0.93	1.02	0.80	
Uniform Delay, d1	14.2		16.0	17.0	18.4	
Progression Factor	1.51		1.00	1.00	1.00	
Incremental Delay, d2	4.8		67.0	32.2	9.9	
Delay (s)	26.2		83.0	49.2	28.3	
Level of Service	C		F	D	C	
Approach Delay (s)	26.2			52.0	28.3	
Approach LOS	C			D	C	

Intersection Summary			
HCM Average Control Delay	39.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	91.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	708	95	251	1203	9	107	0	177	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.20	1.00	1.00	0.27	1.00	1.00		0.76	1.00		0.62	
Satd. Flow (perm)	405	3213	1422	455	3138	1366		1309	1443		636	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	787	106	279	1337	10	119	0	197	1	0	0
RTOR Reduction (vph)	0	0	50	0	0	2	0	0	167	0	0	0
Lane Group Flow (vph)	1	787	56	279	1337	8	0	119	30	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	44.7	44.7	44.7	64.0	64.0	64.0		13.0	13.0		13.0	
Effective Green, g (s)	44.7	44.7	44.7	64.0	64.0	64.0		13.0	13.0		13.0	
Actuated g/C Ratio	0.53	0.53	0.53	0.75	0.75	0.75		0.15	0.15		0.15	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	213	1690	748	560	2363	1029		200	221		97	
v/s Ratio Prot		0.24		0.10	c0.43							
v/s Ratio Perm	0.00		0.04	0.28		0.01		c0.09	0.02		0.00	
v/c Ratio	0.00	0.47	0.07	0.50	0.57	0.01		0.59	0.14		0.01	
Uniform Delay, d1	9.6	12.7	9.9	4.5	4.5	2.6		33.5	31.1		30.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.9	0.2	0.7	0.3	0.0		4.7	0.3		0.0	
Delay (s)	9.6	13.6	10.1	5.2	4.8	2.6		38.2	31.4		30.6	
Level of Service	A	B	B	A	A	A		D	C		C	
Approach Delay (s)		13.2			4.9			34.0			30.6	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	12	775	801	43	23	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.97	
Satd. Flow (prot)		3038	3017		1486	
Flt Permitted		0.94	1.00		0.97	
Satd. Flow (perm)		2843	3017		1486	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	861	890	48	26	10
RTOR Reduction (vph)	0	0	4	0	9	0
Lane Group Flow (vph)	0	874	934	0	27	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1042	2145		116	
v/s Ratio Prot			c0.31		c0.02	
v/s Ratio Perm		c0.31				
v/c Ratio		0.84	0.44		0.23	
Uniform Delay, d1		26.1	5.4		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		8.1	0.3		4.6	
Delay (s)		34.2	0.3		43.6	
Level of Service		C	A		D	
Approach Delay (s)		34.2	0.3		43.6	
Approach LOS		C	A		D	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	423	1	26	554	78	0	0	1	43	3	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.96	1.00
Satd. Flow (prot)		1728			3231			1432			1610	1282
Flt Permitted		0.79			0.93			1.00			0.94	1.00
Satd. Flow (perm)		1382			3025			1432			1581	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	87	470	1	29	616	87	0	0	1	48	3	101
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	68
Lane Group Flow (vph)	0	558	0	0	720	0	0	0	0	0	51	33
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		504			1635			152			470	422
v/s Ratio Prot					c0.07			0.00			c0.02	
v/s Ratio Perm		c0.40			0.16						c0.01	0.03
v/c Ratio		1.11			0.44			0.00			0.11	0.08
Uniform Delay, d1		27.0			12.3			34.0			21.9	19.6
Progression Factor		1.00			1.76			1.00			1.00	1.00
Incremental Delay, d2		72.7			0.1			0.0			0.5	0.4
Delay (s)		99.7			21.7			34.0			22.3	20.0
Level of Service		F			C			C			C	B
Approach Delay (s)		99.7			21.7			34.0			20.8	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM Average Control Delay	51.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	997	57	36	35	48	23	26	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.95			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1556	3022		1587	3021			1816			1706	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	286	3022		604	3021			1649			1630	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1049	60	38	37	51	24	27	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	22	0
Lane Group Flow (vph)	41	653	0	37	1103	0	0	93	0	0	121	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	150	1581		316	1580			583			577	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.14			0.06				0.06			c0.07	
v/c Ratio	0.27	0.41		0.12	0.70			0.16			0.21	
Uniform Delay, d1	8.6	9.4		7.9	11.6			14.4			14.7	
Progression Factor	1.00	1.00		0.70	1.38			1.00			1.00	
Incremental Delay, d2	4.5	0.8		0.7	2.3			0.6			0.8	
Delay (s)	13.1	10.2		6.2	18.4			15.0			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.0			15.0			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	787	5	31	619	40	0	0	0	578	88	375
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.92	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	790	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	336	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	828	5	33	652	42	0	0	0	608	93	395
RTOR Reduction (vph)	0	0	0	0	0	18	0	0	0	0	0	168
Lane Group Flow (vph)	26	833	0	33	652	24	0	0	0	608	93	227
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	160	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.20					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.05						0.15
v/c Ratio	0.16	0.75		0.05	0.36	0.08				0.80	0.23	0.66
Uniform Delay, d1	31.6	38.6		15.2	15.7	13.1				47.2	40.6	45.4
Progression Factor	0.85	0.86		0.34	0.75	1.27				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.4				8.8	1.4	9.8
Delay (s)	28.9	37.4		5.2	12.2	17.0				56.0	42.0	55.2
Level of Service	C	D		A	B	B				E	D	E
Approach Delay (s)		37.2			12.1			0.0			54.5	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	338	809	218	53	560	280	100	247	54	39	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3263		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3263		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	356	852	229	56	589	295	105	260	57	41	0	32
RTOR Reduction (vph)	0	18	0	0	0	222	0	0	42	0	0	30
Lane Group Flow (vph)	356	1063	0	56	589	73	0	365	15	41	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1707		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.32	0.62		0.53	0.76	0.29		0.51	0.05	0.77		0.04
Uniform Delay, d1	31.9	21.9		59.2	45.5	39.8		45.0	40.5	60.1		57.4
Progression Factor	0.94	0.17		1.00	1.00	1.00		0.95	1.00	1.00		1.00
Incremental Delay, d2	0.5	1.1		18.0	7.0	2.9		2.6	0.3	49.7		0.4
Delay (s)	30.5	4.7		77.2	52.5	42.7		45.2	40.9	109.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		11.1			50.9			44.7			87.0	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	885	165	102	813	0	74	0	89	9	15	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.98	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1649	3149		1388		1451	1803	1857	
Flt Permitted		1.00		0.18	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		304	3149		1082		1451	1803	1857	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	983	183	113	903	0	82	0	99	10	17	8
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	67	0	5	0
Lane Group Flow (vph)	0	1151	0	113	903	0	82	0	32	10	20	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		182	1889		346		464	577	594	
v/s Ratio Prot		c0.38			0.29						0.01	
v/s Ratio Perm				0.37			c0.08		0.02	0.01		
v/c Ratio		0.64		0.62	0.48		0.24		0.07	0.02	0.03	
Uniform Delay, d1		13.0		12.7	11.2		25.0		23.6	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.8		14.9	0.9		1.6		0.3	0.1	0.1	
Delay (s)		14.7		27.6	12.1		26.6		23.9	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		14.7			13.8			25.1			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	291	0	1188	214	682	0	0	792	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4271	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4271	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	297	0	1212	218	696	0	0	808	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	297	0	1212	218	696	0	0	1308	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.19		c0.79	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.65		2.77	0.47	0.26			1.16dr	
Uniform Delay, d1				32.3		37.5	29.6	8.6			37.0	
Progression Factor				1.00		1.00	0.64	2.10			1.00	
Incremental Delay, d2				7.1		804.4	2.8	0.2			35.5	
Delay (s)				39.4		841.9	21.6	18.3			72.5	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			684.0			19.1			72.5	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	306.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.40		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.3%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	324	770	146	0	0	0	0	572	403	355	727	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3156						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3156						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	334	794	151	0	0	0	0	590	415	366	749	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	301	964	0	0	0	0	0	590	415	366	749	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.14		c0.23	0.16	
v/s Ratio Perm	0.20	0.31							c0.18			
v/c Ratio	0.62	0.94						0.51	0.69	0.78	0.27	
Uniform Delay, d1	30.0	34.6						32.6	34.6	33.8	10.5	
Progression Factor	1.00	1.00						1.14	1.14	0.86	0.21	
Incremental Delay, d2	5.7	17.5						1.4	5.9	4.6	0.1	
Delay (s)	35.7	52.0						38.7	45.4	33.7	2.3	
Level of Service	D	D						D	D	C	A	
Approach Delay (s)		48.2			0.0			41.5			12.6	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	34.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	287	25	24	11	157	0	0	147	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.54	1.00			1.00	
Satd. Flow (perm)				1688	3132		979	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	319	28	27	12	174	0	0	163	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	319	37	0	12	174	0	0	168	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		636	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.09			0.09	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.16			0.16	
Uniform Delay, d1				24.4	20.0		10.5	8.0			9.8	
Progression Factor				1.00	1.00		1.05	1.17			1.00	
Incremental Delay, d2				4.8	0.1		0.1	0.3			0.3	
Delay (s)				29.2	20.1		11.1	9.7			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			27.9			9.8			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	5	0	14	0	142	43	46	389	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1565			1718		1590	1860	
Flt Permitted	0.74	1.00			0.97			1.00		0.60	1.00	
Satd. Flow (perm)	1516	1735			1531			1718		1004	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	5	0	15	0	149	45	48	409	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	13	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	10	0	0	181	0	48	409	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	551			486			808		639	1094	
v/s Ratio Prot		c0.01						0.11		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.22		0.08	0.37	
Uniform Delay, d1	20.0	20.0			19.9			13.3		8.6	9.2	
Progression Factor	1.00	1.00			1.00			1.00		0.97	0.87	
Incremental Delay, d2	0.1	0.1			0.1			0.6		0.2	0.9	
Delay (s)	20.1	20.1			20.0			14.0		8.6	8.9	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			14.0			8.9	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	46	40	12	183	273	27
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1753		1765	1782	1656	
Flt Permitted	0.97		0.52	1.00	1.00	
Satd. Flow (perm)	1753		966	1782	1656	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	44	13	203	303	30
RTOR Reduction (vph)	30	0	0	0	5	0
Lane Group Flow (vph)	65	0	13	203	328	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		535	987	917	
v/s Ratio Prot	c0.04			0.11	c0.20	
v/s Ratio Perm			0.01			
v/c Ratio	0.12		0.02	0.21	0.36	
Uniform Delay, d1	15.5		6.6	7.3	8.1	
Progression Factor	1.00		0.49	0.60	1.44	
Incremental Delay, d2	0.4		0.1	0.5	0.9	
Delay (s)	15.9		3.3	4.8	12.6	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			4.7	12.6	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	28.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	265	9	257	132	0	0	277	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3771		1693	1678			1738	1428
Flt Permitted					0.99		0.48	1.00			1.00	1.00
Satd. Flow (perm)					3771		854	1678			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	294	10	286	147	0	0	308	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	335	0	286	147	0	0	308	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1153		611	1007			777	638
v/s Ratio Prot					c0.09		c0.06	0.09			0.18	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.47	0.15			0.40	0.01
Uniform Delay, d1					22.5		13.5	7.5			15.8	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.6	0.3			1.5	0.0
Delay (s)					23.1		16.1	7.8			17.3	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.3			17.1	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	95	94	38	133	205	30	59	703	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3287		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.59	1.00	
Satd. Flow (perm)					1896		446	3287		1061	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	106	104	42	148	228	33	66	781	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	15	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	242	0	148	246	0	66	824	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1490		640	1572	
v/s Ratio Prot					c0.13		c0.04	0.07		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.16		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.1		8.2	14.7	
Progression Factor					1.00		0.84	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.2		0.3	1.3	
Delay (s)					22.9		17.1	10.2		8.5	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.7			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	273	24	159	589	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3172		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		600	3172		1008	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	287	25	167	620	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	9	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	303	0	167	665	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		336	1776		564	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.17		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.0		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.2		3.5	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.2			2.9	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	35	182	64	238	558	77
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	202	71	264	620	86

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	241	159	176	413	292
Volume Left (vph)	39	71	0	0	0
Volume Right (vph)	202	0	0	0	86
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.7	6.4	6.2	5.8	5.6
Degree Utilization, x	0.38	0.28	0.30	0.66	0.45
Capacity (veh/h)	599	538	557	611	632
Control Delay (s)	12.1	10.8	10.7	18.2	11.9
Approach Delay (s)	12.1	10.7		15.6	
Approach LOS	B	B		C	

Intersection Summary			
Delay	13.6		
HCM Level of Service	B		
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	378	18	24	410	77	81	55	68	351	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1421			1710	3250	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	930	1731	1421			257	3250	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	420	20	27	456	86	90	61	76	390	36
RTOR Reduction (vph)	0	0	0	12	0	0	36	0	0	0	7	0
Lane Group Flow (vph)	0	75	420	8	27	456	140	0	0	137	419	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		303	725	641	221	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.26					0.13	
v/s Ratio Perm		0.07		0.01	0.03		0.10			c0.53		
v/c Ratio		0.25	0.58	0.01	0.12	1.11	0.41			1.99	0.48	
Uniform Delay, d1		21.6	23.4	17.8	31.4	40.0	33.8			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	3.4	0.0	1.1	76.5	3.7			491.0	1.9	
Delay (s)		23.5	26.8	17.9	32.5	116.5	37.5			529.5	34.3	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.9			92.0					154.8	
Approach LOS			C			F					F	

Intersection Summary			
HCM Average Control Delay	139.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	105	559	80	101	4	110	587	190
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.38	1.00				0.95	1.00	
Satd. Flow (perm)	675	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	621	89	112	4	122	652	211
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	117	810	0	0	0	126	837	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	177	850				334	514	
v/s Ratio Prot		0.25				0.07		
v/s Ratio Perm	0.17						c0.32	
v/c Ratio	0.66	0.95				0.38	1.63	
Uniform Delay, d1	34.6	38.1				36.7	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	17.8	21.4				3.2	291.8	
Delay (s)	52.4	59.5				39.9	334.0	
Level of Service	D	E				D	F	
Approach Delay (s)		58.6				296.6		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	589	0	0	495	49	83	51	18	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1957			1841				
Flt Permitted		0.90			1.00			0.97				
Satd. Flow (perm)		1526			1957			1841				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	71	654	0	0	550	54	92	57	20	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	725	0	0	604	0	0	169	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		939			1204			481				
v/s Ratio Prot					0.31							
v/s Ratio Perm		c0.48						0.09				
v/c Ratio		0.77			0.50			0.35				
Uniform Delay, d1		9.2			7.0			19.5				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.1			1.5			2.0				
Delay (s)		15.3			8.4			21.5				
Level of Service		B			A			C				
Approach Delay (s)		15.3			8.4			21.5			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	420	159	114	327	122	104	625	82	136	751	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1985	1434		1950	1444	1546	3040	1296	1505	3069	1252
Flt Permitted		0.41	1.00		0.57	1.00	0.23	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)		822	1434		1119	1444	379	3040	1296	468	3069	1252
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	73	442	167	120	344	128	109	658	86	143	791	98
RTOR Reduction (vph)	0	0	99	0	0	91	0	0	51	0	0	49
Lane Group Flow (vph)	0	515	68	0	464	37	109	658	35	143	791	49
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		447	587		320	413	275	1225	522	315	1248	509
v/s Ratio Prot		c0.11					0.03	0.22		c0.04	c0.26	
v/s Ratio Perm		0.36	0.05		c0.41	0.03	0.16		0.03	0.18		0.04
v/c Ratio		1.15	0.12		1.45	0.09	0.40	0.54	0.07	0.45	0.63	0.10
Uniform Delay, d1		31.0	19.2		37.5	27.5	16.4	23.9	19.2	15.9	24.9	19.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.76	1.56	2.71
Incremental Delay, d2		91.3	0.4		219.2	0.4	0.9	1.7	0.2	1.0	2.4	0.4
Delay (s)		122.3	19.6		256.7	27.9	17.3	25.6	19.5	29.0	41.2	52.4
Level of Service		F	B		F	C	B	C	B	C	D	D
Approach Delay (s)		97.2			207.3			23.9			40.6	
Approach LOS		F			F			C			D	

Intersection Summary			
HCM Average Control Delay	79.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	474	97	90	451	90	53	59	67	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1645			1645			1799				
Flt Permitted		0.85			0.84			0.99				
Satd. Flow (perm)		1414			1387			1799				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	92	527	108	100	501	100	59	66	74	0	0	0
RTOR Reduction (vph)	0	10	0	0	9	0	0	32	0	0	0	0
Lane Group Flow (vph)	0	717	0	0	692	0	0	167	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		870			854			471				
v/s Ratio Prot												
v/s Ratio Perm		c0.51			0.50			0.09				
v/c Ratio		0.82			0.81			0.35				
Uniform Delay, d1		9.8			9.6			19.5				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		8.8			8.2			2.1				
Delay (s)		18.5			17.8			21.6				
Level of Service		B			B			C				
Approach Delay (s)		18.5			17.8			21.6			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	472	80	74	509	36	39	76	72	53	235	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		0.99	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1684	1382		1713	1417		1685	1455		1878	
Flt Permitted		0.90	1.00		0.86	1.00		0.82	1.00		0.94	
Satd. Flow (perm)		1529	1382		1490	1417		1409	1455		1774	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	497	84	78	536	38	41	80	76	56	247	58
RTOR Reduction (vph)	0	0	36	0	0	12	0	0	52	0	10	0
Lane Group Flow (vph)	0	553	48	0	614	26	0	121	24	0	351	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		877	792		854	812		451	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.36	0.03		c0.41	0.02		0.09	0.02		c0.20	
v/c Ratio		0.63	0.06		0.72	0.03		0.27	0.05		0.62	
Uniform Delay, d1		10.7	7.1		11.6	7.0		19.0	17.6		21.6	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.4	0.1		5.2	0.1		1.5	0.2		5.0	
Delay (s)		14.1	7.2		16.8	7.0		20.4	17.8		26.6	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.2			16.2			19.4			26.6	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	479	34	44	521	52	45	165	55	117	199	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1532	3065		1652	3730		1585	1663	1370	1568	1680	1397
Flt Permitted	0.36	1.00		0.40	1.00		0.59	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	581	3065		692	3730		977	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	532	38	49	579	58	50	183	61	130	221	34
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	37	0	0	20
Lane Group Flow (vph)	66	562	0	49	625	0	50	183	24	130	221	14
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	277	1462		330	1779		391	665	548	417	672	559
v/s Ratio Prot		c0.18			0.17			0.11			c0.13	
v/s Ratio Perm	0.11			0.07			0.05		0.02	0.12		0.01
v/c Ratio	0.24	0.38		0.15	0.35		0.13	0.28	0.04	0.31	0.33	0.02
Uniform Delay, d1	10.0	10.9		9.6	10.7		12.3	13.1	11.9	13.4	13.5	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.84	0.89	0.76	0.59	0.59	0.27
Incremental Delay, d2	2.0	0.8		0.9	0.5		0.7	1.0	0.2	1.9	1.3	0.1
Delay (s)	12.1	11.7		10.5	11.2		11.0	12.7	9.2	9.8	9.3	3.3
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.7			11.2			11.7			8.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	409	81	70	376	64	57	179	64	87	240	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1327	3134		1519	3129		1579	2918		1452	2998	
Flt Permitted	0.46	1.00		0.42	1.00		0.54	1.00		0.59	1.00	
Satd. Flow (perm)	639	3134		678	3129		891	2918		908	2998	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	431	85	74	396	67	60	188	67	92	253	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	42	0
Lane Group Flow (vph)	63	516	0	74	463	0	60	216	0	92	293	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	307	1504		325	1502		368	1206		375	1239	
v/s Ratio Prot		c0.16			0.15			0.07			0.10	
v/s Ratio Perm	0.10			0.11			0.07			c0.10		
v/c Ratio	0.21	0.34		0.23	0.31		0.16	0.18		0.25	0.24	
Uniform Delay, d1	11.2	12.1		11.4	11.9		13.8	13.9		14.4	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.6		1.6	0.5		1.0	0.3		1.6	0.5	
Delay (s)	12.8	12.8		13.0	12.4		14.8	14.3		15.9	14.8	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.8			12.5			14.4			15.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	428	61	31	503	46	82	194	57	76	473	109
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1594	1651		1369	1974		1534	2998		1534	3013	
Flt Permitted	0.26	1.00		0.32	1.00		0.28	1.00		0.59	1.00	
Satd. Flow (perm)	442	1651		464	1974		453	2998		951	3013	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	99	451	64	33	529	48	86	204	60	80	498	115
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	99	515	0	33	577	0	86	264	0	80	613	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	44.0	39.4		40.8	37.8		26.6	21.8		26.6	21.8	
Effective Green, g (s)	44.0	37.4		40.8	35.8		26.6	19.8		26.6	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	291	726		255	831		203	698		331	702	
v/s Ratio Prot	c0.02	c0.31		0.00	0.29		c0.02	0.09		0.01	c0.20	
v/s Ratio Perm	0.16			0.06			0.11			0.06		
v/c Ratio	0.34	0.71		0.13	0.69		0.42	0.38		0.24	0.87	
Uniform Delay, d1	22.2	19.4		19.6	20.1		29.0	27.4		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	5.8		0.2	4.8		1.4	1.6		0.4	14.2	
Delay (s)	22.9	25.2		19.8	24.9		30.5	29.0		22.3	45.5	
Level of Service	C	C		B	C		C	C		C	D	
Approach Delay (s)		24.8			24.6			29.3			42.9	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	73	379	63	111	483	112	64	150	55	121	348	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3680			3131		1652	3237		1549	3026	
Flt Permitted		0.73			0.74		0.44	1.00		0.61	1.00	
Satd. Flow (perm)		2708			2332		766	3237		994	3026	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	81	421	70	123	537	124	71	167	61	134	387	87
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	572	0	0	784	0	71	228	0	134	474	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1228			1057		337	1424		437	1331	
v/s Ratio Prot								0.07			c0.16	
v/s Ratio Perm		0.21			c0.34		0.09			0.13		
v/c Ratio		0.47			0.74		0.21	0.16		0.31	0.36	
Uniform Delay, d1		14.2			16.9		13.0	12.7		13.6	13.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.3			4.7		1.4	0.2		1.8	0.7	
Delay (s)		15.5			21.6		14.4	12.9		15.4	14.7	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		15.5			21.6			13.2			14.8	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	827	6	19	554	236	1	1	9	202	1	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.40	1.00		0.27	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	679	3206		470	3320	1485		1519			2535	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	103	919	7	21	616	262	1	1	10	224	1	84
RTOR Reduction (vph)	0	0	0	0	0	96	0	7	0	0	53	0
Lane Group Flow (vph)	103	926	0	21	616	166	0	5	0	0	256	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		18.6			18.6	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		18.6			18.6	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	431	2033		298	2105	942		389			649	
v/s Ratio Prot		c0.29			0.19							
v/s Ratio Perm	0.15			0.04		0.11		0.00			c0.10	
v/c Ratio	0.24	0.46		0.07	0.29	0.18		0.01			0.39	
Uniform Delay, d1	5.7	6.8		5.1	6.0	5.5		20.2			22.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.3	0.7		0.5	0.4	0.4		0.1			1.7	
Delay (s)	7.0	7.6		5.6	6.3	5.9		20.2			24.1	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		7.5			6.2			20.2			24.1	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	72.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	124	216	119	94	162	56	140	876	87	128	816	97
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1504		1563	1585		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.24	1.00		0.21	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	746	1504		393	1585		323	3069	1337	285	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	131	227	125	99	171	59	147	922	92	135	859	102
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	48
Lane Group Flow (vph)	131	329	0	99	215	0	147	922	52	135	859	54
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	286	389		203	410		235	1264	551	222	1276	543
v/s Ratio Prot	0.03	c0.22		c0.03	0.14		c0.04	c0.30		0.04	0.28	
v/s Ratio Perm	0.11			0.11			0.25		0.04	0.24		0.04
v/c Ratio	0.46	0.85		0.49	0.52		0.63	0.73	0.09	0.61	0.67	0.10
Uniform Delay, d1	22.5	29.9		22.7	27.0		14.6	21.0	15.3	14.8	20.3	15.3
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.79	0.53	1.00	1.00	1.00
Incremental Delay, d2	5.2	19.8		8.2	4.7		11.0	3.4	0.3	11.8	2.9	0.4
Delay (s)	27.7	49.6		30.9	31.8		20.7	19.9	8.5	26.6	23.2	15.7
Level of Service	C	D		C	C		C	B	A	C	C	B
Approach Delay (s)		43.7			31.5			19.1			22.9	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	179	37	20	173	22	32	141	38	46	251	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1836			1848			1938			1975	
Flt Permitted		0.97			0.96			0.92			0.94	
Satd. Flow (perm)		1781			1790			1800			1871	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	185	38	21	178	23	33	145	39	47	259	51
RTOR Reduction (vph)	0	10	0	0	6	0	0	12	0	0	9	0
Lane Group Flow (vph)	0	236	0	0	216	0	0	205	0	0	348	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		740			744			831			864	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.11			c0.19	
v/c Ratio		0.32			0.29			0.25			0.40	
Uniform Delay, d1		12.8			12.6			10.6			11.6	
Progression Factor		1.00			0.69			1.23			1.00	
Incremental Delay, d2		1.1			1.0			0.7			1.4	
Delay (s)		13.9			9.7			13.8			13.0	
Level of Service		B			A			B			B	
Approach Delay (s)		13.9			9.7			13.8			13.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	190	39	25	180	19	49	199	31	42	206	38
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3056		1576	3119		1518	3119		1550	3075	
Flt Permitted	0.61	1.00		0.59	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	966	3056		987	3119		935	3119		969	3075	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	211	43	28	200	21	54	221	34	47	229	42
RTOR Reduction (vph)	0	26	0	0	12	0	0	14	0	0	17	0
Lane Group Flow (vph)	27	228	0	28	209	0	54	241	0	47	254	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	893		289	912		547	1823		566	1798	
v/s Ratio Prot		c0.07			0.07			0.08			c0.08	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.26		0.10	0.23		0.10	0.13		0.08	0.14	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.93	0.96		0.77	0.76		1.29	1.29		0.40	0.36	
Incremental Delay, d2	0.6	0.7		0.7	0.6		0.3	0.1		0.3	0.2	
Delay (s)	16.3	17.5		13.5	13.8		8.0	8.0		2.6	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.4			13.8			8.0			2.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	165	41	24	153	37	27	245	16	40	321	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	3056		1525	2936			1922			1938	
Flt Permitted	0.62	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1014	3056		977	2936			1822			1840	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	183	46	27	170	41	30	272	18	44	357	37
RTOR Reduction (vph)	0	28	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	73	201	0	27	186	0	0	317	0	0	433	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	406	1222		391	1174			869			878	
v/s Ratio Prot		0.07			0.06							
v/s Ratio Perm	c0.07			0.03				0.17			c0.24	
v/c Ratio	0.18	0.16		0.07	0.16			0.36			0.49	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.8			11.6	
Progression Factor	1.03	0.98		0.78	0.76			1.00			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.0	
Delay (s)	14.0	12.5		9.7	9.8			11.9			13.6	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		12.9			9.8			11.9			13.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	28	19	153	26	40	230	11	33	360	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1970		1584	1975			1981			1979	
Flt Permitted	0.58	1.00		0.65	1.00			0.90			0.96	
Satd. Flow (perm)	1013	1970		1087	1975			1800			1912	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	31	21	170	29	44	256	12	37	400	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	154	0	21	199	0	0	312	0	0	500	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	312	606		334	608			1025			1088	
v/s Ratio Prot		0.08			c0.10							
v/s Ratio Perm	0.05			0.02				0.17			c0.26	
v/c Ratio	0.17	0.25		0.06	0.33			0.30			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.3			7.3			8.2	
Progression Factor	0.82	0.80		0.93	0.93			0.97			1.00	
Incremental Delay, d2	1.1	1.0		0.4	1.4			0.8			1.4	
Delay (s)	14.6	14.5		15.1	17.5			7.8			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.5			17.3			7.8			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	12	92	2	5	10	59	223	5	5	442	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1726		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.41	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1332	1726		1224	1808		693	1647	1428	1049	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	13	102	2	6	11	66	248	6	6	491	80
RTOR Reduction (vph)	0	74	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	57	41	0	2	9	0	66	248	4	6	491	52
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		339	501		416	988	857	629	1200	898
v/s Ratio Prot		0.02			0.01			0.15			c0.25	
v/s Ratio Perm	c0.04			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.15	0.09		0.01	0.02		0.16	0.25	0.00	0.01	0.41	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.7	6.1	5.2	5.2	6.9	5.4
Progression Factor	1.41	2.83		1.00	1.00		0.79	0.74	0.91	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.3		0.0	0.1		0.7	0.5	0.0	0.0	1.0	0.1
Delay (s)	25.8	49.5		17.1	17.1		5.2	5.0	4.8	5.3	7.9	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		41.7			17.1			5.1			7.6	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	255	163	197	214	0	0	0	0	111	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.40	1.00					0.95	1.00	
Satd. Flow (perm)		2905		719	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	268	172	207	225	0	0	0	0	117	495	397
RTOR Reduction (vph)	0	101	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	339	0	207	225	0	0	0	0	117	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		565	1805					545	1096	
v/s Ratio Prot		0.12		c0.07	0.07					0.08	c0.25	
v/s Ratio Perm				c0.12								
v/c Ratio		0.36		0.37	0.12					0.21	0.68	
Uniform Delay, d1		26.4		13.7	11.1					22.5	27.6	
Progression Factor		1.00		2.25	2.17					1.00	1.00	
Incremental Delay, d2		1.1		1.6	0.1					0.9	3.5	
Delay (s)		27.5		32.3	24.3					23.4	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.5			28.1			0.0			30.1	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	29.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	225	0	0	338	119	73	511	224	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1675	3196			2855		1767	1782	1560			
Flt Permitted	0.32	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	568	3196			2855		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	237	0	0	356	125	77	538	236	0	0	0
RTOR Reduction (vph)	0	0	0	0	34	0	0	0	167	0	0	0
Lane Group Flow (vph)	148	237	0	0	447	0	77	538	69	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	687	1974			728		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.16		0.04	c0.30				
v/s Ratio Perm	0.05								0.04			
v/c Ratio	0.22	0.12			0.61		0.15	1.03	0.15			
Uniform Delay, d1	10.4	8.1			33.6		26.6	36.0	26.6			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.1			3.8		0.6	46.3	0.7			
Delay (s)	5.0	3.6			37.4		27.2	82.3	27.3			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			37.4			62.1			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	42.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	491	455	77	507	0	0	0	0	13	436	301
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3099		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3099		205	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	511	474	80	528	0	0	0	0	14	454	314
RTOR Reduction (vph)	0	167	0	0	0	0	0	0	0	0	0	207
Lane Group Flow (vph)	0	818	0	80	528	0	0	0	0	14	454	107
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1116		382	1917					543	1085	520
v/s Ratio Prot		c0.26		0.04	c0.16					0.01	c0.14	0.07
v/s Ratio Perm				0.08								
v/c Ratio		0.73		0.21	0.28					0.03	0.42	0.21
Uniform Delay, d1		27.8		13.9	10.5					22.0	25.4	23.4
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		4.3		0.9	0.3					0.1	1.2	0.9
Delay (s)		32.1		15.0	12.8					22.1	26.6	24.3
Level of Service		C		B	B					C	C	C
Approach Delay (s)		32.1			13.1			0.0			25.6	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	401	99	0	0	142	6	441	456	55	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3109			3168		1555	1653	1530			
Flt Permitted	0.66	0.72			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1014	2311			3168		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	413	102	0	0	146	6	455	470	57	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	36	0	0	0
Lane Group Flow (vph)	206	309	0	0	149	0	455	470	21	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	681	1466			475		575	612	566			
v/s Ratio Prot	c0.11	0.08			c0.05		c0.29	0.28	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.30	0.21			0.31		0.79	0.77	0.04			
Uniform Delay, d1	14.0	13.5			37.9		28.1	27.7	20.1			
Progression Factor	0.25	0.27			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.7		10.7	9.0	0.1			
Delay (s)	4.3	3.8			39.6		38.7	36.7	20.2			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		4.0			39.6			36.7			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	26.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	315	116	105	260	107	83	663	72	99	875	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2955			2936		1508	3069	1309	1508	3099	1298
Flt Permitted		0.77			0.73		0.16	1.00	1.00	0.27	1.00	1.00
Satd. Flow (perm)		2307			2163		261	3069	1309	433	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	328	121	109	271	111	86	691	75	103	911	67
RTOR Reduction (vph)	0	32	0	0	32	0	0	0	46	0	0	33
Lane Group Flow (vph)	0	498	0	0	459	0	86	691	29	103	911	34
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		1023			713		169	1210	508	234	1221	504
v/s Ratio Prot		c0.03					c0.02	0.23		0.02	c0.29	
v/s Ratio Perm		0.17			c0.21		0.19		0.02	0.17		0.03
v/c Ratio		0.49			0.64		0.51	0.57	0.06	0.44	0.75	0.07
Uniform Delay, d1		17.8			24.3		16.6	20.1	16.3	15.8	22.1	16.3
Progression Factor		1.00			1.00		1.43	0.68	0.67	1.10	1.17	1.77
Incremental Delay, d2		1.7			4.4		9.7	1.8	0.2	4.3	3.1	0.2
Delay (s)		19.4			28.7		33.4	15.4	11.1	21.8	28.9	29.2
Level of Service		B			C		C	B	B	C	C	C
Approach Delay (s)		19.4			28.7			16.9			28.2	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	23.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	410	0	0	353	81	53	43	32	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.97				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1734			1704			1654				
Flt Permitted		0.87			1.00			0.98				
Satd. Flow (perm)		1525			1704			1654				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	456	0	0	392	90	59	48	36	0	0	0
RTOR Reduction (vph)	0	0	0	0	13	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	540	0	0	469	0	0	125	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		892			996			483				
v/s Ratio Prot					0.28							
v/s Ratio Perm		c0.35						0.08				
v/c Ratio		0.61			0.47			0.26				
Uniform Delay, d1		8.7			7.7			17.6				
Progression Factor		1.00			0.71			1.00				
Incremental Delay, d2		3.0			1.4			1.3				
Delay (s)		11.7			6.9			18.9				
Level of Service		B			A			B				
Approach Delay (s)		11.7			6.9			18.9			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	374	37	37	355	48	30	112	37	52	148	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.99			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1954			1941			2968			2979	
Flt Permitted		0.95			0.94			0.88			0.86	
Satd. Flow (perm)		1872			1828			2647			2596	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	32	416	41	41	394	53	33	124	41	58	164	50
RTOR Reduction (vph)	0	5	0	0	7	0	0	24	0	0	29	0
Lane Group Flow (vph)	0	484	0	0	481	0	0	174	0	0	243	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		864			844			1100			1078	
v/s Ratio Prot												
v/s Ratio Perm		0.26			c0.26			0.07			c0.09	
v/c Ratio		0.56			0.57			0.16			0.23	
Uniform Delay, d1		12.7			12.8			11.9			12.3	
Progression Factor		0.55			0.40			1.34			0.45	
Incremental Delay, d2		2.1			2.5			0.3			0.5	
Delay (s)		9.2			7.7			16.2			5.9	
Level of Service		A			A			B			A	
Approach Delay (s)		9.2			7.7			16.2			5.9	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	320	49	78	445	82	46	217	97	79	215	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	3034		1572	3077		1587	2962		1585	3070	
Flt Permitted	0.34	1.00		0.47	1.00		0.56	1.00		0.54	1.00	
Satd. Flow (perm)	534	3034		775	3077		943	2962		905	3070	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	356	54	87	494	91	51	241	108	88	239	69
RTOR Reduction (vph)	0	19	0	0	23	0	0	50	0	0	32	0
Lane Group Flow (vph)	57	391	0	87	562	0	51	299	0	88	276	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	181	1027		262	1041		508	1595		487	1653	
v/s Ratio Prot		0.13			c0.18			c0.10			0.09	
v/s Ratio Perm	0.11			0.11			0.05			0.10		
v/c Ratio	0.31	0.38		0.33	0.54		0.10	0.19		0.18	0.17	
Uniform Delay, d1	15.9	16.3		16.0	17.4		7.3	7.7		7.7	7.6	
Progression Factor	0.66	0.63		0.94	0.94		0.72	0.62		1.10	1.11	
Incremental Delay, d2	4.0	0.9		3.3	2.0		0.4	0.3		0.8	0.2	
Delay (s)	14.5	11.2		18.4	18.3		5.6	5.0		9.2	8.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		11.6			18.3			5.1			8.8	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	338	78	83	395	48	45	226	57	46	279	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1508	3016		1430	3722			3485			3519	
Flt Permitted	0.46	1.00		0.48	1.00			0.86			0.88	
Satd. Flow (perm)	734	3016		725	3722			3031			3121	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	356	82	87	416	51	47	238	60	48	294	68
RTOR Reduction (vph)	0	30	0	0	15	0	0	27	0	0	25	0
Lane Group Flow (vph)	62	408	0	87	452	0	0	318	0	0	385	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	350	1438		346	1775			1212			1248	
v/s Ratio Prot		c0.14			0.12							
v/s Ratio Perm	0.08			0.12				0.10			c0.12	
v/c Ratio	0.18	0.28		0.25	0.25			0.26			0.31	
Uniform Delay, d1	9.7	10.3		10.1	10.1			13.1			13.3	
Progression Factor	1.60	1.75		1.12	1.11			0.44			0.73	
Incremental Delay, d2	1.1	0.5		1.6	0.3			0.5			0.6	
Delay (s)	16.6	18.5		12.9	11.6			6.3			10.3	
Level of Service	B	B		B	B			A			B	
Approach Delay (s)		18.2			11.8			6.3			10.3	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	284	91	88	276	88	116	79	45	45	79	115
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1670	1436		3086			1885			1835	
Flt Permitted		0.79	1.00		0.80			0.68			0.91	
Satd. Flow (perm)		1342	1436		2487			1319			1679	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	316	101	98	307	98	129	88	50	50	88	128
RTOR Reduction (vph)	0	0	48	0	32	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	412	53	0	471	0	0	254	0	0	215	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		702	751		1301			426			542	
v/s Ratio Prot												
v/s Ratio Perm		c0.31	0.04		0.19			c0.19			0.13	
v/c Ratio		0.59	0.07		0.36			0.60			0.40	
Uniform Delay, d1		10.7	7.7		9.1			18.4			17.1	
Progression Factor		1.82	4.59		0.53			1.00			1.00	
Incremental Delay, d2		3.5	0.2		0.8			6.0			2.2	
Delay (s)		22.9	35.4		5.6			24.5			19.2	
Level of Service		C	D		A			C			B	
Approach Delay (s)		25.4			5.6			24.5			19.2	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	17.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	271	28	25	311	58	26	130	46	62	145	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1443	3025		1565	3019			3581			3598	
Flt Permitted	0.50	1.00		0.55	1.00			0.90			0.84	
Satd. Flow (perm)	757	3025		909	3019			3234			3071	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	301	31	28	346	64	29	144	51	69	161	70
RTOR Reduction (vph)	0	12	0	0	23	0	0	30	0	0	41	0
Lane Group Flow (vph)	61	320	0	28	387	0	0	194	0	0	259	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	349	1396		420	1393			1343			1276	
v/s Ratio Prot		0.11			c0.13							
v/s Ratio Perm	0.08			0.03				0.06			c0.08	
v/c Ratio	0.17	0.23		0.07	0.28			0.14			0.20	
Uniform Delay, d1	10.2	10.5		9.7	10.8			11.8			12.1	
Progression Factor	0.68	0.68		0.81	0.64			1.03			0.41	
Incremental Delay, d2	0.9	0.3		0.2	0.2			0.2			0.3	
Delay (s)	7.8	7.5		8.0	7.2			12.3			5.2	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		7.5			7.3			12.3			5.2	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	440	26	83	483	213	23	118	109	323	248	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3280			3167			3089			3181	
Flt Permitted		0.78			0.80			0.91			0.71	
Satd. Flow (perm)		2557			2553			2816			2306	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	489	29	92	537	237	26	131	121	359	276	87
RTOR Reduction (vph)	0	6	0	0	60	0	0	65	0	0	16	0
Lane Group Flow (vph)	0	564	0	0	806	0	0	213	0	0	706	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		983			982			1342			603	
v/s Ratio Prot								c0.02				
v/s Ratio Perm		0.22			c0.32			0.05			c0.31	
v/c Ratio		0.57			0.82			0.16			1.27dl	
Uniform Delay, d1		15.8			18.0			10.2			24.0	
Progression Factor		1.48			1.00			1.00			0.81	
Incremental Delay, d2		2.4			7.7			0.3			93.0	
Delay (s)		25.8			25.7			10.4			112.4	
Level of Service		C			C			B			F	
Approach Delay (s)		25.8			25.7			10.4			112.4	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	49.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	871	125	46	760	0	78	0	35	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3041			3090			1619				
Flt Permitted		1.00			0.81			0.79				
Satd. Flow (perm)		3041			2510			1329				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	968	139	51	844	0	87	0	39	0	0	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	1092	0	0	895	0	0	108	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1960			920			236				
v/s Ratio Prot		c0.36										
v/s Ratio Perm					c0.36			c0.08				
v/c Ratio		0.56			0.97			0.46				
Uniform Delay, d1		8.9			28.1			33.1				
Progression Factor		0.11			1.41			1.00				
Incremental Delay, d2		0.4			22.8			6.3				
Delay (s)		1.4			62.4			39.4				
Level of Service		A			E			D				
Approach Delay (s)		1.4			62.4			39.4			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	29.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	216	633	22	108	586	178	58	4	103	205	10	205
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3194		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.31	1.00		0.34	1.00	1.00		0.88		0.44	1.00	1.00
Satd. Flow (perm)	504	3194		597	3320	1485		1594		761	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	240	703	24	120	651	198	64	4	114	228	11	228
RTOR Reduction (vph)	0	2	0	0	0	90	0	92	0	0	0	132
Lane Group Flow (vph)	240	725	0	120	651	108	0	90	0	228	11	96
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	55.5	43.3		48.4	39.2	49.2		11.5		24.5	24.5	37.8
Effective Green, g (s)	55.5	43.3		48.4	39.2	49.2		11.5		24.5	24.5	37.8
Actuated g/C Ratio	0.62	0.48		0.54	0.44	0.55		0.13		0.27	0.27	0.42
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	465	1537		430	1446	812		204		307	476	624
v/s Ratio Prot	c0.08	0.23		0.03	0.20	0.01				c0.08	0.01	0.02
v/s Ratio Perm	c0.24			0.12		0.06		0.06		c0.12		0.04
v/c Ratio	0.52	0.47		0.28	0.45	0.13		0.44		0.74	0.02	0.15
Uniform Delay, d1	8.7	15.7		10.4	17.8	10.0		36.3		28.6	24.0	16.2
Progression Factor	2.62	1.90		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.1	0.9		0.5	1.0	0.1		2.1		9.3	0.0	0.2
Delay (s)	23.9	30.7		10.9	18.8	10.0		38.3		38.0	24.0	16.3
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		29.0			16.1			38.3			27.1	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	511	431	2	323	0	0	0	0	18	0	548
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	568	479	2	359	0	0	0	0	20	0	609
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	359			568			752	931	284	647	931	179
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	359			568			752	931	284	647	931	179
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	27
cM capacity (veh/h)	1189			994			79	263	710	353	263	829

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	284	284	479	122	239	20	609
Volume Left	0	0	0	2	0	20	0
Volume Right	0	0	479	0	0	0	609
cSH	1700	1700	1700	994	1700	353	829
Volume to Capacity	0.17	0.17	0.28	0.00	0.14	0.06	0.73
Queue Length 95th (ft)	0	0	0	0	0	4	167
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	15.8	20.3
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		20.2	
Approach LOS						C	

Intersection Summary			
Average Delay	6.2		
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	529	0	325	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	588	0	361	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	294	294	361
Volume Left (vph)	294	294	361
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.1	6.1	5.6
Degree Utilization, x	0.50	0.50	0.56
Capacity (veh/h)	571	573	620
Control Delay (s)	13.9	13.9	15.3
Approach Delay (s)	13.9		15.3
Approach LOS	B		C

Intersection Summary			
Delay	14.5		
HCM Level of Service	B		
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	472	90	188	584	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3133		1605	3210						3074	
Flt Permitted		1.00		0.33	1.00						0.97	
Satd. Flow (perm)		3133		559	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	524	100	209	649	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	606	0	209	649	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1327		445	1850						976	
v/s Ratio Prot		0.19		c0.06	0.20						c0.05	
v/s Ratio Perm				c0.22								
v/c Ratio		0.46		0.47	0.35						0.16	
Uniform Delay, d1		17.5		16.2	9.6						20.8	
Progression Factor		1.00		0.50	0.42						1.00	
Incremental Delay, d2		1.1		3.0	0.4						0.3	
Delay (s)		18.6		11.0	4.5						21.2	
Level of Service		B		B	A						C	
Approach Delay (s)		18.6			6.1			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	12.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	478	0	0	609	124	163	90	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.97			0.97				
Flt Protected	0.95	1.00			1.00			0.97				
Satd. Flow (prot)	1660	3320			3128			4520				
Flt Permitted	0.23	1.00			1.00			0.97				
Satd. Flow (perm)	401	3320			3128			4520				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	531	0	0	677	138	181	100	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	20	0	0	44	0	0	0	0
Lane Group Flow (vph)	106	531	0	0	795	0	0	301	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	375	1875			1288			1436				
v/s Ratio Prot	0.03	c0.16			c0.25			c0.07				
v/s Ratio Perm	0.13											
v/c Ratio	0.28	0.28			0.62			0.21				
Uniform Delay, d1	17.6	9.6			19.7			21.2				
Progression Factor	0.40	0.33			1.00			1.00				
Incremental Delay, d2	1.7	0.4			2.2			0.3				
Delay (s)	8.7	3.5			21.9			21.5				
Level of Service	A	A			C			C				
Approach Delay (s)		4.4			21.9			21.5			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	342	126	79	366	79	178	78	27	29	85	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.99			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2969			3006			1840			1768	
Flt Permitted		0.68			0.72			0.66			0.94	
Satd. Flow (perm)		2025			2179			1251			1677	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	380	140	88	407	88	198	87	30	32	94	157
RTOR Reduction (vph)	0	39	0	0	22	0	0	6	0	0	69	0
Lane Group Flow (vph)	0	608	0	0	561	0	0	309	0	0	214	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		717			771			616			826	
v/s Ratio Prot												
v/s Ratio Perm		c0.30			0.26			c0.25			0.13	
v/c Ratio		0.85			0.73			0.50			0.26	
Uniform Delay, d1		19.4			18.3			11.1			9.6	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		11.9			5.9			2.9			0.8	
Delay (s)		31.3			24.2			14.0			10.4	
Level of Service		C			C			B			B	
Approach Delay (s)		31.3			24.2			14.0			10.4	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	201	100	203	311	65	168	561	243	91	911	140
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2967		1574	3683		1508	3069	1333	1521	3099	1336
Flt Permitted	0.45	1.00		0.52	1.00		0.13	1.00	1.00	0.32	1.00	1.00
Satd. Flow (perm)	739	2967		862	3683		212	3069	1333	520	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	212	105	214	327	68	177	591	256	96	959	147
RTOR Reduction (vph)	0	70	0	0	21	0	0	0	163	0	0	93
Lane Group Flow (vph)	112	247	0	214	374	0	177	591	93	96	959	54
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	977		338	1213		181	1119	486	291	1130	487
v/s Ratio Prot	0.02	0.08		c0.03	0.10		c0.07	0.19		0.02	0.31	
v/s Ratio Perm	0.11			c0.19			c0.35		0.07	0.12		0.04
v/c Ratio	0.37	0.25		0.63	0.31		0.98	0.53	0.19	0.33	0.85	0.11
Uniform Delay, d1	19.4	20.8		22.2	21.3		19.9	21.2	18.4	15.4	24.8	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.42	1.06	2.39
Incremental Delay, d2	3.6	0.6		8.7	0.7		61.4	1.8	0.9	2.2	6.0	0.3
Delay (s)	23.0	21.5		30.9	21.9		81.3	23.0	19.3	24.2	32.2	43.0
Level of Service	C	C		C	C		F	C	B	C	C	D
Approach Delay (s)		21.9			25.1			32.2			32.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	29.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	97	424	30	33	421	24	31	95	39	36	122	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1957	1466		1994	1480		2015	1506		2000	1511
Flt Permitted		0.73	1.00		0.94	1.00		0.92	1.00		0.92	1.00
Satd. Flow (perm)		1435	1466		1888	1480		1869	1506		1870	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	102	446	32	35	443	25	33	100	41	38	128	79
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	24	0	0	46
Lane Group Flow (vph)	0	548	15	0	478	12	0	133	17	0	166	33
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		662	677		871	683		776	626		777	628
v/s Ratio Prot												
v/s Ratio Perm		c0.38	0.01		0.25	0.01		0.07	0.01		c0.09	0.02
v/c Ratio		0.83	0.02		0.55	0.02		0.17	0.03		0.21	0.05
Uniform Delay, d1		15.2	9.5		12.6	9.5		12.0	11.2		12.2	11.4
Progression Factor		1.00	1.00		0.62	0.55		0.92	1.00		1.03	0.93
Incremental Delay, d2		11.4	0.1		2.4	0.0		0.4	0.1		0.6	0.2
Delay (s)		26.6	9.6		10.2	5.2		11.4	11.3		13.1	10.7
Level of Service		C	A		B	A		B	B		B	B
Approach Delay (s)		25.7			10.0			11.4			12.3	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	394	20	41	269	31	10	107	21	104	203	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3077		1550	3052		1550	3024		1550	2977	
Flt Permitted	0.95	1.00		0.49	1.00		0.55	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3077		795	3052		897	3024		1080	2977	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	438	22	46	299	34	11	119	23	116	226	80
RTOR Reduction (vph)	0	6	0	0	13	0	0	13	0	0	47	0
Lane Group Flow (vph)	128	454	0	46	320	0	11	129	0	116	259	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1515		269	1033		373	1256		449	1237	
v/s Ratio Prot	c0.08	c0.15			0.10			0.04			0.09	
v/s Ratio Perm				0.06			0.01			c0.11		
v/c Ratio	0.77	0.30		0.17	0.31		0.03	0.10		0.26	0.21	
Uniform Delay, d1	28.2	9.8		15.1	15.9		11.2	11.6		12.4	12.2	
Progression Factor	1.17	0.39		0.75	0.73		1.05	1.15		1.13	1.14	
Incremental Delay, d2	22.2	0.4		1.3	0.7		0.1	0.1		1.4	0.4	
Delay (s)	55.1	4.2		12.7	12.4		12.0	13.5		15.4	14.3	
Level of Service	E	A		B	B		B	B		B	B	
Approach Delay (s)		15.3			12.4			13.4			14.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	83	332	68	197	337	61	25	245	20	55	270	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1550	3020		1550	3028			3272			3225	
Flt Permitted	0.50	1.00		0.95	1.00			0.90			0.86	
Satd. Flow (perm)	809	3020		1550	3028			2966			2803	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	92	369	76	219	374	68	28	272	22	61	300	61
RTOR Reduction (vph)	0	26	0	0	23	0	0	8	0	0	21	0
Lane Group Flow (vph)	92	419	0	219	419	0	0	314	0	0	401	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	249	929		143	1351			1141			1078	
v/s Ratio Prot		c0.14		c0.14	0.14							
v/s Ratio Perm	0.11							0.11			c0.14	
v/c Ratio	0.37	0.45		1.53	0.31			0.28			0.37	
Uniform Delay, d1	17.6	18.1		29.5	11.6			13.8			14.4	
Progression Factor	0.86	0.80		1.28	1.15			0.87			0.71	
Incremental Delay, d2	4.1	1.5		257.2	0.3			0.6			1.0	
Delay (s)	19.1	16.0		294.9	13.6			12.6			11.2	
Level of Service	B	B		F	B			B			B	
Approach Delay (s)		16.5			106.8			12.6			11.2	
Approach LOS		B			F			B			B	

Intersection Summary			
HCM Average Control Delay	45.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	355	26	73	602	73	54	108	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1613			1602			3249				
Flt Permitted		0.96			0.92			0.99				
Satd. Flow (perm)		1558			1484			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	394	29	81	669	81	60	120	180	0	0	0
RTOR Reduction (vph)	0	3	0	0	5	0	0	137	0	0	0	0
Lane Group Flow (vph)	0	438	0	0	826	0	0	223	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		995			947			775				
v/s Ratio Prot												
v/s Ratio Perm		0.28			c0.56			0.07				
v/c Ratio		0.44			0.87			0.29				
Uniform Delay, d1		5.9			9.6			20.2				
Progression Factor		2.02			1.00			1.00				
Incremental Delay, d2		1.3			10.9			0.9				
Delay (s)		13.2			20.5			21.1				
Level of Service		B			C			C				
Approach Delay (s)		13.2			20.5			21.1			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	18.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	93	414	579	38	117	162
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	98	436	609	40	123	171
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.84				0.84	0.84
vC, conflicting volume	666				1284	651
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	504				1242	486
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				13	65
cM capacity (veh/h)	864				142	481

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	534	649	123	171
Volume Left	98	0	123	0
Volume Right	0	40	0	171
cSH	864	1700	142	481
Volume to Capacity	0.11	0.38	0.87	0.35
Queue Length 95th (ft)	10	0	143	40
Control Delay (s)	3.0	0.0	104.6	16.5
Lane LOS	A		F	C
Approach Delay (s)	3.0	0.0	53.4	
Approach LOS			F	

Intersection Summary			
Average Delay	11.7		
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	684	0	1	600	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	760	0	1	667	3	32
RTOR Reduction (vph)	0	0	0	0	27	0
Lane Group Flow (vph)	760	0	0	668	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	251	
v/s Ratio Prot	c0.43				c0.01	
v/s Ratio Perm				0.38		
v/c Ratio	0.63			1.05	0.03	
Uniform Delay, d1	7.0			27.0	29.8	
Progression Factor	0.10			1.00	1.00	
Incremental Delay, d2	1.1			49.1	0.2	
Delay (s)	1.8			76.1	30.1	
Level of Service	A			E	C	
Approach Delay (s)	1.8			76.1	30.1	
Approach LOS	A			E	C	

Intersection Summary			
HCM Average Control Delay	36.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	236	594	30	386	0	0	0	0	17	6	242
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	262	660	33	429	0	0	0	0	19	7	269
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	429			262			1091	1088	461	627	758	429
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	429			262			1091	1088	461	627	758	429
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	95	98	53
cM capacity (veh/h)	1141			1285			88	212	553	365	330	574

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	175	747	462	26	269
Volume Left	0	0	33	19	0
Volume Right	0	660	0	0	269
cSH	1700	1700	1285	355	574
Volume to Capacity	0.10	0.44	0.03	0.07	0.47
Queue Length 95th (ft)	0	0	2	6	62
Control Delay (s)	0.0	0.0	0.8	15.9	16.7
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.8	16.6	
Approach LOS				C	

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	253	0	417	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	281	0	463	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	141	141	463
Volume Left (vph)	141	141	463
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.3	6.3	5.0
Degree Utilization, x	0.25	0.25	0.64
Capacity (veh/h)	543	544	702
Control Delay (s)	10.1	10.1	16.3
Approach Delay (s)	10.1		16.3
Approach LOS	B		C

Intersection Summary			
Delay	14.0		
HCM Level of Service	B		
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	545	337	322	845	0	0	0	0	305	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3427					1359	3807	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3427					1359	3807	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	574	355	339	889	0	0	0	0	321	283	392
RTOR Reduction (vph)	0	0	206	0	0	0	0	0	0	0	52	113
Lane Group Flow (vph)	0	574	149	0	1228	0	0	0	0	177	571	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		67.4					23.0	23.0	68.0
Effective Green, g (s)		39.0	39.0		67.4					23.0	23.0	68.0
Actuated g/C Ratio		0.24	0.24		0.42					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		775	300		1444					195	547	482
v/s Ratio Prot		c0.18			c0.36					0.13	c0.15	
v/s Ratio Perm			0.12									0.07
v/c Ratio		0.74	0.50		0.85					0.91	1.04	0.17
Uniform Delay, d1		55.8	52.0		41.8					67.5	68.5	28.5
Progression Factor		1.00	1.00		0.16					1.00	1.00	1.00
Incremental Delay, d2		6.3	5.7		0.5					39.2	50.3	0.2
Delay (s)		62.1	57.8		7.1					106.7	118.8	28.7
Level of Service		E	E		A					F	F	C
Approach Delay (s)		60.5			7.1			0.0			98.9	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	51.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	32.6
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	290	561	0	0	854	231	313	204	202	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3055				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3055				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	322	623	0	0	949	257	348	227	224	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	94	0	77	0	0	0	0
Lane Group Flow (vph)	322	623	0	0	949	163	271	451	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	84.6	84.6			36.4	36.4	12.0	12.0				
Effective Green, g (s)	84.6	84.6			36.4	36.4	12.0	12.0				
Actuated g/C Ratio	0.53	0.53			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	849	1814			730	338	117	229				
v/s Ratio Prot	c0.20	0.18			c0.30		c0.17	0.15				
v/s Ratio Perm						0.11						
v/c Ratio	0.38	0.34			1.30	0.48	2.32	1.97				
Uniform Delay, d1	22.2	21.7			61.8	53.6	74.0	74.0				
Progression Factor	0.06	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			145.0	1.1	618.2	452.1				
Delay (s)	1.4	1.3			206.8	54.7	692.2	526.1				
Level of Service	A	A			F	D	F	F				
Approach Delay (s)		1.3			174.3			582.5			0.0	
Approach LOS		A			F			F			A	

Intersection Summary			
HCM Average Control Delay	229.5	HCM Level of Service	F
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	502	134	87	266	66	104	504	68	96	1150	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1575	1600	1373	1596	1791		1579	3015		1537	3027	
Flt Permitted	0.33	1.00	1.00	0.15	1.00		0.12	1.00		0.32	1.00	
Satd. Flow (perm)	549	1600	1373	251	1791		201	3015		523	3027	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	145	528	141	92	280	69	109	531	72	101	1211	126
RTOR Reduction (vph)	0	0	95	0	10	0	0	12	0	0	9	0
Lane Group Flow (vph)	145	528	46	92	339	0	109	591	0	101	1328	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.3	29.3	29.3	33.3	27.8		39.6	34.1		39.6	34.1	
Effective Green, g (s)	34.3	30.3	29.3	31.3	27.8		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.38	0.34	0.33	0.35	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	279	542	450	156	557		154	1150		271	1155	
v/s Ratio Prot	c0.03	c0.33		0.03	0.19		c0.04	0.20		0.02	c0.44	
v/s Ratio Perm	0.16		0.03	0.18			0.26			0.14		
v/c Ratio	0.52	0.97	0.10	0.59	0.61		0.71	0.51		0.37	1.15	
Uniform Delay, d1	19.6	29.2	20.9	22.3	26.2		21.2	21.3		16.5	27.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	32.8	0.5	5.6	4.9		13.8	1.6		0.9	77.9	
Delay (s)	21.2	61.9	21.4	27.9	31.1		35.0	22.9		17.3	105.5	
Level of Service	C	E	C	C	C		D	C		B	F	
Approach Delay (s)		47.7			30.4			24.8			99.3	
Approach LOS		D			C			C			F	

Intersection Summary			
HCM Average Control Delay	62.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	87	454	109	13	324	21	48	57	19	20	88	79
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.94	
Flt Protected		0.99	1.00		1.00	1.00		0.98			0.99	
Satd. Flow (prot)		1963	1467		1629	1381		1890			1857	
Flt Permitted		0.89	1.00		0.98	1.00		0.86			0.97	
Satd. Flow (perm)		1764	1467		1597	1381		1653			1815	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	92	478	115	14	341	22	51	60	20	21	93	83
RTOR Reduction (vph)	0	0	45	0	0	11	0	10	0	0	40	0
Lane Group Flow (vph)	0	570	70	0	355	11	0	121	0	0	157	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		868	722		786	680		687			754	
v/s Ratio Prot												
v/s Ratio Perm		c0.32	0.05		0.22	0.01		0.07			c0.09	
v/c Ratio		0.66	0.10		0.45	0.02		0.18			0.21	
Uniform Delay, d1		12.4	8.8		10.8	8.4		12.0			12.2	
Progression Factor		1.00	1.00		1.85	2.62		1.00			1.99	
Incremental Delay, d2		3.9	0.3		1.8	0.0		0.6			0.6	
Delay (s)		16.2	9.1		21.7	22.2		12.5			24.8	
Level of Service		B	A		C	C		B			C	
Approach Delay (s)		15.0			21.8			12.5			24.8	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	18.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	107	239	90	11	218	10	46	108	18	14	175	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.98	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1742	1443		1728	1487		1712	1489		1703	
Flt Permitted		0.80	1.00		0.98	1.00		0.86	1.00		0.98	
Satd. Flow (perm)		1411	1443		1691	1487		1494	1489		1681	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	113	252	95	12	229	11	48	114	19	15	184	82
RTOR Reduction (vph)	0	0	58	0	0	7	0	0	10	0	23	0
Lane Group Flow (vph)	0	365	37	0	241	4	0	162	9	0	258	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		499	511		598	526		736	733		828	
v/s Ratio Prot												
v/s Ratio Perm		c0.26	0.03		0.14	0.00		0.11	0.01		c0.15	
v/c Ratio		0.73	0.07		0.40	0.01		0.22	0.01		0.31	
Uniform Delay, d1		18.3	13.9		15.8	13.6		9.4	8.4		9.9	
Progression Factor		1.80	3.68		0.96	0.98		0.16	0.20		1.07	
Incremental Delay, d2		7.3	0.2		2.0	0.0		0.1	0.0		1.0	
Delay (s)		40.2	51.5		17.1	13.3		1.6	1.7		11.6	
Level of Service		D	D		B	B		A	A		B	
Approach Delay (s)		42.5			17.0			1.6			11.6	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	23.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	167	45	96	8	16	9	43	224	8	20	458	199
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.99			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1873	1440		1782			1991			1976	1382
Flt Permitted		0.81	1.00		0.93			0.89			0.98	1.00
Satd. Flow (perm)		1573	1440		1686			1780			1947	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	186	50	107	9	18	10	48	249	9	22	509	221
RTOR Reduction (vph)	0	0	63	0	7	0	0	2	0	0	0	92
Lane Group Flow (vph)	0	236	44	0	30	0	0	304	0	0	531	129
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		690	598		441			876			959	680
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.10	0.03		0.02			0.17			c0.27	0.09
v/c Ratio		0.34	0.07		0.07			0.35			0.55	0.19
Uniform Delay, d1		12.9	11.5		18.0			10.1			11.5	9.2
Progression Factor		1.00	1.79		1.00			0.53			0.64	0.22
Incremental Delay, d2		1.1	0.2		0.3			0.7			1.8	0.5
Delay (s)		14.0	20.7		18.3			6.0			9.1	2.5
Level of Service		B	C		B			A			A	A
Approach Delay (s)		16.1			18.3			6.0			7.1	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	922	289	666	1163	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4575		1621	3320					1489	2913	1442
Flt Permitted		1.00		0.10	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4575		173	3320					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	971	304	701	1224	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	49	0	0	0	0	0	0	0	0	9	62
Lane Group Flow (vph)	0	1226	0	701	1224	0	0	0	0	308	603	209
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		35.0		74.9	74.9					28.1	28.1	28.1
Effective Green, g (s)		35.0		74.9	74.9					28.1	28.1	28.1
Actuated g/C Ratio		0.30		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1392		558	2162					364	712	352
v/s Ratio Prot		0.27		c0.39	0.37							
v/s Ratio Perm				c0.43						0.21	0.21	0.14
v/c Ratio		0.88		1.26	0.57					0.85	0.85	0.59
Uniform Delay, d1		38.0		33.0	11.1					41.4	41.4	38.4
Progression Factor		1.00		0.86	2.10					1.00	1.00	1.00
Incremental Delay, d2		8.3		119.4	0.3					16.7	9.4	2.8
Delay (s)		46.3		147.7	23.6					58.1	50.8	41.2
Level of Service		D		F	C					E	D	D
Approach Delay (s)		46.3			68.8			0.0			50.5	
Approach LOS		D			E			A			D	

Intersection Summary			
HCM Average Control Delay	57.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	118.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1094	0	0	1423	269	406	333	377	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4490				
Flt Permitted	0.07	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	220	3353			3241	1489		4490				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1152	0	0	1498	283	427	351	397	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	68	0	75	0	0	0	0
Lane Group Flow (vph)	359	1152	0	0	1498	215	0	1100	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	74.0	74.0			54.1	54.1		29.0				
Effective Green, g (s)	74.0	74.0			54.1	54.1		29.0				
Actuated g/C Ratio	0.64	0.64			0.47	0.47		0.25				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	495	2158			1525	700		1132				
v/s Ratio Prot	c0.09	0.34			c0.46							
v/s Ratio Perm	0.38					0.14		0.25				
v/c Ratio	0.73	0.53			0.98	0.31		0.97				
Uniform Delay, d1	31.6	11.1			30.0	18.8		42.6				
Progression Factor	1.55	0.03			0.90	1.06		1.00				
Incremental Delay, d2	2.6	0.5			3.9	0.1		20.4				
Delay (s)	51.7	0.7			31.0	20.1		63.0				
Level of Service	D	A			C	C		E				
Approach Delay (s)		12.8			29.3			63.0			0.0	
Approach LOS		B			C			E			A	

Intersection Summary			
HCM Average Control Delay	32.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	118.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	760	399	102	1183	99	227	179	66	85	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1313	1602	3284		1578	3002		1540	2941	
Flt Permitted	0.11	1.00	1.00	0.35	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	174	3273	1313	589	3284		654	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	139	800	420	107	1245	104	239	188	69	89	171	127
RTOR Reduction (vph)	0	0	169	0	6	0	0	38	0	0	107	0
Lane Group Flow (vph)	139	800	251	107	1343	0	239	219	0	89	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.8	52.3	68.7	43.3	34.3		38.2	26.4		26.6	18.3	
Effective Green, g (s)	64.8	52.3	68.7	43.3	34.3		38.2	26.4		26.6	18.3	
Actuated g/C Ratio	0.56	0.45	0.60	0.38	0.30		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	425	1489	784	301	979		349	689		264	468	
v/s Ratio Prot	c0.08	c0.24	0.05	0.03	c0.41		c0.10	0.07		0.02	0.07	
v/s Ratio Perm	0.11		0.15	0.11			c0.13			0.05		
v/c Ratio	0.33	0.54	0.32	0.36	1.37		0.68	0.32		0.34	0.41	
Uniform Delay, d1	17.4	22.6	11.5	24.0	40.4		30.5	36.8		36.1	43.5	
Progression Factor	0.78	0.77	1.36	1.00	1.00		1.03	1.05		1.00	1.00	
Incremental Delay, d2	1.6	1.1	0.2	0.7	174.0		5.2	0.9		0.8	2.1	
Delay (s)	15.2	18.4	15.9	24.7	214.4		36.7	39.5		36.8	45.5	
Level of Service	B	B	B	C	F		D	D		D	D	
Approach Delay (s)		17.3			200.4			38.1			43.5	
Approach LOS		B			F			D			D	

Intersection Summary			
HCM Average Control Delay	94.9	HCM Level of Service	F
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	250	367	182	430	107	362	340	107	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1707	2925		1653	3269		1620	3381		1580	3183	
Flt Permitted	0.40	1.00		0.18	1.00		0.32	1.00		0.48	1.00	
Satd. Flow (perm)	723	2925		316	3269		544	3381		802	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	263	386	192	453	113	381	358	113	217	429	59
RTOR Reduction (vph)	0	225	0	0	18	0	0	26	0	0	9	0
Lane Group Flow (vph)	48	424	0	192	548	0	381	445	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.6	28.9		46.8	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	35.6	28.9		46.8	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.31	0.25		0.41	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	281	735		290	1026		454	1299		334	888	
v/s Ratio Prot	0.01	0.15		c0.08	0.17		c0.15	0.13		0.05	0.15	
v/s Ratio Perm	0.04			c0.19			c0.26			0.18		
v/c Ratio	0.17	0.58		0.66	0.53		0.84	0.34		0.65	0.54	
Uniform Delay, d1	28.2	37.7		24.9	32.5		20.8	25.1		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.98	
Incremental Delay, d2	0.3	3.3		5.8	2.0		13.1	0.7		4.2	2.2	
Delay (s)	28.6	41.0		30.7	34.5		33.9	25.8		33.0	36.5	
Level of Service	C	D		C	C		C	C		C	D	
Approach Delay (s)		40.1			33.5			29.4			35.5	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	578	287	10	376	66	718	349	9	188	594	174
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.98		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2965			3034		1452	3229		1523	2874	
Flt Permitted		0.71			0.92		0.20	1.00		0.49	1.00	
Satd. Flow (perm)		2128			2806		303	3229		781	2874	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	112	642	319	11	418	73	798	388	10	209	660	193
RTOR Reduction (vph)	0	72	0	0	21	0	0	3	0	0	42	0
Lane Group Flow (vph)	0	1001	0	0	481	0	798	395	0	209	811	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		870			734		201	1192		382	1061	
v/s Ratio Prot		c0.07					c0.24	0.12		0.03	0.28	
v/s Ratio Perm		c0.37			0.17		c1.46			0.20		
v/c Ratio		1.15			0.65		3.97	0.33		0.55	0.76	
Uniform Delay, d1		20.0			21.4		16.9	14.7		12.8	18.0	
Progression Factor		1.00			1.47		0.98	0.87		1.00	1.00	
Incremental Delay, d2		81.0			0.4		1337.6	0.1		5.5	5.3	
Delay (s)		101.0			31.9		1354.3	12.9		18.3	23.3	
Level of Service		F			C		F	B		B	C	
Approach Delay (s)		101.0			31.9			907.9			22.3	
Approach LOS		F			C			F			C	

Intersection Summary			
HCM Average Control Delay	321.9	HCM Level of Service	F
HCM Volume to Capacity ratio	2.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	122.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	198	222	331	159	27	412	1135	991	33	830	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.98		1.00	0.93		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1707	1840		1601	1991		1676	3012		1437	3283	
Flt Permitted	0.64	1.00		0.34	1.00		0.23	1.00		0.13	1.00	
Satd. Flow (perm)	1144	1840		574	1991		412	3012		195	3283	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	204	229	341	164	28	425	1170	1022	34	856	68
RTOR Reduction (vph)	0	62	0	0	9	0	0	242	0	0	9	0
Lane Group Flow (vph)	69	371	0	341	183	0	425	1950	0	34	915	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	422	679		212	735		196	1436		93	1566	
v/s Ratio Prot		0.20			0.09			0.65			0.28	
v/s Ratio Perm	0.06			c0.59			c1.03			0.17		
v/c Ratio	0.16	0.55		1.61	0.25		2.17	1.36		0.37	0.58	
Uniform Delay, d1	13.8	16.2		20.5	14.2		17.0	17.0		10.8	12.3	
Progression Factor	1.00	1.00		1.34	1.34		1.00	1.00		1.01	0.93	
Incremental Delay, d2	0.8	3.1		275.8	0.1		542.3	165.8		4.7	0.7	
Delay (s)	14.6	19.3		303.3	19.2		559.3	182.8		15.7	12.2	
Level of Service	B	B		F	B		F	F		B	B	
Approach Delay (s)		18.7			201.0			243.9			12.3	
Approach LOS		B			F			F			B	

Intersection Summary			
HCM Average Control Delay	166.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.92		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	132.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	750	449	534	18	3	10	9	46	9	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.98	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.94	
Flt Protected		1.00		0.98				0.99			0.97	
Satd. Flow (prot)		3160		3064				1811			1824	
Flt Permitted		0.95		0.59				0.96			0.89	
Satd. Flow (perm)		3009		1841				1750			1672	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	789	473	562	19	3	11	9	48	9	0	3
RTOR Reduction (vph)	0	0	0	2	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	791	0	1052	0	0	0	33	0	0	13	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom				Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7				2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		833		878				377			360	
v/s Ratio Prot				c0.11								
v/s Ratio Perm		0.26		c0.39				c0.02			0.01	
v/c Ratio		0.95		2.26dl				0.09			0.04	
Uniform Delay, d1		23.1		19.0				20.4			20.2	
Progression Factor		1.40		0.82				1.00			1.00	
Incremental Delay, d2		7.7		99.3				0.5			0.2	
Delay (s)		39.9		115.0				20.9			20.4	
Level of Service		D		F				C			C	
Approach Delay (s)		39.9		115.0				20.9			20.4	
Approach LOS		D		F				C			C	

Intersection Summary			
HCM Average Control Delay	772.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	156.7%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	1155
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1557	
Flt Permitted		1.00	
Satd. Flow (perm)		1557	
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	5	3	1216
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	1219	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.78	
v/s Ratio Perm			
v/c Ratio		5.08	
Uniform Delay, d1		27.5	
Progression Factor		1.23	
Incremental Delay, d2		1836.5	
Delay (s)		1870.3	
Level of Service		F	
Approach Delay (s)		1870.3	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	347	1591	762	62	91	245
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.99		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3291	3283		1660	1485
Flt Permitted		0.61	1.00		0.95	1.00
Satd. Flow (perm)		2025	3283		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	386	1768	847	69	101	272
RTOR Reduction (vph)	0	0	9	0	0	133
Lane Group Flow (vph)	0	2154	907	0	101	139
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1246	2020		434	388
v/s Ratio Prot			0.28		0.06	
v/s Ratio Perm		c1.06				c0.09
v/c Ratio		1.73	0.45		0.23	0.36
Uniform Delay, d1		12.5	6.6		18.9	19.6
Progression Factor		2.00	0.97		1.26	1.58
Incremental Delay, d2		328.2	0.6		1.2	2.5
Delay (s)		353.2	7.1		25.0	33.4
Level of Service		F	A		C	C
Approach Delay (s)		353.2	7.1		31.2	
Approach LOS		F	A		C	

Intersection Summary			
HCM Average Control Delay	226.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	102	1583	734	148	259	92
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3122	3107		1506	1343
Flt Permitted		0.78	1.00		0.95	1.00
Satd. Flow (perm)		2429	3107		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	107	1666	773	156	273	97
RTOR Reduction (vph)	0	0	26	0	0	63
Lane Group Flow (vph)	0	1773	903	0	273	34
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1271	1625		533	475
v/s Ratio Prot			0.29		c0.18	
v/s Ratio Perm		c0.73				0.03
v/c Ratio		1.39	0.56		0.51	0.07
Uniform Delay, d1		15.5	10.4		16.6	13.9
Progression Factor		1.10	1.31		1.63	3.36
Incremental Delay, d2		178.2	1.1		3.1	0.3
Delay (s)		195.3	14.8		30.1	47.0
Level of Service		F	B		C	D
Approach Delay (s)		195.3	14.8		34.6	
Approach LOS		F	B		C	

Intersection Summary			
HCM Average Control Delay	121.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1379	319	117	752	212	55
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.97	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2417		1788	2506	1749	
Flt Permitted	1.00		0.13	1.00	0.96	
Satd. Flow (perm)	2417		243	2506	1749	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1407	326	119	767	216	56
RTOR Reduction (vph)	13	0	0	0	13	0
Lane Group Flow (vph)	1720	0	119	767	259	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1153		116	1195	646	
v/s Ratio Prot	c0.71			0.31	c0.15	
v/s Ratio Perm			0.49			
v/c Ratio	1.49		1.03	0.64	0.40	
Uniform Delay, d1	17.0		17.0	12.8	15.2	
Progression Factor	1.52		1.00	1.00	1.00	
Incremental Delay, d2	221.7		90.7	2.7	1.9	
Delay (s)	247.5		107.7	15.5	17.0	
Level of Service	F		F	B	B	
Approach Delay (s)	247.5			27.9	17.0	
Approach LOS	F			C	B	

Intersection Summary			
HCM Average Control Delay	158.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	111.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1642	83	108	849	1	70	0	149	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.30	1.00	1.00	0.08	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	601	3431	1479	127	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1824	92	120	943	1	78	0	166	0	0	0
RTOR Reduction (vph)	0	0	27	0	0	0	0	0	141	0	0	0
Lane Group Flow (vph)	1	1824	65	120	943	1	0	78	25	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	49.8	49.8	49.8	67.3	67.3	67.3		9.7	9.7			
Effective Green, g (s)	49.8	49.8	49.8	67.3	67.3	67.3		9.7	9.7			
Actuated g/C Ratio	0.59	0.59	0.59	0.79	0.79	0.79		0.11	0.11			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	352	2010	867	350	2629	1211		176	171			
v/s Ratio Prot		c0.53		0.06	c0.28							
v/s Ratio Perm	0.00		0.04	0.21		0.00		c0.05	0.02			
v/c Ratio	0.00	0.91	0.07	0.34	0.36	0.00		0.44	0.15			
Uniform Delay, d1	7.3	15.6	7.6	14.0	2.6	1.8		35.1	33.9			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	7.4	0.2	0.6	0.1	0.0		1.8	0.4			
Delay (s)	7.3	23.0	7.8	14.5	2.7	1.8		36.9	34.3			
Level of Service	A	C	A	B	A	A		D	C			
Approach Delay (s)		22.3			4.0			35.1			0.0	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	9	924	810	29	71	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3098	3083		1533	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2924	3083		1533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	10	1027	900	32	79	14
RTOR Reduction (vph)	0	0	3	0	7	0
Lane Group Flow (vph)	0	1037	929	0	86	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1072	2192		119	
v/s Ratio Prot			c0.30		c0.06	
v/s Ratio Perm		c0.35				
v/c Ratio		0.97	0.42		0.72	
Uniform Delay, d1		28.0	5.4		40.5	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		20.7	0.2		31.1	
Delay (s)		48.6	0.3		71.7	
Level of Service		D	A		E	
Approach Delay (s)		48.6	0.3		71.7	
Approach LOS		D	A		E	

Intersection Summary			
HCM Average Control Delay	27.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	496	0	1	564	38	3	2	28	192	0	131
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1771			3340			1467			1670	1348
Flt Permitted		0.87			0.95			0.93			0.88	1.00
Satd. Flow (perm)		1554			3190			1370			1545	1348
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	64	551	0	1	627	42	3	2	31	213	0	146
RTOR Reduction (vph)	0	0	0	0	6	0	0	28	0	0	0	98
Lane Group Flow (vph)	0	615	0	0	664	0	0	8	0	0	213	48
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		567			1714			145			478	444
v/s Ratio Prot					c0.06						c0.08	
v/s Ratio Perm		c0.40			0.14			0.01			c0.05	0.04
v/c Ratio		1.08			0.39			0.06			0.45	0.11
Uniform Delay, d1		27.0			11.8			34.2			24.4	19.8
Progression Factor		1.00			1.28			1.00			1.00	1.00
Incremental Delay, d2		62.8			0.1			0.8			3.0	0.5
Delay (s)		89.8			15.2			34.9			27.4	20.3
Level of Service		F			B			C			C	C
Approach Delay (s)		89.8			15.2			34.9			24.5	
Approach LOS		F			B			C			C	

Intersection Summary			
HCM Average Control Delay	44.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

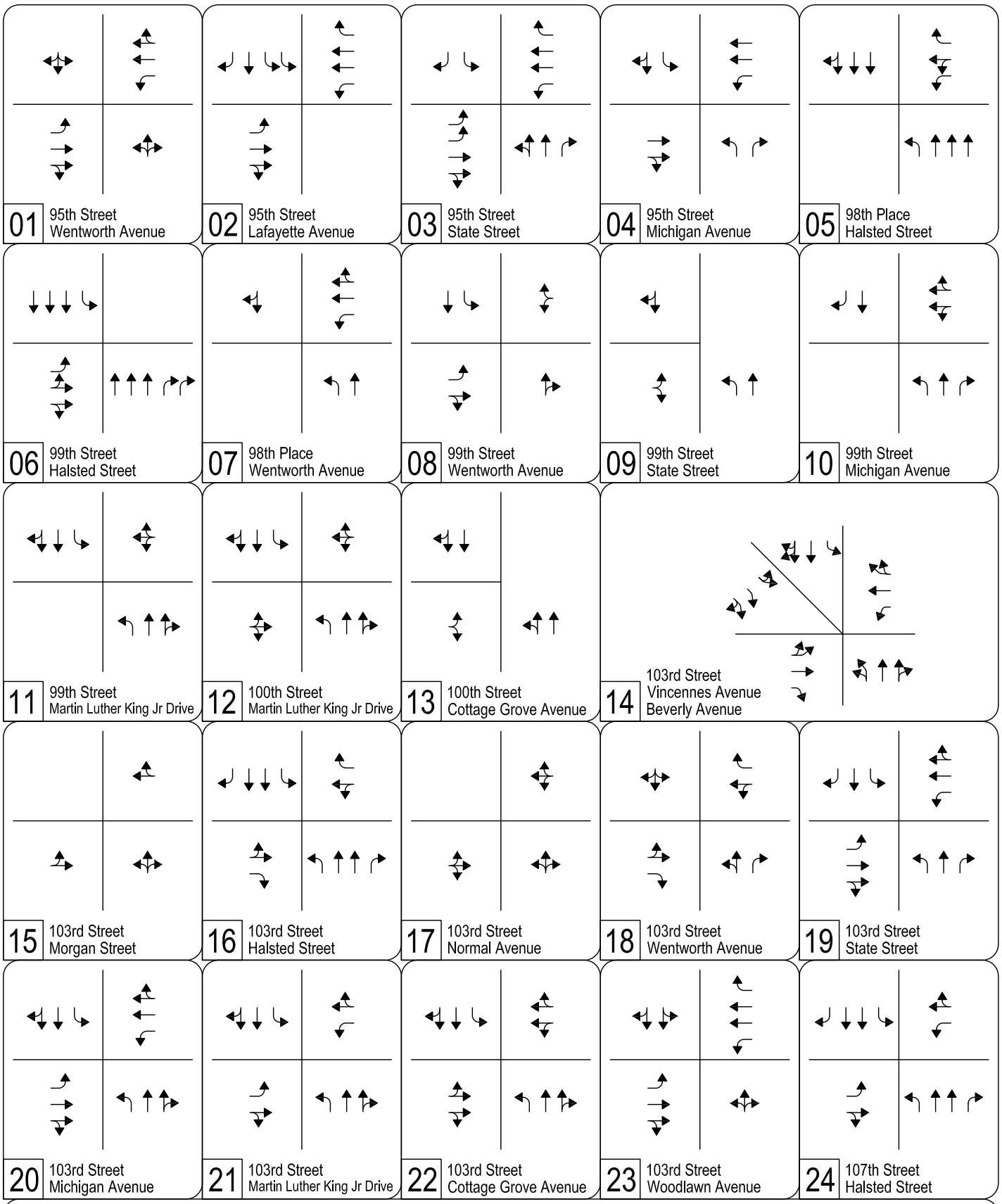

Halsted Rail Alternative (2030) Intersection Lane Geometry

Page 1 of 3

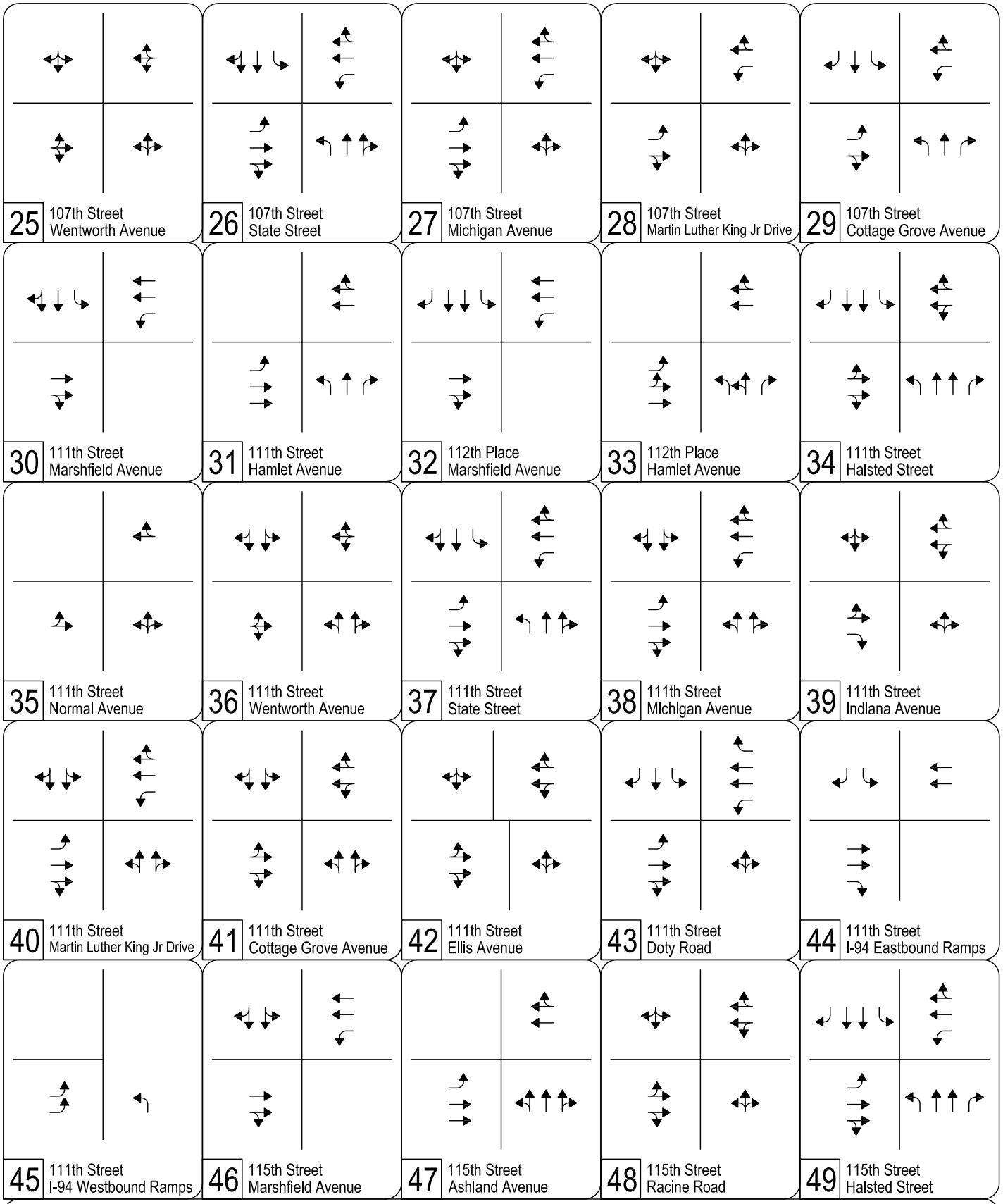

Halsted Rail Alternative (2030) Intersection Lane Geometry

Page 2 of 3

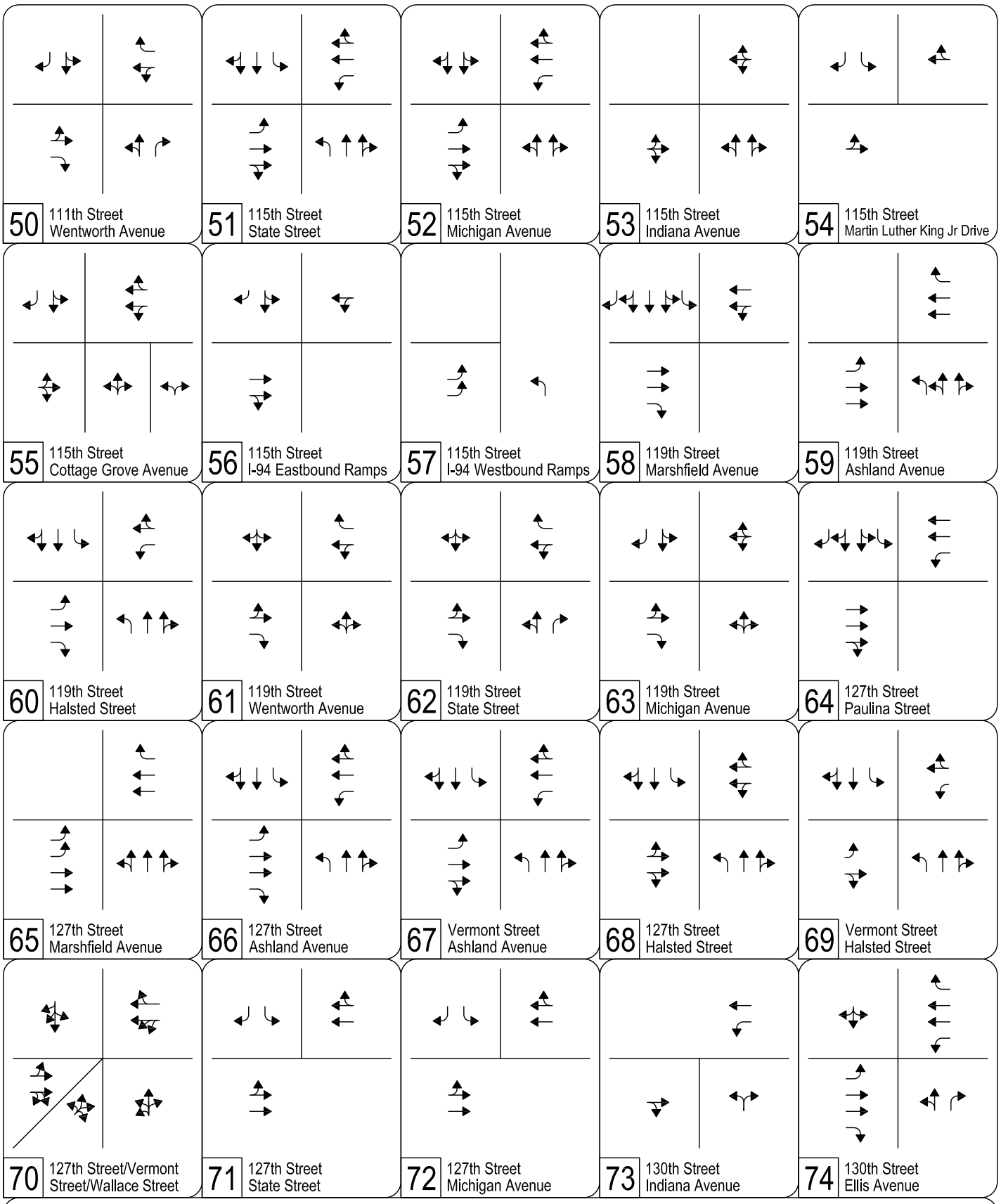

Halsted Rail Alternative (2030) Intersection Lane Geometry

Page 3 of 3

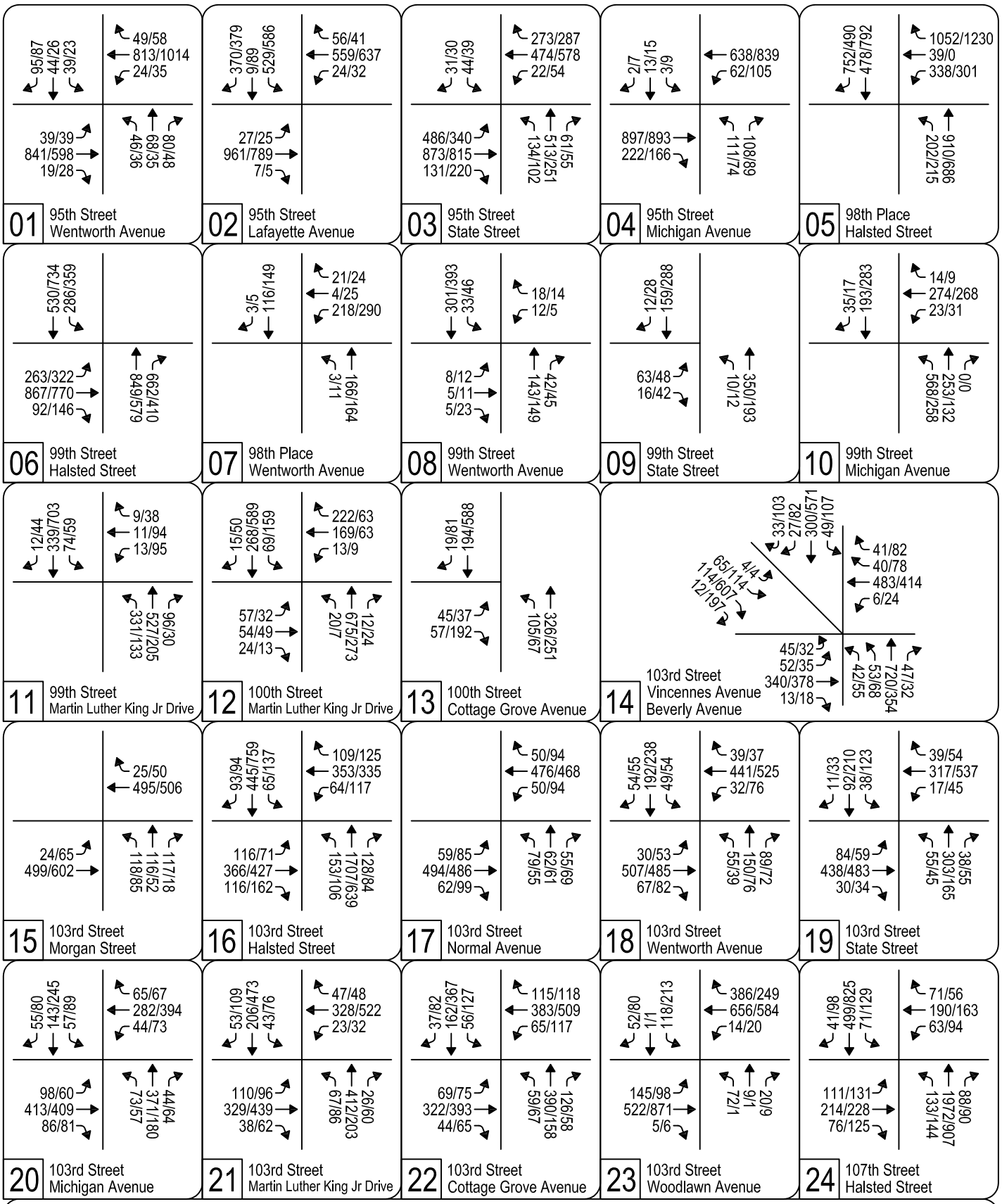

Halsted Rail Alternative (2030) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

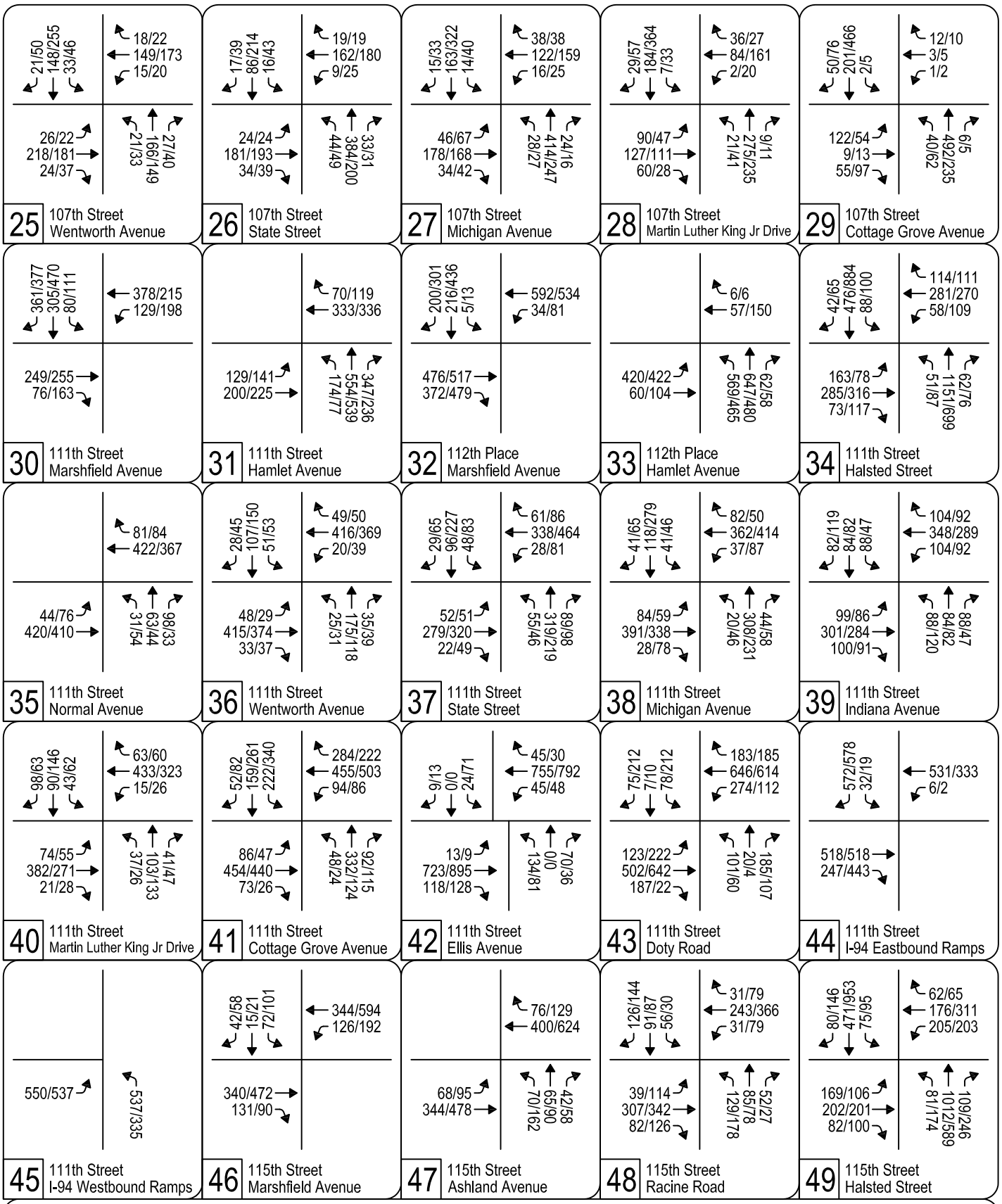

Halsted Rail Alternative (2030) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

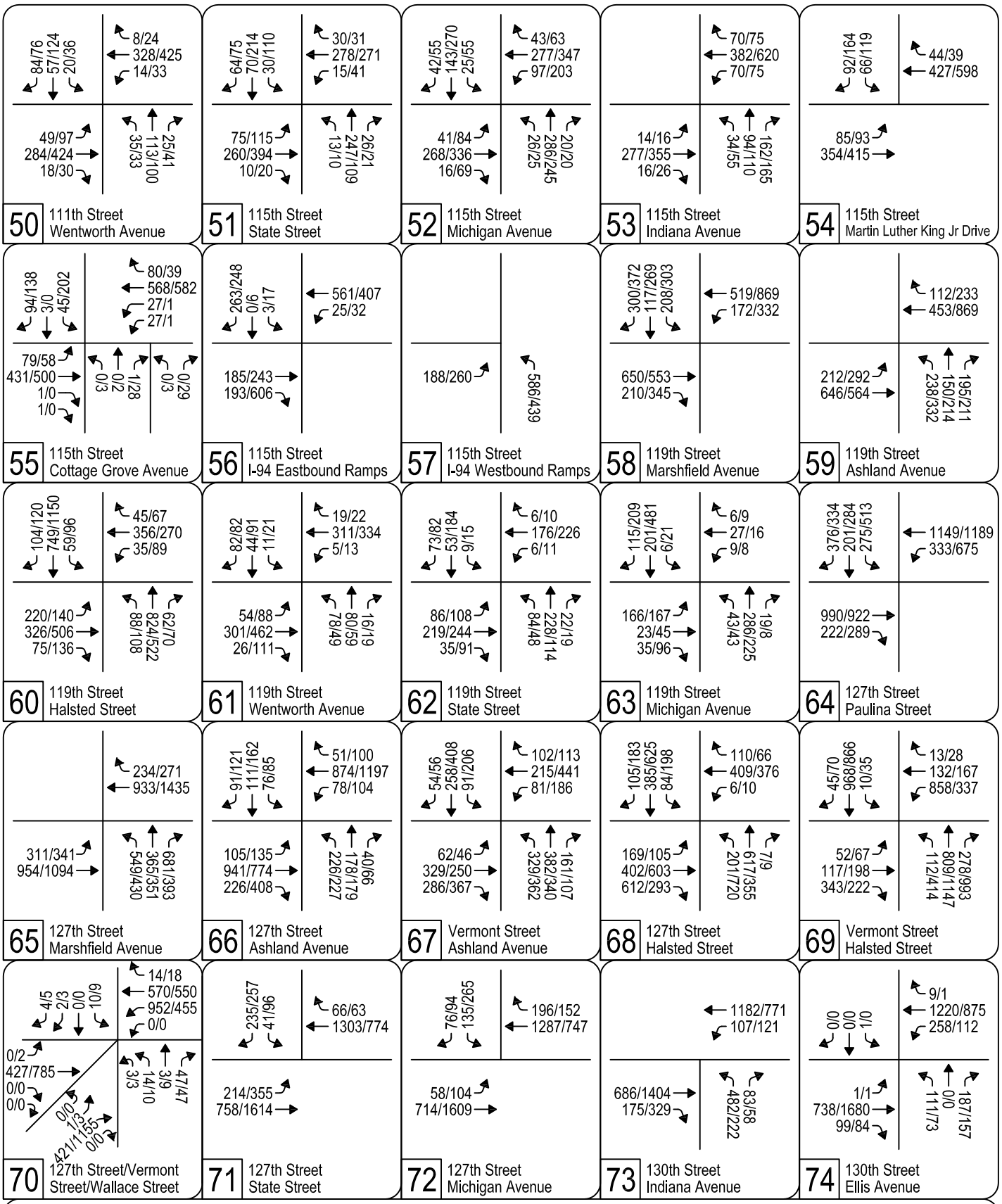

Halsted Rail Alternative (2030) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	841	19	24	813	49	46	68	80	39	44	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1417	2976		1592	2979			1755			1673	
Flt Permitted	0.25	1.00		0.25	1.00			0.90			0.91	
Satd. Flow (perm)	369	2976		417	2979			1596			1532	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	885	20	25	856	52	48	72	84	41	46	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	59	0
Lane Group Flow (vph)	41	903	0	25	901	0	0	165	0	0	128	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	193	1557		218	1558			565			542	
v/s Ratio Prot		c0.30			0.30							
v/s Ratio Perm	0.11			0.06				c0.10			0.08	
v/c Ratio	0.21	0.58		0.11	0.58			0.29			0.24	
Uniform Delay, d1	8.3	10.6		7.9	10.6			15.1			14.8	
Progression Factor	1.00	1.00		0.83	1.16			1.00			1.00	
Incremental Delay, d2	2.5	1.6		0.9	1.4			1.3			1.0	
Delay (s)	10.8	12.2		7.5	13.6			16.4			15.8	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.1			13.5			16.4			15.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	961	7	24	559	56	0	0	0	529	9	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	778	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	352	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1012	7	25	588	59	0	0	0	557	9	389
RTOR Reduction (vph)	0	1	0	0	0	26	0	0	0	0	0	172
Lane Group Flow (vph)	28	1018	0	25	588	33	0	0	0	557	9	217
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	162	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.31		0.01	c0.19					c0.18	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.16
v/c Ratio	0.17	0.94		0.04	0.33	0.12				0.78	0.03	0.67
Uniform Delay, d1	31.6	42.2		15.1	15.4	13.4				46.9	38.7	45.5
Progression Factor	0.80	0.82		0.29	0.63	1.53				1.00	1.00	1.00
Incremental Delay, d2	2.0	14.1		0.1	0.3	0.5				8.2	0.2	10.7
Delay (s)	27.2	48.9		4.5	10.0	20.9				55.1	38.9	56.2
Level of Service	C	D		A	A	C				E	D	E
Approach Delay (s)		48.3			10.7			0.0			55.4	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	486	873	131	22	474	273	134	513	61	44	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	512	919	138	23	499	287	141	540	64	46	0	33
RTOR Reduction (vph)	0	9	0	0	0	158	0	0	25	0	0	31
Lane Group Flow (vph)	512	1049	0	23	499	129	0	681	39	46	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1554		108	697	225		762	327	53		45
v/s Ratio Prot	0.16	c0.34		0.01	c0.17			c0.21		c0.05		
v/s Ratio Perm						0.14			0.03			0.00
v/c Ratio	0.49	0.67		0.21	0.72	0.57		0.89	0.12	0.87		0.05
Uniform Delay, d1	34.7	24.5		57.2	45.5	43.6		48.5	39.5	60.5		57.4
Progression Factor	0.75	0.20		1.00	1.00	1.00		0.94	0.90	1.00		1.00
Incremental Delay, d2	0.7	1.1		4.5	6.2	10.1		14.9	0.7	76.0		0.4
Delay (s)	26.9	6.0		61.6	51.7	53.8		60.7	36.2	136.5		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		12.8			52.7			58.6			103.6	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	35.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	897	222	62	638	0	111	0	108	3	13	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.98	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1650	3005		1390		1465	1803	1943	
Flt Permitted		1.00		0.15	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		267	3005		1093		1465	1803	1943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	997	247	69	709	0	123	0	120	3	14	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	77	0	1	0
Lane Group Flow (vph)	0	1222	0	69	709	0	123	0	43	3	15	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		160	1803		350		469	577	622	
v/s Ratio Prot		c0.43			0.24						0.01	
v/s Ratio Perm				0.26			c0.11		0.03	0.00		
v/c Ratio		0.71		0.43	0.39		0.35		0.09	0.01	0.02	
Uniform Delay, d1		14.0		10.8	10.5		26.0		23.8	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.5		8.3	0.6		2.8		0.4	0.0	0.1	
Delay (s)		16.5		19.1	11.1		28.8		24.2	23.2	23.4	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.5			11.8			26.5			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	338	39	1052	202	910	0	0	478	752
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3940	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3940	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	345	40	1073	206	929	0	0	488	767
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	345	40	1073	206	929	0	0	1255	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1163	
v/s Ratio Prot							c0.13	0.21			c0.32	
v/s Ratio Perm				0.23	0.02	c0.73						
v/c Ratio				0.77	0.08	2.54	0.44	0.34			1.91dr	
Uniform Delay, d1				33.7	26.7	37.5	29.3	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.38			1.00	
Incremental Delay, d2				11.8	0.3	698.4	2.0	0.2			50.5	
Delay (s)				45.5	27.1	735.9	21.3	22.1			87.5	
Level of Service				D	C	F	C	C			F	
Approach Delay (s)		0.0			553.1			22.0			87.5	
Approach LOS		A			F			C			F	

Intersection Summary			
HCM Average Control Delay	244.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	867	92	0	0	0	0	849	662	286	530	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3184						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3184						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	271	894	95	0	0	0	0	875	682	295	546	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	244	1009	0	0	0	0	0	875	682	295	546	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.19	0.12	
v/s Ratio Perm	0.16	0.32							c0.31			
v/c Ratio	0.50	0.98						0.75	1.17	0.63	0.20	
Uniform Delay, d1	28.7	35.1						35.3	38.5	32.1	10.0	
Progression Factor	1.00	1.00						0.43	0.46	1.06	0.42	
Incremental Delay, d2	3.7	23.4						0.4	78.3	2.2	0.1	
Delay (s)	32.4	58.5						15.7	95.9	36.1	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		53.5			0.0			50.8			15.4	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	43.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	166	0	0	116	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1961	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		781	1882			1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	184	0	0	129	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	184	0	0	131	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		501	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.07	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.17			0.12	
Uniform Delay, d1				23.4	19.9		10.0	8.0			9.6	
Progression Factor				1.00	1.00		1.06	1.18			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.6	9.8			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.8			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	12	0	18	0	143	42	33	301	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.92			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.98			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1620			1686		1595	1755	
Flt Permitted	0.74	1.00			0.93			1.00		0.60	1.00	
Satd. Flow (perm)	1502	1809			1543			1686		1005	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	13	0	19	0	151	44	35	317	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	19	0	0	183	0	35	317	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	477	575			490			793		640	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.04			0.23		0.05	0.31	
Uniform Delay, d1	19.9	19.9			20.0			13.4		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		1.01	0.93	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.2			14.0		8.8	8.9	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.2			14.0			8.9	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	16	10	350	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1787		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1787		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	18	11	389	177	13
RTOR Reduction (vph)	12	0	0	0	4	0
Lane Group Flow (vph)	76	0	11	389	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	577		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.40	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.32	0.51	1.16	
Incremental Delay, d2	0.5		0.0	1.1	0.4	
Delay (s)	16.0		2.1	5.4	8.9	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.3	8.9	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	23	274	14	568	253	0	0	193	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3738		1660	1752			1603	1298
Flt Permitted					1.00		0.57	1.00			1.00	1.00
Satd. Flow (perm)					3738		1002	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	26	304	16	631	281	0	0	214	39
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	0	0	0	342	0	631	281	0	0	214	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1143		679	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.16			0.13	
v/s Ratio Perm							c0.45					0.01
v/c Ratio					0.30		0.93	0.27			0.30	0.03
Uniform Delay, d1					22.5		17.0	8.1			15.0	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.7		21.0	0.6			1.1	0.1
Delay (s)					23.2		38.0	8.7			16.1	13.3
Level of Service					C		D	A			B	B
Approach Delay (s)		0.0			23.2			29.0			15.6	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	13	11	9	331	527	96	74	339	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.96		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1796		1692	3237		1707	3352	
Flt Permitted					0.98		0.50	1.00		0.31	1.00	
Satd. Flow (perm)					1796		894	3237		566	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	14	12	10	368	586	107	82	377	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	29	0	368	673	0	82	387	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					551		563	1467		416	1520	
v/s Ratio Prot					c0.02		c0.06	0.21		0.02	0.12	
v/s Ratio Perm							c0.30			0.09		
v/c Ratio					0.05		0.65	0.46		0.20	0.25	
Uniform Delay, d1					18.3		13.7	14.2		12.3	12.7	
Progression Factor					1.00		0.69	0.74		1.00	1.00	
Incremental Delay, d2					0.2		5.3	0.9		1.1	0.4	
Delay (s)					18.5		14.8	11.4		13.4	13.1	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.5			12.6			13.1	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	54	24	13	169	222	20	675	12	69	268	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1946			1626		1596	3232		1641	3131	
Flt Permitted		0.68			0.99		0.57	1.00		0.33	1.00	
Satd. Flow (perm)		1354			1613		957	3232		575	3131	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	57	25	14	178	234	21	711	13	73	282	16
RTOR Reduction (vph)	0	10	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	132	0	0	367	0	21	722	0	73	293	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		451			538		536	1810		322	1753	
v/s Ratio Prot								c0.22			0.09	
v/s Ratio Perm		0.10			c0.23		0.02			0.13		
v/c Ratio		0.29			0.68		0.04	0.40		0.23	0.17	
Uniform Delay, d1		18.5			21.6		7.4	9.3		8.3	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.17	0.06	
Incremental Delay, d2		1.6			6.9		0.1	0.7		1.6	0.2	
Delay (s)		20.1			28.4		7.6	10.0		3.0	0.7	
Level of Service		C			C		A	B		A	A	
Approach Delay (s)		20.1			28.4			9.9			1.1	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	45	57	105	326	194	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	63	117	362	216	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	113	237	241	144	93
Volume Left (vph)	50	117	0	0	0
Volume Right (vph)	63	0	0	0	21
Hadj (s)	-0.16	0.33	0.08	0.09	-0.07
Departure Headway (s)	5.3	5.4	5.1	5.4	5.2
Degree Utilization, x	0.17	0.36	0.35	0.22	0.14
Capacity (veh/h)	628	654	684	641	660
Control Delay (s)	9.3	10.1	9.6	8.7	7.9
Approach Delay (s)	9.3	9.9		8.4	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.4		
HCM Level of Service	A		
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	45	52	340	13	6	483	40	41	42	53	720	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3289	
Flt Permitted		0.11	1.00	1.00	0.54	1.00	1.00			0.39	1.00	
Satd. Flow (perm)		187	1731	1530	967	1731	1487			700	3289	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	58	378	14	7	537	44	46	47	59	800	52
RTOR Reduction (vph)	0	0	0	7	0	0	32	0	0	0	5	0
Lane Group Flow (vph)	0	108	378	7	7	537	58	0	0	106	847	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	295	528	453			167	783	
v/s Ratio Prot		0.05	c0.22			c0.31					c0.26	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.15		
v/c Ratio		0.38	0.46	0.01	0.02	1.02	0.13			0.63	1.08	
Uniform Delay, d1		20.3	18.4	14.5	25.6	36.5	26.4			35.9	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.9	1.8	0.0	0.1	43.5	0.6			17.0	56.8	
Delay (s)		24.2	20.3	14.5	25.7	80.0	27.0			52.9	96.8	
Level of Service		C	C	B	C	F	C			D	F	
Approach Delay (s)			21.0			71.9					91.9	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	62.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	49	300	27	33	4	65	114	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.97				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3279				1710	2621	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3279				1710	2621	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	54	333	30	37	4	72	127	13
RTOR Reduction (vph)	0	8	0	0	0	0	7	0
Lane Group Flow (vph)	54	392	0	0	0	76	133	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.12				0.04		
v/s Ratio Perm	0.18						c0.05	
v/c Ratio	0.79	0.51				0.27	0.31	
Uniform Delay, d1	37.9	35.1				38.2	38.4	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	61.4	2.4				2.3	1.8	
Delay (s)	99.3	37.5				40.4	40.2	
Level of Service	F	D				D	D	
Approach Delay (s)		44.9				40.3		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	499	0	0	495	25	118	116	117	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1930			1771				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1598			1930			1771				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	554	0	0	550	28	131	129	130	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	581	0	0	578	0	0	390	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		762			920			708				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.36						0.22				
v/c Ratio		0.76			0.63			0.55				
Uniform Delay, d1		14.0			12.7			15.0				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.1			3.2			3.1				
Delay (s)		21.1			15.9			18.1				
Level of Service		C			B			B				
Approach Delay (s)		21.1			15.9			18.1			0.0	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	366	116	64	353	109	153	1707	128	65	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1923	1426		1923	1396	1500	3099	1284	1425	2956	1265
Flt Permitted		0.55	1.00		0.62	1.00	0.40	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)		1062	1426		1194	1396	625	3099	1284	142	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	385	122	67	372	115	161	1797	135	68	468	98
RTOR Reduction (vph)	0	0	72	0	0	68	0	0	29	0	0	59
Lane Group Flow (vph)	0	507	50	0	439	47	161	1797	106	68	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	53.1	44.4	44.4	48.9	42.3	42.3
Effective Green, g (s)		43.0	43.0		43.0	43.0	53.1	44.4	44.4	48.9	42.3	42.3
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.51	0.42	0.42	0.47	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		435	584		489	572	389	1310	543	147	1191	510
v/s Ratio Prot							c0.03	c0.58		c0.03	0.16	
v/s Ratio Perm		c0.48	0.04		0.37	0.03	0.18		0.08	0.19		0.03
v/c Ratio		1.17	0.09		0.90	0.08	0.41	1.37	0.19	0.46	0.39	0.08
Uniform Delay, d1		31.0	19.0		28.9	18.9	14.8	30.3	19.1	23.1	22.2	19.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.11	0.75	0.39
Incremental Delay, d2		96.9	0.3		21.9	0.3	0.7	172.2	0.8	2.2	0.9	0.3
Delay (s)		127.9	19.3		50.8	19.2	15.5	202.5	19.9	27.9	17.5	7.7
Level of Service		F	B		D	B	B	F	B	C	B	A
Approach Delay (s)		106.8			44.3			176.3			17.1	
Approach LOS		F			D			F			B	

Intersection Summary			
HCM Average Control Delay	120.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	117.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	494	62	50	476	50	79	62	55	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1627			1630			1779				
Flt Permitted		0.90			0.91			0.98				
Satd. Flow (perm)		1473			1489			1779				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	549	69	56	529	56	88	69	61	0	0	0
RTOR Reduction (vph)	0	6	0	0	5	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	678	0	0	636	0	0	197	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		861			870			520				
v/s Ratio Prot												
v/s Ratio Perm		c0.46			0.43			0.11				
v/c Ratio		0.79			0.73			0.38				
Uniform Delay, d1		10.4			9.8			18.3				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.2			5.4			2.1				
Delay (s)		17.6			15.2			20.4				
Level of Service		B			B			C				
Approach Delay (s)		17.6			15.2			20.4			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	507	67	32	441	39	55	150	89	49	192	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.98	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1636	1288		1658	1490		1737	
Flt Permitted		0.96	1.00		0.95	1.00		0.84	1.00		0.92	
Satd. Flow (perm)		1595	1255		1554	1288		1416	1490		1607	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	534	71	34	464	41	58	158	94	52	202	57
RTOR Reduction (vph)	0	0	30	0	0	16	0	0	64	0	11	0
Lane Group Flow (vph)	0	566	41	0	498	25	0	216	30	0	300	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		914	720		891	738		453	477		514	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.03		0.32	0.02		0.15	0.02		c0.19	
v/c Ratio		0.62	0.06		0.56	0.03		0.48	0.06		0.58	
Uniform Delay, d1		10.6	7.1		10.0	7.0		20.5	17.7		21.3	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.1	0.1		2.5	0.1		3.6	0.3		4.8	
Delay (s)		13.7	7.2		12.6	7.0		24.0	18.0		26.1	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.0			12.2			22.2			26.1	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	438	30	17	317	39	55	303	38	38	92	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1464	2990		1459	3534		1534	1647	1301	1517	1541	1156
Flt Permitted	0.51	1.00		0.43	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	788	2990		658	3534		1116	1647	1301	720	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	487	33	19	352	43	61	337	42	42	102	12
RTOR Reduction (vph)	0	7	0	0	15	0	0	0	22	0	0	7
Lane Group Flow (vph)	93	513	0	19	380	0	61	337	20	42	102	5
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	376	1426		314	1685		446	659	520	288	616	462
v/s Ratio Prot		c0.17			0.11			c0.20			0.07	
v/s Ratio Perm	0.12			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.25	0.36		0.06	0.23		0.14	0.51	0.04	0.15	0.17	0.01
Uniform Delay, d1	10.1	10.7		9.2	10.0		12.4	14.7	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.60	0.74	0.31	0.53	0.54	0.28
Incremental Delay, d2	1.6	0.7		0.4	0.3		0.6	2.8	0.1	1.1	0.6	0.0
Delay (s)	11.6	11.4		9.5	10.3		8.0	13.6	3.8	7.7	7.3	3.4
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.5			10.2			11.9			7.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	413	86	44	282	65	73	371	44	57	143	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.98	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1464	3056		1588	3009		1541	3022		1403	2767	
Flt Permitted	0.52	1.00		0.42	1.00		0.62	1.00		0.46	1.00	
Satd. Flow (perm)	808	3056		698	3009		1007	3022		678	2767	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	435	91	46	297	68	77	391	46	60	151	58
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	34	0
Lane Group Flow (vph)	103	526	0	46	365	0	77	425	0	60	175	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	388	1467		335	1444		416	1249		280	1144	
v/s Ratio Prot		c0.17			0.12			c0.14			0.06	
v/s Ratio Perm	0.13			0.07			0.08			0.09		
v/c Ratio	0.27	0.36		0.14	0.25		0.19	0.34		0.21	0.15	
Uniform Delay, d1	11.6	12.2		10.9	11.5		14.0	15.0		14.2	13.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	0.7		0.9	0.4		1.0	0.7		1.7	0.3	
Delay (s)	13.3	12.9		11.7	12.0		15.0	15.8		15.9	14.1	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		13.0			11.9			15.6			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	110	329	38	23	328	47	67	412	26	43	206	53
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1474	1841		1533	3073		1372	2881	
Flt Permitted	0.45	1.00		0.46	1.00		0.58	1.00		0.41	1.00	
Satd. Flow (perm)	720	1576		713	1841		942	3073		597	2881	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	346	40	24	345	49	71	434	27	45	217	56
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	116	386	0	24	394	0	71	461	0	45	273	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	448	738		358	793		329	730		193	630	
v/s Ratio Prot	c0.02	c0.24		0.00	0.21		c0.01	c0.15		0.01	0.09	
v/s Ratio Perm	0.13			0.03			0.06			0.06		
v/c Ratio	0.26	0.52		0.07	0.50		0.22	0.63		0.23	0.43	
Uniform Delay, d1	13.5	15.9		15.0	17.5		21.5	29.1		26.1	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.6		0.1	2.2		0.3	4.1		0.6	2.2	
Delay (s)	13.8	18.6		15.1	19.7		21.9	33.2		26.8	30.8	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		17.5			19.5			31.7			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	322	44	65	383	115	59	390	126	56	162	37
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3493			2913		1614	3156		1581	2921	
Flt Permitted		0.78			0.84		0.61	1.00		0.38	1.00	
Satd. Flow (perm)		2748			2465		1042	3156		628	2921	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	77	358	49	72	426	128	66	433	140	62	180	41
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	484	0	0	626	0	66	573	0	62	221	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1246			1117		458	1389		276	1285	
v/s Ratio Prot								c0.18			0.08	
v/s Ratio Perm		0.18			c0.25		0.06			0.10		
v/c Ratio		0.39			0.56		0.14	0.41		0.22	0.17	
Uniform Delay, d1		13.6			15.0		12.6	14.4		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9			2.0		0.7	0.9		1.9	0.3	
Delay (s)		14.5			17.1		13.2	15.3		14.9	13.0	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.5			17.1			15.1			13.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	522	5	14	656	386	72	9	20	118	1	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3144		1629	3257	1457		1611			3105	
Flt Permitted	0.35	1.00		0.42	1.00	1.00		0.69			0.75	
Satd. Flow (perm)	585	3144		721	3257	1457		1158			2398	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	580	6	16	729	429	80	10	22	131	1	58
RTOR Reduction (vph)	0	1	0	0	0	150	0	12	0	0	44	0
Lane Group Flow (vph)	161	585	0	16	729	279	0	100	0	0	146	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	381	2046		469	2119	948		274			566	
v/s Ratio Prot		0.19			0.22							
v/s Ratio Perm	c0.28			0.02		0.19		c0.09			0.06	
v/c Ratio	0.42	0.29		0.03	0.34	0.29		0.36			0.26	
Uniform Delay, d1	6.0	5.3		4.4	5.6	5.3		22.6			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	3.4	0.4		0.1	0.4	0.8		3.5			1.0	
Delay (s)	9.4	5.7		4.5	6.0	6.1		26.1			23.0	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.5			6.0			26.1			23.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	70.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	76	63	190	71	133	1972	88	71	499	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1498		1547	1584		1493	3069	1271	1452	2983	1301
Flt Permitted	0.37	1.00		0.32	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	608	1498		521	1584		612	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	80	66	200	75	140	2076	93	75	525	43
RTOR Reduction (vph)	0	15	0	0	16	0	0	0	18	0	0	25
Lane Group Flow (vph)	117	290	0	66	259	0	140	2076	75	75	525	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	252	388		232	410		350	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.03	c0.68		c0.03	0.18	
v/s Ratio Perm	0.11			0.07			0.16		0.06	0.17		0.01
v/c Ratio	0.46	0.75		0.28	0.63		0.40	1.64	0.14	0.43	0.43	0.03
Uniform Delay, d1	22.5	29.0		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.62	0.71	0.50	1.00	1.00	1.00
Incremental Delay, d2	6.0	12.4		3.1	7.2		2.7	292.0	0.5	7.6	1.1	0.1
Delay (s)	28.6	41.4		24.9	35.2		11.0	309.8	8.2	25.7	18.9	15.0
Level of Service	C	D		C	D		B	F	A	C	B	B
Approach Delay (s)		37.8			33.2			279.5			19.5	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	184.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	218	24	15	149	18	21	166	27	33	148	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		1843			1836			1900			1931	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1787			1790			1844			1822	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	225	25	15	154	19	22	171	28	34	153	22
RTOR Reduction (vph)	0	5	0	0	6	0	0	8	0	0	6	0
Lane Group Flow (vph)	0	272	0	0	182	0	0	213	0	0	203	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		742			744			851			841	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.12			0.11	
v/c Ratio		0.37			0.24			0.25			0.24	
Uniform Delay, d1		13.1			12.4			10.7			10.6	
Progression Factor		1.00			0.64			1.08			1.00	
Incremental Delay, d2		1.4			0.8			0.7			0.7	
Delay (s)		14.5			8.6			12.2			11.3	
Level of Service		B			A			B			B	
Approach Delay (s)		14.5			8.6			12.2			11.3	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	34	9	162	19	44	384	33	16	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	2994		1302	3037		1529	3093		1492	2868	
Flt Permitted	0.63	1.00		0.60	1.00		0.68	1.00		0.48	1.00	
Satd. Flow (perm)	965	2994		827	3037		1093	3093		757	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	38	10	180	21	49	427	37	18	96	19
RTOR Reduction (vph)	0	24	0	0	13	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	215	0	10	188	0	49	454	0	18	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	875		242	888		639	1808		443	1677	
v/s Ratio Prot		c0.07			0.06			c0.15			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.25		0.04	0.21		0.08	0.25		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.9	6.6		5.7	5.8	
Progression Factor	0.73	0.73		0.76	0.74		0.93	0.96		0.49	0.44	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.9	13.5		12.8	13.4		5.7	6.6		3.0	2.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.5			13.3			6.5			2.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	38	28	414	24	14	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2868			1878			1808	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1047	2952		965	2868			1838			1739	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	42	31	460	27	16	181	17
RTOR Reduction (vph)	0	23	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	515	0	0	209	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	419	1181		386	1147			877			829	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.28			0.12	
v/c Ratio	0.12	0.18		0.05	0.13			0.59			0.25	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.4			10.1	
Progression Factor	1.01	0.92		0.86	0.88			1.02			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			2.8			0.7	
Delay (s)	13.1	12.0		10.5	11.1			15.4			10.8	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.2			11.0			15.4			10.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	127	60	2	84	36	21	275	9	7	184	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.95			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1879		1587	1870			1971			1933	
Flt Permitted	0.67	1.00		0.57	1.00			0.98			0.99	
Satd. Flow (perm)	1135	1879		950	1870			1928			1916	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	141	67	2	93	40	23	306	10	8	204	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	100	208	0	2	133	0	0	339	0	0	244	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	349	578		292	575			1097			1091	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.09			0.00				c0.18			0.13	
v/c Ratio	0.29	0.36		0.01	0.23			0.31			0.22	
Uniform Delay, d1	17.1	17.5		15.6	16.8			7.3			6.9	
Progression Factor	0.90	0.89		0.89	0.92			0.94			1.00	
Incremental Delay, d2	2.0	1.7		0.0	0.9			0.7			0.5	
Delay (s)	17.5	17.4		14.0	16.3			7.6			7.4	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.4			16.3			7.6			7.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	9	55	1	3	12	40	492	6	2	201	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1672		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.62	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1260	1672		1279	1422		971	1631	1392	648	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	136	10	61	1	3	13	44	547	7	2	223	56
RTOR Reduction (vph)	0	44	0	0	9	0	0	0	3	0	0	22
Lane Group Flow (vph)	136	27	0	1	7	0	44	547	4	2	223	34
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		354	394		583	979	835	389	1144	856
v/s Ratio Prot		0.02			0.00			c0.34			0.12	
v/s Ratio Perm	c0.11			0.00			0.05		0.00	0.00		0.02
v/c Ratio	0.39	0.06		0.00	0.02		0.08	0.56	0.01	0.01	0.19	0.04
Uniform Delay, d1	19.0	17.3		17.0	17.1		5.4	7.8	5.2	5.2	5.9	5.3
Progression Factor	1.47	2.41		1.00	1.00		1.17	1.10	1.32	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.2		0.0	0.1		0.2	1.7	0.0	0.0	0.4	0.1
Delay (s)	31.1	41.9		17.0	17.1		6.5	10.3	6.9	5.2	6.3	5.4
Level of Service	C	D		B	B		A	B	A	A	A	A
Approach Delay (s)		34.8			17.1			10.0			6.1	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	249	76	129	378	0	0	0	0	80	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2829		1621	3288					1574	2907	
Flt Permitted		1.00		0.49	1.00					0.95	1.00	
Satd. Flow (perm)		2829		835	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	262	80	136	398	0	0	0	0	84	321	380
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	313	0	136	398	0	0	0	0	84	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		934		648	1940					504	930	
v/s Ratio Prot		c0.11		c0.05	0.12					0.05	c0.17	
v/s Ratio Perm				0.07								
v/c Ratio		0.34		0.21	0.21					0.17	0.52	
Uniform Delay, d1		25.2		10.6	9.6					24.4	27.8	
Progression Factor		1.00		1.97	2.07					1.00	1.00	
Incremental Delay, d2		1.0		0.6	0.2					0.7	2.1	
Delay (s)		26.2		21.5	19.9					25.1	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.2			20.4			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	200	0	0	333	70	174	554	347	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2833		1750	1782	1514			
Flt Permitted	0.33	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	583	3054			2833		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	211	0	0	351	74	183	583	365	0	0	0
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	245	0	0	0
Lane Group Flow (vph)	136	211	0	0	408	0	183	583	120	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	675	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.07			c0.14		0.10	c0.33				
v/s Ratio Perm	0.04								0.08			
v/c Ratio	0.20	0.12			0.69		0.32	0.99	0.24			
Uniform Delay, d1	11.8	9.5			36.4		25.1	33.4	24.4			
Progression Factor	0.24	0.25			1.00		0.76	0.79	1.91			
Incremental Delay, d2	0.6	0.1			6.3		0.9	27.9	0.7			
Delay (s)	3.5	2.5			42.7		19.9	54.1	47.3			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			42.7			46.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	37.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	372	34	592	0	0	0	0	5	216	200
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3112		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.16	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3112		268	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	496	388	35	617	0	0	0	0	5	225	208
RTOR Reduction (vph)	0	141	0	0	0	0	0	0	0	0	0	137
Lane Group Flow (vph)	0	743	0	35	617	0	0	0	0	5	225	71
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1120		387	1898					543	1074	491
v/s Ratio Prot		c0.24		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.66		0.09	0.33					0.01	0.21	0.14
Uniform Delay, d1		26.9		12.6	10.9					21.8	23.5	22.9
Progression Factor		1.00		0.54	0.68					0.73	0.78	0.90
Incremental Delay, d2		3.1		0.2	0.2					0.0	0.4	0.6
Delay (s)		30.0		7.0	7.6					16.0	18.7	21.3
Level of Service		C		A	A					B	B	C
Approach Delay (s)		30.0			7.5			0.0			19.9	
Approach LOS		C			A			A			B	

Intersection Summary			
HCM Average Control Delay	20.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	420	60	0	0	57	6	569	647	62	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3040			3070		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1083	2333			3070		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	433	62	0	0	59	6	587	667	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	38	0	0	0
Lane Group Flow (vph)	216	279	0	0	60	0	587	667	26	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1444			461		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.38	c0.41	0.02			
v/s Ratio Perm	c0.05	0.03										
v/c Ratio	0.32	0.19			0.13		1.02	1.10	0.05			
Uniform Delay, d1	14.1	13.3			36.8		31.5	31.5	20.2			
Progression Factor	0.22	0.24			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.9	0.2			0.6		42.9	67.2	0.2			
Delay (s)	4.0	3.4			37.4		74.4	98.7	20.4			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.6			37.4			84.1			0.0	
Approach LOS		A			D			F			A	

Intersection Summary			
HCM Average Control Delay	61.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	163	285	73	58	281	114	51	1151	62	88	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2843			2815		1447	3069	1336	1494	2956	1270
Flt Permitted		0.62			0.82		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1801			2328		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	170	297	76	60	293	119	53	1199	65	92	496	44
RTOR Reduction (vph)	0	16	0	0	39	0	0	0	24	0	0	27
Lane Group Flow (vph)	0	527	0	0	433	0	53	1199	41	92	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		836			767		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.39		c0.03	0.17	
v/s Ratio Perm		0.22			c0.19		0.07		0.03	0.24		0.01
v/c Ratio		0.63			0.56		0.18	0.99	0.08	0.64	0.43	0.03
Uniform Delay, d1		19.3			23.5		14.8	25.6	16.4	19.0	18.7	16.1
Progression Factor		1.00			1.00		1.34	0.87	1.43	1.82	1.64	3.14
Incremental Delay, d2		3.6			3.0		0.8	17.5	0.2	18.1	1.0	0.1
Delay (s)		22.9			26.5		20.6	39.8	23.6	52.5	31.8	50.8
Level of Service		C			C		C	D	C	D	C	D
Approach Delay (s)		22.9			26.5			38.2			36.1	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	33.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	420	0	0	422	81	31	63	98	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.98			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1706			1677			1583				
Flt Permitted		0.92			1.00			0.99				
Satd. Flow (perm)		1577			1677			1583				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	467	0	0	469	90	34	70	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	58	0	0	0	0
Lane Group Flow (vph)	0	516	0	0	549	0	0	155	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		825			877			560				
v/s Ratio Prot					0.33							
v/s Ratio Perm		c0.33						0.10				
v/c Ratio		0.63			0.63			0.28				
Uniform Delay, d1		11.0			11.0			15.0				
Progression Factor		1.00			0.63			1.00				
Incremental Delay, d2		3.6			2.8			1.2				
Delay (s)		14.6			9.7			16.3				
Level of Service		B			A			B				
Approach Delay (s)		14.6			9.7			16.3			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	415	33	20	416	49	25	175	35	51	107	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1886			1842			3185			3126	
Flt Permitted		0.92			0.97			0.92			0.83	
Satd. Flow (perm)		1753			1794			2930			2630	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	461	37	22	462	54	28	194	39	57	119	31
RTOR Reduction (vph)	0	4	0	0	6	0	0	22	0	0	18	0
Lane Group Flow (vph)	0	547	0	0	532	0	0	239	0	0	189	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		809			828			1217			1092	
v/s Ratio Prot												
v/s Ratio Perm		c0.31			0.30			c0.08			0.07	
v/c Ratio		0.68			0.64			0.20			0.17	
Uniform Delay, d1		13.7			13.4			12.1			12.0	
Progression Factor		0.63			0.56			0.98			0.61	
Incremental Delay, d2		3.7			3.7			0.4			0.3	
Delay (s)		12.4			11.1			12.2			7.6	
Level of Service		B			B			B			A	
Approach Delay (s)		12.4			11.1			12.2			7.6	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	279	22	28	338	61	55	319	89	48	96	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1503	2936		1584	2944		1497	3034		1594	2899	
Flt Permitted	0.44	1.00		0.53	1.00		0.66	1.00		0.48	1.00	
Satd. Flow (perm)	697	2936		890	2944		1046	3034		809	2899	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	310	24	31	376	68	61	354	99	53	107	32
RTOR Reduction (vph)	0	9	0	0	22	0	0	39	0	0	15	0
Lane Group Flow (vph)	58	325	0	31	422	0	61	414	0	53	124	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	236	994		301	996		563	1634		436	1561	
v/s Ratio Prot		0.11			c0.14			c0.14			0.04	
v/s Ratio Perm	0.08			0.03			0.06			0.07		
v/c Ratio	0.25	0.33		0.10	0.42		0.11	0.25		0.12	0.08	
Uniform Delay, d1	15.5	16.0		14.7	16.6		7.4	8.0		7.4	7.2	
Progression Factor	0.57	0.55		0.78	0.80		0.63	0.62		1.30	1.35	
Incremental Delay, d2	2.0	0.7		0.7	1.3		0.4	0.4		0.6	0.1	
Delay (s)	10.9	9.6		12.1	14.6		5.0	5.4		10.2	9.8	
Level of Service	B	A		B	B		A	A		B	A	
Approach Delay (s)		9.8			14.4			5.3			9.9	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	391	28	37	362	82	20	308	44	41	118	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1385	3013		1335	3538			3438			3303	
Flt Permitted	0.46	1.00		0.48	1.00			0.94			0.84	
Satd. Flow (perm)	674	3013		674	3538			3226			2808	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	88	412	29	39	381	86	21	324	46	43	124	43
RTOR Reduction (vph)	0	8	0	0	30	0	0	16	0	0	26	0
Lane Group Flow (vph)	88	433	0	39	437	0	0	375	0	0	184	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	321	1437		321	1687			1290			1123	
v/s Ratio Prot		c0.14			0.12							
v/s Ratio Perm	0.13			0.06				c0.12			0.07	
v/c Ratio	0.27	0.30		0.12	0.26			0.29			0.16	
Uniform Delay, d1	10.2	10.4		9.4	10.1			13.2			12.5	
Progression Factor	1.60	1.64		0.79	0.78			0.51			0.64	
Incremental Delay, d2	2.1	0.5		0.7	0.3			0.6			0.3	
Delay (s)	18.4	17.6		8.2	8.2			7.3			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		17.7			8.2			7.3			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	301	100	104	348	104	88	84	88	88	84	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3032			1823			1826	
Flt Permitted		0.74	1.00		0.76			0.79			0.78	
Satd. Flow (perm)		1230	1409		2324			1456			1442	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	110	334	111	116	387	116	98	93	98	98	93	91
RTOR Reduction (vph)	0	0	53	0	31	0	0	28	0	0	26	0
Lane Group Flow (vph)	0	444	58	0	588	0	0	261	0	0	256	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		643	737		1216			470			466	
v/s Ratio Prot												
v/s Ratio Perm		c0.36	0.04		0.25			c0.18			0.18	
v/c Ratio		0.69	0.08		0.48			0.55			0.55	
Uniform Delay, d1		11.6	7.7		9.9			18.1			18.1	
Progression Factor		2.01	5.68		0.42			1.00			1.00	
Incremental Delay, d2		5.9	0.2		1.3			4.7			4.6	
Delay (s)		29.1	44.0		5.5			22.8			22.7	
Level of Service		C	D		A			C			C	
Approach Delay (s)		32.1			5.5			22.8			22.7	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	382	21	15	433	63	37	103	41	43	90	98
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3018		1573	3001			3454			3403	
Flt Permitted	0.40	1.00		0.47	1.00			0.87			0.88	
Satd. Flow (perm)	616	3018		771	3001			3030			3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	424	23	17	481	70	41	114	46	48	100	109
RTOR Reduction (vph)	0	6	0	0	18	0	0	25	0	0	60	0
Lane Group Flow (vph)	82	441	0	17	533	0	0	176	0	0	197	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	265	1300		332	1293			1352			1345	
v/s Ratio Prot		0.15			c0.18							
v/s Ratio Perm	0.13			0.02				0.06			c0.07	
v/c Ratio	0.31	0.34		0.05	0.41			0.13			0.15	
Uniform Delay, d1	12.2	12.3		10.8	12.8			10.6			10.7	
Progression Factor	0.98	1.00		1.14	0.99			0.99			0.80	
Incremental Delay, d2	2.3	0.5		0.1	0.5			0.2			0.2	
Delay (s)	14.1	12.9		12.4	13.1			10.7			8.8	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.1			13.1			10.7			8.8	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	454	73	94	455	284	48	332	92	222	159	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3073			3146			3118	
Flt Permitted		0.63			0.74			0.88			0.63	
Satd. Flow (perm)		2028			2280			2771			2008	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	504	81	104	506	316	53	369	102	247	177	58
RTOR Reduction (vph)	0	16	0	0	103	0	0	33	0	0	17	0
Lane Group Flow (vph)	0	665	0	0	823	0	0	491	0	0	465	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		811			912			1271			618	
v/s Ratio Prot								c0.04				
v/s Ratio Perm		0.33			c0.36			0.14			c0.23	
v/c Ratio		0.82			0.90			0.39			0.96dl	
Uniform Delay, d1		17.4			18.3			12.0			20.3	
Progression Factor		1.73			1.00			1.00			0.89	
Incremental Delay, d2		8.9			13.9			0.9			8.3	
Delay (s)		39.1			32.2			12.9			26.3	
Level of Service		D			C			B			C	
Approach Delay (s)		39.1			32.2			12.9			26.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	29.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	723	118	45	755	0	134	0	70	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2976			3031			1583				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2976			2543			1311				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	803	131	50	839	0	149	0	78	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	916	0	0	889	0	0	206	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1918			932			233				
v/s Ratio Prot		c0.31										
v/s Ratio Perm					c0.35			c0.16				
v/c Ratio		0.48			0.95			0.89				
Uniform Delay, d1		8.2			27.8			36.1				
Progression Factor		0.04			1.57			1.00				
Incremental Delay, d2		0.4			18.2			35.5				
Delay (s)		0.7			61.8			71.6				
Level of Service		A			E			E				
Approach Delay (s)		0.7			61.8			71.6			0.0	
Approach LOS		A			E			E			A	

Intersection Summary			
HCM Average Control Delay	35.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	123	502	187	274	646	183	101	20	185	78	7	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1755		1629	1714	1457
Flt Permitted	0.32	1.00		0.20	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	511	3020		342	3257	1457		1582		685	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	137	558	208	304	718	203	112	22	206	87	8	83
RTOR Reduction (vph)	0	42	0	0	0	104	0	75	0	0	0	45
Lane Group Flow (vph)	137	724	0	304	718	99	0	265	0	87	8	38
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	40.1	30.7		47.8	35.4	44.0		20.6		32.2	32.2	41.6
Effective Green, g (s)	40.1	30.7		47.8	35.4	44.0		20.6		32.2	32.2	41.6
Actuated g/C Ratio	0.45	0.34		0.53	0.39	0.49		0.23		0.36	0.36	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	333	1030		383	1281	712		362		335	613	673
v/s Ratio Prot	0.04	0.24		c0.12	0.22	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.17		0.07		0.02
v/c Ratio	0.41	0.70		0.79	0.56	0.14		0.73		0.26	0.01	0.06
Uniform Delay, d1	15.4	25.7		14.7	21.2	12.6		32.1		21.3	18.6	13.4
Progression Factor	1.90	1.58		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	3.6		11.4	1.8	0.1		7.9		0.4	0.0	0.0
Delay (s)	30.2	44.3		26.0	23.0	12.7		40.1		21.7	18.7	13.4
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		42.1			22.1			40.1			17.7	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	247	6	531	0	0	0	0	32	0	572
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	274	7	590	0	0	0	0	36	0	636
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	590			576			884	1179	288	891	1179	295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	590			576			884	1179	288	891	1179	295
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	85	100	8
cM capacity (veh/h)	961			973			19	184	700	231	184	692

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	274	203	393	36	636
Volume Left	0	0	0	7	0	36	0
Volume Right	0	0	274	0	0	0	636
cSH	1700	1700	1700	973	1700	231	692
Volume to Capacity	0.17	0.17	0.16	0.01	0.23	0.15	0.92
Queue Length 95th (ft)	0	0	0	1	0	13	307
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	23.4	41.6
Lane LOS				A		C	E
Approach Delay (s)	0.0			0.1		40.6	
Approach LOS						E	

Intersection Summary			
Average Delay	12.9		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	550	0	537	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	611	0	597	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	306	306	597
Volume Left (vph)	306	306	597
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	7.0	7.0	5.8
Degree Utilization, x	0.59	0.59	0.95
Capacity (veh/h)	513	513	618
Control Delay (s)	18.3	18.3	49.2
Approach Delay (s)	18.3		49.2
Approach LOS	C		E

Intersection Summary			
Delay	33.5		
HCM Level of Service	D		
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	340	131	126	344	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.96		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3017		1574	3149						3014	
Flt Permitted		1.00		0.39	1.00						0.97	
Satd. Flow (perm)		3017		645	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	378	146	140	382	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	48	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	476	0	140	382	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1278		481	1815						957	
v/s Ratio Prot		c0.16		c0.03	0.12						c0.04	
v/s Ratio Perm				0.13								
v/c Ratio		0.37		0.29	0.21						0.12	
Uniform Delay, d1		16.8		12.6	8.7						20.6	
Progression Factor		1.00		0.37	0.33						1.00	
Incremental Delay, d2		0.8		1.4	0.2						0.2	
Delay (s)		17.6		6.2	3.1						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.6			3.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	344	0	0	400	76	70	65	42	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3073			4425				
Flt Permitted	0.38	1.00			1.00			0.98				
Satd. Flow (perm)	656	3257			3073			4425				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	382	0	0	444	84	78	72	47	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	32	0	0	0	0
Lane Group Flow (vph)	76	382	0	0	510	0	0	165	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	485	1839			1265			1406				
v/s Ratio Prot	0.02	c0.12			c0.17			c0.04				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.21			0.40			0.12				
Uniform Delay, d1	12.1	9.1			17.6			20.6				
Progression Factor	0.41	0.42			1.00			1.00				
Incremental Delay, d2	0.7	0.2			1.0			0.2				
Delay (s)	5.7	4.1			18.6			20.7				
Level of Service	A	A			B			C				
Approach Delay (s)		4.3			18.6			20.7			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	307	82	31	243	31	129	85	52	56	91	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.97			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2939			2979			1792			1750	
Flt Permitted		0.89			0.88			0.73			0.89	
Satd. Flow (perm)		2639			2628			1347			1565	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	341	91	34	270	34	143	94	58	62	101	140
RTOR Reduction (vph)	0	32	0	0	13	0	0	14	0	0	48	0
Lane Group Flow (vph)	0	443	0	0	325	0	0	281	0	0	255	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		934			930			663			770	
v/s Ratio Prot												
v/s Ratio Perm		c0.17			0.12			c0.21			0.16	
v/c Ratio		0.47			0.35			0.42			0.33	
Uniform Delay, d1		16.3			15.5			10.6			10.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.7			1.0			2.0			1.2	
Delay (s)		18.0			16.5			12.6			11.2	
Level of Service		B			B			B			B	
Approach Delay (s)		18.0			16.5			12.6			11.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	202	82	205	176	62	81	1012	109	75	471	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	2954		1593	3512		1487	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.54	1.00		0.40	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	954	2954		901	3512		626	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	213	86	216	185	65	85	1065	115	79	496	84
RTOR Reduction (vph)	0	52	0	0	41	0	0	0	68	0	0	51
Lane Group Flow (vph)	178	247	0	216	209	0	85	1065	47	79	496	33
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	973		351	1157		306	1180	523	144	1169	493
v/s Ratio Prot	0.02	0.08		c0.03	0.06		0.01	c0.35		c0.03	0.16	
v/s Ratio Perm	0.15			c0.19			0.10		0.03	0.21		0.03
v/c Ratio	0.49	0.25		0.62	0.18		0.28	0.90	0.09	0.55	0.42	0.07
Uniform Delay, d1	20.6	20.9		22.0	20.3		15.1	24.5	16.5	17.6	19.0	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.94	0.61	0.78
Incremental Delay, d2	4.6	0.6		7.8	0.3		2.2	11.2	0.3	13.0	1.0	0.2
Delay (s)	25.2	21.5		29.8	20.7		17.4	35.7	16.8	47.0	12.6	13.0
Level of Service	C	C		C	C		B	D	B	D	B	B
Approach Delay (s)		22.9			24.9			32.8			16.8	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	26.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	284	18	14	328	8	35	113	25	20	57	84
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1928	1382		1954	1331		1970	1452		1928	1430
Flt Permitted		0.91	1.00		0.98	1.00		0.93	1.00		0.93	1.00
Satd. Flow (perm)		1768	1382		1924	1331		1860	1452		1811	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	299	19	15	345	8	37	119	26	21	60	88
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	51
Lane Group Flow (vph)	0	351	9	0	360	4	0	156	11	0	81	37
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		816	638		888	614		773	603		752	594
v/s Ratio Prot												
v/s Ratio Perm		c0.20	0.01		0.19	0.00		c0.08	0.01		0.04	0.03
v/c Ratio		0.43	0.01		0.41	0.01		0.20	0.02		0.11	0.06
Uniform Delay, d1		11.8	9.5		11.6	9.4		12.1	11.2		11.6	11.4
Progression Factor		1.00	1.00		0.47	0.45		1.33	1.73		0.96	0.93
Incremental Delay, d2		1.7	0.0		1.3	0.0		0.6	0.1		0.3	0.2
Delay (s)		13.4	9.5		6.7	4.2		16.7	19.4		11.4	10.8
Level of Service		B	A		A	A		B	B		B	B
Approach Delay (s)		13.2			6.7			17.1			11.1	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	260	10	15	278	30	13	247	26	30	70	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3023		1520	2996		1520	2996		1520	2823	
Flt Permitted	0.95	1.00		0.57	1.00		0.66	1.00		0.55	1.00	
Satd. Flow (perm)	1520	3023		910	2996		1052	2996		884	2823	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	289	11	17	309	33	14	274	29	33	78	71
RTOR Reduction (vph)	0	4	0	0	13	0	0	12	0	0	42	0
Lane Group Flow (vph)	83	296	0	17	329	0	14	291	0	33	107	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1488		308	1014		437	1244		367	1173	
v/s Ratio Prot	c0.05	0.10			c0.11			c0.10			0.04	
v/s Ratio Perm				0.02			0.01			0.04		
v/c Ratio	0.51	0.20		0.06	0.32		0.03	0.23		0.09	0.09	
Uniform Delay, d1	27.4	9.3		14.5	16.0		11.3	12.3		11.5	11.5	
Progression Factor	0.90	0.38		0.81	0.74		0.61	0.65		1.10	1.20	
Incremental Delay, d2	10.3	0.3		0.3	0.8		0.1	0.4		0.5	0.2	
Delay (s)	34.9	3.8		12.1	12.7		6.9	8.4		13.2	14.0	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		10.5			12.6			8.3			13.8	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	38.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	268	16	97	277	43	26	286	20	25	143	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.99			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1520	3014		1520	2979			3215			3140	
Flt Permitted	0.54	1.00		0.95	1.00			0.92			0.89	
Satd. Flow (perm)	862	3014		1520	2979			2975			2822	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	46	298	18	108	308	48	29	318	22	28	159	47
RTOR Reduction (vph)	0	7	0	0	19	0	0	7	0	0	29	0
Lane Group Flow (vph)	46	309	0	108	337	0	0	362	0	0	205	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	265	927		140	1329			1144			1085	
v/s Ratio Prot		c0.10		c0.07	0.11							
v/s Ratio Perm	0.05							c0.12			0.07	
v/c Ratio	0.17	0.33		0.77	0.25			0.32			0.19	
Uniform Delay, d1	16.5	17.4		28.8	11.2			14.0			13.3	
Progression Factor	0.59	0.58		1.31	1.02			0.72			0.75	
Incremental Delay, d2	1.4	1.0		27.7	0.4			0.7			0.4	
Delay (s)	11.1	11.0		65.5	11.8			10.8			10.3	
Level of Service	B	B		E	B			B			B	
Approach Delay (s)		11.0			24.3			10.8			10.3	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	277	16	70	382	70	34	94	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1585			1560			3164				
Flt Permitted		0.97			0.91			0.99				
Satd. Flow (perm)		1545			1436			3164				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	308	18	78	424	78	38	104	180	0	0	0
RTOR Reduction (vph)	0	2	0	0	7	0	0	138	0	0	0	0
Lane Group Flow (vph)	0	340	0	0	573	0	0	184	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		996			926			735				
v/s Ratio Prot												
v/s Ratio Perm		0.22			c0.40			0.06				
v/c Ratio		0.34			0.62			0.25				
Uniform Delay, d1		5.3			6.8			20.3				
Progression Factor		2.02			1.00			1.00				
Incremental Delay, d2		0.9			3.1			0.8				
Delay (s)		11.5			9.9			21.1				
Level of Service		B			A			C				
Approach Delay (s)		11.5			9.9			21.1			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	85	354	427	44	66	92
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	89	373	449	46	69	97
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.86				0.86	0.86
vC, conflicting volume	517				1050	497
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	353				975	329
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	91				67	84
cM capacity (veh/h)	973				213	599

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	462	496	69	97
Volume Left	89	0	69	0
Volume Right	0	46	0	97
cSH	973	1700	213	599
Volume to Capacity	0.09	0.29	0.33	0.16
Queue Length 95th (ft)	8	0	34	14
Control Delay (s)	2.6	0.0	29.9	12.2
Lane LOS	A		D	B
Approach Delay (s)	2.6	0.0	19.6	
Approach LOS			C	

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	473	1	27	675	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			1711		
Flt Permitted	1.00			0.97		
Satd. Flow (perm)	1714			1661		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	526	1	30	750	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	527	0	0	780	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0		
Effective Green, g (s)	59.0			31.0		
Actuated g/C Ratio	0.69			0.36		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1190			606		
v/s Ratio Prot	c0.31					
v/s Ratio Perm				c0.47		
v/c Ratio	0.44			1.29		
Uniform Delay, d1	5.7			27.0		
Progression Factor	0.06			1.00		
Incremental Delay, d2	0.1			141.4		
Delay (s)	0.5			168.4		
Level of Service	A			F		
Approach Delay (s)	0.5			168.4	0.0	
Approach LOS	A			F	A	

Intersection Summary			
HCM Average Control Delay	100.7	HCM Level of Service	F
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	185	193	25	561	0	0	0	0	3	0	263
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	206	214	28	623	0	0	0	0	3	0	292
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	623			206			992	992	210	782	884	623
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	623			206			992	992	210	782	884	623
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	31
cM capacity (veh/h)	968			984			62	241	802	282	278	424

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	137	283	651	3	292
Volume Left	0	0	28	3	0
Volume Right	0	214	0	0	292
cSH	1700	1700	984	282	424
Volume to Capacity	0.08	0.17	0.03	0.01	0.69
Queue Length 95th (ft)	0	0	2	1	127
Control Delay (s)	0.0	0.0	0.7	17.9	30.3
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	30.2	
Approach LOS				D	

Intersection Summary			
Average Delay	6.9		
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	188	0	586	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	209	0	651	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	104	104	651
Volume Left (vph)	104	104	651
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.9
Degree Utilization, x	0.20	0.20	0.88
Capacity (veh/h)	511	512	734
Control Delay (s)	10.3	10.3	32.2
Approach Delay (s)	10.3		32.2
Approach LOS	B		D

Intersection Summary			
Delay	26.9		
HCM Level of Service	D		
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	650	210	172	519	0	0	0	0	208	117	300
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.94	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3704	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3704	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	684	221	181	546	0	0	0	0	219	123	316
RTOR Reduction (vph)	0	0	107	0	0	0	0	0	0	0	81	92
Lane Group Flow (vph)	0	684	114	0	727	0	0	0	0	120	299	66
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.1	39.1		68.1					22.1	22.1	67.2
Effective Green, g (s)		39.1	39.1		68.1					22.1	22.1	67.2
Actuated g/C Ratio		0.24	0.24		0.43					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		728	294		1435					186	512	471
v/s Ratio Prot		c0.23			c0.22					c0.09	0.08	
v/s Ratio Perm			0.09									0.06
v/c Ratio		0.94	0.39		0.51					0.65	0.58	0.14
Uniform Delay, d1		59.3	50.4		33.6					65.2	64.6	28.6
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		21.5	3.8		0.1					7.5	1.7	0.1
Delay (s)		80.8	54.3		0.7					72.7	66.3	28.7
Level of Service		F	D		A					E	E	C
Approach Delay (s)		74.3			0.7			0.0			58.5	
Approach LOS		E			A			A			E	

Intersection Summary			
HCM Average Control Delay	46.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	32.7
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	212	646	0	0	453	112	238	150	195	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.92				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (prot)	1574	3366			3149	1457	1531	2963				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (perm)	1574	3366			3149	1457	1531	2963				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	236	718	0	0	503	124	264	167	217	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	88	0	117	0	0	0	0
Lane Group Flow (vph)	236	718	0	0	503	36	222	309	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	83.9	83.9			33.7	33.7	15.5	15.5				
Effective Green, g (s)	83.9	83.9			33.7	33.7	15.5	15.5				
Actuated g/C Ratio	0.52	0.52			0.21	0.21	0.10	0.10				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	825	1765			663	307	148	287				
v/s Ratio Prot	0.15	c0.21			c0.16		c0.14	0.10				
v/s Ratio Perm						0.02						
v/c Ratio	0.29	0.41			0.76	0.12	1.50	1.08				
Uniform Delay, d1	21.3	23.0			59.3	51.1	72.2	72.2				
Progression Factor	0.07	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.1	0.1			5.0	0.2	256.9	75.6				
Delay (s)	1.6	1.5			64.3	51.3	329.2	147.8				
Level of Service	A	A			E	D	F	F				
Approach Delay (s)		1.5			61.7			209.9			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	79.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.9
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	220	326	75	35	356	45	88	824	62	59	749	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1546	1556	1328	1595	1760		1532	2990		1509	2919	
Flt Permitted	0.23	1.00	1.00	0.42	1.00		0.17	1.00		0.15	1.00	
Satd. Flow (perm)	374	1556	1328	703	1760		267	2990		238	2919	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	343	79	37	375	47	93	867	65	62	788	109
RTOR Reduction (vph)	0	0	52	0	5	0	0	6	0	0	12	0
Lane Group Flow (vph)	232	343	27	37	417	0	93	926	0	62	885	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		39.6	34.1		39.6	34.1	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	229	557	461	268	554		175	1134		163	1107	
v/s Ratio Prot	c0.07	0.22		0.00	0.24		c0.03	c0.31		0.02	0.30	
v/s Ratio Perm	c0.34		0.02	0.04			0.20			0.14		
v/c Ratio	1.01	0.62	0.06	0.14	0.75		0.53	0.82		0.38	0.80	
Uniform Delay, d1	26.3	23.8	19.6	20.4	27.7		17.9	25.1		17.7	24.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	62.9	5.0	0.2	0.2	9.2		3.1	6.5		1.5	6.1	
Delay (s)	89.2	28.8	19.8	20.7	36.8		21.0	31.6		19.2	30.9	
Level of Service	F	C	B	C	D		C	C		B	C	
Approach Delay (s)		49.1			35.5			30.7			30.2	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	35.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	301	26	5	311	19	78	80	16	11	44	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.92	
Flt Protected		0.99	1.00		1.00	1.00		0.98			1.00	
Satd. Flow (prot)		1910	1482		1600	1198		1904			1792	
Flt Permitted		0.91	1.00		1.00	1.00		0.83			0.98	
Satd. Flow (perm)		1761	1482		1595	1198		1624			1762	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	317	27	5	327	20	82	84	17	12	46	86
RTOR Reduction (vph)	0	0	14	0	0	10	0	6	0	0	50	0
Lane Group Flow (vph)	0	374	13	0	332	10	0	177	0	0	94	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		867	730		785	590		675			732	
v/s Ratio Prot												
v/s Ratio Perm		c0.21	0.01		0.21	0.01		c0.11			0.05	
v/c Ratio		0.43	0.02		0.42	0.02		0.26			0.13	
Uniform Delay, d1		10.6	8.5		10.6	8.4		12.5			11.7	
Progression Factor		1.00	1.00		1.67	2.20		1.00			1.51	
Incremental Delay, d2		1.6	0.0		1.6	0.0		0.9			0.4	
Delay (s)		12.2	8.5		19.2	18.6		13.4			18.1	
Level of Service		B	A		B	B		B			B	
Approach Delay (s)		12.0			19.2			13.4			18.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	219	35	6	176	6	84	228	22	9	53	73
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.93	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1664	1392		1608	1497		1734	1390		1571	
Flt Permitted		0.85	1.00		0.99	1.00		0.88	1.00		0.98	
Satd. Flow (perm)		1439	1392		1592	1497		1553	1390		1541	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	91	231	37	6	185	6	88	240	23	9	56	77
RTOR Reduction (vph)	0	0	24	0	0	4	0	0	12	0	39	0
Lane Group Flow (vph)	0	322	13	0	191	2	0	328	11	0	103	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		509	493		563	530		765	684		759	
v/s Ratio Prot												
v/s Ratio Perm		c0.22	0.01		0.12	0.00		c0.21	0.01		0.07	
v/c Ratio		0.63	0.03		0.34	0.00		0.43	0.02		0.14	
Uniform Delay, d1		17.5	13.7		15.4	13.6		10.6	8.4		9.0	
Progression Factor		1.87	3.33		0.95	0.97		0.27	0.18		1.14	
Incremental Delay, d2		5.5	0.1		1.6	0.0		0.8	0.0		0.4	
Delay (s)		38.3	45.7		16.3	13.2		3.7	1.6		10.6	
Level of Service		D	D		B	B		A	A		B	
Approach Delay (s)		39.0			16.2			3.6			10.6	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	166	23	35	9	27	6	43	286	19	6	201	115
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.99			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.98			0.99			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1772	1390		1835			1970			1873	1328
Flt Permitted		0.79	1.00		0.94			0.95			0.99	1.00
Satd. Flow (perm)		1466	1390		1749			1874			1858	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	184	26	39	10	30	7	48	318	21	7	223	128
RTOR Reduction (vph)	0	0	23	0	5	0	0	3	0	0	0	65
Lane Group Flow (vph)	0	210	16	0	42	0	0	384	0	0	230	63
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		647	577		457			923			915	654
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.09	0.01		0.02			c0.20			0.12	0.05
v/c Ratio		0.32	0.03		0.09			0.42			0.25	0.10
Uniform Delay, d1		12.8	11.2		18.2			10.5			9.6	8.8
Progression Factor		0.85	1.52		1.00			0.43			0.53	0.31
Incremental Delay, d2		1.1	0.1		0.4			1.1			0.6	0.3
Delay (s)		12.1	17.1		18.6			5.6			5.7	3.0
Level of Service		B	B		B			A			A	A
Approach Delay (s)		12.9			18.6			5.6			4.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	990	222	333	1149	0	0	0	0	275	201	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4322		1589	3226					1419	2711	1355
Flt Permitted		1.00		0.12	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4322		204	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1042	234	351	1209	0	0	0	0	289	212	396
RTOR Reduction (vph)	0	32	0	0	0	0	0	0	0	0	59	59
Lane Group Flow (vph)	0	1244	0	351	1209	0	0	0	0	234	394	151
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		44.3		69.3	69.3					23.7	23.7	23.7
Effective Green, g (s)		44.3		69.3	69.3					23.7	23.7	23.7
Actuated g/C Ratio		0.42		0.66	0.66					0.23	0.23	0.23
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1823		405	2129					320	612	306
v/s Ratio Prot		0.29		c0.17	0.37							
v/s Ratio Perm				c0.40						c0.16	0.15	0.11
v/c Ratio		0.68		0.87	0.57					0.73	0.64	0.49
Uniform Delay, d1		24.6		24.7	9.7					37.7	36.8	35.4
Progression Factor		1.00		0.90	1.67					1.00	1.00	1.00
Incremental Delay, d2		2.1		9.0	0.5					8.6	2.4	1.5
Delay (s)		26.7		31.1	16.7					46.3	39.3	36.9
Level of Service		C		C	B					D	D	D
Approach Delay (s)		26.7			19.9			0.0			40.5	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM Average Control Delay	27.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	109.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	954	0	0	933	234	549	365	681	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0			6.0				
Lane Util. Factor	0.97	0.95			0.91			0.91				
Frpb, ped/bikes	1.00	1.00			1.00			1.00				
Flpb, ped/bikes	1.00	1.00			1.00			1.00				
Frt	1.00	1.00			0.97			0.94				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	2915	3138			4350			4339				
Flt Permitted	0.13	1.00			1.00			0.98				
Satd. Flow (perm)	407	3138			4350			4339				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	327	1004	0	0	982	246	578	384	717	0	0	0
RTOR Reduction (vph)	0	0	0	0	36	0	0	89	0	0	0	0
Lane Group Flow (vph)	327	1004	0	0	1192	0	0	1590	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt						Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2						8					
Actuated Green, G (s)	63.6	63.6			45.4			29.4				
Effective Green, g (s)	63.6	63.6			45.4			29.4				
Actuated g/C Ratio	0.61	0.61			0.43			0.28				
Clearance Time (s)	6.0	6.0			6.0			6.0				
Vehicle Extension (s)	3.5	7.0			7.0			5.0				
Lane Grp Cap (vph)	538	1901			1881			1215				
v/s Ratio Prot	0.07	c0.32			0.27							
v/s Ratio Perm	c0.30							0.37				
v/c Ratio	0.61	0.53			0.63			1.42dr				
Uniform Delay, d1	12.9	12.0			23.3			37.8				
Progression Factor	0.60	0.60			1.02			1.00				
Incremental Delay, d2	1.5	0.8			0.9			144.8				
Delay (s)	9.3	8.0			24.6			182.6				
Level of Service	A	A			C			F				
Approach Delay (s)		8.3			24.6			182.6			0.0	
Approach LOS		A			C			F			A	

Intersection Summary			
HCM Average Control Delay	82.1	HCM Level of Service	F
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	109.9%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	941	226	78	874	51	226	178	40	76	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1604	3231		1446	3007		1544	2782	
Flt Permitted	0.11	1.00	1.00	0.29	1.00		0.55	1.00		0.61	1.00	
Satd. Flow (perm)	175	3061	1291	488	3231		841	3007		990	2782	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	991	238	82	920	54	238	187	42	80	117	96
RTOR Reduction (vph)	0	0	98	0	4	0	0	21	0	0	80	0
Lane Group Flow (vph)	111	991	140	82	970	0	238	208	0	80	133	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	62.7	52.6	61.7	40.8	34.2		28.9	19.8		24.7	17.7	
Effective Green, g (s)	62.7	52.6	61.7	40.8	34.2		28.9	19.8		24.7	17.7	
Actuated g/C Ratio	0.60	0.50	0.59	0.39	0.33		0.28	0.19		0.24	0.17	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	435	1533	759	260	1052		284	567		270	469	
v/s Ratio Prot	0.06	c0.32	0.02	c0.02	c0.30		c0.07	0.07		0.02	0.05	
v/s Ratio Perm	0.09		0.09	0.10			c0.16			0.05		
v/c Ratio	0.26	0.65	0.18	0.32	0.92		0.84	0.37		0.30	0.28	
Uniform Delay, d1	13.1	19.3	10.0	20.7	34.1		34.4	37.1		32.4	38.1	
Progression Factor	1.04	1.20	2.56	1.00	1.00		0.96	0.90		1.00	1.00	
Incremental Delay, d2	0.7	1.1	0.1	0.7	14.4		18.0	1.3		0.6	1.2	
Delay (s)	14.3	24.2	25.7	21.4	48.5		51.0	34.9		33.0	39.3	
Level of Service	B	C	C	C	D		D	C		C	D	
Approach Delay (s)		23.6			46.4			43.1			37.6	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	35.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	329	286	81	215	102	329	382	161	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.95		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1635	2916		1463	3047		1589	3174		1549	3135	
Flt Permitted	0.52	1.00		0.23	1.00		0.46	1.00		0.44	1.00	
Satd. Flow (perm)	888	2916		359	3047		772	3174		713	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	346	301	85	226	107	346	402	169	96	272	57
RTOR Reduction (vph)	0	144	0	0	52	0	0	43	0	0	17	0
Lane Group Flow (vph)	65	503	0	85	281	0	346	528	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.4	28.4		36.2	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.4	28.4		36.2	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	349	789		202	836		530	1267		320	935	
v/s Ratio Prot	0.01	c0.17		c0.03	0.09		c0.11	0.17		0.02	0.10	
v/s Ratio Perm	0.05			0.12			c0.22			0.09		
v/c Ratio	0.19	0.64		0.42	0.34		0.65	0.42		0.30	0.33	
Uniform Delay, d1	24.0	33.8		24.8	30.5		16.6	22.7		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.04	0.90	
Incremental Delay, d2	0.3	3.9		1.7	1.1		3.0	1.0		0.6	0.9	
Delay (s)	24.3	37.7		26.4	31.6		19.6	23.8		23.8	26.8	
Level of Service	C	D		C	C		B	C		C	C	
Approach Delay (s)		36.4			30.5			22.2			26.2	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	402	612	6	409	110	201	617	7	84	385	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.92			0.97		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2588			2888		1437	3187		1451	2799	
Flt Permitted		0.62			0.93		0.36	1.00		0.27	1.00	
Satd. Flow (perm)		1620			2690		550	3187		405	2799	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	188	447	680	7	454	122	223	686	8	93	428	117
RTOR Reduction (vph)	0	193	0	0	37	0	0	1	0	0	38	0
Lane Group Flow (vph)	0	1122	0	0	546	0	223	693	0	93	507	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Effective Green, g (s)		27.0			19.0		26.0	22.0		26.0	22.0	
Actuated g/C Ratio		0.42			0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		732			786		275	1079		226	947	
v/s Ratio Prot		c0.09					c0.05	0.22		0.03	0.18	
v/s Ratio Perm		c0.54			0.20		c0.27			0.14		
v/c Ratio		1.53			0.69		0.81	0.64		0.41	0.53	
Uniform Delay, d1		19.0			20.4		16.4	18.2		12.9	17.4	
Progression Factor		1.00			1.51		1.14	1.01		1.00	1.00	
Incremental Delay, d2		246.7			0.5		17.1	2.2		5.5	2.2	
Delay (s)		265.7			31.3		35.7	20.5		18.4	19.5	
Level of Service		F			C		D	C		B	B	
Approach Delay (s)		265.7			31.3			24.2			19.4	
Approach LOS		F			C			C			B	

Intersection Summary			
HCM Average Control Delay	116.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	117	343	858	132	13	112	809	278	10	968	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	0.99		1.00	0.96		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1665	1695		1620	1939		1659	3110		1139	3232	
Flt Permitted	0.66	1.00		0.29	1.00		0.19	1.00		0.16	1.00	
Satd. Flow (perm)	1161	1695		499	1939		326	3110		191	3232	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	54	121	354	885	136	13	115	834	287	10	998	46
RTOR Reduction (vph)	0	41	0	0	5	0	0	52	0	0	5	0
Lane Group Flow (vph)	54	434	0	885	144	0	115	1069	0	10	1039	0
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	429	626		184	716		155	1483		91	1541	
v/s Ratio Prot		0.26			0.07			0.34			0.32	
v/s Ratio Perm	0.05			c1.77			c0.35			0.05		
v/c Ratio	0.13	0.69		4.81	0.20		0.74	0.72		0.11	0.67	
Uniform Delay, d1	13.6	17.4		20.5	14.0		13.8	13.5		9.4	13.1	
Progression Factor	1.00	1.00		1.73	1.92		1.00	1.00		0.98	0.96	
Incremental Delay, d2	0.6	6.2		1715.5	0.1		27.1	3.1		0.2	0.2	
Delay (s)	14.2	23.6		1751.0	26.8		40.8	16.6		9.5	12.8	
Level of Service	B	C		F	C		D	B		A	B	
Approach Delay (s)		22.6			1502.5			18.9			12.7	
Approach LOS		C			F			B			B	

Intersection Summary			
HCM Average Control Delay	415.9	HCM Level of Service	F
HCM Volume to Capacity ratio	2.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	133.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	427	952	570	14	3	14	3	47	10	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.0		5.0				4.0			4.0		
Lane Util. Factor	0.95		0.95				1.00			1.00		
Frpb, ped/bikes	1.00		1.00				1.00			0.99		
Flpb, ped/bikes	1.00		1.00				1.00			1.00		
Frt	1.00		1.00				0.91			0.95		
Flt Protected	1.00		0.97				0.99			0.97		
Satd. Flow (prot)	2956		2880				1732			1864		
Flt Permitted	1.00		0.59				0.94			0.87		
Satd. Flow (perm)	2956		1742				1650			1671		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	449	1002	600	15	3	15	3	49	11	0	2	4
RTOR Reduction (vph)	0	0	1	0	0	0	38	0	0	3	0	0
Lane Group Flow (vph)	449	0	1616	0	0	0	32	0	0	14	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		custom				Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4 7				2			6			
Actuated Green, G (s)	18.0		27.0				14.0			14.0		
Effective Green, g (s)	18.0		27.0				14.0			14.0		
Actuated g/C Ratio	0.28		0.42				0.22			0.22		
Clearance Time (s)	5.0		5.0				4.0			4.0		
Lane Grp Cap (vph)	819		829				355			360		
v/s Ratio Prot	0.15		c0.18									
v/s Ratio Perm			c0.63				c0.02			0.01		
v/c Ratio	0.55		3.37dl				0.09			0.04		
Uniform Delay, d1	20.0		19.0				20.4			20.2		
Progression Factor	1.22		0.66				1.00			1.00		
Incremental Delay, d2	0.2		430.0				0.5			0.2		
Delay (s)	24.8		442.6				20.9			20.4		
Level of Service	C		F				C			C		
Approach Delay (s)	24.8		442.6				20.9			20.4		
Approach LOS	C		F				C			C		

Intersection Summary			
HCM Average Control Delay	366.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	125.7%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	NEL	NER
Lane Configurations		
Volume (vph)	1	421
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)	5.0	
Lane Util. Factor	1.00	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.87	
Flt Protected	1.00	
Satd. Flow (prot)	1429	
Flt Permitted	1.00	
Satd. Flow (perm)	1429	
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	1	443
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	444	0
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	9%
Turn Type		
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.15	
Clearance Time (s)	5.0	
Lane Grp Cap (vph)	220	
v/s Ratio Prot	c0.31	
v/s Ratio Perm		
v/c Ratio	2.02	
Uniform Delay, d1	27.5	
Progression Factor	1.24	
Incremental Delay, d2	469.8	
Delay (s)	503.8	
Level of Service	F	
Approach Delay (s)	503.8	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	214	758	1303	66	41	235
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.99		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3222	3234		1629	1457
Flt Permitted		0.51	1.00		0.95	1.00
Satd. Flow (perm)		1673	3234		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	238	842	1448	73	46	261
RTOR Reduction (vph)	0	0	5	0	0	34
Lane Group Flow (vph)	0	1080	1516	0	46	227
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1030	1990		426	381
v/s Ratio Prot			0.47		0.03	
v/s Ratio Perm		c0.65				c0.16
v/c Ratio		2.20dl	0.76		0.11	0.60
Uniform Delay, d1		12.5	9.0		18.2	21.0
Progression Factor		1.77	0.87		0.99	0.97
Incremental Delay, d2		24.8	1.6		0.5	6.7
Delay (s)		46.9	9.5		18.6	27.1
Level of Service		D	A		B	C
Approach Delay (s)		46.9	9.5		25.8	
Approach LOS		D	A		C	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	58	714	1287	196	135	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2977		1464	1373
Flt Permitted		0.70	1.00		0.95	1.00
Satd. Flow (perm)		2068	2977		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	61	752	1355	206	142	80
RTOR Reduction (vph)	0	0	19	0	0	34
Lane Group Flow (vph)	0	813	1542	0	142	46
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1209	1740		428	401
v/s Ratio Prot			c0.52		c0.10	
v/s Ratio Perm		0.39				0.03
v/c Ratio		0.67	0.89		0.33	0.11
Uniform Delay, d1		9.2	11.6		18.0	16.8
Progression Factor		0.92	1.02		0.96	1.05
Incremental Delay, d2		0.3	2.0		2.0	0.6
Delay (s)		8.7	13.9		19.3	18.2
Level of Service		A	B		B	B
Approach Delay (s)		8.7	13.9		18.9	
Approach LOS		A	B		B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	686	175	107	1182	482	83
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.98	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2222		1770	2436	1820	
Flt Permitted	1.00		0.13	1.00	0.96	
Satd. Flow (perm)	2222		240	2436	1820	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	700	179	109	1206	492	85
RTOR Reduction (vph)	14	0	0	0	9	0
Lane Group Flow (vph)	865	0	109	1206	568	0
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1060		114	1162	672	
v/s Ratio Prot	0.39			c0.50	c0.31	
v/s Ratio Perm			0.45			
v/c Ratio	0.82		0.96	1.04	0.84	
Uniform Delay, d1	14.6		16.3	17.0	18.8	
Progression Factor	1.51		1.00	1.00	1.00	
Incremental Delay, d2	5.5		73.1	36.7	12.4	
Delay (s)	27.6		89.5	53.7	31.2	
Level of Service	C		F	D	C	
Approach Delay (s)	27.6			56.7	31.2	
Approach LOS	C			E	C	

Intersection Summary			
HCM Average Control Delay	42.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	738	99	258	1220	9	111	0	187	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.20	1.00	1.00	0.26	1.00	1.00		0.76	1.00		0.61	
Satd. Flow (perm)	397	3213	1422	430	3138	1366		1309	1443		626	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	820	110	287	1356	10	123	0	208	1	0	0
RTOR Reduction (vph)	0	0	53	0	0	3	0	0	175	0	0	0
Lane Group Flow (vph)	1	820	57	287	1356	7	0	123	33	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	44.4	44.4	44.4	63.7	63.7	63.7		13.3	13.3		13.3	
Effective Green, g (s)	44.4	44.4	44.4	63.7	63.7	63.7		13.3	13.3		13.3	
Actuated g/C Ratio	0.52	0.52	0.52	0.75	0.75	0.75		0.16	0.16		0.16	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	207	1678	743	545	2352	1024		205	226		98	
v/s Ratio Prot		0.26		0.10	c0.43							
v/s Ratio Perm	0.00		0.04	0.29		0.01		c0.09	0.02		0.00	
v/c Ratio	0.00	0.49	0.08	0.53	0.58	0.01		0.60	0.14		0.01	
Uniform Delay, d1	9.7	13.0	10.1	4.9	4.7	2.7		33.4	30.9		30.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.0	0.2	0.9	0.3	0.0		4.7	0.3		0.0	
Delay (s)	9.8	14.0	10.3	5.8	5.0	2.7		38.0	31.2		30.3	
Level of Service	A	B	B	A	A	A		D	C		C	
Approach Delay (s)		13.6			5.2			33.8			30.3	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	13	817	844	45	24	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3038	3017		1487	
Flt Permitted		0.93	1.00		0.96	
Satd. Flow (perm)		2835	3017		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	908	938	50	27	10
RTOR Reduction (vph)	0	0	4	0	9	0
Lane Group Flow (vph)	0	922	984	0	28	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1040	2145		116	
v/s Ratio Prot			c0.33		c0.02	
v/s Ratio Perm		c0.33				
v/c Ratio		0.89	0.46		0.24	
Uniform Delay, d1		26.7	5.6		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		11.1	0.2		4.8	
Delay (s)		37.9	0.3		43.8	
Level of Service		D	A		D	
Approach Delay (s)		37.9	0.3		43.8	
Approach LOS		D	A		D	

Intersection Summary			
HCM Average Control Delay	18.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	431	1	27	568	80	0	0	1	45	3	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1729			3231			1432			1610	1282
Flt Permitted		0.79			0.93			1.00			0.93	1.00
Satd. Flow (perm)		1375			3021			1432			1569	1282
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	88	479	1	30	631	89	0	0	1	50	3	104
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	70
Lane Group Flow (vph)	0	568	0	0	738	0	0	0	0	0	53	34
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		501			1634			152			469	422
v/s Ratio Prot					c0.07			0.00			c0.02	
v/s Ratio Perm		c0.41			0.16						c0.01	0.03
v/c Ratio		1.13			0.45			0.00			0.11	0.08
Uniform Delay, d1		27.0			12.4			34.0			21.9	19.6
Progression Factor		1.00			1.83			1.00			1.00	1.00
Incremental Delay, d2		82.4			0.1			0.0			0.5	0.4
Delay (s)		109.4			22.7			34.0			22.4	20.0
Level of Service		F			C			C			C	C
Approach Delay (s)		109.4			22.7			34.0			20.8	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM Average Control Delay	55.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1001: 95th Street & Wentworth Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	1014	58	36	35	48	23	26	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.95			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1557	3022		1587	3021			1816			1706	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	277	3022		604	3021			1649			1630	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1067	61	38	37	51	24	27	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	21	0
Lane Group Flow (vph)	41	653	0	37	1122	0	0	93	0	0	122	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	145	1581		316	1580			583			577	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.15			0.06				0.06			c0.07	
v/c Ratio	0.28	0.41		0.12	0.71			0.16			0.21	
Uniform Delay, d1	8.7	9.4		7.9	11.8			14.4			14.7	
Progression Factor	1.00	1.00		0.70	1.41			1.00			1.00	
Incremental Delay, d2	4.8	0.8		0.7	2.4			0.6			0.8	
Delay (s)	13.5	10.2		6.2	19.1			15.0			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.6			15.0			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	789	5	32	637	41	0	0	0	586	89	379
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.93	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	793	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	331	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	831	5	34	671	43	0	0	0	617	94	399
RTOR Reduction (vph)	0	0	0	0	0	19	0	0	0	0	0	166
Lane Group Flow (vph)	26	836	0	34	671	24	0	0	0	617	94	233
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	159	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.21					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.05						0.16
v/c Ratio	0.16	0.75		0.05	0.37	0.08				0.81	0.24	0.68
Uniform Delay, d1	31.6	38.7		15.2	15.8	13.1				47.4	40.7	45.6
Progression Factor	0.85	0.86		0.33	0.75	1.24				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.4				9.3	1.4	10.5
Delay (s)	28.9	37.6		5.1	12.2	16.6				56.7	42.1	56.1
Level of Service	C	D		A	B	B				E	D	E
Approach Delay (s)		37.3			12.2			0.0			55.2	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	815	220	54	578	287	102	251	55	39	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3262		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3262		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	358	858	232	57	608	302	107	264	58	41	0	32
RTOR Reduction (vph)	0	18	0	0	0	228	0	0	42	0	0	30
Lane Group Flow (vph)	358	1072	0	57	608	74	0	371	16	41	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1706		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.32	0.63		0.54	0.79	0.30		0.52	0.06	0.77		0.04
Uniform Delay, d1	31.9	22.0		59.2	45.8	39.8		45.1	40.5	60.1		57.4
Progression Factor	0.95	0.16		1.00	1.00	1.00		0.94	0.99	1.00		1.00
Incremental Delay, d2	0.5	1.1		18.7	8.0	3.0		2.7	0.4	49.7		0.4
Delay (s)	30.7	4.7		77.9	53.8	42.8		45.3	40.6	109.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		11.1			51.8			44.7			87.0	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	893	166	105	839	0	74	0	89	9	15	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.98	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1649	3149		1388		1451	1803	1857	
Flt Permitted		1.00		0.17	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		299	3149		1082		1451	1803	1857	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	992	184	117	932	0	82	0	99	10	17	8
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	67	0	5	0
Lane Group Flow (vph)	0	1161	0	117	932	0	82	0	32	10	20	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		179	1889		346		464	577	594	
v/s Ratio Prot		0.39			0.30						0.01	
v/s Ratio Perm				c0.39			c0.08		0.02	0.01		
v/c Ratio		0.65		0.65	0.49		0.24		0.07	0.02	0.03	
Uniform Delay, d1		13.1		13.2	11.4		25.0		23.6	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.8		17.1	0.9		1.6		0.3	0.1	0.1	
Delay (s)		14.9		30.3	12.3		26.6		23.9	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		14.9			14.3			25.1			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	301	0	1230	215	686	0	0	792	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4271	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4271	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	307	0	1255	219	700	0	0	808	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	307	0	1255	219	700	0	0	1308	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.20		c0.82	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.67		2.87	0.47	0.26			1.16dr	
Uniform Delay, d1				32.6		37.5	29.6	8.6			37.0	
Progression Factor				1.00		1.00	0.64	2.11			1.00	
Incremental Delay, d2				7.8		848.6	2.8	0.2			35.5	
Delay (s)				40.4		886.1	21.8	18.4			72.5	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			719.9			19.2			72.5	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	326.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	322	770	146	0	0	0	0	579	410	359	734	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3156						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3156						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	332	794	151	0	0	0	0	597	423	370	757	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	299	964	0	0	0	0	0	597	423	370	757	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.14		c0.23	0.16	
v/s Ratio Perm	0.20	0.31							c0.19			
v/c Ratio	0.61	0.94						0.51	0.71	0.78	0.27	
Uniform Delay, d1	29.9	34.6						32.7	34.8	33.9	10.5	
Progression Factor	1.00	1.00						1.14	1.14	0.86	0.22	
Incremental Delay, d2	5.6	17.5						1.4	6.2	4.8	0.1	
Delay (s)	35.5	52.0						38.7	45.8	34.1	2.4	
Level of Service	D	D						D	D	C	A	
Approach Delay (s)		48.2			0.0			41.6			12.8	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	34.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	25	24	11	164	0	0	149	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.54	1.00			1.00	
Satd. Flow (perm)				1688	3132		974	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	322	28	27	12	182	0	0	166	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	322	37	0	12	182	0	0	171	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		634	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.10			0.09	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.17			0.16	
Uniform Delay, d1				24.5	20.0		10.5	8.0			9.8	
Progression Factor				1.00	1.00		1.04	1.18			1.00	
Incremental Delay, d2				4.9	0.1		0.1	0.3			0.3	
Delay (s)				29.4	20.1		11.0	9.8			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			28.0			9.8			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	5	0	14	0	149	45	46	393	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1565			1718		1590	1860	
Flt Permitted	0.74	1.00			0.97			1.00		0.59	1.00	
Satd. Flow (perm)	1516	1735			1531			1718		987	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	5	0	15	0	157	47	48	414	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	13	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	10	0	0	191	0	48	414	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	551			486			808		630	1094	
v/s Ratio Prot		c0.01						0.11		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.24		0.08	0.38	
Uniform Delay, d1	20.0	20.0			19.9			13.4		8.8	9.3	
Progression Factor	1.00	1.00			1.00			1.00		0.98	0.87	
Incremental Delay, d2	0.1	0.1			0.1			0.7		0.2	0.9	
Delay (s)	20.1	20.1			20.0			14.1		8.8	9.0	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			14.1			9.0	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	48	42	12	193	288	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1752		1765	1782	1657	
Flt Permitted	0.97		0.50	1.00	1.00	
Satd. Flow (perm)	1752		937	1782	1657	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	47	13	214	320	31
RTOR Reduction (vph)	32	0	0	0	5	0
Lane Group Flow (vph)	68	0	13	214	346	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		519	987	918	
v/s Ratio Prot	c0.04			0.12	c0.21	
v/s Ratio Perm			0.01			
v/c Ratio	0.12		0.03	0.22	0.38	
Uniform Delay, d1	15.5		6.6	7.4	8.2	
Progression Factor	1.00		0.51	0.61	1.43	
Incremental Delay, d2	0.4		0.1	0.5	1.0	
Delay (s)	15.9		3.4	5.0	12.7	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			4.9	12.7	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	30.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	268	9	258	132	0	0	283	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3772		1693	1678			1738	1428
Flt Permitted					1.00		0.47	1.00			1.00	1.00
Satd. Flow (perm)					3772		844	1678			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	298	10	287	147	0	0	314	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	339	0	287	147	0	0	314	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		606	1007			777	638
v/s Ratio Prot					c0.09		c0.06	0.09			0.18	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.47	0.15			0.40	0.01
Uniform Delay, d1					22.5		13.7	7.5			15.9	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.6	0.3			1.6	0.0
Delay (s)					23.1		16.4	7.8			17.4	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.5			17.2	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	95	94	38	133	205	30	59	703	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3287		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.59	1.00	
Satd. Flow (perm)					1896		446	3287		1061	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	106	104	42	148	228	33	66	781	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	15	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	242	0	148	246	0	66	824	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1490		640	1572	
v/s Ratio Prot					c0.13		c0.04	0.07		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.16		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.1		8.2	14.7	
Progression Factor					1.00		0.84	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.2		0.3	1.3	
Delay (s)					22.9		17.1	10.2		8.5	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.7			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	273	24	159	589	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3172		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		600	3172		1008	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	287	25	167	620	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	9	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	303	0	167	665	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		336	1776		564	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.17		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.0		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.2		3.5	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.2			2.9	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	37	192	67	251	588	81
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	41	213	74	279	653	90

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	254	167	186	436	308
Volume Left (vph)	41	74	0	0	0
Volume Right (vph)	213	0	0	0	90
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.7	6.6	6.3	5.9	5.7
Degree Utilization, x	0.41	0.30	0.33	0.71	0.48
Capacity (veh/h)	592	528	546	602	622
Control Delay (s)	12.6	11.2	11.2	20.8	12.7
Approach Delay (s)	12.6	11.2		17.4	
Approach LOS	B	B		C	

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	378	18	24	414	78	82	55	68	354	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.93			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1421			1710	3251	
Flt Permitted		0.14	1.00	1.00	0.52	1.00	1.00			0.14	1.00	
Satd. Flow (perm)		238	1731	1530	930	1731	1421			257	3251	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	420	20	27	460	87	91	61	76	393	36
RTOR Reduction (vph)	0	0	0	12	0	0	36	0	0	0	7	0
Lane Group Flow (vph)	0	75	420	8	27	460	142	0	0	137	422	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Effective Green, g (s)		44.0	44.0	44.0	25.0	25.0	25.0			28.0	28.0	
Actuated g/C Ratio		0.42	0.42	0.42	0.24	0.24	0.24			0.27	0.27	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		303	725	641	221	412	338			69	867	
v/s Ratio Prot		0.04	c0.24			c0.27					0.13	
v/s Ratio Perm		0.07		0.01	0.03		0.10			c0.53		
v/c Ratio		0.25	0.58	0.01	0.12	1.12	0.42			1.99	0.49	
Uniform Delay, d1		21.6	23.4	17.8	31.4	40.0	33.9			38.5	32.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	3.4	0.0	1.1	79.9	3.8			491.0	2.0	
Delay (s)		23.5	26.8	17.9	32.5	119.9	37.7			529.5	34.4	
Level of Service		C	C	B	C	F	D			F	C	
Approach Delay (s)			25.9			94.3					154.2	
Approach LOS			C			F					F	

Intersection Summary			
HCM Average Control Delay	147.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.45		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	104.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	107	571	82	103	4	114	607	197
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1705	3246				1710	2633	
Flt Permitted	0.37	1.00				0.95	1.00	
Satd. Flow (perm)	670	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	119	634	91	114	4	127	674	219
RTOR Reduction (vph)	0	12	0	0	0	0	26	0
Lane Group Flow (vph)	119	827	0	0	0	131	867	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	27.5	27.5				20.5	20.5	
Effective Green, g (s)	27.5	27.5				20.5	20.5	
Actuated g/C Ratio	0.26	0.26				0.20	0.20	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	175	850				334	514	
v/s Ratio Prot		0.25				0.08		
v/s Ratio Perm	0.18						c0.33	
v/c Ratio	0.68	0.97				0.39	1.69	
Uniform Delay, d1	34.8	38.4				36.8	42.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	19.3	25.0				3.4	317.6	
Delay (s)	54.1	63.4				40.3	359.9	
Level of Service	D	E				D	F	
Approach Delay (s)		62.2				319.0		
Approach LOS		E				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	602	0	0	506	50	85	52	18	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1956			1842				
Flt Permitted		0.90			1.00			0.97				
Satd. Flow (perm)		1523			1956			1842				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	669	0	0	562	56	94	58	20	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	741	0	0	618	0	0	172	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		937			1204			482				
v/s Ratio Prot					0.32							
v/s Ratio Perm		c0.49						0.09				
v/c Ratio		0.79			0.51			0.36				
Uniform Delay, d1		9.4			7.0			19.5				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		6.8			1.6			2.1				
Delay (s)		16.1			8.6			21.6				
Level of Service		B			A			C				
Approach Delay (s)		16.1			8.6			21.6			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	427	162	117	335	125	106	639	84	137	759	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes		1.00	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1985	1434		1950	1444	1546	3040	1296	1506	3069	1252
Flt Permitted		0.38	1.00		0.54	1.00	0.23	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)		757	1434		1077	1444	373	3040	1296	455	3069	1252
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	449	171	123	353	132	112	673	88	144	799	99
RTOR Reduction (vph)	0	0	101	0	0	94	0	0	53	0	0	49
Lane Group Flow (vph)	0	524	70	0	476	38	112	673	35	144	799	50
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Effective Green, g (s)		43.0	43.0		30.0	30.0	50.6	42.3	42.3	51.4	42.7	42.7
Actuated g/C Ratio		0.41	0.41		0.29	0.29	0.48	0.40	0.40	0.49	0.41	0.41
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		427	587		308	413	272	1225	522	310	1248	509
v/s Ratio Prot		c0.12					0.03	0.22		c0.04	c0.26	
v/s Ratio Perm		0.39	0.05		c0.44	0.03	0.17		0.03	0.19		0.04
v/c Ratio		1.23	0.12		1.55	0.09	0.41	0.55	0.07	0.46	0.64	0.10
Uniform Delay, d1		31.0	19.2		37.5	27.5	16.5	24.0	19.2	16.0	25.0	19.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.75	1.55	2.63
Incremental Delay, d2		121.4	0.4		261.0	0.4	1.0	1.8	0.3	1.1	2.4	0.4
Delay (s)		152.4	19.7		298.5	27.9	17.5	25.8	19.5	29.0	41.1	51.0
Level of Service		F	B		F	C	B	C	B	C	D	D
Approach Delay (s)		119.7			239.8			24.1			40.4	
Approach LOS		F			F			C			D	

Intersection Summary			
HCM Average Control Delay	90.8	HCM Level of Service	F
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	486	99	94	468	94	55	61	69	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1645			1645			1799				
Flt Permitted		0.85			0.83			0.99				
Satd. Flow (perm)		1411			1381			1799				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	540	110	104	520	104	61	68	77	0	0	0
RTOR Reduction (vph)	0	10	0	0	9	0	0	33	0	0	0	0
Lane Group Flow (vph)	0	734	0	0	719	0	0	173	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		868			850			471				
v/s Ratio Prot												
v/s Ratio Perm		c0.52			0.52			0.10				
v/c Ratio		0.85			0.85			0.37				
Uniform Delay, d1		10.0			10.0			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		10.0			10.1			2.2				
Delay (s)		20.0			20.1			21.8				
Level of Service		B			C			C				
Approach Delay (s)		20.0			20.1			21.8			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	20.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	485	82	76	525	37	39	76	72	54	238	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1685	1382		1713	1417		1685	1455		1879	
Flt Permitted		0.89	1.00		0.85	1.00		0.82	1.00		0.94	
Satd. Flow (perm)		1505	1382		1459	1417		1404	1455		1774	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	511	86	80	553	39	41	80	76	57	251	58
RTOR Reduction (vph)	0	0	37	0	0	12	0	0	52	0	9	0
Lane Group Flow (vph)	0	567	49	0	633	27	0	121	24	0	357	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		863	792		836	812		449	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.38	0.04		c0.43	0.02		0.09	0.02		c0.20	
v/c Ratio		0.66	0.06		0.76	0.03		0.27	0.05		0.63	
Uniform Delay, d1		11.0	7.1		12.1	7.0		19.0	17.6		21.7	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.9	0.2		6.3	0.1		1.5	0.2		5.2	
Delay (s)		14.8	7.2		18.4	7.0		20.4	17.8		26.9	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.8			17.7			19.4			26.9	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	483	34	45	537	54	45	165	55	123	210	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1533	3066		1652	3730		1585	1663	1370	1568	1680	1397
Flt Permitted	0.35	1.00		0.40	1.00		0.57	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	563	3066		687	3730		953	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	537	38	50	597	60	50	183	61	137	233	37
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	37	0	0	22
Lane Group Flow (vph)	66	567	0	50	645	0	50	183	24	137	233	15
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	269	1462		328	1779		381	665	548	417	672	559
v/s Ratio Prot		c0.19			0.17			0.11			c0.14	
v/s Ratio Perm	0.12			0.07			0.05		0.02	0.13		0.01
v/c Ratio	0.25	0.39		0.15	0.36		0.13	0.28	0.04	0.33	0.35	0.03
Uniform Delay, d1	10.1	10.9		9.6	10.8		12.3	13.1	11.9	13.5	13.6	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.83	0.89	0.73	0.59	0.59	0.26
Incremental Delay, d2	2.2	0.8		1.0	0.6		0.7	1.0	0.2	2.0	1.4	0.1
Delay (s)	12.2	11.7		10.6	11.3		11.0	12.7	8.8	9.9	9.4	3.1
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.7			11.3			11.6			9.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	409	81	73	394	67	57	180	64	89	245	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1329	3134		1519	3128		1580	2919		1452	2997	
Flt Permitted	0.44	1.00		0.42	1.00		0.53	1.00		0.59	1.00	
Satd. Flow (perm)	619	3134		678	3128		882	2919		907	2997	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	431	85	77	415	71	60	189	67	94	258	84
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	42	0
Lane Group Flow (vph)	63	516	0	77	486	0	60	217	0	94	300	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	297	1504		325	1501		365	1207		375	1239	
v/s Ratio Prot		c0.16			0.16			0.07			0.10	
v/s Ratio Perm	0.10			0.11			0.07			c0.10		
v/c Ratio	0.21	0.34		0.24	0.32		0.16	0.18		0.25	0.24	
Uniform Delay, d1	11.3	12.1		11.4	12.0		13.8	13.9		14.4	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.6		1.7	0.6		1.0	0.3		1.6	0.5	
Delay (s)	12.9	12.8		13.2	12.6		14.8	14.3		16.0	14.8	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.8			12.7			14.4			15.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	439	62	32	522	48	86	203	60	76	473	109
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1595	1652		1370	1973		1534	2998		1535	3013	
Flt Permitted	0.24	1.00		0.31	1.00		0.28	1.00		0.58	1.00	
Satd. Flow (perm)	405	1652		447	1973		453	2998		939	3013	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	101	462	65	34	549	51	91	214	63	80	498	115
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	101	527	0	34	600	0	91	277	0	80	613	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	43.9	39.3		40.7	37.7		26.7	21.8		26.7	21.8	
Effective Green, g (s)	43.9	37.3		40.7	35.7		26.7	19.8		26.7	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	274	725		247	829		205	698		329	702	
v/s Ratio Prot	c0.02	c0.32		0.00	0.30		c0.03	0.09		0.01	c0.20	
v/s Ratio Perm	0.17			0.06			0.11			0.06		
v/c Ratio	0.37	0.73		0.14	0.72		0.44	0.40		0.24	0.87	
Uniform Delay, d1	23.5	19.7		20.2	20.5		29.2	27.6		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	6.3		0.3	5.5		1.5	1.7		0.4	14.2	
Delay (s)	24.4	25.9		20.4	26.0		30.7	29.2		22.2	45.5	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		25.7			25.7			29.6			42.9	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	393	65	117	509	118	67	158	58	127	367	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3681			3131		1652	3237		1549	3027	
Flt Permitted		0.71			0.72		0.42	1.00		0.60	1.00	
Satd. Flow (perm)		2643			2282		737	3237		983	3027	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	437	72	130	566	131	74	176	64	141	408	91
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	592	0	0	827	0	74	240	0	141	499	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1198			1035		324	1424		433	1332	
v/s Ratio Prot								0.07			c0.16	
v/s Ratio Perm		0.22			c0.36		0.10			0.14		
v/c Ratio		0.49			0.80		0.23	0.17		0.33	0.37	
Uniform Delay, d1		14.4			17.6		13.1	12.7		13.7	14.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.5			6.5		1.6	0.3		2.0	0.8	
Delay (s)		15.9			24.0		14.7	13.0		15.7	14.9	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		15.9			24.0			13.4			15.1	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	871	6	20	584	249	1	1	9	213	1	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.38	1.00		0.25	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	648	3206		436	3320	1485		1519			2533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	968	7	22	649	277	1	1	10	237	1	89
RTOR Reduction (vph)	0	0	0	0	0	103	0	7	0	0	52	0
Lane Group Flow (vph)	109	975	0	22	649	174	0	5	0	0	275	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	406	2008		273	2080	930		402			671	
v/s Ratio Prot		c0.30			0.20							
v/s Ratio Perm	0.17			0.05		0.12		0.00			c0.11	
v/c Ratio	0.27	0.49		0.08	0.31	0.19		0.01			0.41	
Uniform Delay, d1	6.2	7.4		5.4	6.4	5.8		19.9			22.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.6	0.8		0.6	0.4	0.4		0.0			1.7	
Delay (s)	7.8	8.2		6.0	6.8	6.3		20.0			24.0	
Level of Service	A	A		A	A	A		B			C	
Approach Delay (s)		8.2			6.6			20.0			24.0	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	73.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	131	228	125	94	163	56	144	907	90	129	825	98
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1504		1563	1585		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.20	1.00		0.20	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	743	1504		337	1585		317	3069	1337	263	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	240	132	99	172	59	152	955	95	136	868	103
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	48
Lane Group Flow (vph)	138	349	0	99	216	0	152	955	55	136	868	55
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	285	389		190	410		232	1264	551	213	1276	543
v/s Ratio Prot	0.03	c0.23		c0.04	0.14		c0.05	c0.31		0.05	0.28	
v/s Ratio Perm	0.11			0.12			0.26		0.04	0.26		0.04
v/c Ratio	0.48	0.90		0.52	0.53		0.66	0.76	0.10	0.64	0.68	0.10
Uniform Delay, d1	22.7	30.4		22.9	27.0		14.7	21.3	15.3	15.0	20.4	15.4
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.79	0.53	1.00	1.00	1.00
Incremental Delay, d2	5.8	25.9		9.9	4.8		12.3	3.8	0.3	13.8	2.9	0.4
Delay (s)	28.4	56.3		32.7	31.8		22.1	20.7	8.5	28.8	23.4	15.7
Level of Service	C	E		C	C		C	C	A	C	C	B
Approach Delay (s)		48.8			32.1			19.9			23.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	181	37	20	173	22	33	149	40	46	255	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1837			1848			1938			1975	
Flt Permitted		0.97			0.96			0.92			0.94	
Satd. Flow (perm)		1781			1790			1800			1869	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	187	38	21	178	23	34	154	41	47	263	52
RTOR Reduction (vph)	0	10	0	0	6	0	0	12	0	0	9	0
Lane Group Flow (vph)	0	238	0	0	216	0	0	217	0	0	353	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		740			744			831			863	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.12			c0.19	
v/c Ratio		0.32			0.29			0.26			0.41	
Uniform Delay, d1		12.8			12.6			10.7			11.6	
Progression Factor		1.00			0.70			1.22			1.00	
Incremental Delay, d2		1.1			1.0			0.7			1.4	
Delay (s)		14.0			9.8			13.8			13.0	
Level of Service		B			A			B			B	
Approach Delay (s)		14.0			9.8			13.8			13.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	193	39	25	180	19	49	200	31	43	214	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3057		1577	3119		1518	3119		1550	3076	
Flt Permitted	0.61	1.00		0.59	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	966	3057		984	3119		926	3119		968	3076	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	214	43	28	200	21	54	222	34	48	238	43
RTOR Reduction (vph)	0	26	0	0	12	0	0	14	0	0	18	0
Lane Group Flow (vph)	27	231	0	28	209	0	54	242	0	48	263	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	894		288	912		541	1823		566	1798	
v/s Ratio Prot		c0.08			0.07			0.08			c0.09	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.26		0.10	0.23		0.10	0.13		0.08	0.15	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.93	0.97		0.74	0.73		1.31	1.31		0.38	0.34	
Incremental Delay, d2	0.6	0.7		0.7	0.6		0.4	0.1		0.3	0.2	
Delay (s)	16.2	17.7		13.1	13.4		8.2	8.1		2.5	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.5			13.4			8.1			2.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	168	42	25	159	38	27	247	16	40	322	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	3056		1525	2937			1922			1938	
Flt Permitted	0.61	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1007	3056		973	2937			1823			1840	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	74	187	47	28	177	42	30	274	18	44	358	37
RTOR Reduction (vph)	0	28	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	74	206	0	28	194	0	0	319	0	0	434	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	403	1222		389	1175			869			878	
v/s Ratio Prot		0.07			0.07							
v/s Ratio Perm	c0.07			0.03				0.17			c0.24	
v/c Ratio	0.18	0.17		0.07	0.16			0.37			0.49	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.8			11.6	
Progression Factor	1.04	0.99		0.78	0.76			1.01			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.0	
Delay (s)	14.1	12.7		9.7	9.9			12.1			13.6	
Level of Service	B	B		A	A			B			B	
Approach Delay (s)		13.0			9.8			12.1			13.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	28	20	161	27	41	235	11	33	364	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1970		1584	1975			1981			1979	
Flt Permitted	0.57	1.00		0.65	1.00			0.90			0.96	
Satd. Flow (perm)	986	1970		1087	1975			1792			1912	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	31	22	179	30	46	261	12	37	404	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	154	0	22	209	0	0	319	0	0	504	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	303	606		334	608			1020			1088	
v/s Ratio Prot		0.08			c0.11							
v/s Ratio Perm	0.05			0.02				0.18			c0.26	
v/c Ratio	0.17	0.25		0.07	0.34			0.31			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.4			7.3			8.2	
Progression Factor	0.83	0.81		0.92	0.93			0.96			1.00	
Incremental Delay, d2	1.2	1.0		0.4	1.5			0.8			1.4	
Delay (s)	14.8	14.6		15.0	17.7			7.9			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.7			17.5			7.9			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	13	97	2	5	10	62	235	5	5	466	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1727		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.39	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1332	1727		1216	1808		660	1647	1428	1030	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	14	108	2	6	11	69	261	6	6	518	84
RTOR Reduction (vph)	0	78	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	60	44	0	2	9	0	69	261	4	6	518	56
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		337	501		396	988	857	618	1200	898
v/s Ratio Prot		0.03			0.01			0.16			c0.26	
v/s Ratio Perm	c0.05			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.16	0.09		0.01	0.02		0.17	0.26	0.00	0.01	0.43	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.8	6.2	5.2	5.2	7.0	5.4
Progression Factor	1.39	2.74		1.00	1.00		0.82	0.76	0.98	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.4		0.0	0.1		0.7	0.5	0.0	0.0	1.1	0.1
Delay (s)	25.6	48.1		17.1	17.1		5.5	5.2	5.1	5.3	8.2	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		40.7			17.1			5.3			7.8	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	255	163	198	215	0	0	0	0	111	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.40	1.00					0.95	1.00	
Satd. Flow (perm)		2905		719	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	268	172	208	226	0	0	0	0	117	495	397
RTOR Reduction (vph)	0	101	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	339	0	208	226	0	0	0	0	117	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		565	1805					545	1096	
v/s Ratio Prot		0.12		c0.07	0.07					0.08	c0.25	
v/s Ratio Perm				c0.12								
v/c Ratio		0.36		0.37	0.13					0.21	0.68	
Uniform Delay, d1		26.4		13.7	11.1					22.5	27.6	
Progression Factor		1.00		2.23	2.15					1.00	1.00	
Incremental Delay, d2		1.1		1.6	0.1					0.9	3.5	
Delay (s)		27.5		32.0	24.0					23.4	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.5			27.9			0.0			30.1	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	225	0	0	336	119	77	539	236	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1675	3196			2855		1767	1782	1560			
Flt Permitted	0.32	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	571	3196			2855		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	237	0	0	354	125	81	567	248	0	0	0
RTOR Reduction (vph)	0	0	0	0	35	0	0	0	170	0	0	0
Lane Group Flow (vph)	148	237	0	0	444	0	81	567	78	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	687	1974			728		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.16		0.05	c0.32				
v/s Ratio Perm	0.05								0.05			
v/c Ratio	0.22	0.12			0.61		0.16	1.08	0.17			
Uniform Delay, d1	10.4	8.1			33.5		26.6	36.0	26.7			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.1			3.8		0.6	63.3	0.8			
Delay (s)	5.0	3.6			37.3		27.3	99.3	27.5			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			37.3			73.0			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	48.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	517	479	81	534	0	0	0	0	13	436	301
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3099		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3099		200	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	539	499	84	556	0	0	0	0	14	454	314
RTOR Reduction (vph)	0	168	0	0	0	0	0	0	0	0	0	200
Lane Group Flow (vph)	0	870	0	84	556	0	0	0	0	14	454	114
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1116		380	1917					543	1085	520
v/s Ratio Prot		c0.28		0.04	c0.17					0.01	c0.14	0.07
v/s Ratio Perm				0.08								
v/c Ratio		0.78		0.22	0.29					0.03	0.42	0.22
Uniform Delay, d1		28.5		14.4	10.6					22.0	25.4	23.5
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		5.4		0.9	0.3					0.1	1.2	1.0
Delay (s)		33.9		15.5	12.9					22.1	26.6	24.5
Level of Service		C		B	B					C	C	C
Approach Delay (s)		33.9			13.2			0.0			25.7	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	422	104	0	0	150	6	465	480	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3109			3170		1555	1653	1530			
Flt Permitted	0.64	0.71			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	992	2286			3170		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	435	107	0	0	155	6	479	495	60	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	217	325	0	0	158	0	479	495	22	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	678	1462			476		575	612	566			
v/s Ratio Prot	c0.12	0.08			c0.05		c0.31	0.30	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.32	0.22			0.33		0.83	0.81	0.04			
Uniform Delay, d1	14.1	13.5			38.0		28.7	28.3	20.1			
Progression Factor	0.25	0.26			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.9		13.3	11.0	0.1			
Delay (s)	4.2	3.7			39.9		42.0	39.3	20.3			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		3.9			39.9			39.5			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	316	117	109	270	111	87	699	76	100	884	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2955			2935		1508	3069	1309	1508	3099	1298
Flt Permitted		0.77			0.72		0.16	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		2281			2151		254	3069	1309	401	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	329	122	114	281	116	91	728	79	104	921	68
RTOR Reduction (vph)	0	33	0	0	32	0	0	0	48	0	0	33
Lane Group Flow (vph)	0	499	0	0	479	0	91	728	31	104	921	35
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		1014			709		167	1210	508	222	1221	504
v/s Ratio Prot		c0.03					c0.03	0.24		0.02	c0.30	
v/s Ratio Perm		0.17			c0.22		0.21		0.02	0.18		0.03
v/c Ratio		0.49			0.68		0.54	0.60	0.06	0.47	0.75	0.07
Uniform Delay, d1		17.8			24.6		16.8	20.5	16.3	15.9	22.2	16.3
Progression Factor		1.00			1.00		1.48	0.68	0.77	1.11	1.16	1.74
Incremental Delay, d2		1.7			5.1		11.1	2.0	0.2	5.0	3.1	0.2
Delay (s)		19.6			29.7		36.0	16.0	12.8	22.6	29.0	28.6
Level of Service		B			C		D	B	B	C	C	C
Approach Delay (s)		19.6			29.7			17.8			28.3	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	410	0	0	367	84	54	44	33	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.97				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1734			1704			1654				
Flt Permitted		0.87			1.00			0.98				
Satd. Flow (perm)		1519			1704			1654				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	456	0	0	408	93	60	49	37	0	0	0
RTOR Reduction (vph)	0	0	0	0	12	0	0	19	0	0	0	0
Lane Group Flow (vph)	0	540	0	0	489	0	0	127	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		888			996			483				
v/s Ratio Prot					0.29							
v/s Ratio Perm		c0.36						0.08				
v/c Ratio		0.61			0.49			0.26				
Uniform Delay, d1		8.7			7.9			17.6				
Progression Factor		1.00			0.76			1.00				
Incremental Delay, d2		3.1			1.5			1.3				
Delay (s)		11.8			7.5			19.0				
Level of Service		B			A			B				
Approach Delay (s)		11.8			7.5			19.0			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	374	37	39	369	50	31	118	39	53	150	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.99			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1954			1941			2969			2981	
Flt Permitted		0.95			0.94			0.88			0.86	
Satd. Flow (perm)		1869			1825			2646			2589	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	32	416	41	43	410	56	34	131	43	59	167	50
RTOR Reduction (vph)	0	5	0	0	7	0	0	25	0	0	29	0
Lane Group Flow (vph)	0	484	0	0	502	0	0	183	0	0	247	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		863			842			1099			1075	
v/s Ratio Prot												
v/s Ratio Perm		0.26			c0.28			0.07			c0.10	
v/c Ratio		0.56			0.60			0.17			0.23	
Uniform Delay, d1		12.7			13.0			11.9			12.3	
Progression Factor		0.56			0.40			1.30			0.44	
Incremental Delay, d2		2.2			2.7			0.3			0.5	
Delay (s)		9.2			7.9			15.9			5.9	
Level of Service		A			A			B			A	
Approach Delay (s)		9.2			7.9			15.9			5.9	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	320	49	81	464	86	46	219	98	83	227	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1510	3034		1572	3077		1587	2962		1585	3071	
Flt Permitted	0.32	1.00		0.47	1.00		0.56	1.00		0.54	1.00	
Satd. Flow (perm)	505	3034		775	3077		928	2962		903	3071	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	356	54	90	516	96	51	243	109	92	252	72
RTOR Reduction (vph)	0	19	0	0	24	0	0	50	0	0	33	0
Lane Group Flow (vph)	57	391	0	90	588	0	51	302	0	92	291	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	171	1027		262	1041		500	1595		486	1654	
v/s Ratio Prot		0.13			c0.19			0.10			0.09	
v/s Ratio Perm	0.11			0.12			0.05			c0.10		
v/c Ratio	0.33	0.38		0.34	0.57		0.10	0.19		0.19	0.18	
Uniform Delay, d1	16.0	16.3		16.1	17.6		7.3	7.7		7.7	7.6	
Progression Factor	0.67	0.64		0.93	0.93		0.72	0.61		1.09	1.08	
Incremental Delay, d2	4.6	0.9		3.5	2.2		0.4	0.3		0.9	0.2	
Delay (s)	15.3	11.4		18.5	18.6		5.6	5.0		9.3	8.5	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		11.9			18.6			5.1			8.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	338	78	87	414	50	46	231	58	46	279	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1509	3016		1430	3722			3485			3519	
Flt Permitted	0.45	1.00		0.48	1.00			0.86			0.88	
Satd. Flow (perm)	712	3016		725	3722			3028			3118	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	356	82	92	436	53	48	243	61	48	294	68
RTOR Reduction (vph)	0	30	0	0	15	0	0	27	0	0	25	0
Lane Group Flow (vph)	62	408	0	92	474	0	0	325	0	0	385	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	340	1438		346	1775			1211			1247	
v/s Ratio Prot		c0.14			0.13							
v/s Ratio Perm	0.09			0.13				0.11			c0.12	
v/c Ratio	0.18	0.28		0.27	0.27			0.27			0.31	
Uniform Delay, d1	9.7	10.3		10.2	10.2			13.1			13.3	
Progression Factor	1.59	1.73		1.10	1.10			0.43			0.73	
Incremental Delay, d2	1.1	0.5		1.7	0.3			0.5			0.6	
Delay (s)	16.6	18.3		12.9	11.5			6.2			10.4	
Level of Service	B	B		B	B			A			B	
Approach Delay (s)		18.1			11.7			6.2			10.4	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	284	91	92	289	92	120	82	47	47	82	119
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1670	1436		3086			1885			1835	
Flt Permitted		0.79	1.00		0.79			0.68			0.90	
Satd. Flow (perm)		1332	1436		2469			1303			1674	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	316	101	102	321	102	133	91	52	52	91	132
RTOR Reduction (vph)	0	0	48	0	32	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	412	53	0	493	0	0	263	0	0	224	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		697	751		1291			421			541	
v/s Ratio Prot												
v/s Ratio Perm		c0.31	0.04		0.20			c0.20			0.13	
v/c Ratio		0.59	0.07		0.38			0.63			0.41	
Uniform Delay, d1		10.7	7.7		9.2			18.7			17.2	
Progression Factor		1.82	4.59		0.52			1.00			1.00	
Incremental Delay, d2		3.6	0.2		0.8			6.8			2.3	
Delay (s)		23.0	35.4		5.6			25.5			19.5	
Level of Service		C	D		A			C			B	
Approach Delay (s)		25.5			5.6			25.5			19.5	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	17.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	271	28	26	323	60	26	133	47	62	146	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1443	3025		1565	3018			3582			3599	
Flt Permitted	0.49	1.00		0.55	1.00			0.90			0.84	
Satd. Flow (perm)	740	3025		909	3018			3238			3069	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	301	31	29	359	67	29	148	52	69	162	70
RTOR Reduction (vph)	0	12	0	0	24	0	0	30	0	0	41	0
Lane Group Flow (vph)	61	320	0	29	402	0	0	199	0	0	260	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	342	1396		420	1393			1345			1275	
v/s Ratio Prot		0.11			c0.13							
v/s Ratio Perm	0.08			0.03				0.06			c0.08	
v/c Ratio	0.18	0.23		0.07	0.29			0.15			0.20	
Uniform Delay, d1	10.3	10.5		9.7	10.9			11.8			12.1	
Progression Factor	0.69	0.69		0.85	0.68			1.02			0.41	
Incremental Delay, d2	0.9	0.3		0.1	0.2			0.2			0.3	
Delay (s)	8.0	7.6		8.4	7.7			12.4			5.3	
Level of Service	A	A		A	A			B			A	
Approach Delay (s)		7.7			7.7			12.4			5.3	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	7.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	440	26	86	503	222	24	124	115	340	261	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3280			3167			3089			3181	
Flt Permitted		0.76			0.80			0.90			0.70	
Satd. Flow (perm)		2509			2532			2805			2289	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	489	29	96	559	247	27	138	128	378	290	91
RTOR Reduction (vph)	0	6	0	0	60	0	0	69	0	0	16	0
Lane Group Flow (vph)	0	564	0	0	842	0	0	224	0	0	743	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			30.0			17.0	
Effective Green, g (s)		25.0			25.0			30.0			17.0	
Actuated g/C Ratio		0.38			0.38			0.46			0.26	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		965			974			1338			599	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.22			c0.33			0.05			c0.32	
v/c Ratio		0.58			0.86			0.17			1.36dl	
Uniform Delay, d1		15.9			18.4			10.2			24.0	
Progression Factor		1.48			1.00			1.00			0.80	
Incremental Delay, d2		2.6			10.1			0.3			121.3	
Delay (s)		26.0			28.5			10.5			140.5	
Level of Service		C			C			B			F	
Approach Delay (s)		26.0			28.5			10.5			140.5	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	59.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	895	128	48	792	0	81	0	36	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3041			3090			1619				
Flt Permitted		1.00			0.80			0.79				
Satd. Flow (perm)		3041			2489			1329				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	994	142	53	880	0	90	0	40	0	0	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	1121	0	0	933	0	0	112	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1960			913			236				
v/s Ratio Prot		c0.37										
v/s Ratio Perm					c0.37			c0.08				
v/c Ratio		0.57			1.02			0.47				
Uniform Delay, d1		9.0			28.5			33.2				
Progression Factor		0.14			1.42			1.00				
Incremental Delay, d2		0.3			34.2			6.7				
Delay (s)		1.6			74.8			39.9				
Level of Service		A			E			D				
Approach Delay (s)		1.6			74.8			39.9			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	35.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	222	642	22	112	614	185	60	4	107	212	10	212
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3194		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.29	1.00		0.33	1.00	1.00		0.88		0.43	1.00	1.00
Satd. Flow (perm)	472	3194		585	3320	1485		1593		758	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	247	713	24	124	682	206	67	4	119	236	11	236
RTOR Reduction (vph)	0	2	0	0	0	95	0	92	0	0	0	135
Lane Group Flow (vph)	247	735	0	124	682	111	0	98	0	236	11	101
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	55.0	42.6		47.8	38.4	48.4		12.0		25.0	25.0	38.6
Effective Green, g (s)	55.0	42.6		47.8	38.4	48.4		12.0		25.0	25.0	38.6
Actuated g/C Ratio	0.61	0.47		0.53	0.43	0.54		0.13		0.28	0.28	0.43
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	451	1512		423	1417	799		212		311	486	637
v/s Ratio Prot	c0.08	0.23		0.03	0.21	0.02				c0.08	0.01	0.02
v/s Ratio Perm	c0.25			0.13		0.06		0.06		c0.13		0.04
v/c Ratio	0.55	0.49		0.29	0.48	0.14		0.46		0.76	0.02	0.16
Uniform Delay, d1	9.2	16.2		10.8	18.6	10.4		36.0		28.7	23.6	15.8
Progression Factor	2.65	1.87		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.5	1.0		0.5	1.2	0.1		2.2		10.2	0.0	0.2
Delay (s)	25.7	31.3		11.3	19.8	10.5		38.2		38.9	23.6	15.9
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		29.9			16.9			38.2			27.3	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	443	2	333	0	0	0	0	19	0	578
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	492	2	370	0	0	0	0	21	0	642
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	370			576			765	950	288	662	950	185
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	370			576			765	950	288	662	950	185
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	22
cM capacity (veh/h)	1178			987			64	256	706	345	256	823

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	492	126	247	21	642
Volume Left	0	0	0	2	0	21	0
Volume Right	0	0	492	0	0	0	642
cSH	1700	1700	1700	987	1700	345	823
Volume to Capacity	0.17	0.17	0.29	0.00	0.15	0.06	0.78
Queue Length 95th (ft)	0	0	0	0	0	5	198
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	16.1	23.1
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		22.8	
Approach LOS						C	

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	537	0	335	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	597	0	372	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	298	298	372
Volume Left (vph)	298	298	372
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.2	6.2	5.6
Degree Utilization, x	0.51	0.51	0.58
Capacity (veh/h)	568	570	619
Control Delay (s)	14.3	14.3	16.0
Approach Delay (s)	14.3		16.0
Approach LOS	B		C

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	472	90	192	594	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3133		1605	3210						3074	
Flt Permitted		1.00		0.33	1.00						0.97	
Satd. Flow (perm)		3133		559	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	524	100	213	660	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	606	0	213	660	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1327		445	1850						976	
v/s Ratio Prot		0.19		c0.06	0.21						c0.05	
v/s Ratio Perm				c0.22								
v/c Ratio		0.46		0.48	0.36						0.16	
Uniform Delay, d1		17.5		16.3	9.6						20.8	
Progression Factor		1.00		0.49	0.41						1.00	
Incremental Delay, d2		1.1		3.1	0.5						0.3	
Delay (s)		18.6		11.0	4.4						21.2	
Level of Service		B		B	A						C	
Approach Delay (s)		18.6			6.0			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	478	0	0	624	129	162	90	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.97			0.97				
Flt Protected	0.95	1.00			1.00			0.97				
Satd. Flow (prot)	1660	3320			3127			4519				
Flt Permitted	0.22	1.00			1.00			0.97				
Satd. Flow (perm)	385	3320			3127			4519				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	531	0	0	693	143	180	100	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	21	0	0	44	0	0	0	0
Lane Group Flow (vph)	106	531	0	0	815	0	0	300	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	367	1875			1288			1435				
v/s Ratio Prot	0.03	c0.16			c0.26			c0.07				
v/s Ratio Perm	0.13											
v/c Ratio	0.29	0.28			0.63			0.21				
Uniform Delay, d1	18.1	9.6			19.9			21.2				
Progression Factor	0.41	0.33			1.00			1.00				
Incremental Delay, d2	1.8	0.4			2.4			0.3				
Delay (s)	9.3	3.5			22.3			21.5				
Level of Service	A	A			C			C				
Approach Delay (s)		4.4			22.3			21.5			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	342	126	79	366	79	178	78	27	30	87	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.99			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2969			3006			1840			1769	
Flt Permitted		0.68			0.72			0.65			0.94	
Satd. Flow (perm)		2025			2179			1242			1676	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	380	140	88	407	88	198	87	30	33	97	160
RTOR Reduction (vph)	0	39	0	0	22	0	0	6	0	0	68	0
Lane Group Flow (vph)	0	608	0	0	561	0	0	309	0	0	222	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		717			771			611			825	
v/s Ratio Prot												
v/s Ratio Perm		c0.30			0.26			c0.25			0.13	
v/c Ratio		0.85			0.73			0.51			0.27	
Uniform Delay, d1		19.4			18.3			11.2			9.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		11.9			5.9			3.0			0.8	
Delay (s)		31.3			24.2			14.1			10.5	
Level of Service		C			C			B			B	
Approach Delay (s)		31.3			24.2			14.1			10.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	201	100	203	311	65	174	589	246	95	953	146
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2967		1574	3683		1508	3069	1333	1521	3099	1336
Flt Permitted	0.45	1.00		0.52	1.00		0.13	1.00	1.00	0.31	1.00	1.00
Satd. Flow (perm)	739	2967		862	3683		212	3069	1333	490	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	212	105	214	327	68	183	620	259	100	1003	154
RTOR Reduction (vph)	0	70	0	0	21	0	0	0	165	0	0	98
Lane Group Flow (vph)	112	247	0	214	374	0	183	620	94	100	1003	56
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	977		338	1213		181	1119	486	280	1130	487
v/s Ratio Prot	0.02	0.08		c0.03	0.10		c0.07	0.20		0.03	0.32	
v/s Ratio Perm	0.11			c0.19			c0.36		0.07	0.13		0.04
v/c Ratio	0.37	0.25		0.63	0.31		1.01	0.55	0.19	0.36	0.89	0.12
Uniform Delay, d1	19.4	20.8		22.2	21.3		20.7	21.5	18.5	15.6	25.4	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.41	1.05	2.36
Incremental Delay, d2	3.6	0.6		8.7	0.7		69.8	2.0	0.9	2.6	8.0	0.4
Delay (s)	23.0	21.5		30.9	21.9		90.5	23.5	19.4	24.6	34.6	42.7
Level of Service	C	C		C	C		F	C	B	C	C	D
Approach Delay (s)		21.9			25.1			34.0			34.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	97	424	30	33	425	24	33	100	41	36	124	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1957	1466		1994	1480		2015	1506		2001	1511
Flt Permitted		0.72	1.00		0.94	1.00		0.91	1.00		0.92	1.00
Satd. Flow (perm)		1426	1466		1888	1480		1863	1506		1870	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	102	446	32	35	447	25	35	105	43	38	131	80
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	25	0	0	47
Lane Group Flow (vph)	0	548	15	0	482	12	0	140	18	0	169	33
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		658	677		871	683		774	626		777	628
v/s Ratio Prot												
v/s Ratio Perm		c0.38	0.01		0.26	0.01		0.08	0.01		c0.09	0.02
v/c Ratio		0.83	0.02		0.55	0.02		0.18	0.03		0.22	0.05
Uniform Delay, d1		15.3	9.5		12.7	9.5		12.0	11.2		12.2	11.4
Progression Factor		1.00	1.00		0.62	0.56		0.93	1.03		1.02	0.92
Incremental Delay, d2		11.8	0.1		2.5	0.0		0.5	0.1		0.6	0.2
Delay (s)		27.1	9.6		10.4	5.4		11.6	11.7		13.1	10.6
Level of Service		C	A		B	A		B	B		B	B
Approach Delay (s)		26.1			10.1			11.6			12.3	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	16.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	394	20	41	271	31	10	109	21	110	214	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3077		1550	3052		1550	3025		1550	2979	
Flt Permitted	0.95	1.00		0.49	1.00		0.54	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3077		795	3052		878	3025		1078	2979	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	438	22	46	301	34	11	121	23	122	238	83
RTOR Reduction (vph)	0	6	0	0	13	0	0	13	0	0	49	0
Lane Group Flow (vph)	128	454	0	46	322	0	11	131	0	122	272	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1515		269	1033		365	1257		448	1237	
v/s Ratio Prot	c0.08	c0.15			0.11			0.04			0.09	
v/s Ratio Perm				0.06			0.01			c0.11		
v/c Ratio	0.77	0.30		0.17	0.31		0.03	0.10		0.27	0.22	
Uniform Delay, d1	28.2	9.8		15.1	15.9		11.2	11.6		12.5	12.2	
Progression Factor	1.17	0.39		0.75	0.73		1.03	1.12		1.12	1.13	
Incremental Delay, d2	22.1	0.4		1.3	0.8		0.1	0.1		1.5	0.4	
Delay (s)	55.0	4.2		12.6	12.3		11.7	13.1		15.5	14.2	
Level of Service	D	A		B	B		B	B		B	B	
Approach Delay (s)		15.3			12.3			13.0			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	336	69	203	347	63	25	245	20	55	270	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1550	3019		1550	3028			3272			3225	
Flt Permitted	0.49	1.00		0.95	1.00			0.90			0.86	
Satd. Flow (perm)	798	3019		1550	3028			2966			2803	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	373	77	226	386	70	28	272	22	61	300	61
RTOR Reduction (vph)	0	26	0	0	23	0	0	8	0	0	21	0
Lane Group Flow (vph)	93	424	0	226	433	0	0	314	0	0	401	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	246	929		143	1351			1141			1078	
v/s Ratio Prot		c0.14		c0.15	0.14							
v/s Ratio Perm	0.12							0.11			c0.14	
v/c Ratio	0.38	0.46		1.58	0.32			0.28			0.37	
Uniform Delay, d1	17.6	18.1		29.5	11.6			13.8			14.4	
Progression Factor	0.86	0.81		1.28	1.15			0.87			0.70	
Incremental Delay, d2	4.3	1.6		277.2	0.3			0.6			1.0	
Delay (s)	19.4	16.2		314.9	13.7			12.5			11.1	
Level of Service	B	B		F	B			B			B	
Approach Delay (s)		16.7			113.5			12.5			11.1	
Approach LOS		B			F			B			B	

Intersection Summary			
HCM Average Control Delay	48.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	355	26	75	620	75	55	110	165	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1613			1602			3249				
Flt Permitted		0.96			0.92			0.99				
Satd. Flow (perm)		1557			1484			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	394	29	83	689	83	61	122	183	0	0	0
RTOR Reduction (vph)	0	3	0	0	5	0	0	139	0	0	0	0
Lane Group Flow (vph)	0	438	0	0	850	0	0	227	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		994			947			775				
v/s Ratio Prot												
v/s Ratio Perm		0.28			c0.57			0.07				
v/c Ratio		0.44			0.90			0.29				
Uniform Delay, d1		5.9			9.9			20.3				
Progression Factor		2.01			1.00			1.00				
Incremental Delay, d2		1.3			13.0			0.9				
Delay (s)		13.2			22.9			21.2				
Level of Service		B			C			C				
Approach Delay (s)		13.2			22.9			21.2			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	93	415	598	39	119	164
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	98	437	629	41	125	173
Pedestrians		5	6		17	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.83				0.83	0.83
vC, conflicting volume	688				1306	672
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	522				1266	503
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	88				8	63
cM capacity (veh/h)	845				136	467

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	535	671	125	173
Volume Left	98	0	125	0
Volume Right	0	41	0	173
cSH	845	1700	136	467
Volume to Capacity	0.12	0.39	0.92	0.37
Queue Length 95th (ft)	10	0	156	42
Control Delay (s)	3.0	0.0	120.4	17.1
Lane LOS	A		F	C
Approach Delay (s)	3.0	0.0	60.6	
Approach LOS			F	

Intersection Summary			
Average Delay	13.1		
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	690	0	1	619	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	767	0	1	688	3	32
RTOR Reduction (vph)	0	0	0	0	27	0
Lane Group Flow (vph)	767	0	0	689	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	63.0			31.0	14.0	
Effective Green, g (s)	59.0			31.0	14.0	
Actuated g/C Ratio	0.69			0.36	0.16	
Clearance Time (s)				4.0	4.0	
Lane Grp Cap (vph)	1213			637	251	
v/s Ratio Prot	c0.44				c0.01	
v/s Ratio Perm				0.39		
v/c Ratio	0.63			1.08	0.03	
Uniform Delay, d1	7.1			27.0	29.8	
Progression Factor	0.10			1.00	1.00	
Incremental Delay, d2	1.1			59.8	0.2	
Delay (s)	1.8			86.8	30.1	
Level of Service	A			F	C	
Approach Delay (s)	1.8			86.8	30.1	
Approach LOS	A			F	C	

Intersection Summary			
HCM Average Control Delay	41.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	243	606	32	407	0	0	0	0	17	6	248
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	270	673	36	452	0	0	0	0	19	7	276
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	452			270			1133	1130	472	658	793	452
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	452			270			1133	1130	472	658	793	452
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	95	98	50
cM capacity (veh/h)	1119			1276			78	200	544	346	314	555

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	180	763	488	26	276
Volume Left	0	0	36	19	0
Volume Right	0	673	0	0	276
cSH	1700	1700	1276	337	555
Volume to Capacity	0.11	0.45	0.03	0.08	0.50
Queue Length 95th (ft)	0	0	2	6	69
Control Delay (s)	0.0	0.0	0.9	16.6	17.7
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.9	17.6	
Approach LOS				C	

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	260	0	439	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	289	0	488	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	144	144	488
Volume Left (vph)	144	144	488
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.4	6.4	5.0
Degree Utilization, x	0.26	0.26	0.68
Capacity (veh/h)	536	537	701
Control Delay (s)	10.3	10.3	17.7
Approach Delay (s)	10.3		17.7
Approach LOS	B		C

Intersection Summary			
Delay	15.0		
HCM Level of Service	B		
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	553	345	332	869	0	0	0	0	303	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1232		3427					1359	3807	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1232		3427					1359	3807	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	582	363	349	915	0	0	0	0	319	283	392
RTOR Reduction (vph)	0	0	208	0	0	0	0	0	0	0	52	113
Lane Group Flow (vph)	0	582	155	0	1264	0	0	0	0	175	571	83
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		39.0	39.0		67.4					23.0	23.0	68.0
Effective Green, g (s)		39.0	39.0		67.4					23.0	23.0	68.0
Actuated g/C Ratio		0.24	0.24		0.42					0.14	0.14	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		775	300		1444					195	547	482
v/s Ratio Prot		c0.18			c0.37					0.13	c0.15	
v/s Ratio Perm			0.13									0.07
v/c Ratio		0.75	0.52		0.88					0.90	1.04	0.17
Uniform Delay, d1		56.0	52.3		42.4					67.3	68.5	28.5
Progression Factor		1.00	1.00		0.17					1.00	1.00	1.00
Incremental Delay, d2		6.6	6.2		0.6					37.0	50.3	0.2
Delay (s)		62.6	58.6		8.0					104.3	118.8	28.7
Level of Service		E	E		A					F	F	C
Approach Delay (s)		61.1			8.0			0.0			98.5	
Approach LOS		E			A			A			F	

Intersection Summary			
HCM Average Control Delay	51.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	32.6
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	564	0	0	869	233	332	214	211	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3056				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3056				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	324	627	0	0	966	259	369	238	234	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	93	0	75	0	0	0	0
Lane Group Flow (vph)	324	627	0	0	966	166	288	478	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	84.6	84.6			36.4	36.4	12.0	12.0				
Effective Green, g (s)	84.6	84.6			36.4	36.4	12.0	12.0				
Actuated g/C Ratio	0.53	0.53			0.23	0.23	0.08	0.08				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	849	1814			730	338	117	229				
v/s Ratio Prot	c0.20	0.18			c0.30		c0.18	0.16				
v/s Ratio Perm						0.11						
v/c Ratio	0.38	0.35			1.32	0.49	2.46	2.09				
Uniform Delay, d1	22.3	21.7			61.8	53.8	74.0	74.0				
Progression Factor	0.06	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			155.0	1.1	682.7	504.1				
Delay (s)	1.4	1.3			216.8	54.9	756.7	578.1				
Level of Service	A	A			F	D	F	F				
Approach Delay (s)		1.3			182.5			639.2			0.0	
Approach LOS		A			F			F			A	

Intersection Summary			
HCM Average Control Delay	252.7	HCM Level of Service	F
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	506	136	89	270	67	108	522	70	96	1150	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1575	1600	1373	1596	1790		1580	3016		1537	3027	
Flt Permitted	0.31	1.00	1.00	0.15	1.00		0.11	1.00		0.33	1.00	
Satd. Flow (perm)	519	1600	1373	253	1790		190	3016		534	3027	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	533	143	94	284	71	114	549	74	101	1211	126
RTOR Reduction (vph)	0	0	98	0	10	0	0	12	0	0	9	0
Lane Group Flow (vph)	147	533	45	94	345	0	114	612	0	101	1328	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.0	29.0	29.0	33.2	27.6		43.0	36.0		40.2	34.6	
Effective Green, g (s)	34.0	30.0	29.0	31.2	27.6		41.0	36.0		38.2	34.6	
Actuated g/C Ratio	0.37	0.33	0.32	0.34	0.30		0.45	0.39		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	263	526	437	154	542		177	1191		274	1148	
v/s Ratio Prot	c0.04	c0.33		0.03	0.19		c0.04	0.20		0.02	c0.44	
v/s Ratio Perm	0.17		0.03	0.18			0.25			0.14		
v/c Ratio	0.56	1.01	0.10	0.61	0.64		0.64	0.51		0.37	1.16	
Uniform Delay, d1	20.7	30.6	21.9	23.5	27.5		20.5	21.0		16.8	28.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.6	42.6	0.5	7.0	5.6		7.8	1.6		0.8	80.8	
Delay (s)	23.3	73.2	22.4	30.4	33.1		28.3	22.5		17.6	109.1	
Level of Service	C	E	C	C	C		C	C		B	F	
Approach Delay (s)		55.5			32.5			23.4			102.7	
Approach LOS		E			C			C			F	

Intersection Summary			
HCM Average Control Delay	65.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	91.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	462	111	13	334	22	49	59	19	21	91	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.94	
Flt Protected		0.99	1.00		1.00	1.00		0.98			0.99	
Satd. Flow (prot)		1963	1467		1629	1381		1892			1857	
Flt Permitted		0.89	1.00		0.98	1.00		0.86			0.97	
Satd. Flow (perm)		1760	1467		1598	1381		1649			1813	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	93	486	117	14	352	23	52	62	20	22	96	86
RTOR Reduction (vph)	0	0	45	0	0	12	0	10	0	0	40	0
Lane Group Flow (vph)	0	579	72	0	366	11	0	124	0	0	164	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		866	722		787	680		685			753	
v/s Ratio Prot												
v/s Ratio Perm		c0.33	0.05		0.23	0.01		0.08			c0.09	
v/c Ratio		0.67	0.10		0.47	0.02		0.18			0.22	
Uniform Delay, d1		12.5	8.8		10.9	8.4		12.0			12.2	
Progression Factor		1.00	1.00		1.84	2.64		1.00			1.98	
Incremental Delay, d2		4.1	0.3		1.9	0.0		0.6			0.7	
Delay (s)		16.6	9.1		21.9	22.3		12.6			24.8	
Level of Service		B	A		C	C		B			C	
Approach Delay (s)		15.3			21.9			12.6			24.8	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	244	91	11	226	10	48	114	19	15	184	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.98	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1743	1443		1728	1487		1712	1489		1703	
Flt Permitted		0.78	1.00		0.98	1.00		0.85	1.00		0.98	
Satd. Flow (perm)		1387	1443		1692	1487		1481	1489		1680	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	114	257	96	12	238	11	51	120	20	16	194	86
RTOR Reduction (vph)	0	0	58	0	0	7	0	0	10	0	23	0
Lane Group Flow (vph)	0	371	38	0	250	4	0	171	10	0	273	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		491	511		599	526		729	733		827	
v/s Ratio Prot												
v/s Ratio Perm		c0.27	0.03		0.15	0.00		0.12	0.01		c0.16	
v/c Ratio		0.76	0.08		0.42	0.01		0.23	0.01		0.33	
Uniform Delay, d1		18.5	13.9		15.9	13.6		9.5	8.4		10.0	
Progression Factor		1.79	3.63		0.96	0.95		0.16	0.21		1.06	
Incremental Delay, d2		8.1	0.2		2.1	0.0		0.1	0.0		1.1	
Delay (s)		41.3	50.8		17.4	13.0		1.6	1.7		11.6	
Level of Service		D	D		B	B		A	A		B	
Approach Delay (s)		43.2			17.2			1.6			11.6	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	23.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	167	45	96	8	16	9	43	225	8	21	481	209
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.99			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1873	1440		1782			1991			1976	1382
Flt Permitted		0.81	1.00		0.93			0.88			0.98	1.00
Satd. Flow (perm)		1573	1440		1686			1762			1946	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	186	50	107	9	18	10	48	250	9	23	534	232
RTOR Reduction (vph)	0	0	63	0	7	0	0	2	0	0	0	92
Lane Group Flow (vph)	0	236	44	0	30	0	0	305	0	0	557	140
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		690	598		441			867			958	680
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.10	0.03		0.02			0.17			c0.29	0.10
v/c Ratio		0.34	0.07		0.07			0.35			0.58	0.21
Uniform Delay, d1		12.9	11.5		18.0			10.1			11.7	9.3
Progression Factor		1.02	1.85		1.00			0.52			0.66	0.22
Incremental Delay, d2		1.1	0.2		0.3			0.6			2.0	0.5
Delay (s)		14.3	21.4		18.3			5.9			9.7	2.6
Level of Service		B	C		B			A			A	A
Approach Delay (s)		16.5			18.3			5.9			7.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	922	289	675	1189	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		1.00	0.95					0.91	0.86	0.91
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4575		1621	3320					1489	2913	1442
Flt Permitted		1.00		0.10	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4575		173	3320					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	971	304	711	1252	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	49	0	0	0	0	0	0	0	0	9	58
Lane Group Flow (vph)	0	1226	0	711	1252	0	0	0	0	308	603	213
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		35.0		74.9	74.9					28.1	28.1	28.1
Effective Green, g (s)		35.0		74.9	74.9					28.1	28.1	28.1
Actuated g/C Ratio		0.30		0.65	0.65					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1392		558	2162					364	712	352
v/s Ratio Prot		0.27		c0.39	0.38							
v/s Ratio Perm				c0.44						0.21	0.21	0.15
v/c Ratio		0.88		1.27	0.58					0.85	0.85	0.60
Uniform Delay, d1		38.0		33.0	11.2					41.4	41.4	38.5
Progression Factor		1.00		0.85	2.08					1.00	1.00	1.00
Incremental Delay, d2		8.3		126.7	0.3					16.7	9.4	3.1
Delay (s)		46.3		154.6	23.6					58.1	50.8	41.6
Level of Service		D		F	C					E	D	D
Approach Delay (s)		46.3			71.0			0.0			50.6	
Approach LOS		D			E			A			D	

Intersection Summary			
HCM Average Control Delay	58.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	119.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1094	0	0	1435	271	430	351	393	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0				
Lane Util. Factor	0.97	0.95			0.95	1.00		0.91				
Frpb, ped/bikes	1.00	1.00			1.00	0.98		1.00				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.98				
Satd. Flow (prot)	3144	3353			3241	1489		4492				
Flt Permitted	0.07	1.00			1.00	1.00		0.98				
Satd. Flow (perm)	220	3353			3241	1489		4492				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1152	0	0	1511	285	453	369	414	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	68	0	75	0	0	0	0
Lane Group Flow (vph)	359	1152	0	0	1511	217	0	1161	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt					Perm	Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2					6	8					
Actuated Green, G (s)	74.0	74.0			54.1	54.1		29.0				
Effective Green, g (s)	74.0	74.0			54.1	54.1		29.0				
Actuated g/C Ratio	0.64	0.64			0.47	0.47		0.25				
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0				
Vehicle Extension (s)	3.5	7.0			7.0	7.0		5.0				
Lane Grp Cap (vph)	495	2158			1525	700		1133				
v/s Ratio Prot	c0.09	0.34			c0.47							
v/s Ratio Perm	0.38					0.15		0.26				
v/c Ratio	0.73	0.53			0.99	0.31		1.02				
Uniform Delay, d1	31.7	11.1			30.2	18.9		43.0				
Progression Factor	1.55	0.03			0.91	1.06		1.00				
Incremental Delay, d2	2.6	0.5			5.1	0.1		33.2				
Delay (s)	51.9	0.7			32.6	20.1		76.2				
Level of Service	D	A			C	C		E				
Approach Delay (s)		12.9			30.6			76.2			0.0	
Approach LOS		B			C			E			A	

Intersection Summary			
HCM Average Control Delay	37.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	119.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	774	408	104	1197	100	227	179	66	85	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1313	1602	3284		1578	3002		1540	2941	
Flt Permitted	0.11	1.00	1.00	0.34	1.00		0.39	1.00		0.59	1.00	
Satd. Flow (perm)	174	3273	1313	580	3284		654	3002		961	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	142	815	429	109	1260	105	239	188	69	89	171	127
RTOR Reduction (vph)	0	0	173	0	6	0	0	38	0	0	107	0
Lane Group Flow (vph)	142	815	256	109	1359	0	239	219	0	89	191	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	64.8	52.2	68.6	43.4	34.3		38.2	26.4		26.6	18.3	
Effective Green, g (s)	64.8	52.2	68.6	43.4	34.3		38.2	26.4		26.6	18.3	
Actuated g/C Ratio	0.56	0.45	0.60	0.38	0.30		0.33	0.23		0.23	0.16	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	425	1486	783	300	979		349	689		264	468	
v/s Ratio Prot	c0.08	c0.25	0.05	0.03	c0.41		c0.10	0.07		0.02	0.07	
v/s Ratio Perm	0.11		0.15	0.11			c0.13			0.05		
v/c Ratio	0.33	0.55	0.33	0.36	1.39		0.68	0.32		0.34	0.41	
Uniform Delay, d1	17.5	22.8	11.6	23.9	40.4		30.5	36.8		36.1	43.5	
Progression Factor	0.78	0.78	1.37	1.00	1.00		1.04	1.06		1.00	1.00	
Incremental Delay, d2	1.6	1.1	0.2	0.8	181.2		5.2	0.9		0.8	2.1	
Delay (s)	15.3	18.9	16.1	24.7	221.5		37.0	39.9		36.8	45.5	
Level of Service	B	B	B	C	F		D	D		D	D	
Approach Delay (s)		17.7			207.0			38.5			43.5	
Approach LOS		B			F			D			D	

Intersection Summary			
HCM Average Control Delay	97.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	250	367	186	441	113	362	340	107	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1707	2925		1653	3267		1620	3381		1580	3183	
Flt Permitted	0.39	1.00		0.18	1.00		0.32	1.00		0.48	1.00	
Satd. Flow (perm)	698	2925		314	3267		544	3381		802	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	263	386	196	464	119	381	358	113	217	429	59
RTOR Reduction (vph)	0	225	0	0	19	0	0	26	0	0	9	0
Lane Group Flow (vph)	48	424	0	196	564	0	381	445	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.5	28.8		46.8	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	35.5	28.8		46.8	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.31	0.25		0.41	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	274	733		291	1026		454	1299		334	888	
v/s Ratio Prot	0.01	0.15		c0.08	0.17		c0.15	0.13		0.05	0.15	
v/s Ratio Perm	0.04			c0.19			c0.26			0.18		
v/c Ratio	0.18	0.58		0.67	0.55		0.84	0.34		0.65	0.54	
Uniform Delay, d1	28.3	37.8		24.9	32.7		20.8	25.1		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.99	0.97	
Incremental Delay, d2	0.4	3.3		6.3	2.1		13.1	0.7		4.2	2.2	
Delay (s)	28.7	41.1		31.2	34.8		33.9	25.8		32.9	36.4	
Level of Service	C	D		C	C		C	C		C	D	
Approach Delay (s)		40.2			33.9			29.4			35.3	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	603	293	10	376	66	720	355	9	198	625	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.98		1.00	1.00		1.00	0.97	
Flt Protected		0.99			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2967			3034		1452	3229		1523	2874	
Flt Permitted		0.71			0.92		0.18	1.00		0.48	1.00	
Satd. Flow (perm)		2106			2802		271	3229		773	2874	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	670	326	11	418	73	800	394	10	220	694	203
RTOR Reduction (vph)	0	70	0	0	21	0	0	3	0	0	42	0
Lane Group Flow (vph)	0	1043	0	0	481	0	800	401	0	220	855	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Effective Green, g (s)		25.0			17.0		28.0	24.0		28.0	24.0	
Actuated g/C Ratio		0.38			0.26		0.43	0.37		0.43	0.37	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		863			733		189	1192		379	1061	
v/s Ratio Prot		c0.07					c0.26	0.12		0.04	0.30	
v/s Ratio Perm		c0.39			0.17		c1.56			0.21		
v/c Ratio		1.21			0.66		4.23	0.34		0.58	0.81	
Uniform Delay, d1		20.0			21.4		16.7	14.8		13.0	18.4	
Progression Factor		1.00			1.47		1.11	0.87		1.00	1.00	
Incremental Delay, d2		104.9			0.4		1455.9	0.1		6.4	6.6	
Delay (s)		124.9			31.9		1474.4	12.9		19.4	25.0	
Level of Service		F			C		F	B		B	C	
Approach Delay (s)		124.9			31.9			984.0			23.9	
Approach LOS		F			C			F			C	

Intersection Summary			
HCM Average Control Delay	347.2	HCM Level of Service	F
HCM Volume to Capacity ratio	2.79		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	124.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	198	222	337	167	28	414	1147	993	35	866	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.98		1.00	0.93		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1707	1840		1601	1992		1676	3013		1437	3282	
Flt Permitted	0.63	1.00		0.34	1.00		0.22	1.00		0.13	1.00	
Satd. Flow (perm)	1128	1840		574	1992		382	3013		195	3282	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	204	229	347	172	29	427	1182	1024	36	893	72
RTOR Reduction (vph)	0	57	0	0	9	0	0	240	0	0	9	0
Lane Group Flow (vph)	69	376	0	347	192	0	427	1966	0	36	956	0
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	24.0	24.0		24.0	24.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.48	0.48		0.48	0.48	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	416	679		212	736		182	1437		93	1565	
v/s Ratio Prot		0.20			0.10			0.65			0.29	
v/s Ratio Perm	0.06			c0.60			c1.12			0.18		
v/c Ratio	0.17	0.55		1.64	0.26		2.35	1.37		0.39	0.61	
Uniform Delay, d1	13.8	16.3		20.5	14.3		17.0	17.0		10.9	12.5	
Progression Factor	1.00	1.00		1.33	1.34		1.00	1.00		1.04	0.96	
Incremental Delay, d2	0.9	3.2		288.5	0.1		622.5	170.2		4.3	0.6	
Delay (s)	14.6	19.5		315.9	19.2		639.5	187.2		15.6	12.7	
Level of Service	B	B		F	B		F	F		B	B	
Approach Delay (s)		18.8			207.1			260.5			12.8	
Approach LOS		B			F			F			B	

Intersection Summary			
HCM Average Control Delay	175.4	HCM Level of Service	F
HCM Volume to Capacity ratio	2.04		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	133.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	785	455	550	18	3	10	9	47	9	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0		5.0				4.0			4.0	
Lane Util. Factor		0.95		0.95				1.00			1.00	
Frpb, ped/bikes		1.00		1.00				0.99			0.98	
Flpb, ped/bikes		1.00		1.00				1.00			1.00	
Frt		1.00		1.00				0.91			0.94	
Flt Protected		1.00		0.98				0.99			0.97	
Satd. Flow (prot)		3160		3065				1810			1824	
Flt Permitted		0.95		0.59				0.96			0.89	
Satd. Flow (perm)		3009		1850				1750			1671	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	826	479	579	19	3	11	9	49	9	0	3
RTOR Reduction (vph)	0	0	0	2	0	0	0	38	0	0	4	0
Lane Group Flow (vph)	0	828	0	1075	0	0	0	34	0	0	13	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		custom				Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4 7				2			6		
Actuated Green, G (s)		18.0		27.0				14.0			14.0	
Effective Green, g (s)		18.0		27.0				14.0			14.0	
Actuated g/C Ratio		0.28		0.42				0.22			0.22	
Clearance Time (s)		5.0		5.0				4.0			4.0	
Lane Grp Cap (vph)		833		881				377			360	
v/s Ratio Prot				c0.11								
v/s Ratio Perm		0.28		c0.39				c0.02			0.01	
v/c Ratio		0.99		2.29dl				0.09			0.04	
Uniform Delay, d1		23.4		19.0				20.4			20.2	
Progression Factor		1.39		0.83				1.00			1.00	
Incremental Delay, d2		8.1		108.4				0.5			0.2	
Delay (s)		40.7		124.2				20.9			20.4	
Level of Service		D		F				C			C	
Approach Delay (s)		40.7		124.2				20.9			20.4	
Approach LOS		D		F				C			C	

Intersection Summary			
HCM Average Control Delay	762.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	158.4%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR2	NEL	NER
Lane Configurations			
Volume (vph)	5	3	1155
Ideal Flow (vphpl)	1800	1800	1800
Lane Width	12	12	12
Total Lost time (s)		5.0	
Lane Util. Factor		1.00	
Frpb, ped/bikes		1.00	
Flpb, ped/bikes		1.00	
Frt		0.87	
Flt Protected		1.00	
Satd. Flow (prot)		1557	
Flt Permitted		1.00	
Satd. Flow (perm)		1557	
Peak-hour factor, PHF	0.95	0.95	0.95
Adj. Flow (vph)	5	3	1216
RTOR Reduction (vph)	0	0	0
Lane Group Flow (vph)	0	1219	0
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Heavy Vehicles (%)	0%	0%	0%
Turn Type			
Protected Phases		3	
Permitted Phases			
Actuated Green, G (s)		10.0	
Effective Green, g (s)		10.0	
Actuated g/C Ratio		0.15	
Clearance Time (s)		5.0	
Lane Grp Cap (vph)		240	
v/s Ratio Prot		c0.78	
v/s Ratio Perm			
v/c Ratio		5.08	
Uniform Delay, d1		27.5	
Progression Factor		1.23	
Incremental Delay, d2		1836.5	
Delay (s)		1870.3	
Level of Service		F	
Approach Delay (s)		1870.3	
Approach LOS		F	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	355	1614	774	63	96	257
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frt		1.00	0.99		1.00	0.85
Flt Protected		0.99	1.00		0.95	1.00
Satd. Flow (prot)		3291	3283		1660	1485
Flt Permitted		0.61	1.00		0.95	1.00
Satd. Flow (perm)		2011	3283		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	394	1793	860	70	107	286
RTOR Reduction (vph)	0	0	9	0	0	128
Lane Group Flow (vph)	0	2187	921	0	107	158
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		40.0	40.0		17.0	17.0
Effective Green, g (s)		40.0	40.0		17.0	17.0
Actuated g/C Ratio		0.62	0.62		0.26	0.26
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1238	2020		434	388
v/s Ratio Prot			0.28		0.06	
v/s Ratio Perm		c1.09				c0.11
v/c Ratio		1.77	0.46		0.25	0.41
Uniform Delay, d1		12.5	6.7		18.9	19.8
Progression Factor		1.98	0.93		1.27	1.54
Incremental Delay, d2		345.3	0.7		1.3	3.1
Delay (s)		370.0	6.9		25.4	33.7
Level of Service		F	A		C	C
Approach Delay (s)		370.0	6.9		31.4	
Approach LOS		F	A		C	

Intersection Summary			
HCM Average Control Delay	235.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	104	1609	747	152	265	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3122	3106		1506	1343
Flt Permitted		0.77	1.00		0.95	1.00
Satd. Flow (perm)		2402	3106		1506	1343
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	109	1694	786	160	279	99
RTOR Reduction (vph)	0	0	26	0	0	64
Lane Group Flow (vph)	0	1803	920	0	279	35
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		34.0	34.0		23.0	23.0
Effective Green, g (s)		34.0	34.0		23.0	23.0
Actuated g/C Ratio		0.52	0.52		0.35	0.35
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1256	1625		533	475
v/s Ratio Prot			0.30		c0.19	
v/s Ratio Perm		c0.75				0.03
v/c Ratio		1.44	0.57		0.52	0.07
Uniform Delay, d1		15.5	10.5		16.7	13.9
Progression Factor		1.10	1.32		1.64	3.39
Incremental Delay, d2		196.4	1.1		3.2	0.3
Delay (s)		213.5	15.0		30.5	47.4
Level of Service		F	B		C	D
Approach Delay (s)		213.5	15.0		35.0	
Approach LOS		F	B		C	

Intersection Summary			
HCM Average Control Delay	131.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1404	329	121	771	222	58
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.97	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	2417		1788	2506	1749	
Flt Permitted	1.00		0.13	1.00	0.96	
Satd. Flow (perm)	2417		243	2506	1749	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1433	336	123	787	227	59
RTOR Reduction (vph)	13	0	0	0	11	0
Lane Group Flow (vph)	1756	0	123	787	275	0
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			Perm			
Protected Phases	4			8	2	
Permitted Phases			8			
Actuated Green, G (s)	31.0		31.0	31.0	24.0	
Effective Green, g (s)	31.0		31.0	31.0	24.0	
Actuated g/C Ratio	0.48		0.48	0.48	0.37	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Lane Grp Cap (vph)	1153		116	1195	646	
v/s Ratio Prot	c0.73			0.31	c0.16	
v/s Ratio Perm			0.51			
v/c Ratio	1.52		1.06	0.66	0.43	
Uniform Delay, d1	17.0		17.0	13.0	15.3	
Progression Factor	1.52		1.00	1.00	1.00	
Incremental Delay, d2	235.7		100.7	2.9	2.0	
Delay (s)	261.5		117.7	15.8	17.4	
Level of Service	F		F	B	B	
Approach Delay (s)	261.5			29.6	17.4	
Approach LOS	F			C	B	

Intersection Summary			
HCM Average Control Delay	166.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	113.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1680	84	112	875	1	73	0	157	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.29	1.00	1.00	0.08	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	583	3431	1479	128	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1867	93	124	972	1	81	0	174	0	0	0
RTOR Reduction (vph)	0	0	27	0	0	0	0	0	140	0	0	0
Lane Group Flow (vph)	1	1867	66	124	972	1	0	81	34	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	49.4	49.4	49.4	67.1	67.1	67.1		9.9	9.9			
Effective Green, g (s)	49.4	49.4	49.4	67.1	67.1	67.1		9.9	9.9			
Actuated g/C Ratio	0.58	0.58	0.58	0.79	0.79	0.79		0.12	0.12			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	339	1994	860	354	2621	1208		180	175			
v/s Ratio Prot		c0.54		0.06	c0.29							
v/s Ratio Perm	0.00		0.04	0.22		0.00		c0.05	0.02			
v/c Ratio	0.00	0.94	0.08	0.35	0.37	0.00		0.45	0.20			
Uniform Delay, d1	7.5	16.4	7.8	14.8	2.7	1.9		35.0	34.0			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	9.9	0.2	0.6	0.1	0.0		1.8	0.6			
Delay (s)	7.5	26.2	8.0	15.4	2.8	1.9		36.8	34.5			
Level of Service	A	C	A	B	A	A		D	C			
Approach Delay (s)		25.4			4.2			35.2			0.0	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	9	952	843	30	71	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3098	3083		1533	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2923	3083		1533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	10	1058	937	33	79	14
RTOR Reduction (vph)	0	0	3	0	7	0
Lane Group Flow (vph)	0	1068	967	0	86	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1072	2192		119	
v/s Ratio Prot			c0.31		c0.06	
v/s Ratio Perm		c0.37				
v/c Ratio		1.00	0.44		0.72	
Uniform Delay, d1		28.4	5.5		40.5	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		26.6	0.2		31.1	
Delay (s)		55.0	0.2		71.7	
Level of Service		E	A		E	
Approach Delay (s)		55.0	0.2		71.7	
Approach LOS		E	A		E	

Intersection Summary			
HCM Average Control Delay	30.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	500	0	1	582	39	3	2	28	202	0	138
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.98
Flpb, ped/bikes		1.00			1.00			1.00			0.99	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1771			3341			1467			1670	1348
Flt Permitted		0.87			0.95			0.88			0.88	1.00
Satd. Flow (perm)		1550			3191			1296			1545	1348
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	64	556	0	1	647	43	3	2	31	224	0	153
RTOR Reduction (vph)	0	0	0	0	6	0	0	28	0	0	0	103
Lane Group Flow (vph)	0	620	0	0	685	0	0	8	0	0	224	50
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		31.0			45.0			9.0			25.0	28.0
Effective Green, g (s)		31.0			45.0			9.0			25.0	28.0
Actuated g/C Ratio		0.36			0.53			0.11			0.29	0.33
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		565			1714			137			478	444
v/s Ratio Prot					c0.07						c0.09	
v/s Ratio Perm		c0.40			0.15			0.01			c0.05	0.04
v/c Ratio		1.10			0.40			0.06			0.47	0.11
Uniform Delay, d1		27.0			11.9			34.2			24.6	19.9
Progression Factor		1.00			1.37			1.00			1.00	1.00
Incremental Delay, d2		67.2			0.1			0.8			3.3	0.5
Delay (s)		94.2			16.4			35.0			27.8	20.4
Level of Service		F			B			D			C	C
Approach Delay (s)		94.2			16.4			35.0			24.8	
Approach LOS		F			B			D			C	

Intersection Summary			
HCM Average Control Delay	46.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

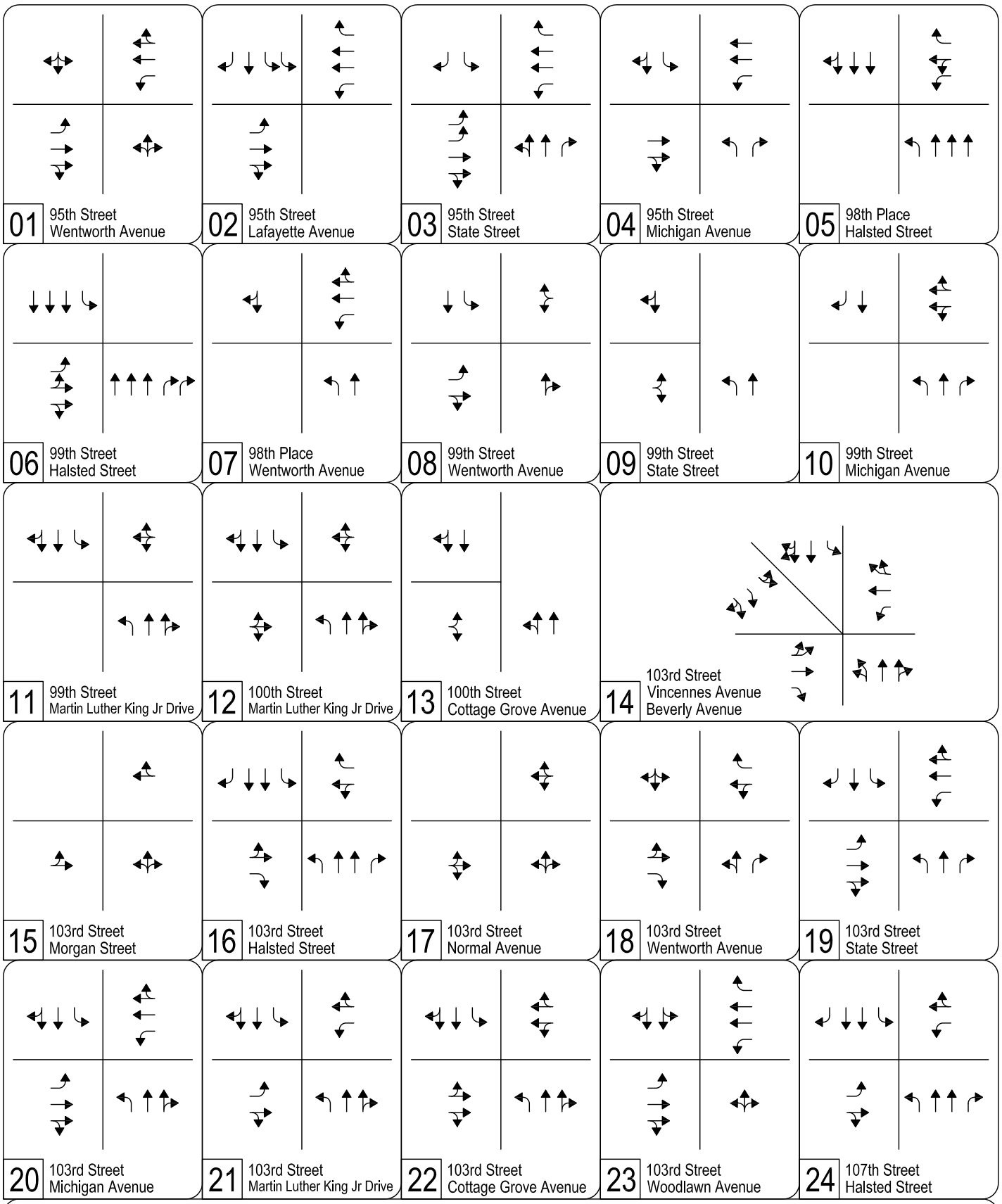

Halsted Rail Alternative Mitigated (2030) Intersection Lane Geometry

Page 1 of 3

Legend: Existing Added Removed

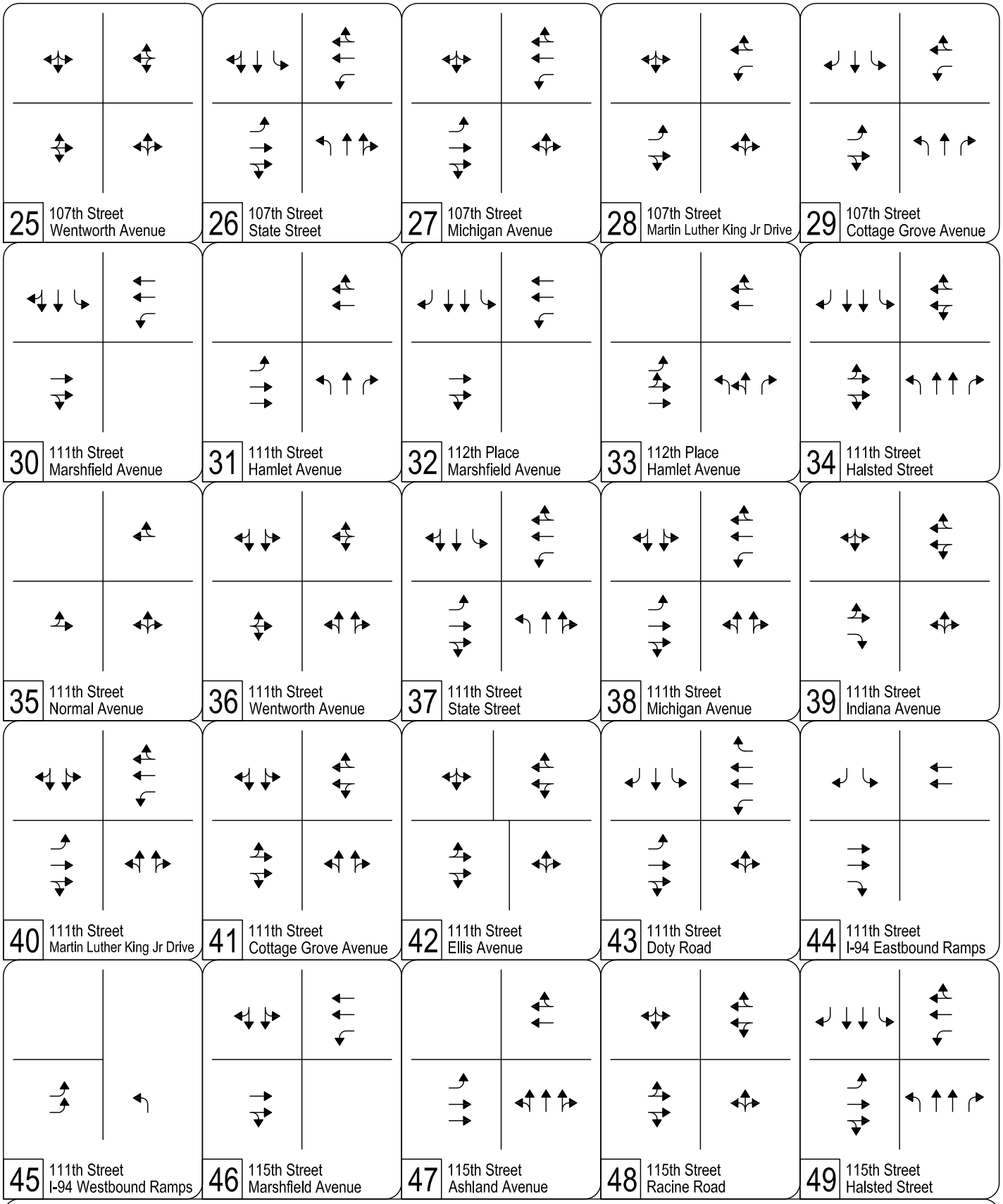

Halsted Rail Alternative Mitigated (2030) Intersection Lane Geometry

Page 2 of 3

Legend: Existing Added Removed

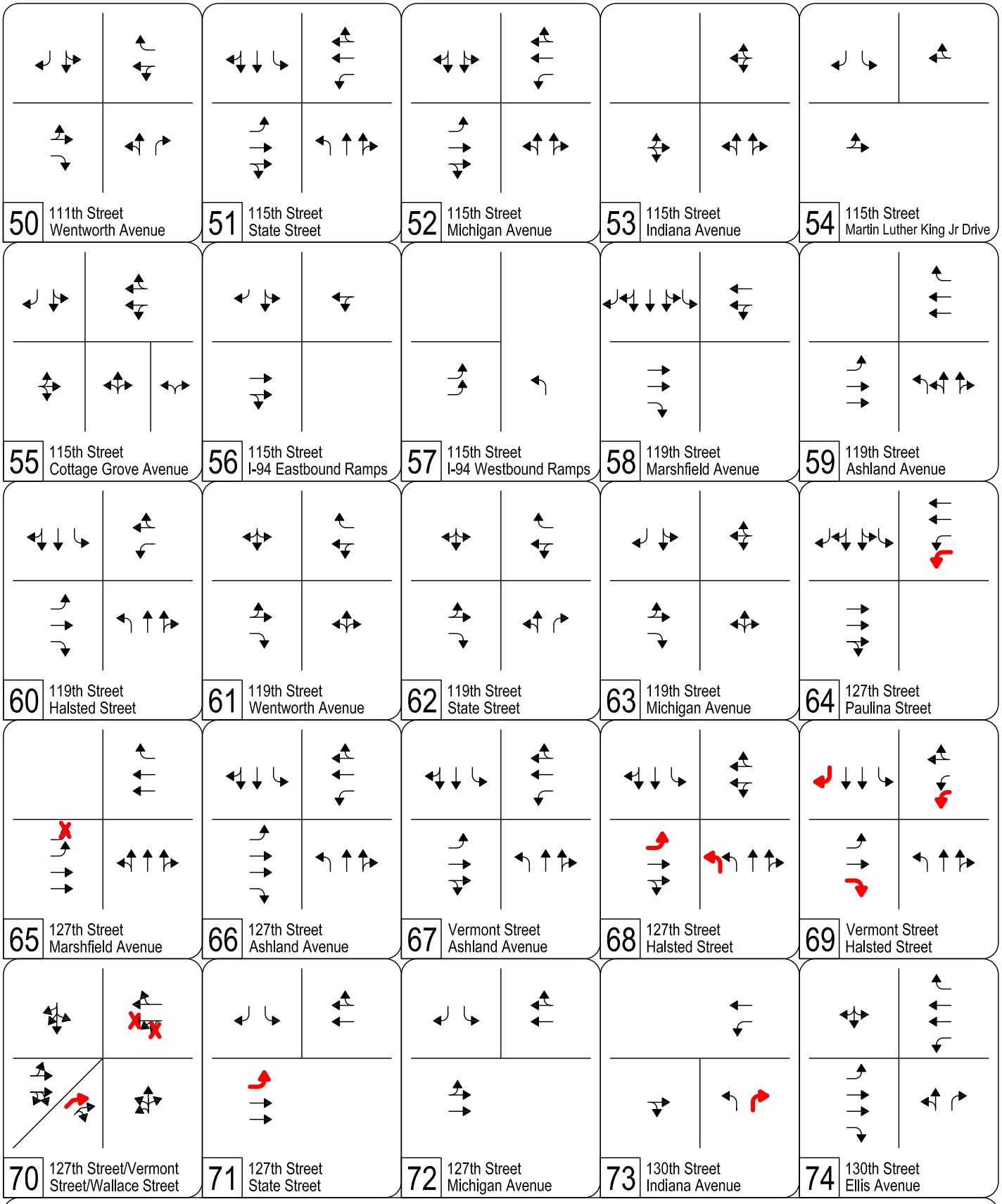

Halsted Rail Alternative Mitigated (2030) Intersection Lane Geometry

Page 3 of 3

Legend: Existing Added Removed

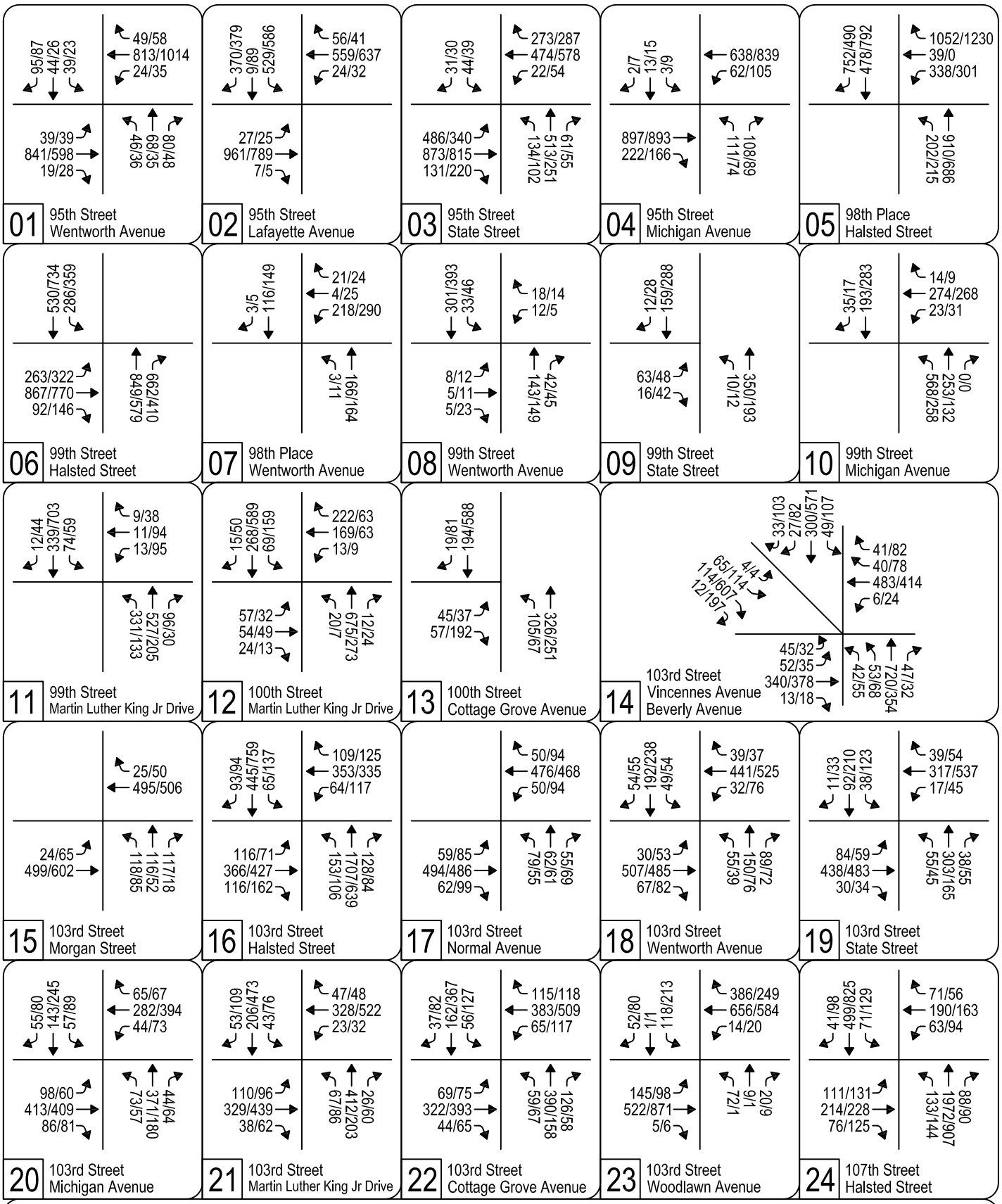

Halsted Rail Alternative Mitigated (2030) Intersection Traffic Volumes

Page 1 of 3

Legend: AM/PM Peak Hour Volumes

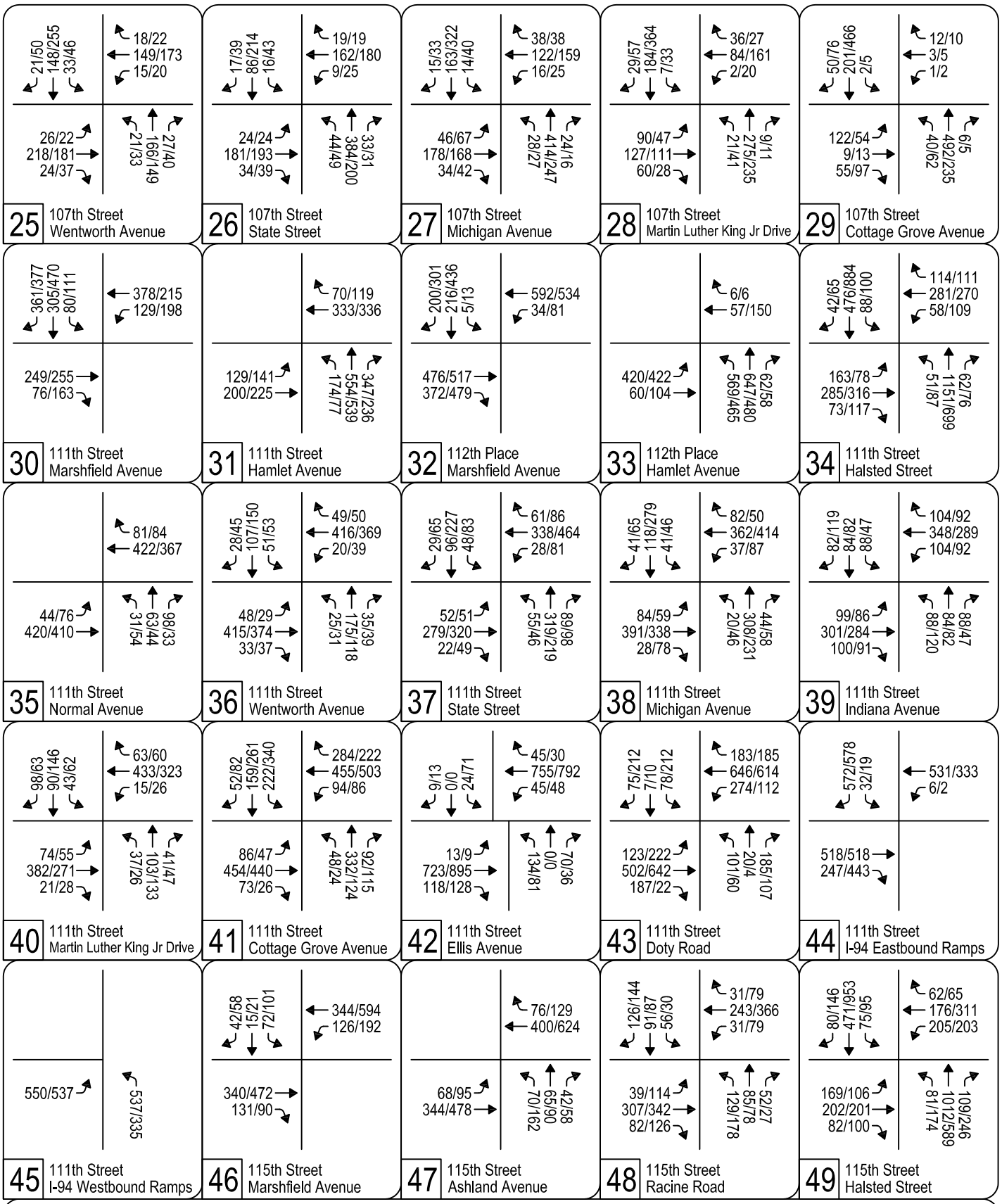

Halsted Rail Alternative Mitigated (2030) Intersection Traffic Volumes

Page 2 of 3

Legend: AM/PM Peak Hour Volumes

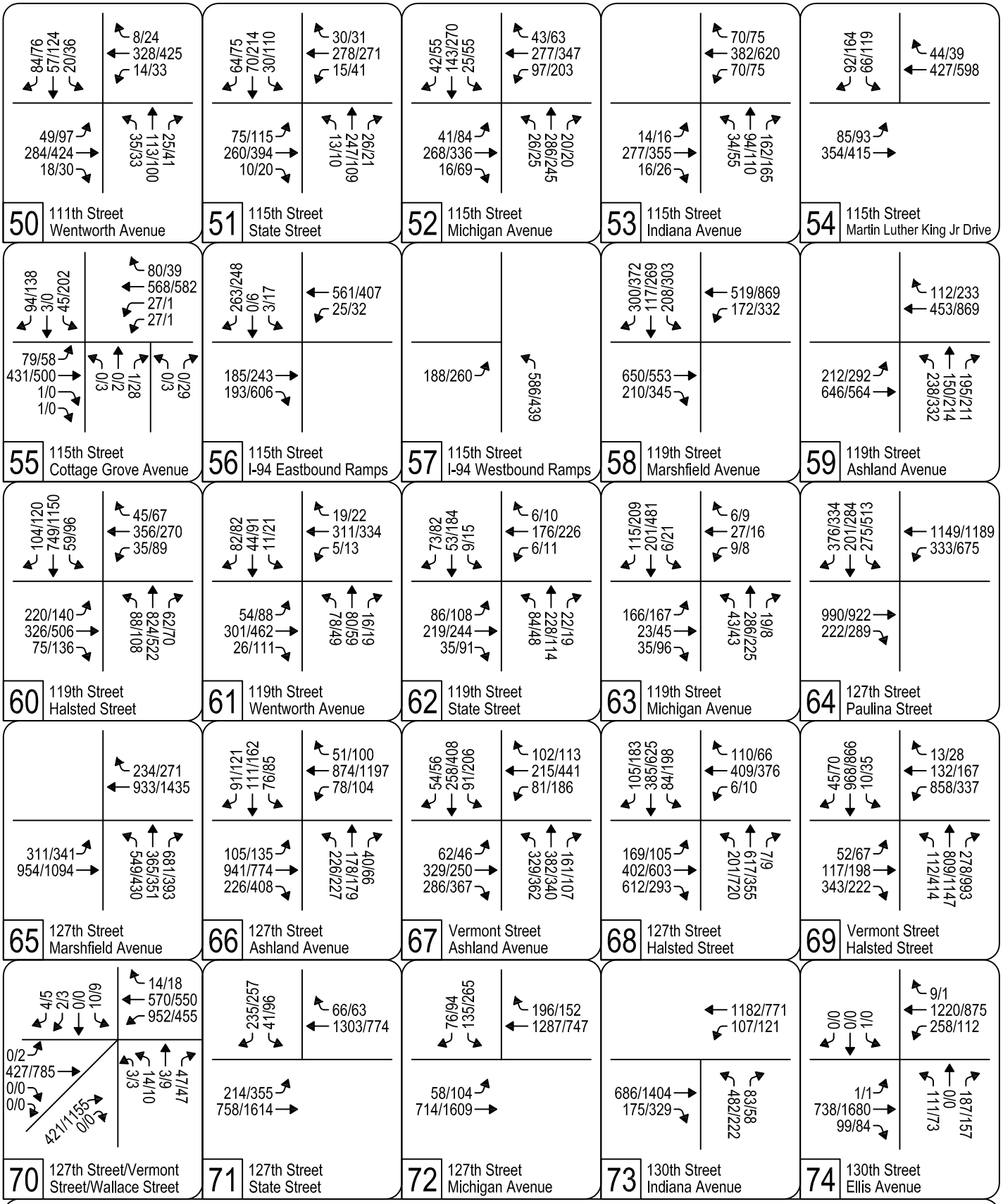

Halsted Rail Alternative Mitigated (2030) Intersection Traffic Volumes

Page 3 of 3

Legend: AM/PM Peak Hour Volumes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	841	19	24	813	49	46	68	80	39	44	95
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.94			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1417	2976		1592	2979			1755			1673	
Flt Permitted	0.25	1.00		0.25	1.00			0.90			0.91	
Satd. Flow (perm)	369	2976		417	2979			1596			1532	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	885	20	25	856	52	48	72	84	41	46	100
RTOR Reduction (vph)	0	2	0	0	7	0	0	39	0	0	59	0
Lane Group Flow (vph)	41	903	0	25	901	0	0	165	0	0	128	0
Confl. Peds. (#/hr)	61		11	11		61	3		5	5		3
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	11%	7%	0%	0%	6%	2%	2%	7%	4%	5%	7%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	193	1557		218	1558			565			542	
v/s Ratio Prot		c0.30			0.30							
v/s Ratio Perm	0.11			0.06				c0.10			0.08	
v/c Ratio	0.21	0.58		0.11	0.58			0.29			0.24	
Uniform Delay, d1	8.3	10.6		7.9	10.6			15.1			14.8	
Progression Factor	1.00	1.00		0.83	1.16			1.00			1.00	
Incremental Delay, d2	2.5	1.6		0.9	1.4			1.3			1.0	
Delay (s)	10.8	12.2		7.5	13.6			16.4			15.8	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		12.1			13.5			16.4			15.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	961	7	24	559	56	0	0	0	529	9	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.96
Flpb, ped/bikes	0.91	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	778	3285		1710	3138	512				3100	1440	1399
Flt Permitted	0.43	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	352	3285		248	3138	512				3100	1440	1399
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1012	7	25	588	59	0	0	0	557	9	389
RTOR Reduction (vph)	0	1	0	0	0	26	0	0	0	0	0	172
Lane Group Flow (vph)	28	1018	0	25	588	33	0	0	0	557	9	217
Confl. Peds. (#/hr)	354		13	13		354	22		22	22		22
Confl. Bikes (#/hr)	4					4			1	1		
Heavy Vehicles (%)	100%	4%	0%	0%	9%	100%	0%	0%	0%	7%	25%	5%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	162	1087		634	1762	288				715	332	323
v/s Ratio Prot	0.02	c0.31		0.01	c0.19					c0.18	0.01	
v/s Ratio Perm	0.04			0.01		0.06						0.16
v/c Ratio	0.17	0.94		0.04	0.33	0.12				0.78	0.03	0.67
Uniform Delay, d1	31.6	42.2		15.1	15.4	13.4				46.9	38.7	45.5
Progression Factor	0.80	0.82		0.29	0.63	1.53				1.00	1.00	1.00
Incremental Delay, d2	2.0	14.1		0.1	0.3	0.5				8.2	0.2	10.7
Delay (s)	27.2	48.9		4.5	10.0	20.9				55.1	38.9	56.2
Level of Service	C	D		A	A	C				E	D	E
Approach Delay (s)		48.3			10.7			0.0			55.4	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	486	873	131	22	474	273	134	513	61	44	0	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.65		1.00	0.94	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.98		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3190	3107		1555	2923	944		3300	1417	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3190	3107		1555	2923	944		3300	1417	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	512	919	138	23	499	287	141	540	64	46	0	33
RTOR Reduction (vph)	0	9	0	0	0	158	0	0	25	0	0	31
Lane Group Flow (vph)	512	1049	0	23	499	129	0	681	39	46	0	2
Confl. Peds. (#/hr)	425		21	21		425	6		34	34		6
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	4%	8%	3%	10%	17%	5%	1%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Effective Green, g (s)	43.0	65.0		9.0	31.0	31.0		30.0	30.0	8.0		8.0
Actuated g/C Ratio	0.33	0.50		0.07	0.24	0.24		0.23	0.23	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1055	1554		108	697	225		762	327	53		45
v/s Ratio Prot	0.16	c0.34		0.01	c0.17			c0.21		c0.05		
v/s Ratio Perm						0.14			0.03			0.00
v/c Ratio	0.49	0.67		0.21	0.72	0.57		0.89	0.12	0.87		0.05
Uniform Delay, d1	34.7	24.5		57.2	45.5	43.6		48.5	39.5	60.5		57.4
Progression Factor	0.75	0.20		1.00	1.00	1.00		0.94	0.90	1.00		1.00
Incremental Delay, d2	0.7	1.1		4.5	6.2	10.1		14.9	0.7	76.0		0.4
Delay (s)	26.9	6.0		61.6	51.7	53.8		60.7	36.2	136.5		57.8
Level of Service	C	A		E	D	D		E	D	F		E
Approach Delay (s)		12.8			52.7			58.6			103.6	
Approach LOS		B			D			E			F	

Intersection Summary			
HCM Average Control Delay	35.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	897	222	62	638	0	111	0	108	3	13	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	0.99	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.98	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2860		1650	3005		1390		1465	1803	1943	
Flt Permitted		1.00		0.15	1.00		0.75		1.00	0.95	1.00	
Satd. Flow (perm)		2860		267	3005		1093		1465	1803	1943	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	997	247	69	709	0	123	0	120	3	14	2
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	77	0	1	0
Lane Group Flow (vph)	0	1222	0	69	709	0	123	0	43	3	15	0
Confl. Peds. (#/hr)	49		15	15		49			12	12		
Heavy Vehicles (%)	0%	6%	14%	0%	10%	0%	23%	0%	2%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1716		160	1803		350		469	577	622	
v/s Ratio Prot		c0.43			0.24						0.01	
v/s Ratio Perm				0.26			c0.11		0.03	0.00		
v/c Ratio		0.71		0.43	0.39		0.35		0.09	0.01	0.02	
Uniform Delay, d1		14.0		10.8	10.5		26.0		23.8	23.2	23.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		2.5		8.3	0.6		2.8		0.4	0.0	0.1	
Delay (s)		16.5		19.1	11.1		28.8		24.2	23.2	23.4	
Level of Service		B		B	B		C		C	C	C	
Approach Delay (s)		16.5			11.8			26.5			23.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	338	39	1052	202	910	0	0	478	752
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0	4.0	5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			0.98	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.91	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1525	1629	1479	1550	4368			3940	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1525	1629	1479	1550	4368			3940	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	345	40	1073	206	929	0	0	488	767
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	345	40	1073	206	929	0	0	1255	0
Confl. Peds. (#/hr)	2					2	12		8	8		12
Heavy Vehicles (%)	0%	0%	0%	3%	5%	2%	3%	5%	0%	0%	5%	8%
Turn Type				Perm		Perm	Prot					
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				30.0	30.0	30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0	31.0	30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30	0.30	0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0	5.0	5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				450	481	423	472	2746			1163	
v/s Ratio Prot							c0.13	0.21			c0.32	
v/s Ratio Perm				0.23	0.02	c0.73						
v/c Ratio				0.77	0.08	2.54	0.44	0.34			1.91dr	
Uniform Delay, d1				33.7	26.7	37.5	29.3	9.2			37.0	
Progression Factor				1.00	1.00	1.00	0.66	2.39			1.00	
Incremental Delay, d2				11.8	0.3	698.4	2.0	0.2			50.5	
Delay (s)				45.5	27.1	735.9	21.3	22.2			87.5	
Level of Service				D	C	F	C	C			F	
Approach Delay (s)		0.0			553.1			22.0			87.5	
Approach LOS		A			F			C			F	

Intersection Summary			
HCM Average Control Delay	244.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	867	92	0	0	0	0	849	662	286	530	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1497	3184						4368	2187	1583	4636	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1497	3184						4368	2187	1583	4636	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	271	894	95	0	0	0	0	875	682	295	546	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	244	1009	0	0	0	0	0	875	682	295	546	0
Confl. Peds. (#/hr)	4		14	14		4	4		3	3		4
Heavy Vehicles (%)	7%	1%	0%	0%	0%	0%	0%	5%	4%	8%	6%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	485	1031						1165	583	467	2737	
v/s Ratio Prot								0.20		c0.19	0.12	
v/s Ratio Perm	0.16	0.32							c0.31			
v/c Ratio	0.50	0.98						0.75	1.17	0.63	0.20	
Uniform Delay, d1	28.7	35.1						35.3	38.5	32.1	10.0	
Progression Factor	1.00	1.00						0.43	0.45	1.06	0.42	
Incremental Delay, d2	3.7	23.4						0.4	78.3	2.2	0.1	
Delay (s)	32.4	58.5						15.5	95.8	36.1	4.3	
Level of Service	C	E						B	F	D	A	
Approach Delay (s)		53.5			0.0			50.7			15.4	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	43.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	218	4	21	3	166	0	0	116	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.98		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.87		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1578	2709		1285	1882			1961	
Flt Permitted				0.95	1.00		0.58	1.00			1.00	
Satd. Flow (perm)				1578	2709		781	1882			1961	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	242	4	23	3	184	0	0	129	3
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	242	9	0	3	184	0	0	131	0
Confl. Peds. (#/hr)	2		2	2		2	3					3
Heavy Vehicles (%)	0%	0%	0%	8%	25%	5%	33%	2%	0%	0%	3%	33%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				501	861		501	1107			1061	
v/s Ratio Prot					0.00		0.00	c0.10			0.07	
v/s Ratio Perm				c0.15			0.00					
v/c Ratio				0.48	0.01		0.01	0.17			0.12	
Uniform Delay, d1				23.4	19.9		10.0	8.0			9.6	
Progression Factor				1.00	1.00		1.06	1.18			1.00	
Incremental Delay, d2				3.3	0.0		0.0	0.3			0.2	
Delay (s)				26.7	19.9		10.6	9.8			9.8	
Level of Service				C	B		B	A			A	
Approach Delay (s)		0.0			26.0			9.8			9.8	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	5	5	12	0	18	0	143	42	33	301	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99			1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.93			0.92			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.98			1.00		0.95	1.00	
Satd. Flow (prot)	1938	1809			1620			1686		1595	1755	
Flt Permitted	0.74	1.00			0.93			1.00		0.60	1.00	
Satd. Flow (perm)	1502	1809			1543			1686		1005	1755	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	5	5	13	0	19	0	151	44	35	317	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	12	0	0	0	0
Lane Group Flow (vph)	8	7	0	0	19	0	0	183	0	35	317	0
Confl. Peds. (#/hr)			3	3			5		2	2		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	6%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	477	575			490			793		640	1032	
v/s Ratio Prot		0.00						0.11		0.00	c0.18	
v/s Ratio Perm	0.01				c0.01					0.03		
v/c Ratio	0.02	0.01			0.04			0.23		0.05	0.31	
Uniform Delay, d1	19.9	19.9			20.0			13.4		8.5	8.8	
Progression Factor	1.00	1.00			1.00			1.00		1.01	0.93	
Incremental Delay, d2	0.1	0.0			0.1			0.7		0.2	0.7	
Delay (s)	20.0	19.9			20.2			14.0		8.8	8.9	
Level of Service	B	B			C			B		A	A	
Approach Delay (s)		19.9			20.2			14.0			8.9	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	63	16	10	350	159	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.97		1.00	1.00	0.99	
Flt Protected	0.96		0.95	1.00	1.00	
Satd. Flow (prot)	1787		1767	1765	1634	
Flt Permitted	0.96		0.64	1.00	1.00	
Satd. Flow (perm)	1787		1187	1765	1634	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	70	18	11	389	177	13
RTOR Reduction (vph)	12	0	0	0	4	0
Lane Group Flow (vph)	76	0	11	389	186	0
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	0%	0%	0%	2%	2%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	577		657	978	905	
v/s Ratio Prot	c0.04			c0.22	0.11	
v/s Ratio Perm			0.01			
v/c Ratio	0.13		0.02	0.40	0.21	
Uniform Delay, d1	15.6		6.5	8.3	7.3	
Progression Factor	1.00		0.32	0.51	1.16	
Incremental Delay, d2	0.5		0.0	1.1	0.4	
Delay (s)	16.0		2.1	5.4	8.9	
Level of Service	B		A	A	A	
Approach Delay (s)	16.0			5.3	8.9	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	23	274	14	568	253	0	0	193	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3738		1660	1752			1603	1298
Flt Permitted					1.00		0.57	1.00			1.00	1.00
Satd. Flow (perm)					3738		1002	1752			1603	1298
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	26	304	16	631	281	0	0	214	39
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	0	0	0	342	0	631	281	0	0	214	17
Confl. Peds. (#/hr)									30	30		
Heavy Vehicles (%)	0%	0%	0%	11%	2%	0%	3%	13%	0%	0%	16%	10%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1143		679	1051			717	580
v/s Ratio Prot					c0.09		c0.11	0.16			0.13	
v/s Ratio Perm							c0.45					0.01
v/c Ratio					0.30		0.93	0.27			0.30	0.03
Uniform Delay, d1					22.5		17.0	8.1			15.0	13.2
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.7		21.0	0.6			1.1	0.1
Delay (s)					23.2		38.0	8.7			16.1	13.3
Level of Service					C		D	A			B	B
Approach Delay (s)		0.0			23.2			29.0			15.6	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	13	11	9	331	527	96	74	339	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.96		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1796		1692	3237		1707	3352	
Flt Permitted					0.98		0.50	1.00		0.31	1.00	
Satd. Flow (perm)					1796		894	3237		566	3352	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	14	12	10	368	586	107	82	377	13
RTOR Reduction (vph)	0	0	0	0	7	0	0	20	0	0	3	0
Lane Group Flow (vph)	0	0	0	0	29	0	368	673	0	82	387	0
Confl. Peds. (#/hr)	2					2	6		20	20		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	11%	0%	1%	3%	0%	0%	5%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					551		563	1467		416	1520	
v/s Ratio Prot					c0.02		c0.06	0.21		0.02	0.12	
v/s Ratio Perm							c0.30			0.09		
v/c Ratio					0.05		0.65	0.46		0.20	0.25	
Uniform Delay, d1					18.3		13.7	14.2		12.3	12.7	
Progression Factor					1.00		0.69	0.74		1.00	1.00	
Incremental Delay, d2					0.2		5.3	0.9		1.1	0.4	
Delay (s)					18.5		14.8	11.4		13.4	13.1	
Level of Service					B		B	B		B	B	
Approach Delay (s)		0.0			18.5			12.6			13.1	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	57	54	24	13	169	222	20	675	12	69	268	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1946			1626		1596	3232		1641	3131	
Flt Permitted		0.68			0.99		0.57	1.00		0.33	1.00	
Satd. Flow (perm)		1354			1613		957	3232		575	3131	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	57	25	14	178	234	21	711	13	73	282	16
RTOR Reduction (vph)	0	10	0	0	59	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	132	0	0	367	0	21	722	0	73	293	0
Confl. Peds. (#/hr)									6	6		
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	0%	0%	12%	2%	2%	0%	2%	0%	4%	5%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		451			538		536	1810		322	1753	
v/s Ratio Prot								c0.22			0.09	
v/s Ratio Perm		0.10			c0.23		0.02			0.13		
v/c Ratio		0.29			0.68		0.04	0.40		0.23	0.17	
Uniform Delay, d1		18.5			21.6		7.4	9.3		8.3	8.0	
Progression Factor		1.00			1.00		1.00	1.00		0.17	0.06	
Incremental Delay, d2		1.6			6.9		0.1	0.7		1.6	0.2	
Delay (s)		20.1			28.4		7.6	10.0		3.0	0.7	
Level of Service		C			C		A	B		A	A	
Approach Delay (s)		20.1			28.4			9.9			1.1	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	45	57	105	326	194	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	63	117	362	216	21

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	113	237	241	144	93
Volume Left (vph)	50	117	0	0	0
Volume Right (vph)	63	0	0	0	21
Hadj (s)	-0.16	0.33	0.08	0.09	-0.07
Departure Headway (s)	5.3	5.4	5.1	5.4	5.2
Degree Utilization, x	0.17	0.36	0.35	0.22	0.14
Capacity (veh/h)	628	654	684	641	660
Control Delay (s)	9.3	10.1	9.6	8.7	7.9
Approach Delay (s)	9.3	9.9		8.4	
Approach LOS	A	A		A	

Intersection Summary			
Delay	9.4		
HCM Level of Service	A		
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	45	52	340	13	6	483	40	41	42	53	720	47
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.97			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1575	1731	1530	1710	1731	1487			1710	3289	
Flt Permitted		0.11	1.00	1.00	0.54	1.00	1.00			0.39	1.00	
Satd. Flow (perm)		187	1731	1530	967	1731	1487			700	3289	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	58	378	14	7	537	44	46	47	59	800	52
RTOR Reduction (vph)	0	0	0	7	0	0	32	0	0	0	5	0
Lane Group Flow (vph)	0	108	378	7	7	537	58	0	0	106	847	0
Confl. Peds. (#/hr)		5					5					6
Heavy Vehicles (%)	8%	9%	4%	0%	0%	4%	0%	0%	0%	0%	3%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Effective Green, g (s)		50.0	50.0	50.0	32.0	32.0	32.0			25.0	25.0	
Actuated g/C Ratio		0.48	0.48	0.48	0.30	0.30	0.30			0.24	0.24	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		281	824	729	295	528	453			167	783	
v/s Ratio Prot		0.05	c0.22			c0.31					c0.26	
v/s Ratio Perm		0.13		0.00	0.01		0.04			0.15		
v/c Ratio		0.38	0.46	0.01	0.02	1.02	0.13			0.63	1.08	
Uniform Delay, d1		20.3	18.4	14.5	25.6	36.5	26.4			35.9	40.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Incremental Delay, d2		3.9	1.8	0.0	0.1	43.5	0.6			17.0	56.8	
Delay (s)		24.2	20.3	14.5	25.7	80.0	27.0			52.9	96.8	
Level of Service		C	C	B	C	F	C			D	F	
Approach Delay (s)			21.0			71.9					91.9	
Approach LOS			C			E					F	

Intersection Summary			
HCM Average Control Delay	62.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	49	300	27	33	4	65	114	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.97				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3279				1710	2621	
Flt Permitted	0.16	1.00				0.95	1.00	
Satd. Flow (perm)	293	3279				1710	2621	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	54	333	30	37	4	72	127	13
RTOR Reduction (vph)	0	8	0	0	0	0	7	0
Lane Group Flow (vph)	54	392	0	0	0	76	133	0
Confl. Peds. (#/hr)	6							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	24.5	24.5				17.5	17.5	
Effective Green, g (s)	24.5	24.5				17.5	17.5	
Actuated g/C Ratio	0.23	0.23				0.17	0.17	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	68	765				285	437	
v/s Ratio Prot		0.12				0.04		
v/s Ratio Perm	0.18						c0.05	
v/c Ratio	0.79	0.51				0.27	0.31	
Uniform Delay, d1	37.9	35.1				38.2	38.4	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	61.4	2.4				2.3	1.8	
Delay (s)	99.3	37.5				40.4	40.2	
Level of Service	F	D				D	D	
Approach Delay (s)		44.9				40.3		
Approach LOS		D				D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	499	0	0	495	25	118	116	117	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.95				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1653			1930			1771				
Flt Permitted		0.96			1.00			0.98				
Satd. Flow (perm)		1598			1930			1771				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	554	0	0	550	28	131	129	130	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	581	0	0	578	0	0	390	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.0			31.0			26.0				
Effective Green, g (s)		31.0			31.0			26.0				
Actuated g/C Ratio		0.48			0.48			0.40				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		762			920			708				
v/s Ratio Prot					0.30							
v/s Ratio Perm		c0.36						0.22				
v/c Ratio		0.76			0.63			0.55				
Uniform Delay, d1		14.0			12.7			15.0				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.1			3.2			3.1				
Delay (s)		21.1			15.9			18.1				
Level of Service		C			B			B				
Approach Delay (s)		21.1			15.9			18.1			0.0	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	366	116	64	353	109	153	1707	128	65	445	93
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1923	1426		1923	1396	1501	3099	1285	1425	2956	1265
Flt Permitted		0.55	1.00		0.62	1.00	0.38	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)		1062	1426		1194	1396	608	3099	1285	145	2956	1265
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	385	122	67	372	115	161	1797	135	68	468	98
RTOR Reduction (vph)	0	0	72	0	0	68	0	0	30	0	0	59
Lane Group Flow (vph)	0	507	50	0	439	47	161	1797	105	68	468	39
Confl. Peds. (#/hr)	42		39	39		42	20		8	8		20
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	6%	4%	3%	0%	6%	5%	6%	3%	4%	8%	8%	4%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		43.0	43.0		43.0	43.0	54.0	47.0	47.0	45.5	41.5	41.5
Effective Green, g (s)		43.0	43.0		43.0	43.0	54.0	47.0	47.0	45.5	41.5	41.5
Actuated g/C Ratio		0.41	0.41		0.41	0.41	0.51	0.45	0.45	0.43	0.40	0.40
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		435	584		489	572	393	1387	575	112	1168	500
v/s Ratio Prot							0.04	c0.58		c0.02	0.16	
v/s Ratio Perm		c0.48	0.04		0.37	0.03	0.17		0.08	0.24		0.03
v/c Ratio		1.17	0.09		0.90	0.08	0.41	1.30	0.18	0.61	0.40	0.08
Uniform Delay, d1		31.0	19.0		28.9	18.9	14.4	29.0	17.4	24.7	22.8	19.8
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.50	0.77	0.42
Incremental Delay, d2		96.9	0.3		21.9	0.3	0.7	138.5	0.7	8.7	1.0	0.3
Delay (s)		127.9	19.3		50.8	19.2	15.1	167.5	18.1	45.8	18.6	8.6
Level of Service		F	B		D	B	B	F	B	D	B	A
Approach Delay (s)		106.8			44.3			146.1			20.0	
Approach LOS		F			D			F			B	

Intersection Summary			
HCM Average Control Delay	104.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	117.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	494	62	50	476	50	79	62	55	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.99			0.99			0.96				
Flt Protected		1.00			1.00			0.98				
Satd. Flow (prot)		1627			1630			1779				
Flt Permitted		0.90			0.91			0.98				
Satd. Flow (perm)		1473			1489			1779				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	549	69	56	529	56	88	69	61	0	0	0
RTOR Reduction (vph)	0	6	0	0	5	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	678	0	0	636	0	0	197	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		861			870			520				
v/s Ratio Prot												
v/s Ratio Perm		c0.46			0.43			0.11				
v/c Ratio		0.79			0.73			0.38				
Uniform Delay, d1		10.4			9.8			18.3				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		7.2			5.4			2.1				
Delay (s)		17.6			15.2			20.4				
Level of Service		B			B			C				
Approach Delay (s)		17.6			15.2			20.4			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	507	67	32	441	39	55	150	89	49	192	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.95		1.00	0.98		0.98	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		1.00	1.00		0.99	1.00		0.99	
Satd. Flow (prot)		1656	1255		1636	1288		1658	1490		1737	
Flt Permitted		0.96	1.00		0.95	1.00		0.84	1.00		0.92	
Satd. Flow (perm)		1595	1255		1554	1288		1416	1490		1607	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	534	71	34	464	41	58	158	94	52	202	57
RTOR Reduction (vph)	0	0	30	0	0	16	0	0	64	0	11	0
Lane Group Flow (vph)	0	566	41	0	498	25	0	216	30	0	300	0
Confl. Peds. (#/hr)	33		15	15		33	68		5	5		68
Confl. Bikes (#/hr)	4					4						
Heavy Vehicles (%)	0%	5%	14%	19%	5%	9%	2%	2%	1%	10%	7%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		914	720		891	738		453	477		514	
v/s Ratio Prot												
v/s Ratio Perm		c0.35	0.03		0.32	0.02		0.15	0.02		c0.19	
v/c Ratio		0.62	0.06		0.56	0.03		0.48	0.06		0.58	
Uniform Delay, d1		10.6	7.1		10.0	7.0		20.5	17.7		21.3	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.1	0.1		2.5	0.1		3.6	0.3		4.8	
Delay (s)		13.7	7.2		12.6	7.0		24.0	18.0		26.1	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.0			12.2			22.2			26.1	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	438	30	17	317	39	55	303	38	38	92	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1464	2990		1459	3534		1534	1647	1301	1517	1541	1156
Flt Permitted	0.51	1.00		0.43	1.00		0.69	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	788	2990		658	3534		1116	1647	1301	720	1541	1156
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	487	33	19	352	43	61	337	42	42	102	12
RTOR Reduction (vph)	0	7	0	0	15	0	0	0	22	0	0	7
Lane Group Flow (vph)	93	513	0	19	380	0	61	337	20	42	102	5
Confl. Peds. (#/hr)	16		9	9		16	1		5	5		1
Heavy Vehicles (%)	8%	6%	0%	13%	8%	3%	4%	2%	8%	5%	9%	22%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	376	1426		314	1685		446	659	520	288	616	462
v/s Ratio Prot		c0.17			0.11			c0.20			0.07	
v/s Ratio Perm	0.12			0.03			0.05		0.02	0.06		0.00
v/c Ratio	0.25	0.36		0.06	0.23		0.14	0.51	0.04	0.15	0.17	0.01
Uniform Delay, d1	10.1	10.7		9.2	10.0		12.4	14.7	11.9	12.4	12.5	11.7
Progression Factor	1.00	1.00		1.00	1.00		0.60	0.74	0.31	0.53	0.54	0.28
Incremental Delay, d2	1.6	0.7		0.4	0.3		0.6	2.8	0.1	1.1	0.6	0.0
Delay (s)	11.6	11.4		9.5	10.3		8.0	13.6	3.8	7.7	7.3	3.4
Level of Service	B	B		A	B		A	B	A	A	A	A
Approach Delay (s)		11.5			10.2			11.9			7.1	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	413	86	44	282	65	73	371	44	57	143	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00		0.98	1.00		0.97	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1464	3056		1588	3009		1541	3022		1403	2767	
Flt Permitted	0.52	1.00		0.42	1.00		0.62	1.00		0.46	1.00	
Satd. Flow (perm)	808	3056		698	3009		1007	3022		678	2767	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	435	91	46	297	68	77	391	46	60	151	58
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	34	0
Lane Group Flow (vph)	103	526	0	46	365	0	77	425	0	60	175	0
Confl. Peds. (#/hr)	98		10	10		98	28		52	52		28
Heavy Vehicles (%)	5%	5%	4%	0%	5%	7%	2%	6%	13%	10%	11%	20%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	388	1467		335	1444		416	1249		280	1144	
v/s Ratio Prot		c0.17			0.12			c0.14			0.06	
v/s Ratio Perm	0.13			0.07			0.08			0.09		
v/c Ratio	0.27	0.36		0.14	0.25		0.19	0.34		0.21	0.15	
Uniform Delay, d1	11.6	12.2		10.9	11.5		14.0	15.0		14.2	13.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	0.7		0.9	0.4		1.0	0.7		1.7	0.3	
Delay (s)	13.3	12.9		11.7	12.0		15.0	15.8		15.9	14.1	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		13.0			11.9			15.6			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	110	329	38	23	328	47	67	412	26	43	206	53
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1533	1576		1474	1841		1533	3073		1372	2881	
Flt Permitted	0.45	1.00		0.46	1.00		0.58	1.00		0.41	1.00	
Satd. Flow (perm)	720	1576		713	1841		942	3073		597	2881	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	346	40	24	345	49	71	434	27	45	217	56
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	116	386	0	24	394	0	71	461	0	45	273	0
Confl. Peds. (#/hr)	7		23	23		7	10		8	8		10
Confl. Bikes (#/hr)	1		2	2		1	1		1	1		1
Heavy Vehicles (%)	4%	8%	10%	0%	9%	5%	0%	3%	0%	12%	7%	6%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.0	41.8		40.6	38.6		26.8	22.2		23.6	20.6	
Effective Green, g (s)	47.0	39.8		40.6	36.6		26.8	20.2		23.6	18.6	
Actuated g/C Ratio	0.55	0.47		0.48	0.43		0.32	0.24		0.28	0.22	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	448	738		358	793		329	730		193	630	
v/s Ratio Prot	c0.02	c0.24		0.00	0.21		c0.01	c0.15		0.01	0.09	
v/s Ratio Perm	0.13			0.03			0.06			0.06		
v/c Ratio	0.26	0.52		0.07	0.50		0.22	0.63		0.23	0.43	
Uniform Delay, d1	13.5	15.9		15.0	17.5		21.5	29.1		26.1	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.6		0.1	2.2		0.3	4.1		0.6	2.2	
Delay (s)	13.8	18.6		15.1	19.7		21.9	33.2		26.8	30.8	
Level of Service	B	B		B	B		C	C		C	C	
Approach Delay (s)		17.5			19.5			31.7			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	322	44	65	383	115	59	390	126	56	162	37
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.97		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3493			2913		1614	3156		1581	2921	
Flt Permitted		0.78			0.84		0.61	1.00		0.38	1.00	
Satd. Flow (perm)		2748			2465		1042	3156		628	2921	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	77	358	49	72	426	128	66	433	140	62	180	41
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	484	0	0	626	0	66	573	0	62	221	0
Confl. Peds. (#/hr)	20		16	16		20	5		33	33		5
Confl. Bikes (#/hr)	2					2			2	2		
Heavy Vehicles (%)	9%	9%	0%	24%	7%	6%	2%	4%	2%	0%	5%	9%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1246			1117		458	1389		276	1285	
v/s Ratio Prot								c0.18			0.08	
v/s Ratio Perm		0.18			c0.25		0.06			0.10		
v/c Ratio		0.39			0.56		0.14	0.41		0.22	0.17	
Uniform Delay, d1		13.6			15.0		12.6	14.4		13.0	12.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9			2.0		0.7	0.9		1.9	0.3	
Delay (s)		14.5			17.1		13.2	15.3		14.9	13.0	
Level of Service		B			B		B	B		B	B	
Approach Delay (s)		14.5			17.1			15.1			13.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	522	5	14	656	386	72	9	20	118	1	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.97	
Satd. Flow (prot)	1574	3144		1629	3257	1457		1611			3105	
Flt Permitted	0.35	1.00		0.42	1.00	1.00		0.69			0.75	
Satd. Flow (perm)	585	3144		721	3257	1457		1158			2398	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	580	6	16	729	429	80	10	22	131	1	58
RTOR Reduction (vph)	0	1	0	0	0	150	0	12	0	0	44	0
Lane Group Flow (vph)	161	585	0	16	729	279	0	100	0	0	146	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Effective Green, g (s)	46.0	46.0		46.0	46.0	46.0		16.7			16.7	
Actuated g/C Ratio	0.65	0.65		0.65	0.65	0.65		0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	381	2046		469	2119	948		274			566	
v/s Ratio Prot		0.19			0.22							
v/s Ratio Perm	c0.28			0.02		0.19		c0.09			0.06	
v/c Ratio	0.42	0.29		0.03	0.34	0.29		0.36			0.26	
Uniform Delay, d1	6.0	5.3		4.4	5.6	5.3		22.6			22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	3.4	0.4		0.1	0.4	0.8		3.5			1.0	
Delay (s)	9.4	5.7		4.5	6.0	6.1		26.1			23.0	
Level of Service	A	A		A	A	A		C			C	
Approach Delay (s)		6.5			6.0			26.1			23.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	70.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	111	214	76	63	190	71	133	1972	88	71	499	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	1498		1547	1584		1493	3069	1271	1452	2983	1301
Flt Permitted	0.37	1.00		0.32	1.00		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	608	1498		521	1584		612	3069	1271	180	2983	1301
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	117	225	80	66	200	75	140	2076	93	75	525	43
RTOR Reduction (vph)	0	15	0	0	16	0	0	0	18	0	0	25
Lane Group Flow (vph)	117	290	0	66	259	0	140	2076	75	75	525	18
Confl. Peds. (#/hr)	4		9	9		4	6		16	16		6
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	4%	3%	1%	2%	3%	4%	4%	6%	7%	3%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	252	388		232	410		350	1264	523	174	1228	536
v/s Ratio Prot	c0.03	c0.19		0.02	0.16		0.03	c0.68		c0.03	0.18	
v/s Ratio Perm	0.11			0.07			0.16		0.06	0.17		0.01
v/c Ratio	0.46	0.75		0.28	0.63		0.40	1.64	0.14	0.43	0.43	0.03
Uniform Delay, d1	22.5	29.0		21.9	27.9		13.3	25.0	15.6	18.1	17.8	14.9
Progression Factor	1.00	1.00		1.00	1.00		0.62	0.71	0.50	1.00	1.00	1.00
Incremental Delay, d2	6.0	12.4		3.1	7.2		2.7	292.0	0.5	7.6	1.1	0.1
Delay (s)	28.6	41.4		24.9	35.2		11.0	309.8	8.2	25.7	18.9	15.0
Level of Service	C	D		C	D		B	F	A	C	B	B
Approach Delay (s)		37.8			33.2			279.5			19.5	
Approach LOS		D			C			F			B	

Intersection Summary			
HCM Average Control Delay	184.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	218	24	15	149	18	21	166	27	33	148	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.99	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		1843			1836			1900			1931	
Flt Permitted		0.96			0.97			0.97			0.94	
Satd. Flow (perm)		1787			1790			1844			1822	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	27	225	25	15	154	19	22	171	28	34	153	22
RTOR Reduction (vph)	0	5	0	0	6	0	0	8	0	0	6	0
Lane Group Flow (vph)	0	272	0	0	182	0	0	213	0	0	203	0
Confl. Peds. (#/hr)	5		11	11		5	7		34	34		7
Confl. Bikes (#/hr)			3	3								
Heavy Vehicles (%)	4%	2%	0%	20%	1%	0%	12%	3%	8%	0%	3%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		742			744			851			841	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.10			c0.12			0.11	
v/c Ratio		0.37			0.24			0.25			0.24	
Uniform Delay, d1		13.1			12.4			10.7			10.6	
Progression Factor		1.00			0.64			1.08			1.00	
Incremental Delay, d2		1.4			0.8			0.7			0.7	
Delay (s)		14.5			8.6			12.2			11.3	
Level of Service		B			A			B			B	
Approach Delay (s)		14.5			8.6			12.2			11.3	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	181	34	9	162	19	44	384	33	16	86	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.95	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1465	2994		1302	3037		1529	3093		1492	2868	
Flt Permitted	0.63	1.00		0.60	1.00		0.68	1.00		0.48	1.00	
Satd. Flow (perm)	965	2994		827	3037		1093	3093		757	2868	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	201	38	10	180	21	49	427	37	18	96	19
RTOR Reduction (vph)	0	24	0	0	13	0	0	10	0	0	8	0
Lane Group Flow (vph)	27	215	0	10	188	0	49	454	0	18	107	0
Confl. Peds. (#/hr)	35		6	6		35	18					18
Confl. Bikes (#/hr)	14		32	32		14	23		7	7		23
Heavy Vehicles (%)	4%	4%	0%	22%	2%	6%	3%	2%	0%	7%	8%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	875		242	888		639	1808		443	1677	
v/s Ratio Prot		c0.07			0.06			c0.15			0.04	
v/s Ratio Perm	0.03			0.01			0.04			0.02		
v/c Ratio	0.10	0.25		0.04	0.21		0.08	0.25		0.04	0.06	
Uniform Delay, d1	16.7	17.5		16.5	17.3		5.9	6.6		5.7	5.8	
Progression Factor	0.73	0.73		0.76	0.74		0.93	0.96		0.49	0.44	
Incremental Delay, d2	0.6	0.6		0.3	0.5		0.2	0.3		0.2	0.1	
Delay (s)	12.9	13.5		12.8	13.4		5.7	6.6		3.0	2.6	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		13.5			13.3			6.5			2.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	178	34	16	122	38	28	414	24	14	163	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.96			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1556	2952		1515	2868			1878			1808	
Flt Permitted	0.64	1.00		0.60	1.00			0.98			0.96	
Satd. Flow (perm)	1047	2952		965	2868			1838			1739	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	51	198	38	18	136	42	31	460	27	16	181	17
RTOR Reduction (vph)	0	23	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	51	213	0	18	153	0	0	515	0	0	209	0
Confl. Peds. (#/hr)	10		29	29		10	17		10	10		17
Confl. Bikes (#/hr)									2	2		
Heavy Vehicles (%)	2%	4%	10%	0%	4%	0%	0%	8%	4%	0%	13%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	419	1181		386	1147			877			829	
v/s Ratio Prot		c0.07			0.05							
v/s Ratio Perm	0.05			0.02				c0.28			0.12	
v/c Ratio	0.12	0.18		0.05	0.13			0.59			0.25	
Uniform Delay, d1	12.3	12.6		11.9	12.4			12.4			10.1	
Progression Factor	1.01	0.92		0.86	0.88			1.02			1.00	
Incremental Delay, d2	0.6	0.3		0.2	0.2			2.8			0.7	
Delay (s)	13.1	12.0		10.5	11.1			15.4			10.8	
Level of Service	B	B		B	B			B			B	
Approach Delay (s)		12.2			11.0			15.4			10.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	127	60	2	84	36	21	275	9	7	184	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.95		1.00	0.95			1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1605	1879		1587	1870			1971			1933	
Flt Permitted	0.67	1.00		0.57	1.00			0.98			0.99	
Satd. Flow (perm)	1135	1879		950	1870			1928			1916	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	141	67	2	93	40	23	306	10	8	204	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	100	208	0	2	133	0	0	339	0	0	244	0
Confl. Peds. (#/hr)			8	8			1		8	8		1
Heavy Vehicles (%)	3%	3%	2%	0%	6%	0%	0%	3%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	349	578		292	575			1097			1091	
v/s Ratio Prot		c0.11			0.07							
v/s Ratio Perm	0.09			0.00				c0.18			0.13	
v/c Ratio	0.29	0.36		0.01	0.23			0.31			0.22	
Uniform Delay, d1	17.1	17.5		15.6	16.8			7.3			6.9	
Progression Factor	0.90	0.89		0.89	0.92			0.94			1.00	
Incremental Delay, d2	2.0	1.7		0.0	0.9			0.7			0.5	
Delay (s)	17.5	17.4		14.0	16.3			7.6			7.4	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		17.4			16.3			7.6			7.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	9	55	1	3	12	40	492	6	2	201	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.97		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1603	1672		1710	1422		1491	1631	1392	1649	1907	1427
Flt Permitted	0.75	1.00		0.71	1.00		0.62	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1260	1672		1279	1422		971	1631	1392	648	1907	1427
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	136	10	61	1	3	13	44	547	7	2	223	56
RTOR Reduction (vph)	0	44	0	0	9	0	0	0	3	0	0	22
Lane Group Flow (vph)	136	27	0	1	7	0	44	547	4	2	223	34
Confl. Peds. (#/hr)	9					9	1		6	6		1
Heavy Vehicles (%)	5%	14%	5%	0%	67%	12%	7%	3%	0%	0%	7%	5%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	349	463		354	394		583	979	835	389	1144	856
v/s Ratio Prot		0.02			0.00			c0.34			0.12	
v/s Ratio Perm	c0.11			0.00			0.05		0.00	0.00		0.02
v/c Ratio	0.39	0.06		0.00	0.02		0.08	0.56	0.01	0.01	0.19	0.04
Uniform Delay, d1	19.0	17.3		17.0	17.1		5.4	7.8	5.2	5.2	5.9	5.3
Progression Factor	1.47	2.41		1.00	1.00		1.17	1.10	1.32	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.2		0.0	0.1		0.2	1.7	0.0	0.0	0.4	0.1
Delay (s)	31.1	41.9		17.0	17.1		6.5	10.3	6.9	5.2	6.3	5.4
Level of Service	C	D		B	B		A	B	A	A	A	A
Approach Delay (s)		34.8			17.1			10.0			6.1	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	249	76	129	378	0	0	0	0	80	305	361
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.96		1.00	1.00					1.00	0.92	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2829		1621	3288					1574	2907	
Flt Permitted		1.00		0.49	1.00					0.95	1.00	
Satd. Flow (perm)		2829		835	3288					1574	2907	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	262	80	136	398	0	0	0	0	84	321	380
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	0	0	214	0
Lane Group Flow (vph)	0	313	0	136	398	0	0	0	0	84	487	0
Confl. Peds. (#/hr)	14		32	32		14	14					14
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	9%	4%	5%	4%	0%	0%	0%	0%	5%	2%	4%
Turn Type				D.P+P						custom		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8						6		
Actuated Green, G (s)		33.0		56.0	59.0					32.0	32.0	
Effective Green, g (s)		33.0		56.0	59.0					32.0	32.0	
Actuated g/C Ratio		0.33		0.56	0.59					0.32	0.32	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		934		648	1940					504	930	
v/s Ratio Prot		c0.11		c0.05	0.12					0.05	c0.17	
v/s Ratio Perm				0.07								
v/c Ratio		0.34		0.21	0.21					0.17	0.52	
Uniform Delay, d1		25.2		10.6	9.6					24.4	27.8	
Progression Factor		1.00		1.97	2.07					1.00	1.00	
Incremental Delay, d2		1.0		0.6	0.2					0.7	2.1	
Delay (s)		26.2		21.5	19.9					25.1	29.9	
Level of Service		C		C	B					C	C	
Approach Delay (s)		26.2			20.4			0.0			29.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	200	0	0	333	70	174	554	347	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1673	3054			2833		1750	1782	1514			
Flt Permitted	0.33	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	583	3054			2833		1750	1782	1514			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	136	211	0	0	351	74	183	583	365	0	0	0
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	245	0	0	0
Lane Group Flow (vph)	136	211	0	0	408	0	183	583	120	0	0	0
Confl. Peds. (#/hr)	14		16	16		14			1	1		
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	2%	12%	0%	0%	5%	4%	1%	1%	3%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Effective Green, g (s)	54.0	58.0			21.0		33.0	33.0	33.0			
Actuated g/C Ratio	0.54	0.58			0.21		0.33	0.33	0.33			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	675	1771			595		578	588	500			
v/s Ratio Prot	c0.07	0.07			c0.14		0.10	c0.33				
v/s Ratio Perm	0.04								0.08			
v/c Ratio	0.20	0.12			0.69		0.32	0.99	0.24			
Uniform Delay, d1	11.8	9.5			36.4		25.1	33.4	24.4			
Progression Factor	0.24	0.25			1.00		0.76	0.79	1.91			
Incremental Delay, d2	0.6	0.1			6.3		0.9	27.9	0.7			
Delay (s)	3.5	2.5			42.7		19.9	54.1	47.3			
Level of Service	A	A			D		B	D	D			
Approach Delay (s)		2.9			42.7			46.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	37.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	372	34	592	0	0	0	0	5	216	200
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3112		1613	3273					1596	3160	1443
Flt Permitted		1.00		0.16	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3112		268	3273					1596	3160	1443
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	496	388	35	617	0	0	0	0	5	225	208
RTOR Reduction (vph)	0	141	0	0	0	0	0	0	0	0	0	137
Lane Group Flow (vph)	0	743	0	35	617	0	0	0	0	5	225	71
Confl. Peds. (#/hr)	22		3	3		22						
Confl. Bikes (#/hr)	4					4			32	32		
Heavy Vehicles (%)	0%	2%	2%	6%	1%	0%	0%	0%	0%	0%	1%	6%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1120		387	1898					543	1074	491
v/s Ratio Prot		c0.24		0.02	c0.19					0.00	c0.07	0.05
v/s Ratio Perm				0.03								
v/c Ratio		0.66		0.09	0.33					0.01	0.21	0.14
Uniform Delay, d1		26.9		12.6	10.9					21.8	23.5	22.9
Progression Factor		1.00		0.54	0.68					0.73	0.78	0.90
Incremental Delay, d2		3.1		0.2	0.2					0.0	0.4	0.6
Delay (s)		30.0		7.0	7.6					16.0	18.7	21.3
Level of Service		C		A	A					B	B	C
Approach Delay (s)		30.0			7.5			0.0			19.9	
Approach LOS		C			A			A			B	

Intersection Summary			
HCM Average Control Delay	20.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	420	60	0	0	57	6	569	647	62	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	0.99	0.99			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.96			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1444	3040			3070		1555	1637	1500			
Flt Permitted	0.71	0.74			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1083	2333			3070		1555	1637	1500			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	433	62	0	0	59	6	587	667	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	38	0	0	0
Lane Group Flow (vph)	216	279	0	0	60	0	587	667	26	0	0	0
Confl. Peds. (#/hr)	30		2	2		30			4	4		
Confl. Bikes (#/hr)	3					3			2	2		
Heavy Vehicles (%)	3%	2%	0%	0%	2%	0%	1%	1%	2%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	682	1444			461		575	606	555			
v/s Ratio Prot	c0.11	0.07			0.02		0.38	c0.41	0.02			
v/s Ratio Perm	c0.05	0.03										
v/c Ratio	0.32	0.19			0.13		1.02	1.10	0.05			
Uniform Delay, d1	14.1	13.3			36.8		31.5	31.5	20.2			
Progression Factor	0.22	0.24			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.9	0.2			0.6		42.9	67.2	0.2			
Delay (s)	4.0	3.4			37.4		74.4	98.7	20.4			
Level of Service	A	A			D		E	F	C			
Approach Delay (s)		3.6			37.4			84.1			0.0	
Approach LOS		A			D			F			A	

Intersection Summary			
HCM Average Control Delay	61.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	163	285	73	58	281	114	51	1151	62	88	476	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.98			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2843			2815		1447	3069	1336	1494	2956	1270
Flt Permitted		0.62			0.82		0.39	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)		1801			2328		600	3069	1336	197	2956	1270
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	170	297	76	60	293	119	53	1199	65	92	496	44
RTOR Reduction (vph)	0	16	0	0	39	0	0	0	24	0	0	27
Lane Group Flow (vph)	0	527	0	0	433	0	53	1199	41	92	496	17
Confl. Peds. (#/hr)	49		20	20		49	26		8	8		26
Confl. Bikes (#/hr)	2					2						
Heavy Vehicles (%)	10%	7%	4%	9%	7%	5%	6%	4%	0%	3%	8%	5%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		836			767		294	1210	519	144	1165	493
v/s Ratio Prot		c0.04					0.01	c0.39		c0.03	0.17	
v/s Ratio Perm		0.22			c0.19		0.07		0.03	0.24		0.01
v/c Ratio		0.63			0.56		0.18	0.99	0.08	0.64	0.43	0.03
Uniform Delay, d1		19.3			23.5		14.8	25.6	16.4	19.0	18.7	16.1
Progression Factor		1.00			1.00		1.34	0.87	1.43	1.82	1.64	3.14
Incremental Delay, d2		3.6			3.0		0.8	17.5	0.2	18.1	1.0	0.1
Delay (s)		22.9			26.5		20.6	39.8	23.6	52.5	31.8	50.8
Level of Service		C			C		C	D	C	D	C	D
Approach Delay (s)		22.9			26.5			38.2			36.1	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	33.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	420	0	0	422	81	31	63	98	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.98			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1706			1677			1583				
Flt Permitted		0.92			1.00			0.99				
Satd. Flow (perm)		1577			1677			1583				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	49	467	0	0	469	90	34	70	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	58	0	0	0	0
Lane Group Flow (vph)	0	516	0	0	549	0	0	155	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.0			34.0			23.0				
Effective Green, g (s)		34.0			34.0			23.0				
Actuated g/C Ratio		0.52			0.52			0.35				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		825			877			560				
v/s Ratio Prot					0.33							
v/s Ratio Perm		c0.33						0.10				
v/c Ratio		0.63			0.63			0.28				
Uniform Delay, d1		11.0			11.0			15.0				
Progression Factor		1.00			0.63			1.00				
Incremental Delay, d2		3.6			2.8			1.2				
Delay (s)		14.6			9.7			16.3				
Level of Service		B			A			B				
Approach Delay (s)		14.6			9.7			16.3			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	415	33	20	416	49	25	175	35	51	107	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1886			1842			3185			3126	
Flt Permitted		0.92			0.97			0.92			0.83	
Satd. Flow (perm)		1753			1794			2930			2630	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	461	37	22	462	54	28	194	39	57	119	31
RTOR Reduction (vph)	0	4	0	0	6	0	0	22	0	0	18	0
Lane Group Flow (vph)	0	547	0	0	532	0	0	239	0	0	189	0
Confl. Peds. (#/hr)	29		16	16		29	28		14	14		28
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	3%	7%	4%	12%	8%	13%	0%	4%	4%	4%	4%	6%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		809			828			1217			1092	
v/s Ratio Prot												
v/s Ratio Perm		c0.31			0.30			c0.08			0.07	
v/c Ratio		0.68			0.64			0.20			0.17	
Uniform Delay, d1		13.7			13.4			12.1			12.0	
Progression Factor		0.63			0.56			0.98			0.61	
Incremental Delay, d2		3.7			3.7			0.4			0.3	
Delay (s)		12.4			11.1			12.2			7.6	
Level of Service		B			B			B			A	
Approach Delay (s)		12.4			11.1			12.2			7.6	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	279	22	28	338	61	55	319	89	48	96	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1503	2936		1584	2944		1497	3034		1594	2899	
Flt Permitted	0.44	1.00		0.53	1.00		0.66	1.00		0.48	1.00	
Satd. Flow (perm)	697	2936		890	2944		1046	3034		809	2899	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	310	24	31	376	68	61	354	99	53	107	32
RTOR Reduction (vph)	0	9	0	0	22	0	0	39	0	0	15	0
Lane Group Flow (vph)	58	325	0	31	422	0	61	414	0	53	124	0
Confl. Peds. (#/hr)	25		14	14		25	12		4	4		12
Confl. Bikes (#/hr)	1					1			1	1		
Heavy Vehicles (%)	5%	7%	12%	0%	6%	2%	6%	1%	3%	0%	4%	12%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	236	994		301	996		563	1634		436	1561	
v/s Ratio Prot		0.11			c0.14			c0.14			0.04	
v/s Ratio Perm	0.08			0.03			0.06			0.07		
v/c Ratio	0.25	0.33		0.10	0.42		0.11	0.25		0.12	0.08	
Uniform Delay, d1	15.5	16.0		14.7	16.6		7.4	8.0		7.4	7.2	
Progression Factor	0.57	0.55		0.78	0.80		0.63	0.63		1.30	1.35	
Incremental Delay, d2	2.0	0.7		0.7	1.3		0.4	0.4		0.6	0.1	
Delay (s)	10.9	9.6		12.1	14.6		5.0	5.4		10.2	9.8	
Level of Service	B	A		B	B		A	A		B	A	
Approach Delay (s)		9.8			14.4			5.3			9.9	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	391	28	37	362	82	20	308	44	41	118	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1385	3013		1335	3538			3438			3303	
Flt Permitted	0.46	1.00		0.48	1.00			0.94			0.84	
Satd. Flow (perm)	674	3013		674	3538			3226			2808	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	88	412	29	39	381	86	21	324	46	43	124	43
RTOR Reduction (vph)	0	8	0	0	30	0	0	16	0	0	26	0
Lane Group Flow (vph)	88	433	0	39	437	0	0	375	0	0	184	0
Confl. Peds. (#/hr)	53		34	34		53	67		28	28		67
Heavy Vehicles (%)	8%	5%	0%	14%	6%	1%	0%	9%	20%	5%	15%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	321	1437		321	1687			1290			1123	
v/s Ratio Prot		c0.14			0.12							
v/s Ratio Perm	0.13			0.06				c0.12			0.07	
v/c Ratio	0.27	0.30		0.12	0.26			0.29			0.16	
Uniform Delay, d1	10.2	10.4		9.4	10.1			13.2			12.5	
Progression Factor	1.60	1.65		0.79	0.78			0.46			0.64	
Incremental Delay, d2	2.1	0.5		0.7	0.3			0.6			0.3	
Delay (s)	18.4	17.6		8.2	8.2			6.7			8.3	
Level of Service	B	B		A	A			A			A	
Approach Delay (s)		17.7			8.2			6.7			8.3	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	301	100	104	348	104	88	84	88	88	84	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.95			0.96	
Flt Protected		0.99	1.00		0.99			0.98			0.98	
Satd. Flow (prot)		1637	1409		3032			1823			1826	
Flt Permitted		0.74	1.00		0.76			0.79			0.78	
Satd. Flow (perm)		1230	1409		2324			1456			1442	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	110	334	111	116	387	116	98	93	98	98	93	91
RTOR Reduction (vph)	0	0	53	0	31	0	0	28	0	0	26	0
Lane Group Flow (vph)	0	444	58	0	588	0	0	261	0	0	256	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		643	737		1216			470			466	
v/s Ratio Prot												
v/s Ratio Perm		c0.36	0.04		0.25			c0.18			0.18	
v/c Ratio		0.69	0.08		0.48			0.55			0.55	
Uniform Delay, d1		11.6	7.7		9.9			18.1			18.1	
Progression Factor		2.01	5.68		0.42			1.00			1.00	
Incremental Delay, d2		5.9	0.2		1.3			4.7			4.6	
Delay (s)		29.1	44.0		5.5			22.8			22.7	
Level of Service		C	D		A			C			C	
Approach Delay (s)		32.1			5.5			22.8			22.7	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	382	21	15	433	63	37	103	41	43	90	98
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1475	3018		1573	3001			3454			3403	
Flt Permitted	0.40	1.00		0.47	1.00			0.87			0.88	
Satd. Flow (perm)	616	3018		771	3001			3030			3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	82	424	23	17	481	70	41	114	46	48	100	109
RTOR Reduction (vph)	0	6	0	0	18	0	0	25	0	0	60	0
Lane Group Flow (vph)	82	441	0	17	533	0	0	176	0	0	197	0
Confl. Peds. (#/hr)	22		40	40		22	18		3	3		18
Confl. Bikes (#/hr)			2	2			1					1
Heavy Vehicles (%)	7%	5%	0%	0%	4%	2%	0%	3%	22%	0%	3%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Effective Green, g (s)	28.0	28.0		28.0	28.0			29.0			29.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.45			0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	265	1300		332	1293			1352			1345	
v/s Ratio Prot		0.15			c0.18							
v/s Ratio Perm	0.13			0.02				0.06			c0.07	
v/c Ratio	0.31	0.34		0.05	0.41			0.13			0.15	
Uniform Delay, d1	12.2	12.3		10.8	12.8			10.6			10.7	
Progression Factor	0.98	1.00		1.14	0.99			0.99			0.80	
Incremental Delay, d2	2.3	0.5		0.1	0.5			0.2			0.2	
Delay (s)	14.1	12.9		12.4	13.1			10.7			8.8	
Level of Service	B	B		B	B			B			A	
Approach Delay (s)		13.1			13.1			10.7			8.8	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	454	73	94	455	284	48	332	92	222	159	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.98			0.95			0.97			0.98	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		3177			3073			3146			3118	
Flt Permitted		0.63			0.74			0.88			0.63	
Satd. Flow (perm)		2028			2280			2771			2008	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	504	81	104	506	316	53	369	102	247	177	58
RTOR Reduction (vph)	0	16	0	0	103	0	0	33	0	0	17	0
Lane Group Flow (vph)	0	665	0	0	823	0	0	491	0	0	465	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.0			26.0			29.0			20.0	
Effective Green, g (s)		26.0			26.0			29.0			20.0	
Actuated g/C Ratio		0.40			0.40			0.45			0.31	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		811			912			1271			618	
v/s Ratio Prot								c0.04				
v/s Ratio Perm		0.33			c0.36			0.14			c0.23	
v/c Ratio		0.82			0.90			0.39			0.96dl	
Uniform Delay, d1		17.4			18.3			12.0			20.3	
Progression Factor		1.73			1.00			1.00			0.89	
Incremental Delay, d2		8.9			13.9			0.9			8.3	
Delay (s)		39.1			32.2			12.9			26.3	
Level of Service		D			C			B			C	
Approach Delay (s)		39.1			32.2			12.9			26.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	29.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	723	118	45	755	0	134	0	70	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	10	10	10
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.95				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		2976			3031			1583				
Flt Permitted		1.00			0.84			0.80				
Satd. Flow (perm)		2976			2543			1311				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	803	131	50	839	0	149	0	78	0	0	0
RTOR Reduction (vph)	0	18	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	916	0	0	889	0	0	206	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1918			932			233				
v/s Ratio Prot		c0.31										
v/s Ratio Perm					c0.35			c0.16				
v/c Ratio		0.48			0.95			0.89				
Uniform Delay, d1		8.2			27.8			36.1				
Progression Factor		0.04			1.57			1.00				
Incremental Delay, d2		0.4			18.2			35.5				
Delay (s)		0.7			61.8			71.6				
Level of Service		A			E			E				
Approach Delay (s)		0.7			61.8			71.6			0.0	
Approach LOS		A			E			E			A	

Intersection Summary			
HCM Average Control Delay	35.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	123	502	187	274	646	183	101	20	185	78	7	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1520	3020		1629	3257	1457		1755		1629	1714	1457
Flt Permitted	0.32	1.00		0.20	1.00	1.00		0.89		0.40	1.00	1.00
Satd. Flow (perm)	511	3020		342	3257	1457		1582		685	1714	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	137	558	208	304	718	203	112	22	206	87	8	83
RTOR Reduction (vph)	0	42	0	0	0	104	0	75	0	0	0	45
Lane Group Flow (vph)	137	724	0	304	718	99	0	265	0	87	8	38
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	40.1	30.7		47.8	35.4	44.0		20.6		32.2	32.2	41.6
Effective Green, g (s)	40.1	30.7		47.8	35.4	44.0		20.6		32.2	32.2	41.6
Actuated g/C Ratio	0.45	0.34		0.53	0.39	0.49		0.23		0.36	0.36	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	333	1030		383	1281	712		362		335	613	673
v/s Ratio Prot	0.04	0.24		c0.12	0.22	0.01				c0.02	0.00	0.01
v/s Ratio Perm	0.14			c0.30		0.05		c0.17		0.07		0.02
v/c Ratio	0.41	0.70		0.79	0.56	0.14		0.73		0.26	0.01	0.06
Uniform Delay, d1	15.4	25.7		14.7	21.2	12.6		32.1		21.3	18.6	13.4
Progression Factor	1.90	1.58		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	3.6		11.4	1.8	0.1		7.9		0.4	0.0	0.0
Delay (s)	30.2	44.3		26.0	23.0	12.7		40.1		21.7	18.7	13.4
Level of Service	C	D		C	C	B		D		C	B	B
Approach Delay (s)		42.1			22.1			40.1			17.7	
Approach LOS		D			C			D			B	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	247	6	531	0	0	0	0	32	0	572
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	274	7	590	0	0	0	0	36	0	636
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	590			576			884	1179	288	891	1179	295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	590			576			884	1179	288	891	1179	295
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	85	100	8
cM capacity (veh/h)	961			973			19	184	700	231	184	692

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	274	203	393	36	636
Volume Left	0	0	0	7	0	36	0
Volume Right	0	0	274	0	0	0	636
cSH	1700	1700	1700	973	1700	231	692
Volume to Capacity	0.17	0.17	0.16	0.01	0.23	0.15	0.92
Queue Length 95th (ft)	0	0	0	1	0	13	307
Control Delay (s)	0.0	0.0	0.0	0.4	0.0	23.4	41.6
Lane LOS				A		C	E
Approach Delay (s)	0.0			0.1		40.6	
Approach LOS						E	

Intersection Summary			
Average Delay	12.9		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	550	0	537	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	611	0	597	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	306	306	597
Volume Left (vph)	306	306	597
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	7.0	7.0	5.8
Degree Utilization, x	0.59	0.59	0.95
Capacity (veh/h)	513	513	618
Control Delay (s)	18.3	18.3	49.2
Approach Delay (s)	18.3		49.2
Approach LOS	C		E

Intersection Summary			
Delay	33.5		
HCM Level of Service	D		
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	340	131	126	344	0	0	0	0	72	15	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.96		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3017		1574	3149						3014	
Flt Permitted		1.00		0.39	1.00						0.97	
Satd. Flow (perm)		3017		645	3149						3014	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	378	146	140	382	0	0	0	0	80	17	47
RTOR Reduction (vph)	0	48	0	0	0	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	476	0	140	382	0	0	0	0	0	112	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1278		481	1815						957	
v/s Ratio Prot		c0.16		c0.03	0.12						c0.04	
v/s Ratio Perm				0.13								
v/c Ratio		0.37		0.29	0.21						0.12	
Uniform Delay, d1		16.8		12.6	8.7						20.6	
Progression Factor		1.00		0.37	0.33						1.00	
Incremental Delay, d2		0.8		1.4	0.2						0.2	
Delay (s)		17.6		6.2	3.1						20.8	
Level of Service		B		A	A						C	
Approach Delay (s)		17.6			3.9			0.0			20.8	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	344	0	0	400	76	70	65	42	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.98			0.96				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1629	3257			3073			4425				
Flt Permitted	0.38	1.00			1.00			0.98				
Satd. Flow (perm)	656	3257			3073			4425				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	382	0	0	444	84	78	72	47	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	32	0	0	0	0
Lane Group Flow (vph)	76	382	0	0	510	0	0	165	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	485	1839			1265			1406				
v/s Ratio Prot	0.02	c0.12			c0.17			c0.04				
v/s Ratio Perm	0.07											
v/c Ratio	0.16	0.21			0.40			0.12				
Uniform Delay, d1	12.1	9.1			17.6			20.6				
Progression Factor	0.41	0.42			1.00			1.00				
Incremental Delay, d2	0.7	0.2			1.0			0.2				
Delay (s)	5.7	4.1			18.6			20.7				
Level of Service	A	A			B			C				
Approach Delay (s)		4.3			18.6			20.7			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	307	82	31	243	31	129	85	52	56	91	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.97			0.94	
Flt Protected		1.00			0.99			0.98			0.99	
Satd. Flow (prot)		2939			2979			1792			1750	
Flt Permitted		0.89			0.88			0.73			0.89	
Satd. Flow (perm)		2639			2628			1347			1565	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	43	341	91	34	270	34	143	94	58	62	101	140
RTOR Reduction (vph)	0	32	0	0	13	0	0	14	0	0	48	0
Lane Group Flow (vph)	0	443	0	0	325	0	0	281	0	0	255	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		934			930			663			770	
v/s Ratio Prot												
v/s Ratio Perm		c0.17			0.12			c0.21			0.16	
v/c Ratio		0.47			0.35			0.42			0.33	
Uniform Delay, d1		16.3			15.5			10.6			10.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.7			1.0			2.0			1.2	
Delay (s)		18.0			16.5			12.6			11.2	
Level of Service		B			B			B			B	
Approach Delay (s)		18.0			16.5			12.6			11.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	202	82	205	176	62	81	1012	109	75	471	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1548	2954		1593	3512		1487	3040	1347	1494	3011	1271
Flt Permitted	0.59	1.00		0.54	1.00		0.40	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	954	2954		901	3512		626	3040	1347	197	3011	1271
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	178	213	86	216	185	65	85	1065	115	79	496	84
RTOR Reduction (vph)	0	52	0	0	41	0	0	0	68	0	0	51
Lane Group Flow (vph)	178	247	0	216	209	0	85	1065	47	79	496	33
Confl. Peds. (#/hr)	31		7	7		31	37		12	12		37
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	4%	0%	0%	6%	2%	3%	5%	0%	3%	6%	4%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	33.0	33.0	36.0	33.0	33.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	365	973		351	1157		306	1180	523	144	1169	493
v/s Ratio Prot	0.02	0.08		c0.03	0.06		0.01	c0.35		c0.03	0.16	
v/s Ratio Perm	0.15			c0.19			0.10		0.03	0.21		0.03
v/c Ratio	0.49	0.25		0.62	0.18		0.28	0.90	0.09	0.55	0.42	0.07
Uniform Delay, d1	20.6	20.9		22.0	20.3		15.1	24.5	16.5	17.6	19.0	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.94	0.61	0.78
Incremental Delay, d2	4.6	0.6		7.8	0.3		2.2	11.2	0.3	13.0	1.0	0.2
Delay (s)	25.2	21.5		29.8	20.7		17.4	35.7	16.8	47.0	12.6	13.0
Level of Service	C	C		C	C		B	D	B	D	B	B
Approach Delay (s)		22.9			24.9			32.8			16.8	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM Average Control Delay	26.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	284	18	14	328	8	35	113	25	20	57	84
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.99		1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1928	1382		1954	1331		1970	1452		1928	1430
Flt Permitted		0.91	1.00		0.98	1.00		0.93	1.00		0.93	1.00
Satd. Flow (perm)		1768	1382		1924	1331		1860	1452		1811	1430
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	299	19	15	345	8	37	119	26	21	60	88
RTOR Reduction (vph)	0	0	10	0	0	4	0	0	15	0	0	51
Lane Group Flow (vph)	0	351	9	0	360	4	0	156	11	0	81	37
Confl. Peds. (#/hr)	5		21	21		5	9		1	1		9
Heavy Vehicles (%)	5%	5%	6%	7%	4%	12%	6%	1%	4%	0%	6%	5%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		816	638		888	614		773	603		752	594
v/s Ratio Prot												
v/s Ratio Perm		c0.20	0.01		0.19	0.00		c0.08	0.01		0.04	0.03
v/c Ratio		0.43	0.01		0.41	0.01		0.20	0.02		0.11	0.06
Uniform Delay, d1		11.8	9.5		11.6	9.4		12.1	11.2		11.6	11.4
Progression Factor		1.00	1.00		0.47	0.45		1.33	1.73		0.96	0.93
Incremental Delay, d2		1.7	0.0		1.3	0.0		0.6	0.1		0.3	0.2
Delay (s)		13.4	9.5		6.7	4.3		16.7	19.4		11.4	10.8
Level of Service		B	A		A	A		B	B		B	B
Approach Delay (s)		13.2			6.7			17.1			11.1	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	260	10	15	278	30	13	247	26	30	70	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1520	3023		1520	2996		1520	2996		1520	2823	
Flt Permitted	0.95	1.00		0.57	1.00		0.66	1.00		0.55	1.00	
Satd. Flow (perm)	1520	3023		910	2996		1052	2996		884	2823	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	289	11	17	309	33	14	274	29	33	78	71
RTOR Reduction (vph)	0	4	0	0	13	0	0	12	0	0	42	0
Lane Group Flow (vph)	83	296	0	17	329	0	14	291	0	33	107	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	164	1488		308	1014		437	1244		367	1173	
v/s Ratio Prot	c0.05	0.10			c0.11			c0.10			0.04	
v/s Ratio Perm				0.02			0.01			0.04		
v/c Ratio	0.51	0.20		0.06	0.32		0.03	0.23		0.09	0.09	
Uniform Delay, d1	27.4	9.3		14.5	16.0		11.3	12.3		11.5	11.5	
Progression Factor	0.90	0.38		0.81	0.74		0.61	0.65		1.10	1.20	
Incremental Delay, d2	10.3	0.3		0.3	0.8		0.1	0.4		0.5	0.2	
Delay (s)	34.9	3.8		12.1	12.7		7.0	8.4		13.2	14.0	
Level of Service	C	A		B	B		A	A		B	B	
Approach Delay (s)		10.5			12.7			8.3			13.8	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	38.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	268	16	97	277	43	26	286	20	25	143	42
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.99		1.00	0.98			0.99			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1520	3014		1520	2979			3215			3140	
Flt Permitted	0.54	1.00		0.95	1.00			0.92			0.89	
Satd. Flow (perm)	862	3014		1520	2979			2975			2822	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	46	298	18	108	308	48	29	318	22	28	159	47
RTOR Reduction (vph)	0	7	0	0	19	0	0	7	0	0	29	0
Lane Group Flow (vph)	46	309	0	108	337	0	0	362	0	0	205	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	265	927		140	1329			1144			1085	
v/s Ratio Prot		c0.10		c0.07	0.11							
v/s Ratio Perm	0.05							c0.12			0.07	
v/c Ratio	0.17	0.33		0.77	0.25			0.32			0.19	
Uniform Delay, d1	16.5	17.4		28.8	11.2			14.0			13.3	
Progression Factor	0.59	0.58		1.31	1.02			0.72			0.75	
Incremental Delay, d2	1.4	1.0		27.7	0.4			0.7			0.4	
Delay (s)	11.1	11.0		65.5	11.8			10.8			10.3	
Level of Service	B	B		E	B			B			B	
Approach Delay (s)		11.0			24.3			10.8			10.3	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	277	16	70	382	70	34	94	162	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.98			0.92				
Flt Protected		1.00			0.99			0.99				
Satd. Flow (prot)		1585			1560			3164				
Flt Permitted		0.97			0.91			0.99				
Satd. Flow (perm)		1545			1436			3164				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	308	18	78	424	78	38	104	180	0	0	0
RTOR Reduction (vph)	0	2	0	0	7	0	0	138	0	0	0	0
Lane Group Flow (vph)	0	340	0	0	573	0	0	184	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.9			41.9			15.1				
Effective Green, g (s)		41.9			41.9			15.1				
Actuated g/C Ratio		0.64			0.64			0.23				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		996			926			735				
v/s Ratio Prot												
v/s Ratio Perm		0.22			c0.40			0.06				
v/c Ratio		0.34			0.62			0.25				
Uniform Delay, d1		5.3			6.8			20.3				
Progression Factor		2.08			1.00			1.00				
Incremental Delay, d2		0.9			3.1			0.8				
Delay (s)		11.8			9.9			21.1				
Level of Service		B			A			C				
Approach Delay (s)		11.8			9.9			21.1			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	85	354	427	44	66	92
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	89	373	449	46	69	97
Pedestrians		3	5		21	
Lane Width (ft)		16.0	16.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.87				0.87	0.87
vC, conflicting volume	517				1050	497
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	373				984	350
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	91				67	84
cM capacity (veh/h)	974				214	594

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	462	496	69	97
Volume Left	89	0	69	0
Volume Right	0	46	0	97
cSH	974	1700	214	594
Volume to Capacity	0.09	0.29	0.33	0.16
Queue Length 95th (ft)	8	0	34	14
Control Delay (s)	2.6	0.0	29.7	12.2
Lane LOS	A		D	B
Approach Delay (s)	2.6	0.0	19.5	
Approach LOS			C	

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	473	1	27	675	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0		
Lane Util. Factor	1.00			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1714			3251		
Flt Permitted	1.00			0.92		
Satd. Flow (perm)	1714			3002		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	526	1	30	750	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	527	0	0	780	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	68.0			38.0		
Effective Green, g (s)	64.0			38.0		
Actuated g/C Ratio	0.71			0.42		
Clearance Time (s)				4.0		
Lane Grp Cap (vph)	1219			1268		
v/s Ratio Prot	c0.31					
v/s Ratio Perm				c0.26		
v/c Ratio	0.43			0.62		
Uniform Delay, d1	5.4			20.3		
Progression Factor	0.02			1.00		
Incremental Delay, d2	0.5			2.2		
Delay (s)	0.6			22.5		
Level of Service	A			C		
Approach Delay (s)	0.6			22.5	0.0	
Approach LOS	A			C	A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	185	193	25	561	0	0	0	0	3	0	263
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	206	214	28	623	0	0	0	0	3	0	292
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	623			206			992	992	210	782	884	623
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	623			206			992	992	210	782	884	623
tC, single (s)	4.1			5.5			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.9			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	99	100	31
cM capacity (veh/h)	968			984			62	241	802	282	278	424

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	137	283	651	3	292
Volume Left	0	0	28	3	0
Volume Right	0	214	0	0	292
cSH	1700	1700	984	282	424
Volume to Capacity	0.08	0.17	0.03	0.01	0.69
Queue Length 95th (ft)	0	0	2	1	127
Control Delay (s)	0.0	0.0	0.7	17.9	30.3
Lane LOS			A	C	D
Approach Delay (s)	0.0		0.7	30.2	
Approach LOS				D	

Intersection Summary			
Average Delay	6.9		
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	188	0	586	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	209	0	651	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	104	104	651
Volume Left (vph)	104	104	651
Volume Right (vph)	0	0	0
Hadj (s)	0.58	0.58	0.29
Departure Headway (s)	6.8	6.8	4.9
Degree Utilization, x	0.20	0.20	0.88
Capacity (veh/h)	511	512	734
Control Delay (s)	10.3	10.3	32.2
Approach Delay (s)	10.3		32.2
Approach LOS	B		D

Intersection Summary			
Delay	26.9		
HCM Level of Service	D		
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	650	210	172	519	0	0	0	0	208	117	300
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.94	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		2978	1202		3372					1346	3704	1122
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		2978	1202		3372					1346	3704	1122
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	684	221	181	546	0	0	0	0	219	123	316
RTOR Reduction (vph)	0	0	123	0	0	0	0	0	0	0	93	92
Lane Group Flow (vph)	0	684	98	0	727	0	0	0	0	120	287	66
Confl. Peds. (#/hr)	5		3	3		5						
Heavy Vehicles (%)	0%	11%	9%	2%	4%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		31.1	31.1		60.9					21.5	21.5	58.6
Effective Green, g (s)		31.1	31.1		60.9					21.5	21.5	58.6
Actuated g/C Ratio		0.22	0.22		0.43					0.15	0.15	0.42
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		662	267		1467					207	569	470
v/s Ratio Prot		c0.23			c0.22					c0.09	0.08	
v/s Ratio Perm			0.08									0.06
v/c Ratio		1.03	0.37		0.50					0.58	0.50	0.14
Uniform Delay, d1		54.5	46.1		28.5					55.1	54.4	25.1
Progression Factor		1.00	1.00		0.02					1.00	1.00	1.00
Incremental Delay, d2		43.8	3.9		0.1					3.9	0.7	0.1
Delay (s)		98.3	50.0		0.6					59.0	55.1	25.3
Level of Service		F	D		A					E	E	C
Approach Delay (s)		86.5			0.6			0.0			48.6	
Approach LOS		F			A			A			D	

Intersection Summary			
HCM Average Control Delay	48.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	212	646	0	0	453	112	238	150	195	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.92				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (prot)	1574	3366			3149	1457	1531	2963				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (perm)	1574	3366			3149	1457	1531	2963				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	236	718	0	0	503	124	264	167	217	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	98	0	135	0	0	0	0
Lane Group Flow (vph)	236	718	0	0	503	26	222	291	0	0	0	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	71.1	71.1			24.5	24.5	18.4	18.4				
Effective Green, g (s)	71.1	71.1			24.5	24.5	18.4	18.4				
Actuated g/C Ratio	0.51	0.51			0.18	0.18	0.13	0.13				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	799	1709			551	255	201	389				
v/s Ratio Prot	0.15	c0.21			c0.16		c0.14	0.10				
v/s Ratio Perm						0.02						
v/c Ratio	0.30	0.42			0.91	0.10	1.10	0.75				
Uniform Delay, d1	19.9	21.6			56.7	48.5	60.8	58.6				
Progression Factor	0.07	0.07			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.1	0.1			19.6	0.2	94.2	7.6				
Delay (s)	1.5	1.5			76.3	48.7	155.0	66.2				
Level of Service	A	A			E	D	F	E				
Approach Delay (s)		1.5			70.8			96.6			0.0	
Approach LOS		A			E			F			A	

Intersection Summary			
HCM Average Control Delay	48.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
1060: 119th Street & Halsted Street

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	220	326	75	35	356	45	88	824	62	59	749	104
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1546	1556	1328	1595	1760		1532	2990		1509	2919	
Flt Permitted	0.23	1.00	1.00	0.42	1.00		0.17	1.00		0.15	1.00	
Satd. Flow (perm)	374	1556	1328	703	1760		267	2990		238	2919	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	343	79	37	375	47	93	867	65	62	788	109
RTOR Reduction (vph)	0	0	52	0	5	0	0	6	0	0	12	0
Lane Group Flow (vph)	232	343	27	37	417	0	93	926	0	62	885	0
Confl. Peds. (#/hr)	33		3	3		33	42		8	8		42
Confl. Bikes (#/hr)							1					1
Heavy Vehicles (%)	3%	8%	6%	0%	7%	5%	4%	5%	11%	2%	6%	9%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.2	31.2	31.2	32.4	28.3		39.6	34.1		39.6	34.1	
Effective Green, g (s)	36.2	32.2	31.2	30.4	28.3		37.6	34.1		37.6	34.1	
Actuated g/C Ratio	0.40	0.36	0.35	0.34	0.31		0.42	0.38		0.42	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	229	557	461	268	554		175	1134		163	1107	
v/s Ratio Prot	c0.07	0.22		0.00	0.24		c0.03	c0.31		0.02	0.30	
v/s Ratio Perm	c0.34		0.02	0.04			0.20			0.14		
v/c Ratio	1.01	0.62	0.06	0.14	0.75		0.53	0.82		0.38	0.80	
Uniform Delay, d1	26.3	23.8	19.6	20.4	27.7		17.9	25.1		17.7	24.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	62.9	5.0	0.2	0.2	9.2		3.1	6.5		1.5	6.1	
Delay (s)	89.2	28.8	19.8	20.7	36.8		21.0	31.6		19.2	30.9	
Level of Service	F	C	B	C	D		C	C		B	C	
Approach Delay (s)		49.1			35.5			30.7			30.2	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	35.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	301	26	5	311	19	78	80	16	11	44	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.97		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.92	
Flt Protected		0.99	1.00		1.00	1.00		0.98			1.00	
Satd. Flow (prot)		1910	1482		1600	1198		1904			1792	
Flt Permitted		0.91	1.00		1.00	1.00		0.83			0.98	
Satd. Flow (perm)		1761	1482		1595	1198		1624			1762	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	317	27	5	327	20	82	84	17	12	46	86
RTOR Reduction (vph)	0	0	14	0	0	10	0	6	0	0	50	0
Lane Group Flow (vph)	0	374	13	0	332	10	0	177	0	0	94	0
Confl. Peds. (#/hr)	6		11	11		6	4		8	8		4
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	0%	7%	0%	0%	5%	16%	0%	0%	0%	10%	0%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		867	730		785	590		675			732	
v/s Ratio Prot												
v/s Ratio Perm		c0.21	0.01		0.21	0.01		c0.11			0.05	
v/c Ratio		0.43	0.02		0.42	0.02		0.26			0.13	
Uniform Delay, d1		10.6	8.5		10.6	8.4		12.5			11.7	
Progression Factor		1.00	1.00		1.67	2.20		1.00			1.51	
Incremental Delay, d2		1.6	0.0		1.6	0.0		0.9			0.4	
Delay (s)		12.2	8.5		19.3	18.6		13.4			18.1	
Level of Service		B	A		B	B		B			B	
Approach Delay (s)		12.0			19.2			13.4			18.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	219	35	6	176	6	84	228	22	9	53	73
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.98		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.93	
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1664	1392		1608	1497		1734	1390		1571	
Flt Permitted		0.85	1.00		0.99	1.00		0.88	1.00		0.98	
Satd. Flow (perm)		1439	1392		1592	1497		1553	1390		1541	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	91	231	37	6	185	6	88	240	23	9	56	77
RTOR Reduction (vph)	0	0	24	0	0	4	0	0	12	0	39	0
Lane Group Flow (vph)	0	322	13	0	191	2	0	328	11	0	103	0
Confl. Peds. (#/hr)	11		17	17		11	4		17	17		4
Confl. Bikes (#/hr)	1		1	1		1	1					1
Heavy Vehicles (%)	0%	9%	5%	33%	11%	0%	6%	1%	6%	0%	0%	8%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		509	493		563	530		765	684		759	
v/s Ratio Prot												
v/s Ratio Perm		c0.22	0.01		0.12	0.00		c0.21	0.01		0.07	
v/c Ratio		0.63	0.03		0.34	0.00		0.43	0.02		0.14	
Uniform Delay, d1		17.5	13.7		15.4	13.6		10.6	8.4		9.0	
Progression Factor		1.87	3.33		0.96	0.96		0.32	0.25		1.14	
Incremental Delay, d2		5.5	0.1		1.6	0.0		0.2	0.0		0.4	
Delay (s)		38.3	45.7		16.4	13.1		3.6	2.1		10.6	
Level of Service		D	D		B	B		A	A		B	
Approach Delay (s)		39.0			16.3			3.5			10.6	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	166	23	35	9	27	6	43	286	19	6	201	115
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		0.99			1.00			1.00	0.95
Flpb, ped/bikes		0.98	1.00		1.00			1.00			1.00	1.00
Frt		1.00	0.85		0.98			0.99			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1772	1390		1835			1970			1873	1328
Flt Permitted		0.79	1.00		0.94			0.95			0.99	1.00
Satd. Flow (perm)		1466	1390		1749			1874			1858	1328
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	184	26	39	10	30	7	48	318	21	7	223	128
RTOR Reduction (vph)	0	0	23	0	5	0	0	3	0	0	0	65
Lane Group Flow (vph)	0	210	16	0	42	0	0	384	0	0	230	63
Confl. Peds. (#/hr)	49		22	22		49	34		17	17		34
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	9%	0%	7%	0%	0%	0%	0%	2%	0%	0%	9%	9%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		647	577		457			923			915	654
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.09	0.01		0.02			c0.20			0.12	0.05
v/c Ratio		0.32	0.03		0.09			0.42			0.25	0.10
Uniform Delay, d1		12.8	11.2		18.2			10.5			9.6	8.8
Progression Factor		0.85	1.52		1.00			0.42			0.53	0.31
Incremental Delay, d2		1.1	0.1		0.4			1.1			0.6	0.3
Delay (s)		12.1	17.2		18.6			5.6			5.7	3.0
Level of Service		B	B		B			A			A	A
Approach Delay (s)		12.9			18.6			5.6			4.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	990	222	333	1149	0	0	0	0	275	201	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		0.97	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.99
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		4322		3083	3226					1419	2711	1355
Flt Permitted		1.00		0.16	1.00					0.95	0.99	1.00
Satd. Flow (perm)		4322		526	3226					1419	2711	1355
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1042	234	351	1209	0	0	0	0	289	212	396
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	46	46
Lane Group Flow (vph)	0	1242	0	351	1209	0	0	0	0	234	407	164
Confl. Peds. (#/hr)	6		4	4		6	2					2
Heavy Vehicles (%)	0%	11%	7%	4%	6%	0%	0%	0%	0%	6%	4%	8%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		43.2		58.1	56.6					21.4	21.4	21.4
Effective Green, g (s)		43.2		58.1	56.6					21.4	21.4	21.4
Actuated g/C Ratio		0.48		0.65	0.63					0.24	0.24	0.24
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		2075		592	2029					337	645	322
v/s Ratio Prot		0.29		0.06	c0.37							
v/s Ratio Perm				0.32						c0.16	0.15	0.12
v/c Ratio		0.60		0.59	0.60					0.69	0.63	0.51
Uniform Delay, d1		17.1		19.3	9.9					31.3	30.8	29.7
Progression Factor		1.00		0.65	0.61					1.00	1.00	1.00
Incremental Delay, d2		1.3		0.7	0.5					6.3	2.1	1.5
Delay (s)		18.4		13.3	6.6					37.6	32.9	31.2
Level of Service		B		B	A					D	C	C
Approach Delay (s)		18.4			8.1			0.0			33.7	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	109.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	954	0	0	933	234	549	365	681	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0			6.0				
Lane Util. Factor	1.00	0.95			0.91			0.91				
Frpb, ped/bikes	1.00	1.00			1.00			1.00				
Flpb, ped/bikes	1.00	1.00			1.00			1.00				
Frt	1.00	1.00			0.97			0.94				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1503	3138			4349			4339				
Flt Permitted	0.12	1.00			1.00			0.98				
Satd. Flow (perm)	192	3138			4349			4339				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	327	1004	0	0	982	246	578	384	717	0	0	0
RTOR Reduction (vph)	0	0	0	0	48	0	0	31	0	0	0	0
Lane Group Flow (vph)	327	1004	0	0	1180	0	0	1648	0	0	0	0
Confl. Peds. (#/hr)	4					4						
Heavy Vehicles (%)	10%	9%	0%	0%	6%	4%	4%	3%	5%	0%	0%	0%
Turn Type	pm+pt						Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2						8					
Actuated Green, G (s)	40.0	40.0			27.0			38.0				
Effective Green, g (s)	40.0	40.0			27.0			38.0				
Actuated g/C Ratio	0.44	0.44			0.30			0.42				
Clearance Time (s)	6.0	6.0			6.0			6.0				
Vehicle Extension (s)	3.5	7.0			7.0			5.0				
Lane Grp Cap (vph)	187	1395			1305			1832				
v/s Ratio Prot	c0.14	0.32			0.27							
v/s Ratio Perm	c0.64							0.38				
v/c Ratio	1.75	0.72			0.90			1.09dr				
Uniform Delay, d1	19.9	20.4			30.3			24.2				
Progression Factor	1.31	0.49			0.63			1.00				
Incremental Delay, d2	354.2	2.6			8.2			6.8				
Delay (s)	380.2	12.6			27.3			31.0				
Level of Service	F	B			C			C				
Approach Delay (s)		102.9			27.3			31.0			0.0	
Approach LOS		F			C			C			A	

Intersection Summary			
HCM Average Control Delay	52.5	HCM Level of Service	D
HCM Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	109.9%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	941	226	78	874	51	226	178	40	76	111	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3061	1291	1604	3231		1446	3008		1544	2784	
Flt Permitted	0.20	1.00	1.00	0.20	1.00		0.55	1.00		0.61	1.00	
Satd. Flow (perm)	331	3061	1291	331	3231		835	3008		990	2784	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	111	991	238	82	920	54	238	187	42	80	117	96
RTOR Reduction (vph)	0	0	105	0	4	0	0	22	0	0	78	0
Lane Group Flow (vph)	111	991	133	82	970	0	238	207	0	80	135	0
Confl. Peds. (#/hr)	3		12	12		3	9		6	6		9
Heavy Vehicles (%)	2%	8%	5%	3%	5%	3%	10%	3%	2%	3%	7%	4%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	51.6	43.7	50.2	44.4	40.1		25.1	18.6		20.9	16.5	
Effective Green, g (s)	51.6	43.7	50.2	44.4	40.1		25.1	18.6		20.9	16.5	
Actuated g/C Ratio	0.57	0.49	0.56	0.49	0.45		0.28	0.21		0.23	0.18	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	298	1486	720	224	1440		277	622		257	510	
v/s Ratio Prot	c0.03	c0.32	0.01	0.02	0.30		c0.06	0.07		0.02	0.05	
v/s Ratio Perm	0.18		0.09	0.16			c0.18			0.06		
v/c Ratio	0.37	0.67	0.18	0.37	0.67		0.86	0.33		0.31	0.26	
Uniform Delay, d1	19.7	17.6	9.8	22.8	19.8		29.8	30.4		28.0	31.5	
Progression Factor	0.80	0.66	0.89	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	1.4	0.1	1.0	2.5		22.3	1.1		0.7	1.0	
Delay (s)	17.7	13.1	8.8	23.9	22.3		52.1	31.5		28.7	32.5	
Level of Service	B	B	A	C	C		D	C		C	C	
Approach Delay (s)		12.7			22.4			42.0			31.5	
Approach LOS		B			C			D			C	

Intersection Summary			
HCM Average Control Delay	22.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	329	286	81	215	102	329	382	161	91	258	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.95		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1635	2916		1463	3047		1589	3182		1549	3135	
Flt Permitted	0.52	1.00		0.23	1.00		0.46	1.00		0.44	1.00	
Satd. Flow (perm)	888	2916		359	3047		772	3182		713	3135	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	346	301	85	226	107	346	402	169	96	272	57
RTOR Reduction (vph)	0	144	0	0	52	0	0	43	0	0	17	0
Lane Group Flow (vph)	65	503	0	85	281	0	346	528	0	96	312	0
Confl. Peds. (#/hr)	20					20	1		2	2		1
Heavy Vehicles (%)	4%	5%	6%	13%	6%	5%	4%	6%	5%	3%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.4	28.4		36.2	28.8		53.2	41.9		38.6	31.3	
Effective Green, g (s)	35.4	28.4		36.2	28.8		53.2	41.9		38.6	31.3	
Actuated g/C Ratio	0.34	0.27		0.34	0.27		0.51	0.40		0.37	0.30	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	349	789		202	836		530	1270		320	935	
v/s Ratio Prot	0.01	c0.17		c0.03	0.09		c0.11	0.17		0.02	0.10	
v/s Ratio Perm	0.05			0.12			c0.22			0.09		
v/c Ratio	0.19	0.64		0.42	0.34		0.65	0.42		0.30	0.33	
Uniform Delay, d1	24.0	33.8		24.8	30.5		16.6	22.7		22.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	3.9		1.7	1.1		3.0	1.0		0.6	1.0	
Delay (s)	24.3	37.7		26.4	31.6		19.6	23.7		23.0	29.7	
Level of Service	C	D		C	C		B	C		C	C	
Approach Delay (s)		36.4			30.5			22.2			28.2	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	402	612	6	409	110	201	617	7	84	385	105
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)	3.0	4.0			4.0		3.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95			0.95		0.97	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91			0.97		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1659	2533			2888		2786	3187		1451	2800	
Flt Permitted	0.25	1.00			0.94		0.35	1.00		0.28	1.00	
Satd. Flow (perm)	440	2533			2714		1032	3187		421	2800	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	188	447	680	7	454	122	223	686	8	93	428	117
RTOR Reduction (vph)	0	200	0	0	24	0	0	1	0	0	20	0
Lane Group Flow (vph)	188	927	0	0	559	0	223	693	0	93	525	0
Confl. Peds. (#/hr)	9		11	11		9	11		14	14		11
Heavy Vehicles (%)	3%	6%	18%	50%	6%	6%	7%	3%	50%	6%	7%	2%
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	47.2	47.2			32.7		52.4	43.4		50.2	42.8	
Effective Green, g (s)	47.2	47.2			32.7		52.4	43.4		50.2	42.8	
Actuated g/C Ratio	0.43	0.43			0.30		0.48	0.39		0.46	0.39	
Clearance Time (s)	3.0	4.0			4.0		3.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	316	1087			807		635	1257		261	1089	
v/s Ratio Prot	0.06	c0.37					c0.03	c0.22		0.02	0.19	
v/s Ratio Perm	0.19				0.21		0.14			0.14		
v/c Ratio	0.59	0.95dr			0.69		0.35	0.55		0.36	0.48	
Uniform Delay, d1	21.6	28.3			34.2		16.9	25.8		18.2	25.3	
Progression Factor	1.00	1.00			1.00		0.92	0.72		1.00	1.00	
Incremental Delay, d2	3.0	6.6			2.6		0.3	1.5		0.8	1.5	
Delay (s)	24.6	34.9			36.8		15.8	20.0		19.0	26.8	
Level of Service	C	C			D		B	C		B	C	
Approach Delay (s)		33.4			36.8			19.0			25.7	
Approach LOS		C			D			B			C	

Intersection Summary			
HCM Average Control Delay	28.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	117	343	858	132	13	112	809	278	10	968	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.0	5.0	4.0	4.0	5.0		4.0	5.0	4.0	4.0	5.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1676	1962	1435	3159	1939		1660	3288	1395	1139	3257	1425
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.10	1.00	1.00	0.33	1.00	1.00
Satd. Flow (perm)	1676	1962	1435	3159	1939		183	3288	1395	401	3257	1425
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	54	121	354	885	136	13	115	834	287	10	998	46
RTOR Reduction (vph)	0	0	9	0	3	0	0	0	84	0	0	29
Lane Group Flow (vph)	54	121	345	885	146	0	115	834	203	10	998	17
Confl. Peds. (#/hr)	10		16	16		10	4		6	6		4
Confl. Bikes (#/hr)			4	4								
Heavy Vehicles (%)	2%	4%	5%	5%	4%	0%	3%	4%	8%	50%	5%	6%
Turn Type	Prot		pm+ov	Prot			pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4	5	3	8		5	2	3	1	6	7
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)	6.9	12.9	28.7	29.0	35.0		54.1	48.7	77.7	35.7	34.3	41.2
Effective Green, g (s)	6.9	12.9	28.7	29.0	35.0		54.1	48.7	77.7	35.7	34.3	41.2
Actuated g/C Ratio	0.06	0.12	0.26	0.26	0.32		0.49	0.44	0.71	0.32	0.31	0.37
Clearance Time (s)	4.0	5.0	4.0	4.0	5.0		4.0	5.0	4.0	4.0	5.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	105	230	374	833	617		302	1456	985	140	1016	534
v/s Ratio Prot	0.03	0.06	c0.13	c0.28	0.08		0.05	0.25	0.05	0.00	c0.31	0.00
v/s Ratio Perm			0.11				0.13		0.09	0.02		0.01
v/c Ratio	0.51	0.53	0.92	1.06	0.24		0.38	0.57	0.21	0.07	0.98	0.03
Uniform Delay, d1	49.9	45.7	39.6	40.5	27.6		20.0	22.9	5.5	25.3	37.5	21.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.13	1.12	1.12
Incremental Delay, d2	4.2	2.2	27.8	49.1	0.2		0.8	1.6	0.1	0.2	20.5	0.0
Delay (s)	54.1	47.8	67.4	89.6	27.8		20.8	24.5	5.7	28.8	62.6	24.5
Level of Service	D	D	E	F	C		C	C	A	C	E	C
Approach Delay (s)		61.6			80.7			19.8			60.6	
Approach LOS		E			F			B			E	

Intersection Summary			
HCM Average Control Delay	53.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SBR2
Lane Configurations												
Volume (vph)	427	952	570	14	3	14	3	47	10	0	2	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	12	12	16	12	12	16	12	12
Total Lost time (s)	5.5	4.0	5.0				4.5			4.5		
Lane Util. Factor	0.95	1.00	1.00				1.00			1.00		
Frpb, ped/bikes	1.00	1.00	1.00				1.00			0.98		
Flpb, ped/bikes	1.00	1.00	1.00				1.00			1.00		
Frt	1.00	1.00	1.00				0.91			0.95		
Flt Protected	1.00	0.95	1.00				0.99			0.97		
Satd. Flow (prot)	2956	1477	1580				1727			1852		
Flt Permitted	1.00	0.23	1.00				0.91			0.76		
Satd. Flow (perm)	2956	350	1580				1586			1449		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	449	1002	600	15	3	15	3	49	11	0	2	4
RTOR Reduction (vph)	0	0	1	0	0	0	46	0	0	4	0	0
Lane Group Flow (vph)	449	1002	614	0	0	0	24	0	0	13	0	0
Confl. Peds. (#/hr)		7		6		3					3	
Confl. Bikes (#/hr)		1										
Heavy Vehicles (%)	8%	8%	6%	0%	0%	8%	0%	5%	0%	0%	0%	0%
Turn Type		pm+pt			Perm	Perm			Perm			
Protected Phases	8	7	4				2			6		
Permitted Phases		4			2	2			6			
Actuated Green, G (s)	16.5	86.2	86.2				6.1			6.1		
Effective Green, g (s)	16.5	86.2	86.2				6.1			6.1		
Actuated g/C Ratio	0.16	0.85	0.85				0.06			0.06		
Clearance Time (s)	5.5	4.0	5.0				4.5			4.5		
Vehicle Extension (s)	3.0	3.0	3.0				3.0			3.0		
Lane Grp Cap (vph)	479	1018	1338				95			87		
v/s Ratio Prot	0.15	c0.63	0.39									
v/s Ratio Perm		c0.20					c0.02			0.01		
v/c Ratio	0.94	0.98	0.46				0.25			0.15		
Uniform Delay, d1	42.1	14.0	2.0				45.7			45.4		
Progression Factor	1.00	1.00	1.00				1.00			1.00		
Incremental Delay, d2	28.1	24.2	1.1				1.4			0.8		
Delay (s)	70.3	38.2	3.1				47.1			46.2		
Level of Service	E	D	A				D			D		
Approach Delay (s)	70.3		24.8				47.1			46.2		
Approach LOS	E		C				D			D		

Intersection Summary			
HCM Average Control Delay	30.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	101.8	Sum of lost time (s)	8.5
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NER
Lane Configurations	
Volume (vph)	421
Ideal Flow (vphpl)	1800
Lane Width	12
Total Lost time (s)	4.0
Lane Util. Factor	0.88
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	2470
Flt Permitted	1.00
Satd. Flow (perm)	2470
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	443
RTOR Reduction (vph)	0
Lane Group Flow (vph)	443
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	9%
Turn Type	Over
Protected Phases	7
Permitted Phases	
Actuated Green, G (s)	65.2
Effective Green, g (s)	65.2
Actuated g/C Ratio	0.64
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1582
v/s Ratio Prot	0.18
v/s Ratio Perm	
v/c Ratio	0.28
Uniform Delay, d1	8.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	8.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	214	758	1303	66	41	235
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1629	3257	3234		1629	1457
Flt Permitted	0.11	1.00	1.00		0.95	1.00
Satd. Flow (perm)	191	3257	3234		1629	1457
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	238	842	1448	73	46	261
RTOR Reduction (vph)	0	0	6	0	0	42
Lane Group Flow (vph)	238	842	1515	0	46	219
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	42.0	42.0	42.0		15.0	15.0
Effective Green, g (s)	42.0	42.0	42.0		15.0	15.0
Actuated g/C Ratio	0.65	0.65	0.65		0.23	0.23
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Lane Grp Cap (vph)	123	2105	2090		376	336
v/s Ratio Prot		0.26	0.47		0.03	
v/s Ratio Perm	c1.25					c0.15
v/c Ratio	1.93	0.40	0.73		0.12	0.65
Uniform Delay, d1	11.5	5.5	7.7		19.8	22.6
Progression Factor	1.00	1.00	0.77		1.07	1.05
Incremental Delay, d2	449.1	0.6	1.3		0.7	9.5
Delay (s)	460.6	6.1	7.2		21.8	33.4
Level of Service	F	A	A		C	C
Approach Delay (s)		106.2	7.2		31.6	
Approach LOS		F	A		C	

Intersection Summary			
HCM Average Control Delay	46.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	58	714	1287	196	135	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.98		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		2928	2977		1464	1373
Flt Permitted		0.70	1.00		0.95	1.00
Satd. Flow (perm)		2068	2977		1464	1373
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	61	752	1355	206	142	80
RTOR Reduction (vph)	0	0	19	0	0	34
Lane Group Flow (vph)	0	813	1542	0	142	46
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)	1			1		
Heavy Vehicles (%)	4%	9%	8%	12%	9%	4%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		38.0	38.0		19.0	19.0
Effective Green, g (s)		38.0	38.0		19.0	19.0
Actuated g/C Ratio		0.58	0.58		0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		1209	1740		428	401
v/s Ratio Prot			c0.52		c0.10	
v/s Ratio Perm		0.39				0.03
v/c Ratio		0.67	0.89		0.33	0.11
Uniform Delay, d1		9.2	11.6		18.0	16.8
Progression Factor		0.69	1.00		0.96	1.05
Incremental Delay, d2		2.8	7.1		2.0	0.6
Delay (s)		9.2	18.7		19.3	18.2
Level of Service		A	B		B	B
Approach Delay (s)		9.2	18.7		18.9	
Approach LOS		A	B		B	

Intersection Summary			
HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	686	175	107	1182	482	83
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		5.0	5.0	5.0	5.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	2222		1770	2436	1844	1471
Flt Permitted	1.00		0.12	1.00	0.95	1.00
Satd. Flow (perm)	2222		233	2436	1844	1471
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	700	179	109	1206	492	85
RTOR Reduction (vph)	12	0	0	0	0	59
Lane Group Flow (vph)	867	0	109	1206	492	26
Confl. Peds. (#/hr)		4	4			8
Heavy Vehicles (%)	11%	7%	3%	7%	2%	2%
Turn Type			Perm			Perm
Protected Phases	4			8	2	
Permitted Phases			8			2
Actuated Green, G (s)	44.2		44.2	44.2	24.4	24.4
Effective Green, g (s)	44.2		44.2	44.2	24.4	24.4
Actuated g/C Ratio	0.56		0.56	0.56	0.31	0.31
Clearance Time (s)	5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1250		131	1370	572	457
v/s Ratio Prot	0.39			c0.50	c0.27	
v/s Ratio Perm			0.47			0.02
v/c Ratio	0.69		0.83	0.88	0.86	0.06
Uniform Delay, d1	12.3		14.1	14.9	25.5	19.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.7		34.1	6.9	15.5	0.2
Delay (s)	14.0		48.3	21.8	41.0	19.3
Level of Service	B		D	C	D	B
Approach Delay (s)	14.0			24.0	37.8	
Approach LOS	B			C	D	

Intersection Summary			
HCM Average Control Delay	23.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	10.0
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1074: 130th Street & Ellis Avenue

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	738	99	258	1220	9	111	0	187	1	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00		0.95	
Satd. Flow (prot)	1881	3213	1422	1589	3138	1366		1642	1443		969	
Flt Permitted	0.20	1.00	1.00	0.26	1.00	1.00		0.76	1.00		0.61	
Satd. Flow (perm)	397	3213	1422	430	3138	1366		1309	1443		626	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	820	110	287	1356	10	123	0	208	1	0	0
RTOR Reduction (vph)	0	0	53	0	0	3	0	0	175	0	0	0
Lane Group Flow (vph)	1	820	57	287	1356	7	0	123	33	0	1	0
Heavy Vehicles (%)	0%	10%	4%	4%	9%	12%	18%	0%	6%	100%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	44.4	44.4	44.4	63.7	63.7	63.7		13.3	13.3		13.3	
Effective Green, g (s)	44.4	44.4	44.4	63.7	63.7	63.7		13.3	13.3		13.3	
Actuated g/C Ratio	0.52	0.52	0.52	0.75	0.75	0.75		0.16	0.16		0.16	
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0	
Lane Grp Cap (vph)	207	1678	743	545	2352	1024		205	226		98	
v/s Ratio Prot		0.26		0.10	c0.43							
v/s Ratio Perm	0.00		0.04	0.29		0.01		c0.09	0.02		0.00	
v/c Ratio	0.00	0.49	0.08	0.53	0.58	0.01		0.60	0.14		0.01	
Uniform Delay, d1	9.7	13.0	10.1	4.9	4.7	2.7		33.4	30.9		30.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.0	0.2	0.9	0.3	0.0		4.7	0.3		0.0	
Delay (s)	9.8	14.0	10.3	5.8	5.0	2.7		38.0	31.2		30.3	
Level of Service	A	B	B	A	A	A		D	C		C	
Approach Delay (s)		13.6			5.2			33.8			30.3	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	13	817	844	45	24	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	12	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.96	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3038	3017		1487	
Flt Permitted		0.93	1.00		0.96	
Satd. Flow (perm)		2835	3017		1487	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	14	908	938	50	27	10
RTOR Reduction (vph)	0	0	4	0	9	0
Lane Group Flow (vph)	0	922	984	0	28	0
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1040	2145		116	
v/s Ratio Prot			c0.33		c0.02	
v/s Ratio Perm		c0.33				
v/c Ratio		0.89	0.46		0.24	
Uniform Delay, d1		26.7	5.6		39.0	
Progression Factor		1.00	0.00		1.00	
Incremental Delay, d2		11.1	0.2		4.8	
Delay (s)		37.9	0.3		43.8	
Level of Service		D	A		D	
Approach Delay (s)		37.9	0.3		43.8	
Approach LOS		D	A		D	

Intersection Summary			
HCM Average Control Delay	18.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	431	1	27	568	80	0	0	1	45	3	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.92			1.00	0.96
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.98			0.86			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1729			3232			1427			1606	1277
Flt Permitted		0.79			0.93			1.00			0.90	1.00
Satd. Flow (perm)		1380			3013			1427			1513	1277
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	88	479	1	30	631	89	0	0	1	50	3	104
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	74
Lane Group Flow (vph)	0	568	0	0	738	0	0	0	0	0	53	30
Confl. Peds. (#/hr)	33		13	13		33	29		13	13		29
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	4%	3%	0%	0%	4%	0%	0%	0%	0%	5%	0%	11%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		38.0			52.0			9.0			23.0	26.0
Effective Green, g (s)		38.0			52.0			9.0			23.0	26.0
Actuated g/C Ratio		0.42			0.58			0.10			0.26	0.29
Clearance Time (s)		4.0						3.0				
Lane Grp Cap (vph)		583			1775			143			401	369
v/s Ratio Prot					c0.06			0.00			c0.02	
v/s Ratio Perm		c0.41			0.18						c0.01	0.02
v/c Ratio		0.97			0.42			0.00			0.13	0.08
Uniform Delay, d1		25.5			10.6			36.5			25.8	23.3
Progression Factor		1.00			2.17			1.00			1.00	1.00
Incremental Delay, d2		31.5			0.6			0.0			0.7	0.4
Delay (s)		57.0			23.5			36.5			26.5	23.7
Level of Service		E			C			D			C	C
Approach Delay (s)		57.0			23.5			36.5			24.7	
Approach LOS		E			C			D			C	

Intersection Summary			
HCM Average Control Delay	36.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	598	28	35	1014	58	36	35	48	23	26	87
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	16	10	10	16	8	15	8	8	14	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.95			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1557	3022		1587	3021			1816			1706	
Flt Permitted	0.17	1.00		0.36	1.00			0.89			0.95	
Satd. Flow (perm)	277	3022		604	3021			1649			1630	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	41	629	29	37	1067	61	38	37	51	24	27	92
RTOR Reduction (vph)	0	5	0	0	6	0	0	33	0	0	21	0
Lane Group Flow (vph)	41	653	0	37	1122	0	0	93	0	0	122	0
Confl. Peds. (#/hr)	145		16	16		145	17		19	19		17
Confl. Bikes (#/hr)	5					5			2	2		
Heavy Vehicles (%)	0%	5%	0%	0%	4%	2%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			22.0			22.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			23.0			23.0	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.35			0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0			5.0	
Lane Grp Cap (vph)	145	1581		316	1580			583			577	
v/s Ratio Prot		0.22			c0.37							
v/s Ratio Perm	0.15			0.06				0.06			c0.07	
v/c Ratio	0.28	0.41		0.12	0.71			0.16			0.21	
Uniform Delay, d1	8.7	9.4		7.9	11.8			14.4			14.7	
Progression Factor	1.00	1.00		0.70	1.41			1.00			1.00	
Incremental Delay, d2	4.8	0.8		0.7	2.4			0.6			0.8	
Delay (s)	13.5	10.2		6.2	19.1			15.0			15.5	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		10.4			18.6			15.0			15.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	789	5	32	637	41	0	0	0	586	89	379
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00				0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.67				1.00	1.00	0.98
Flpb, ped/bikes	0.93	1.00		1.00	1.00	1.00				1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85				1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00				0.95	1.00	1.00
Satd. Flow (prot)	793	3379		1710	3226	514				3285	1731	1481
Flt Permitted	0.40	1.00		0.14	1.00	1.00				0.95	1.00	1.00
Satd. Flow (perm)	331	3379		248	3226	514				3285	1731	1481
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	831	5	34	671	43	0	0	0	617	94	399
RTOR Reduction (vph)	0	0	0	0	0	19	0	0	0	0	0	166
Lane Group Flow (vph)	26	836	0	34	671	24	0	0	0	617	94	233
Confl. Peds. (#/hr)	350		4	4		350	8		6	6		8
Confl. Bikes (#/hr)	7		1	1		7						
Heavy Vehicles (%)	100%	1%	20%	0%	6%	100%	0%	0%	0%	1%	4%	1%
Turn Type	pm+pt			pm+pt		Perm				Split		Perm
Protected Phases	7	4		3	8					6	6	
Permitted Phases	4			8		8						6
Actuated Green, G (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Effective Green, g (s)	43.0	43.0		73.0	73.0	73.0				30.0	30.0	30.0
Actuated g/C Ratio	0.33	0.33		0.56	0.56	0.56				0.23	0.23	0.23
Clearance Time (s)	5.0	5.0		3.0	3.0	3.0				5.0	5.0	5.0
Lane Grp Cap (vph)	159	1118		634	1812	289				758	399	342
v/s Ratio Prot	0.02	c0.25		0.02	c0.21					c0.19	0.05	
v/s Ratio Perm	0.04			0.01		0.05						0.16
v/c Ratio	0.16	0.75		0.05	0.37	0.08				0.81	0.24	0.68
Uniform Delay, d1	31.6	38.7		15.2	15.8	13.1				47.4	40.7	45.6
Progression Factor	0.85	0.86		0.33	0.75	1.24				1.00	1.00	1.00
Incremental Delay, d2	2.1	4.4		0.1	0.4	0.4				9.3	1.4	10.5
Delay (s)	28.9	37.6		5.1	12.2	16.6				56.7	42.1	56.1
Level of Service	C	D		A	B	B				E	D	E
Approach Delay (s)		37.3			12.2			0.0			55.2	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	815	220	54	578	287	102	251	55	39	0	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		0.95	1.00	1.00		1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.67		1.00	0.91	1.00		0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (prot)	3285	3262		1710	3138	1018		3301	1359	855		734
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95		1.00
Satd. Flow (perm)	3285	3262		1710	3138	1018		3301	1359	855		734
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	358	858	232	57	608	302	107	264	58	41	0	32
RTOR Reduction (vph)	0	18	0	0	0	228	0	0	42	0	0	30
Lane Group Flow (vph)	358	1072	0	57	608	74	0	371	16	41	0	2
Confl. Peds. (#/hr)	327		13	13		327	6		60	60		6
Confl. Bikes (#/hr)	6					6						
Heavy Vehicles (%)	1%	1%	0%	0%	9%	1%	0%	3%	2%	100%	0%	100%
Turn Type	Prot			Prot		Perm	Split		Perm	Prot		custom
Protected Phases	7	4		3	8		2	2		6		
Permitted Phases						8			2			6
Actuated Green, G (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Effective Green, g (s)	44.0	68.0		8.0	32.0	32.0		28.0	28.0	8.0		8.0
Actuated g/C Ratio	0.34	0.52		0.06	0.25	0.25		0.22	0.22	0.06		0.06
Clearance Time (s)	3.0	3.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1112	1706		105	772	251		711	293	53		45
v/s Ratio Prot	0.11	c0.33		0.03	c0.19			c0.11		c0.05		
v/s Ratio Perm						0.07			0.01			0.00
v/c Ratio	0.32	0.63		0.54	0.79	0.30		0.52	0.06	0.77		0.04
Uniform Delay, d1	31.9	22.0		59.2	45.8	39.8		45.1	40.5	60.1		57.4
Progression Factor	0.95	0.16		1.00	1.00	1.00		0.94	0.99	1.00		1.00
Incremental Delay, d2	0.5	1.1		18.7	8.0	3.0		2.7	0.4	49.7		0.4
Delay (s)	30.7	4.7		77.9	53.8	42.8		45.3	40.6	109.9		57.8
Level of Service	C	A		E	D	D		D	D	F		E
Approach Delay (s)		11.1			51.8			44.7			87.0	
Approach LOS		B			D			D			F	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	893	166	105	839	0	74	0	89	9	15	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	11	11	8	12	12	12	14	15	12
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00		1.00		0.98	1.00	0.98	
Flpb, ped/bikes		1.00		1.00	1.00		0.97		1.00	0.99	1.00	
Frt		0.98		1.00	1.00		1.00		0.85	1.00	0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		2997		1649	3149		1388		1451	1803	1857	
Flt Permitted		1.00		0.17	1.00		0.74		1.00	0.95	1.00	
Satd. Flow (perm)		2997		299	3149		1082		1451	1803	1857	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	992	184	117	932	0	82	0	99	10	17	8
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	67	0	5	0
Lane Group Flow (vph)	0	1161	0	117	932	0	82	0	32	10	20	0
Confl. Peds. (#/hr)	67		19	19		67	38		12	12		38
Confl. Bikes (#/hr)			1	1								
Heavy Vehicles (%)	0%	2%	11%	0%	5%	0%	19%	0%	3%	0%	0%	0%
Turn Type				Perm			custom		custom	Perm		
Protected Phases		4			8						6	
Permitted Phases				8			2		2	6		
Actuated Green, G (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Effective Green, g (s)		60.0		60.0	60.0		32.0		32.0	32.0	32.0	
Actuated g/C Ratio		0.60		0.60	0.60		0.32		0.32	0.32	0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)		1798		179	1889		346		464	577	594	
v/s Ratio Prot		0.39			0.30						0.01	
v/s Ratio Perm				c0.39			c0.08		0.02	0.01		
v/c Ratio		0.65		0.65	0.49		0.24		0.07	0.02	0.03	
Uniform Delay, d1		13.1		13.2	11.4		25.0		23.6	23.2	23.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		1.8		17.1	0.9		1.6		0.3	0.1	0.1	
Delay (s)		14.9		30.3	12.3		26.6		23.9	23.3	23.5	
Level of Service		B		C	B		C		C	C	C	
Approach Delay (s)		14.9			14.3			25.1			23.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	301	0	1230	215	686	0	0	792	490
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	12	12	10	10	12	12	11	12
Total Lost time (s)				4.0		5.0	3.0	4.0			4.0	
Lane Util. Factor				0.95		1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00		1.00	1.00	1.00			0.98	
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	
Frt				1.00		0.85	1.00	1.00			0.94	
Flt Protected				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1540		1530	1535	4327			4271	
Flt Permitted				0.95		1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1540		1530	1535	4327			4271	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	307	0	1255	219	700	0	0	808	500
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	307	0	1255	219	700	0	0	1308	0
Confl. Peds. (#/hr)	2					2	18		3	3		18
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	4%	6%	0%	0%	4%	1%
Turn Type				Split		Prot	Prot					
Protected Phases				8	8	8	5	2			6	
Permitted Phases												
Actuated Green, G (s)				30.0		30.0	32.0	66.0			31.0	
Effective Green, g (s)				31.0		30.0	32.0	66.0			31.0	
Actuated g/C Ratio				0.30		0.29	0.30	0.63			0.30	
Clearance Time (s)				5.0		5.0	3.0	4.0			4.0	
Lane Grp Cap (vph)				455		437	468	2720			1261	
v/s Ratio Prot				0.20		c0.82	c0.14	0.16			c0.31	
v/s Ratio Perm												
v/c Ratio				0.67		2.87	0.47	0.26			1.16dr	
Uniform Delay, d1				32.6		37.5	29.6	8.6			37.0	
Progression Factor				1.00		1.00	0.64	2.11			1.00	
Incremental Delay, d2				7.8		848.6	2.8	0.2			35.5	
Delay (s)				40.4		886.1	21.8	18.4			72.5	
Level of Service				D		F	C	B			E	
Approach Delay (s)		0.0			719.9			19.2			72.5	
Approach LOS		A			F			B			E	

Intersection Summary			
HCM Average Control Delay	326.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	322	770	146	0	0	0	0	579	410	359	734	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	13	12	12	12	12	12	10	10	8	12	12	12
Total Lost time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Util. Factor	0.91	0.91						0.91	0.88	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	0.99	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	3156						4368	2244	1598	4680	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1509	3156						4368	2244	1598	4680	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	332	794	151	0	0	0	0	597	423	370	757	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	299	964	0	0	0	0	0	597	423	370	757	0
Confl. Peds. (#/hr)	6		1	1		6	6					6
Heavy Vehicles (%)	6%	1%	0%	0%	0%	0%	0%	5%	4%	7%	5%	0%
Turn Type	Perm								Perm	Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Effective Green, g (s)	34.0	34.0						28.0	28.0	31.0	62.0	
Actuated g/C Ratio	0.32	0.32						0.27	0.27	0.30	0.59	
Clearance Time (s)	5.0	5.0						4.0	4.0	3.0	4.0	
Lane Grp Cap (vph)	489	1022						1165	598	472	2763	
v/s Ratio Prot								0.14		c0.23	0.16	
v/s Ratio Perm	0.20	0.31							c0.19			
v/c Ratio	0.61	0.94						0.51	0.71	0.78	0.27	
Uniform Delay, d1	29.9	34.6						32.7	34.8	33.9	10.5	
Progression Factor	1.00	1.00						1.17	1.17	0.86	0.22	
Incremental Delay, d2	5.6	17.5						1.4	5.9	4.8	0.1	
Delay (s)	35.5	52.0						39.7	46.6	34.1	2.4	
Level of Service	D	D						D	D	C	A	
Approach Delay (s)		48.2			0.0			42.5			12.8	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	34.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	25	24	11	164	0	0	149	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	14	12	12	16	12
Total Lost time (s)				4.0	4.0		4.0	4.0			-3.0	
Lane Util. Factor				1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes				1.00	0.99		1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Frt				1.00	0.93		1.00	1.00			1.00	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1688	3132		1710	1846			1955	
Flt Permitted				0.95	1.00		0.54	1.00			1.00	
Satd. Flow (perm)				1688	3132		974	1846			1955	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	322	28	27	12	182	0	0	166	6
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	322	37	0	12	182	0	0	171	0
Confl. Peds. (#/hr)	2		2	2		2			6	6		
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type				Perm			pm+pt					
Protected Phases					8		7	2			6	
Permitted Phases				8			2					
Actuated Green, G (s)				27.0	27.0		50.0	50.0			40.0	
Effective Green, g (s)				27.0	27.0		50.0	50.0			46.0	
Actuated g/C Ratio				0.32	0.32		0.59	0.59			0.54	
Clearance Time (s)				4.0	4.0		4.0	4.0			3.0	
Lane Grp Cap (vph)				536	995		634	1086			1058	
v/s Ratio Prot					0.01		0.00	c0.10			0.09	
v/s Ratio Perm				c0.19			0.01					
v/c Ratio				0.60	0.04		0.02	0.17			0.16	
Uniform Delay, d1				24.5	20.0		10.5	8.0			9.8	
Progression Factor				1.00	1.00		1.04	1.18			1.00	
Incremental Delay, d2				4.9	0.1		0.1	0.3			0.3	
Delay (s)				29.4	20.1		11.0	9.8			10.1	
Level of Service				C	C		B	A			B	
Approach Delay (s)		0.0			28.0			9.8			10.1	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	11	23	5	0	14	0	149	45	46	393	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	16	15	12	8	12	8	12	12	12	10	13	12
Total Lost time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.97			0.98			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	
Frt	1.00	0.90			0.90			0.97		1.00	1.00	
Flt Protected	0.95	1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)	1935	1735			1565			1718		1590	1860	
Flt Permitted	0.74	1.00			0.97			1.00		0.59	1.00	
Satd. Flow (perm)	1516	1735			1531			1718		987	1860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	12	24	5	0	15	0	157	47	48	414	0
RTOR Reduction (vph)	0	16	0	0	10	0	0	13	0	0	0	0
Lane Group Flow (vph)	13	20	0	0	10	0	0	191	0	48	414	0
Confl. Peds. (#/hr)	1		11	11		1	1		10	10		1
Confl. Bikes (#/hr)			2	2			1		2	2		1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Turn Type	Perm			Perm						pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Effective Green, g (s)	27.0	27.0			27.0			40.0		50.0	50.0	
Actuated g/C Ratio	0.32	0.32			0.32			0.47		0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0			3.0		4.0	4.0	
Lane Grp Cap (vph)	482	551			486			808		630	1094	
v/s Ratio Prot		c0.01						0.11		0.01	c0.22	
v/s Ratio Perm	0.01				0.01					0.04		
v/c Ratio	0.03	0.04			0.02			0.24		0.08	0.38	
Uniform Delay, d1	20.0	20.0			19.9			13.4		8.8	9.3	
Progression Factor	1.00	1.00			1.00			1.00		0.98	0.87	
Incremental Delay, d2	0.1	0.1			0.1			0.7		0.2	0.9	
Delay (s)	20.1	20.1			20.0			14.1		8.8	9.0	
Level of Service	C	C			B			B		A	A	
Approach Delay (s)		20.1			20.0			14.1			9.0	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	48	42	12	193	288	28
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	14	12	13	12	10	12
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.99	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1752		1765	1782	1657	
Flt Permitted	0.97		0.50	1.00	1.00	
Satd. Flow (perm)	1752		937	1782	1657	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	53	47	13	214	320	31
RTOR Reduction (vph)	32	0	0	0	5	0
Lane Group Flow (vph)	68	0	13	214	346	0
Confl. Peds. (#/hr)			2			2
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Turn Type			Perm			
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	21.0		36.0	36.0	36.0	
Effective Green, g (s)	21.0		36.0	36.0	36.0	
Actuated g/C Ratio	0.32		0.55	0.55	0.55	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Lane Grp Cap (vph)	566		519	987	918	
v/s Ratio Prot	c0.04			0.12	c0.21	
v/s Ratio Perm			0.01			
v/c Ratio	0.12		0.03	0.22	0.38	
Uniform Delay, d1	15.5		6.6	7.4	8.2	
Progression Factor	1.00		0.51	0.61	1.43	
Incremental Delay, d2	0.4		0.1	0.5	1.0	
Delay (s)	15.9		3.4	5.0	12.7	
Level of Service	B		A	A	B	
Approach Delay (s)	15.9			4.9	12.7	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	10.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	30.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	31	268	9	258	132	0	0	283	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	14	16	12	12	15	12	12	13	10
Total Lost time (s)					4.0		4.0	4.0			3.0	3.0
Lane Util. Factor					0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					3772		1693	1678			1738	1428
Flt Permitted					1.00		0.47	1.00			1.00	1.00
Satd. Flow (perm)					3772		844	1678			1738	1428
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	34	298	10	287	147	0	0	314	19
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	339	0	287	147	0	0	314	8
Confl. Peds. (#/hr)	1					1			5	5		
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	1%	18%	0%	0%	7%	0%
Turn Type				Split			pm+pt					Perm
Protected Phases				8	8		7	2			6	
Permitted Phases							2					6
Actuated Green, G (s)					26.0		51.0	51.0			38.0	38.0
Effective Green, g (s)					26.0		51.0	51.0			38.0	38.0
Actuated g/C Ratio					0.31		0.60	0.60			0.45	0.45
Clearance Time (s)					4.0		4.0	4.0			3.0	3.0
Lane Grp Cap (vph)					1154		606	1007			777	638
v/s Ratio Prot					c0.09		c0.06	0.09			0.18	
v/s Ratio Perm							c0.23					0.01
v/c Ratio					0.29		0.47	0.15			0.40	0.01
Uniform Delay, d1					22.5		13.7	7.5			15.9	13.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.6	0.3			1.6	0.0
Delay (s)					23.1		16.4	7.8			17.4	13.1
Level of Service					C		B	A			B	B
Approach Delay (s)		0.0			23.1			13.5			17.2	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	95	94	38	133	205	30	59	703	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	15	12	12	12	12	12	13	12
Total Lost time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor					1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes					1.00		1.00	1.00		1.00	1.00	
Frt					0.98		1.00	0.98		1.00	0.99	
Flt Protected					0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)					1896		1710	3287		1707	3467	
Flt Permitted					0.98		0.25	1.00		0.59	1.00	
Satd. Flow (perm)					1896		446	3287		1061	3467	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	106	104	42	148	228	33	66	781	49
RTOR Reduction (vph)	0	0	0	0	10	0	0	15	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	242	0	148	246	0	66	824	0
Confl. Peds. (#/hr)							5		5	5		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type				Split			pm+pt			pm+pt		
Protected Phases				8	8		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)					23.0		41.0	34.0		41.0	34.0	
Effective Green, g (s)					23.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio					0.31		0.55	0.45		0.55	0.45	
Clearance Time (s)					4.0		3.0	4.0		3.0	4.0	
Lane Grp Cap (vph)					581		362	1490		640	1572	
v/s Ratio Prot					c0.13		c0.04	0.07		0.01	c0.24	
v/s Ratio Perm							0.19			0.05		
v/c Ratio					0.42		0.41	0.16		0.10	0.52	
Uniform Delay, d1					20.7		16.4	12.1		8.2	14.7	
Progression Factor					1.00		0.84	0.82		1.00	1.00	
Incremental Delay, d2					2.2		3.4	0.2		0.3	1.3	
Delay (s)					22.9		17.1	10.2		8.5	16.0	
Level of Service					C		B	B		A	B	
Approach Delay (s)		0.0			22.9			12.7			15.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	49	13	9	63	63	7	273	24	159	589	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	16	12	12	10	11	12	12	11	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.94		1.00	0.99		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1964			1655		1595	3172		1704	3231	
Flt Permitted		0.89			0.99		0.36	1.00		0.56	1.00	
Satd. Flow (perm)		1775			1637		600	3172		1008	3231	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	52	14	9	66	66	7	287	25	167	620	53
RTOR Reduction (vph)	0	8	0	0	42	0	0	9	0	0	8	0
Lane Group Flow (vph)	0	92	0	0	99	0	7	303	0	167	665	0
Confl. Peds. (#/hr)	2					2	1		6	6		1
Confl. Bikes (#/hr)			1	1			3					3
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%	0%	3%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)		25.0			25.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio		0.33			0.33		0.56	0.56		0.56	0.56	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		592			546		336	1776		564	1809	
v/s Ratio Prot								0.10			c0.21	
v/s Ratio Perm		0.05			c0.06		0.01			0.17		
v/c Ratio		0.16			0.18		0.02	0.17		0.30	0.37	
Uniform Delay, d1		17.6			17.7		7.3	8.0		8.7	9.1	
Progression Factor		1.00			1.00		1.00	1.00		0.27	0.25	
Incremental Delay, d2		0.6			0.7		0.1	0.2		1.2	0.5	
Delay (s)		18.1			18.5		7.5	8.2		3.5	2.8	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.1			18.5			8.2			2.9	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	37	192	67	251	588	81
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	41	213	74	279	653	90

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	254	167	186	436	308
Volume Left (vph)	41	74	0	0	0
Volume Right (vph)	213	0	0	0	90
Hadj (s)	-0.42	0.27	0.05	0.05	-0.15
Departure Headway (s)	5.7	6.6	6.3	5.9	5.7
Degree Utilization, x	0.41	0.30	0.33	0.71	0.48
Capacity (veh/h)	592	528	546	602	622
Control Delay (s)	12.6	11.2	11.2	20.8	12.7
Approach Delay (s)	12.6	11.2		17.4	
Approach LOS	B	B		C	

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	32	35	378	18	24	414	78	82	55	68	354	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00			1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	0.92			1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85			1.00	0.99	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00			0.95	1.00	
Satd. Flow (prot)		1612	1731	1530	1710	1731	1412			1710	3251	
Flt Permitted		0.13	1.00	1.00	0.45	1.00	1.00			0.16	1.00	
Satd. Flow (perm)		215	1731	1530	812	1731	1412			280	3251	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	36	39	420	20	27	460	87	91	61	76	393	36
RTOR Reduction (vph)	0	0	0	13	0	0	29	0	0	0	5	0
Lane Group Flow (vph)	0	75	420	7	27	460	149	0	0	137	424	0
Confl. Peds. (#/hr)		25					25					3
Heavy Vehicles (%)	6%	6%	4%	0%	0%	4%	0%	0%	0%	0%	4%	0%
Turn Type	Perm	pm+pt		Perm	Perm		Perm		Perm	Perm		
Protected Phases		7	4			8					2	
Permitted Phases	4	4		4	8		8		2	2		
Actuated Green, G (s)		46.0	46.0	46.0	28.0	28.0	28.0			44.0	44.0	
Effective Green, g (s)		46.0	46.0	46.0	28.0	28.0	28.0			44.0	44.0	
Actuated g/C Ratio		0.35	0.35	0.35	0.22	0.22	0.22			0.34	0.34	
Clearance Time (s)		3.5	4.0	4.0	4.0	4.0	4.0			4.0	4.0	
Lane Grp Cap (vph)		232	613	541	175	373	304			95	1100	
v/s Ratio Prot		0.04	c0.24			c0.27					0.13	
v/s Ratio Perm		0.08		0.00	0.03		0.11			c0.49		
v/c Ratio		0.32	0.69	0.01	0.15	1.23	0.49			1.44	0.39	
Uniform Delay, d1		31.5	35.8	27.3	41.4	51.0	44.7			43.0	32.7	
Progression Factor		1.00	1.00	1.00	0.89	0.90	0.86			1.00	1.00	
Incremental Delay, d2		3.7	6.1	0.0	1.7	124.1	4.9			248.4	1.0	
Delay (s)		35.2	41.9	27.3	38.4	169.9	43.2			291.4	33.7	
Level of Service		D	D	C	D	F	D			F	C	
Approach Delay (s)			40.4			130.6					96.1	
Approach LOS			D			F					F	

Intersection Summary			
HCM Average Control Delay	131.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	104.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Volume (vph)	107	571	82	103	4	114	607	197
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.5	4.5				4.5	4.5	
Lane Util. Factor	1.00	0.95				1.00	0.88	
Frpb, ped/bikes	1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00				1.00	1.00	
Frt	1.00	0.96				1.00	0.85	
Flt Protected	0.95	1.00				0.95	1.00	
Satd. Flow (prot)	1706	3246				1710	2633	
Flt Permitted	0.41	1.00				0.95	1.00	
Satd. Flow (perm)	729	3246				1710	2633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	119	634	91	114	4	127	674	219
RTOR Reduction (vph)	0	9	0	0	0	0	21	0
Lane Group Flow (vph)	119	830	0	0	0	131	872	0
Confl. Peds. (#/hr)	3							
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	3%	0%
Turn Type	Perm				Split		Perm	
Protected Phases		6			9	9		
Permitted Phases	6						9	
Actuated Green, G (s)	43.5	43.5				27.5	27.5	
Effective Green, g (s)	43.5	43.5				27.5	27.5	
Actuated g/C Ratio	0.33	0.33				0.21	0.21	
Clearance Time (s)	4.5	4.5				4.5	4.5	
Lane Grp Cap (vph)	244	1086				362	557	
v/s Ratio Prot		0.26				0.08		
v/s Ratio Perm	0.16						c0.33	
v/c Ratio	0.49	0.76				0.36	1.57	
Uniform Delay, d1	34.4	38.7				43.8	51.2	
Progression Factor	1.00	1.00				1.00	1.00	
Incremental Delay, d2	6.8	5.1				2.8	262.9	
Delay (s)	41.2	43.8				46.6	314.2	
Level of Service	D	D				D	F	
Approach Delay (s)		43.5				279.9		
Approach LOS		D				F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	602	0	0	506	50	85	52	18	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	11	11	16	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.99			0.98				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		1681			1956			1842				
Flt Permitted		0.90			1.00			0.97				
Satd. Flow (perm)		1523			1956			1842				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	669	0	0	562	56	94	58	20	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	741	0	0	618	0	0	172	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		937			1204			482				
v/s Ratio Prot					0.32							
v/s Ratio Perm		c0.49						0.09				
v/c Ratio		0.79			0.51			0.36				
Uniform Delay, d1		9.4			7.0			19.5				
Progression Factor		0.99			1.00			1.00				
Incremental Delay, d2		5.8			1.6			2.1				
Delay (s)		15.1			8.6			21.6				
Level of Service		B			A			C				
Approach Delay (s)		15.1			8.6			21.6			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
1016: 103rd Street & Halsted Street

1/14/2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	71	427	162	117	335	125	106	639	84	137	759	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	9	9	10	9
Total Lost time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97	1.00	1.00	0.94	1.00	1.00	0.93
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1985	1443		1953	1457	1547	3040	1285	1506	3069	1237
Flt Permitted		0.69	1.00		0.66	1.00	0.17	1.00	1.00	0.23	1.00	1.00
Satd. Flow (perm)		1373	1443		1299	1457	282	3040	1285	357	3069	1237
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	75	449	171	123	353	132	112	673	88	144	799	99
RTOR Reduction (vph)	0	0	83	0	0	74	0	0	53	0	0	50
Lane Group Flow (vph)	0	524	88	0	476	58	112	673	35	144	799	49
Confl. Peds. (#/hr)	24		45	45		24	36		24	24		36
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	3%	5%	1%	2%	4%	3%
Turn Type	pm+pt		Perm	Perm		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		54.0	54.0		46.0	46.0	39.0	33.0	33.0	41.0	34.0	34.0
Effective Green, g (s)		54.0	54.0		46.0	46.0	39.0	33.0	33.0	41.0	34.0	34.0
Actuated g/C Ratio		0.51	0.51		0.44	0.44	0.37	0.31	0.31	0.39	0.32	0.32
Clearance Time (s)		4.0	4.0		4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		735	742		569	638	177	955	404	216	994	401
v/s Ratio Prot		c0.03					0.04	0.22		c0.04	c0.26	
v/s Ratio Perm		0.33	0.06		c0.37	0.04	0.20		0.03	0.22		0.04
v/c Ratio		0.71	0.12		0.84	0.09	0.63	0.70	0.09	0.67	0.80	0.12
Uniform Delay, d1		19.6	13.2		26.2	17.3	24.0	31.7	25.4	22.9	32.5	25.0
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.50	1.34	2.07
Incremental Delay, d2		5.8	0.3		13.7	0.3	7.2	4.4	0.4	7.3	6.6	0.6
Delay (s)		25.4	13.5		39.8	17.5	31.2	36.1	25.8	41.6	50.1	52.3
Level of Service		C	B		D	B	C	D	C	D	D	D
Approach Delay (s)		22.5			35.0			34.4			49.1	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	36.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	486	99	94	468	94	55	61	69	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	15	12	12	15	12
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		0.98			0.98			0.95				
Flt Protected		0.99			0.99			0.99				
Satd. Flow (prot)		1645			1645			1799				
Flt Permitted		0.85			0.83			0.99				
Satd. Flow (perm)		1411			1381			1799				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	540	110	104	520	104	61	68	77	0	0	0
RTOR Reduction (vph)	0	10	0	0	9	0	0	33	0	0	0	0
Lane Group Flow (vph)	0	734	0	0	719	0	0	173	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		40.0			40.0			17.0				
Effective Green, g (s)		40.0			40.0			17.0				
Actuated g/C Ratio		0.62			0.62			0.26				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		868			850			471				
v/s Ratio Prot												
v/s Ratio Perm		c0.52			0.52			0.10				
v/c Ratio		0.85			0.85			0.37				
Uniform Delay, d1		10.0			10.0			19.6				
Progression Factor		1.00			1.00			1.00				
Incremental Delay, d2		10.0			10.1			2.2				
Delay (s)		20.0			20.1			21.8				
Level of Service		B			C			C				
Approach Delay (s)		20.0			20.1			21.8			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	20.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	485	82	76	525	37	39	76	72	54	238	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	11	12	12	15	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.96		1.00	0.96		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		0.99	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.98	
Flt Protected		1.00	1.00		0.99	1.00		0.98	1.00		0.99	
Satd. Flow (prot)		1685	1382		1713	1417		1685	1455		1879	
Flt Permitted		0.89	1.00		0.85	1.00		0.82	1.00		0.94	
Satd. Flow (perm)		1505	1382		1459	1417		1404	1455		1774	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	511	86	80	553	39	41	80	76	57	251	58
RTOR Reduction (vph)	0	0	37	0	0	12	0	0	52	0	9	0
Lane Group Flow (vph)	0	567	49	0	633	27	0	121	24	0	357	0
Confl. Peds. (#/hr)	25		19	19		25	36		30	30		36
Confl. Bikes (#/hr)	1		2	2		1	3					3
Heavy Vehicles (%)	0%	3%	3%	0%	1%	0%	0%	1%	1%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Effective Green, g (s)		43.0	43.0		43.0	43.0		24.0	24.0		24.0	
Actuated g/C Ratio		0.57	0.57		0.57	0.57		0.32	0.32		0.32	
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lane Grp Cap (vph)		863	792		836	812		449	466		568	
v/s Ratio Prot												
v/s Ratio Perm		0.38	0.04		c0.43	0.02		0.09	0.02		c0.20	
v/c Ratio		0.66	0.06		0.76	0.03		0.27	0.05		0.63	
Uniform Delay, d1		11.0	7.1		12.1	7.0		19.0	17.6		21.7	
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2		3.9	0.2		6.3	0.1		1.5	0.2		5.2	
Delay (s)		14.8	7.2		18.4	7.0		20.4	17.8		26.9	
Level of Service		B	A		B	A		C	B		C	
Approach Delay (s)		13.8			17.7			19.4			26.9	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	483	34	45	537	54	45	165	55	123	210	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	11	16	8	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00		1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1533	3066		1652	3730		1585	1663	1370	1568	1680	1397
Flt Permitted	0.35	1.00		0.40	1.00		0.57	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	563	3066		687	3730		953	1663	1370	1043	1680	1397
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	66	537	38	50	597	60	50	183	61	137	233	37
RTOR Reduction (vph)	0	8	0	0	12	0	0	0	37	0	0	22
Lane Group Flow (vph)	66	567	0	50	645	0	50	183	24	137	233	15
Confl. Peds. (#/hr)	51		3	3		51	13		13	13		13
Heavy Vehicles (%)	2%	3%	3%	0%	2%	0%	0%	1%	2%	1%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	269	1462		328	1779		381	665	548	417	672	559
v/s Ratio Prot		c0.19			0.17			0.11			c0.14	
v/s Ratio Perm	0.12			0.07			0.05		0.02	0.13		0.01
v/c Ratio	0.25	0.39		0.15	0.36		0.13	0.28	0.04	0.33	0.35	0.03
Uniform Delay, d1	10.1	10.9		9.6	10.8		12.3	13.1	11.9	13.5	13.6	11.8
Progression Factor	1.00	1.00		1.00	1.00		0.83	0.89	0.73	0.59	0.59	0.26
Incremental Delay, d2	2.2	0.8		1.0	0.6		0.7	1.0	0.2	2.0	1.4	0.1
Delay (s)	12.2	11.7		10.6	11.3		11.0	12.7	8.8	9.9	9.4	3.1
Level of Service	B	B		B	B		B	B	A	A	A	A
Approach Delay (s)		11.7			11.3			11.6			9.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	409	81	73	394	67	57	180	64	89	245	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.95	1.00		0.99	1.00		0.96	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1329	3134		1519	3128		1580	2919		1452	2997	
Flt Permitted	0.44	1.00		0.42	1.00		0.53	1.00		0.59	1.00	
Satd. Flow (perm)	619	3134		678	3128		882	2919		907	2997	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	431	85	77	415	71	60	189	67	94	258	84
RTOR Reduction (vph)	0	0	0	0	0	0	0	39	0	0	42	0
Lane Group Flow (vph)	63	516	0	77	486	0	60	217	0	94	300	0
Confl. Peds. (#/hr)	112		99	99		112	23		53	53		23
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	16%	1%	0%	0%	1%	9%	0%	8%	2%	5%	5%	7%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	36.0	36.0		36.0	36.0		31.0	31.0		31.0	31.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.41	0.41		0.41	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	297	1504		325	1501		365	1207		375	1239	
v/s Ratio Prot		c0.16			0.16			0.07			0.10	
v/s Ratio Perm	0.10			0.11			0.07			c0.10		
v/c Ratio	0.21	0.34		0.24	0.32		0.16	0.18		0.25	0.24	
Uniform Delay, d1	11.3	12.1		11.4	12.0		13.8	13.9		14.4	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.6		1.7	0.6		1.0	0.3		1.6	0.5	
Delay (s)	12.9	12.8		13.2	12.6		14.8	14.3		16.0	14.8	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.8			12.7			14.4			15.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	439	62	32	522	48	86	203	60	76	473	109
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	8	16	12	9	10	10	9	10	10
Total Lost time (s)	3.0	7.0		3.0	7.0		3.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1595	1652		1370	1973		1534	2998		1535	3013	
Flt Permitted	0.24	1.00		0.31	1.00		0.28	1.00		0.58	1.00	
Satd. Flow (perm)	405	1652		447	1973		453	2998		939	3013	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	101	462	65	34	549	51	91	214	63	80	498	115
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	101	527	0	34	600	0	91	277	0	80	613	0
Confl. Peds. (#/hr)	21		95	95		21	36		8	8		36
Confl. Bikes (#/hr)	2		3	3		2	2					2
Heavy Vehicles (%)	0%	2%	0%	7%	2%	0%	0%	3%	0%	0%	2%	1%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	43.9	39.3		40.7	37.7		26.7	21.8		26.7	21.8	
Effective Green, g (s)	43.9	37.3		40.7	35.7		26.7	19.8		26.7	19.8	
Actuated g/C Ratio	0.52	0.44		0.48	0.42		0.31	0.23		0.31	0.23	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	274	725		247	829		205	698		329	702	
v/s Ratio Prot	c0.02	c0.32		0.00	0.30		c0.03	0.09		0.01	c0.20	
v/s Ratio Perm	0.17			0.06			0.11			0.06		
v/c Ratio	0.37	0.73		0.14	0.72		0.44	0.40		0.24	0.87	
Uniform Delay, d1	23.5	19.7		20.2	20.5		29.2	27.6		21.9	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	6.3		0.3	5.5		1.5	1.7		0.4	14.2	
Delay (s)	24.4	25.9		20.4	26.0		30.7	29.2		22.2	45.5	
Level of Service	C	C		C	C		C	C		C	D	
Approach Delay (s)		25.7			25.7			29.6			42.9	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	393	65	117	509	118	67	158	58	127	367	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	11	11	11	11	12	12	10	10	12
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		0.99	1.00	
Frt		0.98			0.98		1.00	0.96		1.00	0.97	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3681			3131		1652	3237		1549	3027	
Flt Permitted		0.71			0.72		0.42	1.00		0.60	1.00	
Satd. Flow (perm)		2643			2282		737	3237		983	3027	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	437	72	130	566	131	74	176	64	141	408	91
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	592	0	0	827	0	74	240	0	141	499	0
Confl. Peds. (#/hr)	23		30	30		23	1		20	20		1
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	0%	3%	0%	2%	2%	0%	0%	1%	0%	2%	2%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		33.0			33.0		32.0	32.0		32.0	32.0	
Effective Green, g (s)		34.0			34.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio		0.45			0.45		0.44	0.44		0.44	0.44	
Clearance Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		1198			1035		324	1424		433	1332	
v/s Ratio Prot								0.07			c0.16	
v/s Ratio Perm		0.22			c0.36		0.10			0.14		
v/c Ratio		0.49			0.80		0.23	0.17		0.33	0.37	
Uniform Delay, d1		14.4			17.6		13.1	12.7		13.7	14.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.5			6.5		1.6	0.3		2.0	0.8	
Delay (s)		15.9			24.0		14.7	13.0		15.7	14.9	
Level of Service		B			C		B	B		B	B	
Approach Delay (s)		15.9			24.0			13.4			15.1	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	871	6	20	584	249	1	1	9	213	1	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	12	12	12	12	12	13	13	13
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	1.00		1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.97	
Satd. Flow (prot)	1605	3206		1660	3320	1485		1545			3176	
Flt Permitted	0.38	1.00		0.25	1.00	1.00		0.98			0.77	
Satd. Flow (perm)	648	3206		436	3320	1485		1519			2533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	109	968	7	22	649	277	1	1	10	237	1	89
RTOR Reduction (vph)	0	0	0	0	0	103	0	7	0	0	52	0
Lane Group Flow (vph)	109	975	0	22	649	174	0	5	0	0	275	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Effective Green, g (s)	46.1	46.1		46.1	46.1	46.1		19.5			19.5	
Actuated g/C Ratio	0.63	0.63		0.63	0.63	0.63		0.26			0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		8.0			8.0	
Lane Grp Cap (vph)	406	2008		273	2080	930		402			671	
v/s Ratio Prot		c0.30			0.20							
v/s Ratio Perm	0.17			0.05		0.12		0.00			c0.11	
v/c Ratio	0.27	0.49		0.08	0.31	0.19		0.01			0.41	
Uniform Delay, d1	6.2	7.4		5.4	6.4	5.8		19.9			22.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	1.6	0.8		0.6	0.4	0.4		0.0			1.7	
Delay (s)	7.8	8.2		6.0	6.8	6.3		20.0			24.0	
Level of Service	A	A		A	A	A		B			C	
Approach Delay (s)		8.2			6.6			20.0			24.0	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	73.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	131	228	125	94	163	56	144	907	90	129	825	98
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	9	12	10	10	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1560	1504		1563	1585		1493	3069	1337	1523	3099	1318
Flt Permitted	0.45	1.00		0.20	1.00		0.20	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	743	1504		337	1585		317	3069	1337	263	3099	1318
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	240	132	99	172	59	152	955	95	136	868	103
RTOR Reduction (vph)	0	23	0	0	15	0	0	0	40	0	0	48
Lane Group Flow (vph)	138	349	0	99	216	0	152	955	55	136	868	55
Confl. Peds. (#/hr)	10		13	13		10	18		7	7		18
Confl. Bikes (#/hr)	2					2	2		1	1		2
Heavy Vehicles (%)	2%	1%	1%	2%	1%	2%	3%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.0	21.0		28.0	21.0		42.0	35.0	35.0	42.0	35.0	35.0
Effective Green, g (s)	26.0	22.0		26.0	22.0		40.0	35.0	35.0	40.0	35.0	35.0
Actuated g/C Ratio	0.31	0.26		0.31	0.26		0.47	0.41	0.41	0.47	0.41	0.41
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	285	389		190	410		232	1264	551	213	1276	543
v/s Ratio Prot	0.03	c0.23		c0.04	0.14		c0.05	c0.31		0.05	0.28	
v/s Ratio Perm	0.11			0.12			0.26		0.04	0.26		0.04
v/c Ratio	0.48	0.90		0.52	0.53		0.66	0.76	0.10	0.64	0.68	0.10
Uniform Delay, d1	22.7	30.4		22.9	27.0		14.7	21.3	15.3	15.0	20.4	15.4
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.79	0.53	1.00	1.00	1.00
Incremental Delay, d2	5.8	25.9		9.9	4.8		12.3	3.8	0.3	13.8	2.9	0.4
Delay (s)	28.4	56.3		32.7	31.8		22.1	20.7	8.5	28.8	23.4	15.7
Level of Service	C	E		C	C		C	C	A	C	C	B
Approach Delay (s)		48.8			32.1			19.9			23.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	181	37	20	173	22	33	149	40	46	255	50
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	14	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.98			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1837			1848			1938			1975	
Flt Permitted		0.97			0.96			0.92			0.94	
Satd. Flow (perm)		1781			1790			1800			1869	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	23	187	38	21	178	23	34	154	41	47	263	52
RTOR Reduction (vph)	0	10	0	0	6	0	0	12	0	0	9	0
Lane Group Flow (vph)	0	238	0	0	216	0	0	217	0	0	353	0
Confl. Peds. (#/hr)	18		34	34		18	16		19	19		16
Confl. Bikes (#/hr)			6	6			1		4	4		1
Heavy Vehicles (%)	0%	1%	0%	5%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			30.0			30.0	
Effective Green, g (s)		27.0			27.0			30.0			30.0	
Actuated g/C Ratio		0.42			0.42			0.46			0.46	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		740			744			831			863	
v/s Ratio Prot												
v/s Ratio Perm		c0.13			0.12			0.12			c0.19	
v/c Ratio		0.32			0.29			0.26			0.41	
Uniform Delay, d1		12.8			12.6			10.7			11.6	
Progression Factor		1.00			0.70			1.22			1.00	
Incremental Delay, d2		1.1			1.0			0.7			1.4	
Delay (s)		14.0			9.8			13.8			13.0	
Level of Service		B			A			B			B	
Approach Delay (s)		14.0			9.8			13.8			13.0	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	193	39	25	180	19	49	200	31	43	214	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1496	3057		1577	3119		1518	3119		1550	3076	
Flt Permitted	0.61	1.00		0.59	1.00		0.58	1.00		0.59	1.00	
Satd. Flow (perm)	966	3057		984	3119		926	3119		968	3076	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	214	43	28	200	21	54	222	34	48	238	43
RTOR Reduction (vph)	0	26	0	0	12	0	0	14	0	0	18	0
Lane Group Flow (vph)	27	231	0	28	209	0	54	242	0	48	263	0
Confl. Peds. (#/hr)	20		17	17		20	2					2
Confl. Bikes (#/hr)	32		36	36		32	22		25	25		22
Heavy Vehicles (%)	4%	1%	0%	0%	0%	0%	5%	0%	0%	3%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	894		288	912		541	1823		566	1798	
v/s Ratio Prot		c0.08			0.07			0.08			c0.09	
v/s Ratio Perm	0.03			0.03			0.06			0.05		
v/c Ratio	0.10	0.26		0.10	0.23		0.10	0.13		0.08	0.15	
Uniform Delay, d1	16.7	17.6		16.8	17.4		6.0	6.1		5.9	6.1	
Progression Factor	0.93	0.97		0.73	0.73		1.32	1.32		0.38	0.34	
Incremental Delay, d2	0.6	0.7		0.7	0.6		0.4	0.1		0.3	0.2	
Delay (s)	16.2	17.7		12.9	13.3		8.2	8.2		2.5	2.3	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		17.5			13.2			8.2			2.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	168	42	25	159	38	27	247	16	40	322	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	9	9	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.97			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1555	3056		1525	2937			1922			1938	
Flt Permitted	0.61	1.00		0.61	1.00			0.94			0.94	
Satd. Flow (perm)	1007	3056		973	2937			1823			1840	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	74	187	47	28	177	42	30	274	18	44	358	37
RTOR Reduction (vph)	0	28	0	0	25	0	0	3	0	0	5	0
Lane Group Flow (vph)	74	206	0	28	194	0	0	319	0	0	434	0
Confl. Peds. (#/hr)	11		17	17		11	26		7	7		26
Heavy Vehicles (%)	2%	1%	0%	0%	1%	3%	4%	5%	0%	0%	4%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			31.0			31.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	403	1222		389	1175			869			878	
v/s Ratio Prot		0.07			0.07							
v/s Ratio Perm	c0.07			0.03				0.17			c0.24	
v/c Ratio	0.18	0.17		0.07	0.16			0.37			0.49	
Uniform Delay, d1	12.6	12.5		12.0	12.5			10.8			11.6	
Progression Factor	1.04	0.99		0.80	0.80			1.08			1.00	
Incremental Delay, d2	1.0	0.3		0.3	0.3			1.2			2.0	
Delay (s)	14.1	12.7		10.0	10.3			12.8			13.6	
Level of Service	B	B		A	B			B			B	
Approach Delay (s)		13.0			10.2			12.8			13.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	111	28	20	161	27	41	235	11	33	364	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	16	12	10	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1652	1970		1584	1975			1981			1979	
Flt Permitted	0.57	1.00		0.65	1.00			0.90			0.96	
Satd. Flow (perm)	986	1970		1087	1975			1792			1912	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	123	31	22	179	30	46	261	12	37	404	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	154	0	22	209	0	0	319	0	0	504	0
Confl. Peds. (#/hr)	1		10	10		1	2		5	5		2
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Effective Green, g (s)	20.0	20.0		20.0	20.0			37.0			37.0	
Actuated g/C Ratio	0.31	0.31		0.31	0.31			0.57			0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	303	606		334	608			1020			1088	
v/s Ratio Prot		0.08			c0.11							
v/s Ratio Perm	0.05			0.02				0.18			c0.26	
v/c Ratio	0.17	0.25		0.07	0.34			0.31			0.46	
Uniform Delay, d1	16.4	16.9		15.9	17.4			7.3			8.2	
Progression Factor	0.83	0.81		0.96	0.98			0.82			1.00	
Incremental Delay, d2	1.2	1.0		0.4	1.5			0.8			1.4	
Delay (s)	14.8	14.6		15.6	18.7			6.8			9.6	
Level of Service	B	B		B	B			A			A	
Approach Delay (s)		14.7			18.4			6.8			9.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	13	97	2	5	10	62	235	5	5	466	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	10	10	10	11	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1695	1727		1702	1808		1594	1647	1428	1653	2000	1496
Flt Permitted	0.75	1.00		0.68	1.00		0.39	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1332	1727		1216	1808		660	1647	1428	1030	2000	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	60	14	108	2	6	11	69	261	6	6	518	84
RTOR Reduction (vph)	0	78	0	0	8	0	0	0	2	0	0	28
Lane Group Flow (vph)	60	44	0	2	9	0	69	261	4	6	518	56
Confl. Peds. (#/hr)	5		5	5		5	3					3
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	17.0	17.0		17.0	17.0		39.0	39.0	39.0	39.0	39.0	39.0
Effective Green, g (s)	18.0	18.0		18.0	18.0		39.0	39.0	39.0	39.0	39.0	39.0
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.60	0.60	0.60	0.60	0.60	0.60
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	369	478		337	501		396	988	857	618	1200	898
v/s Ratio Prot		0.03			0.01			0.16			c0.26	
v/s Ratio Perm	c0.05			0.00			0.10		0.00	0.01		0.04
v/c Ratio	0.16	0.09		0.01	0.02		0.17	0.26	0.00	0.01	0.43	0.06
Uniform Delay, d1	17.8	17.4		17.0	17.1		5.8	6.2	5.2	5.2	7.0	5.4
Progression Factor	1.39	2.73		1.00	1.00		1.18	1.10	1.46	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.4		0.0	0.1		0.7	0.5	0.0	0.0	1.1	0.1
Delay (s)	25.7	48.0		17.1	17.1		7.6	7.3	7.6	5.3	8.2	5.5
Level of Service	C	D		B	B		A	A	A	A	A	A
Approach Delay (s)		40.6			17.1			7.4			7.8	
Approach LOS		D			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	255	163	198	215	0	0	0	0	111	470	377
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	12	12	12	12	12	11	11	12
Total Lost time (s)		4.0		3.0	3.0					5.0	5.0	
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	
Frpb, ped/bikes		0.99		1.00	1.00					1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	
Frt		0.94		1.00	1.00					1.00	0.93	
Flt Protected		1.00		0.95	1.00					0.95	1.00	
Satd. Flow (prot)		2905		1693	3288					1503	3021	
Flt Permitted		1.00		0.40	1.00					0.95	1.00	
Satd. Flow (perm)		2905		719	3288					1503	3021	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	268	172	208	226	0	0	0	0	117	495	397
RTOR Reduction (vph)	0	101	0	0	0	0	0	0	0	0	141	0
Lane Group Flow (vph)	0	339	0	208	226	0	0	0	0	117	751	0
Confl. Peds. (#/hr)	18		3	3		18	1					1
Heavy Vehicles (%)	0%	4%	1%	1%	4%	0%	0%	0%	0%	10%	2%	1%
Turn Type				D.P+P						Split		
Protected Phases		8		7	7 8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		33.0		53.0	56.0					37.0	37.0	
Effective Green, g (s)		33.0		53.0	56.0					37.0	37.0	
Actuated g/C Ratio		0.32		0.52	0.55					0.36	0.36	
Clearance Time (s)		4.0		3.0						5.0	5.0	
Lane Grp Cap (vph)		940		565	1805					545	1096	
v/s Ratio Prot		0.12		c0.07	0.07					0.08	c0.25	
v/s Ratio Perm				c0.12								
v/c Ratio		0.36		0.37	0.13					0.21	0.68	
Uniform Delay, d1		26.4		13.7	11.1					22.5	27.6	
Progression Factor		1.00		2.23	2.15					1.00	1.00	
Incremental Delay, d2		1.1		1.6	0.1					0.9	3.5	
Delay (s)		27.5		32.0	24.0					23.4	31.0	
Level of Service		C		C	C					C	C	
Approach Delay (s)		27.5			27.9			0.0			30.1	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	141	225	0	0	336	119	77	539	236	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	9	12	13	12	13	12	12	12
Total Lost time (s)	4.0	4.0			4.0		5.0	5.0	5.0			
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.96		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1675	3196			2855		1767	1782	1560			
Flt Permitted	0.32	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	571	3196			2855		1767	1782	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	237	0	0	354	125	81	567	248	0	0	0
RTOR Reduction (vph)	0	0	0	0	35	0	0	0	170	0	0	0
Lane Group Flow (vph)	148	237	0	0	444	0	81	567	78	0	0	0
Confl. Peds. (#/hr)	9		13	13		9			1	1		
Confl. Bikes (#/hr)	3					3						
Heavy Vehicles (%)	2%	7%	0%	0%	3%	1%	0%	1%	0%	0%	0%	0%
Turn Type	pm+pt						custom		Perm			
Protected Phases	4	1 4			1		2	2				
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Effective Green, g (s)	59.0	63.0			26.0		30.0	30.0	30.0			
Actuated g/C Ratio	0.58	0.62			0.25		0.29	0.29	0.29			
Clearance Time (s)	4.0				4.0		5.0	5.0	5.0			
Lane Grp Cap (vph)	687	1974			728		520	524	459			
v/s Ratio Prot	c0.07	0.07			c0.16		0.05	c0.32				
v/s Ratio Perm	0.05								0.05			
v/c Ratio	0.22	0.12			0.61		0.16	1.08	0.17			
Uniform Delay, d1	10.4	8.1			33.5		26.6	36.0	26.7			
Progression Factor	0.42	0.43			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.1			3.8		0.6	63.3	0.8			
Delay (s)	5.0	3.6			37.3		27.3	99.3	27.5			
Level of Service	A	A			D		C	F	C			
Approach Delay (s)		4.1			37.3			73.0			0.0	
Approach LOS		A			D			E			A	

Intersection Summary			
HCM Average Control Delay	48.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	517	479	81	534	0	0	0	0	13	436	301
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	11	12	12	12	12	10	10	12
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frpb, ped/bikes		0.99		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.93		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3099		1710	3306					1596	3192	1530
Flt Permitted		1.00		0.11	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3099		200	3306					1596	3192	1530
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	539	499	84	556	0	0	0	0	14	454	314
RTOR Reduction (vph)	0	168	0	0	0	0	0	0	0	0	0	200
Lane Group Flow (vph)	0	870	0	84	556	0	0	0	0	14	454	114
Confl. Peds. (#/hr)	8		8	8		8	3					3
Confl. Bikes (#/hr)	9					9			61	61		
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				pm+pt						Split		Prot
Protected Phases		8		7	7 8					6	6	6
Permitted Phases				7 8								
Actuated Green, G (s)		36.0		54.0	58.0					34.0	34.0	34.0
Effective Green, g (s)		36.0		54.0	58.0					34.0	34.0	34.0
Actuated g/C Ratio		0.36		0.54	0.58					0.34	0.34	0.34
Clearance Time (s)		4.0		4.0						4.0	4.0	4.0
Lane Grp Cap (vph)		1116		380	1917					543	1085	520
v/s Ratio Prot		c0.28		0.04	c0.17					0.01	c0.14	0.07
v/s Ratio Perm				0.08								
v/c Ratio		0.78		0.22	0.29					0.03	0.42	0.22
Uniform Delay, d1		28.5		14.4	10.6					22.0	25.4	23.5
Progression Factor		1.00		1.01	1.19					1.00	1.00	1.00
Incremental Delay, d2		5.4		0.9	0.3					0.1	1.2	1.0
Delay (s)		33.9		15.5	12.9					22.1	26.6	24.5
Level of Service		C		B	B					C	C	C
Approach Delay (s)		33.9			13.2			0.0			25.7	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	25.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	422	104	0	0	150	6	465	480	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	12	12	12	10	12	11	11	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.91	0.91			0.95		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	0.97			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1469	3109			3170		1555	1653	1530			
Flt Permitted	0.64	0.71			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	992	2286			3170		1555	1653	1530			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	435	107	0	0	155	6	479	495	60	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	38	0	0	0
Lane Group Flow (vph)	217	325	0	0	158	0	479	495	22	0	0	0
Confl. Peds. (#/hr)	13		6	6		13			8	8		
Confl. Bikes (#/hr)	1					1			2	2		
Heavy Vehicles (%)	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt						custom		custom			
Protected Phases	4	1 4			1		2	2	2			
Permitted Phases	1 4						2		2			
Actuated Green, G (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Effective Green, g (s)	51.0	51.0			15.0		37.0	37.0	37.0			
Actuated g/C Ratio	0.51	0.51			0.15		0.37	0.37	0.37			
Clearance Time (s)	4.0				4.0		4.0	4.0	4.0			
Lane Grp Cap (vph)	678	1462			476		575	612	566			
v/s Ratio Prot	c0.12	0.08			c0.05		c0.31	0.30	0.01			
v/s Ratio Perm	0.05	0.03										
v/c Ratio	0.32	0.22			0.33		0.83	0.81	0.04			
Uniform Delay, d1	14.1	13.5			38.0		28.7	28.3	20.1			
Progression Factor	0.25	0.26			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.7	0.2			1.9		13.3	11.0	0.1			
Delay (s)	4.2	3.7			39.9		42.0	39.3	20.3			
Level of Service	A	A			D		D	D	C			
Approach Delay (s)		3.9			39.9			39.5			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	316	117	109	270	111	87	699	76	100	884	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	9	10	9	9	10	9
Total Lost time (s)		4.0			4.0		4.0	3.5	4.0	4.0	3.5	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		2955			2935		1508	3069	1309	1508	3099	1298
Flt Permitted		0.77			0.72		0.16	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)		2281			2151		254	3069	1309	401	3099	1298
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	329	122	114	281	116	91	728	79	104	921	68
RTOR Reduction (vph)	0	33	0	0	32	0	0	0	48	0	0	33
Lane Group Flow (vph)	0	499	0	0	479	0	91	728	31	104	921	35
Confl. Peds. (#/hr)	35		30	30		35	34		8	8		34
Confl. Bikes (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	4%	0%	1%	3%	3%	2%	4%	2%	2%	3%	2%
Turn Type	pm+pt			Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)		35.0			27.0		38.0	33.0	33.0	38.0	33.0	33.0
Effective Green, g (s)		36.0			28.0		36.0	33.5	33.0	36.0	33.5	33.0
Actuated g/C Ratio		0.42			0.33		0.42	0.39	0.39	0.42	0.39	0.39
Clearance Time (s)		5.0			5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)		1014			709		167	1210	508	222	1221	504
v/s Ratio Prot		c0.03					c0.03	0.24		0.02	c0.30	
v/s Ratio Perm		0.17			c0.22		0.21		0.02	0.18		0.03
v/c Ratio		0.49			0.68		0.54	0.60	0.06	0.47	0.75	0.07
Uniform Delay, d1		17.8			24.6		16.8	20.5	16.3	15.9	22.2	16.3
Progression Factor		1.00			1.00		1.48	0.68	0.77	1.11	1.16	1.74
Incremental Delay, d2		1.7			5.1		11.1	2.0	0.2	5.0	3.1	0.2
Delay (s)		19.6			29.7		36.0	16.0	12.8	22.6	29.0	28.6
Level of Service		B			C		D	B	B	C	C	C
Approach Delay (s)		19.6			29.7			17.8			28.3	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	410	0	0	367	84	54	44	33	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			1.00				
Frt		1.00			0.97			0.97				
Flt Protected		0.99			1.00			0.98				
Satd. Flow (prot)		1734			1704			1654				
Flt Permitted		0.87			1.00			0.98				
Satd. Flow (perm)		1519			1704			1654				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	84	456	0	0	408	93	60	49	37	0	0	0
RTOR Reduction (vph)	0	0	0	0	12	0	0	19	0	0	0	0
Lane Group Flow (vph)	0	540	0	0	489	0	0	127	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		38.0			38.0			19.0				
Effective Green, g (s)		38.0			38.0			19.0				
Actuated g/C Ratio		0.58			0.58			0.29				
Clearance Time (s)		4.0			4.0			4.0				
Lane Grp Cap (vph)		888			996			483				
v/s Ratio Prot					0.29							
v/s Ratio Perm		c0.36						0.08				
v/c Ratio		0.61			0.49			0.26				
Uniform Delay, d1		8.7			7.9			17.6				
Progression Factor		1.00			0.76			1.00				
Incremental Delay, d2		3.1			1.5			1.3				
Delay (s)		11.8			7.5			19.0				
Level of Service		B			A			B				
Approach Delay (s)		11.8			7.5			19.0			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	374	37	39	369	50	31	118	39	53	150	45
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	10	12	12	10	12
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			0.99			1.00	
Frt		0.99			0.99			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		1954			1941			2969			2981	
Flt Permitted		0.95			0.94			0.88			0.86	
Satd. Flow (perm)		1869			1825			2646			2589	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	32	416	41	43	410	56	34	131	43	59	167	50
RTOR Reduction (vph)	0	5	0	0	7	0	0	25	0	0	29	0
Lane Group Flow (vph)	0	484	0	0	502	0	0	183	0	0	247	0
Confl. Peds. (#/hr)	32		25	25		32	59		24	24		59
Confl. Bikes (#/hr)	3		2	2		3	4		2	2		4
Heavy Vehicles (%)	0%	3%	0%	3%	3%	0%	0%	0%	7%	4%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0			27.0			27.0	
Effective Green, g (s)		30.0			30.0			27.0			27.0	
Actuated g/C Ratio		0.46			0.46			0.42			0.42	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		863			842			1099			1075	
v/s Ratio Prot												
v/s Ratio Perm		0.26			c0.28			0.07			c0.10	
v/c Ratio		0.56			0.60			0.17			0.23	
Uniform Delay, d1		12.7			13.0			11.9			12.3	
Progression Factor		0.56			0.40			1.30			0.44	
Incremental Delay, d2		2.2			2.7			0.3			0.5	
Delay (s)		9.2			7.9			15.8			5.9	
Level of Service		A			A			B			A	
Approach Delay (s)		9.2			7.9			15.8			5.9	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	320	49	81	464	86	46	219	98	83	227	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	9	10	10	9	10	10	12	10	10	12
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1510	3034		1572	3077		1587	2962		1585	3071	
Flt Permitted	0.32	1.00		0.47	1.00		0.56	1.00		0.54	1.00	
Satd. Flow (perm)	505	3034		775	3077		928	2962		903	3071	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	57	356	54	90	516	96	51	243	109	92	252	72
RTOR Reduction (vph)	0	19	0	0	24	0	0	50	0	0	33	0
Lane Group Flow (vph)	57	391	0	90	588	0	51	302	0	92	291	0
Confl. Peds. (#/hr)	20		31	31		20	16		20	20		16
Confl. Bikes (#/hr)							1		3	3		1
Heavy Vehicles (%)	5%	3%	0%	0%	1%	0%	0%	2%	2%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	22.0	22.0		22.0	22.0		35.0	35.0		35.0	35.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.54	0.54		0.54	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	171	1027		262	1041		500	1595		486	1654	
v/s Ratio Prot		0.13			c0.19			0.10			0.09	
v/s Ratio Perm	0.11			0.12			0.05			c0.10		
v/c Ratio	0.33	0.38		0.34	0.57		0.10	0.19		0.19	0.18	
Uniform Delay, d1	16.0	16.3		16.1	17.6		7.3	7.7		7.7	7.6	
Progression Factor	0.67	0.64		0.95	0.95		0.74	0.64		1.09	1.08	
Incremental Delay, d2	4.6	0.9		3.5	2.2		0.4	0.3		0.9	0.2	
Delay (s)	15.3	11.4		18.8	19.0		5.8	5.2		9.3	8.5	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		11.9			19.0			5.3			8.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	338	78	87	414	50	46	231	58	46	279	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	9	10	9	9	16	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	0.98	1.00		0.99	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.98			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1509	3016		1430	3722			3485			3519	
Flt Permitted	0.45	1.00		0.48	1.00			0.86			0.88	
Satd. Flow (perm)	712	3016		725	3722			3028			3118	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	356	82	92	436	53	48	243	61	48	294	68
RTOR Reduction (vph)	0	30	0	0	15	0	0	27	0	0	25	0
Lane Group Flow (vph)	62	408	0	92	474	0	0	325	0	0	385	0
Confl. Peds. (#/hr)	38		17	17		38	125		53	53		125
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	7%	2%	0%	0%	6%	10%	2%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Effective Green, g (s)	31.0	31.0		31.0	31.0			26.0			26.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	340	1438		346	1775			1211			1247	
v/s Ratio Prot		c0.14			0.13							
v/s Ratio Perm	0.09			0.13				0.11			c0.12	
v/c Ratio	0.18	0.28		0.27	0.27			0.27			0.31	
Uniform Delay, d1	9.7	10.3		10.2	10.2			13.1			13.3	
Progression Factor	1.59	1.74		1.12	1.11			0.52			0.74	
Incremental Delay, d2	1.1	0.5		1.7	0.3			0.5			0.6	
Delay (s)	16.6	18.3		13.1	11.6			7.3			10.4	
Level of Service	B	B		B	B			A			B	
Approach Delay (s)		18.1			11.9			7.3			10.4	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	284	91	92	289	92	120	82	47	47	82	119
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	16	12	12	16	12
Total Lost time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Util. Factor		1.00	1.00		0.95			1.00			1.00	
Frt		1.00	0.85		0.97			0.97			0.94	
Flt Protected		0.99	1.00		0.99			0.98			0.99	
Satd. Flow (prot)		1670	1436		3086			1885			1835	
Flt Permitted		0.79	1.00		0.79			0.68			0.90	
Satd. Flow (perm)		1332	1436		2469			1303			1674	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	96	316	101	102	321	102	133	91	52	52	91	132
RTOR Reduction (vph)	0	0	48	0	32	0	0	13	0	0	51	0
Lane Group Flow (vph)	0	412	53	0	493	0	0	263	0	0	224	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		34.0	34.0		34.0			21.0			21.0	
Effective Green, g (s)		34.0	34.0		34.0			21.0			21.0	
Actuated g/C Ratio		0.52	0.52		0.52			0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0			5.0			5.0	
Lane Grp Cap (vph)		697	751		1291			421			541	
v/s Ratio Prot												
v/s Ratio Perm		c0.31	0.04		0.20			c0.20			0.13	
v/c Ratio		0.59	0.07		0.38			0.63			0.41	
Uniform Delay, d1		10.7	7.7		9.2			18.7			17.2	
Progression Factor		1.85	6.02		0.52			1.00			1.00	
Incremental Delay, d2		3.6	0.2		0.8			6.8			2.3	
Delay (s)		23.3	46.4		5.7			25.5			19.5	
Level of Service		C	D		A			C			B	
Approach Delay (s)		27.9			5.7			25.5			19.5	
Approach LOS		C			A			C			B	

Intersection Summary			
HCM Average Control Delay	18.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	271	28	26	323	60	26	133	47	62	146	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	15	8	16	8	8	16	8
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			1.00	
Flpb, ped/bikes	0.99	1.00		0.98	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1443	3025		1565	3018			3582			3599	
Flt Permitted	0.49	1.00		0.55	1.00			0.90			0.84	
Satd. Flow (perm)	740	3025		909	3018			3238			3069	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	301	31	29	359	67	29	148	52	69	162	70
RTOR Reduction (vph)	0	12	0	0	24	0	0	30	0	0	41	0
Lane Group Flow (vph)	61	320	0	29	402	0	0	199	0	0	260	0
Confl. Peds. (#/hr)	24		47	47		24	9		36	36		9
Confl. Bikes (#/hr)			4	4			1					1
Heavy Vehicles (%)	9%	4%	0%	0%	3%	0%	0%	1%	10%	0%	0%	8%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Effective Green, g (s)	30.0	30.0		30.0	30.0			27.0			27.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	342	1396		420	1393			1345			1275	
v/s Ratio Prot		0.11			c0.13							
v/s Ratio Perm	0.08			0.03				0.06			c0.08	
v/c Ratio	0.18	0.23		0.07	0.29			0.15			0.20	
Uniform Delay, d1	10.3	10.5		9.7	10.9			11.8			12.1	
Progression Factor	0.69	0.69		1.31	1.19			1.02			0.41	
Incremental Delay, d2	0.9	0.3		0.1	0.2			0.2			0.3	
Delay (s)	8.0	7.6		12.9	13.2			12.3			5.4	
Level of Service	A	A		B	B			B			A	
Approach Delay (s)		7.7			13.2			12.3			5.4	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	440	26	86	503	222	24	124	115	340	261	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.96			0.93			0.98	
Flt Protected		1.00			0.99			1.00			0.98	
Satd. Flow (prot)		3280			3167			3089			3181	
Flt Permitted		0.75			0.79			0.88			0.70	
Satd. Flow (perm)		2462			2502			2739			2269	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	489	29	96	559	247	27	138	128	378	290	91
RTOR Reduction (vph)	0	6	0	0	60	0	0	67	0	0	16	0
Lane Group Flow (vph)	0	564	0	0	842	0	0	226	0	0	743	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			pm+pt			Perm		
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		24.0			24.0			31.0			23.0	
Effective Green, g (s)		24.0			24.0			31.0			23.0	
Actuated g/C Ratio		0.37			0.37			0.48			0.35	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		909			924			1333			803	
v/s Ratio Prot								c0.01				
v/s Ratio Perm		0.23			c0.34			0.07			c0.33	
v/c Ratio		0.62			0.91			0.17			1.02dl	
Uniform Delay, d1		16.8			19.5			9.7			20.2	
Progression Factor		1.63			1.00			1.00			0.77	
Incremental Delay, d2		3.2			14.6			0.3			17.5	
Delay (s)		30.5			34.1			10.0			33.1	
Level of Service		C			C			A			C	
Approach Delay (s)		30.5			34.1			10.0			33.1	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	30.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	895	128	48	792	0	81	0	36	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	10	10	12	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		0.95			0.95			1.00				
Frt		0.98			1.00			0.96				
Flt Protected		1.00			1.00			0.97				
Satd. Flow (prot)		3041			3090			1619				
Flt Permitted		1.00			0.80			0.79				
Satd. Flow (perm)		3041			2489			1329				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	994	142	53	880	0	90	0	40	0	0	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	1121	0	0	933	0	0	112	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	custom			Perm			Perm			Perm		
Protected Phases		4 5 6 11			8			2			2	
Permitted Phases	4 6 11			8			2			2		
Actuated Green, G (s)		65.0			33.0			16.0				
Effective Green, g (s)		58.0			33.0			16.0				
Actuated g/C Ratio		0.64			0.37			0.18				
Clearance Time (s)					5.0			5.0				
Lane Grp Cap (vph)		1960			913			236				
v/s Ratio Prot		c0.37										
v/s Ratio Perm					c0.37			c0.08				
v/c Ratio		0.57			1.02			0.47				
Uniform Delay, d1		9.0			28.5			33.2				
Progression Factor		0.14			1.42			1.00				
Incremental Delay, d2		0.3			34.2			6.7				
Delay (s)		1.6			74.8			39.9				
Level of Service		A			E			D				
Approach Delay (s)		1.6			74.8			39.9			0.0	
Approach LOS		A			E			D			A	

Intersection Summary			
HCM Average Control Delay	35.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	222	642	22	112	614	185	60	4	107	212	10	212
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	10	12	12	12	12	16	12	12	12	12
Total Lost time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	1550	3194		1660	3320	1485		1782		1660	1748	1485
Flt Permitted	0.29	1.00		0.33	1.00	1.00		0.88		0.43	1.00	1.00
Satd. Flow (perm)	472	3194		585	3320	1485		1593		758	1748	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	247	713	24	124	682	206	67	4	119	236	11	236
RTOR Reduction (vph)	0	2	0	0	0	95	0	92	0	0	0	135
Lane Group Flow (vph)	247	735	0	124	682	111	0	98	0	236	11	101
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt			pm+pt		pm+ov	pm+pt			pm+pt		pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases	4			8		8	2			6		6
Actuated Green, G (s)	55.0	42.6		47.8	38.4	48.4		12.0		25.0	25.0	38.6
Effective Green, g (s)	55.0	42.6		47.8	38.4	48.4		12.0		25.0	25.0	38.6
Actuated g/C Ratio	0.61	0.47		0.53	0.43	0.54		0.13		0.28	0.28	0.43
Clearance Time (s)	3.0	5.0		3.0	5.0	3.0		5.0		3.0	5.0	3.0
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0		4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	451	1512		423	1417	799		212		311	486	637
v/s Ratio Prot	c0.08	0.23		0.03	0.21	0.02				c0.08	0.01	0.02
v/s Ratio Perm	c0.25			0.13		0.06		0.06		c0.13		0.04
v/c Ratio	0.55	0.49		0.29	0.48	0.14		0.46		0.76	0.02	0.16
Uniform Delay, d1	9.2	16.2		10.8	18.6	10.4		36.0		28.7	23.6	15.8
Progression Factor	2.65	1.87		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.5	1.0		0.5	1.2	0.1		2.2		10.2	0.0	0.2
Delay (s)	25.7	31.3		11.3	19.8	10.5		38.2		38.9	23.6	15.9
Level of Service	C	C		B	B	B		D		D	C	B
Approach Delay (s)		29.9			16.9			38.2			27.3	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	518	443	2	333	0	0	0	0	19	0	578
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	576	492	2	370	0	0	0	0	21	0	642
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		498										
pX, platoon unblocked												
vC, conflicting volume	370			576			765	950	288	662	950	185
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	370			576			765	950	288	662	950	185
tC, single (s)	4.2			4.2			7.6	6.6	7.0	7.6	6.6	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	94	100	22
cM capacity (veh/h)	1178			987			64	256	706	345	256	823

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	288	288	492	126	247	21	642
Volume Left	0	0	0	2	0	21	0
Volume Right	0	0	492	0	0	0	642
cSH	1700	1700	1700	987	1700	345	823
Volume to Capacity	0.17	0.17	0.29	0.00	0.15	0.06	0.78
Queue Length 95th (ft)	0	0	0	0	0	5	198
Control Delay (s)	0.0	0.0	0.0	0.2	0.0	16.1	23.1
Lane LOS				A		C	C
Approach Delay (s)	0.0			0.1		22.8	
Approach LOS						C	

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	537	0	335	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	597	0	372	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	298	298	372
Volume Left (vph)	298	298	372
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.2	6.2	5.6
Degree Utilization, x	0.51	0.51	0.58
Capacity (veh/h)	568	570	619
Control Delay (s)	14.3	14.3	16.0
Approach Delay (s)	14.3		16.0
Approach LOS	B		C

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	472	90	192	594	0	0	0	0	101	21	58
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	11	11	11	12	12	12	12	12	12
Total Lost time (s)		3.0		4.0	4.0						5.0	
Lane Util. Factor		0.95		1.00	0.95						0.95	
Frt		0.98		1.00	1.00						0.95	
Flt Protected		1.00		0.95	1.00						0.97	
Satd. Flow (prot)		3133		1605	3210						3074	
Flt Permitted		1.00		0.33	1.00						0.97	
Satd. Flow (perm)		3133		559	3210						3074	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	524	100	213	660	0	0	0	0	112	23	64
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	44	0
Lane Group Flow (vph)	0	606	0	213	660	0	0	0	0	0	155	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				pm+pt						Split		
Protected Phases		4		3	8					6	6	
Permitted Phases				8								
Actuated Green, G (s)		36.0		49.0	49.0						27.0	
Effective Green, g (s)		36.0		49.0	49.0						27.0	
Actuated g/C Ratio		0.42		0.58	0.58						0.32	
Clearance Time (s)		3.0		4.0	4.0						5.0	
Lane Grp Cap (vph)		1327		445	1850						976	
v/s Ratio Prot		0.19		c0.06	0.21						c0.05	
v/s Ratio Perm				c0.22								
v/c Ratio		0.46		0.48	0.36						0.16	
Uniform Delay, d1		17.5		16.3	9.6						20.8	
Progression Factor		1.00		0.49	0.41						1.00	
Incremental Delay, d2		1.1		3.1	0.5						0.3	
Delay (s)		18.6		11.0	4.4						21.2	
Level of Service		B		B	A						C	
Approach Delay (s)		18.6			6.0			0.0			21.2	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	478	0	0	624	129	162	90	58	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			3.0			5.0				
Lane Util. Factor	1.00	0.95			0.95			0.91				
Frt	1.00	1.00			0.97			0.97				
Flt Protected	0.95	1.00			1.00			0.97				
Satd. Flow (prot)	1660	3320			3127			4519				
Flt Permitted	0.22	1.00			1.00			0.97				
Satd. Flow (perm)	385	3320			3127			4519				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	531	0	0	693	143	180	100	64	0	0	0
RTOR Reduction (vph)	0	0	0	0	21	0	0	44	0	0	0	0
Lane Group Flow (vph)	106	531	0	0	815	0	0	300	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt						Split					
Protected Phases	7	4			8		2	2				
Permitted Phases	4											
Actuated Green, G (s)	48.0	48.0			35.0			27.0				
Effective Green, g (s)	48.0	48.0			35.0			27.0				
Actuated g/C Ratio	0.56	0.56			0.41			0.32				
Clearance Time (s)	5.0	5.0			3.0			5.0				
Lane Grp Cap (vph)	367	1875			1288			1435				
v/s Ratio Prot	0.03	c0.16			c0.26			c0.07				
v/s Ratio Perm	0.13											
v/c Ratio	0.29	0.28			0.63			0.21				
Uniform Delay, d1	18.1	9.6			19.9			21.2				
Progression Factor	0.41	0.33			1.00			1.00				
Incremental Delay, d2	1.8	0.4			2.4			0.3				
Delay (s)	9.3	3.5			22.3			21.5				
Level of Service	A	A			C			C				
Approach Delay (s)		4.4			22.3			21.5			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	342	126	79	366	79	178	78	27	30	87	144
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	12	15	12	12	15	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.97			0.98			0.99			0.93	
Flt Protected		0.99			0.99			0.97			0.99	
Satd. Flow (prot)		2969			3006			1840			1769	
Flt Permitted		0.68			0.72			0.65			0.94	
Satd. Flow (perm)		2025			2179			1242			1676	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	380	140	88	407	88	198	87	30	33	97	160
RTOR Reduction (vph)	0	39	0	0	22	0	0	6	0	0	68	0
Lane Group Flow (vph)	0	608	0	0	561	0	0	309	0	0	222	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			32.0			32.0	
Effective Green, g (s)		23.0			23.0			32.0			32.0	
Actuated g/C Ratio		0.35			0.35			0.49			0.49	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		717			771			611			825	
v/s Ratio Prot												
v/s Ratio Perm		c0.30			0.26			c0.25			0.13	
v/c Ratio		0.85			0.73			0.51			0.27	
Uniform Delay, d1		19.4			18.3			11.2			9.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		11.9			5.9			3.0			0.8	
Delay (s)		31.3			24.2			14.1			10.5	
Level of Service		C			C			B			B	
Approach Delay (s)		31.3			24.2			14.1			10.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	201	100	203	311	65	174	589	246	95	953	146
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	12	10	16	12	9	10	9	9	10	9
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1559	2967		1574	3683		1508	3069	1333	1521	3099	1336
Flt Permitted	0.45	1.00		0.52	1.00		0.13	1.00	1.00	0.31	1.00	1.00
Satd. Flow (perm)	739	2967		862	3683		212	3069	1333	490	3099	1336
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	212	105	214	327	68	183	620	259	100	1003	154
RTOR Reduction (vph)	0	70	0	0	21	0	0	0	165	0	0	98
Lane Group Flow (vph)	112	247	0	214	374	0	183	620	94	100	1003	56
Confl. Peds. (#/hr)	19		16	16		19	22		25	25		22
Heavy Vehicles (%)	2%	2%	0%	1%	2%	2%	2%	4%	0%	1%	3%	0%
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	32.0	27.0		32.0	27.0		38.0	31.0	31.0	38.0	31.0	31.0
Effective Green, g (s)	30.0	28.0		30.0	28.0		36.0	31.0	31.0	36.0	31.0	31.0
Actuated g/C Ratio	0.35	0.33		0.35	0.33		0.42	0.36	0.36	0.42	0.36	0.36
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	4.0	4.0	3.0	4.0	4.0
Lane Grp Cap (vph)	299	977		338	1213		181	1119	486	280	1130	487
v/s Ratio Prot	0.02	0.08		c0.03	0.10		c0.07	0.20		0.03	0.32	
v/s Ratio Perm	0.11			c0.19			c0.36		0.07	0.13		0.04
v/c Ratio	0.37	0.25		0.63	0.31		1.01	0.55	0.19	0.36	0.89	0.12
Uniform Delay, d1	19.4	20.8		22.2	21.3		20.7	21.5	18.5	15.6	25.4	17.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.41	1.05	2.36
Incremental Delay, d2	3.6	0.6		8.7	0.7		69.8	2.0	0.9	2.6	8.0	0.4
Delay (s)	23.0	21.5		30.9	21.9		90.5	23.5	19.4	24.6	34.6	42.7
Level of Service	C	C		C	C		F	C	B	C	C	D
Approach Delay (s)		21.9			25.1			34.0			34.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	31.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	97	424	30	33	425	24	33	100	41	36	124	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	16	12	12	16	12
Total Lost time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00
Satd. Flow (prot)		1957	1466		1994	1480		2015	1506		2001	1511
Flt Permitted		0.72	1.00		0.94	1.00		0.91	1.00		0.92	1.00
Satd. Flow (perm)		1426	1466		1888	1480		1863	1506		1870	1511
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	102	446	32	35	447	25	35	105	43	38	131	80
RTOR Reduction (vph)	0	0	17	0	0	13	0	0	25	0	0	47
Lane Group Flow (vph)	0	548	15	0	482	12	0	140	18	0	169	33
Confl. Peds. (#/hr)	11		20	20		11	1		4	4		1
Confl. Bikes (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	4%	3%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Effective Green, g (s)		30.0	30.0		30.0	30.0		27.0	27.0		27.0	27.0
Actuated g/C Ratio		0.46	0.46		0.46	0.46		0.42	0.42		0.42	0.42
Clearance Time (s)		4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0
Lane Grp Cap (vph)		658	677		871	683		774	626		777	628
v/s Ratio Prot												
v/s Ratio Perm		c0.38	0.01		0.26	0.01		0.08	0.01		c0.09	0.02
v/c Ratio		0.83	0.02		0.55	0.02		0.18	0.03		0.22	0.05
Uniform Delay, d1		15.3	9.5		12.7	9.5		12.0	11.2		12.2	11.4
Progression Factor		1.00	1.00		0.62	0.53		0.91	1.11		1.02	0.92
Incremental Delay, d2		11.8	0.1		2.5	0.0		0.5	0.1		0.6	0.2
Delay (s)		27.1	9.6		10.3	5.1		11.4	12.5		13.1	10.6
Level of Service		C	A		B	A		B	B		B	B
Approach Delay (s)		26.1			10.0			11.7			12.3	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	16.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	394	20	41	271	31	10	109	21	110	214	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3077		1550	3052		1550	3025		1550	2979	
Flt Permitted	0.95	1.00		0.49	1.00		0.54	1.00		0.66	1.00	
Satd. Flow (perm)	1550	3077		795	3052		878	3025		1078	2979	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	438	22	46	301	34	11	121	23	122	238	83
RTOR Reduction (vph)	0	6	0	0	13	0	0	13	0	0	49	0
Lane Group Flow (vph)	128	454	0	46	322	0	11	131	0	122	272	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Effective Green, g (s)	7.0	32.0		22.0	22.0		27.0	27.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.49		0.34	0.34		0.42	0.42		0.42	0.42	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	167	1515		269	1033		365	1257		448	1237	
v/s Ratio Prot	c0.08	c0.15			0.11			0.04			0.09	
v/s Ratio Perm				0.06			0.01			c0.11		
v/c Ratio	0.77	0.30		0.17	0.31		0.03	0.10		0.27	0.22	
Uniform Delay, d1	28.2	9.8		15.1	15.9		11.2	11.6		12.5	12.2	
Progression Factor	1.17	0.39		0.75	0.72		1.05	1.16		1.12	1.13	
Incremental Delay, d2	22.1	0.4		1.3	0.8		0.1	0.1		1.5	0.4	
Delay (s)	55.0	4.2		12.6	12.2		12.0	13.6		15.5	14.2	
Level of Service	D	A		B	B		B	B		B	B	
Approach Delay (s)		15.3			12.3			13.4			14.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	336	69	203	347	63	25	245	20	55	270	55
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	0.97		1.00	0.98			0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1550	3019		1550	3028			3272			3225	
Flt Permitted	0.49	1.00		0.95	1.00			0.90			0.86	
Satd. Flow (perm)	798	3019		1550	3028			2966			2803	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	373	77	226	386	70	28	272	22	61	300	61
RTOR Reduction (vph)	0	26	0	0	23	0	0	8	0	0	21	0
Lane Group Flow (vph)	93	424	0	226	433	0	0	314	0	0	401	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Effective Green, g (s)	20.0	20.0		6.0	29.0			25.0			25.0	
Actuated g/C Ratio	0.31	0.31		0.09	0.45			0.38			0.38	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0			4.0	
Lane Grp Cap (vph)	246	929		143	1351			1141			1078	
v/s Ratio Prot		c0.14		c0.15	0.14							
v/s Ratio Perm	0.12							0.11			c0.14	
v/c Ratio	0.38	0.46		1.58	0.32			0.28			0.37	
Uniform Delay, d1	17.6	18.1		29.5	11.6			13.8			14.4	
Progression Factor	0.85	0.80		1.28	1.15			0.96			0.67	
Incremental Delay, d2	4.3	1.6		277.2	0.3			0.6			1.0	
Delay (s)	19.2	16.0		314.9	13.7			13.8			10.6	
Level of Service	B	B		F	B			B			B	
Approach Delay (s)		16.6			113.5			13.8			10.6	
Approach LOS		B			F			B			B	

Intersection Summary			
HCM Average Control Delay	48.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	355	26	75	620	75	55	110	165	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10	12	14	12	10	15	10
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		1.00			1.00			0.95				
Frt		0.99			0.99			0.93				
Flt Protected		1.00			1.00			0.99				
Satd. Flow (prot)		1613			1602			3249				
Flt Permitted		0.96			0.92			0.99				
Satd. Flow (perm)		1557			1484			3249				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	394	29	83	689	83	61	122	183	0	0	0
RTOR Reduction (vph)	0	3	0	0	5	0	0	139	0	0	0	0
Lane Group Flow (vph)	0	438	0	0	850	0	0	227	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm			Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Actuated Green, G (s)		41.5			41.5			15.5				
Effective Green, g (s)		41.5			41.5			15.5				
Actuated g/C Ratio		0.64			0.64			0.24				
Clearance Time (s)		4.0			4.0			4.0				
Vehicle Extension (s)		3.0			3.0			8.0				
Lane Grp Cap (vph)		994			947			775				
v/s Ratio Prot												
v/s Ratio Perm		0.28			c0.57			0.07				
v/c Ratio		0.44			0.90			0.29				
Uniform Delay, d1		5.9			9.9			20.3				
Progression Factor		1.98			1.00			1.00				
Incremental Delay, d2		1.3			13.0			0.9				
Delay (s)		13.0			22.9			21.2				
Level of Service		B			C			C				
Approach Delay (s)		13.0			22.9			21.2			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	93	415	598	39	119	164
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	98	437	629	41	125	173
Pedestrians		5	6		17	
Lane Width (ft)		12.0	12.0		10.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1319	491			
pX, platoon unblocked	0.85				0.85	0.85
vC, conflicting volume	688				1306	672
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	540				1270	522
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	88				9	63
cM capacity (veh/h)	848				138	465

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	535	671	125	173
Volume Left	98	0	125	0
Volume Right	0	41	0	173
cSH	848	1700	138	465
Volume to Capacity	0.12	0.39	0.91	0.37
Queue Length 95th (ft)	10	0	153	42
Control Delay (s)	3.0	0.0	115.9	17.2
Lane LOS	A		F	C
Approach Delay (s)	3.0	0.0	58.7	
Approach LOS			F	

Intersection Summary			
Average Delay	12.7		
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	690	0	1	619	3	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	3.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	1.00			1.00	0.88	
Flt Protected	1.00			1.00	1.00	
Satd. Flow (prot)	1748			1747	1525	
Flt Permitted	1.00			1.00	1.00	
Satd. Flow (perm)	1748			1747	1525	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	767	0	1	688	3	32
RTOR Reduction (vph)	0	0	0	0	27	0
Lane Group Flow (vph)	767	0	0	689	8	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type			Perm			
Protected Phases	1 2 4			4	3	
Permitted Phases			4			
Actuated Green, G (s)	68.4			38.4	13.6	
Effective Green, g (s)	64.4			38.4	13.6	
Actuated g/C Ratio	0.72			0.43	0.15	
Clearance Time (s)				4.0	4.0	
Vehicle Extension (s)				3.0	3.0	
Lane Grp Cap (vph)	1251			745	230	
v/s Ratio Prot	c0.44				c0.01	
v/s Ratio Perm				0.39		
v/c Ratio	0.61			0.92	0.03	
Uniform Delay, d1	6.5			24.4	32.6	
Progression Factor	0.05			1.00	1.00	
Incremental Delay, d2	0.5			19.0	0.1	
Delay (s)	0.9			43.5	32.7	
Level of Service	A			D	C	
Approach Delay (s)	0.9			43.5	32.7	
Approach LOS	A			D	C	

Intersection Summary			
HCM Average Control Delay	21.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	243	606	32	407	0	0	0	0	17	6	248
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	270	673	36	452	0	0	0	0	19	7	276
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	452			270			1133	1130	472	658	793	452
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	452			270			1133	1130	472	658	793	452
tC, single (s)	4.1			4.2			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	100	95	98	50
cM capacity (veh/h)	1119			1276			78	200	544	346	314	555

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	180	763	488	26	276
Volume Left	0	0	36	19	0
Volume Right	0	673	0	0	276
cSH	1700	1700	1276	337	555
Volume to Capacity	0.11	0.45	0.03	0.08	0.50
Queue Length 95th (ft)	0	0	2	6	69
Control Delay (s)	0.0	0.0	0.9	16.6	17.7
Lane LOS			A	C	C
Approach Delay (s)	0.0		0.9	17.6	
Approach LOS				C	

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	260	0	439	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	289	0	488	0	0	0

Direction, Lane #	EB 1	EB 2	NB 1
Volume Total (vph)	144	144	488
Volume Left (vph)	144	144	488
Volume Right (vph)	0	0	0
Hadj (s)	0.55	0.55	0.25
Departure Headway (s)	6.4	6.4	5.0
Degree Utilization, x	0.26	0.26	0.68
Capacity (veh/h)	536	537	701
Control Delay (s)	10.3	10.3	17.7
Approach Delay (s)	10.3		17.7
Approach LOS	B		C

Intersection Summary			
Delay	15.0		
HCM Level of Service	B		
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	553	345	332	869	0	0	0	0	303	269	372
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	13	12	12	12	12	10	10	11
Total Lost time (s)		6.0	6.0		6.0					6.0	6.0	6.0
Lane Util. Factor		0.95	1.00		0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00	0.98		1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00					1.00	1.00	1.00
Frt		1.00	0.85		1.00					1.00	0.95	0.85
Flt Protected		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (prot)		3179	1228		3427					1359	3807	1133
Flt Permitted		1.00	1.00		0.99					0.95	0.99	1.00
Satd. Flow (perm)		3179	1228		3427					1359	3807	1133
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	582	363	349	915	0	0	0	0	319	283	392
RTOR Reduction (vph)	0	0	208	0	0	0	0	0	0	0	52	96
Lane Group Flow (vph)	0	582	155	0	1264	0	0	0	0	175	571	100
Confl. Peds. (#/hr)	4		6	6		4						
Heavy Vehicles (%)	0%	4%	6%	1%	2%	0%	0%	0%	0%	1%	1%	1%
Parking (#/hr)			0									0
Turn Type			Perm	Split						Split		custom
Protected Phases		2		10 12 14	10 12 14					4	4	
Permitted Phases			2									4 2
Actuated Green, G (s)		27.0	27.0		75.0					31.7	31.7	64.7
Effective Green, g (s)		27.0	27.0		75.0					31.7	31.7	64.7
Actuated g/C Ratio		0.17	0.17		0.47					0.20	0.20	0.40
Clearance Time (s)		6.0	6.0							6.0	6.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		536	207		1606					269	754	458
v/s Ratio Prot		c0.18			c0.37					0.13	c0.15	
v/s Ratio Perm			0.13									0.09
v/c Ratio		1.09	0.75		0.79					0.65	0.76	0.22
Uniform Delay, d1		66.5	63.3		35.8					59.1	60.5	31.1
Progression Factor		1.00	1.00		0.12					1.00	1.00	1.00
Incremental Delay, d2		64.2	21.8		0.2					5.5	4.4	0.2
Delay (s)		130.7	85.1		4.6					64.6	64.9	31.4
Level of Service		F	F		A					E	E	C
Approach Delay (s)		113.2			4.6			0.0			58.2	
Approach LOS		F			A			A			E	

Intersection Summary			
HCM Average Control Delay	53.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.3
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	564	0	0	869	233	332	214	211	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	13	12	12	11	12	13	13	14	12	12	12
Total Lost time (s)	6.0	6.0			6.0	6.0	6.0	6.0				
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91				
Frt	1.00	1.00			1.00	0.85	1.00	0.94				
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (prot)	1605	3431			3210	1485	1561	3056				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99				
Satd. Flow (perm)	1605	3431			3210	1485	1561	3056				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	324	627	0	0	966	259	369	238	234	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	94	0	75	0	0	0	0
Lane Group Flow (vph)	324	627	0	0	966	165	288	478	0	0	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split					Perm	Split					
Protected Phases	2 4 8	2 4 8			10		12	12				
Permitted Phases						10						
Actuated Green, G (s)	77.0	77.0			35.0	35.0	22.0	22.0				
Effective Green, g (s)	77.0	77.0			35.0	35.0	22.0	22.0				
Actuated g/C Ratio	0.48	0.48			0.22	0.22	0.14	0.14				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Vehicle Extension (s)					3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	772	1651			702	325	215	420				
v/s Ratio Prot	c0.20	0.18			c0.30		c0.18	0.16				
v/s Ratio Perm						0.11						
v/c Ratio	0.42	0.38			1.38	0.51	1.34	1.14				
Uniform Delay, d1	27.0	26.3			62.5	54.9	69.0	69.0				
Progression Factor	0.05	0.06			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.2	0.1			178.1	1.3	180.7	87.3				
Delay (s)	1.6	1.5			240.6	56.2	249.7	156.3				
Level of Service	A	A			F	E	F	F				
Approach Delay (s)		1.6			201.6			188.3			0.0	
Approach LOS		A			F			F			A	

Intersection Summary			
HCM Average Control Delay	134.8	HCM Level of Service	F
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	506	136	89	270	67	108	522	70	96	1150	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	14	12	10	10	12	9	10	12
Total Lost time (s)	4.0	4.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1576	1600	1373	1596	1790		1580	3016		1537	3030	
Flt Permitted	0.27	1.00	1.00	0.12	1.00		0.08	1.00		0.32	1.00	
Satd. Flow (perm)	452	1600	1373	194	1790		133	3016		513	3030	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	533	143	94	284	71	114	549	74	101	1211	126
RTOR Reduction (vph)	0	0	88	0	8	0	0	9	0	0	7	0
Lane Group Flow (vph)	147	533	55	94	347	0	114	614	0	101	1330	0
Confl. Peds. (#/hr)	28		8	8		28	59		11	11		59
Confl. Bikes (#/hr)	3					3	1		2	2		1
Heavy Vehicles (%)	1%	5%	2%	0%	4%	0%	1%	4%	0%	0%	3%	3%
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	49.0	39.0	39.0	42.6	35.6		58.2	51.2		59.8	52.0	
Effective Green, g (s)	47.4	40.0	39.0	40.6	35.6		56.2	51.2		57.8	52.0	
Actuated g/C Ratio	0.39	0.33	0.32	0.34	0.30		0.47	0.43		0.48	0.43	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	267	533	446	136	531		135	1287		305	1313	
v/s Ratio Prot	c0.04	c0.33		c0.03	0.19		c0.04	0.20		0.02	c0.44	
v/s Ratio Perm	0.17		0.04	0.20			0.36			0.14		
v/c Ratio	0.55	1.00	0.12	0.69	0.65		0.84	0.48		0.33	1.01	
Uniform Delay, d1	26.0	40.0	28.5	31.2	36.8		26.1	24.8		18.0	34.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.4	39.0	0.6	14.1	6.2		35.7	1.3		0.6	28.1	
Delay (s)	28.5	79.0	29.0	45.3	43.0		61.8	26.0		18.6	62.1	
Level of Service	C	E	C	D	D		E	C		B	E	
Approach Delay (s)		61.3			43.5			31.6			59.1	
Approach LOS		E			D			C			E	

Intersection Summary			
HCM Average Control Delay	51.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	462	111	13	334	22	49	59	19	21	91	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	10	10	10	12	15	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	
Frpb, ped/bikes		1.00	0.96		1.00	0.97		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.98			0.94	
Flt Protected		0.99	1.00		1.00	1.00		0.98			0.99	
Satd. Flow (prot)		1963	1467		1629	1381		1892			1857	
Flt Permitted		0.89	1.00		0.98	1.00		0.86			0.97	
Satd. Flow (perm)		1760	1467		1598	1381		1649			1813	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	93	486	117	14	352	23	52	62	20	22	96	86
RTOR Reduction (vph)	0	0	45	0	0	12	0	10	0	0	40	0
Lane Group Flow (vph)	0	579	72	0	366	11	0	124	0	0	164	0
Confl. Peds. (#/hr)	12		20	20		12	8		2	2		8
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	3%	3%	0%	0%	3%	0%	0%	0%	0%	0%	1%	3%
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Effective Green, g (s)		32.0	32.0		32.0	32.0		27.0			27.0	
Actuated g/C Ratio		0.49	0.49		0.49	0.49		0.42			0.42	
Clearance Time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)		866	722		787	680		685			753	
v/s Ratio Prot												
v/s Ratio Perm		c0.33	0.05		0.23	0.01		0.08			c0.09	
v/c Ratio		0.67	0.10		0.47	0.02		0.18			0.22	
Uniform Delay, d1		12.5	8.8		10.9	8.4		12.0			12.2	
Progression Factor		1.00	1.00		1.88	3.14		1.00			1.98	
Incremental Delay, d2		4.1	0.3		1.9	0.0		0.6			0.7	
Delay (s)		16.6	9.1		22.3	26.5		12.6			24.8	
Level of Service		B	A		C	C		B			C	
Approach Delay (s)		15.3			22.5			12.6			24.8	
Approach LOS		B			C			B			C	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	244	91	11	226	10	48	114	19	15	184	82
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	0.97		0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Frt		1.00	0.85		1.00	0.85		1.00	0.85		0.96	
Flt Protected		0.98	1.00		1.00	1.00		0.99	1.00		1.00	
Satd. Flow (prot)		1743	1443		1728	1487		1712	1489		1703	
Flt Permitted		0.78	1.00		0.98	1.00		0.85	1.00		0.98	
Satd. Flow (perm)		1387	1443		1692	1487		1481	1489		1680	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	114	257	96	12	238	11	51	120	20	16	194	86
RTOR Reduction (vph)	0	0	58	0	0	7	0	0	10	0	23	0
Lane Group Flow (vph)	0	371	38	0	250	4	0	171	10	0	273	0
Confl. Peds. (#/hr)	19		25	25		19	3		6	6		3
Confl. Bikes (#/hr)	1		2	2		1			1	1		
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Effective Green, g (s)		23.0	23.0		23.0	23.0		32.0	32.0		32.0	
Actuated g/C Ratio		0.35	0.35		0.35	0.35		0.49	0.49		0.49	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Lane Grp Cap (vph)		491	511		599	526		729	733		827	
v/s Ratio Prot												
v/s Ratio Perm		c0.27	0.03		0.15	0.00		0.12	0.01		c0.16	
v/c Ratio		0.76	0.08		0.42	0.01		0.23	0.01		0.33	
Uniform Delay, d1		18.5	13.9		15.9	13.6		9.5	8.4		10.0	
Progression Factor		1.79	3.63		0.93	0.93		1.00	1.00		1.04	
Incremental Delay, d2		8.1	0.2		2.1	0.0		0.8	0.0		1.1	
Delay (s)		41.3	50.8		16.9	12.7		10.2	8.5		11.5	
Level of Service		D	D		B	B		B	A		B	
Approach Delay (s)		43.2			16.7			10.0			11.5	
Approach LOS		D			B			B			B	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	167	45	96	8	16	9	43	225	8	21	481	209
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	14	12	12	16	12	12	16	12
Total Lost time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Util. Factor		1.00	1.00		1.00			1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.95		0.99			1.00			1.00	0.94
Flpb, ped/bikes		0.98	1.00		0.99			1.00			1.00	1.00
Frt		1.00	0.85		0.96			1.00			1.00	0.85
Flt Protected		0.96	1.00		0.99			0.99			1.00	1.00
Satd. Flow (prot)		1873	1440		1782			1991			1976	1382
Flt Permitted		0.81	1.00		0.93			0.88			0.98	1.00
Satd. Flow (perm)		1573	1440		1686			1762			1946	1382
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	186	50	107	9	18	10	48	250	9	23	534	232
RTOR Reduction (vph)	0	0	63	0	7	0	0	2	0	0	0	92
Lane Group Flow (vph)	0	236	44	0	30	0	0	305	0	0	557	140
Confl. Peds. (#/hr)	37		53	53		37	39		54	54		39
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	0%	1%	0%	0%	3%	4%
Turn Type	pm+pt		Perm	Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		27.0	27.0		17.0			32.0			32.0	32.0
Effective Green, g (s)		27.0	27.0		17.0			32.0			32.0	32.0
Actuated g/C Ratio		0.42	0.42		0.26			0.49			0.49	0.49
Clearance Time (s)		3.0	3.0		3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		690	598		441			867			958	680
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.10	0.03		0.02			0.17			c0.29	0.10
v/c Ratio		0.34	0.07		0.07			0.35			0.58	0.21
Uniform Delay, d1		12.9	11.5		18.0			10.1			11.7	9.3
Progression Factor		1.02	1.87		1.00			1.08			0.66	0.22
Incremental Delay, d2		1.1	0.2		0.3			0.9			2.0	0.5
Delay (s)		14.3	21.7		18.3			11.9			9.7	2.6
Level of Service		B	C		B			B			A	A
Approach Delay (s)		16.6			18.3			11.9			7.6	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	922	289	675	1189	0	0	0	0	513	284	334
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	11	11	11	8	8	8	11	12	14
Total Lost time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Lane Util. Factor		0.91		0.97	0.95					0.91	0.86	0.91
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.96		1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		4578		3144	3210					1489	2913	1442
Flt Permitted		1.00		0.12	1.00					0.95	0.98	1.00
Satd. Flow (perm)		4578		409	3210					1489	2913	1442
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	971	304	711	1252	0	0	0	0	540	299	352
RTOR Reduction (vph)	0	38	0	0	0	0	0	0	0	0	9	42
Lane Group Flow (vph)	0	1237	0	711	1252	0	0	0	0	308	603	229
Confl. Peds. (#/hr)	15		11	11		15						
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	3%	3%	2%	3%	0%	0%	0%	0%	1%	3%	3%
Turn Type				pm+pt						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases				6						4		4
Actuated Green, G (s)		49.6		83.8	82.3					35.7	35.7	35.7
Effective Green, g (s)		49.6		83.8	82.3					35.7	35.7	35.7
Actuated g/C Ratio		0.38		0.64	0.63					0.27	0.27	0.27
Clearance Time (s)		6.0		4.5	6.0					6.0	6.0	6.0
Vehicle Extension (s)		7.0		3.5	7.0					3.5	3.5	3.5
Lane Grp Cap (vph)		1747		857	2032					409	800	396
v/s Ratio Prot		0.27		c0.18	0.39							
v/s Ratio Perm				c0.35						0.21	0.21	0.16
v/c Ratio		0.71		0.83	0.62					0.75	0.75	0.58
Uniform Delay, d1		34.1		32.4	14.3					43.1	43.1	40.7
Progression Factor		1.00		0.78	0.52					1.00	1.00	1.00
Incremental Delay, d2		2.5		3.1	0.6					7.9	4.2	2.2
Delay (s)		36.5		28.3	8.0					51.0	47.3	42.9
Level of Service		D		C	A					D	D	D
Approach Delay (s)		36.5			15.4			0.0			47.3	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM Average Control Delay	30.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	113.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	341	1094	0	0	1435	271	430	351	393	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	11	11	11	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0			6.0			6.0				
Lane Util. Factor	1.00	0.95			0.91			0.91				
Frpb, ped/bikes	1.00	1.00			1.00			1.00				
Flpb, ped/bikes	1.00	1.00			1.00			1.00				
Frt	1.00	1.00			0.98			0.95				
Flt Protected	0.95	1.00			1.00			0.98				
Satd. Flow (prot)	1621	3241			4541			4492				
Flt Permitted	0.06	1.00			1.00			0.98				
Satd. Flow (perm)	106	3241			4541			4492				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	359	1152	0	0	1511	285	453	369	414	0	0	0
RTOR Reduction (vph)	0	0	0	0	21	0	0	70	0	0	0	0
Lane Group Flow (vph)	359	1152	0	0	1775	0	0	1166	0	0	0	0
Confl. Peds. (#/hr)	7		5	5		7						
Confl. Bikes (#/hr)	1		1	1		1						
Heavy Vehicles (%)	2%	2%	0%	0%	2%	1%	2%	1%	3%	0%	0%	0%
Turn Type	pm+pt						Perm					
Protected Phases	5	2			6			8				
Permitted Phases	2						8					
Actuated Green, G (s)	83.4	83.4			58.4			34.6				
Effective Green, g (s)	83.4	83.4			58.4			34.6				
Actuated g/C Ratio	0.64	0.64			0.45			0.27				
Clearance Time (s)	6.0	6.0			6.0			6.0				
Vehicle Extension (s)	3.5	7.0			7.0			5.0				
Lane Grp Cap (vph)	289	2079			2040			1196				
v/s Ratio Prot	c0.18	0.36			0.39							
v/s Ratio Perm	c0.61							0.26				
v/c Ratio	1.24	0.55			0.87			0.98				
Uniform Delay, d1	43.2	13.0			32.4			47.3				
Progression Factor	1.12	0.18			0.62			1.00				
Incremental Delay, d2	128.4	0.8			3.5			20.3				
Delay (s)	176.8	3.1			23.6			67.6				
Level of Service	F	A			C			E				
Approach Delay (s)		44.4			23.6			67.6			0.0	
Approach LOS		D			C			E			A	

Intersection Summary			
HCM Average Control Delay	42.5	HCM Level of Service	D
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	774	408	104	1197	100	227	179	66	85	162	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	12	11	12	12	10	10	13	10	10	10
Total Lost time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1565	3273	1312	1603	3285		1578	3001		1537	2938	
Flt Permitted	0.13	1.00	1.00	0.34	1.00		0.34	1.00		0.59	1.00	
Satd. Flow (perm)	214	3273	1312	581	3285		573	3001		959	2938	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	142	815	429	109	1260	105	239	188	69	89	171	127
RTOR Reduction (vph)	0	0	151	0	5	0	0	30	0	0	106	0
Lane Group Flow (vph)	142	815	278	109	1360	0	239	227	0	89	192	0
Confl. Peds. (#/hr)	11		23	23		11	8		12	12		8
Confl. Bikes (#/hr)									1	1		
Heavy Vehicles (%)	2%	1%	3%	3%	3%	0%	1%	1%	2%	3%	0%	1%
Parking (#/hr)			0									
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	5	2	3	1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	47.2	47.2	64.2	62.7	60.2		37.9	27.8		24.0	17.4	
Effective Green, g (s)	47.2	47.2	64.2	62.7	60.2		37.9	27.8		24.0	17.4	
Actuated g/C Ratio	0.36	0.36	0.49	0.48	0.46		0.29	0.21		0.18	0.13	
Clearance Time (s)	3.5	6.0	3.5	3.5	6.0		3.5	6.0		3.5	6.0	
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0		3.0	7.0		3.0	7.0	
Lane Grp Cap (vph)	248	1188	648	511	1521		298	642		206	393	
v/s Ratio Prot	0.07	c0.25	0.06	0.05	c0.41		c0.10	0.08		0.02	0.07	
v/s Ratio Perm	0.14		0.16	0.05			c0.13			0.06		
v/c Ratio	0.57	0.69	0.43	0.21	0.89		0.80	0.35		0.43	0.49	
Uniform Delay, d1	32.0	35.1	21.1	21.4	32.0		38.8	43.5		45.9	52.2	
Progression Factor	1.15	1.01	1.43	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.0	2.4	0.3	0.2	8.5		14.3	1.2		1.5	3.4	
Delay (s)	43.8	37.7	30.5	21.7	40.5		53.1	44.7		47.3	55.6	
Level of Service	D	D	C	C	D		D	D		D	E	
Approach Delay (s)		36.1			39.1			48.7			53.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	40.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	250	367	186	441	113	362	340	107	206	408	56
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	11	12	11	12	12	11	13	12	10	11	12
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.97		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1707	2925		1653	3267		1620	3381		1580	3183	
Flt Permitted	0.39	1.00		0.18	1.00		0.32	1.00		0.48	1.00	
Satd. Flow (perm)	698	2925		314	3267		544	3381		802	3183	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	48	263	386	196	464	119	381	358	113	217	429	59
RTOR Reduction (vph)	0	225	0	0	19	0	0	26	0	0	9	0
Lane Group Flow (vph)	48	424	0	196	564	0	381	445	0	217	479	0
Confl. Peds. (#/hr)	12		3	3		12	5					5
Heavy Vehicles (%)	0%	2%	2%	0%	1%	1%	2%	1%	0%	1%	2%	0%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	35.5	28.8		46.8	36.1		56.2	44.2		40.1	32.1	
Effective Green, g (s)	35.5	28.8		46.8	36.1		56.2	44.2		40.1	32.1	
Actuated g/C Ratio	0.31	0.25		0.41	0.31		0.49	0.38		0.35	0.28	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.5	7.0		3.5	7.0		3.5	7.0		3.5	7.0	
Lane Grp Cap (vph)	274	733		291	1026		454	1299		334	888	
v/s Ratio Prot	0.01	0.15		c0.08	0.17		c0.15	0.13		0.05	0.15	
v/s Ratio Perm	0.04			c0.19			c0.26			0.18		
v/c Ratio	0.18	0.58		0.67	0.55		0.84	0.34		0.65	0.54	
Uniform Delay, d1	28.3	37.8		24.9	32.7		20.8	25.1		28.8	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	3.3		6.3	2.1		13.1	0.7		4.5	2.3	
Delay (s)	28.7	41.1		31.2	34.8		33.9	25.8		33.3	37.5	
Level of Service	C	D		C	C		C	C		C	D	
Approach Delay (s)		40.2			33.9			29.4			36.2	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	34.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	105	603	293	10	376	66	720	355	9	198	625	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	12	12	10	12	9	11	12	9	9	12
Total Lost time (s)	4.0	4.0			4.0		3.0	4.0		3.0	4.0	
Lane Util. Factor	1.00	0.95			0.95		0.97	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95			0.98		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1690	2962			3035		2817	3230		1523	2873	
Flt Permitted	0.35	1.00			0.82		0.95	1.00		0.31	1.00	
Satd. Flow (perm)	621	2962			2479		2817	3230		497	2873	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	670	326	11	418	73	800	394	10	220	694	203
RTOR Reduction (vph)	0	66	0	0	15	0	0	2	0	0	30	0
Lane Group Flow (vph)	117	930	0	0	487	0	800	402	0	220	867	0
Confl. Peds. (#/hr)	4		2	2		4	8		4	4		8
Confl. Bikes (#/hr)							2					2
Heavy Vehicles (%)	1%	2%	2%	0%	2%	6%	6%	2%	0%	1%	3%	3%
Turn Type	Perm			Perm			Prot			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8						6		
Actuated Green, G (s)	27.0	27.0			27.0		25.0	39.5		27.0	27.0	
Effective Green, g (s)	27.0	27.0			27.0		25.0	39.5		27.0	27.0	
Actuated g/C Ratio	0.30	0.30			0.30		0.28	0.44		0.30	0.30	
Clearance Time (s)	4.0	4.0			4.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	186	889			744		783	1418		292	862	
v/s Ratio Prot		c0.31					c0.28	0.12		0.10	c0.30	
v/s Ratio Perm	0.19				0.20					0.12		
v/c Ratio	0.63	1.05			0.65		1.02	0.28		0.75	1.01	
Uniform Delay, d1	27.2	31.5			27.4		32.5	16.2		26.0	31.5	
Progression Factor	1.00	1.00			1.00		0.43	0.24		1.00	1.00	
Incremental Delay, d2	6.5	43.0			2.1		31.9	0.3		10.5	32.0	
Delay (s)	33.7	74.5			29.5		45.9	4.3		36.5	63.5	
Level of Service	C	E			C		D	A		D	E	
Approach Delay (s)		70.2			29.5			32.0			58.2	
Approach LOS		E			C			C			E	

Intersection Summary			
HCM Average Control Delay	49.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	198	222	337	167	28	414	1147	993	35	866	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.0	5.0	4.0	4.0	5.0		4.0	5.0	4.0	4.0	5.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1710	2040	1491	3130	1991		1676	3320	1429	1437	3320	1485
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.15	1.00	1.00	0.15	1.00	1.00
Satd. Flow (perm)	1710	2040	1491	3130	1991		264	3320	1429	222	3320	1485
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	69	204	229	347	172	29	427	1182	1024	36	893	72
RTOR Reduction (vph)	0	0	21	0	8	0	0	0	143	0	0	40
Lane Group Flow (vph)	69	204	208	347	193	0	427	1182	881	36	893	32
Confl. Peds. (#/hr)	3		20	20		3	2		3	3		2
Confl. Bikes (#/hr)			1	1			2		2	2		2
Heavy Vehicles (%)	0%	0%	1%	6%	0%	0%	2%	3%	6%	19%	3%	2%
Turn Type	Prot		pm+ov	Prot			pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4	5	3	8		5	2	3	1	6	7
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)	12.2	15.1	29.7	15.0	17.9		46.9	39.5	54.5	29.7	27.3	39.5
Effective Green, g (s)	12.2	15.1	29.7	15.0	17.9		46.9	39.5	54.5	29.7	27.3	39.5
Actuated g/C Ratio	0.14	0.17	0.33	0.17	0.20		0.52	0.44	0.61	0.33	0.30	0.44
Clearance Time (s)	4.0	5.0	4.0	4.0	5.0		4.0	5.0	4.0	4.0	5.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	232	342	492	522	396		367	1457	865	106	1007	718
v/s Ratio Prot	0.04	c0.10	0.07	0.11	0.10		c0.19	0.36	c0.17	0.01	0.27	0.01
v/s Ratio Perm			0.07				c0.42		0.45	0.10		0.02
v/c Ratio	0.30	0.60	0.42	0.66	0.49		1.16	0.81	1.02	0.34	0.89	0.04
Uniform Delay, d1	35.0	34.6	23.5	35.1	32.0		29.6	22.0	17.8	38.6	29.9	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.73	0.34	0.13
Incremental Delay, d2	0.7	2.8	0.6	3.2	0.9		99.4	5.0	35.4	0.2	1.2	0.0
Delay (s)	35.8	37.4	24.1	38.3	32.9		129.0	27.0	53.1	28.2	11.5	1.9
Level of Service	D	D	C	D	C		F	C	D	C	B	A
Approach Delay (s)		31.1			36.3			53.7			11.4	
Approach LOS		C			D			D			B	

Intersection Summary			
HCM Average Control Delay	40.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBL	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	785	455	550	18	3	10	9	47	9	0	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	10	10	10	10	12	12	16	12	12	16	12
Total Lost time (s)		5.0	3.0	5.0				4.5			4.5	
Lane Util. Factor		0.95	1.00	1.00				1.00			1.00	
Frpb, ped/bikes		1.00	1.00	1.00				0.98			0.97	
Flpb, ped/bikes		1.00	1.00	1.00				1.00			1.00	
Frt		1.00	1.00	1.00				0.91			0.94	
Flt Protected		1.00	0.95	1.00				0.99			0.97	
Satd. Flow (prot)		3160	1565	1652				1795			1793	
Flt Permitted		0.95	0.14	1.00				0.93			0.87	
Satd. Flow (perm)		3015	234	1652				1681			1609	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	826	479	579	19	3	11	9	49	9	0	3
RTOR Reduction (vph)	0	0	0	1	0	0	0	20	0	0	5	0
Lane Group Flow (vph)	0	828	479	597	0	0	0	52	0	0	12	0
Confl. Peds. (#/hr)	7		4		7		7		2	2		7
Confl. Bikes (#/hr)							2		2	2		2
Heavy Vehicles (%)	0%	1%	2%	1%	6%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm		pm+pt			Perm	Perm			Perm		
Protected Phases		8	7	4				2			6	
Permitted Phases	8		4			2	2			6		
Actuated Green, G (s)		25.1	67.3	67.3				6.7			6.7	
Effective Green, g (s)		25.1	67.3	67.3				6.7			6.7	
Actuated g/C Ratio		0.30	0.81	0.81				0.08			0.08	
Clearance Time (s)		5.0	3.0	5.0				4.5			4.5	
Vehicle Extension (s)		3.0	3.0	3.0				3.0			3.0	
Lane Grp Cap (vph)		906	813	1331				135			129	
v/s Ratio Prot			0.28	0.36								
v/s Ratio Perm		c0.27	0.20					c0.03			0.01	
v/c Ratio		0.91	0.59	0.45				0.38			0.10	
Uniform Delay, d1		28.2	10.6	2.5				36.4			35.6	
Progression Factor		1.00	1.00	1.00				1.00			1.00	
Incremental Delay, d2		15.2	1.1	0.2				1.8			0.3	
Delay (s)		43.3	11.7	2.7				38.3			35.9	
Level of Service		D	B	A				D			D	
Approach Delay (s)		43.3		6.7				38.3			35.9	
Approach LOS		D		A				D			D	

Intersection Summary			
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	83.5	Sum of lost time (s)	12.5
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR2	NER
Lane Configurations		
Volume (vph)	5	1155
Ideal Flow (vphpl)	1800	1800
Lane Width	12	12
Total Lost time (s)		3.0
Lane Util. Factor		0.88
Frpb, ped/bikes		1.00
Flpb, ped/bikes		1.00
Frt		0.85
Flt Protected		1.00
Satd. Flow (prot)		2693
Flt Permitted		1.00
Satd. Flow (perm)		2693
Peak-hour factor, PHF	0.95	0.95
Adj. Flow (vph)	5	1216
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	0	1216
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Heavy Vehicles (%)	0%	0%
Turn Type		Over
Protected Phases		7
Permitted Phases		
Actuated Green, G (s)		39.2
Effective Green, g (s)		39.2
Actuated g/C Ratio		0.47
Clearance Time (s)		3.0
Vehicle Extension (s)		3.0
Lane Grp Cap (vph)		1264
v/s Ratio Prot		c0.45
v/s Ratio Perm		
v/c Ratio		0.96
Uniform Delay, d1		21.4
Progression Factor		1.00
Incremental Delay, d2		17.0
Delay (s)		38.4
Level of Service		D
Approach Delay (s)		
Approach LOS		

Intersection Summary

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	355	1614	774	63	96	257
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1660	3320	3283		1660	1485
Flt Permitted	0.25	1.00	1.00		0.95	1.00
Satd. Flow (perm)	439	3320	3283		1660	1485
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	394	1793	860	70	107	286
RTOR Reduction (vph)	0	0	3	0	0	257
Lane Group Flow (vph)	394	1793	927	0	107	29
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt					Perm
Protected Phases	7	4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)	115.8	115.8	91.3		14.2	14.2
Effective Green, g (s)	115.8	115.8	91.3		14.2	14.2
Actuated g/C Ratio	0.84	0.84	0.66		0.10	0.10
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	550	2786	2172		171	153
v/s Ratio Prot	c0.11	0.54	0.28		c0.06	
v/s Ratio Perm	c0.50					0.02
v/c Ratio	0.72	0.64	0.43		0.63	0.19
Uniform Delay, d1	6.5	3.9	11.0		59.4	56.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	4.4	1.2	0.6		7.0	0.6
Delay (s)	10.9	5.0	11.6		66.3	57.3
Level of Service	B	A	B		E	E
Approach Delay (s)		6.1	11.6		59.7	
Approach LOS		A	B		E	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	104	1609	747	152	265	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	12	10	11	12	10	10
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.95	0.95		1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	0.97		1.00	0.85
Flt Protected		1.00	1.00		0.95	1.00
Satd. Flow (prot)		3122	3106		1506	1341
Flt Permitted		0.76	1.00		0.95	1.00
Satd. Flow (perm)		2389	3106		1506	1341
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	109	1694	786	160	279	99
RTOR Reduction (vph)	0	0	13	0	0	81
Lane Group Flow (vph)	0	1803	933	0	279	18
Confl. Peds. (#/hr)	2			2		1
Heavy Vehicles (%)	1%	2%	2%	10%	6%	5%
Turn Type	Perm					Perm
Protected Phases		4	8		6	
Permitted Phases	4					6
Actuated Green, G (s)		99.0	99.0		23.0	23.0
Effective Green, g (s)		99.0	99.0		23.0	23.0
Actuated g/C Ratio		0.76	0.76		0.18	0.18
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1819	2365		266	237
v/s Ratio Prot			0.30		c0.19	
v/s Ratio Perm		c0.75				0.01
v/c Ratio		0.99	0.39		1.05	0.07
Uniform Delay, d1		15.1	5.3		53.5	44.6
Progression Factor		1.00	1.00		0.80	1.25
Incremental Delay, d2		19.1	0.5		65.0	0.5
Delay (s)		34.2	5.8		107.9	56.2
Level of Service		C	A		F	E
Approach Delay (s)		34.2	5.8		94.3	
Approach LOS		C	A		F	

Intersection Summary			
HCM Average Control Delay	32.9	HCM Level of Service	C
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1404	329	121	771	222	58
Ideal Flow (vphpl)	2300	1800	1800	2300	1800	1800
Lane Width	15	12	14	16	15	12
Total Lost time (s)	5.0		3.0	5.0	5.0	5.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	2417		1788	2506	1758	1509
Flt Permitted	1.00		0.04	1.00	0.95	1.00
Satd. Flow (perm)	2417		69	2506	1758	1509
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1433	336	123	787	227	59
RTOR Reduction (vph)	5	0	0	0	0	50
Lane Group Flow (vph)	1764	0	123	787	227	9
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	2%	2%	2%	4%	7%	0%
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	2	
Permitted Phases			8			2
Actuated Green, G (s)	106.0		116.0	116.0	22.1	22.1
Effective Green, g (s)	106.0		116.0	116.0	22.1	22.1
Actuated g/C Ratio	0.72		0.78	0.78	0.15	0.15
Clearance Time (s)	5.0		3.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1730		135	1963	262	225
v/s Ratio Prot	c0.73		c0.04	0.31	c0.13	
v/s Ratio Perm			0.67			0.01
v/c Ratio	1.02		0.91	0.40	0.87	0.04
Uniform Delay, d1	21.0		54.7	5.1	61.6	53.9
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	26.6		51.3	0.1	24.6	0.1
Delay (s)	47.7		106.0	5.2	86.1	54.0
Level of Service	D		F	A	F	D
Approach Delay (s)	47.7			18.8	79.5	
Approach LOS	D			B	E	

Intersection Summary			
HCM Average Control Delay	41.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	148.1	Sum of lost time (s)	13.0
Intersection Capacity Utilization	109.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1680	84	112	875	1	73	0	157	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	15	13	11	11	12	12	12	16	12	12	16	12
Total Lost time (s)	4.0	4.0	4.0	3.0	3.0	4.0		4.0	4.0			
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1881	3431	1479	1589	3320	1530		1938	1500			
Flt Permitted	0.29	1.00	1.00	0.08	1.00	1.00		0.76	1.00			
Satd. Flow (perm)	583	3431	1479	128	3320	1530		1545	1500			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1867	93	124	972	1	81	0	174	0	0	0
RTOR Reduction (vph)	0	0	27	0	0	0	0	0	140	0	0	0
Lane Group Flow (vph)	1	1867	66	124	972	1	0	81	34	0	0	0
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Perm		Perm	custom		custom	Perm		Perm	Perm		
Protected Phases		4		3	3 8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)	49.4	49.4	49.4	67.1	67.1	67.1		9.9	9.9			
Effective Green, g (s)	49.4	49.4	49.4	67.1	67.1	67.1		9.9	9.9			
Actuated g/C Ratio	0.58	0.58	0.58	0.79	0.79	0.79		0.12	0.12			
Clearance Time (s)	4.0	4.0	4.0	3.0		4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0			
Lane Grp Cap (vph)	339	1994	860	354	2621	1208		180	175			
v/s Ratio Prot		c0.54		0.06	c0.29							
v/s Ratio Perm	0.00		0.04	0.22		0.00		c0.05	0.02			
v/c Ratio	0.00	0.94	0.08	0.35	0.37	0.00		0.45	0.20			
Uniform Delay, d1	7.5	16.4	7.8	14.8	2.7	1.9		35.0	34.0			
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	0.0	9.9	0.2	0.6	0.1	0.0		1.8	0.6			
Delay (s)	7.5	26.2	8.0	15.4	2.8	1.9		36.8	34.5			
Level of Service	A	C	A	B	A	A		D	C			
Approach Delay (s)		25.4			4.2			35.2			0.0	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	9	952	843	30	71	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Width	10	10	10	10	10	10
Total Lost time (s)		5.0	5.0		3.0	
Lane Util. Factor		0.95	0.95		1.00	
Frt		1.00	0.99		0.98	
Flt Protected		1.00	1.00		0.96	
Satd. Flow (prot)		3098	3083		1533	
Flt Permitted		0.94	1.00		0.96	
Satd. Flow (perm)		2923	3083		1533	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	10	1058	937	33	79	14
RTOR Reduction (vph)	0	0	3	0	7	0
Lane Group Flow (vph)	0	1068	967	0	86	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Perm					
Protected Phases		4	8 2 11		5	
Permitted Phases	4					
Actuated Green, G (s)		33.0	64.0		7.0	
Effective Green, g (s)		33.0	64.0		7.0	
Actuated g/C Ratio		0.37	0.71		0.08	
Clearance Time (s)		5.0			3.0	
Lane Grp Cap (vph)		1072	2192		119	
v/s Ratio Prot			c0.31		c0.06	
v/s Ratio Perm		c0.37				
v/c Ratio		1.00	0.44		0.72	
Uniform Delay, d1		28.4	5.5		40.5	
Progression Factor		1.00	0.01		1.00	
Incremental Delay, d2		26.6	0.2		31.1	
Delay (s)		55.0	0.2		71.7	
Level of Service		E	A		E	
Approach Delay (s)		55.0	0.2		71.7	
Approach LOS		E	A		E	

Intersection Summary			
HCM Average Control Delay	30.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	500	0	1	582	39	3	2	28	202	0	138
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	12	12	12	12	12	12	12	12	12	11	12	11
Total Lost time (s)		4.0			4.0			3.0			3.0	3.0
Lane Util. Factor		1.00			0.95			1.00			1.00	1.00
Frpb, ped/bikes		1.00			1.00			0.94			1.00	0.97
Flpb, ped/bikes		1.00			1.00			1.00			0.98	1.00
Frt		1.00			0.99			0.88			1.00	0.85
Flt Protected		0.99			1.00			1.00			0.95	1.00
Satd. Flow (prot)		1772			3341			1463			1667	1346
Flt Permitted		0.87			0.95			0.77			0.86	1.00
Satd. Flow (perm)		1553			3191			1132			1515	1346
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	64	556	0	1	647	43	3	2	31	224	0	153
RTOR Reduction (vph)	0	0	0	0	5	0	0	28	0	0	0	109
Lane Group Flow (vph)	0	620	0	0	686	0	0	8	0	0	224	44
Confl. Peds. (#/hr)	60		44	44		60	14		10	10		14
Confl. Bikes (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	0%	1%	3%	20%	0%	0%	1%	0%	7%
Turn Type	Perm			Prot			Perm			pm+pt		Perm
Protected Phases		4		3	3 4			1		2	1 2	
Permitted Phases	4				3		1	1		1 2		1 2
Actuated Green, G (s)		38.4			52.0			9.0			23.0	26.0
Effective Green, g (s)		38.4			52.0			9.0			23.0	26.0
Actuated g/C Ratio		0.43			0.58			0.10			0.26	0.29
Clearance Time (s)		4.0						3.0				
Vehicle Extension (s)		3.0						3.0				
Lane Grp Cap (vph)		663			1866			113			411	389
v/s Ratio Prot					c0.06						c0.08	
v/s Ratio Perm		c0.40			0.16			0.01			c0.05	0.03
v/c Ratio		0.94			0.37			0.07			0.55	0.11
Uniform Delay, d1		24.6			10.2			36.7			29.0	23.5
Progression Factor		1.00			1.04			1.00			1.00	1.00
Incremental Delay, d2		22.2			0.0			0.3			1.5	0.1
Delay (s)		46.8			10.7			37.0			30.5	23.7
Level of Service		D			B			D			C	C
Approach Delay (s)		46.8			10.7			37.0			27.7	
Approach LOS		D			B			D			C	

Intersection Summary			
HCM Average Control Delay	27.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Appendix F
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Appendix I

Construction Impacts Technical Memorandum

- Final EIS Addendum I, Construction Impacts, July 2022

Chicago Red Line Extension Project

Construction Impacts

Final EIS Addendum I

July 2022

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Table of Contents

Section 1 - Summary 1-3
Section 2 - Project Description and Background 2-1
Section 3 - Methods for Impact Evaluation 3-1
3.1 Federal, State, and Local Regulations 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-1
3.4 Methods 3-1
Section 4 - Affected Environment 4-1
Section 5 - Description of Construction 5-1
Section 6 - Impacts and Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative – Preferred Alignment 6-1
Section 7 - Impacts Remaining after Mitigation 7-1
7.1 No Build Alternative 7-1
7.2 Union Pacific Railroad Alternative - Preferred Alignment 7-1
Section 8 - References Cited 8-1

Figures

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4
Figure 5-1: Construction Segments of the Preferred Alignment 5-2

Table

Table 5-1: Construction Segments and Summary of Work Activities 5-3

Abbreviations

ACM	asbestos containing material
API	area of potential impact
BMPs	best management practices
CCDD	clean construction or demolition debris
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
Conrail	Consolidated Rail Corporation
CTA	Chicago Transit Authority
EA	Environmental Assessment
EJ	Environmental Justice
EIS	Environmental Impact Statement
ESA	Environmental Site Assessment
FTA	Federal Transit Administration
IHB	Indiana Harbor Belt Railroad
LBP	lead-based paint
MAC	Maximum Allowable Concentration
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NS	Norfolk Southern
REC	recognized environmental condition
RLE	Red Line Extension
SPCC	Spill Prevention, Control and Countermeasure Plans
SRO	Soil Remediation Objectives
SWPPP	Stormwater Pollution Prevention Plan
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad
UST	underground storage tank

Section 1 - Summary

This Construction Impacts Addendum updates the analyses of construction impacts and mitigation for the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative, as compared with the Draft Environmental Impact Statement (EIS) for the Red Line Extension (RLE) Project. These analyses draw on the descriptions of construction-related impacts and mitigation described in the other RLE technical memoranda for this Final EIS.

Because of the temporary nature of construction activities, the use of construction best management practices (BMPs), and the mitigation methods proposed, the construction impacts would not be adverse under the Preferred Alignment. The No Build Alternative would not involve any construction activities, so no construction impacts would occur.

Construction impacts are temporary in nature. Construction impacts are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations. Construction of the RLE Project is anticipated to occur from 2025 through 2029.

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th

Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between

UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

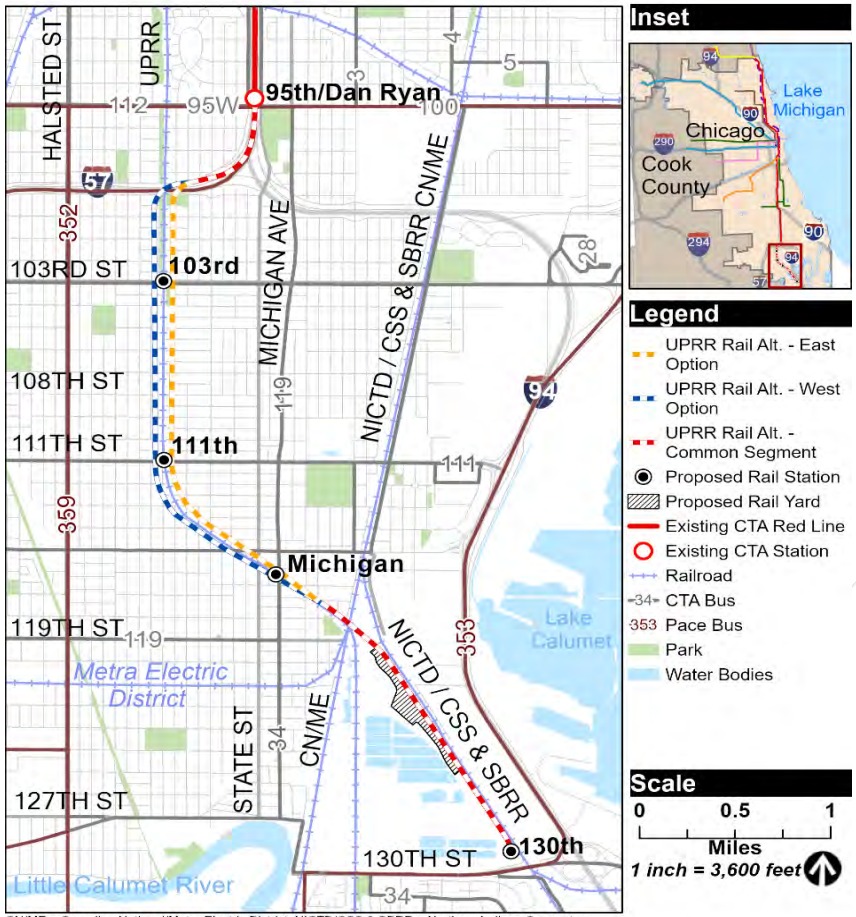

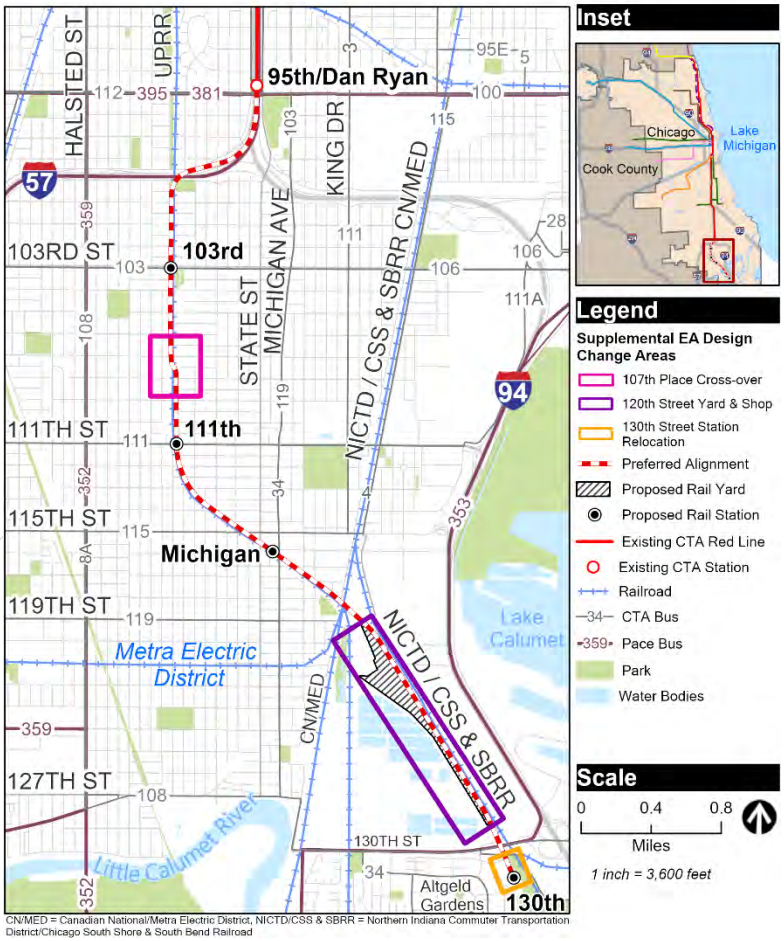

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in the Draft EIS have been carried forward to evaluate the potential construction impacts and mitigation under the Preferred Alignment. The methods for evaluating the construction impacts depend on the environmental resource. The methods for impact evaluation of the Preferred Alignment are similar to those for the East and West Options described in the Draft EIS.

3.1 Federal, State, and Local Regulations

The regulatory framework is specific to each of the environmental resources evaluated in this Final EIS. Any updated regulations are documented in the respective technical memoranda. However, the updated regulations have no effect on the analyses of construction impacts for the Preferred Alignment, unless otherwise stated in the technical memoranda.

3.2 Impact Analysis Thresholds

NEPA does not set specific thresholds of significance for construction-related impacts. The impact thresholds for each environmental resource are identified in the technical memoranda. The construction-related impact thresholds have not changed from those in the Draft EIS.

3.3 Area of Potential Impact

The area of potential impact (API) is specific to each of the environmental resources, and the APIs are identified in the technical memoranda. In general, the APIs for the Preferred Alignment have been expanded farther south to include the relocation of the 130th Street station south of 130th Street.

3.4 Methods

The impact analyses are based on potential construction methods, staging, and possible impacts on environmental resources. The impacts were identified during the analysis performed for each of the environmental resources. Construction impacts are temporary in nature and are not relevant to the operation of transit services once the RLE Project has been constructed. Impacts associated with post-construction activities were therefore not included in these analyses.

Section 4 - Affected Environment

The affected environment for construction impacts depends on the geographic frame of reference used to analyze existing conditions for the environmental resources evaluated in the Final EIS. The affected environment for each of the environmental resources is described in the other RLE technical memoranda.

In general, the affected environment for the Preferred Alignment has been expanded farther south to include the relocation of the 130th Street station south of 130th Street. This extension south incorporates the entire Riverdale community into the project area. The project area encompasses parts of ten community areas in the Far South Side of Chicago: Beverly, Washington Heights, Roseland, Pullman, Morgan Park, West Pullman, Riverdale, South Deering, the Village of Calumet Park, and Hegewisch. Under the Preferred Alignment, the 130th Street station would be located closer to the Altgeld Gardens neighborhood in the Riverdale community.

Section 5 - Description of Construction

Construction activities under the Preferred Alignment are not expected to be markedly different than those described for the East and West Options in the Draft EIS. The *Description of Construction and Phasing* (**Addendum G**) provides the details of the construction activities for the Preferred Alignment.

Construction activities would be grouped by type of work and location. The overall schedule and coordination of all construction segments would be phased and scheduled to maintain the CTA operations at the 95th/Dan Ryan terminal and 98th Yard and Shop, and the vehicular traffic on affected expressways and roadways.

For the purposes of describing construction activities, the RLE Project has been divided into seven segments. These segments indicate similar construction activities and are not intended to indicate any sequencing or phasing. The seven construction segments for the Preferred Alignment are shown on **Figure 5-1**. The work activities for each construction segment are summarized in **Table 5-1**, and described in greater detail in **Addendum G**.

The construction segments and phasing plans described here are based on preliminary engineering completed to date and provide the greatest amount of flexibility for future design within a maximum envelope for evaluating environmental impacts. Construction activities and phasing would be determined during final design of the RLE Project, in coordination with the design-build contractor. Construction is anticipated to occur from 2025 through 2029.

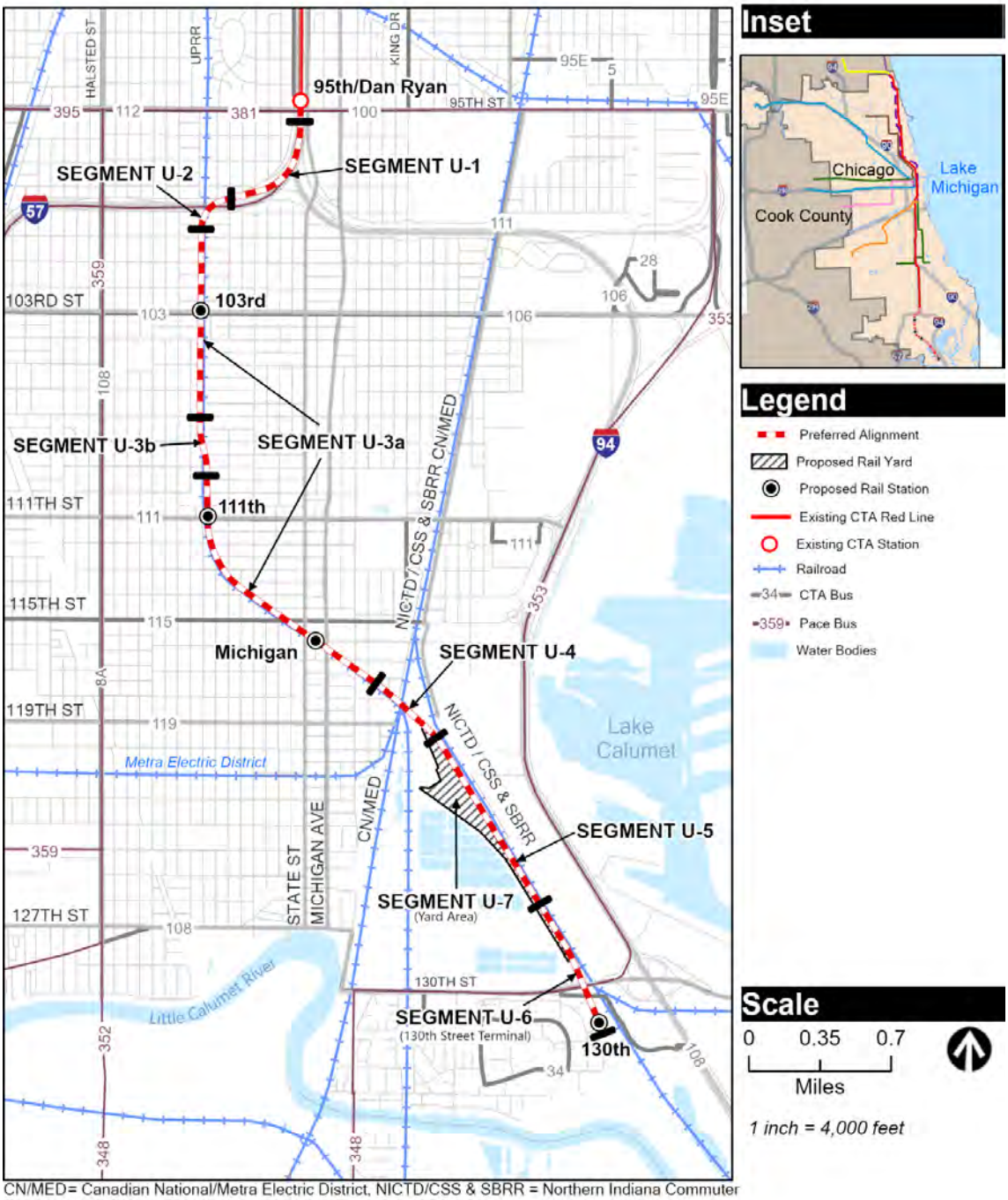

CN/MED= Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 5-1: Construction Segments of the Preferred Alignment

Table 5-1: Construction Segments and Summary of Work Activities

Segment	Location	Work Activities
U-1	From the 95th/Dan Ryan terminal to the beginning of the horizontal curve at the UPRR crossing	▪ Install trackwork and signals to tie into the 95th/Dan Ryan terminal. ▪ Relocate trackwork between the 95th/Dan Ryan terminal and the 98th Street Yard and Shop. ▪ Construct approximately 500 feet of retained fill structure south of the 95th/Dan Ryan terminal. ▪ Construct single-track, elevated structures over existing CTA tracks leading to the 98th Yard and Shop over the existing CTA/southbound I-94 tunnel. ▪ Construct the dual-track, elevated structure through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from southboundI-94, and north of the southbound I-57 lane. ▪ Replace the 95th Street substation with a new 96th Street substation.
U-2	The horizontal curve at the UPRR crossing	▪ Construct the dual-track, elevated structure spanning both lanes of I-57.
U-3a	From the end of the horizontal curve at the UPRR crossing to the CN/MED track crossing near 119th Street	▪ Demolish existing buildings and structures in the proposed right-of-way where necessary. ▪ Construct the dual-track, elevated structure along the UPRR corridor. ▪ Construct stations near 103rd Street, 111th Street, and Michigan Avenue. ▪ Construct parking lots/structures and bus turnarounds at stations. ▪ Construct three substations.
U-3b	From the end of the curves at the UPRR crossing at 107th Place	
U-4	From the CN/MED track crossing near 119th Street to the at-grade track	▪ Demolish existing buildings and structures in the proposed right-of-way where necessary. ▪ Construct the dual-track, elevated structure along the UPRR corridor and over the CN/MED tracks near 119th Street. ▪ Construct the 120th Street yard and shop track tie-in. ▪ Construct retained embankment structure to carry the elevated structure grade and the grade separation 120th Street yard access.

Segment	Location	Work Activities
U-5	From the end of the aerial structure crossing the CN/MED tracks near 119th Street to the south end of the yard test track near 124th Street	▪ Construct the track roadbed. • Construct the Metropolitan Water Reclamation District of Greater Chicago (MWRD) access road and bridge over the RLE tracks and the NICTD/CSS & SBRR crossing.
U-6	From the yard test track to the south end of the project including the 130th Street station	▪ Construct the track roadbed. ▪ Construct the 130th Street station. ▪ Construct an underpass at 130th Street for track alignment. ▪ Construct the parking garage/lot for the 130th Street station. ▪ Construct bus bays and road access for the 130th Street station. ▪ Construct the MWRD access road to 130th Street. ▪ Construct the substation.
U-7	120th Street yard and shop	▪ Construct the yard and track. ▪ Construct the shop building. ▪ Construct the access road and CTA employee parking. ▪ Construct the substation.

Section 6 - Impacts and Mitigation

Consistent with the Draft EIS, this section summarizes the impacts and mitigation during construction of the Preferred Alignment. Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.

6.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning (CMAP) Transportation Improvement Program (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative would not involve any construction activities for the RLE Project, and therefore no construction impacts would occur.

6.2 Union Pacific Railroad Alternative – Preferred Alignment

This section summarizes the potential construction impacts and mitigation measures for the Preferred Alignment and is organized by each of the environmental resources evaluated as they appear in the Final EIS.

6.2.1 Transportation

Construction activities would temporarily affect the physical capacity of roadways, sidewalks, and intersections subject to lane closures, narrowing, and detours. This would affect bus transportation, vehicular traffic, bicycle traffic, truck freight, pedestrians, on-street parking, and potentially access to off-street parking. CTA would prepare traffic management and maintenance of traffic plans that identify traffic detours and emergency response access routes. Increased congestion due to construction may temporarily increase travel times along roadways within the RLE project area. CTA would mitigate these impacts on a case-by-case basis, coordinating with IDOT, Cook County Department of Transportation and Highways (CCDoTH), CDOT, and local businesses, organizations, and residents to select the most appropriate mitigation measures for each situation. Likewise, contractors would adhere to local, state, and federal guidelines for maintaining pedestrian and Americans with Disabilities Act (ADA) access during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimally affect traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from northbound I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, intermittent, temporary shutdown of all traffic would be required at nighttime, per IDOT approval. Temporary shutdown of other traffic would occur at nighttime and low traffic volume intervals per IDOT approval. Proposed structure construction in the vicinity of the I-94/I-57 interchange would be sequenced to limit effect on I-57 traffic flow to the extent practicable per IDOT traffic management requirements. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

Freight railroad traffic adjacent and underneath the Preferred Alignment would experience minimal impacts during construction. The most notable impacts would be the need to stop railroad traffic during bridge erections over tracks on both the UPRR and CN/MED. Coordination would be needed with the UPRR, NS, CN, Metra, and NICTD/CSS & SBRR for work near, adjacent to, or on their property. Impacts to freight and passenger rail would be minimized by efforts such as sequencing construction of crossings and through coordination with the affected railroads, appropriate flagging, and scheduled track outages.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.2 Land Use and Economic Development

Construction activities would cause temporary impacts such as truck traffic, roadway detours, noise, vibration, and dust. Mitigation associated with truck traffic and roadway detours can be found in **Section 6.2.1** and **Section 6.2.4**; noise and vibration mitigation can be found in **Section 6.2.6**; dust mitigation can be found in **Section 6.2.12**. There could be short-term economic benefits due to jobs created by construction. Construction could be disruptive to businesses along the alignment, which would be an adverse impact.

To minimize the adverse impact, CTA would develop and implement a Construction Outreach and Coordination Plan. CTA would coordinate with communities, businesses, and aldermen's local ward offices to finalize and implement a Construction Outreach and Coordination Plan. The plan would include a Business Outreach Program to assist local businesses and residents affected by

construction. The plan would be tailored to business and community needs and would include a series of initiatives to minimize construction disruption to businesses and the surrounding community. Examples of these initiatives include a community calendar to inform residents of the construction schedule and avoid affecting special events or festivals, advertising campaigns, any provisions for additional parking during construction, and signage.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.3 Displacements and Relocation of Existing Uses

Displacements and relocations would occur when land and/or structures are needed to accommodate construction or the permanent footprint for the Preferred Alignment. Some of the parcels acquired may be used partially or primarily for staging, crane erection, site access, or storage of materials during construction; however, these impacts would last long enough that use of the parcels would prevent any use of the property, and in some cases buildings on site would need to be displaced. Therefore, these are considered permanent impacts, and not noted as temporary construction (easement) impacts. There would be parcels needed for easements related to construction equipment access and staging of materials; these affected parcels would be considered temporary construction easements. Temporary construction easements would not result in displacement or relocation impacts; therefore, construction impacts would not occur.

The *Displacements and Relocation of Existing Uses Technical Memorandum* (**Appendix K**) includes additional details on displacements and relocations.

6.2.4 Neighborhoods and Community Impacts

Community disruption would occur temporarily during construction for the Preferred Alignment. Most of the construction activities and staging would occur within street right-of-way, properties to be acquired as part of the project's permanent envelope, and potentially other nearby vacant parcels through the establishment of temporary construction easements. Construction activities would cause temporary impacts such as truck traffic, roadway detours, noise, vibration, and dust. Mitigation associated with truck traffic and roadway detours can be found in **Section 6.2.1** and **Section 6.2.4**; noise and vibration mitigation can be found in **Section 6.2.6**; dust mitigation can be found in **Section 6.2.12**.

Neighborhoods would experience visual impacts, noise, and dust during construction on an intermittent basis, but construction impacts on the Washington Heights, Roseland, and West Pullman communities would not be adverse through the use of best management practices (BMPs).

The 120th Street yard and shop would be located far enough from established communities so that no construction impacts would occur. Mitigation measures associated with visual impacts, noise, and dust can be found in the **Section 6.2.5**, **Section 6.2.6**, and **Section 6.2.12**, respectively.

Construction activities would result in additional truck traffic and temporary street closures throughout Roseland, Washington Heights, West Pullman, and Riverdale. Anticipated hauling routes would be coordinated throughout the RLE Project to minimize the number of trucks and equipment passing through sensitive areas of the community and would utilize highways and major arterials over local roads to the extent feasible and practicable. Religious facilities, schools, community centers, and other facilities near the alignment and stations would be subject to temporary adverse impacts associated with potential traffic detours; however, access would be maintained throughout the duration of the project. Detours would be provided to maintain access to adjacent properties during construction, and CTA would coordinate with Pace Suburban Bus Service so bus transit service would detour around roadway closures. Businesses around the alignment and station park & ride facilities could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Temporary roadway delays due to truck traffic and construction equipment would occur. CTA would provide early notification of construction activities and provision of temporary alternative access routes for the community and advertising programs to increase the visibility of affected businesses during construction. Contractors would perform work in a manner consistent with local ordinances.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.5 Visual and Aesthetic Conditions

Construction-related visual impacts would not be adverse and would include construction fencing, demolition of existing buildings, temporary walls, temporary street closures and related signage, temporary lighting or entrances, and/or shoring of concrete structures or existing viaducts.

Although construction-related visual impacts related to the Preferred Alignment would not be adverse, CTA would maintain as much existing vegetation as practical, including shielding of tree root zones to prevent construction damage to existing trees that would remain. Temporary construction impacts on neighborhoods would be minimized by limiting construction light infiltration into adjacent neighborhoods when nighttime work would be required. In addition, BMPs and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.6 Noise and Vibration

The Preferred Alignment would include the construction of elevated structures and at-grade tracks, stations, parking facilities at the stations, and roadway improvements. Construction noise levels for the Preferred Alignment are not expected to exceed the FTA construction noise criteria and this would be included in the mitigation measures and commitments for contractor adherence and compliance with local noise ordinances. Similarly, construction vibration levels for the Preferred Alignment are not expected to exceed the FTA construction criteria for vibration damage. Construction BMPs would be used to reduce noise and vibration, as described in the Draft EIS.

Contractors would employ noise-reducing construction BMPs. Contractors would keep all construction equipment exhaust mufflers in a state of good repair. As part of the construction specifications, contractors would be responsible for adhering to the noise control requirements of the project. To the extent possible, contractors would avoid idling of vehicles that are not in use on construction sites. CTA would limit nighttime construction near residences to the extent practical. Impact pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station and the vicinity from the I-94 ramp crossing to the east of CN/MED and south of 130th Street, as well as adjacent to sensitive noise and vibration receivers identified in the Final EIS such as residences, parks, churches, etc. CTA would inform community members about construction schedules and would coordinate in advance with aldermen and local officials.

Construction noise impacts are temporary and would not be adverse after mitigation. Construction impacts due to vibration would not occur.

6.2.7 Safety and Security

Contractors performing primary construction activities would need to have an approved Construction Safety and Security Plan in place before any construction work begins. Contractors would perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of CTA's *Safety and Security Management Plan* (CTA 2011) or CTA's other manuals and policies. Contractors would be contractually committed to take prompt and decisive corrective action on safety deficiencies identified at the work sites. For example, CTA would require contractors performing work on, above, or adjacent to the CTA rail system to follow CTA's Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System (Construction Safety Manual) to protect themselves, their employees, sub-contractors, CTA passengers, employees, and the public.

Emergency services would have access to construction sites at all times and would access construction sites in the same way as contractors, using side streets and recommended detours. An access road for the Metropolitan Water Reclamation District of Greater Chicago (MWRD) would be constructed prior to commencing operation on the new CTA tracks, if necessary, to maintain access to the MWRD facility. This roadway would also be used by emergency services.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.8 Historic and Cultural Resources

During project construction, the visual, noise, and vibration effects are not anticipated to affect the characteristics that qualify properties for inclusion on the National Registry of Historic Places. Construction noise and vibration levels for the Preferred Alignment with mitigation described in **Section 6.2.6** would not exceed FTA-recommended construction impact criteria. Contractors would be required to avoid impact pile-driving methods in the vicinity of the historic Roseland Pumping Station.

The Preferred Alignment would have no adverse construction effects on historic and cultural resources.

6.2.9 Hazardous Materials

Construction of the Preferred Alignment would include subsurface excavation, which would result in the generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. The results of the Phase II Environmental Site Assessments (ESAs) show the locations of where contaminated materials would be encountered and indicate how the materials should be handled. (See the *Hazardous Materials Technical Memorandum* **Appendix R.**) Hazardous materials typically used during construction, such as paints, solvents, fuels, and hydraulic fluids, could also be released accidentally during construction. In addition, there is the potential for encountering contaminated groundwater during construction.

Construction would require the demolition of existing structures that were likely constructed before 1978–1979. These structures may contain asbestos containing materials (ACM) and lead-based paint (LBP) that could result in a release of asbestos fibers and lead dust during construction. Prior to demolition of any structures, CTA would test for lead and asbestos and remediate, as necessary.

Maintenance and operation of railroad corridors typically include the use of fuel, oil, paints, herbicides, pesticides, creosote, and polynuclear aromatic hydrocarbons. Therefore, construction activities within or adjacent to existing railroad corridors may encounter these materials. There would be adverse construction-related impacts associated with the Preferred Alignment, but the impacts would be mitigated by implementing the BMPs and standard practices discussed below.

CTA would follow federal, state, and local laws and regulations regarding hazardous materials before and during construction. The following BMPs, at a minimum, would be implemented before and during construction to avoid and minimize the potential for impacts before and during construction:

- CTA would continue to conduct Phase II ESAs on properties identified as Recognized Environmental Conditions (RECs) in the site-specific Phase I ESAs before purchasing a property. The assessments would include characterization and evaluation of the potential for encountering hazardous materials and contaminated soil.
- CTA would prepare a Soil Management Plan for the RLE Project.
- CTA would manage soil by two categories, uncontaminated and contaminated soil. Uncontaminated soils meet all Tier 1 Soil Remediation Objectives (SROs) and Maximum Allowable Concentrations (MAC) levels that can be either reused on or off the RLE Project, disposed of at an approved clean construction or demolition debris (CCDD) facility, or used as fill material at an uncontaminated soil fill operation (35 IAC 1100, Subpart F). Contaminated soil exceeds the Tier 1 SROs and MAC for one or more contaminants. The soil is considered impacted, and any material removed as part of RLE Project construction is required to be disposed at a landfill permitted to accept the material.
- CTA would remove and dispose of creosote railroad ties that are encountered during construction at an approved disposal facility.
- CTA would require that any underground storage tanks (USTs) encountered during construction or previously identified during the Phase II ESAs be removed and disposed and any UST that was determined to be leaking would go through closure through the appropriate regulatory agency.
- CTA would close out any open leaking UST sites and obtain a No Further Remediation Letter from the appropriate regulatory agency.
- ACM, LBP, and hazardous material surveys of buildings or structures would be required before demolition, to identify any ACM, LBP, and hazardous materials, such as polychlorinated biphenyls or mercury-containing equipment. Any ACM, LBP, and hazardous materials identified would be abated and disposed of in accordance with federal, state, and local

regulations. Removal, abatement, and disposal of these materials would be completed by specialists that are trained and certified to conduct such activities.

The following specific and required plans would be developed before construction to further minimize or avoid the potential for hazardous material impacts:

- A Contaminated Material Management Plan that provides the procedures for identifying, characterizing, managing, storing, and disposing of contaminated soil and groundwater encountered during construction activities would be required. The plan would comply with all applicable federal and state cleanup standards and would cover the entire RLE Project, as it is assumed that all material has at least some level of contamination associated with it.
- If required a Spill Prevention, Control and Countermeasure (SPCC) Plan to address the use, storage, and disposal of materials such as asphalt, fuel, paint, solvents, and cleaning agents would be developed. The SPCC Plan would provide BMPs to limit the potential for accidental releases of potentially hazardous materials.
- Construction Stormwater Pollution Prevention Plans (SWPPP), which describe methods to prevent or minimize stormwater runoff from encountering contaminated soil or other hazardous materials, would be required.
- Health and Safety Plans for construction activities would be developed by the contractors and approved by CTA before starting any work. The Health and Safety Plans would identify potential contaminants of concern, required personal protective equipment and procedures, and emergency response procedures.

Construction-related impacts would not be adverse after the implementation of the BMPs and standard practices.

6.2.10 Wetlands

Temporary construction access for installation of a stormwater outlet to Kensington Marsh would necessitate temporary impacts on wetlands. Temporary impacts on the marsh would not exceed 0.19 acre. Temporary affected areas would be restored to pre-construction conditions and would be monitored for a period to be determined in coordination with MWRD. The U.S. Army Corps of Engineers (USACE) determined they do not object to utilization of Kensington Marsh, provided that coordinated BMPs are implemented. In addition to restoration, BMPs would include nine proposed detention ponds per 30 percent design, which would limit runoff volumes. If modifications are made during final design regarding the outflow or use of detention ponds to limit runoff volumes, then CTA would coordinate with the USACE for concurrence. Construction staging areas would be sited outside of wetlands as much as practicable, but if there were any temporary

impacts, those areas would be restored to wetlands after construction. If any staging area is proposed to be sited outside of the previously cleared area, then contractors would coordinate with CTA to review the proposed site for the presence of wetlands.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.11 Indirect and Cumulative Impacts

Construction impacts from the RLE Project were considered when combined with those of other past, present, and reasonably foreseeable projects. Construction impacts from the other potentially concurrent projects would not be likely to result in cumulative impacts when combined with RLE Project construction. Should construction of other nearby projects occur simultaneously with the RLE Project, CTA would coordinate construction activities among the projects to minimize disruption and use of resources.

6.2.12 Air Quality

Impacts on air quality during construction would be associated with temporary and localized emissions of particulate matter and exhaust from construction vehicles and equipment. Construction mitigation measures would include BMPs to reduce construction dust, to provide emissions controls on construction equipment, to use low-sulfur fuels, and to limit equipment operations such as excessive idling. In addition, the contractors performing primary construction activities would develop and implement a Dust Control Plan, which would address, in detail, how dust would be controlled at the construction site, the staging areas, and the access and egress routes. CTA would require contractors to follow Chicago's Clean Diesel Construction Ordinance, which would reduce the potential for construction-related air quality impacts. No additional construction mitigation measures would be required under the Preferred Alignment.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.13 Water Quality

Construction activities could increase erosion and sedimentation near construction areas. However, the potential impact on water quality would be minor due to the highly urbanized nature of the majority of the project corridor. With implementation of construction BMPs to mitigate potential erosion and sedimentation, there would be no adverse water quality impacts associated with the Preferred Alignment from construction. CTA would require contractors to conduct periodic monitoring of runoff water quality before discharge from the site and into the storm

drainage system, at a frequency to be determined during Stormwater Pollution Prevention Plan (SWPPP) development. Contractors would properly store hazardous materials to prevent contact with precipitation and runoff. Coverage would be obtained under a National Pollutant Discharge Elimination System (NPDES) Construction General Permit and the contractors would abide by all terms of the permit.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.14 Floodplains

There are no floodplains present in the RLE Project area of potential impact; therefore, there would be no impacts from the construction of the Preferred Alignment.

6.2.15 Vegetation and Wildlife Habitat

The Preferred Alignment would potentially have adverse impacts on vegetation and wildlife habitat during construction due to tree removal. The loss of trees would reduce migratory bird habitat. Migratory species passing through the Chicago area are likely to be adapted to urban habitats and are highly mobile, able to overcome industrial and land use barriers between the RLE Project and more natural areas. With the implementation of mitigation measures outlined in the Draft EIS and reiterated in mitigation below, potential adverse impacts would be minor. Construction contractors performing primary construction activities would time tree removal as much as possible to occur outside the migratory bird nesting season, which occurs generally from April 1–September 15 and as early as March 1 for some species. If tree removal must occur during the nesting season, two biological surveys will be conducted: one 15 days before and a second 72 hours before the construction that will remove or disturb suitable nesting habitat. This mitigation is likewise applicable for permanent impacts as described in the *Biological Resources Technical Memorandum* (**Appendix V**).

Construction impacts are temporary and would not be adverse after mitigation.

6.2.16 Threatened and Endangered Species

Temporary construction impacts on vegetation and wildlife habitat in the Preferred Alignment would potentially affect threatened and endangered species. However, construction impacts are unlikely with the inclusion of mitigation measures as concurred upon by U.S. Fish and Wildlife Service (northern long-eared bat) and Illinois Department of Natural Resources (wildlife associated with Lake Calumet and the osprey):

- For the protection of the northern long-eared bat, the CTA would require contractors to ensure that tree removal activities occur outside of the northern long-eared bat active season (April 1 through October 31).
- For the protection of wildlife associated with Lake Calumet, the CTA would require contractors to use fully shielded lighting fixtures that emit no light upward. Only "warm-white" or filtered LEDs (CCT < 3,000 K; S/P ratio <1.2) will be used to minimize blue emission. Only light the exact space with the amount (lumens) needed to meet industry safety requirements.
- For protection of the osprey, the CTA would require contractors to remove vertical structures, such as telephone poles, light poles, etc., outside of the osprey active season (April 1 and October 31). If these dates cannot be accommodated, a nesting survey will be conducted to determine if species are utilizing structures in the project area. Survey results will be coordinated with Illinois Department of Natural Resources.

Construction impacts are temporary and would not be adverse after mitigation.

6.2.17 Geology and Soils

Construction of the Preferred Alignment would not have adverse impacts on geologic or soil resources, because all of the features of the Preferred Alignment would be located primarily on or within existing transportation use areas such as streets and railroad corridors. No mitigation measures would be required.

6.2.18 Energy

Construction of the RLE Project would use energy for the production of the guideway and station components (including steel, cement, copper, and glass), and for the operation of construction equipment. The Draft EIS determined that short-term construction energy consumption of the UPRR Rail Alternative would amount to less than 1.2 percent of the total annual of Cook County energy consumption, as detailed in the *Energy Technical Memorandum* (**Appendix W**). Because construction energy use would be a very small fraction of energy use in the region, construction of the RLE Project would not have an adverse impact on regional energy consumption and no construction mitigation measures would be required. Construction energy use would be spread out over the duration of construction. No adverse energy impacts during construction would be anticipated under the Preferred Alignment, and no additional construction mitigation measures would be required.

6.2.19 Environmental Justice

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The communities adjacent to the RLE Project are entirely minority communities, some of which are also low-income. FTA and CTA have undertaken outreach and ongoing coordination with affected communities to identify EJ populations, discuss project impacts and benefits, and identify mitigation measures where relevant.

As identified in other sections of this Addendum, construction activities under the Preferred Alignment would result in temporary impacts such as noise, dust, truck traffic, lane closures and detours, traffic congestion, loss of access and parking, encountering contaminated materials, and visual impacts. With the use of appropriate construction-related mitigation measures summarized in this Addendum, construction impacts would not be adverse under the Preferred Alignment.

Considering the construction impacts, mitigation measures, and benefits, the permanent impact under the Preferred Alignment on EJ communities would not be appreciably more severe or greater in magnitude than similar effects elsewhere in CTA's rail system. The mitigation measures proposed are similar in nature to those for other CTA projects and have been proposed by CTA consistently in EJ and non-EJ populations alike. The project offers considerable benefits that would accrue to the resident EJ populations. Although the Preferred Alignment would still have adverse impacts on EJ populations, these impacts would not be disproportionately high and adverse. As such, no EJ-specific mitigation measures beyond those already identified earlier would be required.

6.2.20 Section 4(f) Evaluation

During construction of the Preferred Alignment, there would be temporary and minor construction activities within Wendell Smith Park for a short duration. CTA would need to temporarily close the northwest corner of Wendell Smith Park (approximately 0.1 acre) in order to construct the RLE Project. Based on the discussions between Chicago Park District and CTA about construction activities within the northwest corner of Wendell Smith Park, the Chicago Park District agrees that the construction activities would be considered a temporary occupancy under 23 CFR Part 774.13 that is so minimal as to not constitute a Section 4(f) use. The Chicago Park District would require a construction permit that requires full restoration, and the land would be fully restored to a condition at least as good as that which exists prior to the RLE Project.

Public use of the park would continue throughout construction of the project, and construction would not affect the attributes, features, or activities of the park. There would be no noise impacts

related to operation of the Preferred Alignment after construction of mitigation measures (noise barrier). Trees within the park property would need to be cut to allow for construction activities, and the removal of tress for construction would be mitigated with replacement trees. Appropriate construction BMPs would be followed to shield construction activities, allow use of the property by the general public, and minimize any safety risks. This includes but is not limited to providing a detour for the sidewalks within Wendell Smith Park.

Section 7 - Impacts Remaining after Mitigation

This section describes the construction impacts of the Preferred Alignment remaining after mitigating for impacts as described in **Section 6**.

7.1 No Build Alternative

The No Build Alternative would not involve any construction activities. Consistent with the findings of the Draft EIS, construction impacts would not occur under the No Build Alternative.

7.2 Union Pacific Railroad Alternative - Preferred Alignment

Construction activities for the Preferred Alignment would include BMPs and other mitigation measures. Consistent with the findings of the Draft EIS, there would be no adverse impacts during construction of the Preferred Alignment remaining after mitigation.

Section 8 - References Cited

Chicago Transit Authority (CTA), 2016. Chicago Red Line Extension Draft Environmental Impact Statement and Section 4(f) Evaluation. Accessed at https://www.transitchicago.com/rle/drafteis/. Accessed on January 20, 2021.

Appendix I

Construction Impacts Technical Memorandum

- Draft EIS Appendix I, Construction Impacts, July 2015
  - Appendix A, Construction Matrix
  - Appendix B, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Construction Impacts
Technical Memorandum

September 18, 2013
Updated July 29, 2015

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Table of Contents

Section 1 Summary 1-1

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1

3.1 Federal Regulations 3-1
3.2 State Regulations 3-1
3.3 Local Regulations 3-2
3.4 Impact Analysis Thresholds 3-2
3.5 Area of Potential Impact 3-3
3.6 Methods 3-4

Section 4 Affected Environment 4-1

4.1 Analyzed by Area of Potential Impact 4-1
4.2 Analyzed by Community Areas 4-1
4.3 Analyzed by Segments of Track 4-1

Section 5 Description of Construction 5-1

5.1 Constructability Assumptions for the Bus Rapid Transit Alternative 5-1
5.2 Constructability Assumptions for all Rail Alternatives 5-2
5.3 Construction Phasing and Segments 5-3
5.4 Potential Construction Staging Areas 5-11
5.5 Anticipated Construction Activities and Methods 5-12

Section 6 Impacts and Mitigations 6-1

6.1 Land Use and Economic Development 6-1
6.2 Displacements and Relocation of Existing Uses 6-2
6.3 Neighborhoods and Community Impacts 6-2
6.4 Parklands and Community Facilities 6-5
6.5 Visual and Aesthetic Conditions 6-9
6.6 Noise and Vibration 6-10
6.7 Safety and Security 6-11
6.8 Historic and Cultural Resources 6-12
6.9 Hazardous Materials 6-13
6.10 Air Quality 6-16
6.11 Water Resources 6-17
6.12 Vegetation and Wildlife Habitat 6-18

6.13 Energy 6-20
6.14 Environmental Justice....6-24
6.15 Transportation 6-24
6.16 Cumulative Impacts 6-33

Section 7 Impacts Remaining After Mitigation 7-1

Section 8 References Cited.... 8-1

Appendices

Appendix A – Construction Matrix

Appendix B - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives....2-2
Figure 4-1: Red Line Extension Alternatives - Construction Segment Map 4-3

Tables

Table 6-1: Estimated Energy Consumption from Construction Activities - Bus Rapid Transit Alternative 6-20
Table 6-2: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-21
Table 6-3: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - East Option....6-22
Table 6-4: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - West Option....6-23
Table 6-5: Estimated Energy Consumption from Construction Activities - Halsted Rail Alternative 6-23

Abbreviations

APE	area of potential effect
API	area of potential impact
BMP	best management practices
BRT	Bus Rapid Transit
BTU	British thermal units
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
CN	Canadian National Railroad
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
ESA	Environmental Site Assessment
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt Railroad
ILCS	Illinois Compiled Statutes
JULIE	Joint Utility Locating Information for Excavators
ME	Metra Electric District
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NB	northbound
NEPA	National Environmental Policy Act
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
NRHP	National Register of Historic Places
OEMC	Office of Emergency Management and Communications
RLE	Red Line Extension
ROW	right-of-way
UPRR	Union Pacific Railroad
USEPA	United States Environmental Protection Agency
WB	westbound

Section 1
Summary

This technical memorandum analyzes the potential construction impacts of the proposed Red Line Extension (RLE) Project. The analysis draws on the descriptions of construction-related impacts and conclusions described in the other RLE technical memoranda. Section 2 introduces the project, describes the project area, and identifies the alternatives being analyzed in the Environmental Impact Statement (EIS). Section 3 describes the methods of analysis for construction impacts, identifies federal, state and local regulations used in the analysis, identifies analysis thresholds, and describes the area of potential impact (API). Section 4 describes the affected environment. Section 5 describes constructability assumptions and construction segments and phasing. Section 6 describes potential impacts and mitigation measures for each of the RLE alternatives, and Section 7 addresses impacts after mitigation. All RLE alternatives are analyzed in this memorandum. The No Build Alternative would not involve any construction activities, so no construction impacts would occur. Because of the temporary nature of construction activities, the use of construction best management practices (BMP), and the mitigation methods proposed, the construction impacts from the build alternatives would not be adverse.

Updated July 29, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix B of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix B supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) proposes to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction and are therefore not included in the scope of the RLE Project.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft EIS focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- Bus Rapid Transit (BRT) Alternative
- Union Pacific Railroad (UPRR) Rail Alternative
    - Right-of-Way (ROW) Option
    - East Option
    - West Option
- Halsted Rail Alternative

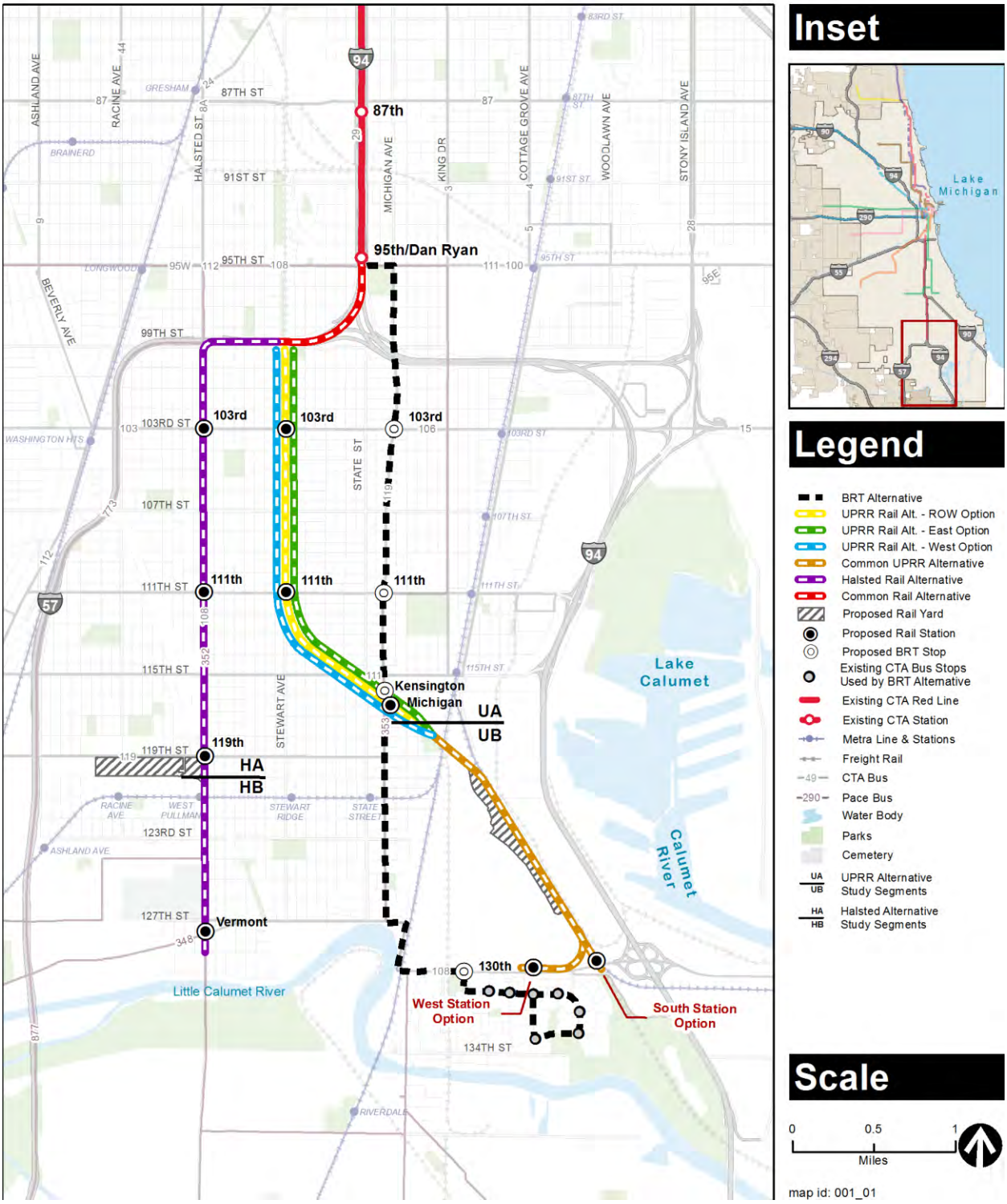

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line service. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning Fiscal Year 2010–2015 Transportation Improvement Program including the improvements to 95th Street Terminal. The Transportation Improvement Program projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal.

Section 3
Methods for Impact Evaluation

This section describes the process used to conduct a macro-level analysis of potential direct and cumulative impacts of construction activities associated with the proposed project. The regulatory framework for the analysis is presented in this section and the potential options to avoid, minimize, and mitigate adverse impacts are discussed in Section 6. Future NEPA analysis, if required for the RLE Project, may provide project-specific analysis of impacts and may provide specific details about the mitigation measures agreed upon by CTA and other project stakeholders.

3.1 Federal Regulations

The project-specific analysis of impacts for the RLE Project is documented in technical memoranda that cover the NEPA resources identified below. The regulatory frameworks relevant to each of these resources are documented in the respective memoranda. Part of the regulatory framework can be applied to construction impacts. The regulatory frameworks for the following resources apply, in part, and are included herein by reference:

- Land Use and Economic Development
- Displacements and Relocation of Existing Uses
- Neighborhood and Community Impacts
- Parklands and Community Facilities
- Visual and Aesthetic Conditions
- Noise and Vibration
- Safety and Security
- Historic and Cultural Resources
- Hazardous Materials
- Air Quality
- Water Resources
- Vegetation and Wildlife Habitat
- Energy
- Environmental Justice
- Transportation

3.2 State Regulations

In addition to the regulatory framework discussed in the other technical reports, the following state regulations apply to construction activities:

- Chapter 15 of 625 ILCS (Illinois Compiled Statutes) 5 - Illinois Vehicle Code includes statutes regarding the maximum size and weight of vehicles that can be lawfully operated throughout Illinois and the network of routes over which these vehicles may operate. Article I describes vehicle size, weight, and load. Article II describes enforcement and recording of weight limit violations. Article III explains special permitting needed to operate or move a vehicle or combination of vehicles of a size or weight of vehicle or load exceeding the maximum specified in this Act.

- The Illinois Department of Transportation's (IDOT) Standard Specifications for Road and Bridge Construction include provisions for dust control. Under these provisions, dust and

airborne dirt generated by construction activities would be controlled through dust control procedures or a specific Dust Control Plan, when warranted. In addition, IDOT has developed construction-related Special Provisions dealing with the use of cleaner diesel fuel, idling reduction requirements for construction equipment, and the installation of emission control devices on contractor vehicles.

- Section 5 of 415 ILCS 5 - (Illinois Environmental Protection Act) establishes the Illinois Pollution Control Board. This independent board determines, defines, and implements the environmental control standards applicable in the State of Illinois and may adopt rules and regulations in accordance with Title VII of the Environmental Protection Act. Title 35 of the Illinois Administrative Code contains the Board's substantive pollution control standards and regulations, and the Illinois Environmental Protection Agency's rules for administering the pollution control program. Part 1100, Clean Construction or Demolition Debris, is among the provisions of Title 35 that pertain to construction impacts.

3.3 Local Regulations

The following parts of the Municipal Code of Chicago codify various noise, water quality, air quality, and construction permitting requirements in the City of Chicago. (Regulatory requirements for parts of the project area outside the City of Chicago also apply.)

- Title 9, Chapter 9-72, Section 30 codifies authority to "determine and designate streets or parts of streets upon which the operation of trucks or other commercial vehicles shall be prohibited or upon which the operation of such vehicles shall be restricted by imposing limitations as to the weight of such vehicles." It also requires that "appropriate signs will be erected and maintained on such streets or parts of streets." Section 35 authorizes vehicle weight limitations computed under subsection (g) of Section 15-111 of the Illinois Vehicle Code. These limitations are similar to those imposed by the State of Illinois on "portions of streets and highways under local jurisdiction and will be authorized on designated arterial streets and industrial access routes". Sections 40, 50, and 60 set "the maximum width of any vehicle at 8 feet, the maximum height of any vehicle at 13 feet, 6 inches, the maximum length of single vehicles at 42 feet, and the maximum length of truck tractor and semi-trailer at 55 feet." Section 70 provides "permitting for a vehicle or combination of vehicles not in conformity with the size regulations of this chapter or the wheel and axle load and gross weight provisions of Section 15-111 of the Illinois Vehicle Code."
- Title 11, Chapter 11-16, Section 120 prohibits discharging "any prohibited wastes as defined by the Metropolitan Water Reclamation District of Greater Chicago (MWRD), the department of health or any other governmental agency, or any other material which the commissioner determines is likely to obstruct or stop the flow of wastewater in the public sewer system."

3.4 Impact Analysis Thresholds

NEPA does not set specific thresholds of significance for construction-related impacts; however, there are construction-related thresholds of significance for some of the NEPA resources included in this analysis. The analyses for various resources were used as the basis for the qualitative and

quantitative evaluations referenced in this document, and to determine the thresholds of significance for each resource.

For this analysis, the impact categories are as follows:

- **Beneficial** - Impact that positively affects the community.
- **No Impact** - No adverse or beneficial impact on the resource would result.
- **Not Adverse** - Would not result in a negative impact on the resource.
- **Not Substantially Adverse** - A negative impact on the resource would result, but it would not be severe, or it could be mitigated to minimize the impact.
- **Adverse** - Negative impact to the community that cannot be mitigated.

For the purpose of this EIS, a construction impact would occur if an impact threshold identified for any of the resources were to be exceeded during proposed construction activities.

3.5 Area of Potential Impact

Two kinds of construction impacts are considered in determining the API for a project. Direct impacts are caused by the proposed project and occur at the same time and place (40 Code of Federal Regulations [CFR] 1508.8). They are immediately related to project activities, and include impacts that result from construction, such as construction noise. Direct impacts occur at facilities and adjacent to the project. Cumulative impacts are those that result from the incremental impact of the proposed project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions (40 CFR 1508.67).

The API for direct impacts due to construction is based on the API for the NEPA resources analyzed. The largest geographic API for direct impacts due to construction is generally bounded on the north by 91st Street; on the south by 134th Street; on the east by Martin Luther King Drive (91st Street to 99th Street) and I-94 (99th Street to 134th Street); and on the west by Halsted Street (91st Street to 95th Street), Racine Avenue (95th Street to 99th Street), and I-57 (99th Street to 134th Street). Direct impacts due to construction and construction-related traffic in this area would primarily affect traffic patterns and land uses along roadways classified as principal and minor arterials, and major and minor collectors. In subsequent phases of the RLE Project, design activities would identify potential locations of material sources, contractor storage and staging areas, and other details that determine construction access routes.

The mid-size API applied for direct impacts due to construction is primarily relevant for non-motorized travel, including pedestrians and bicyclists. One-half mile is a generally accepted distance for travel by non-motorized means for analyses such as land use and economic development impacts, neighborhood and community impacts, and parklands and community facilities impacts. The mid-size API is defined as follows for the respective alternatives:

- **BRT Alternative** - Extends ½ mile on each side of the center of the proposed alignment, from the 95th Street Terminal to the station location at 130th Street and Eberhart Avenue.
- **UPRR Rail Alternative** - Extends ½ mile on each side of the center of the proposed alignments, from the 95th Street Terminal to the 130th Street station location.
- **Halsted Rail Alternative** - Extends ½ mile on each side of the center of the proposed alignment from the 95th Street Terminal to the 127th Street/Vermont Avenue station location.

The smallest APIs are based on unique characteristics of a specific site or sites. A micro-level API is used for analysis of construction impacts on site-specific environmental resources. An example of construction impacts on a site-specific environmental resource includes construction noise and vibration impacts on a historic site adjacent to the RLE alignment. When otherwise not specifically stated, the API for direct impacts due to construction noise includes parcels within 600 feet of the existing and proposed ROWs for the each of the alternatives (Chicago City Code Section 11-4-2835).

The area used to analyze cumulative impacts due to proposed construction activities is based on the RLE *Cumulative Impacts Technical Memorandum*. In general, the API for cumulative impacts includes broader geographic areas than those for direct impacts. The API for cumulative impacts reflects the distribution of the individual resources and is not limited to the project area; it consists instead of the boundaries specific to the resources, such as the construction limits for a transportation improvement, private development, or another public infrastructure project that is near enough to the project and being performed at the same time, potentially inducing cumulative impacts.

3.6 Methods

The analysis is based on considerations including potential construction methods, staging, and possible impacts on environmental resources. The impacts were identified during the analysis performed for each of the NEPA resources. Construction impacts are temporary in nature and are not relevant to the operation of transit services once the proposed project has been constructed. Impacts associated with post-construction activities were therefore not included in this analysis.

Section 4
Affected Environment

The affected environment for construction impacts depends on the geographic frame of reference used to analyze existing conditions for each of the environmental resources listed in Section 3. Analysis of the resources used the geographic frames of reference most relevant to each field of study: the API, community areas, or designated track segments.

4.1 Analyzed by Area of Potential Impact

Resource analyses that considered general environmental conditions or the built environment at a macro level were described by API. Section 6 provides additional information regarding APIs for each environmental resource. The resources framed by API include the following:

- Parklands and Community Facilities
- Noise and Vibration
- Safety and Security
- Hazardous Materials
- Air Quality
- Water Resources
- Energy
- Environmental Justice
- Transportation

4.2 Analyzed by Community Areas

The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single-family), industrial (both existing and vacant), transportation (including freight), and commercial development. The API for direct impacts due to RLE Project construction activities varies depending upon the API for each of the resources analyzed. Community areas were used for these resources based on the public's understanding of cultural context and community boundaries. These resources include the following:

- Land Use and Economic Development
- Displacements and Relocation of Existing Uses
- Neighborhood and Community Impacts
- Historic and Cultural Resources

4.3 Analyzed by Segments of Track

The API for some resources was subdivided into several track segments as shown in Figure 4-1 at the end of this section. Analysis by track segment frames the impact on resources that may be more susceptible to construction impacts, and accounts for a variety of construction techniques

that may apply only to specific segments of track. Resources described by track segment include the following:

- Visual and Aesthetic Conditions
- Vegetation and Wildlife Habitat

Track segments provide a framework for proposed sequencing and coordination with CTA operations and overall construction activities. The segments were also developed so that construction activity in a particular segment could function as a separate contract.

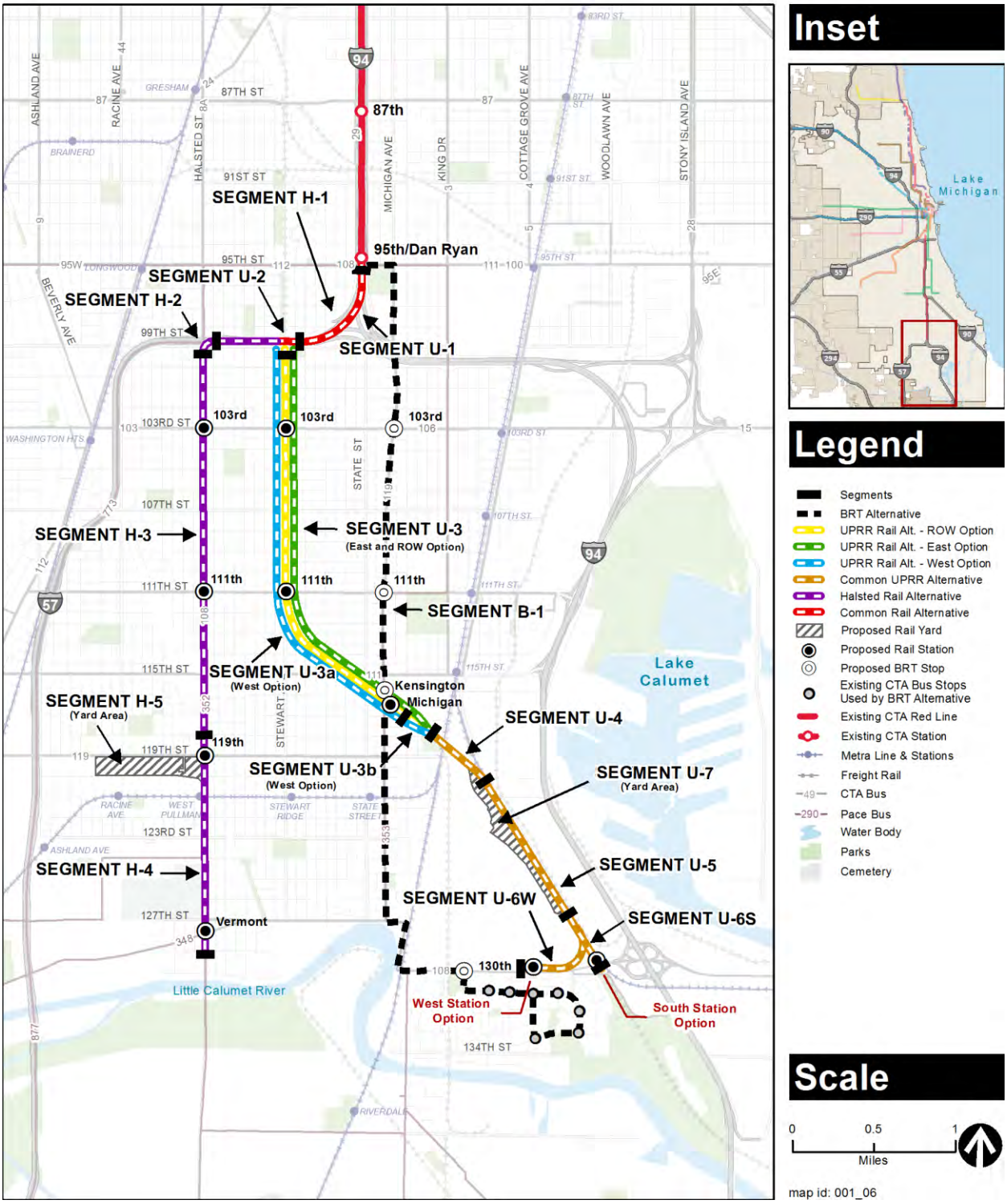

Figure 4-1: Red Line Extension Alternatives - Construction Segment Map

Section 5
Description of Construction

This section is based on and references the *Description of Construction and Phasing for Environmental Impact Statement Build Alternatives*. A summary of the report is provided below. For specific details regarding construction sequencing and phasing, please refer to Section 3 of the *Description of Construction and Phasing for Environmental Impact Statement Build Alternatives*. The report details the construction activities for the BRT Alternative, UPRR Rail Alternative, and Halsted Rail Alternative (the build alternatives).

The following are the major constructability, construction sequencing, and phasing assumptions. Phasing and construction segments may change due to refined engineering, available funding, and other factors later in the project implementation stage. Construction activities involving caisson construction, train rerouting, CTA/UPRR track shutdowns, trackwork, elevated structures, structural steel erection, and pile placement would only be associated with the rail alternatives.

5.1 Constructability Assumptions for the Bus Rapid Transit Alternative

The coordinated construction of infrastructure and stops is a key component of planning and design. Assumptions that affect design solutions include the following:

- The location of stops and parking facilities.
- The ability to perform construction so as to facilitate CTA operations, specifically near the 95th Street Terminal, UPRR operations, and adjacent vehicle traffic.

The following parameters have been assumed for the BRT Alternative:

- The methods of construction required along the proposed alignments would be conventional, using standard construction methods and materials including cast-in-place concrete and pre-cast concrete.
- Streets with adjacent alleys would be used for site access during construction.
- Space for storage and staging of construction materials, equipment, and temporary facilities would occur within the immediate construction zone or work area. Construction material storage and contractor yard areas would also be available at the proposed parking areas.
- Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval.
- Streets, along with adjacent alleys, would be closed temporarily or the number of travel lanes may be reduced for truck queuing and other construction activities.

5.2 Constructability Assumptions for all Rail Alternatives

The coordinated construction of infrastructure and stations is a key component of planning and design. Assumptions that affect design solutions include the following:

- The location of stations, parking facilities, and yard locations.
- The type of aerial structure. New construction of aerial structures would include foundation, columns, and decking. New construction of retained embankment structures would include foundation and two parallel reinforced concrete retaining walls with fill in between.
- The ability to construct facilities in phases to facilitate CTA operations, specifically near the 95th Street Terminal, the 95th Street substation, and 98th Street Yard and Shop.
- The ability to construct facilities in sequences and phases to facilitate UPRR operations.
- The location and size of proposed foundations and structural members that are potentially limited by clearance requirements (e.g., caisson size and depth, concrete pour access, piece weight and size, and similar).
- The ability to phase construction of structures to facilitate traffic operations on I-94 and 1-57.

The following parameters have been assumed for all rail build alternatives:

- The methods of construction required along the proposed alignments would be conventional, using standard construction methods and materials including cast-in-place concrete, pre-cast concrete, and structural steel.
- Streets with adjacent alleys would be used for site access during construction. New construction in and adjacent to the 95th Street Terminal would require track shutdowns in order to access the work site. To perform this work in an efficient manner, while maintaining reasonable service and access to the 98th Street Yard and Shop, it is anticipated that construction would be sequenced and phased to maintain some level of access to the 98th Street Yard and Shop.
- Space for storage and staging of construction materials, equipment, and temporary facilities would occur within the ROW. Construction material storage and contractor yard areas would be available at the proposed parking areas and/or maintenance yard. Construction access adjacent to the ROW could be required, especially during viaduct and station construction activities.
- During construction, access to work zones adjacent to the expressway would require shoulder and lane closures. For the superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would only occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Construction adjacent to or over railroads would require flagging operations and scheduled track closures.

- It is anticipated that streets crossed for station and viaduct construction would be closed temporarily and/or the number of travel lanes would only be reduced during heavy construction activities.

5.3 Construction Phasing and Segments

Phasing construction and performing construction in segments would allow CTA to limit the duration of impacts in a given area rather than potentially affecting resources and areas along the entire corridor simultaneously. Every attempt would be made to group as many construction activities as possible in a given area in order to maximize efficiency and limit the duration of the impact. Phasing and segmenting construction activities also allows for more focused analysis of potential impacts along a corridor that may have several different concentrations of resources and land uses. Construction activities would be grouped by type of work and location. The overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th Street Terminal, the 95th Street substation, and 98th Street Yard and Shop, and vehicular traffic on affected expressways and roadways. Figure 4-1 shows the alignments of all alternatives and the construction segments where applicable.

5.3.1 Bus Rapid Transit Alternative

The corridor for the BRT Alternative consists of one segment for the purposes of describing construction activities. Work activities would include new construction of the following:

- BRT shelters and amenities at BRT stops and park & ride facilities.
- Pavement markings, crosswalks, and signage.
- Americans with Disabilities Act-compliant ramps, bus pads, and lighting at BRT stops.
- A traffic signal at the 130th Street/Eberhart Avenue intersection.
- Transit signal priority detectors and the improvement of traffic signal controllers at existing signalized intersections.

Construction activities would also include utility relocation, sidewalk improvements, and the removal of on-street parking spaces at the proposed BRT stop locations.

All of the construction work activities may require temporary shutdown of traffic, and possible CTA and Pace bus rerouting, which would occur during non-peak and during low-traffic-volume intervals per IDOT and CDOT approval. Work zones along the BRT Alternative would likely require temporary lane closures. Work would be sequenced to minimize impacts and access to adjacent roadways and both commercial and residential buildings.

Additional buses associated with the BRT Alternative would be stored and maintained at other CTA bus garages, such as the 103rd Street Garage.

5.3.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative corridor is divided into seven segments for the purposes of describing construction activities.

A proposed 270-car yard and shop facility, to be located at 120th Street and Cottage Grove, is included as part of all three UPRR Rail Alternative options. The facility would be located on a combination of industrial and vacant land east of the CN/ME tracks and west of the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) tracks. The yard would be entirely at grade. A nominal amount of parking for employees would be included. A proposed substation within the 120th Street yard and shop west of the existing railroad tracks and east of the proposed facility may be included as part of the facility.

5.3.2.1 UPRR-ROW Segment U-1

Work activities in UPRR ROW Option Segment U-1 would include the following:

- New trackwork and signals to tie into the 95th Street Terminal.
- New construction of a retained fill structure south of the 95th Street Terminal.
- New construction of single-track, elevated structures over existing CTA tracks leading to the 98th Street Yard and Shop and over the existing CTA/southbound I-94 tunnel.
- New construction of dual-track, elevated structure through the I-94/I-57 interchange, across the westbound (WB) I-57 entrance ramp from northbound (NB) I-94, and along the I-57 corridor.
- Proposed structure construction would be sequenced to minimally affect traffic flow on the WB I-57 entrance ramp from NB I-94. For superstructure erection over the expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval.

It may be necessary to relocate trackwork leading from the 95th Street Terminal to the existing 98th Street Yard and Shop to allow construction of proposed substructure within the CTA ROW. Tying proposed trackwork and structure into existing trackwork at the 95th Street Terminal would be sequenced to provide rail car access to the 98th Street Yard and Shop. Proposed structure construction would be sequenced to maintain operating routes from the 95th Street Terminal to the 98th Street Yard and Shop, as well as maintain traffic flow on I-94 through the tunnel.

Superstructure erection over the CTA tracks, I-94, the WB I-57 entrance ramp from NB I-94, and Wentworth Avenue would require temporary shutdown of expressway traffic and CTA non-revenue operations to the yard. Temporary shutdown of traffic would occur during non-peak and low-traffic-volume intervals per IDOT and CDOT approval. CTA non-revenue operations

would be shut down during off-peak hours or weekends. Work would be sequenced to minimize impacts on traffic flow on the I-57/I-94 interchange, as well as in the I-57 corridor. Work zones adjacent to the expressway would require shoulder closures and possibly lane closures.

5.3.2.2 UPRR-ROW Segment U-2

Work activities in UPRR ROW Option Segment U-2 would include new construction of dual-track, elevated structure consisting of multiple types of superstructure and substructure spanning I-57 and within the UPRR corridor.

Work would be sequenced to minimize impacts on traffic flow on I-57. Work zones adjacent to the expressway would require temporary shoulder and lane closures. Superstructure erection over I-57 would require temporary shutdown of NB traffic.

5.3.2.3 UPRR-ROW Segment U-3

Work activities in UPRR ROW Option Segment U-3 would include the following:

- New construction of an elevated structure within the UPRR corridor.
- Construction of new stations at 103rd Street, 111th Street, and Michigan Avenue.
- Construction of two new substations.
- Construction of surface parking lots and bus turnarounds at the proposed 103rd and 111th Street stations.
- Construction of a parking garage and bus turnaround at the proposed Michigan Avenue station.

All existing structures and underground utilities would be identified. All existing utilities would be protected or relocated.

5.3.2.4 UPRR-ROW Segment U-4

Work activities in UPRR ROW Option Segment U-4 would include the following:

- New construction of dual track and an elevated structure within the UPRR corridor, branching off and running along the east side of the corridor over the CN/ME tracks.
- New construction of an elevated structure to the 120th Street yard and shop tie-in.
- New construction of a retained embankment structure to carry the elevated structure to grade.

Construction at the CN/ME crossing would be phased to minimize impacts on CN and Metra operations. Construction over and adjacent to the railroads would require flagging operations and potential limited track closures.

5.3.2.5 UPRR-ROW Segment U-5

Work activities in UPRR ROW Option Segment U-5 would include the new construction of track roadbed at grade and the construction of the MWRD access road and bridge over the proposed CTA tracks and the NICTD/CSS & SBRR crossing.

5.3.2.6 UPRR-ROW Segment U-6S

There are two station options for the 130th Street Station: a South Station Option (U-6S) and a West Station Option (U-6W).

Work activities in UPRR ROW Option Segment U-6S would include the following new construction:

- Track roadbed
- The 130th Street station including parking lots and multi-story garage
- Areas for land development, bus bays, and road access for the 130th Street station
- The MWRD access road to the 130th Street station
- One new substation

Coordination with MWRD would be necessary to maintain current operations during new track roadbed construction and during the new road access for the 130th Street station. If necessary, construction would be sequenced to construct the MWRD access road to the west of the station first, allowing MWRD facilities to continue operation. Coordination with the NICTD/CSS & SBRR would be necessary because construction over and adjacent to the railroads would require flagging operations and scheduled track closures.

5.3.2.7 UPRR ROW Segment U-6W

Work activities in UPRR ROW Option Segment U-6W would be similar to those in U-6S with the addition of crosswalks, a signalized intersection at 130th Street and Evans Avenue, and a bridge, in addition to a road at 130th Street.

Coordination with MWRD would be necessary to maintain operations during construction of the new access road for the 130th Street station. If necessary, construction would be sequenced to construct the proposed MWRD access road and bridge crossing the proposed CTA tracks first, thus allowing MWRD facilities to continue operation. Coordination with the NICTD/CSS & SBRR would be necessary because construction over and adjacent to the railroads would require flagging operations and scheduled track closures.

5.3.2.8 UPRR ROW Segment U-7

Construction for the 120th Street yard and shop would be scheduled and coordinated to maintain operations at the MWRD facilities. Work would be sequenced to minimize impacts on adjacent

roadways and both commercial and residential buildings. Construction activities associated with the 120th Street yard and shop would include the following:

- New construction of dual track and elevated structure, new yard and track, shop building, shop access road, and parking.
- Potential construction of a new substation.

5.3.3 Union Pacific Railroad Rail Alternative - East Option

The corridor is divided into seven segments for the purposes of describing construction activities.

5.3.3.1 UPRR East Option Segments U-1 and U-2

Construction and phasing activities would be the same as for the UPRR ROW Option.

Work activities would be sequenced to minimize impacts on traffic flow on I-57 and UPRR operations. Work zones adjacent to the expressway would require temporary shoulder and lane closures. Superstructure erection over I-57 would require temporary shutdown of NB traffic. Construction adjacent to railroads would require flagging operations and scheduled track closures.

5.3.3.2 UPRR East Option Segment U-3

Work activities in UPRR East Option Segment U-3 would include the following:

- Demolition of existing buildings and structures in the proposed ROW where necessary.
- New construction of dual-track, elevated structure consisting of multiple types of superstructure and substructure along the east side of the UPRR corridor.
- New construction of stations at 103rd Street, 111th Street, and Michigan Avenue.
- New construction of surface parking lots and a bus turnaround at 103rd Street station and 111th Street station and new construction of a parking garage and bus turnaround at the Michigan Avenue Station.
- Construction of two new substations.

Work would be sequenced along the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Possible signaling would be needed to replace existing signaling during construction of viaducts for the following at-grade UPRR crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Michigan Avenue, and State Street. All existing structures and underground utilities would be identified, protected, or relocated as described for UPRR ROW Segment U-3.

5.3.3.3 UPRR East Option Segment U-4

Work activities in UPRR East Option Segment U-4 would include the following:

- Demolition of existing building and structures in the proposed ROW where necessary.
- New construction of dual-track, elevated structure along the east side of the UPRR corridor and over the CN/ME tracks.
- New construction of UPRR yard and shop track tie-in.

5.3.3.4 UPRR East Option Segments U-5, U-6S, U-6W, and U-7

The phasing activities would be the same as those described for the UPRR ROW Segments U-5, U-6S, U-6W, and U-7.

5.3.4 Union Pacific Railroad Rail Alternative - West Option

The corridor is divided into seven segments for the purposes of describing construction activities.

5.3.4.1 UPRR West Option Segments U-1 and U-2

Construction and phasing activities for the UPRR West Option would be the same as for the UPRR ROW Option.

Work activities in zones adjacent to the expressway and Eggleston Avenue may require temporary shoulder and lane closures. Superstructure erection over I-57 and the UPRR corridor would require temporary shutdown of NB traffic and UPRR operations. Construction adjacent and across railroads would require flagging operations and scheduled track closures.

5.3.4.2 UPRR West Option Segment U-3a

This portion of the alignment would extend from the end of the horizontal curve at the UPRR crossing to the Prairie Street crossing. Work activities in UPRR West Option Segment U-3a would include the following:

- Demolition of existing buildings and structures in the proposed ROW.
- New construction of dual track and elevated structure along the west side of the UPRR corridor.
- New construction of stations at 103rd Street, 111th Street, and Michigan Avenue.
- New construction of surface parking lots and bus turnarounds at the 103rd Street station and the 111th Street station and new construction of a parking garage and bus turnaround at the Michigan Avenue station.

Work would be sequenced along the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Signaling may be needed to replace existing signaling during construction of viaducts for

the following at-grade UPRR crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Michigan Avenue, and State Street.

5.3.4.3 UPRR West Option Segment U-3b

This portion of the alignment would extend from the Prairie Street crossing to the CN/ME crossing. Work activities in UPRR West Option Segment U-3b would include the following:

- New construction of dual-track, elevated structure along the east and west side of the UPRR corridor, as well as across the UPRR tracks, would consist of multiple types of super- and substructure spanning along and across the UPRR corridor and Prairie Avenue.

Work would be sequenced along and across the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Work zones adjacent to Prairie Avenue may require lane closures and may cause temporary shutdown of all traffic.

5.3.4.4 UPRR West Option Segment U-4

Work in UPRR West Option Segment U-4 would include the following:

- Demolition of existing buildings and structures in the proposed ROW as necessary.
- New construction of dual-track, elevated structure along the east side of the UPRR corridor and over the CN/ME tracks.
- New construction of the 120th Street yard and shop track tie-in.
- New construction of retained embankment structure to carry elevated structure to grade.

5.3.4.5 UPRR West Option Segment U-5

Construction and phasing activities in U-5 would be the same as those described for UPRR ROW Segment U-5.

5.3.4.6 UPRR West Option Segments U-6S, U-6W, and U-7

Construction and phasing activities in U-6S, U-6W, and U-7 would be the same as those described for the UPRR ROW Option.

5.3.5 Halsted Rail Alternative

The corridor is divided into five segments for the purposes of describing construction activities.

The proposed 119th Street yard and shop would be located south of the 119th Street station and north of the Vermont Avenue station west of Halsted Street. The parcel on which the yard would be constructed is west of the 119th Street park & ride location. Track height would transition from elevated at station height to at grade between Halsted Street and Morgan Street, through the park & ride facility. The yard would be entirely at grade. A nominal amount of parking for employees would be included at the yard.

5.3.5.1 Halsted Segment H-1

Work activities in H-1 would include the following:

- New trackwork and signals to tie into the 95th Street Terminal.
- New construction of retained fill structure south of the 95th Street Terminal.
- New construction of single-track, elevated structures over the existing CTA tracks leading to the 98th Street Yard and Shop and over the existing CTA/southbound I-94 tunnel.
- New construction of dual-track, elevated structure through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and along the I-57 corridor.
- Proposed structure construction would be sequenced to minimally affect traffic flow on the WB I-57 entrance ramp from NB I-94. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and low-traffic-volume intervals per IDOT and CDOT approval.

The phasing activities would be the same as for UPRR Rail Segment U-1.

5.3.5.2 Halsted Segment H-2

Work activities in H-2 would include new construction of dual track and elevated structures consisting of multiple types of super- and substructure spanning along and across I-57 and across Halsted Street. Work zones adjacent to and across the expressway may require shoulder and lane closures. Superstructure erection would require temporary shutdown of NB traffic on I-57 and at the intersection of 99th Street and Halsted Street.

5.3.5.3 Halsted Segment H-3

Work activities in H-3 would include the following new construction:

- Dual track and an elevated structure consisting of multiple types of super- and substructure spanning along Halsted Street
- Stations at 103rd Street and 111th Street
- A surface parking lot and bus turnaround at the 103rd Street station
- A surface parking lot at the 111th Street station
- Two new substations

Work would be phased to minimize traffic impacts on Halsted Street and adjoining streets. The construction of the elevated structure would require lane and street closures. In order to increase roadway capacity, parking along Halsted Street would potentially be eliminated during construction. Superstructure erection would require temporary shutdown of all traffic along segments of Halsted Street during off-peak or weekend hours. Traffic would be detoured to the

next major north/south roadway to minimize traffic impacts. Detour routes for Halsted Street would be identified in a Maintenance of Traffic Plan as part of final engineering.

5.3.5.4 Halsted Segment H-4

Work activities in H-4 would include the following new construction:

- Dual track and an elevated structure consisting of multiple types of super- and substructure spanning along Halsted Street
- Stations at 119th Street and Vermont Avenue
- A surface parking lot and bus turnaround at the 119th Street station
- Both a surface parking lot and a parking garage, as well as bus bays, at the Vermont Avenue station
- Two new substations
- Three tracks and an elevated structure south of the Vermont Avenue station
- A surface parking lot at the 111th Street station

The phasing activities for Halsted Segment H-4 would be the same as for Segment H-3.

5.3.5.5 Halsted Segment H-5

For analysis of construction, the 119th Street yard and shop has been separated from the Halsted Rail segments. Work would be sequenced to minimize impacts on adjacent roadways and buildings. Work activities for the 119th Street yard and shop would include the demolition of existing buildings and structures in the proposed ROW where necessary and construction of a new yard, track shop building, shop road access, and parking.

5.4 Potential Construction Staging Areas

Construction staging would be within the proposed ROW or within construction easements of stations/stops and alternative alignments. The following provides a general description of the types of properties that may be used for construction staging in order to minimize impacts:

- Parcels to be acquired by CTA for the implementation of a given alternative would be used as staging areas. Whole parcels or groups of parcels may be acquired and used for the RLE Project. After construction, residual property may be sold.
- Nearby parking lots may be used through the establishment of temporary construction easements.
- Abandoned adjacent parcels may be used through the establishment of temporary construction easements.

In the event of limited available space adjacent to the construction site, off-site CTA, municipal, or privately owned storage yards may need to be provided for the contractor's use. This would allow secure storage of an equipment fleet or permanent materials needing large storage or assembly areas.

5.5 Anticipated Construction Activities and Methods

5.5.1 Basic Construction Activities and Methods

A summary of potential construction activities and methods for the build alternatives is presented in the Construction Matrix within Appendix A. The intent of the Construction Matrix is to provide a general level of construction activity that may occur with each alternative. The Construction Matrix identifies a range of activities based on currently available information and is not intended to be used for scheduling construction, nor is it intended to be used for estimating construction cost.

Terms used to describe quantities of construction materials and durations of construction activities are based on the *Description of Construction and Phasing for Environmental Impact Statement Build Alternatives*. Some, but not all, of these terms are defined below.

- Duration (Months) - Estimated number of months a work activity would be required. Activities would not be sequential, except for advance work if required in the segment. Construction phasing and the need to maintain transit operations would affect the duration of construction activities.

- Construction Equipment - Possible types of construction equipment that may be used for a particular duration within an activity.

- Soil (cubic yards) - Potential amount of cubic yards of earthwork that may be excavated or removed. Concrete removed is included in the soil quantity. Soil removed to install structural caissons and foundations is included in this category.

- Concrete (cubic yards) - Represents the potential quantity of concrete to be placed, including that for caissons and concrete repair areas. Concrete at stations/stops includes concrete used for buildings and platforms. Concrete for track support is included under column concrete in the Elevated Structure activity.

- Structural Steel (pounds) - Represents the potential quantity of new structural steel weighed in pounds. Structural steel at stations includes steel used for buildings and platforms. Structural steel for track support is included in the Elevated Steel Structure activity.

- Average Truck Trips Per Workday - Estimation of the average number of truck trips per workday for an activity. The activity does not include smaller vehicles used for administrative and management purposes or vehicles used by workers to commute to and from the work site.

- Average Workers Per Workday - Estimation of the average number of workers for an activity per workday.

5.5.2 Preconstruction Activities

Contractor preconstruction activities would include development of construction schedules, quality plan, procurement schedules, and would include the following activities as well:

- Process plans would be developed for coordination of work activities to match construction constraints and site access.
- Existing conditions would be verified for design and construction interface criteria. Survey controls would be established for verification of site, existing conditions, and utility conflict/relocation information.
- Utility protection/relocation information would be coordinated and verified in sequence of scheduled construction far in advance of the early construction activities.
- Community notifications would be initiated by the CTA and the Contractor, as early as possible.
- Demolition and building permits would be obtained at the earliest opportunity. City of Chicago Office of Underground Coordination requirements (e.g., shoring designs, support of excavation, caisson procedures) would be met and approved for permits.
- Any special trackwork/signal work/interlocking requirements would be coordinated or procured by the CTA in advance of project procurement and in sequence with any schedule requirements.
- Compliance with all CTA Quality Control and the International Organization for Standardization (ISO) requirements.

5.5.3 Traffic Rerouting

During construction, vehicles, pedestrians, buses, and trains may need to be rerouted around the construction sites. Rerouting of traffic may be done using detours and/or complete street closures. The street closures could include main streets and side streets, as well as alleys and access points. Station and viaduct construction activities, for the rail construction, would be sequenced around street and alley closures. Temporary traffic lanes, temporary access points, or staged construction would be used. The following activities would be part of the traffic rerouting activities:

- Construction signage and temporary traffic barriers, accessibility adjustment (temporary curb ramps).
- Temporary reductions in number of thru-traffic lanes in each direction from two to one, if feasible.
- Detours/complete street closures, including alleys and access points.
- Temporary traffic lanes.

- Construction vehicle access points within and/or adjacent to the ROW.
- Business, residential, and pedestrian impacts including limited parking or parking bans.
- Advance trackwork and signalization to facilitate train rerouting.
- Alternate bus routes and temporary CTA outages may be required during construction of the RLE Project at the 95th Street Terminal.
    - CTA track shutdowns during nights or weekends may be required.
    - Trains would operate on one or two tracks through the construction zones. Flagmen would be required to notify trains of construction activities.

5.5.4 Demolition

Demolition of existing buildings and structures in the proposed ROW would be required. The demolition process would result in increased noise, debris, roadway closures, and construction vehicle access. Work would be performed within parameters of local ordinances for construction activities. In general, pedestrian and vehicular traffic would not be allowed into the area of demolition.

The demolition process would include concrete removal, which would require construction workers to saw cut, jackhammer, knock out the existing concrete, cut or remove the existing reinforcement, or complete demolition of the concrete structures.

To remove foundations or streets, or to relocate existing utilities, the contractor would have to excavate with bulldozers, bobcats, or backhoes to dig and remove the earth. The material to be disposed would be placed in dump trucks and hauled offsite.

Construction vehicles would be accessing the construction site on a regular basis and would require special hauling routes to remove the debris and deliver materials and equipment to the site. The routes may require temporary shutdown of streets, complete closures, or rerouting of traffic. There is ample street capacity and land available for construction staging in the project area. While specific construction routes have not been finalized for the project, it is anticipated that impacts would either be avoided or readily mitigated. This conclusion will be confirmed after designation of a NEPA Preferred Alternative and completion of a detailed construction management plan including routing. Depending on the type of material that would be removed, special handling of waste may be necessary.

5.5.5 Temporary Shoring

During demolition and excavation, temporary shoring may be required to protect adjacent property and/or tracks. The shoring would consist of steel sheet piling that would be driven into the ground with a vibratory pile driver. The rig may be placed within the construction zone or outside the ROW, depending on space limitations and access points. The temporary shoring may

require the use of tiebacks, which are long rods that would be drilled through the sheet piling, embedded into sound rock or other approved materials, and then grouted into place.

5.5.6 Foundations

Due to the variety of structures, including CTA elevated structure, stations/stops, and parking garages, there would be a variety of foundations on the RLE Project. Foundations could consist of concrete spread footings, steel pile foundations, or concrete caisson foundations with caisson caps to transition to exposed columns. The type of foundation depends on the site conditions and structure type.

All types of spread or shallow type foundations would require excavation and removal of earth to form the concrete footings. Bulldozers, bobcats, or backhoes would be used to dig and remove the earth. The earth may be placed in dump trucks and hauled off site or stored for use on the construction site for backfill.

Large cranes with pile-driving leads that help guide the piles into position would be used for the installation of a pile foundation. A diesel hammer would drive the piles into the ground by impact. Pile shoes or pile tips added to the end of a pile or a pre-drilled hole supported by a steel casing could be used to aid the pile installation process.

Caisson construction would also be performed with a crane-mounted drilling rig. An auger of the design diameter would be drilled into the ground and the spoils would be piled nearby for removal. As the auger advances, extensions are added to the supporting shaft. Often, the drilled hole is fitted with a lining when unstable soils are encountered. A pre-formed reinforcement cage would be installed and concrete would be placed to form the caisson support.

5.5.7 Concrete Placement

Determination of the concrete plant location, based on availability of the required concrete mix, is an important part of the construction logistics and process plan. The plant would supply and deliver the concrete to the site using concrete trucks. Temporary street closures and truck routes may need to be established to access the construction site. Coordination of multiple trucks may be necessary for large pours and may require special access and scheduling. The contractor may elect to create an on-site ready-mix plant to supply the concrete if there is ample on-site space and the nearest concrete plant is far away.

Before the concrete could be poured, all necessary reinforcement and concrete forms would need to be in place. The reinforcement would be delivered on large flatbed trucks and would be stored on site in bundles. The formwork could consist of large steel panels or plywood that holds the wet concrete in place. The formwork would be braced or temporarily supported to maintain the weight of the concrete until it cured.

The truck would then be positioned at the location required for the pour. If the truck could not access the location of the pour, the concrete would need to be placed by pump, conveyer system, or similar measures. It may need curing for a week before forms could be removed.

5.5.8 Structural Steel Erection

The proposed improvements would require standard steel erection to assemble the structures. Structural steel could consist of plates, angles, girders, beams, cross frames, deck plates, rails, or similar. The steel could vary in size, length, weight, and use.

The steel members would be delivered to the site on large flatbed trucks or semi-trucks and could require special hauling permits. The construction zone would require special access areas so that the steel could be delivered, assembled on site, stored, or moved into position. Cranes would be used to pick the pieces off the trucks, move the material overhead and place them into position.

5.5.9 Methods for Protecting Utilities and Adjacent Structures

Methods for protecting nearby utilities and adjacent structures would include standard industry practice techniques. These techniques include coordinating with existing utilities and field verifying locations. The Office of Underground Coordination requires a review of foundations that are within two feet of the property line. Dig requests must be submitted to Chicago DIGGER (Chicago Utility Alert Network) for areas within the limits of the City of Chicago and Joint Utility Locating Information for Excavators (JULIE) for areas outside the City of Chicago limits before any excavation can begin.

Section 6
Impacts and Mitigations

This section summarizes the potential construction impacts for each of the build alternatives, as well as the general mitigation measures. All RLE alternatives are analyzed in this memorandum; however, the No Build Alternative does not involve any construction activities, therefore, no construction impacts would occur, and no further discussion of the No Build Alternative is included here.

6.1 Land Use and Economic Development

The following is a summary of construction impacts described in the *Land Use and Economic Development Technical Memorandum*. The impact findings are highlighted here, while detailed information on potential mitigation may be found in the resource-specific technical memorandum. The API for the land use and economic development evaluation includes parcels directly adjacent to project alternative centerlines and the area within a ½-mile radius of stations.

6.1.1 Bus Rapid Transit Alternative

There would be isolated disruptions to business and residential access during construction at parcels directly adjacent to the proposed bus stops and park & ride lots. Due to the isolated site improvements and short construction timeframe, the construction impacts of the BRT Alternative would be considered not substantially adverse on existing land uses. Due to construction jobs creation (refer to the *Land Use and Economic Development Technical Memorandum* for an estimate of the number of short-term jobs), the construction impacts of the BRT Alternative would be considered beneficial for economic development.

6.1.2 Union Pacific Railroad Rail Alternative

The potential construction impacts and mitigation would be similar for the UPRR Rail Alternative options. For the 120th Street yard and shop, the CTA would coordinate construction activities with the MWRD to avoid conflicts with utility operations.

Construction would take up to 5 years and would cause temporary impacts on adjacent residential neighborhoods due to noise, fugitive dust, truck traffic, and roadway detours. Mitigation methods would include daytime construction and soundproofing for sensitive resources, if necessary. Based on mitigation and the beneficial impacts of the project, the land use impacts from construction would be considered not substantially adverse.

Construction would cause temporary impacts on adjacent commercial uses on Michigan Avenue due to noise, fugitive dust, truck traffic, and roadway detours. Mitigation would include daytime construction, commercial signage during detours, and special advertising for businesses within the ½-mile API. There would be short-term beneficial impacts from construction jobs. It is estimated that during mobilization and peak construction, up to 2,660 full-time staff (per the *Land Use and Economic Development Technical Memorandum*) would be devoted to construction of the UPRR Rail Alternative. Based on mitigation and the beneficial impacts of the project, the

overall economic development impact from construction of the UPRR Rail Alternative would be considered beneficial.

6.1.3 Halsted Rail Alternative

Construction would take up to 5 years and would cause temporary impacts on residential areas on or adjacent to Halsted Street due to noise, fugitive dust, truck traffic, and roadway detours. Mitigation methods would include daytime construction and soundproofing for sensitive resources, if necessary. Based on mitigation and the beneficial impacts of the project, the land use impacts from construction would be considered not substantially adverse.

Construction would cause temporary impacts on commercial uses along Halsted Street due to noise, fugitive dust, truck traffic, and roadway detours. Construction activities would occur throughout the Halsted Street corridor within the median and adjacent travel lane, and would affect travel lane patterns and on-street parking. Due to the nature and size of the businesses along Halsted Street, some small businesses may not be able to maintain their customer base and may lose business from construction-related disruptions. Mitigation methods would include daytime construction, commercial signage during detours, and special advertising for businesses within the ½-mile API. As it would be for the UPRR Rail Alternative, it is estimated that up to 2,660 full-time staff (per the *Land Use and Economic Development Technical Memorandum*) would be devoted to construction of the Halsted Rail Alternative. Based on mitigation and the beneficial impacts of the project, the overall economic development impact from construction of the Halsted Rail Alternative would be considered beneficial.

6.2 Displacements and Relocation of Existing Uses

There would be no displacement or relocation impacts associated with the construction phase for the build alternatives. Each of the proposed alternatives requiring permanent ROW would result in land acquisitions and displacements. The BRT Alternative would affect 52 parcels and 3 buildings. The UPRR Rail Alternative ROW Option would affect 133 parcels and 24 buildings. The UPRR Rail Alternative East Option would affect 256 parcels and 112 buildings. The UPRR Rail Alternative West Option would affect 193 parcels and 53 buildings. The Halsted Rail Alternative would affect 108 parcels and 38 buildings. Please refer to the *Displacements and Relocation of Existing Uses Technical Memorandum* for additional information on displacements and relocations. Temporary construction easements would not result in displacements or relocations.

6.3 Neighborhoods and Community Impacts

The following is a summary of construction impacts described in the *Neighborhood and Community Impacts Technical Memorandum*. The impact findings are highlighted here, while detailed information on potential mitigation may be found in the resource-specific technical memorandum. The API includes the neighborhood and community areas within approximately ½ mile of the proposed build alternative alignments. Accordingly, the affected environment includes the Village of Calumet Park and the Chicago neighborhoods of Washington Heights, Roseland, Morgan Park, West Pullman, Pullman, and Riverdale.

6.3.1 Bus Rapid Transit Alternative

Construction of the BRT Alternative would involve placement of new bus shelters, lighting, park & ride facilities, crosswalks, sidewalk improvements, ramps, traffic signals, and transit signal priority infrastructure along the proposed route. Work would occur largely within the street; however, some off-street staging on adjacent publicly owned and vacant lots may occur through the establishment of temporary construction easements. Some temporary road closures would be needed, and would be scheduled at night and other low-traffic times to the extent practicable and per IDOT and/or CDOT approval.

The parking structure at the Kensington Avenue stop would require more intensive construction, but would be phased to minimize disruption. Temporary dust, noise, and visual impacts would occur, as well as minor intermittent traffic delays near the construction site. Adjacent residents would experience these temporary impacts during construction, but impacts on the West Pullman community would be mitigated through best management practices.

6.3.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option

Community disruption would occur during construction for the UPRR Rail Alternative. The 120th Street yard and shop would be located far enough from established communities such that no construction impacts would occur.

Most of the construction activities and staging would occur within street ROW, properties acquired as part of the project's permanent envelope, and potentially other nearby vacant parcels through the establishment of temporary construction easements. Increased truck traffic to and from the alignment would also occur. Hoisting equipment may be visible above the roofs of existing buildings. Storage of materials, equipment, and trucks would introduce visual impacts within communities, but these impacts would not be adverse given their temporary nature and CTA's use of best management practices. CTA would notify the community in advance of disruptive activities such as building demolition, utility relocation, and necessary detours, and would perform work in a manner consistent with local ordinances. Hauling routes would be designed to minimize truck traffic and equipment passing through sensitive areas of the community, and would favor highways to the extent feasible. There is ample street capacity and land available for construction staging in the project area. While specific construction routes have not been finalized for the project, it is anticipated that impacts would either be avoided or readily mitigated. This conclusion will be confirmed after designation of a NEPA Preferred Alternative and completion of a detailed construction management plan including routing.

Temporary dust, noise, and visual impacts would occur. Residents would experience these impacts during construction on an intermittent basis, but impacts on the Washington Heights, Roseland, and West Pullman communities would not be adverse through the use of best management practices. The Michigan Avenue station would require more intensive construction activities due to the multi-level parking structure, but construction would be phased to reduce impacts. Construction activities at any one location along the alignment would not last for the entire duration of the project construction phase.

During construction of the UPRR Rail Alternative, streets crossing the proposed alignment may require temporary closure. Detours would be provided to maintain access to adjacent properties, and bus transit service would detour around closures. Temporary traffic pattern changes, such as full street closure, converting a two-way street to one-way operation, or reducing the number of available travel lanes, may also be needed. Temporary parking restrictions may also be implemented to facilitate construction activities.

Businesses around the alignment and parking structure could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Temporary roadway delays due to truck traffic and construction equipment would occur. The CTA would provide adequate detours and minimize road closures to the extent practicable, but some adverse impacts on businesses may occur, as people may avoid the area altogether. These potentially adverse impacts would be mitigated through early notification of construction activities, provision of temporary alternate access routes, and advertising programs to increase the visibility of affected businesses.

Public schools, public libraries, senior living centers, hospitals, daycare centers, and other public facilities near the proposed 130th Street station (both options) would be subject to temporary adverse impacts associated with potential traffic detours; however, access would be maintained throughout the duration of the project.

6.3.3 Union Pacific Railroad Rail Alternative - East Option

With the East Option, construction impacts and mitigation for affected neighborhoods would be similar to those of the ROW Option. A greater intensity of construction activities is anticipated for the East Option than for the ROW Option, because more building demolition would be required. The East Option would require the greatest number of building acquisitions of the three UPRR Rail Alternative options.

6.3.4 Union Pacific Railroad Rail Alternative - West Option

With the West Option, construction impacts and mitigation for affected neighborhoods would be similar to those of the ROW Option. A greater intensity of construction activities is anticipated for the West Option than for the ROW Option, because more building demolition would be required. The West Option would require fewer building acquisitions overall than the East Option.

6.3.5 Halsted Rail Alternative

Community disruption would occur during construction for the Halsted Rail Alternative. Construction activities would be more disruptive than under the UPRR Rail Alternative because the Halsted Rail Alternative elevated structure would be built in the median of a major commercial street instead of on private off-street ROW.

Most of the construction activities and staging would occur within street ROW, properties acquired as part of the project's permanent envelope, and potentially other nearby vacant parcels through the establishment of temporary construction easements. Increased truck traffic to and from the alignment would also occur, particularly on Halsted Street and major east-west cross

streets. Hoisting equipment would be visible above the roofs of existing buildings and in staging areas. Storage of materials, equipment, and trucks would introduce visual impacts within communities, but these impacts would not be adverse given their temporary nature and CTA's use of best management practices. CTA would notify the community in advance of disruptive activities such as building demolition, utility relocation, pile driving, caisson driving, and necessary traffic detours, and would perform work in a manner consistent with local ordinances. Hauling routes would be designed to minimize the number of trucks and equipment passing through sensitive areas of the community, and would favor highways to the extent feasible.

Temporary dust, noise, and visual impacts would occur. Residents would experience these impacts during construction on an intermittent basis, but with the application of best management practices, impacts would not be adverse.

During construction of the Halsted Rail Alternative, Halsted Streets and its east-west cross streets would require temporary, intermittent roadway and lane closures. Detours would be provided to maintain access to adjacent properties, and bus transit service would detour around closures. Temporary traffic pattern changes may also be needed such as full street closure, converting a two-way street to one-way operation, or reducing the number of available travel lanes. Temporary parking restrictions may also be implemented to facilitate construction activities.

Businesses around the alignment and parking structure would be affected by construction activities, construction-related traffic, and road and sidewalk closures. Temporary roadway delays due to truck traffic and construction equipment would occur. The CTA would provide adequate detours and minimize road closures to the extent practicable, but some adverse impacts on businesses may occur, as people may avoid the area altogether. This potentially adverse impact would be mitigated through early notification of construction activities, provision of temporary alternate access routes, and advertising programs to increase the visibility of affected businesses.

The Vermont Avenue station would require more intensive construction activities due to the multi-level parking structure, but construction would be phased to reduce impacts. Construction activities at any one location along the alignment would not last for the entire duration of the project construction phase.

6.4 Parklands and Community Facilities

The following is a summary of construction impacts described in the *Parklands and Community Facilities Technical Memorandum*. The impact findings are highlighted here, while detailed information on potential mitigation may be found in the resource-specific technical memorandum. The API includes parklands within 500 feet of an alternative's ROW and within ½ mile around the proposed stations/stops, and community facilities within or adjacent to the permanent ROW of an alternative and within ½ mile around the proposed stations/stops.

6.4.1 Bus Rapid Transit Alternative

Golden Gate Park would be subject to temporary impacts during the construction of the parking garage at the 130th Street stop because of its location within 500 feet of construction activities. The temporary impacts would include noise impacts from construction equipment, air quality

impacts from fugitive dust and/or an increase in vehicle activity, and temporary reduction in access to the park due to construction detours. After mitigation, there would be no adverse impacts on Golden Gate Park from construction. Mitigation would include the following:

- Construction BMP, including but not limited to no idling of vehicles to reduce emissions, watering disturbed ground surfaces to reduce fugitive dust, and performing heavy construction activities during off-peak times.
- Coordination with the Chicago Park District in order to inform park users of construction activities and detour routes, provide alternate parking if necessary, or temporarily relocate park activities to another park if necessary.

Rose Haven Manor Senior Housing (at the 102nd Street stop), New Testament Baptist Church (at the 111th Street stop), and Aldridge Elementary School (at the 130th Street stop) are community facilities that would be subject to temporary construction impacts such as noise impacts and temporary changes to traffic flow and/or parking. Mitigation would include construction BMP, detour routes through the construction area, and alternative parking provisions. After mitigation, there would be no adverse impacts on community facilities from construction activities.

6.4.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option

Construction activities would occur in the northwest corner of Wendell Smith Park. Depending on the timing and schedule, construction would interfere with organized activities that occur in Wendell Smith Park. Construction activities would generate temporary noise and air quality impacts, and interrupt access and parking around the park. Construction activities would not interfere with the use of Fernwood Parkway or Block Park; however, access to these parklands could be temporarily altered while the structure, station and parking facilities at the 103rd Street station are under construction. After mitigation, the construction impacts would be considered not adverse.

Construction activities at the Michigan Avenue station would temporarily affect New Christian Joy Missionary Baptist Church with construction noise and temporary changes in access and available parking. Mitigation would involve construction BMP and the provision of information about construction schedules and changes in parking and/or detours to the church. After mitigation, construction impacts on this church would be considered not adverse.

Construction activities at cross streets along the UPRR corridor could temporarily reduce accessibility of the roadway network and cause delays for emergency service providers. Construction activities would be coordinated with the Chicago Office of Emergency Management and Communications (OEMC). In particular, the construction plans for the 103rd Street station would be coordinated with the adjacent Chicago Fire Department - Engine Co. 93, and the construction plans for the 111th Street station would be coordinated with Roseland Community Hospital. After mitigation, the construction impacts on emergency responders would be considered not adverse.

Construction activities would temporarily affect Kensington Park, which is within 500 feet of the construction activities that would occur between Prairie Avenue and CN/ME tracks. Because of the street configuration, construction vehicles would need access to the project via the Kensington Park parking lot at 118th Street. Impacts would include temporary noise and air quality impacts and reduced parking. Construction activities for the 130th Street South Station Option would temporarily affect the park entrance of the Beaubien Woods Nature Preserve on Doty Avenue. Any temporary change in access would be mitigated through coordination with the Forest Preserve District of Cook County. After mitigation, the construction impacts would be considered not adverse.

120th Street Yard and Shop There are no parklands or community facilities near the 120th Street yard and shop location; therefore, no impacts would result from the construction activities.

6.4.3 Union Pacific Railroad Rail Alternative - East Option

The East Option would have similar construction impacts on Wendell Smith Park as the ROW Option; however, a larger geographic area would be affected. After mitigation, the construction impacts would be considered not adverse.

Construction activities for the East Option would occur in the western parcel of Block Park within the proposed permanent envelope. The western parcel would be inaccessible during construction. Construction impacts from noise, air quality, and changes in access would be temporary and would be not substantially adverse because Block Park does not serve a recreational use, construction activities would not interfere with its current use, and the park is currently subject to noise from the adjacent UPRR freight rail traffic. After mitigation, the construction impacts would be considered not adverse.

Construction of the East Option would have the same impacts and mitigation for Fernwood Parkway as those described for the ROW Option. After mitigation, the impacts on Fernwood Parkway would be considered not adverse.

Construction of the East Option would affect the same community facility and emergency service providers identified for the ROW Option; therefore, the same mitigation would be used for the impacts of the East Option. After mitigation, the impacts on community facilities and emergency service providers would be considered not adverse.

The construction impacts on parklands discussed for the ROW Option would be the same for the East Option; therefore, the same mitigation would be used. After mitigation, the construction impacts would be considered not adverse.

The construction impacts on community facilities discussed for the ROW Option would be the same for the East Option; therefore, the same mitigation would be used. After mitigation, the construction impacts would be considered not adverse.

6.4.4 Union Pacific Railroad Rail Alternative - West Option

The construction impacts of the West Option on Wendell Smith Park would be the same as those described for the ROW Option, but the amount of parkland affected by construction would be smaller. The mitigation described for the ROW Option would be the same for the West Option. After mitigation, the construction impacts would be considered not adverse.

Construction activities would occur within Fernwood Parkway; this park is narrow and the proposed permanent envelope of the West Option would pass through the center of the park. The park would not be accessible during construction. The construction impacts would be considered not substantially adverse, because the park does not offer recreational amenities or activities and is largely underutilized. After mitigation, the construction impacts would be considered not adverse.

Construction of the West Option would affect the same community facility and emergency service providers identified for the East and ROW Options; therefore, the same mitigation would be used for the impacts of the West Option. After mitigation, the impacts on community facilities and emergency service providers would be considered not adverse.

The construction impacts on parklands discussed for the ROW and East Options would be the same for the West Option; therefore, the same mitigation would be used. After mitigation, the construction impacts would be considered not adverse.

The construction impacts on community facilities discussed for the ROW and East Options would be the same for the West Option; therefore, the same mitigation would be used. After mitigation, the construction impacts would be considered not adverse.

6.4.5 Halsted Rail Alternative

There are no parklands within 500 feet of the proposed ROW for the Halsted Rail Alternative, but construction activities for the Halsted Rail Alternative would occur near Major Taylor Bike Trail. The impacts on the trail would be the temporary rerouting of pedestrian and bicycle traffic across the 119th Street and Halsted Street intersection during construction. The mitigation would include communicating access changes to trail users and the Friends of Major Taylor Bike Trail and providing alternative routes for pedestrians and bicycle to cross the streets. After mitigation, the impacts on Major Taylor Bike Trail would be considered not adverse.

Construction activities would temporarily affect vehicle and pedestrian access to community facilities on and near Halsted Street; however, clear signage, detour routes, and alternate parking would be provided as mitigation. Construction would also result in temporary noise impacts for community facilities on Halsted Street. While construction noise is unpleasant, it is temporary and would not interfere with any community facility's ability to provide service. Construction BMP would be implemented to mitigate noise impacts. Lastly, construction would generate fugitive dust and other air quality impacts from construction vehicles. Due to sensitive populations, adjacent schools and senior centers would be more sensitive to temporary air quality impacts. Construction BMP to capture dust and minimize idling construction vehicles would be

used to mitigate these impacts. After mitigation, the impacts on community facilities would be considered not adverse.

Construction activities would temporarily reduce accessibility of the roadway network, which could cause delays for emergency service providers. The same mitigation described for the UPRR Rail Alternative would be used to inform the OEMC and the Chicago Fire Department - Engine Co. 115. After mitigation, the impacts on emergency service providers would be considered not adverse.

119th Street Yard and Shop - There are no parklands within 500 feet of the proposed ROW for the 119th Street yard; however, construction of the 119th Street yard and shop would affect the Chicago Fire Department - Engine Co. 115 and Mt. Zion First Holy Miracle Church. After mitigation, the impacts on this emergency service provider and community facility would be considered not adverse.

6.5 Visual and Aesthetic Conditions

The following is a summary of construction impacts described in the *Visual and Aesthetic Conditions Technical Memorandum*. The impact findings are highlighted here, while detailed information on potential mitigation may be found in the resource-specific technical memorandum. The API includes all areas along the alternative corridors within visual range of pedestrians, but would depend on the existence of view corridors. View corridors, including parks and streets, can increase the API. View corridors perpendicular to the project area are assumed to be ¼ mile.

6.5.1 Bus Rapid Transit Alternative

There would be minimal construction impacts on the existing visual condition along the BRT Alternative route. The visual impacts would be temporary, lasting several weeks to a year, and would relate primarily to parking facilities. Visual impacts may include construction fencing, demolition of existing buildings or clearing of vacant lots, temporary street closures and related signage, and temporary lighting or entrances. During construction, BMP and debris-free construction areas would mitigate temporary visual impacts from the construction sites; therefore, the temporary visual impacts would be considered not adverse.

6.5.2 Union Pacific Railroad Rail Alternative

Construction impacts and mitigations would be similar in nature for all UPRR Rail Alternative options. The 120th yard and shop would be located within an industrial land use area, far enough from established communities such that no construction impacts would occur.

The construction impacts from the UPRR Rail Alternative would be more extensive on the existing visual condition than those of the BRT Alternative. The visual impacts would be temporary, lasting several months to a few years depending on the alignment location and occurrence of station facilities and parking. Visual impacts may include construction fencing, demolition of existing buildings, temporary walls, temporary street closures and related signage, temporary lighting, temporary entrances, and shoring of concrete structures or existing viaducts

during construction. During construction, BMP and debris-free construction areas would mitigate temporary visual impacts from the construction sites; therefore, the temporary visual impacts would be considered not adverse after mitigation.

6.5.3 Halsted Rail Alternative

Construction impacts and mitigations would be the same as those described for the UPRR Rail Alternative. Additional road construction impacts would be created for the removal of trees within the median planters and replacement with hammerhead piers. Temporary visual impacts would be considered not adverse after mitigation.

6.6 Noise and Vibration

The following is a summary of construction impacts described in the *Noise and Vibration Technical Memorandum*. The impact findings are highlighted here, while detailed information on potential mitigation may be found in the resource-specific technical memorandum. A general assessment was conducted to determine the location of areas that could have a moderate or severe impact along the proposed corridors. This assessment established an impact contour (defining the outer limit of an impact corridor) because there are numerous existing noise-sensitive receptors along the entire length of the project corridor.

6.6.1 Bus Rapid Transit Alternative

Construction noise from the BRT Alternative would result from minor construction activity at the bus stop areas and parking facilities. Construction noise levels are not expected to exceed the FTA construction noise limits; therefore, the impacts would be considered not adverse.

6.6.2 Union Pacific Railroad Rail Alternative

The UPRR Rail Alternative options would include the construction of an aerial structure, stations, and parking facilities. There would be the potential for construction impacts and mitigation in residential areas and the 120th Street yard and shop. Typical construction equipment could include excavators, front-end loaders, cranes, drilling rigs, compressors, and trucks depending on the type of construction work required. The FTA construction noise impact assessment is based on the cumulative noise level from the two loudest pieces of equipment that, under worst-case conditions, would operate continuously at full power over a period of 1 hour. From the list of construction equipment in the FTA guidance manual, the two noisiest pieces of equipment would be the excavator (85 dBA at a distance of 50 feet) and truck (88 dBA at a distance of 50 feet). The combined noise level from these two pieces of equipment would be 90 dBA at a distance of 50 feet. Using the recommended FTA construction noise limits, any construction activity that occurred within 50 feet of a residential receptor would result in a noise impact during daytime hours. For commercial and industrial areas, the FTA daytime construction noise impact criterion is 100 dBA.

Construction noise levels are not expected to exceed the FTA recommended construction noise limits; therefore, construction noise mitigation measures are not required. Nevertheless, CTA would limit nighttime construction near residences to the extent practicable. All construction equipment exhaust mufflers would be kept in a state of good repair. To the maximum extent

possible, vehicles that are not in use would not remain idling on the construction site. As a result of these BMPs, the impacts would be considered not adverse.

6.6.3 Halsted Rail Alternative

Construction impacts from the Halsted Rail Alternative and the 119th Street yard and shop would be the same as those described for the UPRR Rail Alternative.

6.7 Safety and Security

The following is a summary of construction impacts described in the *Safety and Security Technical Memorandum*. The impact findings are highlighted here, while detailed information on potential mitigation may be found in the resource-specific technical memorandum. The API for the safety and security evaluation includes a ½-mile radius centered on each of the proposed station and stop locations as well as the existing 95th Street Terminal. One-half mile is an approximation of the distance most patrons would walk to a station and is used to measure general pedestrian safety and security in the surrounding neighborhood.

6.7.1 Bus Rapid Transit Alternative

The BRT Alternative would primarily involve the construction of bus shelters, sidewalks, and parking facilities. While there is always a chance that a contractor could fail to follow all safety and security rules, the limited scope of work is likely to minimize the risk of incidents resulting in fatalities, injuries, or criminal acts such as vandalism or theft on construction sites.

6.7.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The extensive scope of work for this alternative would create a need for a large number of contractors in many areas over a long time period. To mitigate risks of safety and security incidents, contractors would be expected to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with any other relevant aspects of the CTA's *Safety and Security Management Plan* (CTA 2011b) or other manuals and policies.

Road closures and detours during construction would affect emergency services. Emergency services would be able to access construction sites at all times in the same way contractors access the sites. Emergency service providers crossing the tracks would have to use recommended detours, just as with any roadway construction project. As mitigation, neither adjacent roadways nor adjacent through streets operating in the same direction would be closed simultaneously. Emergency services would be able to access construction sites at all times in the same way contractors access the sites. An access road for the MWRD would be constructed prior to the new CTA tracks if necessary to maintain access to the MWRD facility. This roadway could also be used by emergency services. The impacts would be not substantially adverse. The 120th Street yard and shop would be within the same area, and the impacts would not be adverse.

As mitigation, traffic management plans would be created during the final engineering phase of the project to identify detour and emergency access routes, which would generally follow the nearest arterial or collector streets. Contractors would also follow the *Manual on Uniform Traffic*

*Control Devices (*FHWA 2009*)* design standards for temporary traffic control and would obtain all required local permits.

6.7.3 Halsted Rail Alternative

The extensive scope of work for this alternative would create a need for a large number of contractors in many areas over a long time period. To mitigate risks of safety and security incidents, contractors would be expected to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with any other relevant aspects of the CTA's Safety and Security Management Plan an or other manuals and policies (CTA 2011b).

Construction work would be phased to minimize traffic impacts on Halsted Street and adjoining streets; however, elevated structure construction would require lane and street closures and superstructure erection would require temporary shutdown of all traffic along portions of Halsted Street. In order to maintain emergency access on cross-streets, only short segments of Halsted Street (less than ½ mile long) would be closed at any given time. Emergency services would need to access construction sites in the same way as contractors, by using various side streets and recommended detours. The impacts would be not substantially adverse. Mitigation would be the same as that described for the UPRR Rail Alternative.

6.8 Historic and Cultural Resources

The following is a summary of construction effects described in the *Historic and Cultural Resources Technical Memorandum*. Effects would be confirmed and considered within the Section 106 process as the preferred alternative selection and design progresses. The area of potential effect (APE) for the RLE Project was delineated considering the location of the proposed alternatives; the potential for ground disturbance, destruction, or property taking; locations from which the undertaking may be visible and/or audible; and the scale and setting of the project. Generally, the APE contains those parcels within a block of the centerlines for the UPRR and Halsted Rail Alternatives, and widens to accommodate the locations of park & ride facilities and a proposed rail yard. The APE for the BRT Alternative includes the area immediately surrounding the park & ride and parking garage locations.

6.8.1 Bus Rapid Transit Alternative

Two resources near the BRT corridor have been identified as eligible for the National Register of Historic Places (NRHP): the Venetian Hall at 133-139 E. Kensington Avenue and the Altgeld Gardens Housing Project at 927 E. 131 Street. While construction activities would likely be perceptible at the Venetian Hall, it is not anticipated to adversely affect the characteristics that qualify the resource for inclusion on the NRHP. Visual, noise, vibration, and construction effects are not anticipated to affect the characteristics that qualify Altgeld Gardens Housing Project for inclusion on the NRHP.

6.8.2 Union Pacific Railroad Rail Alternative

The effects would be similar in nature for all UPRR Rail Alternative Options and for the 120th Street yard and shop. Six resources near the UPRR corridor have been identified as NRHP eligible:

the eclectic neo-traditional residence at 444 W. 100th Place, the fire station at 324 W. 104th Street, the Roseland Pumping Station at 351 W. 104th Street, the Romanesque revival church at 10920 S. Princeton Avenue, the Venetian Hall at 133-139 E. Kensington Avenue, and the Altgeld Gardens Housing Project. Visual, noise, vibration, and construction effects are not anticipated to affect the characteristics that qualify these six resources for inclusion on the NRHP. Given that the Roseland Pumping Station is within 50 feet of the alignment, a barrier wall could be constructed for protection of this resource.

6.8.3 Halsted Rail Alternative

Based on preliminary analysis, the Halsted Rail Alternative would result in adverse effects on four historic resources: the Classical Revival CTA substation at 10227 S. Halsted Street, S.S. Peter & Paul Catholic Church at 12433 - 12439 S. Halsted Street, the fire station (Engine Co. 115) at 11940 S. Peoria Street, and the Cedar Park Cemetery gatehouse/entryway at 12540 S. Halsted Street. Although none of these structures would be physically demolished, the scale and proximity of the construction activities are anticipated to have an adverse effect on the characteristics that qualify each resource eligible for NRHP listing. None of the other alternatives are anticipated to result in adverse effects on other historic resources. Please refer to the Permanent Impacts section of the *Historic and Cultural Resources Technical Memorandum*.

6.9 Hazardous Materials

The following is a summary of construction impacts described in the *Hazardous Materials Technical Memorandum*. More detailed information on potential hazardous sites and mitigation may be found in the resource-specific technical memorandum. The API for the hazardous materials evaluation extends out to ¼ mile from the project limits. Approximate soil/hazardous material removal quantities presented in this section were based on the horizontal and vertical extent of the excavation required for the alternative and the extent of the identified contamination from historical records. The quantities presented in each of the descriptions are estimates and would require field verification during construction activities.

6.9.1 Bus Rapid Transit Alternative

Subsurface excavation associated with the BRT Alternative would occur during construction of proposed parking facilities for the 103rd Street, 111th Street, Kensington Avenue and 130th Street bus stops. Construction of this alternative would result in generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal.

One “High Concern” site was identified near the proposed 130th Street park & ride location and is an operating wastewater treatment plant. Sludge, a byproduct of the wastewater treatment process, typically contains heavy metals and other contaminants and may be present throughout the site, including within the footprint of the proposed park & ride facility at 130th Street.

Construction of park & ride facilities at 103rd Street and Kensington Avenue would include demolition of existing structures that were likely constructed before 1978–1979. These structures potentially contain asbestos-containing material and lead-based paint that could result in a release of asbestos fibers and lead dust during construction. Hazardous materials typically

involved with construction activities, such as paints, solvents, fuels and hydraulic fluids, could also be accidentally released during construction.

Numerous mitigation measures for the BRT Alternative would be used to avoid and minimize impacts prior and during construction. In addition, a Phase I Environmental Site Assessment (ESA) of any property to be purchased would be conducted as part of the Final EIS to identify recognized environmental conditions and assess and limit environmental liability. Based on the Phase I ESA findings, a Phase II ESA could also be required during the property acquisition phase and prior to purchasing a property. After mitigation, the construction impacts would be considered not adverse.

6.9.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR ROW Option would require approximately 270,200 cubic yards of soil or aggregate excavation, and there would be the potential to encounter hazardous materials. The ROW Option would also include construction within the UPRR corridor, which is potentially impacted from the use of fuel, oil, paints, herbicides and pesticides, creosote, polynuclear aromatic hydrocarbons and coal ash associated with the long-term operation as a railroad. If groundwater is encountered during construction, there is the potential that it may contain hazardous materials as well. The ROW Option also would include the demolition of existing structures that were likely constructed before 1978–1979. These structures potentially contain asbestos-containing material and lead-based paint that could result in a release of asbestos fibers and lead dust during construction.

The ROW contains one “High Concern” site within the proposed permanent envelope. Three additional “High Concern” sites would be within the 120th Street Yard and Shop.

The ROW would potentially include two Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)-Archived sites within the permanent envelope. The CERCLIS sites come with increased risk of the United States Environmental Protection Agency (USEPA) imposing liability and remediation obligations on potentially responsible parties. These sites have Archived status, which means USEPA has completed its assessment of the site and has determined that no future action would be taken to list it on the National Priorities List and removed it from their inventory of Superfund sites. This does not, however, mean that a site is considered clean, and additional caution would be taken before acquiring ownership. Construction of the 120th Street yard and shop would require approximately 138,100 cubic yards of soil or aggregate excavation, some of which would be associated with two hazardous material sites: the Keywell site at 11900 Cottage Grove Avenue and the Penn Central Corp./Lake Calumet Quad at 810 E. 124th Street. There would therefore be the potential to encounter hazardous materials, whether from the sites identified or from the presence of urban fill. For additional information for these sites, please refer to the *Hazardous Materials Technical Memorandum*, May 22, 2013.

Proposed mitigation measures for construction impacts on hazardous materials would be similar to those of the BRT Alternative, including Phase I ESA and Phase II ESA of any properties needed

for the proposed permanent envelope. After mitigation, the construction impacts would be considered not adverse.

6.9.3 Union Pacific Railroad Rail Alternative - East Option

The UPRR East Option would require approximately 122,900 cubic yards of soil or aggregate excavation. Construction impacts and mitigation would be similar to those under the UPRR ROW Option. The East Option would include three "High Concern" sites within its permanent envelope. Three additional "High Concern" sites would be within the 120th Street Yard and Shop. Construction impacts and mitigation for the 120th Street yard and shop would be similar to those for the UPRR ROW Option.

6.9.4 Union Pacific Railroad Rail Alternative - West Option

The UPRR West Option would require approximately 129,400 cubic yards of soil or aggregate excavation. Construction impacts and mitigation would be similar to those under the UPRR ROW Option. The West Option would include three "High Concern" sites within its permanent envelope. Three additional "High Concern" sites would be within the 120th Street Yard and Shop. Construction impacts and mitigation for the 120th Street yard and shop would be similar to those for the UPRR ROW Option.

6.9.5 Halsted Rail Alternative

The Halsted Rail Alternative would require approximately 141,300 cubic yards of soil or aggregate excavation, and there would be the potential to encounter hazardous materials. If groundwater is encountered during construction, it may contain hazardous materials as well. Construction of the Halsted Alternative would include the demolition of existing structures that were likely constructed before 1978–1979. These structures potentially contain asbestos-containing material and lead-based paint that could result in a release of asbestos fibers and lead dust during construction. Hazardous materials typically involved with construction activities, such as paints, solvents, fuels and hydraulic fluids, could also be accidentally released during construction.

Construction of the 119th Street yard and shop would require approximately 129,100 cubic yards of soil or aggregate excavation, and there would be the potential to encounter hazardous materials. Six "High Concern" sites are within the permanent envelope of the 120th Street yard and shop. One CERCLIS site (Ingersoll Industrial Site at 1000 W. 120th Street) and one CERCLIS-No Further Remediation Planned site are within the permanent envelope. There is also an active CERCLIS site (Dutch Boy Paint Site at 1200 Peoria Avenue) adjacent to the 119th Street yard and shop location, and it has the potential for offsite migration of contamination.

Construction of the 119th Street yard and shop would include the demolition of existing structures that were constructed before 1978–1979. These structures potentially contain asbestos-containing material and lead-based paint that could result in a release of asbestos fibers and lead dust during construction. Hazardous materials typically involved with construction activities, such as paints, solvents, fuels and hydraulic fluids, could also be accidentally released during construction.

Proposed mitigation measures for construction impacts on hazardous materials would be similar to those of the BRT Alternative, including Phase I ESA and Phase II ESA of any properties needed for the proposed permanent envelope. After mitigation, the construction impacts would be considered not adverse.

6.10 Air Quality

The following is a summary of construction impacts described in the *Air Quality Technical Memorandum*. More detailed information on potential air quality impacts and mitigation may be found in the resource-specific technical memorandum. The API for air quality has both a regional and a local component. The regional component follows the analysis area adopted by the traffic analysis, which is a corridor bounded on the south by a varying boundary that includes 134th Street, on the north by 91st Street, on the west by a varying boundary that includes Halsted Street, and on the east by a varying boundary that includes I-94. The local component would be limited to the individual stations, their associated parking facilities, and nearby intersections affected by traffic entering and exiting the stations.

The air quality impacts from construction would be similar in nature for all build alternatives, as well as their respective segments, the 120th Street yard and shop, and the 119th Street yard and shop; however, the schedule for construction activities would be longer for the UPRR Rail Alternative and the Halsted Rail Alternative than with the BRT Alternative.

Emissions from construction equipment would occur during site preparation activities such as grading, installing curbs, or grubbing and removal of vegetation to prepare a site for construction. Compared with emissions from other motor vehicles sources in the project area, direct emissions from construction equipment and trucks would not likely have the potential to exceed any ambient air quality standards.

Impacts during construction would be primarily associated with fugitive dust and emissions from on-road and non-road vehicles. The equipment producing these emissions would include haul trucks, concrete trucks, front-end loaders, excavators, cranes, drill rigs, compressors, flatbed trucks, and generators. Most state air quality agencies, including Illinois Environmental Protection Agency, have strict guidelines for controlling fugitive dust (usually by good housekeeping practices), diesel particulate emissions (by exhaust emission controls and use of low sulfur fuels), and greenhouse gas emissions (by limiting equipment operations such as excessive idling and by using alternative fuels).

Construction activities would also result in traffic disruption, rerouting, and temporary shutdown of traffic. Traffic disruption, such as decreased roadway capacity or detouring, can lead to increased traffic congestion, thereby increasing motor vehicle exhaust emissions on nearby roadways, and resulting in localized elevated pollutant concentrations. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval.

Proper traffic management during the construction period would mitigate any potential adverse impacts. Traffic management would include finding less congested routes for construction-related

truck traffic, creating temporary detours for regular roadways where capacities were diminished, providing traffic control, routing trucks away from residential neighborhoods, and restricting construction activities during hours of high traffic volumes on the existing roadways. Staging areas and worker parking areas would be established away from sensitive receptors, where possible.

Many state agencies such as IDOT require the contractor to develop a Dust Control Plan that would address in detail how dust would be controlled at all times at the construction site, the staging areas, and the access and egress routes. The agencies also require all diesel-powered equipment and vehicles to be retrofitted with emissions control devices and to use ultra-low sulfur diesel to control diesel particulate emissions.

CTA would require the contractor to develop a plan and schedule to allow construction trucks to access and egress the construction sites and staging areas without excessive disruption and impacts on residences and commercial establishments.

With the use of appropriate mitigation measures as described above, no violations of any of the Illinois or National Ambient Air Quality Standards are anticipated; therefore, no adverse air quality impacts due to construction activities are anticipated.

6.11 Water Resources

The following is a summary of construction impacts described in the *Water Resources Technical Memorandum*. The impact findings are highlighted here, while detailed information on potential mitigation may be found in the resource-specific technical memorandum. The API for the water resources extends 500 feet on either side of the project alternative centerlines. Because the project would occur in a highly urbanized environment, the impacts of construction on water resources would not be expected to extend beyond 500 feet. The affected water resources include stormwater, groundwater, water quality, and wetlands. There are no floodplains in the API.

6.11.1 Bus Rapid Transit Alternative

The physical modifications associated with the BRT Alternative would result in potential impacts on the existing stormwater drainage infrastructure, particularly where park & ride lots and structures would be constructed. These alterations would not greatly affect the direction or volume of drainage through the API.

There would be a potential need for dewatering (by removing groundwater from the construction site by pumping) if groundwater were encountered during construction. Dewatering during construction could temporarily affect local shallow groundwater levels. Given the likelihood of encountering contaminated groundwater, compliance with federal, state, and local laws and regulations would be required during construction.

The impacts from construction of the BRT Alternative on water quality would be minor because the project area is already highly urbanized. In order to ensure that surface water runoff would not have adverse impacts on water quality, human health, or safety, appropriate mitigation measures would be taken to control runoff during implementation.

6.11.2 Union Pacific Railroad Rail Alternative

The potential construction impacts and mitigation would be similar for the UPRR Rail Alternative options and the 120th Street yard and shop. The physical modifications associated with the UPRR Rail Alternative would result in impacts on the existing stormwater drainage infrastructure; however, these alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed. Care would need to be taken during construction in the vicinity of the Roseland Pump Station at 104th Street, as well as the other underground utilities, in order to avoid damaging existing structures.

The impacts from construction of UPRR Rail Alternative on groundwater and water quality would be the same as for the BRT Alternative.

Approximately 27 acres of potential wetlands exist in the vicinity of the UPRR Alternative alignment; however, there would be no temporary construction impacts on wetlands associated with the UPRR Rail Alternative options. Addition information concerning wetlands in the project area is provided in the *Water Resources Technical Memorandum*.

At the 120th Street yard and shop location, physical modifications would result in impacts on the existing stormwater drainage infrastructure; however, these alterations would not greatly affect the direction of drainage through the project area. The potential impacts on groundwater, water quality, and wetlands would be similar to those described under the BRT Alternative.

6.11.3 Halsted Rail Alternative

The physical modifications associated with the Halsted Rail Alternative would result in impacts on the existing stormwater drainage infrastructure; however, these alterations would not greatly affect the direction of drainage through the project area and would not change drainage to the watershed. The potential impacts on groundwater and water quality would be similar to those described under the BRT Alternative. Because there are no wetlands within the API, there would be no construction impacts on wetlands.

At the 119th Street yard and shop location, physical modifications would result in impacts on the existing stormwater drainage infrastructure; however, these alterations would not greatly affect the direction of drainage through the project area and would not change drainage to the watershed. The potential impacts on groundwater and water quality would be similar to those described under the BRT Alternative. Because there are no wetlands at the 119th Street yard and shop site, there would be no construction impacts on wetlands.

6.12 Vegetation and Wildlife Habitat

The following is a summary of construction impacts described in the *Biological Resources Technical Memorandum*. The impact findings are highlighted here, while detailed information on potential mitigation may be found in the resource-specific technical memorandum. For potential impacts on threatened and endangered species, designated critical habitats, vegetation, and other wildlife habitats, the API includes the area within ¼ mile of the proposed alignments, stations, parking facilities, and maintenance yards for each of the project alternatives. Given that the

project is in a highly urbanized environment with high existing levels of noise, light, and human activity, the impacts of construction and operation on available habitats and associated wildlife would not be expected to extend beyond ¼ mile.

6.12.1 Bus Rapid Transit Alternative

A small number of trees would likely be removed as a result of park & ride construction activities under the BRT Alternative. Construction impacts under the BRT Alternative would include potential adverse impacts on the following vegetation and wildlife habitat resources:

- The urban tree inventory, due to tree removal. This impact would be reduced to a not adverse level by compliance with local tree protection regulations.
- Migratory birds wherever tree clearing occurs. This impact would be reduced to a not adverse level by the implementation of mitigation measures.

Mitigation measures would be required for compliance with the Migratory Bird Treaty Act and local tree protection ordinances, and to reduce potential impacts on wildlife habitat. Bird species that may utilize those trees that could be removed or disturbed during construction could be affected. Potential mitigation measures would include the following:

- Tree removal would be timed as much as possible to occur outside the migratory bird nesting season, which occurs generally from April 1–September 15 and as early as March 1.
- If construction must occur during the nesting season, two biological surveys would be conducted: one 15 days prior and a second 72 hours prior to the construction that would remove or disturb suitable nesting habitat. If a protected bird were found, surveys would be continued in order to locate any nests. If an active nest were located, construction within 300 feet of the nest would be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.
- Avoidance measures would be incorporated into the design of the project during preliminary engineering where feasible. If construction of the project requires removal of a protected tree, a permit would be required in accordance with applicable local codes and ordinances of the city in which the affected tree is located. Tree removal permits may require replanting of protected trees within the project area or at another location to mitigate for the removal of these trees. Replanting would be done according to the ratios required by tree removal permits.

6.12.2 Union Pacific Railroad Rail Alternative Options

Trees would likely be removed as a result of construction activities for the UPRR Rail Alternative and the 120th Street yard and shop. Most of the removal would likely occur at the park & ride facilities, and in the median of the interstate just south of the 95th Street Terminal. The potential impacts and mitigation would be similar to those described for the BRT Alternative.

6.12.3 Halsted Rail Alternative

A number of trees would likely be removed as a result of construction activities for the Halsted Rail Alternative and the 119th Street yard and shop. Most of the removal would likely occur from the Halsted Street median and sidewalks. Suitable habitat for listed plant species does not appear to be present in the API. The potential impacts and mitigation would be similar to those described for the BRT Alternative.

6.13 Energy

The proposed alternatives would require energy consumption to support construction activities; however, the approximate quantities used would not be substantial when compared to the annual consumption for Cook County, and would not have an adverse impact on regional energy or fuel supplies. Construction BMP would be implemented to ensure minimization of energy usage.

6.13.1 Bus Rapid Transit Alternative

Energy impacts from construction activities were computed based on typical values for construction categories. Table 6-1 provides a summary for the BRT Alternative. As construction energy use would be a very small fraction of energy use in the region (91 billion British thermal units [BTU] for construction of the BRT Alternative compared to 530 trillion BTU annual energy use in Cook County, or less than 0.02 percent of the Cook County annual energy use), no impact would occur and no mitigation is proposed. (No impact is concluded because 0.02 percent variation is well within the variations in annual energy use due to variations in average temperature and fluctuations in regional employment and manufacturing.)

Table 6-1: Estimated Energy Consumption from Construction Activities - Bus Rapid Transit Alternative

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Guideway	5,940	239	1	Concrete, Reinforcing Steel
Stations	5,940	702	4	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures
Maintenance Facilities	7,310	0	0	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	7,990	48	Earthwork, Removals, Utility Relocations
Systems	9,130	4,130	38	Signals, Fare Vending, Communications, Traffic Signal Priority System
Total Estimated Construction BTU			91	

BTU - British thermal units

6.13.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option

Energy impacts from construction activities were computed based on typical values for construction categories. Construction energy use would vary slightly between the UPRR options.

Table 6-2 provides a summary of the energy use during construction for the UPRR Rail Alternative ROW Option. The construction energy use would be a very small fraction of energy use in the region (approximately 6 trillion BTU compared to the total annual Cook County energy consumption of 530 trillion BTU, less than 1.2 percent of the total annual Cook County energy consumption).

Table 6-2: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - Right-of-Way Option

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Track and Guideway	5,940	264,000	1,568	Structural Steel, Track, Concrete, Reinforcing Steel
Stations	5,940	186,000	1,105	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures, Glass
Maintenance Facilities	7,310	71,000	519	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	133,000	790	Earthwork, Removals, Utility Relocations
Systems	9,130	239,000	2,182	Signals, Fare Vending, Communications, Traction Power, Substations
Total Estimated Construction BTU			6,164	

BTU - British thermal units

6.13.3 Union Pacific Railroad Rail Alternative - East Option

For the UPRR Rail Alternative East Option, Table 6-3 provides a summary of construction-related energy use. Construction energy use would be a very small fraction of the energy use in the region (approximately 6 trillion BTU compared to the total annual Cook County energy consumption of 530 trillion BTU, less than 1.2 percent of the total annual Cook County energy consumption).

Table 6-3: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - East Option

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Track and Guideway	5,940	263,000	1,562	Structural Steel, Track, Concrete, Reinforcing Steel
Stations	5,940	189,000	1,123	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures, Glass
Maintenance Facilities	7,310	71,000	519	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	136,000	808	Earthwork, Removals, Utility Relocations
Systems	9,130	240,000	2,191	Signals, Fare Vending, Communications, Traction Power, Substations
Total Estimated Construction BTU			6,203	

BTU - British thermal units

6.13.4 Union Pacific Railroad Rail Alternative - West Option

Table 6-4 provides a summary of construction-related energy use for the UPRR Rail Alternative West Option. Construction energy use would be a very small fraction of the energy use in the region (approximately 6 trillion BTU compared to the total annual Cook County energy consumption of 530 trillion BTU, less than 1.2 percent of the total annual Cook County energy consumption).

Table 6-4: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - West Option

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Track and Guideway	5,940	269,000	1,598	Structural Steel, Track, Concrete, Reinforcing Steel
Stations	5,940	195,000	1,158	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures, Glass
Maintenance Facilities	7,310	71,000	519	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	137,000	814	Earthwork, Removals, Utility Relocations
Systems	9,130	237,000	2,164	Signals, Fare Vending, Communications, Traction Power, Substations
Total Estimated Construction BTU			6,253	

BTU - British thermal units

6.13.5 Halsted Rail Alternative

Table 6-5 provides a summary of construction energy use for the Halsted Rail Alternative. Construction energy use would be a very small fraction of energy use in the region (approximately 7 trillion BTU compared to the total annual Cook County energy consumption of 530 trillion BTU, less than 1.3 percent of the total annual Cook County energy consumption).

Table 6-5: Estimated Energy Consumption from Construction Activities - Halsted Rail Alternative

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Track and Guideway	5,940	424,000	2,519	Structural Steel, Track, Concrete, Reinforcing Steel
Stations	5,940	140,000	832	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures, Glass
Maintenance Facilities	7,310	62,000	453	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	109,000	647	Earthwork, Removals, Utility Relocations
Systems	9,130	265,000	2,419	Signals, Fare Vending, Communications, Traction Power, Substations
Total Estimated Construction BTU			6,870	

BTU - British thermal units

6.14 Environmental Justice

A majority of the project area consists of minority populations; some of which are low-income populations as well. Because all of the impacts and benefits would occur in the same communities for all the alternatives, none of the construction impacts would be disproportionately adverse to these populations. Temporary construction easements would not result in displacements or relocations. No Environmental Justice mitigation would be required beyond that which is proposed in the other technical memoranda.

6.15 Transportation

During construction, vehicles, pedestrians, buses, and trains may need to be rerouted around the construction sites. Rerouting of traffic may be done using detours and/or complete street closures. The street closures could include main streets and side streets, as well as alleys and access points. Station and viaduct construction activities would be sequenced around street and alley closures. Temporary traffic lanes, temporary access points, or staged construction would be used. The following activities would be part of the traffic rerouting activities:

- Construction signage and temporary traffic barriers.
- Temporary reductions in number of thru-traffic lanes in each direction from two to one, if feasible.
- Detours/complete street closures, including alleys and access points.
- Temporary traffic lanes.
- Designated space for storage and staging of construction materials, equipment, and temporary facilities within the ROW, including parking areas or maintenance yard.
- Construction vehicle access points within and/or adjacent to the ROW.
- Business, residential, and pedestrian impacts including limited parking or parking bans.
- Advance trackwork and signalization to facilitate train reroutes (for the rail alternatives).
- Alternate bus routes and temporary CTA service changes may be required during construction of the RLE Project at the 95th Street Terminal.
    - CTA track shutdowns during nights or weekends may be required (for the rail alternatives).
    - Trains would operate on one or two tracks through the construction zones (for the rail alternatives). Flagmen would be required to notify trains of construction activities.

6.15.1 Bus Rapid Transit Alternative

6.15.1.1 Public Transportation

The BRT Alternative would include construction of improved bus shelters at four locations, four park & ride parking lots, and one proposed traffic signal. Existing traffic signals would be reprioritized. The construction activities associated with this alternative would temporarily affect the physical capacity of roadways and intersections, which may lead to increased travel times and possible shift in traffic volumes and the need to reroute bus transit service and move stop locations. With adherence to local, state, and federal construction and temporary traffic and public transportation management guidelines, no adverse impacts would result from construction of the BRT Alternative.

6.15.1.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections, which may lead to increased travel times and possible shift in traffic volumes and the need to reroute traffic during construction. With adherence to local, state, and federal construction and temporary traffic management guidelines, no adverse impacts would result from construction of the BRT Alternative.

6.15.1.3 Freight Transportation

Construction of the proposed parking lot northeast of the UPRR tracks may require flagging safety near train operations; however, track closures would not be required. Construction activities would be phased to ensure that impacts on freight trains are minimized.

6.15.1.4 Bicycle

Temporary construction impacts for bicycles associated with the BRT Alternative may occur at the locations of new bus shelters and surface parking lots. Some construction activities may reduce the capacity of the roadway due to maintenance of traffic during construction activities. This may lead to increased travel times for bicyclists; however, there are no existing or proposed bicycle routes along Michigan Avenue, the proposed alignment of the BRT Alternative.

6.15.1.5 Pedestrian

Temporary construction impacts for pedestrians associated with the BRT Alternative would occur at the locations of the four upgraded bus shelters and park & ride lots. Some construction activities may result in a temporary sidewalk closure on one side of the street.

6.15.1.6 Parking Facilities

On-street parking along the roadways would be temporarily affected for construction of park & ride lots and bus shelters due to maintenance of traffic during construction activities.

6.15.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option

6.15.2.1 Public Transportation

The construction activities associated with the UPRR Rail Alternative ROW Option would temporarily affect the physical capacity of roadways and intersections, requiring detours. Train

and bus service, include Pace service, at the 95th Street Terminal may also be affected. These impacts may lead to increased travel times and possible shift in traffic volumes and increase travel times for bus transit users. Bus stop locations may be eliminated or relocated temporarily and buses may be rerouted during construction activities. With adherence to local, state, and federal construction and temporary traffic and public transportation management guidelines, no adverse impacts would result from construction of the UPRR Alternative ROW Option.

The UPRR Alternative ROW Option would consist of new construction of dual-track, elevated structure within the UPRR ROW, branching off and running along the east side of the corridor and over existing CN/ME tracks. Construction at the CN/ME crossing would be phased to ensure there are no impacts on Metra operations. During new track roadbed construction for the 120th Street yard and shop and the new access road for the existing MWRD facility, construction over and adjacent to the NICTD/CSS & SBRR would occur. During these construction activities, flagging operations and scheduled track closures would occur. Construction would be phased to ensure there are no impacts on passenger trains.

6.15.2.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections, which may lead to increased travel times and possible shift in traffic volumes and the need to reroute traffic during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

With adherence to local, state, and federal construction and temporary traffic management guidelines, no adverse impacts would result from construction of the UPRR ROW Alternative.

6.15.2.3 Freight Transportation

The UPRR ROW Alternative would consist of new construction of a dual-track, elevated structure within the UPRR corridor, branching off and running along the east side of the corridor and over existing CN/ME tracks. There would be no impact on UPRR operations due to construction activities, because UPRR trains would be relocated to another corridor as part of a separate, earlier project. Construction at the CN/ME crossing would be phased to minimize the impacts on CN and Metra operations.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times and cost for shipping routes that include this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times and cost for shipping routes that include this portion of I-57.

During new track roadbed construction for the 120th Street yard and shop and the new access road for the existing MWRD facility, construction over and adjacent to the NICTD/CSS & SBRR would occur. During these construction activities, flagging operations and scheduled track closures would occur. Construction would be phased to minimize impacts on freight operations.

A portion of the new track alignment would be constructed over abandoned Indiana Harbor Belt Railroad (IHB) tracks north of 130th Place. Construction activities would be coordinated with IHB to ensure that no construction activities would affect freight operations.

6.15.2.4 Bicycle

Bicyclists using recommended collector streets such as 103rd Street, 111th Street, or Michigan Avenue may incur increased travel times due to detours or increase vehicular traffic due to construction activities.

6.15.2.5 Pedestrian

During construction of the aerial structure and stations, some sidewalks would need to be temporarily closed. Increased travel distance and time may be incurred due to pedestrian traffic reroutes.

6.15.2.6 Parking Facilities

On-street parking would be temporarily affected during construction of the aerial structure and stations. Construction of park & ride lots would also contribute to temporary on-street parking loss due to maintenance of traffic during construction activities.

6.15.3 Union Pacific Railroad Rail Alternative - East Option

6.15.3.1 Public Transportation

Potential construction impacts on public transportation associated with the UPRR East Option would be the same as those of the UPRR ROW Option.

6.15.3.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections, which may lead to increased travel times and possible shift in traffic volumes and the need to reroute traffic during construction. Please refer to the *Transportation Technical Memorandum* for additional traffic information.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

The UPRR Alternative East Option alignment curves over I-57 and runs parallel to the UPRR tracks. Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

With adherence to local, state, and federal construction and temporary traffic management guidelines, no adverse impacts would result from construction of the UPRR Alternative East Option.

6.15.3.3 Freight Transportation

The UPRR Alternative East Option would consist of new construction of dual-track, elevated structure immediately adjacent to and east of the UPRR ROW, branching off and running along the east side of the corridor and over existing CN/ME tracks. The East Option would require the construction activities to occur while UPRR tracks are operational. The work would be sequenced along the UPRR corridor to minimize impacts on UPRR operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Construction at the CN/ME crossing would be phased to minimize the impacts on CN freight operations.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times and cost for shipping routes that include this portion of I-94.

The UPRR Alternative East Option alignment curves over I-57 and runs parallel to the UPRR tracks. Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-57. Increased traffic congestion due to construction activities may

temporarily increase freight truck travel times and cost for shipping routes that include this portion of I-57.

During new track roadbed construction for the 120th Street yard and shop and the new access road for the existing MWRD facility, construction over and adjacent to the NICTD/CSS & SBRR would occur. During these construction activities, flagging operations and scheduled track closures would occur. Construction would be phased to minimize impacts on freight operations.

A portion of the new track alignment would be constructed over abandoned IHB tracks north of 130th Place. Construction activities would be coordinated with IHB to ensure that no construction activities would affect freight operations.

6.15.3.4 Bicycle

The bicycle impacts of the UPRR Alternative East Option would be similar to those of the UPRR Alternative ROW Option.

6.15.3.5 Pedestrian

The pedestrian impacts of the UPRR Alternative East Option would be similar to those of the UPRR Alternative ROW Option.

6.15.3.6 Parking Facilities

The parking facility impacts of the UPRR Alternative East Option would be similar to those of the UPRR Alternative ROW Option.

6.15.4 Union Pacific Railroad Rail Alternative - West Option

6.15.4.1 Public Transportation

Potential construction impacts on public transportation associated with the UPRR West Option would be the same as those of the UPRR ROW Option.

6.15.4.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections, which may lead to increased travel times and possible shift in traffic volumes and the need to reroute traffic during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Proposed structure construction would be sequenced to minimize

impacts on the traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

With adherence to local, state, and federal construction and temporary traffic management guidelines, no adverse impacts would result from construction of the UPRR Alternative West Option.

6.15.4.3 Freight Transportation

The UPRR Alternative West Option would consist of new construction of dual-track, elevated structure crossing over the UPRR at Fernwood Parkway just south of I-57 and continuing immediately adjacent to and west of the UPRR ROW, crossing over the UPRR tracks again at Prairie Avenue and running along the east side of the corridor and over existing CN/ME tracks. The West Option would require the construction activities to occur while UPRR tracks are operational. This alternative would have two crossings over the active UPRR tracks that the East Option would not have: at Fernwood Parkway and Prairie Avenue. Construction at these crossings would be phased to minimize impacts on UPRR freight operations. Construction adjacent to railroads would require flagging operations and scheduled track closures. Construction activities would be phased to reduce impacts on the UPRR operations as much as possible. Construction at the CN/ME crossing would be phased to minimize the impacts on CN freight operations.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times and cost for shipping routes that include this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times and cost for shipping routes that include this portion of I-57.

During new track roadbed construction for the 120th Street yard and shop and new access road for the existing MWRD facility, construction over and adjacent to the NICTD/CSS & SBRR would occur. During these construction activities, flagging operations and scheduled track closures would occur. Construction would be phased to minimize impacts on freight operations.

A portion of the new track alignment would be constructed over abandoned IHB tracks north of 130th Place. Construction activities would be coordinated with IHB to ensure that no construction activities would affect freight operations.

6.15.4.4 Bicycle

The bicycle impacts of the UPRR Alternative West Option would be similar to those of the UPRR Alternative ROW Option.

6.15.4.5 Pedestrian

The pedestrian impacts of the UPRR Alternative West Option would be similar to those of the UPRR Alternative ROW Option.

6.15.4.6 Parking Facilities

The parking facility impacts of the UPRR Alternative West Option would be similar to those of the UPRR Alternative ROW Option.

6.15.5 Halsted Rail Alternative

6.15.5.1 Public Transportation

The construction activities associated with the Halsted Rail Alternative would temporarily affect the physical capacity of roadways and intersections, requiring detours. Superstructure erection would require temporary shutdown of all traffic on Halsted Street, which may lead to increased travel times and a shift in traffic volumes, increasing travel times for bus transit users. Bus stop locations may be eliminated or relocated temporarily and buses rerouted, including Pace service, during construction activities. With adherence to local, state, and federal construction and temporary traffic and public transportation management guidelines, no adverse impacts would result from construction of the Halsted Rail Alternative.

The Metra Electric Blue Island line crosses Halsted Street between 120th Street and 122nd Street, and its West Pullman station is west of Halsted Street. Construction of the aerial structure would require temporary scheduled track closures and would be phased to minimize impacts on Metra operations.

6.15.5.2 Traffic

The construction activities associated with this alternative would temporarily affect the physical capacity of local roadways and intersections, which may lead to increased travel times and possible shift in traffic volumes and the need to reroute traffic during construction.

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-94.

Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Proposed structure construction would be sequenced to minimize

impacts on the traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase travel times along this portion of I-57.

The construction activities associated with the Halsted Rail Alternative would temporarily affect the physical capacity of roadways and intersections, requiring detours. Superstructure erection would require temporary shutdown, in segments, of all traffic on Halsted Street. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for those using Halsted Street.

With adherence to local, state, and federal construction and temporary traffic management guidelines, no adverse impacts would result from construction of the Halsted Rail Alternative.

6.15.5.3 Freight Transportation

Work within the median of I-94 would require temporary lane closures. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-94. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times and cost for shipping routes that include this portion of I-94.

The Halsted Rail Alternative alignment crosses over the UPRR at Fernwood Parkway and I-57. Dual-track, elevated structures would be constructed through the I-94/I-57 interchange, across the WB I-57 entrance ramp from NB I-94, and within the I-57 corridor. For superstructure erection over expressway traffic lanes, temporary shutdown of all traffic would be required. Temporary shutdown of traffic would occur at nighttime and during low-traffic-volume intervals per IDOT and CDOT approval. Proposed structure construction would be sequenced to minimize impacts on the traffic flow on I-57. Increased traffic congestion due to construction activities may temporarily increase freight truck travel times and cost for shipping routes that include this portion of I-57.

The construction activities associated with the Halsted Rail Alternative would temporarily affect the physical capacity of roadways and intersections requiring detours. Superstructure erection would require temporary shutdown of all traffic on Halsted Street. This may lead to increased travel times and possible shift in traffic volumes, increasing travel times for freight trucks using Halsted Street. There would be no construction impacts on rail freight transportation because no freight train tracks are near or cross the Halsted Rail Alternative Alignment.

6.15.5.4 Bicycle

Portions of the Major Taylor bike trail would need to be closed temporarily during the construction of the 119th Street station and the aerial structure. Bicycle travel times may increase due to detours or shifting of routes.

6.15.5.5 Pedestrian

During construction of the aerial structure and station construction, some sidewalks would need to be temporarily closed. Increased travel distance and time may be incurred due to pedestrian traffic reroutes.

6.15.5.6 Parking Facilities

On-street parking would be temporarily affected during construction of the aerial structure and stations. Parking would potentially be eliminated from Halsted Street during construction to increase traffic flow. Construction of park & ride lots would also contribute to temporary on-street parking loss due to maintenance of traffic during construction activities.

6.16 Cumulative Impacts

Construction impacts from the other potentially concurrent projects identified in the *Cumulative Impacts Technical Memorandum* would not be likely to result in cumulative impacts when combined with RLE Project construction. No cumulative construction impacts would occur and mitigation measures beyond those already identified for direct impacts due to construction would not be required. Should construction of other nearby projects occur simultaneously with the RLE Project, CTA would coordinate construction activities among the projects to minimize disruption and use of resources.

Section 7
Impacts Remaining After Mitigation

Because of the temporary nature of construction activities, the use of construction BMP, and proposed mitigation methods, the construction impacts from the build alternatives would be considered not adverse. No construction impacts would occur with the No Build Alternative and no mitigation measures would be required.

Section 8
References Cited

Chicago Transit Authority (CTA). Description of Construction and Phasing for Environmental Impact Statement Build Alternatives. November 2012.

Federal Highway Administration. Manual on Uniform Traffic Control Devices. 2009.

Appendix A
Construction Matrix

Note: The information shown in this table reflects construction assumptions for the purposes of NEPA analysis of impacts. It represents the types and order of magnitude of construction activities associated with each alternative. It is not meant to be a final construction plan. A specific construction plan for the preferred alternative presented in the Final EIS will be prepared as design of the project proceeds.

UPRR HRT ROW Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-1: 95th Street Station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,750	500	5-10	10-15
Elevated Concrete Structure														
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	4,100	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,090	11,917	3,701,705	5-10	10-15
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+19)	**12-30**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	600	1,174	364,700	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	170	457	892,100	5-10	10-15
Segment U-3: End of Horizontal Curve to Metra/CN Crossing (142+19 to 286+12)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	7,800	9,967	3,484,100	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	7,800	9,967	3,484,100	5-10	20-30
Construct - Michigan Avenue	24-36	x	x	x	x	x	x	x	x	7,800	9,967	3,484,100	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x	x		x	x	9,300	3,100		2-6	5-11
Construct - Michigan Avenue (2 lots)	24	x	x	x	x			x		18,600	6,200		2-7	5-12
Elevated Steel Structure														
Double Track - Hammerhead Substructure	36	x	x	x	x	x	x	x	x	43,200	84,528	26,258,400	50-100	30-35
Traction Power														
Substation - 175+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substation - 254+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

UPRR HRT ROW Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-4: Metra/CN Crossing to At Grade Track (286+12 to 310+03)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926		5-10	10-15
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,300	12,327	3,829,350	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	400	895	730,320	5-10	10-15
Segment U-5: At Grade Track to 130th Street Station Options (310+03 to 360+02)	**12-36**													
Advance Work														
Utility relocation; staging	12													
At Grade														
Double Track	24-36	x	x	x	x	x	x	x	x	22,950			5-10	20-30
Access Road														
Crossing proposed tracks at 358+00	12-24	x	x	x	x			x		6,778	2,260		5-10	5-10
Bridge for Access Road, Crossing at 358+00	24	x	x	x	x	x		x	x	3,105	4,610	495,000	5-10	10-15
Connector access road, West of Proposed CTA tracks	12	x	x	x	x			x		717	239		5-10	5-10
Segment U-6S: 130th Street South Station Option (360+02 to 380+29)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Station														
Construct - 130th Street South Station Option	24-36	x	x	x	x	x	x	x	x	6,773	2,653	696,305	5-10	20-30
Parking														
Construct - 130th Street South Station Option	24	x	x	x	x			x					2-5	5-10
At Grade														
Double Track	24-36	x		x	x			x	x	5,400				
Triple Track	24	x		x	x			x	x	7,000				
Access Road														
At South Station Option	12-24	x	x	x	x			x		5,778	1,926		5-10	5-10
Segment U-6W: 130th Street West Station Option (380+29 to 395+40)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10

UPRR HRT ROW Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Station														
Construct - 130th Street West Station Option	24-36	x	x	x	x	x	x	x	x	3,148	1,565	467,055	5-10	20-30
Parking														
Construct - 130th Street West Station Option (2 lots)	24	x	x	x	x			x					2-5	5-10
At Grade														
Double Track	24-36	x		x	x			x	x	12,600				
Triple Track	24	x		x	x			x	x	6,300				
Access Road														
At West Station Option	12-24	x	x	x	x			x		6,512	2,171		5-10	5-10
Bridge for Access Road, Crossing at 371+00	24	x	x	x	x	x		x	x	1,553	2,305	247,500	5-10	10-15
Segment U-7: 120th Street Yard and Shop (291+85/45+00 to 352+69/106+12)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Access Road														
Construct	12-24	x	x	x	x			x		10,977	3,659		5-10	5-10
At Grade														
Single Track	36	x		x	x	x		x	x	89,500	1,000		5-10	10-15
Double Track	36	x		x	x	x		x	x	8,100			5-10	10-15
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926	500	5-10	10-15
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	2,100	4,109	1,276,450	5-10	10-15
Shop Facility														
Construct-Shop Building	24-36	x	x	x	x	x	x	x	x	10,380	3,114	1,038,000	5-10	20-30
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
Traction Power														
Substation - Yard	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Final Phase - 95th Street station to 130th Street (96+50 to 380+50/396+00)	**10 - 12**													
Signal/Communication														
Signal/Interlocking	10 - 12							x	x	--	--	--	2-5	10 - 20
Communication System	10 - 12							x	x	--	--	--	2-5	10 - 20

UPRR HRT East Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-1: 95th Street station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,750	500	5-10	10-15
Elevated Concrete Structure														
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	4,100	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,090	11,917	3,701,705	5-10	10-15
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	300	587	182,350	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	170	457	916,100	5-10	10-15
Segment U-3: End of Horizontal Curve to Metra/CN Crossing (142+00 to 285+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - Michigan Avenue	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x			x		9,300	3,100		2-6	5-11
Construct - Michigan Avenue (2 lots)	24	x	x	x	x			x		18,600	6,200		2-7	5-12
Elevated Steel Structure														
Double Track - Hammerhead Substructure	36	x	x	x	x	x	x	x	x	32,700	63,983	19,876,150	50-100	30-35
Traction Power														
Substation - 175+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substation - 254+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

UPRR HRT East Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-4: Metra/CN Crossing to At Grade Track (285+00 to 308+83)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926			
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,300	12,327	3,829,350		
Double Track - TPG, Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	400	897	730,320		
Segment U-5: At Grade Track to 130th Street Station Options (308+83 to 359+00)	**12-36**													
Advance Work														
Utility relocation; staging	12													
At Grade														
Double Track	24-36	x	x	x	x	x	x	x	x	22,950				
Access Road														
Crossing proposed tracks at 357+00	12-24	x	x	x	x			x		6,778	2,260		5-10	5-10
Bridge for access Road, Crossing at 357+00	24	x	x	x	x	x		x	x	3,105	4,610	495,000	5-11	10-15
Connector access road, West of Proposed CTA tracks	12	x	x	x	x			x		717	239		5-10	5-10
Segment U-6S: 130th Street South Station Option (359+00 to 379+27)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Station														
Construct - 130th Street South Station Option	24-36	x	x	x	x	x	x	x	x	6,773	2,653	696,305		
Parking														
At South Station Option	24	x	x	x	x			x		13,900	4,700		2-5	5-10
At Grade														
Double Track	24-36	x		x	x			x	x	4,500				
Triple Track	24	x		x	x			x	x	7,700				
Access Road														
At South Station Option	12-24	x	x	x	x			x		5,778	1,926		5-10	5-10
Segment U-6W: 130th Street West Station Option (379+27 to 394+38)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Station														
Construct - 130th Street West Station Option	24-36	x	x	x	x	x	x	x	x	3,148	1,565	467,055		

UPRR HRT East Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Parking														
At West Station Option (2 lots)	24	x	x	x	x			x		27,800	9,400		2-5	5-10
At Grade														
Double Track	24-36	x		x	x			x	x	12,150				
Triple Track	24	x		x	x			x	x	6,300				
Access Road														
At West Station Option	12-24	x	x	x	x			x		6,512	2,171		5-10	5-10
Bridge for Access Road, Crossing at 369+50	24	x	x	x	x	x		x	x	1,553	2,305	247,500	5-10	10-15
Segment U-7: 120th Street Yard and Shop (290+26/45+00 to 351+67/106+79)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Access Road														
Construct	12-24	x	x	x	x			x		10,977	3,659		5-10	5-10
At Grade														
Single Track	36	x		x	x	x		x	x	89,500	1,000		5-10	10-15
Double Track	36	x		x	x	x		x	x	8,100			5-10	10-15
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926	500	5-10	10-15
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	2,100	4,109	1,276,450	5-10	10-15
Shop Facility														
Construct-Shop Building	24-36	x	x	x	x	x	x	x	x	10,380	3,114	1,038,000	5-10	20-30
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
Traction Power														
Substation - Yard	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Final Phase - 95th Street station to 130th Street (96+50 to 379+70/394+53)	**10 - 12**													
Signal/Communication														
Signal/Interlocking	10 - 12							x	x	--	--	--	2-5	10 - 20
Communication System	10 - 12							x	x	--	--	--	2-5	10 - 20

UPRR HRT West Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-1: 95th Street Station to Beginning of Horizontal Curve at UPRR (96+60 to 132+00)	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,750	500	5-10	10-15
Elevated Concrete Structure														
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	4,100	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	6,090	11,917	3,701,705	5-10	10-15
Segment U-2: Horizontal Curve at UPRR (132+00 to 142+43)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	600	1,174	364,700	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	340	951	1,581,000	5-10	10-15
Segment U-3A: End of Horizontal Curve to Prairie/UPRR Crossing (142+43 to 275+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Construct - Michigan Avenue	24-36	x	x	x	x	x	x	x	x	9,000	11,767	4,030,800	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x	x		x	x	9,300	3,100		2-5	5-10
Construct -Michigan Avenue (2 lots)	24	x	x	x	x			x		18,600	6,200		2-5	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	36	x	x	x	x	x	x	x	x	29,700	58,113	18,052,650	50-100	30-35
Traction Power														
Substation - 180+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substation - 260+00	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

UPRR HRT West Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment U-3B: Prairie/UPRR crossing to Metra/CN Crossing (275+00 to 287+20)	**24-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track -Hammerhead Substructure	36	x	x	x	x	x	x	x	x	1,200	2,438	729,400	50-100	30-35
Double Track - Straddle Bent Substructure	36	x	x	x	x	x	x	x	x	1,020	3,014	3,948,600	50-100	30-35
Segment U-4: Metra/CN Crossing to At Grade Track (287+20 to 311+02)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926		5-10	10-15
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	5,700	11,153	3,464,650	5-10	10-15
Double Track - TPG, Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	400	895	730,320	5-10	10-15
Segment U-5: At Grade Track to 130th Street Station Options (311+02 to 361+19)	**12-36**													
Advance Work														
Utility relocation; staging	12													
At Grade														
Double Track	24-36	x	x	x	x	x	x	x	x	23,400			5-10	20-30
Access Road														
Crossing proposed tracks at 360+00	12-24	x	x	x	x			x		6,778	2,260		5-10	5-10
Bridge for Access Road, Crossing at 360+00	24	x	x	x	x	x		x	x	3,105	4,610	495,000	5-10	10-15
Connector access road, West of Proposed CTA tracks	12	x	x	x	x			x		717	239		5-10	5-10
Segment U-6S: South 130th Street Station Option (361+19 to 381+46)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Station														
Construct - 130th Street South Station Option	24-36	x	x	x	x	x	x	x	x	6,773	2,653	696,305	5-10	20-30
Parking														
Construct - 130th Street South Station Option	24	x	x	x	x			x		13,900	4,700		2-5	5-10
At Grade														

UPRR HRT West Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Double Track	24-36	x		x	x			x	x	5,400				
Triple Track	24	x		x	x			x	x	7,700				
Access Road														
At South Station Option	12-24	x	x	x	x			x		5,778	1,926		5-10	5-10
Segment U-6W: West 130th Street Station Option (381+46 to 396+57)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Station														
Construct - 130th Street West Option	24-36	x	x	x	x	x	x	x	x	3,148	1,565	467,055	5-10	20-30
Parking														
Construct - 130th Street West Option (2 lots)	24	x	x	x	x			x		27,800	9,400		2-5	5-10
At Grade														
Double Track	24-36	x		x	x			x	x	13,050				
Triple Track	24	x		x	x			x	x	5,600				
Access Road														
At West Station Option	12-24	x	x	x	x			x		6,512	2,171		5-10	5-10
Bridge for Access Road, Crossing at 372+00	24	x	x	x	x			x		1,553	2,305	247,500	5-10	10-15
Segment U-7: 120th Street Yard and Shop (292+45/45+00 to 353+86/106+79)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Access Road														
Construct	12-24	x	x	x	x			x		10,977	3,659		5-10	5-10
At Grade														
Single Track	36	x		x	x	x		x	x	89,500	1000		5-10	10-15
Double Track	36	x		x	x	x		x	x	8,100			5-10	10-15
Retained Embankment														
Double Track	24	x	x	x	x	x	x	x	x	2,771	926	500	5-10	10-15
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24	x	x	x	x	x	x	x	x	2,100	4,109	1,276,450	5-10	10-15
Shop Facility														
Construct-Shop Building	24-36	x	x	x	x	x	x	x	x	10,380	3,114	1,038,000	5-10	20-30
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
Traction Power														
Substation - Yard	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

UPRR HRT West Side Option Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Final Phase - 95th Street Station to 130th Street (96+50 to 382+30/396+50)	**10 - 12**													
Signal/Communication														
Signal/Interlocking	10 - 12							x	x	--	--	--	2-5	10 - 20
Communication System	10 - 12							x	x	--	--	--	2-5	10 - 20

Halsted Street HRT Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment H-1: 95th Street Station to Beginning of Horizontal Curve at Halsted (96+60 to 158+00)	**12-36**													
Advance Work														
Signal/cross-over installation; utility relocation; staging	12	x				x							1	5-10
At Grade														
Single Track	12-18	x		x	x	x		x	x	6,830	50	500	1	5-10
Retained Embankment														
Single Track	24	x	x	x	x	x	x	x	x	1,750	1,500	500	5-10	10-15
Elevated Concrete Structure														
Single Track-Rehab/Modify Existing CTA/IDOT tunnel	24	x	x	x	x	x	x	x	x	2,600	1,300	500	5-10	10-15
Elevated Steel Structure														
Single Track-Hammerhead Substructure	24	x	x	x	x	x	x	x	x	2,381	7,870	2,012,500	5-10	10-15
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	8,344	26,820	8,625,155	5-10	10-15
Segment H-2: Horizontal Curve at Halsted (158+00 to 168+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Elevated Steel Structure														
Double Track -TPG, Hammerhead Substructure	24-30	x	x	x	x	x	x	x	x	1,000	2,070	1,825,800	5-10	10-15
Double Track - Straddle Bent Substructure	24-30	x	x	x	x	x	x	x	x	340	914	1,664,200	5-10	10-15
Segment H-3: End of Horizontal Curve to 119th Street Station (168+00 to 285+00)	**12-36**													
Advance Work														
Utility relocation; staging	12	x				x							1	5-10
Stations														
Construct - 103rd Street	24-36	x	x	x	x	x	x	x	x	2,903	4,052	4,764,000	5-10	20-30
Construct - 111th Street	24-36	x	x	x	x	x	x	x	x	2,903	4,052	4,764,000	5-10	20-30
Parking														
Construct - 103rd Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct - 111th Street	12	x	x	x	x			x		9,300	3,100		2-5	5-10
Elevated Steel Structure														
Double Track - Hammerhead Substructure	24-36	x	x	x	x	x	x	x	x	12,600	23,814	7,658,700	50-100	30-35
Double Track - Straddle Bent Substructure	24-36	x	x	x	x	x	x	x	x	13,104	32,261	45,252,480	50-100	30-35
Traction Power														
Substations - 101st Street	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15
Substations - 110th Street	24	x	x	x	x	x		x	x	5,000	1,100	160,000	2-5	10-15

Halsted Street HRT Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Segment H-4: 119th Street station to Vermont Avenue station (285+00 to 367+30)	**12-36**													
Advance Work														
	12													5
Stations														
Construct - 119th Street										2,903	4,052	4,764,000		
Construct - Vermont Avenue										3,363	3,914	4,741,000		
Parking														
Construct - 119th Street	12									9,300	3,100		2-5	5-10
Construct - Vermont Avenue	24									13,900	4,700		2-5	5-10
Double Track - Hammerhead Substructure	24-36									8,400	15,876	5,105,800		
Double Track - Straddle Bent Substructure	24-36									8,736	21,507	30,168,320		
Triple Track - Straddle Bent Substructure	12-24									1,260	3,420	5,875,200		
										5,000	1,100	160,000		10
										5,000	1,100	160,000		10
										5,000	1,100	160,000		10
Segment H-5: 119th Street Yard and Shop (299+47/500+00 to 306+96/1014+64)	**12-36**													
Advance Work														
														5
Single Track		x		x	x	x		x	x	87,000	1,000		5-10	
Double Track		x		x	x	x		x	x	3,150			5-10	
Double Track	24									3,709	1,242	500		
Double Track - Hammerhead Substructure	24									3,300	6,237	2,005,850		
Double Track - Straddle Bent Substructure	24-36									2,520	6,204	8,702,400		
Parking														
Construct - Shop	24	x	x	x	x			x		9,300	3,100		2-5	5-10
Construct-Shop Building	24-36	x	x	x	x	x	x	x	x	8,075	2,423	807,500	5-10	20-30
Access Road														
Construct	12-24	x	x	x	x			x		7,041	2,347		2-5	5-10
										5,000	1,100	160,000		10

Halsted Street HRT Construction Activity	Duration (Months)	Construction Equipment								Soil (CY)	Concrete (CY)	Structural Steel (LB)	Avg Truck Trips Per Work Day	Avg Workers Per Work Day
		Haul Truck	Concrete Truck	Front End Loader	Excavator	Crane	Drill Rig	Compressor	Flatbed					
Final Phase - 95th Street Station to 129th Street (STA 96+50 to 367+00)	**10 - 12**													
Signal/Communication														
Signal/Interlocking	10 - 12							x	x	--	--	--	2-5	10 - 20
Communication System	10 - 12							x	x	--	--	--	2-5	10 - 20

Appendix B
2014-2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Appendix J

Land Use and Economic Development Technical Memorandum

- Final EIS Addendum J, Land Use and Economic Development Technical Memorandum, July 2022

Chicago Red Line Extension Project

Land Use and Economic Development

Final EIS Addendum J

July 2022

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Table of Contents

Section 1 - Summary **1-1**
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-1
3.4 Methods 3-2
Section 4 - Affected Environment **4-1**
4.1 Existing Land Uses 4-1
4.2 Planned Land Uses 4-4
4.3 Land Use and Economic Development Plans 4-6
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-2
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative – Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4
Figure 3-1: Land Use and Economic Development Area of Potential Impact (API) 3-3
Figure 4-1: Existing Land Uses in the API 4-3
Figure 4-2: Zoning Classifications in the API 4-5

Tables

Table 1-1: Land Use and Economic Development 1-1
Table 4-1: Updated Land Use Plans 4-6
Table 4-2: Updated Economic Development Plans 4-9
Table 4-3: Updated Transit-Supportive Policies 4-11
Table 4-4: Updated Quantitative Land Use and Economic Development Data for the Preferred Alignment 4-12
Table 5-1: Summary of Permanent and Construction Impacts 5-1

Abbreviations

API	area of potential impact
CMAP	Chicago Metropolitan Agency for Planning
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
IDOT	Illinois Department of Transportation
MWRD	Metropolitan Water Reclamation District
NEPA	National Environmental Policy Act
NS	Norfolk Southern
RLE	Red Line Extension
UPRR	Union Pacific Railroad

Section 1 - Summary

This technical memorandum analyzes the potential impacts of the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative on land use and economic development and updates any changes since the Draft Environmental Impact Statement (EIS).

As stated in **Appendix J** of the Draft EIS, per Federal Transit Administration (FTA) guidance, a land use change would cause an adverse impact if it would result in any of the following:

- An alignment would not be compatible with surrounding land uses.
- An alignment would encourage land use and development that is inconsistent with local plans, goals, and objectives.

The area of potential impact (API) for determining potential land use and economic development impacts and benefits for the Red Line Extension (RLE) Project includes parcels directly adjacent to the full length of the Preferred Alignment, as well as those parcels within a ½ mile radius of station locations per FTA guidance. The Preferred Alignment was analyzed for potential impacts on existing and expected land use types, densities, and character. Since the Draft EIS, there have been no changes to permanent and construction impacts for land use and economic development.

Table 1-1 summarizes the land use and economic impacts of the Preferred Alignment and No Build Alternative.

Table 1-1: Land Use and Economic Development

Alternative	Permanent Impacts		Construction Impacts
	Land Use	Economic Development	
No Build Alternative	No impact	No impact	No impact
Preferred Alignment	Impacts would not be adverse after mitigation	Beneficial	Impacts would not be adverse after mitigation

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the

UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated

with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

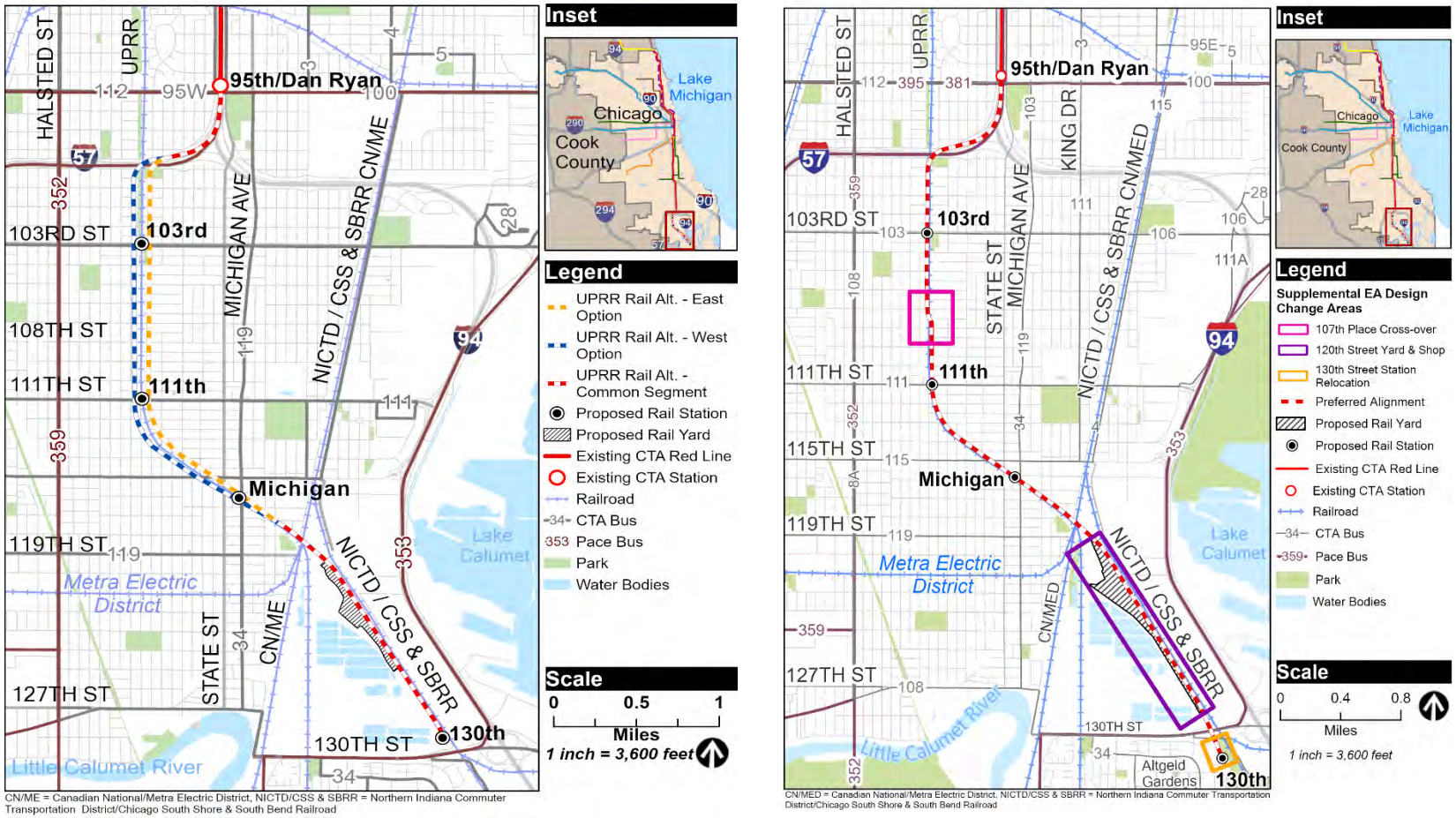

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix J** of the Draft EIS have been carried forward to analyze the potential land use and economic development impacts since the Draft EIS. This section documents the consistency with the Draft EIS **Appendix J** and the associated updates to the corresponding guidelines directing the methods.

3.1 Regulatory Framework

There are no changes to the applicable federal or state regulations referenced in **Appendix J** of the Draft EIS. **Appendix J** further notes there are no local regulations requiring environmental analysis of land use impacts. Local and regional land use plans were reviewed to inform the assessment for the Preferred Alignment. See **Section 4** of this addendum documenting the plans referenced.

3.2 Impact Analysis Thresholds

The National Environmental Policy Act (NEPA) does not set specific thresholds of significance for land use and economic development; however, there is merit in maintaining the approach taken in the Draft EIS based on FTA and the Illinois Department of Transportation (IDOT) land use criteria guidance as the basis for the thresholds of impact for this project. There is no change to the impact analysis thresholds from Draft EIS **Appendix J**.

3.3 Area of Potential Impact

The Draft EIS API was developed per *Guidelines and Standards for Assessing Transit-Supportive Land Use Methods* (FTA 2004) and those guidelines have been superseded by *Planning for Transit-Supportive Development: A Practitioner's Guide (*FTA 2014). However, the updated guidance has no impact on the approach to developing the API for the Preferred Alignment. Consistent with the Draft EIS approach, the API for determining potential land use and economic development impacts and benefits for the Preferred Alignment includes parcels directly adjacent to the full length of the Preferred Alignment, as well as those parcels within a ½ mile radius of stations Because of the relocation of the 130th Street station and refinement of the 120th Street yard and shop, the API for the Preferred Alignment differs from the API for the East and West Options in the Draft EIS.

Although there is no change to the approach to identifying an API, the Preferred Alignment was not defined in the Draft EIS. The Preferred Alignment API has been developed for the Final EIS and is shown in **Figure 3-1.**

3.4 Methods

The analysis of potential land use impacts of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS.

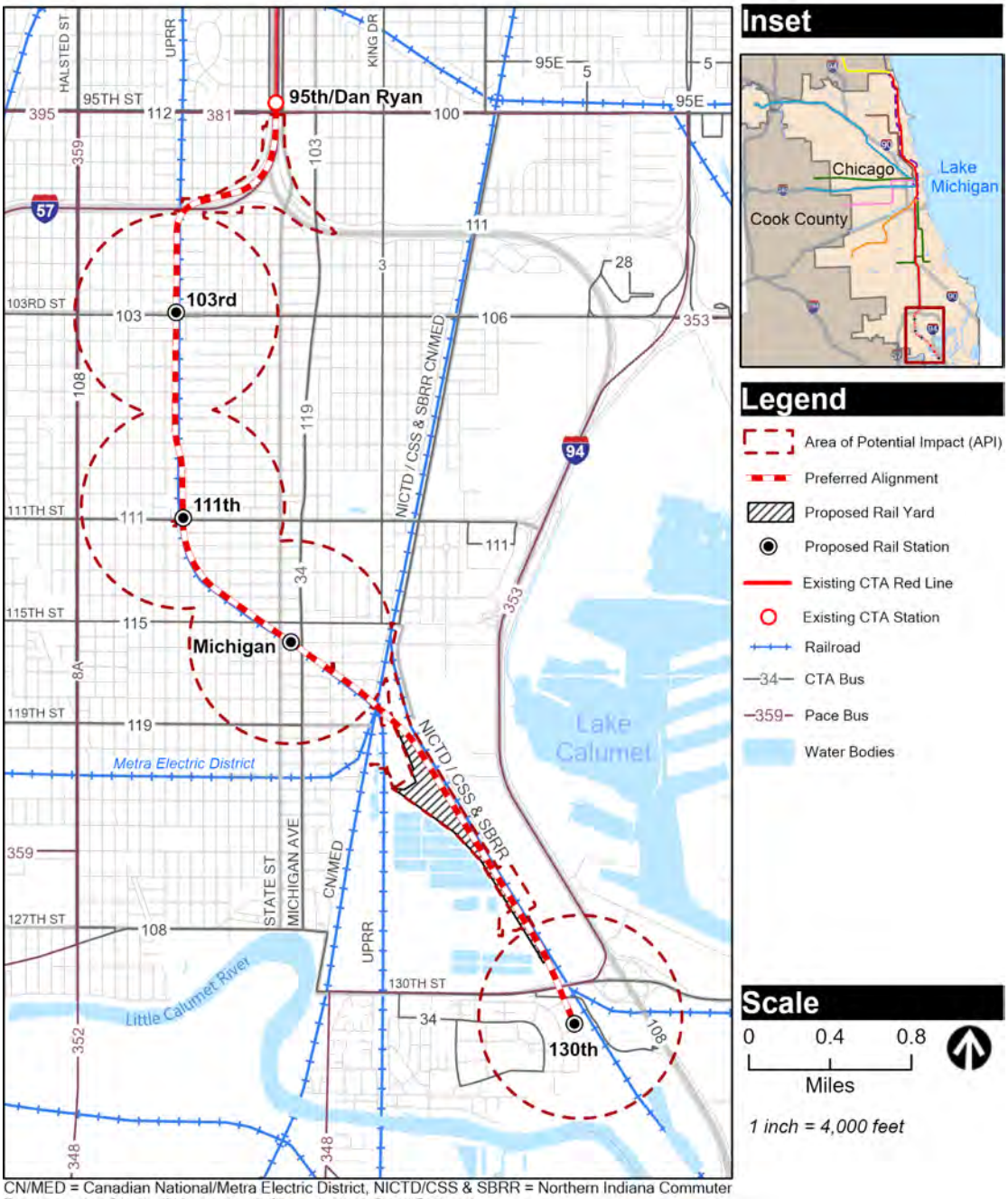

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Preferred Alignment and Area of Potential Impact (API)

Section 4 - Affected Environment

This section describes any updates to the existing and planned land use conditions in the API for land use and economic resources since the publication of the Draft EIS. This section documents updates to the baseline data and planning horizon, as well as any changes to the land use and economic development planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

Where appropriate, Draft EIS data from **Appendix J** have been included for comparison to provide context to the updates in this addendum. Consistent with the Draft EIS, the analysis includes any changes to the existing and planned land uses within ½ mile radius of station locations (referred to as station areas) and the alignment between station areas.

4.1 Existing Land Uses

The following summarizes whether there have been changes to the existing land uses within the API since the Draft EIS publication in 2016. See **Figure 4-1** for a map of the existing land uses in the API.

95th/Dan Ryan terminal – The terminal, including a new station house, bus terminal, pedestrian bridge, and a pick-up/drop-off area for vehicles, was under construction during the Draft EIS. It is now complete and open to the public. The existing land uses surrounding the terminal prior to construction were primarily residential with some commercial uses along 95th Street. Properties that were acquired for the project were rezoned for transportation use.

103rd Street station area – Land uses within the 103rd Street station area have not generally changed since the Draft EIS and are mainly single-family residential.

107th Place cross-over – A cross-over location at 107th Place is part of the Preferred Alignment. The existing land uses in the cross-over area include residential, commercial, industrial, and vacant land.

111th Street station area – Land uses within the 111th Street station area have not generally changed since the Draft EIS. Land uses include single-family residential and industrial uses.

Michigan Avenue station area – Land uses to the northwest of the Michigan Avenue station have not generally changed since the Draft EIS. Land uses are mostly single-family residential, with some

multi-family and vacant land. The station with surface parking lot is proposed in an area that is primarily vacant land with one industrial use.

120th Street yard and shop – The existing land uses remain the same for the yard and shop facility as they did for the Draft EIS. The area includes vacant land as well as industrial and transportation uses associated with utilities and railroad operations. The footprint of the 120th Street yard and shop was shifted approximately 100 feet to the west and has been reduced slightly since publication of the Draft EIS.

130th Street station area – The 130th Street station area has changed since the Draft EIS. The new station area would be located south of 130th Street and east of Greenwood Avenue. The parcel previously consisted of multifamily housing units for the Altgeld Gardens neighborhood. In 2017, approximately 500 housing units in this area (Blocks 11, 12, and 13) were demolished. This parcel is now vacant.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-1: Existing Land Uses in the API

4.2 Planned Land Uses

The current City of Chicago zoning district codes and associated standards were updated on December 18, 2019. However, there are no changes to the zoning tables presented in **Appendix J** in the Draft EIS. See **Figure 4-2** for an updated zoning map of the API.

The City does not have a city-wide comprehensive plan with a future land use map. **Table 4-3** in **Appendix J** in the Draft EIS compared zoned land uses within ½ mile of the UPRR Rail Alternative. There have been no changes to the zoning classifications that are within ½ mile of the station areas since the Draft EIS.

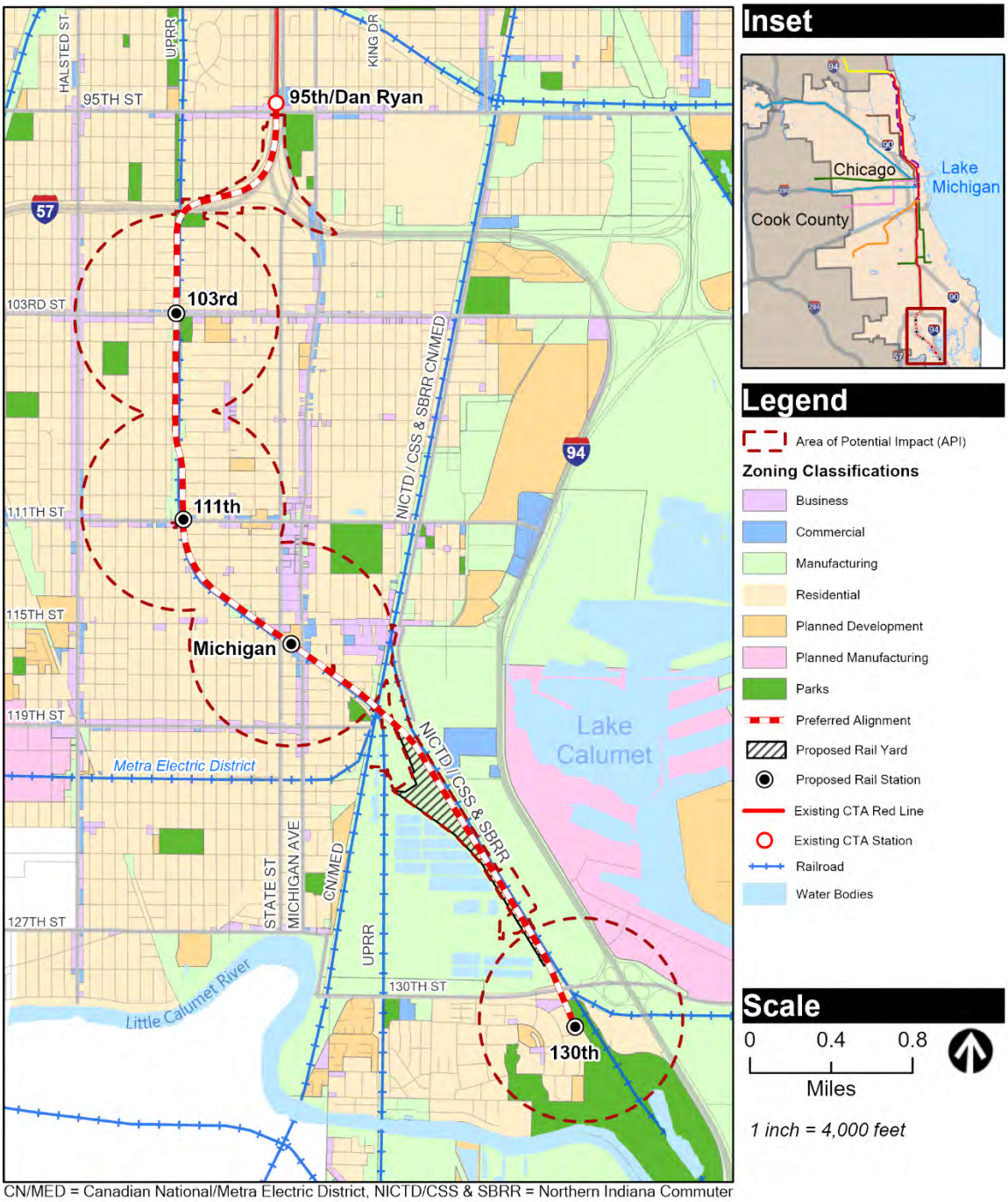

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-2: Zoning Classifications in the API

4.3 Land Use and Economic Development Plans

The plans and policies referenced in **Appendix J** of the Draft EIS were reviewed and this section documents updates to previous resources and new references developed since those documented in the Draft EIS. Consistent with **Appendix J** of the Draft EIS, the following categories were reviewed for new or updated plans or policies:

- Supportive zoning regulations near transit stations
- Tools to implement land use policies
- Performance of transit supportive policies
- Plans and policies to maintain or increase affordable housing
- Transit investment and regional land use

4.3.1 Land Use Plans

Table 4-1 summarizes the updates to Land Use Plans referenced in the Draft EIS and includes new plans released since the Draft EIS.

Table 4-1: Updated Land Use Plans

Plans Referenced in Draft EIS	Updates (if applicable)
GO TO 2040 (Chicago Metropolitan Agency for Planning (CMAP) 2010)	*ON TO 2050* (CMAP 2018)
Transit-Friendly Development Guide (CTA 2009)	No update; still relevant to Final EIS
Calumet Area Land Use Plan (City of Chicago 2002)	No update; still relevant to Final EIS
CitySpace: An Open Space Plan for Chicago (City of Chicago, Chicago Park District, and Forest Preserve District of Cook County 1998)	No update; still relevant to Final EIS
What Will Your Station Look Like? (Developing Communities Project, Inc. and CMAP 2010)	No update; still relevant to Final EIS

Plans Referenced in Draft EIS	Updates (if applicable)
New, not previously referenced	*Washington Heights/95th Street Planning Priorities Report* (CMAP 2016)
New, not previously referenced	*119th Street Corridor Plan*, West Pullman, Chicago (CMAP 2015)
New, not previously referenced	*Roseland Medical District: Existing Conditions Report & Market Analysis* (CMAP 2019)
New, not previously referenced	*Altgeld Gardens-Philip Murray Homes Master Plan* (Chicago Housing Authority (CHA) 2013)
New, not previously referenced	*Transit Supportive Development (TSD) Comprehensive Plan* (CTA 2021- ongoing)

The following summarizes the Land Use Plans not reviewed in the Draft EIS as shown in **Table 4-1.**

- ***ON TO 2050* (CMAP 2018)**

  ON TO 2050 builds on the agency's first comprehensive regional plan, *GO TO 2040*, and identifies three clear, overarching principles:

  1) Inclusive growth: Growing our economy through opportunity for all.
  2) Resilience: Preparing for rapid changes, both known and unknown.
  3) Prioritized Investment: Carefully targeting resources to maximize benefit.

  These principles inform every recommendation in *ON TO 2050*'s five chapters of Community, Prosperity, Environment, Governance, and Mobility. The RLE Project is highlighted as a "regionally significant project" within the Mobility chapter of *ON TO 2050*.

- ***Washington Heights/95th Street Planning Priorities* Report (CMAP 2016)**

  The *Washington Heights/95th Street Planning Priorities Report (*CMAP 2016) includes six focus areas: Capacity Building and Community Engagement, Land Use, Housing, Economic Development, Transportation, and Health and Education. Using two recent projects as catalysts (the renovated CTA 95th/Dan Ryan terminal and the Carter G. Woodson Regional Library), the report recommends the importance of building on existing resources to reduce the effects of economic decline and disinvestment along 95th Street. The report states that the availability of residential land uses can be a catalyst for economic growth in the Washington Heights neighborhood. It also states that the focus for commercial development opportunities should be the 95th/Dan Ryan terminal, particularly on blocks on the south side of 95th Street between

the Dan Ryan Expressway and Parnell Avenue. It also identifies opportunities to attract health care centric facilities and the development of a business and technology incubator on 95th Street.

- ***119th Street Corridor Plan* (CMAP 2016)**
  The 119th Street Corridor Plan (CMAP 2016) addresses the City of Chicago's West Pullman Community Area and stretches four blocks north and south of 119th Street from I-57 to Union Avenue. The vision of the 119th Street Corridor Plan is to attract jobs, industry, and resources to create a vital economic corridor on the Far South Side of Chicago and support the diverse and proud residential neighborhoods in the West Pullman community. The Plan recommends updating zoning to attract private investment, creating a new Special Service Area (SSA), attracting 200,000 square feet of new industrial development on 119th between Racine and Peoria Streets, attracting new restaurants and a bike café, creating a new urban farm between Aberdeen and Peoria Streets south of the railroad tracks, and creating a marketplace at the northeast corner of 1119th and Halsted Streets.

- ***Roseland Medical District Existing Conditions Report & Market Analysis (*CMAP 2019)**
  The *Roseland Medical District* (CMAP 2019) report centers on the 111th Street Corridor and the Roseland Medical District within the Roseland community. The report prioritized the main issues of the corridor and surrounding community, formulating a plan of action including assessments of mobility, land use, and development potential, as well as community engagement and visioning. As an anchor institution, Roseland Community Hospital is a key partner in leading the surrounding area's development. Recommendations include adding affordable multifamily and senior housing options along 111th Street and complimentary health-focused businesses within the 111th Street corridor.

- ***Altgeld Gardens-Philip Murray Homes Master Plan* (CHA 2013)**
  The *Altgeld Gardens-Phillip Murray Homes Master Plan* (CHA 2013) charts a course for opportunities for diverse housing options, access to job and training, efficient transportation infrastructure, expanded learning and recreational spaces, historic preservation, and sustainable design. The Plan states that the RLE Project would provide residents with greater accessibility to jobs, retail, and services in other parts of the city.

- ***Transit Supportive Development (TSD) Comprehensive Plan* (CTA 2021-ongoing)**
  The RLE Transit-Supportive Development (TSD) Plan is a proactive effort to create a guide for future development in communities located near the RLE Project. The TSD Plan is led by CTA and in partnership with the City of Chicago's Department of Planning and Development and the Cook County Land Bank Authority. The TSD Plan is the community's vision for future development along the RLE corridor. This Plan identifies methods and resources needed to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment (CTA 2020-ongoing).

4.3.2 Economic Development Plans and Studies

Table 4-2 summarizes the updates to the Economic Development Plans referenced in the Draft EIS and plans not previously reviewed.

Table 4-2: Updated Economic Development Plans

Plans Referenced in Draft EIS	Updates (if applicable)
Chicago Sustainable Industries, Phase One: A Manufacturing Work Plan for the 21st Century (Chicago 2011)	No update; still relevant to Final EIS
130th Street Station Market/Access Study (Chicago Department of Transportation (CDOT) 2010	No update; still relevant to Final EIS
What Will Your Station Look Like? (Developing Communities Project, Inc. (DCP); CMAP; Center for Neighborhood Technology, CNT 2010)	No update; still relevant to Final EIS
Plan Forward: Communities That Work (CHA 2013)	No update; still relevant to Final EIS
Improving Access, Increasing Livability: The CTA Red Line South Extension (CMAP, DCP, CTA 2012)	No update; still relevant to Final EIS
Transit Equity Matters: A Regional Analysis of the Red Line and Two Other Proposed CTA Transit Line Extensions (University of Illinois at Chicago Voorhees Center 2009)	No update; still relevant to Final EIS
Draft *Comprehensive Economic Development Strategy Report* (Cook County 2009)	Draft *Comprehensive Economic Development Strategy Report* (Cook County 2019)
New; not previously referenced	*The Real Estate Mantra - Locate Near Public Transportation* (Center for Neighborhood Technology 2019)
New; not previously referenced	*A Plan for Economic Growth* (World Business Chicago 2012)
New; not previously referenced	INVEST South/West (City of Chicago 2019)

The following summarizes the economic development plans not reviewed in the Draft EIS per **Table 4-2**:

- ***Draft Comprehensive Economic Development Strategy Report* (Cook County 2019)**
  This report is an update to the 2009 report that was referenced in the Draft EIS. This report outlines the Cook County Department of Planning and Development's vision and five key focus areas, each with a policy goal and strategies for implementation. The report not only fulfills the planning requirements of the U.S. Economic Development Administration and Department of Housing and Urban Development, but also signaled a clear intent to coordinate investments across County departments to maximize their impact.

- ***The Real Estate Mantra - Locate Near Public Transportation* (Center for Neighborhood Technology 2019)**
  This report compares the performance of residential and commercial property sales near fixed-guideway stations with areas without public transit access between 2012 and 2016 in seven regions around the United States. Research results indicate that the presence of fixed-guideway public transportation (rail and bus rapid transit) has a strong correlation to higher property values.

- ***A Plan for Economic Growth* (World Business Chicago 2012)**
  This report provides a framework for greater Chicago to define priorities and undertake an integrated and unified agenda for economic growth. The Plan describes the foundations for growth that are necessary for metropolitan economies to move toward and embrace the "next economy." It also measures how well Chicago is doing in comparison with past performance, national performance, and the performance of peer regions.

- ***INVEST South/West* (City of Chicago 2019)**
  INVEST South/West is a community initiative implemented by the City of Chicago to marshal the resources of multiple City departments, community organizations and corporate and philanthropic partners towards 10 communities on Chicago's South and West sides. With a focus on 12 key commercial corridors in the 10 communities, *INVEST South/West* collectively supports infrastructure development, improved programming for residents and businesses and policies that impact each of the community areas surrounding the corridors to create lasting impact. Target areas include the Roseland, Pullman and West Pullman areas which are within the API. Priority corridors include South Michigan Avenue and 111th Street.

4.3.3 Transit-Supportive Policies

Table 4-3 summarizes the updates to the Transit-Supportive Policy documents not already addressed in **Section 4.3.1** or **Section 4.3.2** but referenced in the Draft EIS.

Table 4-3: Updated Transit-Supportive Policies

Plans Referenced in Draft EIS	Updates (if applicable)
2004 Guidelines and Standards for Assessing Transit-Supportive Land Use (FTA 2004)	*Planning for Transit-Supportive Development: A Practitioner's Guide* (FTA 2014)
Moving Beyond Congestion Strategic Plan (Regional Transportation Authority (RTA) 2007)	*Invest in Transit Strategic Plan* (RTA 2018-2023)
The Case for Transit-Oriented Development in the Greater Roseland Area (University of Illinois at Chicago Voorhees Center 2005)	No update; still relevant to the Final EIS
New, not previously referenced	*Equitable Transit-Oriented Development (eTOD) Policy Plan* (City of Chicago 2020)

The following reviews the Transit-Supportive Policy Reports not previously referenced in the Draft EIS:

- ***Planning for Transit-Supportive Development: A Practitioner's Guide* (FTA 2014)**
  This is a resource document and a guide of best practices, guidance, success stories and lessons learned to assist transit agencies, local governments, and others in integrating transit planning with local land use planning.

- ***Invest in Transit Strategic Plan* (RTA 2018-2023)**
  Invest in Transit is the region's plan for pursuing dependable funding streams that will enable the Chicago area transit agencies to provide vital services well into the future. The report outlines strategies for achieving these goals and includes a list of priority projects that agencies cannot complete at current funding levels, but which are necessary to ensure continued high-quality transit for the region.

- ***The City of Chicago Equitable Transit-Oriented Development (eTOD) Policy Plan* (City of Chicago, 2020)**
  The Chicago eTOD Policy Plan outlines a comprehensive set of actions for the City of Chicago to take to advance racial equity, wealth building, public health, and climate resilience goals through equitable Transit-Oriented Development (eTOD).

4.3.4 Corridor Economic Environment Update

The following table shows the population and employment data for the 2018 Base Year, the 2050 No Build, and the 2050 Growth scenario. Comparison statistics are shown for the corridor, as compared to growth rates in the overall city, central business district and within the half mile station areas. In particular, employment is expected to grow in the corridor by 78% by the year 2050. Note that the quantitative data for the station areas are measured for the area within ½ mile of the stations; the corridor between the station areas is the data from the parcels directly affected by the alignment (generally, those parcels within the API).

Table 4-4: Updated Quantitative Land Use and Economic Development Data for the Preferred Alignment

City of Chicago	2018 Base Year	2050 No Build	2050 Growth
Total Population	2,705,988	3,072,856	14%
Total Employment	1,373,969	1,516,209	10%
Central Business District			
Total Employment	668,454	643,855	-4%
Employment-Portion Metropolitan Area	49%	42%	
Central Business District Land Area (sq mi)	4.02	4.02	
Employment Density (jobs per sq mi)	166,282	160,163	
Corridor			
Total Population	24,556	32,979	26%
Total Employment	2,887	5,127	78%
Population-Portion Metropolitan Area	0.91%	1.07%	
Employment-Portion Metropolitan Area	0.21%	0.37%	
Corridor Land Area (sq mi)	3.76	3.76	
Population Density (persons per sq mi)	6,531	8,771	
Employment Density (jobs per sq mi)	768	1,364	
All Station Areas			
Housing Units	10,200	11,696	15%
Population	23,863	32,268	35%
Employment	2,720	4,441	63%

City of Chicago	2018 Base Year	2050 No Build	2050 Growth
Land Area (sq mi)	3.57	3.57	
Housing Unit Density (units per sq mi)	2,859	3,276	
Population Density (persons per sq mi)	6,689	9,039	
Employment Density (jobs per sq mi)	763	1,244	
103rd Street Station Area			
Housing Units	3,595	3,902	9%
Population	8,393	10,418	24%
Employment	262	810	209%
Land Area (sq mi)	0.89	0.89	
Housing Unit Density (units per sq mi)	4,048	4,393	
Population Density (persons per sq mi)	9,450	11,730	
Employment Density (jobs per sq mi)	295	912	
111th Street Station Area			
Housing Units	3,337	6,377	91%
Population	8,603	17,411	102%
Employment	1,819	2,555	40%
Land Area (sq mi)	0.92	0.92	
Housing Unit Density (units per sq mi)	3,642	6,931	
Population Density (persons per sq mi)	9,390	18,925	
Employment Density (jobs per sq mi)	1,985	2,777	
Michigan Avenue Station Area			
Housing Units	3,317	4,289	29%
Population	7,275	12,307	69%
Employment	713	1,634	129%
Land Area (sq mi)	0.90	0.90	
Housing Unit Density (units per sq mi)	3,706	4,792	
Population Density (persons per sq mi)	8,127	13,750	
Employment Density (jobs per sq mi)	797	1,825	
130th Street Station Area			
Housing Units	1,307	740	-43%
Population	2,785	2,121	-24%
Employment	299	801	168%
Land Area (sq mi)	1.05	1.05	
Housing Unit Density (units per sq mi)	1,245	705	
Population Density (persons per sq mi)	2,653	2,021	
Employment Density (jobs per sq mi)	285	763	

Source: CMAP ON TO 2050 population and employment projections, US Census data 2015-2018

All of the station areas except for the 130th Street station area show population growing, with the 111th Street station area seeing the strongest growth. In all station areas, future population estimates

have been revised upward since the Draft EIS (future year projections are now available for 2050, instead of 2030). Employment is expected to grow faster than population overall in all of the station areas except for the 111th Street station area. As with population, the expected growth rate of jobs has increased since the Draft EIS.

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to affected communities:

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

Consistent with **Appendix J** of the Draft EIS, the same definitions for impact categories were used: i.e., beneficial, no impact, not adverse, and adverse. In addition, a comparison was made to determine if the impact determination resulting from this analysis has changed relative to the determination documented in **Appendix J** of the Draft EIS. The comparison showed no changes in permanent or construction impacts on land use or economic development since the Draft EIS. See **Table 5-1** for a summary of impacts.

Table 5-1: Summary of Permanent and Construction Impacts

Alternative	Permanent Impacts		Construction Impacts
	Land Use	Economic Development	
No Build Alternative	No impact	No impact	No impact
Preferred Alignment	Impacts would not be adverse after mitigation	Beneficial	Impacts would not be adverse after mitigation

This section also documents the new or revised mitigation measures for identified project impacts, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East and West Options evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) mitigation measures apply to the Preferred Alignment.

5.1 No Build Alternative

An assessment was made to identify whether there would be any impacts to land use or economic development, either permanent, from construction, or cumulative on the communities affected by the No Build Alternative. Since the Draft EIS, there have been no changes to impacts of the No Build Alternative and remain as no impacts.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

An assessment was made to identify whether there would be any impacts to land use or economic development, either permanent, from construction, or cumulative on the communities affected by the Preferred Alignment. Since the Draft EIS, there have been no changes to impacts on land use and economic development of the Preferred Alignment. Impacts under the Preferred Alignment remain as not adverse in terms of land use impacts and construction impacts, and beneficial in terms of economic development.

5.2.1 Permanent Impacts and Mitigation - Preferred Alignment

The Preferred Alignment would cause displacements as a result of construction of the track structure and park & ride facilities. The Preferred Alignment would affect the land uses of 14 additional parcels that were not affected by either the East or West Options. These parcels are located in the vicinity of the 107th Place cross-over and would be permanently acquired for staging of construction equipment and for the overhead RLE supports to cross the UPRR track. With compensation and relocation assistance to be provided, the displacement impacts would not be adverse. Where stations, substation and park & ride facilities would be inconsistent with current zoning CTA would coordinate with City of Chicago to rezone the parcels or receive appropriate zoning approvals (e.g., special use permit, variance, etc.).

Implementation of the Preferred Alignment could foster economic benefits by providing new public transit options and opportunities for economic development. The CTA prepared a Transit-Supportive Development (TSD) plan that would help minimize adverse impacts due to incompatible land use types resulting from the RLE Project.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

Construction activities would cause temporary impacts such as truck traffic, roadway detours, noise, vibration, and dust. Mitigation associated with truck traffic and roadway detours can be

found in **Addendum H** and **Addendum L**; noise and vibration mitigation can be found in **Addendum O**; dust mitigation can be found in **Addendum U**. There could be short-term economic benefits due to jobs created by construction. Construction could be disruptive to businesses along the alignment, which would be an adverse impact. Construction impacts and mitigation recommended for land use and economic development under the Preferred Alignment would be similar to the East and West Options in the Draft EIS.

To minimize the adverse impact, CTA would develop and implement a Construction Outreach and Coordination Plan. CTA would coordinate with the communities, businesses, and aldermen's local ward offices to finalize and implement a Construction Outreach and Coordination Plan. The plan would include a Business Outreach Program to assist local businesses and residents affected by construction. The plan would be tailored to business and community needs and would include a series of initiatives to minimize construction disruption to businesses and the surrounding community. Examples of these initiatives include a community calendar to inform residents of the construction schedule and avoid affecting special events or festivals, advertising campaigns, any provisions for additional parking during construction and signage.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

The Preferred Alignment cumulative land use and economic development impacts would be similar to those described in **Appendix J** of the Draft EIS.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on land use or on economic development as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative – Preferred Alignment

Consistent with the results of the Draft EIS analysis for the East and West Options, there would be no permanent or construction-related adverse impacts on land use and economic development for the Preferred Alignment after mitigation measures are implemented.

Section 7 - References Cited

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Appendix J

Land Use and Economic Development Technical Memorandum

- Draft EIS Appendix J, Land Use and Economic Development Technical Memorandum, September 2015
  - Appendix A, Detailed Maps of Current Land Uses
  - Appendix B, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Land Use and Economic Development

Technical Memorandum

May 8, 2013
Updated September 9, 2015

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Table of Contents

Section 1 Summary **1-1**

Section 2 Project Description **2-1**

Section 3 Methods for Impact Evaluation **3-1**

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-3
3.3 Area of Potential Impact 3-4
3.4 Methods 3-4

Section 4 Affected Environment **4-1**

4.1 Existing Land Uses 4-1
4.2 Planned Land Uses 4-7
4.3 Land Use and Economic Development Plans and Policies 4-14

Section 5 Impacts and Mitigations **5-1**

5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-2
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-8
5.4 Union Pacific Railroad Rail Alternative - East Option 5-20
5.5 Union Pacific Railroad Rail Alternative - West Option 5-27
5.6 Halsted Rail Alternative 5-33

Section 6 Impacts Remaining After Mitigation **6-1**

6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-1
6.5 Union Pacific Railroad Rail Alternative - West Option 6-2
6.6 Halsted Rail Alternative 6-2

Section 7 References Cited **7-1**

Appendix

Appendix A - Detailed Maps of Current Land Uses
Appendix B - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 3-1: Land Use and Economic Development Area of Potential Impact 3-5
Figure 4-1: Community Areas in the Red Line Extension Project Area 4-2
Figure 4-2: Existing Land Uses in the Red Line Extension Project Area 4-3
Figure 4-3: Zoning Classifications in the Red Line Extension Project Area 4-9

Tables

Table 1-1: Summary of Land Use and Economic Impacts after Mitigation 1-2
Table 4-1: Red Line Extension Project Area Zoning District Codes and Associated Standards 4-10
Table 4-2: Bus Rapid Transit Alternative Stop Location Zoning Codes 4-12
Table 4-3: Union Pacific Railroad Rail Alternative Station Area Zoning Code Designations 4-13
Table 4-4: Halsted Rail Alternative Station Area Zoning Code Designations 4-14
Table 4-5: Quantitative Land Use and Economic Development Data for Bus Rapid Transit Alternative Alignment* 4-26
Table 4-6: Quantitative Land Use and Economic Development Data for Union Pacific Railroad Rail Alternative Alignments* 4-28
Table 5-1: Summary of No Build Alternative Impacts* 5-1
Table 5-2: Summary of Bus Rapid Transit Alternative Impacts after Mitigation* 5-3
Table 5-3: Quantitative Land Use and Economic Development Data for the Bus Rapid Transit Alternative Alignment* 5-3
Table 5-4: Summary of Travel Time Saving for All Alternatives 5-6
Table 5-5: Summary of Union Pacific Railroad Rail Alternative - Right-of-Way Option Impacts after Mitigation 5-8
Table 5-6: Quantitative Land Use and Economic Development Data for Union Pacific Railroad Rail Alternative Alignments* 5-9
Table 5-7: Summary of Union Pacific Railroad Rail Alternative East Option Impacts after Mitigation* 5-21
Table 5-8: Summary of Union Pacific Railroad Rail Alternative West Option Impacts after Mitigation* 5-27
Table 5-9: Summary of Halsted Rail Alternative Impacts after Mitigation* 5-34
Table 5-10: Quantitative Land Use and Economic Development Data for Halsted Rail Alternative Alignment* 5-34

Abbreviations

API	Area of Potential Impact
BRT	Bus Rapid Transit
CDOT	Chicago Department of Transportation
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CTA	Chicago Transit Authority
DCP	Developing Communities Project, Inc.
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt
MWRD	Metropolitan Water Reclamation District
NEPA	National Environmental Policy Act
NICTD	Northern Indiana Commuter Transportation District
RLE	Red Line Extension
ROW	right-of-way
RTA	Regional Transportation Authority
TIF	tax increment financing
TIP	Transportation Improvement Program
TOD	transit-oriented development
UPRR	Union Pacific Railroad

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on land use and economic development.

Per Federal Transit Administration (FTA) guidance, a land use change would cause an adverse impact if it would result in any of the following:

- An alignment would not be compatible with surrounding land uses.
- An alignment would encourage land use and development that is inconsistent with local plans, goals, and objectives.

The area of potential impact (API) for determining potential land use and economic development impacts and benefits for the RLE Project includes parcels directly adjacent to the build alternative alignments, for the full length of the alignments, as well as those parcels within a ½-mile radius of station locations per FTA guidance.

Each alternative was analyzed for potential impacts on existing and expected land use types, densities, and character resulting from permanent impacts, construction impacts, and cumulative impacts. This analysis determined the following:

- The Bus Rapid Transit (BRT) Alternative would improve land use accessibility between station areas and the 95th Street Terminal and downtown Chicago, but not as much as the Union Pacific Railroad (UPRR) Alternative options or the Halsted Rail Alternative. Travel time savings to downtown Chicago for each affected neighborhood would be greater for the BRT Alternative than for the No Build Alternative.
- Travel time savings would encourage new development or redevelopment within station areas for the UPRR Rail Alternative options or the Halsted Rail Alternative. The extent of such development activity would depend on factors such as local plans, policies, zoning, and financial incentives. The BRT Alternative would not encourage new development due to the lack of rail-like elements, such as exclusive travel lanes and substantial stations, which are typically cited as necessary to attract the attention of private developers.
- The UPRR Rail Alternative would be consistent with local and regional land use and economic development plans in the project area, as well as the U.S. Department of Transportation Livability Initiative. Because the UPRR Rail Alternative would provide new transit service to relatively isolated South Side neighborhoods, the permanent impacts would be beneficial for land use and economic development.

- The BRT Alternative would result in no adverse impacts on land use or economic development and would be consistent with existing land uses.
- Although it is not included in local and regional land use and economic development plans, the Halsted Rail Alternative would provide beneficial impacts on land use and economic impacts. The Halsted Rail Alternative would, however, result in an adverse impact on adjacent single-family residential land uses in West Pullman due to the proposed seven-story parking garage at the Vermont Avenue station.
- Property acquisitions would temporarily reduce the property tax base, but affected residences and businesses could be relocated within the same neighborhoods due to the availability of residential and commercial real estate.

Table 1-1 highlights the land use and economic development impacts of each alternative on the directly affected neighborhoods within the project area. These impacts are presented with mitigation factored into the analysis. If an alternative alignment would not pass through a neighborhood, the impact category assigned to that neighborhood is "Not Applicable," which is represented by dash marks. Section 5 of the technical memorandum provides the specific impact analysis for the proposed alternatives.

Table 1-1: Summary of Land Use and Economic Impacts after Mitigation

	Phase	Directly Affected Neighborhoods within Project Area						
		Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park*
No Build Alternative	Permanent	Land Use	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
		Economic Development	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
	Construction	Land Use	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
		Economic Development	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
	Cumulative	Land Use	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
		Economic Development	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
BRT Alternative	Permanent	Land Use	---	Beneficial	---	Beneficial	Beneficial	---
		Economic Development	---	Not Adverse	---	Not Adverse	Not Adverse	---
	Construction	Land Use	---	Not Adverse	---	Not Adverse	Not Adverse	---
		Economic Development	---	Beneficial	---	Beneficial	Beneficial	---

	Phase	Directly Affected Neighborhoods within Project Area						
		Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park*
	Cumulative	Land Use	---	Not Adverse	---	Not Adverse	Not Adverse	---
		Economic Development	---	Not Adverse	---	Not Adverse	Not Adverse	---
UPRR ROW Option	Permanent	Land Use	Beneficial	Beneficial	---	Beneficial	Beneficial	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Construction	Land Use	Not Substantially Adverse	Not Substantially Adverse	---	Not Substantially Adverse	Not Substantially Adverse	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Cumulative	Land Use	Beneficial	Beneficial	---	Beneficial	Beneficial	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
UPRR East Option	Permanent	Land Use	Beneficial	Not Substantially Adverse	---	Not Substantially Adverse	Beneficial	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Construction	Land Use	Not Substantially Adverse	Not Substantially Adverse	---	Not Substantially Adverse	Not Substantially Adverse	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Cumulative	Land Use	Beneficial	Beneficial	---	Beneficial	Beneficial	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
UPRR West Option	Permanent	Land Use	Beneficial	Not Substantially Adverse	---	Not Substantially Adverse	Beneficial	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Construction	Land Use	Not Substantially Adverse	Not Substantially Adverse	---	Not Substantially Adverse	Not Substantially Adverse	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Cumulative	Land Use	Beneficial	Beneficial	---	Beneficial	Beneficial	---
		Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---

	Phase	Directly Affected Neighborhoods within Project Area						
		Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park*
Halsted Rail Alternative	Permanent	Land Use	Beneficial	Beneficial	Beneficial	Adverse	---	Beneficial
		Economic Development	Beneficial	Beneficial	Beneficial	Beneficial	---	Beneficial
	Construction	Land Use	Not Substantially Adverse	Not Substantially Adverse	Not Substantially Adverse	Not Substantially Adverse	---	Not Substantially Adverse
		Economic Development	Beneficial	Beneficial	Beneficial	Beneficial	---	No Impact
	Cumulative	Land Use	Beneficial	Beneficial	Beneficial	Beneficial	---	No Impact
		Economic Development	Beneficial	Beneficial	Beneficial	Beneficial	---	No Impact

Notes: *Village of Calumet Park

Impact Categories:

- Not Applicable (---)
- Beneficial
- No Impact
- Not Adverse
- Not Substantially Adverse
- Adverse

Updated July 27, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix B of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix B supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - Right-of-Way (ROW) Option
  - East Option
  - West Option
- Halsted Rail Alternative

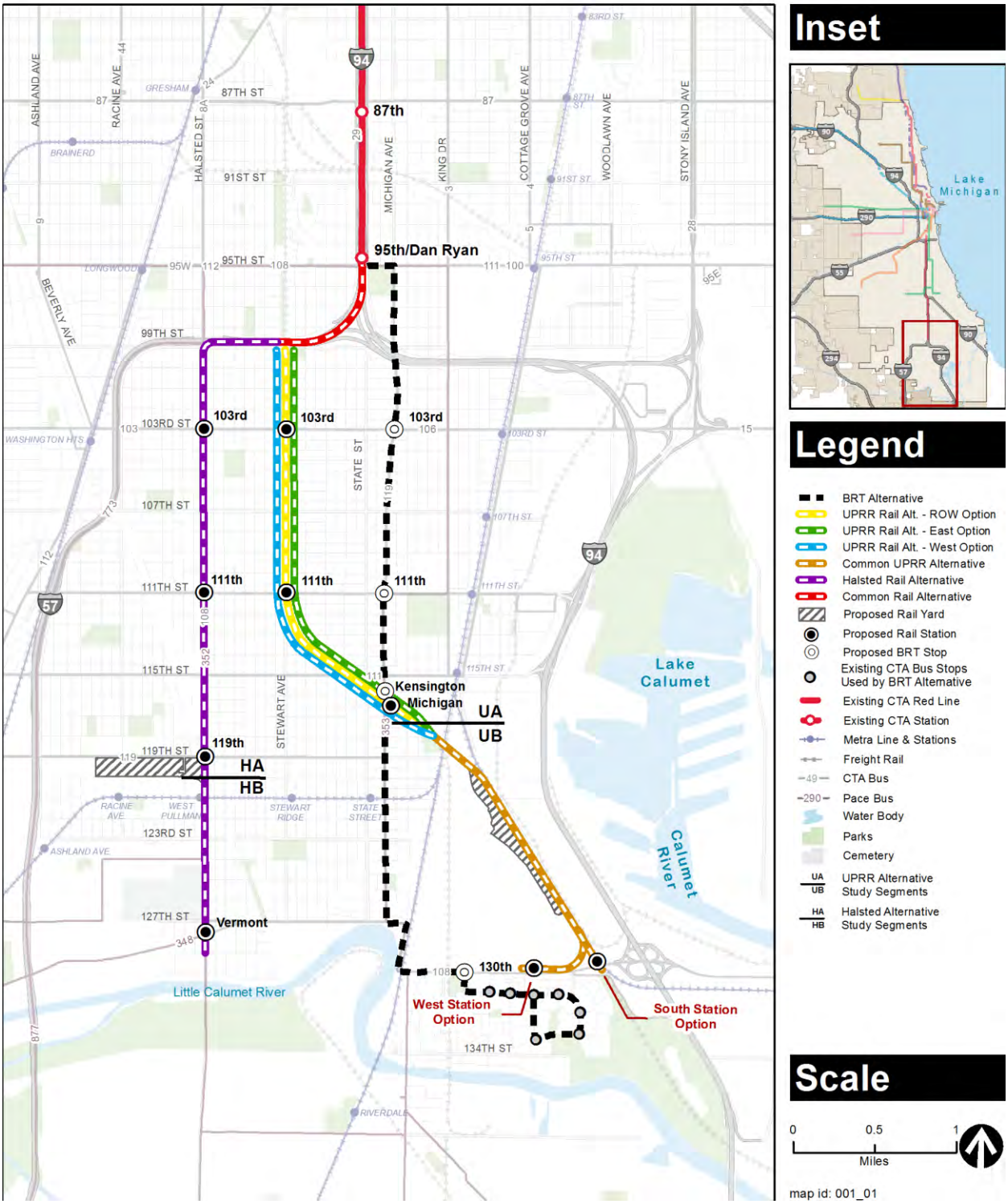

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

This section describes the methods for analysis of potential impacts on land use and economic development. The types of impacts considered in this analysis include conflicts with or disruptions to existing land uses; inconsistencies with local and regional plans, policies, and regulations; and future land use and economic development benefits and opportunities presented by the alternatives.

3.1 Regulatory Framework

3.1.1 Federal

Sections 3 and 5 of the Urban Mass Transportation Act of 1964 require that federally funded transit projects be consistent with official plans for the comprehensive development of an area, as well as with a community's goals and objectives. To ensure compliance with this requirement, the FTA states that every environmental document should include maps that illustrate existing and proposed future land uses of the area around the proposed project alternative alignments. If a proposed project is fully consistent with existing and proposed land uses and will not be the impetus for new development that would be inconsistent with policies or plans, no further analysis is required.

In response to the U.S. Department of Transportation Livability Initiative, a 2010 FTA directive indicated that analysis of transit projects' potential to increase livability, promote economic development, and support community growth should be considered as part of the criteria for FTA's programs. According to the directive, the FTA will seek to do the following:

- Provide more transportation choices.
- Promote equitable, affordable housing.
- Enhance economic competitiveness - access to employment centers, education, services and other basic needs.
- Support existing communities - transit-oriented, mixed-use development, and land recycling.
- Coordinate policies and leverage investment - leverage funding to plan for future growth.
- Value communities and neighborhoods - invest in healthy, safe, and walkable neighborhoods.

The CTA desires to seek FTA New Starts Program funding for the capital cost of the proposed project; therefore, the FTA New Starts guidelines were utilized to document the affected environment for land use and economic development, which provides the foundation for determining potential impacts on existing land uses and plans and policies. As authorized by Section 5309 of Title 49, United States Code, the FTA created the New Starts Program to

efficiently and comparatively evaluate and rate major new capital investments nationwide. Section 5309(d)(6) requires the FTA to publish policy guidance on the major capital investment program review and evaluation process and criteria each time substantial changes are made.

On January 9, 2013, the FTA published a final rule implementing New Starts Program changes that are consistent with Moving Ahead for Progress in the 21st Century (MAP-21), which was signed into law in July 2012. Accompanying the final rule is FTA's Proposed New Starts and Small Starts Policy Guidance (January 9, 2013) to provide details on the measures and analytical techniques, which will be finalized later this year. The proposed guidance does not alter the basic criteria for analyzing existing land uses and economic development, with one exception. The quantity of affordable housing or certified public housing, and related plans and policies to increase affordable housing within a proposed transit corridor, was proposed as a new measure. The proposed guidance was used for the land use and economic development assessment for the RLE Project.

3.1.2 State

The Illinois Department of Transportation (IDOT) *Community Impact Assessment Manual* provides guidance for analyzing the impacts of a transportation project on land use and development as well as impacts on the regional and local economies (IDOT 2007).

3.1.3 Local

There are no local regulations requiring environmental analysis of land use impacts. Local and regional land use plans were reviewed to inform the land use and economic development assessment for the RLE Project. The applicable plans are listed below for reference.

Chicago Metropolitan Region:

- Chicago Metropolitan Agency for Planning (CMAP) *GO TO 2040 Regional Plan (2010)*

Cook County:

- *Cook County Comprehensive Economic Development Strategy Report (2009)*

City of Chicago:

- *Chicago Sustainable Industries, Phase One: A Manufacturing Work Plan for the 21st Century (2011)*
- *Transit-Friendly Development Guide (2009)*
- *The Chicago Central Area Plan (May 2003)*
- *City Space Plan for Chicago (1998)*

Village of Calumet Park:

Note: The Village does not have a recently adopted comprehensive plan; therefore, the Village Code and Zoning Map were utilized to assess future land use within the project area.

3.2 Impact Analysis Thresholds

NEPA does not set specific thresholds of significance for land use and economic development impacts. Guidance published by the FTA and IDOT was used as the basis for a qualitative evaluation of the potential for land use and economic development impacts at parcels adjacent to the RLE Project alternative alignments. The FTA and IDOT land use criteria, as described in the guidance manuals, were used as the basis for the thresholds of impact for this project. For the purposes of this technical memorandum, impacts on land use are based on the following:

- Will the project cause substantial changes in existing land use?
- Will the project facilitate or impede potential growth?
- Is the project located in a high growth region?
- Have there been recent zoning changes in the project area and will zoning changes occur due to project implementation?
- Will the project be compatible with surrounding land uses?
- Will the project encourage land use and development that is inconsistent with local plans, goals and objectives?

Per FTA and IDOT guidance, impacts on economic development are based on the following:

- Will the project result in taxation changes?
- Will the project affect a major employer?
- Which economic sectors might be affected by the project?
- Will the project result in substantial displacement of businesses and individuals?
- Will the project cause short-term and/or long-term disruption of business activities?
- Will the project have an influence on regional construction costs?

If one or more of the above impacts is anticipated, the expected impacts on the area and a discussion of alternative locations must be presented in the environmental document. In addition, the document must identify measures that would be used to mitigate any anticipated adverse impacts. There are no additional criteria at the state and local levels.

3.3 Area of Potential Impact

The API for determining potential land use and economic development impacts and benefits for the RLE Project includes parcels directly adjacent to the build alternative alignments, for the full length of the alignments, as well as those parcels within a ½-mile radius of stations per FTA's 2004 *Guidelines and Standards for Assessing Transit-Supportive Land Use* (see Figure 3-1).

3.4 Methods

The analysis of potential land use impacts associated with each alternative entailed the following components:

- Analysis of the potential for short-term and long-term conflict with, or disruption of access to, land uses adjacent to the alternative alignments.
- Identification of potential conflicts with applicable local land use plans, policies, or regulations.
- Identification of potential land use benefits of the alternatives, such as opportunities for economic development and transit-supportive land uses.

The EIS analyzed impacts at a general level and took into account the impacts of the project on the surrounding existing and future land use categories.

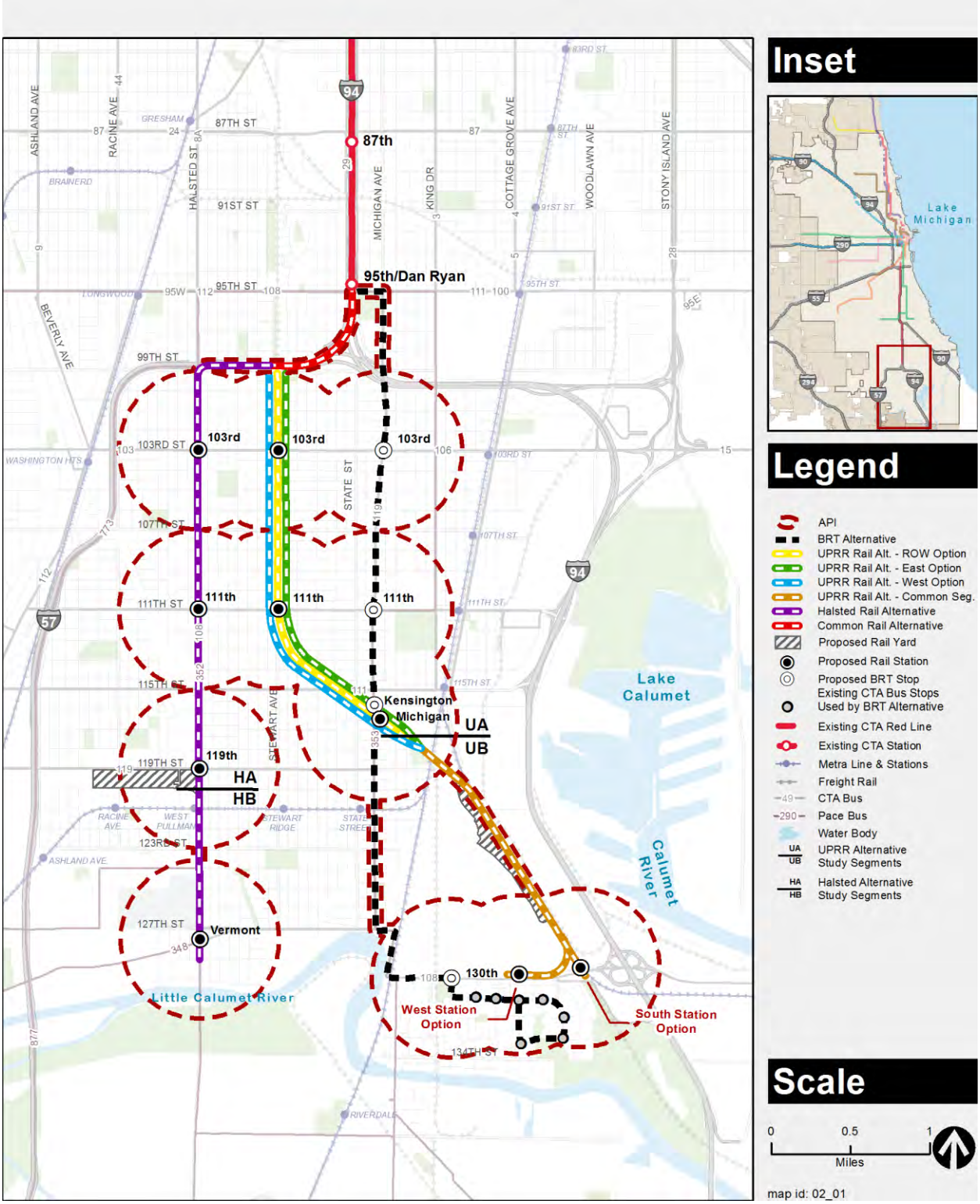

Figure 3-1: Land Use and Economic Development Area of Potential Impact

3.4.1 Land Use Incompatibility and Conflicts

The analysis began with an inventory of the existing land uses surrounding each alternative alignment, to identify the potential short- and long-term conflicts with land uses and potential disruption of access to land uses adjacent to the alternative alignments. The catalog of land uses relied on the land use designations provided by the applicable local land use plans, zoning ordinance designations, review of aerial photography, and observations made during field visits. Land use maps in the plans illustrate the land use designations for parcels near the alternative alignments.

Existing land uses were compared to the land uses that would be expected after implementation of each build alternative and/or the No Build Alternative to identify potential incompatibilities with and disruptions of existing land uses. The types of incompatibilities considered included the introduction of new transit facilities adjacent to sensitive land uses; the introduction of new land uses that are inconsistent with existing land uses; increased noise, security concerns, changes in lighting, transportation changes (e.g., pedestrian access to stations); and pedestrian safety concerns. The potential for land use incompatibility with regard to increased noise, security, lighting, transportation, and pedestrian safety is briefly summarized in this technical memorandum, but is discussed in greater detail in the separate technical memorandums that address those specific topics.

3.4.2 Policy Consistency

The analysis focused on each proposed alternative's consistency with the goals and policies presented in regional and local land use plans and regulations of the City of Chicago, Cook County, and CMAP, as well as the U.S. Department of Transportation Livability Initiative. The analysis determined whether the proposed alternatives would have differing levels of policy consistency.

3.4.3 Land Use and Economic Development Benefits

The analysis included an evaluation of the potential land use benefits associated with each of the proposed alternatives, such as opportunities for economic growth and development, increased transit-supportive development, enhanced livability, and the potential to boost local economic activity. Goals and policies presented in local land use plans and ordinances that encourage transit-supportive development were addressed, along with a comparison of how each proposed alternative would support these objectives. The potential for the proposed alternatives to generate public investment in transportation infrastructure, which would support economic vitality and environmentally sustainable communities, was also considered.

Section 4
Affected Environment

This section describes the existing and planned land use conditions, as well as the land use and economic development planning and policy framework, in the neighborhoods and jurisdictions affected by the proposed project. The analysis includes a description of existing and planned land uses within ½ mile of proposed station locations (referred to as station areas) and the alignment between station areas. The analysis also includes a review of land use and economic development plans and policies by jurisdiction. **Figure 4-1** identifies the City of Chicago neighborhoods affected by the RLE Project. Neighborhoods that may be directly affected by the proposed build alternatives include Washington Heights, Morgan Park, Roseland, West Pullman, and Riverdale.

4.1 Existing Land Uses

The overall project area has residential (primarily single family), commercial (urban mixed-use), industrial, transportation and utilities, and vacant land uses. **Figure 4-2** depicts the overall land uses affected by the RLE Project. The project area has numerous institutional land uses, including Chicago State University (7,200 students), Olive-Harvey College (4,300 students), and several high schools (including Harlan, Corliss, Fenger, Julian, Brooks, and Carver). Major activity centers in the project area include Halsted Street Commercial Corridor, Roseland Hospital, Sherwin-Williams, Ryerson, the Illinois International Port District, and Metron Steel. The Ford Motor plant at 130th Street and Torrence Avenue is just east of the project area and employs 2,800 people.

4.1.1 Bus Rapid Transit Alternative

The BRT Alternative alignment would begin at CTA's 95th Street Terminal, and continue east on 95th Street to Michigan Avenue, then on Michigan Avenue to 130th Street. The BRT route would pass through the Roseland, West Pullman, and Riverdale neighborhoods. The BRT stop locations would be at 103rd Street, 111th Street, Kensington Avenue, and 130th Street. The following subsections describe the existing land uses within ½ mile of the alignment and proposed bus stops. Appendix A contains detailed bus stop area land use maps.

<u>95th Street Terminal to 99th Street</u>

The adjacent land uses for the BRT Alternative alignment from the 95th Street Terminal to 99th Street include urban mixed and open space (Abbott Park) uses along 95th Street; and single-family residential and institutional (Harlan Community Academy High School) uses along Michigan Avenue to 99th Street.

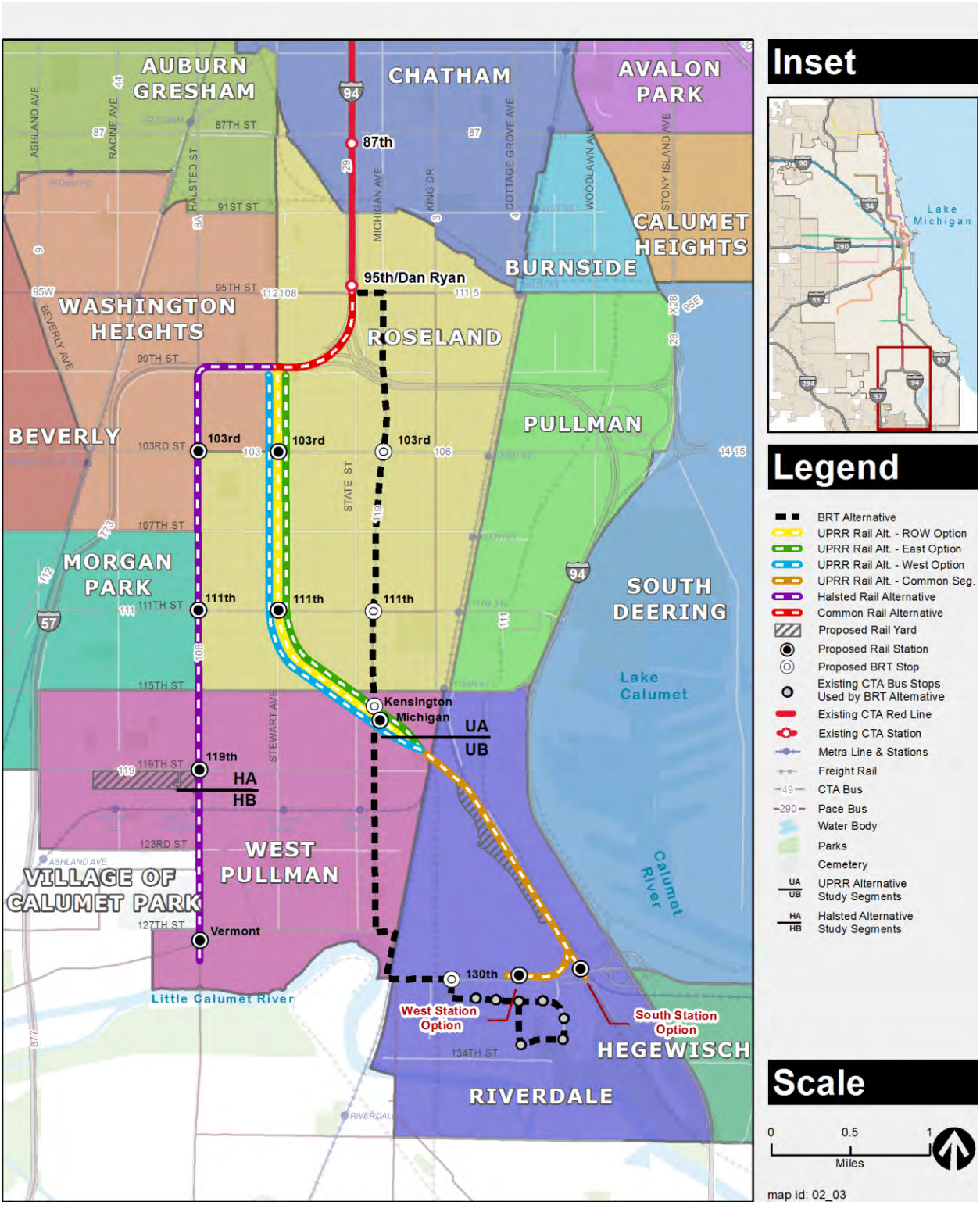

Figure 4-1: Community Areas in the Red Line Extension Project Area

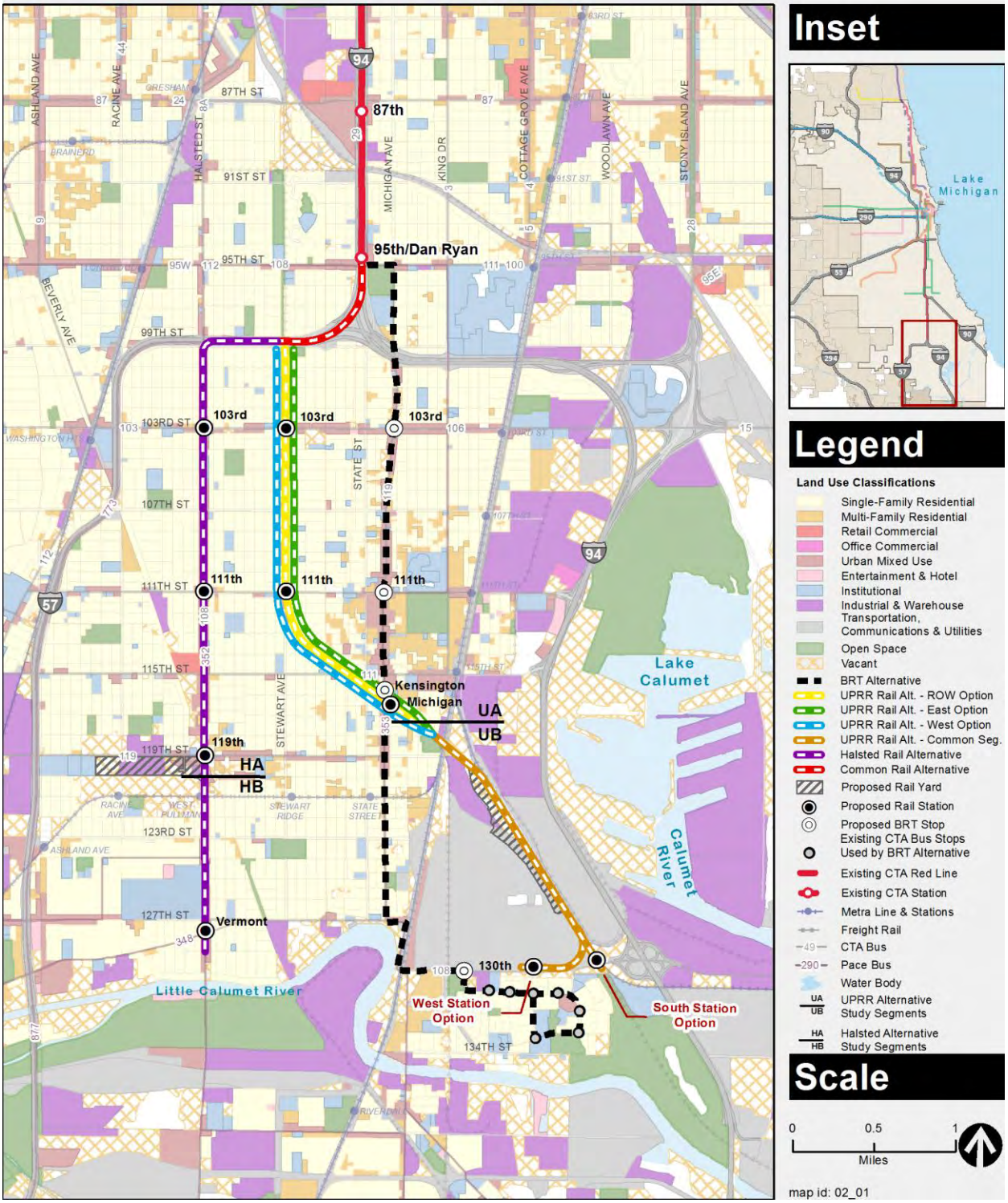

Figure 4-2: Existing Land Uses in the Red Line Extension Project Area

103rd Street Stop

Land uses within ½ mile of the 103rd Street stop location include urban mixed, institutional, multi-family residential, and vacant uses along Michigan Avenue; and primarily urban mixed-use along 103rd Street. The majority of uses beyond these two arterials are single-family residential uses. There are several institutions (schools and churches) throughout the stop area.

111th Street Stop

Land uses within ½ mile of the 111th Street stop location include urban mixed, institutional, multi-family residential, and vacant uses along Michigan Avenue north of 111th Street; and primarily dense urban mixed-use along Michigan south of 111th Street. West of Michigan Avenue, land uses along 111th Street include institutional (Roseland Community Hospital), urban mixed, and multi-family residential uses. East of Michigan Avenue, the primary land uses are institutional (Gwendolyn Brooks College Preparatory Academy) and open space (Palmer Park). The majority of land uses beyond the arterials are single-family residential uses and institutions.

Kensington Avenue Stop

There is a substantial overlap in land uses for the 111th Street stop location and the Kensington Avenue stop location north of 115th Street. Land uses along Michigan Avenue include urban mixed, institutional, and vacant land uses. Land uses along 115th Street include single-family residential, institutional, and vacant uses and a limited amount of urban mixed-use. The remainder of the area around the stop location contains a mix of single-family and multi-family residential uses and institutional uses (churches and schools).

Kensington Avenue Stop to 130th Street

South of the 115th Street stop location, the Michigan Avenue corridor contains primarily single-family residential uses. For areas that are within the API but not on Michigan Avenue, the majority of land uses are single-family residential with some institutions and open space. The Metra Electric District Blue Island Branch is parallel to 121st Street; the State Street Metra station is one block west of Michigan Avenue. Closer to 130th Street, there are industrial, transportation, and utility land uses.

130th Street Stop

North of 130th Street, the area within ½ mile of the 130th Street stop is dominated by a utility land use (Metropolitan Water Reclamation District [MWRD]). South of 130th Street, the area within ½ mile of the 130th Street stop location is dominated by single-family residential, multi-family residential, institutional, urban mixed, and open space uses such as the Beaubien Woods Forest Preserve. The BRT Alternative would serve the interior of the Altgeld Gardens public housing community south of 130th Street.

4.1.2 Union Pacific Railroad Rail Alternative

This section describes existing land use conditions for all three UPRR Rail Alternative options: the ROW Option, East Option, and West Option. The alignments for the three options are within 50 feet of each other; therefore, the affected environment analysis would be the same for all three options, except where noted.

The UPRR Rail Alternative would begin at CTA's 95th Street Terminal, continue south and west along the 1-94 and I-57 medians, and transition to the UPRR corridor south to 130th Street. The alignment passes through the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods. Under this alternative, the stations would be at 103rd Street, 111th Street, Michigan Avenue, and 130th Street (South Station Option or West Station Option).

The following subsections describe the existing land uses adjacent to the alignment and within ½ mile of the proposed station locations, or "station areas," in Segment UA (95th Street Terminal to Michigan Avenue station area) and Segment UB (south of Michigan Avenue station area to 130th Street station area). Appendix A contains detailed station area land use maps.

4.1.2.1 UPRR Rail Segment UA

95th Street Terminal to 99th Street

The alignment for all three UPRR Rail Alternative options would start from CTA's 95th Street Terminal and run within the median of I-94 and I-57. The adjacent land uses are primarily transportation and single-family residential uses beyond the highways.

103rd Street Station Area

Land uses within the 103rd Street station area include industrial, urban mixed, single-family residential, and open space uses along the UPRR ROW, and primarily urban mixed-use along 103rd Street. There are some vacant parcels along both corridors. The remainder of the station area consists of single-family residential uses, several institutional land uses (churches and schools), and a large recreational open space (Fernwood Park).

The UPRR Rail Alternative West Option alignment would be within a linear open space (Fernwood Parkway) along Eggleston Avenue between 99th and 103rd Streets. South of 103rd Street, the West Option alignment would be within urban mixed or vacant land uses. The East Option alignment would be within open space (Wendell Smith Park) and single-family residential land uses between 99th and 103rd Streets. South of 103rd Street, the East Option alignment would be within open space (Block Park), adjacent to the Roseland Pump House, and within single-family residential land uses.

111th Street Station Area

Land uses within the 111th Street station area include industrial, urban mixed, single-family residential, and vacant land uses along the UPRR ROW, and mostly single-family residential with some urban mixed and institutional uses along 111th Street, including Roseland Community

Hospital. The remainder of the station area consists of single-family residential uses, several institutional uses (churches and schools), and limited multi-family residential uses.

The UPRR Rail Alternative East Option alignment would be primarily through single-family residential land uses and a limited amount of industrial and institutional land uses. The West Option alignment would be through urban mixed-use, industrial, and vacant land uses.

Michigan Avenue Station Area

Land uses within the Michigan Avenue station area include urban mixed, single-family residential, open space, and vacant land uses along the UPRR ROW, and primarily urban mixed-use along Michigan Avenue. The remainder of the station area contains a mix of single-family and multi-family residential uses, institutional uses (churches and schools), and urban mixed-use along 119th Street.

The UPRR Rail Alternative East Option alignment would be through urban mixed, vacant, and single-family residential land uses. The West Option alignment would be through urban mixed-use and single-family residential land uses.

4.1.2.2 UPRR Rail Segment UB

Michigan Avenue Station Area to 130th Street Station

Between the Michigan Avenue station and 130th Street station, all three UPRR Rail Alternative options would have alignments through industrial and vacant uses, as well as land uses for transportation, communications, and utilities.

130th Street Station Area

Land uses within the 130th Street station area include utilities (MWRD), transportation (I-94), and industrial land uses north of 130th Street, and single-family residential, institutional, urban mixed-use, and open space (mostly within Altgeld Gardens). According to the *Plan for Transformation* (Chicago Housing Authority 2000), the Altgeld Gardens public housing community contains 1,998 units (approximately 8 percent) of the City's public housing stock (24,773 units).

The South Station Option location would be under the 130th Street bridge overpass to provide direct pedestrian access to/from Altgeld Gardens and Carver Military Academy High School. The West Station Option site would be within MWRD property on the north side of 130th Street across from Altgeld Gardens.

4.1.3 Halsted Rail Alternative

Halsted Street is a major north-south arterial about 1 mile west of I-94 and CTA's 95th Street Terminal. The corridor provides access to the Washington Heights, Roseland, Morgan Park, and West Pullman neighborhoods in the City of Chicago. Station locations would be on Halsted Street at 103rd Street, 111th Street, 119th Street, and Vermont Street. The following subsections describe the existing land uses adjacent to the alignment and within ½ mile of the proposed station

locations, or "station areas," in Segment HA (95th Street Terminal to 119th Street station area) and Segment HB (Vermont Street station area). Appendix A contains detailed station area land use maps.

4.1.3.1 Halsted Rail Segment HA

95th Street Terminal to 99th Street

The alignment for the Halsted Rail Alternative from the 95th Street Terminal to 99th Street would be within the median of I-94 and I-57. The adjacent land uses are primarily transportation and single-family residential uses beyond the highways.

103rd Street Station Area

Land uses within the 103rd Street station area include urban mixed-use (primarily one-story retail) and institutional uses along Halsted and 103rd Streets, with a few multi-family residential uses. These arterials also have some vacant parcels. The majority of uses beyond these two arterials are single-family residential uses. Fernwood Park, which is two blocks east of Halsted Street, is a large recreational open space.

111th Street Station Area

Land uses within the 111th Street station area include urban mixed-use (primarily one-story retail) along Halsted Street. A large vacant retail commercial mall is at 115th and Halsted Streets. There is a large warehouse use on 111th Street, west of Halsted Street. The majority of land uses beyond these two arterials are single-family residential uses.

119th Street Station Area

Land uses within the 119th station area include urban mixed-use (primarily one-story retail) along Halsted Street and on 119th Street east of Halsted Street. Some vacant parcels are on these arterials. Large industrial and vacant uses are in the southwest quadrant of the station area, including a solar panel facility along 120th Street. The Metra Electric District Blue Island Branch is parallel to 120th and 122nd Streets, and the West Pullman Metra station is at Halsted Street. The remaining land uses are primarily single-family residential uses.

4.1.3.2 Halsted Rail Segment HB

Vermont Street Station Area

Land uses within the Vermont Street station area include urban mixed-use (primarily one-story retail) along Halsted Street, surrounded by single-family residential uses. The northwest quadrant is within the Village of Calumet Park, including the Cedar Park Cemetery along the west side of Halsted Street and the north side of Burr Oak Street. The far south end of the station area includes the Cal-Sag Channel and open space within the Village of Riverdale.

4.2 Planned Land Uses

The City's zoning designations, along with various area plans, guide future land use development. The City of Chicago does not have a city-wide comprehensive plan with a future land use map.

The same situation exists within the Village of Calumet Park. Therefore, this section describes the zoned land uses within ½ mile of the alignments and features of the build alternatives.

The project area includes a variety of zoning districts designated by the Chicago Zoning Ordinance. Specific zoning districts fall within broader zoning types such as residential, business, commercial, manufacturing, parks and open space, planned development, and planned manufacturing. The general purpose of each zoning type is described below according to the Chicago Zoning Ordinance.

- Residential Districts - Create, maintain and promote a variety of housing opportunities for individual households and maintain the desired physical character of the city's existing neighborhoods.
- Business and Commercial - Accommodate retail, service and commercial uses and ensure that business and commercial-zoned areas are compatible with the character of existing neighborhoods.
- Manufacturing - Accommodate manufacturing, warehousing, wholesale, and industrial uses outside the central area.
- Parks and Open Space - Preserve, protect, and enhance lands set aside for public open space, public parks and public beaches.
- Planned Development - Ensure adequate public review of major development proposals; encourage unified planning and development; promote economically beneficial development patterns that are compatible with the character of existing neighborhoods; ensure a level of amenities appropriate to the nature and scale of the project; allow flexibility in application of selected use and development standards in order to promote creative building design and high-quality urban design; and encourage protection and conservation of natural resources.
- Planned Manufacturing - Foster the city's industrial base and maintain the city's diversified economy; strengthen existing manufacturing areas that are suitable in size, location, and character; and encourage industrial investment, modernization, and expansion by providing for stable and predictable industrial environments.

Each district type dictates allowable uses, density standards, parking requirements and other character standards for development with zoning district codes. **Figure 4-3** depicts the zoning classifications within the project area. All zoning district codes within the project area are listed in Table 4-1, including the typical uses and standards within each code.

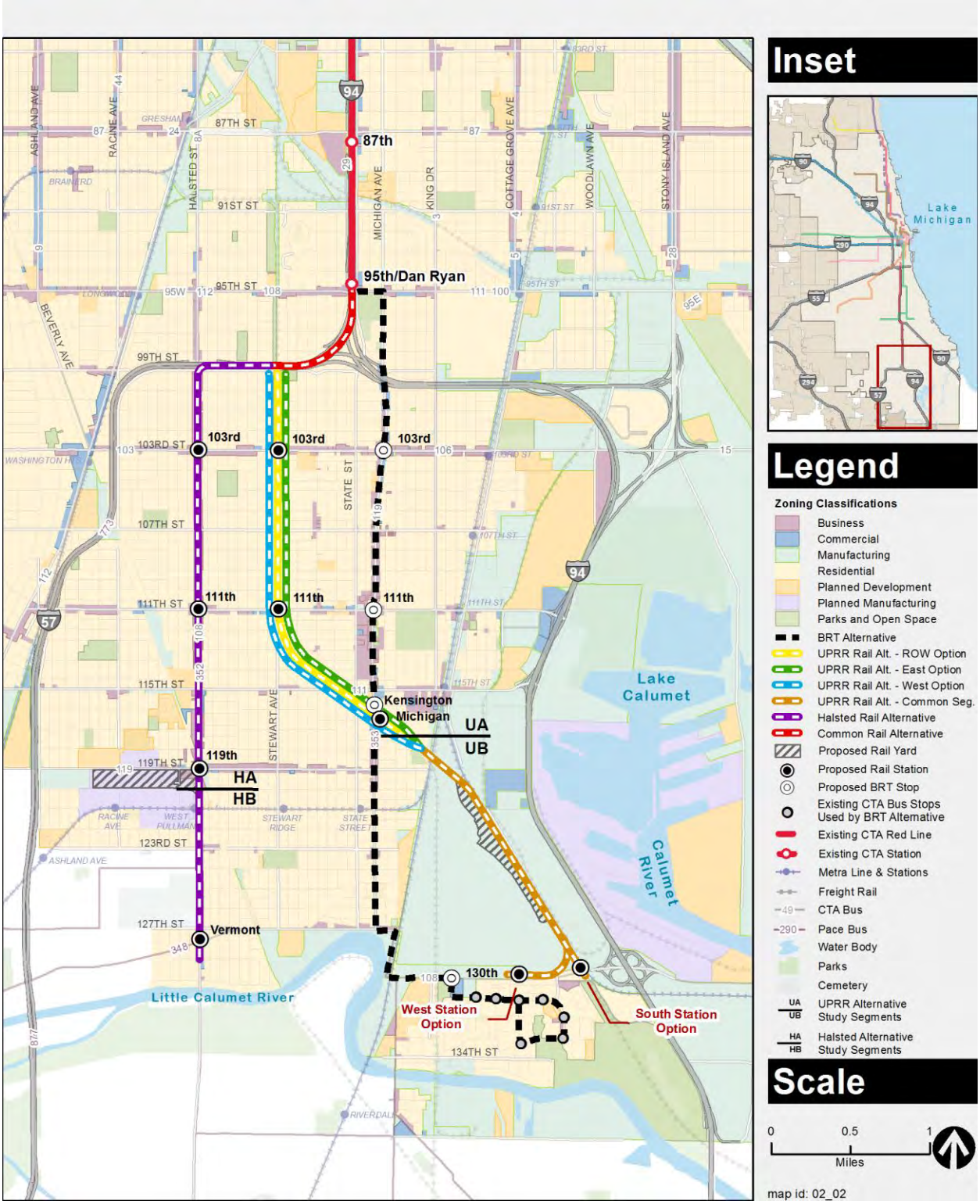

Figure 4-3: Zoning Classifications in the Red Line Extension Project Area

Table 4-1: Red Line Extension Project Area Zoning District Codes and Associated Standards

Type	Code	Title	Typical Uses	Floor to Area Ratio	Max Height (feet)	Front Setbacks	Mixed use Allowed	Parking Requirements
Residential	RS	Residential Single-Unit District	Single family detached, two flats	0.50-0.90	30	20 feet or 16% of lot depth, whichever is less	No	1 to 2 per unit
	RT	Residential Two-Flat, Townhouse, and Multi-Unit District	Single family detached, two to three flats, townhomes, multifamily	1.05-1.50	35-42	15 feet or 12% of lot depth, whichever is less	No	1 per unit
	RM	Residential Multi-Unit District	Townhomes, multifamily	1.70-6.60	47-None	15 feet or 12% of lot depth, whichever is less	Yes	1 per unit
Business	B1	Neighborhood Shopping District	Storefront-style shopping, residential dwelling above ground floor	1.20-5.00	38-80	None, or 50% of abutting residential lots	Yes	1 per residential unit; None for first 4,000 square feet, then 2.5 spaces per 1,000 square feet commercial
	B2	Neighborhood Mixed-Use District	Storefront-style shopping, residential dwelling at ground floor,	1.20-5.00	38-80	None, or 50% of abutting residential lots	Yes	1 per residential unit; None for first 4,000 square feet, then 2.5 spaces per 1,000 square feet commercial
	B3	Community Shopping District	Destination and auto-oriented retail and services, residential dwelling above ground floor	1.20-5.00	38-80	None, or 50% of abutting residential lots	Yes	1 per residential unit; None for first 4,000 square feet, then 2.5 spaces per 1,000 square feet commercial

Type	Code	Title	Typical Uses	Floor to Area Ratio	Max Height (feet)	Front Setbacks	Mixed use Allowed	Parking Requirements
Commercial	C1	Neighborhood Commercial District	Destination and auto-oriented retail and services, residential dwelling above ground floor	1.20-5.00	38-80	None, or 50% of abutting residential lots	Yes	1 per residential unit; None for first 4,000 square feet, then 2.5 spaces per 1,000 square feet commercial
	C2	Motor Vehicle-Related Commercial District	Motor vehicle-related commercial district	1.20-5.00	38-80	None, or 50% of abutting residential lots	Yes	1 per residential unit; None for first 4,000 square feet, then 2.5 spaces per 1,000 square feet commercial
	C3	Commercial, Manufacturing, and Employment District	Commercial, manufacturing uses	1.20-5.00	38-80	None, or 50% of abutting residential lots	No	None for first 4,000 square feet, then 2.5 spaces per 1,000 square feet commercial
Manufacturing	M1	Limited Manufacturing/Business Park District	Low impact manufacturing, wholesaling, and warehousing	1.20-3.00	None	10 feet, or equal to abutting and opposite residential lots	No	1 space per 4 employees
	M2	Light Industry District	Moderate impact manufacturing, wholesaling and warehousing	1.20-3.00	None	None, or equal to abutting and opposite residential lots	No	1 space per 4 employees
	M3	Heavy Industrial District	High impact manufacturing and waste related uses	1.20-3.00	None	None, or equal to abutting and opposite residential lots	No	1 space per 4 employees
Parks and Open Space	POS	Parks and Open Space District	Parks, cemeteries, and open spaces				No	
Planned Development	PD	Planned Development District	Hospitals, Water Plants, Entertainment Grounds	Per district ordinance		Per district ordinance	Yes	Per district ordinance
Planned Manufacturing	PMD	Planned Manufacturing District	Processing assemblies, construction shops	3.00 maximum		None, or equal to abutting and opposite residential lots	No	Based on use

Source: Chicago Zoning Ordinance and Land Use Ordinance, Municipal Code of Chicago, March 14, 2012

The Chicago Zoning Ordinance allows for transit-supportive development patterns that support residential, commercial, and business densities within the RLE station areas. Medium-to-high-density residential areas, neighborhood commercial and mixed-use developments are allowable

within the existing codes. These districts have various requirements for minimum lot sizes, lot widths or maximum heights.

Zoning in the project area consists of a mix of residential, office, and commercial space and allows for opportunities for greater density, encouraging transit-supportive, compact urban design. Small building setbacks and street level, pedestrian-oriented buildings are encouraged to enhance pedestrian activity and create a friendly street environment for pedestrian users.

The Ordinance has parking and loading requirements to manage the supply of off-street parking, improving mobility, promoting the use of alternative modes of transportation, supporting existing and new economic development, and enhancing the urban environment surrounding CTA or Metra rail station entrances. Minimum off-street parking ratios are reduced by 50 percent from otherwise applicable standards for rehabilitation or reuse of existing structures within 600 feet of a CTA or Metra rail station entrance for parking regulations within the station areas.

4.2.1 Bus Rapid Transit Alternative

Zoning districts adjacent to the BRT Alternative stop locations are listed in Table 4-2. The northern stop locations (103rd, 111th, and Kensington) would best support transit-supportive development. The 130th Street stop location contains a mix of allowable uses, with the majority heavily reliant on the automobile.

Table 4-2: Bus Rapid Transit Alternative Stop Location Zoning Codes

Type	Code	District Description	103rd	111th	Kensington	130th
Residential	RS	Residential Single-Unit	x	x	x	x
	RT	Residential Two-Flat, Townhouse, and Multi-Unit	x	x	x	
	RM	Residential Multi-Unit	x	x	x	x
Business	B1	Neighborhood Shopping	x	x	x	
	B2	Neighborhood Mixed-Use	x	x	x	
	B3	Community Shopping	x	x	x	x
Commercial	C1	Neighborhood Commercial	x	x	x	
	C2	Motor Vehicle-Related Commercial			x	x
	C3	Commercial, Manufacturing, and Employment				
Manufacturing	M1	Limited Manufacturing/Business Park	x	x	x	x
	M2	Light Industry				
	M3	Heavy Industrial			x	x

Type	Code	District Description	103rd	111th	Kensington	130th
Parks and Open Space	POS	Parks and Open Space		x	x	x
Planned Development	PD	Planned Development	x	x	x	x
Planned Manufacturing	PMD	Planned Manufacturing				

Source: Chicago Zoning Ordinance and Land Use Ordinance, Municipal Code of Chicago, September 12, 2012

4.2.2 Union Pacific Railroad Rail Alternative

Zoning districts within the station areas of all UPRR Rail Alternative options are listed in **Table 4-3**. The zoning profiles of the northern station areas (103rd Street, 111th Street, and 115th Street) would best support transit-supportive development. The 130th Street station option areas contain a mix of allowable uses heavy in business, commercial, and manufacturing with minimal opportunity for mixed-use development.

Table 4-3: Union Pacific Railroad Rail Alternative Station Area Zoning Code Designations

Type	Code	District Description	103rd	111th	115th	130th South	130th West
Residential	RS	Residential Single-Unit	x	x	x	x	x
	RT	Residential Two-Flat, Townhouse, and Multi-Unit	x	x	x		
	RM	Residential Multi-Unit		x	x		
Business	B1	Neighborhood Shopping	x	x	x	x	x
	B2	Neighborhood Mixed-Use	x		x		
	B3	Community Shopping	x	x	x	x	x
Commercial	C1	Neighborhood Commercial	x	x	x		
	C2	Motor Vehicle-Related Commercial	x		x		x
	C3	Commercial, Manufacturing, and Employment					
Manufacturing	M1	Limited Manufacturing/Business Park	x	x	x	x	x
	M2	Light Industry					
	M3	Heavy Industrial			x		x
Parks and Open Space	POS	Parks and Open Space	x		x	x	x
Planned Development	PD	Planned Development	x	x	x	x	x
Planned Manufacturing	PMD	Planned Manufacturing				x	

Source: Chicago Zoning Ordinance and Land Use Ordinance, Municipal Code of Chicago, September 12, 2012

4.2.3 Halsted Rail Alternative

Zoning districts within the Halsted Rail Alternative station areas are listed in **Table 4-4**. As shown below, all four station areas are similar in zoning profiles and would equally support transit-supportive development.

Table 4-4: Halsted Rail Alternative Station Area Zoning Code Designations

Type	Code	District Description	103rd	111th	119th	Vermont
Residential	RS	Residential Single-Unit	x	x	x	x
	RT	Residential Two-Flat, Townhouse, and Multi-Unit	x	x	x	x
	RM	Residential Multi-Unit			x	
Business	B1	Neighborhood Shopping	x	x	x	x
	B2	Neighborhood Mixed-Use			x	
	B3	Community Shopping	x	x	x	x
Commercial	C1	Neighborhood Commercial	x	x	x	x
	C2	Motor Vehicle-Related Commercial	x	x	x	x
	C3	Commercial, Manufacturing, and Employment				
Manufacturing	M1	Limited Manufacturing/Business Park	x	x	x	x
	M2	Light Industry				
	M3	Heavy Industrial				x
Parks and Open Space	POS	Parks and Open Space	x		x	
Planned Development	PD	Planned Development	x	x	x	x
Planned Manufacturing	PMD	Planned Manufacturing			x	

Source: Chicago Zoning Ordinance and Land Use Ordinance, Municipal Code of Chicago, September 12, 2012

4.3 Land Use and Economic Development Plans and Policies

In the Chicago metropolitan area, land development is guided by regional planning goals and objectives implemented through local land use plans, economic development plans, and interrelated policies, zoning, and incentives. The land use and economic development plans and policies that are summarized below are applicable to the entire project area, unless otherwise noted for a particular alternative. Relevant transportation plans are discussed in the *Transportation Technical Memorandum*.

4.3.1 Summary of Land Use Plans

4.3.1.1 Chicago Metropolitan Agency for Planning *GO TO 2040* Regional Plan

The CMAP serves as the regional planning body and produced *GO TO 2040* (CMAP 2010) as the comprehensive regional plan to help the seven counties and 284 communities in the Chicago metropolitan area plan together for sustainable growth through mid-century and beyond. The link between transportation and land use is recognized by CMAP as an important element of building livable communities. Notably, the RLE Project is a project of regional significance and is on the list of "fiscally constrained projects."

GO TO 2040 states that "growth that emphasizes access to transit and other transportation alternatives can reduce our reliance on cars, helping to reduce congestion and transportation costs for everyone." It also states that "the public sector cannot create a market for redevelopment where none exists, but it can invest in infrastructure and institute regulatory changes to make redevelopment more viable." Finally, *GO TO 2040* states that "community choices about land use and housing should also emphasize principles that improve livability, such as support for transit, walking, and bicycling."

While *GO TO 2040* talks in broad terms, it prioritizes updating and maintaining the existing transit system over expansion. The regional plan also discusses livability—the ability to access services easily within a community—as a main goal for the region, and specifically discusses how access for disabled populations is an important element towards achieving livability.

GO TO 2040 states that local land use decisions should focus on the interrelationship of transportation, land use, and housing, with an emphasis on development patterns that support the use of public transit and access to jobs. Improving public transit is a central element of the regional plan, and supportive land use planning is needed to make transit work well.

4.3.1.2 Transit-Friendly Development Guide

The *Transit-Friendly Development Guide* (CTA 2009) designates each of the CTA's 144 rail stations with one of seven typologies that are common across the rail system. The designations are intended to shape the public's expectations about potential development while identifying the nearby zoning and infrastructure assets that maximize each station as a community anchor. The CTA's 95th Street Terminal is designated as an "Urban Neighborhood."

4.3.1.3 What Will Your Station Look Like?

What Will Your Station Look Like? (2010) was prepared by Developing Communities Project, Inc. (DCP) in conjunction with CMAP, the Metropolitan Planning Council, and the Center for Neighborhood Technology to summarize a community vision of the proposed RLE Project stations. Nearly 130 residents, stakeholders, and public officials attended a vision session on September 14, 2010 to define their use of the RLE Project, and this report includes a preliminary assessment of station area uses, urban design, and densities produced in conjunction with the local stakeholders.

4.3.1.4 Calumet Area Land Use Plan

The *Calumet Area Land Use Plan* (City of Chicago Department of Planning and Development 2002) provides historical background, vision and goals, and a land use plan for largest industrial area in Chicago. The Calumet area has over 1,000 acres suitable for manufacturing, or almost 60 percent of Chicago's available industrial land. Created simultaneously with the Land Use Plan, the Lake Calumet Industrial Corridor Tax Increment Finance (TIF) District is a key method for the Plan's implementation and covers roughly 12,000 acres. A center for industrial development is the Illinois International Port District, which operates the largest intermodal center in the United States, with over 9 million containers per year (2001). In addition, about 4,000 acres are to be managed as the Calumet Open Space Reserve for wildlife habitat and recreation.

4.3.1.5 City Space: An Open Space Plan for Chicago

The *City Space: An Open Space Plan for Chicago* (City of Chicago, Chicago Park District, and Forest Preserve District of Cook County 1998) is a comprehensive plan for creating and preserving open space throughout the City of Chicago. The Plan has two basic goals for the City: (1) each community needs enough acres of open space available to serve the residents who live there, and (2) residents of every community deserve to have parks or other open spaces that are within reasonable travel distances. The Plan singles out the Lake Calumet area as the City's most substantial wetland and natural area, containing 1,000 acres out of the approximately 3,700 acres within the Forest Preserve District of Cook County.

4.3.2 Summary of Economic Development Plans and Studies

4.3.2.1 Chicago Sustainable Industries: A Manufacturing Work Plan for the 21st Century

The *Chicago Sustainable Industries, Phase One: A Manufacturing Work Plan for the 21st Century* (City of Chicago Department of Housing and Economic Development 2011) is a comprehensive planning initiative to support existing manufacturers, manufacturing sub-sectors, and the city's competitive advantages. In the 1990s, Chicago designated 24 Industrial Corridors to focus its industrial retention efforts. Most of these corridors have multi-modal access, favorable zoning, and TIF financing incentives. Three of the 24 Industrial Corridors are completely or partially within the project area: Calumet, Pullman, and West Pullman.

4.3.2.2 Cook County Comprehensive Economic Development Strategy Report

The Cook County *Comprehensive Economic Development Strategy Report* (Cook County Department of Economic Development 2009) is a cooperative regional approach to business development and retention. The County supports planning and development for new public transit lines and transit-oriented development (TOD). One of the ten regional objectives states that expanding access to public transit is a critical factor in making sure that residents in all areas of the region can access affordable transportation options to get to and from job centers. In addition, 1 of 19 regional strategies is to "join other local, state and national organizations to advocate for and plan new commuter rail options that expand existing rail lines, particularly in areas south, southeast, southwest and northwest in the region," and specifically supports the CTA's Red Line Extension.

4.3.2.3 What Will Your Station Look Like?

As described in Section 4.3.1.3, *What Will Your Station Look Like?* summarizes a community vision of the proposed RLE Project stations, desired station amenities, and ideas for station area development, such as small retail, neighborhood grocery, affordable housing, and a bank. Conceptual station area plans for the 103rd, 111th, 115th, and 130th stations were developed in a visioning session with community input. Based on public feedback, the proposed station on the east (i.e., the South Station Option) was preferred by the local community for the 130th Street station.

4.3.2.4 130th Street Station Market/Access Study

The *130th Street Station Market/Access Study* (Chicago Department of Transportation [CDOT] 2010) built upon the CTA's RLE Alternatives Analysis and examined TOD opportunities for the 130th Street station options. The study analyzed market potential, identified development options, evaluated overall accessibility, and provided station concept plans and a vision statement. The study provides information to support the land use and economic development ratings of the FTA's New Starts Program.

4.3.2.5 Transit Equity Matters

*Transit Equity Matters: A Regional Analysis of the Red Line and Two Other proposed CTA Transit Line Extensions (*Voorhees Center, University of Illinois at Chicago 2009) evaluates the RLE Project relative to the CTA's Orange and Yellow line extensions. The study compared these projects using a regional Equity Index with 19 indicators based on transportation equity, environmental justice, and livability. In summary, the RLE Project would affect a high priority area for transit investment with a score of 32 out of a possible 38 points. The RLE Project would also support the U.S. Department of Transportation-Housing and Urban Development-Environmental Protection Agency Interagency Partnership for Sustainable Communities and its livability principles. The TOD opportunities are also evaluated according to the FTA's New Starts criteria.

4.3.2.6 The Case for Transit-Oriented Development in the Greater Roseland Area

The Case for Transit-Oriented Development in the Greater Roseland Area (Voorhees Center, University of Illinois at Chicago 2005) is a report produced for DCP as part of its efforts to promote the RLE Project, to link jobs and economic development, and pursue TOD in Greater Roseland. Specifically, the report focuses on the proposed Michigan Avenue station and the context for future development, with a focus on unmet consumer demand, available vacant land, and potential land uses.

4.3.2.7 Improving Access, Increasing Livability: The CTA Red Line South Extension

Improving Access, Increasing Livability: The CTA Red Line South Extension (CMAP 2012) highlights the livability impacts of the RLE Project and provides a quantitative analysis of its benefits for the Greater Roseland Area. This report also provides data on station area existing conditions in anticipation of future development, as well as projected changes in commute times, access to jobs, and access to community amenities.

4.3.2.8 Chicago Housing Authority Plans

Plan Forward: Communities That Work (Chicago Housing Authority [CHA] 2013) is the latest plan for public housing in Chicago. The new plan takes as its starting point the successes and lessons of the *Plan for Transformation* (CHA 2000; see description below). According to *Plan Forward*, "CHA's new approach accounts for recent economic uncertainty and changing market conditions, reconsiders existing strategies, and develops forward-thinking, creative policies that will help people and communities prosper. It identifies how CHA will work to fulfill its existing commitments, and sets forth how the agency, with a wide array of partners, will provide housing that promotes the health and vitality of neighborhoods and plays the positive role that it can in people's lives, and how it will assist residents along a path to greater economic independence."

Plan for Transformation (CHA 2000) is a long-term plan to rehabilitate or redevelop the entire stock of public housing in Chicago. According to the plan, the City's public housing stock in 2000 was 38,776 units. After the plan's completion, the City will have approximately 25,000 remaining units. The plan calls for the demolition of high-rise developments, the rehabilitation of scattered-site, senior and lower-density family properties, and the construction of new mixed-income developments. Relative to the RLE Project and the UPRR Alternative, CHA has invested $250 million in renovations within Altgeld Gardens and has plans to renovate more units. Altgeld Gardens contains approximately 2,000 units, or 8 percent of the City's projected public housing stock of 25,000 units.

4.3.3 Summary of Transit-Supportive Policies

As described in Sections 4.3.1 and 4.3.2, the City of Chicago has a number of transit-supportive plans and studies that relate to the project area. These plans contain numerous policies that could serve as a catalyst for transit-supportive development if one of the RLE build alternatives is constructed. The following subsections summarize these transit-supportive policies, as well as related programs, according to the criteria established by the FTA New Starts Program that could provide federal funding for the RLE Project.

4.3.3.1 Growth Management

The growth management factors that influence transit-supportive development include (1) regional policies to concentrate development around established activity centers and transit, and (2) local plans, zoning, and capital improvement programs that support the regional policies. Another factor that influences transit-supportive development relates to regional policies on land conservation and management. The relevant growth management policies for the project area are summarized below.

<u>Concentration of Development around Established Activity Centers and Regional Transit</u>

- CMAP's *GO TO 2040* (2010) is the region's first comprehensive long-range plan. The plan addresses livability through land use and housing, TOD strategies, and new transit investments. Notably, the RLE Project is a highlighted project of regional significance and on the list of fiscally constrained projects.

- The *Cook County Comprehensive Economic Development Strategy Report* (2009) promotes a regional objective to expand access to public transit as an affordable transportation option to and from job centers. This report also promotes regional strategies to use TOD as a green development tool and to expand existing rail lines, including CTA's Red Line Extension.

- CTA's *Transit-Friendly Development Guide* (2009) is a site planning tool for future transit-supportive development. All CTA stations were designated into one of the following station typologies: major activity center, local activity center, dense urban neighborhood, urban neighborhood, service employment district, and manufacturing employment district. General design guidelines are provided for each station type, parking, connectivity, and placemaking. A development guidelines matrix simplifies all recommendations into one spreadsheet.

- The Regional Transportation Authority (RTA) has financial and budget oversight of the CTA, Pace (suburban buses), and Metra (commuter trains), and has a history of promoting TOD through planning and policies. The RTA's *Moving Beyond Congestion Strategic Plan* (2007) supports TOD and specifically calls for the regional transit system to integrate transit investments with local and regional planning processes and to integrate funding with TOD.

- The Center for Neighborhood Technology and its partner, the Center for Transit-Oriented Development, developed a planning tool called the Housing + Transportation Affordability Index (H+T Index) that measures the affordability of housing by factoring in both housing and transportation costs for a specific neighborhood. First developed in 2008, this planning tool can be used to promote more affordable housing choices by leveraging existing infrastructure.

<u>Land Conservation and Management</u>

- Reaching back to the Burnham Plan of 1909, CMAP's *GO TO 2040* (2010) promotes a regional green infrastructure network that follows waterway corridors, expands existing preserves, and creates new preserves. The plan specifically recommends the preservation of an additional 150,000 acres of land across the seven county regions within the next 30 years.

- The City of Chicago's *Calumet Area Land Use Plan* (2001) calls for the redevelopment of 1,000 acres of vacant industrial land (60 percent of the city's available industrial land), while at the same time restoring and preserving about 4,000 acres as the Calumet Open Space Reserve.

- The *City Space: An Open Space Plan for Chicago* (1998) singles out the Lake Calumet area as the City's most substantial wetland and natural area. The proposed 130th Street station could provide access to this area via a bus transfer.

4.3.3.2 Transit-Supportive Corridor Policies

According to the FTA New Starts guidelines, the transit corridor planning process should include a substantial focus on land use planning and may involve conceptual plans, local plans, and capital improvement programs. The factors that determine the influence of transit-supportive corridor policies include (1) plans and policies to increase corridor and station area development; (2) plans and policies to enhance transit-friendly character of corridor and station area

development; (3) plans to improve pedestrian facilities and facilities for persons with disabilities; and (4) parking policies. The relevant corridor plans and policies for the project area are summarized below.

Plans and Policies to Increase Corridor and Station Area Development

- *What Will Your Station Look Like?* (2010) is a report that summarizes a community vision session on the RLE Project and potential station area development including infill, density, land uses, parking, streetscape improvements, and conceptual plans and renderings.

- The *130th Street Station Market/Access Study* (2010) analyzes the proposed station options for the 130th Street station relative to the FTA's New Starts criteria. The study includes conceptual station area plans with access and land use recommendations.

- *Transit Equity Matters: A Regional Analysis of the Red Line and Two Other proposed CTA Transit Line Extensions* (2009) evaluates the RLE Project using a regional Equity Index with 19 indicators based on transportation equity, environmental justice, and livability. In addition, TOD potential for the 103rd Street, 111th Street, Michigan Avenue, and 130th Street stations is evaluated according to the following FTA New Starts criteria: development potential of land; transit-supportive plans and policies; and economic climate.

- *The Case for Transit-Oriented Development in the Greater Roseland Area* (2005) is a report that supports the RLE Project, promotes better access to jobs and economic development, and evaluates TOD at the proposed Michigan Avenue station.

Plans and Policies to Enhance Transit-Friendly Character of Corridor and Station Area Development

- The CDOT's "Model Block Program" allocates money for sidewalk improvements by ward. Each alderman can use this fund to build or reconstruct sidewalks in the community.

- Halsted Street has recently undergone a number of streetscape improvements, including street resurfacing, streetscaping, and a landscaped median.

Plans to Improve Pedestrian Facilities and Facilities for Persons with Disabilities

- The *Chicago Pedestrian Plan* (CDOT 2012) was developed by CDOT with collaboration with the Mayor's Pedestrian Advisory Council to identify new opportunities and ongoing initiatives that will strengthen Chicago's pedestrian environment. Chicago has double the national average for hit and run pedestrian fatalities; therefore, the City has set a goal to reduce pedestrian fatalities to zero over the next ten years. The tools for safer streets and action items for short-, mid-, and long-term implementation are key elements of the Plan.

- The Mayor's Office for People with Disabilities coordinates the planning and installation of all sidewalk ramp projects in the city.

- The CTA/CDOT "Walk to Transit" is a program designed to add and improve pedestrian connections and accessibility at transit stations.

- The CDOT Pedestrian Program is the primary lead on pedestrian issues and has a wide range of programs directed toward improving safety and activity, including Safe Streets for Chicago, Safe Routes Ambassadors, Safe Routes to Schools, Walk to Transit, Safe Routes for Seniors, WalkChicago!, pedestrian fatality investigations, and education initiatives.

- Safe Streets for Chicago is a citywide initiative to improve safety on city streets, particularly related to pedestrian safety. One recent effort was crosswalk enforcement to alert motorists that they must yield to pedestrians in crosswalks.

- The City of Chicago has a Complete Streets policy to design the entire roadway ROW to accommodate all users: pedestrians, bicyclists, motorists, and transit users.

- The CDOT Streetscape program is charged with enhancing the public way to support the revitalization of commercial corridors. Enhancing the pedestrian environment is one of the goals. The City has published Streetscape Guidelines.

Parking Policies

- Within the Chicago Zoning Ordinance, specific parking requirements are included for transit-served locations. In B, C, or D districts, minimum off-street parking ratios are reduced by 50 percent from otherwise applicable standards for rehabilitation or reuse of existing structures within 600 feet of a CTA or Metra rail station entrance.

- The Chicago Zoning Ordinance states that bicycle parking must be provided in accordance with the off-street parking ratios. The Zoning Code provides details on design and location.

- The CTA has a program to install bicycle parking at rail stations.

- The terminal station is proposed to include parking facilities with approximately 2,300 spaces in the year 2030. Intermediate stations at 103rd and 111th Streets are proposed to include approximately 200 parking spaces, while the 119th Street (Halsted Rail) and the Michigan Avenue (UPRR Rail) stations are proposed to include approximately 1,000 spaces by 2030.

4.3.3.3 Supportive Zoning Regulations Near Transit Stations

Zoning establishes a framework for future development. According to the FTA, existing and proposed zoning should allow transit-supportive densities and uses, incentives to increase station area development, provisions to enhance transit-supportive character and pedestrian access, and provisions for reduced parking. The relevant zoning regulations and provisions for the project area are summarized below.

Zoning Ordinances that Support Increased Development Density in Transit Station Areas

- Existing zoning along the corridor and around station areas is transit-supportive. Floor area bonuses are included in the Chicago Zoning Ordinance. These are intended to provide an economic incentive for developers to provide affordable housing and public amenities that improve the quality of life for city residents, employees, and visitors, and are a benefit to the

public. Specific menu items are included in the Ordinance that relate to transit-supportive actions, include public plazas, sidewalk widening, streetscape improvements, transit station improvements, and concealed parking.

Zoning Ordinances that Enhance Transit-Oriented Character of Station Area Development

- The Chicago Zoning Ordinance and Land Use Ordinance address "Pedestrian Streets." The regulations of this section are intended to preserve and enhance the character of streets and intersections that are widely recognized as Chicago's best examples of pedestrian-oriented shopping districts. The regulations are intended to promote transit, economic vitality, and pedestrian safety and comfort. While Halsted Street or Michigan Avenue south of downtown Chicago has not been designated as a Pedestrian Street, they contain some of the relevant characteristics. As TOD occurs around station areas, either corridor could receive this designation.

Zoning Allowances for Reduced Parking and Traffic Mitigation

- The Chicago Zoning Ordinance and Land Use Ordinance address Parking and Zoning. In B, C, or D districts, minimum off-street parking ratios are reduced by 50 percent from the otherwise applicable standards for rehabilitation or reuse of existing structures within 600 feet of a CTA or Metra rail station entrance.

4.3.3.4 Tools to Implement Land Use Policies

According to the FTA, the availability and effectiveness of tools for transit agencies and local jurisdictions to implement transit-supportive policies are as important as the plans and policies. Outreach to government agencies and the community, regulatory and financial incentives, and efforts to engage developers are primary tools to facilitate transit-supportive development. The relevant tools to implement land use policies within the project area are summarized below.

Outreach to Government Agencies and the Community in Support of Land Use Planning

- *Improving Access, Increasing Livability: The CTA Red Line South Extension* (CMAP 2012) highlights the livability impacts of the RLE Project and provides a quantitative analysis of its benefits to the Greater Roseland Area. CMAP launched its Local Technical Assistance program, through which it provides planning and grant assistance to advance the principles of *GO TO 2040*. Through the Local Technical Assistance program, DCP, CTA, CMAP, and Loyola University Chicago's Center for Urban Research and Learning worked to better understand how the proposed Red Line South Extension to 130th Street would affect the livability of the Greater Roseland area and the region as a whole. Substantial input from the local community was recorded through 15 focus groups and 20 interviews, with a goal of reaching approximately 175 community stakeholders.

- CMAP's *GO TO 2040* (2010) is the region's first comprehensive long-range plan. The planning process entailed an extensive outreach program to solicit input from local municipalities, agencies, civic groups, private sector interests, and the general public. The RLE Project is a highlighted project of regional significance and on the list of "fiscally constrained projects."

- *What Will Your Station Look Like?* (2010) summarizes a community vision meeting facilitated by DCP, in conjunction with CMAP, Metropolitan Planning Council, and the Center for Neighborhood Technology. Nearly 130 residents, stakeholders and public officials attended the meeting to define station area development and land uses.

- The *130th Street Station Market/Access Study* (2010) analyzes the proposed station options for the 130th Street station relative to the FTA's New Starts criteria. The study includes conceptual station area plans with access and land use recommendations. The study was produced with input from residents of Altgeld Gardens and the non-profit DCP.

- The RTA's Community Planning Program provides funding for local planning projects that focus on TOD and local transit improvements. The RTA program provided funding for *Transit Equity Matters: A Regional Analysis of the Red Line and Two Other proposed CTA Transit Line Extensions (*2009), which among other topics evaluated the TOD potential for the 103rd Street, 111th Street, Michigan Avenue, and 130th Street stations. The RTA, CTA, and DCP were key participants.

- *The Case for Transit-Oriented Development in the Greater Roseland Area* (2005) provides a vision for TOD at the proposed Michigan Avenue station. The report was produced with substantial input from the non-profit DCP, which is a local community group representing businesses, residents, and institutions.

<u>Regulatory and Financial Incentives to Promote Transit-Supportive Development</u>

- As documented in the *Chicago Sustainable Industries* (2011), three industrial corridors are within the project area. New industrial development in these corridors could provide local jobs or could be accessible via the RLE stations with bus transfers. Relevant to the UPRR Rail Alternative, the Pullman Industrial Corridor is off 115th Street, east of Michigan Avenue, and the Lake Calumet Industrial Corridor is off 130th Street, east of I-94. The West Pullman Industrial Corridor is one block west of the Halsted Rail Alternative 119th Street station location. These corridors are the focus of numerous City programs to encourage industrial development and job retention.

- Four TIF districts are within the project area. Funds from TIF districts can be used for capital improvements to support development. The West Pullman TIF and 119th/Halsted TIFs are relevant to the Halsted Rail Alternative corridor. The Lake Calumet Industrial Corridor TIF is relevant to the UPRR Rail Alternative. The Roseland/Michigan TIF is relevant to all build alternatives.

- Portions of the UPRR corridor are within Enterprise Zone 3, and portions of the Halsted Street corridor are within Enterprise Zone 3 and 6.

- The area around 119th Street and Halsted Street was designated as a Redevelopment Project Area in 2001.

Efforts to Engage the Development Community in Station Area Planning & Development

- The City of Chicago is working with a developer (Crown Commercial Real Estate & Development, Inc.) on the Roseland Plaza redevelopment proposal, which would be adjacent to the Michigan Avenue station. The proposal provides for 49,000 square feet of commercial space and includes a grocery store, pharmacy, clothing store, and a bank. The City provided TIF financing of $4,000,000 and land write-down costs of $3,000,000. The developer provided a 25-foot easement for the RLE alignment along the UPRR corridor.

4.3.3.5 Performance of Transit-Supportive Policies

The FTA New Starts guidelines encourage project sponsors, such as the CTA, to demonstrate the relative performance of transit-supportive policies in facilitating development within a proposed project area or within the region. For example, the successful application of policies to facilitate new urbanist developments anywhere in the region is an indicator of the region's potential success in applying transit-supportive policies within the project area. Demonstrated cases of development within the region and station area development proposals in the project area are listed and summarized below.

Demonstrated Cases of Development Affected by Transit-Supportive Policies

- Chicago West Side - Bethel Center at Green Line Pulaski station
- Chicago North Side - Senior housing, parking garage, and Target at Red Line Wilson station

Station Area Development Proposals and Status

The City of Chicago is working with a developer on the Roseland Plaza redevelopment proposal, adjacent to the proposed Michigan Avenue station. The City's Community Development Commission designated the developer in February 2005. The City approved the sale of its land and land write-down costs in May 2009. The developer modified its proposal and received approval of its Planned Development application from the Chicago Plan Commission in October 2011.

4.3.3.6 Plans and Policies to Maintain or Increase Affordable Housing

Any plans and policies to identify and address specific housing affordability needs along the corridor, as well as financial commitments to preserve or build new affordable housing, is an important consideration under newly proposed guidelines for FTA funding. The UPRR Alternative corridor would benefit the Altgeld Gardens public housing community, which has approximately 2,000 units or 8 percent of the City's 25,000 public housing units. CHA has invested $250 million to rehabilitate existing units, and is working to identify future opportunities within Altgeld Gardens.

4.3.3.7 Transit Investment and Regional Land Use

The existing context of a project area, including the availability of developable land and the corridor economic environment, are key factors in determining the likelihood of transit-supportive land use changes in the future due to a major transit investment. These factors also

help determine the potential for a major transit investment to influence regional land use patterns. The available vacant land within the ½-mile station areas and corridor economic conditions for each alternative are summarized below.

Adaptability of Station Area Land for Development

The station areas along the UPRR corridor include vacant parcels and abandoned industrial sites, particularly along the railroad and near 115th and 130th Streets. These sites have redevelopment potential for transit-oriented uses.

- 103rd Street station area - 3.6 percent vacant land
- 111th Street station area - 2.3 percent vacant land
- Michigan Avenue station area - 5.5 percent vacant land
- 130th Street - South Option station area - 7.4 percent vacant land
- 130th Street - West Option station area - 5.8 percent vacant land

The station areas along the Halsted corridor include some vacant parcels, particularly near the 119th Street station location. These sites have redevelopment potential for transit-oriented uses.

- 103rd Street station area - 1.3 percent vacant land
- 111th Street station area - 2.6 percent vacant land
- 119th Street station area - 20.6 percent vacant land
- Vermont Street station area - 1.4 percent vacant land

The station areas along the Michigan Avenue corridor include some vacant parcels, particularly near 115th Street. These sites have redevelopment potential for transit-oriented uses.

- 103rd Street station area - 3.0 percent vacant land
- 111th Street station area - less than 0.1 percent vacant land
- Kensington Street station area - 3.9 percent vacant land
- 130th Street station area - 8.2 percent vacant land

Corridor Economic Environment

The overall economy within the project area was affected by the decline in the manufacturing and steel-producing industries in the Lake Calumet area during the 1980s. In addition, the Pullman Company closed down in 1982. Local suppliers and businesses for these industries began to close as well. Thousands of people lost their jobs, so there was less money to spend in the local economy. The economic fallout of this industrial downturn is still felt within the project area; however, the City of Chicago is promoting new development and redevelopment through plans and policies, financial incentives, and interagency initiatives. Consequently, CMAP is projecting growth within all of the alternative corridors of the project area, as summarized below.

- The BRT Alternative alignment would be primarily along the Michigan Avenue corridor. The Michigan Avenue corridor would have steady growth between 2010 Base Year and year 2030 No Build conditions, according to CMAP forecasts. Population growth within the corridor, at 18 percent, would exceed the average population growth within the metropolitan area, at 15 percent. Employment growth would be at its highest rate within the Kensington Avenue stop area, at 28 percent; however, the 111th Street stop area would contain the highest concentration of jobs within the corridor. Table 4-5 contains the quantitative land use and economic development data for the 2010 Base Year and 2030 No Build conditions along the Michigan Avenue corridor.

Table 4-5: Quantitative Land Use and Economic Development Data for Bus Rapid Transit Alternative Alignment*

Data	2010 Base Year	2030 No Build	Growth
Metropolitan Area			
Total Population	2,653,719	3,053,595	15%
Total Employment	1,241,492	1,437,387	16%
Central Business District			
Total Employment	537,369	628,882	17%
Employment - Portion of Metropolitan Area	43%	44%	---
Central Business District Land Area (square mile)	3.65	3.65	---
Employment Density (jobs per square mile)	147,189	172,255	---
Corridor			
Total Population	45,873	54,159	18%
Total Employment	3,230	3,501	8%
Population - Portion of Metropolitan Area	1.73%	1.77%	---
Employment - Portion of Metropolitan Area	0.26%	0.24%	---
Corridor Land Area (square mile)	6.65	6.65	---
Population Density (persons per square mile)	6,899	8,145	---
Employment Density (jobs per square mile)	486	527	---
All Bus Rapid Transit Stops			
Housing Units	8,433	9,365	11%
Population	25,411	29,704	17%
Employment	1,684	1,892	12%
Land Area (square mile)	2.92	2.92	---
Housing Unit Density (units per square mile)	2,891	3,211	---
Population Density (persons per square mile)	8,712	10,183	---
Employment Density (persons per square mile)	577	649	---
103rd Street Stop			
Housing Units	2,943	3,168	8%
Population	8,579	9,711	13%
Employment	318	353	11%

Data	2010 Base Year	2030 No Build	Growth
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,748	4,034	---
Population Density (persons per square mile)	10,925	12,367	---
Employment Density (persons per square mile)	405	450	---
111th Street Stop			
Housing Units	2,559	2,938	15%
Population	7,555	9,108	21%
Employment	846	967	14%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,259	3,742	---
Population Density (persons per square mile)	9,621	11,598	---
Employment Density (persons per square mile)	1,077	1,232	---
Kensington Avenue Stop			
Housing Units	2,149	2,518	17%
Population	7,023	8,624	23%
Employment	485	623	28%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	2,736	3,207	---
Population Density (persons per square mile)	8,943	10,982	---
Employment Density (persons per square mile)	618	793	---
130th Street Stop			
Housing Units	1,400	1,505	8%
Population	4,218	4,753	13%
Employment	315	308	-2%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	1,782	1,917	---
Population Density (persons per square mile)	5,372	6,053	---
Employment Density (persons per square mile)	401	392	---

Source: Chicago Metropolitan Agency for Planning 2030 Forecast by Subzone, March 22, 2012 (No Build Supplemental March 12, 2013)
Note: * Quantitative data for the corridor and for stop area is measured for the area within ½ mile of the alignment.

- Between the 2010 Base Year and 2030 No Build conditions, the UPRR corridor would have population growth and varying employment growth, according to CMAP forecasts. Population growth within the UPRR corridor, at 16 percent, would remain consistent with the average population growth within the metropolitan area, at 15 percent. Employment growth would vary widely throughout the corridor's station areas. Employment changes would range from growth of 53 percent within the 103rd Street station area to a reduction of 35 percent within the 130th Street South Station Option area. The highest concentration of jobs would be within the 111th Street station area. Table 4-6 contains the quantitative land use and economic

development data for the 2010 Base Year and 2030 No Build conditions for all UPRR Rail Alternative options.

Table 4-6: Quantitative Land Use and Economic Development Data for Union Pacific Railroad Rail Alternative Alignments*

Data	2010 Base Year	2030 No Build	Growth
Metropolitan Area			
Total Population	2,653,719	3,053,595	15%
Total Employment	1,241,492	1,437,387	16%
Central Business District			
Total Employment	537,369	628,882	17%
Employment - Portion of Metropolitan Area	43%	44%	---
Central Business District Land Area (square mile)	3.65	3.65	---
Employment Density (jobs per square mile)	147,189	172,255	---
Corridor			
Total Population	43,001	49,918	16%
Total Employment	3,128	3,435	10%
Population - Portion of Metropolitan Area	1.62%	0	---
Employment - Portion of Metropolitan Area	0.25%	0.00	---
Corridor Land Area (square mile)	6.45	6.45	---
Population Density (persons per square mile)	6,663	7,735	---
Employment Density (jobs per square mile)	485	532	---
All Station Areas			
Housing Units	8,162	9,146	12%
Population	26,031	30,743	18%
Employment	2,136	2,309	8%
Land Area (square mile)	3.51	3.51	---
Housing Unit Density (units per square mile)	2,324	2,604	---
Population Density (persons per square mile)	7,411	8,753	---
Employment Density (persons per square mile)	608	657	---
103rd Street Station Area			
Housing Units	2,460	2,658	8%
Population	7,716	8,923	16%
Employment	231	353	53%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,132	3,385	---
Population Density (persons per square mile)	9,826	11,364	---
Employment Density (persons per square mile)	294	449	---

Data	2010 Base Year	2030 No Build	Growth
111th Street Station Area			
Housing Units	2,502	2,743	10%
Population	8,027	9,145	14%
Employment	1,035	1,137	10%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,186	3,493	---
Population Density (persons per square mile)	10,221	11,646	---
Employment Density (persons per square mile)	1,318	1,448	---
Michigan Avenue Station Area			
Housing Units	2,024	2,362	17%
Population	6,600	8,090	23%
Employment	359	468	30%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	2,578	3,008	---
Population Density (persons per square mile)	8,405	10,302	---
Employment Density (persons per square mile)	457	596	---
130th Street Station Area - South Station Option			
Housing Units	417	602	44%
Population	1,332	2,029	52%
Employment	301	195	-35%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	532	767	---
Population Density (persons per square mile)	1,696	2,584	---
Employment Density (persons per square mile)	383	249	---
130th Street Station Area - West Station Option			
Housing Units	1,196	1,298	9%
Population	3,760	4,314	15%
Employment	476	317	-33%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	1,523	1,654	---
Population Density (persons per square mile)	4,788	5,494	---
Employment Density (persons per square mile)	606	403	---

Source: Chicago Metropolitan Agency for Planning 2030 Forecast by Subzone, March 22, 2012 (No Build Supplemental March 12, 2013)
Note: * Quantitative data for the corridor and for each station or stop area is measured for the area within ½ mile of the alignment.

- The Halsted Street corridor would have slow population growth and substantial employment growth between the 2010 Base Year and 2030 under No Build conditions, according to CMAP forecasts. Population growth within the corridor, at 10 percent, would be below the average population growth within the metropolitan area, at 15 percent. Employment growth within the corridor, at 56 percent, would be well above the metropolitan average at 16 percent. The

most substantial growth in employment would be at the 119th Street and Vermont Avenue station areas, with growth rates of 184 percent and 169 percent, respectively. The highest concentration of jobs within the corridor would shift geographically, from 111th Street station to 119th Street station, between 2010 and 2030. Table 4-7 contains the quantitative land use and economic development data for the 2010 Base Year and 2030 No Build conditions for the Halsted Rail Alternative along the Halsted Street corridor.

Table 4-7: Quantitative Land Use and Economic Development Data for Halsted Rail Alternative Alignment*

Data	2010 Base Year	2030 No Build	Growth
Metropolitan Area			
Total Population	2,653,719	3,053,595	15%
Total Employment	1,241,492	1,437,387	16%
Central Business District			
Total Employment	537,369	628,882	17%
Employment - Portion of Metropolitan Area	43%	44%	---
Central Business District Land Area (square mile)	3.65	3.65	---
Employment Density (jobs per square mile)	147,189	172,255	---
Corridor			
Total Population	46,556	50,644	9%
Total Employment	2,930	4,530	55%
Population - Portion of Metropolitan Area	1.75%	1.66%	---
Employment - Portion of Metropolitan Area	0.24%	0.32%	---
Corridor Land Area (square mile)	5.74	5.74	---
Population Density (persons per square mile)	8,108	8,819	---
Employment Density (jobs per square mile)	510	789	---
All Station Areas			
Housing Units	8,314	8,775	6%
Population	25,044	27,346	9%
Employment	1,748	3,037	74%
Land Area (square mile)	3.14	3.14	---
Housing Unit Density (units per square mile)	2,647	2,794	---
Population Density (persons per square mile)	7,973	8,706	---
Employment Density (persons per square mile)	556	967	---

Data	2010 Base Year	2030 No Build	Growth
103rd Street Station Area			
Housing Units	2,502	2,501	0%
Population	7,377	7,638	4%
Employment	351	427	22%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,186	3,184.30	---
Population Density (persons per square mile)	9,394	9,727	---
Employment Density (persons per square mile)	447	544	---
111th Street Station Area			
Housing Units	2,384	2,592	9%
Population	6,999	7,737	11%
Employment	774	854	10%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,036	3,300	---
Population Density (persons per square mile)	8,913	9,853	---
Employment Density (persons per square mile)	985	1,087	---
119th Street Station Area			
Housing Units	1,797	1,995	11%
Population	5,919	6,730	14%
Employment	562	1,591	183%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	2,289	2,540	---
Population Density (persons per square mile)	7,537	8,571	---
Employment Density (persons per square mile)	716	2,026	---
Vermont Avenue Station Area			
Housing Units	1,631	1,688	4%
Population	4,749	5,240	10%
Employment	62	166	169%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	2,076	2,150	---
Population Density (persons per square mile)	6,048	6,673	---
Employment Density (persons per square mile)	78	211	---

Source: Chicago Metropolitan Agency for Planning 2030 Forecast by Subzone, March 22, 2012 (No Build Supplemental March 12, 2013)
Note: * Quantitative data for the corridor and for each station area is measured for the area within ½ mile of the alignment.

Section 5
Impacts and Mitigations

For the purpose of this analysis, the impacts and mitigations discussion has been organized into three impact categories—permanent, construction, and cumulative—with references to affected neighborhoods (see Figure 4-1). Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent ROW. Construction impacts are temporary and would occur for 1 year of construction staging and utility relocations, and for the 3-year construction phase of the project. Cumulative impacts are those of the project combined with other past, present, or foreseeable future projects within the project area.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus committed transportation improvements within CMAP's Fiscal Year 2010–2015 TIP, which are included in all alternatives (see *Transportation Technical Memorandum* for TIP improvements). In part, the No Build Alternative serves as a means to compare the benefits and impacts of the build alternatives. Table 5-1 highlights the overall impacts and the following subsections describe the specific impacts for the directly affected neighborhoods.

Table 5-1: Summary of No Build Alternative Impacts*

Phase	Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park
Permanent	Land Use	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
	Economic Development	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
Construction	Land Use	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
	Economic Development	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
Cumulative	Land Use	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact
	Economic Development	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact

* Impact Categories: Not Applicable (---), Beneficial, No Impact, Not Adverse, Not Substantially Adverse, Adverse

5.1.1 Permanent Impacts - No Build Alternative

5.1.1.1 Land Use

The No Build Alternative would be inconsistent with the goals of CMAP's *GO TO 2040* Plan, which lists the RLE Project as a fiscally constrained project; however, the No Build Alternative would not create any new inconsistencies beyond those that already exist, and would have no impact on land use.

5.1.1.2 Economic Development

The No Build Alternative would be inconsistent with Cook County's *Comprehensive Economic Development Strategy Report,* which supports the Red Line Extension; however, the No Build Alternative would not create any new inconsistencies beyond those that already exist, and would have no impact on the project area with regard to economic development.

5.1.2 Construction Impacts - No Build Alternative

There would be no construction activity as a result of the No Build Alternative, so there would be no impact on land use or economic development.

5.1.3 Cumulative Impacts - No Build Alternative

5.1.3.1 Land Use

When considered with past, present, and reasonably foreseeable projects, land use conditions under the No Build Alternative would remain unchanged and would have no impact.

5.1.3.2 Economic Development

When considered with past, present, and reasonably foreseeable projects, economic development conditions under the No Build Alternative would remain unchanged and would have no impact.

5.2 Bus Rapid Transit Alternative

The BRT Alternative includes a 5.0-mile route from the CTA's 95th Street Terminal, along Michigan Avenue to 130th Street, and through Altgeld Gardens. New bus shelters and park & ride facilities would be constructed near 103rd Street, 111th Street, Kensington Avenue, and 130th Street; therefore, the BRT Alternative would directly affect the Roseland, West Pullman, and Riverdale neighborhoods only. Table 5-2 highlights the overall impacts after mitigation and the following subsections describe the specific impacts for the directly affected neighborhoods. If the alternative would not pass through a neighborhood, the impact category assigned to that neighborhood is "Not Applicable," which is represented by dash marks.

Table 5-2: Summary of Bus Rapid Transit Alternative Impacts after Mitigation*

Phase	Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park
Permanent	Land Use	---	Beneficial	---	Beneficial	Beneficial	---
	Economic Development	---	Not Adverse	---	Not Adverse	Not Adverse	---
Construction	Land Use	---	Not Adverse	---	Not Adverse	Not Adverse	---
	Economic Development	---	Beneficial	---	Beneficial	Beneficial	---
Cumulative	Land Use	---	No Impact	---	No Impact	No Impact	---
	Economic Development	---	No Impact	---	No Impact	No Impact	---

* Impact Categories: Not Applicable (---), Beneficial, No Impact, Not Adverse, Not Substantially Adverse, Adverse

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

The BRT Alternative alignment would be primarily along the Michigan Avenue corridor. The Michigan Avenue corridor would have steady growth between the 2010 base year and 2030 with the BRT Alternative, according to CMAP forecasts. With the BRT Alternative, population growth within the corridor, at 20 percent, would exceed the average population growth within the metropolitan area, at 15 percent. Employment growth would be at its highest rate within the 115th Street stop area, at 32 percent; however, the 111th Street stop area would contain the highest concentration of jobs within the corridor. Table 5-3 contains the quantitative land use and economic development data for the 2010 Base Year and 2030 with the BRT Alternative along the Michigan Avenue corridor.

Table 5-3: Quantitative Land Use and Economic Development Data for the Bus Rapid Transit Alternative Alignment*

Data	2010 Base Year	2030 with Bus Rapid Transit Alternative	Growth
Metropolitan Area			
Total Population	2,653,719	3,056,567	15%
Total Employment	1,241,492	1,439,154	16%
Central Business District			
Total Employment	537,369	629,690	17%
Employment - Portion of Metropolitan Area	43%	44%	---
Central Business District Land Area (square mile)	3.65	3.65	---
Employment Density (jobs per square mile)	147,189	172,476	---
Corridor			
Total Population	45,873	54,992	20%
Total Employment	3,230	3,544	10%

Data	2010 Base Year	2030 with Bus Rapid Transit Alternative	Growth
Population - Portion of Metropolitan Area	1.73%	1.80%	---
Employment - Portion of Metropolitan Area	0.26%	0.25%	---
Corridor Land Area (square mile)	6.65	6.65	---
Population Density (persons per square mile)	6,899	8,271	---
Employment Density (jobs per square mile)	486	533	---
All BRT Stops			
Housing Units	8,433	9,450	12%
Population	25,411	29,993	18%
Employment	1,684	1,926	14%
Land Area (square mile)	2.92	2.92	---
Housing Unit Density (units per square mile)	2,891	3,240	---
Population Density (persons per square mile)	8,712	10,282	---
Employment Density (persons per square mile)	577	660	---
103rd Street Stop			
Housing Units	2,943	3,187	8%
Population	8,579	9,776	14%
Employment	318	354	11%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,748	4,059	---
Population Density (persons per square mile)	10,925	12,450	---
Employment Density (persons per square mile)	405	451	---
111th Street Stop			
Housing Units	2,559	2,956	15%
Population	7,555	9,172	21%
Employment	846	993	17%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,259	3,764	---
Population Density (persons per square mile)	9,621	11,680	---
Employment Density (persons per square mile)	1,077	1,265	---
Kensington Avenue Stop			
Housing Units	2,149	2,547	19%
Population	7,023	8,727	24%
Employment	485	642	32%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	2,736	3,243	---
Population Density (persons per square mile)	8,943	11,113	---
Employment Density (persons per square mile)	618	818	---

Data	2010 Base Year	2030 with Bus Rapid Transit Alternative	Growth
130th Street Stop			
Housing Units	1,400	1,532	9%
Population	4,218	4,835	15%
Employment	315	309	-2%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	1,782	1,950	---
Population Density (persons per square mile)	5,372	6,157	---
Employment Density (persons per square mile)	401	393	---

Source: Chicago Metropolitan Agency for Planning 2030 Forecast by Subzone, March 22, 2012

Note: * Quantitative data for the corridor and for each station area is measured for the area within ½ mile of the alignment.

5.2.1.1 Land Use

The BRT Alternative would be inconsistent with the region's comprehensive plan, which supports the RLE Project along the UPRR corridor; however, implementation of the BRT Alternative would not create any new inconsistencies beyond those that already exist, would not create an adverse impact on land use, and would provide modest benefits to some neighborhoods.

A limited number of displacements would occur as a result of park & ride lots and parking garages as these facilities are proposed primarily on vacant land. Nevertheless, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended (Uniform Act) guarantees just compensation and relocation assistance for affected residential and business property owners and tenants. With just compensation and relocation assistance per the Uniform Act, these displacement impacts would be considered not adverse due to the availability of similar real estate in the project area and because the land is primarily vacant and underutilized. The park & ride lots and parking garages would be inconsistent with adjacent land uses, and zoning designations do not permit large, stand-alone surface parking lots or parking garages. Mitigation for the parking facilities would include a rezoning and screening, landscaping, and lighting appropriate for adjacent land uses.

Implementation of the BRT Alternative would result in modest travel time savings in the corridor compared to the No Build Alternative. The travel time savings between 95th and 130th Streets would be approximately five minutes when compared to the No Build Alternative (see Table 5-4). The proposed bus stops would improve land use accessibility for local residents who need goods and services from existing businesses in the corridor and need to transfer to the 95th Street Terminal. The proposed park & ride lots and parking garages would improve multi-modal accessibility for auto, bus, and rail transfers. As a result, existing land uses within the ½-mile area of proposed bus stops would benefit from improved travel times and access to the corridor and the 95th Street Terminal and CTA's regional rail network.

Table 5-4: Summary of Travel Time Saving for All Alternatives

Alternative	Total Travel Time (95th Street to 130th Street)*	Time Savings Compared to the No Build Alternative
No Build Alternative	28 minutes	0 minutes
Bus Rapid Transit Alternative	23 minutes	5 minutes
Union Pacific Railroad Rail Alternative (all options)	14 minutes	14 minutes
Halsted Rail Alternative *	10.5 minutes	17.5 minutes

* Halsted Rail Alternative travel time is calculated from 95th to 129th Streets per the RLE Alternatives Analysis Report

Based on improved land use accessibility and modest travel time savings, the BRT Alternative would be beneficial for the Roseland, West Pullman, and Riverdale neighborhoods.

5.2.1.2 Economic Development

The BRT Alternative would be inconsistent with implementation of local and regional economic development plans that support the RLE Project along the UPRR corridor. The only mitigation to remedy this inconsistency with local and regional plans would be to construct the UPRR Rail Alternative. Because implementation of the BRT Alternative would not create any new inconsistencies beyond those that already exist, the alternative would not create an adverse impact.

As stated in Section 5.2.1.1, a limited number of building acquisitions would occur as a result of park & ride lots and parking garages. Because no existing businesses or industries would be displaced, there would be no adverse impact on property tax revenues. The commercial real estate market would not be adversely affected by these park & ride lots and parking garages due to the availability of other commercial real estate in the corridor.

Implementation of the BRT Alternative would not provide any substantive economic development benefits because it would only include limited stop bus service and parking facilities. The lack of rail transit elements, such as a dedicated travel lane and substantial stations, would limit the economic development benefit of the BRT Alternative relative to the rail alternatives.

Based on the overall impacts, the BRT Alternative would have no impact on economic development in Roseland, West Pullman, and Riverdale compared to the UPRR Rail Alternative.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.2.1 Land Use

Construction of the proposed bus stops would occur within the public ROW on sidewalks. Construction of the proposed park & ride lots would occur on land acquired for the project. Due to the isolated site improvements and short timeframe for construction, the construction impacts of the BRT Alternative would be considered not adverse on existing land uses.

5.2.2.2 Economic Development

There would be isolated temporary disruptions to business and residential access during construction at parcels directly adjacent to the proposed bus stops and park & ride lots. Due to the short timeframe for construction, the construction impacts of the BRT Alternative would be considered not adverse for local economic development.

There would be short-term economic benefits from the creation of construction jobs. The CTA will consider adding incentives or requirements on contractors to encourage hiring of workers from the affected communities. The staff estimate is derived from an approach recommended within *Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009 (May 2009)*, by the President's Council of Economic Advisers.

The methodology identifies an approximate government capital spending amount of $92,000 (in 2009 dollars) that would create or maintain one job-year (one full time job for one calendar year) of employment. This figure was escalated to current (2013) equivalent dollars through use of the US Department of Labor, Bureau of Labor Statistics "CPI Inflation Calculator." The equivalent 2013 government spending amount was calculated as approximately $100,300, with an average annual increase of approximately 2.18% from 2009-2013. The average annual increase was then applied to the 2013 spending level to project equivalent government spending levels required to create one job-year for the forecast years of capital expenditure for RLE Alternative Project Development, construction, and subsequent closeout activities.

The total estimated cost of the BRT Alternative is approximately $36.7 million, which is the year-of-expenditure. The annual capital expenditure for project development and construction activities was forecast by applying an annual inflation rate to the estimated base year cost based on a standard, design-bid-build schedule to meet the proposed opening years of 2017 (revenue operations) and 2022 (parking garage construction). During mobilization and peak construction, up to approximately 213 total jobs would be created by the BRT Alternative. Additionally, CTA is proposing construction of 2,400 structured parking spaces approximately 5 years after opening of BRT service (opening year 2022). The total cost of the additional parking facilities is estimated at $123.5 M in YOE dollars, generating up to approximately 1,009 total jobs during peak mobilization and construction.

5.2.3 Cumulative Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.3.1 Land Use

When considered with past, present, and reasonably foreseeable projects, land use conditions under the BRT Alternative would generally remain unchanged and would have no impact.

5.2.3.2 Economic Development

When considered with past, present, and reasonably foreseeable projects, economic development conditions under the BRT Alternative would generally remain unchanged and would have no impact.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option (UPRR ROW Option) is a proposed rail extension from the CTA's 95th Street Terminal, along elevated structure within I-94 and 1-57 medians, and then south and southeast along elevated structure within the centerline of the vacated ROW of the UPRR. East of Prairie Avenue, the alignment would cross over Canadian National (CN)/Metra tracks and then transition to an at-grade alignment until its terminus near 130th Street. The UPRR and Amtrak trains would relocate to another corridor as part of a separate and independent project. Rail stations would be at 103rd Street, 111th Street, Michigan Avenue, and 130th Street (West Station Option and South Station Option). The UPRR ROW Option would directly affect the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods. Table 5-5 highlights the overall impacts after mitigation and the following subsections describe the specific impacts for the directly affected neighborhoods in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street). If the alternative would not pass through a neighborhood, the impact category assigned to that neighborhood is "Not Applicable," which is represented by dash marks.

Table 5-5: Summary of Union Pacific Railroad Rail Alternative - Right-of-Way Option Impacts after Mitigation

Phase	Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park
Permanent	Land Use	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
Construction	Land Use	Not Substantially Adverse	Not Substantially Adverse	---	Not Substantially Adverse	Not Substantially Adverse	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
Cumulative	Land Use	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---

* Impact Categories: Not Applicable (---), Beneficial, No Impact, Not Adverse, Not Substantially Adverse, Adverse

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

As described in Section 4, the UPRR ROW Option would be consistent with local and regional land use and economic development plans that support the RLE Project along the UPRR corridor to 130th Street. The DCP, with support from project area neighborhoods, has strongly advocated

for the RLE Project along the UPRR corridor to 130th Street as a major capital project for the following reasons: to connect residents to regional jobs, shopping, and destinations; to provide a direct connection between affordable housing and regional jobs; to encourage new development and redevelopment near stations; and to improve overall livability in the Greater Roseland Area. The alternative's travel time savings would greatly benefit land use and economic development. The travel time savings between 95th and 130th Streets would be approximately 14 minutes when compared to the No Build Alternative (see Table 5-4). This travel time savings would be the same for all UPRR Rail Alternative options.

Between the 2010 base year and 2030 with the UPRR Rail Alternative, the UPRR corridor would have steady population growth and varying employment growth, according to CMAP forecasts. With the UPRR Rail Alternative, population growth within the UPRR corridor, at 19 percent, would well surpass the average population growth within the metropolitan area, at 15 percent. Employment growth would vary widely throughout the corridor's station areas. Changes in employment would range from a growth of 56 percent within the 103rd Street station area to a reduction of 34 percent within the 130th Street South Station Option area. The highest concentration of jobs would be within the 111th Street station area. Table 5-6 contains the quantitative land use and economic development data for the 2010 Base Year and 2030 Build conditions for all UPRR Rail Alternative options.

Table 5-6: Quantitative Land Use and Economic Development Data for Union Pacific Railroad Rail Alternative Alignments*

Data	2010 Base Year	2030 with UPRR Rail Alternative	Growth
Metropolitan Area			
Total Population	2,653,719	3,056,567	15%
Total Employment	1,241,492	1,439,154	16%
Central Business District			
Total Employment	537,369	629,690	17%
Employment - Portion of Metropolitan Area	43%	44%	---
Central Business District Land Area (square mile)	3.65	3.65	---
Employment Density (jobs per square mile)	147,189	172,476	---
Corridor			
Total Population	43,001	50,982	19%
Total Employment	3,128	3,517	12%
Population - Portion of Metropolitan Area	1.62%	1.67%	---
Employment - Portion of Metropolitan Area	0.25%	0.24%	---
Corridor Land Area (square mile)	6.45	6.45	---
Population Density (persons per square mile)	6,663	7,900	---
Employment Density (jobs per square mile)	485	545	---
All Station Areas			
Housing Units	8,162	9,359	15%

Data	2010 Base Year	2030 with UPRR Rail Alternative	Growth
Population	26,031	31,462	21%
Employment	2,136	2,377	11%
Land Area (square mile)	3.51	3.51	---
Housing Unit Density (units per square mile)	2,324	2,665	---
Population Density (persons per square mile)	7,411	8,957	---
Employment Density (persons per square mile)	608	677	---
103rd Street Station Area			
Housing Units	2,460	2,708	10%
Population	7,716	9,092	18%
Employment	231	359	56%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,132	3,449	---
Population Density (persons per square mile)	9,826	11,579	---
Employment Density (persons per square mile)	294	458	---
111th Street Station Area			
Housing Units	2,502	2,787	11%
Population	8,027	9,297	16%
Employment	1,035	1,185	14%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,186	3,550	---
Population Density (persons per square mile)	10,221	11,840	---
Employment Density (persons per square mile)	1,318	1,509	---
Michigan Avenue Station Area			
Housing Units	2,024	2,390	18%
Population	6,600	8,189	24%
Employment	359	479	34%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	2,578	3,043	---
Population Density (persons per square mile)	8,405	10,428	---
Employment Density (persons per square mile)	457	611	---
130th Street Station Area - South Station Option			
Housing Units	417	678	62%
Population	1,332	2,282	71%
Employment	301	199	-34%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	532	864	---
Population Density (persons per square mile)	1,696	2,905	---
Employment Density (persons per square mile)	383	253	---

Data	2010 Base Year	2030 with UPRR Rail Alternative	Growth
130th Street Station Area - West Station Option			
Housing Units	1,196	1,348	13%
Population	3,760	4,478	19%
Employment	476	317	-33%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	1,523	1,717	---
Population Density (persons per square mile)	4,788	5,703	---
Employment Density (persons per square mile)	606	404	---

Source: Chicago Metropolitan Agency for Planning 2030 Forecast by Subzone, March 22, 2012
Notes: * Quantitative data for the corridor and for each station area is measured for the area within ½ mile of the alignment. UPRR = Union Pacific Railroad.

The following subsections focus on more localized beneficial and adverse impacts on existing land use and economic development conditions in the project area neighborhoods.

5.3.1.1 Segment UA

5.3.1.1.1 Land Use

Washington Heights

From 95th Street to 99th Street, the alignment would be located within the I-57 median, which is owned and maintained by IDOT. There would be no adverse land use impacts because the UPRR ROW Option would be consistent with the existing transportation land uses in that area. The alignment would cross into and also be within the UPRR corridor, which was previously a transportation land use. Between 99th Street and 103rd Street, the adjacent land use in Washington Heights is a linear open space called Fernwood Parkway. Implementation of the UPRR ROW Option would have impacts on this open space, comparable to those of the UPRR (noise and vibration). Therefore, the impacts would be considered not adverse. A CTA rail station would be at 103rd Street, which would provide improved access to residences and businesses within the ½-mile station area. The northwest quadrant of this station area is within Washington Heights, which would benefit from improved access in the local area and region. Due to the improved access and lack of any land acquisitions, the overall impact on Washington Heights' existing land uses would be considered beneficial.

Roseland

Like the alignment in Washington Heights, the alignment in Roseland would be within the I-94 and I-57 medians and the UPRR corridor; however, the transition between the I-57 median and the UPRR ROW centerline at 99th Street would directly affect the northwest corner of the adjacent open space, called Wendell Smith Park (see *Parklands and Community Facilities Technical Memorandum*). Between 99th Place and 103rd Street, the adjacent land uses are primarily single-family residential. The impacts from implementation of the UPRR ROW Option on these residential areas would be comparable to those of the UPRR (noise and vibration), so the impacts would be considered not adverse.

A CTA rail station would be at 103rd Street, which would provide improved access to existing land uses within the ½-mile station area. A park & ride lot would be located on either side of the station. A limited number of displacements would occur as a result of park & ride lots, as they are proposed primarily on vacant land. With just compensation per the Uniform Act, these impacts would be considered not adverse; however, the park & ride lots would be inconsistent with adjacent land uses, and zoning designations do not permit large, stand-alone surface parking lots. Mitigation for the park & ride lots would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses and open space.

Between the 103rd Street and 111th Street stations, the UPRR ROW Option alignment is flanked by substantial vacant land and urban mixed uses (commercial and industrial) on the west side and by single-family residential uses, one public utility, one private school, two industrial uses, and vacant land on the east side. The impacts from implementation of the UPRR ROW Option on these land uses would be comparable to impacts from previous activities of the UPRR (noise and vibration), so the impacts would be considered not adverse. In addition, a substation is proposed on vacant land along the west side of the corridor at 105th Street. The substation would be similar in use to other heavy commercial and light industrial uses along the west side; therefore, it would be considered not adverse on existing and adjacent land uses.

A CTA rail station would be at 111th Street, which would provide improved access to existing land uses within the ½-mile station area. A park & ride lot would be located on either side of the station. No displacements would occur as a result of the park & ride lots, as they are proposed on vacant land; therefore, the land use impacts would not be adverse. The park & ride lots would, however, be inconsistent with adjacent land uses, and zoning designations do not permit large, stand-alone surface parking lots. Mitigation for the park & ride lots would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses. Overall, the impacts from the 111th Street station would be considered beneficial due to improved land use access, new multi-modal access, and reuse of vacant land.

Between 111th and 115th Streets, the UPRR Option alignment is flanked by mostly single-family residential uses on both sides. There are limited amounts of vacant land, industrial, and urban mixed-use. The impacts from implementation of the UPRR ROW Option on these land uses would be comparable to impacts from previous activities of the UPRR (noise and vibration), so the impacts would be considered not adverse.

A CTA rail station would be at Michigan Avenue, which would provide improved access to existing land uses within the ½-mile station area. Roseland's southernmost border is 115th Street, and the land uses north of 115th Street would benefit from improved access. This area includes the mixed-use business district along Michigan Avenues between 113th and 115th Streets, as well as a substantial amount of multi-family residential uses. All of these land uses would receive beneficial impacts from improved access to the Michigan Avenue station and the CTA rail network.

West Pullman

Just north of the Michigan Avenue station, a substation would be on vacant land along the western side of the corridor at Lafayette Street. Although there would be no direct impacts, the substation would be inconsistent with the adjacent single-family residential uses on Lafayette Street. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing. Based on the mitigation, and considering the land use benefits discussed below, the impact on adjacent residential land uses would be not substantially adverse.

The Michigan Avenue station would provide improved access to existing land uses within the ½-mile station area. West Pullman's northernmost border is 115th Street, and the land uses south of 115th Street would benefit from improved access. This area includes the mixed-use business district along Michigan Avenue between 115th and 120th Streets, and a substantial amount of single-family residential and some multi-family residential uses. In addition, the proposed "Roseland Plaza" commercial development on the eastern side of the corridor would benefit from adjacent access. All of these land uses would receive beneficial impacts from improved access to the Michigan Avenue station and the CTA rail network.

A three-story parking garage with ground-floor retail and community facilities would be on the western side of the corridor and bordered by Michigan Avenue, 116th Street, and State Street. Approximately 19 residences would be displaced by this mixed-use parking garage. With just compensation and relocation assistance per the Uniform Act, these impacts would be considered not substantially adverse due to the availability of residential real estate in the same neighborhood and considering the overall land use benefits to the neighborhood.

Across the street from the garage, single-family residential uses along State Street and 116th Street would be adversely affected by changes to the existing land use character. Although there would be no direct impacts, the mixed-use parking garage would be inconsistent with the single-family residential uses on State Street and 116th Street. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing. Based on the mitigation, the impact on adjacent residential land uses would be not substantially adverse.

A park & ride lot would be located along Michigan Avenue and 116th Street on the eastern side of the corridor. Because the park & ride lot would affect vacant land and a vacant building, the impacts would be considered not adverse. The park & ride lot would, however, be inconsistent with adjacent land uses, and zoning designations do not permit large, stand-alone surface parking lots. Mitigation for the park & ride lot would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses.

Between 116th and 117th Streets, the UPRR ROW Option alignment is flanked by mostly single-family residential uses on both sides of the corridor. The impacts from implementation of the UPRR ROW Option on adjacent land uses would be comparable to impacts from previous activities of the UPRR (noise, vibration, and visual), so the impacts would be considered not substantially adverse.

5.3.1.1.2 Economic Development

The UPRR ROW Option would provide beneficial travel time savings to all neighborhoods within the ½-mile station area. The travel time savings would benefit residents that desire improved access to job opportunities within the region, to downtown cultural and recreational events, and to shops and services adjacent to Red Line stations. In addition, travel time savings would benefit the local economy through new opportunities for business or residential development within the station areas. Regional TOD studies conducted by the RTA have shown a correlation between station access, business opportunities, and residential home prices.[1] These new development opportunities are also dependent on local plans, zoning, incentives, and market conditions adjacent to each station.

The following subsections highlight the economic development impacts within the project area neighborhoods that would directly benefit from a new station.

Washington Heights

There would be no acquisitions or displacements associated with the UPRR ROW Option within Washington Heights. The proposed rail station at 103rd Street would improve access for properties within ½ mile of the station. National and local experience has shown that property values tend to increase in proximity to a rail station. As such, residential and commercial properties within Washington Heights could increase in value the closer they are to the 103rd Street station. The extent to which property values would be affected also relates to local plans, policies, incentives, and economic climate, all of which influence property values near rail stations. Also, the new station would increase the potential to attract new residential and/or commercial development. For these reasons, the overall impact on Washington Heights would be considered beneficial for local economic development.

Roseland

As described in Section 5.3.1.1.1, there would be a limited number of property acquisitions related to the park & ride lots at the 103rd and 111th Street stations, and a nearby substation. The conversion of these properties to public use would not adversely affect property tax revenues, because these properties contain vacant land and/or buildings. These property acquisitions would not adversely affect the local commercial real estate market due to the availability of comparable real estate within this neighborhood. As it would be in Washington Heights, the new rail stations could increase property values in relation to their proximity to the stations. Also, the new stations would increase the potential to attract new residential and/or commercial development. Therefore, the overall impact on Roseland would be considered beneficial for local economic development.

West Pullman

As described in Section 5.3.1.1.1, there would be several property acquisitions and displacements related to the substation, three-story mixed-use parking garage, and park & ride lot near the

[1] Transit-Oriented Development: The Future of Development (RTA 2011)

Michigan Avenue station. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced single-family homes; however, the affected families would be offered relocation assistance and the new businesses on the ground floor of the mixed-use parking garage would generate retail tax revenue. These property acquisitions would not adversely affect the local real estate market due to the availability of comparable real estate within this neighborhood. As it would be in Washington Heights and Roseland, the new rail station could increase property values in relation to their proximity to the stations. Also, the new station would increase the potential to attract new residential and/or commercial development, especially after construction of the Roseland Plaza development adjacent to the station. The overall impact would be considered beneficial for local economic development.

5.3.1.2 Segment UB

5.3.1.2.1 Land Use

West Pullman

Between 117th Street and the CN/Metra tracks, the UPRR ROW Option alignment is flanked by mostly single-family residential uses on both sides of the corridor. There is an open space called Kensington Park along the western side, but the alternative would not directly affect it. The impacts from implementation of the UPRR ROW Option on adjacent land uses would be comparable to impacts from previous activities of the UPRR (noise, vibration, and visual), so the impacts would be considered not substantially adverse. There would be one industrial displacement where the UPRR ROW Option transitions from the embankment to an aerial structure over the CN/Metra railroad tracks on the opposite side of Front Avenue. With just compensation per the Uniform Act to the affected landowner and tenants, the direct impact on this industrial use would be considered not adverse.

Riverdale

The UPRR ROW Option alignment would cross the CN/Metra tracks on an aerial structure and then transition to an at-grade alignment within a vacated railroad ROW until the proposed station at 130th Street (South and West Station Options). The adjacent land uses are transportation, utility, industrial, and vacant land, so the alternative would be consistent with existing land use character.

The 130th Street South Station Option would be accessible from both sides of 130th Street. The South Station Option would include a stationhouse, kiss & ride, bus bays, and seven-story parking garage on the north side of 130th Street, all of which would require negotiations with MWRD for use of land. The South Station Option would also include an auxiliary entrance on the south side of 130th Street, which would provide direct pedestrian access to and from the Altgeld Gardens public housing and the Carver Military Academy High School.

The proposed 130th Street West Station Option would be located along 130th Street directly across the street from Altgeld Gardens, with a new signalized intersection at Evans Avenue. The West Station Option would include a stationhouse, kiss & ride, bus bays, park & ride lot, and four-story

parking garage on the north side of 130th Street, which would require negotiations with MWRD for use of land.

The South and West Station Options would equally serve the Altgeld Gardens public housing, which is isolated due to physical boundaries, its geographic position relative to the City, and the surrounding industrial, utility, and transportation land uses. The West Station Option would not only serve Altgeld Gardens, but also the adjacent residential neighborhoods along 130th Street. As is evident from Table 5-6, the West Station Option would serve a larger number of homes and people than the South Station Option. The South Station Option would be at the furthest point east on 130th Street, which would make pedestrian access challenging for half of the residential neighborhoods in this area. The South Station Option would provide easier pedestrian access for Carver High School than the West Station Option.

Both station options would serve as a regional park & ride for commuters using I-94, which would help reduce commuter traffic heading north into Chicago. In addition, the stations would serve as a bus transfer for employees within the Lake Calumet industrial area or visitors to the Lake Calumet nature preserves. Due to improved access for residents, commuters, employees, and visitors, the overall land use impact would be considered beneficial for Riverdale.

5.3.1.2.2 Economic Development

West Pullman

As described in Section 5.3.1.2.1, there would be one industrial displacement associated with the UPRR ROW Option. Due to compensation and relocation assistance within the same neighborhood, the impact would be considered not adverse. The overall economic development impacts for the remaining properties in the ½-mile station area would be considered beneficial, as described in Section 5.3.1.1.2.

Riverdale

As described in Section 5.3.1.2.1, there would be a limited number of property acquisitions related to the 130th Street station and parking facilities. The conversion of these properties to a public use would not adversely affect property tax revenues, because these properties are already tax exempt. Unlike the other proposed stations, the 130th Street station would not increase property values in relation to their proximity to the stations because the closest property is a public housing site. The Chicago Housing Authority supports the RLE Project to 130th Street in order to improve regional job accessibility for the isolated residential population at Altgeld Gardens. The Chicago Housing Authority has reinvested $250 million in residential renovation within Altgeld Gardens, and has plans to renovate more residential units. Lastly, the 130th Street station would be unlikely to increase the potential to attract new residential and/or commercial development due to the limited availability of developable land as well as the isolated nature of this area. This conclusion is supported by the findings of the *130th Street Station Access/Market Study,* which only found support for small retail near the station. Nevertheless, the overall impact on Riverdale would be considered beneficial for local economic development due to improved accessibility to the regional job market and improved access to the Lake Calumet area and communities south of 130th Street.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

Construction of the proposed UPRR ROW Option, including construction staging activities, would occur on land acquired for the project's permanent ROW. As such, there would be no acquisition or displacement impacts from construction.

5.3.2.1 Segment UA

5.3.2.1.1 Land Use

Construction would take up to 5 years and would cause temporary impacts on adjacent residential neighborhoods due to noise, vibration, fugitive dust, truck traffic, and roadway detours. Mitigation methods would include daytime construction activities and other best management practices (see *Construction Impacts Technical Memorandum* for more details). Based on these mitigations and the beneficial impacts of the project, the land use impacts from construction would be considered not substantially adverse in the affected neighborhoods: Washington Heights, Roseland, and West Pullman.

5.3.2.1.2 Economic Development

Construction would take up to 5 years and would cause temporary impacts on adjacent commercial uses on Michigan Avenue due to noise, vibration, fugitive dust, truck traffic, and roadway detours. Mitigation methods would include daytime construction activities, commercial signage during detours, and special advertising for businesses within the ½-mile API. Due to mitigation, the construction impacts on existing businesses would be considered not adverse. Construction activities would occur throughout the corridor and would be more extensive than for the BRT Alternative, but would not substantially influence regional construction costs due to the large size of Chicago's construction industry.

There would be short-term economic beneficial impacts from construction jobs. CTA has developed estimates for the number and types of jobs that would be created by the construction of the RLE Project. RLE Project construction is currently not funded and is contingent upon federal approvals and funding availability. However, the possibility of leveraging Federal capital funding programs to reduce the local financing burden has led CTA to incorporate the job creation methodology identified within *Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009 (May 2009)*, by the President's Council of Economic Advisers.

The methodology identifies an approximate government capital spending amount of $92,000 (in 2009 dollars) that would create or maintain one job-year (one full time job for one calendar year) of employment. This figure was escalated to current (2013) equivalent dollars through use of the US Department of Labor, Bureau of Labor Statistics "CPI Inflation Calculator." The equivalent 2013 government spending amount was calculated as approximately $100,300, with an average annual increase of approximately 2.18% from 2009-2013. The average annual increase was then applied to the 2013 spending level to project equivalent government spending levels required to create one job-year for the forecast years of capital expenditure for RLE Alternative Project Development, construction, and subsequent closeout activities.

The job estimates presented are based on the range of YOE (2026) capital costs calculated for the various UPRR alternative alignment and station configuration options, projected at approximately $2.2 billion to $2.3 billion dollars. Any future changes in the project cost or advancement in construction technologies would affect the actual number and types of jobs that would be created. CTA will revise these job estimates as the planning progresses and more or revised information becomes available.

Based on the above considerations, it is estimated that construction of the RLE Project would create approximately 5,180 total jobs during the year with peak mobilization and construction. All construction jobs would be under the General Contractor, who would be selected for this project per CTA's procurement process through competitive bidding. This competitive bidding would happen only after CTA has secured funding and federal approval for all the interim phases and for construction.

Based on the mitigations and the beneficial impacts of the project, the overall economic development impact from construction would be considered beneficial to the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods.

5.3.2.2 Segment UB

5.3.2.2.1 Land Use

Similar to the impacts and mitigation described in Section 5.3.2.1.1, the land use impacts from construction would be considered not substantially adverse in West Pullman and Riverdale.

5.3.2.2.2 Economic Development

Similar to the impacts and mitigation described in Section 5.3.2.1.2, the economic development impacts from construction would be considered beneficial due to short-term job creation.

5.3.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.3.1 Segment UA

5.3.3.1.1 Land Use

Conditions under the UPRR ROW Option would have a cumulative beneficial impact on those neighborhoods in the project area that are focused on improving employment accessibility to the Chicago region, attracting development adjacent to RLE stations, and improving the overall livability of neighborhoods through local and regional planning. These neighborhoods include Washington Heights, Roseland, and West Pullman. Furthermore, the UPRR ROW Options would only be implemented if the UPRR is relocated as part of a separate, independent project prior to the construction of the UPRR ROW Option. This action will benefit adjacent residential neighborhoods that are relieved of the noise, vibration, and traffic delays caused by the Union Pacific Railroad, and that would benefit from new heavy rail transit services.

5.3.3.1.2 Economic Development

As described in Section 5.2.3.2, the overall economy within the project area was affected by the decline in the manufacturing and steel-producing industries in the 1980s and that the planning and economic development efforts of the City of Chicago and community organizations are showing modest results in the form of new private and public sector investment. For these reasons, implementation of the UPRR ROW Option would have a beneficial cumulative impact on economic development due to new employment accessibility, attraction of new development, and overall livability improvements. The private sector would likely perceive the UPRR ROW Option as a public sector commitment to improve the overall project area and regain confidence in the area's economic development market. The affected neighborhoods include Washington Heights, Roseland, and West Pullman.

5.3.3.2 Segment UB

5.3.3.2.1 Land Use

Similar to the impacts described in Section 5.3.3.1.1, the cumulative land use impacts would be considered beneficial in West Pullman and Riverdale.

5.3.3.2.2 Economic Development

Similar to the impacts described in Section 5.3.3.1.2, the cumulative economic development impacts would be considered beneficial in West Pullman and Riverdale.

5.3.4 120th Street Yard and Shop

A new maintenance yard and shop for 270 train cars would be constructed as part of the RLE Project. The new yard and shop would be built on a combination of industrial and vacant land east of the CN/Metra tracks and west of the Indiana Harbor Belt/Northern Indiana Commuter Transportation District (IHB/NICTD) tracks at approximately 120th Street and Cottage Grove Avenue.

5.3.4.1 Permanent Impacts and Mitigations

5.3.4.1.1 Land Use

The yard and shop would be located within an industrial area; therefore, the facilities would be consistent with existing land uses. The new facilities would require the partial land acquisition of an industrial property, as well as vacant land. With just compensation per the Uniform Act to affected landowners and tenants, the direct impact on existing land uses would be considered not adverse. The maintenance yard would cut off roadway access between contiguous properties of the MWRD property; however, a new road and bridge would be built to maintain connectivity between these properties. The overall land use impacts would not be adverse.

5.3.4.1.2 Economic Development

The yard and shop would partially affect a low-intensity industrial property; therefore, there would be no adverse impacts on local economic development.

5.3.4.2 Construction Impacts and Mitigations

Because the yard and shop would be located in a heavy industrial area, the construction activities would be considered not adverse for land use or economic development. The CTA would coordinate construction activities with MWRD.

5.4 Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative East Option (UPRR East Option) is a proposed rail extension from the CTA's 95th Street Terminal, along elevated structure within I-94 and 1-57 medians, and then on elevated structure south and southeast along the eastern perimeter of the UPRR. East of Prairie Avenue, the alignment would cross over CN/Metra tracks and then transition to at-grade alignment until its terminus near 130th Street. Rail stations would be at 103rd Street, 111th Street, Michigan Avenue, and 130th Street (West Station Option and South Station Option). The UPRR East Option would directly affect the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods. Table 5-7 highlights the overall impacts after mitigation and the following subsections describe the specific impacts for the directly affected neighborhoods in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street). If the alternative would not pass through a neighborhood, the impact category assigned to that neighborhood is "Not Applicable," which is represented by dash marks.

Table 5-7: Summary of Union Pacific Railroad Rail Alternative East Option Impacts after Mitigation*

Phase	Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park
Permanent	Land Use	Beneficial	Not Substantially Adverse	---	Not Substantially Adverse	Beneficial	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
Construction	Land Use	Not Substantially Adverse	Not Substantially Adverse	---	Not Substantially Adverse	Not Substantially Adverse	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
Cumulative	Land Use	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---

* Impact Categories: Not Applicable (---), Beneficial, No Impact, Not Adverse, Not Substantially Adverse, Adverse

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

The UPRR East Option would be consistent with local and regional land use and economic development plans, as described in Section 4, that support the RLE Project along the UPRR corridor to 130th Street. This option would offer beneficial impacts, as described for the ROW Option in Section 5.3.1. The following subsections focus on more localized beneficial and adverse impacts on existing land use and economic development conditions in the project area neighborhoods.

5.4.1.1 Segment UA

5.4.1.1.1 Land Use

Washington Heights

The alignment would be within the I-94 and I-57 medians and would transition to the eastern perimeter of the UPRR ROW. A new CTA rail station would be at 103rd Street, which would provide improved access to residences and businesses within the ½-mile station area. The northwest quadrant of this station area is within Washington Heights, which would benefit from improved access in the local area and region. Due to the improved access and lack of any land acquisitions or building displacements, the overall impact on Washington Heights' existing land uses would be considered beneficial.

Roseland

The transition between the I-57 median and the UPRR East Option centerline at 99th Street would directly affect the western portion of the adjacent open space called Wendell Smith Park (see *Parklands and Community Facilities Technical Memorandum*).

Between 99th Place and 103rd Street, three or four homes at the end of each block would be displaced by the alternative's proposed ROW and station at 103rd Street. Mitigation for these impacts would include just compensation and relocation assistance, as required by the Uniform Relocation Act. The UPRR East Option also would introduce an elevated rail line adjacent to single-family residential land uses. The impacts from implementation of the UPRR East Option on these land uses would be comparable to those of the UPRR (noise and vibration), so the impacts would be considered not substantially adverse.

The 103rd Street station would provide improved access to existing land uses within the ½-mile station area. The station would be located adjacent to a single-family residential street, a local arterial with commercial and residential uses, and within a portion of Block Park. A park & ride lot on either side of the station's alignment would affect vacant land and a vacant building. With just compensation per the Uniform Act, these impacts would be considered not substantially adverse because the land is vacant and underutilized. The park & ride lots would, however, be inconsistent with adjacent land uses, and zoning designations do not permit large, stand-alone surface parking lots. Mitigation for the park & ride lots would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses and open space.

Block Park is a passive open space, which would be directly affected by the UPRR East Option; however, the underutilized park could become integrated as a gateway to and from the station and Roseland neighborhood as mitigation for the direct impacts. Additional park amenities or park space elsewhere in the Roseland neighborhood are other mitigation options (see *Parklands and Community Facilities Technical Memorandum*). Overall, the impacts from the 103rd Street station would be considered beneficial due to improved land use access, new multi-modal access, reuse of vacant properties, and reuse of a passive open space.

A substation would be on vacant land along the west side of the UPRR ROW at 105th Street. The substation would be similar in use to other heavy commercial and light industrial uses along the west side; therefore, the impact on existing and adjacent land uses would be considered not adverse.

Between the 103rd and the 111th Streets, a number of homes at the end of each block would be displaced by the alternative's ROW and station at 111th Street. The proposed ROW also would directly affect a private school's open space, two industrial uses, and vacant land. Mitigation for this affected area would be just compensation and relocation assistance. The UPRR East Option also would introduce an elevated rail line adjacent to single-family residential land uses. The impacts from implementation of the UPRR East Option on these land uses would be comparable to those of the UPRR (noise and vibration), so the impacts would be considered not substantially adverse.

The 111th Street station would provide improved access to existing land uses within the ½-mile station area. The station would be located adjacent to single-family residential streets and a local arterial with commercial and residential uses. A park & ride lot would be located on vacant land on either side of the station's alignment. The park & ride lots would be inconsistent with adjacent

land uses and zoning. Mitigation for the park & ride lots would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses. Overall, the impacts from the 111th Street station would be considered beneficial due to improved land use access, new multi-modal access, and reuse of vacant land.

Between 111th and 115th Streets, a number of homes at the end of each block would be displaced by the alternative's proposed ROW, as well as a limited amount of vacant land, industrial uses, and urban mixed uses. Mitigation for this affected area would be just compensation and relocation assistance. The UPRR East Option also would introduce an elevated rail line adjacent to single-family residential land uses. The impacts from implementation of the UPRR East Option on these land uses would be comparable to impacts from the UPRR (noise and vibration), so the impacts would be considered not substantially adverse.

A new CTA rail station would be at Michigan Avenue, which would provide improved access to existing land uses within the ½-mile station area. Roseland's southernmost border is 115th Street, and the land uses north of 115th Street would benefit from improved access. This area includes the mixed-use business district along Michigan Avenue between 113th and 115th Streets, as well as a substantial amount of multi-family residential uses. All of these land uses would receive beneficial impacts from improved access to the Michigan Avenue station and the CTA rail network.

West Pullman

Between 115th and 116th Streets, the UPRR East Option impacts would be similar to those described for the UPRR ROW Option under Section 5.3.1.1.1 with a few exceptions, noted below.

Between 115th and 116th Streets, the UPRR East Option alignment would displace two single-family residential uses. Between State Street and Michigan Avenue, the alignment would be within a negotiated easement area of the proposed Roseland Plaza.

A three-story parking garage with ground-floor retail and community facilities would be located on the western side of the corridor and bordered by Michigan Avenue, 116th Street, and State Street. Approximately 19 residences would be displaced by this mixed-use parking garage. With just compensation and relocation assistance per the Uniform Act, these impacts would be considered not substantially adverse due to the availability of residential real estate in the same neighborhood and considering the overall land use benefits to the neighborhood.

Across the street from the garage, single-family residential uses along State Street and 116th Street would be adversely affected by changes to the existing land use character. Although there would be no direct impacts, the mixed-use parking garage would be inconsistent with the single-family residential uses on State Street and 116th Street. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing. Based on the mitigation, the impact on adjacent residential land uses would be not substantially adverse.

Between the 1116th and 117th Streets, the alignment would displace a limited number of single-family residential uses and a public use. With just compensation and relocation assistance per the

Uniform Act, the existing land use impact would be considered not substantially adverse. The impacts from implementation of the UPRR East Option on adjacent land uses would be comparable to those of the UPRR (noise, vibration, and visual), so the impacts would be considered not substantially adverse.

5.4.1.1.2 Economic Development

The UPRR East Option would provide beneficial travel time savings and new opportunities for business or residential development within the ½-mile station areas, as described for the UPRR ROW Option in Section 5.3.1.1.2.

Washington Heights

As described in Section 5.4.1.1.1, there would be no acquisitions or displacements associated with the UPRR East Option within Washington Heights. Hence, the UPRR East Option impacts on economic development would be similar to those described for the UPRR ROW Option in Section 5.3.1.1.2.

Roseland

As described in Section 5.4.1.1.1, there would be numerous property displacements related to the UPRR East Option alignment, stations, and park & ride lots at the 103rd and 111th Streets, as well as a nearby substation. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced single-family homes and businesses; however, the affected families and businesses would be offered relocation assistance within Roseland. These property acquisitions would not adversely affect the local commercial real estate market due to the availability of comparable real estate within this neighborhood. As it would be in Washington Heights, the new rail stations could increase property values in relation to their proximity to the stations. Also, the new stations would increase the potential to attract new residential and/or commercial development. Therefore, the overall impact on Roseland would be considered beneficial for local economic development.

West Pullman

As described in Section 5.4.1.1.1, there would be several property acquisitions and displacements related to the UPRR East Option alignment, three-story mixed-use parking garage, and park & ride lot near the Michigan Avenue station, as well as a nearby substation. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced single-family homes and businesses; however, the affected families and businesses would be offered relocation assistance and the new businesses on the ground floor of the mixed-use parking garage would generate retail tax revenue. These property acquisitions would not adversely affect the local real estate market due to the availability of comparable real estate within this neighborhood. As it would be in Washington Heights and Roseland, the new rail station could increase property values in relation to their proximity to the stations. Also, the new station would increase the potential to attract new residential and/or commercial development, especially after construction of the Roseland Plaza development adjacent to the station. The overall impact would be considered beneficial for local economic development.

5.4.1.2 Segment UB

5.4.1.2.1 Land Use

As described in Section 5.3.1.2.1, the UPRR East Option impacts would be similar to those described for the UPRR ROW Option for the Riverdale neighborhood. There would be a slight difference in impacts within West Pullman, as noted below.

West Pullman

Between the 117th Street and the CN/Metra tracks, the UPRR East Option alignment would displace a limited number of single-family residential uses, a public use, an industrial use, and vacant land. With just compensation and relocation assistance per the Uniform Act, the impact on existing land uses would be not substantially adverse. The impacts from implementation of the UPRR East Option on adjacent land uses would be comparable to impacts from the UPRR (noise, vibration, and visual), so the impacts would be considered not substantially adverse.

5.4.1.2.2 Economic Development

As described in Section 5.3.1.2.2, the UPRR East Option impacts would be similar to the UPRR ROW Option impacts within the Riverdale neighborhood. There would be a slight difference in impacts within West Pullman, as noted below.

West Pullman

As described in Section 5.4.1.2.1 above, there would be a limited number of displacements in this segment; therefore, the economic development benefits from the UPRR East Option would be similar to those from the UPRR ROW Option described in Section 5.3.1.2.2.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

Construction of the proposed UPRR East Option, including construction staging activities, would occur on land acquired for the project's permanent ROW. As such, there would be no acquisition or displacement impacts from construction.

5.4.2.1 Segment UA

5.4.2.1.1 Land Use

The UPRR East Option impacts would be similar to the UPRR ROW Option impacts described in Section 5.3.2.1.1. The overall land use impacts from construction would be not substantially adverse within Washington Heights, Roseland, and West Pullman.

5.4.2.1.2 Economic Development

The UPRR East Option impacts would be similar to the UPRR ROW Option impacts described in Section 5.3.2.1.2. Based on the mitigations and the beneficial impacts of the project, the overall economic development impact from construction would be considered beneficial to the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods.

5.4.2.2 Segment UB

5.4.2.2.1 Land Use

The UPRR East Option impacts would be similar to the UPRR ROW Option impacts described in Section 5.3.2.2.1. The overall land use impacts from construction would not be adverse within West Pullman and Riverdale.

5.4.2.2.2 Economic Development

The UPRR East Option impacts would be similar to the UPRR ROW Option impacts described in Section 5.3.2.2.2. The overall economic development impacts from construction would be beneficial due to short-term job creation.

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.3.1 Segment UA

5.4.3.1.1 Land Use

Conditions under the UPRR East Option would have a cumulative beneficial impact on those neighborhoods in the project area that are focused on improving employment accessibility to the Chicago region, attracting development adjacent to RLE stations, and improving the overall livability of neighborhoods through local and regional planning. These neighborhoods include Washington Heights, Roseland, and West Pullman.

5.4.3.1.2 Economic Development

The UPRR East Option impacts would be similar to the UPRR ROW Option impacts described in Section 5.3.3.1.2. The cumulative economic development impacts would be beneficial for the Washington Heights, Roseland, and West Pullman neighborhoods.

5.4.3.2 Segment UB

5.4.3.2.1 Land Use

The UPRR East Option impacts would be similar to the UPRR ROW Option impacts described in Section 5.3.3.2.1. The cumulative land use impacts would be beneficial for the West Pullman and Riverdale neighborhoods.

5.4.3.2.2 Economic Development

The UPRR East Option impacts would be similar to the UPRR ROW Option impacts described in Section 5.3.3.2.2. The cumulative economic development impacts would be beneficial for the West Pullman and Riverdale neighborhoods.

5.4.4 120th Street Yard and Shop

A new yard and shop for 270 train cars would be constructed as part of the RLE Project. The new maintenance yard and shop would be built on a combination of industrial and vacant land east of the CN/Metra tracks and west of the IHB/NICTD tracks at approximately 120th Street and Cottage

Grove Avenue. Impacts and mitigations for this option would be the same as for the ROW Option, described in Section 5.3.4.

5.5 Union Pacific Railroad Rail Alternative - West Option

The Union Pacific Railroad Rail Alternative West Option (UPRR West Option) would be a rail extension from the CTA's 95th Street Terminal, along elevated structure within I-94 and 1-57 medians, and on elevated structure south and southeast along the western perimeter of the UPRR. East of Prairie Avenue, the alignment would cross over CN/Metra tracks and then transition to at-grade alignment until its terminus near 130th Street. Rail stations would be at 103rd Street, 111th Street, Michigan Avenue, and 130th Street (West Station Option and South Station Option). The UPRR West Option would directly affect the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods. Table 5-8 highlights the overall impacts after mitigation and the following subsections describe the specific impacts for the directly affected neighborhoods in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street). If the alternative would not pass through a neighborhood, the impact category assigned to that neighborhood is "Not Applicable," which is represented by dash marks.

Table 5-8: Summary of Union Pacific Railroad Rail Alternative West Option Impacts after Mitigation*

Phase	Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park
Permanent	Land Use	Beneficial	Not Substantially Adverse	---	Not Substantially Adverse	Beneficial	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
Construction	Land Use	Not Substantially Adverse	Not Substantially Adverse	---	Not Substantially Adverse	Not Substantially Adverse	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---
Cumulative	Land Use	Beneficial	Beneficial	---	Beneficial	Beneficial	---
	Economic Development	Beneficial	Beneficial	---	Beneficial	Beneficial	---

* Impact Categories: Not Applicable (---), Beneficial, No Impact, Not Adverse, Not Substantially Adverse, Adverse

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

The UPRR West Option would be consistent with local and regional land use and economic development plans, as described in Section 4, that support the RLE Project along the UPRR corridor to 130th Street. This option would offer beneficial impacts, as described for the ROW Option in Section 5.3.1. The following subsections focus on more localized beneficial and adverse impacts on existing land use and economic development conditions in the project area neighborhoods.

5.5.1.1 Segment UA

5.5.1.1.1 Land Use

Washington Heights

The alignment would be within the I-94 and I-57 medians until it transitions to the western perimeter of the UPRR ROW, which would affect a small portion of Wendell Smith Park. Between 99th Street and 103rd Street, the UPRR West Option alignment would cross and directly affect a linear open space called Fernwood Parkway. This open space was utilized for active uses in the early 20th century, but currently exists as a passive green space. The mitigation for the direct impact would include a replacement of open space elsewhere in the neighborhood or project area. Due to the potential mitigation, the overall impact on the existing land use would be considered not substantially adverse (see *Parklands and Community Facilities Technical Memorandum*).

Across the street from Fernwood Parkway, there are approximately 35 single-family homes that front onto Eggleston Avenue and face Fernwood Parkway. This open space essentially serves as a linear buffer for the UPRR. Due to the proposed alignment, the UPRR West Option would affect the adjacent land uses because it is incompatible with single-family residential land uses. Mitigation would include additional street trees along the west side of Eggleston Avenue and an evergreen tree buffer along the east side of Eggleston Avenue. Due to potential mitigation, the overall impact on land uses would be considered not substantially adverse.

A new CTA rail station would be at 103rd Street, which would provide improved access to residences and businesses within the ½-mile station area. The northwest quadrant of this station area is within Washington Heights, which would benefit from improved access in the local area and region. The northern half of the station and primary access would be within Fernwood Parkway, which would be incorporated into the station design as a gateway park space or plaza to the station. Due to the lack of any residential or business displacements, the overall impact on Washington Heights' existing land uses would be considered beneficial due to improved land use access, new multi-modal access, and reuse of a passive open space.

Roseland

The 103rd Street station would provide improved access to existing land uses within the ½-mile station area. The southwest quadrant and eastern half of the station area would be within Roseland, which would benefit from improved access in the local area and region. The southern half of the station and auxiliary access, as well as a park & ride lot, would be on vacant land and a vacant building. With just compensation per the Uniform Act, the displacement impacts would be considered not substantially adverse because the land is vacant and underutilized. The park & ride lot would, however, be inconsistent with adjacent land uses and zoning designations for the adjacent single-family neighborhood. Mitigation for the park & ride lots would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses. Overall, the impacts from the 103rd Street station would be considered beneficial due to improved land use access, new multi-modal access, and reuse of vacant properties.

A new substation would be located on vacant land along the east side of the UPRR ROW at 105th Street. The substation would be inconsistent with the adjacent single-family residential uses. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing. Based on the mitigation, the impact on adjacent land uses would be not substantially adverse.

Between the 103rd and the 111th Streets, the UPRR West Option alignment would directly affect a limited number of commercial and industrial uses and a substantial amount of vacant land. In particular, the vacant land is overgrown and sometimes used for illegal dumping. This linear strip of industrial and vacant land is located behind the single-family residences along Eggleston Avenue and is detrimental to the overall quality of this residential neighborhood. With just compensation per the Uniform Act and relocation assistance, the displacement impacts would be considered not substantially adverse, because there is available commercial and industrial land elsewhere in the project area.

The 111th Street station would provide improved access to existing land uses within the ½-mile station area. The station and park & ride lot are proposed for vacant land between 110th Street and 111th Street, a local arterial with commercial and residential uses. The park & ride lot would be inconsistent with adjacent land uses and zoning designations for the adjacent single-family neighborhood. Mitigation for the park & ride lot would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses. Overall, the impacts from the 111th Street station would be beneficial due to improved land use access, new multi-modal access, and reuse of vacant land.

Between 111th and 115th Streets, the UPRR West Option alignment would directly affect a limited number of single-family residences and businesses, a church property, vacant land, and unused properties of the UPRR (outside the linear railroad ROW). Mitigation for this affected area would be just compensation and relocation assistance. The UPRR West Option also would introduce an elevated rail line adjacent to single-family residential land uses. The impacts from implementation of the UPRR West Option on these land uses would be comparable to impacts from the UPRR (noise and vibration), so the impacts would be considered not substantially adverse.

A CTA rail station would be at Michigan Avenue, which would provide improved access to existing land uses within the ½-mile station area. Roseland's southernmost border is 115th Street, and the land uses north of 115th Street would benefit from improved access. This area includes the mixed-use business district along Michigan Avenue between 113th and 115th Streets, as well as a substantial amount of multi-family residential uses. All of these land uses would receive beneficial impacts from improved access to the Michigan Avenue station and the CTA rail network.

West Pullman

Between 115th and 116th Streets, the UPRR West Option impacts would be similar to those described for the UPRR ROW Option under Section 5.3.1.1.1 with a few exceptions, noted below.

An additional park & ride lot would not be included, as it would be under the UPRR ROW Option and the UPRR East Option. Instead, a five-story parking garage with ground-floor retail and community facilities would be located on the western side of the corridor and bordered by Michigan Avenue, 116th Street, and State Street. The UPRR West Option alignment and northern portion of the Michigan Avenue station would be also located within this affected area. Approximately 19 residences would be displaced by these facilities. With just compensation per the Uniform Act and relocation assistance, these impacts would be considered not substantially adverse due to the availability of residential real estate in the same neighborhood and considering the overall land use benefits to the neighborhood.

Across the street from the garage, single-family residential uses along State Street and 116th Street would be adversely affected by changes to the existing land use character. Although there would be no direct impacts, the mixed-use parking garage would be inconsistent with the single-family residential uses on State Street and 116th Street. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing such as a "step-back" in the facade to help minimize the height of the garage. Based on the mitigation, the impact on adjacent residential land uses would be not substantially adverse.

Between 115th and 116th Streets, the UPRR West Option alignment and southern portion of the Michigan Avenue station would displace one residential property and vacant land. The impacts from implementation of the UPRR West Option on adjacent land uses would be comparable to impacts from the UPRR (noise, vibration, and visual), so the impacts would be considered not substantially adverse.

5.5.1.1.2 Economic Development

The UPRR West Option would provide beneficial travel time savings and new opportunities for business or residential development within the ½-mile station areas, as described for the UPRR ROW Option in Section 5.3.1.1.2. The following subsections highlight the economic development impacts within the project area neighborhoods that would directly benefit from a new station.

<u>Washington Heights</u>

As described in Section 5.5.1.1.1, there would be no acquisitions or displacements associated with the UPRR West Option within Washington Heights. Hence, the UPRR West Option economic development impacts would be beneficial and similar to those described for the UPRR ROW Option in Section 5.3.1.1.2 and for the UPRR East Option in Section 5.4.1.1.2.

<u>Roseland</u>

As described in Section 5.5.1.1.1, there would be numerous property displacements related to the UPRR West Option alignment, stations, and park & ride lots at the 103rd and 111th Streets, as well as a nearby substation. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced single-family homes and businesses; however, the affected residents and businesses would be offered relocation assistance within Roseland. These property acquisitions would not adversely affect the local real estate market due to the availability of comparable real estate within this neighborhood. As it would be in Washington Heights, the

new rail stations could increase property values in relation to their proximity to the stations. Also, the new stations would increase the potential to attract new residential and/or commercial development. Therefore, the overall impact on Roseland would be considered beneficial for local economic development.

West Pullman

As described in Section 5.5.1.1.1, there would be numerous property acquisitions and displacements related to the UPRR West Option alignment, Michigan Avenue station, and five-story mixed-use parking garage, as well as a nearby substation. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced single-family homes and businesses; however, the affected residents and businesses would be offered relocation assistance within West Pullman and the new businesses on the ground floor of the mixed-use parking garage would generate retail tax revenue. These property acquisitions would not adversely affect the local real estate market due to the availability of comparable real estate within this neighborhood. As it would be in Washington Heights and Roseland, the new rail station could increase property values in relation to their proximity to the stations. Also, the new station would increase the potential to attract new residential and/or commercial development, especially after construction of the Roseland Plaza development near the station. The overall impact would be considered beneficial for local economic development in West Pullman.

5.5.1.2 Segment UB

5.5.1.2.1 Land Use

The UPRR West Option land use impacts within the Riverdale neighborhood would be similar to those described for the UPRR ROW Option (Section 5.3.1.2.1) and for the UPRR East Option (5.4.1.2.1). There would be a slight difference in impacts within West Pullman, as noted below.

West Pullman

Between the 117th Street and the CN/Metra tracks, the UPRR West Option alignment would displace a limited number of single-family residential uses, an industrial use, and vacant land. With just compensation and relocation assistance per the Uniform Act, the impact on existing land uses would be not substantially adverse. The impacts from implementation of the UPRR West Option on adjacent land uses would be comparable to those of the UPRR (noise, vibration, and visual), so the impacts would be considered not substantially adverse.

5.5.1.2.2 Economic Development

The UPRR West Option economic development impacts within the Riverdale neighborhood would be similar to those described for the UPRR ROW Option (Section 5.3.1.2.2) and for the UPRR East Option (5.4.1.2.2). There would be a slight difference in impacts within West Pullman, as noted below.

West Pullman

There would be a limited number of displacements in this segment as described in Section 5.5.1.2.1 above; therefore, the economic development benefits from the UPRR West Option would be similar to those described in Section 5.5.1.1.2 for West Pullman.

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

Construction of the proposed UPRR West Option, including construction staging activities, would occur on land acquired for the project's permanent ROW. As such, there would be no acquisition or displacement impacts from construction.

5.5.2.1 Segment UA

5.5.2.1.1 Land Use

The UPRR West Option impacts would be similar to those described for the UPRR ROW Option (Section 5.3.2.1.1) and for the UPRR East Option (Section 5.4.2.1.1). The overall land use impacts from construction would be considered not substantially adverse within Washington Heights, Roseland, and West Pullman.

5.5.2.1.2 Economic Development

The UPRR West Option impacts would be similar to those described for the UPRR ROW Option (Section 5.3.2.1.2) and for the UPRR East Option (Section 5.4.2.1.2). Based on the mitigations and the beneficial impacts of the project, the overall economic development impact from construction would be considered beneficial to the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods.

5.5.2.2 Segment UB

5.5.2.2.1 Land Use

The UPRR West Option land use impacts would be similar to those described for the UPRR ROW Option (Section 5.3.2.2.1) and for the UPRR East Option (Section 5.4.2.2.1). The overall land use impacts from construction would be considered not adverse within West Pullman and Riverdale.

5.5.2.2.2 Economic Development

The UPRR West Option economic development impacts would be similar to those described for the UPRR ROW Option (Section 5.3.2.2.2) and for the UPRR East Option (Section 5.4.2.2.2). The overall economic development impacts from construction would be considered not adverse within West Pullman and Riverdale.

5.5.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.3.1 Segment UA

5.5.3.1.1 Land Use

The UPRR West Option cumulative land use impacts would be similar to those described for the UPRR ROW Option (Section 5.3.3.1.1) and for the UPRR East Option (Section 5.4.3.1.1). The cumulative land use impacts would be beneficial for Washington Heights, Roseland, and West Pullman.

5.5.3.1.2 Economic Development

The UPRR West Option cumulative economic development impacts would be similar to those described for the UPRR ROW Option (Section 5.3.3.1.2) and for the UPRR East Option (Section 5.4.3.1.2). The cumulative economic development impacts would be beneficial for Washington Heights, Roseland, and West Pullman.

5.5.3.2 Segment UB

5.5.3.2.1 Land Use

The UPRR West Option cumulative land use impacts would be similar to those described for the UPRR ROW Option (Section 5.3.3.2.1) and for the UPRR East Option (Section 5.4.3.2.1). The cumulative land use impacts would be beneficial for West Pullman and Riverdale.

5.5.3.2.2 Economic Development

The UPRR West Option cumulative economic development impacts would be similar to those described for the UPRR ROW Option (Section 5.3.3.2.2) and for the UPRR East Option (Section 5.4.3.2.2). The cumulative economic development impacts would be beneficial for West Pullman and Riverdale.

5.5.4 120th Street Yard and Shop

A new yard and shop for 270 train cars would be constructed as part of the RLE Project. The new maintenance yard and shop would be built on a combination of industrial and vacant land east of the CN/Metra tracks and west of the IHB/NICTD tracks at approximately 120th Street and Cottage Grove Avenue. Impacts and mitigations for this option would be the same as for the ROW Option, described in Section 5.3.4.

5.6 Halsted Rail Alternative

The Halsted Rail Alternative is a proposed rail extension from the CTA's 95th Street Terminal, along elevated structure within I-94 and 1-57 medians, and then within the median of Halsted Street from 99th Street to 129th Street. New rail stations would be at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Halsted Rail Alternative would directly affect the Washington Heights, Roseland, Morgan Park, and West Pullman neighborhoods. Table 5-9 highlights the overall impacts after mitigation and the following subsections describe the specific impacts for the directly affected neighborhoods in Segment HA (95th Street to 120th Street) and

Segment HB (120th Street to 129th Street). If the alternative would not pass through a neighborhood, the impact category assigned to that neighborhood is "Not Applicable," which is represented by dash marks.

Table 5-9: Summary of Halsted Rail Alternative Impacts after Mitigation*

Phase	Impacts	Washington Heights	Roseland	Morgan Park	West Pullman	Riverdale	Calumet Park
Permanent	Land Use	Beneficial	Beneficial	Beneficial	Adverse	---	Beneficial
	Economic Development	Beneficial	Beneficial	Beneficial	Beneficial	---	Beneficial
Construction	Land Use	Not Substantially Adverse	Not Substantially Adverse	Not Substantially Adverse	Not Substantially Adverse	---	Not Substantially Adverse
	Economic Development	Beneficial	Beneficial	Beneficial	Beneficial	---	No Impact
Cumulative	Land Use	Beneficial	Beneficial	Beneficial	Beneficial	---	No Impact
	Economic Development	Beneficial	Beneficial	Beneficial	Beneficial	---	No Impact

* Impact Categories: Not Applicable (---), Beneficial, No Impact, Not Adverse, Not Substantially Adverse, Adverse

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

The Halsted Street corridor would have slow growth in population and substantial employment growth between the 2010 base year and 2030 with the Halsted Rail Alternative, according to CMAP forecasts. With the Halsted Rail Alternative, population growth within the corridor, at 10 percent, would be below the average population growth within the metropolitan area, at 15 percent. Employment growth within the corridor, at 56 percent, would be well above the metropolitan average at 16 percent. The most substantial growth in employment would be at the 119th Street and Vermont Avenue station areas, with growth rates of 184 percent and 169 percent, respectively. The highest concentration of jobs within the corridor would shift geographically between 2010 and 2030, from 111th Street station to 119th Street station. Table 5-10 contains the quantitative land use and economic development data for the Halsted Street corridor, for the 2010 base year and 2030 with the Halsted Rail Alternative.

Table 5-10: Quantitative Land Use and Economic Development Data for Halsted Rail Alternative Alignment*

Data	2010 Base Year	2030 with Halsted Rail Alternative	Growth
Metropolitan Area			
Total Population	2,653,719	3,056,567	15%
Total Employment	1,241,492	1,439,154	16%
Central Business District			
Total Employment	537,369	629,690	17%

Data	2010 Base Year	2030 with Halsted Rail Alternative	Growth
Employment - Portion of Metropolitan Area	43%	44%	---
Central Business District Land Area (square mile)	3.65	3.65	---
Employment Density (jobs per square mile)	147,189	172,476	---
Corridor			
Total Population	46,556	51,142	10%
Total Employment	2,930	4,571	56%
Population - Portion of Metropolitan Area	1.75%	1.67%	---
Employment - Portion of Metropolitan Area	0.24%	0.32%	---
Corridor Land Area (square mile)	5.74	5.74	---
Population Density (persons per square mile)	8,108	8,906	---
Employment Density (jobs per square mile)	510	796	---
All Station Areas			
Housing Units	8,314	8,840	6%
Population	25,044	27,558	10%
Employment	1,748	3,064	75%
Land Area (square mile)	3.14	3.14	---
Housing Unit Density (units per square mile)	2,647	2,814	---
Population Density (persons per square mile)	7,973	8,773	---
Employment Density (persons per square mile)	556	975	---
103rd Street Station Area			
Housing Units	2,502	2,524	1%
Population	7,377	7,715	5%
Employment	351	434	24%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,186	3,214	---
Population Density (persons per square mile)	9,394	9,825	---
Employment Density (persons per square mile)	447	552	---
111th Street Station Area			
Housing Units	2,384	2,615	10%
Population	6,999	7,812	12%
Employment	774	867	12%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	3,036	3,330	---
Population Density (persons per square mile)	8,913	9,948	---

Data	2010 Base Year	2030 with Halsted Rail Alternative	Growth
Employment Density (persons per square mile)	985	1,104	---
119th Street Station Area			
Housing Units	1,797	2,013	12%
Population	5,919	6,789	15%
Employment	562	1,598	184%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	2,289	2,563	---
Population Density (persons per square mile)	7,537	8,646	---
Employment Density (persons per square mile)	716	2,035	---
Vermont Avenue Station Area			
Housing Units	1,631	1,688	4%
Population	4,749	5,241	10%
Employment	62	166	169%
Land Area (square mile)	0.79	0.79	---
Housing Unit Density (units per square mile)	2,076	2,150	---
Population Density (persons per square mile)	6,048	6,674	---
Employment Density (persons per square mile)	78	211	---

Source: Chicago Metropolitan Agency for Planning 2030 Forecast by Subzone, March 22, 2012
Note: * Quantitative data for the corridor and for each station area is measured for the area within ½ mile of the alignment.

5.6.1.1 Segment HA

5.6.1.1.1 Land Use

Like the No Build Alternative (Section 5.1.1.1) and the BRT Alternative (Section 5.2.1.1), the Halsted Rail Alternative would be inconsistent with the region's comprehensive plan, which supports the RLE Project along the UPRR corridor; however, the Halsted Rail Alternative would not create any new inconsistencies beyond those that already exist, and would not create an adverse impact on land uses. The Halsted Rail Alternative would provide similar land use benefits as the UPRR Rail Alternative options: to connect residents to regional jobs, shopping, and destinations; to provide a direct connection between affordable housing and regional jobs; to encourage new development and redevelopment near stations, and to improve overall livability. One of the primary factors for beneficial impacts relates to the alternative's travel time savings, which would contribute to beneficial land use and economic development impacts. The travel time savings between 95th and 129th Streets would be approximately 17.5 minutes when compared to the No Build Alternative (see Table 5-4). This travel time savings would be slightly greater than with the UPRR Rail Alternative options; however, the Halsted Rail Alternative would not have the added benefit of serving the Riverdale neighborhood, including the Altgeld Gardens public housing site. The following subsections focus on more localized beneficial and adverse impacts on existing land use and economic development conditions in the project area neighborhoods.

Washington Heights

From the existing 95th Street Terminal, the Halsted Street Alternative alignment would be in the I-94 and I-57 medians until Halsted Street. At transition from I-57 to Halsted Street, the alignment would directly affect one single-family residence and several mixed-use properties. With just compensation and relocation assistance per the Uniform Act, the impact would be not substantially adverse.

A new substation would be at 101st Street on vacant properties along Halsted Street, adjacent to a church parking lot and single-family residences. Although there would be no direct impacts, the substation would be inconsistent with the adjacent single-family residential uses on Emerald Avenue. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing. Based on the mitigation, the impact on adjacent residential land uses would be not substantially adverse.

A CTA rail station would be at 103rd Street, which would provide improved access to residences and businesses within the ½-mile station area. The western half and the northeast quadrant of this station area would be within Washington Heights, which would benefit from improved access in the local area and region. A park & ride lot would be located on the northwest corner of Halsted and 103rd Streets, which would directly affect several mixed-use properties. With just compensation and relocation assistance per the Uniform Act, the impact would be not substantially adverse. The park & ride lot would, however, be inconsistent with adjacent single-family residential uses and existing zoning on Green Street. Mitigation for the park & ride lot would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses. Overall, the impacts from the 103rd Street station would be beneficial due to improved land use access and new multi-modal access.

Roseland

As described above, the 103rd Street station would provide improved access to residences and businesses within the ½-mile station area. The southeast quadrant of this station area would be within Roseland, which would benefit from improved access in the local area and region. Because there would be no residential or business displacements, the overall impact on Roseland's existing land uses would be considered beneficial from improved land use access and new multi-modal access.

A substation would be at 110th Street on vacant properties along Halsted Street, adjacent to commercial uses and single-family residences. Although there would be no direct impacts, the substation would be inconsistent with the adjacent single-family residential uses on Emerald Avenue. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing. Based on the mitigation, the impact on adjacent residential land uses would be not substantially adverse.

A CTA rail station would be at 111th Street, which would provide improved access to residences and businesses within the ½-mile station area. The eastern half of this station area would be within Roseland, which would benefit from improved access in the local area and region. Because

there would be no residential or business displacements, the overall impact on Roseland's existing land uses would be considered beneficial from improved land use access and new multi-modal access.

Morgan Park

As described above, the 111th Street station would provide improved access to residences and businesses within the ½-mile station area. The western half of this station area would be within Morgan Park, which would benefit from improved access in the local area and region. A park & ride lot would be located on the northwest corner of Halsted and 111th Streets, which would directly affect two mixed-use properties. With just compensation and relocation assistance per the Uniform Act, the impact would be not substantially adverse. The park & ride lot would, however, be inconsistent with adjacent single-family residential uses and zoning on Green Street. Mitigation for the park & ride lot would include a rezoning and screening, landscaping, and lighting appropriate for adjacent residential land uses. Overall, the impacts from the 111th Street station would be beneficial due to improved land use access and new multi-modal access.

West Pullman

A new CTA rail station would be at 119th Street, which would provide improved access to residences and businesses within the ½-mile station area. A regional park & ride lot would be located on the southwest corner of Halsted and 119th Streets, which would directly affect numerous mixed-use properties, an industrial property, and vacant land. Because the park & ride lot would be within the West Pullman Industrial Corridor, the park & ride lot would be consistent with adjacent land uses along 119th and 120th Streets. Due to the size of the park & ride lot, there would be an impact on the neighborhood's beautification efforts for the Industrial Corridor. Mitigation for the park & ride lot would include screening, landscaping, and lighting used elsewhere within the Industrial Corridor. Overall, the impacts from the 119th Street station would be beneficial due to improved land use access and new multi-modal access.

A new substation would be located nearby on vacant properties along Halsted Street at 118th Place, adjacent to single-family residences. Although there would be no direct impacts, the substation would be inconsistent with the adjacent single-family residential uses on 118th Place. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing. Based on the mitigation, the impact on adjacent residential land uses would be not substantially adverse.

5.6.1.1.2 Economic Development

The Halsted Rail Alternative would provide beneficial travel time savings and new opportunities for business or residential development within the ½-mile station areas, as described above for the UPRR Rail Alternative. The following subsections highlight the economic development impacts within the project area neighborhoods that would directly benefit from a new station due to new accessibility for residents and increased foot traffic for businesses.

Washington Heights

As described in Section 5.6.1.1.1, there would be several property displacements related to the Halsted Rail Alternative alignment and park & ride lot at the 103rd Street, as well as a nearby substation. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced mixed-use (retail/apartments) and commercial businesses; however, the affected rental tenants and businesses would be offered relocation assistance within Washington Heights. These property acquisitions would not adversely affect the local commercial real estate market due to the availability of comparable real estate within this neighborhood. Similar to the UPRR Rail Alternative, the Halsted Rail Alternative could increase property values in relation to their proximity to the 103rd Street station. Also, the new station would increase the potential to attract new residential and/or commercial development. Therefore, the overall impact on Washington Heights would be considered beneficial for local economic development.

Roseland

As described in Section 5.6.1.1.1, there would be several property displacements related to the proposed substation at 110th Street. The conversion of these properties to public use would not affect property tax revenues because the properties are currently vacant. Similar to the UPRR Rail Alternative, the Halsted Rail Alternative could increase property values in relation to their proximity to the 103rd Street and the 111th Street stations. Also, the new stations would increase the potential to attract new residential and/or commercial development. Therefore, the overall impact on Washington Heights would be considered beneficial for local economic development.

Morgan Park

As described in Section 5.6.1.1.1, there would be two property displacements related to the park & ride lot at the 111th Street station. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced businesses; however, the affected businesses would be offered relocation assistance within Morgan Park. These property acquisitions would not adversely affect the local commercial real estate market due to the availability of comparable real estate within this neighborhood. Similar to the UPRR Rail Alternative, the Halsted Rail Alternative could increase property values in relation to their proximity to the 111th Street station. Also, the new station would increase the potential to attract new residential and/or commercial development. Therefore, the overall impact on Morgan Park would be considered beneficial for local economic development.

West Pullman

As described in Section 5.6.1.1.1, there would be numerous property displacements related to the park & ride lot at the 119th Street station as well as a nearby substation. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced businesses; however, the affected businesses would be offered relocation assistance within West Pullman. These property acquisitions would not adversely affect the local commercial real estate market due to the availability of comparable real estate within this neighborhood. Similar to the UPRR Rail Alternative, the Halsted Rail Alternative could increase property values in relation to their proximity to the 119th Street station. Also, the new station would increase the potential to

attract new residential and/or commercial development. Therefore, the overall impact on West Pullman would be considered beneficial for local economic development.

5.6.1.2 Segment HB

5.6.1.2.1 Land Use

West Pullman

As stated in Section 5.6.1.1, the 119th Street station would provide improved access to residences and businesses within the ½-mile station area. Because there would be no residential or business displacements, the overall impact on West Pullman's existing land uses would be considered beneficial from improved land use access and new multi-modal access.

A new substation would be located nearby on a commercial parking lot along Halsted Street at 126th Street, adjacent to single-family residences. With just compensation per the Uniform Act, the direct impact on the commercial property would be not substantially adverse. The substation would, however, be inconsistent with the adjacent single-family residential uses on Emerald Avenue. Mitigation would include a rezoning and screening, landscaping, and appropriate architectural design and massing. Based on the mitigation, the impact on adjacent residential land uses would be not substantially adverse.

A new CTA rail station would be at Vermont Avenue and Halsted Street, which would provide improved access to residences and businesses within the ½-mile station area. A seven-story mixed-use parking garage with ground-floor retail and community facilities would be located along Vermont Avenue and Halsted, Green, and 128th Streets, which would displace a mixed-use commercial building with several businesses and 11 single-family residences. With just compensation and relocation assistance per the Uniform Act, these impacts would be considered not substantially adverse due to the availability of commercial and residential real estate in the same neighborhood.

Across the street from the garage, single-family residential uses along Vermont Avenue and Green Street would be adversely affected by changes to the existing land use character. Due to the seven-story height of the garage, and because the adjacent single-family residential homes are one-story structures, the impact on existing land use character would be considered adverse.

Village of Calumet Park

As described above, the Vermont Avenue station would provide improved access to residences and businesses within the ½-mile station area. West of Carpenter Street, a small portion of the Village of Calumet Park would receive beneficial access impacts for primarily single-family residential uses. West of Halsted Street and north of 127th Street, the majority of land uses within the Village relate to the Cedar Park Cemetery. Because there would be no residential or business displacements, the overall impact on the Village of Calumet Park's existing land uses would be considered beneficial from improved land use access and new multi-modal access.

5.6.1.2.2 Economic Development

West Pullman

As described in Section 5.6.1.2.1, there would be numerous property displacements related to the mixed-use parking garage at the Vermont Avenue station as well as a nearby substation. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced single-family homes and businesses; however, the affected families and businesses would be offered relocation assistance within West Pullman. These property acquisitions would not adversely affect the local residential and commercial real estate market due to the availability of comparable real estate within this neighborhood. Similar to the UPRR Rail Alternative, the Halsted Rail Alternative could increase property values in relation to their proximity to the 119th Street station and the Vermont Avenue station. Also, the new stations would increase the potential to attract new residential and/or commercial development. Therefore, the overall impact on West Pullman would be considered beneficial for local economic development.

Village of Calumet Park

As described in Section 5.6.1.2.1, there would be no displacements within the Village of Calumet Park. Therefore, the Halsted Rail Alternative could increase property values in relation to their proximity to the Vermont Avenue station. Also, the new station would increase the potential to attract new residential and/or commercial development on vacant land adjacent to the Little Calumet River. Therefore, the overall impact on the Village of Calumet Park would be considered beneficial for local economic development.

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

Construction of the proposed Halsted Rail Alternative, including construction staging activities, would occur on land acquired for the project's permanent ROW. As such, there would be no acquisition or displacement impacts from construction.

5.6.2.1 Segment HA

5.6.2.1.1 Land Use

Construction would take up to 5 years and would cause temporary adverse impacts on commercial properties along Halsted Street and adjacent residential neighborhoods due to noise, vibration, fugitive dust, truck traffic, and roadway detours. Mitigation methods would include daytime construction activities and other best management practices (see *Construction Impacts Technical Memorandum* for more details). Based on these mitigations and the beneficial impacts of the project, the land use impacts from construction would be considered not substantially adverse in the affected neighborhoods: Washington Heights, Roseland, Morgan Park, and West Pullman.

5.6.2.1.2 Economic Development

Similar to the UPRR Rail Alternative, the Halsted Street Alternative would not substantially influence regional construction costs due to the large size of Chicago's construction industry. Construction would take up to 5 years and would cause temporary adverse impacts on adjacent commercial uses on Halsted Street due to noise, vibration, fugitive dust, truck traffic, and

roadway detours. Construction activities would occur throughout the Halsted Street corridor within the median and adjacent travel lane, which would affect travel lane patterns and on-street parking. Mitigation methods would include daytime construction activities, commercial signage during detours, and special advertising for businesses within the ½-mile API (see *Construction Impacts Technical Memorandum* for more details). Due to the nature and size of the small businesses along Halsted Street, some businesses might not be able to maintain their customer base and could potentially lose business from construction-related disruptions. Due to the short-term nature of construction activities, these impacts would be considered not substantially adverse.

There would be short-term economic beneficial impacts from construction jobs. The total estimated YOE (2026) capital cost of the Halsted Alternative is approximately $2.4 billion. Similar to the construction job estimate described for the UPRR Rail Alternative in Section 5.3.2.1.2, the Halsted Rail Alternative would create approximately 5,350 total jobs during the year with peak mobilization and construction.

Based on the mitigations and the beneficial impacts of the project, the overall economic development impact from construction would be considered beneficial to the Washington Heights, Roseland, Morgan Park, and West Pullman neighborhoods.

5.6.2.2 Segment HB

5.6.2.2.1 Land Use

Similar to the impacts and mitigation described in Section 5.6.2.1.1, the land use impacts from construction would be considered not substantially adverse in West Pullman and the Village of Calumet Park.

5.6.2.2.2 Economic Development

Similar to the impacts and mitigation described in Section 5.6.2.1.2, the economic development impacts from construction would be considered adverse in West Pullman. Due to the lack of any businesses on Halsted Street within the Village of Calumet Park, there would be no impact on economic development.

5.6.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative

5.6.3.1 Segment HA

5.6.3.1.1 Land Use

The cumulative land use impacts for the Halsted Rail Alternative would be similar to those described for the UPRR ROW Option (Section 5.3.3.1.1), the UPRR East Option (Section 5.4.3.1.1), and the UPRR West Option (Section 5.5.3.1.1). The cumulative land use impacts would be beneficial for Washington Heights, Roseland, and West Pullman. There would be one difference between the Halsted Rail Alternative and the UPRR Rail Alternative. Morgan Park would be unaffected by the UPRR Rail Alternative, but would receive beneficial impacts as a result of the Halsted Rail Alternative.

5.6.3.1.2 Economic Development

The cumulative economic development impacts for the Halsted Rail Alternative would be similar to those described for the UPRR ROW Option (Section 5.3.3.1.2), the UPRR East Option (Section 5.4.3.1.2), and the UPRR West Option (Section 5.5.3.1.2). The cumulative economic development impacts would be beneficial for Washington Heights, Roseland, and West Pullman. There would be one difference between the Halsted Rail Alternative and the UPRR Rail Alternative. Morgan Park would be unaffected by the UPRR Rail Alternative, but would receive beneficial impacts as a result of the Halsted Rail Alternative.

5.6.3.2 Segment HB

5.6.3.2.1 Land Use

The cumulative land use impacts for the Halsted Rail Alternative would be similar to those described for the UPRR ROW Option (Section 5.3.3.2.1), the UPRR East Option (Section 5.4.3.2.1), and the UPRR West Option (Section 5.5.3.2.1). The cumulative land use impacts would be beneficial for West Pullman. There would be two differences between the Halsted Rail Alternative and the UPRR Rail Alternative. The Village of Calumet Park has not developed a new comprehensive plan, station area plan, or relevant policies that would allow it to benefit more directly from the RLE Project, so there would be no adverse or beneficial cumulative land use impacts.

5.6.3.2.2 Economic Development

The cumulative economic development impacts for the Halsted Rail Alternative would be similar to those described for the UPRR ROW Option (Section 5.3.3.2.2), the UPRR East Option (Section 5.4.3.2.2), and the UPRR West Option (Section 5.5.3.2.2). The cumulative economic development impacts would be beneficial for West Pullman. There would be two differences between the Halsted Rail Alternative and the UPRR Rail Alternative. The Village of Calumet Park has not developed any economic development plans or policies that would allow it to benefit more directly from the RLE Project, so there would be no adverse or beneficial cumulative economic development impacts.

5.6.4 119th Street Yard and Shop

A new maintenance yard and shop for 270 train cars would be constructed as part of the RLE Project. The new maintenance yard and shop would be built on a combination of industrial and vacant land west of Halsted Street between 119th and 120th Streets in the West Pullman Industrial Corridor.

5.6.4.1 Permanent Impacts and Mitigations

5.6.4.1.1 Land Use

The yard and shop, as well as adjacent substation, would be located within an industrial area; therefore, these facilities would be consistent with existing land uses. These new facilities would require the displacement of a several industrial and commercial properties, as well as the

acquisition of vacant land. With just compensation and relocation assistance per the Uniform Act, the direct impact on existing land uses would be considered not substantially adverse.

5.6.4.1.2 Economic Development

As described in Section 5.6.4.1.1, there would be several property displacements related to the maintenance yard and shop and adjacent substation. The conversion of these properties to public use would temporarily affect property tax revenues due to the displaced businesses; however, the businesses would be offered relocation assistance within West Pullman. These property acquisitions would not adversely affect the local real estate market due to the availability of comparable real estate within this neighborhood. In addition, the City has been working to redevelop the vacant and cleared site of the former Sherman Williams factor within the West Pullman Industrial Corridor, so these new facilities would be considered beneficial to the City's economic development effort. Because compensation and relocation assistance would mitigate displacement impacts, the overall impact on West Pullman would be considered beneficial for local economic development from redevelopment of vacant land and the development of a new industrial facility that would provide new job opportunities to local residents.

5.6.4.2 Construction Impacts and Mitigations

Construction of the proposed yard and shop, including construction staging activities, would occur on land acquired for the yard's permanent ROW. As such, there would be no acquisition or displacement impacts from construction. Because the maintenance yard and shop would be located in an industrial area, the construction activities would be considered not adverse for land use or economic development.

Section 6
Impacts Remaining After Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in Section 5.

6.1 No Build Alternative

There would be no adverse impacts on land use or on economic development as a result of the No Build Alternative.

6.2 Bus Rapid Transit Alternative

There would be no adverse impacts on land use or on economic development as a result of the BRT Alternative.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

6.3.1 Segment UA

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the UPRR ROW Option.

6.3.2 Segment UB

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the UPRR ROW Option.

6.3.3 120th Street Yard and Shop

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the 120th Street yard and shop.

6.4 Union Pacific Railroad Rail Alternative - East Option

6.4.1 Segment UA

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the UPRR East Option.

6.4.2 Segment UB

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the UPRR East Option.

6.4.3 120th Street Yard and Shop

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the 120th Street yard and shop.

6.5 Union Pacific Railroad Rail Alternative - West Option

6.5.1 Segment UA

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the UPRR West Option.

6.5.2 Segment UB

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the UPRR West Option.

6.5.3 120th Street Yard and Shop

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the 120th Street yard and shop.

6.6 Halsted Rail Alternative

6.6.1 Segment HA

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the Halsted Rail Alternative within this segment.

6.6.2 Segment HB

There would be adverse impacts remaining after mitigation due to the Vermont Avenue mixed-use parking garage within a single-family residential area in West Pullman.

Due to the recent and current planning efforts, as well as the overall economic decline in the project area since the 1980s, there would be adverse cumulative impacts as a result of the Halsted Rail Alternative on the Riverdale neighborhood, which would not be connected by this alternative.

6.6.3 119th Street Yard and Shop

After mitigation, there would be no remaining adverse impacts on land use or on economic development from the 119th Street yard and shop.

Section 7
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Appendix A
Detailed Maps of Current Land Uses (13 pages)

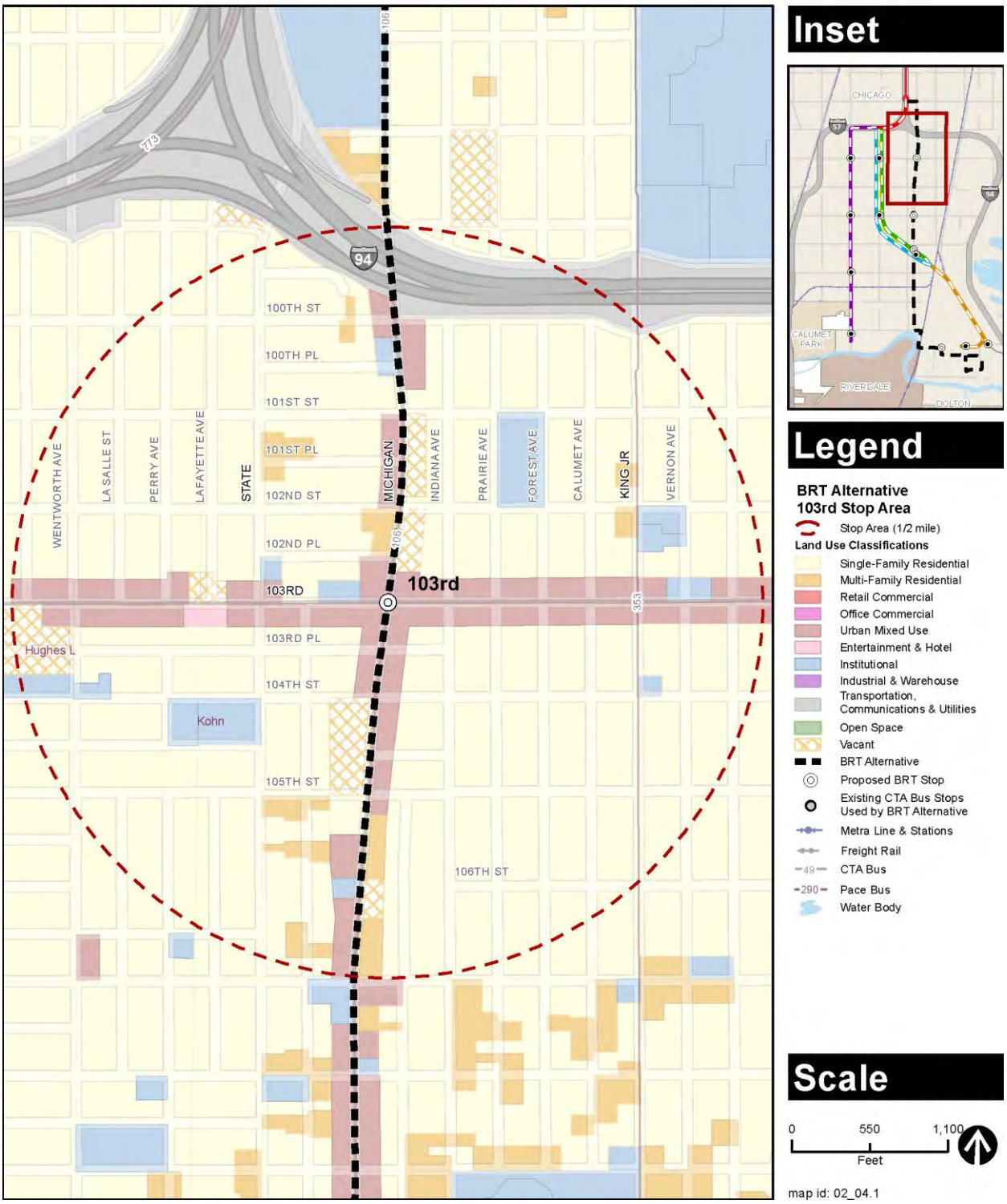
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Multi-Family Residential
Retail Commercial
Office Commercial
Urban Mixed Use
Entertainment & Hotel
Institutional
Industrial & Warehouse
Transportation, Communications & Utilities
Open Space
Vacant
BRT Alternative
Proposed BRT Stop
Existing CTA Bus Stops Used by BRT Alternative
Metra Line & Stations
Freight Rail
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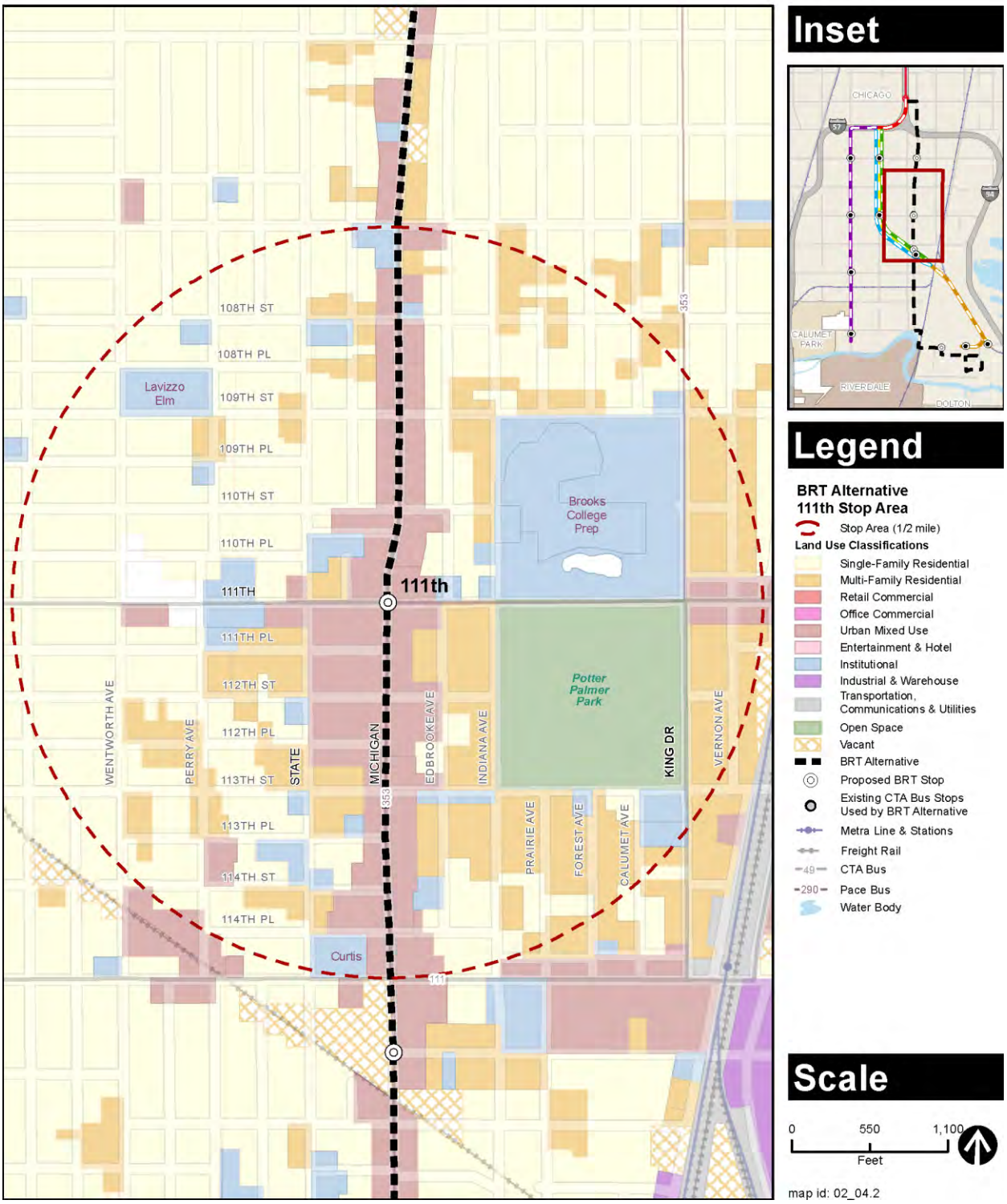
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Brooks College Prep
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Land Use Classifications
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Multi-Family Residential
Retail Commercial
Office Commercial
Urban Mixed Use
Entertainment & Hotel
Institutional
Industrial & Warehouse
Transportation, Communications & Utilities
Open Space
Vacant
BRT Alternative
Proposed BRT Stop
Existing CTA Bus Stops Used by BRT Alternative
Metra Line & Stations
Freight Rail
CTA Bus
Pace Bus
Water Body
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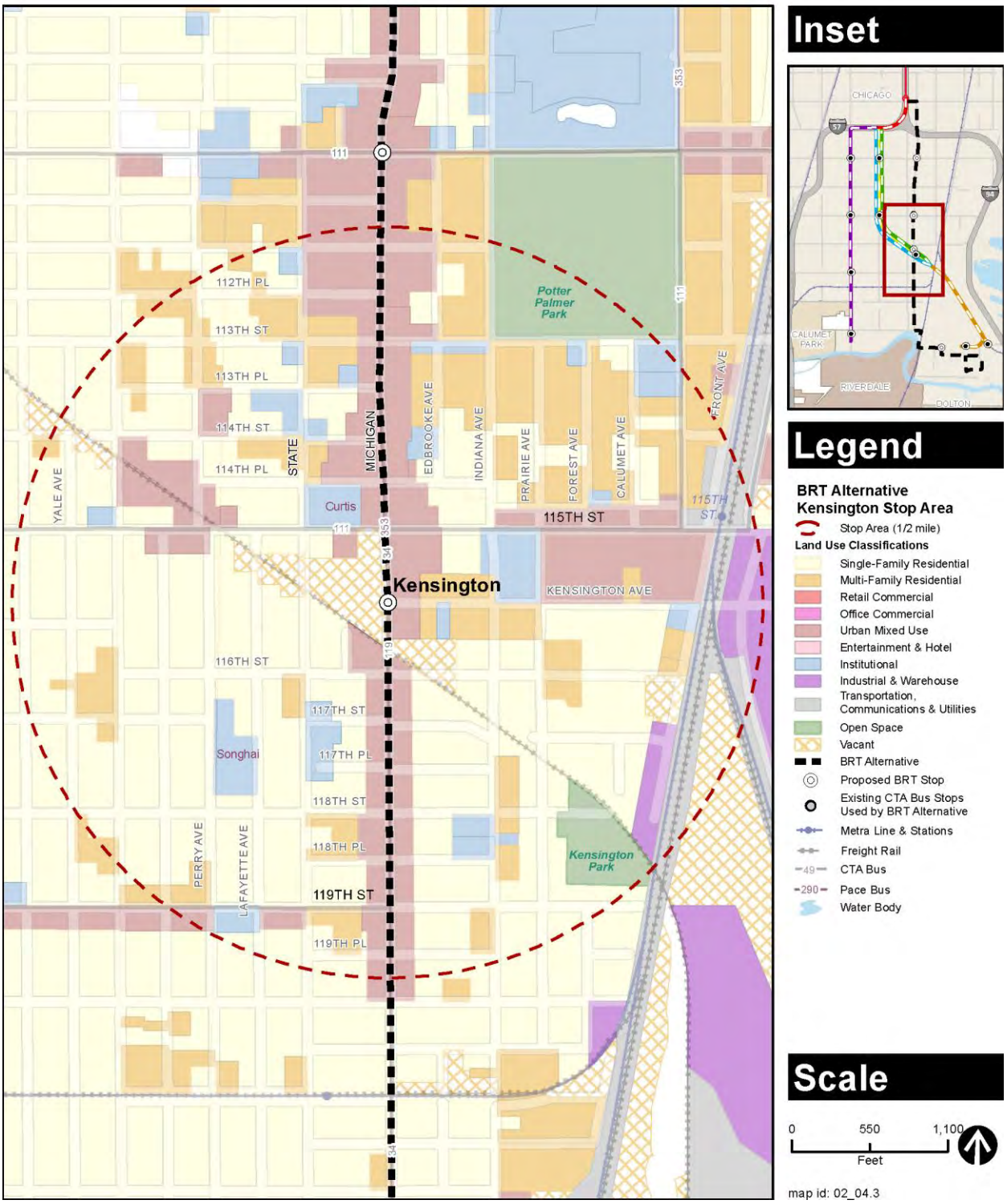
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Multi-Family Residential
Retail Commercial
Office Commercial
Urban Mixed Use
Entertainment & Hotel
Institutional
Industrial & Warehouse
Transportation, Communications & Utilities
Open Space
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BRT Alternative
Proposed BRT Stop
Existing CTA Bus Stops Used by BRT Alternative
Metra Line & Stations
Freight Rail
CTA Bus
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INDIANA AVE
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FOREST AVE
CALUMET AVE
FRONT AVE
Potter Palmer Park
Curtis
115TH ST
115TH ST
Kensington
KENSINGTON AVE
116TH ST
117TH ST
117TH PL
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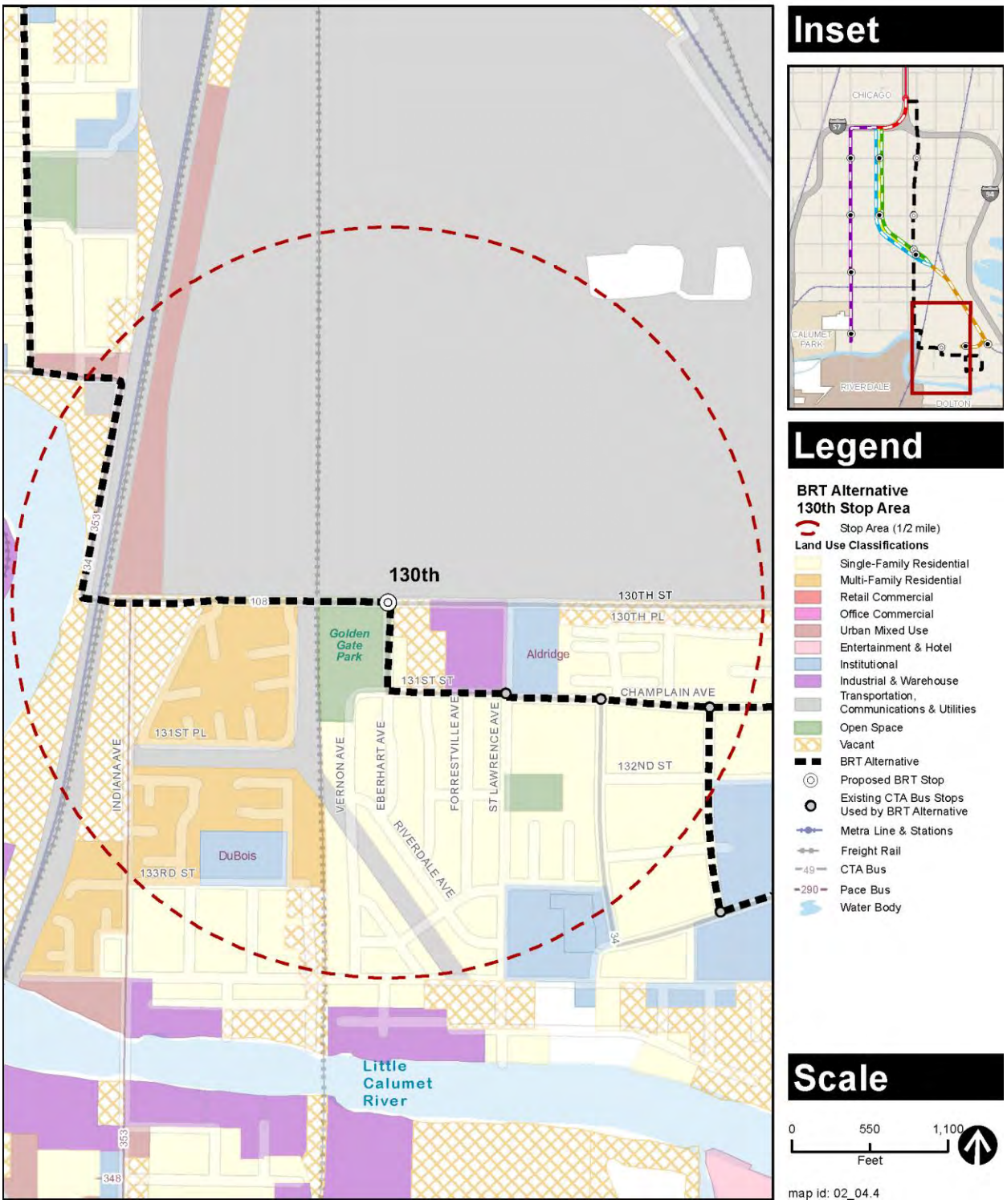
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131ST ST
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131ST PL
132ND ST
INDIANA AVE
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EBERHART AVE
FORRESTVILLE AVE
ST LAWRENCE AVE
RIVERDALE AVE
DuBois
133RD ST
Little Calumet River
Inset
CHICAGO
CALUMET PARK
RIVERDALE
DOLTON
Legend
BRT Alternative
130th Stop Area
Stop Area (1/2 mile)
Land Use Classifications
Single-Family Residential
Multi-Family Residential
Retail Commercial
Office Commercial
Urban Mixed Use
Entertainment & Hotel
Institutional
Industrial & Warehouse
Transportation, Communications & Utilities
Open Space
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BRT Alternative
Proposed BRT Stop
Existing CTA Bus Stops Used by BRT Alternative
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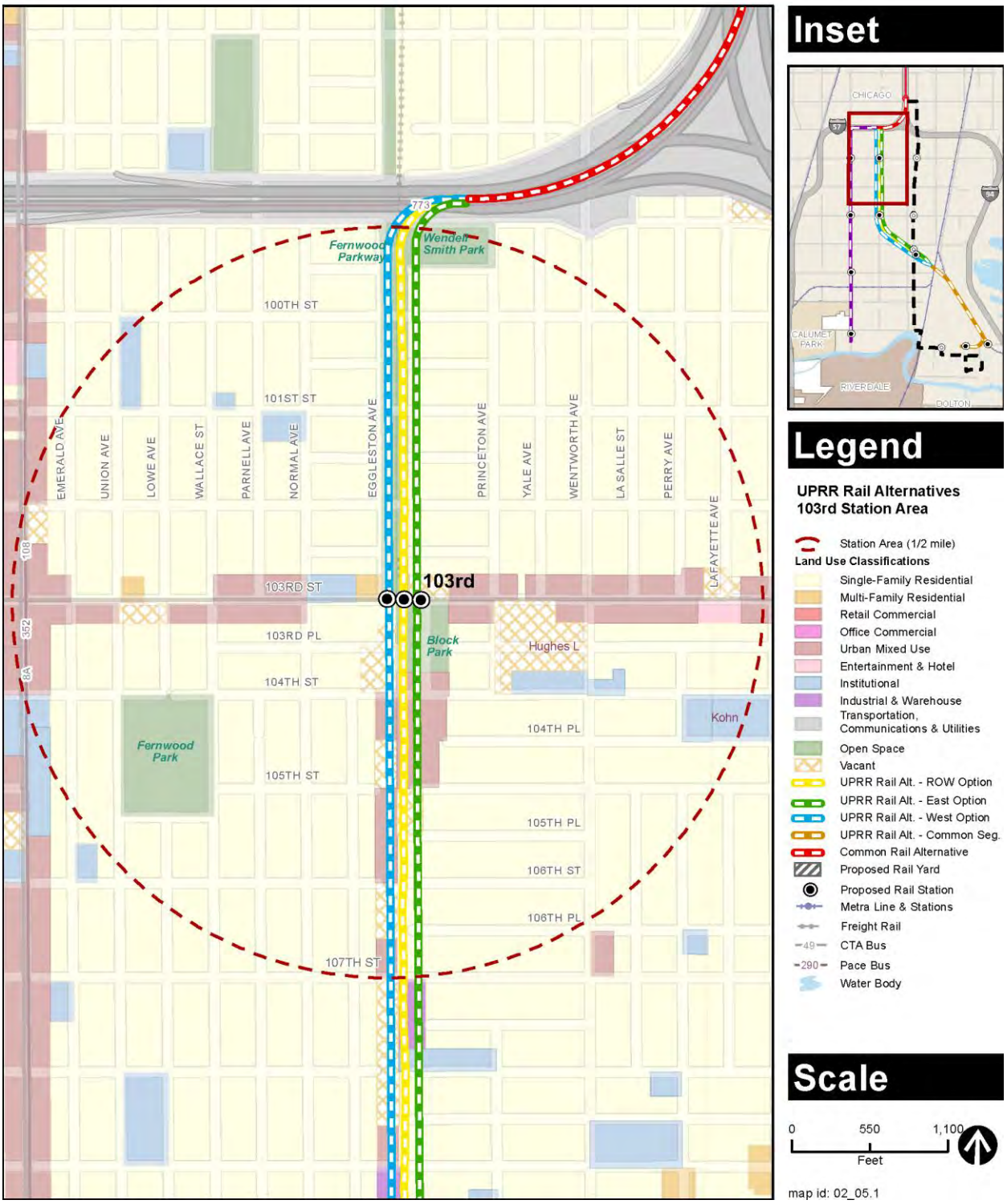
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Land Use Classifications
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Multi-Family Residential
Retail Commercial
Office Commercial
Urban Mixed Use
Entertainment & Hotel
Institutional
Industrial & Warehouse
Transportation, Communications & Utilities
Open Space
Vacant
UPRR Rail Alt. - ROW Option
UPRR Rail Alt. - East Option
UPRR Rail Alt. - West Option
UPRR Rail Alt. - Common Seg.
Common Rail Alternative
Proposed Rail Yard
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Metra Line & Stations
Freight Rail
CTA Bus
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Water Body
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Fernwood Parkway
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WALLACE ST
PARNELL AVE
NORMAL AVE
EGGLESTON AVE
PRINCETON AVE
YALE AVE
WENTWORTH AVE
LA SALLE ST
PERRY AVE
LAFAYETTE AVE
103RD ST
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Block Park
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Fernwood Park
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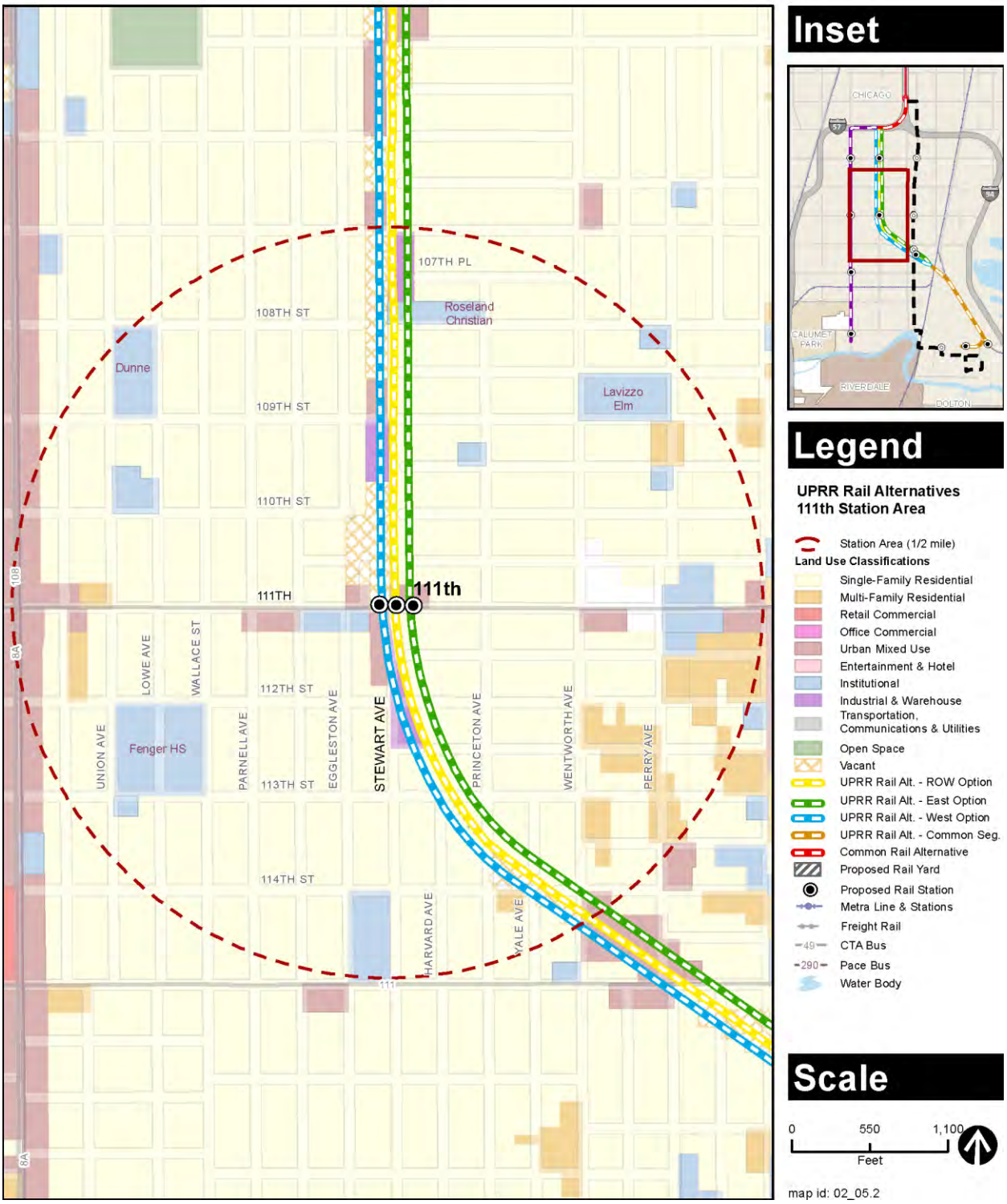
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Land Use Classifications
Single-Family Residential
Multi-Family Residential
Retail Commercial
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Urban Mixed Use
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Industrial & Warehouse
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UPRR Rail Alt. - East Option
UPRR Rail Alt. - West Option
UPRR Rail Alt. - Common Seg.
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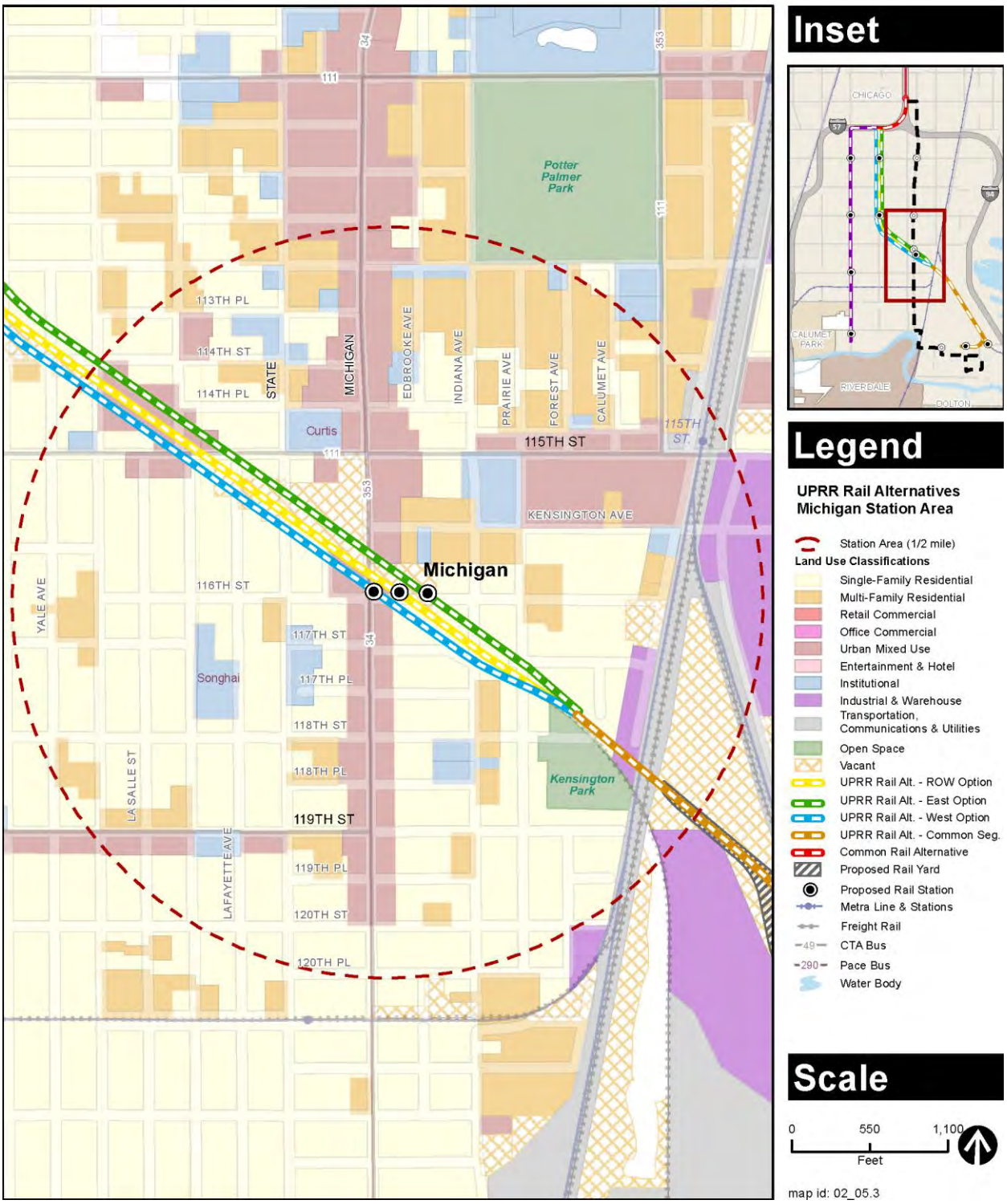
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KENSINGTON AVE
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Kensington Park
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Station Area (1/2 mile)
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Single-Family Residential
Multi-Family Residential
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Office Commercial
Urban Mixed Use
Entertainment & Hotel
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Transportation, Communications & Utilities
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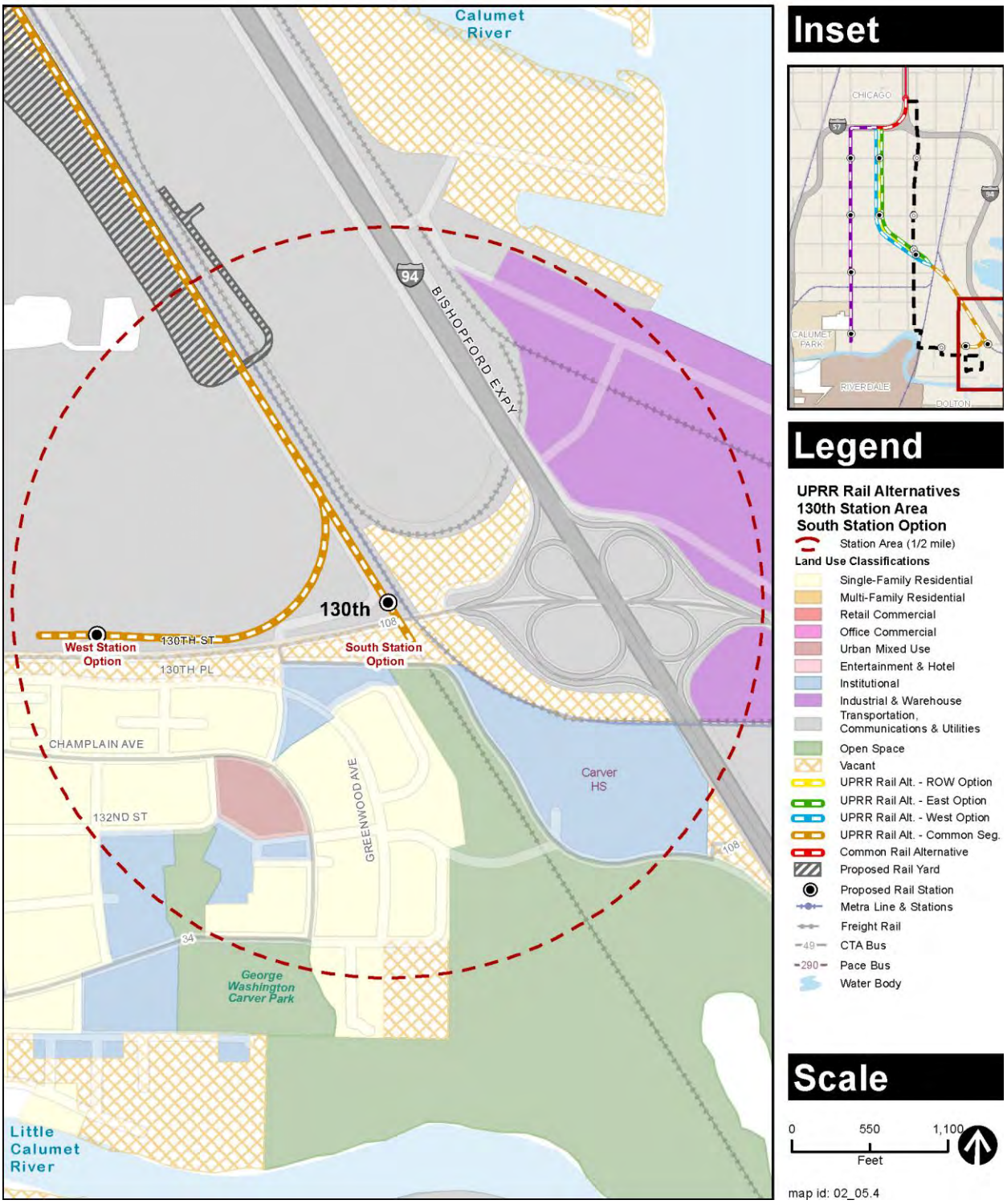
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George Washington Carver Park
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UPRR Rail Alt. - ROW Option
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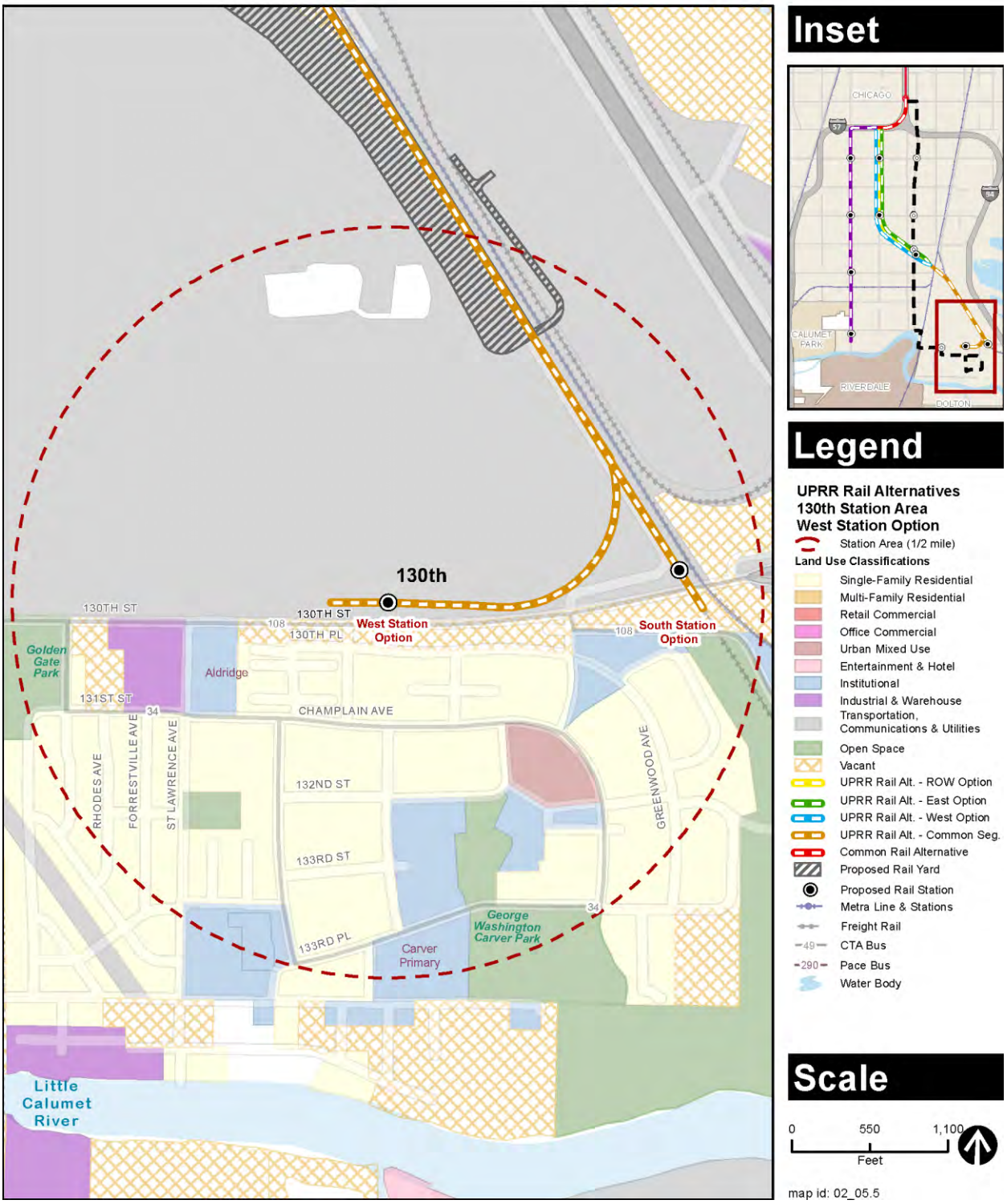
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UPRR Rail Alternatives
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Station Area (1/2 mile)
Land Use Classifications
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UPRR Rail Alt. - West Option
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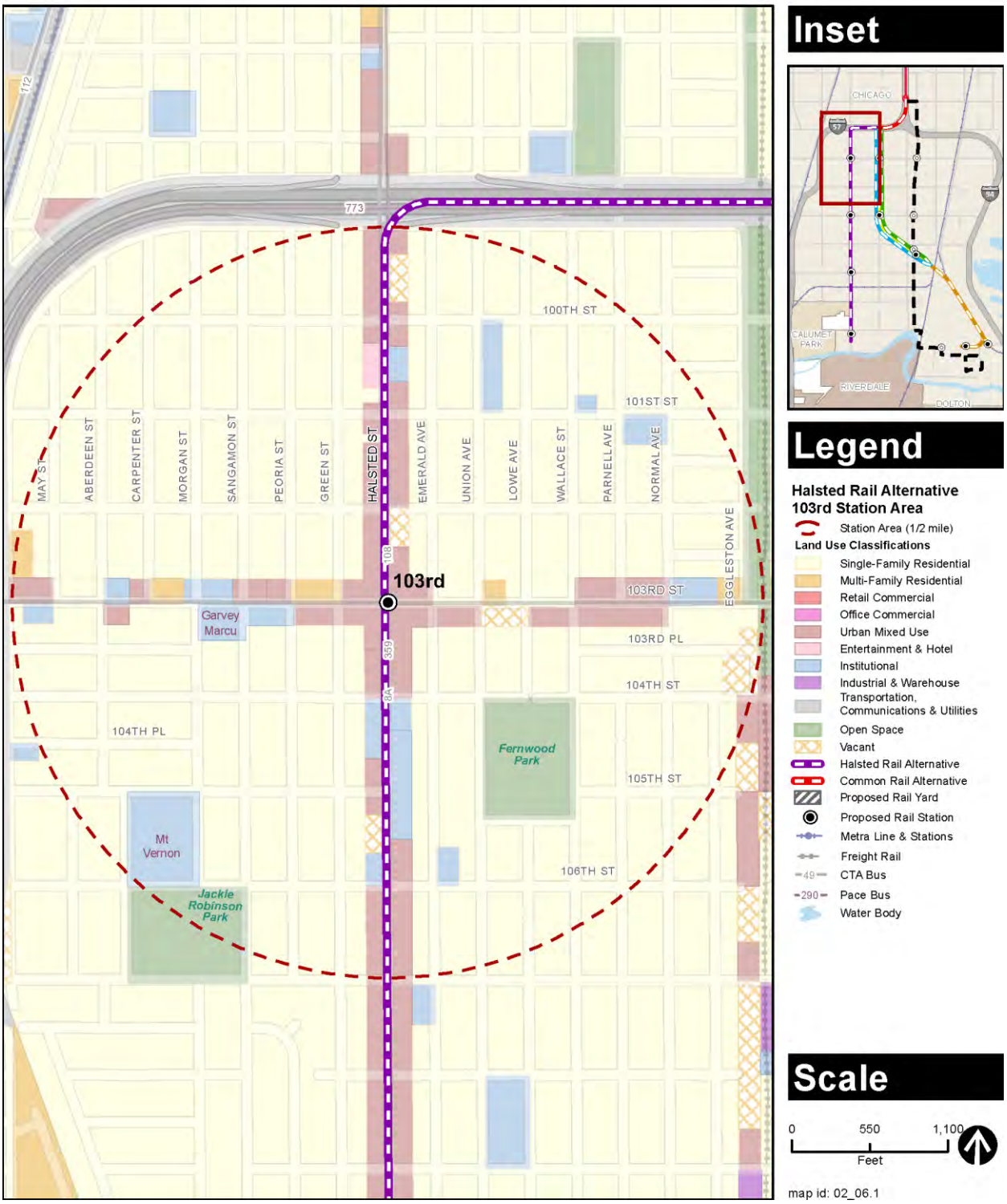
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Station Area (1/2 mile)
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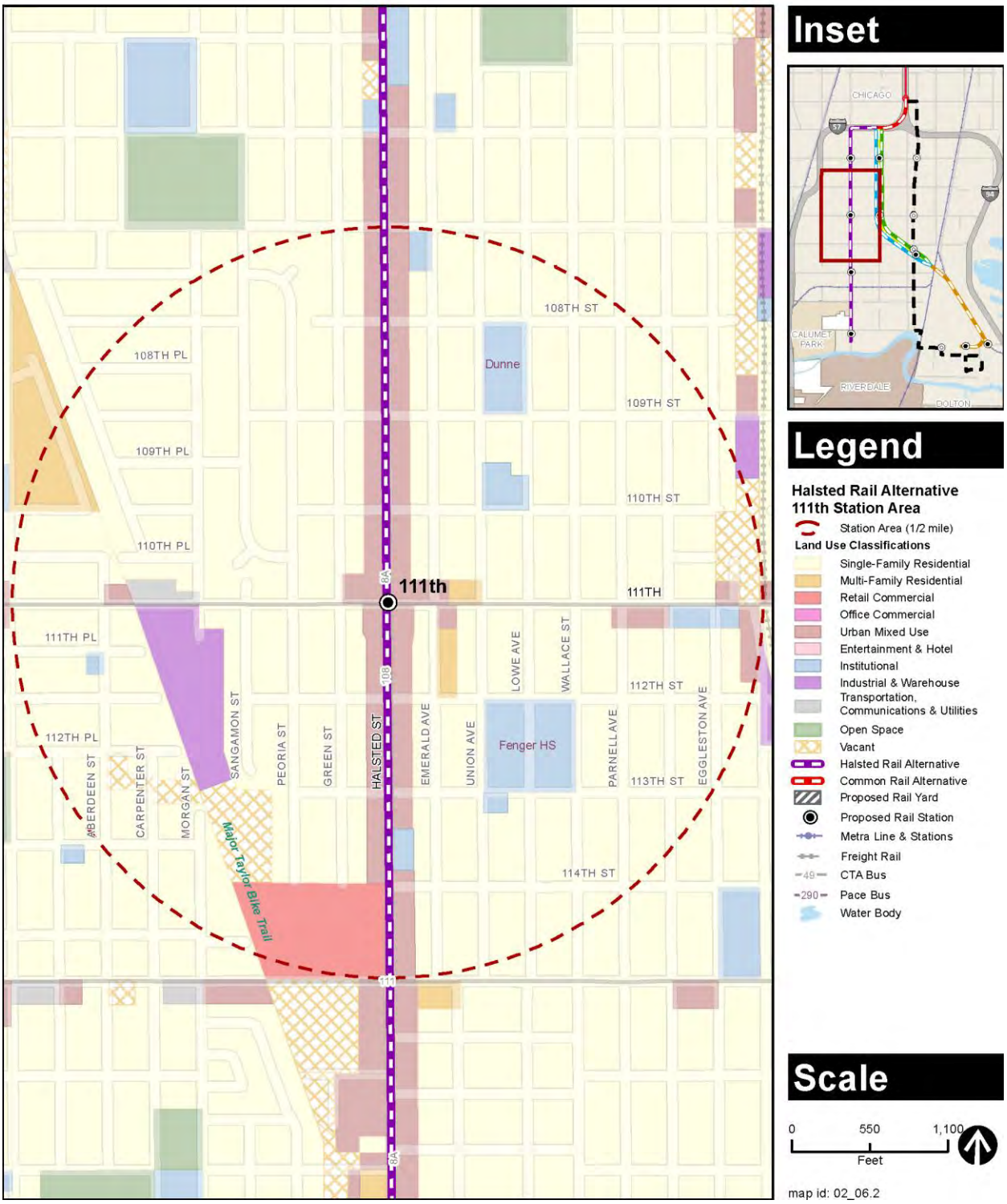
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Multi-Family Residential
Retail Commercial
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Urban Mixed Use
Entertainment & Hotel
Institutional
Industrial & Warehouse
Transportation, Communications & Utilities
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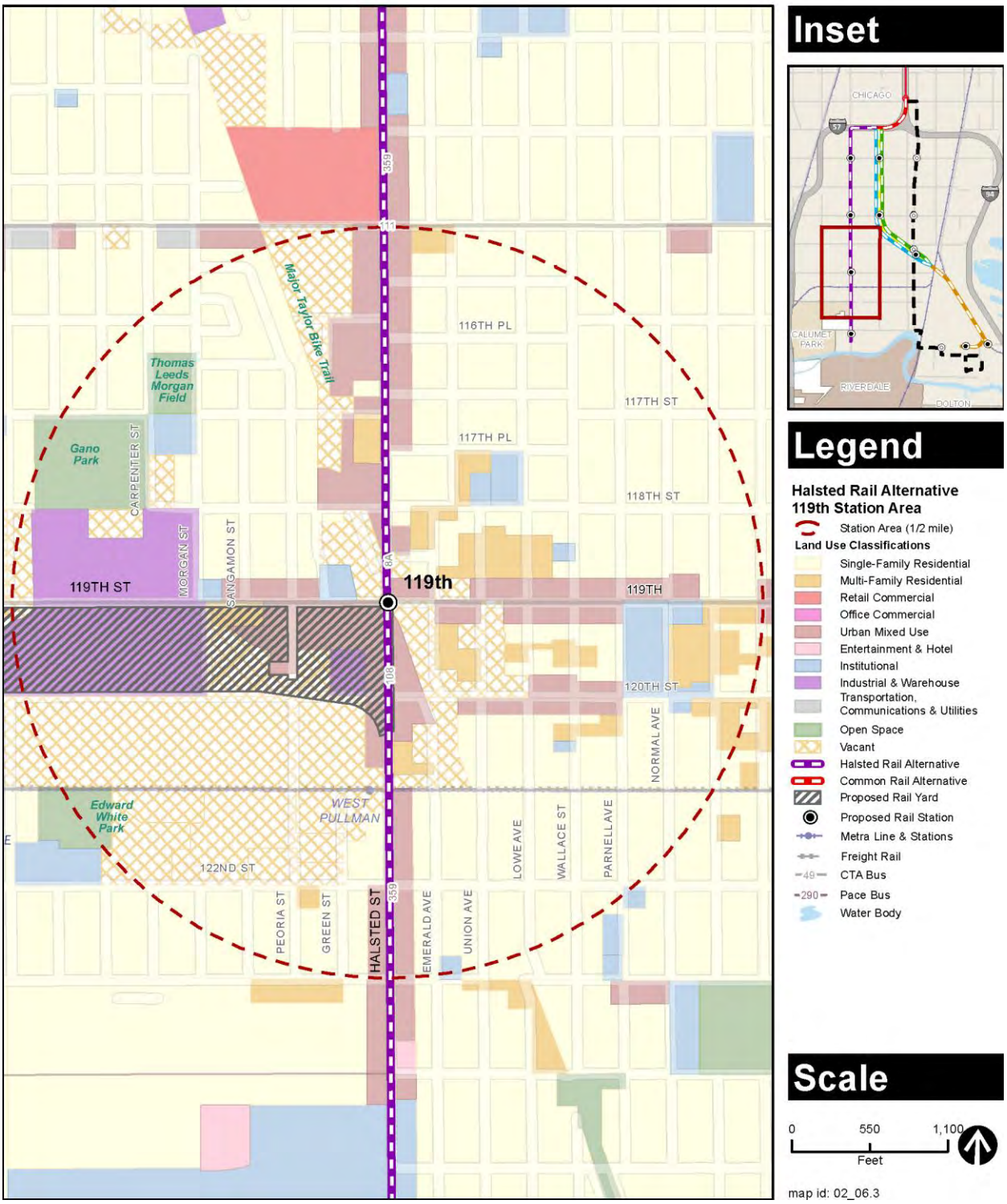
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Multi-Family Residential
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Office Commercial
Urban Mixed Use
Entertainment & Hotel
Institutional
Industrial & Warehouse
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Halsted Rail Alternative
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Metra Line & Stations
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map id: 02_06.3
Major Taylor Bike Trail
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Edward White Park
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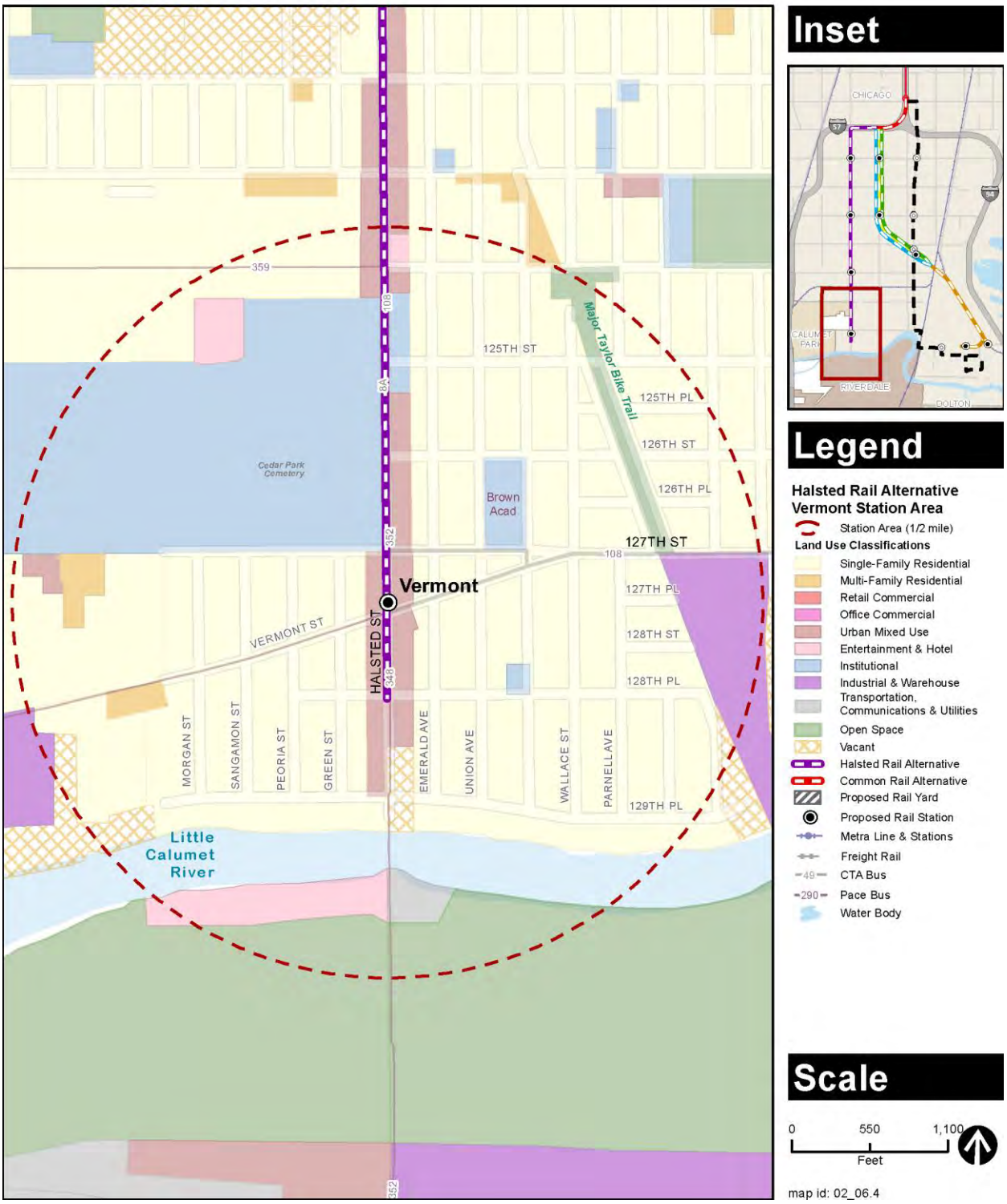
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UNION AVE
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Major Taylor Bike Trail
Cedar Park Cemetery
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CALUMET PARK
RIVERDALE
DOLTON
Legend
Halsted Rail Alternative
Vermont Station Area
Station Area (1/2 mile)
Land Use Classifications
Single-Family Residential
Multi-Family Residential
Retail Commercial
Office Commercial
Urban Mixed Use
Entertainment & Hotel
Institutional
Industrial & Warehouse
Transportation, Communications & Utilities
Open Space
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Halsted Rail Alternative
Common Rail Alternative
Proposed Rail Yard
Proposed Rail Station
Metra Line & Stations
Freight Rail
CTA Bus
Pace Bus
Water Body
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map id: 02_06.4

Appendix B
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Appendix K

Displacements and Relocation of Existing Uses by Alternative Technical Memorandum

- Final EIS Addendum K, Displacements and Relocation of Existing Uses, July 2022
    - Attachment A: Displacements and Relocations of Existing Uses Map and Table of Affected Parcels

Chicago Red Line Extension Project

Displacements and Relocation of Existing Uses

Final EIS Addendum K

July 2022

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Table of Contents

Section 1 - Summary **1-1**
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-1
3.4 Methods 3-1
Section 4 - Affected Environment **4-1**
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 1-1: Preferred Alignment 1-3
Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4
Figure 5-1: Affected Parcels (1 of 2) 5-5
Figure 5-2: Affected Parcels (2 of 2) 5-6

Tables

Table 1-1: Displacements and Relocation of Existing Uses – Impact Summary 1-2
Table 5-1: Summary of Preferred Alignment Impacts Compared to the Draft EIS 5-3
Table 5-2: Permanent Displacements 99th Street to 103rd Street Station 5-7
Table 5-3: Permanent Displacements 103rd Street Station to 111th Street Station 5-8
Table 5-4: Permanent Displacements 111th Street Station to 115th Street 5-8
Table 5-5: Permanent Displacements 115th Street to Michigan Avenue Station 5-9
Table 5-6: Permanent Displacements Michigan Avenue Station to Front Avenue 5-9
Table 5-7: Permanent Displacements Front Avenue to 130th Street Station 5-10

Attachments

Attachment A Displacements and Relocations of Existing Uses Map and Table of Affected Parcels, April 2022

Abbreviations

API	area of potential impact
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
IHB	Indiana Harbor Belt Railroad
MWRD	Metropolitan Water Reclamation District
NS	Norfolk Southern
RLE	Red Line Extension
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad

Section 1 - Summary

This technical memorandum analyzes the potential impacts of displacements and relocations resulting from the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project. It updates the analyses of displacements and relocations under the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative, as compared with the Draft Environmental Impact Statement (EIS.)

According to Federal Transit Administration (FTA) and State of Illinois guidance, displacements and relocations would be considered adverse if they would have one or more of the following results:

- Displacement of substantial numbers of existing housing units (a concentrated number of units in one neighborhood), particularly affordable housing, and/or employer units, necessitating the construction of replacement units elsewhere. This analysis uses the definition of affordable housing provided by the Illinois Housing Development Authority for the Chicago Metro area, which is based on data provided by the U.S. Department of Housing and Urban Development.
- Displacement of a substantial number of residents or employees, necessitating construction of replacement housing or employment locations elsewhere.

Displacements and relocations for the RLE Project include affected parcels for right-of-way necessary for the implementation of the Preferred Alignment, as shown in **Figure 1-1.** The affected parcels include the associated transit stations, electric substations, park & ride facilities, and the yard and shop as well as accommodations for construction staging areas. Construction staging areas provide space to store equipment and materials, load trucks, and have workers perform parts of the construction process. Construction staging areas are currently anticipated to be within the project right-of-way or within property acquired for stations, park & ride facilities, and the yard and shop. In addition, some parcels may be affected due to park replacement needs necessitated by the mitigation measures to address impacts to parklands from the RLE Project.

Federal and state laws require that property owners be paid not less than fair market value for their land and buildings, and that they and their tenants be assisted in finding replacement business sites or dwellings. These protections, compensation, and relocation assistance are guaranteed by the Uniform Relocation and Real Property Assistance Act of 1970, as amended (Uniform Act, 42 United States Code [USC] 4601, et seq.). For displaced residents, the Uniform Act requires that replacement housing must be "decent, safe, and sanitary," and be functionally equivalent in the number of rooms and living space, location, and general improvements. Replacement dwellings must meet all

minimum federal housing requirements and conform to state and local occupancy codes. Relocation assistance would follow the guidelines set forth in Title 49, Part 24 of the Code of Federal Regulations (49 CFR Part 24 and FTA Circular 5010.1E dated July 16, 2018, as revised). Relocation benefits may also be available to businesses and non-profit organizations that may be displaced. Payments may be made for the following: moving costs; tangible personal property loss as a result of relocation or discontinuance of operations; and reestablishment expenses and costs incurred in finding a replacement site. The Uniform Act requires that relocation services and/or payments be made to residential and business owners and to residential and business tenants.

Table 1-1 lists the overall displacement impacts after mitigation and compares them to the No Build Alternative.

Table 1-1: Displacements and Relocation of Existing Uses – Impact Summary

Alternative	Total Affected Parcels	Building Displacements	Permanent Impacts	Construction Impacts
No Build Alternative	0	0	No Impacts	No Impacts
Preferred Alignment	228	97	Impacts would not be adverse after mitigation	No Impacts

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-1: Preferred Alignment

Section 2 - Project Description and Background

CTA, as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the

station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station

would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

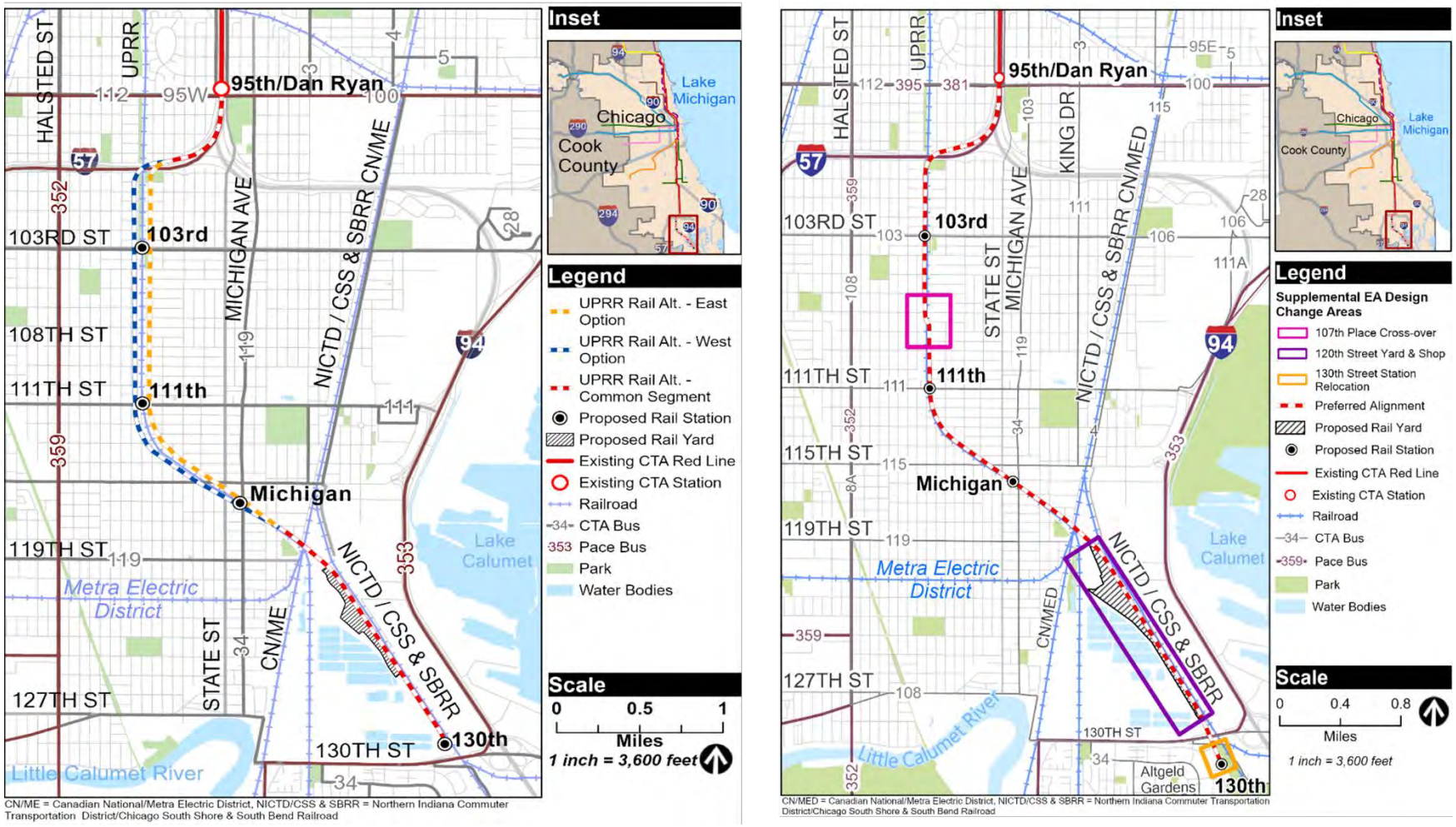

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix K** have been carried forward from the Draft EIS to analyze the displacement and relocation impacts. This section documents the consistency with the Draft EIS and associated updates to the corresponding guidelines directing the methods.

3.1 Regulatory Framework

Since the Draft EIS, there are no changes to the applicable state or federal regulations.

3.2 Impact Analysis Thresholds

There is no change to the impact analysis thresholds from the Draft EIS.

3.3 Area of Potential Impact

The affected parcels have been refined since the Draft EIS with the selection of the Preferred Alignment and the advancement of the project through preliminary engineering. This provided additional details to refine the identification of displacements and relocations. Consistent with the approach for the Draft EIS, the area of potential impact continues to be limited to within and directly adjacent to the future right of way needed. The *Displacements and Relocations of Existing Uses Map and Table of Affected Parcels* (**Attachment A**) contains the figures for parcels affected by the Preferred Alignment.

3.4 Methods

The analysis of potential displacement and relocation impacts of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS.

Section 4 - Affected Environment

This section describes any updates of the affected environment within the API since the publication of the Draft EIS. This section documents updates to the baseline data and planning horizon, as well as any changes to the communities and jurisdictions affected by the Preferred Alignment.

For purposes of this evaluation of property displacements and relocation of existing uses, the affected environment is limited to the areas within and directly adjacent to the Preferred Alignment right-of-way. The following descriptions of the affected environment are similar to those for the West Option of the UPRR Rail Alternative in the Draft EIS.

95th Street to 99th Street

The API includes the 95th Street/Dan Ryan terminal and would be within the medians of I-94 and I-57, which are considered a transportation use. The transportation use continues as the API transitions from the I-57 median to the west UPRR right-of-way at approximately 99th Street. This includes the current CTA substation at 96th Street and Lafayette Avenue.

99th Street to 103rd Street Station

The API includes a linear open space (Fernwood Parkway) that is directly across the street from single-family residences facing the open space. The 103rd Street station with a park & ride lot is proposed in an area of the API with open space and vacant commercial property. The adjacent uses are single-family residential properties.

The following describes the affected environment that includes the cross-over necessitated by the Preferred Alignment, which is a hybrid of the East and West Options. The affected environment thereafter is similar to that described in the Draft EIS for the East Option of the UPRR Rail Alternative; however, it extends farther south to include the relocated 130th Street station.

103rd Street Station to 111th Street Station

The API crosses from west to east near 107th Place over the UPRR and includes residential, commercial, and industrial uses, and vacant land. The 111th Street station with a park & ride facility is proposed in an area of the API with vacant land and single-family and multifamily residential uses.

111th Street Station to 115th Street

The API includes vacant land as well as single-family residential and industrial uses.

115th Street to Michigan Avenue Station

The API includes primarily single-family residential uses and vacant land. However, there is some multifamily residential use. The Michigan Avenue station with a surface parking lot is proposed in an area of the API that is primarily vacant land with one industrial use. Adjacent uses include some single-family residential.

Michigan Avenue Station to Front Avenue

The API is mostly residential with some public property that accommodates sanitation operations and transportation uses.

Front Avenue to 132nd Street

The API encompasses industrial, transportation, and utility uses. The 130th Street station with a four-level parking garage and park & ride lot is proposed in an area of the API that is vacant. Adjacent uses include commercial for healthcare services and multifamily residential.

The API accommodates the area for the proposed new yard and shop for CTA's Red Line near 120th Street and Cottage Grove Avenue. This area includes vacant land as well as industrial and transportation uses associated with utilities and railroad operations with similar adjacent uses.

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to affected communities:

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

This section also documents any new or revised mitigation measures for identified project impacts, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East and West Options of the UPRR Alternative evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning (CMAP) Transportation Improvement Program (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is often used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

The impacts have not changed since the Draft EIS because the No Build Alternative would not involve any new construction for the RLE Project. There would be no major service improvements or new transportation infrastructure beyond projects that are listed in the ON TO 2050 plan and TIP. The transit network within the project area would remain largely the same as it is now.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

Table 5-1 summarizes the impacts on different land uses by the Preferred Alignment and compares them with the impacts documented in the Draft EIS for both the East and West Options. Parcels used as easements are not considered permanent impacts and are not included in this table. However, easements needed have been identified and are called out in the text of each section. As shown, the Preferred Alignment would require 228 parcel acquisitions and 97 building displacements. The increase in parcels affected as compared to the West Option in the Draft EIS includes but is not limited to the addition of parking areas; proposed changes to the 120th Street yard and shop; moving the proposed 130th Street station south; and refined engineering and constructability considerations. Another change from the Draft EIS is that the percentage of total vacant parcels has increased.

A total of 78 additional parcels would be needed for easements related to the overhead RLE crossing of railroad tracks at three locations, construction access, and infrastructure needed for the 120th Street yard and shop. For the aerial structure and yard construction, agreements would be negotiated with Cook County or IDOT (29 parcels in the right-of-way of I-57); various railroads (13 parcels from CN, CSX, UPRR, NS, and Metra) and the Metropolitan Water Reclamation District (MWRD) (10 parcels related to construction activities near the 120th Street yard and shop). Twenty-six other agreements would need to be signed for additional construction access, with private property owners.

A detailed list of all of the impacted parcels (full acquisitions, partial acquisitions, and easements) can be found in **Attachment A**.

Table 5-1: Summary of Preferred Alignment Impacts Compared to the Draft EIS

Land Use Type	Total Affected Parcels			Building Displacements		
	East Option	West Option	Preferred Alignment	East Option	West Option	Preferred Alignment
Vacant	50	41	96	---	---	---
Single-family Residential	87	35	50	75	22	47
Multifamily Residential	16	4	18	15	4	18
Commercial	6	13	9	3	6	4
Mixed-use (Commercial/Residential)	1	2	---	1	2	---
Institutional (Place of Worship)	1	2	2	1	1	2
Institutional (School)	2	---	7	---	---	5
Industrial	17	18	26	10	11	19
Utility	15	15	3	---	---	---
Transportation (Railroad)	29	47	11	---	---	---
Public	34	24	5	1	---	2
Parkland	2	4	1	---	---	---
Totals	**260**	**205**	**228**	**106**	**46**	**97**

CTA would provide informational resources, permitting support, and points of contact for displaced business owners to find suitable sites for relocation. CTA has undertaken early outreach to potentially affected property owners by contacting each owner and tenant (based on available public records). CTA's Uniform Act, public-outreach specialists would provide specific outreach as a one-stop resource to potentially displaced residents and/or businesses to answer questions regarding relocation rights, requirements, processes, and anticipated timelines. With compensation and relocation assistance to displaced property owners and renters provided by CTA per the Uniform Act (42 USC § 4601, et seq.), the impact would be considered not adverse because of the general availability of similar real estate near the project. Displaced businesses and residents are expected to be able to relocate near the RLE Project because of the existing availability of replacement housing, commercial buildings, and vacant parcels. In addition, the beneficial impacts of the project would include new rail transit with four stations, greater accessibility to the region, improved access to jobs, and new development opportunities in the vicinity of the project. CTA would continue to coordinate with the Chicago Department of Planning and Development on the Transit Supportive Development (TSD) Plan to maximize the economic development and

community benefits of the RLE Project. The new stations would improve regional accessibility and help attract new development to the area, thereby reducing the long-term impacts of displacements.

Figures 5-1 and **5-2** highlight the affected parcels on a project area map, while detailed parcel maps are included in **Attachment A**. The following subsections describe the impacts by dividing the Preferred Alignment corridor into sections.

95th Street to 99th Street

The alignment would start at the 95th/Dan Ryan terminal and would be within the medians of I-94 and I-57, which are considered a transportation use. The alignment would transition from the I-57 median to the west UPRR right-of-way at approximately 99th Street.

The alignment would be within the medians of I-94 and I-57, which are interstate highways under the jurisdiction of IDOT and the FHWA. A total of 29 parcel easement agreements would be required for the aerial structure of the RLE Project in this section. One public building would need to be displaced (owned by the CTA) and one parcel of vacant land acquired for a substation.

99th Street to 103rd Street Station

As the part of the transition from the I-57 median to the UPRR corridor, the alignment would be elevated over the northwest corner of the City-owned 99th Street right-of-way, which is currently used as Wendell Smith Park property but remains a transportation use. (see **Appendix M** *Parklands and Community Facilities*). West of the UPRR, the alignment would cross a linear open space (Fernwood Parkway). An easement would be needed from the Chicago Park District for Wendell Smith Park as well as two easements from the UPRR.

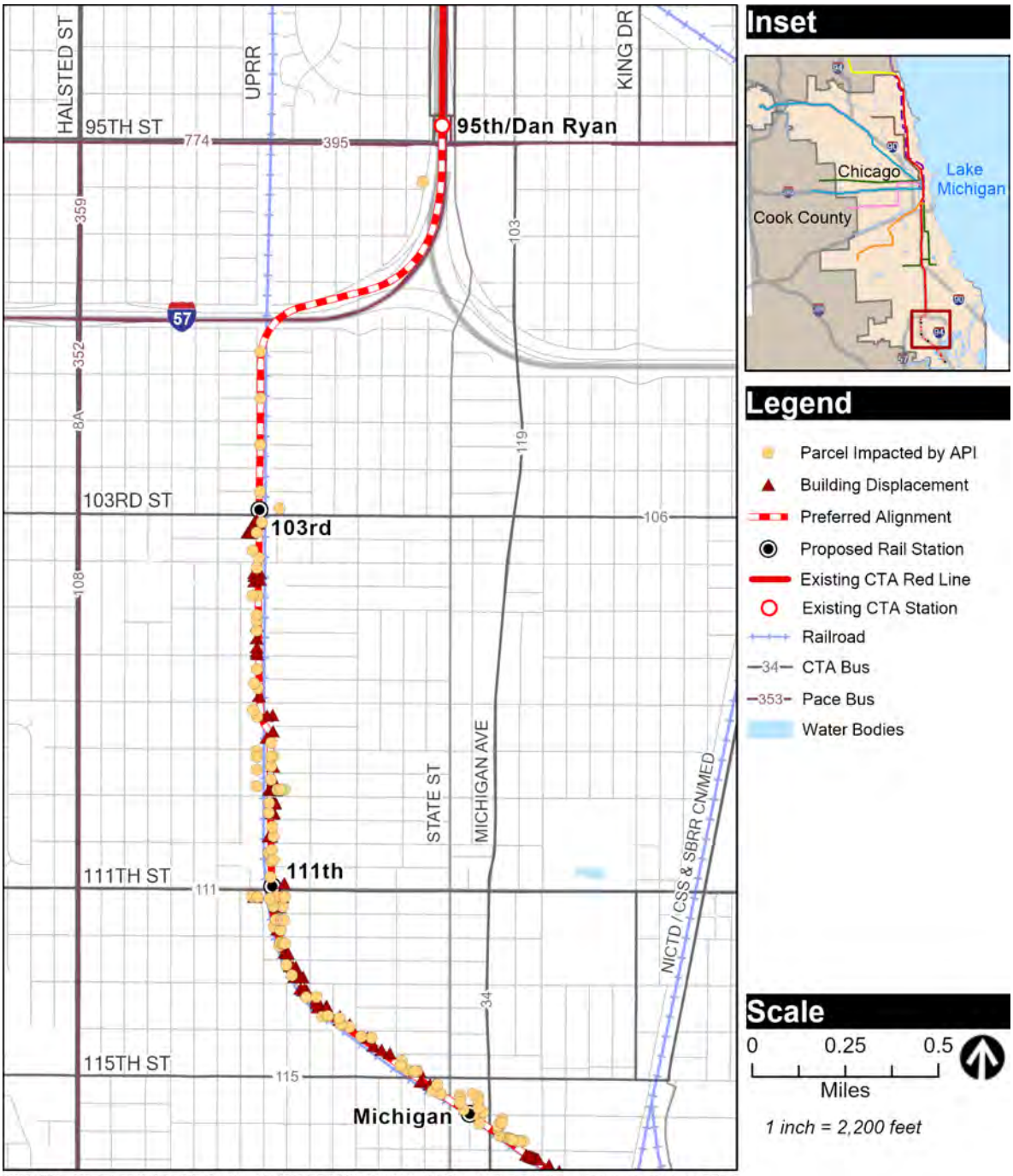

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 5-1: Affected Parcels (1 of 2)

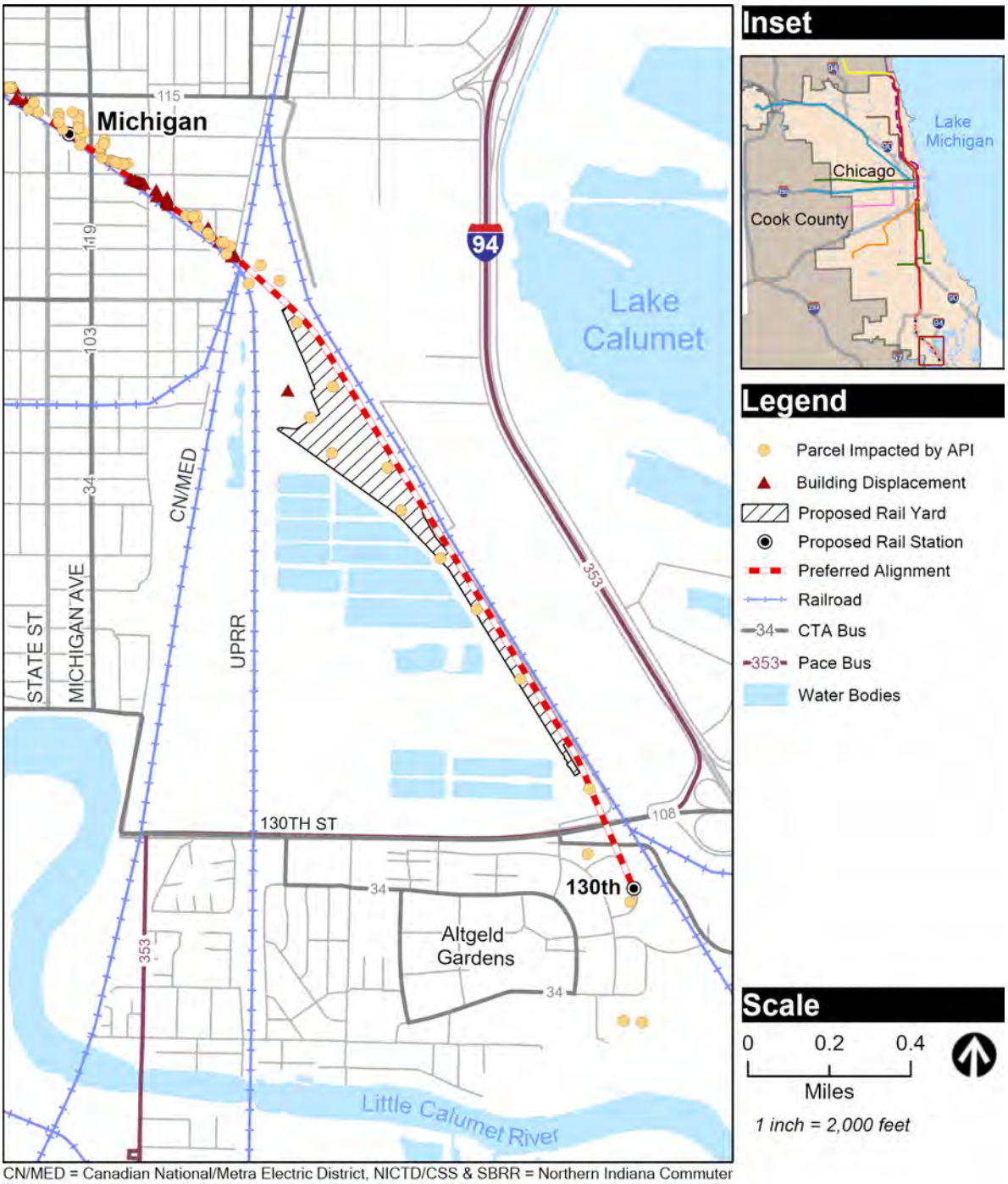

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 5-2: Affected Parcels (2 of 2)

The 103rd Street station and alignment would straddle 103rd Street, which is the boundary between the Washington Heights neighborhood to the north and the Roseland neighborhood to the south. One parcel owned by the Chicago Park District would be affected (Fernwood Parkway) north of 103rd Street. South of 103rd Street, the station, substation, and park & ride lot would affect ten parcels and displace one vacant commercial building, four single-family residences and one multifamily residence within the Roseland neighborhood (**Table 5-2**). Four parcel easement agreements would be needed for an aerial crossing and construction access.

Table 5-2: Permanent Displacements 99th Street to 103rd Street Station

Land Use Type	Total Affected Parcels	Building Displacements
Vacant	2	---
Single-family Residential	4	4
Multifamily Residential	1	1
Commercial	2	1
Parkland	1	---
Totals	**10**	**6**

<u>103rd Street Station to 111th Street Station</u>

The alignment would cross from west to east near 107th Place and would affect property with residential, commercial, and industrial uses, and vacant land. The 111th Street station would be built on vacant land. A park & ride lot would be located between 111th Street and 111th Place on vacant land and parcels with single-family and multifamily residential uses. Another park & ride would be located on 111th Place on vacant land, surrounded by single-family residential uses.

As a result, the Preferred Alignment would affect 80 parcels and displace 37 buildings within the Roseland neighborhood (**Table 5-3**). Seventeen parcel easement agreements would be needed for an aerial crossing and construction access.

Table 5-3: Permanent Displacements 103rd Street Station to 111th Street Station

Land Use Type	Total Affected Parcels	Building Displacements
Vacant	29	---
Single-family Residential	13	13
Multifamily Residential	5	3
Commercial	5	2
Institutional (Place of Worship)	1	1
Institutional (School)	7	5
Industrial	17	13
Public	2	---
Transportation (Railroad)	1	---
Totals	**80**	**37**

111th Street Station to 115th Street

The alignment would affect several single-family residential properties per street, as well as industrial parcels and vacant land. As a result, the Preferred Alignment would affect 56 parcels and displace 31 buildings within the Roseland neighborhood (**Table 5-4**). One parcel easement agreement would be needed for construction access.

Table 5-4: Permanent Displacements 111th Street Station to 115th Street

Land Use Type	Total Affected Parcels	Building Displacements
Vacant	22	---
Single-family Residential	22	22
Multifamily Residential	5	5
Institutional (Place of Worship)	1	1
Industrial	3	3
Transportation (Railroad)	3	---
Totals	**56**	**31**

115th Street to Michigan Avenue Station

The alignment would affect properties with primarily single-family residential uses and vacant land. An electric substation would be located on 116th Street on a site that has a multifamily building on it and is adjacent to other multifamily properties. The Michigan Avenue station would affect

primarily vacant land. Adjacent to the station, a surface parking lot would be located east of State Street on vacant property. A bus turnaround would be located along Michigan Avenue between Kensington Avenue and 116th Street on land that is mostly vacant except for one vacant industrial building. The adjacent properties contain single-family residences.

As a result, the Preferred Alignment would affect 24 properties and displace three buildings within West Pullman (**Table 5-5**). No parcel easement agreements are needed.

Table 5-5: Permanent Displacements 115th Street to Michigan Avenue Station

Land Use Type	Total Affected Parcels	Building Displacements
Vacant	21	---
Single-family Residential	1	1
Multifamily Residential	1	1
Commercial	1	1
Totals	**24**	**3**

Michigan Avenue Station to Front Avenue

Between 117th Street and Front Avenue, the alignment would run through a variety of properties including residential, public, industrial, and vacant land. As a result, the Preferred Alignment would affect 39 properties and displace 19 buildings within West Pullman (**Table 5-6**). Eight parcel easement agreements would be needed for construction access.

Table 5-6: Permanent Displacements Michigan Avenue Station to Front Avenue

Land Use Type	Total Affected Parcels	Building Displacements
Vacant	16	---
Single-family Residential	9	8
Multifamily Residential	7	7
Industrial	4	2
Public	3	2
Totals	**39**	**19**

Front Avenue to 130th Street Station

South of Front Avenue, the alignment would transition from an aerial structure to an at-grade alignment and would remain at grade until crossing 130th Street below grade. The alignment would

run through several industrial, railroad, and utility properties. A yard would be built in the vicinity of 120th Street and Cottage Grove Avenue. Twenty-two properties would be needed for easements, including one for the yard and the others for construction or aerial crossings. South of Front Avenue, the Preferred Alignment would affect 18 parcels within the Riverdale neighborhood with one industrial building displaced. **Table 5-7** lists the number of affected parcels and displacements by land use type and the number of buildings displaced. Nineteen parcel easement agreements would be needed for construction access, infrastructure for the 120th Street yard and shop, and aerial crossings.

Table 5-7: Permanent Displacements Front Avenue to 130th Street Station

Land Use Type	Total Affected Parcels	Building Displacements
Vacant	5	---
Commercial	1	---
Industrial	2	1
Utility	3	---
Transportation (Railroad)	7	---
Totals	**18**	**1**

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

Because all construction activities would occur on land acquired for the permanent right-of-way, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

No other projects identified in **Appendix T** *Cumulative Impacts Technical Memorandum* would cause displacements within the API. If any future displacements would occur as part of a separate project prior to CTA's construction of the RLE Project, CTA would coordinate efforts to minimize cumulative displacement impacts.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the Preferred Alignment remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no displacements or relocations associated with the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

Due to the requirements of the Uniform Act, there would be no adverse impacts remaining after mitigation for the Preferred Alignment. There is no change from the same determination made for the East and West Options of the UPRR Alternative in the Draft EIS.

Section 7 - References Cited

Chicago Transit Authority (CTA). 2016. Chicago Red Line Extension Draft Environmental Impact Statement and Section 4(f) Evaluation. Available at https://www.transitchicago.com/rle/drafteis/. Accessed on October 28, 2020.

Attachment A – Displacements and Relocations of Existing Uses Map and Table of Affected Parcels

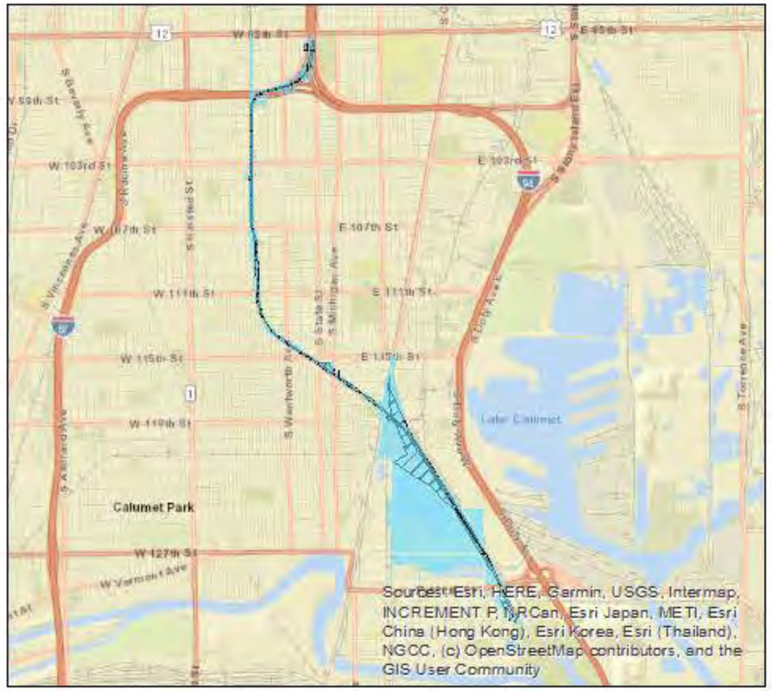

95th Street Station to the Dan Ryan/Bishop Ford Interchange

Dan Ryan/Bishop Ford Interchange to 99th Street

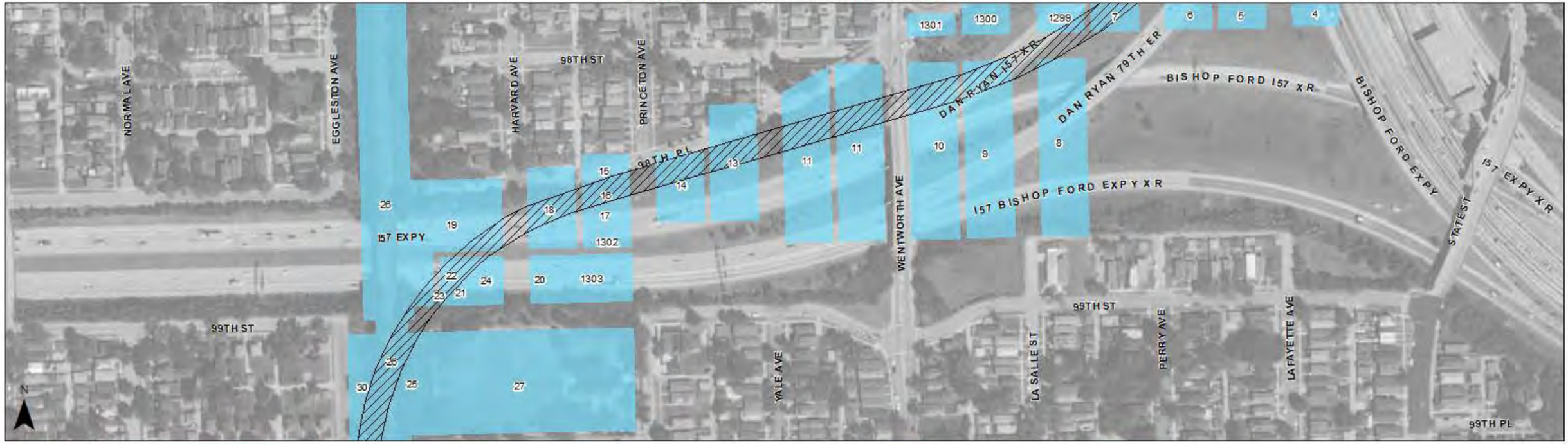

RED AHEAD

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to final refinements as project engineering progresses, the actual displacements for the Preferred Alignment may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

99th Place to 105th Street

105th Street to 110th Place

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

RED AHEAD

Red Line Extension

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to final refinements as project engineering progresses, the actual displacements for the Preferred Alignment may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

110th Place to Perry Avenue

Perry Avenue to Calumet Avenue

RED AHEAD

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to final refinements as project engineering progresses, the actual displacements for the Preferred Alignment may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

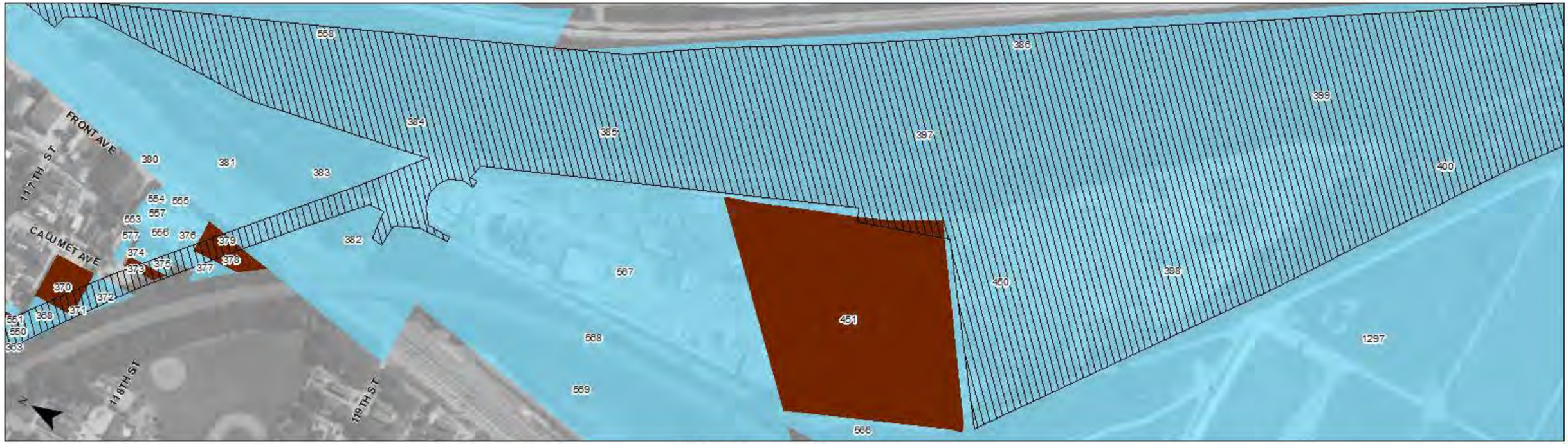

Calumet Avenue to 121st Street

121st Street to MWRD

RED AHEAD

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to final refinements as project engineering progresses, the actual displacements for the Preferred Alignment may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

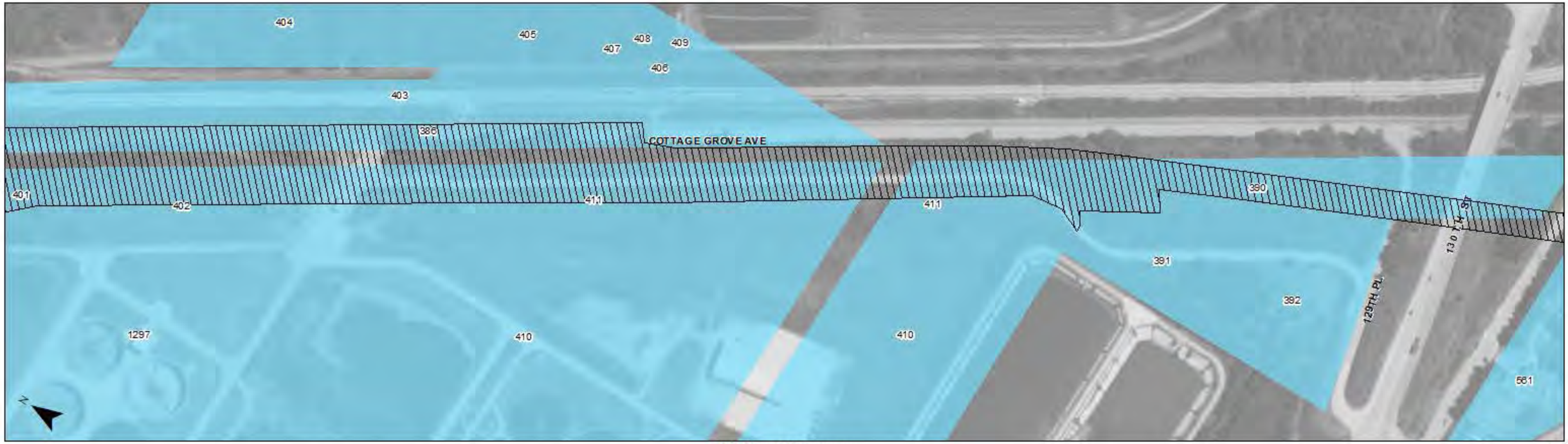

MWRD to 130th Street

130th Street to 133rd Street

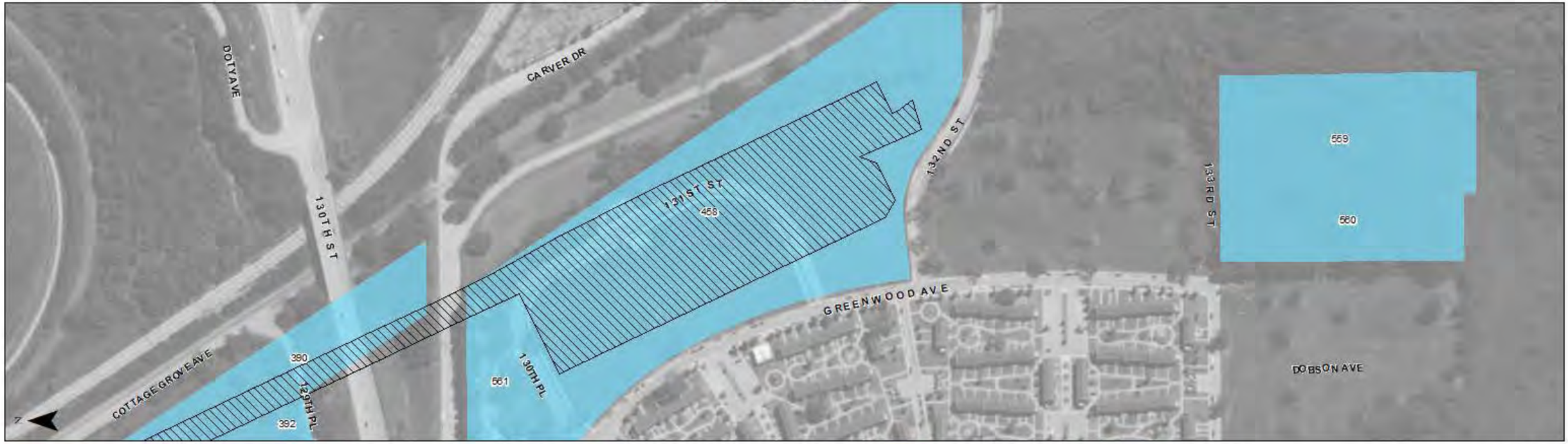

RED AHEAD

Red Line Extension

Red Line Extension Project Footprint | Displaced Building | Affected Parcel

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to final refinements as project engineering progresses, the actual displacements for the Preferred Alignment may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Count	Map ID	Parcel ID	Address	Land Use (2020)	Displacement Type	Displacement Use
1	1	25-09-207-050-0000	9512 S. State Street	Public	Easement	Construction
2	2	25-09-207-049-0000	9511 W. 95th Street	Public	Easement	Construction
3	3	25-09-215-001-0000	9600 S. Lafayette Avenue	Public	Easement	Construction
4	4	25-09-223-043-0000	9721 S. Lafayette Avenue	Public	Easement	Construction
5	5	25-09-222-042-0000	9720 S. Lafayette Avenue	Public	Easement	Construction
6	6	25-09-222-041-0000	9701 S. Princeton Avenue	Public	Easement	Construction
7	7	25-09-221-042-0000	9710 S. Perry Avenue	Public	Easement	Construction
8	8	25-09-229-041-0000	9801 S. LaSalle Street	Public	Easement	Construction
9	9	25-09-228-042-0000	9800 S. LaSalle Street	Public	Easement	Construction
10	10	25-09-228-041-0000	9801 S. Wentworth Avenue	Public	Easement	Construction
11	11	25-09-227-041-0000	9807 S. Yale Avenue	Public	Easement	Construction
12	13	25-09-226-045-0000	9808 S. Yale Avenue	Public	Easement	Construction
13	14	25-09-226-041-0000	9817 S. Princeton Avenue	Public	Easement	Construction
14	15	25-09-225-047-0000	9820 S. Princeton Avenue	Public	Easement	Construction
15	16	25-09-225-026-0000	9822 S. Princeton Avenue	Public	Easement	Construction
16	17	25-09-225-043-0000	9824 S. Princeton Avenue	Public	Easement	Construction
17	18	25-09-225-044-0000	9825 S. Harvard Avenue	Public	Easement	Construction
18	19	25-09-224-019-0000	9822 S. Harvard Avenue	Public	Easement	Construction
19	20	25-09-225-048-0000	350 W. 99th Street	Public	Easement	Construction
20	21	25-09-224-011-0000	354 W. 99th Street	Public	Easement	Construction
21	22	25-09-224-010-0000	352 W. 99th Street	Public	Easement	Construction
22	23	25-09-224-009-0000	350 W. 99th Street	Public	Easement	Construction
23	24	25-09-224-020-0000	356 W. 99th Street	Public	Easement	Construction
24	25	25-09-400-046-0000	341 W. 99th Street	Railroad	Easement	Construction
25	26	25-09-500-002-0000	351 W. 99th Street	Railroad	Easement	Construction
26	27	25-09-400-047-0000	312 W. 99th Place	Park	Easement	Construction
27	30	25-09-999-001-0000	No Street Address	Park	Full Acquisition	Right-of-way
28	65	25-09-424-060-0000	340 W. 103rd Street	Vacant	Full Acquisition	Right-of-way
29	67	25-16-105-034-0000	405 W. 103rd Street	Multi Family	Full Acquisition	Right-of-way
30	68	25-16-105-036-0000	401 W. 103rd Street	Vacant	Full Acquisition	Right-of-way
31	69	25-16-105-035-0000	403 W. 103rd Street	Commercial	Full Acquisition	Right-of-way
32	70	25-16-105-033-0000	400 W. 103rd Place	Commercial	Full Acquisition	Right-of-way
33	77	25-16-113-024-0000	401 W. 104th Street	School	Full Acquisition	Right-of-way
34	79	25-16-113-028-0000	10413 S. Eggleston Avenue	School	Full Acquisition	Right-of-way
35	81	25-16-113-029-0000	405 W. 104th Street	School	Full Acquisition	Right-of-way
36	83	25-16-113-031-0000	400 W. 105th Street	Vacant	Full Acquisition	Right-of-way
37	85	25-16-121-024-0000	411 W. 105th Street	Vacant	Full Acquisition	Right-of-way
38	87	25-16-999-001-0000	No Street Address	Railroad	Easement	Construction
39	88	25-16-121-025-0000	10514 S. Stewart Avenue	Vacant	Full Acquisition	Right-of-way
40	93	25-16-121-031-0000	10520 S. Stewart Avenue	Industrial	Full Acquisition	Right-of-way
41	94	25-16-121-032-0000	10528 S. Stewart Avenue	Industrial	Full Acquisition	Right-of-way
42	95	25-16-121-022-0000	10530 S. Stewart Avenue	Industrial	Full Acquisition	Right-of-way
43	98	25-16-121-027-0000	10548 S. Stewart Avenue	Industrial	Full Acquisition	Right-of-way
44	101	25-16-121-028-0000	10552 S. Stewart Avenue	Industrial	Full Acquisition	Right-of-way
45	102	25-16-121-029-0000	10558 S. Stewart Avenue	Industrial	Full Acquisition	Right-of-way
46	105	25-16-129-030-0000	10638 S. Stewart Avenue	Vacant	Full Acquisition	Right-of-way
47	109	25-16-129-031-0000	10632 S. Stewart Avenue	Vacant	Full Acquisition	Right-of-way
48	111	25-16-129-029-0000	410 W. 107th Street	Industrial	Full Acquisition	Right-of-way
49	114	25-16-129-028-0000	400 W. 107th Street	Industrial	Full Acquisition	Right-of-way
50	115	25-16-400-001-0000	346 W. 107th Place	Industrial	Full Acquisition	Right-of-way
51	116	25-16-307-025-0000	405 W. 107th Street	Vacant	Full Acquisition	Right-of-way
52	117	25-16-401-001-0000	347 W 107th Place	Industrial	Full Acquisition	Right-of-way
53	118	25-16-307-022-0000	400 W. 108th Street	Vacant	Easement	Construction
54	119	25-16-401-016-0000	252 W. 108th Street	School	Full Acquisition	Right-of-way
55	120	25-16-401-017-0000	252 W. 108th Street	School	Easement	Construction
56	121	25-16-315-025-0000	405 W. 108th Street	Vacant	Full Acquisition	Right-of-way
57	122	25-16-407-001-0000	351 W. 108th Street	Vacant	Full Acquisition	Right-of-way
58	123	25-16-407-002-0000	349 W. 108th Street	Vacant	Full Acquisition	Right-of-way
59	124	25-16-315-026-0000	405 W. 108th Street	Vacant	Full Acquisition	Right-of-way
60	125	25-16-407-019-0000	352 W. 108th Place	Vacant	Full Acquisition	Right-of-way
61	126	25-16-407-020-0000	348 W. 108th Place	Single Family	Full Acquisition	Right-of-way

Count	Map ID	Parcel ID	Address	Land Use (2020)	Displacement Type	Displacement Use
62	127	25-16-315-027-0000	410 W. 109th Street	Vacant	Full Acquisition	Right-of-way
63	128	25-16-411-001-0000	351 W. 108th Place	Vacant	Full Acquisition	Right-of-way
64	129	25-16-411-002-0000	349 W. 108th Place	Single Family	Full Acquisition	Right-of-way
65	130	25-16-315-024-0000	410 W. 109th Street	Industrial	Full Acquisition	Right-of-way
66	131	25-16-411-020-0000	350 W. 109th Street	Single Family	Full Acquisition	Right-of-way
67	132	25-16-411-019-0000	354 W. 109th Street	Single Family	Full Acquisition	Right-of-way
68	133	25-16-415-001-0000	355 W. 109th Street	Vacant	Full Acquisition	Right-of-way
69	134	25-16-415-002-0000	351 W. 109th Street	Single Family	Full Acquisition	Right-of-way
70	136	25-16-415-021-0000	354 W. 109th Place	Vacant	Full Acquisition	Right-of-way
71	137	25-16-415-022-0000	350 W. 109th Place	Multi Family	Full Acquisition	Right-of-way
72	139	25-16-419-032-0000	355 W. 109th Place	Vacant	Full Acquisition	Right-of-way
73	141	25-16-419-036-0000	356 W. 110th Street	Industrial	Full Acquisition	Right-of-way
74	142	25-16-419-014-0000	352 W. 110th Street	Industrial	Full Acquisition	Right-of-way
75	143	25-16-419-015-0000	350 W. 110th Street	Industrial	Full Acquisition	Right-of-way
76	145	25-16-423-036-0000	349 W. 110th Street	Vacant	Full Acquisition	Right-of-way
77	146	25-16-423-037-0000	353 W. 110th Street	Vacant	Full Acquisition	Right-of-way
78	148	25-16-423-024-0000	336 W. 110th Place	Vacant	Easement	Construction
79	149	25-16-423-019-0000	348 W. 110th Place	Public	Full Acquisition	Right-of-way
80	150	25-16-423-023-0000	338 W. 110th Place	Vacant	Easement	Construction
81	151	25-16-423-022-0000	340 W. 110th Place	Vacant	Easement	Construction
82	152	25-16-423-021-0000	342 W. 110th Place	Vacant	Easement	Construction
83	153	25-16-423-020-0000	346 W. 110th Place	Vacant	Easement	Construction
84	154	25-16-423-018-0000	352 W. 110th Place	Vacant	Full Acquisition	Right-of-way
85	157	25-16-427-001-0000	356 W. 111th Street	Public	Full Acquisition	Right-of-way
86	160	25-21-501-003-0000	501 E. 112th Street	Railroad	Partial Acquisition	Right-of-way
87	161	25-21-200-001-0000	349 W. 111th Street	Multi Family	Full Acquisition	Right-of-way
88	162	25-21-107-007-0000	405 W. 111th Street	Commercial	Full Acquisition	Right-of-way
89	163	25-21-107-008-0000	401 W. 111th Street	Commercial	Full Acquisition	Right-of-way
90	166	25-21-200-014-0000	348 W. 111th Place	Single Family	Full Acquisition	Right-of-way
91	169	25-21-200-015-0000	344 W. 111th Place	Single Family	Full Acquisition	Right-of-way
92	173	25-21-204-001-0000	345 W. 111th Place	Vacant	Full Acquisition	Right-of-way
93	174	25-21-204-002-0000	341 W. 111th Place	Vacant	Full Acquisition	Right-of-way
94	179	25-21-204-015-0000	340 W. 112th Street	Multi Family	Full Acquisition	Right-of-way
95	181	25-21-204-016-0000	336 W. 112th Street	Vacant	Full Acquisition	Right-of-way
96	182	25-21-208-003-0000	339 W. 112th Street	Vacant	Full Acquisition	Right-of-way
97	183	25-21-208-004-0000	335 W. 112th Street	Vacant	Full Acquisition	Right-of-way
98	184	25-21-208-005-0000	333 W. 112th Street	Vacant	Full Acquisition	Right-of-way
99	186	25-21-208-016-0000	330 W. 112th Place	Single Family	Full Acquisition	Right-of-way
100	187	25-21-208-017-0000	330 W. 112th Place	Single Family	Full Acquisition	Right-of-way
101	189	25-21-208-018-0000	328 W. 112th Place	Single Family	Full Acquisition	Right-of-way
102	192	25-21-212-010-0000	325 W. 112th Place	Single Family	Full Acquisition	Right-of-way
103	194	25-21-212-011-0000	319 W. 112th Place	Multi Family	Full Acquisition	Right-of-way
104	195	25-21-212-012-0000	317 W. 112th Place	Single Family	Full Acquisition	Right-of-way
105	196	25-21-212-019-0000	320 W. 113th Street	Vacant	Full Acquisition	Right-of-way
106	198	25-21-212-020-0000	320 W. 113th Street	Single Family	Full Acquisition	Right-of-way
107	199	25-21-212-021-0000	316 W. 113th Street	Single Family	Full Acquisition	Right-of-way
108	201	25-21-212-022-0000	312 W. 113th Street	Single Family	Full Acquisition	Right-of-way
109	202	25-21-212-023-0000	310 W. 113th Street	Single Family	Full Acquisition	Right-of-way
110	204	25-21-217-001-0000	309 W. 113th Street	Multi Family	Full Acquisition	Right-of-way
111	205	25-21-217-002-0000	307 W. 113th Street	Multi Family	Full Acquisition	Right-of-way
112	206	25-21-217-003-0000	303 W. 113th Street	Single Family	Full Acquisition	Right-of-way
113	207	25-21-217-012-0000	11332 S. Princeton Avenue	Railroad	Full Acquisition	Right-of-way
114	209	25-21-218-024-0000	11315 S. Princeton Avenue	Vacant	Full Acquisition	Right-of-way
115	210	25-21-218-025-0000	11319 S. Princeton Avenue	Single Family	Full Acquisition	Right-of-way
116	211	25-21-218-026-0000	11321 S. Princeton Avenue	Single Family	Full Acquisition	Right-of-way
117	212	25-21-218-027-0000	11325 S. Princeton Avenue	Single Family	Full Acquisition	Right-of-way
118	214	25-21-218-028-0000	11327 S. Princeton Avenue	Single Family	Full Acquisition	Right-of-way
119	216	25-21-218-020-0000	11330 S. Yale Avenue	Single Family	Full Acquisition	Right-of-way
120	218	25-21-218-021-0000	11334 S. Yale Avenue	Single Family	Full Acquisition	Right-of-way
121	219	25-21-218-022-0000	11336 S. Yale Avenue	Single Family	Full Acquisition	Right-of-way
122	221	25-21-218-023-0000	11342 S. Yale Avenue	Vacant	Full Acquisition	Right-of-way

Count	Map ID	Parcel ID	Address	Land Use (2020)	Displacement Type	Displacement Use
123	222	25-21-219-014-0000	11343 S. Yale Avenue	Single Family	Full Acquisition	Right-of-way
124	223	25-21-219-015-0000	11345 S. Yale Avenue	Vacant	Full Acquisition	Right-of-way
125	224	25-21-219-016-0000	11347 S. Yale Avenue	Single Family	Full Acquisition	Right-of-way
126	225	25-21-219-017-0000	11351 S. Wentworth Avenue	Vacant	Full Acquisition	Right-of-way
127	227	25-21-219-018-0000	11355 S. Wentworth Avenue	Vacant	Full Acquisition	Right-of-way
128	228	25-21-219-036-0000	11352 S. Wentworth Avenue	Single Family	Full Acquisition	Right-of-way
129	229	25-21-219-037-0000	11358 S. Wentworth Avenue	Vacant	Full Acquisition	Right-of-way
130	230	25-21-501-001-0000	401 W. 111th Street	Railroad	Partial Acquisition	Right-of-way
131	233	25-21-228-001-0000	149 W. 114th Street	Vacant	Full Acquisition	Right-of-way
132	236	25-21-228-002-0000	135 W. 114th Street	Church	Full Acquisition	Right-of-way
133	238	25-21-228-003-0000	131 W. 114th Street	Vacant	Full Acquisition	Right-of-way
134	240	25-21-228-046-0000	11424 S. Perry Avenue	Industrial	Partial Acquisition	Right-of-way
135	242	25-21-228-047-0000	11424 S. Perry Avenue	Industrial	Partial Acquisition	Right-of-way
136	245	25-21-228-023-0000	11426 S. Perry Avenue	Industrial	Partial Acquisition	Right-of-way
137	248	25-21-230-035-0000	11439 S. Perry Avenue	Vacant	Full Acquisition	Right-of-way
138	249	25-21-230-034-0000	52 W. 115th Street	Vacant	Full Acquisition	Right-of-way
139	253	25-21-230-036-0000	52 W. 115th Street	Vacant	Full Acquisition	Right-of-way
140	255	25-21-230-019-0000	46 W. 115th Street	Vacant	Full Acquisition	Right-of-way
141	257	25-21-230-020-0000	44 W. 115th Street	Railroad	Full Acquisition	Right-of-way
142	258	25-21-230-021-0000	42 W. 115th Street	Vacant	Full Acquisition	Right-of-way
143	259	25-21-230-022-0000	40 W. 115th Street	Multi Family	Full Acquisition	Right-of-way
144	260	25-21-406-029-0000	35 W. 115th Street	Commercial	Full Acquisition	Right-of-way
145	263	25-21-407-001-0000	23 W. 115th Street	Single Family	Full Acquisition	Right-of-way
146	265	25-21-407-002-0000	17 W. 115th Street	Multi Family	Full Acquisition	Right-of-way
147	266	25-21-407-003-0000	11 W. 115th Street	Vacant	Full Acquisition	Right-of-way
148	267	25-21-407-007-0000	11516 S. State Street	Vacant	Full Acquisition	Right-of-way
149	269	25-21-407-029-0000	11514 S. State Street	Vacant	Full Acquisition	Right-of-way
150	276	25-22-300-007-0000	11527 S. State Street	Vacant	Full Acquisition	Right-of-way
151	282	25-22-300-019-0000	11562 S. Wabash Avenue	Vacant	Partial Acquisition	Right-of-way
152	286	25-22-304-047-0000	113 E. Kensington Avenue	Vacant	Full Acquisition	Right-of-way
153	288	25-22-300-068-0000	11552 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
154	290	25-22-304-049-0000	11557 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
155	291	25-22-300-058-0000	11578 S. Michigan Avenue	Vacant	Partial Acquisition	Right-of-way
156	294	25-22-304-005-0000	11563 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
157	296	25-22-304-00-60000	11565 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
158	298	25-22-304-007-0000	11567 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
159	307	25-22-304-008-0000	11579 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
160	311	25-22-304-027-0000	120 E. 116th Street	Vacant	Full Acquisition	Right-of-way
161	313	25-22-304-028-0000	122 E. 116th Street	Vacant	Full Acquisition	Right-of-way
162	314	25-22-304-029-0000	124 E. 116th Street	Vacant	Full Acquisition	Right-of-way
163	315	25-22-304-030-0000	128 E. 116th Street	Vacant	Full Acquisition	Right-of-way
164	316	25-22-304-031-0000	130 E. 116th Street	Vacant	Full Acquisition	Right-of-way
165	317	25-22-304-032-0000	132 E. 116th Street	Vacant	Full Acquisition	Right-of-way
166	318	25-22-304-034-0000	136 E. 116th Street	Vacant	Full Acquisition	Right-of-way
167	319	25-22-304-033-0000	134 E. 116th Street	Vacant	Full Acquisition	Right-of-way
168	336	25-22-308-014-0000	151 E. 116th Street	Multi Family	Full Acquisition	Right-of-way
169	338	25-22-308-015-0000	153 E. 116th Street	Multi Family	Full Acquisition	Right-of-way
170	341	25-22-308-016-0000	155 E. 116th Street	Single Family	Full Acquisition	Right-of-way
171	343	25-22-308-017-0000	157 E. 116th Street	Single Family	Full Acquisition	Right-of-way
172	345	25-22-308-018-0000	159 E. 116th Street	Single Family	Full Acquisition	Right-of-way
173	346	25-22-308-019-0000	163 E. 116th Street	Single Family	Full Acquisition	Right-of-way
174	347	25-22-308-020-0000	165 E. 116th Street	Single Family	Full Acquisition	Right-of-way
175	354	25-22-311-013-0000	11631 S. Indiana Avenue	Public	Full Acquisition	Right-of-way
176	356	25-22-311-021-0000	11630 S. Prairie Avenue	Single Family	Full Acquisition	Right-of-way
177	357	25-22-311-024-0000	11632 S. Prairie Avenue	Multi Family	Full Acquisition	Right-of-way
178	358	25-22-311-025-0000	11634 S. Prairie Avenue	Multi Family	Full Acquisition	Right-of-way
179	363	25-22-316-001-0000	319 E. 117th Street	Public	Full Acquisition	Right-of-way
180	368	25-22-316-035-0000	11712 S. Calumet Avenue	Vacant	Full Acquisition	Right-of-way
181	370	25-22-316-034-0000	11722 S. Calumet Avenue	Multi Family	Full Acquisition	Right-of-way
182	371	25-22-316-030-0000	11726 S. Calumet Avenue	Vacant	Full Acquisition	Right-of-way
183	372	25-22-316-031-0000	11728 S. Calumet Avenue	Vacant	Full Acquisition	Right-of-way

Count	Map ID	Parcel ID	Address	Land Use (2020)	Displacement Type	Displacement Use
184	373	25-22-317-013-0000	354 E. 118th Street	Single Family	Full Acquisition	Right-of-way
185	374	25-22-317-014-0000	356 E. 118th Street	Vacant	Full Acquisition	Right-of-way
186	375	25-22-317-015-0000	358 E. 118th Street	Vacant	Full Acquisition	Right-of-way
187	376	25-22-317-030-0000	11742 S. Front Avenue	Industrial	Full Acquisition	Right-of-way
188	377	25-22-317-031-0000	11810 S. Calumet Avenue	Industrial	Full Acquisition	Right-of-way
189	378	25-22-317-032-0000	11810 S. Calumet Avenue	Industrial	Full Acquisition	Right-of-way
190	379	25-22-317-033-0000	375 E. 118th Street	Industrial	Full Acquisition	Right-of-way
191	380	25-22-317-035-0000	11800 S. Front Avenue	Railroad	Easement	Construction
192	381	25-22-501-005-0000	360 E. 119th Street	Railroad	Easement	Construction
193	382	25-22-325-001-0000	370 E. 119th Street	Railroad	Partial Acquisition	Right-of-way
194	383	25-22-400-026-0000	11600 S. Cottage Grove Avenue	Industrial	Partial Acquisition	Right-of-way
195	384	25-22-400-027-0000	11600 S. Cottage Grove Avenue	Railroad	Partial Acquisition	Right-of-way
196	385	25-27-108-009-0000	11900 S. Cottage Grove Avenue	Railroad	Partial Acquisition	Right-of-way
197	386	25-27-502-001-0000	12330 S. Cottage Grove Avenue	Railroad	Easement	Construction
198	390	25-26-300-017-0000	12807 S. Cottage Grove Avenue	Utility	Full Acquisition	Right-of-way
199	391	25-26-300-015-0000	12813 S. Cottage Grove Avenue	Utility	Easement	Construction
200	392	25-26-300-014-0000	12817 S. Cottage Grove Avenue	Utility	Easement	Construction
201	397	25-22-401-034-0000	1355 E. 121st Street	Railroad	Full Acquisition	Right-of-way
202	398	25-27-200-007-0000	12256 S. Cottage Grove Avenue	Vacant	Full Acquisition	Right-of-way
203	399	25-27-200-009-0000	12256 S. Cottage Grove Avenue	Railroad	Full Acquisition	Right-of-way
204	400	25-27-200-010-0000	12256 S. Cottage Grove Avenue	Railroad	Full Acquisition	Right-of-way
205	401	25-27-200-012-0000	12534 S. Cottage Grove Avenue	Railroad	Full Acquisition	Right-of-way
206	402	25-27-200-013-0000	12546 S. Cottage Grove Avenue	Utility	Full Acquisition	Right-of-way
207	403	25-27-503-001-0000	12320 S. Cottage Grove Avenue	Railroad	Easement	Construction
208	404	25-27-200-004-0000	12500 S. Cottage Grove Avenue	Utility	Easement	Construction
209	405	25-27-400-003-0000	12606 S. Cottage Grove Avenue	Utility	Easement	Construction
210	406	25-27-400-002-0000	12600 S. Cottage Grove Avenue	Railroad	Easement	Construction
211	407	25-27-400-007-0000	12614 S. Cottage Grove Avenue	Utility	Easement	Construction
212	408	25-27-400-005-0000	12608 S. Cottage Grove Avenue	Utility	Easement	Construction
213	409	25-27-400-006-0000	12610 S. Cottage Grove Avenue	Utility	Easement	Construction
214	410	25-27-301-007-0000	300 E. 127th Street	Utility	Easement	Construction
215	411	25-27-400-009-0000	12618 S. Cottage Grove Avenue	Utility	Full Acquisition	Right-of-way
216	412	25-21-200-002-0000	347 W. 111th Street	Multi Family	Full Acquisition	Right-of-way
217	423	25-22-311-012-0000	11633 S. Indiana Avenue	Public	Full Acquisition	Right-of-way
218	424	25-22-311-020-0000	11626 S. Prairie Avenue	Single Family	Full Acquisition	Right-of-way
219	425	25-22-300-006-0000	11525 S. State Street	Vacant	Full Acquisition	Right-of-way
220	445	25-16-415-003-0000	349 W. 109th Street	Single Family	Full Acquisition	Right-of-way
221	446	25-16-415-023-0000	348 W. 109th Place	Single Family	Full Acquisition	Right-of-way
222	447	25-16-500-017-0000	362 W. 108th Place	Railroad	Easement	Construction
223	448	25-16-500-018-0000	364 W. 109th Street	Railroad	Easement	Construction
224	449	25-16-500-028-0000	359 W. 109th Street	Railroad	Easement	Construction
225	450	25-22-401-038-0000	12200 S. Cottage Grove Avenue	Vacant	Full Acquisition	Right-of-way
226	451	25-22-401-037-0000	12120 S. Cottage Grove Avenue	Industrial	Partial Acquisition	Right-of-way
227	452	25-16-107-035-0000	414 W. 104th Street	Vacant	Full Acquisition	Right-of-way
228	453	25-16-107-034-0000	408 W. 104th Street	Vacant	Full Acquisition	Right-of-way
229	458	25-35-100-020-0000	969 E. 130th Street	Vacant	Partial Acquisition	Right-of-way
230	459	25-09-206-052-0000	9522 S. Lafayette Avenue	Vacant	Full Acquisition	Right-of-way
231	460	25-09-206-053-0000	No Street Address	Public	Existing CTA Property	Right-of-way
232	512	25-16-113-027-0000	10411 S. Eggleston Avenue	School	Full Acquisition	Right-of-way
233	513	25-16-113-034-0000	10416 S. Eggleston Avenue	School	Full Acquisition	Right-of-way
234	514	25-16-113-035-0000	407 W. 104th Street	School	Full Acquisition	Right-of-way
235	515	25-16-307-024-0000	413 W. 107th Street	Commercial	Full Acquisition	Right-of-way
236	516	25-16-401-025-0000	363 W. 107th Street	Industrial	Full Acquisition	Right-of-way
237	517	25-16-411-021-0000	348 W. 109th Street	Single Family	Full Acquisition	Right-of-way
238	518	25-16-411-022-0000	346 W. 109th Street	Single Family	Full Acquisition	Right-of-way
239	519	25-16-411-023-0000	342 W. 109th Street	Vacant	Full Acquisition	Right-of-way
240	520	25-16-411-024-0000	340 W. 109th Street	Vacant	Full Acquisition	Right-of-way
241	521	25-16-411-025-0000	338 W. 109th Street	Vacant	Full Acquisition	Right-of-way
242	522	25-16-411-026-0000	334 W. 109th Street	Vacant	Full Acquisition	Right-of-way
243	523	25-16-411-027-0000	332 W. 109th Street	Vacant	Full Acquisition	Right-of-way
244	524	25-16-427-018-0000	344 W. 111th Street	Church	Easement	Construction

Count	Map ID	Parcel ID	Address	Land Use (2020)	Displacement Type	Displacement Use
245	525	25-16-427-019-0000	342 W. 111th Street	Church	Easement	Construction
246	526	25-16-427-020-0000	340 W. 111th Street	Church	Easement	Construction
247	527	25-16-427-021-0000	330 W. 111th Street	Industrial	Full Acquisition	Mitigation
248	528	25-21-200-003-0000	343 W. 111th Street	Multi Family	Full Acquisition	Right-of-way
249	529	25-21-200-004-0000	341 W. 111th Street	Church	Full Acquisition	Right-of-way
250	530	25-21-200-016-0000	340 W. 111th Place	Multi Family	Full Acquisition	Right-of-way
251	531	25-21-200-017-0000	334 W. 111th Place	Vacant	Full Acquisition	Right-of-way
252	532	25-21-200-027-0000	333 W. 111th Street	Single Family	Full Acquisition	Right-of-way
253	533	25-21-200-028-0000	333 W. 111th Street	Vacant	Full Acquisition	Right-of-way
254	534	25-21-204-003-0000	337 W. 111th Place	Vacant	Full Acquisition	Right-of-way
255	535	25-21-204-027-0000	333 W. 111th Place	Vacant	Full Acquisition	Right-of-way
256	536	25-21-212-024-0000	306 W. 113th Street	Single Family	Full Acquisition	Right-of-way
257	537	25-21-218-019-0000	11326 S. Yale Avenue	Single Family	Full Acquisition	Right-of-way
258	538	25-21-228-022-0000	11414 S. Perry Avenue	Industrial	Easement	Construction
259	540	25-22-300-005-0000	11517 S. State Street	Vacant	Full Acquisition	Right-of-way
260	541	25-22-300-038-0000	11516 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
261	542	25-22-300-040-0000	11528 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
262	543	25-22-300-041-0000	11526 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
263	544	25-22-300-042-0000	11530 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
264	545	25-22-300-043-0000	11534 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
265	546	25-22-300-053-0000	11542 S. Michigan Avenue	Vacant	Full Acquisition	Right-of-way
266	547	25-22-304-035-0000	140 E. 116th Street	Vacant	Full Acquisition	Right-of-way
267	548	25-22-304-036-0000	142 E. 116th Street	Vacant	Full Acquisition	Right-of-way
268	549	25-22-311-019-0000	11624 S. Prairie Avenue	Single Family	Full Acquisition	Right-of-way
269	550	25-22-316-002-0000	321 E. 117th Street	Vacant	Full Acquisition	Right-of-way
270	551	25-22-316-003-0000	325 E. 117th Street	Multi Family	Full Acquisition	Right-of-way
271	552	25-22-316-004-0000	327 E. 117th Street	Vacant	Full Acquisition	Right-of-way
272	553	25-22-317-026-0000	11728 S. Front Avenue	Industrial	Easement	Construction
273	554	25-22-317-027-0000	11730 S. Front Avenue	Industrial	Easement	Construction
274	555	25-22-317-028-0000	11734 S. Front Avenue	Industrial	Easement	Construction
275	556	25-22-317-029-0000	11736 S. Front Avenue	Industrial	Easement	Construction
276	557	25-22-317-034-0000	11732 S. Front Avenue	Industrial	Easement	Construction
277	558	25-22-400-001-0000	11528 S. Cottage Grove Avenue	Railroad	Easement	Construction
278	559	25-35-100-010-0000	500 E. 134th Street	Vacant	Full Acquisition	Mitigation
279	560	25-35-100-016-0000	1108 E. 133rd Street	Vacant	Full Acquisition	Mitigation
280	561	25-35-100-021-0000	1029 E. 130th Street	Commercial	Partial Acquisition	Right-of-way
281	563	25-16-105-029-0000	418 W. 103rd Place	Single Family	Full Acquisition	Right-of-way
282	564	25-16-105-030-0000	420 W. 103rd Place	Single Family	Full Acquisition	Right-of-way
283	565	25-16-105-032-0000	412 W. 103rd Place	Single Family	Full Acquisition	Right-of-way
284	566	25-22-401-039-0000	12300 E.Oakwood Boulevard	Vacant	Easement	Construction
285	567	25-27-108-008-0000	11900 S. Cottage Grove Avenue	Industrial	Easement	Construction
286	568	25-27-501-001-0000	11900 S. Front Avenue	Railroad	Easement	Construction
287	569	25-27-108-006-0000	12001 S. Front Avenue	Utility	Easement	Construction
288	570	25-21-107-005-0000	409 W. 111th Street	Commercial	Full Acquisition	Right-of-way
289	571	25-21-107-006-0000	407 W. 111th Street	Commercial	Full Acquisition	Right-of-way
290	572	25-16-415-004-0000	347 W. 109th Street	Single Family	Full Acquisition	Right-of-way
291	573	25-16-415-024-0000	344 W. 109th Place	Vacant	Easement	Construction
292	574	25-16-415-025-0000	342 W 109th Place	Vacant	Easement	Construction
293	575	25-22-311-001-0000	201 E. 116th Street	Vacant	Easement	Construction
294	576	25-22-311-002-0000	203 E. 116th Street	Vacant	Easement	Construction
295	577	25-22-317-012-0000	11731 S. Calumet Avenue	Vacant	Easement	Construction
296	691	25-16-105-015-0000	409 W. 103rd Street	Single Family	Full Acquisition	Right-of-way
297	1281	25-16-400-070-0000	358 W. 107th Place	Industrial	Full Acquisition	Right-of-way
298	1282	25-16-401-018-0000	252 W. 108th Street	School	Easement	Construction
299	1283	25-16-401-024-0000	246 W. 108th Street	School	Easement	Construction
300	1296	25-16-113-030-0000	416 W. 105th Street	Vacant	Full Acquisition	Right-of-way
301	1297	25-27-133-003-0000	12530 S. Cottage Grove Avenue	Utility	Easement	Construction
302	1298	25-09-214-041-0000	9604 S. Lafayette Avenue	Public	Easement	Construction
303	1299	25-09-221-041-0000	9727 S. LaSalle Street	Public	Easement	Construction
304	1300	25-09-220-042-0000	9744 S. LaSalle Street	Public	Easement	Construction
305	1301	25-09-220-041-0000	9753 S. Wentworth Avenue	Public	Easement	Construction
306	1302	25-09-225-030-0000	9826 S. Princeton Avenue	Public	Easement	Construction

Count	Map ID	Parcel ID	Address	Land Use (2020)	Displacement Type	Displacement Use
307	1303	25-09-225-045-0000	352 W. 99th Street	Public	Easement	Construction

Appendix K

Displacements and Relocation of Existing Uses by Alternative Technical Memorandum

- Draft EIS Appendix K, Displacements and Relocation of Existing Uses by Alternative Technical Memorandum, July 2015
  - Appendix A, Bus Rapid Transit Alternative Displacements Map
  - Appendix B, Union Pacific Railroad Rail Alternative Right-of-Way Option Displacement Maps
  - Appendix C, Union Pacific Railroad Rail Alternative East Option Displacement Maps
  - Appendix D, Union Pacific Railroad Rail Alternative West Option Displacement Maps
  - Appendix E, Union Pacific Railroad Rail Alternative Common Displacement Maps
  - Appendix F, Halsted Rail Alternative Displacements Maps
  - Appendix G, Displacements Spreadsheets
  - Appendix H, Availability of Project Area Real Estate
  - Appendix I, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Displacements and Relocation of Existing Uses

Technical Memorandum

August 14, 2013
Appendix I added July 29, 2015

Prepared for:
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Table of Contents

Section 1 Summary 1-1

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-2
3.4 Methods 3-2

Section 4 Affected Environment 4-1

4.1 Bus Rapid Transit Alternative 4-1
4.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option 4-3
4.3 Union Pacific Railroad Alternative - East Option 4-4
4.4 Union Pacific Railroad Alternative - West Option 4-5
4.5 Halsted Rail Alternative 4-7

Section 5 Impacts and Mitigations 5-1

5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-5
5.4 Union Pacific Railroad Rail Alternative - East Option 5-12
5.5 Union Pacific Railroad Rail Alternative - West Option 5-19
5.6 Halsted Rail Alternative 5-26

Section 6 Impacts Remaining After Mitigation 6-1

6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-1
6.5 Union Pacific Railroad Rail Alternative - West Option 6-1
6.6 Halsted Rail Alternative 6-1

Section 7 References Cited 7-1

Appendices

Appendix A - BRT Alternative Displacements Maps
Appendix B - UPRR ROW Option Displacements Maps
Appendix C - UPRR East Option Displacements Maps
Appendix D - UPRR West Option Displacements Maps
Appendix E – UPRR Common Displacements Maps
Appendix F - Halsted Rail Displacements Maps
Appendix G - Displacements Spreadsheets
Appendix H - Availability of Project Area Real Estate
Appendix I - Updated Displacements Information for UPRR East and West Options (May 8, 2015)

Figures

Figure 1-1: Red Line Extension Project Alternatives Map....1-3
Figure 4-1: Red Line Extension Alternatives and Neighborhoods Map....4-2
Figure 5-1: Bus Rapid Transit Alternative - Displacements....5-3
Figure 5-2: Bus Rapid Transit Alternative - Displacements....5-4
Figure 5-3: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Displacements....5-7
Figure 5-4: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Displacements....5-8
Figure 5-5: Union Pacific Railroad Rail Alternative - East Option - Displacements....5-14
Figure 5-6: Union Pacific Railroad Rail Alternative - East Option - Displacements....5-15
Figure 5-7: Union Pacific Railroad Rail Alternative - West Option - Displacements....5-21
Figure 5-8: Union Pacific Railroad Rail Alternative - West Option - Displacements....5-22
Figure 5-9: Halsted Rail Alternative - Displacements....5-28
Figure 5-10: Halsted Rail Alternative - Displacements....5-29

Tables

Table 1-1: Displacement Impacts by Land Use Type*....1-4
Table 1-2: Quantitative Summary of Displacement Impacts*....1-5
Table 1-3: Overall Displacement Impacts After Mitigation*....1-6
Table 5-1: Bus Rapid Transit Alternative - Permanent Displacements*....5-5
Table 5-2: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements*....5-6

Table 5-3: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements (99th Street to 103rd Street Station)* 5-9
Table 5-4: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements (103rd Street to 111th Street Station) 5-9
Table 5-5: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements* (115th to 117th Street)* 5-10
Table 5-6: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements (117th Street to Front Avenue)* 5-10
Table 5-7: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements (Front Avenue to 130th Street) 5-11
Table 5-8: 120th Street Yard and Shop - Permanent Displacements* 5-12
Table 5-9: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements* 5-13
Table 5-10: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (99th Street to 103rd Street Station)* 5-16
Table 5-11: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (103rd Street to 111th Street Station)* 5-17
Table 5-12: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (111th to 115th Street)* 5-17
Table 5-13: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (115th to 117th Street)* 5-18
Table 5-14: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (117th Street to Front Avenue)* 5-18
Table 5-15: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (Front Avenue to 130th Street) 5-19
Table 5-16: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements* 5-20
Table 5-17: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (99th Street to 103rd Street Station)* 5-23
Table 5-18: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (103rd Street to 111th Street Station)* 5-24
Table 5-19: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (111th to 115th Street)* 5-24
Table 5-20: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (115th to 117th Street)* 5-25
Table 5-21: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (117th Street to Front Avenue)* 5-25
Table 5-22: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (Front Avenue to 130th Street) 5-26
Table 5-23: Halsted Rail Alternative - Total Permanent Displacements* 5-27
Table 5-24: Halsted Rail Alternative - Permanent Displacements (99th to 103rd Streets)* 5-30

Table 5-25: Halsted Rail Alternative - Permanent Displacements (103rd to 111th Street)* 5-30
Table 5-26: Halsted Rail Alternative - Permanent Displacements (111th to 120th Street)* 5-31
Table 5-27: Halsted Rail Alternative - Permanent Displacements (120th to 129th Street)* 5-31
Table 5-28: 119th Street Yard and Shop - Permanent Displacements* 5-32

Abbreviations

BRT	Bus Rapid Transit
CFR	Code of Federal Regulations
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt
MWRD	Metropolitan Water Reclamation District
NEPA	National Environmental Policy Act
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
RLE	Red Line Extension
ROW	right-of-way
STB	Surface Transportation Board
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad
USC	United States Code

Section 1
Summary

This technical memorandum analyzes the potential impacts of displacements and relocations resulting from the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project. Figure 1–1 shows the location of the project alternatives.

According to Federal Transit Administration (FTA) and State of Illinois guidance, displacements and relocations would be considered adverse if they would have one or more of the following results:

- Displacement of substantial numbers of existing housing units (a concentrated number of units in one neighborhood), particularly affordable housing, and/or employer units, necessitating the construction of replacement units elsewhere. This analysis uses the definition of affordable housing provided by the Illinois Housing Development Authority for the Chicago Metro area, which is based on data provided by the U.S. Department of Housing and Urban Development.

- Displacement of a substantial number of residents or employees, necessitating construction of replacement housing or employment locations elsewhere.

The area of potential impact for determining displacement and relocation conflicts for the RLE Project includes parcels within the permanent envelope for each alternative, including the necessary right-of-way (ROW) for the alignment, transit stations, electric substations, parking facilities, and maintenance yards. Each alternative was analyzed for potential displacement impacts on existing parcels and buildings. This analysis determined the following:

- The Bus Rapid Transit (BRT) Alternative would have the fewest impacts, with 52 affected parcels and 3 building displacements, which would be caused by construction of the parking lots and garages. Forty-two of the affected parcels are vacant and/or owned by the City of Chicago.

- The Union Pacific Railroad (UPRR) Rail Alternative ROW Option would have the fewest impacts of the UPRR Rail Alternative options, with 133 affected parcels and 24 building displacements, because the UPRR ROW would be used for most of the elevated alignment. For this analysis, it was assumed that the UPRR trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE implementation and that the current railroad ROW would be publicly owned after freight operations have moved to a new alignment. A total of 18 single-family residences would be displaced, mainly due to construction of the parking garage for the Michigan Avenue station.

- The UPRR Rail Alternative East Option would have the most impacts of all the build alternatives, with 256 affected parcels and 112 building displacements. Eighty-five single-family residences would be displaced from the fully developed neighborhoods along the eastern

perimeter of the UPRR. The UPRR Rail Alternative West Option would have fewer impacts (193 affected parcels and 53 building displacements) than the East Option, but more than the ROW Option. The West Option would have fewer impacts on single-family residences (27 displaced single-family residences) than the East Option.

- The Halsted Rail Alternative would have fewer impacts (108 affected parcels and 38 building displacements) than the other rail alternatives. The Halsted Rail Alternative would have the fewest displaced single-family residences (11) and the most displaced commercial buildings (15) of the rail alternatives. The ROW Option would displace 2 commercial buildings, the East Option would displace 3, and the West Option would displace 8.

Federal and state laws require that property owners be paid not less than fair market value for their land and buildings, and that they and their tenants be assisted in finding replacement business sites or dwellings. These protections, compensation, and relocation assistance are guaranteed by the Uniform Relocation and Real Property Assistance Act of 1970, as amended (Uniform Act, 42 United States Code [USC] 4601, et seq.). For displaced residents, the Uniform Act requires that replacement housing must be "decent, safe, and sanitary," and be functionally equivalent in the number of rooms and living space, location, and general improvements. Replacement dwellings must meet all minimum federal housing requirements and conform to state and local occupancy codes. Relocation assistance will follow the guidelines set forth in Title 49, Part 24 of the Code of Federal Regulations (49 CFR Part 24 and FTA Circular 5010.1C dated October 1, 1998, as amended). Relocation benefits may also be available to businesses and non–profit organizations that may be displaced. Payments may be made for the following: moving costs; tangible personal property loss as a result of relocation or discontinuance of operations; reestablishment expenses; and costs incurred in finding a replacement site. The Uniform Act requires that relocation services and/or payments be made to residential and business owners and to residential and business tenants.

Due to the requirements of the Uniform Act, there would be no adverse impacts remaining after mitigation for the BRT Alternative, UPRR Rail Alternative, or Halsted Rail Alternative. The No Build Alternative is an alternative used for comparative purposes to assess the benefits and impacts of the build alternatives, and there would be no displacements or relocations associated with the No Build Alternative.

Table 1–1 summarizes the displacement impacts by land use type for each RLE alternative. Table 1-2 lists the total number of affected parcels and displacements for each alternative. Table 1-3 lists the overall displacement impacts after mitigation.

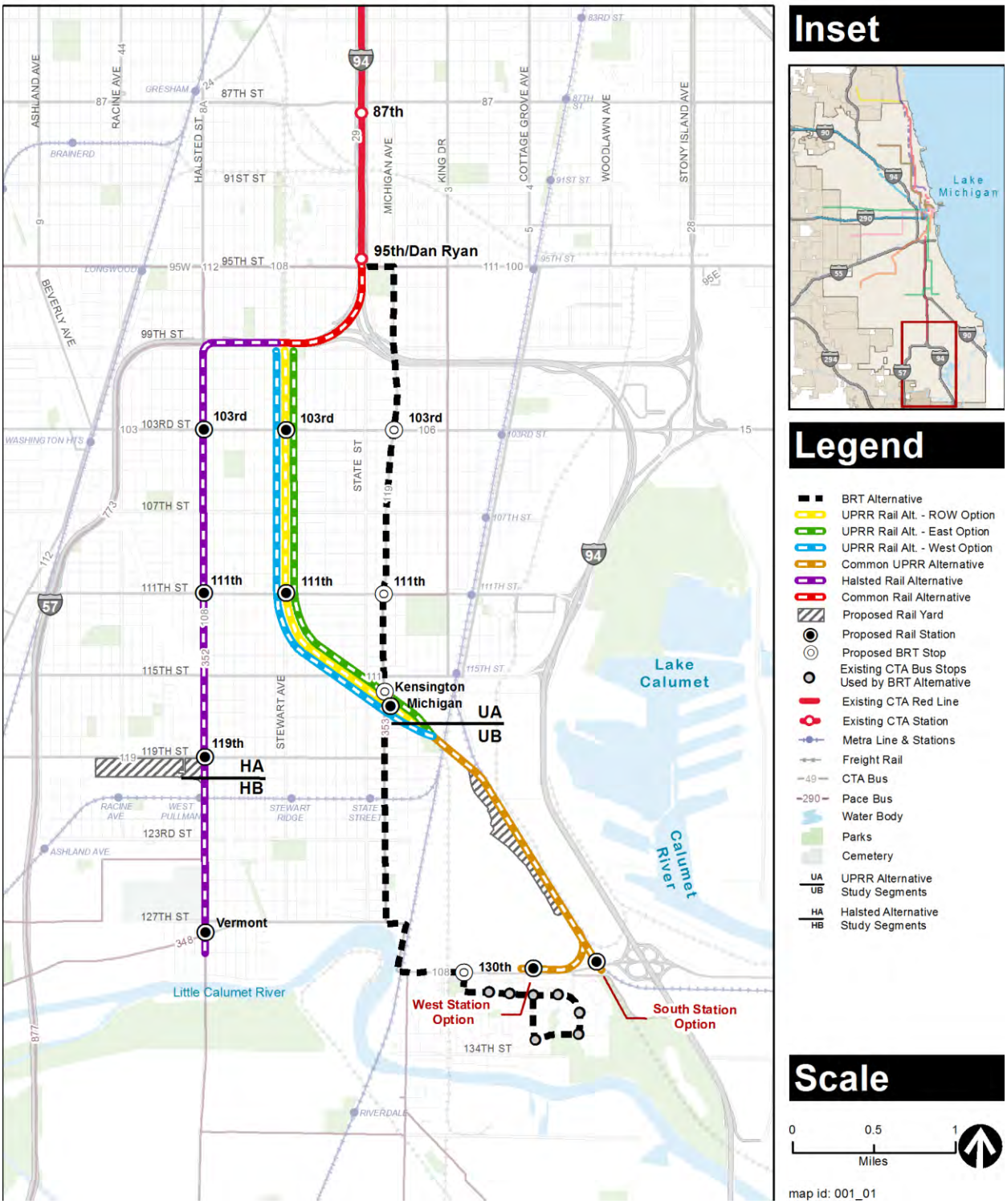

Figure 1-1: Red Line Extension Project Alternatives Map

Section 2
Project Description

The CTA is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
    - ROW Option
    - East Option
    - West Option
- Halsted Rail Alternative

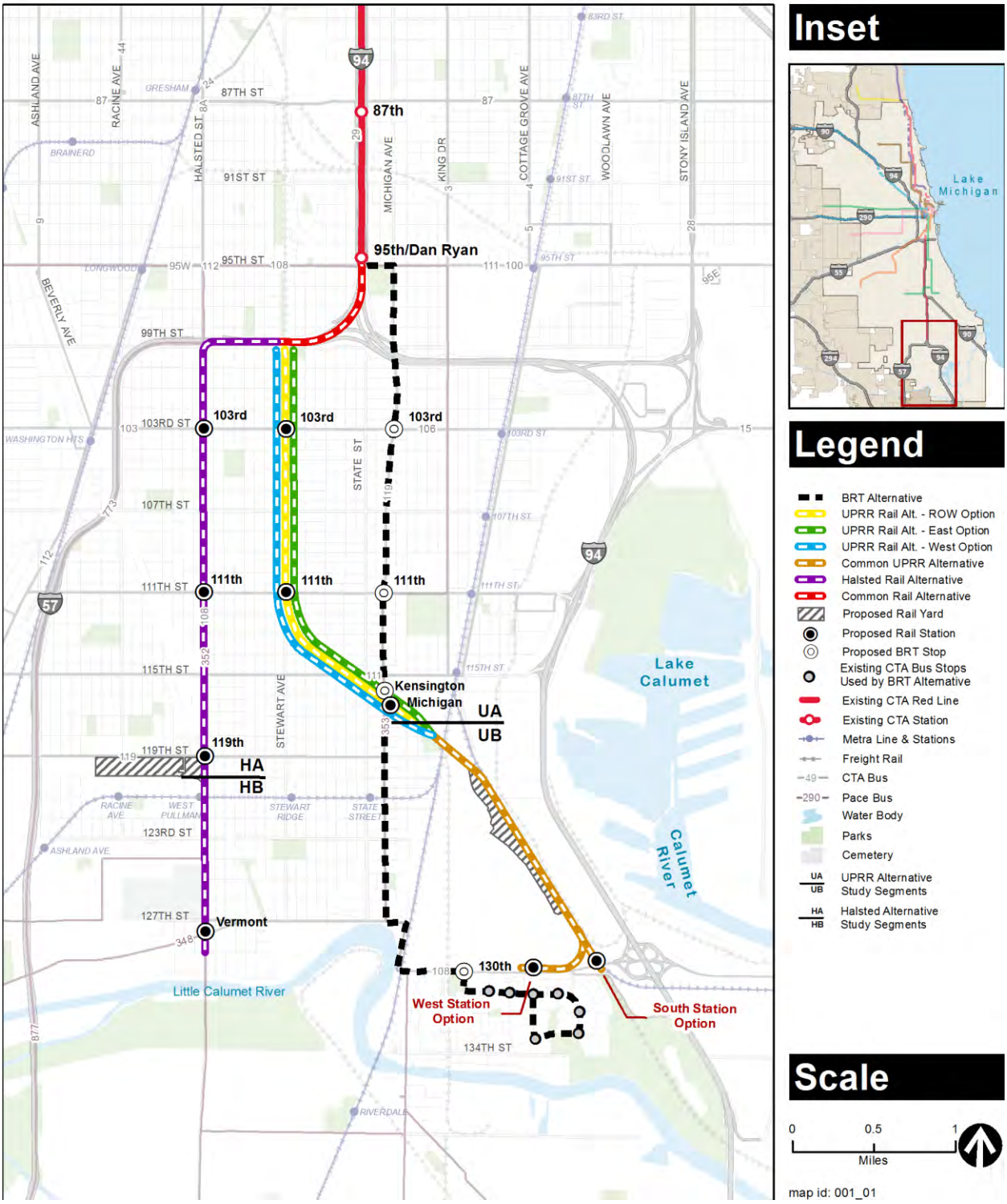

Figure 2-1: Red Line Extension Project Alternatives

Table 1-1: Displacement Impacts by Land Use Type*

Land Use Type	Impact	BRT	UPRR Rail ROW Option	UPRR Rail East Option	UPRR Rail West Option	Halsted Rail Option
Vacant	Affected Parcel(s)	18	13	56	35	22
	Building Displacement	--	--	--	--	--
Single-Family Residential	Affected Parcel(s)	1	18	91	37	13
	Building Displacement	1	15	82	24	11
Multi-Family Residential**	Affected Parcel(s)	--	1	15	4	--
	Building Displacement	--	1	13	4	--
Commercial	Affected Parcel(s)	2	3	6	18	37
	Building Displacement	1	2	3	8	15
Mixed-Use (Retail/Office/ Residential)	Affected Parcel(s)	--	1	--	2	6
	Building Displacement	--	1	--	2	6
Institutional (School)	Affected Parcel(s)	--	--	2	--	--
	Building Displacement	--	--	--	--	--
Institutional (Place of Worship)	Affected Parcel(s)	1	1	1	7	1
	Building Displacement	--	--	1	1	1
Industrial	Affected Parcel(s)	3	11	19	20	4
	Building Displacement	1	4	11	13	3

Land Use Type	Impact	BRT	UPRR Rail ROW Option	UPRR Rail East Option	UPRR Rail West Option	Halsted Rail Option
Utility (MWRD)	Affected Parcel(s)	2	15	15	15	--
	Building Displacement	--	--	--	--	--
Transportation (Railroads)	Affected Parcel(s)	1	11	29	40	7
	Building Displacement	--	1	1	1	--
Public (City of Chicago)***	Affected Parcel(s)	24	59	22	15	18
	Building Displacement	--	--	1	--	2

Notes: BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad, ROW = right-of-way, MWRD = Metropolitan Water Reclamation District
*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**Multi-family residential: All multi-family parcels are single-family homes that have been converted to multi-family homes. The number of multi-family units was determined by counting mailboxes during site visits.
***The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

Table 1-2: Quantitative Summary of Displacement Impacts*

Impact	BRT	UPRR Rail ROW Option	UPRR Rail East Option	UPRR Rail West Option	Halsted Rail Option
Affected Parcels	52	133	256	193	108
Building Displacements	3	24	112	53	38

Notes: BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad, ROW = right-of-way
*Building displacement impacts relate to a primary building displacement and/or a secondary structure.

Table 1-3: Overall Displacement Impacts After Mitigation*

Phase	BRT	UPRR Rail ROW Option	UPRR Rail East Option	UPRR Rail West Option	Halsted Rail Option
Operation	Not Adverse	Not Substantially Adverse	Not Substantially Adverse	Not Substantially Adverse	Not Substantially Adverse
Construction	---	---	---	---	---
Cumulative	Not Adverse	Not Adverse	Not Adverse	Not Adverse	Not Adverse

Notes: BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad, ROW = right-of-way
* Impact Categories: Not Applicable (---); No Impact; Not Adverse; Not Substantially Adverse; Adverse

Updated July 29, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix I of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix I supersedes information presented in other chapters of this technical memorandum.

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

3.1 Regulatory Framework

The following sections present brief descriptions of the regulatory framework applicable to the jurisdictions with respect to displacements and relocations within the project area.

3.1.1 Federal

According to the National Environmental Policy Act of 1969 (NEPA) and FTA guidance, the Uniform Act must be implemented if displacements occur as a direct cause of the project. The Uniform Act, as described in Section 1, mandates relocation services and payments for eligible residents, businesses, and non-profit organizations as well as residential and business tenants displaced as a direct result of projects undertaken by a federal agency or with federal financial assistance. The Uniform Act provides equitable land acquisition policies and treatment of persons displaced from their homes and businesses. Owners of private property possess federal constitutional guarantees that their property will not be taken or damaged for public use without just compensation, which is measured by fair market value as determined by the affected property owners and the court.

The Interstate Commerce Commission Termination Act of 1995 created the Surface Transportation Board (STB) and granted the STB exclusive jurisdiction over the regulation of railroad transportation. Pursuant to the Act, approval must be sought from the STB if any form of state or local action, including construction, operation, and/or acquisition, could be used to deny a railroad the ability to conduct some or part of its operations and/or pose undue safety hazards(49 USC 10101 et. seq.).

3.1.2 State and Local

The Illinois Metropolitan Transit Authority Act created the CTA and grants it authority to acquire property by condemnation subject to, and exercised in accordance with, the Illinois Eminent Domain Act. The Illinois Eminent Domain Act sets forth the procedure for acquiring property through condemnation, as well as reimbursements to displaced persons for relocation costs. Relocation costs must be determined methodically as set forth in the Uniform Act described in Section 3.1.1. Similar to the federal regulations, the Illinois state constitution provides owners of private property guarantees regarding takes, damages and just compensation.

3.2 Impact Analysis Thresholds

The FTA's guidance for implementing NEPA states that impacts must be disclosed if land is being acquired for a project and businesses or individuals will be displaced. The FTA's NEPA implementation guidance requires that the characteristics and needs of persons and businesses to be displaced be considered, the available inventory of comparable replacement dwellings and sites be described, and potential relocation problems be discussed. In addition, implementing the

policies and procedures required by the Uniform Act and the Illinois Eminent Doman Act (described in Sections 3.1.1 and 3. 1.2) will mitigate displacements that must occur.

As noted in Section 1, the following criteria for determining adverse impacts were used for the purposes of this analysis. These criteria are consistent with FTA and Illinois guidance and the urbanized setting of the project area. Displacements and relocation would be considered adverse if they would have one or more of the following results:

- Displacement of substantial numbers of existing housing units (a concentrated number of units in one neighborhood), particularly affordable housing, and/or employer units, necessitating the construction of replacement units elsewhere. This analysis uses the definition of affordable housing provided by the Illinois Housing Development Authority for the Chicago Metro area, which is based on data provided by the U.S. Department of Housing and Urban Development.

- Displacement of a substantial number of residents or employees, necessitating construction of replacement housing or employment locations elsewhere.

3.3 Area of Potential Impact

For purposes of evaluating the potential displacements and relocation impacts, the area of potential impact was limited to within and directly adjacent to the future ROW needed for each project alternative evaluated as part of the EIS. The Appendix contains figures for parcels affected by the future ROW or permanent envelope of the RLE Project.

3.4 Methods

Existing ROW is determined in coordination with CTA, Chicago Department of Transportation and Illinois Department of Transportation (IDOT). Conceptual engineering drawings prepared for each alternative were used to identify affected parcels and building footprints. In order to ensure a conservative analysis for this EIS, each alternative's displacement impacts were analyzed based on a permanent envelope for the alternative's maximum ROW. Displacement impacts associated with specific project components will be confirmed during the project design process and could be fewer.

Counts and locations of residential and business displacements were prepared using CMAP geographic information system parcel data, Cook County assessor data, aerial photography, and Internet desktop surveys via Google Earth, and field verified for any apparent conflicting information. For instance, CMAP parcel data indicated multi-family land uses but Cook County parcel data simply indicated residential uses without a single-family or multi-family designation. A review of Google Earth aerials and street views showed that CMAP's "multi-family land uses" contain what look like single-family homes. The number of mailboxes at the front door observed during field surveys, however, indicated that some single-family homes had been converted to multi-family homes. U.S. Census data was used for housing and population characteristics. The smallest available Census geography was used for each data component.

The majority of the area surrounding the RLE corridor is urbanized and developed, so there would be multiple displacements as a result of the project. Each alternative was analyzed for potential impacts on parcels resulting from operation. The following definitions were used to define impacts:

- **Easement** - The right to use public property (e.g., roadways) for the permanent envelope would be required. An easement can involve a general or specific portion of the property and can be either at the surface level, or above or beneath the property. Permanent easements would occur for the alignment within the median of public roadways or over public roadways.

- **Affected Parcel** - A partial or a full parcel of private or public property would be required to accommodate the project. This impact would occur if, for example, a portion of a commercial parking lot fronting the alignment is required, but not the adjacent commercial building near the alignment. The result would be a land acquisition, but not a building displacement. If the primary structure were within the ROW, land acquisition and a building acquisition would result. Essentially, building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure (see description below).

- **Building displacement** - A structure would be within the future ROW. This impact would occur when any primary (e.g., house) or secondary (e.g., garage) structure is required to accommodate the project. On parcels where primary structures would not be acquired and secondary buildings would be affected, only secondary structures would be acquired.

Land use characteristics of affected parcels were consolidated into the following categories: vacant, single-family residential, multi-family residential, mixed-use, commercial, industrial, parks and open space, institutional (school or church), transportation (railroads), and utility (Metropolitan Water Reclamation District [MWRD]), and public. Public uses include any land or buildings owned by the City of Chicago.

Other current and reasonably foreseeable projects and future actions identified as part of the Indirect and Cumulative Impacts analysis were reviewed to determine whether there would be any potential impacts associated with displacements.

For potential displacements identified, the analysis used local real estate information to determine specific replacement or relocation opportunities for affected residential or commercial structures and a site reconnaissance.

Site reconnaissance of the project area and field observation of the parcels potentially acquired fully or partially was undertaken to confirm mapped/secondary source data. Impacts of potential acquisitions on the remainder of the property, on nearby properties, and neighborhoods were evaluated and general relocation opportunities, such as the availability of nearby vacant properties, were identified to assess the mitigation potential. In addition, the impact analyses contained in the *Historical and Cultural Resources Technical Memorandum* and *Land Use and Economic Development Technical Memorandum* were reviewed.

3.4.1 Residential Relocation Impacts

The potential social and financial impacts related to changes in living environments caused by residential relocation impacts were evaluated.

For each residential structure, the estimated number of persons to be displaced was determined by multiplying the estimated number of displaced residential dwelling units in each community area along the alignment by the average number of persons per household in that parcel based on the 2010 U.S. Census data.

Local real estate data, Cook County Assessor data, and U.S. Census data were collected and reviewed to determine the following for local residential household relocations:

- Amount of safe, decent, and sanitary replacement housing or building sites within existing neighborhoods
- Household types (elderly residents, low-income residents, ethnic or racial minority residents, non-English speaking residents)

3.4.2 Business or Community Facility Relocation Impacts

The impact assessment concerning business and community facility relocation used information provided by the City of Chicago and Cook County to determine relocation impacts. These data were used to identify businesses and community facilities, such as hospitals, schools, churches, cemeteries, parks, shopping centers, as well as zoning and land use designations. Data from CMAP and the U.S. Census were used in order to determine the basic economic condition and travel patterns within the project area.

The estimated number of employees displaced was calculated by multiplying affected non-residential building square footage by appropriate employment factors for commercial, office, and industrial development. The name and type of business to be displaced were determined by Cook County parcel data, City of Chicago land use designations, and field research.

Identified business and community facilities were evaluated based on the potential range of impacts for each alternative. The following community components were assessed during the determination of impact:

- Unique or one-of-a-kind community facility that is specific to its location
- Unique or one-of-a-kind business that is specific to its location
- Changes in access (improvements and/or reductions)
- Loss of public lands
- Minority-Owned Business designation

Section 4
Affected Environment

For purposes of this evaluation of property displacements and relocation of existing uses, the affected environment is limited to the areas within and directly adjacent to an alternative's ROW. Figure 4-1 shows the alternatives, the City of Chicago's neighborhoods, and the eastern portion of the Village of Calumet Park. Properties that would be directly affected by the build alternatives are in the following neighborhoods: Washington Heights, Morgan Park, Roseland, West Pullman, and Riverdale. The following subsections describe the existing uses adjacent to the ROW of each build alternative.

4.1 Bus Rapid Transit Alternative

The BRT Alternative is a 5.5-mile, limited-stop, enhanced BRT route that would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue via 95th Street, Michigan Avenue, 127th Street, Indiana Avenue, and 130th Street. The alignment would cross the Roseland, West Pullman, and Riverdale neighborhoods. Land acquisitions would be required for park & ride lots and parking garages; therefore, the affected environment is limited to properties displaced by these parking facilities and adjacent properties. Appendix A contains maps of the BRT Alternative's alignment and permanent envelope, which includes the ROW for the park & ride lots and parking garages.

The 103rd Street stop would have a park & ride lot along Michigan Avenue between 102nd Street and 103rd Street. The park & ride would be mostly on vacant land, but would displace one single-family residence. The adjacent properties along Indiana Avenue contain single-family residential uses. The adjacent properties along Michigan Avenue contain urban mixed-use, multi-family residential, and vacant land.

The 111th Street stop would have a park & ride lot within the block bordered by Michigan Avenue, 111th Place, State Street, and 112th Street. The park & ride would be on vacant land behind the urban mixed uses on Michigan Avenue. There are limited urban mixed uses along 111th Place and 112th Street. The New Testament Baptist Church is the only adjacent institutional use.

The Kensington Avenue stop would have a multi-level parking garage along Michigan Avenue between Kensington Avenue and 116th Street. The parking garage would be located on land that is vacant except for one vacant industrial building. The adjacent properties along Kensington Avenue and 116th Street contain single-family residential uses. The UPRR track also borders the location of the parking garage.

The 130th Street stop would have a multi-level parking garage on the north side of 130th Street near Eberhart Avenue. The parking garage would be located on property of the Calumet Water Reclamation Plant, owned by the MWRD.

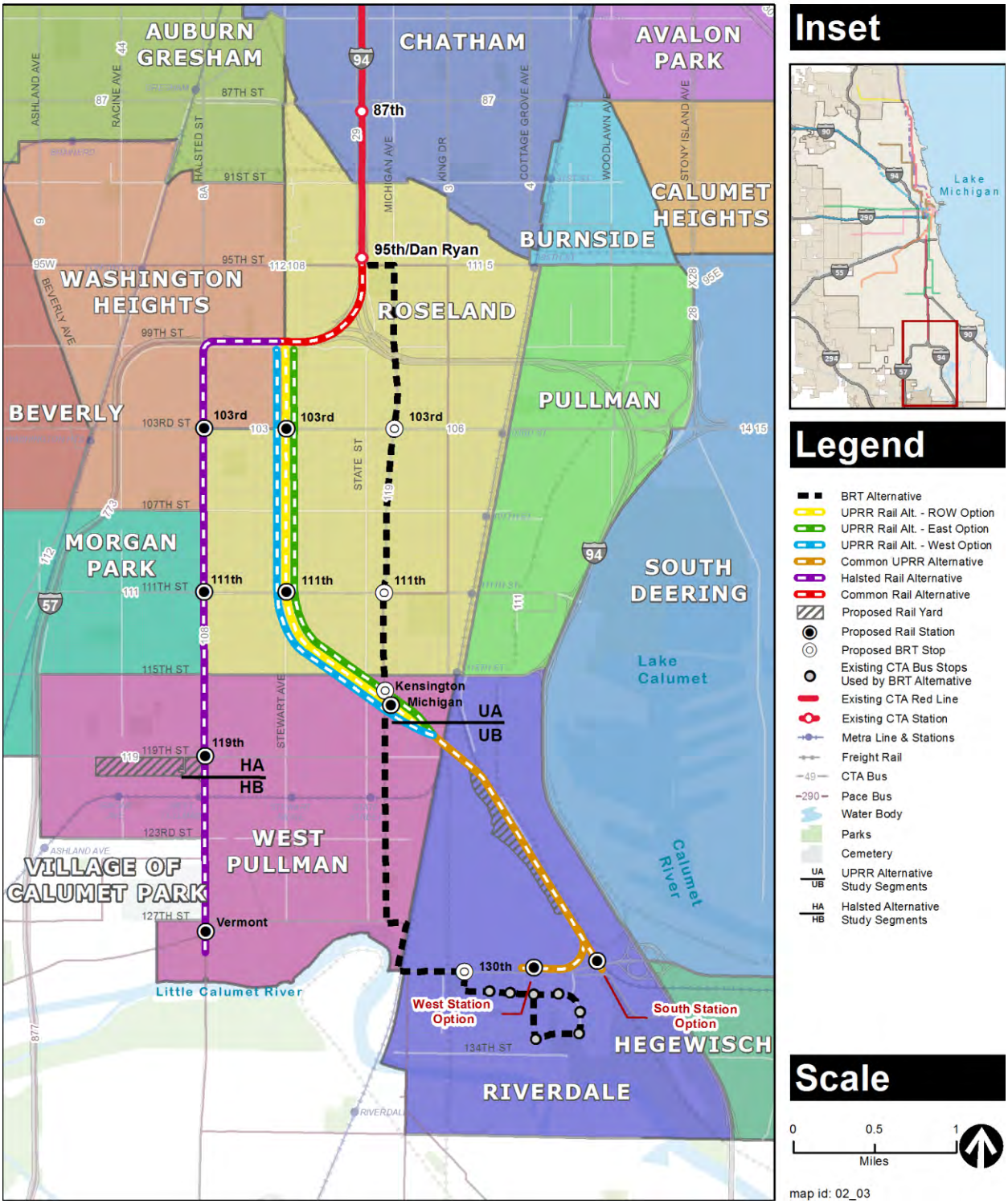

Figure 4-1: Red Line Extension Alternatives and Neighborhoods Map

4.2 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The alignment of the UPRR Rail Alternative ROW Option (ROW Option) would run from CTA's 95th Street Terminal along the I-94 and I-57 medians, transition to the centerline of the UPRR corridor, and run to the 130th Street station. The ROW Option corridor would be within the previous ROW of the UPRR, and would cross the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods. Land acquisitions would be required for construction of park & ride lots, parking garages, and electric substations. The following subsections briefly describe the affected environment in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street). Appendix B contains maps of the ROW Option permanent envelope, which would include the ROW for the structural alignment, stations, park & ride lots, parking garages, and electric substations.

4.2.1 Segment UA

95th Street to 99th Street

The north end of the ROW Option alignment would be at the 95th Street Terminal. The alignment would be within the median of I-94 and I-57, which are considered transportation uses. Then it would transition from the I-57 median to the UPRR corridor at approximately 99th Street.

99th Street to 103rd Street

The property adjacent to the west side of the ROW Option alignment is open space (Fernwood Parkway). The adjacent properties along the east side include open space (Wendell Smith Park) and single-family residential uses. The alignment would cross the northwest corner of Wendell Smith Park. Two park & ride lots would be located along 103rd Street on vacant land and on a vacant industrial property, which are adjacent to single-family residential uses and urban mixed uses.

103rd Street to 111th Street

The properties adjacent to the west side of the ROW Option alignment contain urban mixed uses, industrial uses, and vacant land. An electric substation would be located on vacant land at 105th Street on the west side, with adjacent single-family residences separated by an alley. The adjacent properties along the east side include open space (Block Park), utility (Roseland Pump House), single-family residential uses, industrial uses, and vacant land. Two park & ride lots would be located along 111th Street on vacant land, adjacent to institutional uses and single-family residential uses.

111th Street to 115th Street

The properties adjacent to the west side of the ROW Option alignment contain urban mixed uses, industrial uses, single-family residential uses, and vacant land. The adjacent properties along the east side contain single-family residential uses, urban mixed uses, and vacant land

115th Street to 117th Street

An electric substation would be located on vacant land at the end of Lafayette Avenue, adjacent to single-family residences. For the Michigan Avenue station, a multi-level parking garage would be located along 116th Street and State Street on single-family residential properties. A park & ride lot would be located along Michigan Avenue between Kensington Avenue and 116th Street on mostly

vacant land, except for one vacant industrial building. The adjacent properties contain single-family residences.

4.2.2 Segment UB

117th Street to 130th Street

The ROW Option's alignment would be located on industrial, transportation, and utility properties from 117th Street to the 130th Street station. For the 130th Street station (South Option), a multi-level parking garage and adjacent electric substation would be located on the MWRD Calumet Water Reclamation Plant property north of 130th Place. For the 130th Street station (West Option), a multi-level parking garage and a park & ride lot would be located on MWRD property along 130th Street across from the Altgeld Gardens public housing. An electric substation would be located on MWRD property north of 130th Place.

4.2.3 120th Street Yard and Shop

A new train maintenance yard and shop for CTA's Red Line would be located near 120th Street and Cottage Grove Avenue on vacant land and industrial property. An electric substation would be located in the same area. Adjacent properties contain vacant land, industrial, transportation, and utility uses.

4.3 Union Pacific Railroad Alternative - East Option

The alignment of the UPRR Alternative East Option (East Option) would run from CTA's 95th Street Terminal along the I-94 and I-57 medians, transition to the east side of the UPRR corridor, and run south to the 130th Street station. The alignment would cross the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods. Because the alignment would be east of the existing UPRR ROW within an urbanized area, considerable land would be required for ROW acquisitions, park & ride lots, parking garages, and electric substations. The following subsections briefly describe the affected environment in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street) of the East Option. Appendix C contains maps of the East Option permanent envelope, which would include the ROW for the structural alignment, stations, park & ride lots, parking garages, and electric substations.

4.3.1 Segment UA

95th Street to 99th Street

The alignment would start at the 95th Street Terminal and would run within the median of I-94 and I-57, which are considered transportation uses. The alignment would transition from the I-57 median to the East Option corridor at approximately 99th Street.

99th Street to 103rd Street

The alignment would affect an open space (Wendell Smith Park) and several single-family residential properties per street. Two park & ride lots would be located along 103rd Street on vacant land and a vacant industrial property; these vacant lands are adjacent to single-family residential uses and urban mixed uses.

103rd Street to 111th Street

The alignment would affect an open space (Block Park), alter course to run adjacent to a utility (Roseland Pump House) along UPRR property, and then affect property with single-family residential uses, industrial uses, and vacant land. An electric substation would be on vacant land at 105th Street on the western perimeter of the UPRR corridor, with adjacent single-family residences separated by an alley. A park & ride lot would be located along 111th Street on vacant land, adjacent to an institutional use and vacant land. Another park & ride would be located on 110th Place on vacant land, surrounded by single-family residential uses.

111th Street to 115th Street

The alignment would affect several single-family residential properties per street, as well as urban mixed-use parcels and vacant land.

115th Street to 117th Street

The alignment would affect properties with primarily single-family residential uses and vacant land. An electric substation would be located at the end of Lafayette Avenue on vacant land adjacent to single-family properties. The Michigan Avenue station would affect primarily vacant land. Adjacent to the station, a multi-level parking garage would be located along 116th Street and State Street on single-family residential properties. A park & ride lot would be located along Michigan Avenue between Kensington Avenue and 116th Street on land that is mostly vacant except for one vacant industrial building. The adjacent properties contain single-family residences.

4.3.2 Segment UB

117th Street to 130th Street

The East Option alignment varies slightly from the ROW Option alignment between 117th Street and the Canadian National (CN) railroad, and would affect the same area as the ROW Option from the CN railroad to 130th Street. See the description in Section 4.2.2.

4.3.3 120th Street Yard and Shop

The affected area would be the same as described in Section 4.2.3 for the ROW Option.

4.4 Union Pacific Railroad Alternative - West Option

The alignment of the UPRR Alternative West Option (West Option) would run from CTA's 95th Street Terminal along the I-94 and I-57 medians, transition to the west side of the UPRR corridor, and run to the 130th Street station. The alignment would cross the Washington Heights, Roseland, West Pullman, and Riverdale neighborhoods. Because this alignment would be west of the UPRR ROW within an urbanized area, considerable land acquisitions would be required for ROW, park & ride lots, parking garages, and electric substations. The following subsections briefly describe the affected environment in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street). Appendix D contains maps of the West Option permanent envelope, which would include the ROW for the structural alignment, stations, park & ride lots, parking garages, and electric substations.

4.4.1 Segment UA

95th Street to 99th Street

The alignment would start at the 95th Street Terminal and would be within the median of I-94 and I-57, which is considered a transportation use. The alignment would transition from the I-57 median to the West Option corridor at approximately 99th Street.

99th Street to 103rd Street

The alignment would be within a linear open space (Fernwood Parkway) that is directly across the street from single-family residences facing the open space. The 103rd Street station would be located on open space, a vacant industrial property, and vacant land, and a park & ride lot would be located on 103rd Place on vacant land adjacent to the station. These facilities would be adjacent to single-family residential properties.

103rd Street to 111th Street

The alignment would affect primarily urban mixed uses and vacant properties, as well as one active industrial property at 109th Street. The adjacent properties contain the back yard garages of single-family residences, which are separated by an alley. An electric substation would be located on vacant land at 105th Street on the eastern side of the UPRR corridor, with adjacent single-family residences. A park & ride lot would be located along 111th Street on vacant land, and adjacent land uses are institutional, single-family residences, and vacant land.

111th Street to 115th Street

The alignment would affect several properties with urban mixed uses, as well as vacant land and several single-family residential properties. The adjacent properties are primarily single-family uses.

115th Street to 117th Street

The alignment would affect properties with limited single-family residential and industrial uses and vacant land. An electric substation would be located at the end of Lafayette Avenue on vacant land and single-family residential properties with adjacent single-family uses. The Michigan Avenue station would be located on single-family residential properties and vacant land. Adjacent to the station, a multi-level parking garage would be located along 116th Street and State Street on single-family residential properties.

4.4.2 Segment UB

117th Street to 130th Street

The alignment would cross over the UPRR ROW from west to east between Indiana and Calumet Avenues. The adjacent properties contain single-family residences. The West Option alignment varies slightly from the ROW Option alignment between 117th Street and the CN railroad, and would affect the same area as the ROW Option from the CN railroad to 130th Street. See the description in Section 4.2.2.

4.4.3 120th Street Yard and Shop

The affected area would be the same as that described in Section 4.2.3.

4.5 Halsted Rail Alternative

The north end of the alignment of the Halsted Rail Alternative would be at CTA's 95th Street Terminal. The alignment would run within interstate ROW and the median of Halsted Street, a north-south arterial about 1 mile west of I-94 Dan Ryan Expressway, and the 95th Street Terminal. The alignment would cross the Washington Heights, Roseland, Morgan Park, and West Pullman neighborhoods in Chicago, and the Village of Calumet Park. The alignment would be within public ROW of interstate highways and a commercial arterial with urban mixed uses and institutional uses. Land acquisitions would be required for park & ride lots, parking garages, and electric substations; therefore, the affected environment would be limited to these facilities and adjacent properties. The following subsections briefly describe the affected environment in Segment HA (95th Street Terminal to 120th and Halsted Streets) and Segment HB (120th to 129th Street on Halsted Street) of the Halsted Rail Alternative. Appendix F contains maps of the Halsted Rail Alternative permanent envelope, which would include the ROW for the structural alignment, stations, park & ride lots, parking garages, and electric substations.

4.5.1 Segment HA

95th Street to 99th Street

The north end of the alignment would be at the 95th Street Terminal. The alignment would be within the median of I-94 and I-57, which are considered transportation uses. The alignment would transition from the I-57 median to the Halsted corridor at approximately 99th Street.

99th Street to 103rd Street

As part of the transition from I-57 to Halsted Street, the alignment would affect several urban mixed-use properties and a single-family residence. An electric substation would be located at 101st Street on vacant properties, adjacent to a church and single-family residences. A park & ride lot would be located on several urban mixed-use properties at 103rd and Halsted Streets, a location that is adjacent to urban mixed uses and single-family residences.

103rd Street to 111th Street

An electric substation would be located at 110th and Halsted Streets on vacant land, adjacent to urban mixed uses and single-family residences. A park & ride lot would be located on urban mixed-use properties at 111th and Halsted Streets, a location that is adjacent to urban mixed uses and single-family residences.

111th Street to 120th Street

An electric substation would be located at 118th and Halsted Streets on vacant land, adjacent to vacant land and single-family residences. A large park & ride lot would be located at 119th and Halsted Streets on properties containing several urban mixed uses and limited industrial uses.

4.5.2 Segment HB

120th Street to 129th Street

An electric substation would be located at 126th and Halsted Streets on urban mixed-use property, adjacent to single-family residences. A multi-level parking garage would be located on urban mixed-use and single-family residential properties bordered by Vermont Avenue and

Halsted, Green, and 128th Streets. The adjacent properties are urban mixed uses and single-family residences. A park & ride lot would be located on the southeast corner of Vermont and Halsted Streets on urban mixed uses, adjacent to single-family residences.

4.5.3 119th Street Yard and Shop

A new train maintenance yard and shop for CTA's Red Line would be located at 119th and Peoria Streets, within the West Pullman Industrial Corridor. The majority of the land area contains vacant and cleared industrial properties, except for a limited amount of urban mixed uses.

Section 5
Impacts and Mitigations

The Uniform Act, as described in Sections 1 and 3, must be complied with if displacements occur as a direct cause of the project. Owners of private property possess federal constitutional guarantees that their property will not be taken or damaged for public use without just compensation, which is measured by fair market value as determined by appraisers for both the CTA and the property owner, and ultimately the court if the parties cannot agree. The Uniform Act also requires that relocation services and/or payments be made to residential and business owners and to residential and business tenants.

For purposes of evaluating the potential displacements and relocation impacts, the area of potential impact was limited to within and directly adjacent to the future ROW of each alternative evaluated as part of the EIS. Impacts on many of the parcels and buildings identified in this section might be avoidable or reducible through design. The data and assumptions upon which this analysis is based represent the level of detail permitted by the conceptual design of the RLE alternatives, and reflect an approximate number of displacements and relocations. Displacement findings will be refined and confirmed during final design.

The subsections below contain maps and tables with displacement data for each affected neighborhood. The total approximate number of displacements includes parcels and buildings on land that is needed for the permanent operation of each alternative. Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation impacts associated solely with the construction phase. Easements would be needed for the proposed permanent envelope of any of the rail alternatives, and would be negotiated with IDOT, the City of Chicago, and other political subdivisions. The number of parcels that would be affected by easements is highlighted in the introduction for each rail alternative in this section.

5.1 No Build Alternative

The No Build Alternative is an alternative used for comparative purposes to assess the benefits and impacts of the build alternatives. There would be no displacements or relocations associated with any portion of the No Build Alternative.

5.2 Bus Rapid Transit Alternative

The BRT Alternative is meant to identify lower cost improvements and ROW requirements than the other build alternatives. The BRT Alternative would only affect properties needed for park & ride lots and parking garages near bus stop locations. The BRT Alternative would require fewer permanent acquisitions and displacements than the other build alternatives.

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

As shown in Table 5-1, the BRT Alternative would affect 52 parcels and displace 3 buildings. With just compensation and relocation assistance per the Uniform Act, the impacts would be

considered not substantially adverse because of available vacant land in the project area. In addition, the availability of similar real estate within the project area would facilitate relocation. Figures 5-1 and 5-2 highlight the concentration of affected parcels in the project area, while more detailed maps of affected parcels and building displacements are within Appendix A.

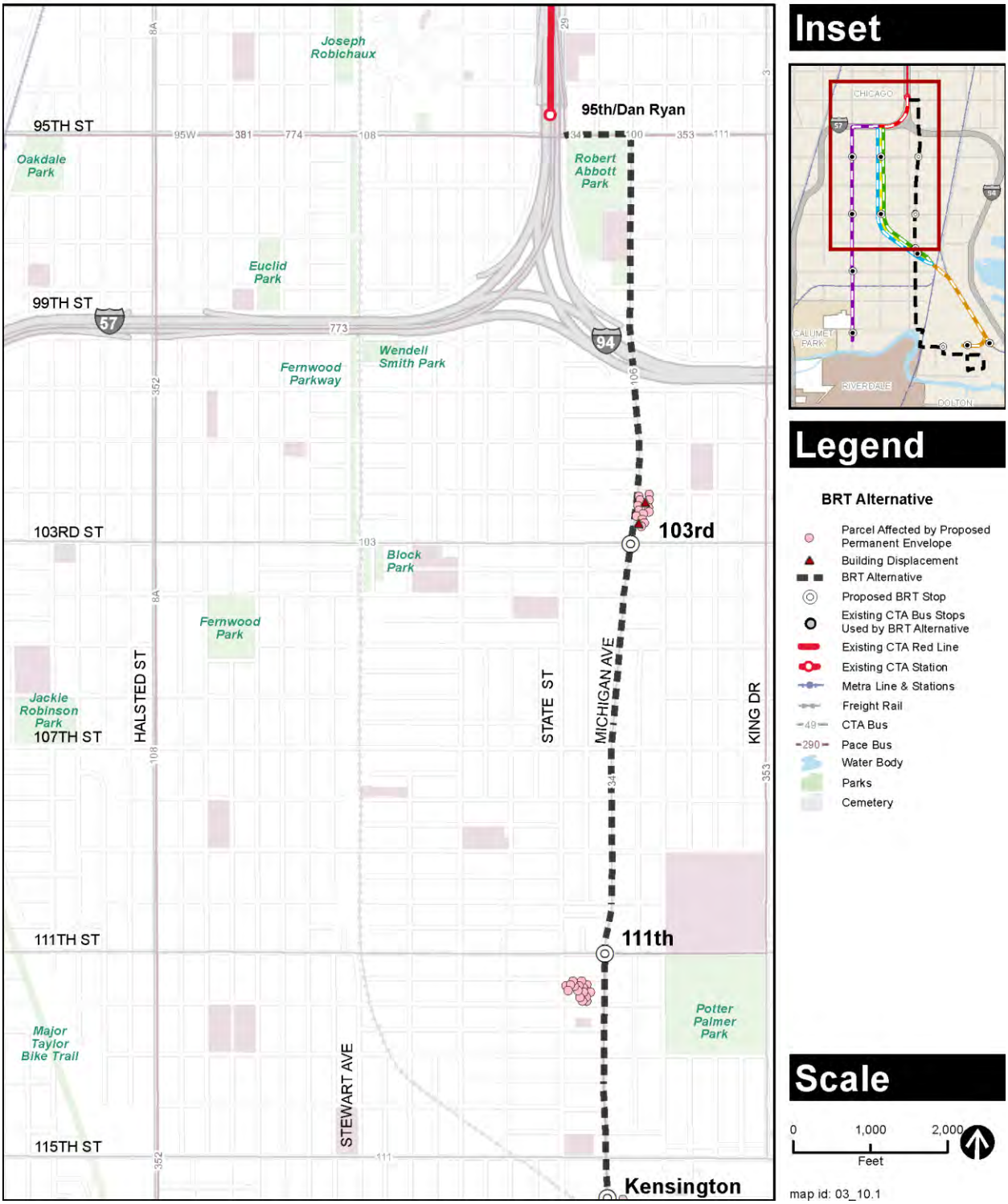

Figure 5-1: Bus Rapid Transit Alternative - Displacements

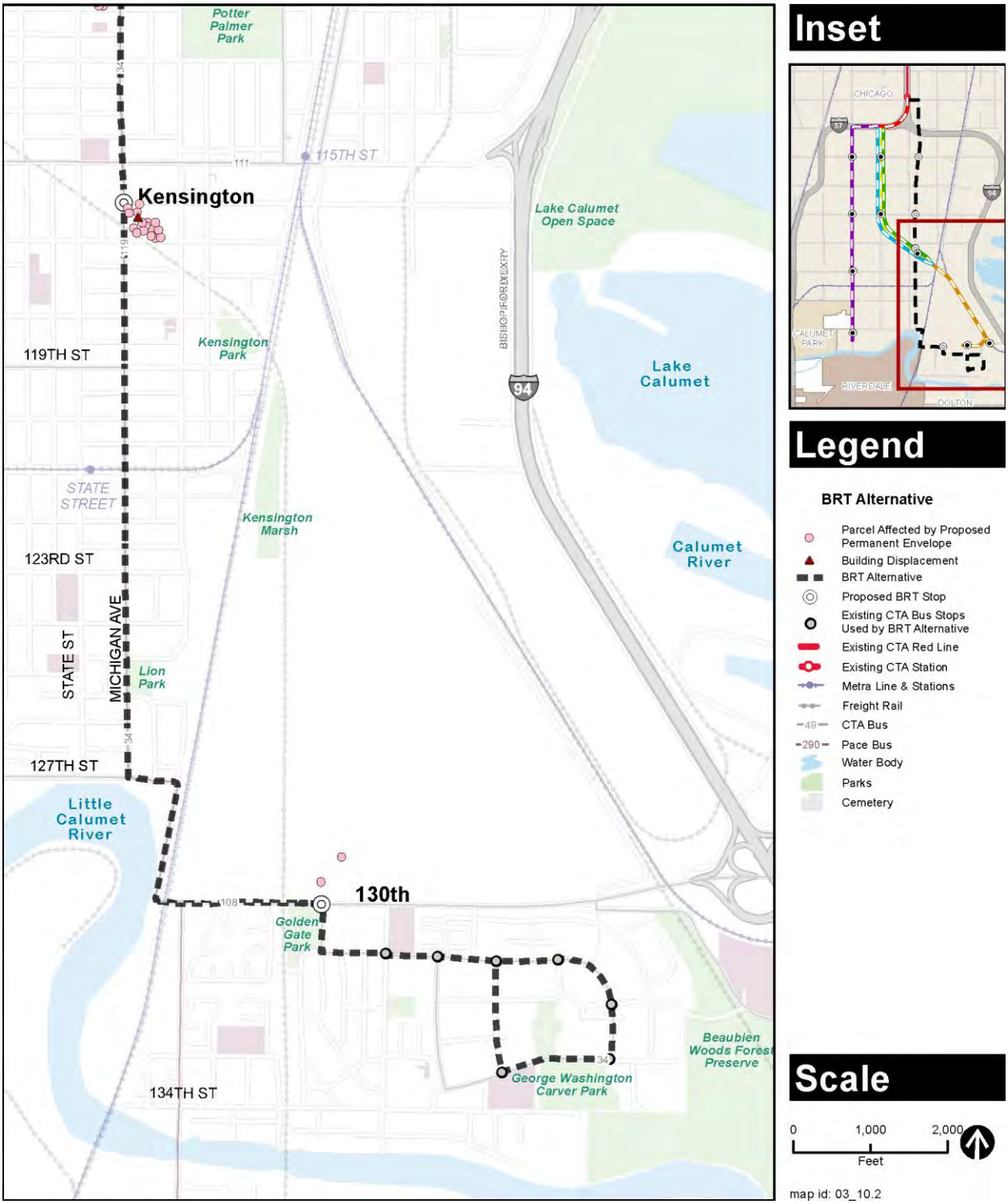

Figure 5-2: Bus Rapid Transit Alternative - Displacements

The 103rd Street stop would have a park & ride lot on Michigan Avenue between 102nd Street and 103rd Street. This park & ride lot would affect 15 parcels and displace 1 single-family residence and 1 commercial cell tower. The 111th Street stop would have a park & ride lot within the block bordered by Michigan Avenue, 111th Place, State Street, and 112th Street. This park & ride lot would affect 16 parcels and 1 institutional parcel. Both park & ride lots would be within Roseland.

The Kensington Avenue stop would have a multi-level parking garage with ground-floor retail and community facilities at Kensington and Michigan Avenues. This parking garage would affect 18 parcels and displace 1 vacant industrial building within West Pullman.

The 130th Street stop would have a multi-level parking garage on the north side of 130th Street and Eberhart Avenue. This parking garage would affect two utility parcels within Riverdale.

Table 5-1: Bus Rapid Transit Alternative - Permanent Displacements*

Land Use Type	Affected Parcels	Building Displacements
Vacant	18	
Single-Family Residential	1	1
Commercial	2	1
Institutional (Place of Worship)	1	
Industrial	3	1
Utility (MWRD)	2	
Transportation (Railroad)	1	
Public (City of Chicago)**	24	
Totals	**52**	**3**

Notes: MWRD = Metropolitan Water Reclamation District
*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

Because all construction activities would occur within the public ROW for bus stop facilities or on land acquired for the parking facilities, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

5.2.3 Cumulative Impacts and Mitigations - Bus Rapid Transit Alternative

No other projects identified in the *Cumulative Impacts Technical Memorandum* would cause displacements within the area of potential impact.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

For this analysis, it was assumed that the UPRR trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE implementation and that the current railroad ROW would be publicly owned after freight operations have moved to a new alignment. The ROW Option would affect properties needed for park & ride lots, parking garages, electric substations, and maintenance yard. The ROW Option would have more land acquisitions

and building displacements than the BRT Alternative, but less than the other UPRR build alternatives. The ROW Option and Halsted Rail Alternative would have a comparable number of affected properties.

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

As shown in Table 5-2, the ROW Option would require 133 parcel acquisitions and 24 building displacements. With just compensation and relocation assistance per the Uniform Act, the impacts would be considered not substantially adverse because of the general availability of vacant land in the project area and the beneficial impacts of the project, including new rail transit with four stations, greater accessibility to the region, improved access to jobs, and new development opportunities in the project area. In addition, the availability of similar real estate within the project area would facilitate relocation. A total of 22 parcel easement agreements via negotiations with IDOT would be required for the aerial structure of the RLE Project. Figures 5-3 and 5-4 highlight the affected parcels on a project area map, while detailed parcel maps are within Appendix B. The following subsections describe the impacts in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street), and from the 120th Street yard and shop.

Table 5-2: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements*

Land Use Type	Affected Parcels	Building Displacements
Vacant	13	
Single-Family Residential	18	15
Multi-Family Residential	1	1
Commercial	3	2
Mixed-Use (Retail/Office/Residential)	1	1
Institutional (Place of Worship)	1	
Industrial	11	4
Utility (MWRD)	15	
Transportation (CN/Metra)	3	
Transportation (IHB)	6	1
Transportation (NICTD/CSS & SBRR)	2	
Public (City of Chicago)**	59	
Totals	**133**	**24**

Notes: MWRD = Metropolitan Water Reclamation District, CN = Canadian National, IHB = Indiana Harbor Belt, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District's Chicago South Shore & South Bend Railroad
*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
** For this analysis, it was assumed that the UPRR trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE implementation and that the current railroad ROW would be publicly owned after freight operations have moved to a new alignment. The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

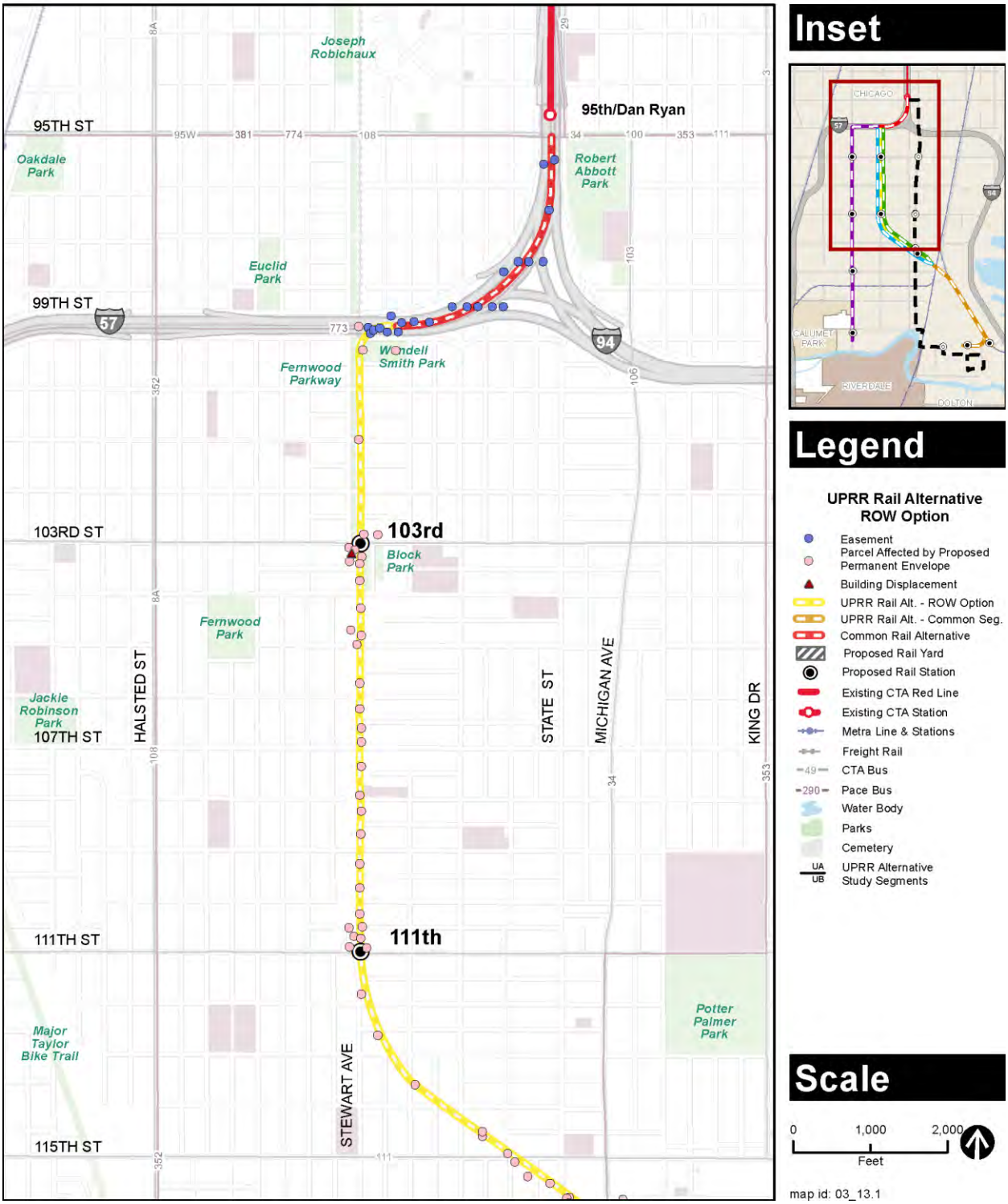

Figure 5-3: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Displacements

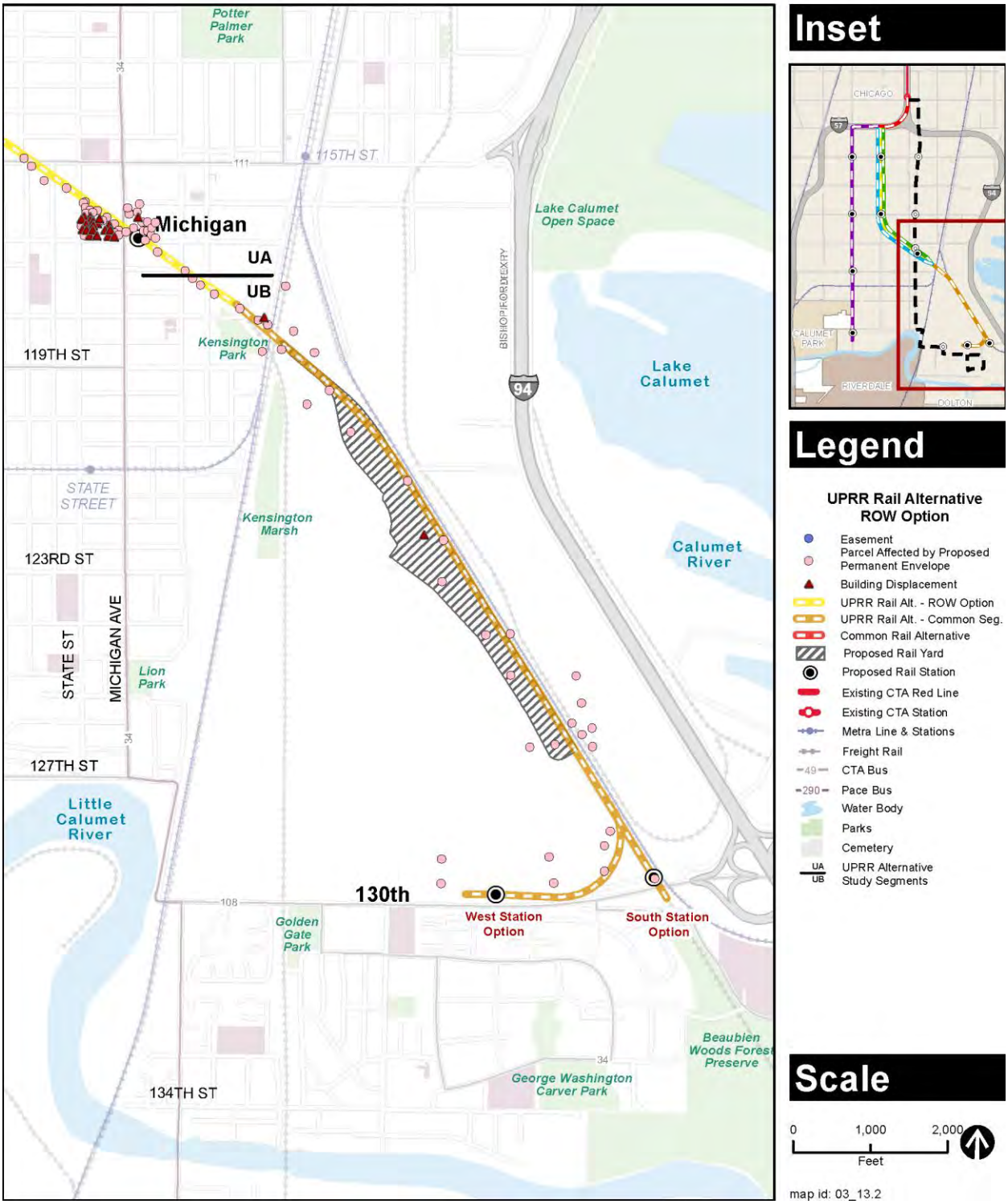

Figure 5-4: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Displacements

5.3.1.1 Segment UA

95th Street to 99th Street

The alignment would be within the median of I-94 and I-57, which are interstate highways under the jurisdiction of IDOT and the Federal Highway Administration (FHWA). A total of 22 parcel easement agreements would be required for the aerial structure of the RLE Project.

99th Street to 103rd Street Station

As the part of transition from the I-57 median to the ROW Option corridor, the alignment would cross the western portion of Wendell Smith Park (see *Parklands and Community Facilities Technical Memorandum*). The alignment would be along the centerline of the UPRR corridor, which would be publicly owned. Two park & ride lots would be on 103rd Street adjacent to the station. As a result, the permanent envelope would affect 12 parcels and displace 1 single-family residence and 1 vacant commercial building within the Roseland neighborhood.

Table 5-3: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements (99th Street to 103rd Street Station)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	2	
Single-Family Residential	1	1
Commercial	1	1
Public (City of Chicago)**	8	
Totals	**12**	**2**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

103rd Street to 111th Street Station

The alignment would be along the centerline of the UPRR corridor, which would be publicly owned. An electric substation at 105th Street would affect one vacant land parcel on the western perimeter of the UPRR corridor. Two park & ride lots would be on 111th Street adjacent to the station: one on vacant land east of the alignment, and one on vacant land west of the alignment. As a result, the permanent envelope would affect 21 parcels within the Roseland neighborhood.

Table 5-4: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements (103rd Street to 111th Street Station)

Land Use Type	Affected Parcels	Building Displacements
Vacant	1	
Institutional (Place of Worship)	1	
Industrial	2	
Public (City of Chicago)*	17	
Totals	**21**	

*The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

111th Street to 115th Street

The alignment would be along the centerline of the UPRR corridor, which would be publicly owned. As a result, the permanent envelope would affect seven city-owned parcels.

115th Street to 117th Street

The alignment would be along the centerline of the UPRR corridor, which would be publicly owned. An electric substation would be located on vacant land at the end of Lafayette Avenue. Adjacent to the Michigan Avenue station, a multi-level parking garage along 116th Street and State Street would require displacement of 14 single-family residences, as well as 2 businesses. A park & ride lot would be located along Michigan Avenue between Kensington Avenue and 116th Street on mostly vacant land. As a result, the permanent envelope would affect 56 parcels and displace 14 single-family residences, 1 multi-family residence, 1 commercial building, 1 mixed-use building, and 1 vacant industrial building within West Pullman.

Table 5-5: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements* (115th to 117th Street)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	8	
Single-Family Residential	17	14
Multi-Family Residential	1	1
Commercial	2	1
Mixed-Use (Retail/Office/Residential)	1	1
Industrial	3	1
Public (City of Chicago)**	24	
Totals	**56**	**18**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

5.3.1.2 Segment UB

117th Street to Front Avenue

Between 117th Street and Calumet Avenue, the alignment would be along the centerline of the UPRR corridor, which would be publicly owned. From Calumet Avenue to Front Avenue, the alignment would transition to the east and would affect one industrial property. As a result, the permanent envelope would affect six parcels and displace one industrial building within West Pullman.

Table 5-6: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements (117th Street to Front Avenue)*

Land Use Type	Affected Parcels	Building Displacements
Industrial	3	1
Public (City of Chicago)**	3	
Totals	**6**	**1**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

Front Avenue to 130th Street Station

South of Front Avenue, the alignment would cross the existing CN/Metra railroad tracks and other railroad properties. The alignment would then transition from an aerial structure to an at-grade alignment and would remain at grade to the 130th Street station (South Option). The

alignment ROW would run through several industrial properties and utility properties. A multi-level parking garage, adjacent electric substation, and bus and auto access roads would be located on vacant utility properties owned by MWRD. South of Front Avenue, the permanent envelope would affect 16 parcels within the Riverdale neighborhood. (Note: The permanent envelopes for the 130th Street West Station Option and South Station Option would affect the same parcels.).

Table 5-7: Union Pacific Railroad Rail Alternative - Right-of-Way Option - Permanent Displacements (Front Avenue to 130th Street)

Land Use Type	Affected Parcels	Building Displacements
Industrial	2	
Utility (MWRD)	7	
Transportation (CN/Metra)	3	
Transportation (IHB)	4	
Totals	**16**	

Notes: MWRD = Metropolitan Water Reclamation District, CN = Canadian National, IHB = Indiana Harbor Belt

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

5.3.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

No other projects identified in the *Cumulative Impacts Technical Memorandum* would cause displacements within the area of potential impact. If any future displacements would occur as part of a separate project prior to CTA's construction of the RLE Project, CTA would coordinate efforts to minimize cumulative displacement impacts.

5.3.4 120th Street Yard and Shop

5.3.4.1 Permanent Impacts and Mitigations

A new train maintenance yard and shop for CTA's Red Line would be located in the vicinity of 120th Street and Cottage Grove Avenue. An electric substation would be located adjacent to the maintenance yard. These facilities would affect primarily railroad properties and utility properties. As a result, the permanent envelope would affect 15 parcels within the Riverdale neighborhood. There would be three building displacements associated with these facilities. Table 5-8 lists the lists the number of affected parcels and displacements by land use type and the number of buildings displaced.

Table 5-8: 120th Street Yard and Shop - Permanent Displacements*

Land Use Type	Affected Parcels	Building Displacements
Vacant	2	
Industrial	1	2
Utility (MWRD)	8	
Transportation (IHB)	2	1
Transportation (NICTD/CSS & SBRR)	2	
Totals	**15**	**3**

Notes: MWRD = Metropolitan Water Reclamation District, IHB = Indiana Harbor Belt, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.

5.3.4.2 Construction Impacts and Mitigations

Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

5.4 Union Pacific Railroad Rail Alternative - East Option

The corridor alignment of the UPRR Rail Alternative - East Option (East Option) would be primarily east of the existing ROW of the UPRR. The East Option would affect numerous residential, mixed-use, and industrial properties needed for the alignment ROW, park & ride lots, parking garages, electric substations, and maintenance yard. The East Option would have many more land acquisitions and building displacements than the ROW Option, Halsted Rail Alternative, or BRT Alternative. The East Option and West Option would affect a comparable number of properties.

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

As shown in Table 5-9, the East Option would affect 256 parcels and displace 112 buildings. With just compensation and relocation assistance per the Uniform Act, the impact would be considered not substantially adverse because of the general availability of vacant land in the project area and the beneficial impacts of the project including new rail transit with four stations, greater accessibility to the region, improved access to jobs, and new development opportunities in the project area. In addition, the availability of similar real estate within the project area would facilitate relocation. A total of 22 parcel easement agreements via negotiations with IDOT would be required for the aerial structure of the RLE Project, as well as 4 parcel easement agreements through negotiations with the City of Chicago. Figures 5-5 and 5-6 highlight the affected parcels on a project area map, while detailed parcel maps are within Appendix C. The following subsections describe the impacts in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street), and from the 120th Street yard and shop.

Table 5-9: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements*

Land Use Type	Affected Parcels	Building Displacements
Vacant	56	
Single-Family Residential	91	82
Multi-Family Residential	15	13
Commercial	6	3
Institutional (Place of Worship)	1	1
Institutional (School)	2	
Industrial	19	11
Utility (MWRD)	15	
Transportation (Union Pacific Railroad)	18	
Transportation (CN/Metra)	3	
Transportation (IHB)	6	1
Transportation (NICTD/CSS & SBRR)	2	
Public (City of Chicago)**	22	1
Totals	**256**	**112**

Notes: MWRD = Metropolitan Water Reclamation District, CN = Canadian National, IHB = Indiana Harbor Belt, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered “affected parcels” and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

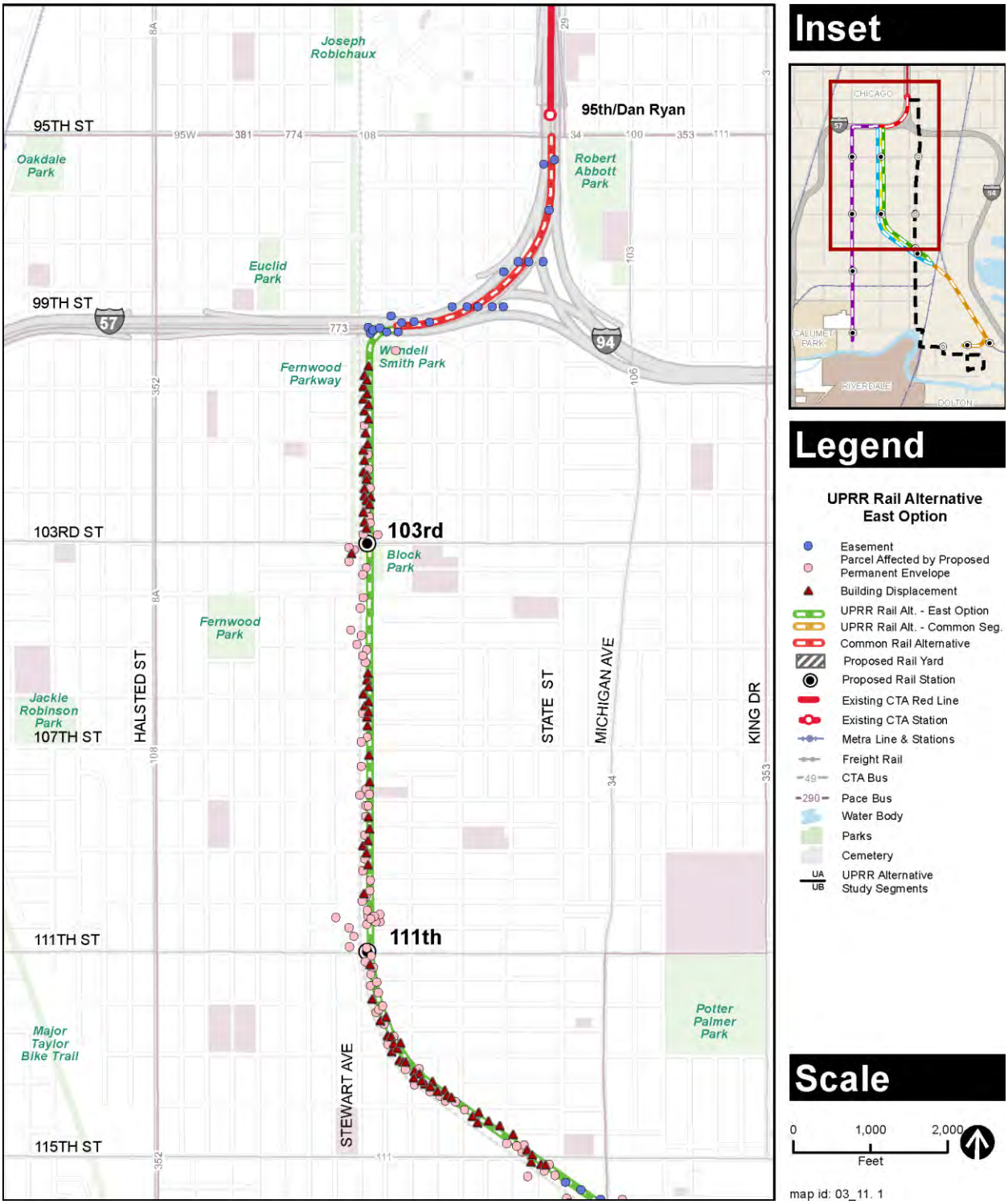

Figure 5-5: Union Pacific Railroad Rail Alternative - East Option - Displacements

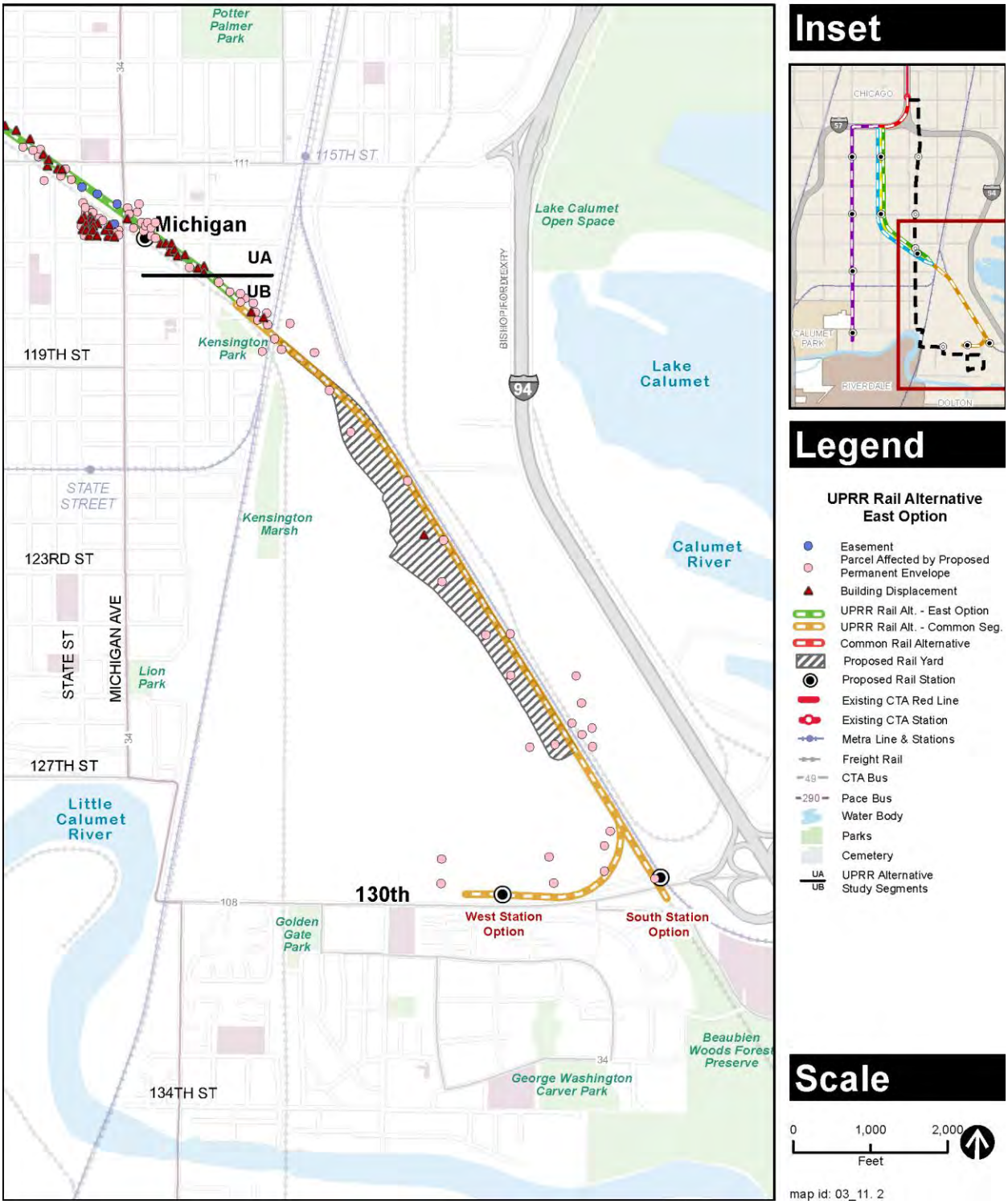

Figure 5-6: Union Pacific Railroad Rail Alternative - East Option - Displacements

5.4.1.1 Segment UA

95th Street to 99th Street

The alignment would be within the medians of I-94 and I-57, which are interstate highways under the jurisdiction of IDOT and the FHWA. A total of 22 parcel easement agreements would be required for the aerial structure of the RLE Project.

99th Street to 103rd Street Station

As the part of the transition from the I-57 median to the East Option corridor, the alignment would cross the western portion of Wendell Smith Park (see *Parklands and Community Facilities Technical Memorandum*). The alignment would run through numerous single-family residential properties per street from 99th Place through 103rd Street, as well as some vacant land. The 103rd Street station would affect this area between 102nd and 103rd Streets. A park & ride lot would be located adjacent to the station on vacant land. Another park & ride lot would be located at 103rd Street on the western perimeter of the UPRR ROW. As a result, the permanent envelope would affect 37 parcels and displace 25 single-family residences and 1 vacant commercial building within the Roseland neighborhood. Table 5-10 lists the number of affected parcels and displacements by land use type and the number of buildings displaced.

Table 5-10: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (99th Street to 103rd Street Station)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	4	
Single-Family Residential	28	25
Commercial	1	1
Industrial	1	
Transportation (Union Pacific Railroad)	1	
Public (City of Chicago)**	2	
Totals	**37**	**26**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

103rd Street to 111th Street Station

The 103rd Street station and alignment would cross Block Park (see *Parklands and Community Facilities Technical Memorandum*). Running south through Block Park, the alignment would alter course and run adjacent to a utility (Roseland Pump House) along UPRR property and then alter course outside the UPRR property. This segment of the alignment would affect five parcels owned by the UPRR. Location of an electric substation at 105th Street would affect one vacant parcel and displace one vacant single-family residence on the western perimeter of the UPRR.

South of 105th Street, the alignment would curve back outside of the UPRR property and would affect vacant land, several single-family residential uses, a few industrial uses, and the open space of an institutional use (Roseland Christian School). The 111th Street station also would affect this area between 110th and 111th Streets. Two park & ride lots would be located adjacent to the 111th Street station: one on vacant land east of the station on 110th Place, and one on vacant land west of the UPRR on 111th Street.

Between 103rd Street and 111th Street, the permanent envelope would affect 57 parcels and displace 14 single-family residences, 1 multi-family residence, and 3 industrial buildings within the Roseland neighborhood. The number of affected parcels and displacements by land use type and the number of buildings displaced is listed in Table 5-11.

Table 5-11: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (103rd Street to 111th Street Station)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	20	
Single-Family Residential	14	14
Multi-Family Residential	1	1
Institutional (School)	2	
Industrial	6	3
Transportation (Union Pacific Railroad)**	8	
Public (City of Chicago)***	6	
Totals	**57**	**18**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
** Union Pacific Railroad right-of-way maps containing hand-written notes indicate a sale of some land area to the City of Chicago in the vicinity of Roseland Pump House; however, Cook County Assessor data indicates that all parcels are owned by the railroad.
***The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

111th Street to 115th Street

The alignment would run through several single-family residential properties per street, as well as a few industrial properties, vacant land, and a place of worship. As a result, the permanent envelope would affect 57 parcels and displace 21 single-family residences, 6 multi-family residences, 4 industrial buildings, and 1 place of worship (Table 5-12).

Table 5-12: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (111th to 115th Street)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	16	
Single-Family Residential	24	21
Multi-Family Residential	7	6
Institutional (Place of Worship)	1	1
Industrial	4	4
Transportation (Union Pacific Railroad)	4	
Public (City of Chicago)**	1	
Totals	**57**	**32**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

115th Street to 117th Street

The alignment would cross several single-family residential properties, commercial properties, and vacant land. An electric substation would be located on vacant land at the end of Lafayette Avenue, west of the UPRR track. The Michigan Avenue station would affect primarily vacant land. Adjacent to the station, a three-story parking garage would be located along 116th Street and State

Street on single-family residential properties. A park & ride lot would be located along Michigan Avenue between Kensington Avenue and 116th Street on mostly vacant land, except for one vacant industrial building. In addition, four parcels would be affected by an easement agreement that the City of Chicago negotiated with the developer of the proposed Roseland Plaza adjacent to the Michigan Avenue station and east of the UPRR track. As a result, the permanent envelope would affect 64 parcels and displace 21 single-family residences, 6 multi-family residences, 2 commercial buildings, 1 vacant industrial building, and 1 public building within West Pullman. Table 5-13 lists the number of affected parcels and displacements by land use type and the number of buildings that would be displaced by the UPRR East Option from 115th Street to 117th Street.

Table 5-13: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (115th to 117th Street)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	11	
Single-Family Residential	24	21
Multi-Family Residential	7	6
Commercial	3	2
Industrial	3	1
Transportation (Union Pacific Railroad)	5	
Public (City of Chicago)**	11	1
Totals	**64**	**31**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

5.4.1.2 Segment UB

117th Street to Front Avenue

Between 117th Street and Front Avenue, the alignment would run through vacant properties, a single-family residential property, and an industrial property. As a result, the permanent envelope would affect 12 parcels and displace 1 single-family residence and 1 industrial building within West Pullman between 117th Street and Front Avenue (Table 5-14).

Table 5-14: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (117th Street to Front Avenue)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	3	
Single-Family Residential	1	1
Commercial	2	
Industrial	4	1
Public (City of Chicago)**	2	
Totals	**12**	**2**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

Front Avenue to 130th Street Station

South of Front Avenue, the alignment would cross the existing CN/Metra railroad tracks and other railroad properties. The alignment would then transition from an aerial structure to at-grade to the 130th Street station (South Station Option). The alignment would run through several industrial properties and utility properties. A multi-level parking garage, adjacent electric substation, and bus and auto access roads would be on vacant utility properties owned by MWRD. South of Front Avenue, the permanent envelope would affect 15 parcels within the Riverdale neighborhood. The permanent envelopes for the 130th Street West Station Option and South Station Option would affect the same parcels. Table 5-15 lists the number of affected parcels and displacements by land use type and the number of buildings displaced.

Table 5-15: Union Pacific Railroad Rail Alternative - East Option - Permanent Displacements (Front Avenue to 130th Street)

Land Use Type	Affected Parcels	Building Displacements
Industrial	1	
Utility (MWRD)	7	
Transportation (CN/Metra)	3	
Transportation (IHB)	4	
Totals	**15**	

Notes: MWRD = Metropolitan Water Reclamation District, CN = Canadian National, IHB = Indiana Harbor Belt

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

No other projects identified in the *Cumulative Impacts Technical Memorandum* would cause displacements within the area of potential impact. If any future displacements would occur as part of a separate project prior to CTA's construction of the Red Line Extension, CTA would coordinate efforts to minimize cumulative displacement impacts.

5.4.4 120th Street Yard and Shop

The impacts for the 120th Street yard and shop would be the same as for the ROW Option. See Section 5.3.4.

5.5 Union Pacific Railroad Rail Alternative - West Option

The corridor alignment of the UPRR Rail Alternative West Option (West Option) would be primarily west of the existing ROW of the UPRR. The West Option would affect numerous residential, mixed-use, and industrial properties needed for the alignment ROW, park & ride lots, parking garages, electric substations, and maintenance yard. The West Option would have many more land acquisitions and building displacements than the ROW Option, Halsted Rail

Alternative, or BRT Alternative. The West Option and East Option would affect a comparable number of properties.

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

As shown in Table 5-16, the West Option would require 193 parcel acquisitions and 53 building displacements. With just compensation and relocation assistance per the Uniform Act, the impact would be considered not substantially adverse because of the general availability of vacant land in the project area and the beneficial impacts of the project including new rail transit with four stations, greater accessibility to the region, improved access to jobs, and new development opportunities in the project area. In addition, the availability of similar real estate within the project area would facilitate relocation. A total of 22 parcel easement agreements through negotiations with IDOT would be required for the aerial structure of the RLE Project, as well as 2 parcel easement agreements via negotiations with the City of Chicago. Figures 5-7 and 5-8 highlight the affected parcels on a project area map, while detailed parcel maps are within Appendix D. The following subsections describe the impacts in Segment UA (95th Street to 117th Street) and Segment UB (117th Street to 130th Street), and from the 120th Street yard and shop.

Table 5-16: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements*

Land Use Type	Affected Parcels	Building Displacements
Vacant	35	
Single-Family Residential	37	24
Multi-Family Residential	4	4
Commercial	18	8
Mixed-Use (Retail/Office/Residential)	2	2
Institutional (Place of Worship)	7	1
Industrial	20	13
Utility (MWRD)	15	
Transportation (Union Pacific Railroad)	29	
Transportation (CN/Metra)	3	
Transportation (IHB)	6	1
Transportation (NICTD/CSS & SBRR)	2	
Public (City of Chicago)**	15	
Totals	**193**	**53**

Notes: MWRD = Metropolitan Water Reclamation District, CN = Canadian National, IHB = Indiana Harbor Belt, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

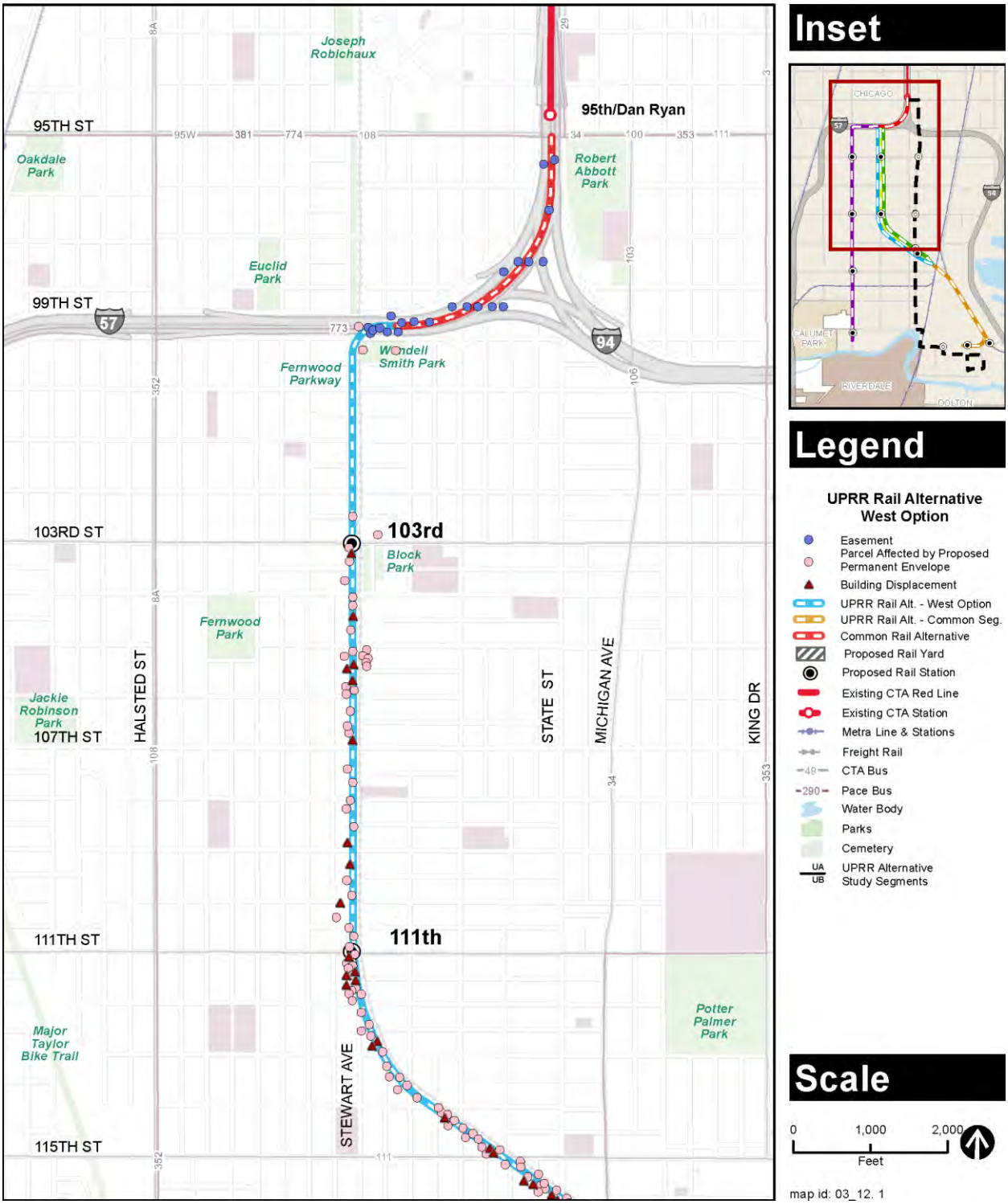

Figure 5-7: Union Pacific Railroad Rail Alternative - West Option - Displacements

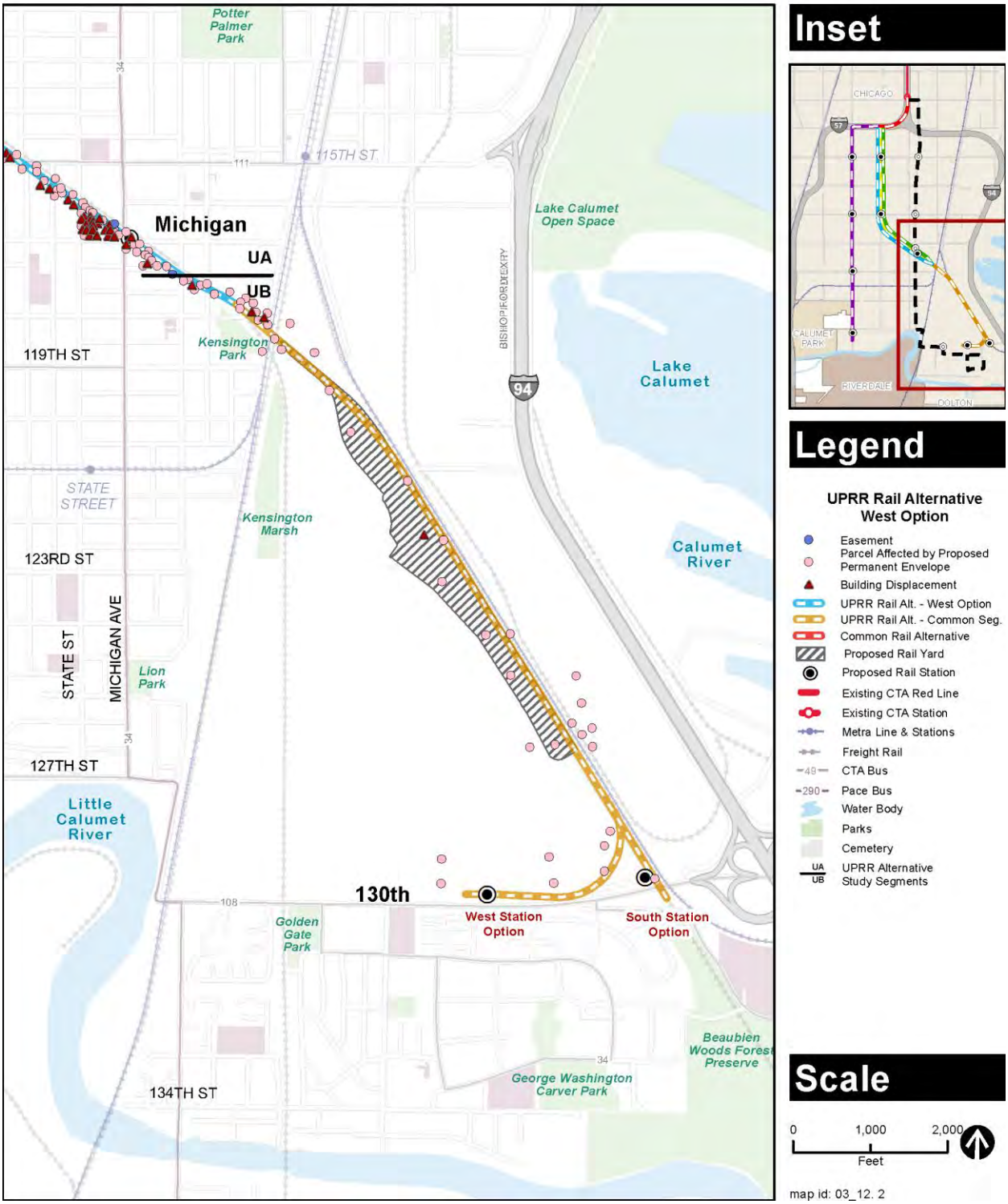

Figure 5-8: Union Pacific Railroad Rail Alternative - West Option - Displacements

5.5.1.1 Segment UA

95th Street to 99th Street

The alignment would be within the median of I-94 and I-57, which are interstate highways under the jurisdiction of IDOT and the FHWA. A total of 22 parcel easement agreements would be required for the aerial structure of the RLE Project.

99th Street to 103rd Street Station

As the part of the transition from the I-57 median to the West Option corridor, the alignment would cross the western portion of Wendell Smith Park (see *Parklands and Community Facilities Technical Memorandum*). West of the UPRR, the alignment would cross a linear open space (Fernwood Parkway) from 99th Place to 103rd Street. The 103rd Street station would be partially within this open space, straddling 103rd Street (see *Parklands and Community Facilities Technical Memorandum*).

The 103rd Street station and alignment would cross both sides of 103rd Street, which is the boundary between the Washington Heights neighborhood to the north and the Roseland neighborhood to the south. South of 103rd Street, the station, alignment ROW, and park & ride lot would affect four parcels and displace one vacant commercial building and one single-family residence within the Roseland neighborhood (Table 5-17).

Table 5-17: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (99th Street to 103rd Street Station)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	3	
Single-Family Residential	1	1
Commercial	1	1
Transportation (Union Pacific Railroad)	2	
Totals	**7**	**2**

*Building displacement impacts relate to a primary building displacement and/or a secondary structure.

103rd Street to 111th Street Station

South of the 103rd Street station to the 111th Street station, the alignment would run through a number of commercial and industrial properties, vacant properties, and city-owned properties. An electric substation would be located on vacant land at 105th Street on the eastern perimeter of the UPRR. A park & ride lot would be located on vacant land adjacent to the 111th Street station. As a result, the permanent envelope would affect 35 parcels and displace 8 industrial buildings and 1 commercial building within the Roseland neighborhood (Table 5-18).

Table 5-18: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (103rd Street to 111th Street Station)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	8	
Commercial	5	1
Institutional (Place of Worship)	1	
Industrial	12	8
Transportation (Union Pacific Railroad)	1	
Public (City of Chicago)**	8	
Totals	**35**	**9**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

111th Street to 115th Street

South of 111th Street, the alignment would curve in parallel with the UPRR property. The alignment would run through several commercial properties, several single-family residential properties, institutional property, vacant land, and property owned by the UPRR. As a result, the permanent envelope would affect 44 parcels and displace 10 buildings within the Roseland neighborhood. The number of affected parcels and displacements by land use type and the number of buildings displaced is listed in Table 5-19.

Table 5-19: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (111th to 115th Street)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	8	
Single-Family Residential	11	2
Multi-Family Residential	1	1
Commercial	8	4
Mixed-Use (Retail/Office/Residential)	1	1
Institutional (Place of Worship)	4	
Industrial	2	2
Transportation (Union Pacific Railroad)	9	
Totals	**44**	**10**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.

115th Street to 117th Street

The permanent envelope would run through numerous single-family residential properties, as well as vacant land, railroad property, city-owned property, and some mixed uses. An electric substation would be located at the end of Lafayette Avenue. The Michigan Avenue station would be located on single-family residential properties and vacant land. Adjacent to the station, a multi-level parking garage would be located along 116th Street and State Street on primarily single-family residential properties. As a result, the permanent envelope would affect 59 properties and displace 26 buildings within West Pullman, including 19 single-family residences (Table 5-20).

Table 5-20: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (115th to 117th Street)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	10	
Single-Family Residential	23	19
Multi-Family Residential	3	3
Commercial	3	2
Mixed-Use (Retail/Office/Residential)	1	1
Institutional (Place of Worship)	2	1
Transportation (Union Pacific Railroad)	13	
Public (City of Chicago)**	4	
Totals	**59**	**26**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

5.5.1.2 Segment UB

117th Street to Front Avenue

Between 117th Street and Front Avenue, the alignment would run through a variety of properties including single-family residential, industrial property, railroad property, and vacant land. As a result, the permanent envelope would affect 18 parcels and displace 3 buildings in the West Pullman neighborhood between 117th Street and Front Avenue. Table 5-21 lists the number of affected parcels and displacements by land use type and the number of buildings displaced.

Table 5-21: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (117th Street to Front Avenue)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	4	
Single-Family Residential	2	2
Commercial	1	
Industrial	4	1
Transportation (Union Pacific Railroad)	5	
Public (City of Chicago)**	2	
Totals	**18**	**3**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

Front Avenue to 130th Street Station

South of Front Avenue, the alignment would cross the existing CN/Metra railroad tracks and other railroad properties. The alignment would then transition from an aerial structure to an at-grade alignment and would remain at grade to the 130th Street station. The alignment would run through several industrial properties and utility properties. A multi-level parking garage, adjacent electric substation, and bus and auto access roads would be located on vacant utility properties owned by MWRD. South of Front Avenue, the permanent envelope would affect 15 parcels within the Riverdale neighborhood. The permanent envelopes for the 130th Street West Station Option

and South Station Option would affect the same parcels. Table 5-22 lists the number of affected parcels and displacements by land use type and the number of buildings displaced.

Table 5-22: Union Pacific Railroad Rail Alternative - West Option - Permanent Displacements (Front Avenue to 130th Street)

Land Use Type	Affected Parcels	Building Displacements
Industrial	1	
Utility (MWRD)	7	
Transportation (CN/Metra)	3	
Transportation (IHB)	4	
Totals	**15**	

Notes: MWRD = Metropolitan Water Reclamation District, CN = Canadian National, IHB = Indiana Harbor Belt

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

5.5.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

No other projects identified in the *Cumulative Impacts Technical Memorandum* would cause displacements within the area of potential impact. If any future displacements would occur as part of a separate project prior to CTA's construction of the Red Line Extension, CTA would coordinate efforts to minimize cumulative displacement impacts.

5.5.4 120th Street Yard and Shop

The impacts for the 120th Street yard and shop would be the same as for the ROW Option. See Section 5.3.4.

5.6 Halsted Rail Alternative

The corridor alignment of the Halsted Rail Alternative would be primarily within the public ROW of interstate highways and an arterial roadway. The Halsted Rail Alternative would affect properties needed for the elevated structure, park & ride lots, parking garages, electric substations, and maintenance yard. The Halsted Rail Alternative would have more land acquisitions and building displacements than the BRT Alternative, but fewer than the UPRR Rail Alternative West or East Options. The Halsted Rail Alternative and UPRR Rail Alternative ROW Option would affect a comparable number of properties.

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

As shown in Table 5-23, the Halsted Rail Alternative would require a total of 108 parcel acquisitions and 37 building displacements. With just compensation and relocation assistance per the Uniform Act, the impact would be considered not substantially adverse because of the general availability of vacant land in the project area and the beneficial impacts of the project including

new rail transit with four stations, greater accessibility to the region, improved access to jobs, and new development opportunities in the project area. In addition, the availability of similar real estate within the same neighborhoods would facilitate relocation. A total of 32 parcel easement agreements would be required for the aerial structure of the RLE Project. These easements would be acquired through negotiations with IDOT. Figures 5-9 and 5-10 highlight the affected parcels on a project area map, while detailed parcel maps are within Appendix F. The following subsections describe the impacts in Segment HA (95th Street to 120th Street) and Segment HB (120th to 129th Street on Halsted Street), as well as the 119th Street yard and shop. Table 5-23 displays the number of affected parcels and displacements by land use type and the number of buildings displaced.

Table 5-23: Halsted Rail Alternative - Total Permanent Displacements*

Land Use Type	Affected Parcels	Building Displacements
Vacant	22	
Single-Family Residential	13	11
Commercial	37	15
Mixed-Use (Retail/Office/Residential)	6	6
Institutional (Place of Worship)	1	1
Industrial	4	3
Transportation (Railroad)	5	
Transportation (Metra)	2	
Public (City of Chicago)**	18	2
Totals	**108**	**38**

Notes: MWRD = Metropolitan Water Reclamation District
*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered “affected parcels” and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

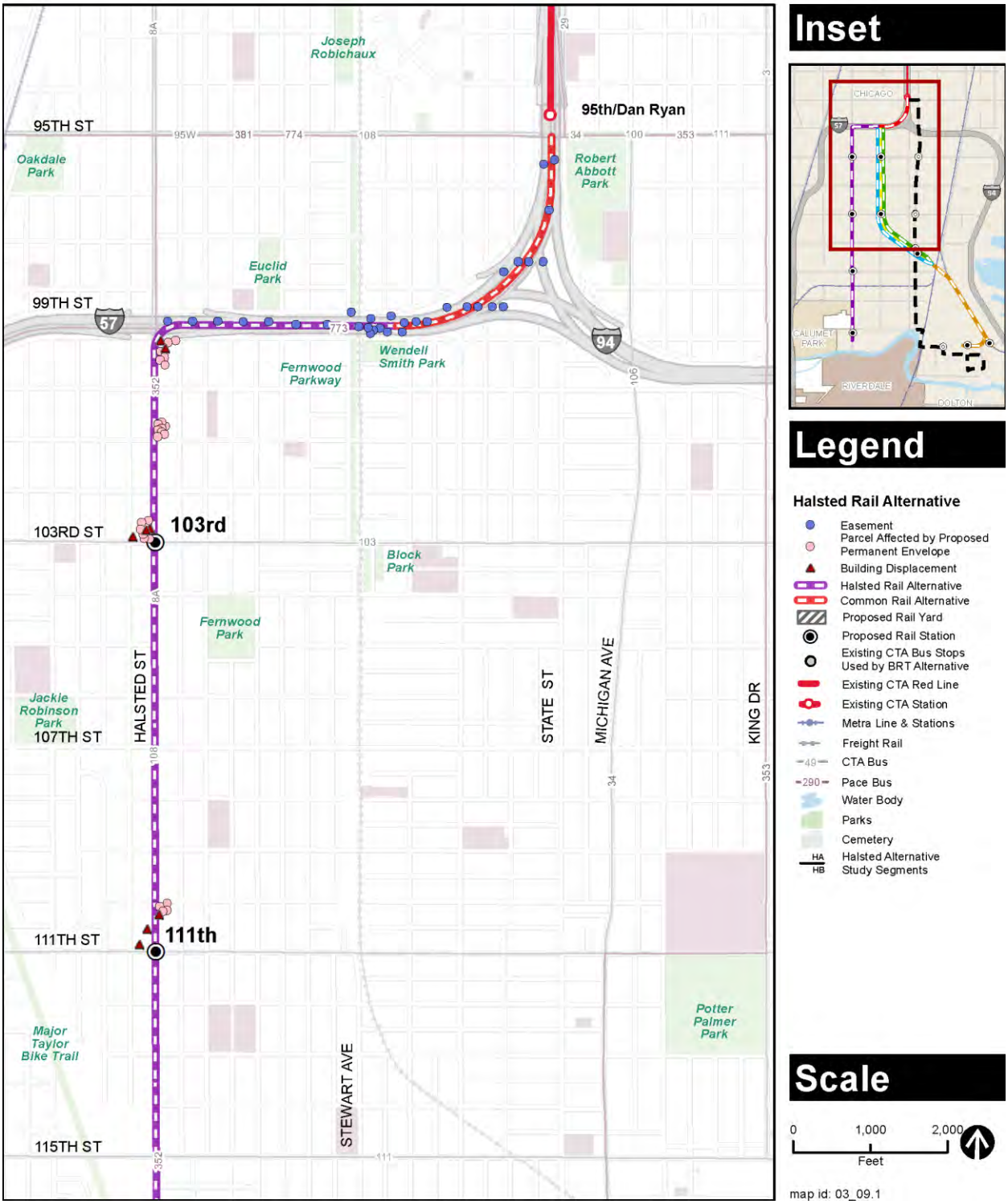

Figure 5-9: Halsted Rail Alternative - Displacements

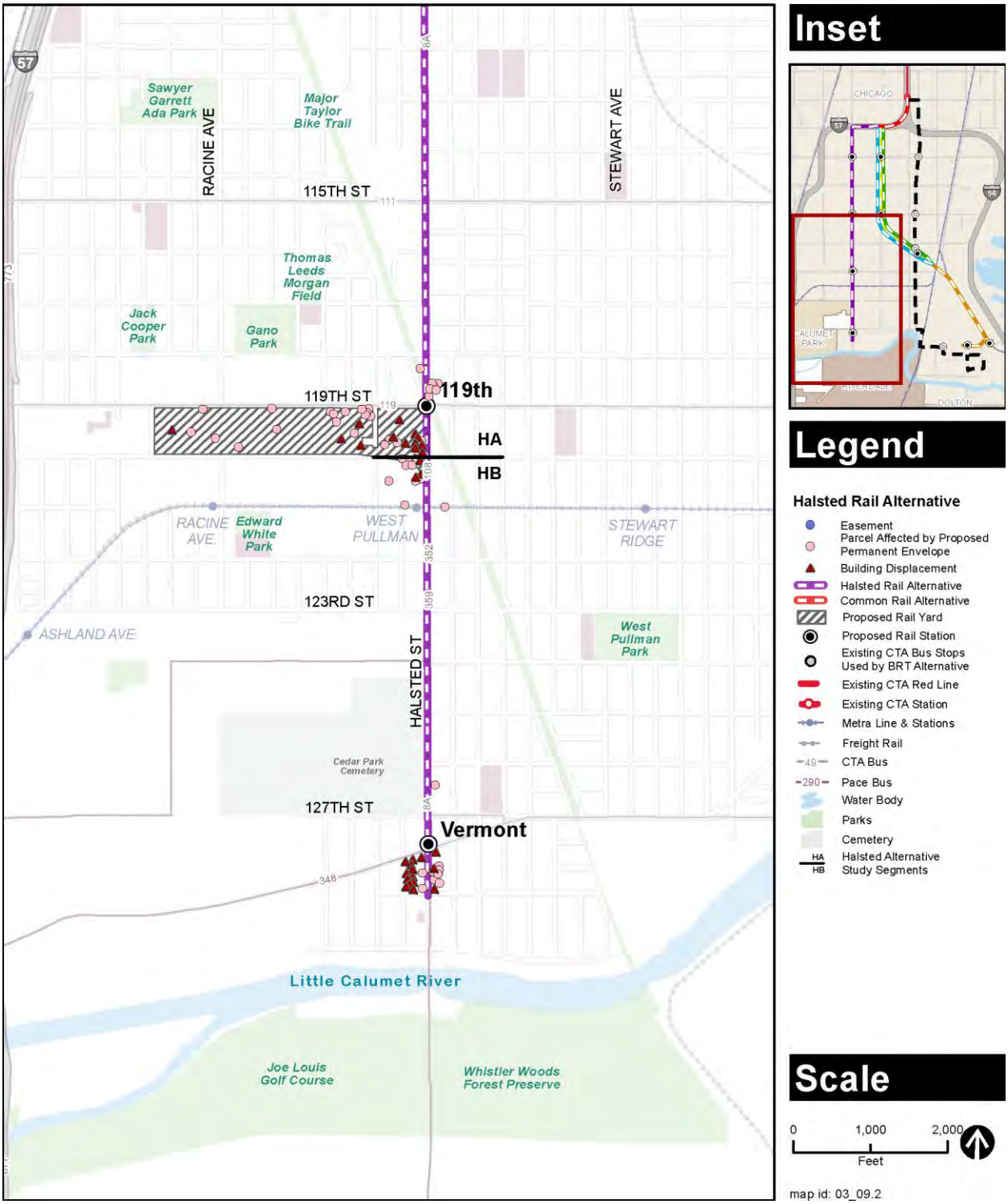

Figure 5-10: Halsted Rail Alternative - Displacements

5.6.1.1 Segment HA

95th Street to 99th Street

The alignment would run within the median of I-94 and I-57, which are interstate highways under the jurisdiction of IDOT and the FHWA. A total of 32 parcel easement agreements would be required for the aerial structure of the RLE Project.

99th Street to 103rd Street

As part of the transition from I-57 to Halsted Street, the structural columns for the elevated rail line and emergency access path would affect a single-family residence and six commercial properties. An electric substation would be located at 101st Street on vacant land. For the 103rd Street station, a park & ride lot would be located on the northwest corner of 103rd and Halsted Streets and would affect one mixed-use building, one single-use commercial building, and one commercial building with two active and two vacant businesses. As a result, the permanent envelope would affect 25 parcels and displace 1 mixed-use building and 4 commercial buildings within the Washington Heights neighborhood (Table 5-24).

Table 5-24: Halsted Rail Alternative - Permanent Displacements (99th to 103rd Streets)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	8	
Single-Family Residential	2	
Commercial	14	4
Mixed-Use (Retail/Office/Residential)	1	1
Totals	**25**	**5**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.

103rd Street to 111th Street Station

An electric substation located at 110th and Halsted Streets would affect vacant land and a vacant commercial building in the Roseland neighborhood. For the 111th Street station, a park & ride lot located on the northwest corner of 111th and Halsted Streets would affect two commercial buildings in the Morgan Park neighborhood. As a result, the permanent envelope would affect seven parcels and displace three commercial buildings (Table 5-25).

Table 5-25: Halsted Rail Alternative - Permanent Displacements (103rd to 111th Street)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	4	
Commercial	3	3
Totals	**7**	**3**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.

111th Street to 120th Street

The permanent envelope would cross a public multi-use path, the Major Taylor Bike Trail, between 118th and 119th Streets (see *Parklands and Community Facilities Technical Memorandum*). An electric substation would be located at 118th and Halsted Streets and would affect vacant land only. For the 119th Street station, a large park & ride lot would be located on the southwest corner

of 119th and Halsted Streets and would affect one block of developed land. As a result, the permanent envelope would affect 19 parcels and displace 4 commercial buildings, 3 mixed-use buildings, and 2 industrial buildings in the West Pullman neighborhood (Table 5-26).

Table 5-26: Halsted Rail Alternative - Permanent Displacements (111th to 120th Street)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	5	
Commercial	6	4
Mixed-Use (Retail/Office/Residential)	3	3
Industrial	3	2
Public (City of Chicago)**	2	
Totals	**19**	**9**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

5.6.1.2 Segment HB

<u>120th Street to 129th Street</u>

The permanent envelope would cross Metra's Blue Island Branch between 120th and 122nd Streets and would affect two of its ROW parcels. An electric substation would be located at 126th and Halsted Streets and would affect a commercial parking lot. For the Vermont Street station, a multi-level parking garage would be located on the southwest corner of Vermont and Halsted Streets and would affect 11 single-family residences and 2 commercial properties with 4 active businesses. A park & ride lot would be located on the southeast corner of Vermont and Halsted Streets and would affect two commercial properties. As a result, the permanent envelope would affect 26 parcels and displace 11 single-family residences and 4 commercial buildings in the West Pullman neighborhood (Table 5-27).

Table 5-27: Halsted Rail Alternative - Permanent Displacements (120th to 129th Street)*

Land Use Type	Affected Parcels	Building Displacements
Vacant	1	
Single-Family Residential	11	11
Commercial	12	4
Transportation (Metra)	2	
Totals	**26**	**15**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

Because all construction activities would occur within the public ROW (median, streets and sidewalks) and on land acquired for the parking facilities and substations, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

5.6.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative

No other projects identified in the *Cumulative Impacts Technical Memorandum* would cause displacements within the area of potential impact. If any future displacements would occur as

part of a separate project prior to CTA's construction of the Red Line Extension, CTA would coordinate efforts to minimize cumulative displacement impacts.

5.6.4 119th Street Yard and Shop

5.6.4.1 Permanent Impacts and Mitigations

A new train maintenance yard and shop for CTA's Red Line would be located at 119th and Peoria Streets, within the West Pullman Industrial Corridor. A new electric substation would be located within the same site. These new facilities would affect vacant land, vacant buildings, and city-owned properties as well as limited mixed uses. As a result, the permanent envelope would affect 31 parcels and displace 2 mixed-use buildings, 1 industrial building, and 1 place of worship within the West Pullman neighborhood (Table 5-28).

Table 5-28: 119th Street Yard and Shop - Permanent Displacements*

Land Use Type	Affected Parcels	Building Displacements
Vacant	4	
Commercial	2	
Mixed-Use (Retail/Office/Residential)	2	2
Institutional (Place of Worship)	1	1
Industrial	1	1
Transportation (Railroad)	5	
Public (City of Chicago)**	16	2
Totals	**31**	**6**

*Building displacements are a subset of affected parcels and relate to a primary building displacement and/or a secondary structure.
**The publicly owned parcels are considered "affected parcels" and not easements, because the CTA would need to negotiate a fee simple property transfer or an easement with the public entity.

5.6.4.2 Construction Impacts and Mitigations

Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

The No Build Alternative is an alternative used for comparative purposes to assess the benefits and impacts of the build alternatives. There would be no displacements or relocations associated with any portion of the No Build Alternative.

6.2 Bus Rapid Transit Alternative

Due to the requirements of the Uniform Act, there would be no adverse impacts remaining after mitigation for the BRT Alternative.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

Due to the requirements of the Uniform Act, there would be no adverse impacts remaining after mitigation for the UPRR Rail Alternative ROW Option.

6.4 Union Pacific Railroad Rail Alternative - East Option

Due to the requirements of the Uniform Act, there would be no adverse impacts remaining after mitigation for the UPRR Rail Alternative East Option.

6.5 Union Pacific Railroad Rail Alternative - West Option

Due to the requirements of the Uniform Act, there would be no adverse impacts remaining after mitigation for the UPRR Rail Alternative West Option.

6.6 Halsted Rail Alternative

Due to the requirements of the Uniform Act, there would be no adverse impacts remaining after mitigation for the Halsted Rail Alternative.

Section 7
References Cited

City of Chicago Department of Housing and Economic Development. 2012. Affordable Rental Housing Resource List. Available at: http://www.cityofchicago.org/city/en/depts/dcd/supp_info/affordable_rentalhousingresourcelist.

Chicago Multiple Listing Service. December 2012. Available at: http://www.thechicagomls.com.

Appendix A
Bus Rapid Transit Alternative Displacements Maps

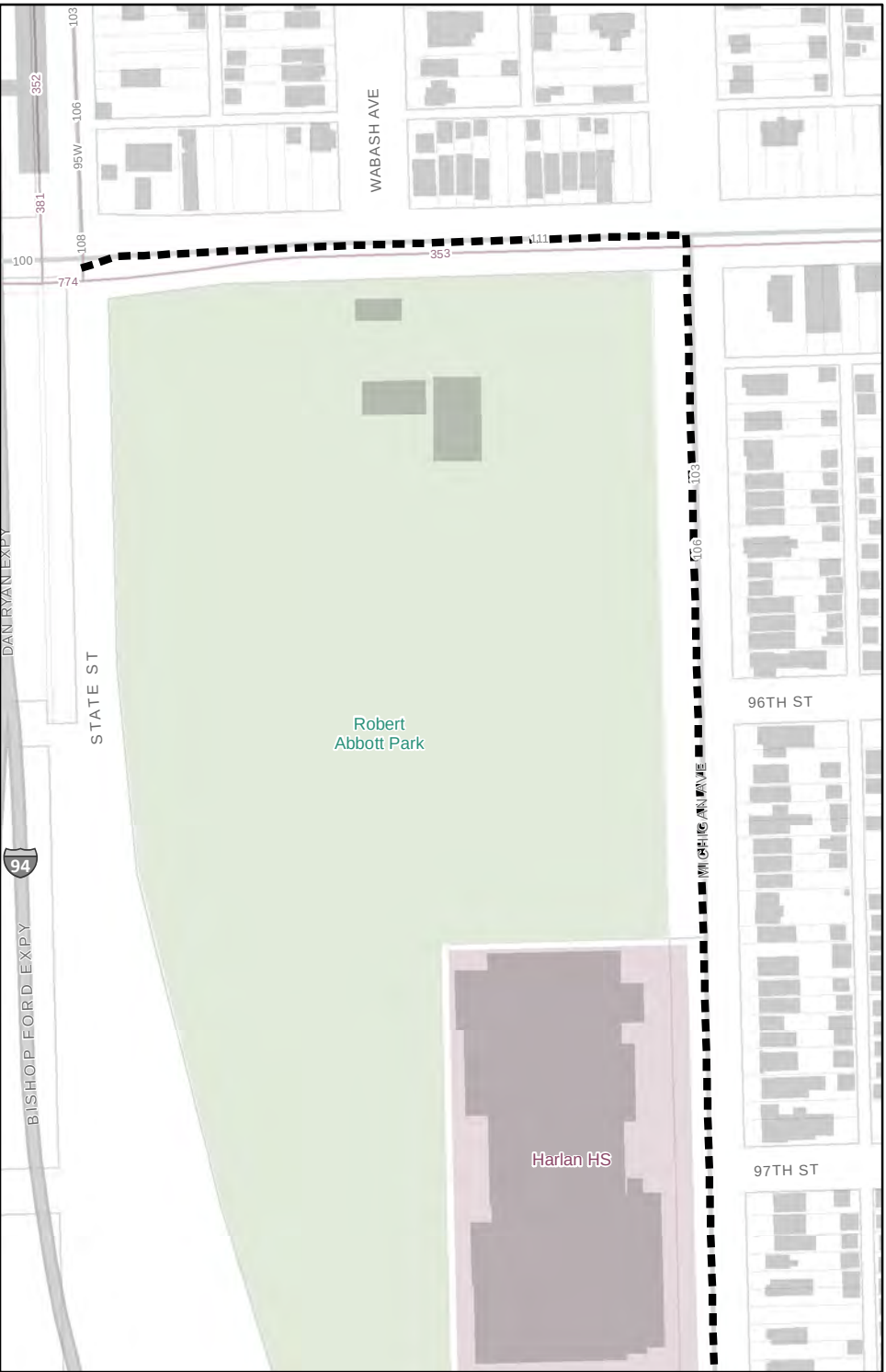

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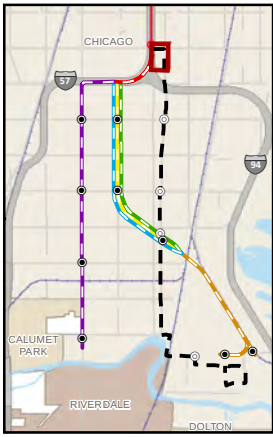

Legend

BRT Alternative

Sheet 1 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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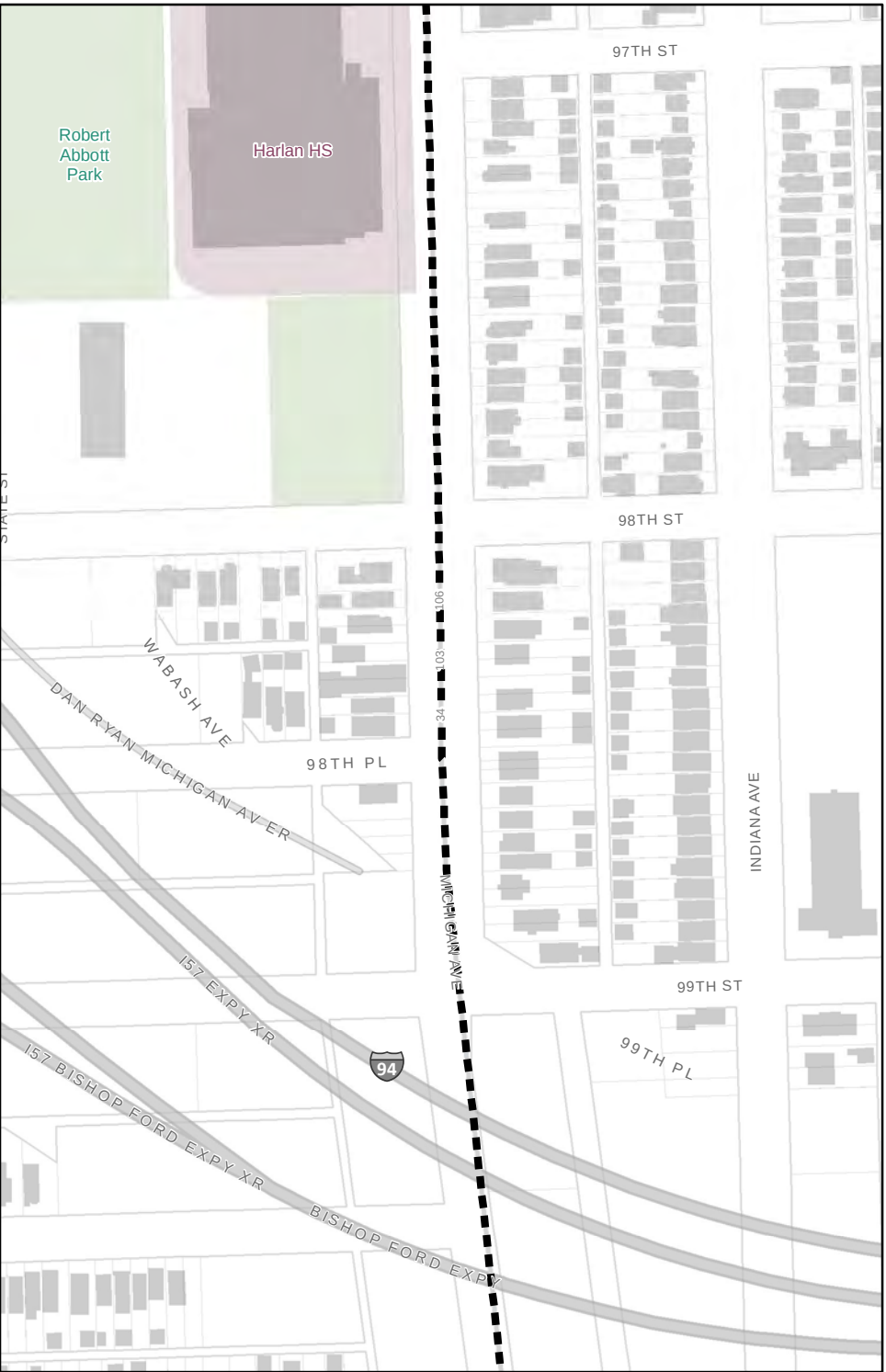

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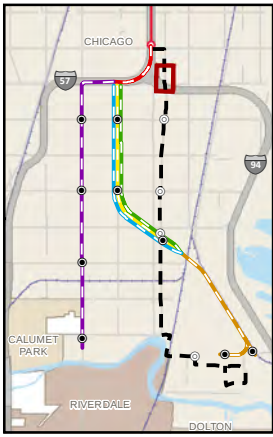

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BRT Alternative

Sheet 2 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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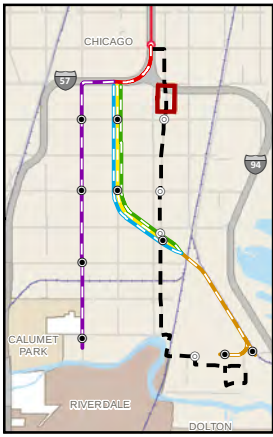

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BRT Alternative

Sheet 3 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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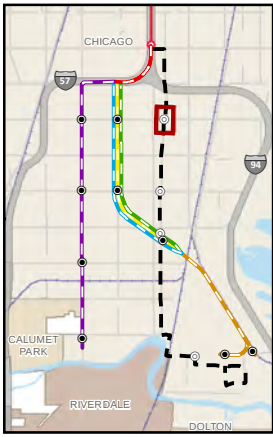

Legend

BRT Alternative

Sheet 4 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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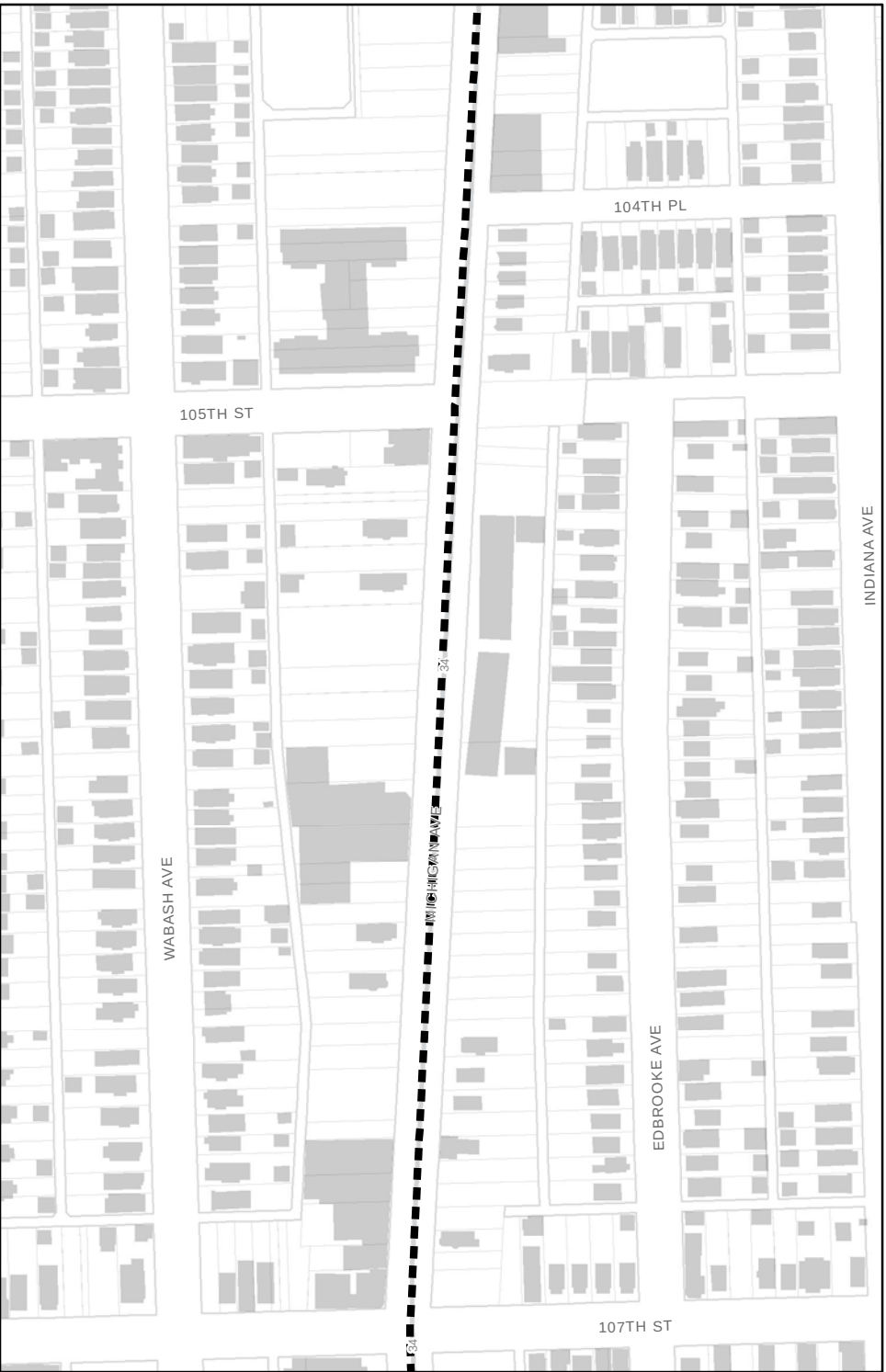

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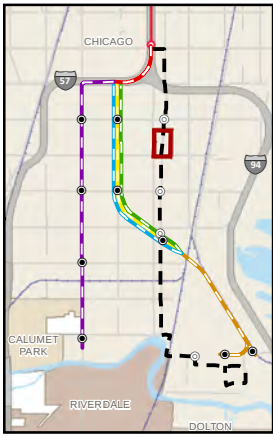

Legend

BRT Alternative

Sheet 5 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.5

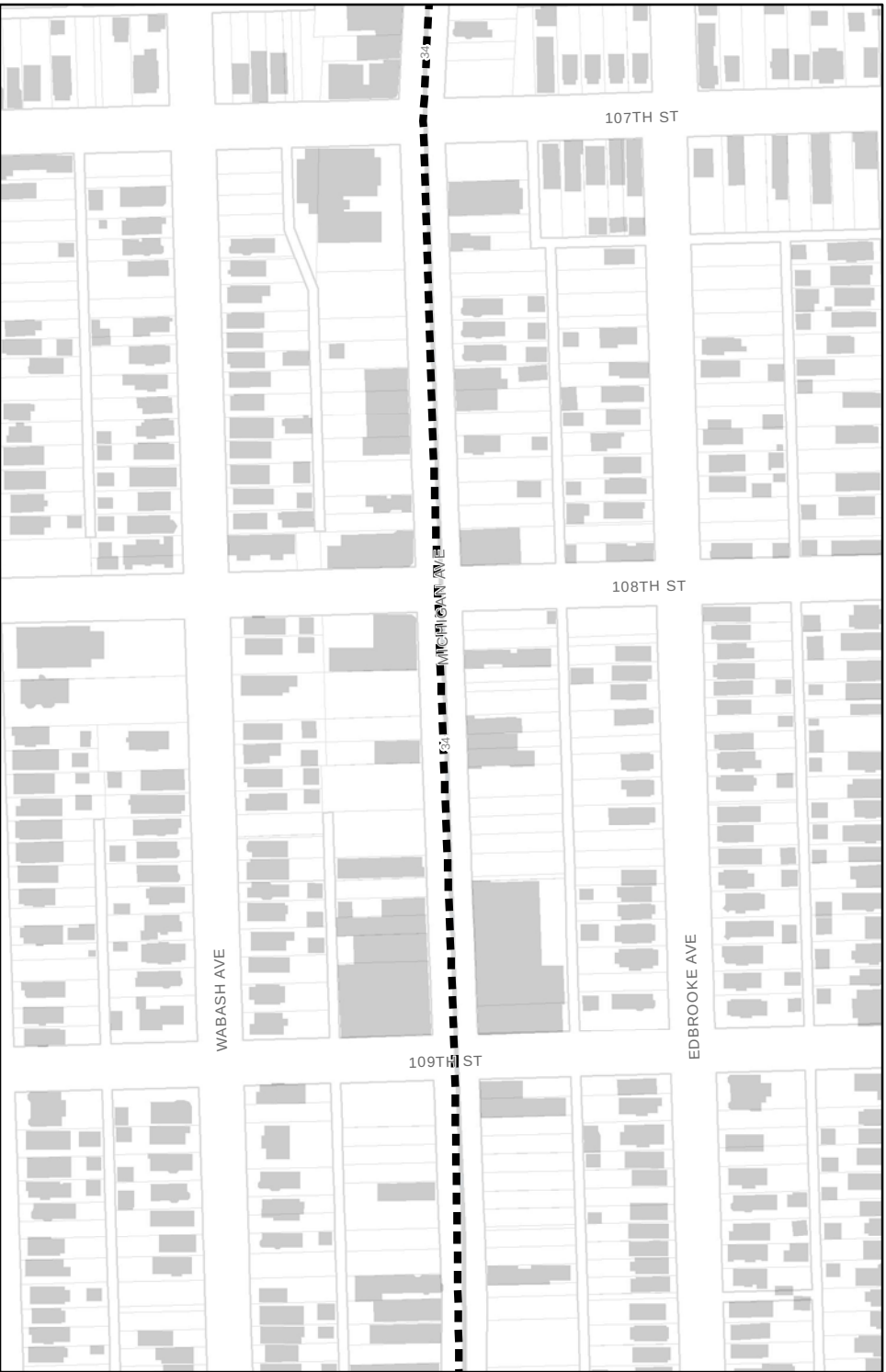

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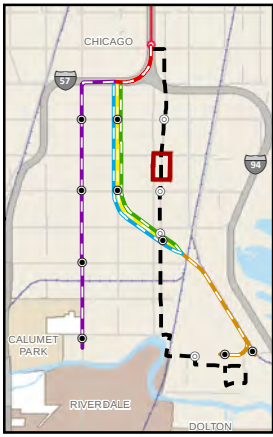

Legend

BRT Alternative

Sheet 6 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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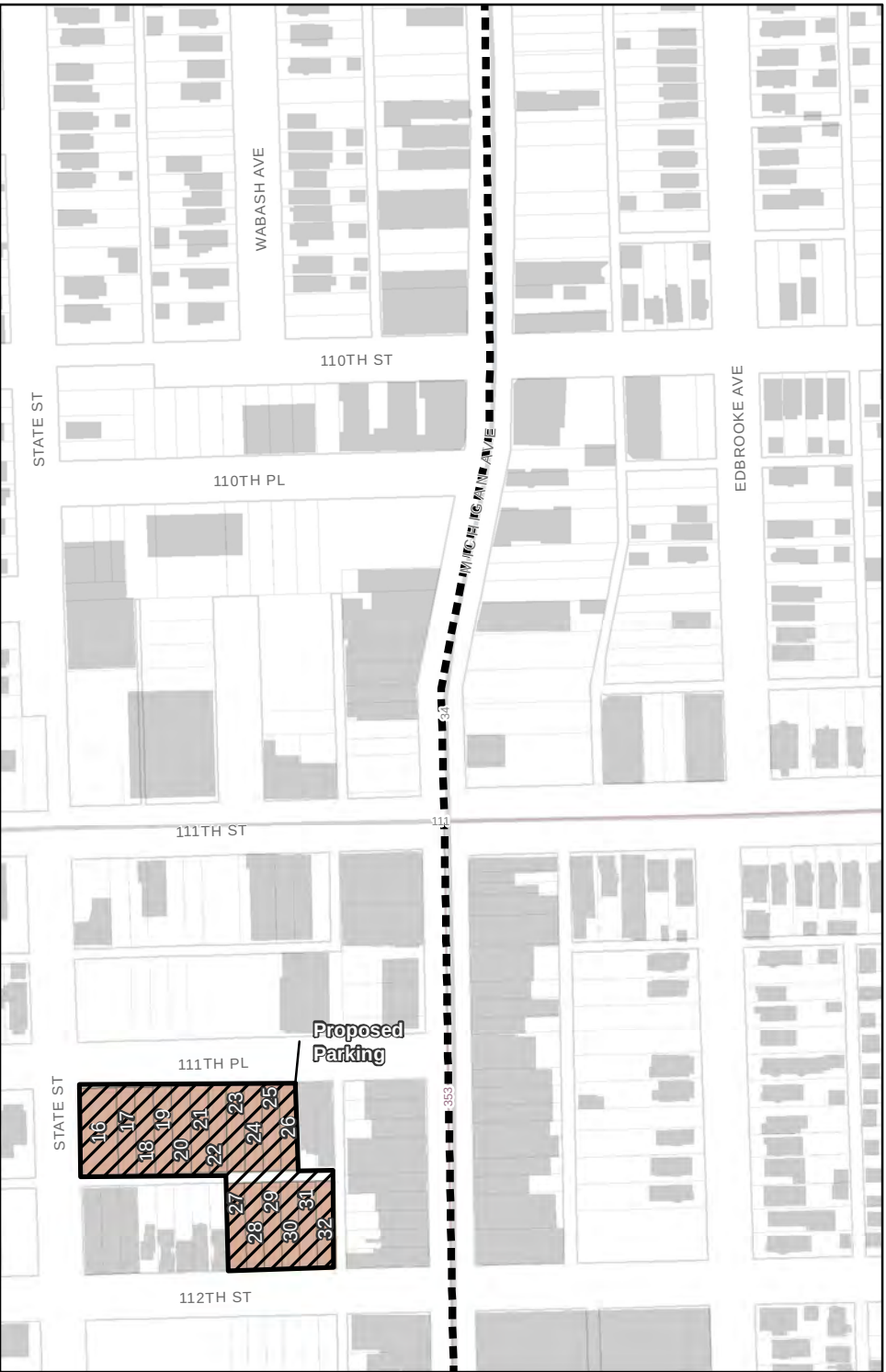

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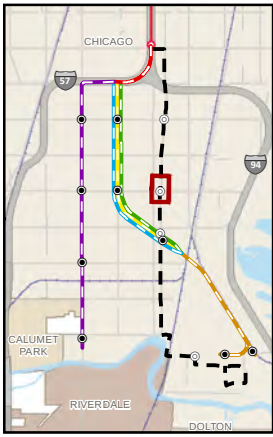

Legend

BRT Alternative

Sheet 7 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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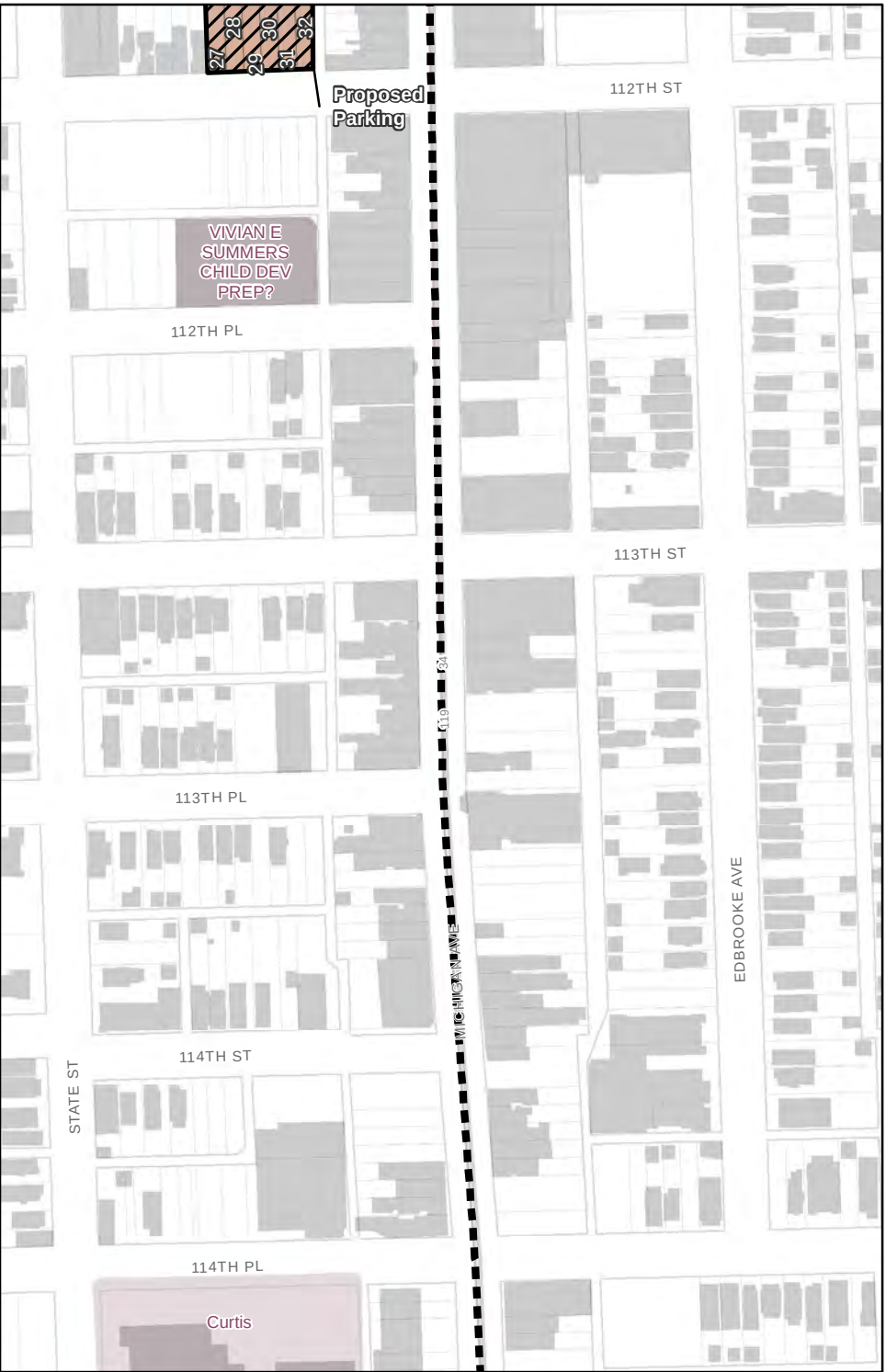

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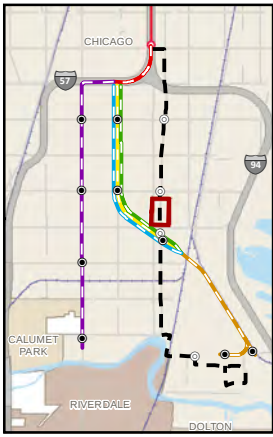

Legend

BRT Alternative

Sheet 8 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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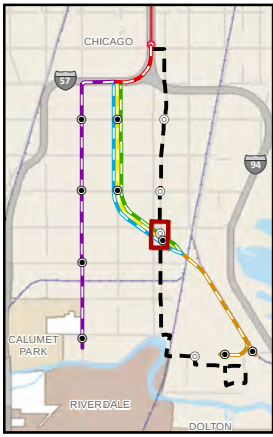

Legend

BRT Alternative

Sheet 9 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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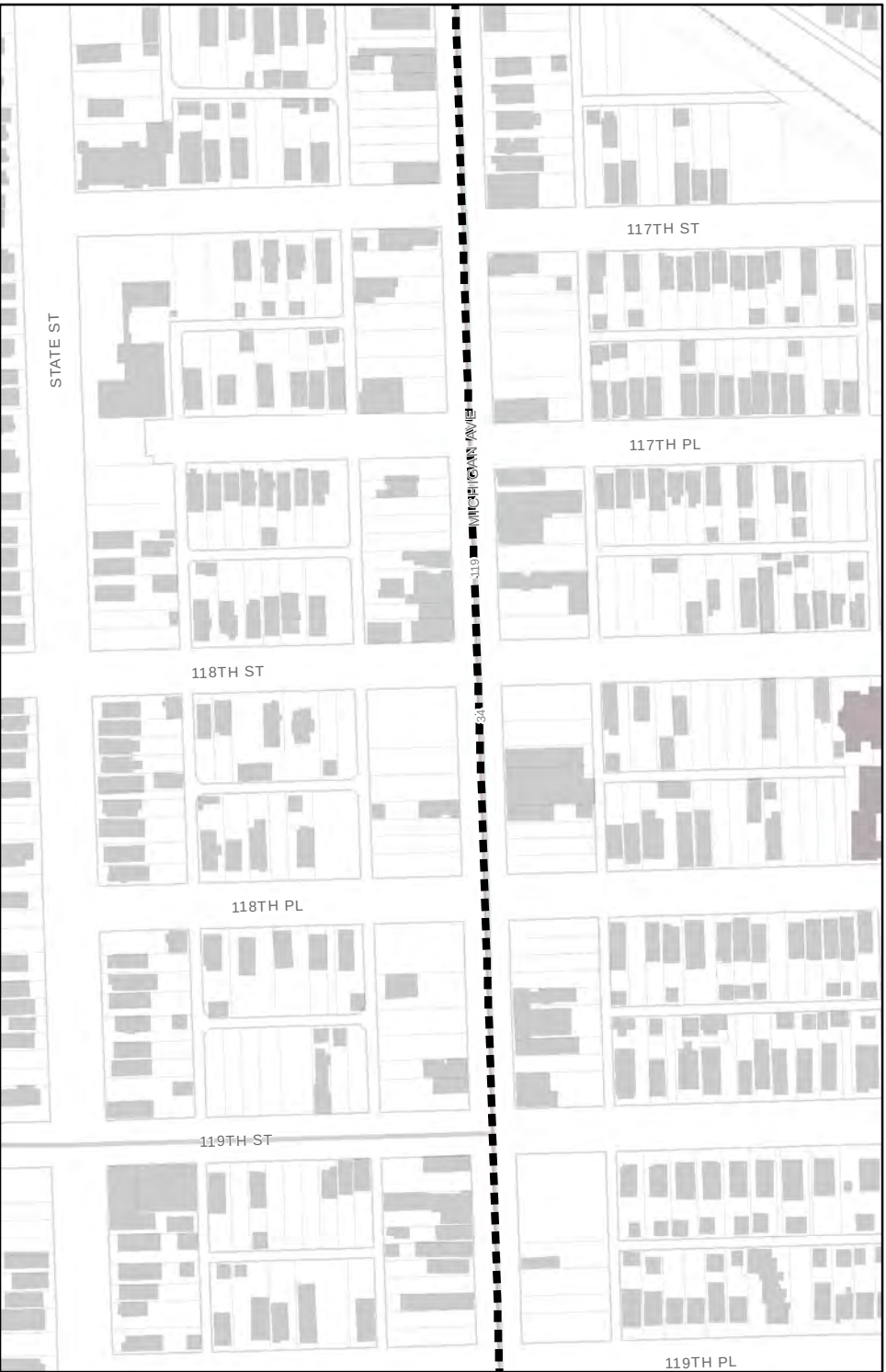

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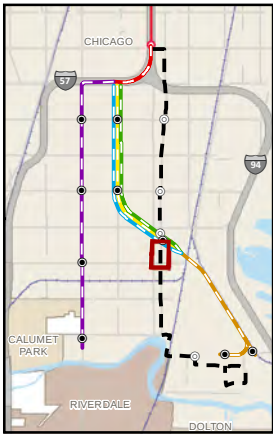

Legend

BRT Alternative

Sheet 10 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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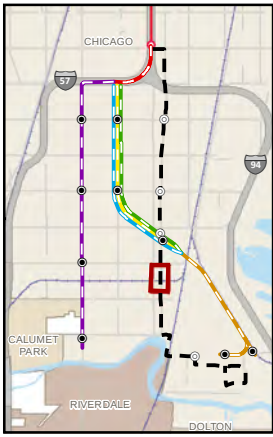

Legend

BRT Alternative

Sheet 11 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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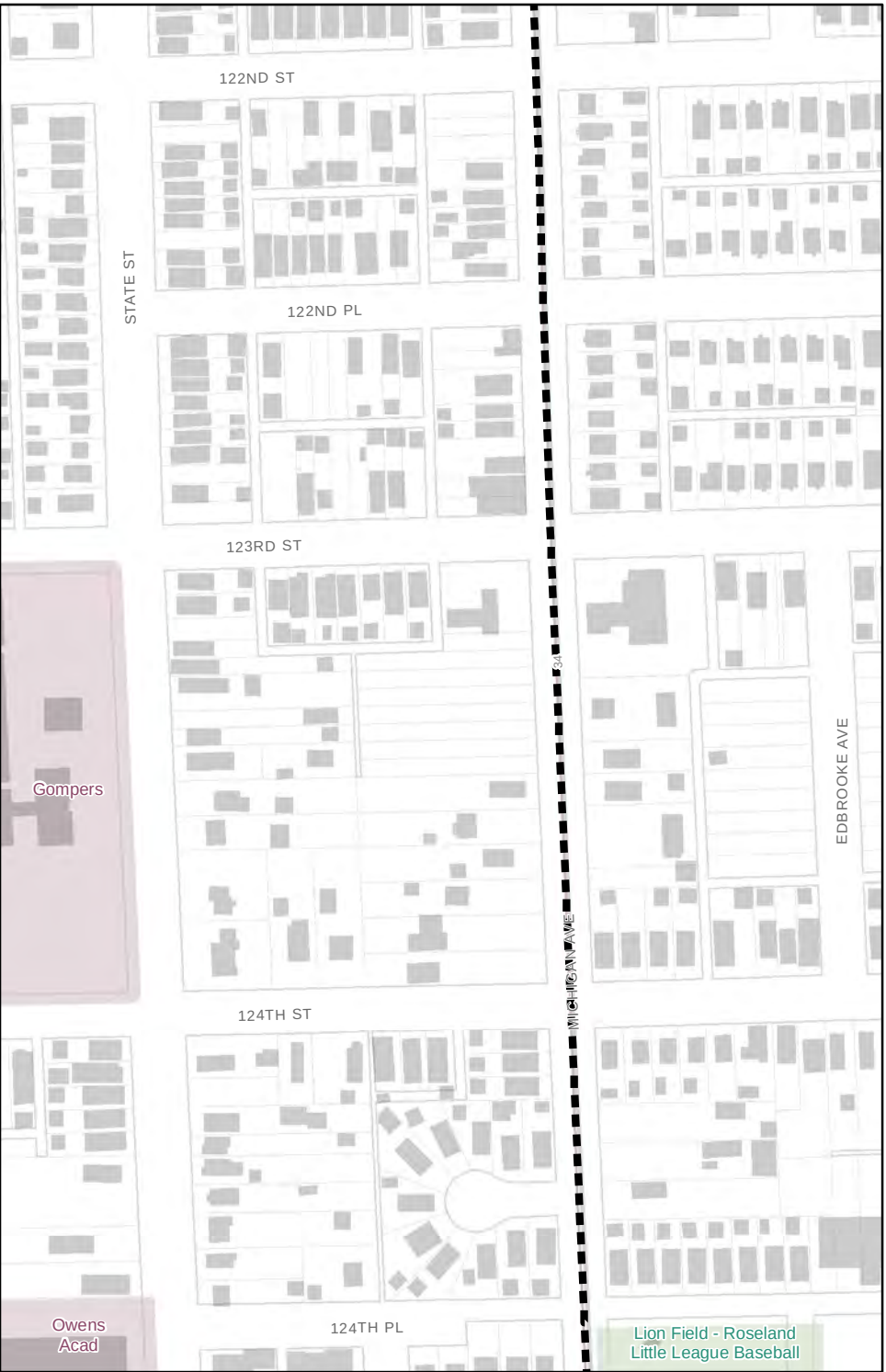

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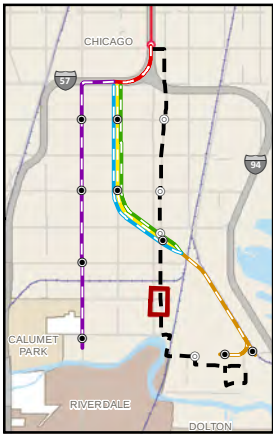

Legend

BRT Alternative

Sheet 12 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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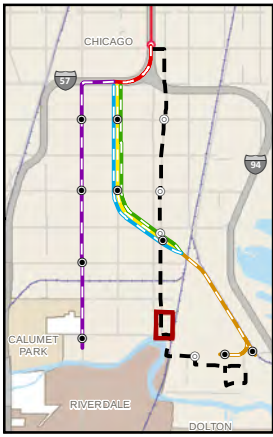

Legend

BRT Alternative

Sheet 13 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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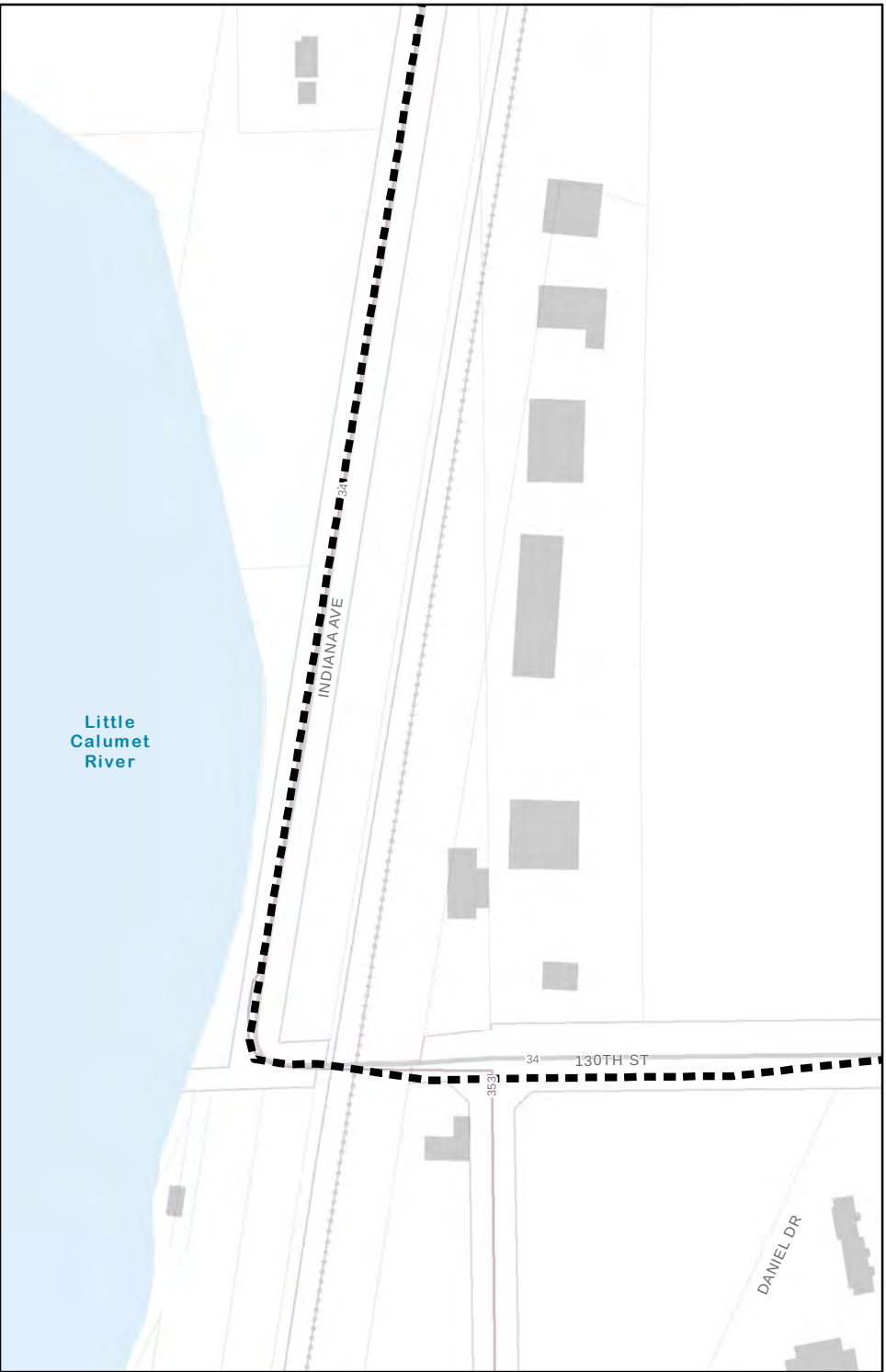

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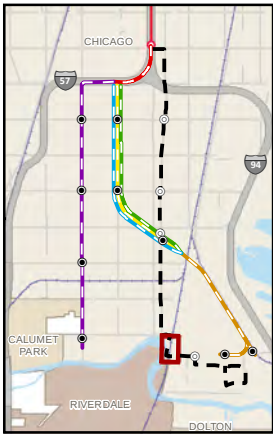

Legend

BRT Alternative

Sheet 14 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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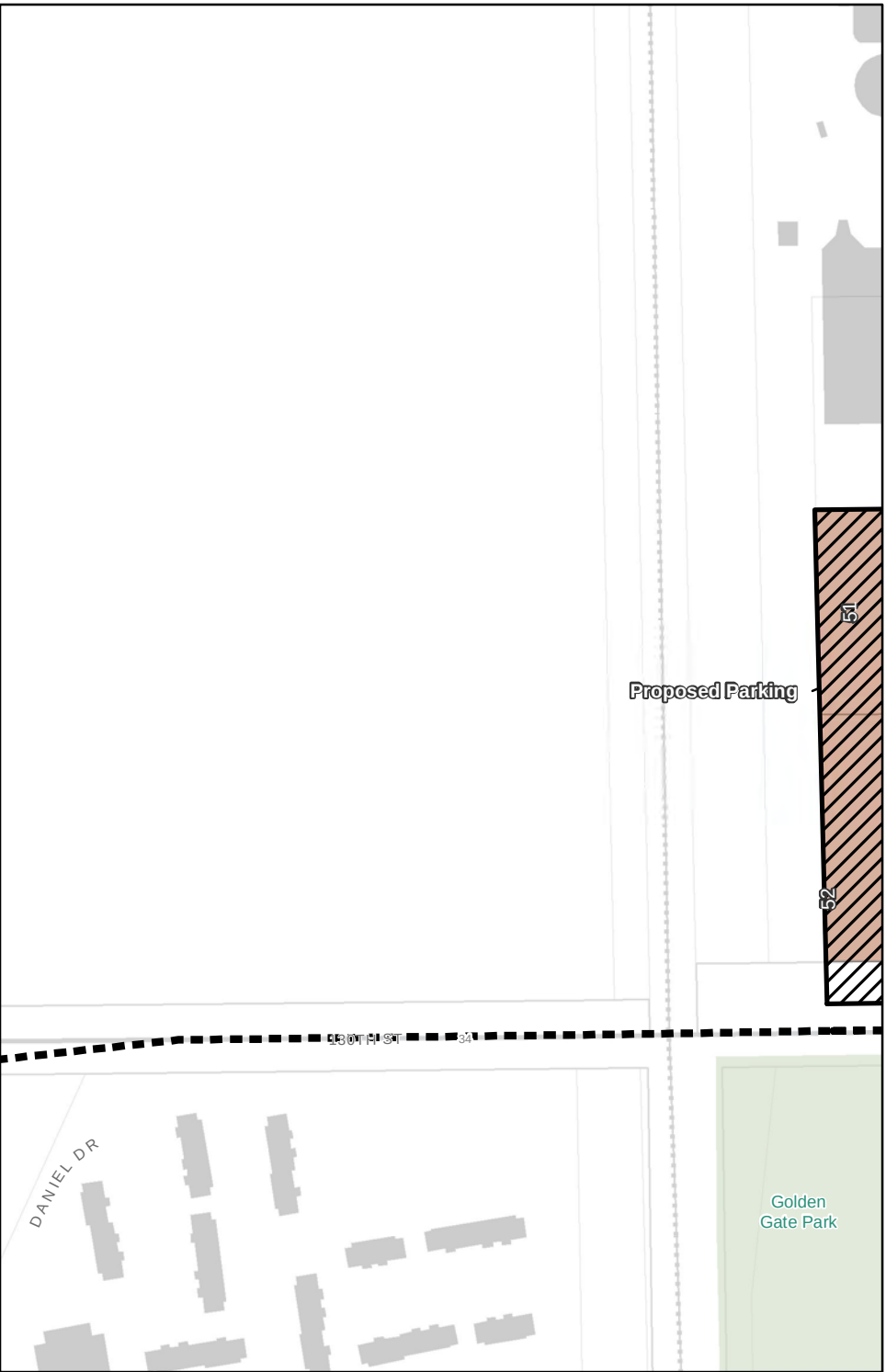

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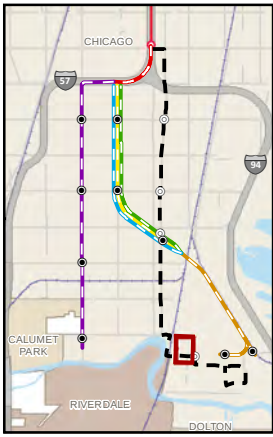

Legend

BRT Alternative

Sheet 15 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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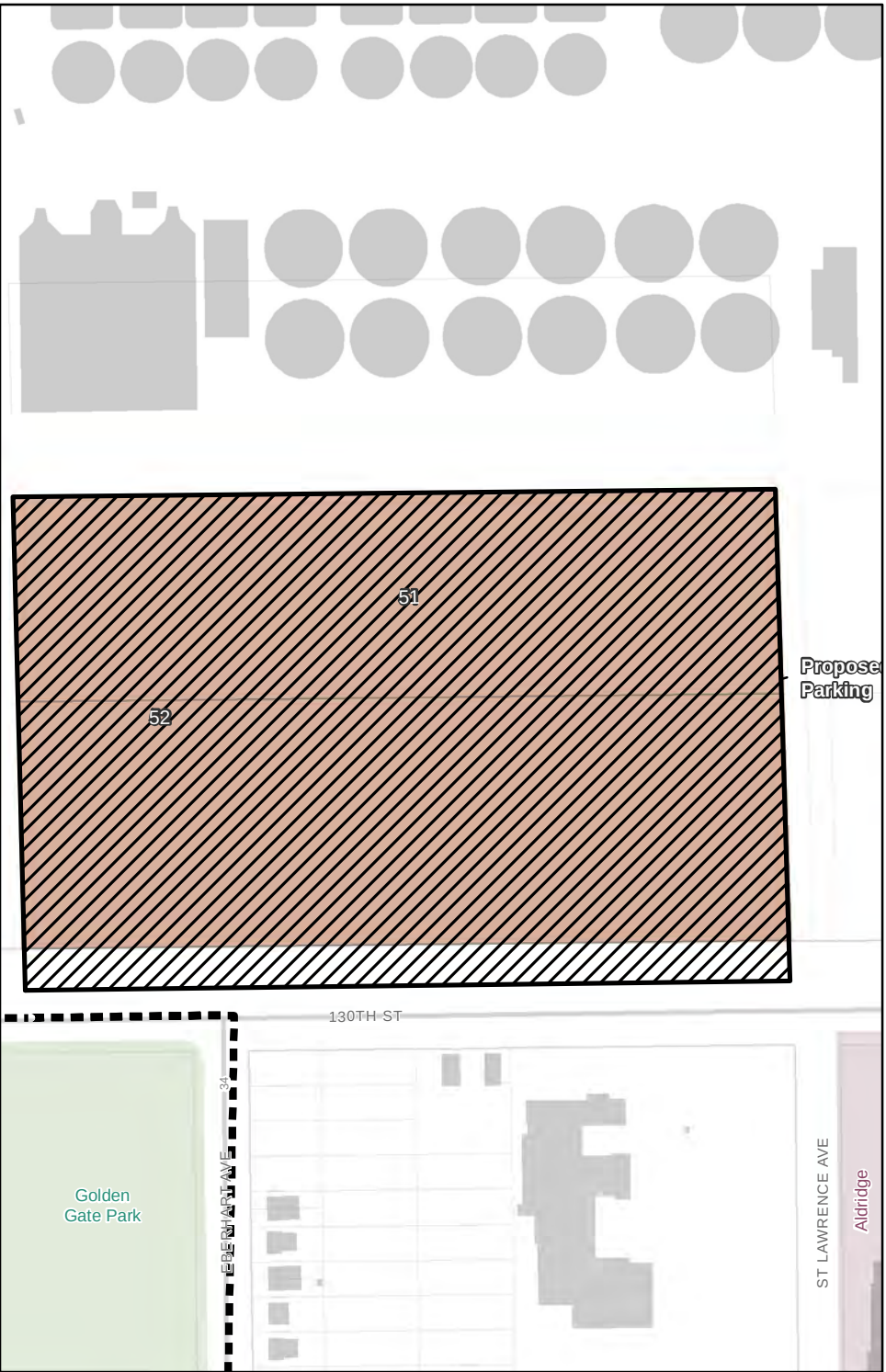

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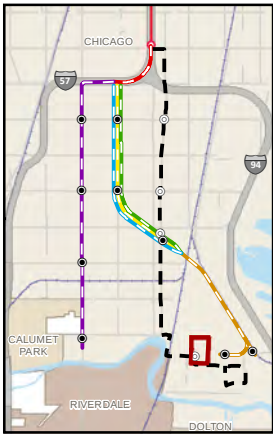

Legend

BRT Alternative

Sheet 16 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.16

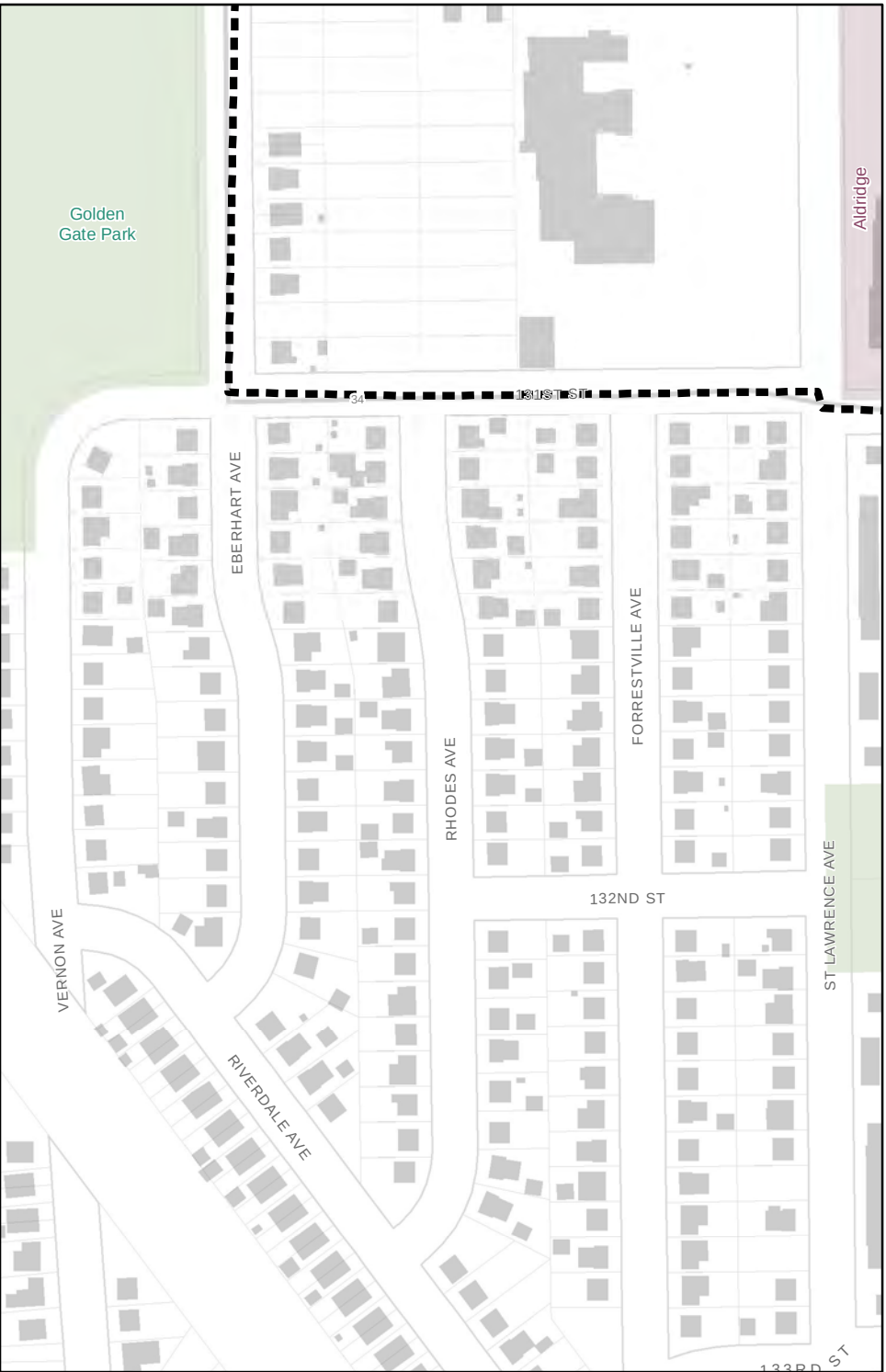

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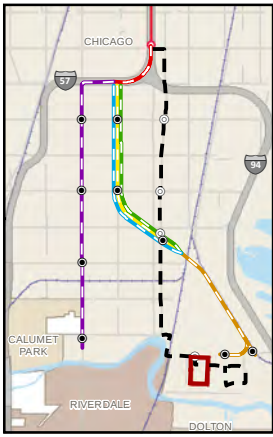

Legend

BRT Alternative

Sheet 17 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.17

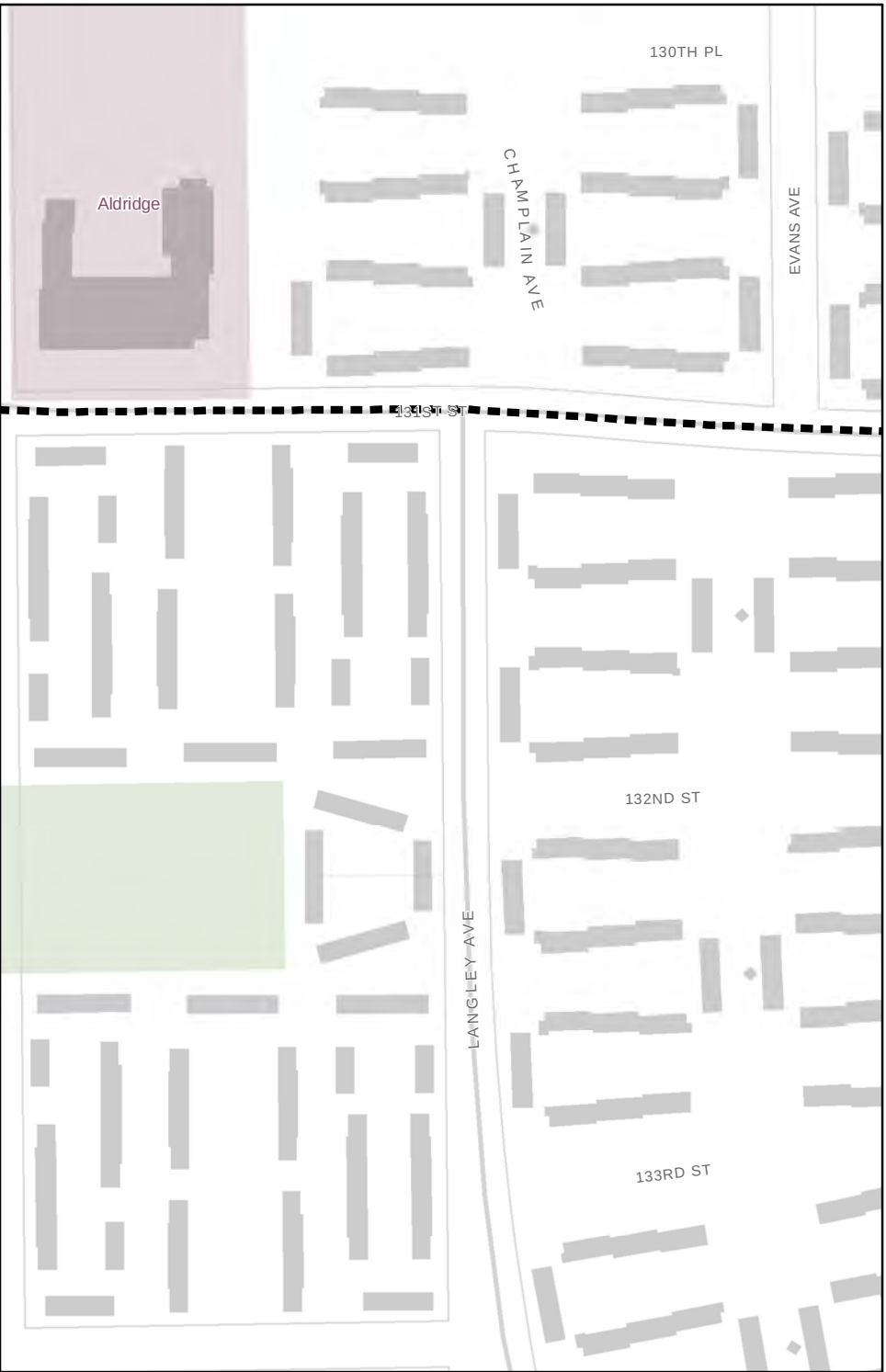

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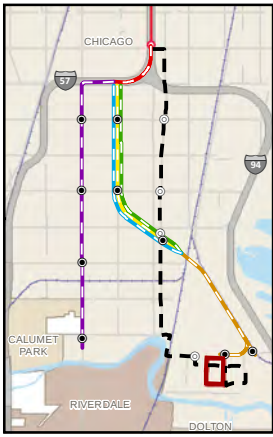

Legend

BRT Alternative

Sheet 18 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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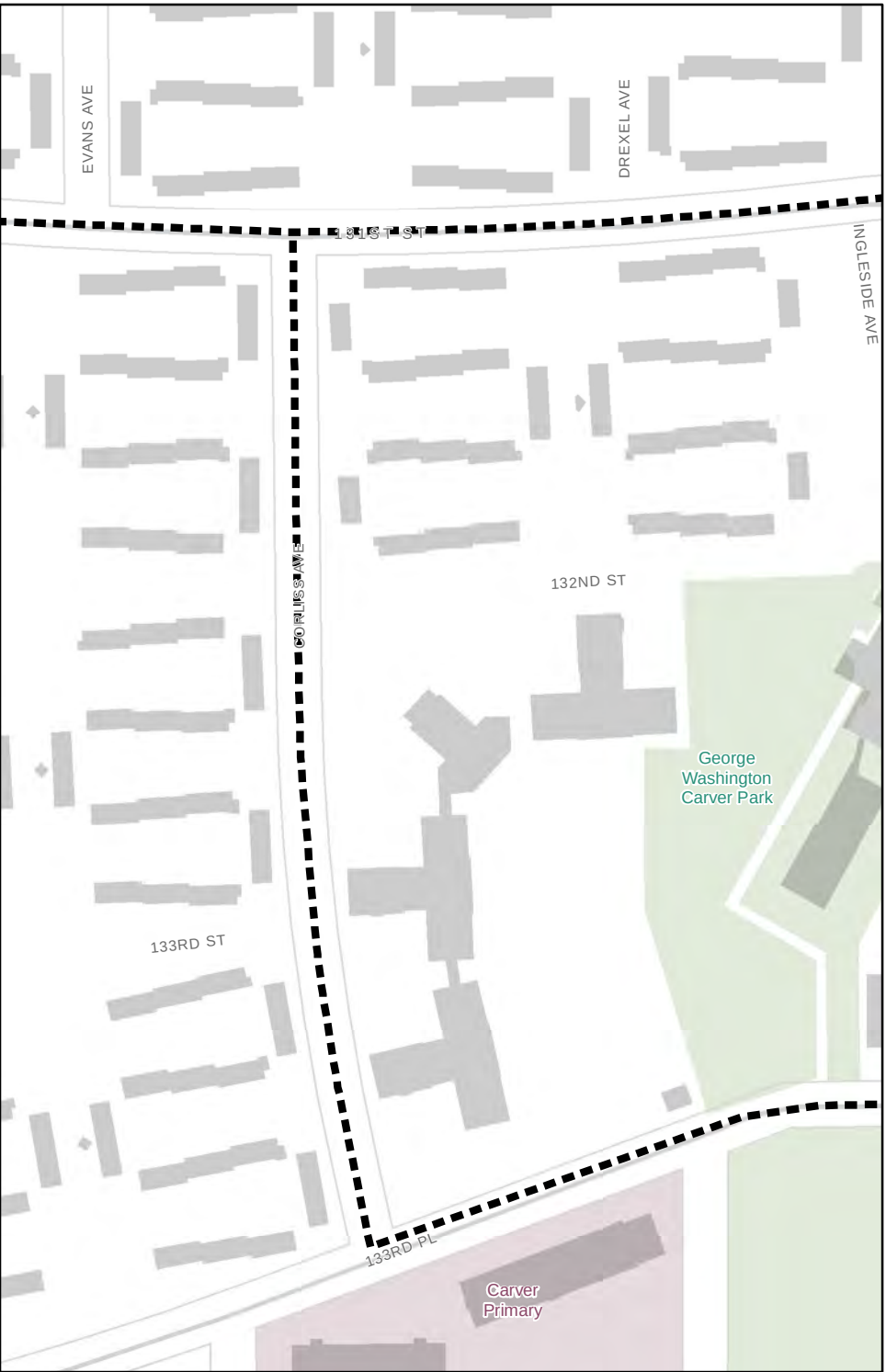

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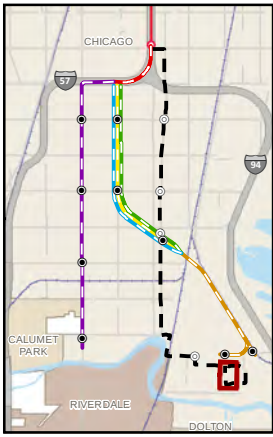

Legend

BRT Alternative

Sheet 19 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.19

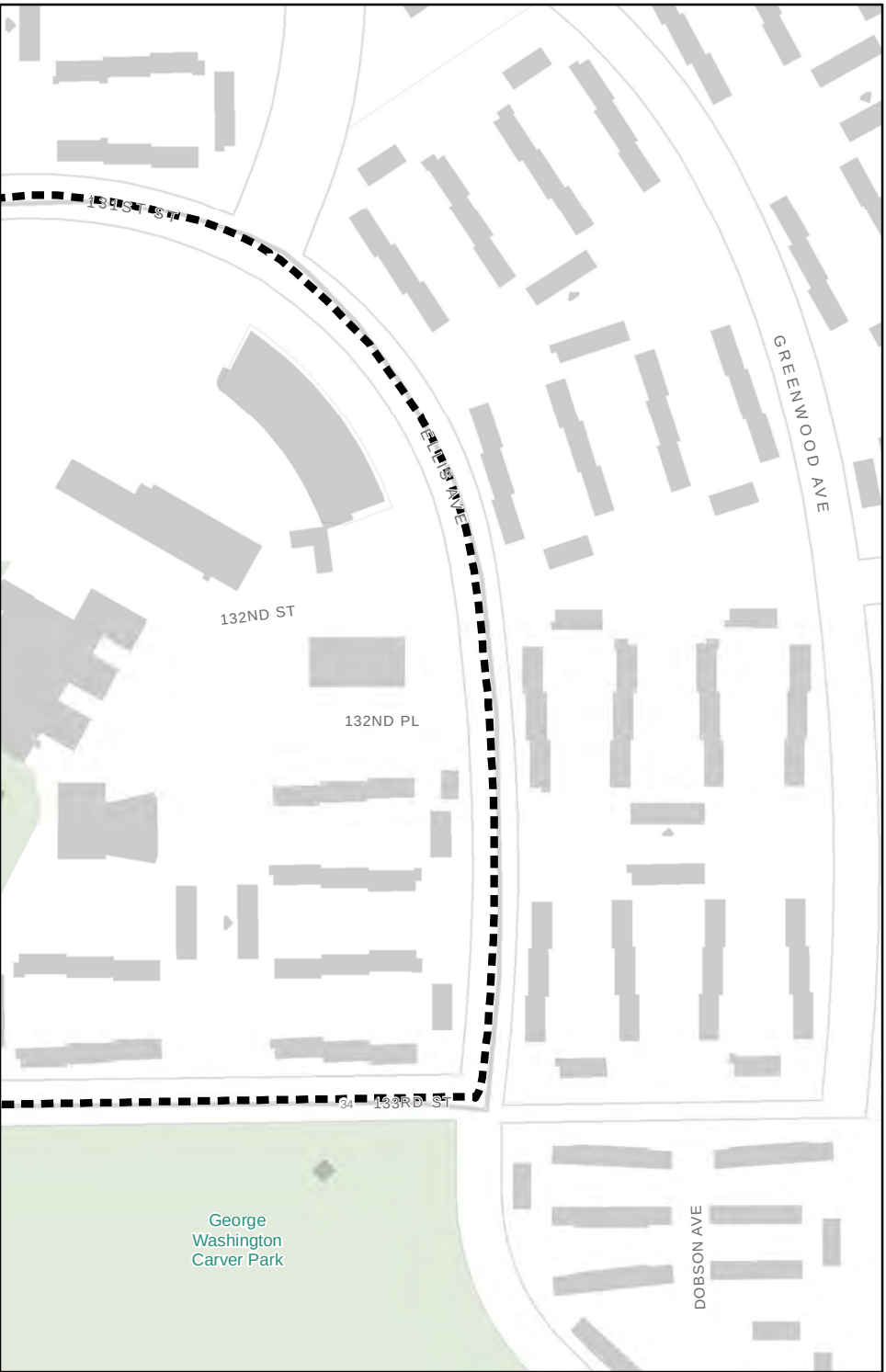

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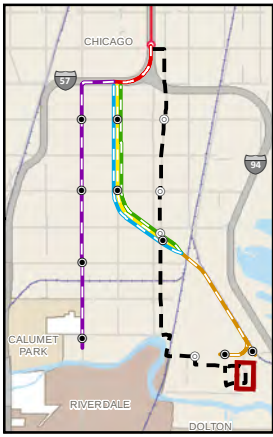

Legend

BRT Alternative

Sheet 20 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.20

Appendix B
Union Pacific Railroad Rail Alternative
Right-of-Way Option
Displacements Maps

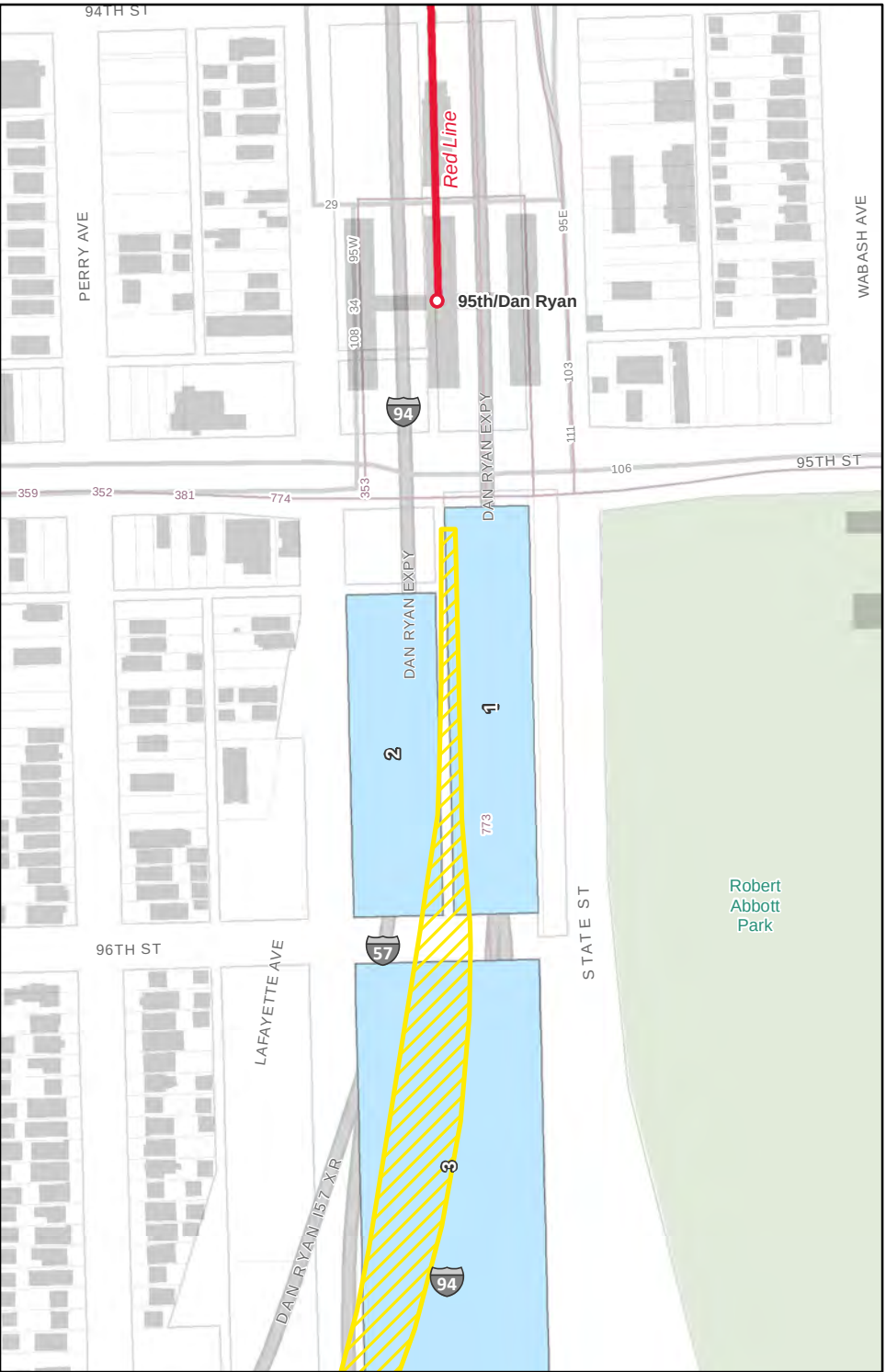

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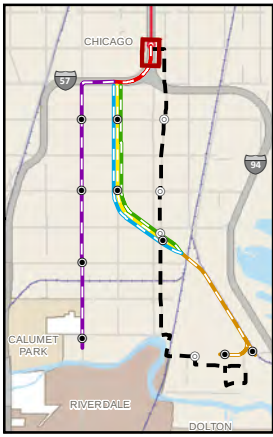

Legend

UPRR Rail Alternative ROW Option

Sheet 1 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.1

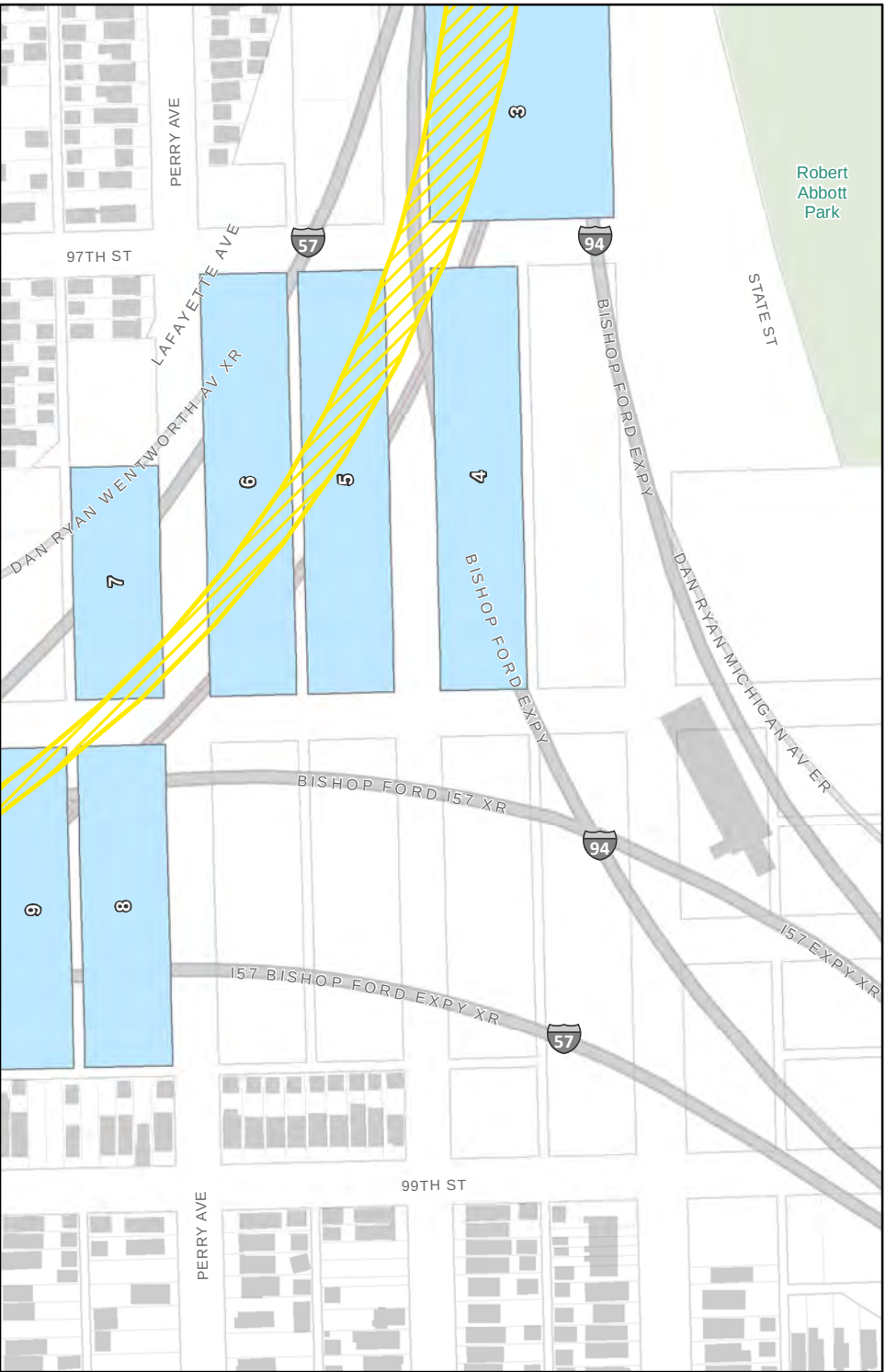

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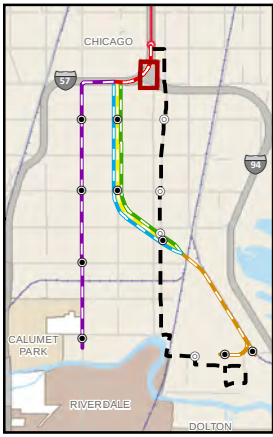

Legend

UPRR Rail Alternative ROW Option

Sheet 2 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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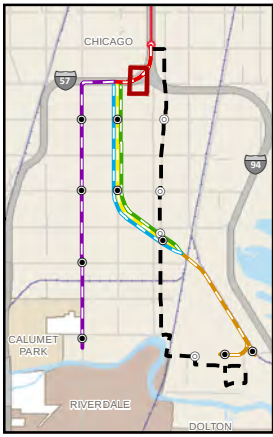

Legend

UPRR Rail Alternative ROW Option

Sheet 3 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.3

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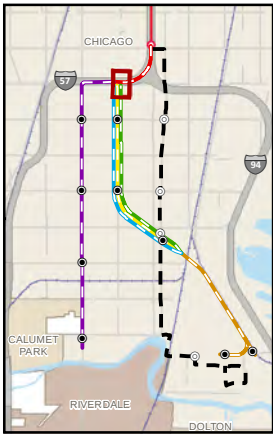

Legend

UPRR Rail Alternative ROW Option

Sheet 4 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.4

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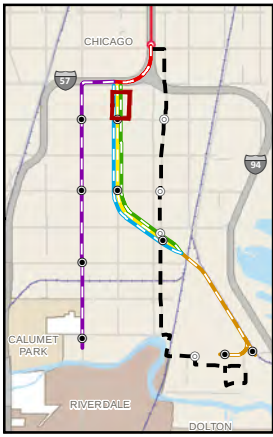

Legend

UPRR Rail Alternative ROW Option

Sheet 5 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.5

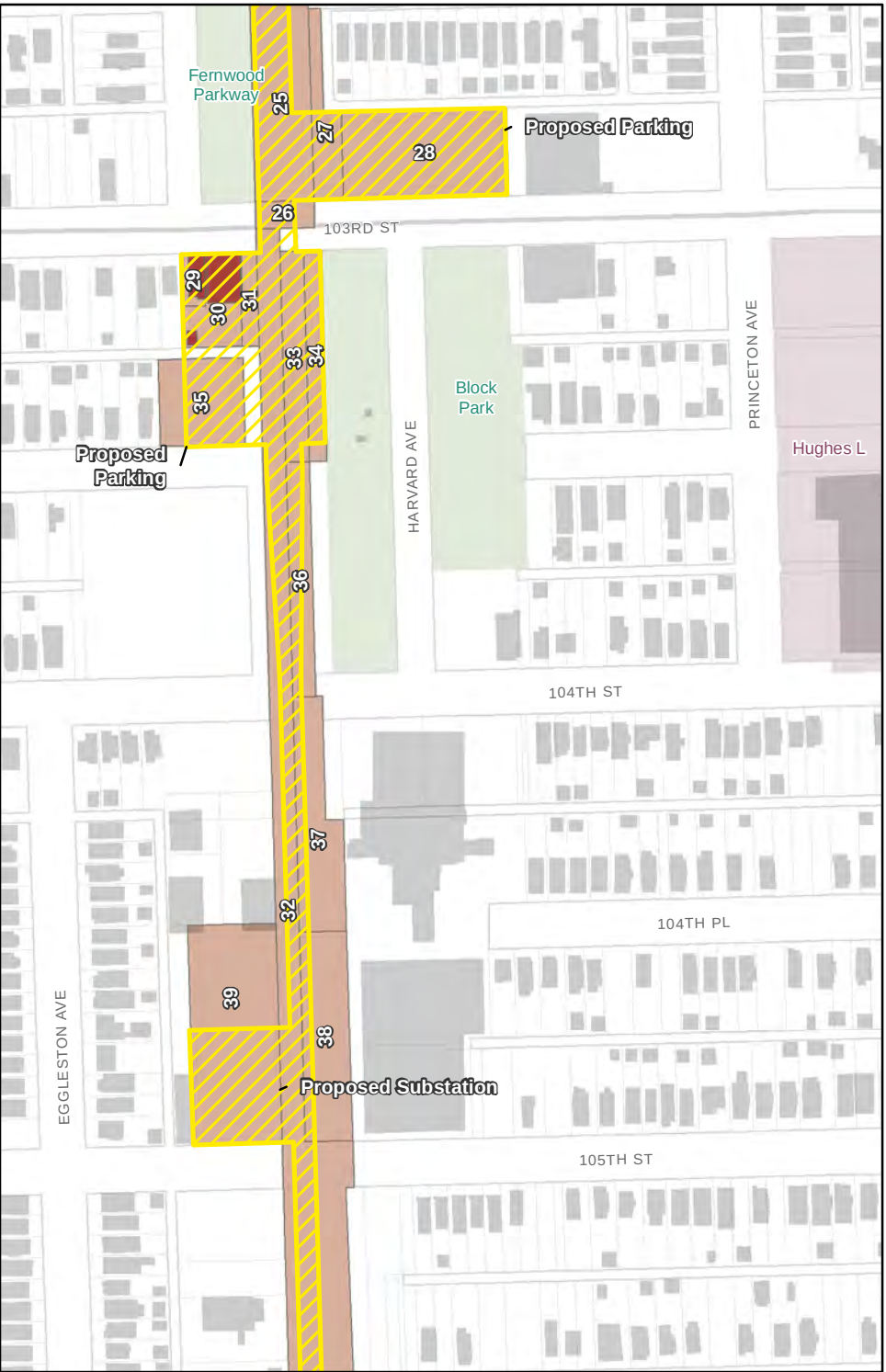

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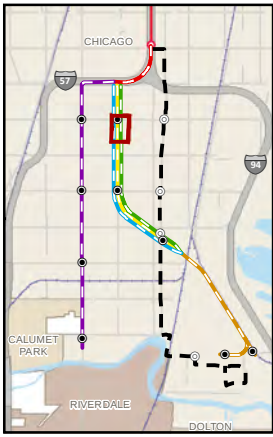

Legend

UPRR Rail Alternative ROW Option

Sheet 6 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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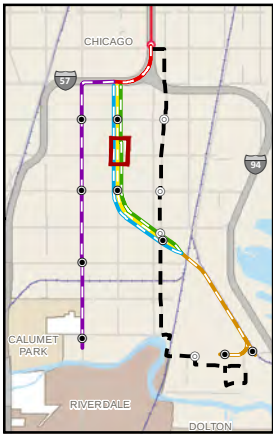

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UPRR Rail Alternative ROW Option

Sheet 7 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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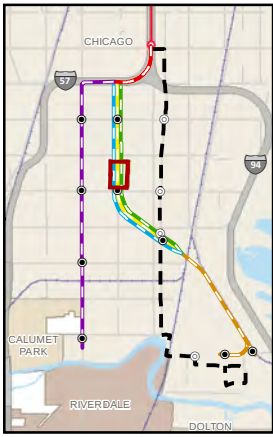

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UPRR Rail Alternative ROW Option

Sheet 8 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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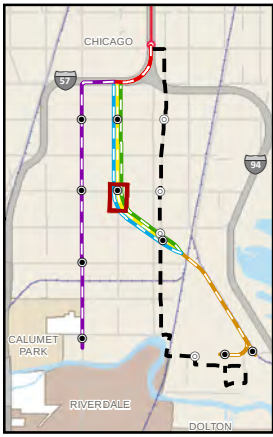

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UPRR Rail Alternative ROW Option

Sheet 9 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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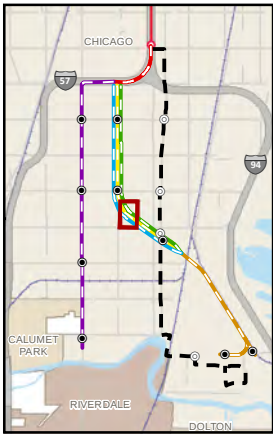

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UPRR Rail Alternative ROW Option

Sheet 10 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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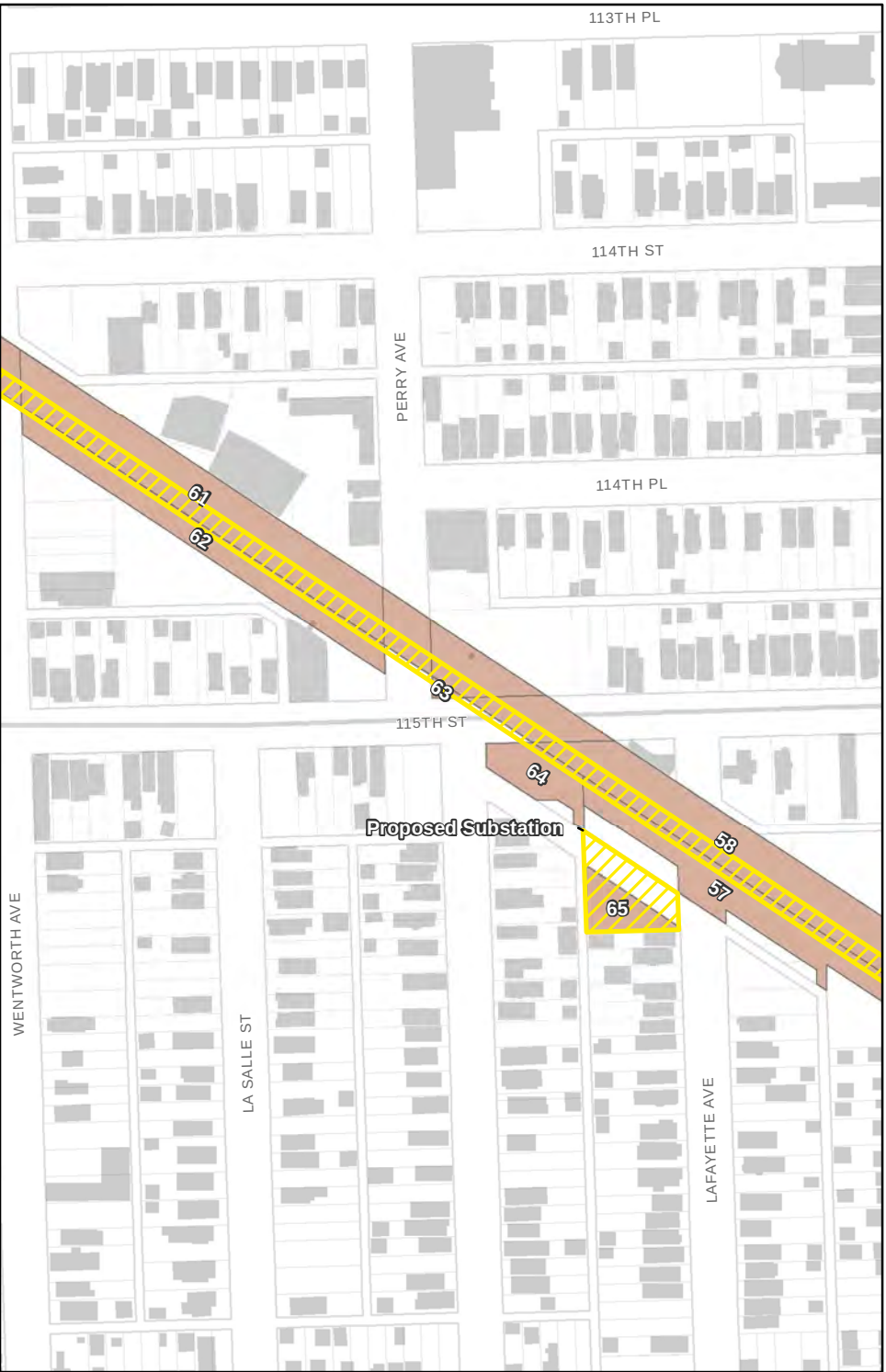

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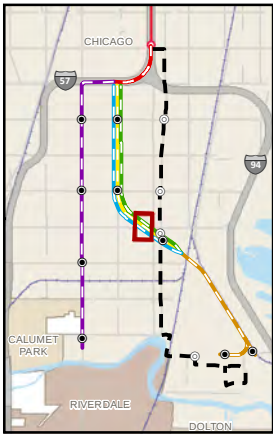

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UPRR Rail Alternative ROW Option

Sheet 11 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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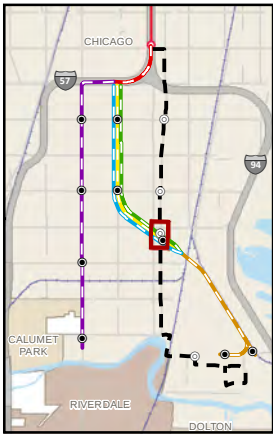

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UPRR Rail Alternative ROW Option

Sheet 12 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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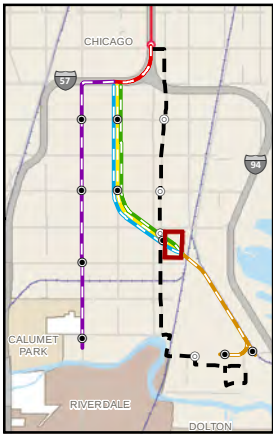

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UPRR Rail Alternative ROW Option

Sheet 13 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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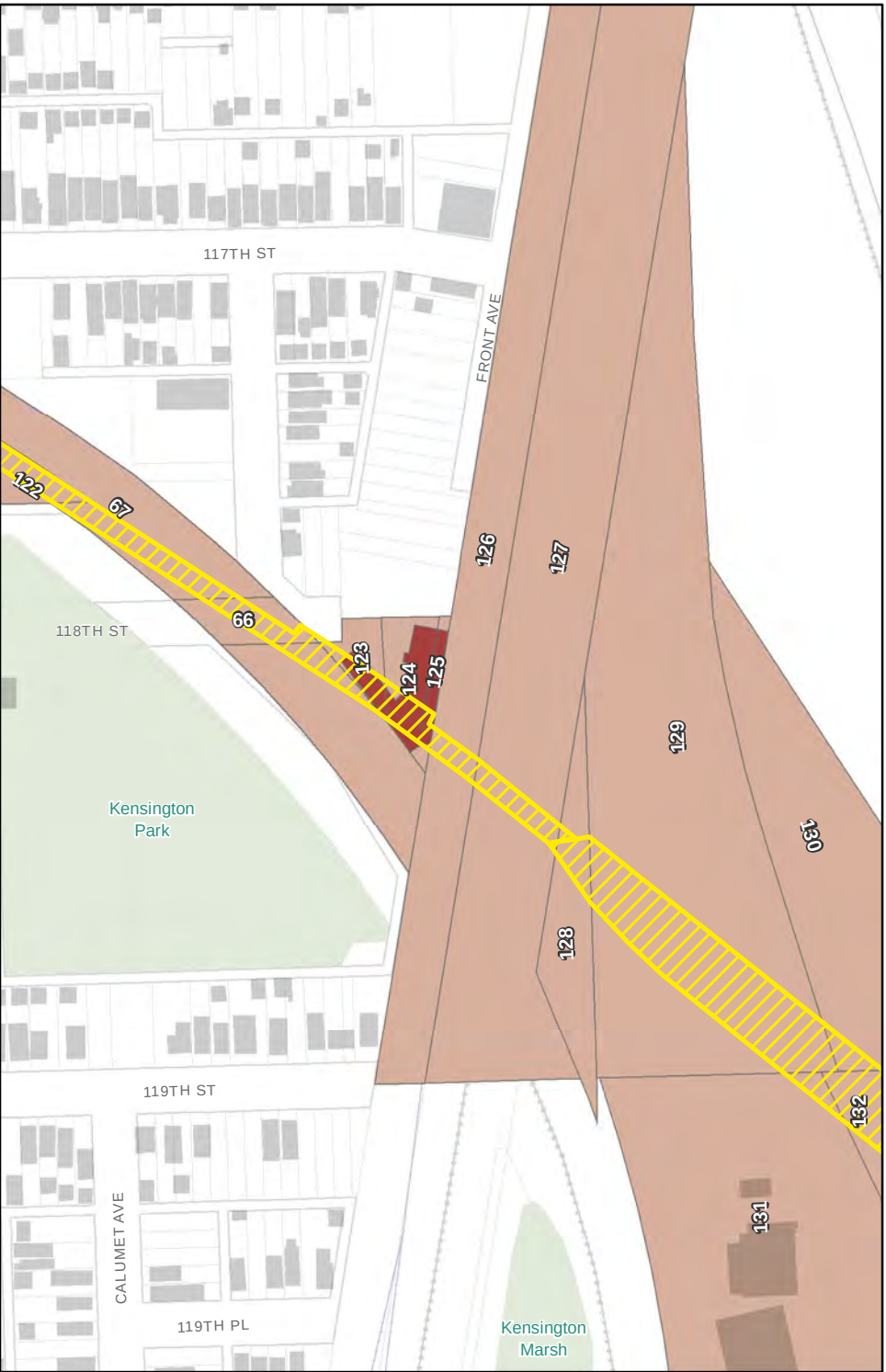

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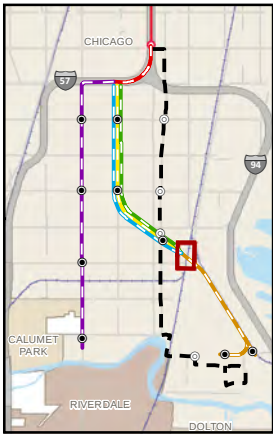

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UPRR Rail Alternative ROW Option

Sheet 14 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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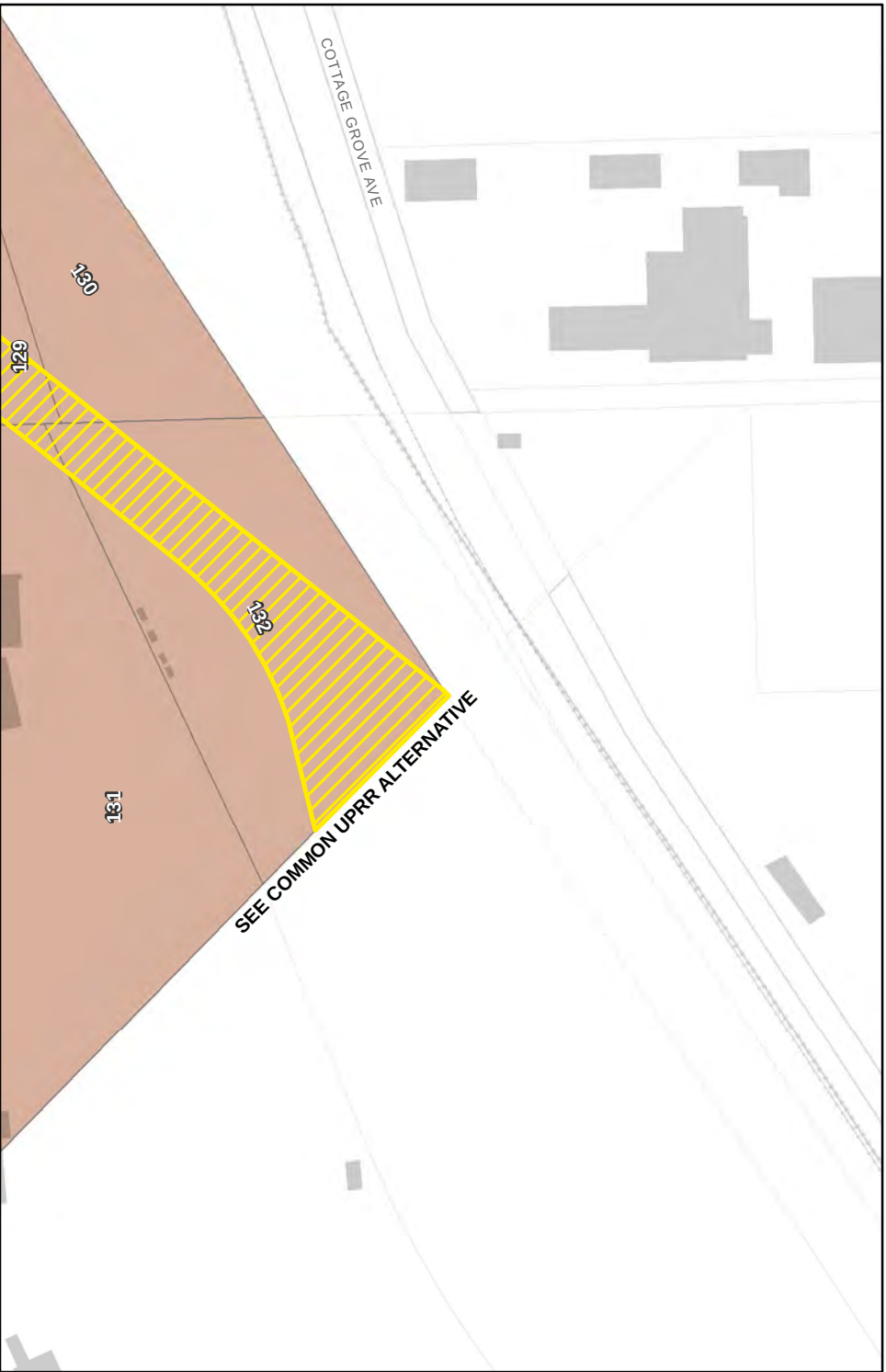

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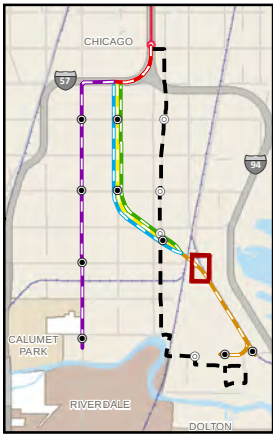

Legend

UPRR Rail Alternative ROW Option

Sheet 15 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.15

Appendix C
Union Pacific Railroad Rail Alternative
East Option
Displacements Maps

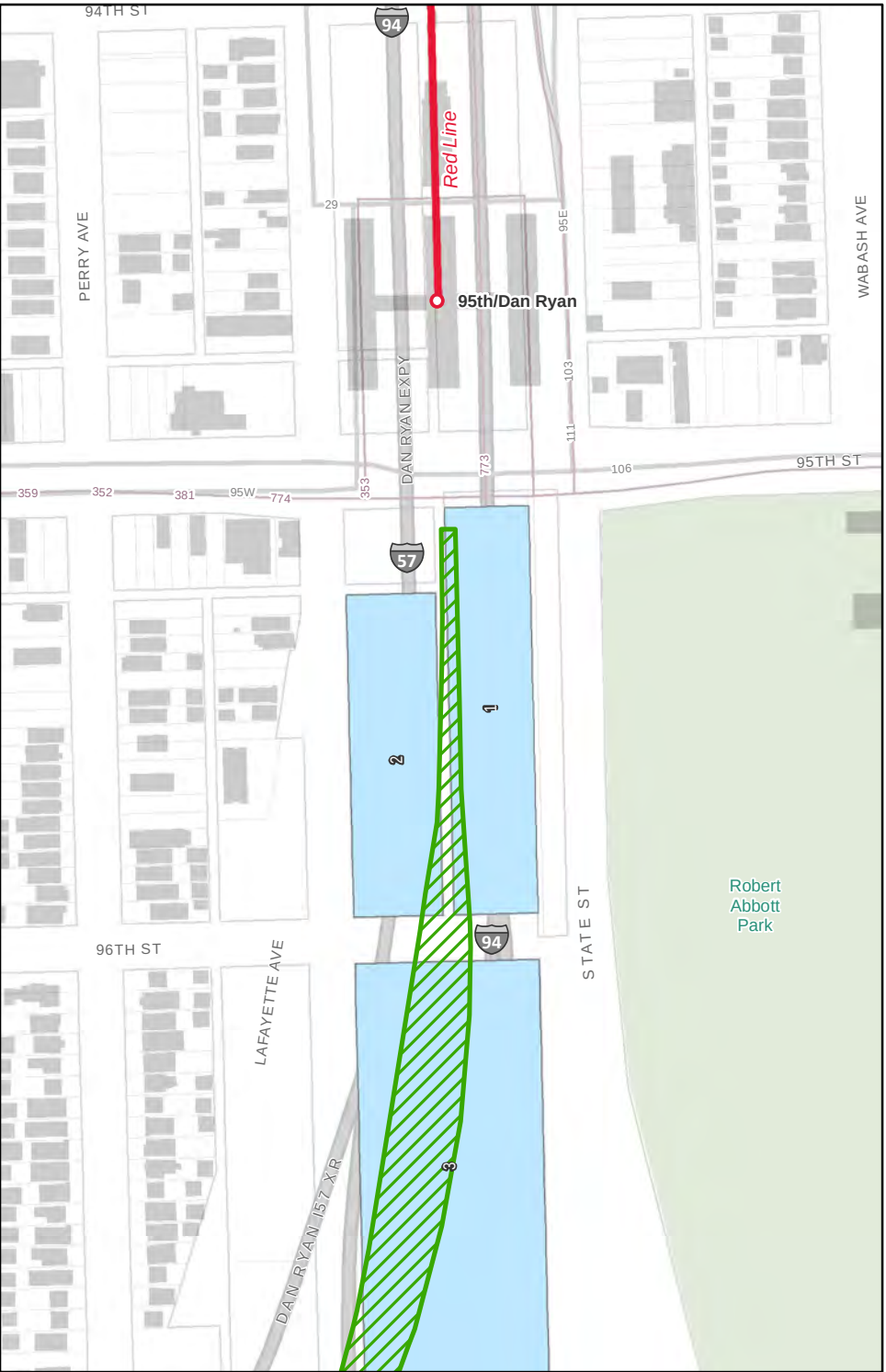

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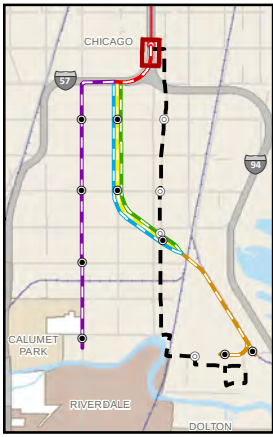

Legend

UPRR Rail Alternative
East Option

Sheet 1 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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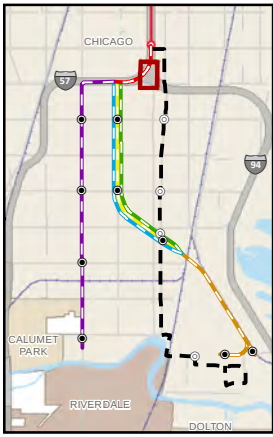

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UPRR Rail Alternative East Option

Sheet 2 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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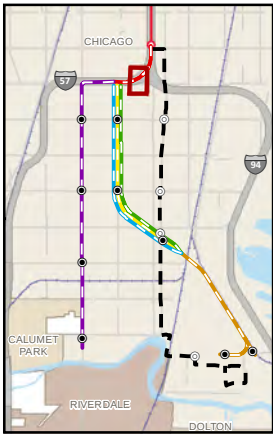

Legend

UPRR Rail Alternative East Option

Sheet 3 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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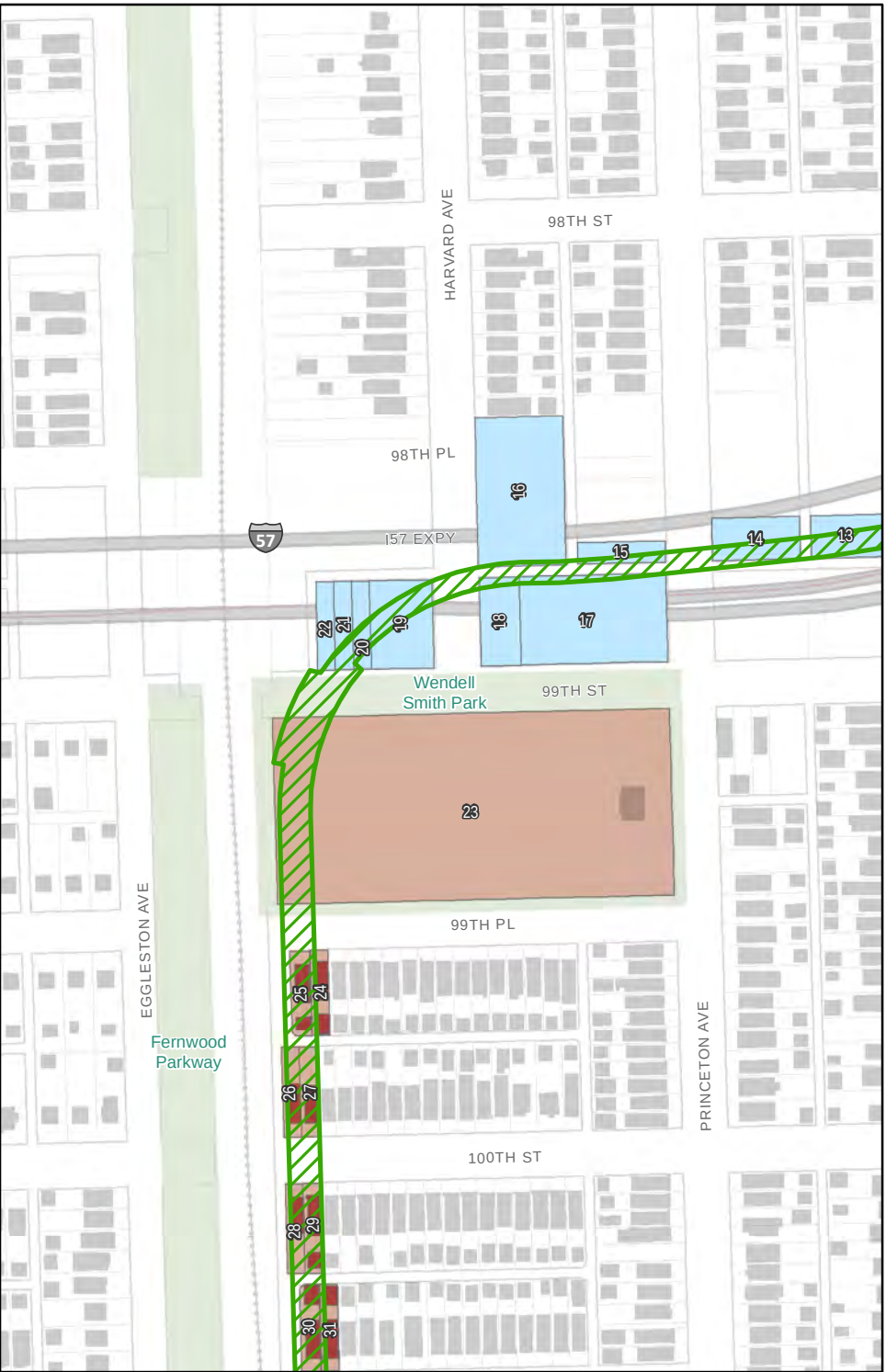

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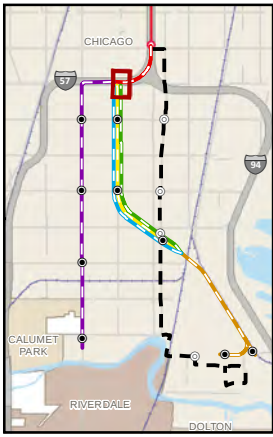

Legend

UPRR Rail Alternative
East Option

Sheet 4 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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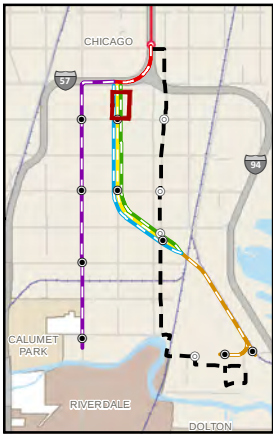

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UPRR Rail Alternative East Option

Sheet 5 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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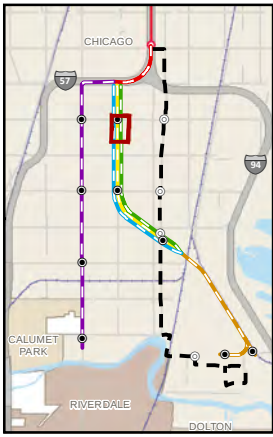

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UPRR Rail Alternative East Option

Sheet 6 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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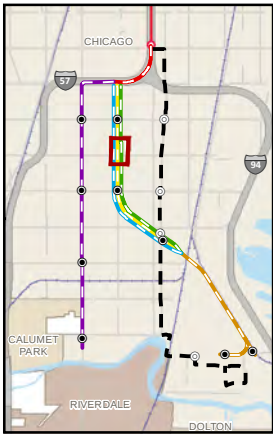

Legend

UPRR Rail Alternative East Option

Sheet 7 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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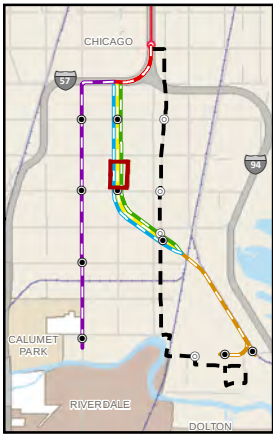

Legend

UPRR Rail Alternative East Option

Sheet 8 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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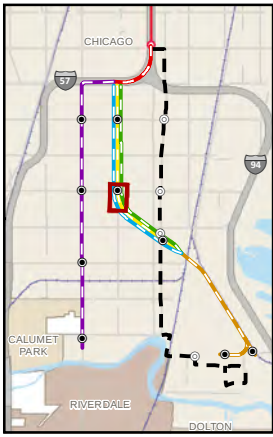

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UPRR Rail Alternative East Option

Sheet 9 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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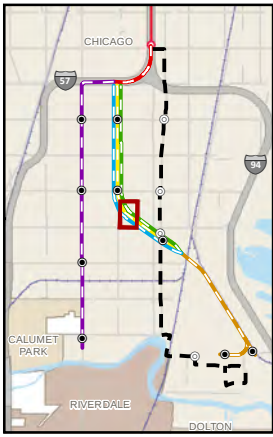

Legend

UPRR Rail Alternative East Option

Sheet 10 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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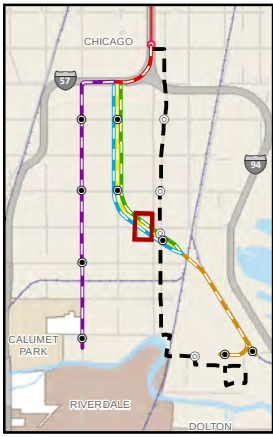

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UPRR Rail Alternative East Option

Sheet 11 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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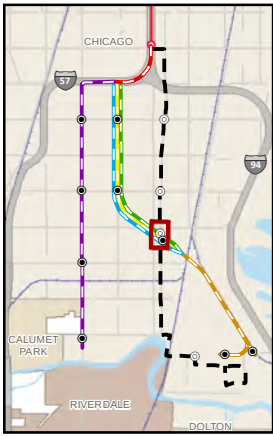

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UPRR Rail Alternative East Option

Sheet 12 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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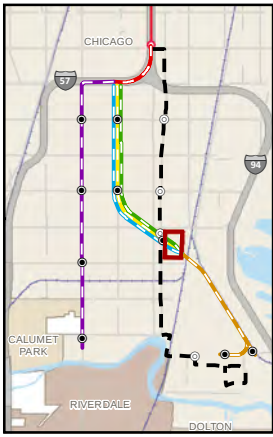

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UPRR Rail Alternative East Option

Sheet 13 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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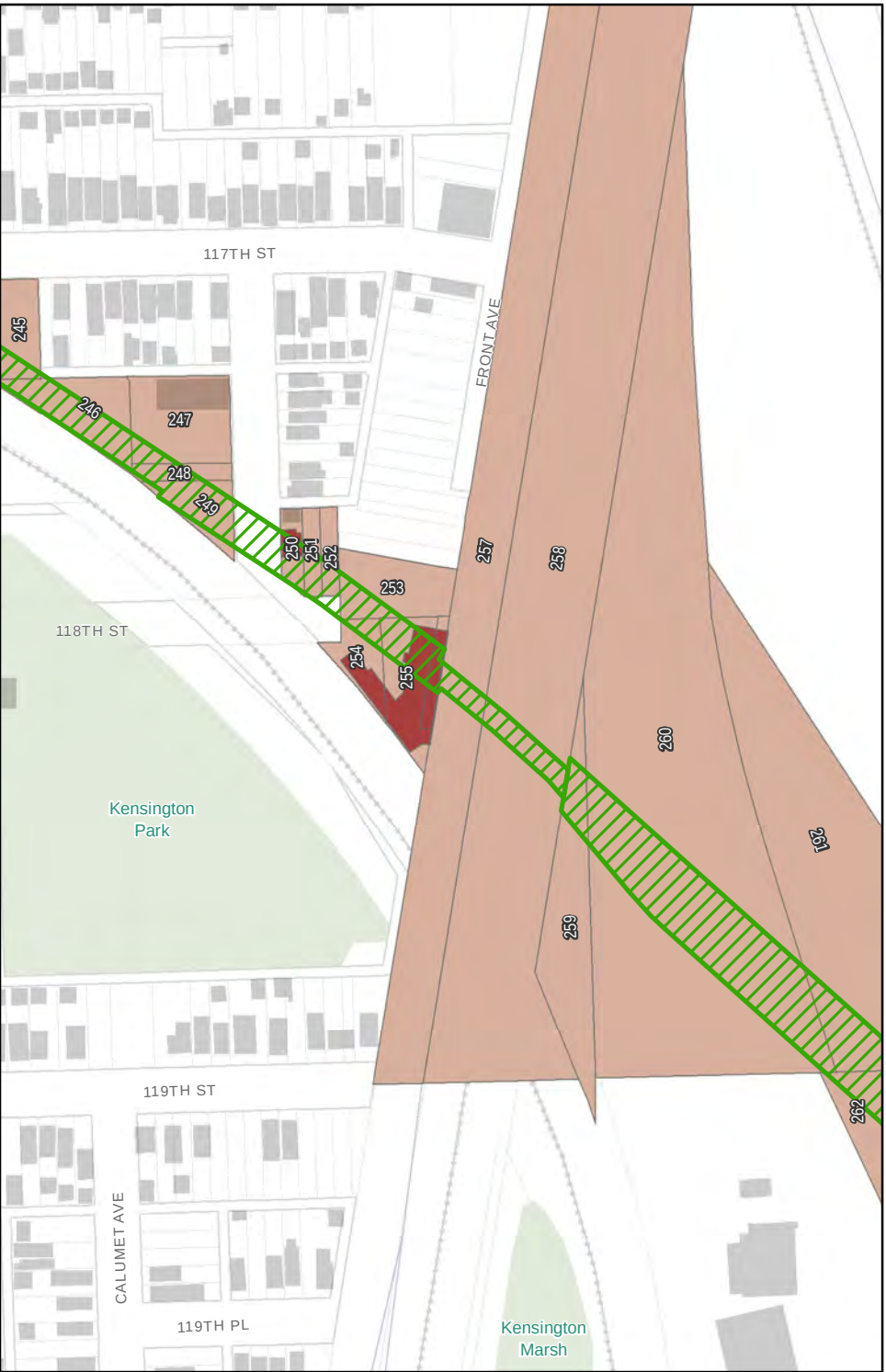

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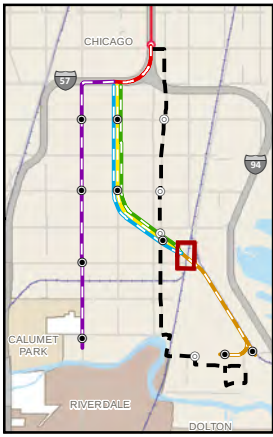

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UPRR Rail Alternative East Option

Sheet 14 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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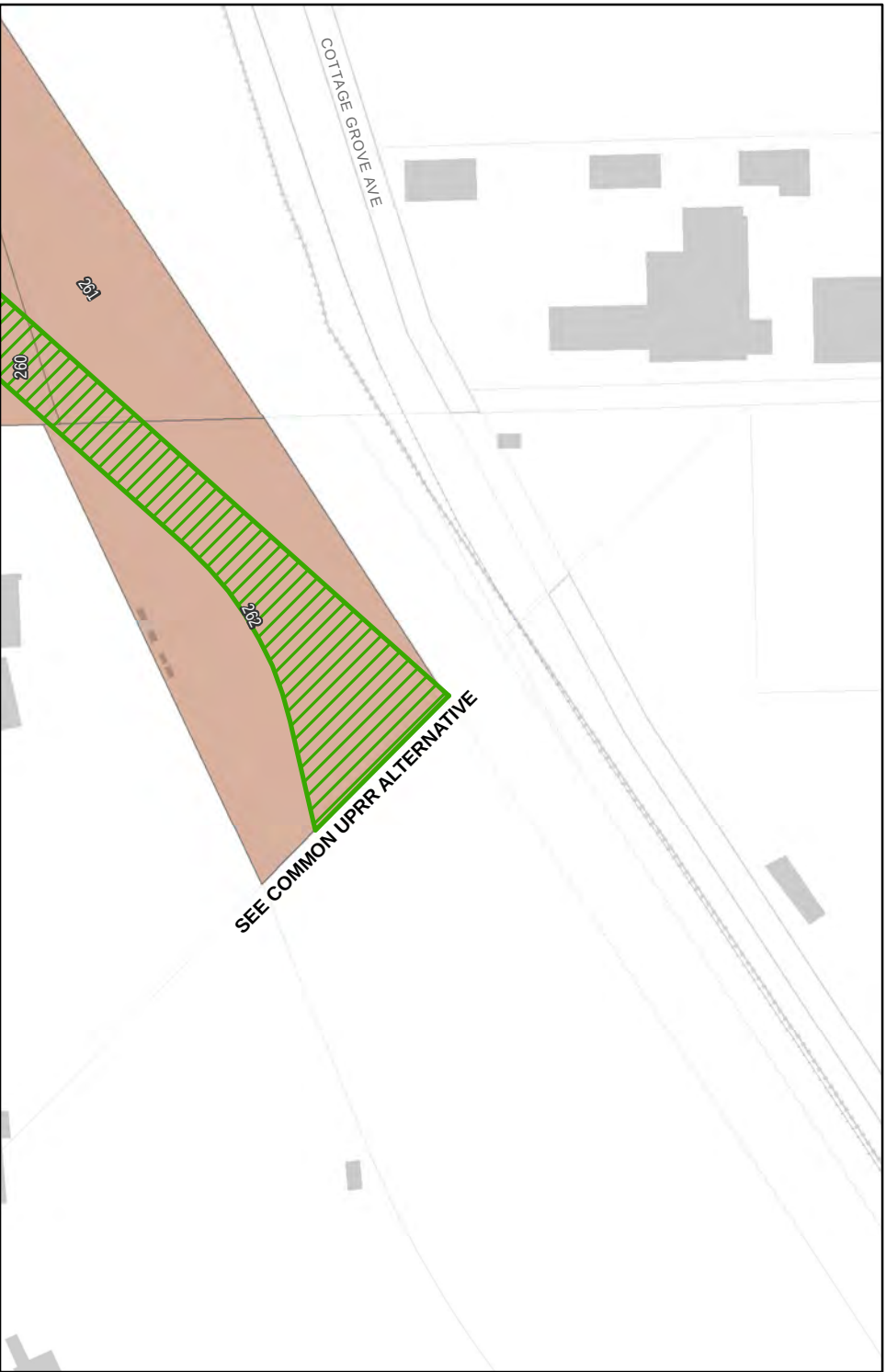

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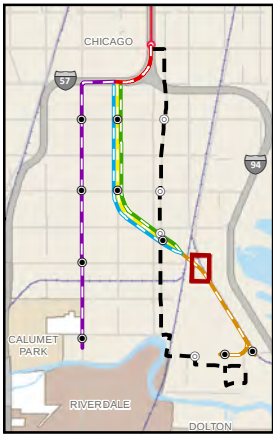

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UPRR Rail Alternative East Option

Sheet 15 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.15

Appendix D
Union Pacific Railroad Rail Alternative
West Option
Displacements Maps

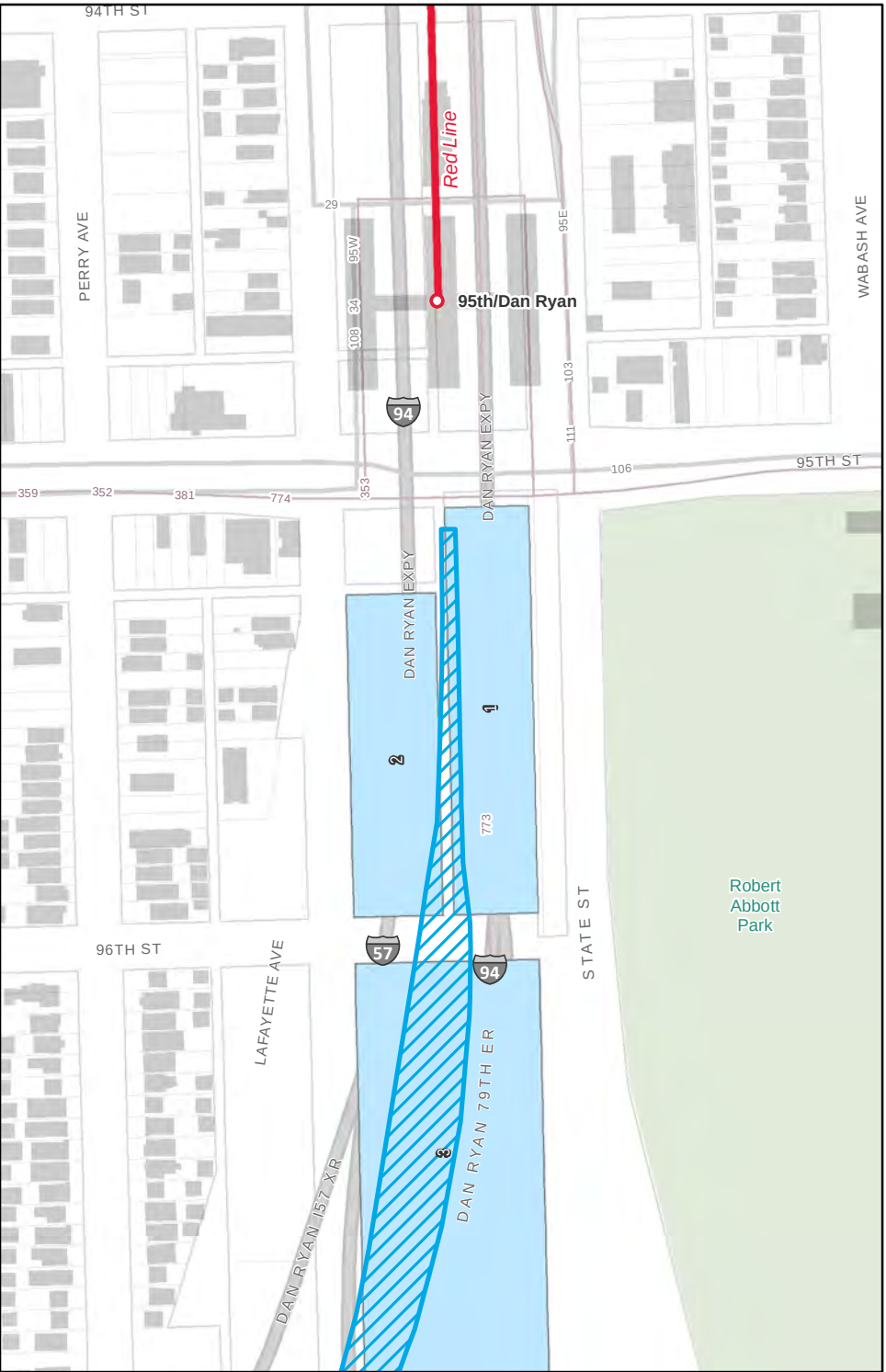

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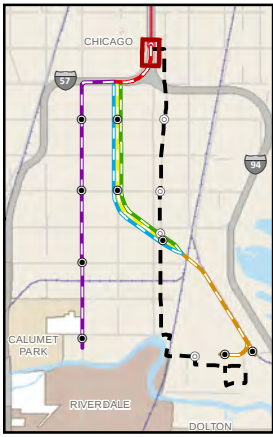

Legend

UPRR Rail Alternative
West Option

Sheet 1 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_02.1

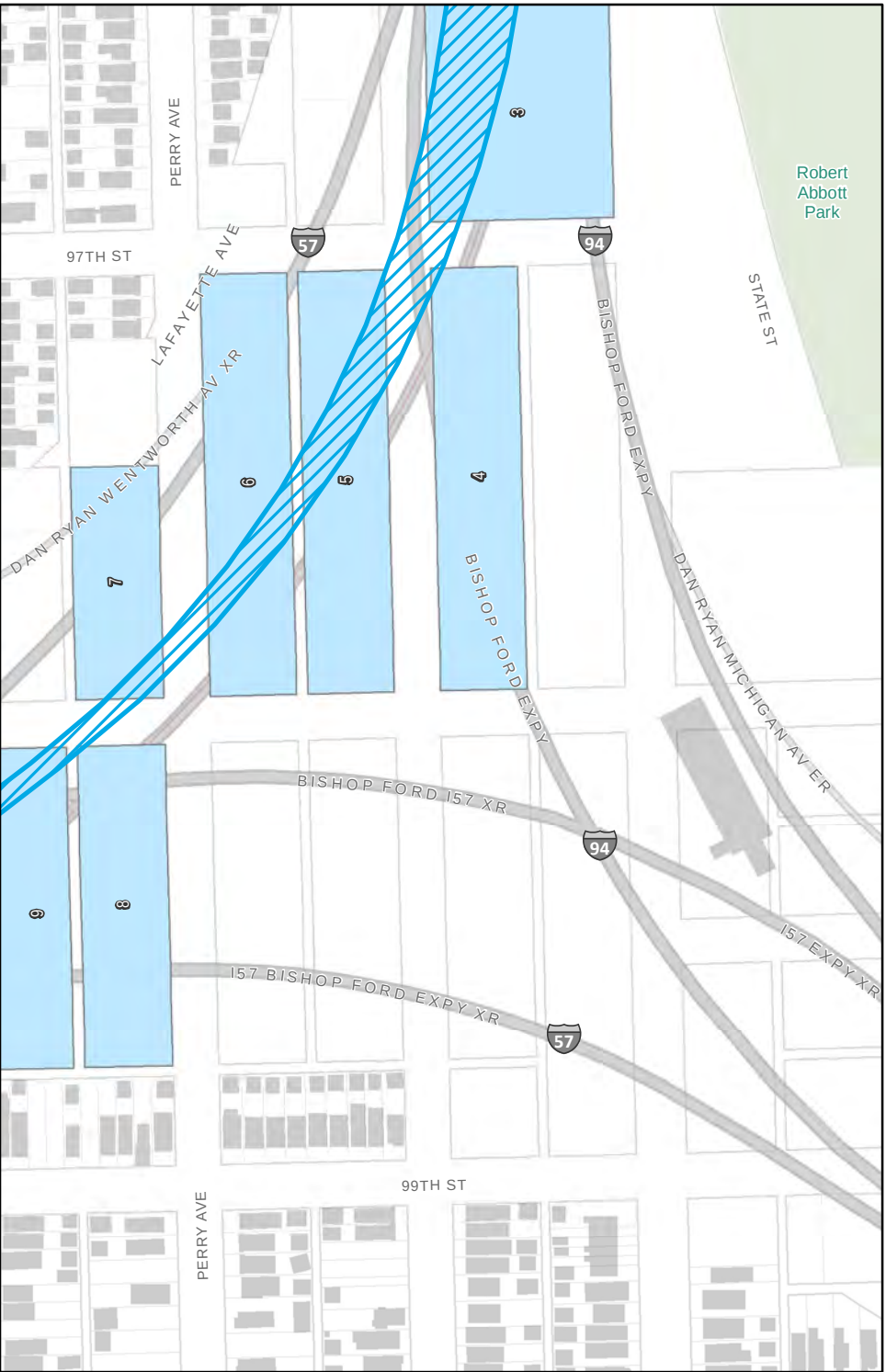

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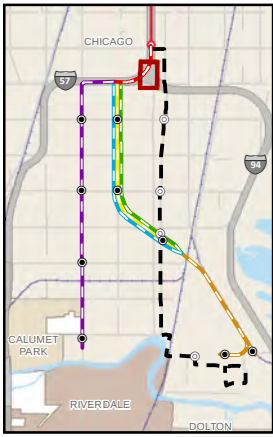

Legend

UPRR Rail Alternative West Option

Sheet 2 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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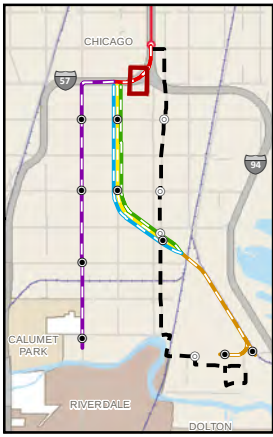

Legend

UPRR Rail Alternative West Option

Sheet 3 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.3

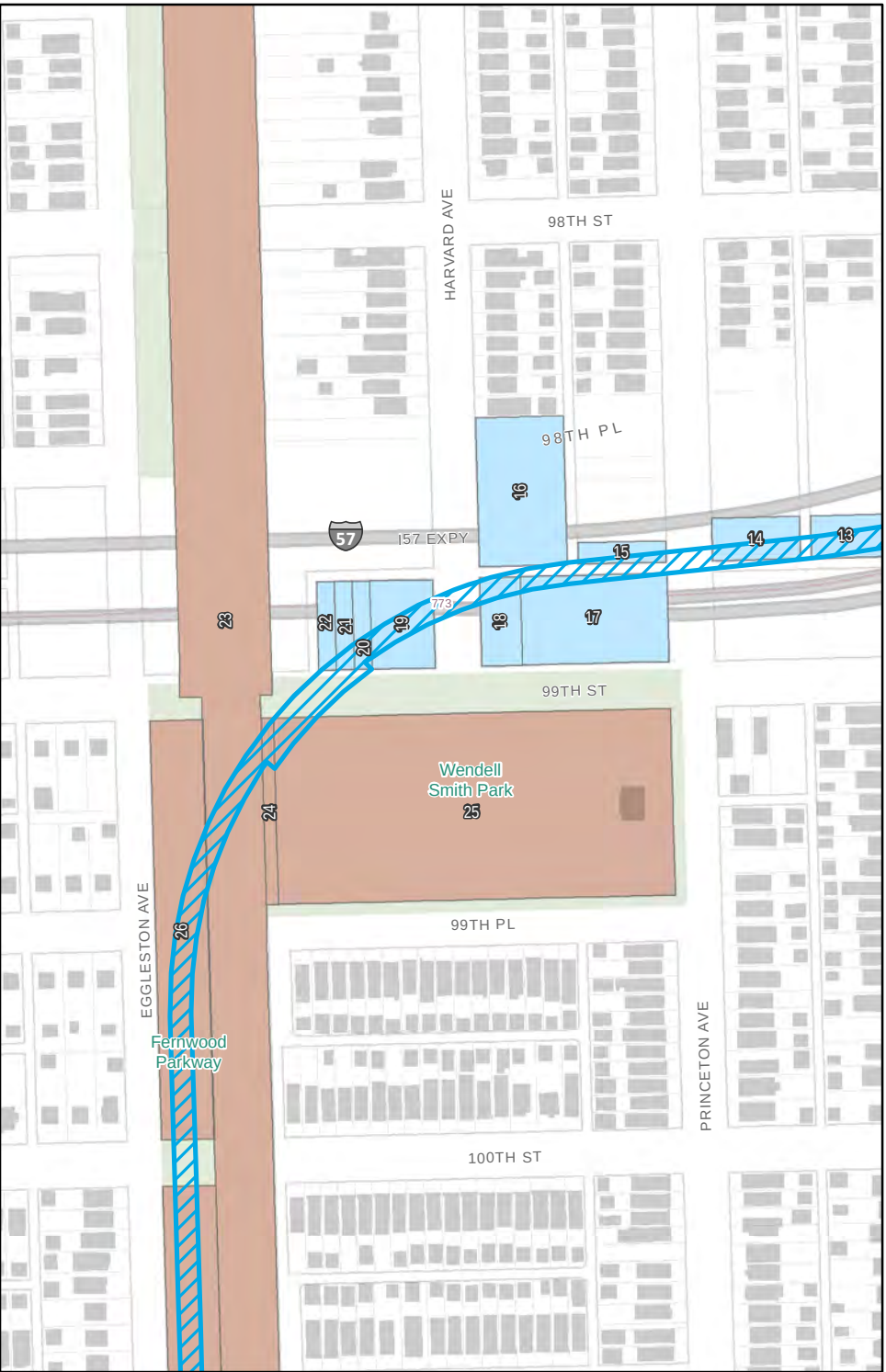

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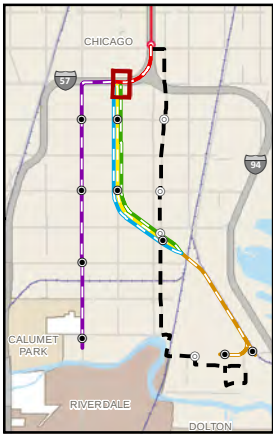

Legend

UPRR Rail Alternative
West Option

Sheet 4 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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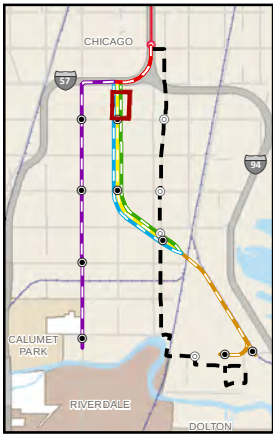

Legend

UPRR Rail Alternative West Option

Sheet 5 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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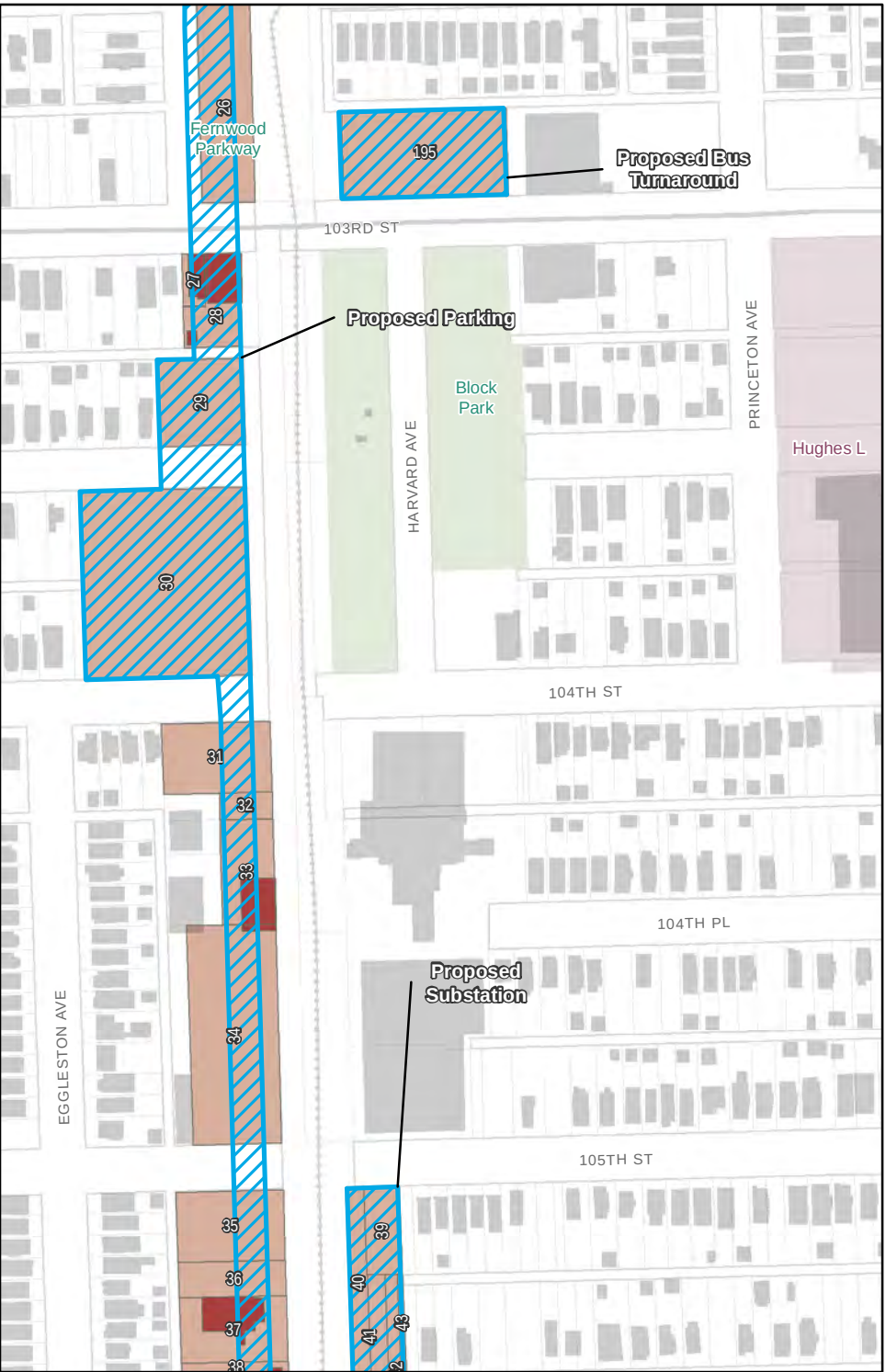

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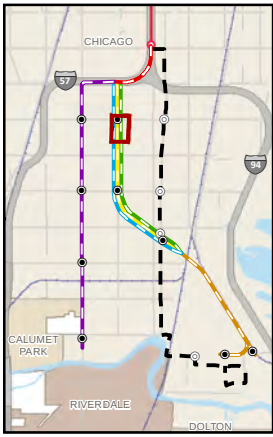

Legend

UPRR Rail Alternative West Option

Sheet 6 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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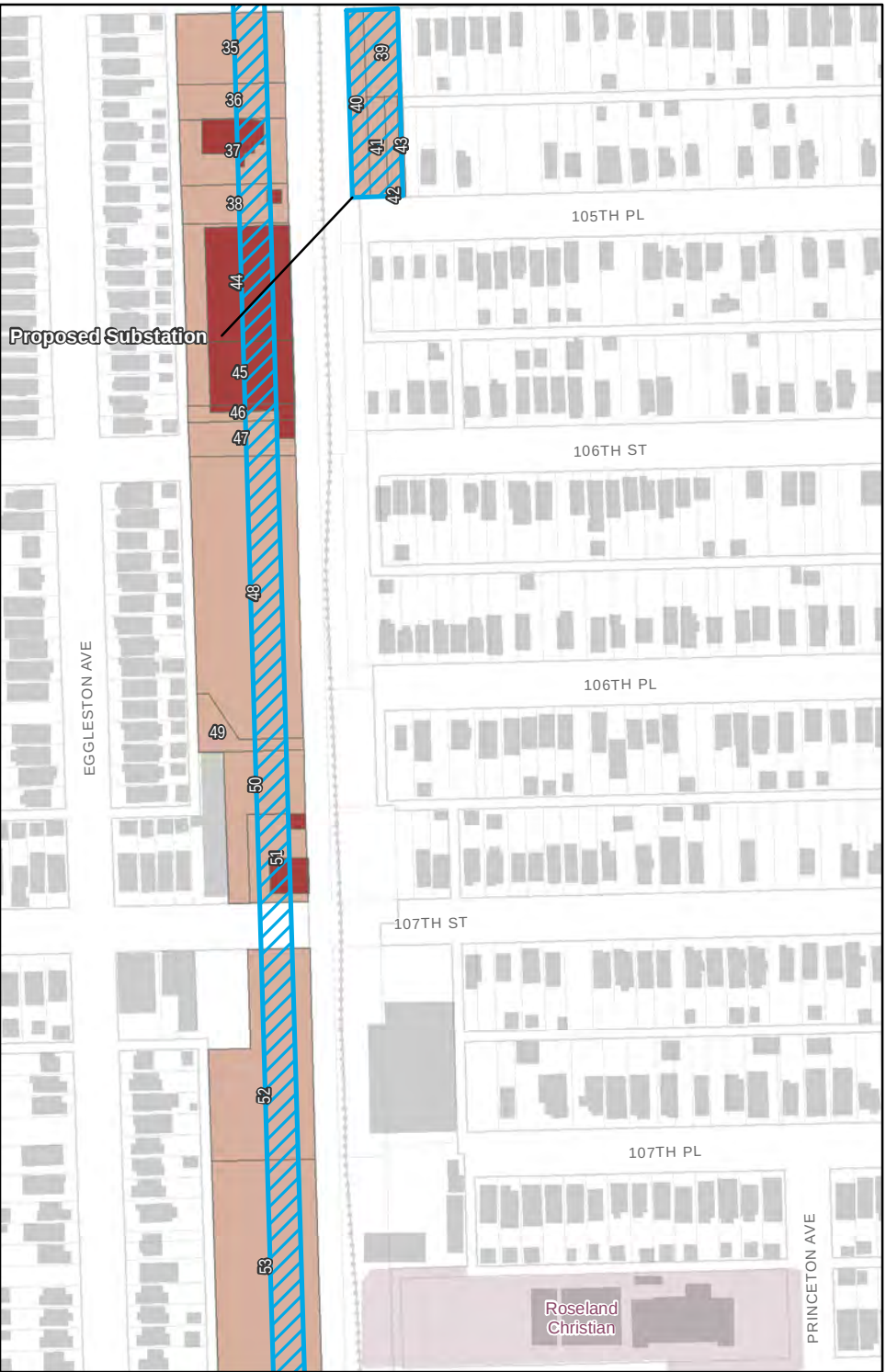

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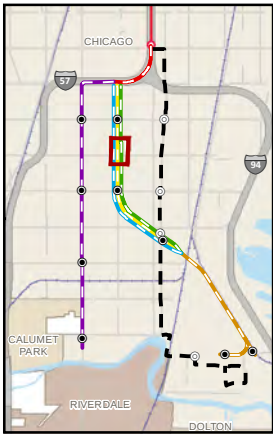

Legend

UPRR Rail Alternative West Option

Sheet 7 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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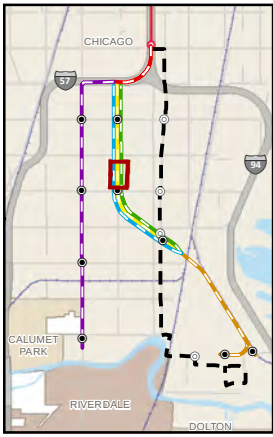

Legend

UPRR Rail Alternative West Option

Sheet 8 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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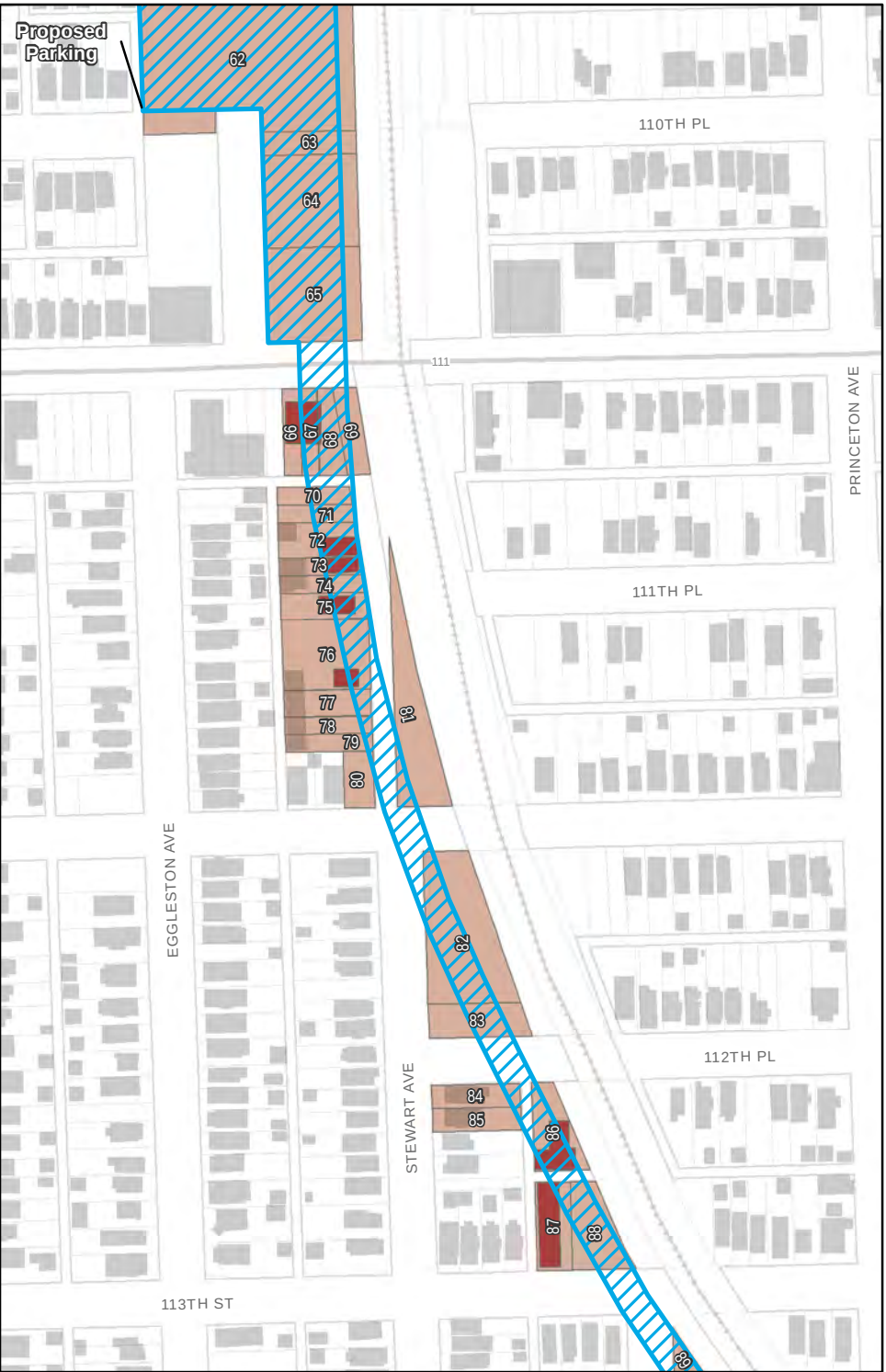

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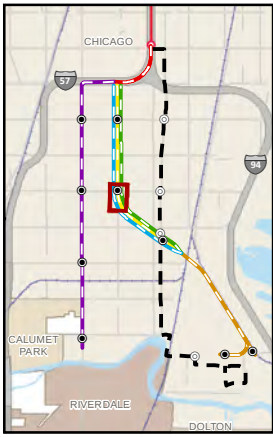

Legend

UPRR Rail Alternative West Option

Sheet 9 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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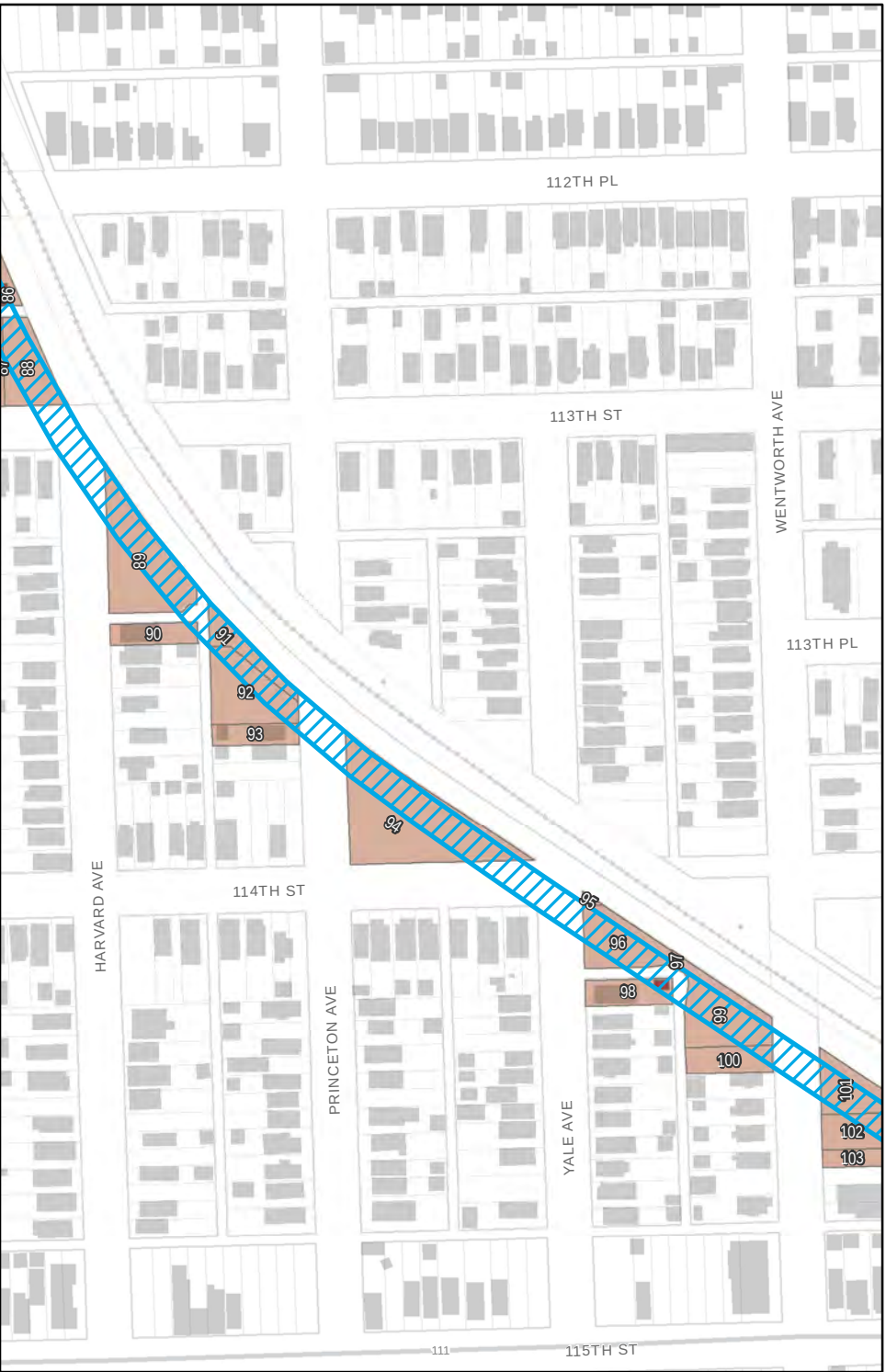

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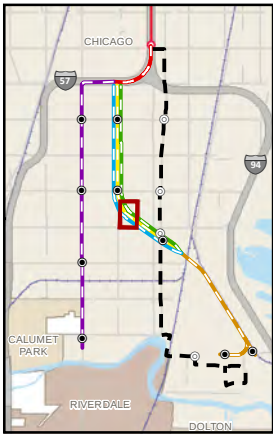

Legend

UPRR Rail Alternative West Option

Sheet 10 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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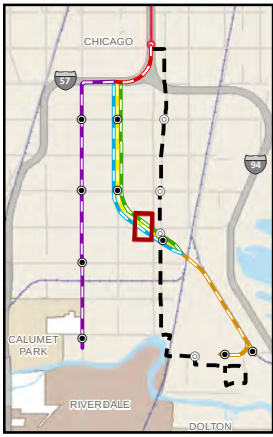

Legend

UPRR Rail Alternative West Option

Sheet 11 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.11

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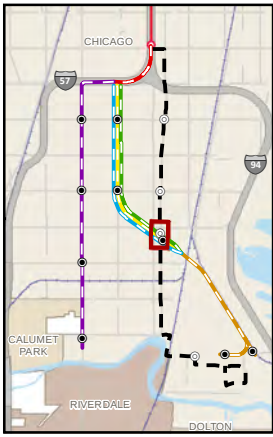

Legend

UPRR Rail Alternative West Option

Sheet 12 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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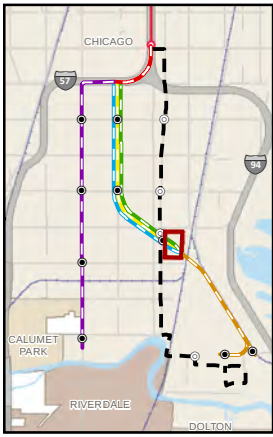

Legend

UPRR Rail Alternative West Option

Sheet 13 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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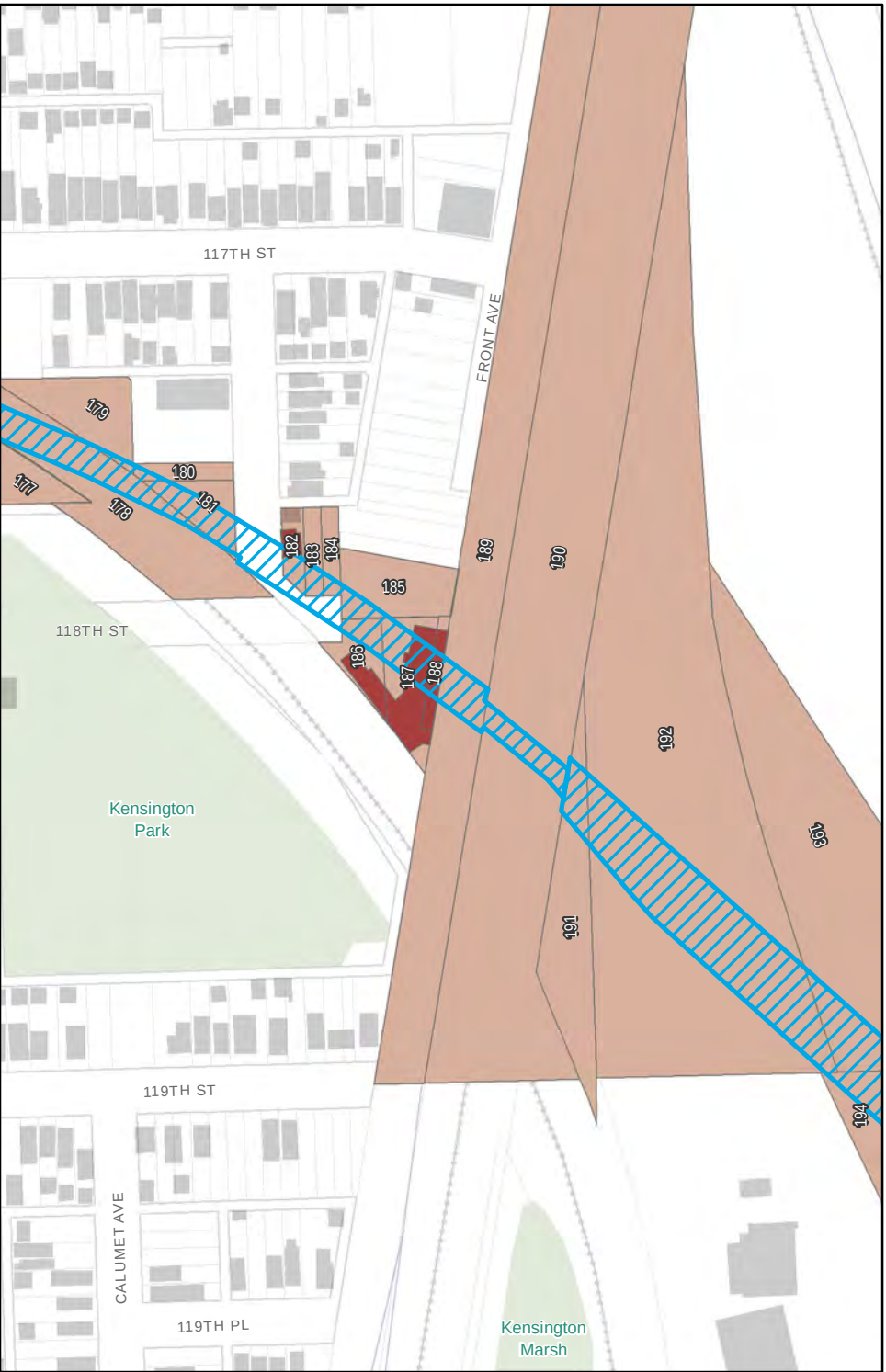

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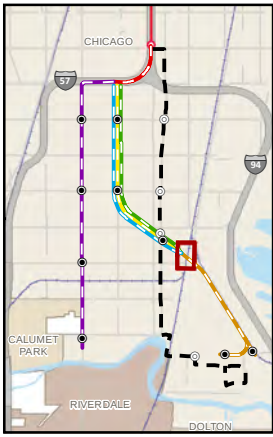

Legend

UPRR Rail Alternative West Option

Sheet 14 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.14

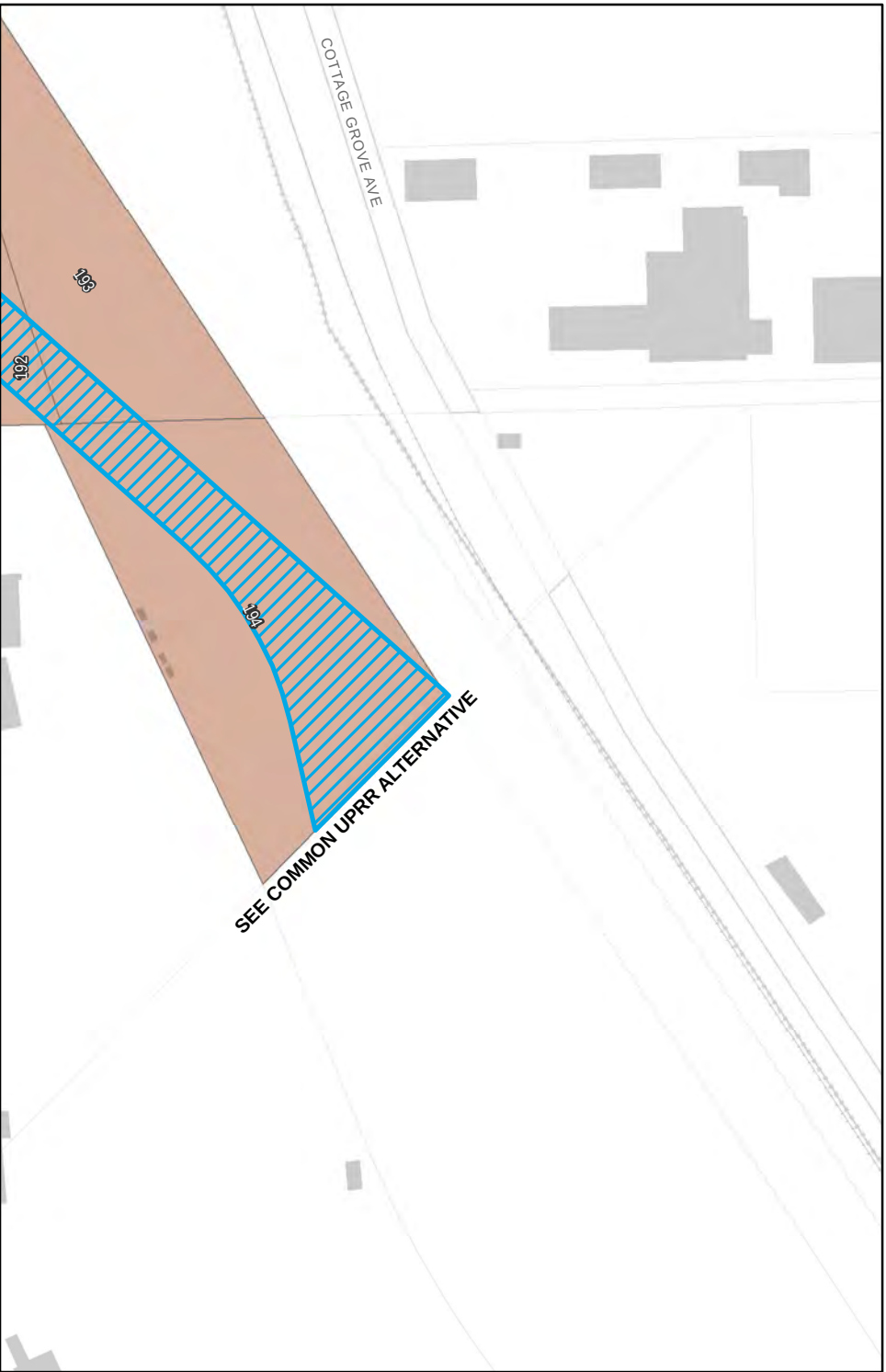

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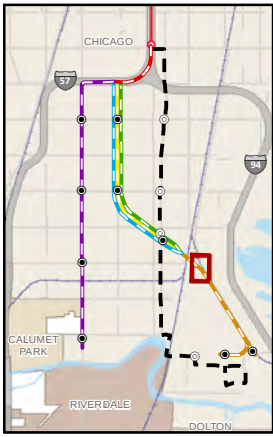

Legend

UPRR Rail Alternative West Option

Sheet 15 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.15

Appendix E
Union Pacific Railroad Rail Alternative
Common Displacements Maps

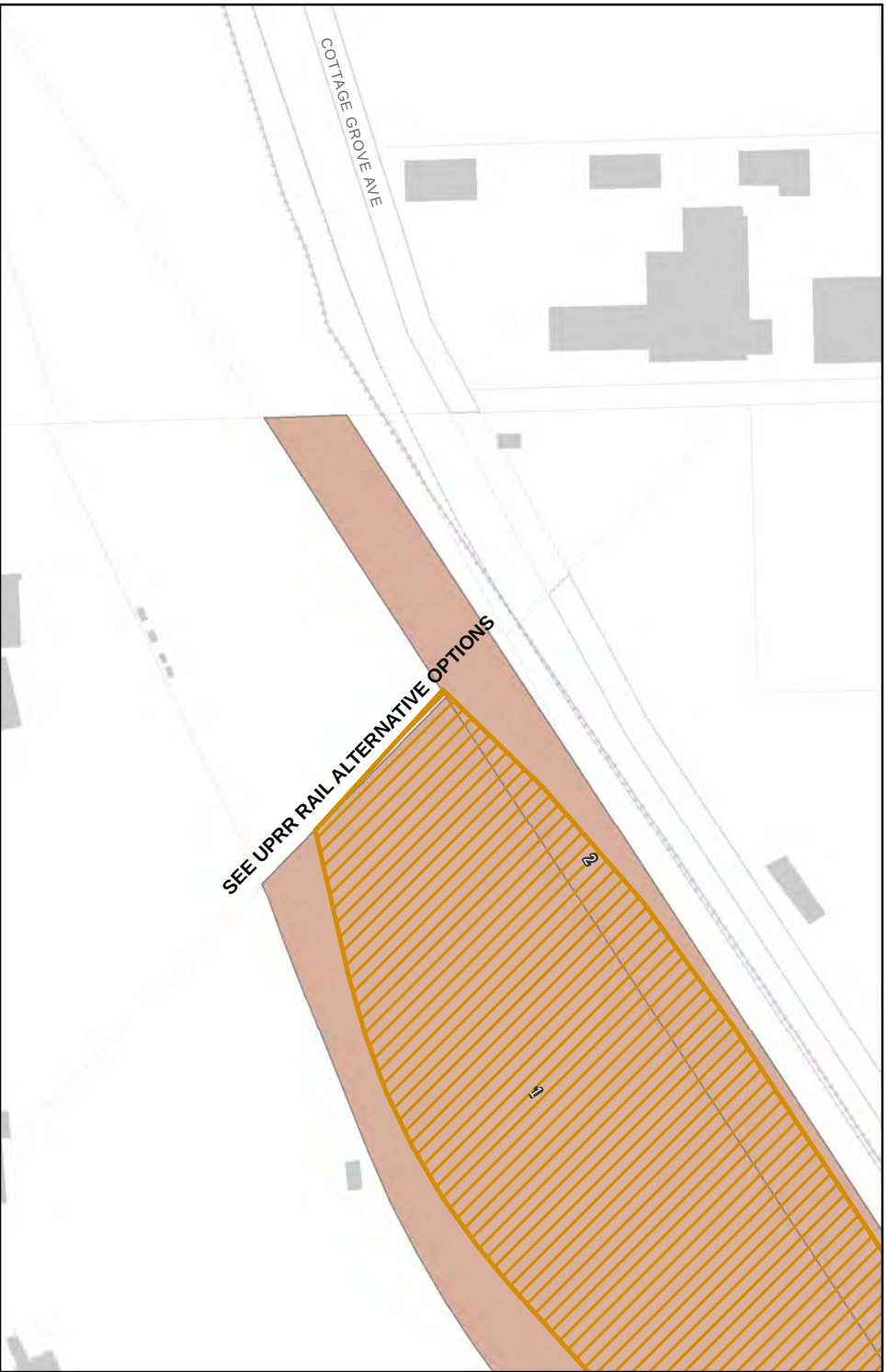

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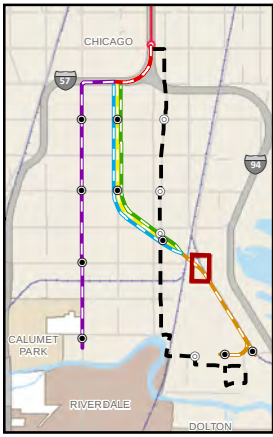

Legend

Common UPRR Rail Alternative

Sheet 1 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.1

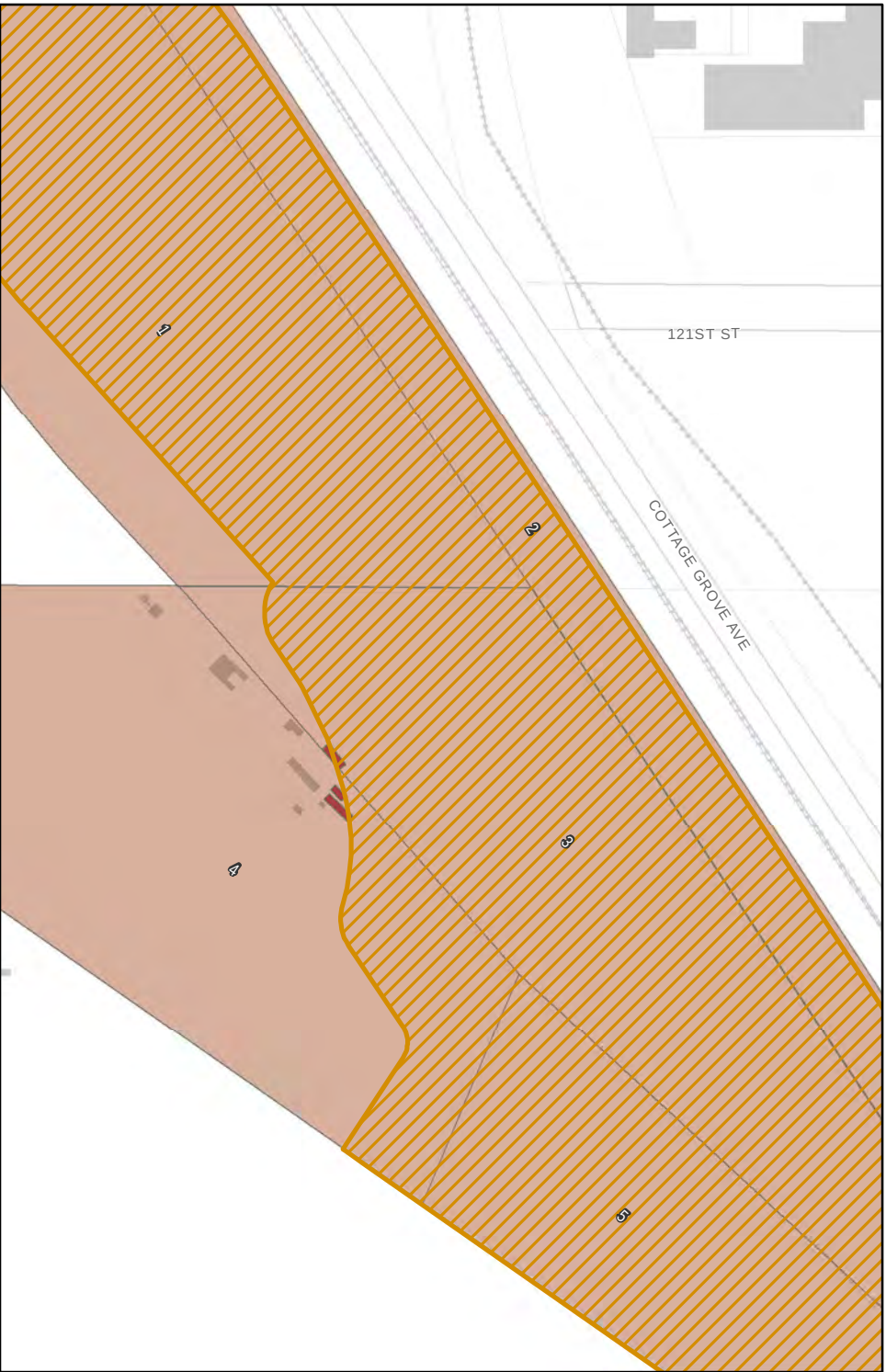

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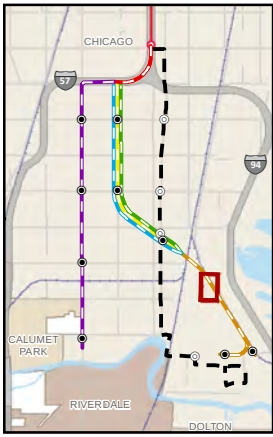

Legend

Common UPRR Rail Alternative

Sheet 2 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.2

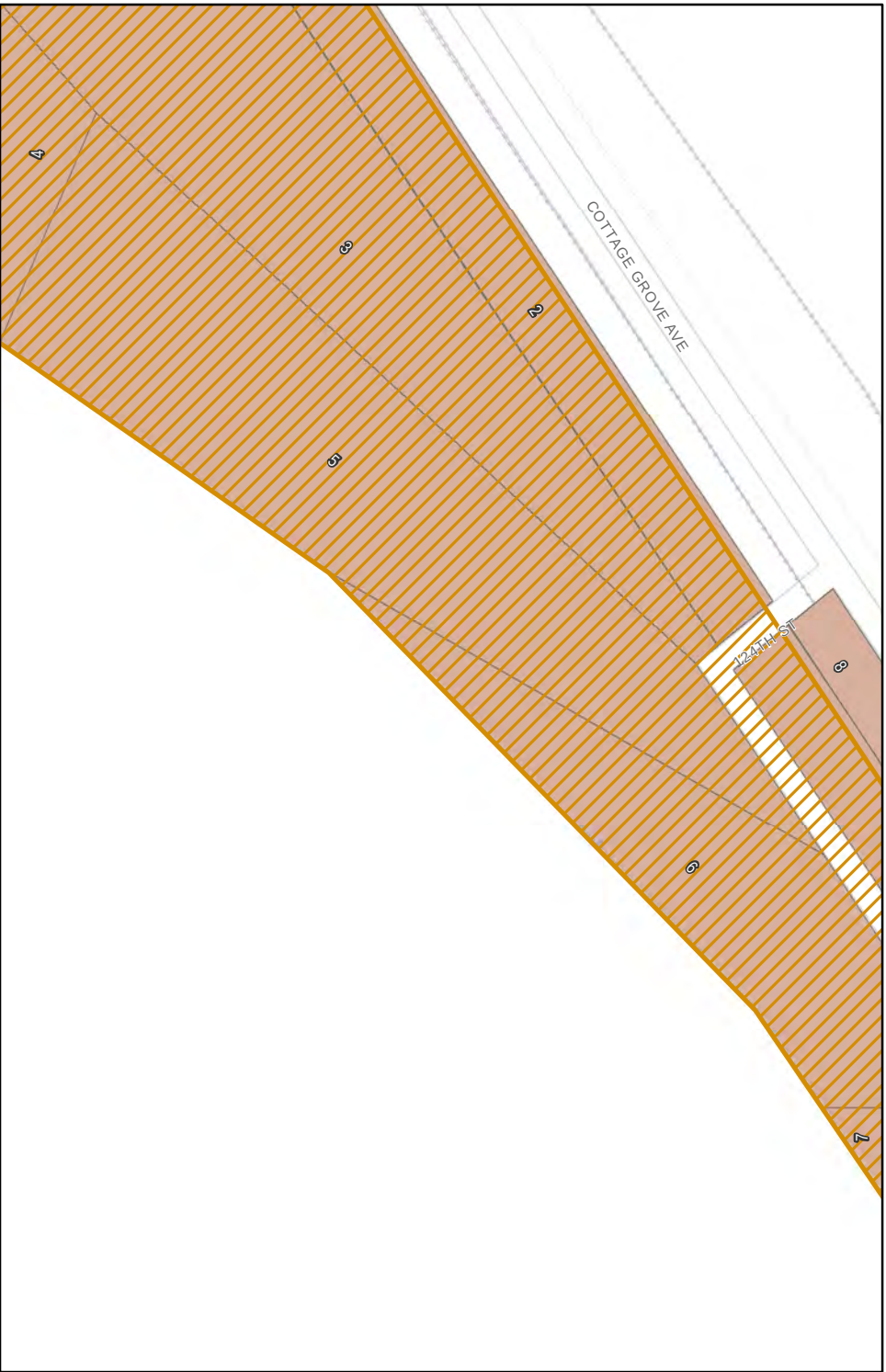

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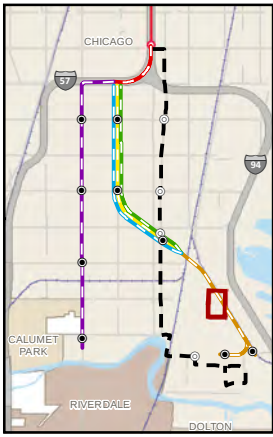

Legend

Common UPRR Rail Alternative

Sheet 3 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.3

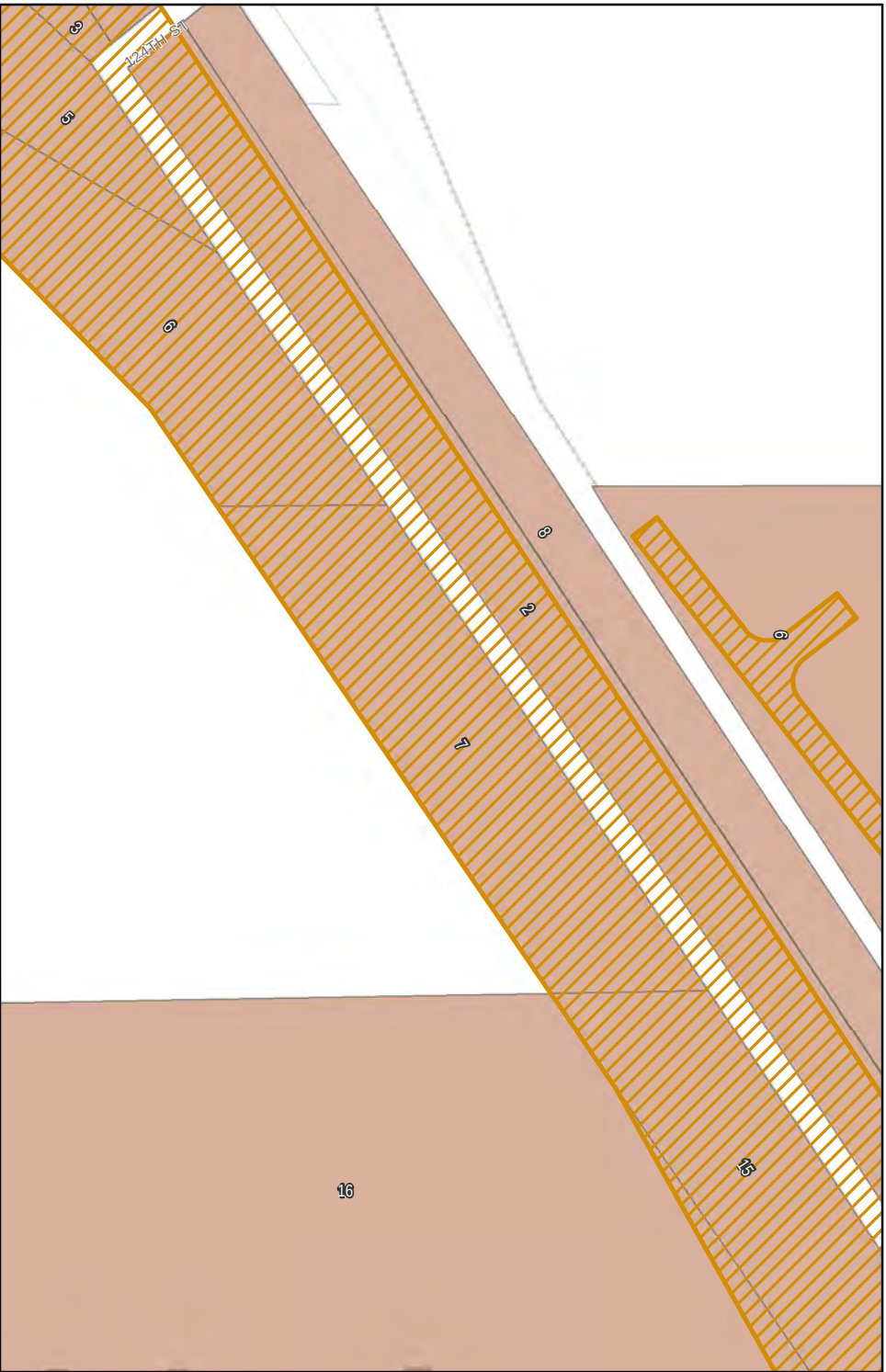

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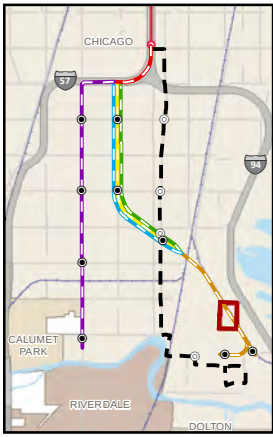

Legend

Common UPRR Rail Alternative

Sheet 4 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.4

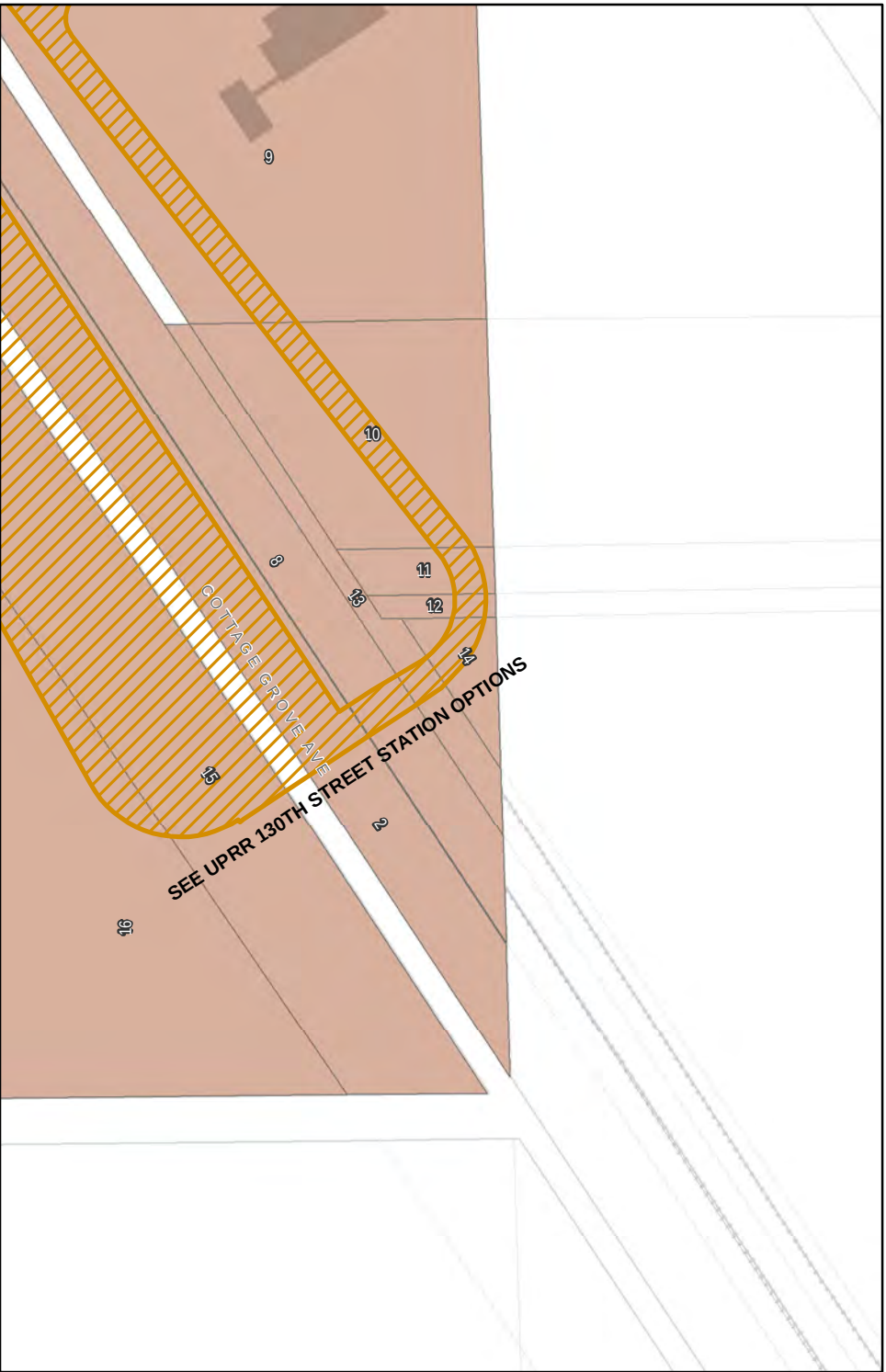

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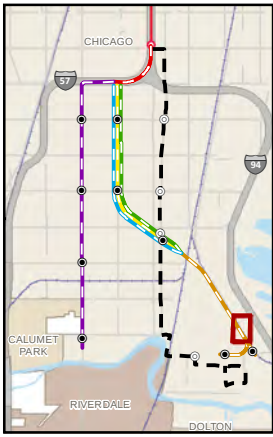

Legend

Common UPRR Rail Alternative

Sheet 5 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.5

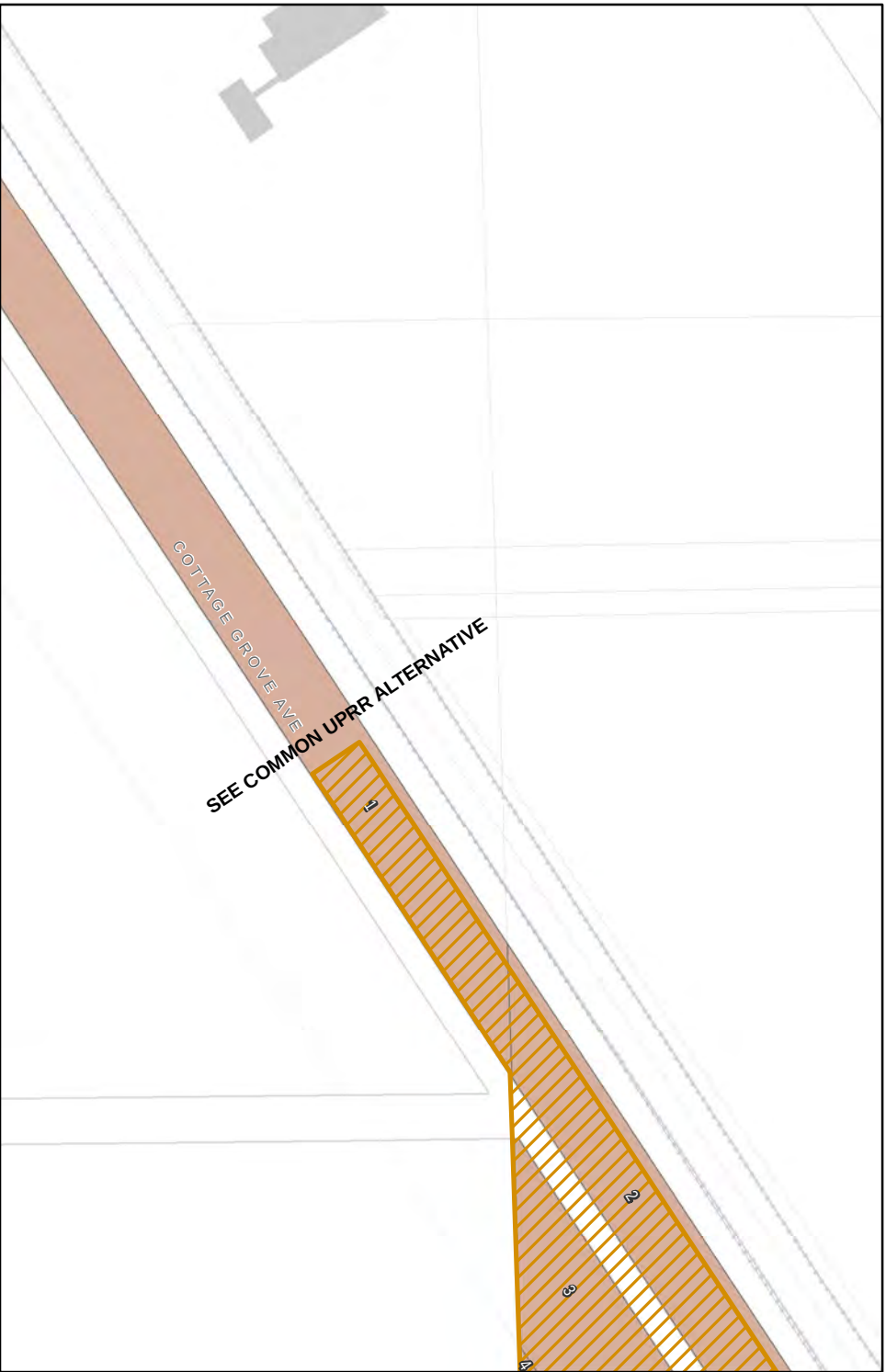

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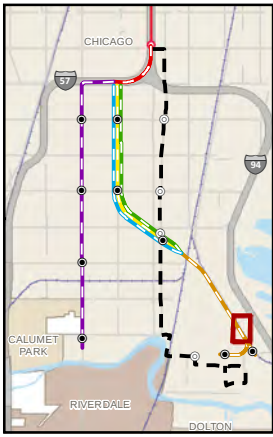

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 1 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.1

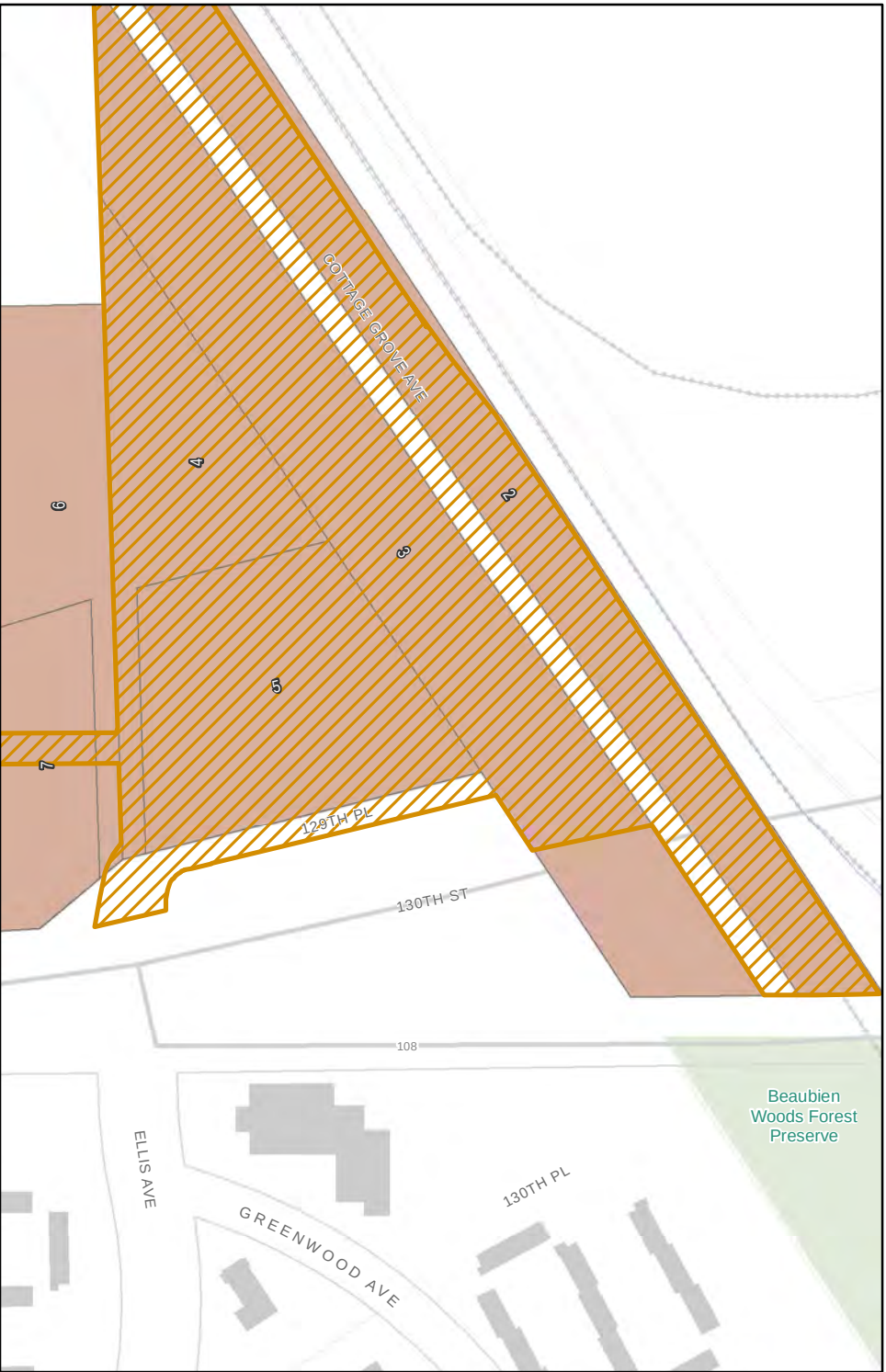

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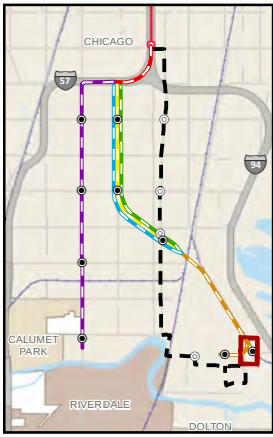

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 2 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.2

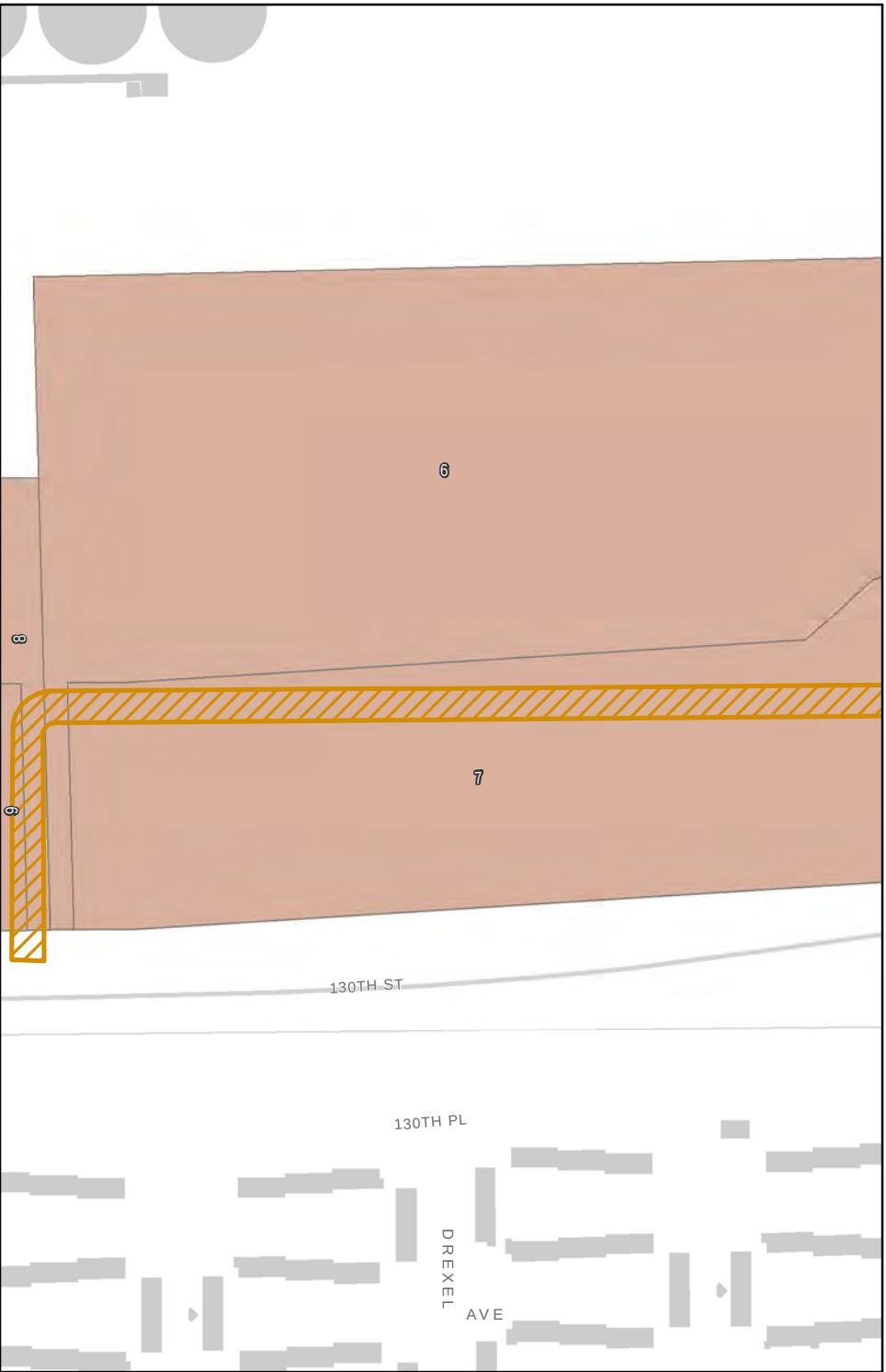

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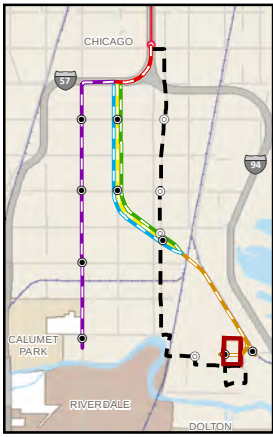

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 3 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.3

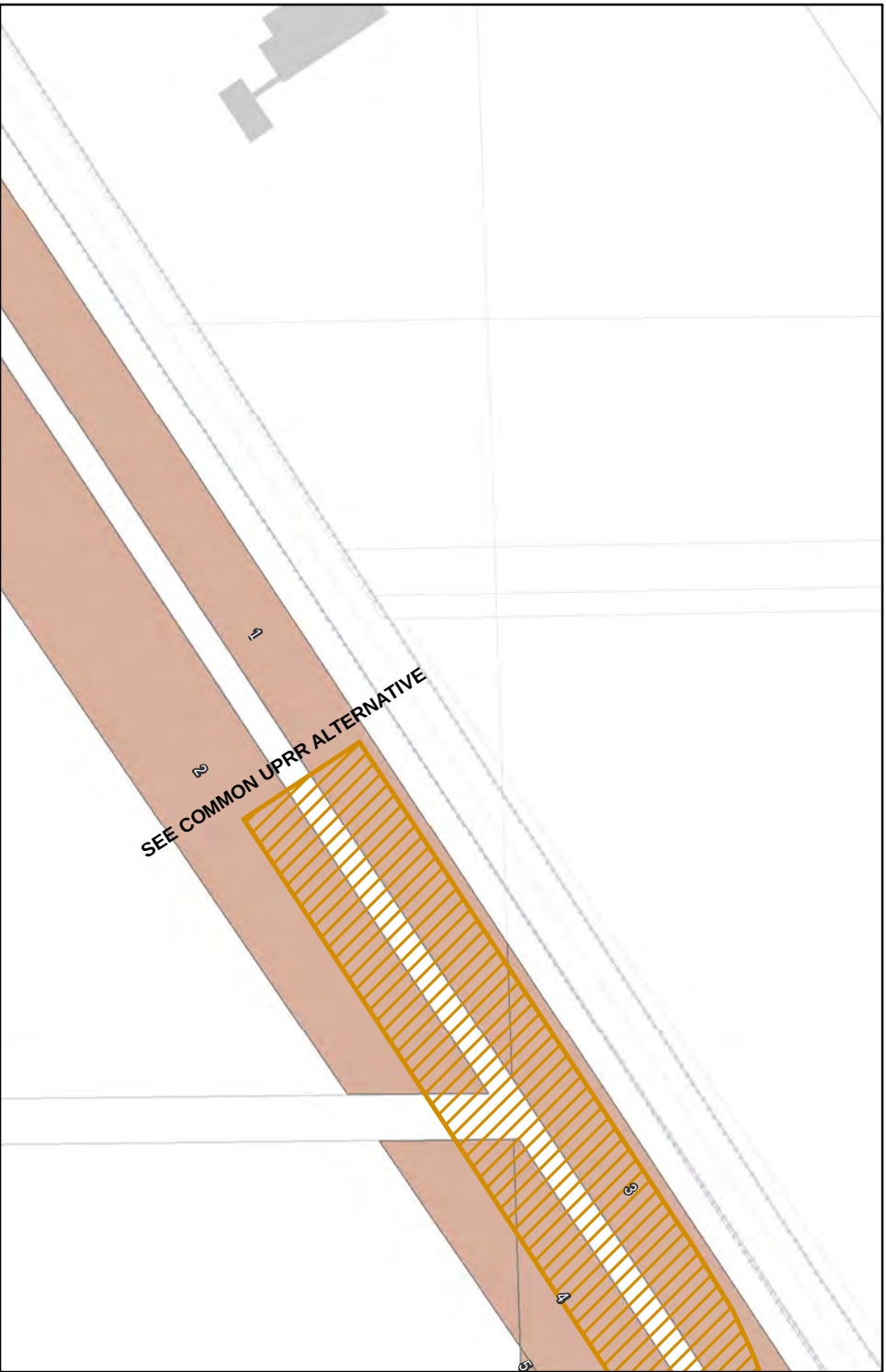

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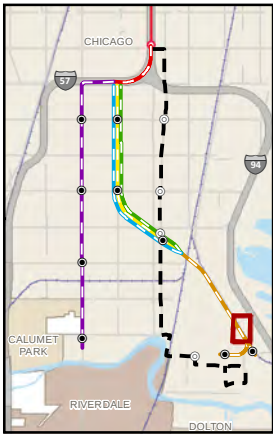

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 1 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.1

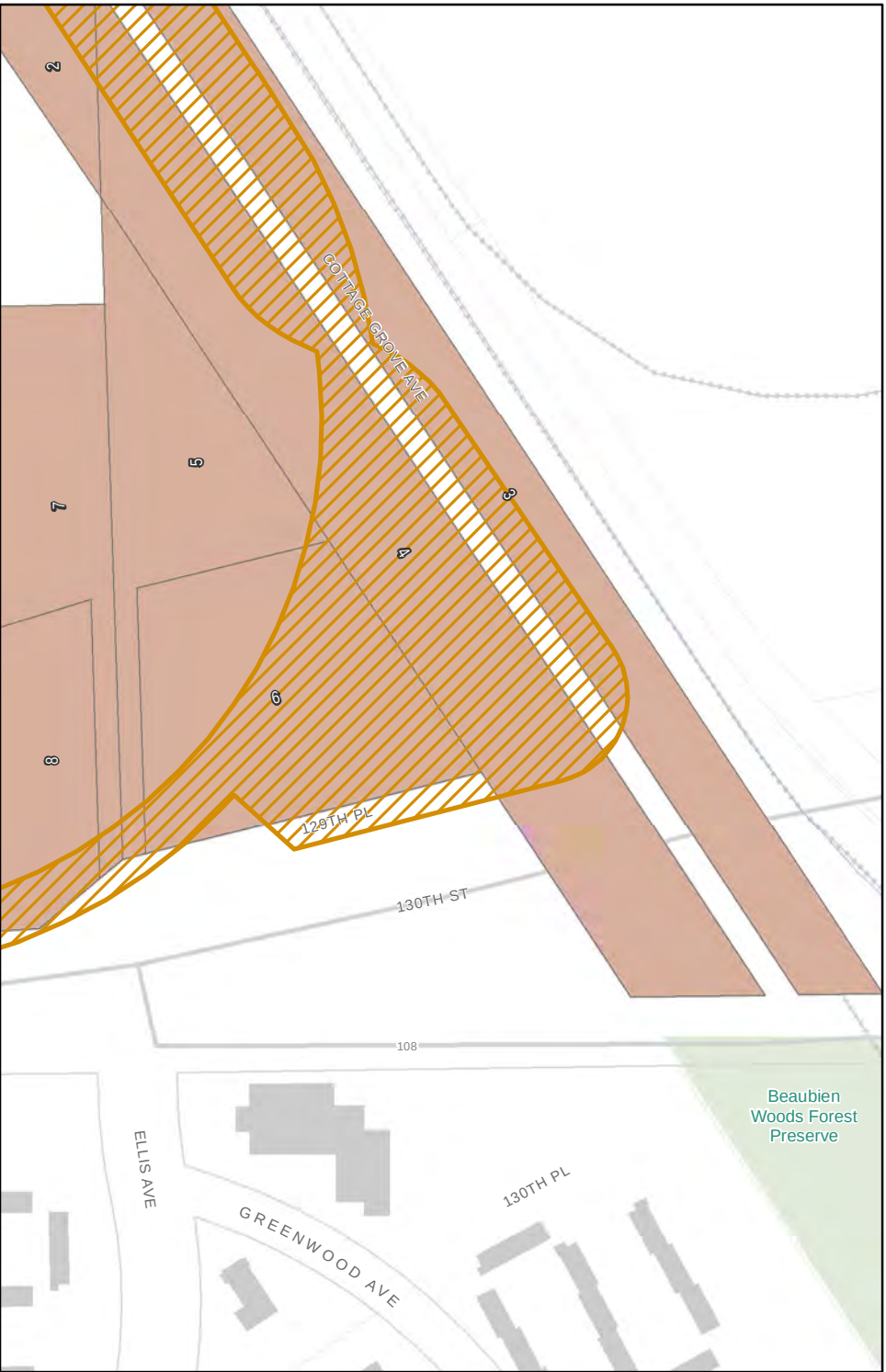

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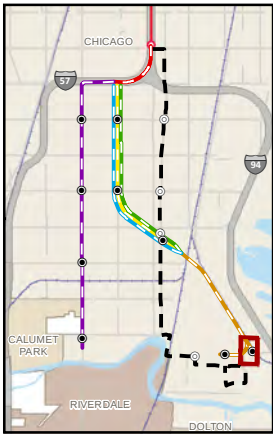

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 2 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.2

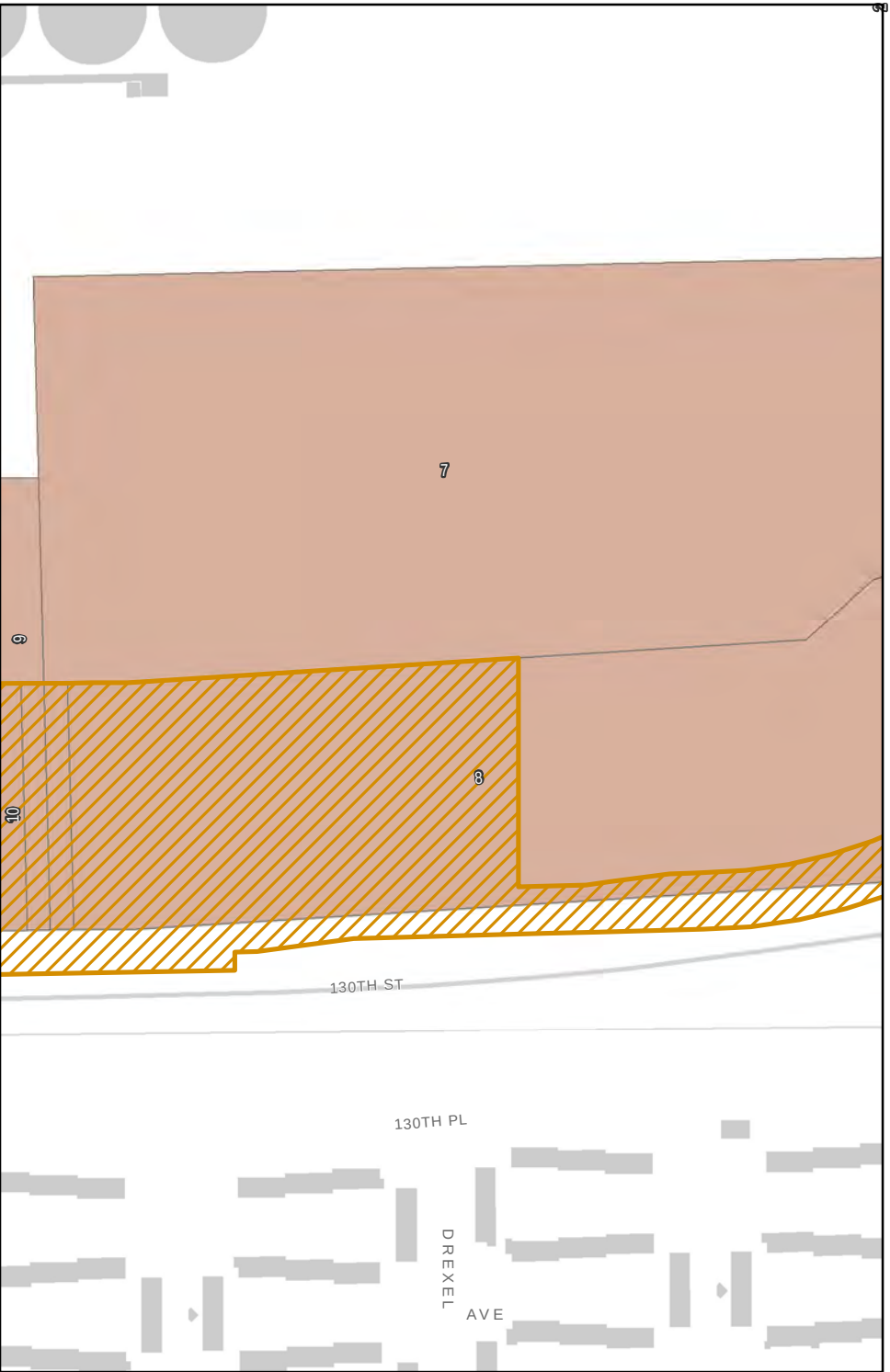

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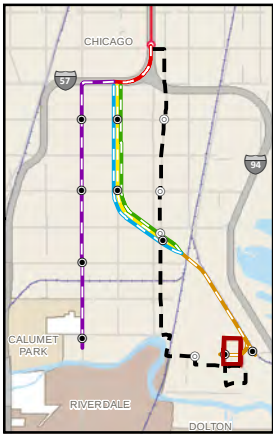

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 3 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.3

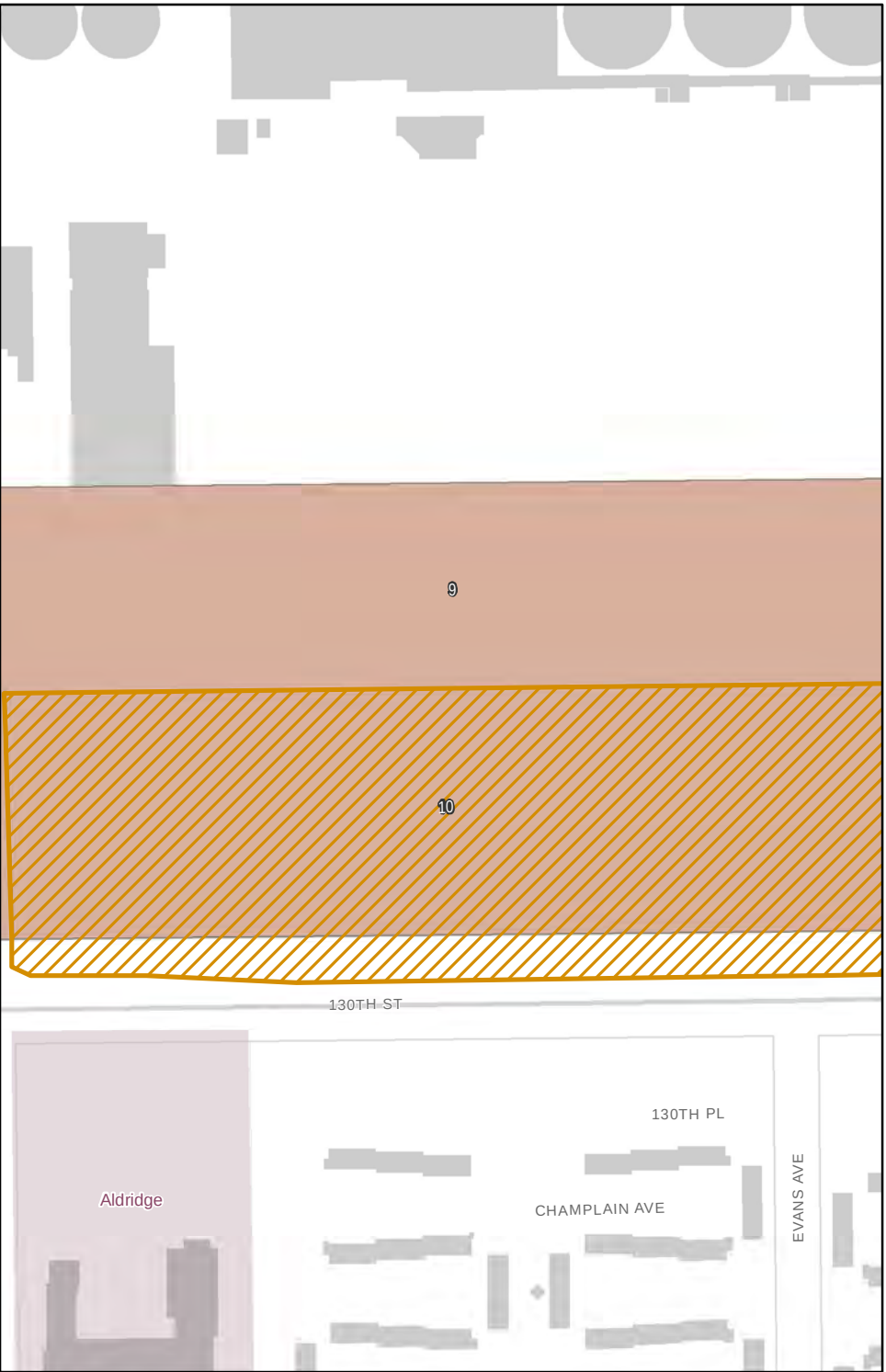

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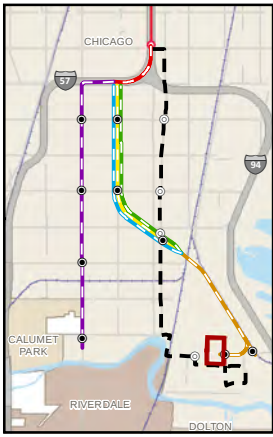

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 4 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.4

Appendix F
Halsted Rail Alternative
Displacements Maps

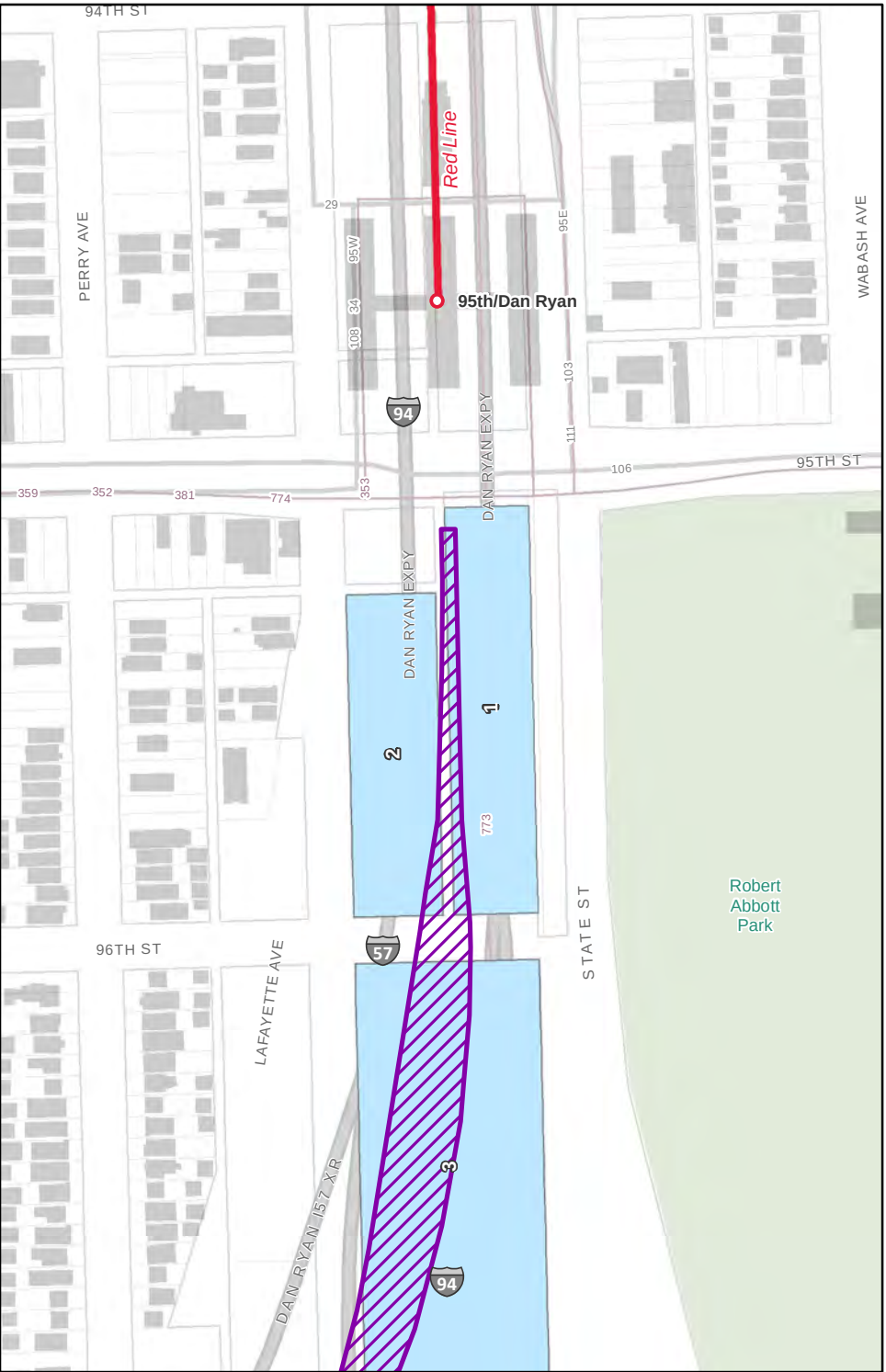

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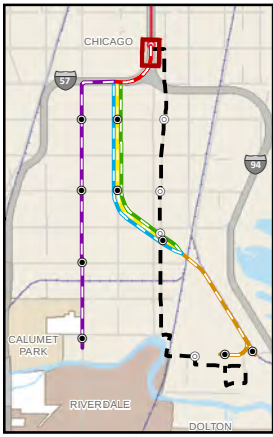

Legend

Halsted Rail Alternative

Sheet 1 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.1

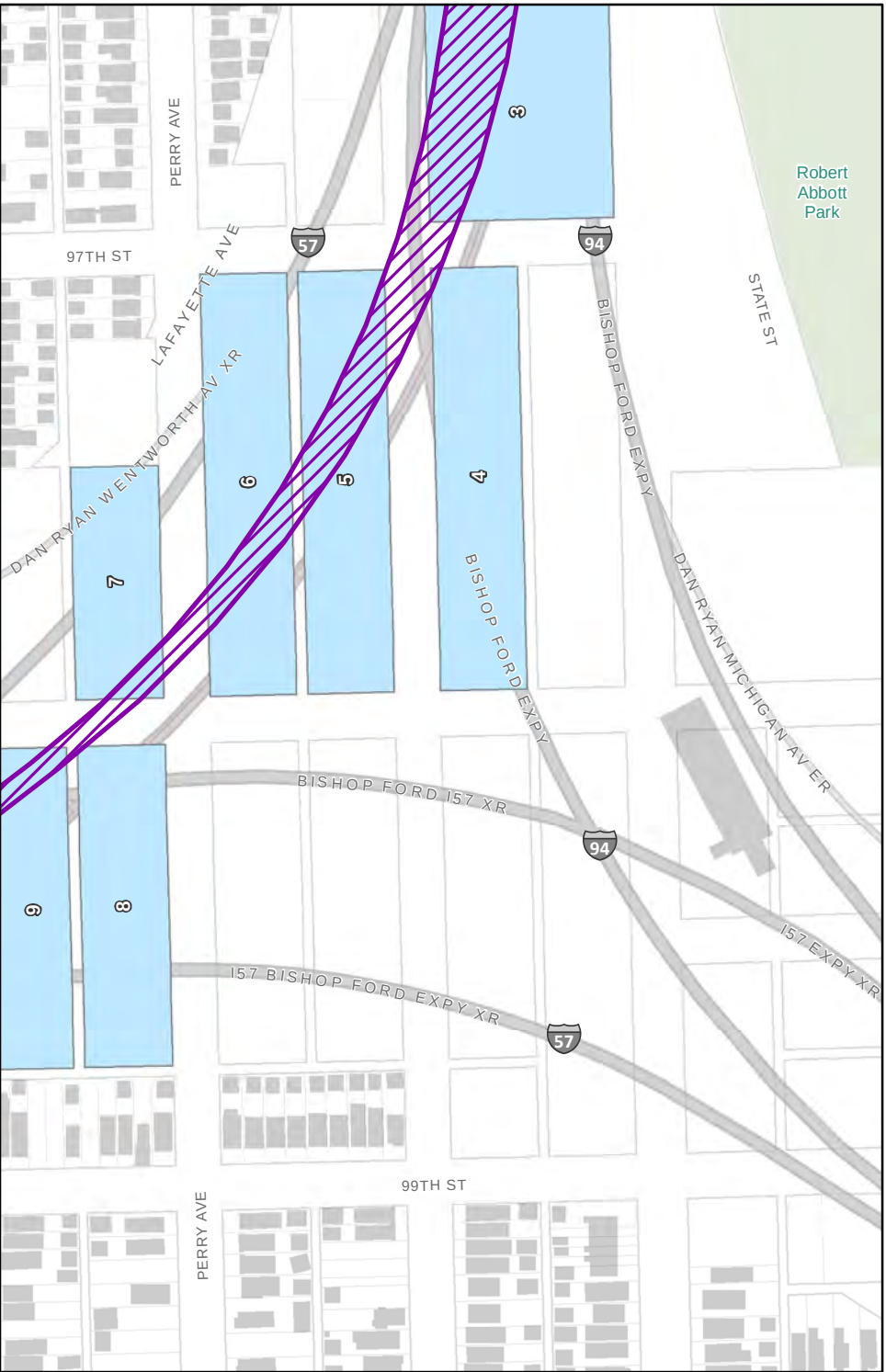

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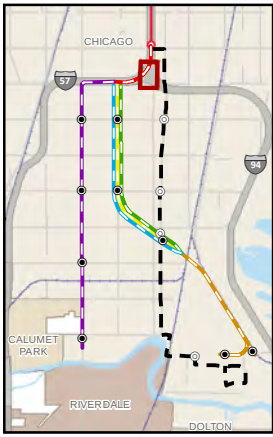

Legend

Halsted Rail Alternative

Sheet 2 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.2

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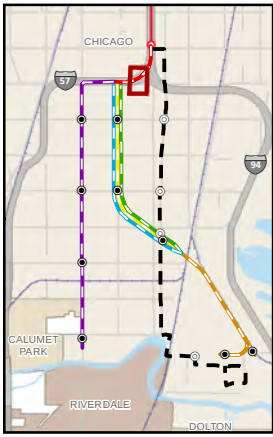

Legend

Halsted Rail Alternative

Sheet 3 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.3

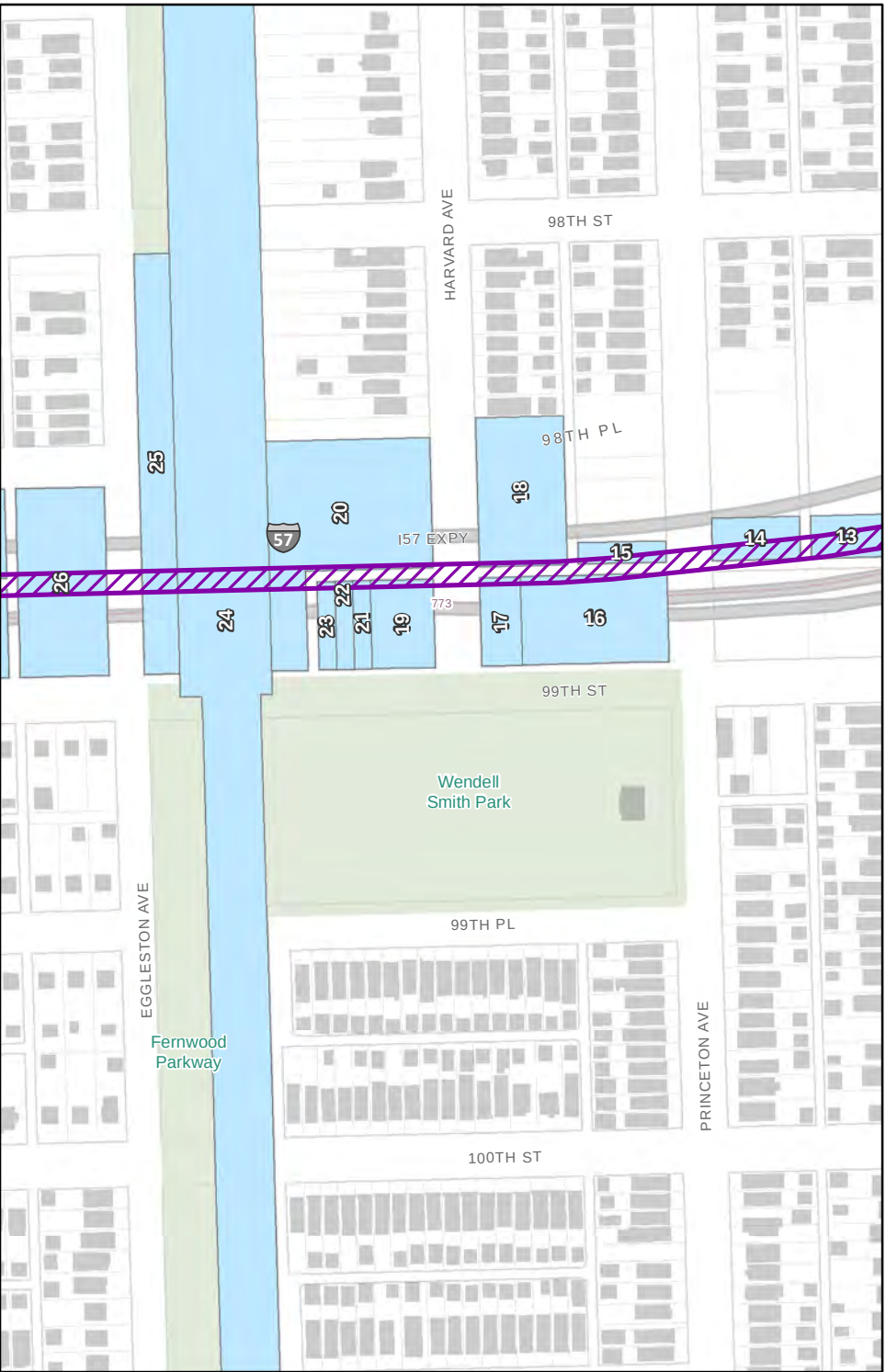

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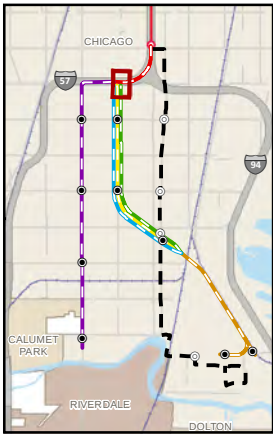

Legend

Halsted Rail Alternative

Sheet 4 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.4

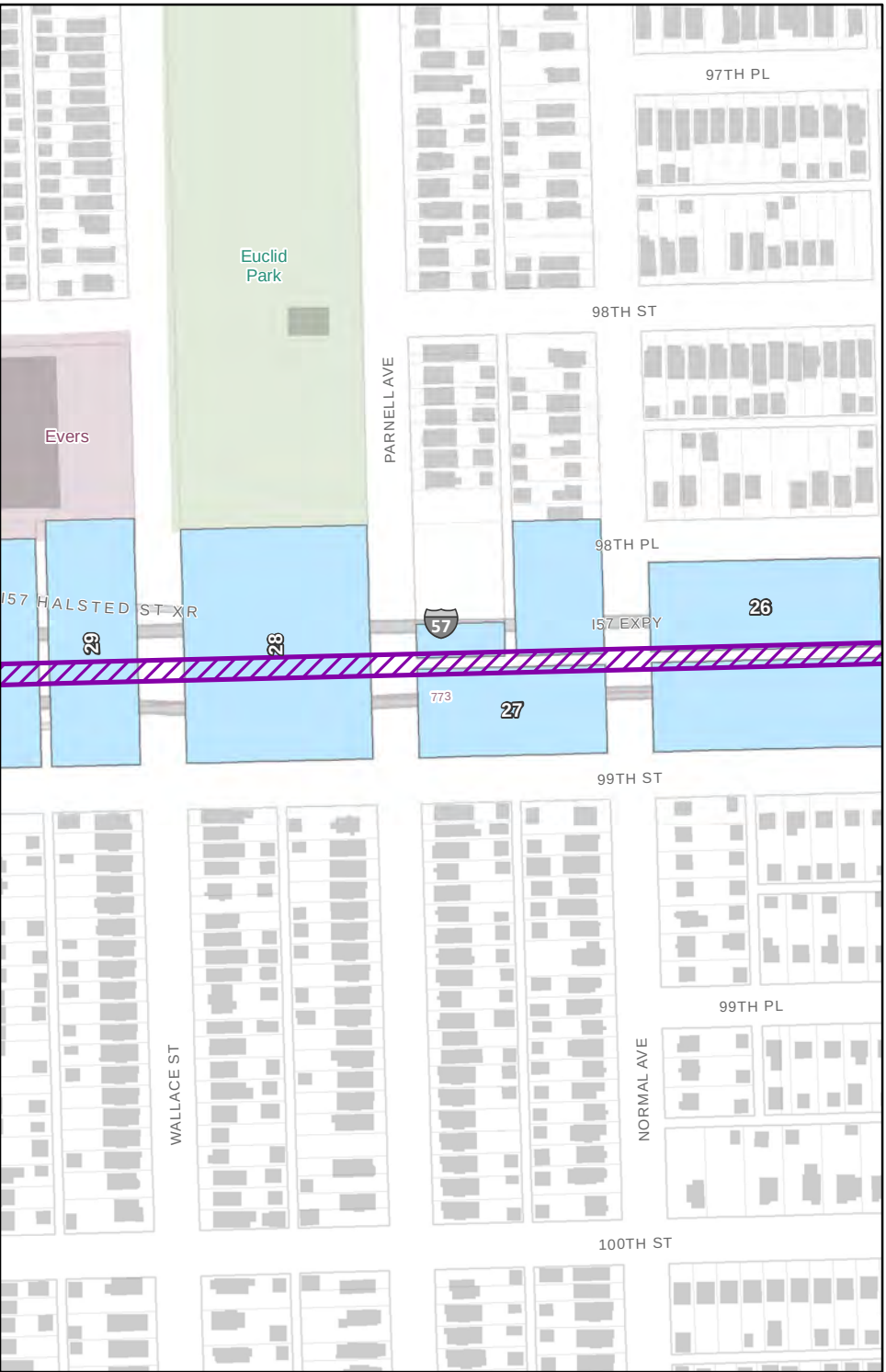

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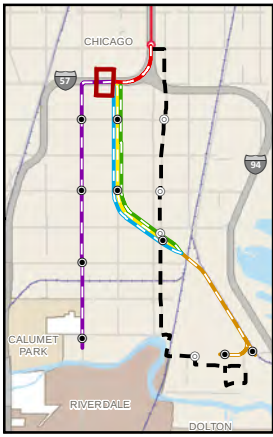

Legend

Halsted Rail Alternative

Sheet 5 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.5

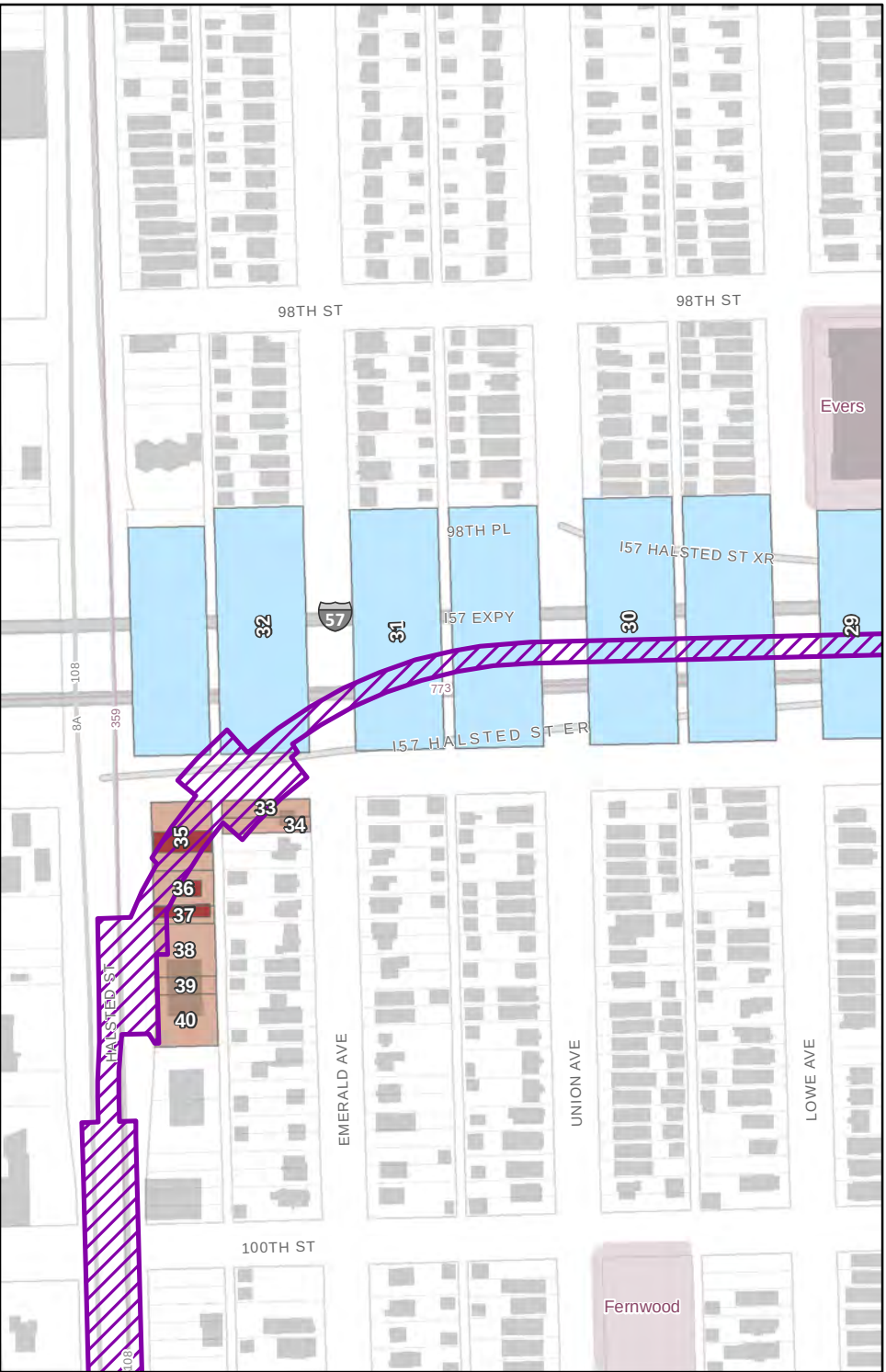

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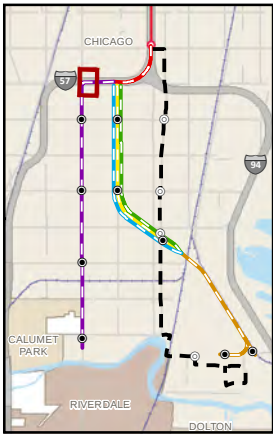

Legend

Halsted Rail Alternative

Sheet 6 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.6

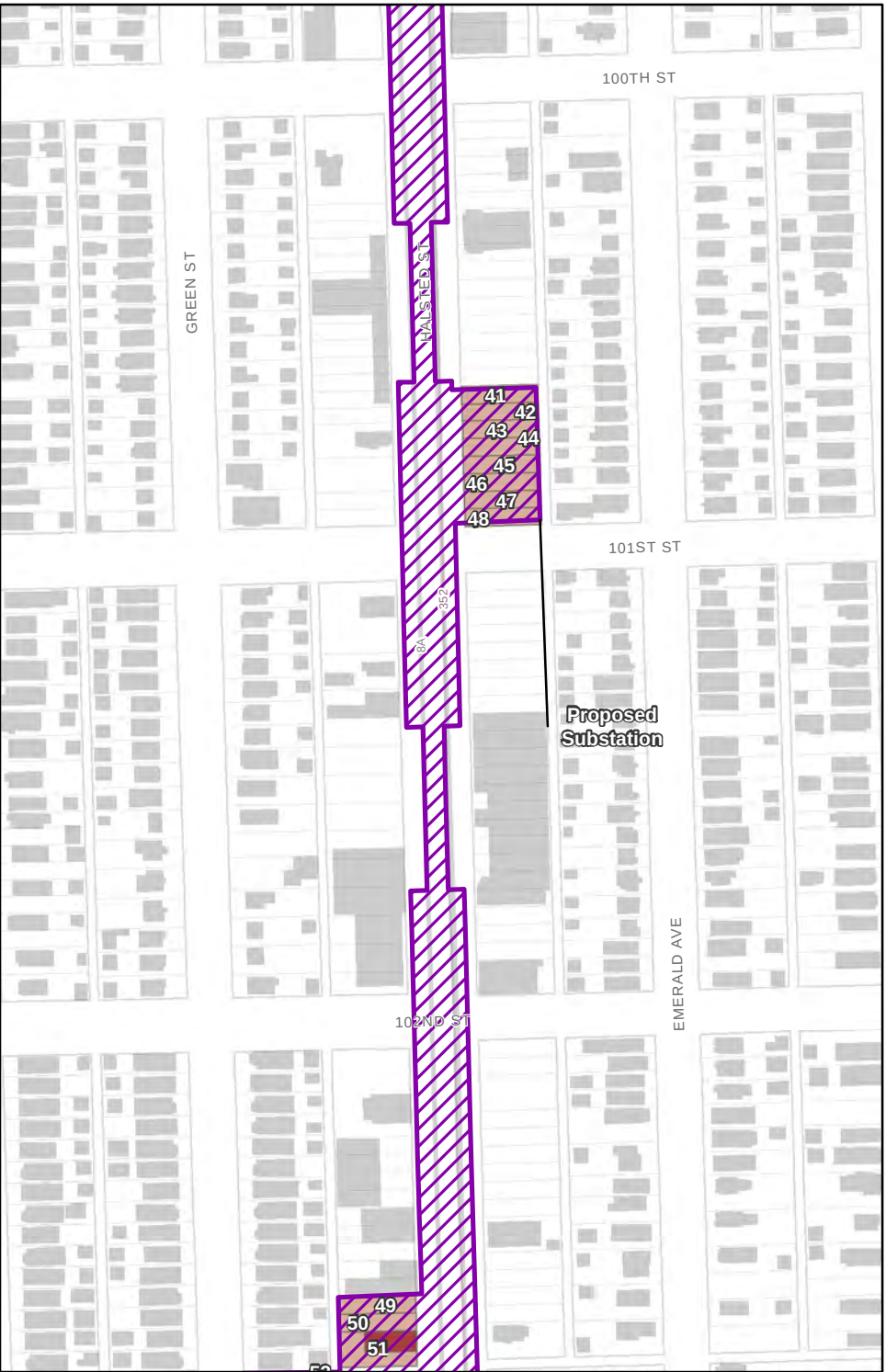

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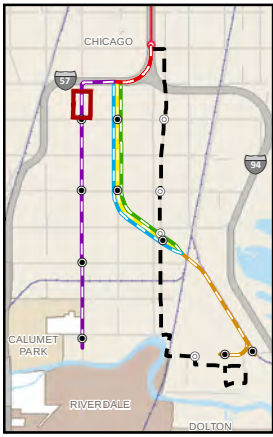

Legend

Halsted Rail Alternative

Sheet 7 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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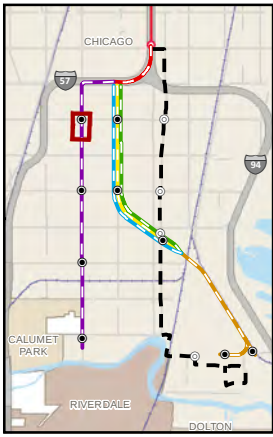

Legend

Halsted Rail Alternative

Sheet 8 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.8

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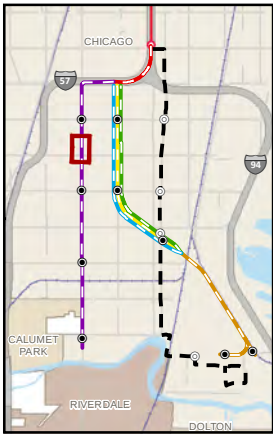

Legend

Halsted Rail Alternative

Sheet 9 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.9

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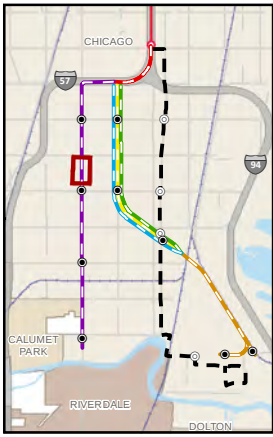

Legend

Halsted Rail Alternative

Sheet 10 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.10

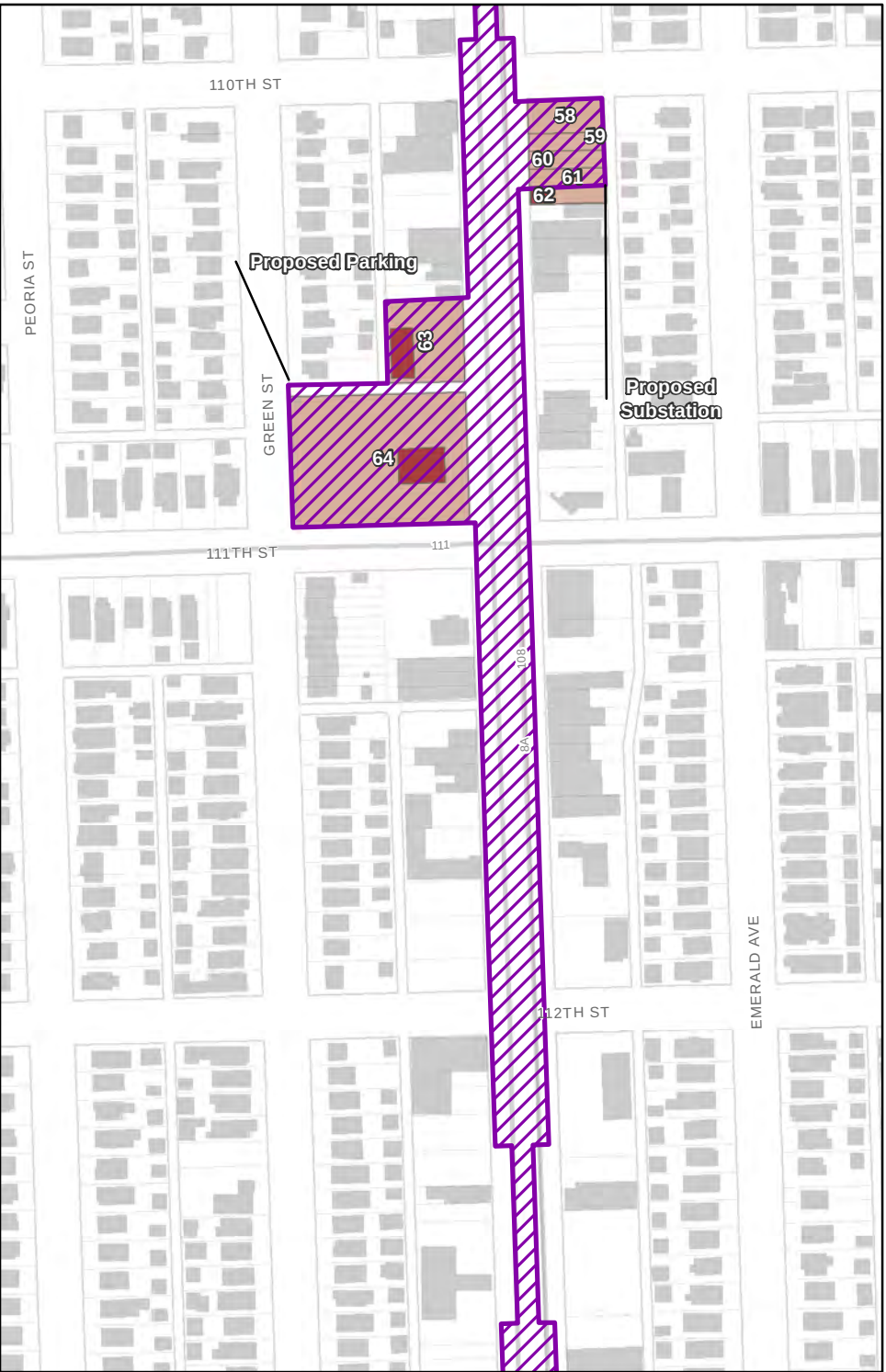

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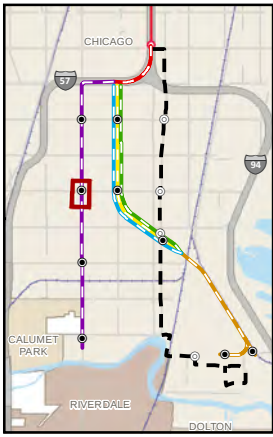

Legend

Halsted Rail Alternative

Sheet 11 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.11

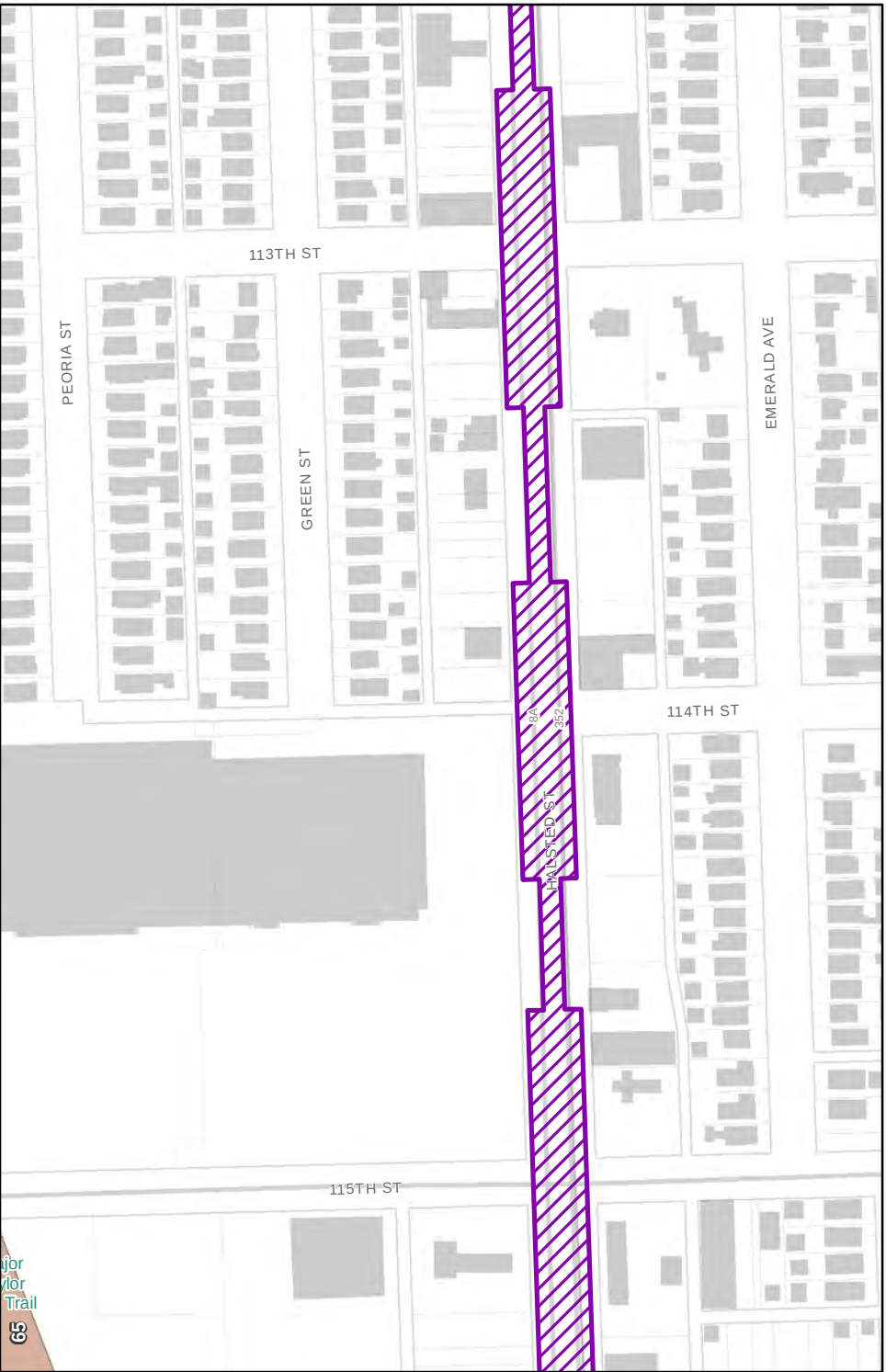

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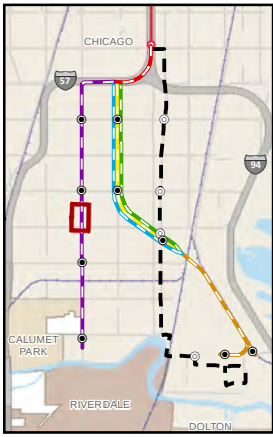

Legend

Halsted Rail Alternative

Sheet 12 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.12

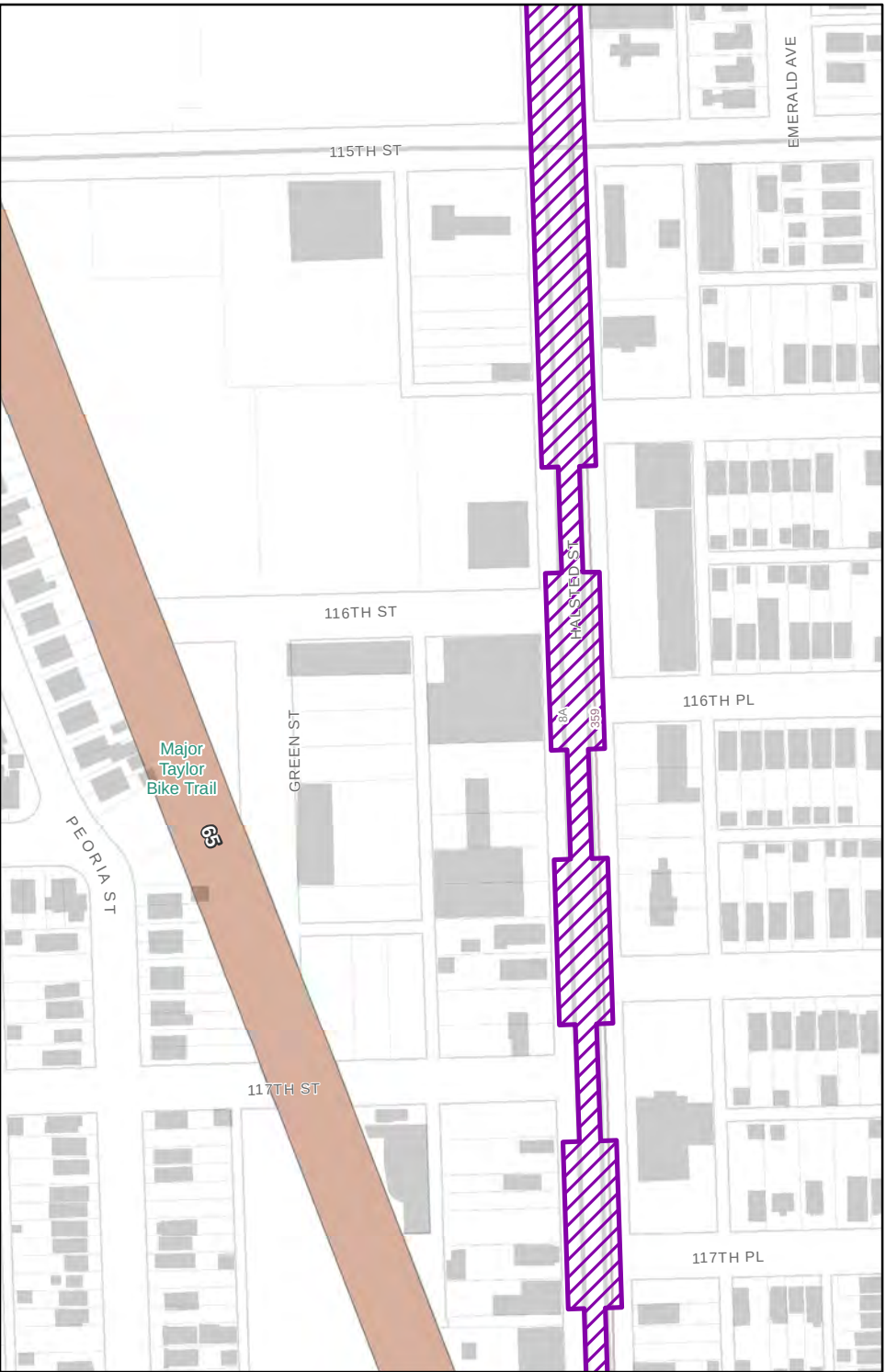

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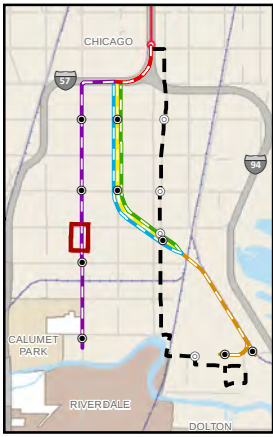

Legend

Halsted Rail Alternative

Sheet 13 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.13

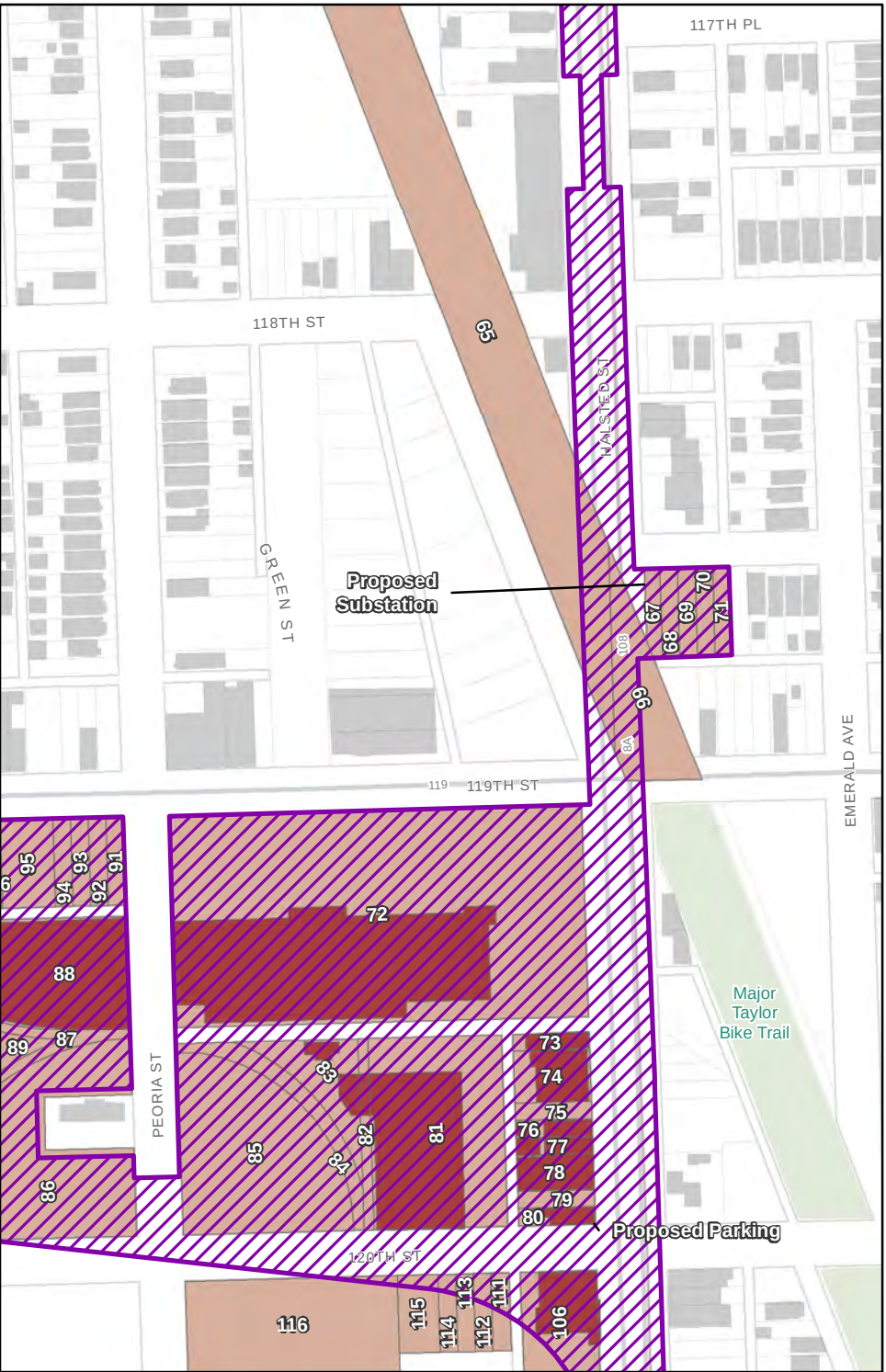

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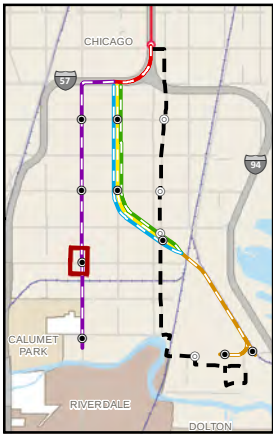

Legend

Halsted Rail Alternative

Sheet 14 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.14

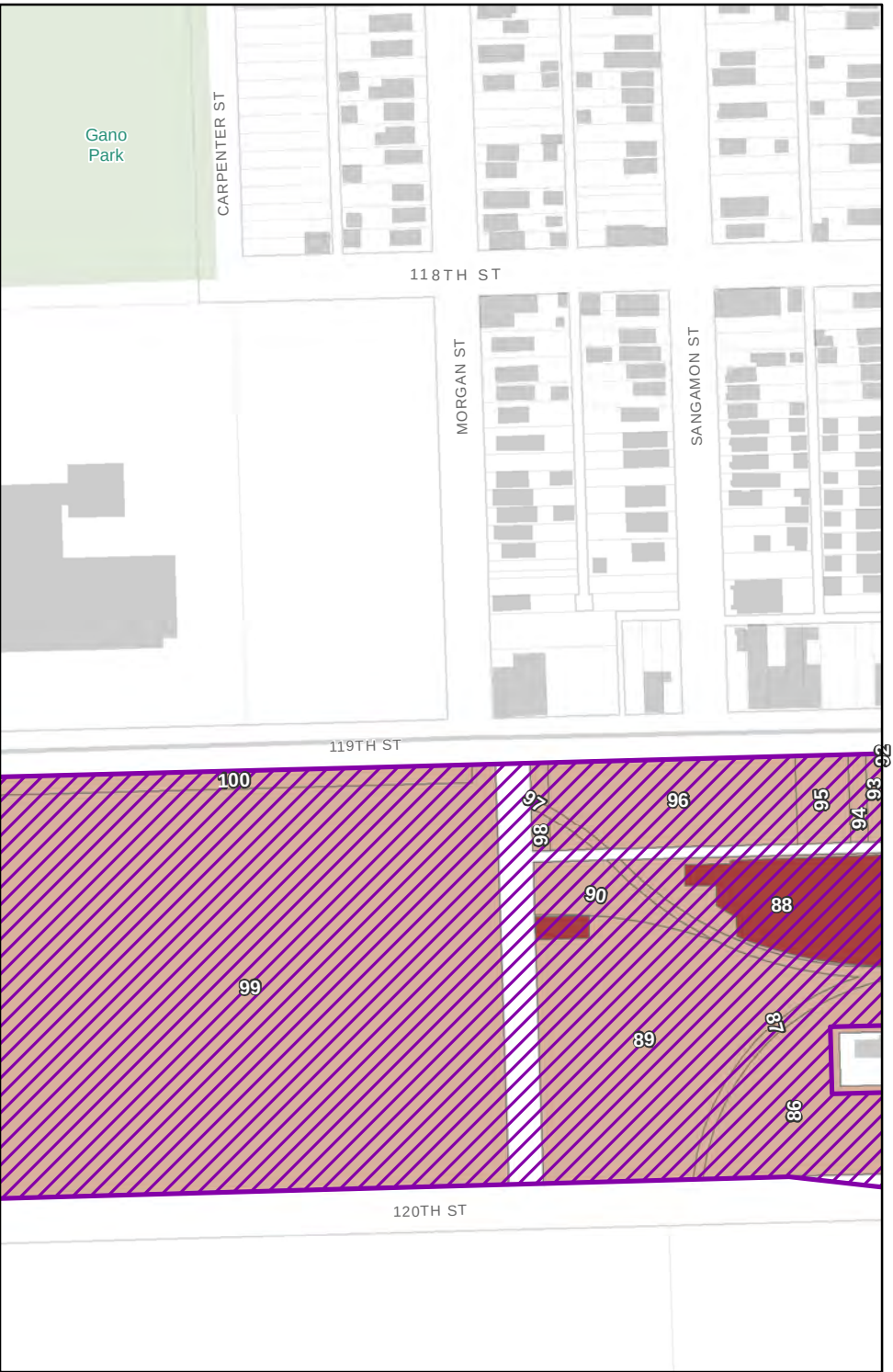

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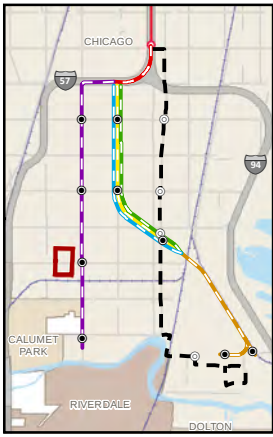

Legend

Halsted Rail Alternative

Sheet 15 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.15

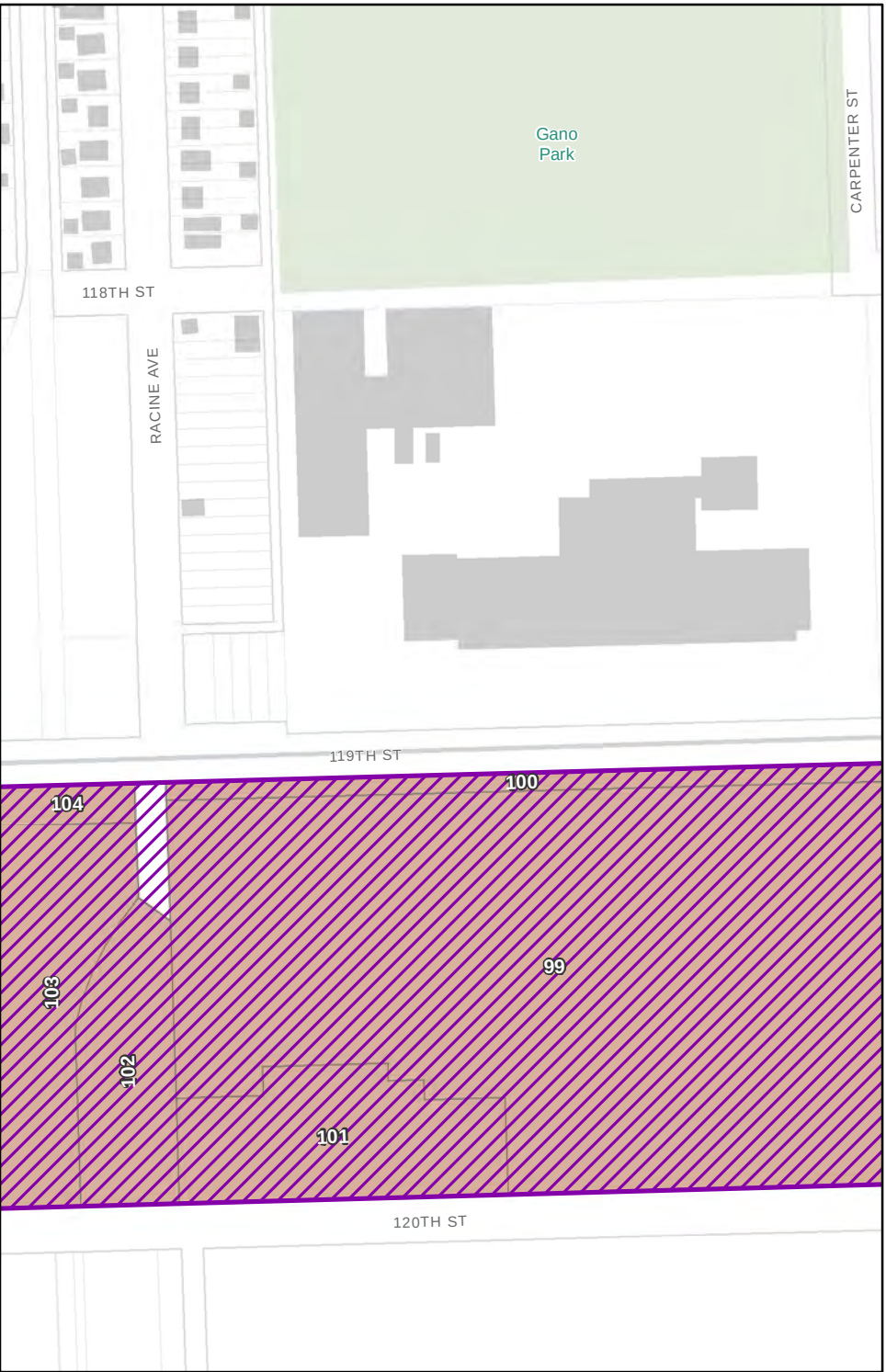

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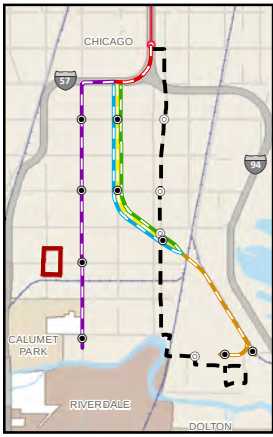

Legend

Halsted Rail Alternative

Sheet 16 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.16

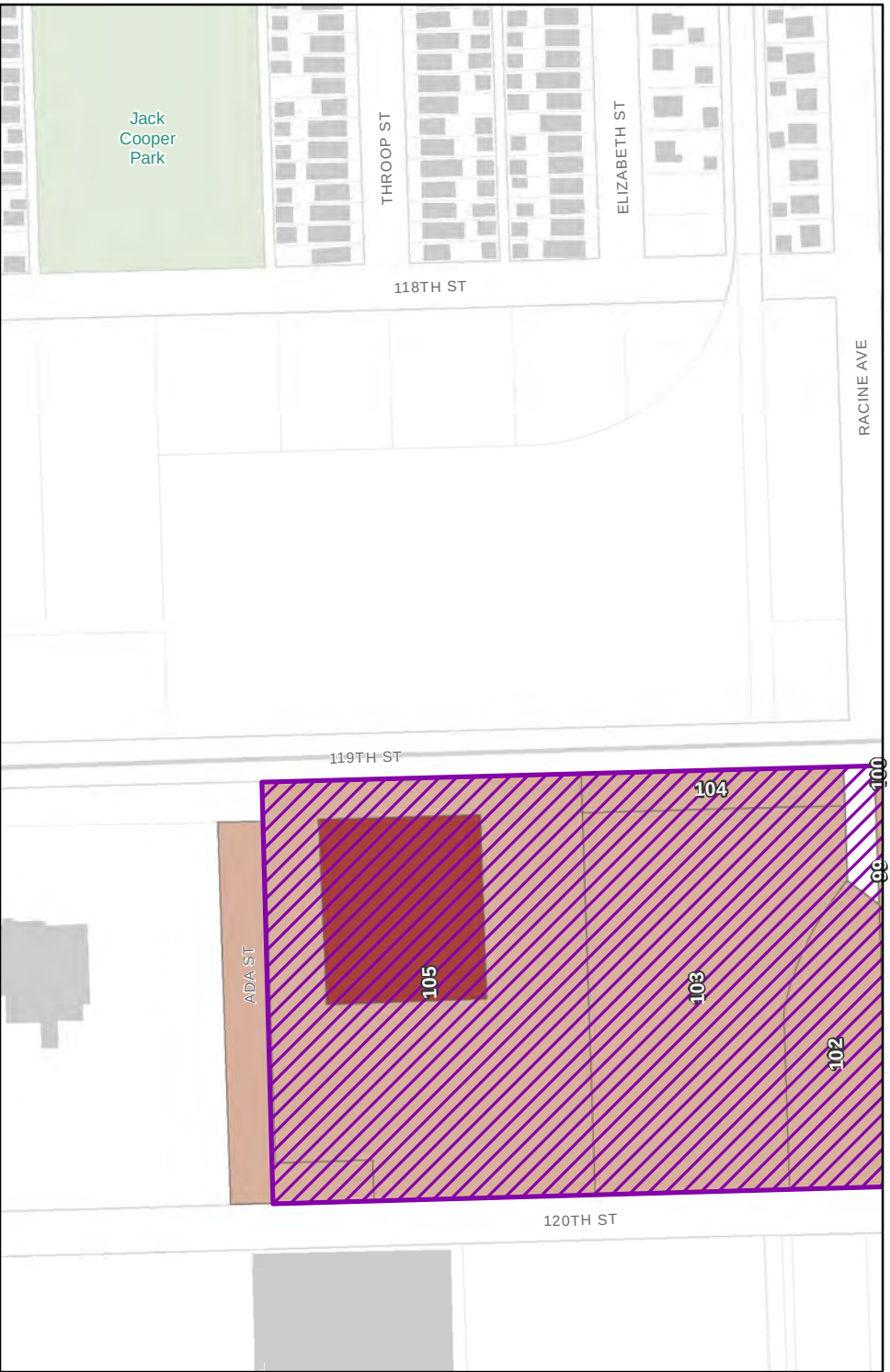

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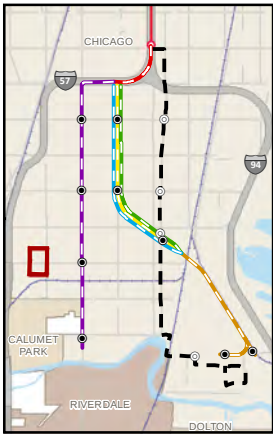

Legend

Halsted Rail Alternative

Sheet 17 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.17

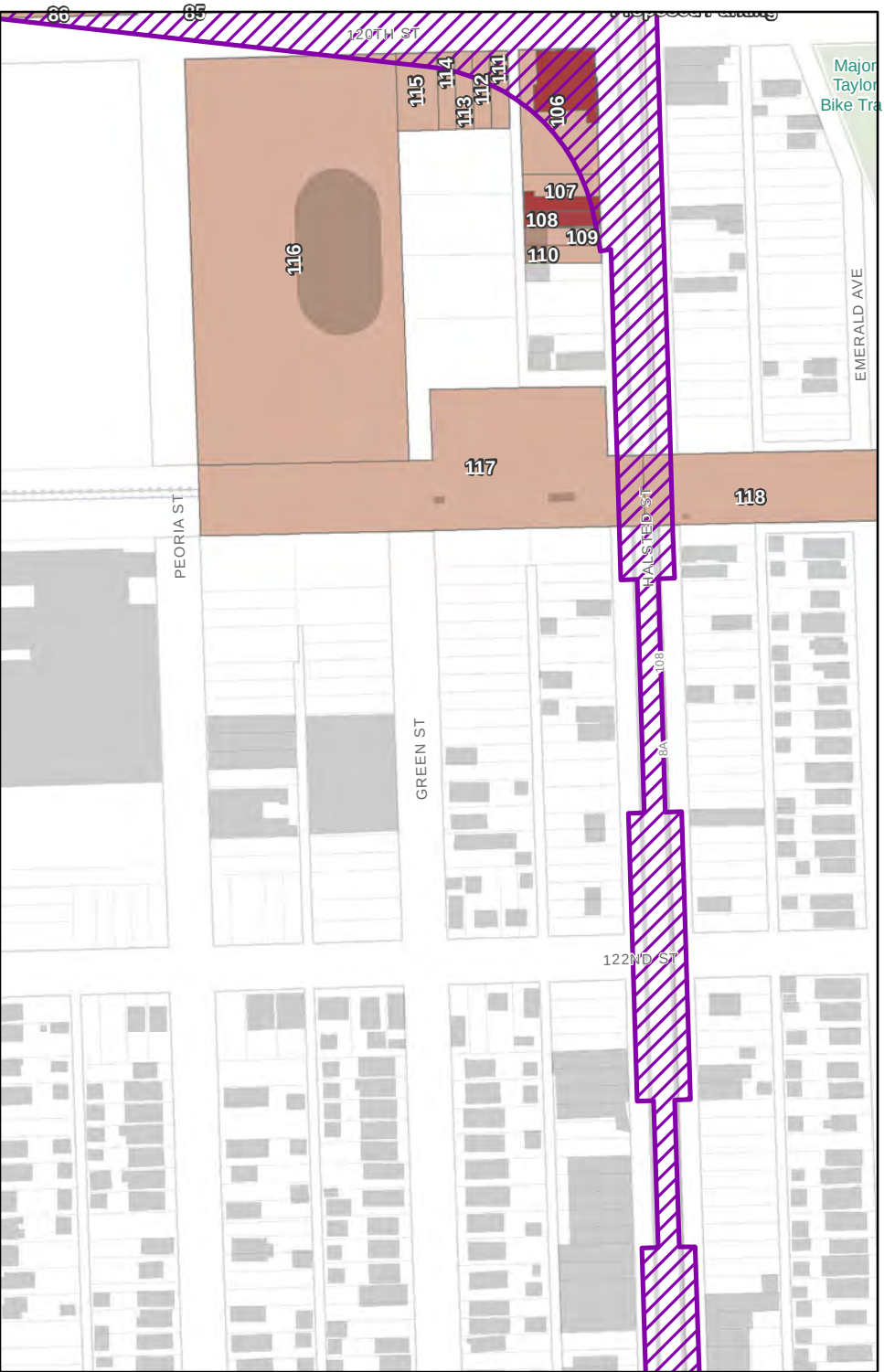

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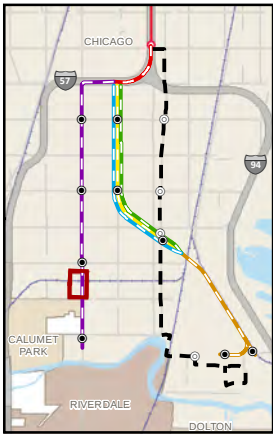

Legend

Halsted Rail Alternative

Sheet 18 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.18

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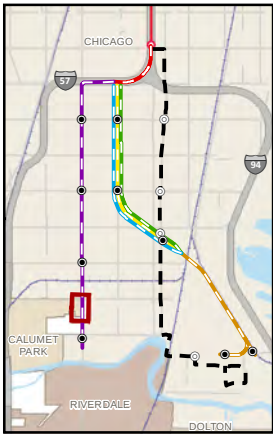

Legend

Halsted Rail Alternative

Sheet 19 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.19

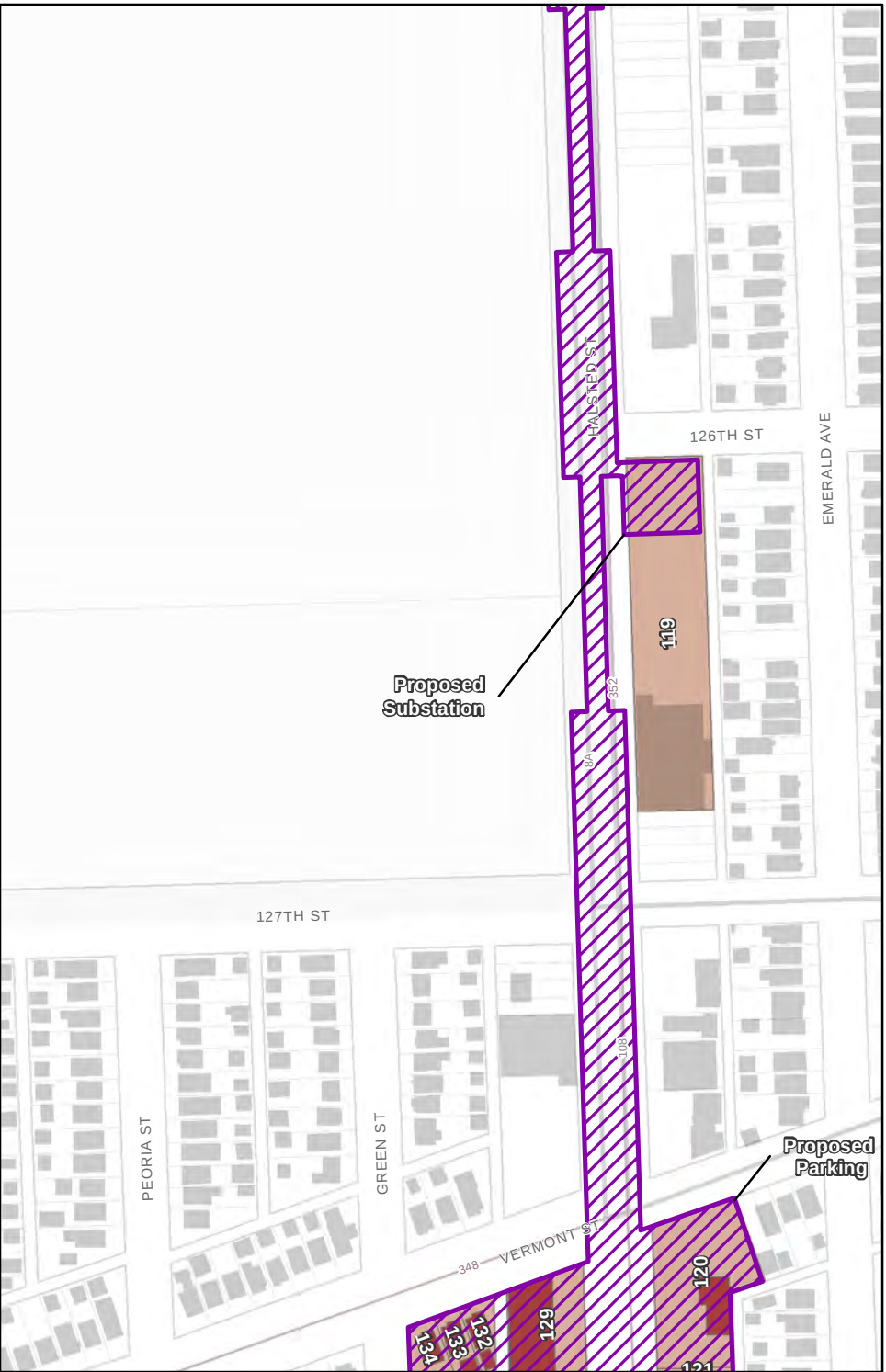

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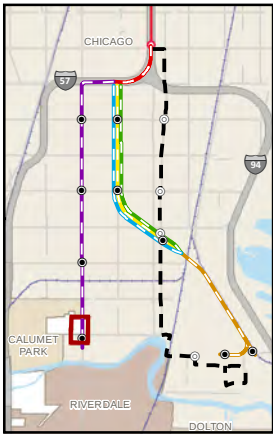

Legend

Halsted Rail Alternative

Sheet 20 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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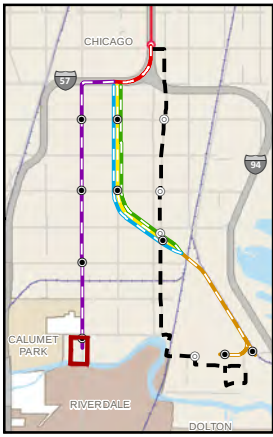

Legend

Halsted Rail Alternative

Sheet 21 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.21

Appendix G
Displacements Spreadsheets

Data Definitions
CTA RLE Displacement Excel Database

COLUMN HEADING	DEFINITION
Division	Geographic limits based on organization of Technical Memorandum Section 5
Segment	Geographic Segment corresponding to the Definition of Alternatives
Map ID	Number corresponding to a parcel on appendix map figure for each alternative
Parcel ID	Cook County Assessor parcel identification number
Address	Cook County Assessor parcel street address
Land Use – Field Verified	Field verified land use designations based on Cook County and CMAP data
Field Notes	Field survey notes used for parcel analysis in Technical Memorandum Section 5
Displacement Type	Type of effect on parcel by proposed alternative
Building Displacement	Number of building displacements within parcel
Land Use – Cook County	Cook County Assessor Land Use based on IMP_CODE

BRT Alternative

Parcels Affected by Land Acquisitions and Easements

Map ID	Segment	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
1	TSM/BRT	25103240010000	10205 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
2	TSM/BRT	25103240020000	10207 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
3	TSM/BRT	25103240030000	10207 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
4	TSM/BRT	25103240040000	10209 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
5	TSM/BRT	25103240050000	10213 S MICHIGAN AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1	Residential
6	TSM/BRT	25103240060000	10215 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
7	TSM/BRT	25103240070000	10217 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
8	TSM/BRT	25103240080000	10219 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
9	TSM/BRT	25103240090000	10221 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
10	TSM/BRT	25103240100000	10225 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
11	TSM/BRT	25103240110000	10229 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
12	TSM/BRT	25103240120000	10231 S MICHIGAN AVE, CHICAGO	Commercial	cell tower site covers 2 parcels	Affected Parcel	Parking	Counted	Vacant
13	TSM/BRT	25103240490000	10235 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
14	TSM/BRT	25103240480000	10235 S MICHIGAN AVE, CHICAGO	Commercial	United State Cellular	Parcel with Building Displacement	Parking	1	Commercial
15	TSM/BRT	25103240140000	10239 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
16	TSM/BRT	25221010010000	1 E 111TH PL, CHICAGO	Institution (Place of Worship)	New Testament Baptist Church	Affected Parcel	Parking	0	EXEMPT - Place of Worship
17	TSM/BRT	25221010370000	25221010370000	Vacant		Affected Parcel	Parking	0	No information provided
18	TSM/BRT	25221010380000	25221010380000	Vacant		Affected Parcel	Parking	0	No information provided
19	TSM/BRT	25221010390000	25221010390000	Vacant		Affected Parcel	Parking	0	No information provided
20	TSM/BRT	25221010400000	25221010400000	Vacant		Affected Parcel	Parking	0	No information provided
21	TSM/BRT	25221010410000	25221010410000	Vacant		Affected Parcel	Parking	0	No information provided
22	TSM/BRT	25221010420000	25221010420000	Vacant		Affected Parcel	Parking	0	No information provided
23	TSM/BRT	25221010080000	23 E 111TH PL, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
24	TSM/BRT	25221010090000	25 E 111TH PL, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
25	TSM/BRT	25221010100000	27 E 111TH PL, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
26	TSM/BRT	25221010110000	29 E 111TH PL, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
27	TSM/BRT	25221010220000	22 E 112TH ST, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
28	TSM/BRT	25221010230000	24 E 112TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
29	TSM/BRT	25221010240000	26 E 112TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
30	TSM/BRT	25221010250000	30 E 112TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
31	TSM/BRT	25221010260000	32 E 112TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
32	TSM/BRT	25221010270000	34 E 112TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
33	TSM/BRT	25223040500000	11555 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
34	TSM/BRT	25223040470000	113 E KENSINGTON AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
35	TSM/BRT	25223040490000	11557 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
36	TSM/BRT	25223040050000	11563 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	Counted	EXEMPT
37	TSM/BRT	25223040060000	11565 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	Counted	Vacant

BRT Alternative
Parcels Affected by Land Acquisitions and Easements

Map ID	Segment	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
38	TSM/BRT	25223040070000	11567 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	1	EXEMPT
39	TSM/BRT	25223040080000	11579 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
40	TSM/BRT	25225000010000	100 E 116TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Parking		EXEMPT - Railroad
41	TSM/BRT	25223040270000	120 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT
42	TSM/BRT	25223040280000	122 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
43	TSM/BRT	25223040290000	124 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT
44	TSM/BRT	25223040300000	128 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT
45	TSM/BRT	25223040310000	130 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT
46	TSM/BRT	25223040320000	132 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT
47	TSM/BRT	25223040330000	134 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT
48	TSM/BRT	25223040340000	136 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT
49	TSM/BRT	25223040350000	140 E 116TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0	Single Family Residential
50	TSM/BRT	25223040360000	142 E 116TH ST, CHICAGO	Vacant		Affected Parcel	Parking	0	Vacant
51	TSM/BRT	25273010080000	320 E 130TH ST, CHICAGO	Utility (MWRD)		Affected Parcel	Parking	0	EXEMPT-METRO WATER RECLM DIST
52	TSM/BRT	25273010090000	340 E 130TH ST, CHICAGO	Utility (MWRD)		Affected Parcel	Parking	0	EXEMPT-METRO WATER RECLM DIST

Building Displacement Summary Table

Total	3

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
95th - 99th	UA	1	25092070500000	9512 S STATE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	2	25092070490000	9511 W 95TH ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	3	25092150010000	9600 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	4	25092230430000	9721 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	5	25092220420000	9720 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	6	25092220410000	9701 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	7	25092210420000	9710 S PERRY AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	8	25092290420000	9800 S PERRY ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	9	25092290410000	9801 S LASALLE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	10	25092280420000	9800 S LASALLE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	11	25092280410000	9801 S WENTWORTH AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	12	25092270410000	9807 S YALE AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	13	25092260440000	9810 S YALE AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	14	25092260470000	9819 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	15	25092250300000	9826 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	16	25092250440000	9825 S HARVARD AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	17	25092250450000	352 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	18	25092250480000	350 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	19	25092240200000	356 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	20	25092240110000	354 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	21	25092240100000	352 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	UA	22	25092240090000	350 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	Vacant
99th - 103rd	UA	23	25094000470000	312 W 99TH PL, CHICAGO	Parkland	Wendell Smith Park	(See *Parklands and Community Resources Technical Memorandum* for park impacts.)	ROW	0	EXEMPT - Parkland
99th - 103rd	UA	24	25094000460000	341 W 99TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
99th - 103rd	UA	25	25095000020000	351 W 99TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
99th - 103rd	UA	26	25099990010000	25099990010000	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	NA
99th - 103rd	UA	27	25094240690000	350 W 103RD ST, CHICAGO	Exempt - Railroad	103rd Street Station (UPRR) - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
99th - 103rd	UA	28	25094240600000	340 W 103RD ST, CHICAGO	Vacant	103rd Street Station (vacant)	Affected Parcel	Parking	0	Vacant
99th - 103rd	UA	29	25161050340000	405 W 103RD ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1	Residential
99th - 103rd	UA	30	25161050350000	403 W 103RD ST, CHICAGO	Commercial	Vacant building - potentially historic	Parcel with Building Displacement	Parking	1	Commercial
99th - 103rd	UA	31	25161050360000	401 W 103RD ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
99th - 103rd	UA	32	25169990010000	25169990010000	Public (City of Chicago)	Parcel affected at W 105th Pl and W 107th St, Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	NA
99th - 103rd	UA	33	25165000030000	361 W 103RD ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
99th - 103rd	UA	34	25165000010000	359 W 103RD ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
99th - 103rd	UA	35	25161050330000	400 W 103RD PL, CHICAGO	Vacant	CTA Commuter Parking (vacant lot)	Affected Parcel	Parking	0	Vacant
103rd - 111th	UA	36	25165000020000	362 W 104TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	37	25165000050000	360 W 104TH PL, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	38	25165000060000	360 W 105TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	39	25161130310000	400 W 105TH ST, CHICAGO	Vacant	Substation Location (vacant lot)	Affected Parcel	Substation	0	Vacant
103rd - 111th	UA	40	25165000080000	361 W 105TH PL, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	41	25165000100000	362 W 106TH PL, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	42	25165000130000	361 W 106TH PL, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	43	25165000140000	360 W 107TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	44	25164000700000	358 W 107TH PL, CHICAGO	Industrial	F.H. Leinweber Co. Underlayments (active industrial use)	Affected Parcel	ROW	0	Industrial
103rd - 111th	UA	45	25164010250000	363 W 107TH ST, CHICAGO	Industrial	F.H. Leinweber Co. Underlayments (active industrial use)	Affected Parcel	ROW	0	Industrial
103rd - 111th	UA	46	25165000170000	362 W 108TH PL, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
103rd - 111th	UA	47	25165000180000	364 W 109TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	48	25165000190000	364 W 109TH PL, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	49	25165000210000	364 W 110TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
103rd - 111th	UA	50	25165000230000	364 W 110TH PL, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Station	0	EXEMPT - Railroad
103rd - 111th	UA	51	25165000260000	360 W 110TH PL, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
103rd - 111th	UA	52	25165000270000	360 W 111TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
103rd - 111th	UA	53	25164270010000	356 W 111TH ST, CHICAGO	Public (City of Chicago)	Vacant lot - appears it is being used as parking for Agape Community Center/New Hope Fellowship which is adjacent to this parcel	Affected Parcel	Parking	0	EXEMPT - City of Chicago
103rd - 111th	UA	54	25163290090000	11037 S EGGLESTON AVE, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Parking	0	EXEMPT - City of Chicago
103rd - 111th	UA	55	25163290080000	11041 S EGGLESTON AVE, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Parking	0	EXEMPT - City of Chicago
103rd - 111th	UA	56	25163290050000	402 W 111TH ST, CHICAGO	Institution (Place of Worship)	Vacant lot w/sign "Future home of Logos Baptist Assembly"	Affected Parcel	Parking	0	Vacant
111th - 115th	UA	57	25219990010000	25219990010000	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	NA
111th - 115th	UA	58	25215010010000	401 W 111TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
111th - 115th	UA	59	25215010020000	501 E 112TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
111th - 115th	UA	60	25215010030000	501 E 112TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
111th - 115th	UA	61	25215010050000	142 W 115TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
111th - 115th	UA	62	25212280210000	11428 S PERRY AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
111th - 115th	UA	63	25215010060000	500 W 113TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
115th - 117th	UA	64	25214060010000	11513 S PERRY AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
115th - 117th	UA	65	25214060300000	11524 S LAFAYETTE AVE, CHICAGO	Public (City of Chicago)	Substation Location (UPRR - Assumed to be City-Owned for UP ROW Option)	Affected Parcel	Substation	0	EXEMPT - Railroad
115th - 117th	UA	66	25229990010000	25229990010000	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Station	0	NA

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
115th - 117th	UA	67	25225000010000	100 E 116TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
115th - 117th	UA	68	25223000080000	11547 S STATE ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
115th - 117th	UA	69	25223000090000	11549 S STATE ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
115th - 117th	UA	70	25223000100000	11551 S STATE ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
115th - 117th	UA	71	25223000110000	11561 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0	Residential
115th - 117th	UA	72	25223000120000	11563 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0	Residential
115th - 117th	UA	73	25223000130000	11567 S STATE ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	74	25223000140000	11569 S STATE ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	75	25223000150000	11571 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	76	25223000160000	11573 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	77	25223000170000	11575 S STATE ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	78	25223000180000	11579 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0	Residential
115th - 117th	UA	79	25223000190000	11562 S WABASH AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	ROW	0	EXEMPT - City of Chicago
115th - 117th	UA	80	25223000700000	11556 S WABASH AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
115th - 117th	UA	81	25223000690000	11562 S WABASH AVE, CHICAGO	Single Family Residential	11562 & 11572 S Wabash appear to be one property	Parcel Affected by Proposed Permanent Envelope	Parking	Counted	Residential
115th - 117th	UA	82	25223000210000	11572 S WABASH AVE, CHICAGO	Single Family Residential	11562 & 11572 S Wabash appear to be one property	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	83	25223000220000	11574 S WABASH AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	84	25223000230000	11578 S WABASH AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1	Residential

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
115th - 117th	UA	85	25223000240000	11583 S STATE ST, CHICAGO	Single Family Residential	4 E 116th under common ownership with 11583 S. State St	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	86	25223000250000	4 E 116TH ST, CHICAGO	Single Family Residential	4 E 116th under common ownership with 11583 S. State St	Parcel with Building Displacement	Parking	Counted	Vacant
115th - 117th	UA	87	25223000260000	8 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	88	25223000270000	12 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	89	25223000280000	16 E 116TH ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	90	25223000290000	20 E 116TH ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	91	25223000470000	11563 S WABASH AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
115th - 117th	UA	92	25223000710000	25223000710000	Commercial	XOXXOX Charter Bus Inc.	Parcel with Building Displacement	Parking	Counted	NA
115th - 117th	UA	93	25223000490000	11573 S WABASH AVE, CHICAGO	Commercial	XOXXOX Charter Bus Inc.	Parcel with Building Displacement	Parking	1	Commercial
115th - 117th	UA	94	25223000500000	32 E 116TH ST, CHICAGO	Single Family Residential	32 & 34 E 116th appear to be one property	Parcel with Building Displacement	Parking	Counted	Residential
115th - 117th	UA	95	25223000510000	34 E 116TH ST, CHICAGO	Single Family Residential	32 & 34 E 116th appear to be one property	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	96	25223000520000	38 E 116TH ST, CHICAGO	Multi-Family Residential	Multi-Family Residential (2 family)	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	97	25223000580000	11578 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
115th - 117th	UA	98	25223000590000	11582 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Parking	0	EXEMPT - Railroad
115th - 117th	UA	99	25223000600000	11586 S MICHIGAN AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0	Vacant
115th - 117th	UA	100	25223000610000	11588 S MICHIGAN AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0	Vacant

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
115th - 117th	UA	101	25223000620000	11592 S MICHIGAN AVE, CHICAGO	Mixed Use Comm/Res	Two-story building w/vacant storefront	Parcel with Building Displacement	Parking	1	Residential
115th - 117th	UA	102	25223040500000	11555 S MICHIGAN AVE, CHICAGO	Vacant	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	Vacant
115th - 117th	UA	103	25223040470000	113 E KENSINGTON AVE, CHICAGO	Vacant	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	Vacant
115th - 117th	UA	104	25223040490000	11557 S MICHIGAN AVE, CHICAGO	Vacant	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	Vacant
115th - 117th	UA	105	25223040050000	11563 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	Counted	EXEMPT
115th - 117th	UA	106	25223040060000	11565 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	Counted	Vacant
115th - 117th	UA	107	25223040070000	11567 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	1	EXEMPT
115th - 117th	UA	108	25223040080000	11579 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	EXEMPT - City of Chicago
115th - 117th	UA	109	25223040270000	120 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	EXEMPT
115th - 117th	UA	110	25223040280000	122 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	EXEMPT - City of Chicago
115th - 117th	UA	111	25223040290000	124 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	EXEMPT
115th - 117th	UA	112	25223040300000	128 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	EXEMPT
115th - 117th	UA	113	25223040310000	130 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	EXEMPT
115th - 117th	UA	114	25223040320000	132 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	EXEMPT
115th - 117th	UA	115	25223040330000	134 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0	EXEMPT
115th - 117th	UA	116	25223040340000	136 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT
115th - 117th	UA	117	25223040090000	11583 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Station	0	EXEMPT - Railroad
115th - 117th	UA	118	25223080130000	121 E 116TH ST, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	Station	0	EXEMPT - Railroad
115th - 117th	UA	119	25223110140000	11629 S INDIANA AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
117th - Front	UB	120	25223150020000	11701 S INDIANA AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
117th - Front	UB	121	25223150160000	11714 S PRAIRIE AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad
117th - Front	UB	122	25223160130000	11763 S PRAIRIE AVE, CHICAGO	Public (City of Chicago)	UPRR - Assumed to be City-Owned for UP ROW Option	Affected Parcel	ROW	0	EXEMPT - Railroad

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
117th - Front	UB	123	25223170310000	11810 S CALUMET AVE, CHICAGO	Industrial	11810 S Calumet & 375 E 118th appear to be one industrial property (active but no signage)	Parcel with Building Displacement	ROW	Counted	Industrial
117th - Front	UB	124	25223170320000	11810 S CALUMET AVE, CHICAGO	Industrial	11810 S Calumet & 375 E 118th appear to be one industrial property (active but no signage)	Parcel with Building Displacement	ROW	1	Industrial
117th - Front	UB	125	25223170330000	375 E 118TH ST, CHICAGO	Industrial	11810 S Calumet & 375 E 118th appear to be one industrial property (active but no signage)	Parcel with Building Displacement	ROW	Counted	Industrial
Front - 130th	UB	126	25223170350000	11800 S FRONT AVE, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0	EXEMPT - CN/METRA
Front - 130th	UB	127	25225010050000	360 E 119TH ST, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0	EXEMPT - Railroad
Front - 130th	UB	128	25223250010000	370 E 119TH ST, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0	EXEMPT - Railroad
Front - 130th	UB	129	25224000260000	11600 S COTTAGE GROVE AVE, CHICAGO	Industrial		Affected Parcel	ROW	0	Industrial
Front - 130th	UB	130	25224000270000	11600 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	ROW	0	EXEMPT - Railroad
Front - 130th	UB	131	25271080080000	11900 S COTTAGE GROVE AVE, CHICAGO	Industrial		Affected Parcel	ROW	0	Industrial
Front - 130th	UB	132	25271080090000	11900 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	0	EXEMPT - Railroad
UPRR COMMON	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displacement**	**Land Use - Cook County**
RRYARD	RRYARD	1	25224010340000	1355 E 121ST ST, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	0	EXEMPT
Front - 130th	UB	2	25275020010000	12330 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	Alignment	Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	3	25272000090000	12256 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	1	EXEMPT - Railroad
RRYARD	RRYARD	4	25272000070000	12256 S COTTAGE GROVE AVE, CHICAGO	Industrial		Affected Parcel	Yard	2	Industrial
RRYARD	RRYARD	5	25272000100000	12256 S COTTAGE GROVE AVE, CHICAGO	Vacant		Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	6	25272000120000	12534 S COTTAGE GROVE AVE, CHICAGO	Vacant		Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	7	25272000130000	12546 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)	Substation Location	Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	8	25275030010000	12320 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	NTCTD/CSS and SBRR	Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	9	25272000040000	12500 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	10	25274000030000	12606 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0	EXEMPT

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
RRYARD	RRYARD	11	25274000070000	12614 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	12	25274000050000	12608 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	13	25274000020000	12600 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	NTCTD/CSS and SBRR	Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	14	25274000060000	12610 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	15	25274000090000	12618 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0	EXEMPT
RRYARD	RRYARD	16	25273010070000	300 E 127TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0	EXEMPT
130th Station - South Option	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displacement**	**Land Use - Cook County**
Front - 130th	UB	1	25275020010000	12330 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB *- Previously counted with Common Perm. Enve*	Affected Parcel	Station	0	EXEMPT - Railroad
Front - 130th	UB	2	25269990010000	25269990010000	Transportation (railroad)	IHB	Affected Parcel	Station	0	NA
Front - 130th	UB	3	25263000170000	12807 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	4	25263000150000	12813 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	5	25263000140000	12817 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	6	25273010120000	325 E 127TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	7	25273010130000	310 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	8	25273010110000	350 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	9	25273010100000	360 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
130th Station - West Option	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displacement**	**Land Use - Cook County**
Front - 130th	UB	1	25275020010000	12330 S COTTAGE GROVE, CHICAGO	Transportation (railroad)	IHB *-Previously counted with Common Perm. Env*	Affected Parcel	Station	0	EXEMPT - Railroad
Front - 130th	UB	2	25274000090000	12618 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)	*Previously counted with Common Perm. Envelop*	Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	3	25269990010000	25269990010000	Transportation (railroad)	IHB	Affected Parcel	Station	0	NA
Front - 130th	UB	4	25263000170000	12807 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation

UPRR HRT Alternative - ROW Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
Front - 130th	UB	5	25263000150000	12813 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	6	25263000140000	12817 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	7	25273010120000	325 E 127TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	8	25273010130000	310 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	9	25273010110000	350 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation
Front - 130th	UB	10	25273010100000	360 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0	EXEMPT - Metro Water Reclamation

Parcel Count Summary Table

95th - 99th	22	22 easements
99th - 103rd	13	
103rd - 111th	21	
111th - 115th	7	
115th - 117th	56	
117th - Front	6	
Front - 130th	27	includes both station options
RRYARD	15	

Building Displacement Summary Table

95th - 99th	0
99th - 103rd	2
103rd - 111th	0
111th - 115th	0
115th - 117th	18
117th - Front	1
Front - 130th	0
RRYARD	3
Total	24

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
95th - 99th	UA	1	25092070500000	9512 S STATE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	Missed	EXEMPT - Cook County
95th - 99th	UA	2	25092070490000	9511 W 95TH ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	3	25092150010000	9600 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	4	25092230430000	9721 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	5	25092220420000	9720 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	6	25092220410000	9701 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	7	25092210420000	9710 S PERRY AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	8	25092290420000	9800 S PERRY ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	9	25092290410000	9801 S LASALLE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	10	25092280420000	9800 S LASALLE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	11	25092280410000	9801 S WENTWORTH AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	12	25092270410000	9807 S YALE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	13	25092260440000	9810 S YALE AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	14	25092260470000	9819 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	15	25092250300000	9826 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	16	25092250440000	9825 S HARVARD AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	17	25092250450000	352 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	18	25092250480000	350 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	19	25092240200000	356 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	20	25092240110000	354 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	21	25092240100000	352 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	22	25092240090000	350 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		Vacant
99th - 103rd	UA	23	25094000470000	312 W 99TH PL, CHICAGO	Parkland	Wendell Smith Park	(See *Parklands and Community Resources Technical Memorandum* for park impacts.)	ROW	0		EXEMPT - City of Chicago
99th - 103rd	UA	24	25094010020000	349 W 99TH PL, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1	Missed	Residential
99th - 103rd	UA	25	25094010010000	355 W 99TH PL, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	26	25094010170000	354 W 100TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
99th - 103rd	UA	27	25094010180000	350 W 100TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	28	25094080010000	355 W 100TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	29	25094080020000	351 W 100TH ST, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	30	25094080170000	352 W 100TH PL, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	31	25094080180000	348 W 100TH PL, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1	Missed	Residential
99th - 103rd	UA	32	25094090020000	349 W 100TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1	Missed	Residential
99th - 103rd	UA	33	25094090010000	353 W 100TH PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
99th - 103rd	UA	34	25094090470000	352 W 101ST ST, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	35	25094160020000	351 W 101ST ST, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	36	25094160010000	355 W 101ST ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	37	25094160180000	348 W 101ST PL, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	ROW	0	Missed	EXEMPT - City of Chicago
99th - 103rd	UA	38	25094160170000	352 W 101ST PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	39	25094170030000	349 W 101ST PL, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
99th - 103rd	UA	40	25094170020000	353 W 101ST PL, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	41	25094170010000	355 W 101ST PL, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	42	25094170190000	348 W 102ND ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	counted	Missed	Residential

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
99th - 103rd	UA	43	25094170180000	348 W 102ND ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	44	25094170170000	352 W 102ND ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	45	25094240030000	347 W 102ND ST, CHICAGO	Single Family Residential	Garage only	Parcel with Building Displacement	ROW	1	Missed	Residential
99th - 103rd	UA	46	25094240020000	351 W 102ND ST, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	47	25094240010000	353 W 102ND ST, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	48	25094240180000	348 W 102ND PL, CHICAGO	Single Family Residential	Residence, plus garage	Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	49	25094240170000	350 W 102ND PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
99th - 103rd	UA	50	25094240160000	354 W 102ND PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
99th - 103rd	UA	51	25094240680000	10228 S PRINCETON AVE, CHICAGO	Industrial	Parcel is located within street ROW	Affected Parcel	Station	0		Industrial
99th - 103rd	UA	52	25094240430000	347 W 102ND PL, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
99th - 103rd	UA	53	25094240420000	351 W 102ND PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	Station	1		Residential
99th - 103rd	UA	54	25094240410000	353 W 102ND PL, CHICAGO	Single Family Residential	103rd Street Station (sf house)- residence, plus garage	Parcel with Building Displacement	Station	1		Residential
99th - 103rd	UA	55	25094240600000	340 W 103RD ST, CHICAGO	Vacant	103rd Street Station (vacant) - commuter parking	Affected Parcel	Parking	0		Vacant
99th - 103rd	UA	56	25094240690000	350 W 103RD ST, CHICAGO	Transportation (railroad)	103rd Street Station (UPRR)	Affected Parcel	Station	0		EXEMPT - Railroad
103rd - 111th	UA	57	25162000010000	329 W 103RD ST, CHICAGO	Parkland	Block Park with utility structure	(See *Parklands and Community Resources Technical Memorandum* for park impacts.)	Station	0		EXEMPT - City of Chicago
103rd - 111th	UA	58	25165000030000	361 W 103RD ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
103rd - 111th	UA	59	25169990010000	25169990010000	Transportation (railroad)	Parcel affected at W 105th Pl and W 107th St - UPRR	Affected Parcel	ROW	0		NA

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
99th - 103rd	UA	60	25161050360000	401 W 103RD ST, CHICAGO	Public (City of Chicago)	Vacant - commuter parking	Affected Parcel	Parking	0		EXEMPT - City of Chicago
99th - 103rd	UA	61	25161050350000	403 W 103RD ST, CHICAGO	Commercial	Vacant building - commuter parking	Parcel with Building Displacement	Parking	1		Commercial
99th - 103rd	UA	62	25161050340000	405 W 103RD ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
99th - 103rd	UA	63	25161050330000	400 W 103RD PL, CHICAGO	Vacant	Commuter Parking (vacant lot)	Affected Parcel	Parking	0		Vacant
103rd - 111th	UA	64	25165000040000	361 W 104TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
103rd - 111th	UA	65	25165000050000	360 W 104TH PL, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
103rd - 111th	UA	66	25165000060000	360 W 105TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
103rd - 111th	UA	67	25161130310000	400 W 105TH ST, CHICAGO	Vacant	Substation Location (vacant lot)	Affected Parcel	Substation	0		Vacant
103rd - 111th	UA	69	25162100010000	317 W 105TH ST, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	ROW	0	Missed	EXEMPT - City of Chicago
103rd - 111th	UA	70	25165000070000	360 W 105TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
103rd - 111th	UA	71	25162100380000	230 W 105TH PL, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	ROW	0		EXEMPT - City of Chicago
103rd - 111th	UA	72	25162110780000	353 W 105TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1	Missed	Residential
103rd - 111th	UA	73	25162110770000	355 W 105TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
103rd - 111th	UA	74	25162110830000	352 W 106TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
103rd - 111th	UA	75	25162110840000	354 W 106TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
103rd - 111th	UA	76	25162120020000	351 W 106TH ST, CHICAGO	Single Family Residential	Boarded up & vacant home, residence and garage	Parcel with Building Displacement	ROW	1	Missed	Residential
103rd - 111th	UA	77	25162120010000	355 W 106TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
103rd - 111th	UA	78	25162120430000	348 W 106TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1	Missed	Residential
103rd - 111th	UA	79	25162120420000	352 W 106TH PL, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	ROW	1		Residential

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
103rd - 111th	UA	80	25165000120000	358 W 106TH PL, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
103rd - 111th	UA	81	25162170010000	353 W 106TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
103rd - 111th	UA	82	25162170390000	354 W 107TH ST, CHICAGO	Vacant	City's building shape file has a structure on this parcel; it's a vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	83	25165000140000	360 W 107TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
103rd - 111th	UA	84	25164000010000	346 W 107TH PL, CHICAGO	Industrial	F.H. Leinweber Co. Underlayments (active industrial use)	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	85	25164000700000	358 W 107TH PL, CHICAGO	Industrial	F.H. Leinweber Co. Underlayments (active industrial use)	Parcel with Building Displacement	ROW	counted		Industrial
103rd - 111th	UA	86	25164010010000	347 W 107TH PL, CHICAGO	Industrial	F.H. Leinweber Co. Underlayments (active industrial use)	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	87	25164010250000	363 W 107TH ST, CHICAGO	Industrial	F.H. Leinweber Co. Underlayments (active industrial use)	Parcel with Building Displacement	ROW	counted		Industrial
103rd - 111th	UA	88	25164010170000	254 W 108TH ST, CHICAGO	Institution (Roseland Christian School)	Parcel adjacent to school building & looks like a recreational field	Parcel Affected by Proposed Permanent Envelope	ROW	0	Missed	EXEMPT - School
103rd - 111th	UA	89	25164010160000	256 W 108TH ST, CHICAGO	Institution (Roseland Christian School)	Parcel adjacent to school building & looks like a recreational field	Affected Parcel	ROW	0		EXEMPT - School
103rd - 111th	UA	90	25164070020000	349 W 108TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0	Missed	Vacant
103rd - 111th	UA	91	25164070010000	351 W 108TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	92	25164070200000	348 W 108TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1	Missed	Residential
103rd - 111th	UA	93	25164070190000	352 W 108TH PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	94	25164110020000	351 W 108TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1	Missed	Residential
103rd - 111th	UA	95	25164110010000	351 W 108TH PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	96	25164110200000	350 W 109TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
103rd - 111th	UA	97	25164110190000	354 W 109TH ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	ROW	1		Residential

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
103rd - 111th	UA	98	25164150020000	351 W 109TH ST, CHICAGO	Single Family Residential	111th Street Station (sf home)	Parcel with Building Displacement	ROW	1		Residential
103rd - 111th	UA	99	25164150010000	355 W 109TH ST, CHICAGO	Vacant	111th Street Station (vacant lot)	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	100	25164150220000	350 W 109TH PL, CHICAGO	Multi-Family Residential	111th Street Station (two-family home)	Parcel with Building Displacement	ROW	1		Residential
103rd - 111th	UA	101	25164150210000	354 W 109TH PL, CHICAGO	Vacant	111th Street Station (vacant lot)	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	102	25164190320000	355 W 109TH PL, CHICAGO	Vacant	111th Street Station (vacant lot)	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	103	25164190150000	350 W 110TH ST, CHICAGO	Vacant	111th Street Station (vacant lot)	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	104	25164190140000	352 W 110TH ST, CHICAGO	Industrial	111th Street Station (Ransom Transportation Inc - School Buses)	Parcel with Building Displacement	ROW	counted		Industrial
103rd - 111th	UA	105	25164190360000	356 W 110TH ST, CHICAGO	Industrial	111th Street Station (Ransom Transportation Inc - School Buses)	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	106	25164230370000	353 W 110TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	Station	0		Vacant
103rd - 111th	UA	107	25164230360000	349 W 110TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	Station	0		Vacant
103rd - 111th	UA	108	25164230180000	352 W 110TH PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	Station	0		Vacant
103rd - 111th	UA	109	25164230190000	348 W 110TH PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0		Commercial
103rd - 111th	UA	110	25164230200000	346 W 110TH PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0		Residential
103rd - 111th	UA	111	25164230210000	342 W 110TH PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0		Commercial
103rd - 111th	UA	112	25164230220000	340 W 110TH PL, CHICAGO	Vacant		Affected Parcel	Parking	0		Vacant
103rd - 111th	UA	113	25164230230000	338 W 110TH PL, CHICAGO	Vacant		Affected Parcel	Parking	0		Vacant
103rd - 111th	UA	114	25164230240000	336 W 110TH PL, CHICAGO	Vacant		Affected Parcel	Parking	0		Vacant
103rd - 111th	UA	115	25163290070000	11026 S EGGLESTON AVE, CHICAGO	Public (City of Chicago)	Vacant lot - Commuter Parking	Affected Parcel	Parking	0		EXEMPT - City of Chicago
103rd - 111th	UA	116	25163290090000	11037 S EGGLESTON AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0		EXEMPT - City of Chicago
103rd - 111th	UA	117	25163290080000	11041 S EGGLESTON AVE, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0		EXEMPT - City of Chicago
103rd - 111th	UA	118	25163290050000	402 W 111TH ST, CHICAGO	Vacant		Affected Parcel	Parking	0		Vacant
103rd - 111th	UA	119	25164270010000	356 W 111TH ST, CHICAGO	Public (City of Chicago)	Vacant lot being used as parking for Agape Community Center/New Hope Fellowship which is adjacent to this parcel	Affected Parcel	Station	0		EXEMPT - City of Chicago
111th - 115th	UA	120	25215010030000	501 E 112TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
111th - 115th	UA	121	25212000010000	349 W 111TH ST, CHICAGO	Multi-Family Residential	Single-family house (3 family use) residence and garage	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	122	25212000020000	347 W 111TH ST, CHICAGO	Multi-Family Residential	Parcel shared with 349 W. 111th St.	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	123	25212000140000	348 W 111TH PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Residential
111th - 115th	UA	124	25212000150000	344 W 111TH PL, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
111th - 115th	UA	125	25212040010000	345 W 111TH PL, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	ROW	0		EXEMPT - City of Chicago
111th - 115th	UA	126	25212040020000	341 W 111TH PL, CHICAGO	Vacant		Affected Parcel	ROW	0	Missed	Vacant
111th - 115th	UA	127	25212040150000	340 W 112TH ST, CHICAGO	Multi-Family Residential	Boarded up & vacant home, residence and garage	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	128	25212040160000	336 W 112TH ST, CHICAGO	Vacant	Structure on map (Chicago GIS data) is no longer there; vacant lot.	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	129	25212080030000	339 W 112TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	130	25212080040000	335 W 112TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	131	25212080050000	333 W 112TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0	Missed	Vacant
111th - 115th	UA	132	25212080160000	330 W 112TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	133	25212080170000	330 W 112TH PL, CHICAGO	Single Family Residential	This parcel is a small sliver between two residential parcels (2521208018000 and a170000) - there are no structures.	Affected Parcel	ROW	0		Residential
111th - 115th	UA	134	25212080180000	328 W 112TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	135	25212120100000	325 W 112TH PL, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	136	25212120110000	319 W 112TH PL, CHICAGO	Multi-Family Residential	Single-family house (2 family use), residence and garage	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	137	25212120120000	317 W 112TH PL, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
111th - 115th	UA	138	25212120190000	320 W 113TH ST, CHICAGO	Vacant	Common ownership as 320 W 113TH ST, CHICAGO	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	139	25212120200000	320 W 113TH ST, CHICAGO	Single Family Residential	Common ownership as 320 W 113TH ST, CHICAGO - residence and garage	Parcel with Building Displacement	ROW	1		Residential

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

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111th - 115th	UA	140	25212120210000	316 W 113TH ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	141	25212120220000	312 W 113TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	142	25212120230000	310 W 113TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	143	25212170010000	311 W 113TH ST, CHICAGO	Multi-Family Residential	Single-family house (2 family use)	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	144	25212170020000	307 W 113TH ST, CHICAGO	Multi-Family Residential	Single-family house (2 family use)	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	145	25212170030000	303 W 113TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	146	25212170120000	11332 S PRINCETON AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	147	25212180240000	11315 S PRINCETON AVE, CHICAGO	Vacant		Affected Parcel	ROW	0	Missed	Vacant
111th - 115th	UA	148	25212180250000	11319 S PRINCETON AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	149	25212180260000	11321 S PRINCETON AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	150	25212180270000	11325 S PRINCETON AVE, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	151	25212180280000	11327 S PRINCETON AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	152	25212180200000	11330 S YALE AVE, CHICAGO	Single Family Residential	Garage only	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	153	25212180210000	11334 S YALE AVE, CHICAGO	Multi-Family Residential	Single-family house (2 family use)	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	154	25212180220000	11336 S YALE AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
111th - 115th	UA	155	25212180230000	11342 S YALE AVE, CHICAGO	Vacant	Vacant; no evidence of commercial use on this parcel	Affected Parcel	ROW	0		Commercial
111th - 115th	UA	156	25212190140000	11343 S YALE AVE, CHICAGO	Single Family Residential		Parcel Affected by Proposed Permanent Envelope	ROW	1	Missed	Residential
111th - 115th	UA	157	25212190150000	11345 S YALE AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	158	25212190160000	11347 S YALE AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	159	25212190170000	11351 S WENTWORTH AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	160	25212190180000	11355 S WENTWORTH AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	161	25212190360000	11352 S WENTWORTH AVE, CHICAGO	Single Family Residential	Garage only	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	162	25212190370000	11358 S WENTWORTH AVE, CHICAGO	Vacant	Vacant; house structure on map (City GIS data) is no longer there	Affected Parcel	ROW	0		Residential
111th - 115th	UA	163	25215010010000	401 W 111TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	164	25212280010000	149 W 114TH ST, CHICAGO	Vacant	Vacant; structure on map (City GIS data) is no longer there	Affected Parcel	ROW	0		Commercial
111th - 115th	UA	165	25212280020000	135 W 114TH ST, CHICAGO	Institution (Place of Worship)	Now Faith Church of God Holiness	Parcel with Building Displacement	ROW	1		EXEMPT - Place of Worship
111th - 115th	UA	166	25212280030000	131 W 114TH ST, CHICAGO	Single Family Residential		Parcel Affected by Proposed Permanent Envelope	ROW	1	Missed	Residential
111th - 115th	UA	167	25212280460000	11424 S PERRY AVE, CHICAGO	Industrial	Appears Vacant - no signage	Parcel with Building Displacement	ROW	1		Industrial
111th - 115th	UA	168	25212280470000	11424 S PERRY AVE, CHICAGO	Industrial	Appears Vacant - no signage	Parcel with Building Displacement	ROW	1		Industrial
111th - 115th	UA	169	25212280230000	11426 S PERRY AVE, CHICAGO	Industrial	Appears Vacant - no signage	Parcel with Building Displacement	ROW	1		Industrial

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
111th - 115th	UA	170	25212300350000	11439 W PIPPIN ST, CHICAGO	Industrial	Body Shop - S.R.M Engineering Workshop	Parcel with Building Displacement	ROW	1		Industrial
111th - 115th	UA	171	25212300340000	52 W 115TH ST, CHICAGO	Vacant	Structure on map (City GIS data) is no longer there; vacant lot.	Affected Parcel	ROW	0		Industrial
111th - 115th	UA	172	25212300360000	52 W 115TH ST, CHICAGO	Vacant	Structure on map (City GIS data) is no longer there; vacant lot.	Affected Parcel	ROW	0		Industrial
111th - 115th	UA	173	25212300190000	46 W 115TH ST, CHICAGO	Vacant	Structure on map (City GIS data) is no longer there; vacant lot.	Affected Parcel	ROW	0		Residential
111th - 115th	UA	174	25212300200000	44 W 115TH ST, CHICAGO	Transportation (railroad)	Vacant lot - UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	175	25212300210000	42 W 115TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	176	25212300220000	40 W 115TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1	Missed	Residential
115th - 117th	UA	177	25214060290000	11502 S LAFAYETTE AVE, CHICAGO	Commercial	Donald's Auto Repair Shop	Parcel with Building Displacement	ROW	1		Commercial
115th - 117th	UA	178	25214070010000	23 W 115TH ST, CHICAGO	Single Family Residential	Boarded up & vacant home	Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	179	25214070020000	17 W 115TH ST, CHICAGO	Multi-Family Residential	Single-family house (2 family use)	Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	180	25214070030000	11 W 115TH ST, CHICAGO	Vacant		Affected Parcel	ROW	0	Missed	Vacant
115th - 117th	UA	181	25214070070000	11516 S STATE ST, CHICAGO	Vacant		Affected Parcel	ROW	0		Vacant
115th - 117th	UA	182	25214070290000	11514 S STATE ST, CHICAGO	Vacant		Affected Parcel	ROW	0		Vacant
115th - 117th	UA	183	25214060300000	11524 S LAFAYETTE AVE, CHICAGO	Transportation (railroad)	Substation Location (vacant lot & vacated street part of UPRR ROW)	Affected Parcel	Substation	0		EXEMPT - Railroad
115th - 117th	UA	184	25223000070000	11527 S STATE ST, CHICAGO	Public (City of Chicago)	Vacant lot -- adjacent lots have been razed and sign says it is the future home of Aldi shopping center	Easement	ROW	0		EXEMPT - City of Chicago
115th - 117th	UA	185	25223000190000	11562 S WABASH AVE, CHICAGO	Public (City of Chicago)	Vacant lot -- adjacent lots have been razed and sign says it is the future home of Aldi shopping center	Easement	ROW	0		EXEMPT - City of Chicago

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
115th - 117th	UA	186	25223000680000	11552 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)	Vacant lot -- adjacent lots have been razed and sign says it is the future home of Aldi shopping center	Easement	ROW	0		EXEMPT - City of Chicago
115th - 117th	UA	187	25223000090000	11549 S STATE ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Parking	0		EXEMPT - Railroad
115th - 117th	UA	188	25223000100000	11551 S STATE ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Parking	0		EXEMPT - Railroad
115th - 117th	UA	189	25223000110000	11561 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0		Residential
115th - 117th	UA	190	25223000120000	11563 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0		Residential
115th - 117th	UA	191	25223000130000	11567 S STATE ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	192	25223000140000	11569 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	193	25223000150000	11571 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	194	25223000160000	11573 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	195	25223000170000	11575 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	196	25223000180000	11579 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0		Residential
115th - 117th	UA	197	25223000700000	11556 S WABASH AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Parking	0		EXEMPT - Railroad
115th - 117th	UA	198	25223000690000	11562 S WABASH AVE, CHICAGO	Single Family Residential	11562 & 11572 S Wabash appear to be one property	Parcel with Building Displacement	Parking	counted		Residential
115th - 117th	UA	199	25223000210000	11572 S WABASH AVE, CHICAGO	Single Family Residential	11562 & 11572 S Wabash appear to be one property	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	200	25223000220000	11574 S WABASH AVE, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	201	25223000230000	11578 S WABASH AVE, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	202	25223000710000	25223000710000	Commercial	XOXXOX Charter Bus Inc.	Parcel with Building Displacement	Parking	counted		NA
115th - 117th	UA	203	25223000490000	11573 S WABASH AVE, CHICAGO	Commercial	XOXXOX Charter Bus Inc.	Parcel with Building Displacement	Parking	1		Commercial

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
115th - 117th	UA	204	25223000580000	11578 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Easement	Parking	0		EXEMPT - City of Chicago
115th - 117th	UA	205	25223000240000	11583 S STATE ST, CHICAGO	Single Family Residential	4 E 116th under common ownership with 11583 S. State St	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	206	25223000250000	4 E 116TH ST, CHICAGO	Single Family Residential	4 E 116th under common ownership with 11583 S. State St	Parcel with Building Displacement	Parking	counted		Vacant
115th - 117th	UA	207	25223000260000	8 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	208	25223000270000	12 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	209	25223000280000	16 E 116TH ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	210	25223000290000	20 E 116TH ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	211	25223000500000	32 E 116TH ST, CHICAGO	Single Family Residential	32 & 34 E 116th appear to one property	Parcel with Building Displacement	Parking	counted		Residential
115th - 117th	UA	212	25223000510000	34 E 116TH ST, CHICAGO	Single Family Residential	32 & 34 E 116th appear to one property	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	213	25223000520000	38 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	214	25223000590000	11582 S MICHIGAN AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Parking	0		EXEMPT - Railroad
115th - 117th	UA	215	25223000600000	11586 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0		Vacant
115th - 117th	UA	216	25223000610000	11588 S MICHIGAN AVE, CHICAGO	Vacant		Affected Parcel	Parking	0		Vacant
115th - 117th	UA	217	25223000620000	11592 S MICHIGAN AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	218	25223040500000	11555 S MICHIGAN AVE, CHICAGO	Vacant	Michigan Ave Station (vacant building)	Affected Parcel	Parking	0		Vacant
115th - 117th	UA	219	25223040470000	113 E KENSINGTON AVE, CHICAGO	Vacant		Affected Parcel	Parking	0		Vacant

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
115th - 117th	UA	220	25223040490000	11557 S MICHIGAN AVE, CHICAGO	Vacant	Michigan Ave Station (vacant building)	Affected Parcel	Parking	0		Vacant
115th - 117th	UA	221	25223040050000	11563 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	counted		EXEMPT
115th - 117th	UA	222	25223040060000	11565 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	counted		Vacant
115th - 117th	UA	223	25223040070000	11567 S MICHIGAN AVE, CHICAGO	Industrial	11563, 11565, & 11567 S Michigan contain one vacant industrial building	Parcel with Building Displacement	Parking	1		EXEMPT
115th - 117th	UA	224	25223040080000	11579 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0		EXEMPT - City of Chicago
115th - 117th	UA	225	25223040270000	120 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0		EXEMPT
115th - 117th	UA	226	25223040280000	122 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0		EXEMPT - City of Chicago
115th - 117th	UA	227	25223040290000	124 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0		EXEMPT
115th - 117th	UA	228	25223040300000	128 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0		EXEMPT
115th - 117th	UA	229	25223040310000	130 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0		EXEMPT
115th - 117th	UA	230	25223040320000	132 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0		EXEMPT
115th - 117th	UA	231	25223040330000	134 E 116TH ST, CHICAGO	Public (City of Chicago)	Michigan Ave Station (vacant lot)	Affected Parcel	Parking	0		EXEMPT
115th - 117th	UA	232	25223040340000	136 E 116TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0		EXEMPT
115th - 117th	UA	233	25223080140000	151 E 116TH ST, CHICAGO	Multi-Family Residential	Single-family house (2 family use); residence and garage	Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	234	25223080150000	153 E 116TH ST, CHICAGO	Multi-Family Residential	Single-family house (2 family use)	Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	235	25223080160000	155 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	236	25223080170000	157 E 116TH ST, CHICAGO	Multi-Family Residential	Single-family house (2 family use)	Affected Parcel	ROW	0		Residential
115th - 117th	UA	237	25223080180000	159 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
115th - 117th	UA	238	25223080190000	163 E 116TH ST, CHICAGO	Multi-Family Residential	Vacant home	Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	239	25223080200000	165 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	240	25223110130000	11631 S INDIANA AVE, CHICAGO	Public (City of Chicago)	C.O.C. Dept of Streets & Sanitation	Parcel with Building Displacement	ROW	counted		EXEMPT - City of Chicago
115th - 117th	UA	241	25223110120000	11633 S INDIANA AVE, CHICAGO	Public (City of Chicago)	C.O.C. Dept of Streets & Sanitation	Parcel with Building Displacement	ROW	1	Missed	EXEMPT - City of Chicago
115th - 117th	UA	242	25223110250000	11634 S PRAIRIE AVE, CHICAGO	Multi-Family Residential	Single-family house (2 family use); residence and garage	Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	243	25223110240000	11632 S PRAIRIE AVE, CHICAGO	Multi-Family Residential	Single-family house (2 family use); residence and garage	Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	244	25223110210000	11630 S PRAIRIE AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
117th - Front	UB	245	25223160010000	319 E 117TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
117th - Front	UB	246	25223160350000	329 E 117TH ST, CHICAGO	Commercial	Back lot appears connected with 11722 S Calumet	Affected Parcel	ROW	0		Commercial
117th - Front	UB	247	25223160340000	11722 S CALUMET AVE, CHICAGO	Commercial	No Signage	Affected Parcel	ROW	0		Commercial
117th - Front	UB	248	25223160300000	11726 S CALUMET AVE, CHICAGO	Vacant		Affected Parcel	ROW	0		Vacant
117th - Front	UB	249	25223160310000	11728 S CALUMET AVE, CHICAGO	Vacant		Affected Parcel	ROW	0		Vacant
117th - Front	UB	250	25223170130000	354 E 118TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
117th - Front	UB	251	25223170140000	356 E 118TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	ROW	0		EXEMPT - City of Chicago
117th - Front	UB	252	25223170150000	358 E 118TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	ROW	0		EXEMPT - City of Chicago
117th - Front	UB	253	25223170300000	11742 S FRONT AVE, CHICAGO	Vacant	Structure on map (City GIS data) is no longer there; vacant lot now used by adjacent industrial use.	Affected Parcel	ROW	0		Industrial
117th - Front	UB	254	25223170310000	11810 S CALUMET AVE, CHICAGO	Industrial	Active - No Signage	Parcel with Building Displacement	ROW	counted		Industrial

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
117th - Front	UB	255	25223170320000	11810 S CALUMET AVE, CHICAGO	Industrial	Active - No Signage	Parcel with Building Displacement	ROW	1		Industrial
117th - Front	UB	256	25223170330000	375 E 118TH ST, CHICAGO	Industrial	Active - No Signage	Parcel with Building Displacement	ROW	counted		Industrial
Front - 130th	UB	257	25223170350000	11800 S FRONT AVE, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0		EXEMPT - RTA / METRA
Front - 130th	UB	258	25225010050000	360 E 119TH ST, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0		EXEMPT - Railroad
Front - 130th	UB	259	25223250010000	370 E 119TH ST, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0		EXEMPT - Railroad
Front - 130th	UB	260	25224000260000	11600 S COTTAGE GROVE AVE, CHICAGO	Industrial		Affected Parcel	ROW	0		Industrial
Front - 130th	UB	261	25224000270000	11600 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	ROW	0		EXEMPT - Railroad
Front - 130th	UB	262	25271080090000	11900 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	0		EXEMPT - Railroad
UPRR COMMON	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displaceme nt**		**Land Use - Cook County**
RRYARD	RRYARD	1	25224010340000	1355 E 121ST ST, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	0		EXEMPT
Front - 130th	UB	2	25275020010000	12330 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	Alignment	Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	3	25272000090000	12256 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	1		EXEMPT - Railroad
RRYARD	RRYARD	4	25272000070000	12256 S COTTAGE GROVE AVE, CHICAGO	Industrial		Affected Parcel	Yard	2		Industrial
RRYARD	RRYARD	5	25272000100000	12256 S COTTAGE GROVE AVE, CHICAGO	Vacant		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	6	25272000120000	12534 S COTTAGE GROVE AVE, CHICAGO	Vacant		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	7	25272000130000	12546 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)	Substation Location	Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	8	25275030010000	12320 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	NTCTD/CSS and SBRR	Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	9	25272000040000	12500 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	10	25274000030000	12606 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	11	25274000070000	12614 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	12	25274000050000	12608 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	13	25274000020000	12600 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	NTCTD/CSS and SBRR	Affected Parcel	Yard	0		EXEMPT

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
RRYARD	RRYARD	14	25274000060000	12610 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	15	25274000090000	12618 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	16	25273010070000	300 E 127TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
130th Station - South Option	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displacement**		**Land Use - Cook County**
Front - 130th	UB	1	25275020010000	12330 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB *- Previously counted with Common Perm. Envelop*	Affected Parcel	Station	0		EXEMPT - Railroad
Front - 130th	UB	2	25269990010000	25269990010000	Transportation (railroad)	IHB	Affected Parcel	Station	0		NA
Front - 130th	UB	3	25263000170000	12807 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	4	25263000150000	12813 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	5	25263000140000	12817 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	6	25273010120000	325 E 127TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	7	25273010130000	310 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	8	25273010110000	350 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	9	25273010100000	360 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
130th Station - West Option	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displacement**		**Land Use - Cook County**
Front - 130th	UB	1	25275020010000	12330 S COTTAGE GROVE, CHICAGO	Transportation (railroad)	IHB *- - Previously counted with Common Perm. Envelop*	Affected Parcel	Station	0		EXEMPT - Railroad
Front - 130th	UB	2	25274000090000	12618 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)	*Previously counted with Common Perm. Envelop*	Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	3	25269990010000	25269990010000	Transportation (railroad)	IHB	Affected Parcel	Station	0		NA
Front - 130th	UB	4	25263000170000	12807 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	5	25263000150000	12813 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	6	25263000140000	12817 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	7	25273010120000	325 E 127TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation

UPRR HRT Alternative - East Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
Front - 130th	UB	8	25273010130000	310 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	9	25273010110000	350 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	10	25273010100000	360 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation

Parcel Count Summary Table		
95th - 99th	22	22 easements
99th - 103rd	38	
103rd - 111th	58	
111th - 115th	57	
115th - 117th	68	4 easements
117th - Front	12	
Front - 130th	26	includes both station options
RRYARD	15	

Building Displacement Summary Table	
95th - 99th	0
99th - 103rd	26
103rd - 111th	18
111th - 115th	32
115th - 117th	31
117th - Front	2
Front - 130th	0
RRYARD	3
Total	112

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
95th - 99th	UA	1	25092070500000	9512 S STATE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	Missed	EXEMPT - Cook County
95th - 99th	UA	2	25092070490000	9511 W 95TH ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	3	25092150010000	9600 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	4	25092230430000	9721 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - City of Chicago
95th - 99th	UA	5	25092220420000	9720 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	6	25092220410000	9701 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	7	25092210420000	9710 S PERRY AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	8	25092290420000	9800 S PERRY ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	9	25092290410000	9801 S LASALLE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	10	25092280420000	9800 S LASALLE ST, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	11	25092280410000	9801 S WENTWORTH AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	12	25092270410000	9807 S YALE AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	13	25092260440000	9810 S YALE AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	14	25092260470000	9819 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	15	25092250300000	9826 S PRINCETON AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	16	25092250440000	9825 S HARVARD AVE, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	17	25092250450000	352 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	18	25092250480000	350 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	19	25092240200000	356 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	20	25092240110000	354 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	21	25092240100000	352 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		EXEMPT - Cook County
95th - 99th	UA	22	25092240090000	350 W 99TH ST, CHICAGO	Transportation (highway)	I-57	Easement	ROW	0		Vacant
99th - 103rd	UA	23	25095000020000	351 W 99TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
99th - 103rd	UA	24	25094000460000	341 W 99TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
99th - 103rd	UA	25	25094000470000	312 W 99TH PL, CHICAGO	Parkland	Wendell Smith Park	(See *Parklands and Community Resources Technical Memorandum* for park impacts.)	ROW	0		EXEMPT - Parklands
99th - 103rd	UA	26	25099990010000		Parkland	Parkland	(See *Parklands and Community Resources Technical Memorandum* for park impacts.)	ROW	0		NA

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
99th - 103rd	UA	195	25094240600000	340 W 103RD ST, CHICAGO	Vacant	CTA Bus Turnaround	Affected Parcel	Bus Turnaround	0		Vacant
99th - 103rd	UA	27	25161050340000	405 W 103RD ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Station	1		Residential
99th - 103rd	UA	28	25161050350000	403 W 103RD ST, CHICAGO	Commercial	Vacant building - potentially historic	Parcel with Building Displacement	Station	1		Commercial
99th - 103rd	UA	29	25161050330000	400 W 103RD PL, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0		Vacant
99th - 103rd	UA	30	25161070100000	401 W 103RD PL, CHICAGO	Vacant	Vacant lot w/cars - no structure	Affected Parcel	Parking	0		Commercial
103rd - 111th	UA	31	25161130240000	401 W 104TH ST, CHICAGO	Commercial	This lot is designated commercial, but there is a sign on the property that says "CPO Outreach Christian School - Fellowship and Career Center."	Affected Parcel	ROW	0		Commercial
103rd - 111th	UA	32	25161130280000	10413 S EGGLESTON AVE, CHICAGO	Commercial	Potential shared use parcel (CPO)	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	33	25161130290000	405 W 104TH ST, CHICAGO	Commercial	Potential shared use parcel (CPO)	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	34	25161130310000	400 W 105TH ST, CHICAGO	Vacant	Vacant lot w/dump materials	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	35	25161210240000	411 W 105TH ST, CHICAGO	Commercial	Commercial lot w/vehicles	Affected Parcel	ROW	0		Commercial
103rd - 111th	UA	36	25161210250000	10514 S STEWART AVE, CHICAGO	Commercial	Commercial lot w/vehicles	Affected Parcel	ROW	0		Commercial
103rd - 111th	UA	37	25161210310000	10520 S STEWART AVE, CHICAGO	Industrial	Auto Garage - no signage	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	38	25161210320000	10528 S STEWART AVE, CHICAGO	Industrial	Lot w/vehicles & small structure	Parcel with Building Displacement	ROW	1		Vacant
103rd - 111th	UA	39	25162100010000	317 W 105TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0		EXEMPT - City of Chicago
103rd - 111th	UA	40	25165000070000	360 W 105TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Substation	0		EXEMPT - Railroad
103rd - 111th	UA	41	25162100380000	230 W 105TH PL, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0		EXEMPT - City of Chicago
103rd - 111th	UA	42	25162100390000	232 W 105TH PL, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0		EXEMPT - City of Chicago
103rd - 111th	UA	43	25162100400000	232 W 105TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0		EXEMPT - City of Chicago
103rd - 111th	UA	44	25161210220000	10530 S STEWART AVE, CHICAGO	Industrial	AmeriTech	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	45	25161210270000	10548 S STEWART AVE, CHICAGO	Industrial	AT&T	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	46	25161210280000	10552 S STEWART AVE, CHICAGO	Industrial	AT&T	Parcel with Building Displacement	ROW	Counted		Industrial

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
103rd - 111th	UA	47	25161210290000	10558 S STEWART AVE, CHICAGO	Industrial	AT&T	Parcel with Building Displacement	ROW	Counted		Industrial
103rd - 111th	UA	48	25161290300000	10638 S STEWART AVE, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	ROW	0		EXEMPT - City of Chicago
103rd - 111th	UA	49	25161290310000	10632 S STEWART AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	50	25161290290000	410 W 107TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	51	25161290280000	400 W 107TH ST, CHICAGO	Industrial	Vacant building - no signage	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	52	25163070250000	405 W 107TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	53	25163070220000	400 W 108TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	54	25163150250000	405 W 108TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	55	25163150260000	405 W 108TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	56	25163150270000	410 W 109TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	57	25163150240000	410 W 109TH ST, CHICAGO	Industrial	Vacant building without signage	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	58	25163200110000	409 W 109TH ST, CHICAGO	Industrial	Active industrial use - "Integrity Wall Panel"	Parcel with Building Displacement	ROW	1		Industrial
103rd - 111th	UA	59	25163200220000	410 W 109TH ST, CHICAGO	Industrial	Integrity Wall Panel	Affected Parcel	ROW	0		Residential
103rd - 111th	UA	60	25163200230000	412 W 109TH ST, CHICAGO	Industrial	Integrity Wall Panel	Affected Parcel	ROW	0		Vacant
103rd - 111th	UA	61	25163290060000	401 W 110TH ST, CHICAGO	Industrial	Lot contains construction equipment & small structure	Parcel with Building Displacement	ROW	1		Vacant
103rd - 111th	UA	62	25163290070000	11026 S EGGLESTON AVE, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Parking	0		EXEMPT - City of Chicago
103rd - 111th	UA	63	25163290090000	11037 S EGGLESTON AVE, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Parking	0		EXEMPT - City of Chicago
103rd - 111th	UA	64	25163290080000	11041 S EGGLESTON AVE, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Parking	0		EXEMPT - City of Chicago
103rd - 111th	UA	65	25163290050000	402 W 111TH ST, CHICAGO	Institution (Place of Worship)	Vacant lot w/sign "Future home of Logos Baptist Assembly"	Affected Parcel	Parking	0		Vacant
111th - 115th	UA	66	25211070060000	407 W 111TH ST, CHICAGO	Commercial	Roseland Tune Up Center	Parcel with Building Displacement	ROW	1	Missed	Commercial
111th - 115th	UA	67	25211070070000	405 W 111TH ST, CHICAGO	Commercial	Rosleand Tune Up Center	Parcel with Building Displacement	ROW	Counted		Commercial
111th - 115th	UA	68	25211070080000	401 W 111TH ST, CHICAGO	Commercial	Roseland Tune Up Center	Affected Parcel	ROW	0		Commercial
111th - 115th	UA	69	25211070090000	403 W 111TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	70	25211070250000	11114 S STEWART AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Commercial

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
111th - 115th	UA	71	25211070260000	11116 S STEWART AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Commercial
111th - 115th	UA	72	25211070270000	11118 S STEWART AVE, CHICAGO	Commercial	Building w/no signage	Parcel with Building Displacement	ROW	1		Commercial
111th - 115th	UA	73	25211070280000	11124 S STEWART AVE, CHICAGO	Commercial	Benson & Son Construction Contractors	Parcel with Building Displacement	ROW	1		Commercial
111th - 115th	UA	74	25211070290000	11128 S STEWART AVE, CHICAGO	Commercial	Benson & Son Construction Contractors	Affected Parcel	ROW	0		Commercial
111th - 115th	UA	75	25211070300000	11130 S STEWART AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	76	25211070310000		Commercial		Parcel with Building Displacement	ROW	1		Commercial
111th - 115th	UA	77	25211070320000	11144 S STEWART AVE, CHICAGO	Commercial	Building w/no signage	Affected Parcel	ROW	0		Residential
111th - 115th	UA	78	25211070330000	11148 S STEWART AVE, CHICAGO	Single Family Residential		Affected Parcel	ROW	0		Residential
111th - 115th	UA	79	25211070340000	11150 S STEWART AVE, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
111th - 115th	UA	80	25211070370000	406 W 112TH ST, CHICAGO	Vacant		Affected Parcel	ROW	0	Missed	Vacant
111th - 115th	UA	81	25215010020000	501 E 112TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	82	25212080010000	11201 S STEWART AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Industrial
111th - 115th	UA	83	25212080020000	11225 S STEWART AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Industrial
111th - 115th	UA	84	25212120010000	11229 S STEWART AVE, CHICAGO	Single Family Residential	Vacant, boarded up single-family home	Affected Parcel	ROW	0		Residential
111th - 115th	UA	85	25212120020000	11239 S STEWART AVE, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
111th - 115th	UA	86	25212120090000	341 W 112TH PL, CHICAGO	Industrial	Boarded up - No signage (339 W 112th)	Parcel with Building Displacement	ROW	1		Industrial
111th - 115th	UA	87	25212120170000	340 W 113TH ST, CHICAGO	Mixed Use Comm/Res	Two-Story Mixed Use (sign "Sisters Exotic Catering")	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	88	25212120180000	338 W 113TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	89	25212170040000	11325 S HARVARD AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	90	25212170050000	11327 S HARVARD AVE, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
111th - 115th	UA	91	25212170270000	11334 S PRINCETON AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	92	25212170280000	11336 S PRINCETON AVE, CHICAGO	Single Family Residential	No building on lot/probably side yard lot for adjacent home	Affected Parcel	ROW	0		Residential
111th - 115th	UA	93	25212170290000	11340 S PRINCETON AVE, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
111th - 115th	UA	94	25212180140000	233 W 113TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	95	25219990010000	25219990010000	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		NA
111th - 115th	UA	96	25212270010000	11411 S YALE AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	97	25219990010000	25219990010000	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		NA
111th - 115th	UA	98	25212270020000	11413 S YALE AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	99	25212270120000	11420 S WENTWORTH AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
111th - 115th	UA	100	25212270130000	11422 S WENTWORTH AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
111th - 115th	UA	101	25212280420000	11423 S WENTWORTH AVE, CHICAGO	Institutional	My Holy Rock M.B. Church; vacant lot/no building	Affected Parcel	ROW	0		Commercial
111th - 115th	UA	102	25212280150000	11433 S WENTWORTH AVE, CHICAGO	Institutional	My Holy Rock M.B. Church; vacant lot/no building	Affected Parcel	ROW	0		Commercial
111th - 115th	UA	103	25212280160000	11437 S WENTWORTH AVE, CHICAGO	Institutional	My Holy Rock M.B. Church	Affected Parcel	ROW	0	Missed	Commercial
111th - 115th	UA	104	25212280430000	11437 S WENTWORTH AVE, CHICAGO	Institutional	My Holy Rock M.B. Church; vacant lot/no building	Affected Parcel	ROW	0		Commercial
111th - 115th	UA	105	25212280440000	124 W 115TH ST, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
111th - 115th	UA	106	25212280450000	120 W 115TH ST, CHICAGO	Single Family Residential		Affected Parcel	ROW	0		Residential
111th - 115th	UA	107	25212280340000	116 W 115TH ST, CHICAGO	Multi-Family Residential	Multi-Family Residential (2 family)	Parcel with Building Displacement	ROW	1		Residential
111th - 115th	UA	108	25212280370000	112 W 115TH ST, CHICAGO	Industrial	One story garage, no sign, potentially historic	Parcel with Building Displacement	ROW	1		Industrial
111th - 115th	UA	109	25212280380000	106 W 115TH ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
115th - 117th	UA	110	25214050080000	103 W 115TH ST, CHICAGO	Vacant	Vacant lot/no building	Affected Parcel	ROW	0		Vacant
115th - 117th	UA	111	25214060010000	11513 S PERRY AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
115th - 117th	UA	112	25214060550000	11515 S PERRY AVE, CHICAGO	Vacant	Vacant	Affected Parcel	ROW	0		Residential
115th - 117th	UA	113	25214060300000	11524 S LAFAYETTE AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Substation	0		EXEMPT - Railroad
115th - 117th	UA	114	25214060310000	11526 S LAFAYETTE AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	Substation	1		Residential
115th - 117th	UA	115	25214060580000	11530 S LAFAYETTE AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	Substation	1		Residential
115th - 117th	UA	116	25219990010000	25219990010000	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		NA
115th - 117th	UA	117	25214070080000	11535 S LAFAYETTE AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
115th - 117th	UA	118	25215010070000	500 W 113TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
115th - 117th	UA	119	25214070090000	11537 S LAFAYETTE AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
115th - 117th	UA	120	25214070100000	11541 S LAFAYETTE AVE, CHICAGO	Single Family Residential		Affected Parcel	ROW	0	Missed	Residential
115th - 117th	UA	121	25214070300000	11512 S STATE ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
115th - 117th	UA	122	25214070310000	11546 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	123	25214070320000	11548 S STATE ST, CHICAGO	Multi-Family Residential		Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	124	25223000090000	11549 S STATE ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
115th - 117th	UA	125	25223000100000	11551 S STATE ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Parking	0		EXEMPT - Railroad
115th - 117th	UA	126	25223000110000	11561 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0		Residential
115th - 117th	UA	127	25223000120000	11563 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0		Residential
115th - 117th	UA	128	25223000130000	11567 S STATE ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	129	25223000140000	11569 S STATE ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	130	25223000150000	11571 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	131	25223000160000	11573 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	132	25223000170000	11575 S STATE ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	133	25223000180000	11579 S STATE ST, CHICAGO	Vacant		Affected Parcel	Parking	0		Residential
115th - 117th	UA	134	25223000700000	11556 S WABASH AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
115th - 117th	UA	135	25223000690000	11562 S WABASH AVE, CHICAGO	Commercial		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	136	25223000210000	11572 S WABASH AVE, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	137	25223000220000	11574 S WABASH AVE, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
115th - 117th	UA	138	25223000230000	11578 S WABASH AVE, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	139	25223000240000	11583 S STATE ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	140	25223000250000	4 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	Counted		Vacant
115th - 117th	UA	141	25223000260000	8 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	142	25223000270000	12 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	143	25223000280000	16 E 116TH ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	144	25223000290000	20 E 116TH ST, CHICAGO	Single Family Residential	Residence and garage	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	145	25223000710000	25223000710000	Commercial	XOXXOX Charter Bus Inc	Parcel with Building Displacement	ROW	Counted		NA
115th - 117th	UA	146	25223000490000	11573 S WABASH AVE, CHICAGO	Commercial	XOXXOX Charter Bus Inc.	Parcel with Building Displacement	Parking	1		Commercial
115th - 117th	UA	147	25223000500000	32 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	148	25223000510000	34 E 116TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	149	25223000520000	38 E 116TH ST, CHICAGO	Multi-Family Residential	Multi-Family Residential (2 family)	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	150	25223000580000	11578 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)		Easement	Station	0		EXEMPT - City of Chicago
115th - 117th	UA	151	25223000590000	11582 S MICHIGAN AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	Station	0		EXEMPT - Railroad
115th - 117th	UA	152	25223000600000	11586 S MICHIGAN AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0		Vacant

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
115th - 117th	UA	153	25223000610000	11588 S MICHIGAN AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0		Vacant
115th - 117th	UA	154	25223000620000	11592 S MICHIGAN AVE, CHICAGO	Mixed Use Comm/Res	Two-story building w/vacant storefront	Parcel with Building Displacement	Parking	1		Residential
115th - 117th	UA	155	25223040090000	11583 S MICHIGAN AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
115th - 117th	UA	156	25223040100000	11589 S MICHIGAN AVE, CHICAGO	Multi-Family Residential	Two-story building: Sign "Step of Faith" on 1st Floor	Parcel with Building Displacement	Station	1		Residential
115th - 117th	UA	157	25223080010000	11601 S MICHIGAN AVE, CHICAGO	Institution (Place of Worship)	Vacant - Two Story Building	Parcel with Building Displacement	Station	1		EXEMPT - Place of Worship
115th - 117th	UA	158	25223080020000	11603 S MICHIGAN AVE, CHICAGO	Institution (Place of Worship)	Vacant - Two Story Building	Parcel with Building Displacement	Station	Counted		EXEMPT - Place of Worship
115th - 117th	UA	159	25223080030000	11607 S MICHIGAN AVE, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Station	0		EXEMPT - City of Chicago
115th - 117th	UA	160	25223080100000	115 E 116TH ST, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Station	0		EXEMPT - City of Chicago
115th - 117th	UA	161	25223080110000	117 E 116TH ST, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Station	0		EXEMPT - City of Chicago
115th - 117th	UA	162	25223080120000	119 E 116TH ST, CHICAGO	Public (City of Chicago)	Vacant lot	Affected Parcel	Station	0		EXEMPT - City of Chicago
115th - 117th	UA	163	25223080240000	120 E 117TH ST, CHICAGO	Vacant		Affected Parcel	ROW	0	Missed	Vacant
115th - 117th	UA	164	25223080250000	124 E 117TH ST, CHICAGO	Vacant	Vacant land under common ownership with adjacent residence	Affected Parcel	ROW	0		Vacant
115th - 117th	UA	165	25223080260000	126 E 117TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
115th - 117th	UA	166	25223080270000	128 E 117TH ST, CHICAGO	Single Family Residential		Affected Parcel	ROW	0		Residential
115th - 117th	UA	167	25223080280000	132 E 117TH ST, CHICAGO	Single Family Residential		Affected Parcel	ROW	0		Residential
115th - 117th	UA	168	25223080290000	132 E 117TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
115th - 117th	UA	169	25223080300000	134 E 117TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
115th - 117th	UA	170	25223100380000	11700 S INDIANA AVE, CHICAGO		Parcel does not exist; it's a street	Easement	ROW	0		Vacant
117th - Front	UB	171	25223150010000	11705 S INDIANA AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
117th - Front	UB	172	25223150030000	11707 S INDIANA AVE, CHICAGO	Vacant	Vacant lot	Affected Parcel	ROW	0		Vacant
117th - Front	UB	173	25223150040000	11709 S INDIANA AVE, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1	Missed	Residential
117th - Front	UB	174	25223150160000	11714 S PRAIRIE AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
117th - Front	UB	175	25223150170000	11716 S PRAIRIE AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0	Missed	EXEMPT - Railroad
117th - Front	UB	176	25229990010000	25229990010000	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		NA
117th - Front	UB	177	25223160130000	11763 S PRAIRIE AVE, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad
117th - Front	UB	178	25225000010000	100 E 116TH ST, CHICAGO	Transportation (railroad)	UPRR	Affected Parcel	ROW	0		EXEMPT - Railroad

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
117th - Front	UB	179	25223160350000	329 E 117TH ST, CHICAGO	Commercial		Affected Parcel	ROW	0	Missed	Commercial
117th - Front	UB	180	25223160300000	11726 S CALUMET AVE, CHICAGO	Vacant		Affected Parcel	ROW	0		Vacant
117th - Front	UB	181	25223160310000	11728 S CALUMET AVE, CHICAGO	Vacant		Affected Parcel	ROW	0		Vacant
117th - Front	UB	182	25223170130000	354 E 118TH ST, CHICAGO	Single Family Residential		Parcel with Building Displacement	ROW	1		Residential
117th - Front	UB	183	25223170140000	356 E 118TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	ROW	0		EXEMPT - City of Chicago
117th - Front	UB	184	25223170150000	358 E 118TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	ROW	0		EXEMPT - City of Chicago
117th - Front	UB	185	25223170300000	11742 S FRONT AVE, CHICAGO	Industrial		Affected Parcel	ROW	0		Industrial
117th - Front	UB	186	25223170310000	11810 S CALUMET AVE, CHICAGO	Industrial	Active - No Signage	Parcel with Building Displacement	ROW	Counted		Industrial
117th - Front	UB	187	25223170320000	11810 S CALUMET AVE, CHICAGO	Industrial	Active - No Signage	Parcel with Building Displacement	ROW	1		Industrial
117th - Front	UB	188	25223170330000	375 E 118TH ST, CHICAGO	Industrial	Active - No Signage	Parcel with Building Displacement	ROW	Counted		Industrial
Front - 130th	UB	189	25223170350000	11800 S FRONT AVE, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0		EXEMPT - RTA/METRA
Front - 130th	UB	190	25225010050000	360 E 119TH ST, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0		EXEMPT - Railroad
Front - 130th	UB	191	25223250010000	370 E 119TH ST, CHICAGO	Transportation (railroad)	CN/Metra	Affected Parcel	ROW	0		EXEMPT - Railroad
Front - 130th	UB	192	25224000260000	11600 S COTTAGE GROVE AVE, CHICAGO	Industrial		Affected Parcel	ROW	0		Industrial
Front - 130th	UB	193	25224000270000	11600 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	ROW	0		EXEMPT - Railroad
Front - 130th	UB	194	25271080090000	11900 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	0		EXEMPT - Railroad
UPRR COMMON	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displacemen t**		**Land Use - Cook County**
RRYARD	RRYARD	1	25224010340000	1355 E 121ST ST, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	0		EXEMPT
Front - 130th	UB	2	25275020010000	12330 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	Alignment	Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	3	25272000090000	12256 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB	Affected Parcel	Yard	1		EXEMPT - Railroad
RRYARD	RRYARD	4	25272000070000	12256 S COTTAGE GROVE AVE, CHICAGO	Industrial		Affected Parcel	Yard	2		Industrial
RRYARD	RRYARD	5	25272000100000	12256 S COTTAGE GROVE AVE, CHICAGO	Vacant		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	6	25272000120000	12534 S COTTAGE GROVE AVE, CHICAGO	Vacant		Affected Parcel	Yard	0		EXEMPT

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
RRYARD	RRYARD	7	25272000130000	12546 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)	Substation Location	Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	8	25275030010000	12320 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	NTCTD/CSS and SBRR	Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	9	25272000040000	12500 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	10	25274000030000	12606 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	11	25274000070000	12614 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	12	25274000050000	12608 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	13	25274000020000	12600 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	NTCTD/CSS and SBRR	Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	14	25274000060000	12610 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	15	25274000090000	12618 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
RRYARD	RRYARD	16	25273010070000	300 E 127TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Yard	0		EXEMPT
130th Station - South Option	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displacemen t**		**Land Use - Cook County**
Front - 130th	UB	1	25275020010000	12330 S COTTAGE GROVE AVE, CHICAGO	Transportation (railroad)	IHB *-Previously counted with Common Perm. Envelop*	Affected Parcel	Station	0		EXEMPT - Railroad
Front - 130th	UB	2	25269990010000	25269990010000	Transportation (railroad)	IHB	Affected Parcel	Station	0		NA
Front - 130th	UB	3	25263000170000	12807 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	4	25263000150000	12813 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	5	25263000140000	12817 S COTTAGE GROVE AVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	6	25273010120000	325 E 127TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	7	25273010130000	310 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	8	25273010110000	350 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	9	25273010100000	360 E 130TH ST, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation

UPRR HRT Alternative - West Option
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Missed if Alley Removed	Land Use - Cook County
130th Station - West Option	**Segment**	**Map ID**	**Parcel ID**	**Address**	**Land Use - Field Verified**	**Field Notes**	**Displacement Type**	**Displacement Subtype**	**Building Displacemen t**		**Land Use - Cook County**
Front - 130th	UB	1	25275020010000	12330 S COTTAGE GROVE, CHICAGO	Transportation (railroad)	IHB *- Previously counted with Common Perm. Envelop*	Affected Parcel	Station	0		EXEMPT - Railroad
Front - 130th	UB	2	25274000090000	12618 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)	*Previously counted with Common Perm. Envelop*	Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	3	25269990010000	25269990010000	Transportation (railroad)	IHB	Affected Parcel	Station	0		NA
Front - 130th	UB	4	25263000170000	12807 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	5	25263000150000	12813 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	6	25263000140000	12817 S COTTAGE GROVE, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	7	25273010120000	325 E 127TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	8	25273010130000	310 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	9	25273010110000	350 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation
Front - 130th	UB	10	25273010100000	360 E 130TH, CHICAGO	Utility (Metro Water Reclamation District)		Affected Parcel	Station	0		EXEMPT - Metro Water Reclamation

Parcel Count Summary Table

95th - 99th	22	22 easements
99th - 103rd	9	
103rd - 111th	35	
111th - 115th	44	
115th - 117th	61	2 easements
117th - Front	18	
Front - 130th	26	includes both station options
RRYARD	15	

Building Displacement Summary Table

95th - 99th	0
99th - 103rd	2
103rd - 111th	9
111th - 115th	10
115th - 117th	26
117th - Front	3
Front - 130th	0
RRYARD	3
Total	53

Halsted Rail Alternative

Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
95th - 99th	HA	1	25092070500000	9512 S STATE ST , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	2	25092070490000	9511 W 95TH ST , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	3	25092150010000	9600 S LAFAYETTE AVE , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	4	25092230430000	9721 S LAFAYETTE AVE, CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	5	25092220420000	9720 S LAFAYETTE AVE , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	6	25092220410000	9701 S PRINCETON AVE , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	7	25092210420000	9710 S PERRY AVE , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	8	25092290420000	9800 S PERRY ST , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	9	25092290410000	9801 S LASALLE ST , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	10	25092280420000	9800 S LASALLE ST , CHICAGO	Transportation (highway)	I-94	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	11	25092280410000	9801 S WENTWORTH AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	12	25092270410000	9807 S YALE AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	13	25092260440000	9810 S YALE AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	14	25092260470000	9819 S PRINCETON AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	15	25092250300000	9826 S PRINCETON AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	16	25092250450000	352 W 99TH ST , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	17	25092250480000	350 W 99TH ST , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	18	25092250440000	9825 S HARVARD AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	19	25092240200000	356 W 99TH ST , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	20	25092240190000	9822 S HARVARD AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	21	25092240110000	354 W 99TH ST , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	22	25092240100000	352 W 99TH ST , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	23	25092240090000	350 W 99TH ST , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	Vacant
95th - 99th	HA	24	25095000020000	351 W 99TH ST , CHICAGO	Transportation (highway)	I-57/Parkland	Easement	ROW	0	EXEMPT - Railroad
95th - 99th	HA	25	25099990010000	25099990010000	Transportation (highway)	I-57	Easement	ROW	0	NA
95th - 99th	HA	26	25091310550000	9826 S EGGLESTON AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	27	25091290560000	9825 S PARNELL AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	28	25091280120000	9803 S WALLACE ST , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	29	25091270440000	9802 S WALLACE ST , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	30	25091260510000	9825 S UNION AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	31	25091250860000	9825 S EMERALD AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
95th - 99th	HA	32	25091240530000	9802 S EMERALD AVE , CHICAGO	Transportation (highway)	I-57	Easement	ROW	0	EXEMPT - Cook County
99th - 103rd	HA	33	25093000250000	9900 S EMERALD AVE, CHICAGO	Single Family Residential	9900 & 9902 S. Emerald contain one house on two lots	Affected Parcel	ROW	0	Residential
99th - 103rd	HA	34	25093000260000	9902 S EMERALD AVE, CHICAGO	Single Family Residential	9900 & 9902 S. Emerald contain one house on two lots	Affected Parcel	ROW	0	Vacant
99th - 103rd	HA	35	25093000570000	9901 S HALSTED ST, CHICAGO	Commercial	9901 & 9911 S. Halsted contain a gas station	Parcel with Building Displacement	ROW	Counted	Commercial
99th - 103rd	HA	36	25093000520000	9911 S HALSTED ST, CHICAGO	Commercial	9901 & 9911 S. Halsted contain a gas station	Parcel with Building Displacement	ROW	1	Commercial
99th - 103rd	HA	37	25093000070000	9915 S HALSTED ST, CHICAGO	Commercial	cell tower & ancillary building	Parcel with Building Displacement	ROW	1	Commercial

Halsted Rail Alternative
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
99th - 103rd	HA	38	25093000530000	9921 S HALSTED ST, CHICAGO	Commercial	9921, 9925, & 9931 S. Halsted contain one single story building	Affected Parcel	ROW	0	EXEMPT - City of Chicago
99th - 103rd	HA	39	25093000110000	9925 S HALSTED ST, CHICAGO	Commercial	9921, 9925, & 9931 S. Halsted contain one single story building	Affected Parcel	ROW	0	EXEMPT - City of Chicago
99th - 103rd	HA	40	25093000540000	9931 S HALSTED ST, CHICAGO	Commercial	9921, 9925, & 9931 S. Halsted contain one single story building	Affected Parcel	ROW	0	EXEMPT - City of Chicago
99th - 103rd	HA	41	25093080170000	10041 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Commercial
99th - 103rd	HA	42	25093080180000	10043 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
99th - 103rd	HA	43	25093080190000	10045 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
99th - 103rd	HA	44	25093080200000	10049 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
99th - 103rd	HA	45	25093080210000	10051 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
99th - 103rd	HA	46	25093080220000	10053 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
99th - 103rd	HA	47	25093080230000	10055 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
99th - 103rd	HA	48	25093080240000	10057 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
99th - 103rd	HA	49	25084310280000	10234 S HALSTED ST, CHICAGO	Commercial	CTA Designated Parking	Affected Parcel	Parking	0	Commercial
99th - 103rd	HA	50	25084310290000	10236 S HALSTED ST, CHICAGO	Commercial	CTA Designated Parking	Affected Parcel	Parking	0	Commercial
99th - 103rd	HA	51	25084310300000	10238 S HALSTED ST, CHICAGO	Mixed Use	CTA Designated Parking; Mixed Use commercial/residential	Parcel with Building Displacement	Parking	1	Residential
99th - 103rd	HA	52	25084310370000	812 W 103RD ST, CHICAGO	Commercial	CTA Designated Parking	Parcel with Building Displacement	Parking	1	Commercial
99th - 103rd	HA	53	25084310310000	812 W 103RD ST, CHICAGO	Commercial	CTA Designated Parking	Affected Parcel	Parking	0	Commercial
99th - 103rd	HA	54	25084310320000	808 W 103RD ST, CHICAGO	Commercial	CTA Designated Parking	Parcel with Building Displacement	Parking	Counted	Commercial
99th - 103rd	HA	55	25084310330000	806 W 103RD ST, CHICAGO	Commercial	CTA Designated Parking	Parcel with Building Displacement	Parking	Counted	Commercial
99th - 103rd	HA	56	25084310340000	804 W 103RD ST, CHICAGO	Commercial	CTA Designated Parking	Parcel with Building Displacement	Parking	1	Commercial
99th - 103rd	HA	57	25084310350000	800 W 103RD ST, CHICAGO	Commercial	CTA Designated Parking	Parcel with Building Displacement	Parking	Counted	Commercial
103rd - 111th	HA	58	25163210010000	11003 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
103rd - 111th	HA	59	25163210020000	11005 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
103rd - 111th	HA	60	25163210030000	11007 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
103rd - 111th	HA	61	25163210040000	11009 S HALSTED ST, CHICAGO	Vacant	Vacant Lot	Affected Parcel	Substation	0	Vacant
103rd - 111th	HA	62	25163210050000	11013 S HALSTED ST, CHICAGO	Commercial		Parcel with Building Displacement	Substation	1	Residential
103rd - 111th	HA	63	25174230300000	11038 S HALSTED ST, CHICAGO	Commercial	Designated Parking	Parcel with Building Displacement	Parking	1	Commercial
103rd - 111th	HA	64	25174230310000	808 W 111TH ST, CHICAGO	Commercial	White Castle Fast Food	Parcel with Building Displacement	Parking	1	Commercial

Halsted Rail Alternative
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
111th - 120th	HA	65	25202100440000	1043 W 111TH ST, CHICAGO	Parkland	City of Chicago	Affected Parcel	Station	0	EXEMPT - City of Chicago
111th - 120th	HA	66	25215000010000	759 W 119TH ST, CHICAGO	Parkland	City of Chicago	Affected Parcel	Station	0	EXEMPT - City of Chicago
111th - 120th	HA	67	25213280010000	757 W 118TH PL, CHICAGO	Vacant		Affected Parcel	Substation	0	Vacant
111th - 120th	HA	68	25213280020000	755 W 118TH PL, CHICAGO	Vacant		Affected Parcel	Substation	0	Vacant
111th - 120th	HA	69	25213280030000	753 W 118TH PL, CHICAGO	Vacant		Affected Parcel	Substation	0	Vacant
111th - 120th	HA	70	25213280040000	749 W 118TH PL, CHICAGO	Vacant		Affected Parcel	Substation	0	Vacant
111th - 120th	HA	71	25213280050000	747 W 118TH PL, CHICAGO	Vacant		Affected Parcel	Substation	0	Vacant
111th - 120th	HA	72	25292020010000	801 W 119TH ST, CHICAGO	Commercial	One-Story Strip Mall & Parking Lot	Parcel with Building Displacement	Parking	1	Commercial
111th - 120th	HA	73	25292020040000	11932 S HALSTED ST, CHICAGO	Commercial		Parcel with Building Displacement	Parking	1	Commercial
111th - 120th	HA	74	25292020050000	11938 S HALSTED ST, CHICAGO	Commercial		Parcel with Building Displacement	Parking	1	Commercial
111th - 120th	HA	75	25292020060000	11942 S HALSTED ST, CHICAGO	Commercial		Affected Parcel	Parking	0	Industrial
111th - 120th	HA	76	25292020070000	11944 S HALSTED ST, CHICAGO	Mixed Use	Mixed Use (Comm/Res)	Parcel with Building Displacement	Parking	1	Residential
111th - 120th	HA	77	25292020080000	11948 S HALSTED ST, CHICAGO	Mixed Use	Mixed Use (Comm/Res)	Parcel with Building Displacement	Parking	1	Residential
111th - 120th	HA	78	25292020090000	11952 S HALSTED ST, CHICAGO	Commercial		Parcel with Building Displacement	Parking	1	Commercial
111th - 120th	HA	79	25292020100000	11954 S HALSTED ST, CHICAGO	Commercial		Affected Parcel	Parking	0	Industrial
111th - 120th	HA	80	25292020110000	11958 S HALSTED ST, CHICAGO	Mixed Use	Mixed Use (Comm/Res)	Parcel with Building Displacement	Parking	1	Residential
111th - 120th	HA	81	25292020130000	820 W 120TH ST, CHICAGO	Industrial		Parcel with Building Displacement	Parking	1	Industrial
111th - 120th	HA	82	25292020140000	830 W 120TH ST, CHICAGO	Industrial		Parcel with Building Displacement	Parking	Counted	Vacant
111th - 120th	HA	83	25292020150000	834 W 120TH ST, CHICAGO	Industrial		Parcel with Building Displacement	Parking	1	Industrial
111th - 120th	HA	84	25292020020000	844 W 120TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
111th - 120th	HA	85	25292020160000	846 W 120TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Parking	0	EXEMPT - City of Chicago
RRYARD	RRYARD	86	25292010210000	11953 S PEORIA ST, CHICAGO	Vacant		Affected Parcel	Yard	0	Industrial
RRYARD	RRYARD	87	25292010230000	932 W 120TH ST, CHICAGO	Transportation (railroad)	Ownership unknown	Affected Parcel	Yard	0	EXEMPT - Railroad
RRYARD	RRYARD	88	25292010200000	11918 S PEORIA ST, CHICAGO	Public (City of Chicago)	Vacant building	Parcel with Building Displacement	Yard	1	EXEMPT - City of Chicago
RRYARD	RRYARD	89	25292010250000		Public (City of Chicago)	Vacant building	Parcel with Building Displacement	Yard	1	No information available
RRYARD	RRYARD	90	25292010180000	921 W 120TH ST, CHICAGO	Transportation (railroad)	Ownership unknown	Affected Parcel	Yard	0	EXEMPT - Railroad
RRYARD	RRYARD	91	25292010170000	901 W 119TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0	EXEMPT - City of Chicago
RRYARD	RRYARD	92	25292010160000	903 W 119TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0	EXEMPT - City of Chicago
RRYARD	RRYARD	93	25292010150000	905 W 119TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0	EXEMPT - City of Chicago
RRYARD	RRYARD	94	25292010140000	909 W 119TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0	EXEMPT - City of Chicago
RRYARD	RRYARD	95	25292010130000	915 W 119TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Substation	0	EXEMPT - City of Chicago

Halsted Rail Alternative
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
RRYARD	RRYARD	96	25292010240000	919 W 119TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	97	25292010030000	1003 W 119TH ST, CHICAGO	Transportation (railroad)	Ownership unknown	Affected Parcel	Yard	0	EXEMPT - Railroad
RRYARD	RRYARD	98	25292010010000	953 W 119TH ST, CHICAGO	Public (City of Chicago)		Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	99	25292000040000	1021 W 119TH ST, CHICAGO	Vacant	Vacant	Affected Parcel	Yard	0	Industrial
RRYARD	RRYARD	100	25292000010000	1155 W 119TH ST, CHICAGO	Transportation (railroad)	Ownership unknown	Affected Parcel	Yard	0	EXEMPT - Railroad
RRYARD	RRYARD	101	25292000050000	1021 W 119TH ST, CHICAGO	Vacant		Affected Parcel	Yard	0	Industrial
RRYARD	RRYARD	102	25291010140000	11930 S RACINE AVE, CHICAGO	Vacant		Affected Parcel	Yard	0	Industrial
RRYARD	RRYARD	103	25291010250000	1325 W 119TH ST, CHICAGO	Public (City of Chicago)	Vacant	Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	104	25291010240000	1325 W 119TH ST, CHICAGO	Public (City of Chicago)	Vacant	Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	105	25291010260000	1321 W 119th St, CHICAGO	Industrial	New Building	Parcel with Building Displacement	Yard	1	Industrial
RRYARD	RRYARD	106	25292040300000	12000 S HALSTED ST, CHICAGO	Institution (Place of Worship)	SURE-WAY M B CHURCH	Parcel with Building Displacement	Yard	1	EXEMPT - Place of Worship
RRYARD	RRYARD	107	25292040290000	12018 S HALSTED ST, CHICAGO	Mixed Use	Check Cashing; Mixed Use (Comm/Res)	Parcel with Building Displacement	Yard	1	Residential
RRYARD	RRYARD	108	25292040190000	12022 S HALSTED ST, CHICAGO	Mixed Use	Mixed Use (Comm/Res)	Parcel with Building Displacement	Yard	1	Commercial
RRYARD	RRYARD	109	25292040200000	12024 S HALSTED ST, CHICAGO	Commercial		Affected Parcel	Yard	0	Commercial
RRYARD	RRYARD	110	25292040210000	12028 S HALSTED ST, CHICAGO	Commercial		Affected Parcel	Yard	0	Commercial
RRYARD	RRYARD	111	25292040060000	815 W 120TH ST, CHICAGO	Public (City of Chicago)	Halsted Rail Yard	Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	112	25292040050000	817 W 120TH ST, CHICAGO	Public (City of Chicago)	Halsted Rail Yard	Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	113	25292040040000	819 W 120TH ST, CHICAGO	Public (City of Chicago)	Halsted Rail Yard	Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	114	25292040030000	823 W 120TH ST, CHICAGO	Public (City of Chicago)	Halsted Rail Yard	Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	115	25292040020000	825 W 120TH ST, CHICAGO	Public (City of Chicago)	Halsted Rail Yard	Affected Parcel	Yard	0	EXEMPT - City of Chicago
RRYARD	RRYARD	116	25292040010000	12657 S PEORIA ST, CHICAGO	Transportation (railroad)	City of Chicago Department of Sanitation	Affected Parcel	Yard	0	EXEMPT - City of Chicago
120th - Vermor	HB	117	25295000080000	12018 S RACINE AVE, CHICAGO	Transportation (railroad)	RTA/Metra	Affected Parcel	ROW	0	EXEMPT - RTA / METRA
120th - Vermor	HB	118	25285010030000	800 W 121ST ST, CHICAGO	Transportation (railroad)	RTA/Metra	Affected Parcel	ROW	0	EXEMPT - RTA / METRA
120th - Vermor	HB	119	25283220620000	12601 S HALSTED ST, CHICAGO	Commercial	One-Story Dollar General Retail Store and Parking Lot	Affected Parcel	Substation	0	Commercial
120th - Vermor	HB	120	25331010570000	12747 S HALSTED ST, CHICAGO	Commercial	Used car lot; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Commercial
120th - Vermor	HB	121	25331010130000	12763 S HALSTED ST, CHICAGO	Commercial	Child's Day Care Center; CTA Designated Parking	Affected Parcel	Parking	0	Commercial
120th - Vermor	HB	122	25331010140000	12767 S HALSTED ST, CHICAGO	Commercial	Child's Day Care Center; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Commercial
120th - Vermor	HB	123	25331010150000	12801 S HALSTED ST, CHICAGO	Commercial	Child's Day Care Center; CTA Designated Parking	Parcel with Building Displacement	Parking	Counted	Commercial
120th - Vermor	HB	124	25331010160000	12803 S HALSTED ST, CHICAGO	Commercial	Child's Day Care Center; CTA Designated Parking	Parcel with Building Displacement	Parking	Counted	Commercial
120th - Vermor	HB	125	25331010170000	12805 S HALSTED ST, CHICAGO	Commercial	Child's Day Care Center; CTA Designated Parking	Parcel with Building Displacement	Parking	Counted	Commercial

Halsted Rail Alternative
Parcels Affected by Land Acquisitions and Easements

Division	Segment	Map ID	Parcel ID	Address	Land Use - Field Verified	Field Notes	Displacement Type	Displacement Subtype	Building Displace-ment	Land Use - Cook County
120th - Vermor	HB	126	25331010560000	12811 S HALSTED ST, CHICAGO	Commercial	Child's Day Care Center; CTA Designated Parking	Parcel with Building Displacement	Parking	Counted	Commercial
120th - Vermor	HB	127	25331010530000	12819 S HALSTED ST, CHICAGO	Commercial	Child's Day Care Center; CTA Designated Parking	Parcel with Building Displacement	Parking	Counted	Industrial
120th - Vermor	HB	128	25331010550000	12825 S HALSTED ST, CHICAGO	Commercial	Vacant Building; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Vacant
120th - Vermor	HB	129	25322110450000	12746 S HALSTED ST, CHICAGO	Commercial	CTA Designated Parking	Parcel with Building Displacement	Parking	1	Commercial
120th - Vermor	HB	130	25322110480000	12726 S HALSTED ST, CHICAGO	Commercial	Laundromat	Parcel with Building Displacement	Parking	Counted	Commercial
120th - Vermor	HB	131	25322110470000	12758 S HALSTED ST, CHICAGO	Vacant	Vacant lot	Affected Parcel	Parking	0	Vacant
120th - Vermor	HB	132	25322110040000	817 W VERMONT AVE, CHICAGO	Single Family Residential	Residence and Garage; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	133	25322110410000	821 W VERMONT AVE, CHICAGO	Single Family Residential	Residence and Garage; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	134	25322110400000	825 W VERMONT AVE, CHICAGO	Single Family Residential	Residence and Garage; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	135	25322110430000	12759 S GREEN ST, CHICAGO	Single Family Residential	Residence; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	136	25322110330000	12819 S GREEN ST, CHICAGO	Single Family Residential	Residence and Garage; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	137	25322110340000	12823 S GREEN ST, CHICAGO	Single Family Residential	Residence and Garage; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	138	25322110350000	12825 S GREEN ST, CHICAGO	Single Family Residential	Residence; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	139	25322110360000	12829 S GREEN ST, CHICAGO	Single Family Residential	Residence and Garage; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	140	25322110370000	12831 S GREEN ST, CHICAGO	Single Family Residential	Residence and Garage; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	141	25322110380000	12835 S GREEN ST, CHICAGO	Single Family Residential	Residence; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential
120th - Vermor	HB	142	25322110390000	12837 S GREEN ST, CHICAGO	Single Family Residential	Residence and Garage; CTA Designated Parking	Parcel with Building Displacement	Parking	1	Residential

Parcel Count Summary Table

95th - 99th	32	32 easements
99th - 103rd	25	
103rd - 111th	7	
111th - 120th	21	
120th - Vermont	26	
RRYARD	31	

Displacement Summary Table

95th - 99th	0
99th - 103rd	5
103rd - 111th	3
111th - 120th	9
120th - Vermont	15
RRYARD	6
Total	38

Appendix H
Availability of Project Area Real Estate

The *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended (Uniform Act), contains specific requirements that determine the manner in which a government entity can acquire private property for public use when federal funds are used for a project. The purpose of this Act is to provide a uniform policy for fair and equitable treatment of persons and businesses displaced as a result of federal and federally assisted programs.

The Uniform Act, as amended ensures that displaced persons are relocated to a property that is comparable in size, features, and location; is decent, safe, and sanitary; and is within the financial means of the displaced person(s). Relocation assistance would be available to all individuals, families, businesses, and nonprofit organizations displaced as a result of the project. This assistance applies to tenants as well as owners occupying the real property needed for the project. Replacement properties must be located in the same type of neighborhood and be equally accessible to public services and places of employment. Chicago Transit Authority (CTA) would also provide assistance to displaced businesses and non-profit organizations to aid in their satisfactory relocation with a minimum of delay and loss in earnings. The RLE Project would proceed to construction only when all displaced families and businesses have been compensated for loss and provided the opportunity to be relocated to adequate replacement sites.

Consistent with US DOT policy as mandated by the Uniform Act, as amended, the CTA would provide relocation resources to all displaced persons without discrimination. All property owners from whom property is needed are entitled to receive just compensation for their land and property. Just compensation is based upon the fair market value of the property. CTA would provide, through its Relocation Assistance Program, payment and services to aid in movement to a new location.

Two Multiple Listing Service (MLS) databases were used to identify by zip code existing housing and commercial stock that is currently available for sale/lease in the RLE Project Area. The RLE Project area is primarily located in zip codes 60628 and 60643. An analysis of inventory of vacant land was also compiled from the findings of the Land Use Technical Memorandum to identify potential sites where additional housing units and/or commercial structures could be constructed within the existing communities.

The RLE Project could displace property ranging in land use and function. A variety of replacement property would be necessary to comply with the Uniform Act and to mitigate the effects of displacements on communities. Table 1-1 shows the number of displacements that would occur as a result of the build alternatives by land use type and zip code.

Table 1-1: Displacements by Alternative and Land Use Type

Displacements By Alternative						
Land Use Type	Zip Code	BRT	UPRR Rail ROW Option	UPRR Rail East Option	UPRR Rail West Option	Halsted Rail
Vacant	60628	18	13	56	35	19
	60643	--	--	--	--	3
Single-Family Residential	60628	1	15	82	24	--
	60643	--	--	--	--	11
	TOTAL	**1**	**15**	**82**	**24**	**11**
Multi-Family Residential	60628	--	1	13	4	--
	60643	--	--	--	--	--
	TOTAL	**0**	**1**	**13**	**4**	**0**
Commercial	60628	1	2	3	8	11
	60643	--	--	--	--	4
	TOTAL	**1**	**2**	**3**	**8**	**15**
Mixed-Use (Retail/Office/ Residential)	60628	--	1	--	2	6
	60643	--	--	--	--	--
	TOTAL	**0**	**1**	**0**	**2**	**6**
Institutional (Place of Worship)	60628	--	--	1	1	1
	60643	--	--	--	--	--
	TOTAL	**0**	**0**	**1**	**1**	**1**
Industrial	60628	1	4	11	13	--
	60643	--	--	--	--	3
	TOTAL	**1**	**4**	**11**	**13**	**3**
Transportation (Railroads)	60628	--	1	1	1	--
	60643	--	--	--	--	--
	TOTAL	**0**	**1**	**1**	**1**	**0**
Public (City of Chicago)	60628	--	--	1	--	--
	60643	--	--	--	--	2
	TOTAL	**0**	**0**	**1**	**0**	**2**

Based on a residential MLS search on November 29, 2012, there are a total of 235 single-family residential properties for sale in zip code 60628 and 199 in 60643. Available multi-family units within the project area total 80 properties, with 67 in zip code 60628 and 13 in zip code 60643. Table 1-2 summarizes available residential properties in the RLE Project Area.

Table 1-2: Available Residential Properties in RLE Project Area

Size	Cost Range	60628	60643	Total
Single-family residential properties for sale				
6 bed / 2 bath	$14,000 to $120,000	16	10	26
5 bed / 2 bath	$14,000 to $120,000	34	29	36
4 bed / 2 bath	$14,000 to $120,000	62	62	124
3 bed / 2 bath	$14,000 to $120,000	103	94	197
2 bed / 2 bath	$14,000 to $120,000	20	4	24
Multi-family residential properties for sale				
2 to 4 units	$10,000 to $250,000	65	11	76
5+ units	$125,000 to $800,000	2	2	4

Source: www.thechicagomls.com

According to a commercial MLS search on November 29, 2012, there are a total of 9 commercial properties for sale in zip code 60628 and 8 in 60643. There are several properties with leased space for retail or office use; in zip code 60628 there are 3 available commercial rental spaces and there are 7 in 60643. Table 1-3 summarizes available commercial space in the RLE Project Area.

Table 1-3: Available Commercial Properties in RLE Project Area

Use	Size Range	Cost Range	60628	60643	Total
Properties for Sale					
Industrial	15,000 to 81,000 sq ft	$120,000 to $2,800,000	3	0	3
Garage/Warehouse	N/A	$79,900	1	0	1
Place of Worship	N/A	$395,000	1	0	1
Retail/Office	1,000 to 17,000 sq ft	$40,000 to $1,360,000	2	8	10
Vacant Commercial	20,000 sq ft	$799,900	1	0	1
Properties for Lease					
Retail/Office	750 to 3,500 sq ft	$0.09 to $83 per sq ft per month	3	7	10

Source: www.cimls.com

Based on the comparison between displaced properties and the availability of properties to absorb relocations, there would likely be sufficient single-family and multi-family residential property. However, additional commercial, mixed-use, and industrial properties would be needed to supplement the existing available land for purchase and lease. Redevelopment of compatible-zoned vacant land is one viable option for addressing the insufficiency of commercial, mixed-use

and industrial properties. Table 1-4 depicts the amount of vacant land by station area (1/2 mile around each station) of each build alternative.

Table 1-4: Available Vacant Land in RLE Project Area

	Vacant Land (Acres)	Vacant Land Percentage
BRT Station Areas		
103rd Street	14.8	3.0%
111th Street	0.10	0.0%
Kensington Avenue	19.8	3.9%
130th Street	41.4	8.2%
Halsted Station Areas		
103rd Street	6.6	1.3%
111th Street	13.2	2.6%
119th Street	103.5	20.6%
Vermont Avenue	7.1	1.4%
UPRR Station Areas		
103rd Street	18.0	3.6%
111th Street	11.3	2.3%
Michigan Avenue	27.5	5.5%
130th Street - South	37.4	7.4%
130th Street - West	28.9	5.8%

As explained above, the Uniform Act requires that replacement property be comparable in size, features, and location; is decent, safe, and sanitary; is within the financial means of the displaced person; and, is located in the same type of neighborhood and be equally accessible to public services and places of employment. If suitable replacement commercial or industrial property cannot be located, some owners could be required to relocate outside of their community.

Appendix I
2014-2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Displacement and Relocation of Existing Uses

The refined East and West Option alignments would result in fewer displaced properties than the previous design. The following pages contain summary tables, detailed tables, and maps (both overview maps and detailed maps) showing displacements for both the East and West Options. Figures 1-4 are summary overview maps. CTA conducted a field verification of potentially displaced properties on March 5, 2015 and July 7-10, 2015. CTA identified numerous houses that were boarded-up and uninhabited, primarily between 105th Street and 115th Street on the east side of the corridor and along Eggleston Avenue from 107th Street south on the west side of the corridor.

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Union Pacific Railroad - East Option
Potential Displacements

Affected Count - By Location			
Location	Total Affected Parcels (with and without building displacements) [1]	Building Diplacements [2]	Easements [3]
95th St - 99th St	-	-	21
99th St - 103rd St	40	26	-
103rd St - 111th St	58	18	-
111th St - 115th St	56	28	-
115th St - 117th St	63	31	5
117th St - Front St	12	2	-
Front St - 130th St	16	-	-
120th St Yard and Shop	15	1	-
Total	**260**	**106**	**26**

1) A partial or a full parcel that would need to be acquired
2) A structure that would need to be removed (the land occupied by the structure would also be counted as an affected parcel)
3) Publicly owned parcels that include a roadway are classified as "easements" for this analysis because CTA would require a use agreement with the public entity

Affected Count - By Land Use Type		
Land Use Type	Total Affected Parcels (with and without building displacements) [1]	Building Diplacements [2]
Vacant	50	-
Single-Family Residential	87	75
Multifamily Residential	16	15
Commercial	6	3
Mixed-Use Commercial/Residential	1	1
Institutional (Place of Worship)	1	1
Institutional (School)	2	-
Industrial	17	10
Utility (MWRD)	15	-
Transportation (highway)	-	-
Transportation (railroad - Union Pacific Railroad)	19	-
Transportation (railroad - CN/ME)	3	-
Transportation (railroad - Norfolk Southern)	2	-
Transportation (railroad - Conrail)	3	-
Transportation (railroad - NICTD/CSS & SBRR)	2	-
Transportation (railroad - Chicago & Western Indiana)	-	-
Public (City of Chicago)	34	1
Parkland	2	-
Total	**260**	**106**

MWRD = Metropolitan Water Reclamation District, CN/ME = Canadian National/Metra Electric, NS = Norfolk Southern Railroad, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Short & South Bend Railroad

Note: This table does not include easements. Publicly owned parcels that include a roadway are classified as "easements" for this analysis because CTA would require a use agreement with the public entity. Publicly owned parcels that do not include a roadway are classified as affected parcels or building displacements because CTA would need to negotiate a fee simple property transfer or other agreement with the public entity

1) A partial or a full parcel that would need to be acquired
2) A structure that would need to be removed (the land occupied by the structure would also be counted as an affected parcel)

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
1	27	25-09-400-047-0000	312 W. 99TH PLACE	Parkland	Affected Parcel	Right-of-way
2	28	25-09-401-002-0000	349 W. 99TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
3	29	25-09-401-001-0000	355 W. 99TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
4	31	25-09-401-019-0000	348 W. 100TH STREET	Single-family Residential	Affected Parcel	Right-of-way
5	32	25-09-401-018-0000	350 W. 100TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
6	33	25-09-401-017-0000	354 W. 100TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
7	34	25-09-408-003-0000	349 W. 100TH STREET	Single-family Residential	Affected Parcel	Right-of-way
8	35	25-09-408-002-0000	351 W. 100TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
9	36	25-09-408-001-0000	355 W. 100TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
10	37	25-09-408-018-0000	348 W. 100TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
11	38	25-09-408-017-0000	352 W. 100TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
12	40	25-09-409-001-0000	353 W. 100TH PLACE	Vacant	Affected Parcel	Right-of-way
13	41	25-09-409-002-0000	349 W. 100TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
14	42	25-09-409-047-0000	352 W. 101ST STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
15	43	25-09-409-018-0000	348 W. 101ST STREET	Single-family Residential	Affected Parcel	Right-of-way
16	44	25-09-416-002-0000	351 W. 101ST STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
17	45	25-09-416-001-0000	355 W. 101ST STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
18	46	25-09-416-018-0000	348 W. 101ST PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
19	47	25-09-416-017-0000	352 W. 101ST PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
20	49	25-09-417-002-0000	353 W. 101ST PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
21	50	25-09-417-001-0000	355 W. 101ST PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
22	51	25-09-417-003-0000	349 W. 101ST PLACE	Single-family Residential	Affected Parcel	Right-of-way
23	52	25-09-417-017-0000	352 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
24	53	25-09-417-018-0000	348 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
25	54	25-09-424-002-0000	351 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
26	55	25-09-424-001-0000	353 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
27	56	25-09-424-003-0000	347 W. 102ND STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
28	57	25-09-424-018-0000	348 W. 102ND PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
29	58	25-09-424-017-0000	350 W. 102ND PLACE	Vacant	Affected Parcel	Right-of-way
30	59	25-09-424-016-0000	354 W. 102ND PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
31	60	25-09-424-068-0000	10228 S. PRINCETON AVENUE	Industrial	Affected Parcel	Right-of-way
32	62	25-09-424-043-0000	347 W. 102ND PLACE	Single-family Residential	Affected Parcel	Right-of-way
33	63	25-09-424-042-0000	351 W. 102ND PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
34	64	25-09-424-041-0000	353 W. 102ND PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
35	65	25-09-424-060-0000	340 W. 103RD STREET	Vacant	Affected Parcel	Parking for 103rd Street Station
36	66	25-09-424-069-0000	350 W. 103RD STREET	Transportation (railroad)	Affected Parcel	Right-of-way
37	67	25-16-105-034-0000	405 W. 103RD STREET	Multifamily Residential	Parcel with Building Displacement	Parking for 103rd Street Station
38	68	25-16-105-036-0000	401 W. 103RD STREET	Public (City of Chicago)	Affected Parcel	Parking for 103rd Street Station
39	69	25-16-105-035-0000	403 W. 103RD STREET	Commercial	Parcel with Building Displacement	Parking for 103rd Street Station
40	70	25-16-105-033-0000	400 W. 103RD PLACE	Vacant	Affected Parcel	Parking for 103rd Street Station
41	71	25-16-200-001-0000	329 W. 103RD STREET	Parkland	Affected Parcel	Right-of-way
42	72	25-16-500-001-0000	359 W. 103RD STREET	Transportation (railroad)	Affected Parcel	Right-of-way
43	75	25-16-500-003-0000	361 W. 103RD STREET	Transportation (railroad)	Affected Parcel	Right-of-way
44	78	25-16-500-004-0000	361 W. 104TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
45	80	25-16-500-005-0000	360 W. 104TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
46	82	25-16-500-006-0000	360 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
47	83	25-16-113-031-0000	400 W. 105TH STREET	Vacant	Affected Parcel	Substation
48	84	25-16-206-095-0000	346 W. 104TH PLACE	Commercial	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
49	86	25-16-210-001-0000	317 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
50	87	25-16-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
51	89	25-16-500-007-0000	360 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
52	92	25-16-210-038-0000	230 W. 105TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
53	96	25-16-211-077-0000	355 W. 105TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
54	97	25-16-500-029-0000	359 W. 105TH PLACE	Transportation (railroad)	Affected Parcel	Right-of-way
55	99	25-16-211-084-0000	354 W. 106TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
56	100	25-16-211-083-0000	352 W. 106TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
57	103	25-16-212-001-0000	355 W. 106TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
58	104	25-16-212-002-0000	351 W. 106TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
59	106	25-16-212-043-0000	350 W. 106TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
60	107	25-16-212-042-0000	352 W. 106TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
61	108	25-16-500-012-0000	358 W. 106TH PLACE	Transportation (railroad)	Affected Parcel	Right-of-way
62	110	25-16-217-001-0000	353 W. 106TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
63	112	25-16-500-014-0000	360 W. 107TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
64	113	25-16-217-039-0000	354 W. 107TH STREET	Single-Family Residential	Parcel with Building Displacement	Right-of-way
65	115	25-16-400-001-0000	346 W. 107TH PLACE	Industrial	Parcel with Building Displacement	Right-of-way
66	117	25-16-401-001-0000	347 W. 107TH PLACE	Industrial	Parcel with Building Displacement	Right-of-way
67	119	25-16-401-016-0000	252 W. 108TH STREET	Institution (School)	Affected Parcel	Right-of-way
68	120	25-16-401-017-0000	252 W. 108TH STREET	Institution (School)	Affected Parcel	Right-of-way
69	122	25-16-407-001-0000	351 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
70	123	25-16-407-002-0000	349 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
71	125	25-16-407-019-0000	352 W. 108TH PLACE	Vacant	Affected Parcel	Right-of-way
72	126	25-16-407-020-0000	348 W. 108TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
73	128	25-16-411-001-0000	351 W. 108TH PLACE	Vacant	Affected Parcel	Right-of-way
74	129	25-16-411-002-0000	351 W. 108TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
75	131	25-16-411-020-0000	350 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
76	132	25-16-411-019-0000	354 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
77	133	25-16-415-001-0000	355 W. 109TH STREET	Vacant	Affected Parcel	Right-of-way
78	134	25-16-415-002-0000	351 W. 109TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
79	136	25-16-415-021-0000	354 W. 109TH PLACE	Vacant	Affected Parcel	Right-of-way
80	137	25-16-415-022-0000	350 W. 109TH PLACE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
81	139	25-16-419-032-0000	355 W. 109TH PLACE	Vacant	Affected Parcel	Right-of-way
82	141	25-16-419-036-0000	356 W. 110TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
83	142	25-16-419-014-0000	352 W. 110TH STREET	Industrial	Affected Parcel	Right-of-way
84	143	25-16-419-015-0000	350 W. 110TH STREET	Vacant	Affected Parcel	Right-of-way
85	145	25-16-423-036-0000	349 W. 110TH STREET	Vacant	Affected Parcel	Right-of-way
86	146	25-16-423-037-0000	353 W. 110TH STREET	Vacant	Affected Parcel	Right-of-way
87	147	25-16-329-007-0000	11026 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
88	148	25-16-423-024-0000	336 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
89	149	25-16-423-019-0000	348 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
90	150	25-16-423-023-0000	338 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
91	151	25-16-423-022-0000	340 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
92	152	25-16-423-021-0000	342 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
93	153	25-16-423-020-0000	346 W. 110TH PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
94	154	25-16-423-018-0000	352 W. 110TH PLACE	Vacant	Affected Parcel	Right-of-way
95	155	25-16-329-009-0000	11037 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
96	156	25-16-329-008-0000	11041 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
97	157	25-16-427-001-0000	356 W. 111TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-Way
98	158	25-16-329-005-0000	402 W. 111TH STREET	Vacant	Affected Parcel	Parking for 111th Street Station
99	160	25-21-501-003-0000	501 E. 112TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
100	161	25-21-200-001-0000	349 W. 111TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
101	166	25-21-200-014-0000	348 W. 111TH PLACE	Vacant	Affected Parcel	Right-of-way
102	169	25-21-200-015-0000	344 W. 111TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
103	173	25-21-204-001-0000	345 W. 111TH PLACE	Vacant	Affected Parcel	Right-of-way
104	174	25-21-204-002-0000	341 W. 111TH PLACE	Vacant	Affected Parcel	Right-of-way
105	179	25-21-204-015-0000	340 W. 112TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
106	181	25-21-204-016-0000	336 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
107	182	25-21-208-003-0000	339 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
108	183	25-21-208-004-0000	335 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
109	184	25-21-208-005-0000	333 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
110	186	25-21-208-016-0000	330 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
111	187	25-21-208-017-0000	330 W. 112TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
112	189	25-21-208-018-0000	328 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
113	192	25-21-212-010-0000	325 W. 112TH PLACE	Single-family Residential	Parcel with Building Displacement	Right-of-way
114	194	25-21-212-011-0000	319 W. 112TH PLACE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
115	195	25-21-212-012-0000	317 W. 112TH PLACE	Single-family Residential	Affected Parcel	Right-of-way
116	196	25-21-212-019-0000	320 W. 113TH STREET	Vacant	Affected Parcel	Right-of-way
117	198	25-21-212-020-0000	320 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
118	199	25-21-212-021-0000	316 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
119	201	25-21-212-022-0000	312 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
120	202	25-21-212-023-0000	310 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
121	204	25-21-217-001-0000	309 W. 113TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
122	205	25-21-217-002-0000	307 W. 113TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
123	206	25-21-217-003-0000	303 W. 113TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
124	207	25-21-217-012-0000	11332 S. PRINCETON AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
125	209	25-21-218-024-0000	11315 S. PRINCETON AVENUE	Vacant	Affected Parcel	Right-of-way
126	210	25-21-218-025-0000	11319 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
127	211	25-21-218-026-0000	11321 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
128	212	25-21-218-027-0000	11325 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
129	214	25-21-218-028-0000	11327 S. PRINCETON AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
130	216	25-21-218-020-0000	11330 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
131	218	25-21-218-021-0000	11334 S. YALE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
132	219	25-21-218-022-0000	11336 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
133	221	25-21-218-023-0000	11342 S. YALE AVENUE	Vacant	Affected Parcel	Right-of-way
134	222	25-21-219-014-0000	11343 S. YALE AVENUE	Single-family Residential	Affected Parcel	Right-of-way
135	223	25-21-219-015-0000	11345 S. YALE AVENUE	Vacant	Affected Parcel	Right-of-way
136	224	25-21-219-016-0000	11347 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
137	225	25-21-219-017-0000	11351 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
138	227	25-21-219-018-0000	11355 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
139	228	25-21-219-036-0000	11352 S. WENTWORTH AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
140	229	25-21-219-037-0000	11358 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
141	230	25-21-501-001-0000	401 W. 111TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
142	233	25-21-228-001-0000	149 W. 114TH STREET	Vacant	Affected Parcel	Right-of-way
143	236	25-21-228-002-0000	135 W. 114TH STREET	Institution (Place of Worship)	Parcel with Building Displacement	Right-of-way
144	238	25-21-228-003-0000	131 W. 114TH STREET	Single-family Residential	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
145	240	25-21-228-046-0000	11424 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
146	242	25-21-228-047-0000	11424 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
147	245	25-21-228-023-0000	11426 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
148	248	25-21-230-035-0000	11439 S. PERRY AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
149	249	25-21-230-034-0000	52 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
150	253	25-21-230-036-0000	52 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
151	255	25-21-230-019-0000	46 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
152	257	25-21-230-020-0000	44 W. 115TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
153	258	25-21-230-021-0000	42 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
154	259	25-21-230-022-0000	40 W. 115TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
155	260	25-21-406-029-0000	11502 S. LAFAYETTE AVENUE	Commercial	Parcel with Building Displacement	Right-of-way
156	263	25-21-407-001-0000	23 W. 115TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
157	265	25-21-407-002-0000	17 W. 115TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
158	266	25-21-407-003-0000	11 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
159	267	25-21-407-007-0000	11516 S. STATE STREET	Vacant	Affected Parcel	Right-of-way
160	269	25-21-407-029-0000	11514 S. STATE STREET	Vacant	Affected Parcel	Right-of-way
161	271	25-21-406-030-0000	11524 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Substation
162	285	25-22-300-009-0000	11549 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
163	286	25-22-304-047-0000	113 E. KENSINGTON AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
164	287	25-22-304-050-0000	11555 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
165	289	25-22-300-010-0000	11551 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
166	290	25-22-304-049-0000	11557 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
167	292	25-22-300-011-0000	11561 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
168	293	25-22-300-070-0000	11556 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
169	294	25-22-304-005-0000	11563 S. MICHIGAN AVENUE	Industrial	Affected Parcel	Parking for Michigan Avenue Station
170	295	25-22-300-012-0000	11563 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
171	296	25-22-304-006-0000	11565 S. MICHIGAN AVENUE	Industrial	Affected Parcel	Parking for Michigan Avenue Station
172	297	25-22-300-013-0000	11567 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
173	298	25-22-304-007-0000	11567 S. MICHIGAN AVENUE	Industrial	Parcel with Building Displacement	Parking for Michigan Avenue Station
174	299	25-22-300-069-0000	11562 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
175	300	25-22-300-014-0000	11569 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
176	301	25-22-300-015-0000	11571 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
177	302	25-22-300-071-0000	11557 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
178	303	25-22-300-021-0000	11572 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
179	304	25-22-300-016-0000	11573 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
180	305	25-22-300-022-0000	11574 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
181	306	25-22-300-017-0000	11575 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
182	307	25-22-304-008-0000	11579 S. MICHIGAN AVENUE	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
183	308	25-22-300-049-0000	11573 S. WABASH AVENUE	Commercial	Parcel with Building Displacement	Parking for Michigan Avenue Station
184	309	25-22-300-023-0000	11578 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
185	310	25-22-300-018-0000	11579 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
186	311	25-22-304-027-0000	120 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
187	313	25-22-304-028-0000	122 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
188	314	25-22-304-029-0000	124 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
189	315	25-22-304-030-0000	128 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
190	316	25-22-304-031-0000	130 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
191	317	25-22-304-032-0000	132 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
192	318	25-22-304-034-0000	136 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
193	319	25-22-304-033-0000	134 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Parking for Michigan Avenue Station
194	320	25-22-300-059-0000	11582 S. MICHIGAN AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
195	321	25-22-300-052-0000	38 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
196	322	25-22-300-051-0000	34 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
197	323	25-22-300-050-0000	32 E. 116TH STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
198	324	25-22-300-029-0000	20 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
199	325	25-22-300-028-0000	16 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
200	326	25-22-300-060-0000	11586 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
201	327	25-22-300-027-0000	12 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
202	328	25-22-300-026-0000	8 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
203	329	25-22-300-025-0000	11583 S. STATE STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
204	330	25-22-300-024-0000	11583 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
205	331	25-22-300-061-0000	11588 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
206	333	25-22-300-062-0000	11592 S. MICHIGAN AVENUE	Mixed-Use Commercial/Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
207	336	25-22-308-014-0000	151 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
208	338	25-22-308-015-0000	153 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
209	341	25-22-308-016-0000	155 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
210	343	25-22-308-017-0000	157 E. 116TH STREET	Multifamily Residential	Affected Parcel	Right-of-way
211	345	25-22-308-018-0000	159 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
212	346	25-22-308-019-0000	163 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
213	347	25-22-308-020-0000	165 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
214	354	25-22-311-013-0000	11631 S. INDIANA AVENUE	Public (City of Chicago)	Parcel with Building Displacement	Right-of-way
215	356	25-22-311-021-0000	11630 S. PRAIRIE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
216	357	25-22-311-024-0000	11632 S. PRAIRIE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
217	358	25-22-311-025-0000	11634 S. PRAIRIE AVENUE	Multifamily Residential	Parcel with Building Displacement	Right-of-way
218	363	25-22-316-001-0000	319 E. 117TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
219	368	25-22-316-035-0000	11712 S. Calumet Avenue	Commercial	Affected Parcel	Right-of-way
220	370	25-22-316-034-0000	11722 S. CALUMET AVENUE	Commercial	Affected Parcel	Right-of-way
221	371	25-22-316-030-0000	11726 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
222	372	25-22-316-031-0000	11728 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
223	373	25-22-317-013-0000	354 E. 118TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
224	374	25-22-317-014-0000	356 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
225	375	25-22-317-015-0000	358 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
226	376	25-22-317-030-0000	11742 S. FRONT AVENUE	Vacant	Affected Parcel	Right-of-way
227	377	25-22-317-031-0000	11810 S. CALUMET AVENUE	Industrial	Affected Parcel	Right-of-way
228	378	25-22-317-032-0000	11810 S. CALUMET AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
229	379	25-22-317-033-0000	375 E. 118TH STREET	Industrial	Affected Parcel	Right-of-way
230	380	25-22-317-035-0000	11800 S. FRONT AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
231	381	25-22-501-005-0000	360 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
232	382	25-22-325-001-0000	370 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
233	383	25-22-400-026-0000	11600 S. COTTAGE GROVE AVENUE	Industrial	Affected Parcel	Right-of-way
234	384	25-22-400-027-0000	11600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
235	385	25-27-108-009-0000	11900 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
236	386	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
237	388	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
238	389	25-26-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
239	390	25-26-300-017-0000	12807 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
240	391	25-26-300-015-0000	12813 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - East Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	East Option Displacement Use
241	392	25-26-300-014-0000	12817 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
242	393	25-27-301-013-0000	310 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
243	394	25-27-301-012-0000	325 E. 127TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
244	395	25-27-301-011-0000	350 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
245	396	25-27-301-010-0000	360 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
246	397	25-22-401-034-0000	1355 E. 121ST STREET	Transportation (railroad)	Affected Parcel	120th Street Yard
247	398	25-27-200-007-0000	12256 S. COTTAGE GROVE AVENUE	Industrial	Parcel with Building Displacement	120th Street Yard
248	399	25-27-200-009-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
249	400	25-27-200-010-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
250	401	25-27-200-012-0000	12534 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
251	402	25-27-200-013-0000	12546 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
252	403	25-27-503-001-0000	12320 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
253	404	25-27-200-004-0000	12500 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
254	405	25-27-400-003-0000	12606 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
255	406	25-27-400-002-0000	12600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
256	407	25-27-400-007-0000	12614 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
257	408	25-27-400-005-0000	12608 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
258	409	25-27-400-006-0000	12610 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
259	410	25-27-301-007-0000	300 E. 127TH STREET	Utility (MWRD)	Affected Parcel	120th Street Yard
260	411	25-27-400-009-0000	12618 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard

Note - The following parcels are defined as easements and are not included in the table: Map ID 1-21, 24, 276, 282, 288, 291, 312. Publicly owned parcels that include a roadway are classified as “easements” for this analysis because CTA would require a use agreement with the public entity.

Union Pacific Railroad - West Option
Potential Displacements

Affected Count - By Location			
Location	Total Affected Parcels (with and without building displacements) [1]	Building Diplacements [2]	Easements [3]
95th St - 99th St	-	-	23
99th St - 103rd St	13	2	-
103rd St - 111th St	35	9	-
111th St - 115th St	46	8	-
115th St - 117th St	62	23	1
117th St - Front St	18	3	-
Front St - 130th St	16	-	-
120th St Yard and Shop	15	1	-
Total	**205**	**46**	**24**

1) A partial or a full parcel that would need to be acquired
2) A structure that would need to be removed (the land occupied by the structure would also be counted as an affected parcel)
3) Publicly owned parcels that include a roadway are classified as “easements” for this analysis because CTA would require a use agreement with the public entity

Affected Count - By Land Use Type		
Land Use Type	Total Affected Parcels (with and without building displacements) [1]	Building Diplacements [2]
Vacant	41	-
Single-Family Residential	35	22
Multifamily Residential	4	4
Commercial	13	6
Mixed-Use Commercial/Residential	2	2
Institutional (Place of Worship)	2	1
Institutional (School)	-	-
Industrial	18	11
Utility (MWRD)	15	-
Transportation (highway)	-	-
Transportation (railroad - Union Pacific Railroad)	36	-
Transportation (railroad - CN/ME)	3	-
Transportation (railroad - Norfolk Southern)	2	-
Transportation (railroad - Conrail)	3	-
Transportation (railroad - NICTD/CSS & SBRR)	2	-
Transportation (railroad - Chicago & Western Indiana)	1	-
Public (City of Chicago)	24	-
Parkland	4	-
Total	**205**	**46**

MWRD = Metropolitan Water Reclamation District, CN/ME = Canadian National/Metra Electric, NS = Norfolk Southern Railroad, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Short & South Bend Railroad

Note: This table does not include easements. Publicly owned parcels that include a roadway are classified as “easements” for this analysis because CTA would require a use agreement with the public entity. Publicly owned parcels that do not include a roadway are classified as affected parcels or building displacements because CTA would need to negotiate a fee simple property transfer or other agreement with the public entity

1) A partial or a full parcel that would need to be acquired
2) A structure that would need to be removed (the land occupied by the structure would also be counted as an affected parcel)

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
1	25	25-09-400-046-0000	341 W. 99TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
2	26	25-09-500-002-0000	351 W. 99TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
3	30	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
4	39	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
5	48	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
6	61	25-09-999-001-0000	No Street Address	Parkland	Affected Parcel	Right-of-way
7	65	25-09-424-060-0000	340 W. 103RD STREET	Vacant	Affected Parcel	Bus Turnaround for 103rd Street Station
8	67	25-16-105-034-0000	405 W. 103RD STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
9	69	25-16-105-035-0000	403 W. 103RD STREET	Commercial	Parcel with Building Displacement	Right-of-way
10	70	25-16-105-033-0000	400 W. 103RD PLACE	Vacant	Affected Parcel	Right-of-way
11	73	25-16-107-030-0000	429 W. 103RD PLACE	Public (City of Chicago)	Affected Parcel	Right-of-way
12	74	25-16-107-010-0000	401 W. 103RD PLACE	Vacant	Affected Parcel	Parking for 103rd Street Station
13	76	25-16-107-031-0000	428 W. 104TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
14	77	25-16-113-024-0000	401 W. 104TH STREET	Commercial	Affected Parcel	Right-of-way
15	79	25-16-113-028-0000	10413 S. EGGLESTON AVENUE	Commercial	Affected Parcel	Right-of-way
16	81	25-16-113-029-0000	405 W. 104TH STREET	Commercial	Parcel with Building Displacement	Right-of-way
17	83	25-16-113-031-0000	400 W. 105TH STREET	Vacant	Affected Parcel	Right-of-way
18	85	25-16-121-024-0000	411 W. 105TH STREET	Commercial	Affected Parcel	Right-of-way
19	86	25-16-210-001-0000	317 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
20	88	25-16-121-025-0000	10514 S. STEWART AVENUE	Commercial	Affected Parcel	Right-of-way
21	89	25-16-500-007-0000	360 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
22	90	25-16-210-040-0000	232 W. 105TH STREET	Public (City of Chicago)	Affected Parcel	Substation
23	91	25-16-210-039-0000	232 W 105TH PLACE	Public (City of Chicago)	Affected Parcel	Substation
24	92	25-16-210-038-0000	230 W. 105TH PLACE	Public (City of Chicago)	Affected Parcel	Substation
25	93	25-16-121-031-0000	10520 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
26	94	25-16-121-032-0000	10528 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
27	95	25-16-121-022-0000	10530 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
28	98	25-16-121-027-0000	10548 S. STEWART AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
29	101	25-16-121-028-0000	10552 S. STEWART AVENUE	Industrial	Affected Parcel	Right-of-way
30	102	25-16-121-029-0000	10558 S. STEWART AVENUE	Industrial	Affected Parcel	Right-of-way
31	105	25-16-129-030-0000	10638 S. STEWART AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
32	109	25-16-129-031-0000	10632 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
33	111	25-16-129-029-0000	410 W. 107TH STREET	Vacant	Affected Parcel	Right-of-way
34	114	25-16-129-028-0000	400 W. 107TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
35	116	25-16-307-025-0000	405 W. 107TH STREET	Vacant	Affected Parcel	Right-of-way
36	118	25-16-307-022-0000	400 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
37	121	25-16-315-025-0000	405 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
38	124	25-16-315-026-0000	405 W. 108TH STREET	Vacant	Affected Parcel	Right-of-way
39	127	25-16-315-027-0000	410 W. 109TH STREET	Vacant	Affected Parcel	Right-of-way
40	130	25-16-315-024-0000	410 W. 109TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
41	135	25-16-320-011-0000	409 W. 109TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
42	138	25-16-320-022-0000	410 W. 109TH STREET	Industrial	Affected Parcel	Right-of-way
43	140	25-16-320-023-0000	412 W. 109TH STREET	Industrial	Affected Parcel	Right-of-way
44	144	25-16-329-006-0000	401 W. 110TH STREET	Industrial	Parcel with Building Displacement	Right-of-way
45	147	25-16-329-007-0000	11026 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Parking for 111th Street Station
46	155	25-16-329-009-0000	11037 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
47	156	25-16-329-008-0000	11041 S. EGGLESTON AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
48	158	25-16-329-005-0000	402 W. 111TH STREET	Vacant	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
49	159	25-21-107-009-0000	403 W. 111TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
50	162	25-21-107-007-0000	405 W. 111TH STREET	Commercial	Parcel with Building Displacement	Right-of-way
51	163	25-21-107-008-0000	401 W. 111TH STREET	Commercial	Affected Parcel	Right-of-way
52	164	25-21-107-025-0000	11114 S. STEWART AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
53	165	25-21-107-026-0000	11116 S. STEWART AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
54	167	25-21-107-027-0000	11118 S. STEWART AVENUE	Commercial	Parcel with Building Displacement	Right-of-way
55	168	25-21-107-028-0000	11124 S. STEWART AVENUE	Commercial	Parcel with Building Displacement	Right-of-way
56	170	25-21-107-029-0000	11128 S. STEWART AVENUE	Commercial	Affected Parcel	Right-of-way
57	171	25-21-107-030-0000	11130 S. STEWART AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
58	172	25-21-107-031-0000	11140 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
59	175	25-21-107-032-0000	11144 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
60	176	25-21-107-033-0000	11148 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
61	177	25-21-107-034-0000	11150 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
62	178	25-21-107-037-0000	406 W. 112TH STREET	Vacant	Affected Parcel	Right-of-way
63	180	25-21-501-002-0000	501 E. 112TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
64	185	25-21-208-001-0000	11201 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
65	188	25-21-208-002-0000	11225 S. STEWART AVENUE	Vacant	Affected Parcel	Right-of-way
66	190	25-21-212-001-0000	11229 S. STEWART AVENUE	Single-family Residential	Affected Parcel	Right-of-way
67	191	25-21-212-002-0000	11231 S. STEWART AVENUE	Single-family Residential	Affected Parcel	Right-of-way
68	193	25-21-212-009-0000	341 W. 112TH PLACE	Industrial	Parcel with Building Displacement	Right-of-way
69	197	25-21-212-017-0000	340 W. 113TH STREET	Mixed-Use Commercial/Residential	Parcel with Building Displacement	Right-of-way
70	200	25-21-212-018-0000	338 W. 113TH STREET	Vacant	Affected Parcel	Right-of-way
71	203	25-21-216-022-0000	335 W. 113TH STREET	Vacant	Affected Parcel	Right-of-way
72	208	25-21-217-004-0000	11325 S. HARVARD AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
73	213	25-21-217-005-0000	11327 S. HARVARD AVENUE	Single-family Residential	Affected Parcel	Right-of-way
74	215	25-21-217-027-0000	11334 S. PRINCETON AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
75	217	25-21-217-028-0000	11336 S. PRINCETON AVENUE	Single-family Residential	Affected Parcel	Right-of-way
76	220	25-21-217-029-0000	11340 S. PRINCETON AVENUE	Single-family Residential	Affected Parcel	Right-of-way
77	226	25-21-218-014-0000	233 W. 113TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
78	231	25-21-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
79	232	25-21-226-008-0000	235 W. 114TH STREET	Single-family Residential	Affected Parcel	Right-of-way
80	234	25-21-227-001-0000	11411 S. YALE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
81	235	25-21-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
82	237	25-21-227-002-0000	11413 S. YALE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
83	239	25-21-227-012-0000	11420 S. WENTWORTH AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
84	241	25-21-227-013-0000	11422 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
85	243	25-21-228-042-0000	11423 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
86	244	25-21-228-015-0000	11433 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
87	246	25-21-228-016-0000	11437 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
88	247	25-21-228-043-0000	11437 S. WENTWORTH AVENUE	Vacant	Affected Parcel	Right-of-way
89	250	25-21-228-044-0000	124 W. 115TH STREET	Single-family Residential	Affected Parcel	Right-of-way
90	251	25-21-228-045-0000	120 W. 115TH STREET	Single-family Residential	Affected Parcel	Right-of-way
91	252	25-21-228-034-0000	116 W. 115TH STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
92	254	25-21-228-037-0000	112 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
93	256	25-21-228-038-0000	106 W. 115TH STREET	Vacant	Affected Parcel	Right-of-way
94	261	25-21-405-008-0000	103 W. 115TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
95	262	25-21-406-001-0000	11513 S. PERRY AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
96	264	25-21-406-055-0000	11515 S. PERRY AVENUE	Vacant	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
97	268	25-21-406-030-0000	11524 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Substation
98	270	25-21-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
99	271	25-21-406-030-0000	11524 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Substation
100	272	25-21-407-008-0000	11535 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
101	273	25-21-406-031-0000	11528 S. LAFAYETTE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
102	274	25-21-501-007-0000	500 W. 113TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
103	275	25-21-406-058-0000	11530 S. LAFAYETTE AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
104	277	25-21-407-008-0000	11535 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
105	278	25-21-407-008-0000	11535 S. LAFAYETTE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
106	279	25-21-407-009-0000	11537 S. LAFAYETTE AVENUE	Vacant	Affected Parcel	Right-of-way
107	280	25-21-407-010-0000	11541 S. LAFAYETTE AVENUE	Single-family Residential	Affected Parcel	Right-of-way
108	281	25-21-407-030-0000	11512 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
109	283	25-21-407-031-0000	11546 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
110	284	25-21-407-032-0000	11548 S. STATE STREET	Multifamily Residential	Parcel with Building Displacement	Right-of-way
111	285	25-22-300-009-0000	11549 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
112	289	25-22-300-010-0000	11551 S. STATE STREET	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
113	292	25-22-300-011-0000	11561 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
114	293	25-22-300-070-0000	11556 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
115	295	25-22-300-012-0000	11563 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
116	297	25-22-300-013-0000	11567 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
117	299	25-22-300-069-0000	11562 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
118	300	25-22-300-014-0000	11569 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
119	301	25-22-300-015-0000	11571 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
120	302	25-22-300-071-0000	11557 S. WABASH AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
121	303	25-22-300-021-0000	11572 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
122	304	25-22-300-016-0000	11573 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
123	305	25-22-300-022-0000	11574 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
124	306	25-22-300-017-0000	11575 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
125	308	25-22-300-049-0000	11573 S. WABASH AVENUE	Commercial	Parcel with Building Displacement	Parking for Michigan Avenue Station
126	309	25-22-300-023-0000	11578 S. WABASH AVENUE	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
127	310	25-22-300-018-0000	11579 S. STATE STREET	Vacant	Affected Parcel	Parking for Michigan Avenue Station
128	320	25-22-300-059-0000	11582 S. MICHIGAN AVENUE	Transportation (railroad)	Affected Parcel	Parking for Michigan Avenue Station
129	321	25-22-300-052-0000	38 E. 116TH STREET	Multifamily Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
130	322	25-22-300-051-0000	34 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
131	323	25-22-300-050-0000	32 E. 116TH STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
132	324	25-22-300-029-0000	20 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
133	325	25-22-300-028-0000	16 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
134	326	25-22-300-060-0000	11586 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
135	327	25-22-300-027-0000	12 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
136	328	25-22-300-026-0000	8 E. 116TH STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
137	329	25-22-300-025-0000	11583 S. STATE STREET	Single-family Residential	Affected Parcel	Parking for Michigan Avenue Station
138	330	25-22-300-024-0000	11583 S. STATE STREET	Single-family Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
139	331	25-22-300-061-0000	11588 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Parking for Michigan Avenue Station
140	332	25-22-304-009-0000	11583 S. MICHIGAN AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
141	333	25-22-300-062-0000	11592 S. MICHIGAN AVENUE	Mixed-Use Commercial/Residential	Parcel with Building Displacement	Parking for Michigan Avenue Station
142	334	25-22-304-010-0000	11589 S. MICHIGAN AVENUE	Vacant	Affected Parcel	Right-of-way
143	335	25-22-308-001-0000	11601 S. MICHIGAN AVENUE	Institution (Place of Worship)	Parcel with Building Displacement	Right-of-way
144	337	25-22-308-002-0000	11603 S. MICHIGAN AVENUE	Institution (Place of Worship)	Affected Parcel	Right-of-way

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
145	339	25-22-308-003-0000	11607 S. MICHIGAN AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
146	340	25-22-308-010-0000	115 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
147	342	25-22-308-011-0000	117 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
148	344	25-22-308-012-0000	119 E. 116TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
149	348	25-22-308-024-0000	120 E. 117TH STREET	Vacant	Affected Parcel	Right-of-way
150	349	25-22-308-025-0000	124 E. 117TH STREET	Vacant	Affected Parcel	Right-of-way
151	350	25-22-308-026-0000	126 E. 117TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
152	351	25-22-308-027-0000	128 E. 117TH STREET	Single-family Residential	Affected Parcel	Right-of-way
153	352	25-22-308-028-0000	132 E. 117TH STREET	Single-family Residential	Affected Parcel	Right-of-way
154	353	25-22-308-029-0000	132 E. 117TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
155	355	25-22-308-030-0000	134 E. 117TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
156	359	25-22-310-038-0000	11700 S. INDIANA AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
157	360	25-22-315-001-0000	11705 S. INDIANA AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
158	361	25-22-315-003-0000	11707 S. INDIANA AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
159	362	25-22-315-004-0000	11709 S. INDIANA AVENUE	Single-family Residential	Parcel with Building Displacement	Right-of-way
160	364	25-22-315-016-0000	11714 S. PRAIRIE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
161	365	25-22-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
162	366	25-22-315-017-0000	11716 S. PRAIRIE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
163	367	25-22-316-013-0000	11763 S. PRAIRIE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
164	368	25-22-316-035-0000	11712 S. Calumet Avenue	Commercial	Affected Parcel	Right-of-way
165	369	25-22-500-001-0000	100 E. 116TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
166	371	25-22-316-030-0000	11726 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
167	372	25-22-316-031-0000	11728 S. CALUMET AVENUE	Vacant	Affected Parcel	Right-of-way
168	373	25-22-317-013-0000	354 E. 118TH STREET	Single-family Residential	Parcel with Building Displacement	Right-of-way
169	374	25-22-317-014-0000	356 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
170	375	25-22-317-015-0000	358 E. 118TH STREET	Public (City of Chicago)	Affected Parcel	Right-of-way
171	376	25-22-317-030-0000	11742 S. FRONT AVENUE	Vacant	Affected Parcel	Right-of-way
172	377	25-22-317-031-0000	11810 S. CALUMET AVENUE	Industrial	Affected Parcel	Right-of-way
173	378	25-22-317-032-0000	11810 S. CALUMET AVENUE	Industrial	Parcel with Building Displacement	Right-of-way
174	379	25-22-317-033-0000	375 E. 118TH STREET	Industrial	Affected Parcel	Right-of-way
175	380	25-22-317-035-0000	11800 S. FRONT AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
176	381	25-22-501-005-0000	360 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
177	382	25-22-325-001-0000	370 E. 119TH STREET	Transportation (railroad)	Affected Parcel	Right-of-way
178	383	25-22-400-026-0000	11600 S. COTTAGE GROVE AVENUE	Industrial	Affected Parcel	Right-of-way
179	384	25-22-400-027-0000	11600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
180	385	25-27-108-009-0000	11900 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	Right-of-way
181	386	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
182	388	25-27-502-001-0000	12330 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	Right-of-way
183	389	25-26-999-001-0000	No Street Address	Transportation (railroad)	Affected Parcel	Right-of-way
184	390	25-26-300-017-0000	12807 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
185	391	25-26-300-015-0000	12813 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
186	392	25-26-300-014-0000	12817 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	Right-of-way
187	393	25-27-301-013-0000	310 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
188	394	25-27-301-012-0000	325 E. 127TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
189	395	25-27-301-011-0000	350 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
190	396	25-27-301-010-0000	360 E. 130TH STREET	Utility (MWRD)	Affected Parcel	Right-of-way
191	397	25-22-401-034-0000	1355 E. 121ST STREET	Transportation (railroad)	Affected Parcel	120th Street Yard
192	398	25-27-200-007-0000	12256 S. COTTAGE GROVE AVENUE	Industrial	Parcel with Building Displacement	120th Street Yard

Union Pacific Railroad Alternative - West Option
Parcels Affected by Land Acquisitions

Count	Map ID	Parcel ID	Address	Land Use - Field (2015)	Displacement Type	West Option Displacement Use
193	399	25-27-200-009-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
194	400	25-27-200-010-0000	12256 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
195	401	25-27-200-012-0000	12534 S. COTTAGE GROVE AVENUE	Public (City of Chicago)	Affected Parcel	120th Street Yard
196	402	25-27-200-013-0000	12546 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
197	403	25-27-503-001-0000	12320 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
198	404	25-27-200-004-0000	12500 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
199	405	25-27-400-003-0000	12606 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
200	406	25-27-400-002-0000	12600 S. COTTAGE GROVE AVENUE	Transportation (railroad)	Affected Parcel	120th Street Yard
201	407	25-27-400-007-0000	12614 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
202	408	25-27-400-005-0000	12608 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
203	409	25-27-400-006-0000	12610 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard
204	410	25-27-301-007-0000	300 E. 127TH STREET	Utility (MWRD)	Affected Parcel	120th Street Yard
205	411	25-27-400-009-0000	12618 S. COTTAGE GROVE AVENUE	Utility (MWRD)	Affected Parcel	120th Street Yard

Note - The following parcels are defined as easements and are not included in the table: Map ID 1-19, 21-24, 312. Publicly owned parcels that include a roadway are classified as “easements” for this analysis because CTA would require a use agreement with the public entity.

Data Definitions

Column Heading	Definition
Division	Geographic limits based on organization of Technical Memorandum Section 5
Parcel ID	Number corresponding to a parcel
Property Index Number	Cook County Assessor property index number
Address	Cook County Assessor parcel street address
Land Use - Field (2015)	Field-verified land use designations based on Cook County and CMAP data
Displacement Type	Type of effect on parcel by proposed alternative
East/West Option Displacement Use	Proposed project use for parcel
Land Use - Cook County	Cook County Assessor Land Use based on IMP_CODE

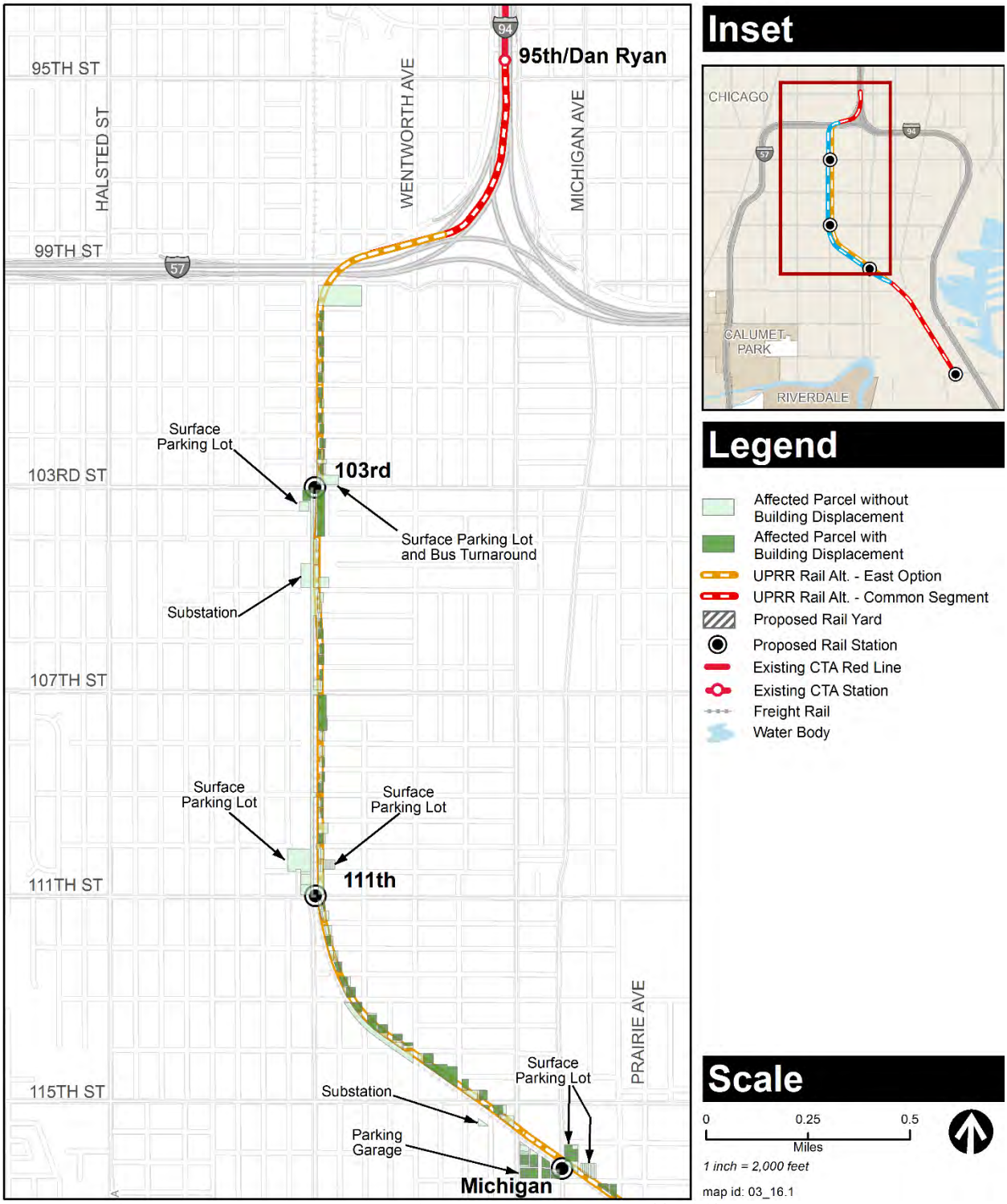

Union Pacific Railroad Alternative East Option Displacements (1 of 2)

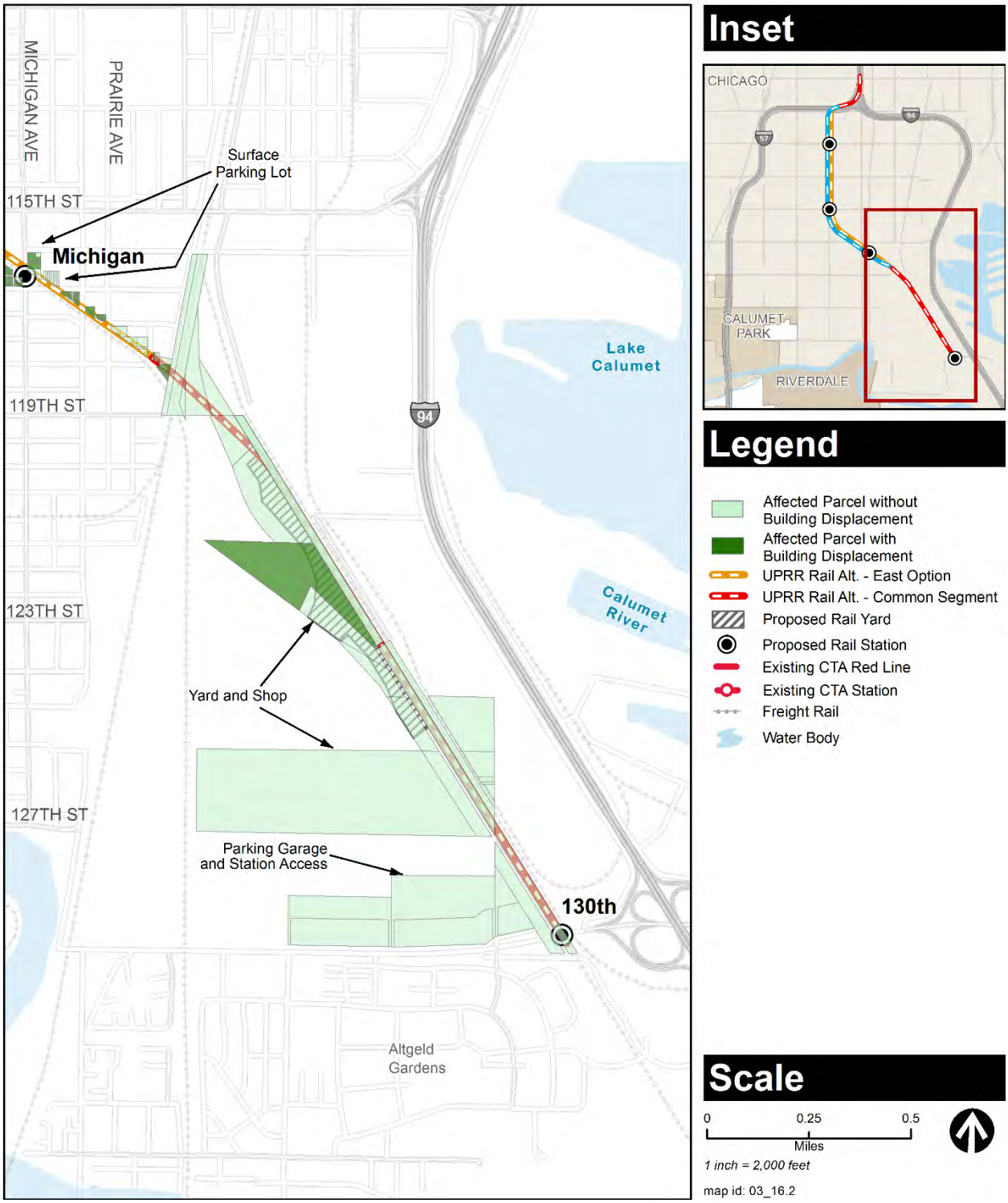

Union Pacific Railroad Alternative East Option Displacements (2 of 2)

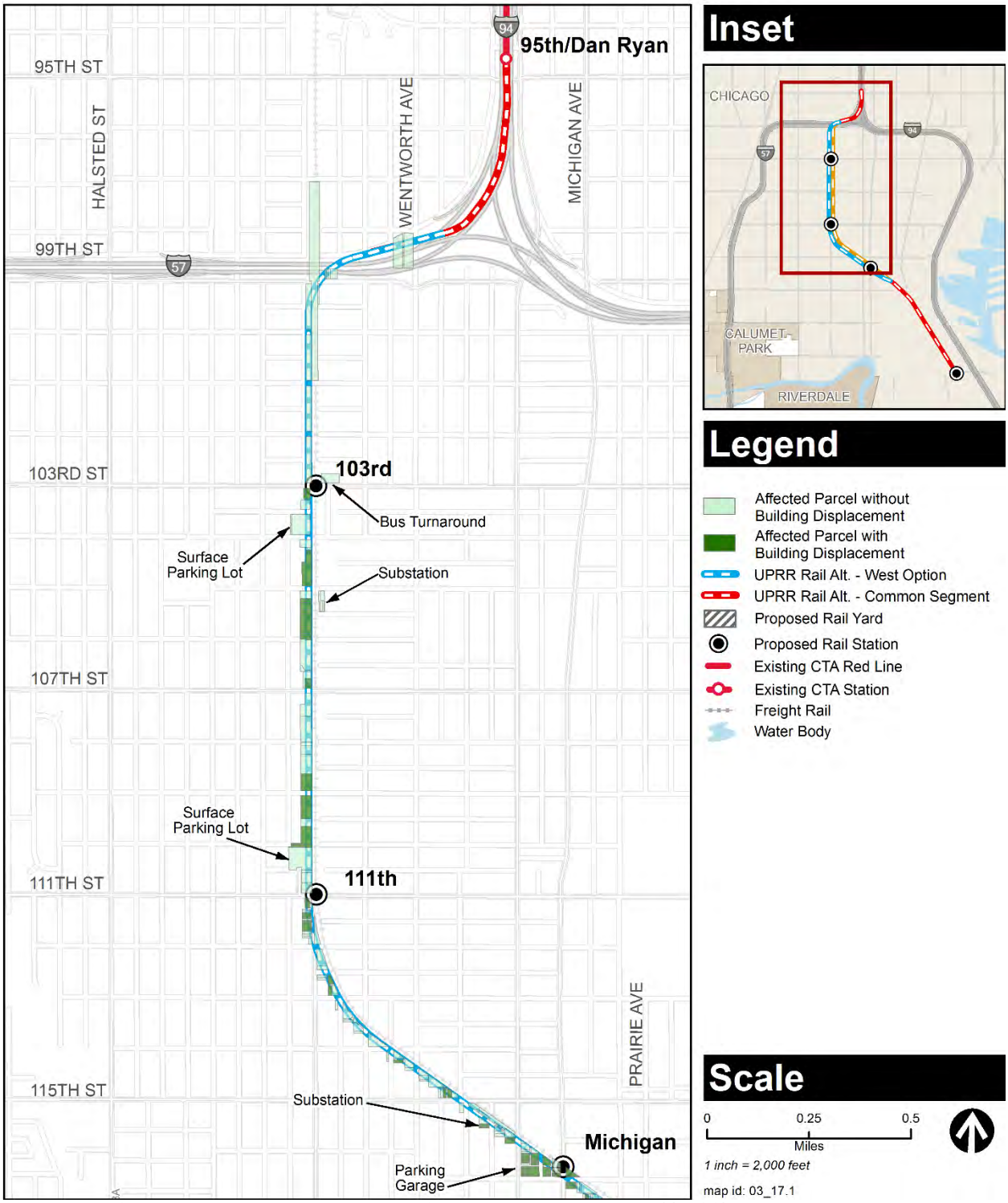

Union Pacific Railroad Alternative West Option Displacements (1 of 2)

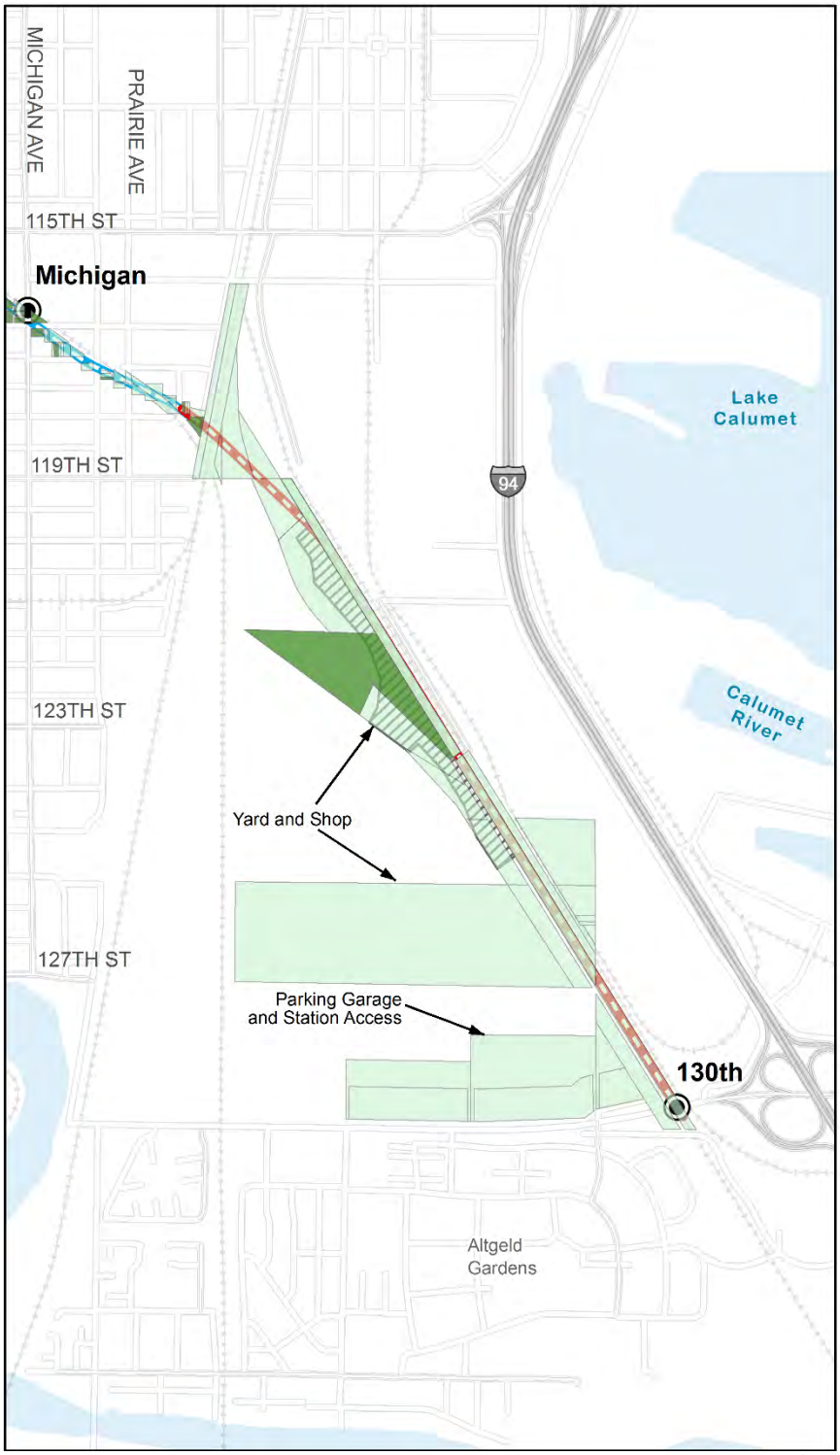

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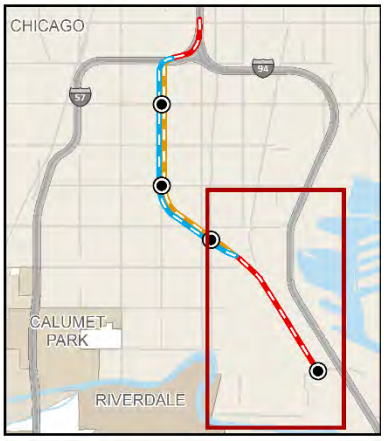

Legend

- Affected Parcel without Building Displacement
- Affected Parcel with Building Displacement
- UPRR Rail Alt. - West Option
- UPRR Rail Alt. - Common Segment
- Proposed Rail Yard
- Proposed Rail Station
- Existing CTA Red Line
- Existing CTA Station
- Freight Rail
- Water Body

Scale

0 0.25 0.5
Miles

1 inch = 2,000 feet

map id: 03_17.2

Union Pacific Railroad Alternative West Option Displacements (2 of 2)

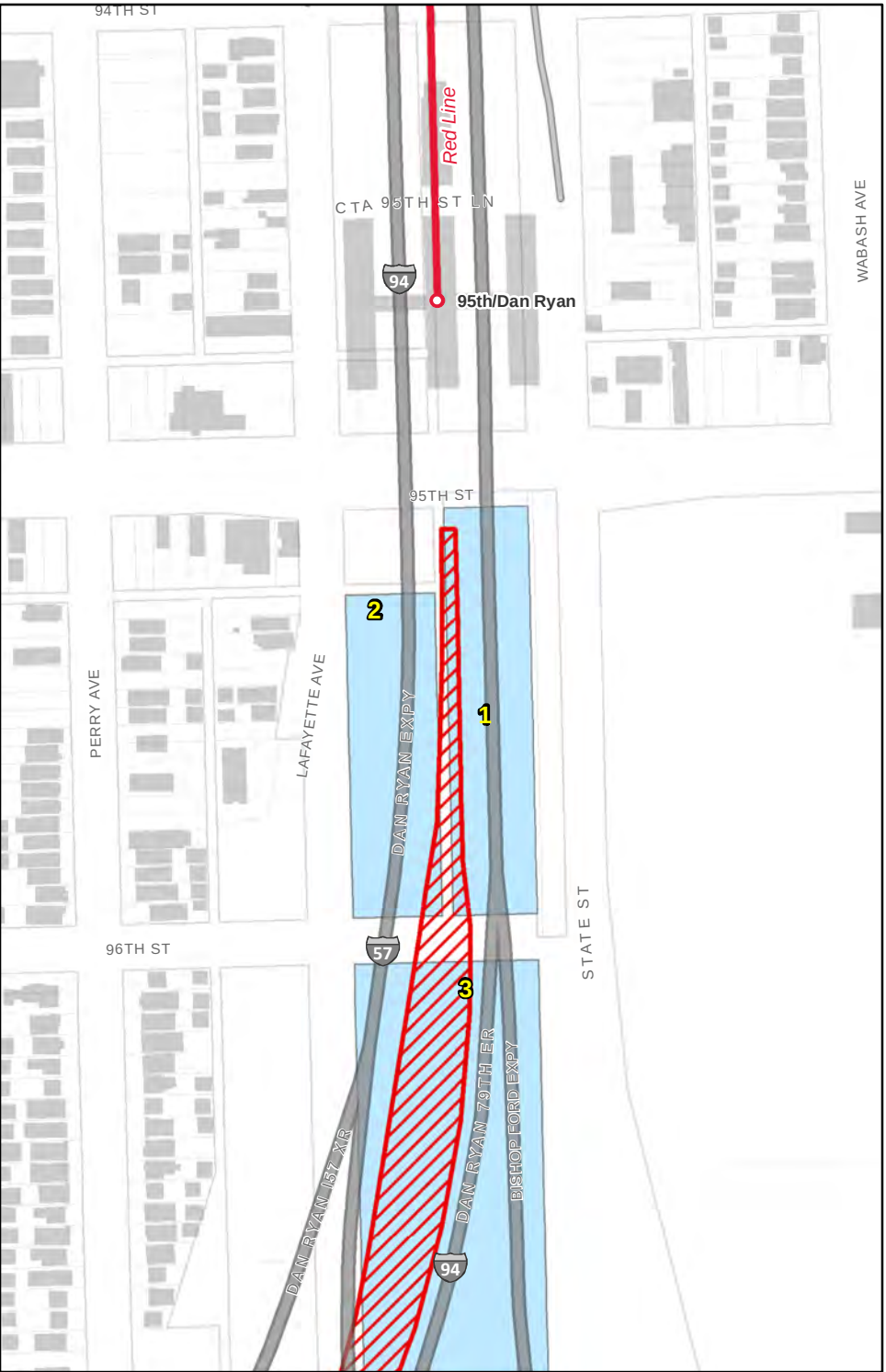

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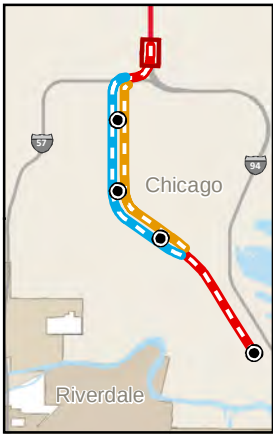

Legend

UPRR Rail Alternative East Option

Sheet 1 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.1

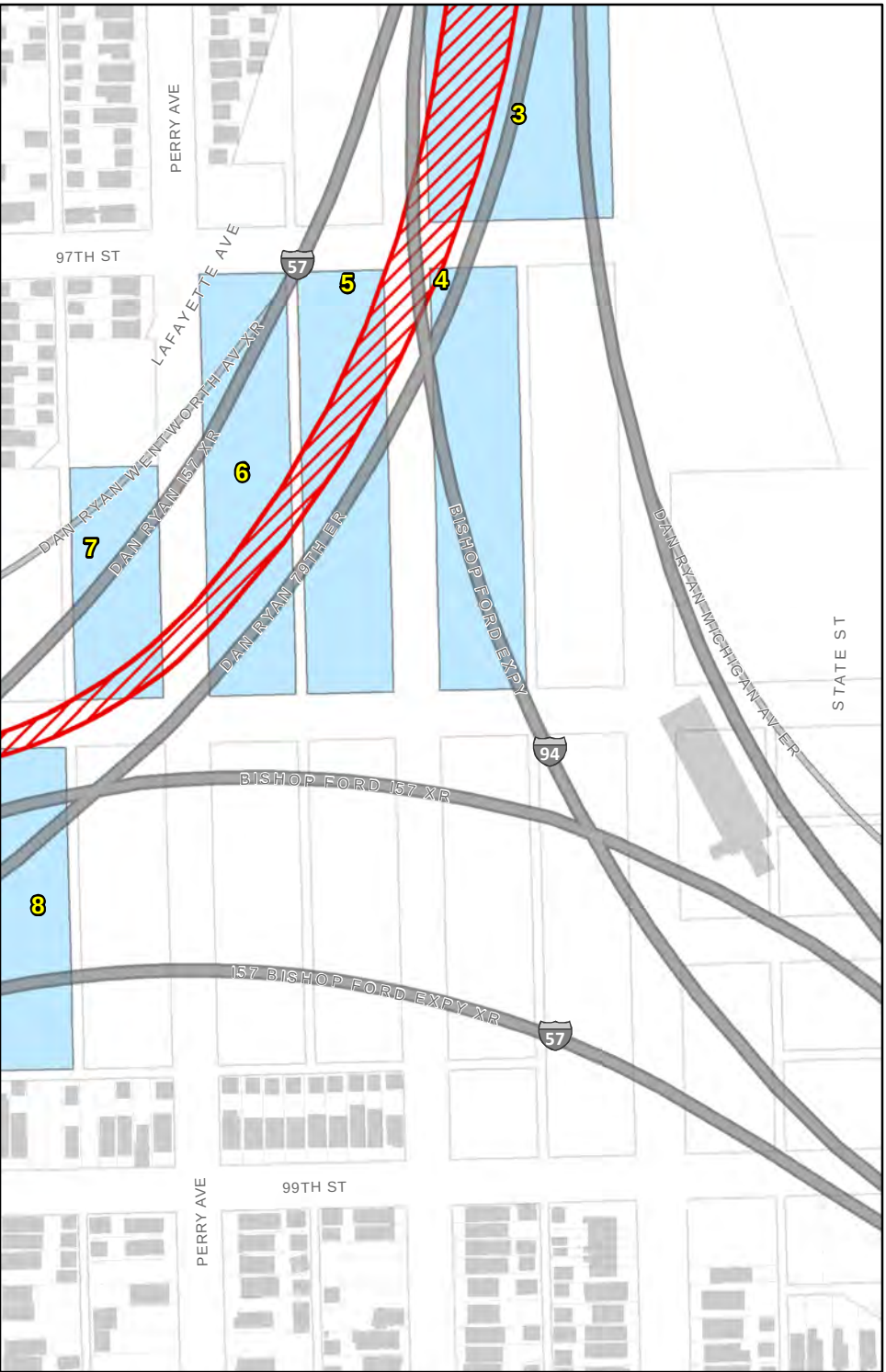

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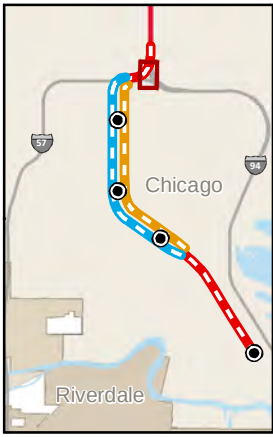

Legend

UPRR Rail Alternative East Option

Sheet 2 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.2

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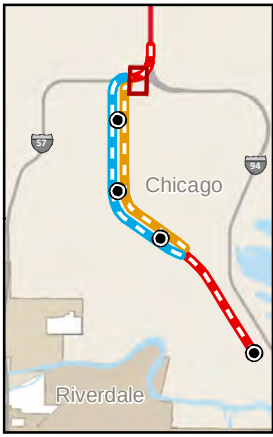

Legend

UPRR Rail Alternative East Option

Sheet 3 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.3

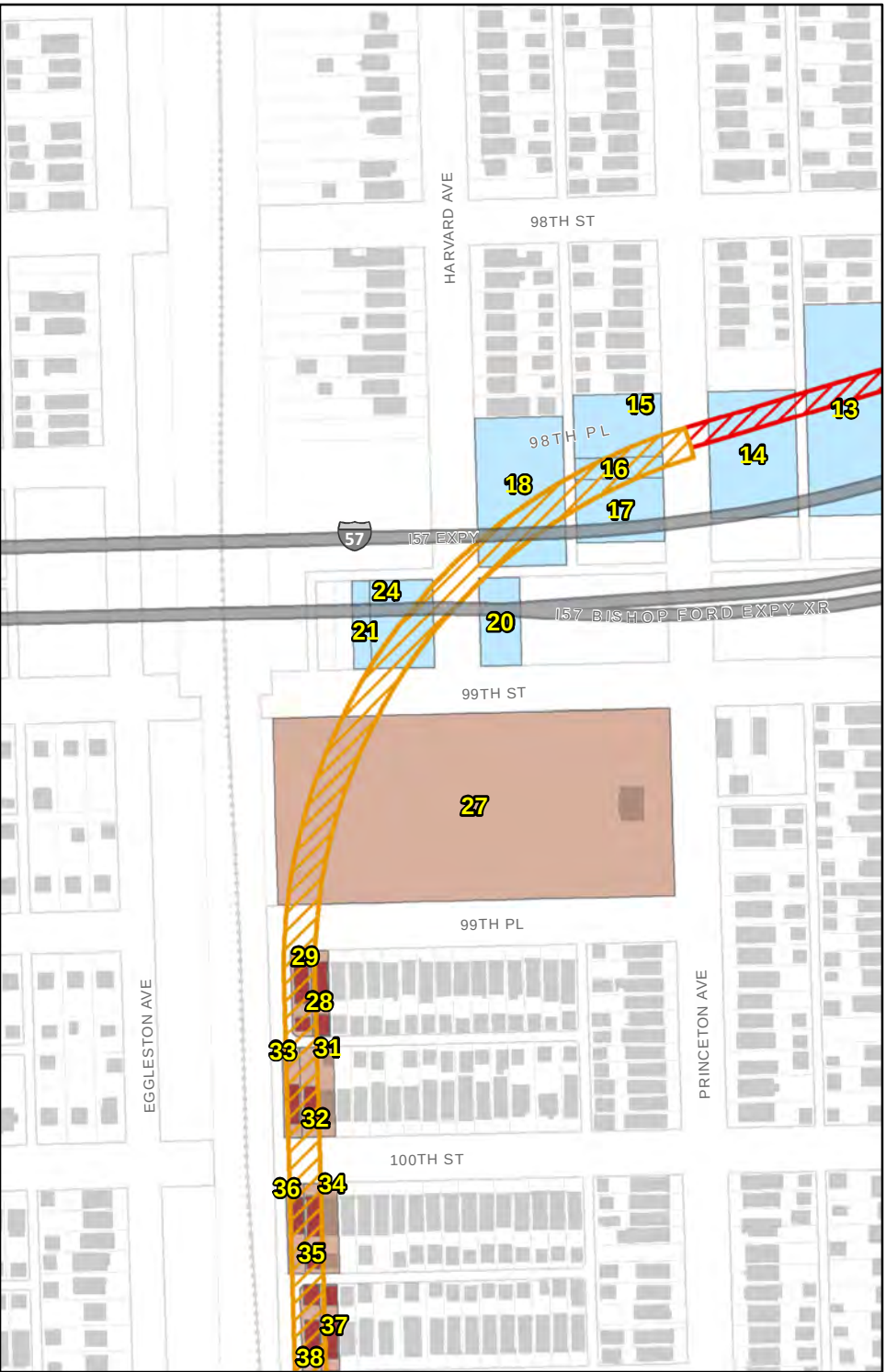

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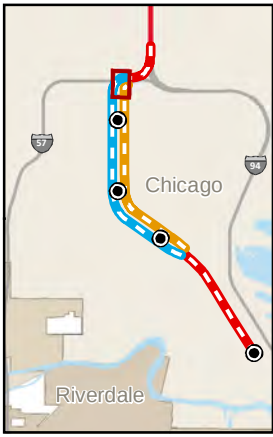

Legend

UPRR Rail Alternative East Option

Sheet 4 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.4

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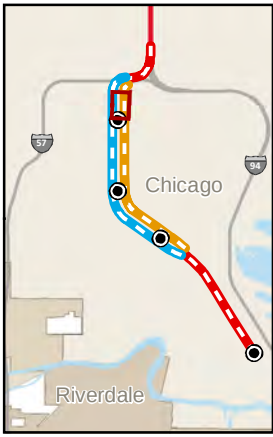

Legend

UPRR Rail Alternative East Option

Sheet 5 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.5

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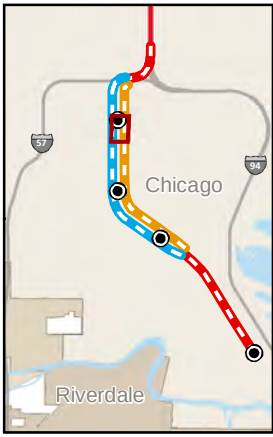

Legend

UPRR Rail Alternative East Option

Sheet 6 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.6

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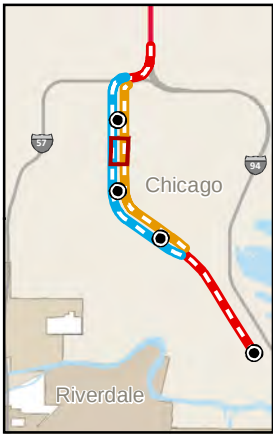

Legend

UPRR Rail Alternative East Option

Sheet 7 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.7

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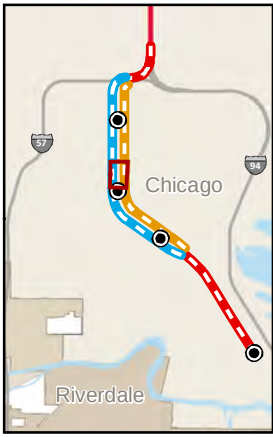

Legend

UPRR Rail Alternative East Option

Sheet 8 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.8

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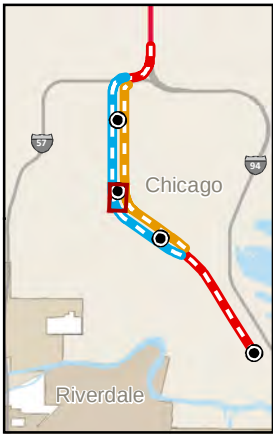

Legend

UPRR Rail Alternative East Option

Sheet 9 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.9

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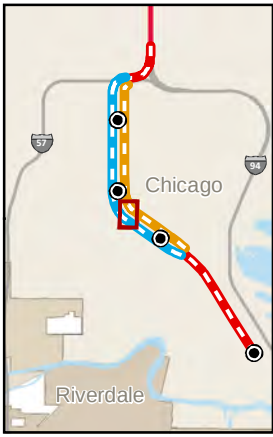

Legend

UPRR Rail Alternative East Option

Sheet 10 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.10

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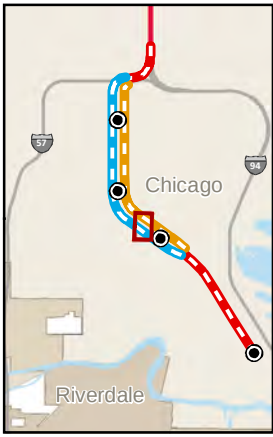

Legend

UPRR Rail Alternative East Option

Sheet 11 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.11

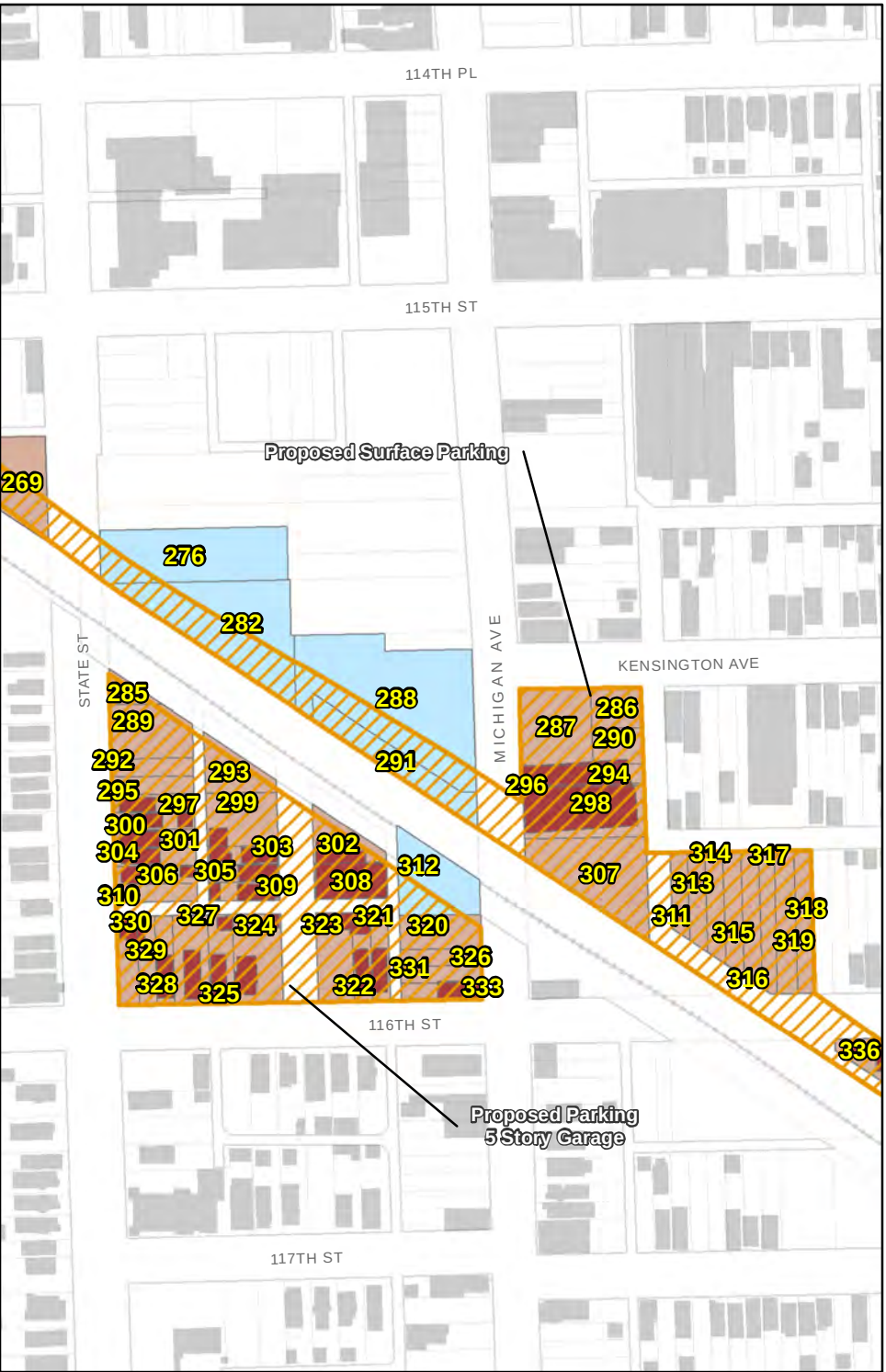

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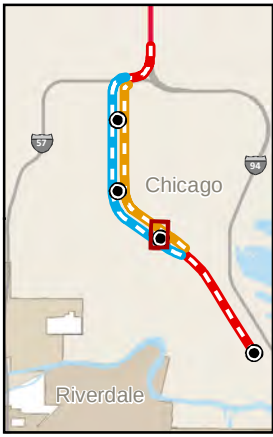

Legend

UPRR Rail Alternative East Option

Sheet 12 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.12

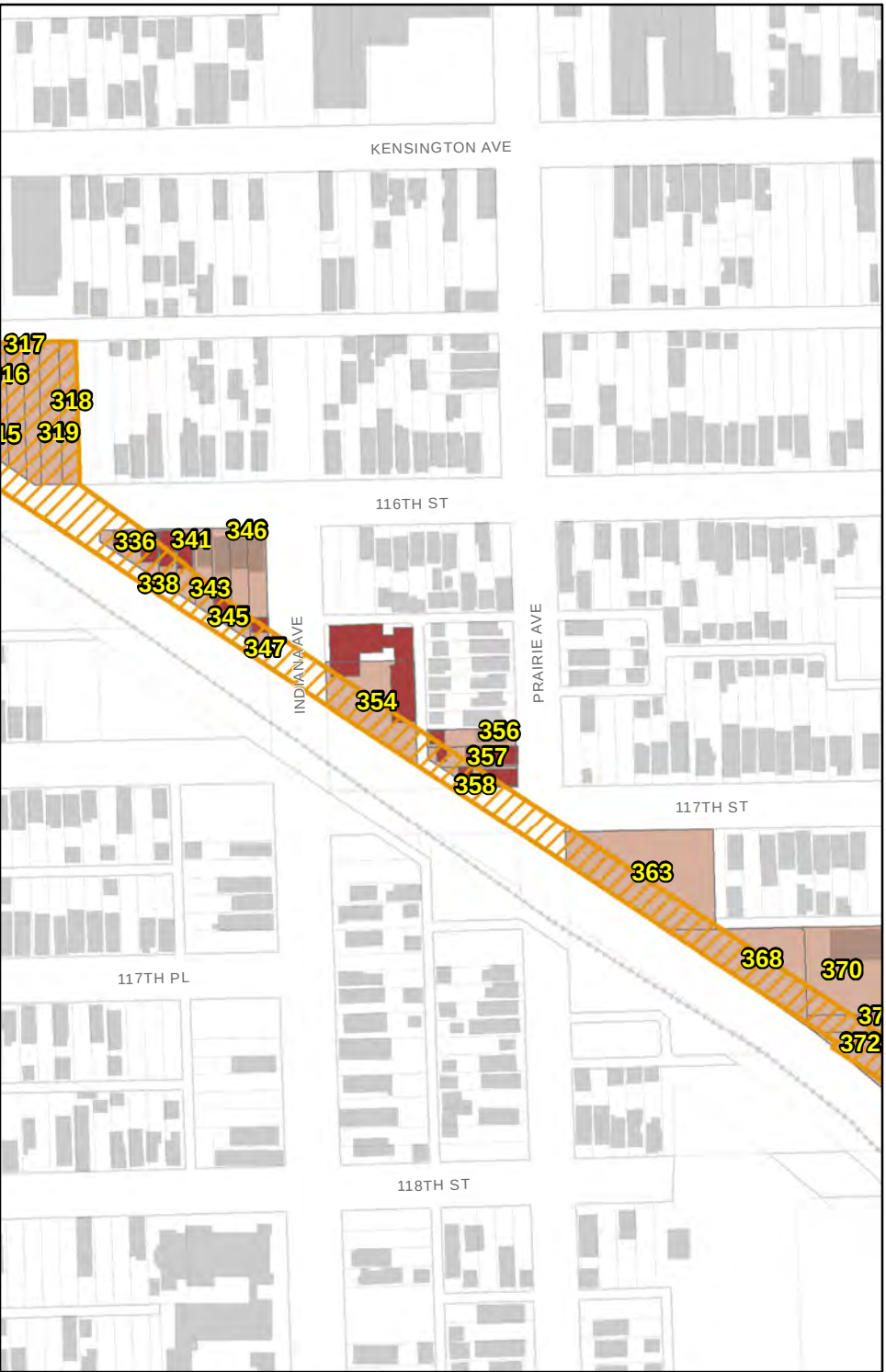

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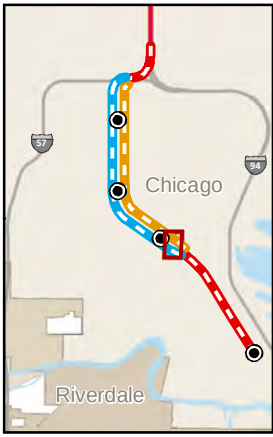

Legend

UPRR Rail Alternative East Option

Sheet 13 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

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Scale

0 125 250

Feet

map id: 03_20.13

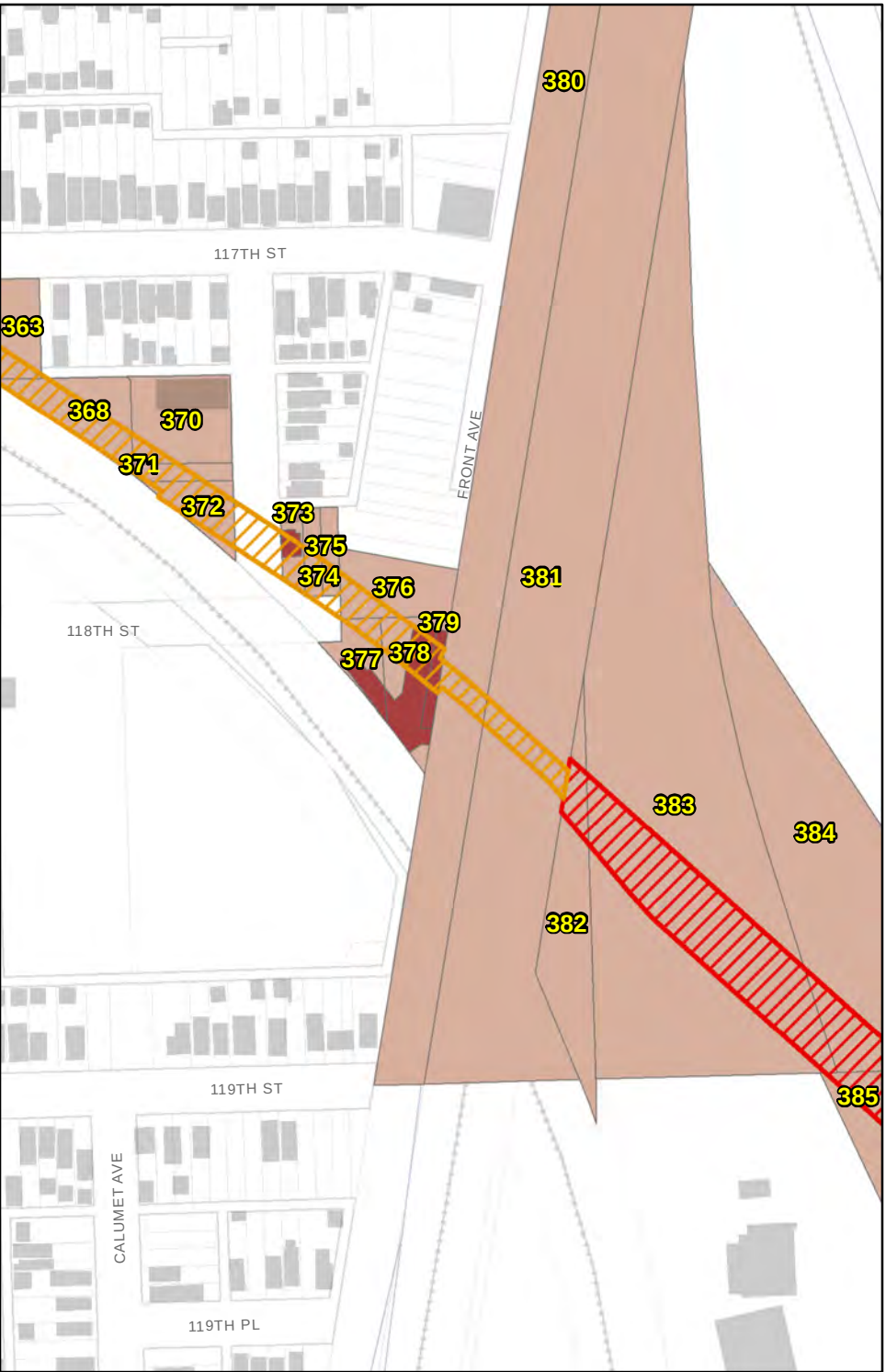

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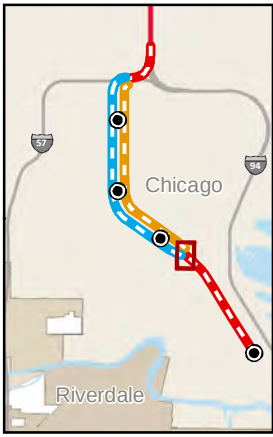

Legend

UPRR Rail Alternative East Option

Sheet 14 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.14

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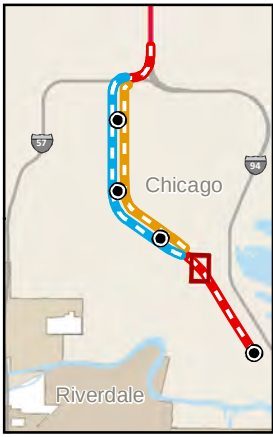

Legend

UPRR Rail Alternative East Option

Sheet 15 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.15

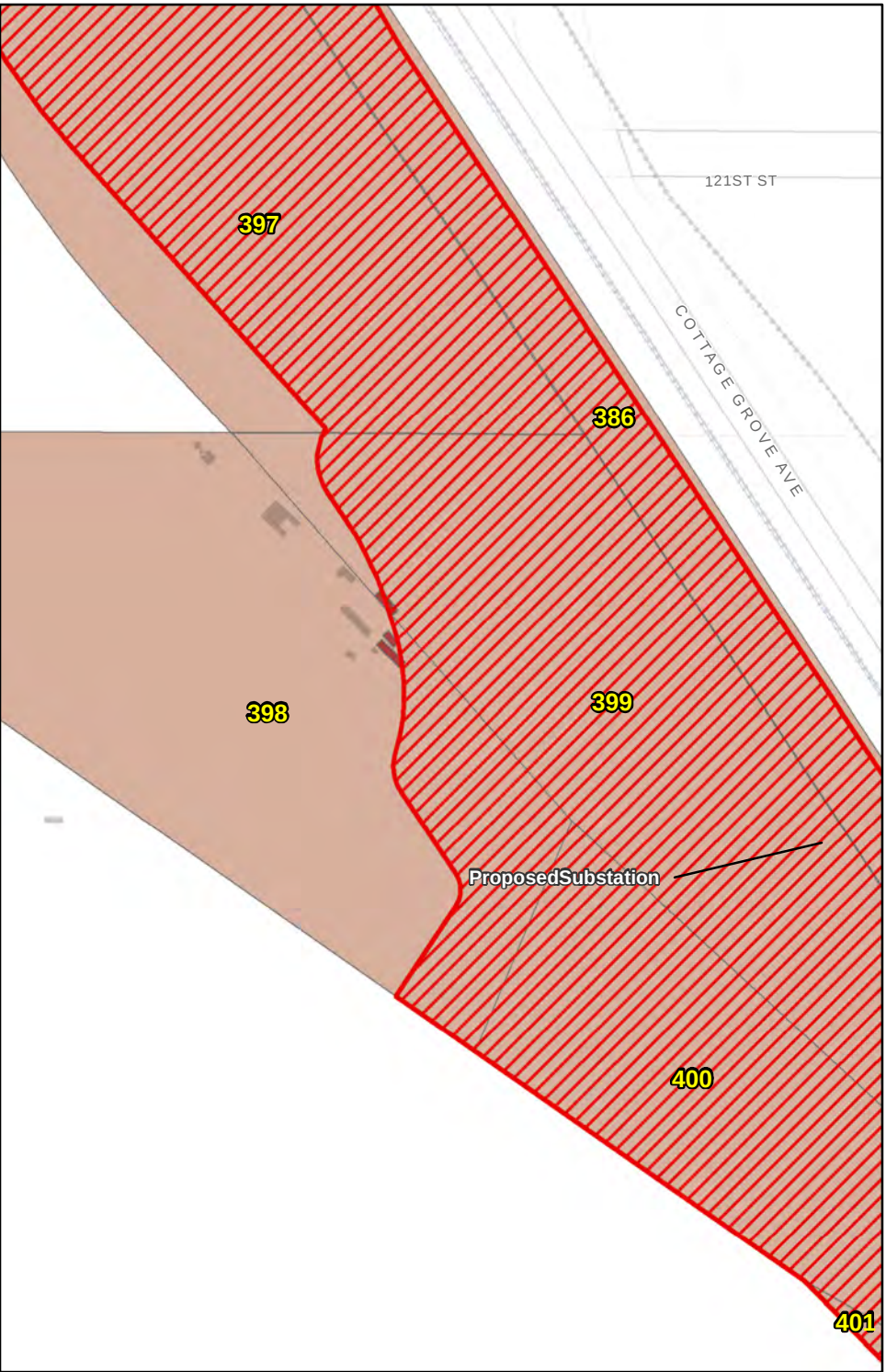

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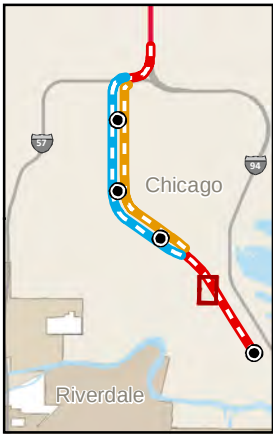

Legend

UPRR Rail Alternative East Option

Sheet 16 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.16

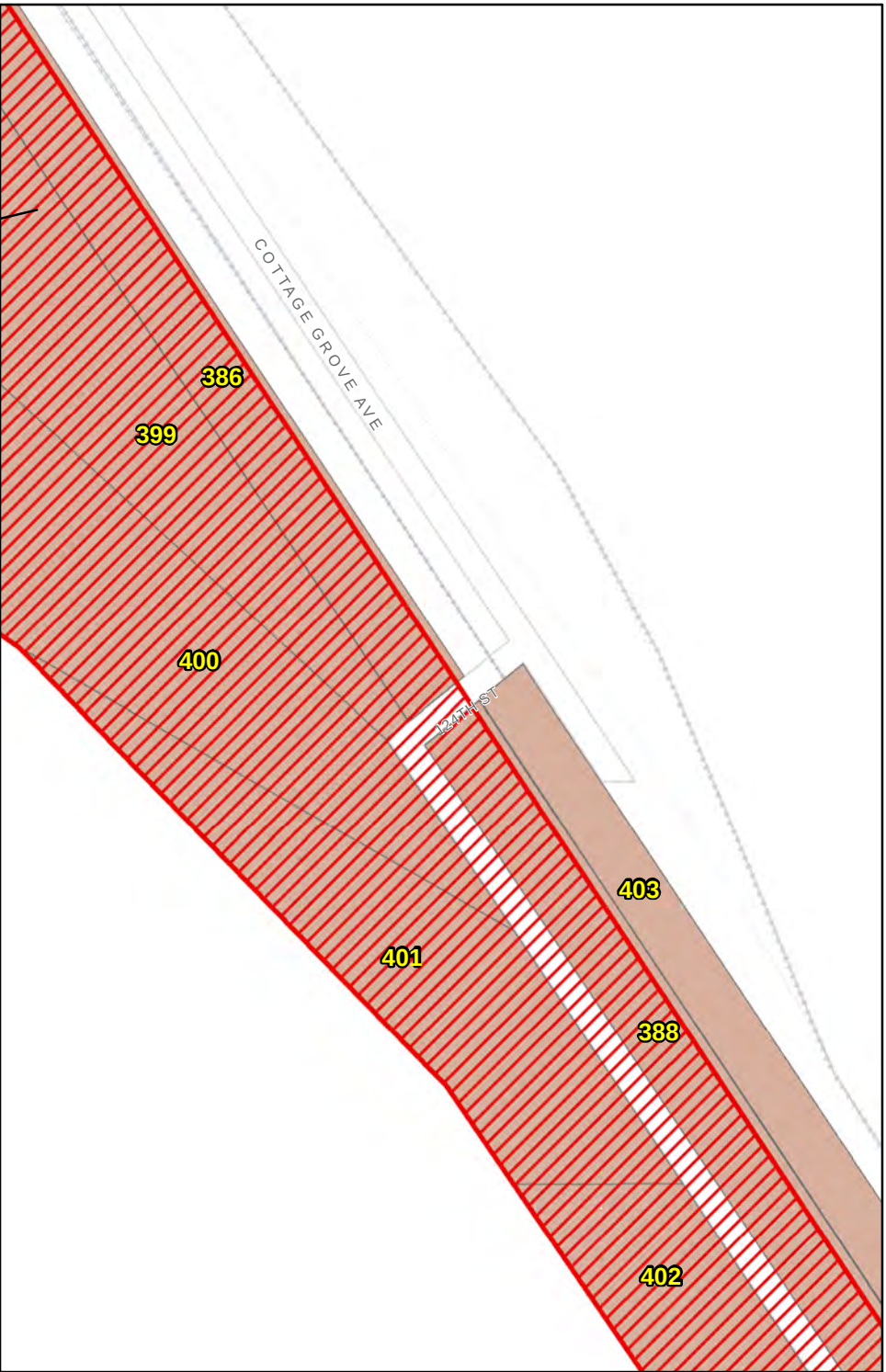

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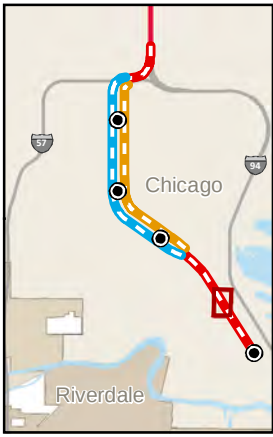

Legend

UPRR Rail Alternative East Option

Sheet 17 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.17

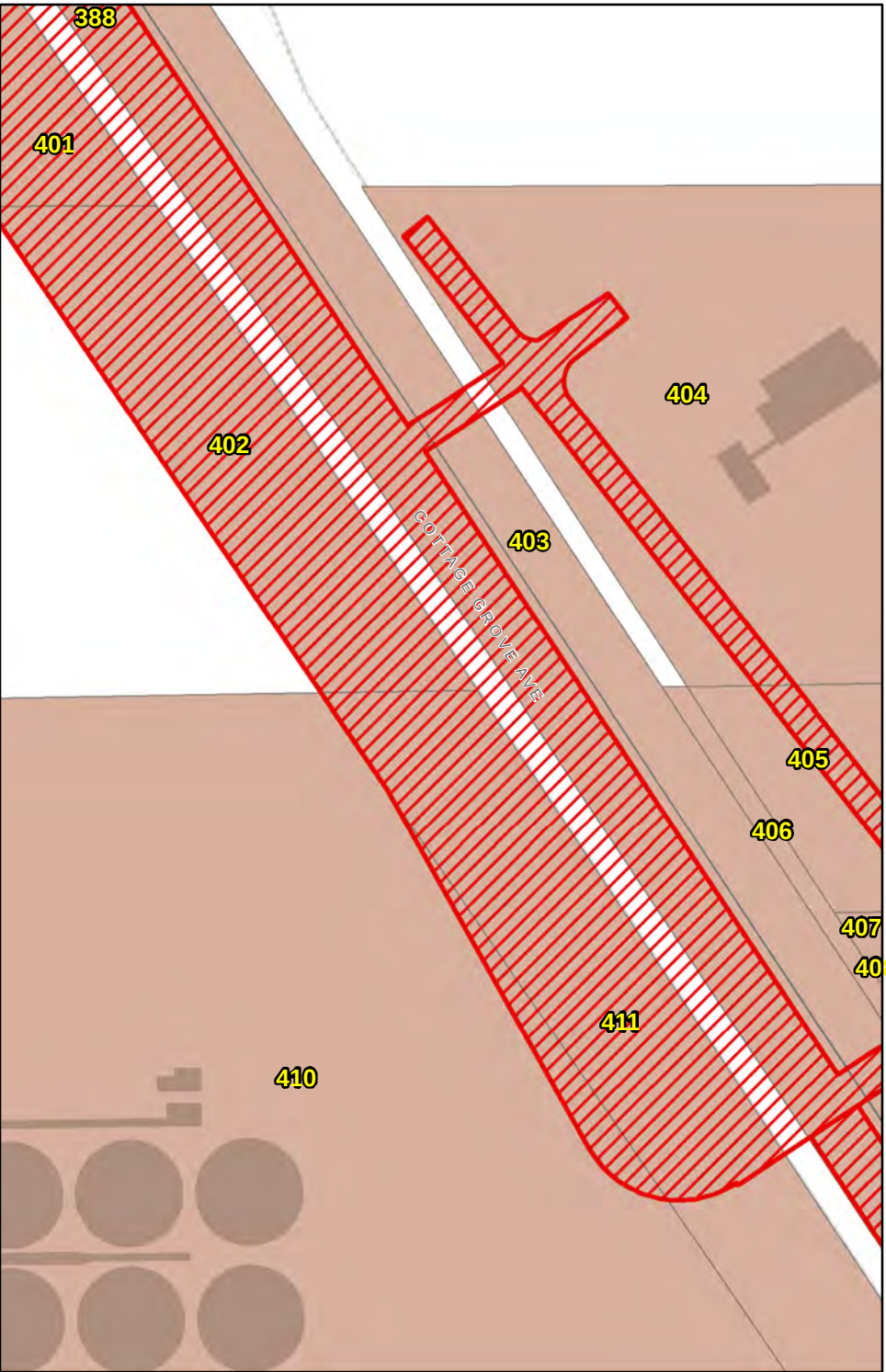

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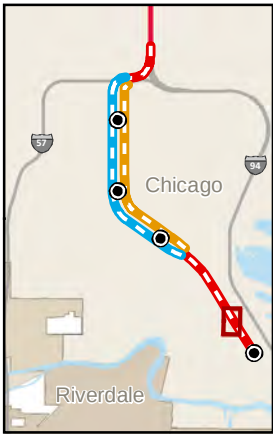

Legend

UPRR Rail Alternative East Option

Sheet 18 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

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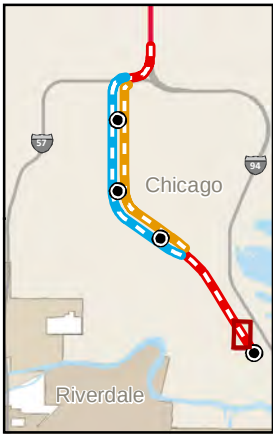

Legend

UPRR Rail Alternative East Option

Sheet 19 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.19

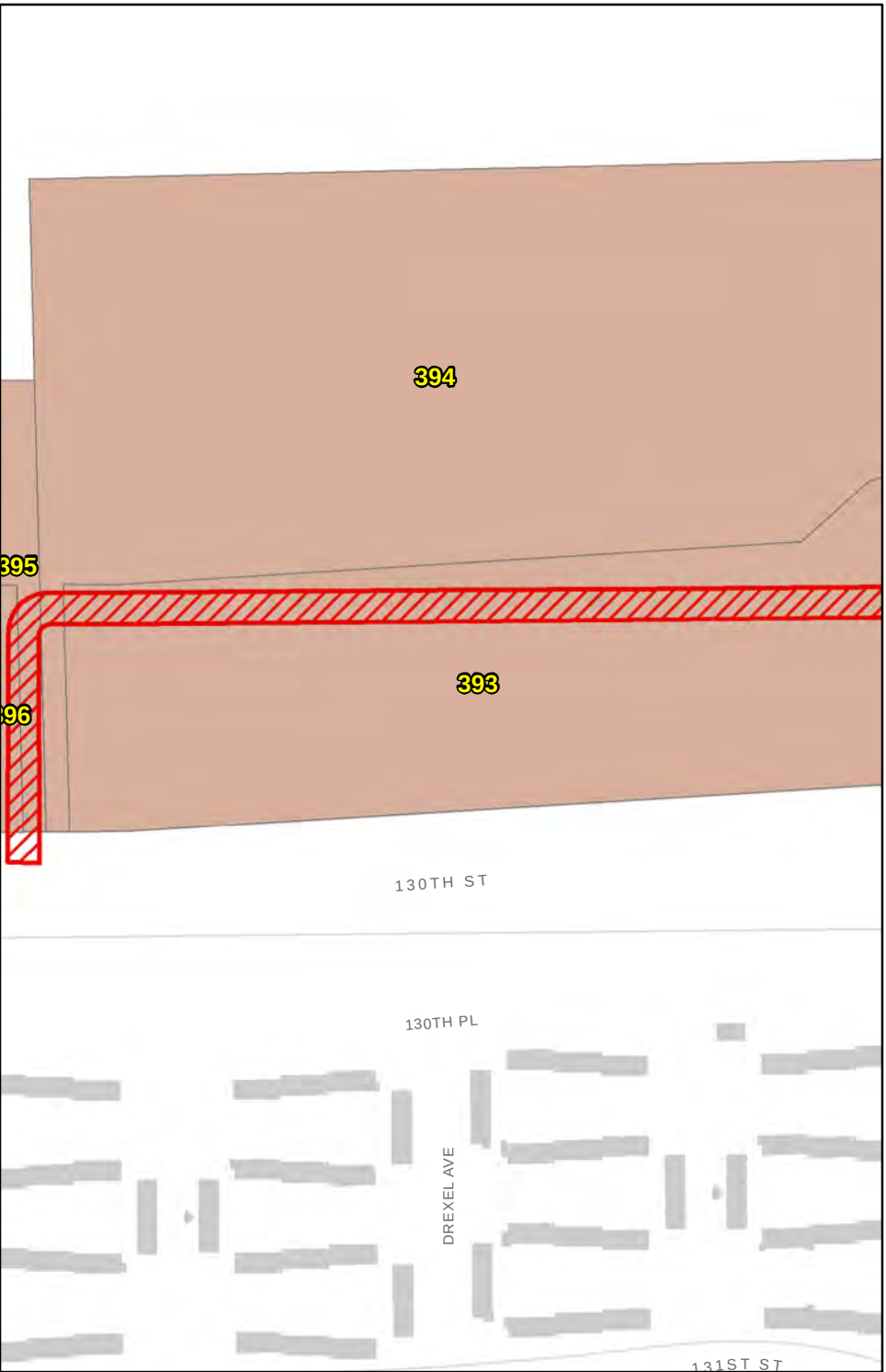

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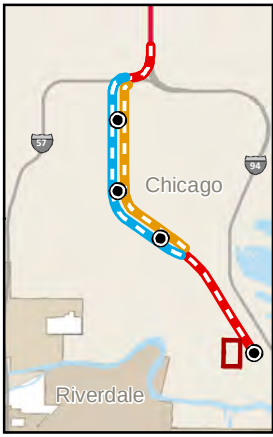

Legend

UPRR Rail Alternative East Option

Sheet 20 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.20

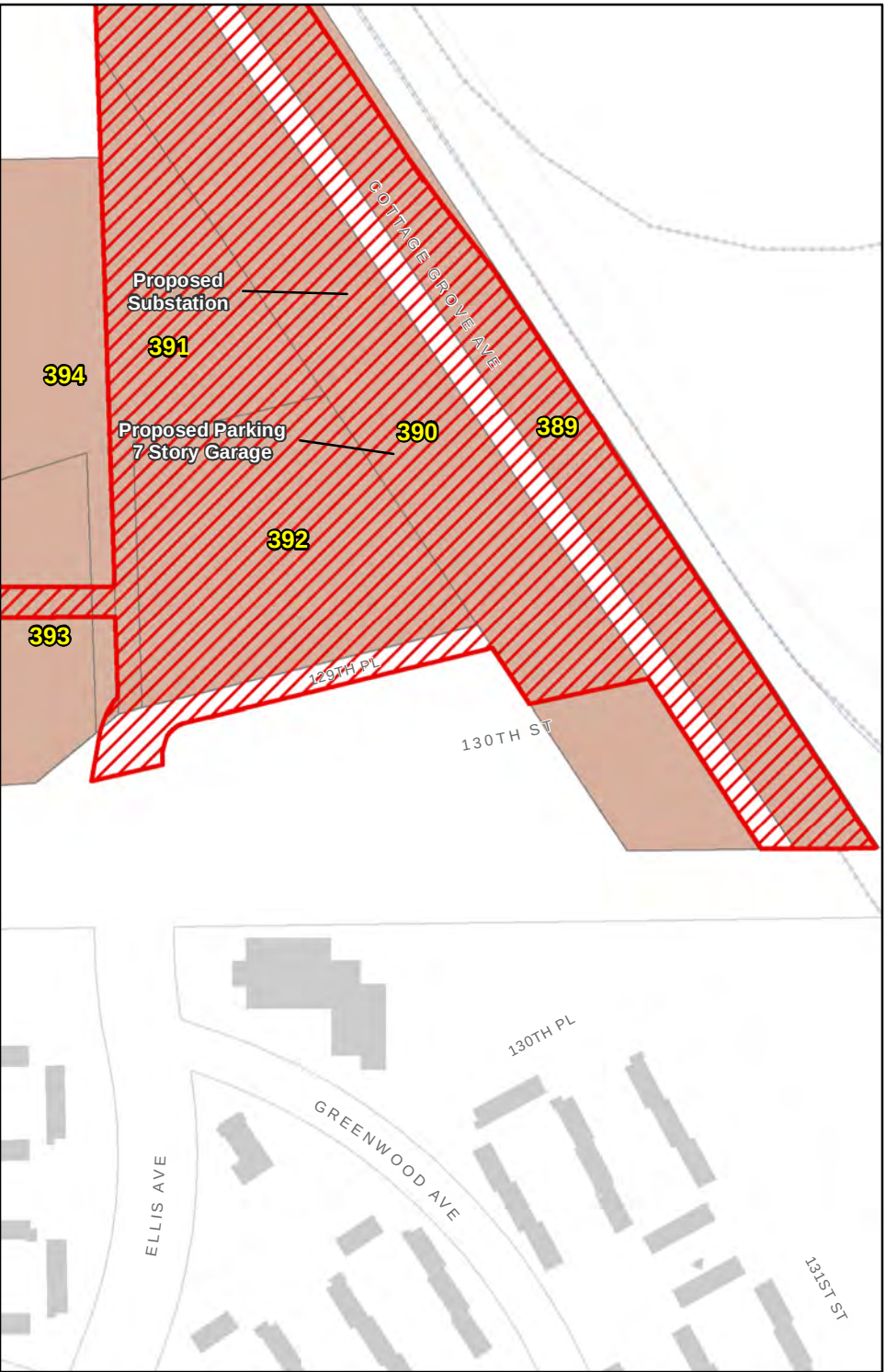

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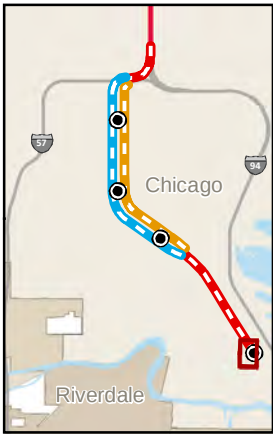

Legend

UPRR Rail Alternative East Option

Sheet 21 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR East
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.21

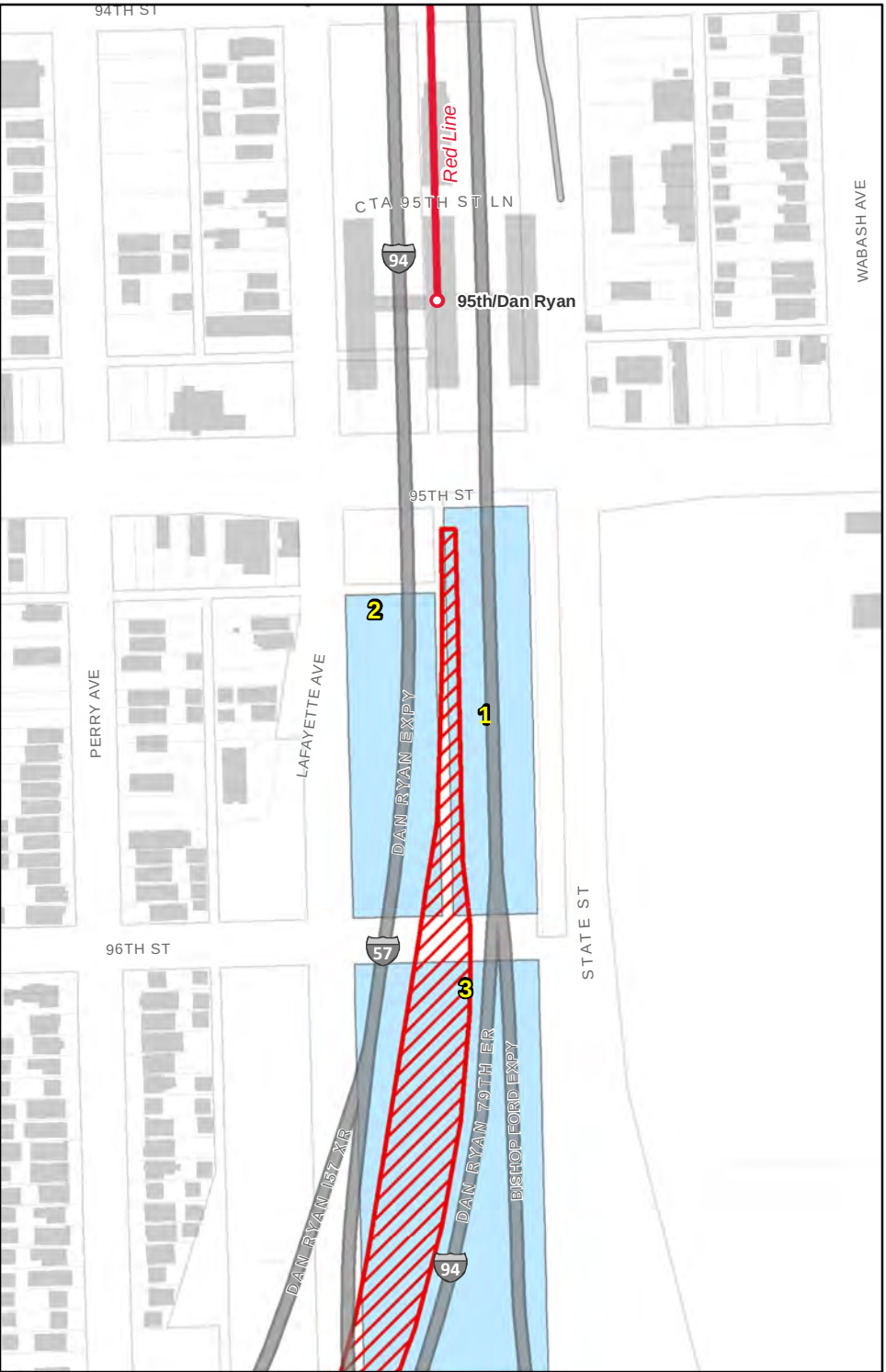

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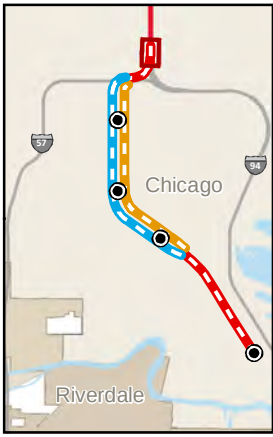

Legend

UPRR Rail Alternative West Option

Sheet 1 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.1

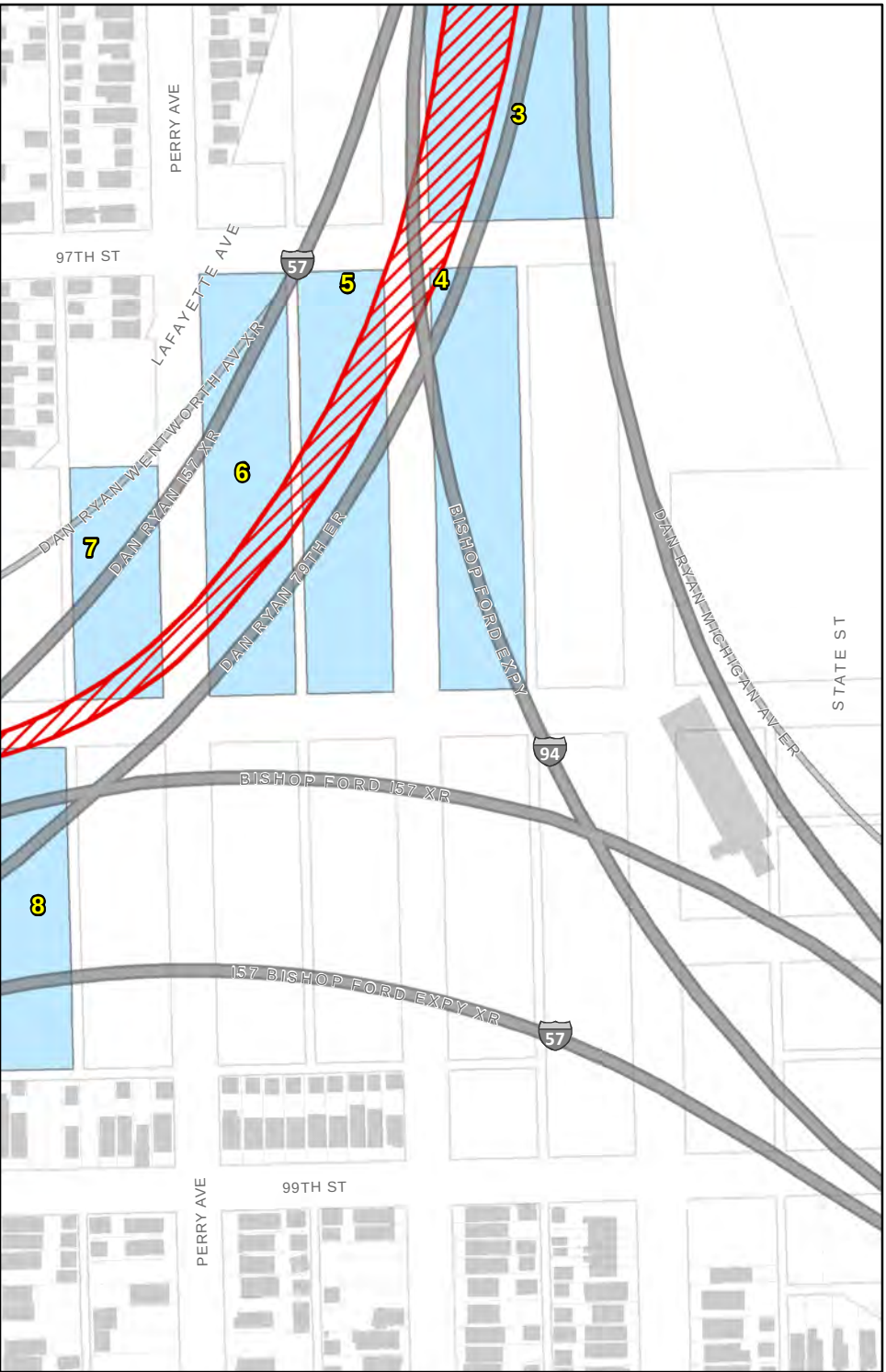

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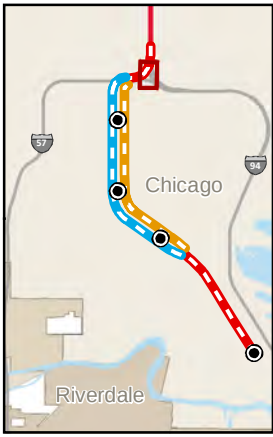

Legend

UPRR Rail Alternative West Option

Sheet 2 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.2

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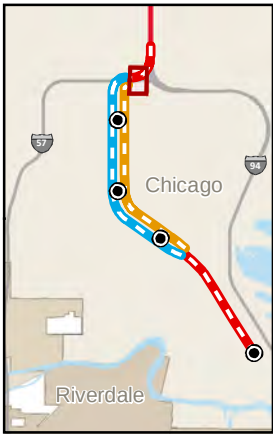

Legend

UPRR Rail Alternative West Option

Sheet 3 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.3

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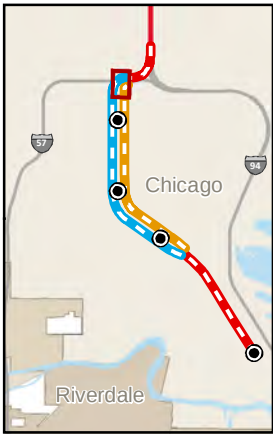

Legend

UPRR Rail Alternative
West Option

Sheet 4 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.4

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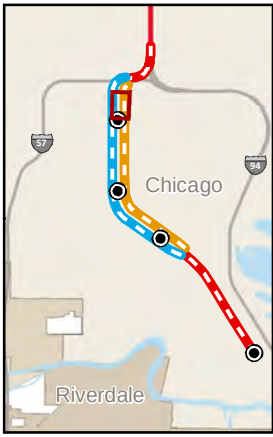

Legend

UPRR Rail Alternative West Option

Sheet 5 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.5

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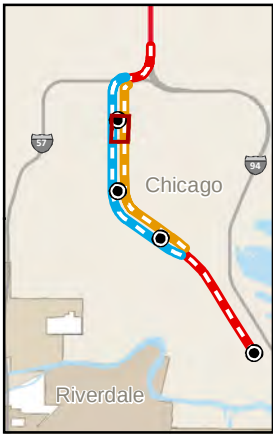

Legend

UPRR Rail Alternative West Option

Sheet 6 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.6

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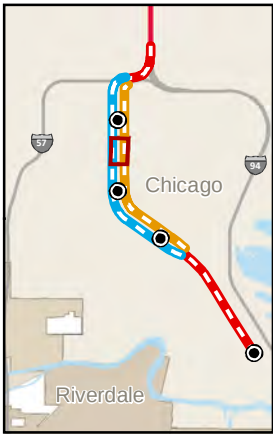

Legend

UPRR Rail Alternative West Option

Sheet 7 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.7

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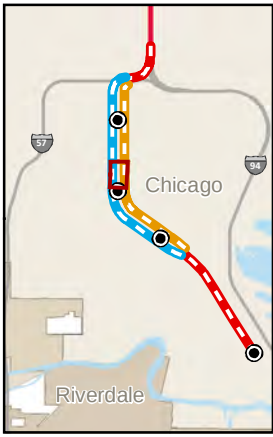

Legend

UPRR Rail Alternative West Option

Sheet 8 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.8

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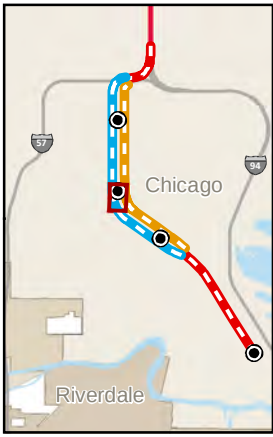

Legend

UPRR Rail Alternative West Option

Sheet 9 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

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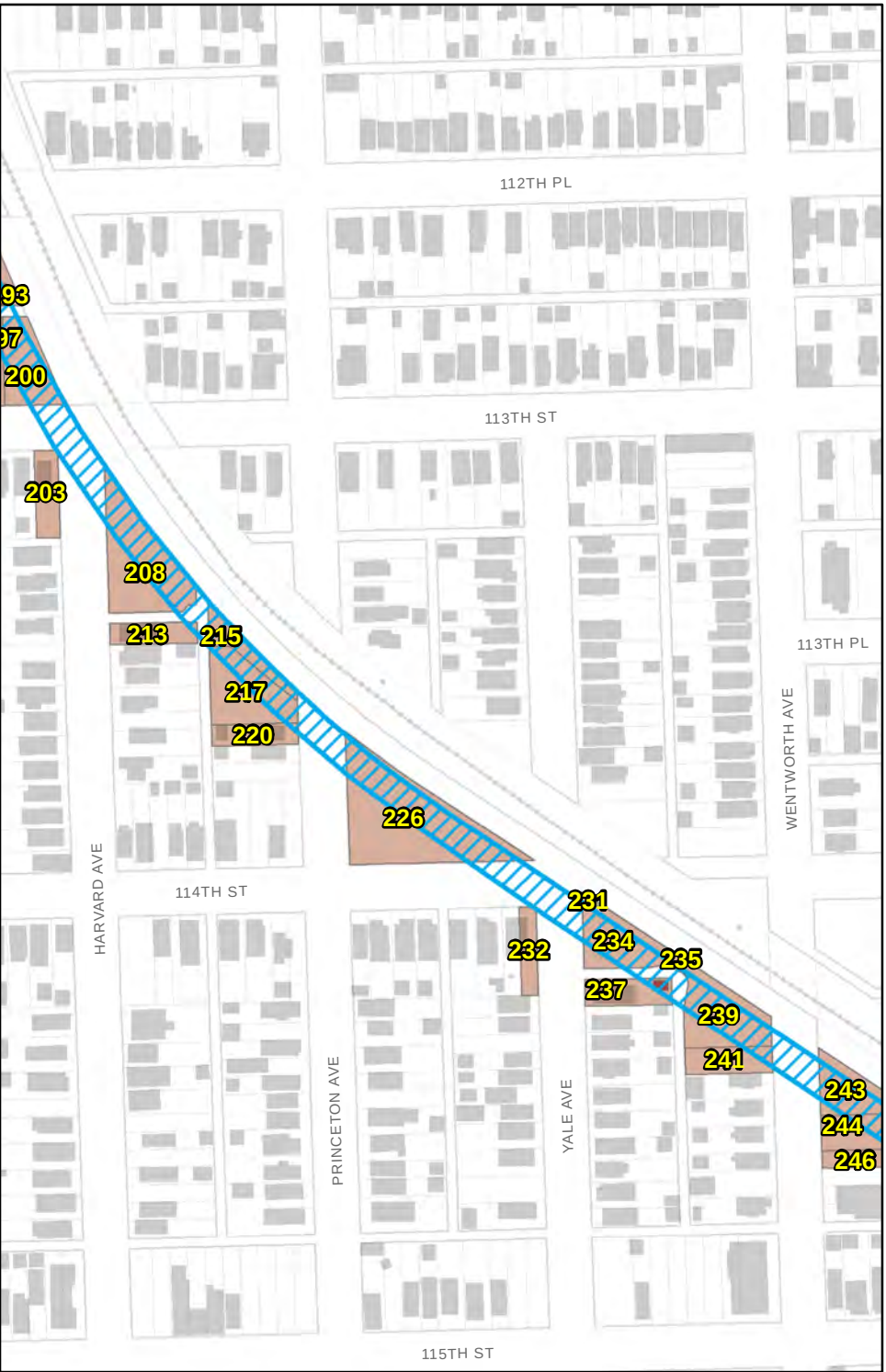

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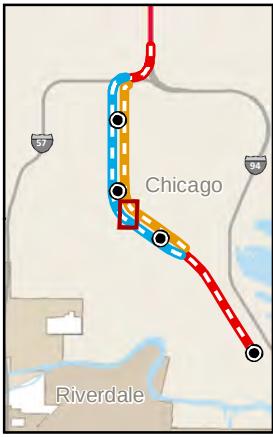

Legend

UPRR Rail Alternative West Option

Sheet 10 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.10

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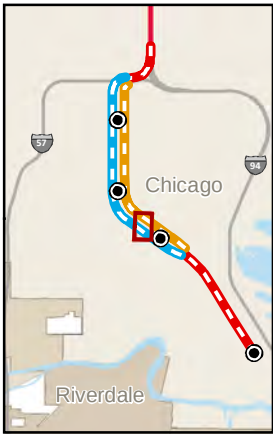

Legend

UPRR Rail Alternative West Option

Sheet 11 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.11

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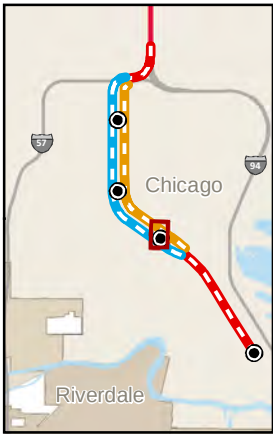

Legend

UPRR Rail Alternative West Option

Sheet 12 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.12

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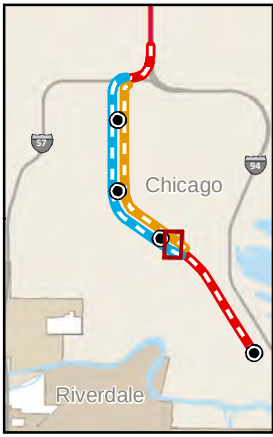

Legend

UPRR Rail Alternative West Option

Sheet 13 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.13

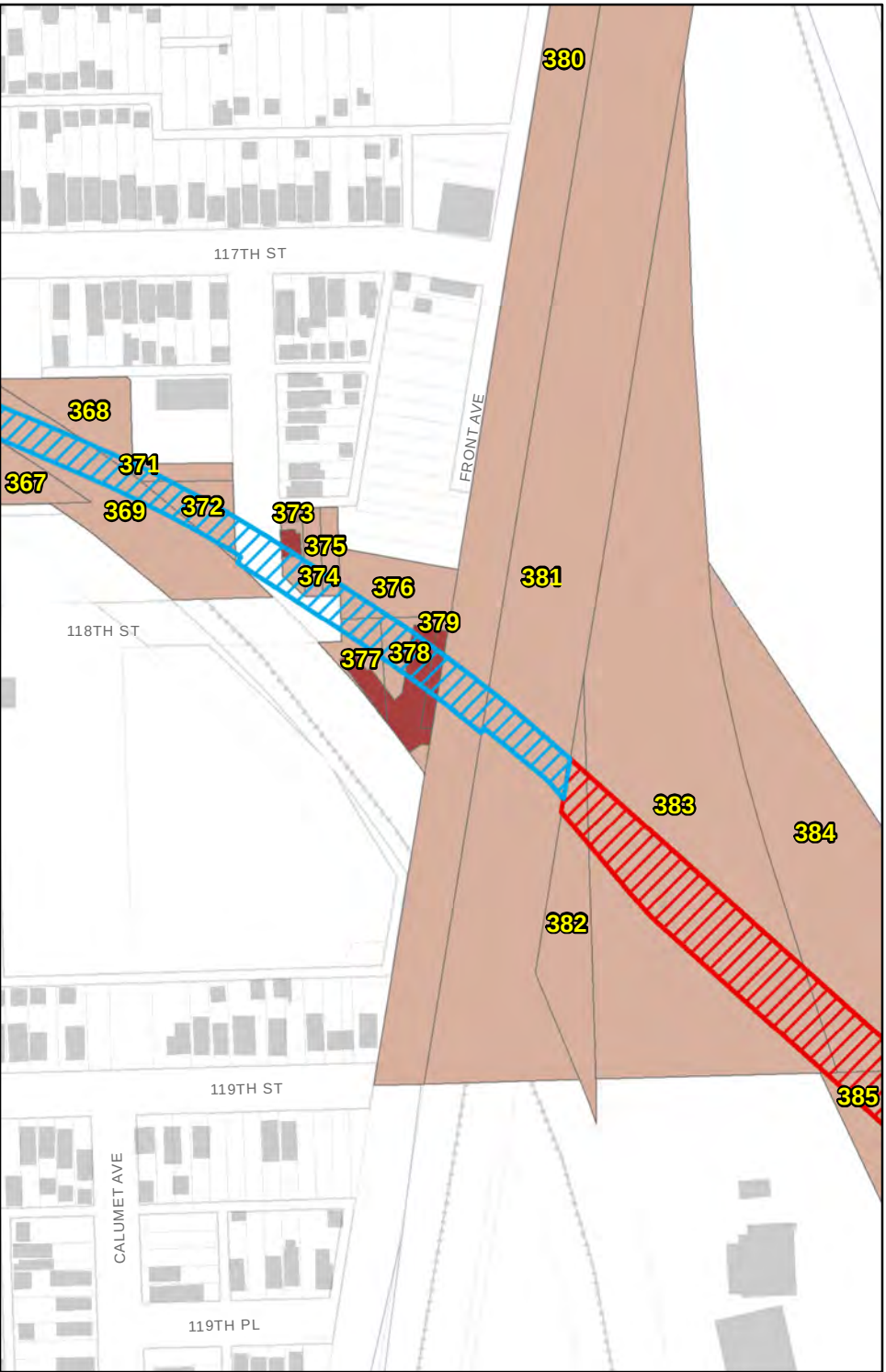

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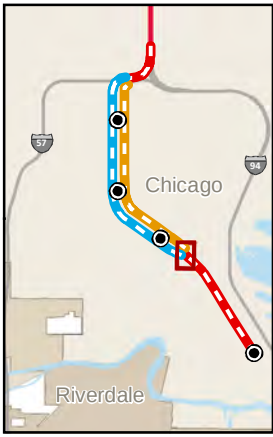

Legend

UPRR Rail Alternative West Option

Sheet 14 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.14

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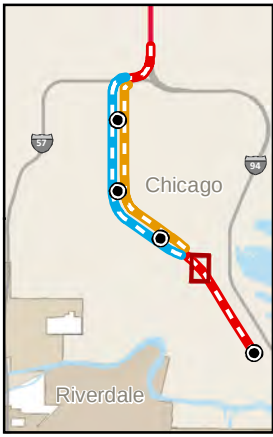

Legend

UPRR Rail Alternative West Option

Sheet 15 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

Parcels and buildings that may be displaced are shown to illustrate maximum impacts and possible locations. Due to the margin for error inherent in predicting displacements based on conceptual engineering, the actual displacements for each alternative may vary from what is shown. Some of the properties shown may not ultimately need to be acquired. Land only property impacts are shown on the entire lot, however, often only portions of the lot would be required. Property acquisitions will be confirmed as project engineering progresses.

Scale

0 125 250

Feet

map id: 03_20.15

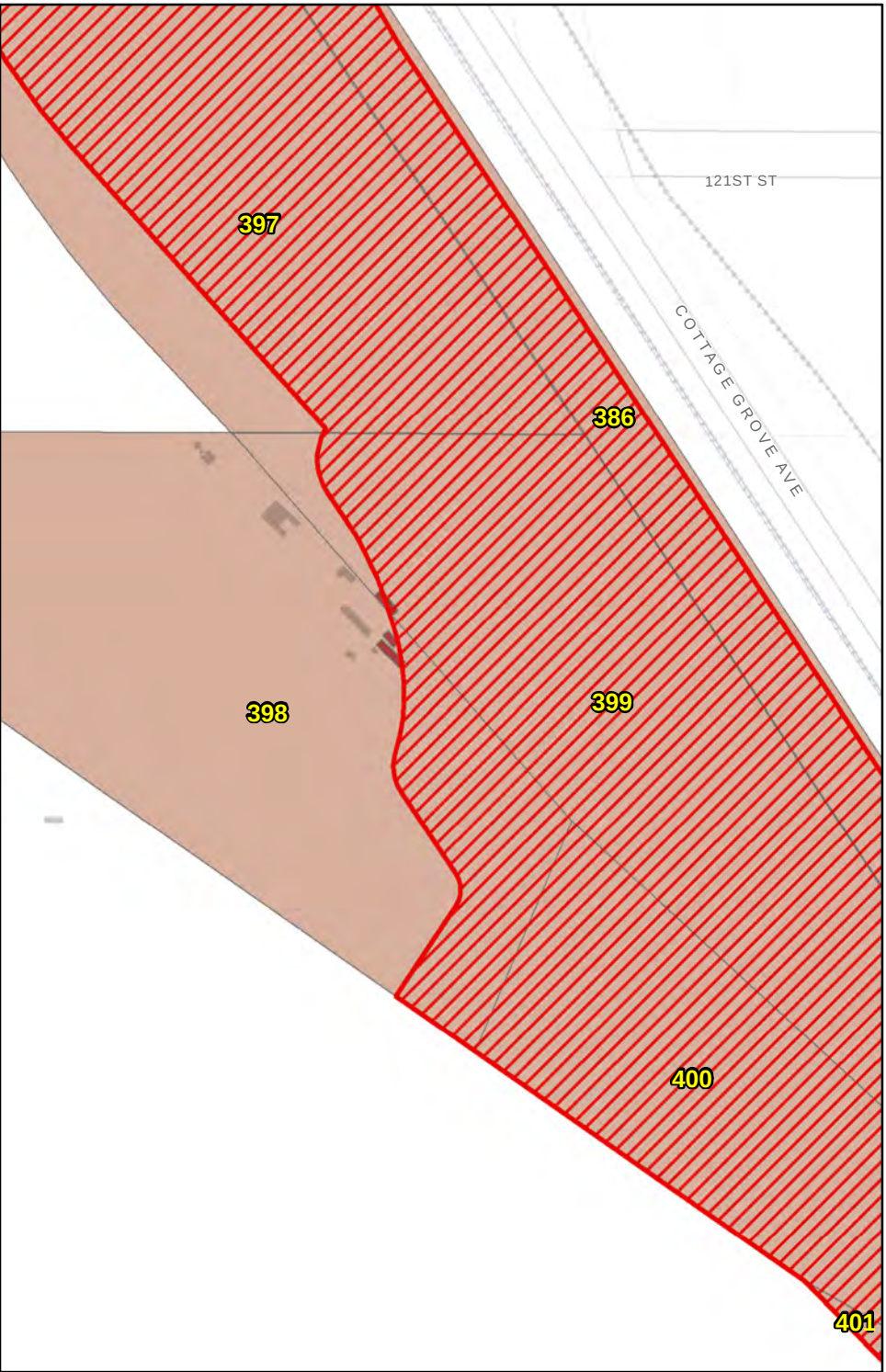

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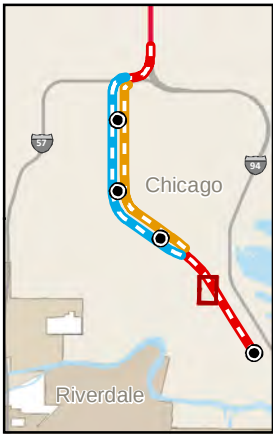

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UPRR Rail Alternative West Option

Sheet 16 of 21

- Proposed Permanent Envelope - UPRR Common
- Proposed Permanent Envelope - UPRR West
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels

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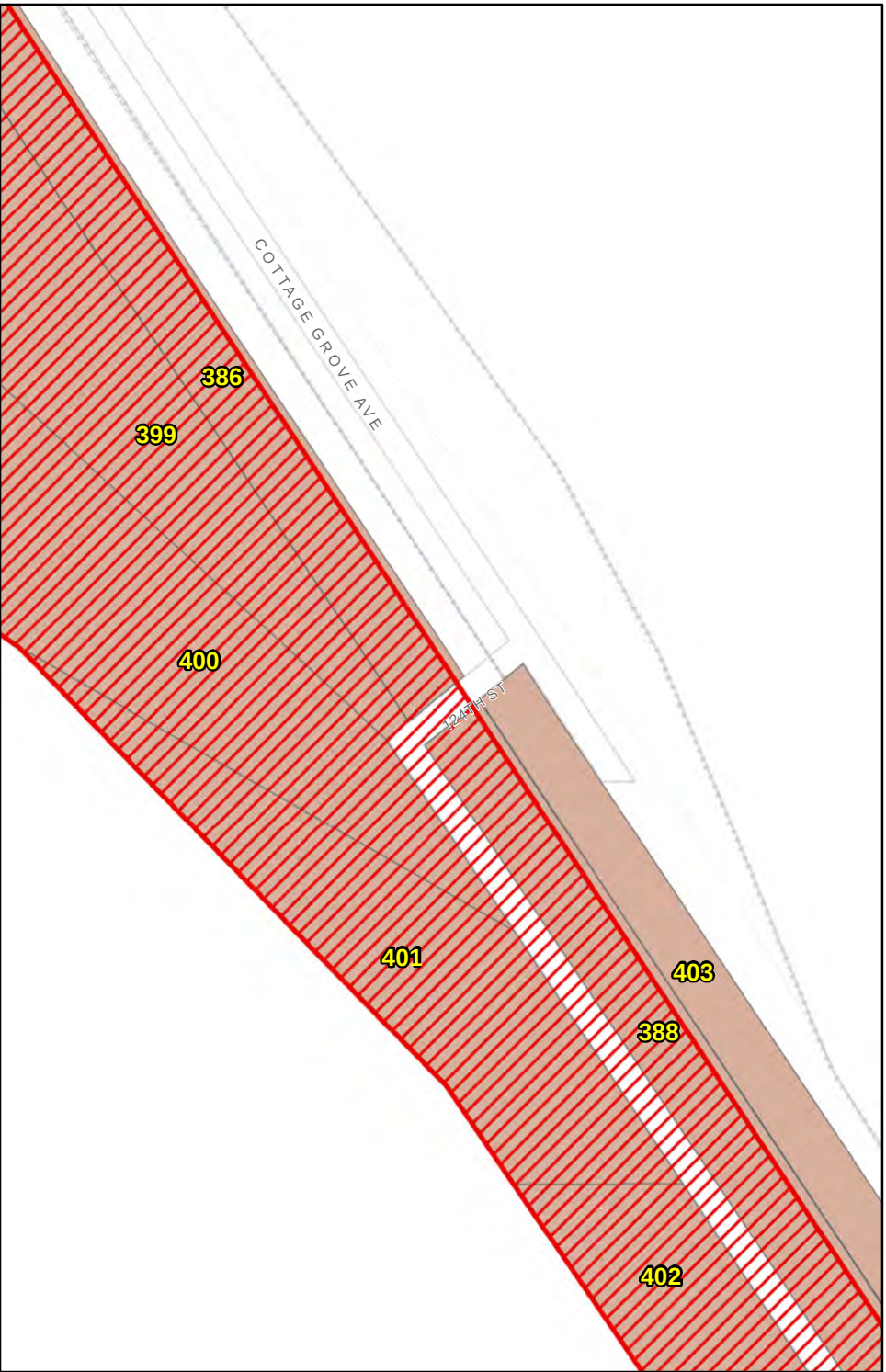

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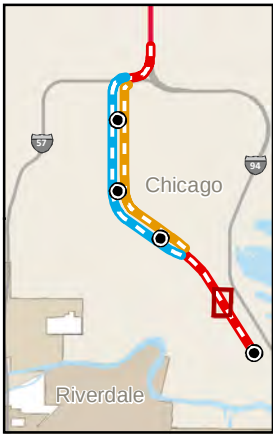

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UPRR Rail Alternative West Option

Sheet 17 of 21

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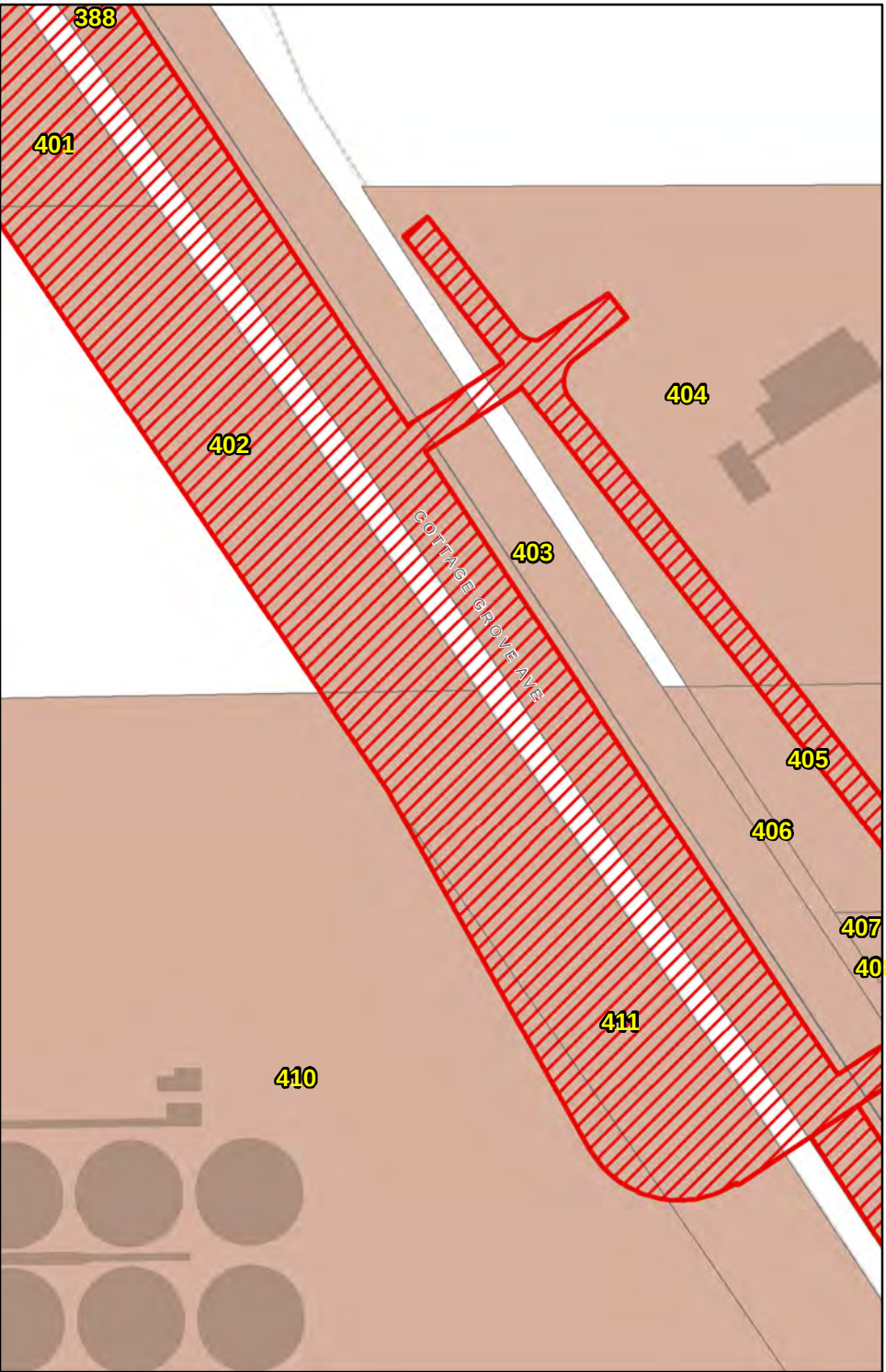

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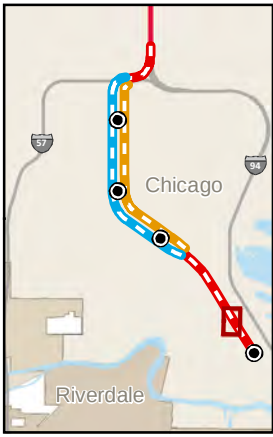

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UPRR Rail Alternative West Option

Sheet 18 of 21

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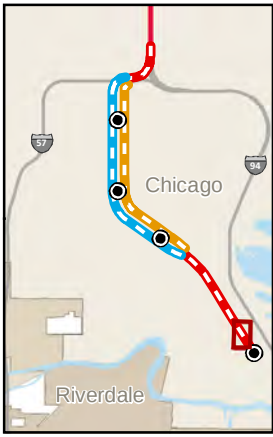

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UPRR Rail Alternative West Option

Sheet 19 of 21

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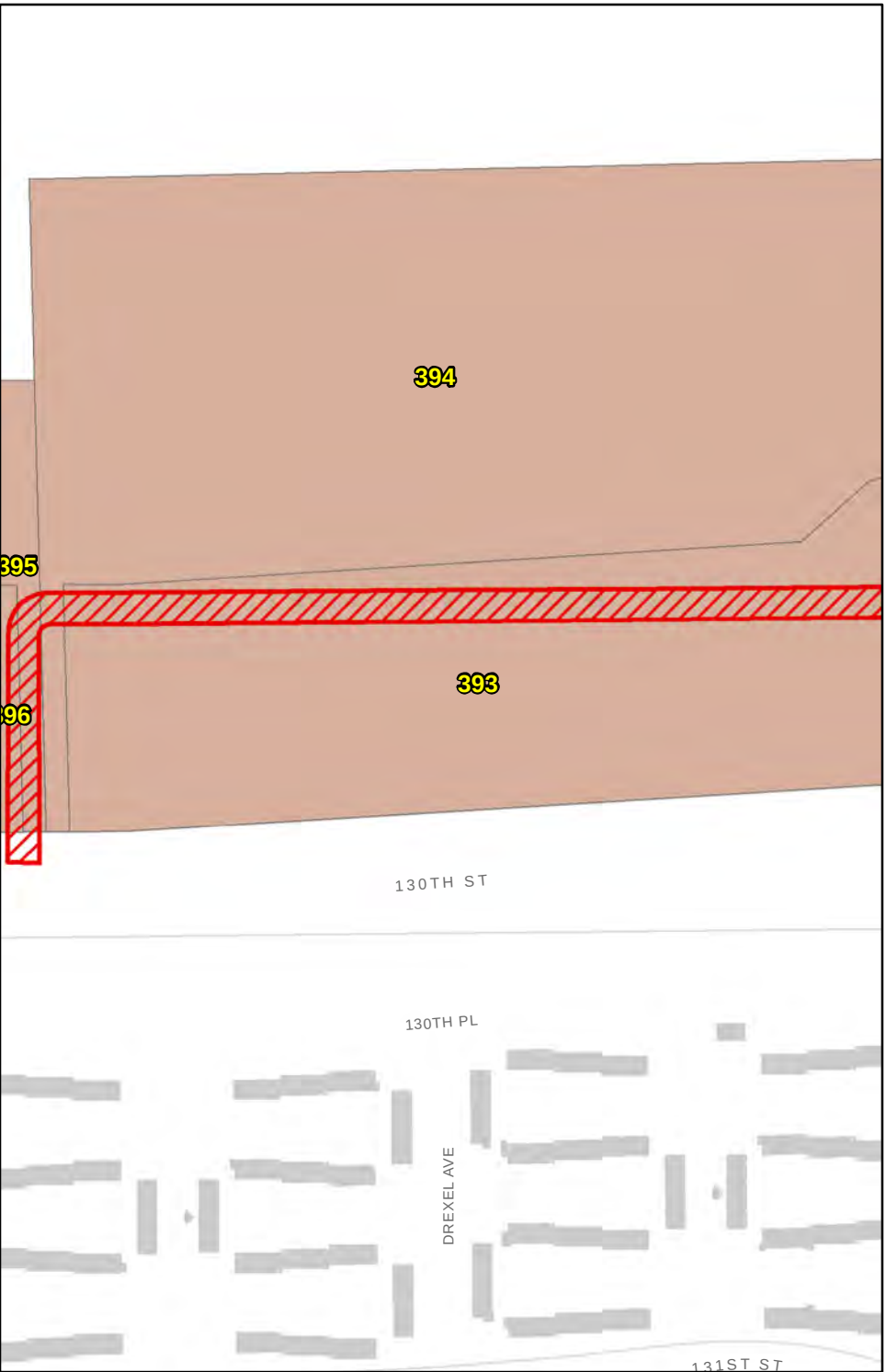

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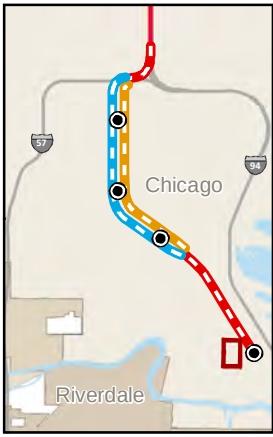

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UPRR Rail Alternative West Option

Sheet 20 of 21

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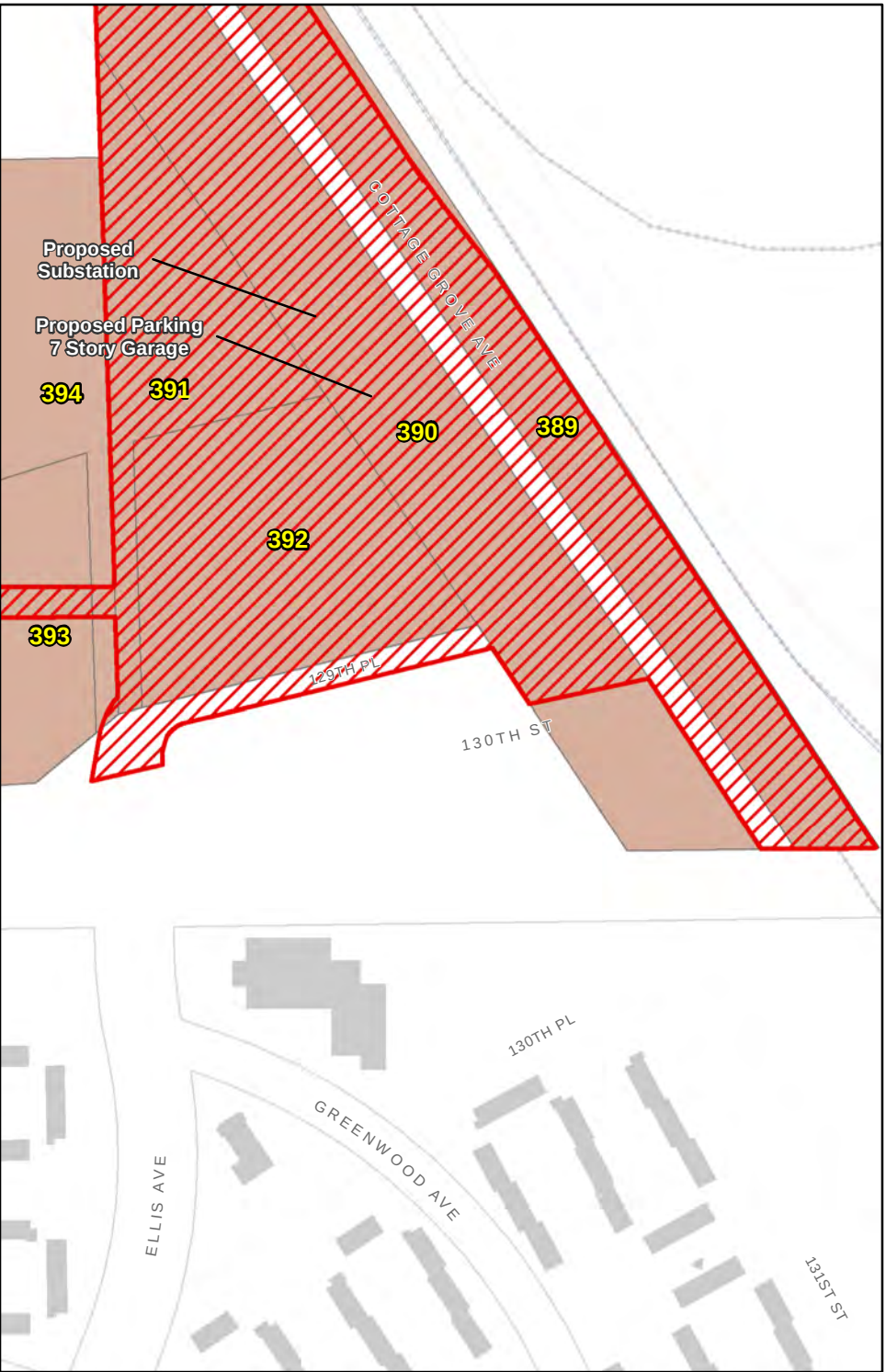

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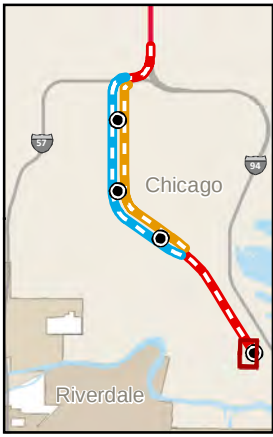

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UPRR Rail Alternative West Option

Sheet 21 of 21

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Appendix L

Neighborhoods and Community Impacts Technical Memorandum

- Final EIS Addendum L, Neighborhoods and Community Impacts Technical Memorandum, July 2022

Chicago Red Line Extension Project

Neighborhood and Community Impacts

Final EIS Addendum L

July 2022

Prepared for:
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567 W. Lake Street
Chicago, IL 60661

Prepared by:
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222 S. Riverside Plaza, Suite 610
Chicago, IL 60606

Table of Contents

Section 1 - Summary 1-1
Section 2 - Project Description and Background 2-1
Section 3 - Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-2
3.3 Area of Potential Impact (API) 3-2
3.4 Methods 3-2
Section 4 - Affected Environment 4-1
4.1 Community Profiles 4-1
4.2 Population, Housing, and Employment 4-2
4.3 Racial Composition 4-3
4.4 Age 4-4
4.5 Languages Spoken at Home 4-5
4.6 Community Mobility 4-5
4.7 Emergency Services 4-5
4.8 Community Resources 4-5
Section 5 - Impacts and Mitigation 5-1
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative - Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited 7-1

Figures

Figure 2-1: Left-East and West Options of the UPRR Rail Alternative (Draft EIS), Right-Preferred Alignment (Final EIS) 2-4
Figure 3-1: Community Areas in and Adjacent to the Area of Potential Impact (API) 3-3
Figure 4-1: Community Facilities in the Area of Potential Impact (API) (1 of 2) 4-7
Figure 4-2: Community Facilities in the Area of Potential Impact (API) (2 of 2) 4-8
Figure 4-3: Parklands in the Area of Potential Impact (API) (1 of 2) 4-9
Figure 4-4: Parklands in the Area of Potential Impact (API) (2 of 2) 4-10

Tables

Table 1-1: Neighborhoods and Communities – Impact Summary 1-2
Table 4-1: 2020 Population and Households in Affected Communities 4-2
Table 4-2: Housing Costs in Affected Communities 4-3
Table 4-3: Unemployment Rates in Affected Communities 4-3
Table 4-4: Racial Composition in Affected Communities 4-4
Table 4-5: Percentage of Population 65 Years and Older in Affected Communities 4-4
Table 4-6: Languages Spoken at Home in Affected Communities 4-5

Abbreviations

ADA	Americans with Disabilities Act
API	Area of Potential Impact
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
Conrail	Consolidated Rail Corporation
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
FPCC	Forest Preserves of Cook County
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act

NS	Norfolk Southern Railway
RLE	Red Line Extension
UPRR	Union Pacific Railroad

Section 1 - Summary

This addendum provides an overview of the changes to the neighborhood and community characteristics that define the Red Line Extension (RLE) Project area for the Final Environmental Impact Statement (EIS), including character and cohesion, mobility, and community resources. The addendum updates the impacts under the No Build Alternative and the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative, as compared with the Draft EIS.

The most recently available data from the Chicago Metropolitan Agency for Planning (CMAP), American Community Survey, and the U.S. Census (2014-2020) have been used to describe the neighborhood statistics. Changes to the overall affected environment since the Draft EIS, including changes to community resources, neighborhood demographics, and livability associated with the Area of Potential Impact (API), are described in the following sections. **Table 1-1** summarizes impacts and mitigation measures identified within this addendum since the Draft EIS.

Table 1-1: Neighborhoods and Communities – Impact Summary

Alternative	Permanent Impacts			Construction Impacts
	Community Character and Cohesion	Mobility	Community Resources	
No Build Alternative	No Impacts	No Impacts	No Impacts	No Impacts
Preferred Alignment	In the communities of Washington Heights and Roseland, the elevated structure through Fernwood Parkway would change the neighborhood setting of the park and the houses facing it, which represents an adverse impact remaining after mitigation. The adverse impact would also include the 103rd Street station and the area near the 107th Place cross-over due to the change in residential character. There would be adverse visual impacts remaining after mitigation in the West Pullman community at 117th Street and Prairie Avenue due to the elevated structure and in the Riverdale community near the Altgeld Gardens neighborhood due to the 130th Street station park & ride facility.	Beneficial impacts for all communities near the project.	Impacts would not be adverse after mitigation for all communities near the project.	Impacts would not be adverse after mitigation for all communities near the project.

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the

UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

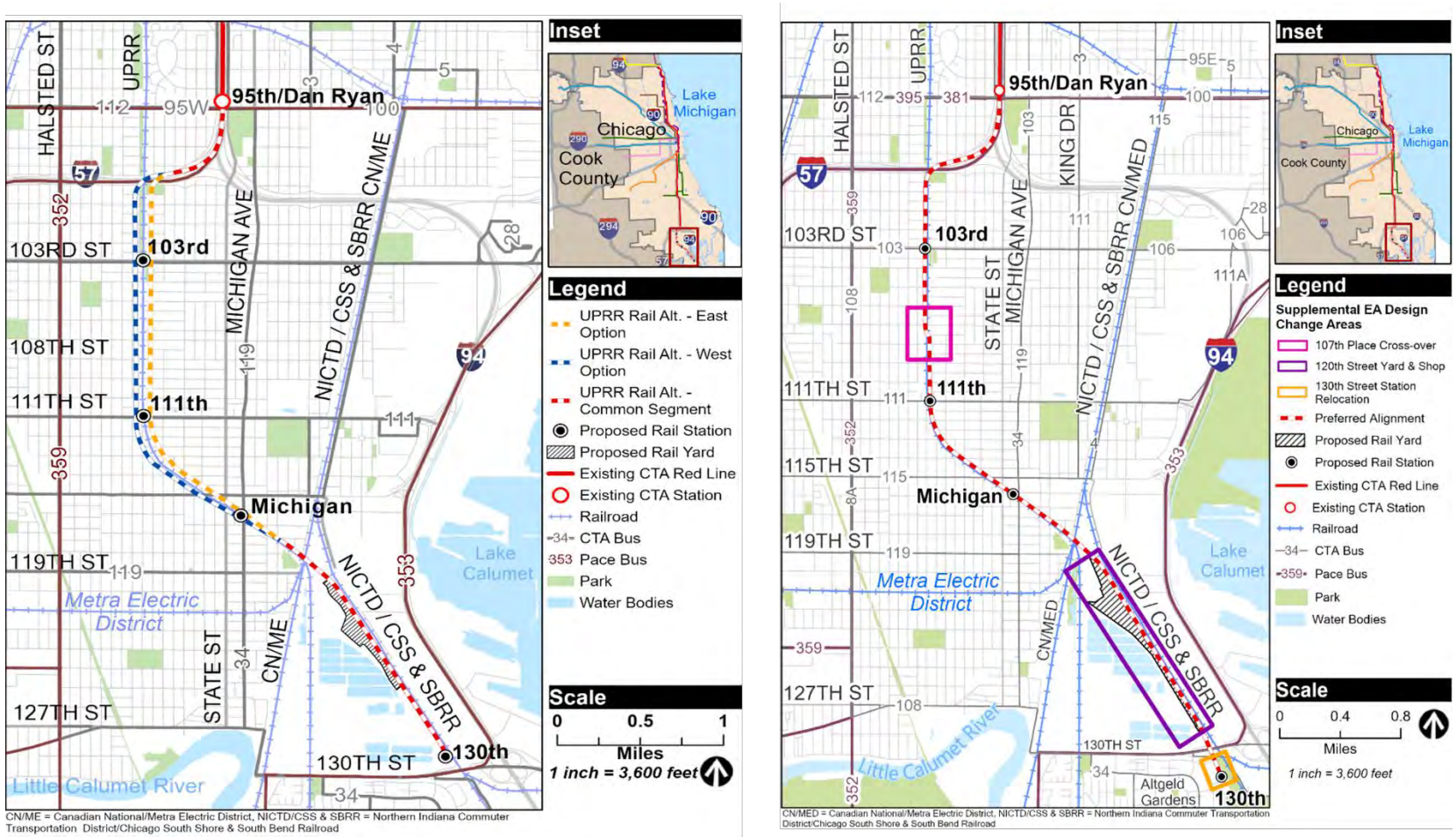

Figure 2-1: Left-East and West Options of the UPRR Rail Alternative (Draft EIS), Right-Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix L** of the Draft EIS have been carried forward to analyze the neighborhood and community impacts. This section documents the consistency with the Draft EIS **Appendix L** and associated updates to the corresponding guidelines directing the methods.

3.1 Regulatory Framework

The Federal Highway Administration (FHWA) and Illinois Department of Transportation (IDOT) both have Community Impact Assessment Manuals (FHWA 2018, IDOT 2007a), which CTA used to evaluate potential neighborhood and community impacts of the Preferred Alignment. The analysis considers the following types of impacts:

Community Character and Cohesion – Impacts due to commercial and residential displacements and changes in land use, visual/aesthetics, noise levels, and population/ demographics. Community character is an attribute of a geographic area with identifiable characteristics that make it unique. Community cohesion is an attribute of a geographic area, where segmentation or division of the area would reduce its desirability to current and future residents. An impact on community character and cohesion would be adverse if impacts related to displacements and changes in land use, visual/aesthetics, noise levels, and population/demographics are adverse.

Mobility - Overall community impacts of changes in transportation options, travel patterns, business activity, access to jobs, and access for emergency service providers. For the Final EIS, an impact on mobility would be adverse if transportation options, access to jobs, and access for emergency service providers would be reduced.

Community Resources - Impacts on key facilities in the API that play an important role in shaping and defining the community, such as landmarks, parks, community centers, and other places that serve as focal points or provide community services. For the Final EIS, an impact on community resources would be adverse if key facilities in the API would be directly affected or access to key facilities would be reduced.

The neighborhood and community impact analysis involved creating detailed demographic and community profiles based on existing community area boundaries within a ½ mile of stations and 500 feet from the Preferred Alignment. CTA conducted field investigations to identify physical, social, or perceived barriers within the established communities. In addition, the analysis considered other potential visual, noise, and environmental impacts that could have ripple effects on the surrounding neighborhood. Mitigation measures would offset identified impacts, with an

emphasis on community and transit-supportive solutions to address temporary construction impacts. The regulatory framework for analysis of neighborhood and community impacts has changed slightly since the issuance of the Draft EIS. Notably, a critical part of the federal framework, the FHWA's manual titled *Community Impact Assessment: A Quick Reference for Transportation*, was updated in 2018. This update was reviewed to inform the assessment of neighborhood and community impacts for the Preferred Alignment. Otherwise, the regulatory framework has not changed considerably since the Draft EIS.

3.2 Impact Analysis Thresholds

The National Environmental Policy Act (NEPA) does not set specific thresholds of significance for neighborhood and community impacts; however, there is merit in maintaining the approach taken in the Draft EIS based on FTA and IDOT community impact guidance as the basis for the thresholds of impact for this project. There is no change to the Impact Analysis Thresholds from the Draft EIS **Appendix L**.

3.3 Area of Potential Impact (API)

The API evaluated by the *Neighborhood and Community Impact Technical Memorandum* (**Appendix L**) has changed since the Draft EIS, to represent the reduction in alternatives (e.g., Halsted Street and Michigan Avenue Bus Rapid Transit alternatives, etc.) to only the Preferred Alignment that was derived from the East and West Options presented in the Draft EIS.

Figure 3-1 shows the community areas in and adjoining the API for the Preferred Alignment.

3.4 Methods

The analysis of potential neighborhood and community impacts of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS consistent with the **Appendix L**.

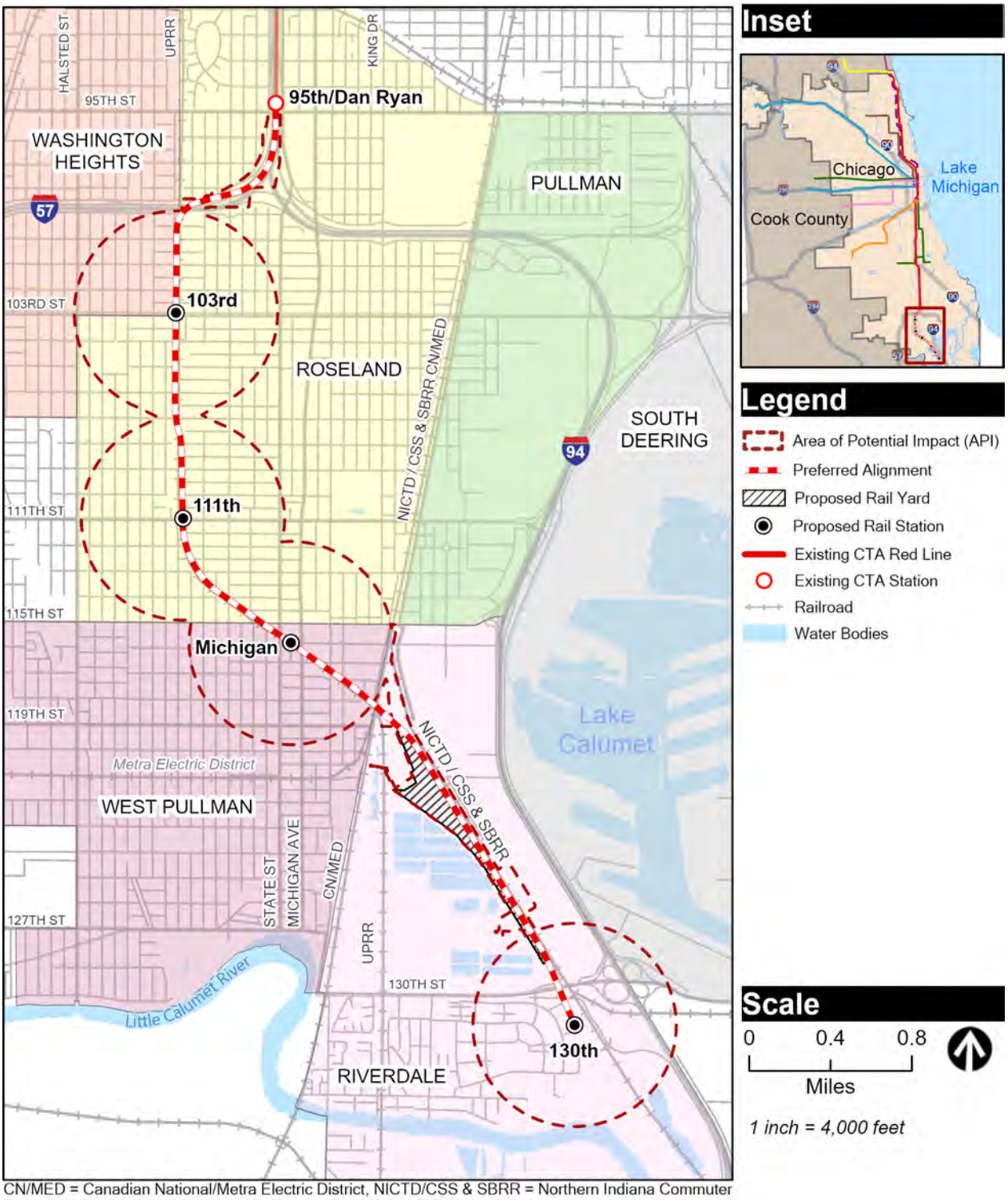

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Community Areas in and Adjacent to the Area of Potential Impact (API)

Section 4 - Affected Environment

This section has been updated to reflect any changes to the neighborhood and community conditions in the API since the publication of the Draft EIS. This section documents updates to the baseline data and planning horizon, as well as any changes to the communities and jurisdictions affected by the Preferred Alignment. This section describes the impacts of the Preferred Alignment on the surrounding neighborhood and community resources. The analysis considered the surrounding community context and character, community mobility, and community facilities near the project corridor such as schools, parks, and community centers. The *Transportation Technical Memorandum* (**Addendum** H), *Parklands and Community Facilities Technical Memorandum* (**Addendum M**) and *Section 4(f) Replacement Park Analysis Technical Memorandum* (**Addendum Y**) contain additional details.

4.1 Community Profiles

The following provides a community profile for each community within the API and summarizes any changes to the neighborhoods if applicable since the Draft EIS publication in 2016.

4.1.1 Washington Heights

Washington Heights in the API primarily consists of single-family homes along a grid of one-way streets with low- to medium-density commercial areas with off-street parking along major arterial streets. Blocks are well maintained, and many have community-organized block associations that provide neighborhood watch programs and other initiatives.

4.1.2 Roseland

Roseland in the API consists primarily of single-family homes along one-way streets with block associations similar to Washington Heights. Michigan Avenue serves as a major retail and commercial corridor, and several blocks also contain single-family and multifamily housing. Michigan Avenue and 111th Street have been identified as corridors of focus within the INVEST South/West initiative, which are corridors that support existing business development and create opportunities for investment. Within Roseland, the greatest amount of retail activity occurs between 111th and 115th Streets, with the areas to the north consisting of automobile-oriented land uses. Subsequent to the issuance of the Draft EIS, the CTA 95th/Dan Ryan terminal improvements have been completed and are open to the public, including a new station house, a bus terminal, a pedestrian bridge, and a pick-up/drop-off area for vehicles. This facility was under construction during the Draft EIS.

4.1.3 West Pullman

West Pullman in the API includes portions of the Michigan Avenue commercial corridor, as well as several large industrial and utility properties. Along Michigan Avenue, many commercial buildings have residential units in their upper floors. Several Spanish-speaking businesses and households are also in the area.

4.1.4 Riverdale

Much of the Riverdale community area in the API is occupied by the Metropolitan Water Reclamation District of Greater Chicago (MWRD) facility and freight railroad properties. The southern portion of Riverdale contains the Altgeld Gardens and Philip Murray Homes neighborhood and the single-family Eden Green and Golden Gate neighborhoods. The Altgeld Gardens neighborhood is a CHA neighborhood built in 1945. Since the Draft EIS, units to the east of Greenwood Avenue (Blocks 11, 12, and 13) were demolished by CHA. The remaining units have been renovated since the Draft EIS was published.

4.2 Population, Housing, and Employment

U.S. Census data were used to report existing population and number of households in the RLE Project affected communities. **Table 4-1** presents the updated population statistics.

Table 4-1: 2020 Population and Households in Affected Communities

Area	Population	Households
Washington Heights	25,065	9,538
Roseland	38,816	15,080
West Pullman	26,104	9,650
Riverdale	7,622	2,523

Source: Chicago Metropolitan Agency for Planning (CMAP) Neighborhood Data, 2020 Census

Since the Draft EIS, housing and rental prices in the neighborhoods have increased. **Table 4-2** presents the updated housing costs.

Table 4-2: Housing Costs in Affected Communities

Area	Median Home Value	Median Monthly Rent
City of Chicago	$246,500	$930
API	**$117,792**	**$807**
Washington Heights	$143,891	$913
Roseland	$123,015	$863
West Pullman	$105,809	$780
Riverdale	$68,267	$474

Source: U.S. Census Bureau 2014-2018

Since the Draft EIS, unemployment rates have changed in the neighborhoods. **Table 4-3** presents current information related to unemployment rates in the neighborhoods.

Table 4-3: Unemployment Rates in Affected Communities

Area	Unemployment Rate
City of Chicago	8.9%
API	**22.6%**
Washington Heights	18.2%
Roseland	22.9%
West Pullman	23.4%
Riverdale	33.3%

Source: U.S. Census Bureau 2014-2018d

4.3 Racial Composition

Since the Draft EIS, racial composition rates have changed in the neighborhoods. **Table 4-4** presents current information related to racial composition in the neighborhoods.

Table 4-4: Racial Composition in Affected Communities

Area	White Alone	Hispanic	Black or African American Alone	American Indian/Native Alaskan Alone	Asian Alone	Native Hawaiian and Other Pacific Islander Alone	Some Other Race Alone	Multiracial
City of Chicago	32.82%	28.99%	29.73%	0.12%	6.36%	0.01%	0.20%	1.76%
API	**2.0%**	**3.7%**	**92.3%**	**0.1%**	**0.2%**	**0.0%**	**0.7%**	**1.0%**
Washington Heights	1.0%	0.6%	96.9%	0.0%	0.1%	0.0%	0.0%	1.3%
Roseland	1.2%	1.2%	96.1%	0.1%	0.4%	0.0%	0.5%	0.5%
West Pullman	0.7%	5.7%	92.1%	0.1%	0.1%	0.0%	0.2%	1.2%
Riverdale	1.8%	2.6%	95.3%	0.0%	0.3%	0.0%	0.0%	0.0%

Source: U.S. Census Bureau 2014-2018a

4.4 Age

Since the Draft EIS, age percentages for those 65 and older have changed in the neighborhoods. **Table 4-5** presents current information related to age in the neighborhoods.

Table 4-5: Percentage of Population 65 Years and Older in Affected Communities

Area	Percent of Population
City of Chicago	12.0%
API	**15.5%**
Washington Heights	19.9%
Roseland	17.3%
West Pullman	14.7%
Riverdale	4.9%

4.5 Languages Spoken at Home

Since the Draft EIS, languages spoken at home have changed in the neighborhoods. **Table 4-6** presents information related to languages in the neighborhoods.

Table 4-6: Languages Spoken at Home in Affected Communities

Area	English	Spanish	Other Indo-European Languages	Asian or Pacific Island Languages	Other Languages
City of Chicago	66.3%	19.9%	7.6%	4.4%	1.8%
API	**93.15%**	**4.95%**	**1.09%**	**0.29%**	**0.52%**
Washington Heights	97.6%	1.0%	1.1%	0.3%	0.0%
Roseland	95.0%	2.2%	1.5%	0.5%	0.7%
West Pullman	90.9%	7.0%	1.2%	0.0%	0.9%
Riverdale	96.7%	2.7%	0.0%	0.3%	0.4%

Source: U.S. Census Bureau 2014-2018i

4.6 Community Mobility

The CTA 95th/Dan Ryan terminal improvements have been completed, including a new station house, a bus terminal, a pedestrian bridge, and a pick-up/drop-off area for vehicles. This facility was under construction during the Draft EIS. It is now complete and open to the public.

4.7 Emergency Services

The emergency services referenced in **Appendix L** of the Draft EIS were reviewed and there are no changes to the emergency services in the neighborhoods in the area of the Preferred Alignment.

4.8 Community Resources

The number of community resources has been updated since the publication of the Draft EIS to reflect resources within the API of the Preferred Alignment. There are 100 community facilities within the API of the Preferred Alignment compared to 76 community facilities within the API for the East and West Options in the Draft EIS. These include community facilities that are adjacent

to the Preferred Alignment and/or are within a ½ mile of a proposed station location. They include 62 religious facilities, 12 schools, 6 community centers, 3 fire stations, 4 healthcare centers or hospitals, 1 library, 9 landmarks, and 5 government facilities. Details about each community facility, including addresses and locations relative to the Preferred Alignment, can be found in the **Addendum M**. One community facility, Chicago Fire Department – Engine 93, is both a fire station and a landmark. Mary Magdalene Missionary Baptist Church is both a place of worship and a landmark. These two community facilities were included in the Fire Station and Landmark and in the Place of Worship and Landmark categories in **Addendum M.** However, they were counted only once in the total number of affected community facilities. **Figures 4-1** and 4-2 show the community facilities in the API.

The Agape Community Center at 342 W. 111th Street is located east of the Preferred Alignment. The Preferred Alignment would require the use of a City-owned parcel located west of the Agape Community Center. CTA has designed an alternative parking location on the east side of the Agape Community Center.

Figures 4-3 and 4-4 show the parklands in the API. Additional information can be found in **Addendum M**. The relocation of the 130th Street station following the publication of the Draft EIS brought the station closer to the Beaubien Woods Forest Preserve and George Washington Carver Park. Beaubien Woods Forest Preserve is a 279-acre forest preserve, owned by the Forest Preserves of Cook County (FPCC) and is located in Riverdale. The northern end of the Beaubien Woods Forest Preserve is a linear green space that parallels the Conrail tracks from just south of Old 130th Street to 132nd Street. This linear green space is open space except for an access road. The Beaubien Woods Forest Preserve has a boat launch area south of 132nd Street providing access to the Little Calumet River. George Washington Carver Park is a 19-acre park that offers a swimming pool and indoor and outdoor recreational facilities. It is owned by the Chicago Park District.

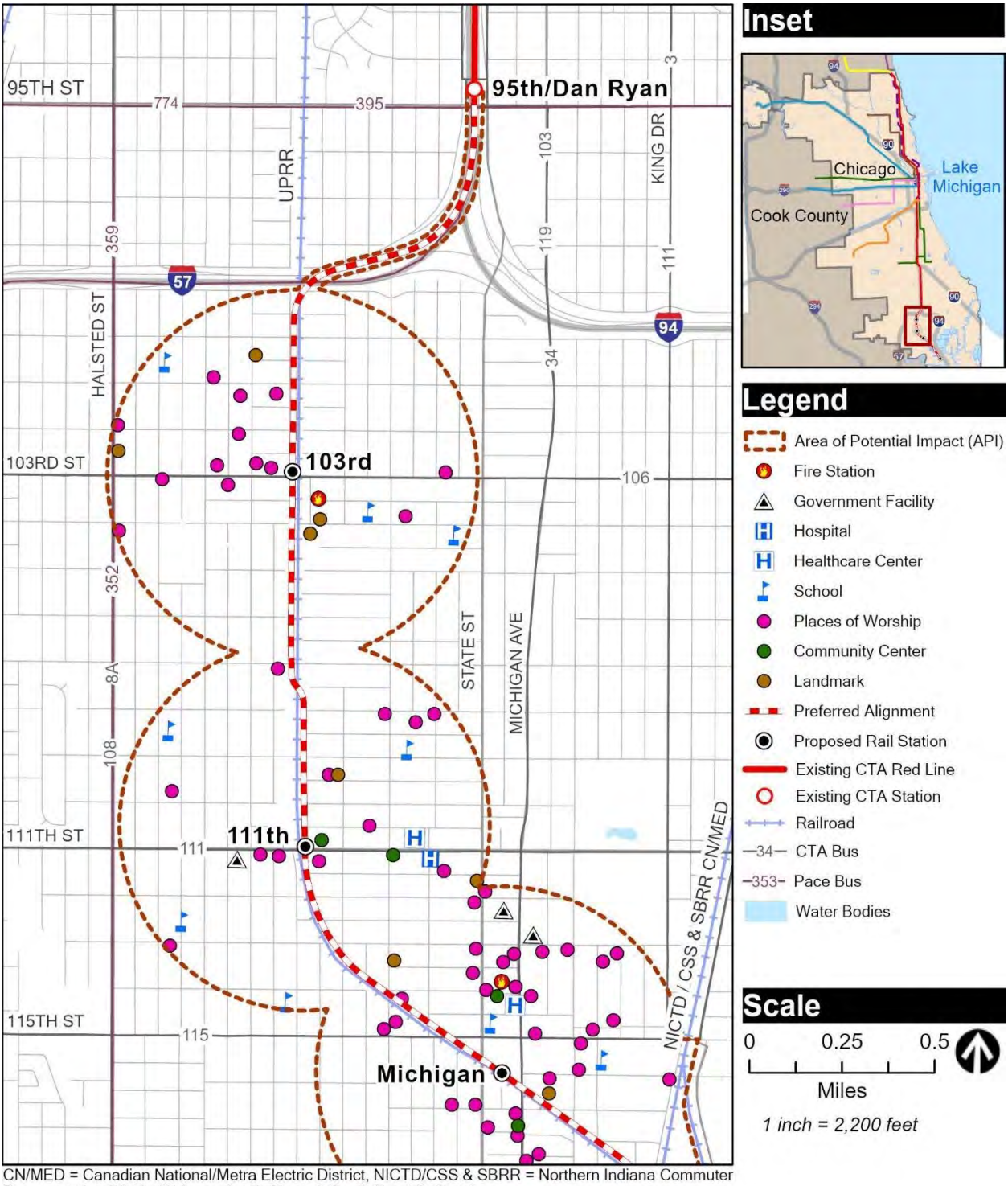

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-1: Community Facilities in the Area of Potential Impact (API) (1 of 2)

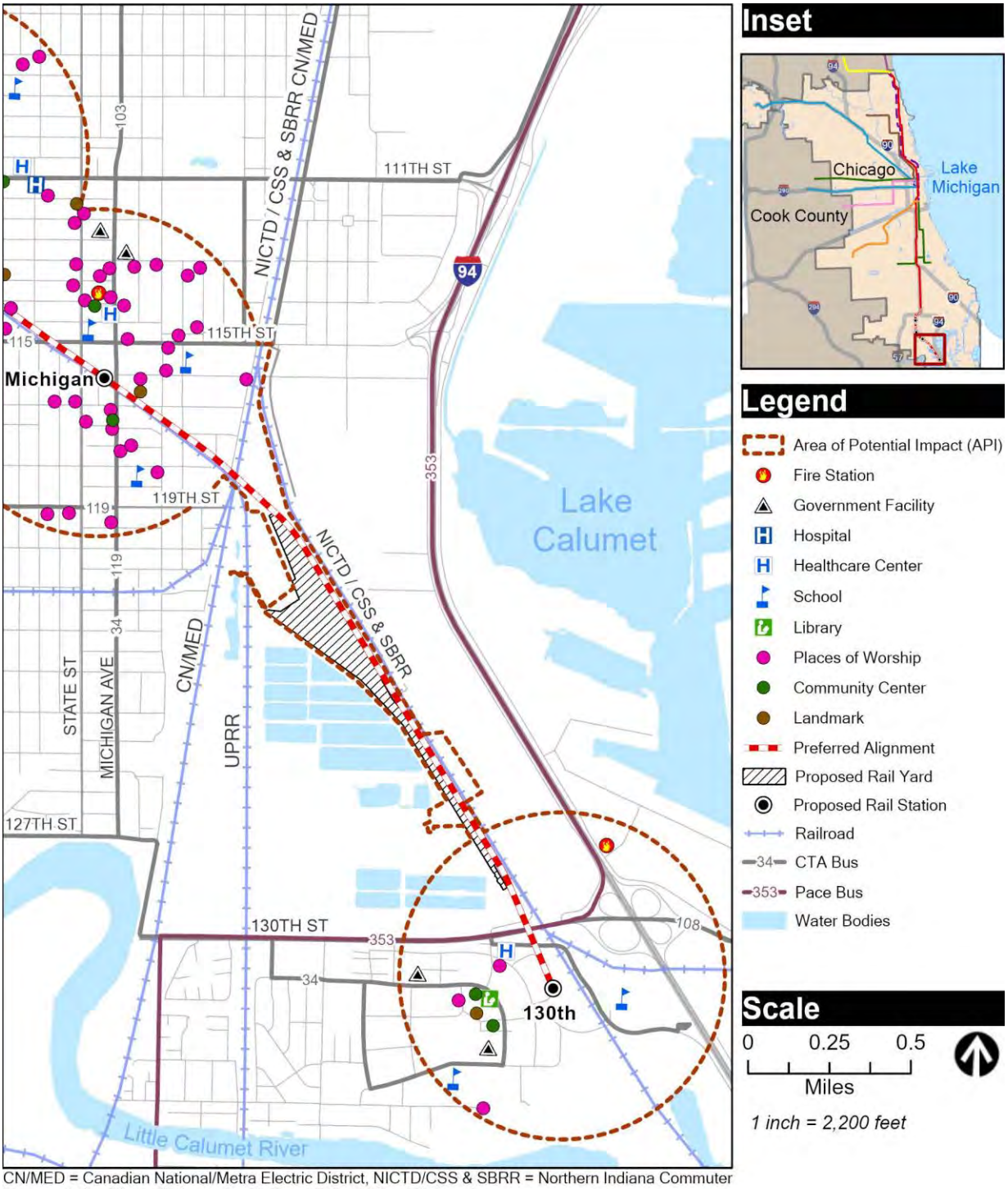

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-2: Community Facilities in the Area of Potential Impact (API) (2 of 2)

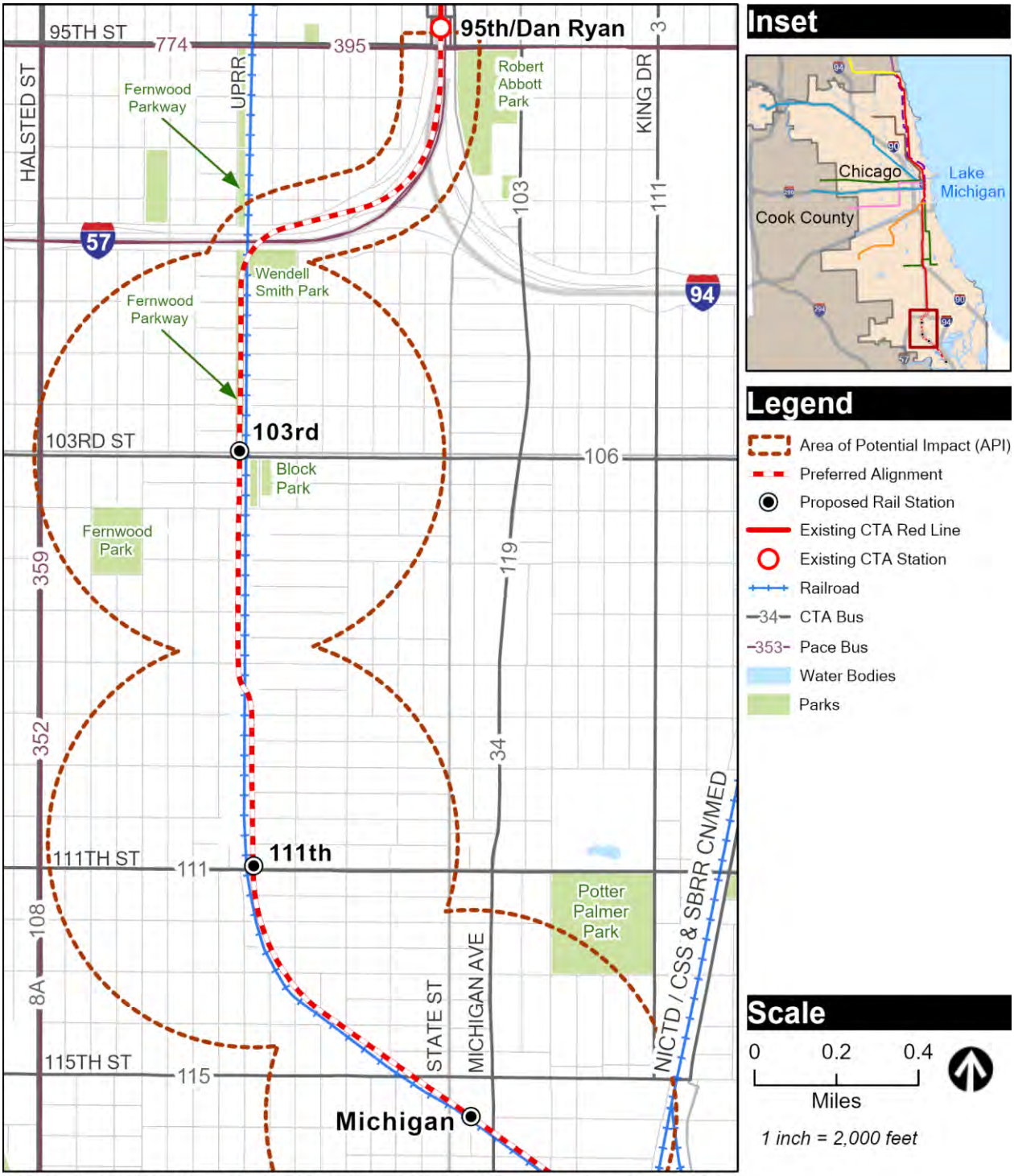

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-3: Parklands in the Area of Potential Impact (API) (1 of 2)

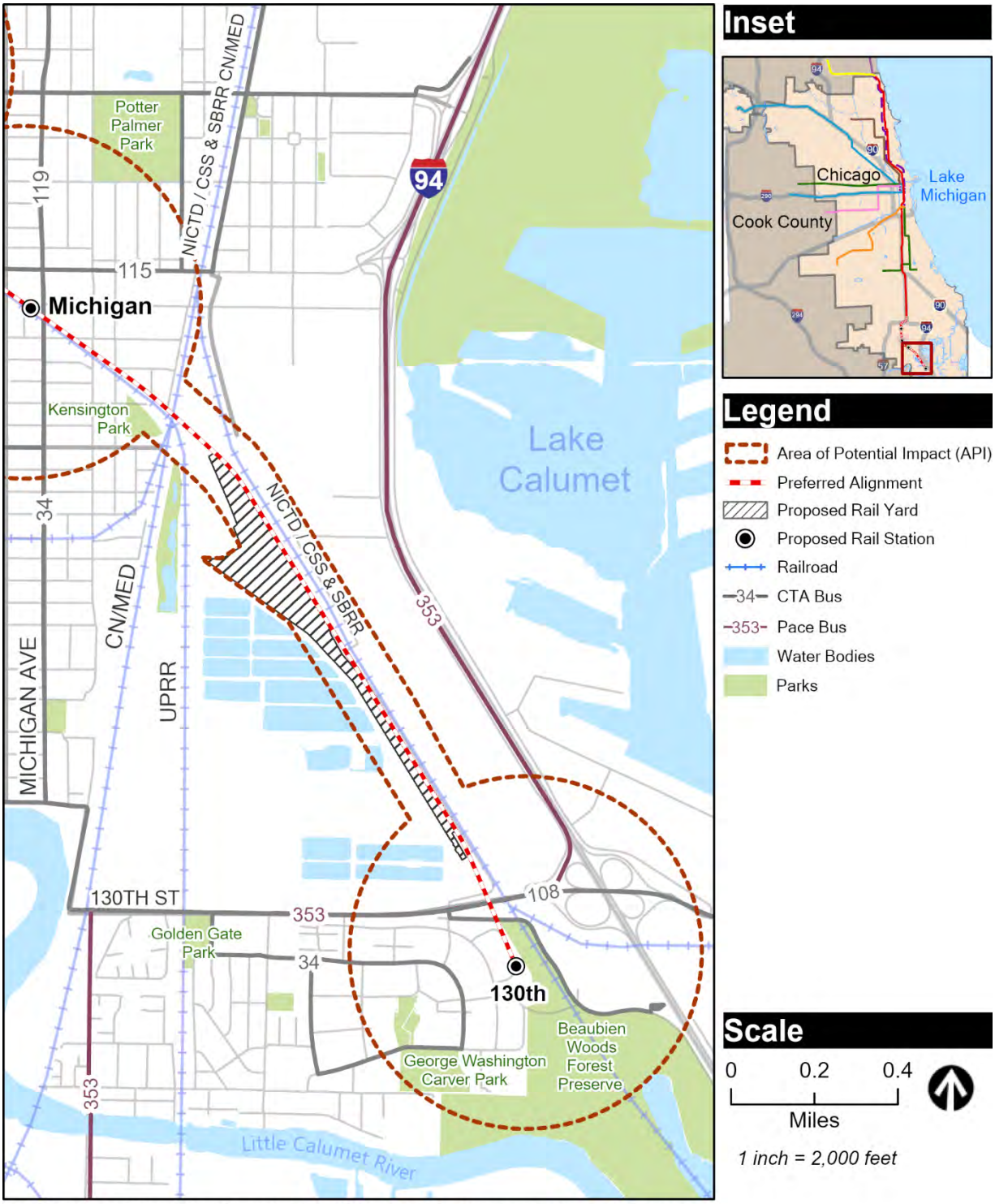

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-4: Parklands in the Area of Potential Impact (API) (2 of 2)

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to affected communities. This analysis was prepared according to the *Community Impact Assessment: A Quick Reference for Transportation* (USDOT 2018).

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

This section also documents the new or revised mitigation measures for identified project impacts, where applicable Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative would not involve any new construction for the RLE Project. There would be no major service improvements or new transportation infrastructure beyond projects that are listed in CMAP's *ONTO 2050 Plan* and Transportation Improvement Program. The transit network within the project area would remain largely the same as it is now.

5.1.1 Permanent Impacts and Mitigation – No Build Alternative

As described in **Appendix L** in the Draft EIS, because no RLE Project would be built, there would be no permanent impacts to community character and cohesion, community resources, and mobility or community development.

5.1.2 Construction Impacts and Mitigation – No Build Alternative

As described in **Appendix L** in the Draft EIS, because no RLE Project would be built, there would be no construction impacts to community character and cohesion, nor construction-related disruption to community resources in the project area. There also would be no construction-related mobility and business disruption associated with the RLE Project; however, it would fail to create new construction jobs or support economic growth in the project area.

5.1.3 Cumulative Impacts and Mitigation – No Build Alternative

As described in **Appendix L** in the Draft EIS, although the No Build Alternative would not cause any adverse impacts, the lack of improved transportation options and new infrastructure would do little to reverse the disinvestment in the project area that has occurred over the past several decades. No mitigation measures would be required.

5.2 Union Pacific Railroad Alternative - Preferred Alignment

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

The following summarizes the permanent impacts of the Preferred Alignment for each of the potential impact areas.

5.2.1.1 Community Character and Cohesion

The following permanent adverse impacts related to community character and cohesion have been updated since the publication of the Draft EIS include:

The removal of vegetation for the elevated structure of the Preferred Alignment would alter the viewshed of the remaining residences in Roseland, Washington Heights, and West Pullman. Because the relocated 130th Street station would include a park & ride facility with a four-level garage and surface parking lot, and other structures, there would also be adverse visual impacts in Riverdale due to the relocation of the 130th Street station for residences that front Greenwood Avenue. The residential character and scale would be noticeably altered by the addition of the RLE Project. Detailed information on the adverse visual impacts and associated mitigation measures can be found in *Visual and Aesthetic Conditions Technical Memorandum* (**Addendum N**).

5.2.1.2 Mobility

There would be beneficial impacts on mobility throughout Roseland, Washington Heights, West Pullman, and Riverdale. As discussed in *Transportation Technical Memorandum* (**Addendum H**), there would be increased access to transportation options, beneficial impacts to travel patterns, increased opportunities for business activity, better access to jobs, and no change in access for emergency service providers. There would be beneficial impacts to pedestrian and bicycle access as gaps in sidewalks near stations would be improved and would be Americans with Disabilities Act (ADA)-compliant. The existing at-grade crossings would be improved with gates at the sidewalks and increased lighting.

Because the 130th Street station has been relocated to the south side of 130th Street since the Draft EIS, Old 130th Street would require closure. In Riverdale, the closure of Old 130th Street would eliminate one of three access routes to the Carver Military Academy High School. However, closure of this route would not result in an adverse impact because the primary access to the school is from 130th Street to Ellis Avenue to Greenwood Avenue to 132nd Street. The secondary access from Doty Avenue from the south would remain unchanged. This change in access to the high school is not considered an adverse impact because two access points would remain. No mitigation measures would be required.

The closure of Old 130th Street would eliminate a connection to the access road into the Beaubien Woods Forest Preserve from Old 130th Street. Closure of this connection would not result in an adverse impact because the primary access to Beaubien Woods Forest Preserve is from Ellis Avenue to Greenwood Avenue to 132nd Street.

5.2.1.3 Community Resources

Community resources in Roseland would be affected by the RLE Project. For Wendell Smith Park detailed information on the impacts and associated mitigation measures can be found in **Addendum Y**. Two churches within the API would be displaced because they fall within the proposed right-of-way for the Preferred Alignment. The Now Faith Church of God Holiness was disclosed in the Draft EIS. In Roseland, the New St. Mary Church of Prayer located at 341 W. 111th Street is a place of worship east of the Preferred Alignment. The entire building and parcel would be potentially affected by the project and the parcel used as parking for the 111th Street station. This is a new displacement because this proposed parcel use had not been identified when the Draft EIS was completed. The Preferred Alignment would require the use of a City-owned parcel that would affect its current use by the Agape Community Center for parking. However, the impacts to the Agape Community Center would not be adverse with mitigation. CTA would continue to coordinate with the Agape Community Center to include an alternative parking location for the Agape Community Center in the final design of the RLE Project. CTA would also maintain truck access to the north side of the Agape Community Center building.

In Washington Heights, Fernwood Parkway detailed information on the impacts and associated mitigation measures can be found in **Addendum Y**. Aside from Wendell Smith Park discussed in the Roseland impacts above, no other community parklands discussed in **Section 4.3** would be affected by the RLE Project. In addition, no community resources in West Pullman would be affected by the RLE Project.

In Riverdale, the 130th Street station access road requires closure of Old 130th Street at the new RLE track crossing. Old 130th Street provides an existing connection to the Beaubien Woods Forest

Preserve access road east of the new RLE at-grade track crossing. Closure of Old 130th Street would eliminate the access road connection into the Beaubien Woods Forest Preserve from Old 130th Street. However, the main access route to the Beaubien Woods Forest Preserve would continue to be from Ellis Avenue to Greenwood Avenue to 132nd Street. The relocation of the 130th Street station was not part of the Draft EIS. Impacts to the Beaubien Woods Forest Preserve are new and were not disclosed in the Draft EIS and, therefore, did not include the closure of Old 130th Street or removal of any trees south of 130th Street. However, with mitigation measures, no adverse impacts to Beaubien Woods Forest Preserve are anticipated. The mitigation and enhancement measures for Beaubien Woods Forest Preserve would follow the lower-impact scenario discussed in FPCC's mitigation concurrence letter to offset the diminished access to the boat launch access road. CTA would uphold their role in the mitigation measures agreed upon by the FPCC. Mitigation and enhancement measures are currently anticipated to include the following:

- Transfer of two City-owned parcels into FPCC ownership
- $250,000 payment to FPCC for ecological restoration, habitat enhancement and beautification of expanded Beaubien Woods Boat Launch land
- New trail connection from Altgeld Gardens recreation facilities on 133rd Street to the Beaubien Woods Boat Launch
- Wayfinding and information signage inside the proposed station and outdoor signage at 130th Street and Ellis Avenue and other locations
- Forest Preserve advertising to encourage CTA riders to use public transportation to visit the Forest Preserves at the 130th Street station, other Red Line stations south of Roosevelt, and inside local trains and buses

FPCC provided their mitigation concurrence letter on May 13, 2021. This letter and other FPCC and CTA coordination is included in **Addendum M**.

The relocation of the 130th Street station also affects the eastern portion of TCA Health because a portion of its property it would be located within the proposed right-of-way; this parcel would be partially acquired as part of the RLE Project. CTA would continue to coordinate with TCA Health to maintain access to the TCA Health parking lot and replace parking space impacts, if any, at a ratio of 1 to 1 in the final design of the RLE Project. With mitigation measures, the impacts to TCA Health would not be adverse.

5.2.2 Construction Impacts and Mitigation – Preferred Alignment

Community disruption would occur temporarily during construction for the Preferred Alignment. Most of the construction activities and staging would occur within street right-of-way, properties to be acquired as part of the project's permanent envelope, and potentially other nearby vacant

parcels through the establishment of temporary construction easements. Construction activities would cause temporary impacts such as truck traffic, roadway detours, noise, vibration, and dust. Mitigation associated with truck traffic and roadway detours can be found in **Addendum H**; noise and vibration mitigation can be found in the *Noise and Vibration Technical Memorandum* (**Addendum O**); dust mitigation can be found in the *Air Quality Technical Memorandum* (**Addendum U**). Construction impacts and mitigation recommended for neighborhoods and community facilities under the Preferred Alignment would be similar to the East and West Options in the Draft EIS.

Neighborhoods would experience visual impacts, noise, and dust during construction on an intermittent basis, but impacts on the Washington Heights, Roseland, and West Pullman communities would not be adverse through the use of best maintenance practices. The 120th Street yard and shop would be located far enough from established communities so that no construction impacts would occur. Mitigation measures associated with visual impacts, noise, and dust can be found in **Addenda N**, **O**, and **U**, respectively.

Construction activities would result in additional truck traffic and temporary street closures throughout Roseland, Washington Heights, West Pullman, and Riverdale. Anticipated hauling routes would be coordinated throughout the RLE Project to minimize the number of trucks and equipment passing through sensitive areas of the community and would utilize highways and major arterials over local roads to the extent feasible and practicable. Religious facilities, schools, community centers, and other facilities near the alignment and stations would be subject to temporary adverse impacts associated with potential traffic detours; however, access would be maintained throughout the duration of the project. Detours would be provided to maintain access to adjacent properties during construction, and CTA would coordinate with Pace so bus transit service would detour around roadway closures. Businesses around the alignment and parking structures could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Temporary roadway delays due to truck traffic and construction equipment would occur.

CTA would provide early notification of construction activities and provision of temporary alternative access routes for the community and advertising programs to increase the visibility of affected businesses during construction. Contractors would perform work in a manner consistent with local ordinances.

Construction-related impacts on neighborhoods and communities under the Preferred Alignment would not be adverse after implementation of mitigation measures as described above.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

Cumulative impacts include those from the RLE Project in addition to those of other past, present, and reasonably foreseeable projects. Consistent with the cumulative impacts under the UPRR East and West Options, construction and operation of the RLE Project would not reduce the overall quality or distribution of parklands and community facilities in the area. Therefore, there would be no adverse cumulative impacts because of the RLE Project. Improved transit in the area would result in benefits by improving access to parklands and community facilities in the area.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on neighborhoods and communities as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

Impacts remaining after mitigation are the same as in the Draft EIS for the communities of Washington Heights and Roseland. In the communities of Washington Heights and Roseland, the elevated structure through Fernwood Parkway would change the neighborhood setting of the park and the houses facing it, which represents an adverse impact remaining after mitigation. In West Pullman, impacts would not be adverse after mitigation. In Riverdale, there would be an adverse impact after mitigation due to the four-level height of the proposed 130th Street station parking garage changing the residential character of the neighborhood.

Section 7 - References Cited

The following are new references, updated from the Draft EIS **Appendix L**.

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Appendix L

Neighborhoods and Community Impacts Technical Memorandum

- Draft EIS Appendix L, Neighborhoods and Community Impacts Technical Memorandum, July 2015
  - Appendix A, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Neighborhood and Community Impacts

Technical Memorandum

August 13, 2013
Updated September 13, 2015

Prepared for:
Chicago Transit Authority
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Table of Contents

Section 1 Summary 1-1

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-4
3.4 Methods 3-5

Section 4 Affected Environment 4-1

4.1 Community Profiles 4-1
4.2 Population, Housing, and Employment 4-6
4.3 Ethnicity 4-10
4.4 Age 4-11
4.5 Languages Spoken at Home 4-12
4.6 Community Mobility 4-13
4.7 Emergency Services 4-14
4.8 Community Resources 4-15
4.9 Livability 4-24

Section 5 Impacts and Mitigations 5-1

5.1 No Build Alternative 5-2
5.2 Bus Rapid Transit Alternative 5-3
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-6
5.4 Union Pacific Railroad Rail Alternative - East Option 5-16
5.5 Union Pacific Railroad Rail Alternative - West Option 5-24
5.6 Halsted Rail Alternative 5-31

Section 6 Impacts Remaining After Mitigation 6-1

6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative – Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative – East Option 6-2
6.5 Union Pacific Railroad Rail Alternative – West Option 6-2
6.6 Halsted Rail Alternative 6-3

Section 7 References Cited 7-1

Appendix

Appendix A: 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 4-1: Project Area Communities 4-2
Figure 4-2a: Parks and Recreational Facilities (Northern Section) 4-16
Figure 4-2b: Parks and Recreational Facilities (Southwestern Section) 4-17
Figure 4-2c: Parks and Recreational Facilities (Southeastern Section) 4-18
Figure 4-3a: Other Community Resources (Northern Section) 4-19
Figure 4-3b: Other Community Resources (Southwestern Section) 4-20
Figure 4-3c: Other Community Resources (Southeastern Section) 4-21
Figure 5-1(a): 117th Street and Prairie Avenue Looking Northwest - East Option (Existing View) 5-20
Figure 5-1(b): 117th Street and Prairie Avenue Looking Northwest - East Option (Visualization) 5-20
Figure 5-2(a): Fernwood Parkway Looking South - West Option (Existing View) 5-26
Figure 5-2(b): Fernwood Parkway Looking South - West Option (Visualization) 5-26
Figure 5-3(a): 100th and Halsted Streets Looking North - Halsted Rail Alternative (Existing View) 5-33
Figure 5-3(b): 100th and Halsted Streets Looking North - Halsted Rail Alternative (Visualization) 5-33
Figure 5-4(a): Vermont Avenue Park & Ride Looking West - Halsted Rail Alternative (Existing View) 5-37
Figure 5-4(b): Vermont Avenue Park & Ride Looking West - Halsted Rail Alternative (Visualization) 5-37

Tables

Table 4-1: 2010 Population and Households within the Project Area as a Whole and in Affected Communities 4-7
Table 4-2: October 2012 Median Home and Rental Prices in Affected Community Areas 4-7
Table 4-3: Future Population, Households, and Employment within the Project Area as a Whole and in Affected Communities 4-9

Table 4-4: Unemployment Rate within the Project Area as a Whole and in Affected Communities..... 4-10
Table 4-5: Ethnicity within the Area of Project Area as a Whole and in Affected Communities..... 4-11
Table 4-6: Median Age within the Project Area as a Whole and in Affected Communities..... 4-11
Table 4-7: Age Ranges within the Project Area as a Whole and in Affected Communities..... 4-12
Table 4-8: Languages Spoken at Home within the Project Area as a Whole and in Affected Communities..... 4-13
Table 5-1: Summary of Benefits and Adverse Impacts Remaining after Mitigation 5-2

Abbreviations

BRT	Bus Rapid Transit
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FSRRFS	Far South Railroad Relocation Feasibility Study
FTA	Federal Transit Administration
IDOT	Illinois Department of Transportation
MWRD	Metropolitan Water Reclamation District
NEPA	National Environmental Policy Act
PUMA	public use microdata area
RLE	Red Line Extension
ROW	right-of-way
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
UPRR	Union Pacific Railroad
USDOT	United States Department of Transportation

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on neighborhoods and communities. For the purposes of this analysis, the affected environment includes the Village of Calumet Park and the Chicago community areas of Washington Heights, Roseland, Morgan Park, West Pullman, Pullman, and Riverdale.

The alternatives analyzed include the No Build Alternative, the Bus Rapid Transit (BRT) Alternative, the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative. The No Build Alternative would not involve any new construction beyond projects that are already planned and funded. The BRT Alternative would add enhanced bus service along Michigan Avenue connecting the 95th Street Terminal to 130th Street. The UPRR Alternative would extend the Chicago Transit Authority's (CTA's) Red Line heavy rail service from the existing 95th Street Terminal to 130th Street, primarily along the existing UPRR freight right-of-way (ROW). The UPRR Rail Alternative has three options for the positioning of the CTA tracks along the UPRR corridor: the ROW, East, and West Options. The Halsted Rail Alternative would extend the Red Line from 95th Street Terminal to Vermont Avenue, primarily along the median of Halsted Street.

This technical memorandum evaluates the potential impacts of the alternatives, including the yard and shop sites at 120th Street for the UPRR Rail Alternative and at 119th Street for the Halsted Rail Alternative, in accordance with the National Environmental Policy Act (NEPA). Criteria for evaluation include consideration of changes to community character, cohesion, resources, mobility, and development. The overall impacts of the RLE Project would be beneficial. The rail alternatives would improve quality of life, provide better access to jobs, and support the economic development of the Far South Side. Some location-specific adverse impacts would also occur as a result of the alternatives. Potential mitigation measures are identified to address potential adverse impacts where possible. The impact findings for the RLE alternatives are as follows:

- The No Build Alternative would not have adverse neighborhood and community impacts; however, it would lack the livability, mobility, and other community benefits that the other alternatives would provide.

- The BRT Alternative would not have adverse neighborhood and community impacts after mitigation, and impacts would be beneficial overall. The BRT Alternative would provide minor improvements in transit service, mobility, community character, and cohesion; however, it would have fewer livability, mobility, and other community benefits than the rail alternatives.

- The UPRR Rail Alternative ROW Option would not have adverse neighborhood and community impacts after mitigation, and impacts would be beneficial overall. The new rail

extension would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would provide substantial livability and mobility improvements for the neighborhoods in the project area, and help spur economic development near stations. It would also reduce the isolation of Altgeld Gardens and the other Riverdale residential areas. The ROW Option would also require the fewest displacements of any of the rail alternatives.

- The UPRR Rail Alternative East Option would have adverse impacts at 117th Street and Prairie Avenue in West Pullman because of visual impacts from the elevated track structure that could not be mitigated. Mitigation measures would not be sufficient to offset these impacts. The East Option would also provide benefits similar to those of the ROW Option. The East Option would require the greatest number of displacements of any of the rail alternatives.

- The UPRR Rail Alternative West Option would have adverse impacts that could not be mitigated because of visual impacts from the elevated track structure between 99th and 103rd Streets in Washington Heights. The 103rd Street station area in Roseland and Washington Heights, and at the Michigan Avenue station park & ride facility in West Pullman would also result in adverse visual impacts. Mitigation measures would not be sufficient to offset these impacts. The West Option would also provide benefits similar to the ROW Option and the East Option. The West Option would require fewer displacements than the East Option, and a greater proportion of the displacements would be industrial instead of residential.

- The Halsted Rail Alternative would have an adverse impact that cannot be mitigated in the West Pullman community along Green Street between Vermont Avenue and 128th Place. The single-family homes on the east side of the block would be acquired and removed to construct a seven-story park & ride garage. The garage would be out of scale and inconsistent with the single-story residential character of the neighborhood. No available mitigation measures would effectively offset this adverse impact. The Halsted Rail Alternative would also provide beneficial livability and mobility improvements for the neighborhoods in the project area, and help revive the Halsted Street commercial corridor. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would also serve communities that are geographically isolated, but would not directly serve Altgeld Gardens.

All other impacts would be mitigated, or would be beneficial, as discussed further in Section 5.

Updated July 28, 2015
In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix A of this technical memorandum summarizes the refined alignments

and any additional or different impacts that would result. The information in Appendix A supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The CTA is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single-family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the NEPA scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - ROW Option
  - East Option
  - West Option
- Halsted Rail Alternative

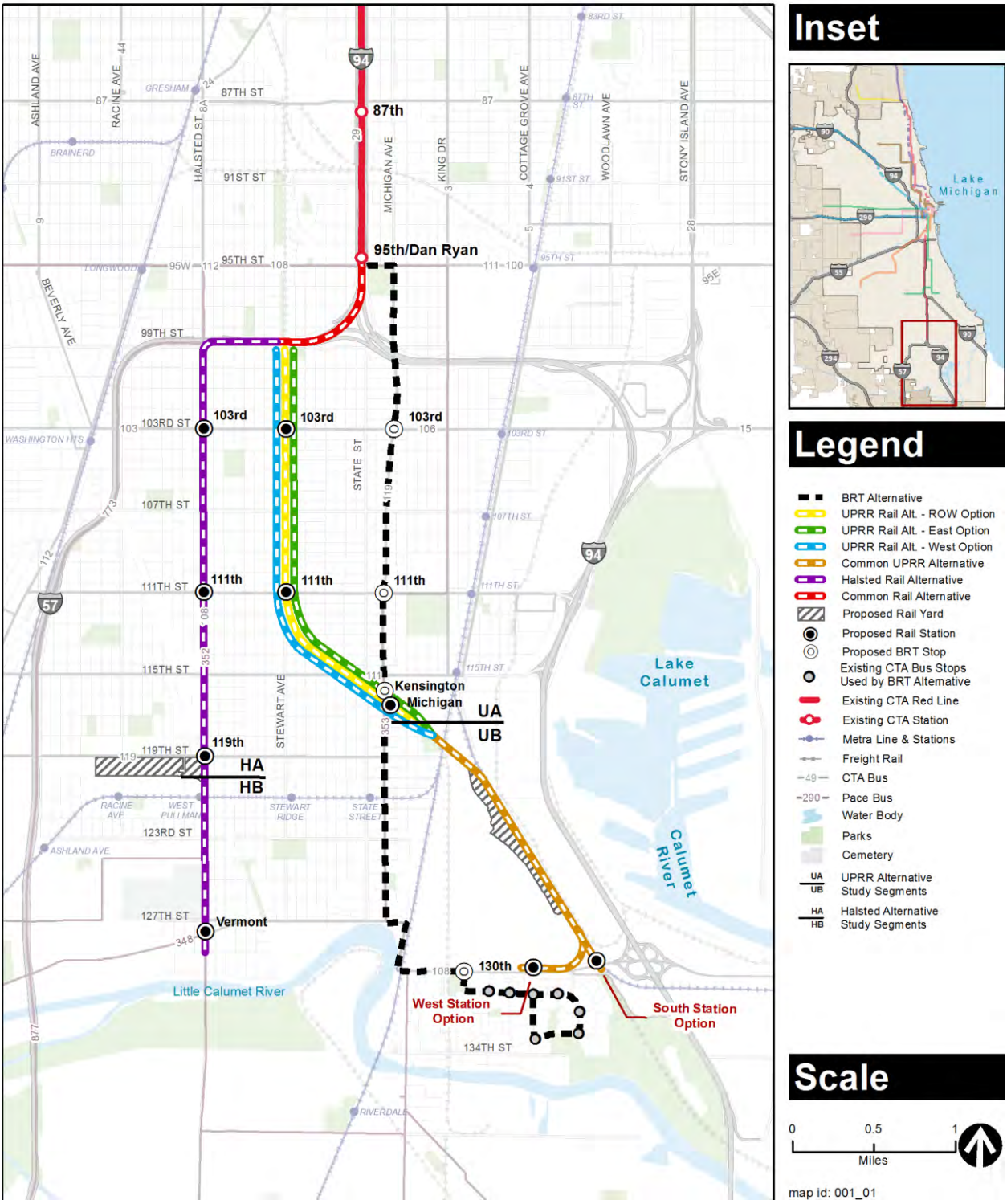

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement. The Transportation Improvement Program projects within the project area consist of improvements to the 95th Street Terminal, four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

Major transit infrastructure projects can affect the social and physical environment of neighborhoods and communities. Construction and operation of the RLE Project could result in changes to the physical layout of the surrounding areas, demographics, and land uses. The project could also change the sense of neighborhoods in local communities. This technical memorandum describes the methods used for the analysis of potential physical and social impacts on existing communities and neighborhoods.

3.1 Regulatory Framework

3.1.1 Federal

Federal regulations for analysis of potential impacts on communities and neighborhoods include NEPA and guidelines provided by the United States Department of Transportation (USDOT) Federal Transit Administration (FTA). A summary of the federal guidance for determining impact significance is presented in Section 3.2.

3.1.2 State

State regulations for analysis of potential impacts on communities and neighborhoods include the 2007 Illinois Department of Transportation (IDOT) *Community Impact Assessment Manual*. Section 3.2 describes the thresholds of significance identified by this manual.

3.1.3 Local

There are no identified local regulations at this time related to neighborhood and community impacts. As part of the project's technical research and analysis phase, this section may be updated with relevant citations of regional and local land use plans and zoning.

3.2 Impact Analysis Thresholds

NEPA does not set specific thresholds of significance for community impacts. Guidance provided by USDOT and IDOT was used as the basis for a qualitative evaluation of community impacts. The community impacts analysis was structured according to the IDOT Community Impact Assessment Manual, which includes four primary impact categories: community impacts as a result of relocations, community impacts as a result of economic development, community impacts as a result of land use changes, and community (cohesion) impacts. The USDOT (2008) guidance identifies qualitative criteria in question form for consideration when determining whether an adverse impact would occur. For the purpose of this EIS, the IDOT impact categories were used as primary screening for impacts and the USDOT qualitative impact criteria were generally used as a secondary screening for impacts, as summarized below.

Some of the findings are made in conjunction with the analysis from the following technical memoranda: Displacements and Relocations of Existing Uses; Land Use and Economic

Development; Visual and Aesthetic Conditions; Parklands and Community Facilities; Transportation; Safety and Security; and Environmental Justice. The community impact analysis considered overall impacts as they relate to the following four primary impact categories and related qualitative criteria.

3.2.1 Relocation Impacts on Neighborhoods

The IDOT guidance states that the following must be included in the analysis: estimate of displaced households/businesses; discussion of available alternative housing/business locations in the area; description of actions proposed to mitigate relocation problems; discussion of early consultation with local governments, business owners, and social agencies; and statements indicating that housing of last resort will be available without discrimination. The USDOT guidance provides qualitative criteria in question form for analysts to consider when determining whether an adverse impact would occur, including the following:

- Changes in Population: Would the project cause redistribution of the populations or an influx or loss of population?
- Displacement of Public Facilities: Would the project result in relocation or displacement of public facilities or community centers (e.g., places of worship)?
- Residential Displacements: How many residences would be displaced? What type(s) (e.g., multi-unit homes, single-family, rural residential, others)? Would the displaced residents have special needs (e.g., disabled, minority, elderly residents)?
- Business Displacement: How many businesses would be displaced? What type(s)? Do they have unique characteristics, such as specialty products or a unique customer base?
- Relocation Sites: Would there be available sites to accommodate those displaced?

This analysis will consider the community impacts with respect to the above criteria.

3.2.2 Economic Impacts on Neighborhoods

The IDOT guidance states that the following discussions must be included in the analysis: local and regional economic impacts; impacts on the economic vitality of existing businesses; and impacts on established business districts. The USDOT guidance provides qualitative criteria in question form for analysts to consider when determining whether an adverse impact would occur, including the following:

- Business and Employment Impacts: Would the project encourage businesses to move to the area, relocate to other locations within the area, close, or move outside the area?
- Short-term Impacts: How would the local economy be affected by construction activities? Would there be both positive (jobs generated) and negative (detours and loss of access) impacts?

- Business Visibility: Would the project alter business visibility for traffic-based businesses? How would visibility and access changes alter business activity?
- Tax Base: What would be the impact on the tax base (from taxable property removed from base, changes in property values, changes in business activity)?
- Property Values: What would be the likely impact on property values caused by relocations or change in land use?

This analysis considers the community impacts with respect to the above criteria and also uses the Major Capital Investment Projects FY 2013 Final Rule as references.

3.2.3 Land Use Impacts on Neighborhoods

The IDOT guidance states that the following discussions must be included in the analysis: compliance with local planning; impact on existing land uses; and joint development. The USDOT guidance provides qualitative criteria in question form for analysts to consider when determining whether an adverse impact would occur, including the following:

- Land Use Patterns: Would the project open new areas for development? Would it induce changes in land use and density? What changes might be expected?
- Compatibility with Plans: Would the project be consistent with local land use plans and zoning?
- Compatibility with Plans: Would the project be compatible with community goals? Have aesthetics surfaced as a community concern?

This analysis considers the community impacts with respect to the above criteria and also uses the Capital Investment Program FY 2013 Annual Report Evaluation and Rating Process and Final Rule as references.

3.2.4 Community Cohesion Impacts on Neighborhoods

The IDOT guidance states that the following discussions must be included in the analysis: changes in neighborhoods or community cohesion; changes in travel patterns; impacts on schools, recreation areas, churches, businesses, police/fire protection districts; impacts on public safety; and benefits and/or adverse impacts on special groups (e.g., disabled persons). The USDOT guidance provides qualitative criteria in question form for analysts to consider when determining whether an adverse impact would occur, including the following:

- Community Cohesion and Interaction: How would the project affect interaction among persons and groups? How would it change social relationships and patterns?
- Isolation: Would certain people be separated or set apart from others?
- Social Values: Would the project cause a change in social values?

- Quality of Life: What would be the perceived impact on quality of life?
- Barrier Effect: Would a wall or barrier effect be created (such as from noise walls or fencing) or would a barrier be removed (such as an embankment)?
- Sounds: Would noise or vibration increase?
- Other Physical Intrusions: Would dust or odor increase or decrease? Would there be a shadowing impact on property?
- Aesthetics: Would the community's aesthetic character be changed?
- Pedestrian and Bicycle Access: How would the project affect non-motorist access to businesses, public services, schools, and other facilities? Would the project impede or enhance access between residences and community facilities and businesses? Would it shift traffic?
- Public Transportation: How would the project affect access to public transportation?
- Vehicular Access: How would the project affect short- and long-term vehicular access to businesses, public services, and other facilities? Would it affect parking availability?
- Use of Public Facilities: Would the project lead to or help alleviate overcrowding of public facilities (e.g., schools, libraries, and recreation facilities)?
- Pedestrian and Bicycle Safety: Would the project increase or decrease the likelihood of accidents for non-motorists?
- Crime: Would the project increase or decrease crime?
- Emergency Response: Would there be changes in emergency response time (fire, police, and emergency medical)?
- Effect on Neighborhoods: What would be the impacts on the neighborhood from which people move and into which people are relocated?
- This analysis considers the community impacts with respect to the above criteria.

3.3 Area of Potential Impact

The area of potential impact for the community and neighborhood resource analysis includes all communities and neighborhoods that would potentially be affected by the construction and operation of the RLE Project. If a portion of a community is within ½ mile of a build alternative alignment, the entire community is included in the area of potential impact. Thus, the analysis in this technical memorandum includes the following community areas of Chicago and the Village of Calumet Park that have portions within approximately ½ mile of the build alternative alignments and proposed facility locations, which could be affected by the RLE Project:

- Washington Heights
- Roseland
- Morgan Park
- West Pullman
- Pullman
- Riverdale
- Village of Calumet Park

Section 4 provides descriptions of these community areas. Other nearby neighborhoods, as well as communities along existing CTA lines, could be beneficially affected by the project because they would now be linked to the areas listed above. Any such impacts on these communities are discussed qualitatively.

3.4 Methods

This analysis of impacts on existing communities and neighborhoods was prepared according to the *Community Impact Assessment: A Quick Reference for Transportation* (USDOT 2008).

The analysis began with the development of community profiles to identify population, housing, and employment characteristics, unique community features and events, community linkages and mobility, and important public services. These community profiles were established using community data provided by the City of Chicago, applicable local land use plans, site visits, Census Bureau statistics, CMAP data, information from the City of Chicago and Village of Calumet Park websites, and public comments and input received on the project from the ongoing meetings and outreach activities.

Communities have a set of identifiable elements (both perceptual and physical) within a specific geographic area. Once a profile was established for each of the potentially affected communities, the report was prepared to describe short-term (temporary) and long-term (permanent) impacts from both construction and operation of the project alternatives on each of the distinct communities. The analysis included several aspects: the creation of physical, social, or psychological barriers within an established community or neighborhood; the disruption of access to community assets; and the displacement impacts on the community assets. This technical memorandum describes qualitative, and where possible, quantitative impacts associated with changes to the local communities. Analysis relied heavily on field visits to verify findings.

Each impact was examined based on the profile of the community or neighborhood in which it would occur. The criteria listed in Section 3.2 were used to assess the nature of potential impacts (temporary construction impacts or permanent operational impacts), and the potential mitigation measures that could be implemented to reduce or avoid them. Potential mitigation measures

were developed for all potential adverse impacts and are included in Section 6. Potential impacts that are considered controversial or have generated public concern were also examined in detail in this analysis, with a focus on community-based solutions. Beneficial impacts on the communities and neighborhoods are also described in this technical memorandum.

Consistent with the guidance and thresholds described in Section 3.2, community impacts discussions are grouped under the following three headings in Section 5:

- Character and Cohesion - Visual, noise, land use, and displacement impacts, as well as changes to the overall function and aesthetic of the community. Any addition or removal of physical divisions within the community or change in quality of life is also discussed under this heading.
- Community Resources - Impacts on the key resources identified in Section 4.
- Mobility and Development - Overall community impacts of changes in transportation options, business activity, access to jobs, and the potential for economic development.

Section 4
Affected Environment

This section describes the current demographic profiles of the communities adjacent to the alternative alignments. These communities comprise the affected environment for the project. The demographic data and community profiles presented in this section have been confirmed through field reconnaissance. All of the stations would provide connections to local buses and would include park & ride facilities, and therefore would serve a larger area than the ¼-mile walking radius typically assumed for transit projects. As such, demographic data is reported for census block groups, census tracts, community areas, public use microdata areas (PUMAs), and CMAP subzones as available, and is appropriate for the scale of the RLE Project.

4.1 Community Profiles

This section describes the community and neighborhood development patterns around the alignments and off-street storage yards in the City of Chicago and the Village of Calumet Park. Along all three alignments, the land use, demographic, and community characters of each neighborhood are similar. Figure 4-1 shows where the alignments would pass through the community areas described in this section.

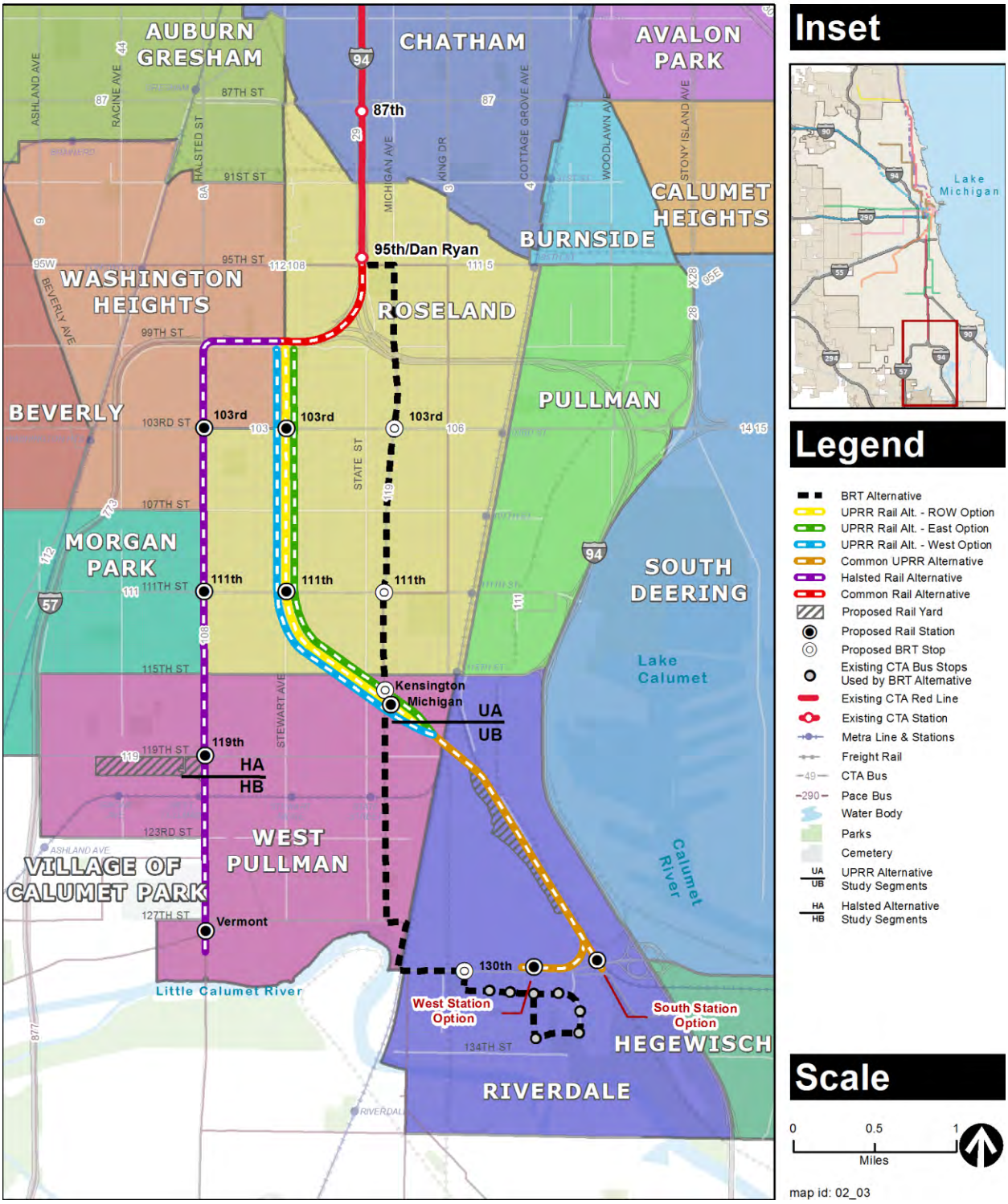

Figure 4-1: Project Area Communities

4.1.1 Washington Heights

The northwest corner of the project area is part of the Washington Heights community area, as shown in Figure 4-1. Washington Heights includes the neighborhood of Longwood Manor, which is north of I-57, and parts of Fernwood, which is in the northwest corner of the project area. The area primarily consists of single-family residential homes along a grid of one-way streets with low- to medium-density commercial areas along major arterial streets. As it is in much of the project area, residents of Washington Heights are mostly African American.

Near the UPRR corridor at the eastern edge of Washington Heights, the community area consists primarily of one-story, single-family houses. Blocks are well maintained, and many have community-organized block associations that provide neighborhood watch and other initiatives for the purposes of enhancing residents' safety and wellbeing. Fernwood Parkway, a narrow patch of parkland between 99th and 103rd Streets, separates the single-family residences along Eggleston Avenue from the UPRR ROW and is approximately 85 feet wide. The UPRR ROW acts as a barrier within the community, because most east-west streets terminate at the tracks. In Washington Heights, only 101st and 103rd Streets cross the UPRR tracks.

In Washington Heights, the Halsted Street corridor consists of one- to two-story businesses and commercial buildings, most of which have adjacent surface parking lots. Parking lots are typically between the buildings and the sidewalk, but some buildings do have direct street frontage. Most of the uses are auto-oriented, including auto body shops and gas stations, and there are two prominent communications towers on either side of Halsted Street just south of 99th Street. Other buildings include churches (both purpose-built church buildings and converted storefronts), household convenience services such as dry cleaners and check cashing, fast food restaurants, and occasional single-family residences.

A landscaped median runs along Halsted Street, containing well-maintained trees, groundcover, and lighted decorative clock pylons at major intersections. There is non-continuous landscaping along the sides of Halsted Street in some areas as well. Several of the lots and buildings along Halsted Street are vacant, which leaves discontinuities within the business district, but to a lesser extent than in the other communities along Halsted Street within the project area. The blocks on either side of Halsted Street contain mostly one-story, single-family homes, with occasional vacant lots and houses interspersed. Senior housing lies to the east of Halsted Street along 103rd Street. Because Halsted Street is a wide state highway (four lanes, plus a center median and curb parking), it acts as a geographic division between neighborhoods.

4.1.2 Roseland

The Roseland community covers a large portion of the RLE Project area, including the existing terminus of the Red Line at the 95th Street Terminal. All of the alternative alignments would pass through a portion of Roseland. Within the project area, the Roseland community generally encompasses the area east of Halsted Street, north of 115th Street, west of Cottage Grove Avenue, and extends beyond the northern boundary of the project area. The Roseland community area also includes portions of the Fernwood neighborhood.

Michigan Avenue is a retail and commercial corridor with several blocks containing single- and multi-family housing fronting the street. North of I-57, the street runs alongside a single-family residential neighborhood, Abbott Park, and Harlan Community Academy High School. Between I-57 and 103rd Street, Michigan Avenue is lined with auto-oriented uses, including several car lots, interspersed with vacant land and occasional stores. There are three senior housing facilities between 102nd Street and 115th Street, and the blocks on either side of Michigan Avenue consist primarily of single-family homes. A busy commercial area, among the most vibrant in the project area, exists between 111th and 115th Streets; the busiest segment is between 111th and 113th Streets. Vacant land and buildings fronting Michigan Avenue are scarce in this area, and businesses include clothing retail, restaurants, banks, and other community-oriented services. The area serves as a shopping destination for the Roseland area.

Along the UPRR ROW in the Roseland community, the neighborhoods comprise mostly single-family homes along one-way streets. Similar to the adjacent Washington Heights area, many blocks have community-organized block associations that provide neighborhood watch and other initiatives for the purposes of enhancing residents' safety and wellbeing. Vacant lots are infrequent in the northern part of the community, but are more common east of the UPRR ROW south of 108th Street, and on both sides of the tracks south of 111th Street. There are strips of vacant land on either side of the UPRR tracks, and some light industrial buildings are in this space between the houses and the tracks. The UPRR ROW acts as a barrier within the community, because most east-west streets and some north-south streets terminate at the UPRR tracks. Two parks border the east side of the UPRR ROW in Roseland: Wendell Smith Park between I-57 and 99th Street, and Block Park between 103rd and 104th Streets. Most of the community's commercial and activity areas are along major streets, away from the UPRR ROW.

Halsted Street, the western edge of the Roseland community between 103rd and 115th Streets, has a similar character throughout the project area, closely resembling that of the Washington Heights community. The street is a local commercial corridor lined with businesses and commercial spaces. Most businesses have parking lots fronting Halsted Street and contribute to the auto-oriented streetscape. Businesses include drug stores, discount retail, hair/beauty suppliers, automotive services, restaurants/fast food, healthcare and dental offices, check cashing, preschools, childcare, and other neighborhood-oriented services. Some storefronts have also been converted to religious institutions. There is a large nursing home between 109th and 110th Streets. Similar to the Washington Heights community, a landscaped median with clock pylons lines the center of Halsted Street. Vacant lots and buildings are more prevalent along this portion of Halsted Street than in areas further north in Washington Heights, which leaves discontinuities within the business district. Due to the width of Halsted Street, it acts as a geographic division between the Roseland community and the adjacent community of Morgan Park.

4.1.3 Morgan Park

Morgan Park borders the western edge of Halsted Street between 107th and 115th Streets. The character of Halsted Street in Morgan Park is similar to the adjacent areas of Roseland described in Section 4.1.2. The Halsted Street commercial corridor is lined with a number of auto-oriented businesses, with single-family residential homes on the blocks immediately to the west. At the

northwest corner of 115th and Halsted Streets, there is a large box retail style center and associated parking lot that is partially vacant. Other businesses along Halsted Street include grocery stores, banks, a supermarket, churches, restaurants, and strip malls. Several single-family homes and vacant lots and buildings are interspersed between the active businesses.

4.1.4 West Pullman

West Pullman would encompass portions of each of the build alternatives' footprints. Generally, the boundaries of West Pullman are I-57 on the west, 115th Street on the north, and the Metra Electric District rail corridor on the east. The southern boundary includes portions of 123rd Street and the Little Calumet River.

Michigan Avenue in the northern portion of West Pullman contains community-serving businesses, with some interspersed vacant buildings and parcels. Many of the commercial buildings have residential units above, and several storefronts have been converted for religious institution use. Notably, a large vacant parcel on the southwest corner of 115th Street and Michigan Avenue, adjacent to the UPRR ROW, is proposed for development into a supermarket center. The highest percentages of Hispanic residents in the project area live southeast of this intersection. As such, several Spanish-speaking businesses are located in this area. The blocks on either side of Michigan Avenue consist primarily of single-family homes. South of 120th Street, Michigan Avenue transitions to mostly single-family homes with few vacant lots. This neighborhood of single-family homes continues southward until Michigan Avenue terminates at 127th Street. The areas along the Little Calumet River south of 127th Street consist mostly of industrial uses.

The character of businesses along Halsted Street in West Pullman is similar to the other portions of Halsted Street within the RLE Project area; however, there is a higher proportion of vacant buildings and parcels. Businesses in the area include automotive services, check cashing, discount retail, grocery stores, restaurants, and fast food establishments. There are also several churches in the vicinity of 119th Street, in addition to a public library and an Illinois Department of Employment Security office. A portion of the Major Taylor Trail, a former rail ROW that has been converted into a bicycle and pedestrian trail, runs diagonally through the neighborhood and crosses Halsted Street at 119th Street via the intersection's signalized crosswalks. The blocks east and west of Halsted Street consist mostly of single-family residences, with some blocks exhibiting high numbers of vacant parcels. The highest concentration of vacant residential parcels along Halsted Street in West Pullman occurs east of Halsted Street between 119th Street and the Metra Electric District tracks. There are fewer vacant residential parcels south of 124th Street and very few south of 127th Street; however, vacant commercial parcels are still present on Halsted Street in these areas. A mid-rise senior housing development is on the east side of Halsted Street just north of the Metra Electric District tracks. West of Halsted Street between 119th and 122nd Streets, there are few residential properties, and most of the area consists of vacant and industrial uses, including warehouses, a salt storage dome, a firehouse, and a recently built solar power plant.

4.1.5 Pullman

The Pullman community comprises the northeast section of the project area, bounded by the Metra Electric District rail corridor on the west, I-94 to the east, 95th Street to the north, and 115th Street to the south. Although none of the alternative alignments pass through the Pullman community, portions of the community are within walking distance of the Michigan Avenue corridor in the Roseland community area, described in Section 4.8.2. This western portion of the Pullman community is mostly residential, with both single- and multi-family residences near 115th Street, and the large Palmer Park between 111th and 113th Streets. Pullman contains relatively few vacant parcels, and several churches are near 111th, 113th, and 115th Streets.

4.1.6 Riverdale

Riverdale is in the southeast portion of the project area, southwest of Lake Calumet and east of the Metra Electric District rail corridor. A large portion of the Riverdale area is industrial and municipal land. A large Metropolitan Water Reclamation District (MWRD) facility occupies a majority of the Riverdale community within the project area. There are three residential neighborhoods in Riverdale: Eden Green, Golden Gate, and the Altgeld Gardens housing project.

The Eden Green and Golden Gate neighborhoods are single-family residential areas and townhouse developments, and Altgeld Gardens is a Chicago Housing Authority (CHA) project built in 1945. The community of approximately 2,000 rowhouse units has its own schools, on-site social services, maintenance staff, and medical facilities. Approximately half of the units have been recently renovated, and the remaining units are currently vacant, awaiting redevelopment or renovation. There are few household-serving businesses or community services in the area, except for the handful of resident-focused resources in the Altgeld Gardens property, and a small grocery store on 130th Street. The area is largely isolated due to barriers on all sides of the residential developments: I-94 and the industrial areas to the east, the MWRD facility to the north, the UPRR ROW to the west, and the Little Calumet River to the west and south. The isolated location of the Riverdale area leaves few transit options for accessing jobs and services outside of the community.

4.1.7 Village of Calumet Park

The Village of Calumet Park is in the southwest portion of the project area, south and west of West Pullman. The village borders the western side of Halsted Street between 123rd and 127th Streets. Between 123rd and 124th Streets on Halsted Street are several businesses similar to those described in Roseland in Section 4.1.2 and Morgan Park in Section 4.1.3, with single-family residences on the blocks to the west. The remainder of the Halsted Street frontage in Calumet Park is occupied by the large Cedar Park Cemetery.

4.2 Population, Housing, and Employment

As reported in Table 4-1, the 2010 U.S. Census data was used for existing population and number of households in the RLE area of potential impact as a whole and for affected communities. The project area has a population of 117,070 with 40,185 households. Table 4-1 shows the project area population and the populations of affected communities through which the alternative alignments would pass (a subset of the larger project area). Roseland has the largest population

and Riverdale has the smallest population and number of households of all communities in the area of potential impact. The average household for the project area is 2.9 persons, and the average family size is 3.5 persons. West Pullman has the largest average household (3.2) and family size (3.7) of all affected communities.

Table 4-1: 2010 Population and Households within the Project Area as a Whole and in Affected Communities

Area	2010 Population	2010 Households
Project Area	**117,070**	**40,185**
Washington Heights	13,847	4,821
Roseland	37,895	12,940
Morgan Park	8,589	2,967
West Pullman	29,640	9,487
Pullman	7,325	2,940
Riverdale	6,482	2,099
Village of Calumet Park	6,925	2,550

Source: U.S. Census Bureau, 2010 Census, Summary File 1, Table P1, All Block Groups within Cook County

According to the real estate website zillow.com, the median Chicago home price in October 2012 was approximately $161,100, and the median rent was $1,501. Home and rental prices in the RLE affected community areas are from 20 to 50 percent lower than the citywide median, as shown in Table 4-2.

Table 4-2: October 2012 Median Home and Rental Prices in Affected Community Areas

Area	Median Home Price	Median Monthly Rental Price
Chicago (Citywide)	*$161,100*	*$1,501*
Washington Heights	$112,300	$1,257
Roseland	$85,200	$1,232
Morgan Park	$113,500	$1,277
West Pullman	$92,700	$1,228
Pullman	$91,500	$1,213
Riverdale	N/A	N/A
Village of Calumet Park	$75,200	$1,219

Source: zillow.com, Chicago Home Prices and Home Values in IL (October 2012); zillow.com, Calumet Park Home Prices and Home Values in IL (October 2012)

The local metropolitan planning organization, CMAP, prepares estimates for future regional demographics in the greater Chicago area. Table 4-3 shows population estimates, number of households, and employment counts for year 2010 and year 2030 for the project area as a whole and for affected communities. Due to different methods and geographical units of measurement (e.g., census block group versus CMAP subzone), 2010 population and number of household estimates vary between the U.S. Census and CMAP; as a result, the 2010 numbers for the project

area as shown in Table 4-3 are different from the numbers shown in Table 4-1. Table 4-3 presents CMAP data to show percent growth over a constant data set.

According to CMAP projections, population in the project area is expected to grow by 15 percent between 2010 and 2030. The largest population growth is projected for the Riverdale community, which is expected to grow 34 percent over the 20-year period. Riverdale is also home to Altgeld Gardens, a CHA public housing project that is currently undergoing renovation and possible redevelopment. Washington Heights and Pullman are expected to have the slowest population growth in the API. The number of households in the project area is expected to grow by 10 percent with the majority of new households occurring in Riverdale. Washington Heights and Pullman are projected to have little or no growth. Employment is expected to increase by 46 percent in the project area as a whole. In 2010, the majority of the project area's jobs were in the Roseland community. Roseland's employment is expected to increase by 11 percent. The most substantial job growth is projected to occur in West Pullman (201 percent increase) and Pullman, which is projected to double its 2010 employment by 2030. Both Washington Heights and Riverdale are projected to lose jobs over the 20-year period. Field visits have revealed that communities in the project area have been shrinking overall during recent decades, and that this trend will likely continue during the near future. The CMAP projections show the level of growth that would be possible, to ensure adequate planning for services and infrastructure.

Table 4-3: Future Population, Households, and Employment within the Project Area as a Whole and in Affected Communities

Area	Population			Households			Employment		
	2010	2030	% Growth	2010	2030	% Growth	2010	2030	% Growth
Project Area[1]	*107,303*	*123,493*	*15*	*36,964*	*40,362*	*9*	*11,103*	*16,194*	*46*
Washington Heights	14,073	14,706	4	4,965	4,984	0	950	902	-5
Roseland	36,174	42,323	17	12,491	13,819	11	4,429	4,907	11
Morgan Park	7,942	9,143	15	2,759	3,104	13	440	560	27
West Pullman	26,596	30,261	14	8,438	9,139	8	1,020	3,074	201
Pullman	8,297	8,838	7	3,399	3,417	1	1,893	3,798	101
Riverdale	7,463	9,990	34	2,480	2,993	21	941	899	-4
Village of Calumet Park	5,566	6,381	15	2,013	2,251	12	887	1,079	22

Source: Chicago Metropolitan Agency for Planning (CMAP), 2010

Note:

1. Due to different methods and geographical units of measurement (e.g., census block group versus CMAP subzone), 2010 population and number of household estimates vary between the U.S. Census and CMAP; as a result, the 2010 numbers for the project area shown here differ from the U.S. Census data shown in Table 4-1.

As shown in Table 4-4, the unemployment rate for the entire project area is 19.0 percent. The unemployment rates for the individual community areas range from a low of 17.0 percent in Morgan Park to a high of 34.8 percent in Riverdale. Unemployment in the project area is generally higher than in the rest of the City of Chicago, which has an overall unemployment rate of 12.0 percent.

Table 4-4: Unemployment Rate within the Project Area as a Whole and in Affected Communities

Area	Unemployment Rate
Project Area	**19.0%**
Washington Heights	18.8%
Roseland	21.2%
Morgan Park	17.0%
West Pullman	18.5%
Pullman	21.4%
Riverdale	34.8%
Village of Calumet Park	17.4%

Source: U.S. Census Bureau, U.S. 2010 Census, 2011 ACS 5-year estimates, Table S2301, All Census Tracts within Cook County
Note: Data not available at block group level

4.3 Ethnicity

The ethnicity of the project area is predominantly Black or African American. As shown in Table 4-5, all communities in the project area have a majority Black or African American population, ranging from just above 89 percent in the Village of Calumet Park to approximately 97 percent in Roseland and Washington Heights. After Black or African American, the second largest ethnicity in the area of potential impact is Hispanic at 4 percent. Pullman has the largest Hispanic population at 7.8 percent followed by the Village of Calumet Park at 6.2 percent and West Pullman at 5.1 percent. Pullman also has the largest white population at 7.1 percent followed by the Village of Calumet Park at 3.6 percent.

Table 4-5: Ethnicity within the Area of Project Area as a Whole and in Affected Communities

Area	White Alone	Black or African-American Alone	American Indian/ Native Alaskan Alone	Asian Alone	Native Hawaiian and Other Pacific Islander Alone	Some Other Race Alone	Multiracial	Hispanic not Alone
Project Area	**2.1%**	**92.7%**	**0.2%**	**0.1%**	**0.0%**	**0.1%**	**1.0%**	**4.0%**
Washington Heights	0.6%	96.9%	0.2%	0.0%	0.0%	0.1%	0.9%	1.3%
Roseland	0.5%	97.3%	0.2%	0.1%	0.0%	0.1%	0.9%	1.0%
Morgan Park	1.0%	96.3%	0.0%	0.3%	0.1%	0.1%	1.0%	1.2%
West Pullman	0.6%	93.1%	0.2%	0.0%	0.0%	0.0%	1.0%	5.1%
Pullman	7.1%	83.6%	0.1%	0.1%	0.0%	0.1%	1.2%	7.8%
Riverdale	0.5%	96.4%	0.1%	0.0%	0.0%	0.1%	0.8%	2.0%
Village of Calumet Park	3.6%	89.1%	0.1%	0.3%	0.0%	0.1%	0.6%	6.2%

Source: U.S. Census Bureau, 2010 Census, Summary File 1, Table P5, All Block Groups within Cook County
Note: Hispanic population includes persons who identify as white or some other race, or combination of races.

4.4 Age

According to data from the 2010 U.S. Census, the median age in the project area is 37.1 years old. Median resident age varies slightly among communities in the project area, from a low of 25.7 years in Riverdale to a high of 41.6 in Washington Heights. Median ages are shown in Table 4-6, and age ranges are shown in Table 4-7. Compared to project area as a whole, a substantial percentage (42 percent) of the Riverdale population is under age 18.

Table 4-6: Median Age within the Project Area as a Whole and in Affected Communities

Area	Both Sexes	Male	Female
Project Area	**37.1**	**34.1**	**39.0**
Washington Heights	41.6	38.7	43.7
Roseland	38.0	35.6	40.0
Morgan Park	40.3	37.0	42.6
West Pullman	34.9	32.1	36.9
Pullman	37.7	33.0	40.8
Riverdale	25.7	20.9	24.8
Village of Calumet Park	36.9	33.6	38.6

Source: U.S. Census Bureau, U.S. 2010 Census, Summary File 1, Table P13, All Block Groups within Cook County

Table 4-7: Age Ranges within the Project Area as a Whole and in Affected Communities

Area	Under 18 Years	18 Years and Over
Project Area	**27%**	**73%**
Washington Heights	24%	76%
Roseland	26%	74%
Morgan Park	24%	76%
West Pullman	28%	72%
Pullman	26%	74%
Riverdale	42%	58%
Village of Calumet Park	26%	74%

Source: U.S. Census Bureau, U.S. 2010 Census, Summary File 1, Table P16, All Block Groups within Cook County

4.5 Languages Spoken at Home

According to the 2010 U.S. Census, English is the most spoken language at home in the project area with 92.6 percent of households speaking English only. As shown in Table 4-8, Spanish is the second most spoken language at home with over 6 percent of households speaking Spanish. The largest Spanish-speaking populations live in the Village of Calumet Park with 15.5 percent of households speaking Spanish. Pullman and West Pullman also have a large percentage of Spanish-speaking households with 10.4 percent and 6.7 percent, respectively. In fact, specific census tracts in the West Pullman and South Deering community areas and the Village of Calumet Park report over 30 percent of households speaking Spanish.

The 2010 U.S. Census data is consistent with findings of a Limited English Proficiency assessment conducted for the project area in 2009. According to the Limited English Proficiency study, 1.0 percent of households within census tracts in the project area are linguistically isolated. This statistic means that in 1.0 percent of households, all household members over the age of 14 had at least some difficulty speaking English.

Table 4-8: Languages Spoken at Home within the Project Area as a Whole and in Affected Communities

Area	English Only	Spanish or Spanish Creole	Other Indo-European Languages	Asian and Pacific Island Languages	Other Languages
Project Area	**92.6%**	**6.3%**	**0.6%**	**0.1%**	**0.4%**
Washington Heights	97.0%	1.8%	0.2%	0%	1.1%
Roseland	98.5%	0.9%	0.5%	0.1%	0.1%
Morgan Park	95.7%	2.3%	1.5%	0.5%	0.1%
West Pullman	92.8%	6.7%	0.2%	0%	0.4%
Pullman	89.4%	10.4%	0.3%	0%	0%
Riverdale	96.2%	2.9%	0%	0.5%	0.5%
Village of Calumet Park	82.7%	15.5%	1.3%	0.1%	0.5%

Source: U.S. Census Bureau, U.S. 2010 Census, 2010 ACS 5-year estimates, Table S1601, All Census Tracts within Cook County
Note: Data not available at block group level

4.6 Community Mobility

Two major highways, Interstate 94 (I-94) and Interstate 57 (I-57), and several major arterial streets pass through the project area. I-94, or the Dan Ryan Expressway, runs south to 99th Street before splitting into I-57 to the west and continuing as I-94 to the east. I-57 continues south on the eastern side of the Metra Rock Island District commuter rail line on the western side of the project area. I-94 continues south on the eastern side of the project area, west of Lake Calumet.

Although there is a substantial amount of roadway infrastructure in the area, highways frequently become congested, even during off-peak hours, which limits mobility for motorists. Roadway performance in the project area is constrained by narrow arterial streets and numerous at-grade rail crossings. Mobility is further inhibited by the limited options for connecting to the CTA's rail system. There is a network of bus lines operated by CTA and Pace, but buses are frequently delayed in the same arterial street congestion as automobiles. There are also no stations along the Dan Ryan branch of the Red Line that currently have park & ride facilities, which precludes residents from accessing the stations by car unless dropped off (kiss & ride). Bus lines cross the major arterial streets and many terminate at the 95th Street Terminal, serving several Metra stations en route.

The CTA Red Line service ends at the 95th Street Terminal in the median of I-94. A lack of park & ride, passenger drop- off, and pedestrian facilities limits access to the station. Customers accessing the station by bus experience measureable delays resulting from poor performance of surrounding arterial intersections, and insufficient space for bus loading, unloading, and layovers. Additional travel time and intersection performance data is provided in the *Transportation*

Technical Memorandum. The population south of the 95th Street Terminal exhibits the demographic characteristics of transit dependency, and consists primarily of minority and low-income residents, as discussed further in the *Environmental Justice Technical Memorandum*. Difficulty reaching the station by alternate modes of transportation isolates Far South Side and South Suburban residents and results in lengthy travel times by both auto and transit to jobs north of 95th Street, including the major employment centers in downtown Chicago. In particular, the Altgeld Gardens housing project, which is south of 130th Street, is physically isolated from other neighborhoods in the city, with few community-serving businesses within walking distance. Existing transit service is provided by the #34 bus route.

Three Metra commuter lines serve the project area: the Rock Island District, Metra Electric District, and the South Shore Line. The Rock Island District commuter rail line has two stations in the project area: the Longwood Station at 95th Street and Vincennes Avenue, and the Washington Heights Station at 103rd Street and Vincennes Avenue. The Metra Electric District commuter rail line has ten stations throughout the project area running southwest from 95th Street and Cottage Grove Avenue to 120th Street where it splits and runs west towards Ashland Avenue. The Metra South Shore Line, operated by the Northern Indiana Commuter Transportation District, operates between downtown Chicago and the South Bend Regional Airport in South Bend, Indiana. The South Shore Line shares the same track with Metra Electric District until 120th Street, where it diverges southeast towards Indiana. Although unaffected by automobile congestion, Metra service is infrequent, and some stations, including both of the Longwood and Washington Heights stations, have no service during mid-day and weekend periods.

Despite having an extensive sidewalk and crosswalk system, pedestrian mobility is limited by physical divisions between communities and public transit connections. These physical divisions include the two Metra rail corridors (one of which is shared by the South Shore Line), the I-57 and I-94 expressways, Lake Calumet, the Little Calumet River, and the UPRR ROW that runs north-south between Eggleston Avenue and Princeton Avenue before turning southeast at 111th Street. All of these are difficult to cross on foot, and effectively separate the communities on either side. Other rail lines operate in the area, but do not divide the communities affected by the project.

The project area also lacks bicycle infrastructure, as there is only one paved off-street bike trail and one on-street bike lane in the project area. The off-street bike trail, the Major Taylor Trail, runs southeast from 105th Street and Throop Street to the Whistler Woods Forest Preserve, south of Little Calumet River in Riverdale, Illinois. The only existing on-street bike lane starts at the 95th Street Terminal and extends south approximately 1,700 feet to Harlan Community Academy High School.

More information on existing transportation patterns and traffic levels in the project area is available in the *Transportation Technical Memorandum*.

4.7 Emergency Services

Police services in the project area are provided by municipal agencies. The City of Chicago Police Department serves the project area within Chicago city limits. The Calumet Park Police

Department has jurisdiction over the Village of Calumet Park. The nearest police stations serving the project area include the following, which are shown in Figure 4-3:

- Chicago Police District 22 - Morgan Park at 1900 W. Monterey Avenue in Chicago
- Chicago Police District 5 - Calumet at 727 E. 111th Street in Chicago
- Calumet Park Police Department at 12409 S. Throop Street in the Village of Calumet Park

Fire services are also provided by municipal agencies. The City of Chicago Fire Department serves the project area within Chicago city limits. The Calumet Park Fire Department has jurisdiction over the Village of Calumet Park. The nearest fire stations serving the project area include the following, which are shown in Figure 4-3:

- Chicago Fire Station E62 at 34 E. 114th Street in Chicago
- Chicago Fire Station E93 at 330 W. 104th Street in Chicago
- Chicago Fire Station E75 at 11958 S. State Street in Chicago
- Chicago Fire Station E115 at 11940 S. Peoria Street in Chicago
- Chicago Fire Station E120 11035 S. Homewood Avenue in Chicago
- Chicago Fire Station E80 at 12701 S. Doty Avenue in Chicago
- Calumet Park Fire Department 12457 S. Ashland Avenue in the Village of Calumet Park

The only hospital in the project area that provides emergency medical services is Roseland Community Hospital at 45 W. 111th Street in Chicago just east of State Street.

4.8 Community Resources

During the Alternatives Analysis and scoping process, stakeholders identified a number of key locations in the project area that play an important role in shaping and defining the community. These include landmarks, parks, community centers, and other places that serve as neighborhood focal points and contribute to community character and identity. Field analysis was also performed to supplement the list of identified community resources to be evaluated in this technical memorandum. Additional consideration was given to resources within ¼ mile of the alignments, because these resources would be close enough to be subject to project-related impacts. Parks and other community resources near the alignments are shown in Figures 4-2 and 4-3, respectively. Key resources with the most potential to be subject to project-related neighborhood/community impacts due to proximity to the alternative alignments are listed below. The resources primarily serve the surrounding communities, unless otherwise noted.

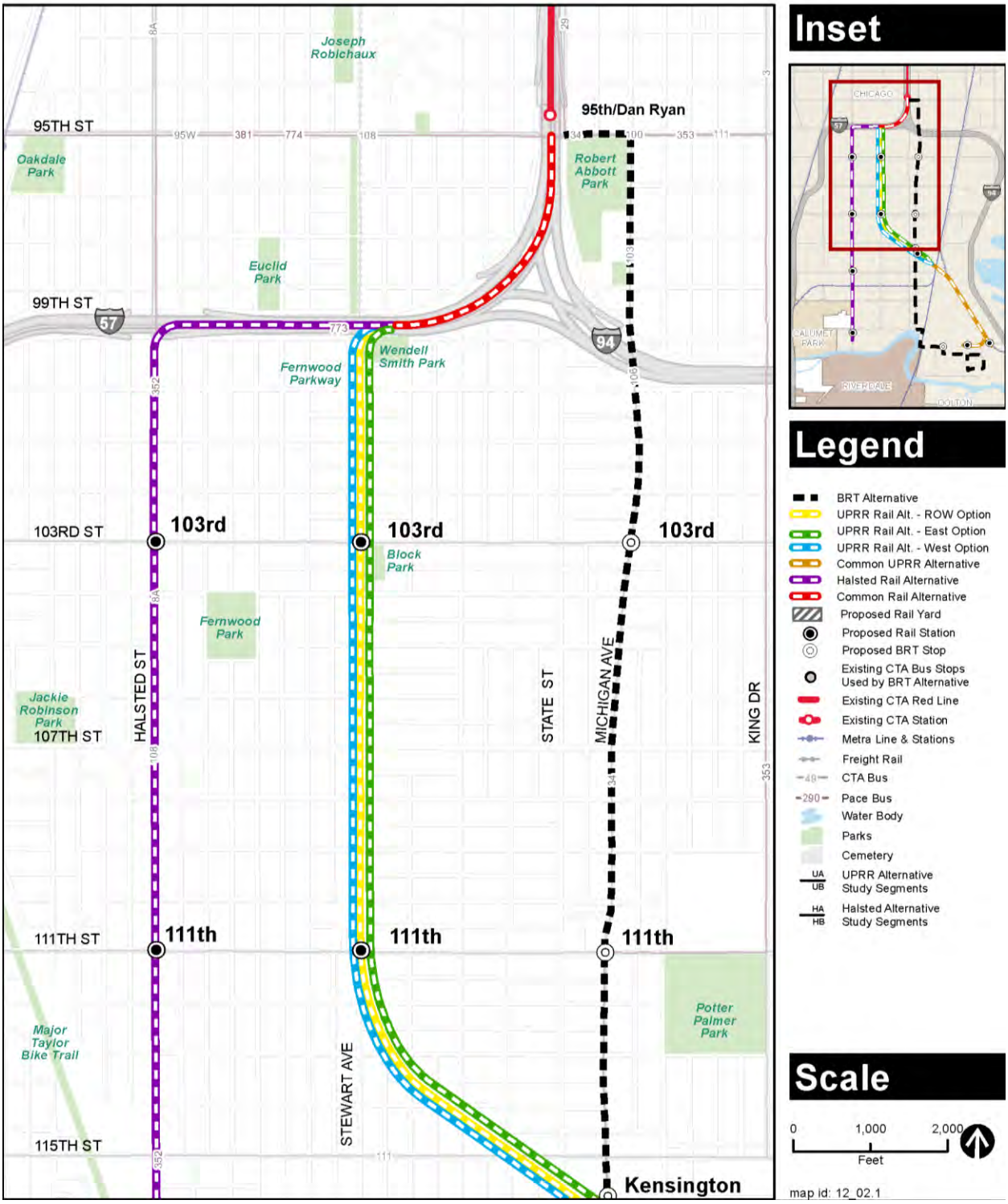

Figure 4-2a: Parks and Recreational Facilities (Northern Section)

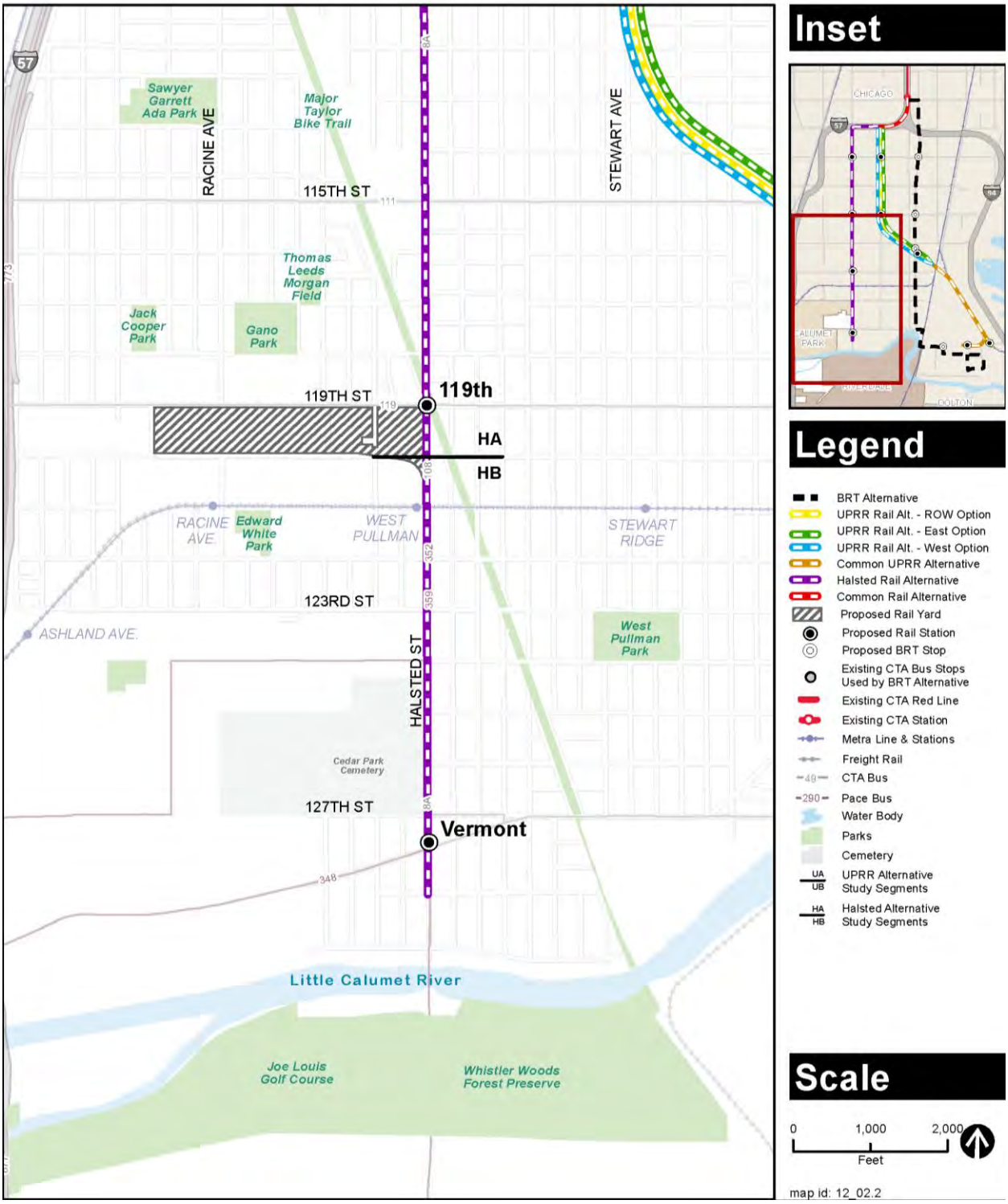

Figure 4-2b: Parks and Recreational Facilities (Southwestern Section)

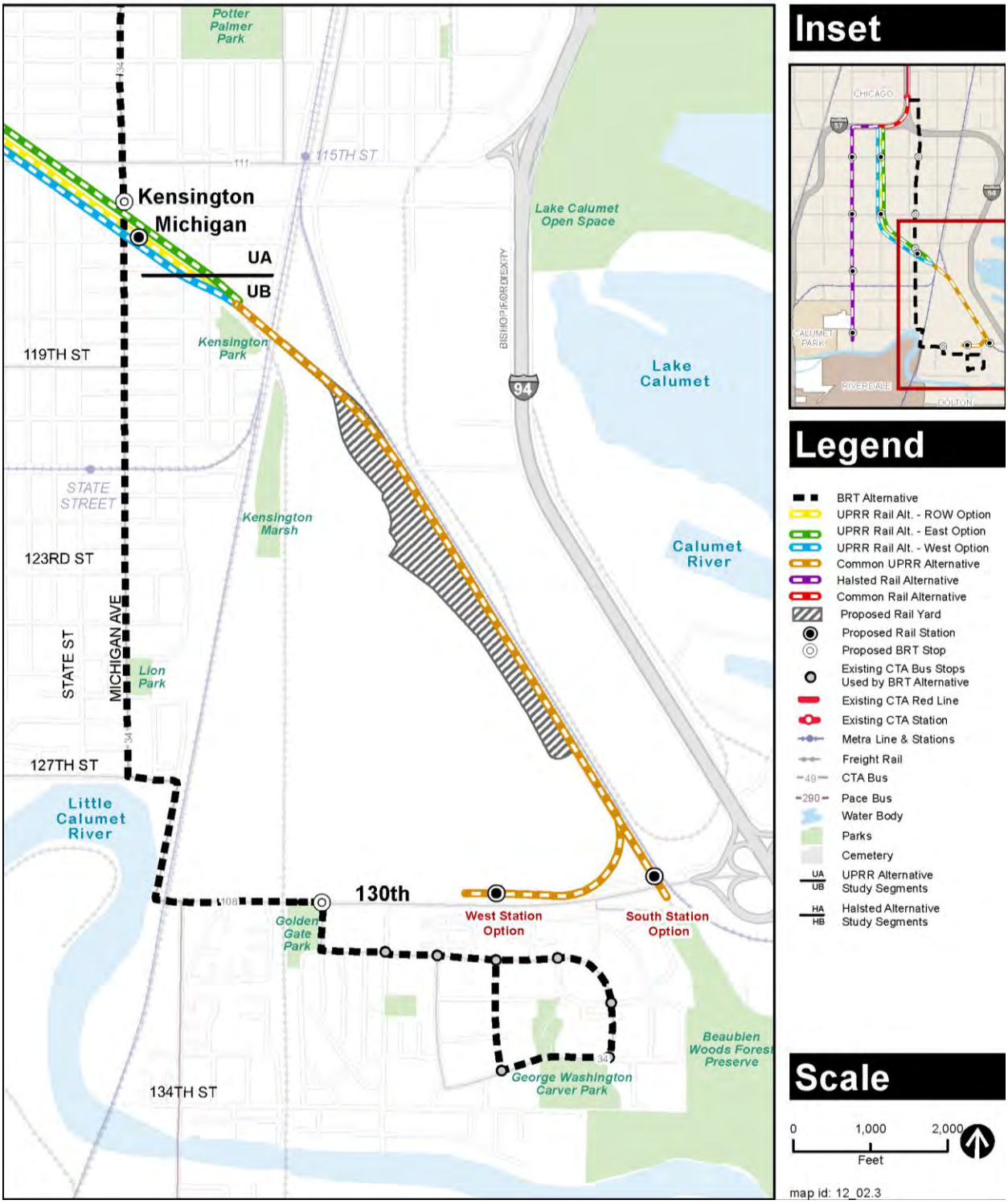

Figure 4-2c: Parks and Recreational Facilities (Southeastern Section)

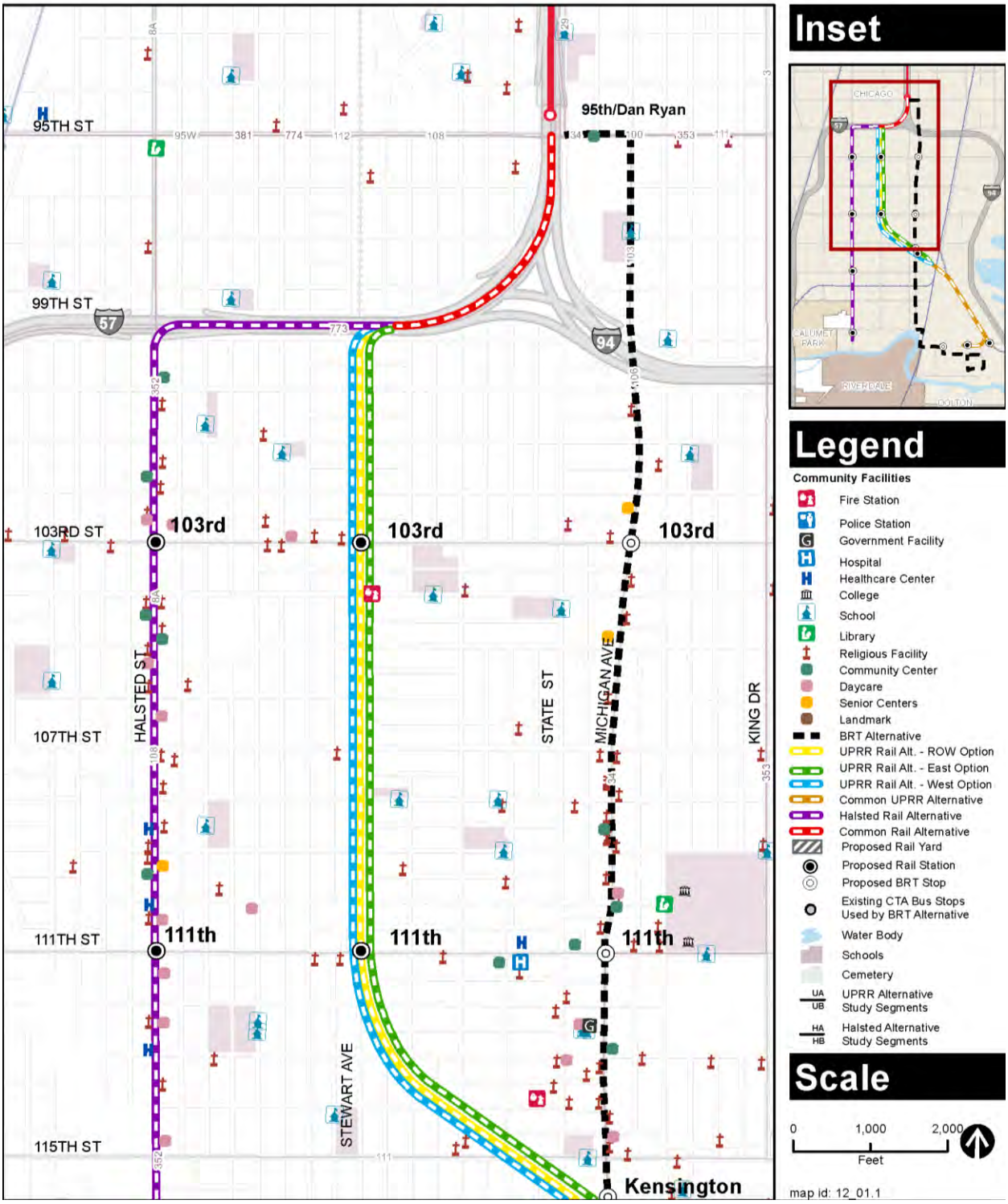

Figure 4-3a: Other Community Resources (Northern Section)

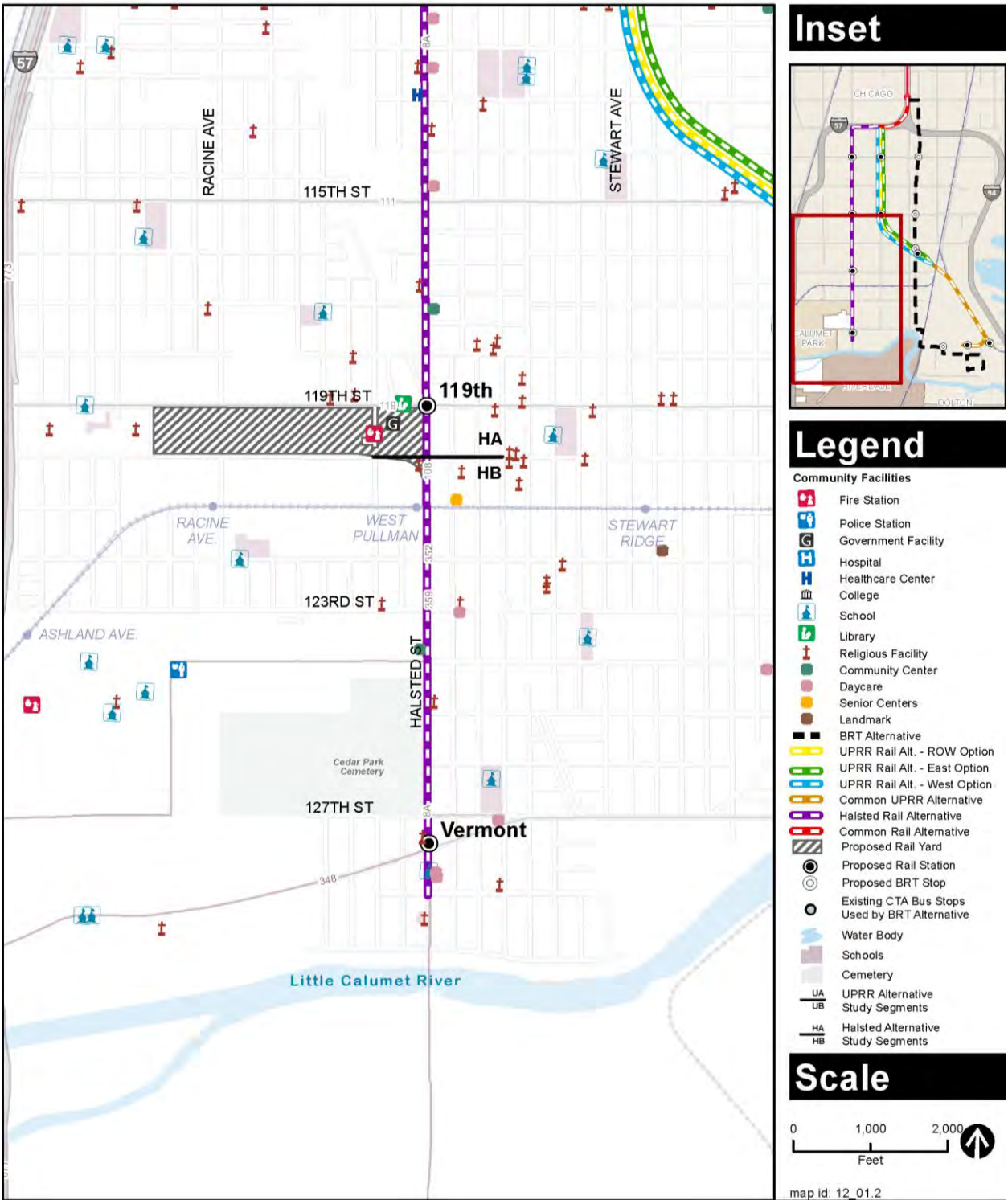

Figure 4-3b: Other Community Resources (Southwestern Section)

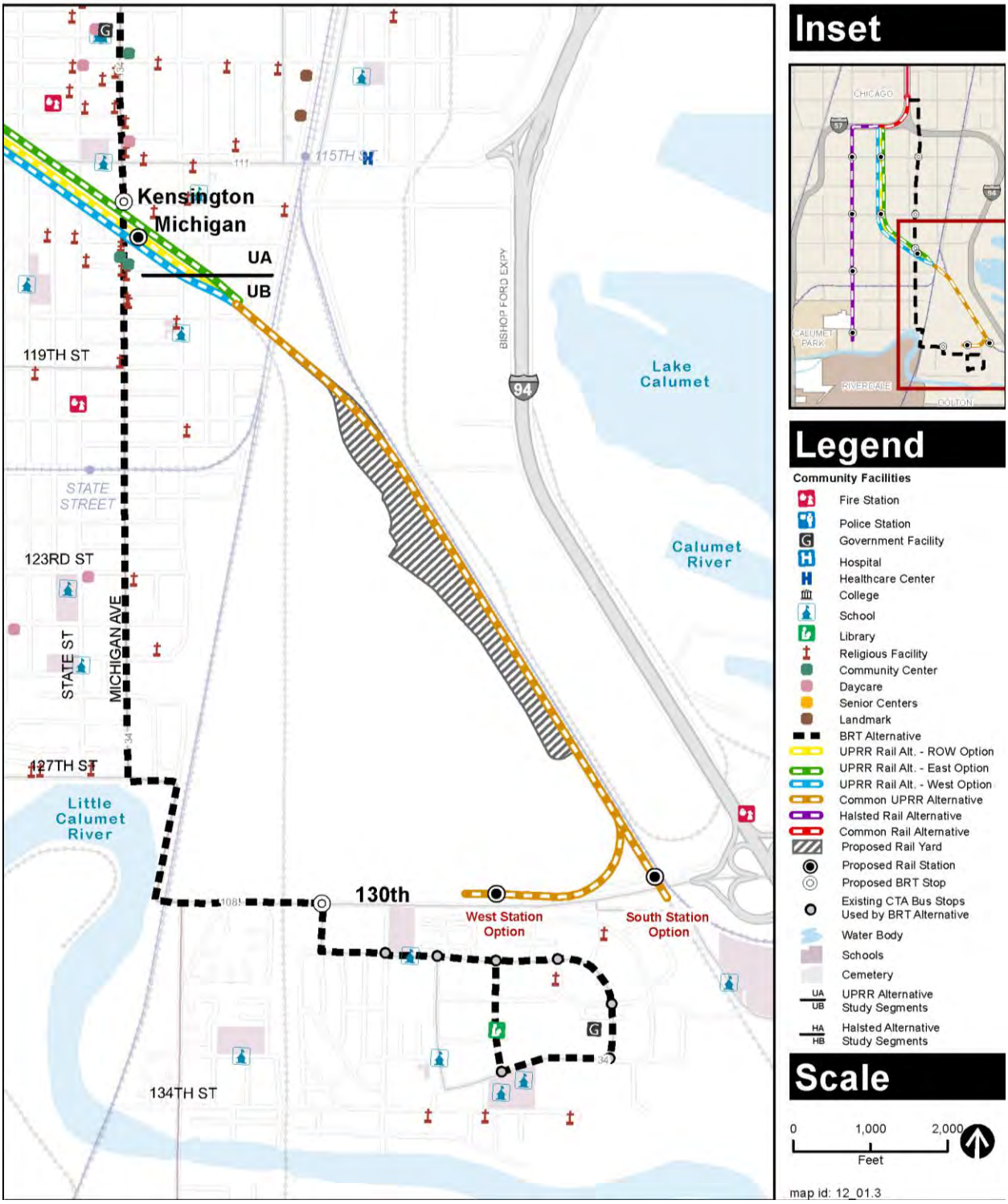

Figure 4-3c: Other Community Resources (Southeastern Section)

4.8.1 Bus Rapid Transit Alternative

Roseland

- Palmer Park at 201 E. 111th Street
- Chicago State University at 9501 S. Martin Luther King Drive (serves a substantial population outside of the immediate community area)
- Kohn Elementary School at 10414 S. State Street
- Bennet Elementary School at 10115 S. Prairie Avenue
- Gwendolyn Brooks College Preparatory Academy at 250 E. 111th Street
- Vivian E. Summers Preparatory School at 30 E. 112th Place
- Curtis Elementary School at 32 E. 115th Street
- Roseland Community Hospital at 45 W. 111th Street
- Alpha Medical Center at 11240 S. Michigan Avenue
- Roseland Family Medical Center at 11309 S. Michigan Avenue
- Roseland Neighborhood Health Center at 200 E. 115th Street
- Chicago Pullman Library at 11001 S. Indiana Avenue
- Multiple religious institutions along Michigan Avenue, particularly north of 117th Street

West Pullman

- Chicago International Charter School - Prairie Elementary at 11530 S. Prairie Avenue
- Gompers Middle School at 12302 S. State Street
- Owens Elementary School at 12450 S. State Street Lion Field; two baseball fields immediately east of Michigan Avenue between 124th Place and 125th Place

Riverdale

- Carver Elementary School at 901 E. 133rd Place
- Golden Gate Park at 13000 S. Eberhart Avenue
- Carver Park at 939 E. 132nd Street
- Chicago International Charter School - Bond Elementary at 13300 S. Langley Avenue

- Chicago International Charter School - Larry Hawkins High School at 801 E. 133rd Place
- Aldridge Elementary School at 630 E. 131st Street
- Dubois Elementary School at 330 E. 133rd Street
- Carver Military High School at 13100 S. Doty Avenue

Pullman

- The Pullman State Historic Site at 11111 S. Forrestville Avenue (attracts visitors from outside of the immediate community area)

4.8.2 Union Pacific Railroad Rail Alternative

Roseland

- Wendell Smith Park at 9912 S. Princeton Avenue just south of I-57 and approximately 120 feet east of the UPRR ROW
- Block Park at 236 W. 104th Street immediately east of UPRR ROW
- Agape Community Center at 342 W. 111th Street
- Roseland Community Hospital at 45 W. 111th Street
- Roseland Neighborhood Health Center at 200 E. 115th Street
- Moderate tree cover along UPRR ROW between 99th Street and 103th Street
- Langston Hughes Elementary School at 240 W. 104th Street
- Lavizzo Elementary School at 138 W. 109th Street
- Roseland Christian School at 314 W. 108th Street
- Curtis Elementary School at 32 E. 115th Street
- Multiple religious institutions at major cross streets, particularly Michigan Avenue

West Pullman

- Chicago International Charter School - Prairie Elementary at 11530 S. Prairie Avenue
- Kensington Playground Park at 345 E. 118th Street

4.8.3 Halsted Rail Alternative

- Landscaped median along majority of Halsted Street corridor
- Multiple religious institutions along Halsted Street and within two blocks on major cross streets, particularly 119th Street

Washington Heights

- Mt Vernon Park south of Mt. Vernon Elementary School, north of 107th Street
- Mt. Vernon Elementary School at 10540 S. Morgan Street
- Marcus Moziah Garvey Elementary School at 10309 S. Morgan Street

Roseland

- Dunne Technology Academy at 10845 S. Union Avenue
- Dunne Elementary School at 10845 S. Union Avenue
- Fernwood Park at 10436 S. Wallace Street
- Fenger High School at 11220 S. Wallace Street

West Pullman

- Brown Elementary School at 12607 S. Union Avenue
- West Pullman Library at 830 W. 119th Street
- Major Taylor Trail - crosses Halsted Street at 119th Street
- Illinois Department of Employment Security at 837 W. 119th Street

Morgan Park

- Southtown Medical Clinic at 11000 S. Halsted Street immediately west of Halsted

4.9 Livability

In partnership with the Developing Communities Project, CMAP is preparing the Red Line South Extension Livability Project report, which emphasizes how the RLE Project would increase access to jobs, streamline bus-rail connections, and generate economic development in the project area. Using demographic analysis, it highlights additional goals for the RLE Project, including the following:

- Reducing transfers and commute times, and addressing gaps in transit access
- Improving transit access for seniors and people with disabilities

- Addressing the mismatch between affordable housing and transit
- Attracting new residents and minimizing the vacant housing stock
- Improving employment and educational opportunities
- Improving access to shopping and other economic development opportunities
- Supporting existing businesses, homes, and neighborhoods
- Improving community health, safety, and security
- Decreasing traffic congestion
- Fostering community pride
- Connecting communities

These goals are consistent with the neighborhood and community benefits of a transit improvement project, and are taken into account in the analysis presented in Section 5.

Section 5
Impacts and Mitigations

This section describes the potential neighborhood and community impacts that each of the alternatives would have on the affected environment described in Section 4, along with potential mitigation measures. The analysis is focused on areas where adverse impacts could occur. Discussion of areas where no adverse impacts would occur is minimized wherever practical. Impacts of the alternatives are broken down into three types:

- Permanent Impacts: Long-term impacts that would be associated with the permanent infrastructure and operation of the project
- Construction Impacts: Temporary impacts that would be associated with construction activities would be limited to the duration of the construction phase of the project
- Cumulative Impacts: Contributions the project would make to adverse impacts in conjunction with other planned projects in the area

The impacts of the rail alternatives are broken down further into two segments (UA and UB for the UPRR Rail Alternative, and HA and HB for the Halsted Rail Alternative). Consistent with the methods described in Section 3, subsections are included for the following types of neighborhood and community impacts:

- Character and Cohesion: Visual, noise, land use, and displacement impacts, as well as changes to the overall function and aesthetic of the community. Any addition or removal of physical divisions within the community or change in quality of life is also discussed under this heading.
- Community Resources: Impacts on the key resources identified in Section 4.
- Mobility and Development: Overall community impacts of changes in transportation options, business activity, access to jobs, and the potential for economic development.

Table 5-1 summarizes the potential adverse impacts that would remain after mitigation for each of the alternatives.

Table 5-1: Summary of Benefits and Adverse Impacts Remaining after Mitigation

Alternative	Adverse Impacts After Mitigation	Benefits
No Build Alternative	None	None
Bus Rapid Transit Alternative	None	Minor improvements in transit service and mobility
Union Pacific Railroad Rail Alternative - Right-of-Way Option	None	Substantial livability and mobility improvements. Potential to spur economic development near stations. Red Line would serve communities that are geographically isolated, including Altgeld Gardens. Potential reuse of the Union Pacific Railroad rail corridor as a community space.
Union Pacific Railroad Rail Alternative - East Option	Community character - 117th Street and Prairie Avenue in West Pullman: Elevated track structure would displace two houses and encroach into the neighborhood beyond the line of trees that currently shields views of the existing Union Pacific Railroad right-of-way. Height would be out of scale with the existing character of the neighborhood.	Substantial livability and mobility improvements. Potential to spur economic development near stations. Red Line would serve communities that are geographically isolated, including Altgeld Gardens.
Union Pacific Railroad Rail Alternative - West Option	Community character - Fernwood Parkway in Washington Heights/Roseland: Elevated structure would run through the parkway. The structure would change the neighborhood setting of the park and the houses facing it along the west side of Eggleston Avenue.	Substantial livability and mobility improvements. Potential to spur economic development near stations. Red Line would serve communities that are geographically isolated, including Altgeld Gardens.
Halsted Rail Alternative	Community character – Green Street between Vermont Avenue and 128th Place in West Pullman: The garage would displace one block of homes and would be out of scale with the single-story residential character of the neighborhood.	Substantial livability and mobility improvements. Potential to spur economic development along the Halsted Street corridor. Red Line would serve communities that are geographically isolated, but would not serve Altgeld Gardens.

5.1 No Build Alternative

The No Build Alternative would not involve any new construction for the RLE Project. There would be no major service improvements or new transportation infrastructure beyond projects that are listed in CMAP's *GO TO 2040* plan and Transportation Improvement Program. The transit network within the project area would remain largely the same as it is now.

5.1.1 Permanent Impacts and Mitigations – No Build Alternative

Character and Cohesion

Because no project would be built, there would be no changes to community character and cohesion, and no impacts on community resources. No mitigation measures would be required. Although no impacts would occur, the No Build Alternative would lack the potential for streetscape enhancements around stations and improved quality of life that the build alternatives would provide.

Community Resources
The No Build Alternative would have no impact on community resources in the project area. The No Build Alternative would lack the benefits of improved transit access to community resources that the build alternatives would provide. No mitigation measures would be required.

Mobility and Development
The No Build Alternative would have no impact on mobility or community development. No mitigation measures would be required. As discussed in the *Transportation Technical Memorandum*, traffic is expected to worsen in the project area by year 2030, and the No Build Alternative would lack the mobility enhancements that the build alternatives would provide. Comments received during scoping reflect a strong local desire for community growth initiatives, which the No Build Alternative would fail to support due to its inability to attract new economic development interests to the community. The No Build Alternative would also fail to strengthen the transit link between the project area and the major employment centers to the north.

5.1.2 Construction Impacts and Mitigations – No Build Alternative

Character and Cohesion
There would be no construction impacts under the No Build Alternative. Community character, resources, and cohesion would remain unchanged. No mitigation measures would be required.

Community Resources
The No Build Alternative would not cause any construction-related disruption to community resources in the project area. No mitigation measures would be required.

Mobility and Development
The No Build Alternative would not have the construction-related mobility and business disruption associated with the build alternatives; however, it would fail to create new construction jobs or support economic growth in the project area. No adverse impacts would result, and no mitigation measures would be required.

5.1.3 Cumulative Impacts and Mitigations – No Build Alternative

Although the No Build Alternative would not cause any adverse impacts, the lack of improved transportation options and new infrastructure would do little to reverse the disinvestment in the project area that has occurred over the past several decades. No mitigation measures would be required.

5.2 Bus Rapid Transit Alternative

In addition to the provisions of the No Build Alternative, the BRT Alternative would provide enhanced bus service and stops from the existing 95th Street Terminal southward along Michigan Avenue to Altgeld Gardens in the Riverdale community. Surface parking lots would be added at the 103rd and 111th Street stops, and three-story parking garages would be added at the Kensington Avenue and 130th Street stops to accommodate park & ride customers.

5.2.1 Permanent Impacts and Mitigations – Bus Rapid Transit Alternative

Character and Cohesion

With the exception of four enhanced bus stops and new parking facilities, the BRT Alternative would result in few physical environment changes. Some increased noise would result from the more frequent bus service, but the entire route of the BRT Alternative is currently served by CTA local bus route #34, so buses are already a frequent presence along the route. No new physical divisions would be created in the project area by the increased service. Bus service would not increase to the extent that the additional buses would cause substantial additional noise, traffic, or visual changes. The placement of enhanced bus shelters, lighting, and crosswalks at the 103rd Street, 111th Street, Kensington Avenue, and 130th Street stops in Roseland and West Pullman would be a streetscape improvement. The provision of new marked and signalized crosswalks would also represent a safety improvement for pedestrians currently crossing Michigan Avenue in the vicinity of the stop locations. The additional buses and enhanced stops would be consistent with Michigan Avenue's existing character as a busy commercial and residential thoroughfare.

The new parking facilities would be the sole cause of displacements for the BRT Alternative, and the multi-level parking structures at the Kensington Avenue and 130th Street stops would be the most pronounced alterations to the built environment. The parking facilities would be built primarily on vacant land and existing parking lots, but displacement of a single-family home on the eastern side of Michigan Avenue south of 102nd Street and a vacant industrial building on Michigan Avenue between Kensington Avenue and the UPRR ROW would be required. These buildings are bordered by vacant lots on both sides, and their removal would not adversely affect community character or cohesion. The three-story parking structure with ground floor retail and community facilities at the Kensington Avenue site would invite active use of the ground floor space on this parcel, resulting in a beneficial impact. Because the remainder of the land to be used for parking facilities is already vacant, the conversion to park & ride use would not meaningfully change the existing neighborhood character, provided that appropriate landscape is planted to visually screen the structure. At the 130th Street stop, the three-story garage would be north of 130th Street, adjacent to the MWRD site and other non-community-oriented land uses. With no residences or other community elements in the immediate vicinity, the new garage would not adversely affect neighborhood character or cohesion and would be shielded with landscaping to offset visual impacts. All properties would be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), which would offset impacts on the displaced owners.

The BRT Alternative would be an overall beneficial change in the character and cohesion of the Roseland, West Pullman, and Riverdale communities, but not to the same extent as the rail alternatives. Impacts would not be adverse, and no mitigation measures would be required.

Community Resources
The BRT Alternative would not displace or otherwise negatively affect any of the community resources in the project area. The BRT Alternative's function as an express version of the existing #34 bus service would slightly shorten travel times for people who access community resources and activity centers near the stop locations by transit (see Section 4.8 for a list of resources near the proposed route). This benefit would be minor because the BRT Alternative would lack rail-like features to further enhance bus service and attract new riders. No adverse impacts would occur, and no mitigation measures would be required.

Mobility and Development
The BRT Alternative would shorten bus travel times along the Michigan Avenue corridor in Roseland, West Pullman, and Riverdale. It would partially meet the project purpose and need by enhancing the connection between these community areas and the 95th Street Terminal, modestly reducing travel times to the employment and activity centers north of the project area. The faster bus service would slightly reduce the isolation of Altgeld Gardens and the other Riverdale residential areas, but not enough to greatly improve economic development opportunities in the area. The BRT Alternative would also benefit the senior citizen housing along Michigan Avenue in the Roseland community, and the low-income populations along the entire alignment, as these groups are more likely to be transit-dependent. Although service would be faster, the BRT Alternative would not yield any new transit access beyond that already provided by the existing #34 bus. The lack of rail-like features to substantially enhance the bus service would limit the BRT Alternative's potential to attract new development or jobs to the project area. Some curb parking spaces along Michigan Avenue would be removed to accommodate the new bus stops, but the enhanced transit service would offset the loss of street parking. Transit mobility in the area would slightly improve as a result of the BRT Alternative, and impacts would be beneficial overall. No mitigation measures would be required.

5.2.2 Construction Impacts and Mitigations – Bus Rapid Transit Alternative

Character and Cohesion
Construction of the BRT Alternative would involve placement of new bus shelters, lighting, park & ride facilities, crosswalks, sidewalk improvements, ramps, traffic signals, and transit signal priority infrastructure along the route. Work would occur largely within the street; however, some off-street staging on adjacent publicly owned and vacant lots might occur. Some temporary road closures would be required, and would be scheduled at night and other low traffic times to the extent practicable and per IDOT approval.

The parking structure at the Kensington Avenue stop would require more intensive construction, but would be phased to minimize disruption. Temporary dust, noise, and visual impacts would occur, as well as minor intermittent traffic delays to accommodate trucks travelling to the construction site. Much of the land around the parking structure location is currently vacant, but there are residences to the east. Residents would experience these temporary impacts during construction, but impacts on the West Pullman community would not be adverse provided that best management practices are employed and nighttime construction near residences is limited to the extent practicable. Similar construction activities would be required for the 130th Street stop

parking structure in Riverdale, but community impacts would be minimal given the site's isolated location north of 130th Street, away from residences and businesses.

Community Resources
Construction of bus shelters, traffic signal control systems, and parking structures would be temporary, and could be scheduled so as not to conflict with community events. The magnitude of construction would not be great enough to affect nearby community resources. Access to community resources would be maintained during construction, via detours when necessary. Construction impacts would not be adverse, and no mitigation measures would be required.

Mobility and Development
Temporary road closures would be required, and would be scheduled at night and other low traffic times to the extent practicable. Bus and auto detours around these closures would temporarily impede mobility and inconvenience residents attempting to travel through the construction zones. The construction activities would not, however, impede mobility to the extent that they would cause adverse impacts. The BRT Alternative would create temporary construction jobs, which could have a beneficial impact on community development, although the employment increase would be greater for the rail alternatives. Impacts would not be adverse overall, and no mitigation measures would be required.

5.2.3 Cumulative Impacts and Mitigations – Bus Rapid Transit Alternative

While the permanent community impacts of the BRT Alternative would be beneficial overall, the minimal improvement of transportation options and new infrastructure would do little to reverse the disinvestment in the project area that has occurred over the past several decades. No mitigation measures would be required.

The temporary impacts described in Section 5.2.2 could contribute to a cumulative impact if other nearby projects were underway at the same time as BRT Alternative construction. Currently, no projects have been identified that would coincide with BRT Alternative construction. The CTA would coordinate activities with adjacent construction projects, if any, to minimize impacts on the community.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option would involve an extension of the Red Line from its current terminus at the 95th Street Terminal southward to 130th Street in the vicinity of Altgeld Gardens via existing highway medians and railroad corridors. The three options for the UPRR Rail Alternative are analyzed in two geographic segments:

- Segment UA: from 95th Street Terminal to Michigan Avenue station area, including the communities of Roseland, Washington Heights, and West Pullman
- Segment UB: south of the Michigan Avenue station area, in the Riverdale community

New stations would be constructed: at 103rd Street on the boundary between the Roseland and Washington Heights communities; at 111th Street in Roseland; at Michigan Avenue in West Pullman; and at 130th Street in Riverdale. All stations would have bus turnarounds and park & ride facilities. The park & ride facilities would be primarily surface parking lots, but multi-level parking structures would be constructed at the Michigan Avenue and 130th Street stations. The Chicago Department of Transportation is preparing the Far South Railroad Relocation Feasibility Study (FSRRFS). The study examines a possible project to move the existing freight operations out of the UPRR corridor, leaving the corridor vacant. The CTA would implement the ROW Option only if this separate project occurs prior to the RLE. If the relocation project does not occur, then CTA would need to choose either the East Option or West Option in order to pursue the UPRR Rail Alternative. Of the three UPRR Rail Alternative options under consideration, the ROW Option would have the fewest adverse impacts. The East and West Options would have greater impacts because the RLE tracks would be located 50 feet from the centerline of the existing UPRR tracks. The UPRR requires a 50-foot separation from active freight tracks for safety reasons.

5.3.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1.1 Segment UA

Character and Cohesion

The ROW Option tracks would be located entirely within highway medians and the existing UPRR ROW in Segment UA, with the exception of an elevated curve across the northwestern corner of Wendell Smith Park at the transition from the I-57 median to the freight ROW. The tracks would transition from at-grade to elevated just south of the existing 95th Street Terminal, and would remain elevated throughout the rest of Segment UA. The primary cause of displacements for the ROW Option would be the park & ride facilities. It is assumed that if the UPRR relocates freight operations out of the corridor, the empty ROW would be owned by the City of Chicago. The ROW Option alignment would run in the center of the UPRR ROW, resulting in the fewest displacements of the three UPRR Rail Alternative options.

The alignment from the 95th Street Terminal to the UPRR ROW would be isolated in the medians of I-94 and I-57, resulting in no community impacts. The elevated track structure would be above the highway grade, and visible from residential neighborhoods to the north and south of I-57, but would not change the character of the surrounding neighborhoods due to its highway median location. The elevated tracks would not worsen the existing barrier effect of the highway, because the highway already separates the neighborhoods on either side and is crossable only at overpasses. No noise-related community impacts would occur, as the adjacent homes are already exposed to considerable highway traffic noise.

Where the elevated alignment would curve southward onto the UPRR ROW, it would pass above the northwestern corner of Wendell Smith Park. There are no active recreational uses of this area of the park, and adverse impacts on the community could be avoided if the area beneath the elevated structure remained open for park use and new trees were planted to shield views of the elevated structure from homes fronting the park. The park is already exposed to considerable

noise levels from the adjacent highway, so the addition of the elevated structure would not dramatically change the park's character.

South of 99th Place, the elevated tracks would be located in the middle of the existing UPRR ROW for the remainder of Segment UA. The elevated structure would not substantially differ from the existing character of the freight railroad tracks. The structure would not introduce new separations between neighborhoods because the UPRR ROW already has limited grade crossings, and the ROW Option would not include their removal. With implementation of the potential project being studied in the FSRRFS, it would be possible to allow more crossing locations along the former freight ROW to enhance the connection between communities on both sides of the tracks. The new elevated structure would be taller than most buildings in the surrounding single-family neighborhoods, but substantial tree cover exists along the UPRR ROW between I-57 and 104th Street, and in intermittent patches between 104th Street and Michigan Avenue. Additional vegetation would be planted to supplement and fill gaps in the tree cover, effectively shielding the elevated structure from view of the adjacent neighborhoods and parks (Fernwood Parkway and Block Park). Substations would be located in the vacant areas bordering the UPRR ROW, adjacent to existing light industrial buildings and out of view from the fronts of adjoining homes. Noise levels along the UPRR ROW portion of Segment UA would be lower than they are under existing conditions due to removal of the freight operations as part of the potential project being studied in the FSRRFS.

At the 103rd Street station, vacant parcels and two vacant buildings would be acquired to accommodate the two surface parking lots and the bus turnaround. Given that there is currently little to no active use of these properties, the conversion to park & ride facilities would not adversely affect the community. The station would create a transit hub and would help revive the neighborhood with pedestrian activity, which would be beneficial. The station would also provide an attractive location for crossing the UPRR ROW, which would enhance the connection between the neighborhoods currently separated by the freight tracks. The station would be elevated above 103rd Street and would be prominently taller than surrounding buildings, but would not adversely change the character of the neighborhood if landscape were planted to provide screening and good design practices were used.

At the 111th Street station, vacant parcels adjacent to the UPRR ROW on the north side of 111th Street would be acquired to accommodate two surface parking lots and the bus turnaround. These parcels currently contain surface parking and remnants of demolished building foundations. Impacts and benefits in the surrounding neighborhood would be similar to those associated with the 103rd Street station.

At the Michigan Avenue station, a combination of vacant, residential, and commercial properties would be acquired on both sides of Michigan Avenue north of 116th Street to construct a surface parking lot, a bus turnaround, and a three-story parking structure with ground floor retail and commercial space. Acquisitions for the parking structure would include the entire triangular area bounded by 116th Street, State Street, the UPRR ROW, and Michigan Avenue. Approximately 20 structures would be removed, most of which are residential (some vacant), with interspersed

commercial and storage uses along Wabash and Michigan Avenues. A vacant industrial building on the east side of Michigan Avenue just south of Kensington Avenue would also be removed to accommodate the surface parking lot. Compensation would be provided according to the Uniform Act, and there are multiple vacant, infill-ready lots in the neighborhood that could be used for relocation.

The City of Chicago is working with a developer (Crown Commercial Real Estate & Development, Inc.) on the Roseland Plaza redevelopment proposal, which would be adjacent to the Michigan Avenue station. The proposal provides for a strip mall within a 91,000 square foot property with 250 parking spaces. There would be 49,000 square feet of commercial space, which would include a grocery store, pharmacy, clothing store, and a bank. The City's Community Development Commission designated the developer in February 2005. The City approved the sale of its land and land write-down costs in May 2009. The developer received approval of its Planned Development application from the Chicago Plan Commission in October 2011.

The parking structure would be a visual alteration of existing neighborhood character and scale despite landscape screening, but the ground floor retail and community space, combined with the proposed supermarket complex north of the station site, would help activate the neighborhood and enhance the station's role as a focal point of community activity. Despite the concentration of residential displacements, the overall impacts of the station would be beneficial, and would contribute to a potential new activity center that enhances the connection between the Roseland and West Pullman communities.

Community Resources

The ROW Option would not result in displacement of any community resources in the project area, but the alignment would pass through the northwestern corner of Wendell Smith Park in Roseland. There are no active recreational uses of this area of the park, and adverse impacts on the community could be avoided if the area beneath the elevated structure remained open for park use and new trees were planted to shield views of the elevated structure from homes fronting the park. The trees planted to shield views of the structure would also serve as replacements for trees removed during the construction process. The park is already exposed to considerable noise levels from the adjacent highway, so the addition of the elevated structure would not dramatically change the park's character.

No other resources would be negatively affected. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents (see Section 4.8 for a list of resources near the proposed route), and this impact would be beneficial overall.

Mobility and Development

The ROW Option would substantially reduce travel times between the Washington Heights, Roseland, West Pullman, and Riverdale communities, and would enhance their connection with major employment and activity centers north of the project area. This enhancement would increase the number and variety of viable employment opportunities available to residents of

these communities, especially those who are transit-dependent. The extended Red Line service and park & ride facilities would also provide alternatives to solo driving, and would attract some motorists off of the nearby highways. More cars would drive into the area to access the park & ride lots, but the increased traffic would not be great enough to worsen congestion following implementation of the mitigation measures prescribed in the *Transportation Technical Memorandum*. Because the UPRR freight operations would have been relocated out of the corridor by the potential project being studied in the FSRRFS, the area near the extended Red Line tracks could potentially be used for a bike or pedestrian path, which would further improve mobility.

The areas around the 103rd and 111th Street stations consist of predominantly single-family homes, with small pockets of neighborhood-scale businesses around each station site. The new transit service and the subsequent increase in pedestrian traffic could attract new businesses to the area and support the growth and enhancement of these neighborhood retail and service nodes. The result would be an overall increase in community livability. There are also multiple vacant residential parcels that would become more attractive for infill development, given the convenience of the nearby Red Line service. Infill would likely occur without changing the overall scale of the neighborhood. The mobility and development impacts of the ROW Option would be beneficial.

The Michigan Avenue station would be located along an existing commercial corridor, and could encourage growth of a larger activity center on the surrounding vacant parcels. The retail and commercial space on the ground floor of the station's park & ride garage, combined with the proposed supermarket complex to the north of the station site, would help activate the neighborhood and enhance the station's role as a focal point of community activity and services. The station might also attract the vibrant commercial and entertainment district along Michigan Avenue between 111th and 113th Streets to expand south toward 115th Street, creating a contiguous transit-oriented retail and activity destination for the community. The station might also attract infill development on vacant parcels along Michigan Avenue and 115th Street that raises the overall density and livability of the neighborhood. The station would serve as a transit hub that brings additional commuters and visitors to the area, which could further boost economic development.

5.3.1.2 Segment UB

Character and Cohesion

Proceeding south from the Michigan Avenue station area, the UPRR Rail Alternative tracks would transition to an at-grade configuration and run along existing railroad corridors through industrial and vacant areas to 130th Street. The only residences, community resources, and community-oriented businesses currently in the area are south of 130th Street. No communities or neighborhoods exist in Segment UB north of 130th Street. As such, there would be no impacts north of 130th Street.

For the South Station Option, the 130th Street station would be constructed at grade on a vacant site partially underneath the 130th Street overpass immediately west of I-94. A bus turnaround, a

substation, and a seven-story parking structure would be constructed adjacent to the station north of 130th Street. The overpass would partly shield views of the parking structure from the nearby residences. Residences and other receptors would be far enough from the infrastructure that no impacts would occur. The South Station Option would improve the character of the area by adding a rail station on an otherwise unused site adjacent to a highway and an active railroad. One of the station entrances would be located south of 130th Street to provide access for Altgeld Gardens residents. Residents would be able to access the station without needing to cross 130th Street, which is a busy feeder road to I-94. Most riders would likely access the station by car, with the exception of pedestrians walking from Altgeld Gardens and the surrounding schools, but the station might attract commuter-serving businesses that would benefit local residents given that the area is isolated and there are few other businesses nearby. Impacts would be beneficial overall.

For the West Station Option, the 130th Street station would be constructed at grade on a vacant site north of 130th Street near Evans Avenue. Station facilities would include a bus turnaround, a surface parking lot, and a four-story parking garage. A substation would also be constructed in approximately the same location proposed for the South Station Option. The parking garage would be visible from the homes on the opposite side of 130th Street, but landscaping and trees would be planted to shield the garage and avoid visual impacts. Residences and other receptors would be far enough from the infrastructure that no impacts would occur. The station would improve the character of the area by adding a rail station on an otherwise unused site adjacent to the MWRD facilities. Unlike the South Station Option, residents from Altgeld Gardens and other homes in the area would need to cross 130th Street to access the station, but a signalized intersection with a crosswalk would be added at the intersection of 130th Street and Evans Avenue to facilitate pedestrian access. Most riders would likely access the station by car, with the exception of pedestrians walking from Altgeld Gardens and the surrounding schools, but the station might attract commuter-serving businesses that would benefit local residents given that the area is isolated and there are few other businesses nearby. Impacts would be beneficial overall.

Community Resources

The 130th Street station would provide new transit access to several schools in Riverdale and to the Altgeld Gardens public housing project. Altgeld Gardens has the fewest neighborhood-serving resources of any community in the project area; there are few stores or household services within walking distance, and residents exhibit demographic characteristics of transit dependency. The community is surrounded by several barriers, including I-94, two active railroad lines, MWRD land, and the Little Calumet River. The extended Red Line service would allow residents to easily access community resources in other neighborhoods, and perhaps serve as a focal point for the development of additional community resources in Riverdale. The South Station Option site would be closest to the housing units in the eastern portion of Altgeld Gardens, as well as Carver Military High School. The West Station Option would be closer to the center of the Altgeld Gardens project, Aldridge Elementary School and the other Riverdale residential areas to the west.

Mobility and Development

The UPRR Rail Alternative would substantially reduce travel times between the Washington Heights, Roseland, West Pullman, and Riverdale communities, and would enhance their connection with major employment and activity centers north of the project area. This enhancement would increase the number and variety of viable employment opportunities available to residents of these communities, especially those who are transit-dependent. The extended Red Line service and park & ride facilities would also provide alternatives to solo driving, and would attract some motorists off of the nearby highways. More cars would drive into the area to access the park & ride lots, but the increased traffic would not be great enough to worsen congestion following implementation of the mitigation measures prescribed in the *Transportation Technical Memorandum*.

There are few community-oriented land uses near the 130th Street station site, aside from Altgeld Gardens. Many residents lack automobile access. This reduced mobility is compounded by the isolated location of the complex and the scarcity of nearby jobs and services. The UPRR Rail Alternative would improve transit accessibility and provide residents with fast, reliable transit service to employment centers to the north and areas where more services are available. Riverdale residents who do have automobiles would also benefit from having a new transit alternative to driving.

Private development near 130th Street station is unlikely in the absence of public incentives due to the public ownership of nearly all surrounding land; however, the CHA is currently renovating and redeveloping some of the Altgeld Gardens units, which could result in a joint development and inclusion of more community services. The UPRR Rail Alternative would support this redevelopment effort and would help attract investment interests to the area. The alternative would also support the continued public housing use of the Altgeld Gardens complex by creating a high-quality, affordable transit link that provides residents access to Chicago's major employment centers.

5.3.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.2.1 Segment UA

Character and Cohesion

Community disruption would occur while construction activities are performed for the UPRR Rail Alternative, with intensive construction occurring over a period of approximately 3 years. Most of the construction activities and staging would occur within street ROW, properties acquired as part of the permanent envelope for the project, and potentially other nearby vacant parcels. Increased truck traffic to and from the alignment would also occur. Given the elevated configuration of most of the UPRR Rail Alternative, hoisting equipment might be visible above the roofs of existing buildings. Storage of materials, equipment, and trucks would introduce temporary intermittent visual impacts within communities, but these impacts would not be adverse given their temporary nature and CTA's use of best management practices. CTA would notify the community in advance of disruptive activities, such as building demolition, utility relocation, and necessary detours, and would perform work in a manner consistent with local ordinances. Hauling routes would be designed to minimize the amount of trucks and equipment passing through sensitive areas of the community, and would favor highways over local roads to the extent feasible.

Temporary dust, noise, and visual impacts would occur. Residents would experience these impacts during construction on an intermittent basis, but impacts on the Washington Heights, Roseland, and West Pullman communities would not be adverse provided that best management practices are employed and nighttime construction near residences is limited to the extent practicable. The Michigan Avenue station would require more intensive construction activities due to the multi-level parking structure, but construction would be phased to reduce impacts. Construction activities at any one location along the alignment would not last for the entire duration of the project construction phase.

Community Resources

Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. Community resources adjacent to the alignment would be subject to temporary adverse impacts, but these would be mitigated through best management practices. Access to community resources would be maintained during construction, via detours when necessary.

Construction activities would be required in Wendell Smith Park in the Roseland community, where the elevated structure would pass through the northwest corner of the park property. The temporary inaccessibility of part of the park would not adversely affect park function, and impacts would be mitigated through best management practices and coordination with community members and the Chicago Park District. Alternate parks, such as Robert Abbott Park, would remain available for use during construction in Wendell Smith Park.

Mobility and Development
During construction of the UPRR Rail Alternative, temporary closures of streets crossing the alignment might be required. Detours would be provided to maintain access to adjacent properties, and bus transit service would detour around closures. Temporary traffic pattern changes might also be needed, such as full street closure, converting a two-way street to one-way operation, or reducing the number of available travel lanes. Temporary parking restrictions might also be implemented to facilitate construction activities.

Businesses around the alignment and parking structure could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Temporary roadway delays due to truck traffic and the movement of construction equipment would occur. Construction would likely result in a temporary, intermittent decrease in accessibility to some businesses. This impact would be limited to businesses on streets near the UPRR Rail Alternative alignment. The CTA would provide adequate detours and minimize road closures to the extent practicable, but some adverse impacts on businesses might occur if people avoid the area altogether. This potentially adverse impact would be mitigated through early notification of construction activities, provision of temporary alternate access routes, and advertising programs to increase the visibility of affected businesses during construction.

5.3.2.2 Segment UB

Character and Cohesion
Construction of the UPRR Rail Alternative in Segment UB would occur north of 130th Street in industrial, railroad, and vacant areas. The 130th Street station site (both options) is the only part of the alignment in Segment UB that would be close to businesses or residences, and most of the construction activities would occur away from these sensitive land uses. Storage of materials, equipment, and trucks would introduce temporary intermittent visual impacts along 130th Street, and temporary dust, noise, and visual impacts would occur. These impacts would not be adverse given their temporary nature and CTA's use of best management practices. CTA would notify the community in advance of disruptive activities, such as utility relocation detours, and would perform work in a manner consistent with local ordinances. Hauling routes would be designed to minimize the amount of trucks and equipment passing through sensitive areas of the community, and would favor highways over local roads to the extent feasible. Impacts on the Riverdale community would not be adverse provided that best management practices are employed and nighttime construction near residences is limited to the extent practicable.

Community Resources
Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. Community resources such as the schools near the 130th Street station location (both options) would be subject to temporary adverse impacts, but these would be mitigated through use of best management practices. Access to community resources would be maintained during construction, via detours when necessary.

Mobility and Development
Some temporary street and lane closures would be required during construction. Given the width of 130th Street and the amount of available space around it for staging, construction would not result in a decrease in access to businesses and residences. Detours would be provided to maintain access to adjacent properties, and bus transit service would detour around closures. Temporary roadway delays due to truck traffic and the movement of construction equipment would also occur. Potentially adverse impacts would also be mitigated through early notification of construction activities and provision of temporary alternate access routes.

5.3.3 Cumulative Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.3.1 Segment UA

The potential project being studied in the FSRRFS would include relocation of UPRR freight operations outside of the corridor prior to CTA's implementation of the ROW Option. This relocation would leave the ROW area near the Red Line tracks available for a possible bike or pedestrian path or other community-oriented use as a separate future project, which would provide more community mobility and livability benefits than the enhanced transit service alone. The potential project being studied in the FSRRFS would also allow more potential locations where residents could cross the UPRR ROW, which currently has grade crossings only at major streets.

At the Michigan Avenue station, the retail and commercial space on the ground floor of the station's park & ride garage, combined with the proposed supermarket complex north of the station site, would help activate the neighborhood and enhance the station's role as a focal point of community activity and services. This cumulative impact of the two projects would be beneficial for the community and its economic development. The station and retail improvements might also attract the vibrant commercial and entertainment district along Michigan Avenue between 111th and 113th Streets to expand south toward 115th Street, creating a contiguous transit-oriented retail and activity destination for the community.

The temporary construction impacts of the ROW Option described in Section 5.3.2 could contribute to a cumulative impact if other nearby projects were underway at the same time as the ROW Option construction. Currently, no projects have been identified that would have coinciding construction timelines. The CTA would coordinate activities with adjacent construction projects, if any, to minimize impacts on the community.

5.3.3.2 Segment UB

Most of Segment UB is in industrial and vacant areas, away from residences and community-oriented businesses and resources. Only the 130th Street station site (either station option) would be located near an established community. The temporary construction impacts of the UPRR Rail Alternative described in Section 5.3.2 could contribute to a cumulative impact if other nearby projects were underway around the 130th Street station site at the same time as the UPRR Rail Alternative construction. Currently, no projects have been identified that would have coinciding

construction timelines. The CTA would coordinate activities with adjacent construction projects, if any, to minimize impacts on the community.

5.3.4 120th Street Yard and Shop

5.3.4.1 Permanent Impacts and Mitigations

The permanent impacts of the 120th Street yard and shop would be the same for all options of the UPRR Rail Alternative. The 120th Street yard and shop would be located in industrial and vacant areas, away from residences and community-oriented businesses and resources. As such, no community impacts would result from operation of the facility.

5.3.4.2 Construction Impacts and Mitigations

The construction impacts of the 120th Street yard and shop would be the same for all options of the UPRR Rail Alternative. The 120th Street yard and shop would be located in industrial and vacant areas, away from residences and community-oriented businesses and resources. Construction activities would be far enough from established communities that no impacts would occur. Hauling routes would be designed to minimize the amount of trucks and equipment passing through sensitive community areas, and would favor highways over local roads to the extent feasible.

5.4 Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative East Option would involve an extension of the Red Line from its current terminus at the 95th Street Terminal southward to 130th Street in the vicinity of Altgeld Gardens via existing highway medians and railroad corridors. The East Option would be different from the ROW Option in that the alignment would be located to the east of the existing UPRR tracks. The three options for the UPRR Rail Alternative are analyzed in two geographic segments, as described in Section 5.3 for the ROW Option.

New stations would be constructed: at 103rd Street on the boundary between the Roseland and Washington Heights communities; at 111th Street in Roseland; at Michigan Avenue in West Pullman; and at 130th Street in Riverdale. All stations would have bus turnarounds and park & ride facilities. The park & ride facilities would be primarily surface parking lots, but multi-level parking structures would be constructed at the Michigan Avenue and 130th Street stations. Compared to the ROW Option, the East and West Options would have greater impacts because the RLE tracks would be located 50 feet from the centerline of existing UPRR tracks. The UPRR requires a 50-foot separation from active freight tracks for safety reasons. This impact would be most pronounced for the East Option, which would have the greatest number of building displacements.

5.4.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - East Option

5.4.1.1 Segment UA

Character and Cohesion

The East Option tracks would be located within highway medians and adjacent to the existing UPRR ROW in Segment UA, with the exception of an elevated curve across the western portion of Wendell Smith Park at the transition from the I-57 median to its route alongside the freight ROW. The tracks would transition from at-grade to elevated just south of the existing 95th Street Station, and remain elevated throughout the rest of Segment UA. The East Option would require the most displacements of any of the build alternatives because the RLE tracks would be located 50 feet from the centerline of the existing UPRR tracks. The UPRR requires a 50-foot separation from active freight tracks for safety reasons. As a result, the track structure footprint would require acquisition of residences on nearly every street it crosses. Additional displacements would also be needed to accommodate the park & ride facilities.

The alignment from the 95th Street Terminal to the UPRR ROW would be isolated in the medians of I-94 and I-57, resulting in no community impacts, as described for the ROW Option in Section 5.3.1.1.

Where the elevated alignment would curve southward along the eastern side of the UPRR ROW, it would pass above the western edge of Wendell Smith Park. There are no active recreational uses of this area of the park aside from a paved path, and adverse impacts on the community could be avoided if the area beneath the elevated structure remained open for park use and new trees were planted to shield views of the elevated structure from homes fronting the park. The park is already exposed to considerable noise levels from the adjacent highway, so the addition of the elevated structure would not dramatically change the park's character.

South of 99th Place, the elevated tracks would continue southward along the eastern side of the existing UPRR ROW for the remainder of Segment UA. The elevated structure would not substantially differ from the existing character of the freight railroad tracks, but would encroach into the residential neighborhood and would be more prominent due to its height. The structure would not introduce new separations between neighborhoods because the UPRR ROW already has limited grade crossings and acts as a barrier for pedestrians. Unlike the ROW Option, the East Option would not present any new opportunities for additional crossings, due to the UPRR's continued use of the ROW.

The new elevated structure would be closer to residences than the existing UPRR tracks, and would require removal of some homes. The CTA elevated structure would adhere to the minimum clearance and crash wall standards requested by UPRR. The elevated structure would be taller than most buildings in the surrounding single-family neighborhoods; however, substantial tree cover exists along the UPRR ROW between I-57 and 104th Street, and in intermittent patches between 104th Street and Michigan Avenue. Additional vegetation would be planted to supplement and fill gaps in the tree cover on both sides of the proposed elevated

structure, effectively shielding the structure from view of the adjacent neighborhoods and parks (Fernwood Parkway and the eastern portion of Block Park). The substation sites would be located in the vacant areas bordering the proposed ROW, adjacent to existing light industrial buildings and out of view from the fronts of adjoining homes.

The track structure would require acquisition of two or three parcels closest to the eastern side of the UPRR ROW on every east-west street from 99th Place to 102nd Place, and from 105th Place to the southern end of Segment UA. Some of these parcels are vacant or have light industrial uses, but most contain single-family houses. The buildings currently occupying these parcels would be displaced. Adverse community impacts would be avoided through compensation and relocation assistance in compliance with the Uniform Act. Sufficient vacant parcels and buildings exist in the immediate area to accommodate relocation. Most of the streets in this area, with the exception of major thoroughfares, terminate at the UPRR ROW. As such, the displaced homes would be adjacent to the UPRR tracks at the ends of blocks, and not in the center of the neighborhood, thus limiting the potentially adverse impact on community cohesion and allowing the blocks to retain their integrity. The elevated tracks would encroach upon the edges of neighborhoods, but would leave them otherwise intact. Although the CTA tracks would be close to existing homes, adverse noise impacts would be avoided by constructing a 3- to 4-foot noise barrier alongside the tracks wherever noise-sensitive land uses exist within 280 feet of the alignment. The visual impacts would be mitigated by planting additional trees to screen the appearance of the new structure.

At the 103rd Street station, vacant parcels and two vacant buildings would be acquired to accommodate the two surface parking lots and the bus turnaround. Given that there is currently little to no active use of these properties, the conversion to park & ride facilities would not adversely affect the community. The station would create a transit hub and would help revive the neighborhood with pedestrian activity, which would be beneficial. The safety features at the adjacent UPRR grade crossing would be improved to facilitate foot traffic between the station and park & ride lot. The improved safety features would also provide a more attractive location for crossing the UPRR ROW, which would enhance the connection between the neighborhoods currently separated by the freight tracks. The station and track structure would be elevated above 103rd Street and a portion of Block Park, and would be prominently taller than surrounding buildings. The affected portion does not contain any facilities, and contains an open grassy area with moderate tree cover. Keeping the park area beneath the tracks and station open to public use, improving of the recreational facilities at Block Park, and improving park space elsewhere in the neighborhood would all be suitable measures to mitigate the potentially adverse impacts. The new transit infrastructure would not adversely change the character of the neighborhood if landscape were planted to provide screening and good design practices were used.

At the 111th Street station, vacant parcels adjacent to the UPRR ROW between 110th and 111th Streets would be acquired to accommodate the two surface parking lots and the bus turnaround. These parcels currently contain surface parking and remnants of demolished building foundations. Given that there is currently little to no active use of these properties, the conversion to park & ride facilities would not adversely affect the community. Impacts would be similar to

those around the 103rd Street station; however, there are no parks adjacent to the 111th Street station site.

The 111th Street station would create a transit hub and would help revive the neighborhood with pedestrian activity, which would be beneficial. The safety features at the adjacent UPRR grade crossing would be improved to facilitate foot traffic between the station and park & ride lot. The improved safety features would also provide a more attractive location for crossing the UPRR ROW, which would enhance the connection between the neighborhoods currently separated by the freight tracks. The station and track structure would be prominently taller than surrounding buildings; however, the station would be less visible than 103rd Street station because it would not be located above any cross streets. The new transit infrastructure would not adversely change the character of the neighborhood if landscape were planted to provide screening and good design practices were used.

At 114th Street and Wentworth Avenue, the footprint of the elevated structure would require displacement of the Now Faith Church of God Holiness, which currently occupies a converted commercial/light industrial building. Given the availability of other buildings and vacant parcels in the immediate area, there would be no adverse impacts after compliance with the Uniform Act.

At the Michigan Avenue station, a combination of vacant, residential, and commercial properties would be acquired on both sides of Michigan Avenue north of 116th Street to construct a surface parking lot, a bus turnaround, and a three-story parking structure with ground floor retail and commercial space. Impacts on the surrounding neighborhood would be similar to those for the ROW Option; however, the station would be slightly further north. During visioning sessions held in 2010, community members indicated a desire for three- to four-story buildings near stations, which would be consistent with the scale of the proposed structure. Acquisitions for the parking structure would include the entire triangular area bounded by 116th Street, State Street, the UPRR ROW, and Michigan Avenue. Approximately 20 structures would be removed, most of which are residential (some vacant), with interspersed commercial and storage uses along Wabash and Michigan Avenues. A vacant industrial building on the east side of Michigan Avenue just south of Kensington Avenue would also be removed to accommodate the surface parking lot. Compensation would be provided according to the Uniform Act, and there are multiple vacant, infill-ready lots in the neighborhood that could be used for relocation.

Visual alteration impacts of the parking structure at the Michigan Avenue station, and the station's community character and cohesion benefits would be the same as described for the ROW Option in Section 5.3.1.1. Despite the concentration of residential displacements, the overall impacts of the station would be beneficial, and would contribute to a potential new activity center that enhances the connection between the Roseland and West Pullman communities.

At the southeastern end of the Michigan Avenue station area, near the intersection of 117th Street and Prairie Avenue in the West Pullman community, the elevated structure would displace two houses and encroach into the neighborhood beyond the line of trees that currently shields views of the UPRR ROW. The structure would be in front of several houses, and the height would be

out of scale with the existing character of the neighborhood. The structure's location above an intersection would preclude screening it with additional trees. This impact would be adverse, and would not be fully offset by mitigation. Figure 5-1 shows the potential change.

Figure 5-1(a): 117th Street and Prairie Avenue Looking Northwest - East Option (Existing View)

Figure 5-1(b): 117th Street and Prairie Avenue Looking Northwest - East Option (Visualization)

Community Resources
As mentioned above, the East Option would displace the Now Faith Church of God Holiness, and would cross portions of Block Park and Wendell Smith Park, all in Roseland. There are no active recreational uses in the affected portion of Wendell Smith Park aside from a paved path, and adverse impacts on the community could be avoided as described above for the ROW Option. As described for the ROW Option, the addition of the elevated structure would not dramatically change the park's character.

The affected portion of Block Park has few recreational purposes and is less attractive to users than the portion east of Harvard Avenue due to the proximity to the UPRR freight tracks and the presence of a large communication tower. Keeping the park area beneath the tracks and station open to public use, improving the recreational facilities at Block Park, and expanding park space elsewhere in the neighborhood would all be suitable measures to mitigate the potentially adverse impacts. New trees would be planted to shield views of the elevated structure from the park and to replace those removed during construction. The park is already exposed to considerable noise levels from the adjacent UPRR freight tracks, so the introduction of the elevated structure would not be adverse after mitigation.

At 114th Street and Wentworth Avenue, the footprint of the elevated structure would require displacement of the Now Faith Church of God Holiness, which currently occupies a converted commercial/light industrial building. Given the availability of other buildings and vacant parcels in the immediate area, there would be no adverse impacts after compliance with the Uniform Act. Another building in the area could be upgraded and adapted, or a new building could be provided for church use without residual adverse impacts on this community resource.

No other resources would be negatively affected. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents (see Section 4.8 for a list of resources near the proposed route), and this impact would be beneficial overall.

Mobility and Development
The East Option would have the same general mobility benefits as described in Section 5.3.1.1 for the ROW Option; however, the East Option would lack the benefit of possible future redevelopment of the UPRR ROW into a bike or pedestrian path, which the ROW Option would allow.

The mobility and development impacts of the East Option would be beneficial for the areas around the 103rd and 111th Street stations and would be the same as described in Section 5.3.1.1 for the ROW Option.

The mobility and development impacts of the East Option in the area of the Michigan Avenue station would be the same as described in Section 5.3.1.1 for the ROW Option.

5.4.1.2 Segment UB

All of the UPRR Rail Alternative options would be the same in Segment UB, south of the Michigan Avenue station area. The permanent impacts of the UPRR Rail Alternative in Segment UB are described in Section 5.3.1.2.

5.4.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - East Option

5.4.2.1 Segment UA

Character and Cohesion

Construction impacts on community character and cohesion for the East Option would be similar to those of the ROW Option, described in Section 5.3.2.1. A greater intensity of construction activities would occur for the East and West Options than for the ROW Option because more building demolition would be required. The East Option would require the greatest number of building acquisitions of the three UPRR Rail Alternative options.

Community Resources

Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. Community resources adjacent to the alignment would be subject to temporary adverse impacts, but these would be mitigated through best management practices. Access to community resources would be maintained during construction, via detours when necessary.

Construction activities would be required in Wendell Smith Park and Block Park in the Roseland community, where the elevated structure would pass through the western portions of both park properties. The temporary inaccessibility of part of the park area would not adversely affect park function, and impacts would be mitigated through best management practices and coordinating with community members and the Chicago Park District. Alternate parks, such as Robert Abbott Park and Fernwood Park, would remain available for use during construction in Wendell Smith and Block Parks.

Mobility and Development

During construction of the UPRR Rail Alternative, temporary closures of streets crossing the alignment might be required. Detours would be provided to maintain access to adjacent properties, and bus transit service would detour around closures. Temporary traffic pattern changes might also be needed such as full street closure, converting a two-way street to one-way operation, or reducing the number of available travel lanes. Temporary parking restrictions might also be implemented to facilitate construction activities. A greater intensity of construction activities would occur for the East and West Options than the ROW Option because more building demolition would be required, so impacts would be more pronounced.

Impacts and mitigations for businesses around the alignment and parking structure would be the same as for the ROW Option, described in Section 5.3.2.1.

5.4.2.2 Segment UB

All of the UPRR Rail Alternative options would be the same in Segment UB, south of the Michigan Avenue station area. The construction impacts of the UPRR Rail Alternative in Segment UB are described in Section 5.3.2.2.

5.4.3 Cumulative Impacts and Mitigations – Union Pacific Railroad Rail Alternative - East Option

5.4.3.1 Segment UA

Cumulative impacts of the East Option at the Michigan Avenue station would be the same as described for the ROW Option in Section 5.3.3.1.

The temporary construction impacts of the East Option described in Section 5.4.2 could contribute to a cumulative impact if other nearby projects were underway at the same time as the East Option construction. Currently, no projects have been identified that would have coinciding construction timelines. The CTA would coordinate activities with adjacent construction projects, if any, to minimize impacts on the community.

The UPRR Rail Alternative would not contribute to any additional adverse cumulative impacts. The East Option would, however, lack the beneficial cumulative impacts with the potential project being studied in the FSRRFS, which the ROW Option would provide.

5.4.3.2 Segment UB

All of the UPRR Rail Alternative options would be the same in Segment UB, south of the Michigan Avenue station area. The cumulative impacts of the UPRR Rail Alternative in Segment UB are described in Section 5.3.3.2.

5.4.4 120th Street Yard and Shop

5.4.4.1 Permanent Impacts and Mitigations

The permanent impacts of the 120th Street yard and shop would be the same for all options of the UPRR Rail Alternative. The 120th Street yard and shop would be located in industrial and vacant areas, away from residences and community-oriented businesses and resources. As such, no community impacts would result from operation of the facility.

5.4.4.2 Construction Impacts and Mitigations

The construction impacts of the 120th Street yard and shop would be the same for all options of the UPRR Rail Alternative. The 120th Street yard and shop would be located in industrial and vacant areas, away from residences and community-oriented businesses and resources. Construction activities would be far enough from established communities that no impacts would occur. Hauling routes would be designed to minimize the amount of trucks and equipment passing through sensitive community areas, and would favor highways over local roads to the extent feasible.

5.5 Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative West Option would include extension of the Red Line from its current terminus at 95th Street Terminal southward to 130th Street in the vicinity of Altgeld Gardens via existing highway medians and railroad corridors. The West Option would be different from the ROW and East Options in that the alignment would be located to the west of the existing UPRR tracks. The three options for the UPRR Rail Alternative are analyzed in two geographic segments, as described in Section 5.3 for the ROW Option.

Four new stations would be constructed: at 103rd Street on the boundary between the Roseland and Washington Heights communities; at 111th Street in Roseland; at Michigan Avenue in West Pullman; and at 130th Street in Riverdale. All stations would have bus turnarounds and park & ride facilities. The park & ride facilities would be primarily surface parking lots, but multi-level parking structures would be constructed at the Michigan Avenue and 130th Street stations. Compared to the ROW Option, the East and West Options would have greater impacts because RLE tracks would be located 50 feet from the centerline of existing UPRR tracks. The UPRR requires a 50-foot separation from active freight tracks for safety reasons. The West Option would require fewer displacements than the East Option, and a greater proportion of the displacements would be industrial instead of residential.

5.5.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - West Option

5.5.1.1 Segment UA

Character and Cohesion

The West Option tracks would be located within highway medians and adjacent to the existing UPRR ROW in Segment UA, with the exception of an elevated curve across the western portion of Wendell Smith Park at the transition from the I-57 median to its route alongside the freight ROW. The tracks would transition from at-grade to elevated just south of the existing 95th Street Terminal, and remain elevated throughout the rest of Segment UA. The West Option would require more displacements than the ROW Option because the RLE tracks would be located 50 feet from the centerline of the existing UPRR tracks. The UPRR requires a 50-foot separation from active freight tracks for safety reasons. As a result, the track structure footprint would require acquisition of residences on nearly every street it crosses. Additional displacements would also be needed to accommodate the park

The alignment from the 95th Street Terminal to the UPRR ROW would be isolated in the medians of I-94 and I-57, resulting in no community impacts, as described for the ROW Option in Section 5.3.1.1.

Where the elevated alignment would curve southward toward the western side of the UPRR ROW, it would pass above the northwestern corner of Wendell Smith Park. The profile of the elevated structure would be taller than the ROW and East Options in this area. There are no active recreational uses of this area of the park, and adverse impacts on the community could be avoided as described for the ROW Option in Section 5.3.1.1.

Between 99th and 103rd Streets, the elevated structure would run along Fernwood Parkway. The parkway consists of grassy areas and trees, and contains no recreational features. The impact on this park could be offset by maintaining and improving the area underneath the elevated structure, or improving park facilities nearby. The change in community character due to the visual impacts of the new elevated structure along the parkway would, however, be adverse given that the existing conditions consist of an attractive open grass area. Mitigation measures, including screening the structure with additional landscaping, would not be sufficient to offset this impact. The structure would change the neighborhood setting of the park and the houses facing it along the west side of Eggleston Avenue. This impact is depicted in Figure 5-2.

Figure 5-2(a): Fernwood Parkway Looking South - West Option (Existing View)

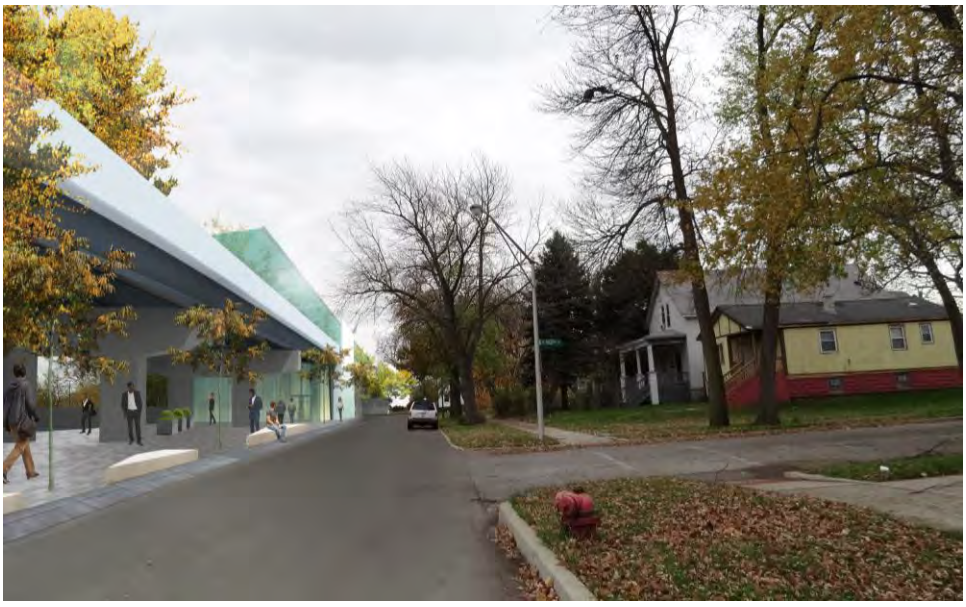

Figure 5-2(b): Fernwood Parkway Looking South - West Option (Visualization)

At the 103rd Street station, vacant parcels and two vacant buildings would be acquired to accommodate a surface parking lot and bus turnaround, which would be an adverse visual impact. Given that there is currently little to no active use of these properties, the conversion to park & ride facilities would not adversely affect the community. The station would create a transit hub and would help revive the neighborhood with pedestrian activity, which would be beneficial. The safety features at the adjacent UPRR grade crossing would be improved to facilitate foot traffic between the station and bus turnaround. The improved safety features would also provide a more attractive location for crossing the UPRR ROW, which would enhance the connection

between the neighborhoods currently separated by the freight tracks. The station and track structure would be elevated above 103rd Street, and would be prominently taller than surrounding buildings. The new transit infrastructure would not adversely change the character of the neighborhood if landscape were planted to provide screening and good design practices were used.

South of 103rd Street, the elevated tracks would continue southward through private property along the western side of the existing UPRR ROW for the remainder of Segment UA. The CTA elevated structure would adhere to the minimum clearance and crash wall standards requested by UPRR. The elevated structure would not substantially differ from the existing character of the freight railroad tracks, but would encroach into the primarily vacant and light industrial areas to the west of the UPRR ROW. The structure would not introduce new separations between neighborhoods because the UPRR ROW already has limited grade crossings and acts as a barrier for pedestrians. Unlike the ROW Option, the West Option would not present any new opportunities for additional crossings, due to the UPRR's continued use of the ROW.

The new elevated structure would be closer to residences than the existing UPRR tracks, and would require removal of several homes and light industrial buildings, but the overall displacement of residences would be substantially less than under the East Option. Adverse community impacts would be avoided through compensation and relocation assistance in compliance with the Uniform Act. Sufficient vacant parcels and buildings exist in the immediate area to accommodate relocation. The elevated structure would be taller than most buildings in the surrounding single-family neighborhoods; however, the elevated structure would primarily run behind and along the sides of the houses adjacent to the alignment, so the structure would not be highly visible except at cross streets. Additional vegetation would be planted to supplement and fill gaps in the tree cover, effectively shielding the elevated structure from view of the adjacent neighborhoods. The substation sites would be located in areas bordering the proposed ROW, and would be out of view of the fronts of adjoining homes.

Most of the streets in this area, with the exception of major thoroughfares, terminate at the UPRR ROW. As such, the displaced buildings would be adjacent to the UPRR tracks at the ends of blocks, and not in the center of the neighborhood, thus limiting the potentially adverse impact on community cohesion and allowing the blocks to retain their integrity. North of the Michigan Avenue station area, the majority of the displacements would be on light industrial or vacant parcels, which do not contribute to the character of the surrounding residential neighborhoods. The elevated tracks would encroach upon the edges of neighborhoods, but would leave them otherwise intact. Although the CTA tracks would be close to existing homes, adverse noise impacts would be avoided by constructing a 3- to 4-foot noise barrier alongside the tracks wherever noise-sensitive land uses exist within 280 feet of the alignment. The visual impacts would be mitigated by planting additional trees to screen the appearance of the new structure.

At the 111th Street station, vacant parcels adjacent to the west of the UPRR ROW between 110th and 111th Streets would be acquired to accommodate the surface parking lot and the bus turnaround. These parcels currently contain trees and remnants of demolished building

foundations. Given that there is currently little to no active use of these properties, the conversion to park & ride facilities would not adversely affect the community. Impacts would be similar to those around the 103rd Street station; however, there would be fewer pedestrians crossing the UPRR tracks because the parking, bus turnaround, and station would all be on the same side of the UPRR ROW.

The 111th Street station would create a transit hub and would help revive the neighborhood with pedestrian activity, which would be beneficial. The station and track structure would be prominently taller than surrounding buildings; however, the station would be less visible than 103rd Street station because it would not be located above any cross streets. The new transit infrastructure would not adversely change the character of the neighborhood if landscape were planted to provide screening and good design practices were used.

At the Michigan Avenue station, a combination of vacant, residential, and commercial properties would be acquired on both sides of Michigan Avenue south of the UPRR ROW to construct a five-story parking structure with ground floor retail and commercial space. Acquisitions for the parking structure would include the entire triangular area bounded by 116th Street, State Street, the UPRR ROW, and Michigan Avenue. Approximately 20 structures would be removed, most of which are residential (some vacant), with interspersed commercial and storage uses along Wabash and Michigan Avenues. Compensation would be provided according to the Uniform Act, and there are multiple vacant, infill-ready lots in the neighborhood that could be used for relocation. The alteration of existing neighborhood scale and character due to the parking structure would be more pronounced than it would under the ROW and East Options because the parking structure would be two stories taller for the West Option; however, the station would otherwise have community character and cohesion benefits that would be the same as described for the ROW Option in Section 5.3.1.1. Screening, landscaping, architectural design that compliments the surrounding neighborhood, and "step back" massing to reduce the appearance of garage height could be used to reduce impacts.

Community Resources

As mentioned above, the West Option would cross a corner of Wendell Smith Park and the majority of Fernwood Parkway on the boundary between Roseland and Washington Heights. There are no active recreational uses in the affected areas of these parks, and adverse impacts on these community resources could be avoided if the area beneath the elevated structure remained open for park use and new trees were planted to replace ones shield views of the elevated structure from homes fronting the park. Additional recreational facilities would be added to these parks, or other parks in the neighborhood would be expanded to offset the addition of the elevated structure. The trees planted to shield views of the structure would also serve as replacements for trees removed during the construction process. As mentioned above, however, the adverse impacts on community character resulting from the elevated structure running in Fernwood Parkway would be unavoidable.

No other resources would be negatively affected. The new rail extension would facilitate access to community resources near the stations, especially for transit-dependent residents (see Section 4.8 for a list of resources near the proposed route), and this impact would be beneficial overall.

Mobility and Development
The mobility and development benefits and impacts for the West Option would be the same as those described for the East Option in Section 5.4.1.1.

5.5.1.2 Segment UB

All of the UPRR Rail Alternative options would be the same in Segment UB, south of the Michigan Avenue station area. The permanent impacts of the UPRR Rail Alternative in Segment UB are described in Section 5.3.1.2.

5.5.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - West Option

5.5.2.1 Segment UA

Character and Cohesion
Construction impacts on community character and cohesion for the West Option would be similar to those of the ROW Option, described in Section 5.4.1. A greater intensity of construction activities would occur for the East and West Options than the ROW Option because more building demolition would be required. The West Option would require fewer building acquisitions overall than the East Option.

Community Resources
Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. Community resources adjacent to the alignment would be subject to temporary adverse impacts, but these would be mitigated through use of best management practices. Access to community resources would be maintained during construction, via detours when necessary.

Construction activities would be required in Wendell Smith Park and Fernwood Parkway near the boundary between the Roseland and Washington Heights communities, where the elevated structure would pass through the northwestern corner of Wendell Smith Park and the nearly the entire length of the Fernwood Parkway property south of 99th Street. The temporary inaccessibility of these park areas would be mitigated through best management practices and coordination with community members and the Chicago Park District. Alternate parks, such as Robert Abbott Park and Fernwood Park, would be available for use during construction in Wendell Smith Park and Fernwood Parkway.

Mobility and Development
The mobility and development impacts for the West Option would be the same as those described for the East Option in Section 5.4.1.2.

5.5.2.2 Segment UB

All of the UPRR Rail Alternative options would be the same in Segment UB, south of the Michigan Avenue station area. The construction impacts of the UPRR Rail Alternative in Segment UB are described in Section 5.3.2.2.

5.5.3 Cumulative Impacts and Mitigations – Union Pacific Railroad Rail Alternative - West Option

5.5.3.1 Segment UA

Cumulative impacts of the West Option at the Michigan Avenue station would be the same as described for the ROW Option in Section 5.3.3.1.

The temporary construction impacts of the West Option described in Section 5.5.2 could contribute to a cumulative impact if other nearby projects were underway at the same time as the West Option construction. Currently, no projects have been identified that would have coinciding construction timelines. The CTA would coordinate activities with adjacent construction projects, if any, to minimize impacts on the community.

The UPRR Rail Alternative would not contribute to any additional adverse cumulative impacts. The West Option would, however, lack the beneficial cumulative impacts with the potential project being studied in the FSRRFS, which the ROW Option would provide.

5.5.3.2 Segment UB

All of the UPRR Rail Alternative options would be the same in Segment UB, south of the Michigan Avenue station area. The cumulative impacts of the UPRR Rail Alternative in Segment UB are described in Section 5.3.3.2.

5.5.4 120th Street Yard and Shop

5.5.4.1 Permanent Impacts and Mitigations

The permanent impacts of the 120th Street yard and shop would be the same for all options of the UPRR Rail Alternative. The 120th Street yard and shop would be located in industrial and vacant areas, away from residences and community-oriented businesses and resources. As such, no community impacts would result from operation of the facility.

5.5.4.2 Construction Impacts and Mitigations

The construction impacts of the 120th Street yard and shop would be the same for all options of the UPRR Rail Alternative. The 120th Street yard and shop would be located in industrial and vacant areas, away from residences and community-oriented businesses and resources. Construction activities would be far enough from established communities that no impacts would occur. Hauling routes would be designed to minimize the amount of trucks and equipment passing through sensitive community areas, and would favor highways over local roads to the extent feasible.

5.6 Halsted Rail Alternative

The Halsted Rail Alternative would involve extension of the Red Line from its current terminus at the 95th Street Terminal southward to Vermont Avenue via existing highway medians and the median of Halsted Street. The Halsted Rail Alternative is analyzed in two geographic segments:

- Segment HA: From the 95th Street Terminal to the 119th Street yard and shop area, including the communities of Roseland, Washington Heights, Morgan Park, and part of West Pullman
- Segment HB: south of the 119th Street yard and shop area, in the West Pullman community and the Village of Calumet Park

Four new stations would be constructed: at 103rd Street on the boundary between the Roseland and Washington Heights community areas; at 111th Street on the boundary between the Roseland and Morgan Park community areas; at 119th Street in the West Pullman area; and at Vermont Avenue in West Pullman. All stations would have bus turnarounds and park & ride facilities. The park & ride facilities would be primarily surface parking lots; however, a multi-level parking structure would be constructed at the Vermont Avenue station.

5.6.1 Permanent Impacts and Mitigations – Halsted Rail Alternative

5.6.1.1 Segment HA

Character and Cohesion

The Halsted Rail Alternative tracks would be located within highway medians and above the median of Halsted Street in Segment HA, with the exception of an elevated curve near the intersection of 99th and Halsted Streets at the transition from the I-57 median to its route down the center of Halsted Street. The tracks would transition from at-grade to elevated just south of the existing 95th Street Terminal, and would remain elevated throughout the rest of the alignment. The primary cause of displacements for the Halsted Rail Alternative would be the off-street park & ride facilities and the 119th Street yard and shop. The elevated structure itself would require few displacements because it would run primarily within existing public ROW. The Halsted Rail Alternative would have more displacements than the UPRR Rail Alternative ROW Option, but fewer than the East and West Options.

The alignment from the 95th Street Terminal to Halsted Street would be isolated in the medians of I-94 and I-57, resulting in no community impacts. The elevated track structure would be above the highway grade, and would be visible from residential neighborhoods to the north and south of I-57. The elevated structure would pass above the existing highway overpasses at Wentworth Avenue, the UPRR ROW, and Parnell Avenue, which would require it to be taller than the structure proposed for the UPRR Rail Alternative in some locations. The structure would not change the character of the surrounding neighborhoods due to its highway median location. The elevated tracks would not worsen the existing barrier effect of the highway, because the highway already separates the neighborhoods on either side, and is crossable only at overpasses. No noise-related community impacts would occur, as the adjacent homes are already exposed to considerable highway traffic noise.

Where the elevated structure would curve southward from the median of I-57 to the median of Halsted Street, the following displacements would be required: a gas station, a communication tower, a small utility building, and a small retail building just south of 99th Street. The introduction of the elevated structure in the area would be a negative visual change, especially in the area just south of 99th Street where there is a row of newly built retail space along the eastern side of Halsted Street. The negative visual change would not, however, be at the level of an adverse impact on community character. Displaced businesses would be able to relocate to other locations on Halsted Street, as there are several available vacant lots and buildings in the area.

Along most of the Halsted Street alignment, the surrounding land uses consist of automotive services, churches, vacant lots and buildings, surface parking, fast food restaurants, beauty supply and services, drug stores, check cashing, discount retail, and household-oriented services such as dry cleaners. Single-family homes and senior housing complexes are interspersed among the businesses throughout the corridor. The business areas are discontinuous due to the presence of parking lots and vacant space, and pedestrian activity is light. Halsted Street also acts as a barrier between neighborhoods due to its width; however, the landscaped median enhances the visual character of the area. Halsted Street is a designated state highway, and carries truck and bus traffic in addition to auto traffic.

The elevated structure would be out of scale with the predominantly single-story buildings along Halsted Street, but not inconsistent with its designation as a state transportation route. In most neighborhoods, the elevated structure would be the tallest structure. The mix of bents and center supports beneath the elevated structure would change the character of Halsted Street by shading the roadway and sidewalks and intensifying the visual separation between the two sides of the street.

The rail stations would enhance and improve the streetscape and bring additional pedestrians into the area, but this benefit would be tempered by the negative visual and aesthetic impacts of the elevated structure. Mitigation measures would include supplemental landscaping along the sidewalks to offset the reduction in median landscaping and partially shield views of the elevated structure. Parts of the structure, such as center supports and the closed deck trackway, may be shielded by the addition of street trees, but bents adjacent to the sidewalk may still be visible. Additional streetscape enhancements would be included. The overall community character impact of adding the elevated structure to the neighborhood would be negative, but not adverse, given the existing setting of a commercial thoroughfare with truck traffic. Moderate noise impacts would occur along the corridor, but could be mitigated with 3- to 4-foot noise barriers wherever the tracks are within 115 to 180 feet of sensitive receptors (threshold distance varies by location and anticipated train speeds).

Three substation facilities would be placed on existing vacant land along Halsted Street in Segment HA at 101st Street, 110th Street, and 119th Street. Good design practices would ensure that the substation buildings contribute to the streetscape by filling in some of the vacant spaces in the business corridor. Building displacements would occur mostly at station and yard areas, leaving most blocks of Halsted Street unaffected by property acquisition. Station and yard areas

are discussed in further detail below. Figure 5-3 shows a conceptual visualization of the proposed elevated structure on Halsted Street.

Figure 5-3(a): 100th and Halsted Streets Looking North - Halsted Rail Alternative (Existing View)

Figure 5-3(b): 100th and Halsted Streets Looking North - Halsted Rail Alternative (Visualization)

At the 103rd Street station, three commercial buildings and associated parking areas would be acquired for use as a park & ride lot and bus turnaround. The affected buildings currently house hair supply, party supply, and car loan businesses, as well as vacant storefronts. Given that there are other vacant properties available in the vicinity for the purposes of relocation, the conversion to park & ride facilities would not adversely affect the community following compliance with the

Uniform Act. The station would improve access to the senior housing complex on 103rd Street just west of Green Street, thereby enhancing mobility for community residents who are potentially transit-dependent. The station would also create a transit hub and would help revive the neighborhood with pedestrian activity, which would be beneficial. The station would also serve as a focal point for the surrounding communities that are currently separated by Halsted Street; however, some of these benefits would be limited by the aesthetic impacts that the elevated structure and supports would have on the streetscape. The new transit infrastructure would not adversely change the character of the neighborhood if landscape were planted to provide screening and good design practices were used.

The conceptual design of the 111th Street station would closely resemble the 103rd Street station. A fast food restaurant and an automotive shop would be acquired to make space for a park & ride lot on the northwest corner of 111th and Halsted Streets. The impacts and benefits of the 111th Street station would be similar to those of the 103rd Street station. The station would improve access to the senior housing/nursing complex on Halsted Street just north of 110th Street, thereby enhancing mobility for community residents who are potentially transit-dependent.

The property acquisitions at 119th Street station would be more extensive than at the 103rd and 111th Street stations. The block bounded by 119th, 120th, Peoria, and Halsted Streets would be acquired to accommodate a park & ride lot and bus turnaround. The block currently contains a large surface parking lot, automotive services, a vacant warehouse, check cashing, a supermarket, a household goods store, and an Illinois Department of Employment Security office. Compliance with the Uniform Act would mitigate the adverse community impacts associated with the business displacements, and the Illinois Department of Employment Security could be moved to other available office or storefront space nearby. Sufficient vacant commercial land exists on Halsted Street in the vicinity of 119th Street and areas southward to relocate the businesses within the same corridor. Given that the affected block already contains a substantial amount of surface parking and vacant space, replacement of the current land uses with a park & ride lot would not be an adverse change in community character. The park & ride lot is adjacent to land that has been identified for acquisition for the proposed 119th Street yard and shop, which is discussed further in Section 5.6.4. Elevated tracks leading to the yard and shop would branch off from the Halsted Street elevated structure at 120th Street, but would cross primarily industrial land that does not contain any community-oriented land uses or resources.

The 119th Street station would create a transit hub and would help revive the neighborhood with pedestrian activity, which would be beneficial. These impacts would primarily occur in areas east and north of the station, because the land to the southwest of the station would be permanently used for park & ride and yard and shop facilities. Some of these benefits would be limited by the aesthetic impacts that the elevated structure and supports would have on the streetscape, particularly along Halsted Street. The station would also serve as a focal point for the surrounding communities that are currently separated by Halsted Street; however, this impact would be limited by the amount of vacant and industrial land present on the blocks surrounding Halsted Street and the placement of the yard and shop facility southwest of the station. The new transit

infrastructure would not adversely change the character of the neighborhood if landscape were planted to provide screening and good design practices were used.

Community Resources
The Halsted Rail Alternative would displace one community resource in Segment HA: the Illinois Department of Employment Security office, which would be moved to another location nearby to avoid adverse impacts. No other resources would be negatively affected.

The new rail extension would also facilitate access to community resources near the station locations, especially for transit-dependent residents (see Section 4.8 for a list of resources near the proposed route), and this impact would be beneficial overall. This impact would be greatest at the 119th Street station, where the Major Taylor Trail crosses the intersection of 119th and Halsted Streets. Station area improvements would enhance this crossing and provide a beneficial connection between the new transit line and the existing bicycle and pedestrian trail. Additional community resources, including the West Pullman Library and several churches (some possibly not currently in use), are east of the 119th Street station site, and community members would benefit from enhanced transit connections to these resources.

Mobility and Development
The Halsted Rail Alternative would substantially reduce travel times between the Washington Heights, Roseland, Morgan Park, and West Pullman communities and the Village of Calumet Park, and would enhance their connection with major employment and activity centers north of the project area. This enhancement would increase the number and variety of viable employment opportunities available to residents of these communities, especially those who are transit-dependent. The extended Red Line service and park & ride facilities would also provide alternatives to solo driving, and would attract some motorists off of the nearby highways. More cars would drive into the area to access the park & ride lots, but the increased traffic would not be great enough to worsen congestion following implementation of the mitigation measures prescribed in the *Transportation Technical Memorandum*.

The area around the 103rd Street station location consists of businesses along Halsted and 103rd Streets, and primarily single-family residences on the surrounding blocks. The business area on 103rd Street extends approximately four blocks west of Halsted Street and two blocks to the east. There are several vacant parcels and buildings in the area, and the enhanced transit service could attract infill development and encourage growth of a community business hub around the station. The station would also provide additional mobility to the residents of the senior housing complex that is two blocks to the west. There are also multiple vacant residential parcels that would become more attractive for infill development, given the convenience of the nearby Red Line service. Infill would likely occur without changing the overall scale of the neighborhood. The mobility and development impacts of the Halsted Street Rail Alternative would be beneficial; however, the development potential along Halsted Street would be limited by the negative aesthetic and shading impacts of the proposed elevated structure in the median.

Development potential would be more limited around the 119th Street station location, given the relatively large amount of land that would be used for permanent rail facilities. The parcels on the four blocks of 119th Street to the east of the station location are almost entirely vacant, however, which would potentially allow for a sizeable transit-oriented development in the future. Toward the west, the land on the north side of 119th Street contains mostly public and religious institution uses. Some of the buildings along this portion of 119th Street are vacant, which would allow additional room for limited infill development. The south side of 119th Street between Halsted and Ada Streets would be used exclusively for the park & ride facility and the yard and shop area, neither of which would be conducive to community development. The park & ride lot would have a similar impact on the west side of Halsted Street to the south of the station. The mobility and development impacts would be beneficial overall, but not to as great an extent as at the other station areas. The 119th Street station would have the added benefit of providing access to the Major Taylor Trail, thereby enhancing the multi-modal connection between the Red Line and the pedestrian and bicycle trail.

5.6.1.2 Segment HB

Character and Cohesion

In Segment HB, most of the Halsted Street alignment contains businesses similar to Segment HA, with the exception of the Cedar Park Cemetery on the west side of Halsted Street between 124th and 127th Streets. The Metra Electric District grade crossing and West Pullman Station are between 120th and 122nd Streets. A substation would be located at 126th Street on land currently occupied by part of a surface parking lot. The elevated structure would be similar in appearance to the structure in Segment HA, and would have similar impacts on the character and cohesion of the surrounding community. The same mitigation measures for community and cohesion impacts identified for Segment HA in Section 5.6.1.1 would apply to Segment HB.

At the Vermont Avenue station, the commercial properties on both sides of Halsted Street would be acquired between Vermont Avenue and 128th Place. The single-family homes on the east side of Green Street between Vermont Avenue and 128th Place would also be acquired. The acquired property would be used for a surface park & ride lot on the east side of Halsted Street, and a seven-story park & ride structure on the west. The parking structure would include retail and community space on the ground floor. The displaced buildings along Halsted Street would include a daycare facility, a restaurant, several vacant buildings, and a partially vacant strip mall. Compliance with the Uniform Act would ensure that impacts are not adverse because there is sufficient available space in the area where the displaced businesses could relocate. Some might be able to relocate into the new retail space that would be built in the parking structure. Approximately 11 single-family homes would need to be acquired along Vermont and Green Streets. There are few vacant residential lots in the immediate area, but the magnitude of residential relocations could likely still be absorbed by the housing market in the neighborhood, and impacts would not be adverse after implementation of the Uniform Act.

The seven-story parking structure at the Vermont Avenue station would have an adverse impact on the neighborhood along Green Street between Vermont Avenue and 128th Place, which currently consists of single-family homes. The houses on the east side of Green Street would be

replaced by the parking structure, which would be out of scale and visually inconsistent with the single-story residential character of the neighborhood, as shown in Figure 5-4. No amount of mitigation or landscape screening would effectively offset this adverse impact.

Figure 5-4(a): Vermont Avenue Park & Ride Looking West - Halsted Rail Alternative (Existing View)

Figure 5-4(b): Vermont Avenue Park & Ride Looking West - Halsted Rail Alternative (Visualization)

Some of the adverse impacts on community character and cohesion would be balanced by the benefits of the improved transit service. The station would create a transit hub and would help

revive the neighborhood with pedestrian activity, which would be beneficial. Like the other stations, the Vermont Avenue station would also serve as a focal point for the surrounding communities that are currently separated by Halsted Street; however, some of these benefits would be limited by the aesthetic impacts that the elevated structure and supports would have on the streetscape. The new transit infrastructure would not adversely change the character of the neighborhood if landscape were planted to provide screening and good design practices were used.

Community Resources
The Halsted Rail Alternative would not displace any community resources in Segment HB. The benefits of enhanced access would be the same as those in Segment HA, described in Section 5.6.1.1.

Mobility and Development
The Halsted Rail Alternative would substantially reduce travel times between the Washington Heights, Roseland, Morgan Park, and West Pullman communities and the Village of Calumet Park, and would have the same general mobility benefits as it would in Segment HA, as described in Section 5.6.1.1.

The area around the Vermont Avenue station location consists of businesses along Halsted Street and primarily single-family residences on the surrounding blocks. There are no businesses fronting Vermont Avenue in the vicinity of Halsted Street, only single-family residences. Several of the commercial parcels along Halsted Street south of 127th Street are vacant and would potentially be available for future redevelopment. The station would increase the attractiveness of the area for businesses, and would encourage economic growth in the community. Infill would likely occur without changing the overall scale of the neighborhood. The mobility and development impacts of the Halsted Street Rail Alternative would be beneficial; however, the development potential along Halsted Street would be limited by the negative aesthetic and shading impacts of the proposed elevated structure in the median.

The Halsted Rail Alternative would lack the access and mobility benefits for the Altgeld Gardens community that the UPRR Rail Alternative would provide, but bus service from Altgeld Gardens would be routed to connect to the Vermont Avenue Station. Benefits would accrue to the West Pullman community and the Village of Calumet Park instead of the Riverdale community.

5.6.2 Construction Impacts and Mitigations – Halsted Rail Alternative

5.6.2.1 Segment HA

Character and Cohesion

Community disruption would occur while construction activities are performed for the Halsted Rail Alternative, with intensive construction occurring over a period of approximately 3 years. Construction activities would be more disruptive than they would under the UPRR Rail Alternative because the Halsted Rail Alternative elevated structure would be built in the median of a major commercial street instead of on private, off-street ROW.

Most of the construction activities and staging would occur within street ROW, properties acquired as part of the permanent envelope for the project, and potentially other nearby vacant parcels. Increased truck traffic to and from the alignment would also occur, particularly on Halsted Street and major east-west cross streets. Given the elevated configuration of most of the Halsted Rail Alternative, hoisting equipment would be visible above the roofs of existing buildings and in staging areas. Storage of materials, equipment, and trucks would introduce temporary intermittent visual impacts within communities, but these impacts would not be adverse given their temporary nature and CTA's use of best management practices. CTA would notify the community in advance of disruptive activities such as building demolition, utility relocation, and necessary detours, and would perform work in a manner consistent with local ordinances. Hauling routes would be designed to minimize the amount of trucks and equipment passing through sensitive areas of the community, and would favor highways over local roads to the extent feasible.

Temporary dust, noise, and visual impacts would occur. Residents would experience these impacts during construction on an intermittent basis, but impacts would not be adverse provided that best management practices are employed and nighttime construction near residences is limited to the extent practicable.

Community Resources

Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. Community resources adjacent to the alignment would be subject to temporary adverse impacts, but these would be mitigated through best management practices. Access to community resources would be maintained during construction, via detours when necessary.

Mobility and Development

During construction of the Halsted Rail Alternative, Halsted Streets and its east-west cross streets would require temporary, intermittent roadway and lane closures. Detours would be provided to maintain access to adjacent properties, and bus transit service would detour around closures. Temporary traffic pattern changes might also be needed such as full street closure, converting a two-way street to one-way operation, or reducing the number of available travel lanes. Temporary parking restrictions might also be implemented to facilitate construction activities.

Businesses around the alignment and parking structure could be affected by construction activities, construction-related traffic, and road and sidewalk closures. Temporary roadway delays due to truck traffic and the movement of construction equipment would occur. Construction would likely result in a temporary, intermittent decrease in accessibility to some businesses. This impact would be limited to businesses on streets near the Halsted Rail Alternative alignment. The CTA would provide adequate detours and minimize road closures to the extent practicable, but some adverse impacts on businesses might occur, as people might avoid the area altogether. This potentially adverse impact would be mitigated through early notification of construction activities, provision of temporary alternate access routes, and advertising programs to increase the visibility of affected businesses during construction.

5.6.2.2 Segment HB

The construction impacts of the Halsted Rail Alternative in Segment HB would be similar to those in Segment HA described in 5.6.2.1, with the exception of the Vermont Avenue station. The Vermont Avenue station would require more intensive construction activities due to the multi-level parking structure, but construction would be phased to reduce impacts. Construction activities at any one location along the alignment would not last for the entire duration of the project construction phase.

5.6.3 Cumulative Impacts and Mitigations – Halsted Rail Alternative

5.6.3.1 Segment HA

There are no projects identified in the *Cumulative Impacts Technical Memorandum* that could cause cumulative impacts in conjunction with the Halsted Rail Alternative. Any developments in the vicinity of the Halsted Rail Alternative stations would, however, benefit from enhanced transit access.

The temporary construction impacts of the Halsted Rail Alternative described in Section 5.6.2 could contribute to a cumulative impact if other nearby projects were underway at the same time as the Halsted Rail Alternative construction. Currently, no projects have been identified that would have coinciding construction timelines. The CTA would coordinate activities with any adjacent construction projects to minimize impacts on the community.

5.6.3.2 Segment HB

The cumulative impacts analysis results for Segment HB would be the same as for Segment HA, described in Section 5.6.3.1.

5.6.4 119th Street Yard and Shop

5.6.4.1 Permanent Impacts and Mitigations

The 119th Street yard and shop would be constructed on primarily vacant industrial parcels, with the exception of the elevated tracks leading connecting the yard to the Halsted Street elevated structure at 120th Street. The tracks would displace two commercial buildings, one of which is vacant, and the Sure-Way Missionary Baptist Church, which occupies a converted building at the southwest corner of 120th and Halsted Streets. Given the availability of other buildings and vacant

parcels in the immediate area, there would be no adverse impacts after compliance with the Uniform Act. For the Sure-Way Missionary Baptist Church, another building in the area could be upgraded and adapted, or a new building could be provided for church use without residual adverse impacts on this community resource.

Although no adverse impacts are expected, the yard and shop and the adjacent park & ride lot for 119th Street station would occupy approximately one-quarter of the land area nearest to the station site. Neither the park & ride lot nor the yard and shop facility would contribute to the growth and development of the community. This would reduce the overall potential of the Halsted Rail Alternative to encourage new development in the 119th Street station area; however, the proposed rail yard and shop would be consistent with the brownfield site that currently exists on the property. Transit-supportive development would still be able to occur in the remainder of the station area.

5.6.4.2 Construction Impacts and Mitigations

Community disruption would occur while construction activities are performed for the 119th Street yard and shop, with intensive construction occurring over a period of up to 3 years. Most of the construction activities and staging would occur within the properties acquired as part of the permanent envelope for the project. Increased truck traffic to and from the yard and shop site would also occur, particularly on 119th and Halsted Streets. Hoisting equipment would be visible above the roofs of existing buildings. Storage of materials, equipment, and trucks would introduce temporary intermittent visual impacts, but these impacts would not be adverse given their temporary nature, CTA's use of best management practices, and the presence of few residences and businesses in the immediate vicinity of the yard and shop site. CTA would notify the community in advance of disruptive activities such as building demolition, utility relocation, and necessary detours, and would perform work in a manner consistent with local ordinances. Hauling routes would be designed to minimize the amount of trucks and equipment passing through sensitive areas of the community, and would favor highways over local roads to the extent feasible. The CTA would provide adequate detours and minimize road closures to the extent practicable. Temporary dust, noise, and visual impacts would occur on an intermittent basis, but impacts would not be adverse provided that best management practices were employed and nighttime construction near residences were limited to the extent practicable.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

The No Build Alternative would have no adverse neighborhood and community impacts. No mitigation measures would be required. The No Build Alternative would lack the livability, mobility, and other community benefits that the other alternatives would provide.

6.2 Bus Rapid Transit Alternative

The BRT Alternative would have no adverse neighborhood and community impacts. No mitigation measures would be required. Impacts would be beneficial overall. The BRT Alternative would provide minor improvements in transit service, mobility, community character, and cohesion and it would have fewer livability, mobility, and other community benefits than the rail alternatives.

6.3 Union Pacific Railroad Rail Alternative – Right-of-Way Option

6.3.1 Segment UA

The UPRR Rail Alternative ROW Option would have no adverse neighborhood and community impacts after mitigation in Segment UA. Impacts would be beneficial overall. The UPRR Rail Alternative ROW Option would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would provide substantial livability and mobility improvements for the neighborhoods in the project area, and help spur economic development near stations. It would also serve the geographically isolated communities in the area.

6.3.2 Segment UB

The UPRR Rail Alternative ROW Option would have no adverse neighborhood and community impacts after mitigation in Segment UB. Impacts would be beneficial overall. The UPRR Rail Alternative ROW Option would facilitate access to community resources near the 130th Street Station, especially for transit-dependent residents. The new rail extension would provide substantial livability and mobility improvements for the neighborhoods in the project area, and help spur economic development near stations. It would also serve the geographically isolated communities in the area, including Altgeld Gardens.

6.3.3 120th Street Yard and Shop

The 120th Street yard and shop would have no adverse neighborhood and community impacts. No mitigation measures would be required.

6.4 Union Pacific Railroad Rail Alternative – East Option

6.4.1 Segment UA

The UPRR Rail Alternative East Option would have an adverse impact on the neighborhood around 117th Street and Prairie Avenue in Segment UA that could not be mitigated. At this location, the elevated track structure would displace two houses and encroach into the neighborhood beyond the line of trees that currently shields views of the existing UPRR ROW. The structure would be in front of several houses, and the height would be out of scale with the existing character of the neighborhood. Like the ROW Option, the East Option would also provide beneficial livability and mobility improvements for the neighborhoods in the project area, and help spur economic development near stations. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would also serve the geographically isolated communities in the area.

6.4.2 Segment UB

The UPRR Rail Alternative East Option would have no adverse neighborhood and community impacts after mitigation in Segment UB. Like the ROW Option, the East Option would also provide beneficial livability and mobility improvements, and help spur economic development. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would also serve the geographically isolated communities in the area, including Altgeld Gardens.

6.4.3 120th Street Yard and Shop

The 120th Street yard and shop would have no adverse neighborhood and community impacts. No mitigation measures would be required.

6.5 Union Pacific Railroad Rail Alternative – West Option

6.5.1 Segment UA

The UPRR Rail Alternative West Option would have the following adverse neighborhood and community impacts in Segment UA that could not be mitigated:

- Between 99th Street and 103rd Street, the elevated track structure would run along Fernwood Parkway. The change in community character would be adverse due to the visual impacts of the new elevated structure along the parkway. The structure would change the neighborhood setting of the park and the houses facing it along the west side of Eggleston Avenue. Mitigation measures, including screening the structure with additional landscaping, would not be sufficient to offset this impact.

- Near 103rd Street station, the vacant parcels and two vacant buildings would be acquired to accommodate a surface parking lot and bus turnaround, which would be an adverse visual impact. Mitigation measures would not be sufficient to offset this impact.

- The Michigan Avenue station park & ride would be an adverse visual impact because the parking structure would be two stories taller and therefore more pronounced for the West Option than for the ROW and East Options. Mitigation measures would not be sufficient to offset this impact.

Like the ROW and East Options, the West Option would also provide beneficial livability and mobility improvements for the neighborhoods in the project area, and help spur economic development near stations. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would also serve the geographically isolated communities in the area.

6.5.2 Segment UB

The UPRR Rail Alternative West Option would have no adverse neighborhood and community impacts after mitigation in Segment UB. Like the ROW and East Options, the West Option would also provide beneficial livability and mobility improvements, and help spur economic development. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would also serve the geographically isolated communities in the area, including Altgeld Gardens.

6.5.3 120th Street Yard and Shop

The 120th Street yard and shop would have no adverse neighborhood and community impacts. No mitigation measures would be required.

6.6 Halsted Rail Alternative

6.6.1 Segment HA

The Halsted Rail Alternative would have no adverse neighborhood and community impacts after mitigation in Segment HA. The Halsted Rail Alternative would also provide beneficial livability and mobility improvements for the neighborhoods in the project area, and help revive the Halsted Street commercial corridor. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would also serve the geographically isolated communities in the area.

6.6.2 Segment HB

In the neighborhood along Green Street between Vermont Avenue and 128th Place, the Halsted Rail Alternative would have an adverse impact that could not be mitigated. The single-family homes on the east side of the block would be acquired and removed to construct a seven-story park & ride garage. The garage would be out of scale and inconsistent with the single-story residential character of the neighborhood. No available mitigation measures would effectively offset this adverse impact. The Halsted Rail Alternative would also provide beneficial livability and mobility improvements for the neighborhoods in the project area, and help revive the Halsted Street commercial corridor. The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents. It would also serve

the geographically isolated communities in the area, but would not directly serve Altgeld Gardens.

6.6.3 119th Street Yard and Shop

The 119th Street yard and shop would have no adverse neighborhood and community impacts. No mitigation measures would be required.

Section 7
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Appendix A
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Neighborhoods and Communities

The refined East and West Option alignments would result in additional permanent adverse impacts to neighborhoods and communities which were not discussed in this technical memorandum.

The refined alignment along the I-57 corridor in the Roseland community area would result in adverse impacts related to community character and cohesion in Roseland. The elevated track structure along the I-57 corridor would cause adverse visual impacts because of the change in the visual setting in the highway right-of-way along the north side of I-57 in Roseland. Figure 1 shows existing conditions and a photo simulation of the track structure in the I-57 right-of-way.

Figure 1: Photo of Existing Conditions and Photo Simulation of the Elevated Track Structure in the I-57 Right-of-Way, Facing East from Lafayette Avenue and Princeton Avenue

Appendix M

Parklands and Community Facilities Technical Memorandum

- Final EIS Addendum M, Parklands and Community Facilities Technical Memorandum, July 2022
    - Attachment A - Coordination

Chicago Red Line Extension Project

Parklands and Community Facilities

Final EIS Addendum M

July 2022

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Table of Contents

Section 1 - Summary 1-1
1.1 Parklands 1-1
1.2 Community Facilities 1-2
Section 2 - Project Description and Background 2-1
Section 3 - Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-2
3.4 Methods 3-2
Section 4 - Affected Environment 4-1
4.1 Parklands 4-1
4.2 Community Facilities 4-4
Section 5 - Impacts and Mitigation 5-1
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited 7-1

Figures

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS) 2-4
Figure 4-1: Parklands in the Area of Potential Impact (1 of 2) 4-2
Figure 4-2: Parklands in the Area of Potential Impact (2 of 2) 4-3
Figure 4-3: Community Facilities in the Area of Potential Impact (1 of 2) 4-5
Figure 4-4: Community Facilities in the Area of Potential Impact (2 of 2) 4-6
Figure 5-1: Impacts on Fernwood Parkway 5-3
Figure 5-2: View Looking Northwest of the Linear Green Space and Access Road, North of 132nd Street within the Beaubien Woods Forest Preserve 5-4
Figure 5-3: Agape Community Center, Looking West 5-6
Figure 5-4: Aerial View of Agape Community Center 5-7
Figure 5-5: New St. Mary Church of Prayer, Looking South 5-8
Figure 5-6: Aerial View of New St. Mary Church of Prayer 5-8
Figure 5-7: Now Faith Church of God Holiness, Looking South 5-9
Figure 5-8: Aerial View of Now Faith Church of God Holiness 5-10
Figure 5-9: TCA Health, Looking Southwest 5-11
Figure 5-10: Aerial View of TCA Health 5-12
Figure 5-11: Impacts on Wendell Smith Park 5-14

Attachments

Attachment A – Forest Preserves of Cook County Mitigation Concurrence Letter

Tables

Table 4-1: Parklands within the Area of Potential Impact 4-1
Table 4-2: Community Facilities within the Area of Potential Impact 4-4
Table 4-3: Community Facilities in the Area of Potential Impact* 4-7

Abbreviations

ADA	Americans with Disabilities Act
API	Area of Potential Impact
BMPs	Best Management Practices
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
Conrail	Consolidated Rail Corporation
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
FPCC	Forest Preserves of Cook County
IDNR	Illinois Department of Natural Resources
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt
NEPA	National Environmental Policy Act
NS	Norfolk Southern Railway
RLE	Red Line Extension
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act
UPRR	Union Pacific Railroad

Section 1 - Summary

This addendum analyzes the potential impacts on parklands and community facilities for the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative, as compared with the Draft EIS. Consistent with the conclusions outlined in **Appendix M** of the Draft Environmental Impact Statement (EIS), the Red Line Extension (RLE) Project would result in adverse and beneficial impacts on parklands and community facilities in the area of potential impact (API).

1.1 Parklands

The API has nine parklands within it. Two parklands, Fernwood Parkway and Beaubien Woods Forest Preserve, would have permanent adverse impacts, whereas one park, Wendell Smith Park, would have only temporary construction impacts. Impacts on these three parklands would be mitigated.

During construction of the Preferred Alignment, there would be temporary and minor construction activities within Wendell Smith Park for a short duration, which would require the temporarily closure of the northwest corner of Wendell Smith Park.

The introduction of new and faster transit services would provide a permanent, beneficial impact to parklands within walking distance (approximately ½ mile) from the proposed station locations.

Fernwood Parkway

Approximately 4.5 acres of Fernwood Parkway would be affected as a result of the Preferred Alignment. Permanent impacts would result from the use of Fernwood Parkway for the elevated structure. This would result in a permanent incorporation of Fernwood Parkway between 99th Street and 103rd Street. Mitigation measures for impacts to Fernwood Parkway would include landscaping and replacement of the impacted acres of parkland with pocket parks located in the Washington Heights community area, directly adjacent to the Major Taylor Trail, or additional areas based on future coordination at a replacement ratio of 1 to 1, for a total of 4.5 acres of replacement parks.

Impacts to Fernwood Parkway under the Preferred Alignment were also noted in the Draft EIS. However, impacts to Fernwood Parkway in the Final EIS would be higher (4.5 acres) than those disclosed in the Draft EIS (1.6 acres under the UPRR East Option and 1.9 acres under the UPRR West Option).

Wendell Smith Park

The Preferred Alignment would be elevated over the northwest corner of the City-owned 99th Street right-of-way. Some trees would need to be removed in this area of the park for construction

equipment staging and construction access. To mitigate trees proposed to be removed, there would be tree replacement and restoration of park landscaping. Landscaping would also help mitigate the change in visual aesthetic of the park due to the placement of the elevated track structure over the northwest corner of the City-owned 99th Street right-of-way. Noise barriers would mitigate noise impacts from operation of the Preferred Alignment, whereas construction Best Management Practices (BMPs) would be implemented to mitigate noise impacts during construction of the Preferred Alignment.

The Draft EIS disclosed 0.7 acre of impacts to Wendell Smith Park. As comparison, the northwest corner of Wendell Smith Park would be temporarily closed during construction of the RLE Project (approximately 0.1 acre).

Beaubien Woods Forest Preserve

The 130th Street station would close Old 130th Street at the new RLE tracks, which would eliminate a connection to the access road into the Beaubien Woods Forest Preserve from Old 130th Street. However, the main access route to the Beaubien Woods Forest Preserve would continue to be from Ellis Avenue to Greenwood Avenue to 132nd Street. **Section 5.2.1.1** discusses the proposed mitigation and enhancement measures.

The 130th Street station was located north of 130th Street in the Draft EIS whereas the Beaubien Woods Forest Preserve is south of 130th Street. Impacts to the Beaubien Woods Forest Preserve are new and were not in the Draft EIS.

Beneficial Impacts on Parklands – Improved Access

The introduction of new and faster transit services in the project area would improve access to those parklands within walking distance (approximately ½ mile) from the proposed stations, such as Beaubien Woods Forest Preserve.

1.2 Community Facilities

There are 100 community facilities in the API. Two facilities, New St. Mary Church of Prayer and Now Faith Church of God Holiness, would be displaced as summarized below. Agape Community Center and TCA Health would not be displaced. Permanent impacts on parking at facilities would not be adverse after mitigation.

A few additional community facilities would have noise impacts from operation and/or construction of the Preferred Alignment. The introduction of new and faster transit services would provide a permanent, beneficial impact to community facilities by providing improved walking distances and accessibility.

Agape Community Center

The Preferred Alignment would require the use of a City-owned parcel located west of the Agape Community Center that would affect its current use by the Agape Community Center as parking. The Chicago Transit Authority (CTA) has coordinated with the Agape Community Center and incorporated into the design an alternative parking location on the east side of the Agape Community Center. The design includes accommodation for trucks to access the garages at the rear of the building located on the north side of the Agape Community Center. Mitigation measures are described in **Addendum L**.

Noise Impacts from Operation and Construction of the Preferred Alignment

Agape Community Center and My Holy Rock Missionary Baptist Church would have moderate noise impacts from operation of the Preferred Alignment. Kingdom Global Outreach Ministries would have severe noise impacts. However, there would be no permanent noise impacts on community facilities after mitigation.

Construction of the elevated structure would have temporary noise impacts on Agape Community Center, adjacent to the Preferred Alignment. These noise impacts could interrupt services conducted at Agape Community Center. Mitigation measures would be the same as those described in **Appendix M** of the Draft EIS, such as providing information about construction schedules and changes in parking and/or detours to Agape Community Center to share with its patrons.

New St. Mary Church of Prayer

Proposed parking for the 111th Street station would displace the New St. Mary Church of Prayer. CTA would work with the church to relocate the facility to available property within the community. The displacement would require replacement in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). Compensation and relocation assistance would be provided to this organization per the Uniform Act. The impact would be considered not adverse because of the general availability of similar real estate near the project that would be of a suitable size to accommodate the relocation.

Impacts to New St. Mary Church of Prayer are new; this facility was not identified in the Draft EIS as being potentially displaced.

Now Faith Church of God Holiness

The proposed right-of-way for the Preferred Alignment would displace Now Faith Church of God Holiness. The same mitigation measures for the New St. Mary Church of Prayer would apply to

Now Faith Church of God Holiness. The impact would be considered not adverse because of the general availability of similar real estate near the project that would be of a suitable size to accommodate the relocation. This community facility was also identified in **Appendix M** of the Draft EIS as a potentially displaced community facility under the UPRR East Option.

TCA Health

TCA Health would be permanently and temporarily impacted during construction. The eastern portion of TCA Health would be located within the proposed RLE Project right-of-way. The proposed exit driveway from the 130th Street station onto Old 130th Street would run through the eastern portion of the TCA Health property; therefore, this property would be partially acquired as part of the RLE Project. TCA Health would remain in operation and access would be maintined during construction. Impacts to TCA Health are new; this facility was not identified in the Draft EIS as being impacted. Mitigation measures are described in **Addendum L**.

Beneficial Impacts on Community Resources – Improved Access

As explained for parklands, the introduction of new and faster transit services in the project area would improve access to facilities within walking distance.

Section 2 - Project Description and Background

CTA, as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the

UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated

with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

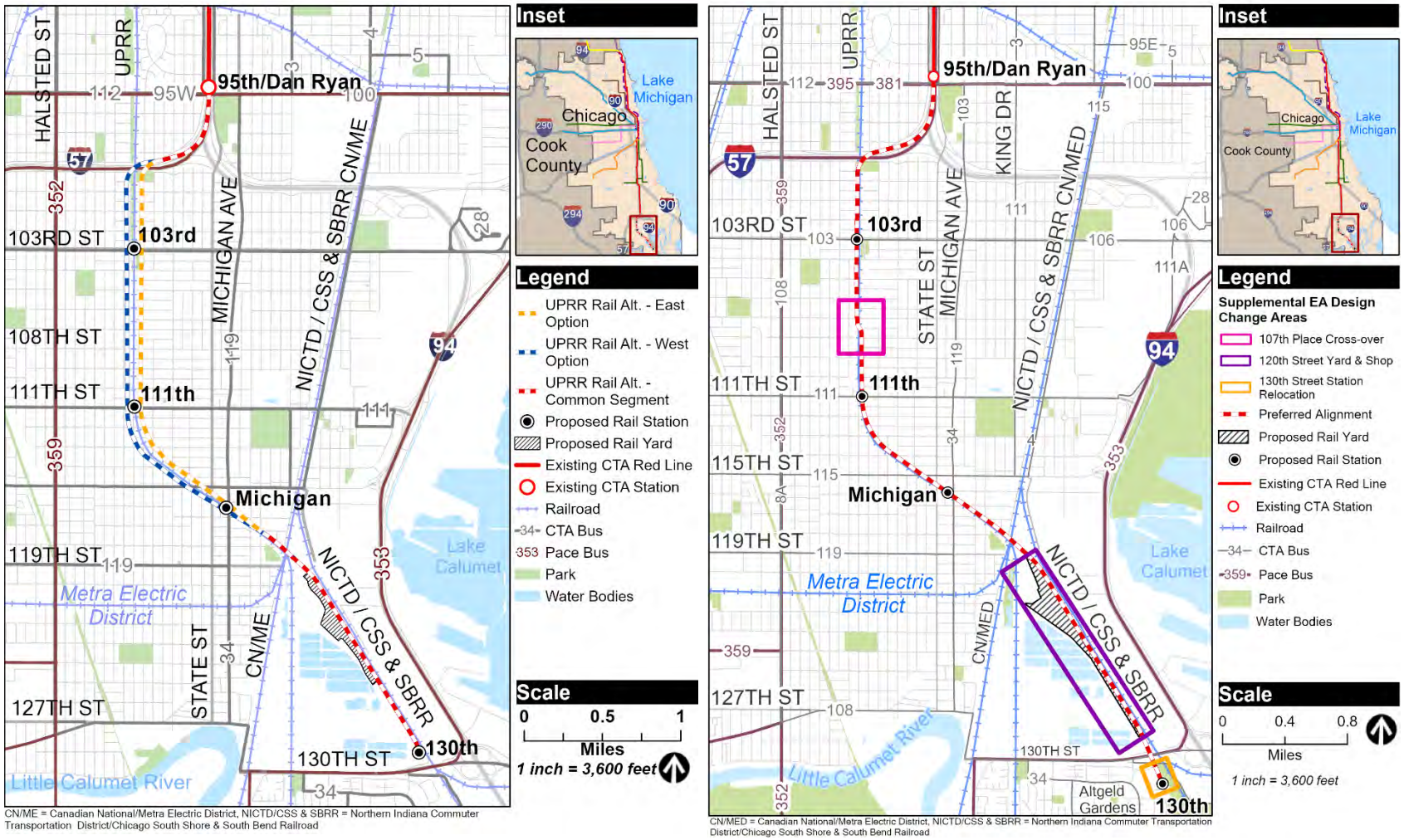

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix M** for the Draft EIS analysis have been carried forward to evaluate impacts to parklands and community facilities. This section documents the methodology for evaluating this resource, consistency with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

There are no changes to the applicable federal regulations referenced in **Appendix M** of the Draft EIS. Although state and local regulations regarding parklands and community facilities have not changed since publication of the Draft EIS, updates and new plans (discussed below) have been developed at the state and local level to manage these resources.

The Illinois Department of Natural Resources (IDNR), in cooperation with the Illinois Forestry Development Council, has prepared the *Illinois Forest Action Plan: 2020 – 2030. A Statewide Forest Resource Assessment and Strategy*. This document identifies tree threats as well as opportunities and strategies for forests in Illinois (IDNR 2019).

At the local level, the Chicago Park District issued its *2021 – 2025 Capital Improvement Plan*, which describes the funding sources and uses for acquisition and development of parklands, facility rehabilitation, and site improvements (Chicago Park District 2021).

The Chicago Metropolitan Agency for Planning (CMAP) *GO TO 2040* has been superseded by *ON TO 2050*, which details goals and objectives to address the region's challenges over the next several years.

3.2 Impact Analysis Thresholds

There are no specific thresholds for parklands identified under the National Environmental Policy Act (NEPA). The definition of impacts on parklands (i.e., adverse, adverse after mitigation, not adverse, not adverse after mitigation, and beneficial) in **Appendix M** of the Draft EIS is still applicable and was used for the Final EIS evaluation.

There are no impact analysis thresholds related to community facilities. However, the 2007 *Community Impact Assessment Manual* from the Illinois Department of Transportation (IDOT) provides qualitative guidance for conducting impact assessments on community facilities, as outlined in **Appendix M** of the Draft EIS. This methodology was consistently used for the Final EIS.

3.3 Area of Potential Impact

Consistent with **Appendix M** of the Draft EIS, the API includes parklands within 500 feet of the Preferred Alignment and within ½ mile around the proposed stations. The API also includes community facilities within or adjacent to the Preferred Alignment and within ½ mile around the proposed stations.

3.4 Methods

The analysis of parklands and community facilities of the Preferred Alignment was performed using the same methods as were documented in and consistent with **Appendix M** of the Draft EIS.

Section 4 - Affected Environment

This section describes any updates to the existing conditions for parklands and community facilities near the RLE Project since the publication of the Draft EIS. This section documents updates to the baseline data and planning horizon, as well as any changes to planning for parklands and community facilities and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

4.1 Parklands

There are nine parklands within the API for the Preferred Alignment, as compared to 10 within the API for the UPRR East and West Options. Golden Gate Park was within the API for the 130th Street station in the Draft EIS. However, it is outside the API for the relocated 130th Street station. **Table 4-1** compares the parklands within the API in **Appendix M** of the Draft EIS to the parklands within the Final EIS API. **Figure 4-1** and **Figure 4-2** depict the locations of these parklands.

Table 4-1: Parklands within the Area of Potential Impact

Parkland	Draft EIS (UPRR Rail Alternative)	Preferred Alignment
Robert Abbott Park	X	X
Fernwood Parkway	X	X
Wendell Smith Park	X	X
Block Park	X	X
Fernwood Park	X	X
Potter Palmer Park	X	X
Kensington Park	X	X
Golden Gate Park	X	
George Washington Carver Park	X	X
Beaubien Woods Forest Preserve	X	X
Total Affected Parks	**10**	**9**

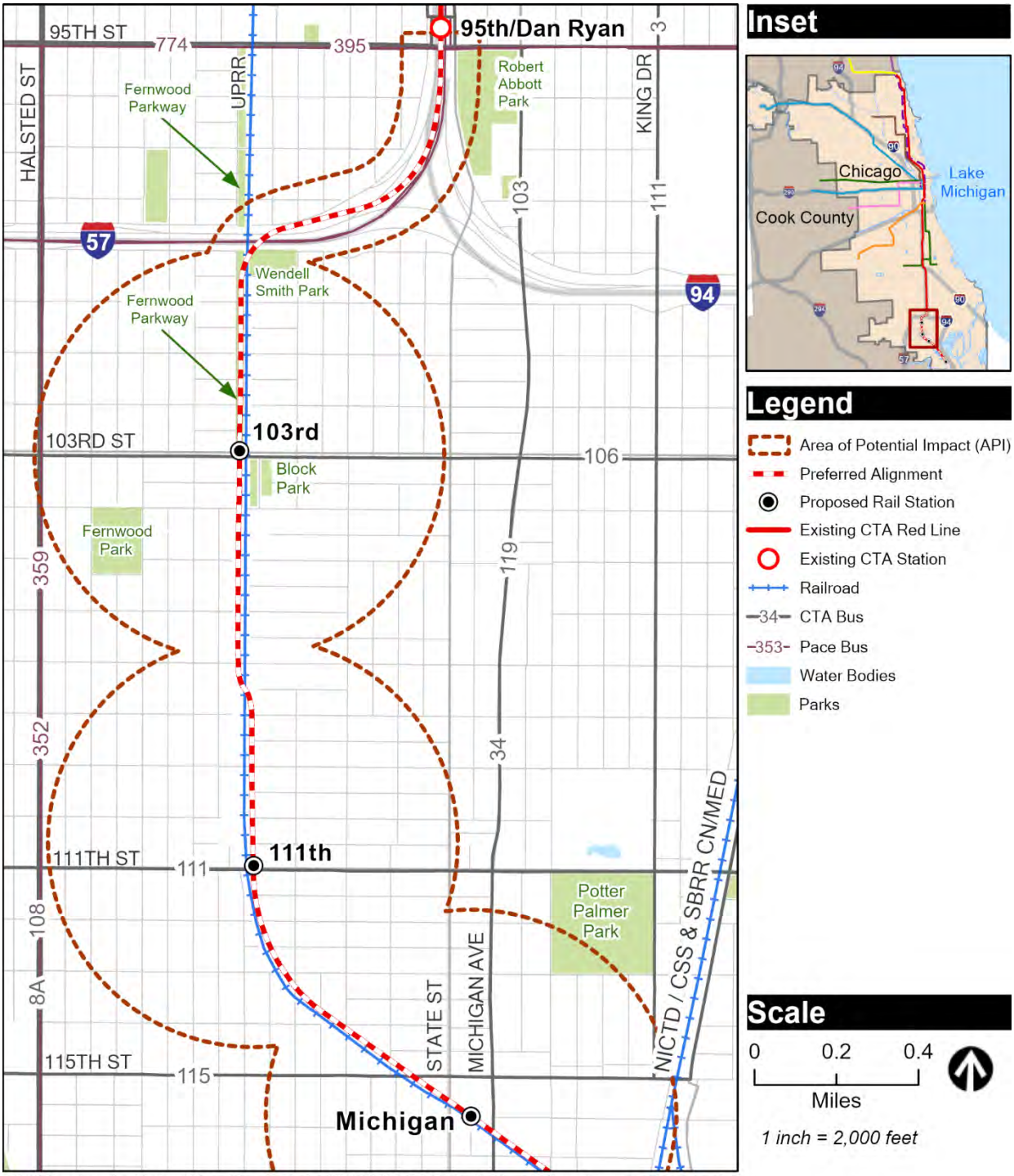

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-1: Parklands in the Area of Potential Impact (1 of 2)

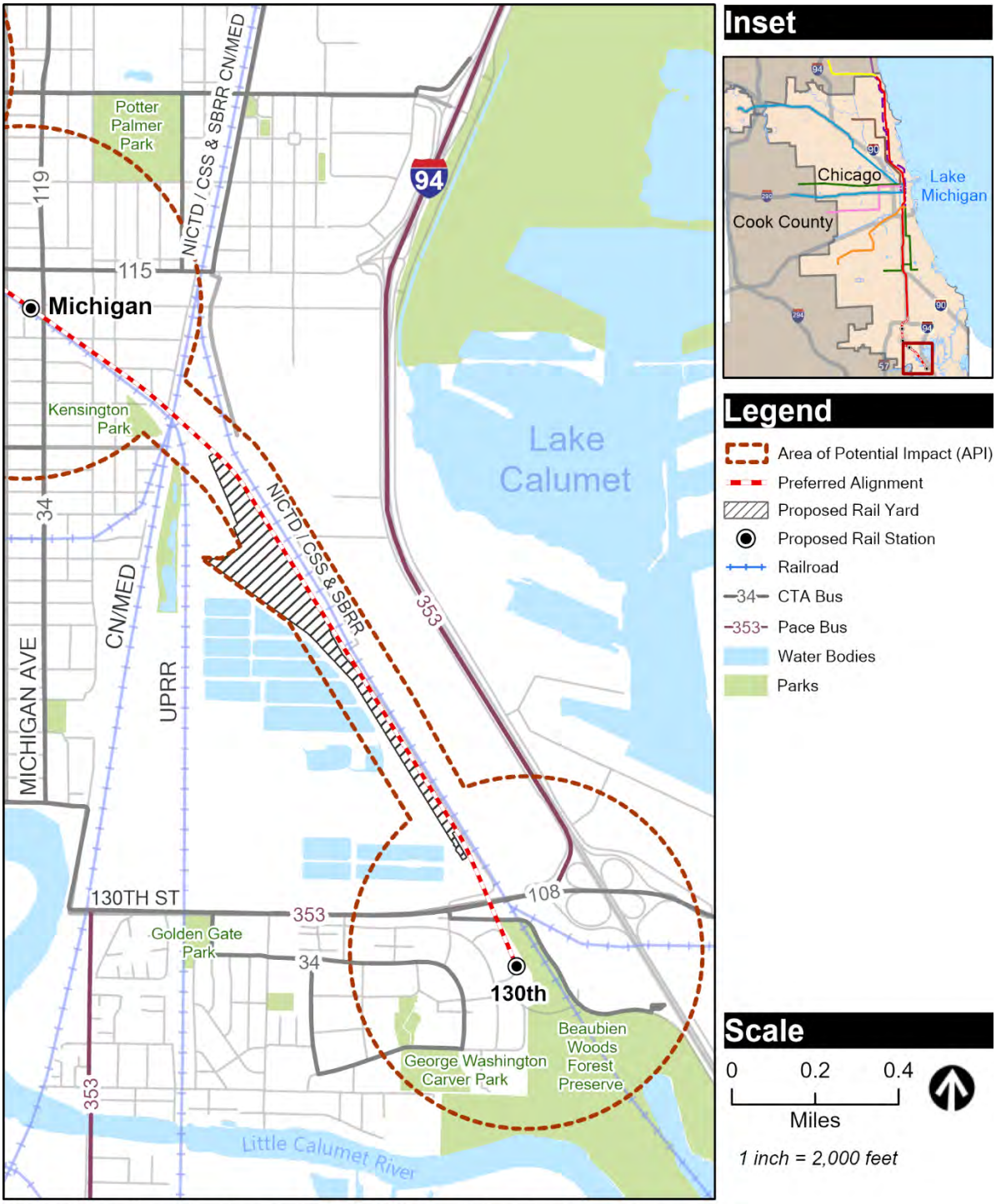

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-2: Parklands in the Area of Potential Impact (2 of 2)

4.2 Community Facilities

There are 100 community facilities within the API of the Preferred Alignment compared to 76 community facilities within the API for the East and West Options in the Draft EIS, as shown in **Table 4-2**. These include community facilities that are adjacent to the Preferred Alignment and/or are within a ½ mile of a proposed station location. Details about each community facility, including addresses and locations relative to the Preferred Alignment, can be found in **Table 4-3**. One community facility, Chicago Fire Department – Engine 93, is both a fire station and a landmark. Mary Magdalene Missionary Baptist Church is both a place of worship and a landmark. These two community facilities were included in the Fire Station and Landmark and in the Place of Worship and Landmark categories in **Table 4-2**. However, they were counted only once in the total number of affected community facilities. Community facilities highlighted in orange in **Table 4-3** were not included in the Draft EIS.

Figures 4-3 and **4-4** show the locations of these community facilities relative to the Preferred Alignment.

Table 4-2: Community Facilities within the Area of Potential Impact

Facility Type	Draft EIS (UPRR Rail Alternative - East and West Options)	Preferred Alignment
Government Facility	2	5
Community Center	2	6
Fire Station	4	3
Healthcare Facility or Hospital	3	4
Landmark	2	9
Library	1	1
Place of Worship	47	62
School	15	12
Total Number of Affected Community Facilities	**76**	**100***

Note: * Two community facilities were included in two categories but counted once in the total number of affected community facilities. This is the reason the total number of affected community facilities is 100 instead of 102.

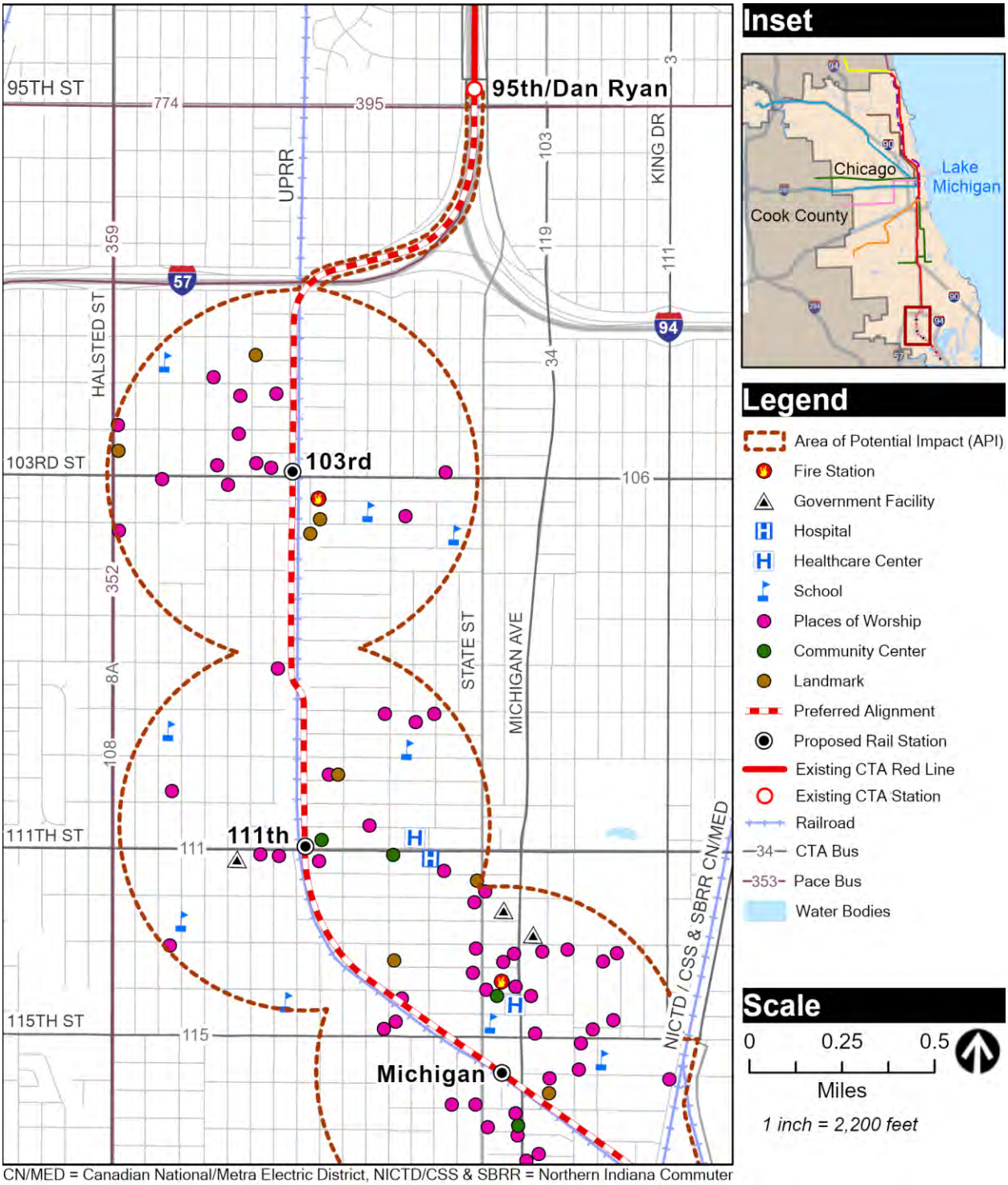

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-3: Community Facilities in the Area of Potential Impact (1 of 2)

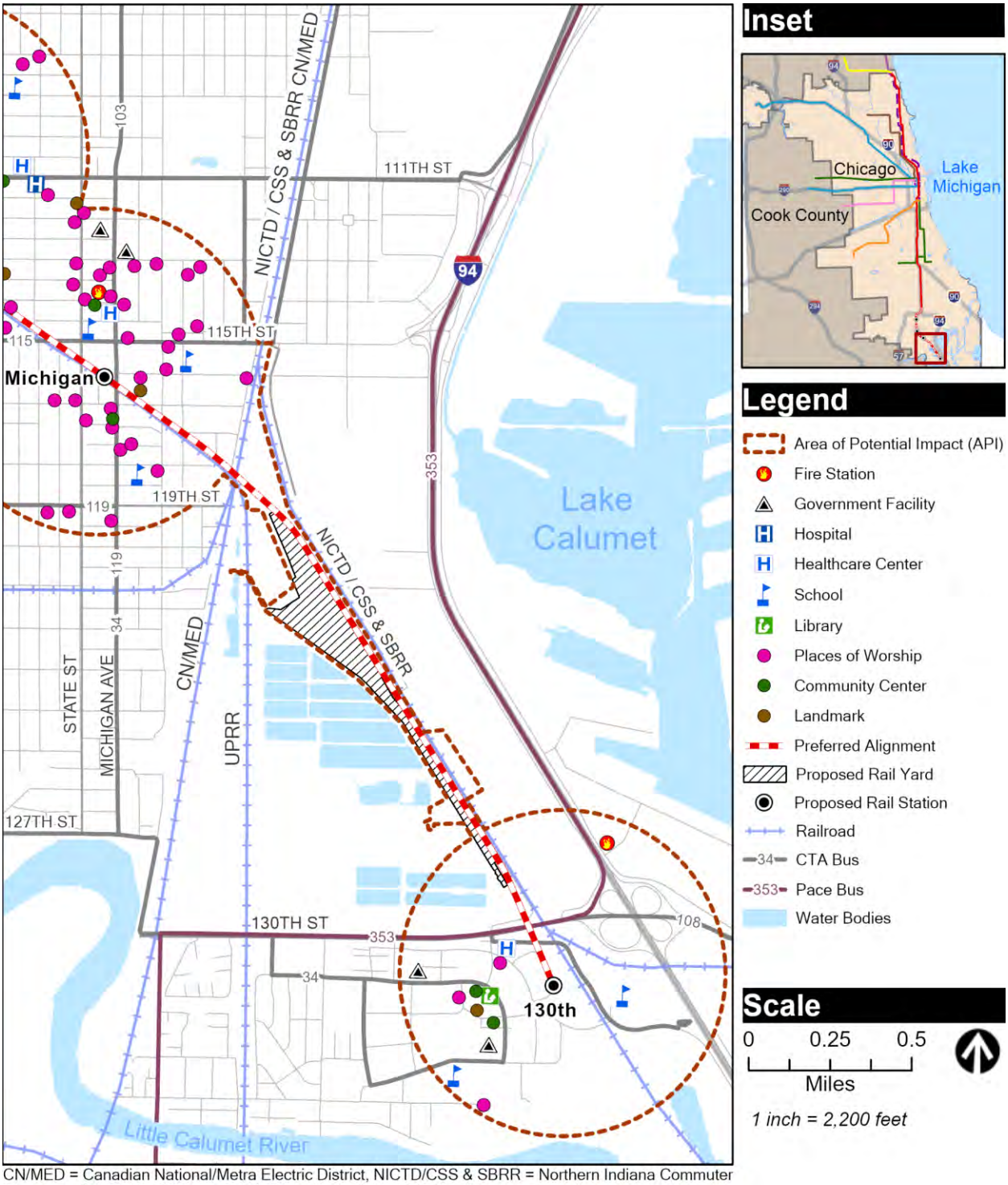

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-4: Community Facilities in the Area of Potential Impact (2 of 2)

Table 4-3: Community Facilities in the Area of Potential Impact*

Facility Type	Name	Address	Adjacent	½ Mile from Station or 500 Feet from Preferred Alignment
Landmark	Eclectic Neo Traditional Home	444 W. 100th Place		X
School	Fernwood Elementary School	10041 S. Union Avenue		X
Place of Worship	Fernwood United Methodist Church	10057 S. Wallace Street		X
Place of Worship	Victory Worship Cathedral	10115 S. Parnell Avenue		X
Place of Worship	Kingdom Global Outreach Ministries	10132 S. Eggleston Avenue		X
Place of Worship	Southtown Church of Christ	W. 102nd Street		X
Place of Worship	Rehoboth Apostolic Worship Center	10159 S. Halsted Street		X
Landmark	Classical Revival Substation	10227 S. Halsted Street		X
Place of Worship	The Way of Holiness Mission Ministries	10401 S. Halsted Street		X
Place of Worship	New Macedonia Baptist Church	432 W. 103rd Street		X
Place of Worship	Loving Spirit Missionary Baptist	424 W. 103rd Street		X
Place of Worship	Ambassadors for Christ Church	531 W. 103rd Street		X
Place of Worship	God's House of Holiness in Christ	538 W. 103rd Street		X
Place of Worship	Faith Temple Coptic Church	625 W. 103rd Street		X
Fire Station and Landmark	Chicago Fire Department - Engine 93	330 W. 104th Street		X
Landmark	Roseland Pumping Station	351 W. 104th Street		X

School	Langston Hughes Elementary School	240 W. 104th Street		X
Place of Worship	Arrows of Deliverance	48 W. 103rd Street		X
Place of Worship	Christian Missionary Baptist Church	132 W. 104th Street		X
School	Kohn Elementary School	10414 S. State Street		X
Place of Worship	Mount Ebal Missionary Baptist Church	425 W. 107th Street		X
Place of Worship	Beacon of Joy Seventh-day Adventist Church	101 W. 108th Street		X
Place of Worship	Holy Ghost Cathedral	115 W. 108th Street		X
Place of Worship	Turner Chapel Missionary Baptist Church	10800 S. Wentworth Avenue		X
Place of Worship	Allen Metropolitan Christian Methodist Episcopal Church	10946 S. Lowe Avenue		X
Landmark	Bethany Reformed Church Manse	3 W. 111th Place		X
City Facility	Alderman Carrie Austin, 34th Ward	507 W. 111th Street		X
School	Dunne Elementary School	10845 S. Union Avenue		X
School	Mildred Lavizzo Elementary School	138 W. 109th Street		X
Place of Worship and Landmark	Mary Magdalene Missionary Baptist Church	10920 S. Princeton Avenue		X
Healthcare Facility	Chicago Family Health Center	120 W. 111th Street		X
Place of Worship	Christ Cathedral Baptist Church	445 W. 111th Street		X
Place of Worship	New St. Mary Church of Prayer	341 W. 111th Street	X	
Place of Worship	Word of Truth Pentecostal COGIC	415 W. 111th Street		X

Community Center	Agape Community Center	342 W. 111th Street	X	
Place of Worship	Roseland Bible Church	233 W. 111th Street		X
Hospital	Roseland Community Hospital	45 W. 111th Street		X
Place of Worship	Christ Temple Cathedral Church	62 W. 111th Place		X
City Facility	Alderman Anthony Beal, 9th Ward	34 E. 112th Place		X
School	Christian Fenger Academy High School	11220 S. Wallace Street		X
Landmark	Roseland Community Hospital Nurses Home	11321 S. Wentworth Avenue		X
State Facility	Illinois Department of Human Services Food Center	11253 S. Michigan Avenue		X
Place of Worship	Lilydale First Baptist Church	649 W. 113th Street		X
School	Alex Haley Academy Elementary School	11411 S. Eggleston Avenue		X
Healthcare Facility	Roseland Medical Center	11416 S. Michigan Avenue		X
Place of Worship	Starlight St. James Missionary Baptist Church	11300 S. State Street		X
Place of Worship	New Pasadena Missionary Baptist Church	11300 S. Indiana Avenue		X
Place of Worship	Reformation African American Lutheran Church	11310 S. Forest Avenue		X
Place of Worship	Word Alive Church Ministry	11308 S. Michigan Avenue		X
Place of Worship	The House of Prayer for All Nations Ministries	11304 S. Edbrooke Avenue		X
Place of Worship	Mission of Faith Baptist Church	11321 S. Prairie Avenue		X

Community Center	Human Resources Development Institute	33 E. 114th Street		X
Place of Worship	Now Faith Church of God Holiness	135 W. 114th Street	X	
Place of Worship	Love Abide Missionary Baptist Church	11354 S. Michigan Avenue		X
Place of Worship	Mosque of Umar	11407 S. Michigan Avenue		X
Place of Worship	My Holy Rock Missionary Baptist Church	11441 S. Wentworth Avenue		X
Place of Worship	Christian Covenant Missionary Baptist Church	200 W. 115th Street		X
Place of Worship	New Life Family Worship Center	32 E. 113th Place		X
Place of Worship	St. James Temple Church of God	11336 S. State Street		X
Place of Worship	Paradise Temple Church of God in Christ	11445 S. Forest Avenue		X
Fire Station	Chicago Fire Department - Engine 62	34 E. 114th Street		X
Community Center	The Urban Ark	149 W. 111th Street		X
Place of Worship	New Testament Baptist Church	2 E. 112th Street		X
Place of Worship	First Corinthians Baptist Church	11341 S. State Street		X
Place of Worship	New Deliverance Church	11200 S. State Street		X
School	Curtis Elementary School	32 E. 115th Street		X
Place of Worship	Faith United Missionary Baptist Church	120 E. 115th Street		X
Place of Worship	St. John Missionary Baptist Church	211 E. 115th Street		X

School	Chicago International Charter School Prairie	11530 S. Prairie Avenue		X
Place of Worship	St. Anthony's Catholic Church	11533 S. Prairie Avenue		X
Landmark	Former Venetian Hall	133-139 E. Kensington Avenue		X
Place of Worship	Miracle Temple	135 E. Kensington Avenue		X
Place of Worship	Old Land Mark Church	401 E. Kensington Avenue		X
Place of Worship	New Christian Joy Missionary Baptist Church	11594 S. State Street		X
Place of Worship	Christian Life Ministries	11592 S. Lafayette Avenue		X
Place of Worship	New Covenant Church Deliverance	11608 S. Michigan Avenue		X
Community Center	Kids Off the Block Youth Center	11623 S. Michigan Avenue		X
Place of Worship	True Word Ministries	11700 S. Michigan Avenue		X
Place of Worship	Cottage Grove Holy Temple Church	11739 S. Michigan Avenue		X
Place of Worship	Word of Knowledge Ministries	11743 S. Michigan Avenue		X
Place of Worship	Full Gospel Pentecostal Church	214 E. 115th Street		X
Fire Station	Chicago Fire Department - Engine 80	12701 S. Doty Avenue		X
School	Saint Salomeas School	11816 S. Indiana Avenue		X
Place of Worship	Salem Baptist Church	11800 S. Indiana Avenue		X
Place of Worship	Full Gospel Christian Center Church	11920 S. Michigan Avenue		X
Place of Worship	Bethel Apostolic Faith Church	16 E. 117th Street		X

Place of Worship	Greater Canaan Missionary Baptist Church	35 W. 119th Street		X
Place of Worship	One Lord, One Faith, One Baptism Ministries	17 W. 119th Street		X
Healthcare Facility	TCA Health	1029 E. 130th Street		X
Place of Worship	Catholic Charities Outreach	13150 S. Ingleside Avenue		X
School	Carver Military Academy High School	13100 S. Doty Avenue		X
Place of Worship	The United Church	13015 S. Ellis Avenue		X
Landmark	Altgeld Gardens - Philip Murray Homes National Register Historic District	945 E. 134th Street	X	
Community Center	Altgeld Family Resource Center	955 E. 131st Street		X
Library	Altgeld Branch of the Chicago Public Library	955 E. 131st Street		X
Community Center	CYC Dorothy Gautreaux Child Development Center	975 E. 132nd Place		X
Government Facility	Local Advisory Council -Chicago Housing Authority	742 E. 131st Street		X
Government Facility	Chicago Housing Authority	976 E. 132nd Place		X
Place of Worship	Altgeld Gardens Seventh Day Adventist Church	945 E. 134th Street		X
School	George Washington Carver Primary School	901 E. 133rd Place		X

Note: * Community facilities highlighted in orange were not included in the Draft EIS.

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to affected communities:

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

This section also documents any new or revised mitigation measures for identified project impacts identified under the Draft EIS, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East and West Options of the UPRR Alternative evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current CMAP Transportation Improvement Program. No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Appendix M** in the Draft EIS, there would be no impacts to parklands or community facilities from the No Build Alternative.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

This section describes the permanent impacts that would result from the operation of the Preferred Alignment and discusses mitigation measures for adverse impacts. This section also compares permanent impacts to those outlined in the Draft EIS.

5.2.1.1 Parklands

Of the nine parklands within the API, the Preferred Alignment would permanently impact Fernwood Parkway and Beaubien Woods Forest Preserve, as described below. Impacts to Fernwood Parkway are not new since they were also noted in the Draft EIS. However, impacts to Fernwood Parkway in the Final EIS would be higher than those disclosed in the Draft EIS as discussed below.

The relocation of the 130th Street station was not part of the Draft EIS. Impacts to the Beaubien Woods Forest Preserve are new and were not in the Draft EIS.

Addendum Y discusses the Section 4(f) use of Fernwood Parkway and the no Section 4(f) use of Beaubien Woods Forest Preserve.

Fernwood Parkway

The Preferred Alignment would permanently impact 4.5 acres of Fernwood Parkway, compared to 1.6 acres under the UPRR East Option and 1.9 acres under the UPRR West Option disclosed in the Draft EIS. Fernwood Parkway would be permanently affected by the Preferred Alignment because the elevated track structure and the 103rd Street station would be constructed over two parcels of Fernwood Parkway from 99th Street to 103rd Street between the existing UPRR tracks and Eggleston Avenue, as shown in **Figure 5-1**. This would result in a permanent incorporation of the park space. Coordination is ongoing with the Chicago Park District to mitigate the impacts to Fernwood Parkway. Mitigation measures in the form of replacement pocket parks are still being finalized. Details of the Chicago Park District coordination and mitigation measures are presented in **Addendum Y**.

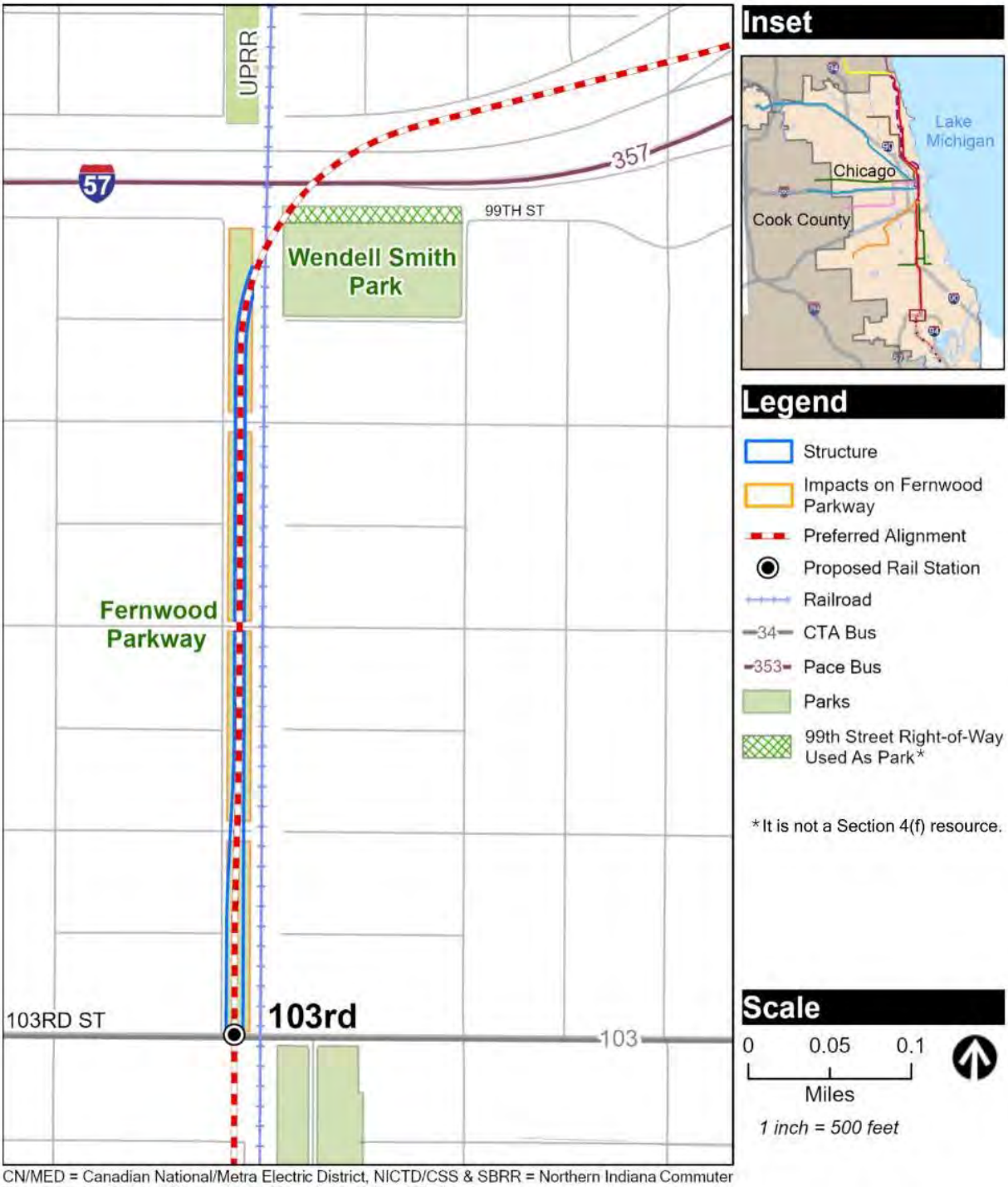

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 5-1: Impacts on Fernwood Parkway

Beaubien Woods Forest Preserve

The Beaubien Woods Forest Preserve is a 279-acre forest preserve, owned by the Forest Preserves of Cook County (FPCC). The northern end of the Beaubien Woods Forest Preserve is a linear green space that parallels the Conrail tracks from just south of Old 130th Street to 132nd Street (**Figure 5-2**). This linear green space is open space except for an access road. The Beaubien Woods Forest Preserve has a boat launch area south of 132nd Street providing access to the Little Calumet River.

Figure 5-2: View Looking Northwest of the Linear Green Space and Access Road, North of 132nd Street within the Beaubien Woods Forest Preserve

The 130th Street station defined in the Preferred Alignment would close Old 130th Street at the new RLE tracks. Old 130th Street currently provides access to the Beaubien Woods Forest Preserve access road. Closure of Old 130th Street would eliminate a connection to the access road into the Beaubien Woods Forest Preserve from Old 130th Street. However, the main access route to the Beaubien Woods Forest Preserve would continue to be provided from Ellis Avenue to Greenwood Avenue to 132nd Street. Mitigation and enhancement measures proposed would follow the lower-impact scenario discussed in FPCC's mitigation concurrence letter and CTA's mitigation concurrence confirmation letter, which can be found in **Attachment A.** to offset the diminished access to the boat launch access road. Mitigation and enhancement measures are currently anticipated to include the following:

- Transfer of two City-owned parcels to FPCC ownership
- $250,000 payment to FPCC for ecological restoration, habitat enhancement, and beautification of expanded Beaubien Boat Launch land
- New trail connection from Altgeld Gardens recreation facilities on 133rd Street to the Beaubien Woods Boat Launch
- Wayfinding and information signage inside the proposed station and outdoor signage at 130th Street and Ellis Avenue and other locations
- Forest Preserve advertising to encourage CTA riders to use public transportation to visit the Forest Preserves at the 130th Street station, other Red Line stations south of Roosevelt, and inside local trains and buses

Impacts to the Beaubien Woods Forest Preserve due to the elimination of the Old 130th Street connection are new compared with the East and West Options, because the 130th Street station in the Draft EIS was located north of 130th Street and, therefore, did not result in the closure of Old 130th Street.

Beneficial Impacts on Parklands – Improved Access

As discussed in **Appendix M** of the Draft EIS, the introduction of new and faster transit services in the project area would improve access to those parklands within walking distance (approximately ½ mile) from the proposed stations, such as Beaubien Woods Forest Preserve.

5.2.1.2 Community Facilities

Of the 100 community facilities within the API, two (New St. Mary Church of Prayer and Now Faith Church of God Holiness) would be displaced because they fall within the proposed right-of-way for the Preferred Alignment. The potentially displaced community facilities are described in more detail below. In comparison, four community facilities were displaced in the Draft EIS. In addition, Agape Community Center and TCA Health would be impacted by the RLE Project. The other 96 community facilities are outside the proposed right-of-way and station footprints for the Preferred Alignment and would not be displaced.

In addition, a detailed noise analysis was conducted for the Final EIS and is discussed in detail in **Addendum O**. Two community facilities, Agape Community Center and My Holy Rock Missionary Baptist Church, would have moderate noise impacts from operation of the Preferred Alignment, while Kingdom Global Outreach Ministries would have severe impacts before mitigation. However, there would be no permanent noise impacts on community facilities after mitigation.

Agape Community Center

The Agape Community Center (**Figures 5-3** and **5-4**) is located at 342 W. 111th Street, east of the Preferred Alignment. Currently, the Agape Community Center uses a City-owned parcel of land that is located immediately west for parking. The Preferred Alignment would require the use of that City-owned parcel that would affect its current use by the Agape Community Center. Impacts to the City-owned parcel adjacent to the Agape Community Center were also disclosed in the Draft EIS. Impacts on parking at the Agape Community Center would not be adverse after mitigation measures as discussed in **Addendum L**.

Source: Google Maps Street View, 2019

Figure 5-3: Agape Community Center, Looking West

Source: Google Maps, 2021

Figure 5-4: Aerial View of Agape Community Center

New St. Mary Church of Prayer

New St. Mary Church of Prayer (**Figures 5-5** and **5-6**) is a place of worship located at 341 W. 111th Street, east of the Preferred Alignment. The entire building and parcel would be fully acquired by the RLE Project and used as parking for the 111th Street station. Impacts to New St. Mary Church of Prayer are new compared to the East and West Options, since this facility was not identified in the Draft EIS as being potentially displaced.

CTA would work with the owners of New St. Mary Church of Prayer to acquire the property in accordance with the Uniform Act. CTA's Uniform Act public outreach specialists would provide specific outreach as a one-stop resource to potentially displaced organizations to answer questions regarding relocation rights, requirements, processes, and anticipated timelines. CTA, in coordination with the City of Chicago and the local aldermen's offices, would provide informational resources, permitting support, and points of contact for displaced organizations to find suitable sites for relocation. With compensation and relocation assistance per the Uniform Act, the impact would be considered not adverse because of the general availability of similar real estate near the project, which would facilitate relocation and staying within the community.

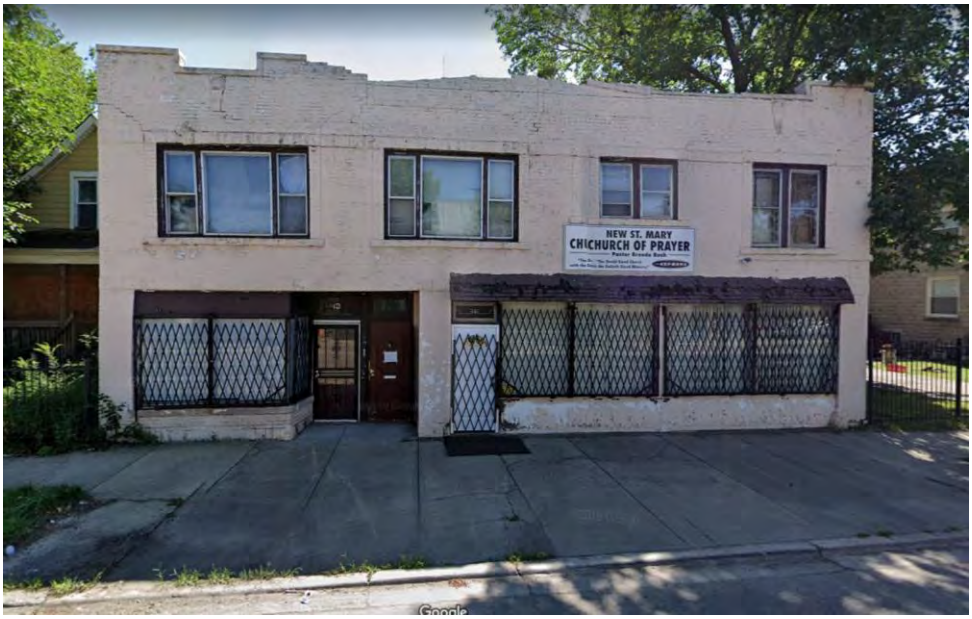

Source: Google Maps Street View, 2019

Figure 5-5: New St. Mary Church of Prayer, Looking South

Source: Google Maps, 2021

Figure 5-6: Aerial View of New St. Mary Church of Prayer

Now Faith Church of God Holiness

Now Faith Church of God Holiness (**Figures 5-7** and **5-8**) is a place of worship located at 135 W. 114th Street, east of the Preferred Alignment. Because the entire building and parcel are located within the proposed right-of-way, this community facility would be fully acquired under the Preferred Alignment. This community facility was also identified in **Appendix M** of the Draft EIS as a potentially displaced community facility under the UPRR East Option.

CTA would work with the owners of Now Faith Church of God Holiness to acquire the property in accordance with the Uniform Act. Mitigation measures for Now Faith Church of God Holiness are the same as those described above for New St. Mary Church of Prayer.

Source: Google Maps Street View, 2019

Figure 5-7: Now Faith Church of God Holiness, Looking South

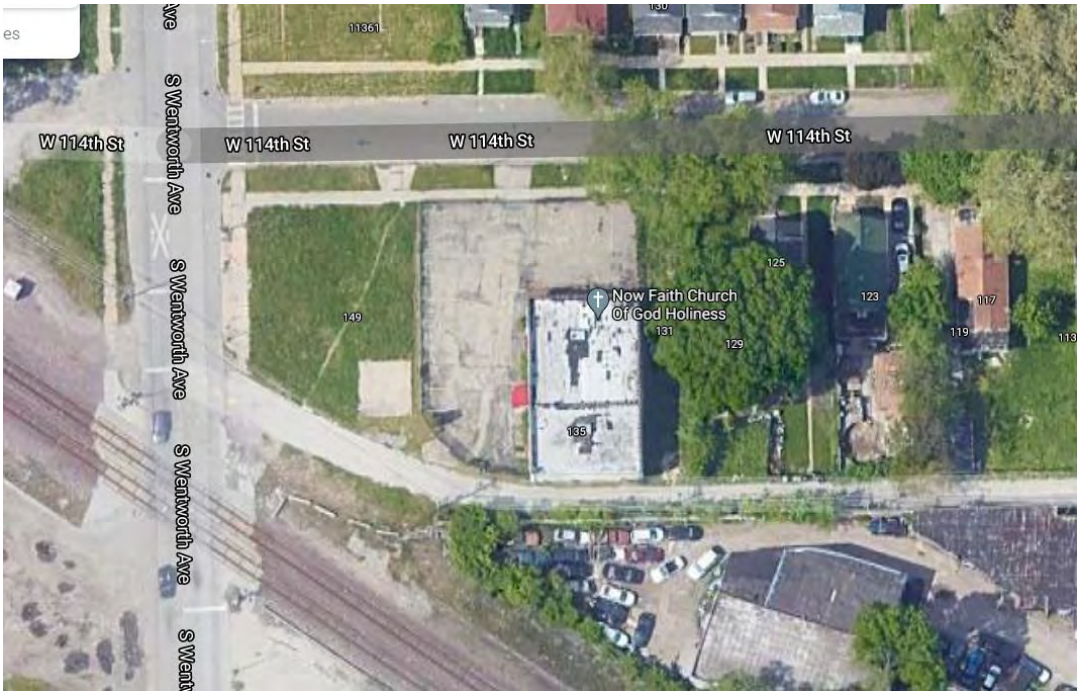

Source: Google Maps, 2021

Figure 5-8: Aerial View of Now Faith Church of God Holiness

TCA Health

TCA Health is a primary healthcare center and pharmacy, located at 1029 E. 130th Street, immediately south of Old 130th Street (**Figures 5-9** and **5-10**). The eastern portion of the parcel would be located within the proposed right-of-way; this facility would be partially acquired as part of the RLE Project.

The proposed exit driveway from the 130th Street station onto Old 130th Street would run through the eastern end of the existing parking lot of TCA Health, impacting the eastern entrance and existing parking spaces. Access would remain for the western entrance leading to the TCA Health building. The partial acquisition would not impact the operations of the TCA Health or prevent the use of the facility.

Impacts to TCA Health are new; this facility was not identified in the Draft EIS as being impacted. Because the 130th Street station in the Draft EIS was located north of 130th Street, there were no impacts to this community facility.

Mitigation measures for the impacts to the entrance and parking spaces to TCA Health would include redesign of the parking lot to maintain three entrance and exit points, and replacement of parking spaces at a minimum ratio of 1 to 1 (i.e., at least the same number of impacted parking

spaces would be provided as mitigation). The redesign of the parking lot would be done in coordination with TCA Health and would provide the required number of ADA parking spaces. The parking lot would also meet the City of Chicago Landscape Ordinance. Permanent impacts on parking at TCA Health would not be adverse after mitigation.

Beneficial Impacts on Community Facilities – Improved Access

As discussed in **Appendix M** of the Draft EIS, the RLE Project would introduce faster transit services in the area, which would improve access to community facilities within walking distance from the proposed stations.

Source: Google Maps Street View, 2019

Figure 5-9: TCA Health, Looking Southwest

Source: Google Earth, 2021

Figure 5-10: Aerial View of TCA Health

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

This section describes the temporary impacts that would result from the construction of the Preferred Alignment and discusses mitigation measures for adverse impacts. This section also compares construction impacts to those outlined in the Draft EIS.

5.2.2.1 Parklands

Wendell Smith Park

The Preferred Alignment would be elevated over the northwest corner of the City-owned 99th Street right-of-way (**Figure 5-11**), currently used as Wendell Smith Park property. This area would be temporarily closed for a short duration during construction. The Chicago Park District was granted usage of the 99th Street right-of-way to expand Wendell Smith Park through a City Ordinance dated December 20, 1989. This ordinance prohibits buildings or other structures within the 99th Street right-of-way that would interfere with the use, maintenance, renewal, or reconstruction of public facilities. This area is shown in **Figure 5-11** as cross-hatching. A permit from the Chicago Park District would be required for this temporary closure prior to the start of construction.

Some trees would have to be removed in this area of the park for construction equipment staging and construction access. However, no piers would be placed within the park. The functional use of this facility would remain unchanged. Mitigation measures for the anticipated tree removal would include tree replacement and restoration of park landscaping. The UPRR East Option would impact 0.7 acre of Wendell Smith Park. Under the Preferred Alignment, the northwest corner of Wendell Smith Park would be temporarily closed during construction (approximately 0.1 acre). Impacts to Wendell Smith Park are lower than those outlined in the Draft EIS, because the right-of-way for the UPRR East Option crossed the park leaving an isolated park fragment that included trees, a portion of a walking path, and benches.

The construction contractor would employ noise-reducing construction BMPs to mitigate temporary noise and vibration from construction of the Preferred Alignment, as discussed in **Addendum O**. The Preferred Alignment would also change the visual and aesthetic conditions of the park by adding an elevated rail structure over the northwest corner of the 99th Street right-of-way. Mitigation measures would include tree replacement and restoration of park landscaping. **Addendum Y** discusses Section 4(f) uses of parks permanently or temporarily during construction.

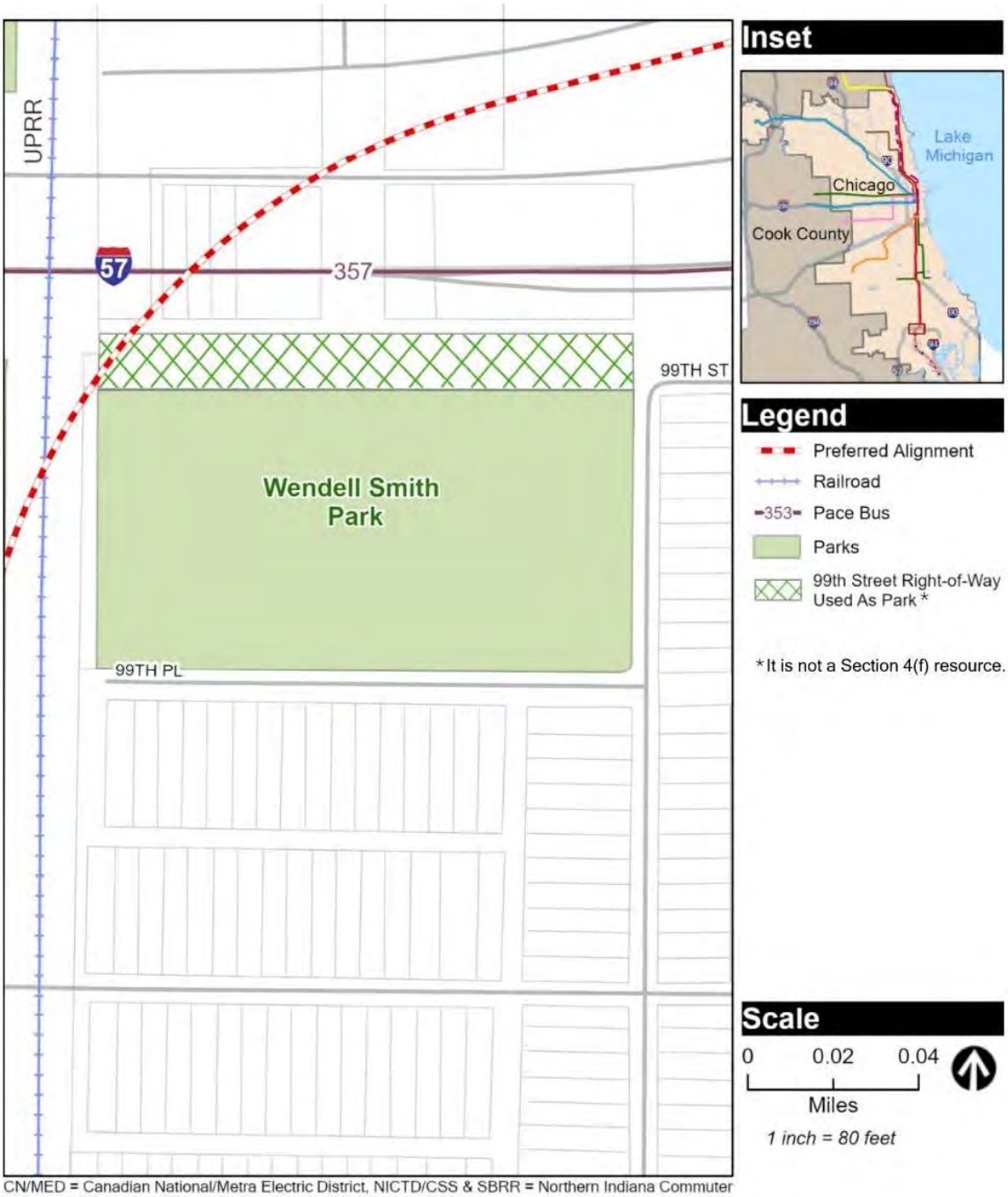

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 5-11: Impacts on Wendell Smith Park

5.2.2.2 Community Facilities

Two additional community facilities would be impacted by construction of the Preferred Alignment, although they would not be displaced. In addition, an entrance and parking spaces at TCA Health would be temporarily impacted. Temporary noise impacts on Agape Community Center were disclosed in the Draft EIS. However, impacts to TCA Health are new and were not included in the Draft EIS. The 130th Street station was located north of 130th Street in the Draft EIS whereas TCA Health is south of 130th Street.

Similar to parklands, the construction contractor would implement noise-reducing BMPs to mitigate temporary noise and vibration resulting from construction of the Preferred Alignment.

Agape Community Center

As outlined in **Appendix M** of the Draft EIS, construction of the elevated structure would have temporary noise impacts on Agape Community Center, which could temporarily interrupt services conducted at this center. Mitigation measures would be the same as those described in **Appendix M** of the Draft EIS under the UPRR Rail Alternative. Mitigation measures would include providing information about construction schedules and changes in parking and/or detours to Agape Community Center to share with its patrons. BMPs would be used to minimize the temporary noise impacts. In addition, temporary changes in access and available parking during construction would make it more difficult for patrons to access Agape Community Center. Marked detour routes and designated alternative parking would mitigate the temporary changes in access.

TCA Health

Construction of the 130th Street station exit roadway to Old 130th Street would temporarily impact an entrance and parking spaces to TCA Health and may temporarily limit parking above and beyond the permanent number of parking spaces being displaced. The temporary displacement of parking during construction would be mitigated by existing on-street parking along Old 130th Street and Greenwood Avenue. These temporary impacts to TCA Health are new compared to the East and West Options, since the 130th Street station in the Draft EIS was located north of 130th Street and, therefore, did not result in impacts to this community facility. In addition, access to TCA Health would be maintained through the duration of construction.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

Consistent with the cumulative impacts under the UPRR East and West Options, construction and operation of the RLE Project would not reduce the quality or distribution of parklands and

community facilities in the area, after mitigation. Therefore, there would be no adverse cumulative impacts because of the RLE Project. Improved transit in the area would result in benefits by improving access to parklands and community facilities in the area.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigation, as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on parklands and community facilities as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

The Preferred Alignment would result in permanent adverse and beneficial impacts, which is consistent with the conclusions outlined in **Appendix M** of the Draft EIS. All adverse impacts would be mitigated.

Section 7 - References Cited

Chicago Park District. 2021. 2021 Capital Improvement Plan. Accessed at https://assets.chicagoparkdistrict.com/s3fs-public/documents/departments/Capital%20%26%20Planning/CIP%20Plan/2021/2021-2025%20Capital%20Improvement%20Plan.pdf. Accessed on May 7, 2021.

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Attachment A – Coordination

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

August 15, 2021

Mr. Arnold Randall
General Superintendent
Forest Preserves of Cook County
536 North Harlem Avenue
River Forest, IL 60305

Re: Concurrence on Section 4(f) Mitigation Measures Request
Chicago Transit Authority Red Line Extension Project

Dear Superintendent Randall:

The Chicago Transit Authority (CTA) is providing our concurrence on the Forest Preserves of Cook County (FPCC) Section 4(f) Lower-Impact Scenario mitigation measures request as detailed in your May 13, 2021 memorandum, included as **Enclosure A** for reference.

FPCC identified a Lower-Impact Scenario of mitigation measures to offset diminished access to the Beaubien Woods Forest Preserve boat launch from the north, and mitigate noise and vibration impacts on seven acres of forest preserve land east-adjacent to the proposed 130th Street station. Five specific mitigation measures were outlined in the FPCC memo:

1. Transfer of approximately seven acres of vacant land owned by the City of Chicago, subject to confirmation of community support for this transfer and additional terms and conditions;
2. $250,000 payment to FPCC for ecological restoration, habitat enhancement and beautification of expanded Beaubien Boat Launch land to encourage use and enjoyment by community residents and visitors arriving via public transit;
3. New trail connection from Altgeld Gardens recreation facilities on 133rd Street to the Beaubien Woods Boat Launch (FPCC concept planning currently in process);
4. Wayfinding and information signage inside the proposed station and outdoor signage at 130th Street and Ellis Avenue and other locations; and

5. Forest Preserve advertising to encourage CTA riders to use public transportation to visit the Forest Preserves at the 130th Street station, other Red Line stations south of Roosevelt, and inside local trains and busses.

The first mitigation measure, the transfer of seven acres of City-owned land to FPCC ownership is comprised of two parcels. The two parcels are located southeast of the intersection of 133rd Street and Greenwood Avenue and are identified as:

- 1108 East 133rd Street, PIN 25-35-100-016
- 500 East 134th Street, PIN 25-35-100-010

Pursuant to the City's concurrence, CTA will complete Phase I and Phase II environmental site assessments (ESAs) for the two city-owned parcels to determine their environmental conditions. The ESAs will ascertain the need for any cleanup and remediation action. Subsequently, if CTA determines that the cleanup and remediation costs are cost-prohibitive, we reserve the right to amend the land transfer of the City-owned parcels to the FPCC as a mitigation measure. If this is the case, CTA will continue to work with FPCC to identify alternative mitigation measures that would satisfy the intent of the first mitigation measure and is acceptable to both parties.

As to the second measure, it is CTA's understanding that the $250,000 will be applied for restoration of the city-owned parcels (brush clearing, dead tree removal, etc.), pavement removal, landscape restoration of the existing seven-acre FPCC parcel that would no longer be used as an access drive, and tree planting and landscape restoration on other existing Beaubien Woods land if possible.

For the third, fourth, and fifth measures, CTA will continue to coordinate the specific details for the new trail connection as FPCC completes their Phase 1 design. When available, FPCC will provide trail design details and an estimate of costs. FPCC will assume long-term maintenance responsibility for trail improvements on their land. Proposed signage locations will be coordinated with CTA and other jurisdictional agencies depending on the locations of the signage. Advertising will be coordinated between FPCC and CTA for ad placement, format, and timing.

CTA will continue to work with FPCC to meet your community outreach needs and develop the details for implementation of the Lower-Impact Scenario mitigation measures listed above. This letter of concurrence for the Lower-Impact Scenario mitigation measures will be included in the Supplemental Environmental Assessment (EA) and Final Environmental Impact Statement (EIS) being prepared for the RLE Project. The letter will serve to document that, with the incorporation of mitigation measures, the RLE Project will have a Section 4(f) "No Use" of Beaubien Woods Forest Preserve.

If you have any questions, please contact me at lmooney@transitchicago.com or 312.388.3533 or Marlise Fratinardo at mfratinardo@transitchicago.com. If preferred, we can set up a virtual meeting to discuss any questions you have regarding this communication.

Regards,

Leah Dawson Mooney
Director of Strategic Planning & Policy
Chicago Transit Authority

Enclosures:
Enclosure A – May 13, 2021 FPCC Memorandum, Request for 4(f) Concurrence

cc:
Marlise Fratinardo, CTA – Planning
Sonali Tandon, CTA – Planning
Eileen Figel, FPCC Deputy General Superintendent
Chris Slattery, FPCC Director of Planning & Development

DEPARTMENT OF PLANNING AND DEVELOPMENT

CITY OF CHICAGO

August 27, 2021

Ms. Leah Dawson Mooney
Director of Strategic Planning & Policy
Chicago Transit Authority
567 West Lake Street, Chicago, IL 60661-1498

Re: Support Letter for City-owned Land Transfer to the Forest Preserves of Cook County
Chicago Transit Authority Red Line Extension Project

Dear Ms. Mooney,

The Chicago Department of Planning and Development (DPD) provides this support letter for the transfer of two city-owned parcels to the Forest Preserves of Cook County as part of the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project. The land transfer would be one piece of a set of mitigation measures to mitigate impacts associated with the RLE Project's proposed 130th Street station to the adjacent Beaubien Woods Forest Preserve. The city-owned land has an area of approximately seven acres comprised of two parcels located southeast of 133rd Street and Greenwood Avenue (identified below and shown in **Enclosure A**, Location Map – City-owned Parcels).

1. 1108 East 133rd Street, PIN 25-35-100-016
2. 500 East 134th Street, PIN 25-35-100-010

DPD understands that CTA will complete Phase I and Phase II environmental site assessments (ESAs) for the above identified city-owned parcels to determine their environmental conditions. The ESA investigations will ascertain the need for any cleanup and remediation action. CTA will provide the ESA reports to DPD. CTA will continue to coordinate with DPD to develop the details of the land transfer in accordance with the City of Chicago processes and approval requirements.

We appreciate the opportunity to provide input on this important project and for the ongoing cooperation between our agencies. If you require additional information, you may contact me at claudia.herasme@cityofchicago.org .

Regards,

Claudia Herasme, Managing Deputy Commissioner
Department of Planning and Development

Enclosures:
Enclosure A – Location Map – City-owned Parcels

Enclosure A: Location Map – City-owned Parcels

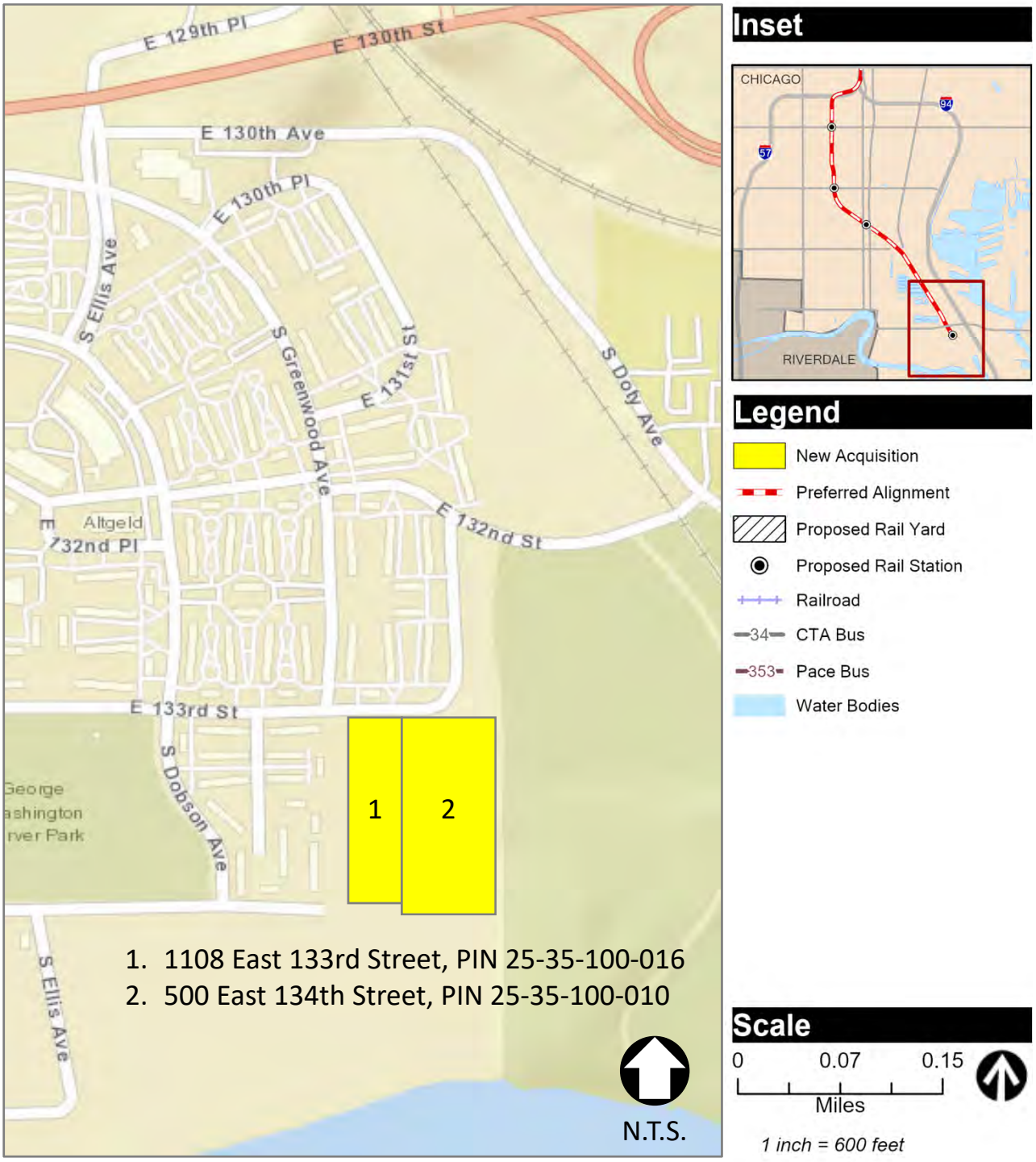

Appendix M

Parklands and Community Facilities Technical Memorandum

- Draft EIS Appendix M, Parklands and Community Facilities Technical Memorandum, July 2015
  - Appendix A, Community Facilities
  - Appendix B, Notes for Early Coordination with the Chicago Park District
  - Appendix C, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Parklands and Community Facilities

Technical Memorandum

July 5, 2013
Appendix B updated May 8, 2015
Updated July 28, 2015

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
CWE Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Summary **1-1**

Section 2 Project Description **2-1**

Section 3 Methods for Impact Evaluation **3-1**

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-3
3.3 Area of Potential Impact 3-3
3.4 Methods 3-3

Section 4 Affected Environment **4-1**

4.1 Parklands 4-1
4.2 Community Facilities 4-11

Section 5 Impacts and Mitigations **5-1**

5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-6
5.4 Union Pacific Railroad Rail Alternative - East Option 5-17
5.5 Union Pacific Railroad Rail Alternative - West Option 5-27
5.6 Halsted Rail Alternative 5-36

Section 6 Impacts Remaining After Mitigation **6-1**

6.1 No Build Alternative 6-1
6.2 BRT Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-2
6.5 Union Pacific Railroad Rail Alternative - West Option 6-4
6.6 Halsted Rail Alternative 6-5

Section 7 References Cited **7-1**

Appendices

Appendix A - Community Facilities
Appendix B - Notes from Early Coordination with Chicago Park District
Appendix C - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 4-1: Parklands in the Area of Potential Impact (1 of 3) 4-2
Figure 4-2: Entrance to Wendell Smith Park (facing west) 4-6
Figure 4-3: Wendell Smith Park Playground (facing southwest)..... 4-6
Figure 4-4: Wendell Smith Park Basketball Courts (facing west)..... 4-7
Figure 4-5: Aerial View of Wendell Smith Park..... 4-7
Figure 4-6: Fernwood Parkway at 100th Street and Eggleston Avenue (facing north) 4-8
Figure 4-7: Fernwood Parkway at 100th Street and Eggleston Avenue (facing south)..... 4-9
Figure 4-8: Block Park Facing South with the Roseland Pumping Station in the Background (facing south) 4-10
Figure 4-9: West Parcel (left) of Block Park and East Parcel (right) of Block Park..... 4-10
Figure 4-10: Aerial View of Block Park..... 4-11
Figure 4-11: Community Facilities in the Area of Potential Impact (1 of 3) 4-13
Figure 4-12: Now Faith Church of God Holiness 4-16
Figure 4-13: Aerial View of Now Faith Church of God Holiness 4-17
Figure 4-14: Grace Temple Church of God Established in Christ..... 4-18
Figure 4-15: Aerial View of Grace Temple Church of God Established in Christ 4-18
Figure 4-16: Sure-Way Missionary Baptist Church 4-19
Figure 4-17: Aerial View of Sure-Way Missionary Baptist Church 4-20
Figure 4-18: Illinois Department of Employment Security..... 4-21
Figure 4-19: Aerial View of the Illinois Department of Employment Security 4-21
Figure 5-1: Impacts on Wendell Smith Park - Union Pacific Railroad Rail Alternative Right-Of-Way Option 5-9
Figure 5-2: Impacts on Wendell Smith Park - Union Pacific Railroad Rail Alternative - East Option 5-19
Figure 5-3: Impacts on Block Park - Union Pacific Railroad Rail Alternative - East Option 5-21
Figure 5-4: Impacts on Now Faith Church of God Holiness - Union Pacific Railroad Alternative - East Option 5-24
Figure 5-5: Impacts on Wendell Smith Park - Union Pacific Railroad Rail Alternative - West Option 5-29
Figure 5-6: Impacts on Fernwood Parkway - Union Pacific Railroad Rail Alternative - West Option 5-31
Figure 5-7: Impacts on Grace Temple Church of God in Christ - Union Pacific Railroad Alternative - West Option 5-33

Figure 5-8: Impacts on the Illinois Department of Employment Security - Halsted Rail Alternative - Segment HA 5-39
Figure 5-9: Impacts on Sure-Way Missionary Baptist Church - Halsted Rail Alternative - 119th Street Yard and Shop 5-45

Tables

Table 1-1: Acres of Parklands Affected by the Red Line Extension Project Alternatives 1-1
Table 1-2: Parklands within Walking Distance of a Proposed Station/Stop 1-3
Table 1-3: Community Facilities Affected by the Project Alternatives 1-4
Table 1-4: Community Facilities within Walking Distance of a Proposed Station/Stop 1-5
Table 4-1: Parklands within the Area of Potential Impact 4-1
Table 4-2: Community Facilities within the Area of Potential Impact 4-11
Table 5-1: Parklands within ½ mile of Stops - Bus Rapid Transit Alternative 5-3
Table 5-2: Community Facilities within ½ mile of Stops - Bus Rapid Transit Alternative 5-5
Table 5-3: Parklands within ½ mile of Stations - Union Pacific Railroad Rail Alternative Right-Of-Way Option - Segment UA 5-10
Table 5-4: Community Facilities within ½ mile of Stations - Union Pacific Railroad Rail Alternative - Right-Of-Way Option - Segment UA 5-11
Table 5-5: Parklands within ½ mile of Rail Stations - Union Pacific Railroad Alternative - Right-Of-Way Option - Segment UB 5-13
Table 5-6: Community Facilities within ½ mile of the Proposed Station Locations - Union Pacific Railroad Rail Alternative Right-Of-Way Option - Segment UB 5-14
Table 5-7: Parklands within ½ mile of Station Locations - Halsted Rail Alternative - Segment HA 5-38
Table 5-8: Community Facilities within ½ mile of Stations - Halsted Rail Alternative - Segment HA 5-41
Table 5-9: Community Facilities within ½ mile of Stations - Halsted Rail Alternative - Segment HB 5-42

Abbreviations

BRT	Bus Rapid Transit
CFR	Code of Federal Regulations
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
IDNR	Illinois Department of Natural Resources
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt
NEPA	National Environmental Policy Act
RLE	Red Line Extension
ROW	right-of-way
UPRR	Union Pacific Railroad

Section 1
Summary

This technical memorandum analyzes the potential impacts on parklands and community facilities of alternatives for the Red Line Extension (RLE) Project. The RLE Project would result in short- and long-term adverse and beneficial impacts on parklands and community facilities in the project area. The alternatives are as follows:

- No Build Alternative
- Bus Rapid Transit (BRT) Alternative
- Union Pacific Railroad (UPRR) Rail Alternative
  - Right-of-way (ROW) Option
  - East Option
  - West Option
- Halsted Rail Alternative

Parklands

The area of potential impact (API) has 18 parklands within it; 3 of these would have permanent impacts. Permanent impacts on parklands would result if the ROW of an alternative passed through a park. Table 1-1 names the permanently affected parklands, the alternative that would affect them, and the amount of land affected within each park. The permanent impacts would be mitigated such that the impacts would not be adverse.

Table 1-1: Acres of Parklands Affected by the Red Line Extension Project Alternatives

Parkland	Bus Rapid Transit Alternative	UPRR Rail Alternative ROW Option	UPRR Rail Alternative East Option	UPRR Rail Alternative West Option	Halsted Rail Alternative
Wendell Smith Park	0	0.23	0.40	0.17	0
Fernwood Parkway	0	0	0	1.90	0
Block Park	0	0	0.80	0	0
Total	0	0.23	1.20	2.07	0

Notes: UPRR = Union Pacific Railroad, ROW = right-of-way

Wendell Smith Park

At Wendell Smith Park, the UPRR Rail Alternative East Option would have the greatest impact of all the UPRR options and would displace a portion of the walking trail, which is one of the park's recreational amenities. The UPRR Rail Alternative ROW Option and West Option would affect the walking trail; however, these impacts would be minimal because the trail would be rerouted around the affected area or the trail may be avoided completely. Overall, the UPRR Rail ROW

Option and West Option would not result in the displacement of amenities that are critical to the functional or recreational use of the park. After mitigation, the impacts on Wendell Smith Park would not be adverse.

Fernwood Parkway

The area affected in Fernwood Parkway is open space only. The operation of the UPRR West Option would acquire 1.9 acres of the park for permanent ROW and would create two park fragments, one between the Chicago Transit Authority (CTA) ROW and UPRR ROW, the other between CTA ROW and Eggleston Avenue. During the Section 4(f) process, it may be determined that impacts on the parkland within the permanent ROW and created by the park fragments could be mitigated by improving nearby park space (e.g., the unaffected northern portion of Fernwood Parkway), and by converting nearby vacant land into new parks. Most of Fernwood Parkway could remain as open park space if public access were to be allowed under the elevated structure after construction. If the space under the structure were to remain open, then there would be a visual impact on the park and some impact due to the shading created by the structure. However, the combination of impacts would not diminish recreational opportunities, as no recreational amenities or organized recreational activities currently occur in Fernwood Parkway. The impacts on parklands would not be adverse after mitigation.

Block Park

The area affected in Block Park is open space only; the operation of the UPRR East Option would reduce the amount of open space by adding an auxiliary entrance for the 103rd Street station and rail infrastructure in the park. The unaffected land would be returned to open space after construction. The impacts would not diminish recreational opportunities, as no recreational amenities or organized recreational activities currently occur in the affected portion of Block Park; however, some open space would be acquired for permanent ROW and some of the remaining open space within the western parcel of the park would be shaded by the rail infrastructure. After mitigation, the impacts on Block Park would not be adverse.

Mitigation Options for Impacts on Parklands

Ongoing coordination with the Chicago Park District and the Chicago Water Department has been occurring to determine the preferred mitigation for the permanent impacts on these parks and will continue for the purposes of mitigation measure implementation. Some impacts could be minimized by the project design. For example, opportunities exist for retaining some of the park uses if public access is allowed under the elevated CTA structure. Another mitigation option is to make improvements to the affected park or another nearby park in lieu of replacing parkland. Fernwood Parkway and Block Park are generally underutilized open spaces; however, they are next to the 103rd Street station proposed for the UPRR Rail Alternative (all options). One in-lieu option would be to make improvements to the parklands around the 103rd Street station to better integrate the spaces into the station area, which would serve future transit users. Another in-lieu option would be to make use (as park space) of unused portions of parcels displaced for the project. Section 4(f) of the Department of Transportation Act requires a detailed analysis of all practicable means of minimizing harm to parks. The *Section 4(f) Technical Memorandum* provides details about the Section 4(f) process and identifies practicable mitigation alternatives.

Beneficial Impacts on Parklands - Improved Access

The introduction of new and faster transit services in the project area would improve access to those parklands within walking distance (approximately ½ mile) from the proposed stops/stations. Of the alternatives, the UPRR Rail Alternative options would improve access to the most parks (nine) while the BRT Alternative would improve access to the least (three) as documented in Table 1-2.

Table 1-2: Parklands within Walking Distance of a Proposed Station/Stop

Parkland	Bus Rapid Transit Alternative	Union Pacific Railroad Rail Alternative	Halsted Rail Alternative
Wendell Smith Park		X	
Fernwood Parkway		X	X
Block Park		X	
Fernwood Park		X	X
Jackie Robinson Park			X
Major Taylor Bike Trail			X
Thomas Leed Morgan Field			X
Edward White Park			X
Potter Palmer Park	X	X	
Kensington Park	X	X	
Lion Field			
Golden Gate Park	X	X	
George Washington Carver Park		X	
Beaubien Woods Forest Preserve		X	
Whistler Woods Forest Preserve			X
Joe Louis Golf Course			X
Total	**3**	**9**	**8**

Beneficial Impacts on Parklands - Noise and the UPRR Rail Alternative ROW Option

Unlike the other build alternatives, the UPRR Rail Alternative ROW Option assumes that the existing UPRR freight rail traffic would be relocated to another corridor as part of a separate, unrelated project. While the UPRR Rail Alternative ROW Option would generate noise, the net impact for adjacent noise-sensitive receptors such as parks would be a net benefit because the noise from the freight rail traffic would no longer be present. Three parklands (Wendell Smith Park, Fernwood Parkway, and Kensington Park) would experience a net benefit in terms of noise impacts compared to the No Build Alternative and the other two UPRR Rail Alternative options.

Community Facilities

There are 230 community facilities in the API, of which 4 would be displaced. In addition, 37 community facilities adjacent to the BRT Alternative alignment and 22 community facilities adjacent to the Halsted Rail Alternative alignment would be subject to noise impacts after mitigation. Table 1-3 describes the community facilities that would be affected by the RLE Project. Of the build alternatives, the BRT Alternative would affect the greatest number of community facilities.

Table 1-3: Community Facilities Affected by the Project Alternatives

Alternative	Community Facility
Bus Rapid Transit	• Adverse Noise - 37 community facilities that are noise-sensitive receptors *(See Section 5.2.1.2 for a list of noise-sensitive community facilities)*
UPRR Rail ROW Option	None
UPRR Rail East Option	• Displacement - Now Faith Church of God Holiness
UPRR Rail West Option	• Displacement - Grace Temple Church of God Established in Christ
120th Street Yard and Shop	None
Halsted Rail	• Displacement - Illinois Department of Employment Security • Adverse Noise - 22 community facilities that are noise-sensitive receptors *(See Section 5.6.1 for a list of noise-sensitive community facilities)*
119th Street Yard and Shop	• Displacement - Sure-Way Missionary Baptist Church

UPRR = Union Pacific Railroad, ROW = right-of-way

Noise Impacts of the BRT Alternative

The BRT Alternative would add approximately 75,000 bus trips per year to the BRT alignment when compared to the No Build Alternative. This change would result in moderate noise impacts on the 37 community facilities that are noise-sensitive receptors adjacent to the alignment of the BRT Alternative. Noise barriers are not feasible along the BRT alignment and moderate noise impacts would remain after mitigation.

Now Faith Church of God Holiness

The proposed ROW for the UPRR Rail Alternative East Option would displace Now Faith Church of God Holiness. This displacement would require replacement in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). According to the *Displacements and Relocations of Existing Uses Technical Memorandum* one available replacement property is zoned for a place of worship use in the project area. Other available property in the community would have to be rezoned for religious use in order to be a comparable replacement property. The displacement of Now Faith Church of God Holiness would not be adverse after mitigation if the church were relocated to a comparable replacement property within the community and if the relocation were to occur prior to starting construction in order to minimize interruption of its services.

Grace Temple Church of God Established in Christ

The proposed ROW for the UPRR Rail Alternative West Option would displace Grace Temple Church of God Established in Christ. The displacement of this property would comply with the requirements of the Uniform Act. As noted above, one available replacement property is zoned for a place of worship in the project area, and other available property in the community would have to be rezoned for religious use in order to be considered a comparable replacement property. If the church were relocated within the community prior to starting construction to minimize interruption of its services, the impact would not be adverse after mitigation.

Illinois Department of Employment Security
The Illinois Department of Employment Security would be displaced as a result of the park & ride facilities at the 119th Street station for the Halsted Rail Alternative. Comparable replacement properties exist within the project area. If this office were relocated before construction and within the same community to avoid loss of services, then there would be no adverse impact after mitigation.

Noise Impacts of the Halsted Rail Alternative
The Halsted Rail Alternative would run in the median of Halsted Street and would generate moderate to severe noise impacts for adjacent community facilities that are noise-sensitive receptors. Twenty-two community facilities (places of worship and senior housing) would be affected by noise along the Halsted Rail Alternative alignment. Noise barriers would be built to reduce the noise impacts; however, moderate noise impacts would remain after mitigation.

Sure-Way Missionary Baptist Church
The 119th Street yard and shop would be built to support the Halsted Rail Alternative and would displace Sure-Way Missionary Baptist Church. The displacement of this property would comply with the requirements of the Uniform Act. As noted above, one available replacement property is zoned for a place of worship in the project area, and other available property in the community would have to be rezoned for religious use in order to be a comparable replacement property. If the church were relocated within the community prior to starting construction to minimize interruption of its services, the impact would not be adverse after mitigation.

Beneficial Impacts on Community Facilities - Improved Access
As explained for the parklands, the introduction of new and faster transit services in the project area would improve access to facilities within walking distance. The BRT Alternative would improve access to the greatest number of community facilities (88), followed by the Halsted Rail Alternative (79), and the UPRR Rail Alternative (72) as shown in Table 1-4. These improvements in access would be beneficial.

Table 1-4: Community Facilities within Walking Distance of a Proposed Station/Stop

Alternative	Community Facility
Bus Rapid Transit	88
Union Pacific Railroad Rail (All Options)	74
Halsted Rail Alternative	81

Beneficial Impacts on Community Facilities - Noise and the UPRR Rail Alternative ROW Option
The UPRR Rail Alternative ROW Option assumes that the existing UPRR freight rail traffic would be relocated to a different corridor as a result of a separate and unrelated project. While the UPRR Rail Alternative ROW Option would generate noise, the net impact for adjacent noise-sensitive places of worship would be a net benefit because the noise from the freight rail traffic would no longer be present. Now Faith Church of God Holiness and New Christian Joy Missionary Baptist

Church would experience a net benefit in terms of noise impacts when compared to the No Build Alternative and the other two UPRR Rail Alternative options.

2014–2015 Red Line Extension Project Update

Updated July 28, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix C of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix C supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The CTA is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the NEPA scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - ROW Option
  - East Option
  - West Option
- Halsted Rail Alternative

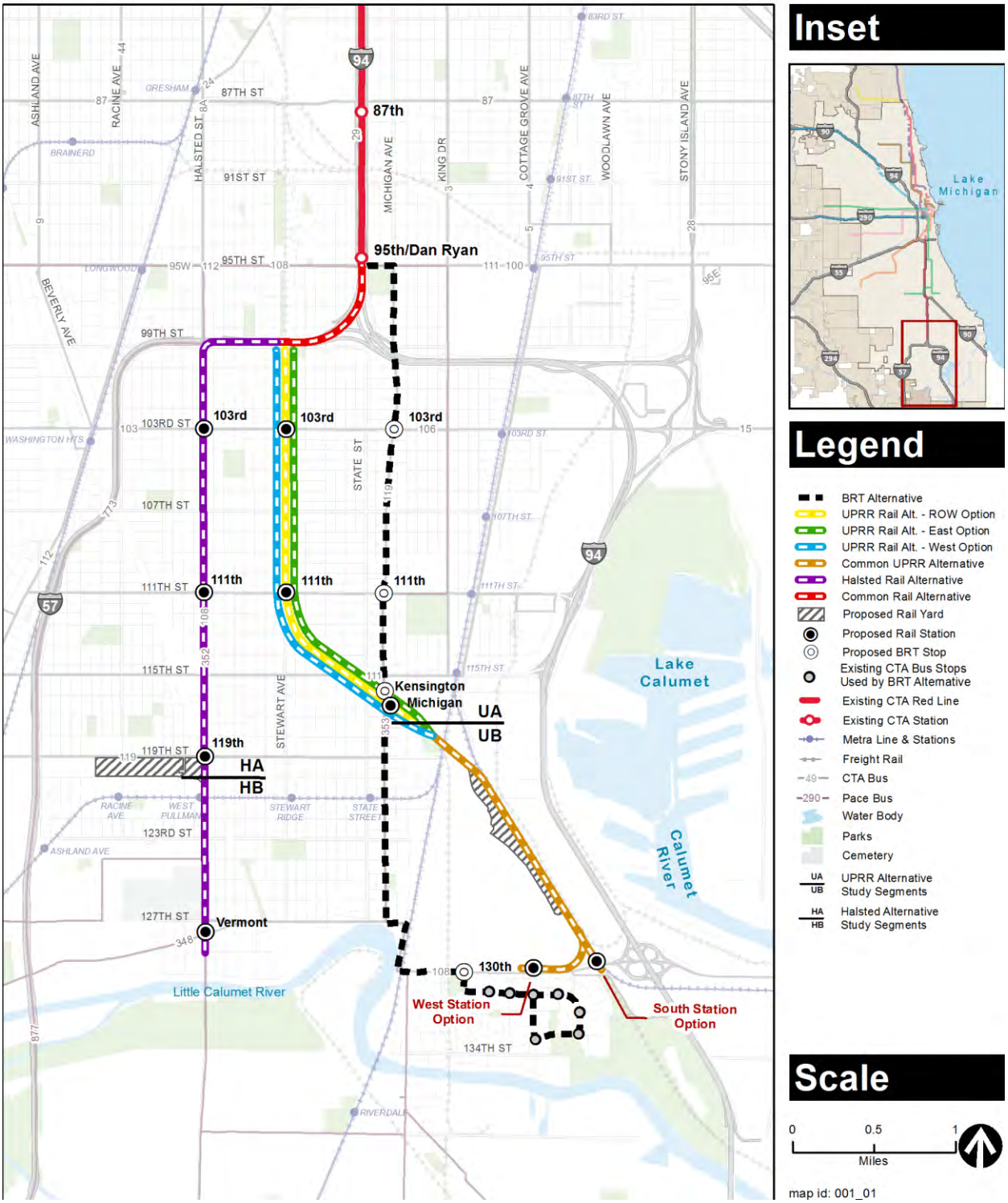

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the CMAP Fiscal Year 2010–2015 Transportation Improvement Program and the improvements to 95th Street Terminal. The Transportation Improvement Program projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

This section describes the process used to conduct a qualitative and quantitative analysis of potential direct and cumulative impacts on parklands and community facilities that would result from the construction and operation of the RLE Project.

3.1 Regulatory Framework

Parklands and community facilities are protected by federal and state laws and regulations that require the proponents of federally funded or permitted projects to consider the projects' potential impacts on parklands and community facilities. In addition, state and local agencies develop long-range plans to serve their communities. As such, state and local entities have a stake in potential impacts that would occur on properties within their purview. Consideration must be given to these planning efforts. Coordination with the public is required, as is coordination with agencies that have responsibility, interest, or jurisdiction over potentially affected properties.

3.1.1 Federal

The preparation of an EIS for every major federal action significantly affecting the human environment is required by NEPA. These impacts include impacts on economic, social and environmental resources, including community cohesion and the availability of and access to public facilities and services. The NEPA implementation regulations that affect Department of Transportation agencies are codified in 23 Code of Federal Regulations (CFR) 771 and also in 40 CFR 1500–1508.

Access to public services is also addressed in the Uniform Fire Code. The National Fire Protection Association develops and publishes consensus codes and standards intended to minimize the possibility and impacts of fire and other human health risks. Topics addressed in the code include fire department access to the community.

Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended, affords special protection to public recreational lands and facilities, including local parks that are open and available to the general public for recreational purposes, significant historic sites, and natural wildlife refuges. Federally funded projects are prohibited from using (i.e., having impacts on the constructive use of the facility or taking of the land) Section 4(f) lands, without examining all feasible alternatives and using all practicable measures to minimize harm. This topic is analyzed in the *Section 4(f) Technical Memorandum*.

State and local governments often obtain grants through Section 6(f) of the Land and Water Conservation Act to acquire parkland and/or make improvements. Section 6(f) prohibits the conversion of property acquired or developed with these funds to non-recreational use without the approval of the Department of the Interior's National Park Service. If no practical alternative exists, replacement lands of equal value, location, and usefulness must be provided. If any potentially affected parkland is determined to have used Section 6(f) funds, coordination with the National Park Service and the Illinois Department of Natural Resources (IDNR) would be

required. The impacts on parklands regulated under Section 6(f) are analyzed in the *Section 4(f) Technical Memorandum*.

3.1.2 State

The IDNR is responsible for managing state parks and state wildlife and recreation areas, and is responsible for administering 6(f) Land and Water Conservation Act funds for the state. The IDNR also develops strategic plans such as the *State of Illinois Urban and Community Forestry Strategic Plan 2005-2015*. The vision statement of this plan includes "building sustainable local community forestry programs that will preserve the health and integrity of the trees," which "will provide a safe and beneficial environment for over 80 percent of Illinois citizens" (IDNR 2005).

Changes in access to community facilities, both temporary and permanent, can lead to decline in quality of life and safety for a community. The Illinois Department of Transportation (IDOT) provides guidance for determining the impacts on community facilities in its 2007 *Community Impact Assessment Manual*. According to this manual, community facilities include "those organizations [that] fulfill a social function or provide services to the population of a community." These facilities include parklands and recreational facilities, public service facilities such as fire and police stations, religious facilities, and educational facilities (IDOT 2007).

3.1.3 Local

Parklands and community facilities are managed by local agencies. As such, coordination with agencies from Cook County and the City of Chicago would be required and the components and implementation of the proposed project alternatives would be required to conform to local policies.

The Chicago Park District manages approximately 8,000 acres of parkland and 580 parks throughout the Chicago metropolitan area. According to the Chicago Park District's *2011–2015 Capital Improvement Plan*, several key goals have been established to prioritize acquisition of parklands, creation of new amenities, and maintenance of existing parklands:

- Create an open and fully accessible park system so that persons of all abilities can have access to parks for recreation and the enjoyment of nature.
- Foster partnerships with public and private entities to help fund priority capital improvement projects.
- Incorporate green and sustainable practices into all capital improvement projects.
- Provide facilities that encourage physical activity.

The Chicago Metropolitan Agency for Planning (CMAP) has devised a long-term comprehensive regional plan, *GO TO 2040*, which details goals and objectives to address the region's challenges over the next 30 years. These goals include creating livable communities and a sense of place by expanding and improving parks and open space and improving the walkability of communities and access to transportation options (CMAP 2010).

3.2 Impact Analysis Thresholds

This memorandum inventories all parklands within an API defined as a corridor encompassing the area within 500 feet of the permanent ROW for each of the RLE alternatives and within ½ mile around each of the proposed stations/stops. The API for community facilities includes properties within or immediately adjacent to the proposed ROW of each alternative and within ½ mile around each of the proposed stations/stops. The analysis describes the features, attributes, or activities of each parkland and community facility that would be affected by construction and/or operation of each alternative and whether these impacts would be temporary or permanent. It then discusses mitigation measures for impacts on affected facilities.

Impacts are described using the following terms:

- Adverse - a permanent negative impact or temporary negative impact that diminishes the overall character or use of the facility
- Adverse after Mitigation - a permanent negative impact or temporary negative impact that diminishes the overall character or use of the facility after mitigation is applied
- Not Adverse - no negative impact
- Not Adverse after Mitigation - a permanent negative impact or temporary negative impact that can be mitigated such that the resulting impact is not adverse
- Beneficial - a permanent positive impact

3.2.1 Community Facilities

NEPA does not define any significance thresholds as it relates to community facilities; however, the 2007 IDOT *Community Impact Assessment Manual* provides qualitative guidance for conducting impact assessments on community facilities; this guidance is described under Section 3.4.

3.3 Area of Potential Impact

The API includes parklands within 500 feet of an alternative's ROW and within ½ mile around the proposed stations/stops and community facilities within or adjacent to the permanent ROW of an alternative and within ½ mile around the proposed stations/stops.

3.4 Methods

Analysis of impacts on parklands and community facilities for the RLE Project will be conducted pursuant to NEPA guidance (40 CFR 1508). The following steps were taken to evaluate the proposed alternatives for the RLE Project, including the No Build Alternative.

Step 1. An inventory of parklands and community facilities was created. This inventory included the following:

- **Public Parklands and Recreational Facilities**
  - National/state/county/local parklands
  - Wildlife and waterfowl refuges
  - Museums
  - Recreational/community facilities
  - Existing or planned trails
  - Planned parks or other recreational facilities
- **Public Services and Religious Facilities**
  - Fire stations
  - Police stations
  - Libraries
  - Government facilities/offices
  - Medical facilities (hospitals, senior care centers)
  - Places of worship
  - Cemeteries
- **Public Educational Facilities**
  - Elementary/middle/high schools
  - Colleges or trade schools

Private facilities such as educational facilities and daycare centers were not analyzed in this report. Private schools, universities, technical schools and/or daycare facilities were not considered to be a "community facility" because they are not readily accessible for use by the general public.

Step 2. An overlay analysis was conducted using the inventory of parklands and community facilities and the API. This process identifies potentially affected properties and facilities.

Step 3. Community Facilities. To determine the extent of impacts on community facilities, the following questions, based on the recommendations in the 2007 IDOT *Community Impact Assessment Manual,* were considered:

- Would there be temporary or permanent change in access to and from community facilities?
- Would major services or facilities be altered or displaced?
- Would barrier impacts be created as a result of the proposed project?
- Would travel time be altered for vehicular or pedestrian traffic?
- Would the usage of existing facilities and services be altered?
- Would alternate facilities be available within a reasonable distance?

The answers to these questions were informed in part by the findings in the *Transportation, Noise and Vibration, Air Quality, Safety and Security,* and the *Displacements and Relocations of Existing Uses Technical Memoranda*, which were used to determine the extent of potential adverse impacts on community facilities and to help identify options to avoid, minimize, and mitigate the adverse impacts. The analysis of impacts on community facilities was incorporated into the *Neighborhood and Community Impacts Technical Memorandum*.

Step 4. Parklands Determine whether the construction and operation of the RLE Project alternatives would result in adverse, adverse after mitigation, not adverse, not adverse after mitigation, or beneficial impacts on the features, attributes, or activities that occur at parklands and whether these impacts would be permanent or temporary.

The analysis of impact on parklands was incorporated in the *Land Use and Economic Development Technical Memorandum*.

Section 4
Affected Environment

This section describes and illustrates the location of the existing parklands and community facilities within the project area.

4.1 Parklands

There are 18 parklands within the API for the RLE Project. As shown in Table 4-1, there are 6 parklands in the API for the BRT Alternative, 10 parklands in the API for the UPRR Rail Alternative (all options), and the 11 parklands in the API for the Halsted Rail Alternative. These parklands are within 500 feet of an alternative's ROW and/or are within ½ mile of the proposed stations/stops.

Table 4-1: Parklands within the Area of Potential Impact

Parkland	Bus Rapid Transit Alternative	UPRR Rail Alternative (All Options)	Halsted Rail Alternative
Robert Abbott Park	X	X	X
Wendell Smith Park		X	X
Fernwood Parkway		X	X
Euclid Park			X
Block Park		X	
Fernwood Park		X	X
Jackie Robinson Park			X
Thomas Leed Morgan Field			X
Major Taylor Bike Trail			X
Edward White Park			X
Potter Palmer Park	X	X	
Kensington Park	X	X	
Lion Field (Roseland Little League)	X		
Golden Gate Park	X	X	
George Washington Carver Park	X	X	
Beaubien Woods Forest Preserve		X	
Whistler Woods Forest Preserve			X
Joe Louis Golf Course			X
Total Affected Parks	**6**	**10**	**11**

UPRR = Union Pacific Railroad

Figure 4-1 shows the locations of these parklands. The amenities in these parklands range from undeveloped open space to facilities that provide diverse recreational, cultural, and community activities.

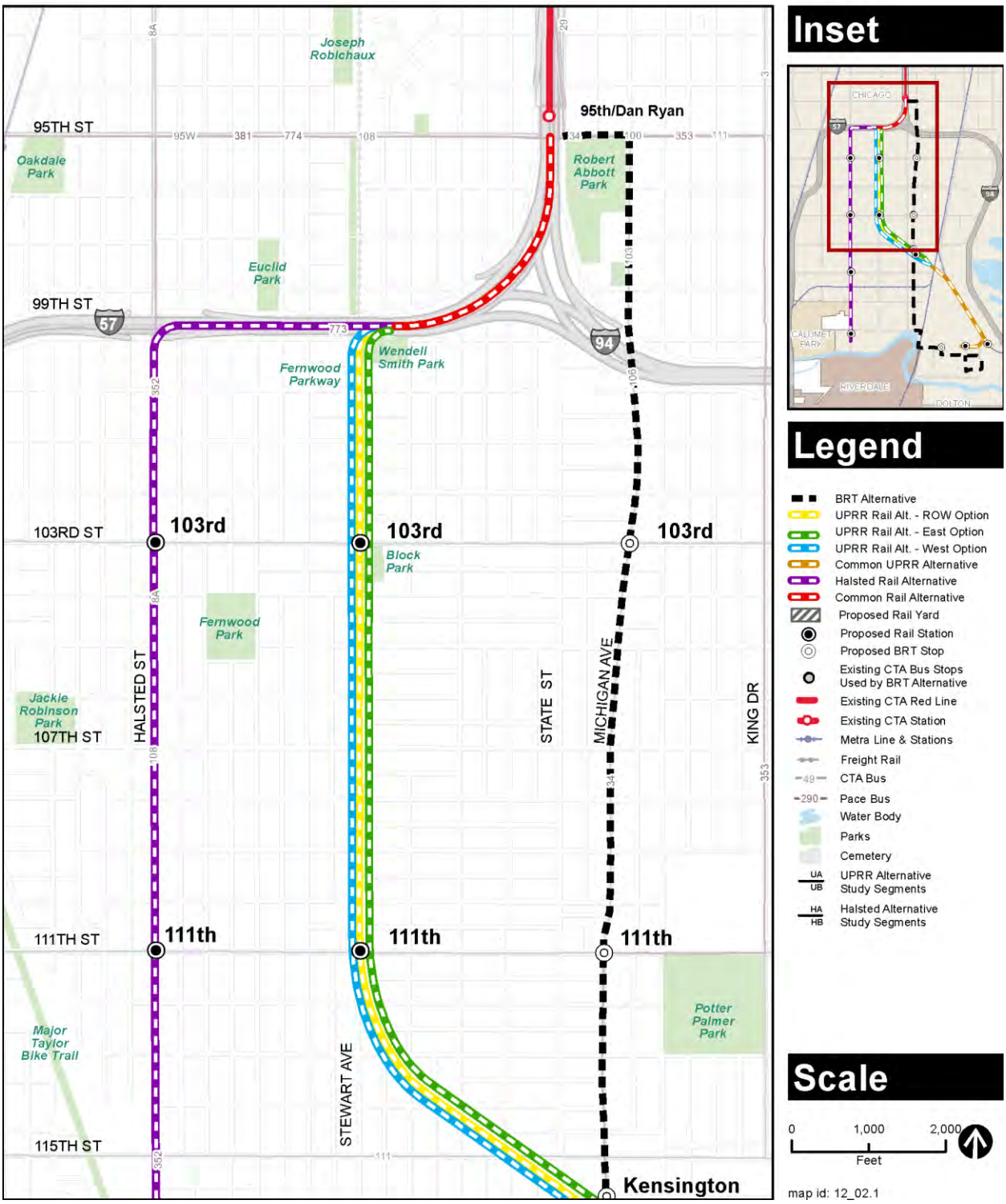

Figure 4-1: Parklands in the Area of Potential Impact (1 of 3)

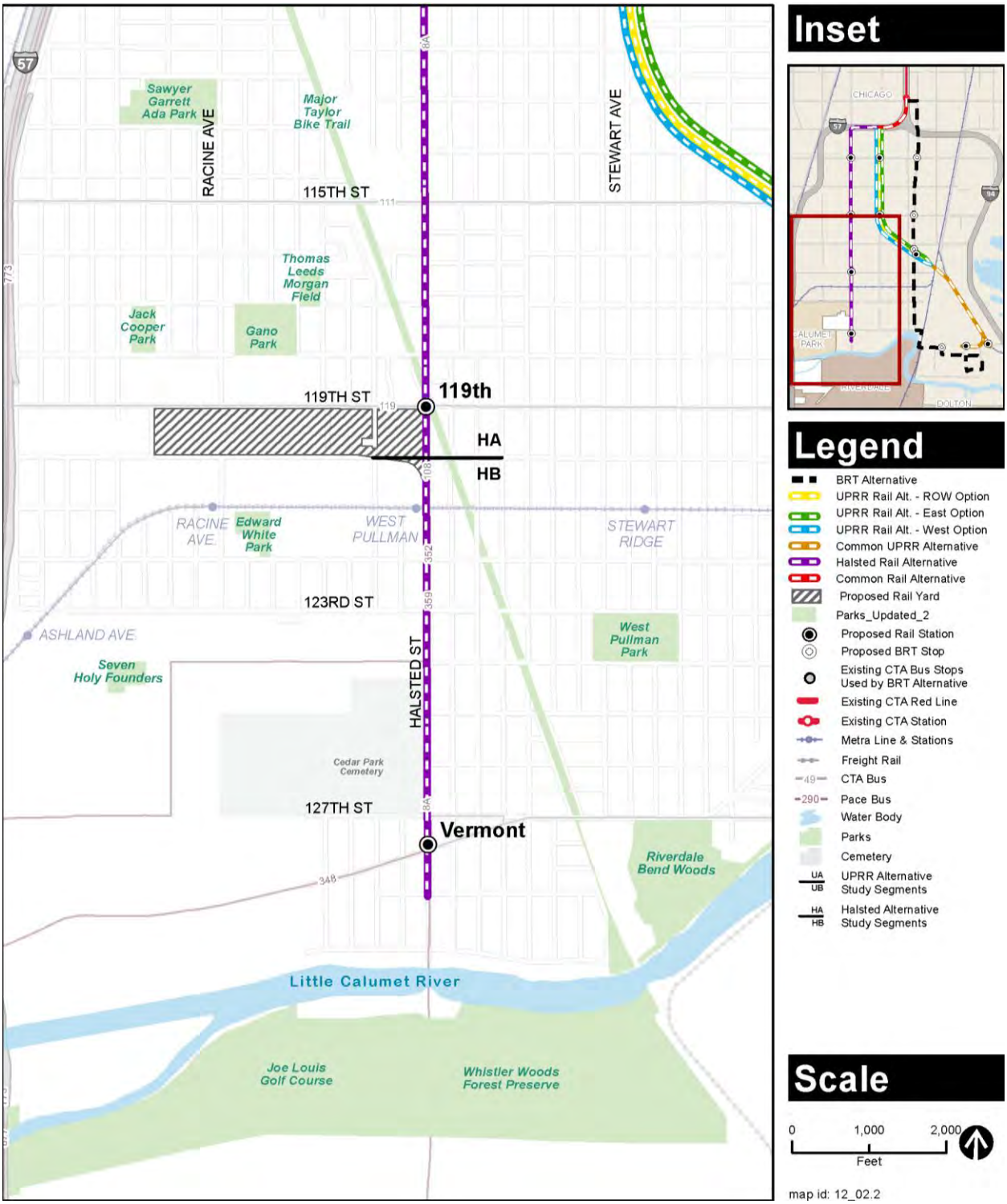

Figure 4-1: Parklands in the Area of Potential Impact (2 of 3)

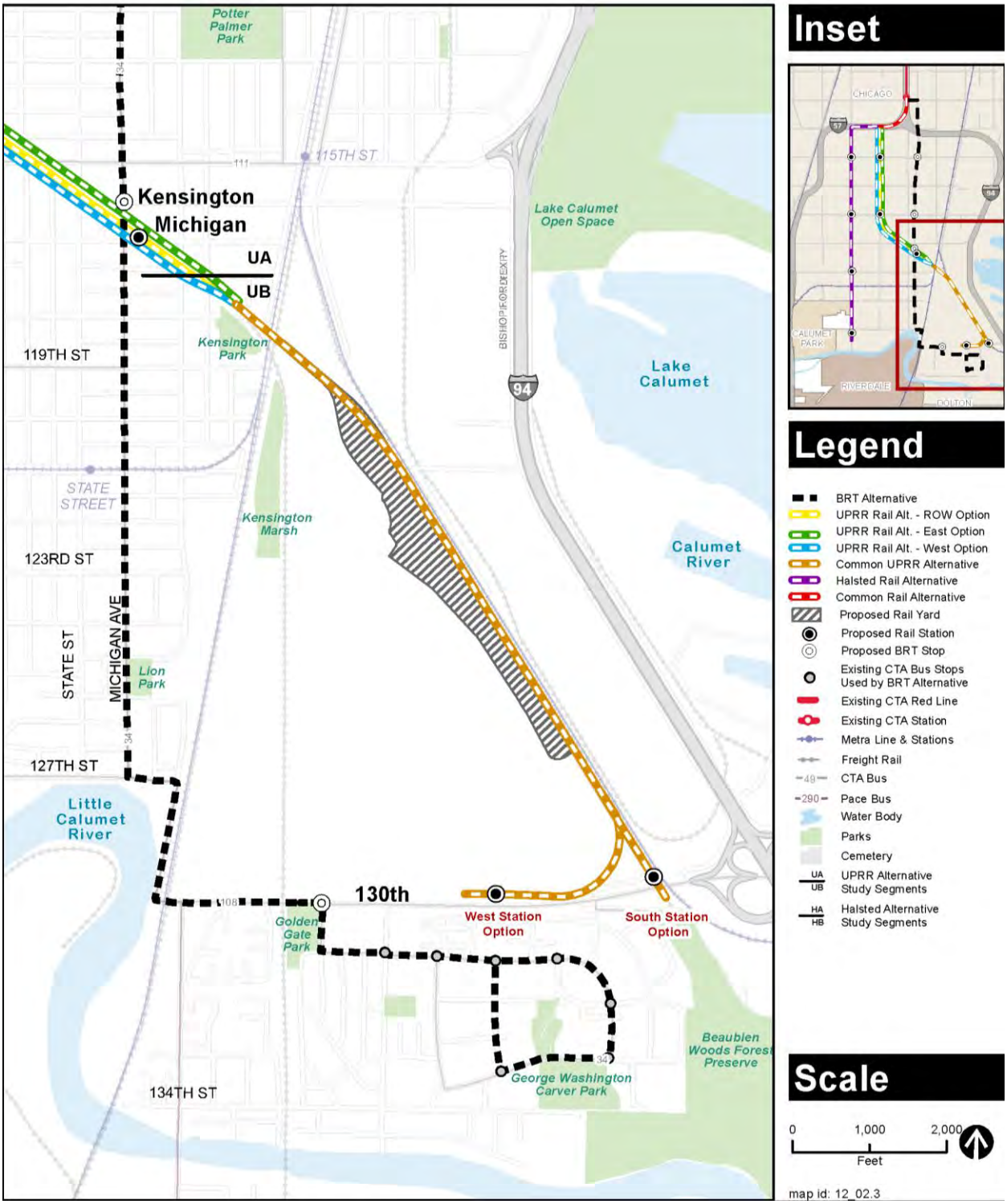

Figure 4-1: Parklands in the Area of Potential Impact (3 of 3)

4.1.1 Description of Parklands with the Potential to be Affected Permanently

Of the 18 parklands within the API, 3 would be permanently affected by the project because they fall within the proposed ROW for one or more build alternative. The other 15 parks are in areas less likely to be permanently affected because they are farther away from the project area. The parklands with the potential to be affected permanently are described in more detail below.

Wendell Smith Park
Princeton Avenue between 99th Street and 99th Place

In 1961, the Chicago Park District purchased land in the growing Roseland neighborhood to establish a community space and by 1970, the land had been transformed into a park with a small recreation building. The 4-acre park was named in honor of Wendell Smith (1914–1972), an African-American sports reporter who was known for championing for equality of black sportsmen throughout his life. While working as a reporter, Smith played a role in bringing racial equality to baseball by introducing Jackie Robinson to Branch Rickey, general manager of the Brooklyn Dodgers, which later recruited Robinson to the team. Smith moved to Chicago in 1947 and became the first full-time black sportswriter for a large daily newspaper.

Wendell Smith Park is approximately 4.7 acres (340 feet wide by 610 feet long). Along the northern boundary, a 0.8-acre (58-foot by 610-foot) portion of the park is owned by the City of Chicago but managed by the Chicago Park District. This City–owned land is managed as open space but is held as ROW for 99th Street. Wendell Smith Park is an actively used facility with basketball courts, baseball fields, a play lot, recreation building, and 0.33 mile of walking trails. Regularly scheduled activities at Wendell Smith Park include 5-on-5 basketball tournaments, baseball/softball games, and concerts in the park. The park is also actively used by day camps and for activities organized by the Chicago Park District (Chicago Park District 2011).

According to the Chicago Park District's *2010–2014 Capital Improvement Plan*, several improvements to the park have been made in the past few years, including the rehabilitation of the basketball courts in 2009; these improvements were paid for by non-Chicago Park District funds. In addition, improvements were made to the recreation building and the sidewalks in Fiscal Year 2009–2010 (Chicago Park District 2009). Figures 4-2 through 4-4 provide westerly views of the park's facilities from Princeton Avenue. Figure 4-5 shows an aerial view of Wendell Smith Park. The UPRR Rail Alternative alignments (all options) would pass through the northwest corner of Wendell Smith Park.

Figure 4-2: Entrance to Wendell Smith Park (facing west)

Figure 4-3: Wendell Smith Park Playground (facing southwest)

Figure 4-4: Wendell Smith Park Basketball Courts (facing west)

(Source: Google Maps, 2011)
Figure 4-5: Aerial View of Wendell Smith Park

Fernwood Parkway
Eggleston Avenue between 95th Street and 103rd Street

Fernwood Parkway was established in 1887 by the newly formed Village of Fernwood and included a green space that was planted with trees and lawn. The original park extended along Eggleston Avenue from 99th Street to 103rd Street and was later expanded northward to 95th Street. When

the Village was annexed by the City of Chicago in 1891, management of Fernwood Parkway was assumed by the City. In the early 20th century, Fernwood Parkway was improved through the City's Special Park Commission, including the planting of more trees and vegetation, and the installation of a wading lagoon and iron fencing. By the late 1920s, the City's Bureau of Parks and Recreation decided that the lagoon would be filled in. In 1959, management of the park was transferred to the Chicago Park District. The most recent improvements to Fernwood Parkway occurred in the 1960s and 1970s and included regrading, plantings, and the installation of new lighting (Chicago Park District 2011).

Within the area of analysis, Fernwood Parkway is divided into two parcels that are separated by 101st Street. The northern parcel, from 99th Street to 101st Street, is approximately 2.4 acres and is 78 feet wide by 1,325 feet long. The southern parcel, from 101st Street to 103rd Street, is approximately 2.9 acres and is 78 feet wide by 1,277 feet long. Both the northern and southern parcels of Fernwood Parkway serve as open space and do not contain recreational facilities or amenities such as sidewalks or benches. According to the *2010–2014 Capital Improvement Plan*, there are no future improvement projects scheduled for Fernwood Parkway (Chicago Park District 2009). Figure 4-6 shows Fernwood Parkway from 100th Street and Eggleston Avenue looking north and Figure 4-7 is looking south. The UPRR Rail Alternative West Option alignment would pass through the center of Fernwood Parkway from 99th Street to 103rd Street.

Figure 4-6: Fernwood Parkway at 100th Street and Eggleston Avenue (facing north)

Figure 4-7: Fernwood Parkway at 100th Street and Eggleston Avenue (facing south)

Block (Griffith Natatorium) Park
Between 103rd Street and 104th Street and on either side on Harvard Avenue

When the City of Chicago purchased property for a pumping station in the Roseland neighborhood in 1912, it donated the excess land to the Special Park Commission for the creation of a park and a swimming pool or natatorium. During this time, the Special Park Commission was focused on the need for parks and playgrounds, particularly in crowded immigrant neighborhoods. The Commission began working with civic organizations to promote park creation and encouraged donation of land for these purposes. Block Park was originally two parks: Griffith Natatorium, which included a swimming pool, changing facilities, and a gymnasium; and Roseland Park, which included the green space around the pool facility. Roseland Park was later renamed in honor of Eugene H. Block, an alderman of the 33rd and 9th wards, chairman of the Special Parks Commission, and later chairman of the City Council Committee on Parks, Playgrounds and Recreation. In 1959, the Chicago Park District began leasing the two parks from the City of Chicago Department of Water Management and consolidated the two parks under the name Block Park. The natatorium facility was razed in 1998 and the site was converted to open space (Chicago Park District 2011). Today ownership of the land remains with the Chicago Department of Water Management.

Block Park is divided into two parcels by Harvard Avenue. The east parcel is approximately 1.4 acres (130 feet wide by 460 feet long) and includes amenities such as benches, walking paths, and sidewalks. The west parcel is approximately 1.3 acres (90 feet wide by 600 feet long) and is generally open space with a sidewalk and no other park amenities. In addition, a radio tower and two utility structures are on the west parcel. Figures 4-8 and 4-9 show current views of the park; Figure 4-10 shows an aerial view. The UPRR Rail Alternative East Option alignment would pass through the west parcel of Block Park.

Figure 4-8: Block Park Facing South with the Roseland Pumping Station in the Background (facing south)

Figure 4-9: West Parcel (left) of Block Park and East Parcel (right) of Block Park

(Source: Google Maps, 2011)
Figure 4-10: Aerial View of Block Park

4.2 Community Facilities

There are 230 community facilities within the API of the RLE Project. As shown in Table 4-2, 91 community facilities are within the API for the BRT Alternative, 73 for the UPRR Rail Alternative ROW Option, 75 for the East Option, 74 for the West Option, and 81 for the Halsted Rail Alternative. As Chapter 3 describes, these include community facilities that are adjacent to an alternative's ROW and/or are within ½ mile of a proposed station/stop location. Details about each community facility, including addresses and locations relative to each build alternative, can be found in Appendix A. Figure 4-11 shows the locations of these community facilities relative to the build alternatives.

Table 4-2: Community Facilities within the Area of Potential Impact

Facility Type	Bus Rapid Transit Alternative	UPRR Rail Alternative ROW Option	UPRR Rail Alternative East Option	UPRR Rail Alternative West Option	Halsted Rail Alternative
Cemetery	0	0	0	0	1
City Facility	1	0	0	0	0
Community Center	5	2	2	2	7
Fire Station	2	4	5	4	1
Healthcare Facility	3	3	3	3	3
Library	2	1	1	1	1
Place of Worship	61	46	47	47	57

Facility Type	Bus Rapid Transit Alternative	UPRR Rail Alternative ROW Option	UPRR Rail Alternative East Option	UPRR Rail Alternative West Option	Halsted Rail Alternative
School	13	15	15	15	8
Senior Center	3	0	0	0	2
State Facility	1	2	2	2	1
Total Number of Affected Community Facilities	91	73	75	74	81

UPRR = Union Pacific Railroad, “ROW = right-of-way

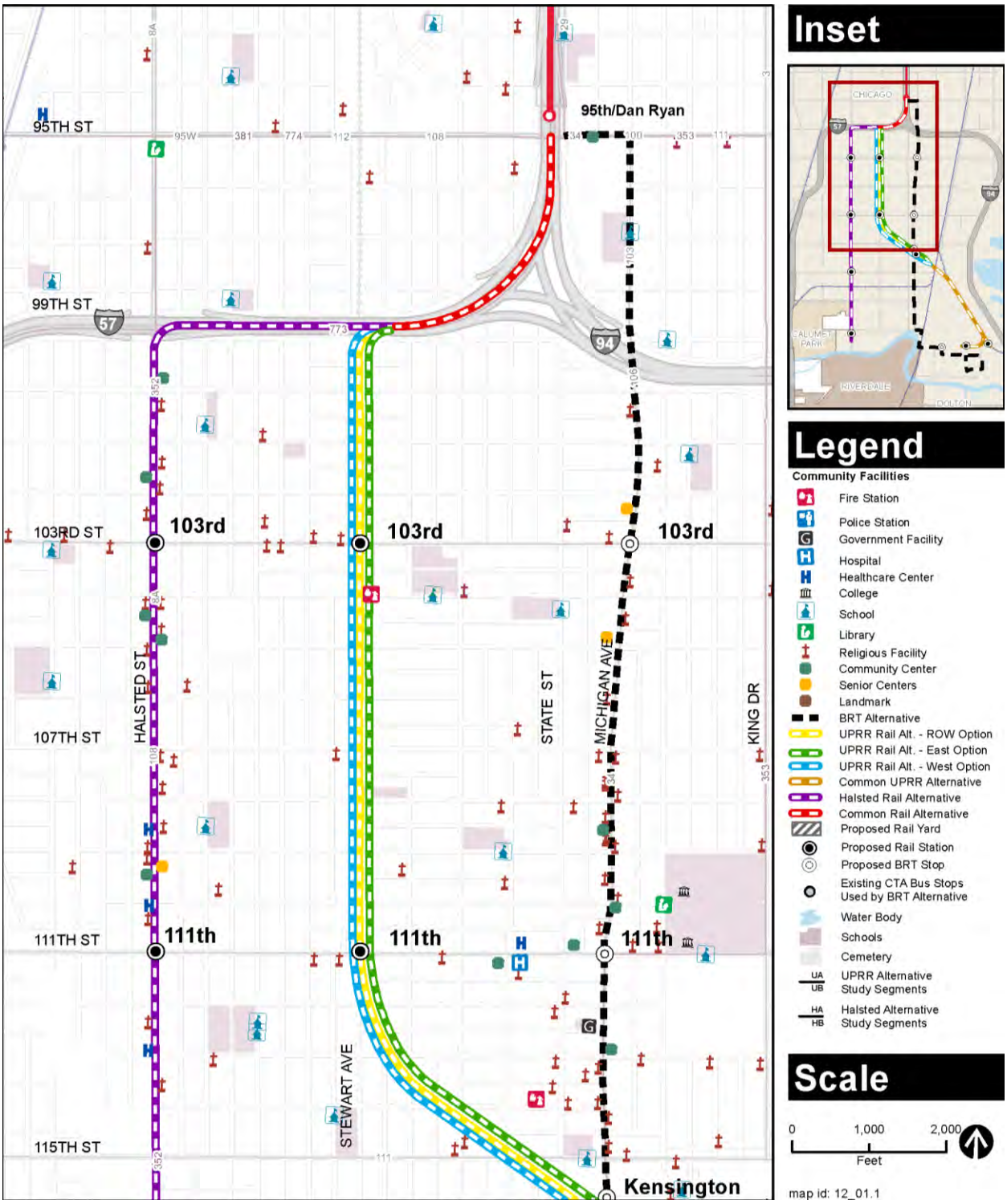

Figure 4-11: Community Facilities in the Area of Potential Impact (1 of 3)

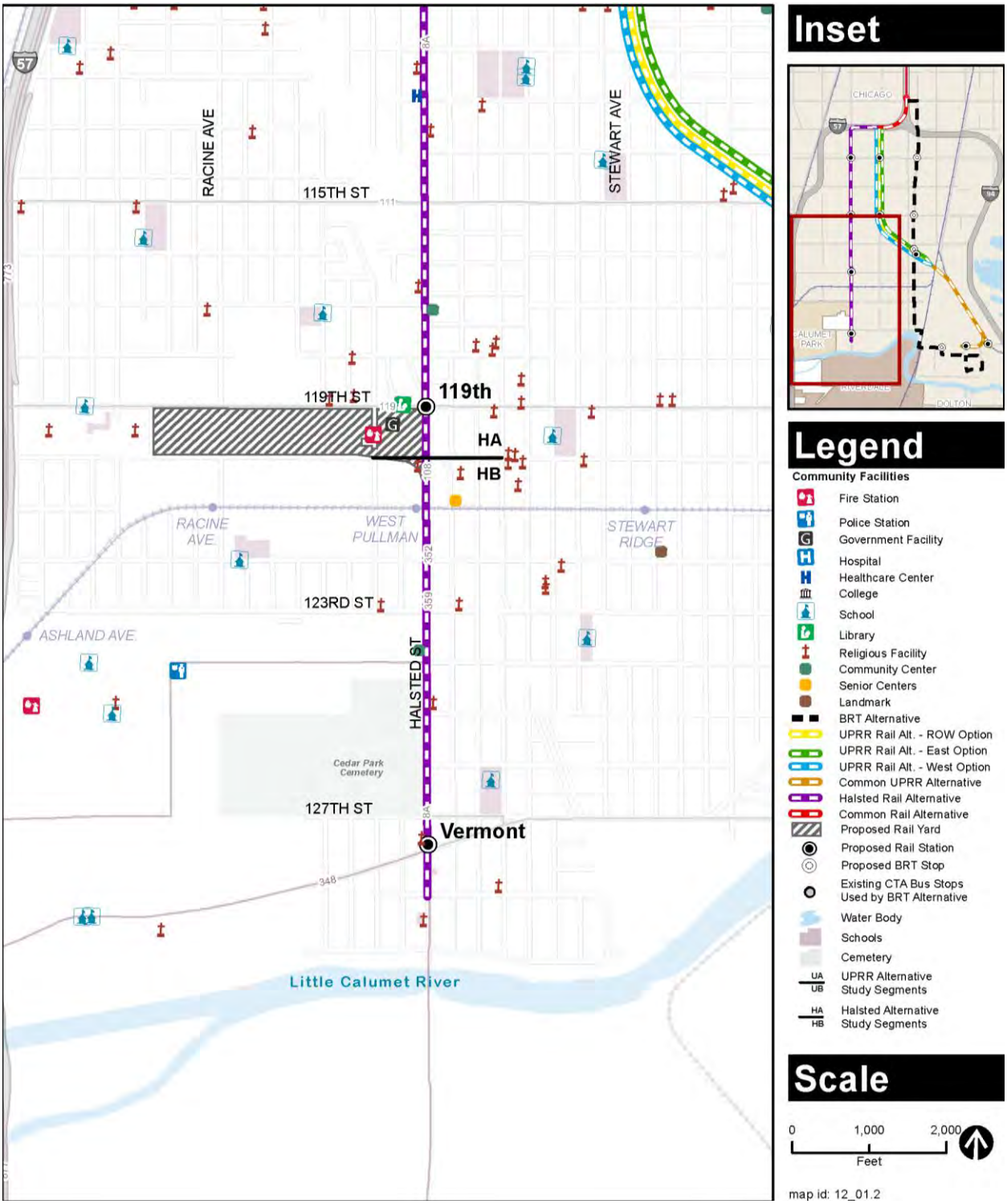

Figure 4-11: Community Facilities in the Area of Potential Impact (2 of 3)

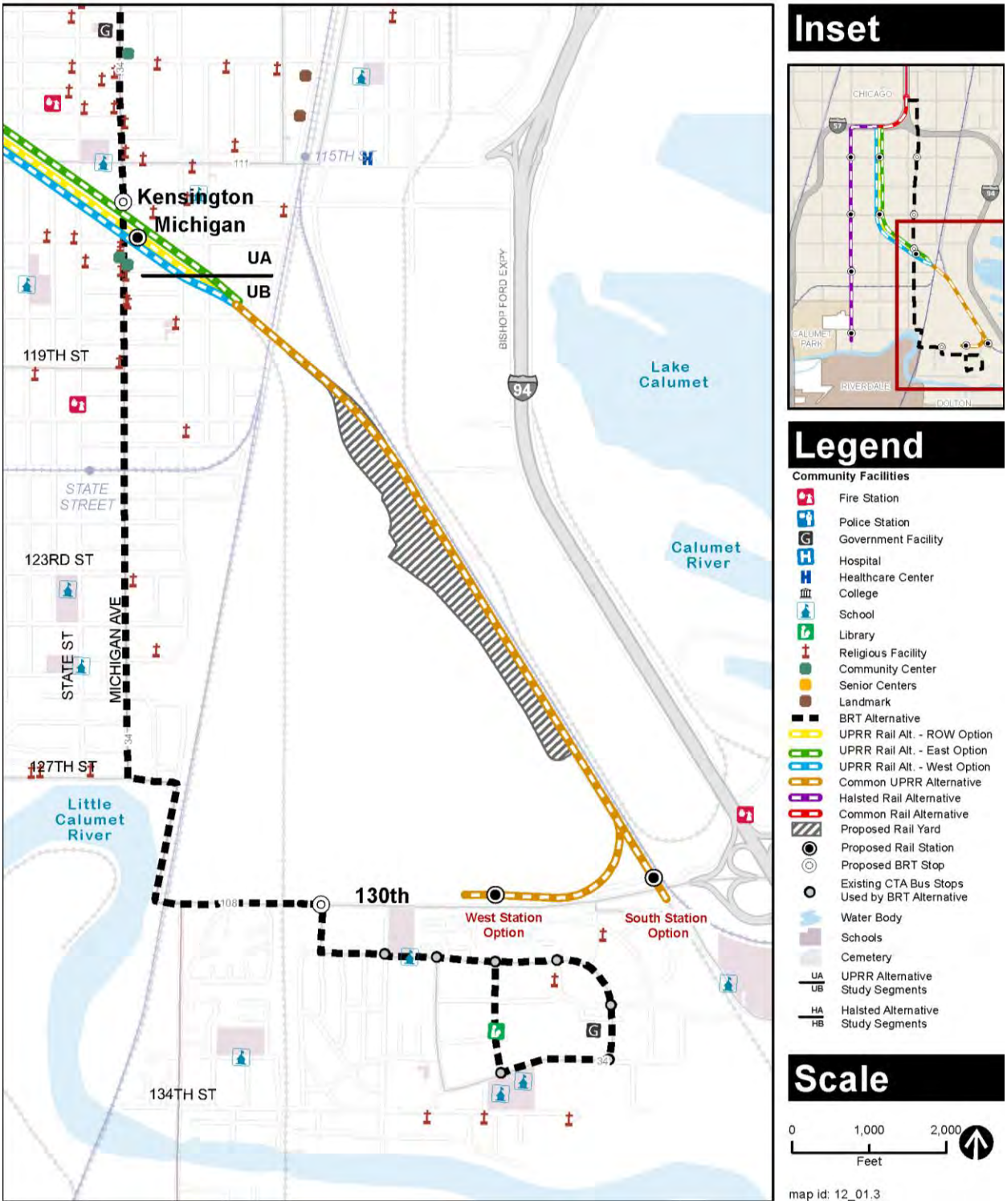

Figure 4-11: Community Facilities in the Area of Potential Impact (3 of 3)

4.2.1 Description of Potentially Displaced Community Facilities

Of the 230 community facilities within the API, 4 would be displaced because they fall within the proposed ROW for one or more build alternative. The other 225 community facilities are outside the proposed ROW for the build alternatives and would not be displaced. The potentially displaced community facilities are described in more detail below.

Now Faith Church of God Holiness
135 W. 114th Street near Wentworth Avenue

Now Faith Church of God Holiness (Figures 4-12 and 4-13) is a small place of worship east of the existing UPRR freight rail ROW. The building is approximately 5,000 square feet and is on a parcel that is approximately 0.3 acre. The entire building and parcel would be affected by the proposed permanent envelope of the UPRR East Option (See Section 5).

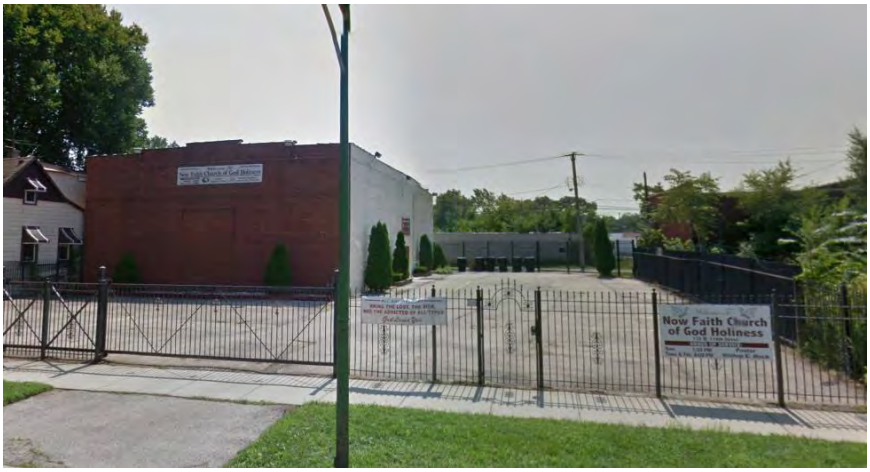

(Source: Google Maps Street View, 2012)
Figure 4-12: Now Faith Church of God Holiness

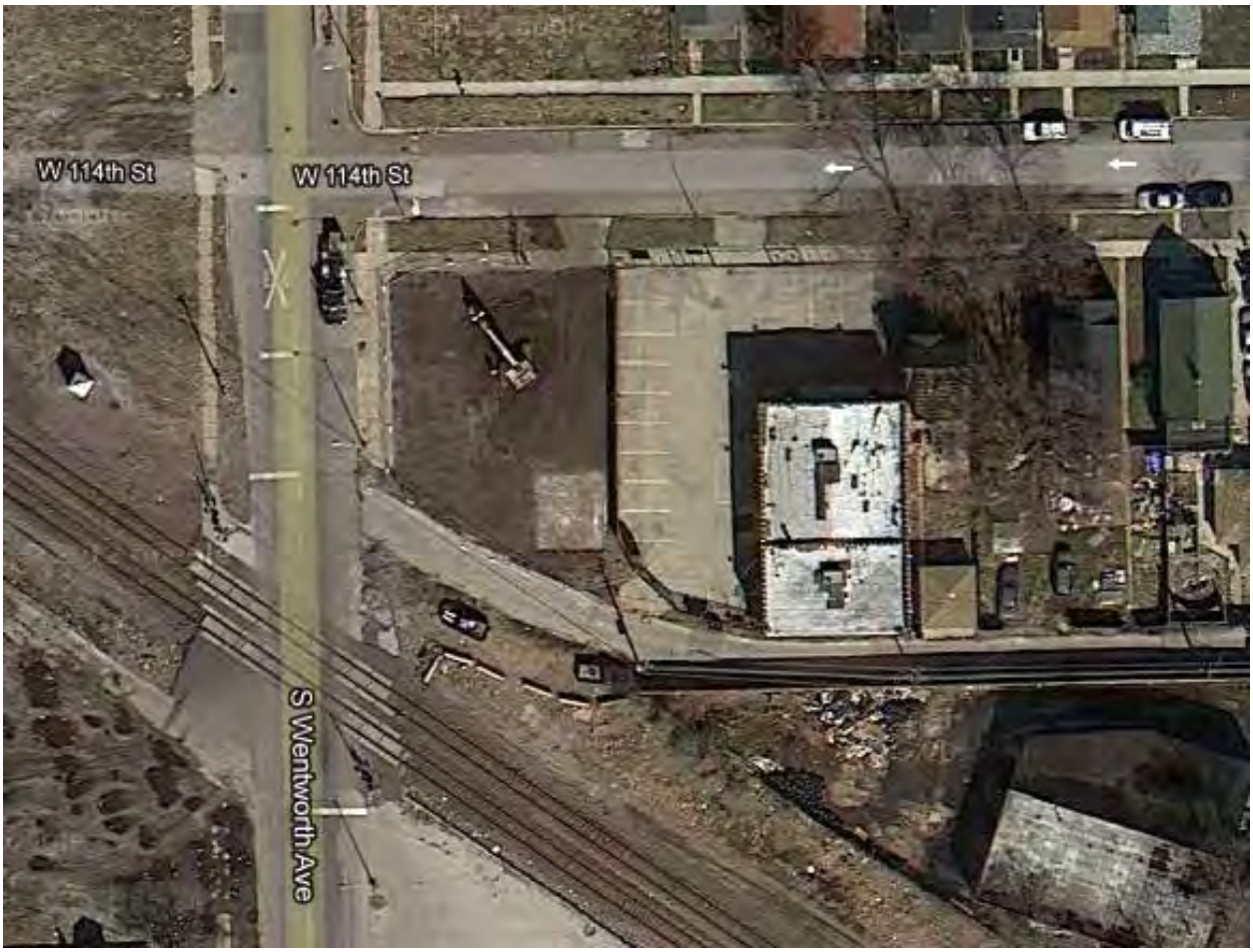

(Source: Google Maps, 2012)
Figure 4-13: Aerial View of Now Faith Church of God Holiness

Grace Temple Church of God Established in Christ
11601 S. Michigan Avenue at 116th Street

Grace Temple Church of God Established in Christ (Figures 4-14 and 4-15) is a place of worship within a former residential building that is west of the existing UPRR freight rail embankment. The building is approximately 1,500 square feet and is on two parcels that make up approximately 0.14 acre, combined. The entire building and parcel would be affected by the proposed permanent envelope of the UPRR West Option (See Section 5).

(Source: Google Maps Street View, August 2011)
Figure 4-14: Grace Temple Church of God Established in Christ

(Source: Google Maps, 2012)
Figure 4-15: Aerial View of Grace Temple Church of God Established in Christ

Sure-Way Missionary Baptist Church
12000 S. Halsted Street at 120th Street

Sure-Way Missionary Baptist Church (Figures 4-16 and 4-17) was incorporated in 1986 and is led by Reverend Eddie M. Miller. The facility includes a worship building and a parking lot. The building is approximately 6,200 square feet and is on a parcel that is approximately 0.5 acre. The entire building and parcel would be affected by the proposed permanent envelope of the Halsted Rail Alternative (See Section 5).

(Source: Google Maps Street View, 2012)
Figure 4-16: Sure-Way Missionary Baptist Church

(Source: Google Maps, 2012)
Figure 4-17: Aerial View of Sure-Way Missionary Baptist Church

Illinois Department of Employment Security
837 W. 119th Street between Halsted Street and Peoria Street

The Illinois Department of Employment Security (Figures 4-18 and 4-19) provides unemployment insurance and employment services and guidance to workers, job seekers, and employers. Services include job development, recruitment opportunities for job seekers, seminars and job search workshops, veteran employment services, migrant seasonal farm workers program, reentry employment services for formerly incarcerated individuals, employment services for young adults (16–24 years of age), and fidelity bonding and work opportunity tax credit assistance for employers who hire at-risk employees. This office is open to the public Monday through Friday from 8:30 AM to 5:00 PM. The Department of Employment Security office is part of a larger shopping center at 119th Street and Halsted Street. The entire parcel and the shopping center would be permanently affected by the proposed permanent envelope of the Halsted Rail Alternative (See Section 5).

Figure 4-18: Illinois Department of Employment Security

(Source: Google Maps, 2012)

Figure 4-19: Aerial View of the Illinois Department of Employment Security

Section 5
Impacts and Mitigations

This section describes the permanent and construction impacts that would result from the RLE Project. Impacts on parklands and community facilities are described as adverse, adverse after mitigation, not adverse, not adverse after mitigation, or beneficial. This section also presents potential mitigation options that would be used to avoid, minimize, and/or mitigate adverse impacts.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the CMAP Fiscal Year 2010–2015 Transportation Improvement Program as well as improvements to the 95th Street Terminal, as described in Section 2. All elements of the No Build Alternative are included in each of the build alternatives.

5.1.1 Permanent Impacts and Mitigations - No Build Alternative

The No Build Alternative would not affect existing parklands in the project area, nor would it change the existing access to community facilities for patrons, employees and residents in the project area overall. Existing bus transit routes in the project area would not change as part of the No Build Alternative; therefore, there would be no change in access to parklands and/or community facilities.

5.1.2 Construction Impacts and Mitigations - No Build Alternative

Under the No Build Alternative no construction activities would take place beyond the currently scheduled improvements.

5.1.3 Cumulative Impacts and Mitigations - No Build Alternative

The No Build Alternative would not change the overall distribution or character of parklands and community facilities along the RLE Project corridor. The overall health of parklands within the project area is stable based on field observations and a review of the past and future park improvement projects identified for the project area in the Chicago Park District's 2011–2015 and 2012–2016 Capital Improvement Plans. These plans identify the locations for improvements and the resources to acquire new and/or improve existing parklands in the project area. The No Build Alternative would not contribute to a decline in the health of community facilities.

5.2 Bus Rapid Transit Alternative

The proposed BRT Alternative would include a 5-mile BRT route, which would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue via 95th Street, Michigan Avenue, 127th Street, Indiana Avenue, and 130th Street. The BRT Alternative would have four stops with improved bus shelters located at 103rd Street and Michigan Avenue (103rd Street stop); 111th Street and Michigan Avenue (111th Street stop); Kensington Avenue and Michigan Avenue (Kensington Avenue stop); and 130th Street and Eberhart Avenue (130th Street

stop). The BRT service would end at the 130th Street stop; however, the bus route would continue through Altgeld Gardens and would use the existing bus stops at 131st Street and Langley Avenue; 131st Street and Corliss Avenue; 131st Street and Ingleside Avenue; 132nd Street and Ellis Avenue; 133rd Street and Ellis Avenue; and 133rd Place and Corliss Avenue. Surface parking lots, each with a capacity for 200 spaces, would be located at the 103rd Street and 111th Street stops. A three-story parking garage would be built at the Kensington Avenue stop (1,000 space capacity). The ground level of the parking garage would be available for retail and/or community facilities. The 130th Street stop would also include a three-story parking garage (1,400 space capacity). Existing parking lanes would be removed for some portions of the alignment. Under the BRT Alternative, the existing 103rd Street Garage would be used to store vehicles.

No dedicated bus lanes would be provided for the BRT Alternative; however, BRT vehicles would use traffic signal priority at signalized intersections along 95th Street, Michigan Avenue, and 130th Street.

The BRT Alternative would offer a 5-minute improvement in travel time from the 95th Street Terminal to 130th Street during the morning peak hours, compared to the existing transit services under the No Build Alternative.

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

This section describes the permanent impacts that would result from the operation of the BRT Alternative and it discusses options to avoid, minimize, or mitigate adverse impacts.

5.2.1.1 Parklands

Implementation of the BRT Alternative would not displace any parkland because the proposed ROW would not cross a park. This alternative's alignment would be within 500 feet of four parklands (Robert Abbott Park, Lion Field, Golden Gate Park, and George Washington Carver Park). These parks would not be subject to impacts greater than with the No Action Alternative because there are existing bus transit services that serve the same corridor and they pass by these parks. There are three parklands within walking distance (approximately ½ mile) of the proposed BRT stops (Kensington Park, Potter Palmer Park and Golden Gate Park). The BRT Alternative would offer minimal improvement in access to these parks.

Golden Gate Park

The parking facility at the 130th Street stop would be across 130th Street from the main entrance to Golden Gate Park. The operation of the parking facilities at the 130th Street stop would generate more vehicle traffic in the immediate area when compared to the existing condition; increased traffic would affect access to the park. The increased traffic flow would primarily occur during the morning and evening peak travel times. These changes would not adversely affect the level of service on 130th Street after transportation mitigation (such as optimized signal timing) was applied. In addition, there are alternate routes to access the park through the Altgeld Gardens neighborhood. The impacts on Golden Gate Park would not be adverse after mitigation.

Parklands within ½ mile of a BRT Stop Location

The addition of BRT services would improve access to the parklands within walking distance (approximately ½ mile) of the proposed BRT stops, particularly for geographically isolated neighborhoods such as Altgeld Gardens. Bus service is already provided along this corridor; however, the BRT Alternative would provide more frequent and faster service. This improvement would be considered beneficial, but not substantial, when compared to the No Build Alternative. As shown in Table 5-1, there are three parklands within walking distance of a BRT stop location.

Table 5-1: Parklands within ½ mile of Stops - Bus Rapid Transit Alternative

Station	Name of Parkland
103rd Street	None
111th Street	Potter Palmer Park
Kensington Avenue	Kensington Park Potter Palmer Park
130th Street	Golden Gate Park

5.2.1.2 Community Facilities

The BRT Alternative would not displace any community facilities. Of the 91 community facilities in the API for the BRT Alternative, 45 are adjacent to the proposed alignment and 88 community facilities are within ½ mile of a BRT stop location; these facilities would have impacts as a result of their proximity to the route, park & ride facilities, and/or stops.

Of the 45 community facilities adjacent to the alignment, 37 are noise-sensitive receptors (schools, libraries, senior housing, and places of worship, listed below) per the definitions found in the *Noise and Vibration Technical Memorandum*. These facilities would have moderate noise impacts as a result of the BRT Alternative. Moderate noise impacts are described as a change in noise that is noticeable but not sufficient to cause a strong, adverse community reaction. The BRT buses would travel along local streets with small blocks, numerous cross streets, and driveways; therefore, noise abatement mitigation, such as barriers, would not be feasible for the BRT Alternative (see the *Noise and Vibration Memorandum* for more details).

Noise-Sensitive Receptors Affected by the Bus Rapid Transit Alternative

- Harlan Community High School
- Damascus Baptist Church
- Rose Haven Manor Senior Housing
- New Tabernacle Baptist Church
- Pentecostal Church of God
- Victory Centre of Roseland Senior Housing
- Harris Temple Church of God in Christ
- Lilydale Progressive Missionary Baptist Church
- St. John Pentecostal Holiness Church of Deliverance
- The Straight Way Pentecostal Church
- Beacon Light Ministries
- New Testament Baptist Church
- Word Alive Church Ministry
- Love Abide Missionary Baptist Church
- Mosque of Umar
- Greater Change Evangelistic
- Miracle Temple
- South of Praise Evangelistic Center
- New Covenant Church Deliverance
- True Word Ministries

- Christian Love Deliverance Church of God in Christ
- Holy Miracle - Christ the Hope of Glory Ministries
- Revelation Baptist Church
- St. Ephraim Coptic
- Roseland Christian Ministries
- Out of a Need Missionary Church Temple
- New St. John Missionary Baptist Church
- Galilee Baptist Church
- Carver Primary School
- Celestial Church of Christ
- Cottage Grove Holy Temple Church
- Word of Knowledge Ministries
- Full Gospel Christian Center Church
- Greater New Eagle Missionary Baptist Church
- Aldridge Elementary School
- Altgeld Library
- Carver Middle School

The parking facility at the 103rd Street stop would be located immediately across Michigan Avenue from Rose Haven Manor Senior Housing; the parking facility at the 111th Street stop would be immediately adjacent to New Testament Baptist Church; and the parking facility at 130th Street stop would be across 130th Street from Aldridge Elementary School. These parking facilities would generate new vehicle traffic. The change in localized traffic volumes would not adversely affect level of service of the roadway network, but would affect pedestrian safety around the parking facilities. The mitigation measures presented in the *Transportation Technical Memorandum* would mitigate the potential adverse safety impacts for pedestrians and patrons of adjacent community facilities. The impacts on community facilities would not be adverse after mitigation.

As mentioned above, the parking garage for the Kensington Avenue stop would include space for retail and community facilities. The operation of the BRT Alternative would benefit the community by offering new and modernized space for the community facilities that locate there.

Community Facilities within ½ mile of a BRT Stop Location

The BRT Alternative would result in a 5-minute improvement in travel time from the 95th Street Terminal to 130th Street compared to the No Build Alternative. As shown in Table 5-2, there are 88 community facilities within walking distance (approximately ½ mile) of the proposed bus stop locations. The improved transit travel time would improve access to these 88 community facilities (see Appendix A for a complete list of facilities within walking distance of the bus stops). These benefits would not be substantial compared to those of the No Build Alternative, because bus transit services that serve similar stop locations are already provided along this route.

Table 5-2: Community Facilities within ½ mile of Stops - Bus Rapid Transit Alternative

Facility Type	Number
City Facility	1
Community Center	6
Fire Station	2
Healthcare Facility	3
Library	2
Place of Worship	59
School	12
Senior Center	2
State Facility	1
Total	**88**

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

Construction of the BRT Alternative would include the construction of new BRT bus stops and the construction of parking facilities at each stop. As such, construction activities would be localized around the bus stop areas. Impacts on parklands and community facilities would include temporary air quality and noise impacts and temporary changes in access; however, these impacts would not be adverse after mitigation.

5.2.2.1 Parklands

Golden Gate Park

Golden Gate Park would have temporary impacts during the construction of the parking garage at the 130th Street stop because of its location with 500 feet of construction activities. The temporary impacts would include noise impacts from construction equipment, impacts on air quality resulting from fugitive dust, and/or an increase in vehicle activity within the localized area and temporary reduction in access to the park due to detours. Mitigation options include, but are not limited to, using construction best management practices, instituting a construction Dust Control Plan, alerting park users of construction activities, and providing safe and clearly marked detour routes. After mitigation, there would be no adverse impacts on Golden Gate Park as a result of construction activities.

5.2.2.2 Community Facilities

The community facilities adjacent to construction activities would have temporary impacts; these facilities include Rose Haven Manor Senior Housing (103rd Street stop), New Testament Baptist Church (111th Street stop), and Aldridge Elementary School (130th Street stop). The construction impacts would include noise impacts, impacts on air quality, and temporary changes to traffic flow and/or parking in the localized area. The same mitigation strategies proposed for the parklands would be applied to mitigate for the adverse impacts on community facilities. Other mitigation options include planning detour routes that allow for access to/from and through the construction areas and designating alternative parking. After mitigation, there would be no adverse impacts on community facilities as a result of construction activities.

5.2.2.2.1 Construction Activities and Emergency Responders

Construction activities at the stop locations and parking facilities would temporarily reduce accessibility of the roadway network, which would cause delays for emergency responders, thereby affecting their ability to provide timely emergency services. These impacts would be mitigated by coordinating the construction schedule with the Chicago Office of Emergency Management and Communications and would require planning detour routes that allow for access to/from and through the construction areas. In particular, the construction plan for the 111th Street stop and parking facilities would be coordinated with the Roseland Community Hospital and the emergency service providers that require access to this hospital. The duration of construction activities for the BRT Alternatives would be shorter than for the rail alternatives; as such, the construction impacts on emergency responders would be fewer with the BRT Alternative that the rail alternatives. After mitigation, the construction impacts on emergency responders would not be adverse.

5.2.3 Cumulative Impacts and Mitigations - Bus Rapid Transit Alternative

The construction and operation of the BRT Alternative would not reduce the overall health of the parklands and/or community facilities in the project area. As such, no adverse cumulative impacts would occur. Improved transit in the project area would result in improved access to parklands and community facilities within and beyond the project area, and within walking distance of the larger network of CTA stop and stations.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option is an extension of the existing Red Line (5.4 miles with the South Station Option, or 5.7 miles with the West Station Option) that would operate in the existing UPRR ROW. The UPRR trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE implementation. The City of Chicago is performing this separate, independent study to evaluate relocating the UPRR trains to another corridor. The CTA trains would operate on an elevated structure heading south from the 95th Street station in the median of I-57 for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would then turn south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of Prairie Avenue, the alignment would cross over the Canadian National (CN)/Metra tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the former Michigan Central/Indiana Harbor Belt (IHB) railroad ROW to terminate at 130th Street.

Three intermediate stops would be included at 103rd Street, 111th Street, and Michigan Avenue with a terminal station at 130th Street. There are two station options for 130th Street: the South Option, which would be along the IHB ROW at 130th Street; and the West Option, which would be on the north side of 130th Street west of the IHB route.

Bus and park & ride facilities would be provided at each station with a total capacity of up to 3,700 parking spaces. The 103rd Street station would include two parking lots, one northeast and one southwest of 103rd Street and the UPRR track, each with a capacity of 100 vehicles; the northeastern parking lot would include a bus turnaround to serve the CTA bus route #9. The 111th Street station would include two parking lots, one northwest and one northeast of 111th Street and

the UPRR track, each with a capacity of 100 vehicles; the northwest parking lot would include a bus turnaround to serve the Pace bus route #352. The Michigan Avenue station would include a three-story parking garage with a capacity for 750 vehicles (the ground level of the garage would be available for retail and/or community facilities use and would include a bus turnaround for the CTA bus route #119 and the Pace bus route #359) A surface parking lot with the capacity for 175 vehicles would be located east of the tracks between 116th Street and Kensington Avenue. The 130th Street station (West or South Option) would include four bus bays, an overhead canopy, a vehicle drop-off area, and weather-protected bicycle parking. The South Option would include a seven-story parking garage with a capacity for 2,300 vehicles. The West Option would include a surface parking lot with the capacity for 350 vehicles and a four-story parking garage with the capacity of 1,950 vehicles.

An at-grade, 270-car yard and shop facility would be built east of the CN/Metra Electric tracks and west of the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad tracks at approximately 120th Street and Cottage Grove Avenue (120th Street yard and shop). The 120th Street yard and shop would also include a small amount of parking for staff. The existing 98th Street Yard and Shop and the south end of the existing tracks would continue to be used for Red Line trains.

Electric substations have been proposed for several locations: west of the CTA tracks between 104th and 105th Street; west of the CTA tracks between Perry Avenue and Lafayette Avenue; west of the CTA tracks north of the proposed parking structure (if the 130th Street South Station Option is the preferred station location), or along the CTA tracks near (if the 130th Street West Station Option is the preferred station location); and within the 120th Street yard and shop facility.

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

This section describes the permanent impacts that would result from the operation of the UPRR Rail Alternative ROW Option and it discusses options to avoid, minimize or mitigate adverse impacts.

5.3.1.1 Segment UA

Segment UA is the northern project area for all three options of the UPRR Rail Alternative. It extends from the existing 95th Street Terminal in the north to just south of the proposed Michigan Avenue station in the south.

5.3.1.1.1 Parklands

The permanent ROW for the UPRR Rail Alternative ROW Option would cross Wendell Smith Park. There are three parks within 500 feet of the ROW: Robert Abbott Park, Fernwood Parkway, and Block Park. These parks would be affected due to their proximity to the proposed tracks, park & ride facilities, and/or stations. In Segment UA, there are six parklands within walking distance (approximately ½ mile) of a proposed station; improved access to these parks would be a benefit of station proximity. Impacts on each park are described below.

Wendell Smith Park

The UPRR Rail Alterative ROW Option would affect Wendell Smith Park. The UPRR Rail ROW Option alignment would run through the northwestern corner of the park. Of the 4.72 acres of the park, approximately 0.23 acre (10,019 square feet) would be within the ROW of the project; this impact would leave an isolated park fragment, between the UPRR and CTA ROWs, of approximately 4,350 square feet (Figure 5-1). The acreage in the ROW and the park fragment includes open space, trees at the park's edge, and the northwest corner of the walking trail.

After construction, the space under the proposed CTA structure would be returned to park use as open space and would provide access to the park fragment. Even if the affected land did not retain its park use, Wendell Smith Park would largely retain its active recreational use because the major amenities in the park would not be in the affected area.

The operation of the UPRR Rail ROW Option would change the visual aesthetic of Wendell Smith Park by adding an elevated rail structure to the park property. The existing visual character of Wendell Smith Park is described in the *Visual and Aesthetic Conditions Technical Memorandum* as having high visual quality. The addition of the rail structure in the park would reduce the visual quality to moderate; however, mitigation such as landscaping would be applied such that the long-term visual impact would not be adverse.

The section of the UPRR Rail ROW Option alignment through the Wendell Smith Park would be curved, which would generate some noise and vibration. The UPRR Rail ROW Option assumes that the freight rail traffic would be relocated to another corridor as part of a separate, earlier project that may occur regardless of RLE implementation; as such, the freight rail noise would no longer be present. The removal of the freight train traffic would reduce the noise impacts such that the net noise impacts of the UPRR Rail ROW Option at Wendell Smith Park would be an overall improvement over the existing condition and no noise mitigation would be needed (see the *Noise and Vibration Technical Memorandum* for more details).

The identification of mitigation options for impacts on Wendell Smith Park would require coordination with the Chicago Park District. Mitigation strategies would include making use of the property under the CTA structure for open space and/or making improvements to Wendell Smith Park such as landscaping, aesthetic improvements on or near the elevated structure, and trail rerouting with tree replanting, which would mitigate impacts on park amenities. The impacts on Wendell Smith Park would not be adverse after mitigation is applied.

Robert Abbott Park

Robert Abbott Park is southeast of the 95th Street Terminal on 95th Street between Michigan Avenue and State Street. While the UPRR Rail Alternative ROW Option would operate within 500 feet of the park, it would not generate greater impacts than the existing condition. Robert Abbott Park currently has impacts associated with its location adjacent to the I-94/I-57 interchange, the bus and rail transit activities at the 95th Street Terminal, and nearby rail yard activities. The addition of the UPRR Rail ROW Option would generate noise and vibration; however, it would not be adverse to Robert Abbott Park, as it would not interfere with the functional and/or recreational use of the park.

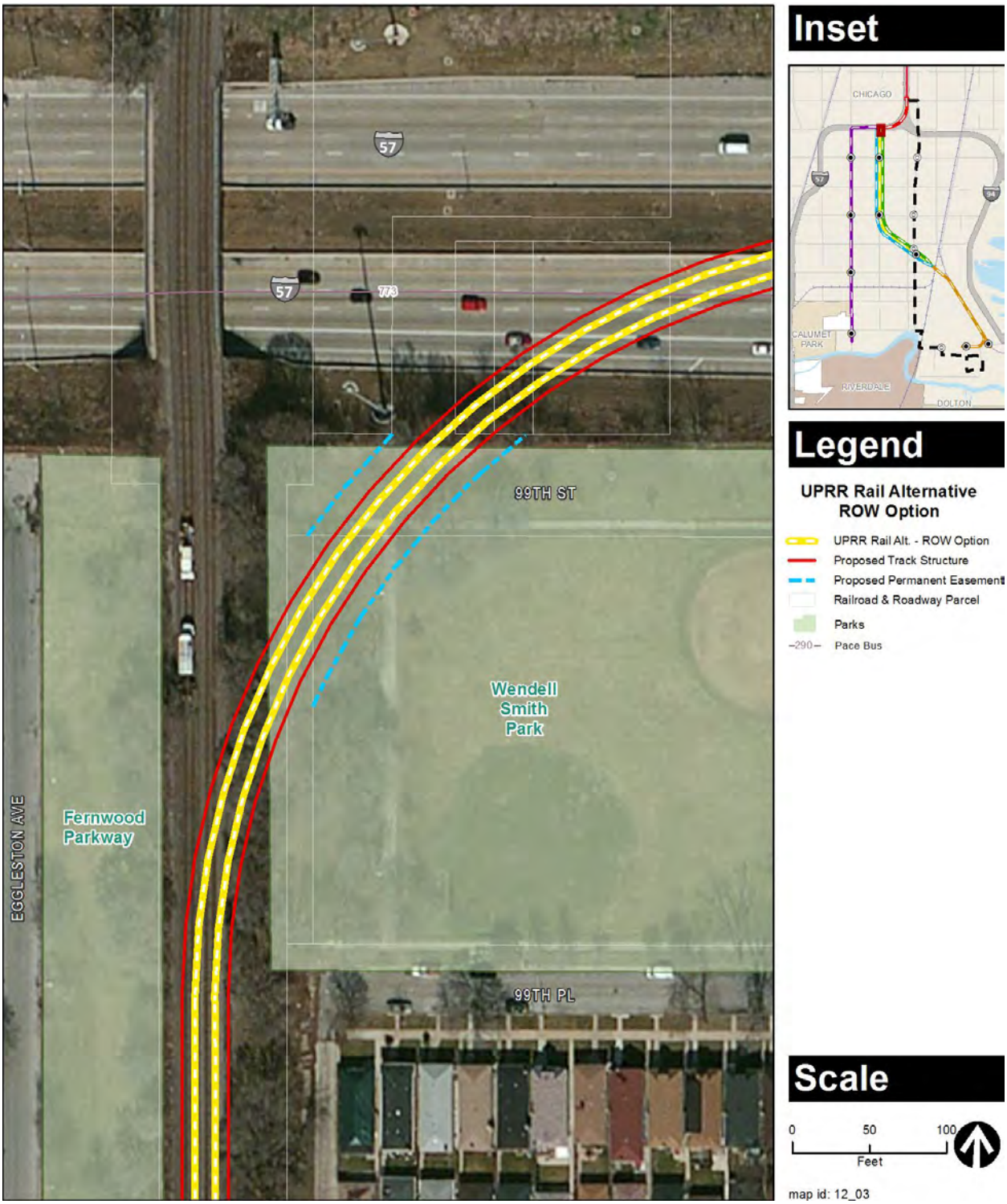

(Source: Chicago Park District, 2012)

Figure 5-1: Impacts on Wendell Smith Park - Union Pacific Railroad Rail Alternative Right-Of-Way Option

Block Park and Fernwood Parkway
Block Park and Fernwood Parkway are near the proposed 103rd Street station and are adjacent to the alignment and parking facilities proposed for this station. The addition of a passenger rail line, a station, and parking facilities near these parklands would result in more vehicle and pedestrian traffic in and around the parks, which may result in traffic and/or pedestrian safety concerns. The mitigation measures proposed in the *Transportation Technical Memorandum* would adequately improve safety. After mitigation, the impacts on Block Park and Fernwood Parkway would not be adverse.

The UPRR Rail ROW Option would not diminish the overall functional use of either park. Today, Block Park has few amenities and Fernwood Parkway is open space only; neither park offers organized activities and they appear to be underutilized based on field observation. The operation of the proposed 103rd Street station and the increased foot traffic may generate more use of these parks and may create an opportunity to improve the parklands' amenities to better integrate Block Park and/or Fernwood Parkway into the station area. Improvements could include adding more seating, improving the landscaping/garden area, adding an outdoor clock, attracting a vendor (such as a newsstand, or coffee cart) and/or incorporating aesthetic elements of the station area design into the parks.

Parklands within ½ mile of a Station Location in Segment UA
The addition of rail transit services would improve access to the parklands within walking distance (approximately ½ mile) of the proposed stations in Segment UA, particularly for geographically isolated neighborhoods such as Altgeld Gardens, and would result in a beneficial impact on the parks. As shown in Table 5-3, there are 6 parklands within walking distance of a proposed station.

Table 5-3: Parklands within ½ mile of Stations - Union Pacific Railroad Rail Alternative Right-Of-Way Option - Segment UA

103rd Street	Wendell Smith Park Fernwood Parkway Block Park Fernwood Park
111th Street	None
Michigan Avenue	Kensington Park Potter Palmer Park

5.3.1.1.2 Community Facilities
No community facilities would be displaced as a result of the UPRR Rail Alternative ROW Option. One community facility, New Christian Joy Missionary Baptist Church, is adjacent to the proposed ROW and would have impacts. Fifty-one community facilities are within approximately ½ mile of one or more of the stations proposed for Segment UA; these facilities would have benefits as a result of their proximity to the stations.

New Christian Joy Missionary Baptist Church
New Christian Joy Missionary Baptist Church would have impacts due to its proximity to the proposed parking facility at the Michigan Avenue station. New Christian Joy Missionary Baptist Church is at 11594 S. State Street. The increased peak-hour traffic would result in congestion and reduced accessibility to this church; however, through transportation mitigation, the UPRR Rail ROW Option would not reduce the level of service of the roadway network around the Michigan Avenue station. New Christian Joy Missionary Baptist Church would not have adverse impacts after mitigation.

As mentioned above, the proposed parking garage at the Michigan Avenue station would include space for retail and community facilities. The operation of the UPRR Rail ROW Option would benefit the community by offering new and modernized space for the community facilities that locate there.

Community Facilities within ½ mile of a Station
The UPRR Rail Alternative ROW Option would result in a 20-minute improvement in travel time from the 95th Street Terminal to 130th Street compared to the No Build Alternative (includes wait time and transfer time at 95th Street Terminal). The improved travel time would improve access to the community facilities within walking distance (approximately ½ mile) of the new rail stations, which would result in a beneficial impact. As shown in Table 5-4, 51 community facilities are within ½ mile of a station location in Segment UA (see Appendix A for a complete list).

Table 5-4: Community Facilities within ½ mile of Stations - Union Pacific Railroad Rail Alternative - Right-Of-Way Option - Segment UA

Facility Type	Number
Community Center	1
Fire Station	2
Healthcare Facility	2
Place of Worship	36
School	9
State Facility	1
Total	51

Noise-Sensitive Community Facilities
The UPRR Rail Alternative ROW Option assumes that the UPRR freight rail traffic would be relocated to another corridor as a result of a separate, unrelated project. While the UPRR Rail Alternative ROW Option would generate noise, the net noise would be less than under existing conditions because the freight rail traffic would be absent. Two noise-sensitive community facilities (Now Faith Church of God Holiness and New Christian Joy Missionary Baptist Church) would experience less noise from the UPRR Rail Alternative ROW Option than with the No Action Alternative.

Operations and Emergency Responders
The operation of the UPRR Rail ROW Option would result in a change in traffic patterns, particularly around the station areas. These changes would cause delays for emergency

responders, thereby adversely affecting their ability to provide timely emergency services. Transportation planning associated with this project would be coordinated with the Chicago Office of Emergency Management and Communications (see the *Safety and Security Technical Memorandum* for more details about the impacts of the project on emergency responders). The impacts on emergency responders would not be adverse after mitigation.

5.3.1.2 Segment UB

Segment UB is the southern project area for all three options of the UPRR Rail Alternative. It extends from just south of the Michigan Avenue station on the north to the proposed 130th Street station (South and West Options) on the south.

5.3.1.2.1 Parklands

The permanent ROW for the UPRR Rail ROW Option would not cross any parkland in Segment UB and would not displace parklands. There are two parks within 500 feet of the ROW: Kensington Park and Beaubien Woods Forest Preserve. These parks would be affected due to their proximity to the tracks, park & ride, and/or stations. In Segment UB there are three parklands within walking distance (approximately ½ mile) of a proposed station; improved access to these parks would be a benefit of station proximity. Impacts on each park are described below.

Kensington Park

Kensington Park is east and south of Prairie Avenue and 118th Street and is bordered to the east by the existing UPRR freight rail ROW. The operation of the UPRR Rail ROW Option would not affect the functional or recreational use of the park. The electrified CTA trains would produce less noise than is generated by the existing freight rail traffic, which would result in a net noise improvement. As such, no noise mitigation would be needed (see the *Noise and Vibration Technical Memorandum* for more details). The impacts on Kensington Park would not be adverse.

Beaubien Woods Forest Preserve

The entrance to the Beaubien Woods Forest Preserve is across Doty Avenue from the 130th Street South Station Option site. This entrance serves the boat launch and does not directly connect to the remainder of the preserve. This section of the preserve is bordered on the west by the Altgeld Gardens neighborhood and on the east by freight rail tracks. The 130th Street South Station Option would improve transit access to the woods. Pedestrian and vehicle traffic would likely use 130th Street to access the station, which would not affect access to the boat launch.

Parklands within ½ mile of a Station

The addition of high capacity rail transit services would improve transit access to the parklands within walking distance (approximately ½ mile) of the proposed stations, which would be a beneficial impact on the parks. As shown in Table 5-5, there are three parklands within walking distance of the proposed station locations.

Table 5-5: Parklands within ½ mile of Rail Stations - Union Pacific Railroad Alternative - Right-Of-Way Option - Segment UB

Station	Name of Parkland
130th Street West Option	Golden Gate Park Beaubien Woods Nature Preserve George Washington Carver Park
130th Street South Option	Beaubien Woods Nature Preserve George Washington Carver Park

5.3.1.2.2 Community Facilities

No community facilities in Segment UB would be displaced as a result of the UPRR Rail Alternative ROW Option. No community facilities are adjacent to the proposed ROW in Segment UB; however, Aldridge Elementary School is near the parking facility location for the 130th Street West Option. There are 23 community facilities within walking distance (approximately ½ mile) of the proposed stations in Segment UB. Improved access to these facilities would be a benefit of station proximity.

Aldridge Elementary School

Aldridge Elementary School is at 131st Street; it is across 130th Street from the 130th Street West Station Option site near one of the proposed parking facility's access points. One of the school's entrances and its playground and play yard face 130th Street. As it currently exists, there are no school zone signs or sidewalks on 130th Street; this suggests that children do not use 130th Street to access the school. Increased peak hour vehicular traffic in this area would generate traffic congestion in the localized area but would not pose a hazard to the school children. Transportation mitigation strategies presented in the *Transportation Technical Memorandum* would offset potential traffic impacts such that there would be no adverse impacts at Aldridge Elementary School after mitigation.

Community Facilities within ½ mile of a Station

The UPRR Rail ROW Option would result in improved travel time and would improve access to the community facilities within walking distance (approximately ½ mile) of the new rail stations, which would be a beneficial impact on community facilities. As shown in Table 5-6, there are 23 community facilities with walking distance of the proposed station options in Segment UB (see Appendix A for a complete list).

Table 5-6: Community Facilities within ½ mile of the Proposed Station Locations - Union Pacific Railroad Rail Alternative Right-Of-Way Option - Segment UB

Facility Type	Number
Community Center	1
Fire Station	2
Healthcare Facility	1
Library	1
Place of Worship	12
School	5
State Facility	1
Total	**23**

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option would require the construction of elevated structure from 95th Street to the CN/Metra Electric tracks near 119th Street, and at-grade track from approximately 119th Street to 130th Street. Where the track would cross roadways and/or rail lines, viaducts would be built and a grade separation would be constructed on the property of the Metropolitan Water Reclamation District of Greater Chicago. Four stations would be built (103rd Street, 111th Street, Michigan Avenue, and 130th Street West or South Option). Construction would also include the bus and park & ride facilities at all stations, the 120th Street yard and shop, and substations, as described above.

5.3.2.1 Segment UA

5.3.2.1.1 Parklands

Construction activities would occur in Wendell Smith Park and would temporarily affect this park. Robert Abbott Park, Fernwood Parkway and Block Park are within 500 feet of the proposed ROW and would have temporary construction impacts.

Wendell Smith Park

Construction activities for the UPRR Rail ROW Option would occur in the northwest corner of Wendell Smith Park, where the alignment would cross through the park. This portion of the park, in addition to the park remnant between the proposed ROW and the existing UPRR freight rail ROW, would be temporarily inaccessible for public use during construction. This section of Wendell Smith Park contains few amenities (open space, trees, and a small section of the walking trail) so the temporary closure would not affect the functional or recreational use of the park. Construction activities would occur adjacent to the baseball field and open space. Depending on the timing and schedule, construction would interfere with the organized activities that occur in Wendell Smith Park such as baseball/softball games and/or concerts in the park. Construction activities would generate temporary noise and air quality impacts, and/or change access to, or parking around the park. These impacts would be temporary in nature and would be mitigated through the use of construction best management practices; by alerting parkland users of construction activities; and by providing clearly marked detour routes and alternate parking. Coordination with the Chicago Park District would result in options to mitigate impacts on any of

the organized park activities; for example the recreational activities would be temporarily relocated to a nearby park, such as Robert Abbott Park, while construction is underway. After mitigation, construction of the UPRR Rail ROW Option would not adversely affect Wendell Smith Park.

Robert Abbott Park
This park would be separated from the construction activities for the UPRR Rail ROW Option by the I-57/I-94 interchange and State Street. Because of this separation, no construction impacts on the Robert Abbott Park would occur.

Fernwood Parkway and Block Park
The impacts of construction on Fernwood Parkway and Block Park would include temporary noise impacts, air quality impacts, and changes in access to the parks. These impacts would be minimal because the parks do not offer organized recreational activities and are largely underutilized, based on field observation. Construction activities would not interfere with the use of Fernwood Parkway or Block Park; however, access to these parklands would be temporarily altered while the structure, station and parking facilities at the 103rd Street Station are under construction. In addition to using construction best management practices to mitigate noise and air quality impacts, mitigation would include alerting park users of temporary closures and/or reduction in access to the parks and providing safe and clearly marked detour routes. Similar amenities are available at Fernwood Park, which is within walking distance of Fernwood Parkway and Block Park; as such, affected parkland users would have an alternate place to recreate during construction. Construction of the UPRR Rail ROW Option would not adversely affect Fernwood Parkway or Block Park after mitigation.

5.3.2.1.2 Community Facilities
Construction of the UPRR Rail Alternative ROW Option would temporarily affect New Christian Joy Missionary Baptist Church because it is adjacent to the proposed ROW.

Now Faith Church of God Holiness and New Christian Joy Missionary Baptist Church
Construction associated with the building of the elevated structure would occur near Now Faith Church of God Holiness and would have temporary impacts. Construction activities at the Michigan Avenue station would temporarily affect New Christian Joy Missionary Baptist Church. Construction noise impacts would interrupt services conducted at these churches and the temporary changes in access and available parking would make it more difficult for church patrons to access the facilities. These temporary impacts would be mitigated by providing information about construction schedules and changes in parking and/or detours to the churches to share with its patrons. Best management practices would be used as part of UPRR Rail ROW Option construction to minimize the temporary noise impacts and clearly marked detour routes and designated alternate parking would mitigate the temporary changes in access. After mitigation, these churches would not have adverse impacts.

5.3.2.1.3 Construction Activities and Emergency Responders
Construction activities at the station locations and at viaducts would temporarily reduce accessibility of the roadway network, which would cause delays for emergency responders. The scheduling of construction activities would be coordinated with the Chicago Office of Emergency

Management and Communications. In particular, the construction plans for the 103rd Street station and parking facilities would be coordinated with the adjacent Chicago Fire Department - Engine 93 and the construction plans for the 111th Street station and parking facilities would be coordinated with Roseland Community Hospital and the emergency service providers that require access to this hospital. Additional mitigation measures ensuring that there is access both to/from and through the construction zone area; this access would be achieved by making sure that adjacent through streets are not temporarily closed at the same time.

5.3.2.2 Segment UB

5.3.2.2.1 Parklands

No parklands would be displaced in Segment UB as a result of construction for the ROW Option. Kensington Park and the park entrance to Beaubien Woods Nature Preserve are within 500 feet of where construction activities would occur in Segment UB; these parks would have the temporary impacts of construction.

Kensington Park

Kensington Park is within 500 feet of the construction activities that would occur between Prairie Avenue and CN/Metra Electric rail tracks; however, because of the street configuration in this area, construction vehicles would need to access to the project via the Kensington Park parking lot (via 118th Street). Construction impacts on Kensington Park would include temporary noise and air quality impacts and reduced parking.

Mitigation options would include, but not be limited to, using best management practices to reduce the construction noise and air quality impacts from fugitive dust and/or construction vehicle activity in the localized area; providing clearly marked and safe alternate access routes to the park and alternate parking spaces; and coordinating with the Chicago Park District to determine whether scheduled recreational activities would need to be relocated during the construction timeframe. After mitigation, Kensington Park would not have adverse impacts.

Beaubien Woods Forest Preserve

The 130th Street South Station Option would be in close proximity to the entrance to Beaubien Woods Nature Preserve. Construction activities at this location would temporarily affect the park entrance on Doty Avenue. This entrance primarily serves the boat launch. Any temporary change in access to the boat launch would be mitigated through coordination with the Forest Preserve District of Cook County; boat launch users would be notified of temporary changes in access and temporary signage would direct users to a clearly marked detour route, for example, via 132nd Street.

5.3.2.2.2 Community Facilities

Aldridge Elementary School is in close proximity to the 130th Street West Station Option site and would have impacts associated with construction activities.

Aldridge Elementary School

One of the school's entrances and its playground and play yard face 130th Street. Construction would temporary affect access to this school entrance if construction required a detour from 130th Street. There is, however, an auxiliary entrance to the school at 131st Street, so the change in

access would not be anticipated to be adverse. Construction activities would result in temporary noise and air quality impacts; however, these impacts would largely be limited to the times when the school yard is in use and the impacts would not be substantial because the school yard is separated from the construction activities by 130th Street. The adverse impacts would be mitigated using construction best management practices, clearly marked detour routes, and notification to the school regarding the construction schedule.

5.3.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - ROW Option

The construction and operation of the UPRR Rail Alternative ROW Option would not reduce the overall health of the parklands and/or community facilities in the project area. As such, no adverse cumulative impacts would occur. Improved transit in the project area would result in cumulative benefits by improving access, via transit, to parklands and community facilities within and beyond the project area and within walking distance of the larger CTA network.

5.3.4 120th Street Yard and Shop

There are no parklands or community facilities in proximity to the 120th Street yard and shop site; therefore, no adverse impacts would result from the construction or operation of the yard and shop.

5.4 Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative East Option would be similar to the UPRR Rail Alternative ROW Option; the major difference would be the alignment: the East Option would operate immediately adjacent and east of the UPRR ROW between I-57 and the CN/Metra Electric track. The UPRR is considering the addition of a third track east of its existing two tracks. The proposed CTA structure would, where feasible, be built 50 feet from the centerline of the easternmost UPRR track, assuming a third track is built. Pier protection crash walls would be installed where a 50-foot buffer is not feasible, such as at the 103rd Street station, and between State Street and Michigan Avenue.

The other major difference between the East Option and the UPRR Rail ROW Option is the proposed configuration of the bus and park & ride facilities at the stations:

- At the 103rd Street station the East Option would include a surface parking lot with the capacity for 75 vehicles east of the tracks and north of 103rd Street, with a turnaround for CTA bus route #9. This station would also have a surface parking lot with the capacity for 125 vehicles west of the tracks between 103rd Street and 103rd Place.

- The 111th Street station would include a surface parking lot with the capacity for 55 vehicles east of the tracks and north of 110th Place, and a second surface parking lot with the capacity for 145 vehicles west of the tracks between 111th Street and 110th Street; a turnaround for the Pace bus route #352 would be incorporated into the west parking lot.

- The facilities at the Michigan Avenue station would be essentially the same as the ROW and East Options; however, for the East Option the parking garage would accommodate 825 vehicles and the surface parking lot would accommodate 175 vehicles.

The 130th Street station would have the same configuration and amenities in all three UPRR Rail Alternative options.

Substations would be included in the East Option: west of the UPRR ROW between 104th and 105th Streets; west of the UPRR ROW between Perry Avenue and Lafayette Avenue; west of the CTA tracks south of the 120th Street yard and shop site; and within the 120th Street yard and shop facility.

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

This section describes the permanent impacts that would result from the operation of the UPRR Rail Alternative East Option and discusses measures to avoid, minimize, or mitigate adverse impacts.

5.4.1.1 Segment UA

5.4.1.1.1 Parklands

The ROW for the UPRR Rail Alterative East Option would pass through Wendell Smith Park and Block Park and would result in adverse impacts. There are also two parks within 500 feet of the proposed ROW: Robert Abbott Park and Fernwood Parkway. These parks would have impacts due to their proximity to the proposed track, park & ride facilities, and/or stations. As with the UPRR Rail ROW Option, the stations proposed for the East Option in Segment UA would be within walking distance (approximately ½ mile) of six parklands; improved access to these parks would be a benefit of station proximity.

Wendell Smith Park

Like the UPRR Rail ROW Option, the East Option would affect the northwestern portion of Wendell Smith Park; however, the ROW for the East Option would displace a larger portion of the park than the UPRR Rail ROW Option. The ROW for the East Option would cross 0.40 acre (17,424 square feet) of the park and would leave an isolated park fragment that is approximately 13,719 square feet (Figure 5-2). This acreage includes trees, the west portion of the walking trail, and several benches.

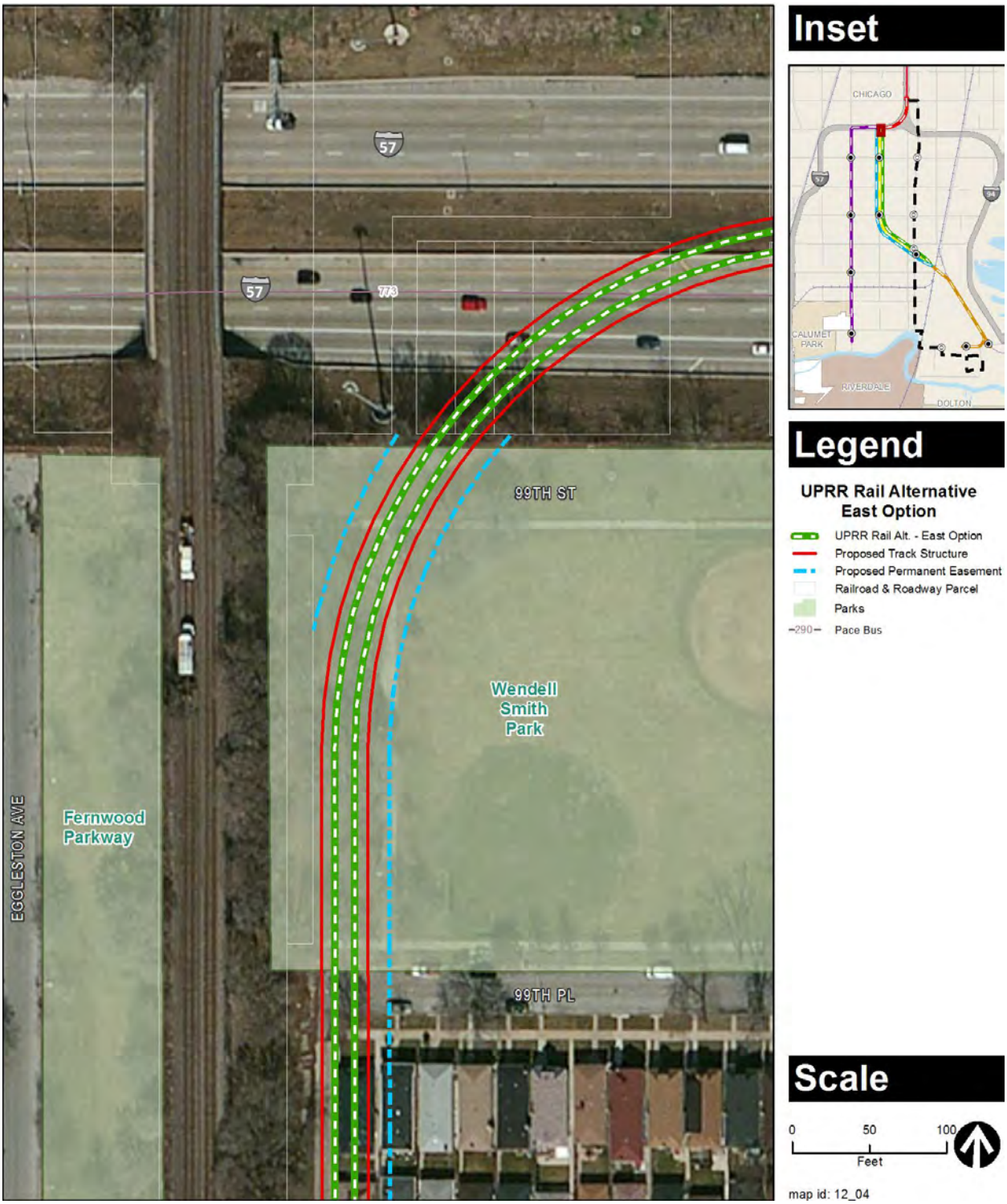

(Source: Chicago Park District, 2012)

Figure 5-2: Impacts on Wendell Smith Park - Union Pacific Railroad Rail Alternative - East Option

The East Option would result in similar impacts on Wendell Smith Park as the UPRR Rail ROW Option. One major difference between the UPRR Rail ROW Option and the East Option is that the East Option would affect a larger portion of open space and a larger portion of the walking trail and would affect several benches. These impacts would interfere with the recreational use of the walking trail. These amenities would be returned to the park after construction is complete, if public access were to be allowed under the CTA structure. Another mitigation option includes making improvements in Wendell Smith Park.

Another difference between the ROW and East Options is that the UPRR freight rail traffic would continue to run in its existing corridor with the East Option; in consequence, the East Option would result in greater noise impacts when compared to the No Build Alternative and the ROW Option. The noise impacts would be mitigated through the use of noise barriers; as such, no adverse noise impacts would occur after mitigation.

Both the ROW and the East Option would change the visual aesthetic of the park by adding an elevated rail structure in the park. The existing visual condition of Wendell Smith Park is considered high quality. Like the UPRR Rail ROW Option, under the East Option the visual quality would be reduced to moderate. Landscaping would be added to the park to mitigate for the visual impacts. The impacts on Wendell Smith Park would not be adverse after mitigation.

Block Park

Block Park is 2.6-acre passive parkland made up of two open space parcels, walking trails, and benches; no organized activities occur in Block Park and the park appears to be underutilized based on field observations. The ROW for the East Option would run through the west parcel and would affect 0.80 acre (34,848 square feet) and would leave two fragments: 0.10 acre (4,356 square feet) west of the CTA ROW and 0.34 acre (14,810 square feet) to the east (Figure 5-3). The acreage within the ROW would include open space and a radio tower.

The area in Block Park that would be affected is open space only; the East Option would reduce the amount of open space by adding an auxiliary entrance for the 103rd Street station and rail infrastructure in the western parcel. If public access is allowed under the CTA structure, the unaffected land in the western parcel would be returned to open space use but may be shaded by the rail infrastructure. The west parcel would likely be displaced if public access under the track is not allowed; the remaining fragments would be too small to be functional park space. The radio tower would be displaced but this displacement would not affect the parkland's use. The impacts would not diminish recreational opportunities, as no recreational amenities or organized recreational activities currently occur in Block Park. The Chicago Park District leases Block Park from the Chicago Water Department and, according to early communications with the Park District, the terms of this lease have likely expired (see Appendix B).

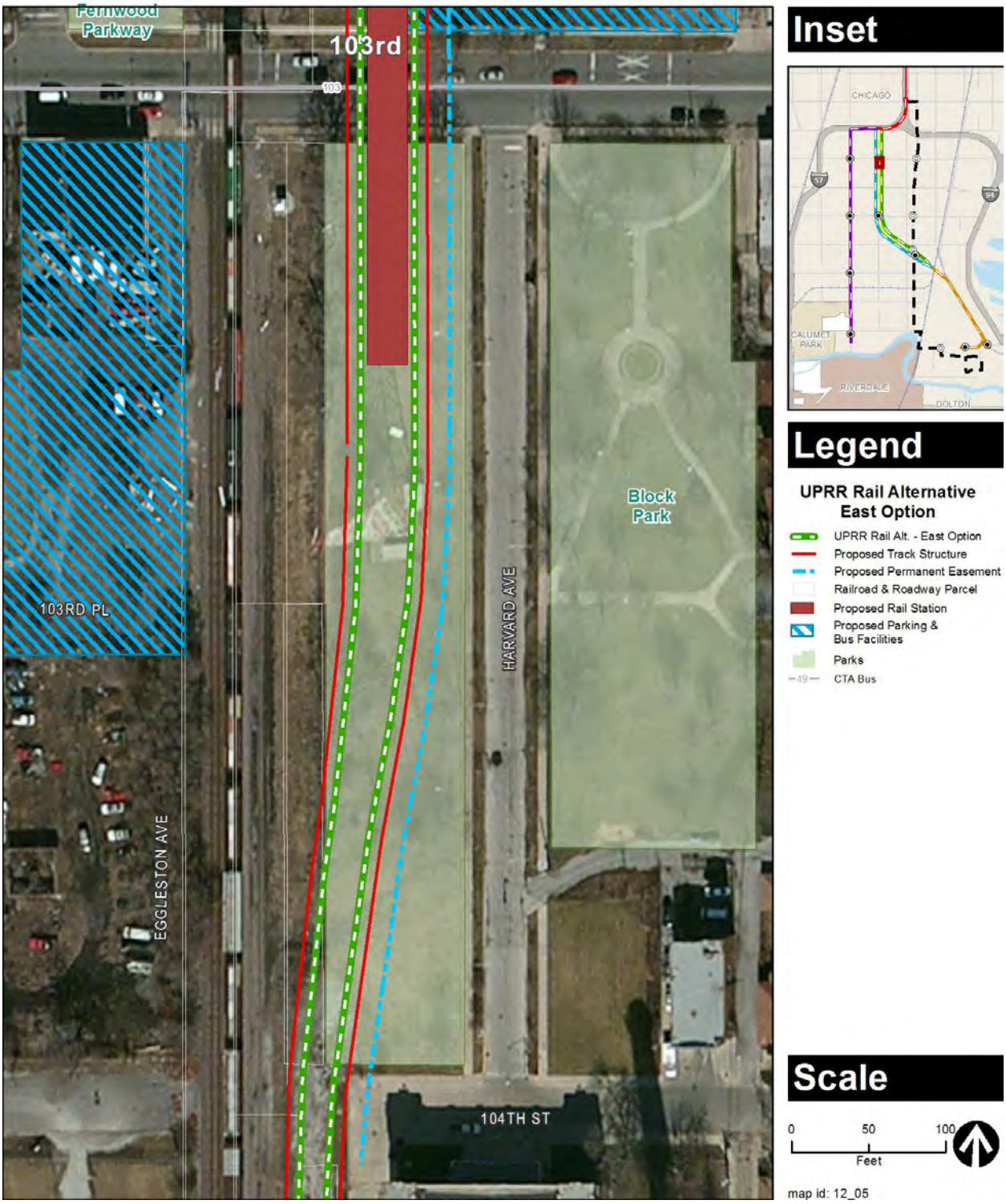

(Source: Chicago Park District, 2012)

Figure 5-3: Impacts on Block Park - Union Pacific Railroad Rail Alternative - East Option

The east parcel of Block Park would have a visual change as a result of the operation of the UPRR Rail Alternative East Option. The existing visual character of Block Park is described as having a moderate visual quality in the *Visual and Aesthetic Conditions Technical Memorandum.* The presence of the elevated track and station would result in a change; however, the visual quality would remain moderate. The visual impacts would be mitigated through landscaping and would result in no adverse impacts after mitigation.

The operation of the East Option would generate moderate noise impacts. These impacts might .detract from the enjoyment of the park but would not change its functional use. The noise impacts would be mitigated with noise barriers such that no adverse impacts would remain after mitigation.

The operation of the proposed 103rd Street Station would generate more foot traffic near Block Park and might create an opportunity to improve the amenities as a means of mitigation for the impacts on the open space. Improvements may include, but not limited to, adding more seating, improving the landscaping/garden area, adding an outdoor clock, attracting a vendor (for example a newsstand, or coffee cart) and/or incorporating aesthetic elements of the station area design into the park. Other mitigation alternatives would include making improvements to another nearby park in lieu of improvements to Block Park, acquiring land for a new park space and/or making use park use of parcel remnants that would be displaced by the project. See the *Displacements and Relocations of Existing Uses Technical Memorandum* for the locations of parcel fragments in reference to Block Park. After mitigation, the impacts on Block Park would not be adverse.

Like the UPRR Rail ROW Option, the East Option would provide beneficial impacts in the form of improved access to Block Park from other neighborhoods within the ½-mile walking distance of stations, particularly for geographically isolated neighborhoods such as Altgeld Gardens.

Robert Abbott Park and Fernwood Parkway
The operation of the UPRR Rail Alternative East Option would have the same impacts on Robert Abbott Park and Fernwood Parkway as those described for the UPRR Rail ROW Option. The same mitigation strategies identified for the UPRR Rail ROW Option would be applied to mitigate the impacts of the East Option. No adverse impacts on these parks would occur after mitigation.

Parklands within ½ mile of a Station
The addition of high capacity rail transit services would improve transit access to the parklands within walking distance (approximately ½ mile) of the proposed stations, particularly for geographically isolated neighborhoods such as Altgeld Gardens. The East Option would improve access to, and result in benefits to the same parklands as identified for the UPRR Rail ROW Option.

5.4.1.1.2 Community Facilities
The UPRR Rail Alternative East Option would result in the displacement of Now Faith Church of God Holiness and would affect the same community facilities that were discussed for the UPRR Rail ROW Option. New Christian Joy Missionary Baptist Church is adjacent to the proposed ROW at the Michigan Avenue station and would be affected, and the 51 community facilities that are

within ½ mile of a station location in Segment UA would have beneficial impacts (see Appendix A for a complete list).

Now Faith Church of God Holiness
The ROW for the UPRR Rail Alternative East Option would displace this place of worship and its parking lot (Figure 5-4). The displacement of this property would have to comply with the requirements of the Uniform Act. According to the *Displacements and Relocations of Existing Uses Technical Memorandum,* there is one replacement property that is zoned for a place of worship in the project area. Other available property in the community would have to be rezoned for religious use in order to be considered a comparable replacement property. If the church was relocated within the community in accordance with the Uniform Act prior to starting construction to minimize interruption of its services, the impact would not be adverse after mitigation.

New Christian Joy Missionary Baptist Church
The operation of the Michigan Avenue station and parking facilities for the East Option would have the same impacts on the New Christian Joy Missionary Baptist Church as the UPRR Rail ROW Option. The same mitigation options identified for the UPRR Rail ROW Option would be applied to mitigate for the impacts of the East Option.

Community Facilities within ½ mile of a Station
Like the UPRR Rail ROW Option, the East Option would result in a 20-minute improvement in travel time (including wait time and transfer time) from the 95th Street Terminal to 130th Street and would improve access to community facilities within walking distance ½ mile) of the proposed stations in Segment UA. The 51 affected community facilities identified for the UPRR Rail ROW Option would be the same for the East Option; these facilities would have benefits because of their proximity to the proposed stations in Segment UA (see Appendix A for a complete list).

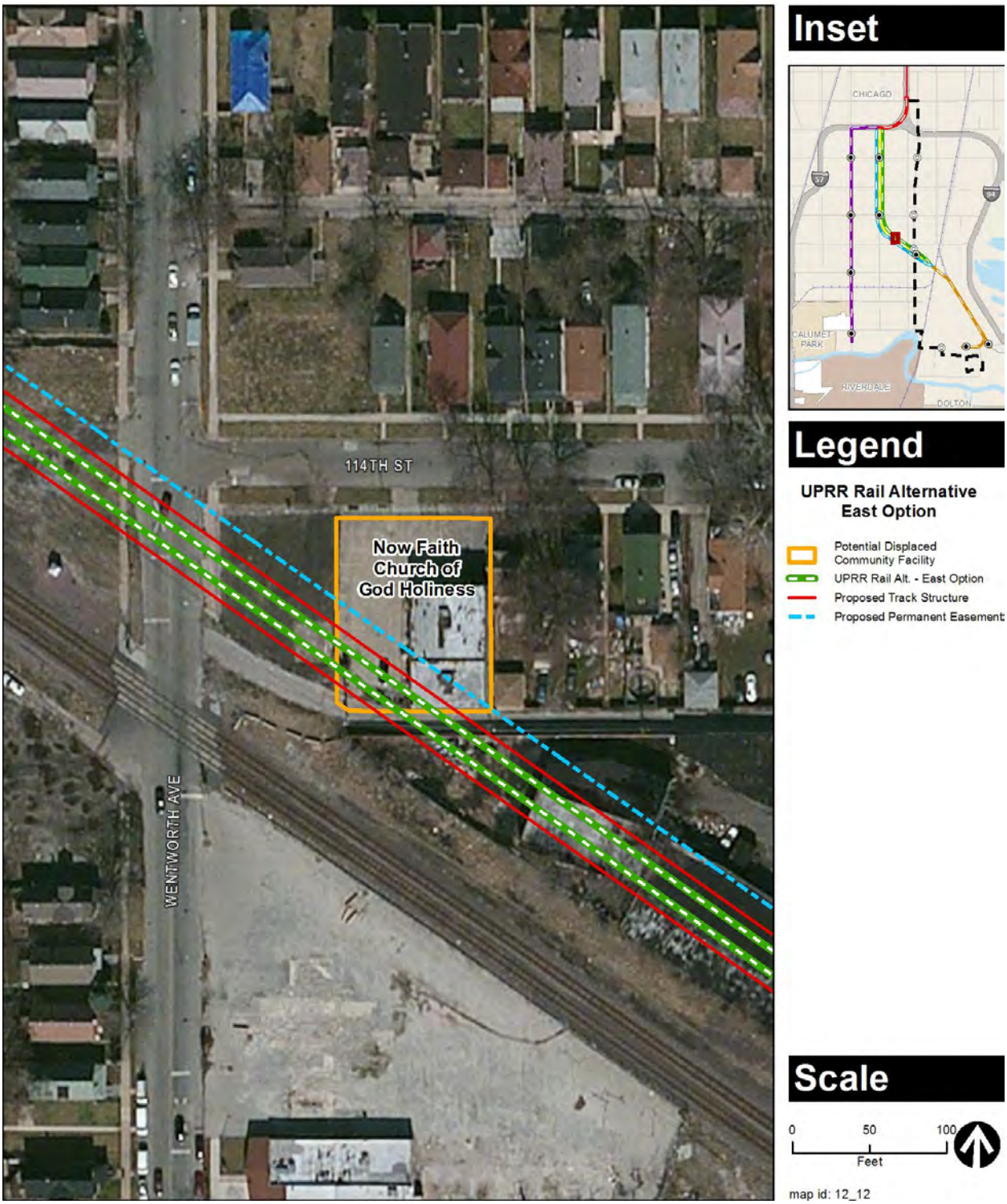

(Source: City of Chicago and Google Maps Aerial View, 2012)

Figure 5-4: Impacts on Now Faith Church of God Holiness - Union Pacific Railroad Alternative - East Option

5.4.1.2 Segment UB

5.4.1.2.1 Parklands

No parklands would be crossed by the ROW for the East Option in Segment UB; therefore, no displacement of parklands would occur. The impacts on parklands discussed for the UPRR Rail ROW Option would be the same for the East Option; as such, the same mitigation measures would be applied.

5.4.1.2.2 Community Facilities

No community facilities would be displaced as a result of the East Option in Segment UB. The East Option would have the same potential impacts on community facilities as the UPRR Rail ROW Option and the same mitigation measures identified for the impacts of the UPRR Rail ROW Option would be applied to the impacts of the East Option.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

The UPRR Alternative - East Option would include similar construction activities as the UPRR Rail ROW Option; however, the elevated structure from 95th Street to the CN/Metra Electric tracks near 119th Street would be immediately east of the existing UPRR ROW as opposed to within it. Like the UPRR Rail ROW Option, the East Option would have viaducts and several grade separations; four stations (103rd Street, 111th Street, Michigan Avenue, and 130th Street West or South Option) including bus and park & ride facilities at all stations; the 120th Street yard and shop; and several substations.

5.4.2.1 Segment UA

5.4.2.1.1 Parklands

Construction of the UPRR Rail Alternative East Option would temporarily affect Wendell Smith Park and Block Park, and would affect Fernwood Parkway.

Wendell Smith Park

The UPRR Rail Alternative East Option would have similar impacts on Wendell Smith Park as the UPRR Rail ROW Option; however, more of the parkland would be within the construction envelope with the East Option. Despite this difference, the impacts would be the same and similar mitigation strategies would be applied to mitigate the construction impacts on Wendell Smith Park. Coordination with the Chicago Park District would occur to discuss whether some of the organized park activities would need to take place in other nearby parks, such as Robert Abbott Park, while construction is underway. After mitigation, there would be no adverse construction impacts on Wendell Smith Park.

Block Park

Construction activities would occur in the west parcel of Block Park within the proposed ROW. The west parcel would be inaccessible during construction. The temporary impacts of construction would also occur in the east parcel of the park. The construction impacts (such as noise, air quality impacts, and changes in access) would be temporary and would be minimal because Block Park does not serve a recreational use, construction activities would not interfere with its current use, and Block Park currently has noise from the adjacent UPRR freight rail

traffic. Mitigation strategies include alerting park users of temporary construction activities, providing safe and clearly marked detour routes, and referring park users to other nearby parks, such as Fernwood Park, as a place to enjoy passive recreation while construction is underway. Other mitigation options would include, but not be limited to, using construction best management practices to reduce the adverse impacts associated with noise and air quality. After mitigation, the impacts on Block Park would not be adverse.

Fernwood Parkway
Construction of the East Option would have the same impacts on Fernwood Parkway as those described for the UPRR Rail ROW Option; the same mitigation strategies identified for the UPRR Rail ROW Option would be applied to mitigate the impacts of the East Option. After mitigation, the impacts on Fernwood Parkway would not be adverse.

5.4.2.1.2 Community Facilities
Like the UPRR Rail Alternative ROW Option, East Option construction would not displace any community facilities. Construction activities associated with the East Option would temporarily affect the New Christian Joy Missionary Baptist Church at 11594 S. State Street and Miracle Temple at 137 E. Kensington Avenue. Now Faith Church of God Holiness would be displaced prior to construction of the East Option so it would not be subject to construction impacts. The mitigation options proposed for the UPRR Rail ROW Option for construction impacts on community facilities would be used to mitigate for the impacts on the two places of worship affected by the East Option. After mitigation, the impacts on community facilities would not be adverse.

5.4.2.1.3 Construction Activities and Emergency Responders
Construction activities at the station locations and at viaducts would temporarily increase congestion and reduce accessibility of the roadway network, which would cause delays for emergency responders. The scheduling of construction activities would be coordinated with the Chicago Office of Emergency Management and Communications. In particular, the construction plans for the 103rd Street station and parking facilities would be coordinated with the adjacent Chicago Fire Department - Engine 93, and the construction plans for the 111th Street station and parking facilities would be coordinated with Roseland Community Hospital and the emergency service providers that require access to this hospital. Other mitigation options would include ensuring continual access to/from and through the construction zones by not temporarily closing adjacent streets at the same time.

5.4.2.2 Segment UB
5.4.2.2.1 Parklands
The construction impacts on parklands discussed for the UPRR Rail Alternative ROW Option in Segment UB would be the same for the East Option; as such, the same mitigation measures would be applied. After mitigation, there would be no adverse impacts.

5.4.2.2.2 Community Facilities

The construction impacts on community facilities discussed for the UPRR Rail Alternative ROW Option in Segment UB would be the same for the East Option; as such, the same mitigation measures would be applied. After mitigation, there would be no adverse impacts.

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

The construction and operation of the UPRR Rail Alternative East Option would not reduce the overall health and/or distribution of parklands and community facilities in the project area, after mitigation. As such, no adverse cumulative impacts would occur. Like the UPRR Rail Alternative ROW Option, improved transit in the project area with the East Option would result in cumulative benefits by improving access, via transit, to parklands and community facilities within and beyond the project area and within walking distance of the larger CTA network.

5.4.4 120th Street Yard and Shop

There are no parklands or community facilities in proximity to the 120th Street yard and shop site; therefore, no adverse impacts would result from the construction or operation of the yard and shop.

5.5 Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative West Option would be similar to the UPRR Rail ROW Option and the East Option; the major difference is the alignment: the West Option would operate immediately adjacent to and west of UPRR ROW between I-57 and the CN/Metra Electric track. The proposed CTA structure would, where feasible, be built 50 feet from the centerline of the westernmost UPRR track. Pier protection crash walls would be installed where a 50-foot buffer is not feasible, such as at 99th Street, at Prairie Avenue, and the UPRR crossing.

The West Option would have a different configuration of bus and park & ride facilities at stations than the ROW and East Options:

- At the 103rd Street station, the West Option would include a surface parking lot with the capacity for 200 vehicles west of the tracks between 103rd Street and 104th Street; a turnaround for CTA bus route #9 would be included at the northeast corner of 103rd Street at the UPRR tracks.

- The 111th Street station would include a surface parking lot with the capacity for 200 vehicles west of the tracks between 110th Place and 110th Street; a turnaround for Pace bus route #352 would be incorporated into the parking lot.

- The facilities at the Michigan Avenue station would include a five-story parking garage west of the track and northeast of the 116th Street and State Street intersection. The garage would accommodate 1,000 vehicles and the ground level would be available for retail and/or community facilities; a bus turnaround would be provided to serve CTA bus route #119 and Pace bus route #359.

The 130th Street station would have the same configuration and amenities in all three UPRR Rail Alternative options.

Substations would be included in the West Option: east of the UPRR ROW between 105th Street and 105th Place; west of the UPRR ROW between Perry Avenue and Lafayette Avenue; west of the CTA track south of the 120th Street yard and shop site; and within the proposed yard.

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

This section describes the permanent impacts that would result from the operation of the UPRR Rail Alternative West Option and discusses options to avoid, minimize or mitigate adverse impacts.

5.5.1.1 Segment UA

5.5.1.1.1 Parklands

The ROW for the UPRR Rail Alterative West Option would run through Wendell Smith Park and Fernwood Parkway. Robert Abbott Park and Block Park are within 500 feet of the proposed ROW and would be affected due to their proximity. As with the ROW and East Options, the stations proposed for the West Option in Segment UA would be within ½ mile of six parklands; improved access to these parklands would be a benefit of being walkable from a station.

Wendell Smith Park

The ROW for the West Option would run through the northwestern corner of the Wendell Smith Park and would affect 0.17 acre of the park (7,405 square feet). An isolated park fragment, approximately 4,167 square feet, would remain in the northwest corner of the park (Figure 5-5). Of the three UPRR Rail Alternatives, the UPRR Rail Alternative West Option would affect the least amount of land in Wendell Smith Park.

The West Option would affect the smallest amount of open space and trail when compared to the other UPRR Rail Options. Like the ROW Option, the West Option would affect a small portion of the trail and would largely leave the functional use of this amenity unharmed. For both Options, the trail would be rerouted around the affected area or possibly be avoided completely. As such, the same mitigation measures identified for the UPRR Rail ROW Option would be applied to the West Option.

Like the ROW and East options, the West Option would result in visual impacts because the rail infrastructure would be in Wendell Smith Park. The same mitigation measures described for the ROW and East Options would be applied to the West Option and would result in not adverse impacts after mitigation.

Operation of the West Option would result in the same noise impacts as described for the East Option and the same mitigation strategies would be applied. Both the West and East Options would result in greater noise impacts when compared to the No Build Alternative and the ROW Option. After mitigation, the noise impacts would not be adverse.

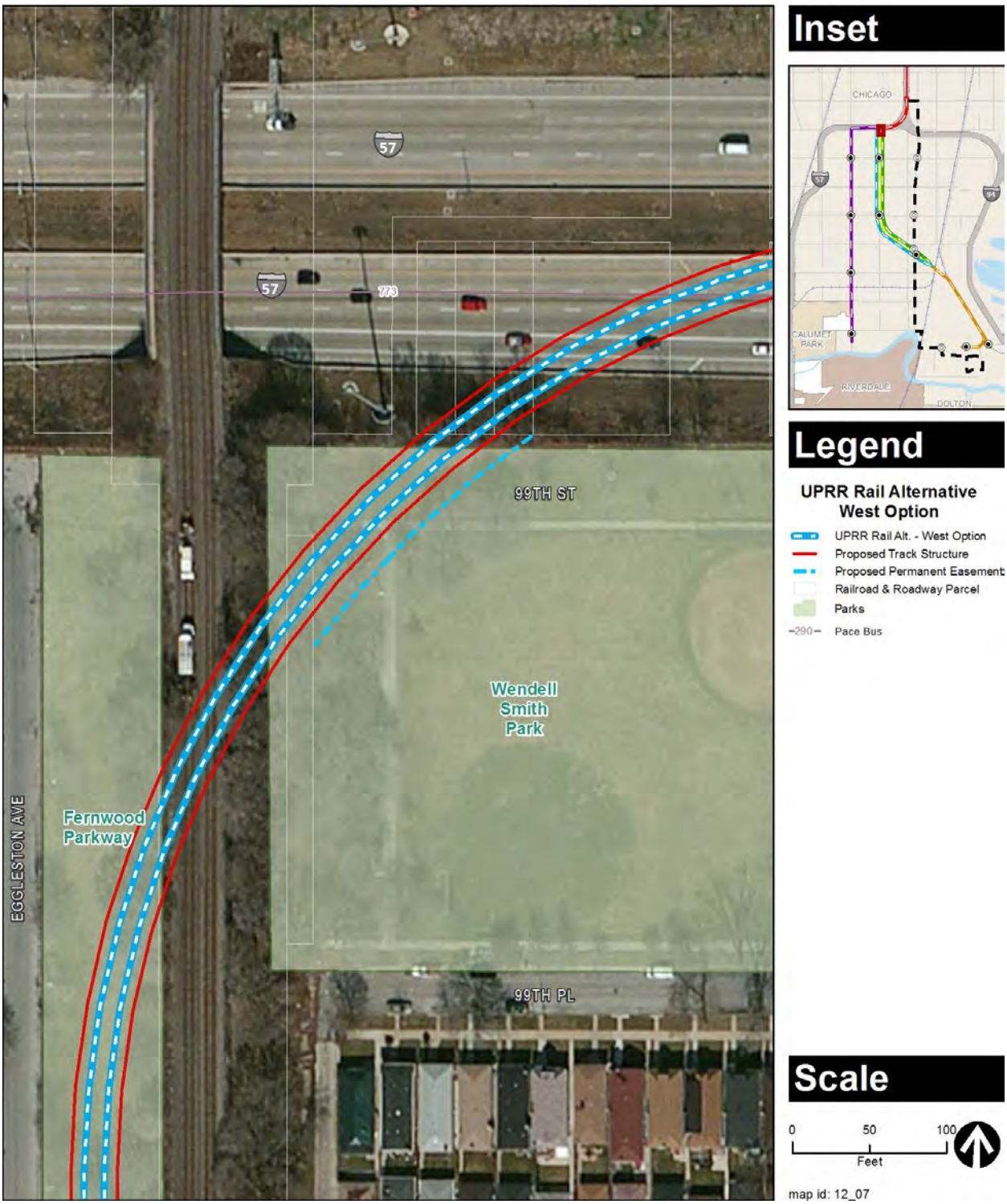

(Source: Chicago Park District, 2012)

Figure 5-5: Impacts on Wendell Smith Park - Union Pacific Railroad Rail Alternative - West Option

Fernwood Parkway

The UPRR Rail Alternative West Option would run through two of the four parcels that make up Fernwood Parkway; the affected parcels are between 101st Street and I-57, and between 101st Street and 103rd Street. Fernwood Parkway is 9.26 acres of green space with grass and some trees; there are no active or passive recreational amenities in this park. Approximately 1.90 acres (82,958 square feet) of Fernwood Parkway would be affected by the ROW of the project and two isolated park fragments would be created to the east and west of the ROW; approximately 1.48 acres would be created between the UPRR and CTA ROWs, and approximately 1.27 acres would be created between the CTA ROW and Eggleston Avenue (see Figure 5-6).

Depending on the decisions made during the Section 4(f) process, it may be determined that mitigation could be applied to another, nearby parkland (e.g., the northern, unaffected parcels of Fernwood Parkway), and/or new park space would be acquired. It may also be possible to create a similar linear park from the displaced parcel remnants that would not be needed for the West Option. See the *Displacements and Relocations of Existing Uses Technical Memorandum* for the locations of potential parcel fragments near Fernwood Parkway. The *Section 4(f) Technical Memorandum* provides details on practicable measures to minimize impacts to Fernwood Parkway.

The West Option would result in moderate noise impacts; however, noise barriers would be installed to mitigate these impacts. No adverse noise impacts would result in Fernwood Parkway after mitigation.

Fernwood Parkway is considered to have a high visual quality and the West Option would result in a high visual impact in that the impacts would not be completely mitigated through the use of landscaping. The visual impact might reduce the enjoyment of the park for park users somewhat but would have a much greater impact on the surrounding residential community than on park users. Other in lieu improvements, such as the addition of a trail, hardscaping, or the addition of other passive recreational amenities such as benches, could be added to enhance the park beyond its existing condition. After mitigation, the parklands impacts on Fernwood Parkway would not be adverse.

Robert Abbott Park

Like operation of the ROW and East Options, the operation of the West Option would not affect the functional or recreational use of Robert Abbott Park.

(Source: Chicago Park District, 2012)

Figure 5-6: Impacts on Fernwood Parkway - Union Pacific Railroad Rail Alternative - West Option

Block Park

The operation of the UPRR Rail Alternative West Option would result in some of the same impacts on Block Park as described for the UPRR Rail ROW Option; however, the number and scale of impacts would be much smaller with the West Option, because the bus and parking amenities for the West Option would be on the west side of the existing UPRR freight rail ROW only and would not be immediately adjacent to Block Park. In comparison, the UPRR Rail ROW Option would include bus and parking facilities on both the east and west sides of the UPRR freight rail ROW and adjacent to Block Park. Most of the pedestrian and vehicle activity associated with the West Option would also occur west of the UPRR freight rail ROW and on the other side of these tracks from Block Park. Traffic management and planning and pedestrian amenities would be used to mitigate any adverse impacts that would occur at Block Park. After mitigation, the impacts on Block Park would not be adverse.

5.5.1.1.2 Community Facilities

The UPRR Rail Alternative West Option would result in the displacement of Grace Temple Church of God Established in Christ. The operation of the UPRR Rail Alternative West Option would result in the same impacts on New Christian Joy Missionary Baptist Church as the ROW and East Options. The same mitigation measures identified for the ROW and East Options for impacts on the church would be applied to mitigate the impacts of the West Option. No adverse impacts on community facilities would occur after mitigation.

The same beneficial impacts described for the ROW and East Options would occur for the 51 community facilities within ½ mile of the proposed stations (see Appendix A for a complete list of facilities).

Grace Temple Church of God Established in Christ

The ROW for West Option would displace this place of worship (Figure 5-7). The displacement of this property would have to comply with the requirements of the Uniform Act. According to the *Displacements and Relocations of Existing Uses Technical Memorandum* there is one replacement property that is zoned for a place of worship in the project area. Other available property in the community would have to be rezoned for religious use in order to be considered a comparable property. If the church were relocated within the community in accordance with the Uniform Act prior to starting construction to minimize interruption of its services, the impact would not be adverse after mitigation.

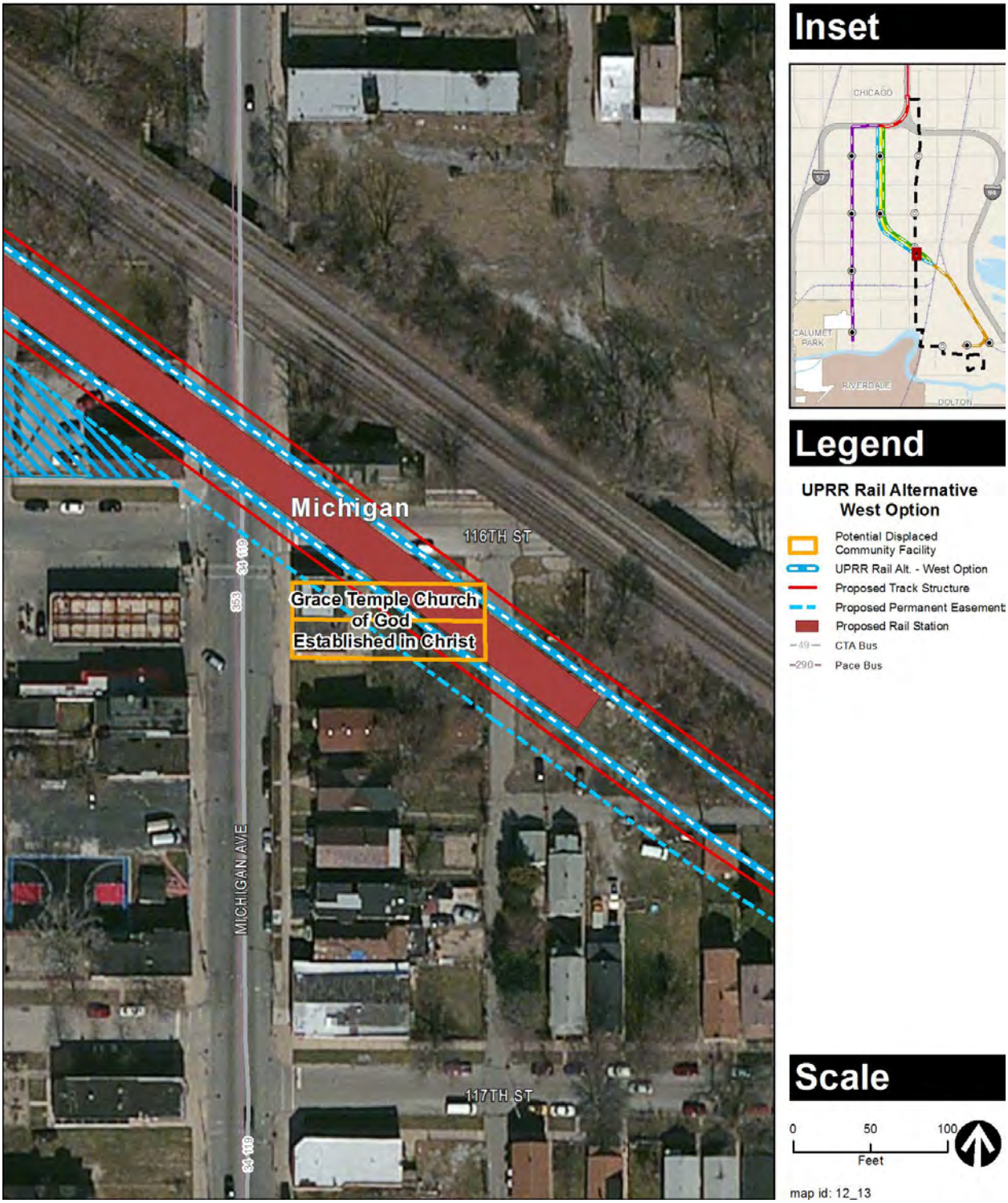

(Source: City of Chicago and Google Maps Aerial View, 2013)

Figure 5-7: Impacts on Grace Temple Church of God in Christ - Union Pacific Railroad Alternative - West Option

5.5.1.2 Segment UB

5.5.1.2.1 Parklands

No parklands would be crossed by the ROW for the West Option in Segment UB; as such, no displacement of parklands would occur in Segment UB. The other impacts on parklands discussed for the ROW and East Options would be the same for the West Option; as such, the same mitigation measures would be applied. After mitigation, there would be no adverse impacts on parklands in Segment UB.

5.5.1.2.2 Community Facilities

No community facilities would be displaced as a result of the UPRR Rail Alternative West Option in Segment UB; therefore, no adverse impacts would occur. The West Option would have the same impacts the as the ROW and East Options and the same mitigation would be applied to mitigate the impacts of the West Option. No adverse impacts on community facilities would occur after mitigation.

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

The UPRR Alternative West Option would include similar construction activities as the ROW and East Options; however, the elevated structure from 95th Street to the CN/Metra Electric tracks near 119th Street would be immediately west of the existing UPRR ROW. Like the ROW and East Options, the West Option would involve construction of viaducts; several grade separations; four stations (103rd Street, 111th Street, Michigan Avenue, and 130th Street West or South Option) including bus and park & ride facilities at all stations; the 120th Street yard and shop; and several substations.

5.5.2.1 Segment UA

5.5.2.1.1 Parklands

Construction activities for the West Option would occur in Wendell Smith Park and Fernwood Parkway and would result in temporary impacts. Robert Abbott Park and Block Park are within 500 feet of the ROW in Segment UA and would have some impacts.

Wendell Smith Park

The construction impacts of the West Option would be the same as described for the UPRR Rail ROW Option; however, the amount of parkland within the construction zone would be smaller for the West Option. The amount of the land in the construction zone would not change the types of potential impacts that would occur in Wendell Smith Park. The impacts and mitigation strategies described for the UPRR Rail ROW Option would be the same for the West Option.

Fernwood Parkway

Construction activities would also occur in the portion of Fernwood Parkway that would be affected by the ROW of the project. Because Fernwood Parkway is narrow, and the proposed ROW would generally pass through the center of the park, it is likely that the park would not be accessible during construction. Fernwood Parkway does not offer recreational amenities or activities and is largely underutilized based of field observation and discussions about the park

with the Chicago Park District. The construction impacts on this park would be minimal because the park is not often used; however, some users would be affected. There are other parks within walking distance that offer open space, such as the northern parcels of Fernwood Parkway, Fernwood Park, or Block Park. Coordination with the Chicago Park District would result in the posting of signage to notify park users of the schedule for construction activities and to map the location of other comparable facilities in the neighborhood. After mitigation, the overall construction impacts would be not adverse.

Robert Abbott Park
Based on its location relative to the alignment of the West Option, it is not likely that this park would have impacts as a result of the construction. Robert Abbott Park would be separated from the West Option alignment by a highway.

Block Park
The construction activities for the West Option would be on the other side of the UPRR freight rail track from Block Park; as such, the only likely construction impact on the park would be temporarily reduced access. There are several ways to access Block Park; therefore, this impact would not be adverse. Any temporary detours that might be required near the park would be clearly posted to mitigate the temporary impacts of a reduction in access.

5.5.2.1.2 Community Facilities
Construction associated with the West Option would have the same impact on Now Faith Church of God Holiness and New Christian Joy Missionary Baptist Church as described for the ROW Option. The mitigation strategies described for the ROW Option would be applied for the West Option, as well.

Construction Activities and Emergency Responders
Construction activities at the station locations and at viaducts would temporarily reduce accessibility of the roadway network, which would cause delays for emergency responders. The scheduling of construction activities would be coordinated with the Chicago fire and police departments and all medical facilities that provide emergency services. In particular, the construction plans for the 103rd Street station and parking facilities would be coordinated with the adjacent Chicago Fire Department - Engine 93, and the construction plans for the 111th Street station and parking facilities would be coordinated with Roseland Community Hospital and the emergency service providers that require access to this hospital (see the *Safety and Security Technical Memorandum* for more details about the impacts on emergency responders).

5.5.2.2 Segment UB

5.5.2.2.1 Parklands
The construction impacts on parklands discussed for the ROW and East Options would be the same for the West Option; as such, the same mitigation measures would be applied.

5.5.2.2.2 Community Facilities
The construction impacts on community facilities discussed for the ROW and East Options would be the same for the West Option; as such, the same mitigation measures would be applied.

5.5.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

The construction and operation of the UPRR Rail Alternative West Option would not reduce the overall health and/or distribution of parklands and/or community facilities in the project area. As such, no adverse cumulative impacts would be anticipated. Like the ROW and East Options, improved transit in the project area with the West Option would result in cumulative benefits by improving access, via transit, to parklands and community facilities within and beyond the project area and within walking distance of the larger CTA network.

5.5.4 120th Street Yard and Shop

There are no parklands or community facilities in proximity to the 120th Street yard and shop site; therefore, no adverse impacts would result from the construction or operation of the yard and shop.

5.6 Halsted Rail Alternative

The Halsted Rail Alternative would be a 5-mile extension of the existing Red Line that would operate on an elevated structure within the median of Halsted Street. The CTA trains would continue south from the 95th Street Station in the median of I-57 until reaching Halsted Street. The alignment would then turn south and continue along Halsted Street until the intersection of Halsted Street and Vermont Street.

Four stations would be built with ADA accessible elevators; stations would be built at 103rd Street, 111th Street, 119th Street and a terminal station would be built at Vermont Street. The 103rd, 111th and 119th Street stations would include 14-foot-wide and 520-foot-long side platforms and the Vermont Street station would be configured as an island platform that would be 26 feet wide and 520 feet long. The primary entrance to the Vermont Street station would be ADA accessible.

Bus and park & ride facilities would be provided at each station with a total capacity of up to 3,700 parking spaces by 2030. The 103rd Street station would include a surface park & ride lot on the northwest of the 103rd Street and Halsted Street intersection; this lot would accommodate 200 vehicles and would include a turnaround for CTA bus route #9. The 111th Street station would include a surface park & ride lot on the northwest corner of the 111th Street and Halsted Street intersection; this lot would accommodate 200 vehicles. The 119th Street station would have a surface park & ride lot to the southwest of the 119th Street and Halsted Street intersection that would accommodate 1,000 vehicles and would include a turnaround for Pace bus route #359. The Vermont Street station would include a surface park & ride lot east of Halsted Street and between Vermont Street and 128th Street; this lot would accommodate 300 vehicles and a seven-story parking garage with the capacity for 2,000 vehicles west of Halsted Street and between Vermont Street and 128th Street. The ground level of the parking garage would be available for CTA office space, retail/commercial space, and/or community facilities. The Vermont Street station would also include bus bays for CTA bus route #8A and Pace bus routes #348 and #352.

The 119th Street yard and shop would be south of the 119th Street station, north of Vermont Street and west of the proposed park & ride lot at the 119th Street station. The track height would

transition from elevated at station height to at-grade between Halsted Street and Morgan Street. The rail yard would be at-grade and would include a small amount of parking for employees.

Several electric substations would be constructed: the northeast corner of Halsted Street and 101st Street; the southeast corner of 110th Street and Halsted Street; along Halsted Street between 120th Street and the CN/Metra Electric tracks; the southeast corner of 126th Street and Halsted Street; and at the entrance of the 119th Street yard and shop along Peoria Street.

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

This section describes the permanent impacts on parklands and community facilities that would result from the operation of the Halsted Rail Alternative and discusses options to avoid, minimize, or mitigate adverse impacts.

5.6.1.1 Segment HA

Segment HA is the northern project area for the Halsted Rail Alternative. It extends from the existing 95th Street Terminal in the north to just south of the proposed 119th Street station in the south. The 119th Street yard and shop would be partially in Segment HA; however, the operational and construction impacts are analyzed separately in Section 5.8.4.

5.6.1.1.1 Parklands

The proposed ROW for the Halsted Rail Alternative would not cross any parkland in Segment HA; therefore, no displacement of parklands would occur. Robert Abbott Park, Euclid Park Wendell Smith Park, and Major Taylor Bike Trail are within 500 feet of the ROW; they would have impacts as a result of their proximity to the proposed tracks, park & ride facilities, and/or stations. Five parks are within walking distance (½ mile) of a proposed station location in Segment HA; these parklands would have the benefit of improved accessibility as a result of their proximity to the stations.

Robert Abbott Park, Euclid Park and Wendell Smith Park

Based on the location of these three parks relative to the Halsted Rail Alternative ROW, no impacts on Robert Abbot Park, Euclid Park, and Wendell Smith Park would occur. All three are separated from the Halsted Rail Alternative ROW by a major highway; as such, any possible operational impact would not be greater than those of the No Build Alternative.

Major Taylor Bike Trail

Major Taylor Bike Trail is in the public ROW at the intersection of Halsted Street and 119th Street to cross Halsted Street. This bike trail connects 105th Street (just west of I-57) to 129th Street (at the Little Calumet River) and serves both for recreation and as an alternative means of north-south transportation. The infrastructure planned near the 119th/Halsted Street intersection includes a station, a rail yard and a substation; the impacts of operating these facilities would include a change in pedestrian/bicycle flow through this intersection. In order for this park to continue to serve its recreational and transportation functions, the changes at this intersection would allow for safe and clearly marked pedestrian and bicycle access across Halsted Street. The transportation plans for this intersection would be communicated to trail users and the Friends of

Major Taylor Trail, a non-profit organization that oversees the use and maintenance of the trail. After mitigation, the impacts on Major Taylor Bike Trail would not be adverse.

Parklands within ½ mile of a Station
The addition of high capacity rail transit services would improve transit access to the parklands within walking distance (approximately ½ mile) of the proposed stations. As shown in Table 5-7, there are six parklands within ½ mile of the station locations in Segment HA.

Table 5-7: Parklands within ½ mile of Station Locations - Halsted Rail Alternative - Segment HA

Station	Name of Parkland
103rd Street	Fernwood Parkway Fernwood Park Jackie Robinson Park
111th Street	Major Taylor Bike Trail
119th Street	Major Taylor Bike Trail Thomas Leed Morgan Field Edward White Park

5.6.1.1.2 Community Facilities
The Illinois Department of Employment Security office would be displaced as a result of the operation of the Halsted Rail Alternative in Segment HA. In addition, there are 33 community facilities adjacent to the proposed ROW, of which 18 are noise-sensitive receptors. These facilities would have impacts due to their proximity to the project. Seventy-three community facilities are within ½ mile of the station locations in the Segment HA; these facilities would have the benefits of station proximity (see Appendix A for a complete list).

The Illinois Department of Employment Security office
The Illinois Department of Employment Security office is in a shopping center at the intersection of 119th Street and Halsted Street; it would be displaced as a result of the operation of the park & ride facilities at the 119th Street station (see Figure 5-8).

The next closest Employment Security office to the project area is the Woodlawn office, at 1515 E. 71st Street, which is approximately 9 miles away from the Halsted office. The Halsted facility provides essential employment assistance services for traditionally underserved populations and the general population in the community; as such, it is important that it be relocated within the community. The displacement of this facility would have to comply with the requirements of the Uniform Act. There is comparable property within the same general area that would be available to accommodate the relocation of this office (see the *Displacements and Relocations of Existing Uses Technical Memorandum* for more details about available replacement property). If the office were to be replaced and relocated, according to the Uniform Act, within the community and prior to its displacement, then there would be no long-term adverse impacts after mitigation.

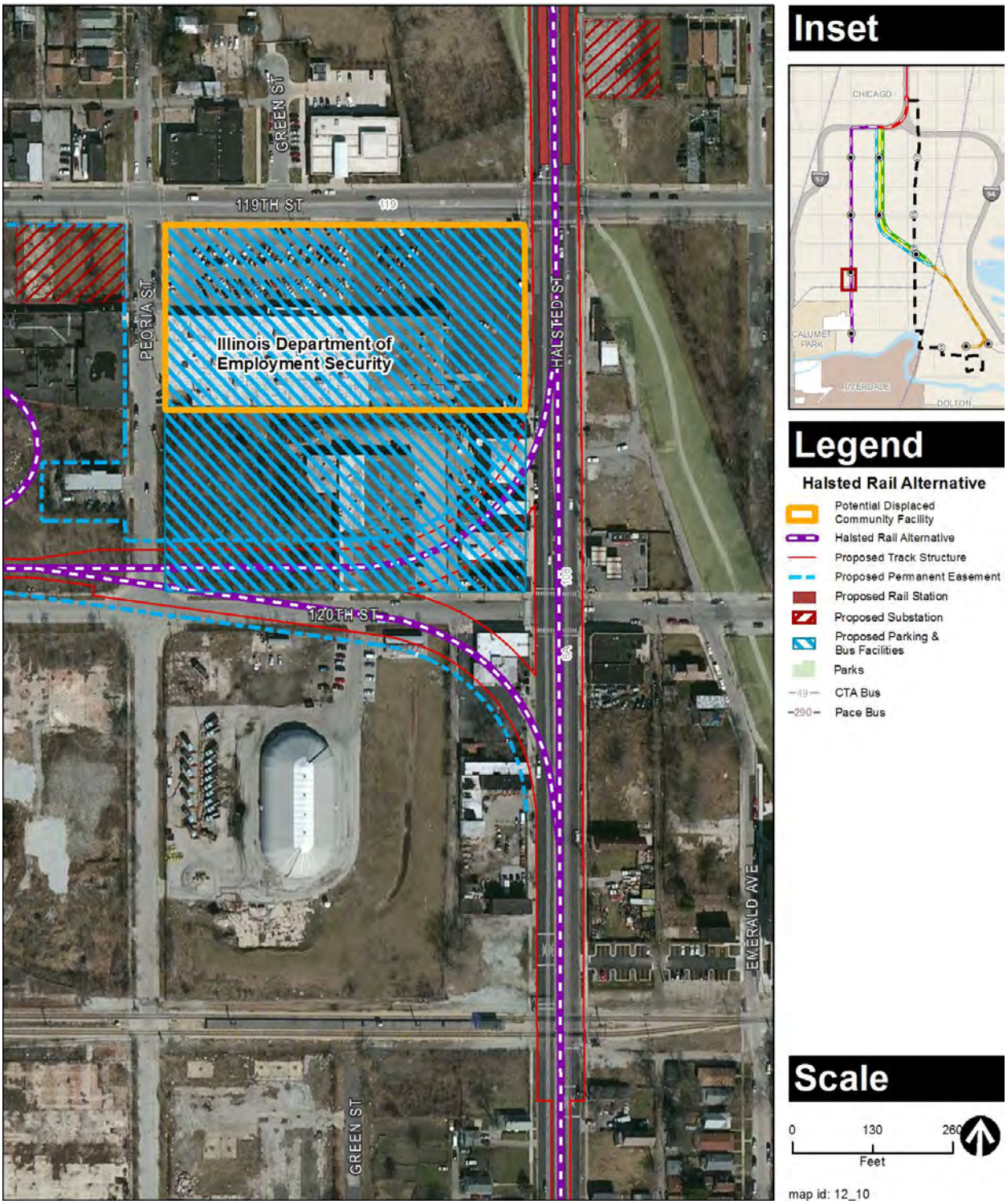

(Source: City of Chicago, 2012)

Figure 5-8: Impacts on the Illinois Department of Employment Security - Halsted Rail Alternative - Segment HA

West Pullman Library

West Pullman Library is at 830 W. 119th Street and would be across 119th Street from the park & ride facilities at the 119th Street station and within a block of the 119th Street station and the 119th Street yard and shop. Quiet is assumed to be a part of a library's environment; however, based on its location, this library would not have noise impacts as a result of the Halsted Rail Alternative. The operation of the Halsted Rail Alternative facilities would generate more vehicle, rail, and pedestrian traffic in the localized area. The increased traffic flow could result in localized congestion; however, transportation changes would be mitigated through the transportation management plans devised to manage the change in traffic patterns as presented in the *Transportation Technical Memorandum*. The adjacency of the 119th Street station would improve access to the library via transit. The level of service on the roadway network around the library would not be adversely affected after mitigation. As such, West Pullman Library would not have adverse impacts after mitigation.

Impacts on Community Facilities Adjacent to the Halsted Rail Alternative Alignment

There are 17 places of worship and one senior housing facility (Renaissance Park South) on Halsted Street that are defined as noise-sensitive receptors. The operation of the Halsted Rail Alternative would result in moderate to severe noise impacts on these places of worship. These impacts would be minimized using noise barriers; however, moderate noise impacts would remain. After mitigation, the operational noise would result in impacts on the adjacent noise-sensitive receptors (places of worship are listed below).

- Gospel Truth Missionary Baptist Church
- Gatling's Chapel Funeral Home
- Rehoboth Apostolic Worship Center
- The Whole Word of God Christian Outreach
- Messiah Baptist Church
- Covenant Faith Church of God
- Missing Peace Church of Living Hope
- Shiloh Missionary Baptist Church
- Way of Holiness Mission
- Bellevue Ministry Center
- Cherubim & Seraphim Church
- Logos Baptist Assembly
- Greater Mt. Eagle Baptist Church
- Christ Church of Chicago
- Sheldon Heights Church of Christ
- Christ the Way of Holiness
- Tabernacle Number One God's House of Holiness in Christ

The Halsted Rail Alternative would change the lane configuration on Halsted Street somewhat by reducing some street parking and adding new turn lanes at intersections. These changes would affect how vehicle traffic accesses the community facilities on Halsted Street. For those community facilities adjacent to parking facilities, the increased traffic flow would result in congestion that reduces accessibility to the facilities. These impacts would be mitigated with the transportation management measures presented in the *Transportation Technical Memorandum*; these measures were devised to ensure that the existing roadway network around the Halsted Rail Alternative alignment would not be affected adversely. The addition of rail transit service would reduce the demand for parking along Halsted Street, as it would encourage a mode shift from personal vehicles to rail transit.

Community Facilities within ½ mile of a Station

The Halsted Rail Alternative would result in a 17.5-minute improvement in travel time from the 95th Street Terminal to 129th Street. The improved travel time would improve access, thereby resulting in benefits to the community facilities within walking distance (approximately ½ mile) of the new rail stations as shown in Table 5-8.

Table 5-8: Community Facilities within ½ mile of Stations - Halsted Rail Alternative - Segment HA

Facility Type	Number
Community Center	6
Fire Station	1
Healthcare Facility	3
Library	1
Place of Worship	52
School	7
Senior Center	2
State Facility	1
Total	73

5.6.1.2 Segment HB

Segment HB is the southern project area for the Halsted Rail Alternative. It extends from the proposed 119th Street station to the proposed Vermont Street station. The 119th Street yard and shop would be partially in Segment HB; however, the operational and construction impacts are analyzed separately in Section 5.8.4.

5.6.1.2.1 Parklands

The proposed ROW for the Halsted Rail Alternative would not cross any parkland; therefore, no impacts would occur on parklands in Segment HB. No parklands are within 500 feet in Segment HB; however, two parks (Whistler Woods Forest Preserve and Joe Louis Golf Course) are within ½ mile of the Vermont Street station location. The addition of high capacity rail transit services would improve access to the two parks within ½ mile of Vermont Street station, thereby resulting in benefits.

5.6.1.2.2 Community Facilities

No community facilities would be displaced as a result of the operation of the Halsted Rail Alternative in Segment HB. There are five community facilities adjacent to the ROW, of which four are considered noise-sensitive receptors (one cemetery and three places of worship). The sensitive receptors would have some impacts. Eight community facilities within ½ mile of Vermont Street station would have benefits as result of improved transit (and thereby improved accessibility).

Impacts on Community Facilities Adjacent to the Halsted Rail Alternative Alignment

The operation of the Halsted Rail Alternative would result in moderate to severe noise impacts on the four noise-sensitive community facilities on Halsted Street in Segment HB (see list below). The noise impacts would be minimized through the use of noise barriers; however, moderate

noise impacts would remain. After mitigation, the operational noise would result in impacts on the four community facilities that are noise-sensitive receptors in Segment HB.

- Light of Zion Ministries
- St. Peter & Paul Church
- Cedar Park Cemetery
- Christ Spiritual Way of Truth

As mentioned above, the parking garage for the Vermont Street station would include space for commercial uses and/or community facilities. The operation of the Halsted Rail Alternative would benefit the community by offering new and modernized space for the community facilities that locate there.

Community Facilities within ½ mile of a Station

The Halsted Rail Alternative would result in a 17.5-minute improvement in travel time from the 95th Street Terminal to Vermont Street. The improved travel time would improve access to the community facilities within walking distance (approximately ½ mile) of the new rail stations as shown in Table 5-9.

Table 5-9: Community Facilities within ½ mile of Stations - Halsted Rail Alternative - Segment HB

Facility Type	Number
Cemetery	1
Community Center	1
Place of Worship	5
School	1
Total	8

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

Construction of the Halsted Rail Alternative includes the building of elevated structure, stations, bus and park & ride facilities, and substations in and around Halsted Street.

5.6.2.1 Segment HA

5.6.2.1.1 Parklands

Construction activities associated with the Halsted Rail Alternative would not occur in any parkland but would occur in close proximity to Major Taylor Bike Trail. The impacts on the trail would be the temporary rerouting of pedestrian/bicycle traffic across the intersection of 119th Street and Halsted Street while the elevated structure, station, and other facilities are being built. This impact would be mitigated by communicating the temporary access changes to trail users and the Friends of Major Taylor Bike Trail and by providing safety and clearly marked alternative routes for pedestrians and bicycles to cross the street. After mitigation, the impacts on Major Taylor Bike Trail would not be adverse.

5.6.2.1.2 Community Facilities

The Halsted Rail Alternative would be built in the median of Halsted Street from just south of 99th Street to the Vermont Street station. Construction activities would temporarily affect the flow of vehicle and pedestrian traffic and street parking on Halsted Street. These impacts would

temporarily make it more difficult for patrons to access the community facilities on and around Halsted Street; however, clear signage, safe detour routes, and alternate parking options would be provided during construction. There would be no adverse transportation impacts after mitigation.

Construction would also result in temporary noise that would affect community facilities on Halsted Street and/or adjacent to the proposed stations and park & ride facilities. While construction noise is unpleasant, it is temporary and would not interfere with any community facility's ability to provide service. Construction best management practices would be implemented to mitigate noise impacts. The noise impacts would not be adverse after mitigation.

Construction would generate fugitive dust and other air quality impacts from construction vehicles. Children and the elderly are most susceptible to air toxics; as such, adjacent schools and the senior center may be more sensitive to temporary air quality impacts than other community facilities. Construction best management practices (such capturing dust and reducing construction vehicle idling time) would be used to mitigate these temporary impacts. There would be no adverse air quality impacts on community facilities after mitigation.

Construction Activities and Emergency Responders
Construction activities would temporarily reduce accessibility of the roadway network, which would cause delays for emergency responders. The scheduling of construction activities would be coordinated with the Chicago Office of Emergency Management and Communications. In particular, the construction plans for the 119th Street station and parking facilities would be coordinated with the adjacent Chicago Fire Department - Engine 115. Other mitigation would include ensuring that adjacent major cross streets were not temporarily closed at the same time. There would be no adverse impacts after mitigation.

5.6.2.2 Segment HB

5.6.2.2.1 Parklands

No parklands are within the proposed ROW or within 500 feet of the proposed ROW for the Halsted Rail Alternative. Construction activities would not affect parklands in Segment HB.

5.6.2.2.2 Community Facilities

As it would be for Segment HA, construction activities in Segment HB would temporarily change the vehicle and pedestrian access and parking availability along and around Halsted Street; however, clear signage, safe detour routes, and alternate parking would be provided as mitigation for these impacts. After mitigation, the transportation impacts would not be adverse.

Construction would also result in temporary noise impacts on the community facilities on Halsted Street and/or adjacent to the proposed stations and park & ride facilities. These impacts would be temporary and would not interfere with the community facilities' ability to provide services if mitigation strategies such as construction best management practices were applied. After mitigation, the temporary noise impacts would not be adverse.

5.6.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative

The construction and operation of the Halsted Rail Alternative would not reduce the overall health of the parklands and/or community facilities in the project area. As such, no adverse cumulative impacts would occur. The project would result in benefits overall, with improved access to community facilities within and beyond the project area and within walking distance of CTA's greater rail network.

5.6.4 119th Street Yard and Shop

The 119th Street yard and shop would be south of the 119th Street station and west of the park & ride facility. The CTA track would transition from elevated to at-grade track between Halsted Street and Morgan Street. The yard would include a small amount of parking for employees.

5.6.4.1 Permanent Impacts and Mitigations

This section describes the permanent impacts that would result from the operation of the 119th Street yard and shop and it discusses strategies to avoid, minimize, or mitigate adverse impacts.

5.6.4.1.1 Parklands

The proposed ROW for the 119th yard and shop does not cross or pass within 500 feet of any parkland; as such, no parklands would be affected by its operation.

5.6.4.1.2 Community Facilities

One place of worship would be displaced as a result of operating the 119th Street yard and shop; this displacement would result in an adverse impact. One fire station and one place of worship are adjacent to the proposed facility; these community facilities would have impacts.

Sure-Way Missionary Baptist Church

Sure-Way Missionary Baptist Church, at 12000 S. Halsted Street, is in the ROW proposed for the southernmost yard entrance (see Figure 5-9).

The displacement of this property would have to comply with the requirements of the Uniform Act. According to the *Displacements and Relocations of Existing Uses Technical Memorandum* there is one replacement property that is zoned for a place of worship in the project area. Other available property in the community would have to be rezoned for religious use in order to be considered a comparable property. If the church were relocated within the community in accordance with the Uniform Act prior to starting construction to minimize interruption of its services, the impact would not be adverse after mitigation. If the church were relocated outside of the project area, the impact would be not substantially adverse after mitigation; the adverse impact would not be substantial because there are other similar churches within the community and the relocation would occur in accordance with the Uniform Act.

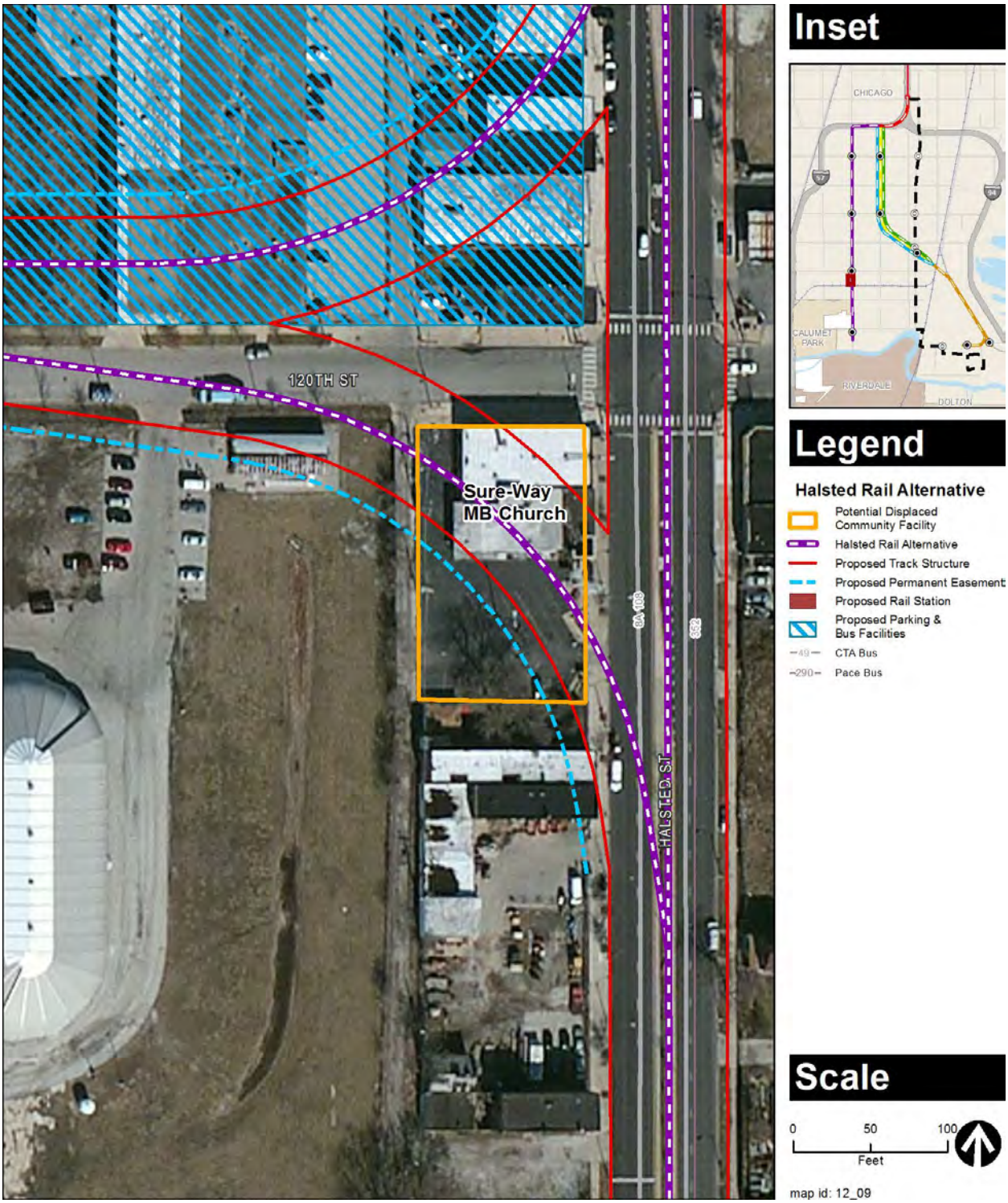

(Source: City of Chicago, 2012)

Figure 5-9: Impacts on Sure-Way Missionary Baptist Church - Halsted Rail Alternative - 119th Street Yard and Shop

5.6.4.2 Construction Impacts and Mitigations

Construction of the 119th Street yard and shop would include the construction of the rail entrances that transition from elevated to at-grade track, the at-grade rail yard and shop, and minimal parking for employees.

5.6.4.2.1 Parklands

The proposed ROW for the 119th Street yard and shop does not cross or pass within 500 feet of any parkland; as such, no parklands would be affected by its construction.

5.6.4.2.2 Community Facilities

The Chicago Fire Department - Engine 115 and Mt. Zion First Holy Miracle Church would have impacts from the construction of the 119th Street yard and shop. Impacts on the fire station would include temporary changes in access. The scheduling of construction activities and detours would be coordinated with the Chicago Office of Emergency Management and Communications. Mt. Zion First Holy Miracle Church would be affected by temporary changes in access and construction noise. The construction impacts would be temporary and would be mitigated by using construction best management practices and by providing clearly marked and safe detour routes. Construction of the 119th Street yard and shop would not result in adverse impacts after mitigation.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

The No Build Alternative would not result in permanent or temporary impacts on parklands or community facilities; therefore, no mitigation strategies would be needed.

6.2 BRT Alternative

The BRT Alternative alignment would not pass through any parkland and would not displace any community facilities. Most adverse impacts of operations would be mitigated; however, there are 35 community facilities that are noise-sensitive receptors that would have moderate noise impacts after mitigation. No parkland or community facilities would have adverse construction impacts after mitigation.

The BRT Alternative would result in moderate noise impacts on the 35 community facilities that are noise-sensitive receptors adjacent to the BRT alignment. These noise impacts would not be mitigated because noise barriers are not feasible along the alignment. Moderate noise impacts would remain after mitigation.

By improving travel time, BRT Alternative operation would improve access to parklands and community facilities within walking distance (½ mile) of the proposed BRT stops when compared to the No Build Alternative; there are 3 parklands and 88 community facilities within ½ mile of a proposed BRT stop location.

The parking garage at the Kensington Avenue stop would provide space for retail and community facilities. This garage would result in a benefit to the community overall because it would provide new and modernized space that would be used by community facilities.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option would result in permanent adverse and beneficial impacts as a result of its operation. After mitigation, no parkland or community facilities would be subject to adverse construction impacts.

6.3.1 Segment UA

In segment UA, the UPRR Rail Alternative ROW Option alignment would pass through Wendell Smith Park but would not displace any community facilities. All of the adverse impacts of operations would be mitigated. After mitigation, no parkland or community facilities would have adverse construction impacts.

Wendell Smith Park

The ROW for the UPRR Rail ROW Option would run through the northwest corner of Wendell Smith Park; this impact would largely leave the functional and recreational use of the park intact. Options to avoid, minimize, and mitigate most of the adverse impacts on this park exist; however,

the presence of the rail structure in the park would still be adverse without additional mitigation. Mitigations options could include, but would not be limited to, using the space under the CTA track as parkland and making improvements within Wendell Smith Park. Impacts on the trail would be avoided; the trail would be rerouted around the affected area or avoided completely. After mitigation, there would be no adverse impacts on Wendell Smith Park.

Parklands and Community Facilities within ½ Mile of a Station
By improving travel time, operation of the UPRR Rail ROW Option in Segment UA would improve access to parklands and community facilities within walking distance (½ mile) of the proposed stations in Segment UA when compared to the No Build Alternative. There are 6 parklands and 51 community facilities within ½ mile of a station location in Segment UA.

New Space for Community Facilities
The parking garage at the Michigan Avenue station would provide space for retail and community facilities; this would result in a benefit to the community overall because it would provide new and modernized space that would be used by community facilities.

6.3.2 Segment UB

The UPRR Rail Alternative ROW Option alignment would not pass through any parkland and would not displace any community facilities in Segment UB. By improving travel time, operations in Segment UB would improve access to parklands and community facilities within walking distance (½ mile) of the proposed station when compared to the No Build Alternative; there are 3 parklands and 23 community facilities within ½ mile of a station location in Segment UB.

6.3.3 120th Street Yard and Shop

There are no parklands or community facilities in, adjacent to or within 500 feet of the proposed ROW for the 120th Street yard and shop. As such, there would be no impacts on parklands or community facilities as a result of the operation and/or construction of the 120th Street yard and shop.

6.4 Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative East Option would result in permanent adverse and beneficial impacts as a result of its operation. Most of the permanent adverse impacts would be mitigated. The displacement of Now Faith Church of God Holiness would not be adverse after mitigation if it were relocated within the project area. After mitigation, no parkland or community facilities would have adverse construction impacts.

6.4.1 Segment UA

In segment UA, the UPRR Rail Alternative East Option alignment would pass through Wendell Smith Park and Block Park and would displace Now Faith Church of God Holiness.

Wendell Smith Park
The ROW proposed for East Option would run through the northwest corner of Wendell Smith Park; this impact would largely leave the functional and recreational use of the park intact.

Coordination with the Chicago Park District is being conducted as part of the Section 4(f) process and practicable mitigation measures are being identified. As it would be for the UPRR rail ROW Option, there are means to avoid, minimize, and mitigate most of the adverse impacts on this park as a result of the East Option; however, the presence of the rail structure in the park and the impacts on the trail would still be adverse without additional mitigation. Mitigation options would be similar to those of the UPRR Rail ROW Option; however, additional mitigation measures would be required to address the impacts on the trail. The trail could be rerouted within the park and/or other improvements could be made within Wendell Smith Park. After mitigation there would be no adverse impacts on Wendell Smith Park.

Block Park

The ROW for the East Option would run through the west parcel of Block Park; this parcel is open space only and does not contain any active and/or passive recreational amenities. Options to avoid, minimize and mitigate most of the adverse impacts on this park exist; however, the presence of the rail structure and the auxiliary entrance for the 103rd Street station in the park would still be adverse without additional mitigation. Mitigation alternatives are being developed through the Section 4(f) process, through coordination with the Chicago Park District and practicable measures to minimize harm are being identified. These mitigation options may include making improvements in the remaining parcel of Block Park After mitigation, there would be no adverse impacts on Block Park.

Now Faith Church of God Holiness

The ROW proposed for East Option would displace Now Faith Church of God Holiness. The displacement of this property would comply with the requirements of the Uniform Act. According to the *Displacements and Relocations of Existing Uses Technical Memorandum* there is one replacement property that is zoned for a place of worship in the project area. Other available property in the community would have to be rezoned for religious use in order to be considered a comparable property. If the church were relocated within the community prior to starting construction, to minimize interruption of its services, the impact would not be adverse after mitigation.

Parklands and Community Facilities within ½ Mile of a Station

By improving travel time, operation of the East Option in Segment UA would improve access to parklands and community facilities within walking distance (½ mile) of the proposed stations in Segment UA when compared to the No Build Alternative. There are 6 parklands and 51 community facilities within ½ mile of a station location in Segment UA.

New Space for Community Facilities

The parking garage at the Michigan Avenue station would provide space for community facilities; this would result in a benefit to the community overall because it would provide new and modernized space for community facilities that locate there.

6.4.2 Segment UB

The UPRR Rail Alternative East Option alignment would not pass through any parkland and would not displace any community facilities in Segment UB; therefore, there would be no adverse

impacts. By improving travel time, operations in Segment UB would improve access to parklands and community facilities within walking distance (½ mile) of the proposed station when compared to the No Build Alternative; there are 3 parklands and 23 community facilities within ½ mile of a station location in Segment UB.

6.4.3 120th Street Yard and Shop

There are no parklands or community facilities in, adjacent to or within 500 feet of the proposed ROW for the 120th Street yard and shop. As such, there would be no impacts on parklands or community facilities as a result of the operation and/or construction of the 120th Street yard and shop.

6.5 Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative West Option would result in beneficial and adverse impacts as a result of its operation. Most of the adverse impact would be mitigated; however, there would be some remaining visual impacts at Fernwood Parkway after mitigation. The UPRR Rail Alternative West Option would result in permanent impacts to one community facility, Grace Temple Church of God Established in Christ; however, the impact would not be adverse after mitigation if it were to be relocated within the project area. No parkland or community facilities would have adverse construction impacts after mitigation is applied.

6.5.1 Segment UA

In segment UA, the UPRR Rail Alternative West Option would pass through Wendell Smith Park and Fernwood Parkway, and would displace Grace Temple Church of God Established in Christ.

Wendell Smith Park

The ROW proposed for the West Option would run through the northwest corner of Wendell Smith Park; this impact would largely leave the functional and recreational use of the park intact. As it would be for the ROW Option, there are means to avoid, minimize, and mitigate most of the adverse impacts on this park as a result of the West Option; however, the presence of the rail structure in the park would still be adverse without additional mitigation. Mitigation options would be the same as for the ROW Option. After mitigation, there would be no adverse impacts on Wendell Smith Park.

Fernwood Parkway

The ROW proposed for West Option would run through two of the four parcels that make up Fernwood Parkway; these parcels are open space only and do not contain any active or passive recreational amenities. The permanent ROW would acquire 1.9 acres of the park and would create two park fragments. There are options to mitigate the adverse impacts created by the elevated rail structure. Depending on the decisions made during the Section 4(f) process, mitigation could be applied to a nearby parkland (e.g., the northern, unaffected parcels of Fernwood Parkway), or conversion of vacant parcels into new park space. It may also be possible to create a similar linear park from the displaced parcel remnants that would not be needed for the West Option. The visual quality of Fernwood Parkway is considered high and the West Option would result in high visual impacts that would not be completely mitigated. These visual impacts would have a greater

impact on the surrounding single-family neighborhood around the park than on park users and would not be substantially adverse after mitigation.

Coordination with the Chicago Park District has been taking place through the Section 4(f) process to identify means to reduce the overall harm. After mitigation, the parklands impacts on Fernwood Parkway would not be adverse.

Grace Temple Church of God Established in Christ
The ROW proposed for West Option would displace Grace Temple Church of God Established in Christ. The displacement of this property would comply with the requirements of the Uniform Act. According to the *Displacements and Relocations of Existing Uses Technical Memorandum* there is one replacement property that is zoned for a place of worship in the project area. Other available property in the community would have to be rezoned for religious use in order to be considered a comparable property. If the church were relocated within the community prior to starting construction, to minimize interruption of its services, the impact would not be adverse after mitigation.

Parklands and Community Facilities within ½ Mile of a Station
By improving travel time, operation of the West Option in Segment UA would improve access to parklands and community facilities within walking distance (½ mile) of the proposed stations in Segment UA when compared to the No Build Alternative. There are 6 parklands and 51 community facilities within ½ mile of a station location in Segment UA.

New Space for Community Facilities
The parking garage at the Michigan Avenue station would provide space for retail and community facilities; this would result in a benefit to the community overall because it would provide new and modernized space for community facilities that locate there.

6.5.2 Segment UB

The UPRR Rail Alternative West Option would not pass through any parkland and would not displace any community facilities in Segment UB. By improving travel time, operations in Segment UB would improve access to parklands and community facilities within walking distance (½ mile) of the proposed station when compared to the No Build Alternative; there are 3 parklands and 23 community facilities within ½ mile of a station location in Segment UB.

6.5.3 120th Street Yard and Shop

There are no parklands or community facilities in, adjacent to or within 500 feet of the proposed ROW for the 120th Street yard and shop. As such, there would be no impacts on parklands or community facilities as a result of the operation and/or construction of the 120th Street yard and shop.

6.6 Halsted Rail Alternative

The Halsted Rail Alternative would result in permanent benefits and adverse impacts as a result of its operation. After mitigation, no parkland or community facilities would have adverse construction impacts.

6.6.1 Segment HA

The Halsted Rail Alternative would not pass through any parkland in Segment HA; however, the ROW would displace one community facility. After mitigation, moderate noise impacts would remain as a result of the operation of the Halsted Rail Alternative, which would affect adjacent noise-sensitive receptors. No parkland or community facilities would have adverse construction impacts after mitigation is applied.

Illinois Department of Employment Security
The ROW proposed for park & ride facility at the 119th Street station would displace the Illinois Department of Employment Security office. This facility provides a vital service to the community and the closest alternate office to the project area is 9 miles away. The displacement of this property would comply with the requirements of the Uniform Act. There is comparable replacement property available within the neighborhood to relocate this facility (see the *Displacements and Relocations of Existing Uses Technical Memorandum* for more details on available property near the employment office). As such, there would be no adverse impact on this facility after mitigation.

Community Facilities Adjacent to the Halsted Rail Alternative Alignment
There are 19 noise-sensitive receptors adjacent to the Halsted Rail Alternative alignment in Segment HA. These community facilities would have moderate to severe noise impacts; however, noise barriers would be used to minimize these impacts. After mitigation, moderate noise impacts on these noise-sensitive receptors would remain.

Parklands and Community Facilities within ½ Mile of a Station
By improving travel time, operation of the Halsted Rail Alternative would improve access to parklands and community facilities within walking distance (½ mile) of the proposed stations in Segment HA when compared to the No Build Alternative; there are 6 parklands and 73 community facilities within ½ mile of a station location.

6.6.2 Segment HB

The Halsted Rail Alternative alignment would not pass through any parkland or displace any community facilities; however, there would be some impacts on community facilities after mitigation. After mitigation, no parkland or community facilities would have construction impacts.

Community Facilities Adjacent to the Halsted Rail Alternative Alignment
There are four noise-sensitive receptors adjacent to the Halsted Rail Alternative alignment in Segment HB. These community facilities would have moderate to severe noise impacts; however, noise barriers would be used to minimize these impacts. After mitigation, moderate noise impacts on these noise-sensitive receptors would remain.

Parklands and Community Facilities within ½ Mile of a Station

By improving travel time, operation of the Halsted Rail Alternative would improve access to parklands and community facilities within walking distance (½ mile) of the proposed stations in

Segment HB when compared to the No Build Alternative; there are 2 parklands and 8 community facilities within ½ mile of a station location.

New Space for Community Facilities
The parking garage at the Vermont Street station would provide space for retail and community facilities; this would result in a benefit to the community overall because it would provide new and modernized space.

6.6.3 119th Street Yard and Shop

The 119th Street yard and shop would not pass through any parkland; however, the ROW would displace a place of worship. After mitigation, no parkland or community facilities would have adverse construction impacts.

Sure-Way Missionary Baptist Church
The ROW for the southernmost entrance to the 119th Street yard and shop would displace Sure-Way Missionary Baptist Church. This church is relatively small and with the exception of its sign, the building does not contain architectural features that would identify it as a place of worship. The displacement of this property would comply with the requirements of the Uniform Act. According to the *Displacements and Relocations of Existing Uses Technical Memorandum* there is one replacement property that is zoned for a place of worship in the project area. Other available property in the community would have to be rezoned for religious use in order to be considered a comparable property. If the church were relocated within the community in accordance with the Uniform Act prior to starting construction to minimize interruption of its services, the impact would not be adverse after mitigation.

Section 7
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Appendix A
Community Facilities

Tables A-1 through A-5 provide the name and address of the community facilities that are within the community facilities area of potential impact for each of the build alternatives. These tables also locate community facilities in reference to the alternative's alignment, proposed right-of way (ROW), and proposed stop/station locations.

Table A-1: Community Facilities in Area of Potential Impact - Bus Rapid Transit Alternative

Type	Name	Address	Adjacent	½ mile from Stop
Senior Center	Satellite Senior Center at Abbott Park	49 E. 95th Street	X	
School	Harlan Community Academy High School	9652 S. Michigan Avenue	X	
School	Shedd Elementary School	200 E. 99th Street		X
Place of Worship	Damascus Baptist Church	10014 S. Michigan Avenue	X	X
School	Bennett Elementary School	10115 S. Prairie Avenue		X
Place of Worship	Salem Baptist Church	10126 S. Indiana Avenue		X
Senior Center	Rose Haven Manor Senior Housing	10200-10220 S. Michigan Avenue	X	X
Place of Worship	St. John de la Salle Catholic Church	10205 S. King Drive		X
Place of Worship	Emmanuel Reformer Church	10241 S. State Street		X
Place of Worship	Kingdom Hall of Jehovah's Witnesses	60 E. 103rd Street		X
Place of Worship	Pullman Christian Reformer Church	424 W. 103rd Street		X
Place of Worship	New Tabernacle Baptist Church	10413 S. Michigan Avenue	X	X
Place of Worship	Christian Missionary Baptist Church	130 W. 104th Street		X
Place of Worship	Great Way Full Gospel	10359 S. King Drive		X
School	Kohn Elementary School	10414 S. State Street		X
Place of Worship	Pentecostal Church of God	10429 S. Michigan Avenue	X	X
Senior Center	Victory Centre of Roseland Senior Housing	10450 S. Michigan Avenue	X	X

Type	Name	Address	Adjacent	½ mile from Stop
Place of Worship	Harris Temple Church of God in Christ	10558 S. Michigan Avenue	X	
Place of Worship	Lilydale Progressive Missionary Baptist Church	10706 S. Michigan Avenue	X	X
Place of Worship	St. John Pentecostal Holiness Church of Deliverance	10707 S. Michigan Avenue	X	X
Place of Worship	The Straight Way Pentecostal Church	10740 S. Michigan Avenue	X	X
Place of Worship	Christian Love Deliverance Church of God in Christ	10742 S. Michigan Avenue	X	X
Place of Worship	Holy Miracle - Christ, the Hope of Glory Ministries	10757 S. Michigan Avenue	X	X
Place of Worship	Beacon of Joy SDA Church	101 W. 108th Street		X
Place of Worship	Universal Community Missionary	10809 S. State Street		X
Place of Worship	Revelation Baptist Church	10818 S. Michigan Avenue	X	X
Community Center	Stamps Funeral Home	10834 S. Michigan Avenue	X	X
Place of Worship	St. Ephraim Coptic	10844 S. Michigan Avenue	X	X
Place of Worship	Roseland Christian Ministries	10846 S. Michigan Avenue	X	X
Place of Worship	Out of a Need Missionary Church Temple	10857 S. Michigan Avenue	X	X
School	Lavizzo Elementary School	138 W. 109th Street		X
Place of Worship	Zion Lutheran Church	312 E. 109th Street		X
School	Brooks College Prep Academy High School	250 E. 111th Street		X
Place of Worship	New St. John Missionary Baptist Church	10930 S. Michigan Avenue	X	X
Place of Worship	Mary Magdalene Missionary Baptist Church	111 W. 109th Place		X
Library	Chicago Pullman Library	11001 S. Indiana Avenue		X
Place of Worship	Galilee Baptist Church	10955 S. Michigan Avenue	X	X

Type	Name	Address	Adjacent	½ mile from Stop
Community Center	Neighborhood Housing Services of Chicago	11001 S. Michigan Avenue	X	X
Place of Worship	Beacon Light Ministries	11026 S. Michigan Avenue	X	X
Healthcare Facility	Chicago Family Health Center	45 W. 111th Street		X
Community Center	A Place for You	11040 S. Wabash Avenue		X
Place of Worship	First Corinthians Baptist Church	134 E. 111th Street		X
Place of Worship	St. George and St. Matthias Episcopal Church	164 E. 111th Street		X
Community Center	Human Resources Development Institute	101 W. 11th Street		X
Hospital	Roseland Community Hospital	45 W. 111th Street		X
Place of Worship	New Testament Baptist Church	2 E. 112th Street	X	X
Place of Worship	Cornerstone Presbyterian Church	11210 S. State Street		X
School	Vivian E. Summers Alternative High School	30 E. 112th Place		X
State Facility	Illinois Department of Human Services Food Center	11253 S. Michigan Avenue	X	X
Place of Worship	Starlight St. James Missionary Baptist Church	11300 S. State Street		X
Place of Worship	New Pasadena Missionary Baptist Church	11300 S. Indiana Avenue		X
Place of Worship	Word Alive Church Ministry	11312 S. Michigan Avenue	X	X
Place of Worship	House of Inspiration Church of God in Christ	659 W. 107th Street		X
Place of Worship	St. James Temple Church of God	11336 S. State Street		X
Fire Station	Chicago Fire Department - Engine 62	34 E. 114th Street		X
Place of Worship	First Corinthians Baptist Church	11341 S. State Street		X
Place of Worship	Love Abide Missionary Baptist Church	11352 S. Michigan Avenue	X	X

Type	Name	Address	Adjacent	½ mile from Stop
Place of Worship	Mosque of Umar	11409 S. Michigan Avenue	X	X
Place of Worship	Greater Change Evangelistic	11477 S. Michigan Avenue	X	X
Place of Worship	Paradise Temple Church of God in Christ	11437 S. Forest Avenue		X
Place of Worship	Mt. Holy Rock Missionary Baptist Church	11441 S. Wentworth Avenue		X
Place of Worship	Christian Covenant Missionary Baptist Church	200 W. 115th Street		X
School	Curtis Elementary School	32 E. 115th Street		X
Place of Worship	Faith United Missionary Baptist Church	120 E. 115th Street		X
Place of Worship	St. John Missionary Baptist Church	211 E. 115th Street		X
Place of Worship	Crown of Light Missionary Baptist Church	11500 S. Front Avenue		X
Place of Worship	St. Anthony's Church	11533 S. Prairie Avenue		X
Place of Worship	Miracle Temple	137 E. Kensington Avenue	X	X
Place of Worship	Christian Life Ministries	11592 S. Lafayette Avenue		X
Place of Worship	New Christian Joy Missionary Baptist Church	11594 S. State Street		X
Place of Worship	South of Praise Evangelistic Center	11602 S. Michigan Avenue	X	X
Place of Worship	New Covenant Church Deliverance	11608 S. Michigan Avenue	X	X
Place of Worship	Bethel Apostolic Faith Church	11613 S. State Street		X
Community Center	Kids Off the Block Youth Center	11625 S. Michigan Avenue	X	X
Place of Worship	True Word Ministries	11700 S. Michigan Avenue	X	X
Place of Worship	Celestial Church of Christ	11705 S. Michigan Avenue	X	X
School	Songhai Elementary Learning Institute	11725 S. Perry Avenue		X

Type	Name	Address	Adjacent	½ mile from Stop
Place of Worship	Cottage Grove Holy Temple Church	11739 S. Michigan Avenue	X	X
Place of Worship	Word of Knowledge Ministries	11743 S. Michigan Avenue	X	X
Place of Worship	Saint Salomea Catholic Church	148 E. 118th Place		X
Place of Worship	Full Gospel Christian Center Church	11852 S. Michigan Avenue	X	X
Fire Station	Chicago Fire Department - Engine 75	11958 S. State Street		X
Place of Worship	Greater New Eagle Missionary Baptist Church	12301 S. Michigan Avenue	X	X
School	Aldridge Elementary School	630 E. 131st Street	X	X
School	Dubois Elementary School	330 E. 133rd Street		X
Library	Altgeld Library	13281 S. Corliss Avenue	X	X
School	Carver Middle School	901 E. 133rd Place	X	X
School	Carver Primary School	901 E. 133rd Place	X	X
Healthcare Facility	Altgeld Murray Clinic	972 E. 133rd Street	X	X
City Facility	Chicago Housing Authority	976 E. 132nd Place	X	X
Community Center	Catholic Charities Outreach	13150 S. Ingleside Avenue	X	X

Table A-2: Community Facilities in the Area of Potential Impact - Union Pacific Railroad Rail Alternative - All Options

Segment	Type	Name	Address	Adjacent			½ Mile from Station
				West	ROW	East	
UA	School	Fernwood Elementary School	10041 S. Union Avenue				X
	Place of Worship	Fernwood United Methodist Church	10047 S. Wallace Street				X
	Place of Worship	Rehoboth Apostolic Worship Center	10159 S. Halsted Street				X
	Place of Worship	New Macedonia Baptist Church	458 W. 103rd Street				X

Segment	Type	Name	Address	Adjacent			½ Mile from Station
				West	ROW	East	
UA	Place of Worship	Loving Spirit Missionary Baptist Church	424 W. 103rd Street				X
	Place of Worship	God's House - Holiness in Christ	538 W. 103rd Street				X
	Place of Worship	Ambassadors for Christ Church	535 W. 103rd Street				X
	Fire Station	Chicago Fire Department, Engine 93	330 W. 104th Street			X	X
	School	Hughes Elementary School	226 W. 104th Street				X
	Place of Worship	Christian Missionary Baptist Church	130 W. 104th Street				X
	School	Kohn Elementary School	10414 S. State Street				X
	Place of Worship	Mount Ebal Missionary Baptist Church	425 W. 107th Street				X
	Place of Worship	Beacon of Joy SDA Church	101 W. 108th Street				X
	School	Dunne Elementary School	10845 S. Union Avenue				X
	School	Lavizzo Elementary School	138 W. 109th Street				X
	Place of Worship	Mary Magdalene Missionary	318 W. 109th Place				X
	Place of Worship	Mary Magdalene Missionary Baptist Church	111 W. 109th Place				X
	Place of Worship	Allen Metropolitan Christian Methodist Episcopal Church	10937 S. Union Avenue				X
	Healthcare Facility	Chicago Family Health Center	45 W. 111th Street				X
	Place of Worship	Christ Cathedral Baptist Church	445 W. 111th Street				X

Segment	Type	Name	Address	Adjacent			½ Mile from Station
				West	ROW	East	
UA	Place of Worship	Church of God in Christ State Temple	421 W. 111th Street				X
	Community Center	A Place for You	11040 S. Wabash Avenue				X
	Healthcare Facility	Roseland Community Hospital	45 W. 111th Street				X
	Place of Worship	Christ Temple Cathedral Church	44 W. 111th Place				X
	School	Fenger Academy High School	11220 S. Wallace Street				X
	State Facility	Illinois Department of Human Services Food Center	11253 S. Michigan Avenue				X
	Place of Worship	Lilydale First Baptist Church	640 W. 113th Street				X
	School	Haley Elementary Academy	11411 S. Eggleston Avenue				X
	Place of Worship	Starlight St. James Missionary Baptist Church	11300 S. State Street				X
	Place of Worship	New Pasadena Missionary Baptist Church	11300 S. Indiana Avenue				X
	Place of Worship	Reformation Lutheran Church	11310 S. Forest Avenue				X
	Place of Worship	Word Alive Church Ministry	11312 S. Michigan Avenue				X
	Place of Worship	House of Inspiration Church of God in Christ	659 W. 107th Street				X
	Place of Worship	St. James Temple Church of God	11336 S. State Street				X
	Fire Station	Chicago Fire Department - Engine 62	34 E. 114th Street				X
	Place of Worship	First Corinthians Baptist Church	134 E. 111th Street				X

Segment	Type	Name	Address	Adjacent			½ Mile from Station
				West	ROW	East	
UA	Place of Worship	Now Faith Church of God Holiness	135 W. 114th Street		X	X	X
	Place of Worship	Love Abide Missionary Baptist Church	11352 S. Michigan Avenue				X
	Place of Worship	Mosque of Umar	11409 S. Michigan Avenue				X
	Place of Worship	Paradise Temple Church of God in Christ	11437 S. Forest Avenue				X
	Place of Worship	Mt. Holy Rock Missionary Baptist Church	11441 S. Wentworth Avenue				X
	Place of Worship	Christian Covenant Missionary Baptist Church	200 W. 115th Street				X
	School	Curtis Elementary School	32 E. 115th Street				X
	Place of Worship	Greater Change Evangelistic	11477 S. Michigan Avenue				X
	Place of Worship	Faith United Missionary Baptist Church	120 E. 115th Street				X
	Place of Worship	St. John Missionary Baptist Church	211 E. 115th Street				X
	School	CICS Prairie	11530 S. Prairie Avenue				X
	Place of Worship	St. Anthony's Church	11533 S. Prairie Avenue				X
	Place of Worship	Miracle Temple	137 E. Kensington Avenue			X	
	Place of Worship	New Christian Joy Missionary Baptist Church	11594 S. State Street	X	X	X	X
	Place of Worship	Christian Life Ministries	11592 S. Lafayette Avenue				X
	Place of Worship	Grace Temple Church of God Established in Christ	11601 S. Michigan Avenue	X			X

Segment	Type	Name	Address	Adjacent			½ Mile from Station
				West	ROW	East	
UB	Place of Worship	South of Praise Evangelistic Center	11602 S. Michigan Avenue				X
	Place of Worship	New Covenant Church Deliverance	11608 S. Michigan Avenue				X
	Place of Worship	Bethel Apostolic Faith Church	11613 S. State Street				X
	Community Center	Kids Off the Block	11625 S. Michigan Avenue				X
	Place of Worship	True Word Ministries	11700 S. Michigan Avenue				X
	Place of Worship	Celestial Church of Christ	11705 S. Michigan Avenue				X
	School	Songhai Elementary Learning Institute	11725 Perry Avenue				X
	Place of Worship	Cottage Grove Holy Temple Church	11739 S. Michigan Avenue				X
	Place of Worship	Word of Knowledge Ministries	11743 S. Michigan Avenue				X
	Place of Worship	Saint Salomea Catholic Church	148 E. 118th Place				X
	Place of Worship	Full Gospel Christian Center Church	11852 S. Michigan Avenue				X
	Place of Worship	Greater Canaan Missionary Baptist Church	41 W. 119th Street				X
	Fire Station	Chicago Fire Department - Engine 75	11958 S. State Street				X
	Fire Station	Chicago Fire Department - Engine 80	12701 S. Doty Avenue				X
	Place of Worship	United Church of Altgeld Garden	13040 S. Dobson Avenue				X
	School	Aldridge Elementary School	630 E. 131st Street	X	X	X	X

Segment	Type	Name	Address	Adjacent			½ Mile from Station
				West	ROW	East	
UB	Place of Worship	Catholic Charities Outreach	13150 S. Ingleside Avenue				X
	Healthcare Facility	Altgeld Murray Clinic	972 E. 133rd Street				X
	School	Carver Military Academy High School	13100 S. Doty Avenue				X
	Library	Altgeld Library	13281 Corliss Avenue				X
	State Facility	Chicago Housing Authority	976 E. 132nd Place				X
	School	Carver Middle School	801 E. 133rd Street				X
	School	Carver Primary School	901 E. 113rd Street				X

Table A-3: Community Facilities within the Area of the Potential Impact - Halsted Rail Alternative

Segment	Type	Name	Address	Adjacent to ROW	½ Mile from Station
HA	Community Center	Far South Community Development Corporation	9923 S. Halsted Street	X	X
	Place of Worship	Gospel Truth Missionary Baptist Church	10015 S. Halsted Street	X	X
	School	Fernwood Elementary School	10041 S. Union Avenue		X
	Place of Worship	Fernwood United Methodist Church	10047 S. Wallace Street		X
	Place of Worship	Gatling's Chapel Funeral Home	10133 S. Halsted Street	X	X
	Community Center	Paul Hall Family Center	10140 S. Halsted Street	X	X
	Place of Worship	Rehoboth Apostolic Worship Center	10159 S. Halsted Street	X	X
	Place of Worship	The Whole Word of God Christian Outreach	10222-224 S. Halsted Street	X	X
	Place of Worship	Prayer Center Baptist Church	10235 S. Wallace Street		X
	Place of Worship	New Macedonia Baptist Church	458 W. 103rd Street		X
	Place of Worship	Loving Spirit Missionary Baptist Church	424 W. 103rd Street		X
	Place of Worship	God's House-Holiness in Christ	551 W. 103rd Street		X
	Place of Worship	Ambassadors for Christ Church	531 W. 103rd Street		X
	Place of Worship	Oasis of Hope - Sanctuary of Prayer Christian Church	851 W. 103rd Street		X
	Place of Worship	Prayer & Faith Outreach Ministries	944 W. 103rd Street		X
	School	Garvey Elementary School	10309 S. Morgan Street		X
	Place of Worship	Gospel Temple Missionary Baptist Church	1040 W. 103rd Street		X
	Place of Worship	Tabernacle Number One Church	1151 W. 103rd Street		X

Segment	Type	Name	Address	Adjacent to ROW	½ Mile from Station
HA	Place of Worship	Way of Holiness Mission	10407-409 S. Halsted Street	X	X
	Place of Worship	Messiah Baptist Church	10400 S. Halsted Street	X	X
	Community Center	The South Side Help Center	10420 S. Halsted Street	X	X
	Place of Worship	Covenant Faith Church of God	10505 S. Halsted Street	X	X
	Community Center	Shared Manna Food Pantry	10505 S. Halsted Street	X	X
	Place of Worship	Missing Peace Church of Living Hope	10504 S. Halsted Street	X	X
	School	Mount Vernon Elementary School	10540 S. Morgan Street		X
	Place of Worship	House of God	10555 S. Emerald Avenue		X
	Place of Worship	Shiloh Missionary Baptist Church	10540 S. Halsted Street	X	X
	Place of Worship	Bellevue Ministry Center	10715 S. Halsted Street	X	X
	Place of Worship	Bellevue Baptist Church	10730 S. Emerald Avenue		X
	Place of Worship	Cherubim & Seraphim Church	10751 S. Halsted Street	X	X
	Place of Worship	Logos Baptist Assembly	10805 S. Halsted Street	X	X
	Healthcare Facility	Urban Family Health Center	10830 S. Halsted Street	X	X
	School	Dunne Elementary School	10845 S. Union Avenue		X
	Place of Worship	Greater Mt. Eagle Baptist Church	10856 S. Halsted Street	X	X
	Place of Worship	Tabernacle Number One God's House of Holiness in Christ	10906 S. Halsted Street	X	X
	Senior Center	Renaissance Park South	10935 S. Halsted Street	X	X
	Place of Worship	Hamlett Lena Church	10916 S. Sangamon Street		X
	Community Center	SGA Roseland Children's Youth & Family Center	10928 S. Halsted Street	X	X

Segment	Type	Name	Address	Adjacent to ROW	½ Mile from Station
HA	Place of Worship	Allen Metropolitan Christian Methodist Episcopal Church	10946 S. Lowe Avenue		X
	Healthcare Facility	Southtown Medical Center	11000 S. Halsted Street	X	X
	Place of Worship	Christ Church of Chicago	11020 S. Halsted Street	X	X
	Place of Worship	Church of God in Christ State Temple	421 W. 111th Street		X
	Place of Worship	Christ Cathedral Baptist Church	445 W. 111th Street		X
	Place of Worship	Holy Zion Healing Temple	1037 W. 112th Place		X
	Place of Worship	Christ the Way of Holiness	11200 S. Halsted Street	X	X
	School	Fenger Academy High School	11220 S. Wallace Street		X
	Healthcare Facility	Planned Parenthood	11250 S. Halsted Street	X	X
	Place of Worship	Lilydale First Baptist Church	640 W. 113th Street		X
	Place of Worship	Sheldon Heights Church of Christ	11325-55 S. Halsted Street	X	X
	Community Center	Community Assistance Programs	11444 S. Halsted Street	X	X
	Place of Worship	Light of Zion Ministries	11636 S. Halsted Street	X	X
	School	Higgins Elementary Community Academy	11710 S. Morgan Street		X
	Place of Worship	West Pullman Baptist Church	656 W. 118th Street		X
	Place of Worship	St. James Church of God in Christ	640 W. 118th Street		X
	Place of Worship	Redeeming Grace Church	11801 S. Sangamon Street		X
	Place of Worship	Original New Paradise	11830 S. Wallace Street		X
	Library	West Pullman Library	830 W. 119th Street	X	X
	Place of Worship	Christian Service Missionary	914 W. 119th Street	X	X
	Place of Worship	Mt. Zion First Holy Miracle	956 W. 119th Street	X	X

Segment	Type	Name	Address	Adjacent to ROW	½ Mile from Station
HA	State Facility	Illinois Department of Employment Security	837 W. 119th Street	X	X
	Place of Worship	House of Prayer Missionary Baptist Church	641 W. 119th Street		X
	Place of Worship	New Mt. Zion Missionary Baptist Church	604 W. 119th Street		X
	Place of Worship	Unveiled Ministries	437 W. 119th Street		X
	Fire Station	Chicago Fire Department - Engine 115	11940 S. Peoria Street	X	X
	School	West Pullman Elementary School	11941 S. Parnell Avenue		X
	Place of Worship	Lively Stone Apostolic Church	620 W. 120th Street		X
	Place of Worship	New Jerusalem Temple	619 W. 120th Street		X
	Place of Worship	House of Rhema	607 W. 120th Street		X
	Place of Worship	Fellowship United Methodist Church of West Pullman	12001 S. Normal Avenue		X
	Place of Worship	Sure-Way Missionary Baptist Church	12000 S. Halsted Street	X	X
	Place of Worship	Divine Love Missionary Baptist Church	713 W. 120th Street		X
	Place of Worship	New Life Full Gospel Christian	12030 S. Wallace Street		X
	Senior Center	Hancock Senior Center	12045 S. Emerald Avenue		X
HB	Place of Worship	St. Titus Church	12257 S. Emerald Avenue		X
	Community Center	Chicago South Community Development Corporation	12338 S. Halsted Street	X	X
	Place of Worship	St. Peter & Paul Church	12433 S. Halsted Street	X	X
	Cemetery	Cedar Park Cemetery	12540 S. Halsted Street	X	X

Segment	Type	Name	Address	Adjacent to ROW	½ Mile from Station
HB	School	Brown Elementary Community Academy	12607 S. Union Avenue		X
	Place of Worship	Christ Spiritual Way of Truth	12730 S. Halsted Street	X	X
	Place of Worship	Colonial Village Church-Christ	12814 S. Lowe Avenue		X
	Place of Worship	Praise Temple	12900 S. Halsted Street	X	X

Appendix B
Notes for Early Coordination with the Chicago Park District

Notes from the following meetings are included in this appendix:

- *April 18, 2011*
- *July 24, 2013*
- *May 8, 2014*
- *April 8, 2015*

Appendix B updated in May 2015.

MEETING NOTES

RE: **CTA-CWC-Chicago Park District Meeting - Red Line South Extension Project**

MEETING DATE: **April 18, 2011**

CHAIRPERSON: **Sonali Tandon, CTA**

LOCATION: **at CTA and via Conference Call**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	*Initials*	*Organization / Title*
Sonali Tandon	ST	CTA
Steve Hands	SH	CTA
Joe Iacobucci	JI	CTA
Helene Kornblatt	HK	CWC Transit Group
Claudia Lea	CL	CWC Transit Group
Joseph Bornstein	JB	Chicago Park District

PREPARED BY: Claudia Lea

ISSUE DATE: April 19, 2011

Meeting called to order at 1:30 pm

Project Background
Sonali Tandon discussed the project background, including the Alternatives Analysis process, the determination of a Locally Preferred Alternative (Union Pacific Railroad Heavy Rail Transit Alternative – UPRR HRT Alternative), the scoping process, as well as an overview of the EIS process.

Helene Kornblatt provided background regarding the 4(f) process: Section 4(f) of the Department of Transportation Act of 1966 prohibits the Federal Transit Administration (FTA) from approving a project or program that uses land from a significant public park, recreation area, wildlife or waterfowl refuge, or historic site except if the Administration determines that the other alternatives are not feasible. All parkland that is used for a transit project needs to be compensated. A 4(f) report will need to be completed as part of the EIS.

West Option
The UPRR HRT West Option would intersect Fernwood Park, located along the proposed alignment between 99th Street and 103rd Street. Fernwood Park is a linear park which runs between the UPRR

tracks and Eggleston Avenue. There are limited improvements to the park (no sidewalks), and it is not programmed much as a park. Abandoned houses and vacant lots are located along the park.

Joseph Bornstein indicated that CPD would be amenable to talking about this park. JB stated that if any of the park is used for the Red Line Extension, the remainder of the park will be unusable, and CTA will be responsible for a one-to-one acreage trade for the entire park area between 99th and 103rd Street. JB indicated that there would likely be land available to create new parks given the vacant land in the near vicinity of the park, but CTA will need to see what the community would like. CPD has no current plans for improvements to Fernwood Park. CTA will recommend several sites in the vicinity of Fernwood Park that would replace the entire Fernwood Park area (4.5 acres), and will begin by reviewing City of Chicago owned property.

East Option

The UPRR HRT East Option would intersect Wendell Smith Park, located on South Princeton Avenue between 99th Street and 99th Place. Wendell Smith Park is 4 acres in size and has basketball courts, baseball fields, a play lot, a recreation building, and 0.33 miles of walking trails. There are regularly-scheduled basketball, baseball, and softball games, concerts, and day camps that take place at the park. The UPRR HRT East Option would run through the northwest corner of the park. Impacts to the park would involve the loss of trees in the unused and unkempt northwest corner of the park, a total of 0.66 acres of impacted area.

The East Option would also run through the eastern parcel of Block Park. Block Park is located on two parcels, to the east and west of South Harvard Avenue, and runs along the eastern boundary of the UPRR. A natatorium was located on this property until 1998. A radio tower is located on the property at this time. Approximately 0.69 acres of the park would be impacted by the UPRR HRT East Option; the total parcel area is 1.26 acres. Following the meeting, JB provided information that the potentially impacted parcel is leased property from the Water Department. He indicated that the lease on the property is most likely expired, and CTA may need to work with the Water Department regarding the future of their parcels.

Process

- CTA will need to get feedback from the community regarding their wants and needs
- CPD does one-for-one land swaps
- CPD requires a two-acre minimum for new parks. CPD would prefer new parks to be greater than two acres, if possible.
- Land actions need to go though the CPD Board, which is a relatively quick process.
- CTA will need to discuss findings with FTA prior to proceeding.
- Funding for the park development will need to be discussed with FTA.
- CPD estimates that it costs ~$1 million per acre for development of property into usable park land, which includes lighting, improvements, etc.

Next Steps

As CTA begins to draft the EIS, they will get back in touch with CPD regarding potential sites and compensation, based on FTA's feedback. At this time, the EIS is not funded. CPD has no plans for further park development in the vicinity of the LPA.

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days.

cc: Attendees

MEETING NOTES

RE: **Chicago Park District Meeting**
Red Line Extension Draft EIS

MEETING DATE: **Wednesday, July 24, 2013 1:00PM**

LOCATION: **Chicago Park District Offices**

ATTENDEES:

Name	***Initials***	***Organization***
Sonali Tandon	ST	CTA
Rob Rejman	RR	Chicago Park District
Doreen O'Donnell	DO	Chicago Park District
Helene Kornblatt	HK	CWC Transit Group
Kansai Uchida	KU	CWC Transit Group

PREPARED BY: Kansai Uchida

ISSUE DATE: Thursday, July 25, 2013

- CTA is currently preparing the Draft Environmental Impact Statement for the Red Line Extension project. The ultimate funding sources and schedule for project implementation are still being determined.
- CPD's policy regarding other agencies' use of their property is replacement (whether the property is active or not). Replacement does not need to be in the same location.
- CTA, CPD, and CWC reviewed draft conceptual plan and profile drawings for the UPRR Rail Alternative options at Wendell Smith Park, Fernwood Parkway, and Block Park.
- CPD recently renewed its lease on Block Park for 25 years.
- CPD recognized that a Fernwood Parkway alignment might mean fewer residential displacements. If CPD received equal acreage nearby, they would have the opportunity to provide a better park for the neighborhood than the existing Fernwood Parkway.
- CWC described the potential Section 4(f) findings:
    - Use of Wendell Smith Park under all of the UPRR Rail Alternative Options
    - Use of Fernwood Parkway under the UPRR Rail Alternative West Option
    - De minimis impact on Block Park under the UPRR Rail Alternative East Option
- CPD understands the accessibility benefits that the extension would provide to the community. CPD sees this as an opportunity to improve existing parks or create a new park in alternate locations that would better serve the neighborhood.
- CPD will conduct an internal analysis of the needs of the community, and potential parks for improvement or new park lands to compensate for parks that may be affected by RLE project alternatives.

- CPD would like to have a representative attend a future meeting that CTA may have with Friends of the Parks.
- ST provided a copy of map showing Red Line Extension alternatives.

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days.

cc: Attendees

Meeting Notes

Date: Thursday, May 8, 2014

Meeting: CTA with Chicago Park District and Friends of the Parks

Meeting Purpose: CTA to share RLE Project updates and Parks Impacts

Present:
Erika Sellke, Chicago Park District
Cassandra Francis, Friends of the Parks
Sylvia Jones, Friends of the Parks
Sonali Tandon, Chicago Transit Authority
Virginia Jackson, CWC Transit Group
Jenifer Palmer, CWC Transit Group

Time: 1:00 pm to 2:00 pm

Location: CTA Headquarters, 567 West Lake Street, 10th Floor, Chicago, IL

Presentation Highlights
CTA staff delivered a presentation about the proposed Red Line Extension (RLE) Project that would extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street. Representatives from the CTA discussed:

- **Project Overview and Benefits**
  The RLE Project would mean a better served Far South Side, by providing direct CTA rail service and reducing commute times from the project area. The project would include four new stations, a new rail yard, and bus and parking facilities at all stations. The project would encourage economic development and benefit the community by bringing construction jobs to the area and increasing access to jobs outside of the project area.

- **RLE Project Alternatives and Potential Impacts**
  CTA is evaluating three options for the Locally Preferred Alternative along the Union Pacific Railroad (UPRR) tracks including an option within the existing freight right-of-way (ROW Option), an East Option, and a West Option. CTA is also evaluating a rail alternative along Halsted Street, a Bus Rapid Transit (BRT) Alternative along Michigan Avenue, and the No Build Alternative.

- CTA is preparing an Environmental Impact Statement (EIS)
  CTA has been evaluating the project alternatives and has begun to prepare a Draft EIS which will analyze the potential positive and negative environmental impacts of construction and operation of each alternative and will propose mitigation measures to reduce or eliminated potential negative impacts. Once the CTA completes the Draft EIS, a public hearing will be held to share the findings of the Draft EIS.

- Parks Impacts
  CTA has been analyzing the potential impacts of the project from a number of different perspectives, including potential for displacements, noise and vibration, impacts to historic properties and others and understands this meeting is mainly to discuss findings with respect to parks. Based on the analysis, the No-Build, BRT and Halsted Rail Alternative have no associated potential park impacts. All UPRR Alternatives have an impact to Wendell Smith Park due to the overlap with the park and elevated structure/vertical clearances. There would be temporary occupancy of a small portion of the park during construction, but the area underneath the elevated structure would remain open after construction. Depending upon the UPRR alternative selected, the acreage impacted varies.

  In addition to potential temporary impacts to Wendell Smith Park from all UPRR Alternatives, the UPRR East Alternative has potential impact to Block Park. The affected area includes an isolated portion of the park's open space and a communications tower and is in an area of the park that does not currently serve a recreational use. The key recreational features of the park, walking trails and benches, are on the other side of Harvard Avenue in the eastern half of the park. While there would be some temporary construction impacts, no permanent incorporation is needed as the area underneath the elevated track structure would remain open after construction.

  In addition to potential temporary impacts to Wendell Smith Park from all UPRR Alternatives, the UPRR West Alternative has potential permanent impact to Fernwood Parkway. The West Option alignment would run through two of the four parcels that make up Fernwood Parkway between 101st and 103rd Streets and would affect about 1.9 acres of the park. Temporary closure of the section of the park overlapped by the elevated structure would be necessary during construction. Public use of the park could resume after construction, as long as the area underneath the elevated structure is reopened. However, much of the park between 101st and 103rd Streets would be permanently overlapped and shaded by the structure. Concrete aerial supports would be placed permanently in the park space. The West Option would result in a permanent incorporation of the park space and if this option is selected, CTA would work with the Chicago Parks District on appropriate mitigation. Some options have already been discussed with the City, including creating replacement park space nearby and/or adding enhanced recreational features to improve Fernwood Parkway's functionality as a park. The end result would potentially be a net benefit for park users.

Questions and Comments from Meeting Participants

- Discussion ensued about appropriated funds for project development and Sylvia Jones noted that it was her understanding that $1.5 Billion was to be appropriated in 2009 for the Red Line Extension. CTA stated that funding for the EIS planning study had been received and was used to fund this portion of the project. Once the Final EIS is submitted and a Record of Decision is determined by the Federal Transit Administration (FTA), the project would become eligible under the federally competitive New Starts grant funding. Additional local and state funding sources would be needed at that time for further project development.
- Sylvia Jones asked about the future parking fee for the proposed park and ride facility. This has not yet been determined by CTA and would be dependent upon the alternative selected to move forward. As the project develops further, CTA will evaluate the size and scale needed for the park and ride facilities.
- CTA asked about any areas of community concern with regard to the potential for park impacts of proposed alternatives. Discussion ensued about specific parks in the surrounding community. Sylvia Jones asked about impacts to Princeton Park and Trinity Church. Based on review of study area mapping, these facilities are located near 95th Street, east of Eggleston. CTA noted that these areas are outside of the proposed alternatives' alignments and study area. Similarly, CTA was asked whether the study reviewed potential impacts to Kensington Park. CTA noted that this had been reviewed but was outside of the area of potential effect.
- Sylvia Jones noted that Carver Park in Altgeld Gardens is a good example park in the area.
- Cassandra Francis asked that Major Taylor Bike Trail be added to the park impacts mapping, as appropriate. Major Taylor Bike Trail is not impacted by the project, but should be shown for reference purposes.
- Discussion ensued about potential impacts from all UPRR alternatives on Wendell Smith Park. It is understood that this is not a permanent incorporation and that only a small portion of parkland is affected. However, Ms. Francis noted that leaving the area of overlap between the park and elevated structure afterwards does change the nature of the park use.
- Cassandra Francis had concerns about impacts to parks from the UP Rail alternatives and noted that replacement of parks should be considered as part of the mitigation efforts for Block Park as well as Fernwood Parkway. CTA explained that the portion of Block Park that would be impacted is not used for recreational activity currently and does not contain any amenities. If the UPRR West Option is selected, and Fernwood Parkway is impacted, CTA would work with the Chicago Parks Department on appropriate mitigation, including creating replacement park area nearby and other amenities.
- Ms. Francis noted that she would like to work with Erika Sellke at the Chicago Parks Department to conduct a field visit of the potentially impacted parks and determine ways to enhance compact, integrated park areas within the project study area.

Follow Up

CTA Government and Community Relations staff will provide Ms. Jones with a copy of the Section 106 (Historic) Effects Report.

Friends of the Parks and Chicago Parks Department staff will further coordinate a field visit to discuss the potential impacts on parks and appropriate mitigation. CTA offered to coordinate and be part of these field visits if desired.

Friends of the Parks will look for other properties in the area that could be used for parkland mitigation.

MEETING NOTES

RE: **Chicago Park District Coordination Meeting**
Chicago Transit Authority Red Line Extension Project

DATE: **April 8, 2015, 9:00 a.m.**

LOCATION: **Chicago Park District, 541 N. Fairbanks Court, Chicago, IL**

ATTENDEES:

Name	*Initials*	*Organization*
Sonali Tandon	ST	CTA
Jenifer Palmer	JP	CWC Transit Group
Michael Lange	MH	CPD
Doreen O'Donnell	DO	CPD
Rob Rejman	RR	CPD

PREPARED BY: **Jenifer Palmer**

ISSUE DATE: **April 15, 2015**

MEETING NOTES:

- Sonali Tandon (CTA) provided an update on the status of the Red Line Extension Project. Since CTA last met with the Chicago Park District (CPD), there have been some new developments. CTA is preparing a Draft Environmental Impact Statement (EIS) and has narrowed the number of alternatives under consideration to two options of the Union Pacific Railroad Rail Alternative—the East Option and the West Option.

- After the Draft EIS phase, only one option will move forward for further study in the Final EIS. This is a community-driven project and public feedback on the environmental impacts of each option will help in refining the alignment and in selection of a single preferred option.

- There are a number of environmental resource areas studied in the Draft EIS in addition to parks, such as property displacements and noise and vibration, which could have an effect on community decision-making. CTA's goal, therefore, is to work with CPD on further detailing appropriate mitigation measures for each of these options that will result in a no adverse effect to parks following implementation of measures and which allows the public an opportunity to review the park impacts of the two options after mitigation.

- CPD stated that they would provide further information on appropriate mitigation measures for each option that are responsive to community needs and would allow the public to weigh in on

the park impacts and mitigation measures in line with other considerations on a preferred option.

- CTA shared maps and information on impacts for each option. The alignment has been refined to reduce park impacts and CTA is continuing to coordinate with Illinois Department of Transportation to seek concurrence on refinements in the I-57 segment. For the East Option, park impacts include a portion of Wendell Smith Park and a portion of Block Park. The West Option would impact Fernwood Parkway – a fewer number of parks but greater acreage affected. CPD noted that mitigation measures should note acre-for-acre replacement in either option.

- CTA shared potential mitigation measures for CPD comment, including replacement park provisions, maintaining park area beneath the structure, restoration/landscaping of any disturbed areas, and incorporating design features into the final transportation infrastructure to enhance parks while maintaining safety of the transit facility. For the West Option, there would also be a potential for creating a bike path beneath the elevated structure. CTA would still need to use the area for maintenance purposes.

- CPD noted that when clipping portions of a park, maintaining the park underneath is not as desirable a mitigation measure from a CPD perspective as replacement. The bike path concept is a very desirable one, especially if it could be a connector to other bike park plans that CPD has (i.e., Calumet). There may also be some interesting opportunities/ideas with regard to both options and providing replacement park space near stations. While a park next to the new station might be a non-continuous park, it would have the potential to enhance the surrounding area and provide better park access and connectivity. When parks are incorporated near transit, they are known to attract greater transit-oriented development.

- CTA shared some additional information on requirements under the National Environmental Policy Act and Section 4(f) as it relates to park impacts. Findings related to Section 4(f) will consider not only the impacts to parks, but the significance of parks and the mitigation measures proposed for the determination of a no adverse effect finding on each option after implementation of mitigation measures.

- Obtaining consensus from CPD, as the official with jurisdiction over findings of the impacts and mitigation measures proposed for each option, will allow the continued community-driven process for selection of a preferred option. A public meeting and comment period on findings of all environmental impacts and mitigation measures proposed is expected to occur in spring 2016.

- As a next step, CTA will send CPD a letter (and the materials reviewed during the meeting) that will outline the major items where CTA would like feedback from CPD.

- CTA shared with CPD next steps in the coordination process. These steps will help formalize mitigation measures and impact findings for both options, which can then be shared with the public for further input and feedback on a preferred option.

Appendix C
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Parklands and Community Facilities

The refined East and West Option alignments would reduce impacts to parklands in the project area.

Union Pacific Railroad Alternative - East Option

The East Option alignment would run through the northwestern corner of Wendell Smith Park, as shown in **Figure 1**. Of the 4.7 acres of the park, approximately 0.7 acre would be overlapped by the elevated structure and its associated clearances. The overlap area includes open space, trees, benches, and a portion of the park's walking trail. The outfield of an existing baseball field would be used. Piers would be located in the park, and the bottom of the elevated structure would be approximately 15 feet above ground level. Temporary closure of the overlapped portion of Wendell Smith Park would be necessary during construction.

The East Option alignment would also run through the west parcel of Block Park. The elevated structure and its associated clearances would overlap 0.9 acre of the park's west parcel, which is 1.3 acres in size, as shown in **Figure 2**. An auxiliary station entrance would also be located in the park, along its western edge. The affected parcel includes an isolated portion of the park's open space and a communications tower, and does not currently serve a recreational use. The key recreational features of the park, walking trails and benches, are on the other side of Harvard Avenue in the east parcel of the park. Some temporary closure of the overlapped area would be necessary during construction.

Union Pacific Railroad Alternative - West Option

The West Option track structure would run through two of the four parcels that make up Fernwood Parkway between 101st and 103rd Streets. Approximately 1.9 acres of the parkway, which is 2.4 acres in size, would be overlapped by the elevated structure and its associated clearances, as shown in **Figure 3**. The parkway functions as open space, and does not contain recreational amenities. Temporary closure of the overlapped section of the parkway would be necessary during construction. Public use of the parkway could resume after construction, as long as the area beneath the elevated track structure were reopened, but much of the parkway between 101st and 103rd Streets would be permanently overlapped and shaded by the structure. Elevated track structure supports would be placed permanently in the park space.

Construction of the West Option would also affect the northwestern corner of Wendell Smith Park. Temporary closure of the overlapped portion of Wendell Smith Park would be necessary during construction. The West Option would have no permanent impacts on Wendell Smith Park.

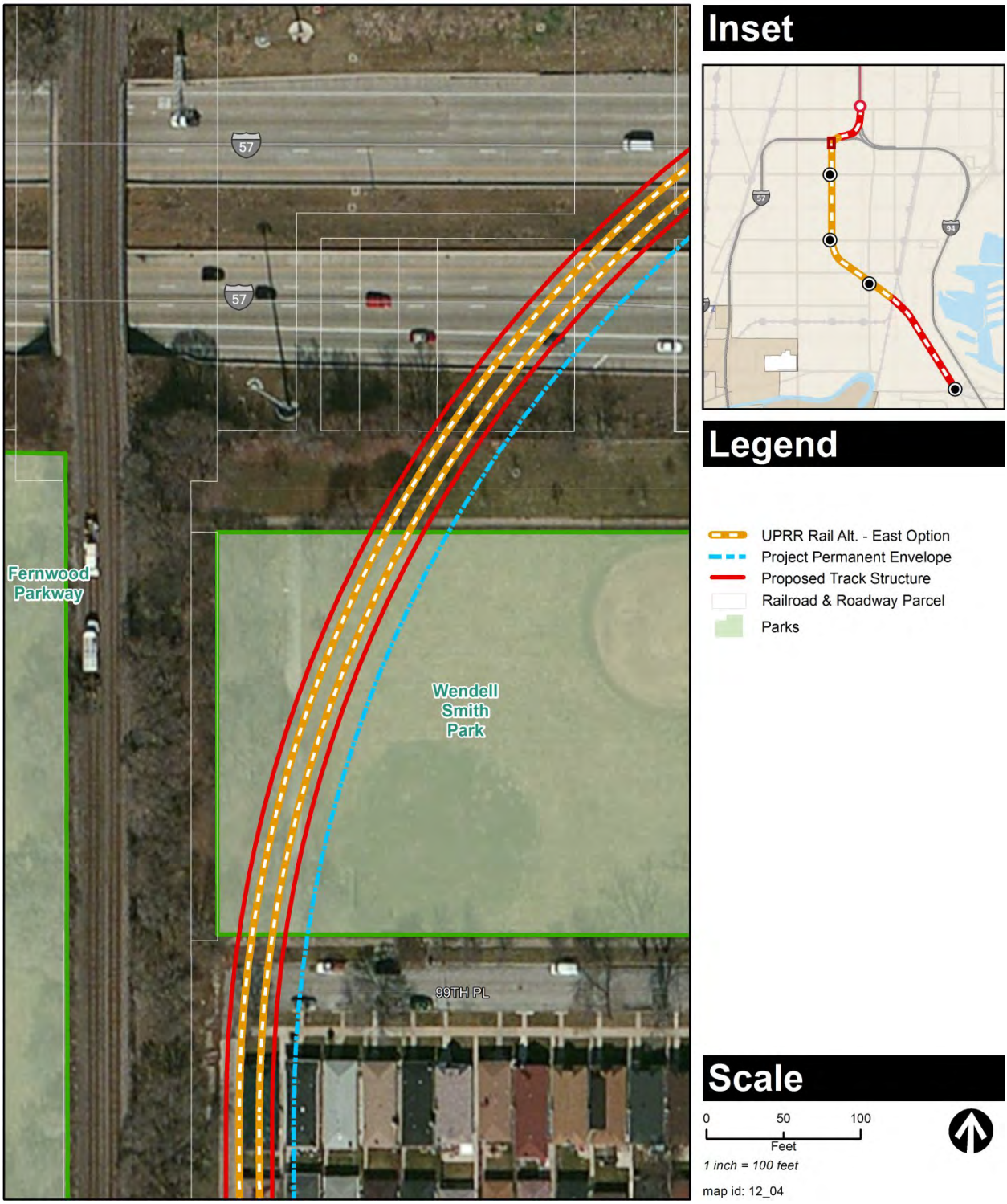

Figure 1: Impacts on Wendell Smith Park - Union Pacific Railroad Alternative East Option

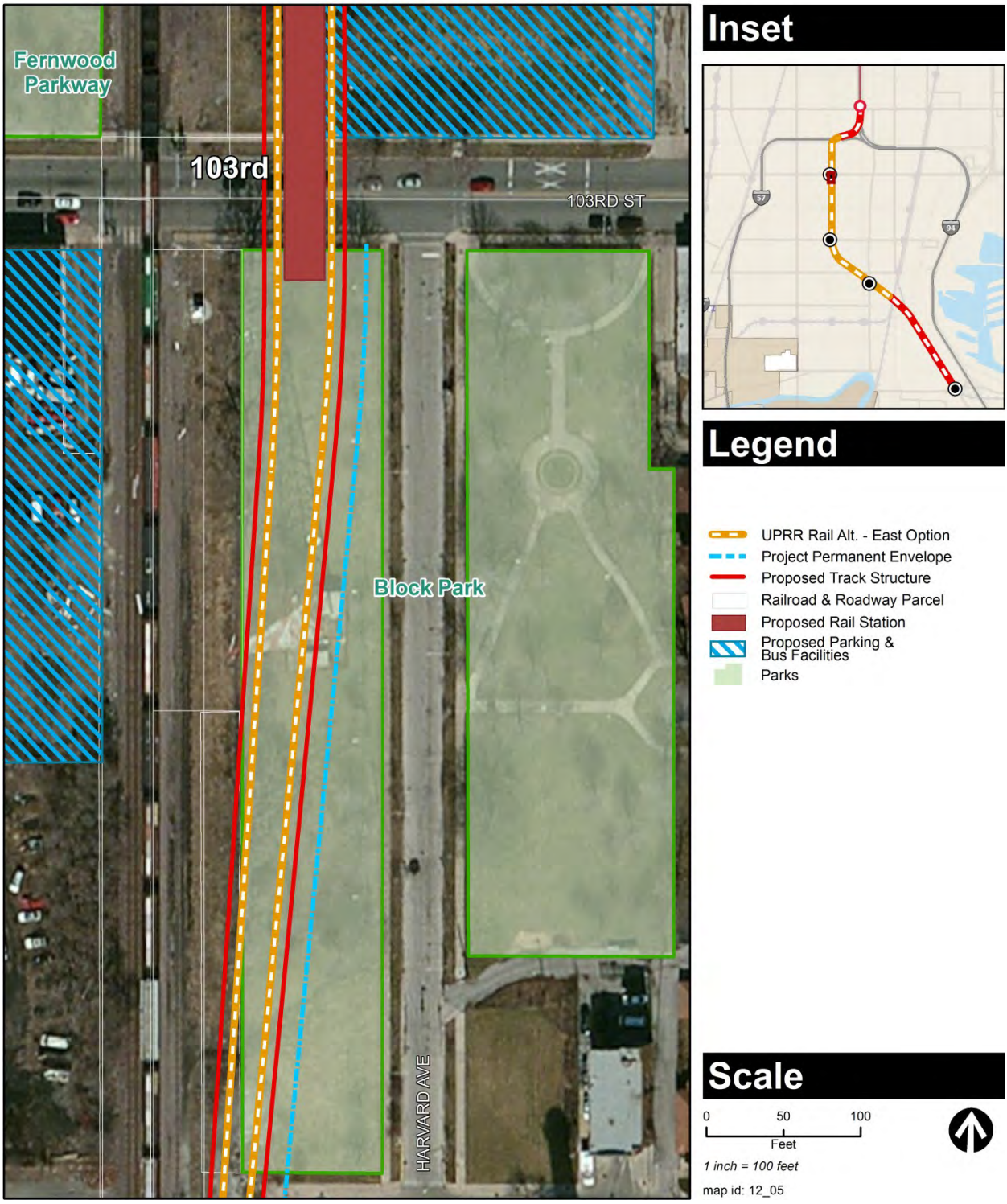

Figure 2: Impacts on Block Park - Union Pacific Railroad Alternative East Option

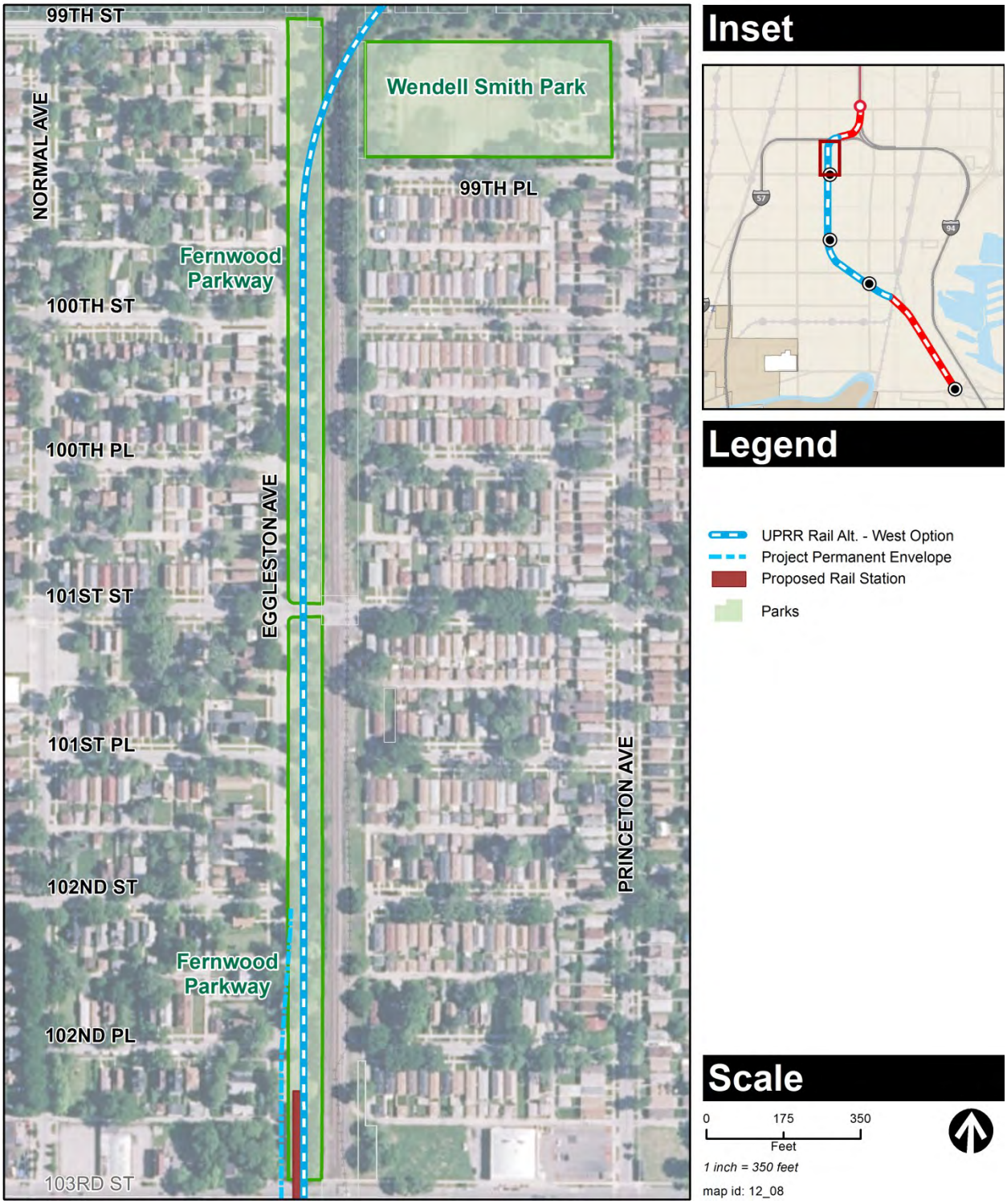

Figure 3: Impacts on Fernwood Parkway - Union Pacific Railroad Alternative West Option

Appendix N

Visual and Aesthetic Conditions Technical Memorandum

- Final EIS Addendum N, Visual and Aesthetic Conditions Technical Memorandum, July 2022

Chicago Red Line Extension Project

Visual and Aesthetic Conditions

Final EIS Addendum N

July 2022

Prepared for:
Chicago Transit Authority
567 W. Lake Street
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Prepared by:
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211 N. Clinton Street, Suite 300N
Chicago, IL 60661

Table of Contents

Section 1 - Summary 1-1
1.1 Permanent Impacts 1-1
1.2 Construction Impacts 1-2
1.3 Cumulative Impacts 1-2
Section 2 - Project Description and Background 2-1
Section 3 - Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-1
3.4 Methods 3-3
Section 4 - Affected Environment 4-1
Section 5 - Impacts and Mitigation 5-1
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative - Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited 7-1

Figures

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS) 2-4
Figure 3-1: Area of Potential Impact for Visual and Aesthetic Conditions 3-2
Figure 4-1: Existing Conditions for the 130th Street Station, Facing East from the Eastern Edge of the Altgeld Gardens Neighborhood 4-2
Figure 4-2: Existing Conditions for the 130th Street Station, Facing West from the Beaubien Woods Forest Preserve 4-2
Figure 5-1: Rendering of the Elevated Structure at Fernwood Parkway, Looking South from Eggleston Avenue near 101st Place 5-4
Figure 5-2: Rendering of the 103rd Street Station, Looking East along 103rd Street 5-4
Figure 5-3: Rendering of the 107th Place Cross-over, Looking Northwest from 108th Street... 5-6
Figure 5-4: Rendering of the 107th Place Cross-over, Looking West from 107th Place 5-6
Figure 5-5: Rendering of the 111th Street Station, Looking North from 111th Street 5-7

Figure 5-6: Rendering of the Michigan Avenue Station, Looking West from Kensington Avenue 5-8
Figure 5-7: Rendering of the Michigan Avenue Station Park & Ride Facility, Looking South along State Street from North of 115th Street..... 5-9
Figure 5-8: Rendering of the 130th Street Station, Facing East from the Eastern Edge of the Altgeld Gardens Neighborhood 5-10
Figure 5-9: Rendering of the 130th Street Station, Facing Northeast from Ellis Avenue 5-11
Figure 5-10: Rendering of the 130th Street Station, Facing West from the Beaubien Woods Forest Preserve 5-11

Tables

Table 1-1: Visual and Aesthetic Conditions – Impact Summary..... 1-2

Abbreviations

API	Area of Potential Impact
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
Conrail	Consolidated Rail Corporation
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NS	Norfolk Southern
RLE	Red Line Extension
UPRR	Union Pacific Railroad

Section 1 - Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on visual and aesthetic conditions. The potential for impacts on visual and aesthetic conditions was evaluated for areas along the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative that were not evaluated in **Appendix N** of the Draft Environmental Impact Statement (EIS). The visual and aesthetic analysis considered potential visual impacts on the visual environment, including changes to infrastructure, building mass and/or scale, visible density, landscape patterns, and viewer's sensitivities.

The analysis of visual and aesthetic conditions for the Preferred Alignment is the same as what was conducted for the Draft EIS. The visual analysis was based on fieldwork, professional judgment, and the analysis of visual renderings included in this addendum.

The existing visual conditions for the Preferred Alignment have not changed since the publication of the Draft EIS except for the area of the 130th Street station. The 130th Street station is proposed south of 130th Street adjacent to the Altgeld Gardens neighborhood. In the Draft EIS, the 130th Street station was proposed north of 130th Street adjacent to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) Calumet Reclamation Plant and existing railroad tracks.

1.1 Permanent Impacts

Based on the additional engineering and design changes to the Preferred Alignment, there would be additional visual impacts to those discussed in the Draft EIS for either the East or West Options of the UPRR Rail Alternative.

The Preferred Alignment is a combination of the East and West Options of the UPRR Rail Alternative that were presented in the Draft EIS. The Preferred Alignment follows the West Option from 99th Street to around 107th Place, where it crosses over to the east side of the UPRR tracks and follows the East Option. Therefore, the impacts on the Preferred Alignment would be the same as described in **Appendix N** of the Draft EIS for the corresponding locations for the East and West Options, in addition to the impacts caused by the design changes of the Preferred Alignment. **Table 1-1** summarizes the visual and aesthetic impacts under the Preferred Alignment.

Table 1-1: Visual and Aesthetic Conditions – Impact Summary

Alternative	Permanent Impacts	Construction Impacts
No Build Alternative	No impacts	No impacts
Preferred Alignment	Adverse impacts despite mitigation north of I-57, between 99th Street and the 103rd Street station area, near the 107th Place cross-over, at 117th Street and Prairie Avenue, and at the 130th Street station	No adverse impacts

1.2 Construction Impacts

There would be no change in construction impacts from the Draft EIS. Construction mitigation would be the same as described in **Appendix N** of the Draft EIS.

1.3 Cumulative Impacts

The cumulative impacts are the same as described in **Appendix N** of the Draft EIS.

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in Figure 2-1.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the

station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station

would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

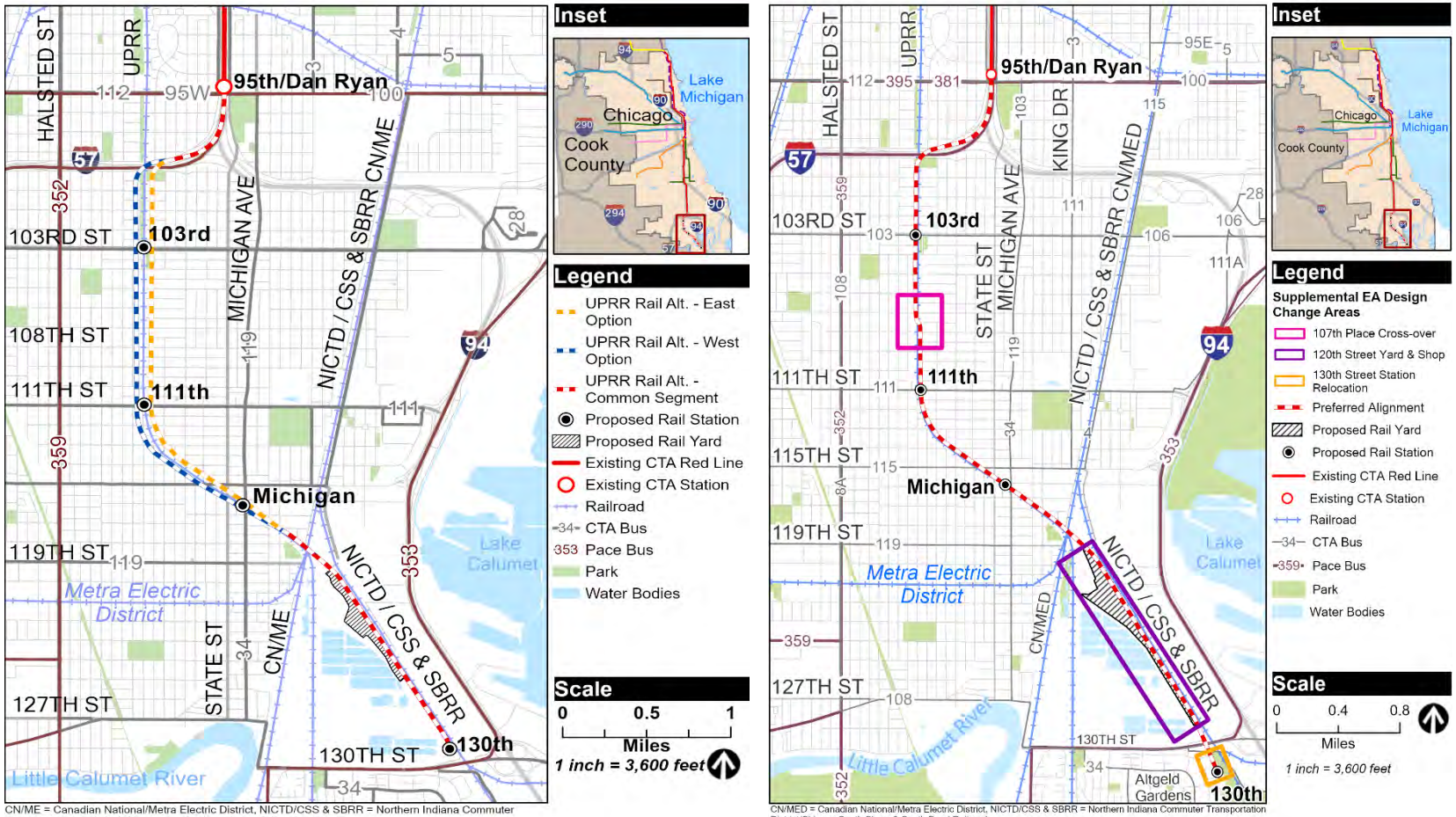

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix N** for the Draft EIS analysis have been carried forward to evaluate the visual and aesthetic conditions of the Preferred Alignment. This section documents the methodology for evaluating this resource, consistency with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

There are no changes to the applicable federal or state regulations referenced in **Appendix N** of the Draft EIS.

3.2 Impact Analysis Thresholds

Impact analysis thresholds for visual and aesthetic conditions are the same as described in **Appendix N** of the Draft EIS.

3.3 Area of Potential Impact

The RLE Project would extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The geographic area of potential impact (API) for aesthetics includes all areas along the project corridor within visual range of major viewer groups, including residents, business owners, recreationists, commuters, and visitors. The distance of the API from the path of the RLE Project would depend on the existence of view corridors. View corridors, including parks and streets, can increase the API. View corridors perpendicular to the API are assumed to be ¼ mile. **Figure 3-1** shows the updated API based on the Preferred Alignment.

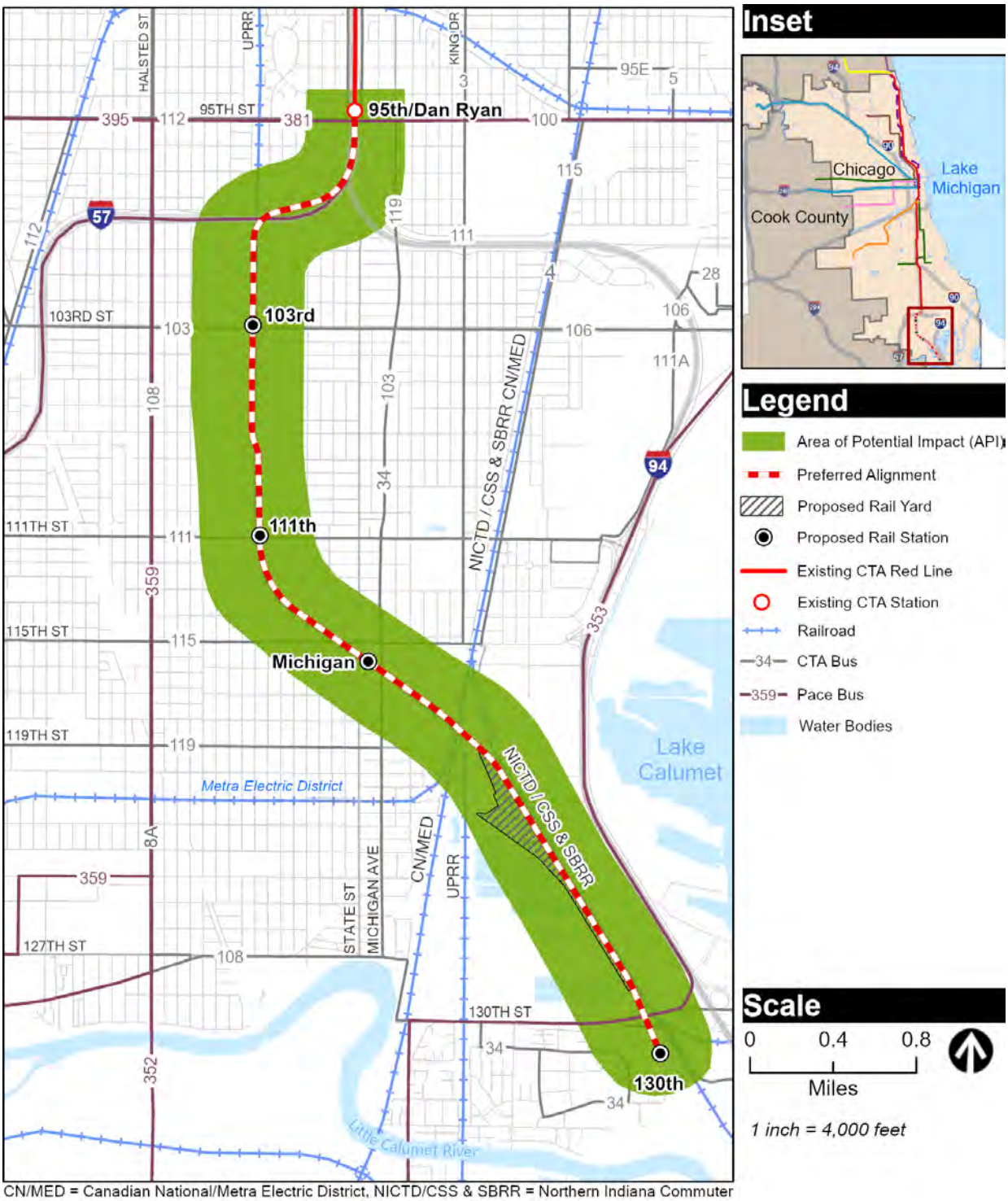

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Area of Potential Impact for Visual and Aesthetic Conditions

3.4 Methods

The analysis of visual and aesthetic conditions of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS.

Six new viewsheds from the API for the Preferred Alignment were selected for further analysis due to the design changes. These viewsheds were studied and ranked in the same way as described in **Appendix N** of the Draft EIS. Visual illustrations are provided in **Section 5** of this document.

Section 4 - Affected Environment

This section describes any updates to the existing visual and aesthetic conditions near the RLE Project since the publication of the Draft EIS. This section documents updates to the baseline data, as well as any changes to the visual and aesthetic conditions planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment. **Figure 4-1** and **Figure 4-2** show the existing conditions for the 130th Street station facing east and west, respectively.

The Preferred Alignment would run through a diverse mix of land uses including residential, commercial, and light industrial. The Preferred Alignment would begin at the existing 95th/Dan Ryan terminal and would run south along I-94, then curve west to follow I-57. The Preferred Alignment south of I-57 runs along an existing railroad corridor that is surrounded by a mix of residential and light commercial districts. Residential development consists of one- or two-story structures of similar style. Light commercial buildings are typically at intersections that meet the existing UPRR tracks at grade. A sizable portion of the development along the corridor is vacant and contains minimum architectural embellishments. The Roseland Pumping Station at 104th Street and Harvard Avenue is one of the few non-residential structures in the area with architectural character. South of 119th Street, the Preferred Alignment would run along the MWRD property and end south of 130th Street in the Altgeld Gardens neighborhood. Aside from the residences at Altgeld Gardens, this area has a light industrial character. The neighborhood is relatively isolated from other neighborhoods by 130th Street, I-94, and the Little Calumet River.

Other than the removal of Blocks 11, 12, and 13 of Altgeld Gardens that facilitated the movement of the proposed 130th Street station from north of 130th Street to south of 130th Street, the existing conditions have not changed considerably since the Draft EIS. The viewshed for the residents within the Altgeld Gardens neighborhood has changed with the removal of Blocks 11, 12, and 13. The existing views are of open greenspace that would be considered high visual quality. There would be no other changes to the existing visual conditions from those presented in the Draft EIS.

Figure 4-1: Existing Conditions for the 130th Street Station, Facing East from the Eastern Edge of the Altgeld Gardens Neighborhood

Figure 4-2: Existing Conditions for the 130th Street Station, Facing West from the Beaubien Woods Forest Preserve

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction and cumulative—with references to affected communities.

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

This section also documents the new or revised mitigation measures for identified project impacts, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East or West Options evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

As part of the Preferred Alignment, land acquisition and demolition of buildings would occur along the project corridor, with the most affected areas occurring along route curves and concentrated near station locations. This is consistent with the East and West Options described in **Appendix N** of the Draft EIS.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning (CMAP) Transportation Improvement Program. No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the National Environmental Policy Act (NEPA) environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

5.1.1 Permanent Impacts and Mitigation

As described in **Appendix N** in the Draft EIS, there would be no visual and aesthetic permanent impacts under the No Build Alternative.

5.1.2 Cumulative Impacts and Mitigation

As described in **Appendix N** in the Draft EIS, there would be no visual and aesthetic cumulative impacts under the No Build Alternative.

5.2 Union Pacific Railroad Alternative - Preferred Alignment

The Preferred Alignment would include new CTA tracks on an elevated structure located immediately adjacent to and west of the existing UPRR right-of-way north of 107th Street, where it crosses over the existing UPRR tracks to follow immediately adjacent to and east of the UPRR right-of-way. The UPRR would remain operational and there would be a 50-foot offset from the existing railroad tracks. Land acquisitions and demolition of buildings would occur along route curves and would be concentrated near station locations. The Preferred Alignment would generally result in impacts on the visual and aesthetic conditions of views for the affected API consistent with the East and West Options described in **Appendix N** of the Draft EIS. Visual illustrations of these impacts are represented in **Figure 5-1** through **Figure 5-10**.

5.2.1 Permanent Impacts and Mitigation

Permanent impacts on the visual and aesthetic conditions of the API under the Preferred Alignment are mostly the same as described in the Draft EIS with the exception of the 107th Place cross-over, Michigan Avenue station, and 130th Street station.

Additional renderings were completed for representative areas for the Preferred Alignment that were not assessed as part of the Draft EIS or where design changes were made that would affect the visual assessment for the Preferred Alignment. Impacts on station areas were determined based on representative renderings and the amount of change that would occur around the station areas. Specific impacts at each station area, as well as view locations associated with design changes, are discussed below. The renderings are intended to show the scale of project elements.

High level of visual change in the visual setting due to the elevated track structure in the highway right-of-way shown in **Figure 5-1** would result in an adverse visual impact north of I-57. The track structure would change the scale, density, and character of the residential neighborhood north of I-57, as presented in the Draft EIS.

Figure 5-1: Rendering of the Elevated Structure North of I-57, Looking East from 98th Place and Princeton Avenue

The elevated structure for the Preferred Alignment would run over the existing Fernwood Parkway between 99th Street and 103rd Street. In addition to shadows and light patterns created by the elevated structure, the removal of vegetation within Fernwood Parkway would alter the visual quality for the residential community to the west. Because of the high level of visual change, visual impacts between 99th Street and the 103rd Street station area would be adverse. Several buildings and vegetation along the west side of the existing UPRR corridor would be removed to accommodate the 103rd Street station and surface parking lot. The new station within the existing Fernwood Parkway would moderately alter the scale and density of the intersection. The creation of elevated platforms and track structure would have a high impact on the viewshed of residences adjacent to the project route and create new shadows. These impacts would be partially mitigated by using standard mitigation measures, including design of the station considering input from the surrounding neighborhood for the appearance of the station in the final design of the RLE Project and provision of landscaping (trees) as visual screening. Despite mitigation measures, impacts would still be high for adjacent residences due to the scale of the structure. **Figure 5-2** is a rendering of the elevated structure through Fernwood Parkway. **Figure 5-3** is a rendering of the 103rd Street station.

Figure 5-2: Rendering of the Elevated Structure at Fernwood Parkway, Looking South from Eggleston Avenue near 101st Place

Figure 5-3: Rendering of the 103rd Street Station, Looking East along 103rd Street

In the area of 107th Place, there were low and moderate impacts identified in the Draft EIS; however, the Preferred Alignment would have a higher elevation at this location in order to cross the UPRR. The residential character and scale would be considerably altered by the addition of the elevated structure. The elevated structure would be approximately 40 feet high to provide the required clearance over the UPRR tracks. Because of the height of the elevated 107th Place cross-over, the existing vegetation would not effectively block the views from adjacent residences, permanently changing the visual setting of the area. Because of the high level of visual changes, there would be adverse visual and aesthetic impacts on the residential neighborhood to the east of the UPRR tracks from the construction of the 107th Place cross-over. **Figure 5-4** and **Figure 5-5** are renderings of the 107th Place cross-over.

Mitigation measures include having the final design reflect the input from the community, replacement/restoration of removed vegetation, addressing neighborhood plan recommendations, shielding exterior lighting and/or use of "down lighting" light fixtures to prevent light pollution into nearby residences, providing landscaping (trees) as visual screening, and generally using good urban design to reduce adverse impacts in the API. Planting trees in front of the structures, where space allows, would provide additional mitigation measures for the 107th Place cross-over to break the sight lines. Planting trees on the west side of Eggleston Avenue north of the 103rd Street station would provide additional visual screening for the residences located on the west side of Eggleston Avenue. However, due to the proximity and height of the elevated structure to residential areas, impacts on visual and aesthetic conditions would remain adverse after mitigation.

Figure 5-4: Rendering of the 107th Place Cross-over, Looking Northwest from 108th Street

Figure 5-5: Rendering of the 107th Place Cross-over, Looking West from 107th Place

The 111th Street station would have a moderate visual impact. A minimal number of buildings would be removed. The new station at 111th Street would minimally change the character and density of the intersection at 111th Street and the existing UPRR tracks. The creation of elevated platforms and track structure would alter the viewshed of residences adjacent to the project route. The removal of vegetation to allow for the two surface parking lots would have a moderate impact on the surrounding neighborhood character. Impacts would be mitigated using standard mitigation measures, including landscaping (trees) as visual screening and design of the station considering input from the surrounding neighborhood for the appearance of the station in the final design of the RLE Project. **Figure 5-6** is a rendering of the 111th Street station.

Figure 5-6: Rendering of the 111th Street Station, Looking North from 111th Street

The Michigan Avenue station area would have a moderate visual impact. Several buildings would be removed along the existing UPRR corridor. The new station on the east side of the existing UPRR corridor would not change the character, scale, and density of the immediate area. Elevated platforms and track structure would minimally affect the viewshed of the surrounding area. The park & ride facility for the Michigan Avenue station has been refined from the Draft EIS and is now located on the north side of the existing UPRR track within a light industrial/commercial area. The height of the park & ride facility is in context with the surrounding community and would not be adverse after mitigation. Impacts would be mitigated using standard mitigation measures, which include designing the station and structures considering input from the surrounding neighborhood for the appearance of the station in the final design of the RLE Project, using urban design techniques to reduce adverse impacts, creating pedestrian friendly surroundings, and providing

landscaping (trees) as visual screening. **Figure 5-7** is a rendering of the Michigan Avenue station. **Figure 5-8** is a rendering showing the park & ride facility on the north side of the UPRR.

Figure 5-7: Rendering of the Michigan Avenue Station, Looking West from Kensington Avenue

Figure 5-8: Rendering of the Michigan Avenue Station Park & Ride Facility, Looking South along State Street from North of 115th Street

The area at 117th Street and Prairie Avenue would have a high visual impact. The viewshed includes highly vegetated railroad embankment with residential fabric of similar scale and style. The residential character and scale would be altered by the removal of some of the vegetation and neighborhood fabric with the construction of the elevated structure. Standard mitigation measures include using landscaping (trees) as visual screening to minimize adverse impacts. However, due to structure height, proximity to adjacent residences, and intact existing neighborhood fabric, impacts after mitigation would still be high, as presented in the Draft EIS.

Because the relocated 130th Street station would include a park & ride facility with a four-level garage and surface parking lot, and other structures, there would be a high level of visual change and therefore adverse visual impacts due to the relocation of the 130th Street station. This is a change from the Draft EIS. The residential character and scale would be considerably altered by the removal of vegetation and the addition of the park & ride facility and station for the residences that front Greenwood Avenue. **Figure 5-9** is a rendering of the 130th Street station. The visual impacts decrease the farther west a residential unit is located within the Altgeld Gardens neighborhood. **Figure 5-10** is a rendering of the 130th Street station deeper within the neighborhood. **Figure 5-11** is a rendering of the 130th Street station from the east along the access road in Beaubien Woods

Forest Preserve. Mitigation measures would include landscaping (trees) as visual screening, using urban design techniques to reduce adverse impacts, and creating pedestrian friendly surroundings.

Figure 5-9: Rendering of the 130th Street Station, Facing East from the Eastern Edge of the Altgeld Gardens Neighborhood

Figure 5-10: Rendering of the 130th Street Station, Facing Northeast from Ellis Avenue

Figure 5-2: Rendering of the 130th Street Station, Facing West from the Beaubien Woods Forest Preserve

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

Construction impacts and mitigation would be the same as described in **Section 5.3.2** of **Appendix N** in the Draft EIS.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along the Preferred Alignment.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

Adverse impacts for the Preferred Alignment would be minimized through various mitigation measures. At view locations where impacts would be low to moderate, visual and aesthetic impacts would be reduced or eliminated after standard mitigation measures. Due to the scale and height of the proposed improvements, the visual impacts in many instances could not be completely mitigated and would remain. Impacts at high impact views would be minimized by implementing many of the standard mitigation measures, as well as specific mitigation described for each view in **Section 5**. Typical adverse impacts that would remain after mitigation would include the replacement of existing cohesive fabric with large parking structures that would considerably alter the scale, character, and density of viewsheds. Despite mitigation measures such as planting vegetation, urban design techniques, stepping back massing, or using context sensitive design and materials, the contrasting mass would still be out of scale and character. Additionally, in many instances, despite mitigation such as incorporating planters and street trees and other methods of good urban design, the addition of stations and elevated structures would adversely affect neighborhood viewsheds, visual character, and cohesive neighborhood fabric. For structures immediately adjacent to the alignment, shadows would be created, which would alter the visual character of the area and could not be mitigated.

The following sections present a summary of the impacts that would remain after mitigation.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on visual and aesthetic conditions from the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

The Preferred Alignment would have permanent adverse visual and aesthetic impacts north of I-57, between 99th Street and the 103rd Street station area, near the 107th Place cross-over, at 117th Street and Prairie Avenue, and at the 130th Street station, despite implementation of mitigation measures.

Construction-related visual impacts would not be adverse and would include construction fencing, demolition of existing buildings, temporary walls, temporary street closures and related signage, temporary lighting or entrances, and/or shoring of concrete structures or existing viaducts.

Although construction-related visual impacts related to the Preferred Alignment would not be adverse, CTA would maintain as much existing vegetation as practical, including shielding of tree root zones to prevent construction damage to existing trees that would remain. Temporary construction impacts on neighborhoods would be minimized by limiting construction light infiltration into adjacent neighborhoods when nighttime work would be required. In addition, BMPs and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

Section 7 - References Cited

Chicago Transit Authority (CTA). 2016. Chicago Red Line Extension Draft Environmental Impact Statement and Section 4(f) Evaluation. Accessed at https://www.transitchicago.com/rle/drafteis/. Accessed on October 28, 2020.

Appendix N

Visual and Aesthetic Conditions Technical Memorandum

- Draft EIS Appendix N, Visual and Aesthetic Conditions Technical Memorandum, September 2015

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Visual and Aesthetic Conditions

Technical Memorandum

October 24, 2013
Updated September 18, 2015

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Table of Contents

Section 1 Summary 1-1
1.1 Permanent Impacts 1-1
1.2 Construction Impacts 1-2
1.3 Cumulative Impacts 1-2
1.4 2014-2015 Red Line Extension Project Update 1-3

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-2
3.3 Area of Potential Impact 3-3
3.4 Methods 3-5

Section 4 Affected Environment 4-1

Section 5 Impacts and Mitigations 5-1
5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-4
5.4 Union Pacific Railroad Rail Alternative - East Option 5-12
5.5 Union Pacific Railroad Rail Alternative - West Option 5-16
5.6 Halsted Rail Alternative 5-21

Section 6 Impacts Remaining After Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-2
6.5 Union Pacific Railroad Rail Alternative - West Option 6-2
6.6 Halsted Rail Alternative 6-2

Section 7 References Cited 7-1

Appendices

Appendix A - Visual and Aesthetic Conditions Visualizations
Appendix B - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Alternatives 2-2
Figure 3-1: Area of Potential Impact 3-4
Figure 4-1: Bus Rapid Transit Alternative 4-3
Figure 4-2: View Locations for the Bus Rapid Transit Alternative - North 4-4
Figure 4-3: View Locations for the Bus Rapid Transit Alternative - North Central 4-5
Figure 4-4: View Locations for the Bus Rapid Transit Alternative - South Central 4-6
Figure 4-5: View Locations for the Bus Rapid Transit Alternative - South 4-7
Figure 4-6: Union Pacific Railroad Rail Alternative 4-8
Figure 4-7: Union Pacific Railroad Rail Alternative View Locations - Segment UA North 4-9
Figure 4-8: Union Pacific Railroad Rail Alternative View Locations - Segment UA 4-10
Figure 4-9: Union Pacific Railroad Rail Alternative View Locations - Segment UA 4-11
Figure 4-10: Union Pacific Railroad Rail Alternative View Locations - Segment UA and UB 4-12
Figure 4-11: Union Pacific Railroad Rail Alternative View Locations - Segment UB 4-13
Figure 4-12: Halsted Rail Alternative 4-14
Figure 4-13: Halsted Rail Alternative View Locations - Segment HA 4-15
Figure 4-14: Halsted Rail Alternative View Locations - Segment HA 4-16
Figure 4-15: Halsted Rail Alternative View Locations - Segment HA 4-17
Figure 4-16: Halsted Rail Alternative View Locations - Segment HA and HB 4-18
Figure 4-17: Halsted Rail Alternative View Locations - Segment HB 4-19
Figure 4-18: Affected Environment - Typical I-94 Visual Condition 4-20
Figure 4-19: Affected Environment - Typical I-57 Visual Condition 4-20
Figure 4-20: Affected Environment - Typical Existing Union Pacific Railroad Condition 4-20
Figure 4-21: Affected Environment - Typical Intersection at Existing Union Pacific Railroad 4-21
Figure 4-22: Affected Environment - View of Roseland Pumping Station 4-21
Figure 4-23: Affected Environment - Typical Halsted Street Visual Condition 4-21

Tables

Table 3-1: Characteristics of High, Moderate, and Low Levels of Visual Change..... 3-5
Table 4-1: Affected Environment - Existing Visual Conditions Assessment 4-22
Table 5-1: Impacts - Bus Rapid Transit Alternative 5-3
Table 5-2: Impacts - Right of Way Option - Segment UA 5-8
Table 5-3: Impacts: Right of Way Option - Segment UB 5-11
Table 5-4: Impacts – East Option - Segment UA 5-15
Table 5-5: Impacts - West Option - Segment UA 5-19
Table 5-6: Impacts - Segment HA..... 5-23
Table 5-7: Impacts - Segment HB..... 5-26

Abbreviations

API	area of potential impact
BRT	Bus Rapid Transit
CSS & SBRR	Chicago South Shore & South Bend Railroad
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CFR	Code of Federal Regulations
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NICTD	Northern Indiana Commuter Transportation District
Metra	Northeast Illinois Regional Commuter Railroad Corporation
ME	Metra Electric District
RLE	Red Line Extension
ROW	right-of-way
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on visual and aesthetic conditions. The potential for impacts on visual and aesthetic conditions was evaluated for each project alternative, including the No Build Alternative, Bus Rapid Transit (BRT) Alternative, Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative. The UPRR and Halsted Rail Alternatives were divided into two segments for analysis. Segment UA consists of the UPRR Rail Alternative alignment north of Michigan Avenue and Segment UB consists of the alignment south of Michigan Avenue. Segment HA consists of the Halsted Rail Alternative alignment north of 119th Street and Segment HB is the alignment south of 119th Street. The visual and aesthetic analysis considered potential visual impacts on the visual environment, including changes to infrastructure, building mass and/or scale, visible density, landscape patterns, and viewers' sensitivities. The RLE Project corridor extends through a diverse mix of residential, commercial, and light industrial areas in the southern edge of Chicago. Developments in the project area include a diversity of scale, architectural style, and neighborhood character.

The visual analysis was based on fieldwork, professional judgment and analysis of the visual simulations included in Appendix A of this report. The following summarizes the results of the potential beneficial and adverse impacts analysis, both temporary and permanent, associated with the build alternatives.

1.1 Permanent Impacts

Typical positive impacts on visual and aesthetic conditions include creating visual density[1] and a visual gateway between two low-density areas. This addition can provide visual interest and aesthetically activate underdeveloped areas, especially where vacant lots or structures currently exist. In neglected or derelict areas, where project-related mitigation measures are utilized, visual quality for pedestrians and adjacent residences or businesses would improve. Examples include providing new vegetation, landscaping, or other urban design amenities.

Typical adverse impacts include the replacement of existing cohesive community fabric with large-scale parking structures that would substantially alter the scale, character, and density of viewsheds. The addition of stations and elevated structures could affect character and visual quality substantially, and would create new shadows and light obstructions on adjacent neighborhoods. In many, but not all, instances, mitigations such as designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening would help reduce visual and aesthetic impacts on viewsheds.

[1] Visual density relates to the massing of objects within a view. Density may be related to buildings or structures, but density may also be created with vegetation, landscaping, or other amenities.

Impacts related to each RLE Project alternative are summarized as follows:

- BRT Alternative - Impacts would be concentrated at the Kensington Avenue and 130th Street stops, where minor land acquisition and demolition would be required to accommodate a park & ride structure at each stop. The impacts from the BRT Alternative would not be adverse after mitigation.

- The UPRR Rail Alternative Right-of-Way (ROW) Option – After mitigation, impacts would not be adverse at the Michigan Avenue station and the area of the park & ride facility (View 13A). The mitigation would involve design features for the parking structure which create relief in the façade in order to match the residential pattern in the vicinity of the parking structure.

- The UPRR Rail Alternative East Option - Impacts would be **adverse** to the southeast of the Michigan Avenue station.

- The UPRR Rail Alternative West Option – Even after application of mitigation measures, impacts would be **adverse** from 99th Street to 103rd Street, including the 103rd Street station and the park & ride facility for the Michigan Avenue station. The height and mass of the structures and its proximity to residences could not be mitigated.

- The Halsted Rail Alternative would have **adverse** impacts in Segment HA in the area at the transition from the I-57 ROW to Halsted Street (see View 23). The visual impact due to the height of the elevated structure could not be mitigated. The Vermont Street station in Segment HB would have **adverse** impacts after mitigation. The height of the structure and its proximity to residences could not be mitigated.

1.2 Construction Impacts

Construction activities associated with the alternatives would cause temporary impacts on visual and aesthetic conditions. The amount of construction activity proposed under the UPRR Rail Alternative East and West Options would be greater than for other options and alternatives due to land acquisition and demolition. Maintaining as much vegetation as practical, limiting light trespassing from night lighting, and maintaining debris-free construction areas are all discussed as construction mitigations to minimize the temporary visual impacts.

1.3 Cumulative Impacts

The No Build Alternative would not cause cumulative impacts. Any proposed developments already being considered for development within the RLE Project corridor would still occur under the No Build Alternative. There are no future developments planned for the project corridor that would have cumulative impacts on visual and aesthetic conditions with the BRT Alternative, UPRR Rail Alternative, or Halsted Rail Alternative.

1.4 2014-2015 Red Line Extension Project Update

Updated July 28, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix B of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix B supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
    - ROW Option
    - East Option
    - West Option
- Halsted Rail Alternative

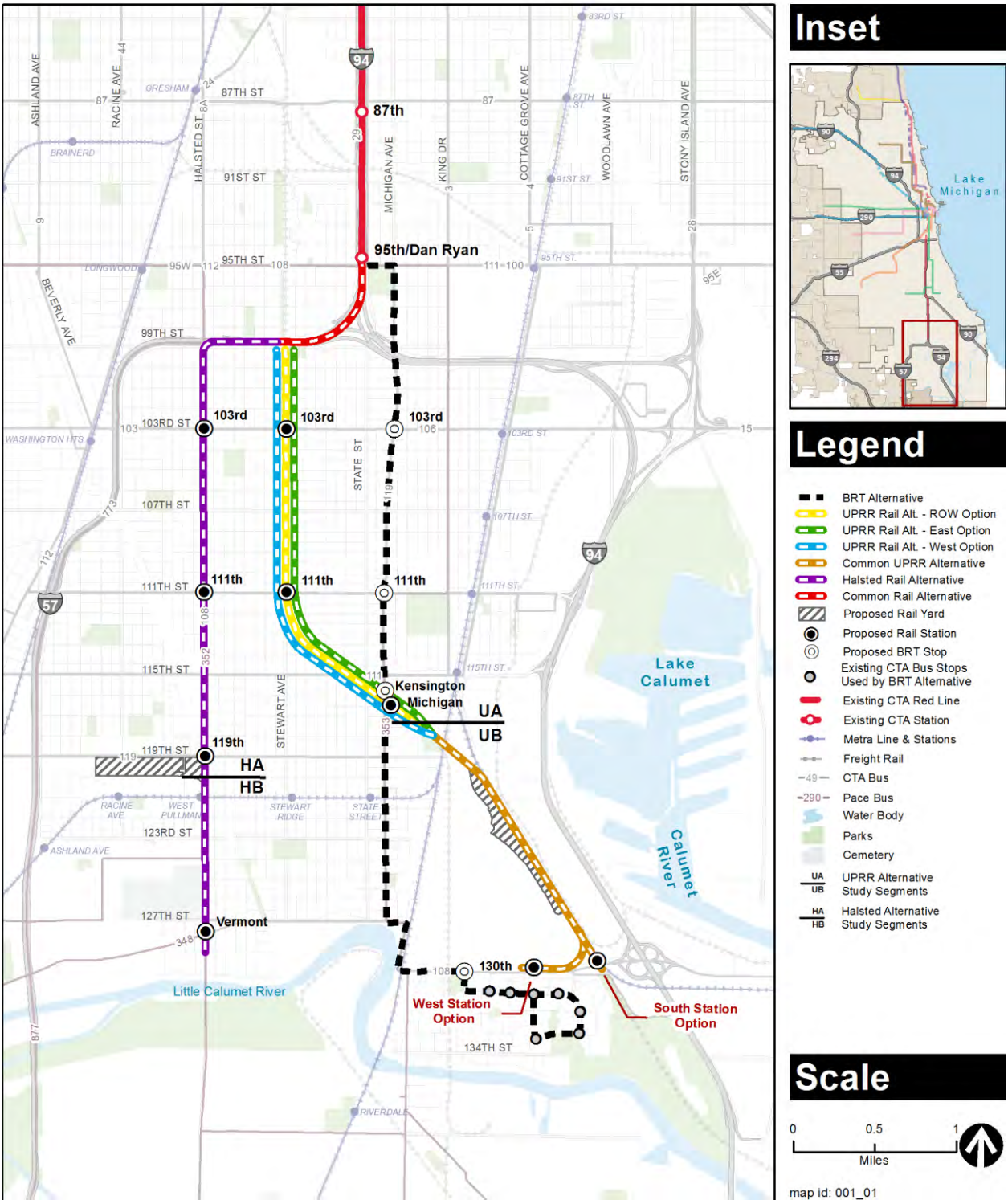

Figure 2-1: Red Line Extension Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra Electric District's (ME) facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National (CN)/ME tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

Impacts on the visual and aesthetic conditions include changes to the existing condition and visible environment that would be brought on by construction and operation of the RLE Project alternatives. Depending on location, these changes might adversely affect or positively enhance the visual environment and might have varying degrees of impact on viewer sensitivity.

3.1 Regulatory Framework

This section summarizes relevant federal, state, and local laws and regulations that guided the aesthetic and visual analysis.

3.1.1 Federal

For historic properties, Section 106 of the National Historic Preservation Act (NHPA) as amended in 1966 [36 Code of Federal Regulations [CFR] § 800.5(a)(2)] regulates activities that could diminish the visual integrity of a property's significant historic features. Potential visual impacts on historic resources were evaluated in the *Historic and Cultural Resources Technical Memorandum*.

Title 23, Section 162 of the United States Code designates National Scenic Byways or All-American Roads based on archaeological, cultural, historic, natural, recreational, and scenic qualities. The RLE Project would not affect any such designated byways or roadways and these are not discussed further in this document.

3.1.2 State

Context Sensitive Design - Public Act 093-0545, Context Sensitive Solutions, is an interdisciplinary approach that seeks effective, multimodal transportation solutions by working with stakeholders to develop, build, and maintain cost-effective transportation facilities that fit into and reflect the project's surroundings—its "context." Through early, frequent, and meaningful communication with stakeholders, and a flexible and creative approach to design, the resulting projects are intended to improve safety and mobility for the traveling public, while preserving and enhancing the scenic, economic, historic, and natural qualities of the settings through which they pass.

3.1.3 Local

The RLE Project would occur within the jurisdiction of the City of Chicago for each of the planned alternatives. In addition, a portion of the Halsted Rail Alternative alignment borders the Village of Calumet Park. The City of Chicago has guidelines or ordinances governing aspects of the aesthetics of developments including the following:

- City of Chicago Zoning Ordinance and Land Use Ordinance - Municipal Code Titles 16 and 17. The City of Chicago's Zoning Ordinance includes requirements for review of Planned

Developments (17-8-0500) including all development using Air Rights (17-8-0501). In addition to the review of building designs and plans, the zoning ordinance requires adherence to the City of Chicago's Landscape Ordinance.

- City of Chicago Landmarks Ordinance - Municipal Code Title 2, Chapter 120, Article XVII. The City of Chicago Landmarks Ordinance requires that buildings designated or "pending" landmarks be reviewed by the Commission on Chicago Landmarks.

- Community and Neighborhood Plans and Studies.

The Village of Calumet Park uses the Code of Ordinances to govern aspects of the aesthetics of developments.

3.2 Impact Analysis Thresholds

Although NEPA offers no specific thresholds for visual significance, the following thresholds were used to identify adverse impacts. For the purpose of this EIS, an impact would be adverse if it resulted in one of more of the following:

- A major change in the community's aesthetic character

- A major incompatibility with the character of the area (i.e., a project feature would contrast strongly with its surroundings)

- Incompatibility with community goals

- A substantial degradation of the existing visual character or quality of a site and its surroundings

- Impacts on a historic site through extensive remodeling or removal of buildings or their surrounding area

- Creation of new shade and shadow effects

In addition to the thresholds listed above which are related to the change in the resource, determination of impacts is influenced by a more subjective measure termed viewer response. Viewer response is related to factors such as number of people in each viewer group and distance between the viewer group and resource. Related to the number of people in each viewer group, if few people are able to view the change in resource, the impact may be low.[2] Related to the distance between the viewer group and the resource, a change in resource that is far away from viewers may be a low impact even if the change in resource is quite substantial because the ability to see the details of an object decreases with distance (USDOT 1981).

[2] Note that no counts of the number of people in a viewer group were made. Size of the viewer groups was made by professional judgment based on adjacent land use and housing density.

3.3 Area of Potential Impact

The geographic area of potential impact (API) for aesthetics includes all areas along the RLE Project corridor within visual range of major viewer groups, including residents, business owners, recreationists, commuters, and visitors. The distance of the API from the path of the RLE Project would depend on the existence of view corridors. View corridors, including parks and streets, can increase the API. View corridors perpendicular to the project area are assumed to be ¼ mile. Figure 3-1 shows the API.

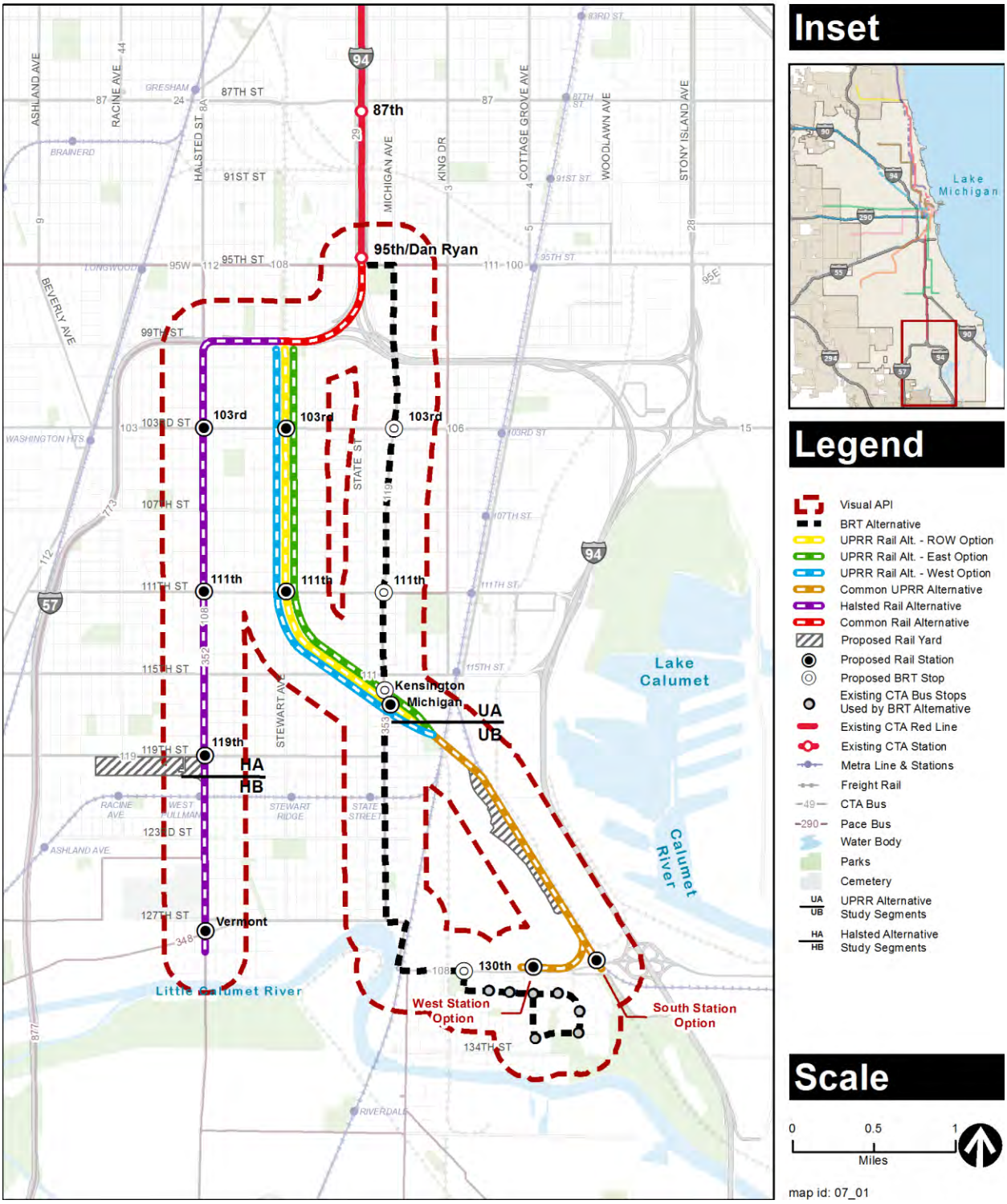

Figure 3-1: Area of Potential Impact

3.4 Methods

It is imperative when evaluating visual and aesthetic conditions to apply an objective process of uniform criteria. Areas of study were developed through fieldwork, evaluations of the scoping document public comments, community planning documents, and analysis of viewsheds.

The identified potential viewsheds included the following types:

- Views to and from historic, or potentially historic, structures or districts
- Views where the project features (either horizontal or vertical) might negatively affect the visual character of the viewshed, including changes to the scale and character of the neighborhood
- Views depicting built or natural features that might be negatively affected by shade and shadow from new structures.
- Notable views of natural features, including waterways or open space.

Potential viewsheds were inventoried and documented with photographs (Appendix A).

Characteristics of *Visual Changes* were categorized by a ranking of the degree of change on the given environment. Table 3-1 identifies the characteristics used to determine the visual change for a viewshed.

Table 3-1: Characteristics of High, Moderate, and Low Levels of Visual Change

High Level of Visual Change	Moderate Level of Visual Change	Low Level of Visual Change
Removal of Historic Building	Moderate Property Displacement	Maintaining Existing Scale
Removal of Historic Neighborhood	Moderate Change in Scale	No Removal of Vegetation
Displacement of Community	Moderate Removal of Vegetation	Similar Construction
Substantial Property Displacement		Within Existing Row
Substantial Change in Scale		Low View Disruption
Blocking Historic or Scenic Views		Low Property Displacement
Removal of All Vegetation		

In addition to classifications of visual change, the identification and determination of *Viewer Sensitivity* (*Federal Highway Administration Visual Impact Assessment for Highway Projects*, p. 63) was taken into consideration. Depending on which user groups interact the most with a given viewshed, and their priorities, the level of significance might increase or decrease. Major viewer groups along the RLE Project corridor include residents, business owners, recreationists, commuters, and visitors:

- *Residents* are defined as individuals residing within direct visual contact of the project area, who typically have a high sensitivity to visual change due to a high degree of familiarity with their surroundings and high level of frequency of visual interaction.

- *Business Owners* are operators of businesses within direct visual contact of the project area and who also typically have a high sensitivity to visual change based on familiarity with the existing conditions and frequency of interaction.

- *Recreationists* are individuals that may walk, run, or bike in direct visual contact of the project area. Individuals using parks are considered recreationists in this assessment. Recreationists have a higher sensitivity to changes to scenic views, historic neighborhoods, displacement of community, or removal of vegetation than other viewers.

- *Commuters* would view the project area in the course of daily travel to and from their ultimate destination. Commuters would typically show less visual sensitivity than other viewers because they are travelling through the project area or traveling to reach a destination within the project area. Commuters living in the immediate vicinity would be categorized as residents.

- *Visitors* are individuals who rarely have visual interaction with the project area and have little familiarity with existing conditions. Visitors would be most affected by changes to historic buildings or structures, and by the blocking or removal of scenic views.

Fifty-two viewsheds from the project area for the BRT, UPRR, and Halsted Rail Alternatives were selected for further analysis. These locations were studied using photo montage techniques for overlaying a 3D graphic rendering of a typical station on photographs representing the viewshed. Rankings of *Visual Impact*, *Viewer Sensitivity* were summarized for each location to determine a comprehensive level of impact in Section 5 of this document. Visual illustrations are provided in Appendix A.

Section 4
Affected Environment

The affected environment includes the existing visual conditions surveyed in the API. The existing conditions and the level of visual quality were used as a baseline to measure the visual impacts of each proposed alternative. For the purpose of this report, all of the RLE alternatives except the BRT Alternative have been subdivided into two segments per alternative. Figure 2-1 shows the alternatives and segment divisions, and Figures 4-1 through 4-17 show the alternatives and the specific viewpoint locations for each alternative. Figures 4-18 through 4-23 illustrate the typical conditions within each segment.

The RLE alignment would run through a diverse mix of land uses including residential, commercial, and light industrial. Each RLE alternative alignment, except for the BRT Alternative, would begin at the existing 95th Street Terminal and would run south along I-94, then curve west to follow I-57. Figures 4-18 and 4-19 show typical visual conditions along this corridor. This segment of the corridor provides a relatively cohesive landscape for all proposed alternatives.

The BRT Alternative would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. The BRT Alternative is shown on Figure 4-1. The low- to medium-density corridor consists of one- to two-story residential and light commercial structures. There is little to no architectural character or significance along the alternative corridor, shown in View 40 in Appendix A. On-street parking and generous sidewalks flank both sides of Michigan Avenue. Areas of visual interest include new development between 104th and 107th Streets and Lion Field between 124th and 125th Place. The portion of the route south of 120th Place is partially lined with trees and consists of mostly residential structures with relatively cohesive character. The portion of the BRT Alternative alignment south of Michigan Avenue runs through a low-density residential and light commercial district until 130th Street and Eberhart Avenue, near the Altgeld Gardens neighborhood. Refer to View 41 in Appendix A. Figures 4-2 through 4-5 show viewpoint locations for the BRT Alternative and Table 4-1 provides a summary of the existing viewpoints for the BRT Alternative. The table contains the description of the characteristics and baseline condition assessment for the existing visual quality.

The UPRR Rail Alternative alignment south of I-57 runs along an existing railroad corridor that is surrounded by a mix of residential and light commercial districts. Figure 4-6 shows the segments and options of the UPRR Rail Alternative. UPRR Rail Alternative Segment UA (north of 117th Street) encompasses residential development consisting of one- to two-story structures of similar style. Light commercial buildings are typically at intersections that meet the existing UPRR tracks at grade. A substantial portion of the development in this segment is vacant and contains minimum architectural embellishments. Figures 4-20 and 4-21 show typical conditions along this segment. The Roseland pumping station at 104th Street and Harvard Avenue is one of the few structures in the area with architectural character and is shown in Figure 4-22. Segment UB (UPRR Rail Alternative south of Michigan Avenue) runs along the Metropolitan Water Reclamation District property and terminates just north of the Altgeld Gardens neighborhood.

Views 18 and 41 in Appendix A show typical conditions in this area. Aside from the neighboring residences, this area has a light industrial character. The partially vacant neighborhood is relatively isolated between 130th Street, I-94, and Little Calumet River. Figures 4-7 through 4-11 show viewpoint locations for the UPRR Alternative and Table 4-1 provides a summary of the existing viewpoints for the UPRR Alternative. The table contains the description of the characteristics and baseline condition assessment for the existing visual quality.

The Halsted Rail Alternative alignment runs south along Halsted Street through a light commercial and retail corridor surrounded by residential districts. Figure 4-12 shows the Halsted Rail Alternative segments. The architectural style and character along both Segment HA and HB is relatively consistent, comprising one- to two-story structures with minimal architectural detail. Large sidewalks and parking lanes flank both sides of Halsted Street, while the street itself contains two through lanes in either direction. Figure 4-23 shows a typical visual condition along Halsted Street. Segment HA (Halsted Rail Alternative north of 119th Street) is low to moderate density and many of the commercial structures have adjacent parking lots. This portion of Halsted Street contains planters along a tree-lined median and is shown in Views 23 and 24 in Appendix A. Segment HB (Halsted Rail Alternative south of 119th Street) has an older, more commercial character but is still low to moderate density. Views 34 and 35 in Appendix A show typical conditions along this segment. The Halsted Rail Alternative alignment runs past Cedar Park Cemetery and terminates north of the bridge that carries Halsted Street over the Little Calumet River. Figures 4-13 through Figure 4-17 show viewpoint locations for the Halsted Street Alternative and Table 4-1 provides a summary of the existing viewpoints for the Halsted Street Alternative. The table contains the description of the characteristics and baseline condition assessment for the existing visual quality.

Land acquisition would be required for all UPRR Rail Alternative options and the Halsted Rail Alternative along the RLE Project corridor. Required building demolition would have impacts on the surrounding scale and character of affected areas by various degrees. Due to the large area of potential impact, not all affected viewsheds are discussed in Table 4-1. Visualization illustrations of project impacts were completed on representative areas and those with highest potential visual impact; thus, only those selected viewsheds have been shown in Table 4-1.

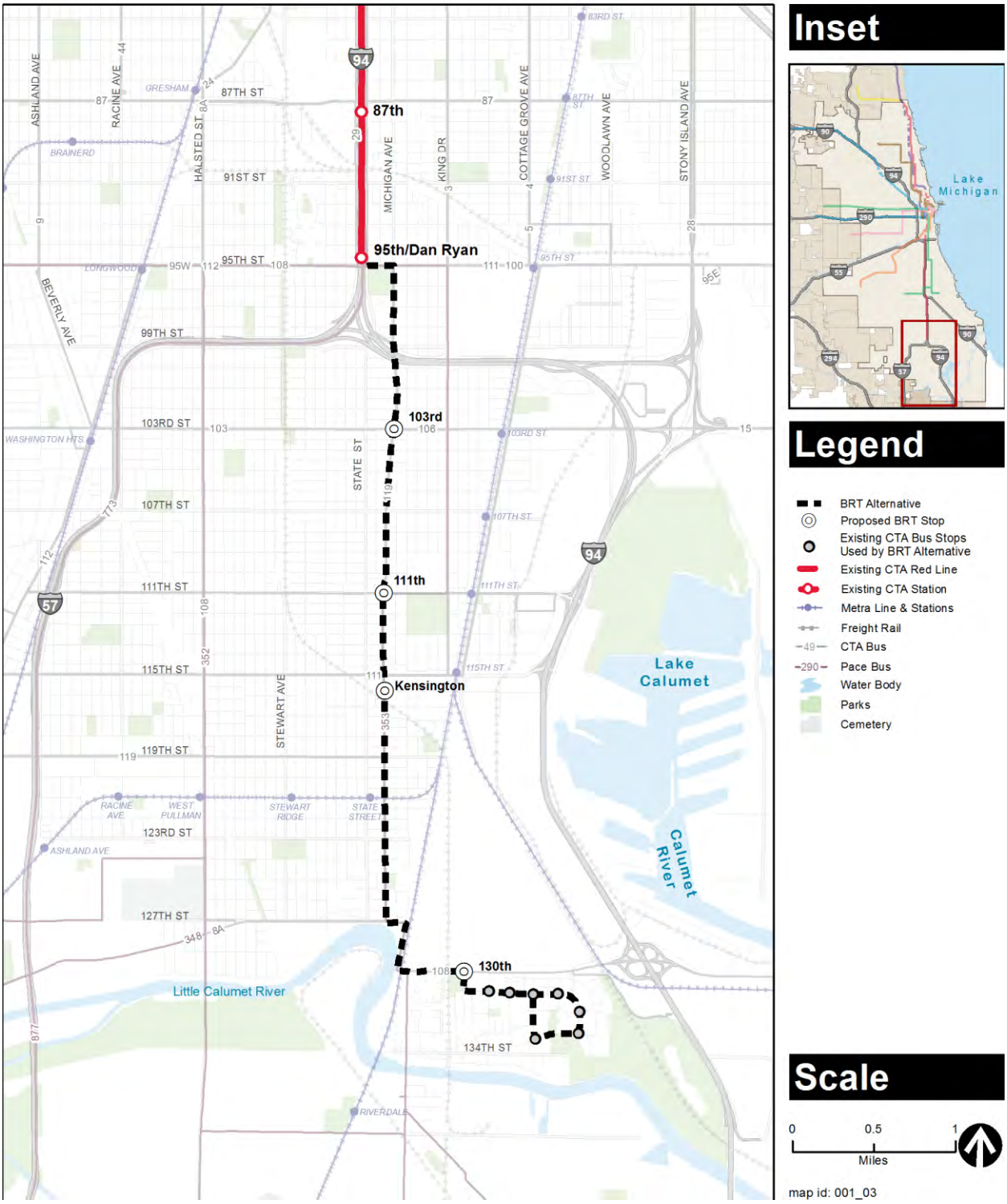

Figure 4-1: Bus Rapid Transit Alternative

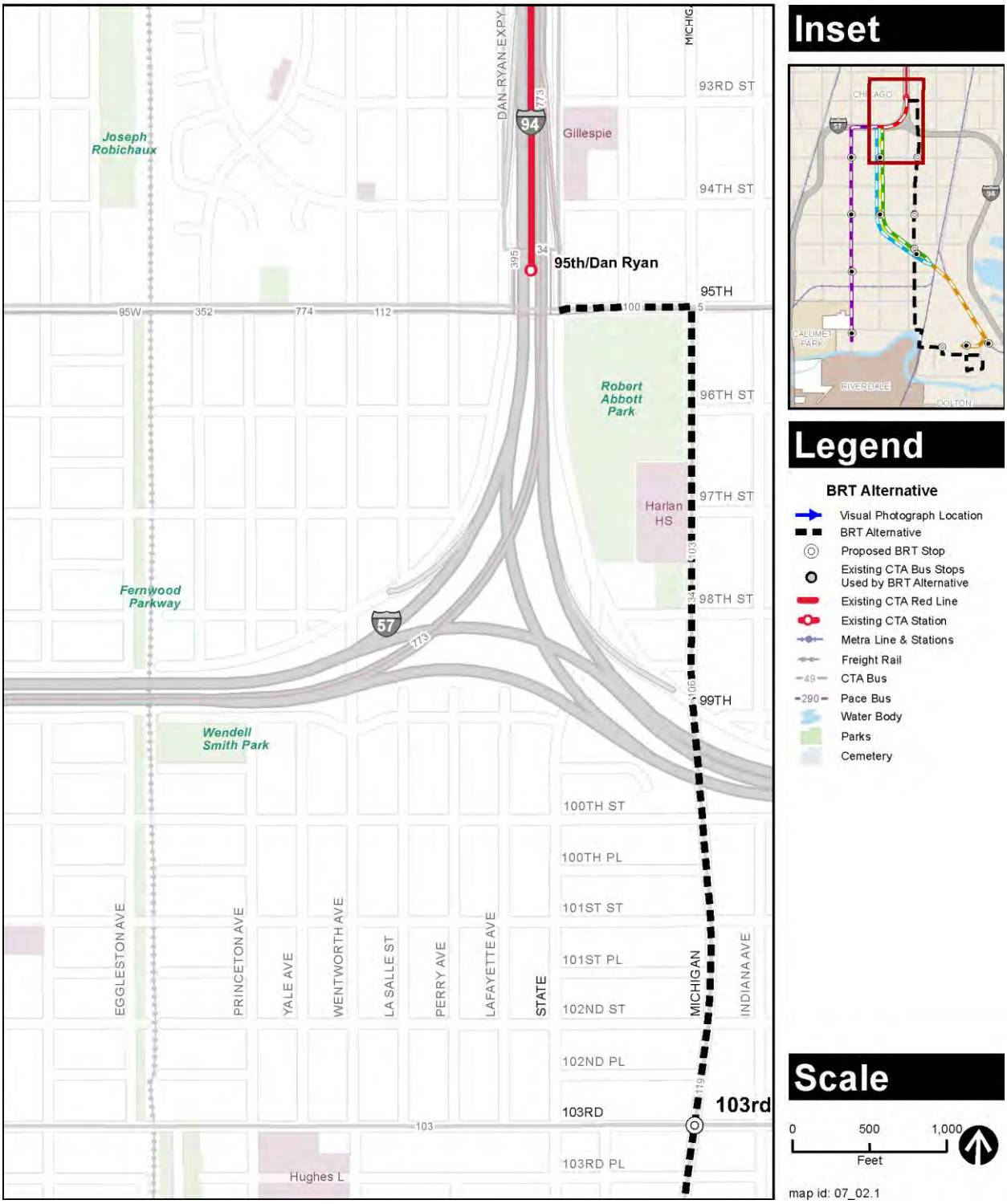

Figure 4-2: View Locations for the Bus Rapid Transit Alternative - North

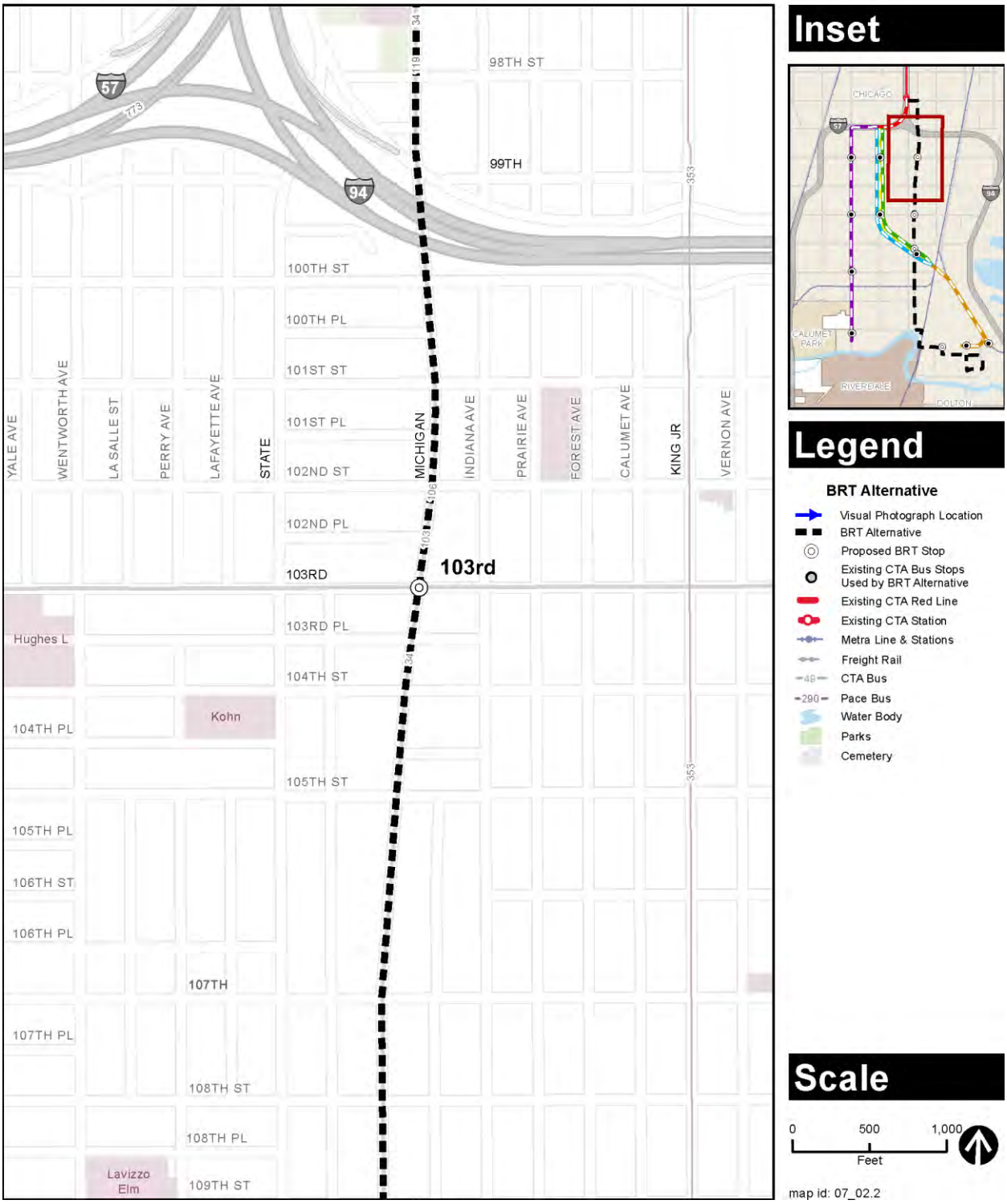

Figure 4-3: View Locations for the Bus Rapid Transit Alternative - North Central

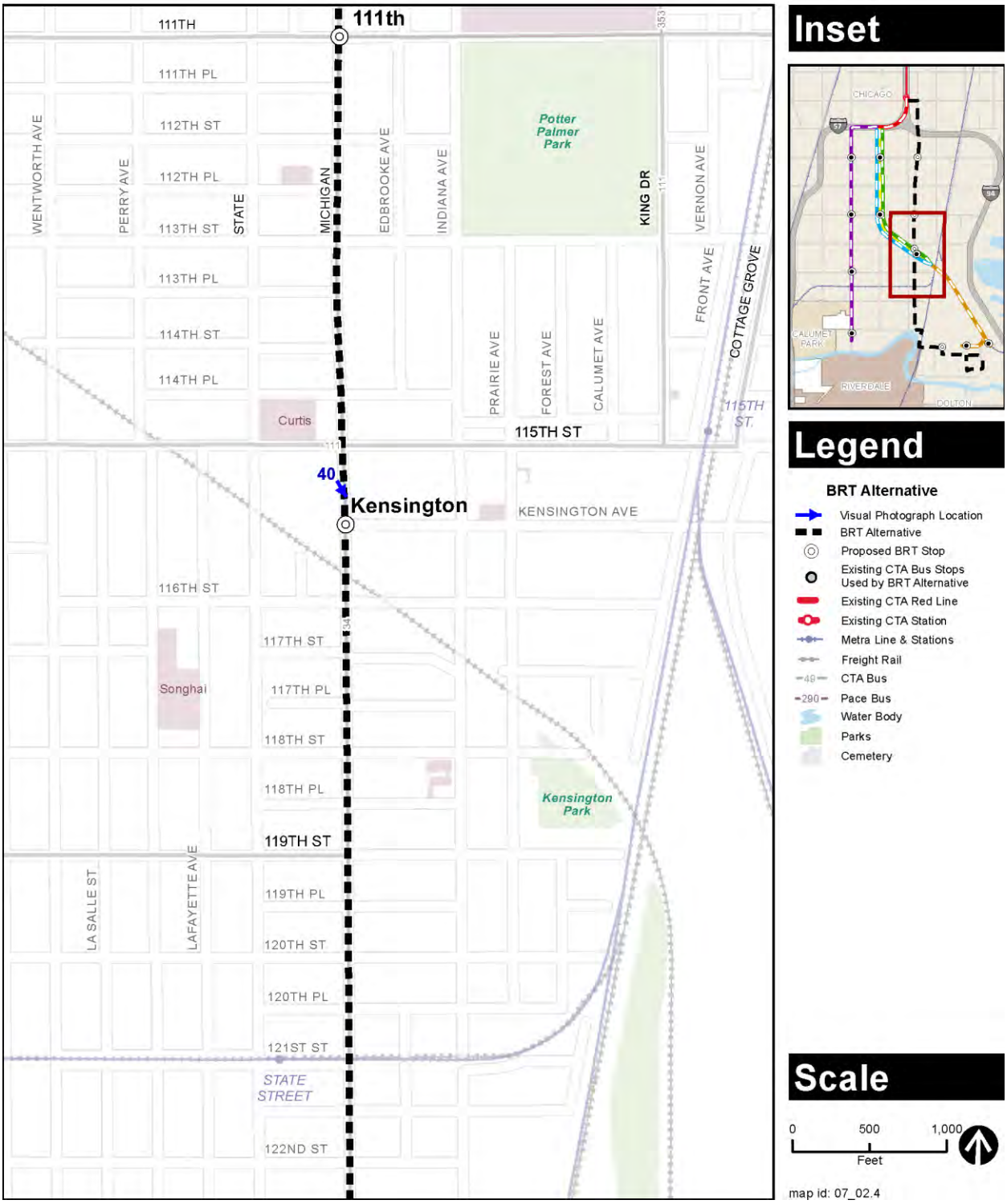

Figure 4-4: View Locations for the Bus Rapid Transit Alternative - South Central

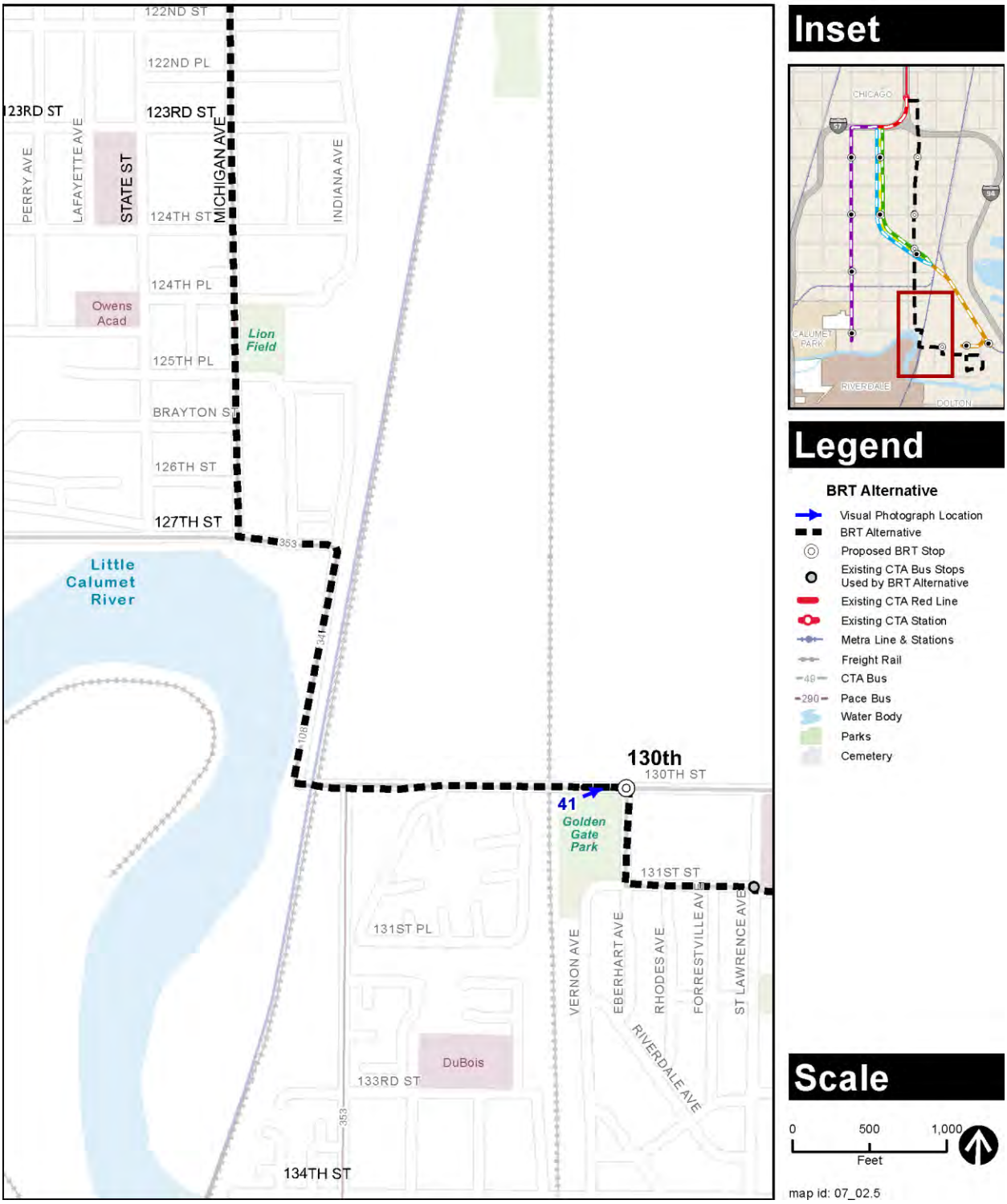

Figure 4-5: View Locations for the Bus Rapid Transit Alternative - South

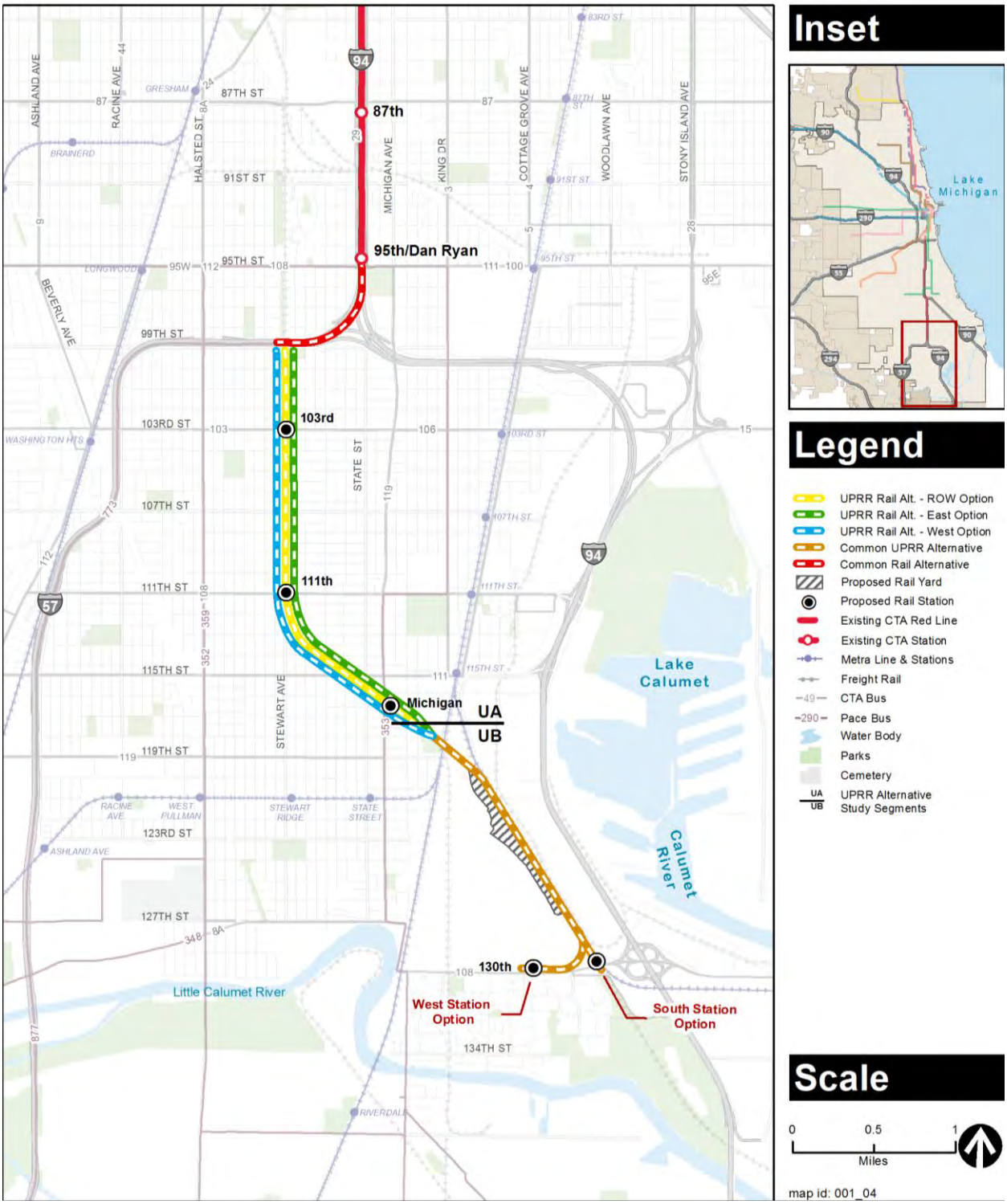

Figure 4-6: Union Pacific Railroad Rail Alternative

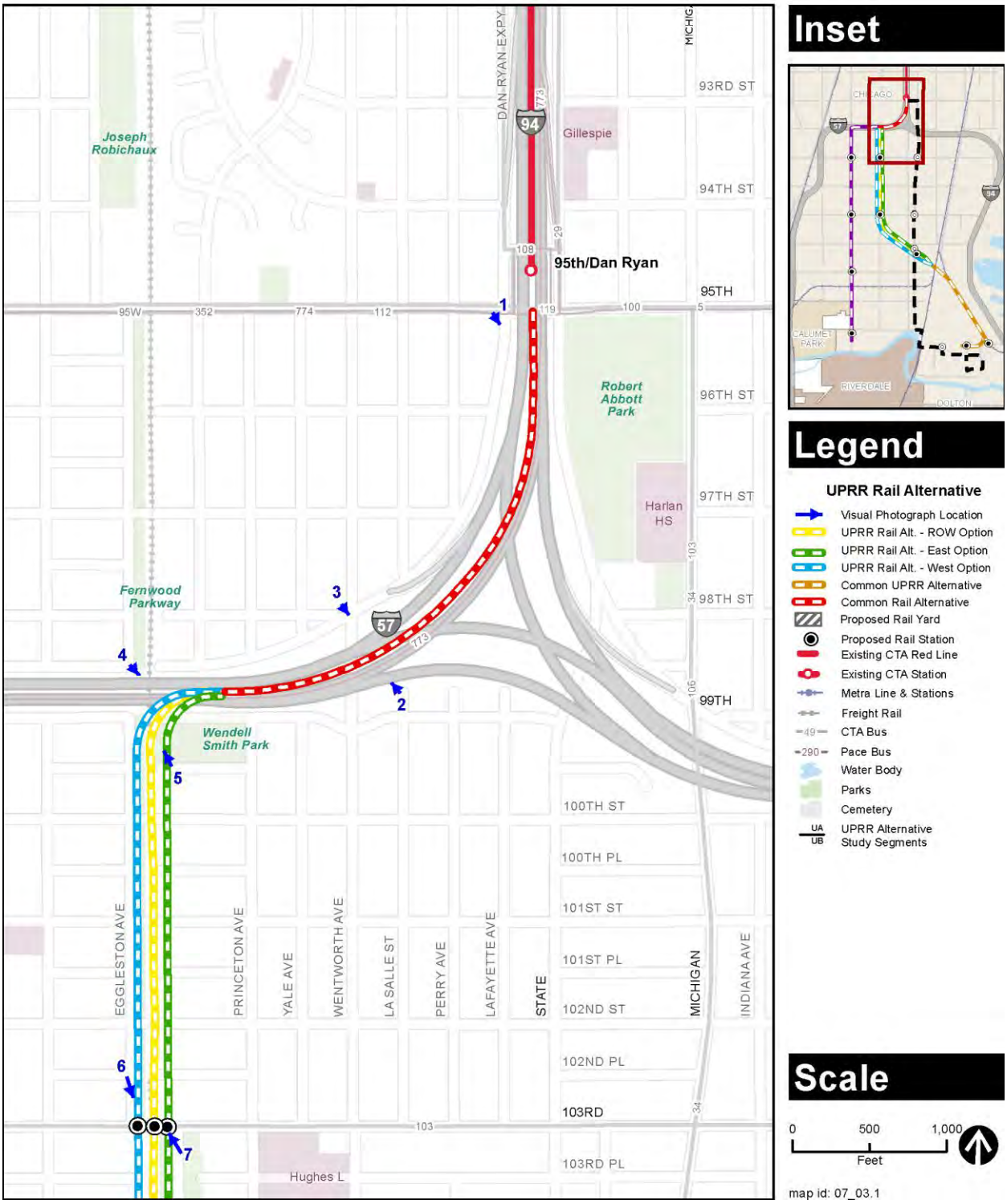

Figure 4-7: Union Pacific Railroad Rail Alternative View Locations - Segment UA North

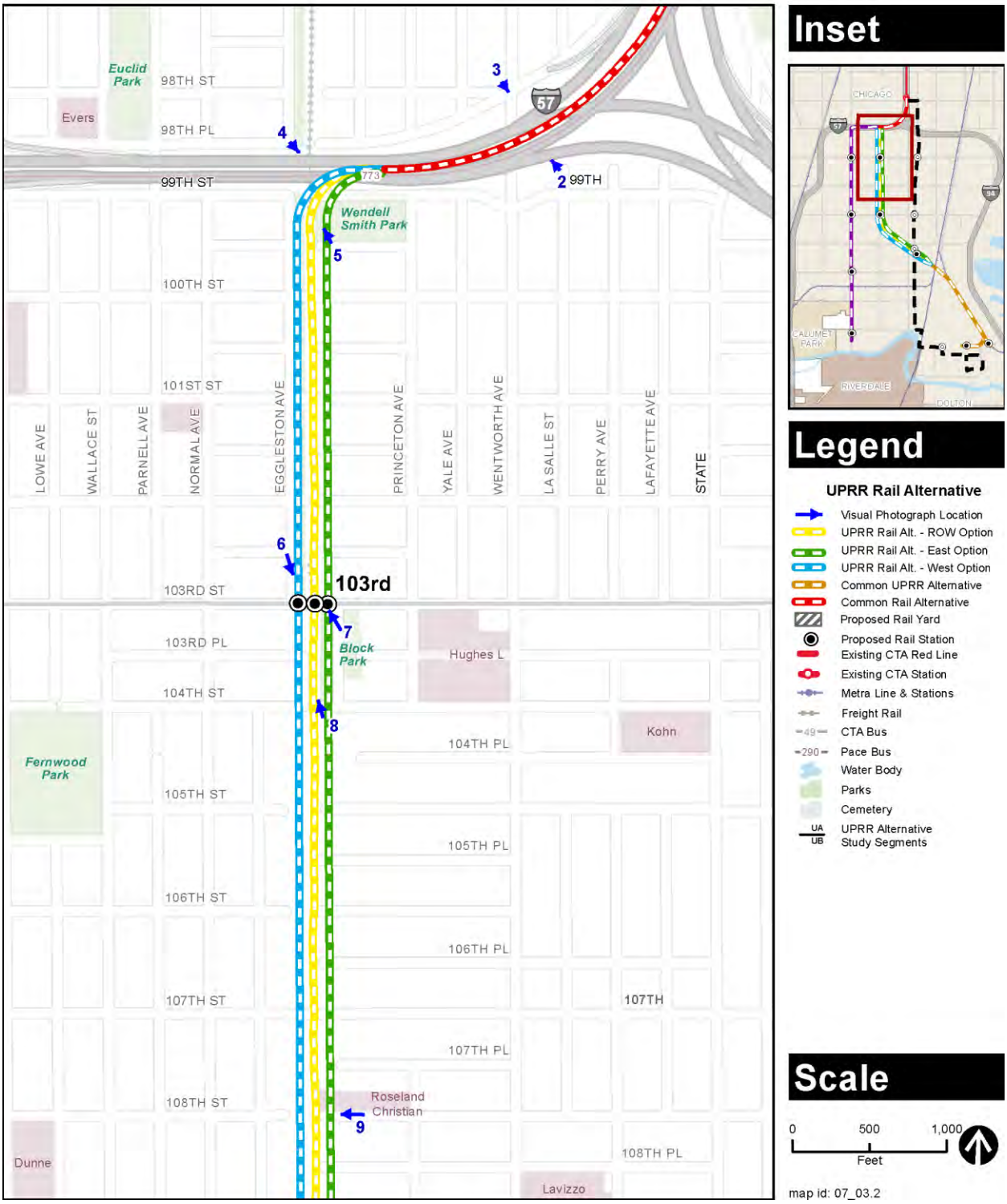

Figure 4-8: Union Pacific Railroad Rail Alternative View Locations - Segment UA

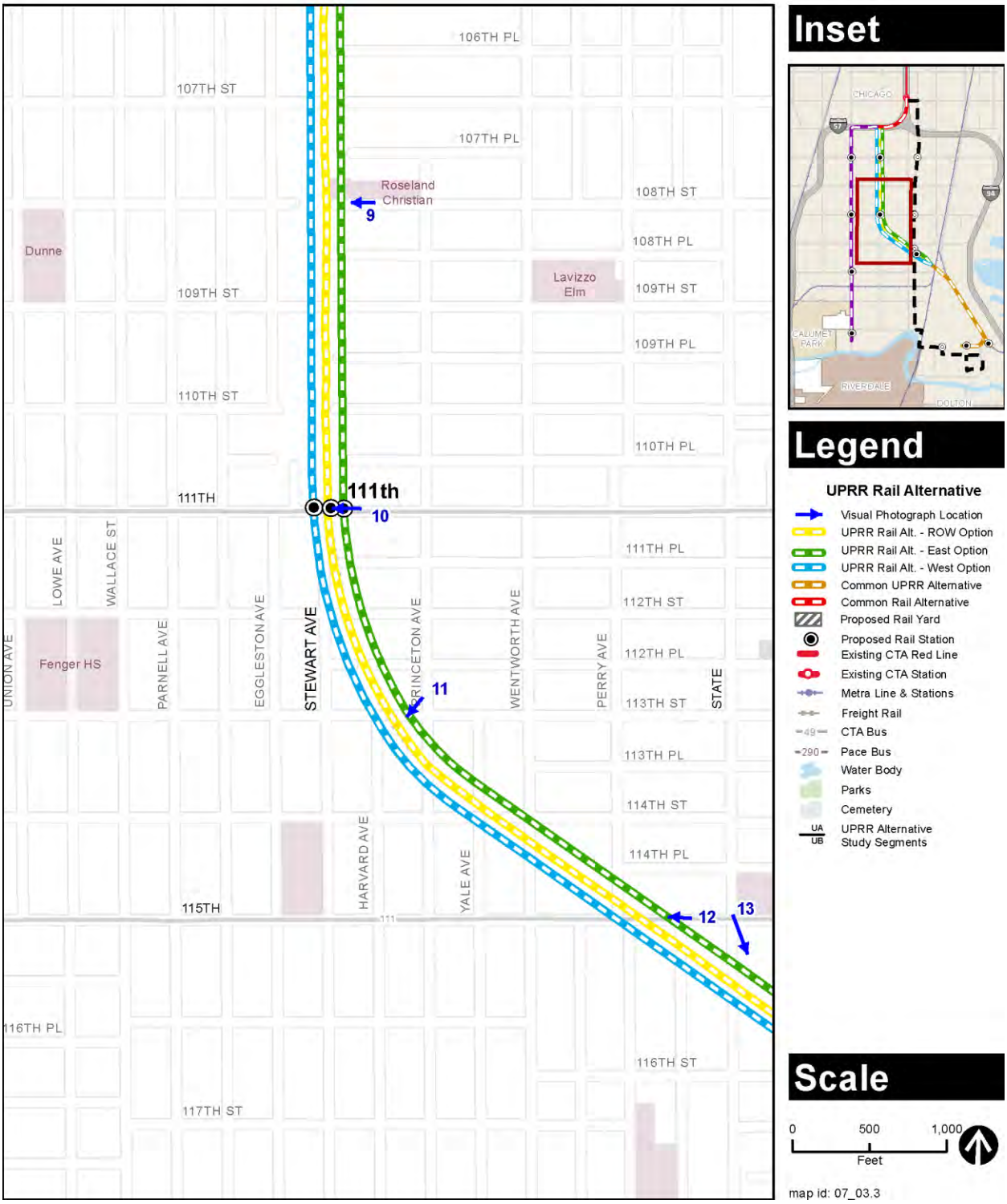

Figure 4-9: Union Pacific Railroad Rail Alternative View Locations - Segment UA

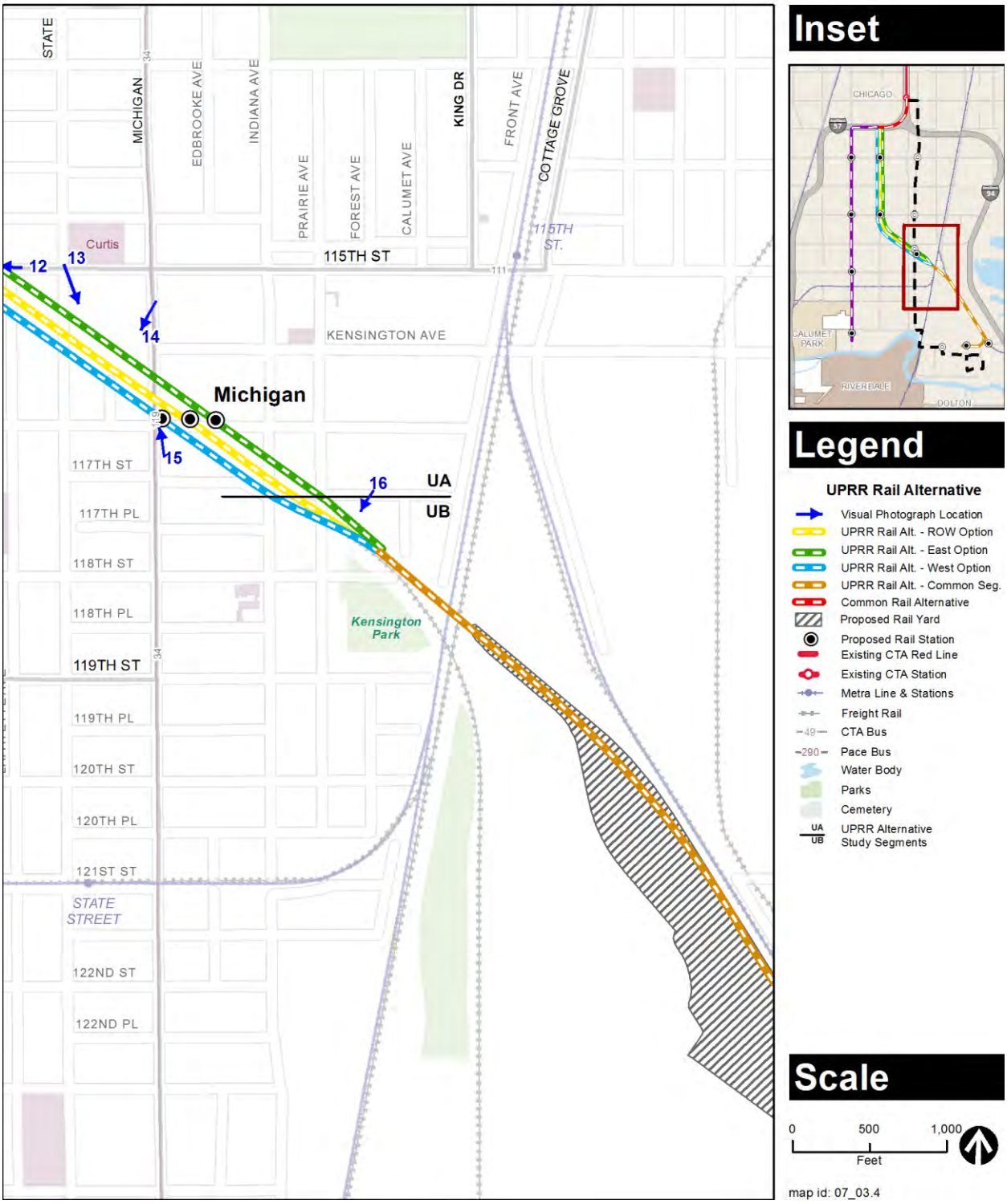

Figure 4-10: Union Pacific Railroad Rail Alternative View Locations - Segment UA and UB

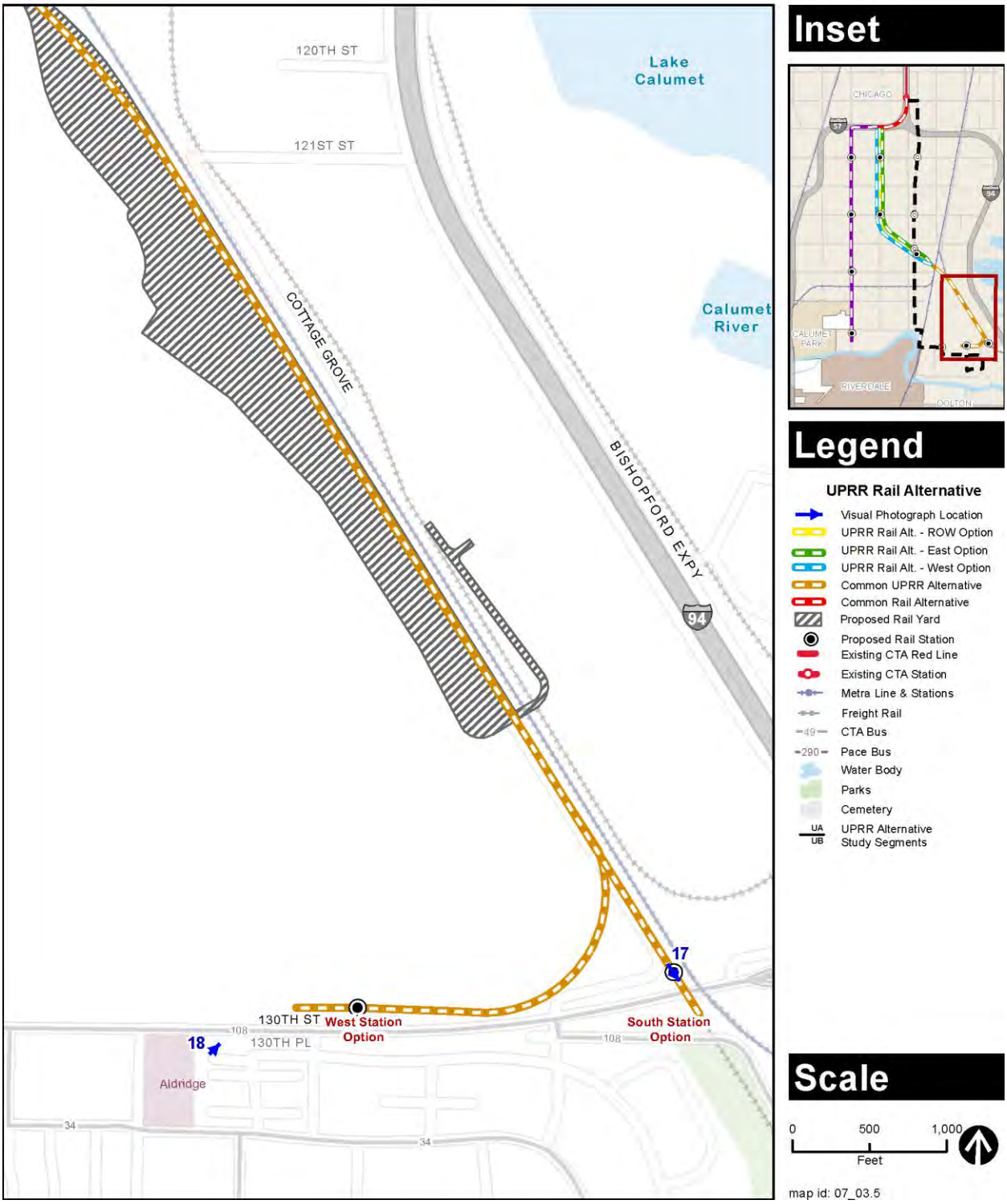

Figure 4-11: Union Pacific Railroad Rail Alternative View Locations - Segment UB

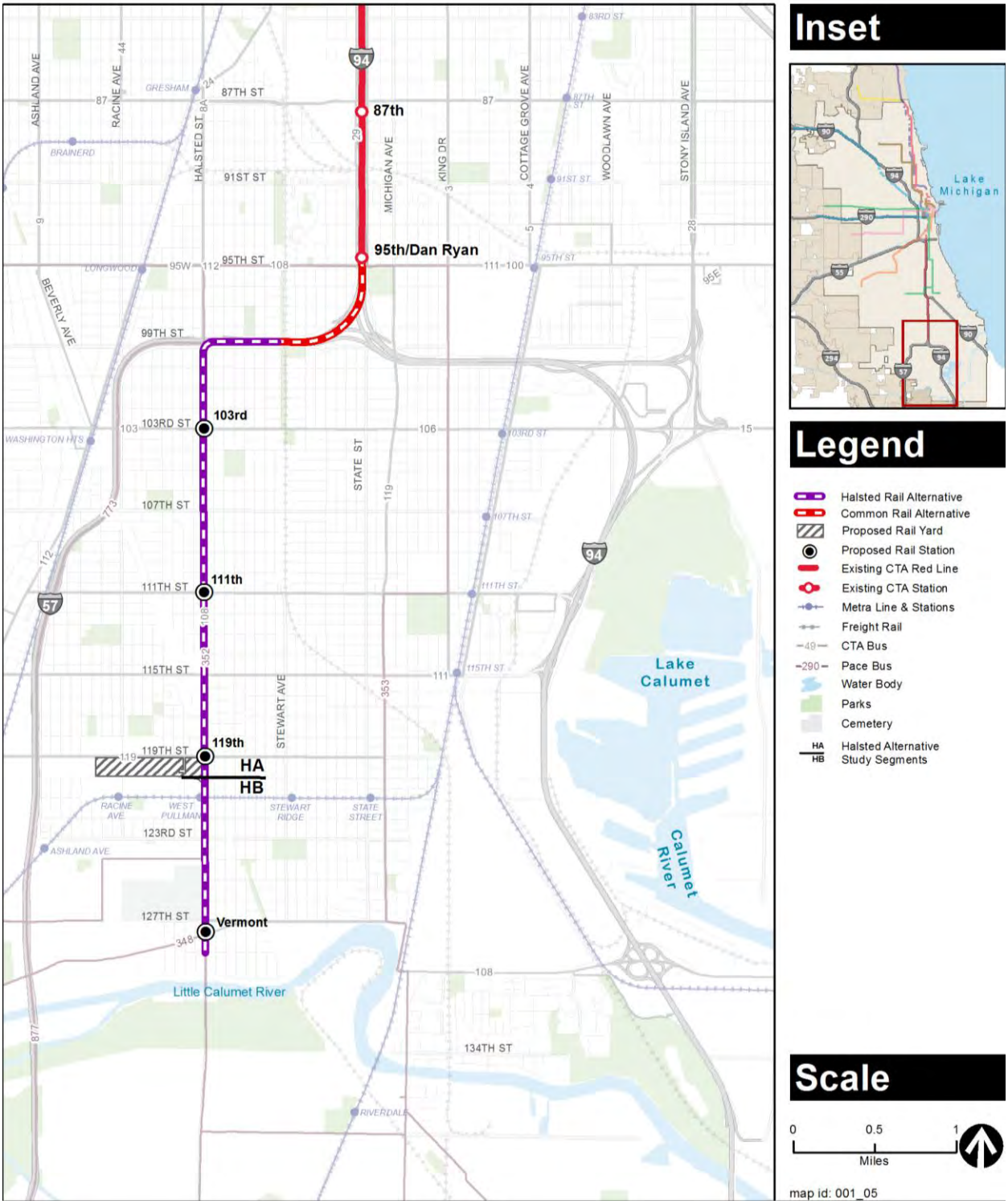

Figure 4-12: Halsted Rail Alternative

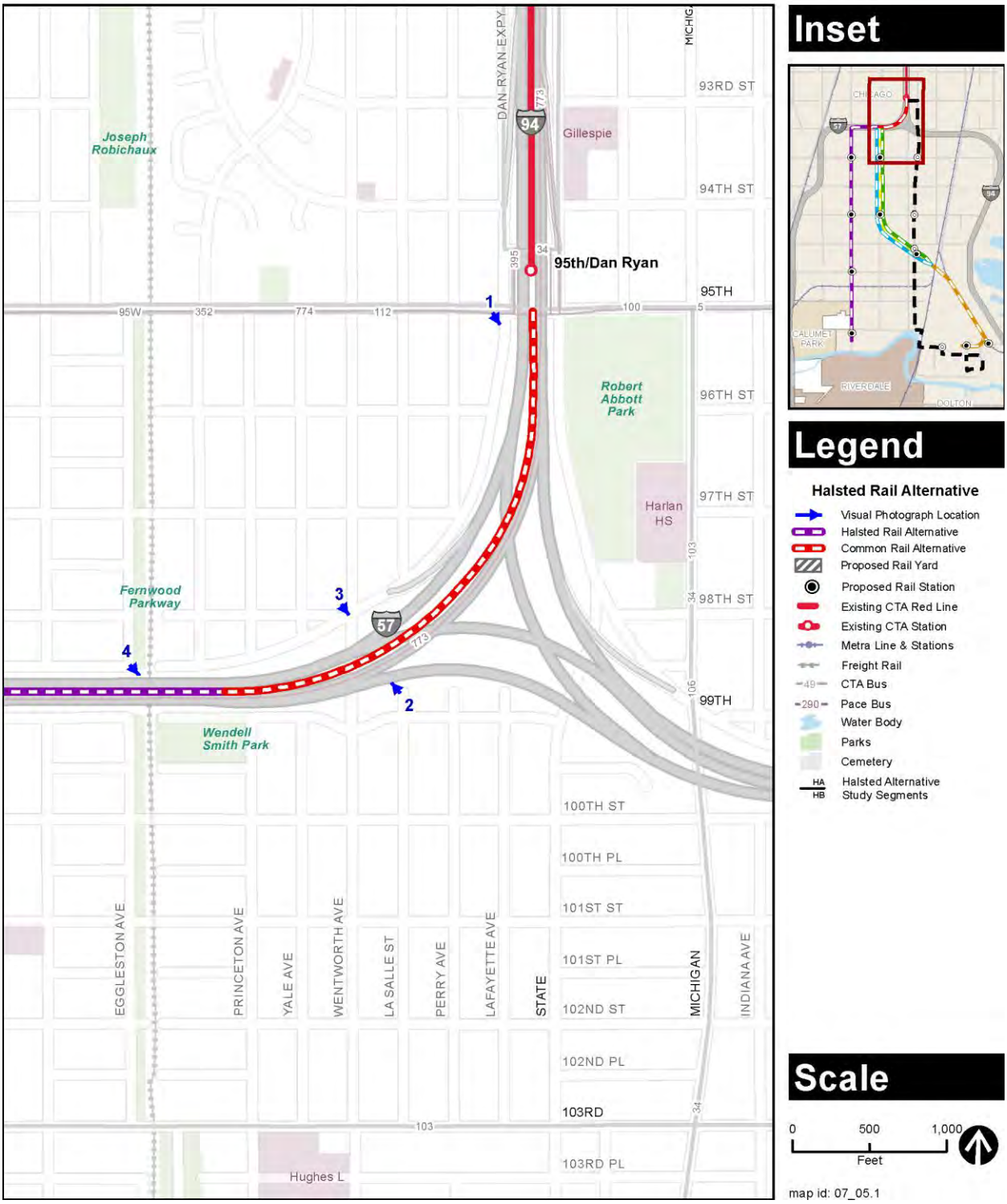

Figure 4-13: Halsted Rail Alternative View Locations - Segment HA

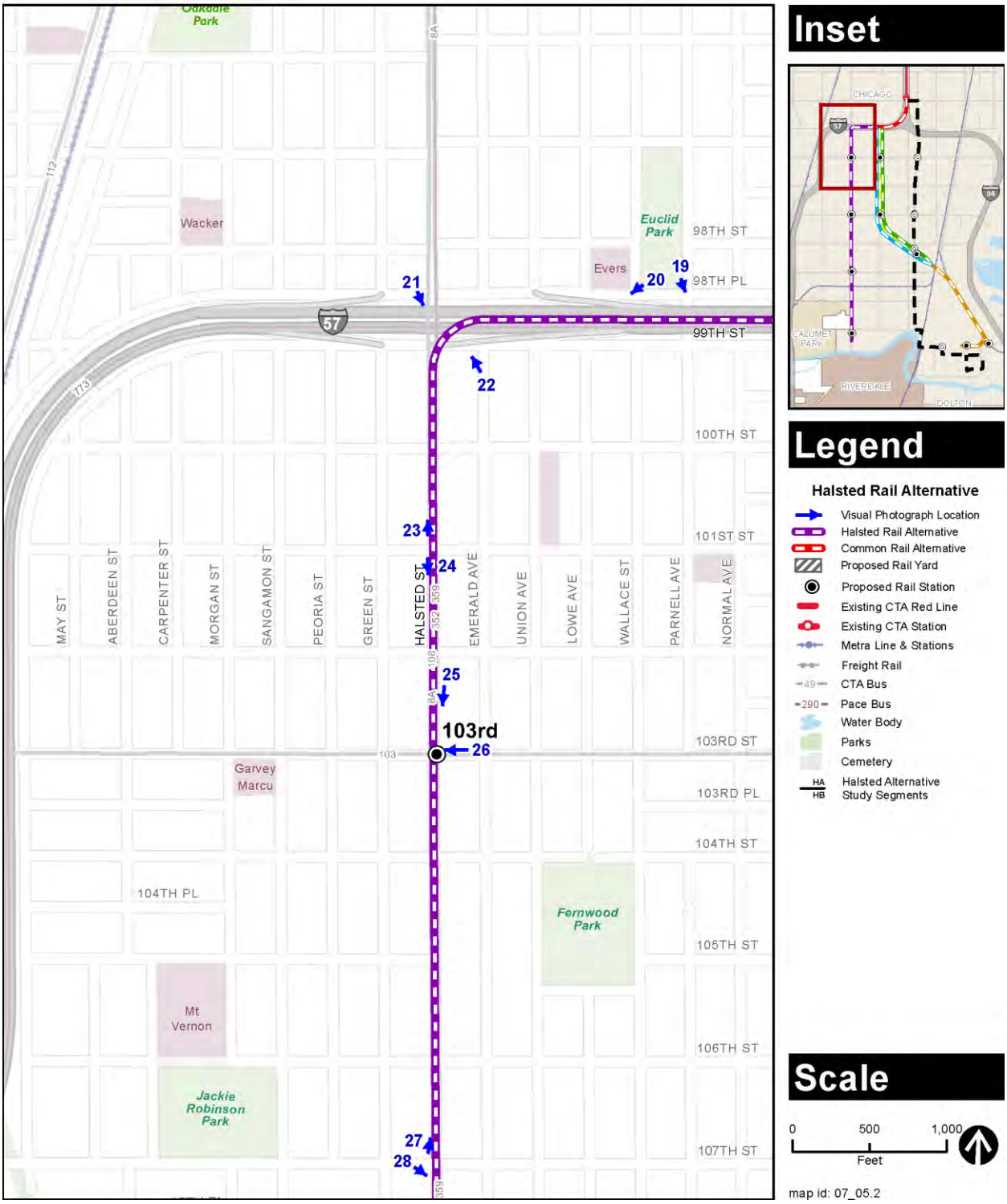

Figure 4-14: Halsted Rail Alternative View Locations - Segment HA

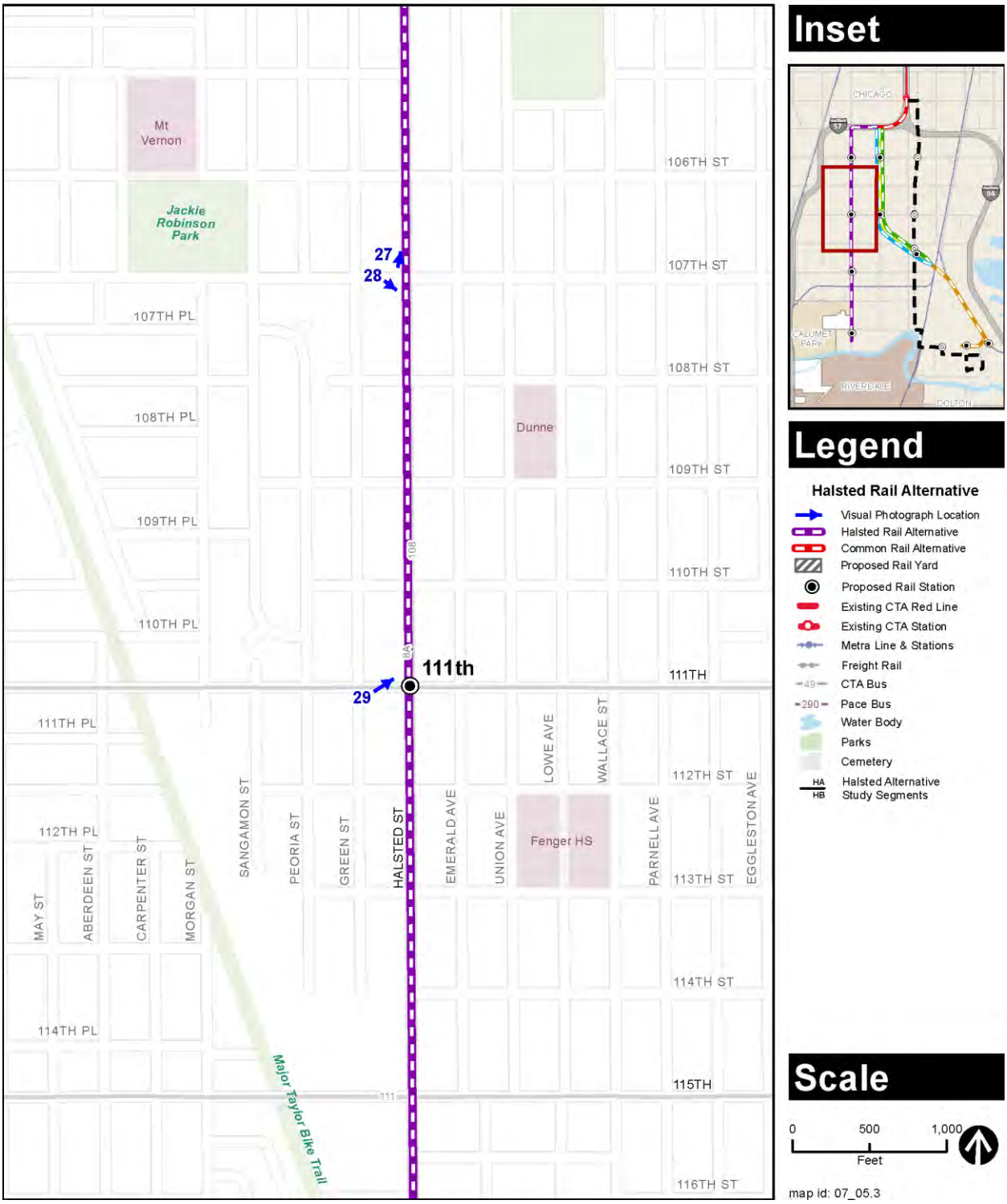

Figure 4-15: Halsted Rail Alternative View Locations - Segment HA

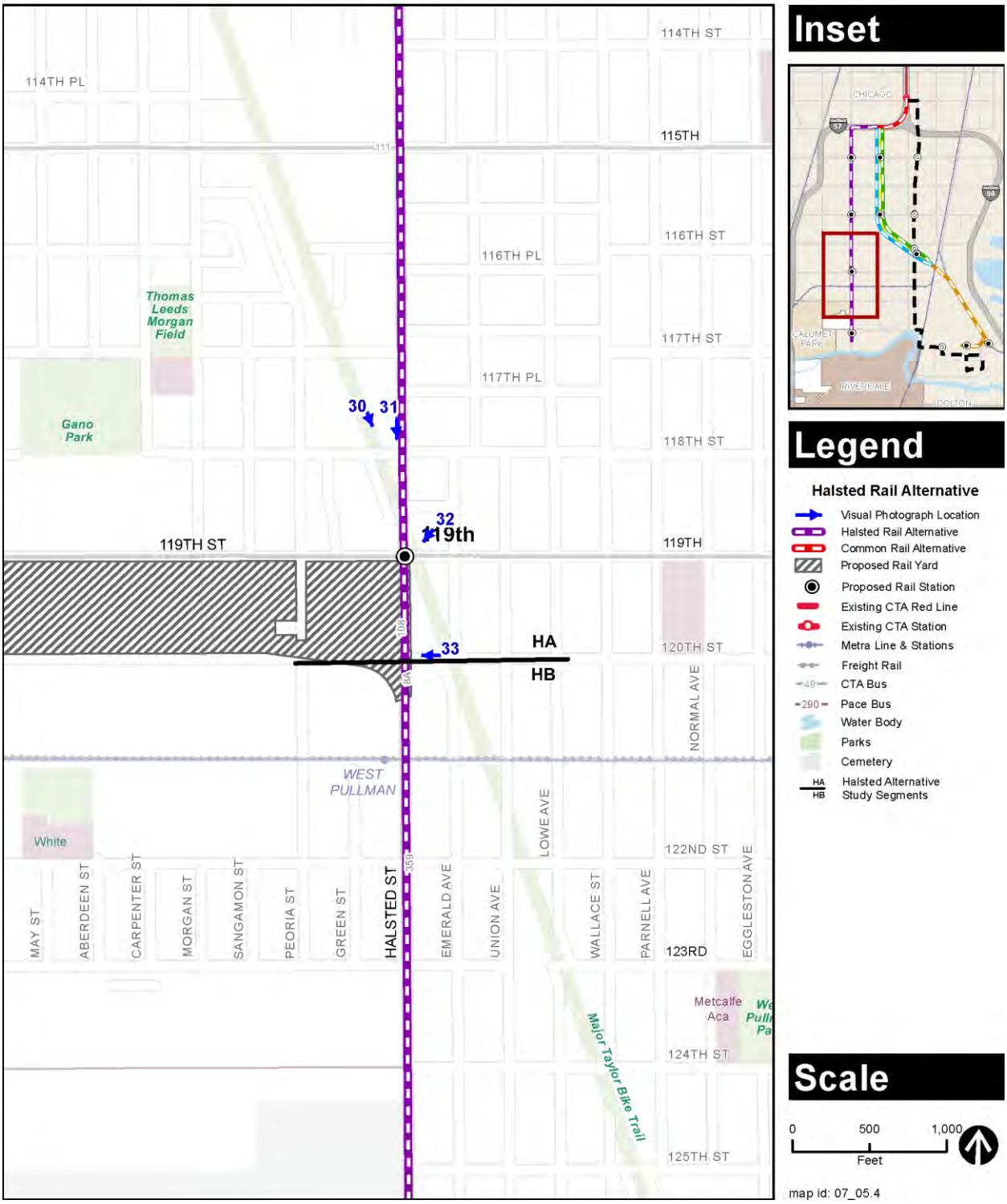

Figure 4-16: Halsted Rail Alternative View Locations - Segment HA and HB

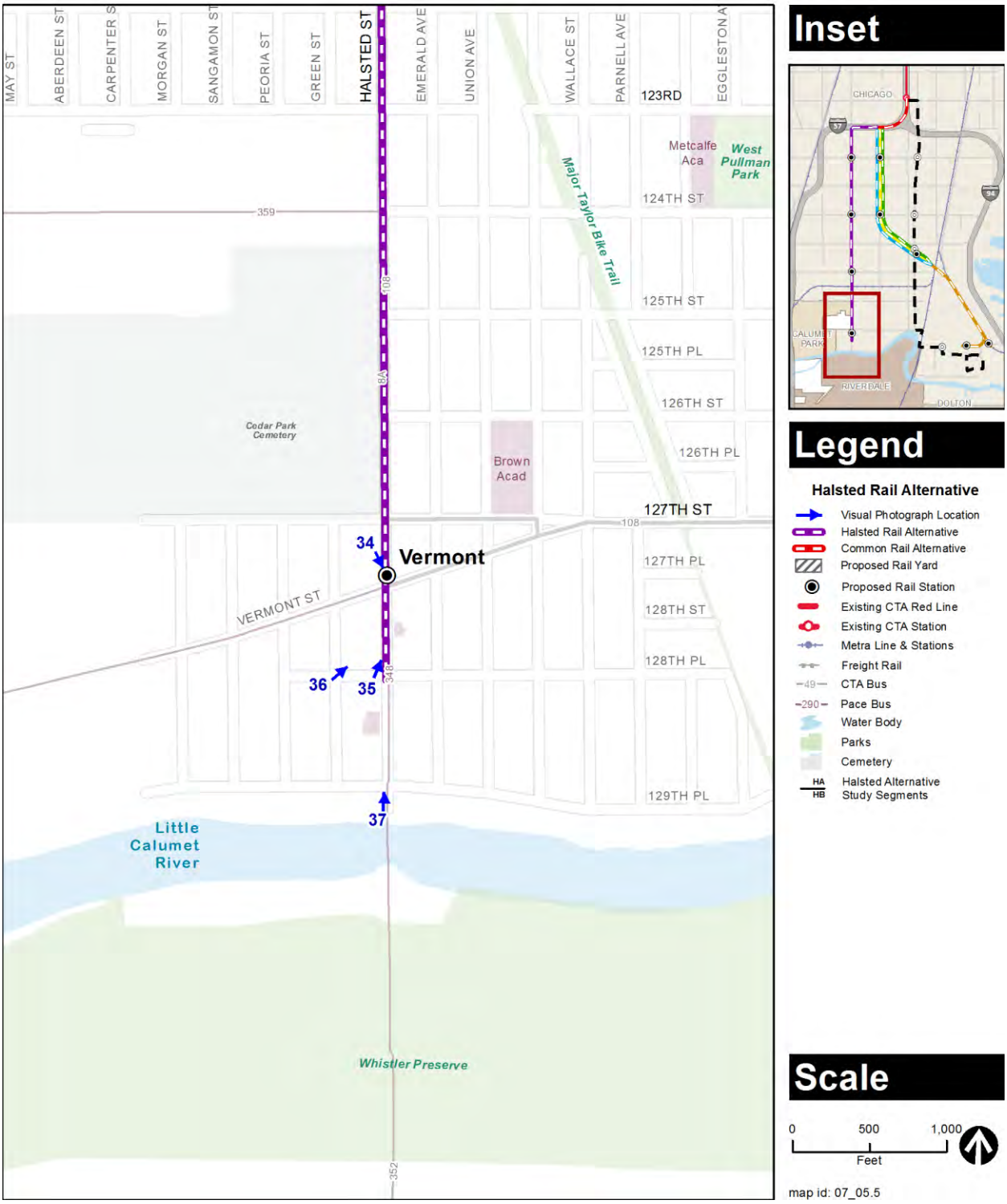

Figure 4-17: Halsted Rail Alternative View Locations - Segment HB

Figure 4-18: Affected Environment - Typical I-94 Visual Condition

Figure 4-19: Affected Environment - Typical I-57 Visual Condition

Figure 4-20: Affected Environment - Typical Existing Union Pacific Railroad Condition

Figure 4-21: Affected Environment - Typical Intersection at Existing Union Pacific Railroad

Figure 4-22: Affected Environment - View of Roseland Pumping Station

Figure 4-23: Affected Environment - Typical Halsted Street Visual Condition

Table 4-1: Affected Environment - Existing Visual Conditions Assessment

Viewpoint *See Figures 4 2 4 17*	View *See Attachment A*	Location/View Direction	Existing Visual Quality	Assessment Area
Bus Rapid Transit Alternative				
40	View 40	View south from Michigan Avenue between 115th Street and Kensington Avenue	Moderate	The viewshed consists of older commercial structures and a parking lot along the east side of Michigan Avenue, with a vacant lot along the west side.
41	View 41	View northeast from Golden Gate Park at 130th Street and Eberhart Avenue	Moderate	The viewshed includes the Altgeld Gardens neighborhood south of 130th Street and the Metropolitan Water Reclamation District property to the north.
Segment UA - UPRR Rail Alternative north of Michigan Avenue				
1	View 1	View south over I-94 from 95th Street overpass and Lafayette Avenue	Low	The viewshed includes I-94 and I-57 corridor and existing Red Line tracks to the yard.
2	View 2	View northwest toward Wentworth Avenue overpass from 99th and LaSalle Street	Low	The viewshed includes I-94 and I-57 corridor, with Wentworth Avenue overpass and surrounding residential neighborhoods visible in the distance.
3	View 3	View south toward I-57 overpass from Wentworth Avenue	Moderate	The surrounding neighborhood viewshed includes medium-density residential fabric of similar scale and style and with I-94 overpass visible in the distance.
4	View 4	View southeast from Eggleston Avenue and 98th Place	Low	The viewshed includes I-57 and existing railroad overpass with Wendell Smith Park beyond.
5	View 5	View northwest from the southwest corner of Wendell Smith Park	High	Existing views from Wendell Smith Park south of I-57 and adjacent to existing Union Pacific Railroad tracks are covered by well-established vegetation.
6	View 6	View south along Eggleston Avenue and Fernwood Parkway toward 103rd Street	High	Existing residential neighborhood fabric to the east of Fernwood Parkway is cohesive in scale and style, while the parkway is lightly vegetated and blocks the view of the existing tracks. The viewshed terminates with light commercial structures.
7	View 7	View northwest from 103rd Street and Harvard Avenue	Moderate	The existing railroad intersection at 103rd Street consists of lightly vegetated, low-density development, with residential neighborhood visible in the distance.
8	View 8	View north from the pumping station on Harvard Avenue	Moderate	The viewshed includes existing tree-lined railroad tracks to the west, a moderately vegetated green space along Harvard Avenue, and an electrical tower in the distance

Viewpoint *See Figures 4 2 4 17*	View *See Attachment A*	Location/View Direction	Existing Visual Quality	Assessment Area
9	View 9	View northwest from 108th Street adjacent to Roseland Christian School	Low	The view south of Roseland Christian School includes schoolyard with existing tree-lined railroad tracks to the west and light industrial buildings to the north.
10	View 10	View west from 111th Street	Low	The viewshed includes existing railroad crossing at 111th Street with light commercial buildings west of the tracks and vacant lots to the east. Existing residential buildings are in the foreground.
11	View 11	View southwest from 113th Street and Princeton Avenue	Low	The corner of 113th Street and Princeton Avenue shows a tree-lined residential fabric consisting of similar scale and style.
12	View 12	View northeast from 115th Street	Low	The existing railroad intersection at 115th Street consists of low-density, light industrial development west of the tracks and a vacant lot and residential building to the east.
13	View 13	View southeast from State Street	Low	The existing railroad intersection at State Street includes a vacant lot east of the tracks and a consistently developed residential neighborhood lined with trees to the west.
14	View 14	View south toward the existing UPRR viaduct from Michigan Avenue	Low	The viewshed includes an existing railroad berm and viaduct crossing over Michigan Avenue. A vacant lot is to the west and poorly maintained commercial buildings line the east side.
15	View 15	View northwest toward the existing UPRR viaduct from Michigan Avenue	Moderate	The viewshed includes an existing railroad viaduct crossing over Michigan Avenue and medium-density commercial and residential development in the surrounding area, some of which is vacant.
16	View 16	View southeast from 117th Street east of Prairie Avenue	Moderate	The viewshed includes highly vegetated existing railroad embankment with residential fabric of similar scale and style adjacent to it.
Segment UB - UPRR Rail Alternative South of Michigan Avenue				
17	View 17	View southeast toward 130th Street overpass from 130th Place	Low	The viewshed includes existing railroad tracks passing under the 130th Street overpass with medium-density vegetation surrounding it.

Viewpoint *See Figures 4 2 4 17*	View *See Attachment A*	Location/View Direction	Existing Visual Quality	Assessment Area
18	View 18	View northeast on 130th Place adjacent to Altgeld Gardens neighborhood	Low	The viewshed includes Altgeld Gardens neighborhood buildings with adjacent parking and 130th Street lined with trees. The Metropolitan Water Reclamation District property is visible to the north of 130th Street.
Segment HA - Halsted Rail Alternative North of 119th Street				
19	View 19	View southeast toward I-57 overpass from 98th and Parnell Street	Moderate	The viewshed includes the intersection of 98th and Parnell Street in the foreground with the I-57 overpass to the south and existing residential area to the east.
20	View 20	View southwest from 98th Place looking across I-57	Low	The viewshed shows typical conditions along the expressway corridor and adjacent residential areas to the south.
21	View 21	View southeast toward 98th Street from the Halsted Street overpass	Moderate	The viewshed includes the I-57 overpass at Halsted Street in the foreground with light commercial structures and a vegetated median in the distance.
22	View 22	View northwest from Emerald Avenue	High	Existing neighborhood fabric is intact and buildings are of similar style and scale.
23	View 23	View northeast from Halsted Street just north of 100th Street	Moderate	The visually cohesive, light commercial corridor consists of structures of similar style, surface parking lots, some on-street parking, and a vegetated median.
24	View 24	View south from Halsted Street at 100th Street	Low	The viewshed includes varying degrees of building styles in a low-density commercial area consisting of a vacant lot, parking lot, various commercial buildings, and a church.
25	View 25	View south from Halsted Street between 102nd Street and 103rd Street	Moderate	The viewshed includes a vegetated median along a medium-density commercial area of consistent style and scale.
26	View 26	View west from the corner of 103rd Street and Emerald Avenue	Moderate	The viewshed consists of a medium-density, light commercial district of similar style and scale, with a new commercial building and parking lot to the south and residential fencing to the north.
27	View 27	View north on Halsted Street at 107th Street	Low	The intersection includes a vacant parking lot and older light commercial buildings of similar scale and style with a newer gas station on the northeast corner.

Viewpoint *See Figures 4 2 4 17*	View *See Attachment A*	Location/View Direction	Existing Visual Quality	Assessment Area
28	View 28	View southeast from 107th Street between Halsted Street and Green Street	Low	The viewshed includes low-density commercial buildings with a large grocery parking lot in the foreground and a church on the east side of Halsted Street. Residential structures are in the distance.
29	View 29	View east from 111th Street between Halsted Street and Green Street	Low	The viewshed includes varying degrees of building style near a low-density commercial intersection. A tree-lined neighborhood is in the distance.
30	View 30	View southeast from the Major Taylor Trail at 118th Street	Moderate	The viewshed includes a tree-lined bike path with commercial structures along Halsted Street in the distance.
31	View 31	View south on Halsted Street at 118th Street	Moderate	The viewshed includes vegetated median along a very low-density, tree-lined, light commercial area.
Segment HB - Halsted Rail Alternative south of 119th Street				
32	View 32	View southwest at the corner of 119th Street and Halsted Street	Low	The intersection includes a large parking lot and older light commercial buildings of similar scale and style with the Major Taylor bike trail to the southeast.
33	View 33	View northwest at the corner of 120th Street and Halsted Street	Low	The viewshed consists of older commercial buildings of similar style and scale along a medium-density corridor.
34	View 34	View south on Halsted Street at Vermont Avenue	Low	The intersection includes older light commercial buildings of similar scale and style with a car sales lot to the west and a non-vegetated median along Halsted Street.
35	View 35	View northeast at the corner of 128th Street and Halsted Street	Low	The viewshed includes two vacant lots adjacent to light commercial buildings that appear to be old and rundown.
36	View 36	View northeast from the corner of 128th Place and Green Street	Moderate	The viewshed includes a medium-density residential neighborhood of similar scale and style with light commercial buildings in the distance.
37	View 37	View north from Halsted Street at the Little Calumet River bridge	Moderate	The viewshed includes the bridge/overpass with vegetation along both sides. Light commercial structures, vegetated median, and vacant lots are in the distance.

UPRR = Union Pacific Railroad

Section 5
Impacts and Mitigations

The No Build Alternative would have no impact on the visual and aesthetic conditions and the BRT Alternative would have very little impact. The BRT Alternative impacts would be concentrated at the Kensington Avenue and the 130th Street stops, where minor demolition would be required to accommodate a parking garage at each stop. The RLE Project could improve visual quality, depending on the location and option in question. The UPRR Rail Alternative ROW Option would require moderate land acquisition that also would typically be concentrated near station locations. Overall, this option would result in a modest change on the visual and aesthetic conditions of views for the affected project area and would be the least impactful of the three UPRR Rail Alternative options. As part of the UPRR Rail Alternative East Option, substantial land acquisition and demolition of buildings would occur along the project corridor, especially in Segment UA, with the most affected areas occurring along route curves and concentrated near station locations (refer to visual simulation). Overall, this option would result in a moderate impact on the visual and aesthetic conditions of views for the affected project area. The UPRR Rail Alternative West Option would have similar impacts as the East Option. The Halsted Rail Alternative would mainly result in visual impacts along Halsted Avenue due to the proposed structure and removal of some existing trees in the median.

5.1 No Build Alternative

The No Build Alternative would not have an impact on the visual and aesthetic conditions of the project area. This alternative only includes projects that are committed in the CMAP Fiscal Year 2010–2015 TIP and does not include extending the existing Red Line south of the 95th Street Terminal. Improvements to the 95th Street Terminal are part of the CMAP Fiscal Year 2010–2015 TIP. Generally, the No Build Alternative would not improve the current visual and aesthetic conditions, and the low visual quality of the existing area would remain and continue to degrade with time.

5.1.1 Permanent Impacts and Mitigations - No Build Alternative

Permanent impacts under the No Build Alternative would consist of minimal visual and aesthetic impacts. There are no existing CTA facilities in the project area.

5.1.2 Cumulative Impacts and Mitigations - No Build Alternative

The No Build Alternative would not cause cumulative impacts. Any proposed developments already being considered for development within the RLE Project corridor would still occur under the No Build Alternative.

5.2 Bus Rapid Transit Alternative

The proposed BRT Alternative would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue with stops at 103rd Street, 111th Street,

Kensington Avenue, and 130th Street. Stops along this portion would include improved bus shelters and park & ride facilities. The route would then continue through the Altgeld Gardens neighborhood along the existing #34 route, in which existing bus shelters would remain unchanged. Figure 4-1 shows the BRT Alternative.

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

Because parking lanes would be removed for some portions as part of the alignment, there would visually be fewer cars parked on the street in areas near new bus stops. New bus shelters would be provided at the 103rd Street, 111th Street, Kensington Avenue, and 130th Street stops and would result in minimal visual impact. Park & ride facilities would also be constructed at each stop and demolition would occur as part of this alternative. These changes would alter the density of some viewsheds in the project area by varying degrees. Potential impacts created by these parking structures are represented in Views 40 and 41 in Appendix A. Aside from the addition of a three-story parking garage at the Kensington Avenue stop and at the 130th Street stop, the implementation of the BRT Alternative overall would have minimal impact on the visual and aesthetic conditions in the project area.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts are discussed below. Mitigations to reduce visual impacts related to the BRT Alternative would include shielding exterior lighting and providing special consideration for lighting placement adjacent to sensitive areas such as residential communities; providing landscaping and/or visual screening at park & ride locations where possible; and designing the parking structure to match the character of the surrounding fabric as well as using urban design techniques to reduce massing. The impacts would not be considered adverse for the low to moderate impacts after mitigation.

- 103rd Street stop - Low visual impact - Improved bus shelters near the intersection of 102nd Street and Michigan Avenue would have little to no visual impact. A surface parking lot on the southeast quadrant of the 102nd Street and Michigan Avenue intersection would require one building to be removed, which would decrease the visual quality of the area. Visual impacts would be mitigated using measures described above.

- 111th Street stop - Low visual impact - Improved bus shelters near the intersection of 111th Street and Michigan Avenue would have little to no visual impact. A surface parking lot located on the southeast quadrant of the 111th Place and State Street would replace existing vacant lots, which would result in an increase in visual quality.

- Kensington Avenue stop - Moderate visual impact prior to mitigation - Improved bus shelters near the intersection of the Kensington Avenue and Michigan Avenue would have little to no visual impact. A three-story parking garage with retail and/or community facilities on the southeast quadrant of the Kensington Avenue and Michigan Avenue intersection would require removal of vegetation and a few structures, which would create a moderate change in

scale, density, and character. Due to low density and low viewer sensitivity in the immediate area, the impacts after mitigations discussed above would result in minimal (low) visual impact. See View 40 in Appendix A for visual illustration of this impact.

- 130th Street stop - Moderate visual impact prior to mitigation - Improved bus shelters near the intersection of 130th Street and Eberhart Avenue would have little to no visual impact. The addition of a three-story parking garage, located on the northwest quadrant of the 130th Street and Water Treatment Plant access road intersection, would change the character and scale of the surrounding area. No buildings would be removed; however, the existing area across from the Altgeld Gardens neighborhood and Golden Gate Park is mostly vegetated. The addition of a large hard surface would decrease the visual quality of the area. Due to a major change in scale of the surrounding area and high viewer sensitivity, impacts after mitigations described above would be moderate. See View 41 in Appendix A for visual illustration of this impact.

Table 5-1 summarizes the impacts on visual and aesthetic conditions for the BRT Alternative and provides an assessment of the impacts. Figures 4-2 through 4-5 show the view locations.

Table 5-1: Impacts - Bus Rapid Transit Alternative

Viewpoint *See Figures 4 2 4 5*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Bus Rapid Transit Alternative				
40	View 40	View south from 115th Street and Michigan Avenue	Low	Minimal removal of buildings and addition of a three-story parking garage would create a change in scale and character. The addition of a bus shelter would have almost no visual impact.
41	View 41	View northeast from Golden Gate Park at 130th Street	Moderate	Removal of vegetation and addition of a three-story parking garage would alter the scale and character of the area; however, the bus shelter would have no visual impact.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

Projects already committed through the CMAP TIP would be constructed as described for the No Build Alternative. There would be minimal construction impacts on the existing visual condition along the BRT Alternative route. Because no dedicated bus lanes would be provided as part of the BRT Alternative, the only construction would be isolated in locations related to the installation of new bus stops, including shelters and a possible parking lot or parking garage depending on location. These visual conditions would be temporary, lasting several weeks to a year and might include construction fencing, cones, and other construction related to parking facilities. At locations where park & ride structures and lots would be created, example impacts would include the following:

- Construction fencing
- Demolition of existing buildings or clearing of vacant lots
- Temporary street closures and related signage
- Temporary lighting or entrances

During construction the CTA would attempt to maintain as much existing vegetation as practical, and minimize temporary construction impacts on the neighborhood with measures such as limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

5.2.3 Cumulative Impacts and Mitigations - Bus Rapid Transit Alternative

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions with the BRT Alternative.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative is an extension of the existing Red Line with three alternative options: the UPRR ROW Option, East Option, and West Option. The trains would operate on an elevated structure that would run south from 95th Street along I-57 for nearly ½ mile to the existing UPRR corridor in the vicinity of Eggleston Avenue. Note that Views 1A, 2A, 3A, and 4A apply to all rail alternatives. The alignment would then run south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of Prairie Avenue, the alignment would cross over the CN/ME tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) ROW to terminate at 130th Street. Four stations would be included: 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Figure 4-6 shows the UPRR Rail Alternative.

The scale, density, and character of several viewsheds would change by varying degrees as part of UPRR Rail Alternative. Refer to Views 1A, 2A, 3A, 4A, 10 and 10A, 13 and 13A, and 14 and 14A for visual illustrations and examples of these impacts.

The UPRR ROW Option would place CTA tracks on an elevated structure located in the existing UPRR ROW between I-57 and CN/ME tracks. UPRR Trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE Project implementation. A visual illustration of this impact is represented in View 12A in Appendix A. Moderate land acquisition would occur as part of this alternative, and would typically be concentrated near station locations. Overall, this option would have a modest change on the visual and aesthetic conditions of views for the affected project area.

Track alignments typically are shown to have a higher degree of visual impact than other changes, due to the demolition of existing structures and, in many cases, a substantial change in scale, density and character of the surrounding environment. Project components for all alternatives would be visible, depending on viewshed and alignment location, which would change the visual and aesthetic quality of the project corridor by varying degrees. Some of the more impactful elements would include elevated tracks and platforms, concrete piers and steel cross-girders, stations and substations, parking structures and surface lots.

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative was analyzed in two segments. Segment UA consists of the UPRR Rail Alternative north of Michigan Avenue and Segment UB is the portion south of Michigan Avenue. Refer to Figure 4-6 for segment division.

In order to reduce adverse impacts on visual and aesthetic conditions, several standard mitigation measures would be implemented for any location identified as having moderate or high impact. Mitigation actions that would apply to all alternatives include, but are not limited to, the following:

- The final design of new stations and additional structures would reflect the character and material quality of uniquely identified neighborhoods or communities.
- In locations where track alignment would lead to the removal of buildings or cohesive neighborhood fabric, all efforts would be made to create new developments on parcels no longer needed; these developments would utilize equivalent scales, styles, and character of the surrounding community.
- Replacement or restoration of removed vegetation and landscaping is assumed in nearly all instances, and additional locations would be considered in areas where new building development prohibits restoration or is limited by size of parcels. Landscaping would be in compliance with the City of Chicago Green Street Project.
- When possible the project would be designed to address neighborhood plan recommendations related to visual and aesthetic issues, especially as they relate to station, substation, and parking garage design. Where parking structures would be taller than surrounding structures, design techniques such as stepping the massing back from the street would be used to reduce the impacts of a dramatic change in scale.
- Exterior lighting would be shielded and carefully placed when adjacent to sensitive areas such as residential communities.

- Landscaping and/or visual screening would be provided at park & ride locations, where possible, to reduce the visual impact of large, open, hard surfaces or structures.

- In locations where the alignment would be immediately adjacent to commercial and residential corridors, methods of good urban design would be used to reduce adverse impacts on neighborhood character and maintain a welcoming visual character for pedestrians.

These mitigation measures would apply in varying degrees to each alternative depending on the quantity and degree of visual and aesthetic impacts. Mitigation measures specific to particular locations are addressed under designated high-impact views within each alternative. Even with mitigation measures that would lessen impacts, several locations would still have adverse impacts, such as the addition of large-scale parking structures that are out of context and scale in residential neighborhoods, or taller, flyover structures that would be at a greater scale and alter the character of their surroundings. These impacts are discussed in Section 6.

5.3.1.1 Segment UA

The creation of elevated structures along Segment UA from 95th Street to the vicinity of Eggleston Avenue would have minimal impact on the visual quality. The elevated structure and creation of related stations would have a moderate impact on the visual quality of Segment UA from the vicinity of Eggleston Avenue to 119th Street. This visual change is subjective.

Shadows created by the elevated structure would change throughout the day and season. The shadows would vary depending on the height, orientation, and density of surrounding structures, vegetation and development. Shadows would have the most impact along Segment UA. The majority of vegetation along the UPRR ROW Option corridor would remain and would help minimize visible light and shadow effects on adjacent neighborhoods. There would be additional lighting introduced to the project area that would be associated with park & ride facilities, stations, substations, yard and shop facilities, and trains (which include interior/safety lighting and exterior headlights). For most of the UPRR Rail Alternative project corridor, light and glare associated with the alignment and trains would not have an adverse impact because the proposed features would generally be located in the existing expressway/highway corridor or the existing UPRR railroad corridor, which currently produce transportation-related light and glare.

Each station in Segment UA comprises elevated island platforms with covered canopies, street level stations structures, and adjacent parking facilities. These stations include the 103rd Street station, 111th Street station, and Michigan Avenue station.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station, as well as view locations with high visual impact, are discussed below. Locations with low to moderate impacts would be mitigated using the standard mitigation measures discussed at the beginning of Section 5.3.1. Impacts would not be considered adverse for the low to moderate

impacts after mitigation. High visual impact views would have specific measures to reduce adverse impacts after mitigation.

- 103rd Street station would have a low visual impact. Minimal buildings would be removed along 103rd Street to accommodate two surface parking lots, which would minimally alter the character of the surrounding neighborhood. The new station on the north side of 103rd Street would minimally change the character and density of the intersection. The creation of elevated platforms and track structure would have a moderate impact on the viewshed of residences adjacent to the project alignment. These impacts would be mitigated by using standard mitigation measures, including design of the station to match the character and scale of surrounding developments and landscaping. See View 8A in Appendix A for a visual illustration of this impact.

- 111th Street station would have a low visual impact. No buildings would be removed. The new station just north of 111th street would minimally change the character and density of the intersection. The creation of elevated platforms and track structure would have a moderate impact on the viewshed of residences adjacent to the project route. The removal of vegetation and addition of two surface parking lots would affect the surrounding neighborhood character. Impacts would be mitigated using standard mitigation measures, including landscaping and design of the station to match the character and scale of surrounding developments. See View 10A in Appendix A for visual illustration of this impact.

- Michigan Avenue station would have a high visual impact prior to mitigation. The new station on the west side of Michigan Avenue would change the character, scale, and density of the immediate area. The addition of elevated platforms and track structure and the substantial removal of buildings and vegetation for the creation of a three-story parking garage west of the tracks would have a high impact on the character and density of the local community. Despite mitigation measures, the impact on residents of State Street and 116th Street would still be substantial due to the large mass of the parking structure adjacent to the neighborhood. The moderate removal of vegetation in the existing vacant lot east of the tracks to accommodate a surface lot would have additional minimal visual impact for adjacent residents. Impacts would be mitigated using standard mitigation measures, which include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening. Impacts after mitigation would be moderate due to the mass of the parking garage. See Views 13A, 14A, and 15A in Appendix A for visual illustration of this impact.

- A high visual impact prior to mitigation would occur at View 13A (see Appendix A). See description of Michigan Avenue station above or refer to Table 5-2.

The UPRR ROW Option along Segment UA would include substations located west of CTA tracks between 104th and 105th Street and west of the CTA tracks between Perry Avenue and Lafayette

Avenue. Additional minimal visual impacts would occur for surrounding residences adjacent to these locations.

Table 5-2 summarizes the impacts on visual and aesthetic conditions for the UPRR ROW Option along Segment UA and provides an assessment of the impacts. Figures 4-7 through 4-10 show the view locations.

Table 5-2: Impacts - Right of Way Option - Segment UA

Viewpoint *See Figures 4 7 4 10*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment UA - North of Michigan Avenue				
1	View 1A	View south over I-94 from 95th Street overpass and Lafayette Avenue	Low	The overall visual character would not change, but the increase in scale and shadows would be noticeable to motorists due to elevated structures.
2	View 2A	View northwest toward Wentworth Avenue overpass from 99th and LaSalle Street	Low	The overall visual character would not change, but the increase in scale and shadows would be noticeable to motorists due to elevated structures. The structure would be visible in the distance to adjacent neighborhoods.
3	View 3A	View south toward I-57 overpass from Wentworth Avenue	Low	The character and scale of neighborhood would not change, but the elevated structure would be visible in the distance
4	View 4A	View southeast from 98th Place and Eggleston Avenue	Low	The character of the area would not change; however, there would be an increase in scale. The elevated structure and removal of vegetation beyond would be visible in the distance to adjacent neighborhoods.
5	View 5A	View northwest from the southwest corner of Wendell Smith Park	Moderate	The visual character would change with the removal of minimal vegetation and view of the structure in the distance.
8	View 8A	View north from the pumping station on Harvard Avenue	Low	The elevated structure would create a change in scale; however, the viewshed would otherwise remain unaltered.
9	View 9A	View northwest from 108th Street adjacent to Roseland Christian School	Low	The elevated structure would create a change in scale; however, the view from Roseland Christian School would otherwise remain unaltered.
10	View 10A	View west from 111th Street	Moderate	The character and scale of the intersection would change with the addition of the elevated structure, elevated platform, and at-grade station. No buildings and minimum vegetation would be removed.
11	View 11A	View southwest from 113th Street and Princeton Avenue	Low	The elevated structure would be minimally visible to residents due to existing vegetation.
12	View 12A	View northeast from 115th Street	Low	The elevated structure would create a minimal change in scale and character for the surrounding area.

Viewpoint *See Figures 4 7 4 10*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
13	View 13A	View southeast from State Street	Moderate	The addition of a three-story park & ride garage would substantially change the scale, character, and density of the neighborhood. The elevated structure would have minimal impact. Visual impact would be moderate after mitigation.
14	View 14A	View south toward the existing UPRR viaduct from Michigan Avenue	Moderate	The scale and character or the viewshed would moderately change with the addition of an elevated structure, elevated platform, and raised station. The removal of vegetation and structures beyond for a three-story park & ride garage would also alter the visual quality, Visual impact would be moderate after mitigation.
15	View 15A	View northwest toward the existing UPRR viaduct from Michigan Avenue	Low	The elevated structure and station would be partially hidden by the existing vegetation and structures. Only minimal vegetation would be removed,
16	View 16A	View southeast from 117th Street east of Prairie Avenue	Low	The elevated structure would be minimally visible to residents due to existing vegetation.

5.3.1.2 Segment UB

Aside from a portion of alignment north of the 120th Street yard and shop location, the UPRR ROW Option alignment in Segment UB runs along an embankment and terminates at grade. This segment continues through an industrial area with no public streets and thus would have minimal impact on the visual quality of the surrounding area. Due to the lack of architectural character and low visual quality of the existing area, changes to the visual and aesthetic conditions would be very minimal. The creation of 130th Street South Station Option or West Station Option would have a moderate impact on the visual quality. These stations would have at-grade island platforms with covered canopies, CTA Rail stationhouse, and adjacent parking facilities. Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station would be as follows:

- 130th Street South Station Option would have a minimal visual impact. Although the new station located west of the NICTD/CSS & SBRR ROW would moderately change the scale and character of the existing light industrial area, changes in a light industrial area are not considered impacts. No buildings would be removed, but some vegetation would be affected. The tracks and platform would be lower in elevation than the 130th Street overpass and would be partially screened. The stationhouse would be similar in height to the overpass and to the one- to two-story structures at Altgeld Gardens neighborhood; however, the creation of a seven-story parking garage would have a high impact on the scale, be out of character with

the surrounding area, and be visible from the adjacent residential community, albeit at a distance. Standard mitigation measures include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing, and providing landscaping and visual screening. Due to low density and viewer sensitivity in this area, overall impacts after mitigation would be minimal. Note that at community visioning sessions, community members expressed desire for higher density surrounding this proposed station. See View 17A in Appendix A for visual illustration of this impact.

- 130th Street West Station Option would have a moderate visual impact. The new station along the north side of 130th Street would moderately change the scale and character of the existing light industrial and low-density residential area. No buildings would be removed, but some vegetation would be affected. The stationhouse, at-grade tracks, and platform would be moderately visible from 130th Street or by residences in the Altgeld Gardens neighborhood, albeit at a distance. The creation of a four-story parking garage would have a high impact on the scale and density of the area due to height and mass. Additionally, the adjacent parking lot would create a large surface area with moderate visual impact. Standard mitigation measures include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing, and providing landscaping and visual screening. As with the South Station Option, community members expressed desire for higher density surrounding this proposed station. See View 18A in Appendix A for visual illustration of this impact.

The UPRR ROW Option along Segment UB would include substations located west of CTA tracks north of the proposed parking structure for the South Option or along the curve of the CTA tracks near 130th Street for the West Option. An additional substation is proposed for a site within the 120th Street yard and shop facility. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-3 summarizes the impacts on visual and aesthetic conditions for the UPRR ROW Option along Segment UB and provides an assessment of the impacts. Figures 4-11 through 4-12 show the view locations.

Table 5-3: Impacts: Right of Way Option - Segment UB

Viewpoint *See Figures 4 10 4 11*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment UB - South of Michigan Avenue				
17	View 17A	View southeast toward 130th Street overpass from 130th Place	Low	The mass of the seven-story parking garage would change the scale and character of the area. Due to the low-density location, however, viewer sensitivity would be low and these impacts would be minimal. The addition of a stationhouse and at-grade platform, partially blocked by the elevation of 130th Street, would be low impact.
18	View 18A	View northeast on 130th Place adjacent to Altgeld Gardens neighborhood	Moderate	The mass of the four-story parking garage would change the scale and character of the area. The addition of a stationhouse, large parking lot, and at-grade platform would change the character of the area creating a moderate impact.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

During construction for the RLE Project, the CTA would attempt to maintain as much existing vegetation as practical and minimize temporary construction impacts on neighborhoods by limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites. The visual impacts of construction under the UPRR ROW Option would include temporary visual conditions related to construction. The durations of these visual conditions would vary from several months to a few years depending on the alignment location and occurrence of station facilities. Examples include the following:

- Construction fencing
- Demolition of existing buildings
- Temporary walls
- Temporary street closures and related signage
- Temporary lighting
- Temporary entrances
- Shoring of concrete structures or existing viaducts during construction

The overall visual impact on commuters and visitors would be relatively limited along the I-94 and I-57 corridor because they typically only see the location during commute times or upon entering and exiting. Residents, business owners, and recreationists typically view one station and portion of the project in their local community. Construction impacts would only be temporary in nature, and would be most extensive in areas of land acquisition.

5.3.2.1 Segment UA

Construction impacts would be longer in nature, lasting a few years, at the Michigan Avenue station due to the substantial removal of buildings and construction of a three-story park & ride garage.

5.3.2.2 Segment UB

Construction impacts would be similar in nature to those discussed in Section 5.3.2.

5.3.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along the alignment for the UPRR ROW Option.

5.3.4 120th Street Yard and Shop

The 120th Street yard and shop would be located on a combination of industrial/vacant land east of the CN/ME tracks and west of the NICTD/CSS & SBRR tracks at approximately 120th Street and Cottage Grove Avenue. The yard would be entirely at grade with a nominal amount of parking for employees. A substation is proposed for a site within the 120th Street yard on the west of the existing railroad tracks and east of the proposed shop facility.

5.3.4.1 Permanent Impacts and Mitigations

Due to the location in a low-density light industrial area, impacts would be minimal. At-grade tracks would not be visible from nearby structures nor would they disrupt the existing visual character of the industrial surroundings. In addition to the standard mitigations discussed in Section 5.3.1 that would be used, additional measures for the 120th Street yard and shop would include designing the shop facility structure to be aesthetically compatible with surrounding uses.

5.3.4.2 Construction Impacts and Mitigations

Construction impacts other than those mentioned in Section 5.3.2 would be minor for the 120th Street yard and shop due to its location in a low-density area and the nature of at-grade construction.

5.4 Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative East Option would include new CTA tracks on an elevated structure located immediately adjacent to and east of the existing UPRR ROW. Under this option, the UPRR would remain operational and there would be a 50-foot offset from the existing railroad

tracks. Substantial land acquisition and demolition of buildings would occur along the project corridor, especially in Segment UA. The most affected areas would occur along route curves and would be concentrated near station locations. Visual illustrations of these impacts are represented in Views 1A, 2A, 3A, 4A, 10B and 11B in Appendix A. Note that Views 1A, 2A, 3A, and 4A apply to all rail alternatives. Overall, this option would result in a substantial change on the visual and aesthetic conditions of views for the affected project area. Mitigations for the substantial visual change associated with the UPRR Rail Alternative East Option are discussed in Section 5.3.1.

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative was analyzed in two segments: Segment UA consists of the UPRR Rail Alternative north of Michigan Avenue and Segment UB is the portion south of Michigan Avenue. Please refer to Figure 4-6 for segment division.

5.4.1.1 Segment UA

The creation of elevated structures along the Segment UA from 95th Street to the vicinity of Eggleston Avenue would have moderate impact on visual quality. The proximity to the expressway corridor is currently screened by vegetation that would be substantially removed as part of the UPRR Rail Alternative East Option, making the new elevated structure visible and intrusive to the viewshed from the adjacent neighborhood and Wendell Smith Park. The elevated structure and creation of related stations would have substantial impact on the visual and aesthetic conditions of Segment UA from the vicinity of Eggleston Avenue to 119th Street. This visual change is subjective. General light and shadow conditions for the UPRR Rail Alternative East Option would be similar to those discussed in Section 5.3.1.1; however, a substantial portion of vegetation would be removed on the east side of the project corridor, which would introduce new shadows and light patterns on developments to the east. The majority of vegetation along the west side of the East Option project corridor would remain and would help minimize visible light and shadow effects on residences to the west.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station area, as well as view locations with high visual impact, are discussed below. Locations with low to moderate impacts would be mitigated using the standard mitigation measures discussed at the beginning of Section 5.3.1. Impacts would not be considered adverse for the low to moderate impacts after mitigation. High visual impact views would have specific measures to reduce adverse impacts after mitigation.

- 103rd Street station would have a moderate visual impact. Several buildings would be removed along the existing UPRR corridor. The new station on the north side of 103rd Street would minimally change the character and density of the intersection of 103rd Street and the existing UPRR tracks. The creation of elevated platforms and track structure would affect the viewshed and create new shadows on residences adjacent to the project route. Two surface parking lots

east of the station and west of the existing UPRR corridor would have additional minimal impacts on the surrounding neighborhood character. These impacts would be partially mitigated by using standard mitigation measures, including landscaping and design of the station to match the character and scale of surrounding developments. See Views 7B and 8B in Appendix A for visual illustration of this impact.

- 111th Street station would have a moderate visual impact. Minimal buildings would be removed. The new station just north of 111th street would minimally change the character and density of the intersection at 111th Street and the existing UPRR tracks. The creation of elevated platforms and track structure would alter the viewshed of residences adjacent to the project route. The substantial removal of vegetation to allow for two surface parking lots would have a moderate impact on the surrounding neighborhood character. Impacts would be mitigated using standard mitigation measures, including landscaping and design of the station to match the character and scale of surrounding developments. See View 10B in Appendix A for visual illustration of this impact.

- Michigan Avenue station area would have a moderate visual impact. Several buildings would be removed along the existing UPRR corridor. The new station on the east side of the existing UPRR corridor would not change the character, scale, and density of the immediate area. Elevated platforms and track structure would minimally affect the viewshed of the surrounding area. The substantial removal of buildings and vegetation for the creation of a three-story parking garage west of the existing UPRR corridor would have a moderate impact on the character and density of the local community. The impact on residents of State Street and 116th Street would still be substantial due to the large mass of the parking structure adjacent to a neighborhood; however mitigation measures such as designing the parking facility to match the character of the surrounding fabric would help to minimize the visual impact. The moderate removal of vegetation in the existing vacant lot east of the tracks to accommodate a surface lot would have additional minimal visual impact. Impacts would be mitigated using standard mitigation measures, which include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening. See View 14B in Appendix A for visual illustration of this impact.

- A high visual impact would occur at View 16B at 117th Street and Prairie Avenue. Refer to Table 5-4. Standard mitigation measures include using landscaping and screening to minimize adverse impacts. Due to structure height, proximity to adjacent residences and intact existing neighborhood fabric, however, impacts after mitigation would still be high.

The UPRR Rail Alternative East Option along Segment UA would include substations west of existing UPRR tracks between 104th and 105th Street and west of the existing UPRR tracks between Perry Avenue and Lafayette Avenue. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-4 summarizes the impacts on visual and aesthetic conditions for the UPRR Rail Alternative East Option along Segment UA and provides an assessment of the impacts. Figures 4-8 through 4-11 show the view locations.

Table 5-4: Impacts - East Option - Segment UA

Viewpoint *See Figures 4 7 4 10*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment UA - North of Michigan Avenue				
5	View 5B	View northwest from the southwest corner of Wendell Smith Park	Moderate	The visual character and scale would change with removal of moderate vegetation and the view of the elevated structure introduced to the park.
7	View 7B	View northwest from 103rd Street and Harvard Avenue	Low	The scale and character of the viewshed would change with the removal of existing residential fabric and the addition of an elevated structure, elevated platform, and at-grade station. A surface park & ride lot in the foreground would also alter the character and density of the area.
8	View 8B	View north from the pumping station on Harvard Avenue	Moderate	The removal of vegetation along Harvard avenue and the elevated structure would moderately alter the scale and character of the area surrounding the pump station.
9	View 9B	View northwest from 108th Street adjacent to Roseland Christian School	Low	The elevated structure would create a change in scale and would partially encroach on the yard at Roseland Christian School and thus would minimally affect this viewshed.
10	View 10B	View west from 111th Street	Moderate	The character and scale of the intersection would change with the addition of an elevated structure and platform and at-grade station. Minimal residential structures would be removed to the east while moderate vegetation would be removed for a surface lot to the west.
11	View 11B	View southwest from 113th Street and Princeton Avenue	Moderate	Substantial vegetation and residential structures would be removed and the elevated structure would alter the scale and character of the neighborhood.
12	View 12B	View northeast from 115th Street	Moderate	The elevated structure would create a minimal change in scale and character for the surrounding area. Moderate commercial structures would be removed.
14	View 14B	View south toward the existing Union Pacific Railroad viaduct from Michigan Avenue	Moderate	The scale and character or the viewshed would moderately change with the addition of an elevated structure, elevated platform and Michigan Avenue stationhouse in the foreground. The removal of vegetation and structures beyond the existing UPRR tracks for a three-story park & ride garage would also alter the visual quality.
16	View 16B	View southeast from 117th Street east of Prairie Avenue	High	The residential character and scale would be substantially altered by the substantial removal of vegetation and neighborhood fabric and the addition of elevated structure east of the embankment

5.4.1.2 Segment UB

The impacts, mitigations, West Station Option, and South Station Option in Segment UB would be the same for all UPRR Rail Alternative options. See Section 5.3.1.2. No specific viewpoints were assessed in Segment UB for the East Option. See Table 5.3 Views 17A and 18A show conditions reflected in all UPRR Rail Alternative options.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

Construction impacts and mitigations would be similar in nature for all UPRR Rail Alternative options. See Section 5.3.2.

5.4.2.1 Segment UA

Construction impacts would be longer in nature for the East Option than for the UPRR ROW Option, lasting a few years, at the Michigan Avenue station due to the substantial removal of buildings and construction of a three-story park & ride garage.

5.4.2.2 Segment UB

Construction impacts would be similar in nature to those discussed in Section 5.3.2.

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along the alignment for the UPRR Rail Alternative East Option.

5.4.4 120th Street Yard and Shop

The 120th Street yard and shop would be the same for all UPRR Rail Alternative options. See Section 5.3.4.

5.4.4.1 Permanent Impacts and Mitigations

See Section 5.3.4.1

5.4.4.2 Construction Impacts and Mitigations

See Section 5.3.4.2

5.5 Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative West Option would include new CTA tracks on an elevated structure located immediately adjacent to and west of the existing UPRR ROW. Under this option, the UPRR would remain operational and there would be a 50-foot offset from the existing railroad tracks. Substantial land acquisition and demolition of buildings would occur along the project corridor, especially in Segment UA. The most affected areas would occur along route curves and would be concentrated near station locations. Similar to the East Option, this option would

generally result in a substantial change on the visual and aesthetic conditions of views for the affected project area. Visual illustrations of these impacts are represented in Views 1A, 2A, 3A, 4A, 12C and 15C in Appendix A. Note that Views 1A, 2A, 3A, and 4A apply to all rail alternatives. Mitigations for the substantial visual change associated with the UPRR Rail Alternative West Option are discussed in Section 5.3.1.

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative was analyzed in two segments. Segment UA consists of the UPRR Rail Alternative north of Michigan Avenue and Segment UB is the portion south of Michigan Avenue. Please refer to Figure 4-6 for segment division.

5.5.1.1 Segment UA

The creation of elevated structures along the Segment UA from 95th Street to the vicinity of Eggleston Avenue would have minimal impact on visual quality. The elevated structure and creation of related stations would have substantial impact on the visual and aesthetic conditions of Segment UA from the vicinity of 99th Street to 103rd Street. Vegetation along Fernwood Parkway would be removed and the viewshed for residents along Eggleston Parkway would be adversely affected. This visual change is subjective. General light and shadow conditions for the West Option would be similar to those discussed in Section 5.3.1.1. In addition to shadows and light patterns created by the elevated structure, the removal of vegetation along the west side of the existing UPRR ROW for the majority of Segment UA would alter the visual quality for developments to the west. Standard mitigation measures include providing landscaping and replanting vegetation where possible. Due to the scale and proximity of the elevated structure to adjacent residences, however impacts after mitigation would remain adverse. The majority of vegetation along the east side of existing UPRR corridor would remain and would help minimize impacts on residences to the east.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station, as well as view locations with high visual impact, are discussed below. Locations with low to moderate impacts would be mitigated using the standard mitigation measures discussed at the beginning of Section 5.3.1. Impacts would not be considered adverse for the low to moderate impacts after mitigation. High visual impact views would have specific measures to reduce adverse impacts after mitigation.

- 103rd Street station would have a high visual impact. Several buildings and vegetation along the west side of the existing UPRR corridor would be removed to accommodate the new station and surface parking lot. The new station within the existing Eggleston Parkway would moderately alter the scale and density of the intersection. The creation of elevated platforms and track structure would have a high impact on the viewshed of residences adjacent to the project route and create new shadows. These impacts would be partially mitigated by using

standard mitigation measures, including design of the station to match the character and scale of surrounding neighborhood and provision of landscaping as screening. Despite mitigation measures, impacts would still be high for adjacent residences due to scale of the structure. See View 6C in Appendix A for visual illustration of this impact.

- 111th Street station would have a moderate visual impact. Minimal buildings would be removed. The substantial removal of vegetation and addition of the new station north of 111th street would have a moderate impact on the visual character of the intersection. The creation of elevated platforms and track structure would substantially affect the viewshed of residences adjacent to the project route. A surface parking lot located west of the station would have a high impact on the surrounding neighborhood character due to the removal of substantial vegetation and adjacency to residential structures to the north. Impacts would be mitigated using standard mitigation measures, including design of the station to match the character and scale of surrounding developments and provision of landscaping to replace removed vegetation. See View 10C in Appendix A for visual illustration of this impact.

- Michigan Avenue station area would have a high visual impact. Several buildings would be removed along the existing UPRR corridor. The new station on the west side of Michigan Avenue would not change the character, scale, and density of the immediate area. Elevated platforms and track structure would minimally affect the viewshed of the surrounding area. The substantial removal of buildings and vegetation for the creation of a five-story parking garage west of the elevated structure would, however, have an impact on the character and density of the local community. Despite mitigation measures, the impact on residents of State Street and 116th Street would still be substantial due to the large mass of the parking structure adjacent to a neighborhood. The moderate removal of vegetation in the existing vacant lot to accommodate a surface parking lot would have minimal visual impact. Impacts would be partially mitigated using standard mitigation measures, which include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening. See Views 13C and 15C in Appendix A for visual illustration of this impact. Due to the five-story parking garage, impacts would remain high despite mitigation.

- A high visual impact would occur at View 6C (Appendix A). See description of 103rd Street station above or refer to Table 5-6.

- A high visual impact would occur at View 13C (Appendix A). Refer to Table 5-6. Standard mitigation measures include using landscaping and screening to minimize adverse impacts. Due to structure height, proximity to adjacent residences, and intact neighborhood fabric, however, impacts after mitigation would still be substantial.

- View 15C in Appendix A: High visual impact - See description of Michigan Avenue station above or refer to Table 5-6.

The UPRR Rail Alternative West Option along Segment UA would include substations located east of existing UPRR tracks between 105th Street and 105th Place and west of the existing UPRR tracks between Perry Avenue and Lafayette Avenue. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-5 summarizes the impacts on visual and aesthetic conditions for the UPRR Rail Alternative West Option along Segment UA and provides an assessment of the impacts. Figures 4-8 through 4-11 show the view locations.

Table 5-5: Impacts - West Option - Segment UA

Viewpoint *See Figures 4 7 4 10*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment UA - North of Michigan Avenue				
5	View 5C	View northwest from the southwest corner of Wendell Smith Park	Moderate	The visual character and scale would change with the removal of vegetation and addition of an elevated structure in park views.
6	View 6C	View south along Eggleston Avenue and Fernwood Parkway toward 103rd Street	High	Removal of vegetation and addition of elevated structure would substantially change the character of the residential street. Removal of existing buildings and addition of surface parking lot in the distance would moderately affect the viewshed.
10	View 10C	View west from 111th Street	Moderate	The character and scale of the intersection would change with the addition of an elevated structure, elevated platform, and at-grade station and removal of moderate residential and commercial structures. Vegetation would be replaced by a surface park & ride lot located to the west.
12	View 12C	View northeast from 115th Street	Moderate	The elevated structure would create a minimal change in scale and character for the surrounding area. Moderate commercial structures would be removed.
13	View 13C	View southeast from State Street	High	The substantial removal of residential structures for the addition of a five-story park & ride garage and elevated structure would substantially change the scale, character, and density of the neighborhood
15	View 15C	View northwest toward the existing UPRR viaduct from Michigan Avenue	High	The removal of structures and vegetation and the addition of an elevated structure, platform, and stationhouse, would alter the scale, character, and density of the viewshed. The five-story park & ride garage to the west would affect the scale of the surrounding area.

5.5.1.2 Segment UB

The impacts, mitigations, West Station Option, and South Station Option in Segment UB would be the same for all UPRR Rail Alternative options, with the exception described in the following paragraph. For all other impacts and mitigations, see Section 5.3.1.

The UPRR Rail Alternative West Option in the vicinity of Prairie Avenue and 117th Street would have additional minimal impacts at the elevated structure's east-west crossing over the existing UPRR tracks. This condition is unique to the West Option and would require the typical hammerhead piers to span straddle bent supports with typical pier protection. The elevation of the structure would be 16 feet higher than in other locations, to maintain a minimum clearance of 23 feet 4 inches over the existing UPRR tracks. There would be additional minimal visual impact isolated to this area and adjacent residences.

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

Construction impacts and mitigations would be similar in nature for all UPRR Rail Alternative options. See Section 5.3.2.

5.5.2.1 Segment UA

Construction impacts would be longer in nature for the West Option than for the UPRR ROW Option, lasting a few years, at the Michigan Avenue station due to the substantial removal of buildings and construction of a five-story park & ride garage.

5.5.2.2 Segment UB

Construction impacts would be similar in nature to those discussed in Section 5.3.2.

5.5.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along alignment for the UPRR Rail Alternative West Option.

5.5.4 120th Street Yard and Shop

The 120th Street yard and shop would be the same for all UPRR Rail Alternative options. See Section 5.3.4.

5.5.4.1 Permanent Impacts and Mitigations

See Section 5.3.4.1

5.5.4.2 Construction Impacts and Mitigations

See Section 5.3.4.2

5.6 Halsted Rail Alternative

The Halsted Rail Alternative would include new CTA tracks on an elevated structure running south from 95th Street along I-57 until Halsted Street, and then continuing south along Halsted Street to its intersection at Vermont Avenue near 127th Street. The scale, density, and character of several viewsheds would change by varying degrees as part of this alternative. The elevated structure would alternate between steel, cross-girder bents spanning the corridor and reinforced, cast-in-place concrete hammerhead piers in the existing median along Halsted Street. In these locations, trees in the planter median would be removed. Moderate land acquisition and demolition of buildings would occur along the project corridor, with most concentrated areas near station locations. Due to the low density and viewer sensitivity along much of the Halsted Rail Alternative corridor, the overall impacts would be moderate with regards to the visual and aesthetic conditions of views for the affected project area. Figure 4-13 shows the Halsted Rail Alternative.

Track alignments typically have a higher degree of visual impact than other changes, due to the demolition of existing structures and, in many cases, a substantial change in scale, density, and character of the surrounding environment.

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

The retail and commercial establishments along Halsted Street are set back from the curb, with parking lots and parking lanes in front, creating a utilitarian appearance and character. The introduction of elevated structures would alter this character to a more urban quality and would also create density in an area that currently has a large portion of vacant lots and unoccupied structures. The trees in the existing vegetated median would be removed as part of the alternative and the addition of the elevated structure would be a visible encroachment, creating new shadows and light patterns, especially to those travelling along Halsted Street by foot or vehicle. Those travelling immediately adjacent to the alternative corridor would experience similar impacts. Visual illustrations of these impacts are represented in Views 1A, 2A, 3A, 4A, 23 and 33 in Appendix A. Note that Views 1A, 2A, 3A, and 4A apply to all rail alternatives. The concrete piers and steel cross-girders would become a prominent visual feature and the introduction of the seven-story park & ride facility at the Vermont Street station would dramatically change the scale, character, and shadows, making a strong impact on the surrounding residential neighborhoods. View 36 in Appendix A shows example station impacts.

Viewsheds that are roughly two to four blocks away and are not immediately adjacent to the alignment would be less sensitive to the impacts on visual and aesthetic conditions along Halsted Street because they take in a longer, more expansive view. In many instances, viewsheds from east-west locations only capture a small portion of the elevated structure due to a narrow perpendicular position. In these views the project elements would be noticeable but not dominant; thus, visual impacts related to the alignment would not be considered substantial unless immediately adjacent to the project corridor. Because the viewshed from east-west locations is narrow, existing views across Halsted Street would be blocked by the elevated structure and piers. With minimum vertical clearances of 14 feet 9 inches, the rail alignment

would create new visual light conditions along the retail and commercial corridor for pedestrians, motorists, and adjacent structures. The elevated structure and associated piers would cast shadows that vary in intensity by time of day and season.

In addition to the standard mitigation discussed in Section 5.3.1, additional measures to reduce impacts of the Halsted Rail Alternative include the following:

- Encouraging more pedestrian-oriented urban development
- Introducing elements such as landscaping, planters, or fencing to provide a visual buffer between the project corridor and the adjacent residential neighborhoods

The Halsted Rail Alternative was analyzed in two segments: Segment HA consists of the Halsted Rail Alternative north of 119th Street and Segment HB is the portion south of 119th Street. Figure 4-13 shows the segment division.

5.6.1.1 Segment HA

The creation of elevated structures along the Segment HA from 95th Street to the vicinity of 99th and Halsted Streets would have overall minimal to moderate impacts on the visual quality. The project corridor between 99th Street and 103rd Street in Segment HA has more high quality commercial development than Segment HB; thus, impacts on visual and aesthetic conditions along this portion would be more substantial. The alternative would introduce an aesthetic, scale, and density that is not currently present along this light commercial corridor and would therefore create a moderate degree of change on the visual and aesthetic condition of views. This visual change is subjective. It would affect the vegetated median in many instances and would create new shadows on the surrounding area.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station, as well as view locations with high visual impact, are discussed below. Locations with low to moderate impacts would be mitigated using the standard mitigation measures discussed at the beginning of Section 5.3.1. Impacts would not be considered adverse for the low to moderate impacts after mitigation. High visual impact views would have specific measures to reduce adverse impacts after mitigation.

- 103rd Street station would have a low visual impact. The new station at the intersection of 103rd and Halsted Streets would minimally change the character and density of the intersection. Minimal buildings would be removed for a surface park & ride lot on the northwest parcel adjacent to the station, which would have little impact on the surrounding neighborhood character. Due to low density and viewer sensitivity, impacts would be minimal. Standard mitigations would reduce impacts. See View 26 in Appendix A for visual illustration of this impact.

- 111th Street station would have a low visual impact. The new station at the intersection of 111th and Halsted Streets would minimally change the character and density of the intersection. Minimal buildings would be removed for a surface park & ride lot adjacent to the station, which would have little impact on the surrounding neighborhood character. Due to low density and viewer sensitivity, impacts would be minimal. Standard mitigations would reduce impacts. See View 29 in Appendix A for visual illustration of this impact.

- 119th Street station would have a low visual impact. The new station at the intersection of 119th and Halsted Streets would minimally change the character and density of the intersection. Minimal buildings would be removed for a surface park & ride lot adjacent to the station, which would have little impact on the surrounding neighborhood character. Due to low density and viewer sensitivity, impacts would be minimal. Standard mitigations would reduce impacts. See Views 30 and 31 in Appendix A for visual illustration of this impact.

- A high visual impact would occur at View 23 (Appendix A, and Table 5-8). To minimize adverse visual impacts, mitigations would include using landscaping and screening. Due to the structure's height and proximity to the established commercial area, however, impacts after mitigation would still be substantial.

The Halsted Rail Alternative along Segment HA would include substations on the northeast corner at the intersection of 101st and Halsted Streets and the southeast corner at the intersection of 110th and Halsted Streets. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-6 summarizes the impacts on visual and aesthetic conditions for the Halsted Rail Alternative along Segment HA and provides an assessment of the impacts. Figures 4-15 through 4-18 show the view locations.

Table 5-6: Impacts - Segment HA

Viewpoint *See Figures 4 13 4 16*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment HA - North of 119th Street				
19	View 19	View southeast from 98th Street and Parnell Avenue	Low	The overall visual character would not change and there would be a minimal increase in scale for adjacent neighbors due to the elevated structure.
20	View 20	View southwest over I-57 from 98th Place	Low	The overall visual character would not change, but the increase in scale and shadows would be noticeable to motorists due to elevated structures. The structure would be visible in the distance to adjacent neighborhoods.

Viewpoint *See Figures 4 13 4 16*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
21	View 21	View southeast from I-57 overpass at Halsted Street	Low	The character and scale of the intersection would change with the addition of an elevated structure and associated shadows. Minimal removal of commercial buildings, vegetation, and median planters would be visible in the distance.
22	View 22	View northwest from Emerald Avenue	Low	The elevated structure in the distance would be minimally visible beyond the existing residential neighborhood.
23	View 23	View northeast from 100th and Halsted Streets	High	The elevated structure and removal of trees within the median planters would moderately change the scale and character of the area. The immediately adjacent commercial structures would introduce new shadows and light on storefronts and create a new visual character for pedestrians.
24	View 24	View south from 100th and Halsted Streets	Moderate	The elevated structured would alter the viewshed of the church and affect the scale of the surrounding area. Due to user sensitivity, the impacts would be moderate.
25	View 25	View south from Halsted Street between 102nd and 103rd Streets	Moderate	The removal of trees within the median planters and a structure to accommodate a surface parking lot would moderately change the character of the viewshed while the elevated structure would introduce new shadows and light patterns to pedestrians and adjacent businesses.
26	View 26	View west from 103rd Street toward Halsted Street	Low	The change of scale and density created by the elevated structure and station would have minimal impact on the viewshed from the adjacent neighborhood due to the existing commercial activity at the intersection.
27	View 27	View north from 107th Street and Halsted Street	Low	The addition of the elevated structure and introduction of shadows would minimally affect and alter the character of the low-density intersection.
28	View 28	View southeast from 107th Street toward Halsted Street	Moderate	The elevated structured would alter the viewshed of the church and affect the scale of the surrounding area. Due to user sensitivity, the impacts would be moderate.
29	View 29	View east from 111th Street toward Halsted Street	Moderate	The elevated structure, platform and station in the distance would have minimal impact on the intersection; however, moderate removal of buildings and parking lot to north of 111th Street station for a new park & ride lot would change the character and density of viewshed from the neighborhood.
30	View 30	View southeast from the Major Taylor Trail at 118th Street	Low	The elevated structure in the distance would be highly visible beyond the existing vegetation.

Viewpoint *See Figures 4 13 4 16*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
31	View 31	View south from 118th Street and Halsted Street	Moderate	The removal of trees within the median planters and removal of greenway along the sidewalk to accommodate station entry would moderately change the character of the viewshed. The elevated structure would introduce new shadows and light patterns to pedestrians and adjacent businesses.
32	View 32	View southwest from 119th Street and Halsted Street	Moderate	The viewshed would show the elevated structure over Halsted Street, as well as tracks traveling to the yard to the east, which would change the scale, character, and density for adjacent businesses and residences. New shadows and light patterns would also be created for pedestrians and recreationists on the Major Taylor Trail. Due to low density and viewer sensitivity in this area, impacts would be moderate.

5.6.1.2 Segment HB

The creation of elevated structures and stations along the alignment in Segment HB from the vicinity of 119th Street to the bridge at Little Calumet River would have moderate impact on the visual quality. The alternative would introduce an aesthetic, scale, and density that is not currently present along this light commercial corridor and would thus create a moderate degree of change on the visual and aesthetic condition of views. This visual change is subjective. It would affect the vegetated median in many instances and create new shadows on the surrounding area; however, it would only require minimal land acquisition. Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas.

- Vermont Street station would have a high visual impact. The new station at the intersection of Vermont Avenue and Halsted Street would substantially change the character and density of the intersection and surrounding neighborhood. Substantial removal of a cohesive residential block to accommodate a seven-story park & ride facility west of Halsted Street would have a marginal impact on the scale, density, shadows, and aesthetic of the surrounding cohesive residential character. Additionally, the removal of commercial structures on the east side of Halsted Street to accommodate a surface lot would have moderate impacts on the adjacent neighborhood to the east. Impacts would be partially mitigated using standard mitigation measures, which include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening. Due to the large mass and proximity to adjacent one- to two-story residential buildings, however, impacts would still be adverse after mitigation. See Views 34, 35 and 36 for visual illustration of this impact.

- A high visual impact would occur at Views 34 and36 (Appendix A and Table 5-9).

The Halsted Rail Alternative along Segment HB would include substations along Halsted Street between 120th Street and the ME tracks, the southeast corner at the intersection of 126th and Halsted Streets, and at the entrance to the yard along Peoria Street. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-7 summarizes the impacts on visual and aesthetic conditions for the Halsted Rail Alternative along Segment HB and provides an assessment of the impacts. Figures 4-17 through 4-18 show the view locations.

Table 5-7: Impacts - Segment HB

Viewpoint *See Figures 4 16 4 17*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment HB - South of 119th Street				
33	View 33	View northwest from 120th Street and Halsted Street	Moderate	Moderate removal of commercial and retail structures to accommodate elevated structure traveling to yard would alter the scale and density of the area and create new shadows and light patterns. Due to low density and viewer sensitivity in this area, impacts would be moderate.
34	View 34	View south from Vermont Avenue and Halsted Street	High	Substantial removal of commercial and retail structures along both sides of Halsted Street to accommodate a park & ride lot on the east and a seven-story garage on the west would visually alter the scale, density, and character of the area.
35	View 35	View northeast from 128th Street and Halsted Street	Moderate	A seven-story park & ride garage would replace the vacant lot west of Halsted Street and a surface lot would replace the vacant lot on the east, altering the scale, density and character of the area. The elevated structure, platform, and supports would alter views and shadows for pedestrians; however, due to low density and viewer sensitivity in this area, impacts would be moderate.
36	View 36	View northeast from 128th Street and Green Street	High	The substantial removal of residential and light commercial structures to accommodate a seven-story park & ride garage in the foreground and a lot on the opposite side of Halsted Street would substantially change the scale, character, and density of the neighborhood. The elevated structure, platform, and associated supports would moderately block views across Halsted Street and would alter the visual quality.
37	View 37	View north from Halsted Street bridge at Little Calumet River	Low	The addition of the elevated structure would minimally affect and alter the character of the low-density area.

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

Construction impacts and mitigations would be similar in nature to those described for the UPRR Rail Alternative, as construction methods would be the same. See Section 5.3.2. Additional road construction impacts would be created for the removal of trees within the median planters and replacement with hammerhead piers. In general, the Halsted Rail Alternative would require more temporary traffic lane closures than any alternative. Parking lanes would be eliminated at portions along Halsted Street to accommodate steel cross-girder and column locations near cross-intersections or stations and would require more temporary traffic lane closures than other alternatives.

5.6.2.1 Segment HA

Construction impacts would be similar in nature to those described for the UPRR Rail Alternative for all locations along Segment HA. See Section 5.3.2.

5.6.2.2 Segment HB

Construction impacts would be similar in nature to those described for the UPRR Rail Alternative for all locations along Segment HB. See Section 5.3.2 Construction impacts would be longer in nature, lasting a few years, at the Vermont Avenue station than at other locations due to the substantial removal of buildings and construction of a seven-story park & ride garage.

5.6.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along the alignment of the Halsted Rail Alternative.

5.6.4 119th Street Yard and Shop

The 119th Street yard and shop would be located south of the 119th Street station and north of Vermont Avenue station, west of Halsted Street. The yard would be entirely at grade with a nominal amount of parking for employees. A substation would be within the 120th Street yard, west of the existing railroad tracks and east of the proposed shop facility.

5.6.4.1 Permanent Impacts and Mitigations

Moderate land acquisition would include the removal of several buildings and a large parking lot. Track height would transition from elevated to at-grade between Halsted Street and Morgan Street, which would help minimize the visual impact on the surrounding residential community. Overall, the street yard and shop would dramatically change the character and scale of the surrounding area, which includes light commercial and residential neighborhoods. In addition to the standard mitigations discussed in the beginning of Section 5, additional measures for the 120th Street yard and shop would include designing the shop facility to be aesthetically compatible with surrounding structures.

5.6.4.2 Construction Impacts and Mitigations

The construction of the 119th Street yard and shop would last several years and would have high visual impacts. The removal of existing buildings and parking lots, including associated debris, would be more substantial than other locations along the project corridor. These impacts could be mitigated using the measures discussed in Section 5.3.2.

Section 6
Impacts Remaining After Mitigation

Adverse impacts for all alternatives would be minimized through various mitigations. At view locations where impacts would be low to moderate, visual and aesthetic impacts would be reduced or eliminated after standard mitigation measures. Due to the scale and height of the proposed improvements, the visual impacts in many instances could not be completely mitigated and would remain. Impacts at high impact views could be minimized by implementing many of the standard mitigations, as well as specific mitigations described for each view in Section 5. Typical adverse impacts that would remain after mitigation would include the replacement of existing cohesive fabric with large parking structures that would substantially alter the scale, character, and density of viewsheds. Despite mitigation measures such as planting vegetation, urban design techniques, stepping back massing, or using context sensitive design and materials, the contrasting mass would still be out of scale and character. Additionally, in many instances, despite mitigations such as incorporating planters and street trees and other methods of good urban design, the addition of stations and elevated structures, which would still be visible beyond vegetation and taller than surrounding structures, would adversely affect neighborhood viewsheds, visual character, and cohesive neighborhood fabric. For structures immediately adjacent to the alignment, shadows would be created, which would alter the visual character of the area and could not be mitigated.

The following sections present a summary of the impacts that would remain after mitigation for each of the alternatives.

6.1 No Build Alternative

There would be no adverse impacts under the No Build Alternative; therefore, there would be no mitigation or impacts remaining.

6.2 Bus Rapid Transit Alternative

No adverse impacts would remain after mitigation.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

6.3.1 Segment UA

Michigan Avenue station and View 13A would not have adverse impacts after mitigation. Moderate impacts would remain after mitigation due to the mass of the parking structure and its proximity to residences.

6.3.2 Segment UB

No adverse impacts would remain after mitigation.

6.3.3 120th Street Yard and Shop

No adverse impacts would remain after mitigation.

6.4 Union Pacific Railroad Rail Alternative - East Option

6.4.1 Segment UA

The area southeast of the Michigan Avenue station (shown in View 16B) would still have adverse impacts after mitigation. The height and mass of the structure and its proximity to residences could not be mitigated. See Section 5.4.1.1 and Table 5.4-1.

6.4.2 Segment UB

No adverse impacts would remain after mitigation.

6.4.3 120th Street Yard and Shop

No adverse impacts would remain after mitigation.

6.5 Union Pacific Railroad Rail Alternative - West Option

6.5.1 Segment UA

The area from 99th Street to 103rd Street, including the 103rd Street station and park & ride structure at the Michigan Avenue station, specifically Views 6C and 13C, would still have adverse impacts after mitigation. The height and mass of the structures and the proximity to residences could not be mitigated. See Section 5.5.1.1 and Table 5.5-1.

6.5.2 Segment UB

No adverse impacts would remain after mitigation.

6.5.3 120th Street Yard and Shop

No adverse impacts would remain after mitigation.

6.6 Halsted Rail Alternative

6.6.1 Segment HA

View 23 would still have adverse impacts after mitigation due to structure height and proximity to the established commercial corridor. See Section 5.6.1.1 and Table 5.6-1.

6.6.2 Segment HB

Vermont Street station, specifically Views 34 and 36, would still have adverse impacts after mitigation. The height and mass of the structure and its proximity to residences could not be mitigated. See Section 5.6.1.2 and Table 5.6-2.

6.6.3 119th Street Yard and Shop

No adverse impacts would remain after mitigation.

Section 7
References Cited

City of Chicago. Landmarks Ordinance - Municipal Code Title 2, Chapter 120, Article XVII.

City of Chicago. Zoning Ordinance and Land Use Ordinance - Municipal Code Titles 16 and 17.

Illinois Department of Transportation. 2007. Illinois State Transportation Plan: Context Sensitive Solutions. June.

The National Historic Preservation Act. Amended 1966. Section 106.

U.S Department of Transportation. 1981. Federal Highway Administration Visual Impact Assessment for Highway Projects.

Visual and Aesthetic Visualizations

Appendix A

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

*** View numbers are not consecutive. Analysis and photography were done in different order than views appear in this appendix.**

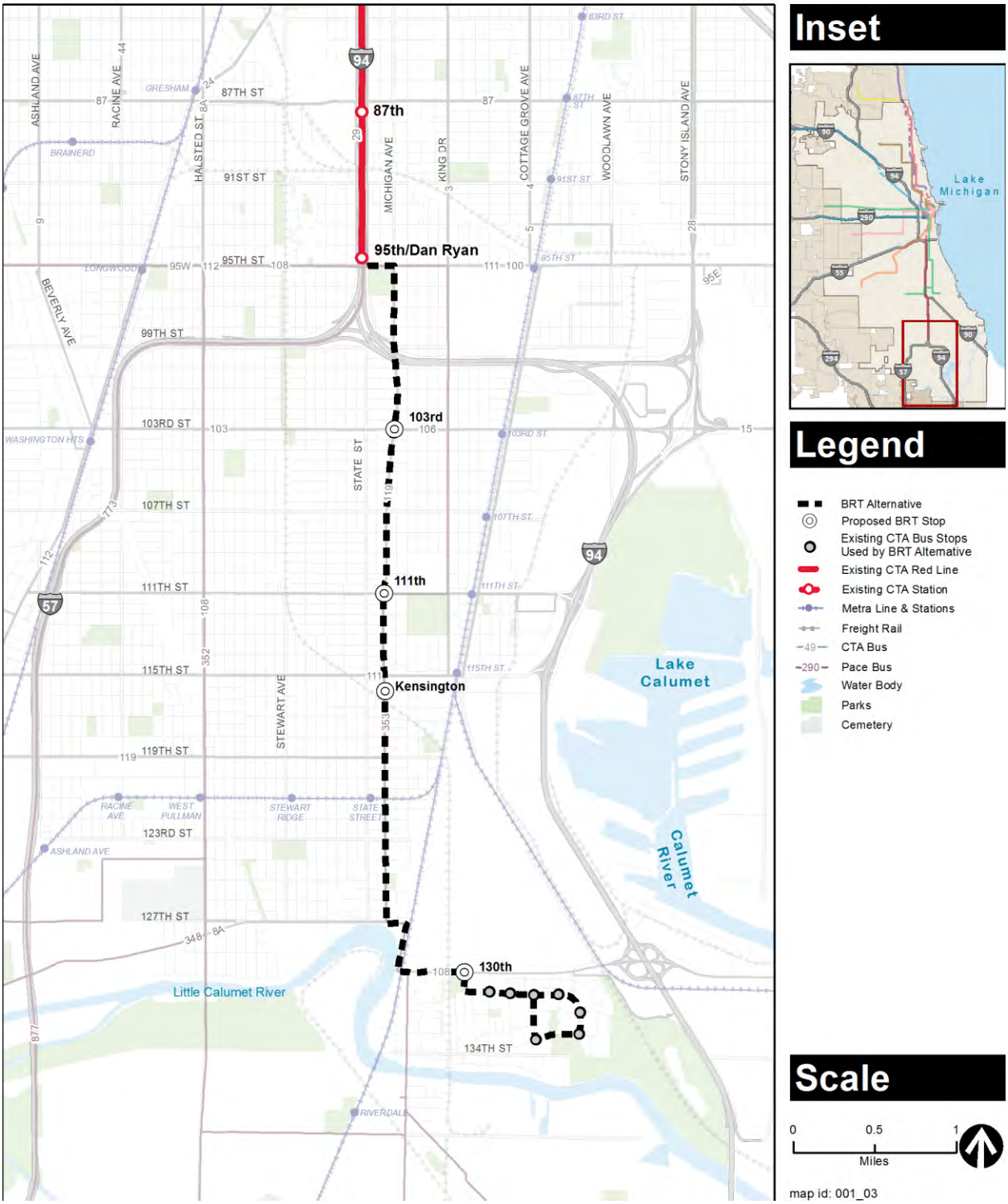

Figure A-1: Bus Rapid Transit Alternative

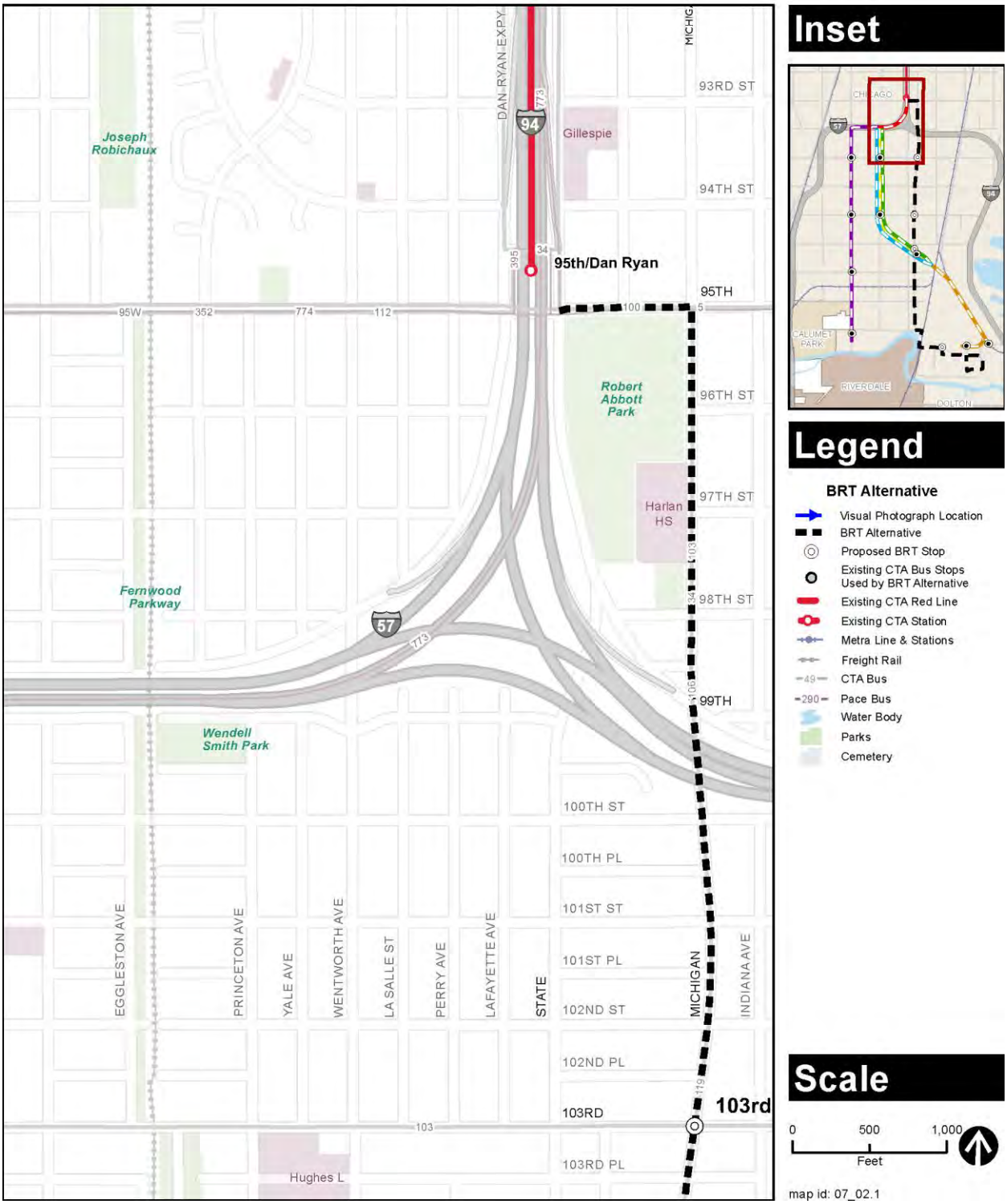

Figure A-2: View Locations for the Bus Rapid Transit Alternative - North

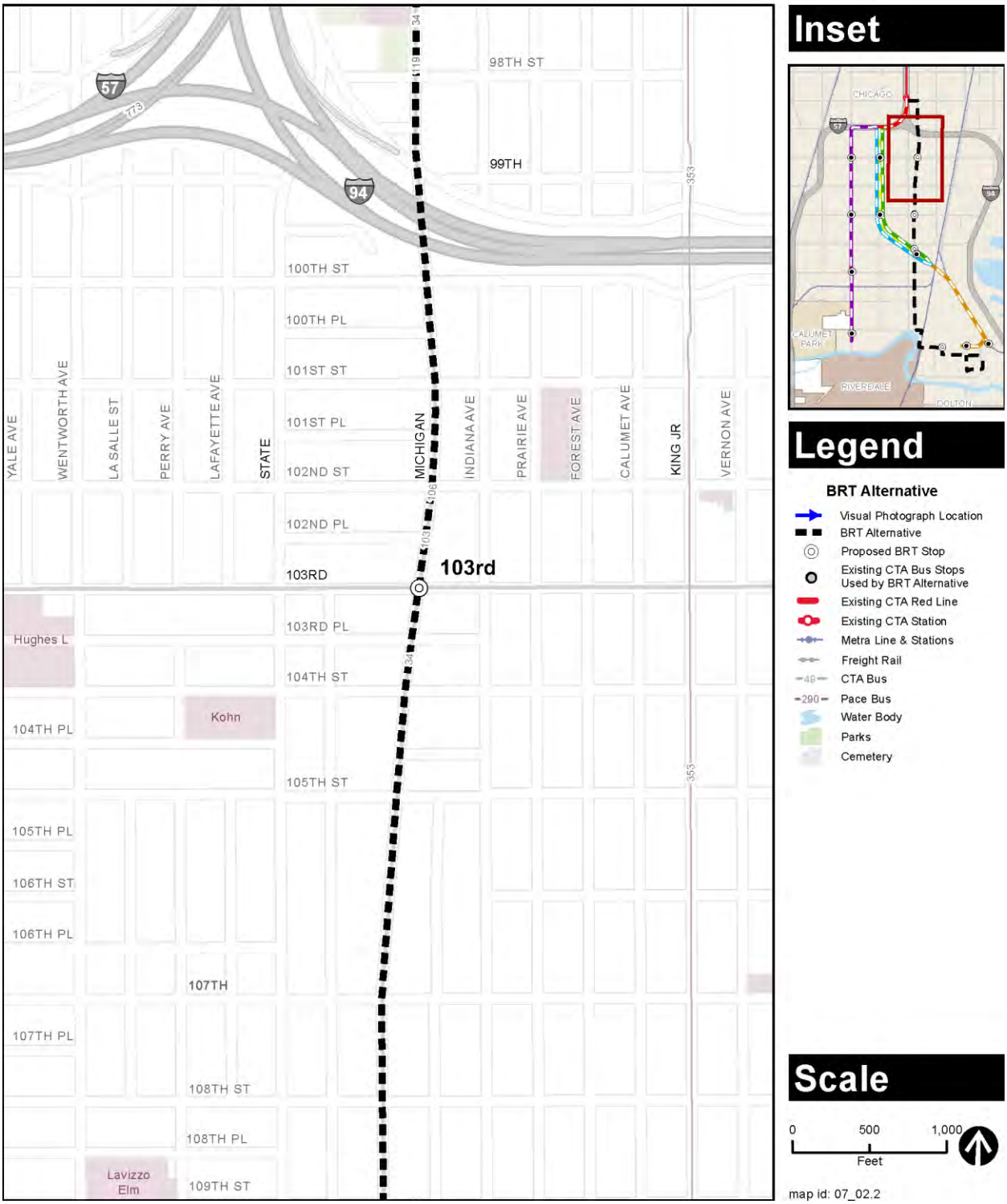

Figure A-3: View Locations for the Bus Rapid Transit Alternative - North Central

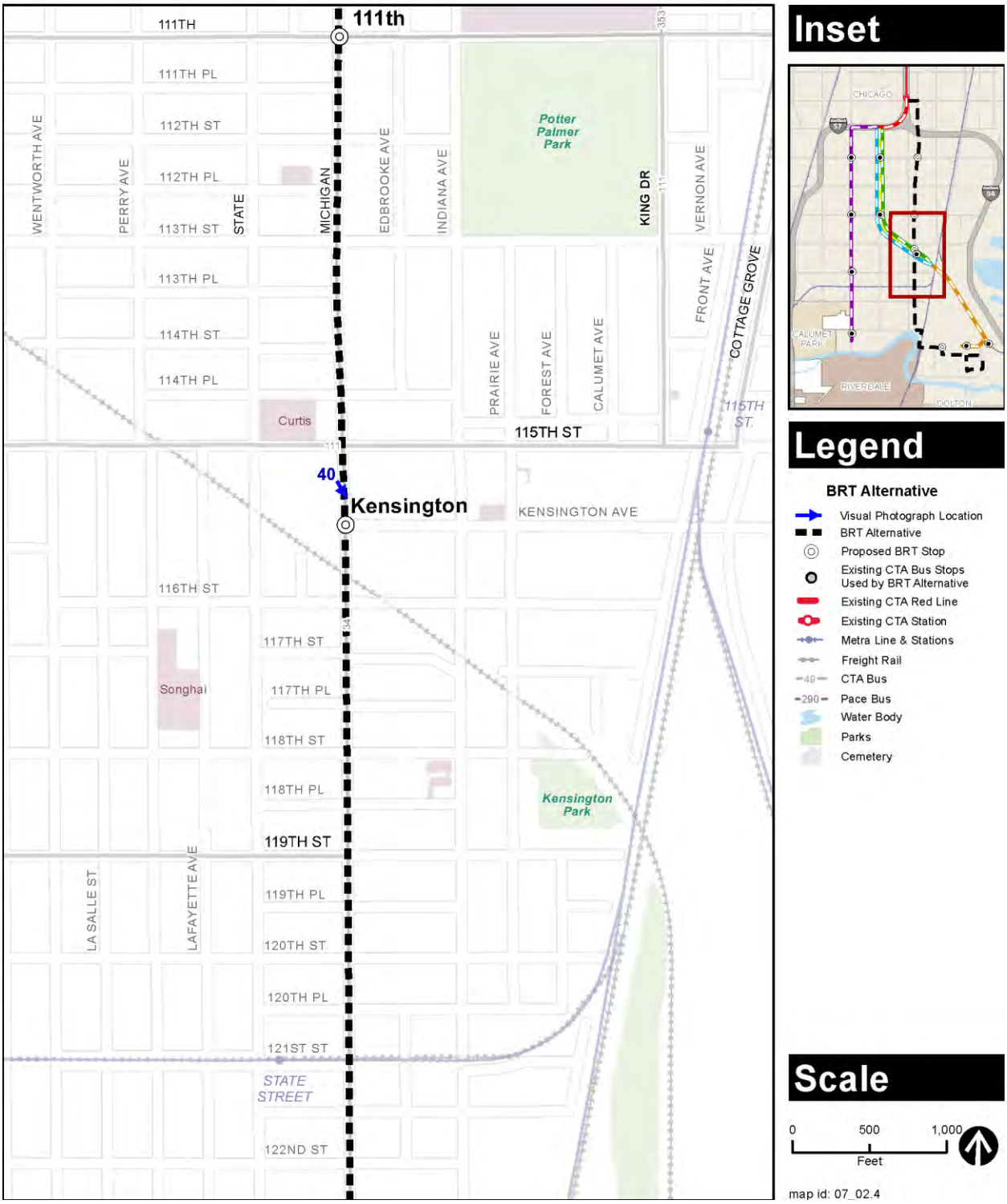

Figure A-4: View Locations for the Bus Rapid Transit Alternative - South Central

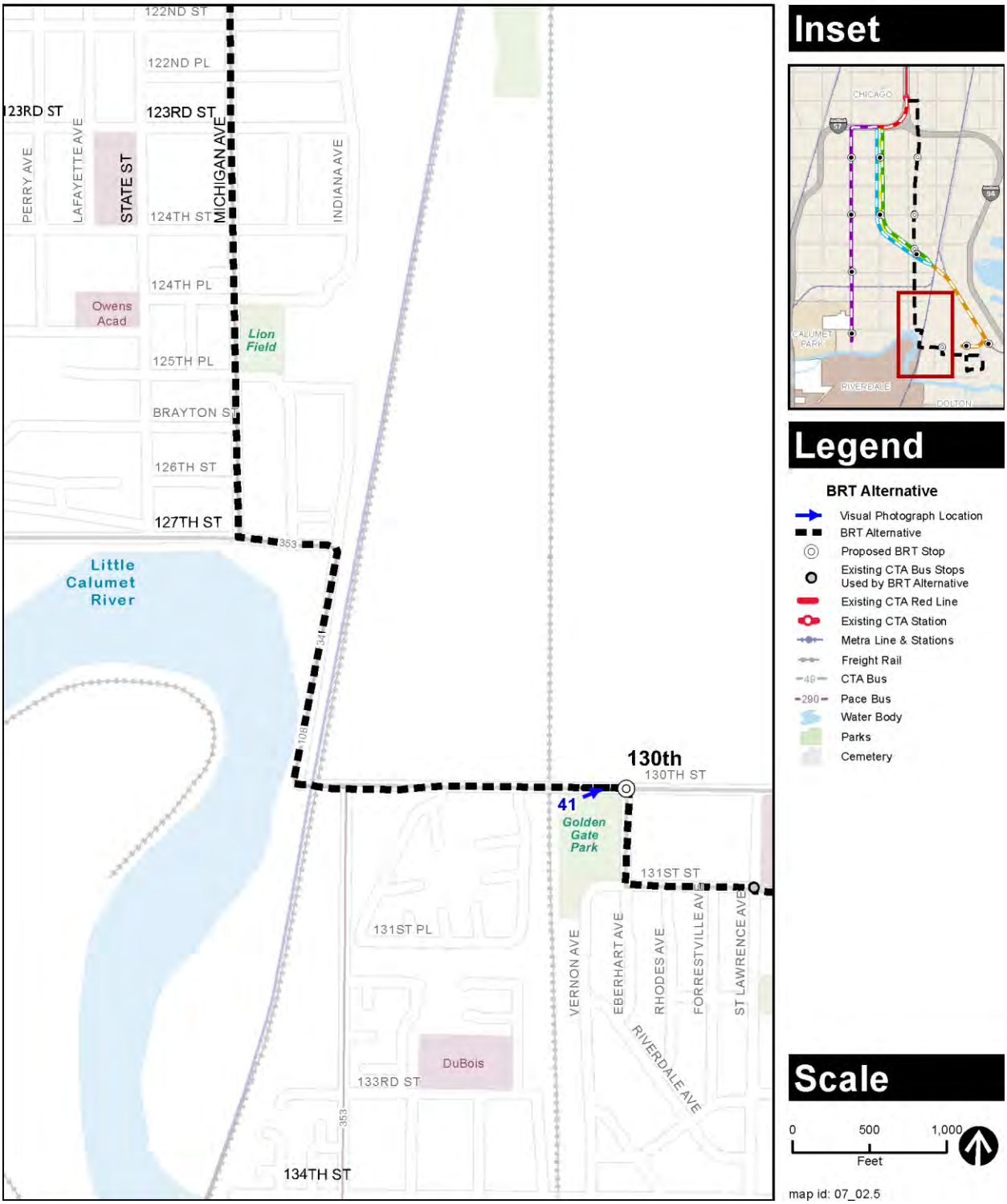

Figure A-5: View Locations for the Bus Rapid Transit Alternative - South

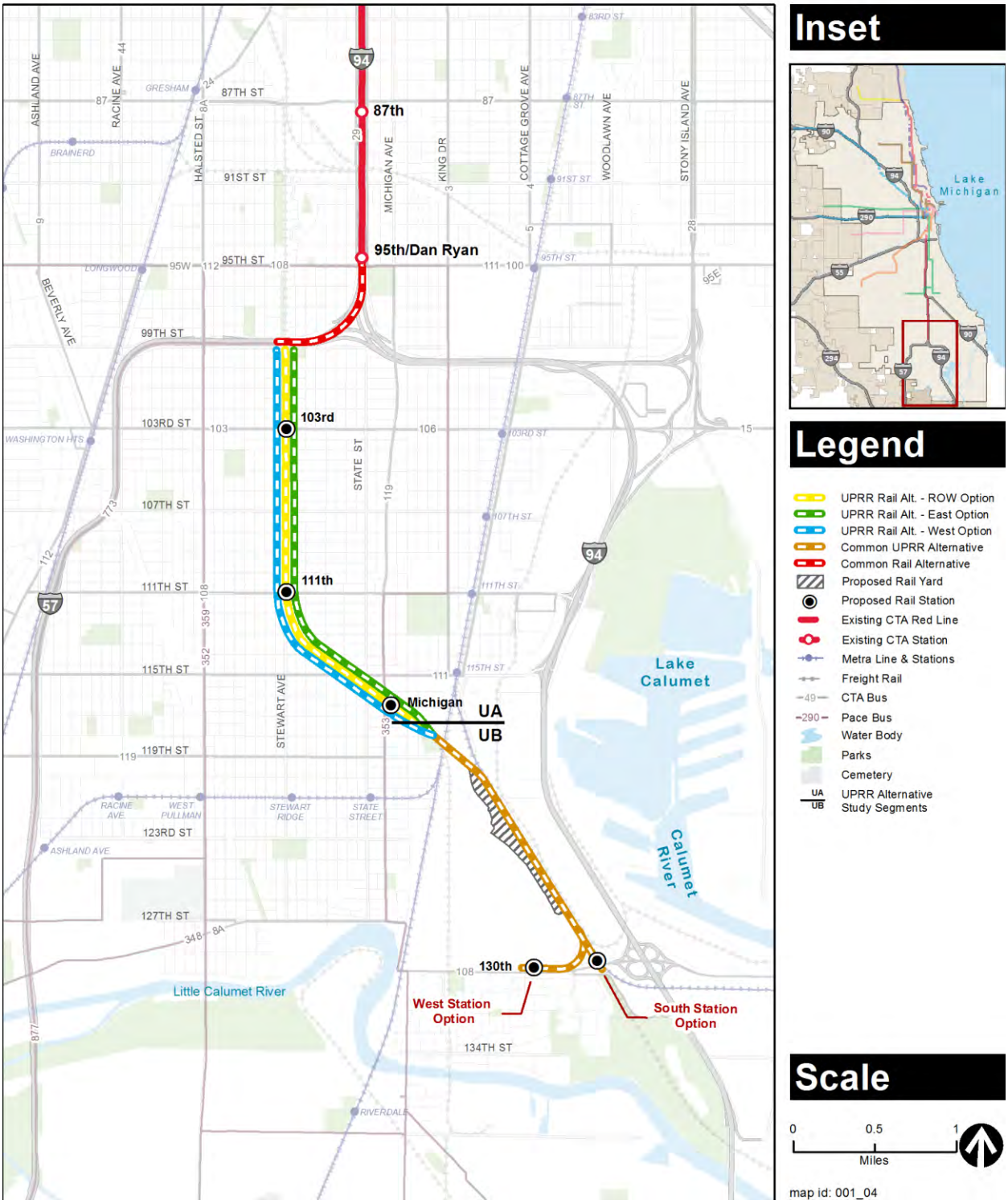

Figure A-6: Union Pacific Railroad Rail Alternative

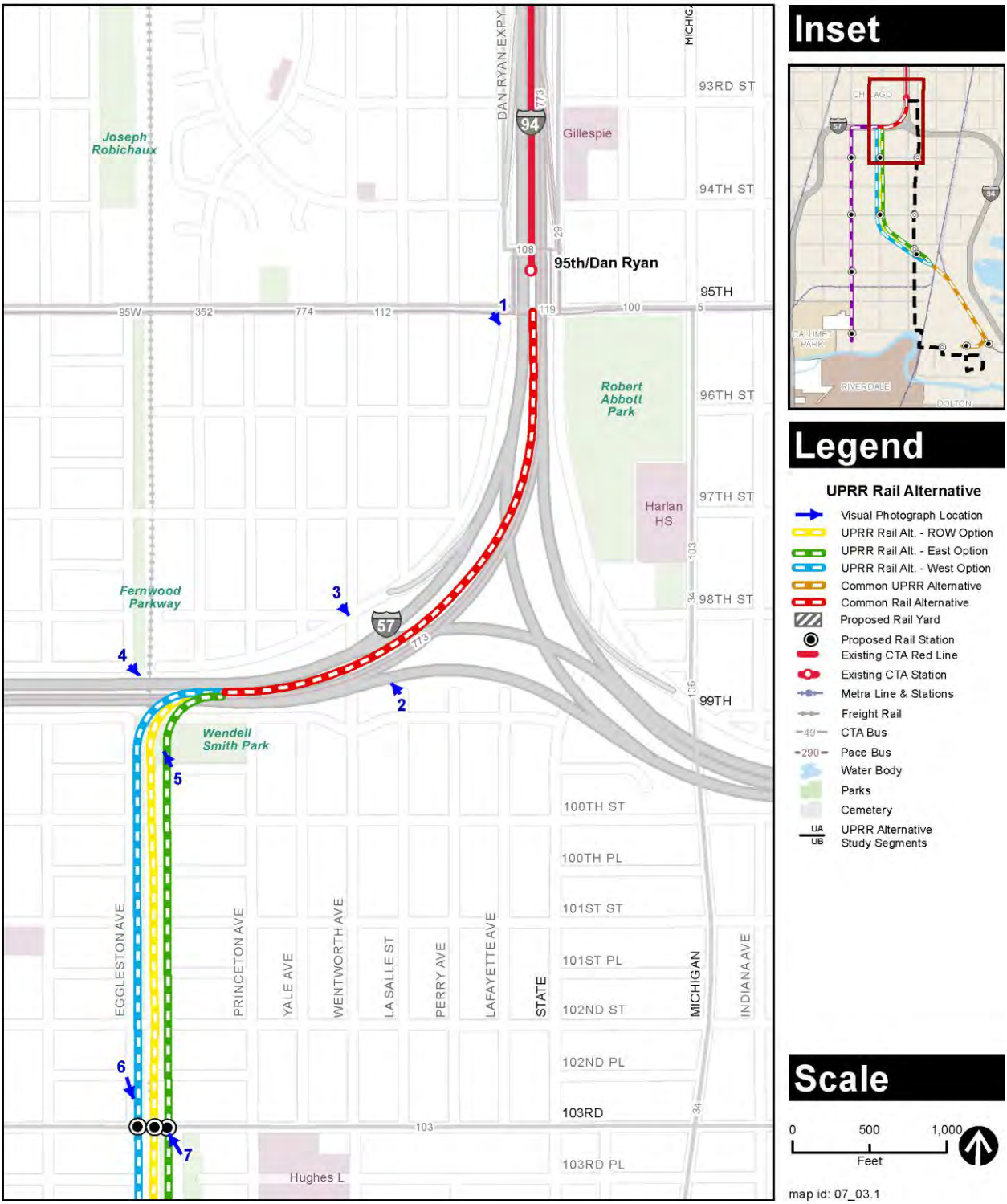

Figure A-7: Union Pacific Railroad Rail Alternative View Locations - Segment UA North

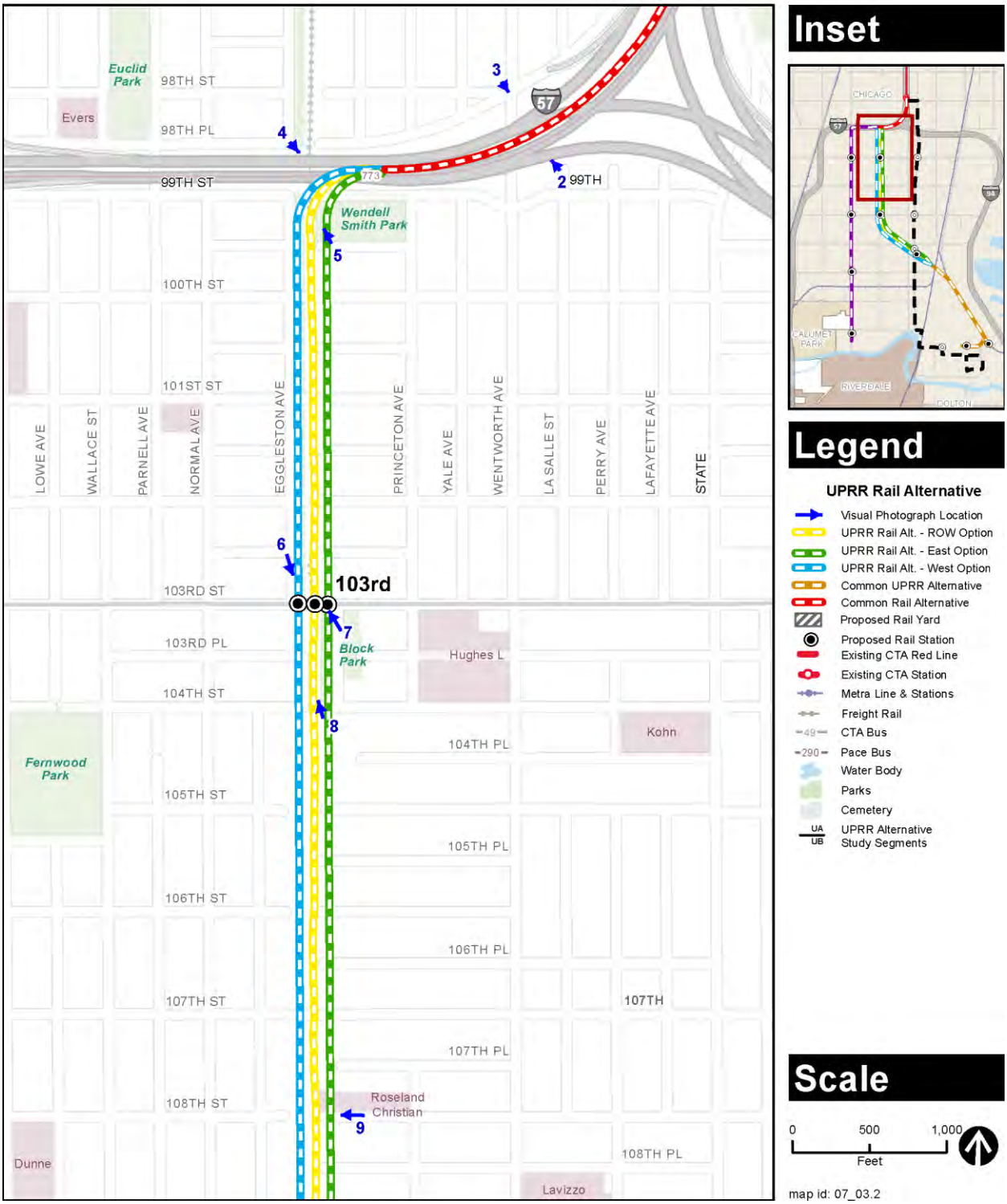

Figure A-8: Union Pacific Railroad Rail Alternative View Locations - Segment UA

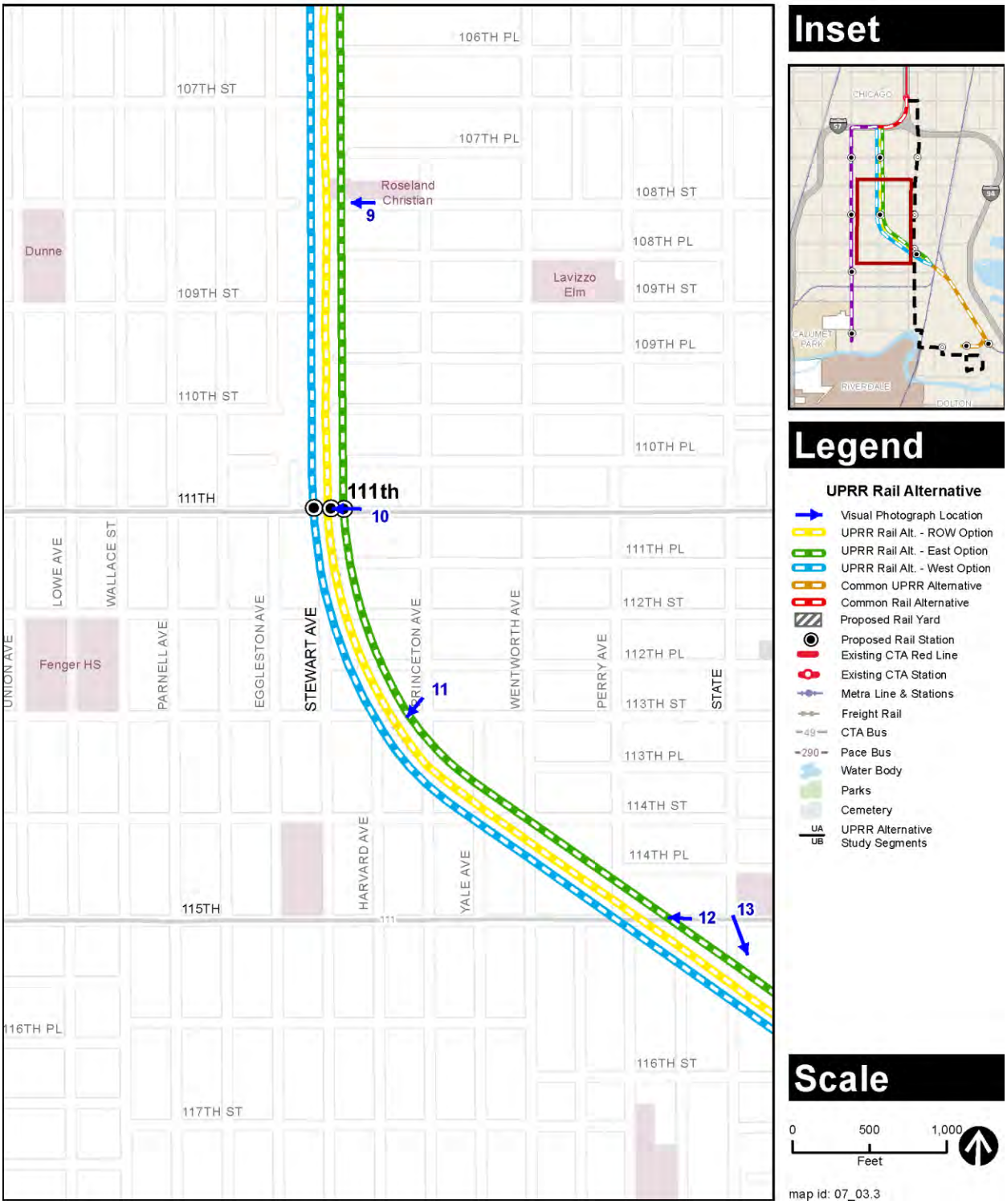

Figure A-9: Union Pacific Railroad Rail Alternative View Locations - Segment UA

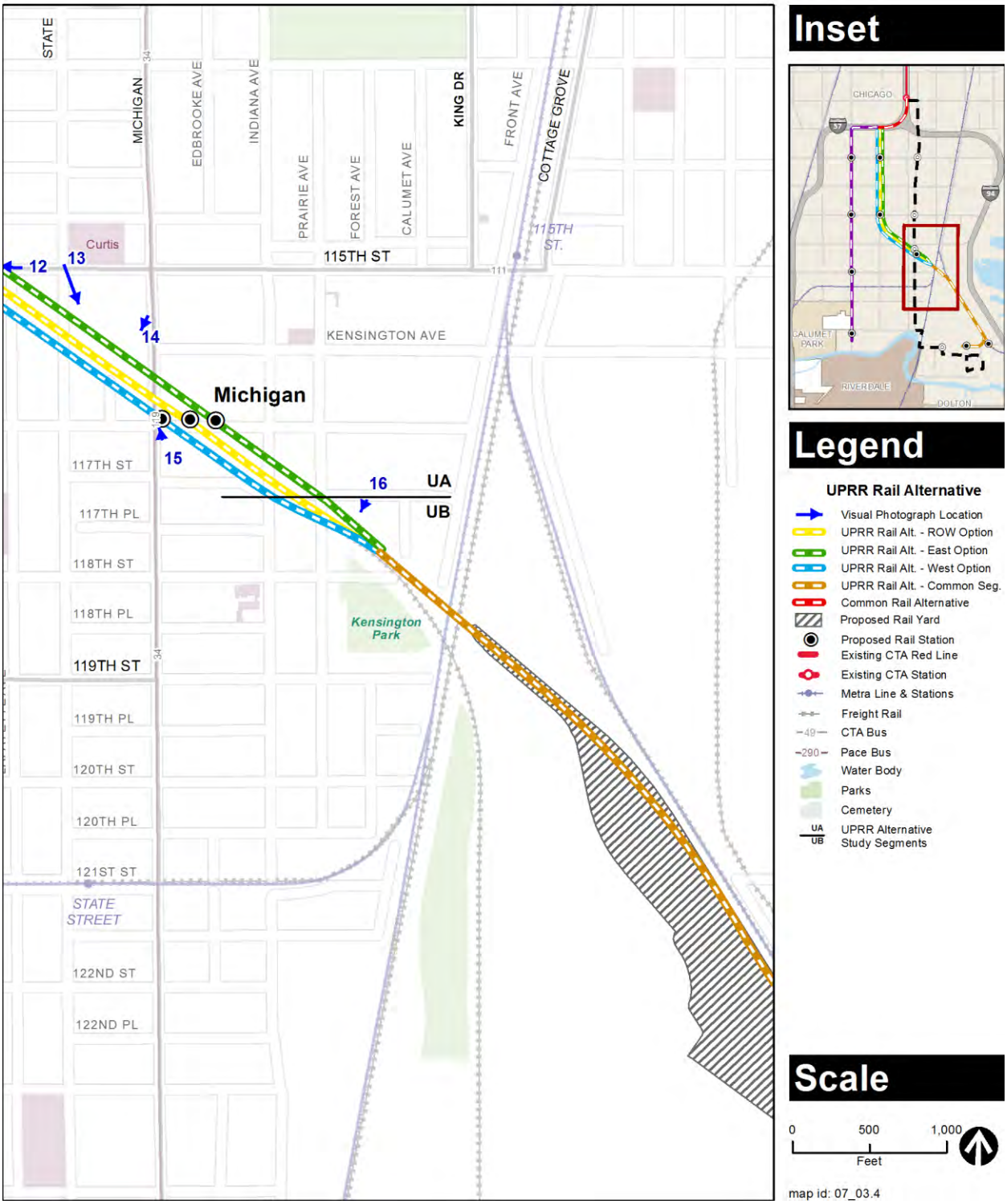

Figure A-10: Union Pacific Railroad Rail Alternative View Locations - Segment UA

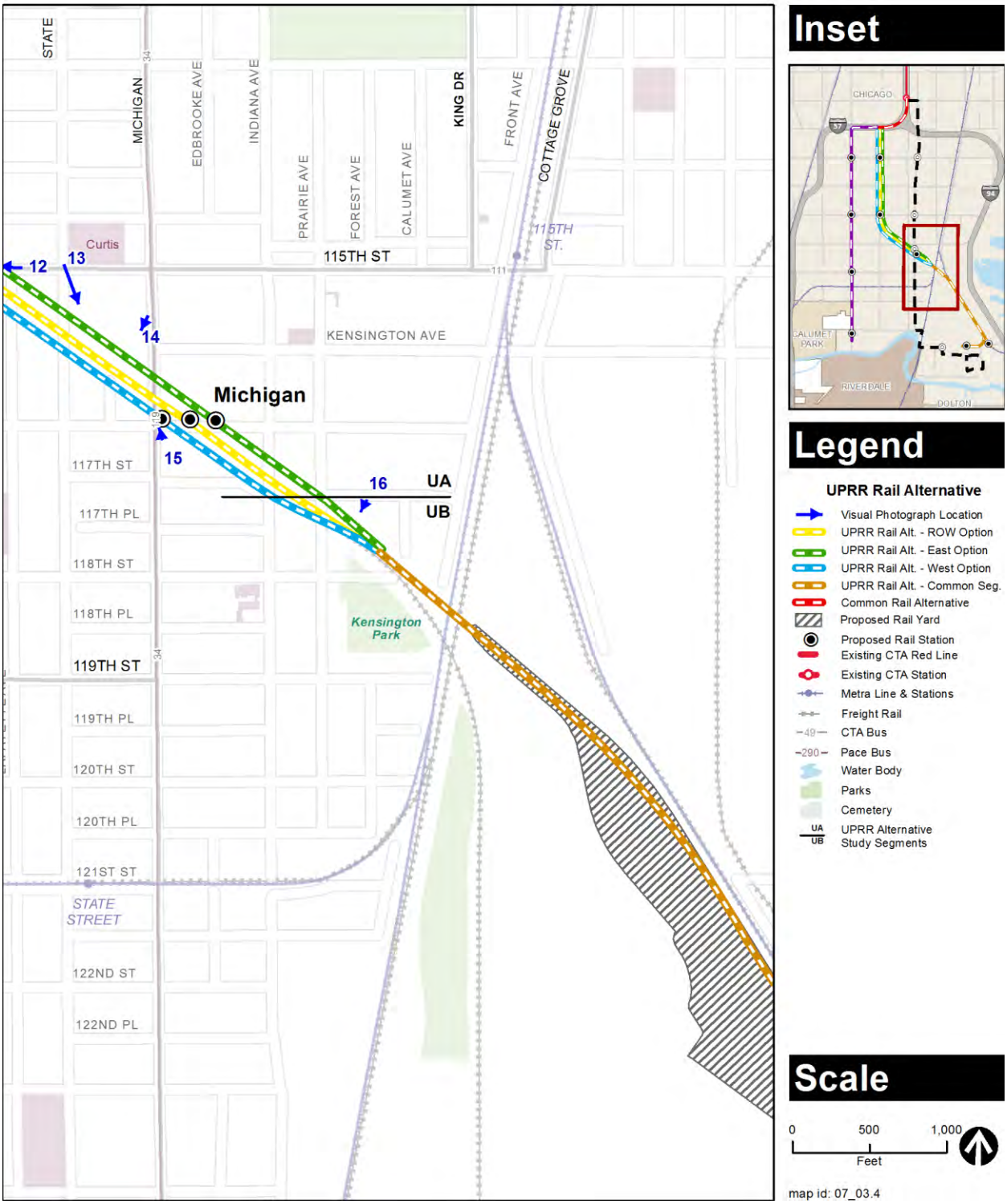

Figure A-11: Union Pacific Railroad Rail Alternative View Locations - Segment UB

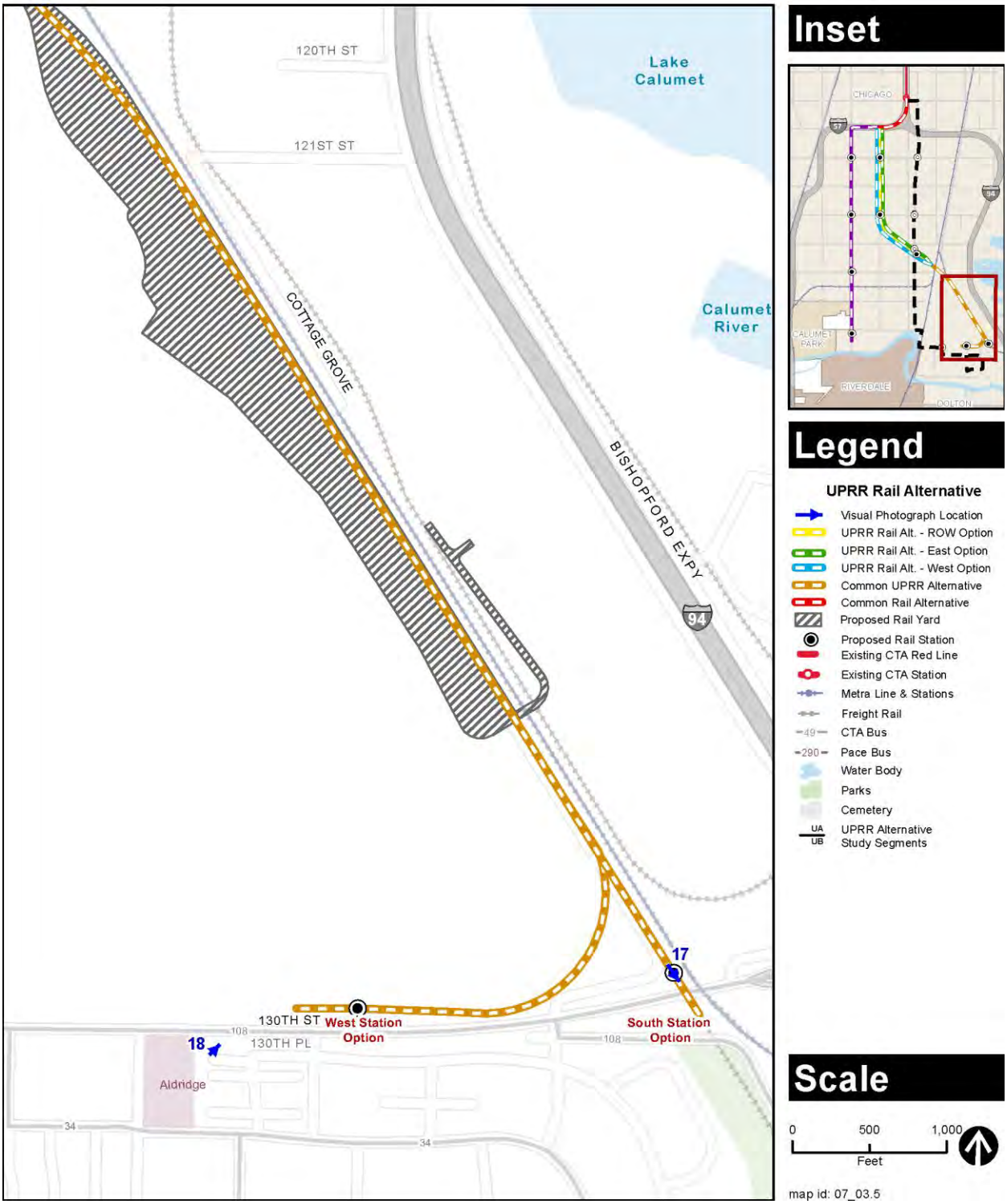

Figure A-12: Union Pacific Railroad Rail Alternative View Locations - Segment UB

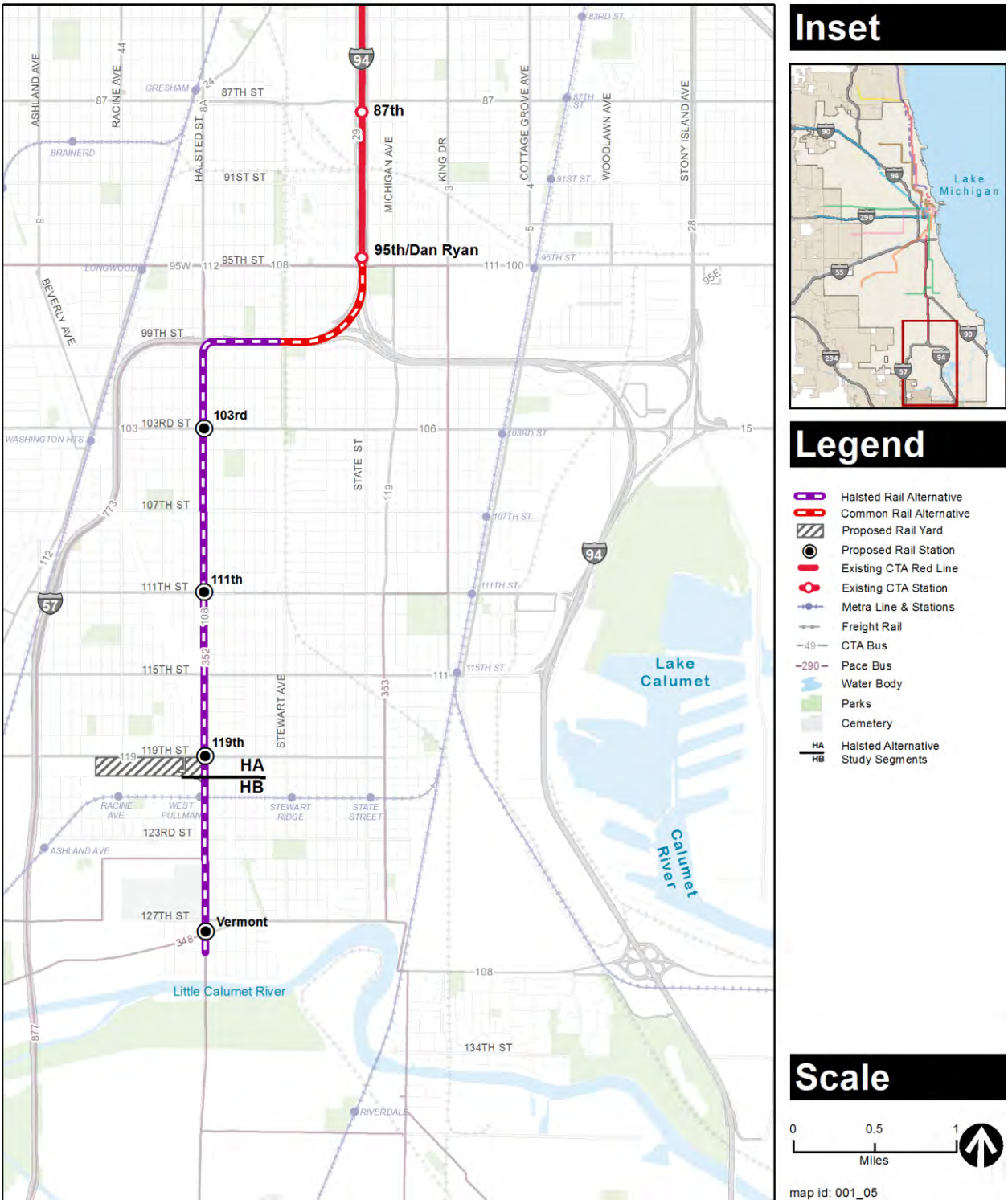

Figure A-13: Halsted Rail Alternative

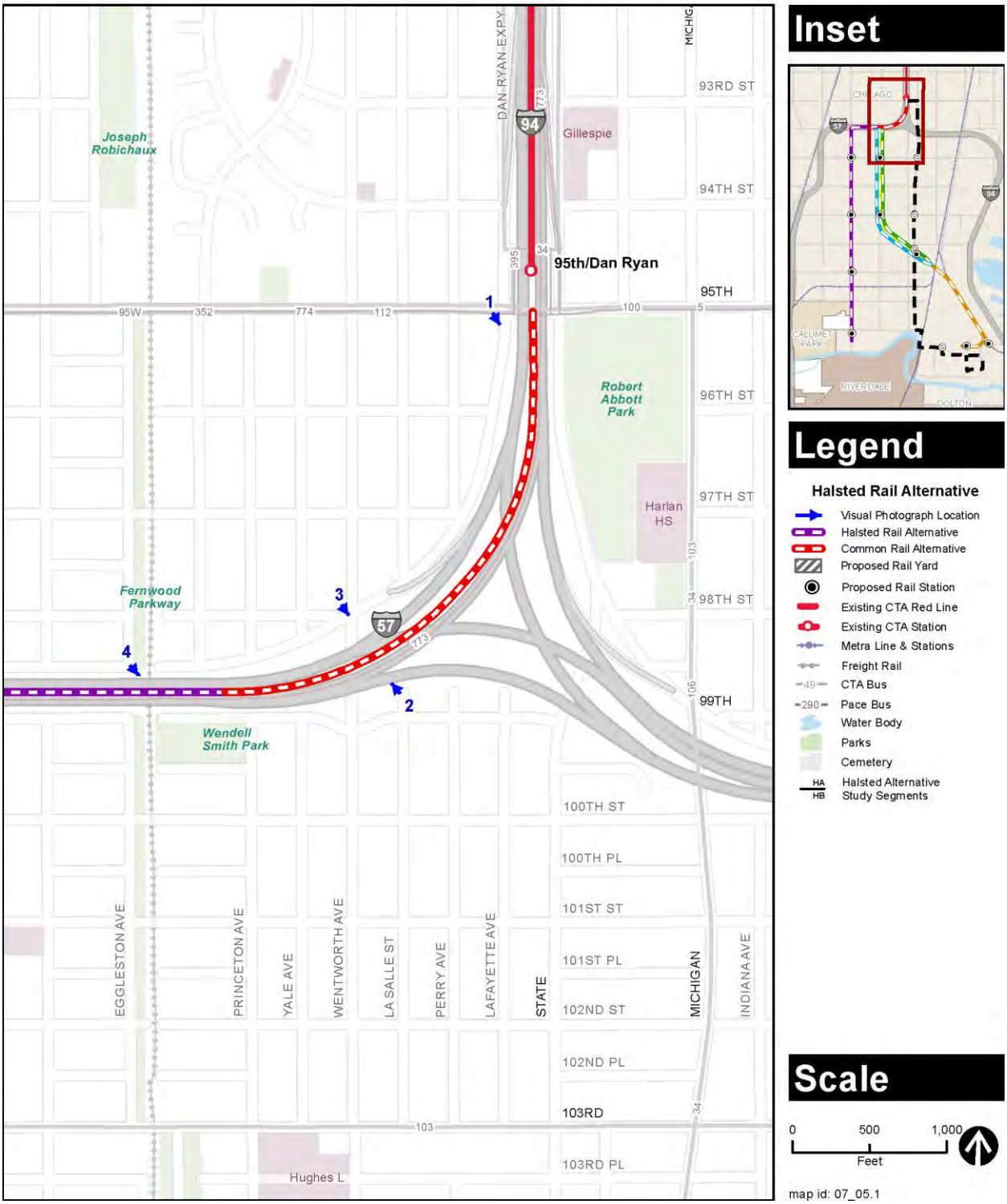

Figure A-14: Halsted Rail Alternative View Locations - Segment HA

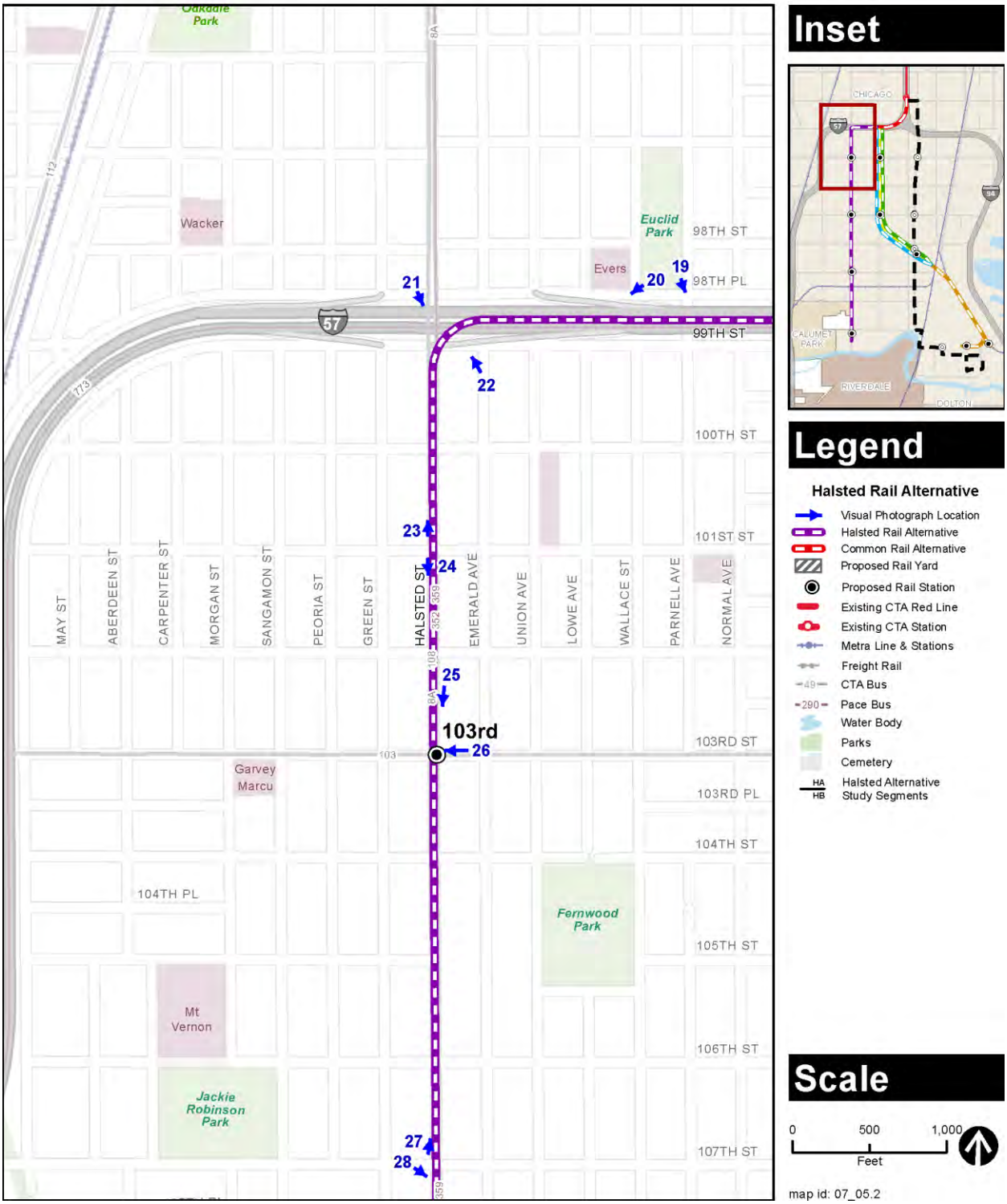

Figure A-15: Halsted Rail Alternative View Locations - Segment HA

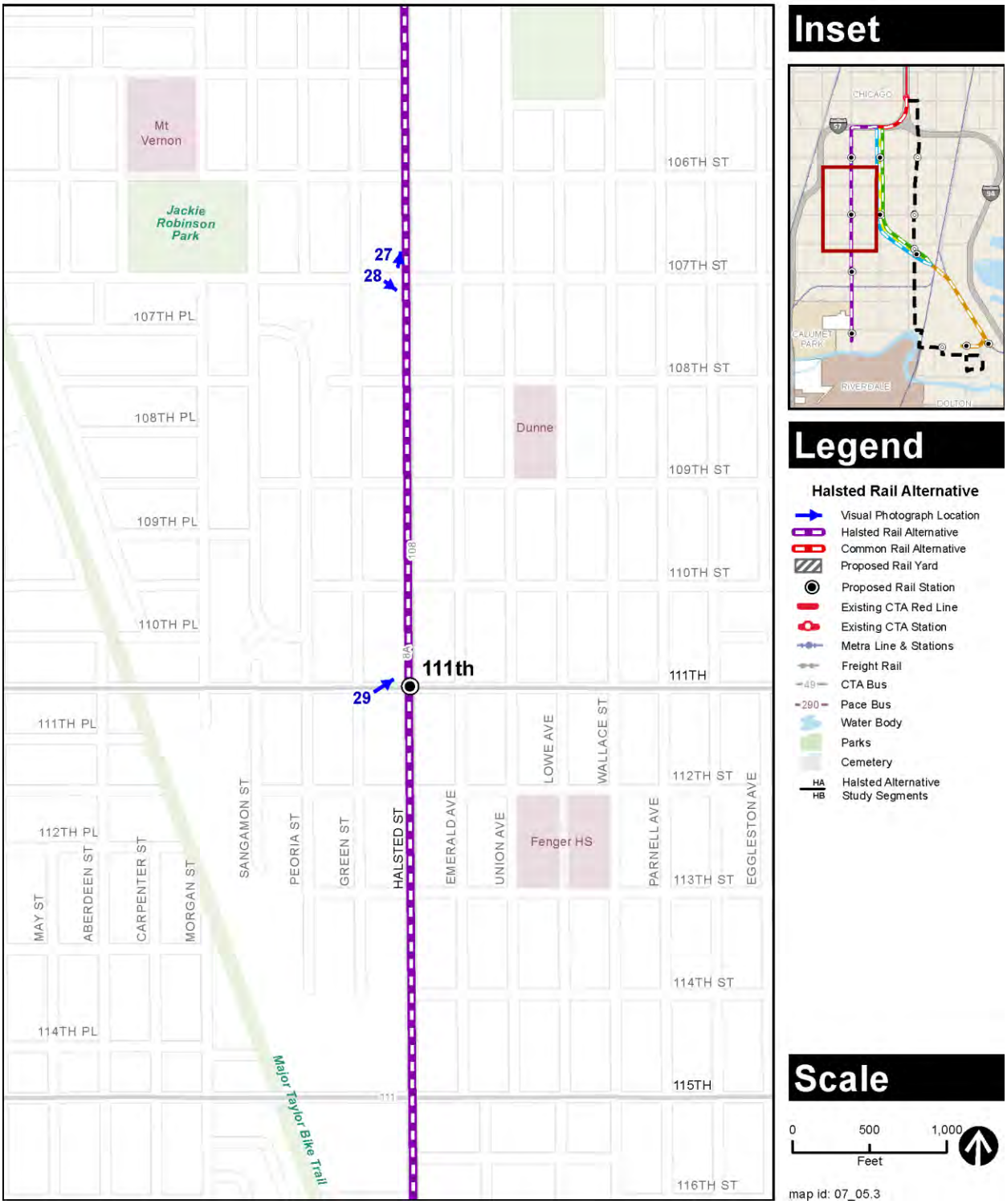

Figure A-16: Halsted Rail Alternative View Locations - Segment HA

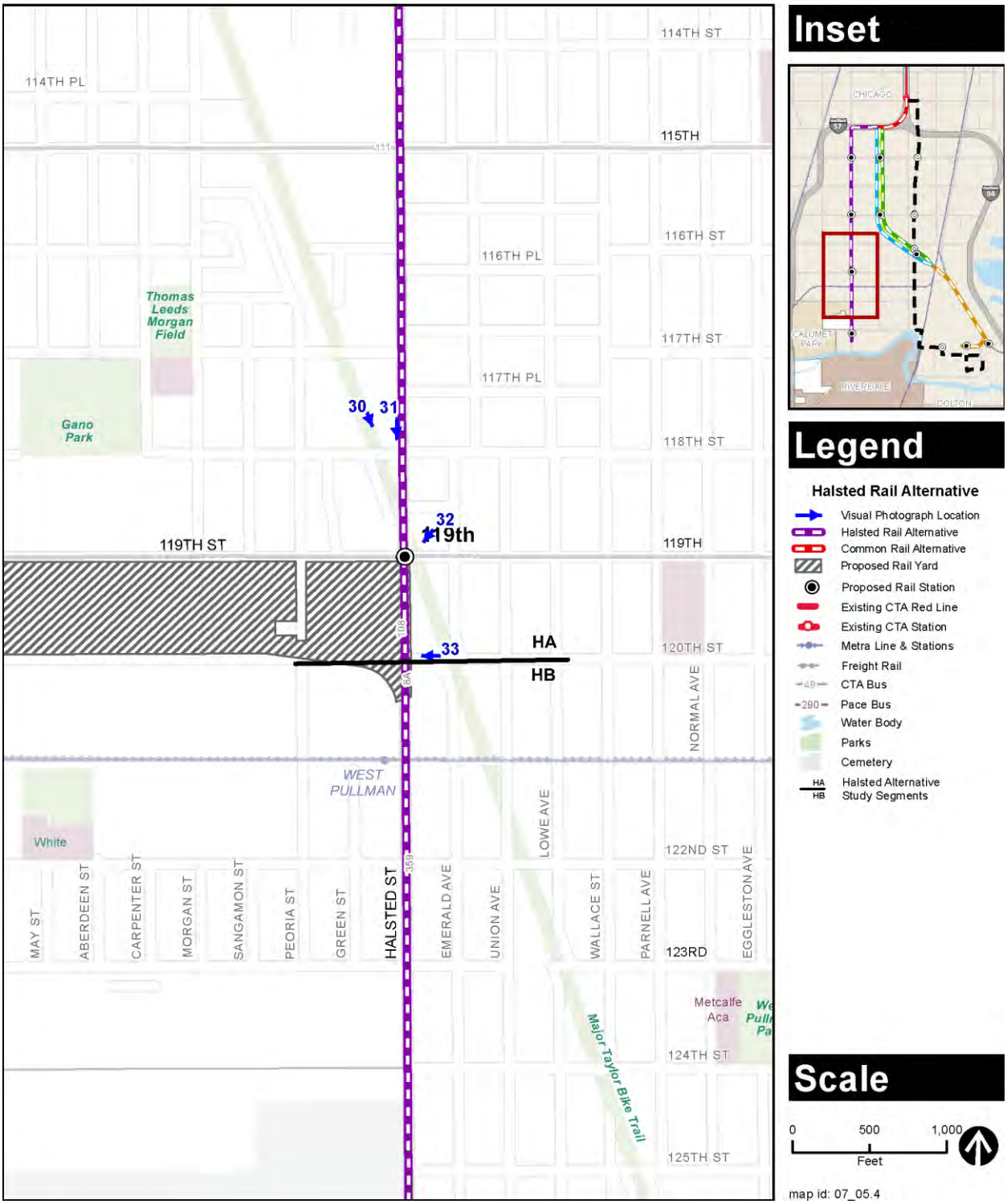

Figure A-17: Halsted Rail Alternative View Locations - Segment HA and HB

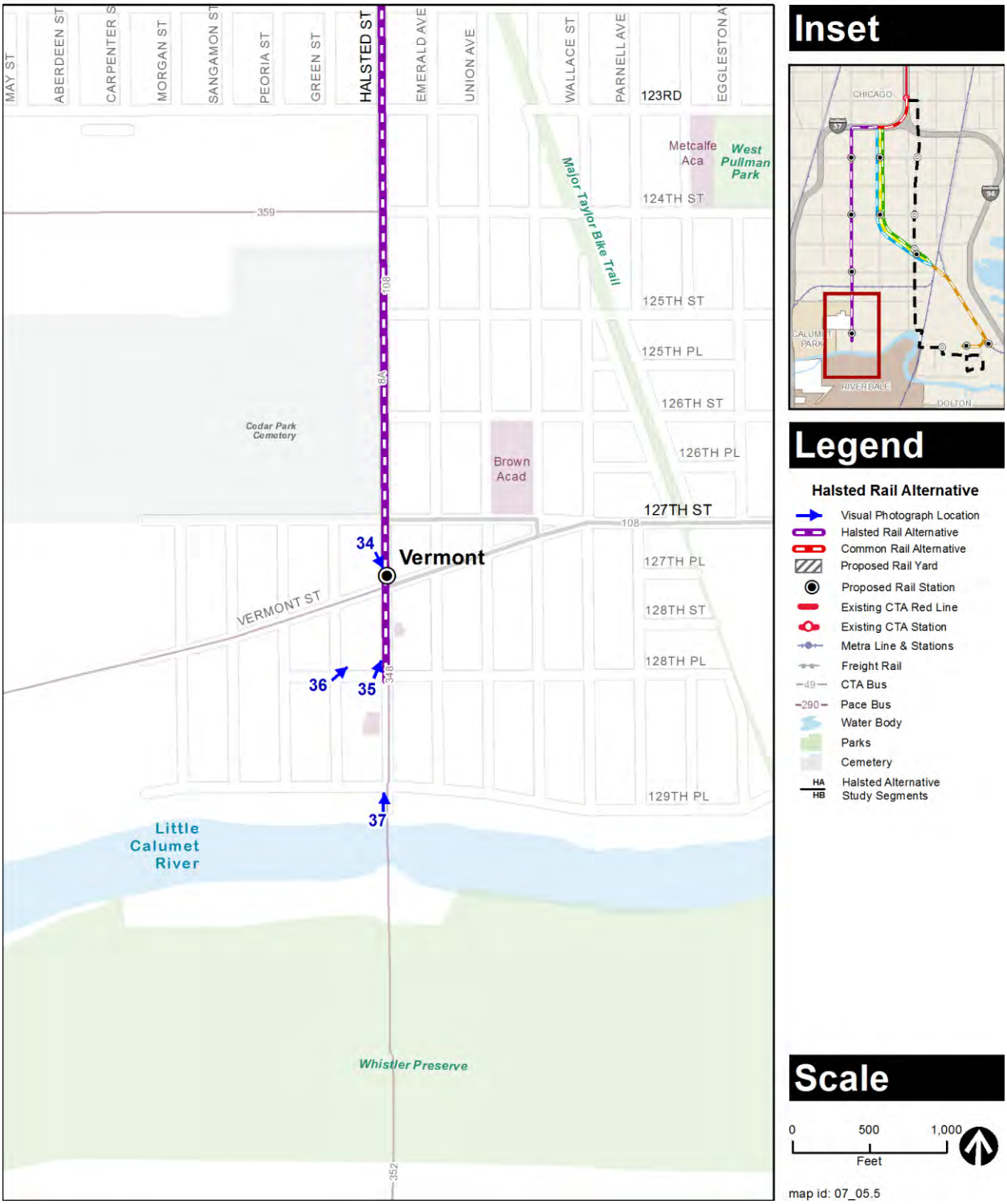

Figure A-18: Halsted Rail Alternative View Locations - Segment HB

BRT ALTERNATIVE

View 40: Existing view

View 40: Visualization- BRT Alternative

BRT ALTERNATIVE

View 41: Existing view

View 41: Visualization- BRT Alternative

All ALTERNATIVES – Segment U-A and Segment H-B

View 1: Existing view at 95th Street overpass and Lafayette Avenue looking South over I-94

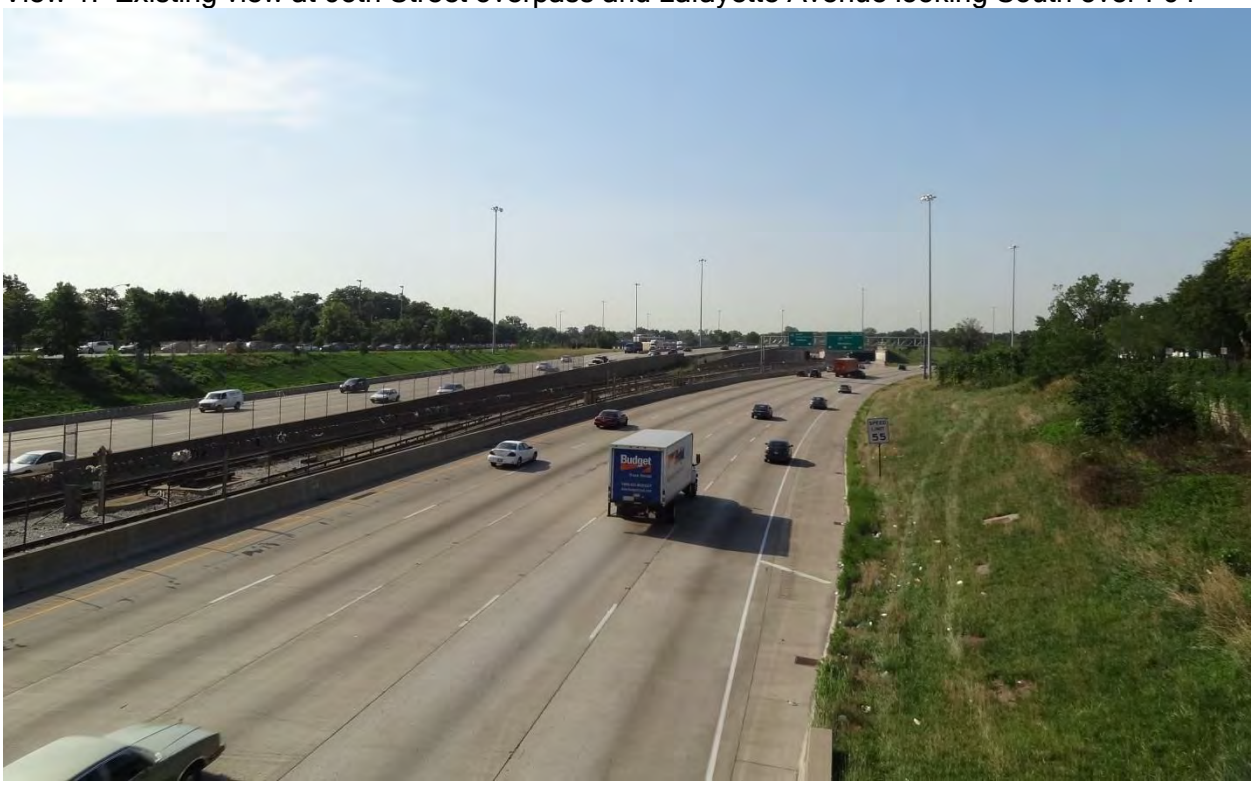

View 1A: Visualization – All Alternatives

All ALTERNATIVES – Segment U-A and Segment H-B

View 2: Existing view northwest from LaSalle Street and 99th Street toward Wentworth overpass

View 2A: Visualization – All Alternatives

All ALTERNATIVES – Segment U-A and Segment H-B

View 3: Existing view south from Wentworth Avenue toward I-57 overpass

View 3A: Visualization – All Alternatives

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 4: Existing view southeast over I-57 from Eggleston Avenue and 98th Street

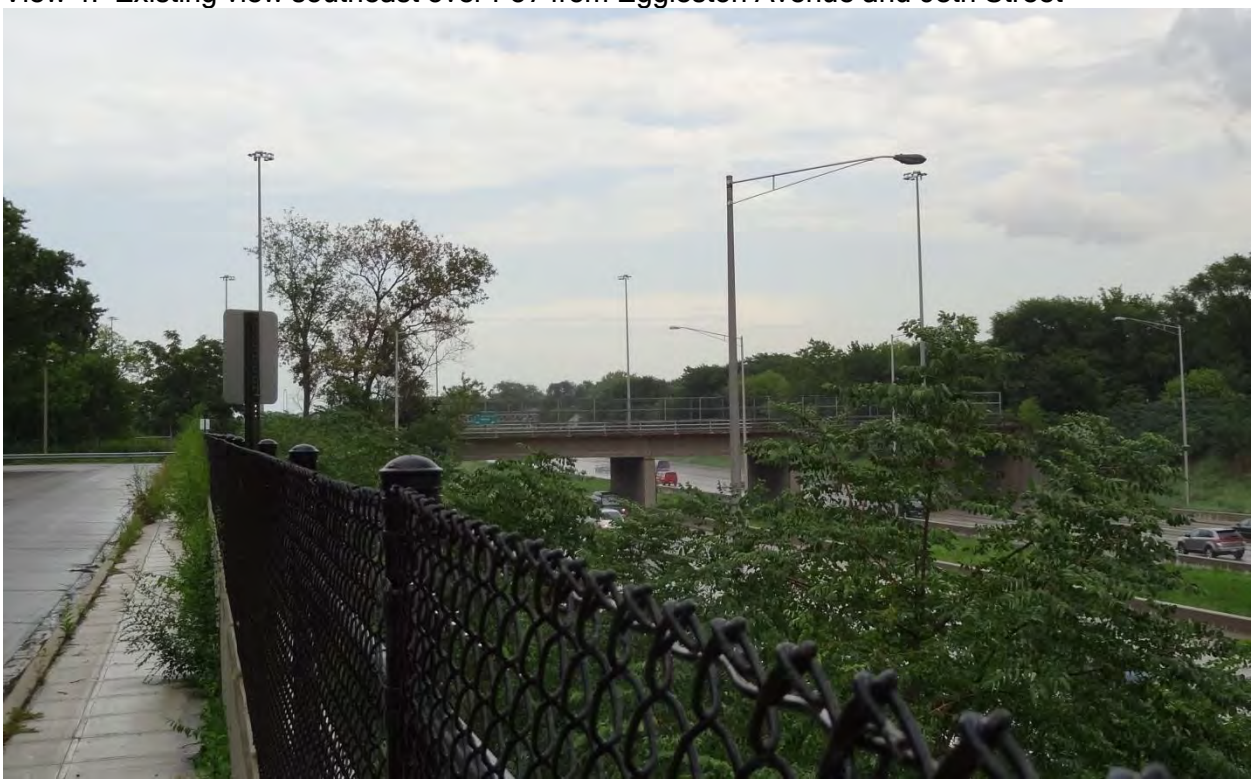

View4A: Visualization – All Alternatives

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 5: Existing view northwest across Wendell Smith Park

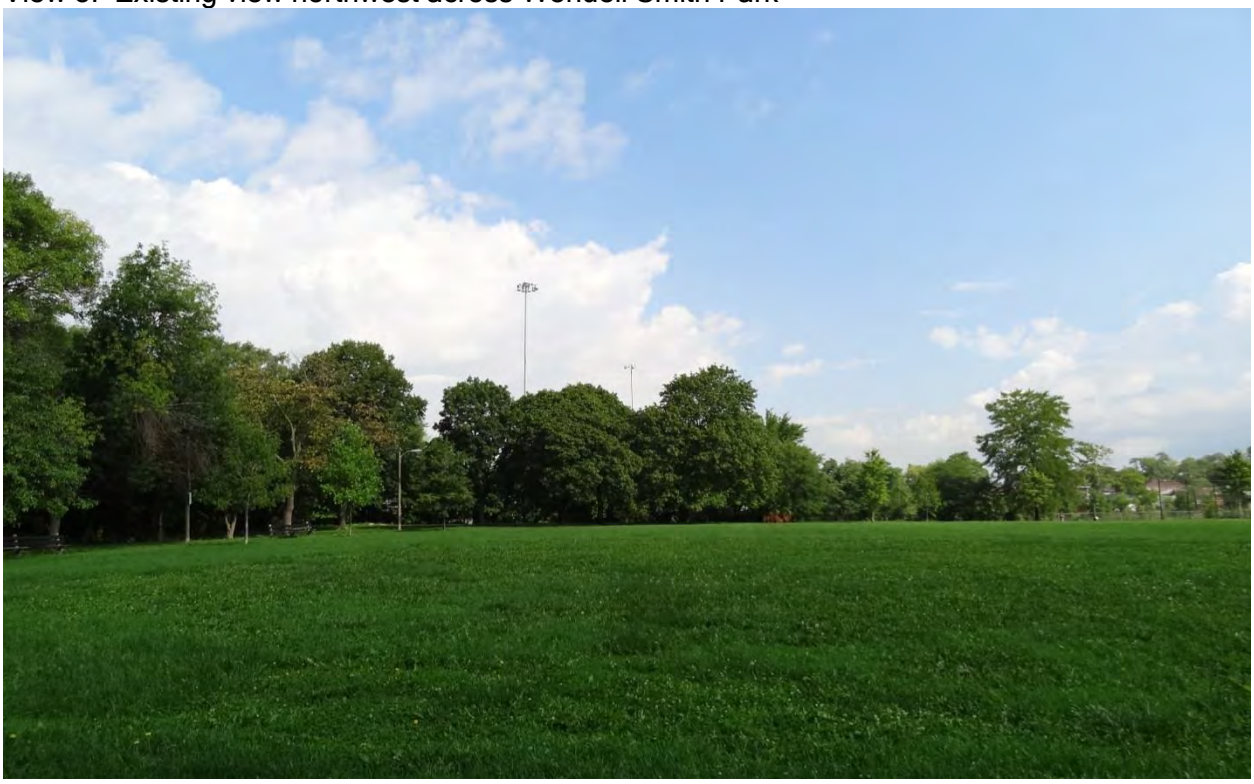

View 5A: Visualization – UPRR ROW Option

View 5B: Visualization – UPRR East Option

View 5C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 6: Existing view south along Eggleston Avenue and Fernwood Parkway toward 103rd Street

View 6C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 7: Existing view northwest from 103rd Street and Harvard Avenue

View 7B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 8: Existing view north from the Pumping Station on Harvard Avenue

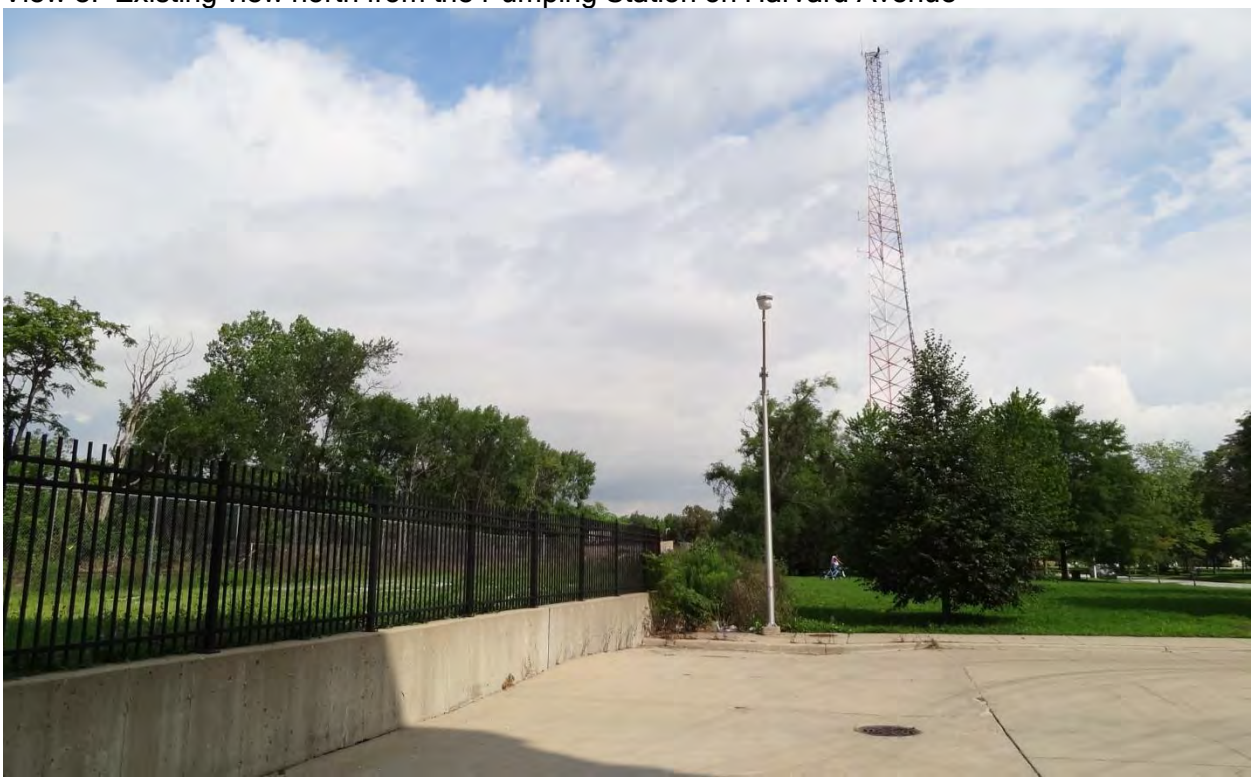

View 8A: Visualization – UPRR ROW Option

View 8B: Visualization – UPRR East Option

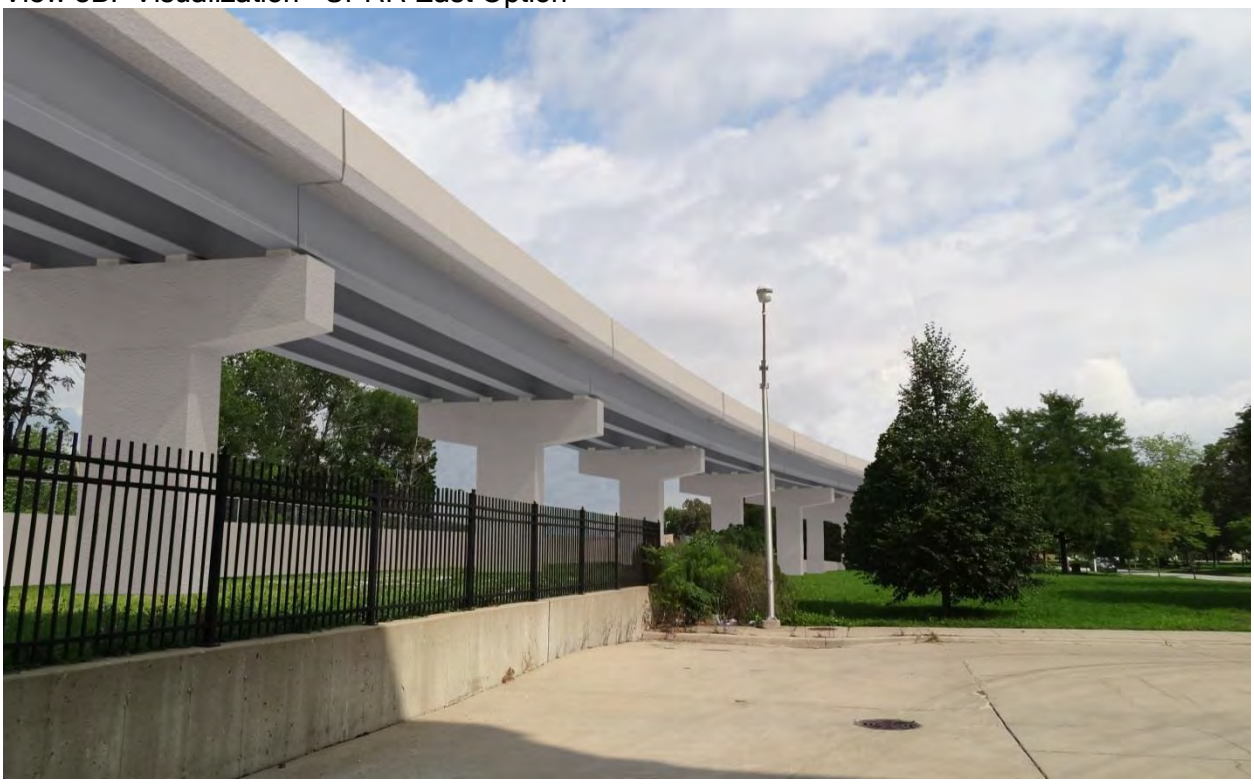

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 9: Existing view northwest from 108th Street adjacent to Roseland Christian School

View 9A: Visualization – UPRR ROW Option

View 9B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 10: Existing view west from 111th Street

View 10A: Visualization – UPRR ROW Option

View 10B: Visualization – UPRR East Option

View 10C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 11: Existing view southwest from 113th Street and Princeton Avenue

View 11A: Visualization – UPRR ROW Option

View 11B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 12: Existing view northwest from 115th Street

View 12A: Visualization – UPRR ROW Option

View 12B: Visualization – UPRR East Option

View 12C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 13: Existing view southeast from State Avenue

View 13A: Visualization – UPRR ROW Option

View 13C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 14: Existing view south toward the existing UPRR viaduct from Michigan Avenue

View 14A: Visualization – UPRR ROW Option

View 14B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 15: Existing view northwest toward the existing UPRR viaduct from Michigan Avenue

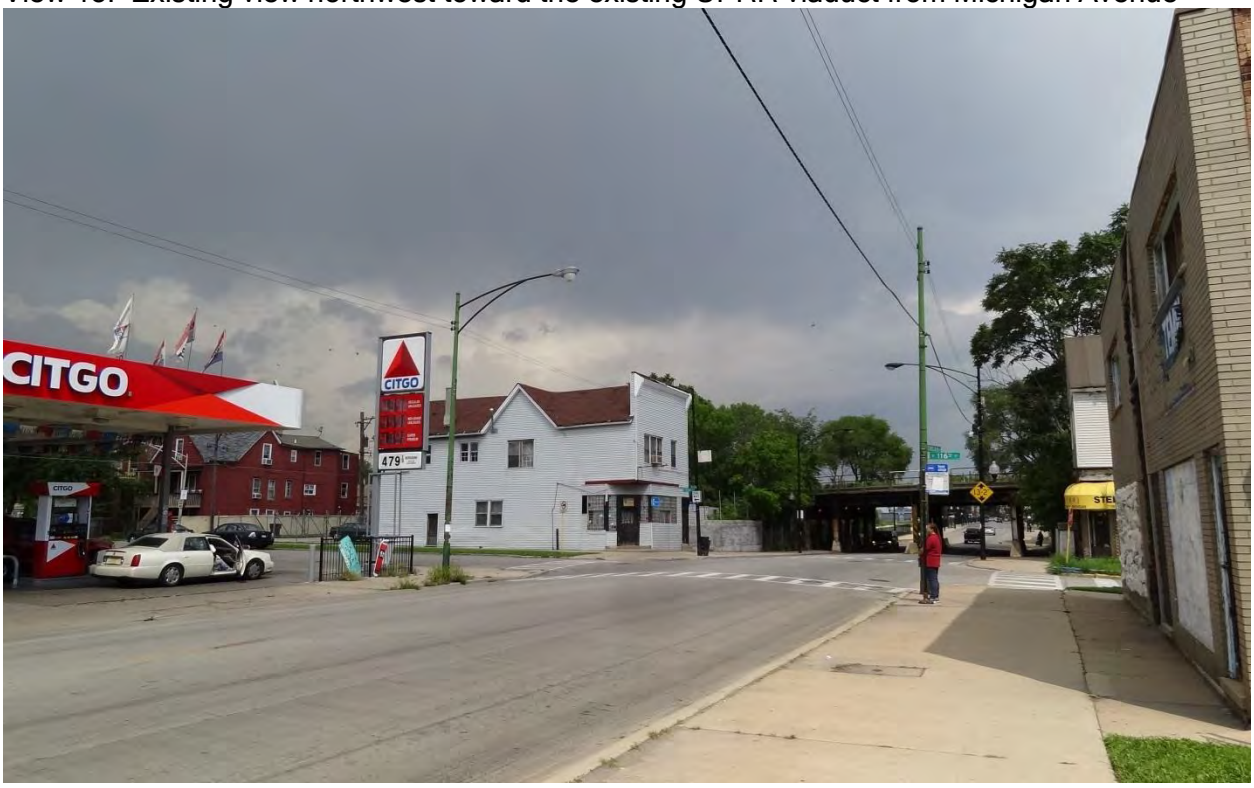

View 15A: Visualization – UPRR ROW Option

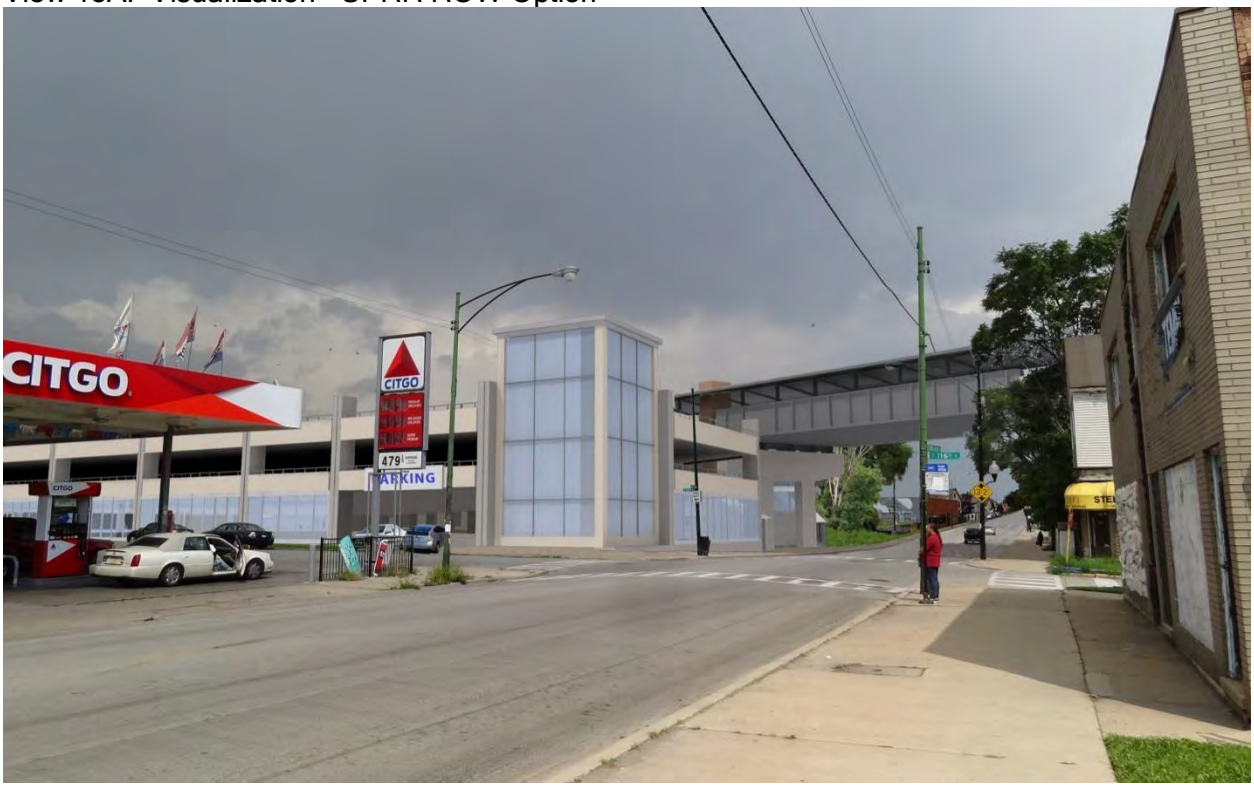

View 15C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 16: Existing view southeast from 117th Street east of Prairie Avenue

View 16A: Visualization – UPRR ROW Option

View 16B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-B

View 17: Existing view southeast toward 130th Street overpass from 130th Place

View 17A: Visualization – South Station Option, All Alternatives

(130th Street Station Market/Access Study, Dec. 2010)

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-B

View 18: Existing view northeast on 130th Place adjacent to Altgeld Gardens neighborhood

View 18A: Visualization – West Station Option, All Alternatives

(Station design reflects CDOT Concept Sketch)

HALSTED ALTERNATIVE – Segment H-A

View 19: Existing view southeast toward I-57 overpass from Parnell Avenue and 98th Street

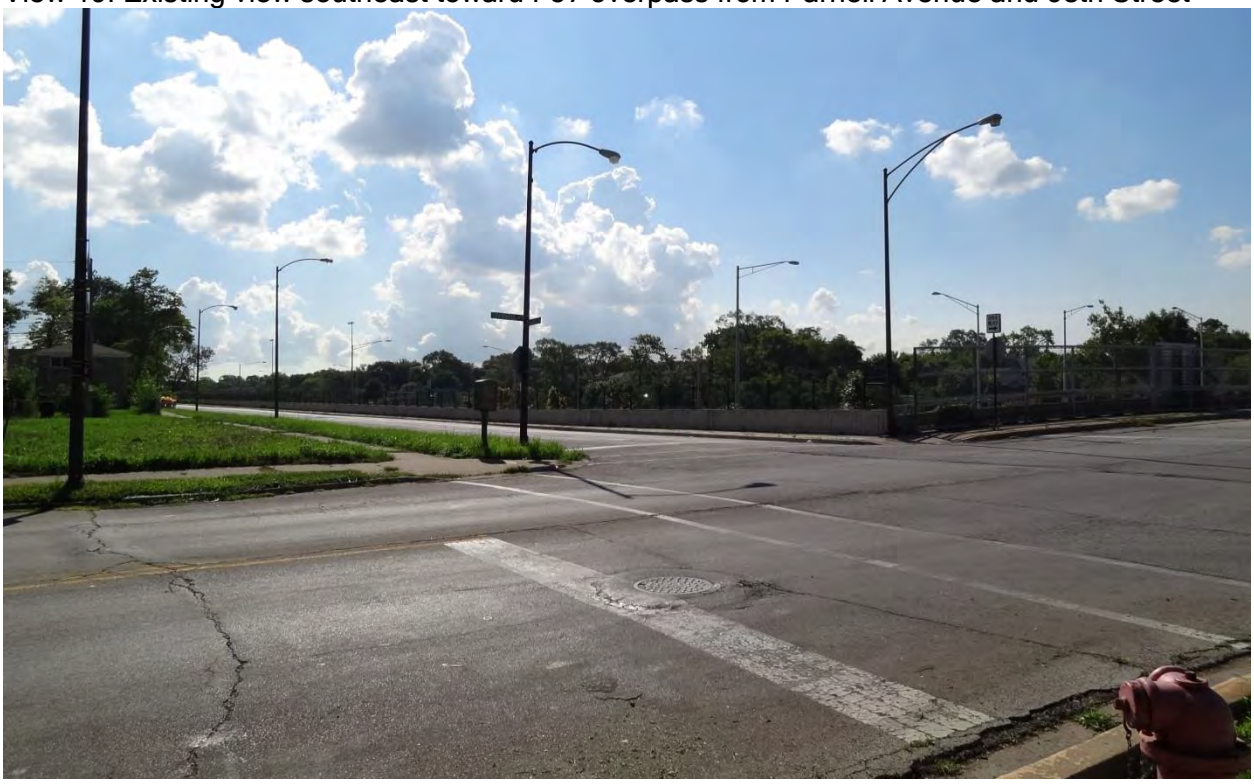

View 19: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 20: Existing view southwest from 98th Place looking across I-57

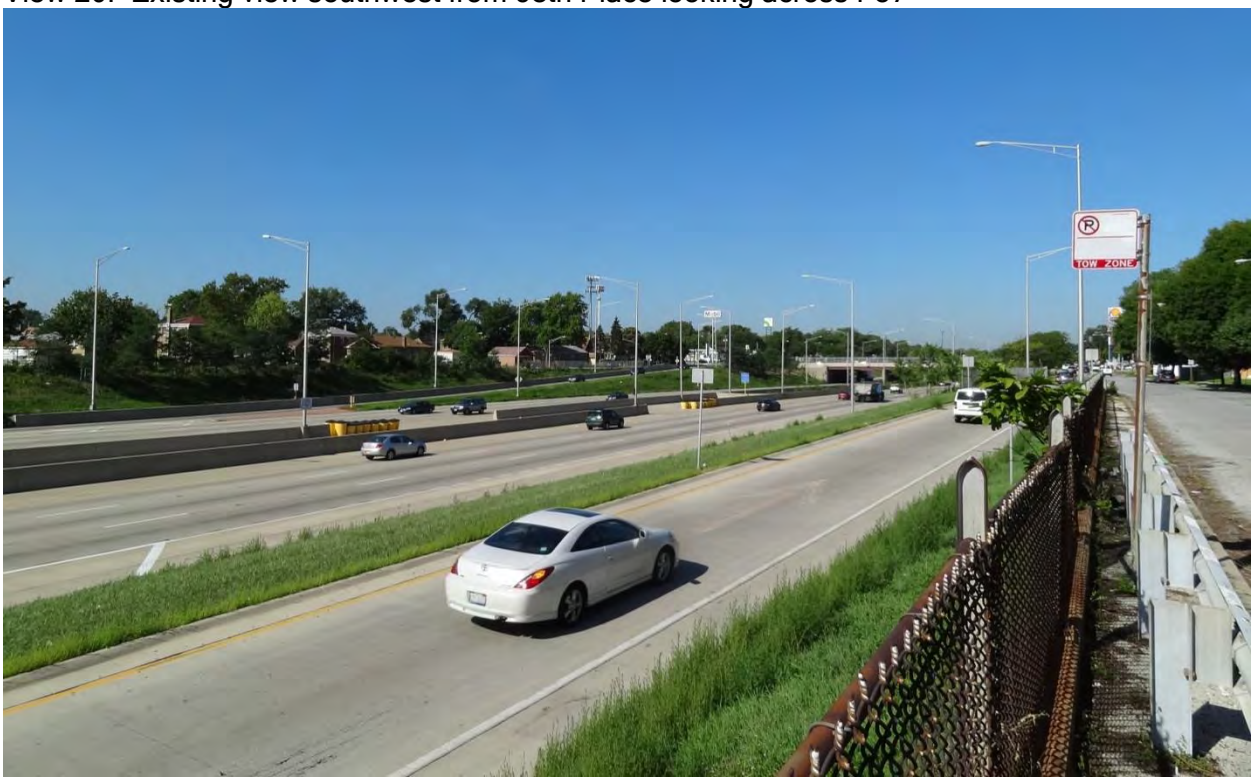

View 20: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 21: Existing view southeast toward 98th Street from the Halsted Street overpass

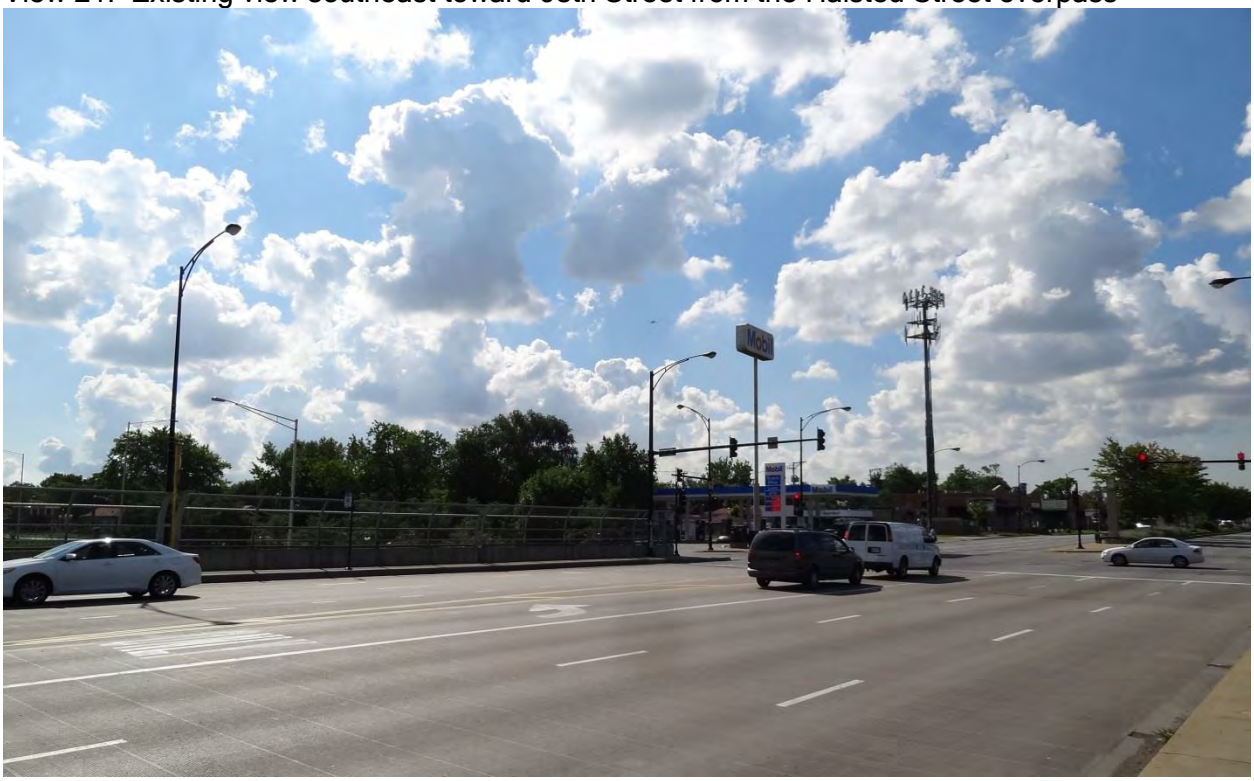

View 21: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 22: Existing view northwest from Emerald Avenue

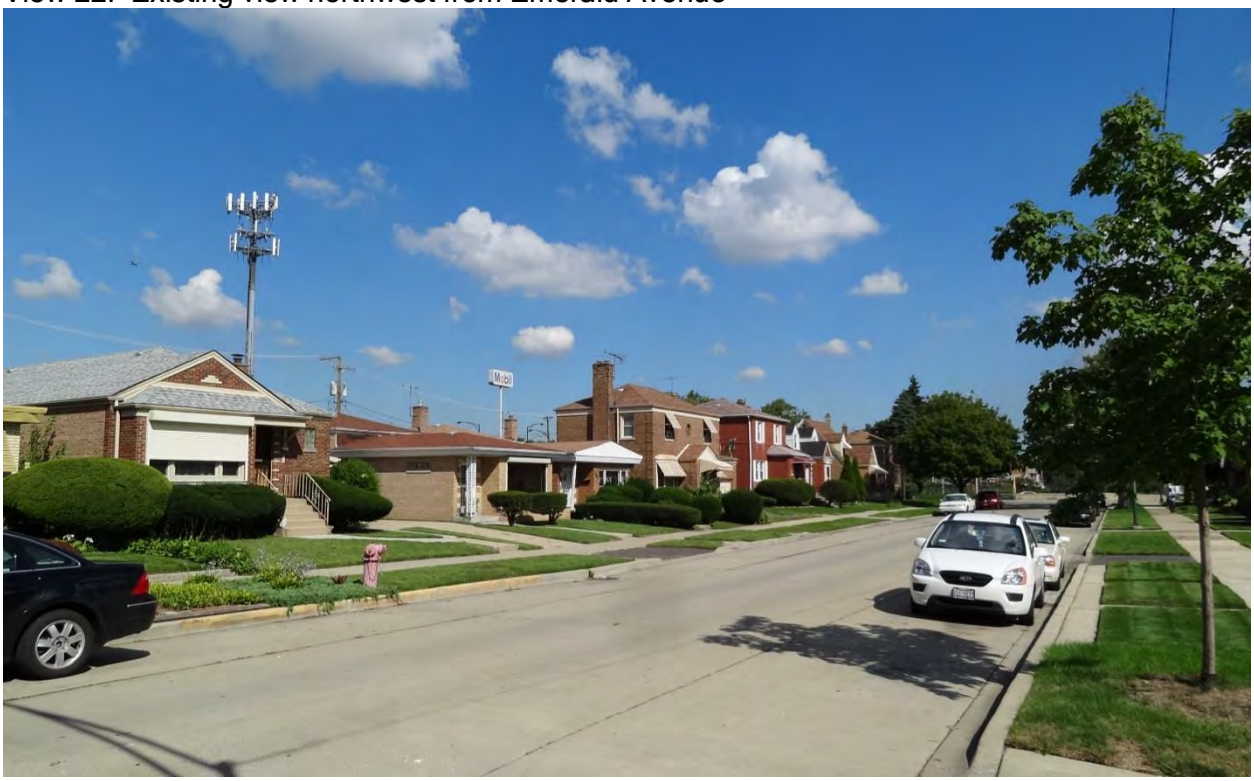

View 22: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 23: Existing view northeast from Halsted Street just north of 100th Street

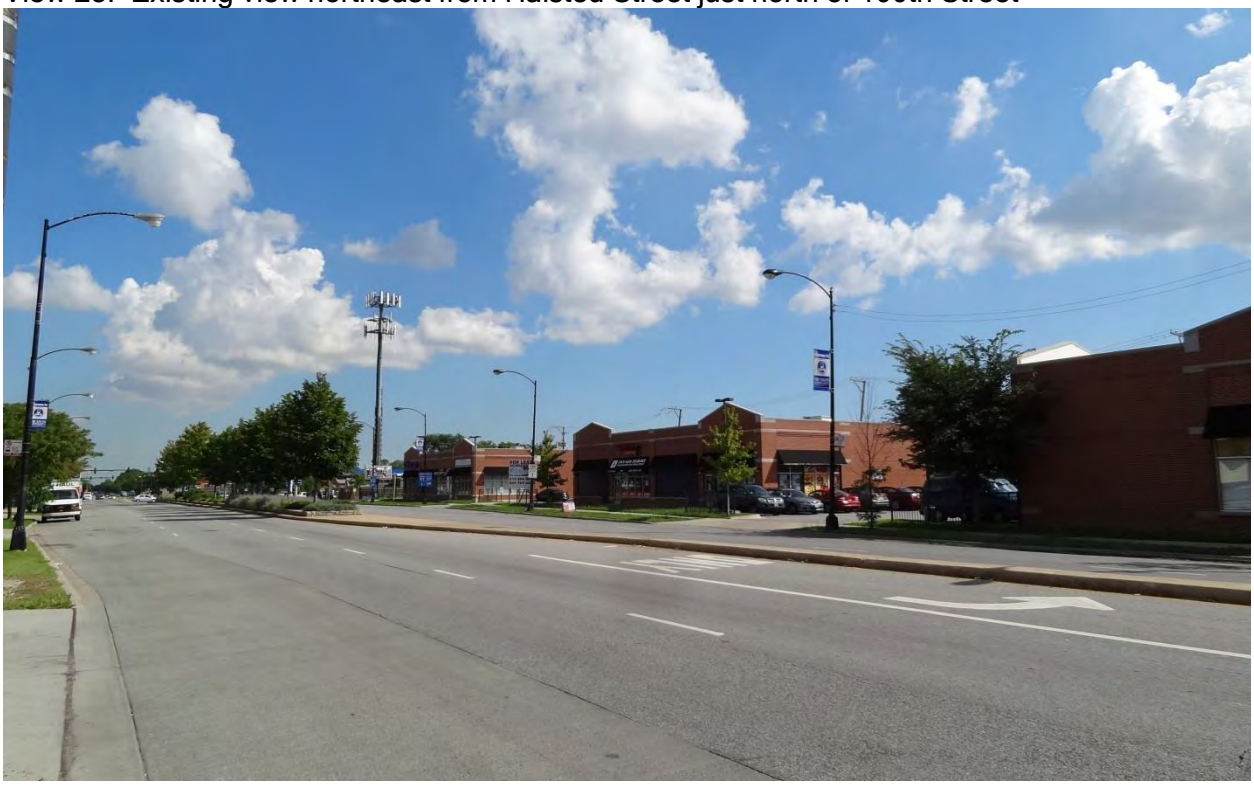

View 23: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 24: Existing view south from Halsted Street at 100th Street

View 24: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 25: Existing view south from Halsted Street between 102nd Street and 103rd Street

View 25: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 26: Existing view west from the corner of 103rd Street and Emerald Avenue

View 26: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 27: Existing view north on Halsted Street at 107th Street

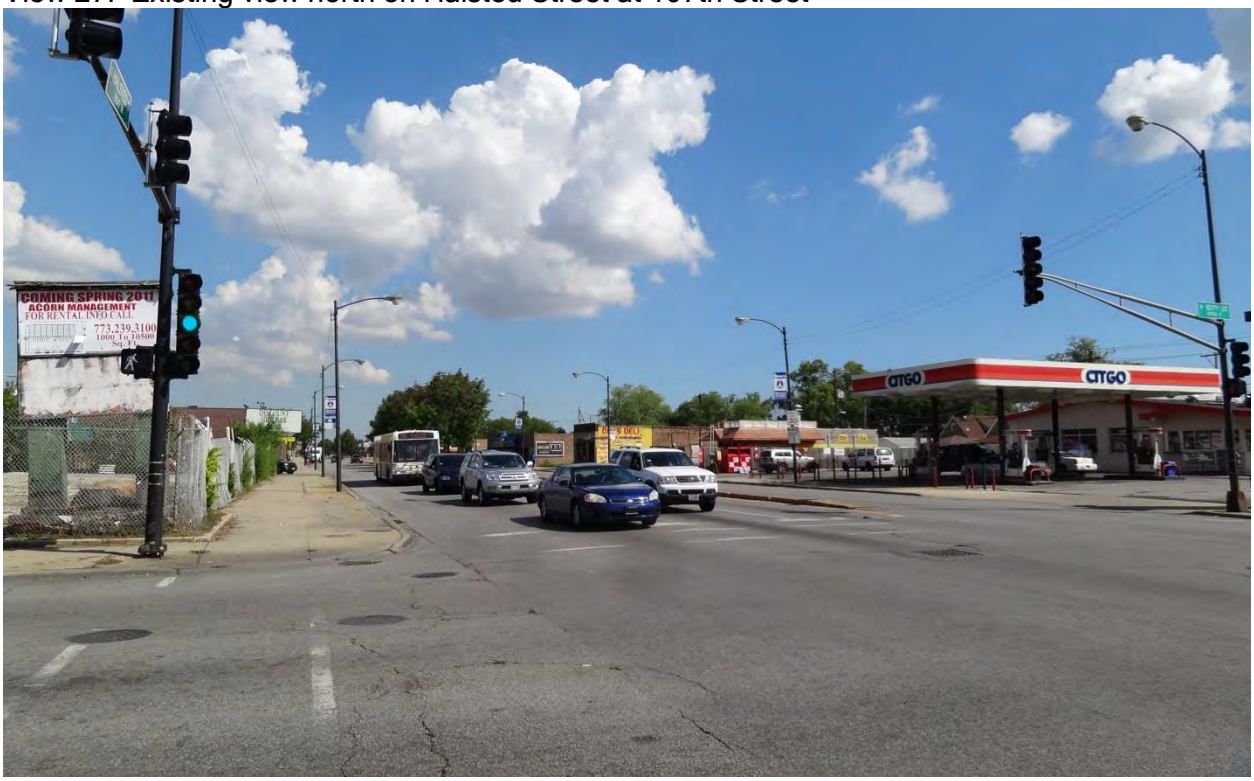

View 27: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 28: Existing view southeast from 107th Street between Halsted Street and Green Street

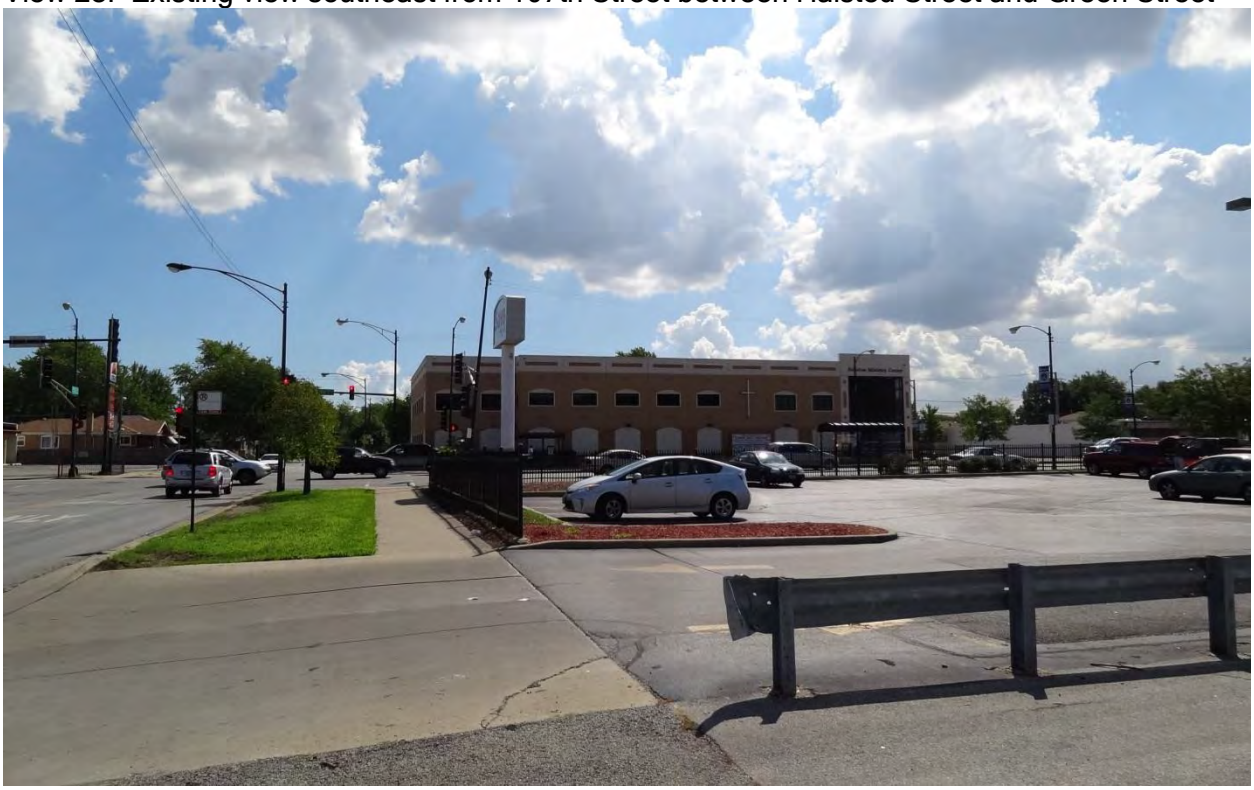

View 28: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 29: Existing view east from 111th Street between Halsted Street and Green Street

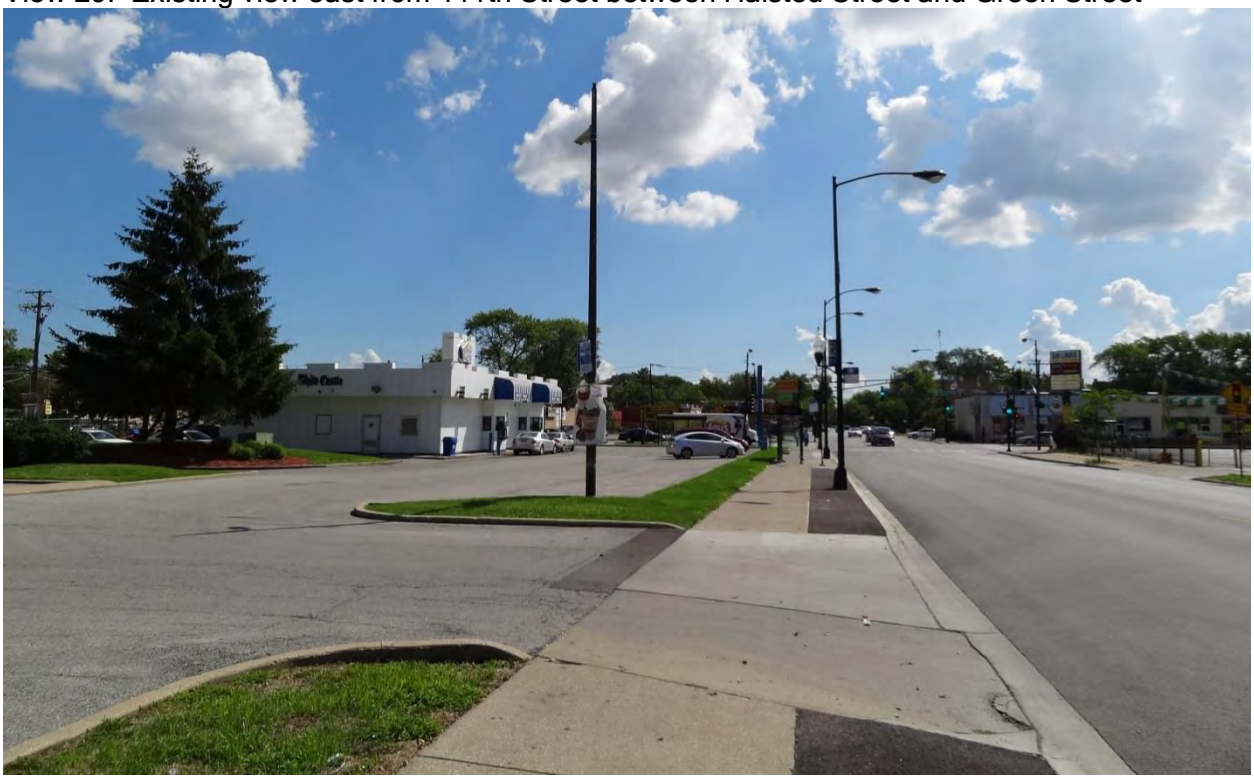

View 29: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 30: Existing view southeast from the Major Taylor Trail at 118th Street

View 30: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 31: Existing view south on Halsted at 118th Street

View 31: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 32: Existing view southwest at the corner of 119th Street and Halsted Street

View 32: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-B

View 33: Existing view northwest at the corner of 120th Street and Halsted Street

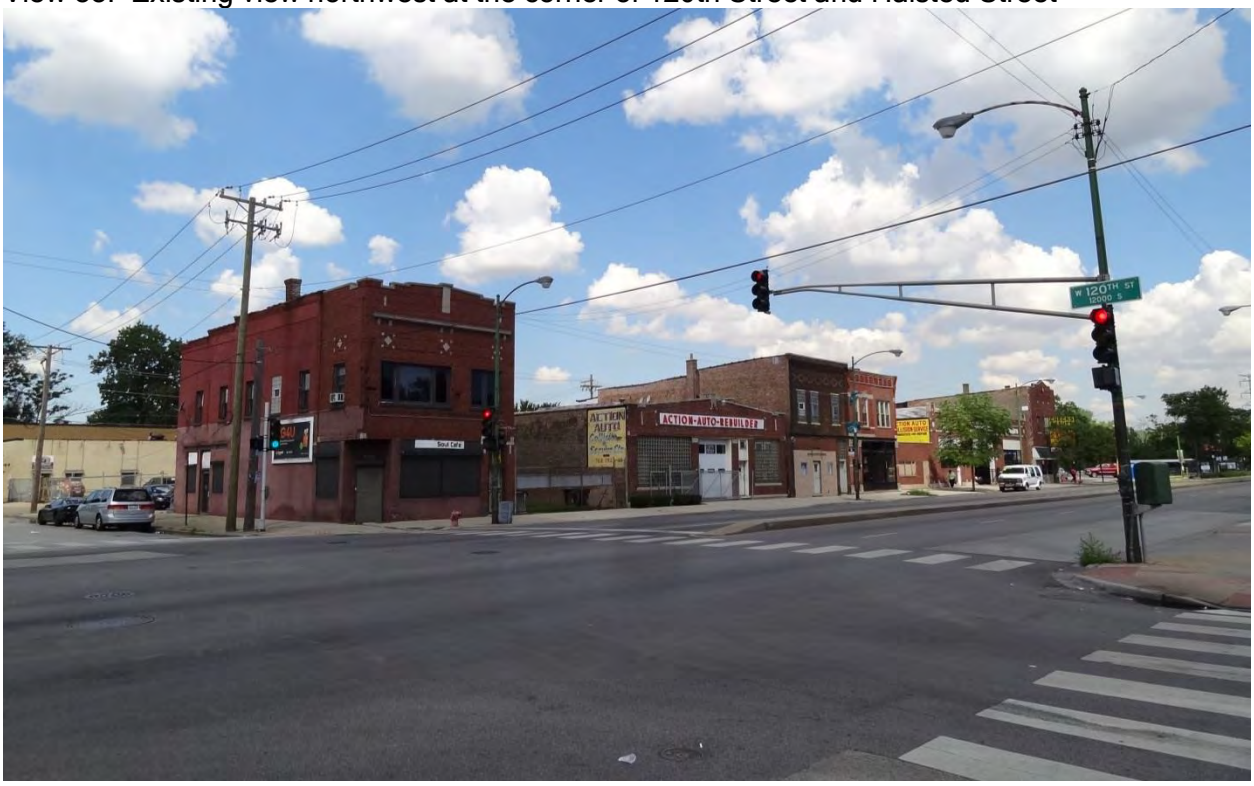

View 33: Visualization- Halsted Alternative

HALSTED ALTERNATIVE- Segment H-B

View 34: Existing view south on Halsted Street at Vermont Avenue

View 34: Visualization- Halsted Alternative

HALSTED ALTERNATIVE- Segment H-B

View 35: Existing view northeast at the corner of 128th Street and Halsted Street

View 35: Visualization- Halsted Alternative

HALSTED ALTERNATIVE- Segment H-B

View 36: Existing view northeast from the corner of Green Street and 128th Place

View 36: Visualization- Halsted Alternative

HALSTED ALTERNATIVE- Segment H-B

View 37: Existing view north from Halsted Street at the Little Calumet River bridge

View 37: Visualization- Halsted Alternative

Appendix B
2014-2015 Red Line Extension Project Update

2014-2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

Visual and Aesthetic Conditions

CTA prepared two additional photo simulations in early 2015, at the locations shown on the map in **Figure 1**.

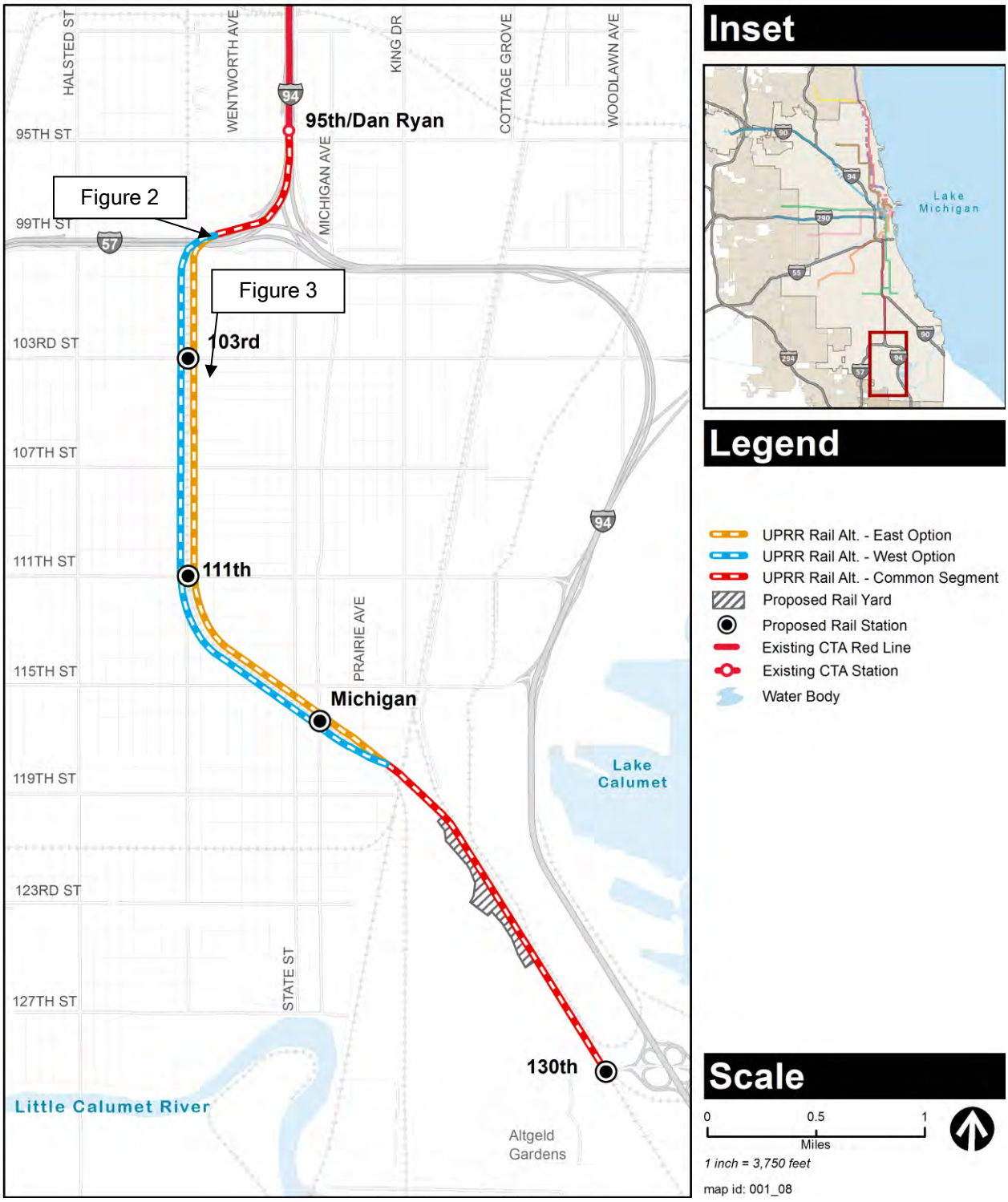

Figure 1: Locations of Additional Photo Simulations

The refined alignment along the I-57 corridor would result in high and adverse visual impacts because of the change in the visual setting due to the elevated track structure in the highway right-of-way. This would change the scale, density, and character of the residential neighborhood north of I-57. The houses that currently have a partial or full view of the expressway would experience a substantial change in their field of view due to the elevated structure and its proximity to 98th Place (frontage road) that parallels I-57. The elevated structure would block the horizon for the homes or pedestrians closest to 98th Place. The elevated structure would also create a new shadow at street level due to the movement of the sun. **Figure 2** shows existing conditions and a photo simulation of the track structure in the I-57 right-of-way.

Figure 2: Photo of Existing Conditions and Photo Simulation of the Elevated Track Structure in the I-57 Right-of-Way, Facing East from 98th Place and Princeton Avenue

CTA also prepared a photo simulation of the East Option track structure adjacent to the Roseland Pumping Station based on feedback from Section 106 consulting parties. The pumping station would not be displaced or directly affected by the East or West Option. The visual changes to the setting would not be high or adverse. **Figure 3** shows existing conditions and a photo simulation of the track structure adjacent to Roseland Pumping Station.

Figure 3: Photo of Existing Conditions and Photo Simulation of the East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue

Appendix O

Noise and Vibration Technical Memorandum

- Final EIS Addendum O, Noise and Vibration Technical Memorandum, July 2022

Chicago Red Line Extension Project

Noise and Vibration

Final EIS Addendum O

July 2022

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Table of Contents

Section 1 - Summary 1-1
Section 2 - Project Description and Background 2-1
Section 3 - Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-3
3.4 Methods 3-4
Section 4 - Affected Environment 4-1
4.1 Existing Noise Conditions 4-1
4.2 Existing Vibration Conditions 4-5
Section 5 - Impacts and Mitigation 5-1
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited 7-1

Figures

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4
Figure 3-1: FTA Detailed Vibration Criteria 3-2
Figure 3-2: FDL Spectra at 50 mph for CTA Train Operations on Aerial Structure 3-6
Figure 4-1: Noise Measurement Site Locations 4-2
Figure 4-2: Vibration Propagation Measurement Schematic 4-6
Figure 4-3: Vibration Measurement Site Locations 4-8
Figure 4-4: Vibration Propagation Test Data 4-9
Figure 5-1: Permanent Noise Impacts without Mitigation (1 of 4) 5-4
Figure 5-2: Permanent Noise Impacts without Mitigation (2 of 4) 5-5
Figure 5-3: Permanent Noise Impacts without Mitigation (3 of 4) 5-6
Figure 5-4: Permanent Noise Impacts without Mitigation (4 of 4) 5-7
Figure 5-5: Recommended Noise Barrier Locations and Residual Noise Impacts (1 of 3) 5-11
Figure 5-6: Recommended Noise Barrier Locations and Residual Noise Impacts (2 of 3) 5-12
Figure 5-7: Recommended Noise Barrier Locations and Residual Noise Impacts (3 of 3) 5-13

Tables

Table 1-1: Comparison of Draft and Final EIS Residential Noise Impacts Without Mitigation .. 1-2
Table 3-1: Interpretation of Vibration Criteria for Detailed Analysis 3-3
Table 4-1: Summary of Existing Ambient Long-Term Noise Measurement Results 4-3
Table 4-2: Summary of Existing Ambient Short-Term Noise Measurement Results 4-3
Table 4-3: Assumptions Used for Estimating Existing Noise Exposure Levels 4-4
Table 4-4: Comparison of Draft and Final EIS Noise Measurements along the UPRR Corridor 4-5
Table 4-5: Comparison of Draft and Final EIS Freight Train Vibration Measurements along the UPRR Corridor 4-10
Table 5-1: Summary of FTA Category 2 (Residential) Noise Impacts for the Preferred Alignment Without Mitigation 5-3
Table 5-2: Summary of Draft and Final EIS Residential Noise Impacts Without Mitigation 5-8
Table 5-3: Summary of Draft and Final EIS Institutional Noise Impacts Without Mitigation 5-9
Table 5-4: Summary of Recommended Noise Barrier Locations and Dimensions 5-10
Table 5-5: Summary of Vibration Impacts for the Preferred Alignment Without Mitigation 5-14
Table 6-1: Summary of Residential Noise Impacts for the Preferred Alignment with Noise Barrier Mitigation 6-2

Abbreviations

ANSI	American National Standards Institute
API	Area of Potential Impact
BMPs	Best Management Practices
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
CSA	Cross-Spectrum Acoustics
CTA	Chicago Transit Authority
CWR	Continuous Welded Rail
dBA	A-Weighted Decibel
EA	Environmental Assessment
EIS	Environmental Impact Statement
FDL	Force Density Level
FTA	Federal Transit Administration
hrs	hours
Hz	Hertz (cycles per second)
IHB	Indiana Harbor Belt Railroad
ISO	International Standards Organization
L_{dn}	Day-Night Equivalent Sound Level
L_{eq}	Equivalent sound Level
L_{max}	Maximum Noise Level
LSTM	Line Source Transfer Mobility
mph	miles per hour
NEPA	National Environmental Policy Act
NIST	National Institute of Standards and Technology
NS	Norfolk Southern Railway
RLE	Red Line Extension
RMS	Root Mean Square
RRT	Rail Rapid Transit
SEL	Sound Exposure Level
TIP	Transportation Improvement Program
TM	transfer mobility
UPRR	Union Pacific Railroad
VdB	Vibration Decibels referenced to 1 micro-inch per second

Section 1 - Summary

This technical memorandum was prepared to support the Final Environmental Impact Statement (EIS) for the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project. The purposes are to identify potential noise and vibration impacts and mitigation measures associated with the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative and to compare them with those identified for the UPRR East and West Options in **Appendix O** in the Draft EIS (CTA 2016).

The analysis of noise and vibration for the Preferred Alignment was carried out using methods similar to those documented in the Draft EIS, described in **Appendix O** of the Draft EIS. The primary difference is that the Federal Transit Administration (FTA) detailed analysis methodology was used rather than the FTA general assessment methodology. The analysis included updates to existing noise and vibration conditions based on noise and vibration measurements conducted in September 2020. While the results of the updated measurements were generally consistent with those conducted for the Draft EIS, they were more extensive to allow for a more detailed characterization of the existing noise and vibration conditions.

Consistent with the Draft EIS, there would be no noise or vibration impacts from the No Build Alternative. For the Preferred Alignment, the analysis identified noise impacts without mitigation at a total of 369 residences, with moderate impacts at 278 residences and severe impacts at 91 residences. In addition to these residential impacts, the analysis identified noise impacts without mitigation at three institutional receivers, including a severe impact at one church and moderate impacts at one church and a community center.

A comparison of Draft and Final EIS residential noise impacts without mitigation is provided in **Table 1-1**. As indicated in this table, a total of 369 impacts are projected for the Preferred Alignment compared to 657 impacts for the East Option and 787 impacts for the West Option. Moderate noise impacts are projected at 278 residences for the Preferred Alignment compared to 574 moderate impacts for the East Option and 738 moderate impacts for the West Option. Severe noise impacts are projected at 91 residences for the Preferred Alignment compared to 83 severe impacts for the East Option and 49 severe impacts for the West Option. In addition, noise impacts were projected at seven institutional receivers for the Draft EIS, including a severe noise impact at one park as well as moderate noise impacts at three churches and three parks for the East Option. A severe noise impact at one park and moderate noise impacts at four churches and two parks were projected for the West Option. Due to differences in analysis methodology, including refined characterization of existing conditions and more detailed calculations, the Final EIS analysis predicts a greater number of severe noise impacts than the Draft EIS analysis, but considerably fewer moderate noise impacts.

Table 1-1: Comparison of Draft and Final EIS Residential Noise Impacts Without Mitigation

Area of Impact	UPRR Alternative East Option		UPRR Alternative West Option		UPRR Alternative Preferred Alignment	
Level of Noise Impact:	Moderate	Severe	Moderate	Severe	Moderate	Severe
95th Street to 103rd Street						
West of Track Structure	167	25	209	32	40	12
East of Track Structure	108	22	81	1	23	0
103rd Street to 111th Street						
West of Track Structure	1	0	125	0	40	4
East of Track Structure	107	25	62	0	31	13
111th Street to Michigan Avenue at 116th Street						
West of Track Structure	37	0	145	9	44	0
East of Track Structure	98	4	47	0	35	21
Michigan Avenue to CN/MED Rail Corridor						
West of Track Structure	16	0	41	7	18	8
East of Track Structure	40	7	28	0	47	33
Total No. of Impacts:	574	83	738	49	278	91
	657		787		369	

Source: CSA 2021

To reduce noise impacts below FTA noise impact criteria, the Draft EIS proposed constructing a noise barrier approximately 4 feet in height above the concrete deck to provide a 10-dBA (A-weighted decibel) reduction in project noise along both sides of the elevated track structure from the 95th Street/Dan Ryan terminal to the Canadian National/Metra Electric District (CN/MED) tracks near 119th Street. Based on the updated noise analysis for the Final EIS, a total of 33,600 lineal feet (6.36 miles) of noise barriers, located on both sides of the elevated track structure from just east of Wentworth Avenue in the I-57 right-of-way to the CN/MED tracks near 119th Street and extending to a height of 3.5 feet above the top-of-rail elevation, is recommended to provide a project noise reduction of up to 15 dBA.

Whereas the Draft EIS analysis for the East and West Options concluded that noise barriers would eliminate all noise impacts, the results for the Preferred Alignment indicate that moderate noise impacts are expected to remain at 15 residences after mitigation with noise barriers, primarily due to the proximity of these residences to track turnouts and crossovers. Other means to mitigate the moderate noise impacts remaining after noise barrier mitigation may be examined during detailed design.

Consistent with the Draft EIS, no vibration impacts were identified, and no vibration mitigation measures are proposed. In addition, construction best management practices (BMPs) would be used to reduce noise and vibration as described in the Draft EIS, and no construction noise or vibration impacts are anticipated.

Section 2 - Project Description and Background

CTA, as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic

Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure…

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation

of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

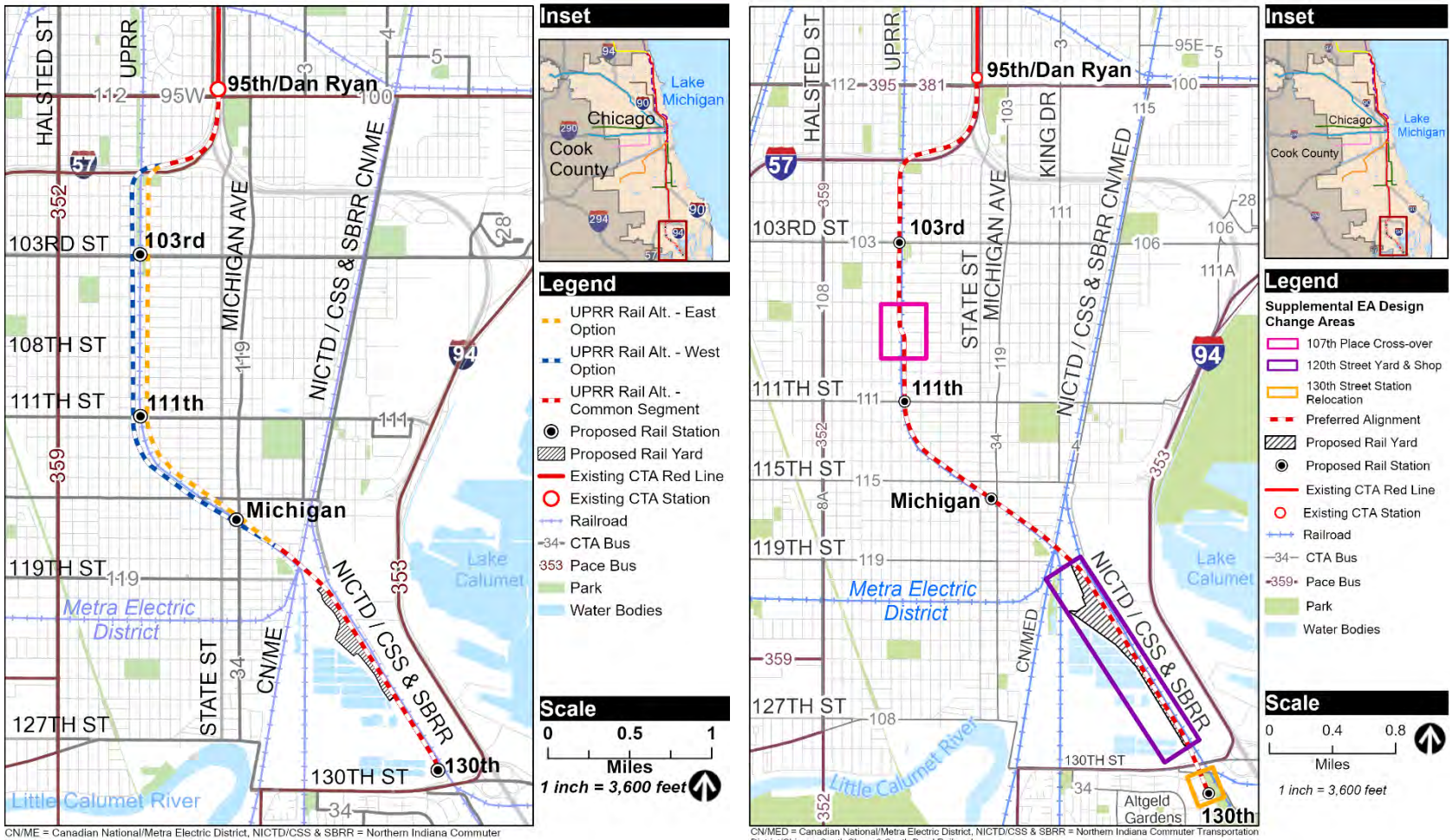

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix O** for the Draft EIS analysis have been carried forward to evaluate the noise and vibration impacts. This section documents the methodology for evaluating this resource, consistency with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

As with the Draft EIS, the Final EIS noise and vibration analyses for this project were prepared in accordance with federal guidelines. The current federal guidelines are included in the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018), which is an updated version of the 2006 guidance manual available when the Draft EIS analyses were conducted. Although the 2018 version of the manual includes some minor updates to the methodology, the noise and vibration impact criteria are the same as in the 2006 version. The primary difference relevant to the Final EIS evaluation is that the FTA detailed noise and vibration analysis procedures were used whereas the FTA general noise and vibration assessment procedures were used for the Draft EIS analyses.

There are no changes to the state or local regulations referenced in **Appendix O** of the Draft EIS. **Appendix O** further notes that the noise and vibration limits in these regulations are not applicable to the RLE Project.

3.2 Impact Analysis Thresholds

For the Final EIS, the impact analysis thresholds for operational noise and for construction noise and vibration are the same as those used in the Draft EIS. For operational vibration, however, the FTA vibration impact criteria for a detailed vibration analysis are applied instead of the FTA general vibration assessment criteria.

The FTA criteria for a detailed vibration assessment are shown in **Figure 3-1** and descriptions of the curves are shown in **Table 3-1**. The curves in **Figure 3-1** are applied to the projected vibration spectrum for the train operations. If the vibration level at any one frequency exceeds the criteria, there is impact. Conversely, if the entire vibration spectrum is below the curve, there will be no impact. Based on these criteria, the impact analysis thresholds for operational vibration are 72 vibration decibels (VdB) for residential buildings and 78 VdB for institutional buildings as measured in 1/3-octave bands of frequency over the frequency range from 8 to 80 hertz (Hz).

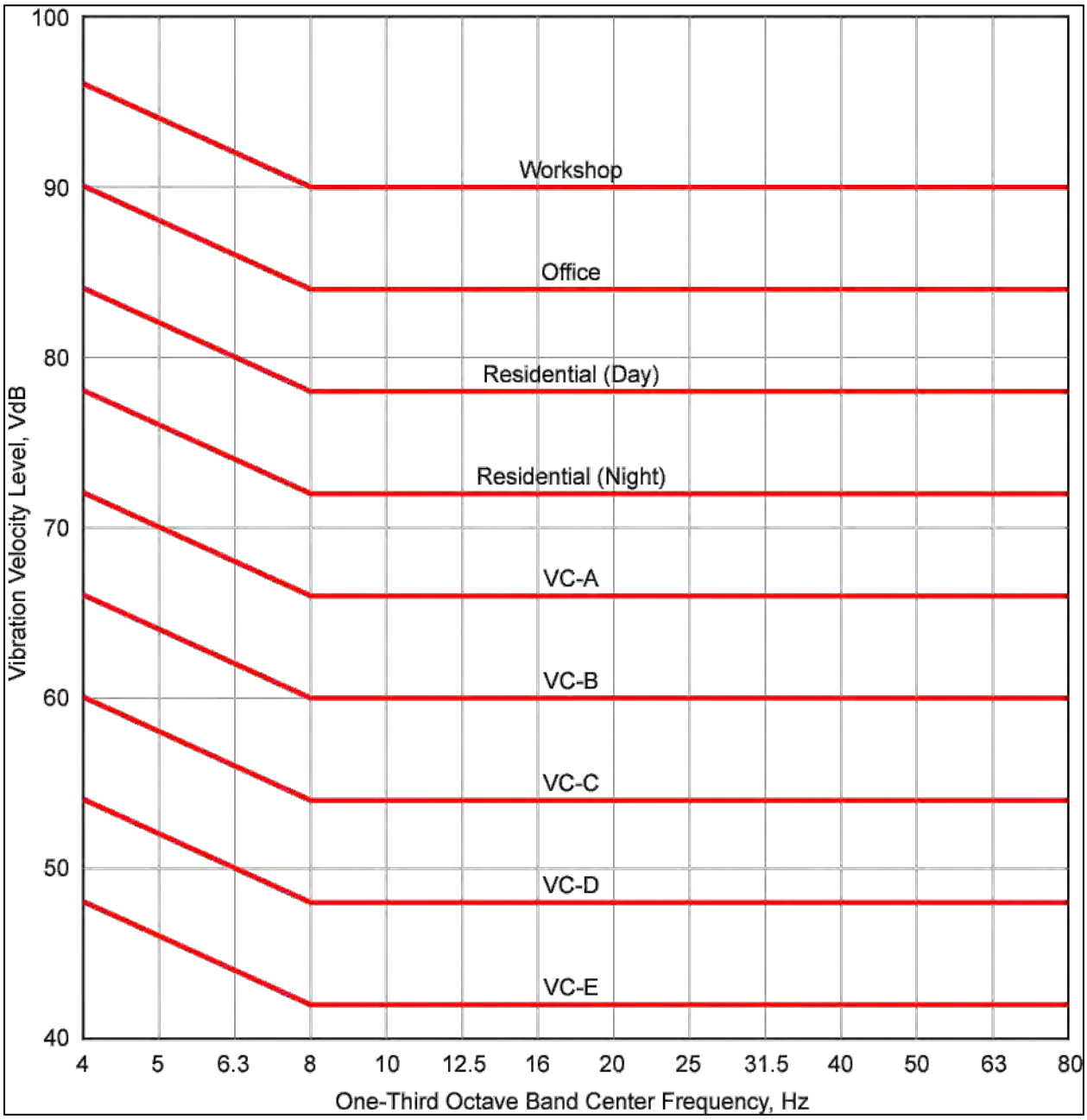

Source: FTA 2018

Figure 3-1: FTA Detailed Vibration Criteria

Table 3-1: Interpretation of Vibration Criteria for Detailed Analysis

Criterion Curve (See Figure 3-1)	Maximum Level* (VdB)	Description of Use
Workshop (ISO)	90	Vibration that is distinctly felt. Appropriate for workshops and similar areas not as sensitive to vibration.
Office (ISO)	84	Vibration that can be felt. Appropriate for offices and similar areas not as sensitive to vibration.
Residential Day (ISO)	78	Vibration that is barely felt. Adequate for computer equipment and low-power optical microscopes (up to 20X).
Residential Night, Operating Rooms (ISO)	72	Vibration is not felt, but ground-borne noise may be audible inside quiet rooms. Suitable for medium-power optical microscopes (100X) and other equipment of low sensitivity.
VC-A	66	Adequate for medium- to high-power optical microscopes (400X), microbalances, optical balances, and similar specialized equipment.
VC-B	60	Adequate for high-power optical microscopes (1000X) and inspection and lithography equipment to 3-micron line widths.
VC-C	54	Appropriate for most lithography and inspection equipment to 1-micron detail size.
VC-D	48	Suitable in most instances for the most demanding equipment, including electron microscopes operating to the limits of their capabilities.
VC-E	42	The most demanding criterion for extremely vibration-sensitive equipment.

* RMS vibration velocity level (in VdB re 1 micro-inch/sec) as measured in 1/3-octave bands of frequency over the frequency range from 8 to 80 Hz.
Source: FTA 2018

3.3 Area of Potential Impact

For the Final EIS, the area of potential impact (API) is defined based on the FTA impact screening distances from Rail Rapid Transit (RRT) sources for residential land use. The applicable screening distances for noise impact are 700 feet from the guideway centerline where the sound path is unobstructed and 350 feet from the guideway centerline where there are intervening buildings. For

vibration, the applicable screening distances are 200 feet for residential land use and 120 feet for institutional land use, as measured from the right-of-way or property line.

The API for the Final EIS analysis is greater than that defined in the Draft EIS, which was based on the moderate noise impact contours determined from a general assessment.

3.4 Methods

The analysis of noise and vibration for the Preferred Alignment was carried out using methods similar to those documented in the Draft EIS, described in **Appendix O**. The primary difference is that the FTA detailed analysis methodology was used rather than the FTA general assessment methodology. The noise and vibration prediction methods used for the detailed analysis are described in the subsections below.

3.4.1 Noise Modeling Methodology

Noise exposure levels from train operations, in terms of day-night sound level (L_{dn}) and peak-hour equivalent sound level (L_{eq}), were predicted using a spreadsheet model incorporating the methods specified in Section 4 of the FTA guidance manual for a detailed noise analysis. The predictions were based on the following assumptions (updated from the Draft EIS in some cases):

- Consistent with the FTA noise source reference level for rail transit cars, the predictions assume that a single CTA vehicle operating at 50 miles per hour (mph) on at-grade ballast and tie track with continuous welded rail (CWR) generates a Sound Exposure Level (SEL) of 82 dBA at a distance of 50 feet from the track centerline.
- Consistent with FTA methodology, an adjustment of +4 dBA is applied to the predicted noise levels along most of the Preferred Alignment where trains would operate on closed deck aerial structure with slab track.
- Based on the hourly train schedule provided by CTA, it is assumed that there would be 304 daytime (7 AM to 10 PM) train operations and 110 nighttime (10 PM to 7 AM) train operations. This schedule corresponds to a total of 414 trains over a 24-hour period (compared to 378 assumed for the Draft EIS analysis). Peak transit hour headways in each direction are assumed to range from 3 to 6 minutes, with an average of 4.5 minutes.

- It is assumed that trains would consist of eight cars between 5 AM and midnight, four cars between midnight and 4 AM, and 6 cars between 4 AM and 5 AM (the Draft EIS analysis assumed 8-car trains from 3 AM to 6 PM and 4-car trains from 6-PM to 3 AM).
- Based on speed data provided by CTA, train speeds are assumed to vary by location along the Preferred Alignment, with a maximum speed of 53 mph (the Draft EIS analysis assumed a speed of 55 mph except near the stations).
- Consistent with current FTA guidance, wheel impacts at crossovers and turnouts are assumed to cause localized noise increases of 5 dBA within a distance of 300 feet.
- To account for shielding by aerial structures, an adjustment of -5 dBA is applied to the predicted noise from trains on the far track for receivers within 150 feet of the far track.

3.4.2 Vibration Modeling Methodology

Projections of ground-borne vibration from train operations, in terms of the maximum vibration velocity level (VdB), were carried out using the detailed vibration analysis procedures specified in Section 6 of the FTA guidance manual, based on the following factors:

- Vibration source level data for the CTA vehicles operating on closed deck aerial structure with slab track and CWR were obtained from measurements conducted at existing representative CTA aerial structure locations in September 2020.
- Ground-borne vibration propagation tests were conducted at five sites along the Preferred Alignment as described in **Section 4.2**. These tests measured the response of the ground to an input force. The results of these tests were combined with vibration source level data for the CTA vehicles to project vibration levels from trains operating on the Preferred Alignment.
- Based on speed data provided by CTA, train speeds are assumed to vary by location along the Preferred Alignment, with a maximum speed of 53 mph.
- Consistent with current FTA guidance, wheel impacts at track crossovers and turnouts are assumed to cause localized vibration increases of 10 VdB within a distance of 100 feet and increases of 5 VdB at distances between 100 feet and 200 feet.
- No adjustments were made for vibration propagation from the ground to building spaces.

The source vibration characteristics of the CTA vehicles are represented by the force density level (FDL). The FDL was determined based on tests conducted adjacent to the CTA Orange Line at 53rd

Street and Kostner Avenue, where trains operate on a closed deck aerial structure with ballast-and-tie track structure. The tests included ground-borne vibration propagation measurements as well as measurements of ground vibration from train operations at the aerial structure site.

The FDL measured for ballast-and-tie track was adjusted for train operation on direct fixation slab track based on tests conducted adjacent to the CTA Red and Brown Line aerial structure north of Fullerton Station. At this site, ground vibration measurements were performed for representative train operations on the structure. The results were then compared to the ground vibration levels measured for train operations on the Orange Line structure, and the FDL was adjusted based on the difference in vibration levels at the two sites. The resulting FDL frequency spectra for CTA train operations on aerial structures with both ballast-and-tie and direct fixation track are presented in **Figure 3-2,** normalized to a train speed of 50 mph.

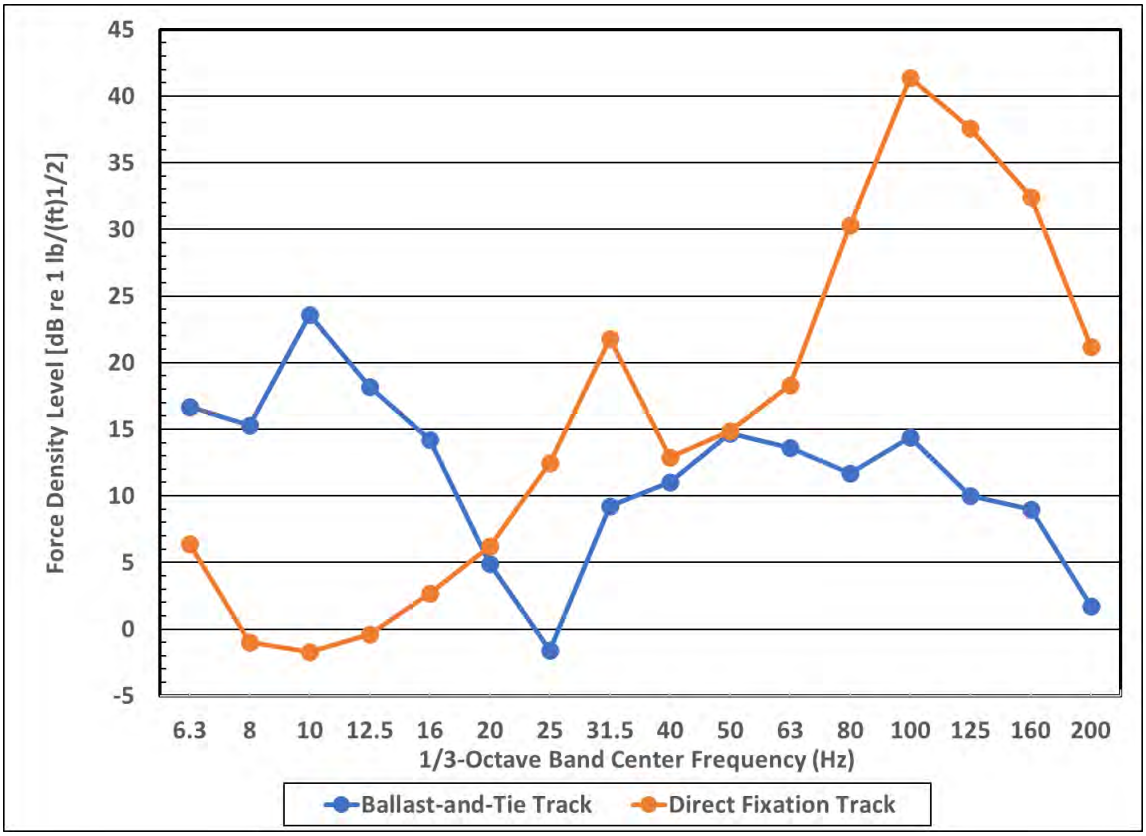

Source: CSA 2021

Figure 3-2: FDL Spectra at 50 mph for CTA Train Operations on Aerial Structure

The FDL for direct fixation track was combined with the ground-borne vibration propagation test results along the Preferred Alignment to project vibration levels as a function of distance for CTA operations on the RLE aerial structure.

Section 4 - Affected Environment

This section describes updates to the existing noise and vibration conditions near the RLE Project since the publication of the Draft EIS. This section documents updates to the baseline data as well as any changes to noise and vibration planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

4.1 Existing Noise Conditions

Noise-sensitive land uses along the Preferred Alignment include many residences as well as churches, schools, parks, and community facilities. Existing noise sources along the RLE Project include roadway traffic, rail operations, and local activities. The existing ambient sound levels vary by location, depending on the proximity to highways, railways, and other noise sources, and are generally typical of an urban environment. Updated existing ambient noise levels were characterized through direct measurements at representative sites in the study area on September 14-17, 2020.

4.1.1 Noise Measurement Locations and Procedures

The noise measurement program consisted of both long-term (24-hour) and short-term (one-hour) monitoring of the A-weighted sound level. General locations for the measurements were pre-approved by CTA and FTA, and specific sites were selected in the field to represent a range of existing noise conditions at noise-sensitive areas along the project alignment. For the Preferred Alignment, long-term noise measurements were made at ten sites (designated as LTN-1 through LTN-10) and short-term noise measurements were made at ten sites (designated as STN-1 through STN-10). The noise measurement locations are shown in **Figure 4-1**.

At each of the measurement sites, the A-weighted sound levels were continuously monitored during the measurement periods. The noise measurements were performed with NTi Audio model XL2 and Larson Davis model 820 noise monitors that conform to American National Standards Institute (ANSI) Standard S1.4 for Class 1 (Precision) sound level meters. Calibrations, traceable to the U.S. National Institute of Standards and Technology (NIST), were carried out in the field before and after each set of measurements using an acoustical calibrator.

In all cases, the measurement microphone was protected by a windscreen and supported on a tripod at a height of four to six feet above the ground and was positioned to characterize the exposure of the site to the dominant noise sources in the area. For example, microphones were located at the approximate setback lines of the receptors from adjacent roads or rail lines, and were positioned to avoid acoustic shielding by landscaping, fences, or other obstructions.

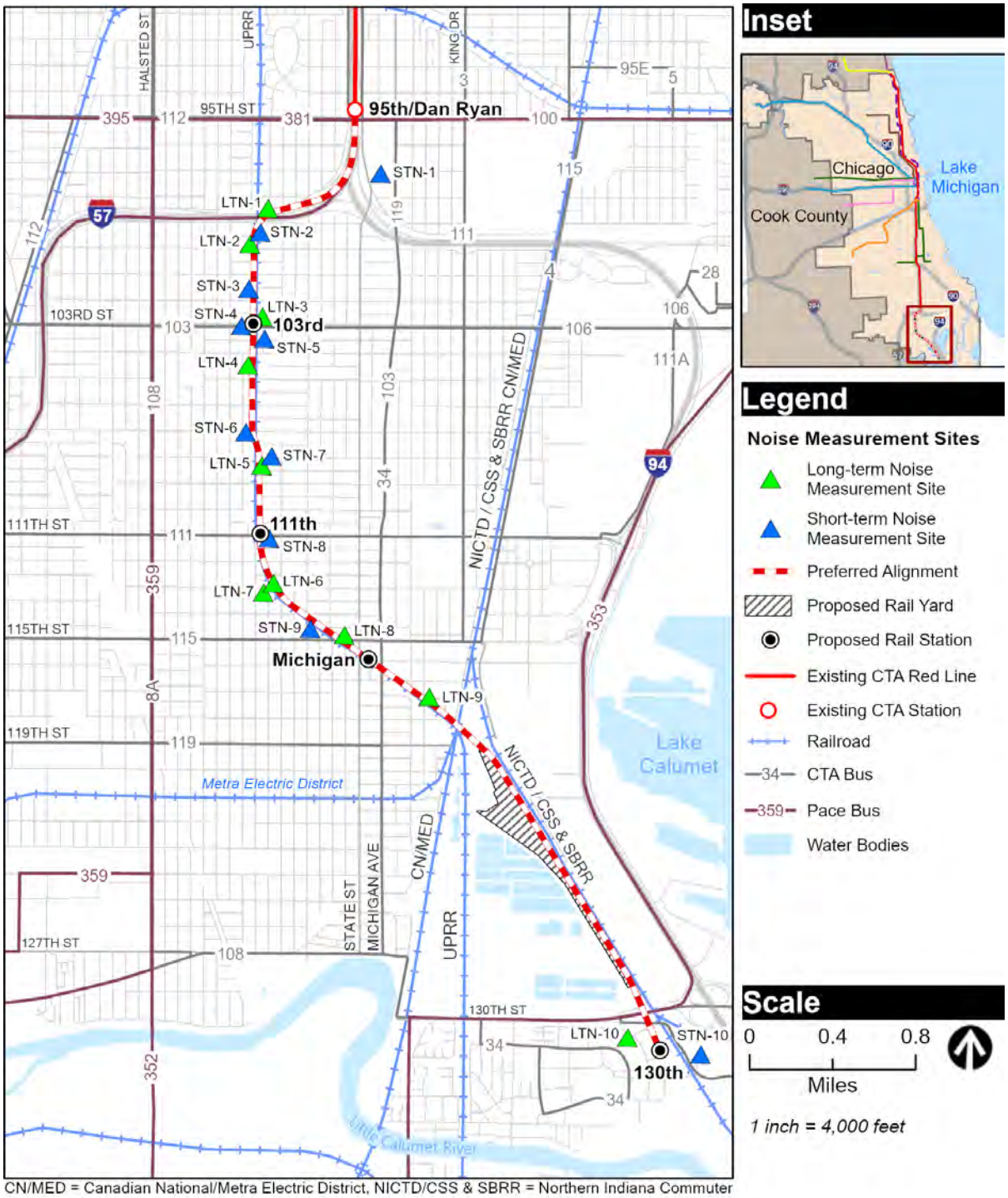

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 4-1: Noise Measurement Site Locations

4.1.2 Noise Measurement Results

The results of the existing ambient noise measurements are summarized in **Table 4-1** for the long-term sites and in **Table 4-2** for short-term sites. Because UPRR train operations are a major contributor to the existing noise levels at many locations along the Preferred Alignment, L_{dn} values for long-term measurements in **Table 4-1** are provided both with and without train noise.

Table 4-1: Summary of Existing Ambient Long-Term Noise Measurement Results

Site No.	Measurement Location Description	Measurement Period			Noise Exposure Ldn (dBA)	
		Start Date	Start Time	Duration (hrs.)	Meas.	w/o Train Noise
LTN-1	9821 S. Harvard Avenue (Residence)	9/14/20	10:00	24	77	77
LTN-2	400 W. 100th Street (Residence)	9/14/20	10:00	24	67	62
LTN-3	351 W. 102nd Place (Residence)	9/14/20	10:00	24	76	72
LTN-4	10427 S. Eggleston Ave. (Residence)	9/14/20	10:00	24	60	58
LTN-5	346 W. 108th Place (Residence)	9/14/20	11:00	24	74	70
LTN-6	316 W. 113th Street (Residence)	9/15/20	17:00	24	72	65
LTN-7	345 W. 113th Street (Residence)	9/15/20	16:00	24	65	61
LTN-8	32 W. 115th Street (Residence)	9/15/20	16:00	24	68	66
LTN-9	310 E. 117th Street (Residence)	9/15/20	16:00	24	61	60
LTN-10	13015 S. Ellis Avenue (Church)	9/15/20	08:00	24	61	61

Source: CSA 2021

Table 4-2: Summary of Existing Ambient Short-Term Noise Measurement Results

Site No.	Measurement Location Description	Measurement Period			Noise Exposure Leq (dBA)
		Start Date	Start Time	Duration (hrs.)	
STN-1	Harlan High School	9/14/20	14:10	1	63
STN-2	Wendell Smith Park	9/14/20	11:30	1	65
STN-3	Kingdom Global Outreach Ministries	9/16/20	13:52	1	56
STN-4	Loving Spirit Missionary Baptist Church	9/16/20	12:42	1	72
STN-5	Block Park	9/17/20	09:00	1	61
STN-6	Mount Ebal Baptist Church	9/16/20	10:49	1	69
STN-7	Kwame Nkrumah Academy	9/16/20	15:08	1	54
STN-8	Agape Community Center	9/15/20	11:16	1	68
STN-9	My Holy Rock Missionary Baptist Church	9/15/20	08:54	1	58
STN-10	Carver Military Academy High School	9/15/20	07:30	1	59

Source: CSA 2021

Overall, the results in **Table 4-1** and **Table 4-2** serve as the basis for determining the existing noise conditions at all noise-sensitive receptors along the Preferred Alignment. In particular, the existing L_{dn} at specific receiver locations was estimated based on the representative noise measurement data by combining the L_{dn} contribution from major highway or railroad noise sources along the Preferred Alignment (adjusted for distance and shielding) with the background L_{dn}. The source L_{dn} was calculated as follows:

$$L_{dn}(\text{source}) = L_{dn}(\text{ref}) - 15*\log_{10}(D/D_{ref}) - A(\text{shielding})$$

where: L_{dn}(source) = L_{dn} contribution from a highway or railroad source at receiver location, dBA

L_{dn}(ref) = L_{dn} source contribution from data at a reference noise measurement site, dBA

D = distance from a highway or railroad source to the receiver location, feet

D_{ref} = distance from highway or railroad source to a reference noise measurement site, feet

A(shielding) = attenuation due to shielding by rows of houses between the highway or railroad source and the receiver location (based on FTA methodology), dBA

The assumptions used for estimating the existing noise exposure levels are provided below in **Table 4-3**.

Table 4-3: Assumptions Used for Estimating Existing Noise Exposure Levels

Receiver Location Along RLE Corridor	Source Reference				Background Reference	
	Source	Site No.	L_{dn} (dBA)	Distance (feet)	Site No.	L_{dn} (dBA)
95th Street - Wentworth Avenue	I-57	LTN-1	71.7[1]	200	N.A.	60 (est.)
Wentworth Avenue - 99th Place	I-57	LTN-1	76.7	200	N.A.	60 (est.)
99th Place[2]	UPRR	LTN-2	64.5	160	LTN-2	62.2
100th Place - 102nd Street	UPRR	LTN-3	73.3	120	LTN-2	62.2
102nd Street - 104th Street	UPRR	LTN-3	73.3	120	LTN-3	72.0
105th Street[3]	UPRR	LTN-2	64.5	160	LTN-4	58.2
106th Street - 112th Street	UPRR	LTN-5	72.0	160	LTN-5	70.4
112th Street - Michigan Avenue	UPRR	LTN-6	70.4	105	LTN-6	65.0
Michigan Avenue - 118th Street	UPRR	LTN-9	55.7	250	LTN-9	59.6
South of 130th Street	(Bkgd.)	N.A.	N.A.	N.A.	LTN-10	61.1

[1] Assumes 5 decibel shielding where I-57 is in cut.
[2] Interpolate to calculate the reference train L_{dn} at locations between 99th Place and 100th Place.
[3] Interpolate to calculate the reference train L_{dn} at locations between 105th Street and 104th Street and at locations between 105th Street and 106th Street.
Source: CSA 2021

Finally, **Table 4-4** compares the updated noise measurements for the Final EIS with the measurements conducted for the Draft EIS along the UPRR corridor. However, because the updated measurements were made at different locations, this comparison is not direct. In particular, the measurements at locations 7, 8, 9 and 10 for the Draft EIS were made at sites that were closer to the UPRR tracks so that the measured noise exposure was likely dominated by freight train noise. Thus, to provide a meaningful comparison, the train noise component of the noise exposure (L_{dn}) was determined at comparable Final EIS measurement locations along the UPRR corridor (Sites LTN-3, LTN-5, and LTN-6), and adjusted to match the distance between the Draft EIS measurement locations and the UPRR tracks. As shown in **Table 4-4**, the updated noise measurement results are consistent with the Draft EIS results, both with an average train noise exposure level (L_{dn}) of 75 dBA at a distance of 80 feet from the UPRR tracks.

Table 4-4: Comparison of Draft and Final EIS Noise Measurements along the UPRR Corridor

Data	Draft EIS (Locations 7, 8, 9 and 10)		Final EIS Update (Sites LTN-3, LTN-5, and LTN-6)		
	Range	Average	Range	Average	
				Measured	Adjusted
Noise Exposure (Ldn, dBA)	74-77	75	70-73	72	75
Distance from UPRR (feet)	70-100	80	105-160	130	80

Source: CSA 2021

The Draft EIS and Final EIS noise measurement results for the Altgeld Gardens neighborhood were also consistent. Specifically, the updated existing L_{dn} measured at Site LTN-10 was 61 dBA, which is only slightly lower than the L_{dn} of 63 dBA measured at Location 11 for the Draft EIS.

4.2 Existing Vibration Conditions

Vibration-sensitive land use along the Preferred Alignment is essentially the same as the noise-sensitive land use, except for parks and other outdoor sites that are not considered vibration-sensitive. Although existing vibration sources along the corridor include motor vehicles on nearby roadways, vibrations from traffic are not generally perceptible unless the roads have sizable bumps, potholes, or other uneven surfaces. Thus, the only major sources of existing ground vibration along the Preferred Alignment are freight train operations on the UPRR tracks. However, because the FTA vibration impact criteria are not ambient based (i.e., future project vibrations are not compared with existing vibrations to assess impact), the vibration measurements for the project focused on characterizing the soil conditions along the corridor as described below.

4.2.1 Vibration Measurement Procedures and Equipment

Vibration propagation measurements were conducted along the Preferred Alignment on September 14-16, 2020 to determine the vibration response characteristics of the ground near vibration-sensitive locations. A custom-built instrumented hammer was used to impart an impulsive force to the ground. The magnitude of the force was calculated based on the acceleration and mass of the falling hammer. The resulting vibration signals were measured using high-sensitivity accelerometers (PCB Model 393C and 393B05) mounted in a vertical direction on pavement or on steel spikes driven into the ground. The signals from the hammer and accelerometers were recorded using Data Translation DT9837A digital acquisition hardware. Data Translation's QuickDAQ software, running on a laptop computer, was used to review the measurement data.

The vibration propagation test procedure is shown schematically in **Figure 4-2**. The instrumented hammer was used to generate impulses at specific locations spaced 15 feet apart along a line on or parallel to the proposed alignment. A line of accelerometers was placed perpendicular to the line of impacts as shown in the figure. The relationship between the input force and the resulting vibration measured by the accelerometers, called the transfer mobility (TM), was calculated using proprietary software in the Cross-Spectrum Acoustics (CSA) laboratory. The transfer mobility represents the vibration propagation characteristics of the ground at the measurement site and at other sites with similar geology.

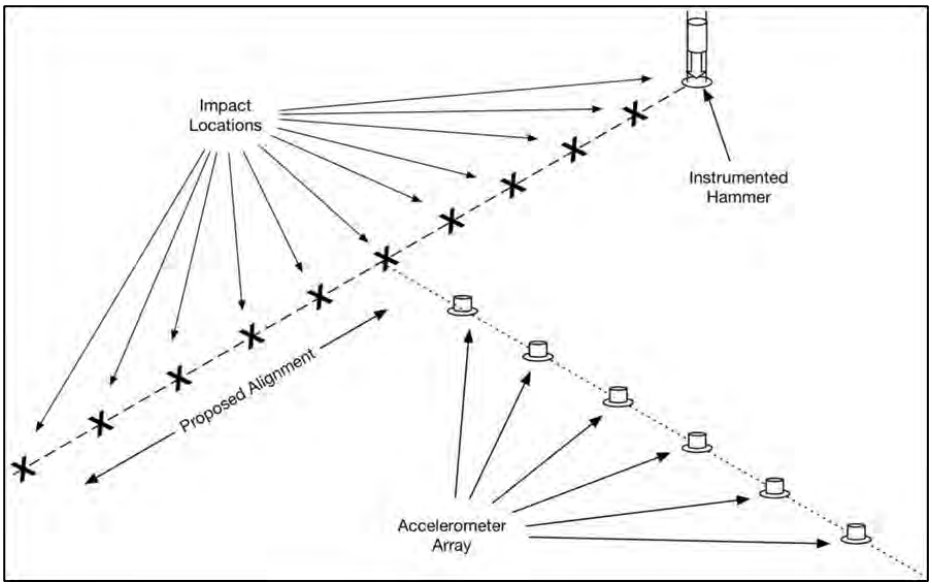

Source: CSA 2021

Figure 4-2: Vibration Propagation Measurement Schematic

In addition to the vibration propagation tests, some limited measurements were made to document existing train vibration levels at certain test sites. Although not used for the vibration assessment, these measurements supplement those conducted for the Draft EIS.

4.2.2 Vibration Measurement Locations

Vibration measurements were conducted at five representative sites (designated as V-1 through V-5) along the Preferred Alignment. General locations for the measurements were pre-approved by CTA and FTA, and specific sites were selected in the field to represent a range of existing soil conditions in vibration-sensitive areas along the corridor. The locations of these sites are shown in **Figure 4-3** and are described below.

Site V-1: Wendell Smith Park. Vibration propagation tests and freight train vibration measurements at this site were conducted on the western edge of the baseball fields at this park, adjacent to the existing UPRR corridor.

Site V-2: Block Park. Vibration propagation tests at this site were conducted at the southern end of this park in the open area west of Harvard Avenue at 104th Street, adjacent to the existing UPRR corridor.

Site V-3: 108th Street at Eggleston Avenue. Vibration propagation tests at this site were conducted at the intersection of 108th Street and the alleyway immediately east of Eggleston Avenue, adjacent to the existing UPRR corridor.

Site V-4: 111th Place at 112th Street. Vibration propagation tests at this site were conducted at the intersection of 111th Place and 112th Street, adjacent to the existing UPRR corridor.

Site V-5: Lot at 115th Street and State Street. Vibration propagation tests and freight train vibration measurements at this site were conducted on the paved area in the empty lot north of the existing UPRR corridor, between State Street and Michigan Avenue.

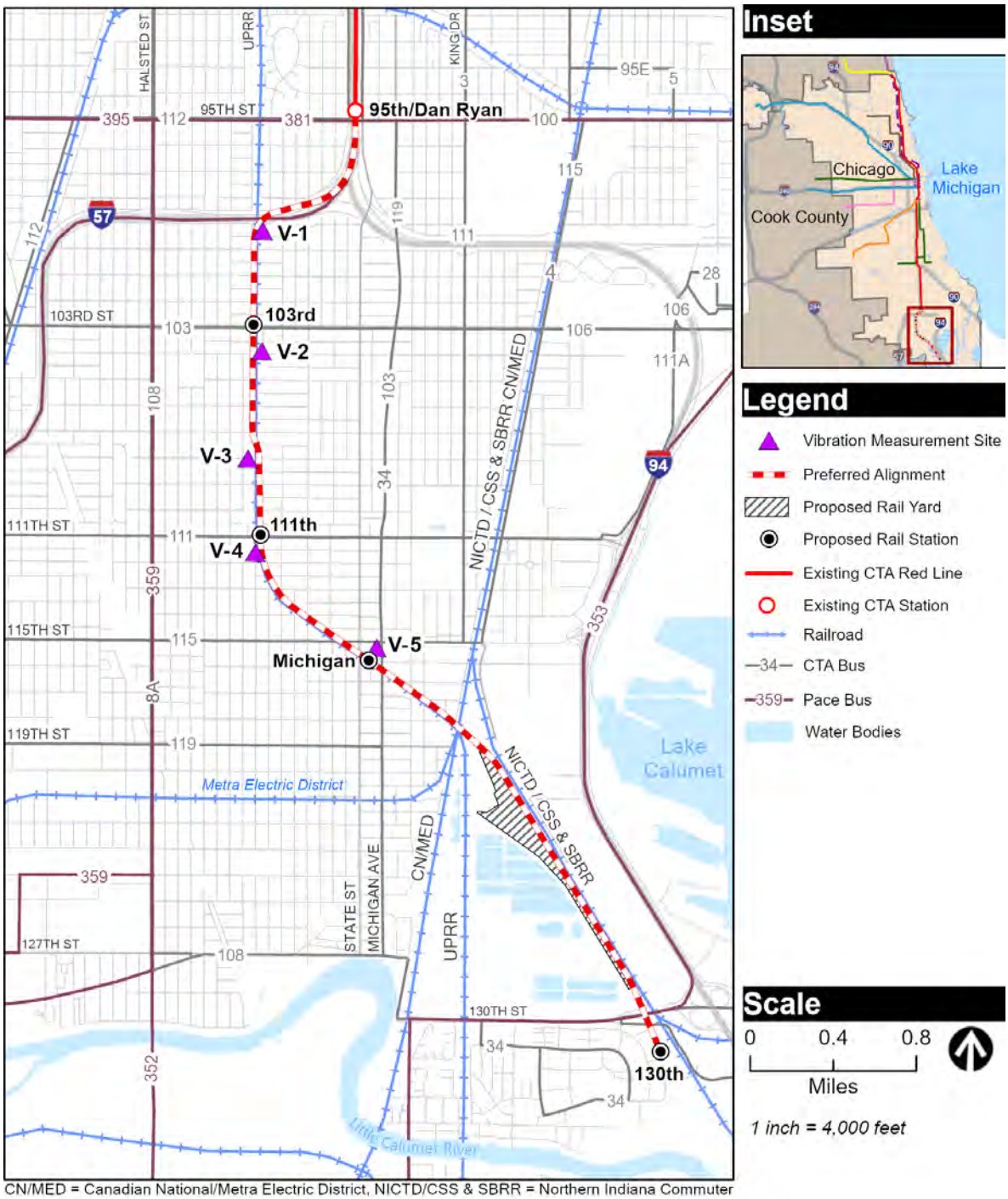

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 4-3: Vibration Measurement Site Locations

4.2.3 Vibration Measurement Results

Representative results of the vibration propagation tests are shown in **Figure 4-4**. These results are provided in terms of the measured Line Source Transfer Mobility (LSTM) at a distance of 100 feet.

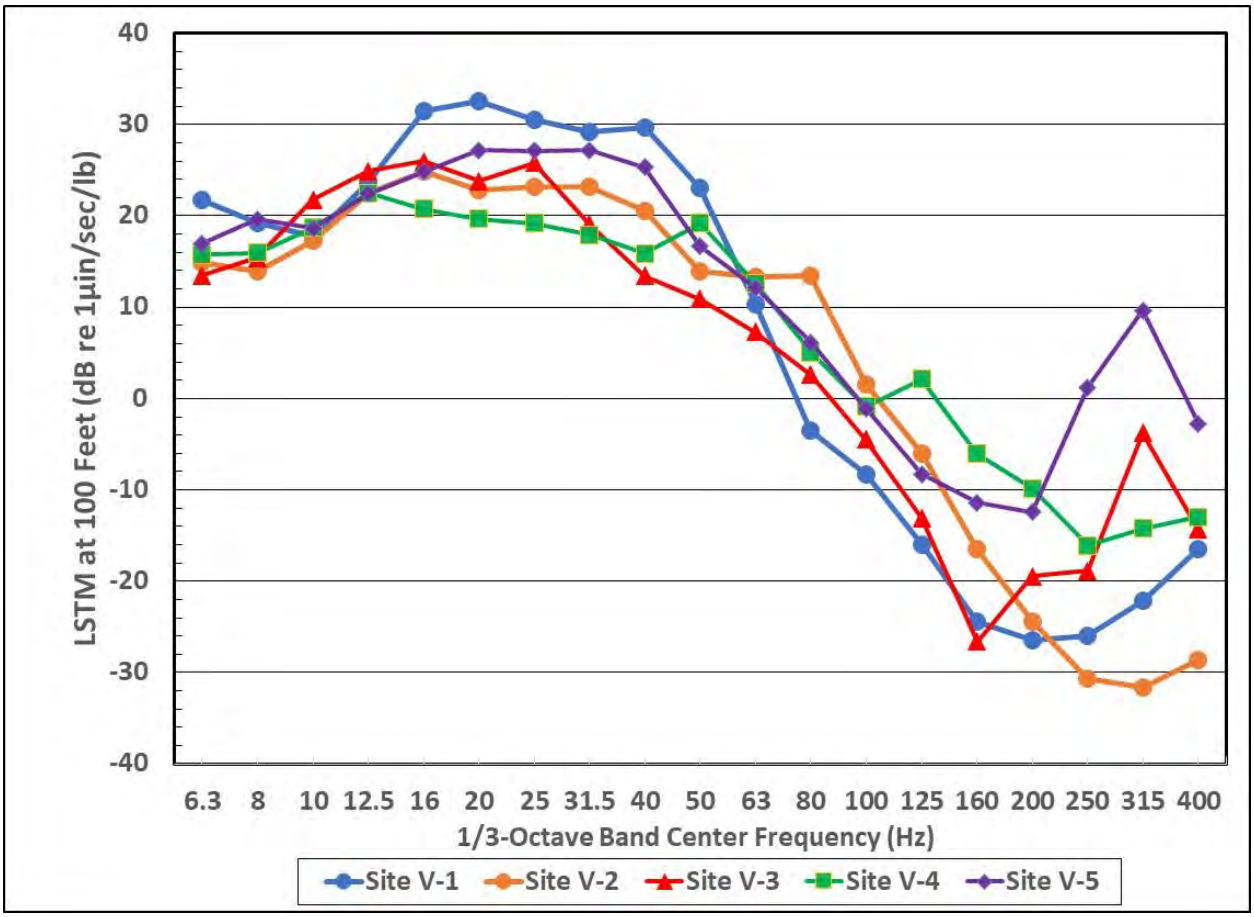

Source: CSA 2021

Figure 4-4: Vibration Propagation Test Data

With regard to existing vibration levels, **Table 4-5** compares the freight train vibration measurements conducted for the Final EIS with the measurements conducted for the Draft EIS along the UPRR corridor. However, because the measurements for the Final EIS were made at different locations, the results were adjusted to match the distance between the Draft EIS measurement locations and the UPRR tracks (using the FTA generalized ground surface vibration curve). As shown in **Table 4-5**, the adjusted Final EIS vibration levels of 73-78 VdB are reasonably consistent with the Draft EIS vibration levels of 75-80 VdB at 70-80 feet from the UPRR tracks.

Table 4-5: Comparison of Draft and Final EIS Freight Train Vibration Measurements along the UPRR Corridor

Data	Draft EIS (Locations 7 and 9)	Final EIS Update			
		Site V-1		Site V-5	
		Measured	Adjusted	Measured	Adjusted
RMS Velocity Level (VdB)	75-80	65	73	70	78
Distance from UPRR (feet)	70-80	175	70-80	170	70-80

Source: CSA 2021

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to affected communities:

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

This section also documents any new or revised mitigation measures for identified project impacts identified under the Draft EIS, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East and West Options of the UPRR Alternative evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning (CMAP) Transportation Improvement Program (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is often used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

It should be noted that, in accordance with FTA methodology, noise impacts (and vibration impacts in some cases) are assessed based on the existing conditions rather than on the future No Build conditions. This is because comparison of a noise or vibration projection with an existing condition is more accurate than a comparison of a projection with another projection. Because noise or vibration may increase by the time the project is operational, this approach of using existing conditions is a conservative one.

As described in **Appendix O** in the Draft EIS, there would be no noise or vibration impacts from the No Build Alternative.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

Detailed noise and vibration impact assessments were carried out based on FTA methodology. The assessment results are presented below.

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

5.2.1.1 Noise Impacts and Mitigation

Comparisons of the existing and future project noise levels are presented in **Table 5-1**, which includes ranges of results for FTA Category 2 (residential) receivers with both daytime and nighttime sensitivity to noise. In addition to the distances from the track and proposed train speeds, **Table 5-1** includes the existing noise levels and the projected noise levels from RLE Project train operations without mitigation. Based on a comparison of the predicted RLE Project noise levels with the FTA impact criteria, the table also includes an inventory of the number of moderate and severe noise impacts on both sides of each segment of the Preferred Alignment. Consistent with the Draft EIS, there are no noise impacts projected along the segment of the Preferred Alignment to the south of the CN/MED rail corridor, which includes the location of the relocated 130th Street station.

The results in **Table 5-1** identify noise impacts without mitigation at a total of 369 residences, with moderate impacts at 278 residences and severe impacts at 91 residences. In addition to these residential impacts, the analysis identified noise impacts without mitigation at three FTA Category 3 (institutional) receivers as follows:

1. Kingdom Global Outreach Ministries – severe noise impact is projected at this church, located on the west side of the track structure between 95th Street and 103rd Street.

2. Agape Community Center – moderate noise impact is projected at this facility, located on the east side of the track structure between 103rd Street and 111th Street.

3. My Holy Rock Missionary Baptist Church – moderate noise impact is projected at this church, located between 111th Street and Michigan Avenue at 116th Street.

The locations of all projected moderate and severe noise impacts for the Preferred Alignment without mitigation are shown on the maps in **Figure 5-1**, **Figure 5-2**, **Figure 5-3**, and **Figure 5-4**.

Table 5-1: Summary of FTA Category 2 (Residential) Noise Impacts for the Preferred Alignment Without Mitigation

Area of Impact	Distance from Near Track (feet)	Train Speed (mph)	Existing Noise Level (Ldn, dBA)	Project Noise Level (Ldn, dBA)			Number of Residential Noise Impacts	
				Predicted	Moderate Impact Criterion	Severe Impact Criterion	Moderate	Severe
95th Street to 103rd Street								
West of Track Structure	76 to 281	33 to 40	64 to 77	61 to 72	60 to 65	66 to 74	40	12
East of Track Structure	137 to 251	33 to 40	67 to 77	62 to 71	62 to 65	67 to 75	23	0
103rd Street to 111th Street								
West of Track Structure	48 to 232	26 to 48	63 to 75	63 to 71	60 to 65	65 to 73	40	4
East of Track Structure	30 to 273	26 to 48	65 to 77	62 to 79	61 to 65	66 to 75	31	13
111th Street to Michigan Avenue at 116th Street								
West of Track Structure	172 to 338	42 to 50	68 to 73	63 to 67	63 to 65	68 to 71	44	0
East of Track Structure	33 to 217	21 to 50	66 to 74	61 to 76	61 to 65	67 to 73	35	21
Michigan Avenue to CN/MED Rail Corridor								
West of Track Structure	214 to 399	15 to 49	60 to 64	58 to 68	58 to 60	64 to 65	18	8
East of Track Structure	62 to 316	15 to 52	60 to 62	58 to 73	58 to 59	63 to 64	47	33
Total Number of Impacts:							278	91
							369	

Source: CSA 2021

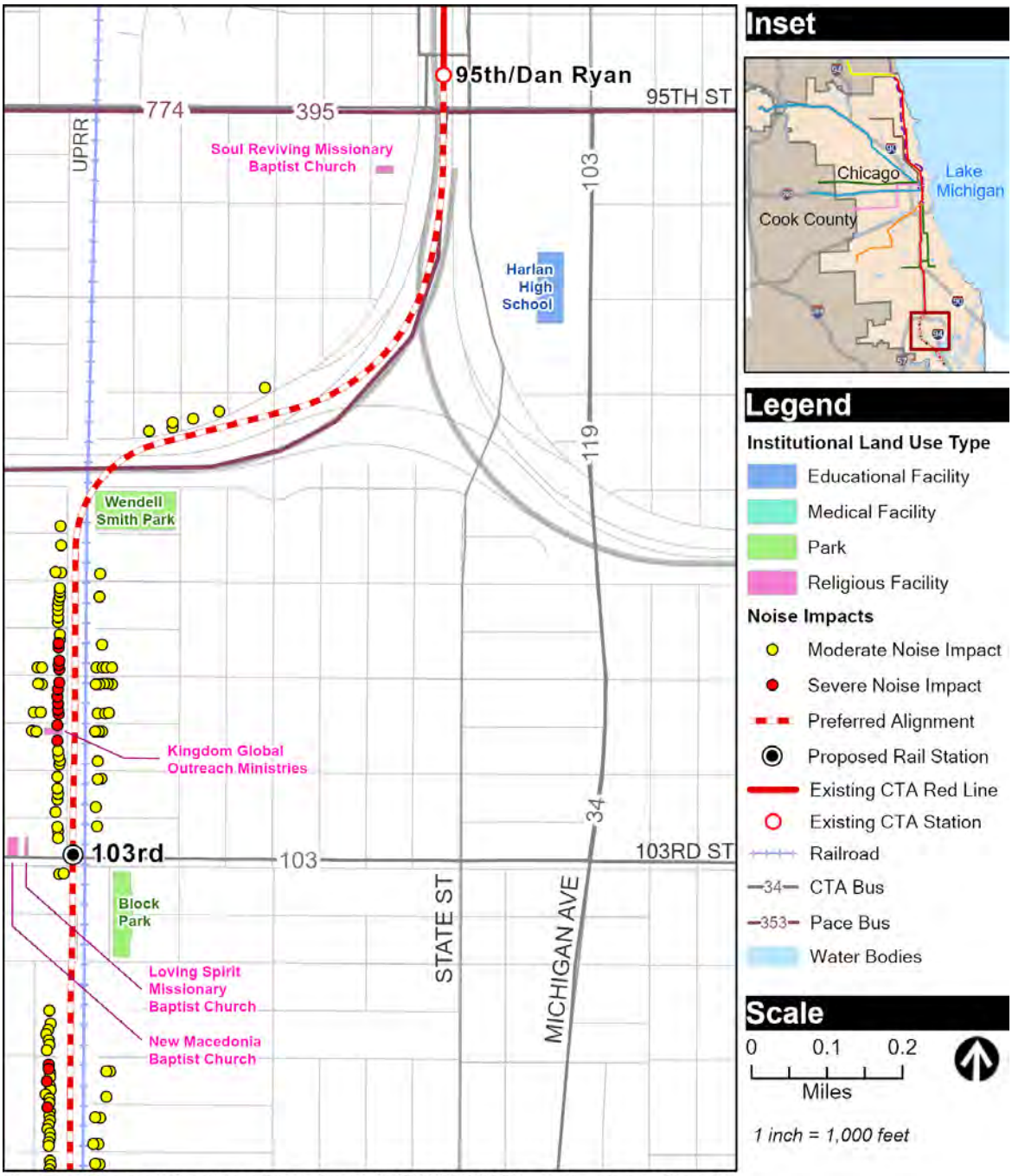

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 5-1: Permanent Noise Impacts without Mitigation (1 of 4)

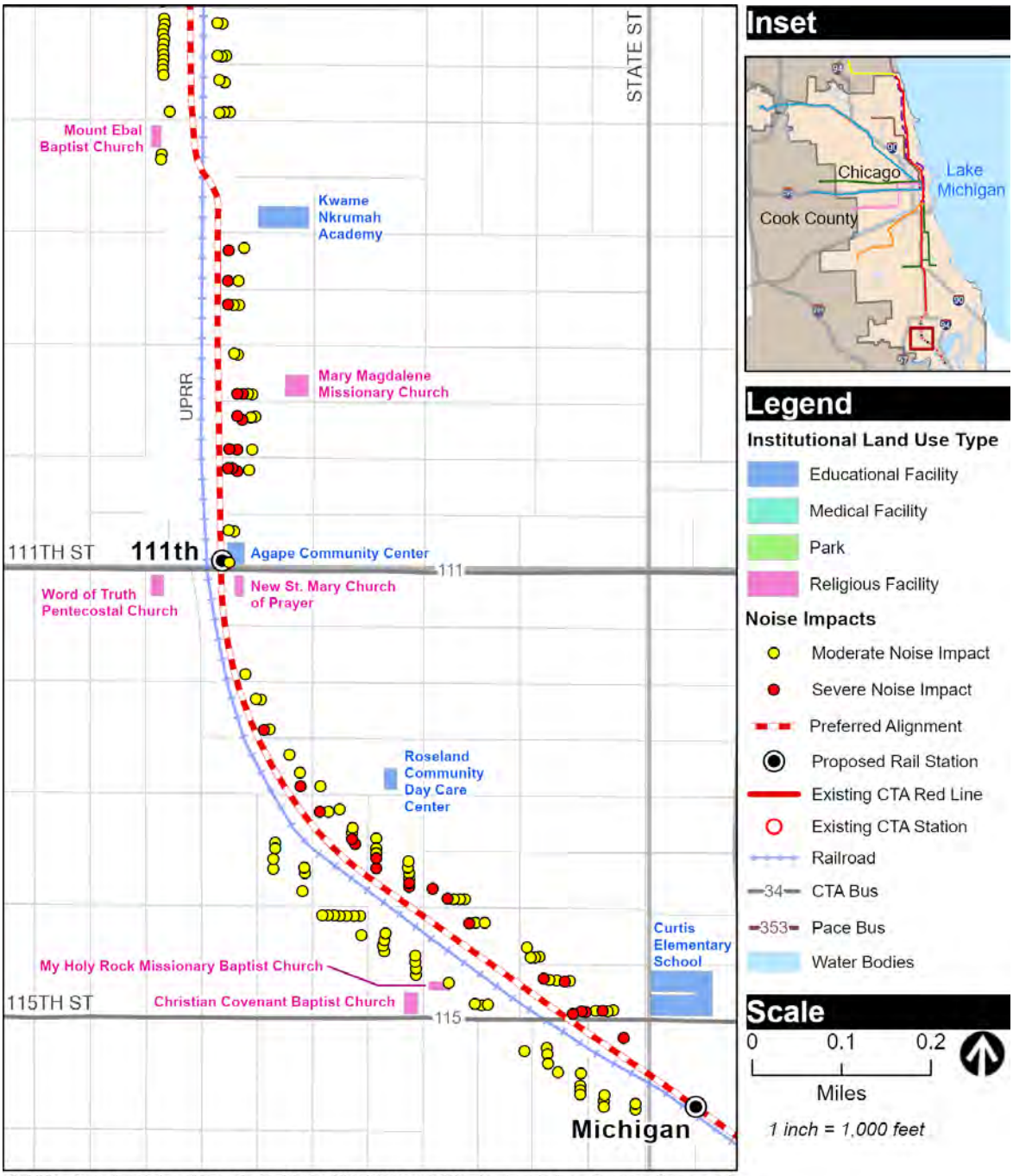

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 5-2: Permanent Noise Impacts without Mitigation (2 of 4)

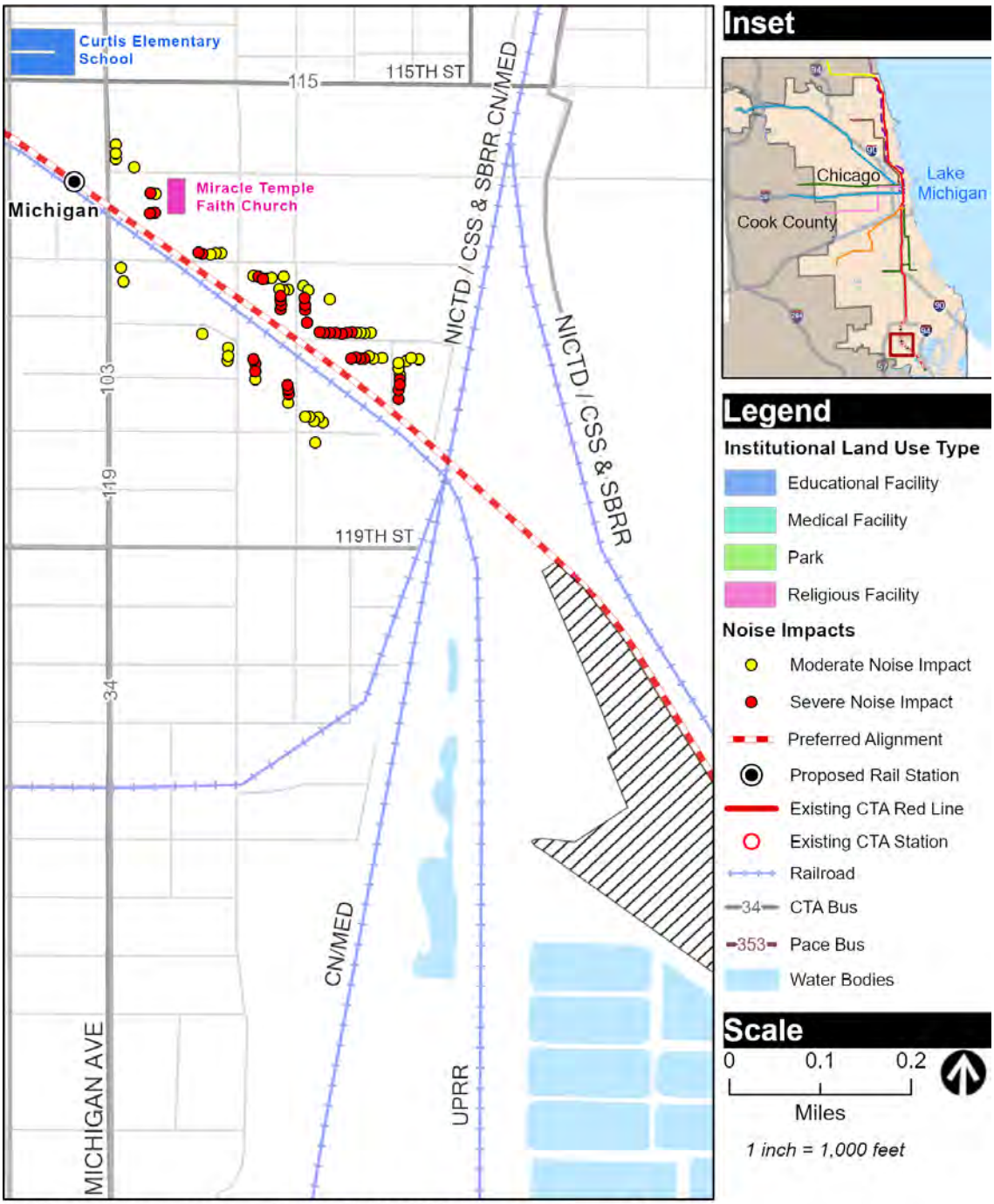

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 5-3: Permanent Noise Impacts without Mitigation (3 of 4)

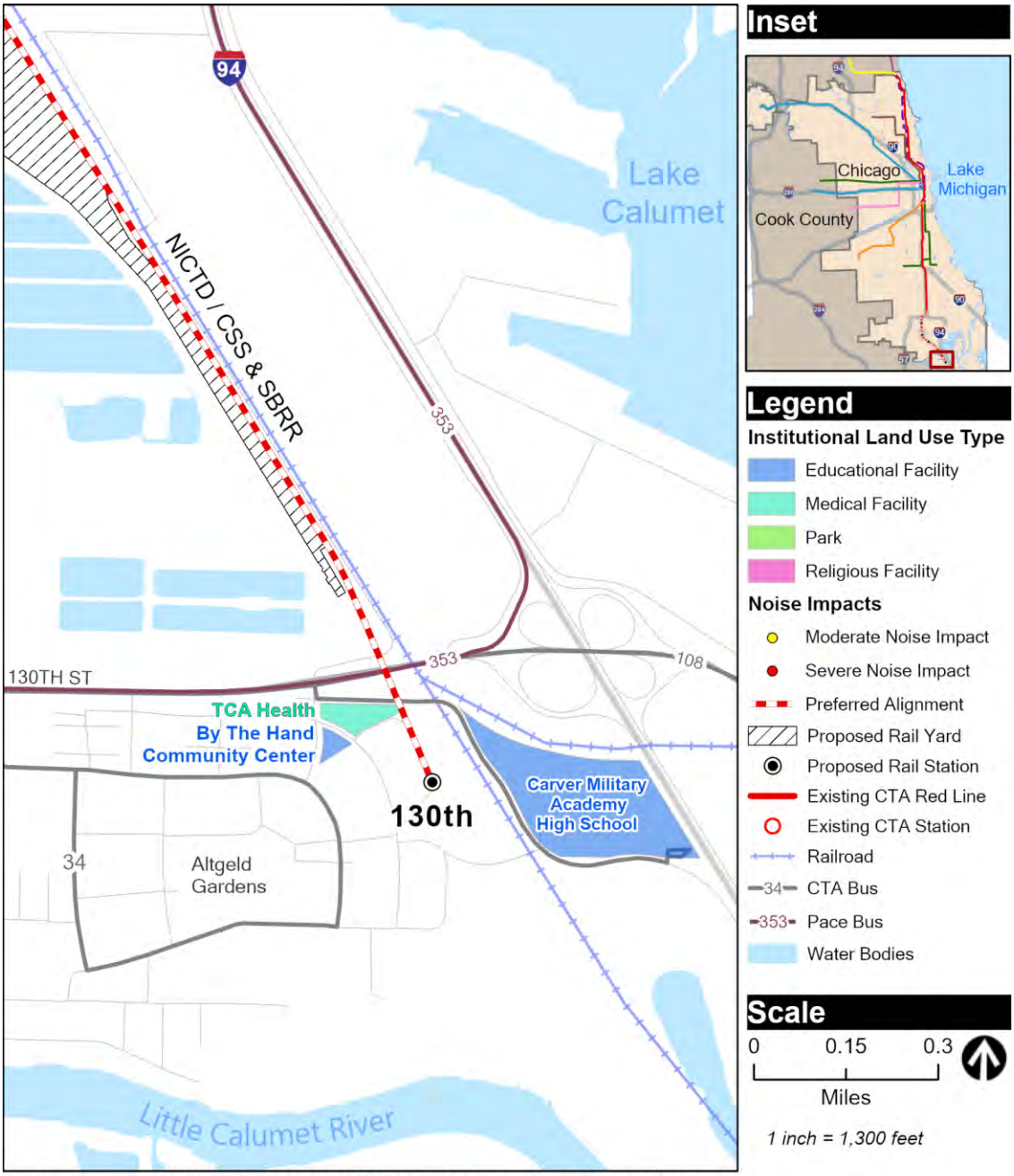

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 5-4: Permanent Noise Impacts without Mitigation (4 of 4)

A comparison of the projected Draft and Final EIS residential noise impacts without mitigation is provided in **Table 5-2**. As indicated in this table, a total of 369 impacts is projected for the Preferred Alignment compared to 657 impacts for the East Option and 787 impacts for the West Option in the Draft EIS. Moderate noise impacts are projected at 278 residences for the Preferred Alignment compared to 574 moderate impacts for the East Option and 738 moderate impacts for the West Option. Severe noise impacts are projected at 91 residences for the Preferred Alignment compared to 83 severe impacts for the East Option and 49 severe impacts for the West Option. Thus, it is concluded that the Final EIS analysis predicts a greater number of severe noise impacts than the Draft EIS analysis, but considerably fewer moderate noise impacts.

Table 5-2: Summary of Draft and Final EIS Residential Noise Impacts Without Mitigation

Area of Impact	UPRR East Option		UPRR West Option		Preferred Alignment	
Level of Noise Impact:	Moderate	Severe	Moderate	Severe	Moderate	Severe
95th Street to 103rd Street						
West of Track Structure	167	25	209	32	40	12
East of Track Structure	108	22	81	1	23	0
103rd Street to 111th Street						
West of Track Structure	1	0	125	0	40	4
East of Track Structure	107	25	62	0	31	13
111th Street to Michigan Avenue at 116th Street						
West of Track Structure	37	0	145	9	44	0
East of Track Structure	98	4	47	0	35	21
Michigan Avenue to CN/MED Rail Corridor						
West of Track Structure	16	0	41	7	18	8
East of Track Structure	40	7	28	0	47	33
Total Number of Impacts:	574	83	738	49	278	91
	657		787		369	

Source: CSA 2021

For noise-sensitive institutional receivers along the Preferred Alignment, a comparison of the projected Draft EIS and Final EIS noise impacts without mitigation is provided in **Table 5-3**. As indicated in this table, noise impacts are projected at three institutional receivers for the Preferred Alignment, including a severe impact at one church as well as moderate impacts at a community center and one church. By comparison, noise impacts were projected at seven institutional receivers for the Draft EIS, including a severe noise impact at one park as well as moderate noise impacts at three churches and three parks for the East Option. A severe noise impact at one park and moderate noise impacts at four churches and two parks were projected for the West Option.

Table 5-3: Summary of Draft and Final EIS Institutional Noise Impacts Without Mitigation

Receiver Location and Description	UPRR East Option	UPRR West Option	Preferred Alignment
	Level of Noise Impact		
95th Street to 103rd Street			
West of Track Structure			
Soul Reviving Baptist Church	Moderate	Moderate	None
Kingdom Global Outreach Ministries	Moderate	Moderate	Severe
East of Track Structure			
Robert Abbot Park	Moderate	Moderate	None
Wendell Smith Park	Severe	Severe	None
103rd Street to 111th Street			
West of Track Structure			
Mount Ebal Missionary Baptist Church	None	Moderate	None
East of Track Structure			
Block Park	Moderate	None	None
Agape Community Center	None	None	Moderate
111th Street to Michigan Avenue at 116th Street			
West of Track Structure			
My Holy Rock Missionary Baptist Church	Moderate	Moderate	Moderate
East of Track Structure	None	None	None
Michigan Avenue to CN/MED Rail Corridor			
West of Track Structure	None	None	None
East of Track Structure			
Kensington Park	Moderate	Moderate	None

Source: CSA 2021

To reduce noise impacts below FTA noise impact criteria, the Draft EIS proposed constructing a noise barrier approximately 4 feet in height (measured from the top surface of the concrete deck) to provide a 10-dBA reduction in project noise along both sides of the elevated track structure from the 95th Street/Dan Ryan terminal to the CN/MED tracks near 119th Street. Based on the updated noise analysis for the Preferred Alignment at 30 percent design, a total of approximately 33,600 lineal feet (6.36 miles) of noise barriers, extending from the top surface of the concrete deck to a minimum height of 3.5 feet above the top-of-rail elevation, is recommended to provide project noise reductions of up to 15 dBA. However, final design would be analyzed for noise to confirm impact thresholds would be met.

The recommended noise barrier locations are along both sides of the elevated track structure from just east of Wentworth Avenue in the I-57 right-of-way to the CN/MED tracks near 119th Street as

shown in **Figure 5-5**, **Figure 5-6**, and **Figure 5-7**. The civil station locations and dimensions of the recommended noise barriers are summarized in **Table 5-4**.

Table 5-4: Summary of Recommended Noise Barrier Locations and Dimensions

Noise Barrier	Side of Track Structure	Civil Station Limits		Height (feet)	Length (feet)
		Start	End		
1	West	20+00	188+00	3.5	16,800
2	East	20+00	188+00	3.5	16,800
Total Length of Noise Barriers:					33,600

Source: CSA 2021

Although the noise impacts were determined using FTA criteria based on a comparison of future project noise with existing noise, the impacts are also related to the increase in cumulative noise (i.e., the difference between the future overall noise exposure with the project and the existing noise exposure). It is projected that the largest increase in noise exposure at sensitive receivers along the Preferred Alignment would be 13 dBA without mitigation and 2-3 dBA with the recommended noise barriers. The noise increases would be highest at locations close to the Preferred Alignment and would be lower at locations farther away.

In accordance with FTA guidelines, noise barriers were recommended to eliminate all severe impacts and as many of the moderate impacts as reasonable. The mitigation goal was to gain substantial noise reduction, not simply to reduce the predicted levels to just below the severe impact threshold. Based on the mitigation analysis, it was determined that a barrier extending to a height of 3.5 feet above the top-of rail elevation would mitigate the identified severe impacts, the identified moderate impacts at institutional receivers, and the identified moderate impacts at residences, except for 15 residual moderate impacts at residential receivers that would remain on the east side of the RLE between Indiana Avenue and Calumet Avenue. The residual impacts are in the lower 50 percent of the moderate noise impact zone, with projected noise increases of less than 3 dBA.

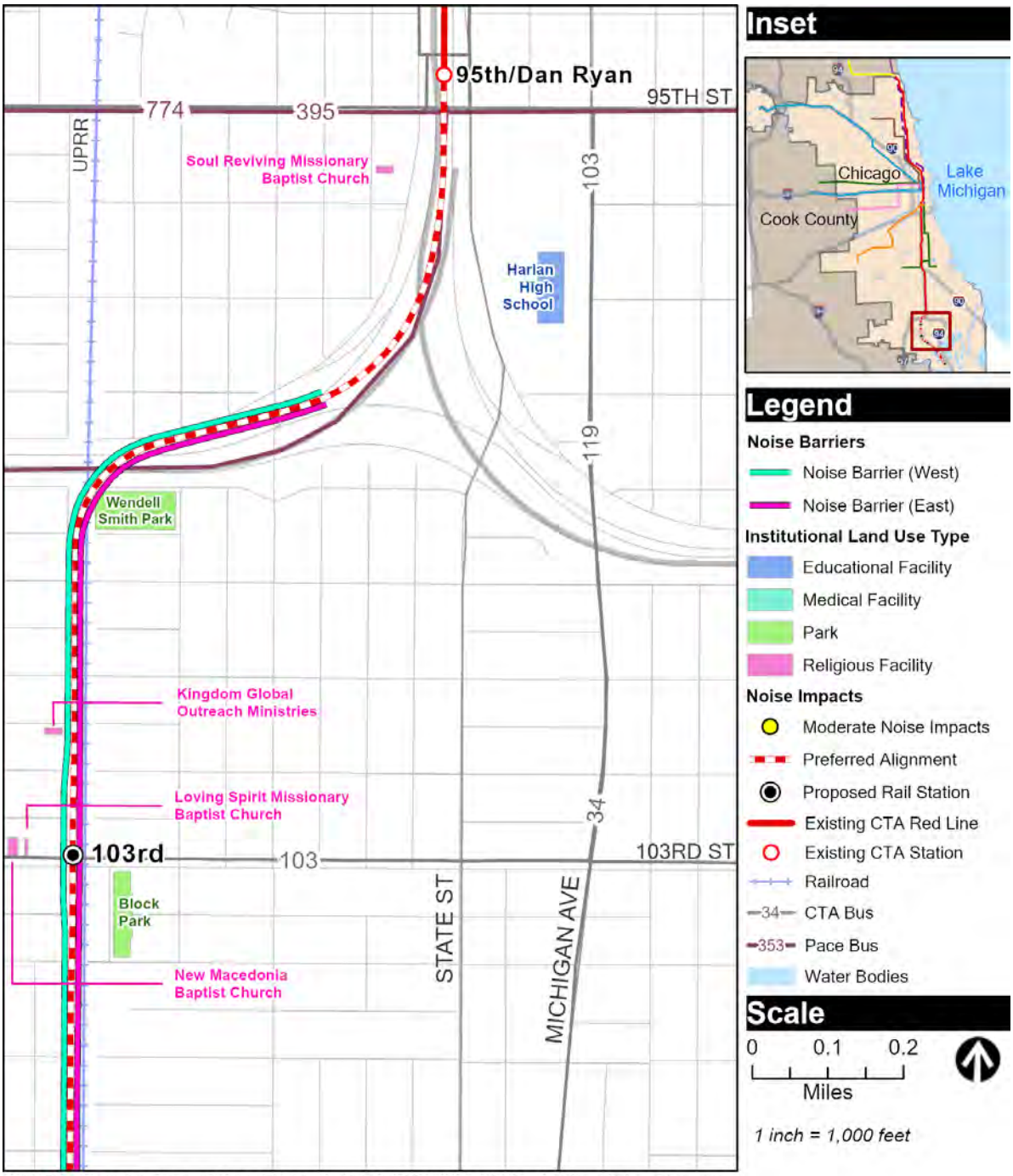

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 5-5: Recommended Noise Barrier Locations and Residual Noise Impacts (1 of 3)

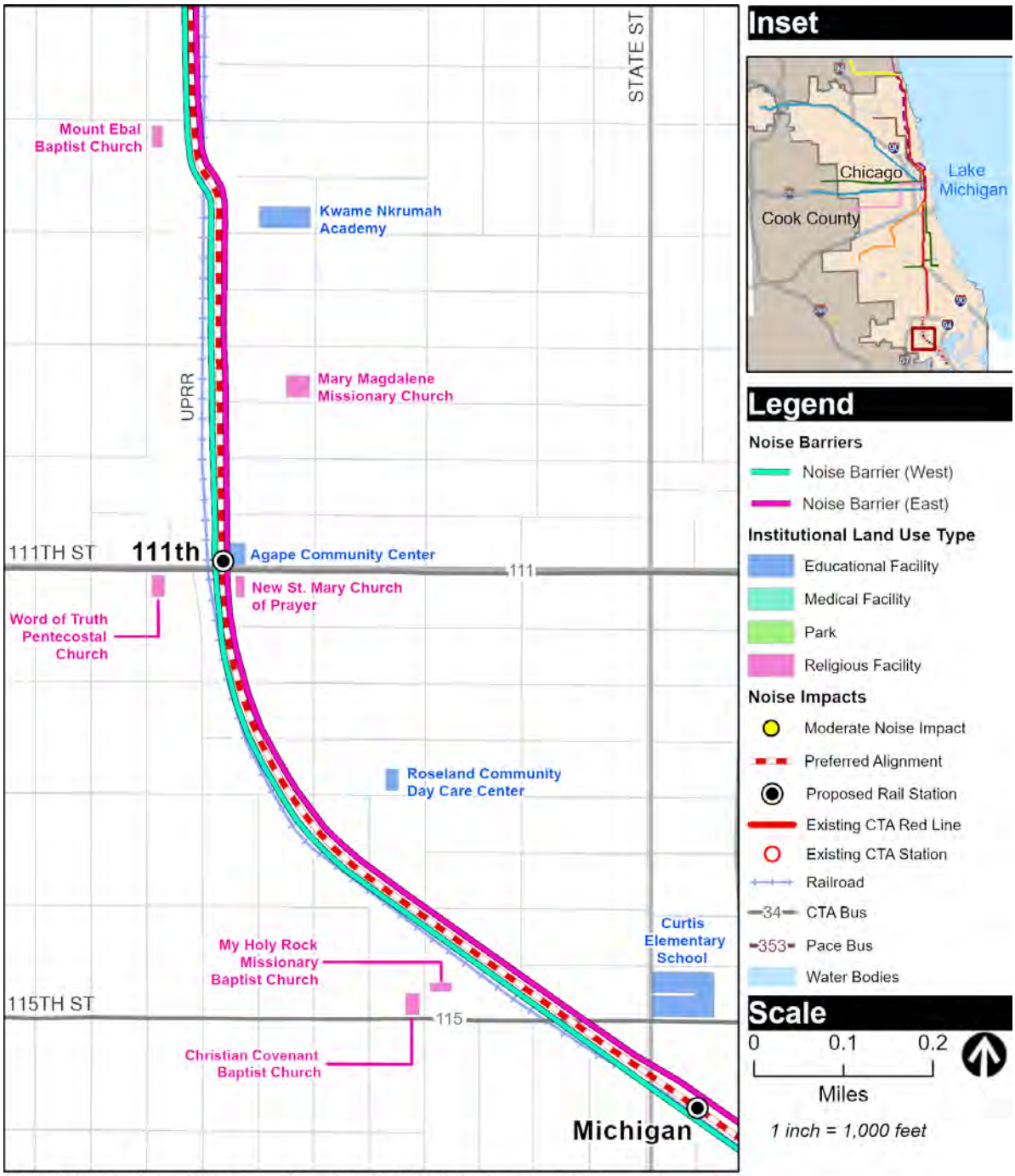

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 5-6: Recommended Noise Barrier Locations and Residual Noise Impacts (2 of 3)

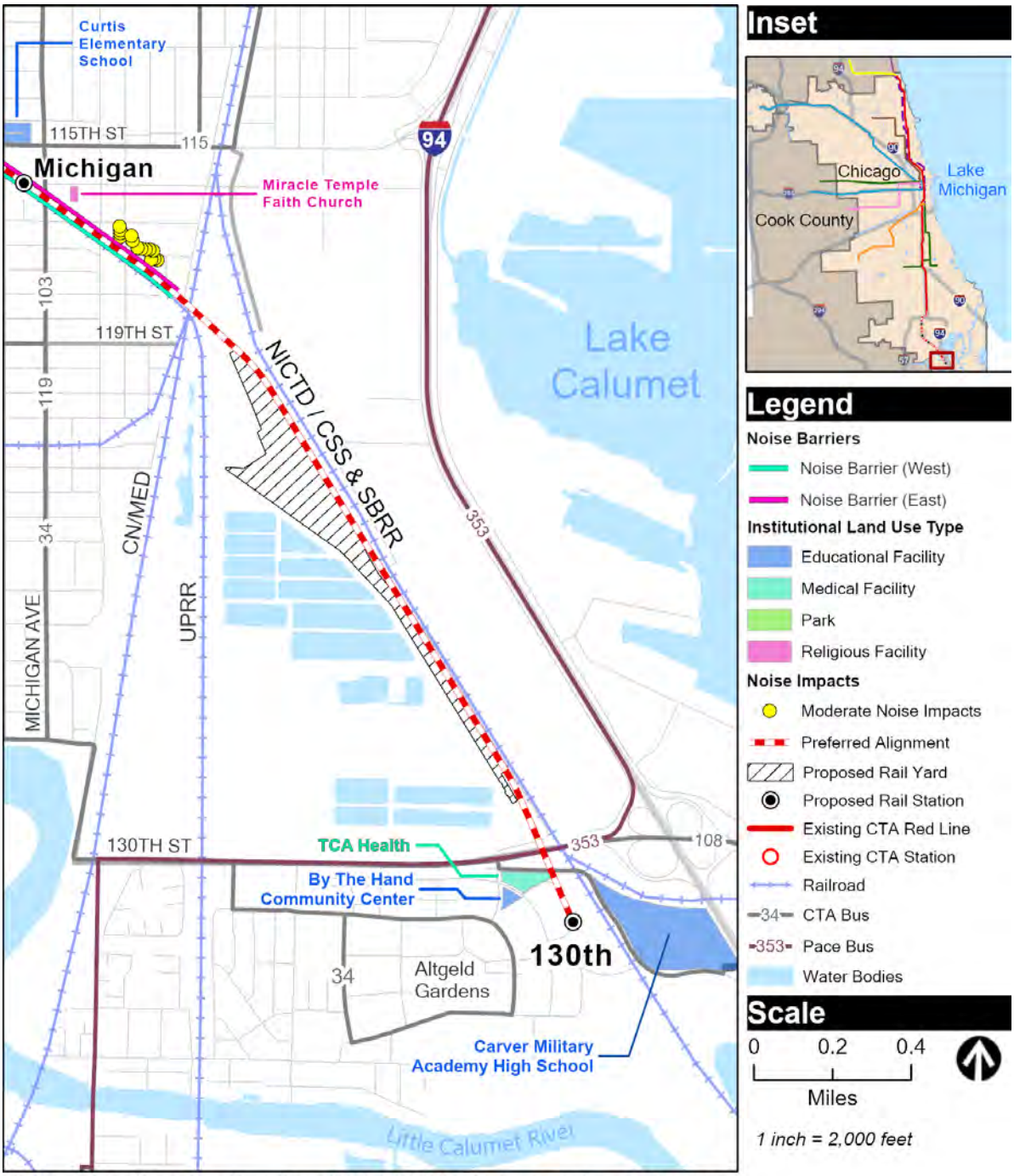

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Source: CSA 2021

Figure 5-7: Recommended Noise Barrier Locations and Residual Noise Impacts (3 of 3)

5.2.1.2 Vibration Impacts and Mitigation

A summary of the detailed vibration impact assessment is presented in **Table 5-5**, which includes the results for FTA Category 2 (residential) receivers. In addition to the distances from the track and proposed train speeds, **Table 5-5** includes the projected maximum vibration levels from RLE train operations without mitigation. Based on a comparison of the predicted RLE vibration levels with the impact criteria, the table also includes an inventory of the number of vibration impacts on both sides of each segment of the corridor. There are no vibration-sensitive receivers within the FTA vibration impact screening distances along the segment of the Preferred Alignment to the south of the CN/MED rail corridor.

The results in **Table 5-5** indicate that no vibration impacts are projected at residential receivers for the Preferred Alignment. Similarly, no vibration impacts are projected at any of the institutional receivers along the alignment. Thus, consistent with the results of the Draft EIS analysis for the UPRR East and West Options, there would be no vibration impacts from RLE Project train operations and no vibration mitigation measures would be required.

Table 5-5: Summary of Vibration Impacts for the Preferred Alignment Without Mitigation

Area of Impact	Distance from Near Track (feet)	Train Speed (mph)	Vibration Level (VdB)*		Number of Residential Impacts
			Maximum Predicted	Impact Criterion	
95th Street to 103rd Street					
West of Track Structure	76	33	55	72	0
East of Track Structure	139	37	49	72	0
103rd Street to 111th Street					
West of Track Structure	48	37	54	72	0
East of Track Structure	34	40	70	72	0
111th Street to Michigan Avenue at 116th Street					
West of Track Structure	172	44	43	72	0
East of Track Structure	33	50	66	72	0
Michigan Avenue to CN/MED Rail Corridor					
West of Track Structure	223	42	40	72	0
East of Track Structure	70	34	61	72	0
Total Number of Vibration Impacts:					0

* RMS vibration velocity level (in VdB re 1 micro-inch/sec) as measured in 1/3-octave bands of frequency over the frequency range from 8 to 80 Hz.

Source: CSA 2021

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

The Preferred Alignment would include the construction of elevated and at-grade track structure, stations, parking facilities at the stations, and roadway improvements. Similar to the findings for the UPRR East and West Options described in **Appendix O** in the Draft EIS, construction noise levels for the Preferred Alignment with mitigation are not expected to exceed the FTA construction noise criteria.

The construction contractor would employ noise-reducing construction best management practices (BMPs). The contractor would keep all construction equipment exhaust mufflers in a state of good repair. As part of the construction specifications, the contractor would be responsible for adhering to the noise control requirements of the project. To the maximum extent possible, vehicles not in use would avoid idling on construction sites. CTA would limit nighttime construction near residences to the extent practicable. As discussed in **Appendix H**, CTA would inform community members about construction schedules and would coordinate in advance with aldermen and local officials.

High-vibration activities during construction include demolition of buildings, construction of aerial structures, pavement breaking, and ground compaction. Similar to the findings for the UPRR East and West Options described in **Appendix O** in the Draft EIS, construction vibration levels for the Preferred Alignment are not expected to exceed the FTA construction criteria for vibration damage.

As was determined from the Draft EIS analysis, most of the equipment can be operated without risk of vibration damage at distances of 15 feet or greater from non-engineered timber and masonry buildings or at distances of 8 feet or greater from reinforced concrete buildings. Impact pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station, and the vicinity from the I-94 ramp crossing to the east of CN/MED and south of 130th Street, as well as adjacent to sensitive noise and vibration receivers identified in the Final EIS such as residences, parks, churches, etc. There would be no residential noise-sensitive receivers within 150 feet of the construction activity along the I-57 right-of-way.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

Cumulative effects are those resulting from past, present, and reasonably foreseeable future actions, combined with the potential noise and vibration effects of the RLE Project. In general, noise levels are likely to increase in the future as a result of increases in population and accompanying development, as well as overall increases in traffic levels and potential future transportation projects.

The noise analysis compares project conditions with the existing conditions, which is conservative because noise is likely to be higher in the future with population growth and expanded highways. However, highway or rail improvements would need to double their capacity to noticeably increase noise levels for the average person (i.e., an increase of 3 dBA), which is unlikely to occur. Project-related construction noise, construction vibration, and operational vibration are expected to be highly localized and are therefore not anticipated to contribute to any adverse cumulative noise effects.

Overall, the project's contribution to cumulative operational and construction noise and vibration effects is not anticipated to be cumulatively adverse. This finding has not changed since the Draft EIS.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse noise or vibration impacts as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

For the Preferred Alignment at 30 percent design, the estimate of noise barriers is approximately 33,600 lineal feet (6.36 miles) of noise barriers, extending from the top surface of the concrete deck to a minimum height of 3.5 feet above the top-of-rail elevation, to provide a project noise reduction of up to 15 dBA. The recommended noise barrier locations are shown in **Figure 5-5, Figure 5-6,** and **Figure 5-7**. However, final design would need to be analyzed for noise to confirm impact thresholds would be met.

A summary of the noise impact assessment with the recommended barriers is presented in **Table 6-1**, which includes ranges of results for FTA Category 2 (residential) receivers with both daytime and nighttime sensitivity to noise. In addition to the distances from the track and proposed train speeds, **Table 6-1** includes the existing noise levels and the projected noise levels from RLE Project train operations with mitigation. Based on a comparison of the predicted RLE Project noise levels with the impact criteria, the table also includes an inventory of the number of moderate and severe noise impacts remaining after mitigation on both sides of each segment of the corridor.

Whereas the Draft EIS analysis for the UPRR East and West Options concluded that noise barriers would eliminate all noise impacts, the results for the Preferred Alignment in **Table 6-1** indicate that moderate noise impacts are expected to remain at 15 residences after noise barrier mitigation. The locations of these residual noise impacts are shown in **Figure 5-7**. However, no noise impacts are projected at any noise-sensitive institutional locations after noise barrier mitigation.

The residual noise impacts are due to proximity to the alignment, and proximity to track turnout and crossover locations in particular. Because the impacts of rail vehicle wheels over rail gaps at such locations increase noise by about 5 dBA close to the track, turnouts can be a major source of noise impact. Other means to mitigate the moderate noise impacts remaining after noise barrier mitigation may be examined during detailed design.

Table 6-1: Summary of Residential Noise Impacts for the Preferred Alignment with Noise Barrier Mitigation

Area of Impact	Distance from Near Track (feet)	Train Speed (mph)	Existing Noise Level (Ldn, dBA)	Project Noise Level (Ldn, dBA)			Number of Residential Noise Impacts	
				Predicted	Moderate Impact Criterion	Severe Impact Criterion	Moderate	Severe
95th Street to 103rd Street								
West of Track Structure	273	40	70	63	64	69	0	0
East of Track Structure	137	39	76	61	65	74	0	0
103rd Street to 111th Street								
West of Track Structure	135	44	67	59	62	68	0	0
East of Track Structure	34	40	74	65	65	73	0	0
111th Street to Michigan Avenue at 116th Street								
West of Track Structure	213	50	70	58	65	70	0	0
East of Track Structure	33	50	71	63	65	70	0	0
Michigan Avenue to CN/MED Rail Corridor								
West of Track Structure	214	37	64	58	60	65	0	0
East of Track Structure	70 to 160	34 to 48	61	59 to 61	58 to 59	64	15	0
Total No. of Impacts:							15	0
							15	

Source: CSA 2021

Section 7 - References Cited

Chicago Transit Authority (CTA). 2016. Chicago Red Line Extension Draft Environmental Impact Statement and Section 4(f) Evaluation. Available at https://www.transitchicago.com/rle/drafteis/. Accessed on October 28, 2020.

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. September 2018.

Appendix O

Noise and Vibration Technical Memorandum

- Draft EIS Appendix O, Noise and Vibration Technical Memorandum, May 2016
  - Appendix A, 2014-2015 Red Line Extension Project Update

Chicago Red Line Extension Project

Noise and Vibration

Technical Memorandum

May 9, 2016

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Table of Contents

Section 1 Summary 1-1
1.1 No Build Alternative 1-1
1.2 BRT Alternative 1-1
1.3 UPRR Rail Alternative - Right-of-Way Option 1-1
1.4 UPRR Rail Alternative - East Option 1-2
1.5 UPRR Rail Alternative - West Option 1-2
1.6 Halsted Rail Alternative 1-2
1.7 2014-2015 Red Line Extension Project Update 1-2

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.1.1 Federal 3-1
3.1.2 State 3-1
3.1.3 Local 3-1
3.2 Impact Analysis Thresholds 3-2
3.2.1 Operational Noise 3-2
3.2.2 Operational Vibration 3-4
3.2.3 Construction Noise 3-5
3.2.4 Construction Vibration 3-6
3.3 Area of Potential Impact 3-6
3.4 Methods 3-7
3.4.1 Noise and Vibration Measurements 3-7
3.4.2 Impact Assessment 3-11

Section 4 Affected Environment 4-1
4.1 Noise Measurements 4-1
4.1.1 BRT Alternative 4-1
4.1.2 UPRR Rail Alternative 4-1
4.1.3 Halsted Rail Alternative 4-1
4.2 Vibration Measurements 4-2

Section 5 Impacts and Mitigations 5-1
5.1 No Build Alternative 5-1
5.1.1 Permanent Impacts and Mitigations - No Build Alternative 5-1

5.1.2 Construction Impacts and Mitigations – No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.2.1 Permanent Impacts and Mitigations – Bus Rapid Transit Alternative 5-2
5.2.2 Construction Impacts and Mitigations – Bus Rapid Transit Alternative 5-9
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-9
5.3.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-9
5.3.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-10
5.3.3 120th Street Yard and Shop 5-11
5.4 Union Pacific Railroad Rail Alternative - East Option 5-11
5.4.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - East Option 5-13
5.4.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - East Option 5-19
5.4.3 120th Street Yard and Shop 5-19
5.5 Union Pacific Railroad Rail Alternative - West Option 5-19
5.5.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - West Option 5-20
5.5.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - West Option 5-27
5.5.3 120th Street Yard and Shop 5-27
5.6 Halsted Rail Alternative 5-27
5.6.1 Permanent Impacts and Mitigations – Halsted Rail Alternative 5-36
5.6.2 Construction Impacts and Mitigations – Halsted Rail Alternative 5-36
5.6.3 119th Street Yard and Shop 5-36

Section 6 Impacts Remaining After Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative – Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative – East Option 6-1
6.5 Union Pacific Railroad Rail Alternative – West Option 6-1
6.6 Halsted Rail Alternative 6-2
6.6.1 119th Street Yard and Shop 6-2

Section 7 References Cited 7-1

Appendix

Appendix A: 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 3-1: Federal Transit Administration Noise Impact Criteria for Transit Projects 3-3
Figure 3-2: Increase in Noise Levels Allowed by Federal Transit Administration Criteria 3-4
Figure 3-3: Noise Measurement Locations 3-10
Figure 3-4: Increase in Noise Levels Allowed by Federal Transit Administration Criteria 3-13
Figure 5-1b: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-4
Figure 5-1c: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-5
Figure 5-1d: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-6
Figure 5-1e: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-7
Figure 5-1f: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-8
Figure 5-2a: Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-14
Figure 5-2b: Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-15
Figure 5-2c Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-16
Figure 5-2d: Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-17
Figure 5-2e: Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-18
Figure 5-3a: Union Pacific Railroad Rail Alternative - West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-22
Figure 5-3b: Union Pacific Railroad Rail Alternative - West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-23
Figure 5-3c: Union Pacific Railroad Rail Alternative - West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-24

Figure 5-3d: Union Pacific Railroad Rail Alternative – West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-25

Figure 5-3e: Union Pacific Railroad Rail Alternative – West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-26

Figure 5-4a: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-31

Figure 5-4b: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-32

Figure 5-4c: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-33

Figure 5-4d: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-34

Figure 5-4e: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours 5-35

Tables

Table 3-1: Federal Transit Administration Land Use Categories and Noise Metrics 3-2

Table 3-2: Federal Transit Administration Ground-Borne Vibration and Noise Impact Criteria for Annoyance 3-5

Table 3-3: Recommended Federal Transit Administration Construction Noise Limits (in dBA)[1] 3-6

Table 3-4: Construction Vibration Damage Criteria 3-6

Table 3-5: Noise Measurement Locations 3-8

Table 3-6: Vibration Measurement Locations 3-9

Table 3-7: Transit Sources Included in the Noise Impact Assessment..... 3-12

Table 4-1: Noise Level Measurements at Representative Locations 4-2

Table 4-2: Measured Vibration Levels 4-3

Table 5-1: Federal Transit Administration Moderate and Severe Impact Criteria for the Bus Rapid Transit Alternative 5-1

Table 5-2: Federal Transit Administration Moderate and Severe Impact Distances for the Bus Rapid Transit Alternative 5-2

Table 5-3: Proposed Red Line Extension Train Operations 5-9

Table 5-4: Federal Transit Administration Moderate and Severe Impact Criteria for the Union Pacific Railroad Rail Alternative..... 5-11

Table 5-5: Federal Transit Administration Moderate and Severe Impact Distances - Union Pacific Railroad Rail Alternative - East Option (at 55 miles per hour)..... 5-12

Table 5-6: Federal Transit Administration Moderate and Severe Impact Distances - Union Pacific Railroad Rail Alternative - East Option (at the Stations) 5-12

Table 5-7: Federal Transit Administration Moderate and Severe Impact Criteria for the Halsted Rail Alternative 5-28

Table 5-8: Federal Transit Administration Moderate and Severe Impact Distances for the Halsted Rail Alternative (at 55 miles per hour) 5-29

Table 5-9: Federal Transit Administration Moderate and Severe Impact Distances for the Halsted Rail Alternative (near the stations) 5-30

Abbreviations

BRT	Bus Rapid Transit
CTA	Chicago Transit Authority
dBA	A-weighted decibel
EIS	Environmental Impact Statement
ft	Feet
FTA	Federal Transit Administration
Ldn	day-night average sound level
Leq	Equivalent continuous sound level
Lmax	Maximum noise level
micro in./sec	microinch per second
mph	miles per hour
NEPA	National Environmental Policy Act
ppv	peak particle velocity
rms	root mean square
RLE	Red Line Extension
ROW	right-of-way
SEL	sound exposure level
UPRR	Union Pacific Railroad
VdB	decibels referenced to 1 microinch per second

Section 1
Summary

This technical memorandum was prepared to support the environmental impact statement (EIS) for the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project. The purpose is to identify, evaluate, and characterize potential noise and vibration impacts and potential mitigation measures associated with each of the RLE Project alternatives. The following is a summary of the results of the noise and vibration analysis for each of the project alternatives.

1.1 No Build Alternative

The No Build Alternative assumes no change in the existing conditions and therefore would result in no change to the existing noise and vibration levels within the project area. The No Build Alternative would result in no noise and vibration impacts.

1.2 BRT Alternative

The results of the noise analysis for the Bus Rapid Transit (BRT) Alternative indicate that noise impacts could occur along the project alignment. Figure 5-1 shows the noise contours for moderate noise impact for the BRT Alternative. Residential receptors within the noise contours could be affected by the project. Because the buses would travel along local streets that have small blocks, numerous cross streets, and driveways, noise abatement mitigation such as barriers would not be feasible for the BRT Alternative.

1.3 UPRR Rail Alternative – Right-of-Way Option

The Union Pacific Railroad (UPRR) Rail Alternative Right-of-Way (ROW) Option would only occur if the freight relocation project were implemented prior to RLE Project implementation. UPRR trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE implementation. The City of Chicago is evaluating the UPRR train relocation in an independent study. If the freight relocation project were implemented, the noise levels along the rail corridor would decrease by 5 to 7 decibels (dBA) from existing conditions due to the removal of the freight rail operations. Because of the reduction in noise level due to replacing the freight operations with the RLE Project, noise mitigation was not considered for the UPRR Rail Alternative ROW Option.

No mitigation measures are proposed for vibration because the aerial structure with continuously welded rail would have vibration levels that are below the Federal Transit Administration (FTA) impact criterion of 72 VdB (root mean square [rms] velocity levels expressed in decibels [VdB] relative to one micro-inch per second). In addition, by moving the freight operations out of the rail corridor, the existing vibration levels generated during freight rail pass-bys would be eliminated from the rail corridor.

1.4 UPRR Rail Alternative – East Option

Based on FTA analysis methods, the UPRR Rail Alternative East Option could result in both moderate and severe noise impacts along the project corridor. Figure 5-2 shows the noise contours for moderate and severe noise impacts from the East Option. Residential receptors within these noise contours could be affected by implementation of this alternative. A noise barrier approximately 4 feet in height (measured from the top surface of the concrete deck) installed along the outer tracks of the aerial structure could provide a 7 to 10-dBA reduction in noise level. A noise barrier approximately 4 feet in height on the aerial structure that could provide a 10-dBA reduction could result in no affected receptors remaining after mitigation.

With regard to vibration, no mitigation measures are proposed. The aerial structure with continuously welded rail could result in vibration levels that are below the FTA impact criterion of 72 VdB at the residential receptors along the project corridor.

1.5 UPRR Rail Alternative – West Option

The UPRR Rail Alternative West Option could result in both moderate and severe noise impacts along the project corridor. Figure 5-3 shows the noise contours for moderate and severe noise impacts from the West Option. Residential receptors within these noise contours could be affected by implementation of this alternative. Noise barrier mitigation measures could be the same as for the East Option. A noise barrier approximately 4 feet in height on the aerial structure that could provide a 10-dBA reduction could result in no affected receptors remaining after mitigation. As it would be for the East Option, vibration levels for the West Option could be below the FTA impact criterion of 72 VdB, and no mitigation measures are proposed for vibration.

1.6 Halsted Rail Alternative

The Halsted Rail Alternative could result in both moderate and severe noise impacts along the project corridor. Figure 5-4 shows the noise contours for moderate and severe noise impact from the Halsted Rail Alternative. Residential receptors within these noise contours could be affected by implementation of this alternative. Noise barrier mitigation measures would be the same as for the East and West Options. Based on a noise reduction of 10 dBA, a noise barrier approximately 4 feet in height on the aerial structure could substantially reduce the number of impacts; however, a noise barrier approximately 4 feet in height on the aerial structure could still result in moderate noise impacts along Halsted Street after mitigation. No severe noise impacts would remain after mitigation.

No mitigation measures are proposed for vibration because the aerial structure with continuously welded rail would have vibration levels that are below the FTA impact criterion of 72 VdB.

1.7 2014-2015 Red Line Extension Project Update

Updated July 27, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also

considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix A of this technical memorandum summarizes the refined alignments and any additional or different impacts that could result. The information in Appendix A supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The CTA is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft EIS focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - ROW Option
  - East Option
  - West Option
- Halsted Rail Alternative

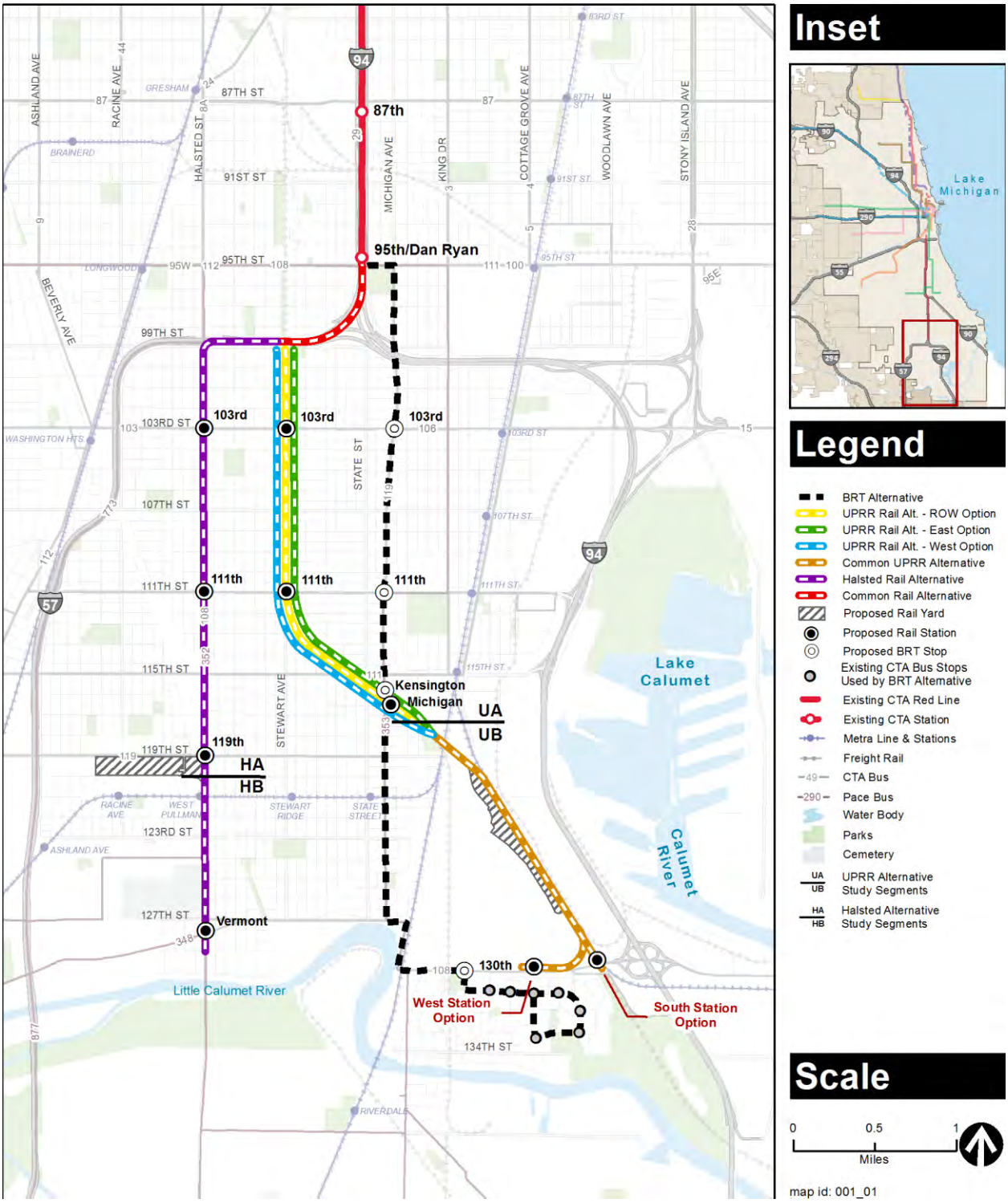

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

This section describes the regulatory framework, the impact analysis thresholds, the area of potential impact, and the methods used to assess the potential for noise and vibration impacts from the RLE Project.

3.1 Regulatory Framework

3.1.1 Federal

The noise and vibration analyses for this project were prepared in accordance with the FTA (2006) *Transit Noise and Vibration Impact Assessment* guidance manual. This manual sets forth the basic concepts, methods, and procedures for evaluating the extent and severity of the noise and vibration impacts from transit projects. All aspects of the noise and vibration analyses were coordinated with CTA and FTA. The FTA employs three levels of analysis that may be applied depending on the complexity of the project. The first level is a screening procedure to determine whether noise-sensitive receivers are present based on the land uses in the vicinity of the project and is used to determine whether more detailed noise and vibration analysis is required. There are two levels of quantitative analysis for predicting impacts: a general assessment and a detailed analysis. The general assessment is used to identify and estimate the severity of noise and vibration impacts in an area. This method is used to provide information needed to differentiate potential alternatives. The detailed analysis is used to quantify impacts through an in-depth analysis of a single alternative.

The screening procedure was not required for this project because a majority of the corridor is within residential area and is known to contain noise- and vibration-sensitive land uses (Category 2). Three parks, six schools, and four churches (Category 3) are near the corridor. There are no Category 1 land uses within the corridor. Because there are known sensitive receivers for the RLE Project, further analysis was required. CTA completed a general assessment for the UPRR corridor to provide basic information for comparing the severity of impacts from implementation of the East and West Options. The impacts disclosed in this Draft EIS are maximum, worst-case impacts. More detailed analysis in the Final EIS may identify areas where impacts may be further reduced through design.

3.1.2 State

The State of Illinois in Title 35: Environmental Protection; Subtitle H: Noise; Part 900 established Sound Emission Standards and Limitations for Property Line Noise Sources for different land use classifications; however, the State of Illinois indicates that the noise limits do not apply to sound emitted from transit systems, or from equipment being used for construction.

3.1.3 Local

The City of Chicago Municipal Code Article XXI: Environmental Noise and Vibration Control (also referred to as the Chicago Environmental Noise Ordinance) established “noise disturbance”

requirements. The City of Chicago noise limits do not apply to sounds or vibration generated in the operation of any mass transit system. In addition, these noise limits do not apply to any construction, demolition, or repair work of an emergency nature or to work on public improvements authorized by a governmental body or agency.

The Village of Calumet Park also has a Noise Code that refers to nuisance noise. Municipal services, such as transit systems that provide a public service, are exempt from such nuisance noise regulations.

3.2 Impact Analysis Thresholds

Because the State of Illinois and the City of Chicago noise limits do not apply to transit projects, the FTA's operational and construction noise and vibration criteria, as described in the guidance manual, were used to determine the thresholds of significance for this project.

3.2.1 Operational Noise

The FTA's *Transit Noise and Vibration Impact Assessment* guidance manual sets forth the basic concepts, methods, and procedures for evaluating the extent and severity of noise impacts from transit projects. In order to determine whether the noise levels from a proposed project might have an impact on an area, a comparison is made of the existing noise levels in the vicinity of the proposed project and the projected future outdoor noise levels from the project. The FTA guidance manual provides a set of criteria to determine land use types where noise-sensitive receptors would most likely occur (see Table 3-1). The FTA does not consider most commercial and industrial receptors to be sensitive to transit-related noise. Existing noise levels at representative noise-sensitive receptor locations along the RLE corridor were measured. Using the general noise assessment process, estimated noise levels were predicted for the No Build Alternative and the build alternatives. The results of the analysis were compared to the existing conditions and FTA noise criteria to determine the potential for impact.

Table 3-1: Federal Transit Administration Land Use Categories and Noise Metrics

Land Use Category[1]	Noise Level[2]	Description
1	$L_{eq}(h)$	Tracts of land set aside for serenity and quiet, such as outdoor amphitheaters, concert pavilions, and historic landmarks.
2	L_{dn}	Buildings used for sleeping, including residences, hospitals, hotels, and other areas where nighttime sensitivity to noise is of utmost importance.
3	$L_{eq}(h)$	Institutional land uses with primarily daytime and evening uses including schools, libraries, churches, museums, cemeteries, historical sites and parks, and certain recreational facilities used for study or meditation.

1. Land Use categories are based on sensitivity to noise intrusions.
2. The threshold noise limits include an hourly equivalent noise level (or $L_{eq}(h)$) for Category 1 and 3 receptors to the day-night noise level (or L_{dn}) for Category 2 receptors. The Federal Transit Administration noise limits, which are based on the existing background levels, are determined using empirical formulas shown graphically in Figure 3-1

The FTA noise impact criteria are delineated into two categories: moderate impact and severe impact. The moderate impact threshold defines areas where the change in noise would be

noticeable but might not be sufficient to cause a strong, adverse community reaction. The severe impact threshold defines the noise limits above which a substantial percentage of the population would be highly annoyed by the change in noise. As shown in Figure 3-1, the FTA noise impact criteria are defined by two curves that allow increasing project noise levels as existing noise increases up to a point, beyond which impact is determined based on project noise alone.

Category 1 receptors (such as an amphitheater or historic landmark) are represented along the left axis and are described by the hourly equivalent noise level (hourly L_{eq}). Category 2 receptors (such as residences, hotels, and hospitals) are also represented along the left axis, but are described by the 24-hour day-night level (L_{dn}). Category 3 receptors (such as schools and churches) are represented along the right axis and are described by the hourly L_{eq} noise metric.

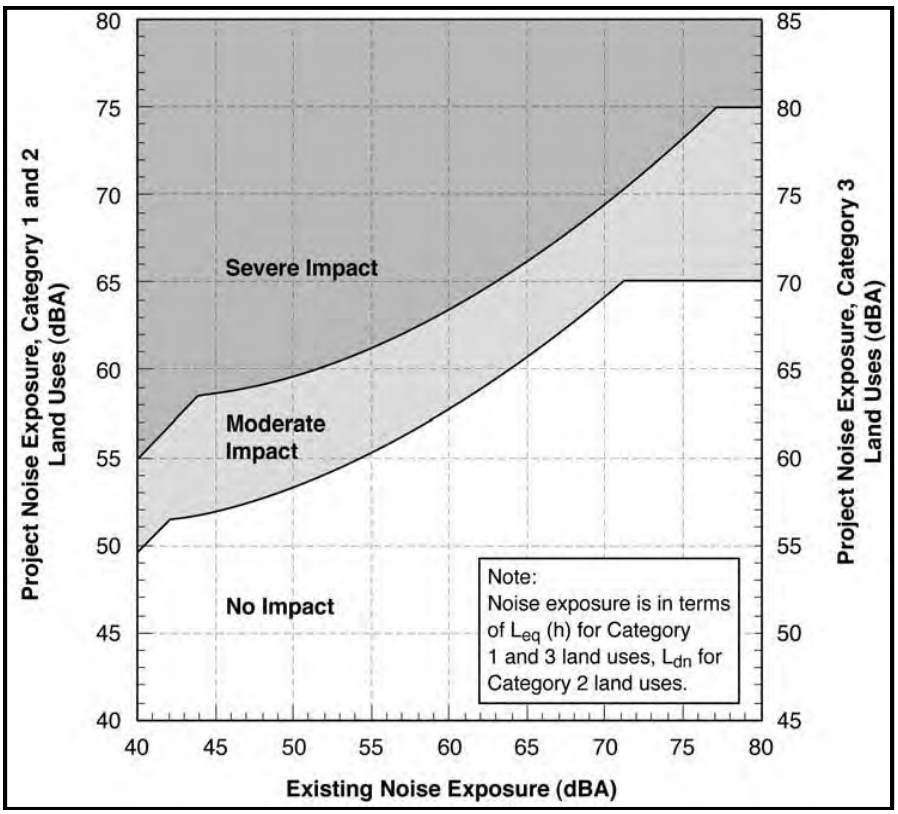

Figure 3-1: Federal Transit Administration Noise Impact Criteria for Transit Projects
Source: Transit Noise and Vibration Impact Assessment (FTA 2006)

Although the curves in Figure 3-1 are defined in terms of the project noise exposure and the existing noise exposure, it is the project's increase in noise from the existing noise levels that is the basis for the criteria. To illustrate this point, Figure 3-2 shows the noise impact criteria for Category 1 and 2 land uses in terms of the allowable increase in the existing noise exposure. The horizontal axis is the existing noise exposure and the vertical axis is the increase in noise level due to the RLE Project. The curves in Figure 3-2 indicate that the criterion for impact allows a noise exposure increase of 10 dBA if the existing noise exposure is 42 dBA or less, but only a one dBA

increase when the existing noise level is 70 dBA. As the existing level of noise increases, the total amount that the community noise exposure is allowed to increase is reduced.

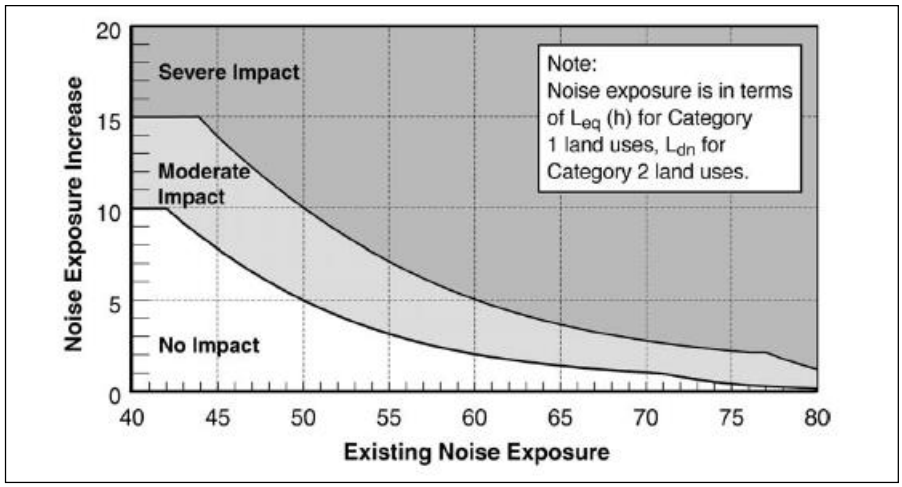

Figure 3-2: Increase in Noise Levels Allowed by Federal Transit Administration Criteria
Source: Transit Noise and Vibration Impact Assessment (FTA 2006)

3.2.2 Operational Vibration

The FTA criteria were used to assess annoyance due to vibration and ground-borne noise from transit operations. Table 3-2 shows the FTA vibration criteria for evaluating ground-borne vibration and noise impacts from train pass-bys at nearby sensitive receptors. These vibration criteria are related to ground-borne vibration levels that are expected to result in human annoyance, and are based on root mean square (rms) velocity levels expressed in decibels (VdB) relative to one micro-inch per second. The FTA's experience with community response to ground-borne vibration indicates that when there are only a few train events per day, it would take higher vibration levels to evoke the same community response that would be expected from more frequent events. This community response to ground-borne vibration is accounted for in the FTA criteria by distinguishing between projects with frequent (more than 70 train events per day), occasional (30 to 70 train events per day), and infrequent events (fewer than 30 train events per day). The vibration levels shown in Table 3-2 are defined in terms of human annoyance for different land use categories: high sensitivity (Category 1), residential (Category 2), and institutional (Category 3). In general, the threshold of human perceptibility of vibration is 65 VdB.

The vibration levels shown in Table 3-2 are well below the damage criteria levels of 95 to 100 VdB. It is extremely rare for vibration from transit operations to cause any sort of building damage, even minor cosmetic damage. Impacts from transit operations were determined for both vibration and ground-borne noise.

Table 3-2: Federal Transit Administration Ground-Borne Vibration and Noise Impact Criteria for Annoyance

Land Use Category	Ground-Borne Vibration Levels (VdB)[1]			Ground-Borne Noise Levels (dBA)[2]		
Description	Frequent Events[3]	Occasional Events[4]	Infrequent Events[5]	Frequent Events[3]	Occasional Event[4]	Infrequent Event[5]
Category 1: Buildings where low vibration is essential for interior operations	65	65	65	N/A[6]	N/A[6]	N/A[6]
Category 2: Residences and buildings where people normally sleep	72	75	80	35	38	43
Category 3: Institutional buildings with primarily daytime use	75	78	83	40	43	48

1. Root mean square vibration velocity levels are reported in decibels (or VdB) referenced to 1 microinch per second.
2. Ground-Borne noise levels are reported in A-weighted decibels (dBA) referenced to 20 micro Pascals.
3. "Frequent Events" is defined as more than 70 vibration events per day.
4. "Occasional Events" is defined as 30 to 70 vibration events per day.
5. "Infrequent Events" is defined as fewer than 30 vibration events per day.
6. N/A means "not applicable." Vibration-sensitive equipment is not sensitive to ground-borne noise.

While vibration criteria are generally used to assess annoyance from transit sources at the exterior facade of receptors, ground-borne noise, or the rumbling sound due to vibrating room surfaces, is typically assessed indoors. In general, the relationship between vibration and ground-borne noise depends on the dominant frequency of the vibration and the acoustical absorption characteristics of the receiving room. Due to the limited data available regarding soil and ground propagation characteristics, average or typical soil conditions (hard compacted soil) were assumed everywhere along the RLE Project corridor. According to the FTA guidance, the dominant vibration frequency from train pass-bys along typical ground and soil conditions generally occurs in the 30–60 Hertz range. The ground-borne noise levels were adjusted accordingly.

3.2.3 Construction Noise

During the preliminary environmental permitting phase of a project, when construction details are limited, the FTA suggests evaluating proposed construction scenarios against the 1-hour L_{eq} thresholds shown in Table 3-3. These criteria are compared to noise levels from the two loudest pieces of equipment that, under worst-case conditions, would operate continuously for 1 hour.

Table 3-3: Recommended Federal Transit Administration Construction Noise Limits (in dBA)[1]

Land Use Category	Daytime[2]	Nighttime
Residential	90	80
Commercial	100	100
Industrial	100	100

1. The FTA construction noise limits are reported for the peak 1-hour period in A-weighted decibels (or dBA).
2. Construction noise limits are established for both daytime (7 AM-10 PM) and nighttime (10 PM-7 AM) activities. The maximum noise limits represent noise levels from the two loudest pieces of equipment operating at full power over a period of 1 hour.

3.2.4 Construction Vibration

For evaluating potential annoyance or interference with vibration-sensitive activities due to construction vibration, the FTA criteria in Table 3-2 were used. In most cases the primary concern regarding construction vibration relates to potential damage effects on buildings. Table 3-4 contains the FTA's guideline vibration damage criteria for various structural categories of buildings. The vibration damage criteria listed for Category IV structures includes historic buildings.

Table 3-4: Construction Vibration Damage Criteria

Building Category	Peak Particle Velocity (inches/second)	Approximate VdB[1]
Reinforced concrete, steel or timber (no plaster)	0.5	102
Engineered concrete and masonry (no plaster)	0.3	98
Non-engineered timber and masonry buildings	0.2	94
Buildings extremely susceptible to vibration damage	0.12	90

1. RMS velocity in decibels (VdB) relative to 1 micro-inch/second

Construction vibration is generally assessed in cases where there is a substantial potential for impacts from construction activity. Such activities include blasting, pile-driving, demolition, and drilling or excavation in close proximity to sensitive structures.

3.3 Area of Potential Impact

A general assessment was conducted to determine the areas that could have a moderate or severe impact along the proposed corridors. A general assessment was used to establish an impact contour (which defines the outer limit of an impact corridor) because there are numerous existing noise-sensitive receptors along the entire length of the project corridor. This noise and vibration assessment estimated the potential for noise and vibration impacts along each of the project alternative alignments.

3.4 Methods

3.4.1 Noise and Vibration Measurements

A noise-monitoring program was conducted to (1) establish the existing ambient background noise levels within the project area, and (2) develop the project criteria noise limits using the FTA guidance. Noise measurements were conducted at representative noise-sensitive receptor locations along each of the proposed project alignments. Using aerial base maps of the project corridor, and information obtained during a site visit, a total of 15 noise measurement locations and 4 vibration measurement locations were selected to represent the different types of residential and other noise-sensitive land uses along each of the project alignments. The primary goal of the initial selection of the noise and vibration measurement locations was to provide a reasonable distribution of locations along the project corridor in order to predict future conditions along the corridor. Only residential receptors were selected for the noise measurement locations because they represent the most noise sensitive locations along each of the proposed project corridors. A total of 15 noise measurement locations was considered reasonable for this project because the Halsted Rail Alternative alignment and the BRT Alternative alignment (along Michigan Avenue) are along streets where local traffic is the major noise source. For the UPRR Rail Alternatives, existing freight rail operation is the primary noise source and is relatively uniform along the project corridor. A distribution of the noise measurement locations along each of these alignments provided a reasonable representation of the existing noise levels. Table 3-5 lists the noise measurement locations along each of the project alternatives and describes the measurement type. Figure 3-3 shows the noise measurement locations along each of the alternative alignments.

The results of the noise-monitoring program were used to establish the existing background noise levels and to develop the allowable project noise increases using the FTA guidance. The noise-monitoring program consisted of measuring peak-hour L_{eq} at non-residential receptors and 24-hour L_{dn} at residential receptors along the RLE Project corridor. Section 4 summarizes the results of the noise-monitoring program. The sound level meters used on this project were Larson Davis Model 820A and CEL Model 593 meters, which are in compliance with the American National Standards Institute standards for Type I accuracy and quality.

Vibration measurements were obtained at four locations along the project corridor to determine the existing vibration levels from freight operations. The four vibration measurement sites are described in Table 3-6, and their locations are shown in Figure 3-3. They are at the same sites (locations 13, 7, 9, and 3) where the noise measurements were obtained. Vibration measurements were obtained using PCB Model 393 accelerometers, with the acceleration levels converted to velocity (in VdB) using a CEL model 293 Integrator, and recorded on a CEL Model 593 analyzer.

The sound level and vibration meters for this project were rented from Scantek. Rental agreements come with calibration verification information and associated documentation for each unit rented.

Table 3-5: Noise Measurement Locations

Location Number	Receptor Description	Measurement Type	Primary Noise Source
Noise Measurement Locations along the BRT Alternative Alignment			
12	Residence at 9630 S. Michigan Avenue	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic
13	Residence at 10445 S. Michigan Avenue	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic
14	Residence at 12221 S. Michigan Avenue	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic
15	Residence at 12505 S. Michigan Avenue	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic
Noise Measurement Locations along the UPRR Rail Alternative Alignment			
7	Residence at 354 W. 102nd Place	24-hour L_{dn} Hourly L_{eq}	UPRR Freight Rail
8	Residence at 352 W. 109th Street	24-hour L_{dn} Hourly L_{eq}	UPRR Freight Rail
9	Residence at 307 W. 113th Street	24-hour L_{dn} Hourly L_{eq}	UPRR Freight Rail
10	Residence at 11718 S. Prairie Avenue	24-hour L_{dn} Hourly L_{eq}	UPRR Freight Rail
11	Altgeld Gardens (along East 130 Place)	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic
Noise Measurement Locations along the Halsted Rail Alternative Alignment			
1	Residence at 9901 S. Emerald Avenue	24-hour L_{dn} Hourly L_{eq}	Traffic on I-57
2	Residence at 10229 S. Halsted Street	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic
3	Residence at 11005 S. Halsted Street	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic
4	Residence along 119th Street	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic
5	Residence at 12125 S. Halsted Street	24-hour L_{dn} Hourly L_{eq}	Local Street Traffic

Notes: L_{dn} = day-night average sound level, L_{eq} = equivalent continuous sound level. BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad

Table 3-6: Vibration Measurement Locations

Location Number	Receptor Description	Vibration Source
13	Residence at 10445 S. Michigan Avenue	Local Street Traffic
7	Residence at 354 W. 102nd Place	UPRR Freight Trains
9	Residence at 307 W. 113th Street	UPRR Freight Trains
3	Residence at 11005 S. Halsted Street	Local Street Traffic

Notes: UPRR = Union Pacific Railroad

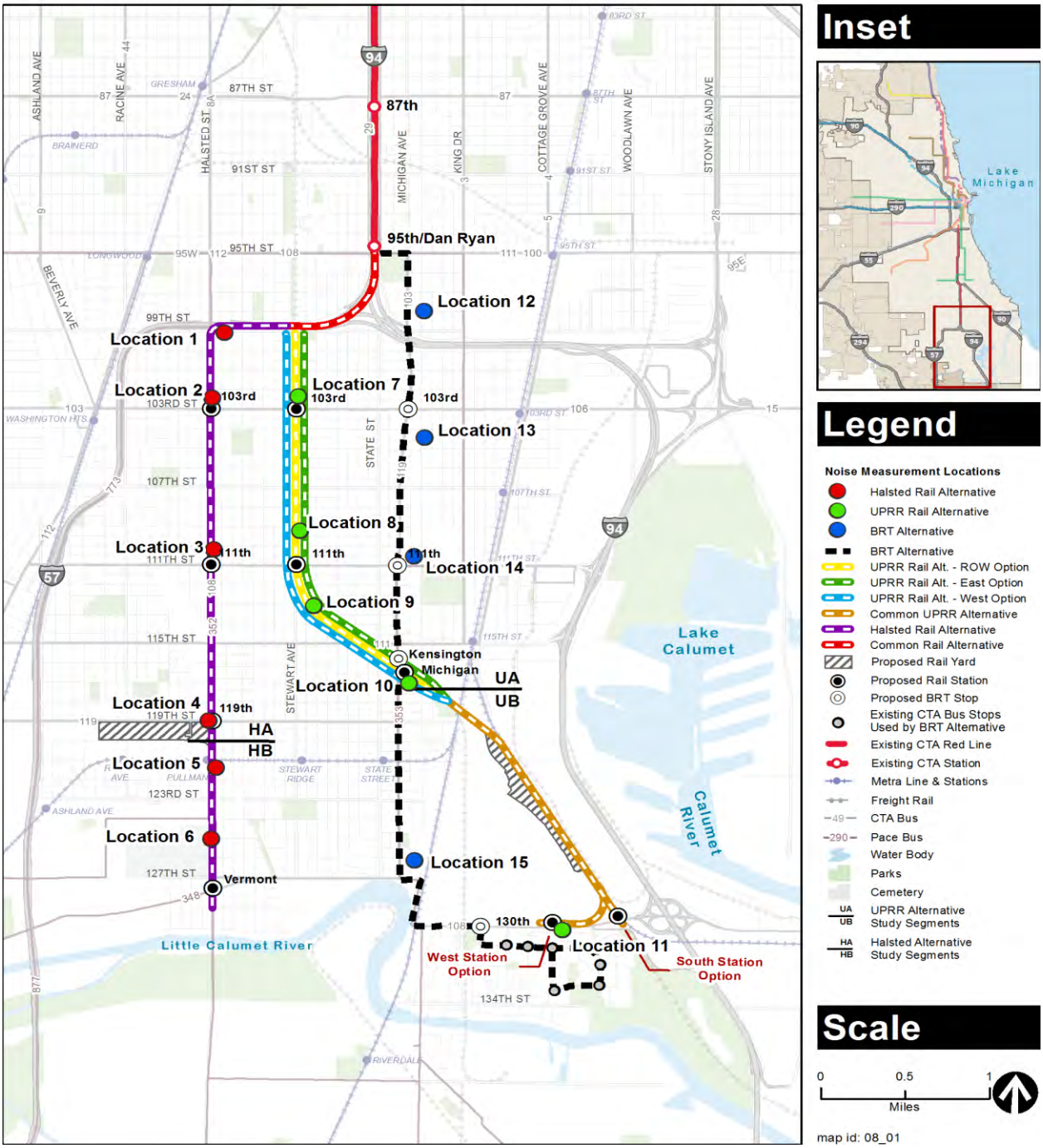

Figure 3-3: Noise Measurement Locations

3.4.2 Impact Assessment

Noise and vibration levels were predicted along the project corridor at the representative sensitive receptors within the project area for the proposed alternatives using FTA modeling methods as described in Section 3.4.2.1 below. Potential corridor-wide impacts were identified at noise-sensitive land uses based on model outcomes to determine areas where increases in noise would be moderate or severe. A similar assessment of the project-related vibration levels was performed to determine the location of vibration impacts. Total project noise levels (e.g., L_{eq} and L_{dn}) and single event transit pass-by vibration levels were compared to the FTA criteria to determine impacts. In addition, the predicted project build noise and vibration levels were compared to the existing measured noise and vibration levels to estimate any expected changes along the project corridor. Maximum hourly L_{eq} construction noise levels and equipment peak particle velocity (ppv) vibration levels were compared to FTA criteria to determine the potential impact during construction.

If the predicted noise and vibration levels exceeded the FTA criteria, the feasibility of abatement measures listed in the FTA guidance was evaluated for mitigating impacts at noise- and vibration-sensitive receptors. For locations where noise barriers were recommended, their feasibility was evaluated in a qualitative manner by identifying potential barrier locations, the approximate length and height of the noise barrier, and other factors that would limit barrier performance.

3.4.2.1 Noise Modeling Analysis

The FTA noise prediction guidance contains mathematical algorithms that allow the computation of project-generated noise levels at the representative receptor locations. The model requires inputs such as maximum noise levels at 50 feet for each type of noise source (e.g., rapid transit pass-bys, wheel squeal) that would occur along the RLE Project corridor. The reference source noise levels to be included in the assessment are described in Table 3-5. Inputs such as vehicle volumes, number of cars, and speeds were used to determine the predicted project noise levels at identified receptors within each of the project corridor alternatives. Other inputs such as track type (continuously welded rail), the presence of an intervening noise barrier, ground attenuation effects, and the shielding effects from rows of buildings were used to refine the modeling assessment. Each of the applicable noise metrics and criteria thresholds, as described in Section 3.2, were used to evaluate project-related noise impacts at receptor locations.

The rail operations proposed along the project corridor would consist of train types similar to those that currently operate along the Red Line corridor. These vehicles consist of electric powered passenger rail cars operating on jointed track. The analysis assumed continuous welded rail on an aerial closed deck structure throughout the RLE rail corridor (CTA 2012). Switches and other trackwork that would increase noise levels were also included in this noise analysis. Adjustments to the predicted noise levels for each pass-by included the following:

- Track type - aerial (closed deck concrete slab) with continuous welded rail
- Train speed

- Distance from the track to the receptor
- Number of cars per train
- Daytime and nighttime train volumes

Table 3-7 shows reference data such as maximum noise level (L_{max}), sound exposure level (SEL), and average acoustical source height for transit pass-by noise sources. The L_{max} level is the maximum noise level generated during the train pass-by. The SEL is the total sound energy generated by the train pass-by compressed into a 1-second time interval.

Table 3-7: Transit Sources Included in the Noise Impact Assessment

Description	Type[4]	Location	Noise Level[1] (L_{max})	Noise Level[1] (SEL)	Time[2] (seconds)	Height[3] (feet)
Rapid Transit Car Pass-bys	Mobile	Alignment	80	82	N/A[5]	2
Wheel Squeal	Stationary	Curves	100	136	4	0
Auxiliary Equipment - Rapid Transit[6]	Stationary	Stations	67	103	30	10

1. Reference Federal Transit Authority maximum noise levels (or L_{max}) or sound exposure levels (or SEL) are reported in A-weighted decibels (dBA) at a reference distance of 50 feet and 50 miles per hour (for mobile sources only).
2. Average duration time for various events is reported in seconds per vehicle or event.
3. The effective acoustical source heights are reported in feet above rail (for train source) or feet above ground.
4. Moving transit sources are modeled as mobile or line sources, while stationary sources are modeled as stationary or point sources.
5. N/A means not applicable. Pass-by and facility noise prediction equations do not require a duration time.
6. Auxiliary equipment refers to the air conditioning units under the passenger rail cars, which are the primary noise source when the trains are stopped at the stations.

Using the peak- and 24-hour train volumes provided by CTA for the build alternatives, pass-by noise levels from train operations were predicted at each of the identified receptor locations along each alternative alignment using the FTA fixed-guideway calculation algorithms from the FTA guidance manual.

3.4.2.2 Vibration Modeling Analysis

As with noise, the FTA guidance was used to predict vibration levels from transit operations. The FTA vibration model combines various algorithms with empirically developed ground surface curves to estimate transit vibration levels in average soil conditions. Figure 3-4 shows the FTA surface vibration curves that were used to predict ground-borne vibration and noise levels from transit operations at receptor locations. For each segment along the RLE Project corridor, other inputs, including source-, path-, and receptor-specific adjustment factors, are specified for each train/receptor combination. The model then computes rms velocity levels and converted ground-borne noise levels at each identified receptor location for single-event train pass-bys. These computed levels were then compared to the FTA ground-borne vibration impact criteria to

determine the onset of impact. As shown in Figure 3-4, vibration curves are specified for locomotives, rapid transit, and buses.

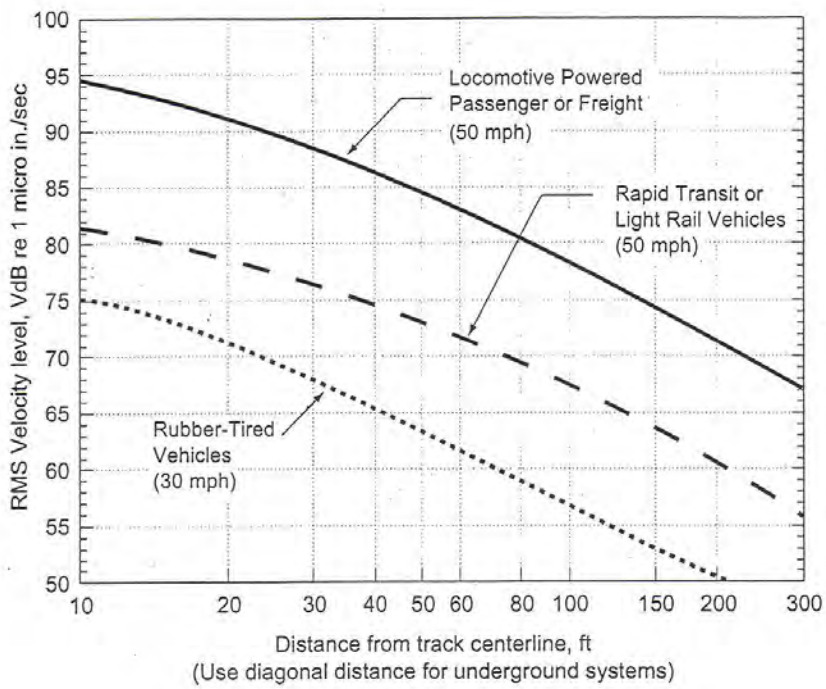

Figure 3-4: Increase in Noise Levels Allowed by Federal Transit Administration Criteria
Source: Transit Noise and Vibration Impact Assessment (FTA 2006)
Notes: mph = miles per hour, ft = feet, micro in./sec = microinch per second

3.4.2.3 Construction Noise and Vibration

Construction noise levels were calculated for the different phases of construction activity associated with the project. The type and number of pieces of construction equipment that could be required during each phase of construction are in the *Construction Technical Report*. Using the construction equipment reference source noise levels and the calculation methods described in the FTA guidance manual, estimates of predicted construction noise levels were determined for the representative receptors to determine potential impacts.

Peak particle velocity (ppv) in inches/second is the metric of interest for evaluating construction vibration impacts on buildings. The ppv is defined as the maximum instantaneous positive or negative peak of the vibration event. Although ppv is appropriate for evaluating the potential for building damage, it is not suitable for evaluating human response to vibration. Because it takes some time for the human body to respond to vibration signals, the average (rms) vibration level expressed in VdB was used to evaluate vibration impacts in terms of annoyance to humans. Vibration from construction activity is caused by general equipment operations, and is usually highest during pile-driving, blasting, soil compacting, jackhammering, and construction-related demolition activities. Construction equipment source vibration levels from the FTA guidance manual were used to assess the potential for structural damage to buildings (ppv) and human annoyance (rms VdB) to building occupants.

Section 4
Affected Environment

4.1 Noise Measurements

Noise measurements were obtained at a total of 15 representative locations near the alignments for the three project alternatives. These 15 measurement locations are shown in Figure 3-3. Six measurement locations were along the Halsted Rail Alternative alignment, five measurement locations were along the UPRR Rail Alternative alignment, and four locations were along the BRT Alternative alignment. All measurement locations represented sensitive receptors that might be affected by noise from the RLE Project.

The noise measurements were obtained during October 19–26, 2012, and consisted of 24-hour noise measurements at residential locations to determine the existing L_{dn} and highest hourly L_{eq} along each of the alignments. Table 4-1 shows the measured L_{dn} and L_{eq} obtained at each of the 15 locations.

4.1.1 BRT Alternative

Measurement Locations 12, 13, 14, and 15 were along Michigan Avenue, the proposed route of the BRT Alternative. The measured L_{dn} levels along Michigan Avenue were due to local street traffic and ranged from 60.8 dBA at measurement Location 13 to 65.5 dBA at measurement Location 15.

4.1.2 UPRR Rail Alternative

Measurement Locations 7, 8, 9, and 10 were along the UPRR Rail Corridor. Because of the existing freight rail operations along the UPRR Rail Corridor, the L_{dn} measurements were high, ranging from 74.6 dBA at Location 8 to 77.0 dBA at Location 9. Measurement Location 11 was at Altgeld Gardens along East 130 Place across from the proposed 130th Street West Station Option. The measured L_{dn} at Location 11 was 63.2 dBA due to the local street traffic on 130th Street.

4.1.3 Halsted Rail Alternative

The measured L_{dn} of 65.0 dBA at Location 1 at 9901 S. Emerald Avenue is representative of the traffic noise along I-57. Measurement Locations 2, 3, 5, and 6 were along Halsted Street, where L_{dn} measurements from local street traffic ranged from 60.5 dBA at Location 3 and 64.2 dBA at Location 2. Measurement Location 4 was along 119th Street adjacent to the proposed yard and shop location. The measured L_{dn} at Location 4 was 58.6 dBA.

Table 4-1: Noise Level Measurements at Representative Locations

Location Number	Receptor Description	Measured L_{dn}	Highest Hourly L_{eq}
Noise Measurement Locations along the BRT Alternative Alignment			
12	Residence at 9630 S. Michigan Avenue	63.7 dBA	63.2 dBA
13	Residence at 10445 S. Michigan Avenue	60.8 dBA	67.5 dBA
14	Residence at 12221 S. Michigan Avenue	64.1 dBA	63.7 dBA
15	Residence at 12505 S. Michigan Avenue	65.5 dBA	71.0 dBA
Noise Measurement Locations along the UPRR Rail Alternative Alignment			
7	Residence at 354 W. 102nd Place	75.5 dBA	76.7 dBA
8	Residence at 352 W. 109th Street	74.6 dBA	73.6 dBA
9	Residence at 307 W. 113th Street	77.0 dBA	78.4 dBA
10	Residence at 11718 S. Prairie Avenue	74.2 dBA	73.0 dBA
11	Altgeld Gardens (along East 130 Place)	63.2 dBA	62.5 dBA
Noise Measurement Locations along the Halsted Rail Alternative Alignment			
1	Residence at 9901 S. Emerald Avenue	65.0 dBA	64.5 dBA
2	Residence at 10229 S. Halsted Street	64.2 dBA	69.2 dBA
3	Residence at 11005 S. Halsted Street	60.5 dBA	59.1 dBA
4	Residence on 119th Street	58.6 dBA	59.7 dBA
5	Residence at 12125 S. Halsted Street	63.7 dBA	70.0 dBA
6	Residence at 12412 S. Halsted Street	61.6 dBA	68.4 dBA

Notes: L_{dn} = day-night average sound level, L_{eq} = hourly equivalent sound level, dBA = A-weighted decibels, BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad

4.2 Vibration Measurements

Vibration measurements were obtained at four locations to determine the existing vibration levels along the alignments of each of the project alternatives. Vibration measurements were obtained at noise measurement Location 3 along the Halsted Rail Alternative alignment, vibration measurements were obtained at two locations along the UPRR Rail Alternative alignment (noise measurement Locations 7 and 9), and the fourth vibration measurement location was along the BRT Alternative alignment (noise measurement Location 13). The vibrations measured along Halsted Street and Michigan Avenue were due to local street traffic, primarily trucks and buses. Typical measured vibration levels from trucks and buses along Halsted Street and Michigan Avenue ranged from 60 to 70 VdB. The vibration levels measured along the UPRR Rail Corridor were due to freight rail operations. At a distance of approximately 100 feet from the freight train pass-bys, the measured vibration levels ranged from 75 to 80 VdB. Table 4-2 shows the results of the vibration measurements.

Table 4-2: Measured Vibration Levels

Location Number	Receptor Description	Measured Vibration Levels
Vibration Measurement Location along the BRT Alternative Alignment		
13	Residence at 10445 S. Michigan Avenue	60 to 70 VdB
Vibration Measurement Locations along the UPRR Rail Alternative Alignment		
7	Residence at 354 W. 102nd Place	75 to 80 VdB
9	Residence at 307 W. 113th Street	75 to 80 VdB
Vibration Measurement Location along the Halsted Rail Alternative Alignment		
3	Residence at 11005 S. Halsted Street	60 to 70 VdB

Notes: BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad, VdB = decibels referenced to 1 microinch per second

Section 5
Impacts and Mitigations

The following sections describe the results of the noise and vibration analysis, identify areas of impact along each of the project alternatives, and present the results and effectiveness of the potential mitigation measures.

5.1 No Build Alternative

The No Build Alternative assumes no change in the existing conditions and therefore no change to the existing noise and vibration levels would occur within the project area.

5.1.1 Permanent Impacts and Mitigations – No Build Alternative

The No Build Alternative would result in no noise and vibration impacts. As a result, mitigation measures were not considered.

5.1.2 Construction Impacts and Mitigations – No Build Alternative

The No Build Alternative would not include any construction. As a result, mitigation measures were not considered.

5.2 Bus Rapid Transit Alternative

In accordance with FTA guidance for residential receptors, the L_{dn} measurements were used to determine the FTA moderate and severe impact criteria for the BRT Alternative using the curves in Figure 3-1. For example, the measured L_{dn} at location 12 was 63.7 dBA. From the curves in Figure 3-1, an existing L_{dn} noise exposure of 63.7 dBA for a residential receptor (Category 2) could result in a moderate noise impact criterion of 60.0 dBA, and a severe noise impact criterion of 65.4 dBA. Table 5-1 shows the measured L_{dn} at each of the four measurement locations along the BRT Alternative Alignment, along with the corresponding FTA moderate and severe noise impact criteria.

Table 5-1: Federal Transit Administration Moderate and Severe Impact Criteria for the Bus Rapid Transit Alternative

Location Number	Receptor Description	Measured Noise Level (L_{dn})	FTA Moderate Impact Criterion	FTA Severe Impact Criterion
12	Residence at 9630 S. Michigan Avenue	63.7 dBA	60.0 dBA	65.4 dBA
13	Residence at 10445 S. Michigan Avenue	60.8 dBA	58.2 dBA	63.8 dBA
14	Residence at 12221 S. Michigan Avenue	64.1 dBA	60.2 dBA	65.7 dBA
15	Residence at 12505 S. Michigan Avenue	65.5 dBA	61.2 dBA	66.5 dBA

Notes: L_{dn} = day-night average sound level, FTA = Federal Transit Administration, dBA = A-weighted decibel

For the BRT Alternative, buses would operate on 4-minute headways in each direction between the hours of 6 AM and 8 PM, and on 12-minute headways in each direction between the hours of 8 PM and 6 AM. Based on these headway times, the total number of northbound and southbound bus operations over a 24-hour period would be 520 (410 daytime bus operations between 7 AM and 10 PM, and 110 nighttime bus operations between 10 PM and 7 AM). Based on the number of daytime and nighttime bus operations and a speed of 35 miles per hour (mph), the 24-hour L_{dn} from the bus operations would be 62.1 dBA at a distance of 50 feet. Extrapolating this noise level using the distance attenuation methods described in the FTA guidance manual results in the impact distances within which moderate and severe noise impacts would occur for the BRT Alternative. For example, for noise measurement Location 12, which represents the existing noise level along the BRT Alternative alignment from 95th Street to 103rd Street, the noise at residential receptors within 69 feet of the buses would exceed the FTA's moderate impact criteria level of 60 dBA, and the noise at residential receptors within 30 feet of the buses would exceed the FTA's severe impact criteria level of 65.4 dBA shown in Table 5-1. Table 5-2 lists the moderate and severe impact distances for the BRT Alternative.

Table 5-2: Federal Transit Administration Moderate and Severe Impact Distances for the Bus Rapid Transit Alternative

Location Number	Receptor Description/(Area of Impact)	Measured Noise Level (L_{dn})	FTA Moderate Impact Distance	FTA Severe Impact Distance
12	Residence at 9630 S. Michigan Avenue/ (from 95th Street to 103rd Street)	63.7 dBA	69 feet	30 feet
13	Residence at 10445 S. Michigan Avenue/ (from 103rd Street to 115th Street)	60.8 dBA	91 feet	38 feet
14	Residence at 12221 S. Michigan Avenue/ (from 115th Street to 124th Street)	64.1 dBA	67 feet	29 feet
15	Residence at 12505 S. Michigan Avenue/ (from 124th Street to 130th Street)	65.5 dBA	57 feet	26 feet

Notes: L_{dn} = day-night average sound level, FTA = Federal Transit Administration, dBA = A-weighted decibel

5.2.1 Permanent Impacts and Mitigations – Bus Rapid Transit Alternative

Using the impact distances from Table 5-2, noise contours were developed for the BRT Alternative to show the areas of moderate and severe impact along the project corridor. Figures 5-1a through 5-1f show the BRT Alternative with the moderate and severe noise impact contours. From 95th Street to 103rd Street, the moderate noise impact distance would be 69 feet from the nearest bus lane, and the severe noise impact distance would be 30 feet from the nearest bus lane. From 103rd Street to 115th Street, the moderate noise impact distance would be 91 feet, and the severe noise impact distance would be 38 feet. From 115th Street to 124th Street, the moderate noise impact distance would be 67 feet, and the severe impact distance would be 29 feet. From 124th Street to 130th Street, the moderate noise impact distance would be 57 feet, and the severe noise impact distance would be 26 feet. Residential receptors within the FTA moderate noise impact contours shown in Figure 5-1 would be affected by the BRT Alternative.

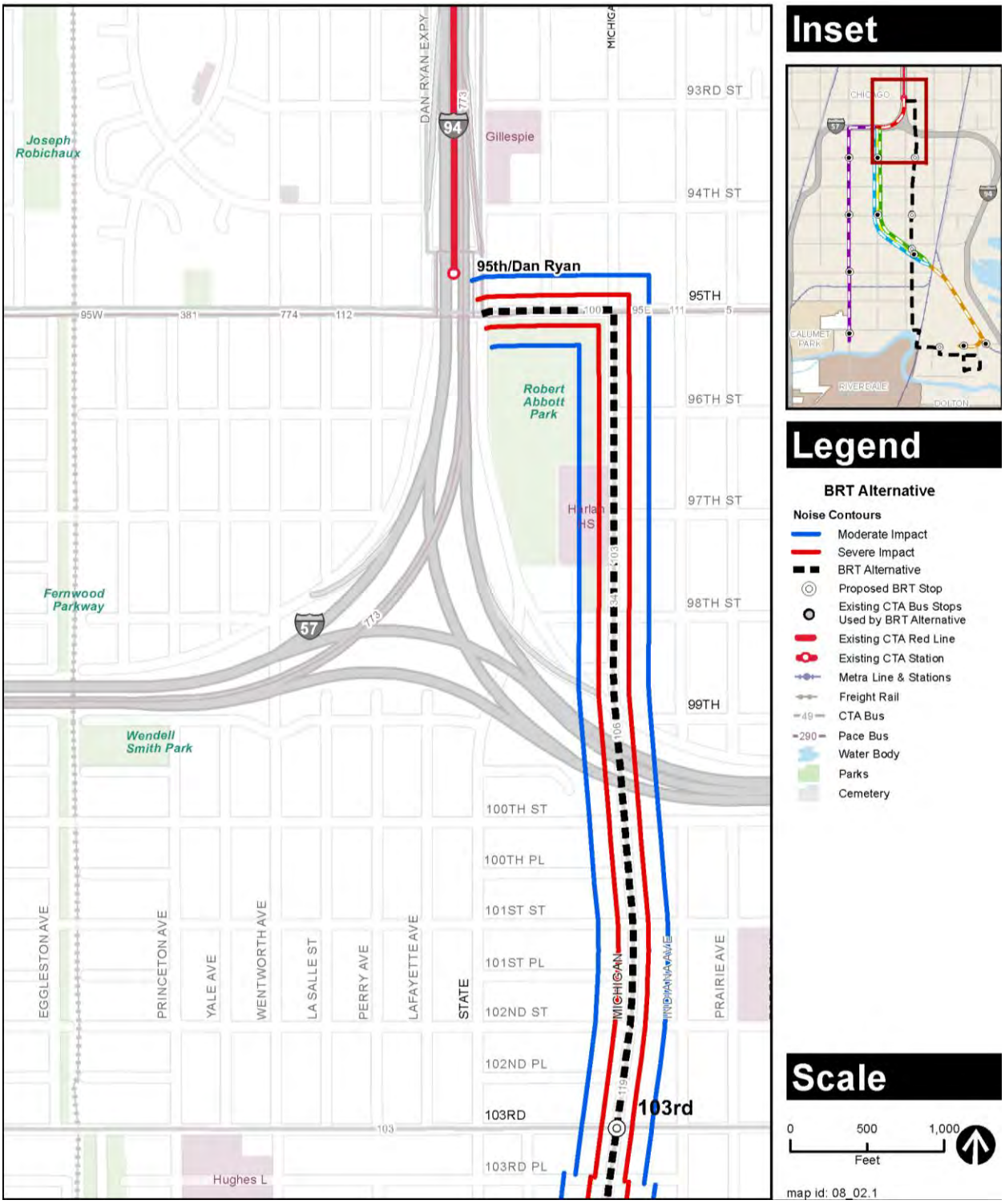

Figure 5-1a: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

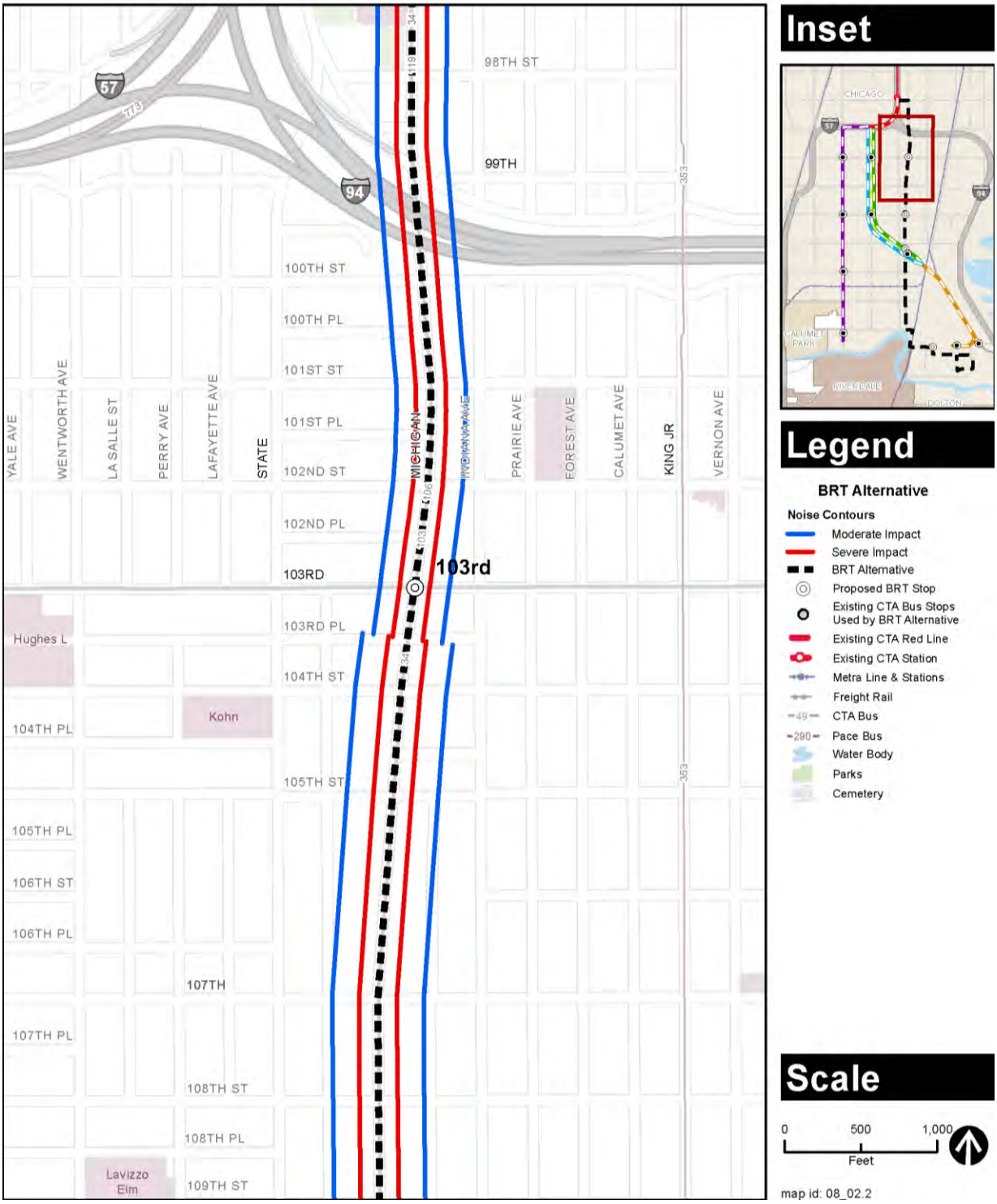

Figure 5-1b: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

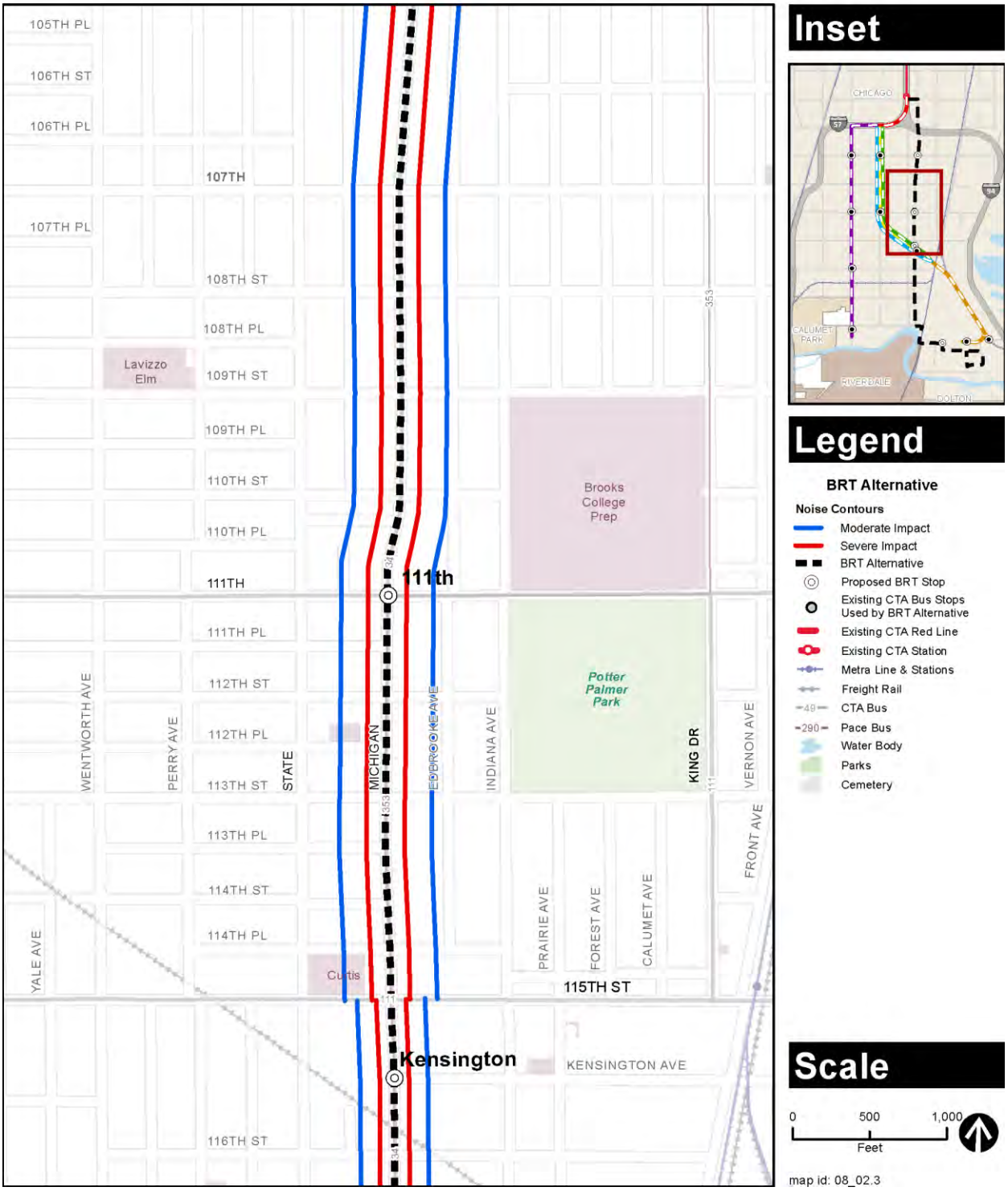

Figure 5-1c: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

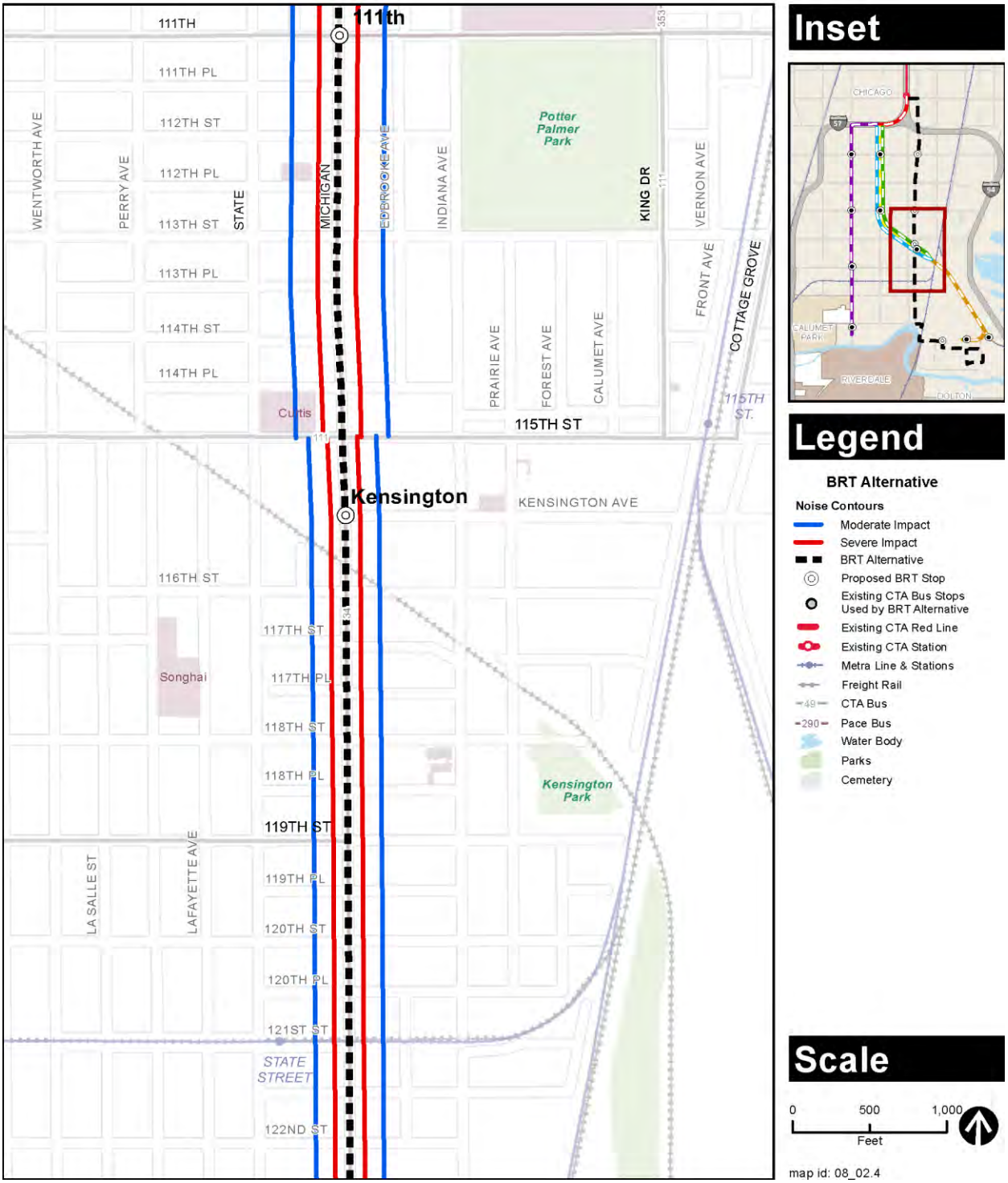

Figure 5-1d: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

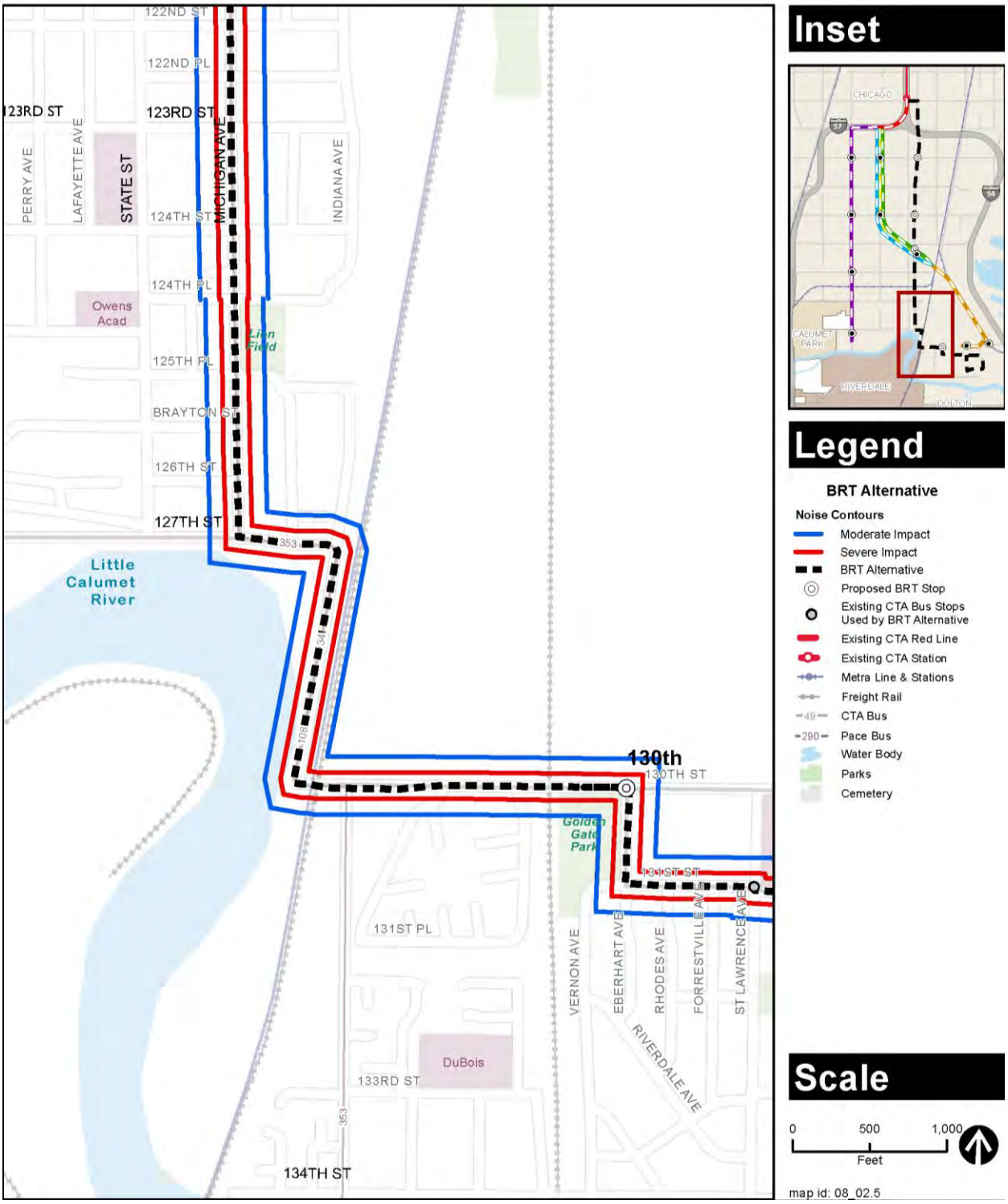

Figure 5-1e: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

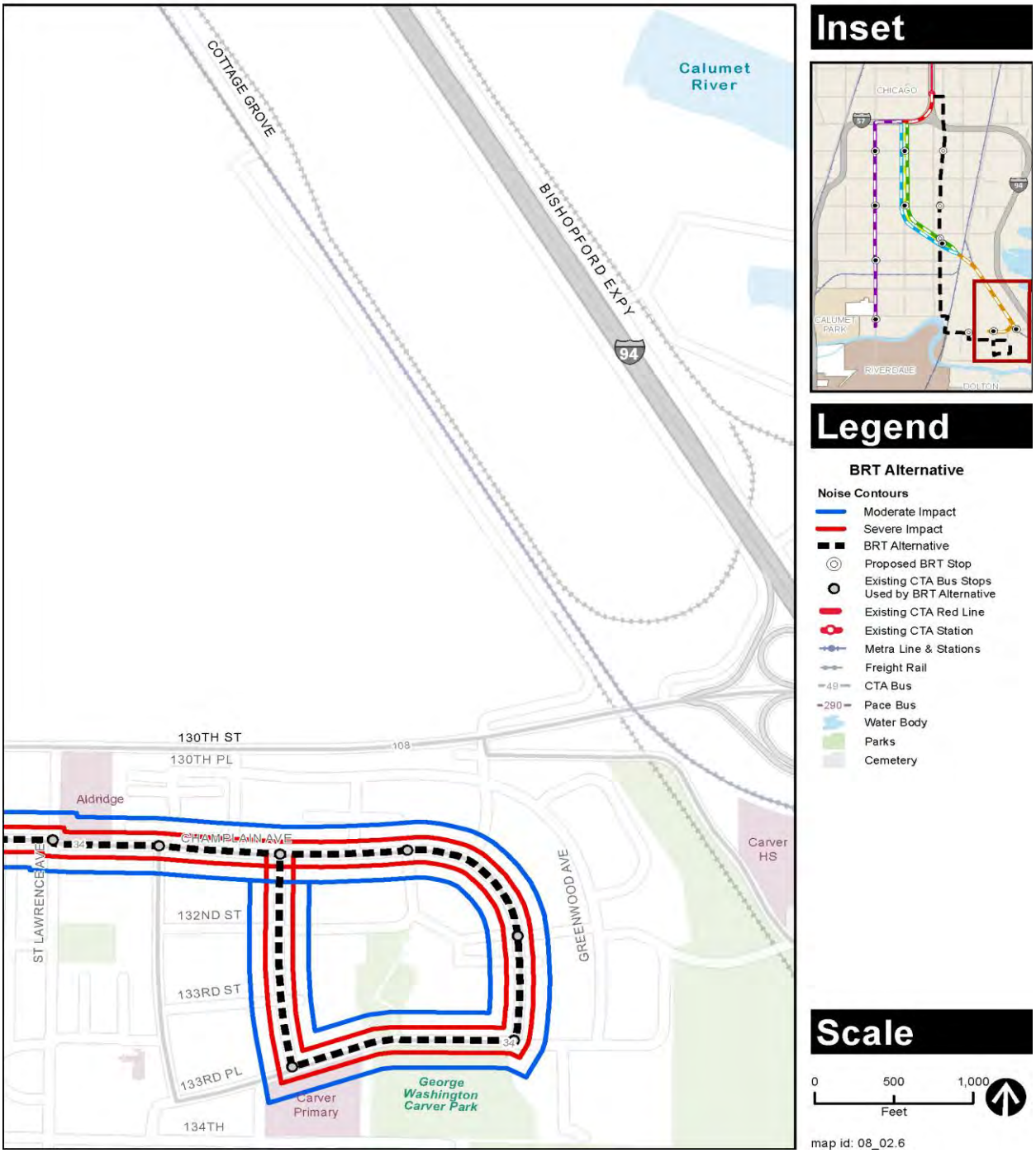

Figure 5-1f: Bus Rapid Transit Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

Because the buses would travel along local streets that have small blocks, numerous cross streets, and driveways, noise abatement mitigation such as barriers would not be feasible for the BRT Alternative.

5.2.2 Construction Impacts and Mitigations – Bus Rapid Transit Alternative

Construction noise from the BRT Alternative is expected to consist of minor construction activity at the stop locations. Construction noise levels are not expected to exceed the FTA construction noise limits described in Table 3-3.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

For the UPRR Rail Alternative, the trains would operate on an aerial structure with continuous welded rail. Based on the headway times shown in Table 5-3, the total number of northbound and southbound trains over a 24-hour period would be 378 (286 daytime trains between 7 AM and 10 PM, and 92 nighttime trains between 10 PM and 7 AM). Based on the number of daytime and nighttime trains traveling at a speed of 55 mph, the 24-hour L_{dn} would be 76.3 dBA at a distance of 50 feet. Near the stations, where the trains would decelerate and accelerate as they enter and leave the station area, the 24-hour L_{dn} would be 65.0 dBA.

Table 5-3: Proposed Red Line Extension Train Operations

Service Period	Time Period	Hours	Average Northbound Headways	Number of Cars/Train
Early Morning	3 AM to 6 AM	3	13 minutes	8
AM Peak	6 AM to 9 AM	3	5 minutes	8
Mid-day	9 AM to 3 PM	6	7 minutes	8
PM Peak	3 PM to 6 PM	3	5 minutes	8
Evening	6 PM to 10 PM	4	7.5 minutes	4
Nighttime	10 PM to 3 AM	5	15 minutes	4

5.3.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option would only occur if the freight relocation project were implemented prior to RLE Project. As a result, the noise levels along the rail corridor would decrease by 5 to 7 dBA due to the removal of the freight operations. Because of the reduction in noise level due to replacing the freight operations with the RLE Project, noise mitigation was not considered for the UPRR ROW Option.

With regard to vibration, no mitigation measures are proposed. The aerial structure with continuously welded rail could result in vibration levels that are below the FTA impact criterion of 72 VdB at the residential receptors along the project corridor. In addition, by moving the freight operations out of the rail corridor, the existing vibration levels generated during freight rail pass-bys would be eliminated from the rail corridor.

5.3.1.1 Segment UA

Because of the reduction in noise level due to replacing the freight operations with the rail transit operations, noise mitigation was not considered for the UPRR ROW Option.

5.3.1.2 Segment UB

Because of the reduction in noise level due to replacing the freight rail operations with the rail transit operations, noise mitigation was not considered for the UPRR ROW Option.

5.3.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option

This alternative would include the construction of an aerial structure, stations, and parking facilities at the stations. Typical construction equipment could include excavators, front-end loaders, cranes, drilling rigs, compressors, and trucks depending on the type of construction work required. The FTA construction noise impact assessment is based on the cumulative noise level from the two loudest pieces of equipment that, under worst-case conditions, would operate continuously at full power over a period of 1 hour. From the list of construction equipment in the FTA guidance manual, the two noisiest pieces of equipment would be the excavator (85 dBA at a distance of 50 feet) and truck (88 dBA at a distance of 50 feet). The combined noise level from these two pieces of equipment is 90 dBA at a distance of 50 feet. In addition to equipment mentioned, pile-driving may be required to support permanent structures such as the aerial track structure. Pile-driving can produce maximum short-term noise levels of 101 dBA at 50 feet. Actual levels vary, depending on the distance and topographical conditions between the pile-driving location and the receiver location. An alternative to impact pile-driving is to drill holes and use impact only to set piles. Using the recommended FTA construction noise limits described in Table 3-3, any construction activity that occurred within 50 feet of a noise sensitive receptor could result in a noise impact during daytime hours. For commercial and industrial areas, the FTA daytime construction noise impact criterion is 100 dBA. For construction that occurs during nighttime hours, the FTA construction noise limit is 80 dBA for residential receptors, resulting in an impact distance of 150 feet.

Construction noise levels are not expected to exceed the FTA recommended construction noise limits. There are no noise sensitive receptors within 50 feet of construction. As a result, construction noise mitigation measures were not considered. Construction activities would, however, be limited to daytime hours for locations that are within 150 feet of the residential locations, and all construction equipment exhaust mufflers would be kept in a state of good repair. As part of the construction specifications, the contractor would be responsible for adhering to the noise control requirements of the project. To the maximum extent possible, vehicles not in use would not remain idling on the construction site. For construction that could occur during the nighttime hours within the expressway median, there would be no residential receptors within 150 feet of the construction activity and no noise impacts are anticipated.

High-vibration activities during construction include demolition of buildings, construction of aerial structures, pavement breaking, and ground compaction. Vibration limits are the levels at which there is a risk for damage, not the level at which damage would occur. The impact

threshold distances were calculated and it was determined from the analysis that most of the equipment can be operated without risk of damage at distances of 15 feet or greater from non-engineered timber and masonry buildings or at distances of 8 feet or greater from reinforced concrete buildings. Pile-driving activities would be avoided in the vicinity of the historic Roseland Pumping Station.

5.3.3 120th Street Yard and Shop

Because there are no sensitive receptors in the vicinity of the 120th Street yard and shop site and because of the much lower amount of train activity in and out of the facility and the lower train speeds compared to other parts of the project corridor, the noise levels generated in this area are anticipated to be lower than the noise levels generated along other parts of the project corridor even with noise generated by maintenance activities conducted at the yard and shop. As a result, the noise generated at the 120th Street yard and shop would not exceed the FTA impact criteria at the nearest sensitive receptors. Therefore, noise mitigation was not considered at the 120th Street yard and shop. In addition, because there are no sensitive receptors in the vicinity of the 120th Street yard and shop site, there would be no construction noise impacts.

5.4 Union Pacific Railroad Rail Alternative - East Option

In accordance with FTA guidance for residential receptors, the L_{dn} measurements were used to determine the FTA moderate and severe impact criteria for the UPRR Rail Alternative using the curves in Figure 3-1. Table 5-4 shows the measured L_{dn} at each of the five measurement locations along the UPRR Rail Alternative alignment, along with the corresponding FTA moderate and severe noise impact criteria.

Table 5-4: Federal Transit Administration Moderate and Severe Impact Criteria for the Union Pacific Railroad Rail Alternative

Location Number	Receptor Description	Measured Noise Level (L_{dn})	FTA Moderate Impact Criterion	FTA Severe Impact Criterion
7	Residence at 354 W. 102nd Place	75.5 dBA	65.0 dBA	73.6 dBA
8	Residence at 352 W. 109th Street	74.6 dBA	65.0 dBA	72.9 dBA
9	Residence at 307 W. 113th Street	77.0 dBA	65.0 dBA	74.8 dBA
10	Residence at 11718 S. Prairie Avenue	74.2 dBA	65.0 dBA	72.6 dBA
11	Altgeld Gardens (along East 130th Place)	63.2 dBA	59.7 dBA	65.1 dBA

Notes: L_{dn} = day-night average sound level, FTA = Federal Transit Administration, dBA= A-weighted decibels

For the UPRR Rail Alternative, the trains would operate on a new aerial structure with continuous welded rail. For the East Option, the aerial structure would be located along the east side of the UPRR rail corridor. Based on the headway times shown in Table 5-3, the total number of northbound and southbound trains over a 24-hour period would be 378 (286 daytime trains between 7 AM and 10 PM, and 92 nighttime trains between 10 PM and 7 AM). Based on the number of daytime and nighttime trains traveling at a speed of 55 mph, the 24-hour L_{dn} would be

76.3 dBA at a distance of 50 feet. Extrapolating this noise level using the distance attenuation methods described in the FTA guidance manual results in the impact distances within which moderate and severe noise impacts would occur for the UPRR Rail Alternative. Table 5-5 indicates the moderate and severe impact distances for the UPRR Rail Alternative.

Table 5-5: Federal Transit Administration Moderate and Severe Impact Distances - Union Pacific Railroad Rail Alternative - East Option (at 55 miles per hour)

Location Number	Receptor Description	Measured Noise Level (L_{dn})	FTA Moderate Impact Distance	FTA Severe Impact Distance
7	Residence at 354 W. 102nd Place	75.5 dBA	280 feet	75 feet
8	Residence at 352 W. 109th Street	74.6 dBA	280 feet	85 feet
9	Residence at 307 W. 113th Street	77.0 dBA	280 feet	65 feet
10	Residence at 11718 S. Prairie Avenue	74.2 dBA	280 feet	90 feet
11	Altgeld Gardens (along East 130 Place at 45 mph)	63.2 dBA	265 feet	117 feet

Notes: L_{dn} = day-night average sound level, FTA = Federal Transit Administration, dBA = A-weighted decibels

At the stations, where the trains idle, the 24-hour L_{dn} is 65.0 dBA. Extrapolating this noise level using the distance attenuation methodology described in the FTA guidance manual results in the impact distances within which moderate and severe noise impacts are expected to occur for the UPRR Rail Alternative. Table 5-6 indicates the moderate and severe impact distances from the idling trains at the station for the UPRR Rail Alternative East Option.

Table 5-6: Federal Transit Administration Moderate and Severe Impact Distances - Union Pacific Railroad Rail Alternative - East Option (at the Stations)

Location Number	Receptor Description/(Station Location)	Measured Noise Level (L_{dn})	FTA Moderate Impact Distance	FTA Severe Impact Distance
7	Residence at 354 W. 102nd Place/ (103rd Street station)	75.5 dBA	50 feet	13 feet
8	Residence at 352 W. 109th Street/ (111th Street station)	74.6 dBA	50 feet	15 feet
10	Residence at 11718 S. Prairie Avenue/ (Michigan station)	74.2 dBA	50 feet	15 feet
11	Altgeld Gardens (along East 130th Place)/ (130th Street station - West and South Station Options)	63.2 dBA	110 feet	50 feet

Notes: L_{dn} = day-night average sound level, FTA = Federal Transit Administration, dBA = A-weighted decibels

5.4.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - East Option

Using the impact distances from Tables 5-5 and 5-6, noise contours were developed for the UPRR Rail Alternative East Option to show the areas of moderate and severe impact along the project corridor. Figures 5-2a through 5-2e show the East Option with both the moderate and severe noise impact contours. From I-57 to the Metra Electric District rail corridor, the moderate noise impact distance would be 280 feet from the centerline of the RLE aerial structure. Near the proposed stations, the moderate noise impact distance would be 50 feet. For the 130th Street station options, the moderate noise impact distance would be 110 feet. Residential receptors within these noise contours would be affected by implementation of the East Option. In addition, there would be a transition zone that extends for a distance of approximately 200 feet north and south of the station platforms where the trains decelerate and accelerate as they enter and leave the station area. Residential receptors within the noise contours shown in Figure 5-2 in the transition zones north and south of the stations would be affected by implementation of the East Option.

From I-57 to 103rd Street, the severe noise impact distance would be 75 feet. From 103rd Street to 111th Street, the severe noise impact distance would be 85 feet. From 111th Street to the Michigan Avenue station, the severe noise impact distance would be 65 feet. From the Michigan Avenue station to the Metra Electric District rail corridor, the severe noise impact distance would be 90 feet. Near the proposed stations, the severe noise impact distance would be approximately 15 feet. For the 130th Street station options, however, the severe noise impact distance would be 50 feet.

Figures 5-2a through 5-2e show the UPRR Rail Alternative East Option with both the moderate and severe noise impact contours. Mitigation measures for noise-affected residential receptors along the project corridor were considered. The moderate impact noise contours shown in Figure 5-2a through 5-2d extend into the residential areas along both sides of the rail corridor. As a result, noise barriers were considered along both sides of the aerial structure from the 95th Street Terminal to the Metra Electric District Rail Corridor. Noise barriers were not considered south of the Metra Electric District Rail Corridor because this area is primarily industrial land use. A noise barrier approximately 4 feet in height (measured from the top surface of the concrete deck) installed along the outer tracks of the aerial structure would reduce the wheel/rail noise that would propagate into the surrounding community. A noise barrier approximately 4 feet in height would provide a 7 to 10-dBA reduction in noise level in the surrounding community. A noise barrier approximately 4 feet in height on the aerial structure that would provide a 10-dBA reduction could result no impacts remaining after mitigation. Figures 5-2a through 5-2e show the location of the proposed noise barriers for the UPRR Rail Alternative East Option.

With regard to vibration, no mitigation measures are proposed. The aerial structure with continuously welded rail could result in vibration levels that would be below the FTA impact criterion of 72 VdB at the noise sensitive receptors along the project corridor.

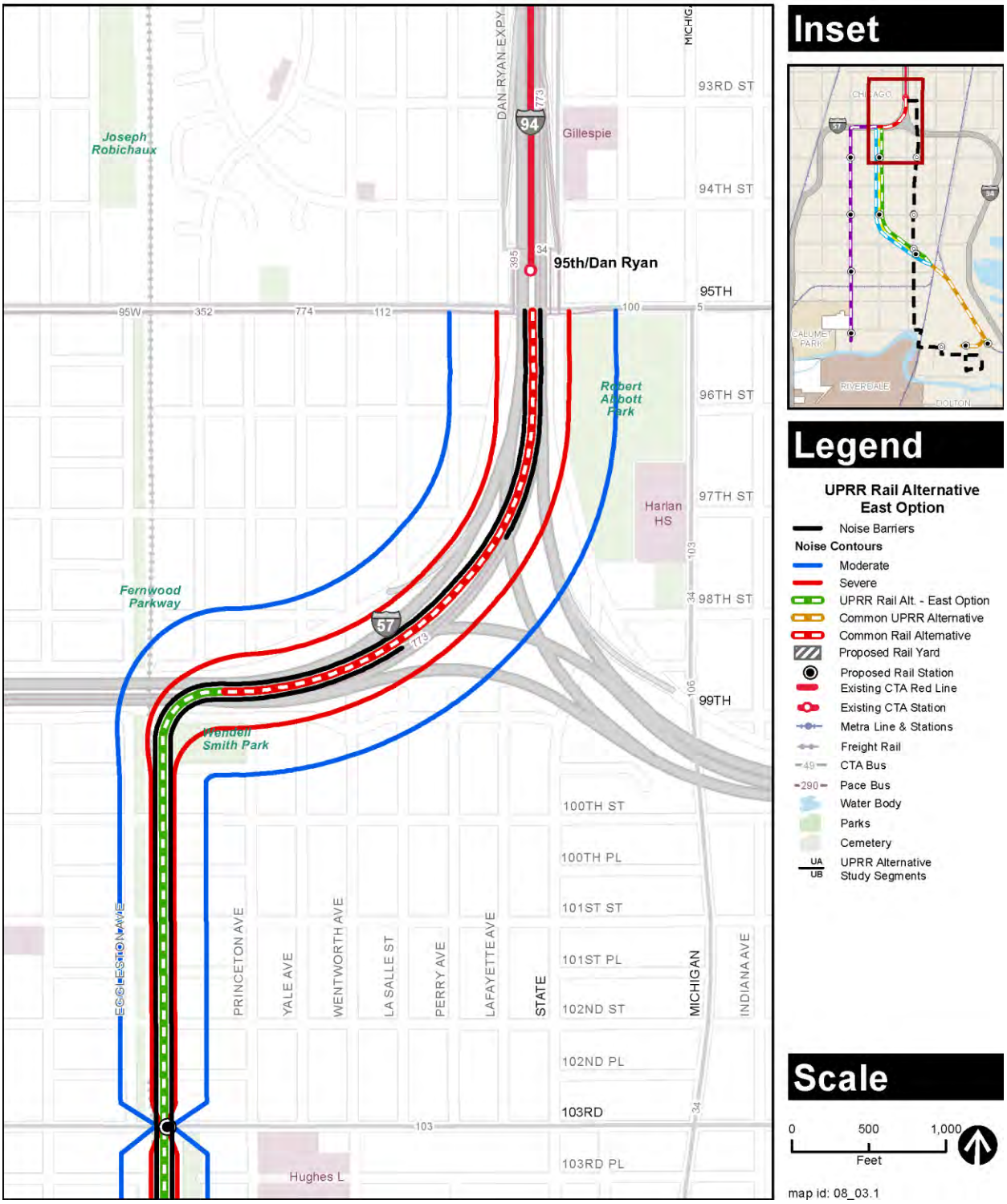

Figure 5-2a: Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

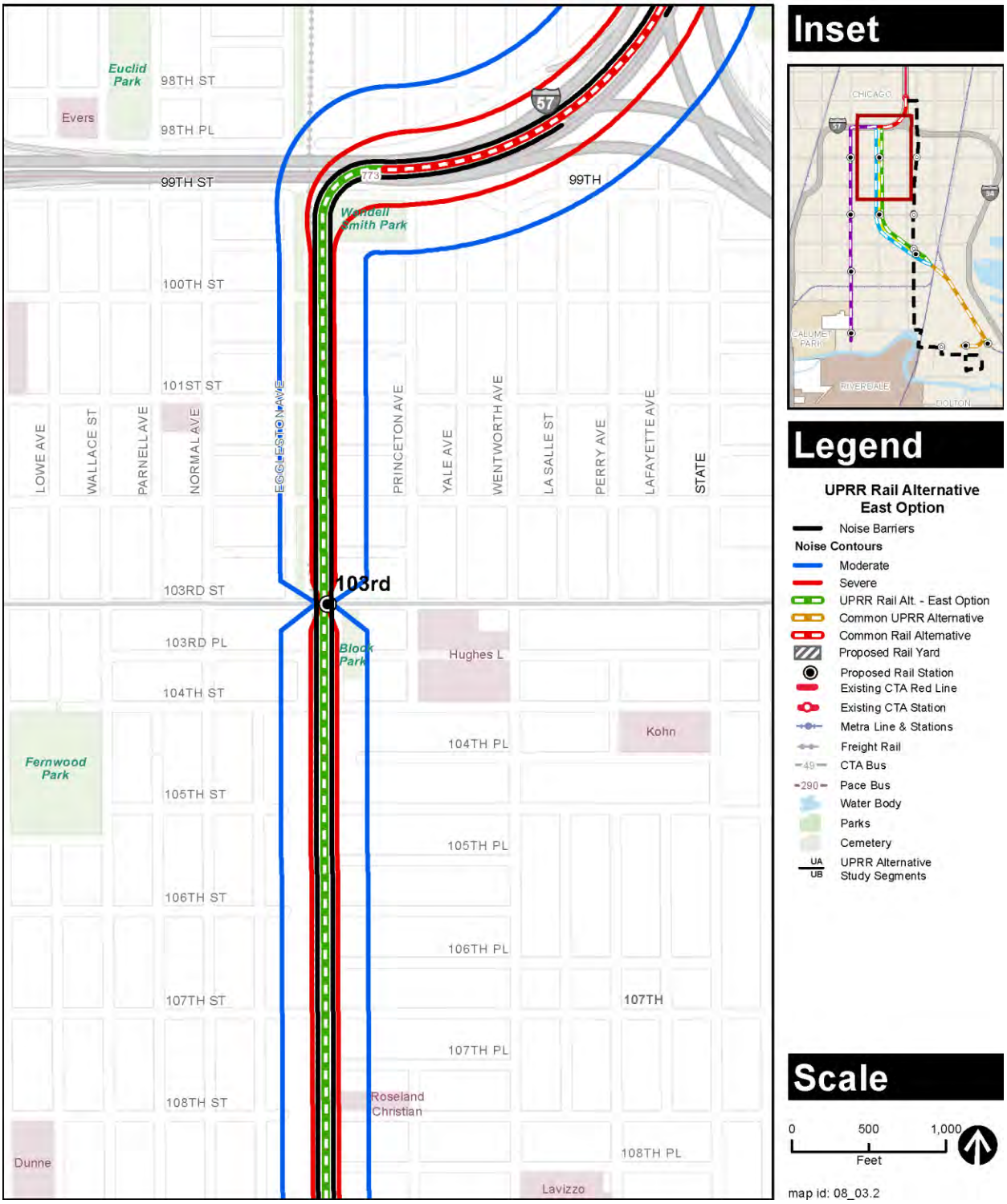

Figure 5-2b: Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

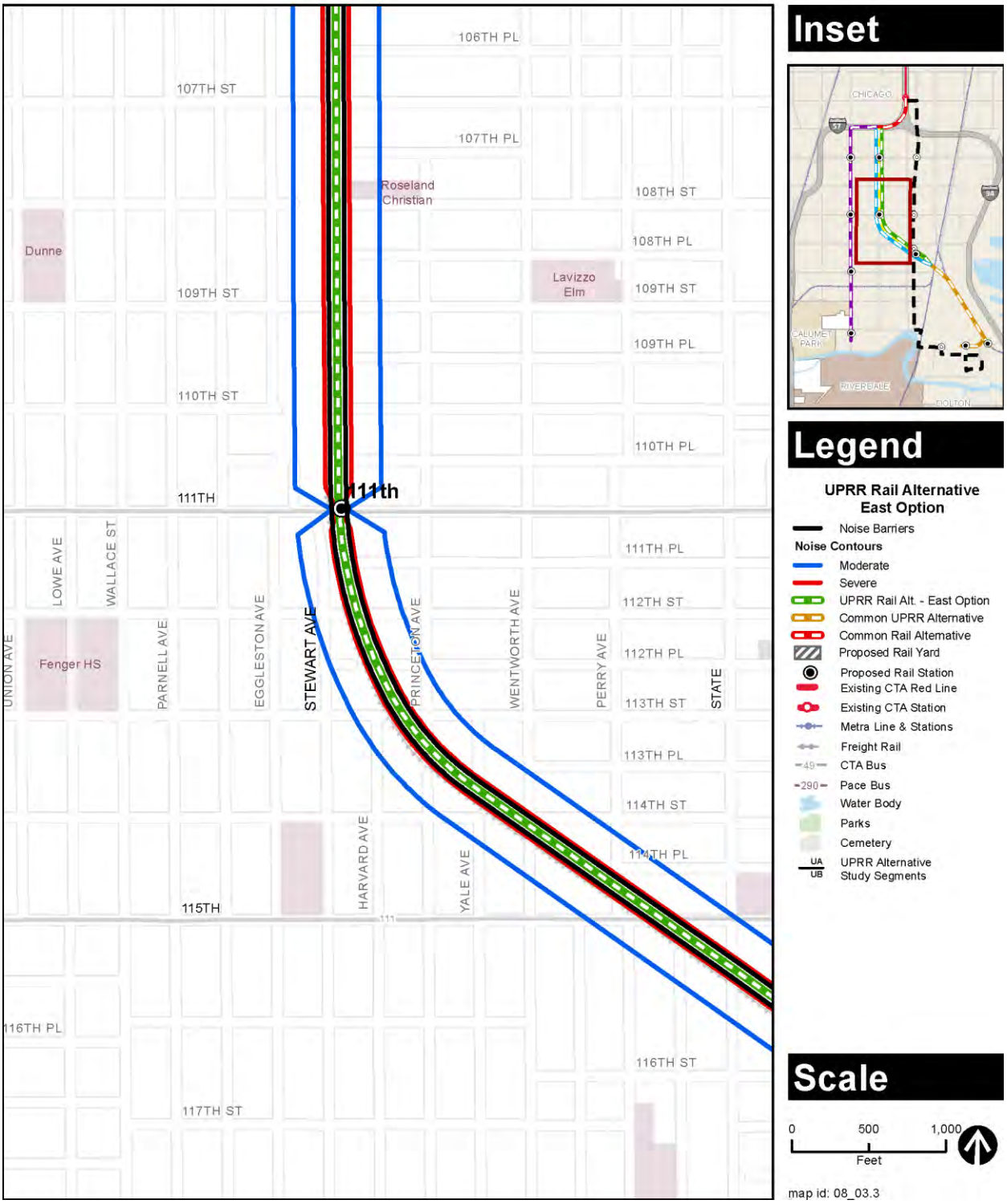

Figure 5-2c Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

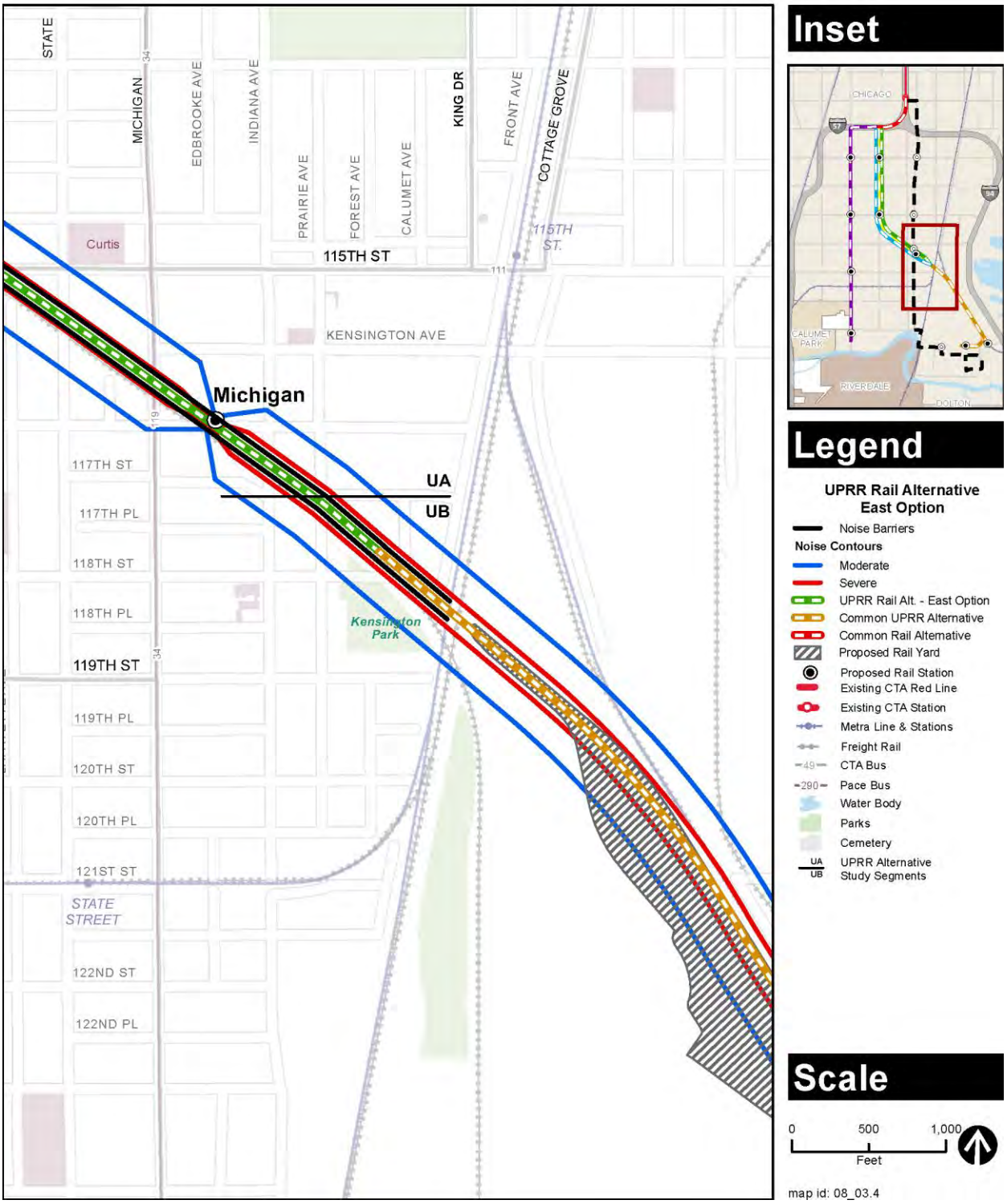

Figure 5-2d: Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

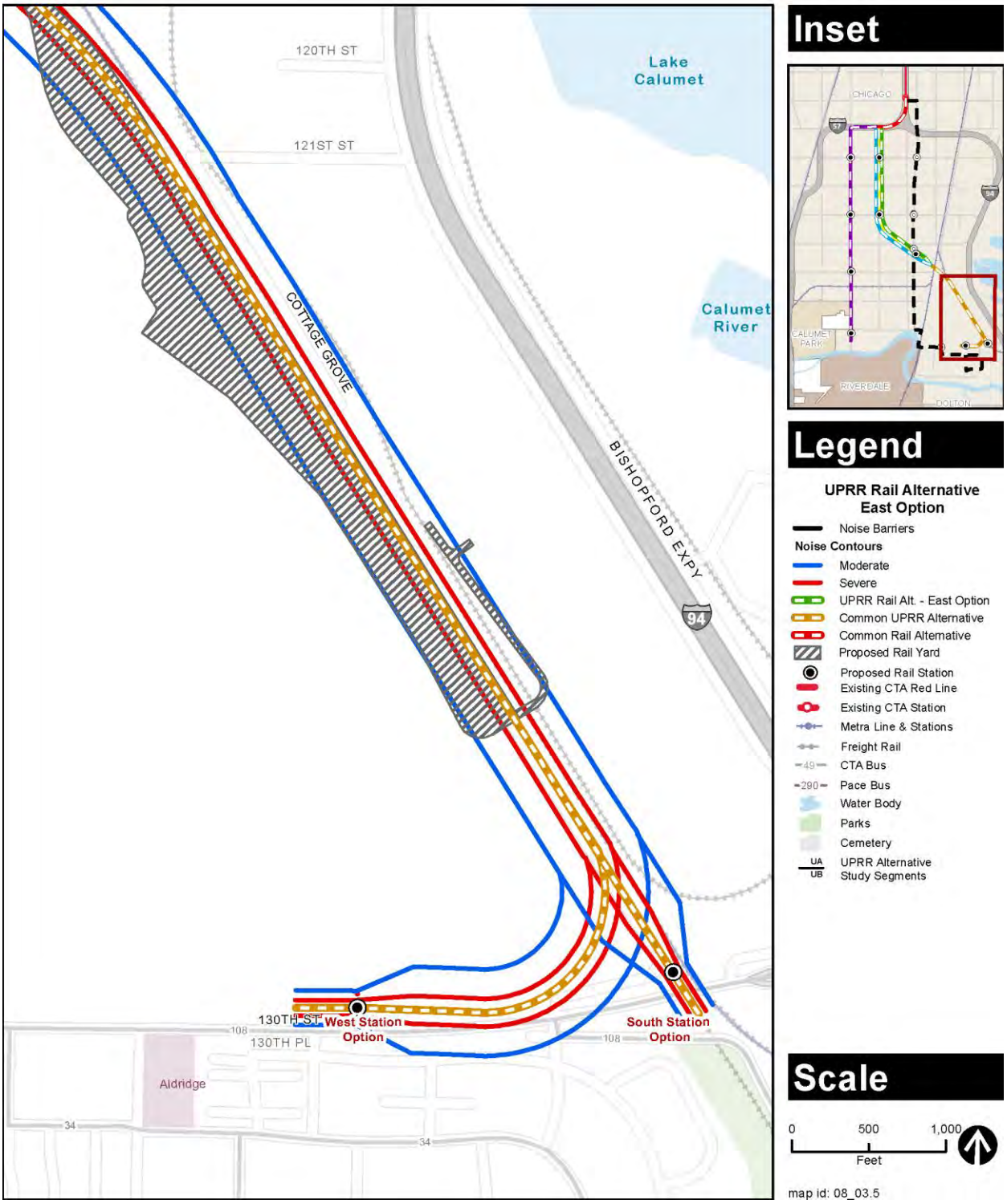

Figure 5-2e: Union Pacific Railroad Rail Alternative - East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

5.4.1.1 Segment UA

Segment UA of the UPRR Rail Alternative is north of Michigan Avenue. As shown in Figure 5-2, there would be a substantial number of affected receptors along this section of the rail corridor where the train speeds reach 55 mph.

5.4.1.2 Segment UB

Segment UB of the UPRR Rail Alternative is south of Michigan Avenue. Although there would be affected receptors between Michigan Avenue and the Metra Electric District Rail Corridor, there would be no affected receptors south of the Metra Electric District Rail Corridor. This area of the rail corridor consists primarily of industrial land use.

5.4.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - East Option

As it would be for the UPRR ROW Option, this alternative would include the construction of an aerial structure, stations, and parking facilities at the stations. Construction noise impacts would be the same as for the UPRR ROW Option. Construction noise levels are not expected to exceed the FTA recommended construction noise limits. As a result, construction noise mitigation measures were not considered. This analysis assumes that the same noise-reducing construction practices described for the UPRR ROW Option would be used for the East Option.

As with the UPRR ROW Option, no vibration impacts are anticipated from construction. The impact threshold distances were calculated for vibration and it was determined from the analysis that most of the equipment can be operated without risk of damage at distances of 15 feet or greater from non-engineered timber and masonry buildings or at distances of 8 feet or greater from reinforced concrete buildings. Pile-driving activities would be avoided in the vicinity of the historic Roseland Pumping Station.

5.4.3 120th Street Yard and Shop

Because there are no sensitive receptors in the vicinity of the 120th Street yard and shop and because of the much lower amount of train activity in and out of the facility and the lower train speeds compared to other parts of the project corridor, the noise levels generated in this area are anticipated to be lower than the noise levels generated along other parts of the project corridor even with noise generated by maintenance activities conducted at the yard and shop. As a result, the noise generated at the 120th Street yard and shop would not exceed the FTA impact criteria at the nearest sensitive receptors. Therefore, noise mitigation was not considered at the 120th Street yard and shop. In addition, because of the distance from the nearest noise sensitive receptors, there would be no construction noise impacts.

5.5 Union Pacific Railroad Rail Alternative - West Option

The results of the noise assessment for the UPRR Rail Alternative West Option are identical to the analysis results for the UPRR Rail Alternative East Option discussed in Section 5.4. The same moderate and severe noise impact contour distances would be applied to the West Option alignment. See Table 5-4 for the impact criteria and impact distances.

For the West Option, the aerial structure for the trains would be located along the west side of the UPRR rail corridor. See Table 5-5 for the moderate and severe impact distances for the UPRR Rail Alternative East Option, which would be the same for the West Option. Likewise, the moderate and severe impact distances from the idling trains at the station would be the same as for the East Option, as shown in Table 5-6.

5.5.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative - West Option

Using the impact distances from Tables 5-4 and 5-5, noise contours were developed for the UPRR Rail Alternative West Option to show the areas of moderate and severe impact along the project corridor. Figures 5-3a through 5-3e show the West Option with both the moderate and severe noise impact contours. From I-57 to the Metra Electric District rail corridor, the moderate noise impact distance would be 280 feet from the centerline of the RLE aerial structure. Near the proposed stations, the moderate noise impact distance would be 50 feet. For the 130th Street station options, however, the moderate noise impact distance would be 110 feet because of the lower measured noise levels near this station location. Residential receptors within these noise contours would be affected by noise. In addition, there is a transition zone that extends for a distance of approximately 200 feet north and south of the station platforms where the trains decelerate and accelerate as they enter and leave the station area. Residential receptors within the noise contours shown in Figure 5-3 in the transition zones north and south of the stations would be affected by noise.

From I-57 to 103rd Street, the severe noise impact distance would be 75 feet. From 103rd Street to 111th Street, the severe noise impact distance would be 85 feet. From 111th Street to the Michigan Avenue station, the severe noise impact distance would be 65 feet. From the Michigan Avenue station to the Metra Electric District rail corridor, the severe noise impact distance would be 90 feet. Near the proposed stations, the severe noise impact distance would be approximately 15 feet. For the 130th Street station options, however, the severe noise impact distance would be 50 feet.

Figures 5-3a through 5-3e show the UPRR Rail Alternative West Option with both the moderate and severe noise impact contours. Mitigation measures for noise-affected residential receptors along the project corridor were considered. The moderate impact noise contours shown in Figures 5-3a through 5-3d extend into the residential areas along both sides of the rail corridor. As a result, noise barriers were considered along both sides of the aerial structure from the 95th Street Terminal to the Metra Electric District Rail Corridor. Noise barriers would not be required south of the Metra Electric District Rail Corridor because this area is primarily industrial land use. A noise barrier approximately 4 feet in height installed along the outer tracks of the aerial structure would reduce the wheel/rail noise that would propagate into the surrounding community. A noise barrier approximately 4 feet in height would provide a 7 to 10-dBA reduction in noise level in the surrounding community. A noise barrier approximately 4 feet in height on the aerial structure that would provide a 10-dBA reduction could result in no impacts remaining after mitigation. Figures 5-3a through 5-3e show the location of the proposed noise barriers for the UPRR Rail Alternative West Option.

With regard to vibration, no mitigation measures are proposed. The new aerial structure with continuously welded rail could result in vibration levels that would be below the FTA impact criterion of 72 VdB at noise sensitive receptors along the project corridor.

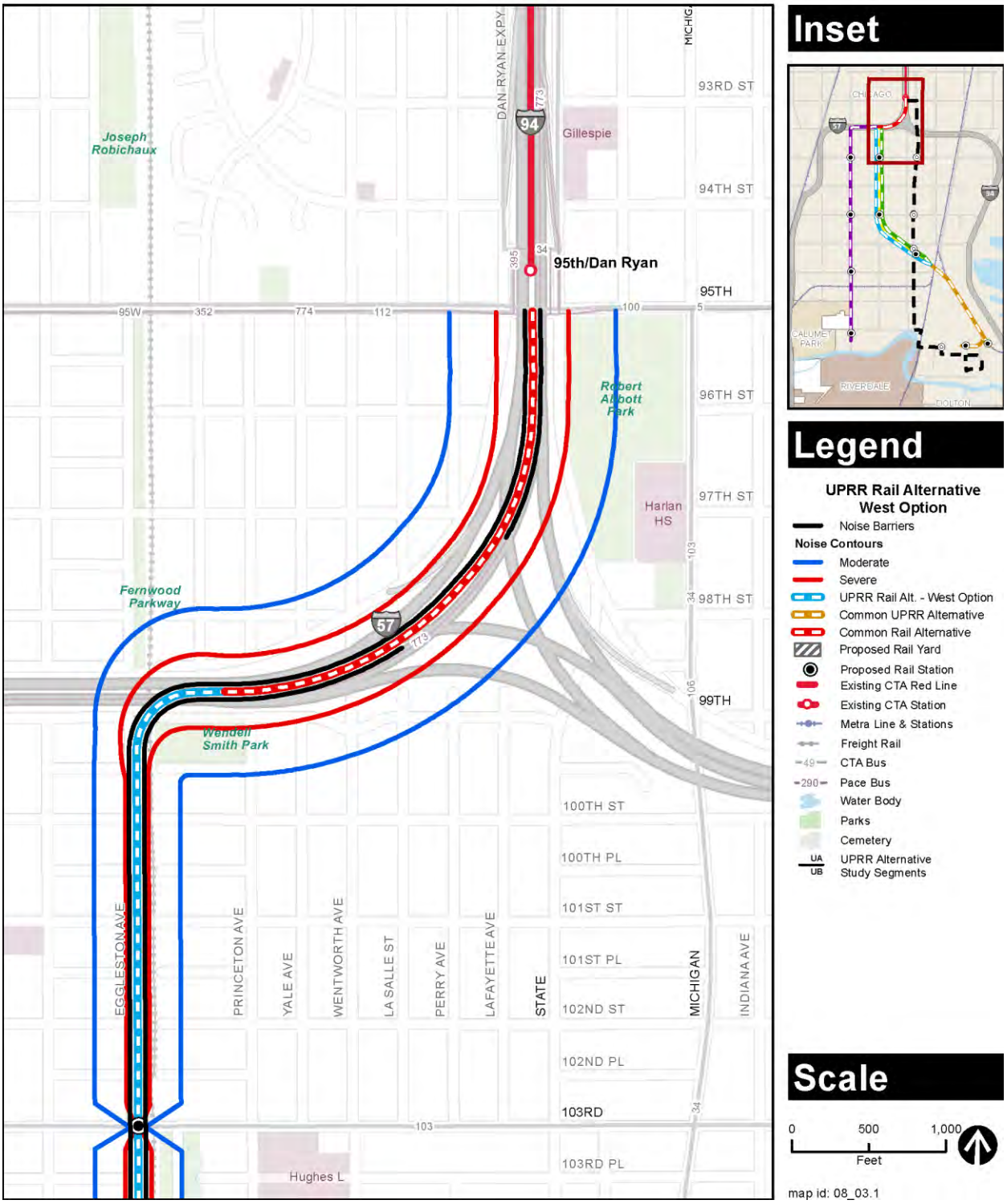

Figure 5-3a: Union Pacific Railroad Rail Alternative - West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

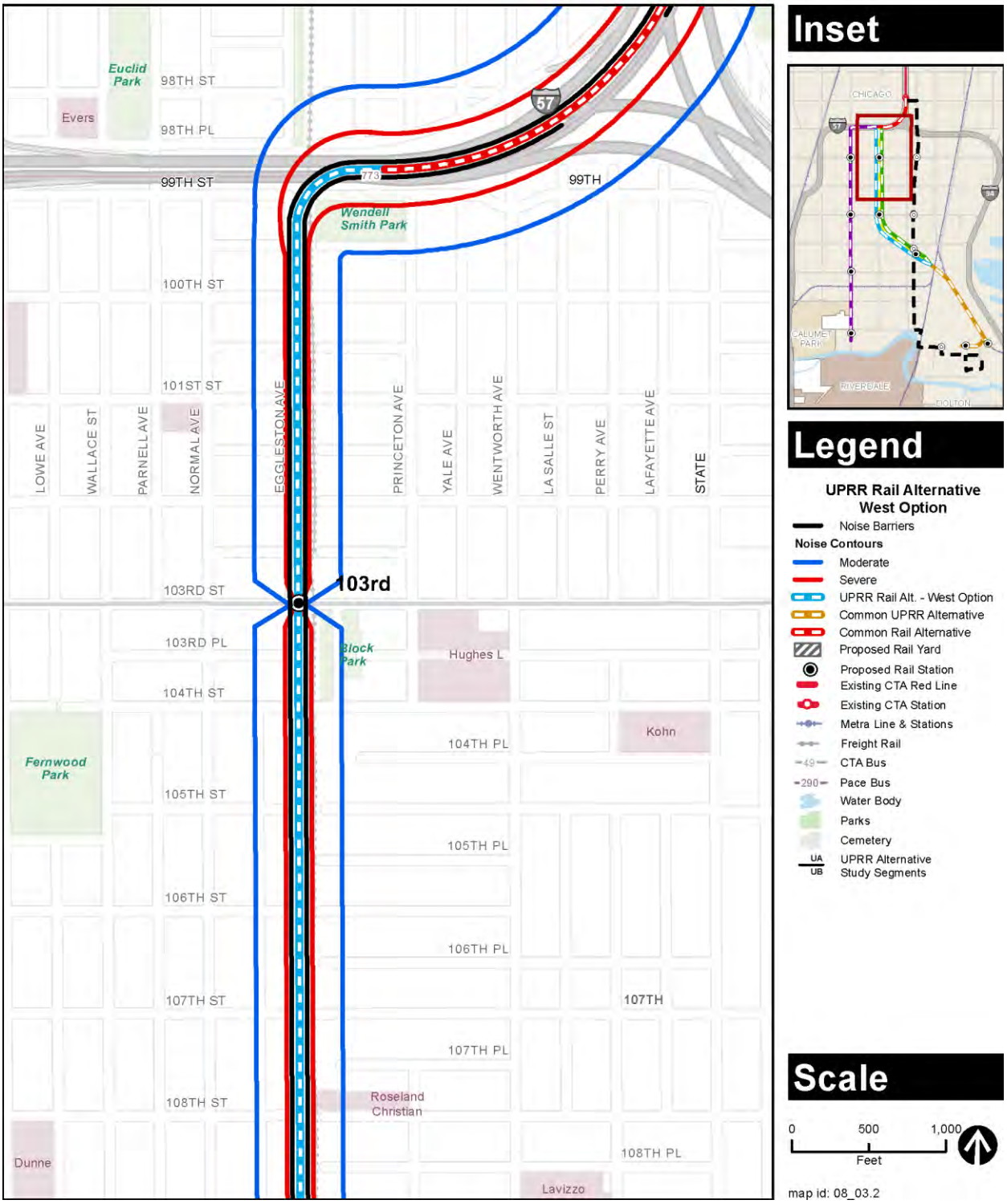

Figure 5-3b: Union Pacific Railroad Rail Alternative - West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

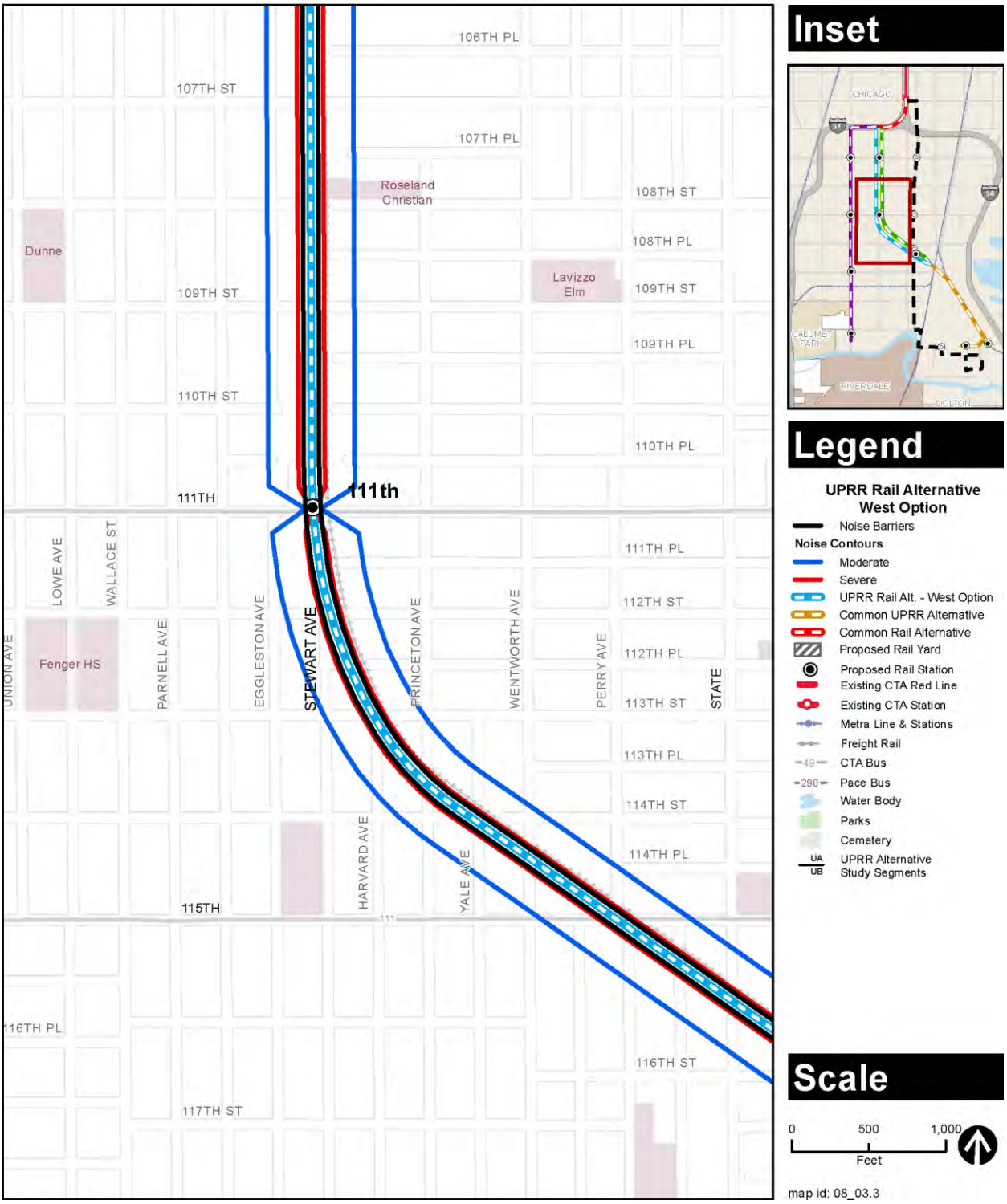

Figure 5-3c: Union Pacific Railroad Rail Alternative – West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

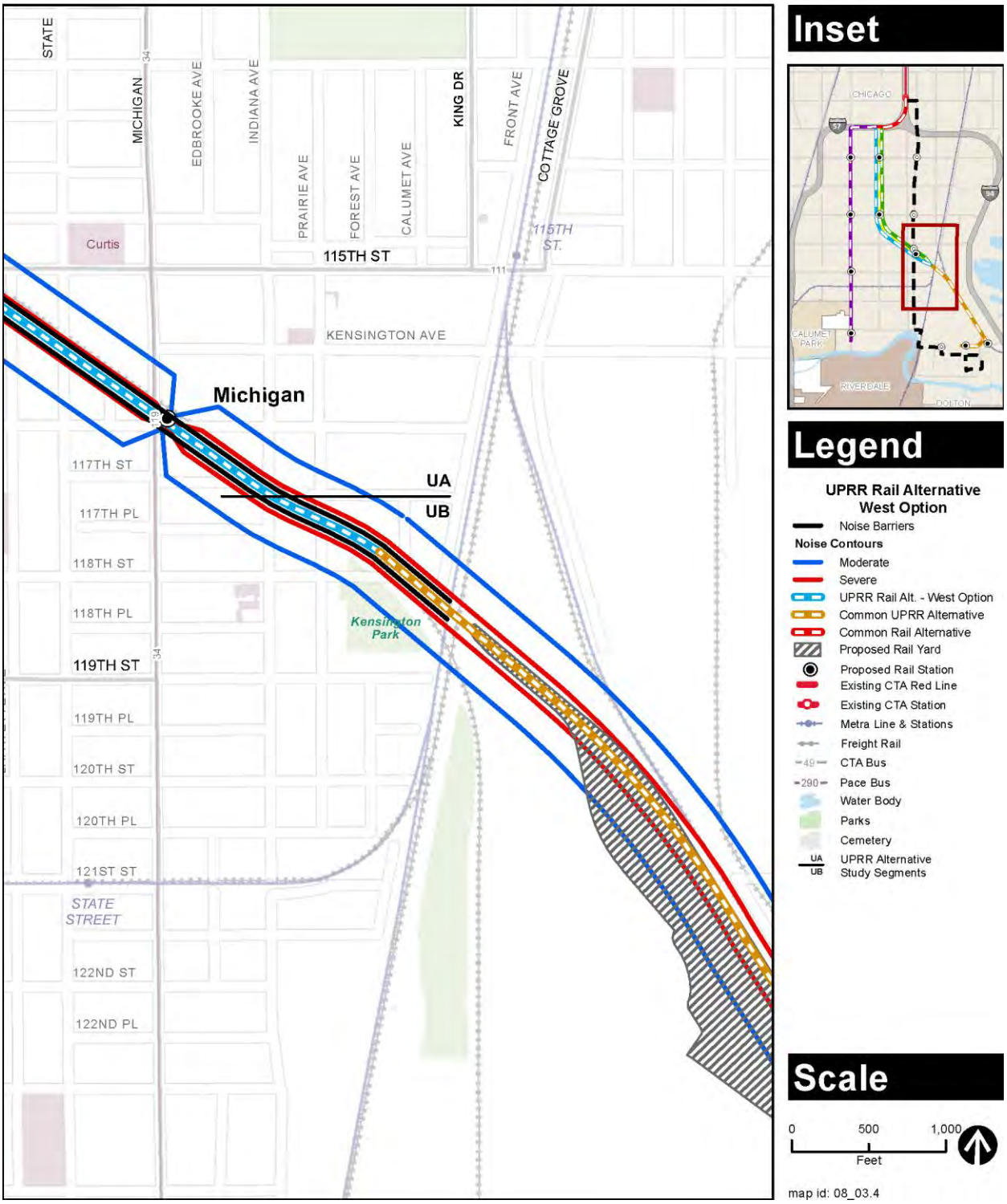

Figure 5-3d: Union Pacific Railroad Rail Alternative - West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

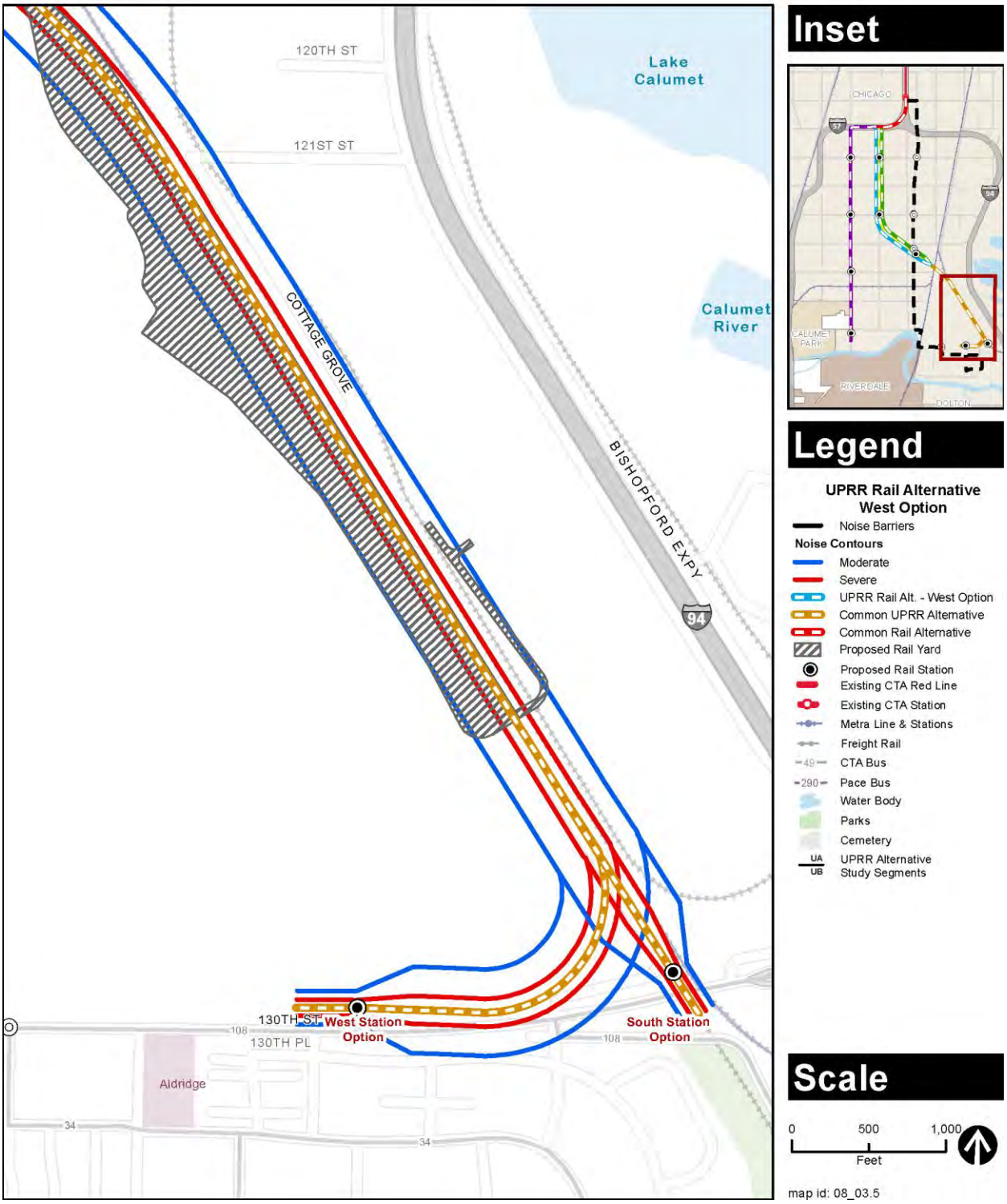

Figure 5-3e: Union Pacific Railroad Rail Alternative - West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

5.5.1.1 Segment UA

Segment UA of the UPRR Rail Alternative is north of Michigan Avenue. As shown in Figure 5-2, there would be a substantial number of affected receptors along this section of the rail corridor where the train speeds reach 55 mph.

5.5.1.2 Segment UB

Segment UB of the UPRR Rail Alternative is south of Michigan Avenue. Although there would be affected receptors between Michigan Avenue and the Metra Electric District Rail Corridor, there would be no affected receptors south of the Metra Electric District Rail Corridor. This area of the rail corridor consists primarily of industrial land use.

5.5.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative - West Option

As it would be for the UPRR ROW and East Options, this alternative would include the construction of an aerial structure, stations, and parking facilities at the stations. Construction noise impacts would be the same as for the UPRR ROW and East Options. Construction noise levels are not expected to exceed the FTA recommended construction noise limits. As a result, construction noise mitigation measures were not considered. This analysis assumes that the same noise-reducing construction practices described for the UPRR ROW Option would be used for the West Option.

As with the UPRR ROW and East Options, no vibration impacts are anticipated from construction. The impact threshold distances were calculated for vibration and it was determined from the analysis that most of the equipment can be operated without risk of damage at distances of 15 feet or greater from non-engineered timber and masonry buildings or at distances of 8 feet or greater from reinforced concrete buildings. Pile-driving activities would be avoided in the vicinity of the historic Roseland Pumping Station.

5.5.3 120th Street Yard and Shop

Because there are no sensitive receptors in the vicinity of the 120th Street yard and shop site and because of the much lower amount of train activity in and out of the facility and the lower train speeds compared to other parts of the project corridor, the noise levels generated in this area are anticipated to be lower than the noise levels generated along other parts of the project corridor even with noise generated by maintenance activities conducted at the yard and shop. As a result, the noise generated at the 120th Street yard and shop would not exceed the FTA impact criteria at the nearest sensitive receptors. Therefore, noise mitigation was not considered at the 120th Street yard and shop. In addition, because of the distance from the nearest noise sensitive receptors, there would be no construction noise impacts.

5.6 Halsted Rail Alternative

In accordance with FTA guidance, for residential receptors, the L_{dn} measurements are used to determine the FTA moderate and severe impact criteria for the Halsted Rail Alternative using the curves in Figure 3-1. Table 5-7 shows the measured L_{dn} at each of the six measurement locations

along the Halsted Rail Alternative, along with the corresponding FTA moderate and severe noise impact criteria.

Table 5-7: Federal Transit Administration Moderate and Severe Impact Criteria for the Halsted Rail Alternative

Location Number	Receptor Description	Measured Noise Level (L_{dn})	FTA Moderate Impact Criterion	FTA Severe Impact Criterion
1	Residence at 9901 S. Emerald Avenue	65.0 dBA	60.8 dBA	66.2 dBA
2	Residence at 10229 S. Halsted Street	64.2 dBA	60.3 dBA	65.7 dBA
3	Residence at 11005 S. Halsted Street	60.5 dBA	58.1 dBA	63.7 dBA
4	Residence along 119th Street	58.6 dBA	57.0 dBA	62.7 dBA
5	Residence at 12125 S. Halsted Street	63.7 dBA	60.0 dBA	65.4 dBA
6	Residence at 12412 S. Halsted Street	61.6 dBA	58.7 dBA	64.2 dBA

Notes: L_{dn} = day-night average sound level, FTA = Federal Transit Administration, dBA = A-weighted decibels

For the Halsted Rail Alternative, the trains would operate on an aerial structure with continuous welded rail. For the Halsted Rail Alternative, the aerial structure would be located down the middle of Halsted Street. Based on the headway times shown in Table 5-3, the total number of northbound and southbound trains over a 24-hour period would be 378 (286 daytime trains between 7 AM and 10 PM, and 92 nighttime trains between 10 PM and 7 AM). Based on the number of daytime and nighttime trains traveling at a speed of 55 mph, the 24-hour L_{dn} would be 76.3 dBA at a distance of 50 feet. Extrapolating this noise level using the distance attenuation methodology described in the FTA guidance manual results in the impact distances within which moderate and severe noise impacts are expected to occur for the Halsted Rail Alternative. Table 5-8 lists the moderate and severe impact distances for the Halsted Rail Alternative for the trains traveling at 55 mph. The impact distances shown in Table 5-8 are substantially greater than the impact distances for the UPRR Rail Alternatives because of the lower measured L_{dn} noise levels along Halsted Street. These lower measured noise levels result in lower moderate and severe impact criteria based on the FTA curves in Figure 3-1. As a result, the impact distances for moderate and severe impact for the Halsted Rail Alternative are substantially greater than the impact distances for the UPRR Rail Alternatives, even though the noise generated by the trains would be the same.

Table 5-8: Federal Transit Administration Moderate and Severe Impact Distances for the Halsted Rail Alternative (at 55 miles per hour)

Location Number	Receptor Description/(Area of Impact)	Measured Noise Level (L_{dn})	FTA Moderate Impact Distance	FTA Severe Impact Distance
1	Residence at 9901 S. Emerald Avenue/ (along I-57)	65.0 dBA	540 feet	235 feet
2	Residence at 10229 S. Halsted Street/ (from I-57 to 103rd Street)	64.2 dBA	590 feet	255 feet
3	Residence at 11005 S. Halsted Street/ (from 103rd Street to 119th Street)	60.5 dBA	810 feet	345 feet
4	Residence along 119th Street/ (along 119th Street)	58.6 dBA	73 feet	20 feet
5	Residence at 12125 S. Halsted Street/ (from 119th Street to 124th Street)	63.7 dBA	610 feet	265 feet
6	Residence at 12412 S. Halsted Street/ (from 124th Street to 128th Street)	61.6 dBA	740 feet	320 feet

Notes: L_{dn} = day-night average sound level, FTA = Federal Transit Administration, dBA = A-weighted decibels

Near the stations, where the trains would decelerate and accelerate as they enter and leave the station area, the trains were assumed to decelerate from a speed of 55 mph within a distance of approximately 200 feet from the train station, as a conservative estimate. A 200-foot distance was also assumed for the train acceleration to 55 mph when leaving the station. As a result, the noise contours narrow near the stations. At the stations, where the trains would be idling, the 24-hour L_{dn} would be 65.0 dBA. Extrapolating this noise level using the distance attenuation methodology described in the FTA guidance manual results in the impact distances within which moderate and severe noise impacts are expected to occur for the Halsted Rail Alternative. Table 5-9 indicates the moderate and severe impact distances for the Halsted Rail Alternative within a distance of approximately 200 feet north and south of the station platforms.

Table 5-9: Federal Transit Administration Moderate and Severe Impact Distances for the Halsted Rail Alternative (near the stations)

Location Number	Receptor Description/(Station Location)	Measured Noise Level (L_{dn})	FTA Moderate Impact Distance	FTA Severe Impact Distance
2	Residence at 10229 S. Halsted Street/ (103rd Street station)	64.2 dBA	105 feet	45 feet
3	Residence at 11005 S. Halsted Street/ (111th Street station)	60.5 dBA	145 feet	41 feet
5	Residence at 12125 S. Halsted Street/ (119th Street station)	63.7 dBA	110 feet	53 feet
6	Residence at 12412 S. Halsted Street/ (Vermont station)	61.6 dBA	130 feet	44 feet

Notes: L_{dn} = day-night average sound level, FTA = Federal Transit Administration, dBA = A-weighted decibels

Using the impact distances from Tables 5-8 and 5-9, noise contours were developed for the Halsted Rail Alternative to show the areas of moderate and severe impact along the project corridor. Figures 5-4a through 5-4e show the Halsted Rail Alternative with both the moderate and severe noise impact contours. Along I-57, the moderate noise impact distance would be 540 feet from the centerline of the RLE aerial structure. From I-57 to 103rd Street, the moderate noise impact distance would be 590 feet. From 103rd Street to 119th Street, the moderate noise impact distance would be 810 feet. From 119th Street to 128th Street, the moderate noise impact distance would be 740 feet. At the 103rd Street station, the moderate noise impact distance would be 105 feet. At the 111th Street station, the moderate noise impact distance would be 145 feet. At the 119th Street station, the moderate noise impact distance would be 110 feet. At the Vermont Street station, the moderate noise impact distance would be 130 feet. Approximately 200 feet north and south of the stations would be a transition zone where the trains decelerate and accelerate as they enter and leave the station area.

Along I-57, the severe noise impact distance would be 235 feet. From I-57 to 103rd Street, the severe noise impact distance would be 255 feet. From 103rd Street to 119th Street, the severe noise impact distance would be 345 feet. From 119th Street to 128th Street, the severe noise impact distance would be 320 feet. At the 103rd Street station, the severe noise impact distance would be 45 feet. At the 111th Street station, the severe noise impact distance would be 41 feet. At the 119th Street station, the severe noise impact distance would be 53 feet. At the Vermont Street station, the severe noise impact distance would be 44 feet.

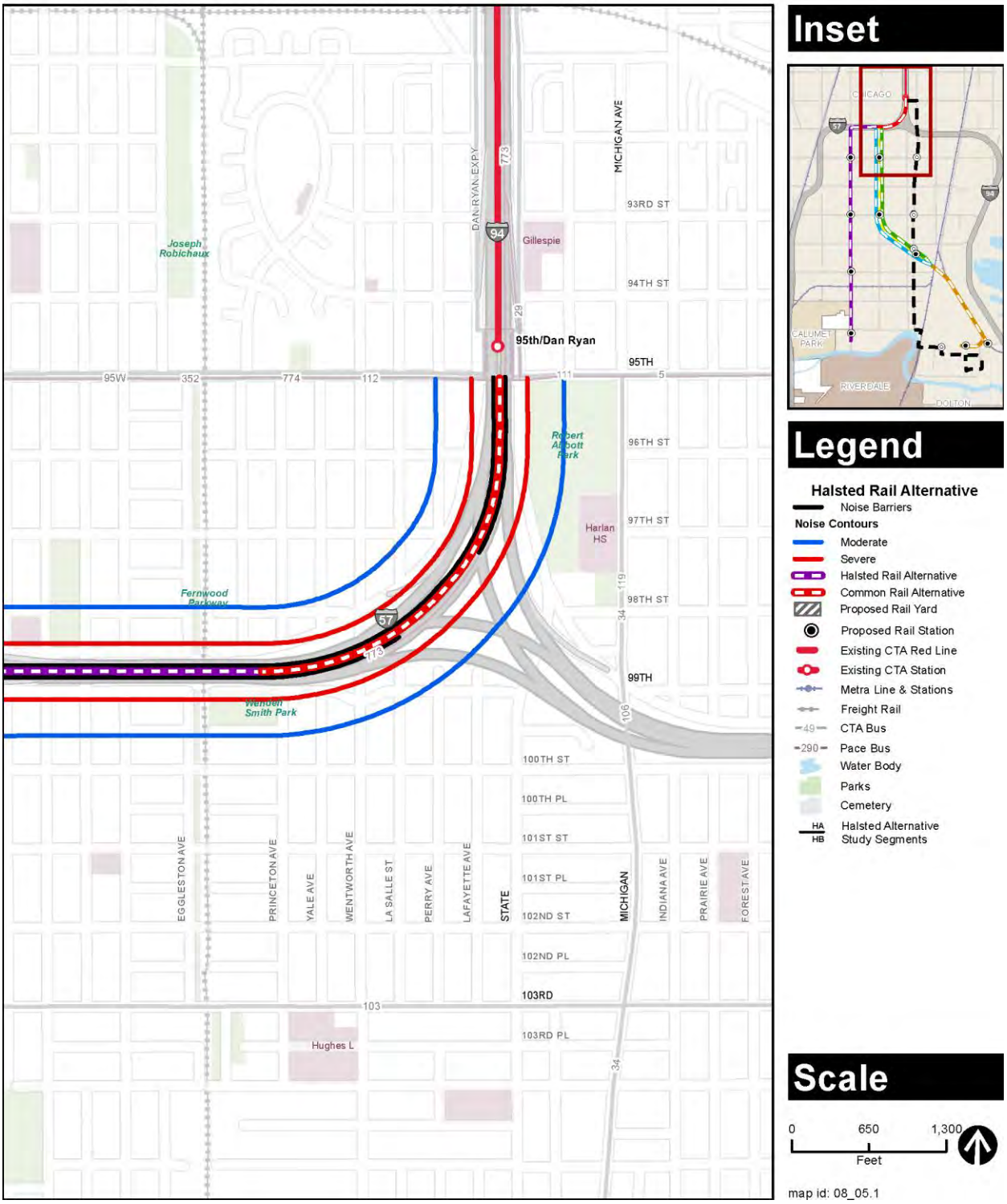

Figure 5-4a: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

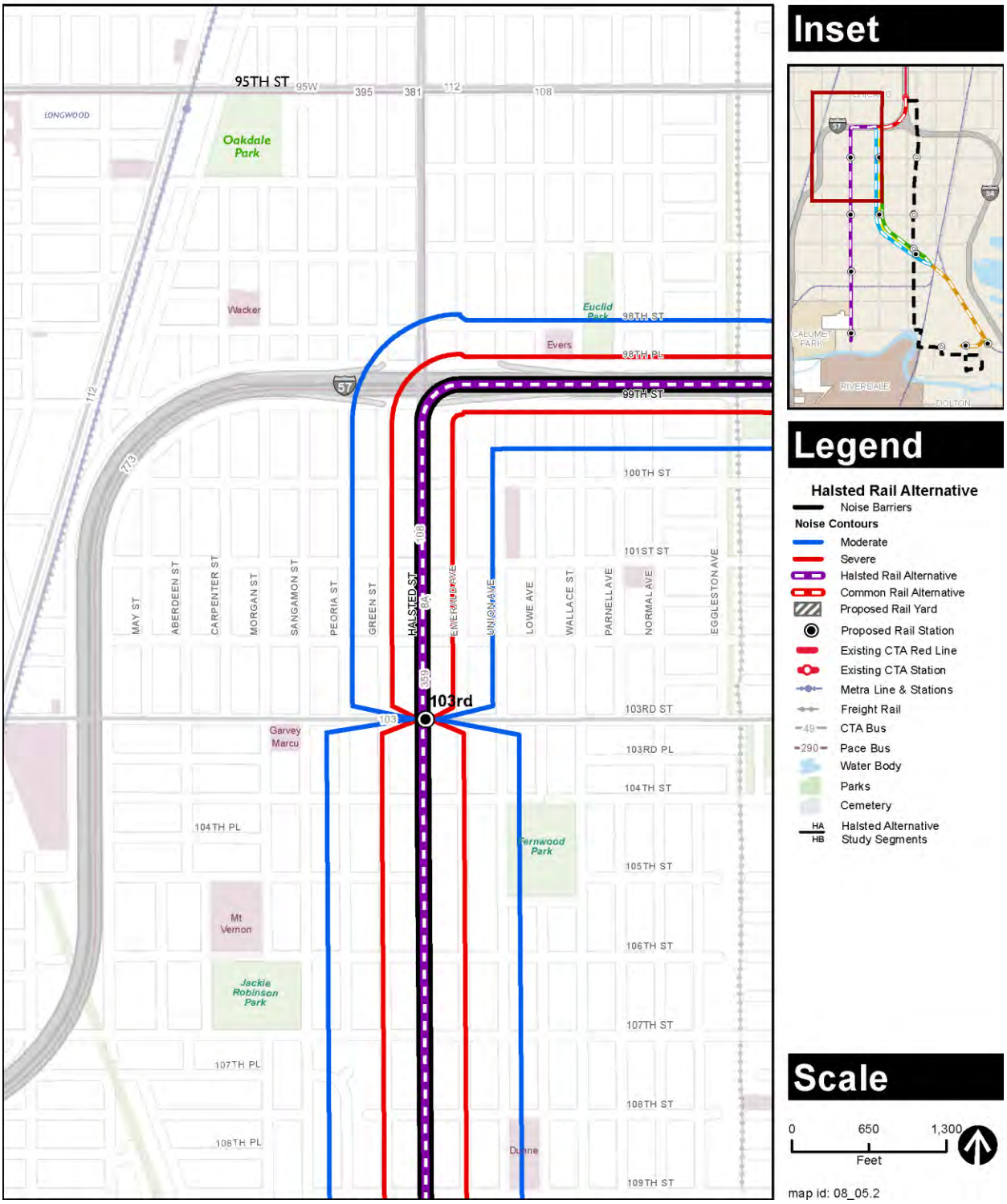

Figure 5-4b: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

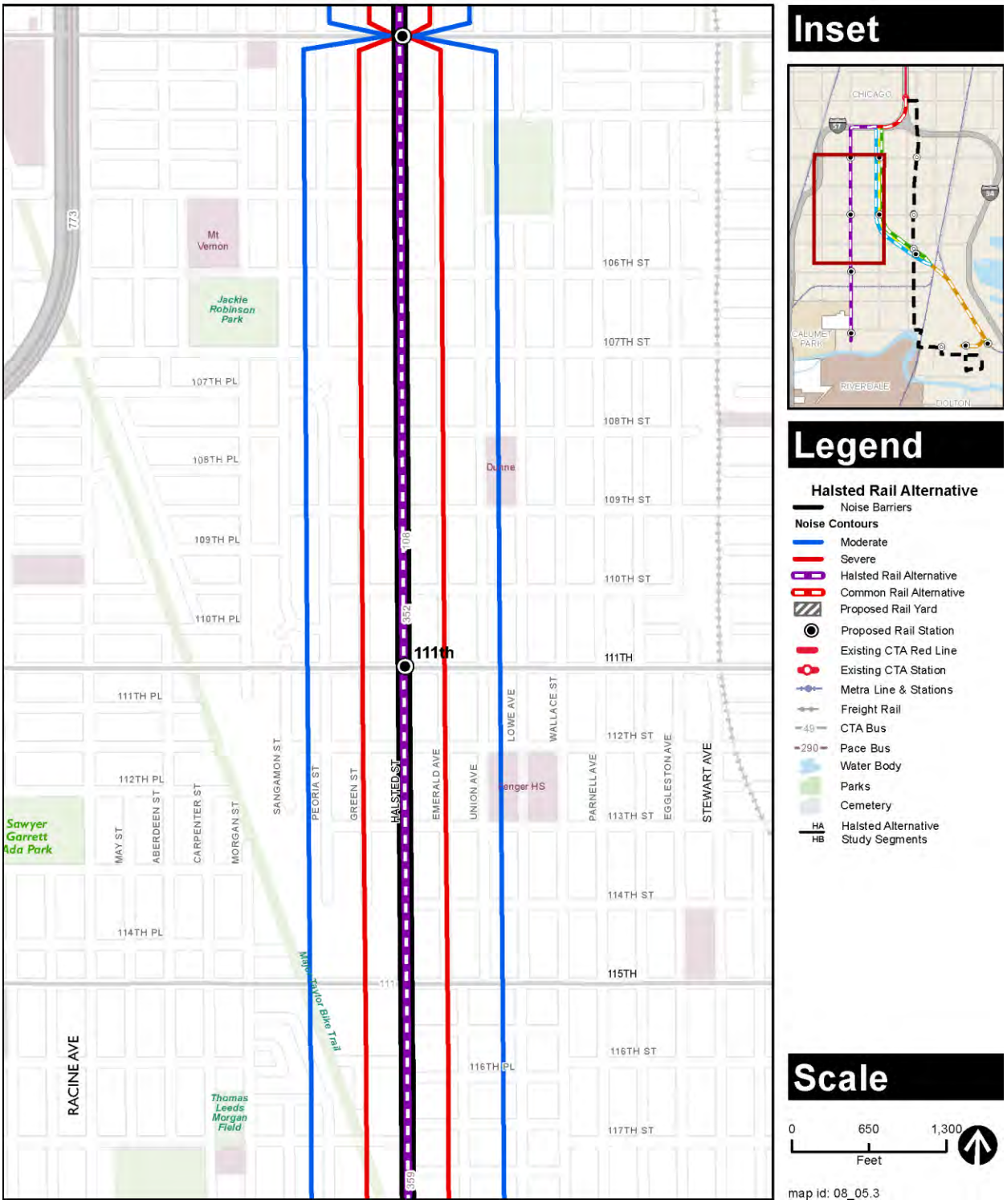

Figure 5-4c: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

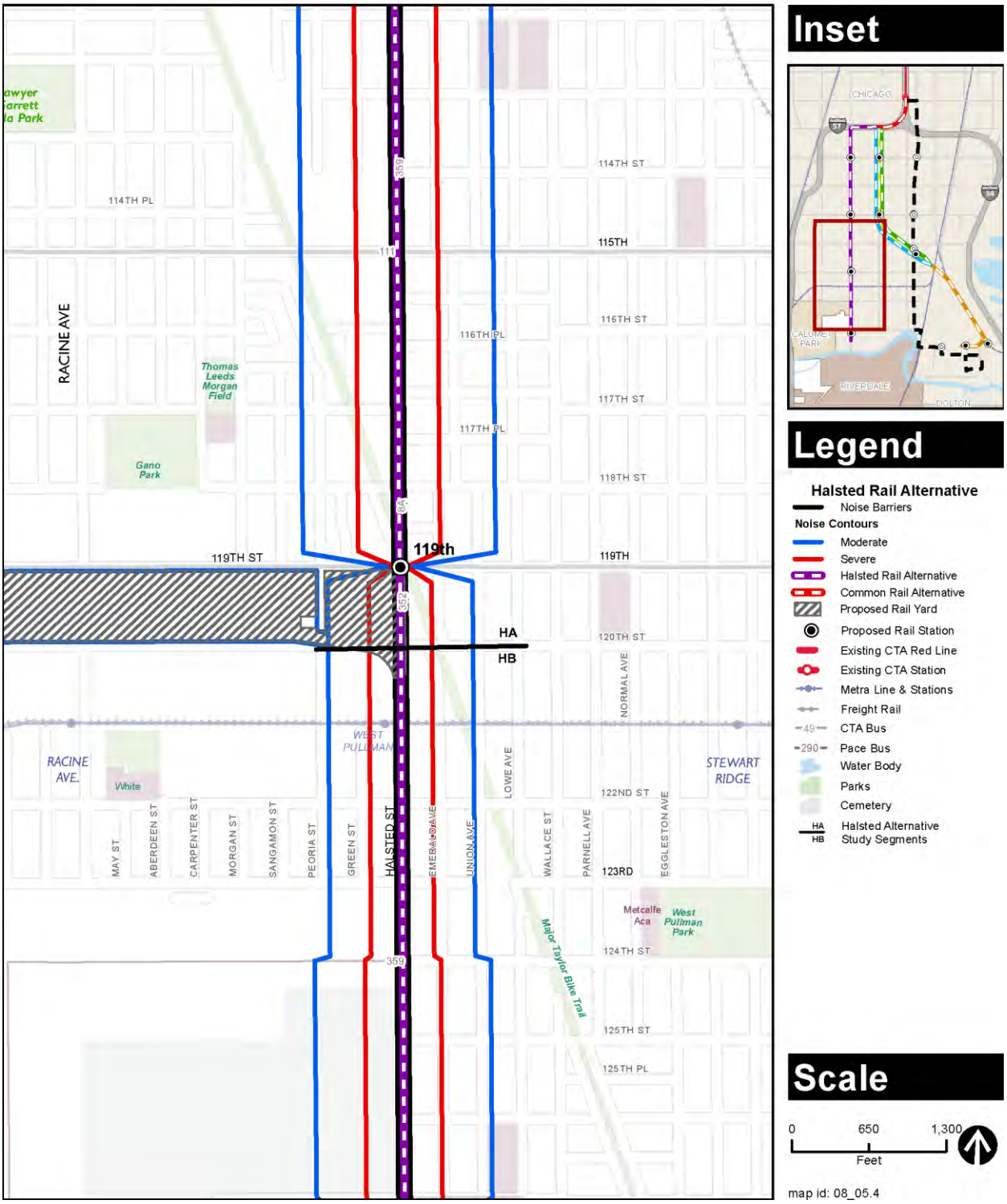

Figure 5-4d: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

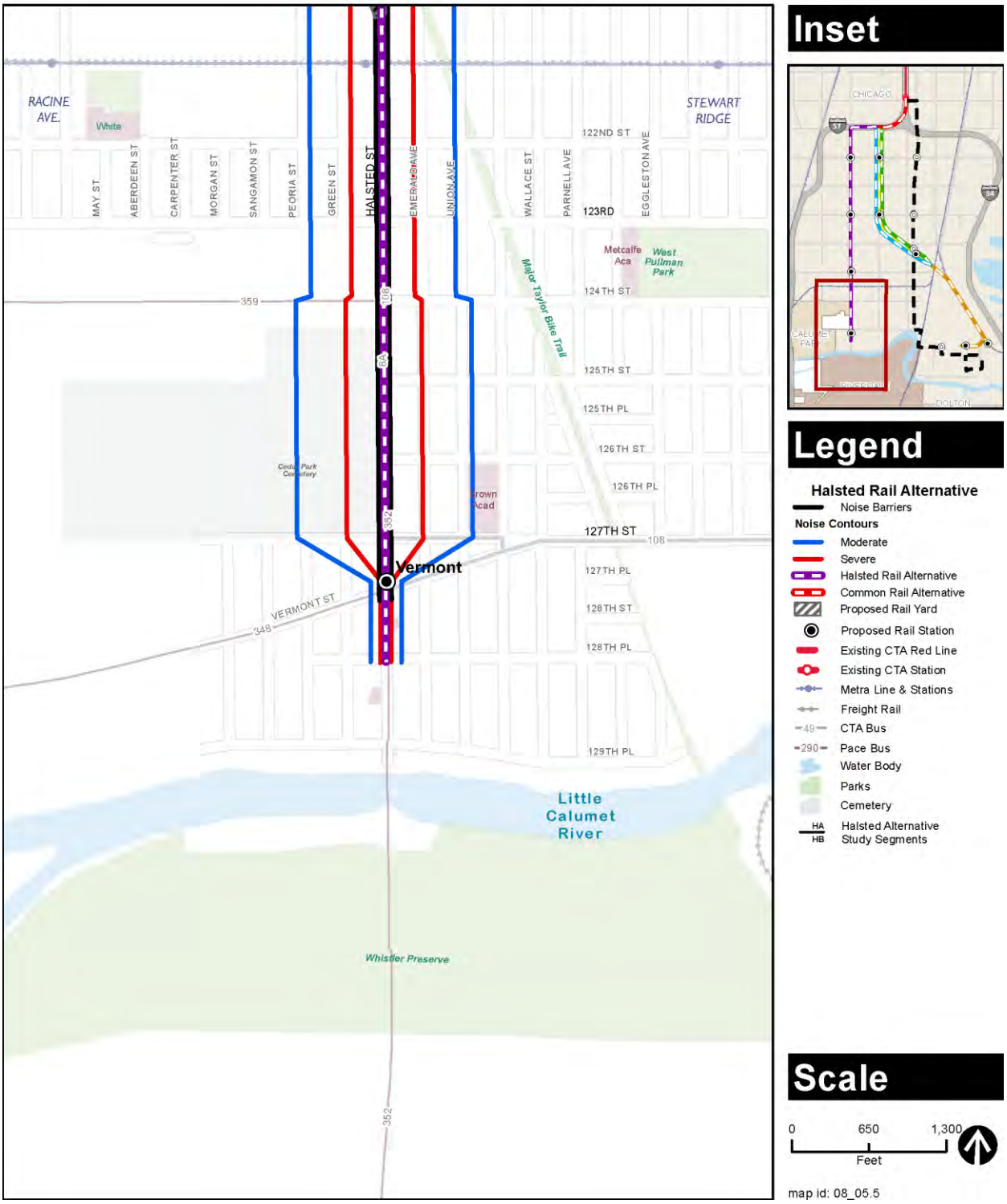

Figure 5-4e: Halsted Rail Alternative with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

5.6.1 Permanent Impacts and Mitigations – Halsted Rail Alternative

Figures 5-4a through 5-4e show the Halsted Rail Alternative with both the moderate and severe noise impact contours. Mitigation measures for noise-affected residential receptors along the project corridor were considered. A noise barrier approximately 4 feet in height installed along the outer tracks of the aerial structure could reduce the wheel/rail noise that would propagate into the surrounding community. A noise barrier approximately 4 feet in height could provide a 10-dBA reduction in noise level in the surrounding community. Figures 5-4a through 5-4e show the location of the proposed noise barriers for the Halsted Rail Alternative.

With regard to vibration, no mitigation measures are proposed. The aerial structure with continuously welded rail could result in vibration levels that would be below the FTA impact criterion of 72 VdB at the residential receptors along the project corridor.

5.6.1.1 Segment HA

Segment HA of the Halsted Rail Alternative is north of 119th Street. As shown in Figure 5-4, there would be a substantial number of affected receptors along this section of the rail corridor in areas where the train speeds reach 55 mph.

5.6.1.2 Segment HB

Segment HB of the Halsted Rail Alternative is south of 119th Street. As shown in Figure 5-4, there would be a substantial number of affected receptors along this section of the rail corridor in areas where the train speeds reach 55 mph.

5.6.2 Construction Impacts and Mitigations – Halsted Rail Alternative

As it would be for the other build alternatives, this alternative would include the construction of an aerial structure, stations, and parking facilities at the stations. Construction noise impacts would be the same as for the other build alternatives. Construction noise levels are not expected to exceed the FTA recommended construction noise limits. As a result, construction noise mitigation measures were not considered. This analysis assumes that the same noise-reducing construction practices described for the UPRR ROW Option would be used for all of the build alternatives, including the Halsted Rail Alternative.

As with the UPRR ROW Option, no vibration impacts are anticipated from construction. The impact threshold distances were calculated for vibration and it was determined from the analysis that most of the equipment can be operated without risk of damage at distances of 15 feet or greater from non-engineered timber and masonry buildings or at distances of 8 feet or greater from reinforced concrete buildings.

5.6.3 119th Street Yard and Shop

Because of the much lower amount of train activity in and out of the 119th Street yard and shop and the lower train speeds compared to other parts of the project corridor, the noise levels generated in this area (an L_{dn} of 58 dBA at a distance of 50 feet) are anticipated to be lower than the noise levels generated along other parts of the project corridor even with noise generated by

maintenance activities conducted at the yard and shop. . The Kroc Center is located more than 135 feet to the northwest of the yard and shop site and is not within the noise impact contours. As a result, the noise generated at the 119th Street yard and shop would have no impact noise sensitive receptors along 119th Street.

5.6.3.1 Permanent Impacts and Mitigations

The noise generated at the 119th Street yard and shop would have no impact on noise sensitive receptors along 119th Street. As a result, noise mitigation was not considered for the 119th Street yard and shop.

5.6.3.2 Construction Impacts and Mitigations

Construction noise levels are not expected to exceed the FTA recommended construction noise limits described in Table 3-3. As a result, construction noise mitigation measures were not considered. Construction activities would, however, be restricted to daytime hours, and all construction equipment exhaust mufflers would be kept in a state of good repair. To the maximum extent possible, vehicles that are not in use would not remain idling on the construction site.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

The No Build Alternative assumes no change in the existing conditions and therefore no change to the existing noise and vibration levels would occur within the project area. As a result, the No Build Alternative could result in no impact, and therefore no mitigation was considered.

6.2 Bus Rapid Transit Alternative

There would be noise impacts associated with the BRT Alternative as shown in Figure 5-1. Noise mitigation would not be feasible because the buses would travel along local streets that have small blocks, numerous cross streets, and driveways.

6.3 Union Pacific Railroad Rail Alternative – Right-of-Way Option

The UPRR Rail Alternative ROW Option would only occur if the freight relocation project were implemented prior to RLE Project implementation. As a result, the noise levels along the rail corridor would decrease by 5 to 7 dBA due to the removal of the freight operations. Because of the reduction in noise level, noise mitigation was not considered for the UPRR Rail Alternative ROW Option.

The aerial structure with continuous welded rail could result in vibration levels that are below the FTA impact criterion of 72 VdB for residential receptors along the project corridor. As a result, vibration mitigation measures are not proposed.

6.4 Union Pacific Railroad Rail Alternative – East Option

A noise barrier approximately 4 feet in height on the aerial structure would provide a 7 to 10-dBA reduction in the projected noise level in the surrounding community. Based on a noise reduction of 10 dBA, the moderate noise impact distance for trains traveling at 55 mph would decrease from 280 feet without mitigation to 60 feet from the centerline of the tracks with mitigation. The severe noise impact distance would be less than 20 feet with mitigation. A noise barrier approximately 4 feet in height on the aerial structure that would provide a 10-dBA reduction could result in no affected receptors remaining after mitigation.

The aerial structure with continuous welded rail could result in vibration levels that are below the FTA impact criterion of 72 VdB for residential receptors along the project corridor. As a result, vibration mitigation measures are not proposed.

6.5 Union Pacific Railroad Rail Alternative – West Option

Noise impacts remaining after mitigation would be the same as for the East Option, but would apply to distances from the centerline of the West Option alignment.

The aerial structure with continuous welded rail could result in vibration levels that are below the FTA impact criterion of 72 VdB for residential receptors along the project corridor. As a result, vibration mitigation measures are not proposed.

6.6 Halsted Rail Alternative

A noise barrier approximately 4 feet in height on the aerial structure would provide a 7 to 10-dBA reduction in projected noise level in the surrounding community. Based on a noise reduction of 10 dBA, the moderate noise impact distance for trains traveling at 55 mph would decrease from the distances shown in Table 5-8, to distances ranging from 115 feet to 180 feet from the centerline of the aerial structure. The severe noise impact distance would be less than 45 feet with mitigation. As a result, the Halsted Rail Alternative after mitigation (i.e., including a noise barrier approximately 4 feet in height on the aerial structure) would still result in moderate noise impacts along Halsted Street. No severely affected receptors would remain after mitigation.

The aerial structure with continuous welded rail could result in vibration levels that are below the FTA impact criterion of 72 VdB for residential receptors along the project corridor. As a result, vibration mitigation measures are not proposed.

6.6.1 119th Street Yard and Shop

The noise generated at the 119th Street yard and shop would have no impact to noise sensitive receptors along 119th Street. As a result, noise mitigation was not considered for the 119th Street yard and shop.

Because of the slow speed of the trains entering and leaving the 119th Street yard and shop, vibration levels would be below the FTA impact criterion of 72 VdB for residential receptors. As a result, vibration mitigation measures are not proposed.

Section 7
References Cited

Chicago Transit Authority (CTA). 2012. Personal Communication - Email from Chicago Transit Authority (Sonali Tandon, Red Line Extension Project Manager) regarding RLE Track Structure Assumptions for noise and vibration analysis (aerial structure with closed deck and continuous welded rail), dated 3 October 2012.

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Appendix A
2014-2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Noise and Vibration

In early 2015, CTA refined the general assessment that was conducted in 2012-2013. CTA identified individual noise-sensitive receivers within the moderate and severe impact contours and conducted a field verification of noise-sensitive receiver locations on March 5, 2015. Residential noise-sensitive receivers within the moderate and severe impact contours were counted unless identified as potentially displaced properties. The land use in the vicinity of the corridor is predominantly residential (Category 2). Three parks, six schools, and four churches (Category 3) are near the corridor and were assessed for impacts. During the field verification, numerous uninhabited residences were identified scattered throughout the area. Although they are not occupied and are not likely to be occupied, these properties are included in the counts of noise-sensitive receivers because they are not contiguous and are adjacent to occupied homes. The land use in the area is expected to continue to be residential, and it is possible that these properties may be resold for residential development. The majority of these houses were between 105th Street and 115th Street on the east side of the corridor and along Eggleston Avenue from 107th Street south on the west side of the corridor. Although these areas would be affected and there are noise-sensitive receivers in the area, the overall impacts would likely be less because the properties are not in use. The identified affected noise-sensitive receivers were counted individually but mapped as sensitive receiver clusters because of the small size of the individual parcels. The clusters of receivers were determined to be similar distances from the proposed tracks and where the CTA operating conditions, such as train speed, were determined to be similar.

The revised alignment along I-57 would result in different permanent noise impacts for both the East and West Options than what was presented previously.

Operating assumptions are based on the operating plan for 95th Street Station because service frequency on the proposed service is anticipated to be the same as for the Red Line. March 2016 average daytime headway at 95th Street Station is 6.1 minutes, which is consistent with the daytime average headway used for noise modeling. Service frequency varies by the time of day and by line; therefore, CTA provides frequency ranges in public schedules. The service frequency would be adjusted to accommodate demand once the proposed project service has been implemented.

Table 1 and **Figures 1a through 1e** summarize the sensitive receivers within the moderate and severe noise impact contours for the East Option.

Table 1: Sensitive Receivers within Moderate and Severe Noise Impact Contours - Union Pacific Railroad Alternative East Option

Area of Impact	West of Track Structure	East of Track Structure	Total
95th Street to 103rd Street	167 Moderate 25 Severe	108 Moderate 22 Severe	275 Moderate 47 Severe
103rd Street to 111th Street	1 Moderate 0 Severe	107 Moderate 25 Severe	108 Moderate 25 Severe
111th Street to Michigan Avenue at 116th Street	37 Moderate 0 Severe	98 Moderate 4 Severe	135 Moderate 4 Severe
Michigan Avenue to CN/ME Rail Corridor	16 Moderate 0 Severe	40 Moderate 7 Severe	56 Moderate 7 Severe
Total	**221 Moderate 25 Severe**	**353 Moderate 58 Severe**	**574 Moderate 83 Severe**

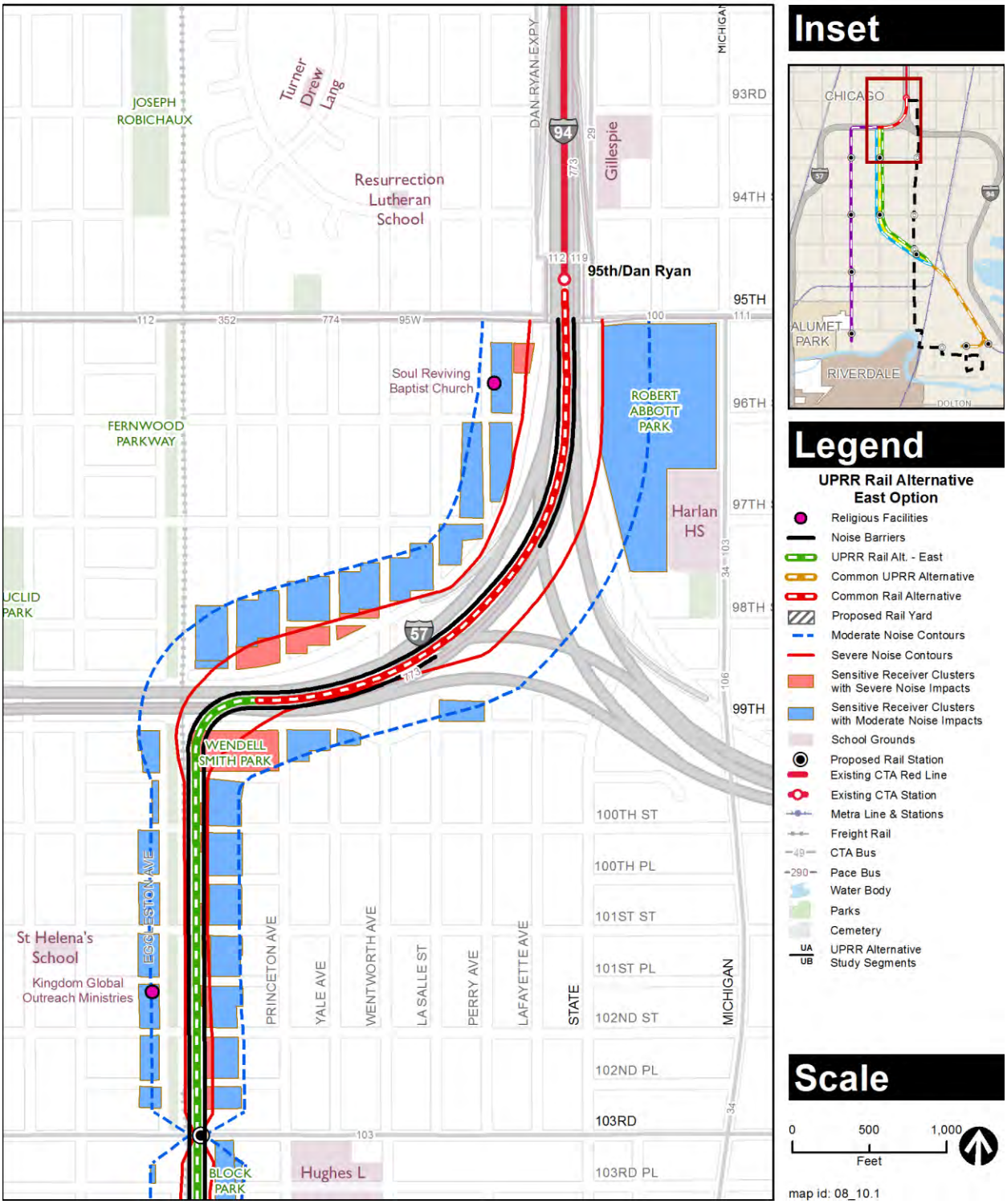

Figure 1a: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

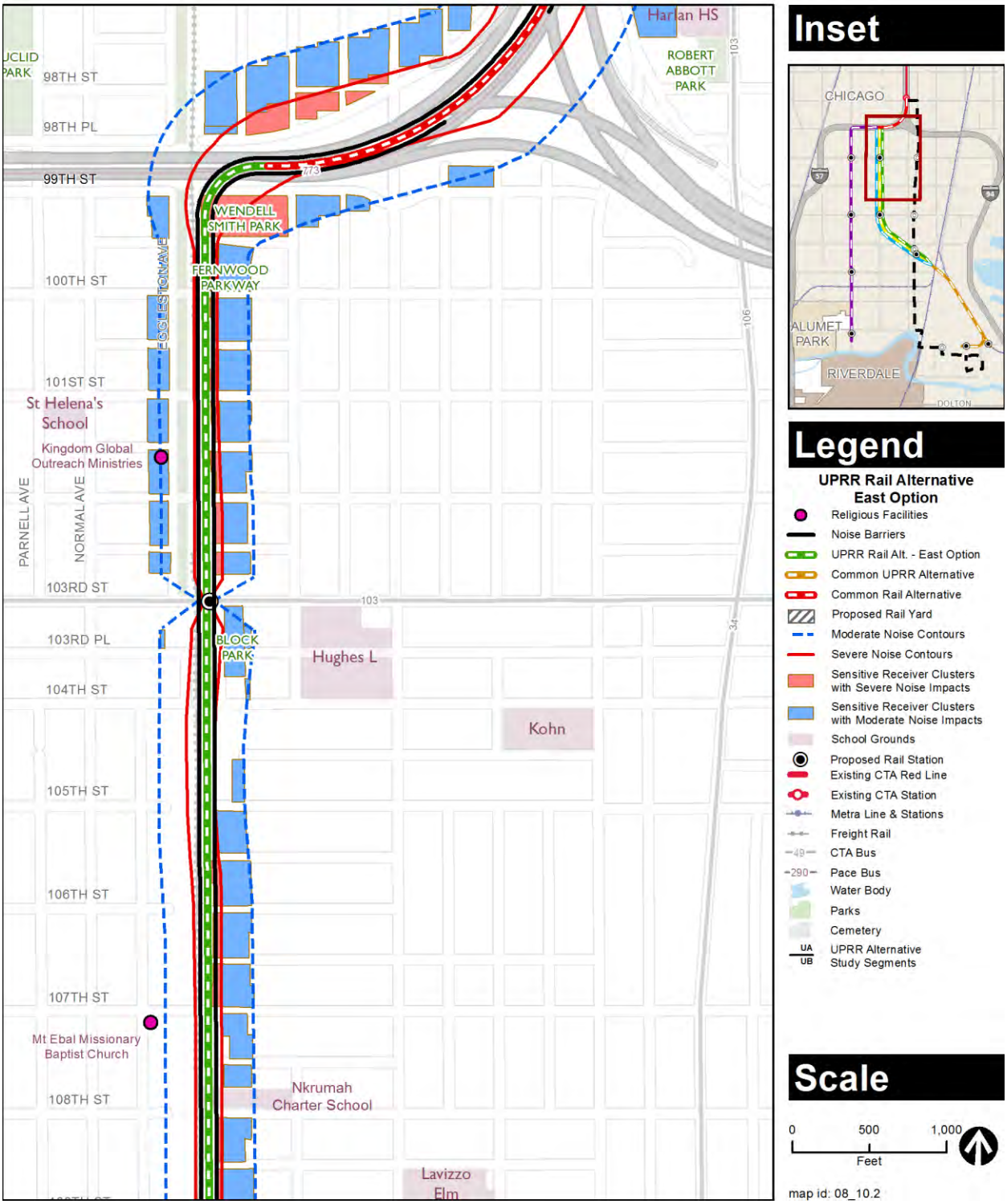

Figure 1b: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

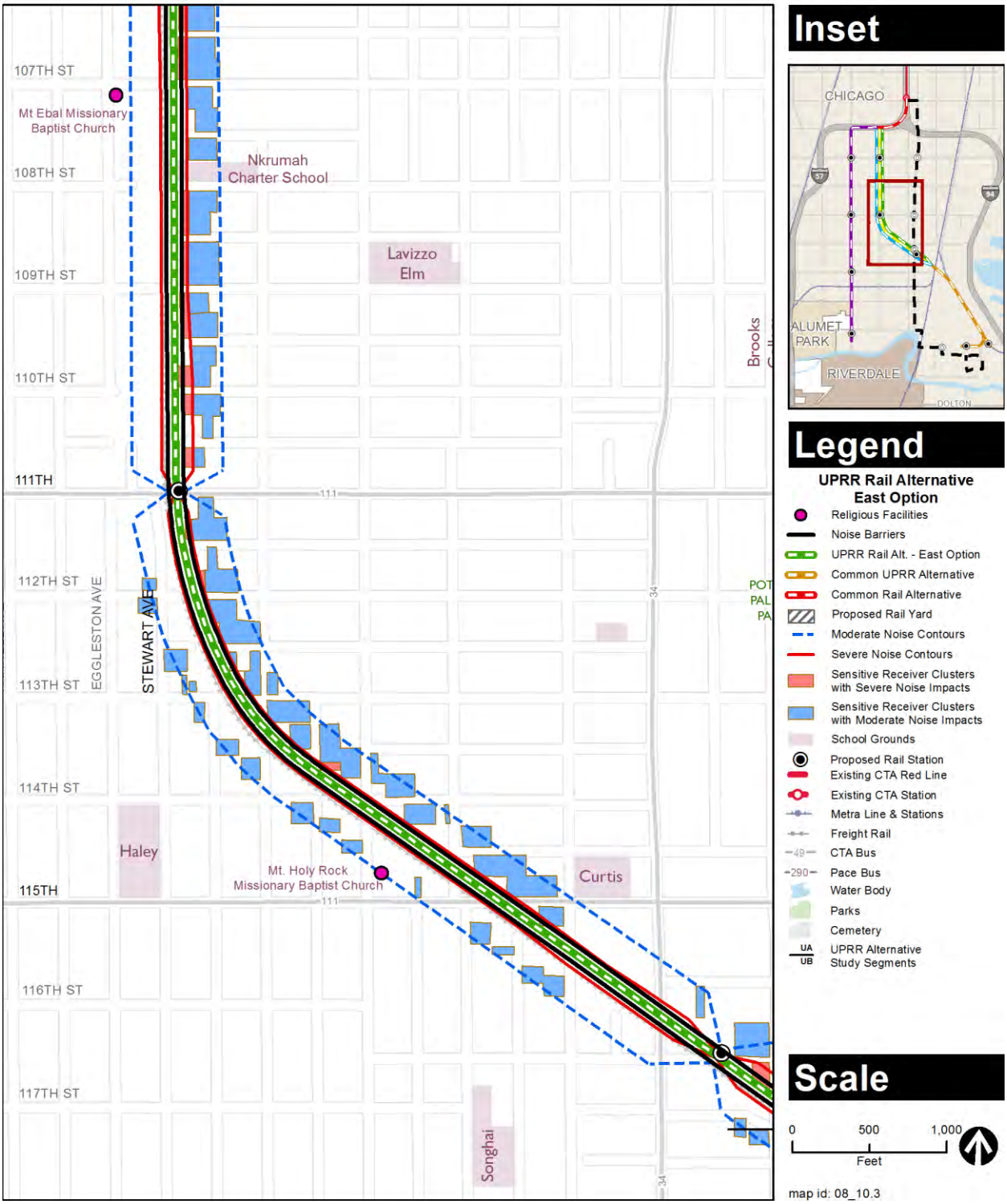

Figure 1c: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

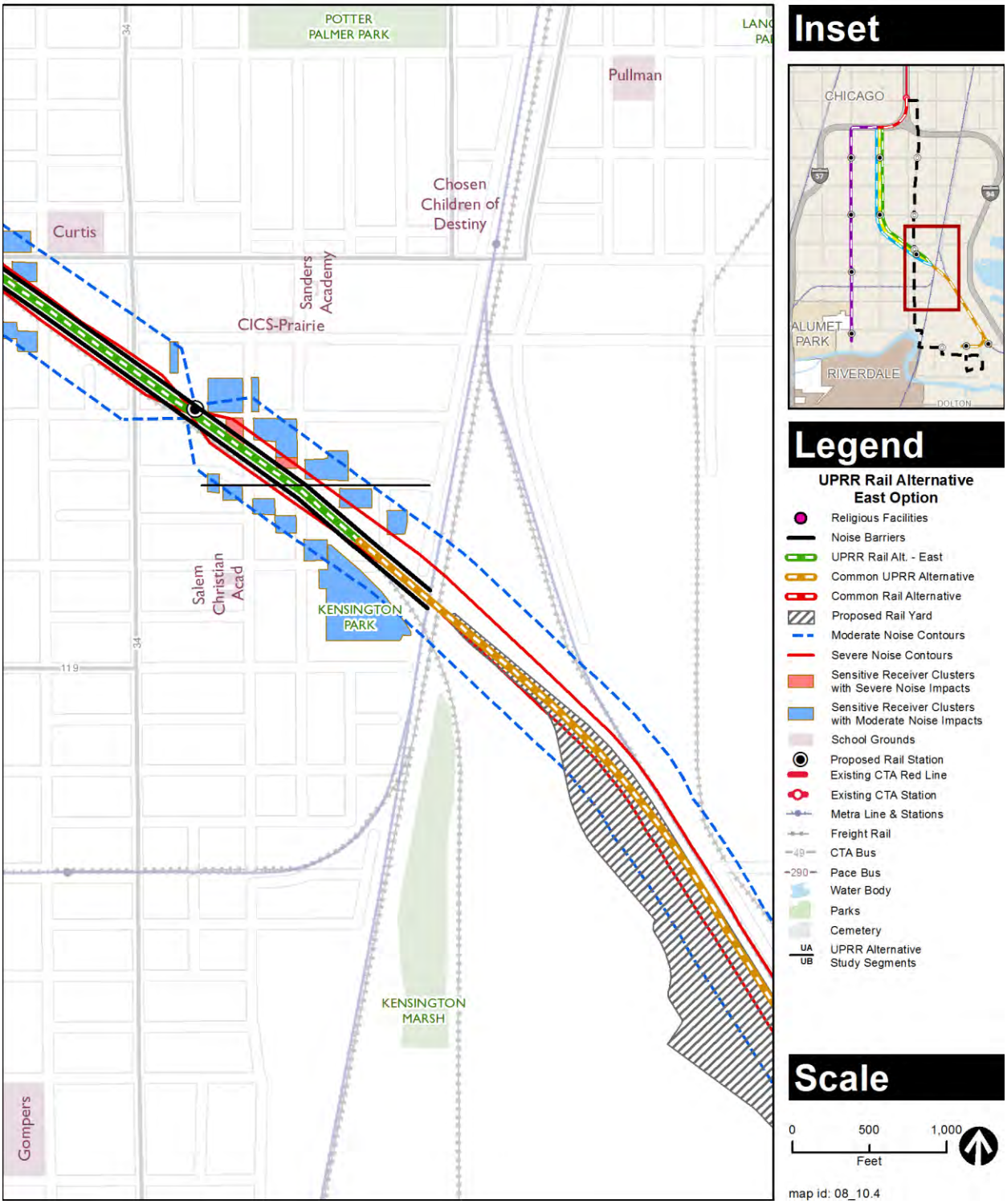

Figure 1d: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

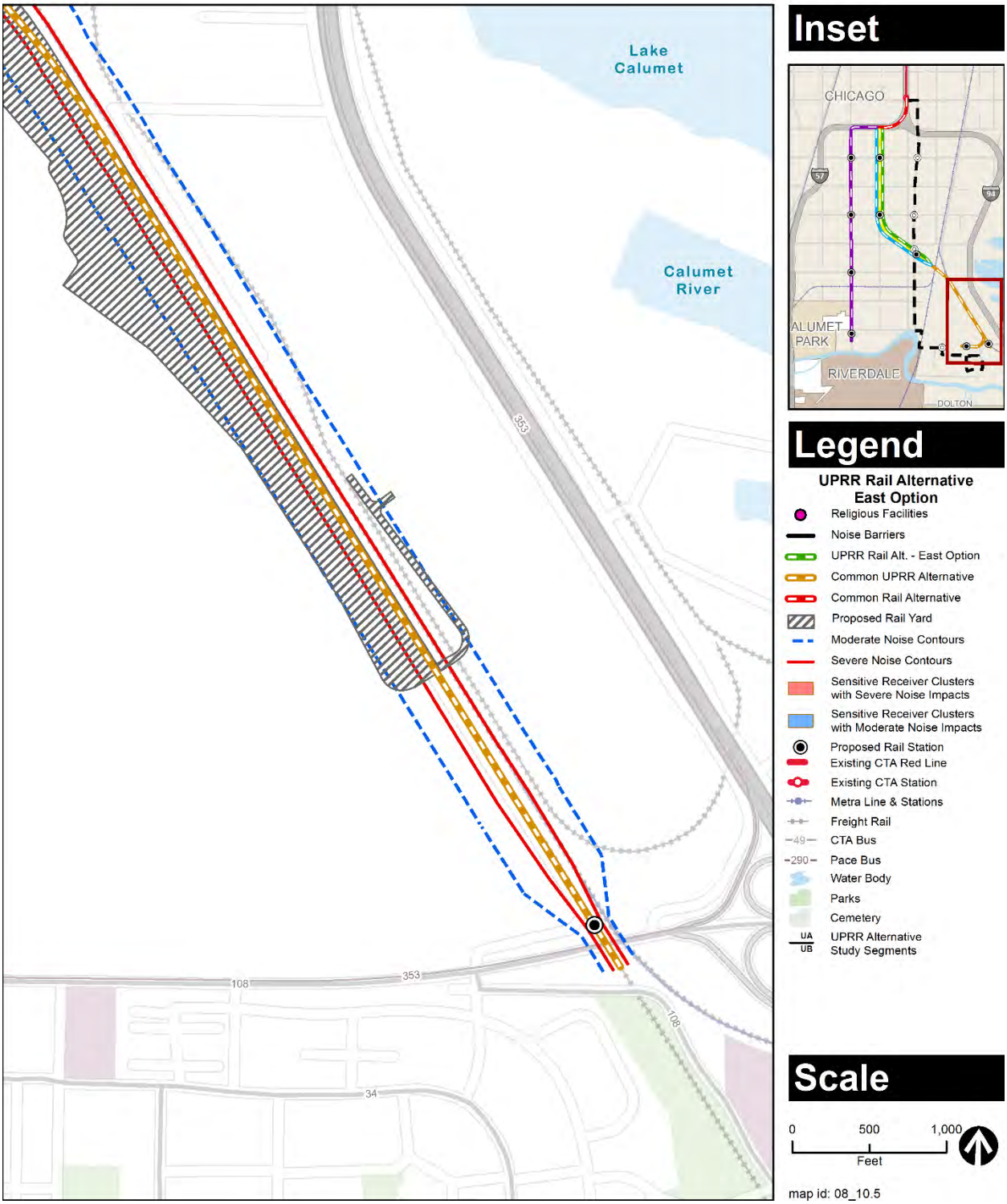

Figure 1e: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

Table 2 and **Figures 2a through 2e** summarize the sensitive receivers within the moderate and severe noise impact contours for the West Option.

Table 2: Sensitive Receivers within Moderate and Severe Noise Impact Contours – Union Pacific Railroad Alternative West Option

Area of Impact	West of Track Structure	East of Track Structure	Total
95th Street to 103rd Street	209 Moderate 32 Severe	81 Moderate 1 Severe	290 Moderate 33 Severe
103rd Street to 111th Street	125 Moderate 0 Severe	62 Moderate 0 Severe	187 Moderate 0 Severe
111th Street to Michigan Avenue at 116th Street	145 Moderate 9 Severe	47 Moderate 0 Severe	192 Moderate 9 Severe
Michigan Avenue to CN/ME Rail Corridor	41 Moderate 7 Severe	28 Moderate 0 Severe	69 Moderate 7 Severe
Total	**520 Moderate 48 Severe**	**218 Moderate 1 Severe**	**738 Moderate 49 Severe**

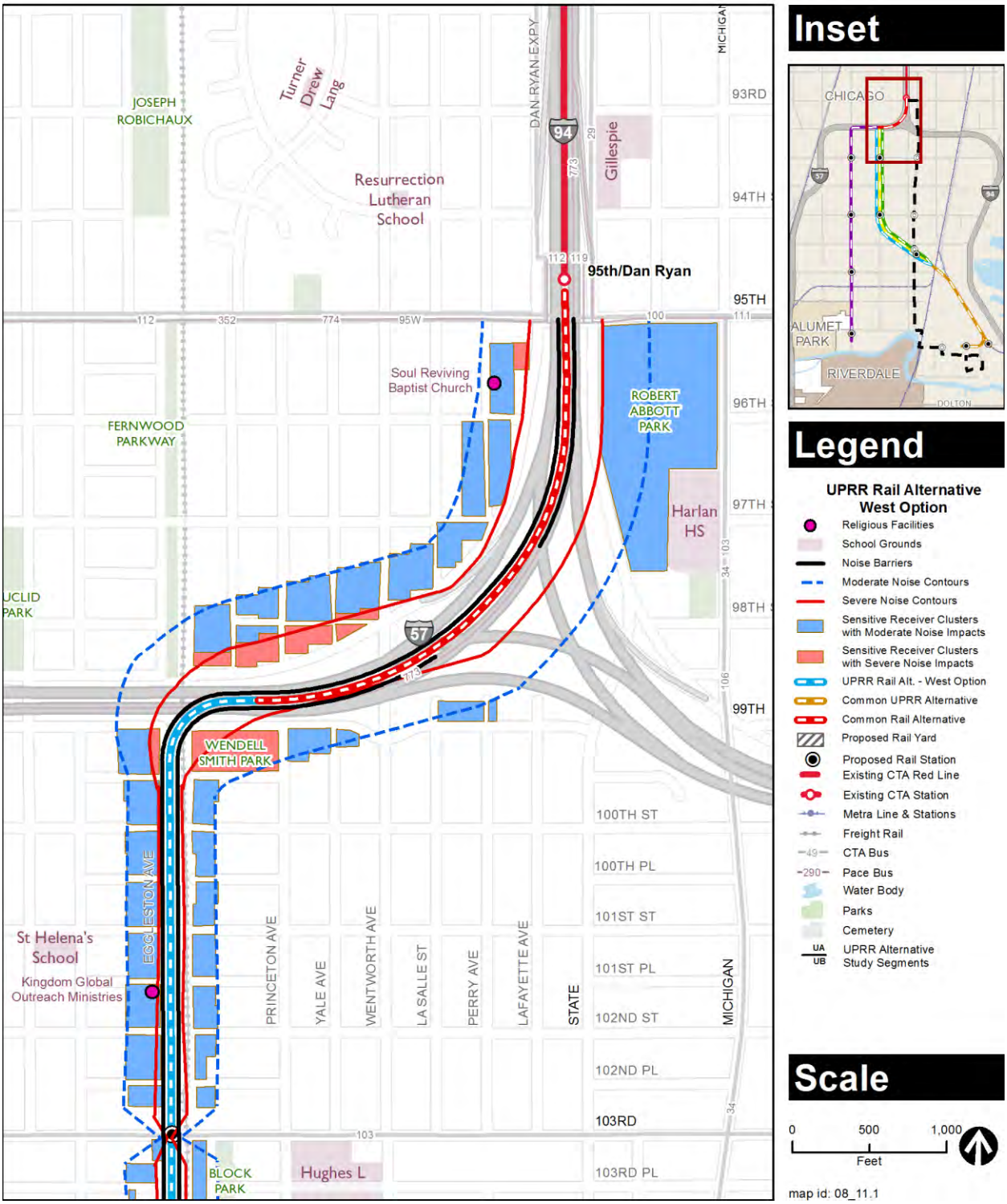

Figure 2a: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

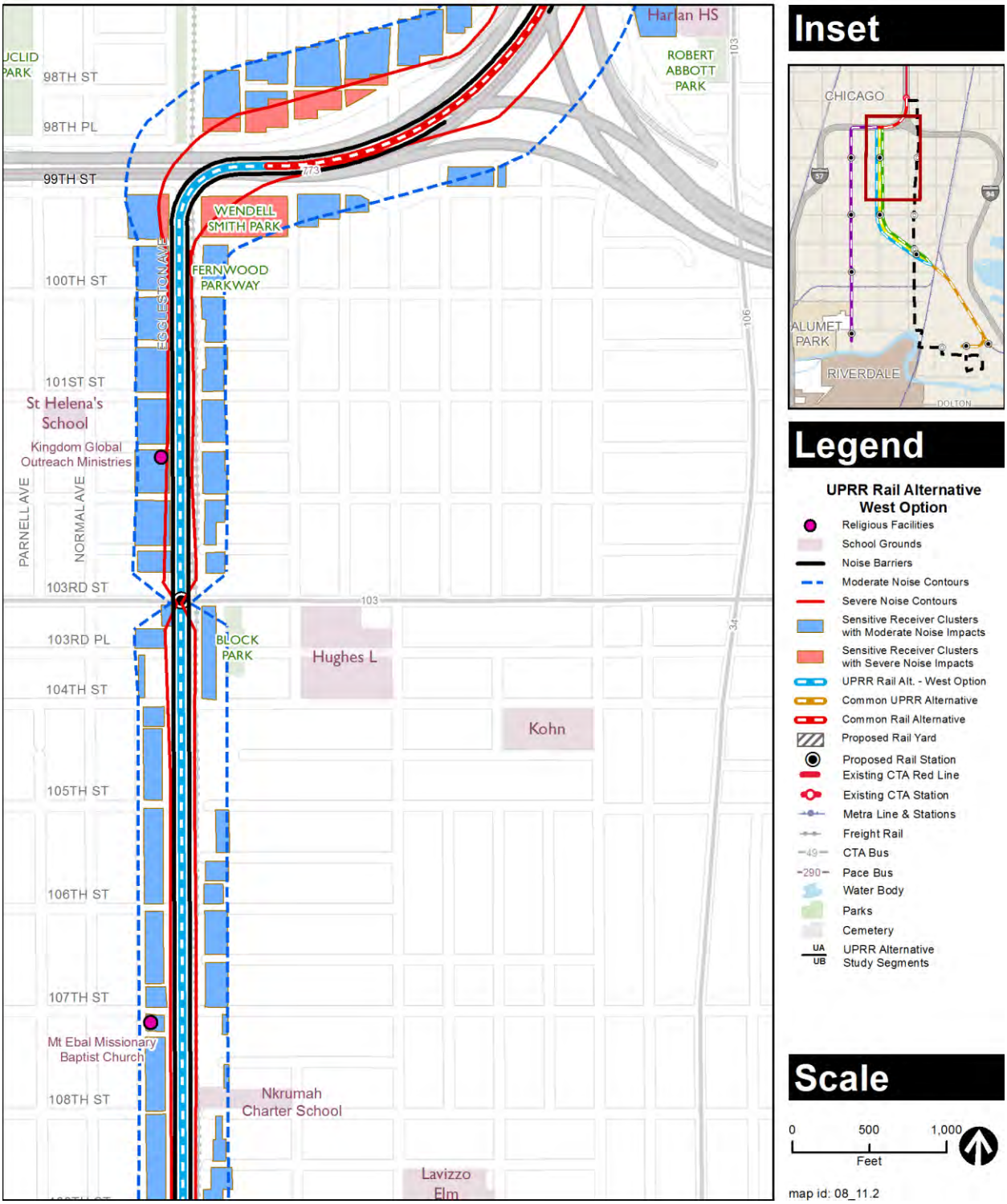

Figure 2b: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

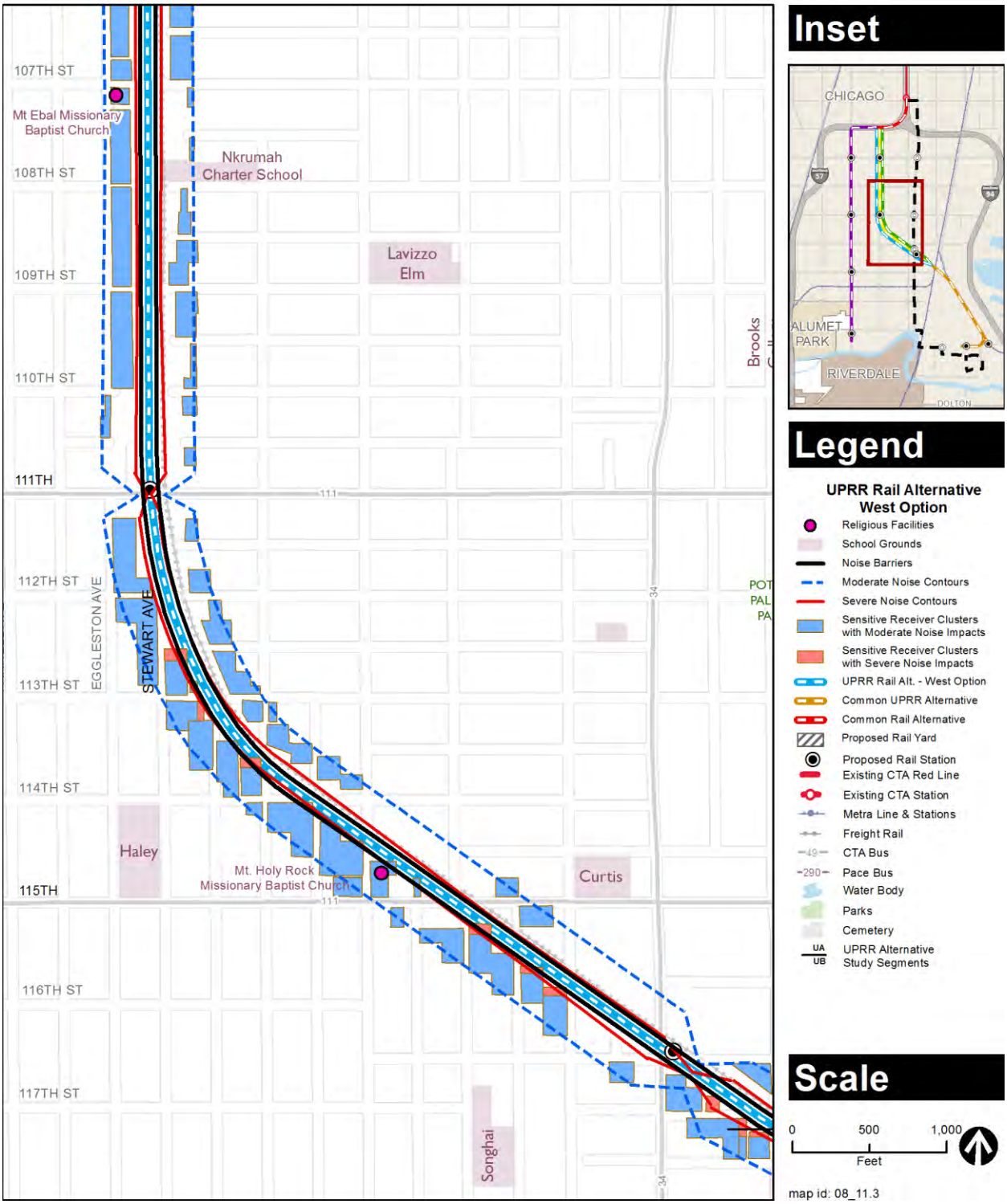

Figure 2c: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

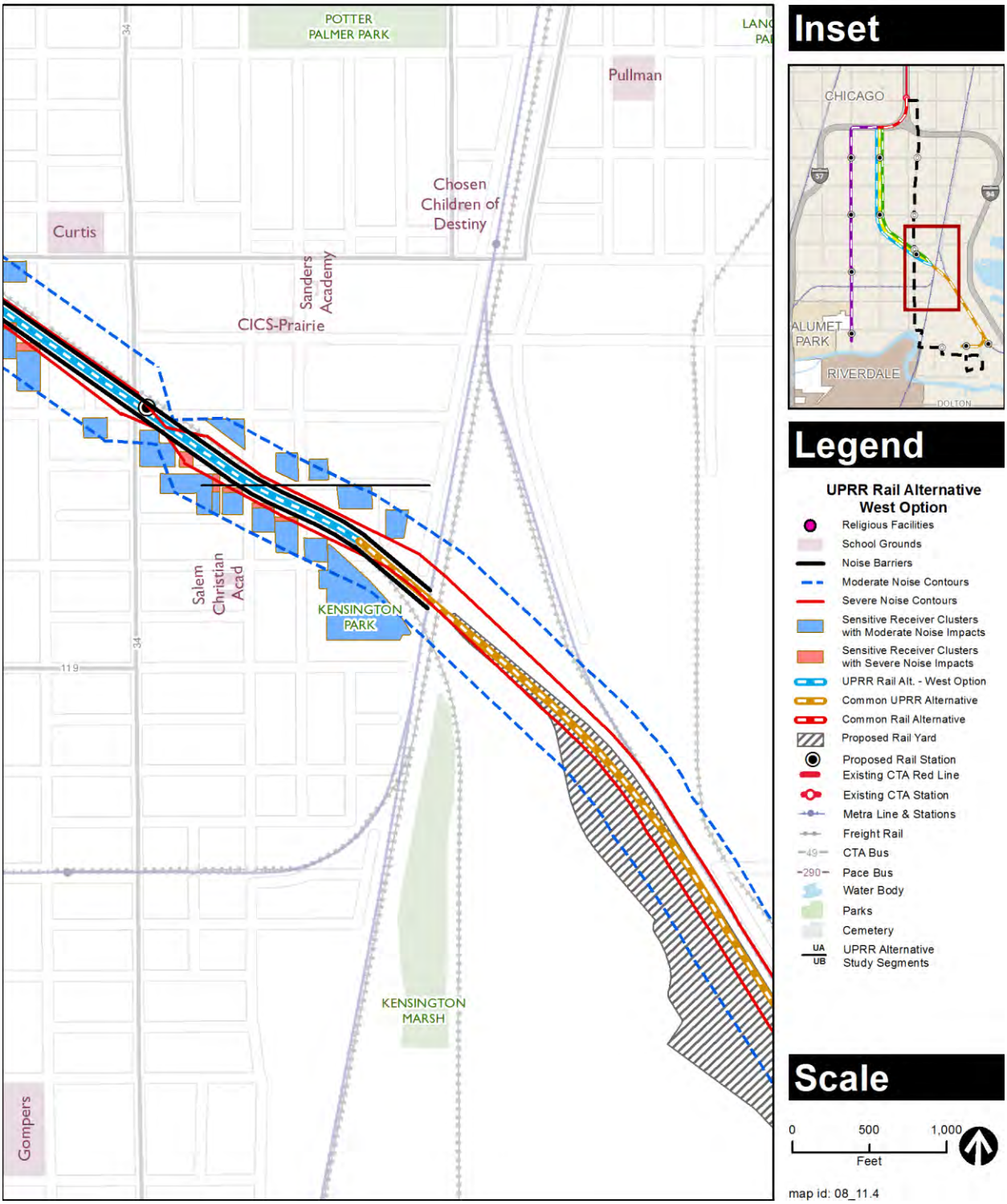

Figure 2d: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

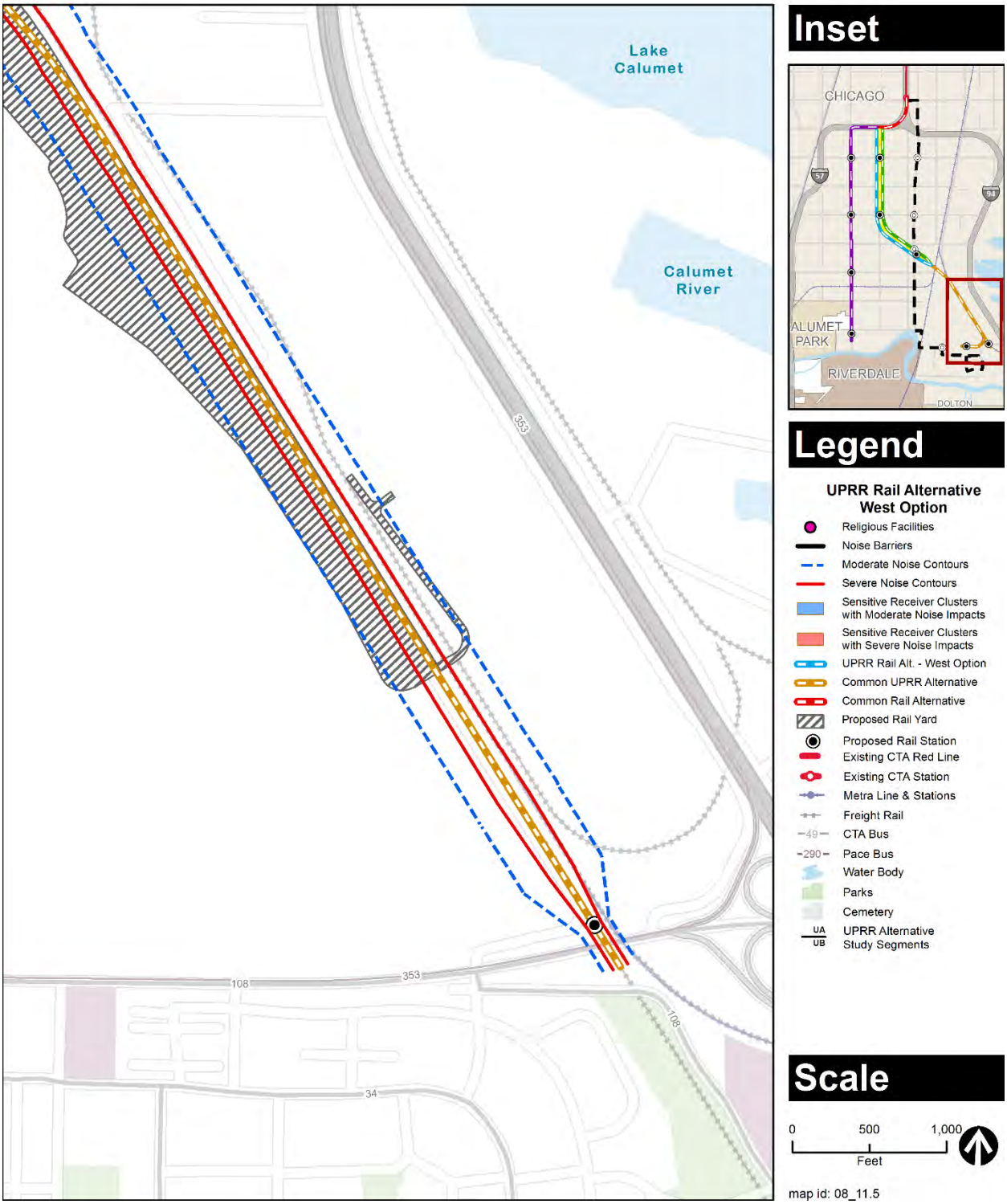

Figure 2e: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours

Appendix P

Safety and Security Technical Memorandum

- Final EIS Addendum P, Safety and Security Technical Memorandum, July 2022

Chicago Red Line Extension Project

Safety and Security

Final EIS Addendum P

July 2022

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Table of Contents

Section 1 - Summary **1-1**
1.1 Safety and Security Defined 1-1
1.2 Key Findings 1-1
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-1
3.4 Methods 3-1
Section 4 - Affected Environment **4-1**
4.1 Major Safety and Security Incidents on CTA Rail System 4-1
4.2 Crime Summary 4-2
4.3 Pedestrian Safety 4-6
4.4 Pedestrian Security 4-8
4.5 Highway-Rail Grade Crossings 4-8
4.6 Emergency Services 4-10
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-1
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS) 2-4
Figure 4-1: Reported CTA-Related Crimes in Chicago (2018-2020) 4-5
Figure 4-2: Police, Fire, Healthcare Centers, and Hospital Facilities near the Preferred Alignment (1 of 2) 4-11
Figure 4-3: Police, Fire, Healthcare Centers, and Hospital Facilities near the Preferred Alignment (2 of 2) 4-12

Tables

Table 4-1: Safety and Security Incident Summary for Entire CTA Bus System 4-1
Table 4-2: Safety and Security Incident Summary for Entire CTA Rail System 4-2
Table 4-3: Crimes on CTA Trains, Platforms and Other Property in Chicago 4-2
Table 4-4: Pedestrian Crashes within 1/8 Mile of Proposed Station Locations 4-6
Table 4-5: Crashes at 103rd Street and UPRR Grade Crossing 4-9
Table 4-6: Crashes at 111th Street and UPRR Grade Crossing 4-9
Table 4-7: Crashes at 115th Street and UPRR Grade Crossing 4-9
Table 4-8: Crashes at State Street and UPRR Grade Crossing 4-9
Table 4-9: Crashes at Old 130th Street and UPRR Grade Crossing 4-10
Table 5-1: Calculated Expected Crash Frequency (ECF) at UPRR Grade Crossings 5-5
Table 6-1: Impacts Remaining After Mitigation 6-1

Abbreviations

ADT	Average Daily Traffic
API	area of potential impact
CDOT	Chicago Department of Transportation
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
CTA	Chicago Transit Authority
EA	Environmental Assessment
ECF	Expected Crash Frequency
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
ICC	Illinois Commerce Commission

IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt Railroad
MUTCD	Manual on Uniform Traffic Control Devices
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NS	Norfolk Southern Railway
PHA	Preliminary Hazard Analysis
RLE	Red Line Extension
TIP	Transportation Improvement Program
TVA	Threat and Vulnerability Assessment
UPRR	Union Pacific Railroad
VMT	vehicle miles traveled

Section 1 - Summary

This technical memorandum analyzes the potential safety and security impacts and mitigation measures for the Red Line Extension (RLE) Project. Subsequent to the publication of the Draft Environmental Impact Statement (EIS), continued design and outreach by the Chicago Transit Authority (CTA) resulted in the selection of the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative, announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS, which follows the general path of the West Option north of 107th Place, and the East Option south of 107th Place.

This technical memorandum provides updates to the analysis for safety and security and provides an update to the potential impacts and mitigation measures based on the additional engineering that has been completed since the publication of the Draft EIS. CTA has also prepared a Threat and Vulnerability Assessment (TVA) and has conducted a Preliminary Hazard Analysis (PHA) as part of the ongoing work for the RLE Project. The analysis, conclusions, and mitigation measures presented in this technical addendum are in keeping with the TVA and PHA prepared for the RLE Project. While the information was considered, no specific information was brought forward from the documents due to their sensitive security status. The documents contain sensitive security information controlled under 49 CFR Parts 15 and 1520. No part of the documents may be disclosed to persons without a "need to know," as defined in 49 CFR Parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation.

Consistent with the conclusions outlined in the Draft EIS, **Appendix P**, the RLE Project would result in adverse and beneficial safety and security impacts in the area of potential impact (API).

1.1 Safety and Security Defined

The definitions of safety and security remain the same as those outlined in **Appendix P** of the Draft EIS.

1.2 Key Findings

The following sections summarize the identified adverse impacts for the No Build Alternative and the Preferred Alignment, mitigation measures to address the adverse impacts, and the impacts remaining after mitigation.

1.2.1 No Build Alternative

There would be no expected permanent impacts, construction impacts, or cumulative impacts on safety and security associated with the No Build Alternative. Therefore, there would be no mitigation measures and no impacts remaining after mitigation. This is consistent with **Appendix P** in the Draft EIS.

1.2.2 Union Pacific Railroad Alternative - Preferred Alignment

The Preferred Alignment would have the following impacts, consistent with **Appendix P** in the Draft EIS:

- Pedestrian Safety – An adverse impact was identified at the 103rd Street, 111th Street, Michigan Avenue, and 130th Street stations because a large number of pedestrians would need to cross major streets without traffic controls or other pedestrian safety treatments. This impact would be mitigated in coordination with Chicago Department of Transportation (CDOT)to implement the additional improvements to enhance safety for crossing pedestrians, as applicable. The impact would not be adverse after mitigation.

- Station Security – All stations would be designed and constructed in compliance with the standards and guidelines in CTA's Design and Rehabilitation Criteria Manual and other design guidelines. Stations would be well lit, and the final design would consider lines of sight for surveillance by station personnel. There would be no adverse impacts on station security.

- Parking Security – All parking facilities and pedestrian access routes would be designed, constructed, and operated with security features. There would be no adverse impacts on parking security.

- Neighborhood Security – New train stations would be unlikely to have much impact on neighborhood crime (Ridgeway and MacDonald 2015). However, some studies have found a correlation between train service and higher crime rates, particularly in low-income areas (Ihlanfeldt 2003). The impact would not be adverse. Mitigation measures would include lighting under the elevated structure in station, parking, and on CTA right-of-way to contribute to improved safety and security, and to improve surveillance visibility. The remaining impacts would not be adverse after mitigation.

- Highway-Rail Crossings – An increase in UPRR train volumes (not associated with the RLE Project), pedestrian volumes, and motor vehicle volumes near the RLE stations would have cumulative and permanent adverse impacts on safety. At the crossings directly adjacent to stations, CTA would include the implementation of at-grade warning device enhancements

including pedestrian gates and improvements for Americans with Disabilities Act compliance in the final design of the RLE Project in coordination with the UPRR. Illinois Commerce Commission, CDOT, and Cook County Department of Transportation and Highways. The impact would not be adverse after mitigation.

- Emergency Services – Emergency services would be able to access construction sites at all times in the same way contractors access the sites, and detours would be needed at times due to roadway closures. The impacts would not be adverse with mitigation.

Section 2 - Project Description and Background

CTA, as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the

UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated

with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

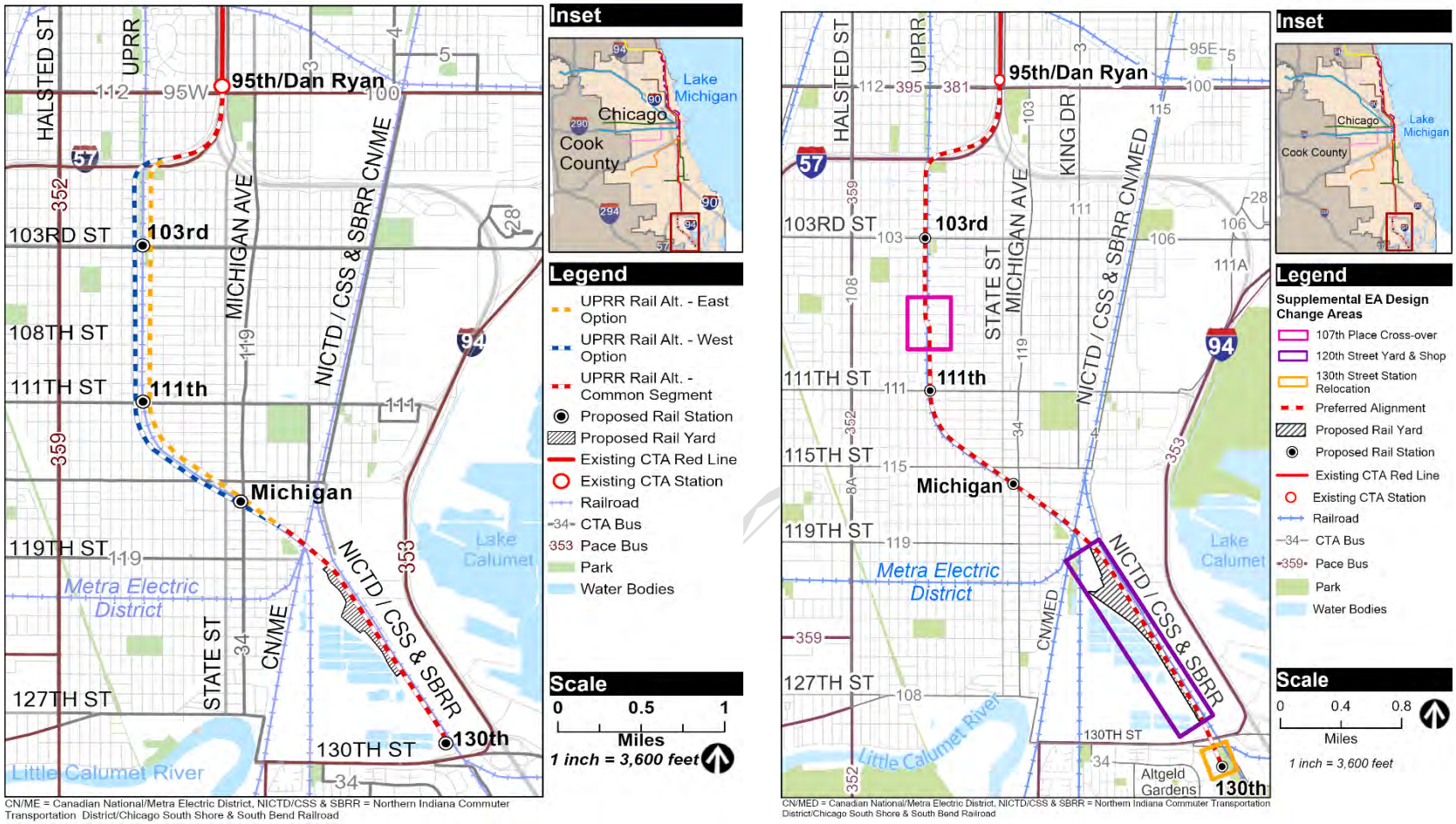

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix P** for the Draft EIS analysis have been carried forward to evaluate Safety and Security. This section documents the methodology for evaluating this resource, consistency with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

There are no changes to the applicable federal or state regulations referenced in **Appendix P** of the Draft EIS.

3.2 Impact Analysis Thresholds

There are no specific thresholds for safety and security identified under the National Environmental Policy Act (NEPA). The definition of an adverse safety and security impact in the Draft EIS **Appendix P** is still applicable.

3.3 Area of Potential Impact

The Draft EIS used an API of ½ mile radius from each of the proposed stations as well as the existing 95th/Dan Ryan terminal. This document takes the same approach as that outlined in **Appendix P** of the Draft EIS.

3.4 Methods

The analysis of safety and security of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS consistent with **Appendix P**.

Section 4 - Affected Environment

This section describes any updates to the existing safety and security conditions near the RLE Project since the publication of the Draft EIS. This section documents updates to the baseline data and planning horizon, as well as any changes to safety and security planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

4.1 Major Safety and Security Incidents on CTA Rail System

As stated in the Draft EIS, CTA is required to report major safety and security incidents, such as fires and fatalities, to the FTA. **Tables 4-1** and **4-2** show a summary of these incidents for the most recent 3 years (2018-2020) of complete data for the CTA bus and rail systems, respectively. From 2018-2020, there were 969 incidents on the bus system, including 6 fatalities and 1,584 injuries requiring immediate off-site medical attention. From 2018 to 2020, there were 513 incidents on the rail system, including 51 fatalities and 525 injuries requiring immediate off-site medical attention. Additional details about the incidents are not provided in the available data (National Transit Database, 2021).

Table 4-1: Safety and Security Incident Summary for Entire CTA Bus System

Year	Major Incident Type						Vehicle Revenue Hours	Major Incidents per Million Vehicle Revenue Hours
	Collisions	Derailments	Fires	Security	Not Otherwise Classified	Total		
2018	214	0	2	75	7	298	5,794,197	51.43
2019	255	0	0	91	5	351	5,814,122	60.37
2020	215	0	0	100	5	320	5,814,122	55.04
Total	684	0	2	266	17	969	17,422,441	55.62

Source: National Transit Database 2021

Table 4-2: Safety and Security Incident Summary for Entire CTA Rail System

Year	Major Incident Type						Vehicle Revenue Hours	Major Incidents per Million Vehicle Revenue Hours
	Collisions	Derailments	Fires	Security	Not Otherwise Classified	Total		
2018	29	1	2	109	14	155	4,068,066	38.10
2019	33	4	1	152	28	218	4,065,132	53.63
2020	31	1	0	85	23	140	4,065,132	34.44
Total	93	6	3	346	65	513	12,198,330	42.05

Source: National Transit Database 2021

4.2 Crime Summary

Table 4-3 shows the number and percent of reported crime types occurring on CTA trains; on CTA platforms; and at garages, parking lots, and other property throughout the City of Chicago. Over the 3-year period, there was an average (calculated as total crimes per location/days in 3 years) of 2.8 incidents per day reported on CTA trains, 1.3 incidents per day reported on CTA train platforms, 1.5 incidents per day on CTA stations, and 0.4 per day at CTA garages and other property.

Table 4-3: Crimes on CTA Trains, Platforms and Other Property in Chicago

Type of Crime	Crimes on CTA Trains in Chicago		Crimes on CTA Platforms in Chicago		Crimes on CTA Stations in Chicago		Crimes at CTA Garages and Other Property in Chicago	
	2018-2020	Percent	2018-2020	Percent	2018-2020	Percent	2018-2020	Percent
Arson	0	0	1	0.1	0	0	0	0
Assault	63	2.1	81	5.6	121	7.5	14	3.1
Battery	342	11.3	332	22.9	252	15.7	17	3.8
Burglary	0	0	0	0	0	0	1	0.2
Concealed Carry License Violation	0	0	0	0	0	0	0	0
Criminal Damage	342	11.3	37	2.5	75	4.7	204	45.8

Type of Crime	Crimes on CTA Trains in Chicago		Crimes on CTA Platforms in Chicago		Crimes on CTA Stations in Chicago		Crimes at CTA Garages and Other Property in Chicago	
	2018-2020	Percent	2018-2020	Percent	2018-2020	Percent	2018-2020	Percent
Criminal Sexual Assault	0	0	0	0	0	0	0	0
Criminal Trespassing	21	0.7	61	4.2	212	13.2	36	8.1
Deceptive Practice	200	6.6	129	8.9	331	20.6	23	5.2
Gambling	0	0	0	0	1	0.1	1	0.2
Homicide	0	0	0	0	0	0	0	0
Human Trafficking	0	0	0	0	0	0	0	0
Interference with Public Officer	5	0.2	21	1.4	16	1.0	1	0.2
Intimidation	0	0	0	0	0	0	0	0
Kidnapping	0	0	0	0	2	0.1	0	0
Liquor Law Violation	0	0	2	0.1	2	0.1	0	0
Motor Vehicle Theft	0	0	0	0	2	0.1	11	2.5
Narcotics	27	0.9	55	3.8	71	4.4	13	2.9
Non-Criminal	0	0	0	0	0	0	0	0
Obscenity	0	0	1	0.1	0	0	0	0
Offense Involving Children	2	0.1	1	0.1	1	0.1	1	0.2
Other Offense	10	0.3	15	1.0	16	1.0	8	1.8
Prostitution	0	0	0	0	0	0	0	0
Public Indecency	1	0	0	0	0	0	0	0
Public Peace Violation	17	0.6	27	1.9	20	1.2	5	1.1
Robbery	251	8.3	161	11.1	86	5.3	8	1.8
Sex Offense	40	1.3	16	1.1	16	1.0	0	0
Stalking	0	0	0	0	2	0.1	0	0
Theft	1,717	56.5	504	34.7	375	23.3	101	22.7
Weapons Violation	2	0.1	8	0.6	9	0.6	1	0.2
Total	3,040	100*	1,452	100*	1,610	100*	445	100*

Source: City of Chicago 2021a

Note: Percentage totals do not add up to 100 percent because individual percentages for each type of crime have been rounded up to the nearest decimal.

Over 95 percent of the CTA-related crimes fell into eight categories: assault, battery, criminal damage, criminal trespassing, deceptive practice, narcotics, robbery, and theft. Theft was the most commonly reported CTA-related crime. Robbery is similar to theft but involves violence or the threat of violence. Assault and battery are similar crimes with differing levels of severity. Assault is the threatening of a victim, while battery is the actual harm of an individual. Criminal trespassing can occur from CTA platforms or elsewhere along the track. The intent of criminal trespassing is often to cause damage.

Figure 4-1 is a bar chart comparing the percentages of different types of crimes on the CTA trains; platforms; stations; and garages, parking lots, and other property. Theft, battery, and criminal damage were more common on trains than on train platforms. Narcotics crimes were more common at train stations and platforms than on trains. Deceptive practice and robbery were the next most common crime reported. The definitions of narcotics crimes and unfair or deceptive acts or practices are the same as those described in the Draft EIS **Appendix P**. These crimes occurred on CTA trains, on train platforms and stations, or at CTA property such as garages.

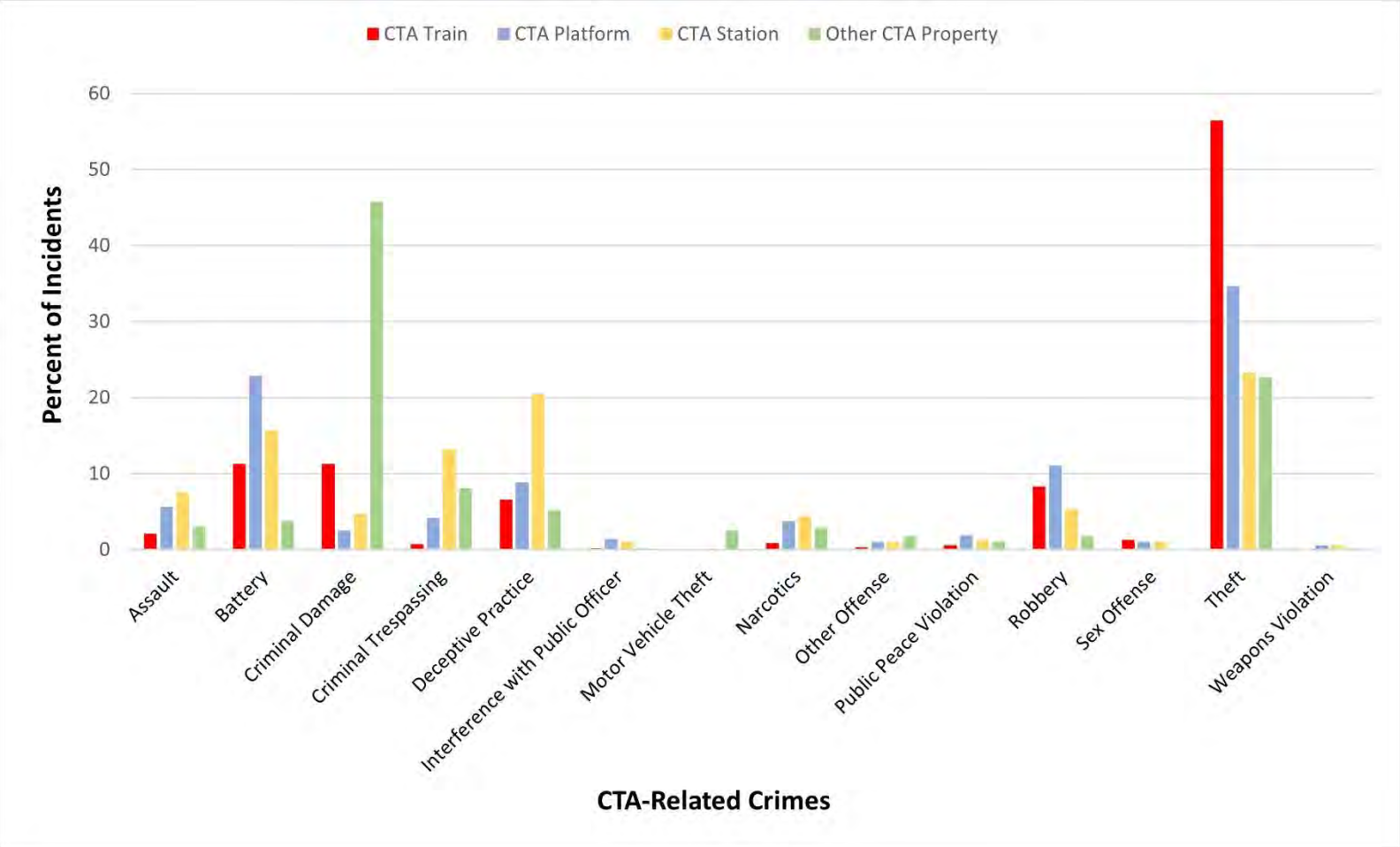

Figure 4-1: Reported CTA-Related Crimes in Chicago (2018-2020)

Note: Crime types with 0 percent reported are not shown.

Source: City of Chicago 2021a

4.3 Pedestrian Safety

The primary station entrances for the Preferred Alignment would be at 103rd Street, 111th Street, Michigan Avenue, and from Greenwood Avenue. Because the primary entrances would be on major through streets, the safety of pedestrians crossing these streets to access stations or nearby destinations would be a concern, as discussed in the Draft EIS.

Table 4-4 shows the frequencies of traffic crashes involving pedestrians in the immediate vicinity of proposed stations. There were six pedestrian crashes within ⅛ mile of the station entrances in the 5-year period (2016-2020).

Table 4-4: Pedestrian Crashes within 1/8 Mile of Proposed Station Locations

Station	2016	2017	2018	2019	2020	Total
103rd Street	0	0	0	1	0	1
111th Street	0	0	0	1	1	2
Michigan Avenue	0	0	1	2	0	3
130th Street	0	0	0	0	0	0

Source: City of Chicago 2021b

The existing pedestrian environments around proposed stations are discussed qualitatively in **Sections 4.3.1** through **4.3.4**.

4.3.1 103rd Street Station

The primary entrance for the 103rd Street station would be on the north side 103rd Street with an auxiliary entrance on the south side of 103rd Street. The existing pedestrian environment presented in **Appendix P** of the Draft EIS for the 103rd Street station remains the same with the exception of the bus route in the vicinity of the station. Bus route #103 traverses the station area as opposed to route #111 in the Draft EIS. Eastbound and westbound bus stops remain unchanged from those reported in the Draft EIS.

Existing land uses along 103rd Street have not changed from those outlined in the Draft EIS.

4.3.2 111th Street Station

The primary entrance for the 111th Street station would be at 111th Street, with an auxiliary exit only at 110th Street. The existing pedestrian environment presented in **Appendix P** of the Draft EIS for the 111th Street station remains the same with the exception of the bus stops for route #111 in the vicinity of the station. Eastbound bus stops for route #111 are at Normal Avenue, Stewart Avenue, and Princeton Avenue. Westbound bus stops for route #111 are at Princeton Avenue, the west side of the UPRR tracks, and Normal Avenue.

Existing land uses along 111th Street have not changed from those outlined in the Draft EIS, which include residential, an auto repair business, religious facilities, and vacant land. The Agape Community Center is east of the UPRR railroad tracks.

4.3.3 Michigan Avenue Station

The entrances for the Michigan Avenue station would be located at both the east and west sides of Michigan Avenue. The existing pedestrian environment presented in the Draft EIS **Appendix P** for the Michigan Avenue station remains the same.

4.3.4 130th Street Station

The 130th Street station access would be from the east side of Greenwood Avenue. The crossing of 130th Street at the Conrail railroad tracks is grade separated, whereas the crossings of Old 130th Street and 132nd Street at the track are at grade. Old 130th Street is classified as a local road or street. Average Daily Traffic (ADT) for Old 130th Street is 200 (IDOT 2021). Old 130th Street has one lane in each direction and is under CDOT jurisdiction.

The nearest controlled intersection to the 130th Street station location is a stop sign along Greenwood Avenue at its intersection with Ellis Avenue. A sidewalk is present on the south side of Old 130th Street between Ellis Avenue and the at-grade crossing. There are no bus stops along Old 130th Street.

The land uses near the 130th Street station include residential (Altgeld Gardens neighborhood) to the west; parks and open space (Beaubien Woods Forest Preserve and George Washington Park) to the east and southwest of the station; institutional (George Washington Carver Primary School and Carver Military Academy High School) southwest and east of the station; and transportation, communications, and utility (Metropolitan Water Reclamation District of Greater Chicago (MWRD) Calumet Reclamation Plant) to the north.

4.4 Pedestrian Security

The areas with the highest crime density for 2020 are clustered at the existing 95th/Dan Ryan terminal and in the area west of the 130th Street station. Another area with high crime density is south of the Michigan Avenue station, near 119th Street (City of Chicago 2021c).

4.5 Highway-Rail Grade Crossings

There are six existing highway-rail at-grade crossings near the proposed stations. Two crossings are where the UPRR tracks intersect 103rd Street and 111th Street, as discussed in the Draft EIS. Four additional crossings are where UPRR tracks intersect 115th Street and State Street and where the Conrail tracks intersect Old 130th Street and 132nd Street. The Conrail crossings were not described in the Draft EIS because they are near the relocated 130th Street station. The Conrail track, operated by IHB, typically has one train per week in each direction with a speed under 10 miles per hour.

The most current available ADT volumes for the roadways near the proposed stations are from 2010-2015. The reported ADT on 103rd Street is 11,600 and 9,000 on 111th Street. The ADT volume for 115th Street is 10,500 whereas ADT for State Street is 3,100. The ADT volume for Old 130th Street is 200. ADT volumes were not reported for 132nd Street (IDOT 2021); however, based on field observations, the ADT volume for 132nd Street is similar to that of Old 130th Street.

The additional automobile and pedestrian traffic crossing the rail line could create a safety concern. Crash histories for the past 25 years (1995 through 2020) at five of the six grade crossings are shown in **Tables 4-5** through **4-9**. The crossings at 103rd Street and Old 130th Street each had one recorded crash in the 25-year period whereas the crossings at 111th Street and State Street each had two recorded crashes in the same period. There have been six crashes at the 115th Street at-grade crossing. There have been no crashes at the 132nd Street at-grade crossing. For comparison, the most recent crash data for Cook County shows 185 collisions at 860 public grade crossings from 2015 to 2020 (Illinois Commerce Commission (ICC) 2021a).

Table 4-5: Crashes at 103rd Street and UPRR Grade Crossing

Date	Time	Crash Type	Warning Devices	Weather	Fatalities	Injuries
10/15/2006	12:30 PM	Freight-Pedestrian	Cantilever Signals and Gates	Cloudy	0	1

Source: ICC 2020b

Table 4-6: Crashes at 111th Street and UPRR Grade Crossing

Date	Time	Crash Type	Warning Devices	Weather	Fatalities	Injuries
4/11/2009	11:15 PM	Train-Auto	Cantilever Signals and Gates	Clear	0	0
6/5/2000	12:52 AM	Train-Auto	Cantilever Signals and Gates	Rain	0	0

Source: ICC 2020c

Table 4-7: Crashes at 115th Street and UPRR Grade Crossing

Date	Time	Crash Type	Warning Devices	Weather	Fatalities	Injuries
2/1/2020	7:40 AM	Train-Auto	Cantilever Signals and Gates	Cloudy	0	0
2/1/2020	6:30 AM	Train-Auto	Cantilever Signals and Gates	Clear	0	1
9/12/2019	2:30 AM	Train-Pedestrian	Cantilever Signals and Gates	Cloudy	1	0
9/29/2011	4:59 PM	Other-Pedestrian	Cantilever Signals and Gates	Rain	1	0
4/9/2005	8:15 PM	Train-Auto	Cantilever Signals and Gates	Clear	0	0
8/26/1999	8:33 PM	Train-Pedestrian	Cantilever Signals and Gates	Clear	0	1

Source: ICC 2020d

Table 4-8: Crashes at State Street and UPRR Grade Crossing

Date	Time	Crash Type	Warning Devices	Weather	Fatalities	Injuries
5/16/2013	5:30 PM	Other-Pedestrian	Gates	Clear	1	0
1/20/2002	1:50 PM	Other-Auto	Cantilever Signals and Gates	Cloudy	0	1

Source: ICC 2020e

Table 4-9: Crashes at Old 130th Street and UPRR Grade Crossing

Date	Time	Crash Type	Warning Devices	Weather	Fatalities	Injuries
9/14/2000	6:45 AM	Yard/Switching Train -Truck	Flash	Rain	0	0

Source: ICC 2020f

4.6 Emergency Services

Figure 4-2 and **Figure 4-3** show the police, fire, healthcare centers, and hospital facilities in the area of the Preferred Alignment. This has not changed from the Draft EIS. The UPRR tracks form the border of the 5th Police District to the east and the 22nd Police District to the west, from 95th Street to 111th Street. There are no police stations along or near the Preferred Alignment.

Three fire stations are near the Preferred Alignment: Engine 93 (330 W. 104th Street), Engine 62 (34 E. 114th Street) and Engine 80 (12701 S. Doty Avenue). The only hospital near the Preferred Alignment is Roseland Community Hospital, three blocks east of the Preferred Alignment along 111th Street.

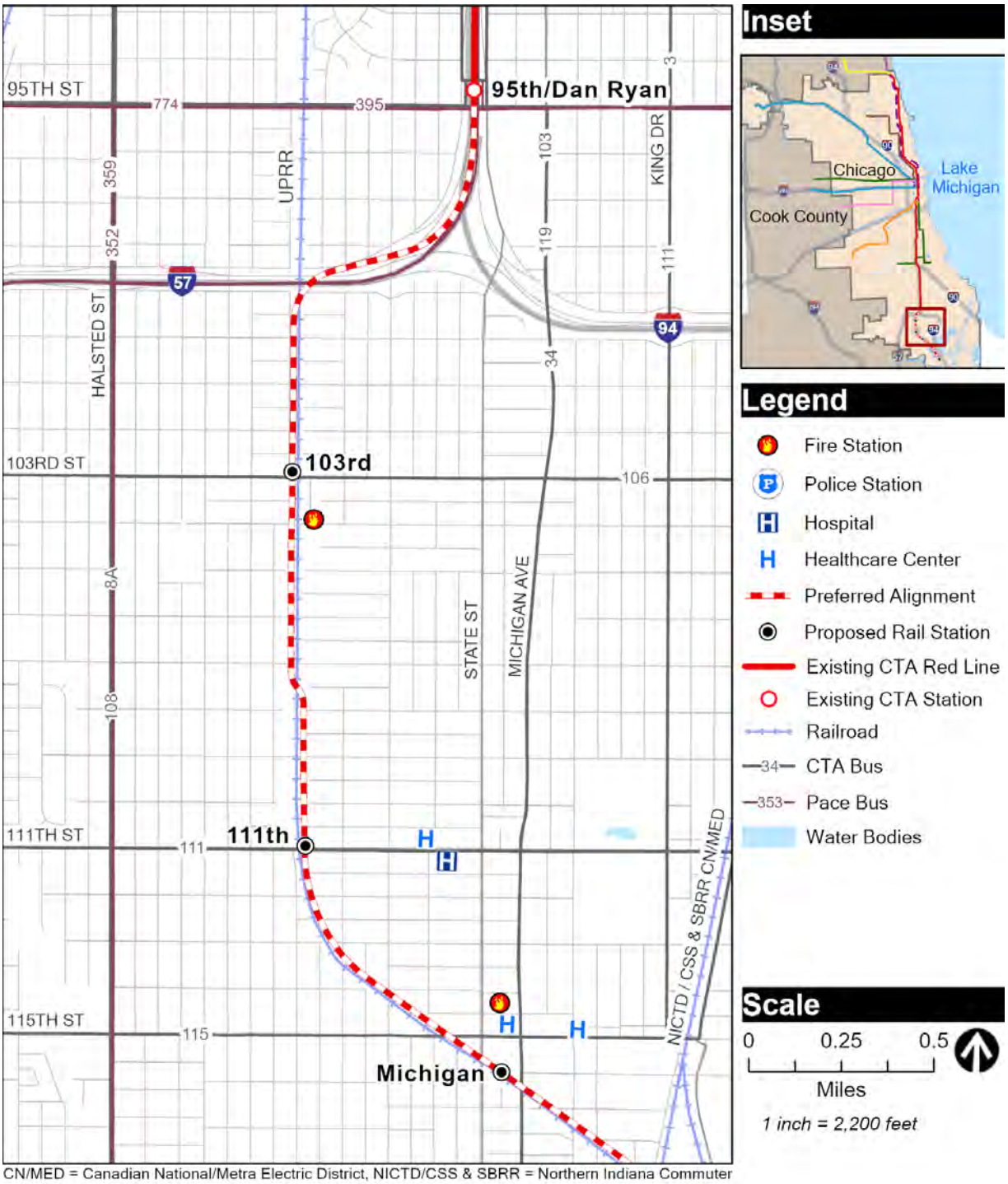

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-2: Police, Fire, Healthcare Centers, and Hospital Facilities near the Preferred Alignment (1 of 2)

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-3: Police, Fire, Healthcare Centers, and Hospital Facilities near the Preferred Alignment (2 of 2)

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction and cumulative—with references to affected communities.

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present or near future projects within the API.

This section also documents any new or revised mitigation measures for project impacts identified under the Draft EIS, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East or West Options of the UPRR Alternative evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning (CMAP) Transportation Improvement Program (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Appendix P** in the Draft EIS, there would be no impacts on safety and security from the No Build Alternative.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

The impacts and mitigation for the Preferred Alignment are the same as described in **Appendix P** of the Draft EIS except as noted below.

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

5.2.1.1 Major Incidents

Consistent with the Draft EIS, the Preferred Alignment would be expected to increase the frequency of major incidents on the rail system and decrease the frequency of major incidents on the bus system compared to existing conditions. Incident rates for each mode would not be expected to change considerably. CTA also attempts to minimize incidents by continuously upgrading bus and rail fleets and through extensive operator training. The impact on major incidents would not be adverse.

5.2.1.2 Motor Vehicle Safety

The Preferred Alignment would be expected to cause a small shift in travel modes from automobiles and buses to rail transit, thus decreasing automobile and bus vehicle miles traveled (VMT), and slightly increasing rail VMT. Overall, this would be expected to lead to a small decrease in fatalities and injuries. Impacts and mitigation for motor vehicle safety remain the same as described in **Appendix P** of the Draft EIS.

5.2.1.3 Pedestrian Safety

The new train stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street would generate a large amount of pedestrian activity, causing a large increase in the number of pedestrians crossing the through streets near stations compared to the No Build Alternative. The nearest controlled intersections (signals or all-way stops) to proposed station locations are approximately one block away in most cases. However, many pedestrians would want to cross the streets immediately adjacent to the station entrances, particularly to access the nearest available bus stops (assumed to be adjacent to stations). Therefore, a large volume of pedestrians would be expected to cross the major streets without positive traffic control, which would be an adverse impact on pedestrian safety. This conclusion is consistent with that in the Draft EIS. Mitigation for pedestrian access is described in **Addendum H**. In addition, lighting would be provided under the elevated structure in station, parking, and on CTA right-of-way to contribute to improved safety and security, and to improve surveillance visibility.

The potential for an increase in crash frequencies at the UPRR at-grade rail crossings adjacent to the RLE stations would be mitigated as described in **Addendum H**. Impacts and mitigation for pedestrian safety remain the same as described in **Appendix P** of the Draft EIS.

5.2.1.4 Parking Security

Security impacts for parking facilities at the 103rd Street, 111th Street, and Michigan Avenue stations on the Preferred Alignment are the same as those described in **Appendix P** of the Draft EIS. In addition, a park & ride facility would be located adjacent to the 130th Street station location. Various design elements would be incorporated to improve security in the park & ride facility, which would result in no adverse impact.

5.2.1.5 Neighborhood Security

Overall, it appears that new train stations would be unlikely to have much, if any, impact on neighborhood crime (Ridgeway and MacDonald 2015). Although research indicates that some risk would remain, particularly in low-income areas (Ihlanfeldt 2003), the impact would not be adverse, consistent with the conclusions of **Appendix P** of the Draft EIS. Impacts and mitigation for neighborhood security remain the same as described in **Appendix P** of the Draft EIS. CTA would continue the Threat and Vulnerability Assessment and Preliminary Hazard Analysis through final design of the RLE Project to determine appropriate security measures in the public right-of-way, such as security surveillance cameras and/or lighting at cross-street areas in the vicinity of the four RLE Project stations. CTA would coordinate the implementation of any improvements in the City right-of-way with the City of Chicago.

5.2.1.6 Terrorism and Homeland Security

As discussed in the Draft EIS, it is unlikely that the RLE Project would be a primary target of terrorists. Based on the Risk Assessment Matrix in **Appendix P** in the Draft EIS, impacts remain the same as the East and West Options.

CTA prepares for acts of terrorism by updating various safety and security plans on a regular basis and coordinating with law enforcement and other agencies as described in **Appendix P** in the Draft EIS. Impacts and mitigation for terrorism and homeland security remain the same as described in the Draft EIS.

5.2.1.7 Highway-Rail Grade Crossings

The Preferred Alignment would directly increase the number of vehicles and pedestrians crossing the UPRR tracks. **Table 5-1** shows the Expected Crash Frequency (ECF) for the 103rd Street, 111th Street, 115th Street, and State Street crossings using Equation 7-3.1 in the Illinois Department of Transportation (IDOT) Bureau of Design and Environmental Manual (IDOT 2010). The ECF was not calculated for Old 130th Street or 132nd Street because the Old 130th Street would be closed to through traffic as part of the project and because of the limited use of the Conrail tracks at this

location. Currently, there is one train per week on this line. **Table 5-1** presents the ECF for the grade crossings near 103rd Street, 111th Street, and Michigan Avenue stations.

Future ADT volumes have not been forecasted, but a modest 2 percent annual growth in vehicle traffic between the construction year (2025) and the planning horizon year (2050) was assumed for the build conditions. Future freight train volumes on the UPRR tracks have not been forecasted for the No Build Alternative and Preferred Alignment (2050). However, the number of freight trains on the UPRR tracks was assumed to increase 2 percent annually.

This increase in traffic volume would result in an approximately 16 percent increase in ECF for the 111th Street crossing and 18 percent increase in ECF for the 103rd Street and State Street crossings under the Preferred Alignment as compared to the No Build Alternative. ECF at the 115th Street crossing would increase by 27 percent under the Preferred Alignment as compared to the No Build Alternative.

At the 103rd Street crossing, a crash would be expected once every 21.7 years under the Preferred Alignment (calculated as 1/ECF) instead of every 25.6 years under the No Build Alternative. At 111th Street, a crash would be expected once every 27.8 years instead of every 32.3 years. At 115th Street, a crash would be expected every 23.8 years instead of 30.3 years, whereas at State Street a crash would be expected every 76.9 years instead of every 90.9 years. Consistent with the Draft EIS, this frequency would be considered an occasional risk with critical severity, which is classified as adverse.

Table 5-1: Calculated Expected Crash Frequency (ECF) at UPRR Grade Crossings

Scenario	Item	103rd Street	111th Street	115th Street	State Street
Existing (2020)	Average Daily Traffic	11,600	9,000	10,500	3,100
	Daily Train Volume	14	14	14	14
	Expected Crash Frequency (ECF)	0.016	0.013	0.015	0.005
	Existing Crash Frequency	0.04	0.08	0.24	0.08
No Build Alternative (2050)	Average Daily Traffic	15,800	12,300	13,300	4,200
	Daily Train Volume	25	25	25	25
	Expected Crash Frequency (ECF)	0.039	0.031	0.033	0.011
Preferred Alignment (2050)	Average Daily Traffic	19,000	14,800	17,200	5,100
	Daily Train Volume	25	25	25	25
	Expected Crash Frequency (ECF)	0.046	0.036	0.042	0.013

As discussed in the Draft EIS, the new CTA stations would be expected to generate additional pedestrian volume crossing the UPRR tracks. However, as discussed in Addendum H, parking would be located on the same side of the UPRR tracks as the proposed stations. It is anticipated that bus stops would be relocated adjacent to the station entrances, eliminating the need for passengers making bus-rail connections to cross the UPRR tracks on foot.

Given that transit passengers are often in a hurry and given the likely delays to pedestrians due to the expected increase in freight volumes over existing conditions, it is reasonable to think that some pedestrians may choose to take unacceptable safety risks by crossing the tracks while the signals are flashing. Mitigation measures for this adverse impact are discussed in the Draft EIS.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

Consistent with the Draft EIS, the contractors performing primary construction activities would need to have an approved Construction Safety and Security Plan in place before any construction work begins. Contractors would perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of CTA's *Safety and Security Management Plan* (CTA 2011) or CTA's other manuals and policies. Contractors would be contractually committed to take prompt and decisive corrective action on safety deficiencies identified at the work sites. For example, CTA would require contractors performing work on, above, or adjacent to the CTA rail system to follow CTA's Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System (Construction Safety Manual) to protect themselves, their employees, sub-contractors, CTA passengers, employees, and the public.

5.2.2.1 Emergency Services

The elevated structure would cross over six arterial or collector streets (103rd Street, 107th Street, 111th Street, Wentworth Avenue, 115th Street, and Michigan Avenue) and multiple local residential streets on the Preferred Alignment. All but four of the streets (Michigan Avenue, 116th Street, Indiana Avenue, and Prairie Avenue) currently have at-grade crossings with the UPRR.

Appendix P in the Draft EIS discusses the approximate time roads and streets would need to be closed for at-grade crossings or if the profile of the roadway were to be reconstructed.

Consistent with **Appendix P** in the Draft EIS, emergency services would be able to access construction sites at all times in the same way contractors access the sites. Emergency services wishing to cross the tracks would have to use recommended detours, just as with a typical roadway construction project. In addition, an access road for the MWRD would also be constructed prior to

commencing operation on the new CTA tracks, if necessary, to maintain access to the MWRD facility. This roadway would also be used by emergency services. The impacts would not be adverse.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

There would be an expected increase in automobile and pedestrian traffic volumes as a result of the RLE Project compared to the No Build Alternative. In addition, the number of freight trains using the UPRR tracks has been projected to increase 2 percent annually. The UPRR reported 14 freight trains per day currently within the API, although multi-day data collection efforts conducted on May 20, 21, 22, and 28 and June 4, 2021 indicate a current average of only 8 to 10 trains per day. In addition, Amtrak runs two passenger trains three times a week on the UPRR tracks within the API. The proposed Metra Southeast Service Line would increase the number of passenger trains per day on the line.

Based on Equation 7-3.1 in the IDOT Bureau of Design and Environment Manual, increases in train volume proportionally increase the ECF at highway-rail grade crossings (IDOT 2010). This increase in crash potential would be an adverse impact at the existing highway-rail grade crossings along the UPRR tracks at 101st Street, 103rd Street, 107th Street, 109th Street, Wentworth Avenue, 115th Street, and State Street. All these crossings currently have gates on both roadway approaches and flashing lights. As discussed in **Section 5.2.1**, ECF was not calculated for Old 130th Street and 132nd Street.

The potential for an increase in crash frequencies at the UPRR at-grade rail crossings adjacent to the RLE stations (103rd Street, 111th Street, 115th Street, and State Street) would be mitigated by creating parking on the same side of the tracks as proposed stations, improved fencing, cantilever and post mounted at-grade crossing warning devices (currently in place), four quadrant gates, pedestrian gates with skirts, and anti-trespass panels. These proposed at-grade crossing improvements are indicative of the level of protection expected. As coordination with the railroad and CDOT take place, details may change, but the protection level would be similar. This is consistent with **Appendix P** in the Draft EIS.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no permanent, construction, or cumulative impacts on safety and security associated with the No Build Alternative. Therefore, there would be no impacts remaining after mitigation.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

Table 6-1 summarizes the impacts, mitigation measures, and impacts remaining after mitigation for seven topic areas for the Preferred Alignment. There would be no remaining adverse impacts after mitigation. See **Section 5** for details about the impacts.

Table 6-1: Impacts Remaining After Mitigation

Topic	Impact before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Major Incidents	Not Adverse	None necessary	Not Adverse
Motor Vehicle Safety	Beneficial	None necessary	Beneficial
Pedestrian Safety	Adverse	Mitigation measures	Beneficial
Parking Security	Not Adverse	Consider pedestrian access routes (i.e., sidewalks) through or adjacent to surface lots, consistent with those discussed in Appendix P of the Draft EIS.	Not Adverse
Neighborhood Security	Not Adverse	Coordinate with the City of Chicago to install sidewalk lighting and surveillance cameras along commercial streets within one block (660 feet) of station entrances, as discussed in Appendix P of the Draft EIS.	Not Adverse

Topic	Impact before Mitigation	Mitigation	Impact Remaining after Mitigation
Terrorism and Homeland Security	Not Adverse	Continue to update safety and security plans and coordination with law enforcement, homeland security and other agencies. Mitigation measures would be the same as those discussed in **Appendix P** of the Draft EIS.	Not Adverse
Highway-Rail Crossings	Adverse	Mitigation measures would be the same as those discussed in **Appendix P** of the Draft EIS, including installation of safety protection technologies for vehicles and pedestrians at crossings.	Not Adverse
Construction Impacts			
Emergency Services	Not Adverse	Neither adjacent roadways nor adjacent parallel through streets would be closed simultaneously. Traffic management plans would be created that would identify recommended detour routes. Contractors would follow MUTCD standards for temporary traffic control and would obtain required local permits. A new access road to the MWRD plant would be constructed prior to the new CTA rail alignment, if necessary, to maintain access.	Not Adverse
Cumulative Impacts			
Highway-Rail Crossings	Adverse	Install safety protection technologies for vehicles and pedestrians at 103rd Street, 111th Street and State Street crossings.	Not Adverse

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Appendix P

Safety and Security Technical Memorandum

- Draft EIS Appendix P, Safety and Security Technical Memorandum, September 2016
  - Appendix A, Tables and Figures
  - Appendix B, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Safety and Security
Technical Memorandum

April 27, 2015
Updated September 9, 2015

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Table of Contents

Section 1 Summary 1-1
1.1 Safety and Security Defined 1-1
1.2 Key Findings 1-1
1.2.1 No Build Alternative 1-1
1.2.2 Bus Rapid Transit Alternative 1-1
1.2.3 Union Pacific Railroad Rail Alternative 1-2
1.2.4 Halsted Rail Alternative 1-3
1.3 2014-2015 Red Line Extension Project Update 1-4

Section 2 Introduction 2-1

Section 3 Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.1.1 Federal 3-1
3.1.2 State 3-2
3.1.3 Regional and Local 3-3
3.1.3.1 Regional Transportation Authority of Northeastern Illinois 3-3
3.1.3.2 Chicago Transit Authority 3-3
3.1.3.3 City of Chicago 3-4
3.1.3.4 Village of Calumet Park 3-5
3.1.4 Other 3-5
3.1.4.1 National Fire Protection Association 3-5
3.1.4.2 Union Pacific Railroad 3-6
3.2 Impact Analysis Thresholds 3-7
3.2.1 Construction Impacts 3-7
3.3 Area of Potential Impact 3-8
3.4 Methods 3-8
3.4.1 Safety 3-9
3.4.2 Security 3-10

Section 4 Affected Environment 4-1
4.1 Bus Rapid Transit Alternative 4-1
4.1.1 Major Safety and Security Incidents on CTA Bus System 4-1
4.1.2 Crime Summary 4-1

4.1.3 Pedestrian Safety 4-2
4.1.4 Pedestrian Security 4-4
4.1.5 Emergency Services 4-4
4.2 Union Pacific Railroad Rail Alternative 4-4
4.2.1 Major Safety and Security Incidents on CTA Rail System 4-4
4.2.2 Crime Summary 4-4
4.2.3 Segment UA 4-7
4.2.3.1 Pedestrian Safety 4-7
4.2.3.2 Pedestrian Security 4-10
4.2.3.3 Highway-Rail Grade Crossings 4-10
4.2.3.4 Emergency Services 4-12
4.2.4 Segment UB 4-12
4.2.4.1 Pedestrian Safety 4-12
4.2.4.2 Pedestrian Security 4-14
4.2.4.3 Emergency Services 4-14
4.3 Halsted Rail Alternative 4-15
4.3.1 Major Safety and Security Incidents on CTA Rail System 4-15
4.3.2 Crime Summary 4-15
4.3.3 Segment HA 4-15
4.3.3.1 Pedestrian Safety 4-15
4.3.3.2 Pedestrian Security 4-19
4.3.3.3 Emergency Services 4-19
4.3.4 Segment HB 4-19
4.3.4.1 Pedestrian Safety 4-19
4.3.4.2 Pedestrian Security 4-20
4.3.4.3 Emergency Services 4-21

Section 5 Impacts and Mitigations 5-1
5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative 5-1
5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative 5-5
5.2.3 Cumulative Impacts and Mitigations – Bus Rapid Transit Alternative 5-5
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-6

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-6
5.3.1.1 Segment UA 5-6
5.3.1.2 Segment UB 5-10
5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-12
5.3.2.1 Segment UA 5-12
5.3.2.2 Segment UB 5-13
5.3.3 Cumulative Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-13
5.3.4 120th Street Yard and Shop 5-13
5.3.4.1 Permanent Impacts and Mitigations 5-13
5.3.4.2 Construction Impacts and Mitigations 5-14
5.4 Union Pacific Railroad Rail Alternative - East Option 5-14
5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option 5-14
5.4.1.1 Segment UA 5-14
5.4.1.2 Segment UB 5-17
5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option 5-18
5.4.2.1 Segment UA 5-18
5.4.2.2 Segment UB 5-18
5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option 5-18
5.4.3.1 Segment UA 5-18
5.4.3.2 Segment UB 5-19
5.4.4 120th Street Yard and Shop 5-19
5.5 Union Pacific Railroad Rail Alternative - West Option 5-19
5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option 5-19
5.5.1.1 Segment UA 5-19
5.5.1.2 Segment UB 5-20
5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option 5-20
5.5.2.1 Segment UA 5-21
5.5.2.2 Segment UB 5-21

5.5.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option 5-21
5.5.3.1 Segment UA 5-21
5.5.3.2 Segment UB 5-21
5.5.4 120th Street Yard and Shop 5-21
5.6 Halsted Rail Alternative 5-21
5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative 5-21
5.6.1.1 Segment HA 5-21
5.6.1.2 Segment HB 5-24
5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative 5-27
5.6.2.1 Segment HA 5-27
5.6.2.2 Segment HB 5-27
5.6.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative 5-28
5.6.4 119th Street Yard and Shop 5-28
5.6.4.1 Permanent Impacts and Mitigations 5-28
5.6.4.2 Construction Impacts and Mitigations 5-28

Section 6 Impacts Remaining after Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-2
6.3.1 Segment UA 6-2
6.3.2 Segment UB 6-3
6.3.3 120th Street Yard and Shop 6-4
6.4 Union Pacific Railroad Rail Alternative - East Option 6-4
6.4.1 Segment UA 6-4
6.4.2 Segment UB 6-5
6.4.3 120th Street Yard and Shop 6-5
6.5 Union Pacific Railroad Rail Alternative - West Option 6-5
6.5.1 Segment UA 6-5
6.5.2 Segment UB 6-6
6.5.3 120th Street Yard and Shop 6-6
6.6 Halsted Rail Alternative 6-6
6.6.1 Segment HA 6-6
6.6.2 Segment HB 6-7

6.6.3 119th Street Yard and Shop 6-8

Section 7 References Cited 7-1

Appendices

Appendix A: Tables and Figures

Appendix B: 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: RLE Project Alternatives 2-2
Figure 4-1: Reported Chicago Transit Authority-Related Crimes in Chicago (2009-2011) 4-6
Figure 4-2: 103rd Street at the Union Pacific Railroad tracks, looking west ... **Error! Bookmark not defined.**
Figure 4-3: 111th Street at the Union Pacific Railroad tracks, looking west ... **Error! Bookmark not defined.**
Figure 4-4: 130th Street at Evans Avenue, looking east ..... **Error! Bookmark not defined.**
Figure 4-5: 130th Street/Doty Avenue at the Kensington Branch rail line, looking west ..... **Error! Bookmark not defined.**
Figure 4-6: 103rd Street and Halsted Street, looking northwest..... **Error! Bookmark not defined.**
Figure 4-7: 111th Street and Halsted Street, looking northwest..... **Error! Bookmark not defined.**
Figure 4-8: 119th Street and Halsted Street, looking northwest..... **Error! Bookmark not defined.**
Figure 4-9: Halsted Street and Vermont Avenue, looking northeast **Error! Bookmark not defined.**
Figure 5-1: Potential Sidewalk Connections at 103rd Street Station Parking Lots 5-8
Figure 5-2: Pedestrian Crossing Gates at Isabella Street on Chicago Transit Authority Purple Line 5-17
Figure 5-3: Intertrack Fencing at a Metra Station..... 5-17
Figure 5-4: Multiple Threat Pedestrian Crash 5-26
Figure A-1: Emergency Services Map A-5
Figure A-2: Crime Heat Map - North Area A-6
Figure A-3: Crime Heat Map - Southwest Area..... A-7
Figure A-4: Crime Heat Map - Southeast Area A-8

Tables

Table 3-1: CTA Risk Assessment Matrix 3-9
Table 4-1: Crashes at 103rd Street and Union Pacific Railroad Grade Crossing 4-11
Table 4-2: Crashes at 111th Street and Union Pacific Railroad Grade Crossing..... 4-11

Table 5-1: Change in Major Incidents for Bus Rapid Transit Alternative 5-1
Table 5-2: Change in Major Incidents for Segment UA 5-6
Table 5-3: Change in Major Incidents for Segment UB 5-10
Table 5-4: Calculated Expected Crash Frequencies at Union Pacific Railroad Grade Crossings5-16
Table 5-5: Change in Major Incidents for Segment HA 5-22
Table 5-6: Change in Major Incidents for Segment HB 5-25
Table 6-1: Impacts Remaining after Mitigation - Bus Rapid Transit Alternative 6-1
Table 6-2: Impacts Remaining after Mitigation - Union Pacific Railroad Rail Alternative Right-of-Way Option, Segment UA 6-2
Table 6-3: Impacts Remaining after Mitigation - Union Pacific Railroad Rail Alternative Rail Alternative ROW Option, Segment UB 6-3
Table 6-4: Impacts Remaining after Mitigation - Union Pacific Railroad Rail Alternative Rail Alternative Right-of-Way Option, 120th Street Yard and Shop 6-4
Table 6-5: Impacts Remaining after Mitigation - Union Pacific Railroad Rail Alternative Rail Alternative East Option, Segment UA 6-5
Table 6-6: Impacts Remaining after Mitigation - Halsted Rail Alternative, Segment HA 6-6
Table 6-7: Impacts Remaining after Mitigation - Halsted Rail Alternative, Segment HB 6-7
Table 6-8: Impacts Remaining after Mitigation - Halsted Rail Alternative, 119th Street Yard and Shop 6-8
Table A-1: Safety and Security Incident Summary for Entire Chicago Transit Authority Bus System A-1
Table A-2: Safety and Security Incident Summary for Entire Chicago Transit Authority Rail System A-1
Table A-3: Crimes on Chicago Transit Authority Buses and at Bus Stops A-2
Table A-4: Crimes on Chicago Transit Authority Trains, Platforms, and Other Property in Chicago A-3
Table A-5: Pedestrian Crashes within ⅛ mile of Proposed Station Locations A-3

Abbreviations

ADA	Americans with Disabilities Act
ADT	average daily traffic
BRT	Bus Rapid Transit
CDOT	Chicago Department of Transportation
CFR	Code of Federal Regulations
CHA	Chicago Housing Authority
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
ICC	Illinois Commerce Commission
IDOT	Illinois Department of Transportation
mph	miles per hour
MUTCD	Manual on Uniform Traffic Control Devices
MWRD	Metropolitan Water Reclamation District
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
RLE	Red Line Extension
ROW	right-of-way
RTA	Regional Transit Authority
RTD	Regional Transportation District
UPRR	Union Pacific Railroad
VMT	vehicle miles traveled
VRH	vehicle revenue hours

Section 1
Summary

This technical memorandum was prepared to support an environmental impact statement (EIS) for the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project. The purpose is to identify, evaluate, and characterize potential safety and security impacts and mitigation measures within the project area or associated with various RLE Project alternatives. Impacts can relate to transit patrons, employees, pedestrians, motorists, and the public.

1.1 Safety and Security Defined

Safety refers to freedom from harm resulting from unintentional acts or circumstances. With regard to the RLE Project, safety includes all incidents within the CTA right-of-way (ROW); including areas along tracks, in yards, and at stations, meeting certain threshold criteria (see Section 3.2). Examples could include collisions, derailments, fires, property damage, injuries, and fatalities.

Security refers to freedom from harm resulting from intentional acts or circumstances. Intentional acts include crimes, and must be reported if the intentional act meets thresholds for notification as specified in the Federal Transit Administration's (FTA's) State Safety Oversight Rule (40 Code of Federal Regulations [CFR] Part 659).

1.2 Key Findings

The following sections summarize the identified adverse impacts for each alternative considered, the mitigation measures to address the adverse impacts, and the impacts remaining after mitigation. Issues that the local community identified as important safety and security concerns are also addressed in the summary. Details regarding impacts that are not adverse or not substantially adverse can be found in Section 5 and Section 6 in this document.

1.2.1 No Build Alternative

There would be no expected permanent impacts, construction impacts, or cumulative impacts on safety and security associated with the No Build Alternative. Therefore, there would be no mitigation measures and no impacts remaining after mitigation.

1.2.2 Bus Rapid Transit Alternative

The Bus Rapid Transit (BRT) Alternative would have the following impacts:

- Pedestrian Safety - An adverse impact was identified at the proposed Kensington Avenue stop because a large number of pedestrians would need to cross Michigan Avenue without traffic controls or other pedestrian safety treatments. This impact would be mitigated through the installation of traffic signals, median refuge islands, and/or other pedestrian crossing

treatments as applicable in coordination with the results of traffic studies completed during the final design phase. The impact remaining after mitigation would be not adverse.

- Bus Stop Security - The public scoping comments included concerns about the potential for crime at stops. In general, either existing major bus stops would be upgraded with new shelters, or BRT stops would be located away from existing crime hot spots. With increased ridership, more pedestrian activity would be expected than under the No Build Alternative. The bus stop crime impacts would all be either not adverse or beneficial.

- Parking Security - All parking facilities would be designed, constructed, and operated with features such as open design, lighting, surveillance cameras and/or security patrols, convex mirrors, emergency push buttons, fencing, and landscaping. For surface lots, pedestrian access routes through or adjacent to parking lots would be considered on a case-by-case basis where they could increase the pedestrian activity and pass-by surveillance. Given these design elements, there would be no adverse impacts on parking security.

- Neighborhood Security - The public scoping comments included concerns about the potential for increased crime in neighborhoods surrounding proposed stops. The addition of BRT service in an existing corridor served by frequent bus service (route #34) would not be expected to generate changes in travel patterns or demographics to an extent that would affect crime in surrounding neighborhoods. Therefore, there would be no adverse impacts on neighborhood security.

- Emergency Services - The public comments received during the scoping period included concerns about the ability of first responders to access construction areas and it is assumed that there would also be concerns about access through construction areas. It is expected that the BRT Alternative would be constructed with equipment temporarily occupying the parking lane, and without closures of the through travel lanes. Therefore, access for emergency services would not be restricted, and the impacts would be not adverse.

1.2.3 Union Pacific Railroad Rail Alternative

The UPRR Rail Alternative would have the following impacts:

- Pedestrian Safety - An adverse impact was identified at the proposed 103rd Street, 111th Street, and Michigan Avenue stations because a large number of pedestrians would need to cross major streets without traffic controls or other pedestrian safety treatments. This impact would be mitigated through the installation of traffic signals, median refuge islands, and/or other pedestrian crossing treatments as applicable in coordination with the results of traffic studies completed during the final design phase. The remaining impact would be not adverse.

- Station Security - The public scoping comments included concerns about the potential for crime at stations. All stations would be designed and constructed in compliance with the standards and guidelines in CTA's *Design and Rehabilitation Criteria Manual* (1996) and other

design guidelines. Stations would be well lit, with clear lines of sight. The final design would consider lines of sight for surveillance by station personnel as well as video cameras. Given these design elements, there would be no adverse impacts on station security.

- Parking Security - As described for the BRT Alternative above, all parking facilities and pedestrian access routes would be designed, constructed, and operated with security features. Given these design elements, there would be no adverse impacts on parking security.

- Neighborhood Security - The public scoping comments included concerns about the potential for increased crime in neighborhoods surrounding proposed stations. A literature review of multiple sources found that new train stations would be unlikely to have much, if any, impact on neighborhood crime (Plano 1993, Denver Regional Transportation District [RTD] 2006, Liggett et al. 2003, San Diego Association of Governments 2007). However, some studies have found a correlation between train service and higher crime rates, particularly in low-income areas similar to the project area (Poister 1996, Ihlanfeldt 2003, Block and Davis 1996). The impact would therefore be not substantially adverse. Suggested mitigation measures would be security surveillance cameras and sidewalk lighting along commercial streets within the immediate vicinity (one block, or 660 feet) of train station entrances. The remaining impacts would be not adverse.

- Highway-Rail Crossings - An increase in train volumes, pedestrian volumes, and motor vehicle volumes in the vicinity of the 103rd Street and 111th Street stations would have both cumulative and permanent adverse impacts on safety for the East Option and the West Option. Pedestrian gates blocking the sidewalks is a potential mitigation measure for these two at-grade crossings. Fencing could be installed around parking lots and ROW lines, or intertrack fencing could be installed between the Union Pacific Railroad (UPRR) tracks to prevent pedestrians from crossing the tracks at places other than the designated locations. The remaining impacts would be not adverse.

- Emergency Services - The public comments received during the scoping period included concerns about the ability of first responders to access construction areas and it is assumed that there would also be concerns about access through construction areas. Emergency services would be able to access construction sites at all times in the same way contractors access the sites, and detours would be needed at times due to roadway closures. The impacts would be not substantially adverse. As a mitigation, to minimize detour lengths, neither adjacent roadways nor adjacent through streets operating in the same direction would be closed simultaneously. The remaining impacts would be not substantially adverse.

1.2.4 Halsted Rail Alternative

The Halsted Rail Alternative would have the following impacts:

- Station Security - The public scoping comments included concerns about the potential for crime at stations. As described for the UPRR Rail Alternative above, all stations would be

designed and constructed in compliance with CTA guidelines and standards, and would incorporate security features. Given these design elements, there would be no adverse impacts on station security.

- Parking Security - As described for the BRT Alternative above, all parking facilities and pedestrian access routes would be designed, constructed, and operated with security features. Given these design elements, there would be no adverse impacts on parking security.

- Neighborhood Security - The public scoping comments included concerns about the potential for increased crime in neighborhoods surrounding proposed stations. As explained above for the UPRR Rail Alternative, research associated with this issue indicates that the impact would be not substantially adverse. The suggested mitigation measures would be the same as for the UPRR Rail Alternative.

- Emergency Services - The public comments received during the scoping period included concerns about the ability of first responders to access construction areas and it is assumed that there would also be concerns about access through construction areas. Emergency services would be able to access construction sites at all times in the same way contractors access the sites, and detours would be needed at times due to roadway closures. The impacts would be not substantially adverse. As a mitigation, only short segments of Halsted Street (less than ½ mile long) would be closed at any given time to prevent adjacent major cross streets from being closed simultaneously. The remaining impacts would be not substantially adverse.

1.3 2014-2015 Red Line Extension Project Update

Updated July 29, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix B of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix B supersedes information presented in other chapters of this technical memorandum.

Section 2
Introduction

The CTA is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft EIS focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - ROW Option
  - East Option
  - West Option
- Halsted Rail Alternative

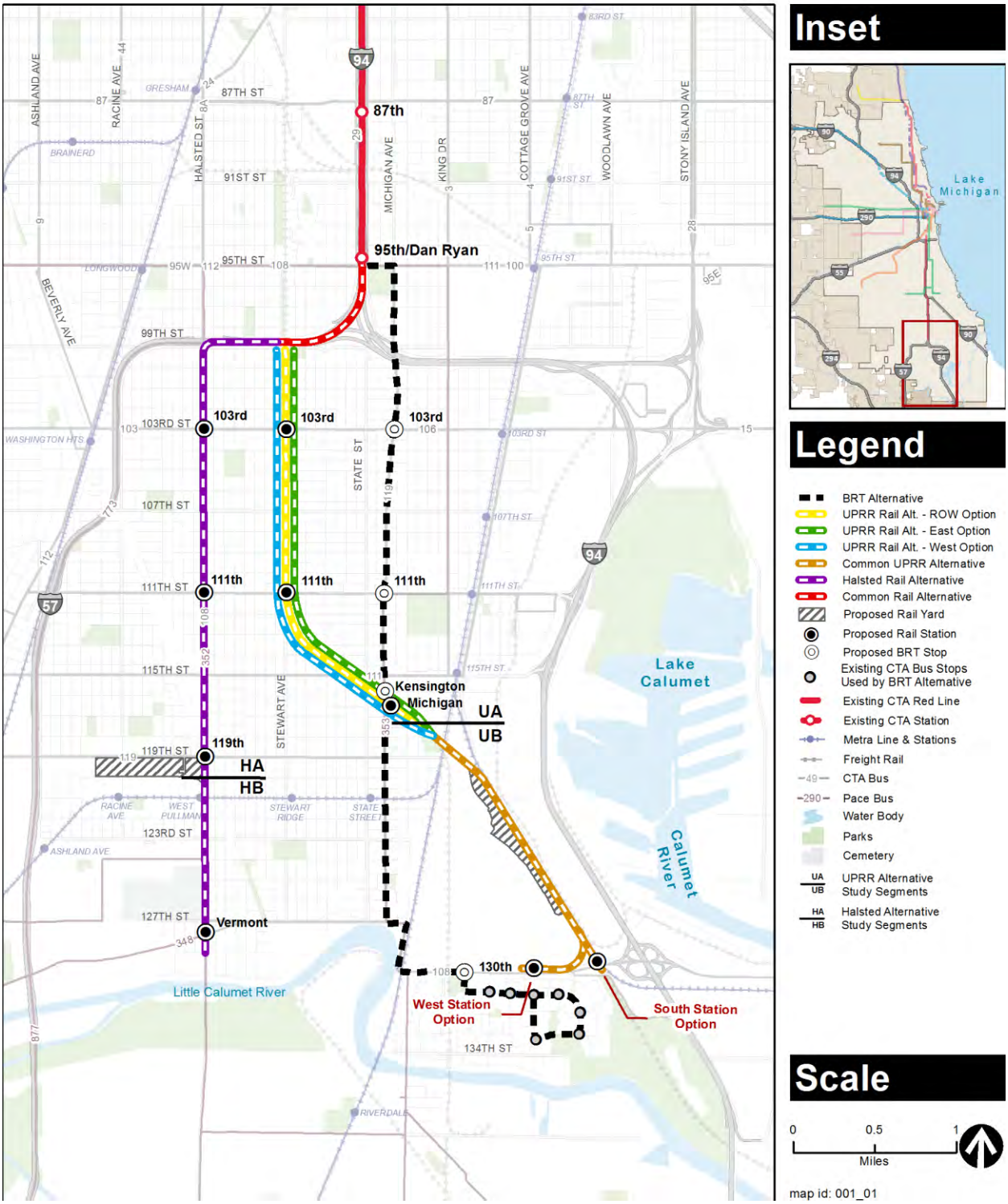

Figure 2-1: RLE Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative

would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

This section describes the process used to conduct an analysis of potential safety and security impacts that could result from the construction and operation of the alternatives analyzed in the EIS for the RLE Project. This technical memorandum also identifies potential options to avoid, minimize, and mitigate adverse impacts.

3.1 Regulatory Framework

The following sections briefly discuss the regulatory framework used to guide the evaluation of project safety and security.

3.1.1 Federal

States with rail fixed guideway systems must comply with 49 CFR Part 659. This rule sets the FTA's requirements for improving rail transit safety and security. Part 659, Implementation Guidelines, produced by the FTA Office of Safety and Security (2006) lists the following requirements:

- Designating a Safety and Security Oversight agency
- Developing a program standard and supporting procedures
- Requiring, reviewing, and approving rail transit agency System Safety Program Plans and System Security Plans
- Requiring an annual cycle for rail transit agencies to review System Safety Program Plans and System Security Plans to determine whether they should be updated
- Requiring and overseeing implementation of the rail transit agency internal safety and security audit program and requiring, reviewing, and approving annual reports and certifications from rail transit agencies
- Requiring and overseeing implementation of the rail transit agency hazard management process
- Requiring and receiving notification of accidents meeting the revised Part 659 thresholds
- Conducting investigations of accidents meeting the revised Part 659 thresholds
- Conducting Three-Year safety and security reviews at rail transit agencies

- Requiring, reviewing, approving, and tracking corrective action plans for findings from accident investigations and Three-Year reviews
- Reporting to FTA

To inform employees about the hazards associated with chemicals in their workplaces, the Occupational Safety and Health Administration issued a Hazard Communication Standard, which is published in 29 CFR 1910.1200 or 1926.59. The Hazard Communication Standard requires that CTA make its employees aware of the hazards of chemicals in their workplace, provide access to information about these chemicals, and properly train employees to work safely with the chemicals.

The Federal Railroad Administration requires all railroads to comply with regulations under Title 49 CFR Part 214 - Roadway Worker Safety, which identifies requirements for workers performing construction, inspection, or maintenance activities in close proximity to active railroad tracks and identifies measures to be followed to provide on-track safety for workers.

On January 9, 2013 a Final Rule was issued to amend Part 611 of Title 49 of the CFR, under which the FTA evaluates and rates major transit capital investments seeking funding under the discretionary programs authorized by Section 5309 of Title 49, U.S. Code. The FTA's Proposed New Starts and Small Starts Policy Guidance, released on the same date as the Final Rule, includes factors to calculate the expected change in injuries and fatalities based on the projected change in vehicle-miles traveled (VMT) for automobile and transit modes, but not other modes such as pedestrians or bicyclists. The guidance also assigns an economic value to each injury and fatality. The analysis to quantify the economic value associated with the Preferred Alternative will be completed as a part of the New Starts process and in the Final EIS.

3.1.2 State

The Illinois Regional Transportation Authority (RTA) Act includes a section on safety (Section 2.11) that requires the RTA to develop and adopt a system safety program and requires all applicable Service Boards (i.e., CTA) to meet all compliance standards associated with Part 659 (Illinois General Assembly 1997).

The Illinois Commercial Transportation Law grants authority to the Illinois Commerce Commission (ICC) to create safety standards for passenger and freight trail carriers for the purpose of protecting public safety (Illinois General Assembly 1996). The ICC Rail Safety Program includes the following functions (ICC 2012c):

- "Manage crossing safety projects paid, in part, by the Grade Crossing Protection Fund.
- Engineering oversight of all safety improvements and/or modifications to the state's public highway/rail crossings.

- Inspection of all Railroad track in the state for defects which could cause train derailments.
- Oversight of all Railroad hazardous material shipments through the state, including radioactive waste and spent nuclear fuel.
- Engineering oversight of all improvements/modifications to highway traffic signal systems interconnected with railroad warning devices.
- Implementation of Illinois' Operation Lifesaver public education campaign.
- Investigation of highway/rail collisions and other rail-related incidents that occur in Illinois."

This analysis assumes that all portions of the proposed project within the jurisdiction of the Illinois Department of Transportation (IDOT) would comply with all design standards in the *Bureau of Design and Environment Manual* (IDOT 2010a) or obtain authorizations for design exceptions as required.

3.1.3 Regional and Local

3.1.3.1 Regional Transportation Authority of Northeastern Illinois

The RTA of Northeastern Illinois is designated as the state safety oversight agency for the CTA's heavy rail rapid transit system. In accordance with Part 659, the RTA has developed program standards and requirements to be followed by the CTA. These standards require the CTA to complete all of the activities described in Section 3.1.1.

3.1.3.2 Chicago Transit Authority

The CTA implements policies, plans, and actions specifically directed toward maintaining safety and security during construction and operation of the transit system. Safety and security planning is included in the CTA's *Rail System Safety Program Plan* and *Security and Emergency Preparedness Plan*, both of which are required of the CTA under 49 CFR Part 659 as noted above. These documents are typically not available for public dissemination due to information security concerns.

The CTA's *Safety and Security Management Plan* includes information on the integration of safety and security into the project development process, responsibilities of various parties, the hazard management process, safety and security design criteria, and the safety and security verification process (CTA 2011b). The primary responsibilities of contractors during the construction phase include developing a Construction Safety and Security Plan, performing job safety analysis, and monitoring safety and security activities. In addition, personnel requiring access to the track bed must undergo an 8-hour CTA rail safety training program.

The CTA, along with the Chicago Police Department as a security partner, also regularly coordinates with the Department of Homeland Security and the Federal Security Director for the Transportation Security Administration. This coordination includes triennial security reviews, the

most recent of which is in progress and is planned to be coordinated with Metra, the regional commuter rail agency, and Pace, a suburban bus transit provider. The CTA's *Security and Emergency Preparedness Plan* is updated annually. The CTA participates in the BASE (Baseline Assessment for Security Enhancement) program, which measures performance in 17 categories related to safety and security.

Other existing CTA manuals that include design standards relevant to safety and security include the *Design and Rehabilitation Criteria Manual* (1996) and the *Bus Facilities Handbook* (2007). The standards in all CTA manuals would be followed for new construction where feasible and practical.

The design standards in the *Design and Rehabilitation Criteria Manual* address system safety, security, fire protection, human factors, reliability, maintainability, configuration management, and quality control. Patron safety is the highest priority in system safety objectives. Construction, installation, inspection, and testing procedures and the safety of CTA personnel are additional objectives.

The *Design and Rehabilitation Criteria Manual* emphasizes the importance of an open station concept, with plenty of lighting to eliminate dark spaces; transparent furnishings; and minimum widths of vertical and horizontal circulation elements (such as stairs, escalators, and aisles) to be determined by the CTA based on passenger volume forecasts.

The *Bus Facilities Handbook* provides the dimensions of bus stops and the appropriate places to locate street furniture and landscaping to ensure safe and accessible operations.

Construction safety is addressed in the CTA's (2011) *Safety Manual for Contract Construction On, Above, or Adjacent to the CTA Rail System* (Construction Safety Manual). The Construction Safety Manual is applicable whenever contractors or consultants perform work on, above, or adjacent to the CTA rail system in order to protect themselves, their employees, sub-contractors, CTA passengers, employees, and the public. The Construction Safety Manual is not addressed to CTA personnel. A comprehensive system of CTA standard operating procedures and rail service bulletins directed to CTA rail-operating personnel governs operations throughout the rail system and supports the safe and expeditious movement of trains.

3.1.3.3 City of Chicago

The portions of the project within the City of Chicago must comply with all applicable City of Chicago Building Code regulations (City of Chicago 2012a). The City of Chicago Building Code contains provisions for structural design, construction material performance, accessibility, fire protection systems, means of egress, and more. Many elements of the code would be applicable to the design of stations and track structure.

3.1.3.4 Village of Calumet Park

Portions of the proposed project within the Village of Calumet Park (along the west side of Halsted Street from 123rd Street to 125th Street) must comply with all requirements of the Village of Calumet Park Building Department (Village of Calumet Park 2013). Requirements are included for construction, demolition, electrical, plumbing, sidewalks, and more.

3.1.4 Other

3.1.4.1 National Fire Protection Association

Fire Code regulations for transit infrastructure are codified in the National Fire Protection Association (NFPA) 130 *Standard for Fixed Guideway Transit and Passenger Rail Systems* (NFPA 2010a). Topics addressed in the NFPA 130 Standard include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire safety requirements for new and existing buildings and their premises. Fire compartmentalization and evacuation requirements for transit facilities include the following:

- Enclosed stations or portions of stations must be of non-combustible construction built to a fire resistant period of 4 hours.
- Non-public areas must be separated from public areas by construction providing at least 2 hours of fire resistance.
- Commercial spaces (and other non-transit uses) must have at least 3 hours of fire resistance separation.
- Non-public area fire resistance requirements include 3 hours for electrical substations, 4 hours for generator rooms, and 2 hours for enclosed staircases, electrical code shafts, other plant rooms, storerooms, and refuse storage.
- Evacuation time for station occupant load must be a maximum of 4 minutes from the platform to ground level point of safety access and 6 minutes from the most remote point on the platform.
- The number of normal accessways (typically open stairways or escalators) can vary and is a function of exit time, given entraining and detraining peak passengers loads.
- Enclosed stairs must be provided at one or both ends of the platform of enclosed stations. Enclosed exits are for passenger use in emergencies, and must be electronically locked for security reasons. Electronically controlled locks must disengage upon fire alarm control panel command or in the event of a power loss. At least one enclosed stair must be designated for firefighter entry.

- Maximum travel distance to an exit on a platform must be 300 feet or less.
- Exit signs and emergency lighting must be provided and must have connections to secondary power.
- Automatic sprinkler systems must be provided for commercial spaces, storage, refuse storage, escalator pits, mechanical plant rooms, and other areas with combustible loading. Otherwise, public areas need not have sprinkler systems as long as non-combustible construction provides negligible fire load.
- Standpipe and hose systems must be in accordance with NFPA 14, *Standard for the Installation of Standpipes and Hose Systems* (NFPA 2010b), and must be installed in enclosed stations.
- Elevators counted as contributing to the means of egress capacity must be accessed via holding areas or lobbies that must be separate from the platform by a smoke-tight fire separation having a fire resistance rating of at least 1 hour, but not less than the time required to evacuate the holding area occupant load. Other requirements include having at least one stair accessible from the holding area, 5 square feet per person size requirements, pressurization to a minimum of 25 Pascals when smoke control is activated, and emergency alarm devices with two-way communication to the system operations control center.

3.1.4.2 Union Pacific Railroad

Several of the EIS alternative footprints would be in and/or adjacent to the active UPRR freight railroad corridor. The analysis considered safety and security issues related to portions of the project area in or adjacent to the freight railroad corridor.

To address the safety risk of collapse of the CTA structure due to damage caused by potential freight train derailment, the CTA track structure will generally have a minimum horizontal separation of 50 feet from the centerline of a proposed third track, planned to be located east of the existing two tracks. A crash wall capable of protecting the CTA track structure and piers from being struck by a derailed train will be provided where the minimum separation distance cannot be achieved. Where crash walls are not practical, the design of the CTA structure will include crash-worthy piers meeting American Railway Engineering and Maintenance of Way Association (2012) requirements.

The American Association of Railroads and its member Class I railroads, including UPRR, also currently participate in e-RAILSAFE program to improve the security of railroad employees, operations, and facilities. The program requires all third-party railroad contractors, vendors, and suppliers to comply with the following:

- Complete a railroad safety training course.
- Complete a railroad security awareness course.

- Acquire a contractor photo identification credential.
- Pass a criminal background check.

The Union Pacific Corporation will require flagging when activities have the potential to foul the track.

3.2 Impact Analysis Thresholds

There are no specific thresholds for safety and security identified under NEPA. The FTA requires transit agencies to report major safety and security incidents within 30 days of their occurrence. This EIS addresses potential safety and security impacts through a combination of qualitative and quantitative analysis. For the purpose of this EIS, an adverse safety and security impact is defined as an impact that would cause one or more of the following:

- Creation of the potential for increased rate of reportable major incidents to the FTA. Major incidents include fatalities, mainline derailments, injuries requiring off-site medical attention, property damage greater than or equal to $25,000, or an evacuation due to life safety reasons (National Transit Database 2010).
- Failure to meet the applicable design standards related to safety.
- Marked increase in pedestrian or motorist safety incidents at highway-rail grade crossings in the immediate vicinity of proposed CTA stations.
- The potential for a marked increase in pedestrian safety incidents in the immediate vicinity of proposed CTA stations.
- The potential for a marked increase in crime incidents near proposed CTA stations.
- Notable increases in emergency response times.
- Marked increase in other security risks on or off the CTA system.

3.2.1 Construction Impacts

The Construction Safety Manual provides guidance regarding security (CTA 2011). For the purpose of this EIS, the following safety and security impacts would be considered adverse:

- The contractor failed to provide a site security plan including measures to prevent unauthorized entry to the site and measures to prevent vandalism.
- Pre-existing security equipment (e.g., at the 95th Street Terminal or City of Chicago “Blue Light” cameras) was disabled without first incorporating similar temporary or permanent

security measures for the construction site, or without prior consent from the CTA's Office of Security.

- A CTA safety inspector determined that the contractor or contractor personnel committed serious or repeated violations of the safety rules or procedures contained in or referenced in the Construction Safety Manual.
- The contractor failed to take prompt and decisive corrective action on safety deficiencies identified at the work site.
- Closure of major roadways or extensive detours that noticeably degrade emergency response times.

3.3 Area of Potential Impact

The area of potential impact for safety and security includes a ½-mile radius centered on each of the proposed stations and stops as well as the existing 95th Street Terminal. One-half mile is used as an approximation of the distance most patrons will walk to a station and is therefore used to measure general pedestrian safety and security in the surrounding neighborhood. Pedestrian activity concentrates in the immediate vicinity of a station, which for this analysis is defined as the area within one full block, or ⅛ mile (660 feet) of station entrances or bus stops.

A small portion of the Village of Calumet Park, and the following Chicago community areas are within the area of potential impact: Beverly, Morgan Park, Pullman, Riverdale, Roseland, Washington Heights, and West Pullman.

3.4 Methods

Impacts on safety and security for the RLE Project were conducted pursuant to NEPA guidance (40 CFR 1508). This section describes the methods that were used to evaluate the safety and security impacts of each alternative.

The CTA has a formal process for the management of safety hazards and security threats and vulnerabilities. This process includes the identification of potential hazards and a risk assessment process. The risk assessment process includes a determination of severity (critical or marginal) and probability of occurrence (probable, occasional, or remote). These factors are put into a Hazard

- **Critical risks** are those that result in death or serious injury to workers, customers, or the public; in system loss; or in major to severe damage to the system environment.
- **Marginal risks** result in minor or less than minor injuries, or service disruptions
- **Probable risks** can be expected to happen regularly, at a rate of 1 in 20 or more.
- **Occasional risks** can be expected to happen at some point during the life of the item or system, at a rate of 1 in 20 to 1 in 200.
- **Remote risks** probably will not occur, but remain a possibility.

Assessment Matrix (see Table 3-1 and sidebar) to determine the required action (CTA 2011b).

The risk assessment process was used in the analysis of potential adverse impacts in this memorandum. Beneficial impacts are analyzed qualitatively on a scale of low impact, medium impact, or high impact. The classification as a low, medium, or high impact was based on the frequency of the event, the scope of work for the alternative being considered, and professional judgment.

The first priority is to eliminate or minimize hazards through design (CTA 1996). This analysis identified minimization measures for the prototypical design. The second priority is to mitigate the hazard, reducing it to an acceptable level of safety. Mitigation measures were developed in response to specific hazards identified. The third priority is to install warning devices to alert persons to the hazard. If it is impossible or impractical to eliminate, minimize, or mitigate identified hazards, then the CTA would develop special procedures and training.

Table 3-1: CTA Risk Assessment Matrix

Probability/Severity	Critical	Marginal
Probable	**Unacceptable** - Requires design or safety solution. Considered "Adverse" for NEPA analysis.	**Undesirable** - Requires management review and mitigating action if at all possible. Considered "Adverse" for NEPA analysis.
Occasional	**Undesirable** - Requires management review and mitigating action if at all possible. Considered "Adverse" for NEPA analysis.	**Review** to determine and sustain acceptability. Considered "Not Substantially Adverse" for NEPA analysis.
Remote	**Review** to determine and sustain acceptability. Considered "Not Substantially Adverse" for NEPA analysis.	**Acceptable** with no review needed. Considered "Not Adverse" for NEPA analysis.

3.4.1 Safety

The safety assessment considered hazards to pedestrians, bicyclists, transit patrons, employees, motorists, and the transit system itself as they relate to the project area. The following types of analysis were conducted:

- The expected change in the number of major incidents reportable to the FTA was performed by multiplying the expected change in service hours for each mode (rail versus bus) for each alternative by the incident rate per service hour for that mode. Major incidents include fatalities, mainline derailments, injuries requiring immediate off-site medical attention, property damage greater than or equal to $25,000, or an evacuation due to life safety reasons (National Transit Database 2010).

- The "Expected Crash Frequency" (ECF) at existing highway-rail grade crossings was calculated using Equation 7-3.1 in the IDOT *Bureau of Design and Environment Manual*, and compared to actual crash frequency shown in ICC data. A site survey was also conducted to evaluate the

presence of existing warnings of approaching trains (e.g., signs, signals, gates), and fencing to prevent or discourage crossing except at authorized locations.

- The existing pedestrian environment near proposed station sites was evaluated both quantitatively and qualitatively. The number of traffic crashes involving pedestrians was evaluated. Recognizing that the number of incidents is related to exposure, the existing pedestrian environment was considered. The evaluated issues included the presence of sidewalks, crosswalks, curb ramps, pedestrian signals, and lighting. Conditions at intersections were considered, including pedestrian delays, number of lanes crossed, traffic volumes, and speed of traffic. The location and adequacy of barriers near railroad tracks (curbs, fences, and vegetation) to channelize pedestrians and bicyclists was considered.

- The public comments received during the scoping period included concerns about the ability of first responders to access construction areas. The impact of the construction and operation of the project on emergency response times was evaluated qualitatively based on the locations of proposed construction areas and proposed transit stations in relation to at-grade rail crossings and public health and safety facilities (e.g., fire stations, hospitals).

- The general safety of the CTA system, including train stations or bus stops, was addressed by assuming newly constructed project elements would conform to CTA standards described in Section 3.1.3.2. The various design standards cover all track, structural, station, electrical, and mechanical elements, as well as other items. In general, stations would be well lit, with clear lines of sight. The final design would also consider lines of sight for surveillance by station personnel as well as video cameras. This guidance is consistent with the results of a community visioning session for the project, where participants noted security as one of their top concerns, and requested well-lit areas, security personnel, and glass elevators as high priorities (Developing Communities Project et al. 2010).

- Fire safety was addressed by assuming newly constructed project elements would conform to NFPA 130 standards for fire protection, prevention, detection, notification, suppression, and evacuation. These standards state that the design would include fire retardant materials, surveillance and detection equipment, adequate egress routes for patrons, and adequate ingress routes for emergency responders. In addition, sprinklers, fire extinguishers, and standpipe systems would be installed where required by code.

Measures to mitigate safety concerns, or to improve safety, were identified where applicable. The inclusion of these mitigation measures in the project could help to avoid certain impacts entirely, reduce the probability of incident occurrence, reduce the severity of incidents that occur, or compensate for the impacts in some way.

3.4.2 Security

Security includes intentional acts, including crime to persons or property, and acts of terrorism. The goal of the design for the RLE Project would be to deter and detect acts of vandalism,

terrorism, and other criminal acts. The design would allow for rapid response by emergency services (CTA 1996).

The public scoping comments included concerns about the potential for crime at stations and in surrounding neighborhoods as a result of the project. The existing crime activity in the areas surrounding proposed transit stations was evaluated by using geographic information systems to identify existing crime hot spots in the project area (see Figure A-2 through Figure A-4 in Appendix A). A literature review was completed to determine how the proposed transit stations would be expected to affect crime in the immediate vicinity of proposed stations and in surrounding neighborhoods. The potential for crime at parking lots and parking garages was also considered.

The potential for other security incidents to occur, particularly related to homeland security risks, was analyzed qualitatively for each alternative. A more detailed analysis of these risks will be conducted by CTA for the selected NEPA preferred alternative identified in the EIS. This Threat and Vulnerability Assessment to be completed by the CTA will ultimately identify security threats in the transit system, and make recommendations to reduce those threats.

The analysis included identification of mitigation measures that could be incorporated into the project's Safety and Security Plan to be developed in the final design phase. The inclusion of these mitigation measures in the project could help to avoid certain impacts entirely, reduce the probability of incident occurrence, reduce the severity of incidents that do occur, or compensate for the impacts in some way.

Section 4
Affected Environment

The affected environment for this analysis includes areas that could be affected by impacts on the CTA system (e.g., vehicles, stations, rail yards), impacts in the areas surrounding stations, and cumulative impacts related to other reasonably foreseeable projects. Groups covered in the affected environment include transit passengers, operators, employees, contractors, and the general public. Members of these groups all come in contact with the system in some way, and could be susceptible to certain safety and security impacts.

4.1 Bus Rapid Transit Alternative

The affected environment for the BRT Alternative includes the CTA bus system, proposed BRT stations and stops, and the area in the immediate vicinity of proposed stations.

4.1.1 Major Safety and Security Incidents on CTA Bus System

The CTA is required to report major safety and security incidents, such as collisions, fires, fatalities, serious injuries, and more, to the FTA within 30 days of their occurrence. The minimum thresholds for reporting these incidents are described in Section 3.2 of this document. Table A-1 shows a summary of these incidents for the most recent three years of complete data for the entire CTA bus system. From 2009 through 2011, there were 1,025 incidents, including 7 fatalities and 1,814 injuries requiring immediate off-site medical attention.

4.1.2 Crime Summary

Criminal incidents occurring on the CTA system and on other property (e.g., rail yards, maintenance facilities, parking facilities) are recorded by local police in the jurisdiction in which they occur. In some cases, such as fatalities and serious injuries, these criminal incidents could also be counted as "major safety and security incidents" (see Section 4.1.1). Table A-3 shows the number and percent of crime types occurring on CTA buses and at CTA bus stops throughout the City of Chicago. Incidents at maintenance facilities, parking facilities, and other locations are shown in the last column of Table A-4.

Over the three-year period, there was an average of 3.6 incidents per day reported on buses, 1.3 incidents per day reported at bus stops, and 2.4 incidents per day on other property. Robbery, which involves violence or the threat of violence, was more common at bus stops, while theft was more common on buses. Battery, which involves actual harm to an individual, was more common on buses, while assault was more common at bus stops. Narcotics crimes are very rare on CTA buses, but very common at bus stops and on other property. Criminal damage is a problem everywhere in the affected environment, but more so on buses and on other property than at bus stops. Section 4.2.2 provides additional analysis and comparison to the rail system.

4.1.3 Pedestrian Safety

The BRT Alternative would include improved bus shelters along Michigan Avenue at the intersections of 103rd Street, 111th Street, and at Kensington Avenue. Improved shelters would also be provided on 130th Street at Eberhart Avenue. Seven existing route #34 bus stops along local residential streets would also be used in the Altgeld Gardens neighborhood. Because many of the BRT stops would be at the intersection of one or more major through streets, the safety of pedestrians crossing those streets to access stations or nearby destinations would be a concern.
Source: (City of Chicago 2012b)

CTA = Chicago Transit Authority

Table A-5 shows frequencies of traffic crashes involving pedestrians for the past five years (2007–2011) within one full block, or ⅛ mile (660 feet), for the intersections where the BRT stops would be. The intersections with the highest number of pedestrian crashes in the region typically have 5 to 10 pedestrian crashes per year (Chicago Metropolitan Agency for Planning 2008).

103rd Street Stop

The five years of data show a high crash frequency (22) within ⅛ mile of 103rd Street and Michigan Avenue, with 10 of the crashes occurring at the intersection of 103rd Street and Michigan Avenue, 1 at 103rd Place and Michigan Avenue, 1 at 103rd Street and Wabash Avenue, and the remaining 10 at mid-block locations, mostly along 103rd Street east of Michigan Avenue.

Michigan Avenue is a two-lane collector street carrying 14,300 vehicles per weekday, and 103rd Street is a two-lane minor arterial carrying 21,700 vehicles per weekday (Chicago Department of Transportation [CDOT] 2006). The intersection of 103rd Street and Michigan Avenue is controlled by traffic signals, with transverse crosswalk markings and pedestrian crossing signals on all legs of the intersection. Lighting is typical of that found along major streets in the City of Chicago.

111th Street Stop

The five years of data show a high crash frequency (20) within ⅛ mile of 111th Street and Michigan Avenue, with 6 incidents at the intersection of 111th Street and Michigan Avenue, 1 at 111th Street and State Street, and 13 at mid-block locations.

Michigan Avenue is a two-lane collector carrying 11,900 vehicles per weekday, and 111th Street is a two-lane minor arterial carrying 12,200 vehicles per weekday (CDOT 2006). The intersections of 111th Street and Michigan Avenue, 112th Street and Michigan Avenue, and 111th Street and State Street are signalized. Transverse crosswalk markings and pedestrian crossing signals are present at all three intersections. Lighting is typical of that found along major streets in the City of Chicago.

Kensington Avenue Stop

The five years of data show the crash frequency near Michigan Avenue and Kensington Avenue (eight) is lower than the frequencies near 103rd Street or 111th Street, but the level of pedestrian

activity is also much lower, so this is an expected result. Of the eight crashes within ⅛ mile of Kensington Avenue, five occurred at the intersection of Michigan Avenue and 115th Street, one occurred at 116th Street, and two occurred at mid-block locations.

Michigan Avenue and 115th Street are both two-lane collector streets carrying 11,900 vehicles per weekday and 11,700 vehicles per weekday, respectively (CDOT 2006). Kensington Avenue is a two-lane residential street terminating at Michigan Avenue to form a three-leg intersection. The intersection of 115th Street and Michigan Avenue is controlled by traffic signals, while 116th Street and Kensington Avenue both stop for Michigan Avenue. Transverse crosswalk markings and pedestrian crossing signals are present on all four legs of the intersections at 115th Street and 116th Street, but only on the north and east legs at Kensington Avenue. Lighting is typical of that found along major streets in the City of Chicago.

Eberhart Avenue Stop

The data show only one pedestrian crash in five years near 130th Street and Eberhart Avenue, which occurred one block to the south at 131st Street and Eberhart Avenue. However, the level of pedestrian activity is low, so the existing crash frequency is consistent with expectations.

The traffic volume on 130th Street, a five-lane arterial roadway, is 25,100 vehicles per day traveling at high speeds (CDOT 2006). Eberhart Avenue is a two-lane local residential street with a planted median, and 131st Street is a two-way local residential street. Eberhart stops for 130th Street, and the intersection of 131st Street and Eberhart Avenue is controlled by all-way stop signs. There are no marked crosswalks across 130th Street and no sidewalks along the street. There are sidewalks along Eberhart Avenue and along the south side of 131st Street. There is roadway lighting along 130th Street and intersection lighting for the residential streets.

Additional Stops

The existing route #34 completes a 1.7-mile loop around the Altgeld Gardens neighborhood, making up to 14 stops on four residential streets: 131st Street, Ellis Avenue, 133rd Street, 133rd Place, and Langley Avenue. The proposed BRT route would operate on a similar route, but use Corliss Avenue instead of Langley Avenue, and only serve seven stops. There were 12 pedestrian crashes in this area over a five-year period, with 8 of them occurring at or near the intersections of 131st Street and Langley Avenue, 131st Street and Evans Avenue, or 131st Street and Corliss Avenue.

The Langley Avenue, Evans Avenue, and Corliss Avenue intersections are all three-legged intersections terminating at 131st Street. Vehicles on Evans Avenue stop for 131st Street. However, traffic on 131st Street stops for Langley Avenue and Corliss Avenue, neither of which have stop signs. There are curb-attached sidewalks and roadway lighting along all the area streets.

It is notable that the Chicago Housing Authority (CHA) has recently completed the rehabilitation of a total of 1,323 units in the Altgeld Gardens neighborhood, including 1,009 units at Altgeld Gardens and 314 units at Phillip Murray Homes. CHA is also working with stakeholders to explore the integration of a “town center” with a variety of land uses, including commercial, institutional,

residential and mixed-use development to bring much needed resources to the community (CHA 2012). This type of rehabilitation and redevelopment is likely to have a positive impact on pedestrian safety in the area.

4.1.4 Pedestrian Security

The *RLE Project Scoping Report* identified the potential for crime at new CTA stations and in surrounding neighborhoods as a concern of residents. Figure A-2 and Figure A-4 show a "heat map" of the crime density (measured in crimes per acre) for 2009 through 2011 in the public ROW (e.g., streets, sidewalks, alleys, parks) and other open areas (railroad property, vacant lots, parking lots) near each proposed station site (City of Chicago 2012b). The highest crime areas along the BRT alignment are clustered at the 95th Street Terminal; 103rd Street and Michigan Avenue; Michigan Avenue from 111th Street to 111th Place; 119th Street and Michigan Avenue; and 131st Street and Langley Avenue.

4.1.5 Emergency Services

The *RLE Project Scoping Report* identified the potential for emergency access *to* construction areas as a concern of residents. It is assumed that residents would also be concerned about emergency access through construction areas, and the impact of detours on response times. Figure A-1 (City of Chicago 2012b) shows a map of the police, fire, and hospital facilities in the area.

The affected environment for the BRT Alternative falls entirely within the boundaries of the 5th Police District, with the station at 727 E. 111th Street. Several fire stations are in the corridor: Engine 93 (330 W. 104th Street), Engine 62 (34 E. 114th Street), Engine 75 (11958 S. State Street), and Engine 80 (12701 S. Doty Avenue). Fire stations also house ambulances serving hospitals. The only hospital near the corridor is Roseland Community Hospital at 45 W. 111th Street.

4.2 Union Pacific Railroad Rail Alternative

The affected environment for the UPRR Rail Alternative includes the CTA rail system, proposed station areas, and the area in the immediate vicinity of proposed station locations.

4.2.1 Major Safety and Security Incidents on CTA Rail System

As noted in Section 4.1.1, the CTA is required to report major safety and security incidents to the FTA. Table A-2 shows a summary of these incidents for the most recent three years of complete data for the entire CTA rail system. From 2009 through 2011, there were 209 incidents, including 28 fatalities and 191 injuries requiring immediate off-site medical attention. Additional details about the incidents are not provided in the available data.

4.2.2 Crime Summary

As noted in Section 4.1.2, criminal incidents occurring on CTA trains, platforms, and other property (e.g., rail yards, maintenance facilities, parking facilities) are recorded by local police in

the jurisdiction in which they occur. Table A-4 shows the number and percent of crime types occurring on CTA trains, on CTA platforms, and on other property throughout the City of Chicago. The incidents on other property include elements of both the bus and rail system, such as rail yards, vehicle maintenance facilities, offices, and parking garages.

Over the three-year period, there was an average of 4.1 incidents per day reported on trains, 5.7 incidents per day reported on train platforms, and 2.4 per day on other property.

Robbery and theft were both more common on trains than on train platforms. Narcotics crimes are mostly the possession of small amounts of marijuana, but often other drugs (e.g., crack cocaine, cocaine, and heroin) as well. Narcotics crimes were more common at train platforms than on trains. Figure 4-1 is a bar chart comparing the percentages of different types of crimes on the bus system, on the rail system, and on other CTA property.

Deceptive practice was the second most common crime reported. The Illinois Compiled Statues defines unfair or deceptive acts or practices as "including but not limited to the use or employment of any deception fraud, false pretense, false promise, misrepresentation or the concealment, suppression or omission of any material fact, with intent that others rely upon the concealment, suppression or omission of such material fact, or the use or employment of any practice described in Section 2 of the 'Uniform Deceptive Trade Practices Act,' approved August 5, 1965, in the conduct of any trade or commerce are hereby declared unlawful whether any person has in fact been misled, deceived or damaged thereby" (815 ILCS 505/2). Examples of these practices include credit card fraud, illegal use of cash card, theft of lost or mislaid property, and theft of labor or services. These crimes occurred on CTA buses or trains, on platforms at train stations, or at CTA property such as garages.

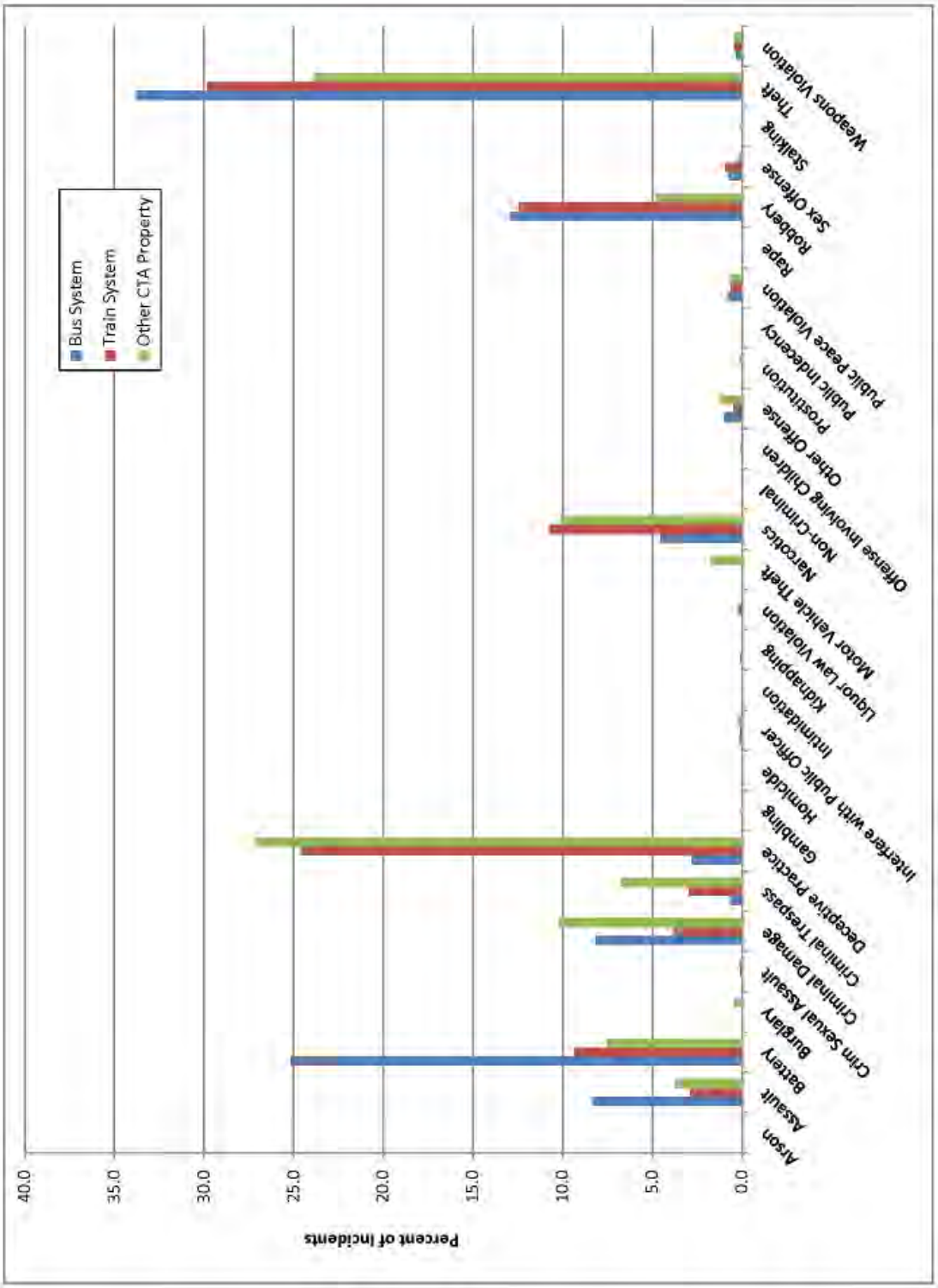

Figure 4-1: Reported Chicago Transit Authority-Related Crimes in Chicago (2009-2011)
Source: City of Chicago 2012

Over 96 percent of the CTA-related crimes fell into eight categories: assault, battery, criminal damage, criminal trespassing, deceptive practice, narcotics, robbery, and theft. Theft (30.2 percent of crimes) was the most commonly reported CTA-related crime, mostly pick-pocketing. Robbery (11.5 percent) is similar to theft, but involves violence or the threat of violence. Assault (4.6 percent) and battery (13.7 percent) are also similar crimes with differing levels of severity. Assault is the threatening of a victim, while battery is the actual harm of an individual. Both were more common on the bus system than on the rail system.

Criminal trespassing (2.8 percent), typically in the form of ROW intrusions, can occur from CTA platforms or elsewhere along the track. The intent of criminal trespassing is often to cause criminal damage (6.0 percent), usually graffiti. Criminal damage was most common at CTA garages and on other property (e.g., rail yards).

4.2.3 Segment UA

Segment UA (see Figure A-1) includes the portion of the UPRR Rail Alternative alignment from 95th Street to the crossing over the Metra Electric District railroad track southeast of the proposed Michigan Avenue station.

4.2.3.1 Pedestrian Safety

The primary station entrances for the UPRR Rail Alternative on Segment UA would be at 103rd Street, 111th Street, and Michigan Avenue. Auxiliary entrances would be at 103rd Place, 110th Street, and 116th Street. Because the primary entrances would be on major through streets, the safety of pedestrians crossing those streets to access stations or nearby destinations would be a concern. Source: (City of Chicago 2012b)

CTA = Chicago Transit Authority

Table A-5 shows the frequencies of traffic crashes involving pedestrians in the immediate vicinity of proposed stations.

There were fewer pedestrian crashes near the proposed station locations for the UPRR Rail Alternative than for the BRT Alternative (see Section 4.1.3) or the Halsted Rail Alternative (see Section 4.3.3.1), but this result is expected due to the lower amounts of pedestrian activity. The existing pedestrian environments around proposed stations are discussed qualitatively below to complement the crash data.

103rd Street Station

The crossing of 103rd Street at the UPRR tracks is shown in **Error! Reference source not found.**. The street is an arterial carrying approximately 18,700 vehicles on an average weekday. The posted speed limit is 30 miles per hour (mph), but the 85th percentile speeds are 37 mph (IDOT 2010b). Drivers reduce speed over the UPRR tracks due to a slight hump in the roadway. There are two lanes in each direction, but on-street parking in the curb lanes effectively reduces the roadway to one lane in each direction for most of the day. There are two through lanes at times during peak

travel periods due to parking restrictions prohibiting on-street parking from 7 AM to 9 AM in the eastbound direction and from 4 PM to 6 PM in the westbound direction.

Figure 4-2: 103rd Street at the Union Pacific Railroad tracks, looking west

The nearest controlled intersections to the 103rd Street station location are traffic signals at Normal Avenue, ⅛ mile west, and all-way stop signs at Princeton Avenue, ⅛ mile east. The nearest marked crosswalks across 103rd Street are at Eggleston Avenue, 140 feet west of the railroad tracks, and at Harvard Avenue, 195 feet east of the railroad tracks.

Standard 6-foot-wide sidewalks are on both sides of 103rd Street. Sidewalk ramps are present on all corners in the immediate vicinity of the 103rd Street station location, with new Americans with Disabilities Act (ADA)-compliant ramps on the north leg of Eggleston Avenue. Standard City of Chicago roadway lighting is present on 103rd Street. Eastbound bus stops for route #111 are at Normal Avenue, Eggleston Avenue, and Princeton Avenue. Westbound bus stops for route #111 are at Princeton Avenue, Harvard Avenue, and Normal Avenue.

The land uses along 103rd Street are primarily residential, with some light industrial, commercial, and vacant land uses as well. Block Park is immediately southeast of the railroad tracks along Harvard Avenue.

The auxiliary entrance to the 103rd Street station would be at 103rd Place, which is a residential street, and not a pedestrian safety concern.

111th Street Station

The crossing of 111th Street at the UPRR tracks is shown in **Error! Reference source not found.**. The street is an arterial carrying approximately 12,800 vehicles on an average weekday. The posted speed limit is 30 mph. The 85th percentile speeds are not known. The roadway width allows for two lanes in each direction, but lightly used parking in the curb lanes effectively reduces the roadway to one through lane in each direction.

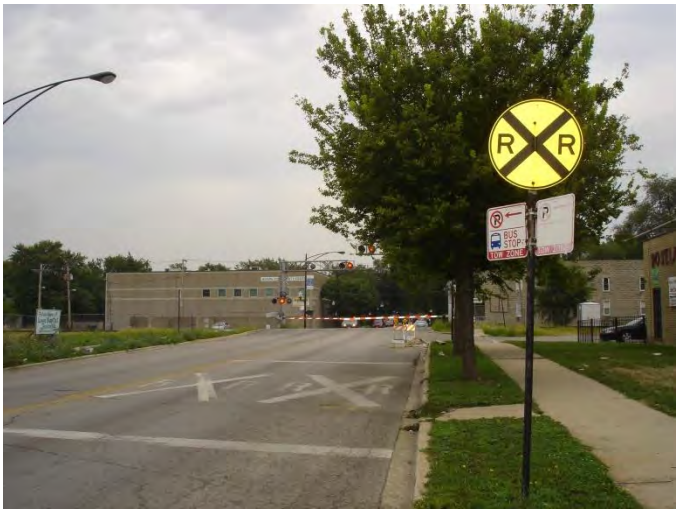

Figure 4-3: 111th Street at the Union Pacific Railroad tracks, looking west

The nearest controlled intersections are traffic signals at Normal Avenue, ⅛ mile west and all-way stop signs at Princeton Avenue, ⅛ mile east. The nearest marked crosswalks across 111th Street are at Eggleston Avenue, 230 feet west of the railroad tracks, and at Princeton Avenue to the east.

Standard 6-foot-wide sidewalks are on both sides of 111th Street. Sidewalk ramps are present on all corners in the immediate vicinity of the 111th Street station location, but do not meet all of the current ADA standards. Standard City of Chicago roadway lighting is present on 111th Street, with additional sidewalk lighting on the north side of the street. Eastbound bus stops for route #111 are at Normal Avenue, Eggleston Avenue, and Princeton Avenue. Westbound bus stops for route #111 are at Princeton Avenue, the east side of the UPRR tracks, and Normal Avenue.

The land uses along 111th Street are primarily residential, with an auto repair business northeast of the railroad tracks, several religious facilities, and vacant land northwest of the railroad tracks. The Agape Community Center is northeast of the railroad tracks.

The auxiliary entrance to the 111th Street station would be at 110th Street, which is a residential street, and not a pedestrian safety concern.

Michigan Avenue Station

The UPRR tracks are grade-separated as they cross over Michigan Avenue. Michigan Avenue is a two-lane collector street carrying approximately 11,900 vehicles on an average weekday. The

nearest controlled intersections are traffic signals at 115th Street, 800 feet north, and all-way stop signs at 117th Street, 450 feet south. The nearest marked crosswalks across Michigan Avenue are at Kensington Avenue, 330 feet north of the railroad tracks, and at 116th Street, 115 feet south of the railroad tracks. The crosswalks at 116th Street are of the higher visibility international style, and are supplemented by pedestrian crossing warning signs.

The sidewalks along Michigan Avenue are approximately 12 feet wide. Sidewalk ramps are present on all corners in the immediate vicinity of the station location, but do not meet all of the current ADA standards. Standard City of Chicago roadway and sidewalk lighting are present along Michigan Avenue. Northbound and southbound bus stops for routes #34 and #119 are at 115th Street, Kensington Avenue, 116th Street, and 117th Street. Eastbound and westbound bus service is available along 115th Street on route #111.

There is a large amount of vacant land along Michigan Avenue and in the surrounding areas. However, there are plans for a new development on the southwest corner of Michigan Avenue and 115th Street called Roseland Plaza, a 91,000 square foot strip mall with 250 parking spaces that would be anchored by a grocery store. The existing occupied buildings are typically mixed-use, with ground floor retail and residential above. Nearby businesses include a gas station, corner store, hair salon, and Mexican restaurant. There are also religious facilities in the area.

The auxiliary entrance to the Michigan Avenue station would be at 116th Street, east of Michigan Avenue; 116th Street is a low-volume residential street, and not a pedestrian safety concern.

4.2.3.2 Pedestrian Security

As discussed in Section 4.1.4, the *RLE Project Scoping Report* identified the potential for crime at new CTA stations and in surrounding neighborhoods as a concern of residents. Figure A-2, Figure A-3, and Figure A-4 show the crime density (measured in crimes per acre) for 2009 through 2011 in the public ROW and open areas near each proposed station site. The highest crime areas along Segment UA are clustered at the 95th Street Terminal, and south of the Michigan Avenue station centered at 119th Street.

4.2.3.3 Highway-Rail Grade Crossings

There are two existing highway-rail at-grade crossings near proposed stations. The crossings are where the UPRR tracks intersect 103rd Street (see **Error! Reference source not found.**) and 111th Street (see **Error! Reference source not found.**). Both crossings have two-quadrant crossing gates and signals cantilevered over the roadway. There are no gates to block pedestrians on the sidewalks. The appropriate crossbuck signs, railroad crossing warning signs, and railroad crossing pavement markings are all present. There is fencing along the railroad ROW to the northwest at 103rd Street, and along the east side of the ROW at 111th Street, but other locations could be accessed by pedestrians.

The most current available Average Daily Traffic (ADT) volumes for 103rd Street and 111th Street are from 2006, and show 18,700 vehicles per weekday on 103rd Street and 12,800 vehicles per

weekday on 111th Street (CDOT 2006). Pedestrian volumes are relatively low, but would be expected to increase with the addition of new transit stations. A total of 4,386 weekday passenger boardings are forecasted at the 103rd Street station and 5,048 weekday passenger boardings are forecasted at the 111th Street station, both in 2030 (AECOM 2009).

The existing train volumes (year 2009) on the UPRR line include 24 freight trains per day and 2 Amtrak passenger trains per day (Chicago Transportation Coordination Office 2011). If the projects in the CREATE Program[1] are implemented, the volume is projected to increase to 44 freight trains and 4 passenger trains per day by 2029, an 85 percent increase in total volume compared to existing conditions.

The additional automobile and pedestrian traffic crossing the rail line, combined with additional rail traffic, could create a safety concern. The expected life of a railroad crossing device is 20 to 30 years, so a period of 25 years was used for analysis. Crash histories for the past 25 years (1987 through 2011) at the 103rd Street and 111th Street grade crossings are shown in Table 4–1 and Table 4–2, respectively. Both crossings had two recorded crashes in the 25-year period. For comparison, the most recent crash data for Cook County shows 161 collisions at 802 public grade crossings from 2007 through 2012 (ICC 2013). Based on this data, an average of one crash per grade crossing would be expected every 30 years.

Table 4–1: Crashes at 103rd Street and Union Pacific Railroad Grade Crossing

Date	Time	Crash Type	Warning Devices	Weather	Fatalities	Injuries
10/15/2006	12:30 PM	Freight-Pedestrian	Cantilever Signals and Gates	Cloudy	0	1
11/16/1989	5:25 AM	Freight-Truck	Gates	Cloudy	0	1

Source: (Illinois Commerce Commission 2012a)

Table 4–2: Crashes at 111th Street and Union Pacific Railroad Grade Crossing

Date	Time	Crash Type	Warning Devices	Weather	Fatalities	Injuries
4/11/2009	11:15 PM	Other-Auto	Cantilever Signals and Gates	Clear	0	0
6/5/2000	12:52 AM	Other-Auto	Cantilever Signals and Gates	Rain	0	0

Source: (Illinois Commerce Commission 2012b)

[1] The Chicago Region Environmental and Transportation Efficiency (CREATE) Program is a partnership between U.S. Department of Transportation, the State of Illinois, City of Chicago, Metra, Amtrak, and the nation's freight railroads. The Program includes approximately 70 component projects designed to reduce delays to passenger rail, freight rail, and highway systems.

4.2.3.4 Emergency Services

As explained in Section 4.1.3, the *RLE Project Scoping Report* identified concerns regarding emergency access. Figure A-1 shows a map of the police, fire, and hospital facilities in the area.

The Segment UA alignment along the UPRR tracks forms the border of the 5th Police District to the east and the 22nd Police District to the west, from 95th Street to 111th Street. Southeast of 111th Street, Segment UA would be entirely within the 5th Police District. The 5th District station is at 727 E. 111th Street. The 22nd District station is at 1900 W. Monterey Avenue. Several fire stations are in the corridor: Engine 93 (330 W. 104th Street), Engine 62 (34 E. 114th Street), and Engine 75 (11958 S. State Street). Fire stations also house ambulances serving hospitals. The only hospital near the corridor is Roseland Community Hospital, three blocks east of the corridor at 45 W. 111th Street.

4.2.4 Segment UB

Segment UB (see Figure A-1) includes the portion of the proposed UPRR Rail Alternative alignment from the crossing over the Metra Electric District railroad tracks southeast of the proposed Michigan Avenue station to the terminal station at 130th Street.

4.2.4.1 Pedestrian Safety

There are two sites under consideration for a terminal station at 130th Street. The West Option would be a station along the north side of 130th Street between Evans Avenue and Ellis Avenue. The South Option would be a station along the Northern Indiana Commuter Transportation District South Shore Line and CSX Kensington Branch tracks, north of Doty Avenue and the 130th Street local road. Source: (City of Chicago 2012b)

CTA = Chicago Transit Authority

Table A-5 shows the crash data for both sites. There were two pedestrian crashes in the vicinity of the West Station Option site, both on Evans Avenue south of 130th Street, and no pedestrian crashes in the vicinity of the South Station Option site. The pedestrian environment for the two stations is described below.

130th Street Station - West Option

The West Station Option site along 130th Street is shown in **Error! Reference source not found.**. The roadway is a four-lane principal arterial with a divided median, carrying approximately 25,100 vehicles on an average weekday. The speed limit is posted at 35 mph.

The nearest controlled intersections are traffic signals at Ellis Avenue, immediately to the east, and all-way stop signs at 127th Street and Indiana Street, 1.1 miles northwest. A cloverleaf interchange with I-94 is approximately 0.5 mile east of the 130th Street station location and an at-grade highway-rail crossing with the UPRR tracks is approximately 0.5 mile west of the 130th Street station location. There are no marked crosswalks at the intersection.

There are no sidewalks at the intersection, but there are 6-foot-wide, curb-attached sidewalks along Evans Avenue, Ellis Avenue, and throughout the Altgeld Gardens neighborhood to the south. There are no sidewalk ramps at the intersections of 130th Street and Ellis Avenue or Evans Avenue. Roadway lighting is present along both sides of 130th Street. There are no bus stops on 130th Street east of Eberhart Avenue, but the #34 route does use the roadway for some trips to Carver High School. The nearest bus stop is approximately 1,000 feet southeast at 131st Street and Corliss Avenue.

Figure 4-4: 130th Street at Evans Avenue, looking east

The north side of 130th Street is bordered by wetlands and a large Metropolitan Water Reclamation District (MWRD) treatment facility. The south side of 130th Street is bordered by Altgeld Gardens, a low-rise Chicago Housing Authority property focused on providing housing to low-income families. There are very few nearby businesses, but there is a grocery store, take-out restaurant, and check-cashing service just over ¼ mile west of the 130th Street station location, and a health clinic east of Ellis Avenue.

130th Street Station - South Option

Near the South Station Option site, there are two streets called 130th Street. One is the four-lane, principal arterial roadway with a bridge over the railroad tracks to the east. The other is a low-volume, local roadway immediately to the south of the arterial (see **Error! Reference source not found.**). This parallel street provides access to a health clinic, Carver Military Academy High School, and the Beaubien Woods Forest Preserve.

Figure 4-5: 130th Street/Doty Avenue at the Kensington Branch rail line, looking west

The local 130th Street terminates at Ellis Avenue to the west and curves to become Doty Avenue to the southeast. There is a 6-foot-wide, curb-attached sidewalk along the south side of the street. There are no marked crosswalks or sidewalk ramps. Roadway lighting is present along the south side of 130th Street. The nearest bus stops are 1,800 feet southwest, at Ellis Avenue and 131st Street, and 1,300 feet southeast, at Carver High School.

The east side of the 130th Street station site is bordered by wetlands and train tracks. Carver Military Academy High School and the Beaubien Woods Forest Preserve are to the south. A TCA Health medical clinic is 670 feet west of the 130th Street station site. Some residences are as close as 350 feet from the 130th Street station site, but there is no existing sidewalk connection. Along sidewalks, the nearest homes are approximately 1,200 feet from the 130th Street station site.

4.2.4.2 Pedestrian Security

As discussed in Section 4.1.4, the *RLE Project Scoping Report* identified the potential for crime at new CTA stations and in surrounding neighborhoods as a concern of residents. Figure A-4 shows the crime density (measured in crimes per acre) for 2009 through 2011 in the public ROW and other open areas near the proposed 130th Street station sites. The highest crime area near Segment UB is at 131st Street and Langley Avenue, approximately ¼ mile southwest of the proposed 130th Street station West Option site.

4.2.4.3 Emergency Services

As explained in Section 4.1.3, the *RLE Project Scoping Report* identified concerns regarding emergency access. Figure A-1 shows a map of the police, fire, and hospital facilities in the area.

Segment UB is entirely within Chicago's 5th Police District. The 5th District station is at 727 E. 111th Street. The nearest fire stations are Engine 75 (11958 S. State Street) and Engine 80 (12701 S.

Doty Avenue). Fire stations also house ambulances serving hospitals. The nearest hospital is Roseland Community Hospital at 45 W. 111th Street.

4.3 Halsted Rail Alternative

The affected environment for the Halsted Rail Alternative includes the CTA rail system, proposed station areas, and the area in the immediate vicinity of proposed stations.

4.3.1 Major Safety and Security Incidents on CTA Rail System

The major incident summary for the CTA rail system described in Section 4.2.1 also applies to the Halsted Rail Alternative.

4.3.2 Crime Summary

The crime summary for the CTA rail system described in Section 4.2.2 also applies to the Halsted Rail Alternative.

4.3.3 Segment HA

Segment HA (see Figure A-1) includes the portion of the Halsted Rail Alternative alignment from 95th Street to 119th Street, including the proposed 119th Street station and its surrounding area.

4.3.3.1 Pedestrian Safety

The station entrances for the Halsted Rail Alternative on Segment HA would be at 103rd Street, 111th Street, and 119th Street. Because the entrances would all be at the intersection of two major through streets, the safety of pedestrians crossing those streets to access stations or nearby destinations would be a concern. Source: (City of Chicago 2012b)

CTA = Chicago Transit Authority

Table A-5 shows the frequencies of traffic crashes involving pedestrians in the immediate vicinity of the proposed stations.

For the Halsted Rail Alternative, there were a high number of pedestrian crashes near 103rd Street, 111th Street, and 119th Street, and a moderate number of crashes near Vermont Avenue. The existing pedestrian environments around proposed stations are discussed qualitatively below to complement the crash data.

103rd Street Station

The intersection of 103rd Street and Halsted Street is shown in **Error! Reference source not found.**. At this location, Halsted Street is a major arterial carrying approximately 31,800 vehicles per weekday and 103rd Street is a minor arterial carrying 21,000 vehicles per weekday (CDOT 2006). Halsted Street has two through lanes in each direction, a landscaped median or left turn lanes, and on-street parking permitted. On 103rd Street there is one through lane in each

direction with on-street parking permitted, but lightly used. Left turn lanes are marked on Halsted Street, but not 103rd Street.

Figure 4-6: 103rd Street and Halsted Street, looking northwest

The intersection of 103rd Street and Halsted Street is controlled by traffic signals, with protected-permissive left turn phasing for all approaches except the westbound direction. There are also red light enforcement cameras at the intersection. High visibility crosswalk markings and pedestrian crossing signals are present on all four legs of the intersection. The adjacent intersections within 660 feet are two-way stop controlled except the 103rd Street and Peoria Street intersection, which is controlled by all-way stop signs.

Sidewalks on Halsted Street are mostly 14 to 16 feet wide, and sidewalks on 103rd Street are 9 to 11 feet wide. ADA-compliant sidewalk ramps are present on all but the northeast corner of the 103rd Street and Halsted Street intersection. Standard City of Chicago roadway lighting is present on both streets. The bus stops on Halsted Street for routes #8A, #108, and #352 are on the far side of the intersection;[2] on 103rd Street for route #103 on the west leg of the intersection; and at intersections ⅛ mile away in all four directions.

The land uses adjacent to the intersection are primarily commercial, and include a drug store, a fast food restaurant, a currency exchange, and a title load business.

[2] Bus stops on the "near side" of an intersection are on the corner in advance of the intersection in the direction of travel. Bus stops on the "far side" of an intersection are on the corner just past the intersection in the direction of travel.

111th Street Station

The intersection of 111th Street and Halsted Street is shown in **Error! Reference source not found.**. At this location, Halsted Street is a major arterial carrying approximately 30,000 vehicles per weekday and 111th Street is a minor arterial carrying 11,800 vehicles per weekday (CDOT 2006, IDOT 2010b). Halsted Street has two through lanes in each direction, a landscaped median or left turn lanes, and on-street parking permitted. At this location, 111th Street has one through lane in each direction with on-street parking permitted, but lightly used. Left turn lanes are marked on Halsted Street, but not 111th Street.

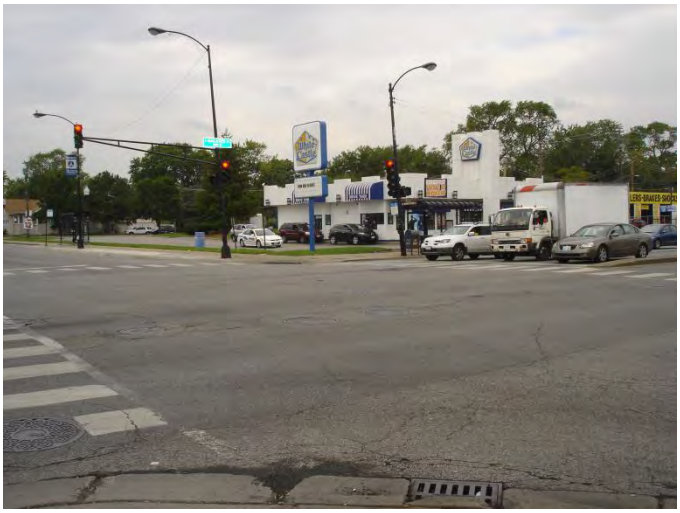

Figure 4-7: 111th Street and Halsted Street, looking northwest

The intersection of 111th Street and Halsted Street is controlled by traffic signals, with protected-permissive left turn phasing for all approaches except the westbound direction. High visibility crosswalk markings and pedestrian countdown signals are present on all four legs of the intersection. The adjacent intersections within 660 feet are two-way stop controlled except 111th Street and Peoria Street, which is controlled by all-way stop signs.

Sidewalks on Halsted Street are 13 to 17 feet wide, and sidewalks on 111th Street are 11 to 13 feet wide. ADA-compliant sidewalk ramps are present on the east side of Halsted Street and older ramps are present on the west side of the street. Standard City of Chicago roadway lighting is present on both streets. Bus stops are on Halsted Street for routes #8A, #108, and #352 on the near side of the intersection; on 111th Street for route #111 on the far side of the intersection; and at intersections ⅛ mile away in all four directions.

The land uses adjacent to the intersection are primarily commercial, and include fast food restaurants, a currency exchange, tax preparation services, insurance providers, and auto repair businesses.

119th Street Station

The intersection of 119th Street and Halsted Street is shown in **Error! Reference source not found.**. At this location, Halsted Street is a major arterial carrying approximately 30,300 vehicles per weekday and 119th Street is a minor arterial carrying 11,500 vehicles per weekday (CDOT 2006). Halsted Street has two through lanes in each direction, a landscaped median or left turn lanes, and on-street parking permitted. At this location, 119th Street has one through lane in each direction with on-street parking permitted, but lightly used. Left turn lanes are marked on Halsted Street and 119th Street.

Figure 4-8: 119th Street and Halsted Street, looking northwest

The intersection of 119th Street and Halsted Street is controlled by traffic signals, with protected-permissive left turn phasing for all approaches. There are also red light enforcement cameras at the intersection. High visibility crosswalk markings and pedestrian countdown signals are present on all four legs of the intersection. The adjacent intersections within 660 feet are two-way stop controlled except 120th Street and Halsted Street, which is signalized.

Sidewalks on Halsted Street are approximately 16 feet wide at the intersection, but they narrow to 6 feet wide north of the intersection. Sidewalks on 119th Street vary from 12 to 19 feet wide, but end on the south side of the street at the alley west of Halsted Street. ADA-compliant sidewalk ramps are present on the west side of Halsted Street and older ramps are present on the east side of the street. Standard City of Chicago roadway lighting is present on both streets. Bus stops are on Halsted Street for routes #8A, #108, #352, and #359 on the far side of the intersection; on 119th Street for route #119 on the west leg of the intersection; and at intersections ⅛ mile away in all four directions.

The land on three of the four intersection quadrants is largely vacant. However, the Major Taylor Trail is northwest and southeast of the intersection on former rail ROW that is also now occupied

by high-tension power lines. A busy strip mall containing a grocery store, dollar store, and clothing store is on the southwest corner of the intersection. The West Pullman branch of the Chicago Public Library is just west of the intersection on the north side of 119th Street.

4.3.3.2 Pedestrian Security

As discussed in Section 4.1.4, the *RLE Project Scoping Report* identified the potential for crime at new CTA stations and in surrounding neighborhoods as a concern of residents. Figure A-2 and Figure A-3 show the crime density (measured in crimes per acre) for 2009 through 2011 in the public ROW and open areas near each proposed station site. The highest crime area along Segment HA is centered on the 95th Street Terminal, with a lower intensity area near 111th Street, and low levels of crime near the proposed 103rd Street or 119th Street station locations.

4.3.3.3 Emergency Services

As explained in Section 4.1.3, the *RLE Project Scoping Report* identified concerns regarding emergency access. Figure A-1 shows a map of the police, fire, and hospital facilities in the area.

Segment HA falls within the boundaries of Chicago's 22nd Police District north of 1115th Street and within the 5th Police District south of 115th Street. The 22nd District station is at 1900 W. Monterey Avenue. The 5th District station is at 727 E. 111th Street. Several fire stations are in the corridor: Engine 93 (330 W. 104th Street), Truck 24 (10400 S. Vincennes Avenue), and Engine 115 (11940 S. Peoria Street). Fire stations also house ambulances serving hospitals. The only hospital near the corridor is Roseland Community Hospital at 45 W. 111th Street.

4.3.4 Segment HB

Segment HB (see Figure A-1) includes the portion of the Halsted Rail Alternative alignment from south of 119th Street to Vermont Avenue.

4.3.4.1 Pedestrian Safety

The Halsted Rail Alternative would include one train station in Segment HB. The primary station entrance would be south of Vermont Avenue and the auxiliary entrance would be north of 128th Place. Table A-5 shows the pedestrian crash data for this site. There were five pedestrian crashes within ⅛ mile of the station entrances in the five-year period. The pedestrian environment for the station is described below.

Vermont Avenue Station

The intersection of Vermont Avenue and Halsted Street is shown in **Error! Reference source not found.**. At this location, Halsted Street is a major arterial carrying approximately 23,600 vehicles per weekday and Vermont Avenue is classified as a collector carrying 5,100 vehicles per weekday (CDOT 2006, IDOT 2010b). Halsted Street has two through lanes in each direction, a landscaped median or left turn lanes, and on-street parking permitted. Vermont Avenue has one through lane in each direction with on-street parking permitted. Left turn lanes are marked on Halsted Street and Vermont Avenue.

The intersection of Halsted Street and Vermont Avenue is controlled by traffic signals with standard two-phase operation. High visibility crosswalk markings and pedestrian countdown signals are present on all four legs of the intersection. Approximately 445 feet north of the intersection is 127th Street, which is also signalized. The Vermont Avenue and Peoria Avenue intersections and the Halsted Street and 128th Place intersections are also controlled by all-way stop signs. Other adjacent intersections are two-way stop controlled.

Figure 4-9: Halsted Street and Vermont Avenue, looking northeast

Sidewalks on Halsted Street are 13 to 17 feet wide and sidewalks on Vermont Avenue vary from 6 to 10 feet wide depending on the location. Sidewalk ramps are present on all corners of the Halsted Street and Vermont Avenue intersection, but do not meet the newest ADA standards. Standard City of Chicago roadway lighting is present on both streets. Bus (CTA) routes #8A and #108 stop on eastbound Vermont Avenue, but do not operate throughout the entire day south of 119th Street. Bus (Pace) route #352 also serves the corridor, and stops on Halsted Street at 128th Place and 127th Street, but not at Vermont Avenue.

The land uses adjacent to the intersection are mostly commercial. There is a strip mall in the southwest quadrant containing a laundromat, dry cleaner, barbershop, and beauty salon. There is a car dealership on the southeast corner, a vacant building on the northeast corner, and a religious facility on the northwest corner.

4.3.4.2 Pedestrian Security

As discussed in Section 4.1.4, the RLE Project Scoping Report identified the potential for crime at new CTA stations and in surrounding neighborhoods as a concern of residents. Figure A-2 and Figure A-3 show the crime density (measured in crimes per acre) for 2009 through 2011 in the public ROW and other open areas near each proposed station site. Crime near the proposed Vermont Avenue station appears to be very low.

4.3.4.3 Emergency Services

As explained in Section 4.1.3, the *RLE Project Scoping Report* identified concerns regarding emergency access. Figure A-1 shows a map of the police, fire, and hospital facilities in the area.

Segment HB falls mostly within the boundaries of Chicago's 5th Police District. However, Halsted Street borders the Village of Calumet Park from 123rd Street to 125th Street to the west, and Cedar Park Cemetery (unincorporated area) from 125th Street to 127th Street also to the west. Chicago's 5th District police station is at 727 E. 111th Street. The Village of Calumet Park police station is six full blocks (0.625 mile) west of Halsted Street at 12409 S. Throop Street. Chicago's Engine 115 is at 11940 S. Peoria Street, one block west of Halsted Street. Calumet Park's fire station is 1 mile west of Halsted Street at 12457 S. Ashland Avenue. Fire stations also house ambulances serving hospitals. The nearest hospitals are Roseland Community Hospital at 45 W. 111th Street and MetroSouth Medical Center, 2 miles west in Blue Island.

Section 5
Impacts and Mitigations

This section analyzes the impacts of the RLE Project for each alternative in three categories: permanent, construction, and cumulative.

5.1 No Build Alternative

There would not be expected permanent impacts, construction impacts, or cumulative impacts on safety and security associated with the No Build Alternative.

5.2 Bus Rapid Transit Alternative

The permanent and construction impacts and mitigations for the BRT Alternative are discussed below.

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.1.1.1 Major Incidents

The forecasted change in major incidents reportable to the FTA was calculated by multiplying the change in vehicle revenue hours (VRH) for the BRT Alternative by the existing major incident rate for the CTA buses (see Table 5-1). The additional service hours would be expected to increase the *frequency* of major incidents by an average of 0.19 per year, or 1 every 5.4 years, compared to existing conditions. However, the incident *rate* would not be expected to change substantially. It is also possible that the incident rate for BRT would be lower than for local bus service because buses would not need to merge in and out of traffic as often to make stops. The CTA attempts to minimize bus incidents by continuously upgrading the bus fleet and through extensive driver training. The impact on major incidents would be not adverse.

Table 5-1: Change in Major Incidents for Bus Rapid Transit Alternative

Item	Bus	Rail	Total
A. Annual Change in VRH	10,307	0	10,307
B. Annual Major Incidents per Million VRH (2009-2011)	18.06	6.52	13.89
C. Annual Change in Major Incidents [(A/1,000,000)*B)]	0.19	0	0.19

Sources: (CTA 2009, National Transit Database 2012)
VRH = vehicle revenue hours

5.2.1.1.2 Motor Vehicle Safety

The FTA released Proposed New Starts and Small Starts Policy guidance on January 9, 2013 that includes factors used to measure the change in safety as a result of transit projects. The factors use the change in VMT to estimate changes in injuries and fatalities for automobiles and transit.

The BRT Alternative is expected to cause a small shift in travel modes from motor vehicles to transit, thus decreasing automobile VMT and slightly increasing bus VMT. This shift is expected to result in a small decrease in fatalities and injuries, and the associated costs.

5.2.1.1.3 Pedestrian Safety

Under existing conditions, nearly 600 passengers per day board or alight on Michigan Avenue at 115th Street, which is controlled by traffic signals. Many of these passengers would likely shift to the faster BRT service that would stop ½ block south at Kensington Avenue, where Michigan Avenue is uncontrolled. A large volume of pedestrians crossing a major street without positive traffic control would cause an adverse impact on pedestrian safety. Signals are already in place at the intersections of 103rd Street and 111th Street with Michigan Avenue, so there would be no adverse impact at those two locations. At the intersection of 130th Street and Eberhart Avenue, signals, sidewalks, sidewalk ramps, and marked crosswalks are part of the project design, so there would be no adverse impacts on pedestrian safety at that intersection. There would also be no adverse pedestrian safety impacts at the additional bus stops in the Altgeld Gardens neighborhood. Pedestrians would likely not have difficulty safely crossing the low-volume local streets in this area.

Traffic signals are one option for mitigating the adverse pedestrian safety impacts at Kensington Avenue if the minimum requirements for traffic signals described in the Manual on Uniform Traffic Control Devices (MUTCD) are met. Based on the existing bus passenger volumes at the intersection, the pedestrian volume signal warrant[3] could likely be met. Other pedestrian crossing treatments, such as refuge medians with appropriate signage, would also have the potential to mitigate safety impacts if confirmed by the results of a traffic gap study. Alternatively, the Kensington Avenue BRT stop could be relocated to 115th Street, which would allow pedestrians to cross Michigan Avenue at an existing signal.

5.2.1.1.4 Bus Stop Security

Research that compared bus stops with varying crime rates within the downtown area identified several variables with statistically significant correlations to bus stop crime (Liggett et al. 2001). The presence of liquor stores, check cashing establishments, vacant lots, vacant buildings, rundown buildings, and litter were all related to higher crime rates. The presence of large commercial storefronts, presence of bus shelters, better visibility, higher automobile traffic, and more pedestrian activity were all associated with lower crime rates. The researchers recommended siting bus stops away from corners containing the variables correlated with more crime where possible in order to reduce impacts. The potential impact for each bus stop is described below:

[3] The MUTCD contains nine sets of factors called Warrants that can be used, in part, to determine whether traffic signals should be installed at an intersection. The pedestrian volume signal warrant (Warrant 4) is used where pedestrians experience delay crossing a major street and the volumes of pedestrians and vehicles on a major street exceed some threshold values.

- 103rd Street and Michigan Avenue - A mix of negative and positive factors would influence bus stop crime at 103rd Street. Negative factors include locating the proposed bus stops within the existing crime hot spot at 103rd Street, where there is an existing liquor store on the northeast corner of the intersection. Positive factors include replacing vacant land on the east side of Michigan Avenue with a park & ride lot, installing new lighted bus shelters, and attracting more pedestrian activity due to the enhanced transit service. Given that there are existing bus stops at this location, the overall impact on bus stop crime would be not adverse.

- 111th Street and Michigan Avenue - A mix of negative and positive factors would influence bus stop crime at 103rd Street. Negative factors include locating the proposed bus stops within the existing crime hot spot at 111th Street, where there is a currency exchange on the northeast corner. Positive factors include replacing vacant land west of Michigan Avenue and south of 111th Place with a park & ride lot, installing new lighted bus shelters, and attracting more pedestrian activity due to the enhanced transit service. Given that there are existing bus stops at this location, the overall impact on bus stop crime would be not adverse.

- Kensington Avenue and Michigan Avenue - The proposed bus stops would be located between two higher crime areas north of 115th Street and south of 116th Street. The stops would be adjacent to a grocery store and hair salon at Kensington Avenue instead of a currency exchange at 115th Street or a corner store and gas station retail at 116th Street. Some vacant land and two buildings east of Michigan Avenue and south of Kensington Avenue would be replaced with a park & ride lot. A large amount of vacant land southwest of Michigan Avenue and 115th Street is also expected to be replaced with Roseland Plaza, a 91,000 square foot retail strip mall and 250-space parking lot that would include a new grocery store. New lighted bus shelters would be added, and pedestrian activity in the area would increase compared to the No Build Alternative. Overall, this would have a beneficial impact on bus stop crime.

- 130th Street - The proposed bus stops would be located at Eberhart Avenue, away from an existing crime hot spot, adjacent to vacant land and a public park, and approximately 300 to 400 feet west of an existing currency exchange. New lighted bus shelters would be added, and pedestrian activity in the area would increase compared to the No Build Alternative due to a large park & ride lot to be located on the north side of 130th Street. Overall, this would be expected to have no adverse impact on bus stop crime.

- Additional Stops - The proposed BRT route would serve seven existing bus stops in the Altgeld Gardens neighborhood on 131st Street, Ellis Avenue, 133rd Street, 133rd Place, and Corliss Avenue. Because these stops are existing, pedestrian activity would not be likely to change markedly as a result of the proposed BRT service. The overall impact on bus stop crime would be expected to be not adverse.

5.2.1.1.5 Parking Security

Research in Los Angeles found that a large percentage—60 percent of "serious crime" and 19 percent of all crimes—of the crime at transit facilities occurred in park & ride lots, and that larger

parking lots with less pedestrian activity and less visibility from the sidewalk resulted in more thefts (Loukaitou-Sideris et al. 2002) than at more active, more visible lots. There was no correlation between the presence of a parking attendant and crime, but a trial of a bicycle security patrol in large Vancouver commuter parking lots found that the patrol significantly reduced theft (Barclay et al. 1996). Other sources also suggest that security patrols can improve security at parking lots (Witherspoon Security Consulting 2012).

For these reasons, all parking facilities would incorporate an open design that eliminates blind spots and isolated areas, including in parking garage stairwells. All parking facilities would be well lit, well maintained, and incorporate security surveillance cameras and/or frequent security patrols during the hours the lots are open. Emergency push buttons would also be considered in the final design. In parking garages, convex mirrors would be used to improve visibility around corners for both pedestrians and drivers. The design will also adhere to the fencing and landscaping design requirements in the Chicago Landscape Ordinance (City of Chicago 1991).

Security impacts for parking facilities at each proposed station are described below:

- 103rd Street - A surface parking lot would be located on the east side of Michigan Avenue, mostly between 102nd Street and 102nd Place. The lot would be modestly sized, easily visible from the sidewalk, and therefore would be expected to have no adverse impact.

- 111th Street - An L-shaped parking lot would be located behind the commercial buildings to the west of Michigan Avenue, between 111th Place and 112th Street. Various design elements would be incorporated to provide security in the lot, which would result in no adverse impact. However, given the shape and location of the lot, additional mitigation measures described below would be considered.

- Kensington Avenue - A 1,000-space, three-story parking garage would be located east of Michigan Avenue between Kensington Avenue and 116th Street. Various design elements would be incorporated to improve security in the garage, which would result in no adverse impact.

- 130th Street - A 1,400-space, three-story parking garage would be located on the north side of 130th Street between Eberhart Avenue and St. Lawrence Avenue. Various design elements would be incorporated to improve security in the garage, which would result in no adverse impact.

As a mitigation, pedestrian access routes through or adjacent to surface parking lots would be considered on a case-by-case basis in the final design phase where total elimination of blind spots or isolated areas may be impractical, such as at the 111th Street lot. Where such sidewalks have the potential to increase pedestrian activity, perhaps by reducing walking distances to the transit station or other destinations, they could create pass-by surveillance that would deter criminal activity.

5.2.1.1.6 Neighborhood Security

Research regarding the impact of new transit service on crime in surrounding neighborhoods is primarily focused on rail stations, and is somewhat mixed in results. The majority of studies have found no adverse impact (see Section 5.3.1). The addition of a BRT service in an existing corridor served by frequent bus service (route #34) would be expected to generate fewer changes in travel patterns and demographics than a new rail alignment, and therefore would have fewer impacts. Therefore, no adverse impacts related to security are expected in the surrounding neighborhoods. Security impacts related to bus stops and parking lots are discussed above.

5.2.1.1.7 Terrorism and Homeland Security

Terrorist events could theoretically happen at any time and any place, including on CTA buses or at bus stops; however, an attack on the bus system is considered less likely than an attack on the rail system, due to the greater level of casualties, damage, and service disruption that would occur with an attack on the rail system. The addition of BRT service on Michigan Avenue is unlikely to further increase the risk of a terrorist attack beyond what currently exists. Therefore, the impact would be not adverse. The CTA prepares for acts of terrorism by updating various plans on a regular basis and coordinating with law enforcement and other agencies as described in Section 3.1.3.2.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

The BRT Alternative primarily involves the construction of bus shelters, sidewalks, and parking facilities. While there is always a chance that a contractor could fail to follow all safety and security rules, the limited scope of work would minimize the risk of incidents resulting in fatalities, injuries, or criminal acts such as vandalism or theft on construction sites.

To mitigate risks, contractors would be required to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of the CTA's *Safety and Security Management Plan* or other manuals and policies (CTA 2011b). The contractor would take prompt and decisive corrective action on safety deficiencies identified at the work site.

5.2.2.1.1 Emergency Services

It is expected that the BRT Alternative would be constructed with construction equipment temporarily occupying the parking lane, and without closures of the through travel lanes. Therefore, access for emergency services would not be restricted, and the impacts would be not adverse. Contractors would follow the MUTCD design standards for temporary traffic control and would obtain required local permits.

5.2.3 Cumulative Impacts and Mitigations – Bus Rapid Transit Alternative

There would not be expected cumulative impacts on safety and security associated with the BRT Alternative.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The permanent and construction impacts and mitigations for the UPRR Rail Alternative ROW Option are discussed below.

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1.1 Segment UA

5.3.1.1.1 Major Incidents

The forecasted change in major incidents reportable to the FTA was calculated by multiplying the change in VRH for the CTA rail and bus systems by the existing major incident rates for those modes (see Table 5-2). For Segment UA, the UPRR Rail Alternative would be expected to increase the *frequency* of major incidents on the rail system by an average of 0.16 per year and decrease the *frequency* of major incidents on the bus system by an average of 0.29 per year compared to existing conditions. The sum of the two changes in crash frequency results in a decrease of 0.13 major incidents per year, or 1 every 7.5 years. However, the incident *rates* for each mode would not be expected to change substantially. It is also possible that the incident rate for the project area would be lower than for the system as a whole given its newer infrastructure. The CTA also attempts to minimize incidents by continuously upgrading the bus and rail fleets and through extensive operator training. The impact on major incidents would be not adverse.

Table 5-2: Change in Major Incidents for Segment UA

Item	Bus	Rail	Total
A. Annual Change in VRH	-15,994	23,816	7,822
B. Annual Major Incidents per Million VRH (2009-2011)	18.06	6.52	13.89
C. Annual Change in Major Incidents [(A/1,000,000)*B)]	-0.29	0.16	-0.13

Sources: (CTA 2009, National Transit Database 2012)
VRH = vehicle revenue hours

5.3.1.1.2 Motor Vehicle Safety

The FTA released Proposed New Starts and Small Starts Policy guidance on January 9, 2013 that includes factors used to measure the change in safety as a result of transit projects. The factors use the change in VMT to estimate changes in injuries and fatalities for automobiles and transit.

The UPRR Rail Alternative is expected to cause a small shift in travel modes from automobiles and buses to rail transit, thus decreasing automobile and bus VMT, and slightly increasing rail VMT. Overall, this would be expected to lead to a small decrease in fatalities and injuries, and the associated costs.

5.3.1.1.3 Pedestrian Safety

The new train stations at 103rd Street, 111th Street, and Michigan Avenue would generate a large amount of pedestrian activity, causing a large increase in the number of pedestrians crossing the three major through streets near stations compared to the No Build Alternative. All three streets

have ADT volumes over 10,000 vehicles per day. The nearest controlled intersections (signals or all-way stops) to proposed station locations are approximately one block away in most cases. However, many pedestrians will want to cross the streets immediately adjacent to the station entrances, particularly to access the nearest available bus stops (assumed to be adjacent to stations). Therefore, a large volume of pedestrians would be expected to cross the major streets without positive traffic control, which would be an adverse impact on pedestrian safety.

It is expected that the minimum requirements for traffic signals described in the MUTCD would be met by pedestrian volumes at any of the three station locations. If warranted by an engineering traffic study, traffic signals would be included to mitigate the pedestrian safety impacts. Other pedestrian crossing treatments, such as refuge medians with appropriate signage, would also have the potential to adequately reduce pedestrian delays and improve safety if confirmed by the results of a traffic gap study.

5.3.1.1.4 Parking Security

As described in Section 5.2.1, research has found that larger parking lots with less pedestrian activity and less visibility from the sidewalk can result in more thefts (Loukaitou-Sideris et al. 2002). Security impacts for parking facilities at the three proposed stations on Segment UA are described below:

- 103rd Street - Two 100-space surface parking lots would be expected to have no adverse impact.
- 111th Street - Two 100-space surface parking lots would be expected to have no adverse impact.
- Michigan Avenue - A 750-space, three-story parking structure would be located northeast of State Street and 116th Street and a 250-space surface lot would be located southeast of Michigan Avenue and Kensington Avenue. Various design elements would be incorporated to improve security for the facilities, which would result in no adverse impacts. However, given the size and location of the surface lot, additional mitigation would be considered as described below.

Mitigation measures would be the same as described for the BRT Alternative (see Section 5.2.1).

Figure 5-1 shows an example of potential locations for sidewalk connections through surface parking lots at the 103rd Street station.

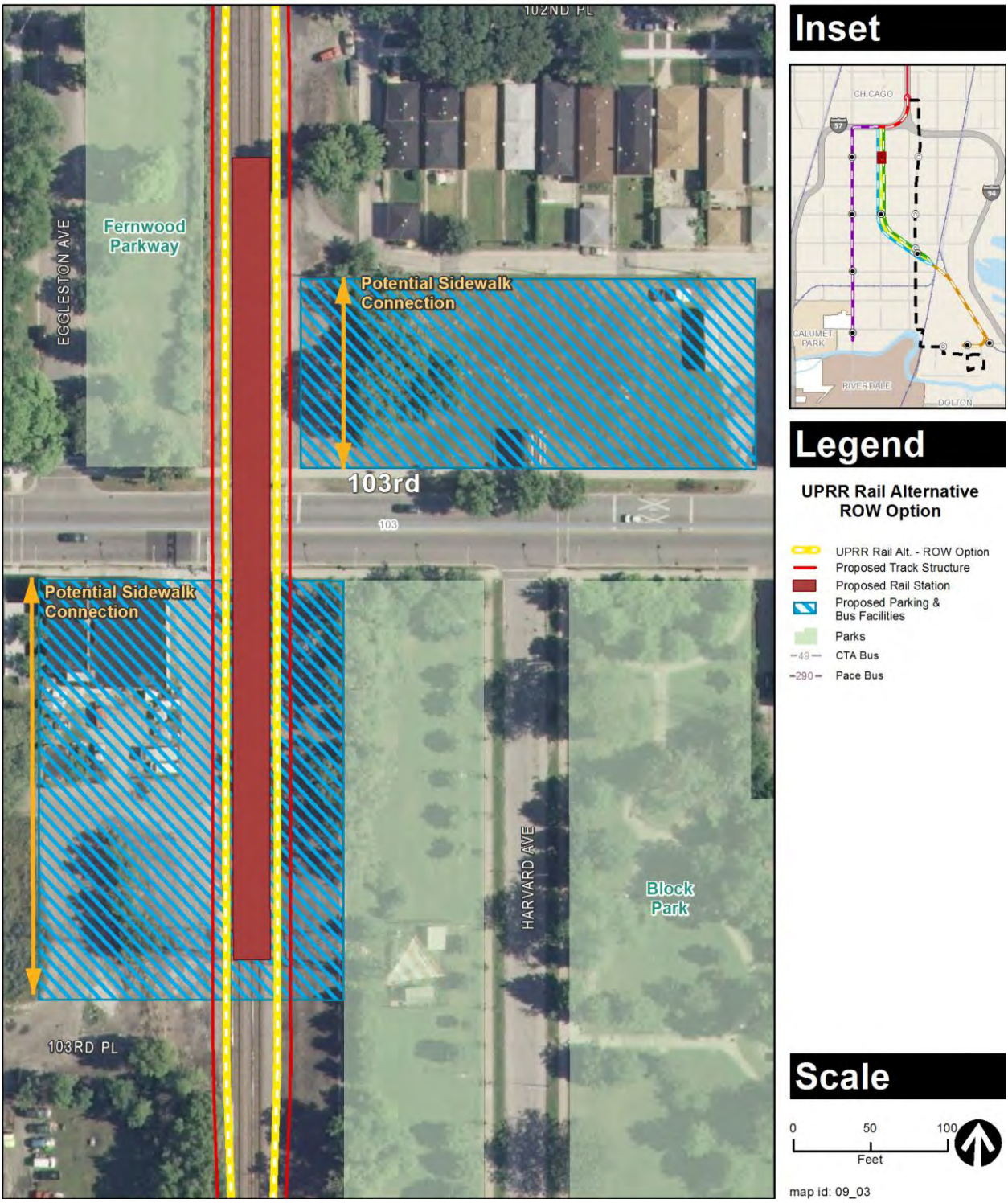

Figure 5-1: Potential Sidewalk Connections at 103rd Street Station Parking Lots

5.3.1.1.5 Neighborhood Security

Comments from the general public during the EIS scoping process included concerns about the potential for increased crime in the neighborhoods surrounding new rail transit stations compared to existing conditions. A literature review was conducted to determine whether the presence or introduction of rail transit stations is expected to have an impact on neighborhood crime. Results were mixed. Studies in Baltimore and Denver examined crime before and after the opening of stations and found no significant relationship to crime rates (Plano 1993, Denver RTD 2006). However, a study of two stations in Atlanta found slight increases in crime after station openings, with rates regressing to the mean over the next several months (Poister 1996).

A study of crime patterns around Los Angeles Green Line stations considered more variables related to the surrounding environment, and found that the rail line had no significant impacts on crime trends (Liggett et al. 2003). This study is mirrored by a recent study in San Diego to compare crime rates in neighborhoods that are similar demographically, but differ with respect to rail transit access. No significant differences in crime were found between similar neighborhoods with and without train access, and crime around San Diego's Green Line extension followed city and county trends after opening (San Diego Association of Governments 2007).

However, an econometric model of crime activity in Atlanta found that adding rail access increases crime in low-income neighborhoods (Ihlanfeldt 2003). A study of street robberies in four Chicago police districts found a disproportionate number of crimes per acre near rapid transit stations (Block and Davis 1996). However, the level of pedestrian and commercial activity is also higher near transit stations, and it was not clear whether the number of crimes was disproportionately high compared to those measures. Regardless, street robberies on the wealthier northeast side peaked not directly outside a train station, but within 1,000 feet of a train station. On the lower income west side, robberies were more widespread throughout the neighborhood, and were concentrated around commercial activity on major streets rather than at train stations.

Overall, it appears that new train stations would be unlikely to have much, if any, impact on neighborhood crime, but research indicates that some risk would remain, particularly in low-income areas. The impact would be not substantially adverse. Suggested mitigation measures would be security surveillance cameras and sidewalk lighting along commercial streets within the immediate vicinity (one block, or 660 feet) of train station entrances. CTA would need to coordinate the implementation of these measures with the City of Chicago because the cameras and lighting would be located on City ROW.

5.3.1.1.6 Terrorism and Homeland Security

As a whole, the CTA heavy rail system is potentially a high profile target of would-be terrorists. However, the damage inflicted by attacking the Red Line within the project area (i.e., south of 95th Street) would not be as large as attacking higher ridership areas and would not cause the same level of service disruption as attacking a more central location. Therefore, it is unlikely that the Red Line Extension would be a primary target of terrorists. The probability of an attack is

remote, but the damage would be critical. Based on the Risk Assessment Matrix in Table 3-1, this is classified as a not substantially adverse impact.

The CTA prepares for acts of terrorism by updating various safety and security plans on a regular basis and coordinating with law enforcement and other agencies as described in Section 3.1.3.2. As additional mitigation, access to the areas under the tracks, where a bomb could be concealed in a vehicle or other container, would be prohibited. A means of detecting intrusions, most likely video and/or thermal imaging, with analytics software to alert security personnel to potential threats, would be considered in the final design of the project. Lighting under the elevated structure would also be considered to deter terrorism and other criminal activity, and improve surveillance visibility. Parking would also be prohibited where the tracks pass over public roadways.

5.3.1.2 Segment UB

5.3.1.2.1 Major Incidents

The forecasted change in major incidents reportable to the FTA was calculated by multiplying the change in VRH for the CTA rail and bus systems by the existing major incident rates for those modes (see Table 5-3). The change in VRH for Segment UB would be expected to increase the frequency of major incidents on the rail system by an average of 0.09 per year and increase the *frequency* of major incidents on the bus system by an average of 0.22 per year compared to existing conditions. The sum of the two changes in crash frequency results in an increase of 0.30 major incidents per year, or 1 every 3.3 years. However, the incident *rates* for each mode would not be expected to change substantially. It is also possible that the incident rate for the project area would be lower than for the system as a whole given its newer infrastructure. The CTA also attempts to minimize incidents by continuously upgrading the bus and rail fleets, and through extensive operator training. The impact on major incidents would be not adverse.

Table 5-3: Change in Major Incidents for Segment UB

Item	Bus	Rail	Total
A. Annual Change in VRH	12,003	13,411	25,414
B. Annual Major Incidents per Million VRH (2009-2011)	18.06	6.52	13.89
C. Annual Change in Major Incidents [(A/1,000,000)*B)]	0.22	0.09	0.30

Sources: (CTA 2009, National Transit Database 2012)
VRH = vehicle revenue hours

5.3.1.2.2 Motor Vehicle Safety

The impacts and mitigations associated with Segment UB would be the same as described for segment UA (see Section 5.3.1.1).

5.3.1.2.3 Pedestrian Safety

Either option for a train station at 130th Street would generate a large amount of pedestrian activity. For the West Option, pedestrians from the Altgeld Gardens neighborhood would need to cross 130th Street at Evans Avenue. A traffic signal, sidewalks, curb ramps, and marked crosswalks

are included in the design, so there would be no adverse impact given these improvements. It is suggested that the entire 130th Street corridor from at least Indiana Avenue to Ellis Avenue be considered for a future redesign with "complete streets" principles. Reduced speeds, narrower travel lanes, pedestrian crossing treatments, bicycle facilities, and opportunities for development would all be considered for the corridor.

For the South Option station, an auxiliary entrance would allow pedestrians to access the station without crossing 130th Street. This would result in no adverse impact for the South Option station, and would offer superior safety to the West Option station, even accounting for the pedestrian facilities to be constructed.

5.3.1.2.4 Parking Security

As described in Section 5.2.1, research has found that larger parking lots with less pedestrian activity and less visibility from the sidewalk can result in more thefts (Loukaitou-Sideris et al. 2002). All parking facilities would incorporate design features as described for the BRT Alternative in Section 5.2.1. Security impacts for the parking facilities at the two 130th Street station options are described below:

- 130th Street South Option - A 2,300-space, seven-story parking structure would be located adjacent to the 130th Street station location. Various design elements would be incorporated to improve security in the garage, which would result in no adverse impact.

- 130th Street West Option - A 1,950-space, four-story parking structure and a 350-space surface lot would be located adjacent to the 130th Street station site in an area of very low pedestrian activity. Various design elements would be incorporated to improve security at the lots, which would result in no adverse impacts.

Mitigation measures would be the same as described for the BRT Alternative (see Section 5.2.1).

5.3.1.2.5 Neighborhood Security

The probability of adverse impacts on neighborhood security on Segment UB would be limited because Segment UB does not have any stations centered in neighborhoods. There are no commercial streets within the immediate vicinity of the two 130th Street station locations, so the probability of adverse security impacts would also be limited in those areas. The impacts would therefore be not adverse. No mitigation measures would be necessary.

5.3.1.2.6 Terrorism and Homeland Security

The impacts and mitigation measures for Segment UB would be the same as those for Segment UA (see Section 5.3.1.1), except that the train line would not pass over any public roadways, so parking prohibitions would not apply.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option would require the removal of the existing UPRR tracks and construction of an extension of the existing CTA Red Line, mostly on elevated structure. The extensive scope of work for this alternative would create a need for a large number of contractors in many areas over a long time period. To mitigate risks of safety and security incidents, contractors would be required to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of the CTA's *Safety and Security Management Plan* or other manuals and policies (CTA 2011b). The contractor would take prompt and decisive corrective action on safety deficiencies identified at the work site.

5.3.2.1 Segment UA

5.3.2.1.1 Emergency Services

The elevated structure would cross over seven arterial or collector streets (103rd Street, 107th Street, 111th Street, Wentworth Avenue, 115th Street, State Street, and Michigan Avenue) and five local residential streets (101st Street, 109th Street, 116th Street, Indiana Avenue, and Prairie Avenue) on Segment UA. All but four of the streets (Michigan Avenue, 116th Street, Indiana Avenue, and Prairie Avenue) currently have at-grade crossings with the UPRR.

For at-grade crossings, full road closures would be required for approximately two weeks to remove the crossing. If the profile of the roadway were to be reconstructed, a through street would need to be one-way for approximately two months, while a minor street would likely be closed completely. For major streets, the new bridge spans for the Red Line structure could be rolled into place over a weekend with a full closure. For local streets, the roadway could be closed for approximately a week to set the new bridge.

At Michigan Avenue, the existing structure could be demolished and the new bridge span for the Red Line could be rolled into place over a weekend with a full closure. For the other three local streets with grade-separated crossings, full road closures could be required for approximately two weeks to remove each existing bridge structure. New structures could be either rolled in over a weekend or the road could be closed for approximately 1 week to set a new bridge structure.

Emergency services would be able to access construction sites at all times in the same way contractors access the sites. Emergency services wishing to cross the tracks would have to use recommended detours, just as with a typical roadway construction project. The impacts would be not substantially adverse.

As a mitigation, neither adjacent roadways nor adjacent through streets operating in the same direction would be closed simultaneously. For example, while 111th Street is closed, 109th Street and Wentworth Avenue would remain open because they are the nearest crossings, and 107th Street and 115th Street would also remain open because they are the nearest east-west

arterial/collector streets. Traffic management plans would be created during the final engineering phase of the project, and would identify detour and emergency access routes. Detour routes would generally follow the nearest arterial or collector streets. Contractors would follow the MUTCD design standards for temporary traffic control and would obtain required local permits.

5.3.2.2 Segment UB

5.3.2.2.1 Emergency Services

South and east of the Canadian National/Metra Electric tracks, the new tracks would be located adjacent to an existing railroad with no public roadway crossings. Emergency services would be able to access construction sites at all times in the same way contractors access the sites. The impacts would be not adverse.

As a mitigation, an access road for the MWRD would be constructed prior to the new CTA tracks if necessary to maintain access to the MWRD facility. This roadway could also be used by emergency services. Traffic management plans would be created during the final engineering phase of the project if necessary. The plans would identify detour and emergency access routes, which would generally follow the nearest arterial or collector streets. Contractors would also follow the MUTCD design standards for temporary traffic control and would obtain the required local permits.

5.3.3 Cumulative Impacts and Mitigations – Union Pacific Railroad Rail Alternative - Right-of-Way Option

There would not be any expected cumulative impacts on safety and security associated with the UPRR Rail Alternative ROW Option.

5.3.4 120th Street Yard and Shop

5.3.4.1 Permanent Impacts and Mitigations

5.3.4.1.1 Security

A study of ROW intrusions for the CTA's Red and Purple Modernization Project found a large number of incidents at the Howard Yard and the Linden Yard, primarily related to graffiti. Some of the same type of activity would be likely to occur at the proposed 120th Street yard and shop. However, the relatively isolated location of the proposed yard and shop may help to reduce the frequency of incidents from a regular occurrence to an occasional occurrence. The yard would be located adjacent to a water treatment plant for the MWRD and other industrial facilities, separated from residential areas by railroads and major arterial streets. It would be approximately 1 mile southeast of the proposed Michigan Avenue station and 0.75 mile northwest of the proposed 130th Street station South Option. Given the occasional probability and the marginal severity, the risk per the CTA's risk assessment matrix (see Table 3-1) is classified as "Review" for acceptability, or not substantially adverse for the NEPA analysis.

To mitigate the risk of security incidents, the design of the yard and shop would comply with all relevant design standards, as discussed in Section 3.1. Security fencing at least 8 feet in height

would be installed around the perimeter of the yard per FTA guidance (FTA 2004). Security cameras would be installed to monitor potential access points. The latest technologies available for automated intrusion detection, such as thermal imaging with analytics software, would be reviewed at the time of final design and construction.

5.3.4.2 Construction Impacts and Mitigations

The construction impacts and mitigation measures associated with the 120th Street yard and shop would be the same as the general construction impacts and mitigation measures associated with Segment UA (see Section 5.3.2.1).

5.4 Union Pacific Railroad Rail Alternative - East Option

The impacts and mitigations for the UPRR Rail Alternative East Option would be the same as described for the UPRR Rail Alternative ROW Option (see Section 5.2.3) except as noted below.

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.1.1 Segment UA

5.4.1.1.1 Major Incidents

The impacts and mitigations associated with the East Option would be the same as described for the ROW Option (see Section 5.3.1.1).

5.4.1.1.2 Motor Vehicle Safety

The impacts and mitigations associated with the East Option would be the same as described for the ROW Option (see Section 5.3.1.1).

5.4.1.1.3 Pedestrian Safety

The impacts and mitigations associated with the East Option would be the same as described for the ROW Option (see Section 5.3.1.1), but new traffic signals in the vicinity of the station for mitigation would likely need to be interconnected with the railroad crossing warning devices. Pedestrian safety impacts related to crossing the railroad tracks are discussed below under "Highway-Rail Grade Crossings."

5.4.1.1.4 Parking Security

The parking security impacts for the UPRR Rail Alternative East Option would be similar to those described for the ROW Option, but some differences in proposed sizes and locations affect the impacts:

- 103rd Street - The East Option would include a 75-space parking lot east of the station and a 125-space lot west of the station. Both would be small and would be visible from the sidewalks along 103rd Street, resulting in no adverse impact.

- 111th Street - The East Option would include a 55-space parking lot east of the station along 110th Place and a 145-space lot west of the station between 110th Street and 111th Street. The 55-space lot would be located on a minor residential street with little pedestrian activity for surveillance. A large portion of the 145-space lot would be far from 111th Street, limiting visibility. Various design elements would be incorporated to improve security in the lot, which would result in no adverse impact. However, given the locations of the lots, additional mitigation would be considered.

- Michigan Avenue - The East Option would include an 825-space, three-story parking structure west of the UPRR tracks and a 175-space surface lot southeast of Michigan Avenue and Kensington Avenue. Various design elements would be incorporated to improve security in the lots, which would result in no adverse impacts. However, the surface lot would be sited such that portions may not be easily visible from sidewalks, so additional mitigation would be considered.

Mitigation measures would be the same as described for the BRT Alternative (see Section 5.2.1).

5.4.1.1.5 Neighborhood Security

The impacts and mitigations associated with the East Option would be the same as described for the ROW Option (see Section 5.3.1.1).

5.4.1.1.6 Terrorism and Homeland Security

The impacts and mitigations associated with the East Option would be the same as described for the ROW Option (see Section 5.3.1.1), except access would be permitted under the rail structure for park uses at Wendell Smith Park and Block Park.

5.4.1.1.7 Highway-Rail Grade Crossings

The UPRR Rail Alternative East Option would directly increase the number of vehicles (mostly buses) and pedestrians crossing the UPRR tracks at 103rd Street and 111th Street compared to the No Build Alternative, and could indirectly induce land development that would further increase traffic volumes.

Table 5-4 shows the Expected Crash Frequency (ECF) for the 103rd Street and 111th Street crossings using Equation 7-3.1 in the IDOT *Bureau of Design and Environment Manual* (IDOT 2010a). Future ADT volumes have not been forecasted, but a modest 1 percent annual growth in vehicle traffic between the construction year (2018) and the planning horizon year (2030) was assumed for the build conditions. This increase in traffic volume would result in an approximately 11 percent increase in ECF at each of the crossings in the UPRR Alternative East Option compared to the No Build Alternative. At 103rd Street, a crash would be expected once every 10.4 years (1/ECF) instead of every 11.6 years. At 111th Street, a crash would be expected once every 14.7 years instead of every 16.3 years. This frequency would be considered an occasional risk with critical severity, which is classified as adverse.

Table 5-4: Calculated Expected Crash Frequencies at Union Pacific Railroad Grade Crossings

Scenario	Item	103rd Street	111th Street
Existing (2009)	Average Daily Traffic	18,700	12,800
	Daily Train Volume	26	26
	Expected Crash Frequency	0.047	0.033
	Existing Crash Frequency	0.080	0.080
No Build Alternative (2030)	Average Daily Traffic	18,700	12,800
	Daily Train Volume	48	48
	Expected Crash Frequency	0.086	0.061
Union Pacific Railroad Alternative, East Option (2030)	Average Daily Traffic	21,100	14,400
	Daily Train Volume	48	48
	Expected Crash Frequency	0.096	0.068

The new CTA train stations would be expected to generate additional pedestrian volume crossing the UPRR tracks at 103rd Street and 111th Street. Some of the pedestrians would come from the planned surface parking lots and some would come from the surrounding neighborhood. For the East Option, a 125-space parking lot would be located across the tracks from the 103rd Street station entrance and a 145-space parking lot would be located across the tracks from the 111th Street station entrance. It is assumed that bus stops would be relocated adjacent to the station entrances, eliminating the need for passengers making bus-rail connections to cross the tracks on foot.

Given that transit passengers are often in a hurry, and given the likely delays to pedestrians due to the expected increase in freight volumes over existing conditions, it is reasonable to think that some pedestrians may choose to take unacceptable safety risks by crossing the tracks while the signals are flashing. This adverse impact could be mitigated in one or more ways. Pedestrian crossing gates could be used at sidewalks to provide the same level of warning to pedestrians as is provided to motorists. Pedestrian crossing gates are provided at other CTA at-grade crossings (see Figure 5-2). Pending coordination with the UPRR, intertrack fencing with signs clearly prohibiting crossing would be installed between tracks to discourage pedestrians from crossing at locations other than designated crossing points (see Figure 5-3). If intertrack fencing is not feasible, fencing would be installed along parking lots or at the ROW line to prevent unsafe pedestrian crossings of the railroad tracks.

Figure 5-2: Pedestrian Crossing Gates at Isabella Street on Chicago Transit Authority Purple Line

Figure 5-3: Intertrack Fencing at a Metra Station

5.4.1.2 Segment UB

The design of Segment UB for the UPRR Rail Alternative is the same for all three options. Therefore, the impacts and mitigations associated with the East Option would be the same as described for the ROW Option (see Section 5.3.1.2).

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

The overall scope of work for the UPRR Rail Alternative East Option would be similar to the UPRR Rail Alternative ROW Option, but the elevated CTA rail line would be constructed adjacent to the existing, at-grade freight railroad line instead of in place of it. Completing construction adjacent to an active freight rail line could create some additional construction safety risks for the project. To mitigate risks of safety and security incidents, contractors would be required to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of the CTA's *Safety and Security Management Plan* or other manuals and policies (CTA 2011b). The contractor would take prompt and decisive corrective action on safety deficiencies identified at the work site.

5.4.2.1 Segment UA

5.4.2.1.1 Emergency Services

Impacts for Segment UA for the East Option would be the same as described for the ROW Option (see Section 5.3.2.1), except existing railroad grade crossings would not be removed, and the roadway profiles would not be reconstructed.

5.4.2.2 Segment UB

The design of Segment UB for the UPRR Rail Alternative is the same for all three options. Therefore, the impacts and mitigations associated with the East Option would be the same as described for the ROW Option (see Section 5.3.2.2).

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.3.1 Segment UA

5.4.3.1.1 Highway-Rail Crossings

In addition to the expected increase in automobile and pedestrian traffic volumes as a result of the RLE Project (see Section 5.4.1.1) compared to the No Build Alternative, the full implementation of the CREATE program would increase the number of trains using the UPRR tracks from 26 to 48 per day, an 85 percent increase over existing conditions. The proposed Metra SouthEast Service Line could also increase the number of passenger trains per day on the line beyond the existing two Amtrak trains per day. Based on Equation 7-3.1 in the IDOT *Bureau of Design and Environment Manual*, increases in train volume proportionally increase the ECF at highway-rail grade crossings (IDOT 2010a). This increase in crash potential would be an adverse impact at the existing highway-rail grade crossings along the UPRR tracks at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Wentworth Avenue, 115th Street, and State Street. All of these crossings currently have gates on both roadway approaches and flashing lights. Crash potential could be further mitigated by installing safety protection technologies for vehicles to prevent drivers from going around the gates, and by installing pedestrian gates on the sidewalks.

5.4.3.2 Segment UB

There would be no cumulative impacts on safety and security for Segment UB of the UPRR Rail Alternative East Option.

5.4.4 120th Street Yard and Shop

The permanent and construction impacts and mitigations associated with the 120th Street yard and shop for the East Option would be the same as described for the ROW Option (see Section 5.3.3).

5.5 Union Pacific Railroad Rail Alternative - West Option

The impacts and mitigations for the UPRR Rail Alternative West Option would be the same as described for the UPRR Rail Alternative East Option (see Section 5.4) except as noted below.

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.1.1 Segment UA

5.5.1.1.1 Major Incidents

The impacts associated with the West Option would be the same as described for the ROW Option and the East Option (see Section 5.3.1.1).

5.5.1.1.2 Motor Vehicle Safety

The impacts and mitigations associated with the West Option would be the same as described for the ROW Option and the East Option (see Section 5.3.1.1).

5.5.1.1.3 Pedestrian Safety

The impacts and mitigations associated with the West Option would be the same as described for the East Option (see Section 5.4.1.1). Pedestrian safety impacts related to crossing the railroad tracks are discussed below under “Highway-Rail Grade Crossings.”

5.5.1.1.4 Parking Security

The parking security impacts for the UPRR Rail Alternative West Option would be similar to those described for the ROW Option, but some differences in proposed sizes and locations affect the impacts:

- 103rd Street - The West Option would include a 200-space parking lot west of the station, north of 104th Street. The lot would be somewhat large and portions could be difficult to see from the adjacent sidewalks. Various design elements would be incorporated to improve security in the lot, which would result in no adverse impact. However, given the size and location of the lot, additional mitigation would be considered.

- 111th Street - A 200-space parking lot would be located west of the station, between 110th Street and 111th Street. A large portion of the 145-space lot would be far from 111th Street or

other public sidewalks, limiting visibility. Various design elements would be incorporated to improve security in the lot, which would result in no adverse impact. However, given the location of the lot, additional mitigation would be considered.

- Michigan Avenue - A 1,000-space, five-story parking structure would be located west of the UPRR tracks and northeast of the 116th Street and State Street intersection. Various design elements would be incorporated to improve security for the structure, which would result in no adverse impact.

Mitigation measures would be the same as described for the BRT Alternative (see Section 5.2.1).

5.5.1.1.5 Neighborhood Security

The impacts and mitigations associated with the West Option would be the same as described for the ROW Option (see Section 5.3.1.1).

5.5.1.1.6 Terrorism and Homeland Security

The impacts and mitigations associated with the West Option would be the same as described for the ROW Option (see Section 5.3.1.1), except access would be permitted under the rail structure for park uses at Fernwood Parkway Park.

5.5.1.1.7 Highway-Rail Grade Crossings

Compared to the East Option, the volume of pedestrians crossing the tracks to access the new station would be lower for the West Option because the proposed parking lots would be located on the same side of the tracks as the proposed stations. However, the presence of the new train station adjacent to the highway-rail grade crossing would still generate additional pedestrian volume and create an adverse safety impact at 103rd Street and 111th Street. This impact could be mitigated in the same ways described for the East Option in Section 5.4.1.1, with pedestrian crossing gates and/or intertrack fencing.

5.5.1.2 Segment UB

The design of Segment UB for the UPRR Rail Alternative is the same for all three options. Therefore, the impacts and mitigations associated with the West Option would be the same as described for the ROW Option (See Section 5.3.1.2).

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

The overall scope of work for the UPRR Rail Alternative West Option would be similar to the UPRR Rail Alternative ROW Option, but the CTA rail line would be constructed west of the at-grade UPRR freight railroad line instead of east of the line. To mitigate risks of safety and security incidents, contractors would be required to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of the CTA's *Safety and Security Management Plan* or other manuals and policies (CTA

2011b). The contractor would take prompt and decisive corrective action on safety deficiencies identified at the work site.

5.5.2.1 Segment UA

5.5.2.1.1 Emergency Services

The impacts and mitigating actions for the West Option would be the same as described for the East Option (see Section 5.4.2.1).

5.5.2.2 Segment UB

The design of Segment UB for the UPRR Rail Alternative is the same for all three options. Therefore, the impacts and mitigations associated with the West Option would be the same as described for the ROW Option (see Section 5.3.1.2).

5.5.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.3.1 Segment UA

The cumulative impacts for the UPRR Rail Alternative West Option would be the same as described for the East Option (see Section 5.4.3.1).

5.5.3.2 Segment UB

There would be no cumulative impacts on safety and security for Segment UB of the UPRR Rail Alternative West Option.

5.5.4 120th Street Yard and Shop

The permanent and construction impacts and mitigations associated with the 120th Street yard and shop in the West Option would be the same as described for the ROW Option (see Section 5.3.3).

5.6 Halsted Rail Alternative

The permanent and construction impacts and mitigations for the Halsted Rail Alternative are discussed below.

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

5.6.1.1 Segment HA

5.6.1.1.1 Major Incidents

The forecasted change in major incidents reportable to the FTA was calculated by multiplying the change in VRH for the CTA rail and bus systems by the existing major incident rates for those modes (see Table 5-5). For Segment HA, the Halsted Rail Alternative would be expected to increase the *frequency* of major incidents on the rail system by approximately 0.18 per year and decrease the *frequency* of major incidents on the bus system by approximately 0.48 per year

compared to existing conditions. Combining the two results in a decrease of 0.30 major incidents per year, or 1 every 3.3 years. However, the incident *rates* for each mode would not be expected to change substantially. It is also possible that the incident rate for the project area would be lower than for the system as a whole given its newer infrastructure. The CTA also attempts to minimize incidents by continuously upgrading the bus and rail fleets and through extensive operator training. The impact on major incidents would be not adverse.

Table 5-5: Change in Major Incidents for Segment HA

Item	Bus	Rail	Total
A. Annual Change in VRH	-26,406	26,919	513
B. Annual Major Incidents per Million VRH (2009-2011)	18.06	6.52	13.89
C. Annual Change in Major Incidents [(A/1,000,000)*B)]	-0.48	0.18	-0.30

Sources: (CTA 2009, National Transit Database 2012)
VRH = vehicle revenue hours

5.6.1.1.2 Motor Vehicle Safety

The FTA released Proposed New Starts and Small Starts Policy guidance on January 9, 2013 that includes factors used to measure the change in safety as a result of transit projects. The factors use the change in VMT to estimate changes in injuries and fatalities for automobiles and transit.

The Halsted Rail Alternative is expected to cause a small shift in travel modes from automobiles and buses to rail transit, thus decreasing automobile and bus VMT, and slightly increasing rail VMT. Overall, this would lead to a small decrease in fatalities and injuries, and the associated costs.

5.6.1.1.3 Pedestrian Safety

The new train stations at 103rd Street, 111th Street, and 119th Street would generate a large amount of pedestrian activity, potentially increasing in the number of pedestrians crossing at the intersections near station entrances compared to the No Build Alternative. Impacts at each station location are described below:

- 103rd Street - Station entrances would be located on all four corners of the intersection with Halsted Street. Therefore, the number of pedestrians crossing Halsted Street and 103rd Street would not be directly increased by the RLE Project. However, new stations would be expected to generate changes in land use and increased economic activity, indirectly increasing the pedestrians crossing in the vicinity of the station compared to the No Build Alternative. There are existing pedestrian safety concerns at the intersection (see Source: (City of Chicago 2012b)

CTA = Chicago Transit Authority

- Table A-5). An increase in the volume of pedestrians would possibly increase the *frequency* of pedestrian crashes, but likely not the *crash rate* due to the safety-in-numbers effect.[4]

[4] Safety in numbers is the hypothesis that increasing the size of a group or situation can reduce the rate of incidents involving that group or situation. Related to pedestrian safety, an increased number of

Therefore, the impact would be not adverse. Pedestrian safety improvements such as curb extensions, refuge medians, leading pedestrian intervals, and protected-only lagging left turns would be considered in the final design.

- 111th Street - Station entrances would be located on all four corners of the intersection with Halsted Street. Therefore, the number of pedestrians crossing Halsted Street and 103rd Street would not be directly increased by implementation of the Halsted Rail Alternative. However, new stations would be expected to generate changes in land use and increased economic activity, indirectly increasing the pedestrians crossing in the vicinity of the station compared to the No Build Alternative. There are existing pedestrian safety concerns regarding this intersection (see Source: (City of Chicago 2012b)

CTA = Chicago Transit Authority

- Table A-5). An increase in the volume of pedestrians would possibly increase the *frequency* of pedestrian crashes, but likely not the *crash rate* due to the safety-in-numbers effect. Therefore, the impact would be categorized as not adverse. Pedestrian safety improvements such as those described for the 103rd Street station would also be considered in the final design.

- 119th Street - The entrances for the 119th Street station would be located north of 119th Street and south of 118th Street, on both sides of Halsted Street. Having these entrances would directly increase the number of pedestrians crossing 119th Street to make the connection from the eastbound #119 bus. New stations would also be expected to generate changes in land use and increased economic activity, indirectly increasing the pedestrians crossing in the vicinity of the station compared to the No Build Alternative. There are existing pedestrian safety concerns regarding the 119th Street intersection (see Source: (City of Chicago 2012b)

CTA = Chicago Transit Authority

- Table A-5). An increase in the volume of pedestrians would possibly increase the *frequency* of pedestrian crashes, but likely not the *crash rate* due to the safety-in-numbers effect. Therefore, the impact would be not adverse. Pedestrian safety improvements such as those described for the 103rd Street station would also be considered in the final design at both the 118th Street and 119th Street intersections.

5.6.1.1.4 Parking Security

As described in Section 5.2.1, research has found that larger parking lots with less pedestrian activity and less visibility from the sidewalk can result in more thefts (Loukaitou-Sideris et al. 2002). All parking facilities would incorporate design features as described for the BRT Alternative

pedestrians at an intersection could increase driver awareness of pedestrians at that intersection, thus causing drivers to behave more carefully and crash rates (and sometimes absolute frequency) to decrease.

in Section 5.2.1. Security impacts for parking facilities at the three proposed stations on Segment HA are described below:

- 103rd Street - A 200-space surface parking lot would be located at the northwest corner of 103rd Street and Halsted Street. The lot would be easily visible from the sidewalk and would be expected to have no adverse impact.
- 111th Street - A 200-space surface parking lot would be located at the northwest corner of 111th Street and Halsted Street. The lot would be easily visible from the sidewalk and would be expected to have no adverse impact.
- 119th Street - A 1,000-space surface parking lot would be located at the southwest corner of 119th Street and Halsted Street. The lot would be very large and would be partially hidden under elevated rail tracks going to the proposed rail yard. Various design elements would be incorporated to improve security in the lot, which would result in no adverse impact. However, given the size of the lot, additional mitigation would be considered.

Mitigation measures would be the same as described for the BRT Alternative (see Section 5.2.1).

5.6.1.1.5 Neighborhood Security

As described in Section 5.3.1.1, a review of research related to crime in neighborhoods surrounding new transit stations found that a marked impact on neighborhood crime would be unlikely, but some risk would remain, particularly in low-income areas. The impact on neighborhood security would be not substantially adverse. Suggested mitigation measures would be security surveillance cameras and sidewalk lighting along commercial streets within one block (660 feet of train station entrances. CTA would need to coordinate the implementation of these measures with the City of Chicago because the cameras and lighting would be located on City ROW.

5.6.1.1.6 Terrorism and Homeland Security

The risks of terrorism for the Halsted Rail Alternative would be similar to those described for the UPRR Rail Alternative (see Section 5.3.1.1). As a whole, the CTA rail system is potentially a high profile target for terrorism, but other parts of the system are more likely targets than the proposed portions in the project area. The probability of an attack is remote, but the damage would be critical. Based on the Risk Assessment Matrix in Table 3-1, this is classified as a not substantially adverse impact.

The CTA prepares for acts of terrorism by updating various plans on a regular basis and coordinating with law enforcement and other agencies as described in Section 3.1.3.2. Unlike the UPRR Rail Alternative, access to the areas under the track structure could not be prohibited for mitigation purposes with the Halsted Rail Alternative, because the train line would be above a public roadway. Lighting and surveillance equipment would be considered in the final design phase to deter criminal activities and to facilitate criminal and vehicle identification

5.6.1.2 Segment HB

5.6.1.2.1 Major Incidents

Table 5-6 shows the forecasted change in major incidents reportable to the FTA. For Segment HB, the Halsted Rail Alternative would be expected to increase the *frequency* of major incidents on the rail system by approximately 0.06 per year and decrease the *frequency* of major incidents on the bus system by approximately 0.05 per year compared to existing conditions. Combining the two results in approximately no change in major incidents. The incident *rates* for each mode would also not be expected to change substantially. It is also possible that the incident rate for the project would be lower than for the system as a whole given its newer infrastructure. The CTA also attempts to minimize incidents by continuously upgrading the bus and rail fleets and through extensive operator training. The impact on major incidents would be not adverse.

Table 5-6: Change in Major Incidents for Segment HB

Item	Bus	Rail	Total
A. Annual Change in VRH	-2,848	8,472	5,624
B. Annual Major Incidents per Million VRH (2009-2011)	18.06	6.52	13.89
C. Annual Change in Major Incidents [(A/1,000,000)*B)]	-0.05	0.06	0.00

Sources: (CTA 2009, National Transit Database 2012)
VRH = vehicle revenue hours

5.6.1.2.2 Motor Vehicle Safety

The impacts and mitigations associated with the Segment HB would be the same as described for Segment HA (see Section 5.6.1.1).

5.6.1.2.3 Pedestrian Safety

The new train station at Vermont Avenue would have station entrances on both sides of Halsted Street south of Vermont Avenue and north of 128th Place. Implementation of the Halsted Rail Alternative would not directly increase the number of pedestrians crossing at Halsted Street and Vermont Avenue. However, new stations would be expected to generate changes in land use and increased economic activity, indirectly increasing the pedestrians crossing in the vicinity of the station compared to the No Build Alternative.

An increase in the volume of pedestrians would not be expected to have an adverse impact on crash rates at a signalized intersection such as Vermont Avenue. However, the intersection of 128th Place and Halsted Street is controlled by all-way stop signs. All-way stop signs can have an adverse impact on pedestrian safety on multi-lane streets such as Halsted Street due to a situation

known as the multiple-threat, where one driver stops, but a second driver cannot see the pedestrian crossing (see

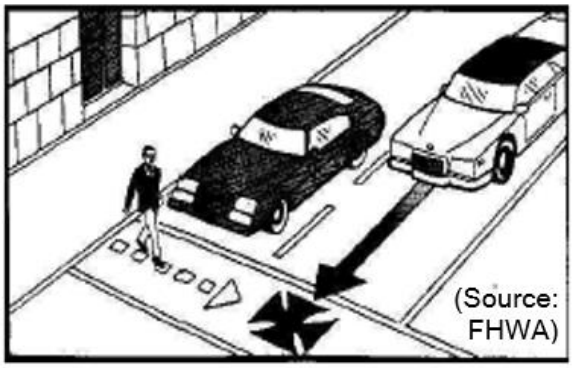

Figure 5-4) and fails to come to a complete stop. It is expected that the minimum requirements for traffic signals described in the MUTCD could be met at the 128th Place and Halsted Street intersection. Traffic signals would be considered for mitigation in coordination with the results of traffic studies completed during the final design phase. Pedestrian safety improvements such as curb extensions, refuge medians, leading pedestrian intervals, and protected-only lagging left turns would also be considered at both intersections in the final design.

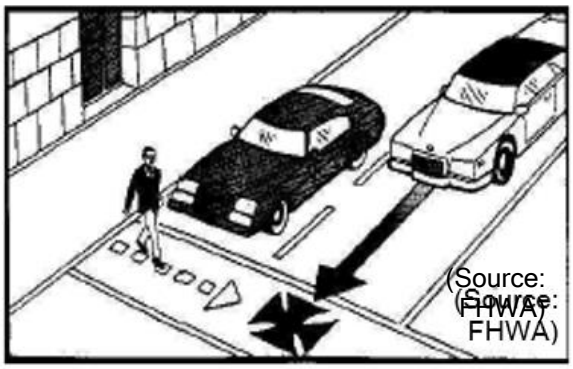

Figure 5-4: Multiple Threat Pedestrian Crash

5.6.1.2.4 Parking Security

As described in Section 5.2.1, research has found that larger parking lots with less pedestrian activity and less visibility from the sidewalk can result in more thefts (Loukaitou-Sideris et al. 2002). All parking facilities would incorporate design features as described for the BRT Alternative in Section 5.2.1. Mitigation measures would also be the same as described for the BRT Alternative (see Section 5.2.1).

Two parking facilities are proposed for the Vermont Avenue station. A 300-space surface parking lot would be located on the east side of Halsted Street between Vermont Avenue and 128th Place. The lot would be easily visible from the sidewalk and would be expected to have no adverse

impact on security. A 2,000 space, six-story parking structure would be located on the west side of Halsted Street between Vermont Avenue and 128th Place. Various design elements would be incorporated to improve security in the garage, which would result in no adverse impact.

5.6.1.2.5 Neighborhood Security

The impacts and mitigation measures for Segment HB would be the same as those described for Segment HA (see Section 5.6.1.1).

5.6.1.2.6 Terrorism and Homeland Security

The impacts and mitigation measures for Segment HB would be the same as those described for Segment HA (see Section 5.6.1.1).

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

The Halsted Rail Alternative would include construction of a 5.0-mile extension of the existing CTA Red Line, mostly on elevated structure over the median of Halsted Street. The extensive scope of work for this alternative would create a need for a large number of contractors in many areas over a long time period. To mitigate risks of safety and security incidents, contractors would be required to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with other relevant aspects of the CTA's *Safety and Security Management Plan* or other manuals and policies (CTA 2011b). The contractor would take prompt and decisive corrective action on safety deficiencies identified at the work site.

5.6.2.1 Segment HA

5.6.2.1.1 Emergency Services

Construction work would be phased to minimize traffic impacts on Halsted Street and adjoining streets. However, elevated structure construction would require lane and street closures and superstructure erection would require temporary shutdown of all traffic along portions of Halsted Street. In order to maintain emergency access on cross-streets, only short segments of Halsted Street (less than ½ mile long) would be closed at any given time. Emergency services would need to access construction sites in the same way as contractors, by using various side streets and recommended detours. The impacts would be not substantially adverse.

As a mitigation, traffic management plans would be created during the final engineering phase of the project to identify detour and emergency access routes, which would generally follow the nearest arterial or collector streets. Contractors will also follow the MUTCD design standards for temporary traffic control and would obtain required local permits.

5.6.2.2 Segment HB

The construction impacts and mitigation measures for Segment HB would be the same as described for Segment HA (see Section 5.6.2.1).

5.6.3 Cumulative Impacts and Mitigations – Halsted Rail Alternative

There would not be expected cumulative impacts on safety and security associated with the Halsted Rail Alternative.

5.6.4 119th Street Yard and Shop

5.6.4.1 Permanent Impacts and Mitigations

A study of ROW intrusions for the CTA's Red and Purple Modernization Project found a large number of incidents at the Howard Yard and the Linden Yard, primarily related to graffiti. The same type of activity would be likely to occur at the proposed 119th Street yard and shop. The yard and shop would be located west of Halsted Street, and would be somewhat separated from residential areas by development north of 119th Street and south of 120th Street. It would also be just ¼ mile west of the proposed 119th Street station. The area surrounding 119th Street and Halsted Street has substantially less background crime activity than the area surrounding the Howard station on the CTA Red Line, so the expected occurrence of incidents would be occasional frequency. The combination of occasional probability and marginal severity for graffiti incidents results in a risk classification of "Review" per the CTA's risk assessment matrix (see Table 3-1), or not substantially adverse for the NEPA analysis.

To mitigate the risk of security incidents, the design of the yard and shop would comply with all relevant design standards, as discussed in Section 3.1. Security fencing at least 8 feet in height would be installed around the perimeter of the yard per FTA guidance (FTA 2004). Security cameras would be installed to monitor potential access points. The latest technologies available for automated intrusion detection, such as thermal imaging with analytics software, would be reviewed at the time of final design and construction.

5.6.4.2 Construction Impacts and Mitigations

The construction impacts and mitigation measures associated with the 119th Street yard and shop would be the same as the general construction impacts and mitigation measures associated with Segment HA (see Section 5.6.2.1).

Section 6
Impacts Remaining after Mitigation

This section describes the impacts of the RLE Project that would remain after mitigating for impacts as described in Section 5.

6.1 No Build Alternative

There would be no expected permanent impacts, construction impacts, or cumulative impacts on safety and security associated with the No Build Alternative. Therefore, there would also be no impacts remaining after mitigation.

6.2 Bus Rapid Transit Alternative

Table 6-1 summarizes the impacts, mitigation measures, and impacts remaining after mitigation for seven topic areas for the BRT Alternative. There would be no remaining adverse impacts after mitigation. See Section 5.2 for details about the impacts.

Table 6-1: Impacts Remaining after Mitigation - Bus Rapid Transit Alternative

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Major Incidents	Not Adverse	None necessary	Not Adverse
Motor Vehicle Safety	Beneficial	None necessary	Beneficial
Pedestrian Safety	▪ Adverse (1 Location) ▪ Not Adverse (4 locations)	Install new traffic signals and/or other pedestrian crossing treatments (e.g., refuge medians).	▪ Not Adverse (5 locations)
Bus Stop Security	▪ Beneficial (1 location) ▪ Not Adverse (3 locations)	None necessary	▪ Beneficial (1 location) ▪ Not Adverse (3 locations)
Parking Security	Not Adverse	Consider pedestrian access routes (i.e., sidewalks) through or adjacent to surface lots on a case-by case basis where it would increase pass-by surveillance.	Not Adverse
Neighborhood Security	Not Adverse	None necessary	Not Adverse
Terrorism and Homeland Security	Not Adverse	Continue to update safety and security plans. Continue coordination with law enforcement, homeland security, and other agencies.	Not Adverse

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Construction Impacts			
Emergency Services	Not Adverse	Contractors would follow MUTCD standards for temporary traffic control, and would obtain required local permits.	Not Adverse

MUTCD = Manual on Uniform Traffic Control Devices

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

6.3.1 Segment UA

Table 6-1 summarizes the impacts, mitigation measures, and impacts remaining after mitigation for six topic areas for the UPRR Rail Alternative ROW Option, Segment UA. There would be no remaining adverse impacts after mitigation. See Section 5.3 for details about the impacts.

Table 6-2: Impacts Remaining after Mitigation - Union Pacific Railroad Rail Alternative Right-of-Way Option, Segment UA

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Major Incidents	Not Adverse	None necessary	Not Adverse
Motor Vehicle Safety	Beneficial	None necessary	Beneficial
Pedestrian Safety	Adverse	Install new traffic signals and/or other pedestrian crossing treatments (e.g., refuge medians).	Beneficial
Parking Security	Not Adverse	Consider pedestrian access routes (i.e., sidewalks) through or adjacent to surface lots on a case-by case basis where it would increase pass-by surveillance.	Not Adverse
Neighborhood Security	Not Substantially Adverse	Coordinate with City of Chicago to install sidewalk lighting and surveillance cameras along commercial streets within one block (660 feet) of station entrances.	Not Adverse
Terrorism and Homeland Security	Not Substantially Adverse	Continue to update safety and security plans. Continue coordination with law enforcement, homeland security, and other agencies. Prohibit parking where tracks cross over public streets. Prohibit access to areas under track structure with fencing, barriers, or signage. Include a means of detecting ROW intrusions in final design. Consider lighting under track structure for improved visibility and crime deterrence.	Not Adverse

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Construction Impacts			
Emergency Services	Not Substantially Adverse	Neither adjacent roadways nor adjacent parallel through streets would be closed simultaneously. Traffic management plans would be created that would identify recommended detour routes. Contractors would follow MUTCD standards for temporary traffic control and would obtain required local permits.	Not Substantially Adverse

ROW = right-of-way, MUTCD = Manual on Uniform Traffic Control Devices

6.3.2 Segment UB

Table 6-13 summarizes the impacts, mitigation measures, and impacts remaining after mitigation for six topic areas for the UPRR Rail Alternative ROW Option, Segment UB. There would be no remaining adverse impacts after mitigation. See Section 5.3 for details about these impacts.

Table 6-3: Impacts Remaining after Mitigation - Union Pacific Railroad Rail Alternative Rail Alternative ROW Option, Segment UB

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Major Incidents	Not Adverse	None necessary	Not Adverse
Motor Vehicle Safety	Beneficial	None necessary	Beneficial
Pedestrian Safety	Not Adverse	In addition to new traffic signal, sidewalks, curb ramps, and marked crosswalks planned at 130th Street and Evans Avenue, consider additional “complete streets” modifications for 130th Street corridor.	Not Adverse
Parking Security	Not Adverse	Consider pedestrian access routes (i.e., sidewalks) through or adjacent to surface lots on a case-by case basis where it would increase pass-by surveillance.	Not Adverse
Neighborhood Security	Not Adverse	None applicable	Not Adverse
Terrorism and Homeland Security	Not Substantially Adverse	Continue to update safety and security plans. Continue coordination with law enforcement, homeland security, and other agencies. Prohibit access to areas under track structure with fencing, barriers, or signage. Include a means of detecting ROW intrusions in final design. Consider lighting under track structure for improved visibility and crime deterrence.	Not Adverse

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Construction Impacts			
Emergency Services	Not Adverse	A new access road to the MWRD plant would be constructed prior to the new CTA rail alignment if necessary to maintain access. Traffic management plans would be created that would identify recommended detour routes. Contractors would follow MUTCD standards for temporary traffic control and would obtain required local permits.	Not Adverse

ROW = right-of-way, MWRD = Metropolitan Water Reclamation District, CTA = Chicago Transit Authority, MUTCD = Manual on Uniform Traffic Control Devices

6.3.3 120th Street Yard and Shop

Table 6-4 summarizes the impacts, mitigation measures, and impacts remaining after mitigation for one topic area for the UPRR Rail Alternative, 120th Street yard and shop. There would be no remaining adverse impacts after mitigation. See Section 5.3 for details.

Table 6-4: Impacts Remaining after Mitigation - Union Pacific Railroad Rail Alternative Rail Alternative Right-of-Way Option, 120th Street Yard and Shop

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Security	Not Substantially Adverse	Design of yard would comply with relevant design standards. Fencing or barriers would be included around perimeter of rail yard. Security cameras would monitor access points. Intrusion detection technologies would be considered in final design.	Not Substantially Adverse

6.4 Union Pacific Railroad Rail Alternative - East Option

6.4.1 Segment UA

The impacts remaining after mitigation for the East Option would be the same as described for the ROW Option (see Section 6.3.1), but with some changes and additions as shown in Table 6-5. There would be no remaining adverse impacts after mitigation. See Section 5.4 for details.

Table 6-5: Impacts Remaining after Mitigation - Union Pacific Railroad Rail Alternative Rail Alternative East Option, Segment UA

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Terrorism and Homeland Security	Not Substantially Adverse	Continue to update safety and security plans. Continue coordination with law enforcement, homeland security, and other agencies. Prohibit parking where tracks cross over public streets. Prohibit access to areas under track structure with fencing, barriers, or signage, except for park uses. Include a means of detecting ROW intrusions in final design. Consider lighting under track structure for improved visibility and crime deterrence.	Not Adverse
Highway-Rail Crossings	Adverse	Install safety protection technologies for vehicles and pedestrians at 103rd Street and 111th Street crossings. Install either intertrack fencing or fencing along parking lots and ROW lines to prevent pedestrian crossings away from sidewalks.	Not Adverse
Cumulative Impacts			
Highway-Rail Crossings	Adverse	Install safety protection technologies for vehicles and pedestrians at 103rd Street and 111th Street crossings.	Not Adverse

ROW = right-of-way

6.4.2 Segment UB

The design of Segment UB for the UPRR Rail Alternative would be the same for all three options. Therefore, the impacts remaining after mitigation associated with the East Option would be the same as described for the ROW Option (see Section 6.3.2).

6.4.3 120th Street Yard and Shop

The design of the 120th Street yard and shop for the UPRR Rail Alternative would be the same for all three options. Therefore, the impacts remaining after mitigation associated with the East Option would be the same as described for the ROW Option (see Section 6.3.3).

6.5 Union Pacific Railroad Rail Alternative - West Option

6.5.1 Segment UA

The impacts remaining after mitigation associated with the West Option would be the same as described for the East Option (see Section 6.3.1). There would be no remaining adverse impacts after mitigation. See Section 5.5 for details.

6.5.2 Segment UB

The design of Segment UB for the UPRR Rail Alternative would be the same for all three options. Therefore, the impacts and mitigations associated with the West Option would be the same as described for the ROW Option (see Section 6.3.2).

6.5.3 120th Street Yard and Shop

The design of the 120th Street yard and shop for the UPRR Rail Alternative would be the same for all three options. Therefore, the impacts remaining after mitigation associated with the East Option would be the same as described for the ROW Option (see Section 6.3.3).

6.6 Halsted Rail Alternative

6.6.1 Segment HA

Table 6-6 summarizes the impacts, mitigation measures, and impacts remaining after mitigation for six topic areas for the Halsted Rail Alternative, Segment HA. There would be no remaining adverse impacts after mitigation. See Section 5.6 for details.

Table 6-6: Impacts Remaining after Mitigation - Halsted Rail Alternative, Segment HA

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Major Incidents	Not Adverse	None necessary	Not Adverse
Motor Vehicle Safety	Beneficial	None necessary	Beneficial
Pedestrian Safety	Not Adverse	Consider pedestrian safety improvements such as curb extensions, refuge medians, and signal timing modifications in final design.	Not Adverse or Beneficial
Parking Security	Not Adverse	Consider pedestrian access routes (i.e., sidewalks) through or adjacent to surface lots on a case-by case basis where it would increase pass-by surveillance.	Not Adverse
Neighborhood Security	Not Substantially Adverse	Coordinate with City of Chicago to install sidewalk lighting and surveillance cameras along commercial streets within one block (660 feet) of station entrances.	Not Adverse
Terrorism and Homeland Security	Not Substantially Adverse	Continue to update safety and security plans. Continue coordination with law enforcement, homeland security, and other agencies. Consider additional lighting and surveillance cameras under track structure for improved visibility and crime deterrence.	Not Substantially Adverse

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Construction Impacts			
Emergency Services	Not Substantially Adverse	Only short segments of Halsted Street (½ mile or less) would be closed at any given time. Traffic management plans would be created that would identify recommended detour routes. Contractors would follow MUTCD standards for temporary traffic control and would obtain required local permits.	Not Substantially Adverse

MUTCD = Manual on Uniform Traffic Control Devices

6.6.2 Segment HB

Table 6-7 summarizes the impacts, mitigation measures, and impacts remaining after mitigation for six topic areas for the Halsted Rail Alternative, Segment HB. There would be no remaining adverse impacts after mitigation. See Section 5.6 for details.

Table 6-7: Impacts Remaining after Mitigation - Halsted Rail Alternative, Segment HB

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Major Incidents	Not Adverse	None necessary	Not Adverse
Motor Vehicle Safety	Beneficial	None necessary	Beneficial
Pedestrian Safety	Adverse	Replace all-way stop signs at Halsted Street and 128th Place with traffic signals if warranted per MUTCD standards. Otherwise, remove stop signs from Halsted Street only. Consider pedestrian safety improvements such as curb extensions, refuge medians, and signal timing modifications in final design.	Not Adverse or Beneficial
Parking Security	Not Adverse	Consider pedestrian access routes (i.e., sidewalks) through or adjacent to surface lots on a case-by case basis where it would increase pass-by surveillance.	Not Adverse
Neighborhood Security	Not Substantially Adverse	Coordinate with City of Chicago to install sidewalk lighting and surveillance cameras along commercial streets within one block (660 feet) of station entrances.	Not Adverse
Terrorism and Homeland Security	Not Substantially Adverse	Continue to update safety and security plans. Continue coordination with law enforcement, homeland security, and other agencies. Consider additional lighting and surveillance cameras under track structure for improved visibility and crime deterrence.	Not Substantially Adverse

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Construction Impacts			
Emergency Services	Not Substantially Adverse	Only short segments of Halsted Street (½ mile or less) would be closed at any given time. Traffic management plans would be created that would identify recommended detour routes. Contractors would follow MUTCD standards for temporary traffic control and would obtain required local permits.	Not Substantially Adverse

MUTCD = Manual on Uniform Traffic Control Devices

6.6.3 119th Street Yard and Shop

Table 6-8 summarizes the impacts, mitigation measures, and impacts remaining after mitigation for one topic area for the Halsted Rail Alternative, 119th Street yard and shop. There would be no remaining adverse impacts after mitigation. See Section 5.6.3 for details.

Table 6-8: Impacts Remaining after Mitigation - Halsted Rail Alternative, 119th Street Yard and Shop

Topic	Impact Before Mitigation	Mitigation	Impact Remaining after Mitigation
Permanent Impacts			
Security	Not Substantially Adverse	Design of yard would comply with all relevant design standards. Fencing or barriers would be included around perimeter of rail yard. Security cameras would monitor access points. Intrusion detection technologies would be considered in final design.	Not Substantially Adverse

Section 7
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Appendix A
Tables and Figures

Table A-1: Safety and Security Incident Summary for Entire Chicago Transit Authority Bus System

Year	Major Incident Type						Vehicle Revenue Hours	Major Incidents per Million Vehicle Revenue Hours
	Collisions	Derailments	Fires	Security	Not Otherwise Classified	Total		
2009	273	0	3	39	15	330	7,008,308	47.09
2010	252	0	1	72	6	331	5,955,896	55.58
2011	272	0	8	77	7	364	5,955,896	61.12
Total	797	0	12	188	28	1,025	18,920,100	54.18

Source: (National Transit Database 2012)

Table A-2: Safety and Security Incident Summary for Entire Chicago Transit Authority Rail System

Year	Major Incident Type						Vehicle Revenue Hours	Major Incidents per Million Vehicle Revenue Hours
	Collisions	Derailments	Fires	Security	Not Otherwise Classified	Total		
2009	21	2	4	33	7	67	3,732,593	17.95
2010	21	3	4	28	7	63	3,479,766	18.10
2011	10	1	3	56	9	79	3,479,766	22.70
Total	52	6	11	117	23	209	10,692,125	19.55

Source: (National Transit Database 2012)

Table A-3: Crimes on Chicago Transit Authority Buses and at Bus Stops

Type of Crime	Crimes on CTA Buses in Chicago		Crimes at CTA Bus Stops in Chicago	
	2009-2011	Percent	2009-2011	Percent
Arson	0	0.0	0	0.0
Assault	378	9.5	77	5.2
Battery	1,109	27.9	264	17.9
Burglary	0	0.0	1	0.1
Criminal Sexual Assault	1	0.0	1	0.1
Criminal Damage	375	9.4	70	4.7
Criminal Trespassing	15	0.4	23	1.6
Deceptive Practice	133	3.3	20	1.4
Gambling	0	0.0	3	0.2
Homicide	1	0.0	0	0.0
Interfere with Public Officer	4	0.1	4	0.3
Intimidation	2	0.1	1	0.1
Kidnapping	0	0.0	6	0.4
Liquor Law Violation	0	0.0	3	0.2
Motor Vehicle Theft	1	0.0	0	0.0
Narcotics	36	0.9	212	14.4
Non-Criminal	2	0.1	0	0.0
Offense Involving Children	1	0.0	0	0.0
Other Offense	34	0.9	22	1.5
Prostitution	0	0.0	0	0.0
Public Indecency	1	0.0	0	0.0
Public Peace Violation	33	0.8	12	0.8
Rape	0	0.0	0	0.0
Robbery	275	6.9	431	29.2
Sex Offense	22	0.6	19	1.3
Stalking	0	0.0	3	0.2
Theft	1,546	38.8	298	20.2
Weapons Violation	12	0.3	6	0.4
Total	3,981	100.0	1,476	100.0

Source: (City of Chicago 2012b)

CTA = Chicago Transit Authority

Table A-4: Crimes on Chicago Transit Authority Trains, Platforms, and Other Property in Chicago

Type of Crime	Crimes on CTA Trains in Chicago		Crimes on CTA Platforms in Chicago		Crimes at CTA Garages and Other Property in Chicago	
	2009-2011	Percent	2009-2011	Percent	2009-2011	Percent
Arson	0	0.0	2	0.0	0	0.0
Assault	85	1.9	228	3.6	97	3.8
Battery	400	8.9	606	9.7	196	7.6
Burglary	0	0.0	2	0.0	12	0.5
Criminal Sexual Assault	7	0.2	4	0.1	4	0.2
Criminal Damage	202	4.5	211	3.4	264	10.2
Criminal Trespassing	27	0.6	294	4.7	175	6.8
Deceptive Practice	184	4.1	2,463	39.2	702	27.1
Gambling	4	0.1	4	0.1	1	0.0
Homicide	0	0.0	1	0.0	1	0.0
Interfere with Public Officer	3	0.1	8	0.1	7	0.3
Intimidation	0	0.0	1	0.0	0	0.0
Kidnapping	0	0.0	3	0.0	2	0.1
Liquor Law Violation	3	0.1	20	0.3	2	0.1
Motor Vehicle Theft	0	0.0	0	0.0	46	1.8
Narcotics	316	7.1	843	13.4	262	10.1
Non-Criminal	0	0.0	0	0.0	0	0.0
Offense Involving Children	4	0.1	3	0.0	2	0.1
Other Offense	21	0.5	30	0.5	32	1.2
Prostitution	0	0.0	0	0.0	4	0.2
Public Indecency	1	0.0	2	0.0	0	0.0
Public Peace Violation	19	0.4	51	0.8	18	0.7
Rape	0	0.0	0	0.0	0	0.0
Robbery	846	18.9	494	7.9	125	4.8
Sex Offense	72	1.6	29	0.5	6	0.2
Stalking	4	0.1	4	0.1	0	0.0
Theft	2,270	50.7	939	15.0	617	23.9
Weapons Violation	13	0.3	36	0.6	11	0.4
Total	4,481	100.0	6,278	100.0	2,586	100.0

Source: (City of Chicago 2012b)
CTA = Chicago Transit Authority

Table A-5: Pedestrian Crashes within ⅛ mile of Proposed Station Locations

Station	2007	2008	2009	2010	2011	Total
BRT Alternative						
103rd Street	7	4	7	3	1	22
111th Street	6	4	3	6	1	20
Kensington Avenue	2	2	2	2	0	8
130th Street and Eberhart Avenue	0	0	1	0	0	1
131st Street, Ellis Avenue, 133rd Street/Place, Corliss Avenue	1	1	2	2	6	12
UPRR Rail Alternative						
103rd Street	1	0	0	1	0	2
111th Street	1	1	1	0	1	4
Michigan Avenue	2	1	1	0	0	4
130th Street - West Option	1	0	1	0	0	2
130th Street - South Option	0	0	0	0	0	0
Halsted Rail Alternative						
103rd Street	3	4	2	2	3	14
111th Street	5	3	3	5	3	19
119th Street	4	2	4	0	2	12
Vermont Avenue	1	1	1	1	1	5

Sources: (City of Chicago 2012c, CTA 2011a)

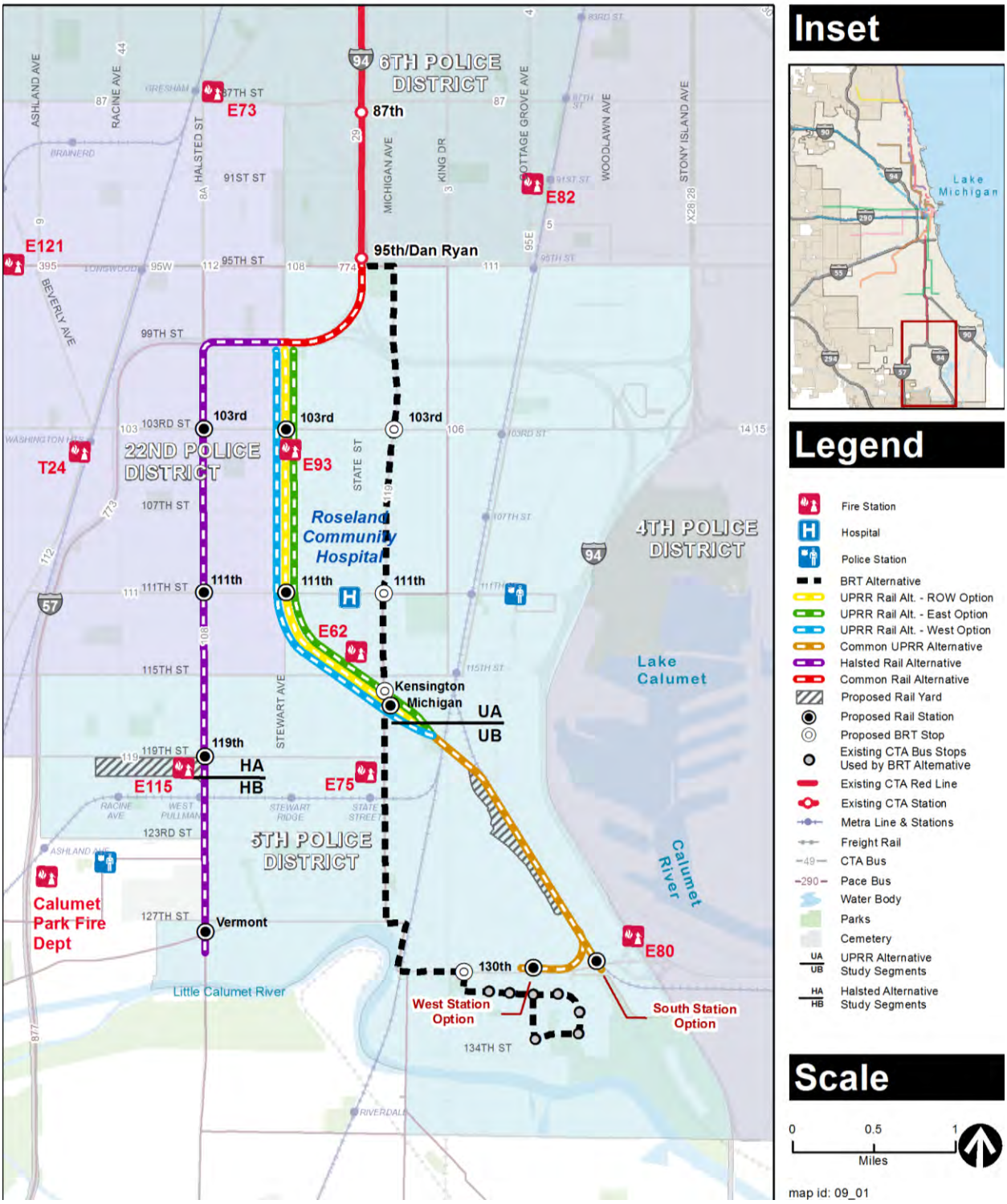

Figure A-1: Emergency Services Map

Source: (City of Chicago 2012b)

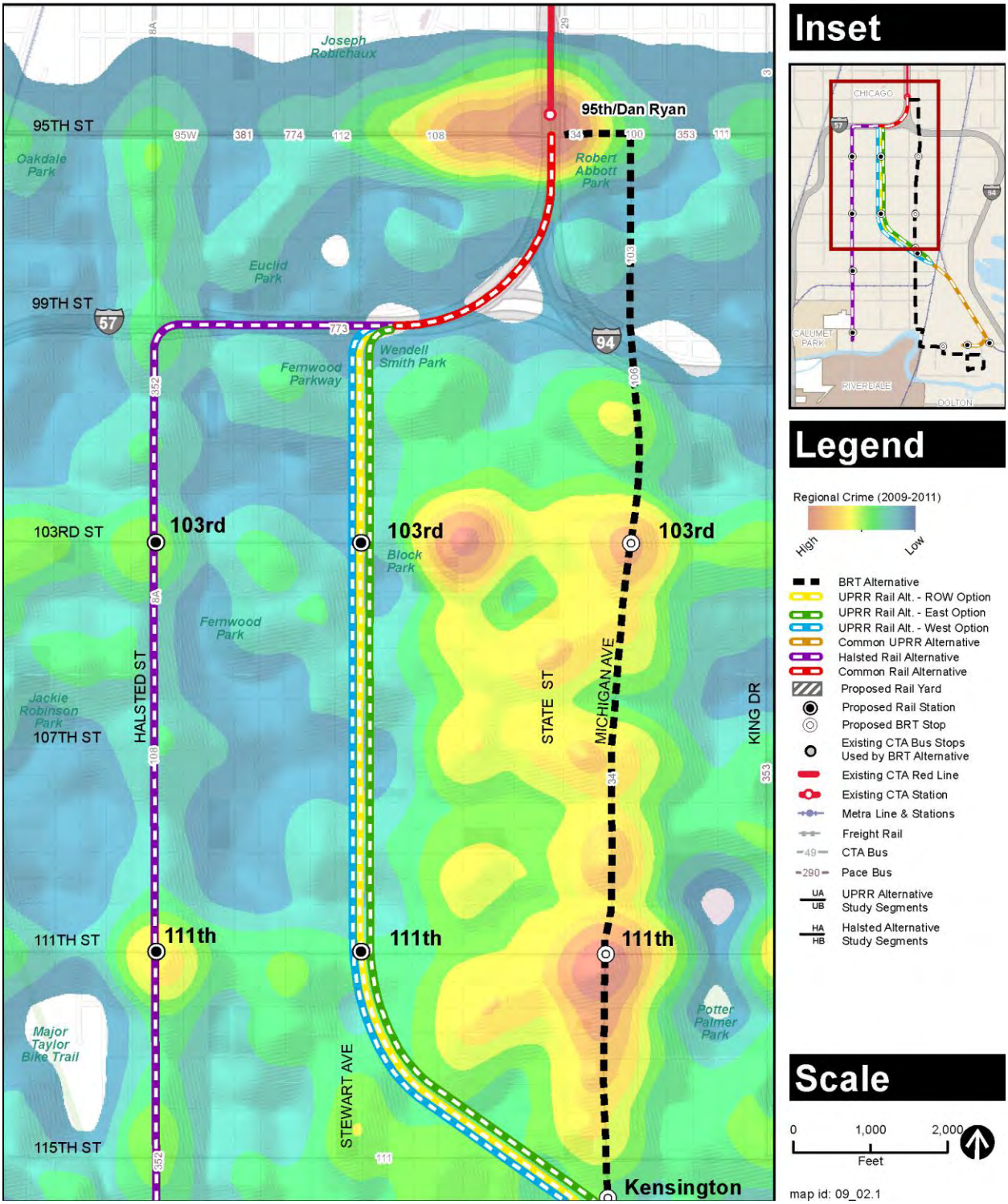

Figure A-2: Crime Heat Map - North Area

Source: (City of Chicago 2012b)

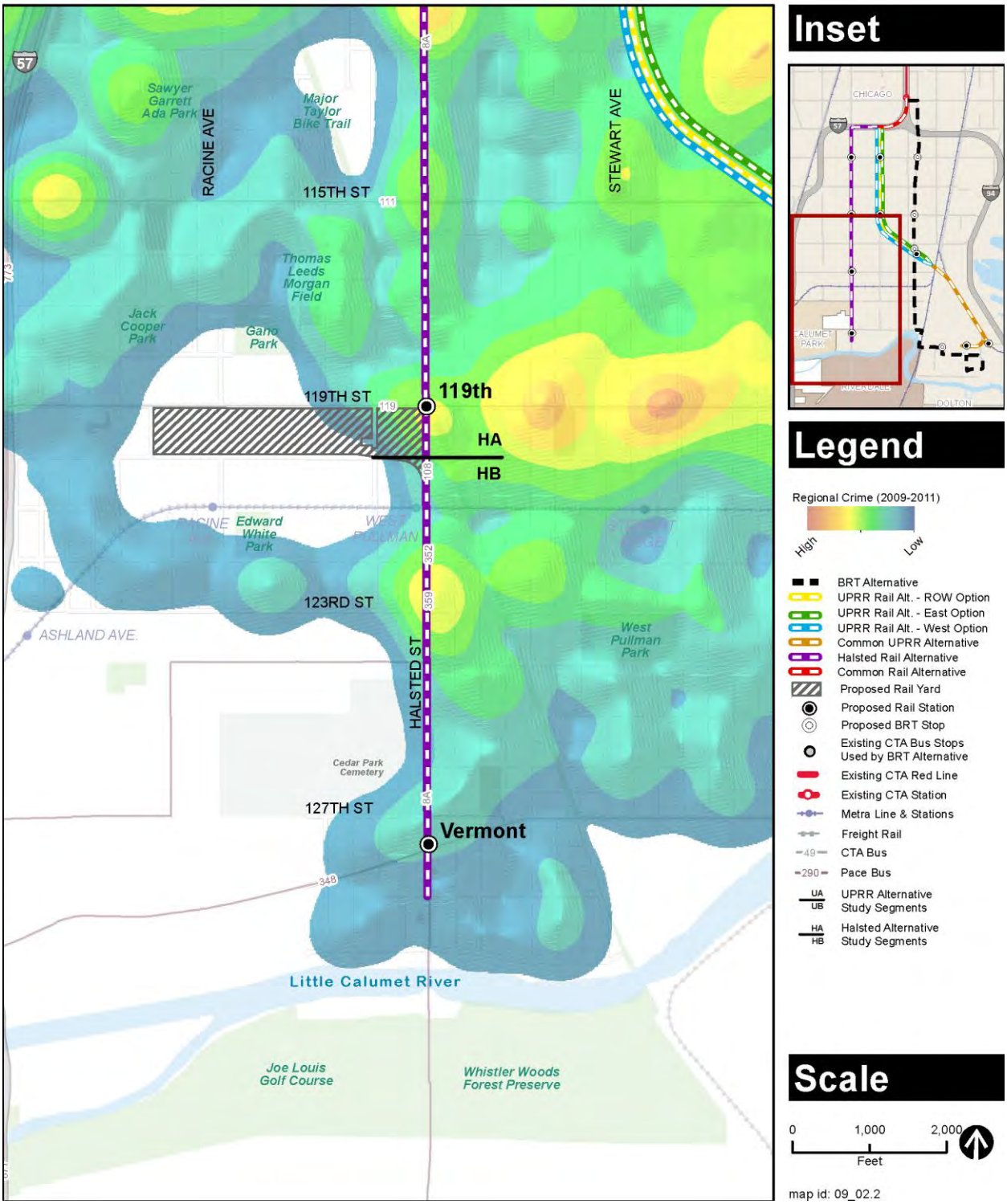

Figure A-3: Crime Heat Map - Southwest Area

Source: (City of Chicago 2012b)

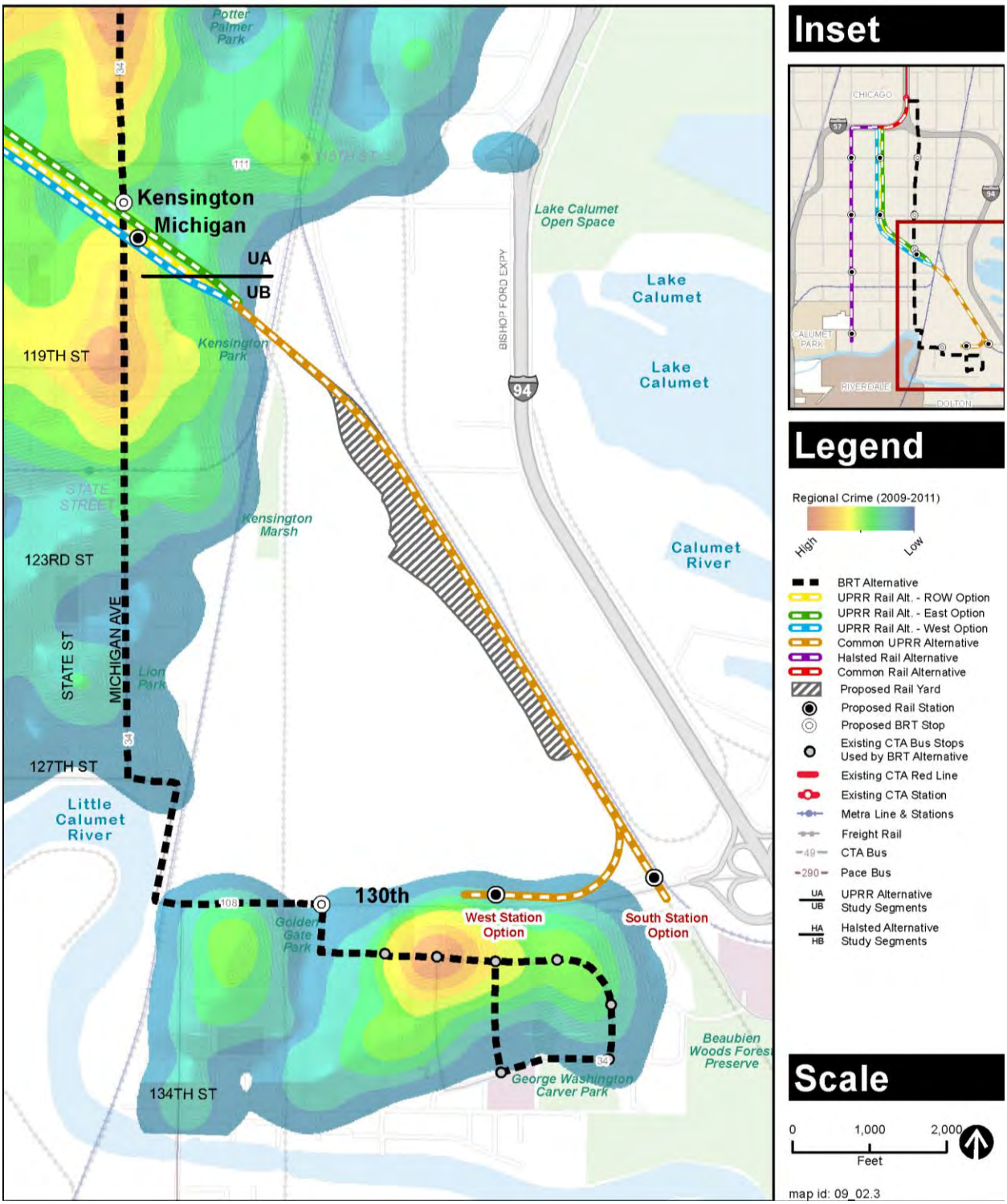

Figure A-4: Crime Heat Map - Southeast Area

Source: (City of Chicago 2012b)

Appendix B
2014-2015 Red Line Extension Project Update

Appendix Q

Historic and Cultural Resources Technical Memorandum

- Final EIS Addendum Q, Historic and Cultural Resources Technical Memorandum, June 2022
- Section 106 Effects Report, September 2021
  - Appendix A - Section 106 Eligibility Report, September 2021
    - Appendix A – Survey Forms
    - Appendix B – (See Section 106 Effects Report, September 2021, Appendix B)
    - Appendix C – RLE Archeological Resources, December 2020
    - Appendix D – Altgeld Gardens-Philip Murray Homes Correspondence
  - Appendix B – RLE Eligibility and Effects Summary Report, September 29, 2016
  - Appendix C – Survey form for George William Curtis Public School, 11445 S. State Street
  - Appendix D – Documentation of SHPO Meeting on July 26, 2021 and Follow-Up Materials
- Consulting Party Meeting #2 Comments and Responses, September 2, 2021
- Meeting Minutes – Consulting Party Meeting #2, June 30, 2021
- Consulting Party Meeting #1 Comments and Responses, April 9, 2021
- Meeting Minutes – Consulting Party Meeting #1, February 18, 2021
- Consulting Party List and Invitation Letters

Chicago Red Line Extension Project

Historic and Cultural Resources

Final EIS Addendum Q

June 2022

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Table of Contents

Section 1 - Summary **1-1**
1.1 Purpose and Scope 1-1
1.2 Identification of Archaeological Resources 1-1
1.3 Identification of Architectural Resources 1-1
1.4 Project Effects 1-3
1.5 Mitigation Recommendations 1-3
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Effect Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Effect Analysis Thresholds 3-1
3.3 Area of Potential Effects 3-2
3.4 Methods 3-3
Section 4 - Archaeological Resources **4-1**
4.1 Prehistoric Context 4-1
4.2 Archaeological Sites in the Project Vicinity 4-1
4.3 Potential for Project Effects 4-10
Section 5 - Identification of Architectural Resources **5-1**
5.1 Historic Context 5-1
5.2 Surveyed Resources 5-1
5.3 National Register of Historic Places-Eligible Resources 5-3
Section 6 - Effects and Mitigations **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative – Preferred Alignment 6-1
Section 7 - Effects Remaining after Mitigation **7-1**
7.1 No Build Alternative 7-1
7.2 Union Pacific Railroad Alternative - Preferred Alignment 7-1
Section 8 - Section 106 Consultation Process **8-1**
8.1 Initiation Activities 8-1
8.2 Identification of Historic Properties 8-1
8.3 Assessment of Effects 8-2
8.4 Resolution of Adverse Effects 8-3
Section 9 - References Cited **9-1**

Figures

Figure 2-1: Left-East and West Options of the UPRR Rail Alternative (Draft EIS), Right-Preferred Alignment (Final EIS) 2-4
Figure 3-1: RLE Project APE 3-4
Figure 3-2: Expanded APE at Michigan Avenue Station 3-5
Figure 3-3: Expanded APE at 130th Street Station 3-6
Figure 4-1: Archaeological Sites within 1 mile 4-4
Figure 4-2: Archaeological Sites within 1 mile 4-5
Figure 4-3: Archaeological Sites within 1 mile 4-6
Figure 4-4: STP Area 2 (excavatable soils along Eggleston Avenue) 4-9
Figure 4-5: Area of historic farmsteads located on 1939 aerial image 4-11
Figure 5-1: West Facade, 11431-11433 S. Michigan Avenue 5-4
Figure 5-2: North and West Facades, 11445-11447 S. Michigan Avenue 5-5
Figure 5-3: West and South Facades, 11451 S. Michigan Avenue 5-7
Figure 5-4: South and East Facades, 11452 S. Indiana Avenue 5-8
Figure 5-5: West Facade, Scanlan Elementary, 11725 S. Perry Avenue 5-9
Figure 5-6: West Facade, George William Curtis Public School, 11445 S. State Street 5-10
Figure 5-7: West Facade, Carver Military Academy, 13100 S. Doty Avenue 5-11
Figure 6-1: Eclectic Neo-Traditional Home, 444 W. 100th Place 6-6
Figure 6-2: Fire Department Engine Company 93 6-7
Figure 6-3: Roseland Pumping Station 6-8
Figure 6-4: Church at 10920 S. Princeton Avenue 6-9
Figure 6-5: Roseland Community Hospital Nurses Home 6-10
Figure 6-6: North Facade, Former Venetian Hall 6-11
Figure 6-7: Existing view west along Kensington Avenue from the Venetian Hall 6-12
Figure 6-8: View west along Kensington Avenue from the Venetian Hall showing conceptual rendering of the Michigan Avenue station. North option is shown, as south option would have similar visual impact 6-12
Figure 6-9: Existing view south along Michigan Avenue from 114th Place 6-14
Figure 6-10: View south along Michigan Avenue from 114th Place showing conceptual rendering of Michigan Avenue station (north option) 6-14
Figure 6-11: View south along Michigan Avenue from 115th Street 6-17

Figure 6-12: View south along Michigan Avenue from 115th Street showing conceptual rendering of Michigan Avenue station (north option) 6-17
Figure 6-13: Altgeld Gardens Residences, view west from Greenwood Avenue and 132nd Street 6-21
Figure 6-14: Existing view from Greenwood Avenue looking east 6-22
Figure 6-15: Conceptual rendering of Project from Greenwood Avenue looking east 6-22
Figure 6-16: Existing view from Ellis Avenue looking northeast between residential buildings 6-23
Figure 6-17: Conceptual rendering of Project from Ellis Avenue looking northeast between residential buildings 6-23
Figure 6-18: Northwest Facade, By the Hand Club, 13015 S. Ellis Avenue 6-24
Figure 6-19: Northeast Facade, Grocery/Retail Building, 13100 S. Ellis Avenue 6-25
Figure 6-20: Southwest Facade, Administration/Maintenance Building, 940 E. 132nd Street 6-26
Figure 6-21: North Facade, CYC – Dorothy Gautreaux Child Development Center, 975 E. 132nd Street 6-27
Figure 6-22: North Facade, Children's Building, 941 E. 132nd Street 6-28
Figure 6-23: North and East Facades, Altgeld Gardens Community Building No. 2, 951 E. 132nd Place 6-29
Figure 6-24: Altgeld Gardens-Philip Murray Homes Historic District, view west at 130th Street and Ellis Avenue 6-31

Tables

Table 1-1: Summary of Historic Properties in the APE for the Preferred Alignment 1-2
Table 1-2: NRHP-Eligible Historic Properties in the Expanded APE 1-2
Table 4-1: Updated Archaeological Sites within 1 mile of the Project Vicinity 4-1
Table 5-1: Historic Resources Surveyed in the Expanded APE 5-1
Table 6-1: Effects Findings (Preferred Alignment) 6-1

Abbreviations

ADA	Americans with Disabilities Act
AGPMH	Altgeld Gardens-Philip Murray Homes
APE	Area of Potential Effect
BRT	Bus Rapid Transit
CCHD	Cook County Highway Department
CDOT	Chicago Department of Transportation
CFR	Code of Federal Regulations
CHA	Chicago Housing Authority
CHRS	Chicago Historic Resources Survey
CN/ME	Canadian National/Metra Electric District
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National Railway
CREATE	Chicago Region Environmental and Transportation Efficiency
CSS & SBRR	Chicago South Shore & South Bend Railroad
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
GIS	Geographic Information System
HARGIS	Historic Architectural Resources Geographic Information System
IDOT	Illinois Department of Transportation
MWRD	Metropolitan Water Reclamation District
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NICTD	Northern Indiana Commuter Transportation District
NRHP	National Register of Historic Places
NS	Norfolk Southern
RLE	Red Line Extension
ROW	right-of-way
SHPO	State Historic Preservation Office
THPO	Tribal Historic Preservation Office
UPRR	Union Pacific Railroad

Section 1 - Summary

1.1 Purpose and Scope

Historic specialists at Johnson Lasky Kindelin Architects (JLK) and archeological specialists at Midwest Archaeological Research Services, Inc. (MARS) conducted a cultural resources analysis of archeological sites and aboveground historic structures that may be affected by the Chicago Transit Authority's (CTA's) proposed Red Line Extension (RLE) Project. This analysis reviewed findings presented in the Draft Environmental Impact Statement (EIS) and updated information based on refinements and changes to the project since publication of the Draft EIS. It updates the analyses of construction impacts and mitigation for the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative.

This report follows the analysis required by the National Historic Preservation Act (NHPA) as described in the Draft EIS. The analysis presented in this document addresses the Preferred Alignment and corresponding Area of Potential Effects (APE) for the Final EIS.

1.2 Identification of Archaeological Resources

From June 15 to June 16, 2020, MARS, Inc. conducted a Phase I archeological reconnaissance survey on the Preferred Alignment. MARS archaeologists did not identify any cultural material within the 53 excavated shovel proves during this survey. Twelve archaeological sites were recorded within 1 mile of the RLE Project vicinity, although none fall within the proposed construction corridor.

1.3 Identification of Architectural Resources

Changes to the RLE Project since publication of the Draft EIS have required expansion of the APE in two locations: the Michigan Avenue and 130th Street stations. Fifty-nine historic properties previously identified as National Register of Historic Places (NRHP)-eligible contributing resources to the Altgeld Gardens-Philip Murray Homes (AGPMH) Historic District were found within the expanded APE. Utilizing the approach described in the Draft EIS, a representative sample of historic-age resources (45 years or older) within the expanded APE were surveyed. Fifteen resources were surveyed and evaluated for NRHP eligibility. Of these, seven were recommended as eligible for listing in the NRHP. Combined with the seven historic properties identified in the Draft EIS, a total of seventy-three historic properties exists within the APE for the Preferred Alignment. These numbers, and those from the Draft EIS are summarized in **Table 1-1**. After finalization of the Section 106 eligibility and effects reports in September 2021, revisions were made to the National Register

nomination for the Altgeld Gardens-Philip Murray Homes Historic District and approved by the National Park Service (NPS) and the State Historic Preservation Office (SHPO) on April 13, 2022. These include a change to the historic district boundary and the historic status of one property within the APE. These changes do not affect the effects evaluations for historic properties by this project and are noted in the Final EIS.

Note that these changes are reflected in **Table 1-1**. The number of historic properties within the AGPMH Historic District has been decreased from 59 to 58 per the final historic district nomination. NRHP status has been updated from "eligible" to "listed."

Table 1-1: Summary of Historic Properties in the APE for the Preferred Alignment

2016 Draft EIS	2021 Expanded APE		Total Historic Properties in the APE for the Preferred Alignment
7 determined eligible	7 additional resources recommended eligible as result of 2020 survey	58 listed as part of AGPMH Historic District	72

Source: JLK Architects

The historic properties identified as NRHP eligible since publication of the Draft EIS are listed in **Table 1-2**. Locations of these properties are shown in **Figures 3-1, 3-2**, and **3-3**.

Table 1-2: NRHP-Eligible Historic Properties in the Expanded APE

Map ID	Address	Description	NRHP Status
7	11431-11433 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criterion A
8	11445-11447 S. Michigan Avenue	Mixed-Use Commercial/Residential	Eligible for Listing in NRHP, Criteria A and C
9	11451 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criteria A and C
10	11452 S. Indiana Avenue	Single-Family Residence	Eligible for Listing in NRHP, Criterion C

Map ID	Address	Description	NRHP Status
11	11725 S. Perry Avenue	Scanlan Elementary School	Eligible for Listing in NRHP, Criteria A and C
12	11445 S. State Street	George William Curtis Public School	Eligible for Listing in NRHP, Criteria A and C
13	13100 S. Doty Avenue	Carver Military Academy	Eligible for Listing in NRHP, Criteria A and C

Source: JLK Architects

1.4 Project Effects

Project changes and refinements associated with the selection of the Preferred Alignment required review and update of effects on the historic properties identified in the Draft EIS. Based on the proposed design of the Preferred Alignment, the RLE Project is anticipated to have no adverse effect on the 72 historic properties within the APE associated with the Preferred Alignment.

1.5 Mitigation Recommendations

Due to there being no adverse effect for the 72 historic properties within the APE associated with the Preferred Alignment, no mitigation measures would be required.

Section 2 - Project Description and Background

CTA, as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic

Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation

of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

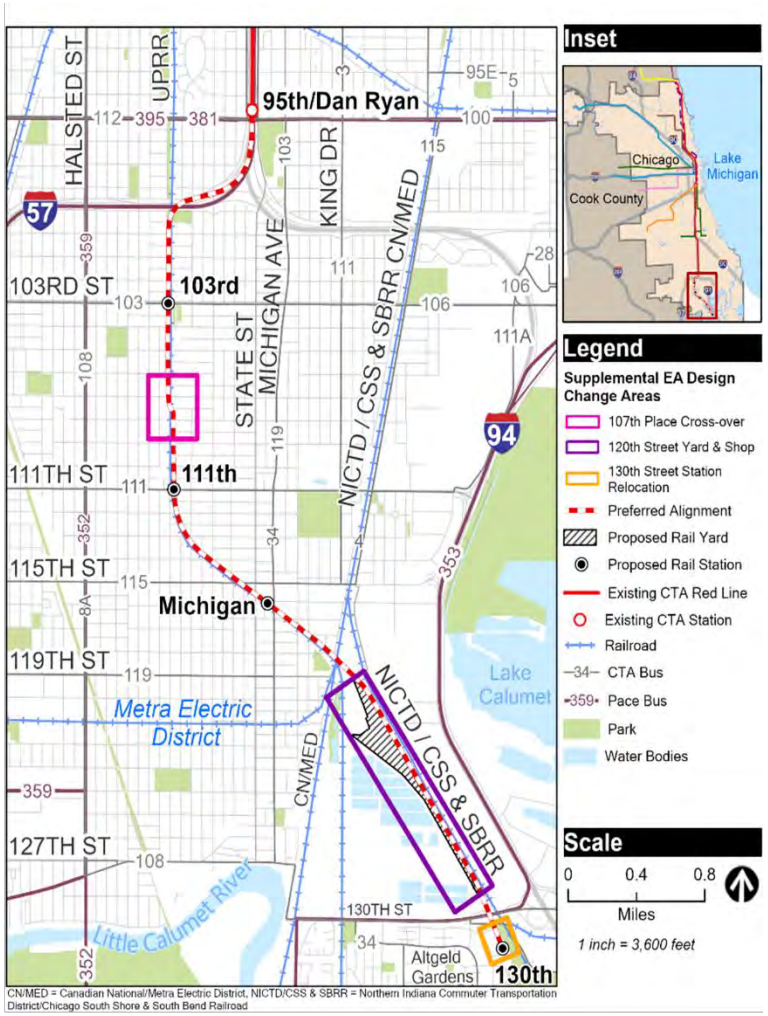

Figure 2-1: Left-East and West Options of the UPRR Rail Alternative (Draft EIS), Right-Preferred Alignment (Final EIS)

Section 3 - Methods for Effect Evaluation

Methods presented in **Appendix Q** for the Draft EIS analysis have been carried forward to evaluate historical and cultural resources. This section documents the methodology for evaluating this resource, consistency with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

Except for the item described below, there are no changes to the applicable federal, state, or local regulations referenced in **Appendix Q** of the Draft EIS.

Since publication of the Draft EIS, the Advisory Council on Historic Preservation (ACHP) Office of General Counsel issued a memorandum to ACHP staff, clarifying the distinction between direct and indirect effects in meeting obligations under section 105 of the NHPA. This memorandum, issued on June 7, 2019, was the result of litigation by the U.S. Court of Appeals. It clarified that direct effects may be the result of physical connection, but may also include visual, auditory, or atmospheric impacts as well. This change has been applied in reevaluation of effects findings for this Final EIS.

3.2 Effect Analysis Thresholds

The NHPA qualitative criteria that define whether a historic property would be subject to an adverse effect are described in **Appendix Q** of the Draft EIS.

One update to the qualitative criteria presented in the Draft EIS follows:

In March 2019 D.C. circuit court issued an opinion that clarified the meaning of term "Directly" in Section 110(f) of the National Historic Preservation Act as referring to causality, not the physicality, of the effect. This has changed the approach for defining visual, auditory, or atmospheric effects on historic properties.

One clarification to the effects evaluation methodology that was not presented in the Draft EIS is as follows:

Under the National Environmental Policy Act of 1969 (NEPA), visual impact assessment of a proposed undertaking includes consideration of scenic resources and scenic experiences of the people who view the landscape (Sullivan et al. 2018). Impacts include any modification of landforms or introduction of structures or other visual elements that negatively or positively affect the visual character of the landscape and the visual experience of persons viewing the landscape (Sullivan et

al. 2018). Therefore, the NEPA visual impact assessment for a project may result in impacts and require mitigation while Section 106 for the same project may find no adverse effect on historic properties due to visual impacts if they do not alter the characteristics which qualify the property for inclusion in the NRHP.

As part of the Final EIS, a noise and vibration impact assessment was conducted. Information from this assessment was used in evaluation of effects on historic properties. See **Addendum O** for details.

3.3 Area of Potential Effects

The APE is defined in the Draft EIS and the development of the APE for the Draft EIS is also described within that document. Generally, the APE developed for the Draft EIS contains parcels within one block of the centerlines for the UPRR Rail Alternative. The APE widens to accommodate the locations of each park & ride and yard and shop beyond the one-block boundary.

Because the Draft EIS APE was developed to account for effects for both the East and West UPRR Options, it continues to do so for the Preferred Alignment, except at three of the four areas of project changes and refinements described below. For these reasons, the APE boundary from the Draft EIS is still considered appropriate for the project except in the areas of refinement as described below. See **Figure 3-1**.

- Preferred Alignment 107th Place Cross-over

  The cross-over at 107th Place is contained within the APE presented in the Draft EIS and does not require extension of the APE at this location. No changes to the APE were required.

- 120th Street Yard and Shop Refinement

  The 120th Street Yard and Shop location has been shifted and the layout refined since the Draft EIS. The APE has been shifted approximately 100 feet to the west consistent with the shift in location of the 120th Street yard and shop. No historic properties, historic-age resources, or archeological materials were identified within this area. See **Figure 3-1.**

- Michigan Avenue Station Refinement

  Two locations for the station parking were being considered through the announcement of the Preferred Alignment in 2018. The locations are to the north and to the south of the UPRR. The Draft EIS Section 106 APE included only the south option. The north option has been carried forward into the Final EIS; therefore, the APE is expanding to include the north option. The

selection of the station parking location is dependent on confirmation of availability of parcels and future coordination with the City of Chicago. The APE has been expanded one block to the north and east to include the north option. The APE has also been expanded to one full block in the south and west to adequately address potential effects in these areas. See **Figure 3-2**.

- 130th Street Station Relocation

  Following relocation of the 130th Street station south of 130th Street, the APE has been expanded to include the full site under consideration for construction and an approximate buffer of a quarter mile, except at visual obstructions where it is slightly truncated. This area is based on building density, height of the proposed work, visual observations on site, intended to encompass changes in traffic, noise, and vibration, caused by the RLE Project. See **Figure 3-3**.

  Note the boundary of Altgeld Gardens-Philip Murray Homes Historic District shown in **Figures 3-1** and **3-3** has been updated since finalization of the Section 106 consultation process. The resulting geometry is slightly different than that shown below. This update does not affect the number of historic resources within the historic district which overlap with the RLE Project APE or the project's effects on historic properties.

3.4 Methods

The analysis of historic and cultural resources of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS.

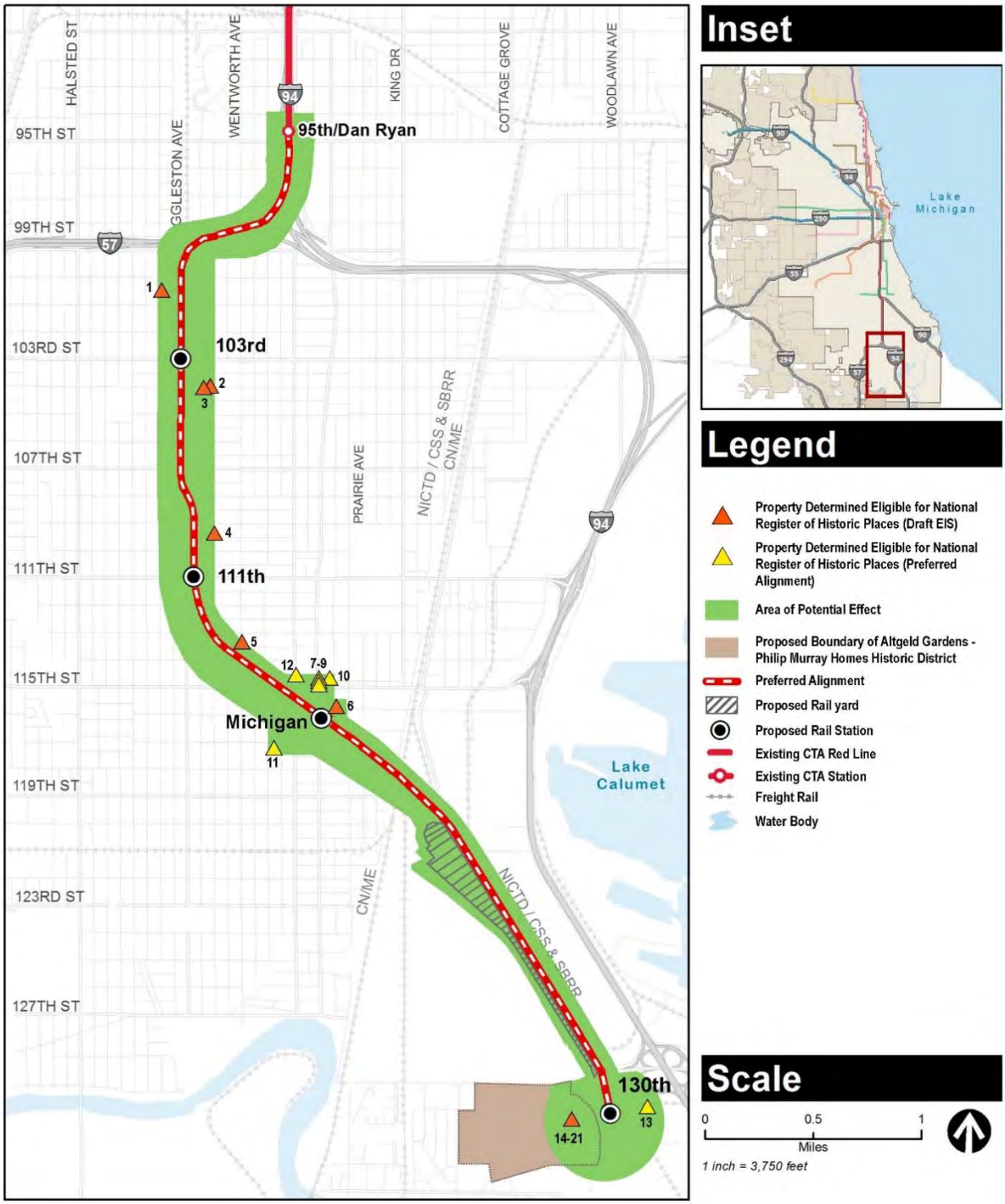

Figure 3-1: RLE Project APE

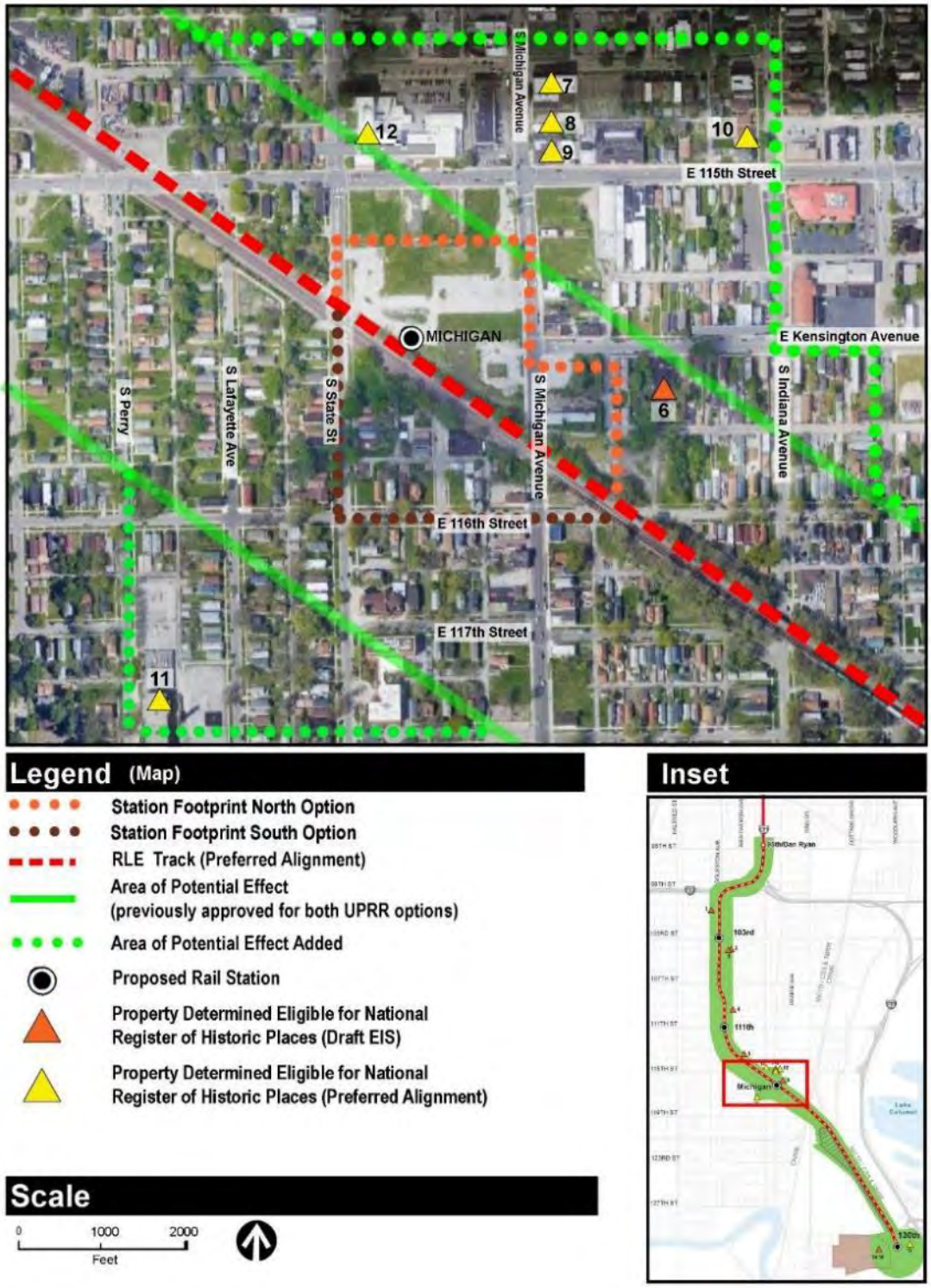

Figure 3-2: Expanded APE at Michigan Avenue Station

Legend (Map)

- Proposed Boundary of Altgeld Gardens - Philip Murray Homes Historic District
- Preferred Alignment
- Area of Potential Effect (previously approved for both UPRR options)
- Area of Potential Effect Added
- Proposed Rail Station
- Property Determined Eligible for National Register of Historic Places (Draft EIS)
- Property Determined Eligible for National Register of Historic Places (Preferred Alignment)

Scale

0 500 1000
Feet

Inset

Figure 3-3: Expanded APE at 130th Street Station

Section 4 - Archaeological Resources

This section describes any updates to the prehistoric development of the area and updates to archeological discoveries near the RLE Project since the publication of the Draft EIS. The full *RLE Archeological Resources* report is included in **Appendix Q** of this Final EIS, and as Appendix C of the *Section 106 Eligibility Report,* June 2021. To simplify references, all future references to the *RLE Archeological Resources* report will state only the report's title and the corresponding appendix within.

4.1 Prehistoric Context

There have been no updates to the prehistoric development of the area since publication of the Draft EIS.

4.2 Archaeological Sites in the Project Vicinity

The Draft EIS identified eight archeological sites within 0.6 miles of the RLE Project vicinity. The Phase I archeological survey required for the Preferred Alignment has identified twelve archaeological sites recorded within 1 mile of the RLE Project vicinity (**Figures 4-1, 4-2, and 4-3**). Identification was based on collections of artifacts made by amateur archaeologists Albert Scharf, Oscar Biedes and Ed Lace, as well as professional investigations completed by the Illinois State Archaeological Survey and Midwest Archaeological Research Services. None fall within the proposed construction corridor. These sites are listed in **Table 4-1**.

Table 4-1: Updated Archaeological Sites within 1 mile of the Project Vicinity

Site #	Site Name	Recorded	Archaeologist	Temporal
11Ck15	-	1955	David J. Wenner	Middle Woodland
11Ck28	-	1957	Elaine Bluhm	Middle Woodland, Upper Mississippian
11Ck177	-	1959	Betty Broyles	Prehistoric
11Ck244	Flatfoot Lake South	1987	Ed Lace	Late Woodland
11Ck245	Flatfoot Lake North	1987	Ed Lace	Prehistoric

Site #	Site Name	Recorded	Archaeologist	Temporal
11Ck246	Flatfoot Lake Central	1987	Ed Lace	Late Woodland, Upper Mississippian
11Ck247	Beaubien Woods	1987	Ed Lace	Prehistoric
11Ck248	-	1987	Ed Lace	Middle Woodland, Upper Mississippian
11Ck249	Beaubien Woods South	1987	Ed Lace	Woodland
11Ck250	-	1987	Ed Lace	Middle Woodland
11Ck1226	Block House B	2016	Jay Martinez	Historic-Pullman
11Ck1240	-	2017	Lindsay Dyle	Historic

Source: Illinois Inventory of Archaeological Sites. Accessed on September 14, 2020.

Historic site 11Ck1240 was recorded by Lindsay Dyle in 2017. This historic artifact assemblage was collected during a shovel test survey of a vacant grass lot. Historic site 11Ck1226 was recorded by Jay Martinez with Midwest Archaeological Research Services Inc. in 2016. The artifacts were recovered from the front yard of a razed brick Block House and represented dumping activities.

Sites 11Ck15, 11Ck28, 11Ck177, and 11Ck244 through 11Ck249 are near Flatfoot Lake within the 135-acre Beaubien Woods Forest Preserve of Cook County. Flatfoot Lake is approximately ½ of a mile to the southeast of the proposed 130th Street station (**Figure 4-3**).

David J. Wenner recorded 11Ck15 based on a collection of Middle and Late Woodland sherds, flint tools and chips. When the site was recorded in 1955 it had been mostly destroyed by mining a gravel pit. It was originally within woods and an agricultural field.

Elaine Bluhm and David J. Wenner recorded site 11Ck28 based on a collection of grit-tempered and shell-tempered ceramics gathered from the site and held by Theodore Shapas. The site dates to the Middle Woodland (grit-tempered sherds) and Upper Mississippian (shell-tempered, Oneota sherds) periods.

Betty Broyles recorded 11Ck177 in 1959 as comprising the village (Ckv125 and Ckv126) and associated mounds (11Ck127 and 11Ck128) detailed by Chicago tobacconist and avocational archaeologist Albert Scharf in 1919. “Two mounds and a camp site were located along the bend of the river” (Brown 1917).

Regarding the Calumet Marshes, Scharf (1919) notes: "The several Indian villages in these marshes were all located along the canoe routes or portage trails of which they form the route simply passing from one to the other and together we have one of the links of the great highway leading from the Illinois River to the 'Great Lake.' "—Manuscript transcribed and on file at MARS.

David J. Keene and Theodore J. Karamanski (1980) reported sites 11Ck244 through 11Ck249 in 1979 during survey work completed for the Forest Preserves of Cook County. Ed Lace, an avocational archaeologist with the Forest Preserves of Cook County with whom Keene and Karamanski had worked on the project, formally recorded the Woodland Period and undefined prehistoric sites in 1987.

11Ck250 also identified by Ed Lace is located just to the north of Beaubien Woods Forest Preserve of Cook County at the current location of Carver Military Academy High School (**Figure 4-3**). An undated newspaper article from the Star-Tribune shows photographs of the Oscar Biedes collection (included with the 11Ck250 site form). Site 11Ck250 was destroyed during the construction of the building at 13100 South Doty Avenue.

The Preferred Alignment would not impact any of the 12 recorded archaeological sites that are located within 1 mile.

Supplementing the identification of historic sites through research as described in the previous sections, CTA also conducted a reconnaissance survey. From June 15 to June 16, 2020 MARS conducted a Phase I archaeological reconnaissance survey along the Preferred Alignment. Field methods employed during the survey were in accordance with the Illinois State Historic Preservation Office Guidelines for Archaeological Reconnaissance Surveys and Reports. The Archaeological Survey Short Report can be found in *RLE Archeological Resources*, December 2020, Appendix D**.** This short report is required with all Phase I reconnaissance survey projects.

Due to the majority of the Phase I survey area consisting of substantially disturbed inner-city terrain, the primary method of investigation was photographic recordation followed up with shovel test probes in surveyable areas. Shovel tests were excavated as specified by the Illinois State Historic Preservation Office. Shovel test probes (STP) are small subsurface sampling units approximately 14 inches in diameter and 14 to 20 inches deep that are excavated at 50-foot intervals across the project area. Soils from the probes were screened through ¼ inch hardware cloth. The summary of the shovel test probes taken can be found in *RLE Archeological Resources*, December 2020, Appendix F.

Source of Map is Bing Aerial Imagery 2020

Figure 4-1: Archaeological Sites within 1 mile

Source of Map is Bing Aerial Imagery 2020

Figure 4-2: Archaeological Sites within 1 mile

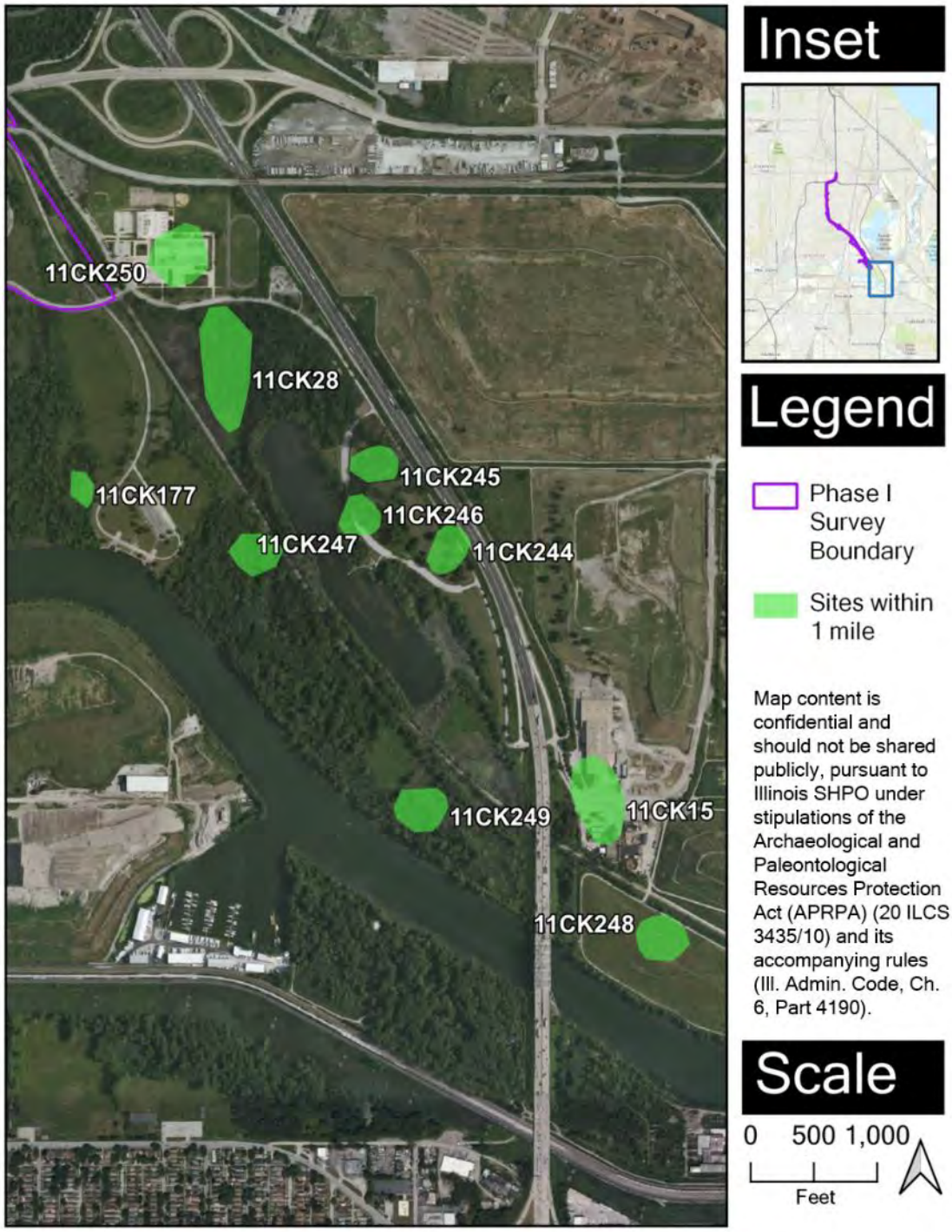

Source of Map is Bing Aerial Imagery 2020

Figure 4-3: Archaeological Sites within 1 mile

With the exception of one area, the entire project area contained non-excavatable soils (gravels or wetland areas): Orthents or Urban Land (USDA 2020 and *RLE Archeological Resources*, December 2020, Appendix E). The one area that contained excavatable soils (likely disturbed during railroad and roadway construction) for shovel tests was located along Eggleston Avenue (STP Area 2: see below and **Figure 4-4**). Photographs were taken with the 16 MP Samsung S10e smartphone camera along the project area at prearranged locations. A total of 166 photographs were taken with 90 images selected as the best representation of the landscape. The 90 selected photographs are included in *RLE Archeological Resources*, December 2020, Appendix C.

The northern portion of the project area starts at 95th Street and heads south along Interstate 57 (*RLE Archeological Resources*, December 2020, Appendix A: Figures 2-4). No shovel tests were excavated within this portion because the ground has been disturbed due to road construction. A total of five photographs were taken to document the route and disturbance (*RLE Archeological Resources*, December 2020, Appendix A: Figures 2-4 and Appendix C: Plates 1-5).

The Preferred Alignment crosses over Interstate 57 and is adjacent to the northwest corner of Wendell Smith Park (*RLE Archeological Resources*, December 2020, Appendix A: Figure 5). This wooded area along the railroad tracks and interstate was disturbed due to road and railroad construction. No shovel tests were excavated within this portion. A total of three photographs were taken to document the route and disturbance (*RLE Archeological Resources*, December 2020, Appendix A: Figure 5 and Appendix C: Plates 6-8).

The Preferred Alignment crosses over 103rd Street and continues south on the west side of the existing UPRR tracks to 107th Street (*RLE Archeological Resources*, December 2020, Appendix A: Figures 7-10). This stretch of the project area contains residences, commercial buildings, and vacant concrete lots (*RLE Archeological Resources*, December 2020, Appendix C: Plates 13-23). Some of the project area was located on the eastern side of the railroad tracks (*RLE Archeological Resources*, December 2020, Appendix A: Figures 7 and 9 and Appendix C: Plates 13 and 18). No shovel tests were excavated within this portion between 103rd Street and 107th Street. The entire section was previously disturbed by residential and commercial development. Development and disturbance began in these areas as early as the 1930's (*RLE Archeological Resources*, December 2020, Appendix B: Figure 10). While the current aerial images show grass and vegetation on some of the vacant lots (*RLE Archeological Resources*, December 2020, Appendix A: Figures 8-10), visual inspection by MARS archaeologists determined that all vacant lots had either concrete or gravel on the surface preventing shovel testing.

From south of 107th Street the Preferred Alignment is on the east side of the existing UPRR tracks heading south then southeast for approximately 1.75 miles to near 119th Street (*RLE Archeological Resources*, December 2020, Appendix B: Figure 18). This stretch of the project area contains

residences, commercial buildings, and vacant concrete lots (*RLE Archeological Resources*, December 2020, Appendix C: Plates 24-51, 76-77). Some of the project area was located on the western side of the railroad tracks (*RLE Archeological Resources*, December 2020, Appendix A: Figures 11, 12, 15, 16 and Appendix C: 29, 30, 31, 40, 42, 43, 44, and 45). No shovel tests were excavated within this portion between 107th Street and 119th Street. The entire section was previously disturbed by residential and commercial development. Development/disturbance began in these areas as early as the 1930's (*RLE Archeological Resources*, December 2020, Appendix B: Figure 10). While the current aerial images show grass and vegetation on some of the vacant lots, visual inspection by MARS archaeologists determined that all vacant lots were either concrete or gravel on the surface preventing shovel testing (*RLE Archeological Resources*, December 2020, Appendix C: 29, 30, 31, 40, 42, 43, 44, and 45).

Near 119th Street the Preferred Alignment crosses the Metra Electric tracks (*RLE Archeological Resources*, December 2020, Appendix A: Figure 18). South of 119th Street, the Preferred Alignment continues southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) tracks right-of-way to the terminus of the RLE Project at 130th Street (*RLE Archeological Resources*, December 2020, Appendix A: Figures 18-15). No shovel tests were excavated within this portion. While current aerial images show these areas to contain a large concrete lot (proposed railyard *RLE Archeological Resources*, December 2020, Appendix C: Plates 78-79), woods, and mowed maintained grass, visual inspection of these by MARS archaeologists concluded these areas to be disturbed due to mechanical stripping and the creation of large soil berms likely the result of railroad development (*RLE Archeological Resources*, December 2020, Appendix C: Plates 63, 83-89). The ground cover in these areas contained gravel below approximately less than an inch of soil development. Large areas of gravel could be seen mounded or directly on the surface (*RLE Archeological Resources*, December 2020, Appendix C: Plate 86). Large portions of the project area contained wetland grasses. The USDA soil maps has this entire area containing Orthents or Urban Land (USDA 2020 and *RLE Archeological Resources*, December 2020, Appendix E). While current aerials show a vast portion of woods (*RLE Archeological Resources*, December 2020, Appendix A: Figures 19-13), 1938 aerials depict a large railroad yard (*RLE Archeological Resources*, December 2020, Appendix B: Figure 12). This area has been disturbed.

The 130th Street station would be located within Altgeld Gardens (*RLE Archeological Resources*, December 2020, Appendix A: Figures 28-29). A small portion of this area was amenable to survey. The remaining large portion of the area was not amenable to survey. The ground has been disturbed by residential development. While the current ground surface is mowed grass (*RLE Archeological Resources*, December 2020, Appendix C: Plates: 70-72, 90), the 2017 aerial image shows residences built within this area (NETRonline 2020).

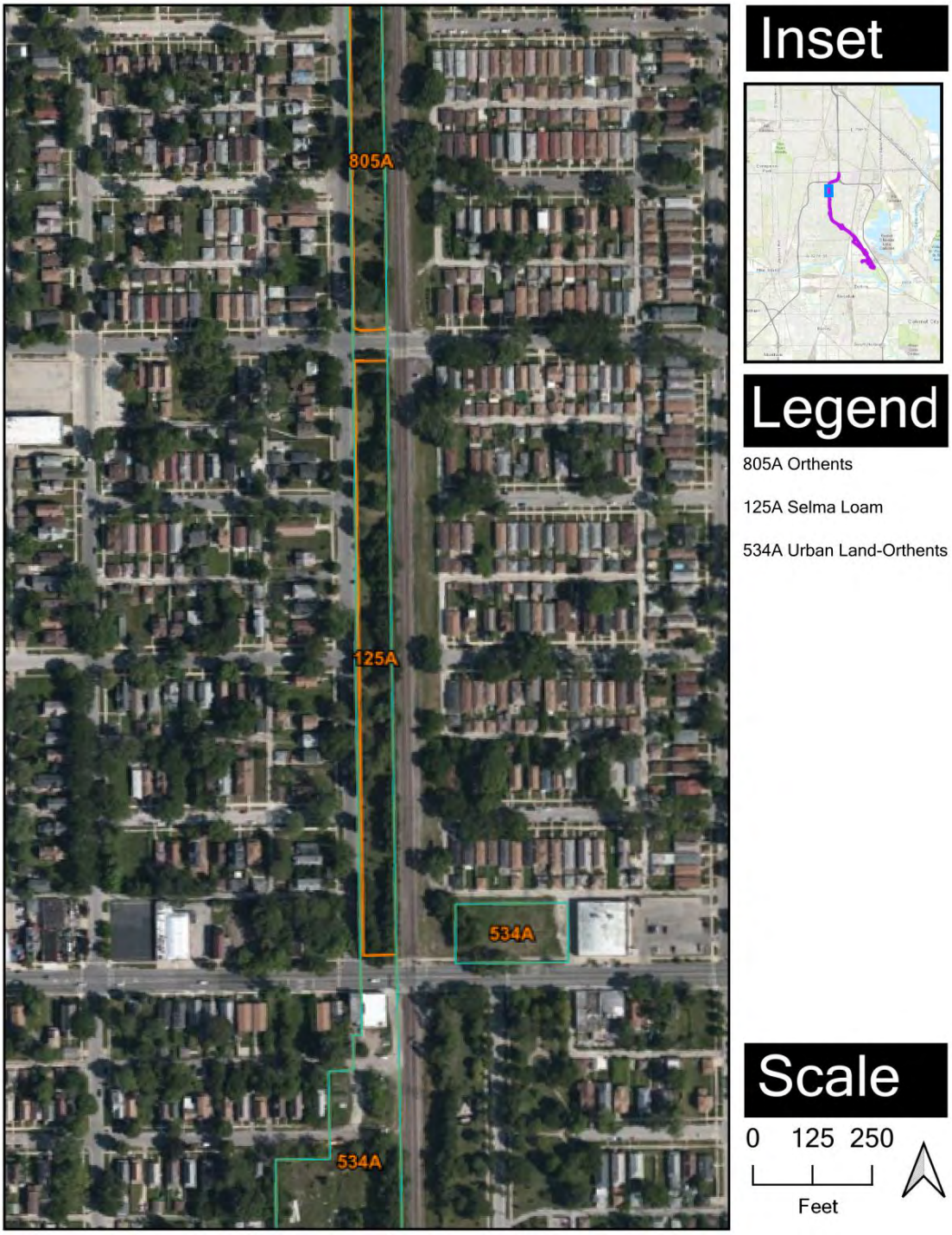

Source USDA 2020

Figure 4-4: STP Area 2 (excavatable soils along Eggleston Avenue)

At the southern end of the project area just north of present day Altgeld Gardens is an area that contained historic residents and farmsteads that are shown on the 1938 aerial image (**Figure 4-5**). The historic homes and farmsteads are highlighted with green boxes. MARS visually inspected these areas and used a historic probe to check for ground disturbance. The soil probe indicated gravel beneath the surface in these areas. All of the potential historic sites had disturbed ground surfaces. None of these potential historic archaeological sites had any structure or foundation remnants remaining and all structures have been razed.

4.3 Potential for Project Effects

No previously recorded sites fall within the APE associated with the Preferred Alignment and the RLE Project would produce no effect on known archeological resources. Since publication of the Draft EIS, additional archaeological investigations within areas of ground disturbance for the Preferred Alignment have found no cultural material in any of the excavated shovel test probes during the Phase I archaeological survey and confirmed that no recorded archaeological sites would be impacted during construction of the Preferred Alignment.

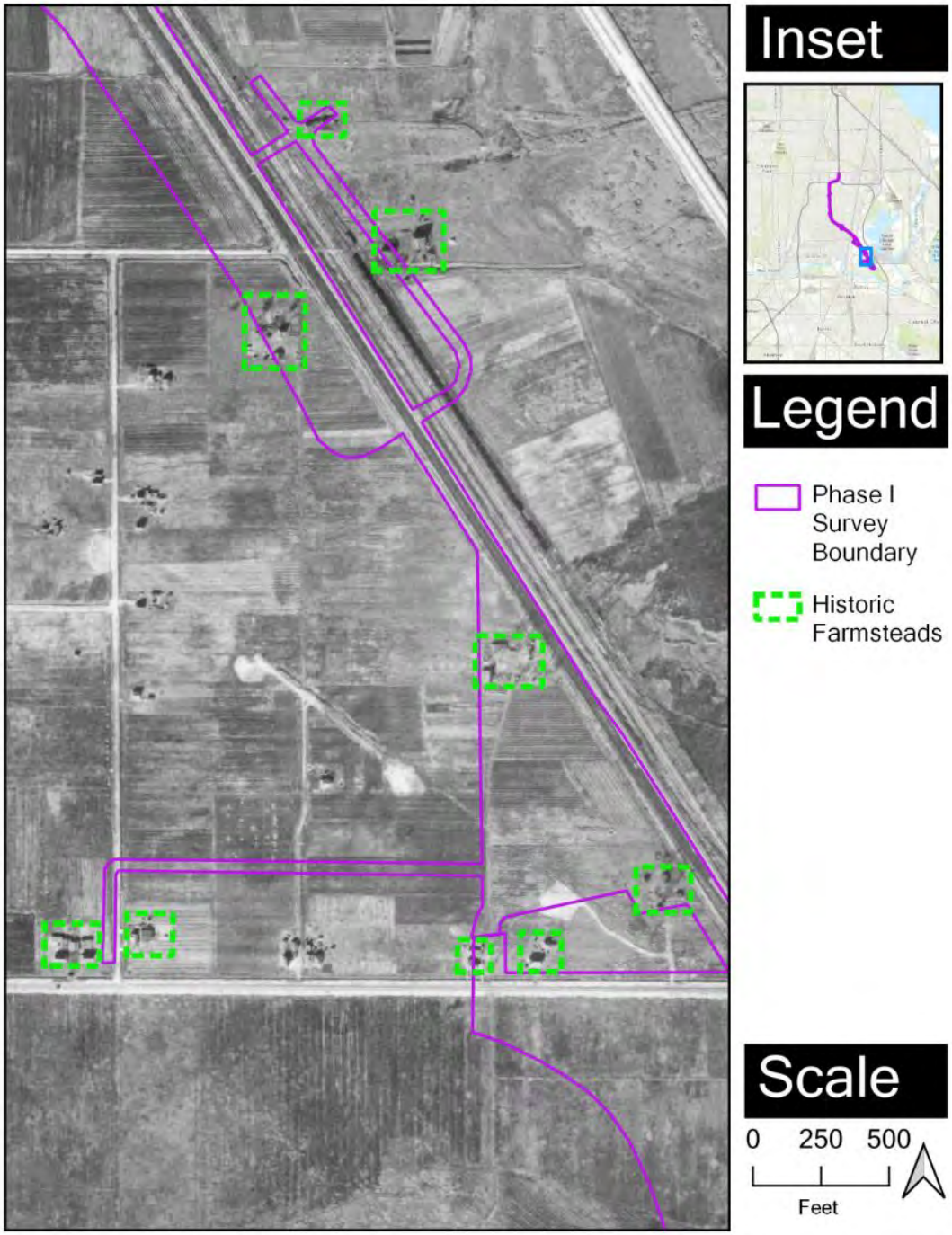

Source
ISGS 2020

Figure 4-5: Area of historic farmsteads located on 1939 aerial image

Section 5 - Identification of Architectural Resources

This chapter presents historic-age resources surveyed in the expanded APE and their evaluations for NRHP eligibility. Historic contexts presented in **Appendix Q** of the Draft EIS were used for these evaluations. While the Draft EIS arranged eligibility evaluations by neighborhoods, evaluations are presented here in the order used for the *Section 106 Eligibility Report* (June 2021) and *Effects Report* (September 2021) to allow consistency with those documents and map ID numbering. For information on the expanded APE, see **Section 3.3**.

5.1 Historic Context

There are no changes to the historic context of the three neighborhoods/communities (Roseland, West Pullman, and Riverdale) in **Appendix Q** of the Draft EIS.

5.2 Surveyed Resources

Following methodologies established by the Draft EIS, a representative sample of historic-age resources within the expanded APE were chosen for survey (see *Draft EIS Appendix Q - Identification of Historic Resources*). Fifteen historic-age resources within the expanded APE for the Preferred Alignment were surveyed and evaluated for NRHP eligibility. These resources, along with their construction date, community area, and assessment of eligibility, are presented in **Table 5-1**. Survey forms were used to collect current and historical data on these properties and are included in **Appendix Q**. Fourteen properties are within the expanded APE at Michigan Avenue station. One property, Carver Military Academy, is within the expanded APE at 130th Street station.

Table 5-1: Historic Resources Surveyed in the Expanded APE

Map ID	Address	Year Built	Description	Community Area	Eligibility
7	11431-11433 S. Michigan Avenue	1911	Commercial	Roseland	NRHP Eligible CHRS Orange
8	11445-11447 S. Michigan Avenue	1903	Mixed-Use Commercial/Residential	Roseland	NRHP Eligible CHRS Orange
9	11451 S. Michigan Avenue	1928	Commercial	Roseland	NRHP Eligible CHRS Orange

Map ID	Address	Year Built	Description	Community Area	Eligibility
10	11452 S. Indiana Avenue	c. 1880	Single-Family Residence	Roseland	NRHP Eligible CHRS Orange
11	135 E. 114th Street	1913	Multifamily Residence	Roseland	None
12	136 E. 115th Street	c. 1900	Single-Family Residence	Roseland	None
13	139 E. 115th Street	1908	Single-Family Residence	West Pullman	None
14	146 E. Kensington Avenue	1898	Single-Family Residence	West Pullman	None
15	203 E. Kensington Avenue	c. 1920	Mixed-Use Commercial/Residential	West Pullman	None
16	11445 S. State Street	1893	George William Curtis Public School	Roseland	NRHP Eligible
17	11611 S. Lafayette Avenue	1890	Multifamily Residence	West Pullman	None
18	11624 S. State Street	1910	Multifamily Residence	West Pullman	None
19	11717 S. Lafayette Avenue	1894	Single-Family Residence	West Pullman	None
20	11725 S. Perry Avenue	1897	Scanlan Elementary School	West Pullman	NRHP Eligible CHRS Orange
21	13100 S. Doty Avenue	1973	Carver Military Academy	Riverdale	NRHP Eligible

Source: JLK Architects

5.3 National Register of Historic Places-Eligible Resources

Of the 15 buildings surveyed in the expanded APE, seven were identified as eligible for listing in the NRHP. These are briefly described below. Location of these properties are shown in **Figures 3-2** and **3-3**.

Eight of the surveyed properties listed in **Table 5-1** did not meet the criteria for NRHP eligibility. Generally, these properties had subsequent alterations that compromise their historic integrity, do not feature a level of distinctive architectural detailing, or have a notable history necessary to qualify for the NRHP.

#7: Commercial Building, 11431-11433 S. Michigan Avenue

This two-story commercial store front building, shown in **Figure 5-1**, is clad in red brick with terra cotta decorative elements. It was built in 1911 as a commercial property along South Michigan Avenue, the major commercial corridor for the Roseland community. The building was commissioned by Alfonse Vincent who worked in the wagon trade and whose descendants would open the first automobile sales agency in Roseland. The architect, Joseph T. Fortin, designed a large number of residential and commercial buildings in Chicago and surrounding suburbs.

The building consists of two stories plus basement constructed of red brick with decorative terra cotta elements on the west and north elevations. The primary east facade contains the majority of ornamentation but has been significantly altered. The intricately patterned, curvilinear and intertwined patterns of the terra cotta are similar to those seen in the designs of Louis Sullivan. However, much has been removed from the original design. The first-floor storefront has been infilled with a modern brick and storefront system. The upper floor windows have been covered (or replaced) with siding. The north elevation remains largely unaltered.

This building is a good example of the commercial buildings built in Roseland's commercial district which was concentrated along South Michigan Avenue between 110th and 115th Streets during the first half of the 20th century. Due to this association, it is recommended eligible for the NRHP under Criterion A for commerce. Due to significant alterations to the storefront and removal/reconfiguration of original decorative material, it is not recommended eligible for NRHP under Criterion C for architecture.

Figure 5-1: West Facade, 11431-11433 S. Michigan Avenue

#8: Mixed-Use Commercial/Residential, 11445-11447 S. Michigan Avenue

This two-story mixed-use commercial/residential building in the Roseland commercial district, shown in **Figure 5-2**, was constructed in 1903 and designed by architects Burtar & Gassmann. It is located along South Michigan Avenue, the major commercial corridor for the Roseland community. The building is a classical three-bay wide building, visually divided by a center section flanked by two side sections with projecting bays. The building has storefronts on the first floor and residences above. The walls on the primary (west) elevation are Indiana limestone, mostly rusticated, but smooth above the second-story windows. The storefront on the north side of the front elevation is metal-framed glass with recessed entry, possibly original to the building. The south entrance and storefront have been boarded over. A limestone belt course runs below and above the second-story windows. Ornamentation of the building includes a thick belt course projecting above the second-story windows with brackets covered with cyma reversa with acanthus leaf molding that runs across the entire front facade, and a large triangular pediment above the second floor on the center section, decorated with a limestone laurel wreath, foliate and ribbons.

The CHRS identified this building "Orange" due to possession of architectural feature(s) or historical association that has made it potentially significant in the context of the surrounding community.

This building is a good example of the commercial buildings built in Roseland's commercial district, which was concentrated along South Michigan Avenue between 110th and 115th Streets during the

first half of the 20th century. It is also an excellent example of the mixed-use configuration popular in this commercial district with commercial use on the first floor and residential above. Due to this association, it is recommended eligible for the NRHP under Criterion A for commerce. Although windows have been replaced at the west facade and the condition of the storefront at the south half of the building is unknown, the north storefront appears to be original, and the stone portions of the facade are in good condition. Original decorative metal trim at the cornice is also intact and in fair condition. Because the resource retains sufficient architectural integrity and remains a good example of Classical Revival applied to a mixed-use building, it is recommended eligible for NRHP listing under Criterion C for architecture.

Figure 5-2: North and West Facades, 11445-11447 S. Michigan Avenue

#9: Commercial Building, 11451 S Michigan Avenue

This one-story commercial building, shown in **Figure 5-3**, is located along South Michigan Avenue, the major commercial corridor for the Roseland community. It was constructed in 1928 and designed by local architect/engineer firm Loewenberg & Loewenberg who designed residential and storefront buildings in the city. The building was originally occupied by Sadock & Adelman, a furniture store and has since served several other commercial businesses including several furniture stores and a school of hair design.

The corner building was designed to address both street fronts, including a corner entrance and one centered on the west (S. Michigan Avenue) facade. The walls of the building are covered with rectangular terra cotta panels and further adorned by gold colored terra cotta stringcourse above the storefronts, cornice at both west and south elevations, and medallions at clerestory level. The storefront has been largely altered and boarded over. Additional windows at the south facade are octagonal in shape but have also been boarded over.

The CHRS has identified this building "Orange" due to possession of some architectural feature or historical association that has made it potentially significant in the context of the surrounding community.

This building is an excellent example of the commercial buildings built in Roseland's commercial district which was concentrated along South Michigan Avenue between 110th and 115th Streets during the first half of the 20th century. Due to this association, it is recommended eligible for the NRHP under Criterion A for commerce. This building is also unique as a remaining Art Deco design within the Roseland Commercial district. Although the storefront has been altered and windows boarded over, terra cotta cladding and decorative medallions, octagonal window openings, decorative trim crowning the storefront, and the highly ornate building cornice remain in fair to excellent condition. Because the building retains sufficient architectural integrity and remains an excellent and unique example of Art Deco design, it is recommended eligible for NRHP listing under Criterion C for architecture.

Figure 5-3: West and South Facades, 11451 S. Michigan Avenue

#10: Single-Family Residence, 11452 S. Indiana Avenue

This two-story Italianate style house in the Roseland community, shown in **Figure 5-4**, was built circa 1880. It is a rare example of a brick-constructed two-story residence from this era. The 1880s was a time of transformation for the Roseland community with the establishment of the Pullman Palace Car Company to the east and development of several additional railroads in the area. This attracted an influx of workers, often immigrants from Sweden, Germany, England, and Ireland. Much of Roseland residences at this time were modest one-and-a-half story frame workers cottages.

This Italianate style building includes a gable-front with decorative fascia and paired eave brackets. The front porch roof appears to be a replacement. A bay-window projects from the south elevation near the rear of the house.

The CHRS has identified this building "Orange" due to possession an architectural feature(s) or historical association that has made it potentially significant in the context of the surrounding community. While window units, front door, and porch roof have been replaced, the original Italianate form of the building (including gable front and side bay window), deep decorative cornice with brackets, arched window openings, and brick facade remain in good condition. Because the building retains sufficient architectural integrity and is a unique remaining example of Italianate design, is recommended eligible for NRHP listing under Criterion C for architecture.

Figure 5-4: South and East Facades, 11452 S. Indiana Avenue

#11: Scanlan Elementary, 11725 S. Perry Avenue

This Classical Revival style school in the West Pullman community, shown in **Figure 5-5**, was built in 1897. It is an excellent example of a Chicago Public School design by W. August Fiedler. An incredibly prolific designer, Fiedler designed 58 new school buildings as Chicago Board of Education Architect from 1893-1896.

The CHRS has identified this building "Orange" due to possession of an architectural feature(s) or historical association that has made it potentially significant in the context of the surrounding community. It was constructed primarily of red brick with limestone foundations and decorative elements. It uses a classical revival vocabulary with venetian gothic detailing including decorative and dentiled cornices, pilasters with Corinthian capitals, corner quoins, arched windows, decorated framed entrances, and limestone cartouches. The two main east west entrances are framed by arched openings with carved foliate scrollwork in the spandrels. The spandrels between first and second floor windows are filled with a brick checkerboard pattern and further adorned with small terra cotta fleur de lis. The arched third floor windows are crowned with limestone ogee arches. Masonry above these arches is of a highly ornate curvilinear pattern. Attic windows above are framed by limestone arches flanked by hexagonal columns with hexagonal capitals. The building retains architectural integrity and is excellent example of Classical Revival design, it is recommended eligible for NRHP listing under Criterion C for architecture.

Per correspondence by the SHPO on July 9, 2021, Scanlan Elementary School is also considered NRHP-eligible under Criterion A.

Figure 5-5: West Facade, Scanlan Elementary, 11725 S. Perry Avenue

#12: George William Curtis Public School, 11445 S. State Street

This Classical Revival style school in the Roseland community, shown in **Figure 5-6**, was built in 1893. It is an excellent example of a Chicago Public School design by W. August Fiedler. An incredibly prolific designer, Fiedler designed 58 new school buildings as Chicago Board of Education Architect from 1893-1896.

The original building along State Street was constructed primarily of red brick with rusticated limestone foundations and decorative elements. It uses a classical revival vocabulary with fluted engaged pilasters, Doric and Ionic capitals, limestone cornices, sills, and lintels, arched windows over secondary entries, and checkerboard brickwork at parapets also over secondary entries. Additions to the building occurred in 1906, 1974, and 2009. The building retains architectural

integrity and is excellent example of Classical Revival design, it is recommended eligible for NRHP listing under Criterion C for architecture.

Per correspondence by the SHPO on July 9, 2021, George William Curtis Public School is also considered NRHP-eligible under Criterion A.

Figure 5-6: West Facade, George William Curtis Public School, 11445 S. State Street

#13: Carver Military Academy, 13100 S. Doty Avenue

This two-story Modernist building in the Riverdale community area, shown in **Figure 5-7**, was constructed in 1973. It was constructed as George Washington Carver High School to serve students from Altgeld Gardens housing complex. The design is credited to John Moutoussamy, the first African-American architect to have a partnership in a major architectural firm, Dubin, Buin, Black & Moutoussamy. He studied at Illinois Institute of Technology in 1948 under Mies van der Rohe. Influenced by this instructor, Moutoussamy designed buildings using a Modernist and Late Modernist vocabulary. His 1971 design for the Johnson Publishing Company is the only high-rise building in Chicago designed by an African-American and was designated a National Historic Landmark in 2018.

The building is a good example of Late Modernist design. Its parti is of simple geometric volumes with simple rectilinear elements and little decoration. Its lineage from the school of Mies van der Rohe is clearly evident, and little has changed from its original design.

Because the building retains excellent architectural integrity, is a good example of Late Modernist design and associated with architect John Moutoussamy, it is recommended eligible for NRHP listing under Criterion C for architecture.

Per correspondence by the SHPO on July 9, 2021, Carver Military Academy is also considered NRHP-eligible under Criterion A.

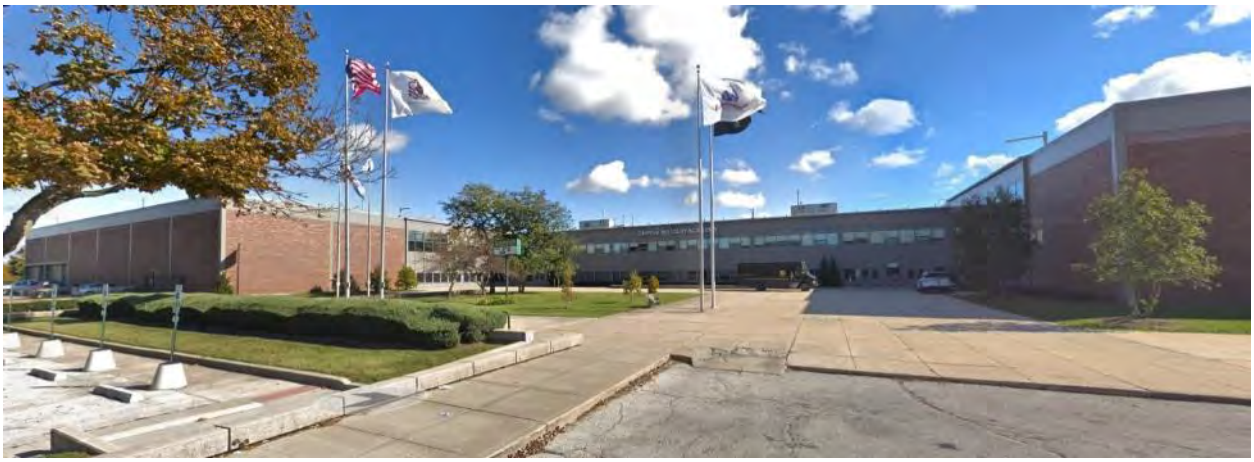

Figure 5-7: West Facade, Carver Military Academy, 13100 S. Doty Avenue

Section 6 - Effects and Mitigations

The following subsections describe the effect findings following consultation with the SHPO and consulting parties since publication of the Draft EIS. **Figure 3-1** presents the locations of each NRHP-eligible resource in relation to the Preferred Alignment.

6.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning Transportation Improvement Program. No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Appendix Q** in the Draft EIS, there would be no impacts to historic and cultural resources from the No Build Alternative. This is consistent in the findings for the Final EIS.

6.2 Union Pacific Railroad Alternative – Preferred Alignment

Assessment of effects for the Preferred Alignment follow in **Section 6.2.1** for all properties in regard to noise and vibration, **Section 6.2.2** for historic properties identified the Draft EIS, and **Section 6.2.3** for historic properties identified in the expanded APE. In all, the RLE Project would result in no adverse effect to historic properties. **Table 6-1** summarizes the effects for each historic property in the APE associated with the Preferred Alignment. Note that the final Altgeld Gardens-Philip Murray Homes Historic District nomination no longer includes property #18, 975 E. 32nd Street as a contributing resource.

Table 6-1: Effects Findings (Preferred Alignment)

Map ID	Address	Description	NRHP Status	Assessment of Effect
1	444 W. 100th Place	Eclectic Neo-Traditional Home	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
2	324 W. 104th Street	Fire Department Engine Company 93	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
3	351 W. 104th Street	Roseland Pumping Station	Eligible for Listing in NRHP, Criterion C	No Adverse Effect

Map ID	Address	Description	NRHP Status	Assessment of Effect
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
6	133-139 E. Kensington Avenue	Former Venetian Hall	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
7	11431-11433 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
8	11445-11447 S. Michigan Avenue	Mixed-Use Commercial/Residential	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
9	11451 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
10	11452 S. Indiana Avenue	Single-Family Residence	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
11	11725 S. Perry Avenue	Scanlan Elementary School	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
12	11445 S. State Street	George William Curtis Public School	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
13	13100 S. Doty Avenue	Carver Military Academy	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
14	Varies*	53 Residences Contributing to AGPMH National Register Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
15	13015 S. Ellis Avenue	By The Hand Club, included in (AGPMH) Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
16	13100 S. Ellis Avenue	Grocery / Retail Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect

Map ID	Address	Description	NRHP Status	Assessment of Effect
17	940 E. 132nd Street	Administration / Maintenance Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
18	975 E. 132nd Street	CYC - Dorothy Gautreaux Child Development Center, within boundary of AGPMH Historic District	Update from Section 106 reports: Not Contributing to NRHP District	No Adverse Effect
19	941 E. 132nd Street	Children's Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
20	951 E. 132nd Place	Altgeld Gardens Community Building No. 2, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
21	Multiple (Public Housing Project)	AGPMH Historic District	Previously Determined Eligible for NRHP, Criteria A, B, and C	No Adverse Effect

*Residences within the APE which contribute to the Altgeld Gardens-Philip Murray Homes Historic District include: 13022 S. Greenwood Avenue, 13030 S. Greenwood Avenue, 13072 S. Greenwood Avenue, 13200 S. Greenwood Avenue, 13240 S. Greenwood Avenue, 13088 S. Ellis Avenue, 13016 S. Ellis Avenue, 13023 S. Ellis Avenue, 13028 S. Ellis Avenue, 13047 S. Ellis Avenue, 13052 S. Ellis Avenue, 13059 S. Ellis Avenue, 13064 S. Ellis Avenue, 13083 S. Ellis Avenue, 13088 S. Ellis Avenue, 13101 S. Ellis Avenue, 13133 S. Ellis Avenue, 13201 S. Ellis Avenue, 13218 S. Ellis Avenue, 13226 S. Ellis Avenue, 13230 S. Ellis Avenue, 13262 S. Ellis Avenue, 13286 S. Ellis Avenue, 13241 S. Ellis Avenue, 13250 S. Ellis Avenue, 929 E 130th Place, 933 E 130th Place, 932 E. 131st Street, 967 E 132nd Place, 1000 E. 132nd Street, 1001 E. 132nd Street, 1008 E. 132nd Street, 1009 E. 132nd Street, 1032 E. 132nd Street, 1033 E. 132nd Street, 1044 E. 132nd Street, 1045 E. 132nd Street, 1068 E. 132nd Street, 1069 E. 132nd Street, 900 E. 133rd Street, 972 E. 133rd Street, 1000 E. 133rd Street, 1008 E. 133rd Street, 1032 E. 133rd Street, 1044 E. 133rd Street, 1068 E. 133rd Street, 901 E. 130th Place, 13029 S. Drexel Avenue, 13053 S. Drexel Avenue, 13065 S. Drexel Avenue, 900 E. 131st Street, 901 E. 131st Street, 13100 S. Ingleside Avenue..
Source: JLK Architects

6.2.1 Effects Due to Noise and Vibration

Changes in noise and vibration caused by an undertaking may result in an adverse effect on historic properties and must be considered in effects analysis. In the NEPA analysis for the project, a general noise and vibration assessment was completed for the East and West Options in Draft EIS. For Final EIS, a detailed noise and vibration analysis at sensitive receivers in the vicinity of the Preferred Alignment was completed using the updated FTA *Transit Noise and Vibration Impact Assessment*

Manual (FTA 2018). See the *Noise and Vibration Technical Memorandum* (**Appendix O**) of the Final EIS.

The Draft EIS found the project would result in no noise or vibration impacts due to construction, no permanent vibration impacts, and no permanent noise impacts after mitigation. Mitigation would consist of construction of a noise barrier approximately four feet in height (measured from the top surface of the concrete deck) to reduce noise transmission at and below the height of the tracks. Therefore, historic properties identified within the APE north of the 130th Street station would not be affected by project noise and vibration by the East and West Options in the Draft EIS.

For the Preferred Alignment, the detailed noise analysis assumed that rail operations along the RLE Project would consist of electric-powered train types similar to those that currently operate along the Red Line corridor. In addition, the noise predictions were based on the train volumes and consists (i.e., the number of cars per train) along with train speed profiles (i.e., speeds by location along the corridor) provided by CTA. The predicted noise exposure levels were adjusted for distance to nearby sensitive receivers using FTA methodology and then compared to the existing noise exposure levels at these receivers to assess noise impacts and mitigation based on FTA criteria.

In accordance with FTA guidelines, noise barriers were recommended to eliminate all severe impacts and as many of the moderate impacts as reasonable. The mitigation goal was to gain substantial noise reduction, not simply to reduce the predicted levels to just below the severe impact threshold. Based on the mitigation analysis, it was determined that a barrier extending to a minimum height of 3.5 feet above the top-of rail elevation from the top surface of the concrete deck would mitigate the identified severe impacts, the identified moderate impacts at institutional receivers, and the identified moderate impacts at residences, except for 15 residual moderate impacts at residential receivers that would remain on the east side of the RLE Project between Indiana Avenue and Calumet Avenue. The historic properties identified within the APE at the 130th Street station would not be affected by project noise and vibration. CTA would require the final design contractor to analyze noise to confirm impact thresholds would be met as defined in the Final EIS/ROD.

There are no vibration-sensitive receivers within the FTA vibration impact screening distances along the segment of the Preferred Alignment to the south of the CN/MED rail corridor. No vibration impacts are projected at residential receivers for the Preferred Alignment. Similarly, no vibration impacts are projected at any of the institutional receivers along the alignment. Thus, consistent with the results of the Draft EIS analysis for the UPRR East and West Options, there would be no vibration impacts from Preferred Alignment train operations and no vibration mitigation measures would be required.

The Preferred Alignment would include the construction of elevated and at-grade track structure, stations, parking facilities at the stations, and roadway improvements. Similar to the findings for the East and West Options in the Draft EIS, construction noise levels for the Preferred Alignment with mitigation are not expected to exceed the FTA construction noise criteria.

High-vibration activities during construction include demolition of buildings, construction of aerial structures, pavement breaking, and ground compaction. Similar to the findings for the East and West Options in the Draft EIS, construction vibration levels for the Preferred Alignment are not expected to exceed the FTA construction criteria for vibration damage. Impact pile driving methods would be avoided in the vicinity of the historic Roseland Pumping Station.

6.2.2 Effects on Historic Properties in the APE

Effects on historic properties identified in the project APE are discussed individually in the following section. Based on the Preferred Alignment project refinements and the 2019 D.C. district court ruling on “direct” vs “indirect” effects, effect findings for the historic properties presented in the Draft EIS have been reviewed and updated. The project would result in visual changes along the Preferred Alignment and cause temporary changes in vibration, noise, and traffic patterns during construction. Although these changes would have direct and indirect impacts on historic properties in the APE, they would not compromise the integrity of historic properties in the APE, nor would they diminish the characteristics that qualify them for inclusion in the NRHP. Therefore, the identified impacts do not rise to the level of an adverse effect.

#1: Eclectic Neo-Traditional Home, 444 W. 100th Place

The Eclectic Neo-Traditional Home at 444 W. 100th Place, shown in **Figure 6-1**, is NRHP-eligible under Criterion C for architecture. The project's elevated track would be approximately one block east of the property. It would fall within the viewshed of this historic property but would be partially blocked by surrounding buildings and trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No vibration or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts as a result of the proximity of the project's elevated track in this location. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 6-1: Eclectic Neo-Traditional Home, 444 W. 100th Place

#2: Fire Department Engine Company 93, 324 W. 104th Street

The fire station at 324 W. 104th Street, shown in **Figure 6-2**, is NRHP-eligible under Criterion C for architecture. The project's elevated track would be approximately 300 feet west of the property. It would fall within the viewshed of this historic property but would be partially blocked by trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts as a result of the proximity of the project's elevated track in this location. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 6-2: Fire Department Engine Company 93

#3: Roseland Pumping Station, 351 W. 104th Street

The Roseland Pumping Station, shown in **Figure 6-3**, is NRHP-eligible under Criterion A for association with broad patterns in history and Criterion C for architecture. The project's elevated track would be approximately 150 feet west of the property. It would fall within the viewshed of this historic property but would be partially blocked by trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no adverse effect" for the UPRR East Option and "no historic properties affected" for the UPRR West Option. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The project's elevated track would fall within the viewshed of this historic property. The property would encounter direct visual impacts as a result of the proximity of the project's elevated track in this location. This would affect the property's integrity of setting; however, this impact would not compromise the integrity of the building, its association with broad patterns in history, or any of its architectural character defining features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 6-3: Roseland Pumping Station

#4: Romanesque Revival-Style Church, 10920 S. Princeton Avenue

The church at 10920 S. Princeton Avenue, shown in **Figure 6-4**, is NRHP-eligible under Criterion A for association with the community's former Dutch population and under Criterion C for architecture. The project's elevated track would be approximately 350 feet southwest of the property. It would fall within the viewshed of this historic property but would be partially blocked by surrounding smaller buildings and trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts as a result of the proximity of the project's elevated track in this location. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with the community's former Dutch population, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 6-4: Church at 10920 S. Princeton Avenue

#5: Roseland Community Hospital Nurses Home, 11321 S. Wentworth Avenue

Constructed by the Roseland Community Hospital, this property formerly served as an educational facility for nurses. It is shown in **Figure 6-5** and is eligible for listing in the NRHP under Criterion A for association with education. The project's elevated track would be approximately 350 feet southwest of the property. It would fall within the viewshed of this historic property but would be partially blocked by surrounding smaller buildings and trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the elevated tracks. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with education, or any of its character defining features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 6-5: Roseland Community Hospital Nurses Home

#6: Former Venetian Hall, 133-139 E. Kensington Avenue

This former social venue and performance hall for Italian Americans, shown in **Figure 6-6**, has been converted into a church. It is eligible for listing in the NRHP under Criterion A for its original use as a social venue for area residents in the early twentieth century. The project's elevated track would be approximately 150 feet southwest of the property. Smaller buildings and a vacant surface lot are situated between the building and the elevated track. For north and south options, the Michigan Avenue station would be along the elevated track, approximately 360 feet to the southwest. For the north option for this station, the parking associated with this station would be approximately 400 feet to the west. The parking would fall within the viewshed of the historic property. For the south option, the parking would be approximately 500 feet southwest of the property and would be blocked by the existing elevated UPRR structure. For both options, the kiss & ride would be approximately 150 feet to the west and the elevated station platform approximately 450 to the west. These elements would fall within the viewshed of the historic property but be partially blocked by surrounding buildings and trees. See **Figures 6-7** and **6-8** for a conceptual rending of the view of this project from the Former Venetian Hall. Only the north option is depicted for it is expected to have the most visual impacts to this historic property.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic use as a social venue, or any of its character defining features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 6-6: North Facade, Former Venetian Hall

Figure 6-7: Existing view west along Kensington Avenue from the Venetian Hall

Figure 6-8: View west along Kensington Avenue from the Venetian Hall showing conceptual rendering of the Michigan Avenue station. North option is shown, as south option would have similar visual impact.

#7: Commercial Building, 11431-11433 S. Michigan Avenue

The commercial building at 11431-11433 S. Michigan Avenue, shown in **Figure 5-1**, is eligible for listing in the NRHP under Criterion A for commerce due to its connection to Roseland's commercial district in the first half of the 20th century. The project's Michigan Avenue station would be approximately 2.5 blocks (950 feet) south of the property. For the north option, the parking would be approximately 1.5 blocks (450 feet) south of the property and for the south option, the parking would be approximately 2.5 blocks (1150 feet) south of the property. The station, parking, and kiss & ride would fall within the viewshed of this historic property, but for the south option, the view of the parking would be blocked by the project's elevated tracks and the existing UPRR line which is elevated at this location. See **Figures 6-9** and **6-10** for a conceptual rendering of the view of the project from this property.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with Roseland's commercial district, or any of its character defining features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 6-9: Existing view south along Michigan Avenue from 114th Place

Figure 6-10: View south along Michigan Avenue from 114th Place showing conceptual rendering of Michigan Avenue station (north option)

#8: Commercial Building, 11445-11447 S. Michigan Avenue

The mixed-use commercial/residential building at 11445-11447 S. Michigan Avenue, shown in **Figure 5-2**, is eligible for listing in the NRHP under Criterion A for commerce due to its connection to Roseland's commercial district in the first half of the 20th century and Criterion C for architecture. The project's Michigan Avenue station would be approximately 2 blocks south (900 feet) of the property. For the north option, the parking would be approximately 1 block (400 feet) south of the property and for the south option, the parking would be approximately 2 blocks (1100 feet) south of the property. The station, kiss & ride, and parking would fall within the viewshed of this historic property but for the south option, view of the parking would be blocked by the existing UPRR line which is elevated at this location.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with Roseland's commercial district, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

#9: Commercial Building, 11451 S. Michigan Avenue

The commercial building at 11451 S. Michigan Avenue, shown in **Figure 5-3**, is eligible for listing in the NRHP under Criterion A for commerce due to its connection to Roseland's commercial district in the first half of the 20th century and Criterion C for architecture. The project's Michigan Avenue station would be approximately 1 ½ blocks (700 feet) south of the property. For the north option, the parking would be approximately ½ block (200 feet) south of the property and for the south option, the parking would be approximately 1 ½ blocks (900 feet) south of the property. The station, parking, and kiss & ride would fall within the viewshed of this historic property, but for the south option, the view of the parking would be blocked by the existing UPRR line which is elevated at this location. See **Figures 6-11** and **6-12** for a conceptual rendering of the view of the project from this property.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with Roseland's

commercial district, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 6-11: View south along Michigan Avenue south of 115th Street

Figure 6-12: View south along Michigan Avenue south of 115th Street showing conceptual rendering of Michigan Avenue station (north option)

#10: Single-Family Residence, 11452 S. Indiana Avenue

The residence at 11452 S. Indiana Avenue, shown in **Figure 5-4**, is eligible for listing in the NRHP under Criterion C for architecture. The project's Michigan Avenue station would be approximately ¼ mile (950 feet) southwest of the property. The elevated station platform and canopy may fall within the viewshed of this historic property but for both options the view would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

#11: Scanlan Elementary School, 11725 S. Perry Avenue

The Classical Revival style school at 11725 S. Perry Avenue, shown in **Figure 5-6**, is eligible for listing in the NRHP under Criterion A for education and Criterion C for architecture. The project's Michigan Avenue station would be approximately ¼ mile (1350 feet) northeast of the property. The elevated platform and canopy of the station would fall within the viewshed of this historic property and views of these elements would be partially blocked by surrounding smaller buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, its association with education, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

#12: George William Curtis Public School, 11445 S. State Street

George William Curtis Public School, shown in **Figure 5-7**, is eligible for listing in the NRHP under Criterion A for education and Criterion C for architecture. The project's Michigan Avenue station would be approximately one block southeast of the property. The elevated track structure would be 250 feet from the property at its closest point and views of the tracks from this property would occur to the west along 115th Street and to the south along State Street. The elevated platform and

canopy of the station would also fall within the viewshed of the property. For the north option, the parking would be approximately 400 feet southeast of the property and fall within the viewshed for this historic property. For the south option, the parking would be approximately 700 feet southeast of the property and view of the parking would be blocked by the existing UPRR line which is elevated in this area.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, its association with education, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

#13: Carver Military Academy, 13100 S. Doty Avenue

Carver Military Academy High School at 13100 S. Doty Avenue, shown in **Figure 5-8**, is eligible for listing in the NRHP under Criterion A for education and Criterion C for architecture. The project's 130th Street station would be approximately 750 feet west of the property. The station and parking garage would fall within the viewshed of this historic property, but views of the project would be partially blocked by trees. Old 130th Street would be permanently closed across the new project tracks, discontinuing its connection to S. Doty Avenue and Carver Military Academy High School. Vehicles traveling to Carver Military Academy High School would use the primary entrance at Greenwood Avenue to 132nd Street if coming from the north or Doty Avenue to 132nd Street if coming from the south.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting and access to the site would be altered; however, this impact would not compromise the integrity of the building, the building's association with education, a notable architect, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

#14: Residences Contributing to Altgeld Gardens-Philip Murray Homes Historic District

The Altgeld Gardens-Philip Murray Homes Historic District was constructed in 1945 (Altgeld Gardens) and 1954 (Philip Murray Homes) and is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. Fifty-three (53) residential buildings within Altgeld Gardens-Philip Murray Homes Historic District are located within the expanded project APE. The residential buildings are uniform in plan and elevation but are oriented in various directions as shown in **Figure 6-13**. The buildings closest to the project area are along Greenwood Avenue between Ellis Avenue and 132nd Street and those at the northwest corner of 130th Place and Ellis Avenue. The project would fall within the viewshed from these properties and from some of the properties to the west via view corridors between buildings. The parking garage at the 130th Street station would be approximately 250 feet east of the closest residences along Greenwood Avenue. For properties further west of Greenwood Avenue, views of the project would

be partially blocked by surrounding buildings and trees. See **Figures 6-14** through **6-17** for representative visual connections of properties closest to the project site.

These historic properties would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify them for inclusion in the NRHP. The properties would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of these buildings, their association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town planning, or public housing design features which qualify them for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on these properties.

Figure 6-13: Altgeld Gardens Residences, view west from Greenwood Avenue and 132nd Street

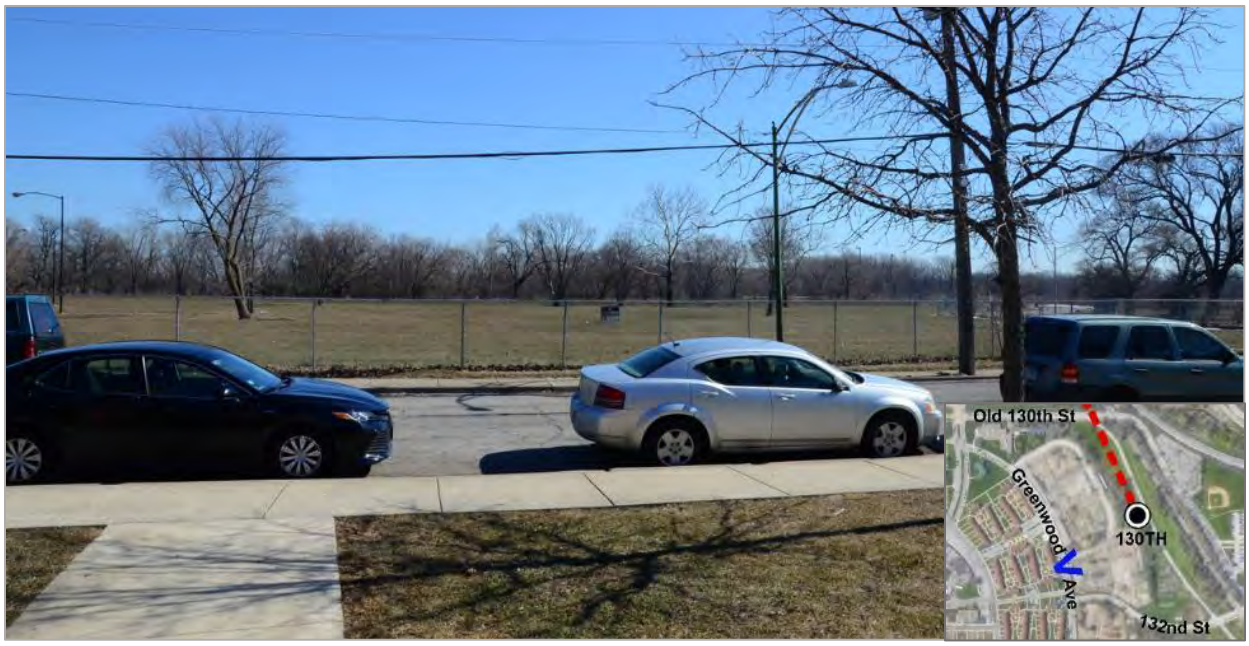

Figure 6-14: Existing view from Greenwood Avenue looking east

Figure 6-15: Conceptual rendering of Project from Greenwood Avenue looking east

Figure 6-16: Existing view from Ellis Avenue looking northeast between residential buildings

Figure 6-17: Conceptual rendering of Project from Ellis Avenue looking northeast between residential buildings

#15: By the Hand Club, 13015 S. Ellis Avenue

The By the Hand Club, shown in **Figure 6-18**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was constructed in 1957 and the architect is not known. It is a unique example of Georgian Revival architecture in the community. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning and public housing. It is approximately 250 feet west of the station parking garage. While the parking garage would fall within the viewshed of this historic property, view of the parking garage would be partially blocked by surrounding trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town planning, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 6-18: Northwest Facade, By the Hand Club, 13015 S. Ellis Avenue

#16: Grocery/Retail Building, 13100 S. Ellis Avenue

The Grocery/Retail Building at 13100 S. Ellis Avenue, shown in **Figure 6-19**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was designed by notable architecture firm Keck and Keck and constructed in 1945. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is approximately 800 feet west of the station parking garage. The parking garage would fall within the viewshed of this building but would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, and Hazel Johnson or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 6-19: Northeast Facade, Grocery/Retail Building, 13100 S. Ellis Avenue

#17: Administration/Maintenance Building, 940 E. 132nd Street

The Administration/Maintenance Building at 940 E. 132nd Street, shown in **Figure 6-20**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was designed by the architectural firm Shaw, Naess & Murphy and constructed in 1944. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is over 950 feet west of the station parking garage. The parking garage would fall within the viewshed of this property, but views of the parking garage would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 6-20: Southwest Facade, Administration/Maintenance Building, 940 E. 132nd Street

#18: CYC - Dorothy Gautreaux Child Development Center, 975 E. 132nd Street

The final Altgeld Gardens-Philip Murray Homes Historic District nomination, approved by NPS and SHPO on April 13, 2022, no longer includes property #18, 975 E. 32nd Street as a contributing resource.

Figure 6-21: North Facade, CYC – Dorothy Gautreaux Child Development Center, 975 E. 132nd Street

#19: Children's Building, 941 E. 132nd Street

The Children's Building at 941 E. 132nd Street, shown in **Figure 6-22**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was constructed in 1944 for community and child care purposes and was designed by architectural firm Shaw Naess & Murphy. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is approximately 1150 feet west of the station parking garage. The parking garage would fall within the viewshed of this historic property, but views of the parking garage would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 6-22: North Facade, Children's Building, 941 E. 132nd Street

#20: Altgeld Gardens Community Building No. 2, 951 E. 132nd Place

The Altgeld Gardens Community Building No. 2 at 951 E. 132nd Place, shown in **Figure 6-23**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was constructed in 1972 and designed by architectural firm Pereira, Bernheim & Kahn. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is approximately 1250 feet west of the station parking garage. The parking garage would fall within the viewshed of this historic property, but views of the parking garage would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 6-23: North and East Facades, Altgeld Gardens Community Building No. 2, 951 E. 132nd Place

#21: Altgeld Gardens-Philip Murray Homes Historic District

This historic district, shown in **Figure 6-24**, was constructed in 1945 (Altgeld Gardens) and 1954 (Philip Murray Homes) and is eligible for listing in the NRHP under Criterion A for association with

community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. The boundary for the historic district, shown in **Figure 3-3**, is roughly 130th Place to the north, Greenwood Avenue to the east, 133rd Place to the south, and South Lawrence Avenue to the west. It includes the east curb of Greenwood Avenue and the entrance to Altgeld Gardens at Ellis Avenue.

Effects on this historic district were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. In response to their review of the 2021 *Eligibility Report*, the Illinois SHPO provided a letter dated March 18, 2021 stating: "Because the Red Line will now extend south of 130th Street, Altgeld Gardens will now be effected by this Undertaking. Therefore, our 2017 concurrence that Altgeld Gardens will not be adversely affected by this Undertaking is rescinded. We will continue to review the undertaking for its effects on Altgeld Gardens." The updated assessment for the historic district follows.

The RLE Project would construct an at-grade station and parking garage to the east of the historic district. The project footprint would be located in an area that once contained Altgeld Gardens residential buildings but is not included in the historic district boundary. All of the residences on these blocks were demolished in 2017 by the Chicago Housing Authority. In addition to closure of Old 130th Street across the project tracks, changes to traffic patterns along Ellis Avenue, Greenwood Avenue, and Old 130th Street would also occur as part of the project. All traffic to the station would use Ellis Avenue to Greenwood Avenue and turn left onto a new entrance between 130th Place and 132nd Street into the original parking lot in Block 11. Traffic exiting the station would be directed back onto 130th Place north to Old 130th Street and back to Ellis Avenue, minimizing traffic changes in the Altgeld Gardens-Philip Murray Homes Historic District.

There are 58 contributing properties to the Altgeld Gardens-Philip Murray Homes Historic District (AGPMH) within the project APE. Assessment of effects for these properties are detailed previously in this section**.** The number of historic properties within the AGPMH Historic District has been decreased from 59 to 58 per the final historic district nomination

These historic properties would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building or any of its character defining features. Other aspects of integrity would remain intact.

In order to accommodate design flexibility for the 130th Street station, the SHPO has defined parameters for a finding of no adverse effect. As stated in a letter provided by the SHPO on August 10, 2021, these parameters include:

- A parking garage of four stories or less.
- An option to use the existing 130th Place as the station entrance; SHPO accepts this option would eliminate on-street parking on Greenwood Avenue for one block between Ellis Avenue and 130th Place.
- An option to place the entrance to the station between 130th Place and 132nd Street into the original parking lot in Block 11; doing so would result in the elimination of two blocks of historically appropriate on-street parking along the east side of Greenwood Avenue and bring traffic deeper (farther south) into AGPMH. SHPO would accept this option as meeting the Secretary of the Interior's Standards and not adversely affecting AGPMH if residents of AGPMH are also in favor.

These design parameters were the result of a meeting between FTA, CTA, and SHPO on July 26, 2021. The meeting presentation, additional renderings, meeting minutes, and SHPO review letter are included in this document as **Appendix Q**.

Following these parameters, the project would have no adverse effect on the historic district or any of its contributing properties.

Figure 6-24: Altgeld Gardens-Philip Murray Homes Historic District, view west at 130th Street and Ellis Avenue

Section 7 - Effects Remaining after Mitigation

In consultation with the SHPO and other consulting parties, no adverse effects were found, and no mitigation measures were required.

7.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no effect on historic and cultural resources as a result of the No Build Alternative.

7.2 Union Pacific Railroad Alternative - Preferred Alignment

There would be no adverse effect on historic and cultural resources as a result of the Preferred Alignment.

Section 8 - Section 106 Consultation Process

In accordance with requirements for consultation established in Section 106 of the NRHP, four distinct rounds of coordination occurred during the RLE Project since publication of the Draft EIS: initiation activities, identification of historic properties, assessment of effects, and resolution of adverse effects. Each outreach effort is described in the following sections.

8.1 Initiation Activities

Appendix Q of the Draft EIS describes the initial distribution of invitations to participate in 2012.

In November 2020, FTA sent invitation letters to three additional Native American tribes to inform them of the process and request assistance in identifying areas with potential cultural and/or religious significance. Letters were sent to the following nations: Kickapoo Tribe of Oklahoma, Little Traverse Bay Bands of Odawa Indians, and Menominee Indian Tribe of Wisconsin.

Due to the time passed between the Draft EIS and the selection of the Preferred Alignment and the relocation of the 130th Street station, CTA and FTA reviewed the previous consulting party list for potential additions. In November 2020, CTA and FTA sent invitation letters to potential consulting parties that were not included in the Section 106 consultation for the Draft EIS. New invitees included: By the Hand Club Altgeld-Murray, Carver Military Academy High School, Chicago Housing Authority, People for Community Recovery, Red Line Extension Coalition, TCA Health, Pullman Civic Organization, Kickapoo Tribe of Oklahoma, Little Traverse Bay Bands of Odawa Indians, Menominee Indian Tribe of Wisconsin. In February 2021, the Greater Roseland Chamber of Commerce contacted CTA with a request to participate in the Section 106 process as a consulting party. This request was accepted by CTA and FTA. In April 2021, CTA sent an invitation letter to one additional consulting party, the National Park Service (NPS) Pullman National Monument. The list of organizations invited and their participation throughout the Draft and Final EIS process is included in **Appendix Q**. Based on all invitations sent to potential consulting parties, a total of 22 new and returning organizations accepted participation as consulting parties. The consulting parties consisted of state and local organizations and one Native American tribe.

8.2 Identification of Historic Properties

On February 18, 2021, CTA conducted the first consulting party meeting for the RLE Project since selection of the Preferred Alignment. This meeting included a summary of the RLE Project, and Section 106 activities conducted to date. Review and discussion focused on areas of APE expansion due to changes since the last Section 106 consultation meeting, corresponding historic property identification, and eligibility recommendations. The draft *RLE Section 106 Eligibility Report* was

submitted to consulting parties for review on February 12, 2021. The meeting presentation and minutes are provided in **Appendix Q**.

As part of this phase of coordination, written comments were received from six consulting parties. Comments received confirmed findings of the eligibility assessment and SHPO provided their concurrence on eligibility findings in March 2021. A summary of these comments and copies of the individual letters are included in **Appendix Q**.

After finalization of the Section 106 eligibility and effects reports in September 2021, revisions were made to the National Register nomination for the Altgeld Gardens-Philip Murray Homes Historic District and approved by NPS and the SHPO on April 13, 2022. These include a change to the historic district boundary and the historic status of one property within the APE. These changes have been noted within the Final EIS.

8.3 Assessment of Effects

On June 30, 2021, CTA held a consulting party meeting to discuss potential RLE Project effects on historic properties. On June 11, 2021, the draft RLE *Section 106 Effects Report* was emailed to consulting parties. The meeting presentation and minutes are provided in **Appendix Q**.

As part of this phase of coordination, written comments were received from four consulting parties. Except for comments from the SHPO, these consulting party comments confirmed findings of the *Effects Report*. SHPO provided their comments on the effects findings on July 9, 2021, confirming effects findings for historic properties outside AGPMH but requesting additional information on the RLE Project for evaluation of effects to AGPMH. A summary of these comments and copies of the individual letters are included in **Appendix Q**.

In order to address the SHPO response to the draft *Effects Report*, an additional break out meeting was held between CTA, FTA and the SHPO on July 26, 2021. As a result, on August 10, 2021, the SHPO provided parameters for a finding of no adverse effect. The *Effects Report* was revised to incorporate this information and was emailed to consulting parties for review with comments accepted from September 13 to September 27, 2021. No comments were received during this time. The meeting presentation, additional renderings, meeting minutes, and SHPO review letter are included in **Appendix Q**.

Based on the proposed design of the Preferred Alignment, the project would have no adverse effect on the 72 historic properties within the project APE. This assumes incorporation of design parameters defined by the SHPO at 130th Street station for a finding of no adverse effect. As stated in a letter provided by the SHPO on August 10, 2021, these parameters include:

- A parking garage of four stories or less.
- Option to use the existing 130th Place as the station entrance. The SHPO accepts this option would eliminate on-street parking on Greenwood Avenue for one block between Ellis Avenue and 130th Place.
- Option to place the entrance to the station between 130th Place and 132nd Street into the original parking lot in Block 11. Doing so would result in the elimination of two blocks of historically appropriate on-street parking along the east side of Greenwood Avenue and bring traffic deeper (farther south) into AGPMH. The SHPO would accept this option as meeting the Secretary of the Interior's Standards and not adversely affecting AGPMH if residents of AGPMH are also in favor.

Note that changes to the National Register nomination for the Altgeld Gardens-Philip Murray Homes Historic District do not affect the effects evaluations for historic properties by this project.

8.4 Resolution of Adverse Effects

No adverse effect was found and therefore no resolution of adverse effects is required.

Section 9 - References Cited

Chicago Transit Authority (CTA). 2016. Chicago Red Line Extension Draft Environmental Impact Statement and Section 4(f) Evaluation. Available at https://www.transitchicago.com/rle/drafteis/. Accessed on October 28, 2020.

Sullivan, R.G., Meyer, M.E., and O'Rourke, D.J. 2018. Comparison of Visual Impact Analysis under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act. Accessed at: https://www.fs.fed.us/nrs/pubs/gtr/gtr-nrs-p-183papers/20-sullivan-VRS-gtr-p-183.pdf. Accessed on: December 13, 2021.

Section 106 Effects Report, September 2021

- Appendix A - Section 106 Eligibility Report, September 2021
  - Appendix A - Survey Forms
  - Appendix B - (See Section 106 Effects Report, September 2021, Appendix B)
  - Appendix C - RLE Archeological Resources, December 2020
  - Appendix D - Altgeld Gardens-Philip Murray Homes Correspondence
- Appendix B - RLE Eligibility and Effects Summary Report, September 29, 2016
- Appendix C - Survey form for George William Curtis Public School, 11445 S. State Street
- Appendix D - Documentation of SHPO Meeting on July 26, 2021 and Follow-Up Materials

Red Line Extension Project

Section 106 Final Effects Report

September 2021

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Version 1.0

Table of Contents

Section 1 - Executive Summary **1**

1.1 Draft EIS 1

1.2 Preferred Alignment 2

1.3 Effects Findings 2

Section 2 - Project Summary **4**

2.1 Project Description 4

2.2 Area of Potential Effects 4

2.3 Identification of Historic Properties 5

Section 3 - Assessment of Effects on Historic Properties **11**

3.1 Summary of Effects 11

3.2 Effects Due to Noise and Vibration 14

3.3 Effects on Historic Properties in the Project APE 15

Appendices **44**

Appendices

Appendix A – *RLE Section 106 Eligibility Report*, June 2021

Appendix B – *RLE Eligibility and Effects Summary Report*, September 19, 2016

Appendix C – Survey form for George William Curtis Public School, 11445 S. State Street

Appendix D – Documentation of SHPO Meeting on July 26, 2021 and Follow-Up Materials

Figures

Figure 2-1: RLE Project APE 8
Figure 2-2: Expanded APE at Michigan Avenue station 9
Figure 2-3: Expanded APE at 130th Street station 10

Figure 3-1: Eclectic Neo-Traditional Home, 444 W. 100th Place 16
Figure 3-2: Fire Department Engine Company 93 17
Figure 3-3: Roseland Pumping Station 18
Figure 3-4: Church at 10920 S. Princeton Avenue 19
Figure 3-5: Roseland Community Hospital Nurses Home 20
Figure 3-6: North Facade, Former Venetian Hall 21
Figure 3-7: Existing view west along Kensington Avenue from the Venetian Hall 22
Figure 3-8: View west along Kensington Avenue from the Venetian Hall 22
Figure 3-9: West Facade, 11431-11433 S. Michigan Avenue 23
Figure 3-10: Existing view south along Michigan Avenue from 114th Place 24
Figure 3-11: View south along Michigan Avenue from 114th Place 24
Figure 3-12: North and West Facades, 11445-11447 S. Michigan Avenue 25
Figure 3-13: West and South Facades, 11451 S. Michigan Avenue 26
Figure 3-14: View south along Michigan Avenue from 115th Street 27
Figure 3-15: View south along Michigan Avenue from 115th Street 27
Figure 3-16: South and East Facades, 11452 S. Indiana Avenue 28
Figure 3-17: West Facade, Scanlan Elementary, 11725 S. Perry Avenue 29
Figure 3-18: West Facade, George William Curtis Public School, 11445 S. State Street 30
Figure 3-19: West Facade, Carver Military Academy High School, 13100 S. Doty Avenue 31
Figure 3-20: Altgeld Gardens Residences, view west from Greenwood Avenue and 132nd Street ... 33
Figure 3-21: Existing view from Greenwood Avenue looking east 34
Figure 3-22: Conceptual rendering of Project from Greenwood Avenue looking east 34
Figure 3-23: Existing view from Ellis Avenue looking northeast between residential buildings 35
Figure 3-24: Conceptual rendering of Project from Ellis Avenue 35
Figure 3-25: Northwest Facade, By the Hand Club, 13015 S. Ellis Avenue 36
Figure 3-26: Northeast Facade, Grocery/Retail Building, 13100 S. Ellis Avenue 37
Figure 3-27: Southwest Facade, Administration/Maintenance Building, 940 E. 132nd Street 38
Figure 3-28: North Facade, CYC – Dorothy Gautreaux Child Development Center, 975 E. 132nd Street 39
Figure 3-29: North Facade, Children's Building, 941 E. 132nd Street 40
Figure 3-30: North and East Facades, Altgeld Gardens Community Building No. 2, 951 E. 132nd Place 41
Figure 3-31: Altgeld Gardens Historic District, view west at 130th Street and Ellis Avenue 43

Tables

Table 1-1: Draft EIS Findings for NRHP-Eligible Properties in the APE - Union Pacific Railroad Alternative East and West Options 2
Table 2-1: Historic Properties Identified in Project APE 6
Table 3-1: Summary of Effects on Historic Properties in the Project APE 12

Section 1 - Executive Summary

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider effects on historic properties from their actions. As stated in 36 CFR § 800, the Section 106 process "seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation" (36 CFR § 800.1(a)). The process is designed to identify historic properties which may be affected by the undertaking, assess effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. The Federal Transit Administration (FTA) is serving as the lead federal agency for the Red Line Extension (RLE) Project and is responsible for Section 106 compliance.

This document summarizes information previously provided on historic and cultural resources affected by the RLE Project and Section 106 consultation conducted to date. Such information can be found in the RLE Draft Environmental Impact Statement (EIS) and is summarized in the *Eligibility and Effects Summary Report* (CTA 2016) included in **Appendix B**. The Chicago Transit Authority (CTA) selected a Preferred Alignment after Section 106 consultation had been completed (in 2017). The purpose of this document is to continue consultation with the State Historic Preservation Office (SHPO) and other identified Consulting Parties on refined project elements presented in the June 2021 *RLE Section 106 Eligibility Report* (CTA 2021, **Appendix A**) that result in an updated assessment of effects. This Effects Report reviews and updates findings from the Draft EIS and presents an assessment of effects for each historic property located within the expanded Area of Potential Effect (APE).

1.1 Draft EIS

Following identification of historic properties and in consultation with the SHPO and Consulting Parties, FTA and CTA assessed effects for each property that was listed in the National Register of Historic Places (NRHP) or determined eligible for listing. The effects assessment completed for the Draft EIS in 2016 included review of specific direct and indirect impacts resulting from specific project elements to determine if they might alter the characteristics that qualify properties for inclusion in the NRHP. Results of the 2016 effects assessment are summarized in **Table 1-1**.

Table 1-1: Draft EIS Findings for NRHP-Eligible Properties in the APE - Union Pacific Railroad Alternative East and West Options

Map ID	Address	Description	Union Pacific Railroad Alternative East Option Effects Finding	Union Pacific Railroad Alternative West Option Effects Finding
1	444 W. 100th Place	Eclectic Neo-Traditional Home	No Historic Properties Affected	No Historic Properties Affected
2	324 W. 104th Street	Fire Department Engine Company 93	No Historic Properties Affected	No Historic Properties Affected
3	351 W. 104th Street	Roseland Pumping Station	No Adverse Effect	No Historic Properties Affected
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church	No Historic Properties Affected	No Historic Properties Affected
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home	No Historic Properties Affected	No Historic Properties Affected
6	133-139 E. Kensington Avenue	Former Venetian Hall	No Historic Properties Affected	No Historic Properties Affected
21	Multiple	Altgeld Gardens Historic District	No Historic Properties Affected	No Historic Properties Affected

1.2 Preferred Alignment

Project changes and refinements associated with the selection of the Preferred Alignment require review and update of effects on the historic properties identified in the Draft EIS. It has also resulted in expansion of the APE in two locations. Details are presented in the *RLE Section 106 Eligibility Report* (CTA 2021, **Appendix A**). Sixty previously identified historic properties, including one historic district, were found within the expanded APE. In addition to the six historic properties recommended eligible in the Draft EIS, seven properties within the expanded APE were recommended as eligible for listing in the NRHP. In total, 73 historic properties exist within the Draft EIS APE and the expanded APE (hereafter referred to as the project APE).

1.3 Effects Findings

Based on the proposed design of the Preferred Alignment, the project would have no adverse effect on the 73 historic properties within the project APE. This assumes incorporation of design parameters defined by the SHPO at 130th Street station for a finding of no adverse effect. As stated in a letter provided by the SHPO on August 10, 2021, these parameters include:

- A parking garage of 4-stories or less.
- Option to use existing 130th Place as the station entrance. The SHPO accepts this option would eliminate on-street parking on Greenwood Avenue for one block between Ellis Avenue and 130th Place.
- Option to place the entrance to the station at the historic curb cut into the original parking lot in Block 11 and creates 132nd Place. Doing so would result in the elimination of two blocks of historically appropriate on-street parking along the east side of Greenwood Avenue and bring traffic deeper (further south) into Altgeld Gardens-Phillip Murray Homes (AGPMH). The SHPO would accept this option as meeting the Secretary of the Interior's Standards and not adversely affecting AGPMH if residents of AGPMH are also in favor.

These design parameters were the result of a meeting between FTA, CTA, and SHPO on July 26, 2021. The meeting presentation, additional renderings, meeting minutes, and SHPO review letter are included in this document as **Appendix D**.

Section 2 - Project Summary

2.1 Project Description

The RLE Project would extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would be elevated from 95th to 119th Streets, at-grade south of 119th Street to 130th Street, and would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus connections and parking facilities. The RLE Project would also provide a modern, efficient car storage yard and shop facility near 120th Street.

The Preferred Alignment, selected in 2018 after publication of the Draft EIS, is a hybrid of the Union Pacific Railroad (UPRR) Alternative East and West Options presented in the Draft EIS. North of 108th Place, the Preferred Alignment follows the UPRR West Option and then south of 108th Place it follows the UPRR East Option to 119th Street. South of 119th Street the UPRR East and West Options were on the same alignment to the terminus of the RLE Project north of 130th Street. The Preferred Alignment would continue along this same alignment to 130th Street but terminate on the south side of 130th Street.

A detailed description of the current conceptual level design is included in the *RLE Section 106 Eligibility Report* (CTA 2021, **Appendix A**). Conceptual level renderings are included in **Section 3**.

2.2 Area of Potential Effects

The APE is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16.d). The APE developed for the Draft EIS of the RLE Project was delineated after considering the location of the proposed alternative options; the potential for ground disturbance, demolition, or property taking; locations from which the undertaking may be visible and/or audible; and the scale and setting of the project. This APE was developed in consultation with CTA, FTA, and SHPO.

The APE developed for the Draft EIS contains parcels within one block of the centerline of the UPRR Alternative and widens to accommodate the locations of each park & ride and the proposed yard and shop beyond the one-block boundary. This APE included both the UPRR East Option and West Option. Project changes and refinements associated with the Preferred Alignment have resulted in expansion of the APE in two locations:

- Michigan Avenue Station Refinement

  Two locations for the station parking garage are being considered. The locations are to the north and to the south of the UPRR. The Draft EIS Section 106 APE had only included the south option and now the APE is expanding to include the north option. The selection of the station parking garage location is dependent on confirmation of availability of parcels and future coordination with the City of Chicago. The APE has been expanded one block to the north and east to include the north option. The APE has also been expanded to one full block in the south and west to adequately address potential effects in these areas. See **Figure 3-2**.

- 130th Street Station Relocation

  Following relocation of the 130th Street station south of 130th Street, the APE has been expanded to include the full site under consideration for construction and an approximate buffer of a quarter mile, except at visual obstructions where it is slightly truncated. This area is based on building density, height of the proposed work, visual observations on site, intended to encompass changes in traffic, noise, and vibration, caused by the project. See **Figure 3-3**.

2.3 Identification of Historic Properties

In total, 73 historic properties have been identified in the APE for the RLE Project This includes one historic district and the 59 residences and other buildings contributing to that district. These properties are listed in **Table 2-1** below. See **Figures 2-1**, **2-2**, and **2-3** for maps of these historic properties.

The Illinois SHPO has reviewed and concurred with eligibility recommendations for properties #1 through #11 and #13. Property #12, George William Curtis Public School at 11445 S. State Street, was reevaluated for eligibility due to a Consulting Party request and is recommended by CTA as eligible for listing in NRHP under criterion C for architecture and association with Chicago Board of Education Architect W. August Fiedler. See the updated evaluation form for this historic property in **Appendix C**. In a letter dated July 9, 2021, the Illinois SHPO concurred with this recommendation for eligibility and stated that Roseland Pumping Station, Scanlan Elementary School, George William Curtis Public School, and Carver Military Academy High School be considered eligible under Criterion A as well as Criterion C at the local level of significance. This report has been updated accordingly. Note that properties #14 through #20 are contributing resources in the Altgeld Gardens-Philip Murray Homes Historic District. Their NRHP status had already been confirmed by the SHPO, initially on October 22, 1992, under Criterion A for Community Planning and Development, and updated on March 29, 2018 under the following Criteria:

- Criterion A for Community Planning and Development, Politics/Government, and Social History
- Criterion B for association with resident Hazel Johnson, widely recognized as a founder of the environmental justice movement of the mid- to late-twentieth century. Her organization, People for Community Recovery, worked to enhance the quality of life of residents living in communities affected by environmental pollution.
- Criterion C for Architecture including town planning, public housing, and modern architecture.

Table 2-1: Historic Properties Identified in Project APE

Map ID	Address	Description	NRHP Status
1	444 W. 100th Place	Eclectic Neo-Traditional Home	Eligible for Listing in NRHP, Criterion C
2	324 W. 104th Street	Fire Department Engine Company 93	Eligible for Listing in NRHP, Criterion C
3	351 W. 104th Street	Roseland Pumping Station	Eligible for Listing in NRHP, Criteria A and C
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church	Eligible for Listing in NRHP, Criteria A and C
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home	Eligible for Listing in NRHP, Criterion A
6	133-139 E. Kensington Avenue	Former Venetian Hall	Eligible for Listing in NRHP, Criterion A
7	11431-11433 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criterion A
8	11445-11447 S. Michigan Avenue	Mixed-Use Commercial/Residential	Eligible for Listing in NRHP, Criteria A and C
9	11451 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criteria A and C
10	11452 S. Indiana Avenue	Single-Family Residence	Eligible for Listing in NRHP, Criterion C
11	11725 S. Perry Avenue	Scanlan Elementary School	Eligible for Listing in NRHP, Criteria A and C
12	11445 S. State Street	George William Curtis Public School	Eligible for Listing in NRHP, Criteria A and C

Map ID	Address	Description	NRHP Status
13	13100 S. Doty Avenue	Carver Military Academy High School	Eligible for Listing in NRHP, Criteria A and C
14	Varies*	53 Residences Contributing to Altgeld Gardens-Philip Murray Homes (AGPMH) National Register Historic District	Contributing to NRHP District, Criteria A, B, and C
15	13015 S. Ellis Avenue	By The Hand Club, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C
16	13100 S. Ellis Avenue	Grocery / Retail Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C
17	940 E. 132nd Street	Administration / Maintenance Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C
18	975 E. 132nd Street	CYC - Dorothy Gautreaux Child Development Center, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C
19	941 E. 132nd Street	Children's Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C
20	951 E. 132nd Place	Altgeld Gardens Community Building No. 2, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C
21	Multiple (Public Housing Project)	Altgeld Gardens-Philip Murray Homes Historic District	Previously Determined Eligible for NRHP, Criteria A, B, and C

*Residences within the APE which contribute to the Altgeld Gardens-Philip Murray Homes Historic District include: 13022 S. Greenwood Avenue, 13030 S. Greenwood Avenue, 13072 S. Greenwood Avenue, 13200 S. Greenwood Avenue, 13240 S. Greenwood Avenue, 13088 S. Ellis Avenue, 13016 S. Ellis Avenue, 13023 S. Ellis Avenue, 13028 S. Ellis Avenue, 13047 S. Ellis Avenue, 13052 S. Ellis Avenue, 13059 S. Ellis Avenue, 13064 S. Ellis Avenue, 13083 S. Ellis Avenue, 13088 S. Ellis Avenue, 13101 S. Ellis Avenue, 13133 S. Ellis Avenue, 13201 S. Ellis Avenue, 13218 S. Ellis Avenue, 13226 S. Ellis Avenue, 13230 S. Ellis Avenue, 13262 S. Ellis Avenue, 13286 S. Ellis Avenue, 13241 S. Ellis Avenue, 13250 S. Ellis Avenue, 929 E 130th Place, 933 E 130th Place, 932 E. 131st Street, 967 E 132nd Place, 1000 E. 132nd Street, 1001 E. 132nd Street, 1008 E. 132nd Street, 1009 E. 132nd Street, 1032 E. 132nd Street, 1033 E. 132nd Street, 1044 E. 132nd Street, 1045 E. 132nd Street, 1068 E. 132nd Street, 1069 E. 132nd Street, 900 E. 133rd Street, 972 E. 133rd Street, 1000 E. 133rd Street, 1008 E. 133rd Street, 1032 E. 133rd Street, 1044 E. 133rd Street, 1068 E. 133rd Street, 901 E. 130th Place, 13029 S. Drexel Avenue, 13053 S. Drexel Avenue, 13065 S. Drexel Avenue, 900 E. 131st Street, 901 E. 131st Street, 13100 S. Ingleside Avenue..
Source: JLK Architects

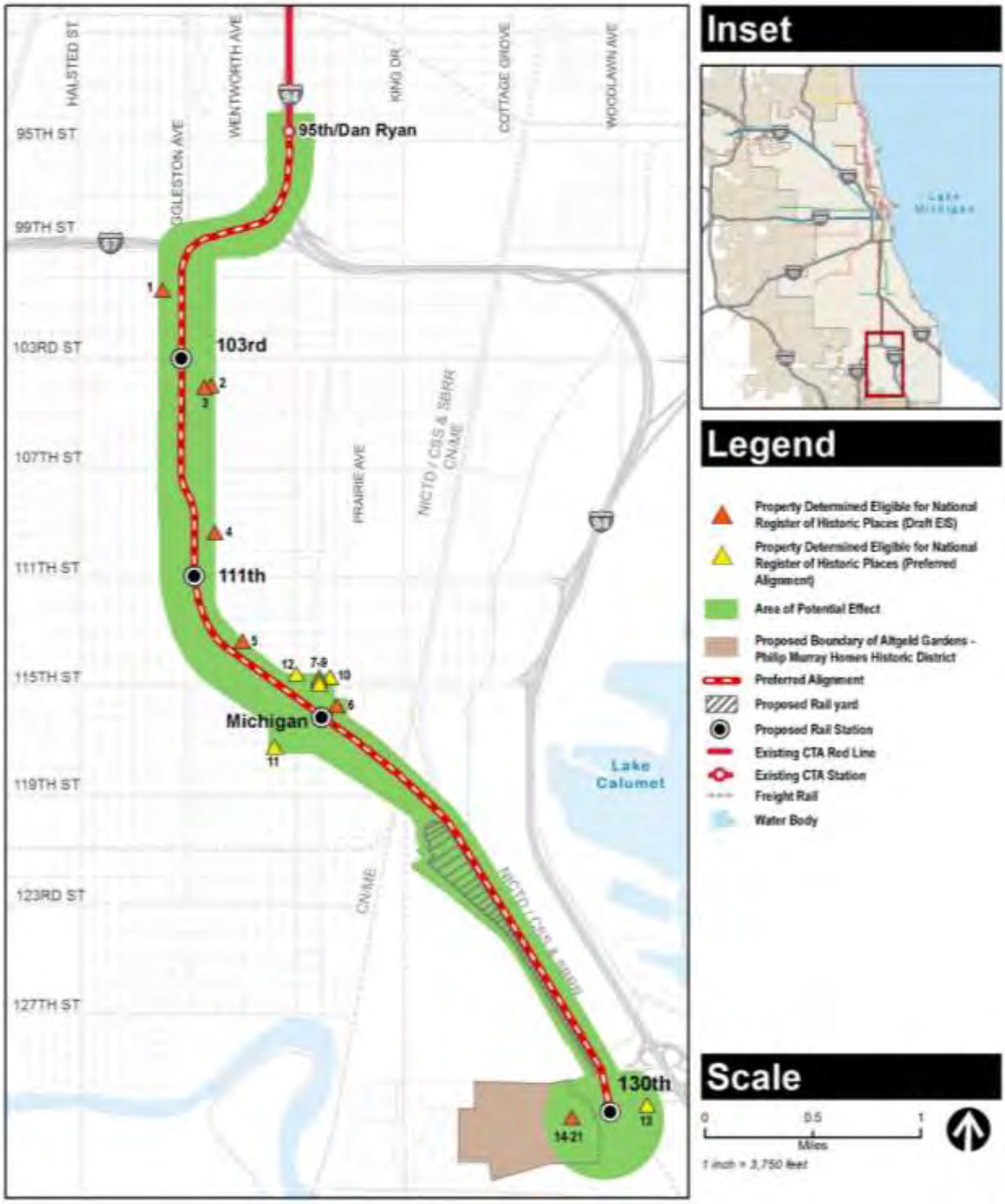

Figure 2-1: RLE Project APE

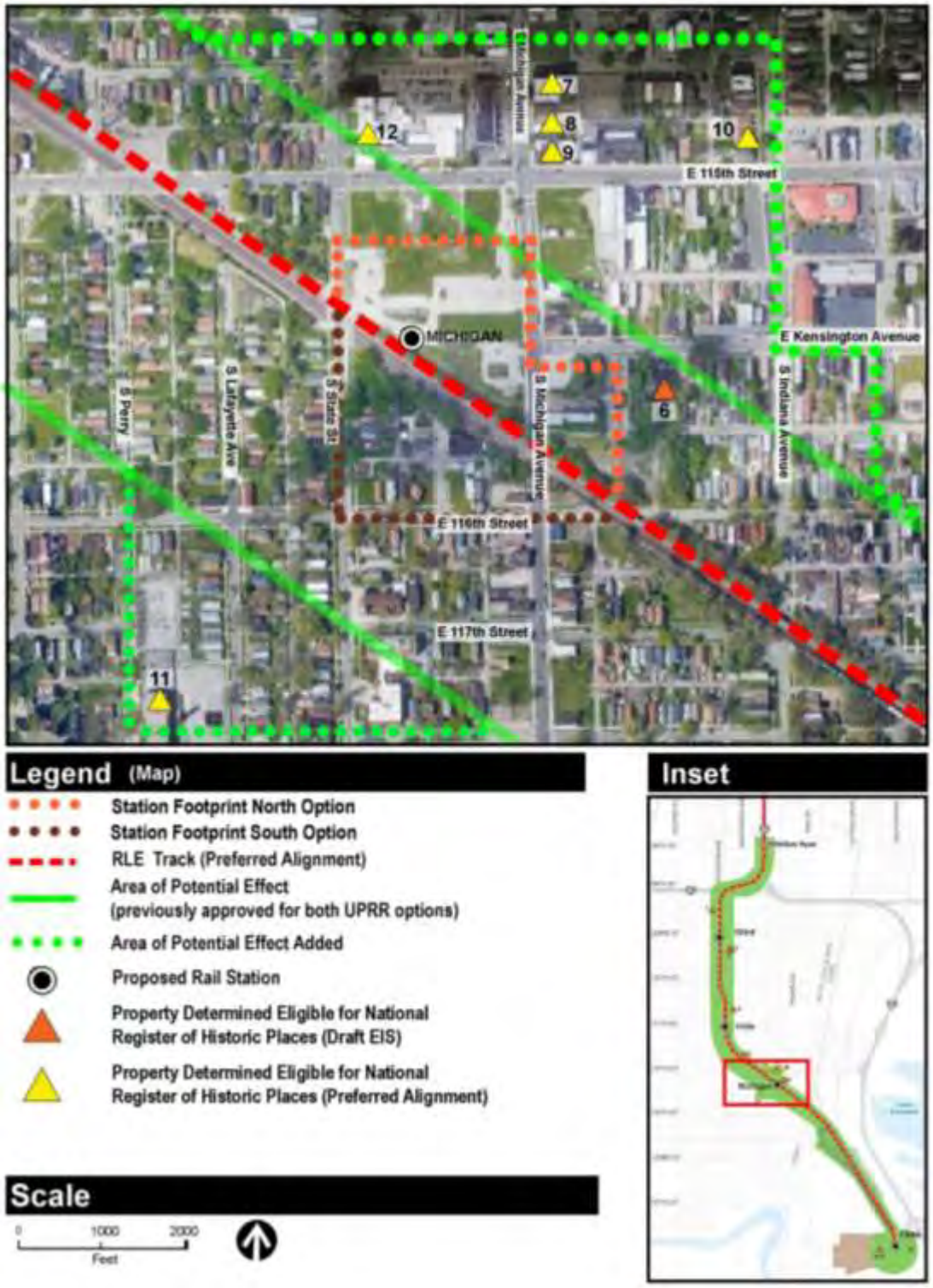

Figure 2-2: Expanded APE at Michigan Avenue station

Figure 2-3: Expanded APE at 130th Street station

Section 3 - Assessment of Effects on Historic Properties

3.1 Summary of Effects

The NHPA implementing regulations established criteria to evaluate whether an undertaking will have an adverse effect on historic properties. An adverse effect occurs when an undertaking "may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" (36 CFR 800.5.a). Therefore, an adverse effect finding will be applied to any historic property that would be subject to one or more of the following criteria listed below, but not limited to (36 CFR 800.5.a.2):

i. Physical destruction or damage to all or part of the historic property.

ii. Alteration that is inconsistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

iii. Removal of the property from its historic location.

iv. Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant features.

v. Change to the character of the property's use or the physical features within the property's setting that contribute to its significance.

vi. Neglect of a property that causes deterioration.

vii. Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation.

Effects can be direct, indirect, or cumulative. If an adverse effect is found, the FTA would consult with the Illinois SHPO and other Consulting Parties to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on the historic property (36 CFR 800.6.a). For the Draft EIS, the FTA and CTA, in consultation with the Illinois SHPO and other Consulting Parties, found no adverse effect for the project and resolution of adverse effects was not required. Individual findings of effect for each historic property from the Draft EIS, including evaluations of "no effect" and "no adverse effect" are summarized in **Table 1-1.**

Under the National Environmental Policy Act of 1969 (NEPA), visual impact assessment of a proposed undertaking includes consideration of scenic resources and scenic experiences of the people who view the landscape. Impacts include any modification of landforms or introduction of structures or other visual elements that negatively or positively affect the visual character of the landscape and the visual experience of persons viewing the landscape. Therefore, the NEPA visual impact assessment for a project may result in impacts and require mitigation while Section 106 for the same project may find no adverse effect on historic properties due to visual impacts if they do not alter the characteristics which qualify the property for inclusion in the NRHP.

Assessment of effects for the project follow in **Section 3.2** for all properties in regard to noise and vibration and **Section 3.3** for each historic property identified in the project APE. In all, the project would result in no adverse effect to historic properties. **Table 3-1** summarizes the effects for each historic property in the project APE.

Table 3-1: Summary of Effects on Historic Properties in the Project APE

Map ID	Address	Description	NRHP Status	Assessment of Effect
1	444 W. 100th Place	Eclectic Neo-Traditional Home	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
2	324 W. 104th Street	Fire Department Engine Company 93	Eligible for Listing in NRHP, Criterion C	No Adverse Effect
3	351 W. 104th Street	Roseland Pumping Station	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
6	133-139 E. Kensington Avenue	Former Venetian Hall	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
7	11431-11433 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criterion A	No Adverse Effect
8	11445-11447 S. Michigan Avenue	Mixed-Use Commercial/Residential	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
9	11451 S. Michigan Avenue	Commercial	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
10	11452 S. Indiana Avenue	Single-Family Residence	Eligible for Listing in NRHP, Criterion C	No Adverse Effect

Map ID	Address	Description	NRHP Status	Assessment of Effect
11	11725 S. Perry Avenue	Scanlan Elementary School	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
12	11445 S. State Street	George William Curtis Public School	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
13	13100 S. Doty Avenue	Carver Military Academy High School	Eligible for Listing in NRHP, Criteria A and C	No Adverse Effect
14	Varies (*see **Table 2-1**)	53 Residences Contributing to Altgeld Gardens-Philip Murray Homes (AGPMH) National Register Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
15	13015 S. Ellis Avenue	By The Hand Club, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
16	13100 S. Ellis Avenue	Grocery / Retail Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
17	940 E. 132nd Street	Administration / Maintenance Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
18	975 E. 132nd Street	CYC - Dorothy Gautreaux Child Development Center, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
19	941 E. 132nd Street	Children's Building, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
20	951 E. 132nd Place	Altgeld Gardens Community Building No. 2, included in AGPMH Historic District	Contributing to NRHP District, Criteria A, B, and C	No Adverse Effect
21	Multiple (Public	Altgeld Gardens-Philip	Previously Determined	No Adverse

Map ID	Address	Description	NRHP Status	Assessment of Effect
	Housing Project)	Murray Homes Historic District	Eligible for NRHP, Criteria A, B, and C	Effect

Source: JLK Architects

3.2 Effects Due to Noise and Vibration

In the NEPA analysis for the project, a general noise and vibration assessment was completed for the Draft EIS and a noise and vibration assessment at sensitive receivers in the vicinity of the relocated 130th Street station is being undertaken with the Final EIS using the updated FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).

The Draft EIS found the project would result in no noise or vibration impacts due to construction, no permanent vibration impacts, and no permanent noise impacts after mitigation. Mitigation would consist of construction of a noise barrier approximately four feet in height (measured from the top surface of the concrete deck) to reduce noise transmission at and below the height of the tracks. Therefore, historic properties identified within the APE north of the 130th Street station would not be affected by project noise and vibration.

For the relocated 130th Street station, the noise assessment assumed that rail operations along the RLE would consist of electric-powered train types similar to those that currently operate along the Red Line corridor. In the vicinity of the 130th Street station, it was assumed that the trains would operate at-grade on ballast-and-tie track with continuous welded rail. In addition, the noise predictions were based on hourly train volumes and consists (i.e., the number of cars per train) along with train speed profiles (i.e., speeds by location along the corridor) provided by CTA. The predicted noise exposure levels were adjusted for distance to nearby sensitive receivers using FTA methodology and then compared to the existing noise exposure levels at these receivers to assess noise impact based on FTA criteria.

Noise impact from future train operations was assessed at four representative sensitive receiver locations near the relocated 130th Street station. These locations include the TCA Health building, the By the Hand Club, the closest residential buildings to the RLE Project in Altgeld Gardens, and the Carver Military Academy High School.

The noise analysis found there would be no noise impacts and no mitigation measures required due to the 130th Street station location. Similarly, for vibration, there would be no impacts from the 130th Street station relocation. The closest sensitive receivers are well beyond the applicable FTA vibration impact screening distances from the project right-of-way or property line, which are 200 feet for residential receivers and 120 feet for institutional receivers. The historic properties

identified within the APE at the 130th Street station would not be affected by project noise and vibration.

Construction activities in the 130th Street station relocation area would include construction of at-grade track as well as park & ride facility and station. As determined in the Draft EIS, these construction activities could result in noise impact at sensitive receivers if they occur within distances of 50 feet during daytime hours and 150 feet during nighttime hours. For vibration, it was determined that most construction equipment can be operated without risk of damage at distances of 15 feet or greater from buildings. Because sensitive receivers are located well beyond these distances, construction noise and vibration levels would not exceed FTA-recommended limits in the vicinity of the 130th Street station relocation. Therefore, there would not be noise or vibration impacts from construction; this has not changed from the Draft EIS.

3.3 Effects on Historic Properties in the Project APE

Effects on historic properties identified in the project APE are discussed individually in the following section. Based on the Preferred Alignment project refinements and the 2019 D.C. district court ruling on "direct" vs "indirect" effects, effect findings for the historic properties presented in the Draft EIS have been reviewed and updated. The project would result in visual changes along the Preferred Alignment and cause temporary changes in vibration, noise, and traffic patterns during construction. Although these changes would have direct and indirect impacts on historic properties in the APE, they would not compromise the integrity of historic properties in the APE, nor would they diminish the characteristics that qualify them for inclusion in the NRHP. Therefore, the identified impacts do not rise to the level of an adverse effect.

3.3.1 #1: Eclectic Neo-Traditional Home, 444 W. 100th Place

The Eclectic Neo-Traditional Home at 444 W. 100th Place, shown in **Figure 3-1**, is NRHP-eligible under Criterion C for architecture. The project's elevated track would be approximately one block east of the property. It would fall within the viewshed of this historic property but would be partially blocked by surrounding buildings and trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No vibration or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts as a result of the proximity of the project's elevated track in this location. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building or any of its character defining architectural features which qualify it

for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-1: Eclectic Neo-Traditional Home, 444 W. 100th Place

3.3.2 #2: Fire Department Engine Company 93, 324 W. 104th Street

The fire station at 324 W. 104th Street, shown in **Figure 3-2**, is NRHP-eligible under Criterion C for architecture. The project's elevated track would be approximately 300 feet west of the property. It would fall within the viewshed of this historic property but would be partially blocked by trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts as a result of the proximity of the project's elevated track in this location. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building or any of its character defining architectural features

which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-2: Fire Department Engine Company 93

3.3.3 #3: Roseland Pumping Station, 351 W. 104th Street

The Roseland Pumping Station, shown in **Figure 3-3**, is NRHP-eligible under Criterion A for association with broad patterns in history and Criterion C for architecture. The project's elevated track would be approximately 150 feet west of the property. It would fall within the viewshed of this historic property but would be partially blocked by trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no adverse effect" for the UPRR East Option and "no historic properties affected" for the UPRR West Option. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The project's elevated track would fall within the viewshed of this historic property. The property would encounter direct visual impacts as a result of the proximity of the project's elevated track in this location. This would affect the property's integrity of setting; however, this impact would not compromise the integrity of the building, its association with broad patterns in history, or any of its architectural character defining features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-3: Roseland Pumping Station

3.3.4 #4: Romanesque Revival-Style Church, 10920 S. Princeton Avenue

The church at 10920 S. Princeton Avenue, shown in **Figure 3-4**, is NRHP-eligible under Criterion A for association with the community's former Dutch population and under Criterion C for architecture. The project's elevated track would be approximately 350 feet southwest of the property. It would fall within the viewshed of this historic property but would be partially blocked by surrounding smaller buildings and trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts as a result of the proximity of the project's elevated track in this location. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with the community's former Dutch population, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-4: Church at 10920 S. Princeton Avenue

3.3.5 #5: Roseland Community Hospital Nurses Home, 11321 S. Wentworth Avenue

Constructed by the Roseland Community Hospital, this property formerly served as an educational facility for nurses. It is shown in **Figure 3-5** and is eligible for listing in the NRHP under Criterion A for association with education. The project's elevated track would be approximately 350 feet southwest of the property. It would fall within the viewshed of this historic property but would be partially blocked by surrounding smaller buildings and trees.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the elevated tracks. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with education, or any of its character defining features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-5: Roseland Community Hospital Nurses Home

3.3.6 #6: Former Venetian Hall, 133-139 E. Kensington Avenue

This former social venue and performance hall for Italian Americans, shown in **Figure 3-6**, has been converted into a church. It is eligible for listing in the NRHP under Criterion A for its original use as a social venue for area residents in the early twentieth century. The project's elevated track would be approximately 150 feet southwest of the property. Smaller buildings and a vacant surface lot are situated between the building and the elevated track. For north and south options, the Michigan Avenue station would be along the elevated track, approximately 360 feet to the southwest. For the north option for this station, the parking garage associated with this station would be approximately 400 feet to the west. The parking garage would fall within the viewshed of the historic property. For the south option, the parking garage would be approximately 500 feet southwest of the property and would be partially blocked by the existing elevated UPRR structure. For both options, the kiss & ride would be approximately 150 feet to the west. It would fall within the viewshed of the historic property but be partially blocked by surrounding buildings and trees. See **Figures 3-7** and **3-8** for a conceptual rending of the view of this project from the Former Venetian Hall. Only the north option is depicted for it is expected to have the most visual impacts to this historic property.

Effects on this property were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. The updated assessment follows.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic use as a social venue, or any of its character defining features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-6: North Facade, Former Venetian Hall

Figure 3-7: Existing view west along Kensington Avenue from the Venetian Hall

Figure 3-8: View west along Kensington Avenue from the Venetian Hall showing conceptual rendering of the Michigan Avenue station and parking garage. North option is shown, as the south option would have lesser visual impact due to the parking garage being located beyond the existing elevated UPRR tracks.

3.3.7 #7: Commercial Building, 11431-11433 S. Michigan Avenue

The commercial building at 11431-11433 S. Michigan Avenue, shown in **Figure 3-9**, is eligible for listing in the NRHP under Criterion A for commerce due to its connection to Roseland's commercial district in the first half of the 20th century. The project's Michigan Avenue station would be approximately 2.5 blocks (925 feet) south of the property. For the north option, the parking garage would be approximately 1.5 blocks (430 feet) south of the property and for the south option, the parking garage would be approximately 2.5 blocks (1130 feet) south of the property. The station, parking garage, and kiss & ride would fall within the viewshed of this historic property, but for the south option, the view of the parking garage would be partially blocked by the project's elevated tracks and the existing UPRR line which is elevated at this location. See **Figures 3-10** and **3-11** for a conceptual rendering of the view of the project from this property.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with Roseland's commercial district, or any of its character defining features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-9: West Facade, 11431-11433 S. Michigan Avenue

Figure 3-10: Existing view south along Michigan Avenue from 114th Place

Figure 3-11: View south along Michigan Avenue from 114th Place showing conceptual rendering of Michigan Avenue station and parking garage (north option)

3.3.8 #8: Commercial Building, 11445-11447 S. Michigan Avenue

The mixed-use commercial/residential building at 11445-11447 S. Michigan Avenue, shown in **Figure 3-12**, is eligible for listing in the NRHP under Criterion A for commerce due to its connection to Roseland's commercial district in the first half of the 20th century and Criterion C for architecture. The project's Michigan Avenue station would be approximately 2 blocks south (900 feet) of the property. For the north option, the parking garage would be approximately 1 block (375 feet) south of the property and for the south option, the parking garage would be approximately 2 blocks (1100 feet) south of the property. The station, kiss & ride, and parking garage would fall within the viewshed of this historic property but for the south option, view of the parking garage would be partially blocked by the existing UPRR line which is elevated at this location.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with Roseland's commercial district, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-12: North and West Facades, 11445-11447 S. Michigan Avenue

3.3.9 #9: Commercial Building, 11451 S. Michigan Avenue

The commercial building at 11451 S. Michigan Avenue, shown in **Figure 3-13**, is eligible for listing in the NRHP under Criterion A for commerce due to its connection to Roseland's commercial district in the first half of the 20th century and Criterion C for architecture. The project's Michigan Avenue station would be approximately 1 ½ blocks (725 feet) south of the property. For the north option, the parking garage would be approximately ½ block (200 feet) south of the property and for the south option, the parking garage would be approximately 1 ½ blocks (900 feet) south of the property. The station, parking garage, and kiss & ride would fall within the viewshed of this historic property, but for the south option, the view of the parking garage would be partially blocked by the existing UPRR line which is elevated at this location. See **Figures 3-14** and **3-15** for a conceptual rendering of the view of the project from this property.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's historic association with Roseland's commercial district, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-13: West and South Facades, 11451 S. Michigan Avenue

Figure 3-14: View south along Michigan Avenue from 115th Street

Figure 3-15: View south along Michigan Avenue from 115th Street showing conceptual rendering of Michigan Avenue station and parking garage (north option)

3.3.10 #10: Single-Family Residence, 11452 S. Indiana Avenue

The residence at 11452 S. Indiana Avenue, shown in **Figure 3-16**, is eligible for listing in the NRHP under Criterion C for architecture. The project's Michigan Avenue station would be approximately ¼ mile (970 feet) southwest of the property. For the north option, the parking garage would be approximately 850 feet southwest of the property and for the south option, the parking garage would be approximately ¼ mile (1140 feet) southwest of the property. The parking garage may fall within the viewshed of this historic property but for both options the view would be partially blocked by surrounding buildings and trees. For the south option, the view would also be blocked by the existing UPRR line which is elevated at this location.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-16: South and East Facades, 11452 S. Indiana Avenue

3.3.11 #11: Scanlan Elementary School, 11725 S. Perry Avenue

The Classical Revival style school at 11725 S. Perry Avenue, shown in **Figure 3-17**, is eligible for listing in the NRHP under Criterion A for education and Criterion C for architecture. The project's Michigan Avenue station would be approximately ¼ mile (1360 feet) northeast of the property. The station and parking garage would fall within the viewshed of this historic property. For the south option, the parking garage would be approximately 700 feet northeast of the property and views of the garage would be partially blocked by surrounding smaller buildings and trees. For the north option, the parking garage would be approximately ¼ mile (1425 feet) northeast of the property and views of the parking garage would be partially blocked by the existing UPRR line, which is elevated at this location, and surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, its association with education, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-17: West Facade, Scanlan Elementary, 11725 S. Perry Avenue

3.3.12 #12: George William Curtis Public School, 11445 S. State Street

George William Curtis Public School, shown in **Figure 3-18**, is eligible for listing in the NRHP under Criterion A for education and Criterion C for architecture. The project's Michigan Avenue station would be approximately one block southeast of the property. The elevated track structure would be 250 feet from the property at its closest point and views of the tracks from this property would occur to the west along 115th Street and to the south along State Street. For the north option, the parking garage would be approximately 400 feet southeast of the property and fall within the viewshed for this historic property. For the south option, the parking garage would be approximately 700 feet southeast of the property and view of the parking garage would be partially blocked by the existing UPRR line which is elevated in this area.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the Michigan Avenue station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, its association with education, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-18: West Facade, George William Curtis Public School, 11445 S. State Street

3.3.13 #13: Carver Military Academy High School, 13100 S. Doty Avenue

Carver Military Academy High School at 13100 S. Doty Avenue, shown in **Figure 3-19**, is eligible for listing in the NRHP under Criterion A for education and Criterion C for architecture. The project's 130th Street station would be approximately 750 feet west of the property. The station and parking garage would fall within the viewshed of this historic property but views of the project would be partially blocked by trees. Old 130th Street would be permanently closed across the new project tracks, discontinuing its connection to S. Doty Avenue and Carver Military Academy High School. Vehicles traveling to Carver Military Academy High School would use the primary entrance at Greenwood Avenue to 132nd Street if coming from the north or Doty Avenue to 132nd Street if coming from the south.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting and access to the site would be altered; however, this impact would not compromise the integrity of the building, the building's association with education, a notable architect, or any of its character defining architectural features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this historic property.

Figure 3-19: West Facade, Carver Military Academy High School, 13100 S. Doty Avenue

3.3.14 #14: Residences Contributing to Altgeld Gardens-Philip Murray Homes Historic District

The Altgeld Gardens-Philip Murray Homes Historic District was constructed in 1945 (Altgeld Gardens) and 1954 (Philip Murray Homes) and is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. Fifty-three (53) residential buildings within Altgeld Gardens-Philip Murray Homes Historic District are located within the expanded project APE. The residential buildings are uniform in plan and elevation, but are oriented in various directions as shown in **Figure 3-20**. The buildings closest to the project area are along Greenwood Avenue between Ellis Avenue and 132nd Street and those at the northwest corner of 130th Place and Ellis Avenue. The project would fall within the viewshed from these properties and from some of the properties to the west via view corridors between buildings. The parking garage at the 130th Street station would be approximately 220 feet east of the closest residences along Greenwood Avenue. For properties further west of Greenwood Avenue, views of the project would be partially blocked by surrounding buildings and trees. See **Figures 3-21** through **3-24** for representative visual connections of properties closest to the project site. While these figures depict a three-story garage, **Appendix D** includes renderings of a four-story garage.

These historic properties would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify them for inclusion in the NRHP. The properties would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of these buildings, their association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town planning, or public housing design features which qualify them for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on these properties.

Figure 3-20: Altgeld Gardens Residences, view west from Greenwood Avenue and 132nd Street

Figure 3-21: Existing view from Greenwood Avenue looking east

Figure 3-22: Conceptual rendering of project from Greenwood Avenue looking east

Figure 3-23: Existing view from Ellis Avenue looking northeast between residential buildings

Figure 3-24: Conceptual rendering of project from Ellis Avenue looking northeast between residential buildings

3.3.15 #15: By The Hand Club, 13015 S. Ellis Avenue

The By the Hand Club, shown in **Figure 3-25**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was constructed in 1957 and the architect is not known. It is a unique example of Georgian Revival architecture in the community. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning and public housing. It is approximately 220 feet west of the station parking garage. While the parking garage would fall within the viewshed of this historic property, view of the parking garage would be partially blocked by surrounding trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town planning, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 3-25: Northwest Facade, By the Hand Club, 13015 S. Ellis Avenue

3.3.16 #16: Grocery/Retail Building, 13100 S. Ellis Avenue

The Grocery/Retail Building at 13100 S. Ellis Avenue, shown in **Figure 3-26**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was designed by notable architecture firm Keck and Keck and constructed in 1945. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is approximately 775 feet west of the station parking garage. The parking garage would fall within the viewshed of this building but would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, and Hazel Johnson or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 3-26: Northeast Facade, Grocery/Retail Building, 13100 S. Ellis Avenue

3.3.17 #17: Administration/Maintenance Building, 940 E. 132nd Street

The Administration/Maintenance Building at 940 E. 132nd Street, shown in **Figure 3-27**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was designed by the architectural firm Shaw, Naess & Murphy and constructed in 1944. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is over 960 feet west of the station parking garage. The parking garage would fall within the viewshed of this property, but views of the parking garage would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 3-27: Southwest Facade, Administration/Maintenance Building, 940 E. 132nd Street

3.3.18 #18: CYC - Dorothy Gautreaux Child Development Center, 975 E. 132nd Street

The CYC-Dorothy Gautreaux Child Development Center at 975 E. 132nd Street, shown in **Figure 3-28**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was constructed in 1979 and the architect is not known. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is approximately 850 feet west of the station parking garage. The parking garage would fall within the viewshed of this historic property but views of the parking garage would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 3-28: North Facade, CYC – Dorothy Gautreaux Child Development Center, 975 E. 132nd Street

3.3.19 #19: Children's Building, 941 E. 132nd Street

The Children's Building at 941 E. 132nd Street, shown in **Figure 3-29**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was constructed in 1944 for community and child care purposes and was designed by architectural firm Shaw Naess & Murphey. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is approximately 1150 feet west of the station parking garage. The parking garage would fall within the viewshed of this historic property but views of the parking garage would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 3-29: North Facade, Children's Building, 941 E. 132nd Street

3.3.20 #20: Altgeld Gardens Community Building No. 2, 951 E. 132nd Place

The Altgeld Gardens Community Building No. 2 at 951 E. 132nd Place, shown in **Figure 3-30**, is a contributing property in the Altgeld Gardens-Philip Murray Homes Historic District and is located within the expanded project APE. It was constructed in 1972 and designed by architectural firm Pereira, Bernheim & Kahn. It is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. It is approximately 1250 feet west of the station parking garage. The parking garage would fall within the viewshed of this historic property but views of the parking garage would be partially blocked by surrounding buildings and trees.

The property would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building, the building's association with Community Planning and Development, Politics/Government, Social History, Hazel Johnson, or any of the character defining architectural, town, or public housing design features which qualify it for listing in the NRHP. Other aspects of integrity would remain intact. Therefore, the project would have no adverse effect on this property.

Figure 3-30: North and East Facades, Altgeld Gardens Community Building No. 2, 951 E. 132nd Place

3.3.21 #21: Altgeld Gardens-Philip Murray Homes Historic District

This historic district, shown in **Figure 3-31**, was constructed in 1945 (Altgeld Gardens) and 1954 (Philip Murray Homes) and is eligible for listing in the NRHP under Criterion A for association with community planning and development, politics/government, and social history, Criterion B for association with resident Hazel Johnson, and Criterion C for architecture including town planning, public housing, and modern architecture. The boundary for the historic district, shown in **Figure 2-3**, is roughly 130th Place to the north, Greenwood Avenue to the east, 133rd Place to the south, and South Lawrence Avenue to the west. It includes the east curb of Greenwood Avenue and the entrance to Altgeld Gardens at Ellis Avenue.

Effects on this historic district were previously assessed in the Draft EIS and resulted in a finding of "no historic properties affected" for UPRR East and West Options. In response to their review of the 2021 Eligibility Report, the Illinois SHPO provided a letter dated March 18, 2021 stating: "Because the Red Line will now extend south of 130th Street, Altgeld Gardens will now be effected by this Undertaking. Therefore, our 2017 concurrence that Altgeld Gardens will not be adversely effected by this Undertaking is rescinded. We will continue to review the undertaking for its effects on Altgeld Gardens." The updated assessment for the historic district follows.

The RLE Project would construct an at-grade station and parking garage to the east of the historic district. The project footprint would be located in an area that once contained Altgeld Gardens residential buildings but is not included in the historic district boundary. All of the residences on these blocks were demolished in 2017 by the Chicago Housing Authority. In addition to closure of Old 130th Street across the project tracks, changes to traffic patterns along Ellis Avenue, Greenwood Avenue, and Old 130th Street would also occur as part of the project. All traffic to the station would use Ellis Avenue to Greenwood Avenue and turn left onto 130th Place. Traffic exiting the station would be directed back onto 130th Place north to Old 130th Street and back to Ellis Avenue, minimizing traffic changes in the Altgeld Gardens-Philip Murray Homes Historic District.

There are fifty-nine contributing properties to the Altgeld Gardens-Philip Murray Homes Historic District within the project APE. Assessment of effects for these properties are detailed above in **Sections 3.3.14** through **3.3.20.**

These historic properties would not be displaced by the project. No noise, vibration, or construction effects would affect the characteristics that qualify the property for inclusion in the NRHP. The property would encounter direct visual impacts due to its proximity to the 130th Street station as described above. This would affect its integrity of setting; however, this impact would not compromise the integrity of the building or any of its character defining features. Other aspects of integrity would remain intact.

In order to accommodate design flexibility for the 130th Street station, the SHPO has defined parameters for a finding of no adverse effect. As stated in a letter provided by the SHPO on August 10, 2021, these parameters include:

- A parking garage of 4-stories or less.
- Option to use existing 130th Place as the station entrance. The SHPO accepts this option would eliminate on-street parking on Greenwood Avenue for one block between Ellis Avenue and 130th Place.
- Option to place the entrance to the station at the historic curb cut into the original parking lot in Block 11 and creates 132nd Place. Doing so would result in the elimination of two blocks of historically appropriate on-street parking along the east side of Greenwood Avenue and bring traffic deeper (further south) into Altgeld Gardens-Phillip Murray Homes (AGPMH). The SHPO would accept this option as meeting the Secretary of the Interior's Standards and not adversely affecting AGPMH if residents of AGPMH are also in favor.

These design parameters were the result of a meeting between FTA, CTA, and SHPO on July 26, 2021. The meeting presentation, additional renderings, meeting minutes, and SHPO review letter are included in this document as **Appendix D**.

Following these parameters, the project would have no adverse effect on the historic district or any of its contributing properties.

Figure 3-31: Altgeld Gardens Historic District, view west at 130th Street and Ellis Avenue

Appendices

Appendix A – *RLE Eligibility Report,* June 2021

Appendix B – *RLE Eligibility and Effects Summary Report*, September 19, 2016

Appendix C – Survey form for George William Curtis Public School, 11445 S. State Street

Appendix D – Documentation of SHPO Meeting on July 26, 2021 and Follow-Up Materials

Appendix A – *RLE Section 106 Eligibility Report*, September 2021

Red Line Extension Project

Section 106 Eligibility Report

September 2021

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Version 4.0

Table of Contents

Section 1 - Executive Summary **1**

1.1 Draft EIS 1

1.2 Preferred Alignment 4

Section 2 - Project Introduction **5**

2.1 Project Description 5

2.2 Preferred Alignment Areas of Refinement 12

2.3 Area of Potential Effect 13

Section 3 - Methods for Identification of Resources **17**

3.1 Identification of Historic Properties 17

3.2 Identification of Archaeological Resources 18

Section 4 - Survey and NRHP Evaluation Results **20**

4.1 NRHP Eligibility Evaluation Guidelines 20

4.2 Historic Properties Identified in the Draft EIS 21

4.3 Previously Identified Historic Properties and Historic-age Resources in the Expanded APE 22

4.4 Resources Surveyed in the Expanded APE 24

4.5 Historic Properties Eligible for National Register of Historic Places 27

4.6 Surveyed Properties Recommended Ineligible 36

4.7 Archaeological Resources 39

Appendices **40**

Appendices

Appendix A – Survey Forms

Appendix B – *RLE Eligibility and Effects Summary Report*, September 19, 2016

Appendix C – *RLE Archeological Resources*, December 2020

Appendix D - Altgeld Gardens-Philip Murray Homes Correspondence

Figures

Figure 2-2-1: Preferred Alignment 7
Figure 2-2: Photo Simulation of Typical Proposed Elevated Structure 8
Figure 2-3: Photo Simulation of Typical Proposed Elevated Station 10
Figure 2-4: RLE Project APE 15
Figure 2-5: Expanded APE at 130th Street Station 16
Figure 4-1: Historic Resources Surveyed in the Expanded APE at Michigan Avenue Station 26
Figure 4-2: West Facade, 11431-11433 S. Michigan Avenue 28
Figure 4-3: North and West Facades, 11445-11447 S. Michigan Avenue 29
Figure 4-4: West and South Facades, 11451 S. Michigan Avenue 31
Figure 4-5: South and East Facades, 11452 S. Indiana Avenue 32
Figure 4-6: West Facade, Scanlan Elementary, 11725 S. Perry Avenue 33
Figure 4-7: George William Curtis Public School, 11445 S. State Street 34
Figure 4-8: West Facade, Carver Military Academy, 13100 S. Doty Avenue 35

Tables

Table 1-1: NRHP-Eligible Properties in the APE - Union Pacific Railroad Alternative East and West Options 3
Table 1-2: Historic Properties in the Project APE 4
Table 2-1: Summary of Park & Ride Facilities 11
Table 2-2: Service Headways 11
Table 4-1: Historic Properties Identified in the Draft EIS 21
Table 4-2: Previously Identified Historic Properties and Historic-Age Resources in the Expanded APE 22
Table 4-3: Historic Resources Surveyed in the Expanded APE 24
Table 4-4: NRHP-Eligible Historic Properties in the Expanded APE 27

Section 1 - Executive Summary

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider effects on historic properties from their actions. As stated in 36 CFR § 800, the Section 106 process "seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation" (36 CFR § 800.1(a)). The process is designed to identify historic properties which may be affected by the undertaking, assess effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. The Federal Transit Administration (FTA) is serving as the lead federal agency for the Red Line Extension (RLE) Project and is responsible for Section 106 compliance.

This document summarizes information previously provided on potential historic and cultural resources affected by the RLE Project and Section 106 consultation conducted to date. Such information can be found in the RLE Draft Environmental Impact Statement (EIS) and is summarized in the *Eligibility and Effects Summary Report* (CTA 2016) included in **Appendix B**. The Chicago Transit Authority (CTA) selected a Preferred Alignment after Section 106 consultation had been completed (in 2017). The purpose of this document is to continue consultation with the State Historic Preservation Office (SHPO) and other identified Consulting Parties based on refined project elements that result in changes to the Area of Potential Effect (APE) and additional identification of historic properties. All information provided in this document is consistent with previous correspondence and materials provided during the Draft EIS Section 106 consultation process.

1.1 Draft EIS

Section 106 is a consultative process consisting of four sequential steps. These steps are:

1. Initiation of the Section 106 Process - This includes establishing the undertaking and identification of Consulting Parties.
2. Identification of Historic Properties - This includes determination of an APE and the historic properties and archaeological resources within.
3. Assessment of Adverse Effects - This includes application of criteria of adverse effect to the historic properties within the APE.
4. Resolution of Adverse Effects - This includes development and evaluation of alternatives to avoid, minimize, or mitigate adverse effects on historic properties.

For the Draft EIS Section 106 assessment of historic properties and archaeological resources, FTA, CTA, the SHPO, and other Consulting Parties conducted the first three steps of this process following requirements of 36 CFR § 800:

1. Initiation of the Section 106 Process – The proposed project was determined to have potential to cause effects on historic properties. FTA and CTA identified the appropriate SHPO, Tribal Historic Preservation Offices (THPO), and other Consulting Parties and invited them to participate in the Section 106 process.
2. Identification of Historic Properties -
    a. Determination of the APE - In consultation with the SHPO and Consulting Parties, FTA and CTA determined an APE for the Project which included two options: Union Pacific Railroad (UPRR) Rail Alternative East and West Options. These options are described in **Appendix B**. The APE is defined as the geographic area within which the project may cause alterations in the character or use of historic properties. Development of the APE involved site visits and a review of aerial photography images and conceptual engineering drawings for the alternatives considered in the Draft EIS.
    b. Identify Historic Properties and Archaeological Resources – Due to the developed urban environment and linear nature of the project, it was determined that effects on properties would be similar for adjacent properties. Therefore, in coordination with the SHPO, it was determined that use of a representative sample was appropriate for the Project. The properties included in the representative sample were determined using GIS databases provided by the City of Chicago, the Historic and Architectural Resources Geographic Information System (HARGIS), online mapping resources, SHPO records, and field visits. Additional details about the definition of the representative sample, and resources in it, are included in **Appendix B**. After an extensive records check, representative samples within the APE footprint were field-surveyed to identify any archaeological resources and historic properties that meet National Register of Historic Places (NRHP) criteria. NRHP criteria are defined in 36 CFR § 60.4 and apply to districts, sites, buildings, structures, or objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association with one or more of the following four criteria:

        - Criterion A – Events that have made a significant contribution to the broad patterns of American history on a federal, state, and/or local level
        - Criterion B – Lives of persons significant in the history of the city, state, and/or the United States
        - Criterion C – Distinctive characteristics of a type, period, or method of construction, or the work of a master, or high artistic values, or a significant and distinguishable entity whose components may lack individual distinction

- Criterion D – Information important to prehistory or history

FTA and CTA identified properties listed in the NRHP, local landmarks, and Chicago Historic Resources Survey (CHRS) "Orange"-rated buildings (properties identified by the City to possess some architectural feature or historical association that made them potentially significant in the context of the surrounding community). FTA and CTA conducted background research to assist this process, using HARGIS and city records, fire insurance and other historical maps, the CHRS, previous architectural surveys in the area, and other relevant scholarly publications. No properties or districts previously listed in the NRHP were present in the APE. Seven historic properties within the APE were determined eligible for listing on NRHP.

3. Assessment of Adverse Effects – In consultation with the SHPO and Consulting Parties, FTA and CTA assessed effects for each property that was listed in the NRHP or determined eligible for listing. The effects assessment completed for the Draft EIS in 2016 included review of specific direct and indirect impacts (for topics such as displacements, noise, and visual impacts) resulting from specific project elements to determine if they might alter the characteristics that qualify properties for inclusion in the NRHP. Results of the effects assessment are summarized in **Table 1-1**. Because no adverse effect was found for the Project, step four of the Section 106 process was not required.

Table 1-1: NRHP-Eligible Properties in the APE - Union Pacific Railroad Alternative East and West Options

Address	Description	Union Pacific Railroad Alternative East Option Effects Finding	Union Pacific Railroad Alternative West Option Effects Finding
444 W. 100th Place	Eclectic Neo-Traditional Home	No Historic Properties Affected	No Historic Properties Affected
324 W. 104th Street	Fire Department Engine Company 93	No Historic Properties Affected	No Historic Properties Affected
351 W. 104th Street	Roseland Pumping Station	No Adverse Effect	No Historic Properties Affected
10920 S. Princeton Avenue	Romanesque Revival-Style Church	No Historic Properties Affected	No Historic Properties Affected
11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home	No Historic Properties Affected	No Historic Properties Affected

Address	Description	Union Pacific Railroad Alternative East Option Effects Finding	Union Pacific Railroad Alternative West Option Effects Finding
133-139 E. Kensington Avenue	Former Venetian Hall	No Historic Properties Affected	No Historic Properties Affected
Multiple	Altgeld Gardens Historic District	No Historic Properties Affected	No Historic Properties Affected

1.2 Preferred Alignment

The Preferred Alignment, selected in 2018 after publication of the Draft EIS, is a hybrid of the UPRR East and West Options. North of 108th Place, the Preferred Alignment follows the UPRR West Option and then south of 108th Place it follows the UPRR East Option to 119th Street. South of 119th Street the UPRR East and West Options were on the same alignment to the terminus of the RLE Project north of 130th Street. The Preferred Alignment would continue along this same alignment to 130th Street but terminate on the south side of 130th Street.

Changes to the RLE Project have required expansion of the APE in two locations. The expanded APE was reviewed and a selection of historic-age resources (45 years or older) within the expanded APE were surveyed utilizing the approach described in **Section 1.1**. Fifteen historic-age resources were surveyed and evaluated for NRHP eligibility. Of these, seven were recommended as eligible for listing in the NRHP. An additional fifty-nine properties within the expanded APE were identified as NRHP-eligible because they are contributing resources to Altgeld Gardens-Philip Murray Homes Historic District. Combined with the seven historic properties identified in the Draft EIS, a total of seventy-three historic properties are located within the Project APE. These numbers are summarized in **Table 1-2**.

Table 1-2: Historic Properties in the Project APE

2016 Draft EIS	2021 Expanded APE		Total Historic Properties in the Project APE
7 determined eligible	7 recommended eligible as result of 2020 survey	59 previously determined eligible as part of Altgeld Gardens-Philip Murray Homes Historic District	73

Source: JLK Architects

The following sections of this report provide further details on the APE expansion and eligibility determinations made for the Preferred Alignment and associated Project changes.

Section 2 - Project Introduction

2.1 Project Description

The RLE Project would extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would be elevated from 95th to 119th Streets, at-grade south of 119th Street to 130th Street, and would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus connections and parking facilities. The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility near 120th Street.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. Additional details on the alternatives development process and history, including the entirety of alternatives evaluated between 2012 and 2014 as part of the Draft EIS Section 106 consultation process for this portion of the project are provided in the 2016 *Eligibility and Effects Summary Report* (CTA 2016) in **Appendix B.**

The UPRR Alternative as presented in the Draft EIS included two options, the East Option and the West Option. On January 26, 2018, the Preferred Alignment for the RLE Project was announced by CTA to the public. The Preferred Alignment is a combination of the UPRR East Option and West Option and would capture the benefits and minimize the impacts disclosed in the Draft EIS of selecting either option.

The Preferred Alignment would run south along I-94 from the 95th/Dan Ryan terminal, then curve west along the north side of I-57 between 97th and 98th Streets (within the I-57 right-of-way) until it reaches the UPRR corridor adjacent to Eggleston Avenue. The alignment would then run south to follow the UPRR corridor for approximately 1 mile. The extension would follow the UPRR corridor, on the west of the existing UPRR corridor, to 108th Street, where it begins traveling east and crossing over the existing UPRR corridor and going south along the east side of the UPRR Corridor to the 111th Street station.

The proposed rail extension would then continue running in a southeasterly direction along the east side of the UPRR corridor to 119th Street where it leaves the UPRR corridor and crosses over

the Canadian National and Metra rail corridor between Kensington Park on the southwest and South Front Avenue on the northeast. The extension then continues southeast crossing over a Norfolk Southern Railroad (NS) industrial lead track. The extension then continues southeast along the NS corridor running along the west side of the NS tracks. A new shop and yard would be located at 120th Street. The extension would run along the west side of the NS tracks and adjacent to South Cottage Grove Avenue on the west until crossing under 130th Street where it terminates on the east side of Altgeld Gardens, west of Carver Military Academy High School. **Figure 2-1** shows the Preferred Alignment.

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 2-2-1: Preferred Alignment

2.1.1 Elevated Structure

The proposed elevated structure would be a closed-deck, steel and concrete, aerial track structure with direct-fixation track and welded rail (welded at joints). With direct-fixation track, rails are mounted to specially-designed concrete blocks fixed to the concrete deck. Noise barriers (approximately 4 feet in height, measured from the top surface of the concrete deck) are proposed for portions of the structure on both sides of the track deck to reduce noise transmission at and below track level. The structure would vary in height from 14 feet 9 inches to 40 feet above existing grade, depending on required clearances above existing roadways and railroads. The two tracks would have a spacing of 13 feet (13 feet between the track centerlines). The elevated deck, on which the tracks would run, would vary in width from approximately 30 feet to approximately 52 feet at stations

Figure 2-2 is a photo simulation of a typical proposed elevated structure above the UPRR right-of-way. The design shown is conceptual, and the actual design would vary based on further engineering and community input.

Figure 2-2: Photo Simulation of Typical Proposed Elevated Structure

2.1.2 Stations

New stations would be constructed at the following locations along the proposed alignment:

- 103rd Street (elevated station)

  The station platform would span over the street, with the main station entrance located on the north side of 103rd Street with an elevator, stair, and escalator to access the platform. An

auxiliary station entrance would be located on the south side of 103rd Street with an elevator and stair to access the platform. The auxiliary station would have entrances on the front for bus transfers and pedestrians, and an entrance at the rear for park & ride transfers from the surface parking lot located south of the station. Street side bus stops in both directions on 103rd Street will provide direct transfers to the main and auxiliary station entrances.

- 111th Street (elevated station)

  The station platform would span from 111th Street to 110th Street, with the main station entrance located on the north side of 111th Street with an elevator, stair, and escalator to access the platform. An auxiliary exit would be located on the south side of 110th Street. Street side bus stops in both directions on 111th Street would provide direct transfers to the main station, and a surface parking lot would be located south of 111th Street. New crosswalks would be developed at 111th Street for pedestrian traffic, park & ride transfers, and eastbound bus transfers to the main station entrance.

- Michigan Avenue (elevated station)

  The station platform would span over Michigan Avenue, with station entrances on each side of Michigan Avenue. Two locations for the station parking garage are being considered. The locations are to the north and to the south of the UPRR. The station facility is anticipated to include a bus turnaround and a four-level parking garage. The station would have a main and an auxiliary station entrance. Both entrances would have elevators and stairs, with the main entrance also having an escalator. The station facility would also include a dedicated surface-level kiss & ride drop off. Existing thru traffic buses on Michigan Avenue would remain on the street with direct transfers to both station entrances. The tallest structure at Michigan Avenue station will likely be the station canopy of the platform on the elevated track structure.

- 130th Street (at-grade station)

  The station platform would be at-grade located south of 130th Street, running parallel to the adjacent Indiana Harbor Belt (IHB) Railroad tracks. The main station entrance would be located at the terminus of the extension on the north side of 132nd Street. A five-bay bus turnaround will be located to the west of the main station for direct transfers. A three-level parking garage would be located northwest of the station platform, with an auxiliary station entrance at the top level to bridge over the tracks to access the station platform for park & ride transfers. CTA Transportation Offices would also be located at the terminus, with a connection to the parking garage and auxiliary station entrance.

  Primary access to the 130th Street station would be provided from 130th Street to Ellis Avenue to Greenwood Avenue to 130th Place into the station area. Some exiting traffic could also travel from the station area to Old 130th Street to Ellis Avenue to 130th Street. Anticipated improvements along 130th Street would include minor lengthening of the west to southbound left turn lane and the east to southbound right turn lane. Station-related traffic within Altgeld Gardens would be limited to the roadways listed above.

Carver Military Academy High School is located east of the 130th Street Station and the IHB Railroad at the intersection of 132nd Street and Doty Avenue. Access to the high school would remain unchanged. Primary access to the school would be provided from 130th Street to Ellis Avenue to Greenwood Avenue to 132nd Street. From the south, the access is also possible along Doty Avenue to 132nd Street to the school entrance.

Each station would have a center platform, approximately 26 feet wide and 520 feet long. Platforms would accommodate ten-car trains. Each station would be Americans with Disabilities Act (ADA) accessible with elevators. **Figure 2-3** is a photo simulation of a typical proposed elevated station. The design shown is conceptual, and the actual design would vary based on further engineering and community input. Currently, there is no photo simulation available for a ground level station.

Figure 2-3: Photo Simulation of Typical Proposed Elevated Station

2.1.3 Park & Ride Facilities

To accommodate passengers arriving at the stations by car, park & ride facilities would be constructed near each station, as described in **Table 2-1**. A total of 2,400 parking spaces would be available along the corridor. CTA estimated parking demand based on travel demand modeling performed in 2020. Bus turnarounds would be provided in the parking areas at Michigan Avenue and 130th Street stations.

Table 2-1: Summary of Park & Ride Facilities

Station	Number of Parking Spaces	Conceptual Description
103rd Street	175	One surface parking lot on the west side of the tracks
111th Street	225	One surface parking lot
Michigan Avenue	800	Four-story parking structure
130th Street	1,200	Three-story parking structure

Source: CTA

2.1.4 120th Street Yard and Shop

The 120th Street yard and shop, with a capacity of 340 train cars, would be sited on a combination of industrial and vacant land east of the Canadian National/Metra Electric tracks and west of the NICTD/CSS & SBRR (Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad) tracks near 120th Street and Cottage Grove Avenue. The yard would be entirely at-grade. Parking spaces for CTA employees would be included at the yard.

2.1.5 Substations

Substations are buildings along the alignment that house equipment to regulate the flow of electricity to the third rail, which supplies power to the trains. Substations would be placed approximately 0.8 to 1 mile apart along the alignment. Six new or replacement substation locations are proposed: near 96th Street, near 104th Street, near 109th Place, near Indiana Avenue, within the 120th Street yard and shop area, and north of 130th Street.

2.1.6 Operating Plan

The Red Line, including the extension, will operate 24 hours a day, each day of the year. Anticipated service headways (time between arrivals) are shown in **Table 2-2**.

Table 2-2: Service Headways

Period	Northbound	Southbound
Morning Peak	5 minutes	3 to 4 minutes
Midday	7.5 minutes	7.5 minutes
Evening Peak	3 to 5 minutes	5 minutes
Late Evening (7 PM-Midnight)	7.5 minutes	7.5 minutes
Owl (Midnight-4 AM)	15 minutes	15 minutes

Source: CTA

Service headways would be adjusted to accommodate demand once the RLE service has been implemented. Train headways would vary throughout the day (like existing Red Line service).

Train sets would initially be eight cars long, however stations and track alignment would accommodate ten-car trains to provide the option of running ten-car trains in the future. With the extension of the Red Line, some existing bus routes would be rerouted to connect to the proposed stations.

2.2 Preferred Alignment Areas of Refinement

The Preferred Alignment includes four distinct project changes and refinements not included in the Draft EIS. These project changes include:

- Preferred Alignment 108th Place Cross-over

  With the selection of the Preferred Alignment, there is a change in the crossing of the UPRR at 108th Place, which was not included in the UPRR East Option or West Option. In the Draft EIS, the West Option had a crossing of the UPRR at Prairie Avenue near 117th Street, further south and at a higher elevation than the crossing at 108th Place.

- Michigan Avenue Station Refinement

  Proposed parking structure and bus turnaround concepts are being considered at two locations, on the north and the south sides of the UPRR. This change is dependent on confirmation of availability of parcels and future coordination with the City of Chicago.

- 120th Street Yard and Shop Refinement

  The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate the NS Railroad access to All American Recycling and the national freight rail network.

- 130th Street Station Relocation

  In the Draft EIS, the 130th Street station would be located north of 130th Street, adjacent to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) Calumet Reclamation Plant. This location was the only viable option for the RLE Project's terminus station at the time of the Draft EIS. An opportunity to relocate the station south of 130th Street arose after the 2017 demolition of the easternmost blocks of Altgeld Gardens, Blocks 11, 12, and 13.

2.3 Area of Potential Effect

The APE is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16.d). The APE developed for the Draft EIS of the RLE Project was delineated after considering the location of the proposed alternative options; the potential for ground disturbance, demolition, or property taking; locations from which the undertaking may be visible and/or audible; and the scale and setting of the project. This APE was developed in consultation with CTA, FTA, and SHPO.

Secretary of the Interior (SOI) qualified architectural historians developed the APE boundaries after conducting site visits and reviewing the aerial maps and engineering details (such as alignment locations, elevation of the proposed rail line, expected right-of-way limits, and the locations of the yard, stations, and parking facilities) for the build alternative.

Generally, the APE developed for the Draft EIS contains parcels within one block of the centerline of the UPRR Alternative. Because the project area is located within a heavily urbanized area, the boundaries for the APE were based on the area directly impacted by construction, the height of the new construction, and visual obstructions such as buildings and trees which may block views of the proposed construction, and the linear nature of the RLE Project. The APE widens to accommodate the locations of each park & ride and the proposed yard and shop beyond the one-block boundary. This APE included both the UPRR East Option and West Option.

Because the Draft EIS APE was developed to account for effects for both the East and West UPRR Options, it continues to do so for the Preferred Alignment, except at three of the four areas of project changes and refinements described in **Section 2.2**. For these reasons, the APE boundary from the Draft EIS is still considered appropriate for the project except in the areas of refinement as described below. See **Figure 2-4**.

At one area of project changes and refinements, no changes to the APE were required:

- Preferred Alignment 108th Place Cross-over

  The cross-over at 108th Place is contained within the project area presented in the Draft EIS and does not require extension of the APE at this location.

At one area of project changes and refinements, the APE has been shifted:

- 120th Street Yard and Shop Refinement

  The 120th Street Yard and Shop location has been shifted and the layout refined since the Draft EIS. The APE has been shifted approximately 100 feet to the west consistent with the

shift in location of the 120th Street yard and shop. No historic properties, historic-age resources, or archeological materials were identified within this area.

At two areas of project changes and refinements, the APE has been expanded:

- Michigan Avenue Station Refinement

  Two locations for the station parking garage are being considered. The locations are to the north and to the south of the UPRR. The Draft EIS Section 106 APE had only included the south option and now the APE is expanding to include the north option. The selection of the station parking garage location is dependent on confirmation of availability of parcels and future coordination with the City of Chicago. The APE has been expanded one block to the north and east to include the north option. The APE has also been expanded to one full block in the south and west to adequately address potential effects in these areas. See **Figure 4-1**.

- 130th Street Station Relocation

  Following relocation of the 130th Street station south of 130th Street, the APE has been expanded to include the full site under consideration for construction and an approximate buffer of a quarter mile, except at visual obstructions where it is slightly truncated. This area is based on building density, height of the proposed work, visual observations on site, intended to encompass changes in traffic, noise, and vibration, caused by the Project. See **Figure 2-5**.

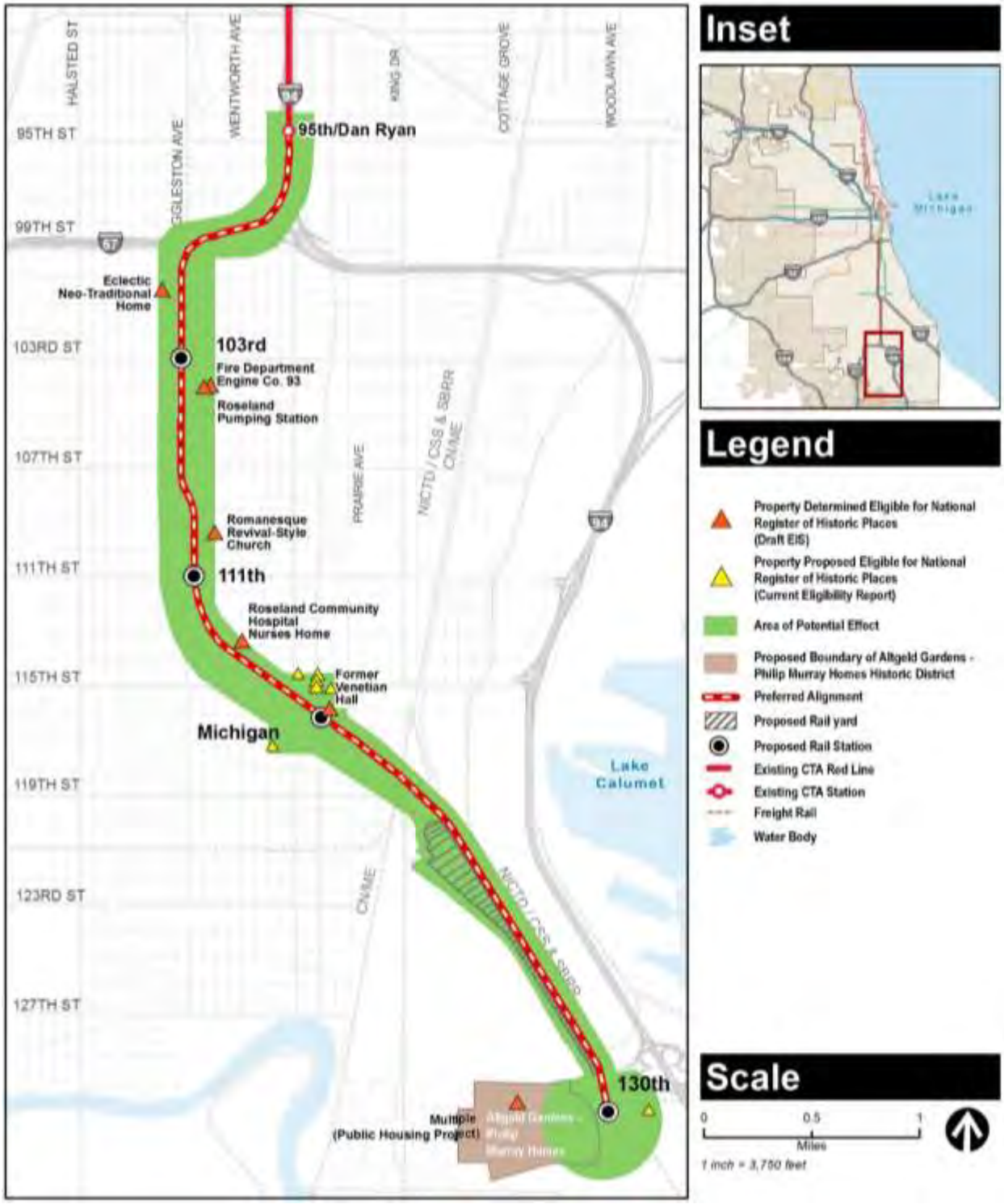

Figure 2-4: RLE Project APE

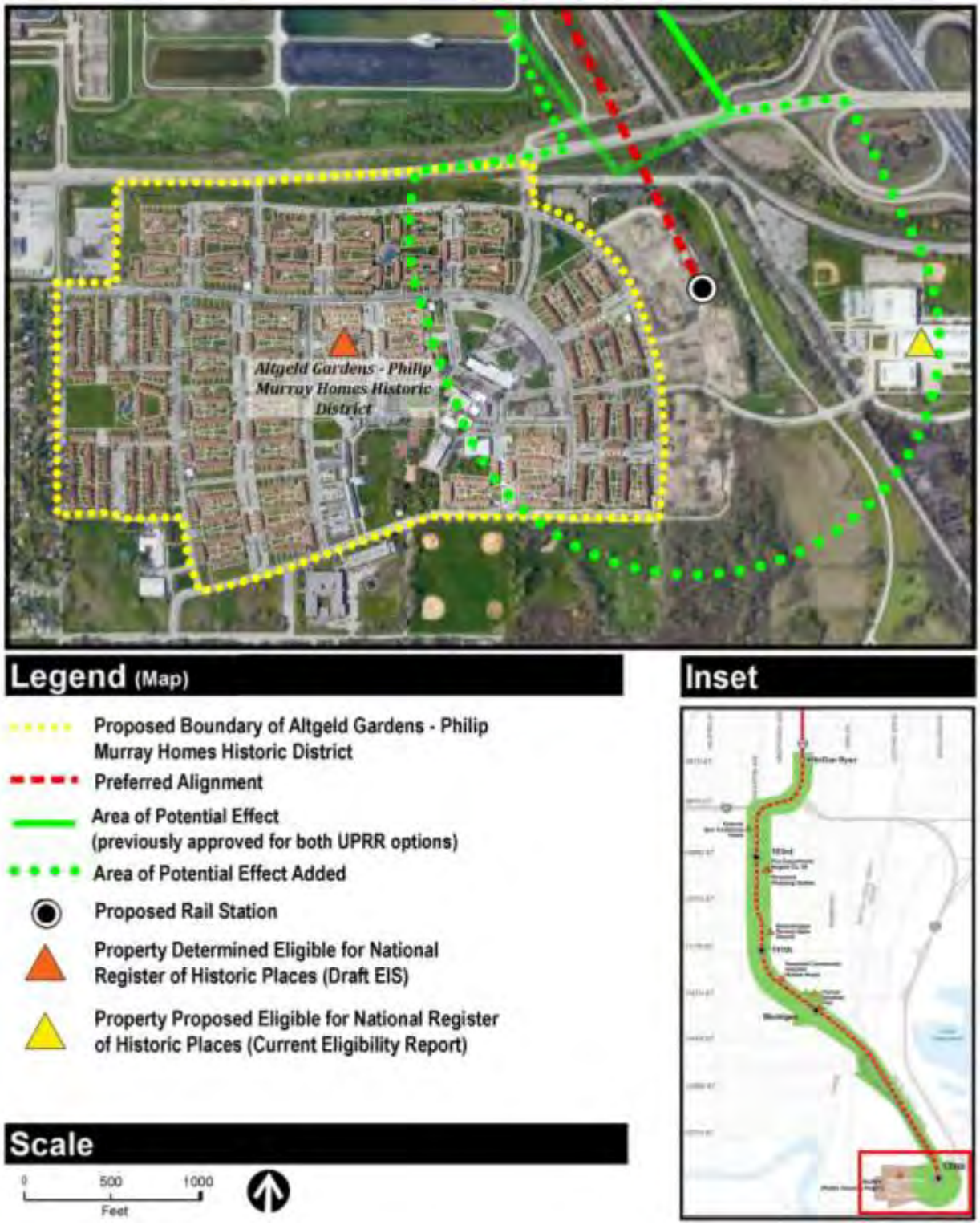

Figure 2-5: Expanded APE at 130th Street Station

Section 3 - Methods for Identification of Resources

3.1 Identification of Historic Properties

3.1.1 Background Research/Historic Context

Background research was conducted to identify previously documented historic properties within the expanded APE areas. An extensive historic context had been developed for the Draft EIS and was determined sufficient to evaluate resources within the expanded APE. . The historic context includes relevant themes in the historical development of the area and provides a framework for evaluating the significance of historic-age resources. The following sources were consulted for identification and description of existing historic properties and those historic-age resources not yet recorded:

- The **HARGIS database** was created by the Illinois SHPO in 2003 to manage information about Illinois historic properties; this database documents the state's built environment. The HARGIS database includes data gathered as a result of three statewide survey projects: the Illinois Historic Structures Survey, the Illinois Historic Landmarks Survey, and the Illinois Rural Survey (conducted 1970–1987). The HARGIS database also includes properties identified as part of a NRHP nomination, surveys by local preservation groups, and information from the Illinois Department of Transportation's Bridge Survey. The database includes data forms, photographs, background documentation, and spatial information within a geographical context for each historic property and historic district within the dataset. This resource was consulted to identify historic properties within the APE.

- The **Chicago Historic Resources Survey (CHRS)** is an inventory of buildings that was compiled during 1983–1995. The Chicago Department of Housing and Economic Development published its findings in a report titled *Chicago Historic Resources Survey: An Inventory of Architecturally and Historically Significant Structures* in 1996. Organized according to Chicago's 77 neighborhoods, the inventory lists over 17,000 architecturally and historically significant buildings and structures that predate 1940. The information is also available online and is searchable by neighborhood, building address, decade of construction, architect's name, building style and type, survey ranking, and landmark status. This resource was consulted to confirm the status of historic-age buildings within the APE that had not yet been evaluated for the NRHP.

- The **Chicago Zoning and Land Use Map** is a database that includes information on existing buildings, structures, and parcels including Sanborn Fire Insurance maps,

CHRS data, NRHP data, and local landmark designations. This resource was used to find addresses and confirm historic status of all buildings within the APE.

- **National Register Bulletin #15**, How to Apply the National Register Criteria for Evaluation, was consulted for the resources requiring NRHP evaluations.

3.1.2 Survey of Historic Resources

Initially, SOI qualified architectural historians conducted a field survey to confirm conditions presented in the Draft EIS. After the development of the expanded APE and review of historic contexts, cultural resource specialists conducted additional field surveys. Within the expanded APE areas, no additional properties were found that would be displaced or demolished as a result of the Preferred Alignment. Following methods of the Draft EIS, a representative sample of historic-age properties within the expanded APE areas were chosen for survey and documentation. As in the Draft EIS, the representative sample was chosen by researching the expanded APE areas for properties listed in HARGIS and the CHRS. Then each block was examined to understand the historic character of each including considerations of age, type of building, functions, architectural styles, and overall context. Sample properties were then chosen for their ability to represent these characteristics of each block.

All newly surveyed historic resources were documented with photographs of their exteriors from the public right-of-way. Additional archival research was conducted for each in order to evaluate potential historic significance and level of integrity.

In total, 15 historic-age properties were surveyed and one National Register eligible historic district was re-evaluated for the expanded project APE.

Survey forms for the 15 historic-age properties are included in **Appendix A**.

3.2 Identification of Archaeological Resources

From June 15 to June 16, 2020 Midwest Archaeological Research Services (MARS), conducted a Phase I Archaeological Reconnaissance Survey on the Preferred Alignment (**Figure 2-1**). Due to the majority of the survey area consisting of substantially disturbed inner-city terrain, the primary method of investigation was photographic recordation followed up with shovel test probes (STP) in surveyable areas. Shovel tests were excavated as specified by the Illinois SHPO. STPs are small subsurface sampling units approximately 14 inches in diameter and 14 to 20 inches deep that are excavated at 50-foot intervals across the project area. Soils from the probes were screened through ¼ inch hardware cloth. With the exception of one area, the entire project area contained non-excavatable soils (gravels or wetland areas). The one area that contained excavatable soils (likely

disturbed during railroad and roadway construction) for shovel tests was located along Eggleston Avenue. Photographs were taken with the 16 MP Samsung S10e smartphone camera along the project area at prearranged locations. A total of 166 photographs were taken with 90 images selected as the best representation of the landscape.

In addition to field investigation, research was conducted to identify the prehistoric context for the area and to identify prehistoric Native American sites recorded within one mile of the RLE Project. This consisted of a new records check using the Illinois State Site Files database and included the entire Project area, including areas of the expanded APE.

See the full *Archeological Resources* report in **Appendix C**.

Section 4 - Survey and NRHP Evaluation Results

4.1 NRHP Eligibility Evaluation Guidelines

As part of the Section 106 review process, cultural resources investigations are undertaken with the purpose of identifying historic properties that are listed in, or eligible for listing in, the NRHP. The assessment of significance of cultural resources is based on federal guidelines and regulations. Any cultural resource that is listed in or eligible for inclusion in the NRHP is known as a "historic property," and the term "eligible for inclusion in the NRHP" includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet NRHP listing criteria (36 CFR 800.16). The criteria for evaluating properties for inclusion in the NRHP (36 CFR 60.4 [a–d]) are codified under the authority of the National Historic Preservation Act of 1966, as amended, and the Secretary of the Interior has set forth guidelines to use in determining eligibility. Subsequent to the identification of relevant historical themes and related research questions, these four criteria for eligibility are applied.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in buildings, structures, objects, sites, and districts that possess integrity of location, design, setting, materials, workmanship, feeling, and association and one or more of the following:

A. that are *associated with events* that have made a significant contribution to the broad patterns of our history; or
B. that are *associated with the lives of persons* significant in our past; or
C. that *embody the distinctive characteristics* of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. that have *yielded, or may be likely to yield, information important in prehistory or history*. Note that the application of Criterion D presupposes that the information imparted by the site is significant in history or prehistory [36 CFR 60.4, emphasis added].

The physical characteristics and historic significance of the overall property are examined when conducting NRHP evaluations. Character-defining elements of a building are the physical features which help define its physical identity including overall form, materials, craftsmanship, decorative details, interior spaces and features, and setting.

For a building, structure, object, site, and district to be determined eligible for the NRHP, it must retain enough of its historic integrity to convey its significance. For the NRHP, there are seven aspects of integrity:

1. Location
2. Design
3. Setting
4. Materials
5. Workmanship
6. Feeling
7. Association.

4.2 Historic Properties Identified in the Draft EIS

Seven historic properties were identified as part of the Draft EIS. These properties are listed in **Table 4-1** below. See **Figure 2-4** for a map of these historic properties and the 2016 *Eligibility and Effects Summary Report* in **Appendix B** for additional information on Historic Properties identified in the Draft EIS.

Per correspondence by the SHPO on July 9, 2021, the Roseland Pumping Station is NRHP-eligible under Criterion A as well as C and has been updated from the Draft EIS.

Table 4-1: Historic Properties Identified in the Draft EIS

Address	Year Built	Description	NRHP Eligibility Criteria
444 W. 100th Place	1930	Eclectic Neo-Traditional Home	Criterion C
324 W. 104th Street	1917	Fire Department Engine Company 93	Criterion C
351 W. 104th Street	1911	Roseland Pumping Station	Criteria A & C
10920 S. Princeton Ave	1916	Romanesque Revival-Style Church	Criteria A & C
11321 S. Wentworth Ave	1930s	Roseland Community Hospital Nurses Home	Criterion A
133-139 E. Kensington Ave	1925	Former Venetian Hall	Criterion A
Multiple (Public Housing Project)	1945	Altgeld Gardens Historic District	Criterion A

4.3 Previously Identified Historic Properties and Historic-age Resources in the Expanded APE

Within the expanded APE, 65 historic properties and historic-age resources had previously been evaluated and found eligible for NRHP and or evaluated as a City of Chicago historic resource. This includes CHRS Orange-rated properties, the Altgeld Gardens-Philip Murray Homes Historic District, and buildings contributing to this historic district.

Table 4-2 summarizes previously identified historic properties and historic-age resources within the expanded APE.

Table 4-2: Previously Identified Historic Properties and Historic-Age Resources in the Expanded APE

Address	Year Built	Description	Area of Refinement	Status
11431-3 S. Michigan Avenue	1911	Commercial	Michigan Avenue Station	CHRS Orange
11445-7 S. Michigan Avenue	1903	Mixed-Use Commercial/Residential	Michigan Avenue Station	CHRS Orange
11451 S. Michigan Avenue	1928	Commercial	Michigan Avenue Station	CHRS Orange
11452 S. Indiana Avenue	c. 1880	Single-Family Residence	Michigan Avenue Station	CHRS Orange
11725 S. Perry Avenue	1897	Scanlan Elementary School	Michigan Avenue Station	CHRS Orange
Varies*	1945	53 Residences Contributing to Altgeld Gardens-Philip Murray Homes (AGPMH) National Register Historic District	130th Street Station	NRHP Eligible
13015 S. Ellis Avenue	1952	By The Hand Club, included in AGPMH Historic District	130th Street Station	NRHP Eligible
13100 S. Ellis Avenue	1945	Grocery / Retail Building, included in AGPMH Historic District	130th Street Station	NRHP Eligible
940 E. 132nd Street	1944	Administration / Maintenance Building, included in AGPMH Historic District	130th Street Station	NRHP Eligible

Address	Year Built	Description	Area of Refinement	Status
975 E. 132nd Street	1979	CYC - Dorothy Gautreaux Child Development Center, included in AGPMH Historic District	130th Street Station	NRHP Eligible
941 E. 132nd Street	1944	Children's Building, included in AGPMH Historic District	130th Street Station	NRHP Eligible
951 E. 132nd Place	1972	Altgeld Gardens Community Building No. 2, included in AGPMH Historic District	130th Street Station	NRHP Eligible
Multiple (Public Housing Project)	1945; 1954	Altgeld Gardens-Philip Murray Homes Historic District	130th Street Station	NRHP Eligible

*Residences within the APE which contribute to the Altgeld Gardens-Philip Murray Homes Historic District include: 13022 S. Greenwood Avenue, 13030 S. Greenwood Avenue, 13072 S. Greenwood Avenue, 13200 S. Greenwood Avenue, 13240 S. Greenwood Avenue, 13088 S. Ellis Avenue, 13016 S. Ellis Avenue, 13023 S. Ellis Avenue, 13028 S. Ellis Avenue, 13047 S. Ellis Avenue, 13052 S. Ellis Avenue, 13059 S. Ellis Avenue, 13064 S. Ellis Avenue, 13083 S. Ellis Avenue, 13088 S. Ellis Avenue, 13101 S. Ellis Avenue, 13133 S. Ellis Avenue, 13201 S. Ellis Avenue, 13218 S. Ellis Avenue, 13226 S. Ellis Avenue, 13230 S. Ellis Avenue, 13262 S. Ellis Avenue, 13286 S. Ellis Avenue, 13241 S. Ellis Avenue, 13250 S. Ellis Avenue, 929 E 130th Place, 933 E 130th Place, 932 E. 131st Street, 967 E 132nd Place, 1000 E. 132nd Street, 1001 E. 132nd Street, 1008 E. 132nd Street, 1009 E. 132nd Street, 1032 E. 132nd Street, 1033 E. 132nd Street, 1044 E. 132nd Street, 1045 E. 132nd Street, 1068 E. 132nd Street, 1069 E. 132nd Street, 900 E. 133rd Street, 972 E. 133rd Street, 1000 E. 133rd Street, 1008 E. 133rd Street, 1032 E. 133rd Street, 1044 E. 133rd Street, 1068 E. 133rd Street, 901 E. 130th Place, 13029 S. Drexel Avenue, 13053 S. Drexel Avenue, 13065 S. Drexel Avenue, 900 E. 131st Street, 901 E. 131st Street, 13100 S. Ingleside Avenue.
Source: JLK Architects

The Draft EIS included evaluation of the Altgeld Gardens Historic District based on an eligibility determination prepared in the 1990s which did not include the Philip Murray Homes. Currently, through guidance of the SHPO, the Chicago Housing Authority (CHA) is preparing a National Register Historic District nomination that includes both Altgeld Gardens and Philip Murray Homes. The Altgeld Gardens-Philip Murray Homes Historic District has been determined eligible under Criteria A, B, and C. See **Appendix D** *Altgeld Gardens-Philip Murray Homes Correspondence* for additional information. At this time, a final boundary and period of significance for this National Register Historic District have not been finalized, as the nomination is an ongoing process being undertaken by CHA in coordination with SHPO and the National Park Service.

4.4 Resources Surveyed in the Expanded APE

Fifteen historic-age resources within the expanded APE for the Preferred Alignment were surveyed and evaluated for NRHP eligibility. Survey forms were used to collect current and historical data on these properties and are included in **Appendix A** and listed in **Table 4-3**. Fourteen properties are within the expanded APE at Michigan Avenue Station, as shown in **Figure 4-1**. One property, Carver Military Academy, is within the expanded APE at 130th Street Station.

Table 4-3: Historic Resources Surveyed in the Expanded APE

Address	Year Built	Description	Eligibility
11431-11433 S. Michigan Avenue	1911	Commercial	NRHP Eligible CHRS Orange
11445-11447 S. Michigan Avenue	1903	Mixed-Use Commercial/Residential	NRHP Eligible CHRS Orange
11451 S. Michigan Avenue	1928	Commercial	NRHP Eligible CHRS Orange
11452 S. Indiana Avenue	c. 1880	Single-Family Residence	NRHP Eligible CHRS Orange
135 E. 114th Street	1913	Multifamily Residence	None
136 E. 115th Street	c. 1900	Single-Family Residence	None
139 E. 115th Street	1908	Single-Family Residence	None
146 E. Kensington Avenue	1898	Single-Family Residence	None
203 E. Kensington Avenue	c. 1920	Mixed-Use Commercial/Residential	None
11445 S. State Street	1893	George William Curtis Public School	NRHP Eligible
11611 S. Lafayette Avenue	1890	Multifamily Residence	None
11624 S. State Street	1910	Multifamily Residence	None
11717 S. Lafayette Avenue	1894	Single-Family Residence	None
11725 S. Perry Avenue	1897	Scanlan Elementary School	NRHP Eligible CHRS Orange

Address	Year Built	Description	Eligibility
13100 S. Doty Avenue	1973	Carver Military Academy	NRHP Eligible

Source: JLK Architects

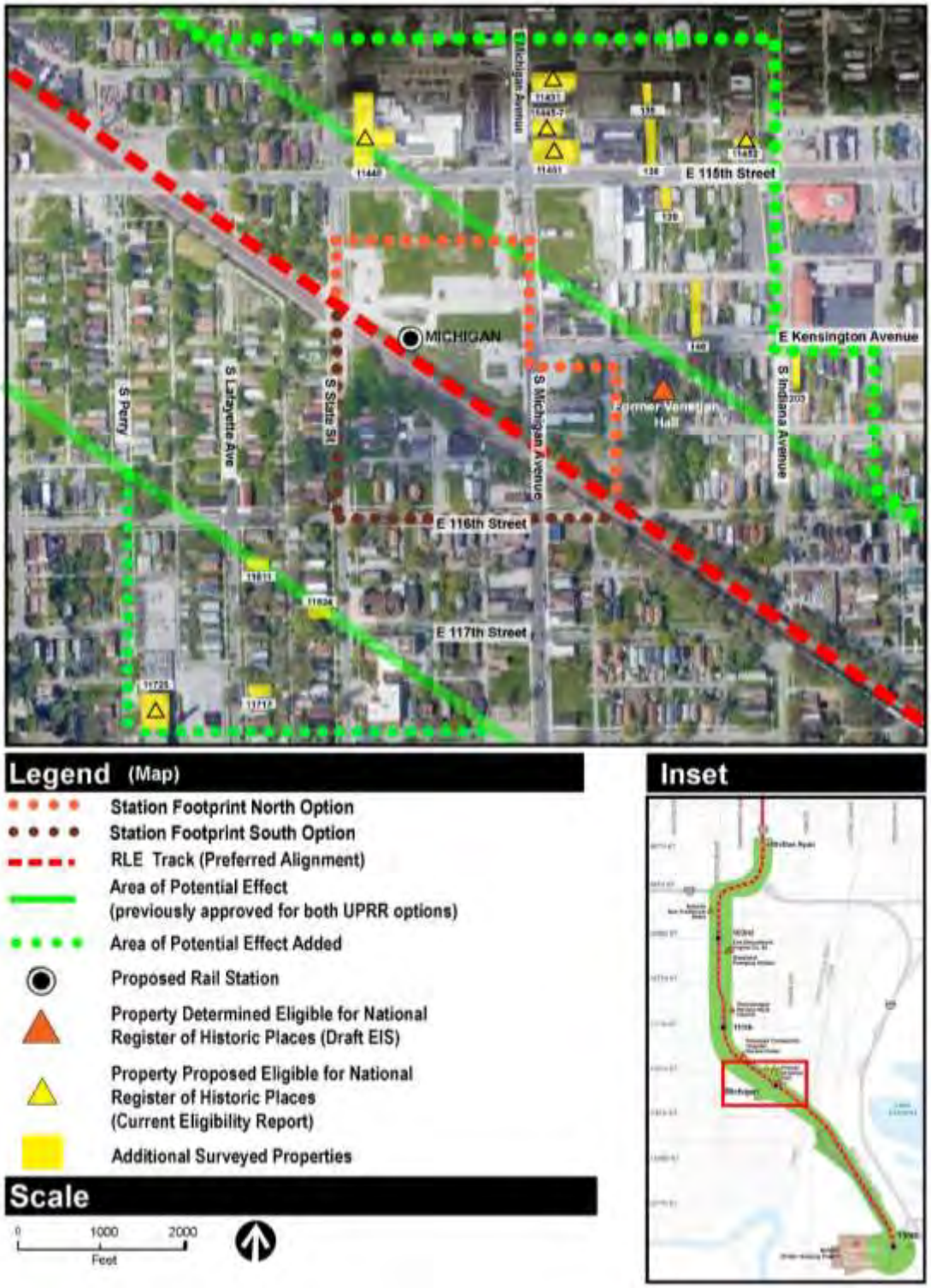

Figure 4-1: Historic Resources Surveyed in the Expanded APE at Michigan Avenue Station

4.5 Historic Properties Eligible for National Register of Historic Places

Of the fifteen buildings surveyed within the Roseland, West Pullman, and Riverdale community areas, seven were identified as eligible for listing on the NRHP. These are described briefly below. See **Appendix A** for additional information on these historic properties.

Per correspondence by the SHPO on July 9, 2021, Scanlan Elementary School, George William Curtis Public School , and Carver Military Academy are considered NRHP-eligible under Criterion A as well as C.

Table 4-4: NRHP-Eligible Historic Properties in the Expanded APE

Address	Year Built	Description	NRHP Eligibility Criteria
11431-11433 S. Michigan Avenue	1911	Commercial	Criterion A
11445-11447 S. Michigan Avenue	1903	Mixed-Use Commercial/Residential	Criteria A and C
11451 S. Michigan Avenue	1928	Commercial	Criteria A and C
11452 S. Indiana Avenue	c. 1880	Single-Family Residence	Criterion C
11725 S. Perry Avenue	1897	Scanlan Elementary School	Criteria A and C
11445 S. State Street	1893	George William Curtis Public School	Criteria A and C
13100 S. Doty Avenue	1973	Carver Military Academy	Criteria A and C

Source: JLK Architects

Commercial Building, 11431-11433 S. Michigan Avenue

This two-story commercial store front building is clad in red brick with terra cotta decorative elements. It was built in 1911 as a commercial property along South Michigan Avenue, the major commercial corridor for the Roseland community. The building was commissioned by Alfonse Vincent who worked in the wagon trade and whose descendants would open the first automobile sales agency in Roseland. The architect, Joseph T. Fortin, designed a large number of residential and commercial buildings in Chicago and surrounding suburbs.

The building consists of two stories plus basement constructed of red brick with decorative terra cotta elements on the west and north elevations. The primary east facade contains the majority of ornamentation but has been significantly altered. The intricately patterned, curvilinear and

intertwined patterns of the terra cotta are similar to those seen in the designs of Louis Sullivan. However, much has been removed from the original design. The first floor storefront has been infilled with a modern brick and storefront system. The upper floor windows have been covered (or replaced) with siding. The north elevation remains largely unaltered.

This building is a good example of the commercial buildings built in Roseland's commercial district which was concentrated along South Michigan Avenue between 110th and 115th Streets during the first half of the 20th century. Due to this association, it is recommended eligible for the NRHP under Criterion A for commerce. Due to significant alterations to the storefront and removal/reconfiguration of original decorative material, it is not recommended eligible for NRHP under Criterion C for architecture.

Figure 4-2: West Facade, 11431-11433 S. Michigan Avenue

Mixed-Use Commercial/Residential, 11445-11447 S. Michigan Avenue

This two-story mixed-use commercial/residential building in the Roseland commercial district was constructed in 1903 and designed by architects Burtar & Gassmann. It is located along South Michigan Avenue, the major commercial corridor for the Roseland community. The building is a classical three-bay wide building, visually divided by a center section flanked by two side sections with projecting bays. The building has storefronts on the first floor and residences above. The walls on the primary (west) elevation are Indiana limestone, mostly rusticated, but smooth above the second-story windows. The storefront on the north side of the front elevation is metal-framed glass with recessed entry, possibly original to the building. The south entrance and storefront

have been boarded over. A limestone belt course runs below and above the second story windows. Ornamentation of the building includes a thick belt course projecting above the second story windows with brackets covered with cyma reversa with acanthus leaf molding that runs across the entire front facade, and a large triangular pediment above the second floor on the center section, decorated with a limestone laurel wreath, foliate and ribbons.

The CHRS identified this building "Orange" due to possession of architectural feature(s) or historical association that has made it potentially significant in the context of the surrounding community.

This building is a good example of the commercial buildings built in Roseland's commercial district, which was concentrated along South Michigan Avenue between 110th and 115th Streets during the first half of the 20th century. It is also an excellent example of the mixed-use configuration popular in this commercial district with commercial use on the first floor and residential above. Due to this association, it is recommended eligible for the NRHP under Criterion A for commerce. Although windows have been replaced at the west facade and the condition of the storefront at the south half of the building is unknown, the north storefront appears to be original and the stone portions of the facade are in good condition. Original decorative metal trim at the cornice is also intact and in fair condition. Because the resource retains sufficient architectural integrity and remains a good example of Classical Revival applied to a mixed-use building, it is recommended eligible for NRHP listing under Criterion C for architecture.

Figure 4-3: North and West Facades, 11445-11447 S. Michigan Avenue

Commercial Building, 11451 S Michigan Avenue

This one-story commercial building is located along South Michigan Avenue, the major commercial corridor for the Roseland community. It was constructed in 1928 and designed by local architect/engineer firm Loewenberg & Loewenberg who designed residential and storefront buildings in the city. The building was originally occupied by Sadock & Adelman, a furniture store and has since served several other commercial businesses including several furniture stores and a school of hair design.

The corner building was designed to address both street fronts, including a corner entrance and one centered on the west (S. Michigan Avenue) facade. The walls of the building are covered with rectangular terra cotta panels and further adorned by gold colored terra cotta stringcourse above the storefronts, cornice at both west and south elevations, and medallions at clerestory level. The storefront has been largely altered and boarded over. Additional windows at the south facade are octagonal in shape but have also been boarded over.

The CHRS has identified this building "Orange" due to possession of some architectural feature or historical association that has made it potentially significant in the context of the surrounding community.

This building is an excellent example of the commercial buildings built in Roseland's commercial district which was concentrated along South Michigan Avenue between 110th and 115th Streets during the first half of the 20th century. Due to this association, it is recommended eligible for the NRHP under Criterion A for commerce. This building is also unique as a remaining Art Deco design within the Roseland Commercial district. Although the storefront has been altered and windows boarded over, terra cotta cladding and decorative medallions, octagonal window openings, decorative trim crowning the storefront, and the highly ornate building cornice remain in fair to excellent condition. Because the building retains sufficient architectural integrity and remains an excellent and unique example of Art Deco design, it is recommended eligible for NRHP listing under Criterion C for architecture.

Figure 4-4: West and South Facades, 11451 S. Michigan Avenue

Single-Family Residence, 11452 S. Indiana Avenue

This two-story Italianate style house in the Roseland community was built circa 1880. It is a rare example of a brick-constructed two-story residence from this era. The 1880s was a time of transformation for the Roseland community with the establishment of the Pullman Palace Car Company to the east and development of several additional railroads in the area. This attracted an influx of workers, often immigrants from Sweden, Germany, England, and Ireland. Much of Roseland residences at this time were modest one-and-a-half story frame workers cottages.

This Italianate style building includes a gable-front with decorative fascia and paired eave brackets. The front porch roof appears to be a replacement. A bay-window projects from the south elevation near the rear of the house.

The CHRS has identified this building "Orange" due to possession an architectural feature(s) or historical association that has made it potentially significant in the context of the surrounding community. While window units, front door, and porch roof have been replaced, the original Italianate form of the building (including gable front and side bay window), deep decorative cornice with brackets, arched window openings, and brick facade remain in good condition. Because the building retains sufficient architectural integrity and is a unique remaining example of Italianate design, is recommended eligible for NRHP listing under Criterion C for architecture.

Figure 4-5: South and East Facades, 11452 S. Indiana Avenue

Scanlan Elementary, 11725 S. Perry Avenue

This Classical Revival style school in the West Pullman community was built in 1897. It is an excellent example of a Chicago Public School design by W. August Fiedler. An incredibly prolific designer, Fiedler designed 58 new school buildings as Chicago Board of Education Architect from 1893-1896.

The CHRS has identified this building "Orange" due to possession of an architectural feature(s) or historical association that has made it potentially significant in the context of the surrounding community. It was constructed primarily of red brick with limestone foundations and decorative elements. It uses a classical revival vocabulary with venetian gothic detailing including decorative and dentiled cornices, pilasters with Corinthian capitals, corner quoins, arched windows, decorated framed entrances, and limestone cartouches. The two main east west entrances are framed by arched openings with carved foliate scrollwork in the spandrels. The spandrels between first and second floor windows are filled with a brick checkerboard pattern and further adorned with small terra cotta fleur de lis. The arched third floor windows are crowned with limestone ogee arches. Masonry above these arches is of a highly ornate curvilinear pattern. Attic windows above are framed by limestone arches flanked by hexagonal columns with hexagonal capitals. The building retains architectural integrity and is excellent example of Classical Revival design, it is recommended eligible for NRHP listing under Criterion C for architecture.

Per correspondence by the SHPO on July 9, 2021, Scanlan Elementary School is also considered NRHP-eligible under Criterion A.

Figure 4-6: West Facade, Scanlan Elementary, 11725 S. Perry Avenue

George William Curtis Public School, 11445 S. State Street

This Classical Revival style school in the Roseland community was built in 1893. It is an excellent example of a Chicago Public School design by W. August Fiedler. An incredibly prolific designer, Fiedler designed 58 new school buildings as Chicago Board of Education Architect from 1893-1896.

The original building along State Street was constructed primarily of red brick with rusticated limestone foundations and decorative elements. It uses a classical revival vocabulary with fluted engaged pilasters, Doric and Ionic capitals, limestone cornices, sills, and lintels, arched windows over secondary entries, and checkerboard brickwork at parapets also over secondary entries. Additions to the building occurred in 1906, 1974, and 2009. The building retains architectural integrity and is excellent example of Classical Revival design, it is recommended eligible for NRHP listing under Criterion C for architecture.

Per correspondence by the SHPO on July 9, 2021, George William Curtis Public School is also considered NRHP-eligible under Criterion A.

Figure 4-7: George William Curtis Public School, 11445 S. State Street

Carver Military Academy, 13100 S. Doty Avenue

This two-story Modernist building in the Riverdale community area was constructed in 1973. It was constructed as George Washington Carver High School to serve students from Altgeld Gardens housing complex. The design is credited to John Moutoussamy, the first African-American architect to have a partnership in a major architectural firm, Dubin, Buin, Black & Moutoussamy. He studied at Illinois Institute of Technology in 1948 under Mies van der Rohe. Influenced by this instructor, Moutoussamy designed buildings using a Modernist and Late Modernist vocabulary. His 1971 design for the Johnson Publishing Company is the only high-rise building in Chicago designed by an African-American and was designated a National Historic Landmark in 2018.

The building is a good example of Late Modernist design. Its parti is of simple geometric volumes with simple rectilinear elements and little decoration. Its lineage from the school of Mies van der Rohe is clearly evident and little has changed from its original design.

Because the building retains excellent architectural integrity, is a good example of Late Modernist design and associated with architect John Moutoussamy, it is recommended eligible for NRHP listing under Criterion C for architecture.

Per correspondence by the SHPO on July 9, 2021, Carver Military Academy is also considered NRHP-eligible under Criterion A.

Figure 4-8: West Facade, Carver Military Academy, 13100 S. Doty Avenue

4.6 Surveyed Properties Recommended Ineligible

Beyond the properties that were identified as eligible for NRHP listing, eight properties were surveyed that did not meet eligibility criteria for inclusion in the NRHP. Generally, these properties have had substantial alterations that compromise their historic integrity or do not feature a level of distinctive architectural detailing necessary to qualify for the NRHP. See **Appendix A** for additional information. These properties include:

135 E. 114th Street

Year Built: 1913

Community Area: Roseland

Evaluation: This house is typical for the area, lacks distinguishing architectural features, was not associated with historical people or events, and is recommended not individually eligible for listing in the National Register.

136 E. 115th Street

Year Built: c. 1900

Community Area: Roseland

Evaluation: This house is typical for the area, lacks distinguishing architectural features, was not associated with historical people or events, and is recommended not individually eligible for listing in the National Register.

139 E. 115th Street

Year Built: 1908

Community Area: West Pullman

Evaluation: This house is typical for the area, lacks distinguishing architectural features, was not associated with historical people or events, and is recommended not individually eligible for listing in the National Register.

146 E. Kensington Avenue

Year Built: 1898

Community Area: West Pullman

Evaluation: This house is typical for the area, lacks distinguishing architectural features, was not associated with historical people or events, and is recommended not individually eligible for listing in the National Register.

203 E. Kensington Avenue

Year Built: c. 1920

Community Area: West Pullman

Evaluation: This building lacks distinguishing architectural features, was not associated with historical people or events, and is recommended not individually eligible for listing in the National Register.

11611 S. Lafayette Avenue

Year Built: 1890

Community Area: West Pullman

Evaluation: This house is typical for the area, lacks distinguishing architectural features, was not associated with historical people or events, and is recommended not individually eligible for listing in the National Register.

11624 S. State Street

Year Built: 1910

Community Area: West Pullman

Evaluation: This house is typical for the area, lacks distinguishing architectural features, was not associated with historical people or events, and is recommended not individually eligible for listing in the National Register.

11717 S. Lafayette Avenue

Year Built: 1894

Community Area: West Pullman

Evaluation: This house is typical for the area, lacks distinguishing architectural features, was not associated with historical people or events, and is recommended not individually eligible for listing in the National Register.

4.7 Archaeological Resources

Review of historic aerials from 1900 to 1980 and Sanborn Fire Insurance Maps from 1880 to 1920 revealed the development of residential and commercial properties, and railroads along the Preferred Alignment. Archaeologically, this demonstrates that the ground has been disturbed and there is a very low chance of intact subsurface deposits.

From June 15 to June 16, 2020 Midwest Archaeological Research Services (MARS), conducted a Phase I Archaeological Reconnaissance Survey on the Preferred Alignment (**Figure 2-1**). The project area is in portions of Sections 4, 9, 16, 21, 22, 26, 27, and 35, of Township 37 North, Range 14 East (Calumet) of the Third Principal Meridian.

MARS archaeologists did not identify any cultural material within their 53 excavated shovel probes during the Phase I archaeological survey. The areas that were not amenable to survey have been disturbed over the past 80 years by commercial, residential, roadway, and rail line development.

Additionally, no archaeological sites would be affected during construction of the Preferred Alignment.

See the full Archeological Resources report in **Appendix C**.

Appendices

Appendix A – Survey Forms

Appendix B – *RLE Eligibility and Effects Summary Report*, September 19, 2016

Appendix C – *RLE Archeological Resources*, December 2020

Appendix D - *Altgeld Gardens-Philip Murray Homes Correspondence*

Appendix A - Survey Forms

PROPERTY NAME 11431-3 S. Michigan Avenue

OTHER NAME(S) Bass Furniture & Rug Co.

STREET ADDRESS 11431- 3 S. Michigan Avenue, Chicago, Illinois

OWNER Original Owner A. Vincent

DATE OF CONSRUCTION 1911 (*American Contractor*)

DESIGNER/CONTRACTOR J.T. Fortin

PROPERTY USE
HISTORIC Commercial
CURRENT Commercial

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

CHICAGO HISTORIC RESOURCES SURVEY: Orange

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: (Y) N **CRITERIA:** A

HARGIS # 152041, Undetermined

INTEGRITY:. Unmodified Some Modification Major Modifications

Notes/Description – First floor storefront has been completely replaced and new masonry used to infill. Second story windows have been removed and/or covered. Terra cotta ornamentation has been significantly altered and large portions removed.

CONDITION: Excellent Good/Fair Poor

Notes/Description – Building appears to be in fair condition.

ARCHITECTURAL STYLE: Commercial Storefront, with Sullivanesque Elements
FOUNDATION: Masonry
WALLS: red brick, white terra cotta
WINDOWS: Non-historic vinyl
ROOF TYPE: flat with raised parapet
ROOF FEATURES: N/A
ROOF MATERIAL: N/A

OUTBUILDINGS (# AND DESCRIPTION) None

PROPERTY DESCRIPTION
11431-3 S. Michigan Avenue is a two-story commercial storefront building at the southeast corner of S. Michigan Avenue and 114th Street. The building's front (west) facade faces Michigan Avenue; its north elevation faces 114th Street, the rear of the building faces an alley to the east, and the south elevation is attached at the west by a party wall to the building located at 11437 S. Michigan Avenue. There are two inset double-door replacement storefront entries on the west facade and a service entrance with driveway access at the east end of the north elevation. The roof is flat.

The walls of the building are red brick. The first story of the front facade has been significantly altered, with replacement brick and storefront windows that extend to western side of the first floor north elevation. The second story appears to be older replacement brick. A slightly raised parapet wall on the front elevation extends to the west portion of the north elevation. Ornamentation of the building consists of white terra cotta on the west and north elevations.

On the front elevation, a terra cotta belt course runs below the second story windows and double rows of white terra cotta form an additional belt course on top of the windows. Four white terra cotta panels vertically divide the boarded-up second story windows and serve as pilasters, with Sullivanesque ornamentation. The two pilasters in the middle have stylized, flared capitals with oval

shields on top of a single vertical row of ornamental terra cotta, the two on the north and south ends do not have capitals. The intricately patterned, curvilinear and entwined decorative ornamentation on the terra cotta pilasters is more elaborate on the pilasters on the north and south ends. Near the roof line, bands of Sullivanesque terra cotta panels bracket two replacement white terra cotta squares. A raised, projecting terra cotta eagle is prominently placed in the middle of, and rises above, the roof line.

The belt course that runs below the second story windows on the front elevation continues along the north elevation, and the west side features two unadorned shields. A horizontal band of small, repeating blocks of rectangular decorative panels runs along the north elevation above the second-story windows. The site of the property is sloped, and basement windows appear on the east side of the north elevation. Windows are replacement double-hung simple punched windows with thick sills. A red brick chimney rises from the north elevation.

The east elevation faces an alley and the walls are common brick. A third floor rises along the south side. Windows from the basement, first, second, and third floors are arched. The windows along the south end of the east elevation are smaller than those on the north end. Several windows have bars and most are boarded- up.

The south elevation walls on the east side are common brick. The windows are arched; and many are bricked-in, and the remaining have bars.

HISTORY/DEVELOPMENT

A. Vincent, Original Owner

On October 23, 1897, a permit was issued to allow Vincent & Johnson to build a one-story and basement brick blacksmith shop for $1,200.00. In 1904, Alfonse Vincent was working at 11431 Michigan Avenue in the wagon trade, maintaining a carriage and wagon factory that manufactured milk and other wagons. On April 29, 1911, a permit was issued to allow A. Vincent to construct the present building located at 11431–3 S. Michigan Avenue. By 1913, a related entity named A. Vincent & Sons was engaged in the wagon trade, manufacturing milk and other wagons, as well as in the automobile industry. It is not known if the company manufactured automobile parts, serviced and/or sold automobiles at that time. By 1921, the business had expanded; A. Vincent was listed at 11431 S. Michigan Avenue and Vincent Bros. was located at 11354 S. Michigan Avenue, both companies in the harness & carriage trade. Advertisements from the period indicate that the companies were also engaged in automobile sales. It is not clear when the family company ceased to make wagons and concentrated solely on selling automobiles.

The family was French Canadian, and multiple extended family members worked for the family businesses and lived along the 11000 block of S. Michigan Avenue. Arthur Frederick Vincent, who was born on July 15, 1896, lived at 11337 S. Michigan Avenue in 1910, and in 1917 he lived at 11437 S. Michigan Avenue. He worked for A. Vincent & Sons at 11431 S. Michigan Avenue and was foreman of a garage. His father Alfred was the manager of a carriage factory. By 1930, Arthur was part owner in auto sales. Arthur's son was Orville A. Vincent, and the two were in the carriage business at the property, which was later occupied by the Bass Furniture company. According to Orville Vincent's obituary, Arthur and Orville opened the first automobile sales agency in Roseland and later constructed another building at 120 E. 115th Street.

Architect J.T. Fortin

Joseph T. Fortin was born on January, 1871 in Canada. Like the Vincent family, Fortin was French Canadian, emigrating to the United States in 1886. J. T. Fortin designed a large number of residential and commercial buildings in Chicago and surrounding suburbs. Commercial buildings that Fortin designed include the Colonial Trust & Savings Bank at 2218 S. Michigan Avenue, currently located in the Chicago Motor Row Landmark District. Among his more notable designs is Saint Louis De France Catholic Church, 117th Street and State Street, for Rev. Father Jules C. Fortin, possibly a family member. Fortin maintained his offices on the South Side of Chicago; in 1907 he was listed as working at 7 Blue Island Avenue, and in 1921 his office was located at 600 Blue Island Avenue in Chicago. He was a member of the Illinois Society of Architects.

SOURCES

American Contractor XXXI, September 17, 1910, p. 40.
"Blacksmith Helper," *Chicago Examiner,* August 8, 1913.
The Economist, October 23, 1897;
"'Fours' Predominate at Paris Show," *Chicago Tribune*, November 19, 1913.
Leather Trades Rating Book, A Directory, April 1921 (Boston: The Shoe & Leather Mercantile Agency, Inc., 1921): 183.
"O.A. Vincent, Pioneer Auto Dealer, Succumbs at Home," *South End Reporter*, July 19, 1950.

PHOTO(S)

West facade, September 13, 2020.

West facade, 2019 Google Maps imagery.

West facade, year unknown. HARGIS Database, Ref# 152041.

LOCATION MAP

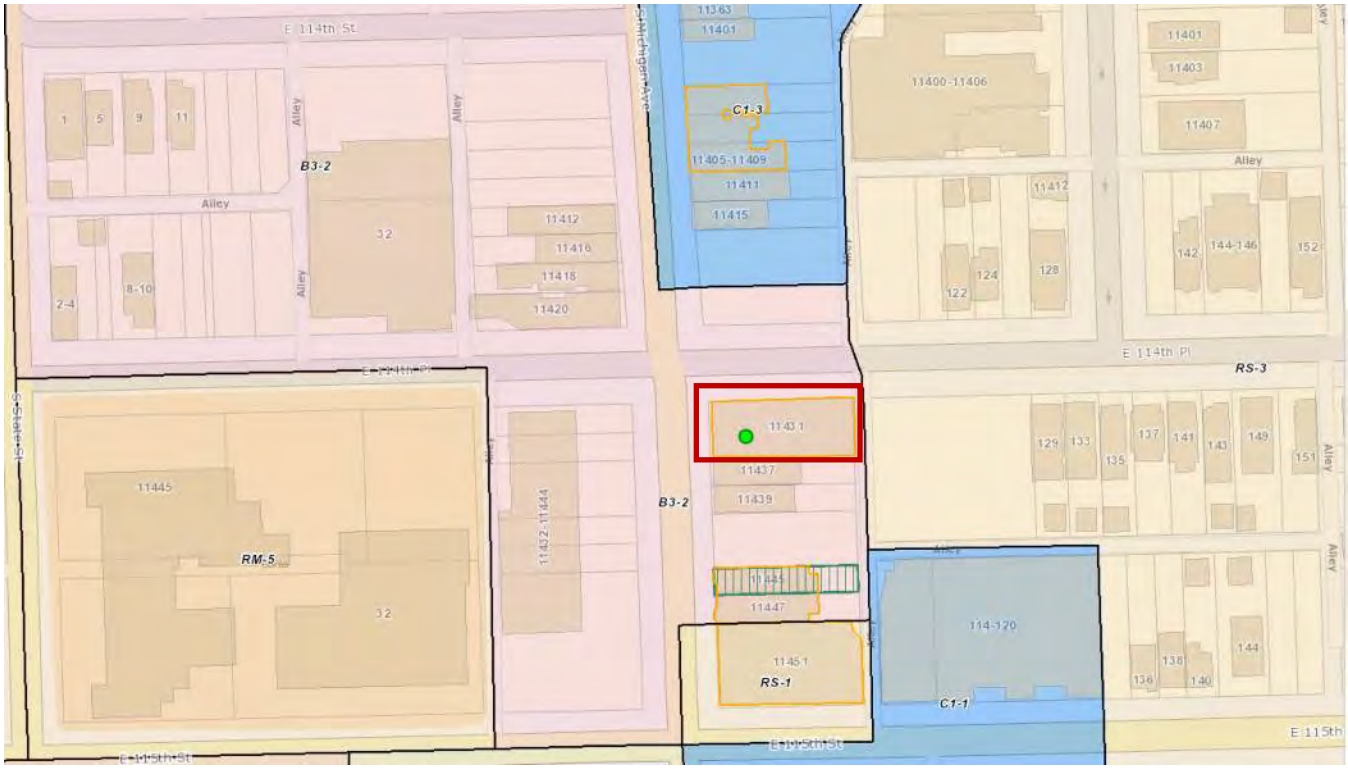

City of Chicago Zoning Map

PROPERTY NAME 11445-7 S. Michigan Avenue

OTHER NAME(S) None

STREET ADDRESS 11445-7 S. Michigan Avenue, Chicago, Illinois

OWNER Original Owner Sam Fisher

DATE OF CONSRUCTION 1903 (August 15, 1903 *American Contractor*)

DESIGNER/CONTRACTOR Burtar & Gassmann

PROPERTY USE

HISTORIC Mixed-Use Commercial/Residential
CURRENT Mixed-Use Commercial/Residential

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

CHICAGO HISTORIC RESOURCES SURVEY: Orange

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: (Y) N **CRITERIA:** A, C

HARGIS # 140665, Undetermined

INTEGRITY: Unmodified Some Modification Major Modifications

Notes/Description – Masonry walls and much ornamentation remain. Storefront of 11445 appears to be original. Second floor windows at 11445 have been replaced. Windows and storefront of 11447 have been removed and/or covered. Wood soffit below window bay of 11447 indicates possible storefront modifications at this address.

CONDITION: Excellent Good/Fair Poor

Notes/Description – Overall, the building shell appears to be in fair condition. Sheetmetal ornamentation of 11447 appears deteriorated.

ARCHITECTURAL STYLE: Commercial Victorian
FOUNDATION: Masonry
WALLS: Masonry
WINDOWS: N/A
ROOF TYPE: Flat
ROOF FEATURES: Parapet
ROOF MATERIAL: N/A

OUTBUILDINGS (# AND DESCRIPTION) None

PROPERTY DESCRIPTION
11445-7 is a classical three-bay wide building, visually divided by a center section flanked by two side sections with projecting bays. The building has storefronts on the first floor and residences above. 11445 is on the north side of the building and 11447 is on the south side of the building. The front facade faces Michigan Avenue on the west, the north elevation faces a vacant lot, the south elevation is a party wall that adjoins 11451 S. Michigan Avenue, and the east elevation faces an alley. Entrances to the building include a recessed storefront entry on the north side of the west elevation, a boarded-up door on the south side of the west elevation, and multiple entrances from a multi-level wood porch on the east elevation.

The walls of the front (west) elevation are Indiana limestone, mostly rusticated, but smooth above the second story windows. The walls of the north, east and south elevations are brick; the second floor of the north elevation has a section of wood and replacement brick. This north elevation wall may have been a party wall. The storefront on the north side of the front elevation is a metal-framed glass storefront with a recessed entry; the south side of the front elevation is boarded-up.

A limestone belt course runs below and above the second story windows. Ornamentation of the building includes a thick belt course projecting above the second story windows with brackets covered with cyma reversa with acanthus leaf molding that runs across the entire front facade, and a large triangular pediment above the second floor on the center section, decorated with a limestone laurel wreath, foliate and ribbons.

Windows on the second floor are replacement double-hung windows in simple, punched openings. There is one non-historic double hung window on the second floor of the north elevation. Windows and doorways on the east elevation are replacement in arched openings, some have bars. Covered wood porches with interconnected stairs lead to the fenced-in back yard. The site is sloped, and the basement level of the north wall is faced with historic stone.

HISTORY/DEVELOPMENT

The August 15, 1903 *American Contractor* journal announced that a building permit was granted to owner Sam Fisher to build a building at 11445 and 11447 S. Michigan Avenue. The architects would be Burtar & Gassmann.

In January of 1919, it was announced that a new enterprise named Roseland Trunk Works was located at 11445 S. Michigan Avenue. The building was for sale in 1937, and from 1945 through 1950, the Roseland Thrift Shop operated in the storefront as the principal fundraising source for the Infant Welfare Society located in the Beverly neighborhood of Chicago. Later in 1950 the building was leasing a “large, well located store, 25’ X 65’ ” at the property and the Roseland Thrift Shop had moved across the street to 11446 S. Michigan Avenue. The 1953 City of Chicago Directory published by the Chicago Cross Reference Association did not list a business at the address. Residents who lived above the store front at 11445 include Lanis Crouse in 1913, Anthony Trovante in 1940 and Dr. E.A. Proby in 1946, and Dr. Leo H. Frigo, Rose Ragonese and Dave G. Weil in 1953.

It is not clear what was located in the storefront at 11447 S. Michigan, but in 1937 an advertisement appeared in the Chicago tribune looking for a waitress. In 1945 and 1946, the American Legion had clubrooms in the building. The 1953 City of Chicago Directory published by the Chicago Cross Reference Association listed Avenue Liquors and Dr. L. Frigo as businesses located at 11447. At some point, Greater Change Cathedral occupied the site. Residents who lived above the storefront at 11447 include Dr. Abraham H. Lifchitz in 1908 through 1912, and Hugh R. Quinn in 1953.

Burtar & Gassmann

Six buildings designed by Burtar & Gassman are listed orange on the Chicago Landmarks historic survey as potentially possessing significant architectural or historical features, including two two-flat buildings designed by Burtar & Gassmann in 1905 at 2715 W. and 2741 W. Logan Boulevard which are listed as contributing structures to the Logan Boulevard Historic District listed on the National Register of

Historic Places and included as notable in the AIA Guide to Chicago *Logan Boulevard Graystones*, the area of Chicago's "finest and most easily viewed collection of graystones."[1]

SOURCES

American Contractor, August 15, 1903, p. 27.
Ancestry.com, 1940 Census
Congressional Record: The Proceedings and Debates of the 63rd Congress, First Session, Volume L, Washington, 1913. p. 84
Fenger Academy High School Courier Yearbook, Class of 1946.
Polk's Medical Register and Directory of the US and Canada, 1908.
"Small Pox its Prevention, Restriction and Suppression (Illinois State Board of Health, 1912)
Smith, Perry L., *Trunks, Leather Goods and Umbrellas: A Journal of Information for the Trade* January, 1919, p. 146.

[1] Laurie McGovern Petersen, ed., *AIA Guide to Chicago*, 2d ed., (Orlando: Harvest Inc., 2004) :270.

PHOTO(S)

North and West facades, September 13, 2020.

LOCATION MAP

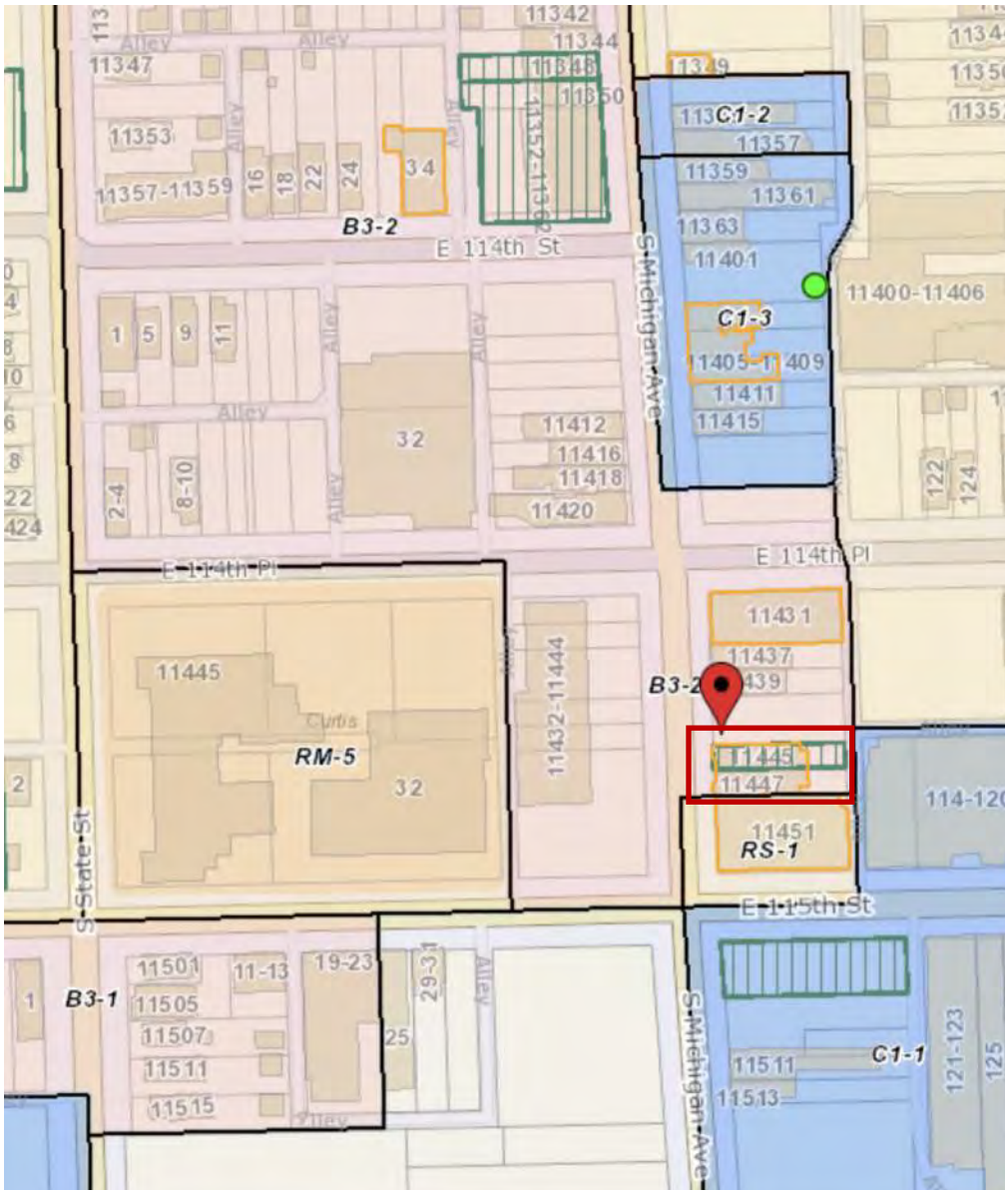

City of Chicago Zoning Map

PROPERTY NAME 11451 S. Michigan Avenue

OTHER NAME(S) None

STREET ADDRESS 11451 S. Michigan Avenue, Chicago, Illinois

OWNER Original owner Teninga Brothers Co.

DATE OF CONSRUCTION 1928 (Construction Permit dated May 10, 1928)

DESIGNER/CONTRACTOR Loewenberg & Loewenberg

PROPERTY USE

HISTORIC Commercial (Furniture Store)
CURRENT N/A Vacant

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

CHICAGO HISTORIC RESOURCES SURVEY: Orange

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: (Y) N **CRITERIA:** A, C

HARGIS # 140666, Undetermined

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Historic photos could not be found. The building shell appears to be largely unmodified except for the storefront at west and south facades which have been boarded over. Condition of original frames is not known. Octagonal windows have been boarded over.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Terra cotta is stained but largely intact. Storefront is hightly deteriorated.

ARCHITECTURAL STYLE: Commercial Corner Storefront, Deco/Classical
FOUNDATION: N/A
WALLS: Terra cotta
WINDOWS: Storefront, Octagonal
ROOF TYPE: Flat
ROOF FEATURES: N/A
ROOF MATERIAL: N/A

OUTBUILDINGS (# AND DESCRIPTION): None

PROPERTY DESCRIPTION
11451 S. Michigan Avenue is a commercial corner storefront building that is located on the southeast corner of S. Michigan Avenue and 115th Street. The west elevation runs along Michigan Avenue, and has a party wall that joins 11445-7 S. Michigan Avenue on the north. The south elevation faces 115th Street, and the east elevation faces an alley. There appear to be two main entries to the building: a recessed corner entry to the building is located at the southwest corner of the building, and faces southwest, and another entrance is located in a storefront window on the north side of the west elevation. An addition is located at the rear (east) of the building along 115th Street.

The walls of the building are covered with rectangular terra cotta panels: white on the walls and black along the sidewalk. Fenestration is boarded-up, but openings include a large storefront window on the west elevation, and another which wraps around the southwest corner along the west and south elevations. Divisions appear to be metal. Additional fenestration on the south elevation consists of boarded up octagonal openings. There is one steel-framed divided window on the east elevation facing northeast, the remaining windows on the are filled-in with masonry.

Consistent with early Art Deco commercial buildings, 11451 S. Michigan Avenue is stripped down to its purest form with applied ornamentation. The storefront windows are the predominant feature,

emphasized by applied gold painted terra cotta surrounding the windows, a stringcourse at the roof lines, and decorative elements applied to the terra cotta on the walls above storefront windows. Ornamentation is classical, with an Art Deco influence. The ornamentation surrounding the storefront windows and over the corner entry openings consists of low-relief swags, ribbons, floral elements and small anthemion flowers. Circular terra cotta elements applied to the terra cotta walls above the storefront windows but below the roofline string course are stylized floral elements bracketed with scrolls and floral elements. The roof line ornamentation is the most dramatic, and consists of a string course with two bands of decoration with arched projections over the roof line, emphasizing verticality. A band of Greek key panels with square panels decorated with anthemion panels is surmounted by a second band of outlined rectangular panels, and projecting shields with lozenges and anthemion flowers.

HISTORY/DEVELOPMENT

On March 22, 1925, the *Chicago Tribune* announced that a one-story and basement building would be built on the northeast corner of Michigan Avenue and 115th Street, to be used as a furniture store. Teninga Brothers & Co. was a real estate brokerage firm, located at 11324 S. Michigan Avenue in 1933. Cornelius Teninga, who lived at 10718 S. Normal Avenue in the Pullman neighborhood, was president of Teninga Bros. Cornelius Teninga graduated from the University of Chicago, among other things, was a licensed attorney, president of Teninga Brothers & Co., vice president of the Roseland National Bank, and secretary-treasurer of the Roseland Standard Building and Loan association, which constructed a building at the southwest corner of 113th Street and Michigan Avenue in 1931. Established in 1895, the Teninga Brothers Co. continues to operate today as Teninga-Bergstrom Realty Co., a realty company focusing on apartment leasing and property management throughout Chicago's South Side.

Over three years after the *Chicago Tribune* article announcement, a permit was issued on May 10, 1928, allowing construction of the building at 11451-5 S. Michigan Avenue. Loewenberg & Loewenberg were listed as architects. In 1929, the property was occupied by Sadock & Adelman, a furniture store. By 1953, Gordon Furniture & Rugs occupied the property, but went out of business in 1954 and Waldorf's, a chain of furniture stores, was operating in the building in 1957. In 1989, the building was occupied by the Canella School of Hair Design.

Loewenberg & Loewenberg, architects

Structural engineer Max L. Loewenberg was born in Russia on November 29, 1889, and architect Israel Sidney Loewenberg was born in Libau, Lithuania on June 22, 1892. The two brothers emigrated to the United States and both graduated with Bachelor of Science degrees from the Armour Institute of Technology, now known as the Illinois Institute of Technology. In 1919, they formed Loewenberg & Loewenberg, an architectural firm, and were principal partners together, starting with designs of residential apartment hotels, small storefronts, and a number of buildings for Jewish institutions. The

firm grew and is practicing today as Loewenberg Architects, concentrating on high-rise apartment buildings in Chicago.

SOURCES

"2 Luxury Facilities Planned," *Chicago Tribune*, August 27, 1967.

"3 New Furniture Stores to Enter 3 New Buildings," *Chicago Tribune*, March 22, 1925.

AIA Historical Directory of American Architects, 1956, 1962, 1970, https://aiahistoricaldirectory.atlassian.net/wiki/spaces/AHDAA/pages/36953960/ahd4003403, accessed September 15, 2020.

City of Chicago Building Permits, May 10, 1928.

"Going out of Business," *Chicago Tribune,* May 28, 1954.

Lisa Cipriani, *Italians In Chicago and The Selected Directory of the Italians in Chicago: 1933 – 1934*, 1933.

"'The Park Lane' is New Arrival for Sheridan Rd," Chicago Tribune, May 16, 1926.

"Plan $150,000 Bank Building for Roseland," *Chicago Tribune,* April 26, 1931.

Susan G. Broyles, Postsecondary Education Statistics Division, National Center for Educational Statistics, 1989-90 Directory of Post-Secondary Institutions, Vol. 2, September, 1990.

Teninga-Bergstrom Realty Co., https://www.teninga.com, accessed September 17, 2020.

University of Chicago Yearbook, 1912.

PHOTO(S)

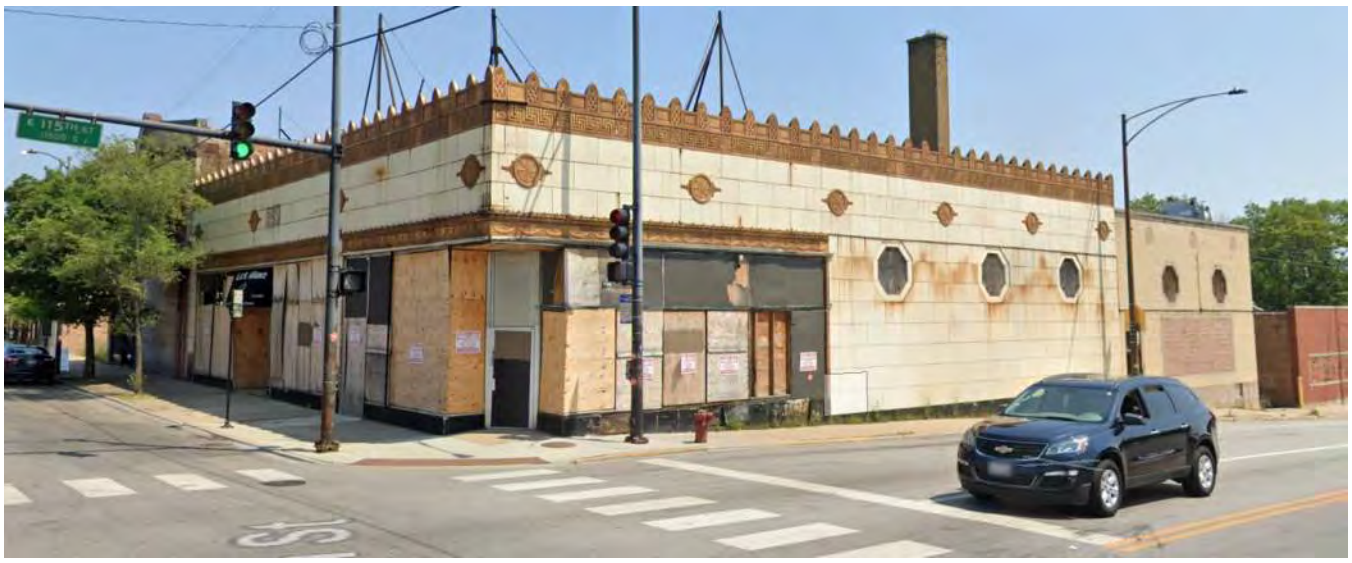

South and West facades, 2019 Google Maps imagery.

West facade, September 13, 2020.

South facade, September 13, 2020.

LOCATION MAP

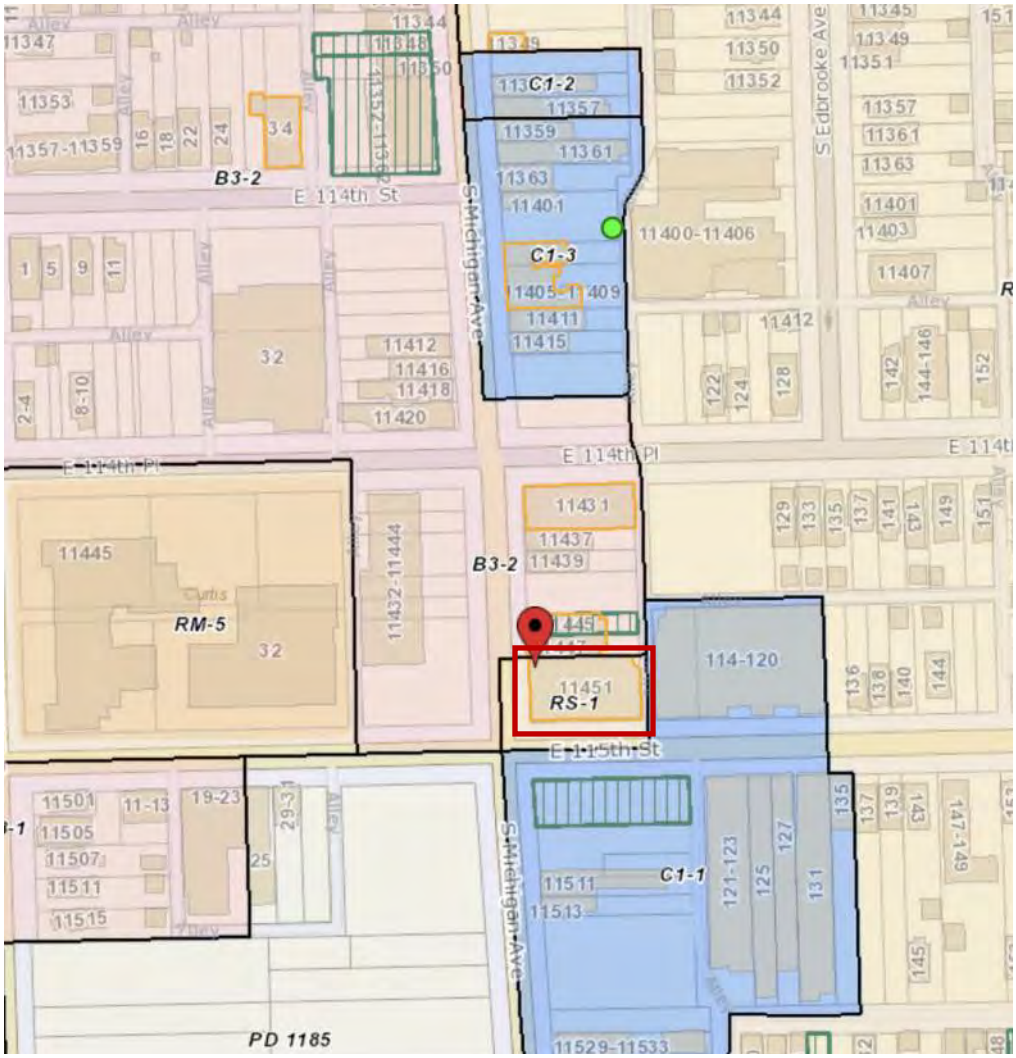

City of Chicago Zoning Map

PROPERTY NAME 11452 S. Indiana Avenue

OTHER NAME(S) N/A

STREET ADDRESS 11452 S. Indiana Avenue, Chicago, Illinois

OWNER N/A

DATE OF CONSTRUCTION c. 1880

DESIGNER/CONTRACTOR Unknown

PROPERTY USE
HISTORIC Single-Family Residential
CURRENT Single-Family Residential

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

CHICAGO HISTORIC RESOURCES SURVEY: Orange

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME: N/A

NOT LISTED BUT ELIGIBLE: (Y) N **CRITERIA: C**

HARGIS #140627, Undetermined

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11452 S. Indiana Avenue

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: (Unmodified) Some Modification Major Modifications

Notes/Description – N/A

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – The roof has visible damage.

ARCHITECTURAL STYLE: Italianate
FOUNDATION: masonry
WALLS: brick masonry
WINDOWS: fixed pane single hung windows
ROOF TYPE: gable roof
ROOF FEATURES: Italianate style brackets
ROOF MATERIAL: asphalt shingles

OUTBUILDINGS (# AND DESCRIPTION) None

PROPERTY DESCRIPTION
This is a single-family residence in the Roseland Community. It is a brick masonry building with Italianate features including arched window openings and decorative eave brackets and fascia. These features contribute to listing of the building in the Chicago Historic Resources Survey as "Orange: possesses potentially significant architectural or historic features." There is visible damage to the roof.

HISTORY/DEVELOPMENT
There are no records of modifications in the building. No notable history found.

SOURCES
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
80 acre: https://gisapps.chicago.gov/gisimages/80acres/pdfs/wnw223714r.pdf
HARGIS: http://gis.hpa.state.il.us/hargis/
HARGIS Report: http://gis.hpa.state.il.us/hargis/Reports/PropertyInformationReport.aspx?refnum=140627
Tax Portal: http://www.cookcountypropertyinfo.com/pinresults.aspx
Cook County Assessor: https://www.cookcountyassessor.com/pin/25221190360000
Chicago Landmarks Report:
https://webapps1.chicago.gov/landmarksweb/search/searchdetail.htm?pin=2522119036&formNumber=490921022
Sanborn Map: https://www.loc.gov/resource/g4104cm.g017901897E/?sp=34&r=-0.921,0.145,2.841,1.669,0

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11452 S. Indiana Avenue

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

PHOTO(S)

East facade, September 13, 2020.

LOCATION MAP

City of Chicago Zoning Map

PROPERTY NAME 135 E. 114th Place

OTHER NAME(S) None

STREET ADDRESS 135 E. 114th Place, Chicago, Illinois

OWNER John Etherly (Listed in Tax portal)

DATE OF CONSTRUCTION 1913

DESIGNER/CONTRACTOR Not mentioned in CHRS

PROPERTY USE
HISTORIC Residential
CURRENT Residential

DESIGNATIONS

LOCAL LANDMARK: Y N

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y N **CRITERIA:**

HISTORIC DISTRICT: Y N **CRITERIA:**

CONTRIBUTING: Y N

DISTRICT NAME: N/A

NOT LISTED BUT ELIGIBLE: Y N **CRITERIA:**

HARGIS # Not in Database

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 135 E. 114th Place

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Parapet railing modified, windows replaced, front door replaced

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Brick deterioration at exterior walls and front stairs in poor condition.

ARCHITECTURAL STYLE Two-flat (Arts and crafts Vernacular)

FOUNDATION: Masonry
WALLS: Masonry
WINDOWS: Fixed pane double hung windows, not original
ROOF TYPE: Flat roof
ROOF FEATURES: Stepped parapet design
ROOF MATERIAL: Built up

OUTBUILDINGS (# AND DESCRIPTION)

Free standing garage shed, with siding on the facade and pitched roof with shingles.

PROPERTY DESCRIPTION

This is a two-story masonry building, in the Roseland Community. It has a raised brick basement and off-center front door. The porch has wooden stairs and railing that extends through the front of the porch. It has a flat roof with stepped parapet detail and cornice on the front facade. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

HISTORY/DEVELOPMENT

No notable history found.

SOURCES

Cook County Assessor: https://www.cookcountyassessor.com/pin/25221190140000
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
HARGIS: http://gis.hpa.state.il.us/hargis/
Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchresult.htm
Tax Portal: http://www.cookcountypropertyinfo.com/pinresults.aspx
Sanborn Map: https://www.loc.gov/resource/g4104cm.g017901897E/?sp=34&r=0.293,1.097,0.366,0.225,0
Real estate website: https://www.redfin.com/IL/Chicago/135-E-114th-Pl-60628/home/13061293#public-records

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 135 E. 114th Place

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

PHOTO(S)

North facade, September 13, 2020.

LOCATION MAP

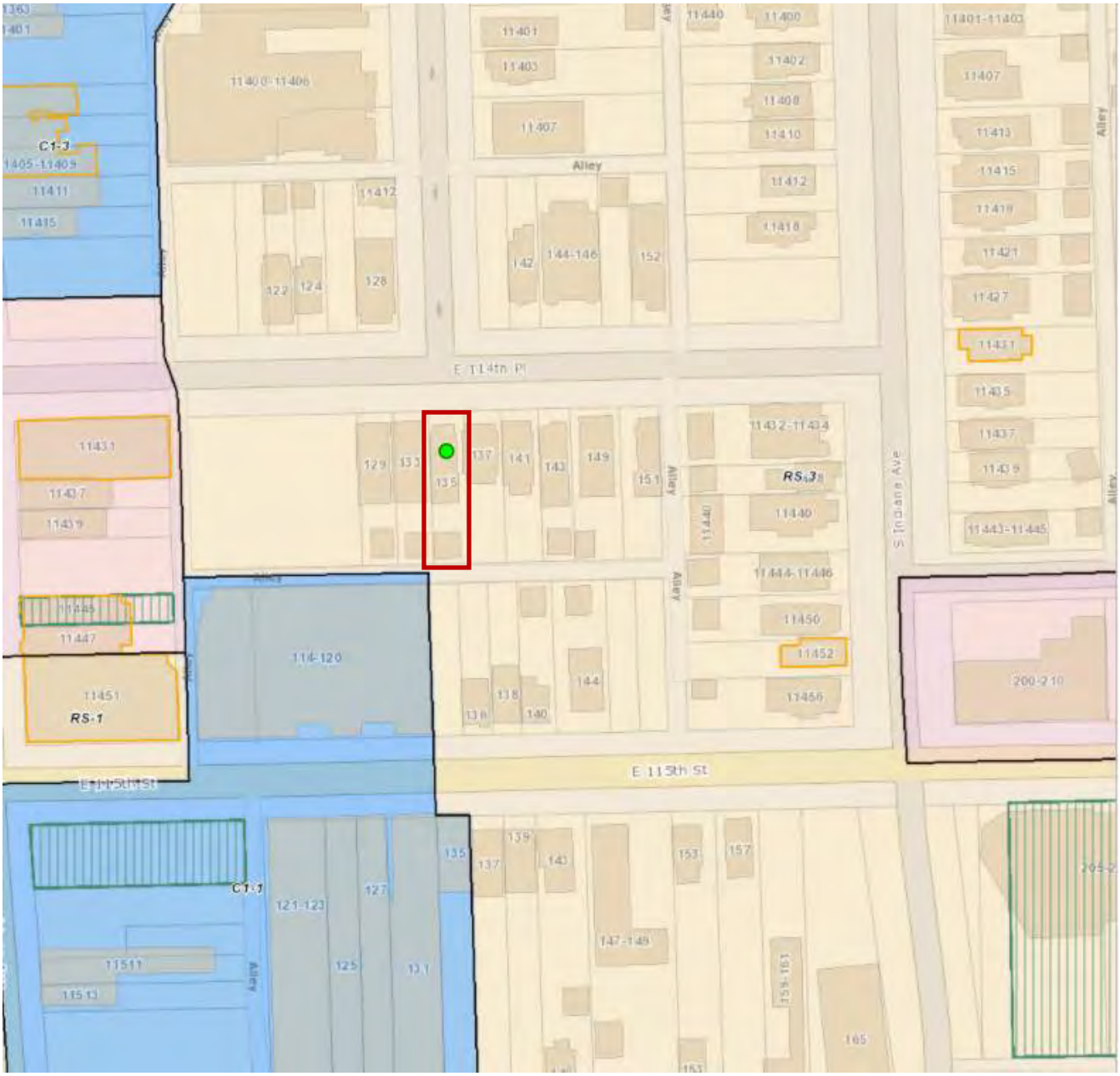

City of Chicago Zoning Map

PROPERTY NAME 136 E. 115th Street

OTHER NAME(S) None

STREET ADDRESS 136 E. 115th Street, Chicago, Illinois

OWNER Mark Billingslea (Listed in Tax portal)

DATE OF CONSRUCTION Circa 1900

DESIGNER/CONTRACTOR Unknown

PROPERTY USE

HISTORIC Residential
CURRENT Residential

DESIGNATIONS

LOCAL LANDMARK: Y N

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y N **CRITERIA:**

HISTORIC DISTRICT: Y N **CRITERIA:**

CONTRIBUTING: Y N

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: Y N **CRITERIA:**

HARGIS # Not listed in database

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 136 E. 115th Street

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: Unmodified Some Modification Major Modifications

Notes/Description – Windows, doors, and siding have been replaced

CONDITION: Excellent Good/Fair Poor

Notes/Description – Roof in poor condition

ARCHITECTURAL STYLE: Vernacular
FOUNDATION: Masonry
WALLS: Framed structure with siding
WINDOWS: Fixed pane double hung windows
ROOF TYPE: Gable roof
ROOF FEATURES: No special feature on roof
ROOF MATERIAL: Asphalt shingles

OUTBUILDINGS (# AND DESCRIPTION)
None

PROPERTY DESCRIPTION
This single-family residence is on 115th Street in the Roseland Community area. It is a 1.5-story wood framed building with vinyl siding and masonry foundation. It has an asymmetrical facade with fixed pane single hung window. The porch has metal railings and concrete stairs. This type of building was constructed in masse in this area at the turn of the 20th century and is prevalent along this and adjacent blocks. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register

HISTORY/DEVELOPMENT
No records of modifications or any visible additions. No notable history found.

SOURCES
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
80 Acres Map: https://gisapps.chicago.gov/gisimages/80acres/pdfs/wnw223714r.pdf
HARGIS: http://gis.hpa.state.il.us/hargis/
Tax portal: http://www.cookcountypropertyinfo.com/pinresults.aspx
Cook County assessor: https://www.cookcountyassessor.com/pin/25221190240000

PHOTO(S)

South facade, 2019 Google Maps imagery.

LOCATION MAP

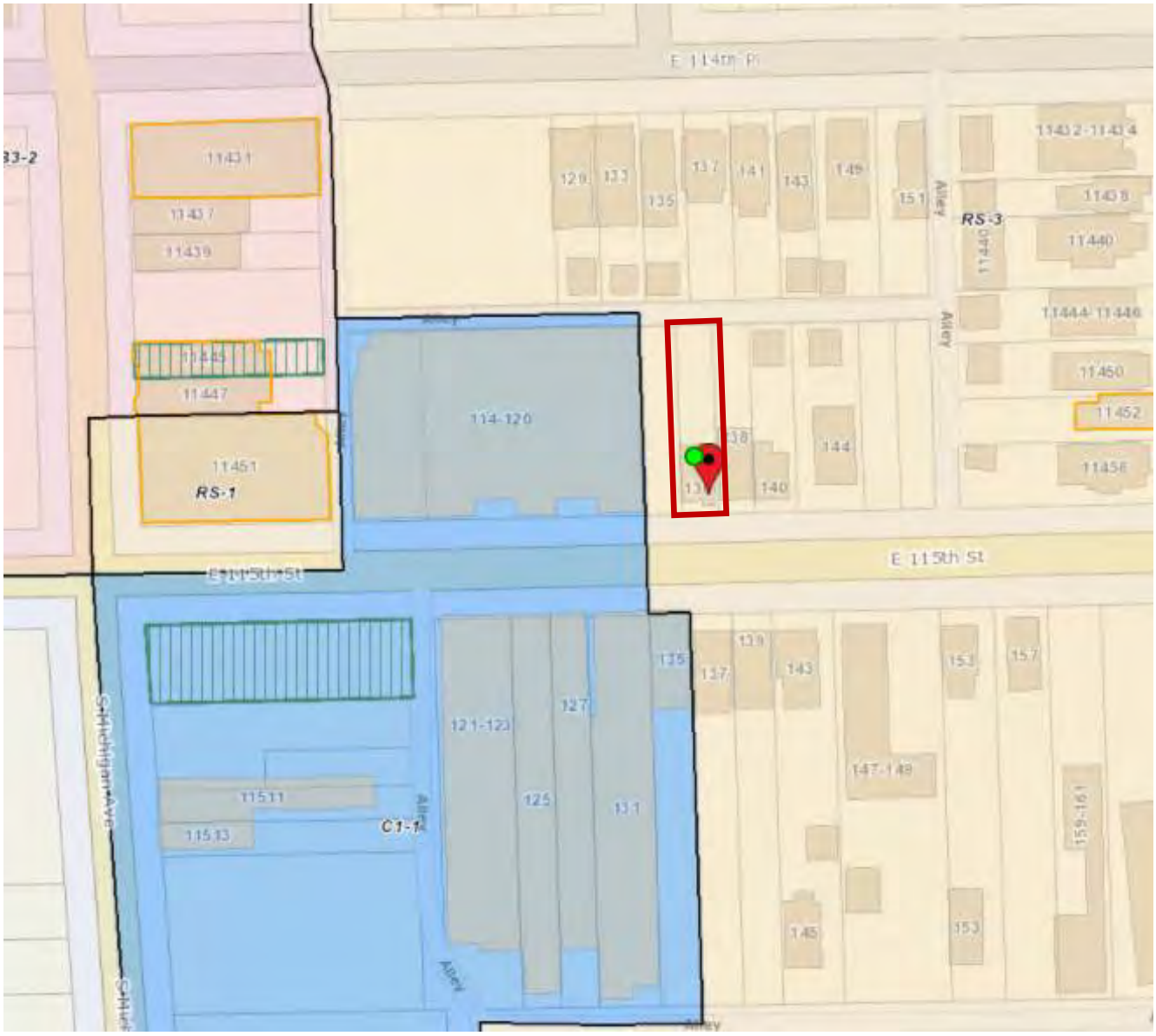

City of Chicago Zoning Map

PROPERTY NAME 139 E. 115th Street

OTHER NAME(S) None

STREET ADDRESS 139 E. 115th Street, Chicago, Illinois

OWNER Kareem Musawwir

DATE OF CONSRUCTION 1908

DESIGNER/CONTRACTOR Not available

PROPERTY USE

HISTORIC Single Family Residential
CURRENT Single Family Residential

DESIGNATIONS

LOCAL LANDMARK: Y N

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y N **CRITERIA:**

HISTORIC DISTRICT: Y N **CRITERIA:**

CONTRIBUTING: Y N

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: Y N **CRITERIA:**

HARGIS # Not listed in database

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – The original form appears to be the same as compared to the 1897 Sanborn Map, but modifications to the exterior have been made over time. Vinyl siding replaced the original siding, the windows are vinyl replacements, and the lower casement windows in the basement feature glass blocks that would not have existed in the original construction. The porch columns and railing have been replaced with decorative metal that likely dates from the 1960s-70s.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – From the exterior, the house appears to be decently maintained. There are no major issues visible from the exterior.

ARCHITECTURAL STYLE: Folk Victorian
FOUNDATION: Concrete
WALLS: Frame
WINDOWS: Vinyl
ROOF TYPE: Cross Gable
ROOF FEATURES: N/A
ROOF MATERIAL: Asphalt Shingle

OUTBUILDINGS (# AND DESCRIPTION) None

PROPERTY DESCRIPTION
The house is a 1.5-story wood frame house with a basement built in a Folk Victorian Style. It is in the West Pullman Community area. Vinyl siding covers the entire house. The roof features a cross gable with a front-facing gable. There is a bay window on the front facade and a porch over the front door supported by decorative metal railing. In the front gable there is a large tri-part window. Glass block casement windows are present at the basement level. This house type was popular in the area during the early 20th century. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register

HISTORY/DEVELOPMENT
No notable history found.

SOURCES
Cook County Assessor: https://www.cookcountyassessor.com/pin/25223010190000
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning

Tax Portal: http://www.cookcountypropertyinfo.com/pinresults.aspx
Sanborn Map: https://www.loc.gov/resource/g4104cm.g017901911G/?sp=49
Cook County Recorder of Deeds: http://162.217.184.82/i2/default.aspx?AspxAutoDetectCookieSupport=1

PHOTO(S)

North facade, 2019 Google Maps imagery.

LOCATION MAP

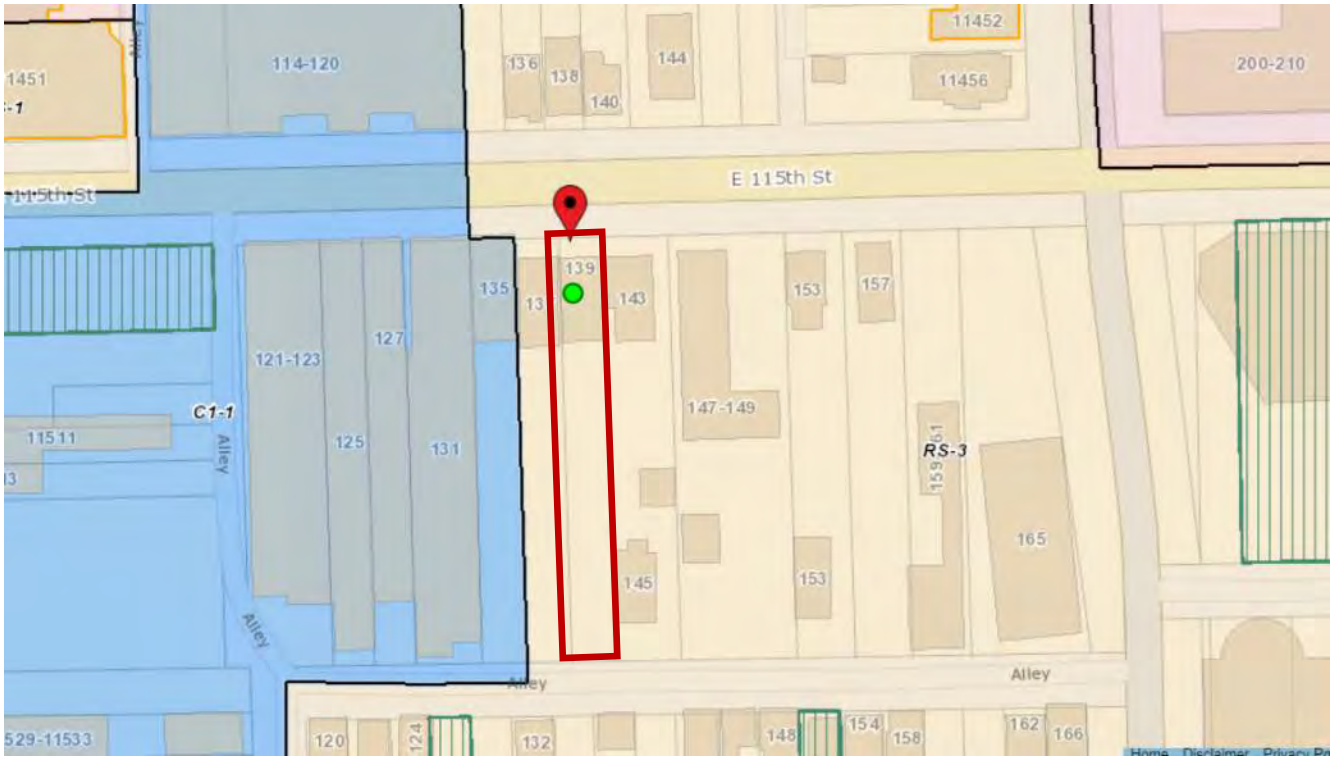

City of Chicago Zoning Map

Historic Map

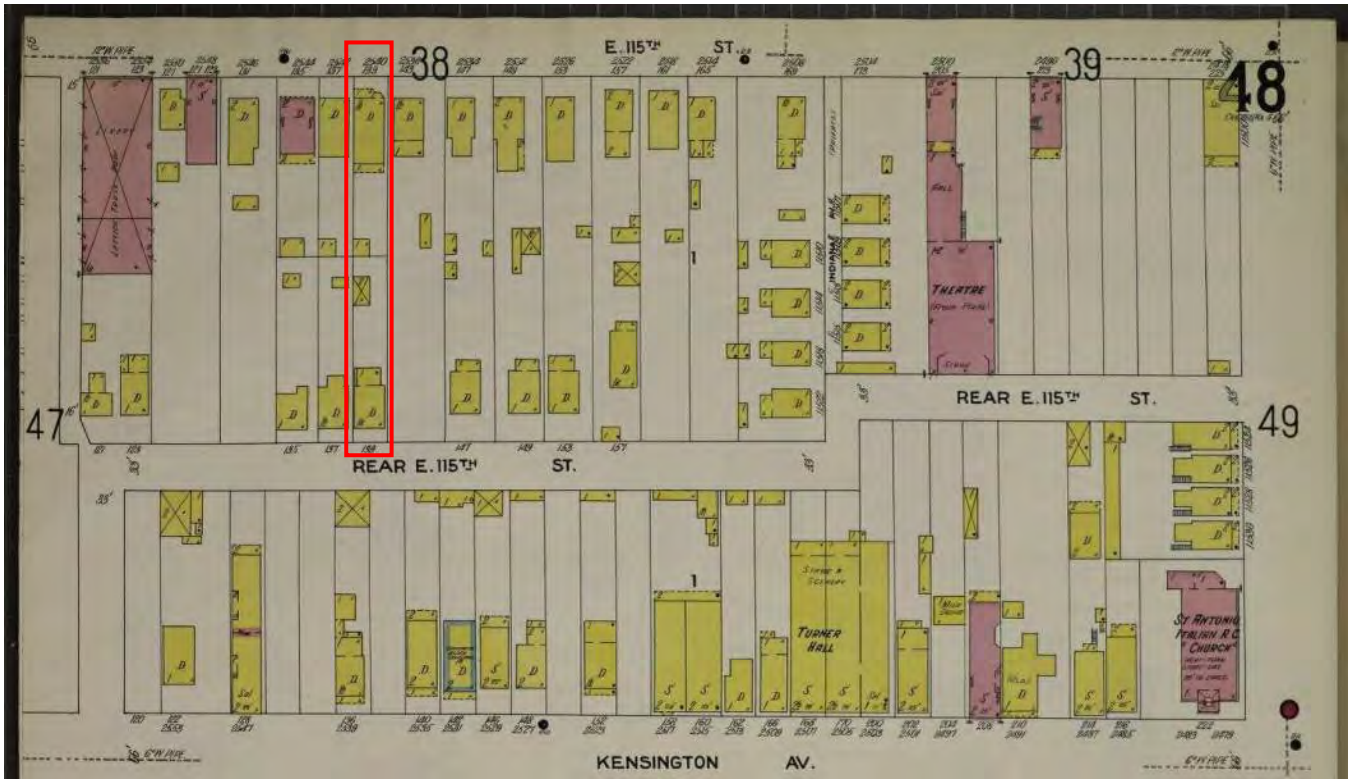

1911 Sanborn Fire Insurance Company Map

PROPERTY NAME 146 E. Kensington Avenue

OTHER NAME(S) None

STREET ADDRESS 146 E.Kensington Avenue, Chicago, Illinois

OWNER Not Found

DATE OF CONSRUCTION 1898

DESIGNER/CONTRACTOR Not Available

PROPERTY USE

HISTORIC Residential
CURRENT Residential

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: Y (N) **CRITERIA:**

HARGIS # Not in Database

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 146 E. Kensington Avenue

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Siding, windows, and doors have all been replaced. Awning over second floor windows is not original.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Generally the building appears to be in good condition. Second floor wood window frames are deteriorated. Awning rusted. Front porch roof is slightly warped.

ARCHITECTURAL STYLE: Vernacular
FOUNDATION: Masonry
WALLS: Vinyl siding
WINDOWS: Replacements
ROOF TYPE: Front Gabled
ROOF FEATURES: None
ROOF MATERIAL: Asphalt Shingles

OUTBUILDINGS (# AND DESCRIPTION)
One 2-car garage at rear of lot with hipped roof in fair condition.

PROPERTY DESCRIPTION
This is a typical two-flat wood frame building in the Roseland Community area. This type of building was constructed in masse in this area at the turn of the 20th century. This house type is prevalent along this and adjacent blocks. Many of the original features of the building envelope have been replaced or covered, but the overall building form remain intact. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register

HISTORY/DEVELOPMENT
No notable history found.

SOURCES
Cook County Assessor: https://www.cookcountyassessor.com/pin/25223010370000
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
HARGIS: http://gis.hpa.state.il.us/hargis/
Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchresult.htm

PHOTO(S)

South facade, September 13, 2020.

LOCATION MAP

City of Chicago Zoning Map

PROPERTY NAME 203 E. Kensington Avenue

OTHER NAME(S) N/A

STREET ADDRESS 203 E. Kensington Avenue, Chicago, Illinois

OWNER Rosalinda Valle

DATE OF CONSRUCTION Circa 1920

DESIGNER/CONTRACTOR N/A

PROPERTY USE

HISTORIC Mixed-use storefront and multi-family residential
CURRENT Mixed-use storefront and multi-family residential

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: Y (N) **CRITERIA:**

HARGIS # Not found in database

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – The front facade retains much of the original architectural features, including the decorative brickwork and stone window surrounds. The lower level storefront has been modified with a band of vinyl siding above the storefront windows.

CONDITION: (Excellent) Good/Fair Poor

Notes/Description – The building appears to be in good condition. No major signs of deterioration are apparent. A full inspection of the current condition was not conducted

ARCHITECTURAL STYLE: Commercial Vernacular
FOUNDATION: Masonry
WALLS: Brick Masonry
WINDOWS: Vinyl
ROOF TYPE: Parapet
ROOF FEATURES: Decorative front parapet
ROOF MATERIAL: N/A

OUTBUILDINGS (# AND DESCRIPTION) This parcel is ½ the depth of this block and contains only the building described below. A one-story wood framed residence occupies the adjacent parcel to the south.

PROPERTY DESCRIPTION
The building is a mixed-use commercial and residential building with a first floor storefront and residential flats in the rear first floor and entire second floor. It is located in the West Pullman Community area. The building features brick construction with a deep red face brick on the front-façade and rough brick on the other three facades. The storefront has display windows with a central front door, as well as a side door leading to the upper level flats. The upper level of the front facade has decorative brickwork at the cornice and beneath the window sills. Decorative stone surround the upper level windows. This building type is prevalent throughout the city including several on along this street which contains a mix of residential and commercial buildings. This building lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

HISTORY/DEVELOPMENT
No notable history found.

SOURCES

Cook County Assessor: https://www.cookcountyassessor.com/pin/25223010190000
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
Tax Portal: http://www.cookcountypropertyinfo.com/pinresults.aspx
Sanborn Map: https://www.loc.gov/resource/g4104cm.g01790193942/?sp=16&r=-0.231,0.507,0.657,0.291,0
Cook County Recorder of Deeds: http://162.217.184.82/i2/default.aspx?AspxAutoDetectCookieSupport=1

PHOTO(S)

South and East facades, 2019 Google Maps imagery.

LOCATION MAP

City of Chicago Zoning Map

HISTORIC MAPS

1939 Sanborn Fire Insurance Company Map

PROPERTY NAME George William Curtis Public School

OTHER NAME(S) None

STREET ADDRESS 11445 S. State Street, Chicago, Illinois

OWNER Chicago Public School

DATE OF CONSTRUCTION 1893

DESIGNER/CONTRACTOR Unknown

PROPERTY USE
HISTORIC Public School
CURRENT Public School

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME: N/A

NOT LISTED BUT ELIGIBLE: (Y) N **CRITERIA: C**

HARGIS # Not listed in database

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11445 S. State Street

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Windows and doors have been replaced.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Some staining present on brick and stone.

ARCHITECTURAL STYLE: Classical Revival
FOUNDATION Masonry
WALLS Brick Masonry
WINDOWS Double hung, replacements
ROOF TYPE: Flat roof
ROOF FEATURES: Cornice detail at the parapet
ROOF MATERIAL N/A

OUTBUILDINGS (# AND DESCRIPTION) None

PROPERTY DESCRIPTION
This building is four story building that is a part of the George William Curtis Public school (Chicago Public Schools). It has a red brick façade with rusticated stone base and limestone lintels and cornice. Windows are double hung replacements. Entrances are set of 4 double doors (replacements) surrounded by limestone columns and entablature. The building appears to be in good condition. Modern brick additions exist to the east and have little architectural character.

The building was mentioned as a comparable school in the West Pullman Elementary School National Register Report. While the building originally was designed in a Romanesque and Classical Revival style, the building received additions in 1906 and 1974, and in 2009 the 1893 and 1906 portions of the building were renovated.

HISTORY/DEVELOPMENT
The original building at 11445 S. State Street was designed by W. August Fiedler. Fiedler immigrated from Germany to the US in 1871. After working as an architect in New York City, he moved to Chicago in 1874 due to its rapid growth at that time. In the 1880s, Fiedler formed an architectural practice with John Addison. In 1893, Fiedler was appointed Chicago Board of Education Architect. During this three-year appointment, Fiedler designed 58 new school buildings throughout the city.

The building opened in 1893, with Thomas Hill as principal. Mr. Hill remained principal until 1925. The building operated as a combination elementary school and high school. The high school, known as Fenger High School, occupied the lower floors of the building, and the elementary school, known as Curtis school, occupied the upper floors. In 1910, the high school had 310 students and the elementary school had 1120 students. In 1926 Fenger High School was built at 112th St and Wallace, and high school classes were transferred to the new school. A junior high school was maintained at Curtis School until 1933. Not long after, the school became an all-elementary school.

On September 1, 1892, the *Inter Ocean* reported that Miss Burt, a member of the School Board, presented a resolution naming a new school building in honor of George William Curtis, best known as editor of *Harper's Weekly*, who had died in August of that year. The nomination was adopted. The school building would be located at Michigan and Stanwood Avenues in the Kensington neighborhood. The building was constructed in 1893, designed by Chicago Board of Education architect W. August Fiedler in the Romanesque and Classical Revival styles.

In 1903, the Iroquois Theater burned in Chicago and 41 teachers from 32 Chicago Public Schools who were in attendance lost their lives, including Amy Owens, a teacher from Curtis School, and her mother Frances E. Owens, died in the Iroquois Theater Fire. Chicago Public Schools were closed in memoriam until Tuesday, January 5, 1904.

In 1906, the Chicago Board of Education architect Dwight H. Perkins announced that the Curtis School would receive an addition of 12 rooms and a hall, the cost of which would be $200,000.

In December of 1931, a fire occurred in the northwest wing of the school. The damaged wing wasn't re-built, and the space was converted into a playground.

SOURCES

Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchresult.htm
West Pullman Elementary School, National Register of Historic Places Registration Form, https://www2.illinois.gov/dnrhistoric/Preserve/SiteAssets/Pages/illinois-historic-sites-advisory-council/Chicago%20--%20West%20Pullman%20Elementary%20School.pdf, accessed March 11, 2021.

Chicago Public School Buildings, Pre-1940 Context Statement, https://www.chicago.gov/content/dam/city/depts/zlup/Historic_Preservation/Publications/CPS_Bldgs_Pre_1940_Context_Statement.pdf.

"All Schools to Close," *Chicago Tribune*, January 3, 1904.

"Curtis School was Forerunner of Fenger High," *Suburbanite Economist*, June 15, 1949.

"Flames Wreck Old Fenger School Building," December 3, 1931.

"Progress Already Made," *Chicago Tribune*, June 29, 1906.

"Two Reports in the Bradford Case," *Chicago Tribune*, September 1, 1892.

"Want Her Dismissed," *The Inter Ocean*, September 1, 1892.

Iroquois Fire, http://www.iroquoistheater.com/chicago-teachers-iroquois-theater-victims.php.

Amy Owens,
http://www.iroquoistheater.com/cookbook-author-frances-owens-and-daughter-iroquois-victims.php.

City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
HARGIS: http://gis.hpa.state.il.us/hargis/
Sanborn Map: https://www.loc.gov/resource/g4104cm.g017901897E/?sp=33&r=-0.858,-0.076,2.716,1.669,0

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11445 S. State Street

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

PHOTO(S)

Central Entrance, west façade. Sept. 13, 2020.

West façade, Googlemaps 2019.

South façade, Googlemaps 2019.

LOCATION MAP

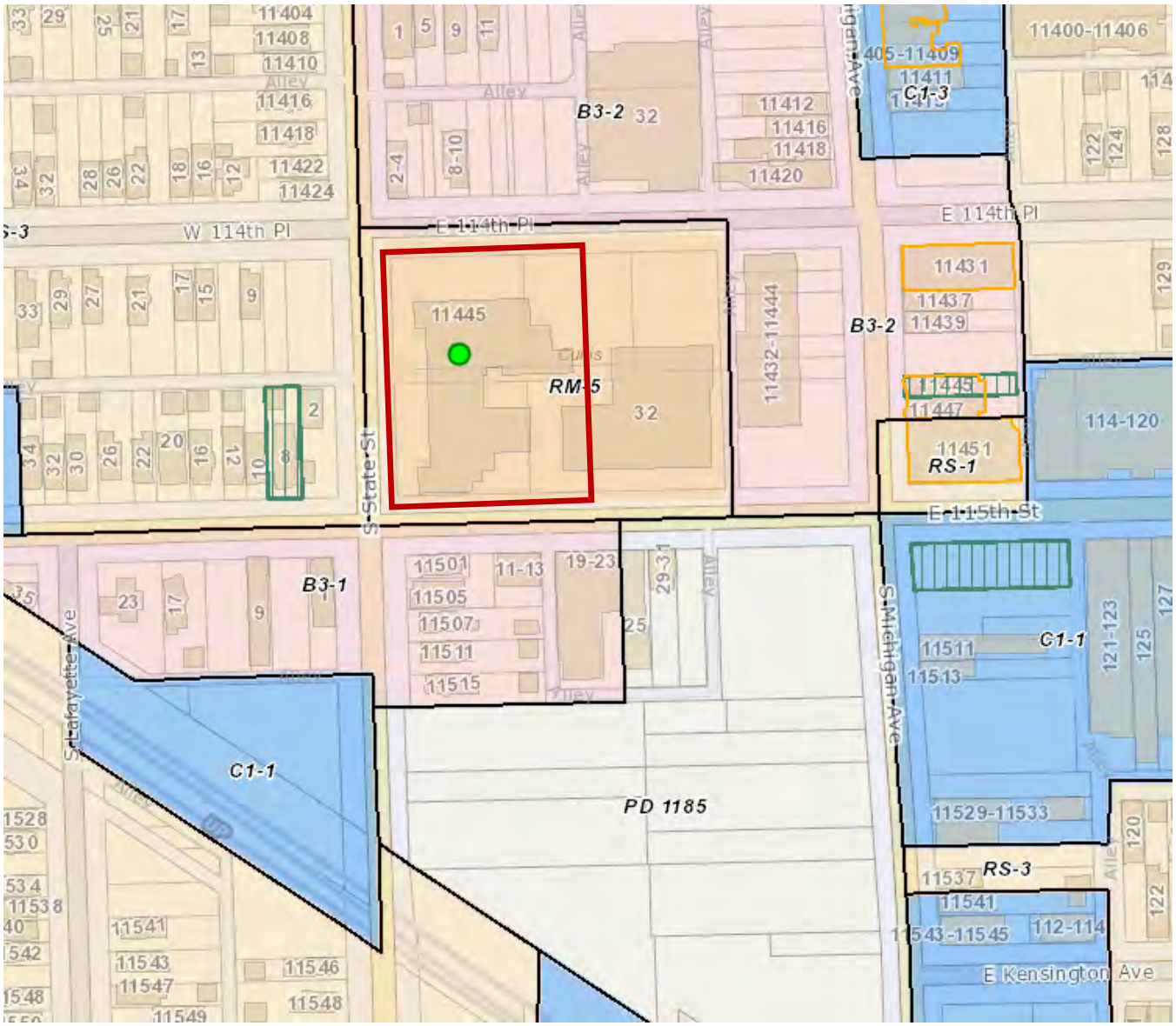

City of Chicago Zoning Map

Amy Owens

School Journal, http://www.iroquoistheater.com/chicago-teachers-iroquois-theater-victims.php,

[TRIBUNE Photo.]

FIRE CAUSES $25,000 DAMAGE TO OLD FENGER HIGH SCHOOL. Firemen called by a 4-11 alarm battle flames on top of the Curtis Junior High school, 114th and State streets. The fire was confined to the old section of the building erected in 1893.

Chicago Tribune, December 3, 1931

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11611 S. Lafayette Avenue

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

PROPERTY NAME 11611 S. Lafayette Avenue

OTHER NAME(S) None

STREET ADDRESS 11611 S. Lafayette Avenue, Chicago, Illinois

OWNER Not Found

DATE OF CONSRUCTION 1890 (approx.)

DESIGNER/CONTRACTOR Not Available

PROPERTY USE

HISTORIC Residential
CURRENT Residential

DESIGNATIONS

LOCAL LANDMARK: Y N

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y N **CRITERIA:**

HISTORIC DISTRICT: Y N **CRITERIA:**

CONTRIBUTING: Y N

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: Y N **CRITERIA:**

HARGIS # Not available.

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11611 S. Lafayette Avenue

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Siding, windows, and doors have all been replaced.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Generally the building appears to be in poor condition. Front windows have been boarded over and trim around front door is missing. Front porch roof is warped. Porch handrail is warped and missing balusters.

ARCHITECTURAL STYLE: Vernacular
FOUNDATION: Masonry
WALLS: Vinyl siding
WINDOWS: Replacements
ROOF TYPE: Front Gabled
ROOF FEATURES: Chimney
ROOF MATERIAL: Asphalt Shingles

OUTBUILDINGS (# AND DESCRIPTION)
One 2-car garage at rear of lot with hipped roof.

PROPERTY DESCRIPTION
This is a typical 2-flat wood frame building in the West Pullman Community area. This type of building was constructed in masse in this area at the turn of the 20th century. This house type is common along this and adjacent blocks. Many of the original features of the building envelope have been replaced or covered, but the overall building form remains intact. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

HISTORY/DEVELOPMENT
No notable history found.

SOURCES
Cook County Assessor: https://www.cookcountyassessor.com/pin/25214210030000
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchresult.htm

PHOTO(S)

West façade, 2019 Google Maps Imagery.

LOCATION MAP

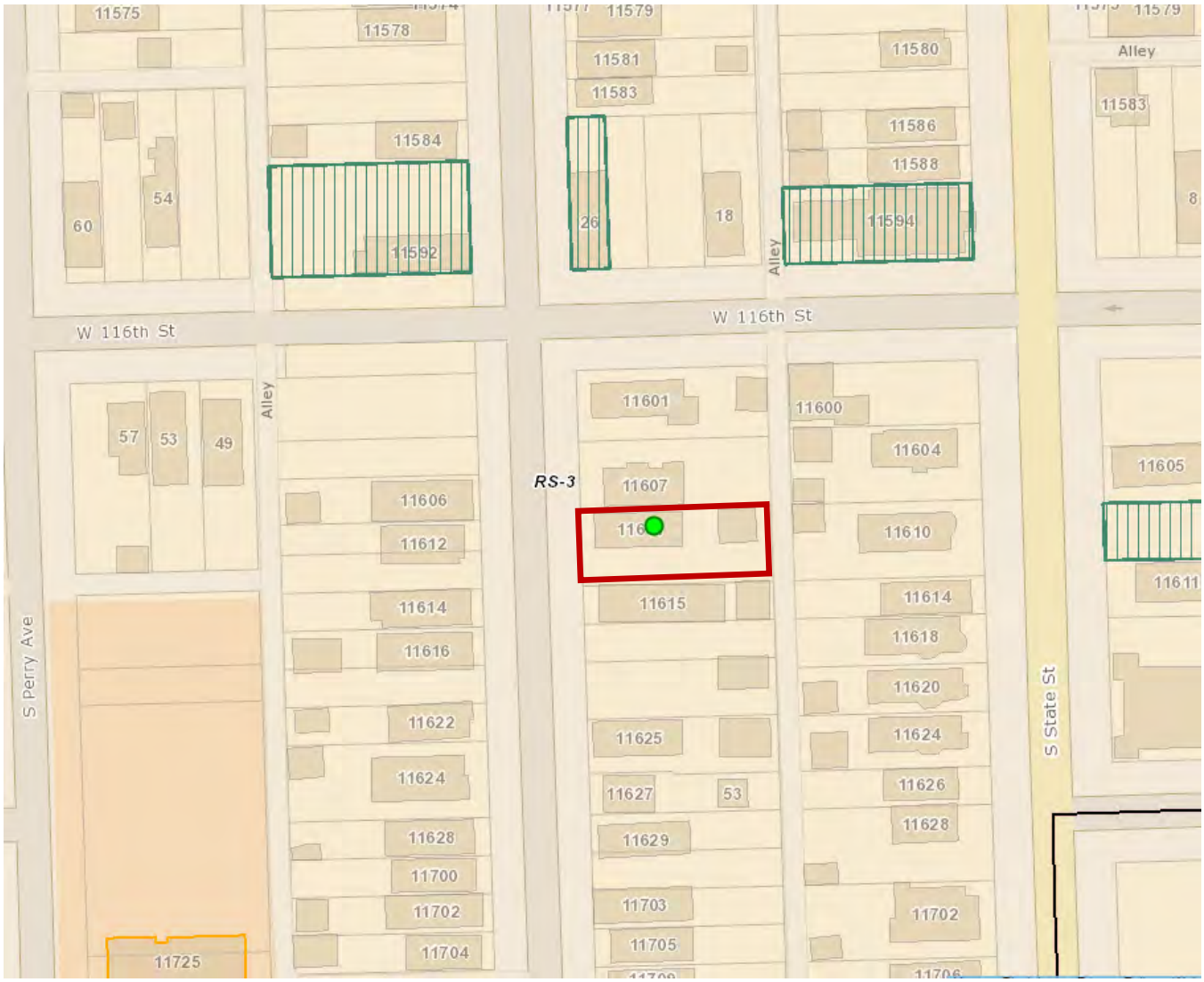

City of Chicago Zoning Map

PROPERTY NAME 11624 S. State Street

OTHER NAME(S) None

STREET ADDRESS 11624 S. State Street, Chicago, Illinois

OWNER Not Found

DATE OF CONSRUCTION 1910 (approx.)

DESIGNER/CONTRACTOR Not Available

PROPERTY USE

HISTORIC Residential
CURRENT Residential

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: Y (N) **CRITERIA:**

HARGIS # Not available.

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11624 S. State Street

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Windows replaced, front door replaced

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Property appears to be in overall good condition. Some evidence of wood deterioration at porch roof.

ARCHITECTURAL STYLE: Two-flat Vernacular
FOUNDATION: Masonry
WALLS: Masonry
WINDOWS: Replacements
ROOF TYPE: Flat
ROOF FEATURES: Parapet
ROOF MATERIAL: Built-up

OUTBUILDINGS (# AND DESCRIPTION)
One 2-car garage at rear of lot with hipped roof.

PROPERTY DESCRIPTION
This is a two-story masonry building, in the West Pullman Community Area. It has an asymmetrical façade with bay window and small front porch. The porch has concrete stairs and cast iron handrails, balusters, and vertical corner supports. The roof is flat with minimally decorative cornice on the front façade. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

HISTORY/DEVELOPMENT
No notable history found.

SOURCES
Cook County Assessor: https://www.cookcountyassessor.com/pin/25214210330000
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchresult.htm

PHOTO(S)

East façade, Google Maps imagery.

LOCATION MAP

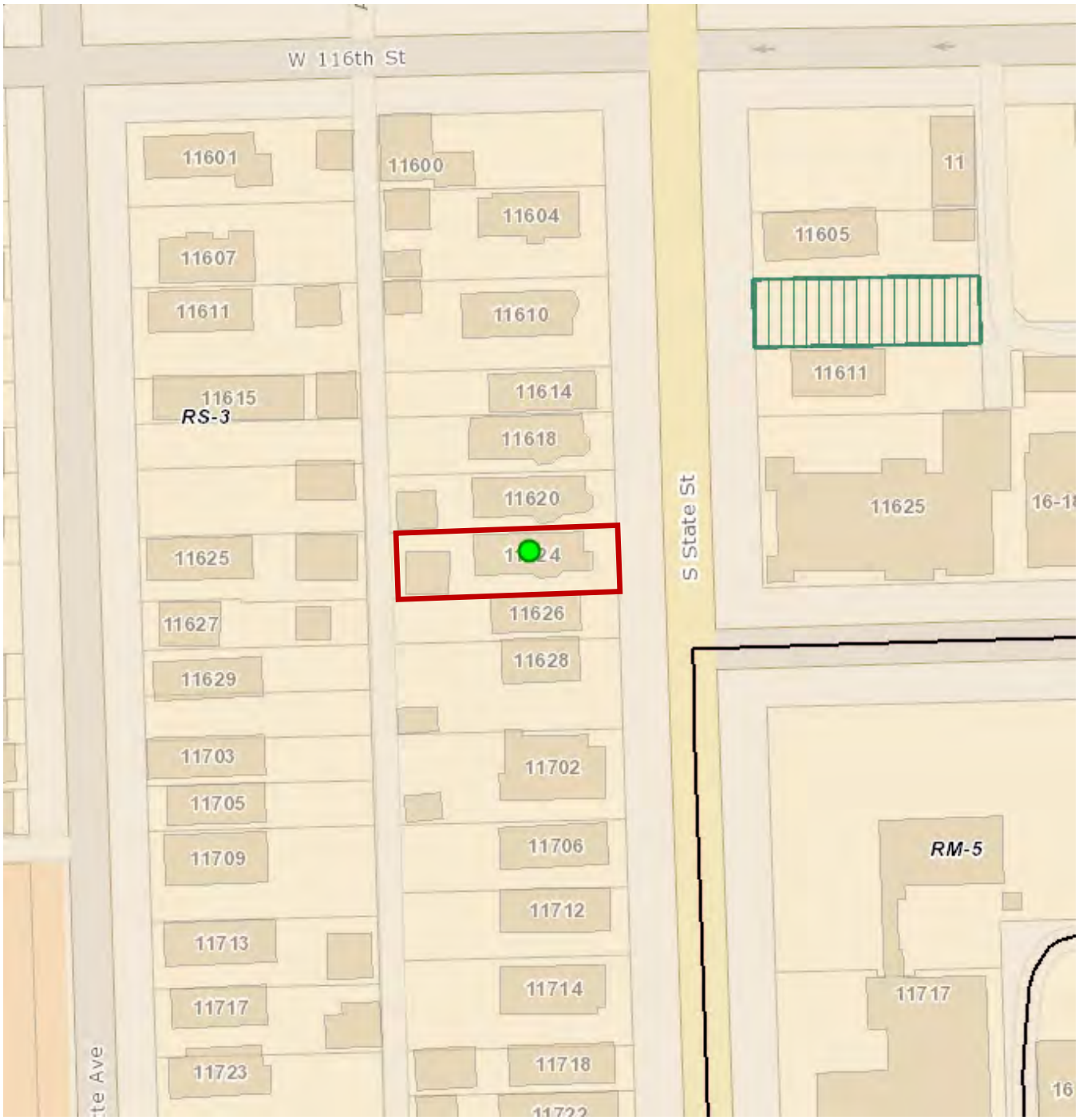

City of Chicago Zoning Map

PROPERTY NAME 11717 S. Lafayette Avenue

OTHER NAME(S) None

STREET ADDRESS 11717 S. Lafayette Avenue, Chicago, Illinois

OWNER Not Found

DATE OF CONSRUCTION 1894

DESIGNER/CONTRACTOR Not Available

PROPERTY USE

HISTORIC Residential
CURRENT Residential

DESIGNATIONS

LOCAL LANDMARK: Y N

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y N **CRITERIA:**

HISTORIC DISTRICT: Y N **CRITERIA:**

CONTRIBUTING: Y N

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: Y N **CRITERIA:**

HARGIS # Not available.

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11717 S. Lafayette Avenue

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Siding, windows, and doors have all been replaced. Porch handrail/balustrade have been replaced.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Generally the building appears to be in fair condition. Some bowing at the front porch roof.

ARCHITECTURAL STYLE: Vernacular
FOUNDATION: Masonry
WALLS: Vinyl siding
WINDOWS: Replacements
ROOF TYPE: Front Gabled
ROOF FEATURES: Brick chimney
ROOF MATERIAL: Asphalt Shingles

OUTBUILDINGS (# AND DESCRIPTION)
None. Appears to have been recently demolished.

PROPERTY DESCRIPTION
This is a typical 2-flat wood frame building in the West Pullman Community area. This type of building was constructed in masse in this area near the turn of the 20th century. This house type is common along this and adjacent blocks. Many of the original features of the building envelope have been replaced or covered, but the overall building form remains intact. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

HISTORY/DEVELOPMENT
No notable history found.

SOURCES
Cook County Assessor: https://www.cookcountyassessor.com/pin/25214210140000/print
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchresult.htm

PHOTO(S)

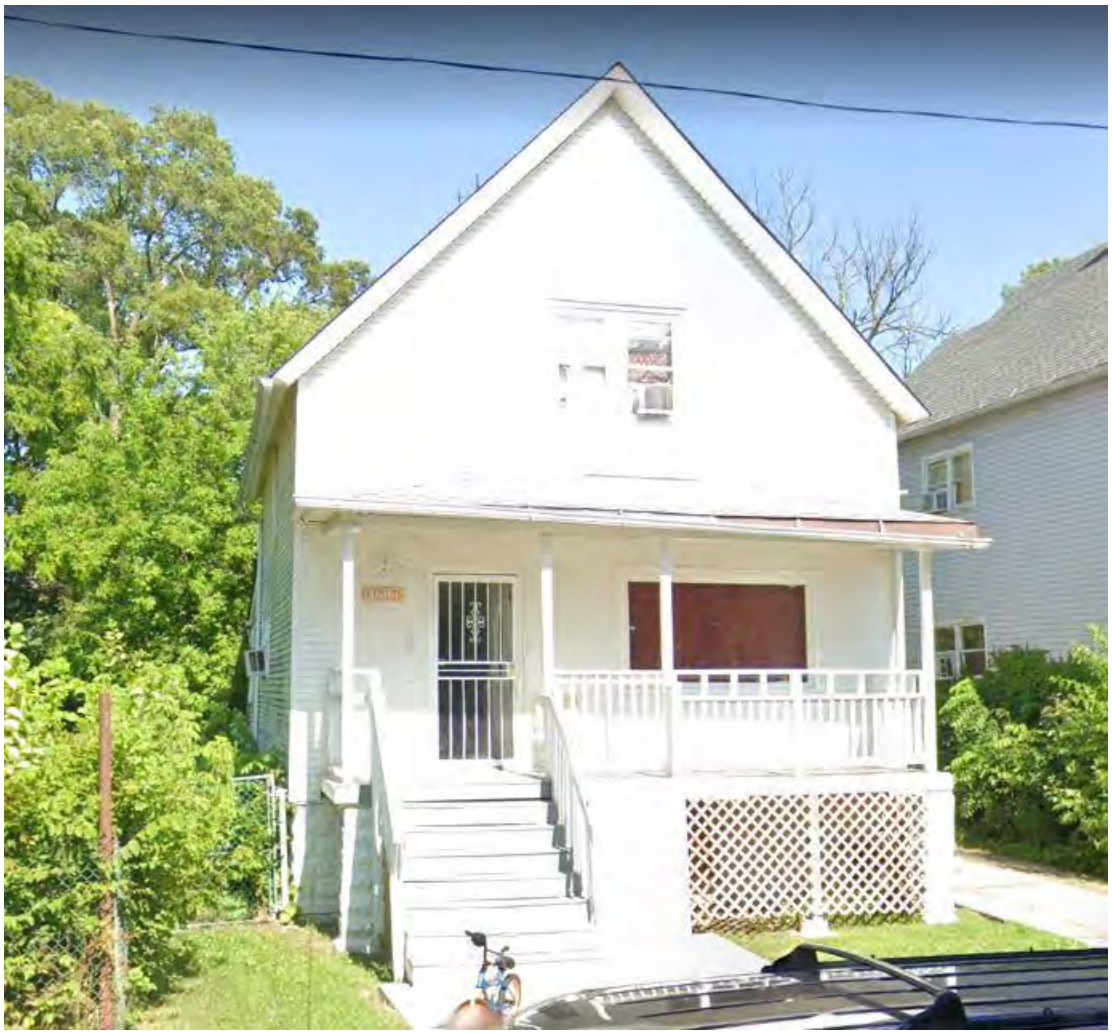

West façade, 2019 Google Maps Imagery.

LOCATION MAP

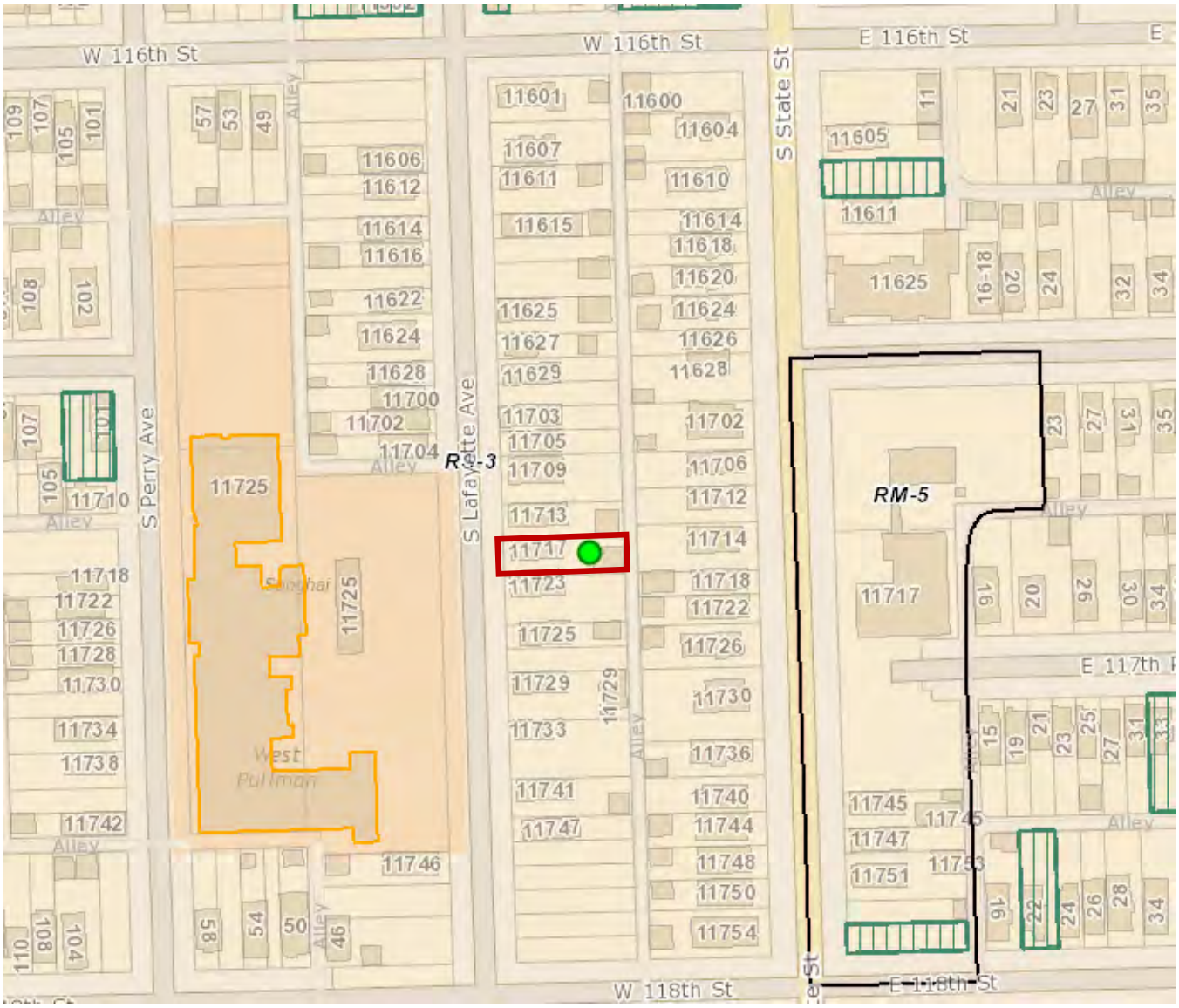

City of Chicago Zoning Map

PROPERTY NAME 11725 S. Perry Avenue

OTHER NAME(S) Scanlan Elementary (originally), Songhai Learning Institute (1997-2013)

STREET ADDRESS 11725 S. Perry Avenue, Chicago, Illinois

OWNER Not Found

DATE OF CONSRUCTION 1897

DESIGNER/CONTRACTOR Not Available

PROPERTY USE

HISTORIC School
CURRENT Vacant

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION: CHRS Orange

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: (Y) N **CRITERIA: C**

HARGIS # Not available.

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Windows have been boarded up at lower levels. Addition to north.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Generally the building envelope appears to be in good to fair condition.

ARCHITECTURAL STYLE: Classical Revival (Gothic/Venetian details)
FOUNDATION: Masonry
WALLS: Brick with limestone ornamentation
WINDOWS: Double Hung
ROOF TYPE: Flat
ROOF FEATURES: Brick chimney
ROOF MATERIAL: Built-up

OUTBUILDINGS (# AND DESCRIPTION)
None.

PROPERTY DESCRIPTION
The property at 11725 S. Perry Avenue is located at the center of the block between 117th Street and 118th Street between S. Perry Avenue and S. Lafayette Avenue. Its main façade faces west and there is a paved lot to the east. A one-story 20th-century addition is located at the north end of the original building.
The original three-story building was built in 1897 as a Chicago Public School. It was constructed primarily of red brick with limestone foundations and decorative elements. It uses a classical revival vocabulary with venetian gothic detailing including decorative and dentiled cornices, pilasters with Corinthian capitals, corner quoins, arched windows, decorated framed entrances, and limestone cartouches. The two main east west entrances are framed by arched openings with carved foliate scrollwork in the spandrels. The spandrels between first and second floor windows are filled with a brick checkerboard pattern and further adorned with small terra cotta fleur de lis. The arched third floor windows are crowned with limestone ogee arches. Masonry above these arches is of a highly ornate curvilinear pattern. Attic windows above are framed by limestone arches flanked by octagonal columns with octagonal capitals.
Architecturally, the school is very similar to the original (1894) West Pullman Elementary School which is approximately 1 mile southwest and has been designated a City of Chicago Landmark.

The building is listed in the Chicago Historic Resources Survey as Orange for possession of potentially significant architectural or historical features. Due to its architectural significance and integrity, it is recommended eligible for listing in NRHP under Criteria C for architecture.

HISTORY/DEVELOPMENT

The original building at 11725 S. Perry Avenue was designed by W. August Fiedler. Fiedler immigrated from Germany to the US in 1871. After working as an architect in New York City, he moved to Chicago in 1874 due to its rapid growth at that time. In the 1880s, Fiedler formed an architectural practice with John Addison who was known for his "Modern Gothic" designs. In 1893, Fiedler was appointed Chicago Board of Education Architect. During this three-year appointment, Fiedler designed 58 new school buildings throughout the city.

The school operated as Scanlan Elementary until 1997 when it was converted into Songhai Learning Institute. In 2013, along with many other Chicago Public Schools, the school was closed. It remains vacant today.

SOURCES

Cook County Assessor: https://www.cookcountyassessor.com/pin/25214210140000/print
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchdetail.htm?pin=2521420008&formNumber=533404002
West Pullman Elementary School Landmark Designation Report: https://www.chicago.gov/content/dam/city/depts/zlup/Historic_Preservation/Publications/West_Pullman_School_PrelimFinal.pdf

PHOTO(S)

West façade, 2019 Google Maps Imagery.

East façade, 2019 Google Maps Imagery.

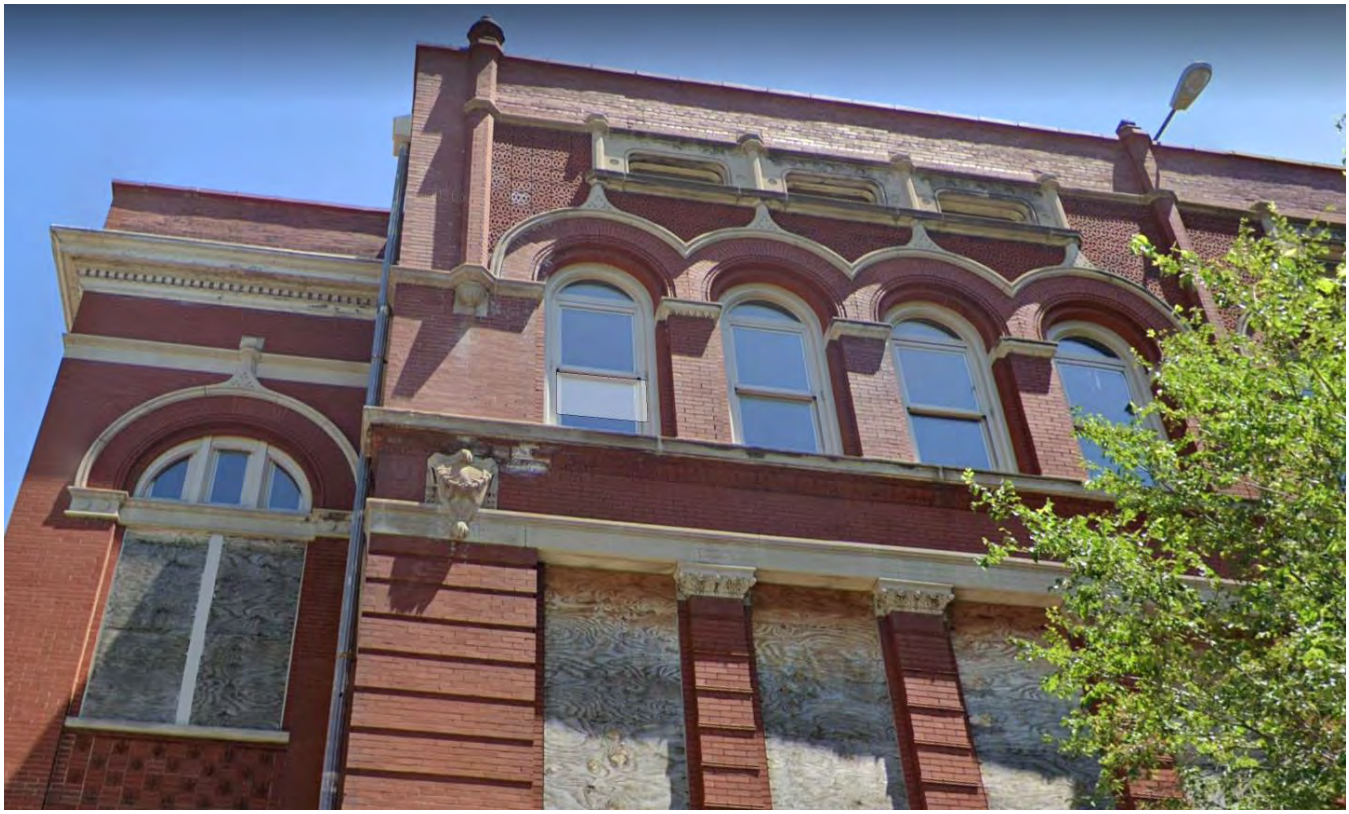

Decorative details at west facade, 2019 Google Maps Imagery.

LOCATION MAP

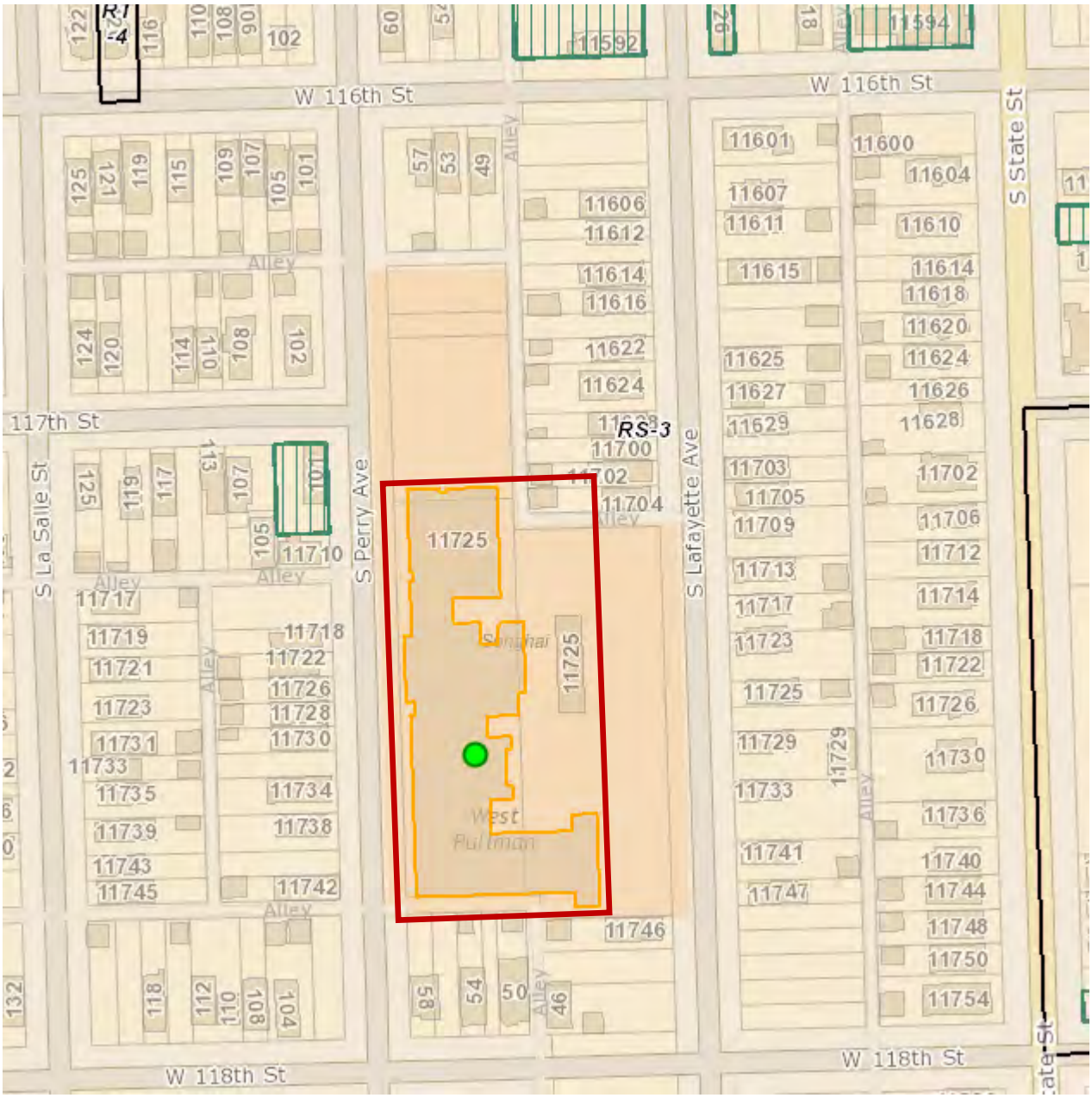

City of Chicago Zoning Map

PROPERTY NAME 13100 S. Doty Avenue

OTHER NAME(S) Carver Military Academy

STREET ADDRESS 13100 S. Doty Avenue, Chicago, Illinois

OWNER Not Found

DATE OF CONSRUCTION 1973

DESIGNER/CONTRACTOR Dubin, Dubin, Black & Moutoussamy

PROPERTY USE

HISTORIC High School
CURRENT Military Academy

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME:

NOT LISTED BUT ELIGIBLE: (Y) N **CRITERIA: C**

HARGIS # Not available.

INTEGRITY: (Unmodified) Some Modification Major Modifications

Notes/Description – No notable changes observed.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Property appears to be in overall good condition. Some deterioration of outdoor athletic facilities observed. No notable architectural issues observed. Mismatched brick in areas suggest previous masonry repair campaigns.

ARCHITECTURAL STYLE: Late Modernist
FOUNDATION: Masonry
WALLS: Masonry & Metal Panels
WINDOWS: Metal Framed, Awning
ROOF TYPE: Flat
ROOF FEATURES: Mechanical Units
ROOF MATERIAL: Built-up

OUTBUILDINGS (# AND DESCRIPTION)
None.

PROPERTY DESCRIPTION
This is a two-story building in the Riverdale Community Area. It is composed of 3 box-shaped volumes which are shifted east and west on a north-south axis where they connect. The facade of the central volume is clad in strips of windows at each story with metal panels between. North and south volumes are primarily clad in expanses of brick in concrete with no windows. The main entrance is to the west where a courtyard and drop-off area are located. Parking is located to the west and south of the building. Remains of athletic fields (track/football field and baseball diamonds) are present but not currently maintained. There have been no additions to the original building.
Stylistically, the building is of late Modernist design. It is of simple geometric volumes with rectilinear elements and little to no decoration. Its lineage from the school of Mies van der Rohe is clearly evident.

HISTORY/DEVELOPMENT
This building was designed by Chicago architectural firm Dubin, Dubin, Black & Moutoussamy. It was constructed in 1973 for Chicago Public Schools as George Washington Carver High School to serve students in the Altgeld Gardens housing complex. In 2000 it was converted into a public military academy.

The design is credited to John Moutoussamy, the first African-American architect to have a partnership in a major architectural firm, Dubin, Buin, Black & Moutoussamy. He studied at Illinois Institute of Technology in 1948 under Mies van der Rohe. Influenced by this instructor, Moutoussamy designed buildings using a Modernist vocabulary. His 1971 design for the Johnson Publishing Company is the only high-rise building in Chicago designed by an African-American and was designated a National Historic Landmark in 2018.

SOURCES

Cook County Assessor: https://www.cookcountyassessor.com/pin/25214210330000
City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchresult.htm
DOCOMOMO US: https://www.docomomo-us.org/designer/john-moutoussamy
Public Building Commission of Chicago: https://www.pbcchicago.com/projects/george-washington-carver-high-school-2/
Chicago Department of Planning and Development, Johnson Publishing Company Building Landmark Recommendation: https://www.chicago.gov/content/dam/city/depts/zlup/Historic_Preservation/Publications/Johnson_Publishing_Co_Bldg.pdf
AIArchitect: https://info.aia.org/aiarchitect/thisweek06/1110/1110rc_divers2.pdf

PHOTO(S)

South façade, Google Maps imagery.

West façade, Google Maps imagery.

LOCATION MAP

City of Chicago Zoning Map

Appendix C - RLE Archaeological Resources, December 2020

Red Line Extension Project

Archaeological Resources

December 2020

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Version 2.0 - February 1, 2021

Table of Contents

Section 1 - Introduction 3
Section 2 - Federal and State Guidelines 8
2.1 Federal 8
2.2 Illinois State Guidelines 8
Section 3 - Physical Setting 9
Section 4 - Cultural History of Region 10
4.1 Paleoindian Period (10,000 to 8,000 B.C.) 10
4.2 Archaic Period (8,000 to 1,500 B.C.) 10
4.3 Woodland Period (1,500 B.C. to A.D. 1,000) 11
4.4 Mississippian Period (A.D. 1000 to A.D. 1600) and Proto-Historic Period (A.D. 1600 to A.D. 1673) 12
4.5 Historic Period (1673 to Present) 12
Section 5 - Archaeological Sites in Project Vicinity 17
Section 6 - Field Methods 23
Section 7 - Results and Recommendation 28
Section 8 - References Cited 29

Appendices

Appendix A - Project Area and Selected Project Photograph Direction Maps

Appendix B - Historic Maps

Appendix C - Selected Project Photographs

Appendix D - Archaeological Survey Short Report

Appendix E – Web Soil Maps

Appendix F – Shovel Test Probes Summary Table

Figures

Figure 1-1: Preferred Alignment 4

Figure 1-2: Phase I survey boundary (7.5' USGS Quandrangle Map, Blue Island & Lake Calumet) .. 6

Figure 1-3: Phase I survey boundary (7.5' USGS Quandrangle Map, Blue Isalnd & Lake Calumet) ... 7

Figure 5-1: Archaeological Sites within 1 mile 19

Figure 5-2: Archaeological Sites within 1 mile 20

Figure 5-3: Archaeological Sites within 1 mile 22

Figure 6-1: STP Area 2 (excavatable soils along Eggleston Avenue) 25

Figure 6-2: Area of historic farmsteads located on 1939 aerial image 27

Tables

Table 5-1: .Archaeological Sites within 1 mile of the Project Vicinity 17

Section 1 - Introduction

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing terminal at 95th/Dan Ryan to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include Park & Ride facilities and bus connections. In 2018, CTA selected the Preferred Alignment as shown in **Figure 1-1**.

The Preferred Alignment for the Red Line Extension (RLE) Project would run south along I-94 from the 95th/Dan Ryan terminal, then curve west along the north side of I-57 between 97th and 98th Streets (within the I-57 right-of-way) until it reaches the Union Pacific Railroad (UPRR) corridor adjacent to Eggleston Avenue. The alignment would then run south to follow the UPRR corridor for approximately 1 mile. The extension would follow the UPRR corridor, on the west of the existing UPRR corridor, to 108th Street, where it begins traveling east and crossing over the existing UPRR corridor and going south along the east side of the UPRR Corridor to the 111th Street station.

The proposed rail extension would then continue running in a southeasterly direction along the east side of the UPRR corridor to 119th Street where it crosses over the Canadian National and Metra rail corridor between Kensington Park on the southwest and Front Avenue on the northeast. The extension then continues southeast leaving the UPRR corridor and crossing over the Norfolk Southern Railroad (NS) corridor. The extension then continues southeast along the NS corridor running along the east side of the NS tracks. A new shop and yard would be located at 120th Street. Slightly northwest of 124th Street the extension would cross back over the NS tracks and begin running along the west side of the tracks and adjacent to Cottage Grove Avenue on the west until crossing under 130th Street where it terminates on the east of side of Altgeld Gardens, west of Carver Military Academy High School.

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-1: Preferred Alignment

Appendix B contains historic plat maps from 1861, 1870, 1886, 1890, 1898, and 1929, as well as 1938 historic aerials, and 1911 Sanborn Fire Insurance Maps. These maps show the development of residential and commercial properties, and railroads along the Preferred Alignment. Archaeologically, this demonstrates that the ground has been disturbed and there is a very low chance of intact subsurface deposits.

From June 15 to June 16, 2020 Midwest Archaeological Research Services (MARS), conducted a Phase I archaeological reconnaissance survey on the Preferred Alignment. The project area is in portions of Sections 4, 9, 16, 21, 22, 26, 27, and 35 of Township 37 North, Range 14 East (Calumet) of the Third Principal Meridian (**Figures 1-2 and 1-3**). MARS archaeologists did not identify any cultural material within their 53 excavated shovel probes during the Phase I archaeological survey (**Appendix A: Figures 5-7, 28-29**). Additionally, no recorded archaeological sites would be impacted during construction of the Preferred Alignment. **MARS recommends project clearance**.

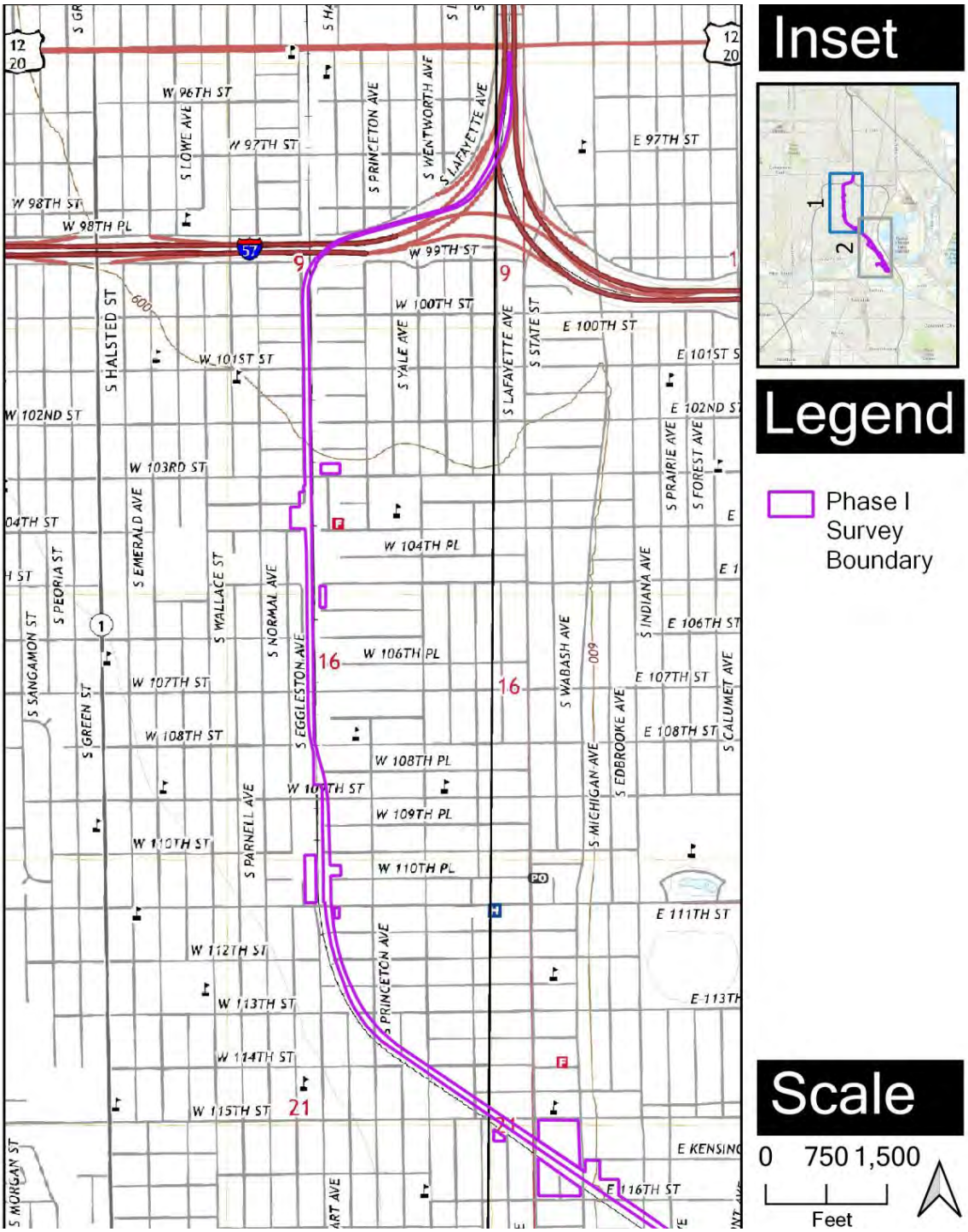

Figure 1-2: Phase I Survey Boundary
(7.5' USGS Quadrangle Map, Blue Island & Lake Calumet)

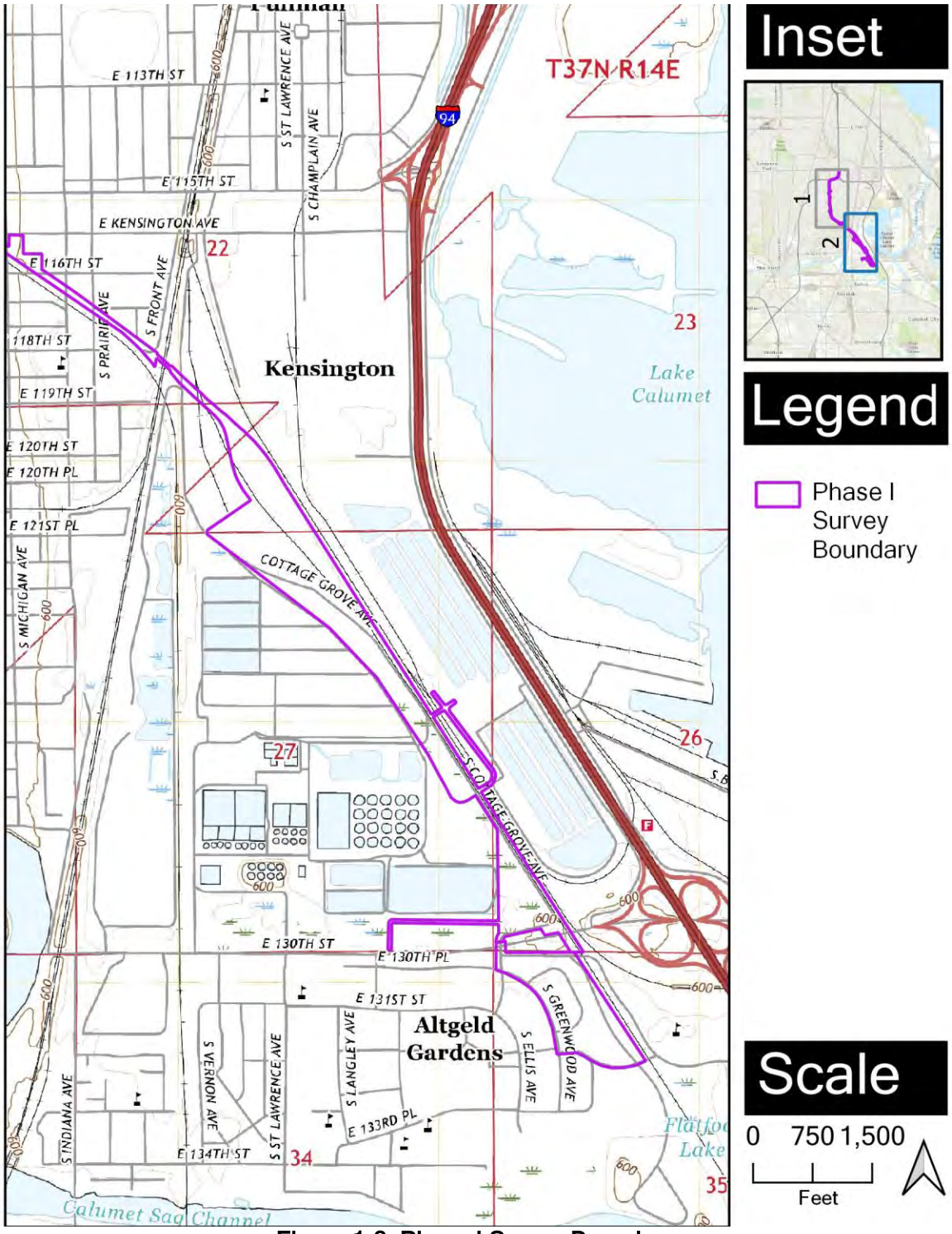

Figure 1-3: Phase I Survey Boundary
(7.5' USGS Quadrangle Map, Blue Island & Lake Calumet)

Section 2 - Federal and State Guidelines

This section discusses the applicable federal and state regulations.

2.1 Federal

Among the federal laws and regulations that address the protection of archaeological resources are the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the Department of Transportation Act of 1966. These laws and regulations resulted from the recognition that historic resources provide valuable opportunities to study human behavior and to plan for the future while conserving and protecting these resources and environments. Methods employed during the archaeological investigation associated with the RLE Project were conducted in accordance with the applicable federal laws and regulations as well as with the Secretary of the Interior's *Standards and Guidelines*.

2.2 Illinois State Guidelines

Pertinent state laws, regulations, and guidelines relating to the proposed undertaking include the Human Skeletal Remains Protection Act of 1989 and the Illinois Archaeological and Paleontological Resources Act of 1989. The Illinois State Museum maintains site files for archaeological sites, available online to qualified researchers.

Reconnaissance surveys are conducted to identify possible prehistoric or historic remains on landscapes scheduled for modification. Identification of any such non-renewable cultural resources allows land managers to plan adequate preservation or mitigation measures. Field methods employed during the survey were in accordance with the Illinois State Historic Preservation Office Guidelines for Archaeological Reconnaissance Surveys and Reports.

Section 3 - Physical Setting

The RLE Project would be wholly contained within the exceptionally flat, crescent-shaped Chicago Lake Plain. The approximately 45-mile by 15-mile plain occupies the exposed floor of glacial Lake Chicago. Relief within the lake plain varies only 10 feet above the former lake floor where sand spits, dunes, and beaches formed near the shoreline during one of three high water stages of Lake Chicago (water levels at 600–620 feet)—Glenwood Stage, Calumet Stage, and Tolleston Stage.

The project area includes lake plain-associated surface features such as Calumet Stage beach ridges, the Washington Heights Spit, and the Stewart Ridge Spit (Bretz 1939:105, 108).

Philip C. Hanson (1981), then with the Field Museum of Natural History, used the General Land Office survey notes and plats to reconstruct pre-settlement vegetation within the Chicago Lake Plain. Hanson's analysis (1981:160) identified nine plant communities within the lake plain, with wet prairie, prairie, and oak savanna plant communities mapped along the RLE Project corridor. The savanna community, dominated by black oak and bur oak, is associated with the sandy beach ridges and spits in the “Calumet area” at the southern end of the lake plain (Hanson 1981:161). The beach ridges and spits provided dry, elevated landforms suitable for habitation sites and for travel by land. The wet prairie community is mapped south of the “Old Indian Reservation Boundary” line shown on the U.S. Geological Survey quadrangles, between the Little Calumet River (south) and Lake Calumet (north). Hanson (1981) mapped prairie north of the boundary line. Surface water drains into Lake Michigan by way of the Little Calumet, Calumet, and Grand Calumet Rivers, unless artificially diverted into the Calumet-Saganashkee Canal.

Section 4 - Cultural History of Region

This section contains a brief description of the natural landscape features that influenced the prehistoric development of the area, followed by a description of the prehistoric context for the Paleoindian, Archaic, Woodland, Mississippian, Proto-Historic, and Historic Periods.

Although humans probably entered North America from Asia at least 20,000 years ago, solid evidence for their presence in the Midwest before 10,000 B.C. is elusive. From the time of the initial arrival until the arrival of the Europeans in the 17th century, the archaeological record shows evidence for continuous population growth and changing social adaptations to new developments in both the natural and cultural landscape.

The recorded sites represent only a small percentage of the prehistoric cultural resources within the Chicago area, as substantial numbers of sites have been destroyed by urban development or were found by amateur archaeologists or relic collectors but have not been reported. Other sites remain undiscovered on unsurveyed land.

4.1 Paleoindian Period (10,000 to 8,000 B.C.)

During the Paleoindian Period, populations across the Midwest were highly mobile bands of hunters and gatherers occupying large territories. The Paleoindians hunted a variety of mammals including the now extinct mammoth and mastodon, elk, and deer, and gathered locally available plants. Sites within the Chicago area dating to the Paleoindian Period are rare, although individual tools are more common.

The stone tools most often associated with this period, fluted projectile points and knives, are occasionally recovered as isolated finds in upland areas and along the margins of large river valleys and ancient lake beds. Many archaeological sites in the Chicago Lake Plain dating to the Paleoindian Period have been either destroyed by erosional processes or buried by natural deposition.

4.2 Archaic Period (8,000 to 1,500 B.C.)

The long Archaic Period was a time of transition in the Midwest. After the final retreat of the glaciers, subsistence pursuits adjusted to the changing natural environment as deciduous forests replaced coniferous forests and as the prairie expanded to the east. Human population densities gradually increased, mobility decreased, resource exploitation and technology became more diverse and localized, and social organization became more complex.

During the Archaic Period, hunting began to focus on deer as the primary source of meat. A variety of smaller animals and fish were also collected with increased emphasis on aquatic resources throughout the period. Plant foods including tubers, nuts and seeds became increasingly important subsistence items. Some native plants, such as goosefoot, sumpweed, and possibly native squash or gourd, may have been domesticated during the latter part of the Archaic. Domesticated dog has been identified at archaeological sites in the Midwestern United States.

New tool types were developed including new forms of spear or projectile points, the chipped stone adze, ground stone tools, copper tools, stone mortars for processing plants, and ornaments from bone, shell, and copper. The first cemeteries in Illinois appear during the Middle Archaic and late in this period; graves were occasionally covered with low mounds of earth. Toward the end of the Archaic Period, groups had established particular territories within which settlements were shifted to exploit the seasonally available natural resources. Networks for the exchange of resources within and between regions also developed toward the end of the Archaic Period.

4.3 Woodland Period (1,500 B.C. to A.D. 1,000)

The onset of the Woodland Period is traditionally marked by the introduction of pottery technology; however, in the southern Midwest, pottery was manufactured as early as 2,500 B.C., well within the Late Archaic.

Early Woodland patterns of settlement, subsistence, and social organization were probably not very different from those of the Late Archaic. Hunting and fishing remained focal subsistence activities. While nuts continued to be an important food item, seeds played an increasingly important role, although plant cultivation did not account for the bulk of subsistence calories. Sunflower may have been added to the list of domesticated plants at this time. Data from the Lower Illinois Valley and the Mississippi River in Illinois suggest that Early Woodland groups focused on river bottom resources during at least part of the year. Early Woodland sites are identified by the occurrence of the first pottery vessels and by particular forms of projectile points and other stone tools and the construction of substantial earthen burial mounds.

During the Middle Woodland Period, settlements in the Midwest tended to concentrate along broad river valleys. Burials were placed in mounds on nearby bluffs, possibly serving as territorial markers. Sites were occupied for longer periods of time during the year and by greater numbers of people than in preceding periods. Subsistence activities focused on harvesting the abundant seed plants of the floodplain as well as on raising some native domesticates. Deer, fish, and a variety of small mammals and birds were also important food resources.

During the late Middle Woodland and early Late Woodland, the trade of long distance materials came to an end. Mortuary activities became less complex, and settlement patterns changed. There appears to have been a radical reorganization of social and economic systems in the Midwest, the impetus for which is currently unclear. Throughout the region, Late Woodland appears to have been a period of population growth and expansion with settlements no longer restricted to broad alluvial river valleys. Late Woodland sites are found in a variety of topographic settings, sometimes in the same locations as earlier Archaic sites. The hierarchy of sites present during the Middle Woodland disappeared and Late Woodland settlement systems apparently consisted of small seasonal villages and associated support camps.

Although subsistence continued to be based on hunting, fishing, and the gathering of plants, corn horticulture began to be increasingly important in the economy. The quantity and diversity of seeds recovered from Late Woodland period sites indicate extensive use of this resource in the subsistence strategy.

Seven of the twelve sites (11Ck15, 11Ck28, 11Ck246, 11Ck246, 11Ck248, 11Ck249, 11Ck250) recorded within 1 mile of the project area contain artifacts diagnostic of the Woodland Period (Discussed in **Section 5**).

4.4 Mississippian Period (A.D. 1000 to A.D. 1600) and Proto-Historic Period (A.D. 1600 to A.D. 1673)

Mississippian subsistence was characterized by an increasing reliance on cultivated plants, particularly corn and squash. Beans enter the archaeological record for the first time in the Midwest late in the period. Deer was the most important faunal resource, although migratory waterfowl, elk, bison, fish, and raccoon also made varying contributions to the protein intake.

The Proto-Historic Period is the time of trade and contact between Native Americans and Europeans in the region.

Three of the twelve sites (11Ck28, 11Ck246, 11Ck248) recorded within 1 mile of the project area contain artifacts diagnostic of the Mississippian Period (Discussed in **Section 5**).

4.5 Historic Period (1673 to Present)

Historic Indian tribes known to have inhabited northeastern Illinois during this time include Fox (Mesquakie), Kickapoo, Mascouten, Menominee, Miami, Ojibwa (Chippewa), Ottawa (Odawa), Potawatomi, Winnebago (Ho-Chunk), and Sauk (Tanner 1987:93, 98, 106, 140). The Potawatomi were firmly established in the vicinity when the settlers arrived following the Black Hawk War of

1832. Portage points and river junctures along the waterways were important locations for Native American encampments and villages, and Euro-American trading posts, towns, and forts.

Trails around the head of Lake Michigan (Calumet Region) skirted the lakeshore or used beach ridges to cross the Chicago Lake Plain. The 1819 General Land Office plat notes an "Indian Trail" passing along the western shore of Lake Calumet. The Bishop Ford Freeway and Cottage Grove Avenue follow the approximate alignment of the old trail within the project area. Outside the project area, the trail continues to the southeast aligned with State Street through Calumet City. The "Indian Trail" joined Scharf's Trail P, a branch of the historic Chicago-Vincennes Trace (Quaife 1923:51-71), at about Kensington (near center of Section 22). James Rees' 1851 map and Albert Scharf's 1901 map of *Indian Trails and Villages of Chicago* (1901) show Trail P crossing the Little Calumet River at the toll bridge, established by George Dolton and Levi Osterhoudt in 1842, at Riverdale Crossing (aligns with Indiana Avenue and Vincennes Avenue). The General Land Office "Indian Trail" and Trail P are branches of the Chicago-Vincennes Trace.

Railroads followed the same general alignments as the early trails around the head of the lake from the eastern states into Chicago. The Illinois Central Railroad appears on the 1870 plat of Calumet Township and aligns with Trail P while the Michigan Central Railroad appears on the same plat aligned with the "Indian Trail." The rail lines, as the trails before them, join at Kensington (Van Vechten 1870).

Sources of information about the Historic Period include accounts of traders, missionaries, Indian agents, surveyors, military personnel, travelers, and settlers as well as the insights gained from archaeological investigations.

Two of the twelve sites (11Ck1226 and 11Ck1240) recorded within 1 mile of the project area contain artifacts diagnostic of the Historic Period (Discussed in **Section 5**).

The Preferred Alignment is located within three neighborhoods/communities (Roseland, West Pullman, and Riverdale). The historic development of these three neighborhoods/communities is discussed by community in the following subsections.

4.5.1 Roseland Community

The Roseland community, which is approximately 12 miles south of Chicago's Loop, is bounded by train tracks on the north, 115th Street on the south, Cottage Grove Avenue on the east, and Halsted and Stewart Streets on the west. The community is served by public transportation via the CTA Red Line station at 95th Street, the last stop on this line, and by the Metra with four stops between 103rd and 115th Streets.

The Roseland community was undeveloped wet prairie with occasional patches of dry prairie in the mid-19th century. The Chicago-Thornton Road (now Indiana Avenue), which was built on

high prairie, crossed the community. Initial settlement occurred in 1849 when a group of Dutch families from the district between Amsterdam and Rotterdam in Holland, in search of land for truck farming, established a settlement of frame houses along this road between 103rd and 111th Streets (Andreas 1884:607).

The immigrants became known as the "Hollanders of the High Prairie," and cultivated cabbage, cauliflower, beets, carrots, potatoes, and tomatoes, which they hauled to Chicago's South Water Street Market on the Chicago-Thornton Road. More Dutch immigrants settled the low-lying land between the high prairie and Lake Calumet to the east. Some of the Dutch worked on the construction of the new railroads. The community was called Hope when the first post office was opened in 1861 and was initially part of the Lake Township. In 1867, the area east of State Street became part of the newly incorporated Village of Hyde Park (Chicago Fact Book Consortium 1995:152). The Dutch truck farmers also grew flowers, and the lavish annual display of red roses led to the adoption of the name of Roseland for the community in the 1870s.

Roseland's transformation to an urban community began in the 1880s with the establishment of the Pullman Palace Car Company to the east and the development of several additional railroads along the borders of the area. The annexation of both Lake Township and the Village of Hyde Park in the early 1890s brought Roseland within Chicago's city limits. The Calumet region became steadily industrialized during the 1890s as the Illinois Central Railroad built its Burnside shops in the northeast section of Roseland.

In 1920, Roseland's population stood at 28,241 and an abundance of undeveloped land remained throughout the community. This situation was to quickly change during the decade to follow, when Roseland's population rapidly increased with an influx of Lithuanians, Italians, Germans, and a small number of African Americans. The accompanying building boom of the 1920s transformed Roseland into a mature residential community and vacant parcels were improved with one- to two-story gable-roofed wood cottages, brick bungalows, and wood frame homes in the popular American Foursquare style.

During the 1950s and 1960s, Roseland served as a community—albeit on its northern end only—where African Americans could purchase a home and build a future. Construction of the Dan Ryan Expressway during the late 1950s cut a wide swath through Roseland's north end. This dramatic intervention on the urban landscape resulted in the demolition of many homes and physically divided this area from the remainder of the community to the south. Roseland's vacant edges were developed from the 1950s through the early 1970s with clusters of identical one-story and split-level tract homes.

4.5.2 West Pullman Community

The West Pullman community, approximately 16 miles south of Chicago's Loop, is bounded by 115th Street to the north, 123rd Street and the Little Calumet River to the south, Front Street and

railroad tracks to the east, and Ashland Avenue, Halsted Street, and Morgan Street (city limits) to the west.

The first settlers in the area known as West Pullman were civil engineer and land surveyor David Andrews and his wife Caroline, who married in 1840 and established a 360-acre farm near the northeast corner of the future community. The couple only had two neighbors who were about 3 miles away, and at that time, "prairie wolves, deer, and prairie chickens abounded, and occasionally a lynx was seen" according to A. T. Andreas in his *History of Cook County* (1884:603). The first signs of change arrived in 1852, when the Illinois Central Railroad and Michigan Central Railroad companies established the Calumet Station at the present intersection of 115th Street and Cottage Grove Avenue. A settlement grew slowly around the Calumet Station and came to be called Kensington, initially consisting of a general store and saloon at the corner of Front Street and Kensington Avenue, wood shanties, and a boarding house inhabited by men working on freight handling for the railroads.

In 1920, West Pullman had a population of 23,019 and still featured large areas of undeveloped land. This was to change during the citywide construction boom of the 1920s, during which vacant parcels throughout the community were improved with bungalows and two-flat residential buildings in frame and brick, homes designed in the popular American Foursquare style, and small brick apartment buildings.

West Pullman's population rose from 29,000 in 1950 to 35,000 in 1960, a period in which Poles, Italians, and Germans predominated among the whites, who constituted nearly 100 percent of the community's population (Chicago Fact Book Consortium 1995:161). Vacant lots throughout the community and along its undeveloped southern and western edges were improved during the post-War period with suburban style tract homes and split-level homes, as well as duplexes, many of which were on the south, north, and west sides of the factory district. Starting in the 1960s, some of the vacant land on West Pullman's western edges finally opened to African Americans, such as the Maple Park subdivision.

4.5.3 Riverdale Community

The community of Riverdale—distinct from the adjacent Village of Riverdale to the southwest—is approximately 16 miles south of Chicago's Loop. It is bounded by the Bishop Ford Expressway (I-94) on the east, the Illinois Central Railroad on the west, 115th Street on the north, and the Chicago city limits (138th Street) on the south. The northern two-thirds of the community is occupied by rail yards, industry, and the Calumet Sewage Treatment Plant, while residential development is concentrated south of 130th Street and east of Indiana Avenue.

The earliest settler in the Riverdale area was George Dolton, who arrived with his wife and seven children in 1835. He was joined near the banks of the Little Calumet River by several other pioneers over the next few years, including J. C. Matthews. Dolton and Matthews operated a ferryboat across the river starting in 1836. In 1836, Dolton and another settler, Levi Osterhoudt,

built a toll bridge across the river, which they operated until 1842 when it was purchased by the county (Goodspeed and Healy 1909:317). The area grew slowly as a truck farming community that provided produce to Chicago. Early farmers were soon joined by Dutch and Swedish railroad workers during construction of the Illinois Central tracks through the area from 1850–1852 (Andreas 1884:601-602).

Riverdale's industrial development had its beginnings in the 1860s, when widespread truck farming gave rise to establishments that processed foods, such as a sugar beet refinery founded in 1865. The Union Copper Distilling Company of Chicago established the Riverdale Distillery in 1871, and by 1883, the company employed an average of 50 men and boasted a profit of $1.5 million. In the late 19th century, Riverdale was also home to lumber yards and planning mills operated by the Riverdale Lumber Company, which was established in 1879, and by the Calumet Lumber Company (Andreas 1884:602). Several railroads were built through the area between 1852 and 1880, claiming large parcels of land for their right-of-ways and yards. In addition to the Illinois Central, the railroads included the Pittsburg, Cincinnati, Chicago and St. Louis Railroad, and the Chicago and Eastern Line.

By the start of the 20th century, the land in the northern two-thirds of the community had become increasingly industrialized. In 1902, Sherwin-Williams enlarged its 116th Street facility with new buildings on an additional 10 acres purchased that year from the Pullman Land Company. Over the next half century, the company's Riverdale plant grew to encompass 100 acres, which included land once used by the Pullman Farm. It became one of the largest paint factories in the world, capable of making the complete product, from raw material to container (*Chicago Tribune* 1902, Sherwin-Williams 2008).

World War II revitalized industries on Chicago's Far South Side and stimulated demand for low-cost war-worker housing for African Americans. The response of the federal government and the Chicago Housing Authority (CHA) was construction of the Altgeld Gardens public housing project on an immense 157-acre tract of vacant land between 130th and 133rd Streets, from Langley to Greenwood Avenues. Construction started in November 1943 and the complex was dedicated before a crowd of 5,000 people on August 26, 1945 (Chicago Tribune 1945, Bowly 1978: 42).

Section 5 - Archaeological Sites in Project Vicinity

Based on collections of artifacts made by amateur archaeologists Albert Scharf, Oscar Biedes and Ed Lace, as well as professional investigations completed by the Illinois State Archaeological Survey and Midwest Archaeological Research Services, twelve archaeological sites have been recorded within 1 mile of the RLE Project vicinity, although none fall within the proposed construction corridor. The sites are listed in **Table 5-1**.

Table 5-1. Archaeological Sites within 1 mile of the Project Vicinity

Site #	Site Name	Recorded	Archaeologist	Temporal
11Ck15	-	1955	David J. Wenner	Middle Woodland
11Ck28	-	1957	Elaine Bluhm	Middle Woodland, Upper Mississippian
11Ck177	-	1959	Betty Broyles	Prehistoric
11Ck244	Flatfoot Lake South	1987	Ed Lace	Late Woodland
11Ck245	Flatfoot Lake North	1987	Ed Lace	Prehistoric
11Ck246	Flatfoot Lake Central	1987	Ed Lace	Late Woodland, Upper Mississippian
11Ck247	Beaubien Woods	1987	Ed Lace	Prehistoric
11Ck248	-	1987	Ed Lace	Middle Woodland, Upper Mississippian
11Ck249	Beaubien Woods South	1987	Ed Lace	Woodland
11Ck250	-	1987	Ed Lace	Middle Woodland
11Ck1226	Block House B	2016	Jay Martinez	Historic-Pullman
11Ck1240	-	2017	Lindsay Dyle	Historic

Source: Illinois Inventory of Archaeological Sites. Accessed on September 14, 2020.

Site 11Ck1240 is located ¾ of a mile to the north of the CTA 95th/Dan Ryan station (**Figure 5-1**). Site 11Ck1226 is located approximately 1 mile to the east of the proposed construction corridor in the historic Pullman District (**Figure 5-2**).

Historic site 11Ck1240 was recorded by Lindsay Dyle in 2017. This historic artifact assemblage was collected during a shovel test survey of a vacant grass lot. Historic site 11Ck1226 was recorded by Jay Martinez with Midwest Archaeological Research Services Inc. in 2016. The artifacts were recovered from the front yard of a razed brick Block House and represented dumping activities.

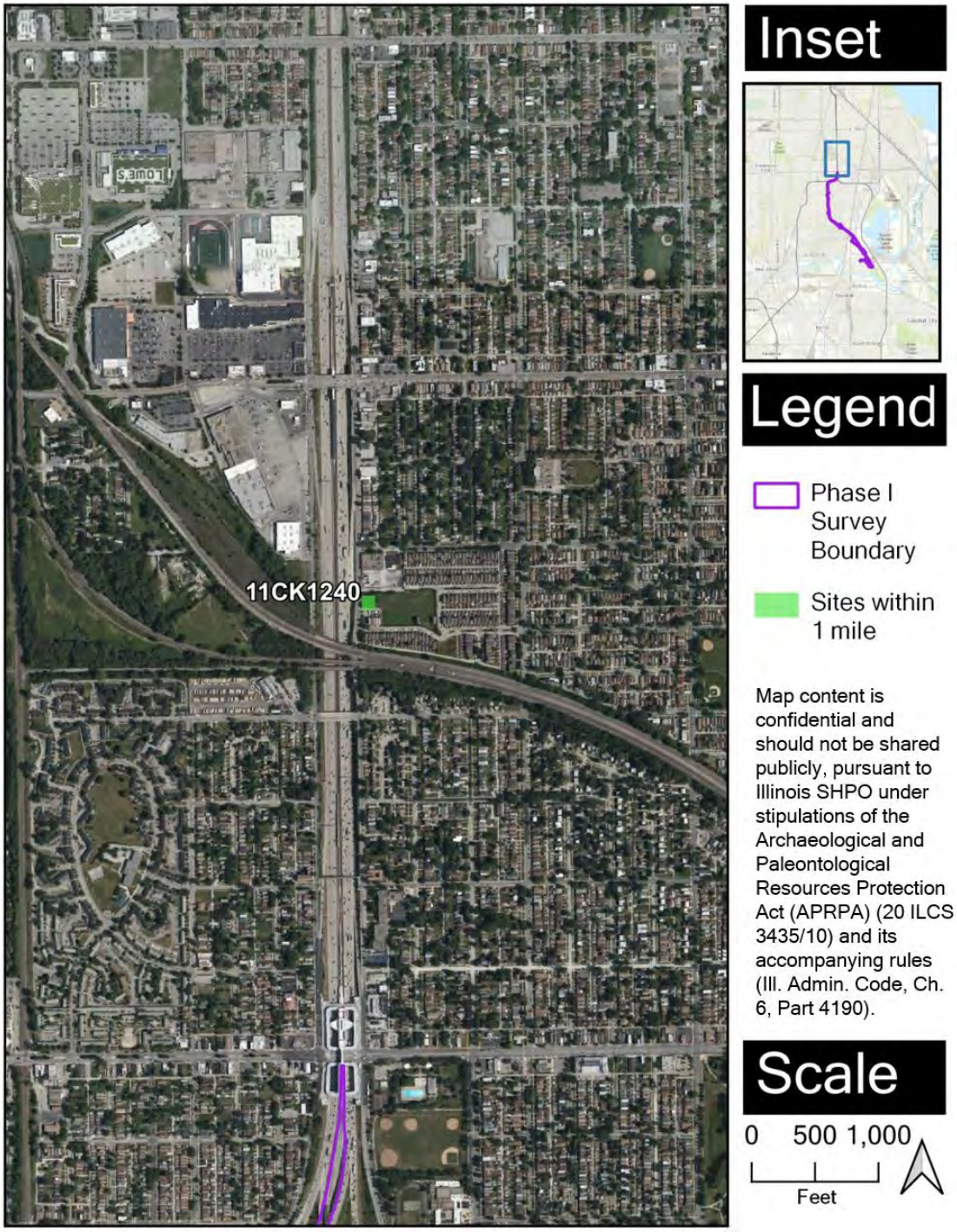

Source of Map is Bing Aerial Imagery 2020

Figure 5-1: Archaeological Site within 1 mile

Source of Map is Bing Aerial Imagery 2020

Figure 5-2: Archaeological Site within 1 mile

Sites 11Ck15, 11Ck28, 11Ck177, and 11Ck244 through 11Ck249 are near Flatfoot Lake within the 135-acre Beaubien Woods Forest Preserve of Cook County. Flatfoot Lake is approximately ½ of a mile to the southeast of the proposed 130th Street station (**Figure 5-3**).

David J. Wenner recorded 11Ck15 based on a collection of Middle and Late Woodland sherds, flint tools and chips. When the site was recorded in 1955 it had been mostly destroyed by mining a gravel pit. It was originally within woods and an agricultural field.

Elaine Bluhm and David J. Wenner recorded site 11Ck28 based on a collection of grit-tempered and shell-tempered ceramics gathered from the site and held by Theodore Shapas. The site dates to the Middle Woodland (grit-tempered sherds) and Upper Mississippian (shell-tempered, Oneota sherds) periods.

Betty Broyles recorded 11Ck177 in 1959 as comprising the village (Ckv125 and Ckv126) and associated mounds (11Ck127 and 11Ck128) detailed by Chicago tobacconist and avocational archaeologist Albert Scharf in 1919. "Two mounds and a camp site were located along the bend of the river" (Brown 1917). Regarding the Calumet Marshes, Scharf (1919) notes: "The several Indian villages in these marshes were all located along the canoe routes or portage trails of which they form the route simply passing from one to the other and together we have one of the links of the great highway leading from the Illinois River to the 'Great Lake.' "—Manuscript transcribed and on file at MARS.

David J. Keene and Theodore J. Karamanski (1980) reported sites 11Ck244 through 11Ck249 in 1979 during survey work completed for the Forest Preserves of Cook County. Ed Lace, an avocational archaeologist with the Forest Preserves of Cook County with whom Keene and Karamanski had worked on the project, formally recorded the Woodland Period and undefined prehistoric sites in 1987.

11Ck250 also identified by Ed Lace is located just to the north of Beaubien Woods Forest Preserve of Cook County at the current location of Carver Military Academy High School (**Figure 5-3**). An undated newspaper article from the Star-Tribune shows photographs of the Oscar Bidese collection (included with the 11Ck250 site form). Site 11Ck250 was destroyed during the construction of the building at 13100 South Doty Avenue.

The Preferred Alignment would not impact any of the 12 recorded archaeological sites that are located within 1 mile.

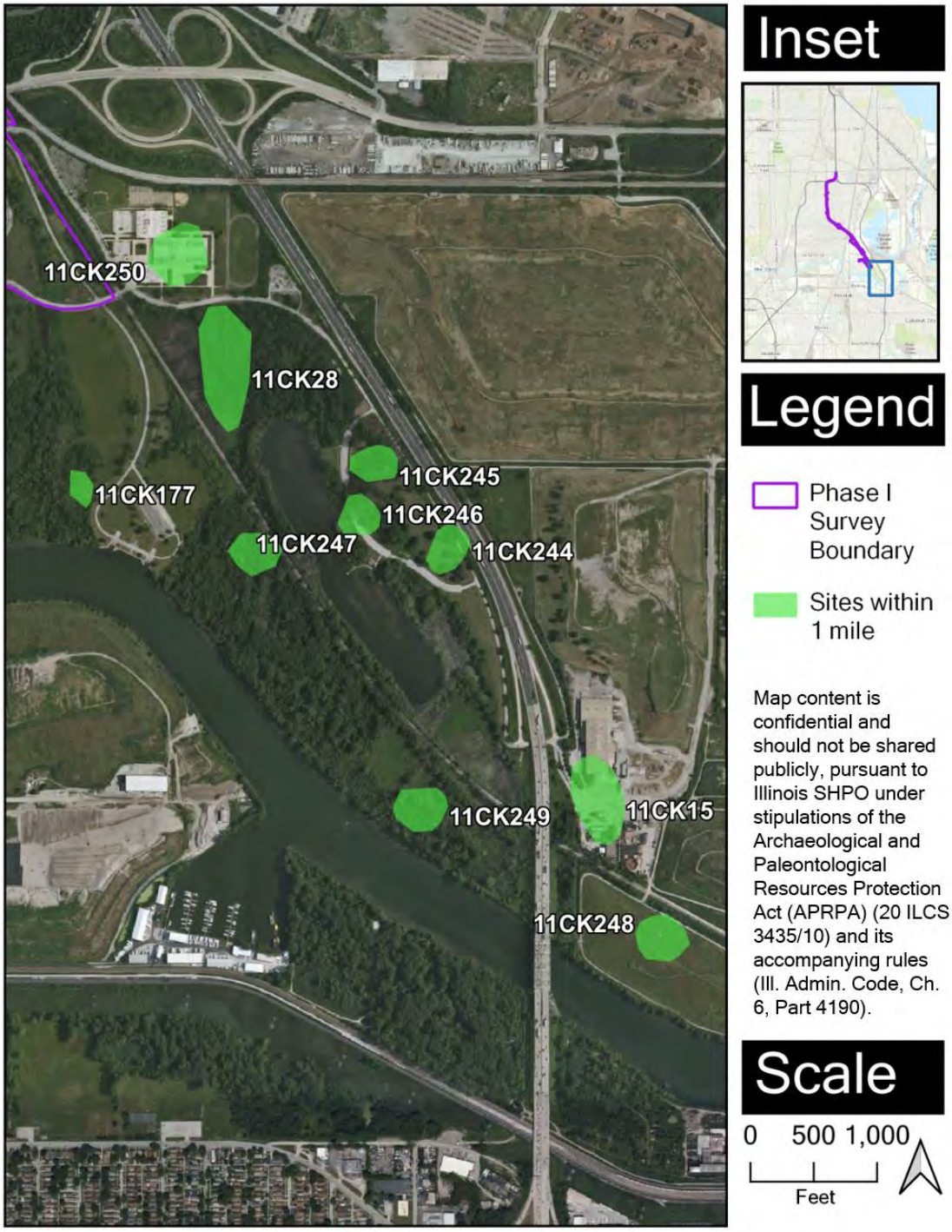

Source of Map is Bing Aerial Imagery 2020

Figure 5-3: Archaeological Site within 1 mile

Section 6 - Field Methods

From June 15 to June 16, 2020 Midwest Archaeological Research Services (MARS), conducted a Phase I archaeological reconnaissance survey along the Preferred Alignment. Field methods employed during the survey were in accordance with the Illinois State Historic Preservation Office Guidelines for Archaeological Reconnaissance Surveys and Reports. The Archaeological Survey Short Report can be found in **Appendix D.** This short report is required with all Phase I reconnaissance survey projects.

Due to the majority of the Phase I survey area consisting of substantially disturbed inner-city terrain, the primary method of investigation was photographic recordation followed up with shovel test probes in surveyable areas. Shovel tests were excavated as specified by the Illinois State Historic Preservation Office. Shovel test probes (STP) are small subsurface sampling units approximately 14 inches in diameter and 14 to 20 inches deep that are excavated at 50-foot intervals across the project area. Soils from the probes were screened through ¼ inch hardware cloth. The summary of the shovel test probes taken can be found in **Appendix F**.

With the exception of one area, the entire project area contained non-excavatable soils (gravels or wetland areas): Orthents or Urban Land (USDA 2020 and **Appendix E**). The one area that contained excavatable soils (likely disturbed during railroad and roadway construction) for shovel tests was located along Eggleston Avenue (STP Area 2: see below and **Figure 6-1**). Photographs were taken with the 16 MP Samsung S10e smartphone camera along the project area at prearranged locations. A total of 166 photographs were taken with 90 images selected as the best representation of the landscape. The 90 selected photographs are included in this report (**Appendix C**).

The northern portion of the project area starts at 95th Street and heads south along Interstate 57 (**Appendix A: Figures 2-4**). No shovel tests were excavated within this portion because the ground has been disturbed due to road construction. A total of five photographs were taken to document the route and disturbance (**Appendix A: Figures 2-4** and **Appendix C: Plates 1-5**).

The Preferred Alignment crosses over Interstate 57 and is adjacent to the northwest corner of Wendell Smith Park (**Appendix A: Figure 5**). This wooded area along the railroad tracks and interstate was disturbed due to road and railroad construction. No shovel tests were excavated within this portion. A total of three photographs were taken to document the route and disturbance (**Appendix A: Figure 5** and **Appendix C: Plates 6-8**).

The Preferred Alignment crosses over 103rd Street and heads south on the west side of the existing UPRR tracks for approximately 0.63 miles to 108th Street (**Appendix A: Figures 7-10**).

This stretch of the project area contains residences, commercial buildings, and vacant concrete lots (**Appendix C: Plates 13-23**). Some of the project area was located on the eastern side of the railroad tracks (**Appendix A: Figures 7 and 9** and **Appendix C: Plates 13 and 18**). No shovel tests were excavated within this portion between 103rd Street and 108th Street. The entire section was previously disturbed by residential and commercial development. Development and disturbance began in these areas as early as the 1930's (**Appendix B: Figure 10**). While the current aerial images show grass and vegetation on some of the vacant lots (**Appendix A: Figures 8-10**), visual inspection by MARS archaeologists determined that all vacant lots had either concrete or gravel on the surface preventing shovel testing**.**

From south of 108th Street the Preferred Alignment is on the east side of the existing UPRR tracks heading south then southeast for approximately 1.75 miles to near 119th Street (**Appendix B: Figure 18**). This stretch of the project area contains residences, commercial buildings, and vacant concrete lots (**Appendix C: Plates 24-51, 76-77**). Some of the project area was located on the western side of the railroad tracks (**Appendix A: Figures 11, 12, 15, 16** and **Appendix C: 29, 30, 31, 40, 42, 43, 44, and 45**). No shovel tests were excavated within this portion between 108th Street and 119th Street. The entire section was previously disturbed by residential and commercial development. Development/disturbance began in these areas as early as the 1930's (**Appendix B: Figure 10**). While the current aerial images show grass and vegetation on some of the vacant lots, visual inspection by MARS archaeologists determined that all vacant lots were either concrete or gravel on the surface preventing shovel testing (**Appendix C: 29, 30, 31, 40, 42, 43, 44, and 45).**

Near 119th Street the Preferred Alignment crosses the Metra Electric tracks (**Appendix A: Figure 18**). South of 119th Street, the Preferred Alignment continues southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) tracks right-of-way to the terminus of the RLE Project at 130th Street (**Appendix A: Figures 18-15**). No shovel tests were excavated within this portion. While current aerial images show these areas to contain a large concrete lot (proposed railyard **Appendix C: Plates 78-79**), woods, and mowed maintained grass, visual inspection of these by MARS archaeologists concluded these areas to be disturbed due to mechanical stripping and the creation of large soil berms likely the result of railroad development (**Appendix C: Plates 63, 83-89**). The ground cover in these areas contained gravel below approximately less than an inch of soil development. Large areas of gravel could be seen mounded or directly on the surface (**Appendix C: Plate 86**). Large portions of the project area contained wetland grasses. The USDA soil maps has this entire area containing Orthents or Urban Land (USDA 2020 and **Appendix E**). While current aerials show a vast portion of woods (**Appendix A: Figures 19-13**), 1938 aerials depict a large railroad yard (**Appendix B: Figure 12**). This area has been disturbed.

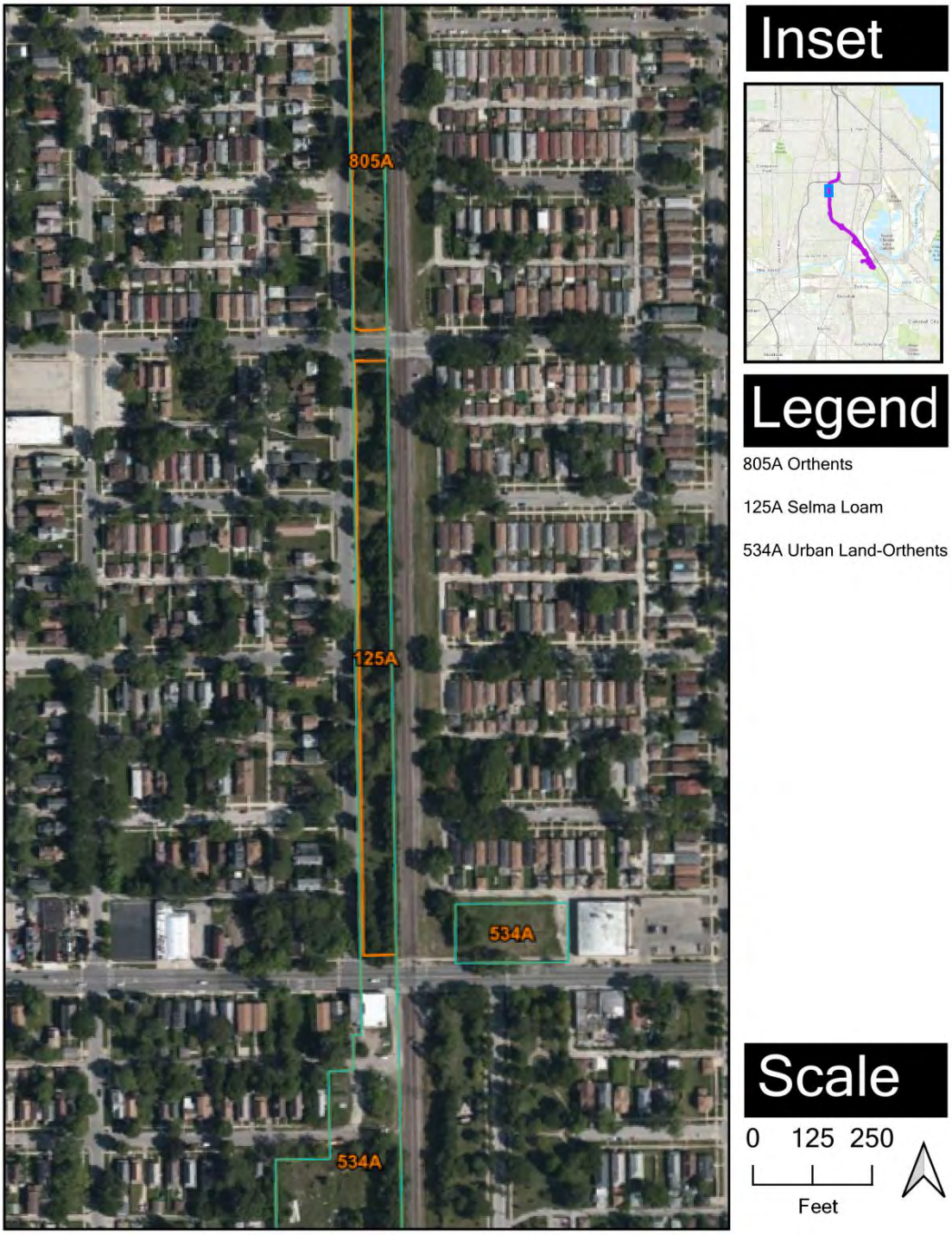

Source USDA 2020

Figure 6-1: STP Area 2 (excavatable soils along Eggleston Avenue)

The 130th Street station would be within Altgeld Gardens (**Appendix A: Figures 28-29**). A small portion of this area was amenable to survey (discussed in **Section 7 – Results and Recommendation**). The remaining large portion of the area was not amenable to survey. The ground has been disturbed by residential development. While the current ground surface is mowed grass (**Appendix C: Plates: 70-72, 90**), the 2017 aerial image shows residences built within this area (NETRonline 2020).

At the southern end of the project area just north of present day Altgeld Gardens is an area that contained historic residents and farmsteads that are shown on the 1938 aerial image (**Figure 6-2**). The historic homes and farmsteads are highlighted with green boxes. MARS visually inspected these areas and used a historic probe to check for ground disturbance. The soil probe indicated gravel beneath the surface in these areas. All of the potential historic sites had disturbed ground surfaces. None of these potential historic archaeological sites had any structure or foundation remnants remaining and all structures have been razed.

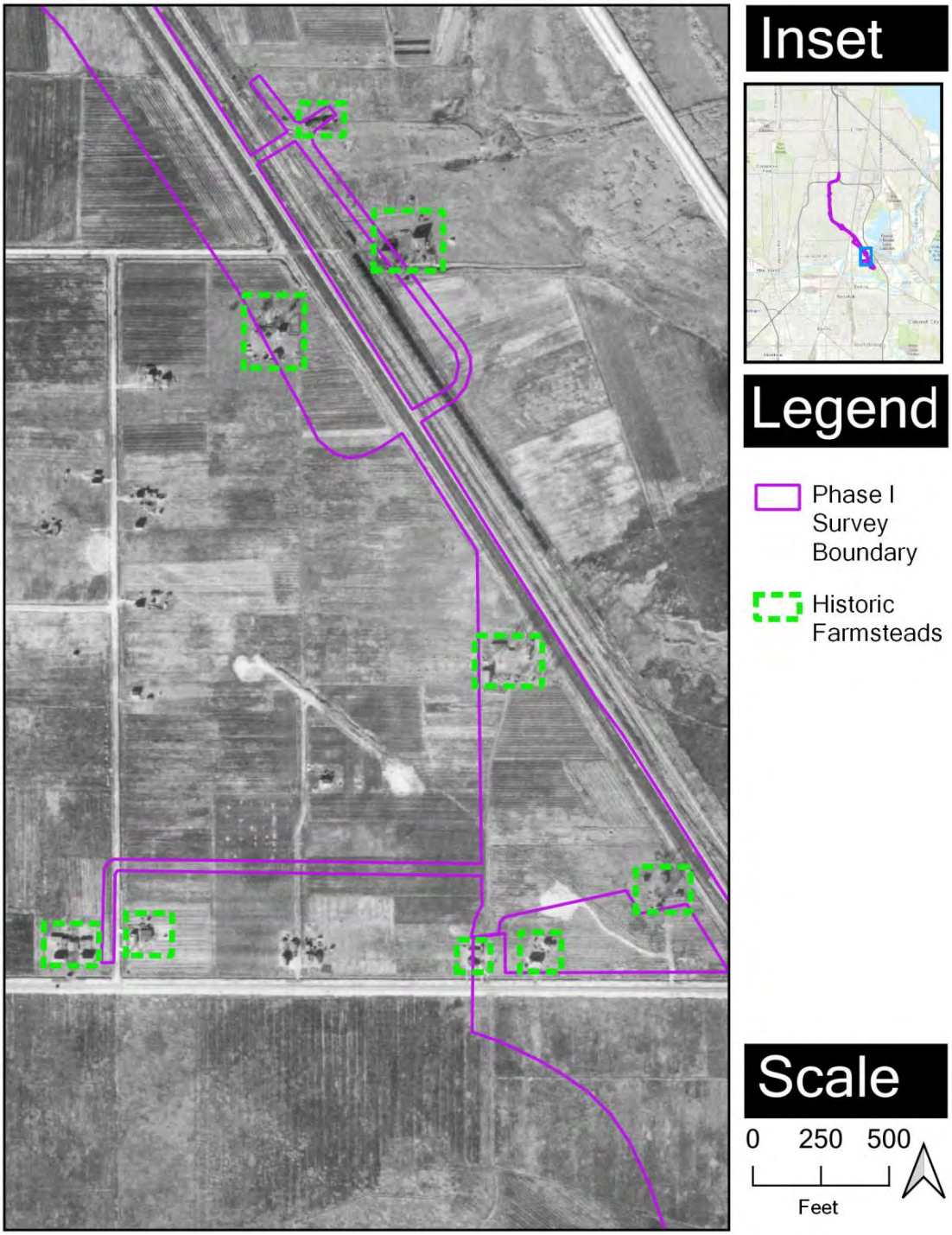

Source ISGS 2020

Figure 6-2: Area of historic farmsteads located on 1939 aerial image

Section 7 - Results and Recommendation

Three transects of shovel test probes (STPs) were excavated in areas with a ground surface visibility of less than 25 percent and of lesser disturbance. The STPs were dug at 50-foot intervals by shovel and screened through ¼ inch hardware cloth. Each transect was placed in probable zones named STP Area 1, STP Area 2, and STP Area 3. A total of 53 shovel probes were excavated. There were 19 STPs in Area 1, 19 STPs in Area 2, and 15 STPs in Area 3. See **Appendix F** for specific data per shovel test probe.

STP Areas 1 and 2 is a narrow stretch of mowed grass located between Eggleston Avenue and the UPRR railroad tracks (**Appendix A: Figures 5-7**). STP Area 1 is located between 99th Street and 101st Street, just west of the UPRR tracks (**Appendix A: Figures 5- 6** and **Appendix C: Plates 9-10**). A typical soil horizon seen in STP Area 1 was a 10YR3/2 very dark grayish brown silty loam down to 8 inches below surface underlain by a very mottled 10YR4/1 dark gray silty clay loam (**Appendix C: Plate 80**). The 19 STPs were dug, from north to south, to an average depth of 8 inches below the surface (**Appendix E**). **No cultural material was identified in any of the excavated shovel probes.**

STP Area 2 is located between 101st Street and 103rd Street (**Appendix A: Figure 7** and **Appendix C: Plates 11-12**). A typical soil horizon seen in STP Area 2 was a 10YR3/3 dark brown sandy loam down to 8 inches below surface underlain by a very mottled 10YR4/1 dark gray sandy clay loam (**Appendix C: Plate 81**). The 19 STPs were dug, from north to south, to an average depth of 8 inches below the surface (**Appendix E**). **No cultural material was identified in any of the excavated shovel probes.**

STP Area 3 is located in the southern end of the project area, just west of the rail line near Altgeld Gardens (**Appendix A: Figures 28-29** and **Appendix C: Plates 69 & 72**). A typical soil horizon seen in STP Area 3 was a 10YR3/3 dark brown silty clay loam down to 8 inches below surface underlain by a very mottled 10YR4/1 dark gray clay loam (**Appendix C: Plate 82**). The 15 STPs were dug, southeast to northwest on both sides of the access road, to an average depth of 8 inches below the surface (**Appendix E**). **No cultural material was identified in any of the excavated shovel probes.**

In summary, MARS archaeologists did not identify any cultural material within their 53 excavated shovel probes during the Phase I archaeological survey (**Appendix A: Figures 5-7, 28-29**). Additionally, no recorded archaeological sites would be impacted during construction of the Preferred Alignment. **MARS recommends project clearance**.

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Appendix A

Project Area and Selected Project Photograph Direction Maps

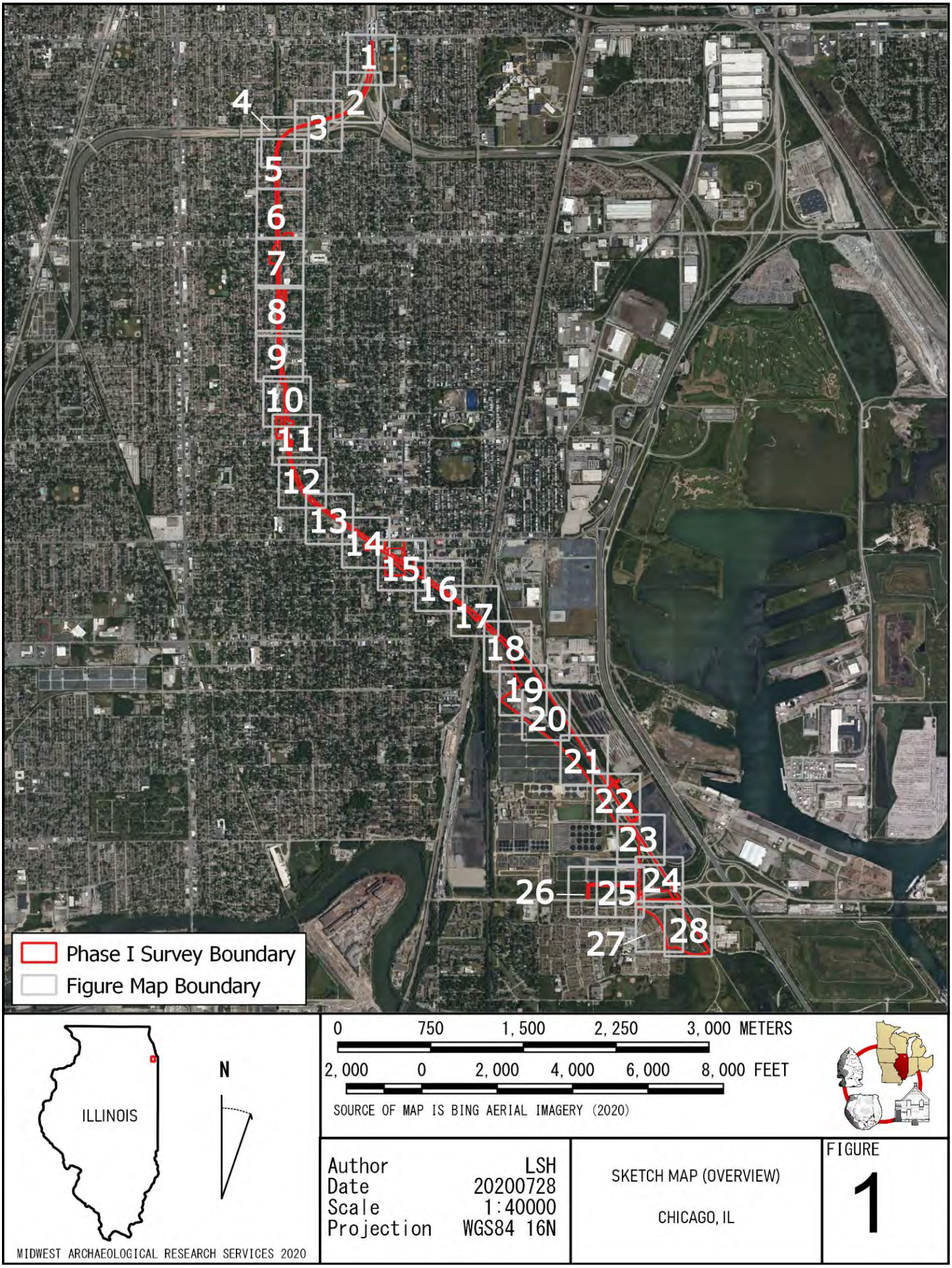
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Phase I Survey Boundary
Figure Map Boundary
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Date 20200728
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SKETCH MAP (OVERVIEW)
CHICAGO, IL
FIGURE
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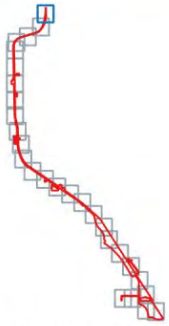

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CHICAGO, IL

FIGURE

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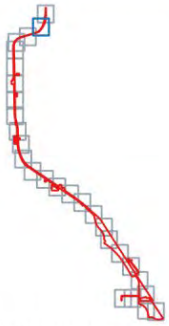

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SKETCH MAP (2)

CHICAGO, IL

FIGURE

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SKETCH MAP (3)

CHICAGO, IL

FIGURE

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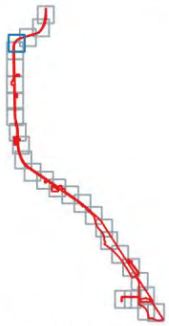

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SKETCH MAP (4)

CHICAGO, IL

FIGURE

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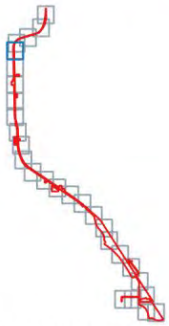

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SKETCH MAP (5)

CHICAGO, IL

FIGURE

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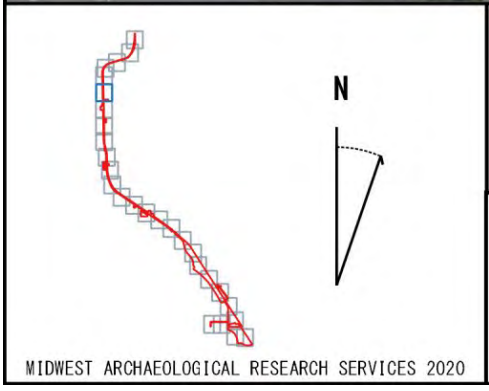

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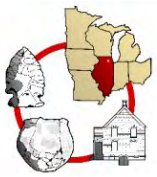

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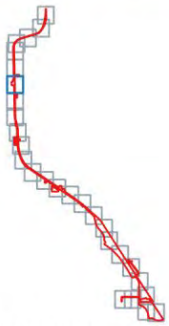

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SKETCH MAP (7)

CHICAGO, IL

FIGURE

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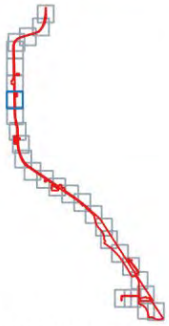

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SKETCH MAP (8)

CHICAGO, IL

FIGURE

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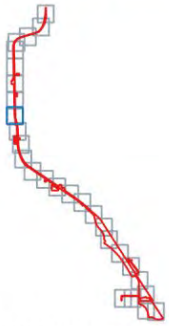

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SKETCH MAP (9)

CHICAGO, IL

FIGURE

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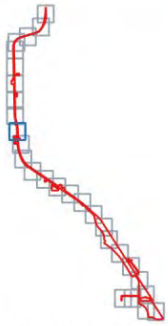

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SKETCH MAP (10)

CHICAGO, IL

FIGURE

11

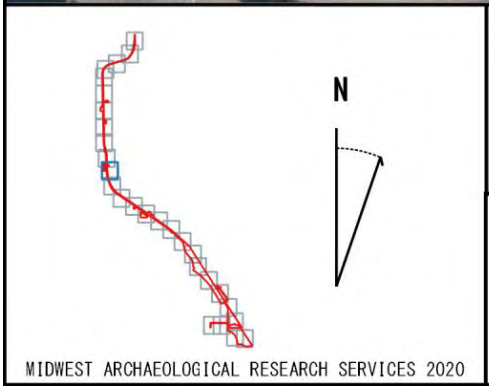

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SKETCH MAP (11)

CHICAGO, IL

FIGURE

12

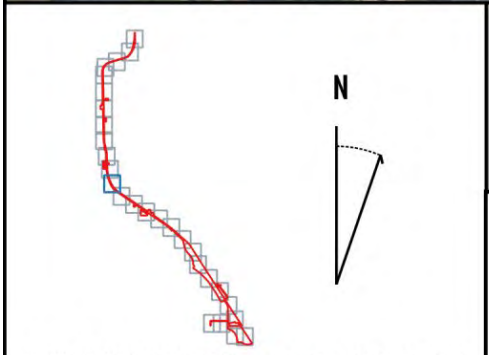

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (12)

CHICAGO, IL

FIGURE 13

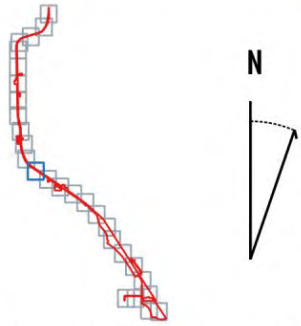

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (13)

CHICAGO, IL

FIGURE 14

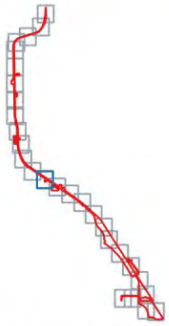

N

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (14)

CHICAGO, IL

FIGURE

15

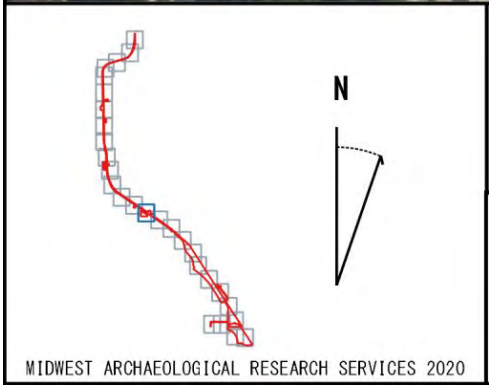

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

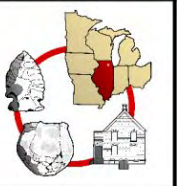

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (15)

CHICAGO, IL

FIGURE 16

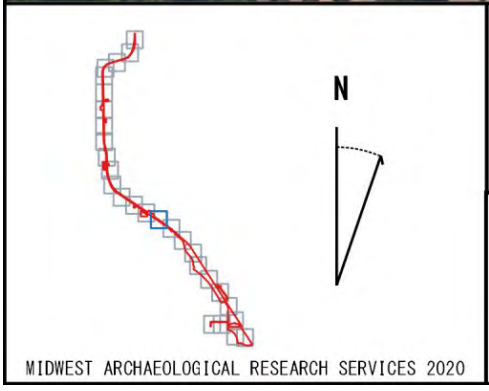

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

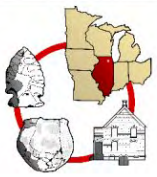

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (16)

CHICAGO, IL

FIGURE 17

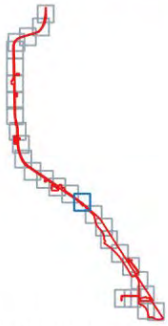

N

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (17)

CHICAGO, IL

FIGURE

18

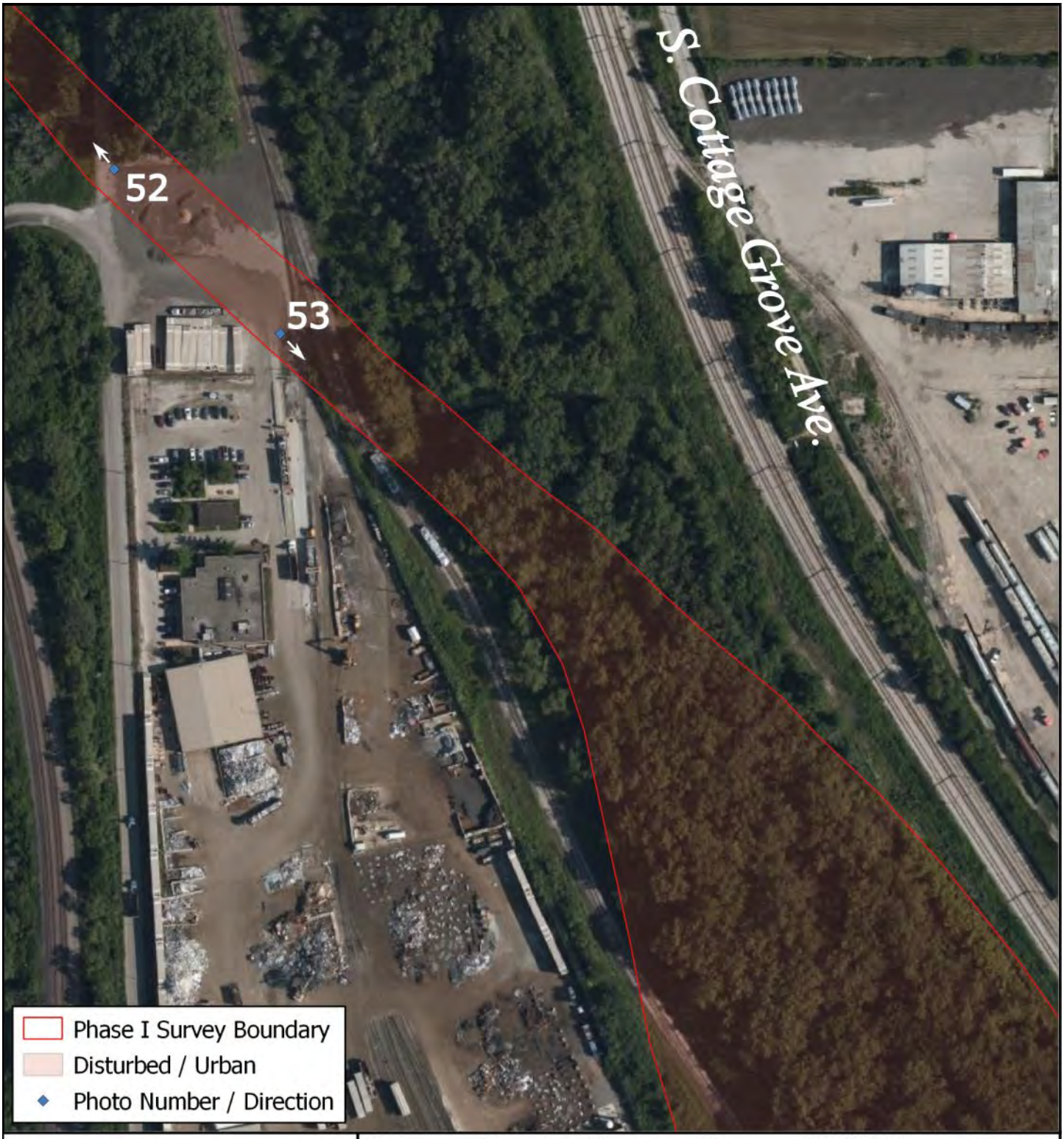

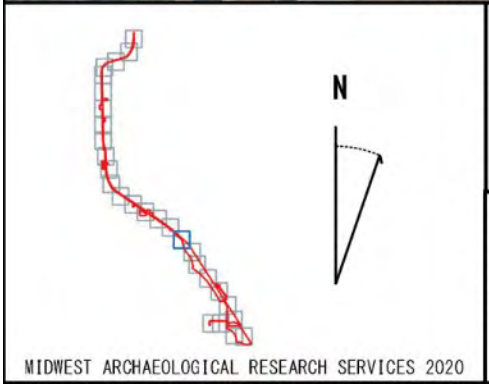

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (18)

CHICAGO, IL

FIGURE

19

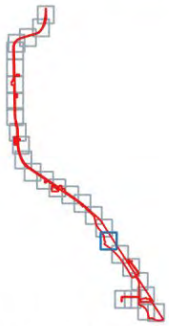

N

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (19)

CHICAGO, IL

FIGURE

20

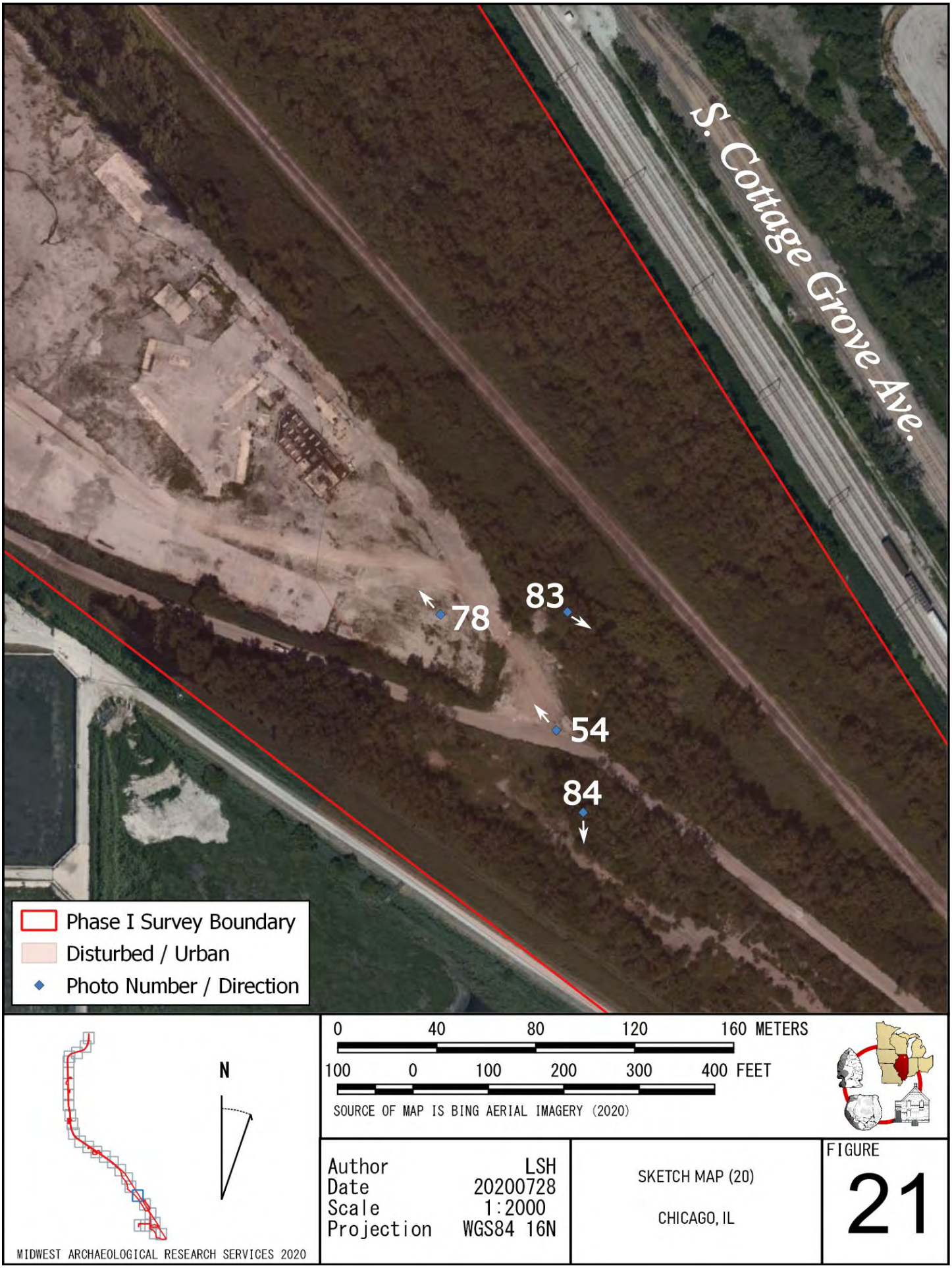
S. Cottage Grove Ave.
78
83
54
84
Phase I Survey Boundary
Disturbed / Urban
Photo Number / Direction
N
0 40 80 120 160 METERS
100 0 100 200 300 400 FEET
SOURCE OF MAP IS BING AERIAL IMAGERY (2020)
MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020
Author LSH
Date 20200728
Scale 1:2000
Projection WGS84 16N
SKETCH MAP (20)
CHICAGO, IL
FIGURE
21

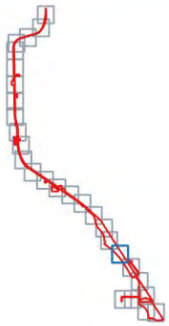

N

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (21)

CHICAGO, IL

FIGURE

22

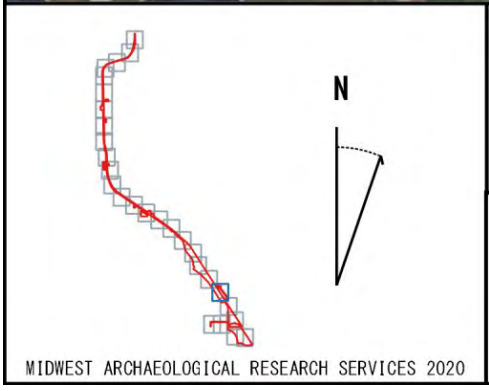

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

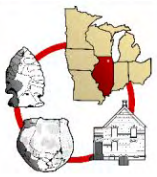

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (22)

CHICAGO, IL

FIGURE

23

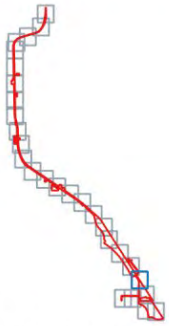

N

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (23)

CHICAGO, IL

FIGURE

24

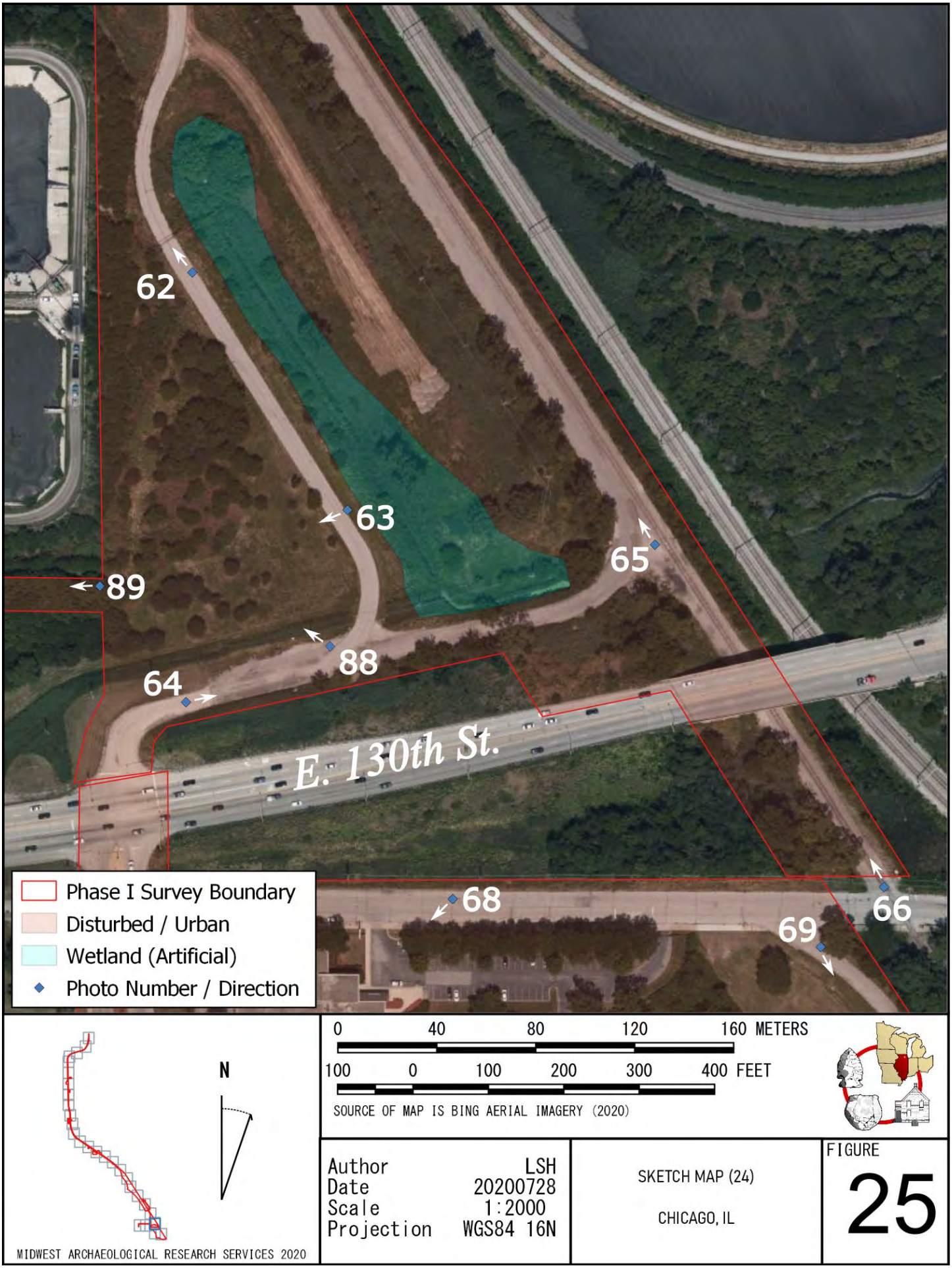
62
63
65
89
88
64
E. 130th St.
68
66
69
Phase I Survey Boundary
Disturbed / Urban
Wetland (Artificial)
Photo Number / Direction
N
0 40 80 120 160 METERS
100 0 100 200 300 400 FEET
SOURCE OF MAP IS BING AERIAL IMAGERY (2020)
MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020
Author LSH
Date 20200728
Scale 1:2000
Projection WGS84 16N
SKETCH MAP (24)
CHICAGO, IL
FIGURE
25

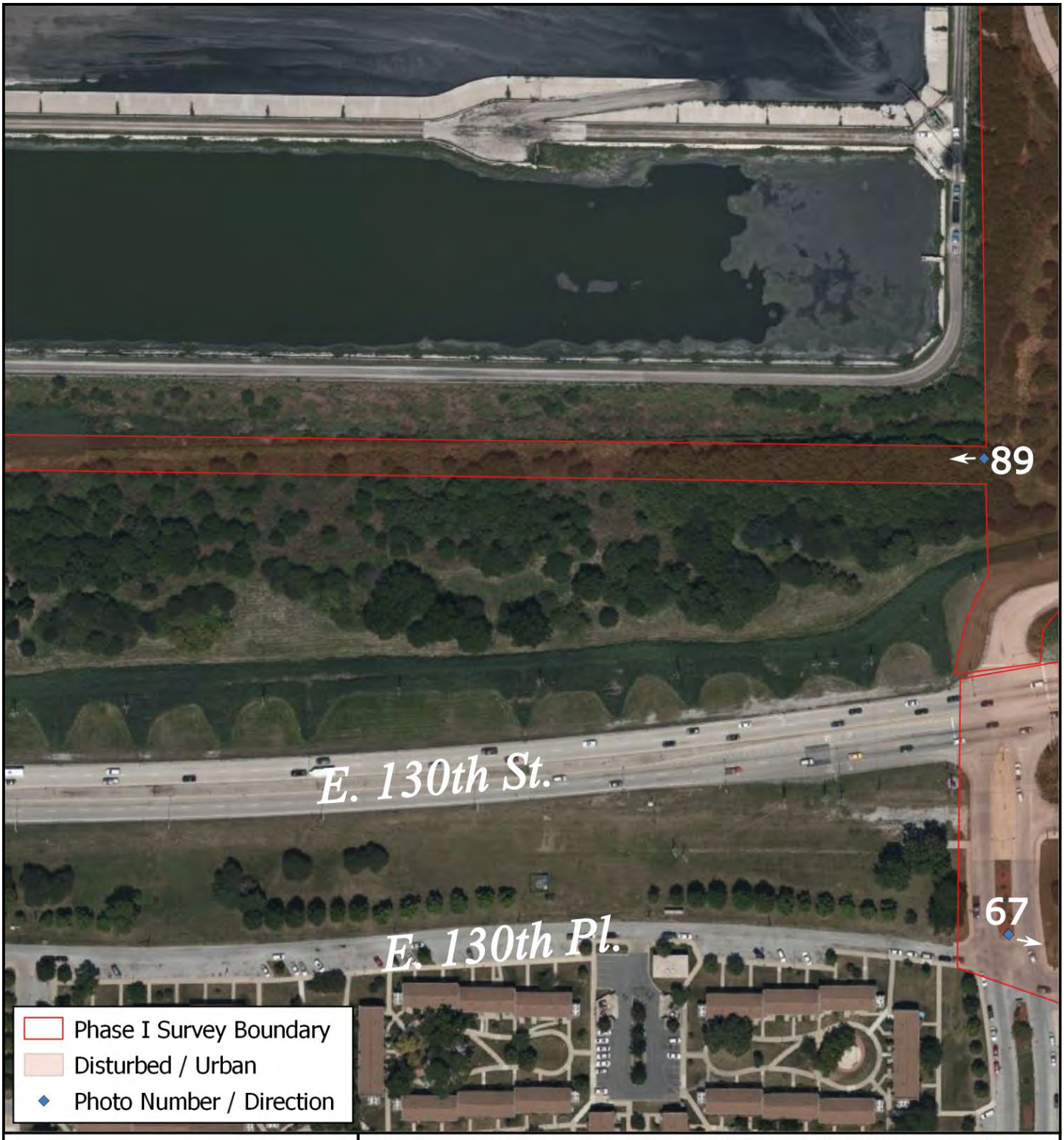

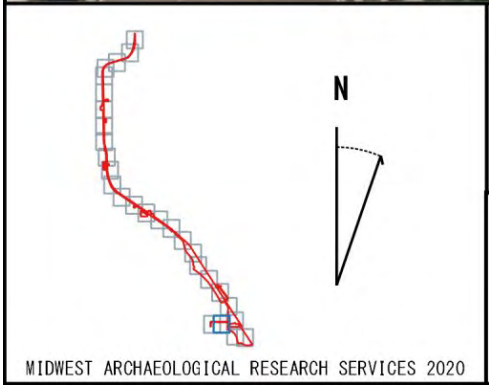

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

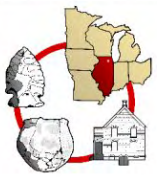

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (25)

CHICAGO, IL

FIGURE

26

N

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (26)

CHICAGO, IL

FIGURE

27

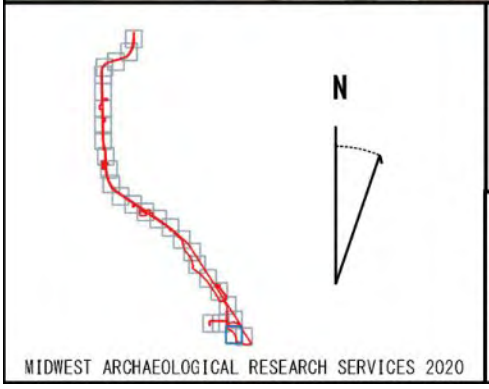

0 40 80 120 160 METERS

100 0 100 200 300 400 FEET

SOURCE OF MAP IS BING AERIAL IMAGERY (2020)

Author	LSH
Date	20200728
Scale	1:2000
Projection	WGS84 16N

SKETCH MAP (27)

CHICAGO, IL

FIGURE

28

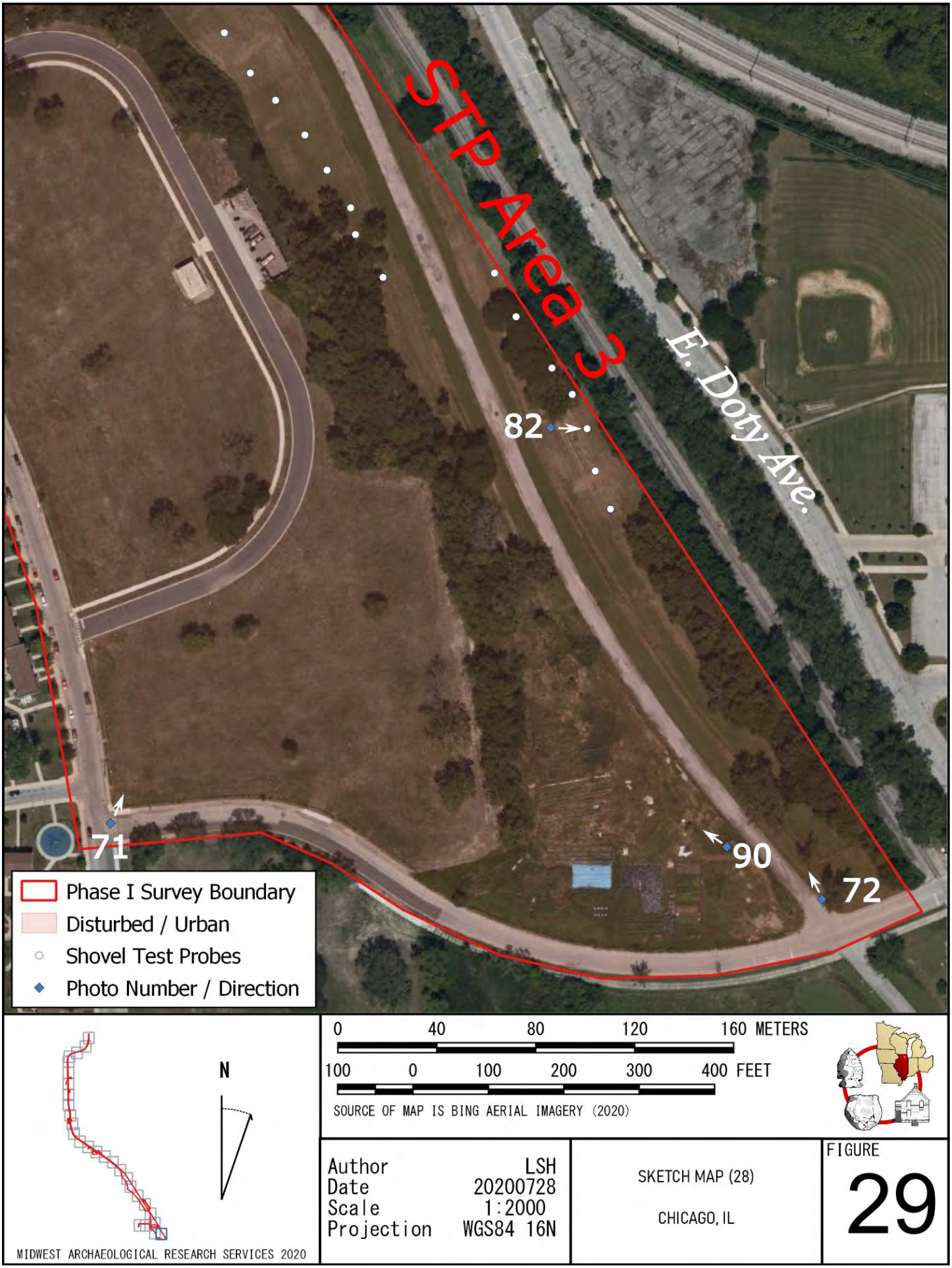
STP Area 3
E. Doty Ave.
82
71
90
72
Phase I Survey Boundary
Disturbed / Urban
Shovel Test Probes
Photo Number / Direction
N
0 40 80 120 160 METERS
100 0 100 200 300 400 FEET
SOURCE OF MAP IS BING AERIAL IMAGERY (2020)
MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020
Author LSH
Date 20200728
Scale 1:2000
Projection WGS84 16N
SKETCH MAP (28)
CHICAGO, IL
FIGURE
29

Appendix B
Historic Maps

Historic Plats, 7.5' U.S.G.S. Topographic Maps,
1938 Historic Aerials
1911 Sanborn Fire Insurance Maps

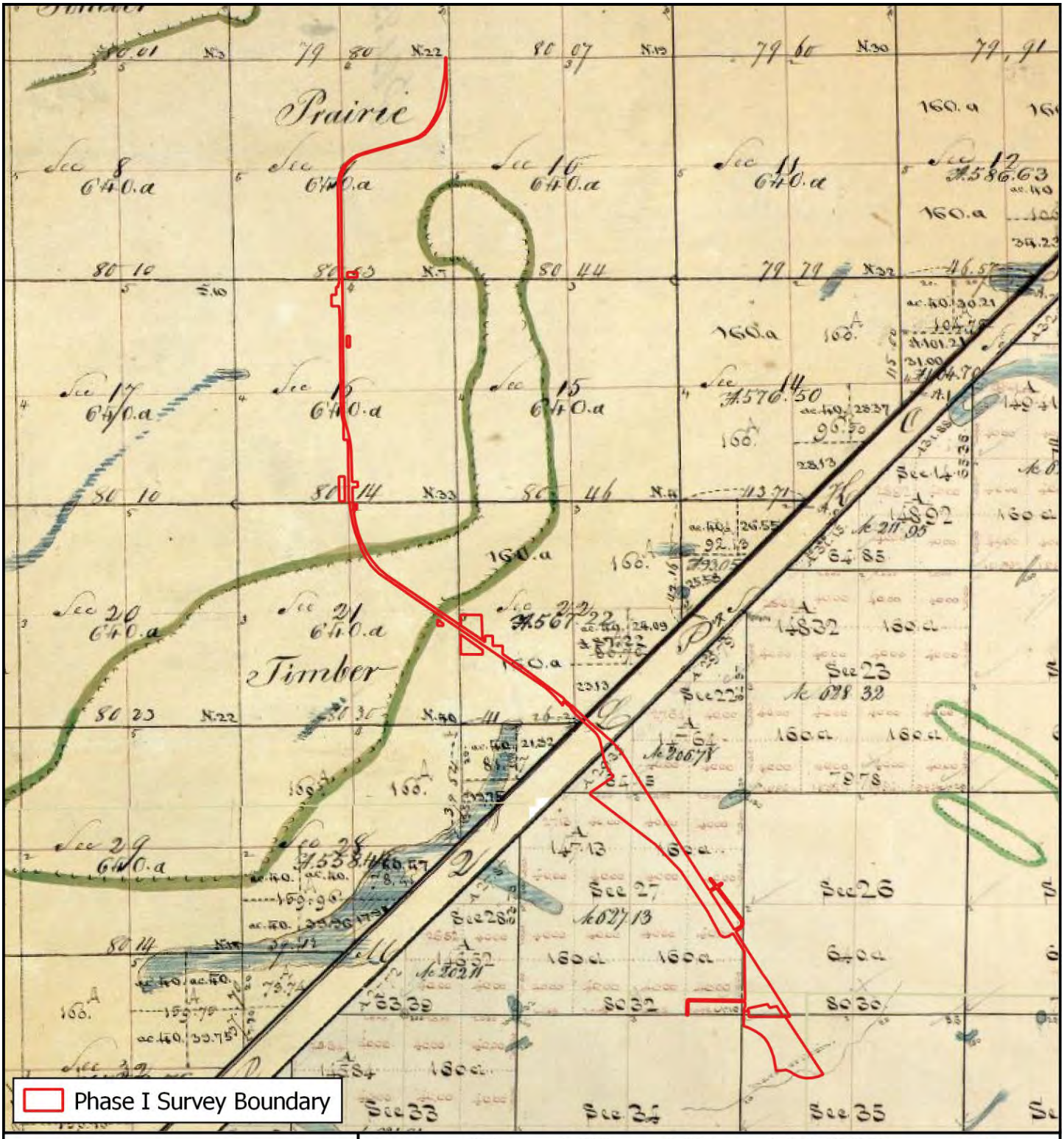

N

0 750 1,500 2,250 3,000 METERS

2,000 0 2,000 4,000 6,000 8,000 FEET

SOURCE OF MAP IS FEDERAL TOWNSHIP PLATS OF IL (1804-1891)

Author	LSH
Date	20200728
Scale	1:40000
Projection	WGS84 16N

1822 & 1839 GLO
CHICAGO, IL
FEDERAL TOWNSHIP PLATS OF IL
(1804-1891)

FIGURE
1

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

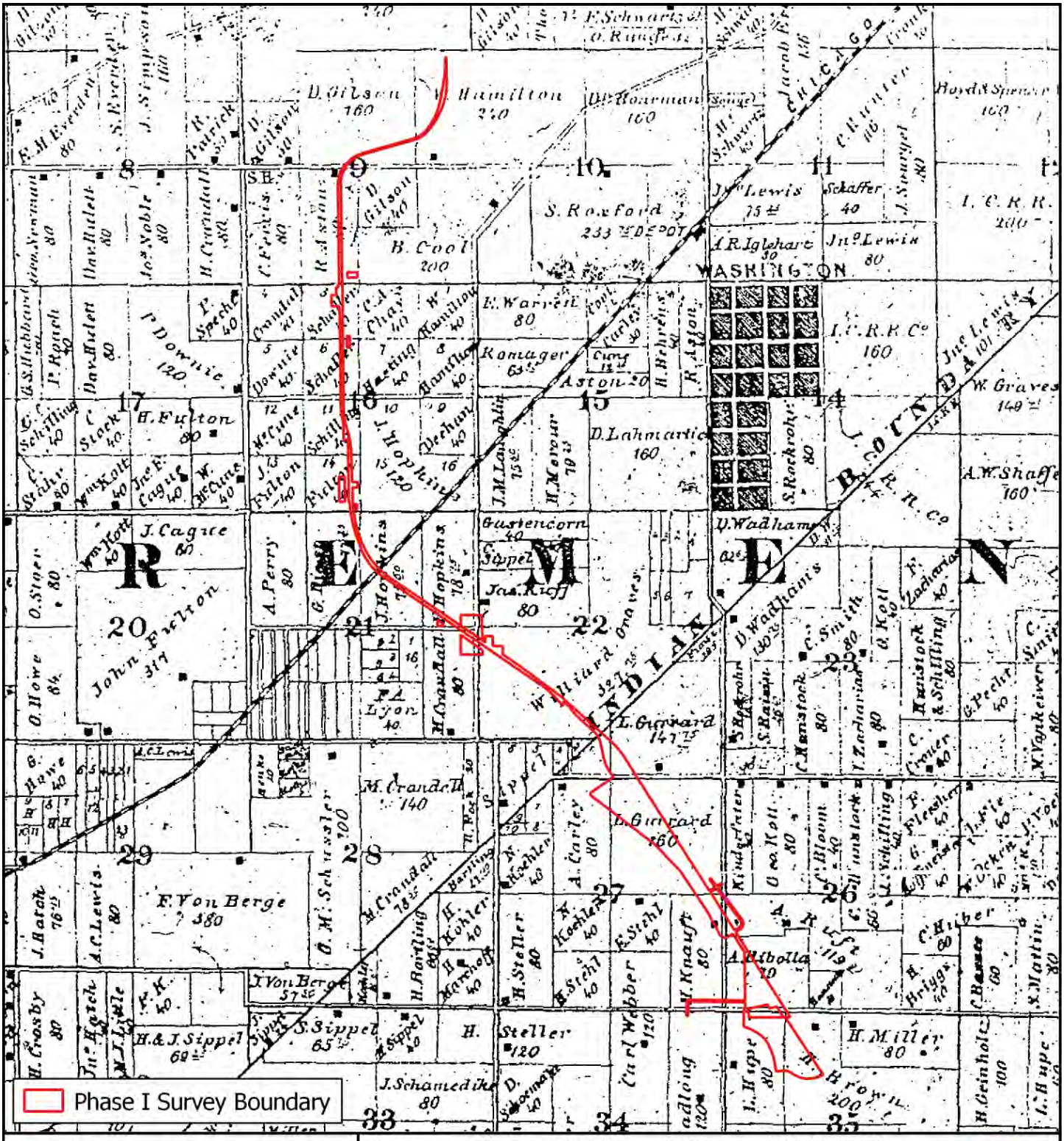

Author	LSH
Date	20200728
Scale	1:40000
Projection	WGS84 16N

1861 PLAT
CHICAGO, IL
FLOWER, WALTER L. (1861)

FIGURE
2

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

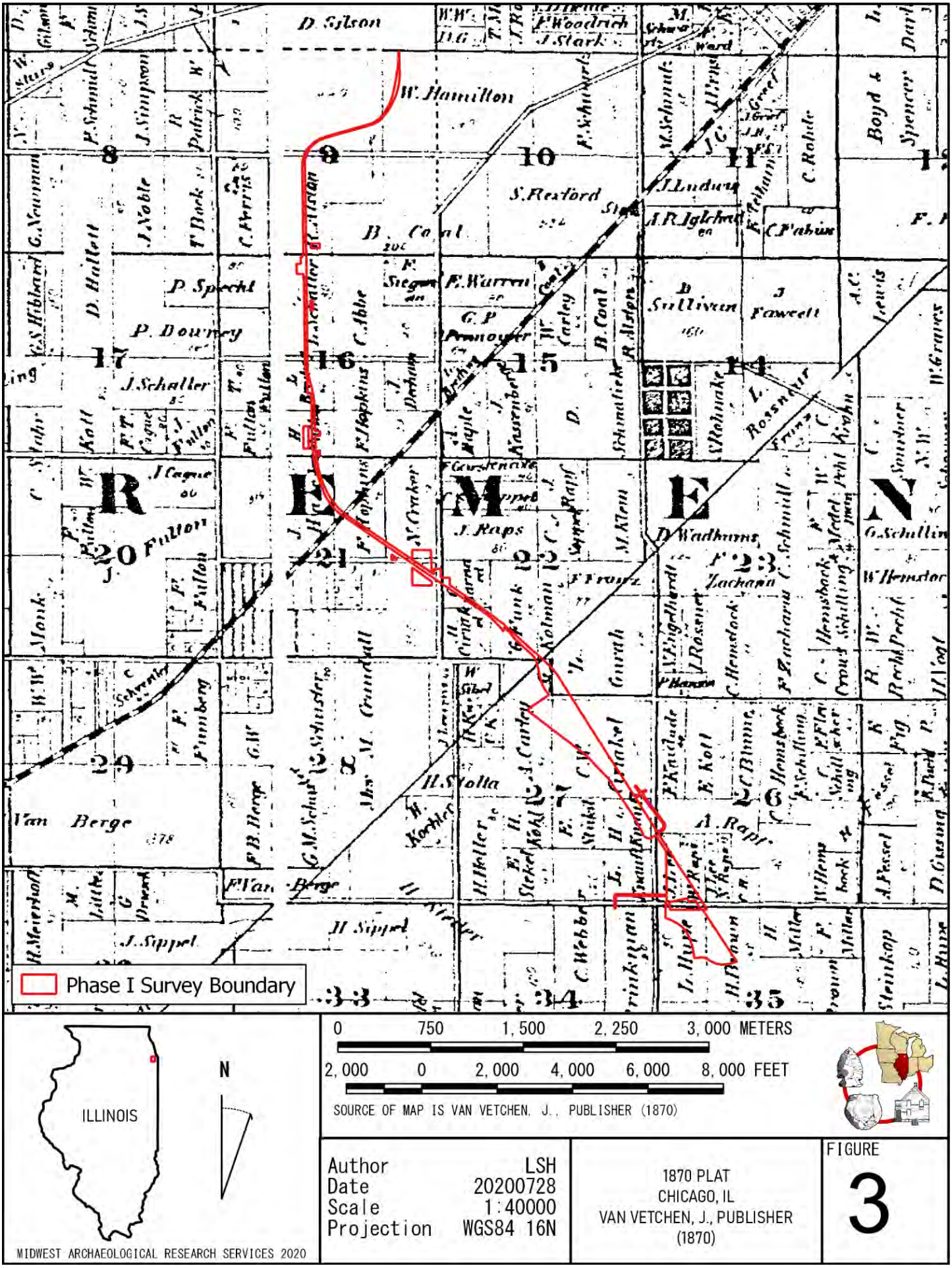
Phase I Survey Boundary
ILLINOIS
N
0 750 1,500 2,250 3,000 METERS
2,000 0 2,000 4,000 6,000 8,000 FEET
SOURCE OF MAP IS VAN VETCHEN, J., PUBLISHER (1870)
Author LSH
Date 20200728
Scale 1:40000
Projection WGS84 16N
1870 PLAT
CHICAGO, IL
VAN VETCHEN, J., PUBLISHER
(1870)
FIGURE
3
MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

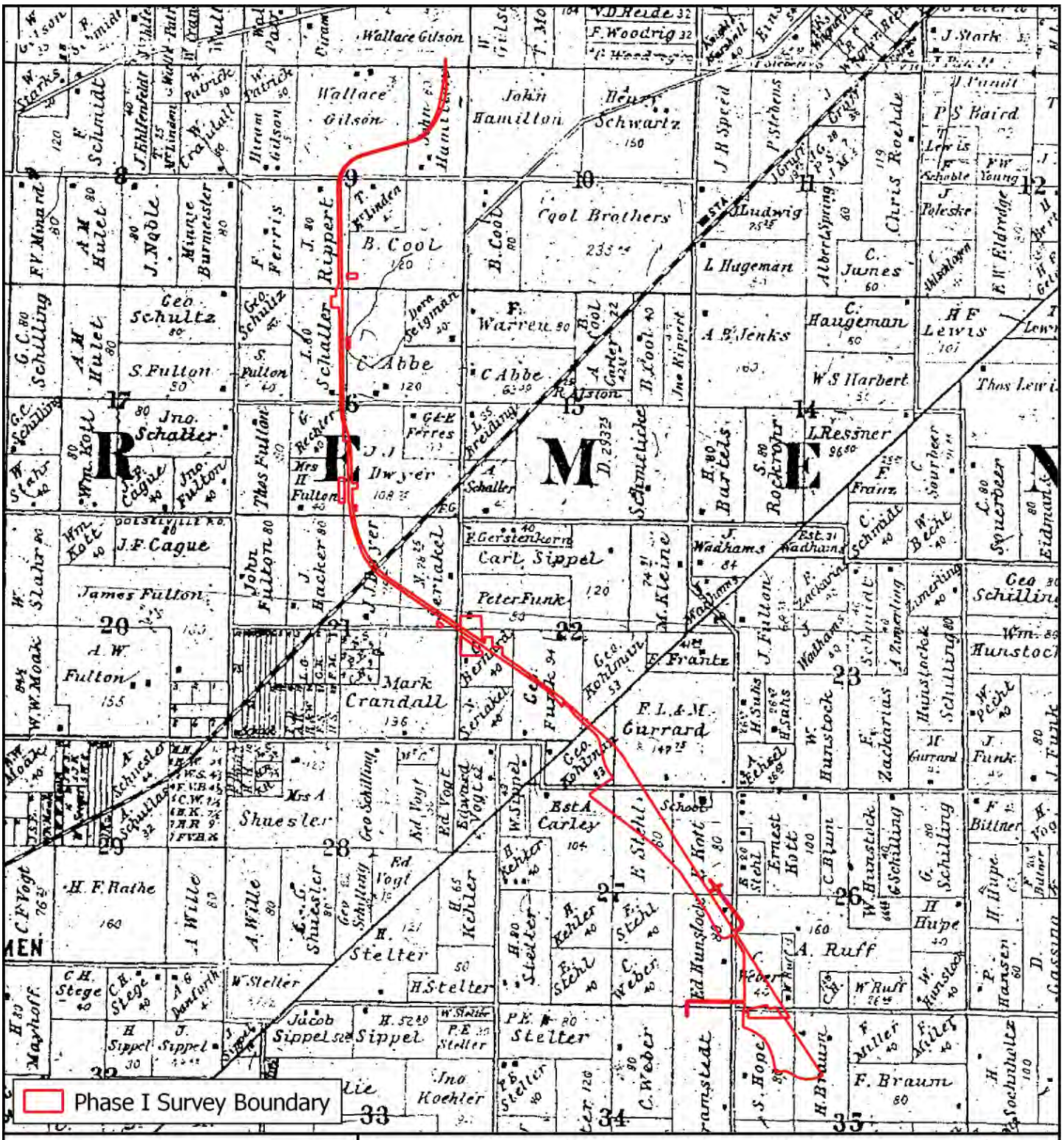
Phase I Survey Boundary
Wallace Gilson
John Hamilton
Henry Schwartz
Cool Brothers
B. Cool
Geo. Schultz
S. Fulton
Jno. Schaller
C. Abbe
F. Warren
Carl Sippel
Peter Funk
Mark Crandall
F. L. & M. Gurrard
Est. A. Carley
Shuesler
H. F. Rathe
H. Stelter
A. Ruff
F. Braun
Jacob Sippel
Jno. Koehler
S. Hope
H. Braun
Ed. Hunstock
Ernest Hott
Chas. Blum
Chas. Roehle
P. S. Baird
L. Hugeman
C. Haugeman
A. B. Jenks
W. S. Harbert
L. Ressner
H. F. Lewis
Thos. Lewis
Thos. Fulton
J. F. Cague
James Fulton
A. W. Fulton
Geo. Schilling
Wm. Hunstock
Zacharias
Frantz
Ludwig
Alber Spring
C. James
J. Poleske
F. W. Eldridge
Thos. Lewis
Schmidt
Becht
Squerbeer
Eidmann
Franz
Rockenbach
Bartels
Schmeltzer
Kleine
Wadhams
Est. Wadhams
Gerstenkorn
Ferres
Schaller
Dwyer
Fulton
Hacker
Rippert
Ferris
Burmeister
Noble
Hulet
Minard
Schilling
Koll
Slater
Moak
Schuessler
Schultz
Vogt
Ed. Vogt
Edward Vogt
Kehler
Stelter
Stehl
Weber
Ruff
Hupe
Bittner
Hansen
Schuchultz
Miller
Braun
Hope
Koehler
Sippel
Stege
Mayhoff
Wille
Schuessler
Schilling
Hunstock
Zacharias
Hunstock
Schilling
Hunstock
Ernest Hott
Chas. Blum
Ed. Hunstock
Weber
Stehl
Kehler
Stelter

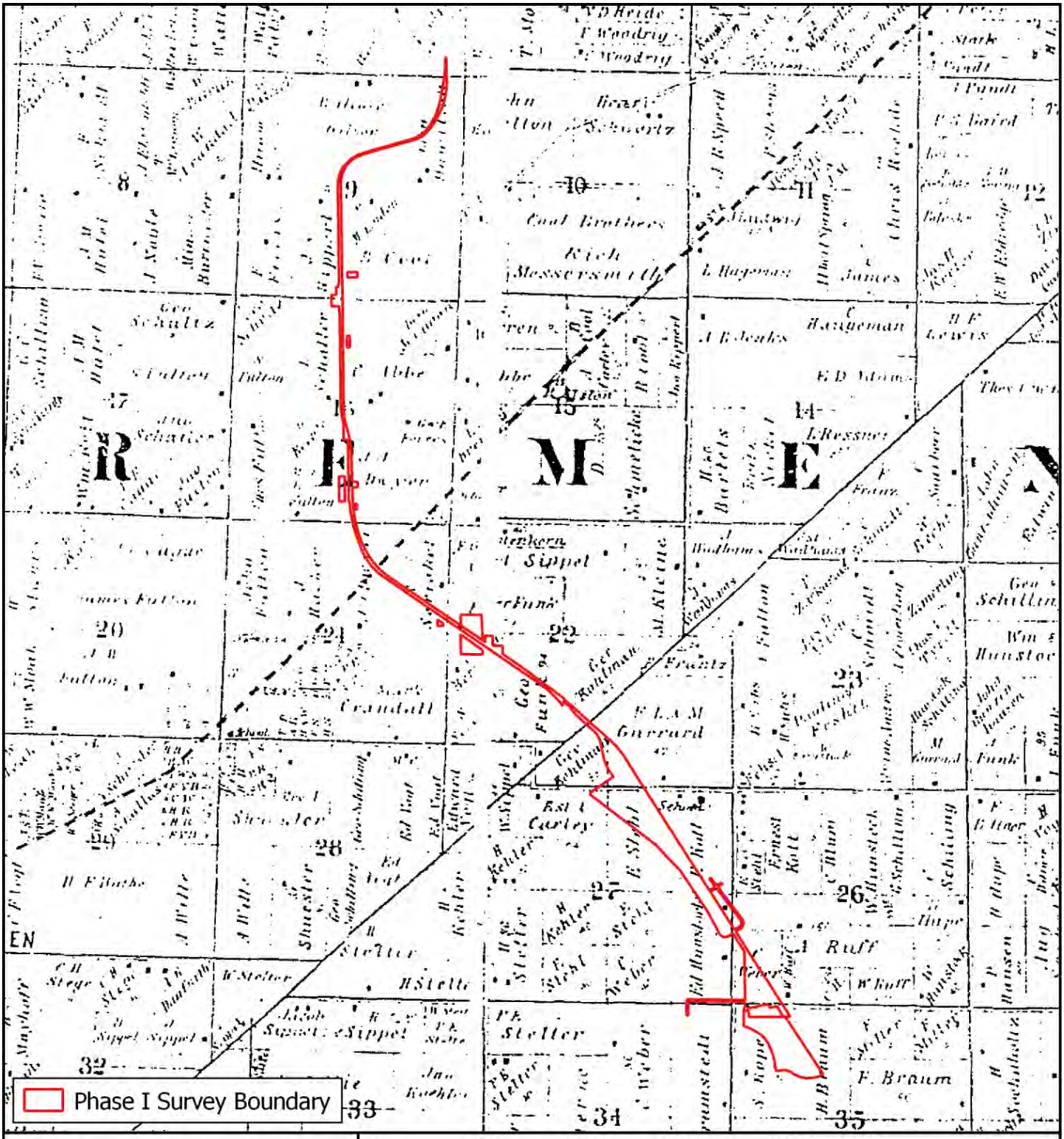

N

0 750 1,500 2,250 3,000 METERS

2,000 0 2,000 4,000 6,000 8,000 FEET

SOURCE OF MAP IS SNYDER, F. M. PUBLISHER (1890)

Author	LSH
Date	20200728
Scale	1:40000
Projection	WGS84 16N

1890 PLAT
CHICAGO, IL
SNYDER, F. M. PUBLISHER (1890)

FIGURE
5

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

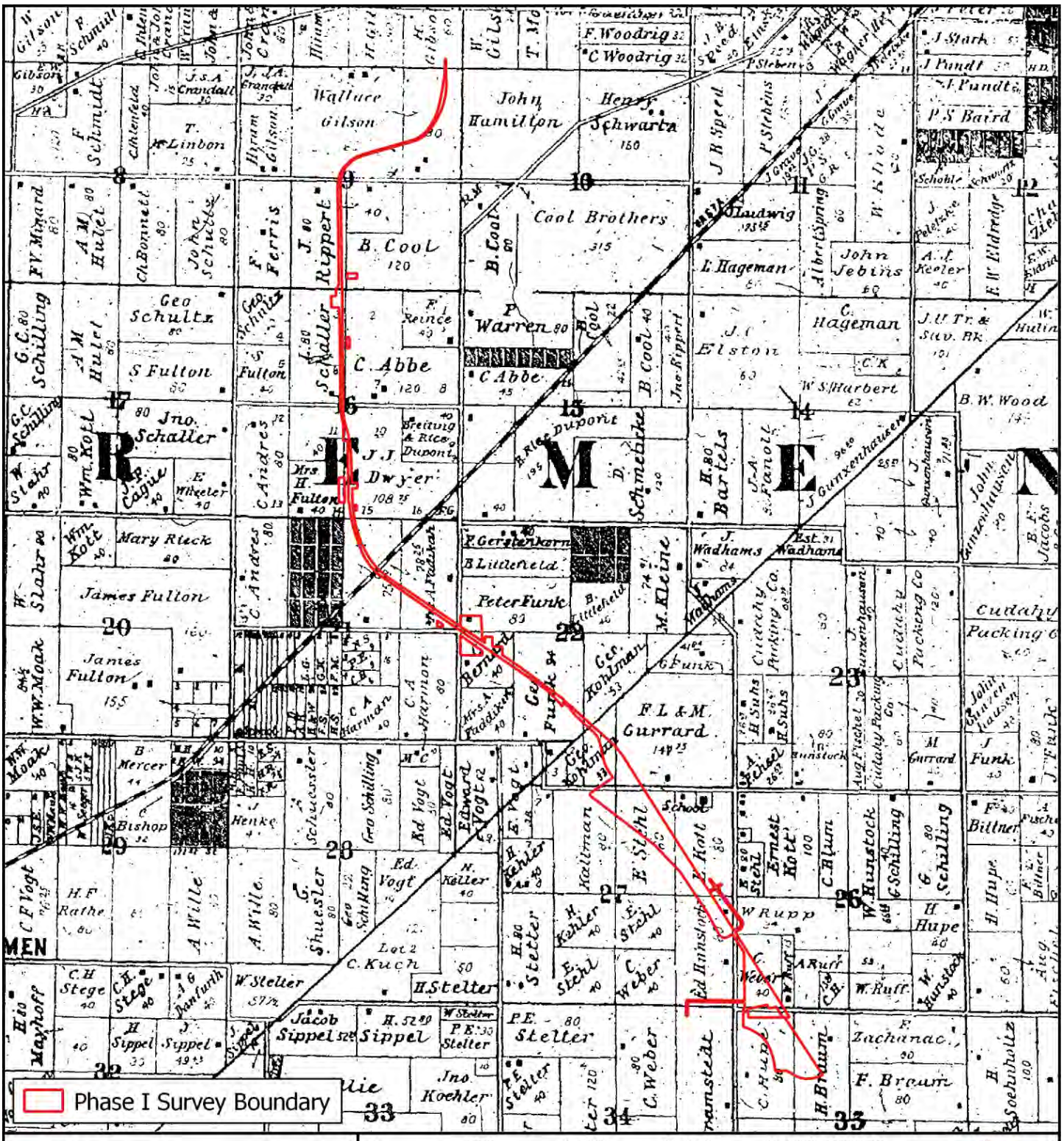
Phase I Survey Boundary
Wallace Gilson
John Hamilton
Henry Schwartz
Cool Brothers
B. Cool
C. Abbe
P. Warren
J. J. Dwyer
Jno. Schaller
James Fulton
Mary Rieck
Peter Funk
F. L. & M. Gurrard
Geo. Kohlman
Ed. Vogt
Edward Vogt
Geo Schilling
A. Wille
H. F. Rathe
C. Kuch
H. Stelter
Jacob Sippel
Jno. Koehler
P. E. Stelter
C. Weber
Ernest Kott
W. Rupp
W. Hunstock
F. Braun
Zachanac
H. Hupe
Cudahy Packing Co
Schmebike
Bartels
Hageman
Elston
Warren
Schaller
Ripper
Fulton
Schultz
Schilling
Hulet
Ferris
Reince
Andres
Kott
Moak
Mercer
Bishop
Henke
Schuessler
Stege
Maxhoff
Sippel
Jansen
Koehler
Stelter
Weber
Hunstock
Ruff
Braun
Zachanac
Soebbultz
Billner
Fischel
Schuhs
Kohlman
Stehl
Kehler
Keller
Vogt
Funk
Gurrard
Wadhams
Kleine
Littlefield
Gerstenkorn
Dupont
Reice
Breitung
Fischel
Hunstock
Ruff
Hupe
Schilling
Kott
Stehl
Weber
Koehler
Stelter
Sippel
Braun
Zachanac
Soebbultz
Billner
Hupe
Hunstock

N

0 750 1,500 2,250 3,000 METERS

2,000 0 2,000 4,000 6,000 8,000 FEET

SOURCE OF MAP IS USGS TOPO, CHICAGO, IL (1901)

Author	LSH
Date	20200728
Scale	1:40000
Projection	WGS84 16N

1901 TOPO
CHICAGO, IL
USGS TOPO, CHICAGO, IL (1901)

FIGURE 7

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

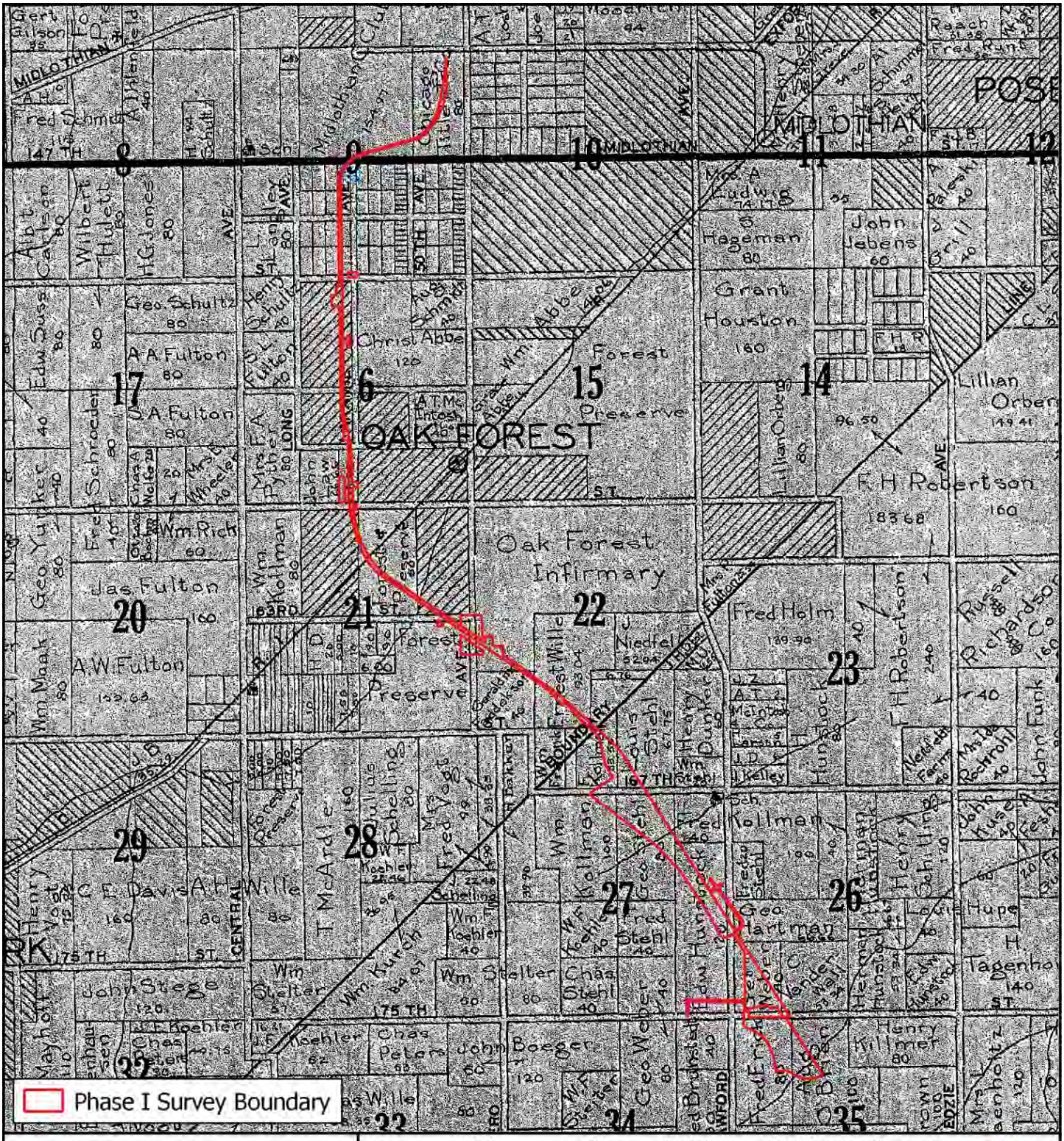
OAK FOREST
Oak Forest Infirmary
Christ Abbe
Forest Preserve
Grant Houston
Hageman
John Jebens
Lillian Orberg
F.H. Robertson
Fred Holm
Geo. Schultz
A.A. Fulton
S.A. Fulton
Wm. Rich
Jas. Fulton
A.W. Fulton
Wm. Kollman
Niedfeldt
Geo. Hartman
Henry Killmer
Wm. Stelter
Chas. Stehl
John Stege
Chas. Peters
John Boeger
Phase I Survey Boundary
ILLINOIS
N
0 750 1,500 2,250 3,000 METERS
2,000 0 2,000 4,000 6,000 8,000 FEET
SOURCE OF MAP IS THRIFT PRESS, PUBLISHER (1926)
Author LSH
Date 20200728
Scale 1:40000
Projection WGS84 16N
1926 PLAT
CHICAGO, IL
THRIFT PRESS, PUBLISHER (1926)
FIGURE
8
MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

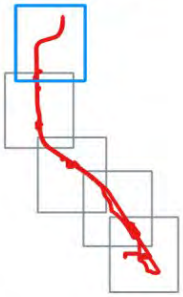

N

0 200 400 600 800 METERS

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SOURCE OF MAP IS ISGS HISTORICAL AERIAL PHOTO 19391114-20

Author	LSH
Date	20200728
Scale	1:10000
Projection	WGS84 16N

1938 HISTORIC AERIAL

CHICAGO, IL

FIGURE

9

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

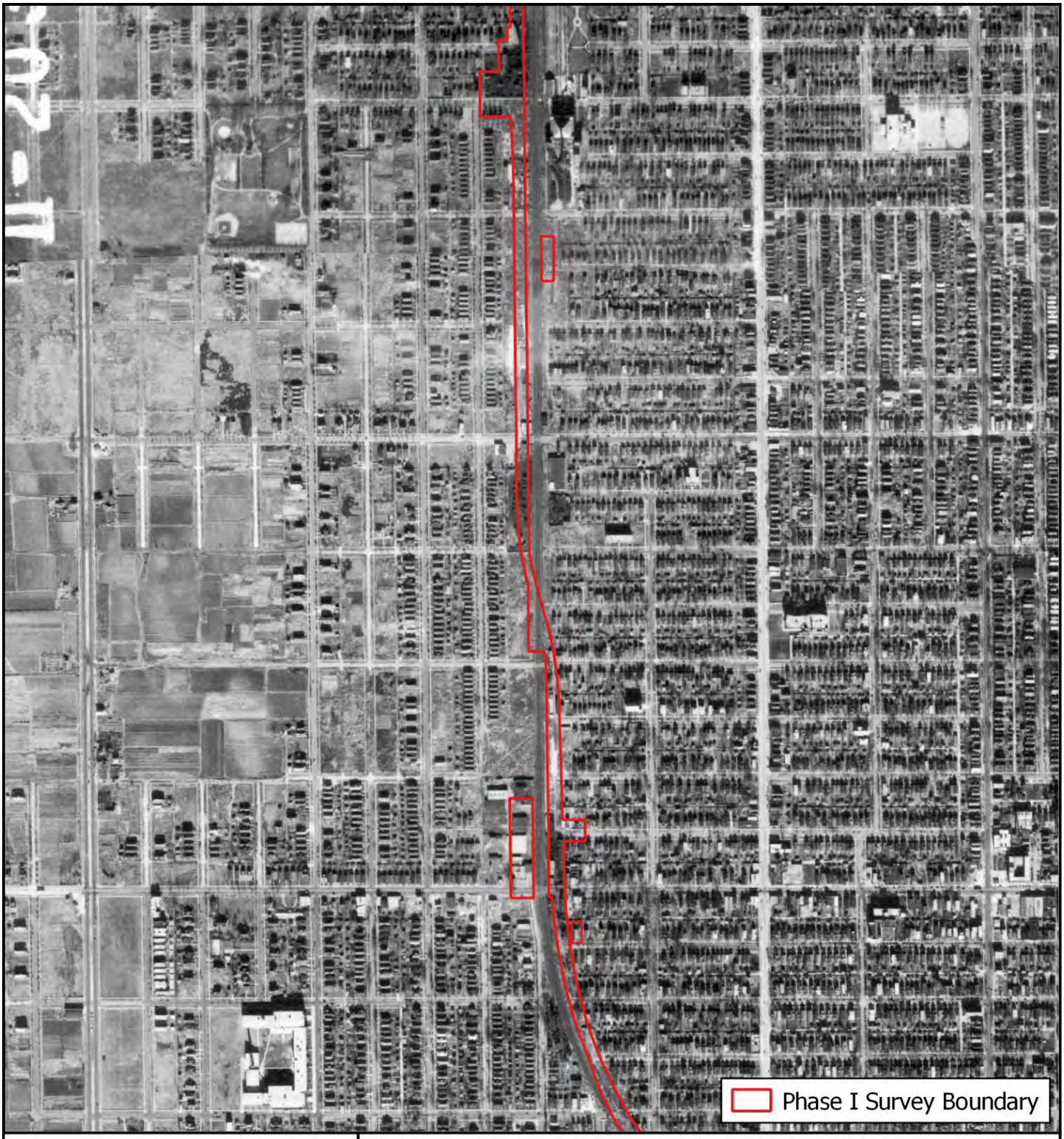

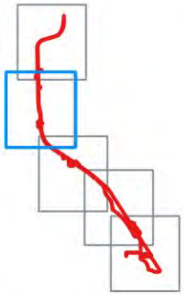

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SOURCE OF MAP IS ISGS HISTORICAL AERIAL PHOTO 19391114-20

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:10000
Projection	WGS84 16N

1938 HISTORIC AERIAL

CHICAGO, IL

FIGURE

10

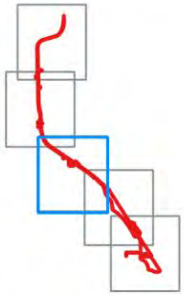

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SOURCE OF MAP IS ISGS HISTORICAL AERIAL PHOTO 19391114-20

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:10000
Projection	WGS84 16N

1938 HISTORIC AERIAL

CHICAGO, IL

FIGURE

11

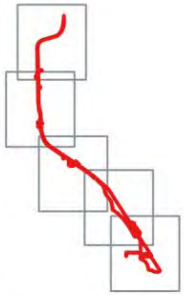

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MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:10000
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1938 HISTORIC AERIAL

CHICAGO, IL

FIGURE

12

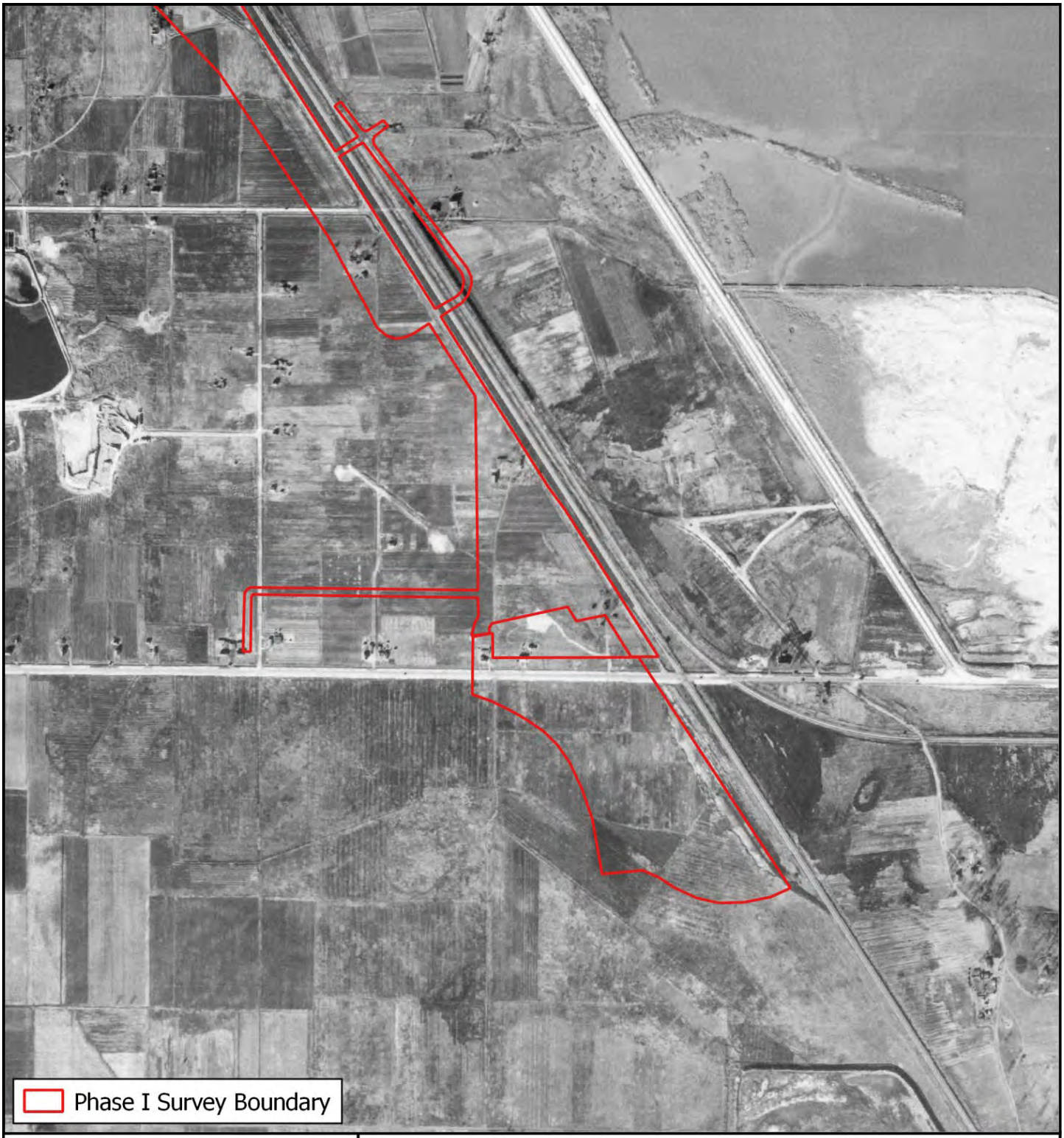

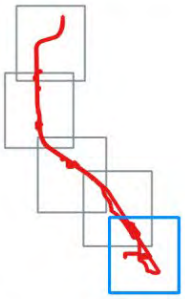

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SOURCE OF MAP IS ISGS HISTORICAL AERIAL PHOTO 19391114-20

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:10000
Projection	WGS84 16N

1938 HISTORIC AERIAL

CHICAGO, IL

FIGURE

13

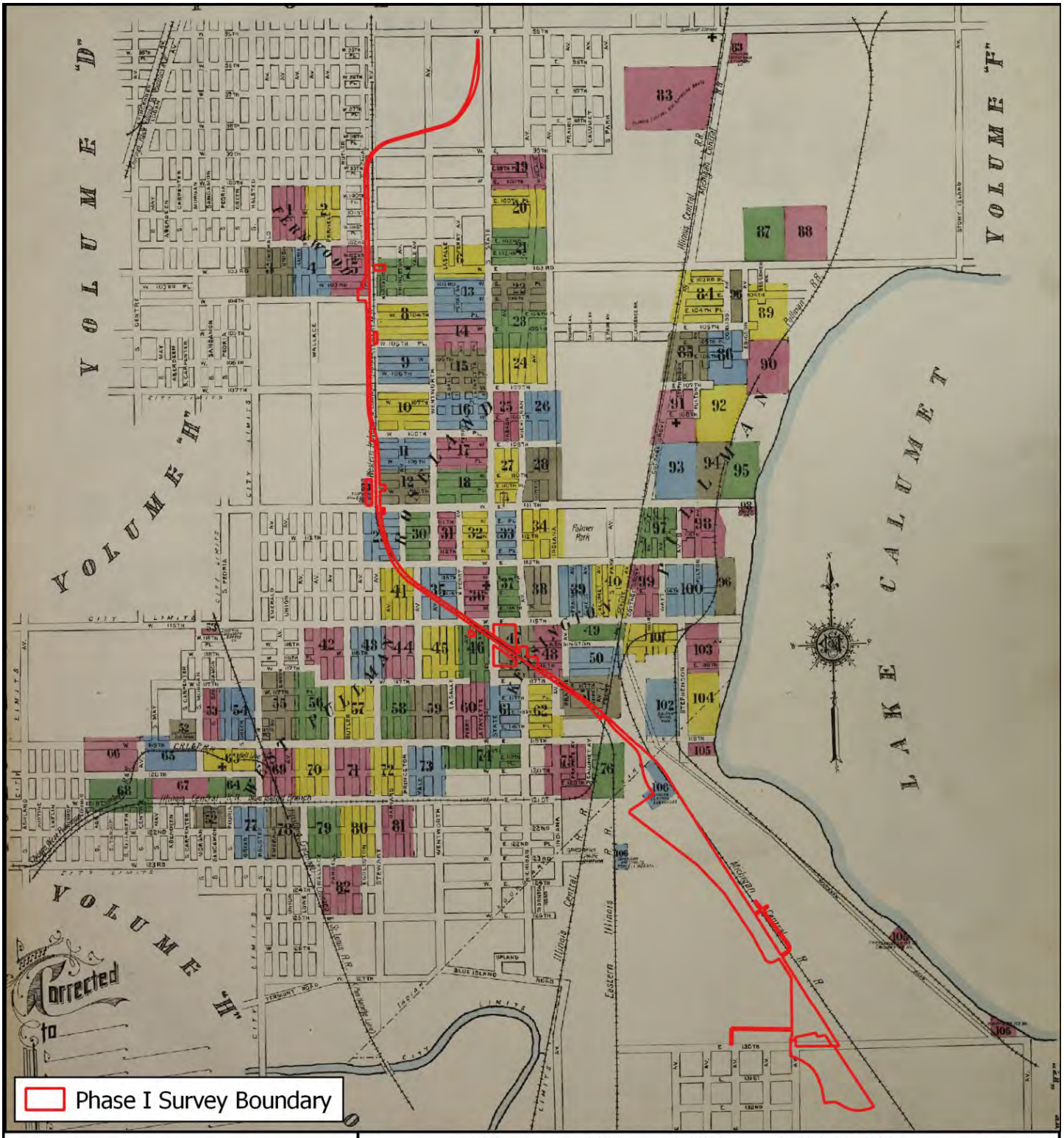

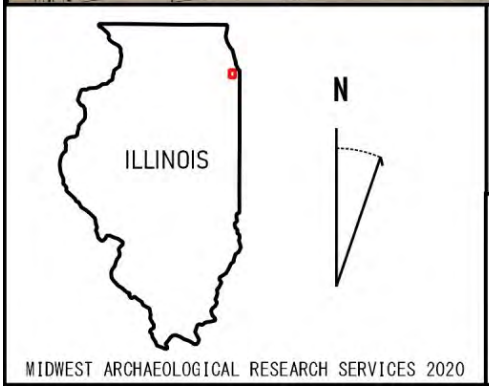

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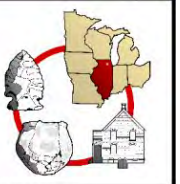

Author	LSH
Date	20200728
Scale	1:40000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G CHICAGO, IL

FIGURE 14

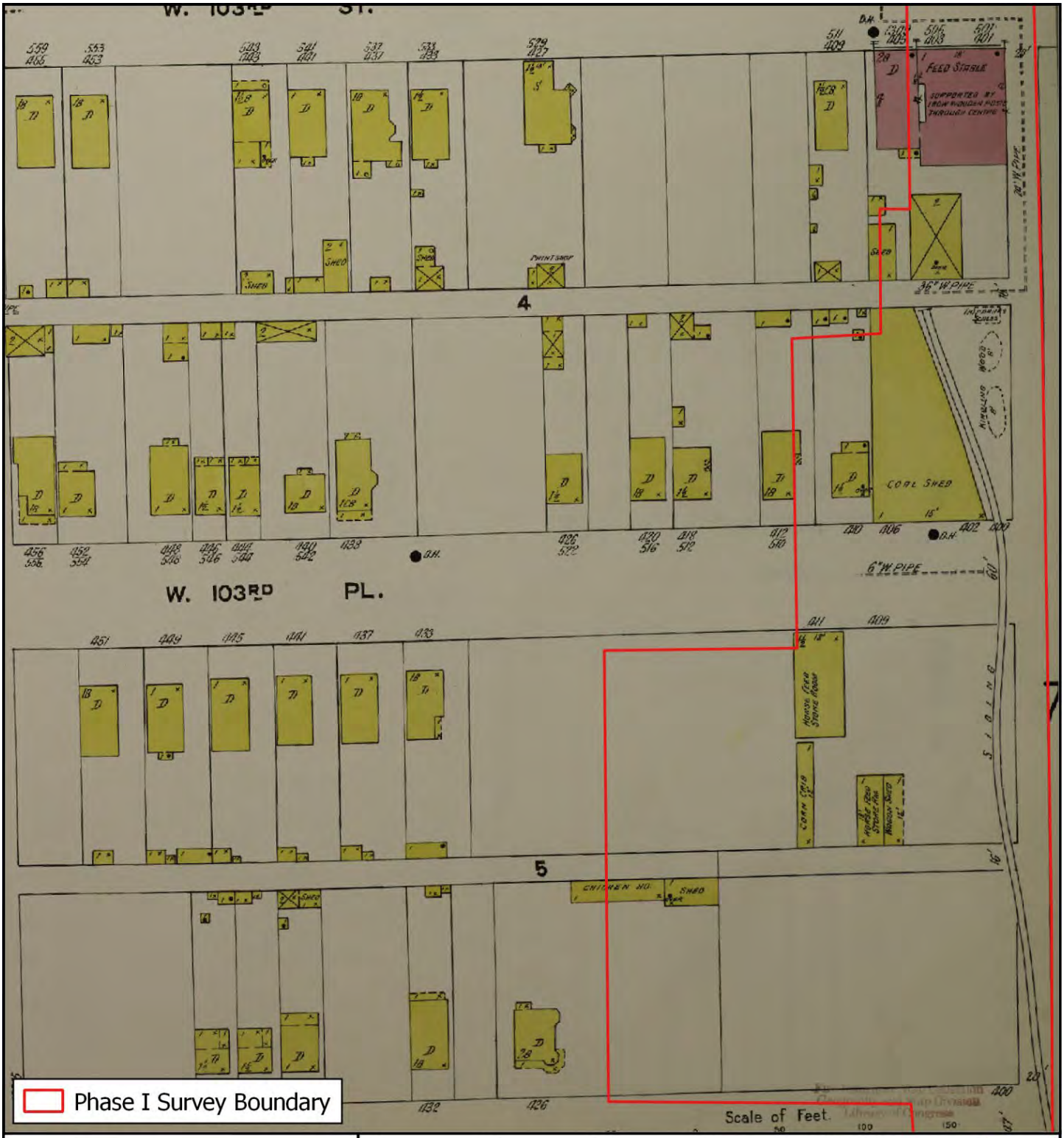

N

0 20 40 60 80 METERS

50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 5

CHICAGO, IL

FIGURE 15

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

0 20 40 60 80 METERS

50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 7

CHICAGO, IL

FIGURE 16

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

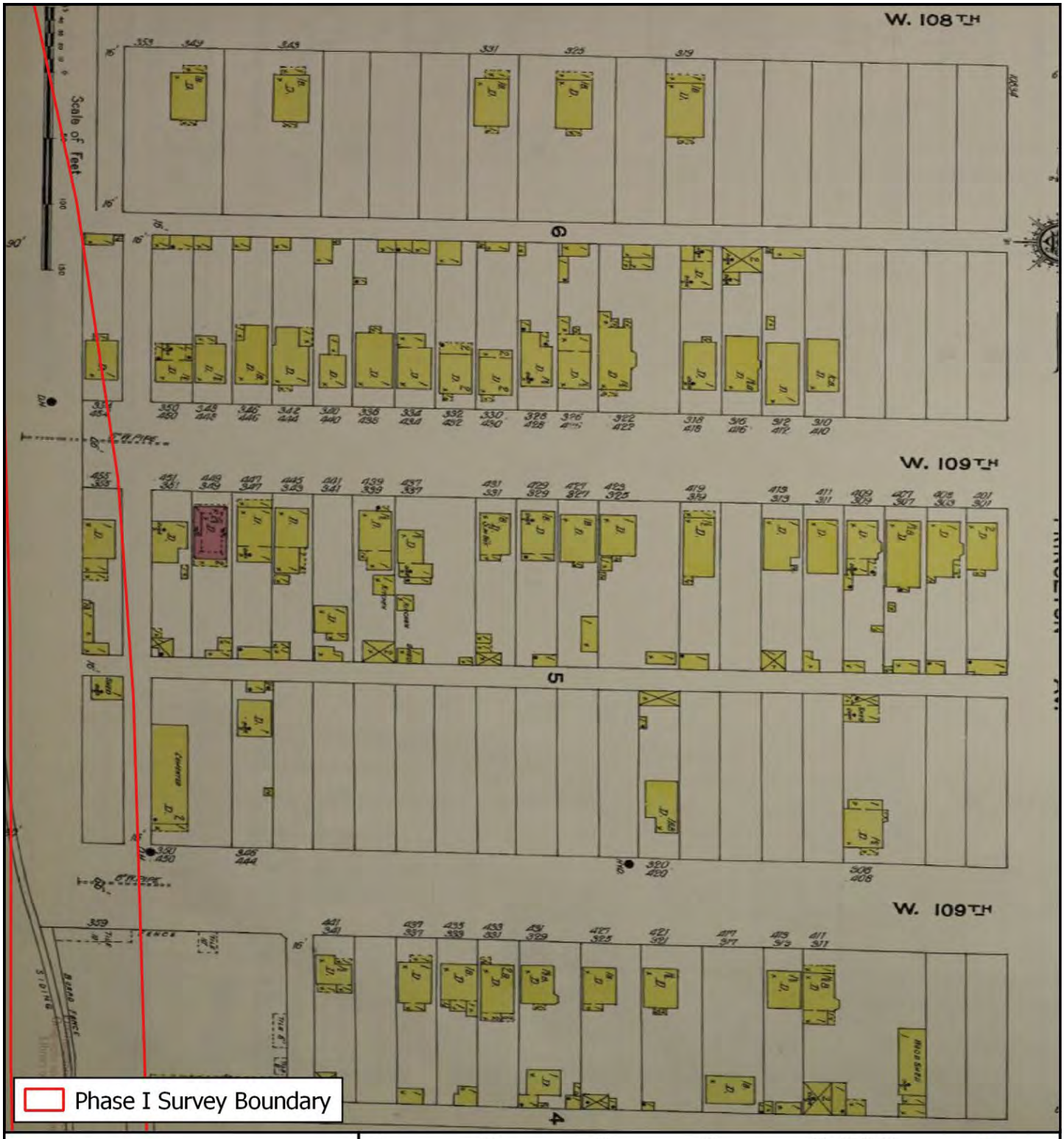

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50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 11

CHICAGO, IL

FIGURE 17

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

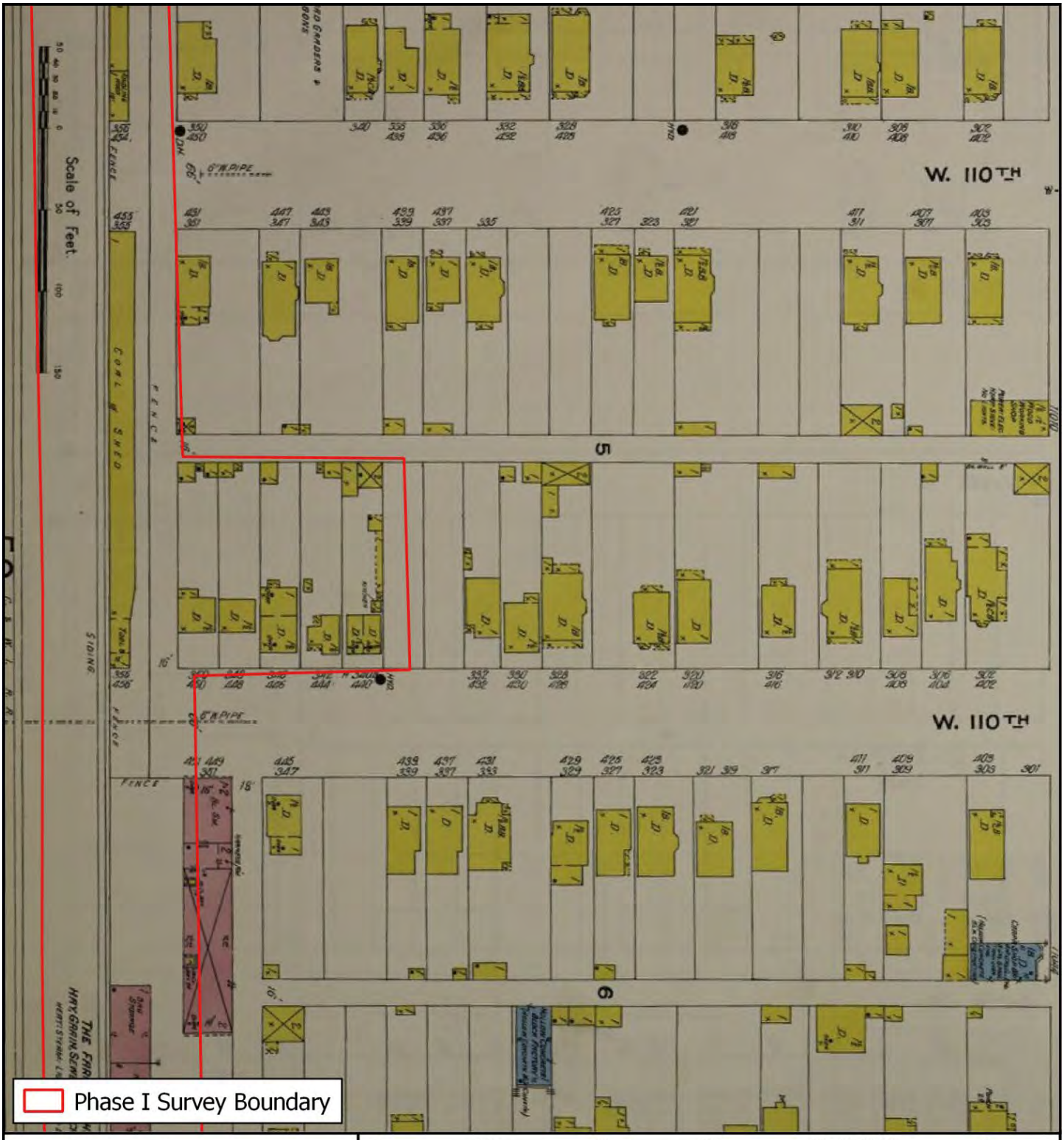

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50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 12

CHICAGO, IL

FIGURE 18

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

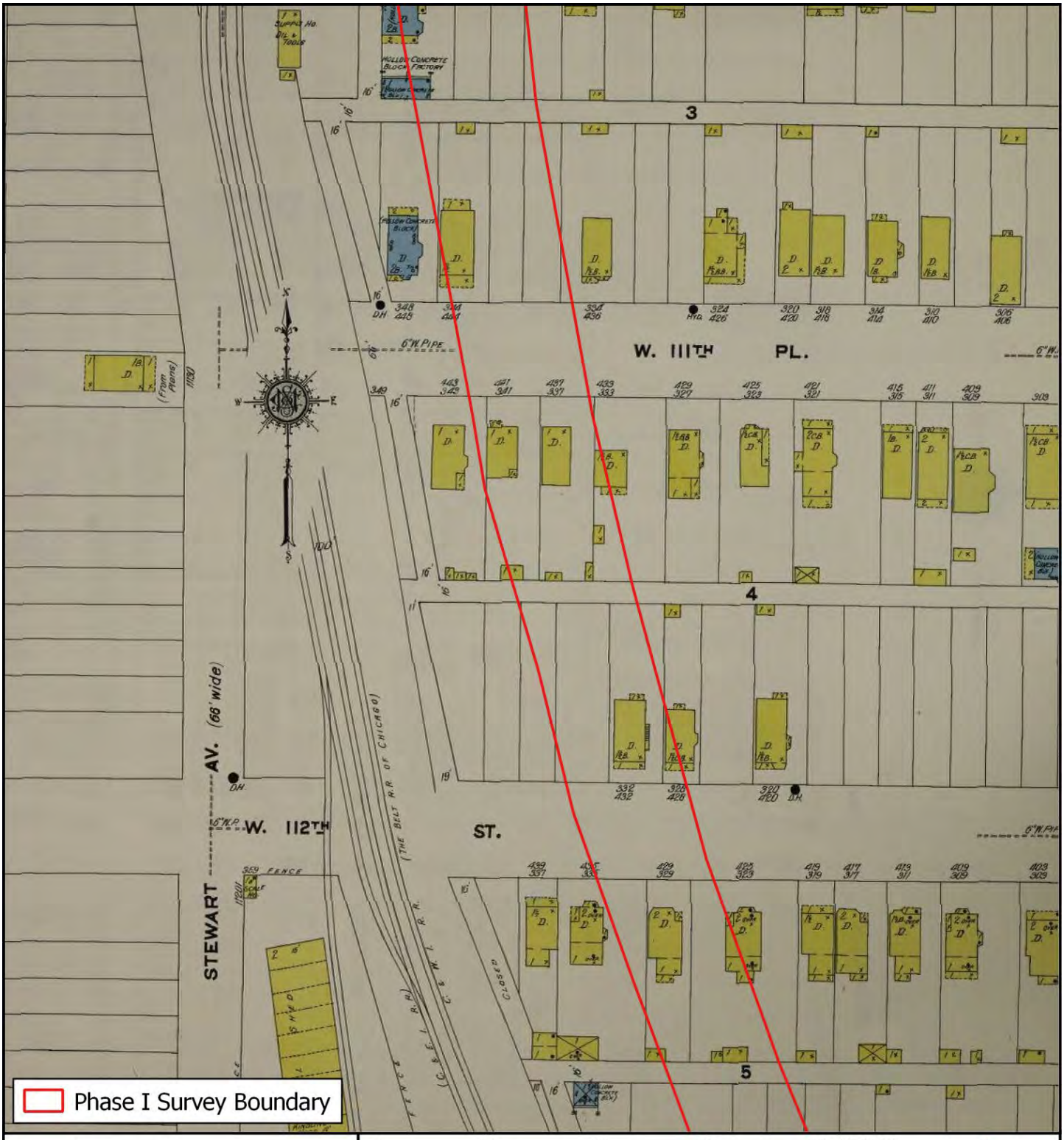

N

0 20 40 60 80 METERS

50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
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1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 29

CHICAGO, IL

FIGURE 19

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

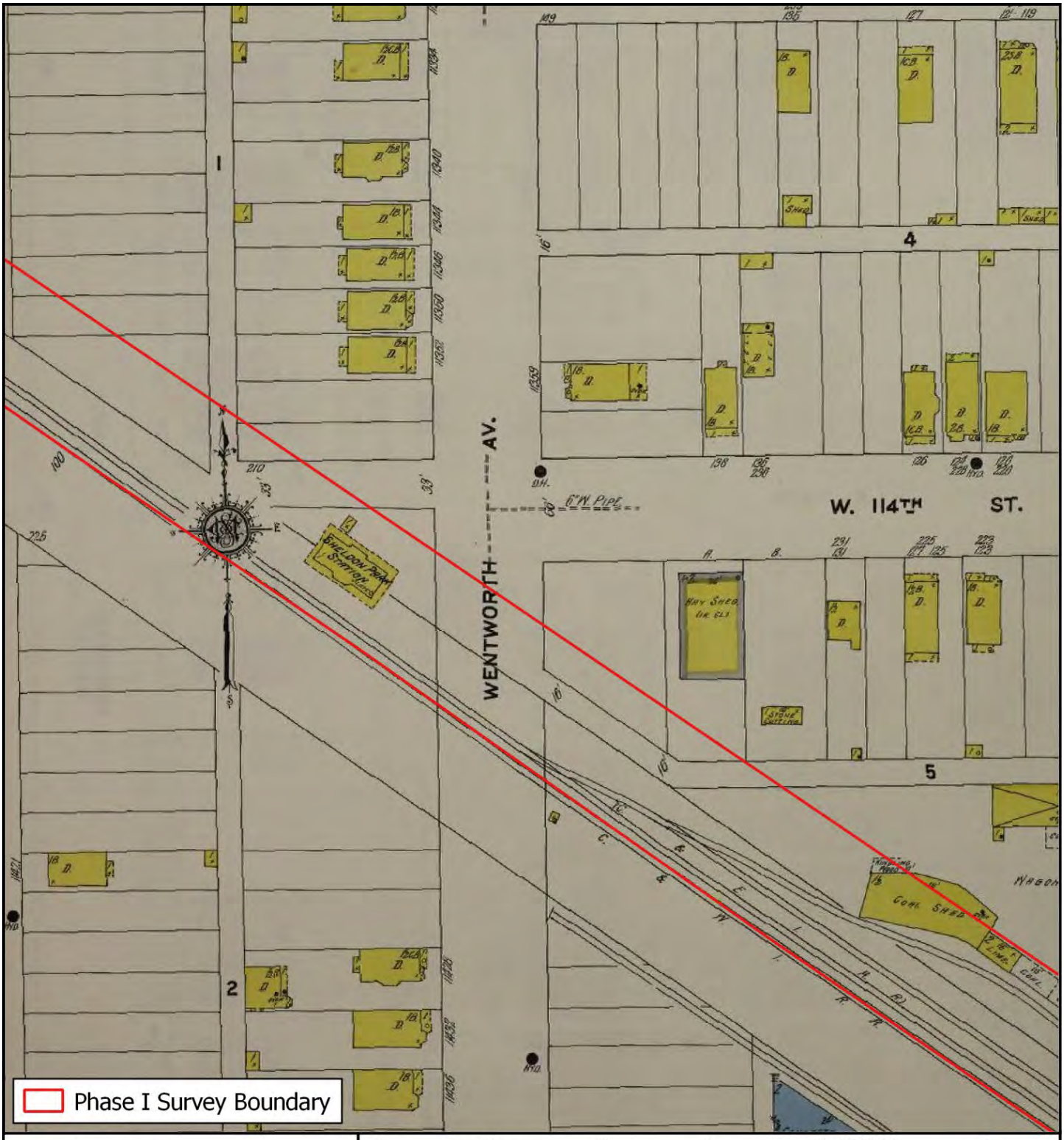

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50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 35

CHICAGO, IL

FIGURE 20

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

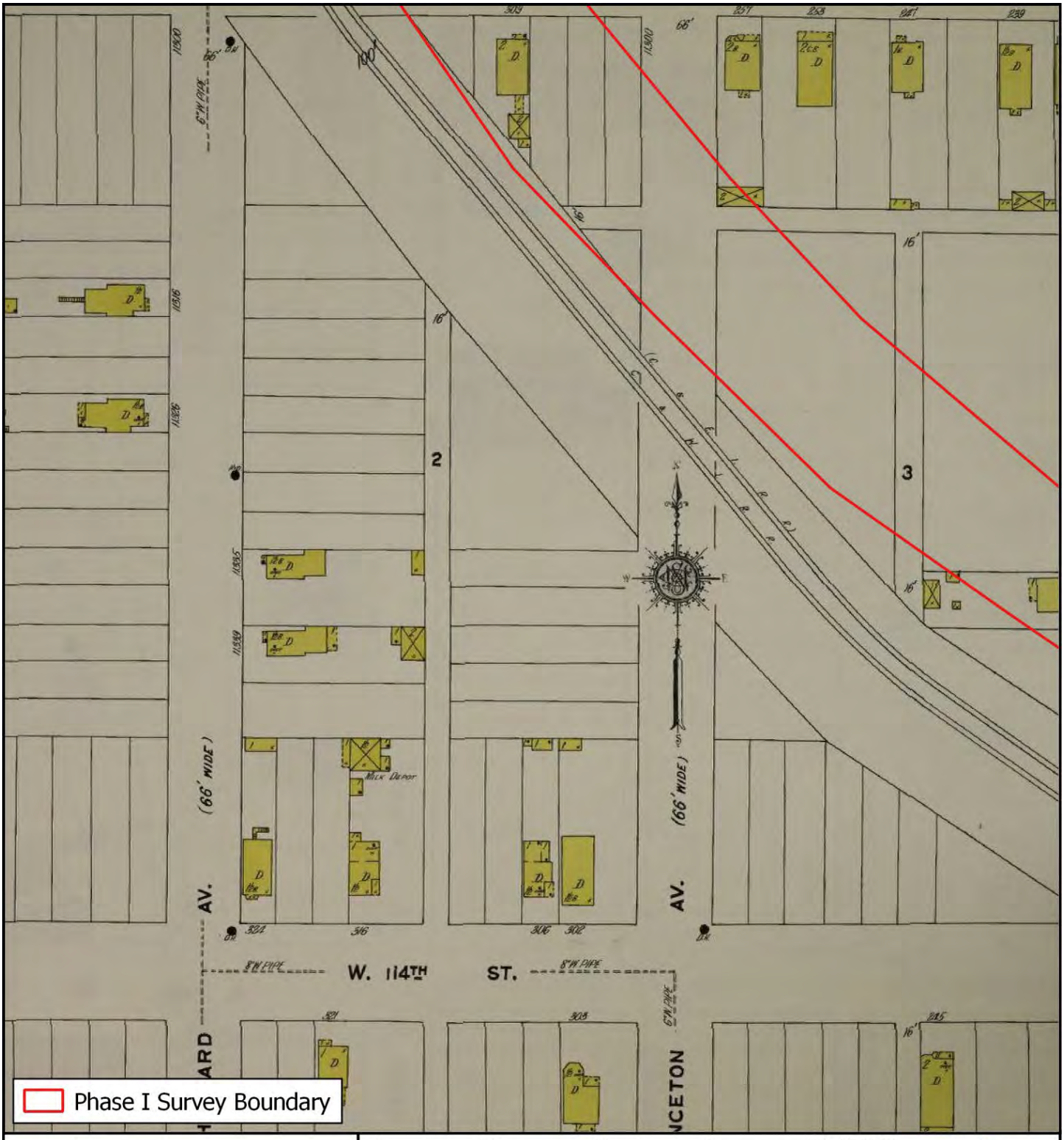

0 20 40 60 80 METERS

50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 41

CHICAGO, IL

FIGURE 21

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

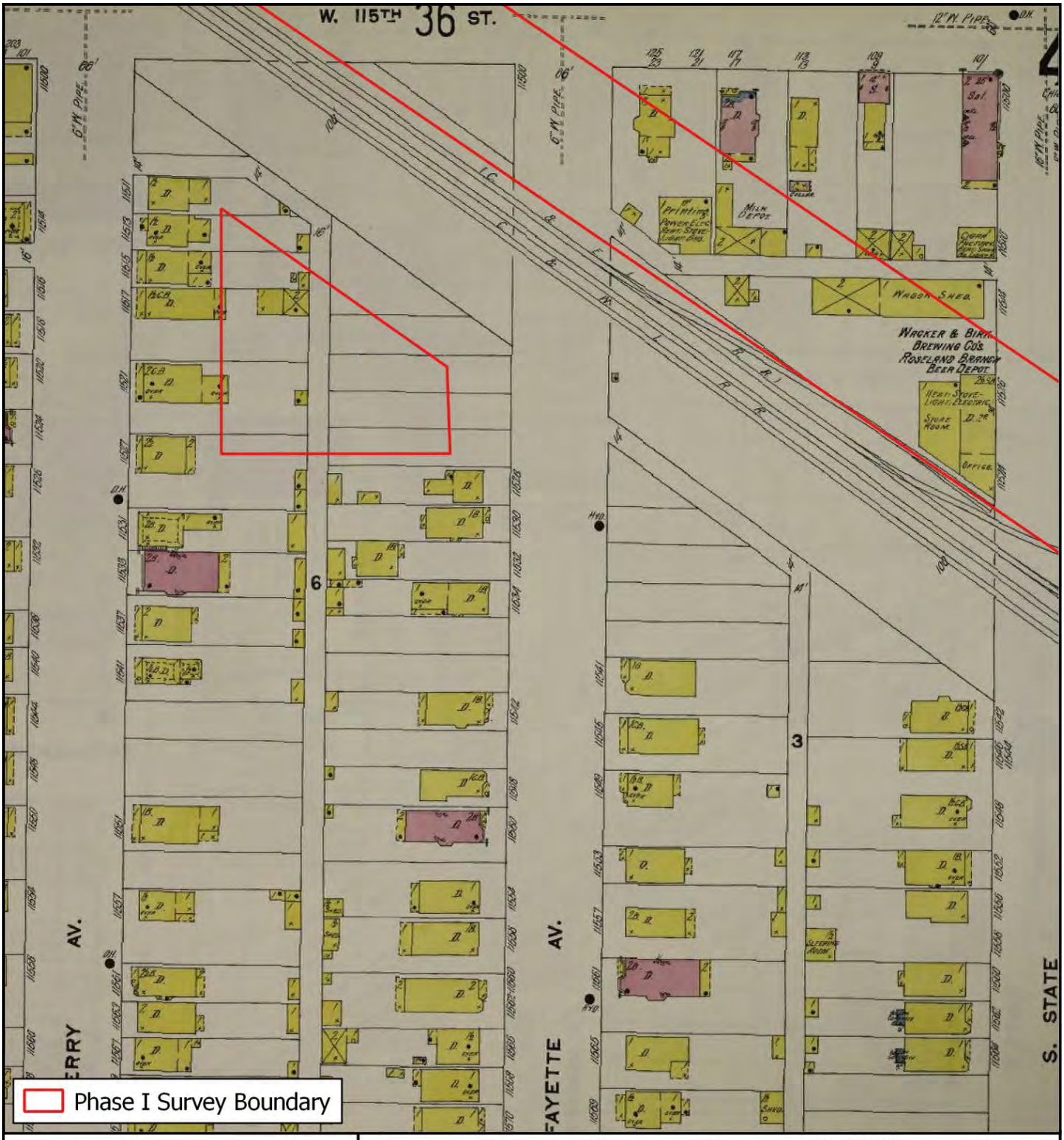

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50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 46

CHICAGO, IL

FIGURE 22

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

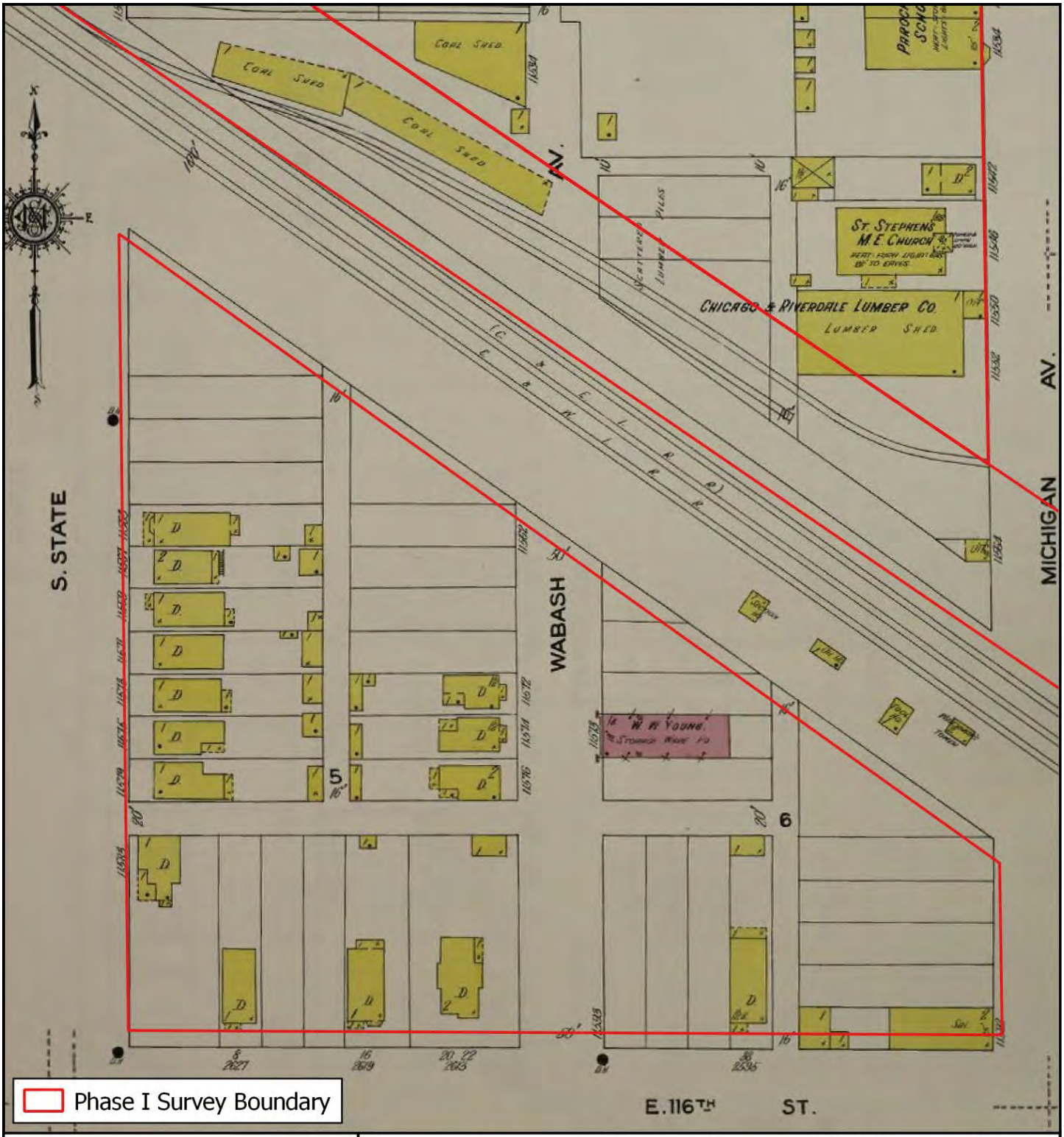

N

0 20 40 60 80 METERS

50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 47

CHICAGO, IL

FIGURE 23

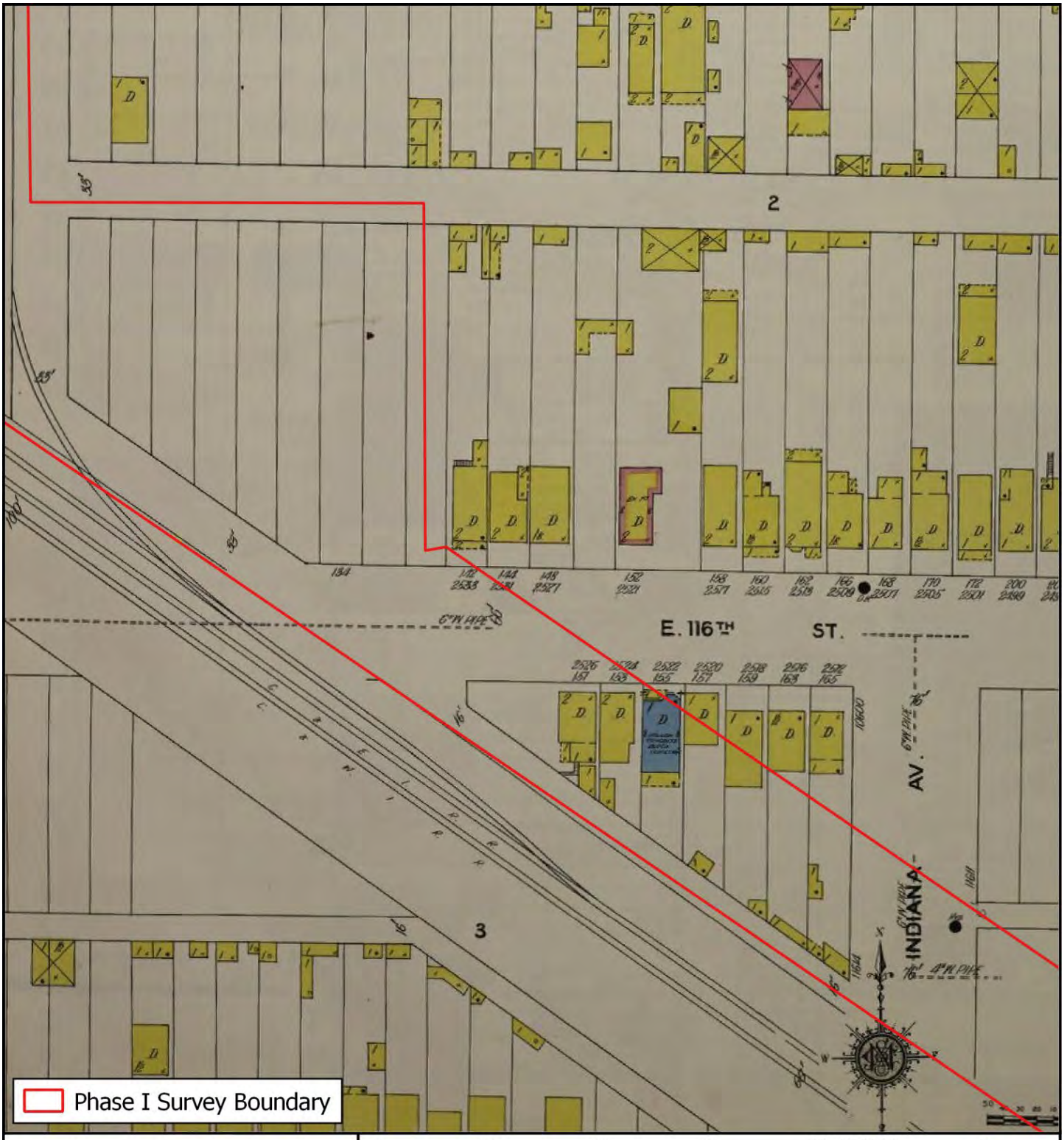

0 20 40 60 80 METERS

50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 48

CHICAGO, IL

FIGURE 24

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

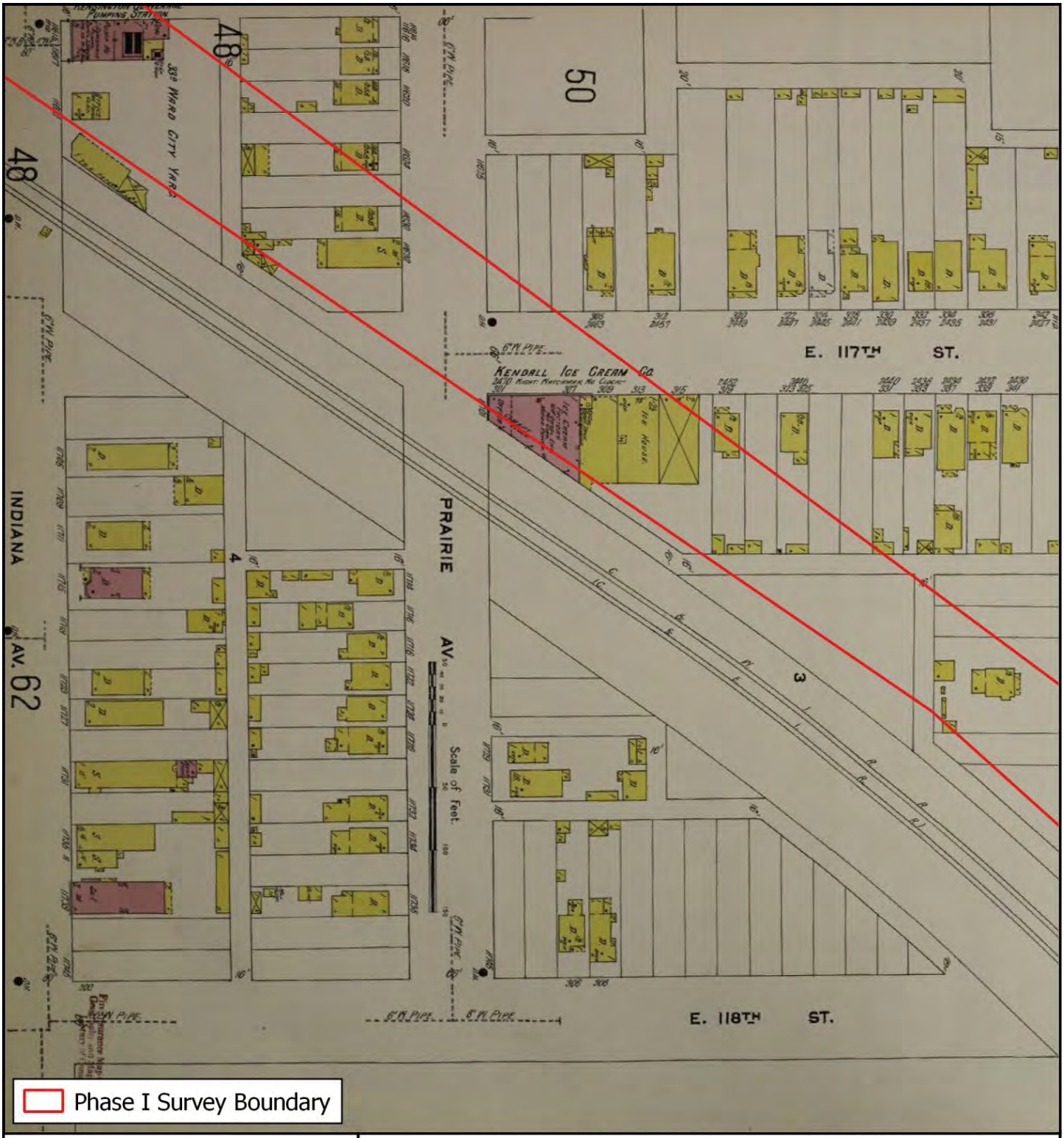

0 20 40 60 80 METERS

50 0 50 100 150 200 FEET

SOURCE OF MAP IS SANBORN MAP COMPANY (1911)

Author	LSH
Date	20200728
Scale	1:1000
Projection	WGS84 16N

1911 SANBORN FIRE INSURANCE MAP VOL. G SEC. 51

CHICAGO, IL

FIGURE 25

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Appendix C

Selected Project Photographs

Plate 1. Photo of Dan Ryan CTA Station, facing southeast from northwest intersection of 95th Street and Lafayette Avenue
(Photo 1, Appendix A Figure 2 Sketch Map 1).

Plate 2. Photo of project area, facing south from 95th Street overpass
(Photo 2, Appendix A Figure 2 Sketch Map 1).

Plate 3. Photo of project area crossing Interstate-57, facing east from Wentworth Avenue (Photo 3, Appendix A Figure 4 Sketch Map 3).

Plate 4. Photo of project area along Interstate-57, facing west from Wentworth Avenue (Photo 4, Appendix A Figure 4 Sketch Map 3).

Plate 5. Photo of project area crossing Interstate 57, facing southwest from 98th Place
(Photo 5, Appendix A Figure 4 and 5 Sketch Map 3 and 4).

Plate 6. Photo of project area along railroad tracks, facing south from east side of tracks within Wendell Smith Park
(Photo 6, Appendix A Figure 5 Sketch Map 4).

Plate 7. Photo of project area, facing west from within Wendell Smith Park
(Photo 7, Appendix A Figure 5 and 6 Sketch Map 4 and 5).

Plate 8. Photo of project area, facing north from Wendell Smith Park
(Photo 8, Appendix A Figure 5 and 6 Sketch Map 4 and 5).

Plate 9. Photo of STP (Soil Test Probe) Area 1, facing south along Eggleston Avenue (Photo 9, Appendix A Figure 5 and 6 Sketch Map 4 and 5).

Plate 10. Photo of STP Area 1, facing north along Eggleston Avenue (Photo 10, Appendix A Figure 6 Sketch Map 5).

Plate 11. Photo of STP Area 2, facing south along Eggleston Avenue
(Photo 11, Appendix A Figure 7 Sketch Map 6).

Plate 12. Photo of STP Area 2, facing north along Eggleston Avenue
(Photo 12, Appendix A Figure 7 Sketch Map 6).

Plate 13. Photo of project area, facing west over vacant lot near intersection of Eggleston Avenue and 103rd Street
(Photo 13, Appendix A Figure 8 Sketch Map 7).

Plate 14. Photo of project area along railroad tracks, facing north from 103rd Place
(Photo 14, Appendix A Figure 8 Sketch Map 7).

Plate 15. Photo of project area over vacant lot, facing south from 103rd Place
(Photo 15, Appendix A Figure 8 Sketch Map 7).

Plate 16. Photo of project area, facing south from 104th Street
(Photo 16, Appendix A Figure 8 Sketch Map 7).

Plate 17. Photo of project area along west side of railroad tracks, facing south from 105th Street (Photo 17, Appendix A Figure 9 Sketch Map 8).

Plate 18. Photo of project area along east side of railroad tracks, facing south from 105th Street (Photo 18, Appendix A Figure 9 Sketch Map 8).

Plate 19. Photo from the project area, facing south from 105 Place
(Photo 19, Appendix A Figure 9 Sketch Map 8).

Plate 20. Photo of project area vacant lot, facing south from near intersection of 106th Street and Eggleston Ave
(Photo 20, Appendix A Figure 9 Sketch Map 8).

Plate 21. Photo of project area, facing south near the railroad crossing of 107th Street (Photo 21, Appendix A Figure 10 Sketch Map 9).

Plate 22. Photo of project area vacant lot, facing south from 107th Street (Photo 22, Appendix A Figure 10 Sketch Map 9).

Plate 23. Photo of project area vacant lot, facing north towards 107th Street
(Photo 23, Appendix A Figure 10 Sketch Map 9).

Plate 24. Photo of project area east of railroad tracks, facing south from 108th Place
(Photo 24, Appendix A Figure 10 and 11 Sketch Map 9 and 10).

Plate 25. Photo of project area, facing south from 109th Street
(Photo 25, Appendix A Figure 11 Sketch Map 10).

Plate 26. Photo of project area, vacant lot facing south from 109th Place
(Photo 26, Appendix A Figure 11 Sketch Map 10).

Plate 27. Photo of project area, facing north from 110th Street
(Photo 27, Appendix A Figure 11 and 12 Sketch Map 10 and 11).

Plate 28. Photo of project area vacant lot, facing east from 110th Place
(Photo 28, Appendix A Figure 11 and 12 Sketch Map 10 and 11).

Plate 29. Photo of project area west of tracks vacant lot, facing northeast from 110th Place (Photo 29, Appendix Figure 11 and 12 Sketch Map 10 and 11).

Plate 30. Photo of project area west of tracks vacant lot, facing east from Eggleston Avenue (Photo 30, Appendix A Figure 12 Sketch Map 11).

Plate 31. Photo of project area west of tracks vacant lot, facing north from 111th Street (Photo 31, Appendix A Figure 12 Sketch Map 11).

Plate 32. Photo of project area, facing south from 111th Street (Photo 32, Appendix A Figure 12 Sketch Map 11).

Plate 33. Photo of project area, facing southeast from 111th Place
(Photo 33, Appendix A Figure 12 Sketch Map 11).

Plate 34. Photo of project area, facing southeast from 112th Street
(Photo 34, Appendix A Figure 13 Sketch Map 12).

Plate 35. Photo of project area, facing southeast from 113th Street
(Photo 35, Appendix A Figure 13 Sketch Map 12).

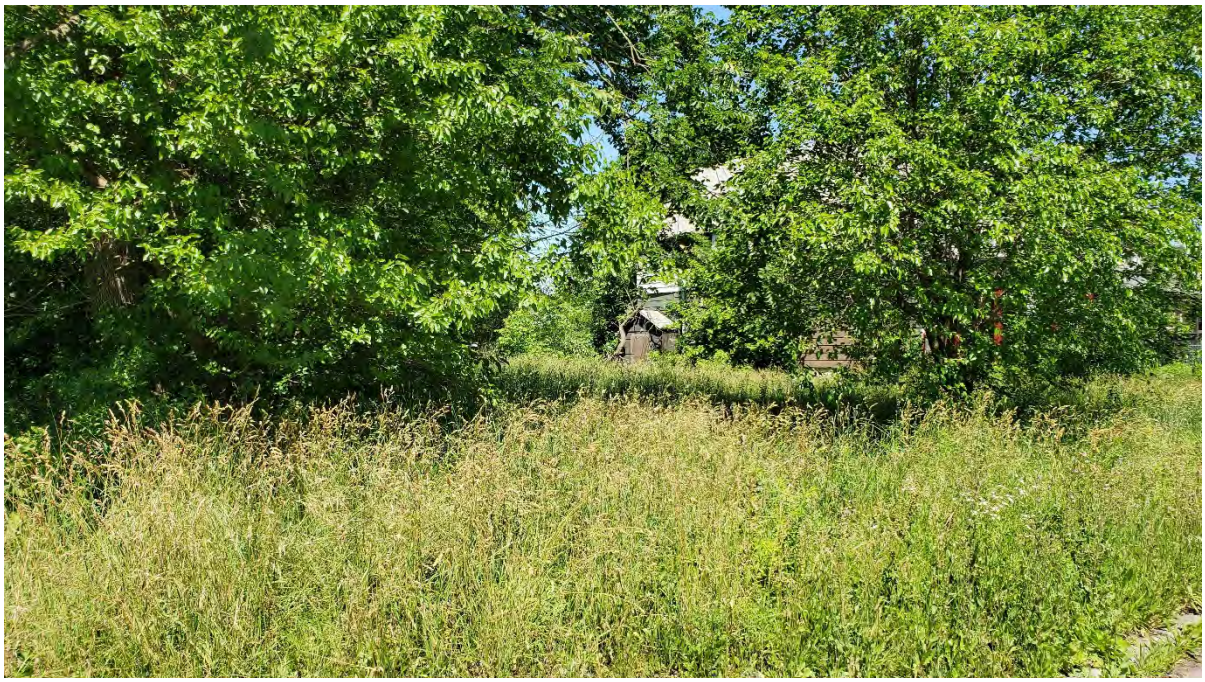

Plate 36. Photo of project area, facing southeast from Yale Avenue
(Photo 36, Appendix A Figure 14 Sketch Map 13).

Plate 37. Photo of project area, facing east by southeast towards Wentworth Avenue (Photo 37, Appendix A Figure 14 Sketch Map 13).

Plate 38. Photo of project area vacant lot, facing northwest from 115th Street (Photo 38, Appendix A Figure 15 Sketch Map 14).

Plate 39. Photo of project area, facing southeast from Lafayette Avenue
(Photo 39, Appendix A Figure 15 Sketch Map 14).

Plate 40. Photo of project area, facing southwest from Lafayette Avenue
(Photo 40, Appendix A Figure 15 Sketch Map 14).

Plate 41. Photo of project area vacant lot, facing southeast from State Street
(Photo 41, Appendix A Figure 15 and 16 Sketch Map 14 and 15).

Plate 42. Photo of project area vacant lot, facing southeast from State Street
(Photo 42, Appendix A Figure 15 and 16 Sketch Map 14 and 15).

Plate 43. Photo of project area, facing north from Wabash Avenue
(Photo 43, Appendix A Figure 16 Sketch Map 15).

Plate 44. Photo of project area, facing northeast from intersection of State Street and 116th Street
(Photo 44, Appendix A Figure 16 Sketch Map 15).

Plate 45. Photo of project area vacant lot, facing northwest from the intersection of 116th Street and Michigan Avenue
(Photo 45, Appendix A Figure 16 Sketch Map 15).

Plate 46. Photo of project area vacant lot, facing north towards Kensington Avenue
(Photo 46, Appendix A Figure 16 Sketch Map 15).

Plate 47. Photo of project area, facing northwest from 116th Street
(Photo 47, Appendix A Figure 16 and 17 Sketch Map 15 and 16).

Plate 48. Photo of project area, facing east by southeast from Indiana Avenue
(Photo 48, Appendix A Figure 17 Sketch Map 16).

Plate 49. Photo of project area, facing southwest from the intersection of Prairie Avenue and 117th Street
(Photo 49, Appendix A Figure 17 Sketch Map 16).

Plate 50. Photo of project area, facing south from Calumet Avenue
(Photo 50, Appendix A Figure 18 Sketch Map 17).

Plate 51. Photo of project area along railroad tracks, facing south from Front Avenue
(Photo 51, Appendix A Figure 18 Sketch Map 17).

Plate 52. Photo of project area, facing northwest
(Photo 52, Appendix A Figure 18 and 19 Sketch Map 17 and 18).

Plate 53. Photo of project area, facing southeast toward the proposed rail yard (Photo 53, Appendix A Figure 19 Sketch Map 18).

Plate 54. Photo of project area, facing northwest toward the proposed rail yard (Photo 54, Appendix A Figure 21 Sketch Map 20).

Plate 55. Photo of project area, facing northwest from Cottage Grove Avenue
(Photo 55, Appendix A Figure 22 Sketch Map 21).

Plate 56. Photo of project area, facing southeast from Cottage Grove Avenue
(Photo 56, Appendix A Figure 22 Sketch Map 21).

Plate 57. Photo of project area, facing northwest from Cottage Grove Avenue
(Photo 57, Appendix A Figure 23 Sketch Map 22).

Plate 58. Photo of project area, facing southeast from 124th Street
(Photo 58, Appendix A Figure 23 Sketch Map 22).

Plate 59. Photo of project area, facing southeast from Cottage Grove Avenue (Photo 59, Appendix A Figure 23 Sketch Map 22).

Plate 60. Photo of project area, facing southeast from Cottage Grove Avenue (Photo 60, Appendix A Figure 23 and 24 Sketch Map 22 and 23).

Plate 61. Photo of project area, facing northwest from Cottage Avenue
(Photo 61, Appendix A Figure 24 Sketch Map 23).

Plate 62. Photo of project area, facing northwest from Cottage Avenue
(Photo 62, Appendix A Figure 25 Sketch Map 24).

Plate 63. Photo of project area, facing west from Cottage Grove Avenue
(Photo 63, Appendix A Figure 25 Sketch Map 24).

Plate 64. Photo of project area, facing east from Cottage Grove Avenue
(Photo 64, Appendix A Figure 25 Sketch Map 24).

Plate 65. Photo of project area, facing northwest from Cottage Grove Avenue
(Photo 65, Appendix A Figure 25 Sketch Map 24).

Plate 66. Photo of project area, facing northwest from Doty Avenue
(Photo 66, Appendix A Figure 25 and 26 Sketch Map 24 and 25).

Plate 67. Photo of project area, facing southeast from Ellis Avenue
(Photo 67, Appendix A Figure 28 Sketch Map 27).

Plate 68. Photo of project area, facing southwest from Doty Avenue
(Photo 68, Appendix A Figure 25 and 28 Sketch Map 24 and 27).

Plate 69. Photo of STP Area 3, facing southeast from Doty Avenue
(Photo 69, Appendix A Figure 25 and 28 Sketch Map 24 and 27).

Plate 70. Photo of project area vacant lot, facing east by southeast from the intersection of Leanna Tucker Avenue and 130th Place
(Photo 70, Appendix A Figure 28 Sketch Map 27).

Plate 71. Photo of project area vacant lot, facing northeast from intersection of Leanna Tucker Avenue and 132nd Street
(Photo 71, Appendix A Figure 28 and 29 Sketch Map 27 and 28).

Plate 72. Photo of project area, facing northwest from 132nd Street
(Photo 72, Appendix A Figure 29 Sketch Map 28).

Plate 73. Photo of project area, facing south towards 130th Street
(Photo 73, Appendix A Figure 27 Sketch Map 26).

Plate 74. Photo of project area, facing north from 130th Street
(Photo 74, Appendix A Figure 27 Sketch Map 26).

Plate 75. Photo of project area, facing south from 111th Street
(Photo 75, Appendix A Figure 12 Sketch Map 11).

Plate 76. Photo of project area vacant lot, facing east from State Street
(Photo 76, Appendix A Figure 16 Sketch Map 15).

Plate 77. Photo of project area vacant lot, facing south from 115th Street
(Photo 77, Appendix A Figure 16 Sketch Map 15).

Plate 78. Photo of project area, facing northwest towards the proposed rail yard
(Photo 78, Appendix A Figure 21 Sketch Map 20).

Plate 79. Photo of project area, facing east toward the proposed rail yard
(Photo 79, Appendix A Figure 20 Sketch Map 19).

Plate 80. Excavated shovel test probe from STP Area 1, depth is at 12 inches below the surface, mottled disturbed soil profile
(Photo 80, Appendix A Figure 6 Sketch Map 5).

Plate 81. Excavated shovel test probe from STP Area 2, depth is at 10 inches below the surface, mottled disturbed soil profile
(Photo 81, Appendix A Figure 7 Sketch Map 6).

Plate 82. Excavated shovel test probe from STP Area 3, depth is at 8 inches below surface, mottled disturbed soil profile
(Photo 82, Appendix A Figure 29 Sketch Map 28).

Plate 83. Photo of project area looking southeast at disturbed ground surface, large berms of mechanically stripped soil within old railroad yard west of the Metra Electric Line (Photo 83, Appendix A Figure 21 Sketch Map 20).

Plate 84. Photo of project area looking south at disturbed ground surface, large berms of mechanically stripped soil within old railroad yard west of the Metra Electric Line (Photo 84, Appendix A Figure 21 Sketch Map 20).

Plate 85. Photo of project area looking north at disturbed ground surface, gravel just below surface within old railroad yard west of the Metra Electric Line
(Photo 85, Appendix A Figure 20 Sketch Map 19).

Plate 86. Photo of project area looking south at disturbed ground surface, large berms of mechanically stripped soil and dumped piles of gravel and asphalt within old railroad yard west of the Metra Electric Line
(Photo 86, Appendix A Figure 22 Sketch Map 21).

Plate 87. Photo of project area looking southwest at wetland plant area within old railroad yard west of the Metra Electric Line
(Photo 87, Appendix A Figures 22 Sketch Map 21, and Figure 23 Sketch Map 22).

Plate 88. Photo of project area looking northwest at disturbed ground surface, mechanically stripped soil pushed into large berms from Cottage Grove Avenue, just north of 130th Street
(Photo 88, Appendix A Figure 25 Sketch Map 24).

Plate 89. Photo of project area looking west at disturbed ground surface, mechanically stripped soil pushed into large berm and fenced off restricted area Calumet Water Reclamation Plant
(Photo 89, Appendix A Figure 26 Sketch Map 25).

Plate 90. Photo of project area looking northwest over wetland area with standing water from the intersection of 132nd Street and access road at the southeast corner of Altgeld Gardens
(Photo 90, Appendix A Figure 29 Sketch Map 28).

Appendix D

Archaeological Survey Short Report

ARCHAEOLOGICAL SURVEY SHORT REPORT
Illinois State Historic Preservation Office
Illinois Department of Natural Resources
Review & Compliance-Archaeology Division
One Natural Resources Way
Springfield, Illinois 62702

Reviewer_____
Date_____
_____Accepted _____ Rejected___

Locational Information and Survey Conditions

SHPO Log # 001010713 MARS Project # 1885
County: Cook Quadrangle: 7.5 Min. Blue Island & Lake Calumet
Project Type/Title: Red Line Extension-Archaeological Resources-Environmental Impact Statement
Funding/Permitting Agency: FTA
Section: Portions of Sections 4, 9, 16, 21, 22, 26, 27, and 35, Township 37 North, Range 14 East, Calumet Township (Figure 1).
Natural Division (No.): 3c
U.T.M.: To center of the project area: 16T 447985E 4615020N (WGS84)
Project Description: Phase I archaeological reconnaissance survey
Topography: Urban
Soils: 125A Selma loam (0-2% slopes), 533 & 534A (Urban Land), 802A, 805A, 805B, 805D (Orthents), 811A Anthroportic Udorthents, 2232A Orthents (Figure 2).
Drainage: Chicago/Calumet
Land Use/Ground Cover (Include % Visibility): The land use within the Phase I project boundary consisted of a mix of disturbed ground surface from residential development and grass parcels with 0% visibility.

Archaeological and Historical Information:

Historic Plats/Atlases/Sources: 1822 & 1839 Government Land Office plat (Appendix B: Figure 1); 1861, 1870, 1886, 1890, 1898, 1901, 1926, historic plat maps and historic topographic maps (Appendix B: Figures 2-8), 1938 historic aerials (Appendix B: Figures 9-13), Sanborn Fire Insurance Maps (Appendix B: Figures 14-25).
Previously Reported Sites: There are no previously recorded archaeological sites present within the project area. There are 12 archaeological sites (11Ck15, 11Ck28, 11Ck177, 11Ck244-250, 11Ck1226, and 11Ck1240) present within 1.6 km (1 mile) of the project area.
Previous Surveys: There are two recorded surveys present (ASSR#10639 & 18465) within the project area. There are five previous surveys present (ASSR#570, 4170, 11173, 20873, and 91240) within 1.6 km (1 mile) of the project area.

Regional Archaeologist Contacted: Jay Martinez, M.A, RPA
Investigation Techniques: Pedestrian Survey and Digital Photo Recordation.
Time Expended: 8-person days
Sites/Find Spots Located: None
Cultural Material: None
Curated At: N/A
Collection Techniques: N/A
Area Surveyed (Acres & Square Meters): 152.8 acres/ 618,373.3 square meters

Results of Investigation and Recommendations:

X Phase I Archaeological Reconnaissance located no archaeological material; Project clearance Recommended.
__ Phase I Archaeological Reconnaissance located archaeological material; Project clearance Recommended.
__ Phase I Archaeological Reconnaissance located archaeological material; Phase II Testing Recommended.

Comments:

From June 15 to June 16, 2020 Midwest Archaeological Research Services (MARS), conducted a Phase I archaeological reconnaissance survey on the Preferred Alignment. The project area is in portions of Sections 4, 9, 16, 21, 22, 26, 27, and 35 of Township 37 North, Range 14 East (Calumet) of the Third Principal Meridian (**Figures 1-2 and 1-3**). MARS archaeologists did not identify any cultural material within their 53 excavated shovel probes during the Phase I archaeological survey (**Appendix A: Figures 5-7, 28-29**). Additionally, no recorded archaeological sites would be impacted during construction of the Preferred Alignment. **MARS recommends project clearance**.

Archaeological Contractor Information:

Archaeological Contractor: Midwest Archaeological Research Services
Address/Phone: PO Box 2533, Crystal Lake, Illinois 60039/ (815) 568-0680
Surveyed by: Jay Martinez and Lucas Howser Survey Date(s): 6-15-2020 to 6-16-2020
Report Completed by: Jay Martinez and Lucas Howser Date: 8-25-2020
Submitted by (Signature and Title):
Jay Martinez, President

Attachment Check List: (#1 through #4 are MANDITORY)

X 1) Portion of USGS 7.5' Topographic Map(s) Showing Project Location.
X 2) Project Maps(s) Depicting Survey Limits.
__ 3) Site Form(s): Two Copies of Each Form.
X 4) All Relevant Project Correspondence
X 5) Additional Sheets as Necessary.

Address of Owner/Agent to Whom SHPO Comment Should Be Mailed:

Address: Chicago Transit Authority (CTA).
567 West Lake Street
Chicago, Illinois 60661-1498
Contact Person: Marlise Fratinardo, Senior Project Manager, Planning
Email: mfratinardo@transitchicago.com
Phone Number: (312) 681-4124

Reviewers Comments:

Appendix E

Web Soil Maps

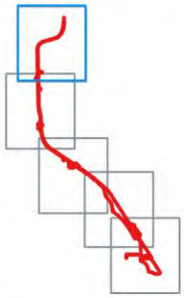

N

0 200 400 600 800 METERS

500 0 500 1,000 1,500 2,000 FEET

SOURCE OF MAP IS USDA WEB SOIL SURVEY 20160210 THRU 20161008

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

Author	LSH
Date	20201015
Scale	1:10000
Projection	WGS84 16N

WEBSOIL MAP

CHICAGO, IL

FIGURE

1

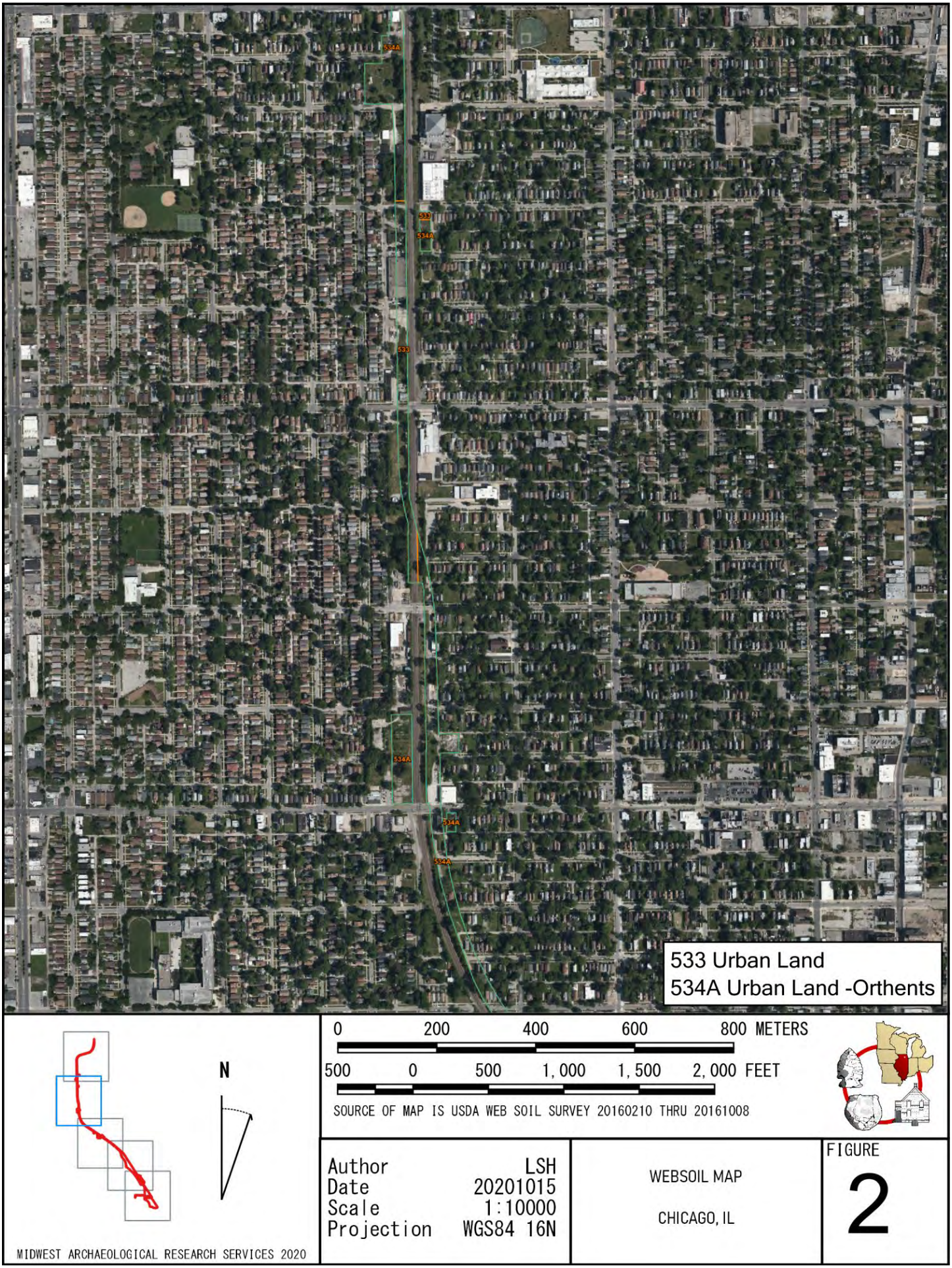
533 Urban Land
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0 200 400 600 800 METERS
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SOURCE OF MAP IS USDA WEB SOIL SURVEY 20160210 THRU 20161008
Author LSH
Date 20201015
Scale 1:10000
Projection WGS84 16N
WEBSOIL MAP
CHICAGO, IL
FIGURE
2
MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

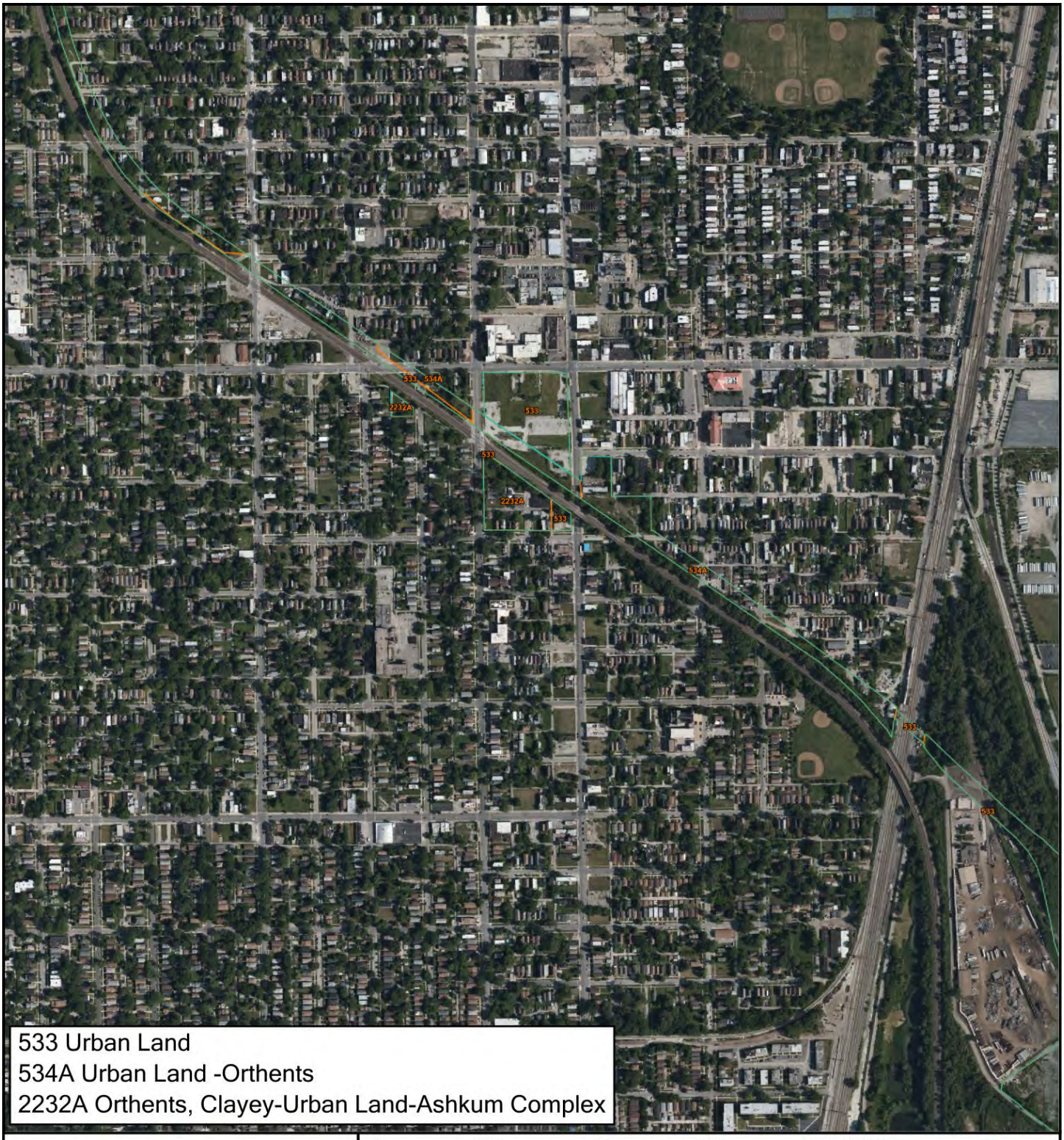

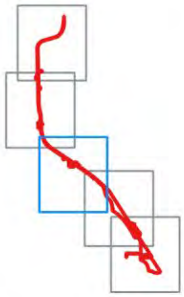

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SOURCE OF MAP IS USDA WEB SOIL SURVEY 20160210 THRU 20161008

Author	LSH
Date	20201015
Scale	1:10000
Projection	WGS84 16N

WEBSOIL MAP

CHICAGO, IL

FIGURE

3

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

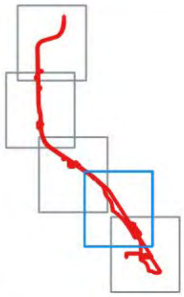

N

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500 0 500 1,000 1,500 2,000 FEET

SOURCE OF MAP IS USDA WEB SOIL SURVEY 20160210 THRU 20161008

Author	LSH
Date	20201015
Scale	1:10000
Projection	WGS84 16N

WEBSOIL MAP

CHICAGO, IL

FIGURE

4

MIDWEST ARCHAEOLOGICAL RESEARCH SERVICES 2020

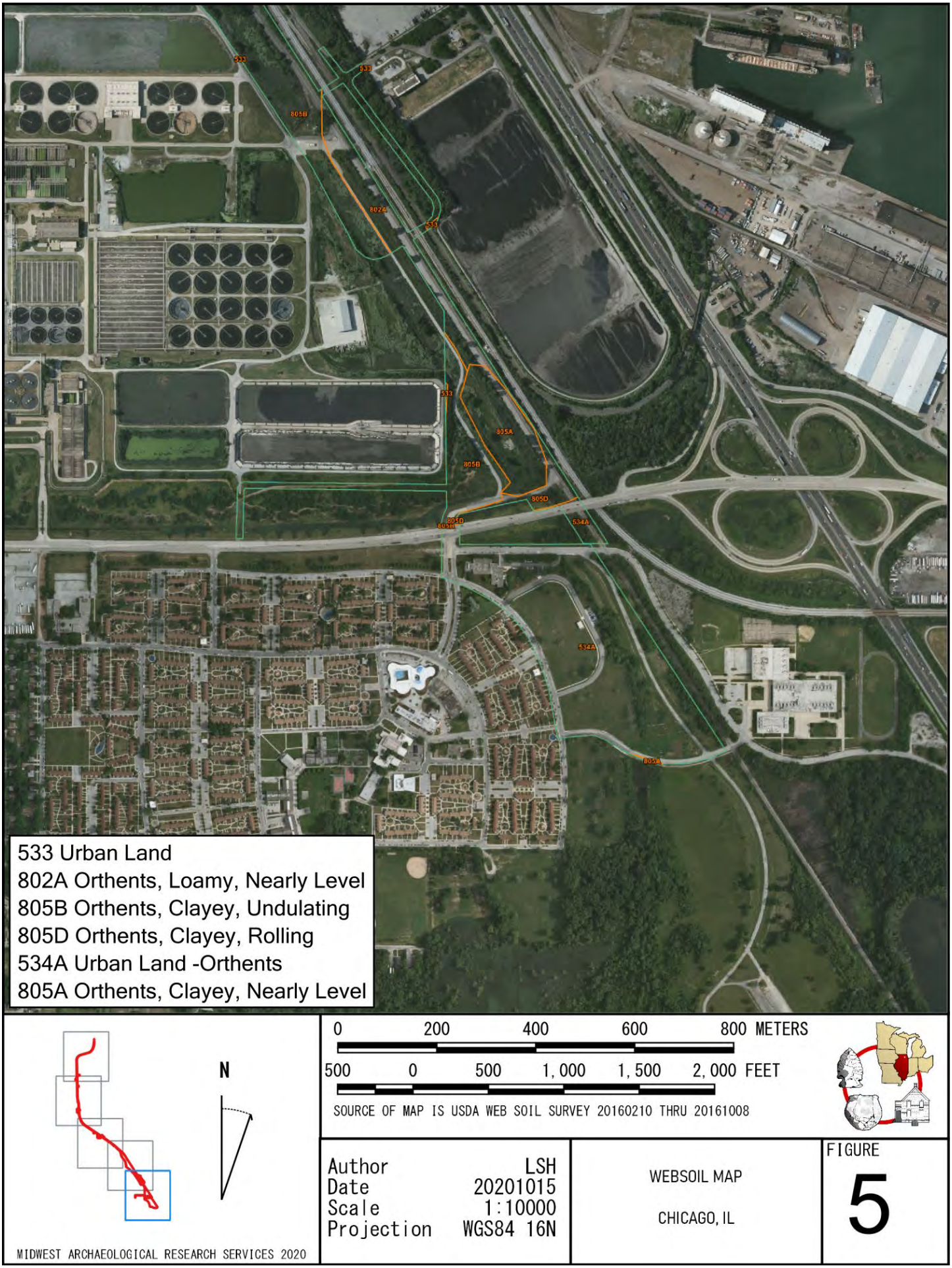

Author	LSH	WEBSOIL MAP	FIGURE
Date	20201015		5
Scale	1:10000	CHICAGO, IL	
Projection	WGS84 16N		

Appendix F

Shovel Test Probes Summary Table

PHASE I ARCHAEOLOGY SHOVEL TEST PROBES SUMMARY TABLE

County: Cook | Township/Section#: Chicago | 7.5' Quad Blue Island, Lake Calumet

Area Designation/ Photo #	Landform	Land Use	Surface Visibility	Survey Method	Soils	B Horizon Depth	Notes
STP Area 1 STP1	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR2/1 Silty Loam	21cmbs	Mottled
STP Area 1 STP2	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	20cmbs	Mottled
STP Area 1 STP3	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR2/1 Silty Loam	20cmbs	Mottled, low adhesion, friable
STP Area 1 STP4	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	22cmbs	Mottled
STP Area 1 STP5	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR2/1 Silty Loam	19cmbs	Mottled low adhesion, friable
STP Area 1 STP6	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Loam	6cmbs	Mottled, terminated by large root, low adhesion, friable
STP Area 1 STP7	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Loam	20cmbs	Mottled, low adhesion, friable

PHASE I ARCHAEOLOGY SHOVEL TEST PROBES SUMMARY TABLE

County: Cook | Township/Section#: Chicago | 7.5' Quad Blue Island, Lake Calumet

Area Designation/ Photo #	Landform	Land Use	Surface Visibility	Survey Method	Soils	B Horizon Depth	Notes
STP Area 1 STP8	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	10cmbs	Mottled, terminated by large root
STP Area 1 STP9	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR2/1 Silty Loam	20cmbs	Gravel inclusions, low adhesion, friable
STP Area 1 STP10	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	18cmbs	Gravel inclusions
STP Area 1 STP11	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	15cmbs	Mottled, large roots, gravel
STP Area 1 STP12	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	24cmbs	Gravel inclusions
STP Area 1 STP13	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Clay Loam	18cmbs	Mottled, terminated by large root
STP Area 1 STP14	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR2/1 Silty Clay Loam	17cmbs	Mottled, terminated by large root

PHASE I ARCHAEOLOGY SHOVEL TEST PROBES SUMMARY TABLE

County: Cook | Township/Section#: Chicago | 7.5' Quad Blue Island, Lake Calumet

Area Designation/ Photo #	Landform	Land Use	Surface Visibility	Survey Method	Soils	B Horizon Depth	Notes
STP Area 1 STP15	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Loam	22cmbs	Mottled, low adhesion, friable
STP Area 1 STP16	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR2/1 Sandy Loam	18cmbs	Mottled, low adhesion, friable
STP Area 1 STP17	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Loam	16cmbs	Mottled, terminated by large root, low adhesion, friable
STP Area 1 STP18	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Loam	12cmbs	Gravel inclusions, low adhesion, friable
STP Area 1 STP19	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR2/1 Sandy Loam	13cmbs	Gravel inclusions, low adhesion, friable
STP Area 2 STP1	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR4/2 Sandy Loam	20cmbs	Low till inclusions, low adhesion, friable
STP Area 2 STP2	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR4/2 Sandy Loam	20cmbs	Low till inclusions, low adhesion, friable

PHASE I ARCHAEOLOGY SHOVEL TEST PROBES SUMMARY TABLE

County: Cook | Township/Section#: Chicago | 7.5' Quad Blue Island, Lake Calumet

Area Designation/ Photo #	Landform	Land Use	Surface Visibility	Survey Method	Soils	B Horizon Depth	Notes
STP Area 2 STP3	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR4/2 Sandy Loam	26cmbs	Mottled, low till inclusions, low adhesion, friable
STP Area 2 STP4	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR5/2 Sandy Loam	21cmbs	Low till inclusions, low adhesion, friable
STP Area 2 STP5	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR5/2 Sandy Loam	19cmbs	Low till inclusions, roots, low adhesion, friable
STP Area 2 STP6	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR4/2 Sandy Loam	20cmbs	Mottled, low till inclusions, low adhesion, friable
STP Area 2 STP7	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR5/2 Sandy Loam	20cmbs	Mottled, low till inclusions, low adhesion, friable
STP Area 2 STP8	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Sandy Loam	6cmbs	Terminated by gravel strata
STP Area 2 STP9	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Sandy Loam	6cmbs	Heavily mottled, terminated by gravel strata

PHASE I ARCHAEOLOGY SHOVEL TEST PROBES SUMMARY TABLE

County: Cook | Township/Section#: Chicago | 7.5' Quad Blue Island, Lake Calumet

Area Designation/ Photo #	Landform	Land Use	Surface Visibility	Survey Method	Soils	B Horizon Depth	Notes
STP Area 2 STP10	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Sandy Loam	7cmbs	Heavily mottled, terminated by gravel strata
STP Area 2 STP11	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Sandy Loam	8cmbs	Heavily mottled, terminated by gravel strata
STP Area 2 STP12	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Sandy Loam	6cmbs	Terminated by gravel strata
STP Area 2 STP13	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Sandy Loam	6cmbs	Terminated by gravel strata
STP Area 2 STP14	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Sandy Loam	10cmbs	Heavily mottled, terminated by gravel strata
STP Area 2 STP15	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Sandy Loam	22cmbs	Mottled, roots, till inclusions, low adhesion, friable
STP Area 2 STP16	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR5/2 Sandy Loam	17cmbs	Mottled, roots, till inclusions, low adhesion, friable

PHASE I ARCHAEOLOGY SHOVEL TEST PROBES SUMMARY TABLE

County: Cook | Township/Section#: Chicago | 7.5' Quad Blue Island, Lake Calumet

Area Designation/ Photo #	Landform	Land Use	Surface Visibility	Survey Method	Soils	B Horizon Depth	Notes
STP Area 2 STP17	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR4/2 Sandy Loam	18cmbs	Gravel inclusions, low adhesion, friable
STP Area 2 STP18	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR5/2 Sandy Loam	22cmbs	Gradual soil transition, low adhesion, friable
STP Area 2 STP19	Urban Upland	Urban/Well-Maintained Grass Lot	0-10%	Visual Inspection (15m)/ Shovel Test	10YR5/2 Sandy Loam	20cmbs	Gravel inclusions, low adhesion, friable
STP Area 3 STP1	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	18cmbs	Terminated by gravel strata
STP Area 3 STP2	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Silty Clay Loam	18cmbs	Terminated by gravel strata
STP Area 3 STP3	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Silty Clay Loam	12cmbs	Terminated by gravel strata
STP Area 3 STP4	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	12cmbs	Terminated by gravel strata

PHASE I ARCHAEOLOGY SHOVEL TEST PROBES SUMMARY TABLE

County: Cook | Township/Section#: Chicago | 7.5' Quad Blue Island, Lake Calumet

Area Designation/ Photo #	Landform	Land Use	Surface Visibility	Survey Method	Soils	B Horizon Depth	Notes
STP Area 3 STP5	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	15cmbs	Terminated by gravel strata
STP Area 3 STP6	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	10cmbs	Terminated by gravel strata
STP Area 3 STP7	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	12cmbs	Terminated by large roots
STP Area 3 STP8	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR5/2 Silty Clay Loam	18cmbs	Mottled, roots, till inclusions
STP Area 3 STP9	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR5/2 Silty Clay Loam	15cmbs	Mottled, roots, till inclusions
STP Area 3 STP10	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Silty Clay Loam	16cmbs	Mottled, roots, till inclusions
STP Area 3 STP11	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Silty Clay Loam	16cmbs	Mottled, roots, till inclusions

PHASE I ARCHAEOLOGY SHOVEL TEST PROBES SUMMARY TABLE

County: Cook | Township/Section#: Chicago | 7.5' Quad Blue Island, Lake Calumet

Area Designation/ Photo #	Landform	Land Use	Surface Visibility	Survey Method	Soils	B Horizon Depth	Notes
STP Area 3 STP12	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Silty Clay Loam	14cmbs	Mottled, roots, till inclusions
STP Area 3 STP13	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	17cmbs	Mottled, roots, till inclusions
STP Area 3 STP14	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/2 Silty Clay Loam	18cmbs	Mottled, roots, till inclusions
STP Area 3 STP15	Urban Upland	Urban/Well-Maintained Grass Lot	0%	Visual Inspection (15m)/ Shovel Test	10YR3/3 Silty Clay Loam	18cmbs	Mottled, roots, till inclusions

Appendix D - Altgeld Gardens-Philip Murray Homes Correspondence

Illinois Historic
Preservation Agency

Old State Capitol • Springfield, Illinois 62701 • (217) 782-4836

Cook County
Chicago
Comprehensive Grant Program
Application for Several Chicago Housing Authority Developments
IHPA Log #01092192

October 22, 1992

Ms. Gertrude W. Jordan
U.S. Dept. of Housing & Urban Development
Chicago Regional Office, Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Dear Ms. Jordan:

We have reviewed the referenced project. In our opinion, the following complexes are probably eligible for the National Register of Historic Places pursuant to criterion (a) for community planning and criterion (c) for architecture:

IL-2-1	Ida B. Wells Homes
IL-2-2	Francis Cabrini Homes
IL-2-7	Altgeld Gardens
IL-2-23	Jane Addams Houses
IL-2-24	Julia C. Lathrop Homes
IL-2-25	Trumbull Park Homes

The other properties presented in your September 21, 1992 submission either do not meet the 50 year age requirement or do not meet the National Register eligibility criteria.

Those properties that do meet the National Register criteria may either be treated as eligible or you may wish to contest our opinion and seek a ruling from the Keeper of the National Register in Washington, D.C.

If you decide to treat the properties as eligible, we suggest that the most expeditious way to handle their maintenance is to develop a Programmatic Agreement which would detail acceptable building treatments in accordance with the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings".

We look forward to a site inspection of these properties and a meeting to work out an acceptable program that will satisfy both your program requirements and those of the National Historic Preservation Act.

If you have any questions, please contact Anne Haaker, at Illinois Historic Preservation Agency, Old State Capitol, Springfield, Illinois 62071, or at 217/785-5027.

Sincerely,

Theodore W. Hild
Deputy State Historic
Preservation Officer

TWH:AMH:kh

cc: Steve Vahl
ACHP

Advisory
Council On
Historic
Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

MAR 1 [illegible]

Mr. Joseph P. Garaffa
Acting Regional Administrator/Regional Housing
Commissioner
U.S. Department of Housing and Urban Development
Chicago Regional Office, Region V
77 W. Jackson Boulevard
Chicago, IL 60604-3507

REF: Chicago Housing Authority Comprehensive Grant Program

Dear Mr. Garaffa:

Enclosed is a copy of the Programmatic Agreement which has been executed for the referenced program. The execution of the Agreement, and fulfillment of the provisions set forth therein, satisfies the requirements of Section 106 of the National Historic Preservation Act and the Council's regulations. A copy of the Agreement has also been sent to the Illinois State Historic Preservation Officer (SHPO).

We look forward to consulting further with HUD regarding the development of treatment plans for those public housing complexes formally determine eligible by the Keeper of the National Register of Historic Places. If we can be of assistance, please contact Charlene Dwin Vaughn at 202-606-8505.

We appreciate your continued cooperation.

Sincerely,

Don L. Klima
Director
Eastern Office of Review

Enclosure

PROGRAMMATIC AGREEMENT

AMONG THE U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,
THE ILLINOIS HISTORIC PRESERVATION AGENCY, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
FOR THE ADMINISTRATION OF THE COMPREHENSIVE GRANT PROGRAM
IN CHICAGO, ILLINOIS

WHEREAS, the U. S. Department of Housing and Urban Development (HUD) proposes to provide funding to the Chicago Housing Authority (CHA) for purposes of rehabilitation and repair activities as set forth in the Comprehensive Grant program application for Fiscal Year 1992; and

WHEREAS, HUD has determined that the administration of this program may have an affect on properties that may be eligible for inclusion in the National Register of Historic Places and has consulted with the Illinois Historic Preservation Agency (IHPA) and Advisory Council on Historic Preservation (Council) pursuant to 36 CFR 800.13 implementing the National Historic Preservation Act (NHPA, 16 U.S.C. 470 et. seq.); and

WHEREAS, CHA has particpated in the consultation and has been invited to concur in the programmatic agreement.

NOW, THEREFORE, HUD, in coordination with the IHPA and the Council, agree that the Comprehensive Grant program at CHA shall be administered in accordance with the following stipulations in order to satisfy HUD's Section 106 responsibilities for those individual undertakings of the program being undertaken by CHA.

STIPULATIONS

HUD will ensure that the following measures are carried out.

DETERMINATION OF ELIGIBILITY

1. Within six months of the execution of this agreement HUD will request a determination of eligibility for the six public housing complexes listed below from the Keeper of the National Register pursuant to 36 CFR 63.

   Ida B. Wells Homes
   Francis Cabrini Homes
   Altgeld Gardens
   Jane Addams Houses
   Julia C. Lathrop Homes
   Trumbull Park Homes

CONSULTATION

2. If the Keeper determines that any of the 6 complexes referenced in stipulation 1, or any portions thereof, are eligible for inclusion in the National Register of Historic Places, HUD will consult further with IHPA and Council to develop an appropriate treatment plan for activities that might affect the integrity of said complexes.

LIFE, HEALTH AND SAFETY ACTIVITIES

3. CHA may proceed with all emergency activities as defined in its approved Comprehensive Grant program which relate to life, health and safety concerns which do not alter the exterior of the public housing complexes listed in stipulation 1. Exhibit A lists those activities. Exhibit A is attached hereto and incorporated herein.

ACTIVITIES AFFECTING EXTERIORS

4. Pending completion of treatment plans for complexes determined eligible for listing on the National Register, HUD will require that CHA consult with HUD and the IHPA to determine what action must be taken to obtain the comments of the Council, in accordance with 36 CFR 800, for any rehabilitation activities proposed for the exterior. This Agreement will be amended upon completion of said consultation to include the specifics of any interim plan.

TERMINATION OF AGREEMENT

5. Any party to the Programmatic Agreement may terminate it by providing thirty (30) days notice to the other parties, provided that HUD, the Illinois State Historic Preservation Officer and the Council will consult prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, HUD will comply with 36 CFR Section 800.4 through 800.6 with regard to undertakings funded under the Comprehensive Grant Program which affect historic properties, unless HUD determines that compliance with Section 106 is no longer required for this program.

Execution and implementation of this Programmatic Agreement evidences that HUD has afforded the Council a reasonable opportunity to comment on the Chicago Housing Authority Comprehensive Grant program and that HUD has taken into account the affects of the program on historic preservation.

ADVISORY COUNCIL ON HISTORIC PRESERVATION
By: Robert D. Bush Date: 2/26/93

U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
By: Jerome W. Jaden Date: 1/22/93

ILLINOIS HISTORIC PRESERVATION AGENCY
By: William L. Wheeler Date: 1-28-93

The Chicago Housing Authority has declined to be a concurring body to the Programmatic Memorandum of Agreement at this time.

EXHIBIT A

SPECIFIC ACTIVITIES, RELATING TO LIFE-SAFETY, THAT MAY PROCEED WITHOUT FURTHER CONSULTATION

1. Repair and/or replacement of all site infrastructure, such as water, sewer, wastewater, stormwater, steam, vehicular movement and parking areas, etc.

2. Repair and/or replacement of all site-wide facilities used to maintain safe operation of utilities, such as mechanical rooms, boiler room mechanical systems, etc.

3. Repair and/or replacement of all building mechanical and electric systems, such as heat distribution, elevators, electric lines and junction boxes, etc.

4. Repair and/or replacement of all interior building and architectural features, such as basements, halls, stairs, lobbies, vestibules, mail facilities, community rooms, offices, etc. This does not include exterior and/or roof repairs.

5. Repair of dwelling units, including finish items, kitchens, bathrooms, HVAC, electrical, etc.

6. Interior Lead Based Paint and Asbestos Abatement. This does not include abatement of any exterior areas.

7. Any activities ancillary to the above enumerated activities, such as administration, fees and costs, relocation, etc.

E.O. 11593

DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places
National Park Service

Project Name: Chicago Housing Authority Properties

Location: Cook County **State:** ILLINOIS

Request submitted by: HUD/Joseph P. Garaffa

Date received: 10/1/93 **Additional information received:** 5/31/94

Name of property	SHPO opinion	Eligibility: Secretary of the Interior's opinion	Criteria
Wells, Ida B., Houses	Eligible	Eligible	A
Cabrini, Francis, Houses	Eligible	Eligible	A
Altgeld Gardens	Eligible	Eligible	A
Addams, Jane, Houses	Eligible	Eligible	A
Lathrop, Julia C., Houses	Eligible	Eligible	A
Trumbull Park Houses	Eligible	Eligible	A

Keeper of the National Register

Date: 7/15/94

WA80-27

PROJECT NAME:	Chicago Housing Authority Properties: Julia C. Lathrop Houses; Trumbull Park Houses; Jane Addams Houses; Ida B. Wells Houses; Francis Cabrini Houses; Altgeld Gardens
LOCATION:	Cook County, Illinois
SUBMITTING AGENCY:	HUD/Chicago Housing Authority

The documentation submitted by the Chicago Housing Authority (CHA) and the State Historic Preservation Officer (SHPO) provides sufficient information to render an opinion that the six (6) properties referenced above are eligible for listing in the National Register of Historic Places. The properties appear eligible under National Register Criterion A in the areas of Community Planning and Development, and Social history. Erected between 1938 and 1945, the six housing complexes are historically significant for their association with this country's earliest efforts to provide large-scale public housing for the urban poor. The Addams, Altgeld Gardens, Cabrini, Lathrop, Trumbull, and Wells Houses represent the built response of governmental agencies--at the both the National and local levels--to the development of new policies for city planning and urban housing on a scale never before attempted.

While cognizant of the issues and concerns identified by the CHA in their report, the fact remains that when evaluated in light of the National Register criteria, these properties clearly reflect an important period in American urban history and reveal the prevalent attitudes toward public housing, city planning, and the plight of the poor associated with that period.

Contemporary photographs of the housing complexes reveal a substantial deterioration of the built fabric, however, the larger elements that help define the character of the complexes remain largely intact. These character-defining elements include the overall layout of the sites (the orientation of buildings to one another, to the open spaces, and to the immediate neighborhood); the Spartan design of the individual housing units, enlivened only by simple corbeling or roofline treatments; the unadorned rhythmic fenestration patterns; and the repetitive use of economic standardized floorplans. The rather austere designs that make the buildings seem so visually "unremarkable" today are in fact the architectural features that constitute important design principles within the context of period planning and design for low-income public housing. National Register eligibility is not a validation of the worth or appropriateness of those historic design or planning decisions, but rather an evaluation of their significance in representing the broad patterns of historic development in this country.

The projects are representative of what Chicago historian Carl W. Condit has called the "New Deal theory of public works." In the local context, the six housing projects provide valuable insight into the city's dynamic urban planning history and the economic and social ramifications of those significant planning decisions.

INDIVIDUAL RESOURCES

Jane Addams Houses:
Eligible under National Register Criterion A in the areas of Community Planning and Development and Social history, as the earliest and largest of Chicago's three PWA-built experimental demonstration projects. Completed in 1938, the rather austere housing project's two-, three-, and four-story units reflect the initial prototypical responses of architects John Armstrong, Melville Chatton, Earnest Grunsfield, Frederick Hodgdon, John Hollabird, Ralph Husjagh, Elmer Jensen, Philip Maher, John Merrill, and Chester Wolcott to the requirements of federally-subsidized urban housing for the poor. The layout, density, and architectural severity of the housing units is intact and represents the historic constraints of both federal design mandates and program funding during the period. The complex is a significant local example of America's emerging policies for publically-subsidized housing during the 1930s and 1940s.

Julia C. Lathrop Homes:
Eligible under National Register Criterion A in the areas of Community Planning & Development and Social history. The 1938 housing complex is a significant local example of the PWA's experimental demonstration projects for low-income public housing in Chicago. The relatively low-density (compared to later developments) housing project's two-, three-, and four-story units reflect the response of the architectural consortium known as the Diversey Housing Project Associated Architects [architects: Robert DeGolyer, Hugh Garden, Hubert Burnham, Vernon Watson, Thomas Tallmadge, Israel Loewenberg, E. E. Roberts, Roy Christiansen, Everett Quinn, Charles White, Bertram Weber, Edwin Clark, Earnest Mayo, and Peter Moro] to the severe constraints of limited funding and the mandated design practices associated with the federally-subsidized urban housing program. The complex is a significant local example of America's emerging policies for publically-subsidized housing during the 1930s and 1940s.

Trumbull Park Homes:
Eligible under National Register Criterion A, as an important early example of the experimental demonstration housing designed, built, and funded by the PWA for low-income tenants in Chicago. Completed in 1938, the housing project significantly impacted Depression-era Chicago through the creation of construction jobs; the removal of low-income tenants from substandard slum areas, and the creation of new affordable housing. The housing project's austere two- and four-story housing units contain International style design elements that reflect the programs' innovative approach to design and the contemporary perception of the program as advancing public thinking on housing and urban planning.

Ida B. Wells Homes:
Eligible under National Register Criterion A, as a significant early example of publically-funded urban housing in Chicago. Initially planned by the PWA under the Federal housing program, the complex was one of the first to be completed (1941) by the newly established Chicago Housing Authority. The 1662-unit complex was the largest of Chicago's pre-World War II public housing developments and represented an effort significantly more comprehensive than any previously undertaken in the city. The design included such innovative public amenities as

a community center building, a self-contained city park, and larger apartment units, which reflected a growing refinement of the city's public housing policies.

Francis Cabrini Homes:
Eligible under National Register Criterion A in the areas of Community Development and Planning and Social History. Completed in 1942, the housing complex represents Chicago's significant efforts to develop affordable public housing to meet the growing need for worker housing related to the city's pre-war industrial buildup. The Chicago Housing Authority's efforts at Cabrini served both the earlier demands for slum clearance, job creation, and affordable housing and the growing demands of America's military preparedness program. The individual units at Cabrini reflect a significant attempt to provide substantial housing and outdoor living space to each tenant within the confines of a dense urban development area.

Altgeld Gardens:
Eligible under National Register Criterion A in the areas of Community Development and Planning and Social History. Constructed between 1942 and 1945 for black workers in the Far South Side area, the housing complex represents Chicago's significant efforts to develop affordable public housing to meet the growing needs of the city's wartime industrial buildup. The Chicago Housing Authority's efforts at Altgeld Gardens served both the earlier demands for slum clearance, job creation, and affordable housing and the significant growing demands of America's military preparedness programs. Altgeld Gardens is also significant as one of the most self-contained of the early public housing developments in Chicago, containing a park, library, school, clubhouse, professional office building, and shopping center in addition to low-income housing units.

Reviewer: Paul R. Lusignan, Historian
(202) 343-1628
Date: 7/30/94

a:\publichs.doe

CHA

CHICAGO HOUSING AUTHORITY

John T. Hooker
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Vice Chairman

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Cristina Matos
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Eugene Jones, Jr.
Chief Executive Officer

José R. Alvarez
Chief of Staff and
Chief Operations Officer

April 6, 2018

Eric L. Lohrenz
Chief Counsel
Illinois Department of Natural Resources
1 Natural Resources Way
Springfield, Illinois 62702-1271

Re: New Construction of Chicago Public Library Branch and Daycare Facility, Altgeld Gardens – 951 E. 132nd Pl., SE Corner 131st Street and Ingleside Avenue, Chicago, IL. – SHPO Log#006030917

Dear Mr. Lohrenz:

Enclosed, please find an original executed Chicago Housing Authority ("CHA") signature page evidencing the CHA's concurrence with the Illinois Department of Natural Resources' "No Adverse Effect with Conditions" Letter.

Should you require anything further from CHA in connection with this matter, please contact me directly at (312) 913-7134.

Sincerely,

LaRue Little

LaRue Little
Deputy General Counsel

Chicago Housing Authority
60 E. Van Buren
12th Floor
Chicago, IL 60605

o 312-742-8500

www.thecha.org

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor
Wayne A. Rosenthal, Director

FAX (217) 524-7525

Cook County
Chicago
New Construction of Chicago Public Library Branch and Daycare Facility, Altgeld Gardens
951 E. 132nd Pl., SE Corner 131st St. and Ingleside Ave.
SHPO Log #006030917

March 29, 2018

Lynn A. Crivello
Chicago Housing Authority
60 E. VanBuren St., 8th Floor
Chicago, IL 60605

Dear Ms. Crivello:

This letter revises the Illinois State Historic Preservation Office (SHPO) determination of effects for the undertaking submitted by the Chicago Housing Authority (CHA) on February 26, 2018. Based upon recent conversations and further consideration of effects, we are now making a determination of No Adverse Effect with Conditions for the proposed library and community Center in the National Register-eligible historic district of Altgeld Gardens.

Our review is required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, "Protection of Historic Properties" (36 CFR 800). Altgeld Gardens was previously determined eligible for listing in the National Register of Historic Places, under Criterion A for Community Planning and Development and under Criterion C for Architecture, on October 22, 1992 (IHPA Log # 01092192). The Stores Building, designed by the renowned architecture firm of Keck and Keck, was determined to be individually eligible for listing in the National Register of Historic Places on May 20, 2015 (IHPA Log # 001082213). Prior to that, in a letter written on January 17, 2014, our office had concurred with the Chicago Housing Authority (CHA)'s determination of eligibility of that same building (also called the Retail Building or Building 7).

In our first comment letter on this undertaking, dated March 23, 2017, for which we reviewed only a block diagram, we made an initial determination of no adverse effect, with conditions, stating that our office expected that the CHA and the City of Chicago's Fleet and Facility Management (2FM) would submit schematic design drawings and design development plans as they progressed. Then, in our letter of February 26, 2018, we wrote that the design and location of the new public library and community center constituted an adverse effect to Altgeld Gardens, in accordance with 36 CFR 800.5, as the fully developed and finalized plans for the project were for a building and landscape that were not compatible with the historic district and did not meet the Secretary of the Interior's Standards for the Rehabilitation of Historic Properties (Standards).

Further, we advised CHA to notify the Advisory Council on Historic Preservation (ACHP) of this finding to determine if they wished to join the consultation process. Lastly, we proposed mitigation measures to be considered for inclusion in a Memorandum of Agreement document that our office would prepare with other consulting parties.

After reconsidering the proposed design—including Koo Architecture's explanation of the design precedents in the curved façade of the Stores Building, which were intended for reference within the design of the new library, and changes to the landscape plan that will preserve more historic landscape features—the SHPO is revising its determination of this undertaking to No Adverse Effect to Altgeld Gardens, provided that the conditions listed below are accepted and met. Our office recognizes the significant community value of this project and wishes to help the CHA meet the impending deadline by which the general contractor must begin construction of the new building. Considering this urgency and after consultation with staff at the CHA, 2FM, the ACHP, the U.S. Department of Housing and Urban Development (HUD), and the Office of Governor Bruce Rauner, we recommend that we complete our Section 106 review of this undertaking by your concurrence with the determination that there is No Adverse Effect with the following conditions:

1. CHA will retain a qualified architectural historian to work with the community and with the SHPO staff, as needed, to prepare a nomination and list Altgeld Gardens in the National Register of Historic Places. The nomination should be completed and submitted to the SHPO for review by the Illinois Historic Sites Advisory Council (IHSAC) within twenty-four (24) months of this letter. The complex will be nominated as a historic district, with the Stores Building as a contributing resource therein, under the following criteria:
    a. Criterion A, considered at the local and national levels of significance, in the three areas of Community Planning and Development, Politics/Government, and Social History. As a complex designed and constructed by the federal government to provide housing for African-American veterans of World War II and their families, the roles of both local and federal government in its successful completion should be explored and documented within the nomination. The statement of significance should place Altgeld Gardens within the context of planning and design of that era's public housing. Further, the nomination will document Altgeld Gardens' role in the evolution of the environmental justice movement nationwide beginning in the late 1960s and early 1970s, which directly resulted in Environmental Justice Executive Order 12898, which President Bill Clinton signed on February 11, 1994, with Hazel Johnson attending at the White House in recognition of her achievements in forwarding the national discussion of environmental justice.
    b. Criterion B, considered at the local level of significance, for Altgeld Gardens' association with resident Hazel Johnson, widely recognized as a founder of the environmental justice movement of the mid- to late-twentieth century. Ms. Johnson and her organization, People for Community Recovery, worked to elevate awareness of the environmental and health hazards of asbestos and the need for its removal, which was bolstered with assistance from future senator and President Barack Obama, and their efforts received coverage in newspapers and magazines with nationwide distribution.

c. Criterion C, considered at the local level of significance, for Architecture. The statement of significance will place Altgeld Gardens within a national context for town planning, public housing, and modern architecture, but emphasize its comparison to designs within the City of Chicago.

Generally, the period of significance for the nomination will be 1944 through 1994, when the Executive Order 12898 was signed. The period of significance for Architecture will be 1944 through 1948, which reflects the date of design or construction through the Stores Building's appearance in the June 1948 issue of *Progressive Architecture*, a magazine with professional readership nationwide. The statement of significance that describes Hazel Johnson's work and Altgeld Gardens' role in the national movement for environmental justice will be prepared such that it will be clearly demonstrated that Altgeld Gardens easily meets Criterion Consideration G for resources that have achieved historic significance less than 50 years ago.

2. The revised landscape plan, Option 2, that was emailed to this office on March 8, 2018, by Kevin Parzych of Koo Architecture will be constructed as part of the undertaking. Our reply on March 19, 2018 to Koo and CHA staff stated our preference for Option 2, which preserves the greatest amount of significant features of the historic central plaza.

In addition, we request that CHA conduct training on the Section 106 process, within twelve (12) months of this letter, for relevant CHA and HUD staff and staff from other pertinent City and State agencies, including 2FM, the Illinois Housing Development Authority (IHDA), and the Illinois SHPO. We trust that you will make scheduling this training a priority, and we will be pleased to participate.

Please indicate your concurrence with this No Adverse Effect determination and stated conditions by signing on the lines below, and return the signed letter to our office. If you have questions, please contact me at (217) 785-5031, or at rachel.leibowitz@illinois.gov.

Sincerely,

Rachel Leibowitz, Ph.D.
Deputy State Historic
Preservation Officer

c: Eleny Ladias, U.S. Dept. of Housing & Urban Development
Kevin Laberge, City of Chicago, Illinois
John D. Gerut, Chicago Housing Authority
Erik Sandstedt, U.S. Department of Housing and Urban Development
Angela Brooks, Chicago Housing Authority
Diana Liu, Chicago Housing Authority

CONCUR

4/2/18

Eugene E. Jones, Jr.
Chief Executive Officer
Chicago Housing Authority

Date

David J. Reynolds
Commissioner
Chicago Fleet and Facility Management

Date

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

May 15, 2020

Rachel Barnhart
MacRostie Historic Advisors
53 W Jackson Blvd, Suite 1142
Chicago, IL

RE: **Altgeld Gardens - Phillip Murray Homes Historic District**
Roughly Bound by E. 130th Place, Leanna Tucker Avenue,
E. 133rd Place, and S. St. Lawrence Avenue (see attached map)
Chicago -- Cook County

Dear Ms. Barnhart:

Thank you for requesting an assessment of the above property's eligibility for nomination to the National Register of Historic Places. After reviewing the material you submitted, we are of the opinion that the district is still eligible for listing. Please refer to the attached eligibility assessment sheet for further details.

Submission requirements and other helpful information about the nomination process here in Illinois is located at our website:
http://www.illinois.gov/ihpa/Preserve/Pages/Places.aspx

Please feel free to contact me at 217/782-8588 if you have any questions, and I would be happy to assist you.

Sincerely,

Amy Hathaway
National Register and Survey Specialist

National Register Eligibility Assessment Sheet

Preservation Services Division
State Historic Preservation Office – Springfield, IL

Property: Altgeld Gardens - Phillip Murray Homes Historic District

Location: Roughly Bound by E. 130th Place, Leanna Tucker Avenue,
E. 133rd Place, and S. St. Lawrence Avenue
Chicago -- Cook County

Date: May 15, 2020

The above property appears to meet the following National Register Criteria:

(x) **Criteria A:** Property is associated with events that have made a significant contribution to the broad patterns of history.

( ) **Criteria B:** Property is associated with the lives of persons significant in our past.

( ) **Criteria C:** Property embodies the distinctive characteristics of a type, period or method of construction or represents the work of a master, or possesses high artistic values, or represents a distinguishable entity whose components lack individual distinction.

( ) **Criteria D:** Property has yielded or is likely to yield information important to prehistory or history.

Areas of Significance

Social History

Community Planning & Development

Additional Comments

The district appears to retain enough integrity and is locally significant for community planning & development and for its social history. The period of significance is from 1943, the initial date of construction, until 1972, the date the Community Center was built.

This eligibility assessment is provided to assist in determining whether to pursue National Register Listing. It is not a guarantee of eventual National Register Listing

Altgeld Gardens - Phillip Murray Homes

Carolyn Andrews

From: Hathaway, Amy <Amy.Hathaway@Illinois.gov>
Sent: Thursday, December 3, 2020 9:04 AM
To: Carolyn Andrews
Subject: RE: Altgeld Gardens-Philip Murray Homes

Good morning!

I would say it was a determination of eligibility from Review and Compliance.

From: Carolyn Andrews <candrews@jlkarch.com>
Sent: Wednesday, December 2, 2020 6:23 PM
To: Hathaway, Amy <Amy.Hathaway@Illinois.gov>
Subject: [External] RE: Altgeld Gardens-Philip Murray Homes

Thanks Amy!

Do you see this as equivalent to a determination of eligibility?
I'm trying to decide if we need to present an argument for eligibility under these Criteria in our report as well.

Have a nice evening,

Carri Andrews, RA
Architect | candrews@jlkarch.com

JLK JOHNSON LASKY KINDELIN ARCHITECTS

230 West Huron, Suite 510 | Chicago, Illinois 60654
office 312-357-1221 ext. 205 | cell 773-405-1016
www.jlkarch.com

As the City of Chicago enters Phase 4 of their Covid Response, JLK will transition to a mixed from-home and in-office work schedule. Please continue to reach us via email and cell phone during typical work hours, or via virtual conferencing.

From: Hathaway, Amy <Amy.Hathaway@Illinois.gov>
Sent: Wednesday, December 2, 2020 4:07 PM
To: Carolyn Andrews <candrews@jlkarch.com>
Subject: RE: Altgeld Gardens-Philip Murray Homes

Hi Carolyn—

The consultants were instructed to do the nomination as per the attached letter from Rachel Leibowitz. I hope this helps!

From: Carolyn Andrews <candrews@jlkarch.com>
Sent: Tuesday, December 1, 2020 5:36 PM

To: Hathaway, Amy <Amy.Hathaway@Illinois.gov>
Subject: [External] FW: Altgeld Gardens-Philip Murray Homes

Hello Amy,

I was hoping you could confirm if Altgeld Gardens-Philip Murray Homes has been determined eligible for listing under Criteria B & C. I understand the nomination is still underway and have seen a directive from the SHPO in 2018 that suggest these criteria being applicable.
We are completing an eligibility report for the Red Line Extension project and want to make sure we have all our facts straight!

Thanks again,

Carri Andrews, RA
Architect | candrews@jlkarch.com

JOHNSON LASKY KINDELIN
ARCHITECTS

230 West Huron, Suite 510 | Chicago, Illinois 60654
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www.jlkarch.com

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From: Rachel Barnhart <rbarnhart@mac-ha.com>
Sent: Tuesday, December 1, 2020 5:24 PM
To: Carolyn Andrews <candrews@jlkarch.com>
Cc: John Cramer <jcramer@mac-ha.com>
Subject: RE: Altgeld Gardens-Philip Murray Homes

Hello Carri,

I'm actually not sure which Criteria are included in SHPO's official determination of eligibility, since as you mentioned there exists more than one document referencing this subject. I do know that MacRostie Historic Advisors will have to research and document how the district meets Criteria A, B, and C in the first draft of the National Register nomination.

I think it would be best to touch base with Amy Hathaway at the Illinois SHPO and ask her to clarify which Criteria the district has officially been determined eligible for at this time. Email is probably the best way to reach her: Amy.Hathaway@Illinois.gov.

I wish I could be of more help!

Best,

Rachel Barnhart
Associate, MacRostie Historic Advisors LLC

**** I am working remotely and available via cell at (404) 468-0595.*

From: Carolyn Andrews <candrews@jlkarch.com>
Sent: Tuesday, December 1, 2020 5:11 PM
To: Rachel Barnhart <rbarnhart@mac-ha.com>
Subject: Altgeld Gardens-Philip Murray Homes

Hello Rachel,

I'm sorting through the information you sent to us regarding the SHPO evaluations of significance and other correspondence for Altgeld Gardens. We are trying to determine if the proposed district has been determined eligible for Criteria B and C, or if these criteria are only under consideration at this time. It's not clear to me if the directive from the SHPO in 2018 is a recognition of these criteria being applicable. It does look like we had official correspondence confirming eligibility under A.
Are you able to shed any light on this?

Would be happy to have a phone conversation on this tomorrow if that works better for you.

Thanks again,

Carri Andrews, RA
Architect | candrews@jlkarch.com

JOHNSON LASKY KINDELIN
ARCHITECTS

230 West Huron, Suite 510 | Chicago, Illinois 60654
office 312-357-1221 ext. 205 | cell 773-405-1016
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As the City of Chicago enters Phase 4 of their Covid Response, JLK will transition to a mixed from-home and in-office work schedule. Please continue to reach us via email and cell phone during typical work hours, or via virtual conferencing.

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Appendix B – *RLE Eligibility and Effects Summary Report*, September 19, 2016

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Eligibility and Effects Summary Report

September 19, 2016

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
CWE Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Summary 1
1.1 Regulatory Framework 1
1.2 Section 106 Consultation History and Evolution 3
1.3 Organization of this Report 4

Section 2 Project Description and Area of Potential Effect 5
2.1 No Build Alternative 6
2.2 Build Alternative 6
2.2.1 Alignment 6
2.2.2 Stations 9
2.2.3 Park & Ride Facilities 10
2.2.4 Yard and Shop 11
2.2.5 Substations 11
2.2.6 Operating Plan 11
2.3 Area of Potential Effect 12

Section 3 Methodology for Identification of Resources 14
3.1 Identification of Historic Resources 14
3.1.1 Background Research/Historic Context 14
3.1.2 Surveys of Historic Resources 15
3.2 Identification of Archaeological Resources 16

Section 4 Eligible Historic and Archaeological Resources 17
4.1 Historic Resources 17
4.1.1 NRHP-Eligible Resources 17
4.1.2 CHRS Orange-Rated Properties 27
4.2 Archaeological Resources 27

Section 5 Effects Determinations and Mitigation 28
5.1 Effect Analysis Thresholds 28
5.2 No Build Alternative 28
5.3 Build Alternative - UPRR Alternative 29
5.3.1 East Option 29
5.3.2 West Option 31

Section 6 Consultation Process 32
6.1 Initiation Activities 32
6.1.1 Invitations to Participate 32
6.1.2 Section 106 Kickoff Webinar 33
6.2 Identification of Historic Properties 33
6.3 Assessment of Effects 34
6.4 Resolution of Adverse Effects 34

Attachments

Attachment 1: Alternatives Refinement Process

Attachment 2: Historic Survey Inventory Sheets

Attachment 3: Section 106 Consultation Supporting Documentation

Figures

Figure 2-1: Red Line Extension Project Build Alternative 8
Figure 2-2: Photo Simulation of Union Pacific Railroad Alternative East Option at 111th Street Facing West - Typical Proposed Elevated Structure 9
Figure 2-3: Photo Simulation of Union Pacific Railroad Alternative East Option at 103rd Street Facing Northwest - Typical Proposed Elevated Station.....10
Figure 2-4: RLE Project Area of Potential Effect 13
Figure 4-1: NRHP-Eligible Resources in the Area of Potential Effects 18
Figure 4-2: South Facade of the Eclectic Neo-Traditional Home at 444 W. 100th Place 19
Figure 4-3: South Facade of Chicago Fire Department Engine Company 93.....20
Figure 4-4: North Facade of the City of Chicago Roseland Pumping Station 21
Figure 4-5: East and North Facades of Church at 10920 S. Princeton Avenue 22
Figure 4-6: Front Facade of Nurses Home at 11321 S. Wentworth Avenue.....23
Figure 4-7: Front Facade of Venetian Hall 24
Figure 4-8: Photo of Altgeld Gardens 26
Figure 5-1: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue 30
Figure 5-2: Photo of Existing Conditions and Photo Simulation of the 130th Street Station and Parking Garage, Facing Northeast on 130th Place.....31

Tables

Table 2-1: Summary of Park & Ride Facilities.....11
Table 4-1: NRHP-Eligible Resources in the Area of Potential Effects 17
Table 5-1: NRHP-Eligible Resources in the Area of Potential Effects - Union Pacific Railroad Alternative East and West Options 29

Section 1
Summary

This document summarizes information previously provided on the results of technical analysis on potential historic and cultural resources affected by the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project and consultation conducted under Section 106 of the National Historic Preservation Act (NHPA). Because CTA narrowed the selection of alternatives under evaluation during project development (see **Attachment 1**) after Section 106 consultation had significantly progressed, this document has been developed to provide the Illinois Historic Preservation Agency (IHPA) with a streamlined and concise summary of the Area of Potential Effect (APE) for the project and eligibility and effects determinations made to date by the Federal Transit Administration (FTA). All Section 106 findings on alternatives considered that are presented in this document are consistent with previous correspondence and materials provided during the Section 106 consultation process.

1.1 Regulatory Framework

Cultural and historic resources are protected by various federal regulations; Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider effects on historic resources from their actions and to balance preservation needs with the need for the actions. As provided in 36 CFR § 800, the Section 106 process "seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation" (36 CFR § 800.1(a)). The goal of the consultation is to identify historic properties potentially affected by the undertaking, assess project effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

For the Section 106 assessment of historic and archaeological resources, FTA and CTA conducted a four-step process following requirements of 36 CFR § 800:

1. **Define the Area of Potential Effects** - FTA and CTA first determined an APE for cultural/historic resources. The APE is defined as the geographic area within which the project may cause alterations in the character or use of historic properties. Development of the APE involved site visits and a review of aerial photography images and conceptual engineering drawings for the alternative.

2. **Identify Historic and Archaeological Resources** - After an extensive records check, representative samples within the APE footprint were field-surveyed to identify any archaeological resources and historic resources that meet National Register of Historic Places (NRHP) criteria. Representative samples were used to determine effects on similar properties on a block-by-block basis. The properties included in the representative sample were determined using GIS databases provided by the City of Chicago, the Historic and Architectural Resources Geographic Information System, online mapping resources, State Historic Preservation Office (SHPO) records, and field visits. Additional details about the definition of the representative sample, and resources in it, are included in **Section 3** of

this report. NRHP criteria are defined in 36 CFR § 60.4 and apply to districts, sites, buildings, structures, or objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association with one or more of the following four criteria:

- Criterion A - Events that have made a significant contribution to the broad patterns of American history on a federal, state, and/or local level
- Criterion B - Lives of persons significant in the history of the city, state, and/or the United States
- Criterion C - Distinctive characteristics of a type, period, or method of construction, or the work of a master, or high artistic values, or a significant and distinguishable entity whose components may lack individual distinction
- Criterion D - Information important in prehistory or history

FTA and CTA identified properties listed on the NRHP, local landmarks, and Chicago Historic Resources Survey (CHRS) "Red" and "Orange"-rated[1] buildings (properties with locally designated historic importance). FTA and CTA conducted background research to assist this process, using the Historic and Architectural Resources Geographic Information System and city records, fire insurance and other historic maps, the CHRS, previous architectural studies in the area, and other relevant scholarly publications. No properties or districts currently listed on the NRHP are present in the APE.

3. **Assess Effects on Historic and Archaeological Resources** - FTA and CTA assessed effects for each evaluated resource that was listed in the NRHP or determined eligible for listing. The effects analysis included review of specific direct and indirect impacts that were evaluated for the project (for topics such as displacements, noise, and visual impacts) and focused on how the alternative might alter the characteristics that qualify properties for inclusion in the NRHP.

4. **Resolve any Adverse Effects** - FTA and CTA will develop any necessary mitigation measures through consultation with the SHPO and other consulting parties to address adverse effect determinations. Based on the results of the assessment of effects conducted, there would be no adverse effects to historic properties resulting from the project and no additional mitigation measures are proposed.

[1] The CHRS is an inventory of architecturally and historically significant buildings in the City of Chicago that uses a color-coded ranking system used to identify historic and architectural significance relative to age, degree of external physical integrity, and level of possible significance. The two highest color codes are "Red" and "Orange." These types of local historic resources are subject to the City of Chicago's Demolition-Delay Ordinance. "Red" or "Orange"-rated properties were identified as possessing some architectural feature or historical association that made them potentially significant in the context of the surrounding community.

1.2 Section 106 Consultation History and Evolution

In accordance with requirements for consultation established in Section 106 of the NHPA, three distinct rounds of coordination occurred during the RLE Project: initiation activities, identification of historic properties, and assessment of effects. In August 2012, FTA and CTA invited 11 Native American tribes and 19 state and local preservation interest groups to participate in the upcoming consultation process. At present, 11 groups are participating in the process. On October 24, 2012, FTA and CTA held a webinar on RLE historic properties to introduce the project and initiate the consultation process.

As part of the eligibility phase, CTA surveyed 541 potentially eligible resources within the APEs for all alternatives being studied at the time (Bus Rapid Transit [BRT], Union Pacific Railroad [UPRR], and Halsted Alternatives). FTA and CTA provided draft materials on the identification of NRHP-eligible properties to consulting parties on January 4, 2013 and followed it with an in-person meeting on January 30, 2013. As a result of the field investigations and comments received from consulting parties on potentially eligible resources, for all alternatives, 15 total resources were identified as eligible for inclusion on the NRHP, including 13 individual buildings and 2 historic districts.

FTA and CTA mailed a Draft Effects Report to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. On May 8, 2014, FTA and CTA met with consulting parties to discuss potential project effects on NRHP-eligible historic properties.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Alternative.

CTA had originally considered three alignment options for the UPRR Alternative: the Right-of-Way Option, the East Option, and the West Option. In 2014, the Right-of-Way Option was removed from consideration as it is no longer feasible. This option was added in 2012 in response to the CDOT feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible. Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Alternative.

Additional conceptual engineering was conducted on the UPRR Alternative to refine the East and West Option alignments. In addition, CTA is now considering only the South Station Option of the 130th Street Station.

CTA provided responses to all consulting party comments received in May 2014 on November 23, 2014. Responses noted that the alternatives had been further narrowed and that the UPRR Alternative (East and West Options) were proposed to move forward as the NEPA Preferred Alternative.

1.3 Organization of this Report

The following sections of this report provide further details on development of the APE and eligibility and effects determinations made and presented during the Section 106 consultation process for this project.

Section 2 of this report provides a brief description of the No Build and Build Alternative (the UPRR Alternative) under consideration and details on identification of the APE.

Section 3 of this report provides a summary of the methodology undertaken to identify potentially affected historic and archaeological resources.

Section 4 of this report provides details on eligible historic and archaeological resources identified.

Section 5 provides details on the effects determinations for the East and West Options of the Build Alternative.

Section 6 summarizes the Section 106 consultation process conducted at each stage of the four-step Section 106 consultation process.

Section 2
Project Description and Area of Potential Effect

The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Alternative as the Locally Preferred Alternative on August 12, 2009. During 2012–2014 and as part of the Draft EIS analysis, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the BRT Alternative (along Michigan Avenue), the UPRR Alternative, and the Halsted Alternative. CTA evaluated three options for the UPRR Alternative: the Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Alternative 130th Street station: a South Station Option and a West Station Option. The Section 106 analysis and consultation was performed during 2012–2014,on all those alternatives and options. As further described in **Section 2.3**, CTA developed separate APEs for each alternative.

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. While CTA had originally considered a UPRR Right-of-Way Option, this was subsequently removed as it is no longer feasible. This option was added in 2012 in response to the CDOT feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible.

Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Alternative. CTA has chosen to move forward with the South Station Option at 130th Street based on technical analysis and public feedback. As further described in **Section 6**, the consulting parties were notified of the NEPA Preferred Alternative in November 2014 as part of the responses to consulting party comments on assessments of effect.

Additional details on the alternatives development process and history, including the entirety of alternatives evaluated between 2012 and 2014 as part of the Section 106 consultation process for this project, are provided in **Attachment 1**.

The Draft EIS focuses on the following alternatives, which emerged from the Alternatives Analysis, NEPA scoping process, and additional technical analysis and public input:

- No Build Alternative
- UPRR Alternative
  - East Option
  - West Option

2.1 No Build Alternative

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the UPRR Alternative.

The No Build Alternative represents future conditions if the UPRR Alternative were not implemented. The No Build Alternative includes all projects currently included in the fiscally constrained portion of the CMAP FY 2014–2019 Transportation Improvement Program (TIP). Projects in the TIP in the project area include renovation of the 95th Street Terminal, rail line maintenance and improvements, preservation of the North Pullman historic area, road resurfacing, coordination of traffic signal timing, and construction of a new bicycle/pedestrian facility. Impacts related to the construction and operation of the 95th Street Terminal are documented in the approved *95th Street Terminal Improvement Project Environmental Assessment* (CTA 2013b). FTA issued a Finding of No Significant Impact for the 95th Street Terminal Improvement Project in April 2013, and an Amended Finding of No Significant Impact in July 2013. FTA performed an Environmental Assessment Re-Evaluation in July 2016, which confirmed that the Amended Finding of No Significant Impact dated July 2013 remains valid. No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

2.2 Build Alternative

The UPRR Alternative is shown in **Figure 2-1** and would extend the heavy rail Red Line 5.3 miles from the existing 95th Street Terminal to 130th Street. As noted above, the Chicago Transit Board designated the UPRR Alternative as the LPA at its August 12, 2009 board meeting. The UPRR Alternative would reduce transit travel times from the project area to points on the Red Line north of 95th Street (from 130th Street to 95th Street) from 28 minutes to approximately 14 minutes (CTA 2009). The following describe major aspects of the proposed alignment options under consideration, stations, park & ride facilities, 120th Street yard and shop, substations, and overview of the operations plan.

2.2.1 Alignment

Two alignment options adjacent to the UPRR are considered for this alternative: the East Option and the West Option. The CTA elevated structure would be located either east or west of the existing UPRR corridor. The alignment would follow the UPRR corridor to Prairie Avenue, where

it would cross over the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street. South of this point, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation (Conrail) right-of-way to the terminus (end) of the RLE at 130th Street.

As described, two UPRR Alternative options for the segment of the proposed alignment between I-57 and the CN/ME tracks near 119th Street are studied in the Draft EIS:

- East Option - The CTA elevated structure would be placed immediately adjacent to the east side of the UPRR right-of-way.
- West Option - The CTA elevated structure would be placed immediately adjacent to the west side of the UPRR right-of-way.

In the UPRR Alternative, the tracks would be on a new elevated (aerial) track structure from the 95th Street Terminal through the CN/ME track crossing near 119th Street. South of this elevated crossing, the tracks would transition to an at-grade profile (they would continue at ground level).

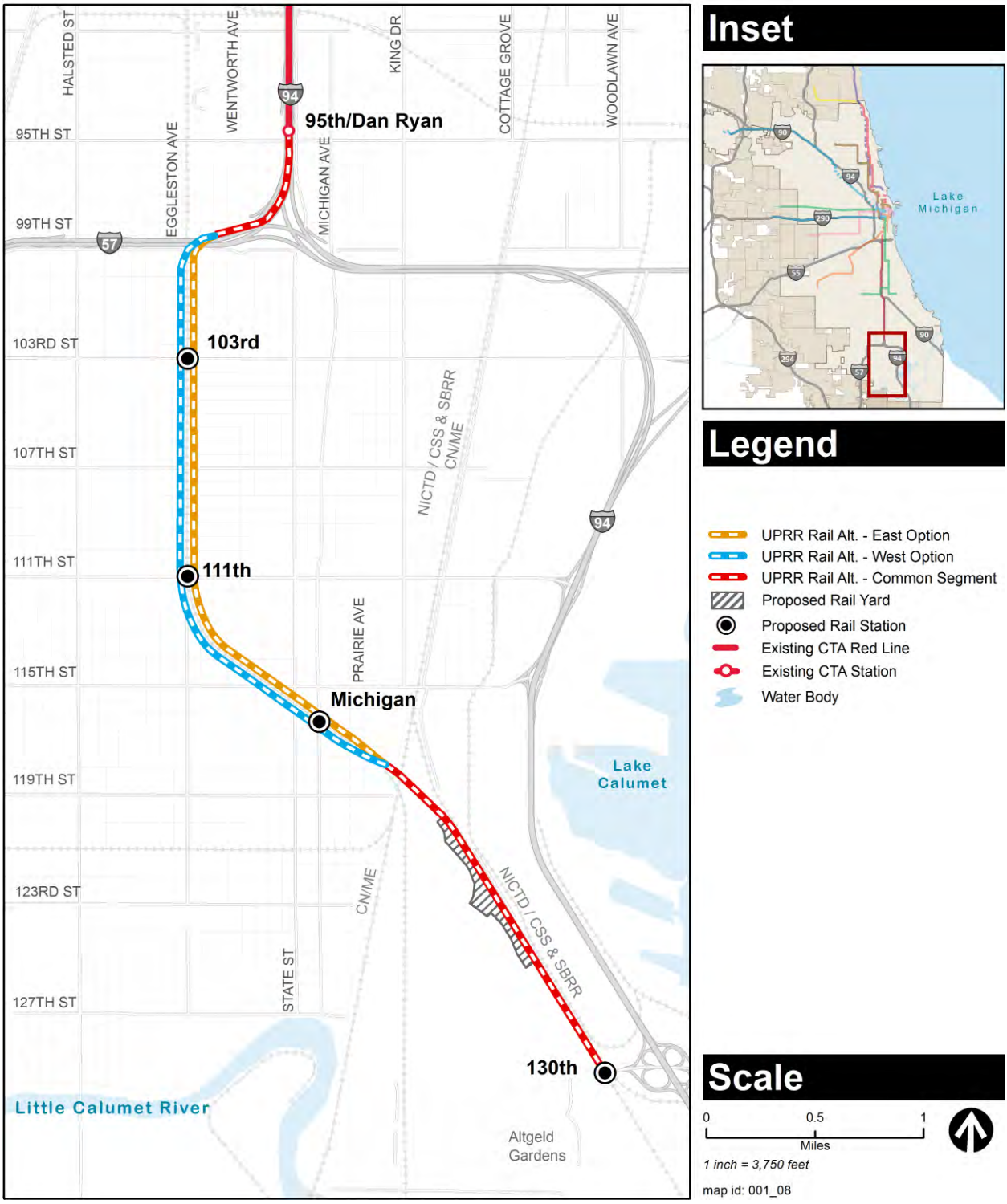

Figure 2-1: Red Line Extension Project Build Alternative

The proposed elevated structure would be a closed-deck, steel and concrete, aerial track structure with direct-fixation track and welded rail (welded at joints). With direct-fixation track, rails are mounted to specially designed concrete blocks fixed to the concrete deck. Noise barriers (approximately 4 feet in height, measured from the top surface of the concrete deck) are proposed for portions of the structure on both sides of the track deck to reduce noise transmission at and below track level. The structure would vary in height from 14 feet 9 inches to 40 feet above existing grade, depending on required clearances above existing roadways and railroads. The two tracks would have a spacing of 13 feet (13 feet between the track centerlines). The elevated deck, on which the tracks would run, would vary in width from approximately 30 feet to approximately 52 feet at stations

Figure 2-2 is a photo simulation of a typical proposed elevated structure above the UPRR right-of-way. The design shown is conceptual, and the actual design would vary based on further engineering and community input.

Figure 2-2: Photo Simulation of Union Pacific Railroad Alternative East Option at 111th Street Facing West - Typical Proposed Elevated Structure

2.2.2 Stations

As part of the UPRR Alternative, four new stations would be constructed at the following locations along the proposed alignment:

- 103rd Street (elevated station)
- 111th Street (elevated station)
- Michigan Avenue (elevated station)
- 130th Street (at-grade station)

Each station would have a center platform, approximately 26 feet wide and 520 feet long. Platforms would accommodate ten-car trains. Each station would be Americans with Disabilities

Act (ADA) accessible with elevators. Each station area would include areas for bus boarding, new crosswalks where needed to accommodate pedestrian traffic, and park & ride facilities. **Figure 2-3** is a photo simulation of a typical proposed station. The design shown is conceptual, and the actual design would vary based on further engineering and community input.

Figure 2-3: Photo Simulation of Union Pacific Railroad Alternative East Option at 103rd Street Facing Northwest - Typical Proposed Elevated Station

The 130th Street station would be located immediately west of the NICTD/CSS & SBRR right-of-way at 130th Street. Pedestrians from Altgeld Gardens would access the station from 130th Place. Pedestrians would not need to cross 130th Street to access the station because 130th Street goes over 130th Place and the railroad tracks.

2.2.3 Park & Ride Facilities

To accommodate passengers arriving at the UPRR Alternative stations by car, park & ride facilities would be constructed near each station, as described in **Table 2-1**. A total of 3,700 parking spaces would be available along the corridor. CTA estimated parking demand based on travel demand modeling performed in 2009. Bus turnarounds would be provided in the parking areas. The ground floor of the parking structure at the Michigan Avenue station would contain space for retail and community facilities.

Table 2-1: Summary of Park & Ride Facilities

Station	Number of Parking Spaces	Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
103rd Street	200	Divided between two surface parking lots (one on the east side of the tracks and one on the west side of the tracks)	One surface parking lot
111th Street	200	Divided between two surface parking lots (one on the east side of the tracks and one on the west side of the tracks)	One surface parking lot
Michigan Avenue	1,000	Divided between a three-story parking structure and a surface parking lot (a surface parking lot on the east of the tracks and a parking structure on the west of the tracks)	Five-story parking structure
130th Street	2,300	Seven-story parking structure	

2.2.4 Yard and Shop

The 120th Street yard and shop, with a capacity of 340 train cars, would be sited on a combination of industrial and vacant land east of the CN/ME tracks and west of the NICTD/CSS & SBRR tracks near 120th Street and Cottage Grove Avenue. The yard would be entirely at grade. Parking spaces for CTA employees would be included at the yard.

2.2.5 Substations

Substations are buildings along the alignment that house equipment to regulate the flow of electricity to the third rail, which supplies power to the trains. Substations would be placed approximately 0.8 to 1 mile apart along the alignment. Six new and upgraded substation locations are proposed: 98th Street Yard and Shop, near 101st Street, near 107th Street, near Lafayette Avenue, within the 120th Street yard and shop area, and near the 130th Street station. CTA would confirm the need and location for substations during future design phases.

2.2.6 Operating Plan

The UPRR Alternative would operate 24 hours a day, each day of the year. Service frequency is anticipated to be the same as with the current service (April 2016) at 95th Street—approximately 6-minute headways during morning peak hours and approximately 3-minute headways during afternoon peak hours. Headways at night (between 1 AM and 4 AM) are approximately 13–15 minutes. Service frequency would be adjusted to accommodate demand once the RLE service has been implemented. Train frequencies would vary throughout the day (like existing Red Line service), and late night service would operate approximately every 15 minutes.

Train sets would be eight cars long. Stations and track alignment would accommodate ten-car trains to maintain the option of running ten-car trains in the future. With the extension of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations.

2.3 Area of Potential Effect

In the context of Section 106, the APE is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16.d). The APE for the RLE Project was delineated after considering the location of the proposed alternative; the potential for ground disturbance, destruction, or property taking; locations from which the undertaking may be visible and/or audible; and the scale and setting of the project. The APE was developed in consultation with CTA, FTA, and IHPA.

Cultural resource specialists developed the APE boundaries for the BRT, UPRR, and Halsted Alternatives in 2012 after conducting site visits and reviewing the aerial maps and engineering details (such as alignment locations, elevation of the proposed rail line, expected right-of-way limits, and the locations of the yard, stations, and parking facilities) for the Build Alternatives. SHPO concurred on the APE boundaries on July 20, 2012.

Generally, the APEs for the UPRR and Halsted Alternatives contain parcels within one block of the centerline of the alignment. The APE widens to accommodate the locations of each park & ride and the proposed yard and shop beyond the one-block boundary. The APE for the BRT Alternative includes the area immediately surrounding park & ride facilities.

As described above, in August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. In late 2014, CTA also conducted additional conceptual engineering on the UPRR Alternative to refine the East and West Option alignments. FTA and CTA revised the APE for the UPRR Alternative accordingly and as shown in **Figure 2-4**. The revised APE presents no new effects from the UPRR Alternative than what was presented during consultation. Because the BRT and Halsted Alternatives are no longer under consideration, those APEs are no longer discussed.

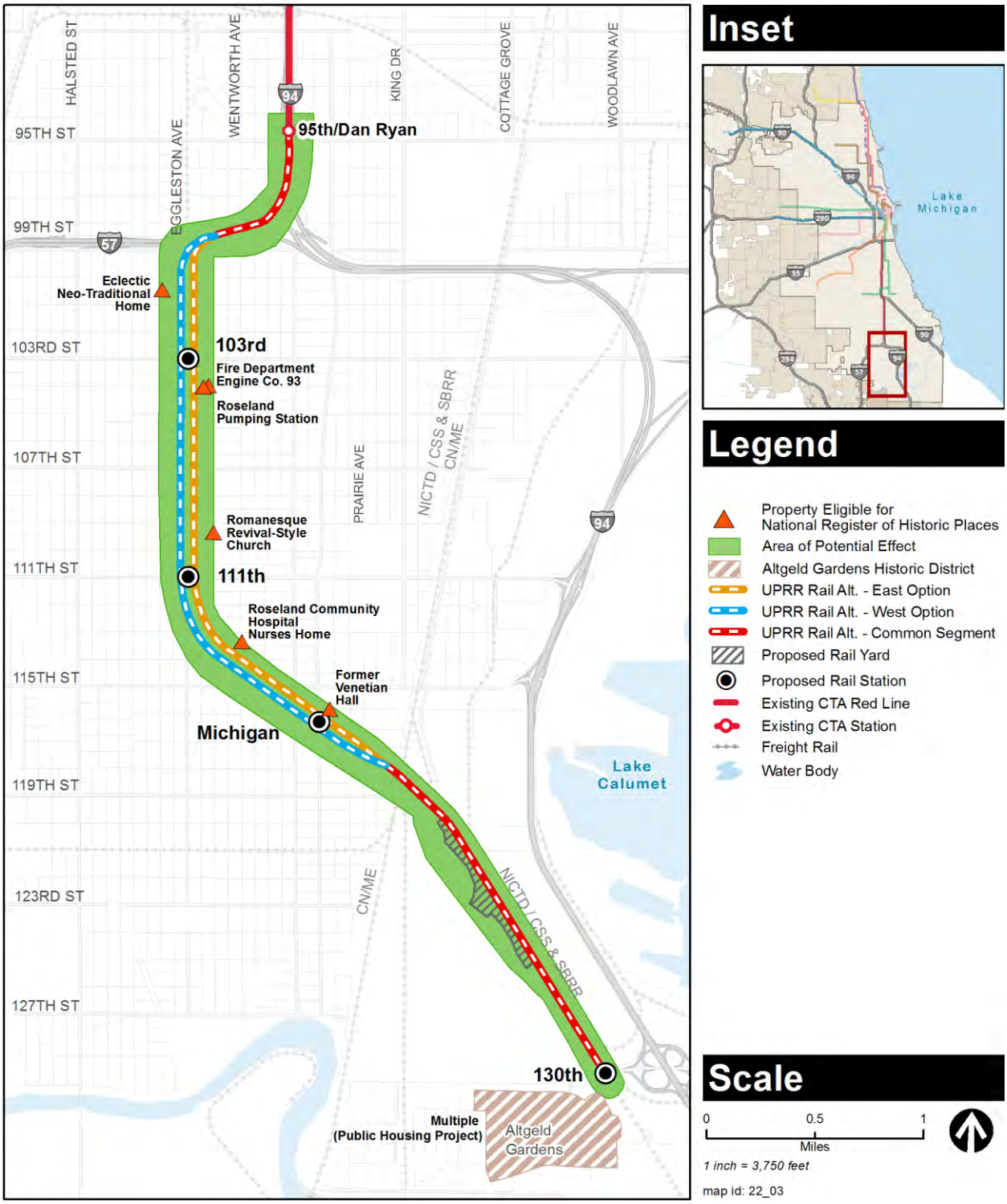

Figure 2-4: RLE Project Area of Potential Effect

Section 3
Methodology for Identification of Resources

3.1 Identification of Historic Resources

3.1.1 Background Research/Historic Context

Background research was conducted to describe the historic context for the project area. Understanding the historic context is essential in establishing the significance of individual properties, and by extension, and NRHP eligibility for the built environment. The following resources were consulted in developing the historic context and identifying known sites:

- The Historic Architectural Resources Geographic Information System (**HARGIS) database** was created by the IHPA in 2003 to manage information about Illinois historic properties; this database documents the state's built environment. The HARGIS database includes data gathered as a result of three statewide survey projects: the Illinois Historic Structures Survey, the Illinois Historic Landmarks Survey, and the Illinois Rural Survey (conducted 1970–1987). The HARGIS database also includes properties identified as part of a NRHP nomination, surveys by local preservation groups, and information from the Illinois Department of Transportation's Bridge Survey. The database includes data forms, photographs, background documentation, and spatial information within a geographical context for each historic property and historic district within the dataset.

- The **CHRS** is an inventory of buildings that was compiled during 1983–1995. The Chicago Department of Housing and Economic Development published its findings in a report titled *Chicago Historic Resources Survey: An Inventory of Architecturally and Historically Significant Structures* in 1996. Organized according to Chicago's 77 neighborhoods, the inventory lists over 17,000 architecturally and historically significant buildings and structures that predate 1940. The information is also available online and is searchable by neighborhood, building address, decade of construction, architect's name, building style and type, survey ranking, and landmark status.

- **Sanborn Fire Insurance maps** contain a wealth of information on the built environment in urban areas. Originally created and maintained to assess fire insurance liability, the maps provide dated contexts in which to describe the development of neighborhoods as well as the compositional components and historical use of individual buildings. Data especially useful for this project include the building footprint, number of stories, foundation material, and cladding material. The Sanborn maps are available online through subscription.

- **NRHP nomination forms** for individually listed historic properties and districts provide a wealth of contextual information for the individual properties and the historic districts. They include construction dates for most historic properties discussed therein and identify the architect in most instances.

Architectural datasets at the local level were reviewed as well, including information from the Commission on Chicago Landmarks.

The Commission on Chicago Landmarks recommends individual buildings, sites, objects, or entire districts to the Mayor and City Council for designation as Chicago Landmarks. To be recommended by the Commission for landmark designation, these resources must meet at least two criteria: (1) being valuable as an example of city, state, or national heritage, and (2) being historically significant—the site of a significant historic event, association with a significant person, architecturally significant, the work of a significant architect or designer, association with a significant historic theme, or a having unique visual feature. In addition, the potential landmark must maintain integrity in light of its location, design, setting, materials, workmanship, and ability to express such historic, community, architectural, or aesthetic interest or value. The Commission reviews any proposed alteration, demolition, or new construction affecting individual landmarks or properties in landmark districts as part of the permit review process. The Commission produces two new publications each year, one for individual landmarks and landmark districts and another for Chicago listings on the NRHP.

Using information in HARGIS and the other sources listed above, a list of previously identified historic and archaeologically-sensitive properties within the RLE APE was compiled and mapped. This effort included the identification of NRHP-listed districts and structures, and any properties identified as local landmarks in Chicago.

3.1.2 Surveys of Historic Resources

After the development of the APE and historic contexts, cultural resources specialists conducted field surveys on two distinct categories of properties: properties that would likely be displaced or demolished as a result of one or more alternatives, and a representative sample of other properties within the APE.

For both categories of properties that were surveyed, cultural resource specialists conducted archival research and photo-documented the exterior of each structure from the public ROW. Each property was assessed for NRHP eligibility using the data gathered during the fieldwork and research phases of the investigation.

The following subsection identifies how the representative sample in the latter category was identified. Because of the developed urban environment and linear nature of the project, effects on properties would be similar for adjacent properties. This method is consistent with November 2011 guidance provided by the Advisory Council on Historic Preservation regarding the "Reasonable and Good Faith Identification Standard in Section 106 Review."

Defining the Representative Sample

To determine the properties to be included in the representative sample, the team's architectural historian relied on the GIS database provided by the City of Chicago, the HARGIS database,

online mapping resources, SHPO records, and field reconnaissance. Examining the APE block by block, the historic character of each block was considered, including the following:

- What age are the buildings?
- What types of buildings are present?
- What function(s) do they serve?
- What architectural styles are apparent?
- How does the structure fit the context of the larger neighborhood?

In light of the neighborhood and block level contexts, analysts selected one or more properties per block to represent the range of buildings over 50 years in age throughout the area. In areas where the project would likely cause more substantial effects, a greater concentration of sample properties was selected. More sample properties were selected for heterogeneous blocks (e.g., blocks having a mix of property types and ages) than homogenous blocks. Where multiple similar buildings exist within the block, analysts selected the building with the greatest integrity or most distinguishing architectural features.

For example, block A contains only residential buildings, both Craftsman style bungalows and Minimal Traditional brick homes. Structures date to the 1920s and 1930s. The project would cause moderate effects on the adjacent block, but block A would be screened from the transit line by an existing row of buildings. Analysts therefore selected one bungalow and one Minimal Traditional house from this block. Alternatively, Block B contains a mix of residential and commercial properties, dating from 1902 through the 1950s, plus some modern infill. A mix of architectural styles is present. In this case, analysts selected five structures on this block to represent the cross-section of existing structures.

This process was repeated along the entire APE corridor.

3.2 Identification of Archaeological Resources

Cultural resource specialists conducted a records search to identify archaeological sites within the vicinity of the project area. The **Illinois State Archaeological Survey** (ISAS) GIS database and supporting documentation provides the most comprehensive source for archival background information on archaeological resources. The ISAS conducts multiple-scale field and laboratory research projects that concentrate on interpreting the archaeological heritage of Illinois. Data sources include the Illinois Department of Transportation Historic Bridge Survey and the Cultural Resource Management Archaeological Report Archive, as well as more detailed supporting information including archeological survey data.

This background research included review of artifacts collected by amateur archaeologists Albert Scharf, Oscar Biedes, and Ed Lace, as well as professional investigations completed by the Illinois State Archaeological Survey.

No known archaeological resources were identified within the project APE.

Section 4
Eligible Historic and Archaeological Resources

4.1 Historic Resources

4.1.1 NRHP-Eligible Resources

Figure 4-1 is a map of the APE and the seven identified NRHP-eligible resources. No properties or districts currently listed on the NRHP are present in the APE. **Table 4-1** summarizes historic resources within the APE. The following subsections provide further details on these historic properties. **Attachment 2** provides inventory sheets for NRHP-eligible properties.

Table 4-1: NRHP-Eligible Resources in the Area of Potential Effects

ID	Address	Description	NRHP Eligibility Criteria	Community Area
1	444 W. 100th Place	Eclectic Neo-Traditional Home (built 1930)	Criterion C	Washington Heights
2	324 W. 104th Street	Fire Department Engine Company 93 (built 1917)	Criterion C	Roseland
3	351 W. 104th Street	Roseland Pumping Station (built 1911)	Criterion C	Roseland
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church (built 1916)	Criteria A and C	Roseland
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home (built 1930s)	Criterion A	Roseland
6	133-139 E. Kensington Avenue	Former Venetian Hall (built 1925)	Criterion A	Riverdale
7	Multiple (Public Housing Project)	Altgeld Gardens Historic District (built 1945)	Criterion A	Riverdale

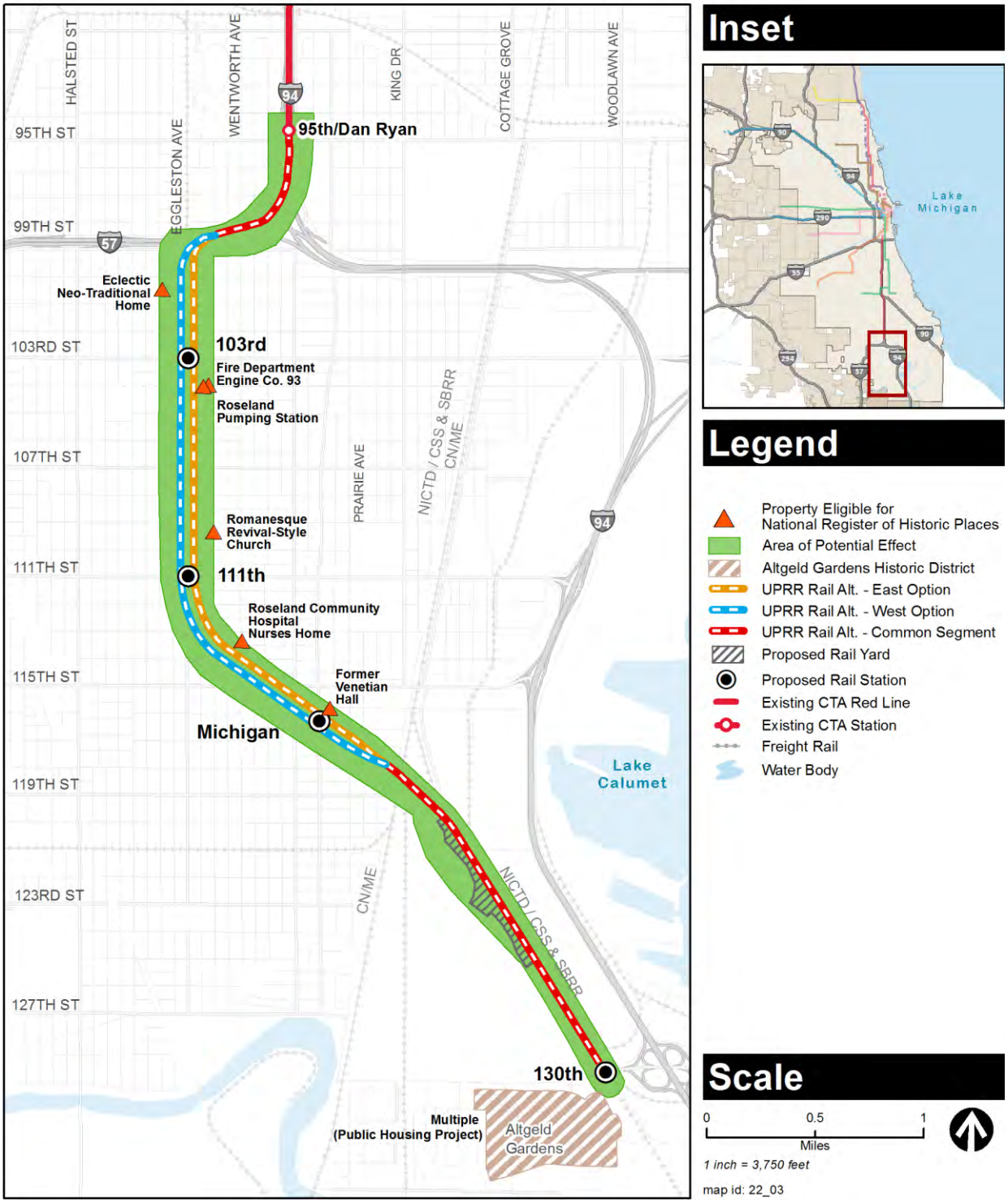

Figure 4-1: NRHP-Eligible Resources in the Area of Potential Effects

Eclectic Neo-Traditional Home, 444 W. 100th Place

This one-story home in the Washington Heights community area rests on a raised basement as shown in **Figure 4-2**. Built in 1930, it is clad with polychromatic brick and has a side gabled roof covered with asphalt shingles. Its front elevation has a gabled living room bay pavilion with paired basement windows, a group of three non-original one-over-one windows with concrete sills, brick arch lintels, colonettes with acanthus leaf capitals, and a small round-arched window in the gable. The house has a recessed corner porch with a metal storm door, round-arch openings, a Neo-Gothic castellated top, concrete steps, and brick sidewalls. The integrity of its materials and detailing is very good. Its Eclectic Neo-Traditional ornamentation makes it stand out among the vernacular, stripped-down brick and frame bungalows and cottages that comprise the predominant building stock in the Washington Heights community area. As a result, it was identified as individually eligible for NRHP listing under Criterion C for its architecture.

Figure 4-2: South Facade of the Eclectic Neo-Traditional Home at 444 W. 100th Place

Fire Department Engine Company 93, 324 W. 104th Street

This two-story firehouse in the Roseland community area is clad with light brown face brick, as shown in **Figure 4-3**. The building has a flat roof and a parapet with concrete coping. The front elevation has a two-story projecting pavilion, an overhead garage door, two window openings, an off-center, hollow-core metal door on the first floor, and a strip of three windows and a single window on the second floor. All windows are non-original, one-over-one aluminum sash. The spandrel area between the garage door and the windows above features a large stone sign plate inscribed with the words, "City of Chicago Fire Department." The spandrel area between the corner door and window above has a metal plate identifying the 1917 construction date and the names of a series of people associated with the building's construction, including the mayor, alderman, city architect (Charles W. Kallal), and contractor (Butler & Co.). Detailing includes stone door and window surrounds on the first floor, bracketed stone window lintels, concrete belt courses, and brick pilasters topped by stone panels with the City of Chicago's "Y" emblem and decorative scrolls. The "Y" emblem is also repeated above the off-center door.

This building is eligible for individual listing on the NRHP under Criterion C for architecture. It is a rare extant example of an early 20th century neighborhood firehouse in Roseland, has largely retained its original building materials and detailing, and still functions as a firehouse.

Figure 4-3: South Facade of Chicago Fire Department Engine Company 93

Roseland Pumping Station, 351 W. 104th Street

The two-story Prairie style Roseland Pumping Station, designed by architect William G. Kreig in 1911, is clad in brown brick, as shown in **Figure 4-4**. The building has a high limestone water table, a flat roof, parapet, and two square towers at the corners of the front elevation. The front elevation features a projecting, two-story, flat roofed entrance pavilion with a pair of centrally located glass double doors, sidelights, and a stone panel above that features the City of Chicago's "Y" emblem in metal. The entrance has a smooth stone surround. Above the entrance is a limestone panel incised with the words "City of Chicago Roseland Pumping Station." Detailing on the entrance pavilion includes brick pilasters with stone bases and coping and geometric motifs. The parapet is clad in limestone and features decorative geometric motifs. The building's fenestration is largely composed of multi-paned, steel-sash windows, some of which have transoms.

This is an excellent intact example of a neighborhood pumping station with fine integrity that still functions in its original use. It was identified as individually eligible for the NRHP under Criterion C for architecture, as it stands as an excellent, well-preserved example of a neighborhood pumping station designed in the Prairie style.

Figure 4-4: North Facade of the City of Chicago Roseland Pumping Station

Romanesque Revival Style Church, 10920 S. Princeton Avenue

This circa 1916 Romanesque Revival style church in the Roseland community area has a front elevation and two flanking towers clad with brown face brick, while the remainder of the side elevation and the rear elevation are clad with common brick. Shown in **Figure 4-5**, the church has a gable roof covered with asphalt shingles and gable wall dormers with shaped parapets on both side elevations. The east tower has a flat roof and a shaped parapet while the west tower has a peaked roof with overhanging eaves and exposed rafters and is topped by a finial. The central bay of the front elevation has a broad, round-arched entrance with a stone surround and two sets of single-light oak double doors. A strip of double-hung windows is within a broad arch and there is a rose window with tracery. Windows on both towers and along the side elevations include round-arch windows with tracery. It is unknown whether the original stained glass for all of these windows is extant inside the church. Both towers also feature paired casement windows. Window openings at the top of the west tower have been boarded over. Detailing includes stone sills, belt courses, brick pilasters, and keystones. A one-story, brick-clad entrance vestibule is along the rear of the west elevation.

Built as the First Reformed Church of Roseland, this church was identified as individually eligible for NRHP listing under Criterion A for its association with the community's once-dominant Dutch population and under Criterion C as a fine example of a Romanesque Revival style church in Roseland.

Figure 4-5: East and North Facades of Church at 10920 S. Princeton Avenue

Roseland Community Hospital Nurses Home, 11321 S. Wentworth Avenue

Shown in **Figure 4-6**, this four-story building has a flat roof and parapet. Its symmetrical front elevation is clad with brown face brick and has a centrally located entrance with a glass door and stone surround topped by two stone owls holding books. Windows are non-original one-over-one aluminum sash; those directly above the entrance have stone casings. Detailing includes stone sills, coping, insert blocks, sill courses, cornice, panels, and pinnacles at the parapet level.

This building is locally significant and eligible for NRHP listing under Criterion A for Education. Formerly the Roseland Community Hospital Nurses Home, it was built by the hospital as a dormitory and educational facility for its nurses. Closely affiliated with Roseland Community Hospital, which has served as an important institution in the Roseland area since its establishment in 1924, the Nurses Home is an excellent example of this building type on Chicago's South Side. The exterior of the building has very good integrity and the interior—which now functions as a homeless shelter—appears to retain classrooms and other spaces associated with its original use.

Figure 4-6: Front Facade of Nurses Home at 11321 S. Wentworth Avenue

Venetian Hall, 133–139 E. Kensington Avenue

The two-story performance hall was built for cultural and recreational purposes, although it has long since been repurposed as a church. The 1938 Sanborn map shows the hall with a stage, balcony, and place for storage of scenery. The street entrance was flanked by two storefronts in 1938, as it is today.

Shown in **Figure 4-7**, the 1925 building is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a flat roof and a shaped parapet with concrete coping. The first floor of the front elevation has a recessed, centrally located bay with three pairs of multi-light wood doors and in-filled transoms. This central bay is flanked by two original storefronts with central recessed doors and flanking display windows that are covered with wood and topped by transoms that have been filled in with glass block. Separating the central bay from the two flanking storefronts and providing access to the second floor are two doors with transoms. The spandrel area directly above the central entrance bay has a concrete sign plate with incised lettering that reads "Venetian Hall." Fenestration on the second floor features six-over-one and three-over-one wood-sash windows arranged in pairs and in groups of three, topped by round-arch stone lintels with rosette motifs. The parapet features a series of Classical shields and swags.

Figure 4-7: Front Facade of Venetian Hall

The exterior of this building has good overall integrity, although elements of the original storefront materials are no longer extant. It does not display sufficient distinguishing architectural features to qualify as individually eligible for listing on the NRHP for its architecture. Instead, it is recommended for individual listing under Criterion A for its original

use as a social venue for area residents in the early 20th century. Local theater houses such as the Venetian Hall were jewels within the local communities. It is rare to see an early 20th century neighborhood social hall that retains its original storefronts and is set within a residential area of workers' housing, rather than along a commercial thoroughfare. The opening of Illinois Terra Cotta Works in the first half of the 20th century brought Italians to Kensington; the area gradually became a center of South Side Italian-American life with the establishment of Venetian Hall and the nearby San Antonio de Padua (patron saint of Venice) Roman Catholic Church.

Altgeld Gardens Historic District

This large public housing project was built between 1943–1945 and is shown in **Figure 4-8**. Designed by architects Naess & Murphy, it was originally comprised of 1,498 units located on over 190 acres. Altgeld Gardens is mainly comprised of two-story buildings that are topped with side gable roofs covered in asphalt shingles. The buildings are clad in brick with stepped parapet walls along the gable elevations. A series of single entry doors are located on the front facade. A combination of original and replacement windows are found throughout the complex. Groups of seven units are clustered around central courtyards.

This resource was determined eligible as a district in 1992 by IHPA under Criterion A for its association with community development, planning, and social history.

Figure 4-8: Photo of Altgeld Gardens

4.1.2 CHRS Orange-Rated Properties

Beyond the NRHP-eligible resources, four properties within the APE are identified as notable "Orange" in the CHRS, three of which have also been identified as NRHP-eligible:

- Fire Department Engine Company 93 at 324 W. 104th Street (NRHP-eligible, ID #3)
- Roseland Pumping Station at 351 W. 104th Street (NRHP-eligible, ID #4)
- Romanesque Revival-style church at 10920 S. Princeton Avenue (NRHP-eligible, ID #5)
- St. Salomea Church at 11800–11808 S. Indiana Avenue

These CHRS "Orange"-rated resources are protected by the City's 2003 Demolition-Delay Ordinance. As none of the CHRS "Orange"-rated resources are proposed for demolition under either the East or West Option, this ordinance is not discussed further.

4.2 Archaeological Resources

A records search was conducted by cultural resource specialists and no known archaeological sites exist within the APE. Although the landscape through which the transit lines would pass is developed, additional archaeological sites may remain undiscovered within protected locations such as parks and gardens. Once the project design has been further refined and before the Final EIS is published, archaeological investigations will occur within areas of ground disturbance for the selected option to determine whether potential resources are present. These investigations will follow the guidelines issued by the State of Illinois.

Section 5
Effects Determinations and Mitigation

5.1 Effect Analysis Thresholds

The NHPA establishes qualitative criteria that define whether a historic property would be subject to an adverse effect: when a project "may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" (36 CFR 800.5.a). Based on this regulatory framework, an adverse effect finding will be applied to any historic property that would be subject to one or more of the following (36 CFR 800.5.a.2):

- Physical destruction or damage to all or part of the archaeological resource or historic property
- Alteration that is inconsistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*
- Removal of the property from its historic location
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant features
- Change to the character of the property's use or the physical features within the property's setting that contribute to its significance
- Neglect of a property that causes deterioration
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation

Effects can be direct, indirect, or cumulative. If an adverse effect is found, the Federal Transit Administration (FTA) would consult with the Illinois Historic Preservation Agency (the SHPO for Illinois) and other interested parties to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on the resource (36 CFR 800.6.a).

Effects determinations from the No Build and Build Alternative are provided below.

5.2 No Build Alternative

No adverse effects on historic and cultural resources would result from implementation of the No Build Alternative; therefore, no mitigation measures would be required.

5.3 Build Alternative – UPRR Alternative

Table 5-1 summarizes the effects findings for each historic resource in the APE for both the East and West Options.

Table 5-1: NRHP-Eligible Resources in the Area of Potential Effects - Union Pacific Railroad Alternative East and West Options

ID	Description	Union Pacific Railroad Alternative East Option Effects Finding	Union Pacific Railroad Alternative West Option Effects Finding
1	Eclectic Neo-Traditional Home	No Historic Properties Affected	No Historic Properties Affected
2	Fire Department Engine Company 93	No Historic Properties Affected	No Historic Properties Affected
3	Roseland Pumping Station	No Adverse Effect	No Historic Properties Affected
4	Romanesque Revival-Style Church	No Historic Properties Affected	No Historic Properties Affected
5	Roseland Community Hospital Nurses Home	No Historic Properties Affected	No Historic Properties Affected
6	Former Venetian Hall	No Historic Properties Affected	No Historic Properties Affected
7	Altgeld Gardens Historic District	No Historic Properties Affected	No Historic Properties Affected

NRHP = National Register of Historic Places

5.3.1 East Option

The East Option would cause displacements and visual, noise, and other environmental effects within the APE, but none of these effects would alter the characteristics that qualify any of the identified historic resources for inclusion on the NRHP. No mitigation measures would be required. Because none of the NRHP-eligible resources in the APE would be directly affected (they would not be displaced), each resource was evaluated for potential visual effects from the aerial structure, stations, and parking facilities.

Figure 5-1 is a photo simulation of the East Option track structure adjacent to the Roseland Pumping Station. Although the track structure would be approximately 9 feet west of the Roseland Pumping Station at its nearest point, the East Option is anticipated to have no adverse effect. The pumping station would not be displaced or directly affected by the UPRR Alternative. The resource was recommended eligible under Criterion C for its architecture as an excellent example of a well-preserved community pumping station designed in the Prairie Style that still functions in its original use. The building retains much of its original design, materials, and workmanship, including its projecting two-story flat-roofed entrance pavilion with geometric limestone details and coping. The proposed project would not affect these characteristics and would preserve the property's entrance approach. The changes in setting and feeling brought on by the proposed project would not detract from the architectural aspects of the building that qualify the resource as eligible for NRHP listing. Pile-driving activities would be avoided in the vicinity of the pumping station.

Figure 5-1: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue

The 130th Street station would be approximately 800 feet from Altgeld Gardens Historic District at its closest point and the parking garage at the 130th Street station would be located at a distance away from Altgeld Gardens where the size of the structure would not create a visual impact; therefore, the 130th Street station and parking garage would not affect the Altgeld Gardens Historic District. **Figure 5-2** shows a view of the 130th Street station and parking structure from Altgeld Gardens.

Figure 5-2: Photo of Existing Conditions and Photo Simulation of the 130th Street Station and Parking Garage, Facing Northeast on 130th Place

5.3.2 West Option

Like the East Option, the West Option would cause displacements and visual, noise, and other environmental effects within the APE, but none of these effects would alter the characteristics that qualify any of the identified historic resources for inclusion on the NRHP. No mitigation measures would be required.

Section 6
Consultation Process

In accordance with requirements for consultation established in Section 106 of the NHPA, three distinct rounds of coordination occurred during the RLE Project: initiation activities, identification of historic properties, and assessment of effects. Because there would be no adverse effects as a result of this project, no additional coordination for resolution of adverse effects was needed. Each outreach effort is described in the following sections. **Attachment 3** contains copies of meeting notes from each of these meetings, comments received from consulting parties, and responses to comments.

6.1 Initiation Activities

6.1.1 Invitations to Participate

In August 2012, FTA sent invitation letters to 11 Native American tribes to inform them of the process and request assistance in identifying areas with potential cultural and/or religious significance. Also in August 2012, CTA sent invitation letters to 19 state and local preservation interest groups to inform them of the project and invite them to participate in the upcoming consultation process. FTA and CTA sent invitation letters to the following recipients:

Native American Tribes
- Ho-Chunk Nation
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Sac and Fox Nation of Oklahoma
- Pokagon Band of Potawatomi Indians
- Prairie Band of the Potawatomi Nation
- Citizen Potawatomi Nation
- Forest County Potawatomi Nation
- Potawatomi Nation
- Sac and Fox Nation of Mississippi in Iowa
- Sac and Fox Nation of Missouri

State and Local Preservation Groups
- SHPO
- Advisory Council on Historic Preservation
- Illinois State Museum
- Illinois State Archaeological Survey
- City of Chicago Department of Planning and Development's Historic Preservation Division
- Preservation Chicago
- Landmarks Illinois
- Chicago Historical Society
- Ridge Historical Society
- Beverly Area Planning Association
- East Beverly Association
- Rosemoor Community Association
- Cottage Grove Cottage Grove Heights Community Coalition
- Historic Pullman Foundation
- South Suburban Genealogical and Historical Society
- Chicago Neighborhood Initiatives
- Neighborhood Housing Services of Chicago
- Mercy Housing Lakefront
- Friends of the Parks

At present, 11 groups are participating in the process. The consulting parties include the SHPO, the City of Chicago Department of Planning and Development's Historic Preservation Division, Preservation Chicago, Landmarks Illinois, the Ridge Historical Society, the Rosemoor Community Association, Friends of the Parks, Chicago Neighborhood Initiatives, Neighborhood Housing Services of Chicago, DCP, and the Chicago Park District.

6.1.2 Section 106 Kickoff Webinar

On October 24, 2012, FTA and CTA held a webinar on RLE historic properties to introduce the project and initiate the consultation process. During the eligibility phase of consultation, properties and districts that were identified as eligible for listing on the NRHP were discussed. Properties over 50 years old in the APE were evaluated to determine whether they are NRHP-eligible under one of the four National Park Service Criteria for Evaluation.

6.2 Identification of Historic Properties

FTA and CTA provided draft materials on the identification of NRHP-eligible properties to consulting parties on January 4, 2013, in compliance with Section 106 of the NHPA. A 30-day comment period followed, with an in-person meeting on January 30, 2013 to facilitate discussion among consulting parties. The meeting was followed by an informal tour of the corridor that afternoon. As part of this phase of coordination, CTA received written comments from six consulting parties.

Comments received from consulting parties in regards to eligibility focused on requesting additional surveys of resources, potential districts that should be considered recommended as eligible, reconsideration of surveyed properties and their eligibility, and the importance of looking at resources in the historical/social context.

As part of the eligibility phase, CTA surveyed 541 potentially eligible resources within the APEs for all alternatives being studied at the time (BRT, UPRR, and Halsted Alternatives). As a result of the field investigations and comments received from consulting parties on potentially eligible resources, for all alternatives, 15 total resources were identified as eligible for inclusion on the NRHP, including 13 individual buildings and 2 historic districts.

Specifically for the UPRR Alternative, CTA surveyed 280 potentially eligible resources within the UPRR Alternative APE. As a result of the field investigations and comments received from consulting parties on potentially eligible resources, for the UPRR Alternative, 7 total resources were identified as eligible for inclusion on the NRHP, including 6 individual buildings and 1 historic district.

6.3 Assessment of Effects

FTA and CTA mailed a Draft Effects Report to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. On May 8, 2014, FTA and CTA met with consulting parties to discuss potential project effects on NRHP-eligible historic properties. CTA received written comments from four consulting parties.

Comments received from consulting parties in regards to assessments of effect included eligibility reconsiderations, effects reconsiderations, and requests for renderings for properties in the APE. Comments also related to effects associated with the Halsted Alternative and 130th Street West Station Option, both of which have been eliminated from further consideration.

As discussed above in Section 2, in August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. Additional conceptual engineering was conducted on the UPRR Alternative to refine the East and West Option alignments. In addition, CTA is now considering only the South Station Option of the 130th Street Station. Further details on the alternatives evaluated and eliminated through the Draft EIS process are provided in **Attachment 1**.

CTA provided responses to all consulting party comments received in May 2014 on November 23, 2014. Responses noted that the alternatives had been further narrowed and that the UPRR Alternative (East and West Options) were proposed to move forward as the NEPA Preferred Alternative. The consulting parties requested renderings at the Roseland Pumping Station and the 130th Street station near Altgeld Gardens, which are included in the Draft EIS.

6.4 Resolution of Adverse Effects

Based on the assessment of effects and review of consulting party comments, CTA recommends that no adverse effects on historic resources would occur because of the RLE Project (East or West

Option); no mitigation measures would be required and therefore consultation with consulting parties is complete. Coordination with the SHPO will continue through the remainder of the project.

Attachments

Attachment 1: Alternatives Development Process

Attachment 2: Historic Survey Inventory Sheets

Attachment 3: Section 106 Consultation Supporting Documentation

Attachment 1
Alternatives Development Process

CTA began developing the alternatives studied in the Draft EIS during the Alternatives Analysis (AA), which took place during 2006–2009. Starting with multiple modes and corridor options, CTA developed and screened alternatives through a combination of conceptual engineering, public input (open house and stakeholder meetings), and preliminary analysis of potential impacts and costs. A three-level, detailed screening process was used to evaluate the alternatives and identify an LPA. The LPA Report provides detailed documentation of the Screen 1, Screen 2, and Screen 3 evaluations.

The Screen 1 evaluation began by identifying the universe of alternatives, which included a wide range of transit modes (such as bus, rail, or streetcar), project area corridors, and profiles (where the transit line is in relation to the ground). Combinations of 11 modes, 9 corridors, and 4 profiles were evaluated against the purpose and need. Based on this evaluation, the following alternatives were carried forward for further analysis in Screen 2: two bus rapid transit (BRT) alternatives along Halsted Street and Michigan Avenue; six heavy rail transit (HRT) alternatives along Halsted Street, the Union Pacific Railroad (UPRR), and Michigan Avenue; the No Build Alternative; and a "low cost" alternative (formerly required for FTA analyses known as the Transportation System Management [TSM] Alternative).

The alternatives carried through to the Screen 2 evaluation were more thoroughly defined to include mapping of a more defined alignment, identification of potential station locations, and preliminary service plans. Station spacing was determined by the type of alternative proposed, project area needs, and consistency with the purpose and need. The eight evaluation factors for the Screen 2 included a mix of qualitative and quantitative factors intended to further evaluate the performance of each alternative with respect to the project goals and objectives. Specific evaluation factors included physical constraints; right-of-way requirements; social and economic factors; demographics and employment; environmental factors; noise, visual, natural, and cultural resource impacts; transportation factors; and travel time, transit connectivity, and traffic.

Based on the results of the Screen 2 evaluation, a BRT alternative along Halsted Street (operating on dedicated lanes), two HRT alternatives along Halsted Street and the UPRR, the No Build Alternative, and the TSM Alternative were recommended for further evaluation in Screen 3. In addition to the alternatives carried forward from the Screen 2 evaluation and based on discussions with FTA, CTA combined the TSM Alternative with a BRT alternative (operating on existing right-of-way rather than dedicated lanes as proposed in Screen 2) along Michigan Avenue to form a single alternative (called the BRT Alternative) for evaluation in Screen 3. Because the Michigan Avenue BRT Alternative would operate in the existing right-of-way, it would require fewer property acquisitions than BRT on dedicated lanes. Screen 3 was a two-step evaluation process that included the further definition and refinement of alternatives, including conceptual design and the evaluation of these alternatives. Nine evaluation factors were used to evaluate the alternatives as part of Screen 3, including physical constraints, public support, social and

economic factors, environmental factors, transportation factors, capital cost comparison, operating and maintenance cost comparison, ridership potential, and FTA's Cost Effectiveness Index. The result of the Screen 3 evaluation was a recommendation for the LPA: the UPRR Alternative.

Based on the results of the AA and considerable public support for the corridor, including a 2004 referendum where 38,000 residents in the 9th and 34th Wards supported the UPRR corridor for the RLE Project, the UPRR Alternative was recommended as the LPA, indicating that it is the alternative that would best meet the purpose and need of the project while addressing potential impacts and other potential constraints. The UPRR Alternative would provide access to the most densely populated portions of the study area, which are primarily residential and transit supportive. The Chicago Transit Board designated the UPRR Alternative as the LPA on August 12, 2009. **Figure 1** summarizes the AA process.

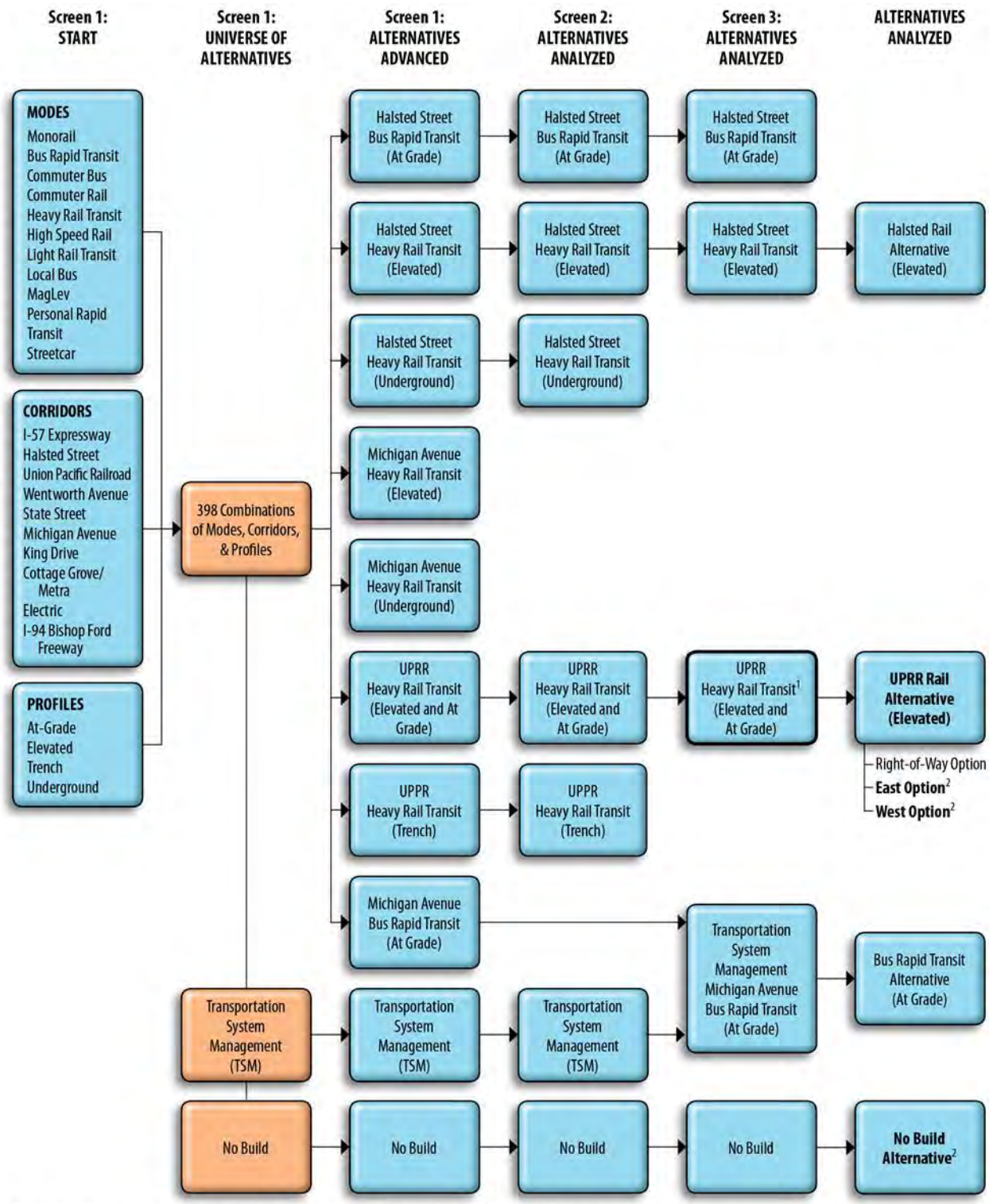

[1]The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009.
[2]This Draft EIS presents impacts of the No Build Alternative and two options of the UPRR Rail Alternative: the East Option and the West Option.

EIS = Environmental Impact Statement, UPRR = Union Pacific Railroad

Figure 1: Alternatives Development Summary

After the AA, CTA further refined the alternatives for presentation during the NEPA scoping process and study in the Draft EIS. At the conclusion of the AA process, the UPRR Alternative was anticipated to be located adjacent to the east or west edge of the UPRR right-of-way. In 2012, CTA learned of a Chicago Department of Transportation (CDOT) feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. By moving UPRR freight operations out of the existing UPRR corridor, CTA could use the existing UPRR right-of-way for the RLE Project. CTA evaluated this new option of the UPRR Alternative, known as the Right-of-Way Option, in preparation of the Draft EIS. Subsequent coordination between local agencies and the railroads indicated that relocating UPRR freight operations from this corridor presents considerable challenges and would not be feasible.

During 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the BRT Alternative (along Michigan Avenue), the UPRR Alternative, and the Halsted Alternative. CTA evaluated three options for the UPRR Alternative: the Right-of-Way Option, East Option, and West Option. CTA also evaluated two options for the UPRR Alternative 130th Street station: a South Station Option and a West Station Option.

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Alternative. CTA has chosen to move forward with the South Station Option at 130th Street based on technical analysis and public feedback. Additional information about the BRT Alternative, UPRR Right-of-Way Option, UPRR West Station Option for the 130th Street station, and Halsted Alternative is presented below in the discussion of alternatives considered but not pursued.

Alternatives Considered but Not Pursued

During development of the project, CTA fully evaluated the BRT Alternative, the Right-of-Way Option for the UPRR Alternative, and the Halsted Rail Alternative (Halsted Alternative). In addition, CTA fully evaluated a West Station Option for the 130th Street station. These alternatives and the station option were analyzed as part of the technical memoranda preparation for the Draft EIS, but are not included in the Draft EIS. They were eliminated from analysis based on public input, technical constraints, potential impacts, and the extent to which they met the project's purpose and need.

CTA also evaluated a variation of the UPRR Alternative where the tracks would be at grade rather than elevated, described below.

Bus Rapid Transit Alternative

CTA considered a BRT Alternative along Michigan Avenue between 95th Street Terminal and Altgeld Gardens. This limited-stop enhanced bus route along the existing #34 South Michigan Avenue bus route would have transit signal priority along Michigan Avenue. The alternative included four stops, each with park & ride facilities. Although the BRT Alternative was a lower-cost alternative than the UPRR Alternative, it was eliminated in August 2014 based on public feedback including the following concerns:

- The BRT Alternative would have minimal travel time improvements compared to the No Build Alternative (23 minutes from 130th Street to 95th Street under the BRT Alternative, compared to 28 minutes for existing conditions or 14 minutes for the UPRR Alternative over the same distance).
- Approximately 1 million riders per year were anticipated for the BRT Alternative (in comparison to 13 million riders per year anticipated for the UPRR Alternative).
- The BRT buses would not have traveled on a dedicated lane along Michigan Avenue because of limited right-of-way. Although transit signal priority was planned, additional travel time savings would not have been realized without dedicated lanes for BRT buses.

Union Pacific Railroad Alternative

The Draft EIS summarizes the benefits and impacts of the East and West Options. In preparation of the Draft EIS, CTA fully evaluated the Right-of-Way Option and the 130th Street Station West Station Option. CTA also considered an at-grade (rather than elevated) track structure for the UPRR Alternative.

Right-of-Way Option

As part of the UPRR Right-of-Way Option, the elevated CTA structure would have been placed in the UPRR right-of-way. This option was added in 2012 in response to the CDOT feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible. Estimated travel times and ridership were the same for the Right-of-Way Option as for the East and West Options. Because the elevated CTA structure would have been placed in the UPRR right-of-way, the Right-of-Way Option would have resulted in fewer displaced properties than either the East or West Option.

130th Street Station - West Station Option

CTA initially considered two options for the 130th Street station: a South Station Option and a West Station Option. The South Station Option would be located immediately west of the

Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way at 130th Street. The West Station Option would be located along the north side of 130th Street at Evans Avenue. Pedestrians from Altgeld Gardens would access the West Station Option through a pedestrian crosswalk on 130th Street. A traffic signal would be required at this intersection to allow pedestrians to safely cross 130th Street.

The South Station Option is supported by the community and the Chicago Housing Authority because it would be more accessible from Altgeld Gardens. The West Station Option would incur additional costs because it would require approximately 1,100 feet of additional track due to its location, and would require intersection improvements to allow pedestrians to safely cross the street. The South Station Option would provide the best opportunity for a future connection to NICTD, improving regional rail connections and linkages to other modes of public transportation. Based on public feedback and technical analysis, CTA is considering only the South Station Option for 130th Street station.

At-Grade Track Structure

CTA considered a variation of the UPRR Alternative in which the RLE tracks would run at grade along the UPRR rail corridor (between I-57 and Prairie Avenue). In this variation, the existing east-west roadways would run either above or below the new at-grade CTA tracks and the existing at-grade UPRR tracks. Like the proposed UPRR Alternative, this variation would be elevated from the 95th Street Terminal to south of I-57, then at grade from I-57 to Prairie Avenue, elevated to cross the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street, then at grade near the proposed yard and shop and 130th Street station. CTA evaluated potential impacts and cost implications to run the east-west roadways both above (using overpasses) and below (using underpasses) the at-grade UPRR tracks and the proposed at-grade CTA tracks.

Roadway Overpasses

For an at-grade track structure, one option would be to use overpasses to carry roadways over the tracks. If roadway overpasses were used, they would need to be constructed at eight locations. More than 100 properties (primarily residential homes) would be displaced due to the overpass footprint, elimination of access to existing alleyways or driveways, and proximity of the embankment structure to the residential homes. The overpass structure and associated embankment could be as high as 30 feet, creating a substantial visual impact on the adjacent one-story residential buildings. In addition, permanent north-south residential street closures would be required where the streets would intersect with the embankment, which would disrupt neighborhood connectivity. Utilities that currently run within the street rights-of-way would have to be relocated. The potential construction cost savings between the elevated track structure and the at-grade structure would be insignificant when the cost of additional right-of-way acquisition and utility relocations is included. Roadway overpasses would also increase community impacts.

Roadway Underpasses

A second option for an at-grade track structure would be to use underpasses to carry roadways under the tracks. If underpasses were used, they would need to be constructed at eight locations. The underpass variation would have property displacements and community impacts similar to

those of the roadway overpass option except a large retaining wall would be located in front of the residential homes. Because the cost of a roadway underpass structure may be as much as double the cost of an overpass structure, this variation would provide no additional cost savings over the elevated track structure alternative and would have significantly more community impacts and right-of-way costs.

Based on the property displacements and community impacts that would be created by grade-separating the roadways from the proposed CTA tracks (through either roadway overpasses or underpasses), CTA eliminated this variation from further consideration.

Halsted Alternative

CTA considered the Halsted Alternative, which would extend the Red Line from 95th Street Terminal along I-57, and south along Halsted Avenue to Vermont Avenue on a new elevated structure. The Halsted Alternative would run above Halsted Avenue with center piers, except at the station locations where the structures would span Halsted Avenue. The Halsted Alternative would result in travel times similar to those of the UPRR Alternative. The alternative included four stations, each with park & ride facilities. Construction costs for the Halsted Alternative were approximately 6 percent higher than for the UPRR Alternative. The Halsted Alternative was eliminated in August 2014 based on technical analysis and public feedback including the following concerns:

- The Halsted Alternative would not have the potential for a direct connection to other regional transit services[2] like the UPRR Alternative would; therefore, it would not meet the purpose and need for the project.
- The Halsted Alternative would affect four historic resources, resulting in adverse effects on historic properties, while the UPRR Alternative would not affect any historic resources.
- The proposed seven-story parking structure at Vermont Avenue would result in adverse visual impacts because of its location within a neighborhood with single-family homes.
- The Halsted Alternative would not directly serve as many affordable housing locations in the project area as the UPRR Alternative would serve, including Altgeld Gardens.
- The public expressed concern that implementation of the Halsted Alternative would be disruptive to the surrounding community and would increase shadows, crime, and noise along the Halsted Street.

[2] Although the Halsted Alternative intersects the ME Blue Island branch, the southern terminus of that branch is less than 3 miles from the intersection at Halsted Street and is located just to the west of the project area. The northern terminus of the ME Blue Island branch is only two blocks from the Red Line in the Loop. Intersection with the ME Blue Island branch would not provide regional service.

- The Halsted Alternative did not receive the considerable public support before and during scoping in 2009 that the UPRR Alternative received.

Attachment 2
Historic Survey Inventory Sheets

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

418 W. 98th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1931

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
South façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick bungalow in the Washington Heights community is clad with tan face brick on its front elevation, common brick on its side elevations, and synthetic siding on its rear elevation. It has a steeply pitched hip roof covered with asphalt shingles and synthetic-clad, hip roof dormers with paired one-over-one windows on both the front and rear elevations. The front elevation has a recessed corner porch with round-arch opening, low brick sidewalls, and concrete steps. The residence also includes a door tucked into the side of the living room bay and four one-over-one windows, three of which are grouped together under a segmental arch. All windows are modern replacements with aluminum sashes. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (rear)	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Segmental arch, round arch porch opening			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

221 W. 98th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, split-level, single family residence.

Property Description: **Stories:** Spilt-level

This split-level home in the Roseland community is clad with buff brick and synthetic siding, has a shed roof with exposed rafters above its one-story section and a gable roof above its two-story section. It has centrally located wood double-doors topped by two large fixed-pane windows; other windows are arranged in groups of three along its front elevation. Windows are one-over-one aluminum-sash. This split-level home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable, shed	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

124 W. 99th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with glass block windows, is clad with buff brick, and has a hip roof covered with asphalt shingles and overhanging eaves. Its front elevation is fronted by a faux stone planter. It has an off-center door and sidelight comprised of glass blocks, two decorative glass block inserts, a picture window flanked by one-over-one aluminum-sash windows, and concrete steps behind a low faux stone wall. An attached two-car hip roof garage clad in the same buff brick is situated along the home's rear elevation. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Planter, glass block inserts, faux stone wall at entry			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Attached two-car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

401 W. 99th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a brick, two-story, single family residence

Property Description: **Stories:** 2

This two-story, brick clad house in the Washington Heights community is situated on a raised brick basement with glass block windows. The house has a hip roof covered with asphalt shingles. Its front elevation has a partial-width, hip roof, brick clad, enclosed porch with a metal storm door. It has concrete steps, metal railings, a pair of windows on the first floor and two single windows on the second floor. Windows throughout the house are non-original one-over-one aluminum-sash. Detailing includes concrete sills and orange brick banding that contrasts with the brown face brick cladding. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

314 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of split-level, single-family residence.

Property Description: **Stories:** Split-level

This back-split home in the Roseland community has a hip roof on both levels covered with asphalt shingles. The front elevation is clad with faux stone below the concrete sill line and brown brick above. This elevation has an off-center hollow core metal door, a picture window flanked by one-over-one aluminum-sash windows, and two decorative glass block inserts. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (lower façade)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Glass block inserts			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

319 W. 100th Place

Alternate: 321 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, single-family residence.

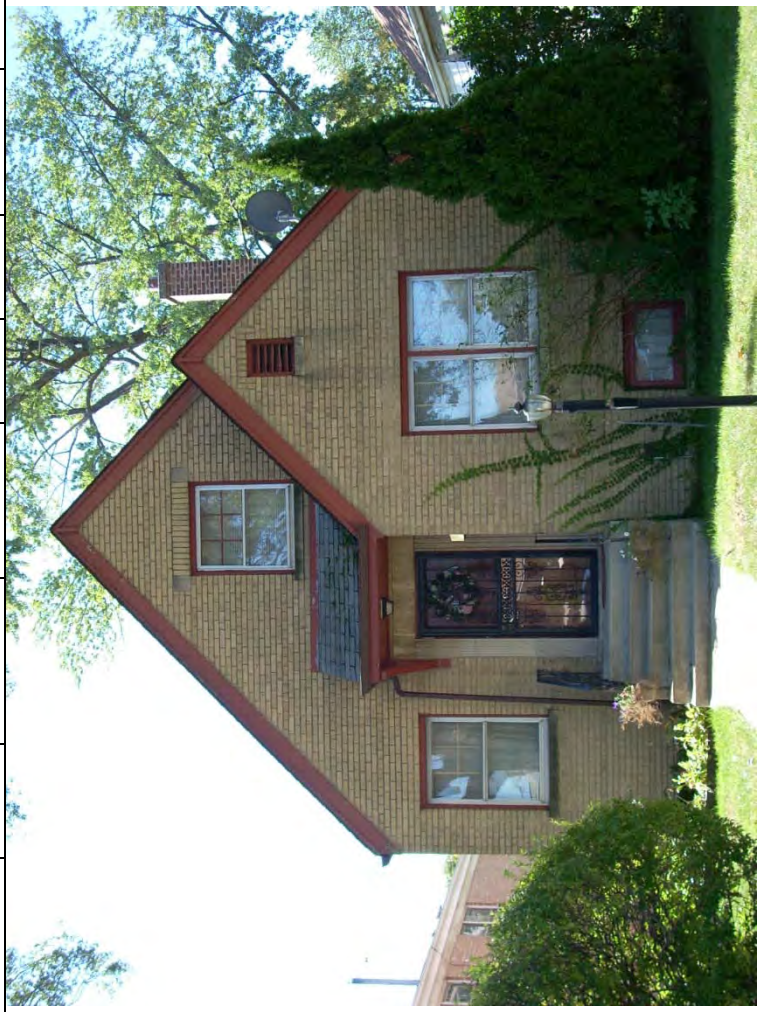

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised brick basement and has a front gable roof covered with asphalt shingles. Its front elevation is clad with buff brick and has a projecting gabled living room bay. This elevation also has a centrally located entrance with a metal storm door, concrete steps, metal railings, a bracketed shed-roofed door hood, and four six-over-one windows: three on the first floor and one in the gable. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete sills			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

435 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is clad with polychromatic brick and has a side-gabled roof covered with asphalt shingles. End gable walls are clad in aluminum siding. Its front elevation features a gabled pavilion with a strip of three non-original one-over-one aluminum-sash windows and a gabled entrance vestibule featuring a wood door with diamond pane window, concrete steps, and metal railings. A single non-original one-over-one aluminum-sash window is located in the corner of the front elevation. A small ventilating louver is situated in the gable. Detailing includes concrete sills and lintels with keystones. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding in gable ends
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Side gable	
Ornamental Architectural Details Concrete sills and lintels with keystones			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

444 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Eclectic Neo-Traditional

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a brick one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community sits on a raised basement. It is clad with polychromatic brick and has a side gabled roof covered with asphalt shingles. Its front elevation has a gabled living room bay pavilion with paired basement windows that appear to be casements. There is a group of three non-original one-over-one windows with concrete sills and brick arch lintels that are separated by colonettes with acanthus leaf capitals. A small round-arched window is located in the gable. The house has a recessed corner porch with a metal storm door, round-arch openings, a Neo-Gothic castellated top, concrete steps, and brick sidewalls. This house has very good integrity in terms of its materials and detailing, and its Eclectic Neo-Traditional ornamentation makes it stand out among the vernacular, stripped-down brick and frame bungalows and cottages that comprise the predominant building stock in the Washington Heights community. As a result, it is recommended as individually eligible for National Register listing under Criterion C for architecture.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Castellated porch roofline	**Roof Type** Gable	
Ornamental Architectural Details Concrete sills, brick arched lintels, colonettes, arched window with keystone, stone insets, decorative brickwork, porch with castellated roofline			**Windows** Double-hung, fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** The Eclectic Neo-Traditional ornamentation stands out among the vernacular, stripped-down brick and frame residences that comprise the predominant building stock in the Washington Heights community.

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

318 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, brick, single family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story brick-clad home has a steeply pitched side gable roof covered with asphalt shingles, an exterior brick chimney, and two aluminum-clad shed dormers, each of which has a single one-over-one aluminum-sash window (non-original). Its front elevation has a centrally located gabled front vestibule with brick quoins, a door with wood surround and pediment, and concrete steps with metal railings. The entrance is flanked by three-sided window bays, which feature six-over-one windows with decorative brick corbelling beneath. It does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, dormer windows, and siding
Condition: Excellent Good Poor			
Additional Alterations Dormers may be post-construction addition.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side gable	
Ornamental Architectural Details Brick quoins and corbelling; stone quoins and inserts			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

426 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1943

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story house in the Washington Heights community is situated on a raised basement that is covered with siding and has glass block windows. The house is clad with synthetic siding and has a hip roof covered with asphalt shingles, overhanging eaves, and gable dormers on the front and side elevations. Its front elevation has an off-center hollow-core metal door and a partial-width hip-roof porch with wood steps and open metal supports. There are three windows on the first floor and two in its gabled wall dormer, all of which are non-original one-over-one aluminum-sash. This house lacks integrity, does not display distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

430 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and west façades of a one-story, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the Washington Heights community sits on a raised basement with glass block windows. It has a hip roof covered with asphalt shingles. Its front elevation is clad with faux stone and its side and rear elevations are clad with synthetic siding and stucco. Its front elevation has a partial-width gabled porch with concrete steps and non-original open metal supports. It also has an off-center entrance with a metal storm door and two non-original one-over-one aluminum-sash windows. This house lacks integrity, does not feature distinguishing architectural elements, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch supports, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (sides), faux stone (façade), stucco (sides)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

334 W. 101st Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a hip roof covered with asphalt shingles and a projecting gable-roofed living room. The front elevation is clad with brownish-orange face brick. Its off-center entrance features a metal storm door and a porch with concrete steps, metal railings and open metal posts supporting a metal awning. The front elevation has a window grouping that is partially obscured by a low metal canopy but appears to be a picture window flanked by double-hung windows. The side elevations are clad with common brick. Detailing includes a brick arch with stone keystone above the front elevation window group and stone blocks surrounding the door. This house does not feature sufficient distinguishing architectural elements to be individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick arch with stone keystone, stone blocks at entrance			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 101st Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 4 September 2012

Photos with Captions:
North façade of brick, single family residence.

Property Description: **Stories:** 1

This one-story house has gable front roof covered with asphalt shingles. Its front façade is sheltered by an overhang and is clad orange face brick, stone, and clapboards. A bow window with casements fronts the street façade. The off-center metal core door is accessed via a concrete stoop with metal hand rails. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick and stone (façade), clapboard (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

331 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a side gable roof covered with asphalt shingles. It is clad with brick on the first floor and with synthetic siding in the gables. The front elevation has a gabled projecting living room, an off-center door with concrete steps and metal railings, a picture window flanked by non-original one-over-one aluminum-sash windows, and a single non-original one-over-one aluminum-sash window. Detailing includes stone insert blocks flanking the door and several decorative glass insert blocks. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows on street elevation
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Side-gable	
Ornamental Architectural Details Stone insert blocks around door, decorative glass insert blocks			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

342 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of two-story, brick, single-family residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised brick basement and has a hip roof covered with asphalt shingles. Its front elevation is clad with buff brick. This elevation has an off-center hollow core metal door, a porch with concrete steps and metal railings, open metal supports, and a metal awning roof. It has a three-sided first floor bay with central multi-light fixed-pane window flanked by non-original one-over-one aluminum-sash windows and two non-original one-over-one aluminum-sash windows on the second floor. Detailing includes brick quoins and faux stone insert blocks flanking the door and beneath the window bay. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick quoins, faux stone insert blocks			**Windows** Double hung, fixed-pane
Outbuildings (*Number and Description*) Storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of brick, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in brown face brick and common brick along its front and side elevations, respectively. It has a hip roof covered with asphalt shingles. Its front elevation has an off-center door and a porch with concrete steps, metal railings, open metal supports, and metal awning roof. The front façade features a strip of three non-original one-over-one windows with concrete sills and a gable dormer with two single-pane windows. Glass block windows provide light in the basement. This building lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 4 September 2012

Photos with Captions:
North and west façades of a one-story, brick single family residence.

Property Description: **Stories:** 1

This one-story house is situated on a raised basement. It has a rectangular footprint, a hip roof covered with asphalt shingles, and a hip roof dormer with paired windows. Its front façade is clad in brown face brick with concrete block inserts and has a strip of three three-over-one windows. Its off-center metal core door is accessed via a short flight of concrete steps with metal railings. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete block inserts			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 4 September 2012

Photos with Captions:
South and east façades of one-story, brick story single family residence.

Property Description: **Stories:** 1

This one-story house is situated on a raised basement. It has a rectangular footprint, a hip roof covered with asphalt shingles, and overhanging eaves. Its front façade is clad in buff face brick and has a strip of three windows, which appears to be one large picture window flanked by double-hung windows, beneath a metal awing. The off-center metal core front door is accessed via a flight of concrete steps with metal railings. Two large decorative glass blocks are situated next to the door. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Gablet	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

330 W. 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community has a hip roof covered with asphalt shingles and a hip dormer with a non-original one-over-one aluminum-sash window. The front elevation is clad with light brown face brick and has a hip-roofed porch with brick sidewalls, concrete steps, short wood Doric columns and frieze band. This elevation also has a strip of three non-original one-over-one aluminum-sash windows. Detailing includes a stone sill course, a brick soldier course with stone insert blocks above the windows, and decorative scrolled stone brackets. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Doric columns and frieze band, stone sill course, brick soldier course with stone insert block, stone brackets			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 21 September 2012

Photos with Captions:
South and west façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in Roseland is clad in synthetic siding, sits atop a raised basement, and has a front gable roof covered with asphalt shingles. The front elevation features a projecting, enclosed, gable roofed sun porch also clad in synthetic siding with one-over-one windows and an off-center front door accessed by a flight of concrete steps with metal railings. This home does not have distinguishing architectural features and is covered with synthetic siding, both of which preclude it from individual listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

416 W. 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and east façades of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised basement with glass block windows. It is clad with brown brick and has a hip roof covered with asphalt shingles and overhanging eaves. There are hip-on-gable dormers on the front and side elevations, each of which has a strip of non-original one-over-one aluminum-sash windows. The house features a recessed corner porch with a single-light oak door, concrete steps, low brick sidewalls, and a brick corner pier. The front elevation's rounded living room bay has a series of casement windows and transoms. Detailing includes a brickwork soldier course above windows with decorative stone insert blocks and concrete sills. This is a good example of a brick Chicago Style Bungalow, a building type that was produced in the thousands throughout the city's undeveloped areas and in nearby suburbs during the 1910s and 1920s. This house does not feature sufficient distinguishing architectural features to be individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier courses above windows, stone insert blocks, concrete sills			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

320 W 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding, has a hip-on-gable roof covered with asphalt shingles, and has overhanging eaves in front with aluminum soffits. The front elevation features a recessed corner porch with wood steps, railings, and corner post. A pair of casement windows is located within the porch. There is a strip of four windows on the first floor and a pair of windows in the gable. All windows are non-original one-over-one aluminum-sash. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

337 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a hip-on-gable roof covered with asphalt shingles. The front elevation features a recessed porch with concrete steps, metal railings, and a corner support consisting of a faux stone pier with open metal post above. This elevation also has overhanging eaves with aluminum soffits and decorative exposed rafters, an off-center recessed door with a metal storm door, and a strip of three windows on the first floor and a pair of windows in the gable, all of which are non-original one-over-one aluminum-sash. This residence does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

342 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1940

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, 1.5-story, single family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community has a cross-gable roof covered with asphalt shingles and is clad with brown face brick. Its front elevation has an off-center, gable roofed entrance vestibule with a metal storm door sheltered by a metal awning, concrete steps, metal railings, and paired double-hung windows on both the first and second floors that are partially obscured by low metal awnings. A one-story hip roof covered side entrance is situated along the west elevation. Detailing includes concrete sills, a keystone above the entrance, and brick soldier course lintels. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Cross-gable	
Ornamental Architectural Details Concrete sills, keystone above the entrance, brick soldier course lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: J. Martinez

Date: September 2012

Photos with Captions:
South façade of brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story, brick-clad house in Roseland has a square footprint and a hip roof covered with asphalt shingles. An off-center, projecting, gable-roofed vestibule with front door is accessed via a short flight of concrete steps with metal railings. The front elevation has a three-sided bay with a central eight-over-one window flanked by four-over-one windows, and the second floor has two one-over-one windows with wood shutters. Windows are modern replacements. Detailing includes brick banding on the second floor and concrete bands in the vestibule gable meant to simulate half-timbering. This house lacks architectural distinction; as a result, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete bands for half-timber look			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 102nd St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 21 September 2012

Photos with Captions:
South façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in synthetic siding and has a hipped roof with asphalt shingles and overhanging eaves. The front elevation features a centrally located front door flanked by two one-over-one aluminum-sash windows and has a hipped roof dormer with paired one-over-one windows. Windows are modern replacements; replacement windows in the dormer are smaller than the original windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

444 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Washington Heights community is situated on a raised concrete block basement. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation features a hip-roofed full-width screened-in porch with concrete steps, metal pipe railings, a faux stone base, and supports comprised of faux stone pedestals topped by squat Doric columns. A pair of windows sheltered by a metal awning is situated in the gable. A two-story, gable-roofed, bay pavilion is situated along one of the side elevations. Windows throughout the house are non-original one-over-one aluminum-sash. This house lacks integrity, does not display distinguishing architectural features, and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations Porch screened in			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

301 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1921

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East (Princeton) façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow is situated at the southwest corner of 103rd Place and Princeton Avenue in the Roseland community. It has a hip-on-gable roof covered with asphalt shingles and overhanging eaves with decorative knee braces located on the front gable section of the roof. The central portion of the house retains its original wood clapboard siding; the areas above and below are clad with wood shingles. Its 103rd Place elevation has a strip of three one-over-one windows, a strip of three casements, and a strip of three windows in the gable that appear to be casements. Its Princeton Street elevation has a metal storm door topped by a gabled hood with two knee braces, glass block basement windows, a strip of three one-over-one windows, a single one-over-one window, and a pair of casements. This house does not have sufficient distinguishing features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood clapboards and shingles	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Knee braces			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

306 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1941

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community is clad with synthetic siding, has a side-gabled roof covered with asphalt shingles, and has two gable dormers with double-hung multi-sash windows that are visually connected with aluminum siding. The front elevation has an off-center door covered with plywood and a Classical surround consisting of simple wood pilasters and unadorned entablature. The front elevation also has concrete steps with metal railings and paired windows that are covered with plywood. This home does not have distinguishing features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Side-gable	
Ornamental Architectural Details Pilasters at surround			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

321 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is clad with synthetic siding, has a hip roof covered with asphalt shingles, and a hip dormer with three one-over-one windows beneath a metal awning. The front elevation has a recessed corner porch with concrete steps, metal railings, and an open metal corner post. It also features an off-center entrance with metal storm door, a small casement window within the porch, and a large picture window beneath a metal awning. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

326 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of 1.5-story, multi-family, frame residence.

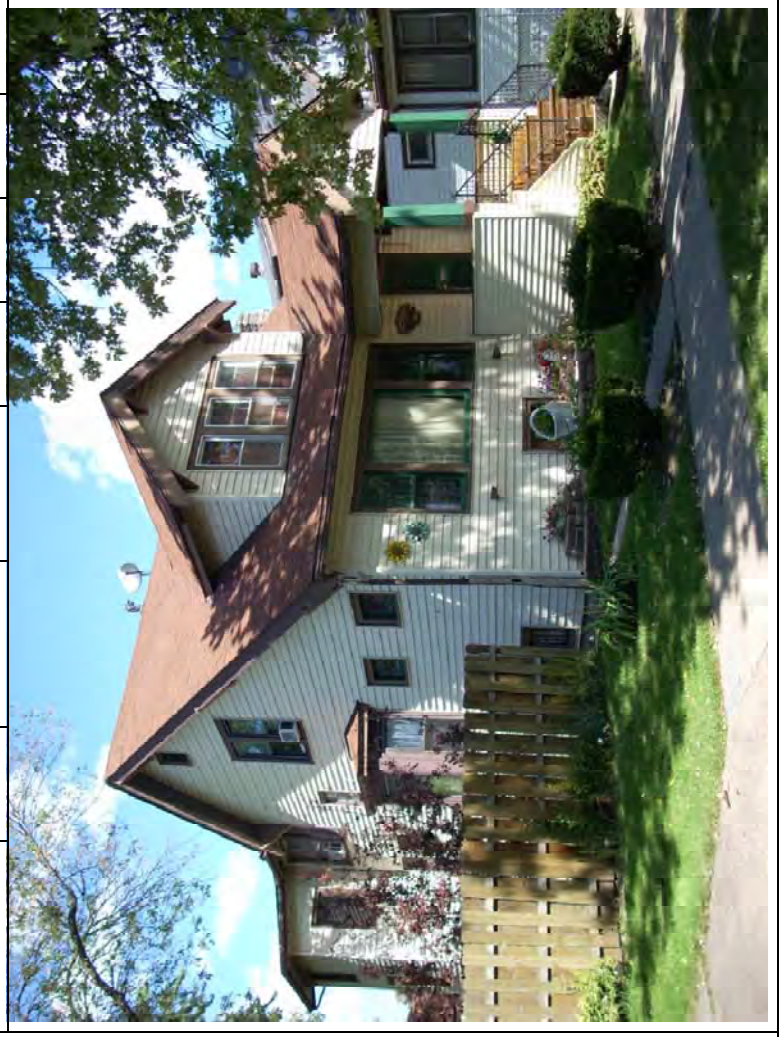

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised brick basement with glass block windows. It is clad with aluminum siding and has a side-gabled roof covered with asphalt shingles. The house also has a gable dormer with a strip of one-over-one windows and decorative knee braces. Its front elevation has a partial-width, off-center, gable-roofed, wood porch with two squat Doric column supports atop aluminum-clad sidewalls, a door with metal storm, and a picture window flanked by one-over-one windows. Its western elevation has a three-sided window bay as well as a large shed roofed addition. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations Shed roof addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side-gable	
Ornamental Architectural Details Doric columns, knee braces			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Two-car garage with hipped roof			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

426 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with faux stone and synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center entrance with metal storm door and a flat-roofed, partial-width porch with a wood deck, wooden steps, metal railings, and open metal posts. There is a strip of three windows on the first floor and three on the second. All windows are non-original one-over-one aluminum sash. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

427 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a 1.5-story, frame multi-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center, enclosed, gabled roof vestibule with a metal storm door and concrete steps with metal railings. There is a multi-paned bow window on the first floor and a pair of non-original one-over-one aluminum-sash windows in the gable. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

440 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a side-gabled roof covered with asphalt shingles. The front elevation has an off-center metal storm door topped by a metal awning, non-original wood steps and railings, and a pair of non-original one-over-one aluminum-sash windows. This house lacks integrity and any distinguishing architectural features and is not eligible for individual listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

455 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof porch with wood steps, boxed supports, and low aluminum-clad walls. This elevation also has an off-center hollow core metal paneled door with fanlight, a strip of three windows on the first floor, and a pair of windows in the gable. All windows above the raised basement are non-original one-over-one aluminum-sash. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Structural Survey

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

316 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and east façades of one-story, brick supermarket.

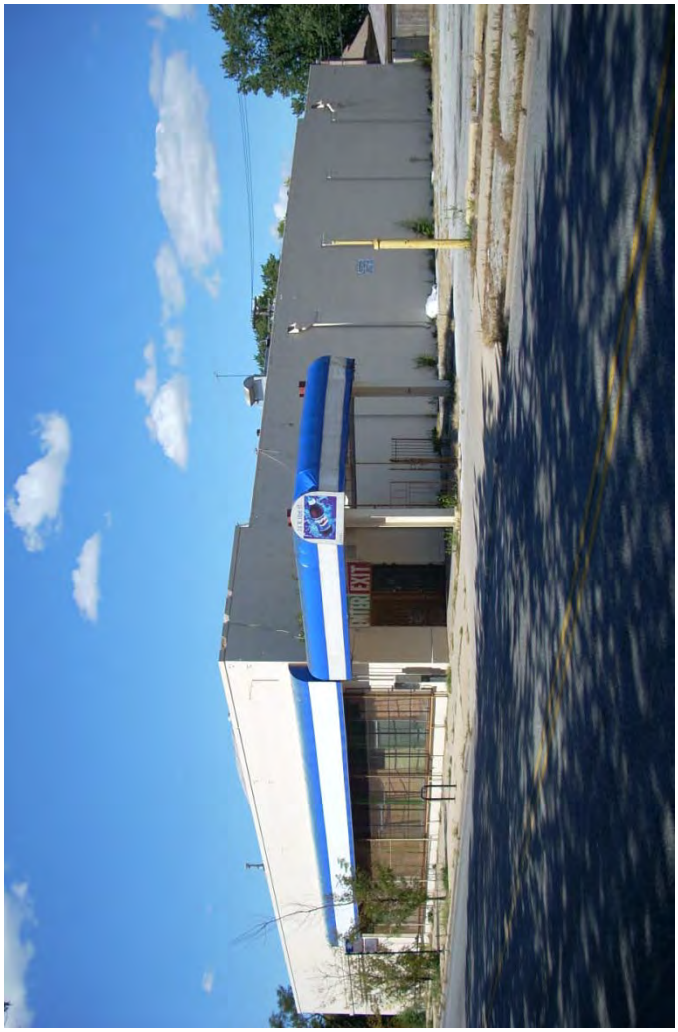

Property Description: **Stories:** 1

This one-story brick-clad former supermarket in the Roseland community has a flat roof, a parapet and a strip of large fixed-pane display windows along its 103rd Street elevation. It has a pair of doors along its east elevation, which are sheltered by a nylon canopy supported by two metal I-beam posts. This building does not have any distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name **Historic:** Not labeled, not in CHRS **Common/Current:** Unknown	**Photos with Captions:** North façade of one-story, brick property
Property address: 319 W. 103rd Street Alternate: 327 W. 103rd St	
HAARGIS Number: Not in database	
Present Owner and /or Occupant: Chazap Barber College	
Property Use **Historic:** Commercial **Current:** Educational	
Date of Construction: 1953 **Architect's Name:** Not in CHRS **Builder/Contractor:** Not in CHRS	
Architectural Style: Vernacular	
Prepared By: C. Tolmie, M. C. Bird, J. Guarino **Photo By:** S. Katz **Date:** 16 September 2012	

Property Description: **Stories:** 1

This one-story brick-clad barber college building in the Roseland community has a flat roof and parapet. A single course of limestone surrounds its former storefront area, which has been in-filled with red brick, a recessed entrance with metal door, and a continuous strip of glass block windows. The eastern end of the building's front elevation has a metal overhead door and a single glass door. This building does not feature sufficient integrity to be individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** In-filled windows, modified storefront
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Hay, Grain & Feed (1905)

Common/Current: Unknown

Property Address:

403-405 W. 103rd St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1900

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of a brick, commercial building.

Property Description: **Stories:** 2

The two-story commercial portion of this building is identified as a "Hay, Grain & Feed" shop in the 1905 Sanborn while the one-story portion is identified as used for related storage. The buildings were joined at a later date. Both are clad in brown face brick and have flat roofs and parapets. The two-story section has an off-center entrance with an original wood door, sidelights, transom, and a stone surround with cornice, as well as a metal cornice. The glass panes in the sidelights and door have been removed and their openings in-filled with wood. It has bay windows on the first and second floors and an additional window opening above the entrance bay. All windows are comprised of one-over-one wood-sash. Detailing includes brick banding and a stone cornice. The one-story part has altered door and window openings, including one large window opening that has been in-filled with glass blocks. Side elevations are clad in common brick. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some window openings in-filled with wood and glass block
Condition: Excellent Good Poor			
Additional Alterations Two buildings connected after 1905			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone cornice and surround at entrance, brick banding, metal cornice			**Windows** Glass block, double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

421 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and east façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center door, concrete steps and metal railings, and faux stone cladding below the first floor sill line and surrounding the door. There is a three-sided window bay on the first floor and a pair of windows in the gable. Both side elevations feature shed-roofed dormers. Windows throughout the house are non-original one-over-one aluminum-sash. This house does not feature sufficient integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement widows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

424 W. 103rd Street
Alternate: 440 W. 103rd Street (CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Loving Spirit M.B. Church

Property Use

Historic: Commercial

Current: Religious

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a two-story, frame, religious building.

Property Description: **Stories:** 2

This two-story frame building in the Washington Heights community has a gable roof covered with asphalt shingles that is obscured by a false front with faux stone siding and high stepped parapet. The first floor has two large window openings that are in-filled with glass block. The second floor has a non-original picture window flanked by one-over-one aluminum-sash windows. The building has a one-story flat-roofed wing. The wing's front elevation is clad with vertically laid wood boards above a brick base. It has a pair of non-original hollow core metal paneled doors with fanlights. The wing also features decorative modern angled wood pylons at its corner and along its side elevation. This building does not feature sufficient integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, brick, faux stone	
Roof Material Asphalt shingle	**Roof Features** Parapet	**Roof Type** Gable, flat	
Ornamental Architectural Details Stepped parapet			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

453 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1878

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, frame, single-family residence.

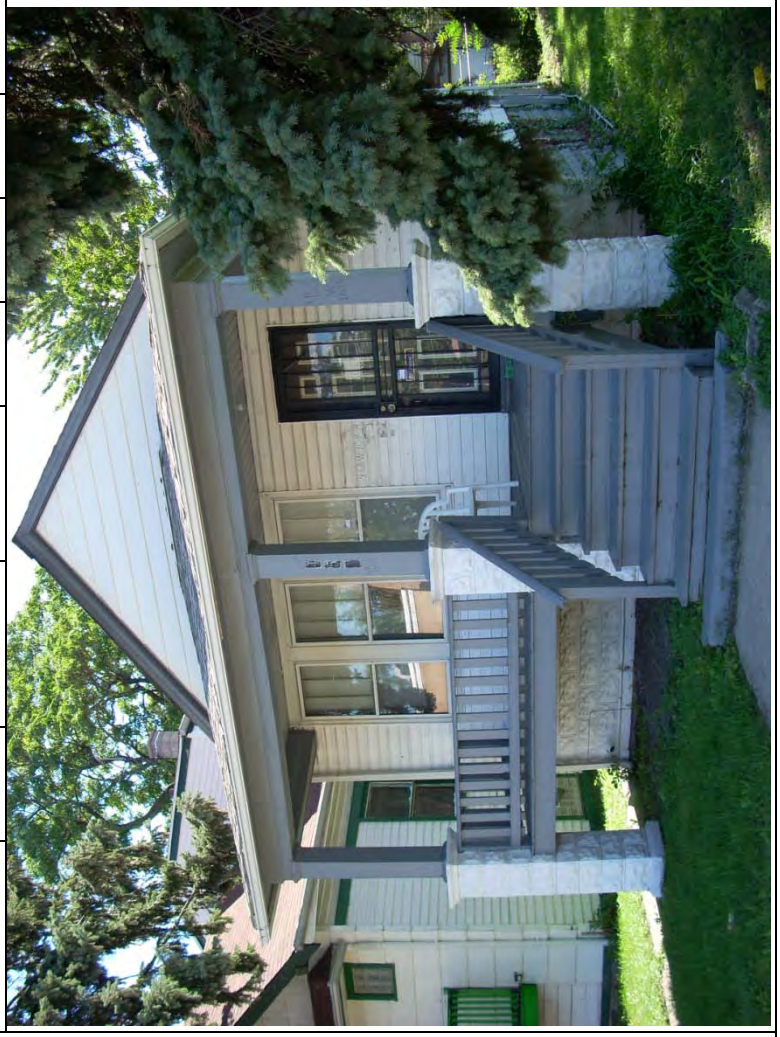

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community sits on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation features a full-width wood porch with wooden steps, wooden railing, and supports consisting of faux stone piers topped by squat, square columns. It has an off-center hollow core metal door and a strip of three non-original three-over-one windows. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Square columns			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

328 W. 104th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised basement and clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and overhanging eaves with decorative rafters. Its roof overhangs to shelter the full-width wood porch with supports consisting of low square wood columns atop synthetic-clad porch walls. The front elevation has an off-center non-original hollow core metal paneled door, a strip of three non-original double-hung windows, and an original wood casement window in the attic gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Exposed rafters, square columns on porch			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

335 W 104th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

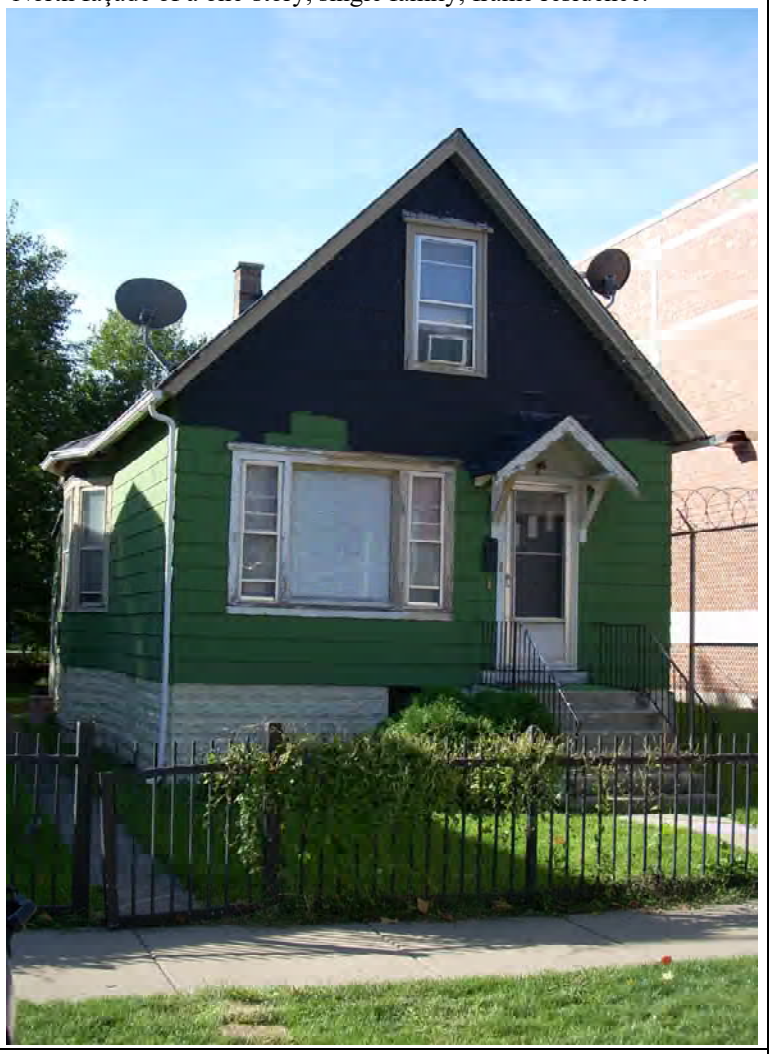

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with shingles. The building has a front gable roof covered with asphalt shingles. The front elevation has an off-center door with bracketed gable hood, concrete steps with metal railings, a picture window flanked by double-hung windows, and a non-original one-over-one window in the gable. The east elevation has a three-sided bay window. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations Some windows have aluminum storms			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood shingles	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed hood above entrance			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

310 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. The residence is clad with synthetic siding, has a hip roof covered with asphalt shingles, overhanging eaves, and a gable dormer with three original wood casement windows. The front elevation features a strip of four one-over-one wood-sash windows and a recessed corner porch with a hollow core metal door, an adjacent casement window, wood steps, metal railings, and a corner support consisting of a low faux stone pier topped by a short open metal post. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Chicago Fire Department. Engine Company #93

Property Address:

324 W. 104th Street
Alternate: 328-330 W. 104th Street

HAARGIS Number:

140602

Present Owner and /or Occupant:

Chicago Fire Department

Property Use

Historic: Public

Current: Public

Date of Construction: 1917

Architect's Name: Charles W. Kallal

Builder/Contractor: Butler & Co. General Contractors

Architectural Style:

Classical Revival

Prepared By: J. Martinez, M. C. Bird, J. Gaurino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
South façade of a brick, two-story, fire station (above), HAARGIS (below)

Property Description: **Stories:** 2

This two-story firehouse in the Roseland community is clad with light brown face brick and has a flat roof and a parapet with concrete coping. Its front elevation has a two-story projecting pavilion, an overhead garage door, two window openings, an off-center hollow core metal door on the first floor, and a strip of three windows and a single window on the second floor. All windows are non-original one-over-one aluminum sash. The spandrel area between the garage door and the windows above features a large stone sign plate inscribed with the words, “City of Chicago Fire Department.” The spandrel area between the corner door and window above has a metal plate identifying the 1917 construction date and the names of a series of people associated with the building’s construction, including the mayor, alderman, city architect, and contractor. Detailing includes stone door and window surrounds on the first floor, bracketed stone window lintels, concrete belt courses, and brick pilasters topped by stone panels with the City of Chicago’s “Y” motif and decorative scrolls. The “Y” motif is also situated above the off-center door. This building is

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

recommended as eligible for individual listing on the National Register under Criterion C for architecture. It is a rare extant example of an early twentieth-century neighborhood firehouse in Roseland, has largely retained its original building materials and detailing, and still functions as a firehouse.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping, stone sign plate, metal info plate, bracketed stone window lintels, concrete belt courses, brick pilasters with stone panels (including city motif and scrolls)			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Rare example of an early twentieth century firehouse in Roseland.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

325 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles. The front elevation has a recessed corner porch with wood steps, metal railings, and an open metal corner post. Additional features include a front door tucked into the side of the living room bay, a casement window, a strip of four non-original one-over-one aluminum-sash windows on the first floor, and a strip of three single-pane casement windows in the gable. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Chicago Fire Department. Engine Company #93

Property Address:

324 W. 104th Street
Alternate: 328-330 W. 104th Street

HAARGIS Number:

140602

Present Owner and /or Occupant:

Chicago Fire Department

Property Use

Historic: Public

Current: Public

Date of Construction: 1917

Architect's Name: Charles W. Kallal

Builder/Contractor: Butler & Co. General Contractors

Architectural Style:

Classical Revival

Prepared By: J. Martinez, M. C. Bird, J. Gaurino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
South façade of a brick, two-story, fire station (above), HAARGIS (below)

Property Description: **Stories:** 2

This two-story firehouse in the Roseland community is clad with light brown face brick and has a flat roof and a parapet with concrete coping. Its front elevation has a two-story projecting pavilion, an overhead garage door, two window openings, an off-center hollow core metal door on the first floor, and a strip of three windows and a single window on the second floor. All windows are non-original one-over-one aluminum sash. The spandrel area between the garage door and the windows above features a large stone sign plate inscribed with the words, “City of Chicago Fire Department.” The spandrel area between the corner door and window above has a metal plate identifying the 1917 construction date and the names of a series of people associated with the building’s construction, including the mayor, alderman, city architect, and contractor. Detailing includes stone door and window surrounds on the first floor, bracketed stone window lintels, concrete belt courses, and brick pilasters topped by stone panels with the City of Chicago’s “Y” motif and decorative scrolls. The “Y” motif is also situated above the off-center door. This building is

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

recommended as eligible for individual listing on the National Register under Criterion C for architecture. It is a rare extant example of an early twentieth-century neighborhood firehouse in Roseland, has largely retained its original building materials and detailing, and still functions as a firehouse.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping, stone sign plate, metal info plate, bracketed stone window lintels, concrete belt courses, brick pilasters with stone panels (including city motif and scrolls)			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Rare example of an early twentieth century firehouse in Roseland.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Roseland Pumping Station

Common/Current: Roseland Pumping Station

Property Address:

351 W 104th Street

HAARGIS Number:

140603

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1911

Architect's Name: William G. Krieg

Builder/Contractor: Not in CHRS

Architectural Style:

Prairie

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz, HAARGIS

Date: 24 September 2012

Photos with Captions:
North façade of brick pumping station (above), north and east facades of pumping station from HAARGIS (below).

Property Description: **Stories:** 2

The two-story Prairie style Roseland Pumping Station is clad in brown brick. It has a high limestone watertable, a flat roof, parapet, and two square towers at the corners of the front (Roseland) elevation. The front elevation features a projecting, two-story flat-roofed entrance pavilion with a pair of centrally located glass double-doors, sidelights, and a stone panel above that features the City of Chicago's "Y" emblem in metal. The entrance has a smooth stone surround. Above the entrance is a limestone panel incised with the words: "City of Chicago Roseland Pumping Station." Detailing on the entrance pavilion includes brick pilasters with stone bases, coping, and geometric motifs. The parapet is clad in limestone and features decorative geometric motifs. The building's fenestration is largely comprised of multi-paned steel sash windows, some of which have transoms.

This is an excellent intact example of a community pumping station with fine integrity that still functions in its original use. It is recommended as individually eligible for the National Register under Criterion C for architecture as a well-preserved example of a community pumping station designed in the Prairie style.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** View of some windows obscured by aluminum storms; others are original steel sash
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Entrance pavilion with brick pilasters; stone bases, coping, cornice, banding, and geometric motifs			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Excellent example of a well-preserved community pumping station designed in the Prairie style that still functions in its original use.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

415 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story T-Plan house in the Roseland community is clad with synthetic siding and has a cross-gabled roof covered with asphalt shingles. Its front elevation has a centrally located wood door with a diamond-shaped window located in a projecting gable front bay with concrete steps with metal railings. There are two window openings on the front façade, one of which is covered with plywood. The other window is fixed-pane or casement. Side elevation window openings are also covered with plywood. This house lacks integrity, does not feature any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Fixed-pane or casement; others covered with plywood
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

430 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 10 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad house in the Roseland community is situated on a raised brick basement with glass block windows. It has a hip roof covered with asphalt shingles, an aluminum-clad front gable dormer with a pair of sliding glass windows, and a set-back synthetic-clad gable-roofed addition on the second story. The front elevation has a strip of three one-over-one aluminum-sash windows, a metal storm door, and a recessed corner porch with concrete steps, low brick side walls, and a brick corner pier support. Detailing includes decorative concrete block inserts. This house does not feature distinguishing architectural features, does not retain its integrity, and, therefore, is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and new cladding
Condition: Excellent Good Poor			
Additional Alterations Second story addition at rear			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (dormers)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip, Gable	
Ornamental Architectural Details Concrete block inserts			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

457 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. The front elevation has a strip of three non-original one-over-one windows, a recessed corner porch with a metal storm door and adjacent casement window, wood steps, and low aluminum-clad sidewalls topped by two squat wood columns supporting the porch's gabled roof. Decorative knee braces are situated beneath the eaves of the front elevation. The pair of windows in the gable appears to be casements. This house does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and some windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Brackets under eaves			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

344 W. 105th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a gable dormer with three small casement windows. Its front elevation features a strip of four non-original one-over-one aluminum-sash windows and a recessed corner porch with metal storm door, wood steps and railings, and a corner support consisting of a low faux stone pier topped by a short aluminum-clad post. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

416 W. 105th Street
Alternate: 410 W 105th St

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial (Warehouse, 1938)

Current: Mixed-Use

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story building in the Roseland community, a former warehouse later converted to residential use and now abandoned, has a flat roof and shaped parapet with concrete coping. Its front elevation is clad in brown face brick and its side and rear elevations are clad with common brick. The front elevation has an off-center door opening with transom, a garage door opening, and two window openings, all of which are covered with plywood. A portion of one of these window openings is visible and reveals a multi-paned upper sash. The second floor has a pair of window openings and a strip of three window openings, all of which have had their glass panes removed. Detailing includes concrete sills and insert blocks between the first floor openings, two brick soldier courses, and brick stringcourses at the parapet level. This building does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Abandoned building with broken windows, partially secured with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and insert blocks, brick soldier courses, and brick stringcourses, shaped parapet			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

411 W. 105th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

AT&T

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1960/2005

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 25 September 2012

Photos with Captions:
South façade of two, brick, one-story light industrial buildings. The building dating to 1960 is shown in the top photo while the building dating to 2005 is shown in the bottom photo.

Property Description: **Stories:** 1

These one-story brick-clad flat-roofed light industrial buildings in Roseland have overhead garage doors and a hinged hollow metal door opening. The earlier building has a parapet with tile coping. Original window openings along the side elevations have been in-filled with brick or glass blocks with central casement windows. The newer building has a flat roof. These buildings lack any architectural distinction and are not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Bricked over windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

338 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width, hip-roof, wood porch with low, synthetic-clad walls, boxed supports, and side-facing steps. The residence also has an off-center metal storm door, a three-sided bay window on the first floor, and paired windows in the gable, all of which feature non-original one-over-one aluminum sashes. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story, Craftsman style, frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer with three casement windows. The front elevation has a recessed corner porch with a concrete block corner pier, a front door tucked into the north side of the living room bay, wood steps with wood railings, and a strip of non-original one-over-one aluminum-sash windows. This is an example of a frame Craftsman bungalow, a residential building type that was produced during the 1910s and 1920s. This house does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
North façade of a brick and vinyl, one-story, single family residence.

Property Description: **Stories:** 1

This building consists of a central, hipped-roof, brick clad structure on a raised basement that was constructed in 1914. Later, shed-roof, vinyl clad additions were constructed on the front and rear of the central brick portion. The front elevation features an off-center porch with concrete steps, metal railings and supports topped by a metal awning roof. It also has a hollow metal front door and a five-sided bow window. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Additions to front and rear			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (original part), Vinyl (front and rear additions)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip, shed	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

350 W 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
South façade of vinyl-sided, one-and-a-half-story, single-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half story home in the Roseland community is situated on a raised basement, is clad in aluminum siding, and has a front-gabled roof covered with asphalt shingles. Its front elevation features an off-center, gable-roofed porch with wood steps, railings, and posts. It has a front door that appears to be hollow metal, a picture window on the first floor, and paired one-over-one windows on the second floor. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows; new porch
Condition: Excellent Good Poor			
Additional Alterations Fixed-pane picture window replaces original windows			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed- pane, double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 25 September 2012

Photos with Captions:
South façade of one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised basement and clad with stone (first floor) and synthetic siding (dormer). It has a hip roof covered with asphalt shingles and a gable-roofed dormer with three windows that appear to be casements. Its front façade features a recessed porch with concrete steps, metal railings, and a metal corner support; it also has a leaded glass casement window and a strip of four one-over-one windows. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding on dormer
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone, synthetic siding (dormer)	
Roof Material Asphalt	**Roof Features** Gabled dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and two large non-original flat-roofed side elevation dormers with one-over-one aluminum-sash windows. The front elevation has an off-center non-original hollow core metal door, steps obscured by foliage with metal railings, and a strip of three non-original one-over-one aluminum-sash windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Side dormers added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable, flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

346 W. 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows and has a hip roof covered with asphalt shingles. Its front elevation is clad with red brick on one side and buff brick on the other, has an off-center hollow core metal door, concrete steps with metal railings, and a picture window flanked by one-over-one aluminum-sash windows. Detailing includes three decorative glass blocks and concrete inserts flanking the front door. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, concrete inserts at entrance			**Windows** Double-hung, fixed-pane, glass blcok
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of a one story, single-family residence.

Property Description: **Stories:** 1

This one story home in Roseland has a front gable roof with asphalt shingles. Its front façade is clad in both vinyl and faux stone siding; it has a flat-roofed enclosed porch with an off-center entrance covered with plywood. The two first floor window openings are in-filled with wood and the gable features a pair of one-over-one aluminum-sash windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl, faux stone	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, in-filled
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

353 W 106th Street
Alternate: 355 W 106th Street, per Assessor

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of vinyl and stone, one-story single-family residence.

Property Description: **Stories:** 1

This one-story home in Roseland is situated on a raised basement. It has a hip roof with asphalt shingles and a gable-roofed dormer with sliding glass windows. Its front elevation is clad in synthetic stone and features an off-center hollow metal paneled door with fanlight, accessed via a short flight of wood steps with wood railings. Its strip of three windows features a picture window flanked by one-over-one windows. The side elevations are clad in vinyl siding. Alterations include the installation of siding and replacement windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl (sides and rear), Faux stone (façade)	
Roof Material Asphalt	**Roof Features** Gabled dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

332 W. 107th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad house in the Roseland community sits on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a large hip-roofed rear wing. Its projecting gable-roofed front wing has a recessed corner porch with low brick walls, a brick corner pier, concrete steps with metal railings, and a door tucked into the side of the living room bay. Its front elevation features two large picture windows, a glass block window, and a bulls-eye window in the gable. Other windows are non-original double-hung. Detailing includes faux stonework at the corners of the basement, concrete sills, glass blocks, and keystone-like blocks surrounding the bulls-eye window. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stonework at corners, concrete sills, bull's eye window with stone accents			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Detached three car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

333 W. 107th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised brick basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer with a pair of original wood casement windows and decorative rafters. Its roof overhangs to shelter a full-width wood porch with straight railings and posts. The front elevation has an off-center non-original hollow-core metal door and a strip of three non-original one-over-one aluminum-sash windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

335 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and a shed dormer along its west elevation. It has a full-width, gable-roof, wood porch with low walls and three boxed supports all covered with aluminum siding. The front elevation has an off-center door with a metal storm door, a strip of three windows on the first floor and a pair of windows in the attic, all of which are non-original one-over-one aluminum-sash. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

400 W 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
South façade of a one-story, concrete block, light industrial building.

Property Description: **Stories:** 1

This one-story, concrete block, light industrial building has a flat roof with parapet. Its front elevation has an off-center entrance with a non-original metal core door with surround and transom, a strip of one-over-one windows, and three glass block windows. Detailing includes drip molds above the entrance and windows. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Drip molds above entrance and windows			**Windows** Glass block, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

415 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1920

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
North and east façades of a brick, one story, commercial building.

Property Description: **Stories:** 1

This one-story commercial building in the Roseland community has a flat roof, castellated parapet, a brick panel at the cornice line, and concrete coping. Its front elevation is clad in yellow face brick and has a recessed, off-center hollow core metal door that is non-original. Aluminum siding has replaced this door's original transom and its original storefront has been in-filled with a strip of fixed pane windows with aluminum siding above and below. The north portion of its east elevation is also clad in yellow face brick and has been altered with the insertion of an overhead metal door that is surrounded by aluminum siding. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good <u>Poor</u>			
Additional Alterations Garage door opening inserted on east facade			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (infill)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick panel			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

432 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South façade of a masonry, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home at the northwest corner of 107th Street and Eggleston Avenue in the Roseland community is situated on a raised brick basement. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front elevation is clad with faux stone below the sill line and red brick above. The building has an off-center door behind a metal storm, concrete steps with metal railings, and a picture window flanked by one-over-one aluminum-sash windows. Detailing includes faux stone blocks flanking the front door and two horizontal strips of faux stone, each with a glass block, on the front elevation. The side (Eggleston) elevation is clad in red brick and has two pairs of four-over-one windows. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (below sill)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone panels with glass blocks, stone surround at entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

300 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz (too much foliage), Cook County Assessor (2007)

Date: 17 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This 1.5-story house at the northwest corner of 108th Street and Princeton Avenue in the Roseland community is situated on a raised brick basement and is clad with synthetic siding. The building has a gambrel roof covered with asphalt shingles. Its front (108th Street) elevation has a full-width, hip-roofed, wood porch with frieze band and supports consisting of three brick piers topped by squat wood posts. The building has an off-center door and a single double-hung window on the first floor. A pair of double-hung windows and a small casement window provide light to the attic space. Its Princeton Avenue elevation has a three-sided window bay. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding; possibly some of the windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** gambrel	
Ornamental Architectural Details Frieze band			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

313 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1918

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North and west façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a gable roof covered with asphalt shingles. Its front elevation features an off-center non-original hollow core metal door, concrete steps with metal railings, a three-sided window bay on the first floor, and a pair of windows in the gable. Windows are non-original one-over-one aluminum-sash. The house has a shed-roofed second story addition at the rear of its west elevation and a gable dormer along its east elevation. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, steps, and railing
Condition: Excellent Good Poor			
Additional Alterations Second story shed roof addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South and west façades of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story, frame home in the Roseland community is situated on a raised basement and clad with synthetic siding. It has a hip roof covered with asphalt shingles and a dormer with two one-over-one windows. Its front elevation has a projecting living room bay with replacement one-over-one windows, an off-center hollow metal door, and concrete steps with metal railing. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
North façade of 1 story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is situated on a raised concrete block basement, is clad with aluminum siding, and has a front-gabled roof covered with asphalt shingles. Glass blocks in-fill the window openings in the basement. The front elevation of the residence features an off-center hollow metal door topped by a bracketed gabled hood and concrete steps with metal railings. It also features paired, non-original, sliding glass windows on the first floor and a one-over-one, non-original window in the gable. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, windows, and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed gabled hood			**Windows** Double-hung, sliding, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Roseland Christian School

Common/Current: Roseland Christian School

Property Address:

234 W. 108th Street
Alternate: 314 W 108th St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Roseland Christian School

Property Use

Historic: Education

Current: Education

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a brick, three-story school.

Property Description: **Stories:** 3

This three-story school in the Roseland community is clad in brown face brick. The building has a flat roof, shaped parapet with concrete coping, and corner pavilions. Full height brick pilasters divide the front elevation into a series of bays, each of which contains a strip of three one-over-one windows. The main entrance features a pair of non-original hollow core metal doors topped by a stone sign plate inscribed with the words, “Roseland Christian School.” Detailing includes decorative brick panels in the spandrels, concrete sills and lintels. This school lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Parapet with concrete coping, corner pavilions, brick pilasters, stone sign, brick panels, concrete sills and lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

301 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1905

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and is clad in red brick. The building has a flat roof and parapet. The front elevation has a full-width shed-roofed porch with wood posts and steps but no railings, an off-center door, an adjacent glass block window, and a group of three windows on the first floor. The second floor of the front elevation has a group of three windows and a single window. Nearly all windows are covered with plywood, with the exception of two non-original one-over-one aluminum-sash windows. The east elevation has a full-height window bay pavilion. Detailing includes stone sills, lintels, coping, and cornice. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills, lintels, coping, and cornice			**Windows** Double-hung, glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles, overhanging eaves, and decorative rafters. It has a recessed corner porch with a door tucked into the side, a faux stone corner pier, and wood steps with metal railings sheltered by a flat-roofed metal canopy supported by two wood posts. Its front elevation features a casement window within the recessed porch, a strip of four double-hung wood-sash windows on the first floor, and a strip of three wood casement windows in the attic. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has an off-center door behind a metal storm door, non-original wood steps and railings, and five non-original one-over-one aluminum-sash windows: four on the first floor and one in the gable. Review of the 1938 Sanborn and the assessor's 2007 photograph suggests that while the front and rear porches are original to the house, a second story was added to the residence between 1938 and 2007. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and railings
Condition: Excellent Good Poor			
Additional Alterations Second story added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Sanborn map 4228.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South façade of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad with synthetic siding. It has a hip roof covered with asphalt shingles and a gabled dormer with two windows that appear to be casements. Its front façade features an off-center door within a recessed porch with concrete steps, metal railings and corner support, and a picture window flanked by double-hung windows. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

350 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South façade of two-story multi-family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community has “cemented” cladding material, which is original per the 1911 Sanborn map. Its front elevation has an enclosed, full-façade, flat-roofed porch with an off-center metal core door, concrete steps and metal railings, and a strip of four windows that appear to be sliding windows. The second floor of the front elevation has four one-over-one windows. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch enclosed
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Cement	
Roof Material None	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Sliding, double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
North and west façades of 1-story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is clad with aluminum siding, has a gambrel roof covered with asphalt shingles, and rests on a concrete block foundation. Its front elevation features an off-center door and porch with concrete steps, metal railings and supports, a metal awning roof, and a strip of three one-over-one windows on the first floor and a one-over-one window above. Window openings in the basement are filled with glass blocks surrounding a central, casement window. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, no in CHRS

Common/Current: Unknown

Property Address:

354 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South and east façades of 1 -story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is clad with synthetic siding, has has a front-gabled roof covered with asphalt shingles, and rests on a concrete block foundation. Its front elevation features an off-center door and porch with concrete steps, metal railings and supports, and metal awning roof. It has a strip of three one-over-one windows on the first floor and a small single-pane window in the gable. Glass blocks with a central casement infill the basement window openings. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows in basement
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: South Shore Iron Works

Common/Current: South Shore Iron Works

Property Address:

404-410 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz (top photo, photo pg. 3), CCA (bottom photo)

Date: 5 September 2012

Photos with Captions:

East façade of industrial, brick and metal storage shed.

South and east façades of industrial, brick and metal storage shed.

Property Description: **Stories:** 1

This one-story, side-gabled, metal shed on the vacated South Shore Iron Works property is partially obscured by foliage. The front elevation is clad in buff brick and contains a series of hollow metal doors, each flanked by three windows to one side; many are covered with plywood. A full width metal canopy is present on the front façade. The gable ends and rear elevation are clad in corrugated sheet metal. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Window openings covered with boards
Condition: Excellent Good Poor			Abandoned, overgrown, and rusting
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (façade), metal (rear)	
Roof Material Metal	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Detail photo of door:

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Marengo, Illinois 60152
Phone (815) 568- 0680

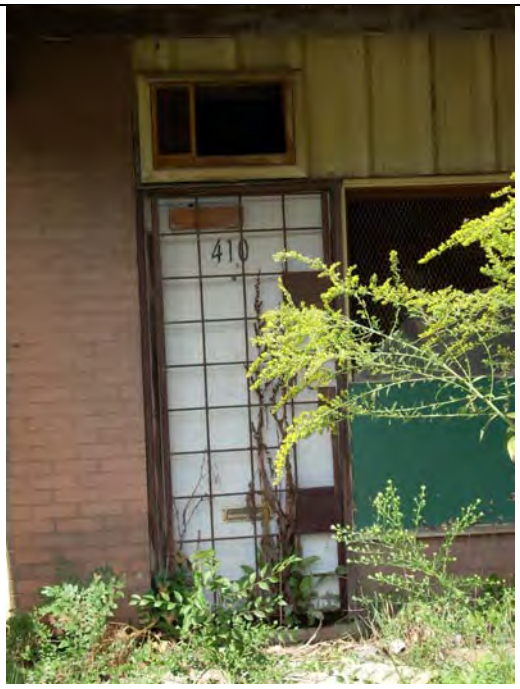

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505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

407-409 W 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

South Shore Iron Works

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz, Cook County Assessor

Date: 5 September 2012

Photos with Captions:
North and east façades of metal sheds and concrete block building.

Property Description: **Stories:** 2

This property includes a two story, flat-roofed concrete block building associated with South Shore Iron Works, manufacturers of structural steel. The building is difficult to see from the public right-of-way. The first floor has one-over-one windows below a metal awning and the second floor has glass block windows. Portion of the building has had its roof raised, creating more height for the interior workspace. The Cook County Assessor's photo shows large sliding metal doors on the warehouse façade. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Roof height raised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Metal	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Sheet metal storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

332 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has an off-center non-original hollow core metal door, a partial width, flat-roofed wood corner porch, and a non-original picture window flanked by double-hung windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, porch rails and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a one-story, single family, stucco residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and is covered with stucco. The building has a gable roof with cornice returns and is covered with asphalt shingles. Its front elevation has a gable-roofed wood porch, an off-center hollow core metal door, a glass block window and a rounded window bay on the first floor, and a pair of windows in the gable end, all of which are one-over-one vinyl-sash. The east elevation has a rounded window bay and gable wall dormer. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

347 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1892

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center hollow core metal door with partial-width, gable-roofed, wood porch. There is a strip of three one-over-one wood-sash windows on the first floor and a pair of two-over-two wood-sash windows in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

331 W. 110th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a pent roof, off-center door, wood steps with wood railings, and single windows on the first floor and in the attic, both of which are non-original one-over-one aluminum-sash. The east elevation has a three-sided window bay with a gable wall dormer above. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 110th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a 1.5- story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a gable roof with cornice returns and is covered with asphalt shingles. The front elevation has a pent roof with scalloped trim, an off-center door, and wood steps with wood railings. There is a group of windows on the first floor (fixed-pane flanked by four-over-four), and a pair of non-original four-over-four windows in the gable end. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns, scalloped trim			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

340 W. 111th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a flat roof and parapet. Its front elevation has a full-width hipped-roof wood porch with square wood posts and a straight railing balustrade. The porch sits atop piers of rusticated concrete block. The porch also features an off-center door with a metal storm door. There are two slightly rounded window bays—one on the first floor and one on the second—and an additional single window on the second floor. Windows are non-original one-over-one aluminum sash. Detailing includes an aluminum-covered cornice. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails, posts, and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Cornice			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

344 W 111th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South and east façades of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is situated on a raised basement, is clad with synthetic siding, and has a gambrel roof covered with asphalt shingles with wall dormers. Its front elevation features a non-original, flat-roofed, full-façade wood porch with straight railings and posts. The home also features an off-center door, a three-sided window bay on the first floor, and paired casement windows on the second floor. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, siding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt Shingles	**Roof Features** Dormers	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

303 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North and west façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding and wood shingles. The building has a side hip-on-gable roof, overhanging eaves. There are decorative wood brackets and a hip-on-gable dormer with bracketed, overhanging eaves. There are three double-hung wood-sash windows with aluminum storms in the gable. Asphalt shingles clad the roof and the dormer. The roof has a wide overhang that serves as the roof for a full-width wood porch that has faux stone piers and wood railings, but no steps. The front elevation has a centrally located door that appears to be oak with a glass pane, which is flanked by three windows on either side, all of which are double-hung wood-sash with aluminum storms. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Aluminum storms added, replacement siding on lower level
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (lower), Wood shingles (upper), Asphalt shingles (dormer)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side hip-on-gable	
Ornamental Architectural Details Bracketed eaves			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: St. Mary Church of Prayer

Property Address:

339-341 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

St. Mary Church of Prayer

Property Use

Historic: Commercial (Tin Shop, 1938)

Current: Mixed-Use

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story former commercial building (now a storefront church) in the Roseland community is clad with painted brick and has a flat roof and a stepped parapet. The first floor of the front elevation has two storefronts with strips of single-pane windows and non-original doors with transoms. The second floor has two groups of picture windows flanked by one-over-one windows and two pairs of one-over-one aluminum-sash windows. Detailing includes concrete coping and sills, a brick stringcourse, and a brick panel along the cornice line. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and coping, brick stringcourse, brick panel			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1917

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South façade of two-flat greystone residential building.

Property Description: **Stories:** 2

This two-flat greystone residential building in the Roseland community has a flat roof and parapet. Its front elevation features a full-height window bay pavilion with fenestration comprised of one-over-one replacement windows. It has an off-center porch with two entrances that feature non-original wood doors, stone steps, metal and stone railings, and wood columns supporting a flat wood roof with dentil molding. Detailing includes a stone sill courses, lintels, beltcourses, and cornice.

The City of Chicago has recognized this building type through its Historic Greystone Initiative, which promotes the preservation of Chicago's ornate, limestone-clad homes by offering technical assistance and financial resources to property owners. Although this is an example of the greystone residential building type, it does not possess sufficient distinguishing architectural characteristics to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details Stone sill courses, lintels, beltcourses, cornice, and railings			**Windows** Double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

401 W 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Roseland Tune-Up Center

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South and east façades of one-story, brick garage.

Property Description: **Stories:** 1

This one-story, brick-clad garage in the Roseland neighborhood has a flat roof and a front elevation that features three garage door openings with metal overhead doors. The fourth bay features an off-center plate glass door with transom in-filled with wood and flanking single-pane windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Transom in-filled with wood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

428 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is clad with buff brick on its front elevation and common brick on its side and rear elevations. The building has a raised basement and a hip roof covered with asphalt shingles. Its front elevation has a projecting three-sided living room bay with a picture window flanked by one-over-one aluminum-sash windows, an off-center entrance with a metal storm door, and concrete steps with metal railings. The gable's cladding material has been removed. Detailing includes two decorative glass blocks adjacent to the front door. It does not display distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows; cladding removed from the gable
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

256 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of single-family, 1.5-story, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles and a small dormer. The front elevation has a centrally located, partial-width, hipped-roof porch with scallop detailing at the roofline, an aluminum-clad base, straight wood posts and railings (non-original), and steps on the side. It has a centrally located entrance with a metal storm door flanked by a window on either side and has a single window in the gable. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows, cladding, and porch rails and posts
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Scallop detailing on porch roofline			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

303 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, brick residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house at the southwest corner of 112th Place and Princeton Avenue is situated on a raised concrete block basement with glass block windows and is clad with light brown face brick. The building has a front gable roof covered with asphalt shingles. Its front elevation has a partial-width, flat-roofed porch with wood steps and open metal railings, an off-center door with transom, and a three sided bay window on the first floor. The upper floor of the front elevation has a pair of windows and two single windows. Windows are non-original one-over-one aluminum-sash. The home's east elevation has a three-sided, full-height window bay pavilion and its west elevation has a gable wall dormer. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Two garages			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

312 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single-family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S .Katz

Date: 16 September 2012

Photos with Captions:
South and east façades of single story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with casement windows. The building has original wood clapboard siding and a cross-gambrel roof with asphalt shingles. The roof extends forward to serve as the roof over the full-façade wood porch with supports consisting of faux stone piers topped by wood columns. The front elevation has an off-center wood door and a window covered with plywood on the first floor. There are two one-over-one windows on the second floor. Above the basement, windows are one-over-one, some with aluminum storms. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some windows have aluminum storms
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

319 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, multi-family home in the Roseland community is situated on a raised concrete block basement with a glass block window. It is clad with synthetic siding and has a gambrel roof with cornice returns, covered with asphalt shingles. Its full-width hip-roof wood porch has cast concrete pier supports. The first floor has two doors and a three-sided bay with non-original one-over-one windows. The second floor has four one-over-one windows and the attic level has a pair of single-pane windows that may be casements. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations Conversion from single family to multi-family residence after 1939 (Sanborn)			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

325 W 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised basement with glass block windows. It is clad with aluminum siding and has a gable roof covered with asphalt shingles. The front elevation has a partial-width hip roof concrete porch with metal railings and open metal supports. An off-center door with transom and a three-sided bay comprised of non-original one-over-one windows are also included on the front elevation. A single one-over-one window is situated in the gable. This building does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

328 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and clad with aluminum siding above. It has a hip roof covered with asphalt shingles and a hip dormer with three, single-pane, casement windows. Glass block windows provide light for the basement. The front elevation has an off-center hollow metal panel door with sidelights, wood steps and railings, and four one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Hipped dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, fixed-pane, glass block
Outbuildings (*Number and Description*)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

339 W. 112th Place
Alternate: 341 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1908/post 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a brick, two-story industrial building.

Property Description: **Stories:** 2

This two-story, brick-clad, light industrial building in the Roseland community has a flat roof, parapet with coping, and a T-shaped footprint. The front segment of the building was a one-story building erected in 1908. Sometime after 1939, a second story and a rear wing were added. The original segment has an off-center door and the outline of three former window openings (with brick arched lintels and stone sills) that have been in-filled with brick. The second floor and the rear wing have glass block window openings with small ventilating louvers. This building lacks integrity and distinguishing architectural features; it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Windows in-filled with brick (front segment)
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Addition to rear and second story added after 1939			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick arched lintels			**Windows** Glass-block with central casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

303 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip-on-gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, half of which is enclosed, covered with synthetic siding, and surrounded by non-original multi-paned aluminum-sash windows with some original wood-sash windows. The open corner of the porch has a wood post, wood steps and railings (non-original), and an entrance with a metal storm door that is surrounded by faux stone siding. The hip-gable area has a strip of three double-hung windows. Both side elevations have shed-roofed wall dormers. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Detached two-car garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

334 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1912

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, half of which has been enclosed with synthetic siding and is surrounded by non-original multi-paned aluminum-sash windows. The open corner of the porch has a wood post, wood steps and railings (non-original), and an entrance with a metal storm door. There is a pair of non-original one-over-one aluminum-sash windows in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch posts, rails, and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current:N/A Historic: N/A		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat apartment building is situated on a raised basement and has a hip roof covered with asphalt shingles. Its front façade is clad in buff brick and has an off-center metal door, a vertical strip of decorative glass blocks above the porch hood, and six window openings: two each in the basement, first, and second floors. All window openings are covered with metal panels. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Opening covered with metal panels
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Contrasting colored brick panels			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

410 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story brick bungalow in the Roseland community is situated on a raised basement with glass block windows and is clad with brown face brick. The building has a hip roof covered with asphalt shingles, a hip dormer with two windows on its front elevation, and a shed dormer with three windows on its west elevation. Both dormers are covered with synthetic siding. The front elevation has a strip of five windows. Windows throughout the house are non-original one-over-one aluminum-sash of varying sizes with the exception of a casement window along the east elevation. The main entrance is situated along the east elevation and consists of a hollow core metal door topped by a bracketed wood gabled hood. Detailing includes brick corner pilasters, concrete sills, and decorative square insert blocks. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations Shed dormer is a later addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (shed dormer)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Bracketed hood, brick corner pilasters, concrete sills and insert blocks			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

139 W. 113th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of two-story, brick, four-flat residence.

Property Description: **Stories:** 2

This two-story four-flat apartment building in the Roseland community has a flat roof and castellated parapet with concrete coping. The front elevation is clad with brown face brick, has two full-height enclosed sun porch pavilions, and a centrally located entrance with sidelights that have been boarded over. The first floor windows have been covered with plywood. Second floor fenestration features two strips of three-over-one wood-sash windows. An additional three-over-one wood-sash window is situated above the entrance. Detailing includes brick soldier courses with stone coping and insert blocks. This building lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone coping and insert blocks, brick soldier courses			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

228 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single-family residence

Current: Single family residence

Date of Construction: 1890

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a gambrel roof covered with asphalt shingles that overhangs the side elevations. The front elevation has a gable-roofed full-width porch, most of which is enclosed and covered with synthetic siding. Windows on all three sides of the house are covered with plywood. The off-center door is also covered with plywood and accessed via concrete steps with metal railings. There is a synthetic-clad addition on the rear elevation. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations Porch enclosed, rear addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

235 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1905

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house at the southwest corner of 113th Street and Yale Avenue in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, most of which is enclosed with synthetic siding and surrounded on all three sides by one-over-one aluminum-sash windows. The off-center entrance with metal storm door is set within the open corner of the porch. The open part of the porch has a non-original wood support, steps and railings. A pair of windows is situated in the gable. Windows throughout the house are non-original one-over-one aluminum sash. The east elevation has a first floor window bay and both shed and gable wall dormers. The west elevation has a shed wall dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

303 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement and clad with wood siding. It has a hip roof covered with asphalt shingles and gable dormers. It has a full-width, hip-roof, wood porch with metal railings, an unadorned frieze band, and supports consisting of two faux stone corner piers and one low faux stone pedestal topped by a square wood pier. Its front façade has an off-center door and a strip of three non-original double-hung windows. Both the front and side dormers each feature a strip of three windows, although those on the front façade dormer are covered with plywood. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, some in-filled with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood	
Roof Material Asphalt	**Roof Features** Gable dormers	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

307 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1917

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This multi-family residential building in the Roseland community is clad with synthetic siding and has a flat roof and parapet. Its front façade has an off-center door with a sidelight in-filled with plywood. It has strips of three, non-original, single-pane windows on the first and second floors that appear to be casements and a single one-over-one window on the second floor, directly above the entrance. Doric columns support the hip roof of the porch. The wood rails and steps do not appear to be original. A plain wood cornice is situated directly above the second floor windows. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, cladding, and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

309 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is clad with synthetic siding. It has a hip-on-gable roof covered with asphalt shingles and side elevations with gable wall dormers. It has a full-width, gabled-roof wood porch with supports consisting of wood posts atop faux stone pedestals. The front elevation has an off-center non-original, hollow core, paneled, metal door with fanlight. There are a pair of non-original one-over-one windows on the first floor and three non-original one-over-one windows on the second floor, including two that are paired. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hipped gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

310 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of 1.5 -story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one and a half-story house in the Roseland community is clad with synthetic siding and has a cross-gabled roof covered with asphalt shingles. It has a full-width, gable-roofed, wood porch with supports consisting of low faux stone pedestals topped by square wood piers. The front elevation also features an off-center hollow core paneled metal door with fanlight, two window openings on the first floor and paired windows on the second floor. All front elevation window openings have been covered with plywood. This home is in deteriorated condition, lacks integrity, and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding, windows covered with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-Gable	
Ornamental Architectural Details None			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

312 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and has a hip roof covered with asphalt shingles and a front overhang. Its front elevation is clad in buff brick, has an off-center door with concrete steps and metal railings, and features a picture window flanked by one-over-one windows. Glass block windows provide light to the basement. Contrasting orange-colored brick trims the entrance. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

316 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement, has a front gable roof covered with asphalt shingles, and a front overhang. Its front elevation is clad in buff brick below the sill line and orange brick above. It has an off-center door with concrete steps and metal railings and a picture window flanked by one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

320 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and has a hip roof covered with asphalt shingles and a front overhang. Its front elevation is clad with orange face brick, has an off-center door with concrete steps and metal railings, and a picture window flanked by one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

337 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1910

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and east façades of 1.5-story, frame, single-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a gable roof covered with asphalt shingles. The front elevation has a hip-roof, full-width porch with faux stone piers topped by squat squared wood column supports, wood steps and straight wood railings. It also has an off-center entrance with a metal storm door, a strip of three windows on the first floor, and two windows on the second. Windows throughout the house are non-original one-over-one aluminum-sash. The east elevation has a three-sided bay window on the first floor with a gable wall dormer above. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial (Sanborn, 1939)

Current: Multi-family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, two-story, multi-family residence (above), outbuilding (garage) below.

Property Description: **Stories:** 2

This two-story residential building in the Roseland community has a flat roof and crenellated parapet with concrete coping. Its front elevation is clad in brown face brick and its side elevations are clad in common brick. The front elevation features two hollow core metal doors, the outline of a former storefront that has been in-filled with faux stone and two glass block windows, and six three-over-one wood-sash windows on the second floor. The original off-center entrance that provides access to the second floor apartment has a transom that is in-filled with faux stone. Detailing includes a concrete sill course, inset brick panels, and a parapet that features small decorative concrete insert blocks and a centrally located stone panel with shield. This building lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, storefront windows in-filled, transom in-filled
Condition: Excellent Good Poor			
Additional Alterations None			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sill course, insert blocks and stone panel with shield on parapet			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) One-story brick garage with parapet (tile coping)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

345 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1911

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and west façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a hip-roof full-width porch with faux stone piers beneath the wood deck, squared wood column supports, wood steps, and straight wood railings. There is an off-center non-original hollow core metal door, a strip of three windows on the first floor, and two windows on the second. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, porch rails and supports
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

41 W. 114th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles and a second story rear shed-roof addition. It has a full-width, gable-roof sun porch, half of which is enclosed and has three non-original one-over-one aluminum-sash windows on the front elevation. The open half of the porch is accessed via concrete steps with metal railings. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations Shed roof addition to rear of building.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

62 W. 114th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction:

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This vacant one-story, frame bungalow in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a recessed wood corner porch with a faux stone corner pier topped by a squat, squared wood column. the door and first floor windows are covered with plywood. There are two original wood casement windows in the attic. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns			**Windows** Casement, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

131 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement, is clad in synthetic siding, and has a side gable roof covered with asphalt shingles. The peaks of the side gables are clad in wood board-and-batten. The front façade of the home has a projecting gabled entrance vestibule with a small casement window, concrete steps with metal railings, and a larger window opening that is partially obscured by a low metal awning. Non-original double-hung windows are used elsewhere. Scalloped verge boards frame the projecting gable. A rear, dormer addition is visible from the street. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations Rear dormer addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

135 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Now Faith Church of God Holiness

Property Use

Historic: Industrial

Current: Religious

Date of Construction: circa 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of one-story religious building.

Property Description: **Stories:** 1

This one-story, brick-clad, former industrial building in the Roseland community has a flat roof and a stepped parapet with tile coping. The front façade displays the outline of a former overhead door opening that has been in-filled with brick. One of the side elevations features three metal core doors that provide access to the Now Faith of God Holiness Church, the building's current occupant. Decorative details include brick stringcourses. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Brick in-fills old service garage entrance
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stepped parapet with tile coping, brick stringcourses.			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

138 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof wood porch with non-original straight posts and railings, an off-center entrance with a metal storm door, and two non-original one-over-one aluminum-sash windows. A small ventilating louver is situated in the attic gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails and posts
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

235 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house at the southwest corner of 114th Street and Yale Avenue in the Roseland community is situated on a raised brick basement and is clad with yellow face brick along its street elevations. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front elevation has a picture window flanked by one-over-one aluminum-sash windows and an off-center door. This elevation also has a partial-width porch with open metal posts covered by the wide roof overhang, concrete steps, and metal railings. Detailing includes stones flanking the front door and decorative glass blocks on both street elevations. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, stone flanking entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

324 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1907

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South and west façades of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with casement windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. Its front elevation has two off-center doors and a partial-width shed-roof porch with wood steps, metal railings and open metal supports. It also has a three-sided bay window on the first floor and a pair of windows in the gable. Windows are non-original one-over-one aluminum-sash. The central window of the bay features a transom. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from single family to multi-family after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable roof	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane (transom), casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

One W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1907

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Queen Anne

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story Queen Anne style commercial building at the southwest corner of 115th and State streets in the West Pullman community is clad with brick and has a flat roof and parapet. The first floor of both street elevations has been drastically altered by the removal of the corner storefront and the infill of virtually all door, window, and round-arch transom openings with brick. The first floor of the front (115th Street) elevation currently features a single, non-original, off-center hollow core metal door. The first floor of the State Street elevation has a centrally-located non-original hollow core metal door and a single non-original one-over-one aluminum-sash window. The second floor, however, retains its original metal corner turret with conical roof and a three-sided metal window bay on the State Street elevation. Both bays have rectangular panels at their bases and dentil molding, and the turret features decorative pilasters. However, the windows in both the bay and turret are non-original. The second floor of the 115th street elevation has a non-original glass block window and an aluminum-sash window, both of which have stone sills and lintels. The second floor of the State Street elevation has a series of non-original one-over-one aluminum-sash windows with rounded transoms that have been in-filled with brick. This building lacks integrity and is not

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

individually eligible for listing on the National Register.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Replacement windows, storefronts, openings in-filled
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Metal turret with conical roof and pilasters, metal bays with panels and dentil molding, stone lintels and sills, cornice				**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

8 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a greystone, two-flat residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and is clad with rusticated limestone on its front elevation and common brick along its side and rear elevations. The building has a flat roof and parapet. Its front elevation has a full-height three-sided window bay pavilion, a partial-width stone porch with Corinthian columns and balustrade, and an off-center entrance with metal storm door. There is a secondary entrance to the lower level. The first floor window bay has a non-original central fixed-pane window with multiple lights and flanking nine-over-one windows. The second floor of the front elevation has four non-original one-over-one aluminum-sash windows—three on the bay and one above the entrance. Casement windows provide light to the basement. Detailing includes smooth stone sill courses, belt courses, and a cornice with dentil molding.

This is an example of a greystone, a building type that the City of Chicago has recognized through its Historic Greystone Initiative. However, there are thousands of greystone residential buildings in Chicago and this particular example does not stand out among the city's stock of this residential building type. As a result, it does not qualify as

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

individually eligible for listing on the National Register.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Replacement windows & door
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone (façade), Brick (sides and rear)		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Corinthian columns and stone balustrade, stone sill courses, belt courses, and cornice with dentils				**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

17 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat

Date of Construction: 1897

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North and east façades of two-flat greystone residence.

Property Description: **Stories:** 2

This two-flat residential building in the West Pullman community is situated on a raised basement and has a front façade clad with limestone; common brick cover both the sides and rear. The building has a full-height three-sided window bay pavilion, flat roof, and a shaped parapet with a pediment above the bay. Its off-center, flat-roofed porch has concrete steps, metal railings, Doric columns, and a non-original metal door with transom. Windows are non-original one-over-one and those on the second floor feature transoms. Detailing includes continuous banding in rusticated limestone and a metal cornice.

This is an example of a greystone, a popular historic residential building type that the City of Chicago has recognized through its Historic Greystone Initiative, which offers technical assistance and financial resources to property owners to encourage their preservation. This building does not possess sufficient distinguishing architectural characteristics to qualify for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone (façade), Brick (sides and rear)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Metal cornice, stone banding, Doric columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

23 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is clad with synthetic siding, has a limestone foundation, and has a gable front roof crossed by hip-on-gable sides. The front elevation has a full-width hip roof porch, a portion of which is enclosed. A shed roof dormer is visible on a side elevation. The open portion of the porch has wood steps and railings, a wood post, and a door opening covered with plywood. Windows are one-over-one aluminum-sash, some of which are covered with plywood. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows, enclosed porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable/Hipped gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

35 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Donald's Auto Repairs

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1936

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, sheet metal and brick clad, commercial building.

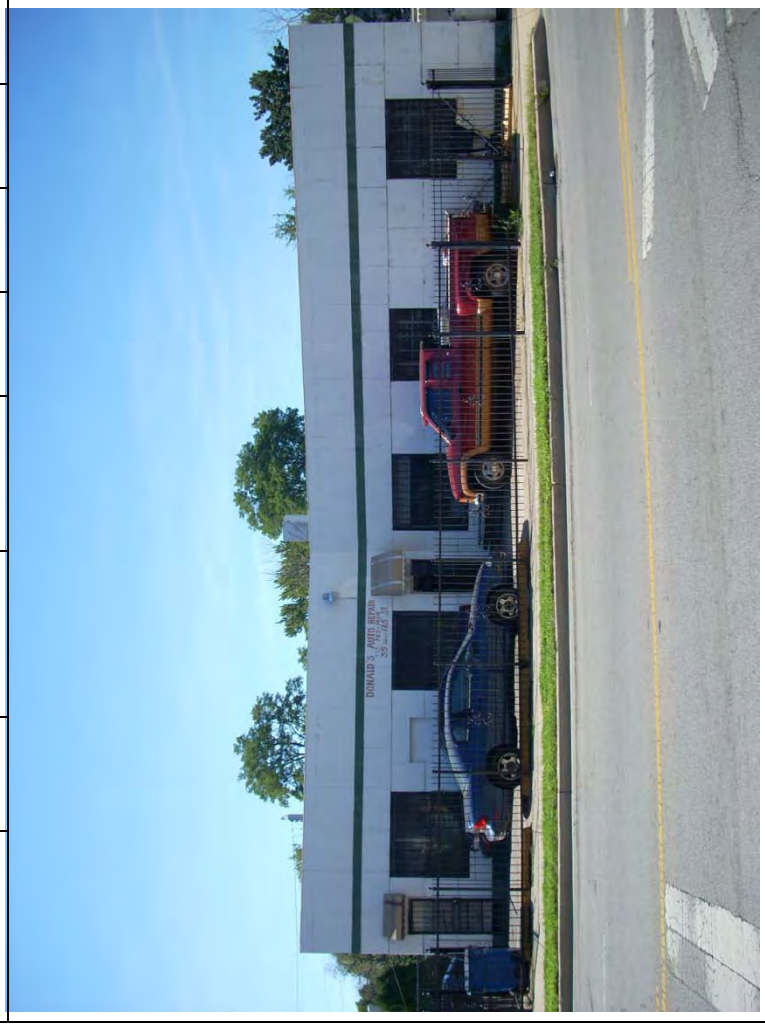

Property Description: **Stories:** 1

This one-story auto repair building at the corner of 115th Street and Lafayette Avenue in the West Pullman community has a flat roof and a V-shaped footprint. Its street elevations are clad with white sheet metal and its rear elevations are clad in common brick. Overhead metal garage doors are situated on either end of the building while the bent front elevation along 115th Street features two metal doors and a series of fixed-pane steel sash windows. Windows along the rear of the building are covered with corrugated metal. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors; rear windows covered
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Metal (front and sides), Brick (rear)	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: None

Property Address:

40 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Multi-family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions

South façade of two-story, multi-family, frame residence (former commercial building).

Property Description: **Stories:** 2

This two-story residential building in the Roseland community has a flat roof and parapet. Its front façade is mostly clad in synthetic faux stone siding with contrasting colors around the doors and windows. The lowest portion of the façade is covered in stucco; the upper portion is clad in synthetic siding. The front elevation has two hollow metal core doors, Chicago-style windows on the first and second floors, and a single one-over-one window on the second floor. A pent roof is situated above the second floor windows and a bracketed wood cornice is situated at the parapet level. This building lacks integrity, does not have sufficient distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from commercial building to residential use			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone, stucco	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

42 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
South and west façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement with glass block windows. The home is clad with synthetic siding and has a front gable roof covered with asphalt shingles. It has a full-width hip-roof wood porch with wood slat railings, and supports consisting of three concrete block piers topped by open metal posts. Its front façade has an off-center door with transom, a picture window flanked by one-over-one windows, and a single-pane window in the dormer. This home lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** New porch columns & rails, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

112 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of one-story, brick industrial building.

Property Description: **Stories:** 1

This one-story industrial building in the Roseland community has a flat roof and stepped parapet. Its front elevation is clad with red face brick and has a concrete water table, a wide overhead metal garage door, entrance that has been replaced with a non-original hollow core metal door and plywood, and a window opening that has been covered with plywood and replacement windows. Detailing in cream-colored terra cotta includes coping and geometric panels on either end of the parapet that feature foliate motifs. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and garage door; openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stepped parapet with terra-cotta coping and decorative panels.			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

116 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, multi-family residential building in the Roseland community is clad with synthetic siding, is situated on a raised limestone foundation, and has a flat roof with an overhanging eave. Its front elevation features a non-original, partial width wood porch with metal railings, open metal supports, and a metal awning roof. It has a full-height three-sided pavilion with non-original one-over-one windows and a single, non-original, one-over-one window on the second floor directly above the entrance. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: N A Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

120 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-half-story home in the Roseland community is situated on a raised brick basement, clad with synthetic siding, and has a gable roof covered with asphalt shingles. The front façade has a partial-width flat-roofed porch with non-original metal railings open metal supports and an off-center door. Windows are non-original one-over-one: there is a three-sided bay on the first floor and are two additional windows centered on the second floor. One of the side elevations has a three-sided bay window and gable wall dormer above. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

143 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1911

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with a wall dormer on the side elevation. The house has a two-story hip-roof front addition. The front elevation has an off-center recessed entrance with a metal storm door, a non-original picture window flanked by one-over-one aluminum-sash windows on the first floor, and a single non-original one-over-one aluminum-sash window on the second floor addition. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Addition to front of building			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

8 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement that features multi-pane casement windows. It is clad with brick painted white and has a gable roof covered with asphalt shingles. It front elevation features a full-width, hip roof, wood porch with concrete steps, metal railings, and brick pier supports. It has an off-center door and one-over-one windows with aluminum storms: a strip of three on the first floor and one in the gable. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Aluminum storms
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has cornice returns and a cross-gable roof covered with asphalt shingles. It front elevation features a full-width, flat roof, wood porch with non-original slat railing, thin wood posts, and an off-center door. There is a three-sided bay with one-over-one double-hung windows on the first floor and a strip of three single-pane windows on the second floor that may be sliding glass. This house lacks sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

16 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1902

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

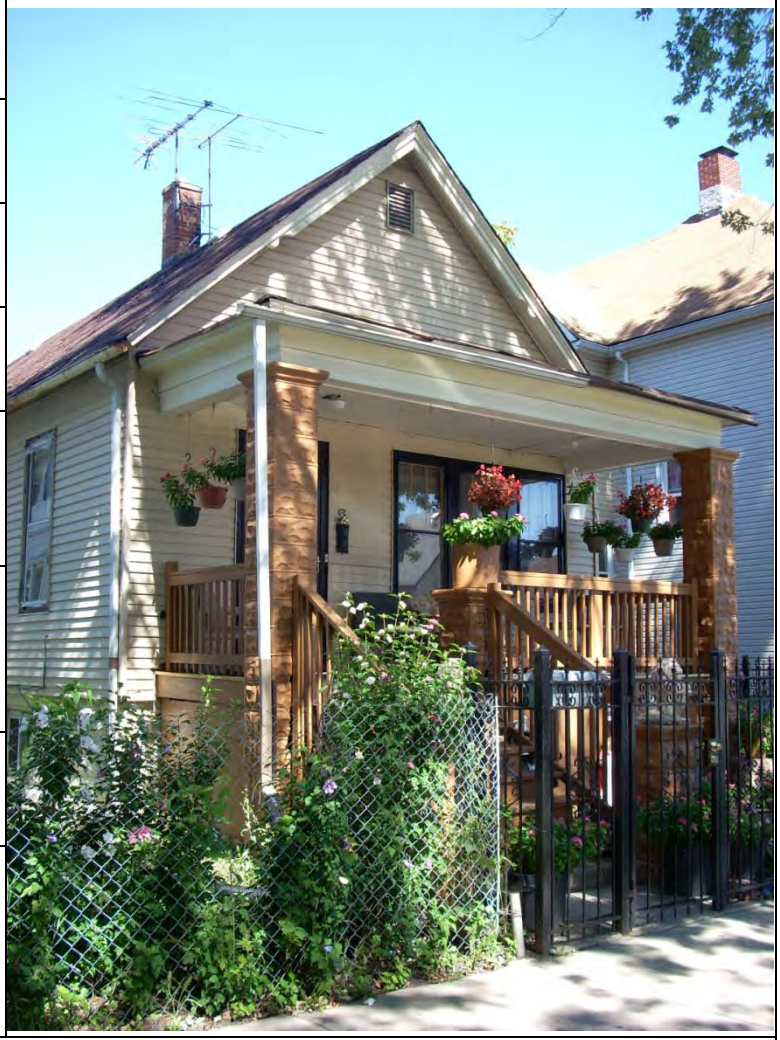

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip roof, wood porch with faux stone pier supports and replacement wood railing. The front also has an off-center front door and a strip of three one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, new porch rails, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage behind residence			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

20 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Queen Anne

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of two-story, single-family, frame residence.

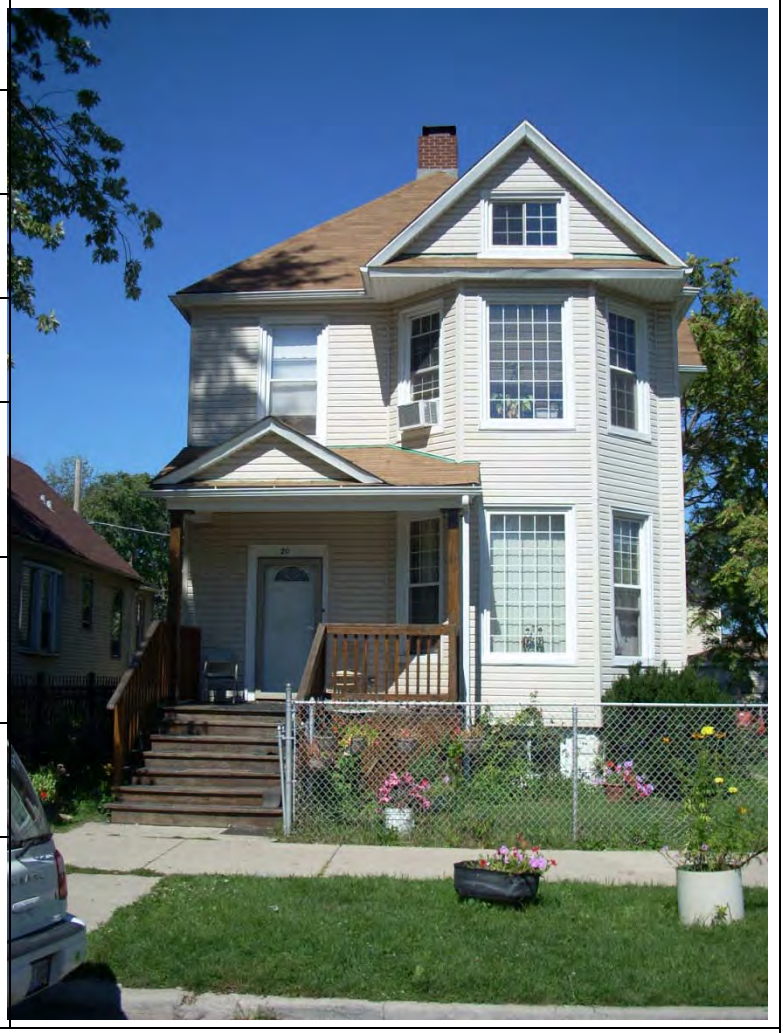

Property Description: **Stories:** 2

This two-story Queen Anne style house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, has full-height window bay pavilions with pediment and gable dormers on its front elevation and side elevations, and has a hip roof covered with asphalt shingles. The front elevation has a shed-roofed partial-width wood porch with pediment and metal hollow core paneled door. Fenestration is non-original on the front elevation bays and features fixed-pane windows with multiple lights, multi-paned double-hung windows, and a single one-over-one window on the second floor, directly above the porch. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Pediments at gables			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

32 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Garage

Current: Garage

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story brick garage.

Property Description: **Stories:** 1

This one-story, four-car garage building in the West Pullman community is clad in common brick and features two pairs of hinged metal garage doors with a continuous wooden lintel along its front elevation. A side (alley) elevation displays the outlines of dormer door openings that have been in-filled with brick as well as a hinged metal garage door. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows in-filled, metal doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

36 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1918

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of brick, two-flat residence.

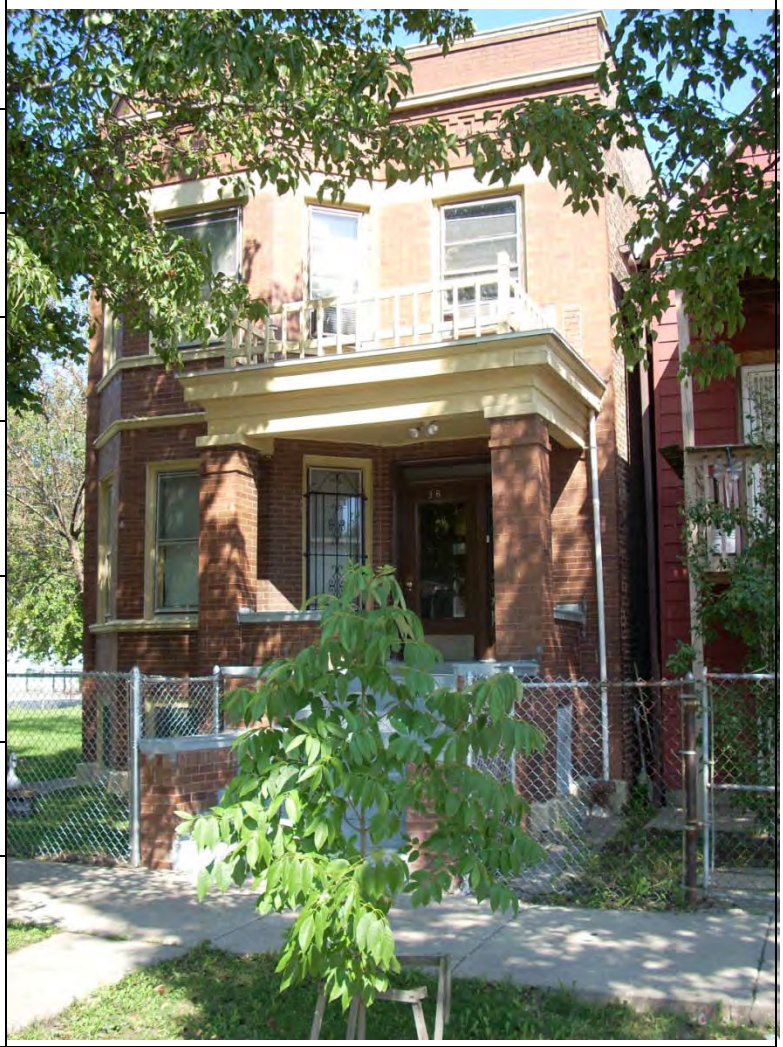

Property Description: **Stories:** 2

This two-flat residential building in the West Pullman community is situated on a raised basement and has a front façade clad with orange face brick. It has a full-height three-sided window bay pavilion, flat roof, and parapet. Its off-center flat-roofed porch has concrete steps, brick piers, and a single-light oak door with sidelight. Fenestration is comprised of one-over-one windows. Detailing includes stone sill courses, beltcourse, a cornice, as well as decorative brickwork on the parapet. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sill courses, beltcourse, cornice, decorative brickwork on cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

38 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South and east façades of 2.5-story, multi-family, frame residence.

Property Description: **Stories:** 2.5

This two-and-a-half-story, multi-family house in the West Pullman community is clad with synthetic siding and has a cross gable roof covered with asphalt shingles. Its front elevation has off-center doors on the first and second floors and an elevated, flat-roofed, full-width, non-original wood porch with straight railings and posts. Fenestration on the front and side elevations is comprised of one-over-one windows. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, doors, porch, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

144 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame residential building in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Both floors of the front elevation are partially obscured by a full-width wood porch with exterior steps leading to a second floor balcony. Both floors also have a hollow core metal door and non-original double-hung windows: three on the first floor and two on the second. A third window on the second floor has been in-filled. There is a single-pane window in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Exterior stairs are not original			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

150 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1891

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community sits on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width hip-roof porch with wood steps, metal railings, and open metal posts. The off-center hollow core metal door is non-original as is the strip of three one-over-one windows on the first floor. There is an in-filled window opening in the attic, above which is a small ventilating louver. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

151 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is on a raised concrete block basement and is clad with rolled asphalt shingle siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a hip roof porch with concrete steps, metal railings and open metal posts. It also features an off-center non-original door and one-over-one windows: three each on the first and second floors. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Asphalt shingle siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

153 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has a centrally located door with concrete steps and metal railings. It has non-original three-over-one windows: three on the first floor and one on the second, plus an additional pair of sliding glass windows on the second floor and a small single-pane window in the gable. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

155 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single-family, concrete block residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is clad with rusticated concrete block and has a flat roof and parapet with a stringcourse along the cornice. Its front elevation features a three-sided bay with non-original one-over-one windows and a flat-roof, partial width porch with concrete steps, metal railings, and open metal posts. The hollow core metal door is non-original. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stringcourse			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

157 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. The front elevation has a flat-roofed, full-width porch with concrete steps, metal railings, and open metal posts. It also has an off-center hollow metal core door, two non-original Chicago-style windows (one on each floor), and an additional one-over-one window on the second floor. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

159 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a full-width hipped-roof wood porch, a three-sided bow window with non-original casements, and an off-center door. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

163 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story frame house in the West Pullman community is clad with synthetic siding and has a gable roof covered with asphalt shingles. The front elevation has a hip-roofed partial-width wood porch with wood posts and railings. It has an off-center non-original hollow metal core door and a pair of non-original one-over-one windows on both the first and second floors. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

165 E 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a partial-width porch with concrete steps, metal railings, and open metal posts supporting a metal canopy roof. It has a centrally located door and four non-original one-over-one windows: three on the first floor and one in the gable. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

207 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 22 October 2012

Photos with Captions:
North façade of a 2.5-story, multi-family, frame residence.

Property Description: **Stories:** 2.5

This two-and-a-half-story frame house in the West Pullman community is clad in rusticated concrete bock on the first floor and in synthetic siding above. The building has a front gable roof with asphalt shingles. It has a two-story full-width, hip-roof wood porch/balcony with faux stone piers and wood posts as supports on the first and second floors, respectively. A non-original stairway leads to the second floor balcony. Both first and second floors have off-center non-original hollow core metal doors. Windows on the front elevation are non-original and include one on the first floor that is obscured by the staircase, a picture window flanked by one-over-one aluminum-sash windows on the second floor, and a single one-over-one aluminum-sash window in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations External stairway added during conversion from single family home.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block (lower), Synthetic siding (upper)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

120 E. 117th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South facade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof wood porch with straight posts and an off-center entrance with a metal storm door. It has two windows on the first floor and a pair of windows in the gable, all of which are non-original one-over-one aluminum sash. A decorative wood truss is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Wood truss			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

126 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic materials and has a gable roof covered with asphalt shingles and gable dormers along the side elevations. The front elevation has a strip of three windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. The front door has been moved to the side elevation. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door and windows
Condition: Excellent Good Poor			
Additional Alterations Entrance moved to side elevation			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

128 E 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South façade of a one-and-a-half-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. The front elevation has a non-original, full-width, flat-roofed, wood porch and a non-original off-center hollow core metal panel door with a fanlight. There is a large non-original picture window flanked by double-hung windows on the first floor and a pair of non-original one-over-one aluminum-sash windows in the gable. This house lacks integrity, does not have any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

132 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South and east façades of a one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the West Pullman community is on a raised concrete block basement with glass block windows, is clad with synthetic materials (possibly fiberboard), has a gable roof covered with asphalt shingles, and has gable dormers along the side elevations. The front elevation has a strip of three windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. The front door has been moved to the side elevation. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations Entrance relocated to side elevation			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (possibly fiberboard)	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

149 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof porch with side-facing concrete steps, metal railings, and open metal posts. This elevation also has an off-center metal storm door, a non-original picture window flanked by one-over-one aluminum-sash windows on the first floor, and a single-pane window in the attic. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

312 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1891

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community sits on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center metal storm door, concrete steps with metal railings, a picture window flanked by one-over-one aluminum-sash windows on the first floor, and a pair of one-over-one aluminum-sash windows in the gable, all of which are non-original. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

322 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1878

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the West Pullman community is situated on a raised brick basement and has a hip-on-gable roof covered with asphalt shingles. Its front elevation is clad with brown face brick and has a central hollow core metal door flanked by a pair of one-over-one aluminum sash windows on one side and a strip of three casement windows on the other. The gable has a pair of one-over-one aluminum-sash windows. This elevation also has side-facing concrete steps faced with faux stone and metal railings. Detailing includes brick pilasters flanking the door, concrete sills, flat arch window lintels with square stone inserts, and a lintel above the door that reads: “FAM.TOVALIN.E.322.” This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Brick pilasters, concrete sills, flat arch window lintels with stone inserts, inscribed lintel above entrance			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

345 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residece.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center wood door with wood steps, metal railings, and a metal awning. This elevation also has a rounded bow window with four casements on the first floor and a pair of small casement windows in the attic, each with four lights. A small triangular ventilating louver is located at the apex of the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

306 E. 118th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. It has a full-width flat-roof porch, half of which is enclosed and features a single one-over-one aluminum-sash window. The open portion of the porch has a door, a pair of non-original sliding windows, wood posts, steps, and railings. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

354 E. 118th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1886

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 2 October 2012

Photos with Captions:
North and west façades of two-story, single-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows, is clad with synthetic siding, and has a gable roof with asphalt shingles. The fenestration pattern has been altered with the moving of the main entrance from the 118th Street elevation and the windows, which feature non-original casements and one-over-one non-original aluminum varieties on both the first and second floors. This house lacks integrity, does not have visible distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) Detached two-car garage with pyramidal roof and vinyl siding.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11727 S. Calumet Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, stucco residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised basement and is covered with stucco. The building has a front gable roof covered with asphalt shingles and a gable dormer along its south elevation. It has a partial-width flat-roofed porch that appears to be concrete, with solid sidewalls, straight posts, and a stepped parapet. Its front elevation has an off-center non-original hollow core metal door and a three-sided window bay with single-pane window and transom in the center flanked by one-over-one aluminum-sash windows. There is a pair of sliding aluminum-sash windows in the gable with a lunette fixed-pane window above. Windows are modern replacements. While the stucco cladding is somewhat unusual for this community's housing stock, this particular house lacks integrity as well as architectural features that are distinctive enough to merit individual inclusion on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Lunette window, stepped parapet, decorative accent blocks			**Windows** Double-hung, fixed-pane, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9824 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house at the northwest corner of Eggleston Avenue and Fernwood Parkway in the Washington Heights community is situated on a raised basement and is clad with red face brick on its two street elevations. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front (Eggleston) elevation has an off-center metal storm door, concrete steps with metal railings, and a picture window flanked by casements. The Fernwood Parkway elevation has both casements and glass block windows. It lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casements, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10024 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1943

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
East façade of a two-story, brick and frame, single family residence.

Property Description: **Stories:** 2

This two-story cottage in the Washington Heights community has a gable roof covered with asphalt shingles and large, non-original, flat-roofed, aluminum-clad dormers on both side elevations transforming the original one-story building into a two-story residence. The front elevation is clad with orange face brick, the gables are clad with aluminum siding, and the lower side elevations are clad with common brick. The front elevation has a centrally located hollow core metal paneled door with fanlight, three concrete steps with metal railings, two pairs of windows on the first floor and a single window in the gable. Windows are non-original one-over-one aluminum sash. The front door and windows are sheltered by metal awnings. Detailing includes concrete sills and brick lintel arches. This house does not feature distinguishing architectural elements or sufficient integrity to be individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement front door and windows
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Dormers added to expand the home into two stories			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (lower), synthetic siding (gable ends and dormers)	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Flat, gable	
Ornamental Architectural Details Concrete sills, brick lintel arches			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10058 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Chicago Style Bungalow

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story bungalow at the northwest corner of Eggleston and 101st Street in the Washington Heights community is situated on a raised basement and is clad with brown face brick along its two street elevations. It has a hip roof covered with asphalt shingles and hip dormers along both its front and rear elevations. Its front elevation has a curved window group in the basement level with frosted glass casement windows. It has a recessed corner porch with carpeted concrete steps and corner brick pier support, a metal storm door, and a projecting living room bay with one-over-one windows that are partially obscured by a low metal awning. Detailing includes stone block inserts and a planter box. Its 101st Street elevation has glass block basement windows and one-over-one windows on the first floor. This house does not have sufficient distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows in basement
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Stone block inserts, planter box with brackets			**Windows** Casement, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10100 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame house at the southwest corner of Eggleston and 101st Street in the Washington Heights community is situated on a raised stone block basement with glass block windows. It is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front elevation has a metal storm door and a partial-width porch with concrete steps, metal railings, and open metal posts supporting a metal awning roof. Windows are non-original double-hung and come in varying sizes. Both side elevations feature window bays. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, siding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10104 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a two-story, frame, single family residence.

Property Description: **Stories:** 2

This two-story frame house in the Washington Heights community is situated on a raised concrete block basement, is clad with synthetic siding, and has a cross-gabled roof covered with asphalt shingles. The front elevation has a hip-roofed, enclosed corner vestibule at its south end with a hollow core metal door. It also has a non-original shed-roofed wood porch with straight railings and posts and two pairs of non-original one-over-one aluminum-sash windows: one on the first floor and one on the second. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Cross-gabled	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10142 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised brick basement with glass block windows. It has a cross-gable roof with asphalt shingles; the front wing features a hip-on-gable. The front elevation is clad with red face brick and the side elevations are clad with common brick. The first floor of the front elevation has an off-center entrance with a metal storm door, metal awning, concrete steps and railings. The first floor also has a one-over-one window and a picture window flanked by one-over-one windows. A single one-over-one window is situated in the gable. All double-hung windows are non-original aluminum-sash. Detailing features concrete sills and a vertical strip of four glass blocks adjacent to the front door. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** Hip-on-gable	**Roof Type** Cross gable,	
Ornamental Architectural Details Decorative glass blocks, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10148 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz (lower); CCA (upper 2007)

Date: 31 October 2012

Photos with Captions:
East and north façades of a two-story, single family residence.

Property Description: **Stories:** 2

This two-story house in the Washington Heights community is clad with stucco and has a hip roof covered in asphalt shingles with overhanging eaves. Its front elevation has a large picture window, an off-center door with concrete steps, and a pair of windows on the second floor. Glass block and non-original double-hung windows are visible on the side elevation. The second story and rear one-story addition with a shed roof represent later additions. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Second story added after 1938 (Sanborn). Rear addition also post-dates 1938.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Detached garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10200 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 10 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house on the southwest corner of Eggleston and 102nd Street in the Washington Heights community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has a gabled roof, enclosed porch with a hollow core metal core, wood steps and railings, five windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. This house lacks integrity, does not feature distinguishing architectural elements, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10236 S. Eggleston Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Washington Heights community is situated on a raised concrete block basement with glass block windows. It is clad with wood boards laid vertically and has a gable roof covered with asphalt shingles. There is decorative vertical stickwork in the gable. The residence has a recessed corner porch with a hollow-core metal paneled door, concrete steps, and non-original wood railings and posts. A picture window is on the front elevation and one-over-one aluminum-sash windows on the side elevations (non-original). This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, siding, and porch railing
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stickwork above porch			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10415 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a hip roof covered with asphalt shingles and a hip dormer with two windows that appear to be casements. The front elevation has a strip of four non-original one-over-one aluminum-sash windows and a recessed corner porch with a metal storm door, wood steps, metal railings, and an open metal corner post. This house does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10531 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1940

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: J. Martinez, M. C. Bird, J. Gaurino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad cottage in the Roseland community is situated on a raised brick basement and has a side gable roof covered with asphalt shingles. It has and a non-original flat-roofed aluminum-clad dormer with two non-original one-over-one aluminum-sash windows. The front elevation has an off-center entrance with a metal storm door, concrete steps with metal railings, and a hip-roof living room bay with six-over-one wood-sash windows. Detailing includes decorative stone at the basement level and surrounding the front door. This building does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows
Condition: Excellent Good Poor			
Additional Alterations Dormer added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side gable	
Ornamental Architectural Details Stone accents at basement level and around entrance			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10558 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East faced of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow at the northwest corner of Eggleston Avenue and 106th Street in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, decorative rafters, and a hip dormer. The residence has a recessed corner porch with a wood door, wood steps and railings, and a corner support consisting of a faux stone pedestal topped by a Doric column. The front (Eggleston) elevation has a picture window flanked by one-over-one aluminum-sash windows (non-original). The hip dormer has sliding windows, one of which is partially enclosed by plywood. The 106th Street elevation has a gabled pavilion, non-original one-over-one aluminum-sash windows, and a single casement window. This building does not have sufficient distinguishing architectural features or integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Exposed rafters, Doric column			**Windows** Double-hung, sliding, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10601 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised basement with glass block windows. The building is clad in brown brick, has a hip roof covered with asphalt shingles, and has overhanging eaves. The front and both side elevations feature large gable dormers and the rear elevation has a shed dormer, all of which are clad with aluminum siding. The house features a recessed corner porch with a metal storm door, concrete steps, low brick sidewalls, a brick corner pier, and arched front and side openings. The front elevation's three-sided living room bay has six windows and the front gable dormer has three windows, all of which are non-original one-over-one aluminum-sash. Detailing includes brick soldier courses above and below the living room bay windows, decorative stone insert blocks, and concrete sills. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding in dormers
Condition: Excellent Good Poor			
Additional Alterations Dormers may have been a later addition.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Aluminum siding (dormers)	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills and insert blocks, brick soldier courses			**Windows** Double-hung, fixed-pane, stained glass
Outbuildings (*Number and Description*) Detached two-car garage with pyramidal roof behind residence.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10612 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community area is clad with tan face brick on its front elevation and common brick on its side elevations. The building has a steeply-pitched side-gable roof covered with asphalt shingles and two synthetic-clad gable dormers with one-over-one windows. Its front elevation has a centrally located, gabled, brick-clad entrance vestibule, a metal storm door with an unadorned wood surround, concrete steps with metal railings, and two nine-over-nine windows. It lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main); Synthetic siding (dormers)	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10720 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. The front elevation has a partial-width porch with gable roof, aluminum-clad sidewalls, and wood posts, steps, and railings. Its front door and flanking windows are covered with plywood. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross gable	
Ornamental Architectural Details One tapered wood column			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10757 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house at the northwest corner of Eggleston Avenue and 108th Street in the Roseland community is situated on a raised basement, is clad with synthetic siding, and has a hip roof covered with asphalt shingles. Its front elevation is partially clad with faux stone siding and has a partial-width porch with gable roof, wood deck, and post supports. The porch steps and railings have been removed; the front door and all window openings are covered with plywood. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, steps removed
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (main), Faux stone (entrance)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10904 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and clad with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles and overhanging eaves with wood brackets. The front elevation has a recessed corner porch with concrete steps, metal railings, a single wood corner post, and an entrance with a metal storm door. Windows are non-original and include a small casement window adjacent to the front door, a strip of three one-over-one windows on the first floor, and a pair of one-over-one aluminum-sash windows in the attic. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip on Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10953 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community with a raised basement is clad with buff brick on its front elevation and common brick on its side and rear elevations. The building has a front gable roof covered with asphalt shingles and has overhanging eaves. Its front elevation has a projecting three-sided living room bay with a picture window flanked by one-over-one aluminum-sash windows that are sheltered by a metal awning. The residence has an off-center entrance with a metal storm door, concrete steps with metal railings, and an wood-clad gable laid in diagonal patterns. Detailing includes two decorative glass blocks adjacent to the front door and scalloped trim around the gable. It does not feature distinctive architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Wood (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Glass block detail near entrance, diagonal pattern for gable clapboards			**Windows** Double-hung
Outbuildings (*Number and Description*) Detached, one-car, frame garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11130 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of two-story, concrete block, two-flat residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and made of rusticated concrete block. The building has a flat roof and parapet. It features a flat-roofed full-width porch, half of which is enclosed and covered with aluminum siding. The enclosed porch has a strip of three non-original one-over-one aluminum-sash windows on its front elevation. The open half of the porch has an entrance with metal storm door, a faux stone corner support, and wood steps flanked by concrete block half-walls. The second floor of the front elevation has a strip of three windows and a single window, which are non-original one-over-one aluminum-sash and have stone sills and lintels. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Porch partially enclosed after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills and lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11133 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This 1.5-story frame house in the Roseland community is situated on a raised basement and is covered with synthetic siding. The building has an original, full-width, hip-roofed wrap-around wood porch with turned posts and straight railings. It has a cross-gable-on-hip roof covered with asphalt shingles. Its front elevation has an off-center door with transom and two one-over-one windows. The second floor of the front elevation has two pairs of double-hung windows, one of which features nine-over-nine sashes. Windows are modern replacements. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Turned columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11139 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1915

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised brick basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width porch with low, aluminum-covered sidewalls and squat squared wood column supports. The entrance is off-center and has a metal storm door. There is a strip of three non-original double-hung windows on the first floor and a strip of three original wood casement windows in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and first floor windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11211 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised brick basement and is clad with wood clapboards with wood shingles in the gabled ends. The building has a front gable roof covered with asphalt shingles and overhanging eaves with exposed rafters and decorative knee braces. The front elevation features a partial-width, front-gable, wood porch with squat, squared Doric columns and a boxed cornice. The porch door and adjacent window opening are covered with plywood. There is a group of four one-over-one windows on the first floor and a pair of original wood casement windows in the attic. This is an example of a Craftsman bungalow, an exceedingly common style during the 1910s and 1920s but lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows (first floor)
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding and shingles	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, exposed rafters, squared columns			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11257 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West and south façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, and a hip dormer with two casement windows. The front elevation features a full-width, gable-roof, synthetic-clad sun porch surrounded by non-original one-over-one aluminum-sash windows and a centrally located door with sidelights. There is also an open shed-roof porch with concrete steps, metal railings, and open metal posts. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11730-11736 S. Front Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1952-1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
Looking south at light industrial complex.

Property Description: **Stories:** 1

This concrete block, Quonset utility outbuilding in the West Pullman community is set back from the public right-of-way and has a front elevation with a centrally located garage door opening flanked by a one-over-one window on either side. The 1962 aerial photograph shows two buildings on the property, the extant Quonset and a larger building. The larger building was razed between 2007 and 2012. A one-story building and a trailer standing on the remaining concrete slab from the larger, razed building are also part of this complex but too far from the road for evaluation. Windows appear to be fixed-pane on all buildings within the complex. This building complex does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Extant buildings that are visible from the public ROW remain unchanged
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Barrel	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9820 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1959

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of split-level, brick, single family residence.

Property Description: **Stories:** Split-level

This back-split home in the Roseland community has a hip roof on both levels that are covered with asphalt shingles. The front elevation is clad with orange face brick and has a centrally located hollow core metal door, two pairs of casement windows, and metal steps and railings. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) Detached two-car garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9823 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1915

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades, of 1.5-story, single family, brick residence.

Property Description: **Stories:** 1.5

This 1.5-story home in the Roseland community is situated on a raised brick basement with glass block windows and has a front gable roof covered with asphalt shingles. Its front elevation is clad with brown face brick, as is its enclosed, full-width, hip roof porch that has concrete lintels and sills. The front elevation has an off-center door with sidelights, metal steps and railings, and two first-floor window groups that are covered with metal screens, as were the paired windows in the gable. Some windows on the side elevation are in-filled with brick and glass block. This home lacks integrity and does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, enclosed porch, metal storm shutters, window openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete lintels and sills			**Windows** Glass block, covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11314 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with faux stone on the front elevation. The building has a hip roof covered with asphalt shingles and a hip dormer with three small non-original one-over-one aluminum-sash windows. The front elevation has a recessed corner porch with wood steps, railings, and a corner post. The front door and all first floor windows have been covered with plywood. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone (front) Synthetic siding (sides)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11356 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial (1938 Sanborn)

Current: Multi-family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story building at the northwest corner of Harvard Avenue and 114th Street in the Roseland community is clad with wood board vertically laid on the first floor and with synthetic siding on the second floor. The building has a flat roof and parapet. The front (Harvard Avenue) elevation has an off-center door and a group of three first floor windows that have been covered with plywood and are sheltered by a metal awning. The second floor of the front elevation has four windows—a group of three and a single window—that were formerly three-over-one wood-sash, although most of the glass panes are now gone. The front elevation is topped by a bracketed unadorned wood cornice. The windows on the 114th Street elevation have been covered with plywood on the first floor and have missing glass panes on the second floor. This former commercial building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from commercial to residential after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (upper), Wood (lower)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11415 S. Harvard Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a two-story, four-flat, frame residence.

Property Description: **Stories:** 2

This two-story four-flat building in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a flat roof and parapet. Its front elevation has four centrally located doorways that lack doors, a partial-width wood porch with a gable-on-shed roof, non-original straight posts and railings. There are two window groups on the first floor that are covered with plywood and six non-original one-over-one aluminum-sash windows on the second floor. The parapet level features a bracketed unadorned cornice. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11708 S. Indiana Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house at the southwest corner of Indiana Avenue and 117th Street in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, flat-roof, enclosed sun porch with an off-center metal storm door, concrete steps with metal railings (non-original), and a strip of three windows on the first floor. The second floor of the front elevation has a strip of three windows and a single window, and the attic level has a pair of windows. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11709 S. Indiana Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
North and west façades of two story, single family residence (above), concrete block outbuilding (below)

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof with asphalt shingles. The front elevation features a two-story flat-roofed addition and a single story, shed-roofed, enclosed porch. Fenestration is comprised of non-original one-over-one aluminum-sash windows, many of which are covered with plywood. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement doors, cladding and windows
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Addition on front façade, enclosed porch			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable, Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Two-car, gable-roofed, concrete block garage with glass block and louvered windows, and asphalt shingles			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11715 S. Indiana Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J.Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat, multi-family residential building in the West Pullman community is situated on a raised basement with glass block windows and is clad with face brick on the front elevation and common brick on the side and rear elevations. The building has a full-height window bay pavilion, a flat roof, and parapet. The front elevation has a partial-width porch with concrete steps and open metal posts supporting a metal shed-roof. A pair of off-center storm doors is located under the porch roof. There are seven non-original one-over-one windows: three on the first floor bay and four on the second floor, including three on its window bay. Detailing includes concrete sills, belt courses, brick cornice with corbelling, and brick dentils. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and belt courses; brick cornice with corbelling, brick dentils			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11740 S. Indiana Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with what appears to be roofing paper. The front elevation has a full-width, hip-roof, wood porch with a synthetic-clad base, straight wood railings and posts, and an off-center door. A group of three windows on the first floor are partially obscured by plywood. There are four windows on the second floor (three of which are grouped together) and a pair of windows in the gable. Above the basement, windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Roofing paper	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

112 E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1900

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a brick, two-story, multi-family (Flat) residence.

Property Description: **Stories:** 2

This two-story brick-clad flat residential building in the West Pullman community has a flat roof and parapet. Its front elevation is clad with face brick, has two centrally-located plate glass doors with transoms, and twelve non-original one-over-one aluminum-sash windows: six on the first floor and six on the second. Detailing includes recessed brick panels with dentils at the parapet level, concrete sills, coping, and a concrete stringcourse. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Recessed brick panels with dentils; concrete stringcourse, coping, and sills			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

121 E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, frame, two-flat residential building in the West Pullman community is covered with synthetic siding. The building has a two-story, three-sided window bay pavilion on its front elevation and a front gable roof covered with asphalt shingles. The front elevation has an off-center pair of hollow core metal doors topped by a bracketed pent roof. There are three windows on the first floor, four windows on the second floor, and a single window in the gable. All windows are non-original one-over-one aluminum-sash. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed pent roof			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

121 ½ E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North and west façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story residential building in the West Pullman community is clad with synthetic siding and has a flat roof and parapet. The first floor of its front elevation has an off-center storm door and a group of three windows sheltered by a full-width hip roof that is supported by three wood posts. The second floor of the front elevation has four windows, three of which are grouped together. Windows are non-original one-over-one aluminum sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Venetian Hall (Sanborn 1938)

Common/Current: Unknown

Property Address:

133-139 E .Kensington Avenue
(137 E. Kensington CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Miracle Temple Faith Church

Property Use

Historic: Commercial

Current: Religious Building

Date of Construction: 1924-1926

Architect's Name: Arthur F Hughes

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a brick, two-story, religious building.

Property Description: **Stories:** 2

This two-story building in the West Pullman community (formerly part of Kensington) was originally called "Venetian Hall." The performance hall was built for a cultural/recreational purpose, although it has long since been repurposed as a church. The 1938 Sanborn shows the hall with a stage, balcony, and place for storage of scenery. The street entrance was flanked by two storefronts in 1938, as it is now.

The building is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a flat roof and a shaped parapet with concrete coping. The first floor of the front elevation has a recessed centrally located bay with three pairs of multi-light wood doors and in-filled transoms. This central bay is flanked by two original storefronts with central recessed doors and flanking display windows that are covered with wood and topped by transoms that have been in-filled with glass block. Separating the central bay from the two flanking storefronts are two doors with transoms that provide access to the second floor. The spandrel area directly above the

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

central entrance bay has a concrete sign plate with incised lettering that reads: "Venetian Hall." Fenestration on the second floor features six-over-one and three-over-one wood-sash windows arranged in pairs and in groups of three, topped by round-arch stone lintels with rosette motifs. The parapet features a series of Classical shields and swags.

The exterior of this building has good overall integrity, although elements of the original storefronts materials are no longer extant. However, it does not display sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register for its architecture. Instead, is recommended for individual listing under Criterion A for its original use as a social venue for area residents in the early twentieth century. Local theater houses, such as the Venetian Hall, were jewels within the local communities. It's rare to see an early twentieth century neighborhood social hall that retains its original storefronts and is set within a residential area comprised of worker's housing, rather than along a commercial thoroughfare. The opening of Illinois Terra Cotta works in the first half of the twentieth century brought Italians to Kensington; the area gradually became a center of South Side Italian-American life with the establishment of Venetian Hall and the nearby San Antonio de Padua (patron saint of Venice) Roman Catholic Church.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Some original storefront materials no longer extant
Condition: Excellent Good Poor				
Additional Alterations Converted to use as a church.				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Concrete coping, incised name plate, stone lintels, Classical shields and swags				**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None				

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? Yes	**A** **B** **C**	**Significance:** Good overall integrity and important social gathering place for Italian-American residents of Kensington in the early twentieth century.

Additional Comments:

"Venetian Hall" in 1938 Sanborn.

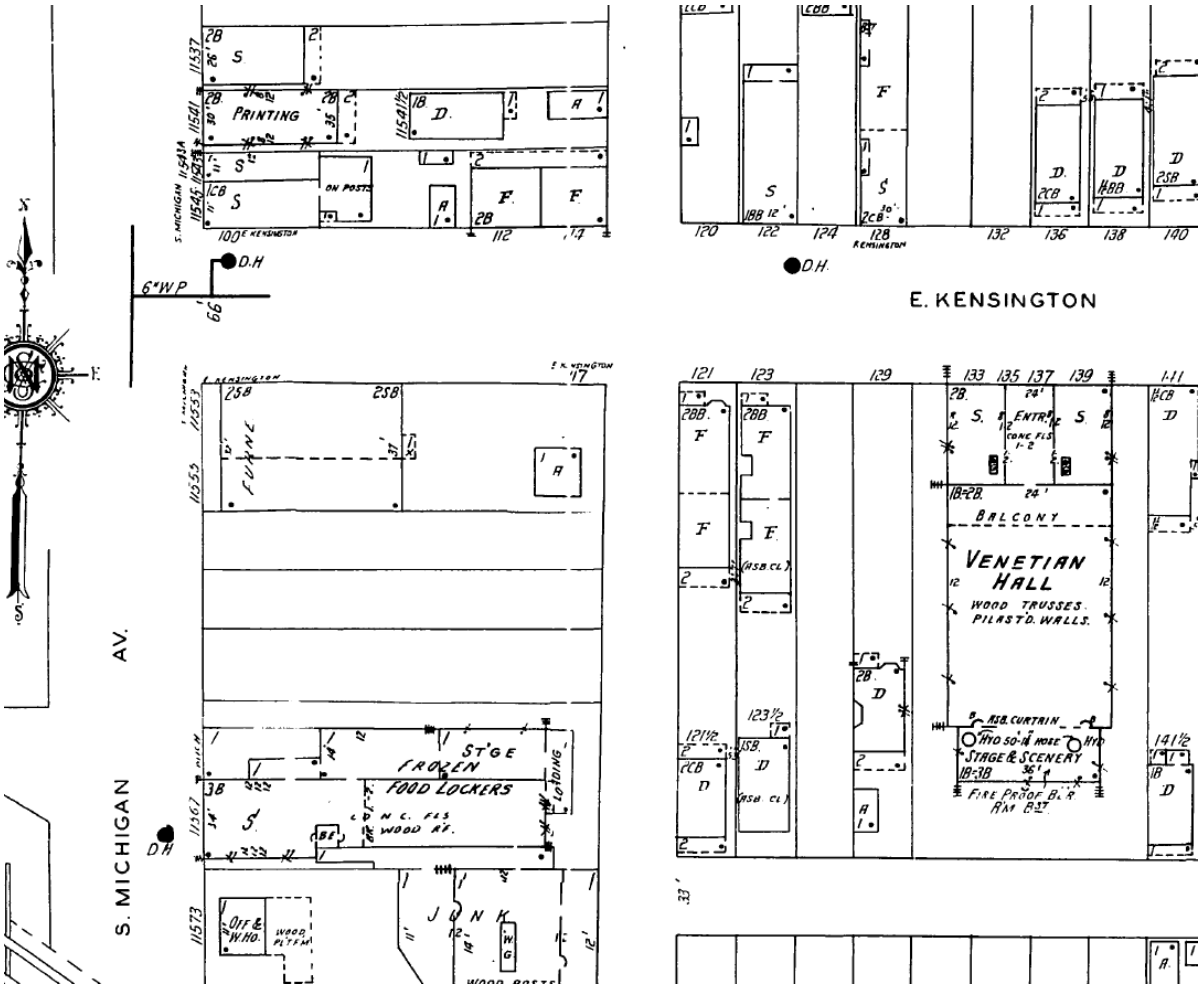

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9723 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with casement windows and has a gable-on-hip roof clad with asphalt shingles. The front elevation has a pent roof, an off-center door, concrete steps with metal railings, a small glass block window, and a picture window flanked by casements. This window group is partially obscured by a low metal awning. Detailing includes a diamond-shaped tile insert in the gable end, stone quoins near the base of the residence, concrete sills, and scalloped boards above and below the pent roof. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable-on-hip	
Ornamental Architectural Details Diamond-shaped tile insert, stone quoins, concrete sills, and scalloped boards			**Windows** Fixed-pane, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9738 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This home in the Roseland community is clad with orange face brick and has a hip roof covered with asphalt shingles. The hip roof extends beyond the front elevation to serve as the roof of the second floor balcony, which is situated above the flat-roofed full-façade porch. Both levels feature open metal supports and railings. The porch has concrete steps. The front elevation features off-center doors trimmed with stone on both floors, a picture window flanked by double-hung windows on the first floor, and a pair of double-hung windows on the second floor. This building does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone at entrances.			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9902 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised brick basement with glass block windows, is clad with aluminum siding, and has a front gable roof covered with asphalt shingles. A non-original, full-width, enclosed front porch covered with lattice obscures the original front elevation of the house. The porch has a horizontal strip of square, non-original windows and an off-center door. The side elevations have one-over-one windows. This home does not have sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Addition to front façade			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*)			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9706 S. Lafayette Avenue
Alternate: 9708 S Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement and has a front gable roof covered with asphalt shingles. Its front elevation is clad with faux stone below the sill line, orange face brick above, and synthetic siding in the gable. It has a centrally-located door, concrete steps with metal railings, a single-pane window flanked by a casement, and what appears to be a pair of casement windows. Windows are partially obscured by low metal awnings. This standard 1950s era house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable end)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11528 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
East and south façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised brick basement, is clad with aluminum siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a gable-roofed, full-width, enclosed porch with an off-center door, metal steps and railings, and two non-original one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11532 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
East façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a flat-roofed, full-width, wood porch with wood slats and posts. It also has an off-center hollow core metal door and a strip of three non-original one-over-one aluminum sash windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11557 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, hip-roof, enclosed porch with non-original synthetic siding, an off-center entrance with metal storm door and metal awning, and a first floor group of sliding windows that is partially obscured by a metal awning. The second floor of the front elevation has a strip of three windows and a single window, all of which are non-original one-over-one aluminum-sash with metal awnings. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11563-11565 S. Michigan Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1900 (1962 addition)

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North and east façades of two-story, brick, industrial building.

Property Description: **Stories:** 2

This two-story industrial building in West Pullman has a flat roof and parapet. A one-story, flat-roofed north wing is a later addition (1962). The original building has been drastically altered with new brick cladding on the first floor and the removal of original doors and windows on the front elevation. The first floor of the front elevation currently features two small non-original windows. The original window openings on the second floor of the front elevation have been in-filled with brick. Two one-over-one windows have been installed on either side. Window openings on the side elevations have all been altered as well. The parapet retains original decorative brick corbelling along the front and side elevations. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, openings in-filled, later addition
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick corbelling			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11592 S. Michigan Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

EZ Phone

Property Use

Historic: Mixed-use

Current: Mixed-use

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of two-story, frame building.

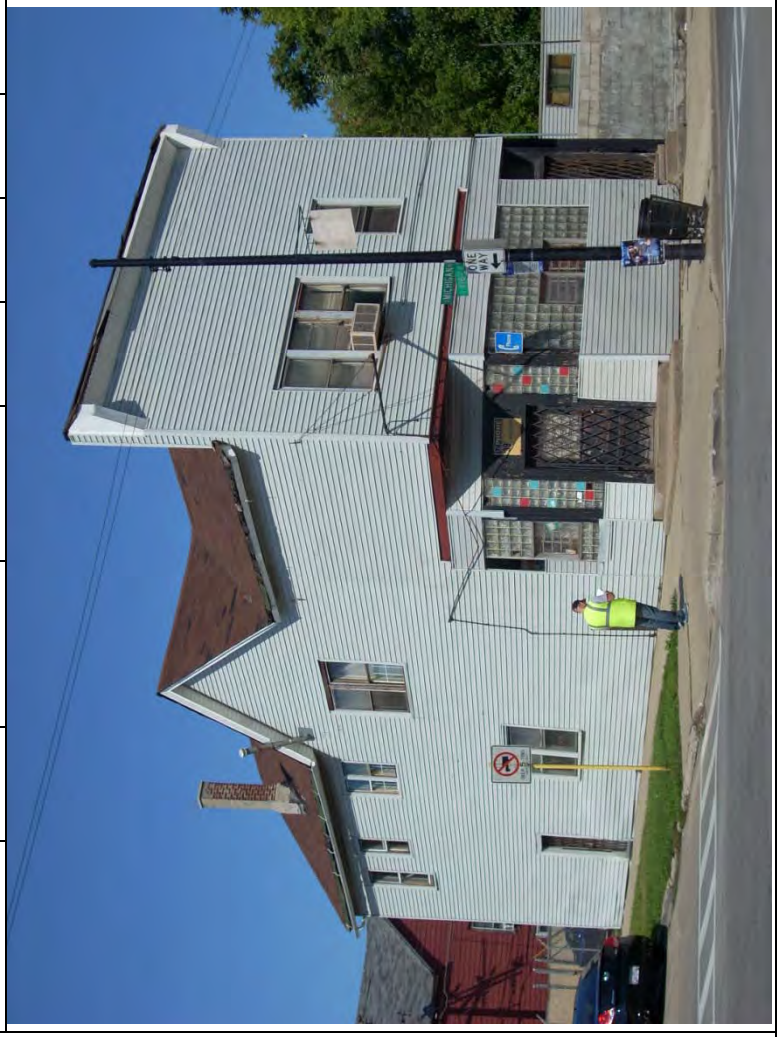

Property Description: **Stories:** 2

This two-story frame building at the northwest corner of Michigan Avenue and 116th Street in the West Pullman community is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front (Michigan Avenue) elevation features a tall false front, a recessed corner storefront entrance flanked by non-original glass block windows, an off-center metal door with transom that provides access to second floor apartments, and four one-over-one windows. Fenestration along the 116th Street elevation is also comprised of one-over-one windows. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Parapet	**Roof Type** Cross-Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11593 S Michigan Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Step of Faith

Property Use

Historic: Commercial (Upholstery, 1938)

Current: Mixed-Use

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
West façade of two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story, frame, mixed-use building at the northeast corner of Michigan Ave. and 116th Street in the West Pullman community is clad with synthetic siding (upper) and brick (lower) and has a front gable roof with asphalt shingles. The front elevation has a recessed brick storefront with an entrance at corner and one at the opposite end, which is covered with plywood. Neither the doors nor the windows appear to be original. The cornice above the first floor includes wood brackets. The second floor on both street elevations features non-original one-over-one aluminum-sash windows. This building lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (upper), Brick (lower)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Wood brackets along first floor cornice line			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11611 S. Michigan Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
West and north façades of two-story, multi-family, frame building.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features an off-center non-original hollow core metal door fronted by a concrete stoop with metal railings and open metal posts supporting a metal canopy. There are two windows on the first floor and two on the second, all of which are non-original one-over-one aluminum sash.

The 1938 Sanborn shows this residence as a 1.5-story building with a round bay pavilion. Subsequent alterations, including the addition of a full second floor have heavily altered this building. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows and siding, removal of bay pavilion, addition of a second floor
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9925 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1946

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of two-story, brick, single-family residence.

Property Description: **Stories:** 2

This two-story brick-clad house at the southeast corner of Normal Avenue and 99th Place in the Washington Heights community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles. Its front elevation has an off-center non-original hollow core metal door, a small adjacent glass block window, concrete steps with metal railings, a pair of non-original double-hung windows on the first floor, and two non-original double-hung windows on the second floor. The door and all front elevation windows have metal awnings. Details include a brick stringcourse and corbelling above first floor window. The difference in the brick colors relates to the removal of shutters. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick stringcourse and corbelling, decorative glass block			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9939 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the Washington Heights community is situated on a raised brick basement with glass block windows. It has a side-gabled roof covered with asphalt shingles. Its front elevation has a centrally located hollow metal paneled door with fanlight, concrete steps with metal railings, two sets of paired windows, and two aluminum-clad gabled dormers, each of which has one window. Windows are non-original one-over-one aluminum-sash. All front elevation windows and the front door feature metal awnings. Detailing includes concrete sills, lintels, and quoins surrounding the door. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding on dormers
Condition: Excellent Good Poor			
Additional Alterations Dormers may be a later addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormers	**Roof Type** Side gable	
Ornamental Architectural Details Quoins at entrance, concrete sills and lintels			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10457 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Dutch Colonial

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South and west façades of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story Dutch Colonial style house at the northeast corner of Normal Avenue and 105th Street in the Roseland community is situated on a raised basement and is clad with red face brick. The building has a side-gambrel roof covered with asphalt shingles, a one-story flat-roofed enclosed sun porch surrounded by four-over-one wood-sash windows along its east elevation, and exterior chimneys on both side elevations. The front (105th Street) elevation has a centrally located non-original hollow core metal paneled door, concrete steps, and metal railings. The door was once flanked by fluted pilasters with geometric capitals. The shaft of one of these pilasters has been removed as has the base of the extant pilaster. The door is topped by an unadorned frieze band and a broken pediment and is flanked by strips of three six-over-one and four-over-one wood-sash windows on either side. The shed-roofed second floor of the front elevation has three non-original one-over-one aluminum-sash windows. This house does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and some windows; pilasters compromised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Side-gambrel	
Ornamental Architectural Details Door surround (frieze band, pediment, pilasters)			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10511 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story brick-clad house in the Roseland community is situated on a raised basement with glass block windows and has a hip roof covered with asphalt shingles. Its front elevation features a pent roof that spans the three-sided living room bay and an off-center hollow core metal door that is accessed by concrete steps with metal railings. The living room bay features a picture window flanked by non-original one-over-one aluminum-sash windows that are sheltered by a metal awning. The second floor of the front elevation has two non-original one-over-one aluminum-sash windows. Detailing includes concrete sills and decorative stones at the basement level. It does not feature distinguishing architectural features nor does it retain sufficient integrity, therefore, is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone accents at basement level, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10641 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised basement with glass block windows and clad with brown brick. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer, the windows of which were obscured by foliage. The house features a recessed corner porch with a hollow core metal door, concrete steps, low brick sidewalls, and a brick corner pier. The front elevation's projecting living room bay has a series of double-hung windows, a decorative brick soldier course, stone insert blocks, and concrete sills. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier course, stone insert blocks, concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10701 S. Normal Avenue
Alternate: 459 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Ranch

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story Ranch house at the corner of Normal Avenue and 107th Street in the Roseland community is situated on a raised basement and is clad with orange face brick below the sill line and buff brick above. The building has a cross-gable roof covered with asphalt shingles; gable ends are clad in synthetic siding. A gabled rear wing contains an attached two-car garage. The front (Normal Ave.) elevation has an off-center metal storm door sheltered by a roof overhang supported by a corner open metal post, concrete steps with metal railings, two pairs of non-original one-over-one aluminum-sash windows, and a non-original picture window flanked by one-over-one aluminum-sash windows on the main block. The front elevation of the rear wing has an off-center metal storm door, a roof overhang supported by two open metal posts, and a large glass block window. The side (107th Street) elevation has corner windows that are obscured by foliage but appear to be casements. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main) Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block, casement
Outbuildings (*Number and Description*) Attached two-car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10747 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a one-story, single family residence.

Property Description: **Stories:** 1

This one-story Craftsman cottage in the Roseland community has a side-gable roof with overhanging eaves and decorative knee braces. The building is made of masonry units with aluminum siding in its gabled ends. Its front elevation has a recessed corner porch with overhanging gable roof with rafter tails, low walls, and squat, squared wood column supports. The building features a front door tucked into the side of the living room bay, a strip of three casements, and a picture window flanked by what appear to be casements. All windows on the front elevation feature concrete sills. Side elevation windows appear to be non-original one-over-one aluminum-sash. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Masonry (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, rafter tails, squared columns, concrete sills			**Windows** Double-hung, casement, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10853 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows and is clad with brown brick. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip-on-gable dormer with three original wood casement windows. The house features a recessed corner porch with a metal storm door, concrete steps, low brick sidewalls, a brick corner pier, and arched front and side openings. The front elevation's projecting living room bay has a series of double-hung windows, a decorative brick soldier course, stone insert blocks, and concrete sills. This house does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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505 North State Street
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier courses, stone insert blocks, concrete sills			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10959 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, brick single-family residence.

Property Description: **Stories:** 2

This two-story house at the corner of Normal Avenue and 110th Street in the Roseland community is clad with buff brick and has a hip roof covered with asphalt shingles, an exterior buff brick chimney, and a raised basement. Its front elevation features a centrally located hipped-roof entrance vestibule with a door that is surrounded by decorative stones. A vertical strip of glass blocks adjacent to the door accents the façade. Concrete steps and metal railings lead to the entrance. There are five windows—two on the first floor and three on the second. The first floor windows are non-original one-over-one aluminum-sash while the second floor windows are six-over-one. Detailing includes concrete sills and brick flat arch window lintels. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone around entrance, concrete sills, brick flat arch window lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11001 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: circa 1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, brick single-family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows. The building has a front elevation clad with buff face brick, a hip roof covered with asphalt shingles, and overhanging eaves. Its front elevation has an off-center entrance with a metal storm door sheltered by a metal awning, concrete steps with metal railings, and a window group with a large decorative faux stone panel beneath. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Faux stone panel			**Windows** Glass block, covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11035 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:

West façade of one-story, single family, frame residence.

West and north façades of residence.

Property Description: **Stories:** 1

This single story frame house at the southeast corner of Normal Avenue and 110th Place in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a side gable roof covered with asphalt shingles and flared, bracketed, overhanging eaves. It features both front and rear gable dormers. It has a recessed corner porch with non-original hollow core metal door, a faux stone corner pier topped by a squat squared wood column, and wood steps and railings. The front elevation has a strip of four windows on the first floor and three in the gable. Above the basement, windows are non-original one-over-one aluminum-sash. A small hip-roofed porch is situated along the 110th Place elevation with hollow core metal door (non-original), concrete steps with metal railings, and open metal supports. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Squat, square column, bracketed eaves			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11426 S. Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

R. E. Russell Paint Company

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: circa 1920s

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 11 September 2012

Photos with Captions
East façades of brick building in industrial complex.

Property Description: **Stories:** 2

This two-story industrial building in the Roseland community has a flat roof and parapet. It sits within an industrial complex bounded by South Perry Avenue, an alley, and the Union Pacific Railroad line. Its front elevation is clad in painted brick. It has a hollow core metal door with in-filled transom and window openings on the first and second floors that are in-filled with glass block with louvered or casement insets. Most of the face brick at the parapet level has been replaced by a stucco-like material. The uppermost portion of the stepped parapet has bricks arranged as decorative dentils. Other buildings within the paint company complex include one-story sheet metal and brick buildings. These buildings lack integrity, do not have distinguishing architectural features, and are not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: N A Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Dentils along cornice			**Windows** Glass block, louvered or casement
Outbuildings (*Number and Description)* Sheet metal warehouse on Perry Avenue, paint production plant and storage areas along railroad.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

In CCA database, age give as 26 years, which was when partial improvements occurred. Structure probably dates to 1900-1930, based on style. Buildings shown on following page are part of the industrial complex.

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Brick and sheet metal industrial buildings within complex.

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11439 S. Perry Avenue
Alternate: 11439 Pippin Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1892

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 11 September 2012

Photos with Captions
South façade of "building A" in a set of three joined industrial buildings. (Additional photographs appended).

Property Description: **Stories:** various

This industrial complex of buildings in the Roseland community includes three conjoined brick buildings: a two-story gable-roofed building (A, photo above), a collapsed brick building (B, photos on page 3), and a two-story flat-roofed brick building (C, photos on page 3). Building A has first floor clad in brick with a one-story, flat-roofed, brick commercial wing in front. The upper half of this building is clad in synthetic siding covering clapboards. It is vacant, deteriorated, and many of its window openings have been covered with particle board. Windows along the south side on the first floor are sliding or double-hung. Building B has collapsed. Building C at the far north has a parapet and is clad with red face brick and common brick. The windows with arched lintels have been in-filled with wood and brick. A new door pierces the façade. This complex of building lacks integrity, does not have any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations <u>Major Alterations</u>			**Additional Notes/Descriptions** In-filled windows, replacement garage doors and siding, new door added, collapsed walls
Condition: Excellent Good <u>Poor</u>			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Sliding, double-hung
Outbuildings (*Number and Description)* None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Additional photos:
Two photos at left: west façade of middle section (Building B), struck by lightning
Right photo: north façade of Building C

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

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Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11515 S. Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
West façade of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community has a gable roof covered with asphalt shingles, overhanging eaves, and a flat-roofed attached one-car garage. Glass blocks with stone sills and brick planter boxes decorate the front of the garage. The front elevation of the house is clad with light orange face brick and features two picture windows, one of which is flanked by narrow one-over-one windows. A stone panel separates the two picture windows. The front gable is clad with synthetic siding in a decorative pattern. The entrance is located along the side elevation and accessed via a flight of concrete steps with metal railings. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone panel, glass block with stone sills, brick planter boxes, clapboards in gable			**Windows** Fixed-pane, glass block, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11516 S. Perry Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

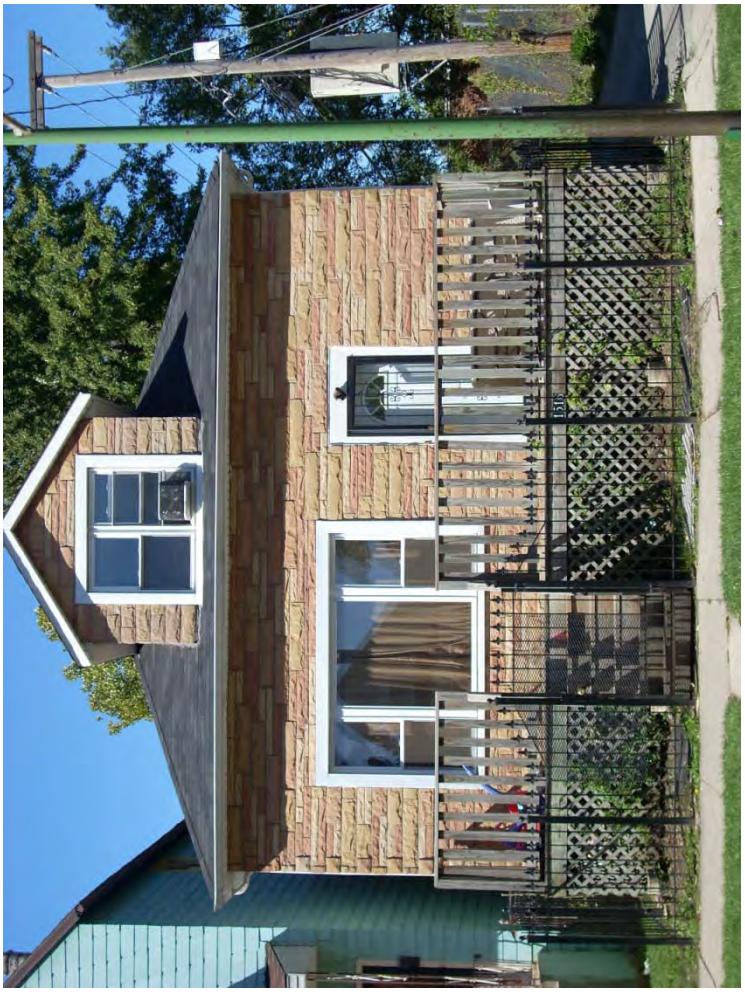

Property Description: **Stories:** 1

This one-story bungalow in the West Pullman community is situated on a raised concrete block basement and is covered with faux stone siding. The building has a hip roof covered with asphalt shingles and a gable dormer with a pair of non-original one-over-one aluminum-sash windows. The front elevation has a full-width porch with a wood deck, steps, and straight railings. This elevation has an off-center hollow core metal door, and a non-original picture window flanked by one-over-one aluminum-sash windows. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11521 S. Perry Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1879

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has a full-width wood porch with a flat roof that is supported by faux stone piers topped by short Doric columns. The façade features an off-center non-original hollow core metal door and five non-original one-over-one aluminum-sash windows: three on the first floor and two on the second. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11630 S. Prairie Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of one-and-a-half-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised brick basement, is clad with synthetic siding, and has a front gable roof with asphalt shingles. Its front elevation features a flat-roofed enclosed porch with concrete steps with metal railings. It also has a hollow metal core door, four non-original windows on the first floor—one casement and a strip of three one-over-one windows—and two paired windows on the second floor, one of which is in-filled with plywood. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11632 S. Prairie Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family

Current: Multi-family

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, frame, multi-family residential building in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features two off-center non-original hollow core metal doors, three windows on the first floor and four windows on the second floor, all of which are non-original one-over-one aluminum sash. A small single-pane window is situated in the gable. This building lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11634 S. Prairie Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East and south façades of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features an off-center, non-original, hollow core metal door, three windows on the first floor, five windows on the second floor, and one in the gable, all of which are non-original one-over-one aluminum sash. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11718 S. Prairie Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1885

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised brick basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The second story was added in the last few years. Its front elevation has a partial-width, hip-roof wood porch with straight posts and railings, an off-center non-original hollow core metal door, and five multi-paned double-hung windows: three on the first floor and two on the second, all non-original. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Second story added after 2007			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11814 S. Prairie Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad bungalow in the West Pullman community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles, overhanging eaves, and gable dormers along its front and rear elevations. The front elevation has a recessed corner porch with a brick pier support at the corner, concrete steps, and a metal railing. Above the basement, windows have been covered with plywood. Detailing includes soldier brick lintels, concrete sills, and concrete insert blocks used as decorative accents. This is an example of a Chicago bungalow, a building type that the City of Chicago has recognized through its Historic Chicago Bungalow Initiative. However, this house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Brick lintels, concrete sills and insert blocks			**Windows** Glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9815 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a steeply pitched front gable roof covered with asphalt shingles. Its front elevation is clad with brown and orange face brick on the first floor and synthetic siding in the gable. It has an off-center door, concrete steps with metal railings, a decorative perforated screen, a picture window flanked by one-over-one aluminum-sash windows on the first floor, and a one-over-one aluminum-sash window in the gable. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Perforated screen			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9818 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community has a gable-on-hip roof clad with asphalt shingles. The front elevation is clad with red face brick on the first floor and synthetic siding in the gable. It has a centrally located door, a decorative perforated screen, and a picture window flanked by what appear to be casements. This window group is partially obscured by a low metal awning. The wood ramp is non-original. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations Wood ramp appended to residence but has not altered the building.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Perforated screen			**Windows** Casement, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10054 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family residence

Current: Multi-family residence

Date of Construction: 1934

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, multi-family residence.

Property Description: **Stories:** 2

This two-story multi-family building at the northwest corner of 100th Street and Princeton Avenue in the Roseland community is clad with brown face brick along its two street elevations. It has a raised brick basement with glass block windows, a hip roof covered with asphalt shingles with overhanging eaves, a shed dormer along its 100th Street elevation, and a hip dormer along its rear elevation. The front elevation has an off-center hollow core metal door with two strips of three windows—one on the first floor and one on the second—along with an additional window on the second floor. Fenestration along both street elevations is comprised of three-over-one wood-sash windows. Detailing includes concrete sills, window surrounds with soldier bricks and square concrete insert blocks, and a course of soldier bricks above the first floor windows that spans both street elevations. The brick panels above both the front and side doors feature the same decorative basketweave pattern. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Dormer appears to be a later addition
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills, soldier bricks, concrete insert blocks, brick panels			**Windows** Double hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10136 S Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1954

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of split-level, brick single family residence.

North façade of split-level showing roofline.

Property Description: **Stories:** 1

This split-level home in the Roseland community has a cross-gabled roof covered with asphalt shingles and is clad with buff and orange face brick. The front elevation's gable is clad with aluminum and has a deep overhang that is supported by two open metal posts. The roofline exhibits an overhanging shed roof along the ridgeline, running the width of the house. The eave of this overhang is clad in vinyl siding. The front elevation's windows and door are obscured by high foliage. Three of the four side elevation windows are covered with plywood. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gabled	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10224 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised brick basement. It is clad with brown face brick and has a cross-gable roof covered with asphalt shingles. Its front elevation has an arched basement window group, an off-center door with a metal storm, a corner recessed porch with concrete steps and metal railings, a projecting three-sided hip-roofed living room bay with five double hung sash windows, and a strip of three one-over-one windows on the second floor. Detailing includes a stone sill course and a decorative soldier course with stone insert blocks above the living room bay windows, decorative scrolled stone brackets below the living room bay windows, and a porch archway with stone keystone. The side elevation has a shed-roofed window bay with large glass block window opening. The rear elevation's original roofline has been raised with a shed-roofed addition. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Rear elevation roofline raised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable, shed	
Ornamental Architectural Details Stone sill course, brick soldier course with stone insert blocks, scrolled stone brackets, archway with stone keystone, arched basement window group			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: First Christian Reform Church of Roseland

Common/Current: Mary Magdalene Missionary Baptist Church

Property Address:

10920 S. Princeton Avenue
Alternate: 10914 S. Princeton Ave.
Alternate: 318 W 109th Place

HAARGIS Number:

140670

Present Owner and /or Occupant:

Mary Magdalene Missionary Baptist Church

Property Use

Historic: Religious

Current: Religious

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Romanesque Revival

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
East façade of two-story religious building (above), south and east facades from HAARGIS (below).

Property Description: **Stories:** 2

This Romanesque Revival style church in the Roseland community has a front elevation and two flanking towers clad with brown face brick, while the remainder of the side elevation and the rear elevation are clad with common brick. It has a gable roof covered with asphalt shingles and gable wall dormers with shaped parapets on both side elevations. The east tower has a flat roof and a shaped parapet while the west tower has a peaked roof with overhanging eaves and exposed rafters and is topped by a finial. The central bay of the front elevation has a broad, round-arched entrance with stone surround and two sets of single-light oak double-doors. The central bay also contains a strip of double-hung windows situated within a broad arch and a rose window with tracery. Fenestration on the both towers and along the side elevations comprises round-arch windows with tracery. It is unknown whether the original stained glass for all of these windows is extant inside the church. Both towers also feature paired casement windows. Window openings at the top of the west tower have been boarded-over. Detailing includes stone sills, belt courses, brick

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

pilasters and keystones. A one-story brick-clad entrance vestibule is situated along the rear of the west elevation. Built as the First Reformed Church of Roseland, this church is recommended as individually eligible for National Register listing under Criterion A for its association with the community's once-dominant Dutch population and under Criterion C as fine example of a Romanesque Revival style church in Roseland.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Square tower brick infilled
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Asphalt shingle	**Roof Features** Parapet, Towers, Dormers	**Roof Type** Gable		
Ornamental Architectural Details Stone sills, belt courses, brick pilasters, and keystones, shaped parapet, rose window				**Windows** Double-hung, fixed-pane, glass block (raised basement)
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** A fine example of a Romanesque Revival style church in the Roseland community associated with the community's once-dominant Dutch population

Additional comments

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11122 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Apartment building

Current: Apartment building

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a brick, two-story, apartment building.

Property Description: **Stories:** 2

This two-story apartment building at the northwest corner of Princeton Avenue and 111th Place in the Roseland community is situated on a raised basement with glass block windows and is clad with brown face brick on its two street elevations. The building has a flat roof and shaped parapet with concrete coping. Windows are original three-over-one wood-sash windows arranged singly, in pairs, or in groups of four. The Princeton Avenue elevation also features four leaded glass casement windows. Each street elevation has an entrance with a non-original hollow core metal door. Detailing includes concrete sills and brick soldier courses with square stone inserts blocks. This building lacks sufficient distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Windows in garden apartments in-filled with glass blocks
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping and sills, stone insert blocks, brick soldier courses			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11142 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat (Single family, CCA)

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of concrete block, two-flat residence.

Property Description: **Stories:** 2

This two-flat rusticated concrete block residential building in the Roseland community is situated on a raised basement. The building has a flat roof and parapet. Its front elevation has a pair of off-center hollow core metal doors, a partial-width hipped-roof wood porch with straight posts and railings, and five non-original one-over-one aluminum-sash windows: two on the first floor and three on the second. Detailing includes stone sills and lintels. The south (alley) elevation has a full-height window bay pavilion. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills and lintels			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11319 S Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised concrete block basement. Its front façade has an off-center, non-original, hollow metal paneled door and a porch with concrete steps, metal railings, and metal supports with a metal canopy roof. Fenestration is comprised of non-original one-over-one windows: a strip of three on the first floor and two on the second floor. One of the side elevations has a three-sided window bay on the first floor. This home lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11321 S Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised basement. Its front façade has an off-center hollow metal paneled door and a porch with wood steps and straight wood railings. The first floor of the front façade has a large picture window and the second floor has paired, double-hung windows. This home lacks integrity and distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11325 S. Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised concrete block basement. Its front façade has an off-center, non-original, hollow, metal paneled door and a porch with wood steps and straight wood railings. Both the first and second floors of the front façade feature a large picture window flanked by one-over-one windows. The second floor has an additional one-over-one window situated directly above the entrance. This home lacks integrity and distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11327 S Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
West façade one-story, single family, frame residence

Property Description: **Stories:** 1

The one-story home in the Roseland community is clad with synthetic siding and has a flat roof. Its front façade has an off-center door, wood steps and railings, and a strip of three, non-original one-over-one windows. It lacks integrity and any distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11340 S. Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of two-story, brick, single family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with face brick and common brick on the front and side elevations, respectively, and has a hip roof covered with asphalt shingles. The front façade has a three-sided bay window on the first floor and casement windows at each corner of the second floor, each topped by an awning. Details include concrete quoins on the bay and concrete sills. The main entrance is located along the side elevation, which contains an entryway porch topped by a flat roof supported by metal pole. Decorative lattice is present at the entrance. This building lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hipped	
Ornamental Architectural Details Concrete quoins and sills, lattice at entry			**Windows** Fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11546 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1901

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West and north façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with wood slat railings and wood posts. It also has an off-center door, a multi-light fixed-pane window on the first floor, and a pair of non-original one-over-one windows in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement cladding, door, and windows in gable
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Not in CHRS

Property Address:

11548 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West and south façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a gable roof covered with asphalt shingles and a shed roof dormer on its south elevation. Its front elevation features a full-width, hip-roof, wood porch with open metal railings and posts, an off-center door, a bay window on the first floor, and a single non-original one-over-one window in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows, doors, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Not in CHRS

Property Address:

11567 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a front gable roof covered with asphalt shingles and an enclosed hip roof porch. The front door and all window openings are covered with plywood. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and doors covered with plywood, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11569 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement with a stone veneer. Above, it is clad with aluminum siding and has a gable roof covered with asphalt shingles. Its front elevation features a pent roof with decorative knee braces, an off-center door, concrete steps with metal railings and a strip of three non-original one-over-one windows. The window opening in the gable contains a pair of narrow casements. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces supporting porch roof			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11571 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with Doric columns and metal pipe railings. It also has an off-center door, a strip of three non-original one-over-one windows, and a single-pane window in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11573 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with square porch supports and non-original railings. It has an off-center metal hollow core paneled door with fanlight and a picture window flanked by non-original one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11575 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
South façade of one-story, single-family frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a front gable roof covered with asphalt shingles and a flat-roofed dormer along one of its side elevations. Its front elevation features a full-width porch with wood steps and support consisting of brick piers topped by squat Doric columns. The porch deck and railings have been removed and the door and all windows openings are covered with plywood. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and doors covered, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11583 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South and east façades of single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised basement with glass block windows and is clad with common brick. It has a steeply pitched hip roof covered with asphalt shingles and a shed dormer with sliding glass windows. Its front elevation features a centrally located hollow metal paneled door (non-original) flanked by paired, double-hung windows. The porch has concrete steps, metal railings and supports, and a metal canopy roof. Detailing includes rusticated stonework at the basement corners and around the door. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Rusticated stonework at corners and around the entrance			**Windows** Double-hung, sliding, glass block
Outbuildings (*Number and Description*) None.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Trinity Italian Reformed Church (1938)

Common/Current: New Christian Joy F.G.B.C.

Property Address:

11594 S. State Street
Alternate: 11588 S State Street (per CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

New Christian Joy F.G.B.C.

Property Use

Historic: Religious

Current: Religious

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a brick, 1.5-story religious building.

Property Description: **Stories:** 1.5

This church at the corner of State and 116th streets is clad in buff face brick on a concrete block foundation. The building has a raised basement, gable roof covered with asphalt shingles, and a square corner tower with a hip roof. Its front (State Street) elevation has a centrally located hip-roof entrance pavilion with metal stairs on both sides and a gable wall dormer above. The pavilion features a cross of glass blocks and the flanking walls each have a single square leaded glass window. The side (116th Street) elevation features one large and two small pointed arch windows. This church lacks sufficient distinctive architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Square tower, cruciform-shaped glass blocks, pointed windows, leaded glass			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11118 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Benson & Son Construction Contractor

Property Use

Historic: Industrial (Sash & Screen Door Factory, 1939)

Current: Garage

Date of Construction: 1922

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz, CCA

Date: 6 September 2012

Photos with Captions:
East and north facades of a one-story, concrete block garage.
Cook County Assessor's photo (top), MARS, Inc. photo (bottom):

Property Description: **Stories:** 1

This one-story concrete block garage has a flat roof and parapet. Its front elevation has been covered with what appears to be shotcrete and has an off-center hollow metal door. The structure has a series of overhead garage door openings along one of its side elevations. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Re-clad with shotcrete
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Business office attached (11124 S. Stewart Ave.)

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11130 S Stewart Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad with synthetic siding; it has a hip roof covered with asphalt shingles and a hipped roof dormer with louver. The front elevation has an off-center door, wood steps and railings, and a pair of windows that appear to be casements. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11142 S. Stewart Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: circa 1950

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade two-story, brick light industrial building.

Property Description: **Stories:** 2

This two-story light industrial building is clad with face brick and common brick along its front and side elevations, respectively, and has a flat roof and parapet. The front elevation has an off-center entrance with no door, a large window opening on the first floor that is obscured by foliage, and window openings on the second floor that have been in-filled with both wood and brick. The buff brick between the first and second floors and at the parapet level contrasts with the red brick cladding of the front elevation and may be non-original. Detailing includes dentil molding on the parapet, banding in brick, and stone sills. Side elevation windows are in-filled with glass block. This building lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** In-filled windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Parapet with dentil molding, banding, sills			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11224 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of 1.5-story, frame, single family residence.

Property Description: **Stories:** 1.5

This 1.5-story house in the Roseland community is situated on a raised brick basement with glass block windows. The building has a front gable roof covered with asphalt shingles and overhanging eaves with decorative knee braces. The front elevation is covered with faux stone to the top of the first floor windows and in vertical synthetic siding above. It has a partially recessed gable-roofed corner porch with sidewalls covered with synthetic siding, two low squared wood column supports, and wood steps. A glass block window and hollow core metal door are tucked into one side of the porch. A strip of four windows on the first floor and a pair of windows in the gable are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (including faux stone)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, square column on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11229 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
West façade of one-story, single family frame residence.

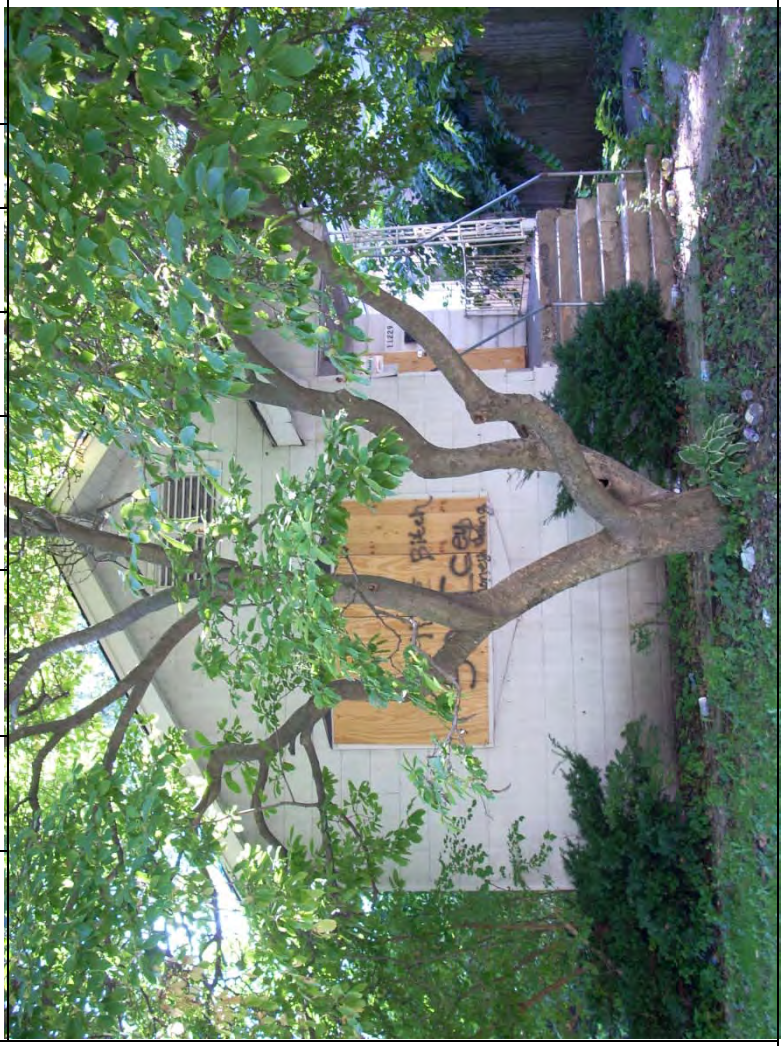

Property Description: **Stories:** 1

This one-story frame home in the Roseland community is clad with synthetic siding and has a front-gabled roof covered with asphalt shingles. Its off-center recessed porch with gabled hood has concrete steps, metal railings, and a corner support, plus a door opening that has been covered with plywood. The bow window on the front elevation and window openings along the side elevations have all been covered with plywood. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, covered window and door openings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Gabled hood at entrance			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11231 S. Stewart Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
West façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland neighborhood is clad with aluminum siding. It has a cross-gable roof covered with asphalt shingles, overhanging eaves, extended rafter ends, and decorative knee brace supports. Its recessed corner porch features wood steps, a wood post, a paneled hollow core metal door with fanlight, and a decorative gable hood with knee brace supports. Its front façade has a strip of four one-over-one windows and a pair of single-pane windows in the attic gable that may be casements. This home does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details Extended rafters, knee braces			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11572 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-half-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation has a metal core door and two one-over-one windows on the first floor and sliding glass doors on the second floor. All doors and windows are non-original. The metal stairway and balconies are non-original. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, & cladding
Condition: Excellent Good Poor			
Additional Alterations Metal stairway and balconies added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage and storage shed behind residence.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11573 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

XOXXOX Charter Bus, Inc.

Property Use

Historic: Warehouse (Sanborn, 1938)

Current: Garage

Date of Construction: 1910

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of brick bus garage building.

Property Description: **Stories:** 1

This one-story former warehouse in the West Pullman community is clad with common brick and has a flat roof, parapet, and a shed-roofed frame wing. Its front façade features the outline of an original door opening that has been in-filled with brick, a non-original overhead metal door, a metal door with transom, and a former door opening that has been in-filled with wood panels and two horizontal strips of small fixed-pane windows. One of the side elevations displays the outlines of former window openings that have been in-filled with brick while the other features an overhead metal garage door. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and door openings in-filled, small addition
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11574 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised basement and clad with synthetic siding. It has a hip roof covered with asphalt shingles and a hip dormer with a pair of single-pane casement windows. The front elevation features a full-width, hip roof wood porch with faux stone pier supports, an off-center door, and non-original one-over-one windows arranged in strips of two and three on the first and second floors, respectively. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, porch railing
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11578 S. Wabash Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. The front elevation features a full-width flat-roofed wood porch with supports consisting of low faux stone pedestals topped by wood Doric columns, an off-center wood paneled door, and strips of three one-over-one non-original windows on both the first and second floors. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch railings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9745 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with glass block windows. It is clad with buff brick and has a hip roof covered with asphalt shingles. Its front elevation has an off-center hollow core metal door, a casement window, a picture window flanked by one-over-one aluminum-sash windows, concrete steps with metal railings and a small patio area. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not in CHRS database.

Common/Current: Not in CHRS database

Property address:

11321 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

A Little Bit of Heaven

Property Use

Historic: Apartment building

Current: Public

Date of Construction: circa 1924-1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of the four-story, brick building

Property Description: **Stories:** 4

This four-story building at the northeast corner of Wentworth Avenue and 113th Place in the Roseland community has a flat roof and parapet. Its symmetrical front (Wentworth Avenue) elevation is clad with brown face brick and has a centrally located entrance with a glass door and stone surround topped by two stone owls holding books. Windows are non-original one-over-one aluminum-sash; those directly above the entrance have stone casings. Detailing includes stone sills, coping, insert blocks, sill courses, cornice, panels, and pinnacles at the parapet level.

This building is recommended locally significant for National Register listing under Criterion A for Education. Formerly the Roseland Community Hospital Nurses Home, it was built by the hospital as a dormitory and educational facility for its nurses. Closely affiliated with Roseland Community Hospital, which has served as an important institution in the Roseland area since its establishment in 1924, the Nurses Home is an excellent example of this building type on Chicago's South Side. The exterior of the building has very good integrity and the interior—which now functions as a homeless shelter—appears to retain classrooms and other spaces associated with its original use.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone casings, sills, cornice, panels, inserts, and pinnacles; stone surround with owls at entrance			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Built as a dormitory for Roseland Community Hospital nurses and served as an important educational facility for women training in this profession.

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11334 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1906

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised concrete block basement with casement windows and is covered with synthetic siding. The building has a gable roof with asphalt shingles. The front elevation has a hipped-roof wood porch with Doric columns, an off-center entrance with a hollow core metal panel door, a three-sided bay window on the first floor, and a strip of three windows in the gable. With the exception of the basement, windows are non-original one-over-one aluminum-sash. The north elevation has a hipped-roof wall dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric columns			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11352 S. Wentworth Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1897

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, has a flat-roofed dormer along one of its side elevations, and is situated on a raised concrete block basement with glass block windows. Its front elevation has a full-width gable roof porch, a portion of which is enclosed with synthetic siding and features a strip of non-original one-over-one windows. The open portion of the porch has a corner support consisting of a low faux stone pedestal topped by a wood Doric column, a window opening that has been covered, wood steps, and metal railings. A pair of non-original one-over-one windows with original wood casing is situated in the gable. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations Dormer and rear addition may be non-original			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric column on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11428 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 22 October 2012

Photos with Captions:
East façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story cottage in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. Its front elevation has a three-sided bay with plywood-covered windows, a partial-width shed-roofed porch with straight wood railings and posts, and a plywood-covered door. A single non-original one-over-one aluminum-sash window is situated in the gable. The north elevation has a synthetic-clad gable dormer with a single window. Side elevation windows are non-original one-over-one aluminum sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9808 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, two story, single family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is situated on a raised brick basement and has a hip roof covered with asphalt shingles. Its front elevation is clad with buff and orange brick with linear concrete inserts and sills. It has an off-center door, a flat-roofed partial-width porch with brick sidewalls, concrete steps and metal railings. It has a picture window flanked by one-over-one aluminum-sash windows on the first floor and two one-over-one aluminum-sash windows on the second floor. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Structural Survey

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505 North State Street
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Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete inserts and sills			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9904 S Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement, is clad with synthetic siding, and has a hip-on-gable roof covered with asphalt shingles with overhanging eaves and exposed rafters. The front elevation has a pent roof that extends forward above the front windows and door, and is supported by open metal posts. The porch has concrete steps and metal railings. The front elevation also features an off-center door and a picture window flanked by non-original one-over-one aluminum-sash windows on either side. This home does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Pent roof	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9905 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised basement, is clad with brick, and has a side-gabled roof covered with asphalt shingles and overhanging eaves. Its side-gabled elevations are clad with synthetic siding, as is the gable dormer along the front elevation. The roof extends beyond the front elevation to serve as the roof of the porch, which is supported by open metal posts and has metal railings, a wooden deck, and wooden steps. The front elevation features an off-center hollow core metal door, a leaded glass casement window, and two strips of non-original double-hung aluminum-sash windows: one on the first floor and one in the dormer. This home does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable ends and dormers)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Side-gabled	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11319 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. It has a hip-roofed, full-width porch with faux stone supports beneath the deck, wood columns, railings, and steps. The front elevation's off-center door and first floor window group are covered with plywood; paired windows in the gable are non-original one-over-one aluminum-sash. The south elevation has a shed dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current :NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11330 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front façade has a three-sided window bay comprised of non-original one-over-one windows, a recessed front door, and a full-width hipped-roof wood porch with supports consisting of low faux stone pedestals topped by open metal posts. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11334 S Yale Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is situated on a raised basement, clad in synthetic siding, has a hip roof covered with asphalt shingles and overhanging eaves. It features a full-width, hip-roof, wood porch. The front façade has an off-center door, three-sided window bays on the first and second floors comprised of non-original one-over-one windows, and a single one-over-one window on the second floor directly above the door. Its hip dormer has three window openings: two comprised of single-pane windows and a third that is covered with plywood. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11336 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story home in the Roseland community is situated on a raised basement and clad in two layers of synthetic siding. It has a gable roof covered with asphalt shingles and a full-width, hip-roof wood porch with non-original, wooden, square columns and rails. The front façade has an off-center, non-original, hollow metal core panel door with fanlight. It also has a three-sided window bay on the first floor comprised of non-original one-over-one windows and a strip of three, non-original one-over-one windows on the second floor. One of the side elevations has a three-sided bay window and gable wall dormer above. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11343 S. Yale Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: Jay Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 1 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. Above, it is clad with synthetic siding on the sides and clapboards on the front. It has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer. The roofline extends forward to shelter the full-width, hipped-roof, wood porch that is supported by low faux stone pedestals topped by squat wood Doric columns. The front elevation has an off-center door opening and a three-sided window bay. The door and all window openings have been covered with plywood. This building does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Openings covered with plywood, synthetic siding on sides
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Clapboard (front), Synthetic siding (sides)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Doric columns on porch			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11413 S. Yale Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1920

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
West and south façades of single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. It has a hip roof covered with asphalt shingles and a hip dormer with a pair of single-pane or sliding windows. Its roof overhangs to shelter the full-width wood porch with supports consisting of faux stone pedestals topped by squared wood columns. The front façade has an off-center front door, an adjacent single-pane window, and a strip of four double-hung windows. Windows appear to be original wood-sash. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Square pillars on porch			**Windows** Double-hung, fixed-pane or sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11417 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised brick basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width porch with a mansard-like roof that is partially enclosed and covered with synthetic siding. This elevation of the porch also has a strip of three non-original one-over-one aluminum sash windows. The open portion of the porch has a metal storm door, concrete steps with metal railings, and an open metal corner post. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding.
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Attachment 3
Section 106 Consultation Supporting Documentation

RLE Mailing List for S106 Consulting Parties

Accept	AGENCY	CONTACT	ADDRESS	EMAIL
X	Illinois Historic Preservation Agency (SHPO)	Anne Haaker	One Old State Capitol Plaza Springfield, IL 62701	anne.haaker@illinois.gov
X	Chicago Historic Preservation Div. Dept of Housing & Economic Development	Terry Tatum	33 N. La Salle Street, #1600 Chicago, IL 60602	ttatum@cityofchicago.org
X	Preservation Chicago	Jonathan Fine, Executive Director	4410 N. Ravenswood Chicago, IL 60640	jfine@preservationchicago.org
X	Landmarks Illinois	Bonnie McDonald or L. DiChiera	53 W. Jackson Blvd., # 1315 Chicago, IL 60604	DiChieraL@lpci.org
X	Ridge Historical Society	Jennifer Kenny	9927 S Longwood Dr. Chicago, IL 60643	jennifer.kenny@mindspring.com
X	Rosemoor Community Association	Gloria Cosey, President	10205 S. King Drive Chicago, IL 60628	rosemoorchicago@yahoo.com
X	Friends of the Park	Erma Tranter, President Tim Jeffries	17 N State Street, #1450 Chicago, IL 60602-3315	trantere@fotp.org jeffriest@fotp.org
X	Chicago Neighborhood Initiatives	Angelica Marks	1000 E 111th Street - 10th Floor Chicago, IL 60628	amarks@cnigroup.org
X	Neighborhood Housing Services of Chicago Citywide office	Matt Cole	1279 N. Milwaukee Avenue, 5th Floor Chicago, Illinois 60622	MCole@nhschicago.org
X	Peoria Tribe of Indians of Oklahoma	Frank Hecksher	P.O. Box 1527 Miami, OK 74355	
X	Forest County Potawatomi	Melissa Cook, THPO	P. O. Box 340 Crandon, WI 54520	Melissa.Cook@fcpotawatomi-nsn.gov
X	Miami Tribe of Oklahoma	George Strack, THPO	202 S. Eight Tribes Trail Miami, OK 74354	gstrack@miamination.com
PARTIES ADDED LATER				
X	DCP	Gwendolyn Rice Executive Director	212 E 95th Street Chicago, IL 60619-7208	gmrice@dcpchicago.com

MEETING NOTES

RE: **Section 106 Kick-off Meeting**
Red Line Extension EIS

DATE: **October 24, 2012**

LOCATION: **Conference Call/Webinar**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	**Organization**
Sonali Tandon	CTA
Reggie Arkell	FTA
Anne Haaker	IHPA (SHPO)
Jonathan Fine	Preservation Chicago
Terry Tatum	Chicago Historic Preservation Division
Lisa DiChiera	Landmarks Illinois
Erma Tranter	Friends of the Park
Helene Kornblatt	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group

PREPARED BY: Rebecca Thompson

ISSUE DATE: October 24, 2012

Meeting called to order at 1:00 pm CT

Objective: Red Link Extension Kickoff Meeting for Section 106 Consultation

Item No.	*Item Description*	*Responsibility*	*Due Date*
1	**Welcome/Intro** Sonali welcomed attendees and callers introduced themselves.		
2	**Overview of Section 106 Process** John Mettille provided an overview of the four-step Section 106 process. Reggie Arkell explained that FTA is overseeing the consultation process, working in conjunction with CTA. FTA will make determinations regarding eligibility and effects, referencing recommendations prepared by the consultant and considering input from consulting parties, including the SHPO. John discussed the roles of consulting parties and identified ground rules to ensure everyone has a fair chance to provide meaningful input.		

Item No.	Item Description	Responsibility	Due Date
3	**Project Info & Alternatives** Sonali provided a brief overview of the project area, the No Build alternative, and the three Build alternatives that are being considered: UPRR rail, Halsted rail, and Bus Rapid Transit. John presented the Area of Potential Effects (APE), which defines the geographic boundary where the analysis of historic resources will occur. A larger scale APE map is attached to the meeting summary.		
4	**Schedule/Next Steps** John explained the next steps in the process. Work is underway to identify potential historic properties. We are tentatively planning to hold a meeting to discuss the eligibility of resources in December. A meeting to discuss effects will occur in early 2013.		
5	**Question/Answer** - Jonathan: Is the purple segment on the alternatives map new or existing? It would be a new structure in the median of the expressway. - Reggie: What is the pier spacing for the Halsted Alternative? Spans between piers would typically be 60 to 100 feet, and as long as 140 feet. Span length would be based on site conditions, geometrics, and clearance requirements. - Jonathan: What advantages does the Halsted Alternative offer over the No Build Alternative? Halsted would extend the red line south to serve additional transit markets. The No Build Alternative includes improvements at the 95th Street station which are currently being planned but would not include an extension of the route or other improvements. - Jonathan: Which alternative has the least impacts on historic resources? That is part of what we will determine through this process. - Lisa: Is documentation of the previous study available online? Yes, the project website is http://www.transitchicago.com/redeis Please use following links to access specific materials: Locally Preferred Alternative Report and Scoping Report (http://www.transitchicago.com/Redeis/documents.aspx); Alternatives Analysis Materials (http://www.transitchicago.com/news_initiatives/planning/redextend.aspx) - Lisa: If we have additional information about resources, should we send it to the team? Yes, please direct it to Sonali at STandon@transitchicago.com. - Erma: Are parks covered in the 106 process too? Parks are protected under Section 4(f) regulation, which is a separate law; they will be addressed in the project EIS. The Section 106 process will deal with historic resources; if any parks in the area or park facilities are determined to be historic, they will be considered during the 106 process. If any historic resources are used by the project, they will be addressed under Section 4(f) as well. Parks that are not historic are subject to the 4(f).		

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days.

As requested, contact information for participants is below:

Name	Organization	Email
Sonali Tandon	CTA	STandon@transitchicago.com
Reggie Arkell	FTA	Reginald.Arkell@dot.gov
Anne Haaker	IHPA (SHPO)	Anne.Haaker@Illinois.gov
Jonathan Fine	Preservation Chicago	JFine@preservationchicago.org
Terry Tatum	Chicago Historic Preservation Division	TTatum@cityofchicago.org
Lisa DiChiera	Landmarks Illinois	DiChieraL@lpci.org
Erma Tranter	Friends of the Park	TranterE@FOTP.org
Helene Kornblatt	CWC Transit Group	KornblattHK@cdmsmith.com
John Mettille	CWC Transit Group	MettilleJL@cdmsmith.com
Rebecca Thompson	CWC Transit Group	ThompsonRD@cdmsmith.com
Robert Ball	CWC Transit Group	BallRW@cdmsmith.com

cc: Attendees

MEETING NOTES

RE: **Section 106 Eligibility Meeting**
Red Line Extension EIS

DATE: **January 30, 2013**

LOCATION: **CTA/Conference Call**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	Organization
Sonali Tandon	CTA
George Coleman	CTA
Joseph Iacobucci	CTA
Reggie Arkell	FTA
Mark Assam	FTA
David Halpin	IHPA
Jonathan Fine	Preservation Chicago
Terry Tatum	Historic Preservation Division, Dept. of Housing and Economic Development
Lisa DiChiera	Landmarks Illinois
Erma Tranter	Friends of the Park
Jennifer Kenny	Ridge Historical Society
Gloria Cosey	Rosemoor Community Association
Angelica Marks	Chicago Neighborhood Initiatives
Matt Cole	Neighborhood Housing Services of Chicago, Inc.
Gwendolyn Rice	DCP
Rev. Mitchell Johnson	DCP
Phyllis Palmer	DCP
Helene Kornblatt	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group
Jean Guarino	CWC Transit Group

PREPARED BY: Rebecca Thompson

ISSUE DATE: January 31, 2013

Meeting called to order at 10:30 am CT

Objective: Red Link Extension Eligibility Meeting for Section 106 Consultation

Item No.	*Item Description*	*Responsibility*	*Due Date*
1	**Welcome/Intro** Sonali welcomed attendees. Reggie Arkell explained FTA's oversight role on the project. John Mettille reviewed the agenda.		
2	**Background & Regulations** John Mettille provided an overview of the four-step Section 106 process, which is intended to assess historic resources and their eligibility for listing on the National Register of Historic Places (NRHP). John identified ground rules to ensure everyone has a fair chance to provide meaningful input.		
3	**Review of Area of Potential Effects (APE)** John presented the APE, which defines the geographic boundary where the analysis of historic resources will occur. The area includes over 1,400 acres and 7,000 buildings.		
4	**Methodology for Identification of Historic Properties** The team developed historic contexts for each community in the APE to frame the evaluation of historic properties. The team also conducted field surveys and archival research for over 500 individual properties within the APE. The survey sample included all buildings that would be demolished by one or more alternatives and a sample of other properties; sample properties were concentrated in areas that are likely to experience greater effects. Based on this, eligibility recommendations were developed for individual properties. - Q: Did you look at properties less than 50 years in age that could be significant to the community? A: We primarily examined properties over 50, but we did look for overall significant properties as well as potential historic districts. - Q: Are Chicago Historic Resources Survey (CHRS) red/orange properties shown? A: They are noted in the summary table in section 3 of the handout packet. - Q: What research was done on the social history of the area? For example, what about identifying community meeting places or locations significant in the lives of civil rights leaders? Of the 7,000 buildings in the APE, it is concerning that only 10 are identified as eligible.		

Item No.	Item Description	Responsibility	Due Date
	A: The team developed historic contexts for each of the communities represented in the APE but these focused primarily on the built environment. Part of the intent of the consultation process is to gather your input about what additional resources are out there, particularly from organizations more familiar with the immediately vicinity and social history. If you have information about potentially significant resources, please let us know during the comment period.		
5	**Overview of Surveyed Properties** Nine properties were recommended eligible for NRHP listing. - Residence at 444 W 100th Place - Former substation at 10227 S Halsted Street (gas & electric for the city) - Fire Department at 324 W 104th Street - Roseland Pumping Station (still in use) - Residence at 11310 S Emerald Avenue - Church at 10920 S Princeton Avenue (currently Mary Magdalena Missionary Baptist Church) - Fire Department at 931 W 120th Street - Church at 12433-12439 S Halsted Street - Venetian Hall at 133-139 E Kensington Avenue (currently used as church and shelter) *Note: the address is correct but the property lies in the West Pullman community.* In addition, Altgeld Gardens was determined NRHP eligible in 1992 independent of the project. - Q: How do you account for the fact that the community is under surveyed and underserved? Underrepresentation undercuts the intention of the project. A: The team prepared historic contexts for each community, consistent with the state of the practice. Beyond that, we rely on your input. Once you provide your comments, the team will establish a strategy to move forward. We will respond to comments received and keep you informed. - Q: Does the list of surveyed properties fully cover the area to be considered in the historic/social context? (DCP agreed that it does not.) A: The APE covers the area that could be impacted by the project; it forms the limits for our analysis. - Q: Is there a separate involvement process for Section 4(f)? A: There is a public involvement element if these resources are affected. It isn't a committee, but there is a mechanism to gather input from agencies and others. - Kensington Park along the UPRR corridor should be added to the table on slide 29. *Note: information for Fernwood Parkway was included in the table although the name was mistakenly presented as "Fernwood Park" instead. Wendell-Smith Park is presented as "Smith Playlot" in the table, consistent with the Chicago Parks Department naming convention.*	CWC	3/1

Item No.	Item Description	Responsibility	Due Date
6	**Schedule & Next Steps** John Mettille reviewed the schedule and next steps. - Q: Can you describe the effects for each eligible property? A: We will cover this in the next phase of the process, probably in Spring 2013. - Q: What is the third alternative shown? A: The Halsted Alternative was added during the scoping process to look for options to minimize the impacts on parks and other 4(f) resources. The UPRR Alternative is the locally preferred alternative; we will define a National Environmental Policy Act (NEPA) preferred alternative as part of the NEPA process. - Q: Can the UPRR alternative fall anywhere inside the APE boundary? A: No, it will follow or run adjacent to the existing UPRR alignment. The APE includes a buffer to account for visual, noise, and other indirect effects. - Q: What source did you use for the architects and construction dates? A: CHRS and the County Assessor website. - Two of the photos on slide 26 could be considered contributing within a district. There are enough "Ranchalows" that they could be considered a housing style. The team will provide a full survey map and consulting party list as requested by attendees. Materials will be revised to clarify that properties referenced in Riverdale lie in the Riverdale Community in Chicago rather than Riverdale, Illinois. Please submit written comments on the eligibility materials by February 18.	CWC/CTA	2/6

Following the morning presentation, a number of attendees participated in a driving tour of the project area. Please notify Sonali Tandon of the minutes of any corrections and/or clarifications within five (5) business days.

cc: Attendees

Red Line Extension (RLE) Summary of Eligibility Comments received from Consulting Parties and Responses from Project Team

The following paragraphs briefly summarize comments received from the consulting parties on the eligibility of historic resources for the RLE Project and corresponding responses from the project team. Under the Section 106 consultation process, CTA undertook an extensive data collection and analysis effort during Fall 2012 to identify historic resources located within the Area of Potential Effect (APE) for the three built alternatives that are under evaluation in the RLE Draft Environmental Impact Statement (EIS). This analysis culminated in recommendations regarding the potential eligibility of historic resources pursuant to the National Historic Preservation Act of 1966. These recommendations were presented to the ten consulting parties, including the Illinois Historic Preservation Agency (SHPO), during a meeting on January 30, 2013. Participants were asked to provide relevant information from their perspective that may supplement the National Register of Historic Places (NRHP) evaluations contained within the RLE Draft EIS. Written comments were received from the following six organizations:

- Anne Haaker, Illinois Historic Preservation Agency
- Jennifer Kenny, Ridge Historical Society
- Jonathan Fine, Preservation Chicago
- Lisa DiChiera, Landmarks Illinois
- Matt Cole, Neighborhood Housing Services of Chicago
- Terry Tatum, Chicago Historic Preservation Division, Department of Housing and Economic Development

Based on local knowledge and input from the consulting parties, additional analysis was undertaken regarding historic resources within the APE. The original recommendations presented in January will be revised as described below and presented in the RLE Draft EIS. In addition to the written comments received by CTA, comments from the January 30 meeting will also be incorporated into the Draft EIS to provide additional clarification. Comments and responses are presented by general topic below.

<u>Comments requesting additional surveys:</u>
Several comments requested that the team evaluate additional sites for NRHP eligibility. These additional sites and their evaluations are summarized below, including both individual properties (Comments #1-6) and potential districts (Comments #7-12).

1. American Ideal Cleaning Building at 10343 South Michigan Avenue
   This building falls beyond the APE boundaries.
2. Lilydale Progressive Missionary Baptist Church at 10716 South Michigan Avenue
   This building falls beyond the APE boundaries.
3. Greystone building at 11445-11447 South Michigan Avenue
   This building falls beyond the APE boundaries.
4. Entrance gate and structure at Cedar Park Cemetery at 12584 South Halsted Street
   These structures were field surveyed in February 2013 and are recommended eligible for the NRHP under Criterion C for the high quality craftsmanship and unusual stonework. A site form is attached.

5. Kensington Park
   The Park was field surveyed and, following archival research is not recommended eligible for the NRHP. Purchased by the City in 1942, Kensington Park has been updated throughout the decades and currently contains a number of contemporary recreational amenities that give it a recent appearance: a mid-twentieth century field house that is no longer in use, playground equipment, a splash pad, a paved basketball court, a horseshoe pit, and baseball fields. Although the field house is over 50 years in age, it lacks distinguishing architectural features. As a publicly-owned park, Kensington Park will be addressed in the NEPA document as a Section 4(f) resource.
6. Two-story commercial building at 11206 South Michigan Avenue
   The building was surveyed and is not recommended eligible for the NRHP due to its lack of integrity and distinguishing architectural features. The site form is included on the Eligibility CD as 11200-11206 S Michigan Avenue.

Note: A number of sources consulted during the archival research phase – including the City of Chicago GIS database, Illinois Historic Preservation Agency's HARGIS database, County Assessor Records, and others – present building addresses inconsistently. Street numbers may differ by several addresses: the church at 12433-12439 South Halsted Street is called 12427 South Halsted Street by a different agency, though both refer to the same building. To aid comparisons, the summary table notes alternate addresses for several properties when these inconsistencies were identified during the eligibility assessments.

7. Potential historic district/grouping of cast stone-faced residences on South Eggleston Avenue between 111th & 112th Streets
   Numerous buildings in this location were surveyed as part of the representative sample set, including one cast stone-faced residence on South Eggleston Avenue (11130 South Eggleston Avenue). Individually, this building was not recommended eligible for the NRHP due to its lack of integrity and distinguishing architectural features. Along South Eggleston Avenue near West 111th Street and West 112th Street, there appear to be only two cast stone-faced residences within the APE, which is not sufficient for these properties to be considered as a potential historic district or multiple property grouping.
8. Could groupings of ranchelows contribute to a future NRHP district (between 103rd St, 104th Pl, UPRR, and Princeton Ave)?
   A number of raised ranches were surveyed as part of the representative sample set; none were found to merit individual listing for the NRHP. Although the area (between 103rd St, 104th Pl, UPRR line, and Princeton Ave) contains numerous residences with similar architectural styles, massing, setbacks, and construction dates, architectural historians confirmed that these properties do not retain sufficient integrity for the NRHP as a district due to contemporary - alterations (e.g., replacement siding, porches, windows, and doors). Numerous vacant lots and recent construction, such as the post-1980 Langston Hughes Elementary School that encompasses an entire city block, disrupts the visual cohesiveness of this area.
9. Potential district of Residential Railroad Suburbs or Historic Streetcar Communities, e.g. along the Chicago & Eastern Illinois RR; the Chicago & Great Eastern RR; the Illinois Central RR 121st Street spur; or streetcars along Michigan Ave, 103rd St, 111th St, 115th St, and 119th St.
   After additional fieldwork, no cohesive groupings of historic commercial buildings or community centers were identified along the primary thoroughfares that supported streetcar lines, railroad

lines, or spurs. Therefore, the suggested areas are not recommended as a district or multiple property group.

10. Potential district/group of properties associated with the former Village of Fernwood, generally located between 90th St, 103rd St, Stewart Ave, and Morgan/Halsted Street
    As part of the original fieldwork effort, a handful of these resources were surveyed within the APE. As noted in the letter, many have integrity issues. Many of Fernwood's signature buildings are located outside the APE or have been demolished. Further, the amount of contemporary infill has compromised the historic setting of the residential suburb. Therefore, this area is not recommended as a district or multiple property group.
11. Potential district/group of historic automobile-related buildings along major thoroughfares (e.g. Halsted and Michigan Ave)
    Although a number of auto-related resources were surveyed within the APE, none exhibited sufficient historic integrity to qualify as eligible for the NRHP either individually or as a contributing resource within a multiple property group. All of the surveyed automotive service buildings exhibit contemporary alterations.
12. Chicago Georgian and Raised Ranch Historic Districts
    The Ridge Historical Society and other consulting parties suggested these styles be considered as part of the eligibility discussions for the Section 106 process. Review by architectural historians confirmed that a cluster of these properties exists along an approximately five block area on the east side of Green Street between 104th Street and 109th Street. The streetscape has a cohesive grouping of vernacular homes that is representative of residences that were constructed in the outlying areas of Chicago during the post-World War II era. Although such neighborhoods are common throughout the city, these five blocks include hipped-roof ranch homes, front-gabled cottages, and Chicago Georgian style homes with little to no contemporary infill. The residences date from the 1950s and 1960s with consistent setbacks and similar brick cladding; they appear to be well-maintained. Therefore, the portion of Green Street between 104th Street and 109th Street is recommended as eligible for the NRHP as a historic district for architecture (Criterion C).

<u>Comments requesting reconsideration of surveyed properties:</u>
Several comments requested that the team reconsider properties that were surveyed but recommended not eligible for NRHP listing at the January meeting. These additional properties and their evaluations are summarized below.

13. Sure-Way M.B. Church at the southwest corner of Halsted Street and 120th Street
    The building is not recommended eligible for the NRHP due to lack of integrity and because it no longer serves its original use. The site form is included on the Eligibility CD as 12000 S Halsted Street.
14. Fernwood Parkway
    Fernwood Parkway was evaluated against NRHP criteria and is recommended not eligible for NRHP listing. However, as a publicly-owned park, it will be addressed in the NEPA document as a Section 4(f) resource.
15. Roseland Auto Sales & Service at 11200 South Halsted Street
    The building is not recommended eligible for the NRHP due to its lack of integrity. The setting is compromised by contemporary infill and the exterior has been clad in modern materials. The site form is included on the Eligibility CD as 11200 S Halsted Street.

16. Bethany Reformed Church Manse at Three West 111th Place
    The building was not originally recommended eligible due to its lack of distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society, the resource is recommended eligible for the NRHP under Criterion B due to its association with Reverend Harry J. Hager (1899-1983), a pioneer in media evangelism in Chicago during the mid-twentieth century. A revised site form is attached.
17. Pridjian & Co Building at 11600 South Halsted Street
    The building is not recommended eligible due to its lack of distinguishing architectural features. While the Pridjian & Company business has been in operation for decades, the property does not reach the level of significance required by the NRHP. The site form is included on the Eligibility CD as 11600 S Halsted Street.
18. Roseland Community Hospital Nurse's Home at 11321 South Wentworth Avenue
    The building was surveyed and was not originally recommended eligible due to its lack of distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society during the eligibility discussions for the Section 106 process, the resource could be considered locally significant under Criterion A for Education based on its use as a dormitory for its nurses and as an important nurse training facility. A revised site form is attached.
19. Galloy & Van Etten Cut Stone Contractors Building at 11756 South Halsted Street
    The building was not originally recommended eligible under Criterion C due to its lack of integrity and distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society during the eligibility discussions for the Section 106 process, the resource could be considered locally significant under Criterion A for its longstanding association with the local construction industry as a 113-year old stone contracting company. A revised site form is attached.
20. Would the substation at 10227 South Halsted Street be eligible under Criterion A as well?
    Yes: the substation is recommended eligible under Criterion A for its association with utilities infrastructure within the city of Chicago. At the January 2013 meeting, it was recommended as NRHP eligible under Criterion C. A revised site form is attached indicating this building as eligible both under Criterion A and Criterion C.
21. Although noted architect Murray Hetherington designed the house at 11001 S Green Street, the resource was only evaluated based on its integrity.
    Numerous residences designed by Hetherington that exhibit greater integrity exist today, including 2078 West Hopkins Place, 8918 South Hamilton Avenue, and 8929 South Hamilton Avenue. Due to the compromised integrity of the Green Street property, it is not recommended as NRHP eligible. The site form is included on the Eligibility CD as 11001 S Green St.

<u>Comments regarding assessment of effects:</u>
The following comments expressed concern about the assessment of effects, which will be covered in the next phase of the consultation process. Noted below, these will be considered in the next phase of the analysis.

22. We object to historic properties being purchased and demolished for construction staging.
23. The proposed BRT route would affect the fewest cultural resources. The UPRR route will affect fewer resources than the proposed Halsted line.

24. Building an elevated rail line down Halsted Street would have negative consequences for the tranquil and bucolic atmosphere of the Cedar Park Cemetery.

Comments requesting minor amendments to the summary table and/or site forms:
The following comments identified minor amendments to the summary table and/or site forms for individual properties. None of these modifications change the NRHP eligibility recommendations. Noted below, these edits will be incorporated; revised materials will be provided along with the effects materials prior to the next phase of the consultation process.

25. The Fire Department Engine Co. 93 building at 324 West 104th Street (alternate address: 328-330 W. 104th St.) is CHRS Orange
26. The Roseland Pumping Station at 351 West 104th Street is CHRS Orange
27. The French Eclectic style house at 11310 South Emerald Avenue was listed as a "local landmark" but is not designated; it is CHRS Orange.
28. The Romanesque Revival style Church at 10920 South Princeton Street is CHRS Orange
29. The two-story commercial building at 11206 South Michigan Avenue is CHRS Orange
30. The architectural firm of Fox & Fox designed the church at 12433-1439 South Halsted Street, which was built in 1958-1959.
31. The Venetian Hall at 133-139 East Kensington Avenue was built in 1925-1926 and designed by Arthur F Hughes.
32. The house at 11310 South Emerald Avenue was built 1927-1928 for Stuart Colman. Inventory form should specify this resource is individually eligible.
33. Property listed as 748 East 103rd Street should be 748 West 103rd Street.
34. The substation at 10227 South Halsted Street was built in 1919-1920.

Other Comments:
Additional comments received are discussed below.

35. There should be a separate category in the spreadsheet for Chicago properties rated as "orange" on the Chicago Historic Resources Survey (CHRS).
    CHRS Orange properties were noted in the summary table provided to consulting parties on January 5, 2013. These properties will be discussed separately within the project's Environmental Impact Statement.
36. We [SHPO] generally concur with the findings of the architectural surveys. It is expected that additional resources suggested will be considered once the final route is selected.
    Comment noted.
37. While we agree that the house at 444 West 100th Place is NRHP eligible, we disagree about the Neo-Traditional style description and are concerned that the replacement of the original tile roof jeopardizes integrity.
    Based on the ornamentation (Neo-Gothic castellated porch roof, Classical colonettes, and arched lintels), the house was identified as an early example of the Neo-Traditional style. It is recommended as NRHP eligible and will be assessed for effects in the next phase of the consultation process.
38. Use of catch-all architectural style descriptors was inconsistent and difficult to sort/review.
    Many of the residential resources are stripped-down brick and frame bungalows and cottages representing the predominant building stock for the study area. Likewise, commercial resources

contain little ornamentation or detailing. The broad term "vernacular" was used whenever a resource did not exhibit a particular architectural style. This approach is consistent with the current state-of-the-practice.

39. Historic functions should match NRHP categories.
    While official NRHP functions were not used on the survey forms, easily identifiable equivalent terms were used to improve comprehension for a broader audience. This approach is consistent with the current state-of-the-practice.
40. Construction dates listed in the Cook County Assessor Records are less reliable than dates listed in building permit records.
    Numerous varied sources were used to establish and cross-check construction dates: County Assessor records, GIS database layers provided by the City of Chicago, the HARGIS database maintained by the Illinois Historic Preservation Agency, Sanborn mapping, etc. This approach is consistent with the current state-of-the-practice.
41. The church at 10920 South Princeton Avenue is currently called Mary Magdalene Missionary Baptist Church.
    The church at 10920 South Princeton Avenue was identified by both its historic name (First Christian Reform Church of Roseland) and its current name (Mary Magdalene Missionary Baptist Church) on the inventory form. The property is eligible for the NRHP due in part to its association with early Dutch settlement in the area, so the historic name was referenced in the presentation.

Illinois Historic
Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • www.illinois-history.gov

Cook County PLEASE REFER TO: IHPA LOG #001010713
Chicago
From Existing 95th Street Station to Approximately 130th St. and Halsted St.

CTA
Red Line Extension

February 4, 2013

Sonali Tandon
Chicago Transit Authority
567 W. Lake St.
Chicago, IL 60661-1498

Dear Ms. Tandon:

Thank you for requesting comments from our office concerning the possible effects of the referenced project on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We appreciated information provided during the meeting at the CTA on January 30, 2013, and the tour that augmented the architectural surveys and introduced the three routes proposed by the CTA. In general we concur with the findings of the architectural surveys submitted to this office prior to the meeting and tour, but during the tour is was noted that resources identified on the Chicago Historic Resources Survey were not identified and that structures such as those located within Cedar Park Cemetery were excluded from the sample. It is likely that our preservation partners present at the meeting will have additional resources that they would like to see included in the survey. It is expected that these additional resources will be considered once a final route has been selected.

In our opinion, the proposed expansion of the BRT route will affect the least amount of cultural resources located within its APE. We also believe the UPRR route that is often adjacent to existing railroad tracks will affect fewer resources than the line proposed on Halsted Street.

We look forward to reviewing the final historic resources report once the comments of our preservation partners have been considered.

If you have questions please contact David J. Halpin, Cultural Resources Manger, at 217-785-4998.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer
AEH:DJH

cc: Marisol R. Simon, U.S. Department of Transportation
Lisa DiChiera, Landmarks Illinois
Terry Tatum, City of Chicago, Illinois

From: Tandon, Sonali [STandon@transitchicago.com]
Sent: Friday, February 15, 2013 4:33 PM
To: Thompson, Rebecca D.; Kornblatt, Helene B.; Lea, Claudia
Cc: 'Bojan, Sharon'
Subject: FW: Red LIne Extension Section 106 - comments on historic resource identification
Attachments: Michigan 11206 S_CHRS orange_dataform.pdf; Michigan 11206 S_CHRS orange.xps

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From: Tatum, Terry [mailto:Terry.Tatum@cityofchicago.org]
Sent: Friday, February 15, 2013 3:13 PM
To: Tandon, Sonali
Subject: Red LIne Extension Section 106 - comments on historic resource identification

Dear Ms. Tandon:

Thank you for the opportunity to comment on historic resource identification efforts for the Red Line Extension Project as part of the ongoing Section 106 consultation process for this project. Our office appreciates the scale and importance of this undertaking, and we commend the CTA's efforts to incorporate historic preservation issues and concerns into its larger planning efforts. We hope to work with you to minimize the effect of the Red Line Extension Project on historic properties.

As part of the Section 106 process, we wish to bring to your attention both general observations on this historic resource identification effort, as well as comments on specific properties that may be impacted by the project.

Chicago Historic Resources Survey red- and orange-rated properties

With the help of your consultant team, you have preliminarily identified properties that are eligible for NR listing. These properties have been listed in the "RLE Draft Eligibility Findings for Surveyed Properties" spreadsheet.

Our office believes that there should be a separate category in the spreadsheet for Chicago properties rated as "orange" on the Chicago Historic Resources Survey. (There are no CHRS "red-rated" buildings in the Red Line Extension's APEs.) Conducted between 1983 and 1995, this city-wide survey identified properties constructed prior to 1940 that were perceived to have, within at least the context of their neighborhoods, some historic significance to these neighborhoods. These buildings were either color-coded red or orange, depending upon the level of their historical and architectural significance as known at the time of the survey.

Although not designated Chicago Landmarks, these CHRS "red" and "orange"-rated properties are covered by the City's Demolition-Delay Ordinance, enacted by City Council in 2003, which allows for an up-to-90-day hold on building permit applications for demolition by the Department of Housing and Economic Development (DHED) for these properties. (More information on this ordinance can be found at http://www.cityofchicago.org/city/en/depts/dcd/supp_info/demolition_delay.html.) Even where such properties have also been determined eligible for National Register listing, we believe that it is prudent of the CTA to separately identify all CHRS orange-rated properties within the APEs on the historic resources spreadsheet. The effect of the Red Line Extension Project on these "orange" properties can then be determined and, if necessary, mitigated through direct discussions with DHED as early in the project as possible.

Observations concerning individual properties located in the APEs

1. Several buildings identified as "orange-rated" in the Chicago Historic Resources Survey (CHRS) were sampled by the CTA's historic resources consultants.

The **Classical Revival substation** at 10227 S. Halsted St. (Map 7) was determined eligible for National Register listing. It is a CHRS "orange-rated" building and was noted as such on the spreadsheet.

The **Fire Department Engine Co. 93 building** at 324 W. 104th St. (alternate: 328-330 W. 104th St.) (Map 30) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

The **Roseland Pumping Station** at 351 W. 104th St. (Map 30) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

The **French Eclectic style house** at 11310 S. Emerald Ave. (Map 12) was listed as a "local landmark" and preliminarily determined eligible of NR listing. However, it is not a designated Chicago Landmark. Instead, it is an "orange-rated" building in the CHRS, but was not noted as such on the spreadsheet It should be so noted.

The **Romanesque Revival style Church** at 10920 S. Princeton St. (Map 34) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

2. In addition, one building identified as "orange-rated" on the CHRS and located within the APE for the BRT option was not identified and sampled. The **two-story commercial building** at 11206 S. Michigan Ave. (listed as 11208 S. Michigan on Map 45) was not sampled by the historic resource survey. It is an "orange-rated" building in the CHRS (CHRS data form and Google Earth photo attached) and should be noted as such on the spreadsheet. It should also be separately evaluated for National Register eligibility.

I would be pleased to assist the CTA's consultant team as they gather additional information on historic resources within the APEs for this project.

Sincerely,

Terry

Terry Tatum
Coordinating Planner I
Historic Preservation Division, Dept. of Housing and Economic Development
33 N. LaSalle St., Room 1600
Chicago, IL 60602
312-744-9147
312-744-9140 (fax)
ttatum@cityofchicago.org
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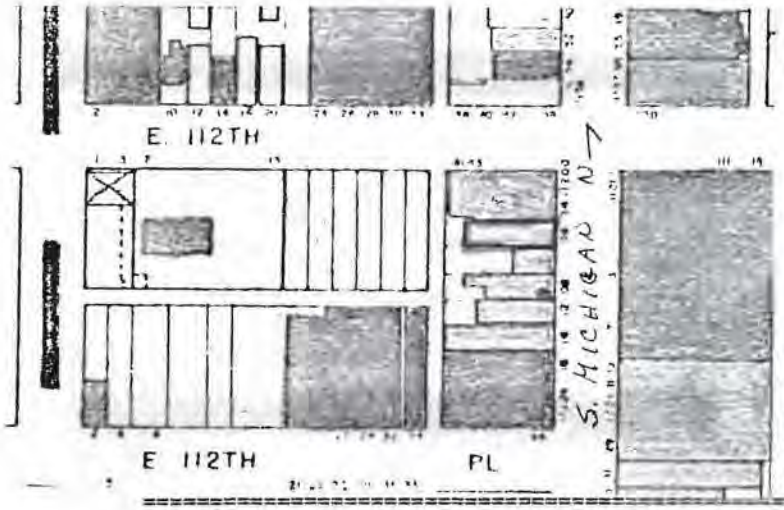

PHOTOGRAPH:

roll no. 9-R4
frame no. 3
orientation: E
photographer: TW
date: 9-28-83

Address: 11206 S. Michigan AV
Color Coded: Orange

District Form No: ___
Form No: 49-9-21-019
No. Cont. Sheets: ___
Surveyors: TW/CR
Date: 9-28-83

COMMISSION ON CHICAGO HISTORICAL AND ARCHITECTURAL LANDMARKS
INDIVIDUAL RESOURCE FORM

Common Name (or major tenant): Excellent Fashions for Men
Historic Name:
Orientation: (circle) N S (E) W NE SE NW SW
Classification: [✓] Building [ ] Site [ ] Structure [ ] Object
[ ] Other:

Evaluation: Potential

	N/I	N/D	C/I	C/D	I/I
F	[ ]	[ ]	[ ]	[ ]	[ ]
A	[ ]	[ ]	[ ]	[ ]	[ ]
H	[ ]	[ ]	[ ]	[ ]	[ ]

Building Type: Commercial, Residential
Style: overall: N/A
details: CLASSICAL
Roof Type: N/✓
Stories: TWO
Approximate dimensions 25 feet (W) x 88 feet (D).
Original Use: Commercial, Residential
Present Use: Commercial, Residential

Approximate Period of Construction:

[ ] pre-1870 [ ] 1910-1919
[ ] 1871-1879 [ ] 1920-1929
[ ] 1880-1889 [ ] 1930-1939
[✓] 1890-1899 [ ] post-1940
[ ] 1900-1909

Materials (including color):
foundation: N/✓
walls: BRICK (Red)
trim: Stone (Gray) Metal/Painted (Mustard Yellow) Wood/Painted (Mustard yellow)
roof: N/✓
porches: N/A
other: N/A

Physical Condition:

	E	G	F	P	NV
foundation:	[ ]	[ ]	[ ]	[ ]	[✓]
walls:	[ ]	[✓]	[ ]	[ ]	[ ]
roof:	[ ]	[ ]	[ ]	[ ]	[✓]
porches:	[ ]	[ ]	[ ]	[ ]	[ ]
other:					
BAY	[ ]	[✓]	[ ]	[ ]	[ ]
____	[ ]	[ ]	[ ]	[ ]	[ ]
overall:	[ ]	[✓]	[ ]	[ ]	[ ]

Alterations, Additions:
One bay window covered w/ wood
Modern 1950s 1st Floor storefront alterations

Noteworthy Features of Resource/Site:
metal dentil cornice w/ garland motif above
metal fascia w/ garland and masks.
Metal 3-sided bay

Rationale for Landmark Potential:
Noteworthy because of the intricate detailing on the fascia.

Relation to Streetscape(s):
Flanked to the S. by modern one story & altered historic 2 story commercial bldg. Flanked to the north by contemporary 2 story commercial bldg and to the east by 1 story modern commercial bldg on a heavily trafficked street.

Field notes:

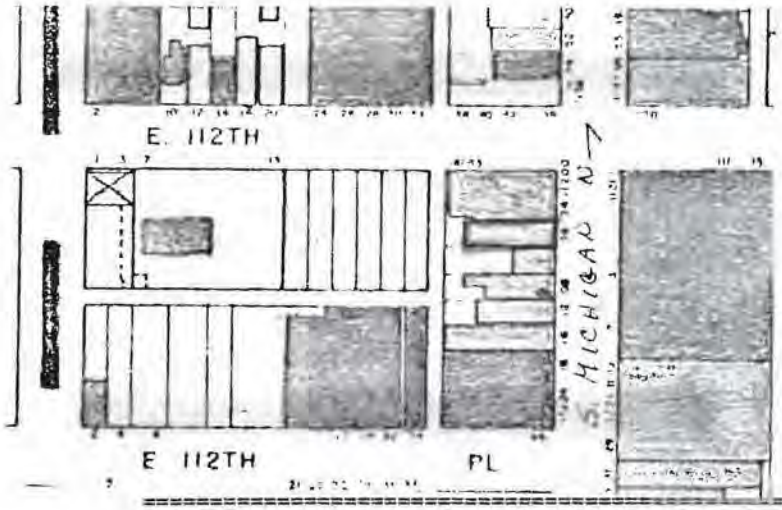

PHOTOGRAPH:

roll no. 9-R4
frame no. 3
orientation: E
photographer: TW
date: 9-28-83

Address: 11206 S. Michigan AV
Color Coded: Orange

COMMISSION ON CHICAGO HISTORICAL AND ARCHITECTURAL LANDMARKS
INDIVIDUAL RESOURCE FORM

Common Name (or major tenant): Excellent Fashions for Men
Historic Name:
Orientation: (circle) N S (E) W NE SE NW SW
Classification: [✓] Building [ ] Site [ ] Structure [ ] Object
[ ] Other:

Evaluation: Potential

	N/I	N/D	C/I	C/D	I/I
F	[ ]	[ ]	[ ]	[ ]	[ ]
A	[ ]	[ ]	[ ]	[ ]	[ ]
H	[ ]	[ ]	[ ]	[ ]	[ ]

Building Type: Commercial, Residential
Style: overall: N/A
details: CLASSICAL
Roof Type: N/✓
Stories: TWO
Approximate dimensions 25 feet (W) x 88 feet (D).
Original Use: Commercial, Residential
Present Use: Commercial, Residential

Approximate Period of Construction:

[ ] pre-1870 [ ] 1910-1919
[ ] 1871-1879 [ ] 1920-1929
[ ] 1880-1889 [ ] 1930-1939
[✓] 1890-1899 [ ] post-1940
[ ] 1900-1909

Materials (including color):
foundation: N/V
walls: BRICK (Red)
trim: Stone (Gray) Metal/Painted (Mustard Yellow) wood/Painted (mustard yellow)
roof: N/V
porches: N/A
other: N/A

Physical Condition:

	E	G	F	P	NV
foundation:	[ ]	[ ]	[ ]	[ ]	[✓]
walls:	[ ]	[✓]	[ ]	[ ]	[ ]
roof:	[ ]	[ ]	[ ]	[ ]	[✓]
porches:	[ ]	[ ]	[ ]	[ ]	[ ]
other:					
BAY	[ ]	[✓]	[ ]	[ ]	[ ]
____	[ ]	[ ]	[ ]	[ ]	[ ]
overall:	[ ]	[✓]	[ ]	[ ]	[ ]

Alterations, Additions:
One bay window covered w/ wood
Modern 1950s 1st Floor storefront alterations

Noteworthy Features of Resource/Site:
metal dentil cornice w/ garland motif above
metal fascia w/ garland and masks.
Metal 3-sided bay

Rationale for Landmark Potential:
Noteworthy because of the intricate detailing on the fascia.

Relation to Streetscape(s):
Flanked to the S. by modern one story & altered historic 2 story commercial bldg. Flanked to the north by contemporary 2 story commercial bldg and to the east by 1 story modern commercial bldg on a heavily trafficked street.

District Form No: ___
Form No: 49-9-21-019
No. Cont. Sheets: ___
Surveyors: TW/CR
Date: 9-28-83

Field notes:

IDENTIFICATION ON EXISTING SURVEYS:

Date:	Survey:	Listing:
[11/2/83]	[ ] Chicago Landmark (CL).	
[11/2/83]	[ ] Potential CL	
[11/2/83]	[ ] National Register (NR)	
[11/2/83]	[ ] NR Eligible	
[11/2/83]	[ ] Illinois Register.	
[11/2/83]	[ ] State Survey	
[/ /]	[ ] HABS	
[/ /]	[ ] HAER	
[/ /]	[ ] LPCI Inventory.	
[/ /]	[ ] Federal Agency Inventory	
[/ /]	[ ] Other: _____	
[/ /]	[ ] _____	
[/ /]	[ ] _____	

LEGAL DESCRIPTION:

TAX NUMBER: 25.22.105.029.0000

ZONING DESIGNATION: B3-3

AREAS OF SIGNIFICANCE:

BUILDING HISTORY:

[ ] Original Site

[ ] Moved

Date: _____

Source No(s): _____

Original Location: _____

Prepared by: _____

Source No(s): _____

Date: _____

(1) Permit No. NW744 Date: 10-8-1901 SUNDRY. Permit # 112357 File # 296521 8-17-33(1)

File No.

Book No. Pg. COST: $4800 (2)

HISTORICAL SIGNIFICANCE:

Original Owner: O BASS

Source No(s): 2

Prepared by: _____

Source No(s): _____

Date: _____

ARCHITECTURAL/ENGINEERING SIGNIFICANCE:

Architect:		Source No.
Builder:	WILLIAM C WOOD	Source No. 2
Engineer:		Source No.
Other:		Source No.
		Source No.
Date of Construction:		Source No.
Structural system:	BRICK	Source No. 2

Prepared by: _____

Source No(s): _____

Date: _____

SOURCES: [1] "Ancient Permit File Index," Department of Inspectional Services, City Hall, Chicago.
[2] "Permit Ledgers," Department of Inspectional Services, City Hall, Chicago.

Google earth

ihhw 43

p hwhuv 8

February 18, 2013

Sonali Tandon, Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake St
Chicago, IL 60661

RE: Red Line Extension– NR eligible properties in APE

Dear Ms. Tandon,

As requested, we have reviewed the APE boundaries and the properties identified within the APE that are listed in or "eligible" for listing in the National Register of Historic Places by the Red Line Extension project team.

We are very pleased to see the numerous properties identified and acknowledged as historic. However we have the following observations:

- We recommend including all properties that are orange-rated in the Chicago Historic Resources Survey (CHRS) in a separate category due to the fact that they will require an additional mitigation process through the city's demolition delay ordinance.
- During the driving tour of the preferred Red Line Extension routes, I took note of the following properties that were not included in the project team's list of eligible properties that looked as if they could be of possible architectural significance.
    - The American Ideal Cleaning Building at 10343 S. Michigan – a mid-century commercial building
    - The Lilydale Progressive M.B. Church at 10716 S. Michigan
    - City Sports store commercial block at 11102 S. Michigan
    - 11445-47 S. Michigan – Commercial/residential side by side Greystone – rated orange in CHRS
    - 11451 S. Michigan – one story commercial Art Deco building – rated orange in CHRS
    - Sure-Way Missionary Baptist Church at S.W. corner of Halsted and 120th. Art Deco corner building with a mid-century addition on the south side
    - Entrance gates and structure to Cedar Park Cemetery, 12584 S. Halsted
- Based on precedent with the Brown Line renovation project, we object to historic properties being purchased and demolished to make way for construction staging. We hope the team will specifically identify historic properties in the areas where construction staging may be planned to help identify alternative locations.

Thank you for the opportunity to review the findings by your team for this project. Please let me know if we can be of further assistance before the next consultation.

Sincerely,

Lisa DiChiera

Lisa DiChiera
Director of Advocacy

cc: Anne Haaker, IHPA
Jonathan Fine, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago
Matt Cole, NHS

LANDMARKS ILLINOIS

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February 19, 2013

Ms. Sonali Tandon
Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: Red Line Extension – National Register eligible properties in APE

Dear Ms. Tandon,

As a housing and community development organization with longstanding ties to the greater Roseland area, we appreciate CTA inviting Neighborhood Housing Services of Chicago, Inc. (NHS) to participate in the Section 106 review for the proposed Red Line Extension routes. NHS believes the Red Line Extension project will ultimately enhance the livability and well-being of Roseland and surrounding neighborhoods by increasing transit access for residents. At the same time, we wish to ensure that the project minimizes any undue impacts on the existing residential, community, and historic buildings that make these neighborhoods great and that our experience has shown can be important community-building and engagement assets. Therefore, NHS would like to submit the following comments regarding the National Register eligible properties surveyed by the Red Line Extension project team in the APE:

- We recommend re-evaluating the exclusion of raised ranches – colloquially referred to "ranchelows" for looking like a cross between a Chicago bungalow and a ranch-style home – from the survey. While currently not a formally recognized form of Chicago vernacular architecture, these homes define the look and character of large stretches of the APE adjacent to UPRR right-of-way. We would encourage the CTA project team to determine if groupings of "ranchelows" in the APE could contribute to a future National Register district.
- During the van tour of the preferred Red Line Extension routes on January 30th, we also took note of the following areas that warrant additional surveying/review by the project team:
    - 111th & 112th South Eggleston: A few cast stone-faced residences were observed on or adjacent to these blocks, including one home immediately adjacent to the UPRR right-of-way. These buildings, which look similar to Chicago greystones, are relatively rare and should be evaluated for National Register eligibility.
    - 103rd Street to 104th Place between the UPRR and Princeton Avenue: This area includes the previously identified, National Register-eligible Roseland Pumping Station and Roseland Fire Station properties. However, the blocks also include a largely intact and well-maintained grouping of Chicago bungalows and frame

cottages. We would encourage the project team to conduct a more detailed survey of these blocks to determine if these residential properties could contribute to a future National Register district.

- Though not directly applicable to the survey of National Register-eligible properties, we encourage the project team to carefully evaluate the potential impact of the Red Line Extension on the Fernwood Parkway that runs immediately west of the existing UPRR right-of-way. Albeit simply landscaped, the parkway provides a nice amenity to homes along Eggleston Avneue between 99th and 104th Streets.

In addition to these observations, we fully concur with the recommendations from Lisa DiChiera, Director of Advocacy, at Landmarks Illinois regarding specifically calling out "orange-rated" properties listed on the Chicago Historic Resources Survey; the additional commercial, religious, and community buildings that should be evaluated on Michigan Avenue and Halsted Street; and avoiding the demolition of any historic properties to make way for construction staging.

Thank you again for inviting NHS to participate in the Section 106 review for the Red Line Extension project. Please let us know if we can be of further assistance before the next scheduled consultation.

Best,

Matt Cole
Project Coordinator
Neighborhood Housing Services of Chicago, Inc.

CC: Ed Jacob, NHS
Deborah Moore, NHS
Robert Tucker, NHS
Christopher Smith, NHS
Anne Hacker, IHPA
Lisa DiChiera, Landmarks Illinois
Jonathan Fine, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago

Preservation Chicago

Citizens advocating for the preservation of Chicago's historic architecture

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* Executive Committee

Staff
Jonathan Fine
Executive Director

Stacey Pfingsten
Communications Mgr.

February 20, 2013

Sonali Tandon, Project Manager
Strategic Planning & Policy
CTA
567 West Lake Street
Chicago, IL 60661

Re: Red Line Extension – Possible negative effects to historic properties with in the proposed APE

Dear Ms. Tandon,

Thank you for facilitating the recent driving tour of the three proposed routes for the Red Line extension. I am writing in response to concerns our organization has regarding possible destruction of historic buildings or landscapes with the APE.

I have had a chance to review the comments being submitted by Landmarks Illinois and we agree with and support all of their concerns.

In addition, we are concerned about the negative consequences that building an elevated rail line down the middle of South Halsted Street would have on the tranquil and bucolic atmosphere of Cedar Park Cemetery.

Thank you for your consideration. We look forward to continuing our partnership on this exciting project.

Sincerely,

Jonathan Fine

Jonathan Fine
Executive Director
Preservation Chicago

cc: Anne Haaker, IHPA
Terry Tatum, Historic Preservation Division, DHED
Lisa DiChiera, Landmarks Illinois
Matt Cole, NHS

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February 20, 2013

Sonali Tandon
Chicago Transit Authority
567 West Lake Street, 10th Floor
Chicago, IL 60661

Dear Sonali,

Thanks for the opportunity to be a consulting party to the CTA's Red Line Extension (RLE) Section 106 eligibility process.

The Ridge Historical Society (RHS) serves the Beverly, Morgan Park and Washington Heights community areas on Chicago's south side. For this reason, we are particularly interested in the RLE impact upon historic properties in the APE situated within the Morgan Park and Washington Heights community areas. Both the Halsted Street and Union Pacific Railroad APE are located at the easternmost boundary of our service area. Please note that we do maintain an archival collection that reaches beyond our service area since our history does overlap with nearby areas, including West Pullman and Roseland. We reserve the right to comment on historic resources in other community areas just outside of our service area.

I have reviewed the materials and inventory forms submitted by the consulting team and offer the following comments.

IDENTIFIED NR ELIGIBLE PROPERTIES

The Ridge Historical Society agrees with the National Register (NR) eligibility of the two properties identified by the study in the Washington Heights community areas (our service area) – 10227 S. Halsted Street and 444 West 100th Place. Unfortunately, the team did not identify any NR eligible properties in the Morgan Park community area.

1. We agree that the City of Chicago Department of Gas and Electricity, Southwest Substation, at **10227 South Halsted Street** is NR eligible under C for its architecture, as a rare remaining example of a city government public works building. As stated on the study's inventory form, it is an orange rated building in the Chicago Historic Resource Survey (CHRS). The CHRS did supply a date of construction, 1919-20, that does not appear on the inventory form. I am wondering if this public works building is also NR eligible under A.
2. We agree that the single family dwelling at **444 West 100th Place**, built 1931, is potentially NR eligible under C for its architecture, as a rare brick Bungalow in

Washington Heights with striking Tudor Revival and Mediterranean Revival detailing. The Bungalow sports a handsome crenellated entry, decorative arches, and colonettes. I would not call this building Neo-Traditional, which is an architectural style reserved for late 20th-century buildings. I am concerned that this home once had a clay tile roof, perhaps jeopardizing its integrity. A similar house, designed by architect John Hoche, can be found in Beverly at 1762 W. 94th Street.

Additionally, I am providing architectural and historic info on other properties in the APE flagged as NR eligible by the team:

- The architectural firm of Fox and Fox designed S. S. Peter and Paul Church, **12433-12439 S. Halsted Street**, 1958-59. Architect John J. Fox, Jr. was a longtime resident of Beverly-Morgan Park and a noted local Roman Catholic church designer. He died in 2003.
- Venetian Hall, **133-139 E. Kensington Avenue**, was built in 1925-26 and designed by architect Arthur F. Hughes. Hughes is a local architect who designed a number of striking historic revival style homes in Beverly-Morgan Park.
- **11310 South Emerald Avenue** was built in 1927-28 for owner Stuart Colman. Note: the Individually Eligible category on page 2 of the inventory form says No when it should say Yes.

ADDITIONAL INDIVIDUAL PROPERTIES THAT MAY BE POTENTIALLY ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES

The Ridge Historical Society would like the team to consider the following buildings for NR eligibility:

Roseland Auto Sales and Service Building (Allinone Auto Sales Building)
11200 South Halsted Street (Morgan Park)
Built 1927 for Henry T. Vollmer
Doerr, Lindquist and Doerr, architects

Potentially eligible under Criterion C for architecture as a rare remaining example of a garage and auto sales building from the early 20th-century in Morgan Park. Both Beverly-Morgan Park and Roseland were once major centers of auto sales on Chicago's south side, with dealerships along major area thoroughfares. Building is best known historically as a satellite salesroom for Roseland Auto Sales, featuring Studebakers. Additionally, Midland Terra Cotta Company provided the handsome terra cotta ornament for the one-story brick store building. Its integrity was likely questioned by its wood paneled storefront, but the original storefront may be behind the vertical boards If not individually eligible, perhaps eligible as part of a multiple property listing (see below).

Bethany Reformed Church Manse
3 West 111th Place
Craftsman-style single family residence
Built 1923-24
Purchased by church and addition built in 1928

Potentially eligible under criterion B for its historic associations with Reverend Harry J. Hager, pastor of Bethany Reformed Church from 1929-1975. Hager was a pioneer in media evangelism in Chicago during the mid 20th-century through his Sunday radio ministry broadcasts on local stations WHIP and WCFL. This church-related residence in the Craftsman style retains a high degree of architectural integrity, including a Gothic Revival style entry porch that likely dates to Hager's residency.

K. A. Pridjian and Company Building
11600 South Halsted Street
Built 1960

Potentially eligible under Criterion A for its historic associations with longtime local business, K. A. Pridjian and Company, Rug Cleaning and Sales. Established in 1924 in Roseland, Pridjian first operated at 54 West 111th Street. Owner K. A. Pridjian (d. May 6, 1965) had the facility built specially for his rug operation. Building retains much of its integrity in its mid-century storefront design, materials, and signage. (side note: Almost everyone in Beverly-Morgan Park has their rugs cleaned by Pridjian!)

Roseland Community Hospital Nurses Home
11321 South Wentworth Avenue
Built 1923-24
E. Hall, architect.

Potentially eligible under Criterion C for its architecture as a rare remaining example of a unique education-related building type in Chicago, a hospital-affiliated nurses' home. The three-story brick, Roseland Community Hospital Nurses' Home provided housing and educational opportunities for women training in the nursing profession. The interior may still reflect dormitory rooms, classrooms, and other spaces essential for nurses' training during the early 20th-century. Not sure how many of these building types are left in Chicago, but might be one of the only on the south side.

Galloy and Van Etten Cut Stone Contractors Building
11756 South Halsted Street
Built over time – 1921, 1928, 1946 and 1950

Potentially eligible under Criteria C for its associations with the Van Etten family, prominent local builders on Chicago's south side. Galloy and Van Etten, a longtime cut stone contracting business near the Panhandle railroad tracks, has operated continuously at this site from at least 1909. The cut stone exterior of the buildings within the complex reflects its occupant's trade. Founder Abe Van Etten was the brother of Simon and Henry Van Etten, whose contracting firm known as Van Etten Brothers built monumental residences and religious buildings on the south side. Galloy and Van Etten likely provided the cut stone used in many of these buildings.

NR ELIGIBLE CONTIGUOUS HISTORIC DISTRICTS OR MULTIPLE PROPERTIES

The Ridge Historical Society urges the team to revisit any groupings of historic properties that may be potentially NR eligible as contiguous districts or as multiple property listings The APE is located in a section on Chicago's south side that has been under surveyed in the past, and as a result, little data is available and very few historic resources have been proactively designated as local landmarks or listed in the National Register of Historic Places. Perhaps our community areas need a different approach in this type of study, especially when conducting cultural resource surveys. For example, surveyors could relax harsh integrity standards or look at broader patterns that might lead to multiple property nominations.

Here are some suggestions:

1. Would any of the Historic Residential Railroad Suburbs or Historic Streetcar Communities in the APE be NR eligible as multiple property listings? Since suburban development was extensive outside of nineteenth-century Chicago, perhaps the team could take a second look at the communities that were stimulated and developed along the area's railroads and streetcars in 19th-century Calumet Township and Chicago's early 20th-century neighborhoods. Especially important are those along the Chicago and Eastern Illinois, which came through in 1880-81 (UPRR APE); the Chicago and Great Eastern Railroad, an early subsidiary of the Pittsburgh, Cleveland, Chicago and St. Louis Railway who constructed tracks in 1865 (Halsted APE); and the Illinois Central Railroad who operated an east-west spur at 121st Street. Streetcars were operating along Michigan Avenue, 103rd Street, 111th Street, 115th Street and 119th Street, and stimulating residential and commercial development.

   Properties Associated with the former suburban Village of Fernwood. Fernwood is now part of the Washington Heights community area and within the RHS service area.

   Fernwood, a station stop on the Chicago and Eastern Indiana Railroad was first incorporated as a village in 1886 and annexed to the City of Chicago in Spring of 1891. Focused on a station at the 103rd Street crossing (then Tracy Avenue), Fernwood was mostly a residential district, with a few locally serving commercial buildings. Its boundaries ran from 90th Street on the north, 103rd Street on the south, Stewart Avenue on the East, and Morgan

and Halsted on the west. Developers E. L. Gillette and Henry L. Hill, along with S. Montgomery Smith, laid out Fernwood in 1883 for residential development with an adjacent public park, approximately 75 feet wide along the tracks from 99th Street to 103rd Street. This park, now known as Fernwood Parkway, played a significant role in the development of this railroad suburb. This landscape feature marks the importance of open space, trees, and grassy public space to a growing residential suburb. Within the APE, a number of frame homes on suburban size lots remain, particularly along Eggleston Avenue, representing this period of development. Yet, these residences may have integrity issues (see 10100 South Eggleston Avenue), and many of Fernwood's signature buildings are either outside of the APE (including churches and a public school) or have been demolished (such as the Fernwood Station and Gillette Hall).

2. **Historic automobile-related buildings along major thoroughfares, including service stations, garages and car sales dealerships**. In reviewing the inventory forms in the APE, the team recorded a large number of auto-related buildings, although not contiguous. Halsted Street and Michigan Avenue were both major thoroughfares for the area, and as stated above, both Beverly-Morgan Park and Roseland were once major centers of auto sales on Chicago's south side. Could these buildings be NR eligible as a multiple property nomination?

3. **Chicago Georgian and Raised Ranch Historic Districts**. Just like the Chicago Bungalow Multiple Property Listing and subsequent NR districts, perhaps a multiple property listing is imminent for neighborhoods of Chicago Georgians and Raised Ranches. Both are mid 20th-century vernacular types which evolved from the earlier designs and plans of the American Foursquare and Bungalow respectively. Rows of raised ranches (also known as Bungalow Ranches) are found in the Halsted APE.

<u>GENERAL COMMENTS AND CORRECTIONS</u>:

1. Usage of catch-all architectural styles and types. Most every building I reviewed was labeled vernacular. Architectural styles, when used, were inconsistent. Using catch all categories makes it quite difficult to sort, review and compare important architectural specimens. Upon request, I can provide corrections to architectural styles and types in the Washington Heights and Morgan Park community areas.
2. Historic and current functions and uses should match National Register categories.
3. Construction dates for historic buildings in the APE came from an unreliable source–Cook County Assessor lists. A better primary source, such as City of Chicago building permit records, should be used for those properties determined NR eligible. It is disappointing that the team did not conduct basic research on the very small number of buildings (9) determined eligible in the study under NR Criterion C for architecture. Construction dates, owners, architects and builders would surely add to the historic context and story.

4. 748 E. 103rd Street (Washington Heights) should be **748 W. 103rd Street**.
5. Noted Beverly-Morgan Park architect Murray Hetherington designed the Tudor Revival-style residence at **11001 South Green Street** (Morgan Park), built 1940-41. Although a handsome, small scale Tudor Revival house, strict integrity standards were applied by the team.

Please contact me with further questions.

Sincerely,

Jennifer R. Kenny
Architectural Historian, Ridge Historical Society
773-429-9831
jennifer.kenny@mindspring.com

MEETING NOTES

RE: **Section 106 Effects Meeting**
Red Line Extension Environmental Impact Statement (EIS)

DATE: **May 8, 2014**

LOCATION: **CTA**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	Organization
Sonali Tandon	CTA
Mike Connelly	CTA
Marlise Fratinardo	CTA
Kevin O'Malley	CTA
Gerald Nichols	CTA
Tony Greep	FTA
Mark Assam	FTA
Anne Haaker	IHPA (by phone)
David Halpin	IHPA
Ward Miller	Preservation Chicago
Terry Tatum	Historic Preservation Division, Dept. of Housing and Economic Development
Lisa DiChiera	Landmarks Illinois
Matt Cole	Neighborhood Housing Services of Chicago, Inc.
Jenifer Palmer	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group
Virginia Jackson	CWC Transit Group
Erika Sellke	Chicago Park District
Sylvia Jones	Friends of the Parks
Maria Stone	Friends of the Parks

PREPARED BY: Rebecca Thompson

ISSUE DATE: June 6, 2014

Meeting called to order at 10:00 am CT

Objective: Red Line Extension Effects Meeting for Section 106 Consultation

Item No.	Item Description
1	**Welcome/Intro** Mike Connelly welcomed attendees. JM reviewed the agenda and informed attendees that a public Open House is scheduled for May 13.
2	**Review of Project and Previous Section 106 Tasks** ST explained the overall purpose of the project and alternatives. JM provided an overview of the four-step Section 106 process, which is intended to assess project effects on historic resources (those previously identified as eligible for National Register of Historic Places [NRHP] listing). JM identified ground rules and reviewed previous coordination efforts undertaken to date as part of the Project. In response to comments received after the eligibility consultation in January 2013, Kensington Park was surveyed but was not recommended as eligible. Six potential historic districts were suggested; Green Street is recommended as eligible. Nine individual resources were suggested for reconsiderations. Of these, four resources are recommended as eligible based on supplemental information.
3	**Overview of Alternatives** JM presented an overview of the four alternatives that will be evaluated in the EIS: No Action, Bus Rapid Transit (BRT) along Michigan Avenue, the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative. - Q: Is the BRT park-and-ride lot on the north side of 130th Street? A: Yes. - Q: Why are the garages shown as three levels? As shown, it looks like a huge impact on Altgeld Gardens. A: Preliminary ridership analysis indicates park-and-ride demand, which is why we are proposing such large structures. As we fine tune the design moving forward, we'll re-evaluate the garage sizes and incorporate some urban design elements to mitigate the impact. - Q: How many properties would be removed along the Halsted route? A: We'll discuss this at the individual community meetings and Open House. The focus of this meeting is effects on historic resources. - Q: Are the piers for the Halsted line in the sidewalk or street? A: That will be determined in future engineering phases. The straddle bent piers could encroach into the parking lane. - Q: Would the Halsted piers have a similar placement to the structure at the Morgan/Lake? A: Halsted Street has two travel lanes and a parking lane in each direction and is wider than the configuration at Lake Street. The pier type chosen will make a difference on placement too. There could be impacts on parking spaces. *Follow up note: All traffic impacts would be covered in the Transportation section of the Draft EIS.* - Q: How high is the structure along Halsted? A: It varies – roughly 23-30 feet above ground level; the necessary height is determined based on the street clearance requirements. - Comment: In talking with business owners at Galloy & Van Etten Stone Contractors, they are worried about their large trucks being able to access their sites.
4	**Section 106 Effects on National Register of Historic Places Eligible Resources** The team developed effects recommendations based on the conceptual alternatives described previously. JM stepped through each resource. The criteria for determining effects are defined in 36 CFR 800.5. For the three options of Union Pacific Railroad (UPRR) Alternative, the team examined the option that is closest to the historic resource, to represent the worst case analysis. - Q: Will you be sending a copy of the slides? A: The Effects Report provides general information and distances and CTA will have additional

Item No.	Item Description
	boards at the Open House, which will also be posted on CTA website. The effects slides contain preliminary deliberative materials so CTA will not be circulating copies. - Comment: The Cottage/Bungalow District that Neighborhood Housing Services of Chicago (NHS) commented on in the eligibility comments shows up in the map near the Pump Station. - WM: How close is the East Option UPRR track structure to the Pumping Station? A: It is close and almost adjacent– we'll have to look it up. *Follow-up note: Horizontally, it is about 8.8 feet between the pump station and track structure in the UPRR East Option. However this distance is based on conceptual engineering and can change slightly as additional detailed engineering is performed.* - Comment: If there is a future expansion along the UPRR line, we want to be sure that there is ample room to accommodate it. It would be good if the alternative were further from the building; I question whether it is actually a "No Effect" as shown. Response: It is a tight site at the Pumping Station. We are required to be outside of UPRR right-of-way. - Q: Does the analysis include staging areas as well? A: Yes. These are included in the footprints. - Q: How tall is the BRT garage by the Venetian Hall? A: 2 stories *Correction: it is 3 stories with some space for retail and community facilities at ground floor.* - Q: Are there any buildings in the footprint of the proposed garage? A: We looked at all the potential displacements associated with each alternative. There are no structures within the garage footprint that would be displaced. - Q: Is it a possibility to adopt/restore the Venetian Hall as part of the adjacent garage? Or incorporate similar elements in the garage design? A: If there is an adverse effect, we will try to mitigate that. We will look at improving the view of the garage and making it more street friendly. CTA can take this under consideration. - Q: NHS' eligibility comments included the cast masonry structures, one of which appears immediately south of the Venetian Hall. What was the determination there? A: Those were determined non-eligible; several were surveyed and lacked integrity and/or distinguishing architectural features. There wasn't a cohesive grouping either. - Q: What is the building across from the garage, next to Altgeld Gardens? A: There is a park; the buildings next to the park may be part of Golden Gate. - Q: What is the station like for UPRR at the west option? A: Trains stop, unload/load, and turn back. There is no yard or additional tracks at this location – the yard is proposed further north at 120th Street. - Comment: The garage could have a visual impact. Nothing else nearby is built at that scale/height. There may be an impact on the Altgeld Garden Historic District, which will likely gain historic significance into the future due to its association with President Obama. CTA should consider a more modest garage design. - Comment: Several parties would like to see a view of the West Terminal station option from directly across 130th Street at Altgeld. Response: Early communications with community members indicated a local preference for the South Station option, which would have an entrance south of 130th Street. - Comment: Both 130th UPRR station options need further study – there will be impacts to transportation, people's homes, etc. *Follow-up note: All other impacts will be discussed in the Draft EIS.* - Q: How difficult is it to cross from the south station to Altgeld or Philip Homes? A: 130th Street is on a viaduct that allows the tracks and platforms to extend under 130th Street. You wouldn't have to cross 130th Street to get to the Station, only a local street. - Q: Are the viaducts safe for travel?

Item No.	Item Description
	A: Vehicles travel on the 130th Street viaduct today. - Q: Will a station include CTA/CDOT landscaping improvements to link to Altgeld? A: Definitely. A study was conducted focusing on access and connectivity at 130th Street Station. CTA has coordinated and will continue to coordinate with CHA to integrate plans. - Comment: At the Green Street Historic District, track structure will certainly be visible and audible. - Q: What level of noise impacts are anticipated along Green Street? A: Noise mitigation measures (e.g. noise walls, closed deck, etc.) have been incorporated into preliminary designs to mitigate impacts. *Follow-up: Based on the general level noise analysis conducted per FTA guidance, the Green Street Historic District lies at the edge of the moderate noise impact zone, assuming the project includes 3-4 foot high noise barriers and a closed deck structure. Historic experts will reexamine potential effects on the Green Street Historic District.* - Comment: I think property owners who live within the Green Street Historic District would be adversely affected by the Halsted Alternative. Response: That will definitely be looked at as part of the National Environment Policy Act (NEPA) analysis. - Comment: As you look at this more, it would be nice to have a rendering showing how close the tracks are and what the relationship will look like between the Halsted line and Green Street district. - Comment: The former substation is city-owned and vacant. Consider incorporating it into the station. Maybe it could be an entry point. This provides a good opportunity to give back to the community by adopting some of the Chicago Historic Resources Survey Orange buildings, similar to measures at the Wilson station. - Comment: The French Eclectic House would experience the same impacts as Green Street. There are several nice homes within this block, possibly nicer than the resources along Green Street, though they lack the consistency of Green Street. Scale and noise will be issues. These areas could be negatively impacted, driving people to move out of the area. - Comment: Galloy and van Etten is a family business and has been in the area since 1899. Photos show the building dating to 1909; it is a huge resource for the area. The business owner feels like they would be so adversely affected by the Halsted Alternative that they would have to relocate. It is a fourth generation family-owned business and provides a lot of employment. They are also concerned about the proximity to the 119th Street yard. - Comment: A lot of businesses are within the 119th Street yard. It used to feed all of Roseland with jobs. Many of the buildings have been demolished but some are left and could be negatively impacted. Response: CTA is coordinating with Far South Community Development Corporation regarding potential impacts on businesses. - Comment: Several consulting parties requested renderings for the four adversely affected resources along Halsted. - Q: What about impacts on the rest of the cemetery? A: Only the gatehouse/entryway is considered eligible. Comment: The impacts on the cemetery will be assessed as part of NEPA analysis. - Q: Is the fire station within the rail yard still accessible? A: Yes. - Comment: By placing the tracks so close to the resource, are you precluding future viability of the resource to function? This is an issue at the fire station and the St. Peter & Paul Church in particular. TT: The fire station's current location isn't particularly viable as it is today. Perhaps relocating this building should be a consideration as part of mitigation, although we don't typically like to

Item No.	Item Description
	move structures. The fire station would be more viable on an arterial. The trend city-wide has been to close a number of these smaller structures. - Comment: We've heard some good ideas regarding mitigation, but there are a few steps between now and then. We still have to have a selected alternative before developing detailed mitigation measures.
5	**Schedule and Next Steps** There is an open house next week. A Draft EIS is being prepared, which will include additional analyses and public involvement opportunities. - Q: When would a single preferred alternative be selected? A: The Final EIS would be prepared on a single alternative. - Q: Is there a way to understand whether any of the resources we identified in the eligibility phase that were not determined eligible would be affected? A: They were not examined as part of this analysis since we evaluated only eligible buildings or districts for Effects determination. - Comment: Please resend the responses to eligibility comments.

Please notify ST of any corrections and/or clarifications to the minutes within five (5) business days.

cc: Attendees

Red Line Extension (RLE) Summary of Effects Comments received from the Consulting Parties and Responses from the Project Team

The following paragraphs briefly summarize comments received from the consulting parties regarding the project effects on historic resources for the RLE Project and corresponding responses from the project team. Under the Section 106 consultation process, the Chicago Transit Authority (CTA) undertook an extensive data collection and analysis effort during fall 2012 to identify historic resources located within the Area of Potential Effect (APE) for the three build alternatives that are under evaluation in the RLE Draft Environmental Impact Statement (EIS). This analysis culminated in recommendations regarding the potential eligibility of historic resources pursuant to the National Historic Preservation Act of 1966. These recommendations were presented to the ten consulting parties, including the Illinois Historic Preservation Agency (IHPA), during a meeting on January 30, 2013. Input from consulting parties was considered throughout 2013, resulting in 13 individual properties and two historic districts being identified as eligible under the National Register of Historic Places (NRHP) criteria.

Following this step in the consultation process, CTA undertook an analysis of effects on NRHP-eligible historic properties in accordance with criteria established in 36 CFR 800.5. This analysis culminated in recommendations regarding the potential effects on historic resources, which were mailed to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. An in-person meeting was conducted on May 8, 2014 to discuss these recommendations. Participants were asked to provide relevant information from their perspective that may supplement the effects recommendations summarized in the April 18 packet. Written comments were received from the following four organizations:

- Anne Haaker, Illinois Historic Preservation Agency (IHPA)
- Lisa DiChiera, Landmarks Illinois
- Matt Cole, Neighborhood Housing Services of Chicago
- Terry Tatum, City of Chicago, Department of Planning and Development, Historic Preservation Division

Comments and responses are presented by general topic below. Based on local knowledge and input from the consulting parties, additional analysis was undertaken regarding historic resources within the APE. The original recommendations presented in April/May 2014 will be revised as described below and presented in the RLE Draft EIS.

The CTA announced on August 10, 2014 that as part of its planning process to extend rail service to 130th Street on the far South Side, it has narrowed down the alternatives to two preliminary options for the proposed RLE Project. Based on feedback received from the public this spring and summer via community meetings and comments provided to the agency, the CTA is now focusing on one “preferred alternative” with two possible variations from the three build alternatives that have been under consideration. The CTA believes these options would best serve communities and residents on the Far South Side:

≠ Union Pacific Railroad Rail (UPRR) Alternative, East Option. Under this option, CTA tracks would be placed immediately east of the Union Pacific railroad right-of-way from 99th Street to 118th Street

≠ UPRR Alternative, West Option. Under this option, CTA tracks would be placed immediately west of Union Pacific's right-of-way from 99th Street to north of 118th Street.

The proposed alignment of the rapid transit line would be the same for the two East and West options north of 99th Street and south of 118th Street.

Eligibility Reconsideration Requests

1. Resurvey the grouping of Chicago bungalows and frame cottages at 103rd Street to 104th Place between the UPRR line and Princeton Avenue.
   Nine resources (Chicago bungalows and frame cottages) were surveyed as part of the representative sample of surveys. Although the area contains numerous residences with similar architectural styles, massing, setbacks, and construction dates, architectural historians verified that these properties do not retain sufficient integrity for the NRHP as a district due to contemporary alterations (e.g., replacement siding, porches, windows, and doors). None were found to merit individual listing for the NRHP due to their integrity. Numerous vacant lots disrupt the visual cohesiveness of this area. Despite the general consistency in property types, the collection of bungalows and frame cottages is broadly representative of residential areas on the South Side, lacking the distinguishing elements to qualify as NRHP eligible. Please refer to forms 301, 306, 321, or 326 W 103rd Place; 262, 328, or 335 W 104th Place; or 310 or 325 W 104th Street on the Eligibility DVD provided to consulting parties on January 4, 2013 for specific examples.

2. Reconsider eligibility determinations for cast stone-faced residences adjacent to the UPRR right-of-way, including the property adjacent to the Venetian Hall.
   The properties adjacent to the Venetian Hall are a brick two-flat (129 E Kensington Ave on southwest side) and a vinyl-clad multi-residence (141 E Kensington Ave on the east side). Neither building exhibits distinctive architectural features or sufficient integrity for inclusion on the NRHP. Likewise, the two cast stone-faced houses facing the Venetian Hall (122 and 136 E Kensington Ave) do not feature distinctive architectural elements or sufficient integrity for inclusion on the NRHP. Architectural historians verified that these properties do not retain sufficient integrity for the NRHP due to contemporary alterations (e.g., replacement porch, windows, and doors), compromising the historic materials and workmanship. No cohesive set of similar properties has been identified in the vicinity that would merit consideration as a potential historic district or multiple property grouping.

3. Reassess the area around 111th Street at Emerald Avenue for a potential district.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The area around 111th Street at Emerald Avenue is distant from the UPRR Alterative corridor and would not be affected by the RLE Project.

Effects Reconsideration Requests

4. Reevaluate the visual, noise, and economic effects of the Halsted Alternative on the Green Street Historic District, which could have a significant impact on the quality of life without proper mitigation.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The Green Street Historic District is distant from the UPRR Alterative

corridor and would not be affected by the RLE Project.

5. Reassess No Effect finding for the Altgeld Gardens Historic District based on the UPRR Alternative. The proposed station and garage would alter the landscape; a rendering should be developed.
   Altgeld Gardens Historic District is eligible for NRHP listing under Criterion A (i.e., events that have made a significant contribution to the broad patterns of American history on a local, state, and/or national level) based on its association with community development, planning, and social history. As defined by 36 CFR 800.5, an adverse effect on this resource would be an "alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the NRHP." While the UPRR Rail Alternative would increase transportation choices and improve access for this geographically isolated area, none of the proposed infrastructure improvements in the vicinity would significantly alter the characteristics that qualify the district as eligible for NRHP listing. As part of the UPRR Rail Alternative, an at-grade station and parking facilities would be constructed in one of two locations to provide access to the Altgeld Gardens Housing Project: a South Station Option or a West Station Option. Either station location option is separated from Altgeld Gardens Historic District by a multi-lane street (i.e., E. 130th Street and/or E. 130th Place). Preliminary plans for each terminal station option would include parking for 2,300 vehicles through a combination of a parking structure and surface parking lots.

   The South Station Option parking structure for the UPRR 130th Street Station is approximately 800 feet from Altgeld Gardens Historic District at its closest point; the parking structure would not be visible from within the historic district and would not adversely affect the historic district.

   The West Station Option parking structure for the UPRR 130th Street Station is approximately 400 feet from Altgeld Gardens Historic District at its closest point and would only be visible from the outer line of buildings on the north side of the Altgeld Gardens development. This outer row of buildings would obstruct the view of the parking structure from interior buildings and streets. The construction of the West Station Option would not adversely affect the characteristics that qualify the district as eligible for NRHP listing, i.e. its association with community development, planning, and social history.

   As the project would not adversely affect the integrity of the district or its association with community development, planning, and social history, any visual simulation rendering and any appropriate mitigation measures identified would occur independent of the formal Section 106 consultation process for this resource.

   The UPRR Alternative has been selected as the National Environmental Policy Act (NEPA) Preferred Alternative, and an additional rendering of the station will be developed and presented as part of the Draft EIS to assist local stakeholders in understanding the extent of visual impacts created by the project.

6. Reassess No Effect finding for the Roseland Pumping Station based on the UPRR Alternative.
   For the UPRR East Option, the track structure is approximately 8.8 feet from the side of the building at its nearest point. It should be noted that an existing at-grade freight line runs in close proximity to this location. The pumping station would not be displaced or directly affected by the UPRR Rail Alternative. The changes in the setting (e.g., visual, noise, vibration, etc.) would

not adversely affect the characteristics that qualify the resource as eligible for NRHP listing, i.e. its architecture.

The UPRR West Option would also not affect the characteristics that qualify the resource as eligible for NRHP listing.

7. CTA should develop appropriate renderings for all properties in the APE where there was a finding of No Adverse Effect or Adverse Effect.
   CTA will develop additional visual simulation renderings, for inclusion in the Draft EIS, of the UPRR Alternative, which has been selected as the NEPA Preferred Alternative. Renderings are particularly helpful in understanding the extent of visual impacts and in developing appropriate mitigation measures for any adversely affected historic resources.

   At the current stage of Effects consultation, additional renderings would not change the effects findings for NRHP-eligible resources. Justification for effects findings was provided in the effects report mailed to consulting parties and additional justification is included in this document. As a reminder, the key consideration is whether the project would alter the specific characteristics that qualify a resource as eligible for the NRHP.

   In addition to the Historic impacts, the Draft EIS will also include a discussion of the potential visual impacts of the RLE Project alternatives, including general renderings of the alternatives that were prepared to assess those impacts. Some of those renderings were also presented at the May 13th CTA open house and the exhibit boards can be viewed at http://www.transitchicago.com/assets/1/red_ahead/MS_CWC_CL_RLE_Exhibit_Boards_lowres_FINAL_20140515.pdf

8. Renderings should be developed for any NRHP or Chicago Historic Resources Survey (CHRS) Orange properties potentially impacted by the close proximity of the proposed elevated track structures.
   See Response #7.

9. The property owner of the Galloy and Van Etten Stone Contractors business is concerned about their access and viability if the Halsted Alternative is built.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The Galloy and Van Etten Stone Contractors business is distant from the UPRR Alternative corridor and would not be impacted.

10. Noise studies should be undertaken to demonstrate that the introduction of the elevated rail structure on Halsted would not adversely affect historic resources within the APE of that route.
    CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. Noise analysis has been conducted per Federal Transit Administration (FTA) guidance and mitigation measures have been identified, which will be presented in the Draft EIS.

11. The French Eclectic House would experience the same impacts as Green Street. Scale and noise would be issues. These areas could be negatively impacted, driving people to move out of the area.

CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The French Eclectic House is distant from the UPRR Alterative corridor and would not be affected by the RLE Project.

Other Comments

12. In general, we [IHPA] concur with the findings concerning historic architectural resources presented in the draft report. The Bus Rapid Transit (BRT) Alternative would have the least impacts, followed by the UPRR Alternative.

13. The potential to encounter archaeological resources needs to be addressed. If the potential for undisturbed archaeological resources exists, a survey will be required.
    No previously recorded archaeological sites fall within the RLE APE and therefore the project would produce no effect on known archaeological resources. The need for and extent of further archaeological investigations will be determined in consultation with IHPA.

14. CTA should consider incorporating the city-owned, vacant historic substation (10227 S. Halsted Street) into plans for the nearby station.
    CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued; the vacant historic substation would not be affected by the RLE Project.

Illinois Historic
Preservation Agency

FAX (217) 524-7525

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • www.illinois-history.gov

Cook County
Chicago
Red Line Extension
From Existing 95th Street Station to Approximately 130th St. and Halsted St.
IHPA Log #001010713

May 22, 2014

Sonali Tandon
Chicago Transit Authority
567 W. Lake St.
Chicago, IL 60661-1498

Dear Ms. Tandon:

Thank you for requesting comments from our office concerning the possible effects of the referenced project on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We are in receipt of the 2014 *Draft Effects Report*, and appreciated the opportunity to participate in the May 8, 2014 meeting at the CTA where your findings were presented. In general we concur with the findings concerning historic architectural resources presented in the draft report. However, the report indicates that noise walls will reduce the amount of noise that resources such as the proposed Green Street Historic District will experience. Noise studies that include current conditions will need to be undertaken to demonstrate that the introduction of the elevated rail structure on Halstead will not adversely affect historic resources located within the APE of that route.

It was noted in the report that archaeological resources may be uncovered during construction activities and that they would be investigated once found. At a minimum, the potential to encounter archaeological resources needs to be addressed and the results need to be presented to this office for review. If the potential for undisturbed archaeological resources exists within the areas of potential effect, a survey will be required.

As previously stated, it is our opinion that the proposed BRT route will affect the least amount of cultural resources located within its APE. We also believe the UPRR route that is often adjacent to existing railroad tracks will affect fewer resources than the elevated line proposed on Halsted Street.

We look forward to reviewing the final historic resources report once the preferred alternative has been selected and all cultural resource surveys have been completed.

If you have questions please contact David J. Halpin, Cultural Resources Manager, at 217-785-4998.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer

c: Lisa DiChiera, Landmarks Illinois
Terry Tatum, City of Chicago, Illinois
Marisol R. Simon, U.S. Department of Transportation
Mark Assam, U.S. Department of Transportation
Marlise Fratinardo, Chicago Transit Authority
Ward Miller, Preservation Chicago

May 22, 2014

Sonali Tandon, Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake St
Chicago, IL 60661

RE: Red Line Extension – Potential Effects Consultation Comments

Dear Ms. Tandon,

Thank you for the opportunity to review on May 8th the Red Line Extension team's findings and recommendations regarding historic properties in the APE. We are pleased to see some additions made to the list of National Register-eligible properties and the identification of orange-rated buildings in the Chicago Historic Resources Survey (CHRS) based on our February 18, 2013 letter.

From the May 8th meeting, we have the following comments:

- We strongly recommend that better renderings are produced to illustrate the potential impact of a UPRR West Station and four-story parking garage on 130th Street and the adjacent Altgeld Gardens Historic District.
- We agree with comments made during the meeting that the "No Effect" determination made for the Roseland Pumping Station, 351 W. 104th St., and Altgeld Gardens Housing Project Historic District, under the UPRR Rail scenario, should be reassessed as potentially having an "Adverse Effect" determination.
- We recommend producing renderings that will illustrate the "Adverse Effect" on National Register-eligible properties in the Halsted Rail scenario. This is particularly important if the proximity of rail tracks could potentially make these properties less viable in the future. These properties include:
    - The Former Classic Revival Substation, 10227 S. Halsted St.
    - The S.S. Peter & Paul Catholic Church at 12433-12439 S. Halsted St.
    - Cedar Park Cemetery Entryway and Gatehouse, 12540 S. Halsted St.
    - Fire Department Engine Company 115, 931 W. 120th St.
- While we understand that the design phase of a Halsted Rail scenario, if selected, will be some time later, we would like consideration to be made of incorporating the city-owned and vacant historic substation at 10227 S. Halsted St. into plans for a station that was indicated would be built in that vicinity.
- Lastly, we support the reassessments suggested by Matt Cole of Neighborhood Housing Services in his May 14, 2014 letter.

Again, thank you for the opportunity to review the findings by your team for this project.

Sincerely,

Lisa Di Chiera

Lisa DiChiera
Director of Advocacy

cc: Anne Haaker, IHPA
David Halpin, IHPA
Ward Miller, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago
Matt Cole, NHS

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www.nhschicago.org

May 14, 2014

Ms. Sonali Tandon
Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: Red Line Extension – Potential Impacts to National Register Eligible Properties in APE

Dear Ms. Tandon,

Thank you again for inviting NHS to participate in the Section 106 review process for the Red Line Extension project. We believe that extending the Red Line will ultimately enhance the livability and well-being of the greater Roseland-area. At the same time, as an organization rooted in the use of asset-based community development strategies, we wish to ensure that the project minimizes any undue impacts on the existing residential, community, and historic buildings that make these neighborhoods great and that our experience has shown can be important community-building and engagement assets. Therefore, based on the information presented in the May 9th Effects Meeting, we recommend that the following additional actions be undertaken by the project team before any mitigation planning is undertaken:

- Develop appropriate and assessable renderings for all properties in the APE where there was a finding of No Adverse Effect or Adverse Effect. This currently includes the Former Venetian Hall, the Green Street Historic District, the Former Classical Revival Substation, Galloy and Van Etten Stone Contractors, S.S. Peter & Paul Catholic Church, Cedar Park Cemetary Entryway and Gatehouse, and Fire Department Engine Company 115. We also believe that such renderings should be created, as necessary, based on our recommendations below (e.g, re: Altgeld Garden Historic District).

- Re-Survey 103rd Street to 104th Place between the UPRR and Princeton Avenue: This area includes the previously identified, National Register-eligible Roseland Pumping Station and Roseland Fire Station properties. However, the blocks also include a largely intact and well-maintained grouping of Chicago bungalows and frame cottages. We would encourage the project team re-survey these blocks to determine if these residential properties could contribute to a future National Register district, as well as any potential impact that a UPRR-located elevated train line would have on such a district.

- Reassess Determination that Cast Stone-faced Residences in APE are not National Register Eligible: Several of these buildings, which look similar to Chicago Greystones and are relatively rare, were observed adjacent to the UPRR right-of-way. This includes the 2-flat on Kensington Avenue immediately east of the Former Venetian Hall.

- Reassess Finding of No Adverse Effect on Potential Green Street Historic District: Re-evaluate visual, noise, and economic effects of a Halsted-located elevated train line on homes along Green

Street. While such train lines do run through other residential areas of Chicago (e.g., Pink Line), this corridor would be new and could have a significant impact on the quality of life of the area without proper mitigation.

- Reassess Area Around 111th Street and Emerald Avenue for Potential Historic District: Re-survey area around 11310 South Emerald (Emerald, Union, and Wallace Avenues) for eligibility as a historic district. If determined eligible, assess effect of a Halsted-located elevated train line on the district.

- Reassess Finding of No Effect of a UPRR West Station on Altgeld Gardens Historic District: The proposed station, station house, and four-story parking garage would be located immediately to the north of Altgeld Gardens. The height of the parking garage would be taller than any other properties in the area and would likely loom above the landscaped tree line of 130th Street. The existing rendering of the proposed station developed by project team is inadequate to assess the effect of the station due to its oblique view from the west.

Thank you again for inviting NHS to participate in the Section 106 review for the Red Line Extension project. Please let us know if we can be of further assistance before the next scheduled consultation.

Best,

Matt Cole
Project Coordinator
Neighborhood Housing Services of Chicago, Inc.

CC: Ed Jacob, NHS
Deborah Moore, NHS
Robert Tucker, NHS
Phillip Snorden, NHS
Anne Hacker, IHPA
Lisa DiChiera, Landmarks Illinois
Ward Miller, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago

From: Tatum, Terry [mailto:Terry.Tatum@cityofchicago.org]
Sent: Tuesday, May 20, 2014 4:16 PM
To: Tandon, Sonali
Cc: Halpin, David
Subject: Red Line Extension Historic Properties Consultation

Dear Ms. Tandon,

Thank you for hosting the consulting parties meeting held at CTA headquarters on May 8, 2014 for the Red Line Extension Historic Properties Consultation. We appreciate the opportunity to comment on the draft effects to historic properties that were discussed at that meeting.

Based on information provided, our comments are as follows:

1. Properties determined to be historic and/or color coded orange in the Chicago Historic Resources Survey and that would be potentially impacted by close proximity of elevated tracks under any of the alternative routes being considered should have photo renderings executed to show the effect of such close proximity of tracks. This would mainly include properties along the Halsted St. alternative, but would also include the UPRR east alternative route as it would affect the Roseland Pumping Station.

Our office looks forward to continuing to work with you on this exciting undertaking.

Sincerely,

Terry Tatum
Coordinating Planner I
Historic Preservation Division
Department of Planning and Development
City Hall, 121 N. LaSalle St., Room 1101
Chicago, IL 60602
312-744-9147 (phone)
312-744-9140 (fax)
Terry.Tatum@cityofchicago.org

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Appendix C – Survey form for George William Curtis Public School, 11445 S. State Street

PROPERTY NAME George William Curtis Public School

OTHER NAME(S) None

STREET ADDRESS 11445 S. State Street, Chicago, Illinois

OWNER Chicago Public School

DATE OF CONSTRUCTION 1893

DESIGNER/CONTRACTOR Unknown

PROPERTY USE

HISTORIC Public School
CURRENT Public School

DESIGNATIONS

LOCAL LANDMARK: Y (N)

OTHER LOCAL DESIGNATION:

NATIONAL REGISTER

INDIVIDUALLY LISTED: Y (N) **CRITERIA:**

HISTORIC DISTRICT: Y (N) **CRITERIA:**

CONTRIBUTING: Y (N)

DISTRICT NAME: N/A

NOT LISTED BUT ELIGIBLE: (Y) N **CRITERIA: C**

HARGIS # Not listed in database

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11445 S. State Street

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

INTEGRITY: Unmodified (Some Modification) Major Modifications

Notes/Description – Windows and doors have been replaced.

CONDITION: Excellent (Good/Fair) Poor

Notes/Description – Some staining present on brick and stone.

ARCHITECTURAL STYLE: Classical Revival
FOUNDATION Masonry
WALLS Brick Masonry
WINDOWS Double hung, replacements
ROOF TYPE: Flat roof
ROOF FEATURES: Cornice detail at the parapet
ROOF MATERIAL N/A

OUTBUILDINGS (# AND DESCRIPTION) None

PROPERTY DESCRIPTION
This building is four story building that is a part of the George William Curtis Public school (Chicago Public Schools). It has a red brick façade with rusticated stone base and limestone lintels and cornice. Windows are double hung replacements. Entrances are set of 4 double doors (replacements) surrounded by limestone columns and entablature. The building appears to be in good condition. Modern brick additions exist to the east and have little architectural character.

The building was mentioned as a comparable school in the West Pullman Elementary School National Register Report. While the building originally was designed in a Romanesque and Classical Revival style, the building received additions in 1906 and 1974, and in 2009 the 1893 and 1906 portions of the building were renovated.

HISTORY/DEVELOPMENT
The original building at 11445 S. State Street was designed by W. August Fiedler. Fiedler immigrated from Germany to the US in 1871. After working as an architect in New York City, he moved to Chicago in 1874 due to its rapid growth at that time. In the 1880s, Fiedler formed an architectural practice with John Addison. In 1893, Fiedler was appointed Chicago Board of Education Architect. During this three-year appointment, Fiedler designed 58 new school buildings throughout the city.

The building opened in 1893, with Thomas Hill as principal. Mr. Hill remained principal until 1925. The building operated as a combination elementary school and high school. The high school, known as Fenger High School, occupied the lower floors of the building, and the elementary school, known as Curtis school, occupied the upper floors. In 1910, the high school had 310 students and the elementary school had 1120 students. In 1926 Fenger High School was built at 112th St and Wallace, and high school classes were transferred to the new school. A junior high school was maintained at Curtis School until 1933. Not long after, the school became an all-elementary school.

On September 1, 1892, the *Inter Ocean* reported that Miss Burt, a member of the School Board, presented a resolution naming a new school building in honor of George William Curtis, best known as editor of *Harper's Weekly*, who had died in August of that year. The nomination was adopted. The school building would be located at Michigan and Stanwood Avenues in the Kensington neighborhood. The building was constructed in 1893, designed by Chicago Board of Education architect W. August Fiedler in the Romanesque and Classical Revival styles.

In 1903, the Iroquois Theater burned in Chicago and 41 teachers from 32 Chicago Public Schools who were in attendance lost their lives, including Amy Owens, a teacher from Curtis School, and her mother Frances E. Owens, died in the Iroquois Theater Fire. Chicago Public Schools were closed in memoriam until Tuesday, January 5, 1904.

In 1906, the Chicago Board of Education architect Dwight H. Perkins announced that the Curtis School would receive an addition of 12 rooms and a hall, the cost of which would be $200,000.

In December of 1931, a fire occurred in the northwest wing of the school. The damaged wing wasn't re-built, and the space was converted into a playground.

SOURCES

Chicago Landmarks: https://webapps1.chicago.gov/landmarksweb/search/searchresult.htm
West Pullman Elementary School, National Register of Historic Places Registration Form, https://www2.illinois.gov/dnrhistoric/Preserve/SiteAssets/Pages/illinois-historic-sites-advisory-council/Chicago%20--%20West%20Pullman%20Elementary%20School.pdf, accessed March 11, 2021.

Chicago Public School Buildings, Pre-1940 Context Statement, https://www.chicago.gov/content/dam/city/depts/zlup/Historic_Preservation/Publications/CPS_Bldgs_Pre_1940_Context_Statement.pdf.

"All Schools to Close," *Chicago Tribune*, January 3, 1904.

"Curtis School was Forerunner of Fenger High," *Suburbanite Economist*, June 15, 1949.

"Flames Wreck Old Fenger School Building," December 3, 1931.

"Progress Already Made," *Chicago Tribune*, June 29, 1906.

"Two Reports in the Bradford Case," *Chicago Tribune*, September 1, 1892.

"Want Her Dismissed," *The Inter Ocean*, September 1, 1892.

Iroquois Fire, http://www.iroquoistheater.com/chicago-teachers-iroquois-theater-victims.php.

Amy Owens,
http://www.iroquoistheater.com/cookbook-author-frances-owens-and-daughter-iroquois-victims.php.

City of Chicago, Zoning map: https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning
HARGIS: http://gis.hpa.state.il.us/hargis/
Sanborn Map: https://www.loc.gov/resource/g4104cm.g017901897E/?sp=33&r=-0.858,-0.076,2.716,1.669,0

HISTORIC RESOURCE SURVEY FORM

RESOURCE TYPE Building
ADDRESS 11445 S. State Street

PROJECT NAME CTA Red Line Extension
PROJECT NUMBER 2009

PHOTO(S)

Central Entrance, west façade. Sept. 13, 2020.

West façade, Googlemaps 2019.

South façade, Googlemaps 2019.

LOCATION MAP

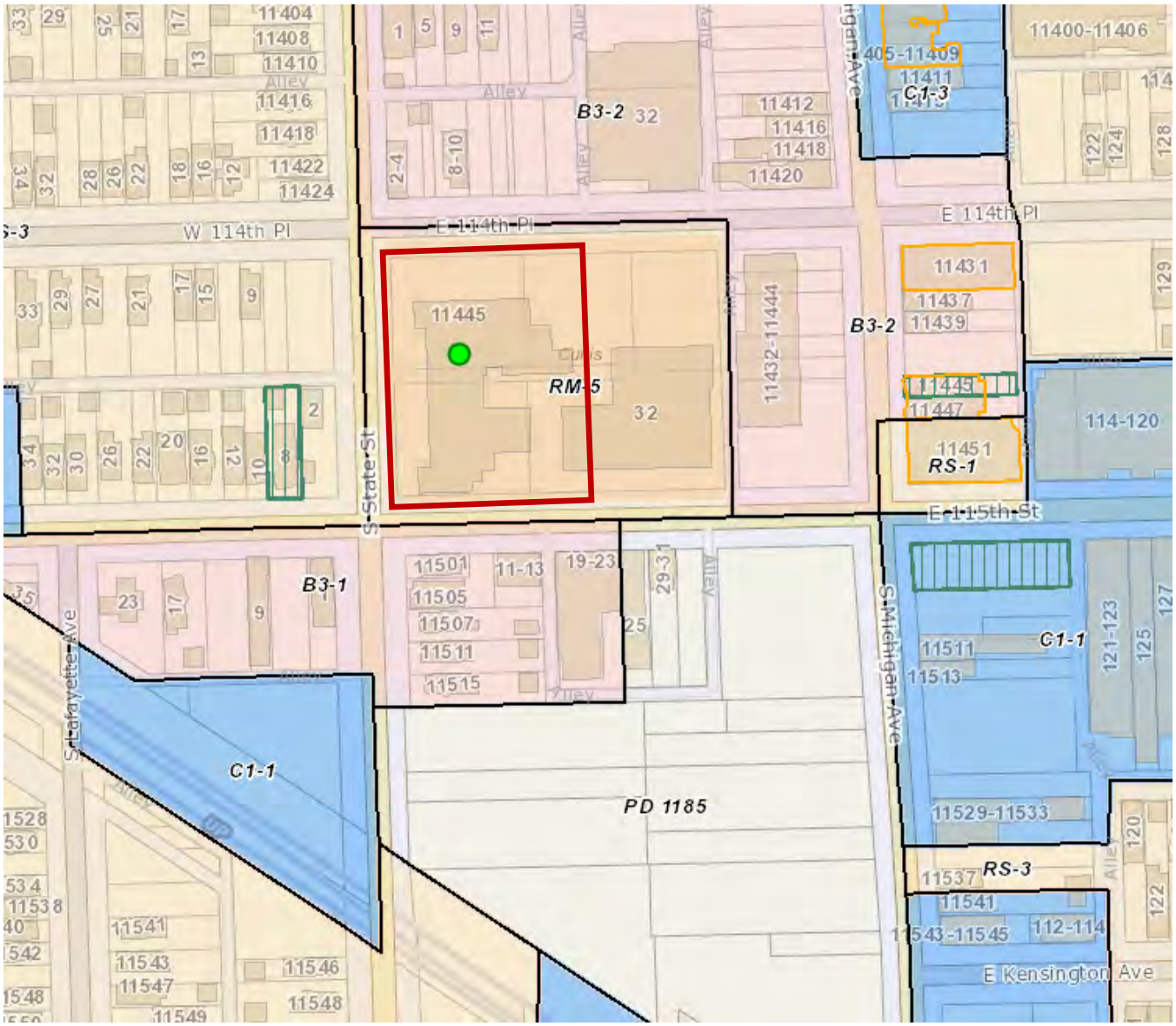

City of Chicago Zoning Map

Amy Owens

School Journal, http://www.iroquoistheater.com/chicago-teachers-iroquois-theater-victims.php,

[TRIBUNE Photo.]

FIRE CAUSES $25,000 DAMAGE TO OLD FENGER HIGH SCHOOL. Firemen called by a 4-11 alarm battle flames on top of the Curtis Junior High school, 114th and State streets. The fire was confined to the old section of the building erected in 1893.

Chicago Tribune, December 3, 1931

Appendix D – Documentation of SHPO Meeting on July 26, 2021 and Follow-Up Materials

RED AHEAD

Red Line Extension

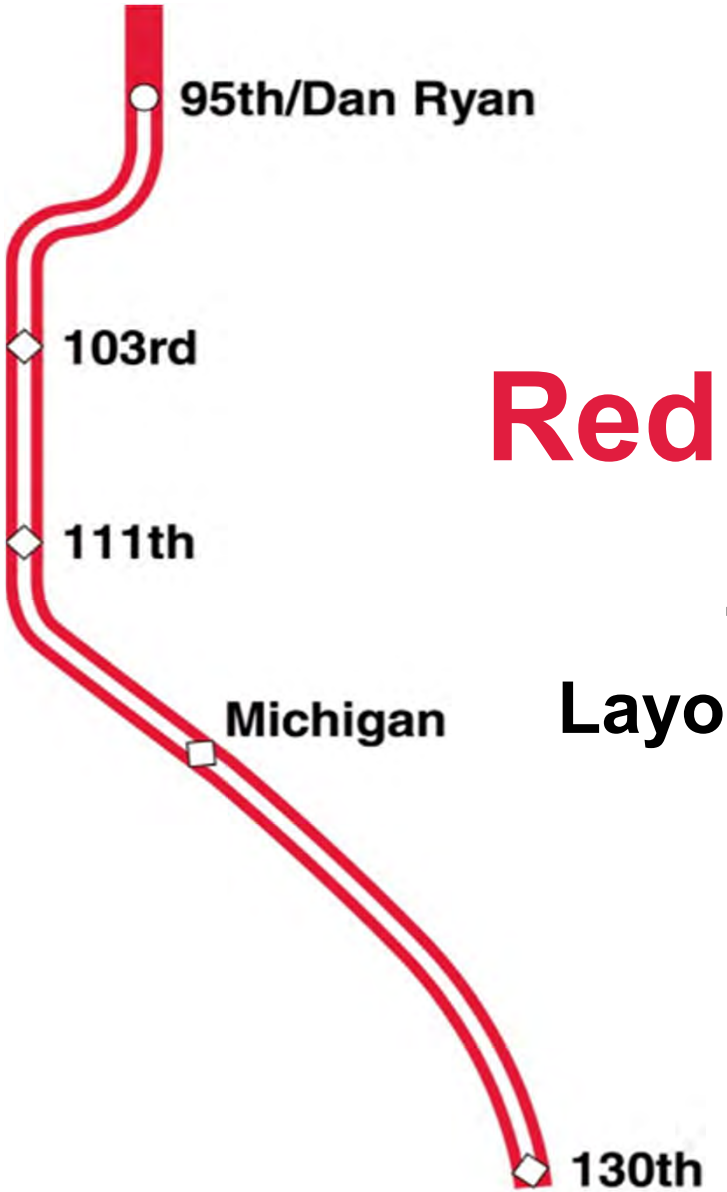

Red Line Extension

SHPO Presentation
130th Street Station
Layout and Access Concepts

July 26, 2021

cta

Welcome and Introductions

Meeting Purpose

RED AHEAD

Red Line Extension

- Provide additional information on 130th station layout and access concept
- Provide clarification on relationship of station to historic properties
- Identify a path forward for SHPO determination on 130th station within Supplemental EA period.

Agenda

- Review of Current Proposed Station Layout and Access Concept
- Additional Station Access Concepts
- Open Discussion

Review of Current Proposed Station Layout and Access Concept

Historic District Boundaries

Altgeld Gardens-Phillip Murray Homes (AGPMH) Historic District

130th Street Station Concept

RED AHEAD

Red Line Extension

Draft - for discussion purposes only

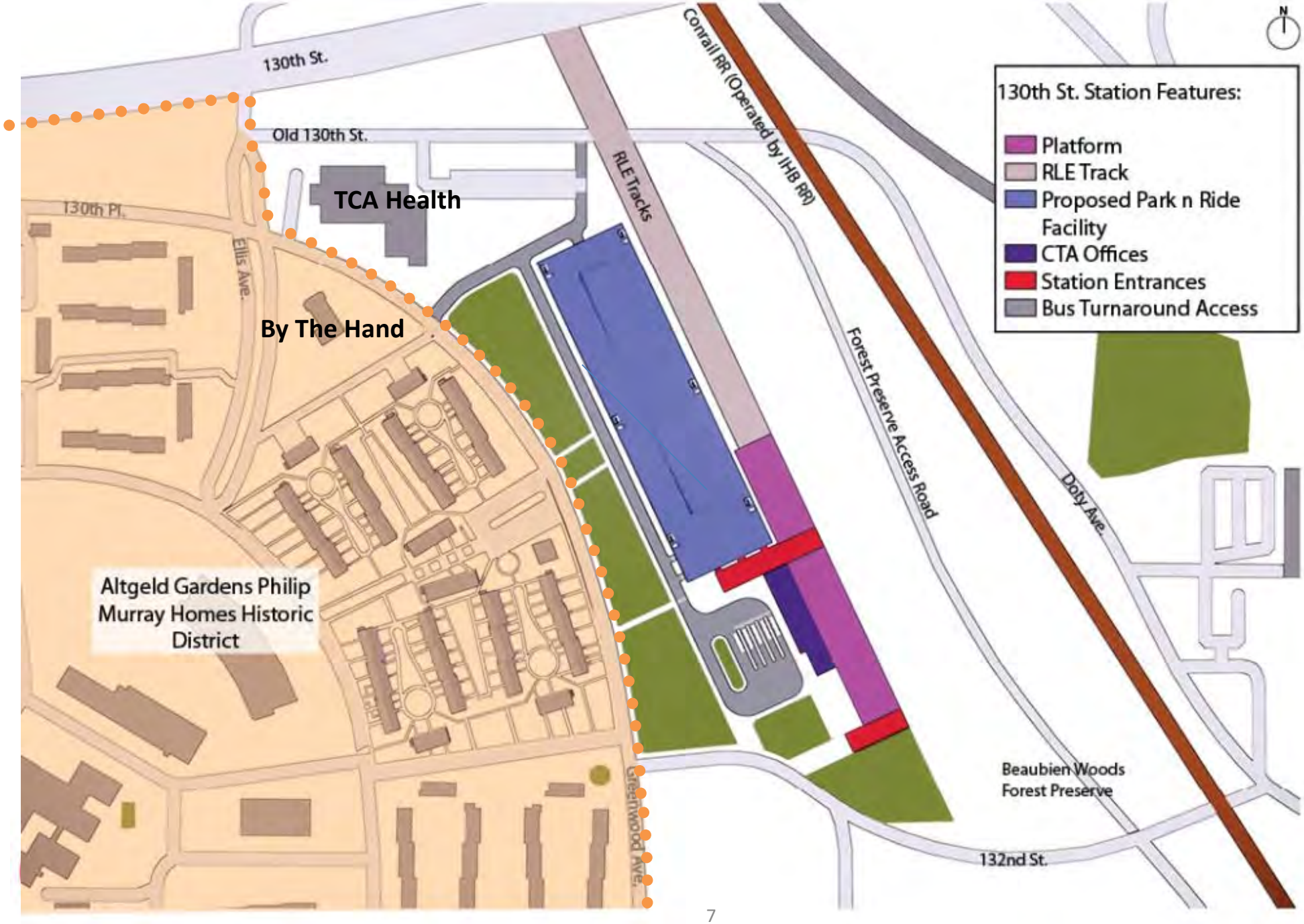

Traffic Circulation Plan

RED AHEAD

Red Line Extension

AGPMH Historic District

- Historic District Boundary is the east curb of Ellis and Greenwood Avenues.
- The project proposes no changes to the geometry or location of streets within the historic district.
- Project proposes traffic routing to minimize increased use of the streets within the historic district

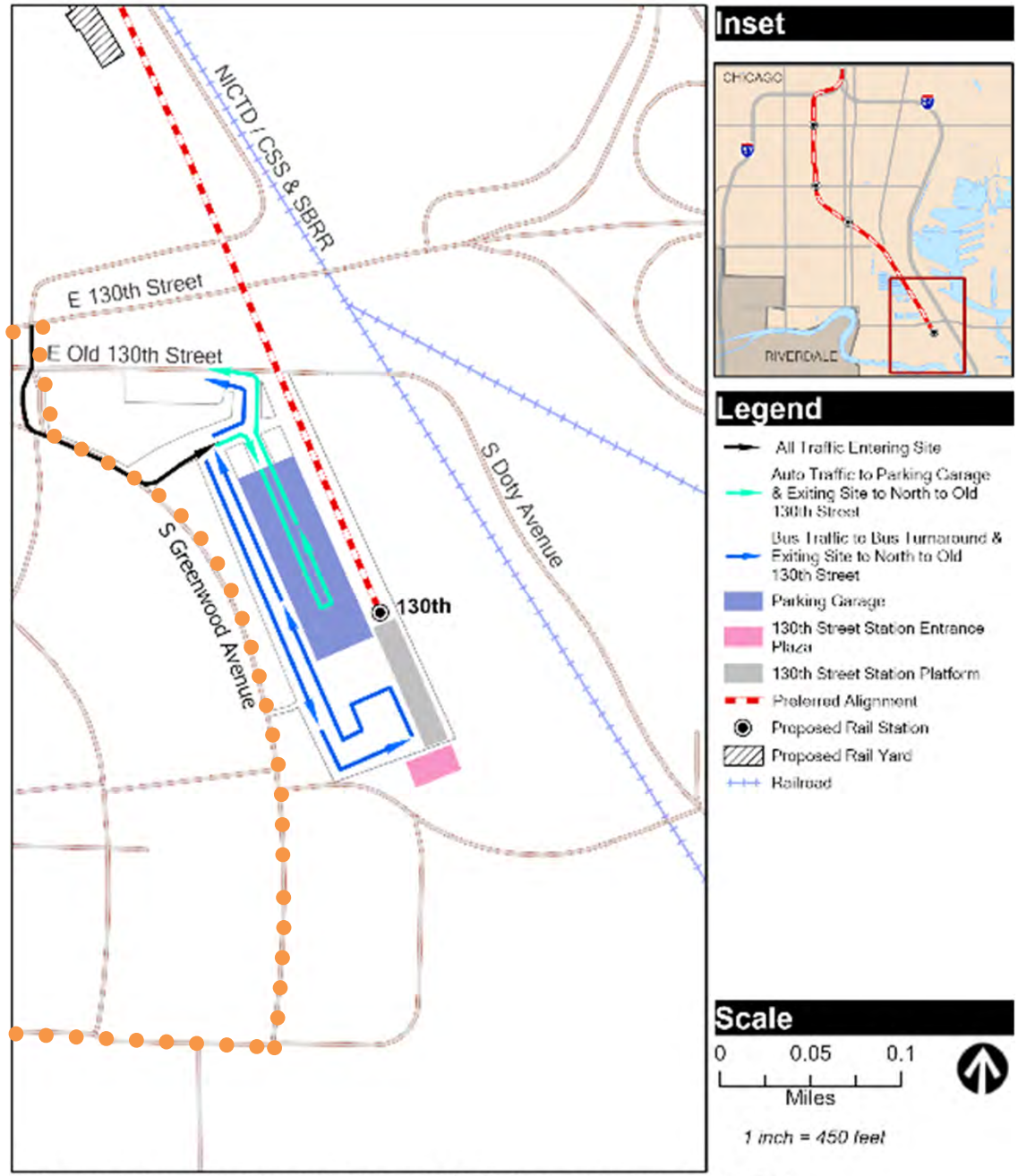

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

cta

Rendering of Station Views

RED AHEAD

Red Line Extension

- View looking east on Greenwood Avenue from Altgeld Gardens

Appearance of project elements and residences in visualizations in these renderings is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specified design design features.

Rendering of Station Views

RED AHEAD

Red Line Extension

- View looking east from Ellis Avenue through Parking Lot

Appearance of project elements and residences in visualizations in these renderings is intended to show the scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specified design design features.

Traffic Studies

RED AHEAD

Red Line Extension

Compiled and Reviewed:

- 16 vehicular traffic counts
  - 8 intersections
  - 8 interstate ramps
- Analyzed Build and No Build Conditions
- Traffic distribution and local circulation patterns
- Road capacity
- Road peak hour (AM & PM) hour traffic volumes
- Planned roadway improvements

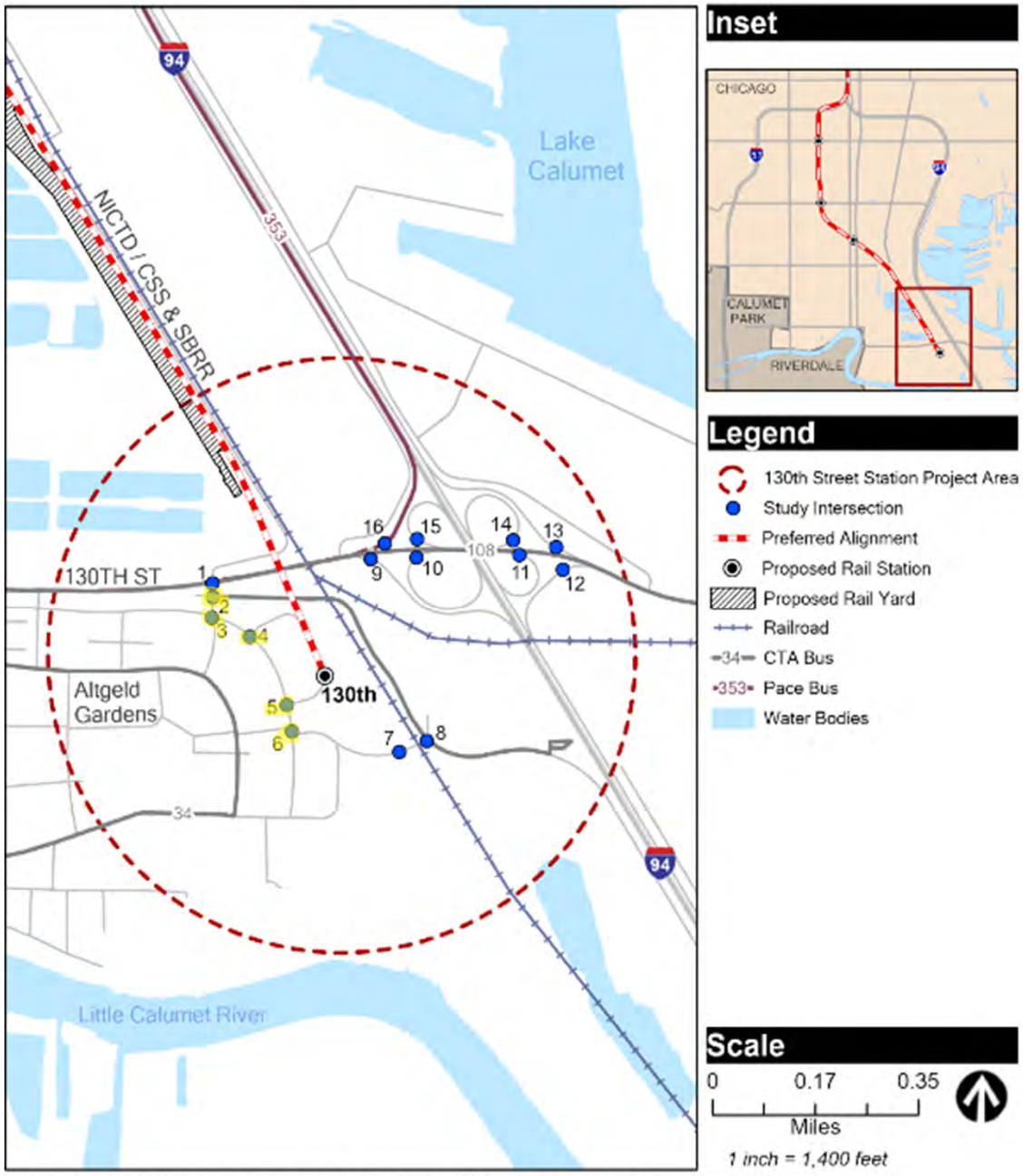

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

cta

Traffic Studies

Draft - for discussion purposes only

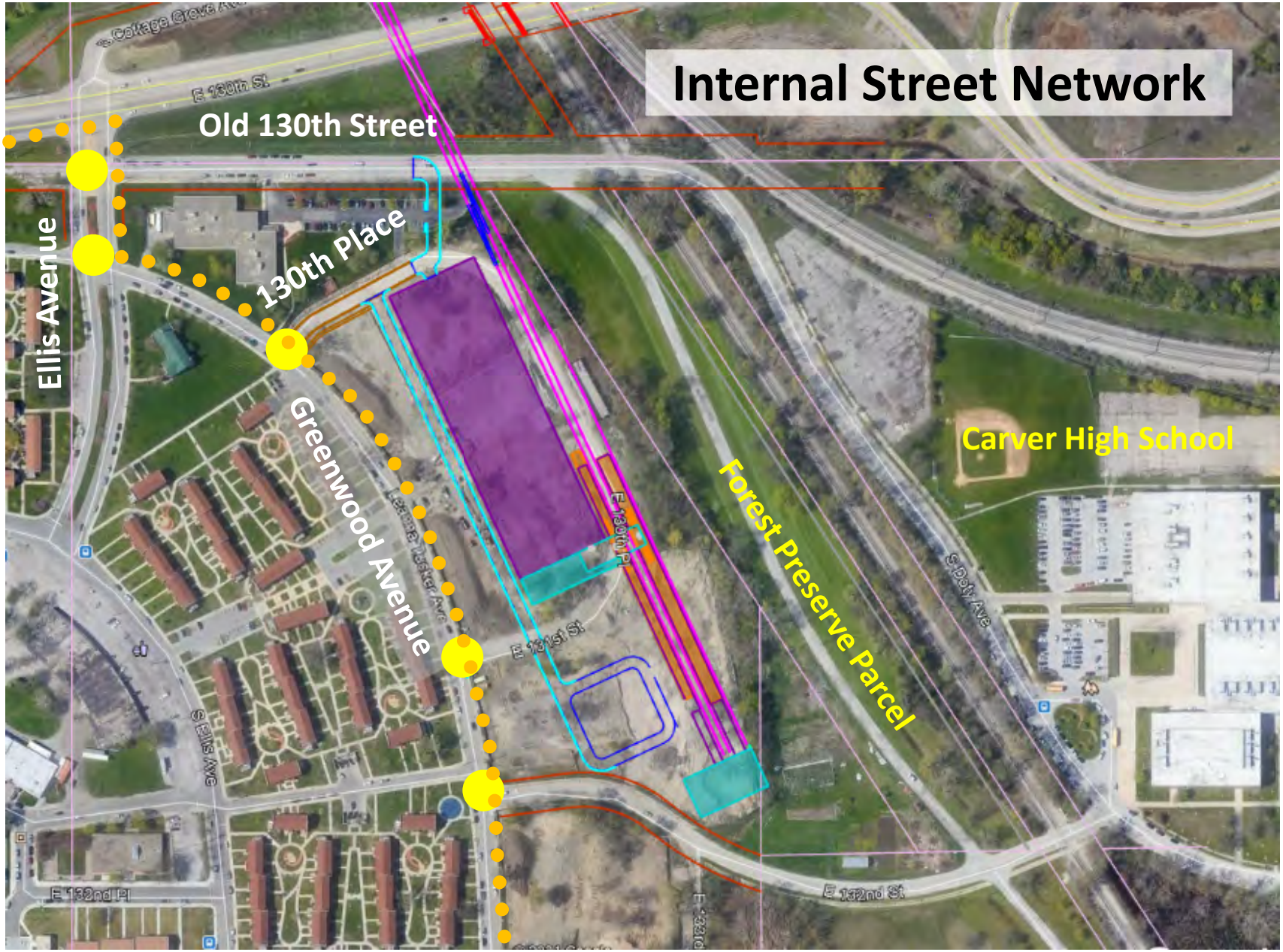

Traffic Studies

- Historic Peak Volume Analysis for Blocks 11, 12, & 13

ITE Description	ITE Code	Unit	No. of Units	AM Peak Hour Trips 7:30 AM to 8:30 AM			PM Peak Hour Trips 4:00 PM to 5:00 PM		
				Total	Enter	Exit	Total	Enter	Exit
Multifamily Housing (Low-Rise)	220	Dwelling Units	500	258	72	186	331	196	136

Traffic Studies

- 2050 Peak Hourly Volumes Analysis
- Ellis Avenue Traffic Immediately South of 130th Street

	AM Peak Hour Trips 7:30 AM to 8:30 AM			PM Peak Hour Trips 4:00 PM to 5:00 PM		
	Total	Enter (SB)	Exit (NB)	Total	Enter (SB)	Exit (NB)
2050 Background Traffic (No Build)	481	296	185	299	128	171
2050 Station Generated Traffic	500	421	79	441	47	394
2050 Total Traffic (Build)	981	717	264	740	175	565

Rule of thumb for 2-Lane Street:

- 1600 vehicles per hour – typical max lane capacity before needing more lanes.

• Analysis of Internal Intersections

ID	Intersection	Control Type	No Build		Build	
			AM Peak Hour LOS[1]	PM Peak Hour LOS[1]	AM Peak Hour LOS[1]	PM Peak Hour LOS[1]
1	130th St and Ellis Ave	Signalized	B	B	B	C
2	Old 130th St and Ellis Ave	Unsignalized	A	A	A	A
3	Greenwood Ave and Ellis Ave	Unsignalized	A	A	A	A
4	130th Pl and Greenwood Ave	Unsignalized	A	A	A	A
5	131st St and Greenwood Ave	Unsignalized	A	A	A	A
6	132nd St and Greenwood Ave	Unsignalized	A	A	A	A
7	132nd St and Beaubien Woods driveway	Unsignalized	A	A	A	A
8	132nd St and Doty Ave	Unsignalized	A	A	A	A

Notes:
1. Signalized intersection Level of Service (LOS) is reported as the average delay for all movements. Unsignalized intersection LOS reported is the average delay for the minor street movements and major street left turns.
2. LOS deterioration between No Build and Build is shown in red.

Roadway Improvements

- 130th Street and Ellis Avenue Intersection
  - Not within the AGPMH Historic District
  - Adjust amount of time allotted to each phase of the signal for the PM peak.
  - Extend the eastbound right turn and westbound left turn storage lanes on 130th Street.
- Only roadway improvements proposed

Roadway Improvements

RED AHEAD

Red Line Extension

- 130th Street and Ellis Avenue Intersection

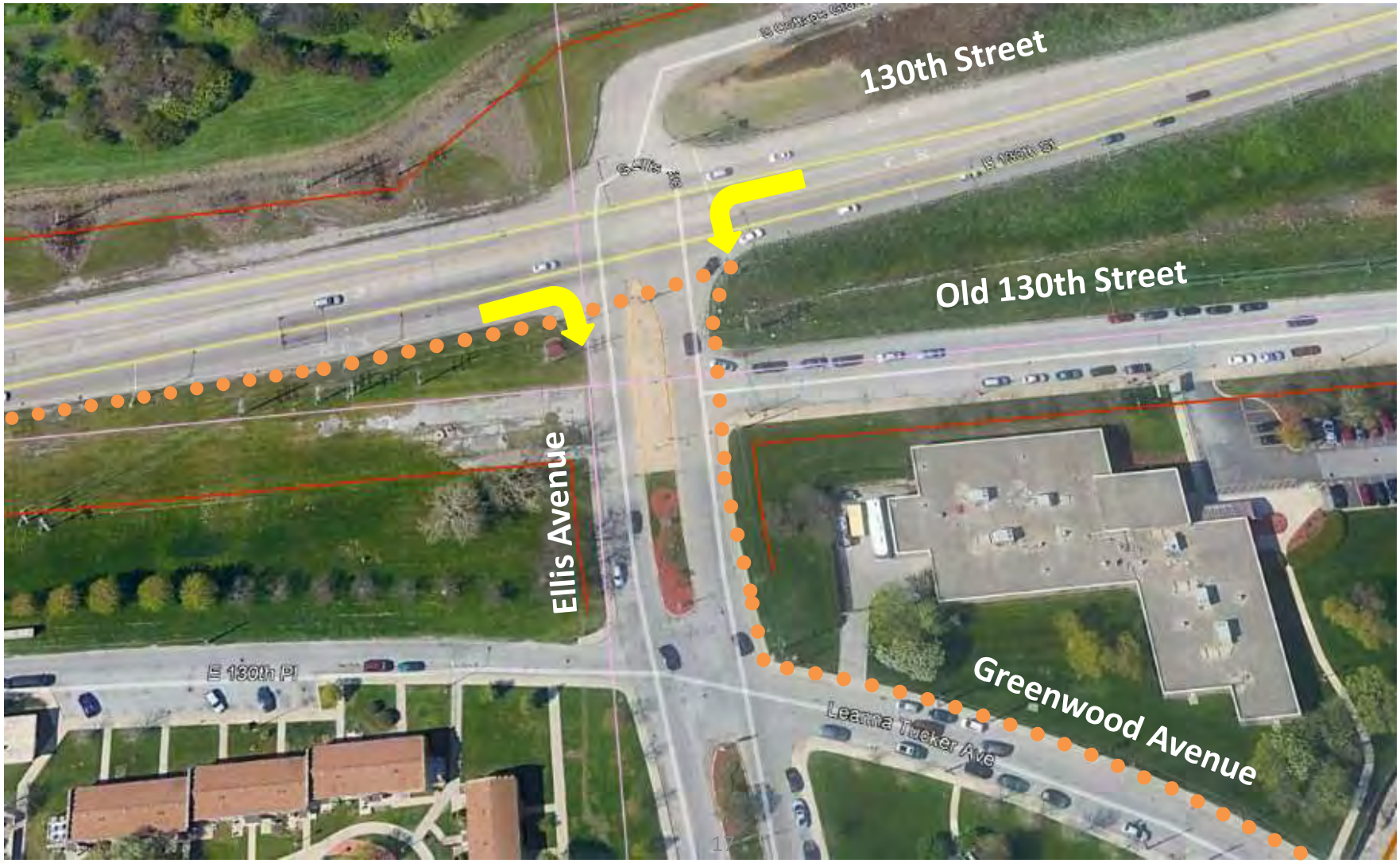

Additional Station Access Concepts

Additional Considerations

RED AHEAD

Red Line Extension

Draft - for discussion purposes only

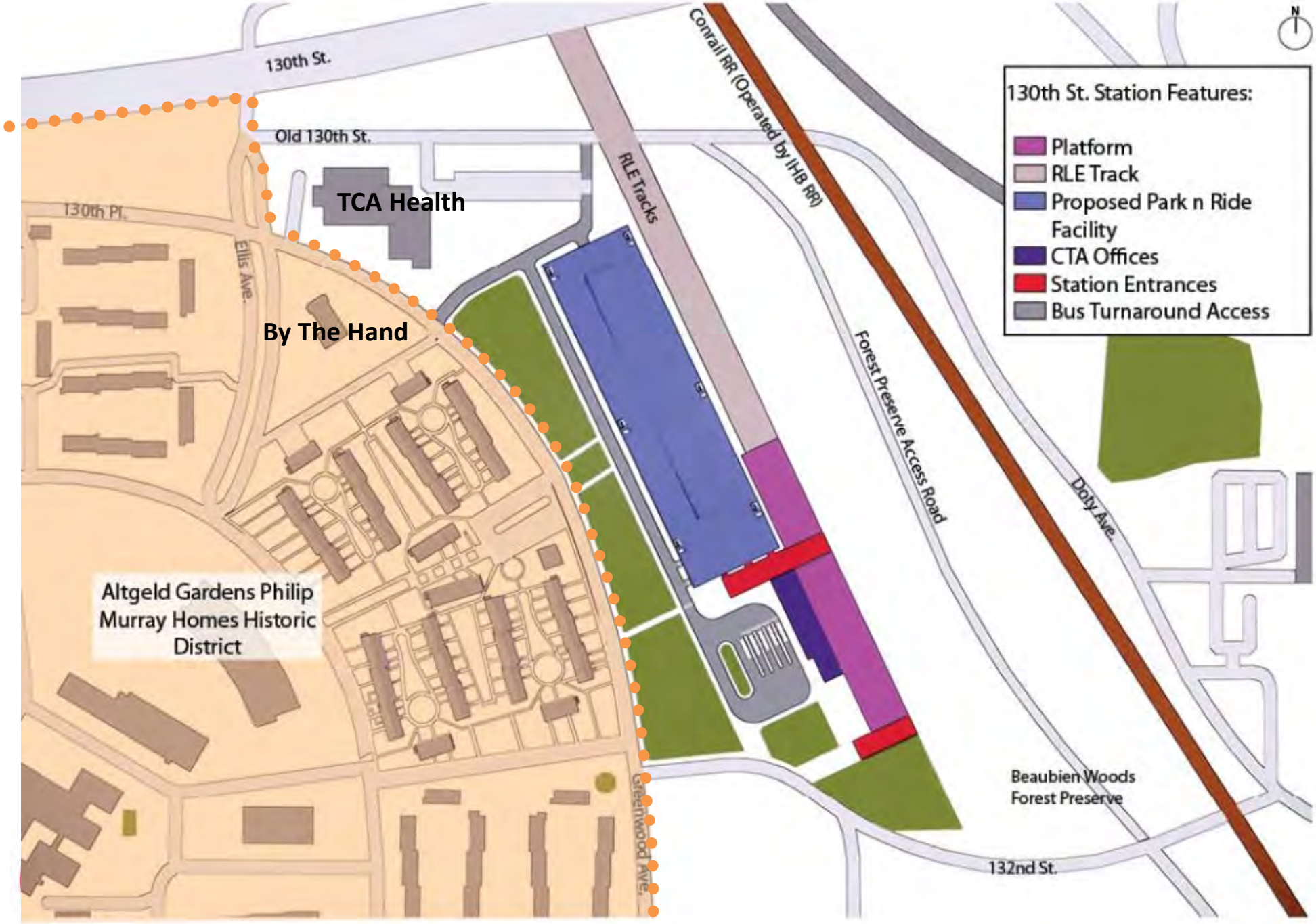

Additional Concepts

Vehicle Access Option 1

Draft - for discussion purposes only

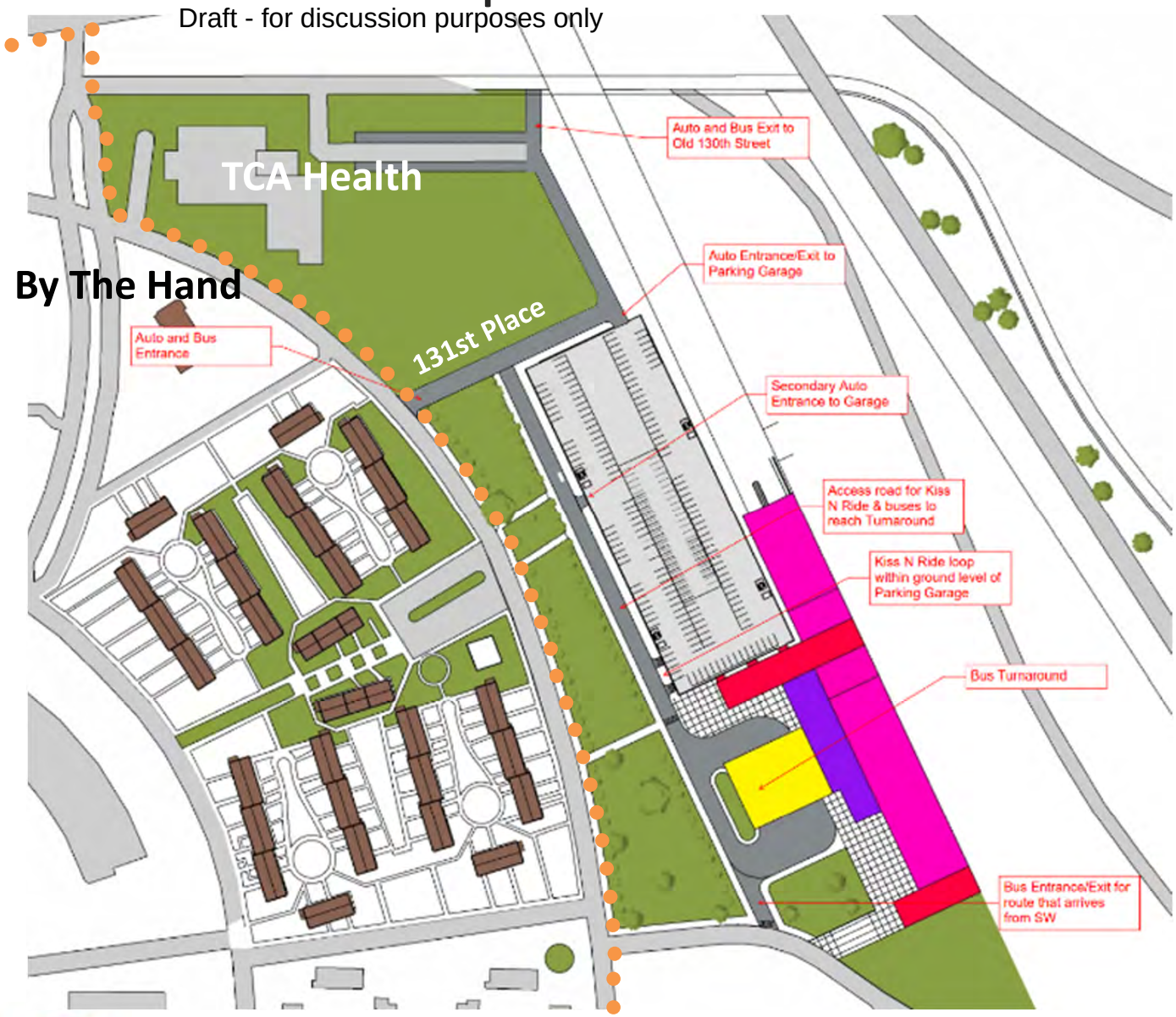

- Garage increases in height by one story, reduces footprint at the north end of the parcel
- Close 130th Pl, open new street further south (131st Pl) to access north end of southward shifted garage footprint
- Garage entrance / exit shifted eastward to be directly adjacent to RLE Tracks
- Maintains current bus entrance from Greenwood and bus exit to Old 130th St, with entrance / exit at 132nd St for single bus route arriving from southwest of the station

Additional Concepts

RED AHEAD

Red Line Extension

Vehicle Access Option 2

Draft - for discussion purposes only

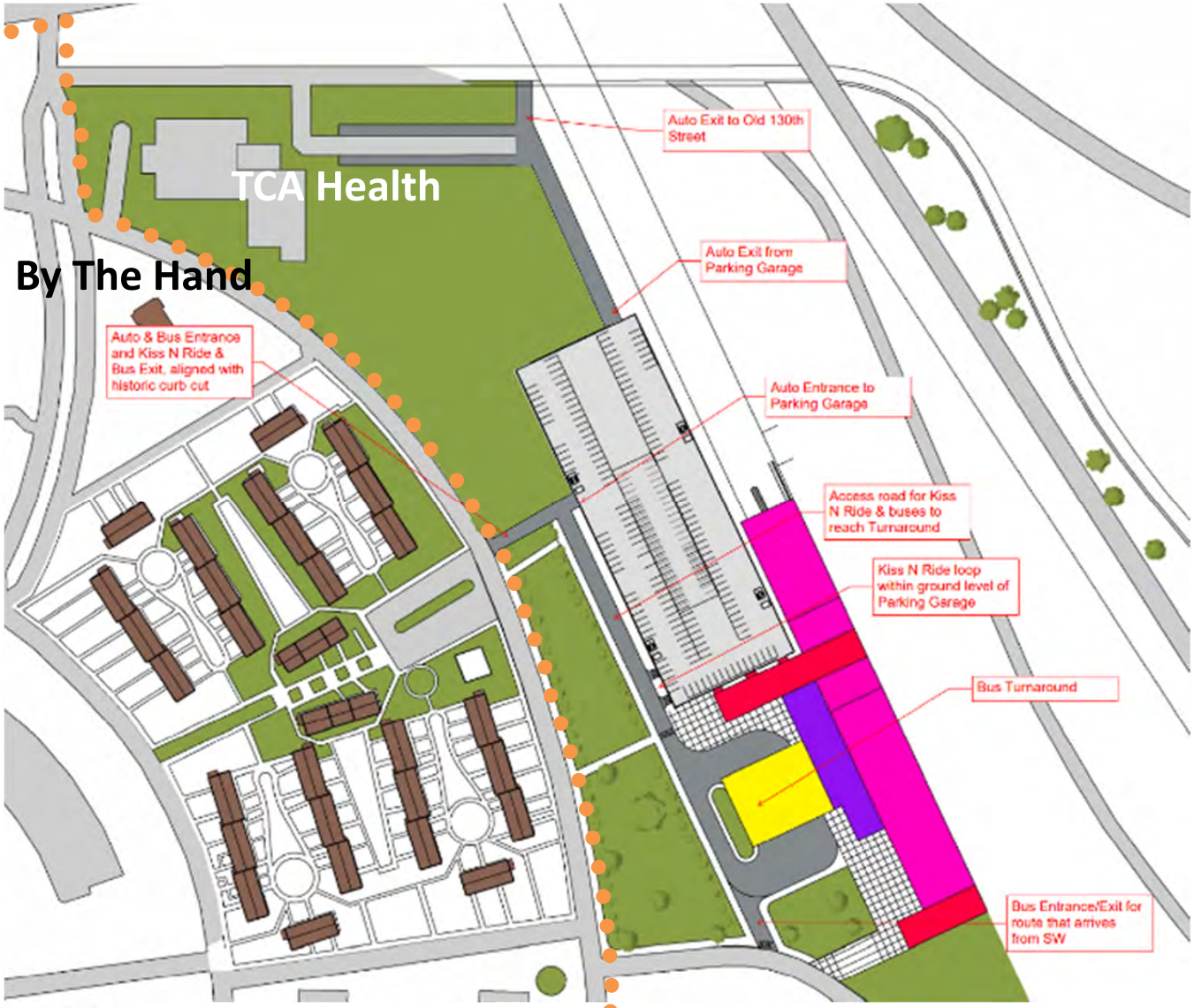

- Garage entrance from west side of garage / garage exit remains from north side of garage to Old 130th St and shifted eastward to be directly adjacent to RLE Tracks
- Close 130th Pl, open new street further south than Option 1 (132nd Pl) to access mid-point of west side of garage utilizing historic curb cut on east side of Greenwood
- Garage entrance from west side of garage / garage exit remains from north side of garage, but shifted eastward to be directly adjacent to RLE tracks
- Maintains current bus entrance from Greenwood, however bus exit now returns to Greenwood the way they entered. Kiss n Ride-only exit traffic will also return to Greenwood (will not pass through garage to exit north to Old 130th St)

cta

Open Discussion

RED AHEAD

Red Line Extension

Thank you!

PREVIOUS RENDERING DEPICTING
A 3-STORY GARAGE

ADDITIONAL RENDERING DEPICTING A 4-STORY GARAGE

PREVIOUS RENDERING DEPICTING
A 3-STORY GARAGE

ADDITIONAL RENDERING DEPICTING A 4-STORY GARAGE

Meeting Minutes

Project: Red Line Extension
Meeting Purpose: SHPO Coordination
Date: Monday, July 26, 2021
Location: Remote Meeting
Time: 2:00 PM

Chairperson: Marlise Fratinardo

Attendees: (See Attached copy of Sign-in-Sheet)

Item No.	*Date*	*Item Description*	*Responsibility/ Status*	*Due/Closed Date*
1.00	**Introductions**			
1.01	7/26/21	Introductions were made.		
2.00	**Purpose of Meeting**			
2.01	7/26/21	The purpose of this meeting was to discuss the SHPO comments on the draft Effects Report. In the comments, SHPO indicated that there was not enough information available to definitively determine that there would be no adverse effect on the Altgeld Gardens historic district. Additional design information will be presented regarding the vehicle access to 130th Street station and the completed traffic study in this area.		
2.02	7/26/21	SHPO was given an opportunity to provide additional clarification on the comments but did not have any clarifications to add.		
2.03	7/26/21	A path forward for the SHPO determination for the Supplemental EA will also be discussed.		
3.00	**Review of Current Proposed 130th Street Station Layout and Access Concept**			
3.01	7/26/21	A more detailed review of the materials presented at the 6/30/21 consulting party (CP) meeting was discussed.		
3.02	7/26/21	The nomination of the Altgeld Gardens-Phillip Murray Homes (AGPMH) historic district is being prepared by the Chicago Housing Authority (CHA).		
3.03	7/26/21	As part of the National Register of Historic Places (NRHP) nomination, a historic district boundary has been determined and preliminarily approved by SHPO.		
3.04	7/26/21	According to the NRHP nomination, the AGPMH historic district is eligible under Criteria A, B and C.		
3.05	7/26/21	The AGPMH historic district nomination has been used for the evaluation of the RLE project's effects on the historic district.		
3.06	7/26/21	The AGPMH neighborhood was planned on a curvilinear street system. A core of community and public buildings was surrounded by 2-story brick row houses. The neighborhood was intended to be a city within a city and provided public and private transportation throughout the neighborhood.		
3.07	7/26/21	Much of the original AGPMH area is encompassed by the historic district boundary. Because of the demolition of the buildings east of Greenwood Avenue (CHA blocks 11, 12 and 13) and the resulting loss of historic integrity, this area was excluded from the historic district.		
3.08	7/26/21	The proposed 130th Street station will be located on CHA blocks 11 and 13, and a connection from the station to Old 130th Street would pass through the east side of the TCA Health parcel.		

Item No.	Date	Item Description	Responsibility/ Status	Due/Closed Date
3.09	7/26/21	In the current concept, there will be a 3-story parking garage containing a Kiss n Ride loop, a bus turnaround, CTA offices, station platforms, and track alignment leading into the station.		
3.10	7/26/21	Primary access to the station would be from 130th Street, south to Ellis Avenue, southeast to Greenwood Avenue, and East to 130th Place. Vehicles would primarily exit the site north to Old 130th Street, north to Ellis, and out to 130th Street.		
3.11	7/26/21	No new curb cuts are being proposed in this concept, as access to the station via 130th Place is part of the historical ring road.		
3.12	7/26/21	Green space would be provided west of the station to provide a buffer between the station and the neighborhood.		
3.13	7/26/21	Altgeld Gardens was originally designed for vehicle and bus traffic. The #34 bus is currently routed through the Altgeld Gardens historic district and runs every 10 minutes during peak hours.		
3.14	7/26/21	The RLE project provides a critical connection and much needed access to transit for Altgeld Gardens residents.		
3.15	7/26/21	No changes are proposed to the geometry or location of streets within the historic district, and the station conceptual layout has been developed to minimize increases in traffic on the historic district streets.		
3.16	7/26/21	The only overlap between the station traffic and the historic district is one block of Ellis Avenue and one block of Greenwood Avenue, which only fronts commercial properties.		
3.17	7/26/21	Renderings of the station from Greenwood looking east that were presented at the CP meeting were reviewed. The renderings were intended to show the scale of the station elements, but the construction appearance may differ based on future design decisions.		
3.18	7/26/21	A traffic study has been completed, including vehicular traffic counts within Altgeld Gardens and at the 130th Street interchange with I-94. The analysis included the Build and No Build conditions, traffic distribution and local circulation patterns, road capacities, peak hour traffic volumes, and planned roadway improvements. Five of the eight intersections analyzed within Altgeld Gardens were within the historic district.		
3.19	7/26/21	A trip generation analysis was performed for the housing units previously located on CHA blocks 11, 12 and 13. These blocks have been demolished and will be the site of the proposed 130th Street station. In the AM peak, there would be 258 vehicles, and in the PM peak, there would be 331 vehicles.		
3.20	7/26/21	In comparison to the trips that would have been generated by the demolished blocks, the projected 2050 peak hour volumes were calculated for both the Build and No Build conditions. In the AM peak, the 2050 station generated traffic would be 421 vehicles and the 2050 total traffic for the build condition would be 717 vehicles. In the PM peak, the 2050 station generated traffic would be 394 vehicles and the 2050 total traffic for the build condition would be 565 vehicles. A two-lane street, such as Greenwood Avenue, typically can accommodate 1,600 vehicles per hour before additional lanes are needed, and the 2050 Build traffic peak hour volumes are much lower than the 1,600 vehicles per hour.		

Item No.	Date	Item Description	Responsibility/ Status	Due/Closed Date
3.21	7/26/21	Of the 8 analyzed intersections within Altgeld Gardens, only the 130th Street and Ellis Avenue intersection is signalized, and the remaining 7 intersections are controlled by stop signs. Intersection Level of Service (LOS) was assigned for each of the 8 intersections for the Build and No Build conditions for the AM and PM peaks, grading the operations of an intersection from A to F. LOS A is free flowing traffic with almost no delay, and LOS F is congested with delays affecting all drivers. All 7 unsignalized intersections have no change to the LOS from the No Build to Build 2050 forecasted conditions, all remaining at LOS A. The signalized intersection at 130th Street and Ellis in the PM peak would change from LOS B to LOS C, which is the Chicago DOT target LOS for dense urban settings.		
3.22	7/26/21	Mitigations are proposed at the intersection of 130th Street and Ellis Avenue due to the change in LOS. Ellis Avenue is under CDOT jurisdiction, and 130th Street is under IDOT jurisdiction. Proposed mitigations included signal timing adjustments and extending the eastbound right turn lane and westbound left turn lanes along 130th Street, which is outside the historic district.		
4.00	**Additional Station Access Concepts**			
4.01	7/26/21	As part of ongoing coordination with local project stakeholders and to support information-gathering for the Transit-Supportive Development (TSD) Plan, CTA has been conducting informational interviews with community members. At a recent informational interview, TCA Health, a stakeholder located north of the proposed station, disclosed that an 8,000 SF expansion of the facility is being planned within the existing TCA Health parcel to create a healthy food hub. TCA Health expressed the desire for improved connectivity of their facility to the community and asked CTA for additional information about the proximity of the station garage to their parcel, future station circulation, and parking. The TSD Plan team previously recommended that potential development areas would be more viable closer to 130th Street, north of the garage, to provide better visibility than a location more internal to the Altgeld Gardens neighborhood.		
4.02	7/26/21	CTA explored refinements and additional station access concepts with consideration to potential development site identified by the TSD Plan team, the TCA Health proximity to the station and planned expansion, and revising the station area access connections to bring the access closer to residents. Two alternate concepts were presented for review. The options have not yet been shared with the project stakeholders. Coordination with TCA Health and other stakeholders is ongoing.		
4.03	7/26/21	In both of the alternate options, the garage height was increased by one story (from 3 to 4 levels) to reduce the footprint at the north end of the parcel but maintain the same parking capacity, and 130th Place would be closed. The visual impacts of the taller parking garage on Altgeld Gardens and the forest preserve would need to be assessed and disclosed.		
4.04	7/26/21	The roadway connecting Old 130th Street to the station would be shifted east in both options, reducing the amount of TCA Health property needed for the roadway. However, a longer protective barrier would be needed between the roadway and the at-grade RLE tracks.		
4.05	7/26/21	The bus turnaround in both options would be connected to 132nd Street for the bus route that will access the station from the southwest. This was considered after the current concept was developed but could be incorporated into the current concept pending further evaluation.		
4.06	7/26/21	All other station components in the alternate concepts would remain unchanged from the current concept.		

Item No.	Date	Item Description	Responsibility/ Status	Due/Closed Date
4.07	7/26/21	Option 1: A new 131st Place vehicle access would be opened south of 130th Place at the new north face of the parking garage. More room would be preserved for the TCA Health expansion and would provide opportunities for improving the connection to the neighborhood. The garage internal circulation would need additional verification with the shift of the vehicle access roadway. Impacts to on-street parking along the east side of Greenwood Avenue would be more than the current concept, but less than in Option 2. On-street parking would be restricted between Ellis Avenue and 131st Place. A new curb cut would be required on Greenwood Avenue for the connection to 131st Place, and the east curb of Greenwood is included in the historic district boundary. Roadway use and capacity would need additional evaluation to determine if on-street parking could be retained along Greenwood Avenue.		
4.08	7/26/21	Option 2: The station entrance would be shifted further south to 132nd Place, at a location at the midpoint of the west face of the parking garage. Buses would enter and exit at 132nd Place, and cars would enter at 132nd Place but could exit either at 132nd Place or north to Old 130th Street. Slightly more space would be provided at the north end of the parcel in this option than in Option 1. A new roadway access point would be created on Greenwood Avenue, closer to the residences; this new access point would re-utilize an original feature of the property, a historical curb cut that was filled in when Block 11 was demolished. Station-related traffic would be brought further into the Altgeld Gardens historic district, and the change in the garage entrance location may require modifications to the internal garage circulation patterns and layout. On-street parking would be restricted along the east side of Greenwood Avenue between Ellis Avenue and 132nd Place.		
4.09	7/26/21	SHPO noted that the current concept and Option 2 would be equivalent in the number of curb cuts affected. Option 1 would introduce a new curb cut in the historic district, exiting vehicles would be shining headlights into the end residential unit, and was not desirable.		
4.10	7/26/21	CTA confirmed that all alternatives were feasible and not cost-prohibitive, but cost estimates have not yet been developed.		
4.11	7/26/21	SHPO noted that community input would be needed on the options presented. These options have not yet been presented to the public, as CTA is still in an exploratory phase for the alternate concepts. Community members have previously expressed concerns with traffic, and CTA has endeavored to minimize traffic impacts to the community through the designs.		
4.12	7/26/21	Restrictions in parking along the east side of Greenwood Avenue could be considered to increase the lane width for the segment of Greenwood that would experience heavier two-way traffic, including buses, between Ellis Avenue and the station entrance. This would be considered for the current and alternate concepts but would affect different lengths of Greenwood depending on the location of the station entrance.		
5.00	**Discussion**			
5.01	7/26/21	Even with the additional information presented, although SHPO would likely find no adverse effect on Altgeld Gardens, SHPO would not be able to make a determination until more design details were finalized, specifically whether a left turn lane would be needed on Greenwood Avenue into the station or if the community opposed any of the options.		
5.02	7/26/21	Based on the traffic analyses performed, the volume of opposing through movements on Greenwood Avenue would not warrant a separate left turn lane on Greenwood Avenue into the station access.		

Item No.	Date	Item Description	Responsibility/ Status	Due/Closed Date
5.03	7/26/21	SHPO confirmed that other than the potential impacts of the parking garage height, there was no significant difference between the current concept and Option 2.		
5.04	7/26/21	TCA Health intended to add only 20 new parking spaces for the expansion, therefore only modest changes in traffic from the TCA Health expansion are anticipated.		
5.05	7/26/21	SHPO requested renderings of the taller 4-level parking garage to review the visual impacts, and SHPO believed that CPs would be interested in these renderings as well. SHPO noted that the parking garage height would be an indirect effect.	CTA	
5.06	7/26/21	SHPO noted that the proposed 131st Place intersection in Option 1 was undesirable because this intersection would be across from residences, and headlights from waiting cars would shine into homes. The current concept and Option 2 would avoid this situation.		
5.07	7/26/21	SHPO offered to provide a letter stating which elements of each option would meet the Secretary of the Interior (SOI) Standards for a no adverse effect.	SHPO	
5.08	7/26/21	CTA confirmed that traffic studies and analyses results for the alternate concepts would remain unchanged from the current concept.		

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days, otherwise minutes will be considered final.

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: SHPO Coordination

MEETING DATE: Monday, July 26, 2021

MEETING TIME: 2:00 PM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
1	Y	Marlise Fratinardo	CTA - Planning	Senior Project Manager, Planning	mfratinardo@transitchicago.com	14124
2	Y	Sonali Tandon	CTA - Planning	Senior Manager - Strategic Planning, Rail	STandon@transitchicago.com	14246
3	Y	Leah Mooney	CTA - Planning	Director of Strategic Planning and Policy	lmooney@transitchicago.com	14250
4	Y	Elizabeth Breiseth	FTA - Region 5	Environmental Protection Specialist	elizabeth.breiseth@dot.gov	
5	Y	Jason Ciavarella	FTA - Region 5	Director, Office of Planning and Program Development	jason.ciavarella@dot.gov	
6	Y	Anthony Rubano	IL SHPO	Deputy State Historic Preservation Officer	anthony.rubano@illinois.gov	
7	Y	Rita Baker	IL SHPO	Cultural Resources Manager	rita.baker@illinois.gov	
8	Y	Carol Wallace	IL SHPO	Cultural Resources Coordinator	Carol.Wallace@illinois.gov	
9	Y	Joanna Littrell	PMC - HNTB	Program Manager	jlittrell.hntb@transitchicago.com	14223
10	Y	Patrick Dunn	PMC - CDM-Smith	NEPA Lead	PDunn.cdm@transitchicago.com	14243
11	Y	Grace Dysico	PEC - TranSystems	NEPA Lead	gldysico@transystems.com	(847) 407-5247

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: SHPO Coordination

MEETING DATE: Monday, July 26, 2021

MEETING TIME: 2:00 PM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
12	Y	Meg Kindelin	PEC - JLK	Historical & Cultural Lead	mkindelin@jlkarch.com	
13	Y	Carolyn Andrews	PEC - JLK	Historical & Cultural Specialist	candrews@jlkarch.com	
14	Y	Helen Yeung	PEC - CERA	Document Control	hyeung@cerasolutions.com	

NOTE: All individuals listed have been invited to the meeting. Only those indicated were in attendance.

ILLINOIS
DEPARTMENT OF NATURAL RESOURCES

Illinois Department of Natural Resources

JB Pritzker, Governor
Colleen Callahan, Director

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov
Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

Cook County
Chicago
Red Line Extension
From Existing 95th Street Station to Approximately 130th St. and Halsted St.
Roseland Pumping Station - 351 W. 104th St., Miracle Temple Faith Church (Formerly Venetian Hall) - 133-139 E. Kensington Ave., 444 W. 100th Pl., Fire Department Engine Company #93 - 324 W. 104th St., Roseland Community Hospital Nurses Home - 11321 S. Wentworth Ave., Mary Magdalene Missionary Baptist Church (Formerly First Christian Reform Church of Roseland) - 10920 S. Princeton Ave.
SHPO Log #001010713

August 10, 2021

Jay Ciavarella
U.S. Department of Transportation
Federal Transit Administration
Region V, Planning & Program Development
200 W. Adams St., Suite 320
Chicago, IL 60606-5253

Dear Mr. Ciavarella:

Thank you for the Layout and Access Concepts presentation and meeting on July 26, 2021 and for the revised renderings received on July 29, 2021. According to the presentation, the traffic analyses indicate that Greenwood Avenue, which is a contributing element within the boundaries of the Altgeld Gardens-Phillip Murray Homes Historic District (AGPMH), will not require widening or the addition of a left-turn lane as a result of the new station. This office finds that providing vehicular access to the new station from East 132nd Street, which is outside the AGPMH, meets The Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (Standards) across all options.

The Base Option meets the Standards and will not adversely affect AGPMH. We find that the 3-story parking garage and schematic station design do not pose an adverse visual effect. Although AGPMH was designed for the automobile, and on-street parking defined and continues to define the historic character of the district, we accept that the Base Option will eliminate on-street parking on Greenwood Avenue for the one block between Ellis and 130th Place, which will be the new access road to the station.

Option 2 may meet the Standards and may not adversely affect AGPMH. We find that the 4-story parking garage and schematic station design do not pose an adverse visual effect. This option places the entrance to the station at the historic curb into the original parking lot in Block 11 and creates 132nd Place. While we understand that placing the station entrance at 132nd Place means eliminating two blocks of historically

appropriate on-street parking and bringing traffic deeper into AGPMH, we will accept Option 2 as meeting the Standards and not adversely affecting AGPMH as long as the residents of AGPMH are also in favor. Option 1 does not meet the Standards because of the new curb cut and entrance into the new station at an inappropriate, non-historic location. As cars on the newly created 131st Place stop at Greenwood to turn right, their headlights will shine into the historic houses in Block 10, which is inappropriate.

Please contact CJ Wallace, Cultural Resources Coordinator, at 217/785-5027 or at Carol.Wallace@illinois.gov with any questions.

Sincerely,

Robert F. Appleman
Deputy State Historic
Preservation Officer

c: Marlise Fratinardo, Chicago Transit Authority
Elizabeth Breiseth, U.S. Department of Transportation

SHPO Log #001010713
August 10, 2021

Consulting Party Meeting #2 Comments and Responses, September 2, 2021

Summary of Consulting Party Comments and Responses

This document addresses comments received from consulting parties regarding the Red Line Extension (RLE) Project Draft Effects Report (dated June 2021). Based on the selection of the Preferred Alignment and other design refinements, the Chicago Transit Authority (CTA) undertook data collection and analysis to make recommendations regarding the Project's effects on historic properties under Section 106 of the National Historic Preservation Act (NHPA). The resulting Draft Effects Report served as a summary of and update to the Section 106 consultation, which began in 2012, for the RLE Draft Environmental Impact Statement (Draft EIS). The 2021 Draft Effects Report and revisions to the 2021 Eligibility Report were presented to the consulting parties, including the Illinois State Historic Preservation Office (SHPO), during a consulting party meeting on June 30, 2021. Comments and responses discussed during the consulting party meeting were recorded in meeting minutes. Written comments were received from the following organizations:

- Robert F. Appleman, Illinois SHPO
- Ward Miller, Preservation Chicago
- Lisa DiChiera, Landmarks Illinois
- Michael LaFargue, Red Line Extension Coalition (RLEC)

Written comments and corresponding responses provided by CTA are recorded below. Copies of the comments received in writing are included as **Attachment A** at the end of this summary.

Illinois SHPO

Comment: *The Roseland Pumping Station, Scanlan Elementary School, George William Curtis Public School, and Carver Military Academy should be considered eligible for the National Register of Historic Places under Criterion A as well as Criterion C at the local level of significance. The draft effects report specifies only Criterion C.*

Response: This determination by the SHPO will be included as a revision to the Eligibility Report and updated in the final Effects Report.

Comment: *The draft effects report asserts that the project will have no adverse effect on all the identified historic resources. Altgeld Gardens is one of the identified historic resources. We cannot concur that there will be no adverse effect to Altgeld Gardens. The project is within the cultural landscape of Altgeld, since a portion of Altgeld where houses were recently located will be under the proposed station and since Altgeld's historic streets that are in the historic district will serve as*

access roads to the station. How those streets will be treated within the district will be part of this project. The project isn't designed yet, so we don't know what its effects will be to Altgeld, let alone whether that effect will be adverse or not. We do, however, concur that there will be no adverse effects to the other identified historic resources in the Area of Potential Effect.

Response: Further discussion between the Federal Transit Administration (FTA), SHPO, and CTA occurred on July 26, 2021 to address determination of effects at the Altgeld Gardens-Philip Murray Homes Historic District. The presentation, meeting minutes, additional renderings, and SHPO review letter will be included in the revised Effects Report.

Preservation Chicago

Comment: *It would be most appropriate for the CHA and CTA to figure a preservation plan for the Keck & Keck Retail Building and the nearby school buildings which have been mostly abandoned, by no fault of the community. This needs to happen, as there have been far too many broken promises and demolitions at Altgeld Gardens.*

We need to not only give the community better transportation, but also improve the quality of life for the residents of Altgeld. So, in the budget of this multi-million dollar transit project, lets [sic] plan on including the acquisition, renovation and reuse plans for these three structures at Altgeld, which remain in an embarrassing state of disrepair and neglect.

We at Preservation Chicago fully support the Red Line Extension project and are honored to be part of the Section 106 Process. However, we all need to help with efforts in these sometimes long-neglected communities where this massive transportation project is to be a part of. We need to look holistically at Altgeld Gardens, make good on past promises, and also help communities like the commercial intersections in Roseland and at 115th and Michigan, near these new train stations.

Response: While this recommendation is outside the scope of the RLE Project, CTA is supportive of any initiatives by CHA or CPS to preserve and/or redevelop these properties to benefit the AGPMH community. As stated in Consulting Party Meeting #2, a listening session was held with Chicago Public Schools (CPS) to explore possibilities of what could be incorporated into potential future Transit-supportive development (TSD) recommendations, including discussions about School Building C. CTA is preparing the RLE TSD plan, which is intended to help identify opportunities for future development along the RLE corridor and particularly in areas near the RLE stations. CTA is not developing properties as a part of the RLE transit investment; however, input from community stakeholders will continue to help shape the RLE TSD plan.

Landmarks Illinois

Comment: *As I stated during the meeting, my biggest disappointment is CPS' intention to demolish School Building C at Altgeld Gardens, which like the Shop "Up Top" Building, we believe will have more market opportunity than ever before to be reinvested in, rehabbed and reused with the planned Red line station at Altgeld Gardens and the planned listing of Altgeld Gardens in the National Register of Historic Places, which will enable use of federal and state historic tax credits for rehabilitation. The transit supported development plan for the new station area that CTA will undertake is exactly the type of assistance these historic buildings need and I commend the agency for integrating this planning process into the timeline. I request that CTA reach out to CPS regarding this important development plan process CTA will undertake with community input that will help find uses for existing parcels and buildings in the proposed station area. CTA should encourage CPS to defer demolition of School Building C so that the building may be part of this important station area planning evaluation.*

Information on School Building C and other vacant historic buildings at Altgeld that will benefit from CTA's station area planning process can be found here:

http://www.landmarks.org/wp-content/uploads/2021/04/Altgeld-Gardens.pdf

Response: While this recommendation is outside the scope of the RLE Project, CTA is supportive of any initiatives by CHA or CPS to preserve and/or redevelop these properties to benefit the AGPMH community. As stated in Consulting Party Meeting #2, a listening session was held with CPS to explore possibilities of what could be incorporated into potential future TSD recommendations, including discussions about School Building C. CTA is preparing the RLE TSD plan, which is intended to help identify opportunities for future development along the RLE corridor and particularly in areas near the RLE stations. CTA is not developing properties as a part of the RLE transit investment; however, input from community stakeholders will continue to help shape the RLE TSD plan.

Red Line Extension Coalition

Comment: *Per comments made by Landmarks Illinois, Preservation Chicago, Ms. Cheryl Johnson (Ms. Hazel Johnson's Daughter) and others during the meeting the Altgeld Gardens residential community and commercial buildings are considered one of the 7 Most Endangered Places in Chicago and there is historic significance of Altgeld being designed with a self-supporting community aspect. The Red Line Extension Coalition (RLEC) supports the interest in saving the Keck Retail Building and the nearby school building "C" which have been abandoned.*

I will share this letter with the Chicago Association of Realtors and share my personal support that the owners of these buildings, CHA and CPS, save them. If CHA and CPS cannot renovate these

properties, my suggestion is that they list, lease, or donate the buildings to a community-oriented developer to be repurposed. Repurposing ideas include an art (music/dance/art) facility, a job training center or an educational (pre-law, law enforcement, vocation training) facility or a museum (or area history, environmental…) etc.

Response: While this recommendation is outside the scope of the RLE Project, CTA is supportive of any initiatives by CHA or CPS to preserve and/or redevelop these properties to benefit the AGPMH community. As stated in Consulting Party Meeting #2, a listening session was held with CPS to explore possibilities of what could be incorporated into potential future TSD recommendations, including discussions about School Building C. CTA is preparing the RLE TSD plan, which is intended to help identify opportunities for future development along the RLE corridor and particularly in areas near the RLE stations. CTA is not developing properties as a part of the RLE transit investment; however, input from community stakeholders will continue to help shape the RLE TSD plan.

Note: Michael LaFargue, representative for the RLEC, is also a member of "The 77" Chicago Association of Realtors, which is not a consulting party for this project. The letter he provided from "The 77" replicates that of the RLEC and has been included at the end of this document for record purposes.

Attachment A: Comments Received

ILLINOIS
DEPARTMENT OF NATURAL RESOURCES

Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor
Colleen Callahan, Director

Cook County
Chicago
Red Line Extension
From Existing 95th Street Station to Approximately 130th St. and Halsted St.
Roseland Pumping Station - 351 W. 104th St., Miracle Temple Faith Church (Formerly Venetian Hall) - 133-139 E. Kensington Ave., 444 W. 100th Pl., Fire Department Engine Company #93 - 324 W. 104th St., Roseland Community Hospital Nurses Home - 11321 S. Wentworth Ave., Mary Magdalene Missionary Baptist Church (Formerly First Christian Reform Church of Roseland) - 10920 S. Princeton Ave.
SHPO Log #001010713

July 9, 2021

Jay Ciavarella
U.S. Department of Transportation
Federal Transit Administration
Region V, Planning & Program Development
200 W. Adams St., Suite 320
Chicago, IL 60606-5253

Dear Mr. Ciavarella:

We have reviewed the Revised Eligibility Report and Draft Effects Report for the above referenced project. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties."

The Roseland Pumping Station, Scanlan Elementary School, George William Curtis Public School, and Carver Military Academy should be considered eligible for the National Register of Historic Places under Criterion A as well as Criterion C at the local level of significance. The draft effects report specifies only Criterion C.

The draft effects report asserts that the project will have no adverse effect on all the identified historic resources. Altgeld Gardens is one of the identified historic resources. We cannot concur that there will be no adverse effect to Altgeld Gardens. The project is within the cultural landscape of Altgeld, since a portion of Altgeld where houses were recently located will be under the proposed station and since Altgeld's historic streets that are in the historic district will serve as access roads to the station. How those streets will be treated within the district will be a part of this project. The project isn't designed yet, so we don't know what its effect will be to Altgeld, let alone whether that effect will be adverse or not. We do, however, concur that there will be no adverse effects to the other identified historic resources in the Area of Potential Effect.

Please contact CJ Wallace, Cultural Resources Coordinator, at 217/785-5027 or at Carol.Wallace@illinois.gov with any questions.

Sincerely,

Robert F. Appleman
Deputy State Historic
Preservation Officer

c: Marlise Fratinardo, Chicago Transit Authority
Elizabeth Breiseth, U.S. Department of Transportation

Comment from:
Ward Miller
Executive Director, Preservation Chicago

Carolyn Andrews

From: wmiller@preservationchicago.org
Sent: Thursday, July 8, 2021 9:56 PM
To: 'Lisa DiChiera'; 'Fratinardo, Marlise'; 'Daniel Klaiber'; Matt.Crawford@cityofchicago.org; jjacks749@gmail.com; mseidel@preservationchicago.org; ridgehistory@hotmail.com; rosemoorchicago@yahoo.com; IrizarryJ@FOTP.org; 'David Doig'; sarah.white@chicagoparkdistrict.com; lpappenfort@peoriatribe.com; Michael.LaRonge@FCPotawatomi-nsn.gov; dhunter@miamination.com; info@greaterroselandchamber.org; teri_gage@nps.gov; michael.lafargue@cbexchange.com; vclarke@tcahealth.org; pcopres@gmail.com; cheryl@pcrchi.org; andraya.yousfi@bythehand.org; 'McKenzie, Ann'; serouse@cps.edu; vsdurrah@cps.edu; dclarke@nhschicago.org; 'Hall, Kevin S.'; hgonzalez@nhschicago.org; 'Dekesha Calhoun'; 'Samantha OMitchell'
Cc: 'Mooney, Leah Dawson'; Anthony.Greep@dot.gov; 'Elmajdoub, Ammar'; harshitha.beere@gmail.com; hyeung@cerasolutions.com; jason.ciavarella@dot.gov; 'Breiseth, Elizabeth (FTA)'; 'Meg Kindelin'; 'Carolyn Andrews'; Grace Dysico; 'Littrell, Joanna (HNTB)'; 'Tandon, Sonali'; 'Dunn, Patrick (CDM)'; 'Rubano, Anthony'; 'Baker, Rita E'
Subject: RE: CTA Red Line Extension Section 106 Meeting #2: Follow-Up

Dear Marlise and All,

We at Preservation Chicago also concur with Landmarks Illinois and after taking part in numerous Section 106 meetings on Altgeld Gardens extending back to 2016 and 2017, when the complex of residential, community and commercial buildings was one of our "Preservation Chicago--Chicago 7 Most Endangered Places."

There were several good outcomes promised, including a preservation plan to preserve and renovate all of the housing units and retracting the plans to extend a large wide boulevard drive from 130th Street/Hazel Johnson Environmental Justice Way, to the river. This would have also destroyed a great number of the community buildings, and created a dangerous speedway to the Little Calumet River, which seemed ill-conceived from the start. Some of these community buildings which would have been destroyed were affiliated with the work of then President Barack Obama, and this was very important to recognize, and perhaps even more than ever now. Anyway, the promises and commitment to preservation and restoration were disappointingly never fulfilled—not even one bit!

Due to legal challenges residential Blocks 11, 12 and 13, comprising about 25+ structures, in which the CHA and the City agreed to be preserved and renovated for housing, suffered numerous delays and further deterioration. This resulted in a total demolition of 456 units and no promised renovations of community buildings, resulting in where we are today, with several buildings facing demolition. The loss of 456 housing units was at the time, unacceptable and even shameful in our eyes at Preservation Chicago, as there's such a great need to these types of units by so many in our city.

The site of these 456 units is now the site of the Red Line Extension Project and terminal, and the great scar from the removal of these hundreds and hundreds of housing units, in this area resulted in it being removed from the National Register document.

So, with all of this said and noted, and these promises and discussions ongoing for more than five years, it would be most appropriate for the CHA and CTA to figure a preservation plan for the Keck & Keck Retail Building and the nearby school buildings which have been mostly abandoned, by no fault of the community. This needs to happen, as there have been far too many broken promises and demolitions at Altgeld Gardens.

We need to not only give the community better transportation, but also improve the quality of life for the residents of Altgeld. So, in the budget of this multi-million dollar transit project, lets plan on including the acquisition, renovation and reuse plans for these three structures at Altgeld, which remain in an embarrassing state of disrepair and neglect.

We at Preservation Chicago fully support the Red Line Extension project and are honored to be part of the Section 106 Process. However, we all need to help with efforts in these sometimes long-neglected communities where this massive transportation project is to be apart of. We need to look holistically at Altgeld Gardens, make good on past promises, and also help communities like the commercial intersections in Roseland and at 115th and Michigan, near these new train stations.

We are partners with all of you and hope that historic preservation, noted as an important component in all of these recent discussions as a priority in tandem with this wonderful project, will finally be realized.

Thank you for the opportunity to share these histories and to help achieve these goals. We stand united with Landmarks Illinois, our City and our State Historic Preservation Agency to insure that we look holistically at the larger picture and achieve plans that are acceptable to all.

Thank you for your consideration of these ideas and suggestions to help communities along this new transit line—which will also be a long-overdue lifeline to jobs and services, while also greatly reducing travel times to the Far South Side Communities.

Sincerely,
Ward Miller

--
Ward Miller, Executive Director

Preservation Chicago
The Williams Building
205 W. Monroe, Suite 400
Chicago, Illinois 60606-5006
c: 773-398-6432 o: 312-443-1000
wmiller@preservationchicago.org
www.preservationchicago.org [preservationchicago.org]

"Love Your City Fiercely!"

From: Lisa DiChiera <ldichiera@landmarks.org>
Sent: Thursday, July 8, 2021 7:47 PM
To: Fratinardo, Marlise <mfratinardo@transitchicago.com>; 'Daniel Klaiber (Daniel.Klaiber@cityofchicago.org)' <Daniel.Klaiber@cityofchicago.org>; 'Crawford, Matt (Matt.Crawford@cityofchicago.org) (Matt.Crawford@cityofchicago.org)' <Matt.Crawford@cityofchicago.org>; 'jjacks749@gmail.com'

Comment from:
Lisa DiChiera
Director of Advocacy, Landmarks Illinois

Carolyn Andrews

From: Lisa DiChiera <ldichiera@landmarks.org>
Sent: Thursday, July 8, 2021 7:47 PM
To: Fratinardo, Marlise; 'Daniel Klaiber (Daniel.Klaiber@cityofchicago.org)'; 'Crawford, Matt (Matt.Crawford@cityofchicago.org) (Matt.Crawford@cityofchicago.org)'; 'jjacks749 @gmail.com'; 'mseidel@preservationchicago.org'; 'wmiller@preservationchicago.org'; 'ridgehistory@hotmail.com'; 'rosemoorchicago@yahoo.com'; 'IrizarryJ@FOTP.org'; 'David Doig (ddoig@cnigroup.org)'; 'sarah.white@chicagoparkdistrict.com'; 'lpappenfort@peoriatribe.com'; 'Michael.LaRonge@FCPotawatomi-nsn.gov'; 'dhunter@miamination.com'; 'info@greaterroselandchamber.org'; 'teri_gage@nps.gov'; 'michael.lafargue@cbexchange.com'; 'vclarke@tcahealth.org'; 'pcopres@gmail.com'; 'cheryl@pcrchi.org'; 'andraya.yousfi@bythehand.org'; 'McKenzie, Ann (amckenzie@thecha.org)'; 'serouse@cps.edu'; 'vsdurrah@cps.edu'; 'dclarke@nhschicago.org'; 'Hall, Kevin S. (khall@thecha.org)'; 'hgonzalez@nhschicago.org'; 'Dekesha Calhoun'; 'Samantha OMitchell'
Cc: Mooney, Leah Dawson; 'Anthony.Greep@dot.gov'; Elmajdoub, Ammar; 'harshitha.beere@gmail.com'; 'hyeung@cerasolutions.com'; 'jason.ciavarella@dot.gov'; 'Breiseth, Elizabeth (FTA) (elizabeth.breiseth@dot.gov)'; 'Meg Kindelin (mkindelin@jlkarch.com)'; 'Carolyn Andrews (candrews@jlkarch.com)'; Grace Dysico; Littrell, Joanna (HNTB); Tandon, Sonali; Dunn, Patrick (CDM); 'Rubano, Anthony (Anthony.Rubano@Illinois.gov)'; 'Baker, Rita E (Rita.E.Baker@Illinois.gov)'
Subject: Re: CTA Red Line Extension Section 106 Meeting #2: Follow-Up

Marlise,

Thank you for the opportunity to comment.

As I stated during the meeting, my biggest disappointment is CPS' intention to demolish School Building C at Altgeld Gardens, which like the Shop "Up Top" Building, we believe will have more market opportunity than ever before to be reinvested in, rehabbed and reused with the planned Red line station at Altgeld Gardens and the planned listing of Altgeld Gardens in the National Register of Historic Places, which will enable use of federal and state historic tax credits for rehabilitation. The transit supported development plan for the new station area that CTA will undertake is exactly the type of assistance these historic buildings need and I commend the agency for integrating this planning process into the timeline. I request that CTA reach out to CPS regarding this important development plan process CTA will undertake with community input that will help find uses for existing parcels and buildings in the proposed station area. CTA should encourage CPS to defer demolition of School Building C so that the building may be part of this important station area planning evaluation.

Information on School Building C and other vacant historic buildings at Altgeld that will benefit from CTA's station area planning process can be found here:
http://www.landmarks.org/wp-content/uploads/2021/04/Altgeld-Gardens.pdf [landmarks.org]

We look forward to further design development of the proposed Red Line station and to CTA's kickoff with the Altgeld community of the transit supported development planning.

Thank you again,

Lisa DiChiera
Director of Advocacy
Landmarks Illinois

SHOP BUILDING ("Up-Top") & SCHOOL BUILDINGS C & E Chicago [landmarks.org]

2021 MOST ENDANGERED HISTORIC PLACES IN ILLINOIS ALTGELD GARDENS: SHOP BUILDING ("Up-Top") & SCHOOL BUILDINGS C & E 3 . provide a home for a high-quality food store . A 2020 survey by grassroots environmental justice

www.landmarks.org [landmarks.org]

From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Thursday, July 8, 2021 7:23 AM
To: 'Daniel Klaiber (Daniel.Klaiber@cityofchicago.org)' <Daniel.Klaiber@cityofchicago.org>; 'Crawford, Matt (Matt.Crawford@cityofchicago.org) (Matt.Crawford@cityofchicago.org)' <Matt.Crawford@cityofchicago.org>; 'jjacks749@gmail.com' <jjacks749@gmail.com>; 'mseidel@preservationchicago.org' <mseidel@preservationchicago.org>; 'wmiller@preservationchicago.org' <wmiller@preservationchicago.org>; Lisa DiChiera <ldichiera@landmarks.org>; 'ridgehistory@hotmail.com' <ridgehistory@hotmail.com>; 'rosemoorchicago@yahoo.com' <rosemoorchicago@yahoo.com>; 'IrizarryJ@FOTP.org' <IrizarryJ@FOTP.org>; 'David Doig (ddoig@cnigroup.org)' <ddoig@cnigroup.org>; 'sarah.white@chicagoparkdistrict.com' <sarah.white@chicagoparkdistrict.com>; 'lpappenfort@peoriatribe.com' <lpappenfort@peoriatribe.com>; 'Michael.LaRonge@FCPotawatomi-nsn.gov' <Michael.LaRonge@FCPotawatomi-nsn.gov>; 'dhunter@miamination.com' <dhunter@miamination.com>; 'info@greaterroselandchamber.org' <info@greaterroselandchamber.org>; 'teri_gage@nps.gov' <teri_gage@nps.gov>; 'michael.lafargue@cbexchange.com' <michael.lafargue@cbexchange.com>; 'vclarke@tcahealth.org' <vclarke@tcahealth.org>; 'pcopres@gmail.com' <pcopres@gmail.com>; 'cheryl@pcrchi.org' <cheryl@pcrchi.org>; 'andraya.yousfi@bythehand.org' <andraya.yousfi@bythehand.org>; 'McKenzie, Ann (amckenzie@thecha.org)' <amckenzie@thecha.org>; 'serouse@cps.edu' <serouse@cps.edu>; 'vsdurrah@cps.edu' <vsdurrah@cps.edu>; 'dclarke@nhschicago.org' <dclarke@nhschicago.org>; 'Hall, Kevin S. (khall@thecha.org)' <khall@thecha.org>; 'hgonzalez@nhschicago.org' <hgonzalez@nhschicago.org>; 'Dekesha Calhoun' <dcalhoun@tcahealth.org>; 'Samantha OMitchell' <somitchell@tcahealth.org>
Cc: Mooney, Leah Dawson <LMooney@transitchicago.com>; 'Anthony.Greep@dot.gov' <Anthony.Greep@dot.gov>; Elmajdoub, Ammar <AElmajdoub@transitchicago.com>; 'harshitha.beere@gmail.com' <harshitha.beere@gmail.com>; 'hyeung@cerasolutions.com' <hyeung@cerasolutions.com>; 'jason.ciavarella@dot.gov' <jason.ciavarella@dot.gov>; 'Breiseth, Elizabeth (FTA) (elizabeth.breiseth@dot.gov)' <elizabeth.breiseth@dot.gov>; 'Meg Kindelin (mkindelin@jlkarch.com)' <mkindelin@jlkarch.com>; 'Carolyn Andrews (candrews@jlkarch.com)' <candrews@jlkarch.com>; 'gldysico@transystems.com' <gldysico@transystems.com>; Littrell, Joanna (HNTB) <jlittrell.hntb@transitchicago.com>; Tandon, Sonali <STandon@transitchicago.com>; Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>; 'Rubano, Anthony (Anthony.Rubano@Illinois.gov)' <Anthony.Rubano@Illinois.gov>; 'Baker, Rita E (Rita.E.Baker@Illinois.gov)' <Rita.E.Baker@Illinois.gov>
Subject: RE: CTA Red Line Extension Section 106 Meeting #2: Follow-Up

Dear Section 106 Consulting Parties,

Red Line Extension Coalition

Continuing the work of Developing Communities Project, Inc.

SUPPORTING ORGANIZATIONS

RLEC 95th Street POD
9400 S. Perry Ave.
Chicago, IL. 60620
773.251.0760
Mlafarguerlec@gmail.com

African American Leadership and Policy Institute
Chicago, IL. 60619

Endeleo Institute an Adjunct of Trinity Church
1947 95th St,
Chicago, IL 60643

- **Education Village Keepers**
- **Ninth Ward Greater**
- **Roseland Community Coalition**

10552 S. Vernon
Chicago IL 60628

Communities Organized to Win
6901 S. Wabash
Chicago, IL. Zip 60637

Golden Gate Homeowners
13134 S Vernon Ave,
Chicago, IL 60827

Greater Roseland Chamber of Commerce
1000 East 111th Street
Chicago, IL. 60628

Lake Calumet Vision Committee
13300 S Baltimore Ave,
Chicago, IL 60633

New Progressive Baptist Church
9425 S Perry Ave,
Chicago, IL 60620

Reunite Chatham
P.O. Box 1495
Chicago, IL. Zip 60619

Roseland Heights Community Association
Post Office Box 436889
Chicago, IL 60643

Rosemoor Community Association
10205 South King Drive
Chicago, Illinois 60628

St. James AME Church
9256 S. Lafayette Ave.
Chicago, IL. Zip 60620

United Neighbors of Colonial Village

July 8, 2021 (Update)

To: Marlise Fratinardo, Ladies and Gentlemen of CTA's "Section 106" Committee

From: Michael LaFargue Member CTA "Section 106" Landmarks Committee

Thank you for the opportunity to participate on the CTA 106 Landmarks Committee.

Per comments made by Landmarks Illinois, Preservation Chicago, Ms. Cheryl Johnson (Ms. Hazel Johnson's Daughter) and others during the meeting the Altgeld Gardens residential community and commercial buildings are considered one of the 7 Most Endangered Places in Chicago and there is historic significance of Altgeld being designed with a self-supporting community aspect. The Red Line Extension Coalition (RLEC) supports the interest in saving the Keck Retail Building and the nearby school building "C" which have been abandoned.

I will share this letter with the Chicago Association of Realtors and share my personal support that the owners of these buildings, CHA and CPS, save them. If CHA and CPS cannot renovate these properties, my suggestion is that that they list, lease, or donate the buildings to a community-oriented developer to be repurposed. Repurposing ideas include an art (music/dance/art) facility, a job training center or an educational (pre-law, law enforcement, vocation training) facility or a museum (of area history, environmental…) etc.

Altgeld Gardens is a neglected community that requires better transportation and an improved the quality-of-life plan for the residents.

Thank you is advance for consideration of committee member ideas. I ask for CTA's support, backing and suggestions to assist communities along the RLEP are long-overdue a safety line for jobs and services on the Far South Side of Chicago.

I may be contacted at 773.251.0760 or michael.lafargue@cbexchange.com.

Sincerely,

Michael E. LaFargue, Associate Managing Broker, RCC, RPA, MBA-MPA
Immediate Past President of the Red Line Extension Coalition (RLEC)
Past Chairman RLEC 95th Street Panel of Development
"The 77" Diversity Committee Member

Dr. William T. Briggs Jr. Chairman
Michael LaFargue, Past Pres.
Deborah Truss
Pastor Reuben Coleman
Alonzo Anderson Rev.
Alice Harper-Jones
Marcia Shannon Jones
Andrea Reed

''The 77''
Chicago Association of Realtors
Diversity Committee
Member

July 8, 2021

To: Marlise Fratinardo Ladies and Gentlemen of the CTA "Section 106" Committee

From: Michael LaFargue

Thank you for the opportunity to participate on the CTA 106 Landmarks Committee

I am the appointed community representative of ROSELAND and RIVERDALE for the Chicago Association of Realtors' (CAR) Diversity Committee, "The 77."

"The 77" tackles real estate and community issues as Fair Housing, encouraging economic development, engaging with chambers of commerce boards, and liaising with local public officials... As a designated representative I filter information into CAR, as it relates to fair housing and economic development, as well as engage with local chambers of commerce, community organizations and quasi-governmental bodies (i.e., TIF Boards)

Per comments made by The Landmarks Illinois, Preservation Chicago, Ms. Cheryl Johnson (Ms. Hazel Johnson's Daughter) and others during the meeting regarding the Altgeld Garden residential, community and commercial buildings being one of the 7 Most Endangered Places in Chicago, the historic significance of Altgeld being a community self-supporting community and community members interest in saving the Keck Retail Building and the nearby school building "C" which has been abandoned.

I will share this letter with the Chicago Association and share my personal support that the owners of these building CHA and CPS save them. If CHA and CPS cannot renovate these properties, my suggestion is that that they list, lease, or donate the buildings to a community-oriented developer to be repurposed into an art (music/dance/art facility) or a job training center or an educational (pre-law, law enforcement, vocation training) or museum (area history…) oriented facility.

Altgeld is a neglected community than requires better transportation and an improved the quality-of-life plan for the residents of Altgeld.

Thank you is advance for consideration of the committee member ideas. I ask for CTA's support, backing and suggestions to help all communities along the RLEP as a long-overdue safety line for jobs and services for Far South Side of Chicago.

Sincerely,

Michael E. LaFargue, Associate Managing Broker. RCC, RPA, MBA-MPA
"The 77" Diversity Committee Member
Commercial and Residential Luxury Institute Real Estate and Consulting

cc: Dr. William Briggs and Debra Truss Red Line Extension Coalition, State, Senator Elgie Sims Jr., Representative Marcus Evans, Representative Nick Smith, Michelle Mills Clement is the CEO, Kristopher J. Anderson, Director of Government & External Affairs, CSU Pres Zaldwaynaka Scott via CSU External Relation, 9th Ward Alderman, Anthony Beale.

Coldwell Banker Residential and Commercial
1314 E. 47th Street, Chicago, IL 60653

Carolyn Andrews

From: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Sent: Friday, September 10, 2021 4:59 PM
To: Grace Dysico
Cc: Robert Gorski (robert.gorski@tylin.com); Littrell, Joanna (HNTB)
Subject: FW: CTA Red Line Extension Section 106 Meeting #2: Minutes & Responses to Comments

FYI.

From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Friday, September 10, 2021 4:25 PM
To: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Cc: Tandon, Sonali <STandon@transitchicago.com>; Joanna Littrell (jlittrell@HNTB.com) <jlittrell@HNTB.com>
Subject: FW: CTA Red Line Extension Section 106 Meeting #2: Minutes & Responses to Comments

Fyi…

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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From: McKenzie, Ann [mailto:amckenzie@thecha.org]
Sent: Friday, September 10, 2021 4:23 PM
To: Fratinardo, Marlise
Cc: Cruz, Daniel; Hall, Kevin S.
Subject: RE: CTA Red Line Extension Section 106 Meeting #2: Minutes & Responses to Comments

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Marlise-

Thanks for your hard work on the Red Line extension. CHA just wants to clarify a few items:

> CHA is excited to partner with the CTA to ensure that the proposed future Red Line extension benefits residents of Altgeld Gardens. CHA recognizes the need for additional resources for families living in this community. CHA has cooperated with the CTA's assessment process to determine whether the final station of the Red Line extension can be on CHA-owned land in the hopes that this will provide CHA residents with greater access to transportation and economic development opportunities.
>
> CHA would like to clarify that there are buildings on the site that CHA does not own, such as the privately-owned commercial building (referred to as the Keck and Keck building) and the Chicago Public Schools' building known

as Building C. These buildings' conditions have significantly deteriorated in recent years. Like others, CHA would like to see those owners work to bring uses to those buildings that benefit community residents.

In July 2020, CHA engaged consultants Studio ARQ and MacRostie Historic Advisors to assist with the nomination of Altgeld Gardens and Murray Homes to the National Register of Historic Places, and we anticipate this process lasting through the first quarter of 2022.

Have a great weekend.

Ann C. McKenzie | Chief Development Officer
Phone 312.913.7656 | Cell 312.523.8818
Chicago Housing Authority | 60 E. Van Buren | Chicago, IL 60605
amckenzie@thecha.org | www.thecha.org [gcc02.safelinks.protection.outlook.com]

Like us on Facebook [gcc02.safelinks.protection.outlook.com] | Follow us on Twitter [gcc02.safelinks.protection.outlook.com]

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From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Thursday, September 2, 2021 5:57 PM
To: 'Daniel Klaiber (Daniel.Klaiber@cityofchicago.org)' <Daniel.Klaiber@cityofchicago.org>; 'Crawford, Matt (Matt.Crawford@cityofchicago.org) (Matt.Crawford@cityofchicago.org)' <Matt.Crawford@cityofchicago.org>; 'jjacks749@gmail.com' <jjacks749@gmail.com>; 'mseidel@preservationchicago.org' <mseidel@preservationchicago.org>; 'wmiller@preservationchicago.org' <wmiller@preservationchicago.org>; 'Lisa DiChiera (ldichiera@landmarks.org)' <ldichiera@landmarks.org>; 'ridgehistory@hotmail.com' <ridgehistory@hotmail.com>; 'rosemoorchicago@yahoo.com' <rosemoorchicago@yahoo.com>; 'IrizarryJ@FOTP.org' <IrizarryJ@FOTP.org>; 'David Doig (ddoig@cnigroup.org)' <ddoig@cnigroup.org>; 'sarah.white@chicagoparkdistrict.com' <sarah.white@chicagoparkdistrict.com>; 'lpappenfort@peoriatribe.com' <lpappenfort@peoriatribe.com>; 'Michael.LaRonge@FCPotawatomi-nsn.gov' <Michael.LaRonge@FCPotawatomi-nsn.gov>; 'dhunter@miamination.com' <dhunter@miamination.com>; 'info@greaterroselandchamber.org' <info@greaterroselandchamber.org>; 'teri_gage@nps.gov' <teri_gage@nps.gov>; 'michael.lafargue@cbexchange.com' <michael.lafargue@cbexchange.com>; 'vclarke@tcahealth.org' <vclarke@tcahealth.org>; 'pcopres@gmail.com' <pcopres@gmail.com>; 'cheryl@pcrchi.org' <cheryl@pcrchi.org>; 'andraya.yousfi@bythehand.org' <andraya.yousfi@bythehand.org>; McKenzie, Ann <amckenzie@thecha.org>; 'serouse@cps.edu' <serouse@cps.edu>; 'vsdurrah@cps.edu' <vsdurrah@cps.edu>; 'dclarke@nhschicago.org' <dclarke@nhschicago.org>; Hall, Kevin S. <khall@thecha.org>; 'hgonzalez@nhschicago.org' <hgonzalez@nhschicago.org>; 'Dekesha Calhoun' <dcalhoun@tcahealth.org>; 'Samantha OMitchell' <somitchell@tcahealth.org>
Cc: Mooney, Leah Dawson <LMooney@transitchicago.com>; 'Anthony.Greep@dot.gov' <Anthony.Greep@dot.gov>; Elmajdoub, Ammar <AElmajdoub@transitchicago.com>; 'harshitha.beere@gmail.com' <harshitha.beere@gmail.com>; 'jason.ciavarella@dot.gov' <jason.ciavarella@dot.gov>; 'Breiseth, Elizabeth (FTA) (elizabeth.breiseth@dot.gov)' <elizabeth.breiseth@dot.gov>; 'Meg Kindelin (mkindelin@jlkarch.com)' <mkindelin@jlkarch.com>; 'Carolyn Andrews (candrews@jlkarch.com)' <candrews@jlkarch.com>; 'gldysico@transystems.com' <gldysico@transystems.com>; Littrell, Joanna (HNTB) <jlittrell.hntb@transitchicago.com>; Tandon, Sonali <STandon@transitchicago.com>; Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>; 'Rubano, Anthony (Anthony.Rubano@Illinois.gov)' <Anthony.Rubano@Illinois.gov>; 'Baker, Rita E (Rita.E.Baker@Illinois.gov)' <Rita.E.Baker@Illinois.gov>
Subject: CTA Red Line Extension Section 106 Meeting #2: Minutes & Responses to Comments

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Dear Section 106 Consulting Parties,

For your review, attached are the minutes from Consulting Parties meeting #2 plus the Responses to Comment document that compiles the comments received by CTA after the meeting.

Please provide your comments on these documents to me by **Friday, September 10, 2021.**

Thank you and enjoy the holiday weekend!

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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Carolyn Andrews

From: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Sent: Friday, September 10, 2021 4:59 PM
To: Grace Dysico
Cc: Robert Gorski (robert.gorski@tylin.com); Littrell, Joanna (HNTB)
Subject: FW: CTA Red Line Extension Section 106 Meeting #2: Minutes & Responses to Comments

FYI.

From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Friday, September 10, 2021 4:25 PM
To: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Cc: Tandon, Sonali <STandon@transitchicago.com>; Joanna Littrell (jlittrell@HNTB.com) <jlittrell@HNTB.com>
Subject: FW: CTA Red Line Extension Section 106 Meeting #2: Minutes & Responses to Comments

Fyi…

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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From: McKenzie, Ann [mailto:amckenzie@thecha.org]
Sent: Friday, September 10, 2021 4:23 PM
To: Fratinardo, Marlise
Cc: Cruz, Daniel; Hall, Kevin S.
Subject: RE: CTA Red Line Extension Section 106 Meeting #2: Minutes & Responses to Comments

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Marlise-

Thanks for your hard work on the Red Line extension. CHA just wants to clarify a few items:

> CHA is excited to partner with the CTA to ensure that the proposed future Red Line extension benefits residents of Altgeld Gardens. CHA recognizes the need for additional resources for families living in this community. CHA has cooperated with the CTA's assessment process to determine whether the final station of the Red Line extension can be on CHA-owned land in the hopes that this will provide CHA residents with greater access to transportation and economic development opportunities.
>
> CHA would like to clarify that there are buildings on the site that CHA does not own, such as the privately-owned commercial building (referred to as the Keck and Keck building) and the Chicago Public Schools' building known

as Building C. These buildings' conditions have significantly deteriorated in recent years. Like others, CHA would like to see those owners work to bring uses to those buildings that benefit community residents.

In July 2020, CHA engaged consultants Studio ARQ and MacRostie Historic Advisors to assist with the nomination of Altgeld Gardens and Murray Homes to the National Register of Historic Places, and we anticipate this process lasting through the first quarter of 2022.

Have a great weekend.

Ann C. McKenzie | Chief Development Officer
Phone 312.913.7656 | Cell 312.523.8818
Chicago Housing Authority | 60 E. Van Buren | Chicago, IL 60605
amckenzie@thecha.org | www.thecha.org [gcc02.safelinks.protection.outlook.com]

Like us on Facebook [gcc02.safelinks.protection.outlook.com] | Follow us on Twitter [gcc02.safelinks.protection.outlook.com]

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From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Thursday, September 2, 2021 5:57 PM
To: 'Daniel Klaiber (Daniel.Klaiber@cityofchicago.org)' <Daniel.Klaiber@cityofchicago.org>; 'Crawford, Matt (Matt.Crawford@cityofchicago.org) (Matt.Crawford@cityofchicago.org)' <Matt.Crawford@cityofchicago.org>; 'jjacks749@gmail.com' <jjacks749@gmail.com>; 'mseidel@preservationchicago.org' <mseidel@preservationchicago.org>; 'wmiller@preservationchicago.org' <wmiller@preservationchicago.org>; 'Lisa DiChiera (ldichiera@landmarks.org)' <ldichiera@landmarks.org>; 'ridgehistory@hotmail.com' <ridgehistory@hotmail.com>; 'rosemoorchicago@yahoo.com' <rosemoorchicago@yahoo.com>; 'IrizarryJ@FOTP.org' <IrizarryJ@FOTP.org>; 'David Doig (ddoig@cnigroup.org)' <ddoig@cnigroup.org>; 'sarah.white@chicagoparkdistrict.com' <sarah.white@chicagoparkdistrict.com>; 'lpappenfort@peoriatribe.com' <lpappenfort@peoriatribe.com>; 'Michael.LaRonge@FCPotawatomi-nsn.gov' <Michael.LaRonge@FCPotawatomi-nsn.gov>; 'dhunter@miamination.com' <dhunter@miamination.com>; 'info@greaterroselandchamber.org' <info@greaterroselandchamber.org>; 'teri_gage@nps.gov' <teri_gage@nps.gov>; 'michael.lafargue@cbexchange.com' <michael.lafargue@cbexchange.com>; 'vclarke@tcahealth.org' <vclarke@tcahealth.org>; 'pcopres@gmail.com' <pcopres@gmail.com>; 'cheryl@pcrchi.org' <cheryl@pcrchi.org>; 'andraya.yousfi@bythehand.org' <andraya.yousfi@bythehand.org>; McKenzie, Ann <amckenzie@thecha.org>; 'serouse@cps.edu' <serouse@cps.edu>; 'vsdurrah@cps.edu' <vsdurrah@cps.edu>; 'dclarke@nhschicago.org' <dclarke@nhschicago.org>; Hall, Kevin S. <khall@thecha.org>; 'hgonzalez@nhschicago.org' <hgonzalez@nhschicago.org>; 'Dekesha Calhoun' <dcalhoun@tcahealth.org>; 'Samantha OMitchell' <somitchell@tcahealth.org>
Cc: Mooney, Leah Dawson <LMooney@transitchicago.com>; 'Anthony.Greep@dot.gov' <Anthony.Greep@dot.gov>; Elmajdoub, Ammar <AElmajdoub@transitchicago.com>; 'harshitha.beere@gmail.com' <harshitha.beere@gmail.com>; 'jason.ciavarella@dot.gov' <jason.ciavarella@dot.gov>; 'Breiseth, Elizabeth (FTA) (elizabeth.breiseth@dot.gov)' <elizabeth.breiseth@dot.gov>; 'Meg Kindelin (mkindelin@jlkarch.com)' <mkindelin@jlkarch.com>; 'Carolyn Andrews (candrews@jlkarch.com)' <candrews@jlkarch.com>; 'gldysico@transystems.com' <gldysico@transystems.com>; Littrell, Joanna (HNTB) <jlittrell.hntb@transitchicago.com>; Tandon, Sonali <STandon@transitchicago.com>; Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>; 'Rubano, Anthony (Anthony.Rubano@Illinois.gov)' <Anthony.Rubano@Illinois.gov>; 'Baker, Rita E (Rita.E.Baker@Illinois.gov)' <Rita.E.Baker@Illinois.gov>
Subject: CTA Red Line Extension Section 106 Meeting #2: Minutes & Responses to Comments

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Dear Section 106 Consulting Parties,

For your review, attached are the minutes from Consulting Parties meeting #2 plus the Responses to Comment document that compiles the comments received by CTA after the meeting.

Please provide your comments on these documents to me by **Friday, September 10, 2021.**

Thank you and enjoy the holiday weekend!

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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Meeting Minutes – Consulting Party Meeting #2, June 30, 2021

Meeting Minutes

Project: Red Line Extension
Meeting Purpose: Consulting Party Meeting #2
Date: Wednesday, June 30, 2021
Location: Remote Meeting
Time: 9:00 AM

Chairperson: Remote Meeting

Attendees: (See Attached copy of Sign-in-Sheet)

Item No.	*Date*	*Item Description*	*Responsibility/ Status*	*Due/Closed Date*
1.00	**Introduction**			
1.01	6/30/21	Federal agencies are required to consider effects of federally funded projects on historic properties through the Section 106 process. Consulting Party (CP) Meetings provide an opportunity for all CPs to provide input through the Section 106 consultation process.		
1.02	6/30/21	The goal of this process is to identify historic properties potentially affected by the project and assess the effects of the project on these properties.		
1.03	6/30/21	This meeting will summarize the findings from the draft Effects Report and updated Eligibility Report that were provided for CP review in advance of this meeting.		
1.04	6/30/21	Definitions of key terms and ground rules were reviewed.		
2.00	**Part 1: Review of 2021 Eligibility Findings**			
2.01	6/30/21	In May 2021, the position of the 130th Street station was refined to avoid the use of a parcel owned by the Forest Preserves of Cook County (FPCC) to the east. This resulted in the station shifting approximately 350ft northwest, but the proposed station components and access points would be the same as was previously presented.		
2.02	6/30/21	As a result of the 130th Street station refinement, there was a corresponding shift of the project APE approximately 350ft northwest. The Eligibility Report has been updated to reflect this change, and the draft Effects Report includes the updated APE.		
2.03	6/30/21	The Draft Eligibility Report included 60 historic properties, and the Illinois State Historic Preservation Office (IL SHPO) concurred with the eligibility recommendations for properties 1-11 and 13.		
2.04	6/30/21	Properties 14-19 are within the Altgeld Gardens Philip Murray Homes Historic District, which has already been confirmed by IL SHPO through the National Register of Historic Places (NRHP) nomination. All properties within the Altgeld Gardens Philip Murray Homes Historic District are NRHP eligible under Criteria A, B and C. Due to the refinement of the 130th Street station location, two additional commercial buildings (Properties 19 and 20) have been added.		
2.05	6/30/21	Property 12 is George Williams Curtis Public School, which has been reevaluated for eligibility per CP request and is now being recommended as eligible under Criterion C for association with W. August Fiedler, an architect for the Chicago Board of Education. This recommendation is subject to review and concurrence with IL SHPO.		
2.06	6/30/21	Based on the 130th Street station refinement, there are currently 73 total historic properties within the project APE, an increase over the 60 historic properties previously identified prior to the station refinement.		

3.00	Part 2: Effects Evaluations			
3.01	6/30/21	The evaluation of effects is the third step of the Section 106 consultation process. If adverse effects are found, the next step will be resolution of adverse effects.		
3.02	6/30/21	Criteria for determining adverse effects, established by the National Historic Preservation Act, are based on whether an undertaking may directly or indirectly alter the characteristics of a historic property that would qualify the property for inclusion on the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association.		
3.03	6/30/21	An adverse effect finding occurs when one or more of the following criteria are met: physical destruction or damage; alteration not following the Secretary of Interior's Standards; removal of the property from its historic location; new elements that diminish the integrity of the property's significant features; change to the property's use, physical features, or setting that contribute to its significance; neglect of a property causing deterioration; or transfer, lease, or sale of property without conditions to ensure long-term preservation.		
3.04	6/30/21	Effects can be direct, such as visual or audible elements, or indirect, (such as future developments), and effects can be cumulative.		
3.05	6/30/21	If adverse effects are found, the Federal Transit Administration (FTA) will consult with IL SHPO and the CPs to develop and evaluate alternatives or modifications to the undertaking that would avoid, minimize or mitigate the adverse effects on the historic properties.		
3.06	6/30/21	In the Draft Environmental Impact Statement (EIS), historic properties were identified for the East and West UPRR alignment options. FTA and CTA in consultation with IL SHPO and other CPs determined there were no adverse effects found in the Draft EIS.		
3.07	6/30/21	With the selection of the Preferred Alignment and the recent refinement of the 130th Street station location, the current effects evaluation, including a reevaluation of findings of the Draft EIS findings and an evaluation of properties in the expanded APE, found no adverse effects for properties within the project APE. All preliminary findings are subject to IL SHPO concurrence, and CPs will have an opportunity to review and comment.		
3.08	6/30/21	The Draft EIS noise and vibration analysis found that the project would result in no noise or vibration impacts due to construction, no permanent vibration impacts, and no permanent noise impacts after mitigation. Mitigations would consist of the construction of an approximately 4ft high noise barrier on the elevated structure.		
3.09	6/30/21	No noise impacts were found near the 130th Street station, therefore no mitigation measures would be required. Noise impacts from future train operations was assessed at four representative sensitive receiver locations near the refined 130th Street station location.		
3.10	6/30/21	No vibration impacts were found near the refined 130th Street station location, as the sensitive residential and institutional receivers would not be within the FTA vibration impact screening distances.		
3.11	6/30/21	Construction activities will not exceed the FTA recommended construction noise limits. Construction equipment can be operated without risk of damage to buildings from vibrations.		
3.12	6/30/21	Based on the SHPO direction, project alignment refinement, and 2019 court rulings on direct versus indirect effects, the Draft EIS effect findings have been reviewed and updated.		
3.13	6/30/21	The project would result in visual changes along the Preferred Alignment and temporary changes to vibration, noise and traffic patterns during construction. Although there would be both direct and indirect effects on the historic properties, none of these effects would compromise the integrity of the historic properties, nor diminish the qualities that would qualify them for inclusion in the NRHP.		
3.14	6/30/21	Each historic property within the project APE and its corresponding effects was reviewed.		

3.15	6/30/21	In response to the 2021 Eligibility Report, SHPO provided a letter that noted that because of the relocation of the 130th Street station south of 130th Street, the 2017 concurrence that Altgeld Gardens would not be adversely affected by this undertaking has been rescinded. SHPO will continue to review the RLE project's effects on Altgeld Gardens.		
3.16	6/30/21	A reevaluation of effects on the Altgeld Gardens Historic District was performed.		
3.17	6/30/21	Altgeld Gardens is currently in the process of being listed in the NRHP under Criteria A, B and C.		
3.18	6/30/21	A history of the Altgeld Gardens and Philip Murray Homes was described. This development was planned on a curvilinear street system that provided public and private transportation throughout the community and with residential buildings surrounding a core of community facilities. Altgeld Gardens was intended to be a city within a city because of its isolated location and is historically significant for its planning.		
3.19	6/30/21	The boundary of the Altgeld Gardens Historic District has preliminarily been approved by SHPO. The proposed 130th Street station would be east of Greenwood Avenue, outside the preliminarily approved Altgeld Gardens Historic District boundary. This portion of Altgeld Gardens was excluded from the historic district boundary because of the lack of historic integrity since the buildings there were demolished. Because the proposed station would be adjacent to and visible from the Altgeld Gardens Historic District, there would be impacts to the district's integrity of setting. To minimize the effects on the historic district, a landscape buffer is planned between the station and the historic district. Despite the impacts to the historic district's integrity of setting, neither the integrity of the historic properties nor the architectural features that qualify them for listing in the NRHP would be affected.		
3.20	6/30/21	Altgeld Gardens was designed to accommodate traffic from cars, school buses and city buses. The RLE project would provide critical connections, access improvements, and public transit for Altgeld Gardens residents.		
3.21	6/30/21	There are no proposed changes to the geometry or location of streets within the historic district, and the project was designed to minimize the increase of traffic on roads within the historic district. Proposed traffic routing to the 130th Street station would only utilize Ellis Avenue from 130th Street to Greenwood Avenue, and Greenwood Avenue from Ellis Avenue to 130th Place, and this block of Greenwood Avenue only fronts commercial properties.		
3.22	6/30/21	A finding of no adverse effect is recommended for the Altgeld Gardens Historic District.		
3.23	6/30/21	Historic properties within Altgeld Gardens would all be eligible under the same criteria as the Altgeld Gardens Historic District. The 130th Street station parking garage would cause direct visual impacts to the residences and commercial buildings, which would impact the integrity of setting but not compromise the integrity of the buildings or architectural character that would qualify them for listing on the NRHP, therefore a finding of no adverse effect is recommended.		
3.24	6/30/21	Renderings from various historic properties near the corridor were presented to show the scale of the project. It was noted that the appearance of project elements in the renderings is intended to show scale of the project elements. Actual construction appearance may differ from what is shown in the renderings based on final designs.		
4.00	**Part 3: Discussion and Comments**			
4.01	6/30/21	Each CP was provided a chance to provide verbal comments regarding the updated eligibility and evaluation of effects for the historic properties.		

4.02	6/30/21	By the Hand Club, Altgeld-Murray had no comments and believed the RLE would have positive impacts to the communities, but requested clarification on Transit Oriented Development around the Red Line Extension. CTA noted that a Transit-Supportive Development (TSD) plan is being developed in conjunction with but separate from this project. TSD possibilities are being studied at each station area, community meetings have been held, and the process is ongoing to collect feedback from the community about future development desired around the station areas. By the Hand Club invited CTA to host a joint community meeting.		
4.03	6/30/21	The Chicago Housing Authority noted that the presentation was very thorough and had no comments at this time.		
4.04	6/30/21	Chicago Park District had no comment.		
4.05	6/30/21	Greater Roseland Chamber of Commerce noted that the presentation was thorough and requested clarification on the location of the parking garage at Michigan Avenue Station. There is a North and South option for the station, and in the North option, the parking garage would be on the vacant lot between Michigan Avenue and State Street north of the UPRR tracks. The Michigan Avenue Station layout is being coordinated with INVEST South/West on the same lot and in the area.		
4.06	6/30/21	The City of Chicago Historic Preservation Division Department of Planning (DPD) believed the presentation was very thorough and did not have questions.		
4.07	6/30/21	IL SHPO provided a comment via email on 6/17/21, concurring with all findings other than the no adverse effect finding on Altgeld Gardens. No finding for the Altgeld Gardens Historic District could be confirmed by SHPO for Altgeld Gardens because the 130th Street station has not yet been designed and the traffic impacts to the historic district roadways are not yet known. SHPO stated that this concern applies to the finding of effects for the historic district as a whole, not the individual properties within. SHPO was not concerned about noise or vibration impacts to the Altgeld Gardens Historic District. SHPO also suggested that the Roseland Pumping Station, Scanlon Elementary School, George William Curtis Public School and Carver Military Academy should be listed under Criterion A in addition to Criterion C, and Preservation Chicago agreed.		
4.08	6/30/21	Landmarks IL noted that development is important to the community. Three buildings within Altgeld Gardens are on Landmarks IL's 2021 Most Endangered List of historic places in Illinois, and Landmarks IL believed that these buildings could benefit from the CTA TSD efforts for redevelopment. School Building C, owned by Chicago Public Schools (CPS), is in the most immediate danger of demolition. CTA clarified that the TSD plan is meant to perform intensive research, collect community comments, and vet possibilities for TSD in the station areas. A listening session was held with CPS to explore possibilities of what could be incorporated into potential future TSD recommendations, including discussions about School Building C. Although CTA is developing the TSD plan and intends to facilitate the future development, CTA does not have the funds for the development efforts. Landmarks IL was concerned that the timing of the TSD efforts would not address the imminent demolition of School Building C, but Landmarks IL was supportive of the TSD efforts.		
4.09	6/30/21	Neighborhood Housing Services of Chicago did not have any comments.		

4.10	6/30/21	People for Community Recovery (PCR) requested clarification on the Altgeld Gardens Historic District boundary and NRHP nomination. Due to the loss of integrity of Blocks 11, 12 and 13 following demolition, SHPO agreed that the National Register historic district boundary would be along Greenwood Avenue and exclude the area east of Greenwood where the 130th Street station is being proposed. The Altgeld Gardens nomination for the NRHP is being prepared by MacRostie, on behalf of CHA, separate from the RLE project. However, because the boundary has direct impacts on the RLE project, some coordination between the nomination and the RLE project is required. SHPO restated that because traffic to the proposed 130th Street station is expected to use Ellis Avenue and Greenwood Avenue, which are within the historic district boundary, SHPO cannot make a determination of effects on the Altgeld Gardens Historic District until more detailed proposals are available for SHPO review.		
4.11	6/30/21	Preservation Chicago noted that Altgeld Gardens and the South Roseland Community are among the most endangered neighborhoods. Because of historical demolitions, Preservation Chicago was concerned about the preservation of the Altgeld Gardens buildings and encouraged CTA and other organizations to support the preservation of the historic buildings, particularly for the buildings facing demolition. Preservation Chicago also suggested that the portion of the Roseland community near the proposed Michigan Station be considered for nomination for the NRHP.		
4.12	6/30/21	The RLE Coalition believed the reports were succinct and detailed, and they believed that their concerns about the traffic along Greenwood Avenue to access the proposed 130th Street station and concerns about the preservation of School Building C and the retail building within Altgeld Gardens are being addressed. The RLE Coalition suggested that listing some of the properties slated for demolition as special use properties could attract a developer. PCR referenced a 1997 study where it was–envisioned that School Building C could be used as a vocational training center and that the former retail space could be used for a grocery store. PCR believed that a commercial developer could help these visions to be realized and will follow up with the RLE Coalition to coordinate.		
4.13	6/30/21	Rosemoor Community Association expressed interest in seeing additional renderings. The renderings provided in the Draft Effects Report were focused on the visual impacts from the historic properties, and additional renderings focused on the parking garages and station areas will be published in the environmental documents, including the Supplemental EA. A video created for the RLE project also shows the station and potential for development nearby. CTA will share the video link.	CTA	
4.14	6/30/21	TCA Health noted that the presentation was detailed and informative, and hearing the discussions was helpful. TCA Health indicated that they intend to provide comments by email.		
5.00	**Schedule and Next Steps**			
5.01	6/30/21	The process is currently in the review period for the materials that have been distributed to SHPO and the CPs.		
5.02	6/30/21	Written comments are being requested by 7/9/21, which is 30 days after the reports were provided to the CPs and SHPO for review. Comments should be addressed to Marlise Fratinardo (CTA).	SHPO/CPs	7/9/21
5.03	6/30/21	Once all comments are collected, a response to the comments will be prepared.		
Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days, otherwise minutes will be considered final.				

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Consulting Party Meeting #2

MEETING DATE: Wednesday, June 30, 2021

MEETING TIME: 9:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
1	Y	Marlise Fratinardo	CTA - Planning	Senior Project Manager, Planning	mfratinardo@transitchicago.com	14124
2	N	Sonali Tandon	CTA - Planning	Senior Manager - Strategic Planning, Rail	STandon@transitchicago.com	14246
3	N	Leah Mooney	CTA - Planning	Director of Strategic Planning and Policy	lmooney@transitchicago.com	14250
4	Y	Patrick Dunn	PMC - CDM-Smith	NEPA Lead	PDunn.cdm@transitchicago.com	14243
5	N	Joanna Littrell	PMC - HNTB	Program Manager	jlittrell.hntb@transitchicago.com	14223
6	Y	Grace Dysico	PEC - TranSystems	NEPA Lead	gldysico@transystems.com	(847) 407-5247
7	Y	Carolyn Andrews	PEC - JLK	Historical & Cultural Specialist	candrews@jlkarch.com	
8	Y	Meg Kindelin	PEC - JLK	Historical & Cultural Lead	mkindelin@jlkarch.com	
9	Y	Elizabeth Breiseth	FTA - Region 5	Environmental Protection Specialist	elizabeth.breiseth@dot.gov	
10	Y	Anthony Rubano	IL SHPO	Deputy State Historic Preservation Officer	anthony.rubano@illinois.gov	
11	Y	Rita Baker	IL SHPO	Cultural Resources Manager	rita.baker@illinois.gov	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Consulting Party Meeting #2

MEETING DATE: Wednesday, June 30, 2021

MEETING TIME: 9:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
12	Y	Ammar Elmajdoub	CTA - Planning	Project Manager	aelmajdoub@transitchicago.com	
13	N	Jason Ciavarella	FTA - Region 5	Director, Office of Planning and Program Development	jason.ciavarella@dot.gov	
14	N	Bob Appleman	IL SHPO	Deputy State Historic Preservation Officer	bob.appleman@illinois.gov	
15	Y	Daniel Klaiber	Historic Preservation Division, Department of Planning and Development		Daniel.Klaiber@cityofchicago.org	
16	N	Matt Crawford	Historic Preservation Division, Department of Planning and Development		Matt.Crawford@cityofchicago.org	
17	N	Joyce Jackson	Preservation Chicago		jjacks749@gmail.com	
18	N	Mary Lu Seidel	Preservation Chicago	Director of Community Engagement	mseidel@preservationchicago.org	
19	Y	Ward Miller	Preservation Chicago		wmiller@preservationchicago.org	
20	Y	Lisa DiChiera	Landmarks Illinois	Director of Advocacy	ldichiera@landmarks.org	
21	N	Elaine Spencer	Ridge Historical Society	President	ridgehistory@hotmail.com	
22	Y	Gloria Cosey	Rosemoor Community Association	President	rosemoorchicago@yahoo.com	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Consulting Party Meeting #2

MEETING DATE: Wednesday, June 30, 2021

MEETING TIME: 9:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
23	N	Juanita Irizarry	Friends of the Parks	Executive Director	IrizarryJ@FOTP.org	
24	N	David Doig	Chicago Neighborhood Initiatives	President	ddoig@cnigroup.org	
25	Y	Sarah White	Chicago Park District		Sarah.White@ChicagoParkDistrict.com	
26	N	Logan Pappenfort	Peoria Tribe of Indians of Oklahoma		lpappenfort@peoriatribe.com	
27	N	Michael LaRonge	Forest County Potawatomi	THPO	Michael.LaRonge@FCPotawatomi-nsn.gov	
28	Y	Andrea Reed	Greater Roseland Chamber of Commerce	Executive Director	info@greaterroselandchamber.org	
29	N	Teri Gage	Pullman National Monument	Superintendent	Teri_Gage@nps.gov	
30	Y	Michael Lafargue	RLE Coalition		michael.lafargue@cbexchange.com	
31	N	Veronica Clarke	TCA Health	President & Chief Executive Officer	vclarke@tcahealth.org	
32	N	Rachel Smith Kovarsky	Pullman Civic Organization	President	pcopres@gmail.com	
33	Y	Cheryl Johnson	People for Community Recovery	Executive Director	cheryl@pcrchi.org	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Consulting Party Meeting #2

MEETING DATE: Wednesday, June 30, 2021

MEETING TIME: 9:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
34	Y	Andraya Yousfi	By the Hand Club Altgeld-Murray	Manging Director of Parterships and Development	andraya.yousfi@bythehand.org	
35	Y	Ann McKenzie	CHA	Chief Development Officer	amckenzie@thecha.org	
36	N	Steven Rouse	Carver Military Academy High School	Principal	serouse@cps.edu	
37	N	Donna Clarke	Neighborhood Housing Services of Chicago	COO	DClarke@NHSChicago.org	
38	Y	Helen Yeung	PEC - CERA	Document Control	hyeung@cerasolutions.com	
39	Y	Harshitha Beere	PEC - JLK	Project Architect	HBeere@jlkarch.com	
40	Y	Kevin Hall	CHA	Director of Planning, Design, and Engineering	khall@thecha.org	
41	Y	Hector Gonzalez	Neighborhood Housing Services of Chicago	Manager of Construction Services		
42	Y	Carol Wallace	IL SHPO	Cultural Resources Coordinator	Carol.Wallace@illinois.gov	
43	N	Anthony Greep	FTA - Region 5	Community Planner	Anthony.Greep@dot.gov	
44	Y	Dekesha Calhoun	TCA Health		dcalhoun@tcahealth.org	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Consulting Party Meeting #2

MEETING DATE: Wednesday, June 30, 2021

MEETING TIME: 9:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
45	Y	Samantha Oliver Mitchell	TCA Health		somitchell@tcahealth.org	

NOTE: All individuals listed have been invited to the meeting. Only those indicated were in attendance.

Consulting Party Meeting #1 Comments and Responses, April 9, 2021

Consulting Party Comments and Responses

This document addresses comments received from consulting parties regarding the Red Line Extension (RLE) Project Draft Eligibility Report (dated February 2021). Based on the selection of the Preferred Alignment and other design refinements, the Chicago Transit Authority (CTA) undertook data collection and analysis to make recommendations regarding the Project's Area of Potential Effect (APE) and identification of historic resources under Section 106 of the National Historic Preservation Act (NHPA). The resulting Draft Eligibility Report served as a summary of and update to the Section 106 consultation, which began in 2012, for the RLE Draft Environmental Impact Statement (Draft EIS). The 2021 Draft Eligibility Report was presented to the consulting parties, including the Illinois State Historic Preservation Office (SHPO), during a consulting party meeting on February 18, 2021. Comments collected during the consulting party meeting were recorded in meeting minutes. Items from the meeting that required response pertained to matters outside historic properties and Section 106 review and have been addressed separately. Written comments were received from the following organizations:

- Robert F. Appleman, Illinois SHPO
- Ward Miller, Preservation Chicago
- Daniel Klaiber, Chicago Department of Planning and Development, Historic Preservation Division
- Lisa DiChiera, Landmarks Illinois
- Diane Hunter Miami Tribe of Oklahoma

Landmarks Illinois and Miami Tribe of Oklahoma responded that they have no comments at this time. Other written comments and corresponding responses provided by the CTA are recorded below. Copies of the comments received are attached to the end of this summary.

Illinois SHPO

Comment: *We concur with the Federal Transit Administration (FTA) that the 6 additional properties in the expanded APE in Table 2 of the FTA's February 11, 2021 letter are eligible for the National Register of Historic Places. On page 14 of the survey, 11451 S. Michigan Ave is circled as "N" (no) for eligibility, which is an error.*

Response: Noted. The Eligibility Report will be revised to correct the error noted above.

Comment: *Because the Red Line will now extend south of 130th Street, Altgeld Gardens will now be effected by this Undertaking. Therefore, our 2017 concurrence that Altgeld Gardens will not be adversely effected by this Undertaking is rescinded. We will continue to review the undertaking for its effects on Altgeld Gardens.*

Response: Noted. New recommendations concerning effects at Altgeld Gardens-Philip Murray Homes will be presented for review in the Effects Report.

Comment: *We concur that there are no historic archaeological resources within the original and expanded APE.*

Response: Noted. The current RLE Archeological Report will be considered complete and final.

Preservation Chicago

Comment: *The new Michigan Avenue Station at 115th Street be located on the north side of the proposed track-line to reduce demolition of houses and buildings and place the station and parking facility on vacant land. So, this CTA station and multi-story parking lot would be located at the southwest corner of 115th and South Michigan Avenue on current vacant land. We are hoping that the base of the parking lot could hold retail and stores, and perhaps some green spaces.*

Response: The CTA is investigating options for parking and bus facilities for the Michigan Avenue station on both the north and south sides of the Union Pacific tracks. The development project that was planned for the vacant site on the north side of the tracks has not moved forward and has presented an opportunity to potentially locate the parking and bus facilities to this site. The Chicago Department of Planning and Development (DPD) is in the process of acquiring this land from the developer and the CTA is coordinating with DPD on this effort.

The use of space within the parking lot and parking garage at the Michigan Avenue station are still under development. The CTA is currently conducting the RLE Transit-Supportive Development (TSD) Plan which, along with the community input collected as a part of that plan, will assist in identifying appropriate uses for the available space.

Comment: *The historic buildings at 115th and Michigan and extending northward should be reinvested-in as part of the larger efforts to reinvest in the area. This could include the gold and crème terra cotta building at the northeast corner of 115th and Michigan Avenue, as well as other nearby structures, including buildings along Kensington Avenue, like the historic "Venetian Hall Building."*

Response: The CTA understands that these are historic properties and values them as such. It is not within the CTA's scope for the RLE Project to reinvest in these properties.

Comment: *Please clarify why the historic public school in the APE-the Area of Potential Effect, is not eligible for the National Register of Historic Places?*

Response: Additional research has uncovered historical information for George William Curtis Public School supporting eligibility under Criterion C for Architecture. This information will be included in the final Eligibility Report and the property is recommended as Eligible for NRHP.

Comment: *Would the CTA consider honoring Hazel Johnson, and her work on Environmental Justice (130th Street is also named in her honor), along with her work with former President Obama and the African-American World War II Servicemen at the 130th Street terminal at Altgeld Gardens Terminus? Altgeld Gardens was built specifically for returning African American Servicemen, and that would be a wonderful tribute to their sacrifices and also to Hazel Johnson.*

Response: The CTA recognizes the rich local history of the nearby neighborhoods and residents, including the contributions of Hazel Johnson. The CTA is open to work with the community and its leaders to consider suggestions for naming the stations.

Chicago Department of Planning and Development, Historic Preservation Division

Comment: *Our comment that we would like to add for the record is that DPD is in the midst of completing a historic assessment of a portion of Michigan Avenue in Roseland that overlaps with the Section 106 APE. The study, officially called Historic Research and Report for the Michigan Avenue Business District in the Roseland Community Area is focusing on the social, economic, business and architectural/building history of Michigan Avenue, especially in a core area from 110th Street to 115th Street. With input from various community stakeholders, DPD intends that the study will be used to help lay the groundwork for further planning initiatives on Michigan Avenue that will capitalize on the area's history.*

Response: Noted. The CTA is interested in reviewing this study once completed.

Comments Received

ILLINOIS
DEPARTMENT OF NATURAL RESOURCES

Illinois Department of **Natural Resources**

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor
Colleen Callahan, Director

FAX (217) 524-7525

Cook County
Chicago
Red Line Extension with 4 New Stations
From Existing 95th Street Terminal to 130th St., New Stations Near 103rd Street, 111th Street, Michigan Avenue, and 130th Street
SHPO Log #001010713

March 18, 2021

Jay Ciavarella
U.S. Department of Transportation
Federal Transit Administration
Region V, Planning & Program Development
200 W. Adams St., Suite 320
Chicago, IL 60606-5253

Dear Mr. Ciavarella:

We have reviewed the Revised Area of Potential Effect (APE), Eligibility Report and Consulting Parties List for the above referenced project. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties."

We concur with the Federal Transit Administration (FTA) that the 6 additional properties in the expended APE in Table 2 of the FTA's February 11, 2021 letter are eligible for the National Register of Historic Places. On page 14 of the survey, 11451 S. Michigan Ave is circled "N" (no) for eligibility, which is an error.

Because the Red Line will now extend south of 130th Street, Altgeld Gardens will now be effected by this Undertaking. Therefore, our 2017 concurrence that Altgeld Gardens will not be adversely effected by this Undertaking is rescinded. We will continue to review the undertaking for its effects on Altgeld Gardens.

We concur that there are no historic archaeological resources within the original and expanded APE.

Please contact CJ Wallace, Cultural Resources Coordinator, at 217/785-5027 with any questions.

Sincerely,

Robert F. Appleman
Deputy State Historic
Preservation Officer

c: Marlise Fratinardo, Chicago Transit Authority
Elizabeth Breiseth, U.S. Department of Transportation

Comment from:
Ward Miller
Executive Director, Preservation Chicago

Carolyn Andrews

From: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Sent: Tuesday, March 23, 2021 8:40 AM
To: Meg Kindelin; Carolyn Andrews
Cc: Grace Dysico; Barbara Frost; Lynn Otte; Joseph Yesbeck; Littrell, Joanna (HNTB)
Subject: FW: RLE-Red Line Extension Comments

Follow Up Flag: Follow up
Flag Status: Flagged

From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Tuesday, March 23, 2021 7:42 AM
To: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Cc: Tandon, Sonali <STandon@transitchicago.com>; Littrell, Joanna (HNTB) <jlittrell.hntb@transitchicago.com>
Subject: FW: RLE-Red Line Extension Comments

Fyi…

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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From: wmiller@preservationchicago.org [mailto:wmiller@preservationchicago.org]
Sent: Monday, March 22, 2021 11:30 PM
To: Fratinardo, Marlise
Subject: RLE-Red Line Extension Comments

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Dear Marlise Fratinardo,

Thank you for you presentation and the opportunity to comment on the Red Line Extension Project of the CTA. We are very excited about this extended Red Line project to 130th Street, which will serve so many residents in many Far South Side Communities of Chicago. Kudos!

Our comments and concerns are limited to the following points at this time.

1. The new Michigan Avenue Station at 115th Street be located on the north side of the proposed track-line to reduce demolition of houses and buildings and place the station and parking facility on vacant land. So, this CTA station and multi-story parking lot would be located at the southwest corner of 115th and South Michigan

Avenue on current vacant land. We are hoping that the base of the parking lot could hold retail and stores, and perhaps some green spaces.

2. The historic buildings at 115th and Michigan and extending northward should be reinvested-in as part of the larger efforts to reinvest in the area. This could include the gold and crème terra cotta building at the northeast corner of 115th and Michigan Avenue, as well as other nearby structures, including buildings along Kensington Avenue, like the historic "Venetian Hall Building."

3. Please clarify why the historic public school in the APE-the Area of Potential Effect, is not eligible for the National Register of Historic Places?

4. Would the CTA consider honoring Hazel Johnson, and her work on Environmental Justice (130th Street is also named in her honor), along with her work with former President Obama and the African-American World War II Servicemen at the 130th Street terminal at Altgeld Gardens Terminus? Altgeld Gardens was built specifically for returning African American Servicemen, and that would be a wonderful tribute to their sacrifices and also to Hazel Johnson.

Thanks so much for your consideration of these important points and observations.

Sincerely,
Ward Miller

--
Ward Miller, Executive Director

Preservation Chicago
The Williams Building
205 W. Monroe, Suite 400
Chicago, Illinois 60606-5006
c: 773-398-6432 o: 312-443-1000
wmiller@preservationchicago.org
www.preservationchicago.org

"Love Your City Fiercely!"

Comment from:
Daniel Klaiber
Chicago Department of Planning and Development
Historic Preservation Division

Carolyn Andrews

From: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Sent: Monday, March 22, 2021 12:47 PM
To: Meg Kindelin; Carolyn Andrews
Cc: Grace Dysico; Lynn Otte; Littrell, Joanna (HNTB); Joseph Yesbeck
Subject: FW: Red Line Extension Section 106 Comments

From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Monday, March 22, 2021 11:11 AM
To: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Cc: Tandon, Sonali <STandon@transitchicago.com>
Subject: FW: Red Line Extension Section 106 Comments

Fyi…

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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From: Daniel Klaiber [mailto:Daniel.Klaiber@cityofchicago.org]
Sent: Monday, March 22, 2021 11:10 AM
To: Fratinardo, Marlise
Subject: Red Line Extension Section 106 Comments

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Hello Marlise: Thank you for providing DPD an overview of the Section 106 Review Process (#2) for the Red Line Extension Project.

Our comment that we would like to add for the record is that DPD is in the midst of completing a historic assessment of a portion of Michigan Avenue in Roseland that overlaps with the Section 106 APE. The study, officially called *Historic Research and Report for the Michigan Avenue Business District in the Roseland Community Area* is focusing on the social, economic, business and architectural/building history of Michigan Avenue, especially in a core area from 110th Street to 115th Street. With input from various community stakeholders, DPD intends that the study will be used to help lay the groundwork for further planning initiatives on Michigan Avenue that will capitalize on the area's history.

Thank you, Dan Klaiber

Daniel Klaiber
Historic Preservation Division

Department of Planning and Development
121 North LaSalle St #905
Chicago, IL 60602
(312) 744-0097
dklaiber@cityofchicago.org

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Comment from:
Lisa DiChiera
Director of Advocacy, Landmarks Illinois

Carolyn Andrews

From: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Sent: Friday, March 12, 2021 1:43 PM
To: Grace Dysico; Carolyn Andrews; Meg Kindelin
Cc: Littrell, Joanna (HNTB); 'Joseph Yesbeck'
Subject: FW: CTA Red Line Extension Section 106 Consulting Parties: Eligibility Report Comments

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From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Friday, March 12, 2021 12:54 PM
To: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Cc: Tandon, Sonali <STandon@transitchicago.com>
Subject: FW: CTA Red Line Extension Section 106 Consulting Parties: Eligibility Report Comments

Fyi… response #2. I imagine that Preservation Chicago will submit a response as they said they would. I also predict it will arrive next week. Thanks.

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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From: Lisa DiChiera [mailto:ldichiera@landmarks.org]
Sent: Friday, March 12, 2021 12:04 PM
To: Fratinardo, Marlise
Subject: RE: CTA Red Line Extension Section 106 Consulting Parties: Eligibility Report Comments

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Marlise,
I have no comments on the expansion of the APE and Eligibility Report.
Thank you,
Lisa DiChiera
Director of Advocacy
Landmarks Illinois

From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Friday, March 05, 2021 2:25 PM
To: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Cc: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Subject: CTA Red Line Extension Section 106 Consulting Parties: Eligibility Report Comments

Dear Section 106 Consulting Parties,

Thank you again for your participation in Meeting #1 of the Section 106 process for the CTA Red Line Extension Project earlier this month.

The link below provides the Section 106 Eligibility Report, including its four appendices:
https://transystems.sharefile.com/d-sbfb966e0caa54cc8aaca462a95222cec

Also attached is the meeting presentation for your convenience.

As noted at the meeting, comments on the Eligibility Report are requested by **Friday, March 12, 2021**. Please let me know if you have any questions in the meantime. Enjoy the weekend!

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 ● P.O. Box 1326, Miami, OK 74355
Ph: (918) 541-1300 ● Fax: (918) 542-7260
www.miamination.com

Via email: mfratinardo@transitchicago.com

March 8, 2021

Marlise Fratinardo
Chicago Transit Authority

Re: CTA Red Line Extension – Comments of the Miami Tribe of Oklahoma

Dear Ms. Fratinardo:

Aya, kikwehsitoole – I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding the CTA Red Line Extension.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Illinois and specifically in the Chicago area, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at dhunter@miamination.com to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer, I am the point of contact for consultation.

Respectfully,

Diane Hunter

Diane Hunter
Tribal Historic Preservation Officer

Meeting Minutes – Consulting Party Meeting #1, February 18, 2021

Meeting Minutes

Project: Red Line Extension
Meeting Purpose: Consulting Party Meeting 1
Date: Thursday, February 18, 2021
Location: Remote Meeting
Time: 1:00 PM

Chairperson: Marlise Fratinardo

Attendees: (See Attached copy of Sign-in-Sheet)

Item No.	*Date*	*Item Description*	*Responsibility/ Status*	*Due/Closed Date*
1.00	**General**			
1.01	2/18/21	A PowerPoint presentation was used for the meeting. Presenters included Marlise Fratinardo, Meg Kindelin, and Carri Andrews.		
1.02	2/18/21	The goal of Section 106 is to determine the project effects on historic properties and is required for projects with federal funding. As part of Section 106, feedback is solicited from Consulting Parties. Impacts to historic properties potentially affected by the project are assessed and mitigations for adverse effects will be determined.		
1.03	2/18/21	The Draft Eligibility Report was provided in advance of the meeting to all Consulting Parties (CPs), and written comments are requested by 3/12/21. CP feedback will be incorporated into the project's Section 106 process that will be included in the Supplemental Environmental Assessment (EA) and Final Environmental Impact Statement (EIS).		
1.04	2/18/21	The purpose of this meeting was to review the project and focus on the Section 106 Draft Eligibility Report.		
2.00	**Project Overview**			
2.01	2/18/21	The Red Line Extension (RLE) will extend from the existing 95th Terminal Station to 130th St. There will be four new stations and a new rail yard and shop.		
2.02	2/18/21	One of the primary project benefits is equity, bringing affordable rapid transit to historically underserved communities. Other benefits include economic opportunity, frequent rail service and sustainability.		
2.03	2/18/21	An Alternatives Analysis considered multiple options including rail and bus rapid transit alternatives. Based on additional technical analysis and public input received, the rail line running along the UPRR track was selected. Options to the East and West of the UPRR track were considered, and the Preferred Alignment a combination of the East and West Options that minimizes impacts, was announced in 2018.		
2.04	2/18/21	The tracks will be on an elevated structure from 95th Station to 119th St, then will continue at grade from 119th St to the 130th Terminal Station.		
2.05	2/18/21	Section 106 consultation was initiated, historic properties were identified, and adverse effects were assessed in the Draft EIS. Because no adverse effects were found, no resolution of adverse effects was needed. However, with changes to the Project following the Draft EIS publication, the findings are being reevaluated, and the results of the Phase 1 Archeological Survey will be presented at this meeting.		

2.06	2/18/21	In the Draft EIS, the identification of historic properties was performed on the project's Area of Potential Effects (APE), which was generally one block from the centerline of tracks and widened at station areas. National Register of Historic Places (NRHP) evaluations were performed to determine eligible properties on a representative sample of buildings in the APE. Each block was examined for historic character, and sample properties were chosen for their ability to represent the characteristics of each block. Field surveys were performed to assess the conditions. For the Draft EIS, a total of 280 properties were field surveyed, and 7 properties were recommended as eligible for NRHP.		
2.07	2/18/21	For the UPRR East and West Options presented in the Draft EIS, no adverse effects were found on the historic properties. Therefore, mitigations were not required.		
3.00	**Section 106 Updates**			
3.01	2/18/21	This meeting serves to initiate consultation of the CPs regarding the process and identification of areas with potential cultural or religious significance.		
3.02	2/18/21	The four new RLE stations will be at 103rd St, 111th St, Michigan Ave, and 130th St. The rail yard and shop will be near 120th St. Although the alignment at the 108th Pl has changed from what was shown in the Draft EIS, there has been no change to the APE. The APE has been modified to accommodate changes to the Yard and Shop area but no historic properties or cultural material was found within, and the Michigan Station and 130th Station APEs have been expanded.		
3.03	2/18/21	In the Draft EIS, the Michigan Station parking was shown South of the UPRR. There is an opportunity to relocate the Michigan Station parking North of the UPRR. This new location is being vetted through the NEPA process, and DPD is in the process of acquiring the land. Station components will include a stationhouse, primary and secondary entrances and a parking garage up to four stories tall, and the layout of these components is under development. The APE was expanded to the North and South based on building density and visual observation to account for the new potential station parking location and to address potential effects in this area.		
3.04	2/18/21	In the Draft EIS, 130th Station was located North of 130th St, adjacent to MWRD water treatment facilities. This provided a more difficult path of travel and is a more isolated location for future amenities. The location South of 130th St would be closer to residents and would provide more opportunities for future development. This new location is being vetted through the NEPA process. The APE was expanded in consideration of the building density, height of proposed work, changes to traffic patterns, and potential changes to the noise and vibration environment.		
3.05	2/18/21	The identification of historic properties was performed at areas of APE expansion. Five properties were identified near the Michigan Station to have Chicago Historic Resources Survey (CHRS) Orange ratings, meaning they have historical features or historical associations potentially significant to the community. The Altgeld Gardens-Philip Murray Homes Historic District has been determined eligible under Criteria A, B and C from the CHA nomination for the NRHP. One other historic-age property near 130th Station was identified.		
3.06	2/18/21	A representative sample of 15 properties was chosen and evaluated, and six were recommended as eligible. Nine historic-age properties were recommended as not eligible due to the lack of distinguishing historical features and no association with historical people or events.		
3.07	2/18/21	An overview of each of the six recommended properties was presented.		

3.08	2/18/21	Part of the Section 106 process is a study of the archeological resources that may be affected. A Phase 1 Archaeological Reconnaissance Survey was performed along the Preferred Alignment. The terrain was substantially disturbed, and photographic recordation and shovel test probes (STP) were conducted. Based on the findings and a records check with the state database, it was determined that no identified archaeological sites or resources would be affected during construction.		
4.00	**General Discussion**			
4.01	2/18/21	Each Consulting Party was called on in alphabetical order to be given an opportunity to comment.		
4.02	2/18/21	The People for Community Recovery (PCR) requested information on the layout of the future station, and CTA will follow up after the meeting.	CTA	
4.03	2/18/21	By the Hand Club liked the proposal of 130th Station to be located closer to Altgeld Gardens, noting that this provides better access to the community.		
4.04	2/18/21	By the Hand Club inquired about the project timeline, and CTA noted that the entry to Project Development (PD) was announced in December 2020, construction is targeted to begin in 2025, and revenue service is targeted to begin in 2029.		
4.05	2/18/21	CHA noted that their main concerns are for the best interest of the residents, including access to jobs and safety. CHA would be interested in more details of the station layout.		
4.06	2/18/21	CPD did not have any comments at this time.		
4.07	2/18/21	The Greater Roseland Chamber of Commerce requested clarification on the location of the proposed Michigan Station parking. CTA discussed the two options being considered and confirmed that a portion of the parcels to the North of Michigan Station are being considered for potential development through the Transit Supportive Development (TSD) Study.		
4.08	2/18/21	The Greater Roseland Chamber of Commerce expressed interest in improvements to the properties being recommended for historic preservation and inquired if funding (programs) were available.		
4.09	2/18/21	The Historic Preservation Division of DPD did not have any comments at this time.		
4.10	2/18/21	Illinois SHPO did not have any comments at this time.		
4.11	2/18/21	Landmarks Illinois noted the importance of coordination between organizations for improvements to the Roseland neighborhood, and it was noted that coordination is being done.		
4.12	2/18/21	The Neighborhood Housing Services of Chicago did not have any comments at this time.		
4.13	2/18/21	PCR expressed support for the project to bring transit to the Altgeld Gardens community but expressed interest in understanding other community benefits that would result from the land transferred for the new 130th Station. CTA is aware of community interest in development within the community, is working on setting up an implementation plan, and can follow up with PCR on community requests. PCR noted that future redevelopment opportunities would be improved with the introduction of a transit station in the Altgeld Gardens neighborhood.	CTA	
4.14	2/18/21	Preservation Chicago expressed interest in seeing the Michigan Station and 130th Station renderings.		
4.15	2/18/21	Preservation Chicago requested a status update on the NRHP nomination of Altgeld Gardens and will follow up with CHA.		
4.16	2/18/21	Preservation Chicago preferred the Michigan Station to be located on the North side of the UPRR tracks and expressed interest in housing development in this area.		
4.17	2/18/21	Preservation Chicago inquired about the roadway improvements near historic properties near Michigan Station, and CTA will follow up.	CTA	
4.18	2/18/21	The Pullman Civic Organization had no comments at this time.		

4.19	2/18/21	The RLE Coalition expressed support for the furniture store, Carver Military Academy and Altgeld Gardens to be recommended as historic properties.		
4.20	2/18/21	The RLE Coalition believed that the North location of Michigan Station would be preferable for parking and TOD. Suggestions for development included a bank, pharmacy, grocery store or entertainment center.		
4.21	2/18/21	The RLE Coalition expressed interest in using the space South of Kensington and East of Michigan for a park or green space, and CTA noted that this will be part of the Section 4(f) process to determine replacement park options with CPD.		
4.22	2/18/21	The RLE Coalition supported the new 130th Station location due to improved access and walkability and suggested that a bank and grocery store are desired in this area.		
4.23	2/18/21	The RLE Coalition noted that the community would be interested in businesses that would benefit and participate in the community and retain money within the community. The Greater Roseland Chamber of Commerce noted that this would be a community initiative. CTA noted that this would be discussed in the TSD plan.		
4.24	2/18/21	The RLE Coalition also suggested branding of the area and 130th station to reflect the history.		
4.25	2/18/21	The Rosemoor Community Association noted that the community supports the project.		
4.26	2/18/21	TCA Health expressed support for the project and excitement for the community benefits.		
4.27	2/18/21	TCA Health inquired about the roadway improvements near historic properties at Altgeld Gardens, and CTA will follow up.	CTA	
4.28	2/18/21	The Chicago Neighborhood Initiatives was excited about the project and expressed interest in development opportunities at 115th and Michigan. The Chicago Neighborhood Initiatives suggested that the National Park Service may be appropriate to add as a CP although there may be a conflict of interest due to their review of the Section 106 documents. CTA will review.	CTA	
5.00	**Next Steps**			
5.01	2/18/21	The deadline for submission of written comments is 3/12/21. Comment responses and meeting minutes will be issued in April 2021.		
5.02	2/18/21	The next CP Meeting will review the Effects Report and is targeted for June 2021.		
5.03	2/18/21	Input received will be summarized in the environmental documents that will be publicly available.		
5.04	2/18/21	Presentation slides and the Section 106 terms document will be provided to participants.	CTA	
Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days, otherwise minutes will be considered final.				

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Consulting Party Meeting #1

MEETING DATE: Thursday, February 18, 2021

MEETING TIME: 1:00 PM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
1	Y	Marlise Fratinardo	CTA - Planning	Senior Project Manager, Planning	mfratinardo@transitchicago.com	
2	Y	Leah Mooney	CTA - Planning	Director of Strategic Planning and Policy	lmooney@transitchicago.com	
3	Y	Sonali Tandon	CTA - Planning	Senior Manager - Strategic Planning, Rail	STandon@transitchicago.com	
4	Y	Joanna Littrell	PMC - HNTB	Program Manager	jlittrell.hntb@transitchicago.com	
5	Y	Patrick Dunn	PMC - CDM-Smith	NEPA Lead	PDunn.cdm@transitchicago.com	
6	Y	Grace Dysico	PEC - TranSystems	NEPA Lead	gldysico@transystems.com	
7	Y	Meg Kindelin	PEC - JLK	Historical & Cultural Lead	mkindelin@jlkarch.com	
8	Y	Carolyn Andrews	PEC - JLK	Historical & Cultural Specialist	candrews@jlkarch.com	
9	Y	Helen Yeung	PEC - CERA	Document Control	hyeung@cerasolutions.com	
10	Y	Anthony Greep	FTA - Region 5	Community Planner	Anthony.Greep@dot.gov	
11	Y	Elizabeth Breiseth	FTA - Region 5	Environmental Protection Specialist	elizabeth.breiseth@dot.gov	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Consulting Party Meeting #1

MEETING DATE: Thursday, February 18, 2021

MEETING TIME: 1:00 PM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
12	Y	Anthony Rubano	IL SHPO	Deputy State Historic Preservation Officer	anthony.rubano@illinois.gov	
13	Y	Rita Baker	IL SHPO	Cultural Resources Manager	rita.baker@illinois.gov	
14	Y	Andraya Yousfi	By the Hand Club Altgeld-Murray	Manging Director of Parterships and Development	andraya.yousfi@bythehand.org	
15	Y	Andrea Reed	Greater Roseland Chamber of Commerce	Executive Director	info@greaterroselandchamber.org	
16	Y	Ann McKenzie	CHA	Chief Development Officer	amckenzie@thecha.org	
17	Y	Carol Wallace	IL SHPO	Cultural Resources Coordinator	Carol.Wallace@illinois.gov	
18	Y	Cheryl Johnson	People for Community Recovery	Executive Director	cheryl@pcrchi.org	
19	Y	Donna Clarke	Neighborhood Housing Services of Chicago	COO	DClarke@NHSChicago.org	
20	Y	Gloria Cosey	Rosemoor Community Association	President	rosemoorchicago@yahoo.com	
21	Y	Hector Gonzalez	Neighborhood Housing Services of Chicago	Manager of Construction Services		
22	Y	Kandalyn Hahn	Chicago Department of Planning and Development, Historic Preservation Division	Project Coordinator	Kandalyn.Hahn@cityofchicago.org	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Consulting Party Meeting #1

MEETING DATE: Thursday, February 18, 2021

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CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
23	Y	Kevin Hall	CHA	Director of Planning, Design, and Engineering	khall@thecha.org	
24	Y	Lisa DiChiera	Landmarks Illinois	Director of Advocacy	ldichiera@landmarks.org	
25	Y	Mary Lu Seidel	Preservation Chicago	Director of Community Engagement	mseidel@preservationchicago.org	
26	Y	Michael LaFargue	RLE Coalition		michael.lafargue@cbexchange.com	
27	Y	Rachel Smith Kovarsky	Pullman Civic Organization	President	pcopres@gmail.com	
28	Y	Sarah White	CPD		Sarah.White@ChicagoParkDistrict.com	
29	Y	Veronica Clarke	TCA Health	President & Chief Executive Officer	vclarke@tcahealth.org	
30	Y	Wyatt Ollestad	Pullman Civic Organization			
31	Y	David Doig	Chicago Neighborhood Initiatives	President	ddoig@cnigroup.org	

NOTE: All individuals listed have been invited to the meeting. Only those indicated were in attendance.

Consulting Party List and Invitation Letters

May 20, 2021

RLE Mailing List for Section 106 Consulting Parties

Accept	Agency	Contact Prefix	Contact	Address Phone (If available)	Email	Notes
X	Chicago Neighborhood Initiatives	Mr.	David Doig, President	1000 E 111th Street, 10th Floor Chicago, IL 60628	ddoig@cnigroup.org	
X	Chicago Park District	Ms.	Sarah White	541 N Fairbanks Chicago, IL 60611	Sarah.White@ChicagoParkDistrict.com	
X	Friends of the Parks	Ms.	Juanita Irizarry, Executive Director	17 N State Street, #1450, Chicago, IL 60602-3315	irizarryj@fotp.org	
X	Historic Preservation Division, Department of Planning and Development	Mr. Ms.	Daniel Klaiber Erika Selke	121 N LaSalle Street, 10th Floor Chicago, IL 60602	Daniel.Klaiber@cityofchicago.org Erika.Selke@cityofchicago.org	3/16/21, Per Kandalyn Hahn, replace Matt Crawford with Daniel Klaiber and Erika Selke.
X	Illinois Department of Natural Resources, State Historic Preservation Division	Ms.	Carol J. Wallace, Cultural Resources Coordinator	One Old State Capitol Plaza Springfield, IL 62701	Carol.Wallace@illinois.gov	
		Mr.	Robert Appleman, Deputy SHPO		Bob.Appleman@illinois.gov	
X	Landmarks Illinois	Ms.	Bonnie McDonald	30 North Michigan Avenue, Suite 2020 Chicago, IL 60602	bmcdonald@landmarks.org	
		Ms.	Lisa DiChiera		ldichiera@landmarks.org	
X	Neighborhood Housing Services of Chicago Citywide office	Ms.	Donna Clarke	1279 N. Milwaukee Avenue, 4th Floor Chicago, IL 60622	DClarke@NHSChicago.org	
X	Preservation Chicago	Mr.	Ward Miller, Exec. Director	205 West Monroe, Suite 400 Chicago, IL 60606	WMiller@preservationchicago.org	
X	Ridge Historical Society	Ms.	Elaine Spencer, President	10621 South Seeley Avenue Chicago, IL 60643	ridgehistory@hotmail.com	
X	Rosemoor Community Association	Ms.	Gloria Cosey, President	10205 S. King Drive Chicago, IL 60628	rosemoorchicago@yahoo.com	
X	Forest County Potawatomi	Mr.	Michael LaRonge, THPO	P.O. Box 340, Crandon, WI 54520	Michael.LaRonge@FCPotawatomi-nsn.gov	
X	Miami Tribe of Oklahoma	Ms.	Diane Hunter, THPO	Tribal Historic Preservation Office, Miami Tribe of Oklahoma, P.O. Box 1326 Miami, OK 74355	dhunter@miamination.com	
X	Peoria Tribe of Indians of Oklahoma	Mr.	Logan Pappenfort	118 South Eight Tribes Trail, P.O. Box 1527 Miami, OK 74355	lpappenfort@peoriatribe.com	
Recommended Additions						
X	By The Hand Club, Altgeld-Murray	Ms.	Andraya Yousfi	13015 S Ellis Avenue Chicago, IL 60827	andraya.yousfi@bythehand.org	Accepted 12/2/20. Requested to change contact from Jamie Morriss (Site Director) to Andraya Yousfi (staff).
X	Carver Military Academy	Ms.	Vickie Durrah, Assistant Principal	13100 S Doty Avenue Chicago, IL 60827	vsdurrah@cps.edu	
		Mr.	Steven Rouse, Principal		serouse@cps.edu	Accepted 12/1/20
X	Chicago Housing Authority	Ms.	Ann McKenzie, Chief Development Officer	60 E Van Buren Street Chicago, IL 60605	amckenzie@thecha.org	Accepted 1/7/21
		Ms.	Tracy Sanchez			cc'ed on emailed letter
X	Greater Roseland Chamber of Commerce	Ms.	Andrea D. Reed Executive Director	1000E. 111th Street Chicago, IL 60628	info@greaterroselandchamber.org	Added to the CP list 2/10/21
X	People for Community Recovery	Ms.	Cheryl Johnson, Executive Director	13330 S. Corliss Chicago, IL 60827 (773) 971-5028	cheryl@pcrchi.org	Accepted 12/10/20
X	Pullman Civic Organization	Ms.	Rachel Smith Kovarsky, President	11436 S Forrestville Avenue Chicago, IL 60628	pcopres@gmail.com	Accepted 1/13/21
X	Red Line Extension Coalition (RLEC)	Dr.	Dr. William Briggs, Chair	16049 Woodlawn East Avenue South Holland, IL 60473	drelzieyoungcc@gmail.com	Replacement organization for the DCP consulting party that is now defunct.
		Mr.	Michael LaFargue (substitute for Dr. Briggs)		michael.lafargue@cbexchange.com	Accepted 1/15/21 RLEC member & past President, also community representative of Chicago Assoc. of Realtors "The 77" Diversity Committee.
X	TCA Health	Ms.	Veronica Clarke, President & Chief Executive Officer	1029 East 130th Street Chicago, IL 60628 Direct (773) 928-5090	vclarke@tcahealth.org	Accepted 12/11/20
X	NPS Pullman National Monument	Ms.	Teri Gage, Superintendent	(715) 209-0135	tero_gage@nps.gov	Joined as a new CP on 5/19/21.
NR	Kickapoo Tribe of Oklahoma	Mr.	Kent Collier, NAGPRA	PO Box 70 McLoud, OK 74851	pamwesley@kikapootribeofoklahoma.com	No response as of 1/15/21
NR	Little Traverse Bay Bands of Odawa Indians	Ms.	Melissa Wiatrolik, THPO	7500 Odawa Circle Harbor Springs, MI 49740	MWiatrolik@ltbbodawa-nsn.gov	No response as of 1/15/21
NR	Menominee Indian Tribe of Wisconsin	Mr.	David Grignon, THPO	PO Box 910 Keshena, WI 54135	dgrignon@mitw.org	No response as of 1/15/21
Declines and Removals						
Removed	DCP		Gwendolyn Rice, Executive Director	212 E 95th Street Chicago, IL 60619-7208	gmrice@dcpchicago.org	DCP is now defunct. RLEC is the new group that several members of DCP moved to. RLEC has been added to replace DCP.
declined	Forest Preserves of Cook County (FPCC)	Mr.	Arnold Randall, General Superintendent	69 W Washington Street, Suite 2060 Chicago, IL 60602	Arnold.Randall@cookcountyil.gov	12/1/20, Chris Slattery declined for the FPCC on behalf of Superintendent Randall
		Ms.	Chris Slattery, Director of Planning & Development	536 N Harlem Avenue River Forest, IL 60305	chris.slattery@cookcountyil.gov	

NR - No Response

U.S. Department
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**Federal Transit
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REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

November 25, 2020

Estavio Elzondo, Chairman
Kickapoo Tribe of Oklahoma
PO Box 70
McLoud, OK 74851

RE: Section 106 Consulting Party Invitation – CTA Red Line Extension (RLE) Project, Chicago, IL

Mr. Elzondo:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), is completing an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) Project in Chicago, Illinois. The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility. A project map of the preferred alignment is enclosed for reference (see Enclosure #2).

A Draft EIS for the RLE Project was published October 6, 2016 and the Project's Preferred Alignment was selected and announced on January 26, 2018. FTA and CTA previously conducted a Section 106 consultation process in coordination with the Illinois State Historic Preservation Office (SHPO) and other identified consulting parties as part of the Draft EIS. Documentation on the previous Section 106 consultation can be found in the Draft EIS available at https://www.transitchicago.com/redext/drafteis/.

As part of its responsibilities under 36 CFR § 800 – Protection of Historic Properties and the National Historic Preservation Act (NHPA), FTA and CTA are re-initiating the Section 106 consultation process as a result of changes to the project. The most notable change to be evaluated for effects on historical resources is the relocation of the 130th Street station from a location north of 130th Street to a location south of 130th Street, adjacent to Altgeld Gardens.

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. This process involves efforts to identify historic properties

potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. In accordance with 36 CFR § 800.2(c), you are invited to participate in the Section 106 process as a Consulting Party. As part of the process, the project team will work through a three-step process with consulting parties to:

1. Identify historic properties that could be potentially affected by the project,
2. Assess project effects on these resources, and
3. If there are adverse effects, develop ways to avoid, minimize, or mitigate adverse effects on historic properties.

We are inviting you to participate in consultation to help us identify places that may have traditional religious and cultural importance to your tribal organization. Please note that we are requesting information only on such places that you believe may be impacted by the proposed project so that we may try to avoid impacts. We would be pleased to discuss project details as well any confidential concerns you may identify.

Your timely response to this invitation will greatly help us incorporate your concerns into project development. For that purpose, we respectfully request that you complete the enclosed Project Consultation Options Form (See Enclosure #1) and forward it to FTA within ***30 days of receipt*** of this letter.

If you have questions or comments related to the proposed project, please contact Tony Greep of the FTA Regional Office at the address above, by telephone at 312-353-1646 or by email at anthony.greep@dot.gov.

Sincerely,

Jay M. Ciavarella
Director, Office of Planning and Program Development

ecc: Tony Greep, FTA
Elizabeth Breiseth, FTA
Marlise Fratinardo, CTA

Enclosures:

Enclosure 1: Project Consultation Options Form
Enclosure 2: Preferred Alignment

Enclosure #1: Project Consultation Options Form

Kickapoo Tribe of Oklahoma

Project: Red Line Extension Project, Chicago, IL

For each project, please check the appropriate response. Use the back of this form or additional sheets if you wish to make comments:

Project	There are no known places of traditional religious or cultural importance present or within the vicinity of the proposed project and **further consultation is not requested**.	There are or may be places of traditional religious or cultural importance present or within the vicinity of the proposed project and **further consultation is requested.**	Our organization has no interest associated with this proposed project and **further consultation is not required**
CTA Red Line Extension Project, Chicago, IL	☐	☐	☐

If you have chosen to continue consultation, please indicate the manner in which you wish to do so:

Mail (Address):

Phone:

Fax:

e-mail:

Other: (please describe)

Kickapoo Tribe of Oklahoma designated contact for this proposed project:

_____ Phone: _____

NAME, TITLE (Please print)

Signed: _____ Date: _____

Please respond within *30 days* of the date of the letter.

Please return Via Email by scanning to:
Via Fax to:
312-886-0351 Attention: Tony Greep

Via Mail to:
Tony Greep, Federal Transit Administration, Region V
200 West Adams Street, Suite 320
Chicago, IL 60606-5253

Enclosure #2: Preferred Alignment

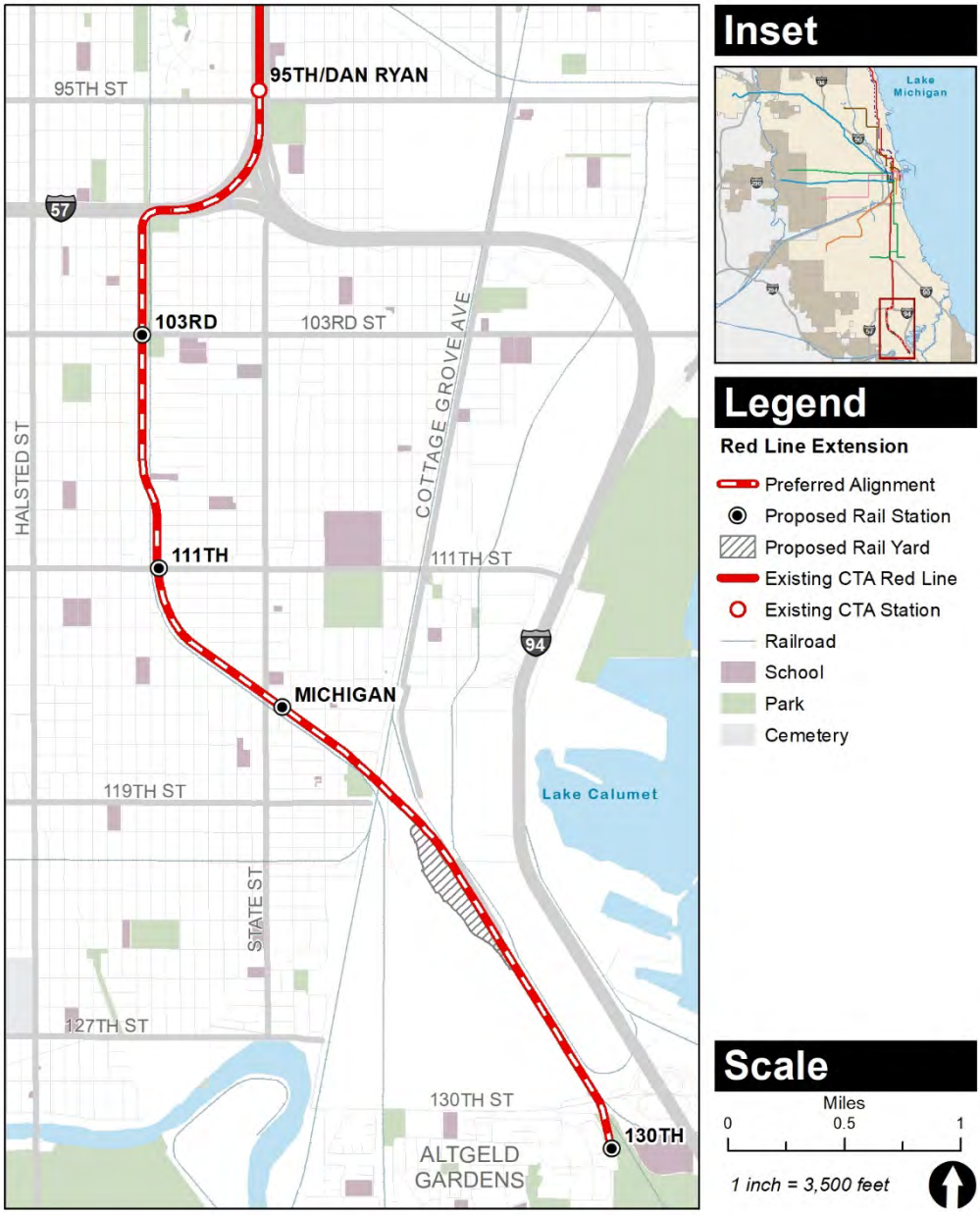

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312-886-0351 (fax)

November 25, 2020

Wesley Andrews, THPO
Little Traverse Bay Bands of Odawa Indians, Michigan
7500 Odawa Circle
Harbor Springs, MI 49740

RE: Section 106 Consulting Party Invitation – CTA Red Line Extension (RLE) Project, Chicago, IL

Mr. Andrews:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), is completing an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) Project in Chicago, Illinois. The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility. A project map of the preferred alignment is enclosed for reference (see Enclosure #2).

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Sincerely,

Jay M. Ciavarella
Director, Office of Planning and Program Development

ecc: Tony Greep, FTA
Elizabeth Breiseth, FTA
Marlise Fratinardo, CTA

Enclosures:

Enclosure 1: Project Consultation Options Form
Enclosure 2: Preferred Alignment

Enclosure #1: Project Consultation Options Form

Little Traverse Bay Bands of Odawa Indians, Michigan

Project: Red Line Extension Project, Chicago, IL

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CTA Red Line Extension Project, Chicago, IL	☐	☐	☐

If you have chosen to continue consultation, please indicate the manner in which you wish to do so:

Mail (Address):

Phone:

Fax:

e-mail:

Other: (please describe)

Little Traverse Bay Bands of Odawa Indians, Michigan designated contact for this proposed project:

_____ Phone: _____

NAME, TITLE (Please print)

Signed: _____ Date: _____

Please respond within *30 days* of the date of the letter.

Please return Via Email by scanning to:
Via Fax to:
312-886-0351 Attention: Tony Greep

Via Mail to:
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200 West Adams Street, Suite 320
Chicago, IL 60606-5253

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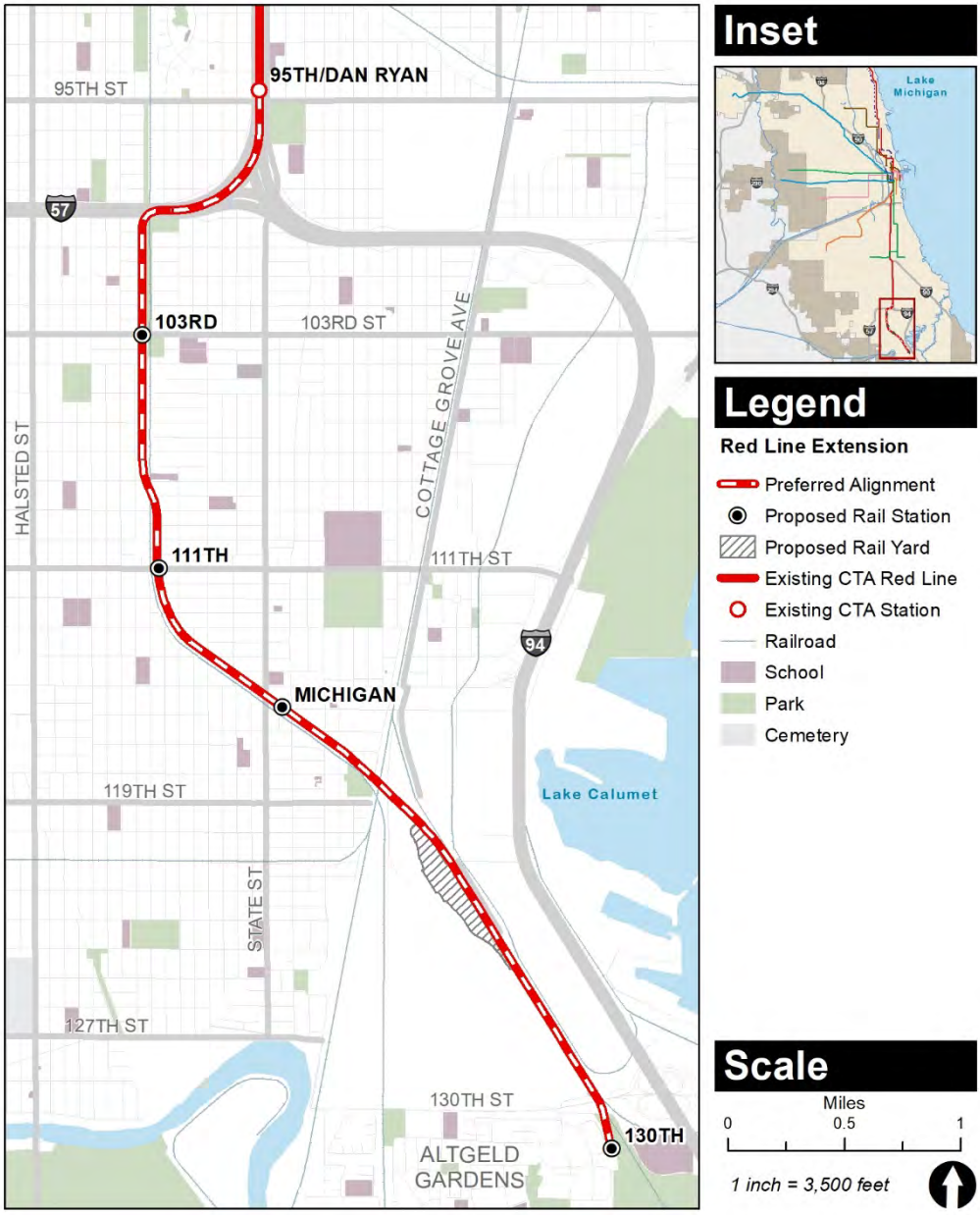

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312-353-2789
312-886-0351 (fax)

November 25, 2020

David Grignon, THPO
Menominee Indian Tribe of Wisconsin
PO Box 910
Keshena, WI 54135

RE: Section 106 Consulting Party Invitation – CTA Red Line Extension (RLE) Project, Chicago, IL

Mr. Grignon:

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Sincerely,

Jay M. Ciavarella
Director, Office of Planning and Program Development

ecc: Tony Greep, FTA
Elizabeth Breiseth, FTA
Marlise Fratinardo, CTA

Enclosures:

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Enclosure 2: Preferred Alignment

Enclosure #1: Project Consultation Options Form

Menominee Indian Tribe of Wisconsin

Project: Red Line Extension Project, Chicago, IL

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CTA Red Line Extension Project, Chicago, IL	☐	☐	☐

If you have chosen to continue consultation, please indicate the manner in which you wish to do so:

Mail (Address):

Phone:

Fax:

e-mail:

Other: (please describe)

Menominee Indian Tribe of Wisconsin designated contact for this proposed project:

_____ Phone: _____

NAME, TITLE (Please print)

Signed: _____ Date: _____

Please respond within *30 days* of the date of the letter.

Please return Via Email by scanning to:
Via Fax to:
312-886-0351 Attention: Tony Greep

Via Mail to:
Tony Greep, Federal Transit Administration, Region V
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Chicago, IL 60606-5253

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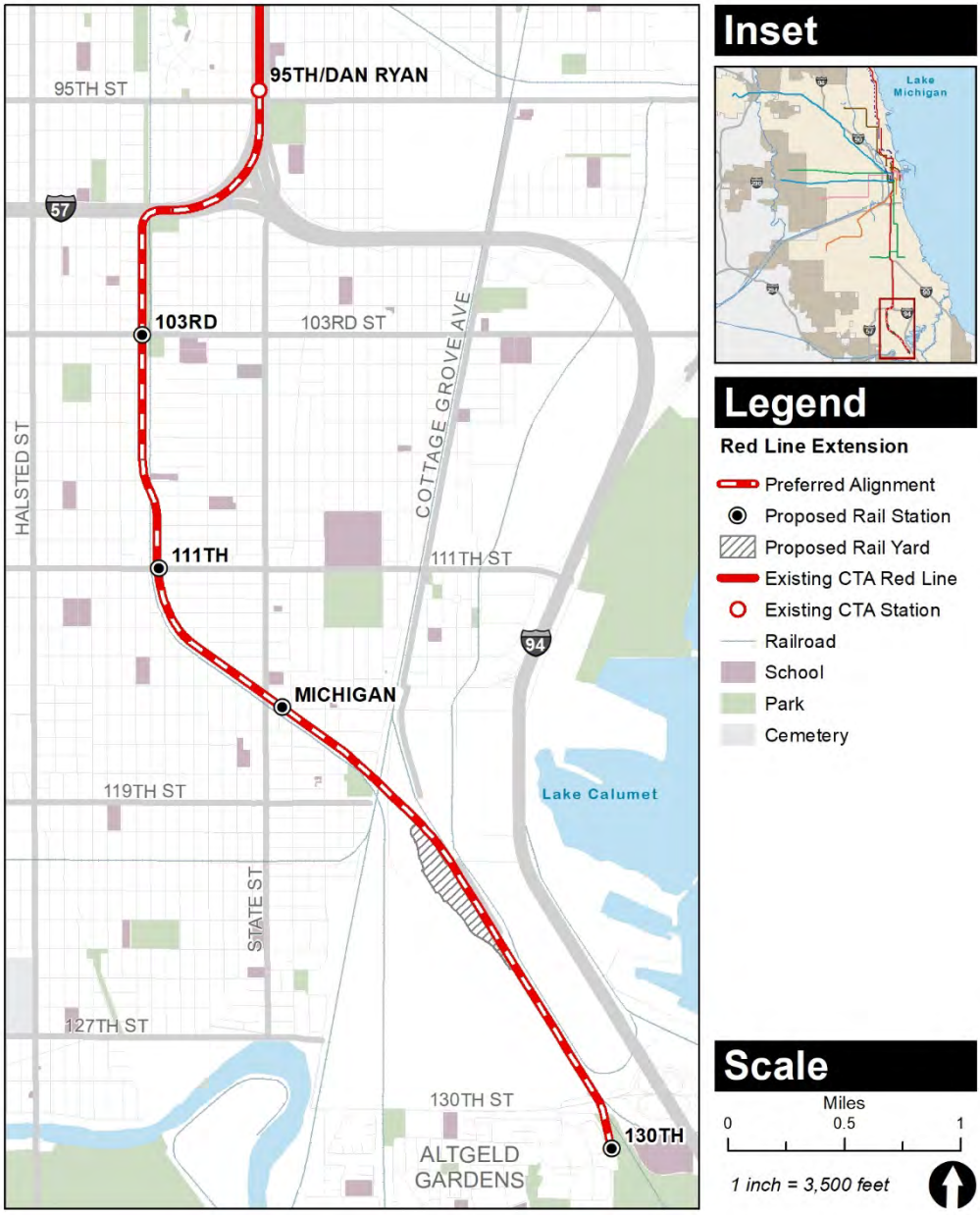

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

November 23, 2020

Dr. William Briggs
Chair
Red Line Extension Coalition
16049 Woodlawn East Avenue
South Holland, IL 60473

Re: Section 106 Consulting Party Invitation - Red Line Extension (RLE) Project

Dear Dr. Briggs:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), is completing an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) Project in Chicago, Illinois. The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility. A project map is attached for reference.

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As part of its responsibilities under 36 CFR § 800 – Protection of Historic Properties and the National Historic Preservation Act (NHPA), FTA and CTA are re-initiating the Section 106 consultation process as a result of changes to the project. The most notable change to be evaluated for effects on historical resources is the relocation of the 130th Street station from a location north of 130th Street to a location south of 130th Street, adjacent to Altgeld Gardens.

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. This process involves efforts to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. In accordance with 36 CFR § 800.2(c), you

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Thank you for your cooperation and interest in this project. If you have questions, please contact me by email at mfratinardo@transitchicago.com.

Sincerely,

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority

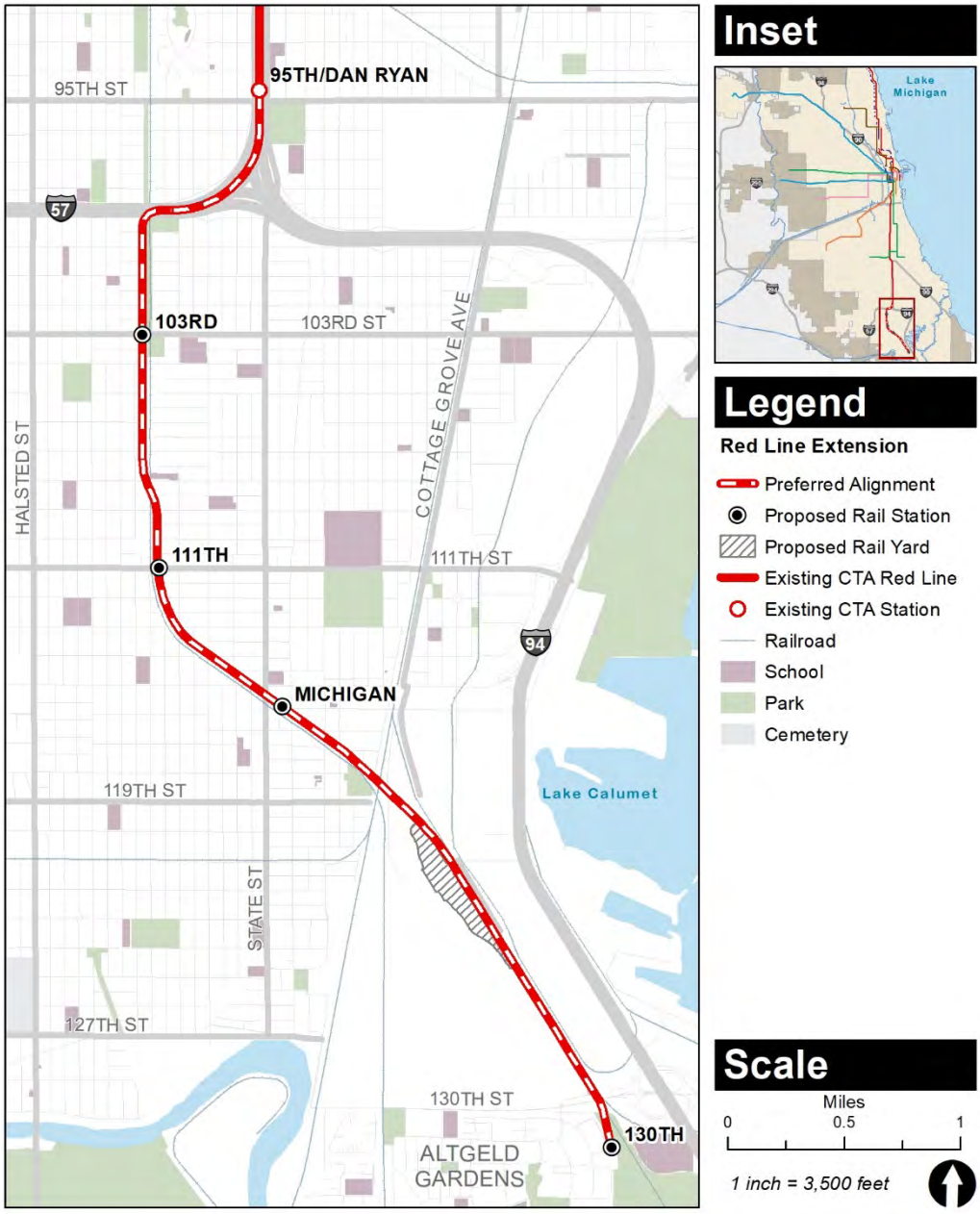

Figure 1: Preferred Alignment

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

November 23, 2020

Cheryl Johnson
Executive Director
People for Community Recovery
13330 S. Corliss Avenue
Chicago, IL 60827

Re: Section 106 Consulting Party Invitation - Red Line Extension (RLE) Project

Dear Ms. Johnson:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), is completing an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) Project in Chicago, Illinois. The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility. A project map is attached for reference.

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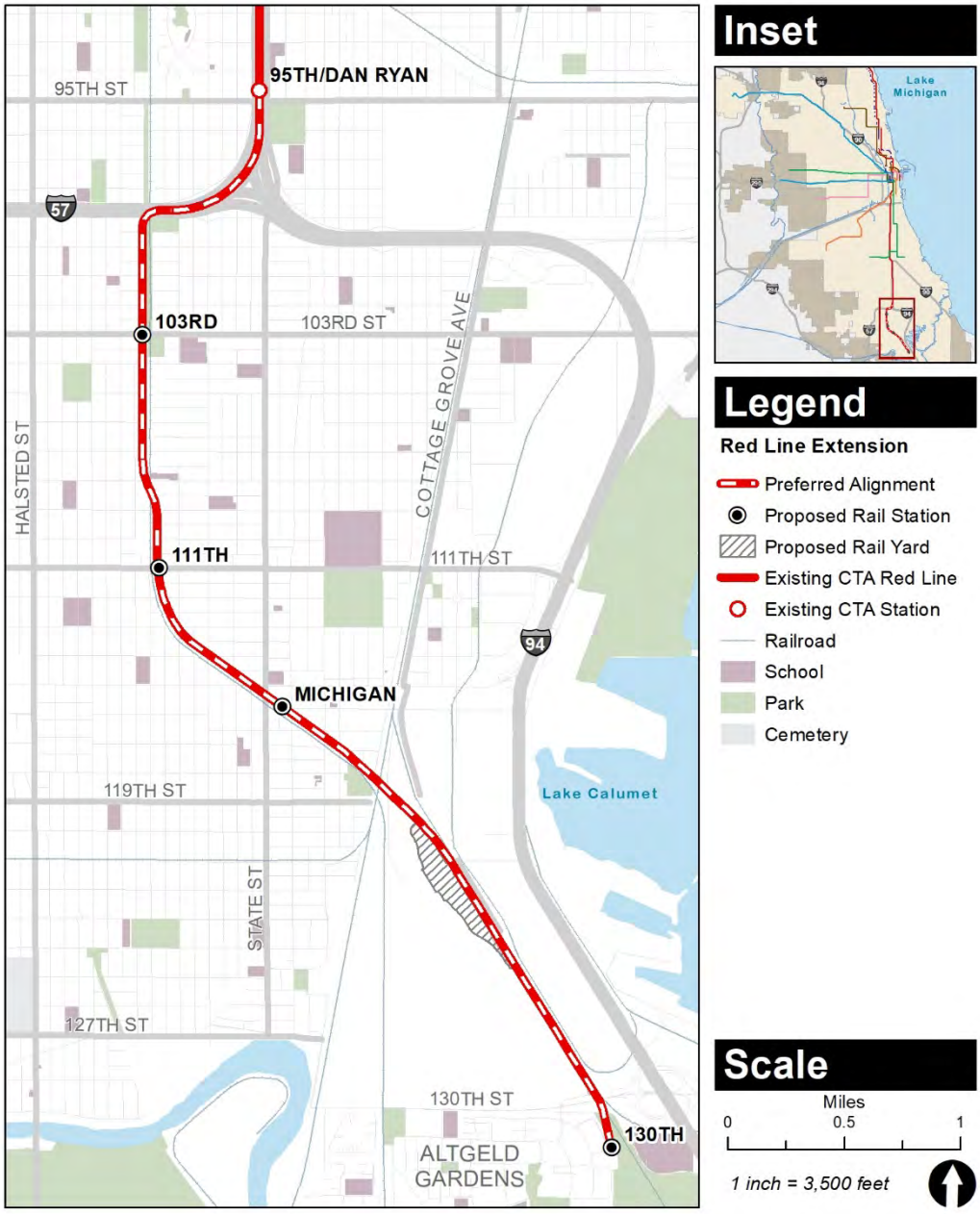

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CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

November 23, 2020

Rachel Smith Kovarsky
President
Pullman Civic Organization
11436 S. Forrestville Avenue
Chicago, IL 60628

Re: Section 106 Consulting Party Invitation - Red Line Extension (RLE) Project

Dear Ms. Kovarsky:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), is completing an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) Project in Chicago, Illinois. The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility. A project map is attached for reference.

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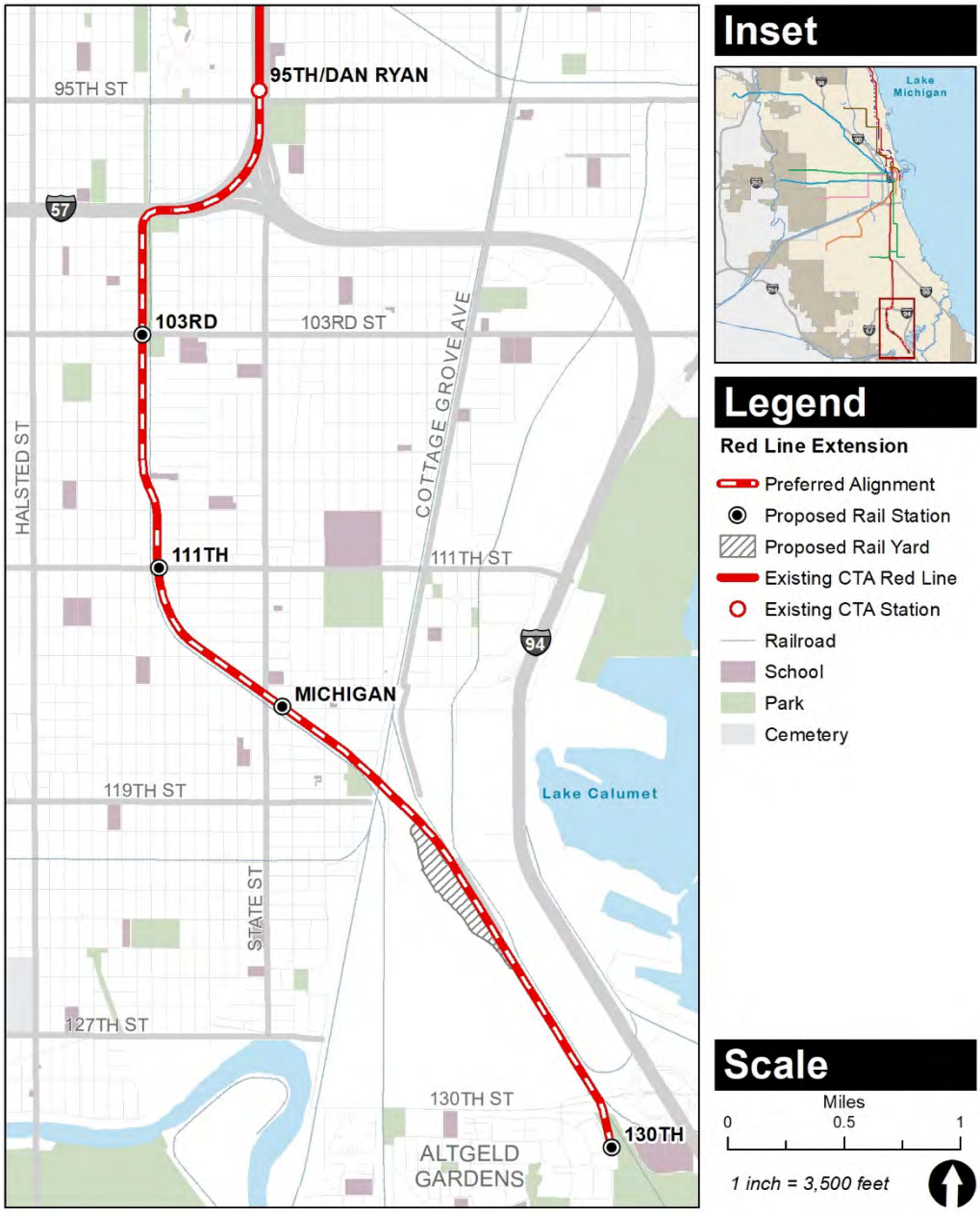

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CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

November 23, 2020

Ann McKenzie
Chief Development Officer
Chicago Housing Authority
60 E. Van Buren Street
Chicago, IL 60605

Re: Section 106 Consulting Party Invitation - Red Line Extension (RLE) Project

Dear Ms. McKenzie:

The Federal Transit Administration (FTA), in cooperation with the Chicago Transit Authority (CTA), is completing an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) Project in Chicago, Illinois. The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility. A project map is attached for reference.

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Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority

ecc: Tracy Sanchez (tsanchez@thecha.org)

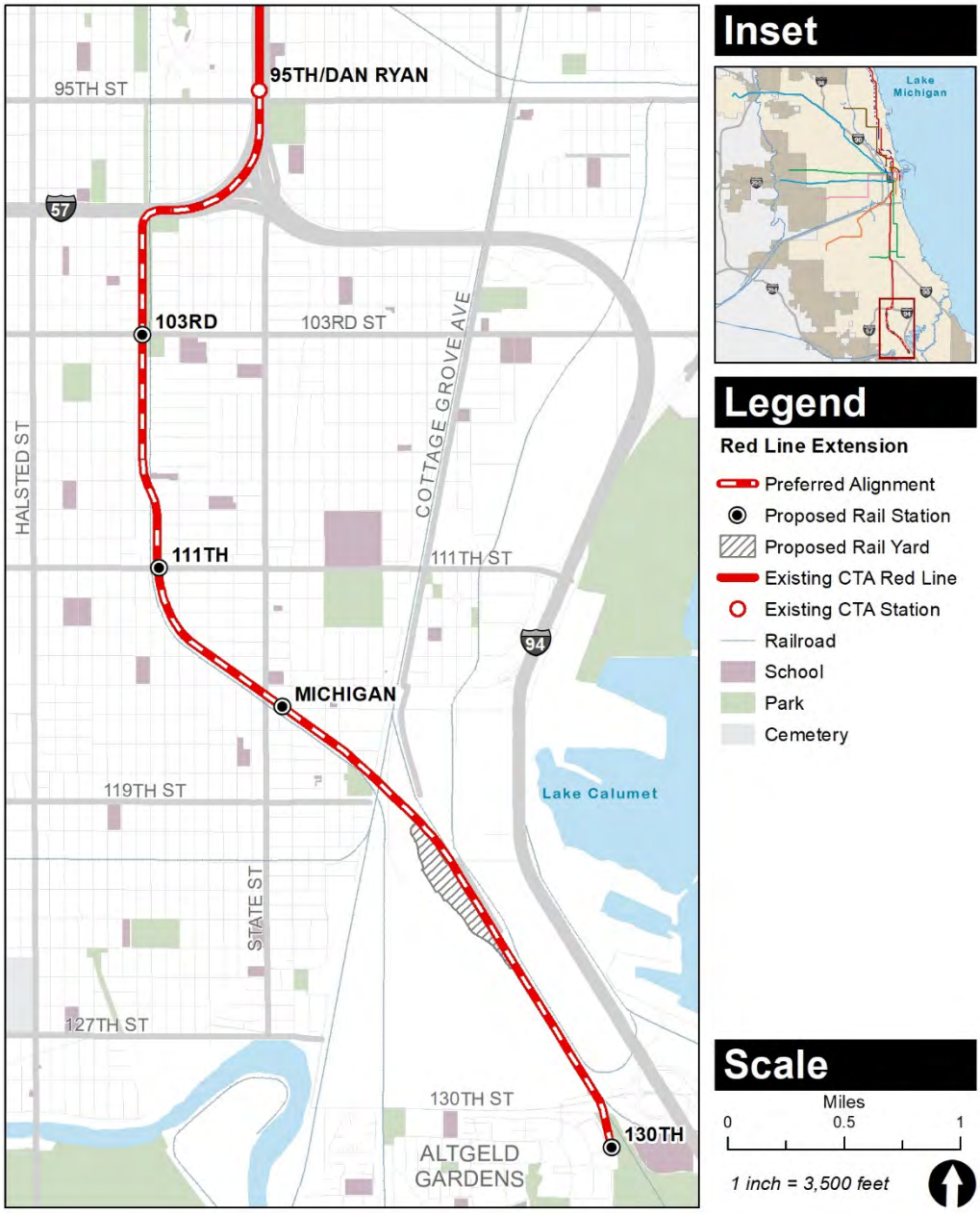

Figure 1: Preferred Alignment

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

November 23, 2020

Jamie Morriss
Site Director
By the Hand Club, Altgeld-Murray
13015 S. Ellis Avenue
Chicago, IL 60827

Re: Section 106 Consulting Party Invitation - Red Line Extension (RLE) Project

Dear Ms. Morriss:

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Senior Project Manager, Planning
Chicago Transit Authority

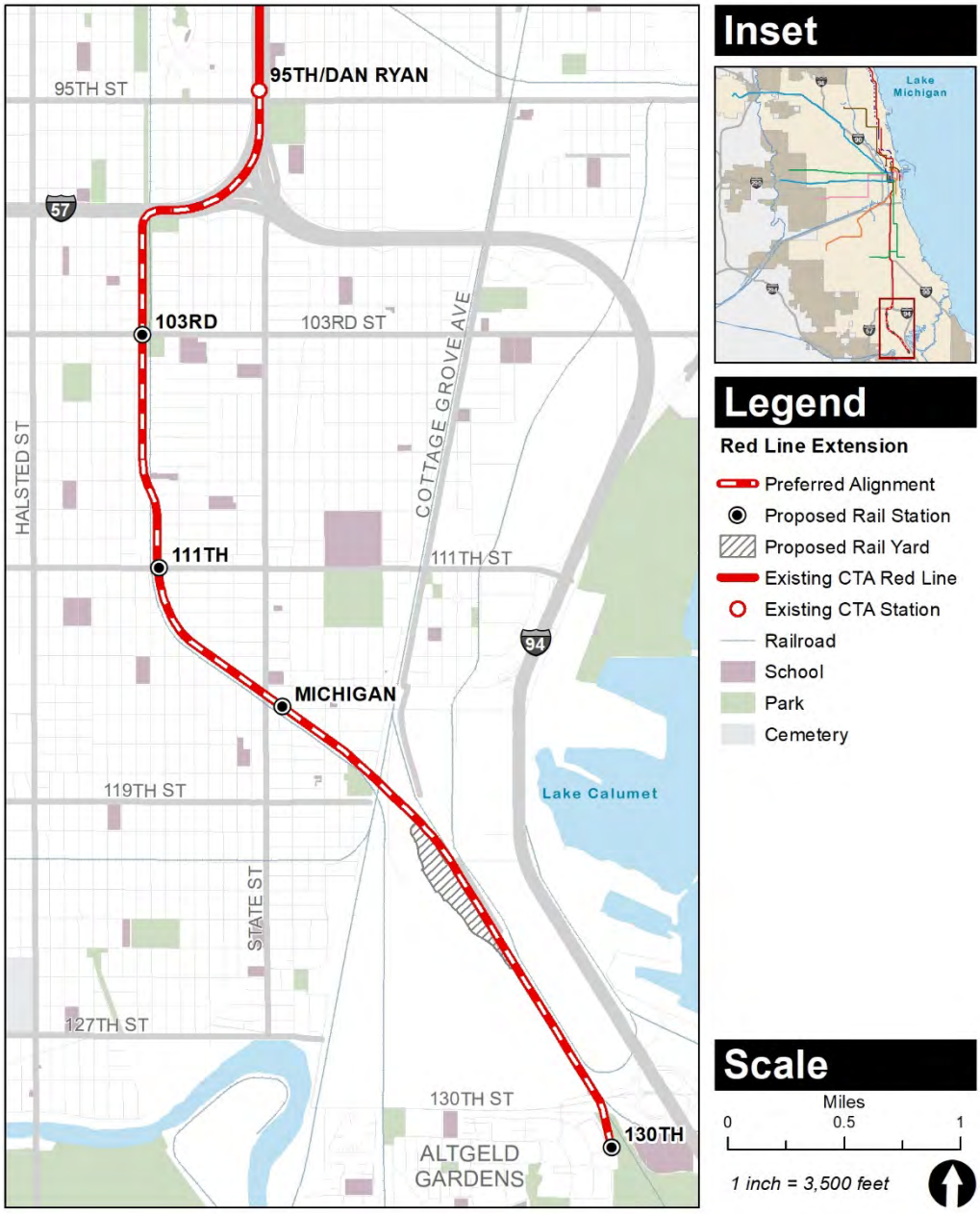

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CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

November 23, 2020

Arnold Randall
General Superintendent
Forest Preserves of Cook County
69 W. Washington Street, Suite 2060
Chicago, IL 60602

Re: Section 106 Consulting Party Invitation - Red Line Extension (RLE) Project

Dear Mr. Randall:

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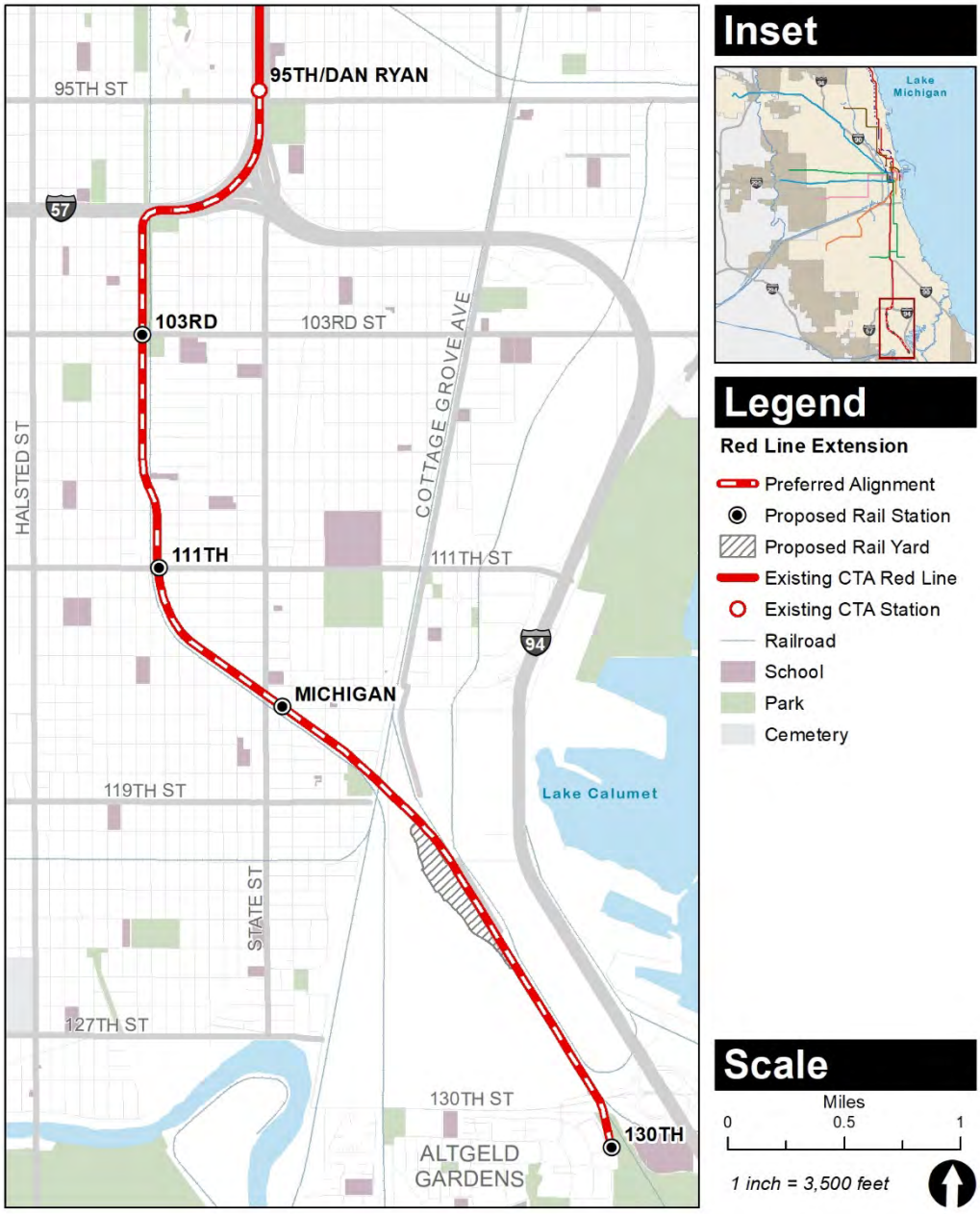

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CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
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November 23, 2020

Steven Rouse
Principal
Carver Military Academy
13100 S. Doty Avenue
Chicago, IL 60827

Re: Section 106 Consulting Party Invitation - Red Line Extension (RLE) Project

Dear Mr. Rouse:

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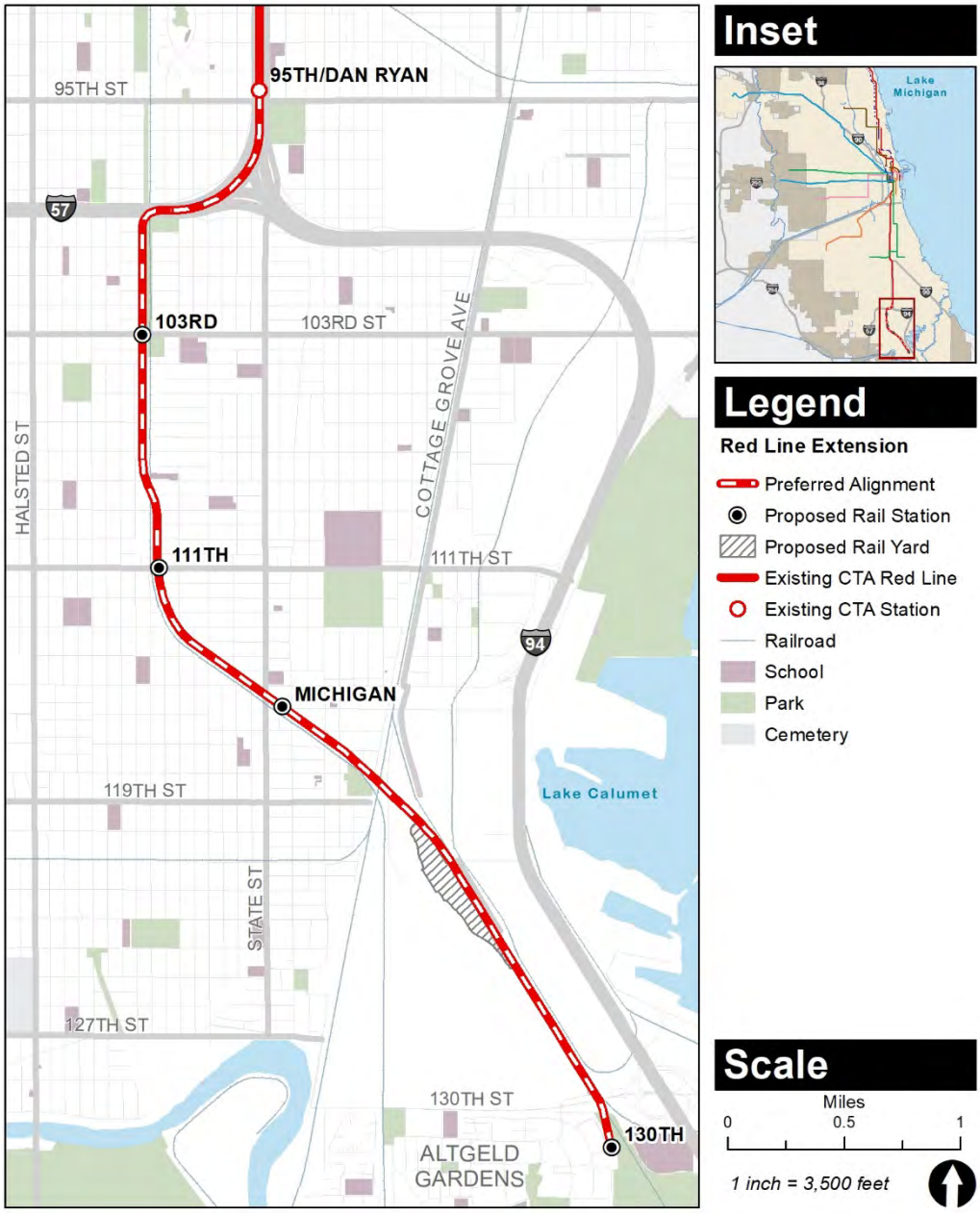

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CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
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November 23, 2020

Veronica Clarke
President and Chief Executive Officer
TCA Health
1029 East 130th Street
Chicago, IL 60628

Re: Section 106 Consulting Party Invitation - Red Line Extension (RLE) Project

Dear Ms. Clarke:

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Participation in this process is voluntary and open to anyone "with a demonstrated interest in the effect of the undertaking on properties listed on or eligible for listing on the National Register of Historic Places." This may include property owners, business owners, historic preservation groups, neighborhood associations, or others who are interested in historic resources and preservation. Additional information about the consultation process is available online at https://www.achp.gov/digital-library-section-106-landing/citizens-guide-section-106-review. The project website is available at https://www.transitchicago.com/redext/.

Please respond by email within 30 days of receipt of this letter indicating whether or not you would like to participate as a Section 106 consulting party. Please direct your response to Marlise Fratinardo at mfratinardo@transitchicago.com. If you indicate that you do not desire to be a Section 106 consulting party or if you do not reply within this time period, you will not be included on the further Section 106 coordination efforts for this project.

Thank you for your cooperation and interest in this project. If you have questions, please contact me by email at mfratinardo@transitchicago.com.

Sincerely,

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority

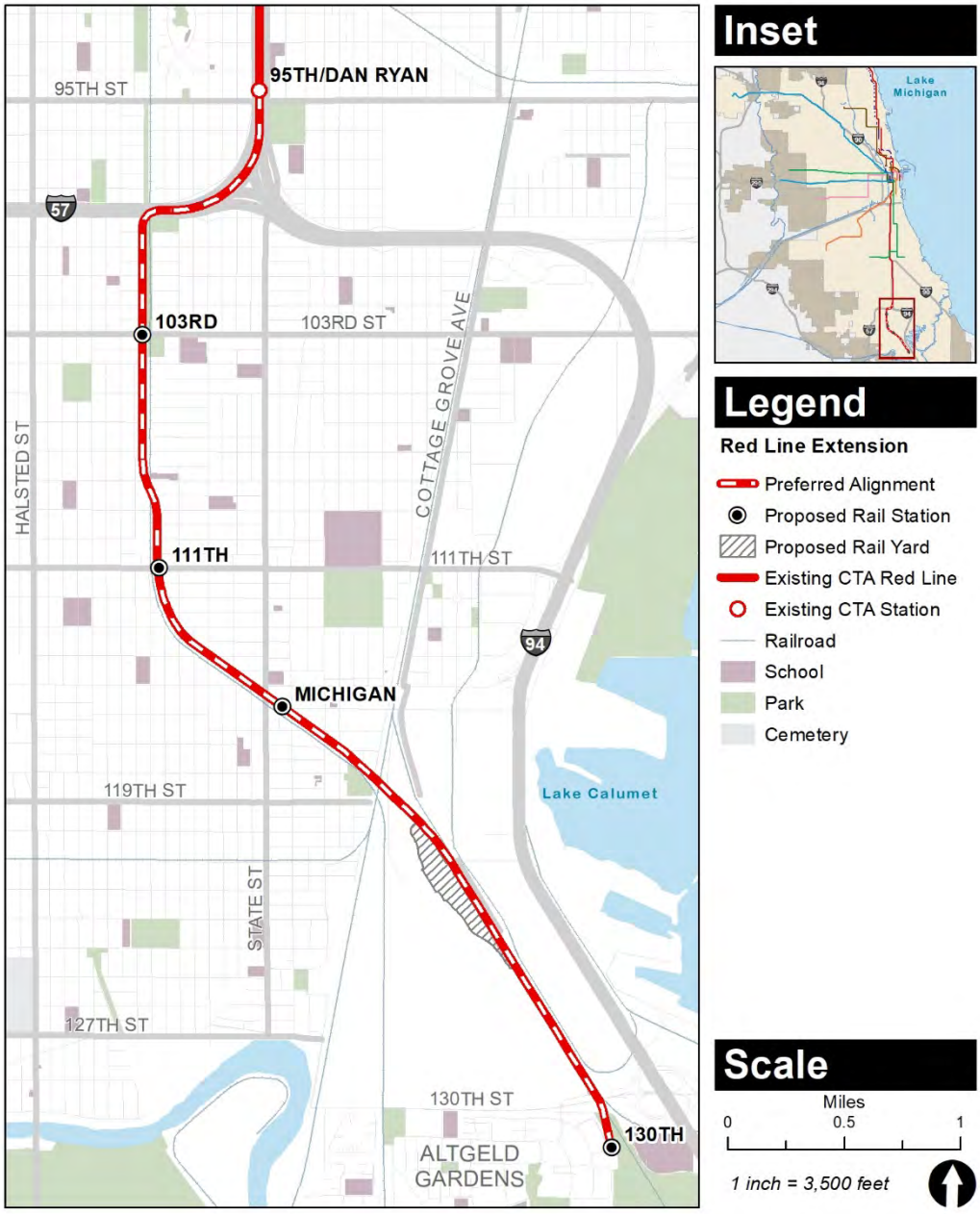

Figure 1: Preferred Alignment

Merchan Paniagua, Sara

From: Dunn, Patrick (CDM) <PDunn.cdm@transitchicago.com>
Sent: Thursday, May 20, 2021 12:03 PM
To: Grace Dysico
Cc: Littrell, Joanna (HNTB); Joseph Yesbeck; Carolyn Andrews; Meg Kindelin (mkindelin@jlkarch.com)
Subject: Section 106 NPS Consulting Party
Attachments: FW: CTA Red Line Extension Section 106 Consultation: Pullman National Monument; Revised Consulting Party List_Rev04_mxf.xlsx

Hi Grace,

I have an update for you and your Section 106 team regarding the National Park Service/Pullman National Monument and their joining as a consulting party. They have formally requested to join as a consulting party (see attached email). The attached consulting party list has been updated to include NPS Pullman.

Can you get a link (with a one-month long expiration) in order to provide this new consulting part all the prior documentation sent to the other consulting parties? These items would be: 1) final eligibility report; 2) first consulting party meeting minutes; 3) comment responses; and 4) copy of first consulting party meeting presentation. It would be PDFs of all these documents. You should have all of these, but let me know if you need me to provide anything to you or if you have any questions.

Thank you,

Patrick

Appendix Q

Historic and Cultural Resources Technical Memorandum

- Draft EIS Appendix Q, Historic and Cultural Resources Technical Memorandum, September 2015
  - Appendix A – Maps of Properties Surveyed
  - Appendix B – Inventory sheets for Properties Surveyed
  - Appendix C – Consultation and Correspondence
  - Appendix D – Displacement Maps
  - Appendix E – 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Historic and Cultural Resources

Technical Memorandum

April 27, 2015
Updated September 9, 2015

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
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cta

Table of Contents

Section 1 Summary 1-1
1.1 Purpose and Scope 1-1
1.2 Identification of Archaeological Resources 1-1
1.3 Identification of Architectural Resources 1-1
1.4 Project Effects 1-2
1.5 Mitigation Recommendations 1-3
1.6 2014-2015 Red Line Extension Project Update 1-3

Section 2 Project Description 2-1

Section 3 Methods for Effect Evaluation 3-1
3.1 Regulatory Framework 3-1
3.1.1 Federal 3-1
3.1.1.1 National Historic Preservation Act of 1966, as Amended 3-1
3.1.1.2 National Environmental Policy Act of 1969 3-2
3.1.1.3 Department of Transportation Act of 1966, as Amended 3-3
3.1.2 State - Illinois 3-3
3.1.3 Local 3-3
3.2 Effect Analysis Thresholds 3-3
3.3 Area of Potential Effects 3-4
3.4 Methods 3-5
3.4.1 Historic Context and Known Sites 3-5
3.4.2 Identification of Historic Resources 3-7
3.4.3 Effects from the Project 3-9
3.4.4 Consultation 3-9

Section 4 Archaeological Resources 4-1
4.1 Prehistoric Context 4-1
4.1.1 Natural Landscape 4-1
4.1.2 Paleoindian Period (10,000 to 8,000 B.C.) 4-2
4.1.3 Archaic Period (8,000 to 1,500 B.C.) 4-3
4.1.4 Woodland Period (1,500 B.C. to A.D. 1,000) 4-4
4.1.5 Mississippian Period (A.D. 1000 to A.D. 1600) and Proto-Historic Period (A.D. 1600-1673) 4-7
4.1.6 Historic Period (1673 to Present) 4-8

4.2 Archaeological Sites in Project Vicinity 4-9
4.3 Potential for Project Effects 4-10

Section 5 Identification of Architectural Resources 5-1
5.1 Washington Heights 5-1
5.1.1 Historic Context 5-1
5.1.2 Surveyed Resources 5-6
5.1.2.1 National Register of Historic Places-Eligible Resources 5-8
5.1.2.2 Properties Surveyed but Determined Ineligible 5-13
5.2 Roseland Community 5-13
5.2.1 Historic Context 5-13
5.2.2 Surveyed Resources 5-19
5.2.2.1 Resources Eligible for National Register of Historic Places 5-26
5.2.2.2 Properties Surveyed but Determined Ineligible 5-34
5.3 Morgan Park Community 5-34
5.3.1 Historic Context 5-34
5.3.2 Surveyed Resources 5-39
5.4 West Pullman Community 5-39
5.4.1 Historic Context 5-40
5.4.2 Surveyed Resources 5-46
5.4.2.1 Resources Eligible for National Register of Historic Places 5-51
5.4.2.2 Properties Surveyed but Determined Ineligible 5-56
5.5 Riverdale Community 5-56
5.5.1 Historic Context 5-56
5.5.2 Surveyed Resources 5-60
5.5.2.1 Resources Eligible for National Register of Historic Places 5-60
5.5.2.2 Properties Surveyed but Determined Ineligible 5-60
5.6 Village of Calumet Park 5-60
5.6.1 Historic Context 5-60
5.6.2 Surveyed Resources 5-63
5.6.2.1 Resources Eligible for National Register of Historic Places 5-64
5.6.2.2 Properties Surveyed but Determined Ineligible 5-65
5.7 Summary of CHRS Resources 5-66
5.8 Parks as Historic Resources 5-66

Section 6 Effects and Mitigations 6-1

6.1 No Build Alternative 6-3
6.2 Bus Rapid Transit Alternative 6-3
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-4
6.3.1 Segment UA 6-4
6.3.2 Segment UB 6-6
6.3.3 120th Street Yard and Shop 6-7
6.4 Union Pacific Railroad Rail Alternative - East Option 6-7
6.4.1 Segment UA 6-7
6.4.2 Segment UB 6-7
6.4.3 120th Street Yard and Shop 6-7
6.5 Union Pacific Railroad Rail Alternative - West Option 6-7
6.5.1 Segment UA 6-8
6.5.2 Segment UB 6-8
6.5.3 120th Street Yard and Shop 6-8
6.6 Halsted Rail Alternative 6-8
6.6.1 Rail Corridor 6-8
6.6.2 119th Street Yard and Shop 6-11

Section 7 Effects Remaining After Mitigation 7-1

Section 8 Section 106 Consultation Process 8-1
8.1 Initiation Activities 8-1
8.1.1 Invitations to Participate 8-1
8.1.2 Section 106 Kickoff Webinar 8-1
8.2 Identification of Historic Properties 8-2
8.3 Assessment of Effects 8-2
8.4 Resolution of Adverse Effects 8-2

Section 9 References Cited 9-1

Appendices

Appendix A – Maps of Properties Surveyed
Appendix B – Inventory Sheets for Properties Surveyed
Appendix C – Consultation and Correspondence
Appendix D – Displacement Maps
Appendix E - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: RLE Project Alternatives 2-2
Figure 3-1: Area of Potential Effects and the Red Line Extension Alternatives 3-6
Figure 5-1: Community Areas and Red Line Extension Alternatives 5-2
Figure 5-2: Proposed Boundary for Green Street Historic District and Red Line Extension Area of Potential Effects 5-10
Figure 5-3: South Facade of the Eclectic Neo-Traditional Home at 444 W. 100th Place 5-11
Figure 5-4: West Facade of the Classical Revival Substation at 10227 S. Halsted Street 5-12
Figure 5-5: South Facade of Chicago Fire Department Engine Company 93 5-28
Figure 5-6: North Facade of the City of Chicago Roseland Pumping Station 5-29
Figure 5-7: North and East Facades of the French Eclectic Home at 11310 S. Emerald Avenue 5-30
Figure 5-8: East and North Facades of Church at 10920 S. Princeton Avenue 5-31
Figure 5-9: Front Facade (left) and East Wing (right) of 3 W. 111th Place 5-32
Figure 5-10: Front Facade of Nurses Home at 11321 S. Wentworth Avenue 5-33
Figure 5-11: South Facade of Galloy & Van Etten Industrial Building 5-52
Figure 5-12: East Facade of Fire Department Engine Company 115 at 931 W. 120th Street 5-53
Figure 5-13: South Facade of S.S. Peter & Paul Catholic Church at 12433-12439 S. Halsted Street 5-54
Figure 5-14: Front Facade of Venetian Hall 5-55
Figure 5-15: Cedar Park Cemetery Gatehouse 5-65
Figure 5-16: Surveyed Parks within the Area of Potential Effects 5-67
Figure 6-1: NRHP Eligible Sites within the Area of Potential Effects 6-2

Tables

Table 4-1: Archaeological Sites in the Red Line Extension Project Vicinity 4-9
Table 5-1: 69 Surveyed Properties in Washington Heights 5-7
Table 5-2: 279 Surveyed Properties in Roseland 5-19
Table 5-3: 13 Surveyed Properties in Morgan Park 5-39
Table 5-4: 172 Surveyed Properties in West Pullman 5-46
Table 5-5: Seven Surveyed Properties in Calumet Park 5-64
Table 5-6: Chicago Historic Resources Survey Red/Orange Properties in the Area of Potential Effects 5-66
Table 5-7: Eight Surveyed Parks in the Area of Potential Effects 5-68
Table 6-1: Effects Findings (BRT Alternative) 6-3
Table 6-2: Effects Findings (UPRR Rail Alternative – ROW Option) 6-4
Table 6-3: Effects Findings (Halsted Rail Alternative) 6-9
Table 7-1: Effects Findings 7-1

Abbreviations

APE	area of potential effect
BRT	bus rapid transit
CHA	Chicago Housing Authority
CHRS	Chicago Historic Resources Survey
CFR	Code of Federal Regulations
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
GIS	geographic information system
HARGIS	Historic Architectural Resources Geographic Information System
HUD	Department of Housing and Urban Development
MARS	Midwest Archaeological Research Services
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
RLE	Red Line Extension
ROW	right-of-way
SHPO	State Historic Preservation Office
THPO	Tribal Historic Preservation Office
TIF	tax increment financing
UPRR	Union Pacific Railroad
USC	United States Code

Section 1
Summary

1.1 Purpose and Scope

Archeological and historic specialists on the CWC Transit Group team (Midwest Archaeological Research Services, Inc. [MARS, Inc.], independent consultant Jean Guarino, and CDM Smith) conducted a cultural resources overview analysis of archaeological sites and aboveground historic structures that may be affected by the Chicago Transit Authority's (CTA's) proposed Red Line Extension (RLE) Project. These specialists compiled the available records and datasets, conducted fieldwork, and prepared this technical memorandum, which is the historic and cultural resources analysis that will be presented in the Draft Environmental Impact Statement (Draft EIS).

This report follows the general outline of the analysis steps required by the National Historic Preservation Act (NHPA): the identification of historic resources, an assessment of effects of the project on historic resources, and the resolution of adverse effects through avoidance, minimization, and/or mitigation efforts. Additional sections describe the area of potential effects (APE), provide an overview of archaeological investigations, and describe the consultation process pursuant to Section 106 of the NHPA. Information about historic resources and project effects that is developed as part of the Section 106 process will be included in the EIS, satisfying the National Environmental Policy Act (NEPA) requirement that the effects of federal actions on the environment be considered.

The project area is in the City of Chicago and the Village of Calumet Park in Cook County, Illinois. The RLE Project would extend the Red Line from the 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. Four alternatives are being considered: the No Build Alternative, the Bus Rapid Transit (BRT) Alternative, the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative. Analysis presented in this document is confined to the APE, the geographic area where a project may directly or indirectly change the character or use of historic properties.

1.2 Identification of Archaeological Resources

Cultural resource specialists conducted a records search to identify archaeological sites within the vicinity of the project area. Eight prehistoric Native American sites have been recorded within 0.6 mile of the project area. All eight fall outside of the RLE APE. The undertaking will produce no effect on these known resources. Additional archaeological sites may remain undiscovered within the RLE Project footprint; within areas of ground disturbance for the preferred alternative, archaeological investigations would occur prior to construction.

1.3 Identification of Architectural Resources

The cultural resource specialists evaluated 541 properties within the APE and determined that 15 historic resources are eligible for inclusion on the National Register of Historic Places (NRHP).

This includes 13 individual buildings plus two historic districts. No previously listed NRHP properties or districts lie within the APE.

The following resources were identified as NRHP eligible. Maps in Appendix A show the locations of these resources in relation to the alternatives considered:

- 1930 Eclectic Neo-Traditional Home at 444 W. 100th Place (Washington Heights)
- 1920 Classical Revival Substation at 10227 S. Halsted Street (Washington Heights)
- Green Street Historic District (Washington Heights/Morgan Park)
- 1917 Chicago Fire Department Engine Co. 93 at 324 W. 104th Street (Roseland)
- 1911 Roseland Pumping Station at 351 W. 104th Street (Roseland)
- 1928 French Eclectic Home at 11310 S. Emerald Avenue (Roseland)
- 1916 Romanesque Revival Church at 10920 S. Princeton Avenue (Roseland)
- 1934 Bethany Reformed Church Manse at 3 W. 111th Place (Roseland)
- 1930s Roseland Community Hospital Nurses Home at 11321 S. Wentworth Avenue (Roseland)
- 1931 Galloy & Van Etten Stone Contractors at 11756 S. Halsted Avenue (West Pullman)
- 1897–1911 Fire Department Engine Co. 115 at 931 W. 120th Street (West Pullman)
- 1958 S.S. Peter & Paul Catholic Church at 12433–12439 S. Halsted Street (West Pullman)
- 1925 former Venetian Hall at 133–139 E. Kensington Avenue (West Pullman)
- 1923 Romanesque Revival Gatehouse and Entryway to Cedar Park Cemetery at 12540 S. Halsted Street (Calumet Park)
- Altgeld Gardens Housing Project (Riverdale)

1.4 Project Effects

Neither the BRT nor the UPRR Rail Alternative would result in adverse effects on historic resources; however, the Halsted Rail Alternative would result in adverse effects on four historic resources: the Classical Revival substation at 10227 S. Halsted Street, the church at 12433–12439 S. Halsted Street, the fire station at 931 W. 120th Street, and the Cedar Park Cemetery gatehouse and entryway at 12540 S. Halsted Street. Although none of these structures would be physically demolished, the scale and proximity of the construction are anticipated to have an adverse effect on the characteristics that qualify each resource as eligible for NRHP listing.

1.5 Mitigation Recommendations

Due to the scale and proximity of construction for the Halsted Rail Alternative, it is unlikely that the anticipated adverse effects on these resources could be resolved; however, consultation with the State Historic Preservation Office (SHPO) and other interested parties may identify measures to mitigate effects. These measures may include but would not be limited to structural documentation, interpretative signage, further study to identify noise mitigation options for the church, or special provisions regarding construction in the vicinity.

1.6 2014–2015 Red Line Extension Project Update

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix E of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix E supersedes information presented in other chapters of this technical memorandum. (Updated July 29, 2015)

Section 2
Project Description

The CTA is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single-family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft EIS focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the NEPA scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - Right-of-Way (ROW) Option
  - East Option
  - West Option
- Halsted Rail Alternative

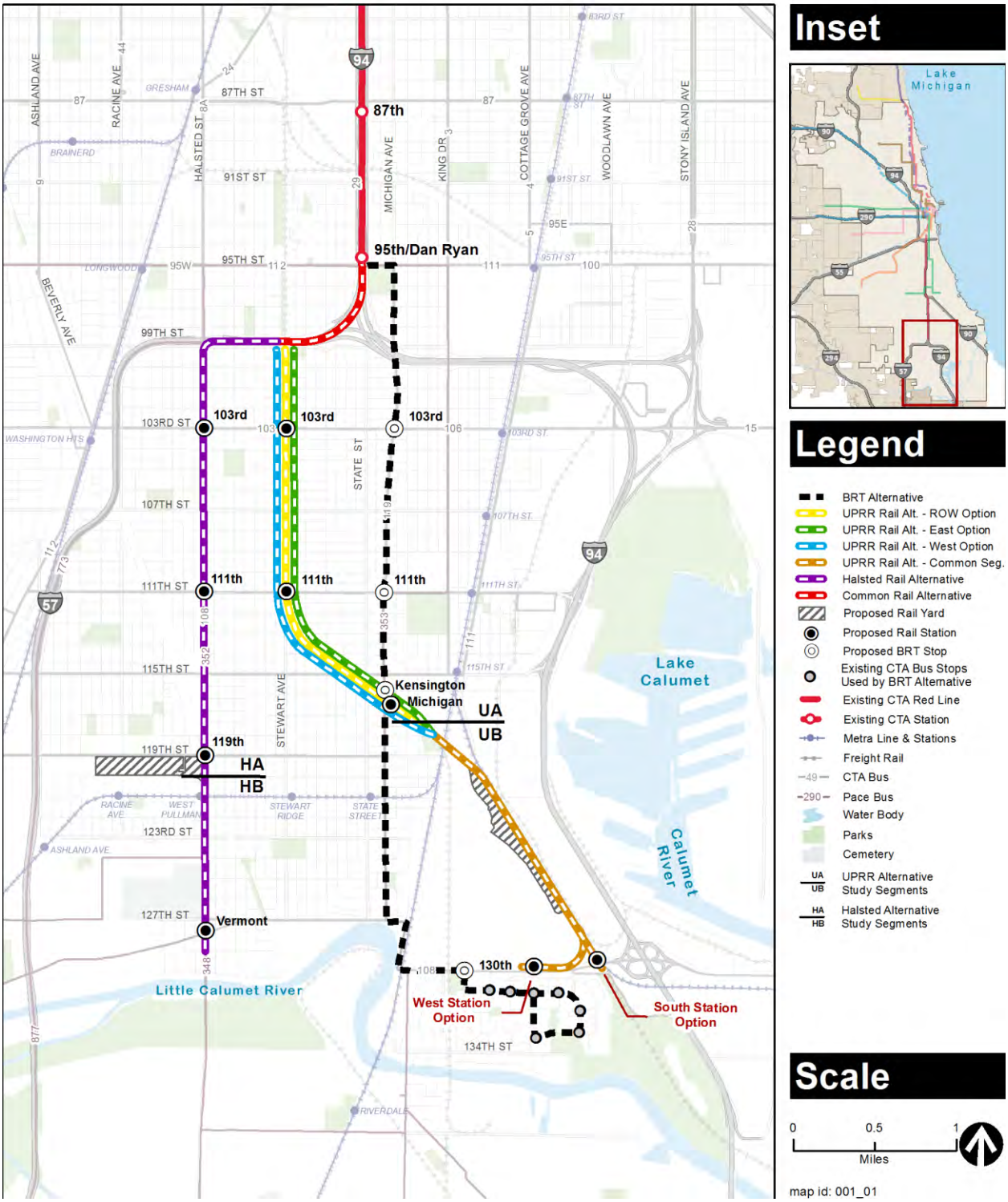

Figure 2-1: RLE Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning Fiscal Year 2010–2015 Transportation Improvement Program, including the improvements to 95th Street Terminal. The Transportation Improvement Program projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day along Michigan Avenue between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative due to the limited existing lane capacity along the alignment; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens public housing project along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours

of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 to Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line at the 95th Street Terminal. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to the Altgeld Gardens public housing project, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Effect Evaluation

3.1 Regulatory Framework

This section discusses the applicable federal and state regulations that define archaeological resources and historic properties and provide thresholds for determining effects on the archaeological resources and historic properties.

3.1.1 Federal

Among the federal laws and regulations that address the protection of archaeological resources and historic properties are the NHPA, NEPA, and the Department of Transportation Act of 1966. These laws and regulations resulted from the recognition that historic resources provide valuable opportunities to study human behavior and to plan for the future while conserving and protecting these resources and environments.

Methods employed during the archaeological and architectural investigations associated with the RLE Project were conducted in accordance with the applicable federal laws and regulations as well as with the Secretary of the Interior's *Standards and Guidelines*.

3.1.1.1 National Historic Preservation Act of 1966, as Amended

Undertakings permitted, licensed, approved, or funded, in whole or in part, by a federal agency are required to comply with Section 106 of the NHPA (Public Law 89-665; 16 United States Code [USC] 470 et seq.). The NHPA set up a national framework for historic preservation, requiring the federal government to establish a national system for identifying, evaluating, protecting, and rehabilitating historic places. The act appropriated funds to conduct surveys and planning in each state (Section 101), called for the establishment of the NRHP (Section 101), requires federal agencies to consider archaeological resources and historic properties when undertakings are planned (Section 106), and established the Advisory Council on Historic Preservation (Section 201).

The Section 106 consultation process covers four distinct coordination points that apply to specific projects:

1. Initiation of the process, in which consulting parties (including the SHPO and appropriate Tribal Historic Preservation Offices [THPOs]) are invited to participate in the process

2. Identification of historic properties, in which the APE is established and a reasonable and good faith effort is undertaken to identify historic properties within the APE and evaluate their significance

3. Assessment of adverse effects, in which effects from the project are examined to determine whether they may alter the integrity of historic properties

4. Resolution of adverse effects, in which the SHPO, THPO, and other parties consult to develop measures to avoid, minimize, or mitigate adverse effects on historic resources

To guide the selection of properties included in the NRHP, the National Park Service developed Criteria for Evaluation (36 Code of Federal Regulations [CFR] 60.4). The quality of significance in American history, architecture, archaeology, engineering, or culture may be present in districts, sites, buildings, structures, or objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association with one or more of the following criteria:

A. Events that have made a significant contribution to the broad patterns of American history on a local, state, and/or national level

B. Lives of persons significant in the history of the city, state, and/or the United States

C. Distinctive characteristics of a type, period, or method of construction, or the work of a master, or high artistic values, or a significant and distinguishable entity whose components may lack individual distinction

D. Information important in prehistory or history

Subpart B of the regulations for the NHPA (36 CFR 800.5) defines the assessment of adverse effects on archaeological resources and historic properties: "an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association…Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative" (36 CFR 800.5.a.1). A finding of "no adverse effect" can be made when the undertaking's effects would not meet this Criteria of Adverse Effect or when the undertaking would be modified to avoid adverse effects (36 CFR 800.5.b).

An analysis of archaeological and historic resources undertaken for the RLE Project is documented in this technical memorandum and will be summarized in the EIS. This analysis satisfies the requirements of NEPA.

3.1.1.2 National Environmental Policy Act of 1969

NEPA (Public Law 91-190; 42 USC 4321-4347) requires federal agencies to evaluate the significance of potential direct and indirect effects on the environment, including effects on archaeological resources and historic properties. Information about historic resources and project effects that is developed as part of the Section 106 process will be included in the EIS, satisfying the requirements of NEPA.

3.1.1.3 Department of Transportation Act of 1966, as Amended

Section 4(f), a special provision of the Department of Transportation Act (Public Law 109-59; 49 USC 303, 23 USC 138; 23 CFR 774), provides substantive protection for archaeological resources and historic properties relating to undertakings on publicly owned land involving the U.S. Department of Transportation agencies. The act establishes a policy that mandates initiation of a special effort to preserve parks, wildlife refuges, and historic sites; consideration of feasible and prudent alternatives; and the implementation of measures to minimize harm. Adversely affected historic properties that would be subject to direct effects have been analyzed in accordance with the requirements of Section 4(f); this analysis is contained in a separate technical memorandum.

3.1.2 State – Illinois

Pertinent state laws, regulations, and guidelines relating to the proposed undertaking include the Human Skeletal Remains Protection Act of 1989 and the Illinois Archaeological and Paleontological Resources Act of 1989. The Illinois State Museum maintains site files for archaeological sites, which are available online to qualified researchers.

Methods employed during the archaeological and architectural investigations associated with the RLE Project were conducted in accordance with the applicable state laws and regulations as well as with the memorandum *Protecting Illinois Cultural Resources: An Introduction to Archaeological Surveys Cultural Resources Guidelines* and the *Survey and Reporting Requirements Addendum* (Illinois Historic Preservation Agency 2010).

3.1.3 Local

The City of Chicago has local historic preservation ordinances, commissions, and designated landmarks. Available data from the city was used to help identify previously listed historic properties. In addition, local government representatives and other local preservation groups were invited to participate in the Section 106 consultation process.

The 2003 Demolition Delay Ordinance establishes a 90-day hold period prior to demolition of historic buildings rated Red or Orange in the Chicago Historic Resources Survey (CHRS), a citywide historic survey completed from 1983 to 1995. These designations represent potentially significant resources at the city or community level, respectively. Although these resources are evaluated independent of the evaluation of NRHP eligibility, they are discussed in this technical memorandum as well.

3.2 Effect Analysis Thresholds

The NHPA establishes qualitative criteria that define whether a historic property would be subject to an adverse effect: when a project “may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association” (36 CFR 800.5.a). Based on this regulatory framework, an adverse effect finding will be applied to any historic property that would be subject to one or more of the following (36 CFR 800.5.a.2):

- Physical destruction or damage to all or part of the archaeological resource or historic property
- Alteration that is inconsistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*
- Removal of the property from its historic location
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant features
- Change to the character of the property's use or the physical features within the property's setting that contribute to its significance
- Neglect of a property that causes deterioration
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation

If an adverse effect is found, the Federal Transit Administration (FTA) would consult with the Illinois Historic Preservation Agency (the SHPO for Illinois) and other interested parties to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on the resource (36 CFR 800.6.a).

3.3 Area of Potential Effects

In the context of Section 106, the APE is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16.d). The APE for the RLE Project was delineated after considering the location of the proposed alternatives; the potential for ground disturbance, destruction, or property taking; locations from which the undertaking may be visible and/or audible; and the scale and setting of the project. The APE was developed in consultation with CTA, FTA, and the SHPO.

Cultural resource specialists developed the APE boundaries after conducting site visits and reviewing the aerial maps and engineering details (such as alignment locations, elevation of the proposed rail line, expected ROW limits, and the locations of the yards, stations, and parking facilities) for the various alternatives.

Generally, the APE contains those parcels that are within one block of the centerlines for the UPRR Rail and Halsted Rail Alternatives. The APE widens to accommodate the locations of each park & ride and yard and shop beyond the one-block boundary. The APE for the BRT Alternative includes the area immediately surrounding park & ride facilities. Figure 3-1 shows the APE for each alternative corridor.

While the necessary archaeological investigations will occur within the APE, they will be limited only to areas of ground disturbance for the preferred alternative.

3.4 Methods

The Section 106 consultation process includes four distinct coordination points: initiation, identification of properties, assessment of effects, and mitigation of adverse effects. The following subsections summarize how technical analyses will be undertaken to facilitate these four consultation points.

For the RLE Project, "representative sampling" was pursued for the identification of aboveground historic resources. Because of the developed urban environment and linear nature of the project, effects on properties would be similar for adjacent properties. This method is consistent with November 2011 guidance provided by the Advisory Council on Historic Preservation regarding the "Reasonable and Good Faith Identification Standard in Section 106 Review."

3.4.1 Historic Context and Known Sites

Background research was conducted to describe the historic context for the project area. Understanding the historic context is essential in establishing the significance of individual properties, and by extension, NRHP eligibility for the built environment and any archaeological resources. In addition to reviewing the Historic Architectural Resources Geographic Information System (HARGIS) and city records, the following resources were consulted in developing the historic context:

- Sanborn Fire Insurance maps and other historic maps
- Chicago's citywide GIS database
- CHRS
- Previous architectural studies in the area
- Other relevant scholarly publications

Using information in HARGIS and the other sources listed above, a list of previously identified historic properties within the RLE APE was compiled and mapped. This effort included the identification of known archaeological sites, NRHP-listed districts and structures, and any properties identified as local landmarks in Chicago.

The delineation of the APE is described in **Section 3.3**. Historic contexts are presented for archaeological resources in **Section 4** and for individual communities in **Section 5**.

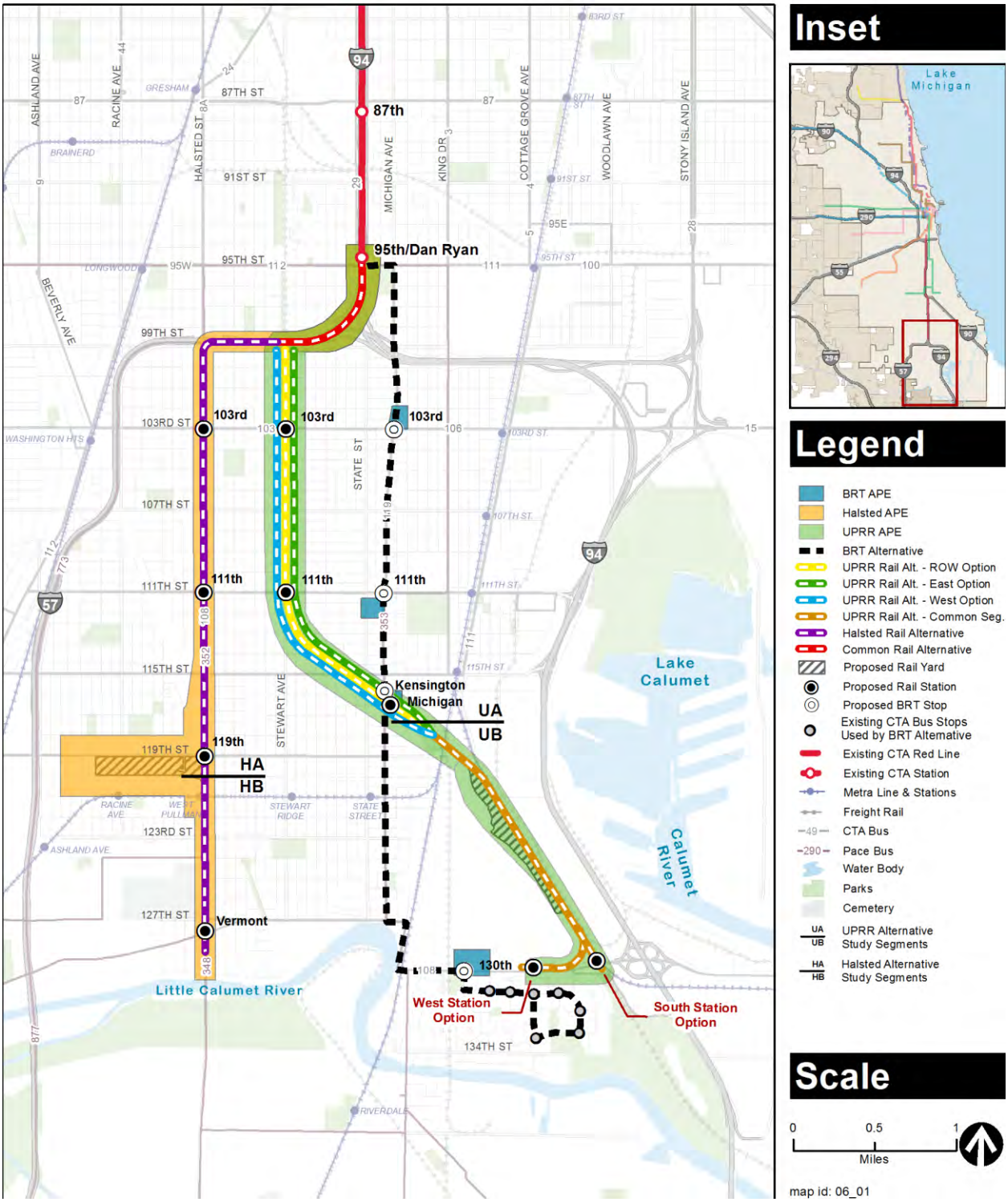

Figure 3-1: Area of Potential Effects and the Red Line Extension Alternatives

3.4.2 Identification of Historic Resources

Following the development of the APE and historic contexts, cultural resources specialists conducted field surveys on two distinct categories of properties: properties that would likely be displaced or demolished as a result of one or more alternatives, and a representative sample of other properties within the APE. The following subsection identifies how the representative sample in the latter category was identified.

For both categories of properties that were surveyed, cultural resource specialists conducted archival research and photo-documented the exterior of each structure from the public ROW. Each property was assessed for NRHP eligibility using the data gathered during the fieldwork and research phases of the investigation. Results of this analysis are described by community in **Section 5**.

Defining the Representative Sample

To determine the properties to be included in the representative sample, the team's architectural historian relied on the GIS database provided by the City of Chicago, the HARGIS database, online mapping resources, SHPO records, and field reconnaissance. Examining the APE block by block, the historic character of each block was considered, including the following:

- What age are the buildings?
- What types of buildings are present?
- What function(s) do they serve?
- What architectural styles are apparent?
- How does the structure fit the context of the larger neighborhood?

In light of the neighborhood and block level contexts, analysts selected one or more properties per block to represent the range of buildings over 50 years in age throughout the area. In areas where the project would likely cause more substantial effects, a greater concentration of sample properties was selected. More sample properties were selected for heterogeneous blocks (e.g., blocks having a mix of property types and ages) than homogenous blocks. Where multiple similar buildings exist within the block, analysts selected the building with the greatest integrity or most distinguishing architectural features.

For example, block A contains only residential buildings, both Craftsman style bungalows and Minimal Traditional brick homes. Structures date to the 1920s and 1930s. The project would cause moderate effects on the adjacent block, but block A would be screened from the transit line by an existing row of buildings. Analysts therefore selected one bungalow and one Minimal Traditional house from this block. Alternatively, Block B contains a mix of residential and commercial properties, dating from 1902 through the 1950s, plus some modern infill. A mix of architectural

styles is present. In this case, analysts selected five structures on this block to represent the cross-section of existing structures.

This process was repeated along the entire APE corridor.

Available Resources for Architectural Research

Architectural datasets for Cook County that were consulted for the RLE Project included the following:

- The **HARGIS database** was created by the Illinois Historic Preservation Agency in 2003 to manage information about Illinois historic properties; this database documents the state's built environment. The HARGIS database includes data gathered as a result of three statewide survey projects: the Illinois Historic Structures Survey, the Illinois Historic Landmarks Survey, and the Illinois Rural Survey (conducted 1970–1987). The HARGIS database also includes properties identified as part of a NRHP nomination, surveys by local preservation groups, and information from the Illinois Department of Transportation's Bridge Survey. The database includes data forms, photographs, background documentation, and spatial information within a geographical context for each historic property and historic district within the dataset.

- The **CHRS** is an inventory of buildings that was compiled during 1983–1995. The Chicago Department of Housing and Economic Development published its findings in a report titled *Chicago Historic Resources Survey: An Inventory of Architecturally and Historically Significant Structures* in 1996. Organized according to Chicago's 77 neighborhoods, the inventory lists over 17,000 architecturally and historically significant buildings and structures that predate 1940. The information is also available online and is searchable by neighborhood, building address, decade of construction, architect's name, building style and type, survey ranking, and landmark status.

- **Sanborn Fire Insurance maps** contain a wealth of information on the built environment in urban areas. Originally created and maintained to assess fire insurance liability, the maps provide dated contexts in which to describe the development of neighborhoods as well as the compositional components and historical use of individual buildings. Data especially useful for this project include the building footprint, number of stories, foundation material, and cladding material. The Sanborn maps are available online through subscription.

- **NRHP nomination forms** for individually listed historic properties and districts provide a wealth of contextual information for the individual properties and the historic districts. They include construction dates for most historic properties discussed therein and identify the architect in most instances.

Architectural datasets at the local level were reviewed as well, including information from the Commission on Chicago Landmarks.

The Commission on Chicago Landmarks recommends individual buildings, sites, objects, or entire districts to the Mayor and City Council for designation as Chicago Landmarks. To be recommended by the Commission for landmark designation, these resources must meet at least two criteria: (1) being valuable as an example of city, state, or national heritage, and (2) being historically significant—the site of a significant historic event, association with a significant person, architecturally significant, the work of a significant architect or designer, association with a significant historic theme, or a having unique visual feature. In addition, the potential landmark must maintain integrity in light of its location, design, setting, materials, workmanship, and ability to express such historic, community, architectural, or aesthetic interest or value. The Commission reviews any proposed alteration, demolition, or new construction affecting individual landmarks or properties in landmark districts as part of the permit review process. The Commission produces two new publications each year, one for individual landmarks and landmark districts and another for Chicago listings on the NRHP.

3.4.3 Effects from the Project

In consultation with FTA, CTA, the SHPO, and other consulting parties, effects were assessed for each resource previously listed on the NRHP and for those determined to be NRHP eligible. Effects were largely drawn from the other technical memos prepared for the RLE Project and were applied to the NRHP-eligible properties to assess how the project may alter the characteristics that qualify properties for inclusion in the NRHP. Because indirect effects (e.g., noise, vibration, and changes in the visual environment) would be similar for individual properties in close proximity along the corridor, effects on potentially historic properties beyond the representative sample set will be evaluated at a district or neighborhood level. Effects on historic resources are discussed in **Section 6**.

In consultation under Section 106, mitigation strategies will be developed to address any adverse effect determinations. As appropriate, a Memorandum of Agreement will be developed in consultation with FTA, CTA, and Section 106 consulting parties. Mitigation measures are discussed in **Section 7**.

3.4.4 Consultation

As required by Section 106 of the NHPA, consultation covered four distinct coordination points:

1. Initiation of the process
2. Identification of historic properties
3. Assessment of adverse effects
4. Resolution of adverse effects (developing measures to avoid, minimize, or mitigate adverse effects on historic resources)

Section 8 of this technical memorandum discusses the Section 106 consultation process for the RLE Project.

Section 4
Archaeological Resources

This chapter presents an overview of the prehistoric development of the area and an overview of archaeological discoveries in the vicinity. Eight prehistoric Native American sites have been recorded within 0.6 mile of the project area; no known sites fall within the project footprint or the APE itself. Although the landscape through which the transit lines would pass is developed, additional archaeological sites may remain undiscovered within protected locations such as parks and gardens.

4.1 Prehistoric Context

This section briefly describes the natural landscape features that influenced the prehistoric development of the area, followed by a description of the prehistoric context for the Paleoindian, Archaic, Woodland, Mississippian, Proto-Historic, and Historic Periods.

Although humans probably entered North America from Asia at least 20,000 years ago, solid evidence for their presence in the Midwest before 10,000 B.C. is elusive. From the time of the initial arrival until the arrival of the Europeans in the 17th century, the archaeological record shows evidence for continuous population growth and changing social adaptations to new developments in both the natural and cultural landscape.

The following description of the cultural landscape in northeastern Illinois will serve as a framework for assessing the significance of the archaeological remains within the APE (adapted and updated from Bird and Tolmie 2000). The recorded sites represent only a small percentage of the prehistoric cultural resources in the Chicago area, as substantial numbers of sites have been destroyed by urban development or were found by amateur archaeologists or relic collectors but have not been reported. Other sites remain undiscovered on unsurveyed land.

4.1.1 Natural Landscape

The RLE Project would be wholly contained within the exceptionally flat, crescent-shaped Chicago Lake Plain. The approximately 45-mile by 15-mile plain occupies the exposed floor of glacial Lake Chicago. Relief within the lake plain varies only 10 feet above the former lake floor where sand spits, dunes, and beaches formed near the shoreline during one of three high water stages of Lake Chicago, when water levels reached 600–620 feet: Glenwood Stage, Calumet Stage, and Tolleston Stage.

The project area includes lake plain-associated surface features such as Calumet Stage beach ridges, the Washington Heights Spit, and the Stewart Ridge Spit (Bretz 1939:105, 108, Plate 1).

Philip C. Hanson (1981), then with the Field Museum of Natural History, used the General Land Office survey notes and plats to reconstruct pre-settlement vegetation in the Chicago Lake Plain. Hanson's analysis (1981:160) identified nine plant communities within the lake plain, with wet

prairie, prairie, and oak savanna plant communities mapped along the RLE corridor. The savanna community, dominated by black oak and bur oak, is associated with the sandy beach ridges and spits in the "Calumet area" at the southern end of the lake plain (Hanson 1981:161). The beach ridges and spits provided dry, elevated landforms suitable for habitation sites and for travel by land. The wet prairie community is mapped south of the "Old Indian Reservation Boundary" line shown on the U.S. Geological Survey quadrangles, between the Little Calumet River to the south and Lake Calumet to the north. Hanson (1981) mapped prairie north of the boundary line. Surface water drains into Lake Michigan by way of the Little Calumet, Calumet, and Grand Calumet rivers, unless artificially diverted into the Calumet-Saganashkee Canal.

4.1.2 Paleoindian Period (10,000 to 8,000 B.C.)

During the Paleoindian Period, populations across the Midwest were highly mobile bands of hunters and gatherers occupying large territories. The Paleoindians hunted a variety of mammals including the now extinct mammoth and mastodon, elk, and deer, and gathered locally available plants. Sites within the Chicago area dating to the Paleoindian Period are rare, although individual tools are more common. The stone tools most often associated with this period, fluted projectile points and knives, are occasionally recovered as isolated finds in upland areas and along the margins of large river valleys and ancient lake beds. Many archaeological sites in the Chicago Lake Plain dating to the Paleoindian Period have been either destroyed by erosional processes or buried by natural deposition.

Very little is known regarding the actual distribution, subsistence pattern, and social organization of the Paleoindians. Within recent years three sites in northeastern Illinois dating to this period and/or a late Paleoindian/Early Archaic transitional period have been investigated. Fluted points and preforms, along with other tools diagnostic of early Paleoindian technology, have been recovered from Hawk's Nest (11-L-344) during archaeological investigations (Loebel, Amick, and Lurie 2000). The Gainey Phase Hawk's Nest site in Lake County is one of the few extensively studied early Paleoindian sites in northeastern Illinois. Repeated surface collections and limited excavations at the 11,000-year-old site have yielded close to 200 chipped stone tools, including fluted point preforms, end and sidescrapers, and gravers, along with manufacturing debris from raw materials obtained up to 350 miles away. The size of the assemblage and its distinctive content suggest a place that was repeatedly being used as a transient camp during extended hunting forays (perhaps seasonal) in the Upper Illinois and Lake Michigan basins (Amick et al. 2000).

The multi-component Garrison Site (11-L-337), on Lake Border Moraine till along a linear slough now carrying the North Branch of the Chicago River, contains an ephemeral late Paleoindian component that has not been disturbed by plowing. MARS, Inc. conducted Phase II testing and Phase III data recovery at Garrison over three field seasons (Lurie et al. 1993, Demel 2000). Floral and faunal analyses suggest a late summer through fall and possibly winter occupation of the site with a focus on plant and/or nut processing (Demel 2000:403).

Archaeologists from Northwestern University recovered late Paleoindian/Early Archaic diagnostic lithics during Phase II investigations at Plenemuk Mound (11-Wi-241). Plenemuk Mound is a 5.6-acre site with a buried Archaic component and an Upper Mississippian component including a probable Langford Tradition Upper Mississippian burial mound (estimated at about 3 feet high and 50 feet in diameter) associated with the 11-Wi-280 habitation site to the east (Bird 1997:321). The scatter of artifacts along a high terrace (valley train remnant) above the Kankakee River is most likely associated with a seasonally occupied late Paleoindian/Early Archaic base camp (Doershuk 1988:143). Late prehistoric people disturbed the earlier Paleoindian/Early Archaic occupation during the subsequent erection of a burial mound.

Recent research into the poorly defined Chesrow Complex of far southeastern Wisconsin has uncovered important information bearing on mammoth and mastodon exploitation (Overstreet 1993). Although radiocarbon dates from bone collagen and preserved spruce suggest that the megafauna were exploited by Paleoindians, no temporally diagnostic tools have been recovered in association with the remains and the integrity of some sites is questioned (Mason 1997:97).

4.1.3 Archaic Period (8,000 to 1,500 B.C.)

The long Archaic Period was a time of transition in the Midwest. After the final retreat of the glaciers, subsistence pursuits adjusted to the changing natural environment as deciduous forests replaced coniferous forests and as the prairie expanded to the east. Human population densities gradually increased, mobility decreased, resource exploitation and technology became more diverse and localized, and social organization became more complex.

During the Archaic Period, hunting began to focus on deer as the primary source of meat. A variety of smaller animals and fish were also collected, with increased emphasis on aquatic resources throughout the period. Plant foods including tubers, nuts, and seeds became increasingly important for subsistence. Some native plants, such as goosefoot, sumpweed, and possibly native squash or gourd, may have been domesticated during the latter part of the Archaic. Domesticated dog has been identified at archaeological sites in the Midwestern United States.

New tool types were developed, including new forms of spear or projectile points, the chipped stone adze, ground stone tools, copper tools, stone mortars for processing plants, and ornaments from bone, shell, and copper. The first cemeteries in Illinois appear during the Middle Archaic and late in this period; graves were occasionally covered with low mounds of earth. Toward the end of the Archaic Period, groups had established particular territories within which settlements were shifted to exploit the seasonally available natural resources. Networks for the exchange of resources within and between regions also developed toward the end of the Archaic.

Although many archaeological sites date within the long Archaic Period, few have been extensively excavated in the Upper Illinois drainage. Until recently, very little was known about the nature of subsistence practices, social organization, or the processes of cultural change and stability during the Archaic (Lurie et al. 2009). Demel (2000:482) posits that sites affiliated with Early Archaic and early Middle Archaic periods have been inundated under the waters of Lake

Michigan. Groups taking advantage of coastal resources would have established extraction camps and villages along the now inundated shoreline of glacial Lake Chippewa.

McGraw Farm (11-L-386) mortuary and habitation site, located on a prominent glacial kame overlooking the Fox River, was mitigated in 1996 (Porubcan et al. 1998). Formal burial features on the site were grouped into two sets, with Middle to late Middle Archaic burials (dated 3,630 to 3,350 B.C.) densely concentrated near the ridge crest. Multiple mortuary treatments including primary burial, cremation, and bundle reburial were represented, and no selection of treatment type based upon age or sex was apparent. Non-burial features contained moderate amounts of lithic debris, tool fragments, and carbonized plant and animal remains.

In 2001 and 2002 MARS, Inc. tested and mitigated the Chen site (11-Wi-2514), an unplowed Late Archaic Period campsite on a northwest-facing bluff slope above the DuPage River (Lurie et al. 2002). The excavations yielded over 2,700 artifacts including two Late Archaic Period projectile points or knives; geomorphological investigations confirmed the undisturbed nature of the deposits. Site location and analysis of chipped stone tools and debris suggest that the Chen site probably functioned as a spring, summer, or fall habitation where general activities linked to resource extraction from the nearby DuPage River floodplain and upland margin areas were conducted. Substantial amounts of lithic debris indicate that tool manufacture and maintenance were frequently conducted on site.

A nutshell, recovered in association with a Matanzas point in feature context at the Garrison site, was dated by calibrated radiocarbon assay at 3,363 B.C. Demel (2000:479) suggests that the site was most densely occupied during the Early Archaic and the late Middle Archaic/early Late Woodland as a residential camp where plant processing was an important activity.

4.1.4 Woodland Period (1,500 B.C. to A.D. 1,000)

The onset of the Woodland Period is traditionally marked by the introduction of pottery technology; however, in the southern Midwest pottery was manufactured as early as 2,500 B.C., well within the Late Archaic. This early pottery, such as Black Sand and Marion, tends to be thick and porous, with fiber or coarse grit temper. Gillette (1949:64) notes that Marion Thick sherds and Adena points have been found at the Fisher site (11-Wi-5) near the mouth of the Illinois River. Slaymaker and Slaymaker (1971:192) report “typical” Early Woodland pottery from surface collections at Knoll Spring (11-Ck-19) on Calumet Stage beach deposits overlooking the Sag Valley. The available information suggests, therefore, that both Black Sand and Marion ceramics have been recovered within Early Woodland Period sites in northeastern Illinois.

Early Woodland patterns of settlement, subsistence, and social organization were probably not very different from those of the Late Archaic. Hunting and fishing remained focal subsistence activities. While nuts continued to be an important food item, seeds were increasingly important, although plant cultivation did not account for the bulk of subsistence calories. Sunflower may have been added to the list of domesticated plants at this time. Data from the Lower Illinois Valley and the Mississippi River in Illinois suggest that Early Woodland groups focused on river bottom resources during at least part of the year. Early Woodland sites are identified by the

occurrence of the first pottery vessels, by particular forms of projectile points and other stone tools, and by the construction of substantial earthen burial mounds.

Charles Faulkner (1960:43-44) noted an early expression of the Early Woodland, contemporaneous with the Red Ochre Culture, at a small number of sites within the sand ridges of the lake plain surrounding the head of Lake Michigan. Red Ochre is now widely recognized to fall mainly within the Early Woodland Period, although ceramics are absent in the complex (Brown 1986:605).

During the Middle Woodland Period, settlements in the Midwest tended to concentrate along broad river valleys. Burials were placed in mounds on nearby bluffs, possibly serving as territorial markers. Sites were occupied for longer periods of time during the year and by greater numbers of people than in preceding periods. Subsistence activities focused on harvesting the abundant seed plants of the floodplain as well as on raising some native domesticates. Deer, fish, and a variety of small mammals and birds were also important food resources.

The best-known data on Middle Woodland come from the region of the Ohio, Mississippi, and Illinois Rivers in Ohio and Illinois. Along the lower Illinois River, Middle Woodland settlement systems consisted of a number of functionally differentiated site types including regional centers, base camps, small seasonal camps, and mortuary sites. Exotic and stylized artifacts called Hopewell have been found in both mortuary and habitation contexts throughout the Midwest during the period. They suggest a widespread social and economic network that stretched as far west as the Rocky Mountains, north to Lake Superior, south to the Gulf of Mexico, and east to the southern Appalachians. Middle Woodland can be recognized by diagnostic pottery vessel decoration, projectile point types, exotic artifacts, large burial mounds, complexes of earthworks, and other remains. Site 11-Ck-250 includes Middle Woodland artifacts (e.g., corner-notched projectile points, scrapers, and grit-tempered sherds) within the Oscar Biedes collection. Weaver ceramics in association with Steuben points, diagnostic of the transition from Middle Woodland to Late Woodland, have been recovered from two radiocarbon-dated sites in northeastern Illinois (11-Wi-684 and 11-Mh-125) excavated by Kullen (1995) and Lurie and Johnson (1996), respectively. The sites are confidently placed within the Steuben Phase (circa A.D. 200 to 419) as defined by Wolforth (1995).

During the late Middle Woodland and early Late Woodland, the trade of long-distance materials came to an end. Mortuary activities became less complex, and settlement patterns changed. There appears to have been a radical reorganization of social and economic systems in the Midwest, the impetus for which is currently unclear. Throughout the region, Late Woodland appears to have been a period of population growth and expansion with settlements no longer restricted to broad alluvial river valleys. Late Woodland sites are found in a variety of topographic settings, sometimes in the same locations as earlier Archaic sites. The hierarchy of sites present during the Middle Woodland disappeared and Late Woodland settlement systems apparently consisted of small seasonal villages and associated support camps.

Although subsistence continued to be based on hunting, fishing, and the gathering of plants, corn horticulture began to be increasingly important in the economy. The quantity and diversity of seeds recovered from Late Woodland period sites indicate extensive use of this resource in the subsistence strategy.

Burials continued to be placed in mounds. Some Late Woodland mounds were constructed in the form of animal effigies in southern Wisconsin and northern Illinois. Late Woodland sites can be recognized by the presence of thin-walled, harder, grit-tempered ceramics and new projectile point types, including arrow points. The Late Woodland Period local pattern may be suggested through examination and integration of information encompassing the recent investigations at Hurd (11-L-71) and McGraw Farm (11-L-386), 0.6 mile northeast of Hurd (Bird 1998, Porubcan et al. 1998). Hurd and McGraw are temporally and culturally related sites, perhaps task-specific sites within the Late Woodland seasonal round—one a fall hunting and harvesting encampment, the other a mortuary facility. Flint Creek separates the encampment from the mortuary site. Three Late Woodland burial features have been identified at McGraw; these comprise a minimum burial population of ten individuals. Temporal affiliation was determined using radiocarbon assays, diagnostic artifacts in association with inhumations, and similarity of burial treatment program. Dr. Anne Grauer's analysis (Porubcan et al., 1998: 29) suggests that the Late Woodland burials appear to be primary interments, although the disposition of some of the flexed burials may indicate postmortem processing. The low incidence of infection and anemia compared to contemporaneous burial populations in west-central and southern Illinois suggests to Grauer that the McGraw Late Woodland population was not sedentary; however, equivalent rates of dental caries suggest that the McGraw population had a similar diet, high in carbohydrates and probably related to the consumption of corn.

Calibrated radiocarbon assays from Hurd and McGraw suggest that Hurd is somewhat later than McGraw. Hurd calibrated dates range from A.D. 1180 to 1280 while calibrated dates at McGraw range from A.D. 970 to 1195. Ceramics recovered from two of the features relate the occupation to people who used Starved Rock Collared jars within the territorial region encompassing the Upper Illinois River system and the Middle Rock River. The occupants grew corn and gathered resources from the uplands and floodplain at the confluence of Flint Creek and the Fox River.

Starved Rock and Aztalan Collared vessels are commonly found within sites south of the coniferous/deciduous tension zone in Wisconsin encompassing mixed prairie-oak-hickory woodland and the Prairie Peninsula. Hurley (1975), Fowler and Hall (1978:560), Benn (1979), Hall (1987:66-68), Salkin (1987, 1993), Goldstein (1991:224), Richards (1992:418), Bird (1997), Emerson and Titlebaum (2010), and Kelly (2002) have presented theories to account for the relationship among various Late Woodland groups in the Midwest. Most researchers agree that the Late Woodland collared-style pottery appears circa 900 to 1000, disappears circa 1100 or 1200, and is replaced by Upper Mississippian ceramics in the region. Based on morphological attributes and paste recipes, Aztalan Collared, Starved Rock Collared, and Upper Mississippian Langford Corded are indistinguishable without rim segments.

Two of the eight sites (11-Ck-244 and 11-Ck-246) recorded near the project area contain artifacts diagnostic of the Late Woodland Period (e.g., grit-tempered sherds and triangular projectile points). Both are situated on a low sand bar associated with glacial Lake Chicago and formed during the Calumet stage of Lake Chicago (Bretz 1939:Plate 1).

4.1.5 Mississippian Period (A.D. 1000 to A.D. 1600) and Proto-Historic Period (A.D. 1600–1673)

Mississippian subsistence relied increasingly on cultivated plants, particularly corn and squash. Beans enter the archaeological record for the first time in the Midwest late in the period. Deer was the most important faunal resource, although migratory waterfowl, elk, bison, fish, and raccoon also contributed to the protein intake.

Two types of Mississippian occupations have been identified in Illinois: Middle Mississippian and Upper Mississippian. Middle Mississippian sites tend to occur along rivers with wide, fertile floodplains and reliance on cultivated plants appears to have been substantial. Upper Mississippian sites, on the other hand, tend to occur along rivers extending into the Prairie Peninsula, where reliance on cultivation may have been less intense than for Middle Mississippian populations.

Middle Mississippian peoples achieved the greatest level of cultural complexity in the prehistory of the United States. The river valleys were densely occupied and the settlement systems included permanent towns surrounded by smaller villages and farmsteads. In the Greater St. Louis area of Illinois and Missouri, this Mississippian development may have reached urban proportions. Exchange networks and new systems of political control extended throughout much of the eastern United States. Middle Mississippian sites can be recognized by their diagnostic substructure mounds, house forms, pottery styles, and stone hoes. Although major Middle Mississippian sites are found in the southern part of the state, there is little evidence of Middle Mississippian occupation in northeastern Illinois.

Upper Mississippian peoples were probably more dispersed across the landscape than Middle Mississippian peoples, and apparently lived in smaller villages and farmsteads. In northeastern Illinois, Upper Mississippian occupations known as Fisher/Oneota and Langford are well documented and can be recognized primarily by their distinctive ceramics. The Sanctuary Golf Course in New Lenox in Will County, Illinois near the confluence of Marley and Hickory Creeks contains the remnants of a number of archaeological sites including 11-Wi-654, a 7.0-acre single component Langford Tradition habitation (circa A.D. 1110 and 1426), and 11-Wi-213, an 18.5-acre multi-component habitation (circa A.D. 1165 through 1644). The analysis of ceramics from these sites focused on separating site components, defining temporal trends, and examining regional interaction (Bird 1997). The analysis illuminated temporal, spatial, and social trends involving late prehistoric and proto-historic group interaction at the head of Lake Michigan (Bird 1999, 2010). Important Oneota sites within the Chicago Lake Plain include Huber (11-Ck-1), Hoxie (11-Ck-4) and Oak Forest (11-Ck-53). All three were situated to utilize the resources along the edge of the lake plain. Huber is 6.9 miles west of the confluence of Tinley Creek and the Sag. Hoxie is 7.1

miles south-southeast of Thorn Creek, south of the Little Calumet River. Oak Forest is 4.9 miles south of the interface between the morainal uplands and the lake plain.

Two of the eight sites (11-Ck-28 and 11-Ck-284) recorded near the RLE Project contain artifacts diagnostic of the Mississippian or Proto-Historic periods. The shell-tempered sherds recovered by Bluhm and Wenner from ridges adjacent to a slough at 11-Ck-28 suggest a Fisher/Oneota occupation for the site. Lace and Nowicki reported the Joe Louis site (11-Ck-284) above the south bank of the Little Calumet River near a spring. Artifacts included fauna, lithics, and late Fisher Phase shell-tempered ceramics (primarily), some from feature context (including superimposed pits). Subsequent survey and testing of this substantial habitation site further defined the site limits and concentrations of materials within the site.

4.1.6 Historic Period (1673 to Present)

Historic Indian tribes known to have inhabited northeastern Illinois during this time include Fox (Mesquakie), Kickapoo, Mascouten, Menominee, Miami, Ojibwa (Chippewa), Ottawa (Odawa), Potawatomi, Winnebago (Ho-Chunk), and Sauk (Tanner 1987:93, 98, 106, 140). The Potawatomi were firmly established in the vicinity when the settlers arrived following the Black Hawk War of 1832. Portage points and river junctures along the waterways were important locations for Native American encampments and villages as well as Euro-American trading posts, towns, and forts.

Trails around the head of Lake Michigan (Calumet Region) skirted the lakeshore or used beach ridges to cross the Chicago Lake Plain. The 1819 General Land Office plat notes an "Indian Trail" passing along the western shore of Lake Calumet. The Bishop Ford Freeway and Cottage Grove Avenue follow the approximate alignment of the old trail within the project area. Outside the project area, the trail continues to the southeast aligned with State Street through Calumet City. The "Indian Trail" joined Scharf's Trail P, a branch of the historic Chicago-Vincennes Trace (Quaife 1923:51-71), at about Kensington (near the center of Section 22). James Rees' 1851 map and Albert Scharf's 1901 map of *Indian Trails and Villages of Chicago* (1901) show Trail P crossing the Little Calumet River at the toll bridge established by George Dolton and Levi Osterhoudt in 1842 at Riverdale Crossing, which aligns with Indiana Avenue and Vincennes Avenue. The General Land Office "Indian Trail" and Trail P are branches of the Chicago-Vincennes Trace.

Railroads followed the same general alignments as the early trails, around the head of the lake from the eastern states into Chicago. The Illinois Central appears on the 1870 plat of Calumet Township and aligns with Trail P while the Michigan Central Railroad appears on the same plat aligned with the "Indian Trail." The rail lines, like the trails before them, join at Kensington (Van Vetchen 1870).

Sources of information about the Historic Period include accounts of traders, missionaries, Indian agents, surveyors, military personnel, travelers, and settlers as well as the insights gained from archaeological investigations.

Section 5 discusses the historic development of each of the six neighborhoods and communities along the RLE Project corridor.

4.2 Archaeological Sites in Project Vicinity

Based on artifacts collected by amateur archaeologists Albert Scharf, Oscar Biedes, and Ed Lace, as well as professional investigations completed by the Illinois State Archaeological Survey, eight prehistoric Native American sites have been recorded within 0.6 mile of the RLE Project vicinity, although none fall within the APE. The sites are listed in Table 4-1.

Table 4-1: Archaeological Sites in the Red Line Extension Project Vicinity

Site #	Site Name	Recorded	Archaeologist(s)	Temporal
11-Ck-28	T. Shapas Collection	1957	E. Bluhm, D. Wenner	Middle Woodland Upper Mississippian
11-Ck-177	(Detail No. 38)	1919	A. Scharf	Two mounds, Village
11-Ck-244	Flat Foot Lake South	1987	E. Lace	Late Woodland
11-Ck-245	Flat Foot Lake North	1987	E. Lace	Prehistoric
11-Ck-246	Flat Foot Lake Central	1987	E. Lace	Late Woodland
11-Ck-247	Beaubien Woods	1987	E. Lace	Prehistoric
11-Ck-250	Oscar Biedes Collection	1987	E. Lace	Middle Woodland
11-Ck-284	Joe Louis Site	1986, 2010	E. Lace, ISAS	Upper Mississippian

Source: Illinois State site files

Site 11-Ck-284 is south of the Little Calumet River (0.6 mile southwest of the Halsted Rail Alternative footprint), and sites 11-Ck-28, 11-Ck-177, 11-Ck-244 through 247, and 11-Ck-250 are near Flatfoot Lake within the 135-acre Beaubien Woods Forest Preserve of Cook County (0.6 mile southeast of the UPRR Rail Alternative footprint). Only the Joe Louis site (11-Ck-284) has been reviewed for NRHP eligibility and was determined eligible, independent of the RLE Project.

Elaine Bluhm and David J. Wenner recorded site 11-Ck-28 based on a collection of grit-tempered and shell-tempered ceramics gathered from the site and held by Theodore Shapas. The site dates to the Middle Woodland (grit-tempered sherds) and Upper Mississippian (shell-tempered, Oneota sherds) periods.

Betty Broyles recorded 11-Ck-177 in 1959 as comprising the village (Ckv125 and Ckv126) and associated mounds (Ck-127 and Ck-128) detailed by Chicago tobacconist and avocational archaeologist Albert Scharf in 1919: "Two mounds and a camp site were located along the bend of the river" (Brown 1917). Regarding the Calumet Marshes, Scharf (1919) notes:

> "The several Indian villages in these marshes were all located along the canoe routes or portage trails of which they form the route simply passing from one to the other & together we have one of the links of the great highway leading from the Illinois River to the 'Great Lake.'"—Manuscript transcribed and on file at MARS, Inc.

David J. Keene and Theodore J. Karamanski (1980) reported sites 11-Ck-244 through 11-Ck-247 and site 11-Ck-250 in 1979 during survey work completed for the Forest Preserve District of Cook County. Ed Lace, an avocational archaeologist with the Forest Preserve District of Cook County

with whom Keene and Karamanski had worked on the project, formally recorded the Woodland Period and undefined prehistoric sites in 1987. An undated newspaper article from the Star-Tribune shows photographs of the Oscar Biedes collection (included with the 11-Ck-250 site form).

David J. Keene and Theodore J. Karamanski (1980) also reported site 11-Ck-284 within the Joe Louis "The Champ" Golf Course (designed by Dick Nugent) during survey work completed for the Forest Preserve District of Cook County. Ed Lace recorded the Joe Louis site in 1986 after an informal testing program. The 21.2-acre late Fisher Upper Mississippian site (circa A.D. 1200–1400) has been partially destroyed by golf course construction, but further testing in 2010 discovered that part of the site is preserved in the wooded area between the golf course and the Little Calumet River (Porubcan and Baltus 2011).

4.3 Potential for Project Effects

As no previously recorded sites fall within the RLE APE, the RLE Project would produce no effect on known archaeological resources. Additional archaeological sites may remain undiscovered within the project footprint; archaeological investigations will occur within areas of ground disturbance for the preferred alternative.

Section 5
Identification of Architectural Resources

This chapter presents the historic contexts and a description of historic properties for each of the six communities within the RLE Project APE: Washington Heights, Roseland, Morgan Park, West Pullman, and Riverdale within the City of Chicago, and the Village of Calumet Park. Figure 5-1 illustrates the location of each community relative to the project.

A series of maps in Appendix A graphically presents an overview of listed sites and surveyed properties; individual inventory sheets for surveyed properties are included in Appendix B. The map also identifies properties surveyed in the CHRS that were rated Red or Orange. CHRS properties are discussed further in **Section 5.7**.

Following the discussions of the built environment in the six communities, **Section 5.8** discusses parks that fall within the APE. Parks and other Section 4(f) resources are discussed in a separate technical memorandum prepared for the project; this memo only evaluates their eligibility for listing on the NRHP as historic resources.

5.1 Washington Heights

The following subsections include a description of the historic context for the development of Washington Heights (**Section 5.1.1**) and an overview of properties that were surveyed (**Section 5.1.2**). No NRHP-listed sites or districts fall within the RLE APE in the Washington Heights community.

5.1.1 Historic Context

The community of Washington Heights, approximately 11 miles south of Chicago's Loop, is roughly bounded by 89th and 91st Streets on the north, 107th Street on the south, Stewart Avenue on the east, and Beverly Avenue on the west.

<u>Washington Heights Development in the 19th Century</u>
The present community of Washington Heights is bisected by Vincennes Avenue, originally an Indian trail that served as an important route to Chicago from the south during the 19th century. Pioneer Norman Rexford established a home and tavern at 91st Street and Vincennes Avenue in 1834, just a year after Chicago was incorporated, and farmers slowly moved into the area during the ensuing decades. The coming of the railroads hastened drainage of the swampy flatlands, thereby encouraging settlement. In the 1860s a small settlement of German and Irish railroad workers gravitated to the vicinity of 103rd Street and Vincennes Avenue, near the intersection of the Chicago, Rock Island and Pacific Line, and the Panhandle Line (Pittsburgh, Cincinnati and St. Louis Railroad), an area that became known as "The Crossing" (Chicago Fact Book Consortium 1995:206).

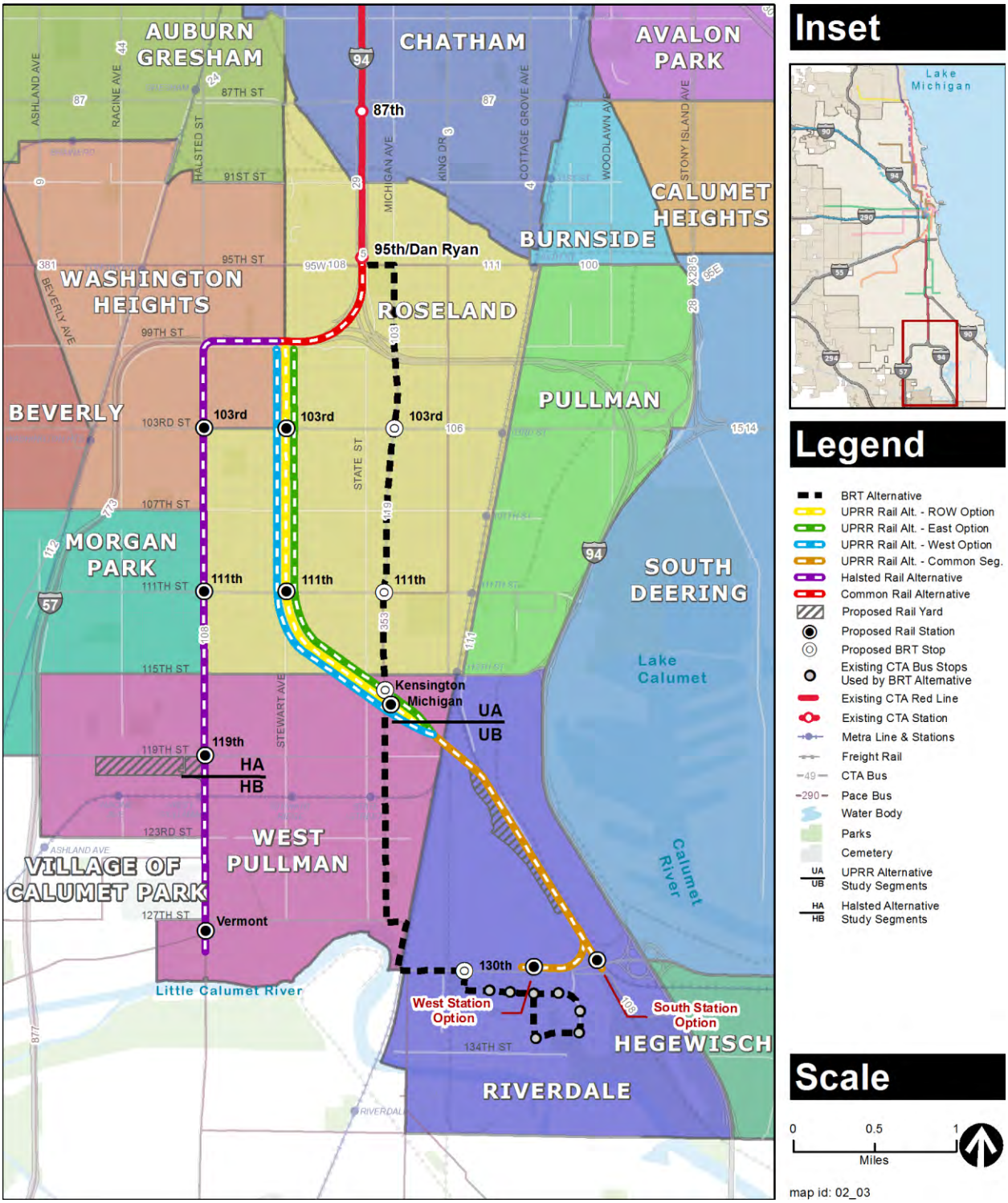

Figure 5-1: Community Areas and Red Line Extension Alternatives

Subdivision of the present Washington Heights community began in its southwestern corner during the mid-1860s when Willis M. Hitt and Lauren P. Hilliard bought farmland in the area between 103rd and 107th Streets, between Loomis and Racine Avenues. A small settlement was established around a new station on the Rock Island Railroad line that ran through this area. In 1870 the Blue Island Land and Building Company purchased and subdivided 1,500 acres between 99th and 107th Streets, but it was not extensively developed during the 19th century (Keating 2008:289).

The Village of Washington Heights was incorporated in 1874, with boundaries that stretched from 95th to 107th Streets between Halsted Street and Western Avenue and included much of the present Chicago community of Beverly. A substantial public school building was erected in 1874 at a cost of $20,000, replacing a one-room schoolhouse built in 1866 along 103rd Avenue (Andreas 1884:647). Surviving houses from this early stage of development include a modest Greek Revival style frame house at 9635 South Genoa Avenue and a larger frame home at 9802 South Winston Avenue, distinguished by pointed arch windows in the Gothic Revival style; both homes date to the 1870s (Chicago Department of Housing and Economic Development 1996).

In 1874 the Catholic Church of the Sacred Heart established the Academy of Our Lady of the Sacred Heart in its convent along 95th Street. The school educated about 150 young women, both day and boarding students, by the mid-1880s. The growing population of the girls-only school led the church to build an impressive four-story red brick Romanesque Revival-style edifice at the southwest corner of 95th and Throop Streets in 1899. The girls' school housed classrooms, dormitories, and an auditorium. The German Lutheran Zion Congregation, also founded in 1874, built a frame church at the corner of 99th Street and Vincennes Avenue and a small adjacent school (Andreas 1884:648).

During the 1880s two additional settlements were established within the present boundaries of Washington Heights, although they were originally outside the 1874 boundaries of the Village of Washington Heights. The first, called "Fernwood," was located along the line of the Chicago and Eastern Illinois Railroad east of Halsted Street, between 99th and 103rd Streets. By 1885 there were a reported 180 homes in the area, inhabited mainly by native-born Americans and some Dutch (Keating 2008:289). In 1887 the newly formed Village of Fernwood created a wide parkway between 99th and 103rd Streets. Trees and grass were planted and the village extended Fernwood Parkway north to 95th Street the following year. Though the new parkway provided a lovely setting for new homes and its handful of businesses, the sleepy village remained sparsely settled in the 19th century.

The Brainerd subdivision was created in 1885 and extended from 87th Street to 91st Street, between Racine and Ashland Avenues. The portion of this subdivision north of the Rock Island tracks is now part of the Auburn Gresham community. A Rock Island station was opened at 89th and Loomis Streets in 1889, but settlement awaited the 20th century. By 1890 there were only about six houses in Brainerd (Keating 2008:289).

In 1889 Kansas City bridge builder Horace Horton established the Chicago Bridge and Iron Company in the southwest corner of Washington Heights near the "The Crossing" at 103rd Street and Vincennes Avenue. The company is credited with establishing the Beverly Bank in Washington Heights, which served as a mortgage lender to many Chicago Bridge and Iron Company workers.

Annexation by Chicago of what is now considered the Washington Heights community took place in three stages. In 1890 the area north of 95th Street, including the Brainerd subdivision, was annexed along with South Englewood. Later that year the Village of Washington Heights voted to join them. Fernwood residents feared that becoming part of Chicago would result in the opening of saloons and increasing taxes and thus voted against annexation. Due to its refusal to be annexed, the Village of Fernwood became an island in the city, nicknamed "the Monaco of Chicago" (Chicago Tribune 1890). Residents soon reconsidered their decision, as the small village could not afford to pave its streets or build a school. Annexation of the Fernwood neighborhood took place in 1891 and brought the last section of the current community area within the Chicago city limits. Washington Heights remained sparsely settled through the 1890s, although subdivision activity continued. The land from 91st to 95th Streets, between Vincennes and Ashland Avenues, was subdivided by Cremin and Brenan in 1891 and marketed as the Fairview Park Subdivision (Chicago Tribune 1891a).

Washington Heights Development: 1900 to 1950

By 1900 the western portion of Washington Heights had become known as Beverly. The low-lying eastern portion retained the name of Washington Heights. The present Washington Heights community grew slowly and continued its slow growth in the early 20th century due to poor transportation to Chicago's Loop. It wasn't until 1919 and 1920 that streetcar lines were extended southward along Halsted Street, Racine Avenue, and Ashland Avenue to Washington Heights. As late as 1920, Washington Heights had a population of just about 8,000 and still featured large areas of undeveloped land. This was to change during the citywide construction boom of the 1920s, during which the population more than doubled to 18,000 (Chicago Fact Book Consortium 1995: 206). Vacant parcels throughout the community were improved with brick bungalows and, to a lesser degree, with two- and three-flat residential buildings, homes designed in the popular American Foursquare style, and small brick apartment buildings.

Many of Washington Heights' residents during this period were Germans, Swedes, and Irish who had moved from South Englewood and Greater Grand Crossing in search of better housing. They were served by new institutions and parks, such as the Gothic Revival style Mt. Vernon Public School at 10540 S. Morgan Street, which featured a large adjacent park. The growing St. Margaret of Scotland Parish, which had a large Irish congregation, built a commodious new church (1928) and school (1930) near the intersection of 98th and Throop Streets. Architect Charles Wallace designed both of these Gothic Revival style edifices. The Academy of Our Lady School at 95th and Throop Streets (which became known as Longwood Academy) expanded its campus during the 1920s with three additional buildings that housed dormitories, a music conservatory, and a science hall. After 1950, it served only as a high school (Illinois High School Glory Days 2012).

The 5.5-acre Euclid Park at 9800 S. Parnell Avenue was established during the 1920s to serve the area that was once the old Village of Fernwood. An area real estate office building was moved into the new park for use as a small recreation building and ball fields were installed. The 8-acre Brainerd Park was established during the 1930s at 1246 S. 92nd Street, and featured outdoor athletic facilities and a small field house. It was named for Mr. Brainerd, one of the five founders of the Rock Island Railroad (Chicago Park District 2012).

The boom period of the 1920s was mainly confined to residential development. Washington Heights never developed a cohesive business district, although major thoroughfares in the community such as 103rd Street, Vincennes Avenue, and Halsted Street developed as mixed-use districts with one- to three-story commercial buildings and structures such as gas stations intermixed with residential buildings. Commercial buildings from this period were typically one to three stories in height, mainly faced in brick, with storefronts below and apartments above. Detailing was restrained and included stone lintels and sills, storefront surrounds of stone or terra cotta, and stone or metal cornices or parapets. Most of the commercial buildings were not designed in a specific architectural style, but often included details from a style, such as the Queen Anne, Romanesque, or Classical Revival.

The Chicago Bridge and Iron Company was a major employer in Washington Heights during the first half of the 20th century, with about 600 workers in 1910. During World War II, the company temporarily became a large military contractor and had 12,000 workers making military vessels (Wilson 2005). Residential growth continued through the Depression and World War II, and Washington Heights reached residential maturity before 1950. In that year the population was approaching 25,000 (Chicago Fact Book Consortium 1995:206).

Washington Heights Development: 1950 to Present

Vacant lots throughout Washington Heights were improved with suburban style tract homes and split-level homes during the 1950s and 1960s, a period that also saw the construction of Interstate 57 through the community's southeast quadrant. Community demographics also began to change in the post-World War II period as African-Americans began moving into the area east of Halsted Street. By 1960, African-Americans comprised 12 percent of the total population of about 30,000 residents. Irish, Germans, and Swedes were still the predominant white ethnic groups. During the 1960s, the white population dropped by almost two-thirds while the number of African-American residents increased. A new Washington Heights civic organization was formed in 1967 with the goal of promoting "racial stability" (Wright 1967). By 1970 African-Americans comprised 75 percent of the population, which peaked at 36,540. Ten years later the community had declined in population to 29,843 residents, 98 percent of whom were African-American (Chicago Fact Book Consortium 1995:206).

Several new Modernist style schools were erected in Washington Heights during this period, including the Charles Wacker Elementary School at 9746 S. Morgan Street; the two-story Medgar Evers Elementary School at 9811 S. Lowe Avenue; the three-story Marcus Garvey Elementary School at 10309 S. Morgan Street; and the three-story Percy Julian High School at 10330 S. Elizabeth Street, which opened in 1975. The Carter G. Woodson Regional Library at 9525 S.

Halsted Street, named for an African-American historian, opened in 1975. The two-story building features a 182-seat auditorium and houses the Vivian Harsh Collection, which is the second-largest collection of African-American history and literature in the country. Longwood Academy (originally Academy of Our Lady) at 95th and Throop Streets closed its doors in 1999 and its campus is now the home of Chicago International Charter School-Longwood (Bechetta 1999).

During the late 1990s, much of Halsted Street between 99th and 107th Streets was designated as a Redevelopment Area by the City Council. This designation entitled the city to acquire and assemble land to attract developers. Beautification efforts included median improvements and the installation of planters (Almada 1999). In 2001 the City designated a 58-acre parcel in the southwestern corner of the community as the 105th/Vincennes Avenue Tax Increment Financing (TIF) District. The parcel extends from 103rd to 107th Streets, between I-57 and Vincennes Avenue. Many blocks within the district are irregularly shaped due to the various railroad ROWs and the diagonal alignment of Vincennes Avenue. At the time of designation, this area was largely characterized by vacant and underused land and deteriorated and obsolete buildings, and suffered from a lack of private investment (URS/TPAP 2003:3-4).

The 105th/Vincennes Avenue TIF District was created to assemble large tracts of vacant and underused land for redevelopment as a cohesive and distinct residential neighborhood. Targeted development sites include the former Chicago Bridge and Iron Works property (Ernst and Young 2005, 2010, Camiros Ltd. 2003). New residential development within the TIF District has had a slow start, however. A plan to build 124 homes on six square blocks collapsed and only about two dozen two-story homes were built in the vicinity of 105th Street and Vincennes Avenue (Rodkin 2012). Today Washington Heights is a middle class, African-American neighborhood and the vast majority of its built landscape comprises small, single-family, owner-occupied homes. The community has seen little new construction in recent years.

5.1.2 Surveyed Resources

As part of the fieldwork for the RLE Project, 69 buildings within the Washington Heights portion of the APE were surveyed. These properties, along with their construction date and an assessment of their eligibility for listing on the NRHP, are presented in Table 5-**1**, alphabetized by street name. Properties determined individually eligible are highlighted. A series of maps in Appendix A graphically presents these findings; individual inventory sheets for surveyed properties are presented in Appendix B.

Table 5-1: 69 Surveyed Properties in Washington Heights

Address	Year Built	Description	Eligibility**
435 W. 100th Place	1942	Single-Family	Not Eligible
444 W. 100th Place	1930	Eclectic Neo-Traditional Home	Eligible
426 W. 100th Street	1943	Single-Family	Not Eligible
430 W. 100th Street	1919	Single-Family	Not Eligible
438 W. 101st Place	1955	Single-Family	Not Eligible
416 W. 102nd Place	1929	Chicago Style Bungalow	Not Eligible
444 W. 102nd Street	1913	Single-Family	Not Eligible
424 W. 103rd Street	1889	Religious Building	Not Eligible
748 W. 103rd Street	1928	Commercial (vacant)	Not Eligible
800-804 W. 103rd Street or 10252-10258 S. Halsted Street	1991	Commercial	Modern
814-824 W. 103rd Street	1958	Commercial	Not Eligible
418 W. 98th Place	1931	Chicago Style Bungalow	Not Eligible
401 W. 99th Street	1942	Single-Family	Not Eligible
9824 S. Eggleston Avenue	1965	Single-Family	Not Eligible
10024 S. Eggleston Avenue	1943	Single-Family	Not Eligible
10058 S. Eggleston Avenue	1930	Chicago Style Bungalow	Not Eligible
10100 S. Eggleston Avenue	1894	Single-Family	Not Eligible
10104 S. Eggleston Avenue	1904	Single-Family	Not Eligible
10142 S. Eggleston Avenue	1948	Single-Family	Not Eligible
10148 S. Eggleston Avenue	1919	Single-Family	Not Eligible
10200 S. Eggleston Avenue	1888	Single-Family	Not Eligible
10236 S. Eggleston Avenue	1913	Single-Family	Not Eligible
9818 S. Emerald Avenue	1899	Single-Family	Not Eligible
9823 S. Emerald Avenue	1944	Single-Family	Not Eligible
9900 S. Emerald Avenue	1947	Single-Family	Not Eligible
9906 S. Emerald Avenue	1942	Single-Family	Not Eligible
9909 S. Emerald Avenue	1944	Single-Family	Not Eligible
9936 S. Emerald Avenue	1955	Modernist Style Residence	Not Eligible
10004 S. Emerald Avenue	1909	Flat	Not Eligible
10100 S. Emerald Avenue	1940	Neo-Tudor Style Residence	Not Eligible
10134 S. Emerald Avenue	1939	Minimal Traditional Residence	Not Eligible
10216 S. Emerald Avenue	1956	Single-Family	Not Eligible
9909 S. Green Street	1929	Chicago Style Bungalow	Not Eligible
9957 S. Green Street	1952	Single-Family	Not Eligible
10051 S. Green Street	1928	Craftsman Style Residence	Not Eligible

Address	Year Built	Description	Eligibility**
10157 S. Green Street	1957	Single-Family	Not Eligible
10201 S. Green Street	1926	Chicago Style Bungalow	Not Eligible
10237 S. Green Street	1926	Chicago Style Bungalow	Not Eligible
10345 S. Green Street	1919	Single-Family	Not Eligible
10401 S. Green Street*	1949	Minimal Traditional Residence	Not Eligible
10457 S. Green Street*	1956	Single-Family	Not Eligible
10541 S. Green Street*	1962	Single-Family	Not Eligible
10601 S. Green Street*	1954	Single-Family	Not Eligible
9901 S. Halsted Street	1987	Commercial	Modern
9911 S. Halsted Street	1986	Commercial	Modern
9915 S. Halsted Street	1996	Substation & Cell Tower	Modern
10004 S. Halsted Street	1957	Commercial	Not Eligible
10019 S. Halsted Street	1996	Church	Modern
10114 S. Halsted Street	1903	Multi-Family	Not Eligible
10116 S. Halsted Street	1937	Multi-Family	Not Eligible
10159 S. Halsted Street	1952-1962	Religious	Not Eligible
10227 S. Halsted Street	1919-1920	Classical Revival Substation	Eligible CHRS Orange
10238-10240 S. Halsted Street	1938	Mixed-Use	Not Eligible
10241 S. Halsted Street	1894	Single-Family	Not Eligible
10326 S. Halsted Street	1938-1959	Mixed-Use	Not Eligible
10506 S. Halsted Street	1955	Commercial	Not Eligible
9906 S. Lowe Avenue	1904	Single-Family	Not Eligible
9907 S. Lowe Avenue	1926	Single-Family	Not Eligible
9822 S. Normal Avenue	1947	Single-Family	Not Eligible
9900 S. Normal Avenue	1953	Single-Family	Not Eligible
9925 S. Normal Avenue	1946	Single-Family	Not Eligible
9821 S. Parnell Avenue	1961	Single-Family	Not Eligible
9900 S. Parnell Avenue	1950	Single-Family	Not Eligible
9901 S. Parnell Avenue	1965	Single-Family	Not Eligible
9819 S. Union Avenue	1962	Single-Family	Not Eligible
9822 S. Union Avenue	1944	Single-Family	Not Eligible
9901 S. Union Avenue	1948	Minimal Traditional Residence	Not Eligible
9906 S. Union Avenue	1957	Single-Family	Not Eligible
9912 S. Wallace Street	1922	Single-Family	Not Eligible

CHRS = Chicago Historic Resources Survey
* Surveyed property within proposed Green Street Historic District
** Properties noted as “Modern” are less than 50 years in age and do not exhibit “exceptional importance.”

5.1.2.1 National Register of Historic Places-Eligible Resources

Of the 69 buildings surveyed within the Washington Heights portion of the RLE APE, 2 were identified as eligible for listing on the NRHP. These are briefly described below.

In addition, one NRHP-eligible historic district was identified along Green Street, between 104th Street and 109th Street. A cluster of Chicago Georgian and Raised Ranch homes exist in this area. While only one side of Green Street falls within the APE, the area could form a district under NRHP Criterion C based on its architecture. The linear streetscape features a cohesive grouping of vernacular homes of the type used to build up the outlying areas of Chicago that developed in the post-WWII era. Although such neighborhoods are common throughout the city, these five blocks include front gabled and hip roof ranch homes, front gabled cottages, and Chicago Georgian style homes with little to no modern infill. Individual homes date from the 1950s and 1960s and feature the same setbacks and similar brick cladding. They appear to be well maintained. A portion of the district falls within the Morgan Park neighborhood. The proposed district boundary is shown in Figure 5-2. Eight buildings were surveyed within the proposed Green Street Historic District but none are recommended as individually eligible.

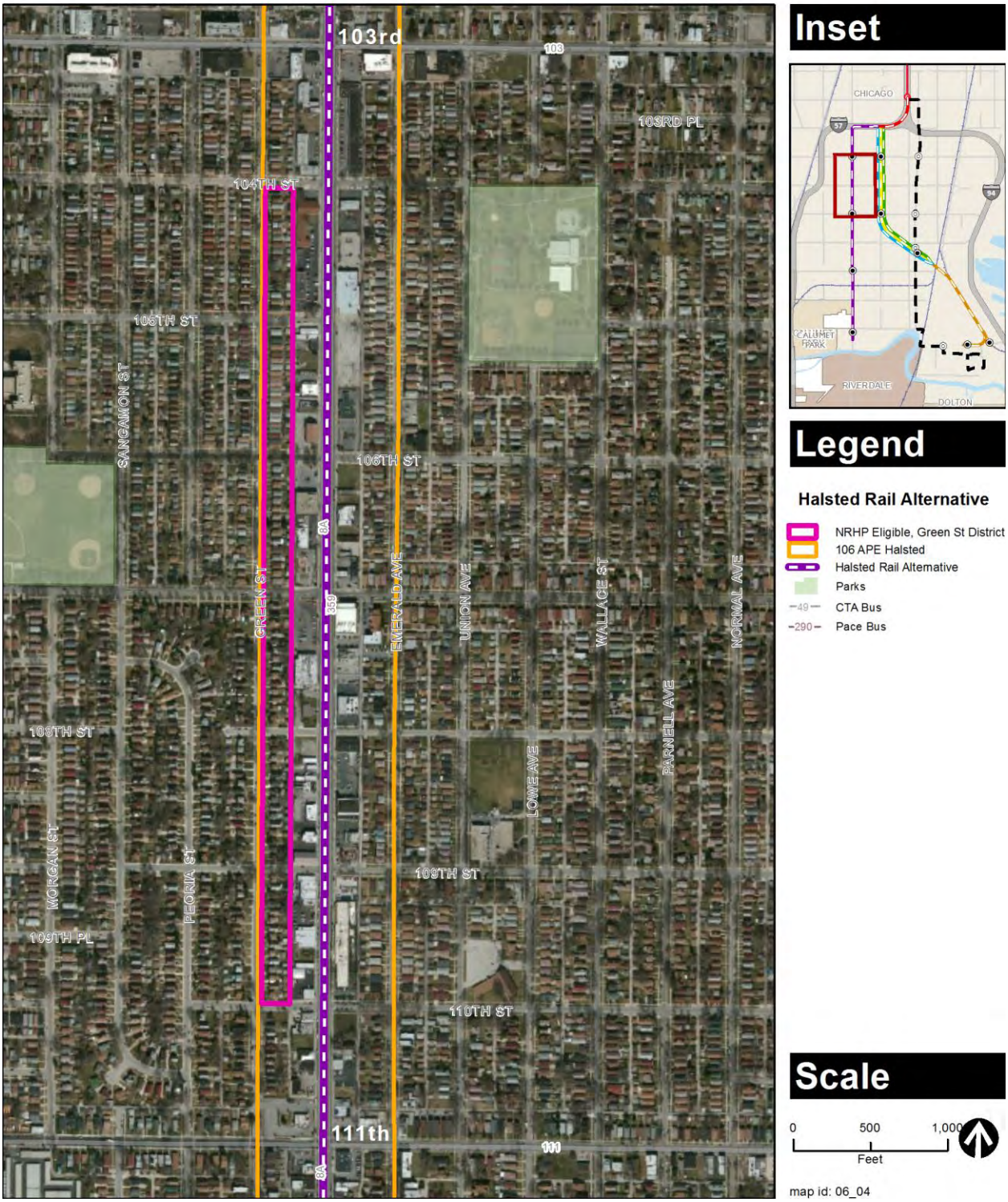

Figure 5-2: Proposed Boundary for Green Street Historic District and Red Line Extension Area of Potential Effects

Eclectic Neo-Traditional Home, 444 W. 100th Place

This one-story home in the Washington Heights community rests on a raised basement as shown in Figure 5-3. Built in 1930, it is clad with polychromatic brick and has a side gabled roof covered with asphalt shingles. Its front elevation has a gabled living room bay pavilion with paired basement windows, a group of three non-original one-over-one windows with concrete sills, brick arch lintels, colonettes with acanthus leaf capitals, and a small round-arched window in the gable. The house has a recessed corner porch with a metal storm door, round-arch openings, a Neo-Gothic castellated top, concrete steps, and brick sidewalls. The integrity of its materials and detailing is very good. Its Eclectic Neo-Traditional ornamentation makes it stand out among the vernacular, stripped-down brick and frame bungalows and cottages that comprise the predominant building stock in the Washington Heights community. As a result, it was identified as individually eligible for NRHP listing under Criterion C for its architecture.

Figure 5-3: South Facade of the Eclectic Neo-Traditional Home at 444 W. 100th Place

Classical Revival Substation, 10227 S. Halsted Street

This vacant two-story Classical Revival style substation in Washington Heights has a stone water table. Built circa 1920, it is clad with multi-hued brown face brick on its front elevation and common brick along its side and rear elevations. The building is shown in Figure 5-4. The building has a flat roof with parapet. Dark brown-colored brick accents the facade with stringcourses, soldier courses, and cruciform patterns against the reddish brown-colored brick. The front elevation features a centrally located entrance with a Classical surround that includes Ionic columns and an entablature including a segmental pediment and frieze band with incised lettering that reads, "Southwest Substation." The original door, sidelight, and transom have been removed and their openings covered with plywood. Directly above the entrance is a strip of three plywood-covered window openings with stone casing. Decorative detailing includes full-height brick corner pilasters, a stone belt course above the windows, and a stone cornice with widely spaced dentils. Directly beneath the cornice is a stone panel with incised lettering that reads, "City of Chicago Dep't of Gas & Electricity." Nearly all of the side elevation window openings are covered with plywood.

Figure 5-4: West Facade of the Classical Revival Substation at 10227 S. Halsted Street

This is a rare extant example of a Classical Revival substation in Washington Heights. The substation has retained its decorative detailing; it is possible that original windows may be behind the wood covering. Assuming that the interior has retained interior fabric, this building is recommended as individually eligible for listing on the NRHP under Criterion A for its association with utilities infrastructure and under Criterion C for architecture.

5.1.2.2 Properties Surveyed but Determined Ineligible

Beyond the properties that were identified as individually eligible for NRHP listing, a number of properties were surveyed that did not meet the criteria. Generally, these properties had subsequent alterations that compromise their historic integrity, or they do not feature a level of distinctive architectural detailing necessary to qualify for the NRHP.

5.2 Roseland Community

The following subsections include a description of the historic context for the development of the Roseland community (**Section 5.2.1**) and an overview of historic properties that were surveyed (**Section 5.2.2**). No NRHP-listed sites or districts fall within the RLE APE in the Roseland community.

5.2.1 Historic Context

The Roseland community, which is approximately 12 miles south of Chicago's Loop, is bounded by train tracks on the north, 115th Street on the south, Cottage Grove Avenue on the east, and Halsted and Stewart Streets on the west. The community is served by public transportation via the CTA Red Line station at 95th Street, the last stop on this line, and by the Metra with four stops between 103rd and 115th Streets.

<u>Roseland Development in the 19th Century</u>
The Roseland community was undeveloped wet prairie with occasional patches of dry prairie in the mid-19th century. The Chicago-Thornton Road (now Indiana Avenue), which was built on high prairie, crossed the community. Initial settlement occurred in 1849 when a group of Dutch families from the district between Amsterdam and Rotterdam in Holland, in search of land for truck farming, established a settlement of frame houses along this road between 103rd and 111th Streets. One of the immigrants' first endeavors was to build a small wood meeting house at the southwest corner of 107th Street and Michigan Avenue in 1850 for the First Reformed Church of Roseland, the first of three Dutch churches on this site (Andreas 1884:607).

The immigrants became known as the "Hollanders of the High Prairie." They cultivated cabbage, cauliflower, beets, carrots, potatoes, and tomatoes, which they hauled to Chicago's South Water Street Market on the Chicago-Thornton Road. More Dutch immigrants settled the low-lying land between the high prairie and Lake Calumet to the east. Some of the Dutch worked on the construction of the new railroads. The community was called Hope when the first post office opened in 1861, and was initially part of the Lake Township. In 1867 the area east of State Street became part of the newly incorporated Village of Hyde Park (Chicago Fact Book Consortium 1995:152). The Dutch truck farmers also grew flowers, and the lavish annual display of red roses led to the adoption of the name of Roseland for the community in the 1870s. The gable-roofed cottage at 10057 S. Michigan Avenue (1869) is a rare extant home from this early period of agricultural settlement.

Roseland remained a sparsely settled pastoral village of 772 residents in 1880, featuring Old World language and customs as noted by A.T. Andreas (1884:607) in his History of Cook County:

> "Its inhabitants are the sturdy phlegmatic, industrious, natives of Holland; and standing by some of the little, squat, small-windowed houses, hearing the high-Dutch gutturals, seeing the pollards and rectangular enclosures, the square-faced, wooden-shoed, tow-headed little Dutchmen; in fact, observing the *tout ensemble* would cause one to fancy themselves rather near Amsterdam, or in primitive Nieuw Amsterdam, rather than fifteen miles from Chicago."

Roseland's transformation to an urban community began in the 1880s with the establishment of the Pullman Palace Car Company to the east and the development of several additional railroads along the borders of the area. The annexation of both Lake Township and the Village of Hyde Park in the early 1890s brought Roseland within Chicago's city limits. The Calumet region became steadily industrialized during the 1890s as the Illinois Central Railroad built its Burnside shops in the northeast section of Roseland.

Swedish, German, English, and Irish workers moved into the Roseland community in the late 19th century, attracted to readily available jobs for the railroads, the Pullman shops, steel plants, and other industries that moved into the Calumet region. Roseland's population spread to the south and west and the new residences included modest one- and one-and-a-half-story frame workers' cottages, such as those at 351 W. 109th Street (1889) and 11336 S. Yale Avenue (1894). Less common were cottages built of brick, such as the Italianate style example at 11452 S. Indiana Avenue (1880s).

An impressive Romanesque Revival style public elementary school, the Peter Van Vlissingen School at 137 W. 108th Street (demolished 1999), was completed in 1892 by the Chicago Board of Education. Numerous churches were built in the community during the 1880s and 1890s, including the German Catholic St. Nicholas Church at 11324 S. State Street (built 1896 by architect William Brinkmann) and the church at 11032 S. Indiana Avenue (1891), both designed in the Gothic Revival style. Holy Rosary Church at 113th Street and Martin Luther King Drive was built for the Irish community in 1890 and designed in the Romanesque style by Pullman architect Solon Beman. The First Reformed Church of Roseland at 10706 S. Michigan Avenue, a designated Chicago landmark built in 1887 by architects Henrik De Jong and Jan Kleinhuizen, became the third Dutch church on this site (Taussig 1989).

The corner of 111th Street and Michigan Avenue served as a commercial node for Roseland's earliest settlers, growing to the north and south with the extension of the Michigan Avenue streetcar line to 115th Street in 1892. The two-story buildings at 11314 S. Michigan Avenue, 11349 S. Michigan Avenue, and 11433 S. Michigan Avenue with ground floor shops and flats above are representative of this period of development. The 11314 and 11349 S. Michigan Avenue buildings retain their decorative second-story pressed metal window bays, while the 11433 S. Michigan Avenue building features intact terra cotta detailing. By the turn of the 20th century, Roseland's Michigan Avenue stores served customers from several nearby communities, including Burnside and West Pullman, and its merchants had formed the South End Merchants Association (later called the South End Chamber of Commerce).

Roseland Development: 1900 to 1950

Roseland's largest green space—the 40-acre Palmer Park—was created in 1904 on the tract bounded by 111th and 113th Streets to the north and south, and by King Drive and Indiana Avenue to the east and west. The park is named for Potter Palmer (1826–1902), one of Chicago's most successful merchants and a member of the South Park Commission that established Palmer Park as part of its revolutionary neighborhood parks system to provide green space in Chicago's crowded immigrant neighborhoods. Palmer Park, as well as the nine other South Side neighborhood parks that opened in 1905, was designed by the Olmsted Brothers, a nationally renowned landscape architecture firm. The Classically styled fieldhouse was designed by the prominent Chicago firm of D. H. Burnham and Company. In 1934, Park District Art Director James Edward McBurney created three murals for the Palmer Park Fieldhouse as a Works Progress Administration project funded by the federal government. They are titled "Native Americans," "Explorers," and "Dutch Settlers."

In 1910 the City of Chicago erected a pumping station and firehouse across the street from each other on the 300 block of West 104th Street and donated adjacent property to Chicago's Special Park Commission for the creation of a natatorium with swimming and changing room facilities. The natatorium, which opened in 1916, was equipped to serve 1,500 patrons per day. A gymnasium was added to the natatorium in the 1920s. The surrounding park was named in 1940 for Eugene H. Block (1865–1938), who served as Alderman for the 33rd and 9th Wards between 1910 and 1917.

The Pullman Free School of Manual Training opened in 1915 at 11006 S. Indiana Avenue, on the block just north of Palmer Park. Designed by architect Frank Jobson in the Classical Revival style, the school was built through a bequest of $1.2 million made by George Pullman upon his death in 1897, with an additional bequest made later by Mrs. Pullman. The school served the children of employees of the Pullman car works and the Pullman-Roseland communities (*Chicago Tribune* 1914, 1915). The school closed in 1950, as its endowment could no longer sustain the rising costs of the school, which was prohibited from charging tuition according to Pullman's will. In subsequent years, the building served as the Gregor Mendel Roman Catholic High School, operated by the Augustinians (1951–88), and as St. Martin de Porres High School, operated by the Archdiocese of Chicago (1989–97). The building was sold to the Chicago Public Schools system in 1998, and opened in 1998 as the Southside College Preparatory Academy, which was renamed in 2001 in honor of Gwendolyn Brooks, a former South Side resident and U.S. poet laureate.

Polish and Italian immigrants were added to Roseland's ethnic mix in the early 20th century. In 1920 Roseland's population stood at 28,241 and abundant undeveloped land remained throughout the community. This situation was to change quickly during the decade to follow, when Roseland's population rapidly increased with an influx of Lithuanians, Italians, Germans, and a small number of African-Americans. The accompanying building boom of the 1920s transformed Roseland into a mature residential community and vacant parcels were improved with one- to two-story gable-roofed wood cottages, brick bungalows, and wood frame homes in the popular American Foursquare style. Some multi-family brick two-flats and small apartment buildings were built as well, including an Art Deco style apartment building at 10411 S. Rhodes Avenue (1929).

The years from 1900 to 1950 saw the erection of numerous churches to serve Roseland's growing multi-ethnic community. Holy Rosary Church added a rectory (1901) and a two-story Renaissance Revival style Catholic school (1916; Anders G. Lund) along the 113th block of Martin Luther King Drive (Chicago Real Estate Daily 2008). Solon S. Beman was the architect of the Classical Revival style Sixth Church of Christ, Scientist at 11325 S. Prairie Avenue (1911), one of six Christian Science church buildings he designed in Chicago. The Roseland Christian School, a three-story brick building at 314 W. 108th Street, was built by the Dutch community in 1929. Institutional buildings erected during the 1920s in Roseland included the Pullman Public Library at 11011 S. Indiana Avenue, a Classical Revival style building designed by Arthur Hussander, and the Roseland Community Hospital at 45 W. 111th Street.

During the early 20th century, Roseland's Michigan Avenue commercial district expanded to encompass the mile-long stretch from 103rd Street to 115th Street. Its wide range of small shops, department stores, and recreational amenities including bowling alleys and movie theaters attracted customers from an ever-expanding geographic area on the South Side. Buildings erected along Roseland's commercial spine were typically one to two stories in height, mainly faced in brick, with commercial storefronts and apartments above. Detailing was restrained and included stone lintels and sills, storefront surrounds of stone or terra cotta, and stone or metal cornices or parapets. The two-story building at 11000 S. Michigan Avenue is an example of a terra cotta-clad building from this period. Most of the commercial buildings were not designed in a specific architectural style, but often included details from a style such as the Queen Anne, Romanesque, Classical Revival, or Chicago School. Some buildings had more elaborate upper-story ornamentation, such as pressed metal window bays or Sullivanesque panels in terra cotta, as displayed in the one-story building at 10351 S. Michigan Avenue.

In 1917 James Gately opened the two-story Gately's People Store at the corner of 112th Street and Michigan Avenue, a Chicago School style department store that became a fixture in the community until its closure in 1980. The 2,000-seat State Theater at 110th Street and Michigan Avenue opened in 1922; the block-long building, which featured store-and-office wings flanking the theater, quickly became a prominent visual landmark in the community with its marquees and exuberant, Classically styled ornamentation in terra cotta. The considerably smaller Roseland Theater at 11331 S. Michigan Avenue was designed in a restrained version of the Art Deco style.

Roseland's growth slowed during the economic depression of the 1930s but rebounded during the 1940s following World War II, with population rising from 44,009 in 1940 to 56,705 in 1950 (Priddy 1954). African-Americans constituted a large portion of this increase. They moved to an enclave called Lilydale, which was established north of 99th Street after World War I. The Lilydale Improvement Association was formed to provide assistance to African-Americans seeking homeownership in the area (*Chicago Tribune* 1928). During the 1940sthe Lilydale neighborhood was increasingly developed with small brick homes and duplexes. Many of these homes were located in the Princeton Park development, which was built in 1944 and bounded by 91st Street, 95th Street, Wentworth Avenue, and Harvard Avenue, and later expanded to State Street. In 1947 prominent African-American contractor Matthew Goodwin Sr., who worked in partnership with his two sons, built 30 homes in the Lilydale neighborhood. Goodwin's work was described in a

1947 *Chicago Tribune* article by Albert F. Barnett titled "Chicago Negroes Fight Housing Shortage, Build Their Own Homes:"

> Goodwin Sr. is rated in housing circles as one of the ablest contractors in the city regardless of race…Goodwin up to date has constructed more than 700 homes for Negroes, a record reportedly without precedent anywhere in the nation among Negroes…At present Goodwin and Sons has 30 homes under construction on the far Southside in the section ranging from 90th Street to 95th Street and from State Street west to Perry Avenue.

Roseland Development: 1950 to Present

The private rental Princeton Park development was joined in 1954 by an adjacent Chicago Housing Authority project, comprising 128 row houses in 18 clusters centered around 95th Street and Wentworth Avenue. Designed by architect Sydney H. Morris, the Governor Frank O. Lowden Homes were mainly occupied by African-Americans fleeing the Black Belt of the inner city (Bowly 1978:86). The growing African-American community in Roseland's northern section was served by the creation in 1950 of the 23-acre Abbott Park, which was bounded by 95th Street, 98th Street, State Street, and Michigan Avenue. The park, which features both a swimming pool and field, was named for Robert Abbott (1868–1940), who founded the influential *Chicago Defender* newspaper in 1905. In 1956, the park district sold a portion of the parkland to the Board of Education for the establishment of Harlan High School at 9652 S. Michigan Avenue.

During the 1950s and 1960s, Roseland served as a community—albeit on its northern end only—where African-Americans could purchase a home and build a future. Construction of the Dan Ryan Expressway during the late 1950s cut a wide swath through Roseland's north end. This dramatic intervention on the urban landscape resulted in the demolition of many homes and physically divided this area from the remainder of the community to the south.

Roseland's vacant edges were developed from the 1950s through the early 1970s with clusters of identical one-story and split-level tract homes. Residents of Roseland and neighboring communities continued to be served by the Michigan Avenue commercial district, which thrived into the 1950s. A 1957 *Chicago Tribune* article noted that the stretch of Michigan Avenue from 101st Street to 119th Street, which included four blocks of the West Pullman community to the south, featured "close to 500 stores which saw a $76 million retail business as far back as 1954." During the 1950s "The Avenue," as it was called by Roseland residents, featured 119 food stores, 72 eating and drinking places, 72 apparel stores, 34 furniture and appliance dealers, and 18 drug stores, leading a contemporary *Chicago Tribune* reporter (Bach 1957) to optimistically state "Roseland is alive with new plans to meet the demands of its promising business future."

Roseland's economic fortunes began a rapid decline in the 1970s, however, due in large part to the collapse of the South Side's industrial base. Industries such as the Pullman Company, Wisconsin Steel, International Harvester, CIP Warehousing, Allied Chemical, and Dutch Boy Paint Company that once hired numerous Roseland residents closed their doors, and other industries dramatically reduced their work forces. The establishment in 1972 of the Chicago State University on the former site of Illinois Central Railroad's Burnside Shops in the northeastern corner of the

community was seemingly the only bright spot during this period. Jobs in Roseland decreased from 22,945 to 9,889 between 1974 and 1985 (City of Chicago Department of Planning 1991:9). The 53 percent decline in employment in this decade had a devastating effect on many households and businesses in the area.

Chicago's South Side workers followed their jobs to the far south suburbs. Joining them were residents who feared integration during a period when Roseland's racial composition changed dramatically. During the decade of 1970–80, Roseland changed from a racially mixed community to an almost exclusively African-American community. Roseland's economic woes quickly sparked a downward slide that featured a variety of community woes, such as unemployment, mortgage defaults, business failures, and gang-related problems. More than 900 mortgages were foreclosed during the 1970s and the Department of Housing and Urban Development (HUD) announced the beginning of a repair-and-sell program for repossessed houses in the Roseland area (Chicago Fact Book Consortium 1995:152). Roseland also lost a key recreational amenity when the 1915 natatorium building with swimming pool and gymnasium in Block Park was razed in 1998 and its site was converted to green space.

The most dramatic changes to Roseland's urban landscape, however, have occurred throughout its once thriving and densely built spine along Michigan Avenue. Decline set in as early as the 1960s, as the district found it hard to compete with automobile-oriented shopping centers such as Evergreen Plaza (95th Street and Western Avenue in Evergreen Park), Ford City (75th Street and Cicero Avenue), and River Oaks (Calumet City). The loss of residents' buying power in subsequent decades hastened the decline of the business district, which spurred the closure of larger community businesses such as Gately's Peoples Store and J.C. Penney, leaving behind smaller and more marginal businesses. Numerous commercial buildings that suffered from years of vacancy and neglect were razed, including the block-long State Theater, once a prominent visual landmark in the community. By the 1990s the Michigan Avenue corridor was characterized by large swaths of land and vacant buildings, especially in the area between 104th and 110th Streets; however, the stretch between 110th and 115th streets retained a concentration of buildings with viable retail establishments.

In response to this situation, the Chicago Department of Housing and Economic Development initiated a Community Assistance Panel in 1990 to analyze the Michigan Avenue Commercial District and to provide recommendations for its revitalization. The panel recommended that the area between 110th and 116th Streets be designated as the community's primary commercial district and that the area between 103rd and 110th Streets be designated as a primarily residential district (Chicago Department of Planning 1990:1).

In 2002 the city created the Roseland/Michigan TIF District, which encompasses 176 acres of commercial, residential, and institutional properties along Michigan Avenue between 100th and 120th Streets in the Roseland and West Pullman communities. The TIF District was created "to encourage a broad range of improvements to existing commercial and residential properties and to foster new construction where appropriate" (Chicago Department of Housing and Economic Development 1996). At the time of its designation, there were 484 buildings in the project area,

420 (86 percent) of which were classified as deteriorating, and 252 vacant lots (Trkla, Pettigrew, Allen & Payne:4). Some positive new developments in Roseland over the past decade include the Victory Centre of Roseland, a senior housing development at 10450 S. Michigan Avenue, single-family houses and two-flats along South Michigan Avenue between 105th and 107th Streets by Neighborhood Housing Services, and the Art Deco style Roseland Theater at 11331 S. Michigan Avenue that has been restored and converted to retail space.

5.2.2 Surveyed Resources

As part of the fieldwork for the RLE Project, 279 buildings within the Roseland portion of the APE were surveyed. These properties, along with their construction date and an assessment of their eligibility for listing on the NRHP, are presented in Table 5-2, alphabetized by street name. Properties determined individually eligible are highlighted. A series of maps in Appendix A graphically present these findings; individual inventory sheets for surveyed properties are presented in Appendix B.

Table 5-2: 279 Surveyed Properties in Roseland

Address	Year Built	Description	Eligibility
222 W. 98th Street	1964	Single-Family	Not Eligible
349 W. 99th Place	1979	Single-Family	Modern
355 W. 99th Place	1972	Single-Family	Modern
124 W. 99th Street	1965	Single-Family	Not Eligible
314 W. 100th Place	1965	Single-Family	Not Eligible
319 W. 100th Place	1949	Single-Family	Not Eligible
348 W. 100th Place	1967	Single-Family	Modern
349 W. 100th Place	1967	Single-Family	Modern
352 W. 100th Place	1967	Single-Family	Modern
318 W. 100th Street	1947	Minimal Traditional Residence	Not Eligible
348 W. 100th Street	1974	Single-Family	Modern
349 W. 100th Street	1969	Single-Family	Modern
350 W. 100th Street	1973	Single-Family	Modern
351 W. 100th Street	1970	Single-Family	Modern
354 W. 100th Street	1967	Single-Family	Modern
355 W. 100th Street	1971	Single-Family	Modern
317 W. 101st Place	1966	Single-Family	Modern
334 W. 101st Place	1949	Single-Family	Not Eligible
349 W. 101st Place	1965	Single-Family	Not Eligible
352 W. 101st Place	1967	Single-Family	Modern
353 W. 101st Place	1973	Single-Family	Modern
355 W. 101st Place	1973	Single-Family	Modern
331 W. 101st Street	1952	Single-Family	Not Eligible

Address	Year Built	Description	Eligibility
342 W. 101st Street	1948	Single-Family	Not Eligible
348 W. 101st Street	1970	Single-Family	Modern
349 W. 101st Street	1930	Chicago Style Bungalow	Not Eligible
351 W. 101st Street	1930	Chicago Style Bungalow	Not Eligible
352 W. 101st Street	1960	Single-Family	Not Eligible
355 W. 101st Street	1971	Single-Family	Modern
330 W. 102nd Place	1930	Chicago Style Bungalow	Not Eligible
347 W. 102nd Place	1973	Single-Family	Modern
348 W. 102nd Place	1927	Single-Family	Not Eligible
351 W. 102nd Place	1973	Single-Family	Modern
353 W. 102nd Place	1972	Single-Family	Modern
354 W. 102nd Place	1973	Single-Family	Modern
320 W. 102nd Street	1929	Single-Family	Not Eligible
337 W. 102nd Street	1930	Single-Family	Not Eligible
342 W. 102nd Street	1940	Single-Family	Not Eligible
347 W. 102nd Street	1966	Single-Family	Modern
348 W. 102nd Street	1939	Minimal Traditional Residence	Not Eligible
351 W. 102nd Street	1967	Single-Family	Modern
352 W. 102nd Street	1930	Single-Family	Not Eligible
353 W. 102nd Street	1969	Single-Family	Modern
301 W. 103rd Place	1921	Craftsman Style Residence	Not Eligible
306 W. 103rd Place	1941	Single-Family (vacant)	Not Eligible
321 W. 103rd Place	1924	Craftsman Style Residence	Not Eligible
326 W. 103rd Place	1923	Multi-Family	Not Eligible
426 W. 103rd Place	1909	Single-Family	Not Eligible
427 W. 103rd Place	1898	Multi-Family	Not Eligible
436 W. 103rd Place	1908	Single-Family	Not Eligible
440 W. 103rd Place	1893	Single-Family	Not Eligible
455 W. 103rd Place	1908	Single-Family	Not Eligible
316 W. 103rd Street	1962	Commercial (vacant)	Not Eligible
319 W. 103rd Street	1953	Commercial	Not Eligible
403-405 W. 103rd Street	1900	Former Hay, Grain, & Feed Store	Not Eligible
421 W. 103rd Street	1899	Single-Family	Not Eligible
453 W. 103rd Street	1878	Single-Family	Not Eligible
262 W. 104th Place	1910	Single-Family	Not Eligible
328 W. 104th Place	1923	Craftsman Style Residence	Not Eligible
335 W. 104th Place	1919	Single-Family	Not Eligible
310 W. 104th Street	1923	Craftsman Style Residence	Not Eligible

Address	Year Built	Description	Eligibility
324 W. 104th Street or 328-330 W. 104th Street	1917	Fire Department Engine Co. 93	Eligible CHRS Orange
325 W. 104th Street	1924	Single-Family	Not Eligible
351 W. 104th Street	1911	Roseland Pumping Station	Eligible CHRS Orange
401 W. 104th Street	1967	Education	Modern
405 W. 104th Street	1967	Education	Modern
415 W. 104th Street	1923	Single-Family	Not Eligible
430 W. 104th Street	1927	Chicago Style Bungalow	Not Eligible
457 W. 104th Street	1922	Single-Family	Not Eligible
351 W. 105th Place	1972	Single-Family	Modern
355 W. 105th Place	1972	Single-Family	Modern
343 W. 105th Place	1926	Craftsman Style Residence	Not Eligible
344 W. 105th Place	1925	Craftsman Style Residence	Not Eligible
411 W. 105th Street	1960/2005	Industrial	Not Eligible
416 W. 105th Street or 410 W. 105th Street	1929	Mixed-Use (vacant)	Not Eligible
338 W. 106th Place	1913	Single-Family	Not Eligible
340 W. 106th Place	1925	Craftsman Style Residence	Not Eligible
343 W. 106th Place	1907	Single-Family	Not Eligible
349 W. 106th Place	1914	Single-Family	Not Eligible
350 W. 106th Place	1908	Single-Family	Not Eligible
352 W. 106th Place	1924	Single-Family	Not Eligible
353 W. 106th Place	1972	Single-Family	Modern
341 W. 106th Street	1903	Single-Family	Not Eligible
346 W. 106th Street	1964	Single-Family	Not Eligible
351 W. 106th Street	1898	Single-Family	Not Eligible
352 W. 106th Street	1972	Single-Family	Modern
353 W. 106th Street	1924	Single-Family	Not Eligible
354 W. 106th Street	1972	Single-Family	Modern
332 W. 107th Place	1949	Single-Family	Not Eligible
333 W. 107th Place	1924	Craftsman Style Residence	Not Eligible
346 W. 107th Place	1927	Industrial	Not Eligible
355 W. 107th Place	1986	Industrial	Modern
335 W. 107th Street	1899	Single-Family	Not Eligible
350 W. 107th Street	1979	Single-Family	Modern
352 W. 107th Street	1974	Single-Family	Modern
400 W. 107th Street	1929	Industrial	Not Eligible
415 W. 107th Street	1920	Commercial	Not Eligible

Address	Year Built	Description	Eligibility
432 W. 107th Street	1962	Single-Family	Not Eligible
744 W. 107th Street	1957	Single-Family	Not Eligible
300 W. 108th Place	1908	Single-Family	Not Eligible
313 W. 108th Place	1918	Single-Family	Not Eligible
348 W. 108th Place	1928	Single-Family	Not Eligible
349 W. 108th Place	1909	Single-Family	Not Eligible
234 W. 108th Street or 314 W. 108th Street	1928	Educational	Not Eligible
340 W. 109th Place	1925	Craftsman Style Residence	Not Eligible
341 W. 109th Place	1883	Single-Family	Not Eligible
348 W. 109th Place	1930	Single-Family	Not Eligible
350 W. 109th Place	1908	Multi-Family	Not Eligible
301 W. 109th Place	1905	Multi-Family (vacant)	Not Eligible
349 W. 109th Street	1888	Multi-Family	Not Eligible
350 W. 109th Street	1894	Single-Family	Not Eligible
351 W. 109th Street	1889	Single-Family	Not Eligible
354 W. 109th Street	1894	Single-Family	Not Eligible
404-410 W. 109th Street	1965	Industrial (vacant)	Not Eligible
407-409 W. 109th Street	1956	Industrial	Not Eligible
743 W. 109th Street	1954	Single-Family	Not Eligible
332 W. 110th Place	1899	Single-Family	Not Eligible
341 W. 110th Place	1916	Single-Family	Not Eligible
347 W. 110th Place	1892	Single-Family	Not Eligible
301 W. 110th Street or 11010 S. Princeton Avenue	1903	Single-Family	Not Eligible
331 W. 110th Street	1909	Single-Family	Not Eligible
340 W. 110th Street	1909	Multi-Family	Not Eligible
352 W. 110th Street	1968	Industrial	Modern
401 W. 110th Street	1981	Industrial	Modern
Two W. 111th Place	1922	Apartment Building	Not Eligible
3 W. 111th Place	1934	Bethany Reformed Church Manse	Eligible
340 W. 111th Place	1908	Multi-Family	Not Eligible
344 W. 111th Place	1913	Single-Family	Not Eligible
303 W. 111th Street	1923	Craftsman Style Residence	Not Eligible
316 W. 111th Street	1893	Multi-Family (vacant)	Not Eligible
339-341 W. 111th Street	1924	Mixed-Use	Not Eligible
349 W. 111th Street	1917	Greystone Flat	Not Eligible
401 W. 111th Street	1964	Commercial	Not Eligible

Address	Year Built	Description	Eligibility
428 W. 111th Street	1960	Single-Family	Not Eligible
256 W. 112th Place	1888	Single-Family	Not Eligible
303 W. 112th Place	1909	Single-Family	Not Eligible
312 W. 112th Place	1914	Single-Family	Not Eligible
319 W. 112th Place	1914	Multi-Family	Not Eligible
325 W. 112th Place	1899	Single-Family	Not Eligible
328 W. 112th Place	1963	Single-Family	Not Eligible
330 W. 112th Place	1966	Single-Family	Modern
339 W. 112th Place	1908	Industrial	Not Eligible
10 E 112th Street	1883	Single-Family (vacant)	Not Eligible
20 E 112th Street	1926	Mixed-Use	Not Eligible
303 W. 112th Street	1908	Single-Family	Not Eligible
334 W. 112th Street	1912	Single-Family	Not Eligible
340 W. 112th Street	1964	Flat (vacant)	Not Eligible
410 W. 112th Street	1929	Chicago Style Bungalow	Not Eligible
139 W. 113th Place	1923	Flat (vacant)	Not Eligible
228 W. 113th Street	1890	Single-Family	Not Eligible
235 W. 113th Street	1905	Single-Family	Not Eligible
303 W. 113th Street	1919	Single-Family	Not Eligible
307 W. 113th Street	1917	Multi-Family	Not Eligible
309 W. 113th Street	1904	Multi-Family	Not Eligible
310 W. 113th Street	1904	Multi-Family (vacant)	Not Eligible
312 W. 113th Street	1962	Single-Family	Not Eligible
316 W. 113th Street	1962	Single-Family	Not Eligible
320 W. 113th Street	1962	Single-Family	Not Eligible
337 W. 113th Street	1910	Single-Family	Not Eligible
340 W. 113th Street	1924	Multi-Family	Not Eligible
345 W. 113th Street	1911	Single-Family	Not Eligible
41 W. 114th Place	1889	Single-Family	Not Eligible
62 W. 114th Place	1924	Craftsman Style Residence	Not Eligible
131 W. 114th Street	1903	Single-Family	Not Eligible
135 W. 114th Street or 131 W. 114th Street	1922	Religious	Not Eligible
138 W. 114th Street	1909	Single-Family	Not Eligible
235 W. 114th Street	1964	Single-Family	Not Eligible
324 W. 114th Street	1907	Multi-Family	Not Eligible
8 W. 115th Street	1903	Flat	Not Eligible
40 W. 115th Street	1894	Multi-Family	Not Eligible

Address	Year Built	Description	Eligibility
42 W. 115th Street	1899	Single-Family	Not Eligible
112 W. 115th Street	1927	Industrial	Not Eligible
116 W. 115th Street	1904	Multi-Family	Not Eligible
120 W. 115th Street	1899	Single-Family	Not Eligible
10415 S. Eggleston Avenue	1927	Craftsman Style Residence	Not Eligible
10531 S. Eggleston Avenue	1940	Minimal Traditional Residence	Not Eligible
10558 S. Eggleston Avenue	1924	Craftsman Style Residence	Not Eligible
10601 S. Eggleston Avenue	1929	Chicago Style Bungalow	Not Eligible
10612 S. Eggleston Avenue	1947	Single-Family	Not Eligible
10720 S. Eggleston Avenue	1924	Single-Family (vacant)	Not Eligible
10757 S. Eggleston Avenue	1923	Single-Family (vacant)	Not Eligible
10904 S. Eggleston Avenue	1927	Single-Family	Not Eligible
10953 S. Eggleston Avenue	1960	Single-Family	Not Eligible
11130 S. Eggleston Avenue	1914	Flat	Not Eligible
11133 S. Eggleston Avenue	1888	Single-Family	Not Eligible
11139 S. Eggleston Avenue	1915	Single-Family	Not Eligible
11211 S. Eggleston Avenue	1922	Craftsman Style Residence	Not Eligible
11257 S. Eggleston Avenue	1908	Single-Family	Not Eligible
10316 S. Emerald Avenue	1919	Craftsman Style Residence	Not Eligible
10428 S. Emerald Avenue	1941	Single-Family	Not Eligible
10554 S. Emerald Avenue	1962	Single-Family	Not Eligible
10614 S. Emerald Avenue	1948	Minimal Traditional Residence	Not Eligible
10750 S. Emerald Avenue	1956	Single-Family	Not Eligible
10824 S. Emerald Avenue	1955	Single-Family	Not Eligible
10952 S. Emerald Avenue	1962	Single-Family	Not Eligible
11034 S. Emerald Avenue	1924	Single-Family	Not Eligible
11104 S. Emerald Avenue	1951	Single-Family	Not Eligible
11212 S. Emerald Avenue	1951	Single-Family	Not Eligible
11310 S. Emerald Avenue	1928	French Eclectic Style House	Eligible, CHRS Orange
11456 S. Emerald Avenue	1951	Single-Family	Not Eligible
10401-10419 S. Halsted Street	1957	Mid-Century Modern Church	Not Eligible
10615 S. Halsted Street	1954	Commercial	Not Eligible
10861 S. Halsted Street	1954	Commercial	Not Eligible
11011 S. Halsted Street	1961	Commercial	Not Eligible
11013 S. Halsted Street	1879	Multi-Family	Not Eligible
11121 S. Halsted Street	1969	Commercial	Modern
11139 S. Halsted Street	1957	Modernistic Commercial Building	Not Eligible

Address	Year Built	Description	Eligibility
9820 S. Harvard Avenue	1959	Single-Family	Not Eligible
9823 S. Harvard Avenue	1915	Single-Family	Not Eligible
11314 S. Harvard Avenue	1926	Craftsman Style Residence	Not Eligible
11356 S. Harvard Avenue	1916	Multi-Family (vacant)	Not Eligible
11415 S. Harvard Avenue	1898	Flat (vacant)	Not Eligible
10204 S. Indiana Avenue	1903	Single-Family	Not Eligible
10242 S. Indiana Avenue	1906	Multi-Family	Not Eligible
9723 S. La Salle Street	1955	Single-Family	Not Eligible
9738 S. La Salle Street	1964	Single-Family	Not Eligible
9902 S. La Salle Street	1919	Single-Family	Not Eligible
9706 S. Lafayette Avenue or 9708 S. Perry Avenue	1957	Single-Family	Not Eligible
10159 S. Michigan Avenue	1918	Craftsman Style Residence	Not Eligible
10213 S. Michigan Avenue	1888	Single-Family	Not Eligible
10220 S. Michigan Avenue	1900s	Multi-Family	Modern
10259 S. Michigan Avenue	1888	Commercial	Not Eligible
11156 S. Michigan Avenue	1923	Commercial	Not Eligible
11200-11206 S. Michigan Avenue	1904	Mixed-Use	Not Eligible CHRS Orange (11206)
10457 S. Normal Avenue	1927	Dutch Colonial Style Residence	Not Eligible
10511 S. Normal Avenue	1949	Single-Family	Not Eligible
10641 S. Normal Avenue	1925	Chicago Style Bungalow	Not Eligible
10701 S. Normal Avenue	1955	Ranch	Not Eligible
10747 Normal Avenue	1928	Craftsman Style Residence	Not Eligible
10853 S. Normal Avenue	1929	Chicago Style Bungalow	Not Eligible
10959 S. Normal Avenue	1938	Minimal Traditional Residence	Not Eligible
11001 S. Normal Avenue	1938	Single-Family	Not Eligible
11035 S. Normal Avenue	1924	Single-Family	Not Eligible
11439 S. Perry Avenue or 11439 S. Pippin Avenue	1892	Industrial Complex	Not Eligible
11426 S. Perry Avenue	1920s	Industrial Complex	Not Eligible
9815 S. Princeton Avenue	1963	Single-Family	Not Eligible
9818 S. Princeton Avenue	1964	Single-Family	Not Eligible
9915 S. Princeton Avenue	1964	Single-Family	Not Eligible
9938 S. Princeton Avenue	1964	Single-Family	Modern
10000 S. Princeton Avenue	1967	Single-Family	Modern
10040 S. Princeton Avenue	1967	Single-Family	Modern
10054 S. Princeton Avenue	1934	Multi-Family	Not Eligible
10136 S. Princeton Avenue	1954	Single-Family (vacant)	Not Eligible

Address	Year Built	Description	Eligibility
10224 S. Princeton Avenue	1930	Single-Family	Not Eligible
10920 S. Princeton Avenue	1916	Romanesque Revival Style Church	Eligible CHRS Orange
11122 S. Princeton Avenue	1922	Apartment Building	Not Eligible
11142 S. Princeton Avenue	1908	Flat	Not Eligible
11319 S. Princeton Avenue	1916	Single-Family	Not Eligible
11321 S. Princeton Avenue	1903	Single-Family	Not Eligible
11325 S. Princeton Avenue	1903	Single-Family	Not Eligible
11327 S. Princeton Avenue	1903	Single-Family	Not Eligible
11340 S. Princeton Avenue	1948	Single-Family	Not Eligible
11210 S. State Street	1910, 1936	Gothic Revival Style Church	Not Eligible
11118 S. Stewart Avenue	1922	Garage	Not Eligible
11124 S. Stewart Avenue	1972	Commercial	Modern
11130 S. Stewart Avenue	1914	Single-Family	Not Eligible
11142 S. Stewart Avenue	1950	Industrial (vacant)	Not Eligible
11224 S. Stewart Avenue	1923	Single-Family	Not Eligible
11229 S. Stewart Avenue	1924	Single-Family (vacant)	Not Eligible
11231 S. Stewart Avenue	1925	Craftsman Style Residence	Not Eligible
9745 S. Wentworth Avenue	1964	Single-Family	Not Eligible
9756 S. Wentworth Avenue	1963	Single-Family	Not Eligible
9907 S. Wentworth Avenue	1966	Single-Family	Modern
11321 S. Wentworth Avenue	1911-1938	Roseland Community Hospital Nurses Home	Eligible
11334 S. Wentworth Avenue	1906	Single-Family	Not Eligible
11352 S. Wentworth Avenue	1897	Single-Family	Not Eligible
11428 S. Wentworth Avenue	1908	Single-Family (vacant)	Not Eligible
11441 S. Wentworth Avenue	1974-1988	Church	Modern
9808 S. Yale Avenue	1963	Single-Family	Not Eligible
9904 S. Yale Avenue	1923	Craftsman Style Residence	Not Eligible
9905 S. Yale Avenue	1924	Craftsman Style Residence	Not Eligible
11319 S. Yale Avenue	1909	Single-Family (vacant)	Not Eligible
11330 S. Yale Avenue	1916	Single-Family	Not Eligible
11334 S. Yale Avenue	1922	Multi-Family	Not Eligible
11336 S. Yale Avenue	1894	Single-Family	Not Eligible
11343 S. Yale Avenue	1914	Craftsman Style Residence	Not Eligible
11347 S. Yale Avenue	1966	Single-Family	Modern
11413 S. Yale Avenue	1920	Craftsman Style Residence	Not Eligible
11417 S. Yale Avenue	1914	Single-Family	Not Eligible

CHRS = Chicago Historic Resources Survey

5.2.2.1 Resources Eligible for National Register of Historic Places

Of the 279 buildings surveyed within the Roseland portion of the RLE APE, 6 were identified as eligible for listing on the NRHP. These are briefly described below.

Fire Department Engine Company 93, 324 W. 104th Street

This two-story firehouse in the Roseland community is clad with light brown face brick, as shown in Figure 5-5. The building has a flat roof and a parapet with concrete coping. The front elevation has a two-story projecting pavilion, an overhead garage door, two window openings, an off-center, hollow-core metal door on the first floor, and a strip of three windows and a single window on the second floor. All windows are non-original, one-over-one aluminum sash. The spandrel area between the garage door and the windows above features a large stone sign plate inscribed with the words, "City of Chicago Fire Department." The spandrel area between the corner door and window above has a metal plate identifying the 1917 construction date and the names of a series of people associated with the building's construction, including the mayor, alderman, city architect (Charles W. Kallal), and contractor (Butler & Co.). Detailing includes stone door and window surrounds on the first floor, bracketed stone window lintels, concrete belt courses, and brick pilasters topped by stone panels with the City of Chicago's "Y" emblem and decorative scrolls. The "Y" emblem is also repeated above the off-center door.

This building is eligible for individual listing on the NRHP under Criterion C for architecture. It is a rare extant example of an early 20th century neighborhood firehouse in Roseland, has largely retained its original building materials and detailing, and still functions as a firehouse.

Figure 5-5: South Facade of Chicago Fire Department Engine Company 93

Roseland Pumping Station, 351 W. 104th Street

The two-story Prairie style Roseland Pumping Station, designed by architect William G. Kreig in 1911, is clad in brown brick, as shown in Figure 5-6. The building has a high limestone water table, a flat roof, parapet, and two square towers at the corners of the front elevation. The front elevation features a projecting, two-story, flat roofed entrance pavilion with a pair of centrally located glass double doors, sidelights, and a stone panel above that features the City of Chicago's "Y" emblem in metal. The entrance has a smooth stone surround. Above the entrance is a limestone panel incised with the words "City of Chicago Roseland Pumping Station." Detailing on the entrance pavilion includes brick pilasters with stone bases and coping and geometric motifs. The parapet is clad in limestone and features decorative geometric motifs. The building's fenestration is largely composed of multi-paned, steel-sash windows, some of which have transoms.

This is an excellent intact example of a neighborhood pumping station with fine integrity that still functions in its original use. It was identified as individually eligible for the NRHP under Criterion C for architecture, as it stands as an excellent, well-preserved example of a neighborhood pumping station designed in the Prairie style.

Figure 5-6: North Facade of the City of Chicago Roseland Pumping Station

French Eclectic Style Home, 11310 S. Emerald Avenue

This two-story, asymmetrical French Eclectic style house in the Roseland community is clad with brownish-orange face brick. Built circa 1928, it is shown in Figure 5-7. The building has a steeply pitched roof covered with slate, a pair of gabled pavilions along its north elevation, and an L-shaped footprint with a one-story, side-gabled wing that features two flat-roofed dormers. The front elevation of the main block has two first-floor windows that are obscured by metal grates and two through-the-cornice wall dormers with paired casement windows. The recessed front door has a smooth stone surround. A stone-clad, upper-story oriel is at the juncture between the front wing and its adjacent gabled pavilion. Attic windows in the paired gable pavilions are surrounded by stone quoins. Fenestration appears to be mainly casement windows.

This is an unusual example of a French Eclectic style home in Roseland and stands as a visual landmark among the predominant building stock of cottages and bungalows. Although windows appear to be replacements, overall it has very good integrity and is individually eligible for NRHP listing under Criterion C for architecture.

Figure 5-7: North and East Facades of the French Eclectic Home at 11310 S. Emerald Avenue

Romanesque Revival Style Church, 10920 S. Princeton Avenue

This circa 1916 Romanesque Revival style church in the Roseland community has a front elevation and two flanking towers clad with brown face brick, while the remainder of the side elevation and the rear elevation are clad with common brick. Shown in Figure 5-8, the church has a gable roof covered with asphalt shingles and gable wall dormers with shaped parapets on both side elevations. The east tower has a flat roof and a shaped parapet while the west tower has a peaked roof with overhanging eaves and exposed rafters and is topped by a finial. The central bay of the front elevation has a broad, round-arched entrance with a stone surround and two sets of single-light oak double doors. A strip of double-hung windows is within a broad arch and there is a rose window with tracery. Windows on both towers and along the side elevations include round-arch windows with tracery. It is unknown whether the original stained glass for all of these windows is extant inside the church. Both towers also feature paired casement windows. Window openings at the top of the west tower have been boarded over. Detailing includes stone sills, belt courses, brick pilasters, and keystones. A one-story, brick-clad entrance vestibule is along the rear of the west elevation.

Built as the First Reformed Church of Roseland, this church was identified as individually eligible for NRHP listing under Criterion A for its association with the community's once-dominant Dutch population and under Criterion C as a fine example of a Romanesque Revival style church in Roseland.

Figure 5-8: East and North Facades of Church at 10920 S. Princeton Avenue

Bethany Reformed Church Manse, 3 W. 111th Place

This Craftsman house at the southwest corner of 111th Place and State Street sits on a raised basement and is clad with brown face brick. The building has a hip roof covered with asphalt shingles, overhanging eaves with knee braces, and a hip dormer along the 111th Place elevation. Built in 1934, the main block of the house has two additions: a one-story Gothic Revival style east wing with a flat roof and battlemented parapet and a one-story hipped-roof sun porch to the west that is surrounded by double-hung windows. Both wings are also clad in brown face brick. The home's front elevation has a centrally located single-light wood door with sidelights, brick piers, concrete steps with low brick sidewalls, and a flat-roofed wood canopy. The front entrance is flanked on either side by a group of three windows: a picture window flanked by double-hung windows. The second floor of the front elevation features a series of double-hung windows. The front elevation of the Gothic Revival style wing has an off-center metal storm door with slit windows on either side, as well as a picture window flanked by double-hung windows. The door and window group have stone quoins and drip molding. Detailing also includes stone insert blocks.

The residence is identified as individually eligible for NRHP listing under Criterion B due to its association with Reverend Harry J. Hager (1899-1983), a pioneer in media evangelism in Chicago during the mid-20th century. Reverend Hager served as pastor of the adjacent Bethany Reformed Church for 44 years (1929-1975). He was a pioneer in the emerging media ministry, beginning in 1933 with the weekly Bethany Bible Broadcast on the FM station WHIP. Starting in 1944, Reverend Hager's preaching reached a national audience when Chicago's high-powered AM station WCFL began broadcasting his Sunday evening services across America. The manse is shown in Figure 5-9.

Figure 5-9: Front Facade (left) and East Wing (right) of 3 W. 111th Place

Roseland Community Hospital Nurses Home, 11321 S. Wentworth Avenue

Shown in Figure 5-10, this four-story building has a flat roof and parapet. Its symmetrical front elevation is clad with brown face brick and has a centrally located entrance with a glass door and stone surround topped by two stone owls holding books. Windows are non-original one-over-one aluminum sash; those directly above the entrance have stone casings. Detailing includes stone sills, coping, insert blocks, sill courses, cornice, panels, and pinnacles at the parapet level.

This building is locally significant and eligible for NRHP listing under Criterion A for Education. Formerly the Roseland Community Hospital Nurses Home, it was built by the hospital as a dormitory and educational facility for its nurses. Closely affiliated with Roseland Community Hospital, which has served as an important institution in the Roseland area since its establishment in 1924, the Nurses Home is an excellent example of this building type on Chicago's South Side. The exterior of the building has very good integrity and the interior—which now functions as a homeless shelter—appears to retain classrooms and other spaces associated with its original use.

Figure 5-10: Front Facade of Nurses Home at 11321 S. Wentworth Avenue

5.2.2.2 Properties Surveyed but Determined Ineligible

Beyond the properties that were identified as individually eligible for NRHP listing, a number of properties were surveyed that did not meet the criteria. Generally, these properties have had subsequent alterations that compromise their historic integrity or do not feature a level of distinctive architectural detailing necessary to qualify for the NRHP.

5.3 Morgan Park Community

The following subsections include a description of the historic context for the development of the Morgan Park community (**Section 5.3.1**) and an overview of historic properties that were surveyed (**Section 5.3.2**). No NRHP-listed sites or districts fall within the RLE APE in the Morgan Park community.

5.3.1 Historic Context

The community of Morgan Park, approximately 16 miles southwest of Chicago's Loop, is roughly bounded by 107th Street on the north, 115th and 119th Streets on the south, Halsted Street on the east, and California and Rockwell Avenues on the west.

<u>Morgan Park Development in the 19th Century</u>
Morgan Park is named for Thomas Morgan, an Englishman who in 1844 purchased a heavily wooded 3,000-acre tract stretching from the present 91st to 115th Streets on either side of a glacial moraine. The Blue Island moraine remnant, which is roughly 6 miles long and 2 miles wide, is the only high ground within this portion of the lake plain. Morgan built a home at 92nd Street and Pleasant Avenue, in today's Beverly community, and fenced his land for farming, ranching, and hunting (Chicago Fact Book Consortium 1995:210). Other farmers purchased land near the Morgan farm and used the Vincennes Trail along the morainal ridge for access to Chicago.

The transformation of the rural ridge area to a suburban community began in 1869 when the Blue Island Land and Building Company purchased Morgan's property from his heirs and subdivided the land south of 107th Street, between Ashland and Western Avenues, as a subdivision of the Washington Heights community (much of which is Beverly today) to the north (Andreas 1884:639). West of Vincennes Avenue, English landscape architect Thomas F. Nichols designed a series of picturesque, curving streets dotted with parks on behalf of the Blue Island Company (Pacyga and Skerrett 1976:535). This area featured large, deep lots suitable for spacious Victorian homes and evoked the ambiance of an English country town. East of Vincennes Avenue and south of 111th Street, the area was platted with a more typical, rectilinear street grid featuring smaller lots. This section was developed with more modest homes.

The new subdivision benefitted from the 1871 opening of a branch line of the Chicago, Rock Island, and Pacific Railroad, which provided commuter service from Blue Island to downtown Chicago and included a stop at 111th (formerly Morgan) Street. Several important early institutions were established that spurred development in the area. In 1873 the Blue Island Company donated land for the Mt. Vernon Military Academy, which still exists as the Morgan Park Academy, on 111th Street between Hoyne and Bell Avenues. The military academy's headmaster lived in the

house at 2203 W. 111th Street, which was built during the 1870s. Dwight Perkins designed a fieldhouse, located at 2147 W. 112th Street, for the Academy in 1900. The exclusive Chicago Female College was established in 1875, but has been demolished.

In 1877 the Blue Island Company convinced the Baptist Union Theological Seminary to move to Morgan Park from the Douglas area of Chicago. By 1879 its well-regarded faculty included William Rainey Harper, who later became the first president of the University of Chicago (Keating 2008:216). The seminary was located near the present day intersection of 111th Street and Western Avenue, a block west of the Morgan Park Academy. According to an early guidebook, the seminary, together with the Morgan Park Military Academy and the Chicago Female College, "formed the chief attraction of the place" (Pacyga and Skerrett 1976:536). Morgan Park received its first Baptist Church in 1874 at 110th Street and Bell Avenue (replaced by a new church begun in 1896). With the arrival of the Baptist Union Theological Seminary in 1877, Morgan Park Baptist Church became one of the most powerful institutions in the community.

During these early years, the Blue Island Company sponsored land auctions and advertised in Chicago newspapers and building journals. An 1889 publication of Morgan Park boosters noted that the village was "much superior to other localities" because it was "near enough to Chicago and sufficiently far removed to afford all the blessings of a Suburban Home with all the conveniences and advantages of the city, far from all its objectionable features." The scenery was an added attraction. Set on a ridge 100 feet above Lake Michigan, it was claimed to be in "semi-mountainous" country, on "the oak-shaded heights of the Blue Island plateau" (Mayer and Wade 1969:170).

Italianate mansions from the early 1870s are located along the ridge at 11347 S. Lothair Avenue and at 11410 S. Longwood Drive. More modest houses from the same period include those at 10934 S. Prospect Avenue, 10970 S. Prospect Avenue, and 2204 W. 111th Street. Reflecting its origins as a Baptist community, Morgan Park prohibited the sale of liquor in the area between Western and Vincennes Avenues when it was incorporated as a village in 1882. Its middle-class character was further reinforced by the construction of other mainline protestant churches, among them Methodist (1888), Episcopalian (1889), Congregational (1890), and Presbyterian (1891), rivaling in size and influence the earlier Morgan Park Baptist Church (Keating 2008:217). For decades, village life centered on its churches; Morgan Park developed a reputation as a temperance town.

Prospect Avenue became Morgan Park's most fashionable street during the 1880s and 1890s, although elaborately designed homes were also built on nearby streets. Examples of the Queen Anne style include an 1888 house at 10920 S. Oakley Avenue and an 1892 house at 11156 S. Longwood Avenue. Local architect Harry Hale Waterman developed a distinctive picturesque style, exemplified by houses at 10838 S. Longwood Drive (1892) and 2023 W. 108th Place (1894). Among those who built homes in the village were executives of the Rock Island line, the Chicago stockyards, and the Chicago Bridge and Iron Company, which opened in 1889 on nearby Vincennes Avenue.

By the late 1880s, 2,800 people lived in Morgan Park (Chicago Fact Book Consortium 1995:210) and the community received regular commuter service to downtown Chicago via the Rock Island Railroad's branch commuter line, the tracks of which were situated to the west of the railroad's main line. Monterey Avenue became the community's commercial center, concentrated around the railroad's Queen Anne style depot at the intersection of 111th Street and Hale Avenue (1890). The year 1890 also saw the completion of Esmond Public School, a substantial three-story, brick edifice at the intersection of Montvale and Home Avenues, and the Walker Library at 11071 S. Hoyne Avenue. The Walker Library was donated by George C. Walker, President of the Blue Island Land and Building Company, and designed in the Richardsonian Romanesque style by noted Chicago architect Charles Frost.

Despite these clear signs of growth, Morgan Park lost its bid to become the home of the University of Chicago, which settled in Hyde Park. After the Baptist Theological Union left Morgan Park in 1892, its buildings were used by Morgan Park Military Academy. During the 1890s The Budget, a local newspaper, advocated streetcar connections with nearby communities as the way to build up Morgan Park. Although service along Vincennes Avenue began in 1896, Morgan Park and its twin community of Beverly to the north remained isolated from the expanding city (Pacyga and Skerrett 1976:537).

Morgan Park Development: 1900 to 1950

The battle over annexation to Chicago, which began in 1911, sharply divided the community and dragged on in court until 1914, finally passing with a margin of only 15 votes (Chicago Fact Book Consortium 1995:210). The building boom that occurred in Morgan Park between 1910 and 1930 reinforced earlier patterns of settlement and the community remained suburban in character. No saloons, factories, or businesses were allowed along the ridge, and developers took care to remove "only trees that actually interfere with building" (Pacyga and Skerrett 1976:539). The community lacked industry, major commercial thoroughfares with heavy traffic, and recreational amenities such as movie palaces or dance halls. Community leaders believed that streetcar lines threatened the exclusivity of the area and consequently streetcars were not extended along Western Avenue to Morgan Park until the 1930s.

Morgan Park's small town character remained appealing to many, and residential growth increased as existing subdivisions were re-divided and new subdivisions were platted west of Western Avenue and south of 115th Street. The Classical Revival style Morgan Park High School opened in 1916 at 111th Street and Vincennes Avenue. The community's growing population, which increased from 7,780 to 12,747 between 1920 and 1930 (Keating 2008:216), necessitated a high school addition in 1925 that featured a new gymnasium, auditorium, and natatorium. Monterey Avenue remained the community's commercial center during this period, although retail strips along 95th Street to the north and along Michigan Avenue to the east, in the Roseland community, also attracted shoppers.

Many of the homes erected during the early 20th century reflected the popular Craftsman style of the period, which was used for both frame bungalows and American Foursquare homes. Builders constructed brick Chicago Style Bungalows as well as more elaborate homes in a variety of

historical styles, with Tudor and Colonial Revival being especially popular. Although a few apartment buildings were erected, Morgan Park remained primarily a community of single-family homes.

During the 1920s Longwood Drive emerged as the area's most prestigious street, eclipsing Prospect Avenue as the main north-south thoroughfare. Many elaborate homes were also built along Hoyne Avenue between 111th and 112th Streets. Sidewalks, shade trees, and carefully tended lawns enhanced Morgan Park's high quality housing. Longwood Drive was also the setting for several prominent churches including the brick Gothic Revival style Morgan Park Methodist Church at 11030 S. Longwood Drive. Built in 1913 and designed by Henry H. Waterman, the church received a 1927 addition designed by Dwight Perkins. A Gothic Revival style stone Presbyterian Church was designed by Anders Lund and erected at 11052 S. Longwood Drive in 1933.

Whereas Morgan Park's Protestants tended to live and worship in the oldest part of the neighborhood, in 1904 a small community of French immigrant Roman Catholics established Sacred Heart Church at 11652 S. Church Street. The largely Irish Roman Catholic parishes of St. Cajetan at 2445 W. 112th Street (1927) and St. Walter at 11722 S. Oakley Street (1953) drew most of their congregations from the area west of Western Avenue.

Morgan Park was also home to a small but growing middle class African-American community during this period, which had established itself in the area between Vincennes Avenue and Halsted Street in the late 19th century. In 1921 the Chicago Commission on Race Relations reported that whites and blacks in Morgan Park "maintain a friendly attitude," but it also noted "there seems to be a common understanding that Negroes must not live west of Vincennes Road" (Pacyga and Skerrett 1976:540). Public institutions such as the Morgan Park High School and the Walker Branch Public Library, however, were integrated. The African-American population in Morgan Park increased from 12 percent in 1920 to 35 percent in 1930. Other residents were mostly of English, German, Swedish, and Irish descent, with only a small proportion of foreign-born residents (Chicago Fact Book Consortium 1995:210).

Morgan Park Development: 1950 to Present

Morgan Park experienced a residential building boom following World War II as the community developed areas along its fringes and subdivided some of the large lots in the older area of the community for single-family homes. The community maintained a stable residential population and continued to be "dry," a prohibition demanded by early Baptist settlers and upheld by Catholic newcomers. By 1960 an increase in the number of Irish residents made them the predominant group, followed by those of German, English, and Swedish descent. The South Side St. Patrick's Day parade down Western Avenue, organized in 1979, has become a symbol of the large Irish population and the Catholic presence in the ridge area that stretches north to the neighboring Beverly community.

The Morgan Park Military Academy dropped the military aspect of its program in 1950 and is today a private coeducational grammar school and high school that attracts students from all over the South Side of Chicago and neighboring suburbs. Monterey Avenue remained the business

center of old Morgan Park until the 1970s. After urban renewal, all that remain of the former commercial district are the post office, police station, train station, and a few stores west of Hale Avenue.

During the late 1960s the I-57 Expressway had effectively isolated the older black settlement east of Vincennes Avenue. Between 1960 and 1970 Morgan Park's population peaked at more than 31,000 due to an over 50 percent increase in the number of African-Americans (Chicago Fact Book Consortium 1995:210). Perhaps the greatest change to Morgan Park's urban landscape involved the construction of nearly 400 "Section 235" subsidized housing units between 1969 and 1974, the largest number built in any Chicago neighborhood. Most of these homes—which were modern versions of the 19th-century workers cottage—were built along Vincennes Avenue, south of Morgan Park High School (Pacyga and Skerrett 1976:544).

During the 1970s the Beverly Area Planning Association, comprising civic groups from both Morgan Park and neighboring Beverly, succeeded in halting panic peddling by unscrupulous real estate dealers to avoid the rapid racial turnover experienced by other Chicago South Side neighborhoods. As a result, by the mid-1970s home values in both communities had stabilized and began to rise. The African-American population rose to 63 percent in 1980 and then slowed. Today Morgan Park has both integrated and racially segregated areas: the population east of Ashland is nearly all black; the population west of Western Avenue is nearly all white; and the area in between is mixed (Chicago Fact Book Consortium 1995:210).

Residents of both Morgan Park and Beverly began to jointly promote their shared architectural heritage of historic homes along the ridge through the leadership of the Beverly Area Planning Association, which sponsored home tours that continue to attract thousands of Chicagoans each year. The establishment of the Ridge Historical Society in 1971 sparked an interest in the past of Morgan Park and Beverly with its museum at 10616 S. Longwood Drive. The Society has identified landmark homes throughout the area over the past several decades and established an oral history program and archives.

Today Morgan Park's winding, tree-shaded streets display a rich array of residential architecture. The Ridge Historic District, listed on the NRHP in 1975, is centered on Longwood Drive, running from 87th to 115th Streets and linking the center of Morgan Park to the Beverly community area to the north. In 1981 the Longwood Drive District became a designated City of Chicago landmark district. This narrow, 12-block-long district extends along Longwood Drive between 98th and 110th Streets and also along Seeley Avenue between 102nd and 107th Streets. Both districts feature intact collections of homes dating from the 1870s through the 1920s that display a wide variety of architectural styles including the Italianate, Queen Anne, Tudor Revival, Colonial Revival, French Provincial, Craftsman, and Prairie. Morgan Park remains a stable, largely integrated, middle-class neighborhood that boasts the Beverly Arts Center's complex for the performing arts, which was built in 2002 at 2407 W. 111th Street and has sparked redevelopment at the intersection of 111th Street and Western Avenue.

5.3.2 Surveyed Resources

As part of the fieldwork for the RLE Project, 13 buildings within the Morgan Park portion of the APE were surveyed. These properties, along with their construction date and an assessment of their eligibility for listing on the NRHP, are presented in Table 5-3, alphabetized by street name. No properties were determined individually eligible. A series of maps in Appendix A graphically presents these findings; individual inventory sheets for surveyed properties are presented in Appendix B.

Table 5-3: 13 Surveyed Properties in Morgan Park

Address	Year Built	Description	Eligibility
808 W 111th Street or 11050 S. Halsted Street	1982	Commercial	Modern
10701 S. Green Street*	1950	Single-Family	Not Eligible
10757 S. Green Street*	1947	Single-Family	Not Eligible
10829 S. Green Street*	1948	Single-Family	Not Eligible
10901 S. Green Street*	1948	Single-Family	Not Eligible
11001 S. Green Street	1942	Single-Family	Not Eligible
11039 S. Green Street	1942	Single-Family	Not Eligible
11121 S. Green Street	1959	Multi-Family	Not Eligible
11247 S. Green Street	1950	Single-Family	Not Eligible
11359 S. Green Street	1951	Single-Family	Not Eligible
11038 S. Halsted Street	1977	Commercial	Modern
11200 S. Halsted Street	1925	Commercial	Not Eligible
11320-11322 S. Halsted Street	1962	Modernistic Mixed-Use Building	Not Eligible

* Surveyed property within proposed Green Street Historic District

Of the 13 buildings surveyed within the Morgan Park portion of the RLE APE, none were identified as eligible for listing on the NRHP. Generally, these properties have had alterations that compromise their historic integrity or do not feature a level of distinctive architectural detailing necessary to qualify for the NRHP. A portion of the Green Street Historic District, which was identified as NRHP eligible, falls within the Morgan Park community. A description of the resource is presented in **Section 5.1.2.1**.

5.4 West Pullman Community

The following subsections include a description of the historic context for the development of the West Pullman community (**Section 5.4.1**) and an overview of historic properties that were surveyed (**Section 5.4.2**). No NRHP-listed sites or districts fall within the RLE APE in the West Pullman community.

5.4.1 Historic Context

The West Pullman community, approximately 16 miles south of Chicago's Loop, is bounded by 115th Street to the north, 123rd Street and the Little Calumet River to the south, Front Street and railroad tracks to the east, and Ashland Avenue, Halsted Street, and Morgan Street (city limits) to the west.

West Pullman Development in the 19th Century

The first settlers in the area known as West Pullman were civil engineer and land surveyor David Andrews and his wife Caroline, who married in 1840 and established a 360-acre farm near the northeast corner of the future community. The couple only had two neighbors who were about 3 miles away, and at that time, "prairie wolves, deer, and prairie chickens abounded, and occasionally a lynx was seen" according to A. T. Andreas in his *History of Cook County* (1884:603). The first signs of change arrived in 1852, when the Illinois Central and Michigan Central Railroad companies established the Calumet Station at the present intersection of 115th Street and Cottage Grove Avenue. A settlement grew slowly around the Calumet Station and came to be called Kensington. It initially consisted of a general store and saloon at the corner of Front Street and Kensington Avenue, wood shanties, and a boarding house inhabited by men working on freight handling for the railroads.

Kensington became part of the Village of Hyde Park in 1867. Ten years later, the small community comprised only about 20 houses; however, Kensington's population would soon more than quadruple, from 250 in 1880 to 1,280 in 1883. This sudden growth was due to the establishment of the Pullman Palace Car Factory as well as other industries, such as the Chicago Forge Company Works at 116th Street and Cottage Grove Avenue. Kensington's boundaries came to encompass the area bounded by 115th and 125th Streets, between State Street and the Illinois Central tracks. Some of the more prominent residents who arrived in the community during this decade were from the East Coast. They included native New Yorkers Thomas Gaines, proprietor of the Gaines Hotel, A. Burchard, a physician who established a large medical practice in the community, and various other merchants who created commercial enterprises (Andreas 1884:604-606).

In 1881, the Gano Company of Cincinnati purchased and subdivided a large tract of land that was part of Calumet Township, just west in Kensington. This subdivision, then called Gano, extended from 115th Street to 119th Street, between State Street and Wentworth Avenue. In 1888, the Village of Gano was organized and withdrawn from control of Calumet Township. The new village extended from 115th Street to the Little Calumet River, between State and Halsted Streets, but was only very sparsely settled along its eastern portion. The area beyond the initial Gano subdivision boundaries comprised open prairie and farmland, including what would become the West Pullman residential district. Kensington was annexed to Chicago in 1889 and Gano's need to secure municipal services led its residents to seek annexation the following year (Chicago Fact Book Consortium 1995:161).

The name West Pullman came to the current community area in the 1890s following the West Pullman Land Association's November 1891 purchase of 480 acres of farmland that encompassed

much of the former Village of Gano (West Pullman Land Association 1900:3). This initial parcel was between 119th and 123rd Streets, from Wentworth Avenue to Halsted Street. By January 1893, the Land Association purchased additional tracts of undeveloped land that extended their original holdings west to Ashland Avenue, between 115th and 123rd Streets. The land was platted to include an industrial district west of Halsted Street, workers' housing in the center with a commercial strip along Halsted Street, and a district called Stewart Ridge for the "finer class of residence" to the east. The Association aimed to create an industrial village to rival and even surpass the already established town of Pullman to the northeast, as was clear by the comments made by director H. D. Patton at a May 17, 1893 groundbreaking for the Whitman and Barnes Company:

> "You are in the center of what will be the greatest manufacturing district in the world, and I predict that in time this suburb will outgrow the beautiful citadel to the east, that it will eventually be known as east Pullman and this place will take the parent name (*Chicago Tribune* 1893c)."

Whitman and Barnes, whose large facility encompassed 19 buildings, was one of two manufacturers of agricultural implements that moved to West Pullman in 1893. The other was the Plano Manufacturing Company, which relocated from Plano, Illinois to a sprawling facility on its 25-acre tract in West Pullman. The *Chicago Tribune* (1893b) estimated that Plano Manufacturing would employ 1,500 workers. Other early industries located in West Pullman's factory district by 1893 were the Illinois Electrical Forging Company, the White and Ballard Shoe Company, the Burgland & Sheal Woodenware Company, and the West Pullman Lumber Company. They were joined by the end of the decade by others including the Chicago Malleable Casting Company, the Chicago Pail Company, the Inglis Photographic Supply Company, the Phoenix Boot and Shoe Company, and the Chicago Brass Bed Factory (West Pullman Land Association 1900:8-9).

The West Pullman Land Association had phenomenal success in attracting both industry and workers to its industrial village at the southern outskirts of Chicago due to a range of transportation improvements. The Illinois Central constructed its Blue Island Branch westward along 121st Street and located three stations within West Pullman, including one in the midst of the Stewart Ridge residential district, one at Halsted Street, and one within the factory district. The Pittsburg, Cincinnati, Chicago & St. Louis (known as the Pan Handle of the Pennsylvania railway system) already crossed the property from north to south and established passenger and freight stations at 119th and 120th Streets. The Chicago, Rock Island & Pacific Railway Company arriving from the west established its freight station at Morgan and 119th Streets. The Land Association constructed and controlled a terminal railway system connecting these three trunk lines to ensure they reached all parts of the factory district. The Illinois Central's passenger service from West Pullman ran an express train north to 67th Street that reached the Loop in 38 minutes. Additional passenger service along Michigan Avenue was provided by the Calumet Electric Railway, which was extended south from 115th Street to 119th Street and then westward along 119th Street to Halsted in 1893 (West Pullman Land Association 1900:8-9, 16; *Chicago Tribune* 1893a). West Pullman was annexed to the City of Chicago in 1895.

Many executives of the West Pullman Land Association and of the community's various industries resided in the community's Stewart Ridge district, which was about a mile east of the factory district, around the Illinois Central's station at the intersection of Stewart and 121st Streets. Streets on either side of Stewart, such as Harvard and Princeton Avenues to the east and Eggleston and Normal Avenues to the west, featured large, architect-designed homes of various styles built between the 1890s and the early 1900s. The homes at 12134 S. Eggleston Avenue (1896), 12112 S. Normal Avenue (1895), and 12021 S. Stewart Avenue (1896) are representative of this period of development.

Outside the Stewart Ridge district, 19th century residential development throughout West Pullman—including the earlier Kensington and Gano communities of the 1880s—featured workers' housing with modest one- to two-story, gable-roof, frame cottages and homes. An Italianate style home at 605 W. 116th Street (1880s) is among the extant homes from West Pullman's earlier period of development. By 1893 the West Pullman Land Association had built nearly 300 speculative homes and also had sold lots to individuals and builders, providing for some variety in the stock of workers' homes erected during this decade of rapid growth. A promotional booklet developed by the Land Association wrote that this area provided "every opportunity for cheap, good and contented living," noting the following:

> "The property there is of low price, ranging from $350 to $500 per lot; and if a home-seeker lacks either the means or the inclination to build, a company having capital and surplus of $200,000 and especially organized for this purpose, stands ready to construct such a home as may be desired, to be paid for on the monthly installment plan (West Pullman Land Association 1900:24)."

Nineteenth-century workers who flocked to West Pullman's newly established industries were a multi-ethnic mix of French, Dutch, Swedish, Irish, and German immigrants who established their own churches and parochial schools. These included St. Louis de France Church (later called St. Ambrose), established by the French community in the 1880s at 117th and State Streets; the Irish St. Catherine of Genoa Church at 118th and Lowe Streets (founded 1890s); the Polish St. Salomea Catholic Church at 118th Street and Indiana Avenue (founded 1890s); and the Norwegian Nazareth Lutheran Church at the corner of 118th and Yale Streets (founded 1890s). Two large public schools were also built in West Pullman during the 1890s for its rapidly growing population: the Romanesque Revival style West Pullman School at 11919 S. Parnell Avenue (1894) and the Classical Revival style Thomas Scanlon School at 11721 S. Perry Avenue (1897; now the Songhai Learning Institute); both feature Classical detailing.

West Pullman residents were served by community commercial districts that sprang up along Michigan Avenue, between 115th and 119th Streets to the east, and around the intersection of 119th and Halsted Streets to the west. Historic photos show that 19th century commercial buildings erected in these areas were typically one to three stories in height, mainly faced in brick, with storefronts on the ground level and apartments above. Detailing was restrained and included stone lintels and sills, storefront surrounds of stone or terra cotta, and stone or metal cornices or

parapets. Most of the commercial buildings were not designed in a specific architectural style, but often included details from a style such as the Queen Anne, Romanesque, or Classical Revival.

An 1893 *Chicago Tribune* article that discussed a tour of West Pullman by a number of dignitaries noted, "Halsted Street is the principal business thoroughfare, and considerable favorable comment was indulged in at the amount of business now carried on and the number of business blocks that have been built since the suburb sprang into existence a year ago" (1893c). Another article from the same year that highlighted the construction of a new commercial block at the corner of 119th Street and Lowe Avenue reported, "There is demand for business houses, and especially for hotels and boarding houses, to accommodate the increasing population" (*Chicago Tribune* 1893d). The Enright Block at the corner of Emerald Avenue and 120th Street was "rapidly filled with businesses: a tailor store, grocery, printing office, bakery, and millinery store being among the number" (*Chicago Tribune* 1893e).

West Pullman Development: 1900 to 1950

The early 20th century brought a wave of Eastern European immigrants that included Lithuanians, Poles, Hungarians, Armenians, and Czechoslovakians. After World War I, many Italians arrived. These new residents built their own churches and ethnic institutions, and in some cases older groups expanded their existing institutions. In 1903 the Italian community built the Renaissance Revival style St. Anthony of Padua Church at 11153 S. Prairie Avenue.

The Lithuanian community built S.S. Peter and Paul Catholic Church at 123rd Street and Emerald Avenue in 1914 (now St. Titus Missionary Baptist Church), which features Romanesque Revival style detailing. In 1928 the Irish parish of St. Catherine of Genoa replaced its earlier church with a Renaissance Revival style edifice at the corner of 118th Street and Lowe Avenue, and also added an elementary school and convent during this period.

West Pullman saw the erection of two church complexes—Assumption of the Blessed Virgin Mary and St. Salomea—built by its large Polish community in the early 20th century. The Assumption Blessed Virgin Mary Society, which had been founded in 1895, built a frame church in 1904 at 123rd Street and Parnell Avenue. In 1907, the parish built a brick rectory at 544 W. 123 Street and converted its old rectory at 12240 S. Parnell Avenue into classrooms. A convent was built at 12242 S. Parnell Avenue in 1919 (now demolished) and 4 years later, a brick church/school building was erected at 12238 S. Parnell Avenue to accommodate the needs of the rapidly growing parish (now Glory to the Holy Family Baptist Church). At that time, the former frame church was remodeled as a parish hall (now demolished) (Polish Genealogical Society of America 2012). In 1911, St. Salomea parish built an imposing Gothic Revival style church at the corner of 118th Street and Indiana Avenue in West Pullman's Kensington neighborhood and also erected an adjacent rectory and elementary school.

Corporate officers continued to reside in the Stewart Ridge district, where larger than average homes of varying styles continued to be built through the early 1900s. The most notable home in this district was designed by Frank Lloyd Wright for Stephen A. Foster, a director of the West Pullman Land Association (1900). The Stephen A. Foster House and Stable at 12147 S. Harvard

Avenue, a designated Chicago landmark, shows Wright's interest in Japanese architecture during the years he was developing his Prairie style (Chicago Historical and Architectural Landmarks 1996). The Queen Anne style home at 12225 S. Harvard Avenue (1905) and the Colonial Revival style home at 12204 S. Stewart Avenue (1903) are representative of this period in the Stewart Ridge neighborhood's development.

The West Pullman Land Association went bankrupt in 1908 during an economic downturn, but residential development continued sporadically with mainly gable-roofed frame cottages, Craftsman style bungalows, and some multi-family two-flats and small apartment buildings. The community received an important recreational amenity with the establishment of the 15-acre West Pullman Park in 1915. The park—which extends from 123rd to 124th Street, between Princeton and Normal Avenues—included tennis courts, baseball diamonds, and a one-story brick field house that offered a range of civic education and social welfare programs in its early years.

In 1920, West Pullman had a population of 23,019 and still featured large areas of undeveloped land. This was to change during the citywide construction boom of the 1920s, during which vacant parcels throughout the community were improved with bungalows and two-flat residential buildings in frame and brick, homes designed in the popular American Foursquare style, and small brick apartment buildings. By 1930 West Pullman's population reached 28,000. Commercial streets continued to develop with buildings such as the Classical Revival style State Bank of West Pullman at 622 W. 120th Street (1919; John Hetherington), now Lively Stone Apostolic Church. In 1927–28, two additional parcels of industrial land along the Calumet River were annexed to Chicago, completing the land area of the present West Pullman community (Chicago Fact Book Consortium 1995:161). Many developers of new subdivisions in the community placed restrictions on their property that prohibited its purchase by African-Americans, contributing to a concerted effort among residents to keep Pullman white. Some employers hired only white workers; International Harvester refused to hire African-Americans at its West Pullman works until mandated to do so during World War II (Keating 2008:298-299).

West Pullman Development: 1950 to Present

West Pullman's population rose from 29,000 in 1950 to 35,000 in 1960, a period in which Poles, Italians, and Germans predominated among the whites who constituted nearly 100 percent of the community's population (Chicago Fact Book Consortium 1995:161). Vacant lots throughout the community and along its undeveloped southern and western edges were improved during the post-War period with suburban style tract homes and split-level homes. Duplexes were also built, especially on the south, north, and west sides of the factory district. Starting in the 1960s, some of the vacant land on West Pullman's western edges, such as the Maple Park subdivision, finally opened to African-Americans. Gradually, African-Americans began moving into other West Pullman neighborhoods, although racial turnover in the next decade was accompanied by brewing social unrest. By 1980, 90 percent of West Pullman's 45,000 residents were African-American. This figure rose to 94 percent by 1990 (Chicago Fact Book Consortium 1995:161).

The collapse of the South Side's industrial base, starting in the 1970s, led to a rapid decline of West Pullman's economic fortunes. Industries such as the Pullman Company, Wisconsin Steel, International Harvester, and Dutch Boy Paint Company that once hired numerous West Pullman residents closed their doors. Other industries such as Carl Buddig and Ingersoll Products dramatically reduced their work forces. Layoffs and plant shutdowns made it difficult for many residents to continue payments on their homes, which had been acquired through loans from HUD. After owners defaulted, many HUD homes were foreclosed. By 1982 the Greater Roseland Organization began rehabilitating HUD homes in the northeastern area, where the housing stock is the oldest. Continued depressed economic conditions during the 1980s contributed to the demolition of 450 homes by the end of the decade (Chicago Fact Book Consortium 1995: 161). In 1985 West Pullman received a major new institution when Christ Universal Church was built on a 32-acre parcel at 119th Street and Ashland Avenue. (Buursma 1985).

By the 1990s West Pullman's once thriving industrial district west of Halsted Street featured large tracts of vacant land, blighted or underutilized buildings, deteriorated infrastructure, and substantial environmental contamination, which served as major impediments to redevelopment and new industrial investment. In response to this situation, in 1998 the City of Chicago created the 220-acre West Pullman Industrial Park TIF, which aims to foster the area's revitalization through site assembly efforts, soil remediation projects, and numerous infrastructure improvements. The TIF District also supports job training and relocation costs (Friedman & Co. 1997:1).

Some important developments within the West Pullman Industrial Park TIF District boundaries since its designation include the redevelopment of a 39-acre brownfield parcel around the 1000 block of 120th Street—formerly the home of International Harvester's West Pullman Works and the Dutch Boy Paint factory—as a solar energy facility by Chicago-based Exelon and SunPower, a California energy company. Opened in 2010, the parcel is the largest urban solar panel plant in the nation, capable of providing electricity for as many as 1,500 homes. Just a couple of blocks east of this ambitious project is the new West Pullman Branch of the Chicago Public Library at 830 W. 119th Street. Perhaps the most important project in terms of its direct effect on a large number of residents is the $160 million Ray and Joan Kroc Community Center, which opened in 2012 on a 33-acre site at 1250 W. 119th Street. The multi-purpose center features an aquatics center, a performing arts center, a soccer field, and other recreational activities, as well as job training classes (Bryne 2012).

Adjacent to the West Pullman Park Industrial TIF District is the 183-acre 119th/Halsted TIF District, which was designated by the City of Chicago in 2002. The TIF District includes the stretch of Halsted Street from 113th to 123rd Street, as well as stretches of 119th, 120th, and 121st Streets east of Halsted Street. The area encompassed by the 119th/Halsted TIF District consists of commercial, residential, industrial, and mixed-use property. It also includes Metra's electric rail commuter line along 121st Street with a commuter station on Halsted and 121st Streets. By the 1990s, this area was characterized by blighted and vacant buildings and large amounts of vacant land created through building demolition. The TIF District aims to foster a viable business district along Halsted Street at its intersections with 115th and 119th Streets, while promoting the

development of affordable rental and for-sale housing along portions of 119th and 120th Streets. The TIF District also supports the creation of a pedestrian/bike trail along the former Penn Central Railroad ROW, which was purchased by the Chicago Department of Transportation (Camiros, Ltd. 2001, 2003:5-6, 15).

Small portions of land along West Pullman's western edge are included within the 119th/I-57 TIF District designated by the City of Chicago in 2002 to enable new development at key sites within the Morgan Park community. The West Pullman portions of this TIF District include 111th Street between Ashland and Racine Avenues, and the parcel roughly bounded by 119th and 123rd Streets, between Ashland Avenue and Loomis Street. Homeowners within both the 119th/Halsted TIF District and the 119th/I-57 TIF District are eligible for home repair grants through the City's TIF District-Neighborhood Improvement Program, which is administered through HUD. In recent years, new homes have been built along West Pullman's western edge near Christ Universal Church, including a gated community called Renaissance Estates in the Victory Heights neighborhood.

5.4.2 Surveyed Resources

As part of the fieldwork for the RLE Project, 172 buildings within the West Pullman portion of the APE were surveyed. These properties, along with their construction date and an assessment of their eligibility for listing on the NRHP, are presented in Table 5-4, alphabetized by street name. Properties determined individually eligible are highlighted. A series of maps in Appendix A graphically present these findings; individual inventory sheets for surveyed properties are presented in Appendix B.

Table 5-4: 172 Surveyed Properties in West Pullman

Address	Year Built	Description	Eligibility
1 W. 115th Street	1907	Queen Anne Style Mixed-Use	Not Eligible
17 W. 115th Street	1897	Greystone Flat	Not Eligible
23 W. 115th Street	1883	Single-Family (vacant)	Not Eligible
35 W. 115th Street	1936	Commercial	Not Eligible
143 W. 115th Street	1911	Single-Family	Not Eligible
738 W. 116th Place	1925	Craftsman Style Residence	Not Eligible
8 E. 116th Street	1908	Single-Family	Not Eligible
12 E. 116th Street	1913	Multi-Family	Not Eligible
16 E. 116th Street	1902	Single-Family	Not Eligible
20 E. 116th Street	1893	Queen Anne Style Single-Family	Not Eligible
32 E. 116th Street	1922	Garage	Not Eligible
36 E. 116th Street	1918	Flat	Not Eligible
38 E. 116th Street	1888	Multi-Family	Not Eligible
144 E. 116th Street	1888	Single-Family	Not Eligible
150 E. 116th Street	1891	Single-Family	Not Eligible

Address	Year Built	Description	Eligibility
151 E. 116th Street	1898	Multi-Family	Not Eligible
153 E. 116th Street	1898	Multi-Family	Not Eligible
155 E. 116th Street	1903	Single-Family	Not Eligible
157 E. 116th Street	1898	Multi-Family	Not Eligible
159 E. 116th Street	1903	Single-Family	Not Eligible
163 E. 116th Street	1898	Multi-Family	Not Eligible
165 E. 116th Street	1898	Single-Family	Not Eligible
207 E. 116th Street	1888	Multi-Family	Not Eligible
742 W. 116th Street	1919	Single-Family	Not Eligible
120 E. 117th Place	1908	Single-Family	Not Eligible
736 W. 117th Place	1946	Single-Family	Not Eligible
126 E. 117th Street	1898	Multi-Family	Not Eligible
128 E. 117th Street	1908	Single-Family	Not Eligible
132 E. 117th Street	1908	Single-Family	Not Eligible
149 E. 117th Street	1908	Craftsman Style Residence	Not Eligible
312 E. 117th Street	1891	Single-Family	Not Eligible
322 E. 117th Street	1878	Single-Family	Not Eligible
345 E. 117th Street	1903	Single-Family	Not Eligible
742 W. 117th Street	1925	Craftsman Style Residence	Not Eligible
306 E. 118th Street	1898	Single-Family	Not Eligible
354 E. 118th Street	1886	Single-Family	Not Eligible
737 W. 118th Street	1897	Multi-Family	Not Eligible
834 W. 118th Street	1909	Single-Family	Not Eligible
738 W. 119th Street	1893	Multi-Family	Not Eligible
829-837 W. 119th Street	1971	Commercial	Modern
846 W. 119th Street	1915	Industrial	Not Eligible
918 W. 119th Street	1925	Multi-Family	Not Eligible
956 W. 119th Street	1906	Religious	Not Eligible
820 W. 120th Street	1968	Industrial	Modern
931 W. 120th Street	1897-1911	Fire Department, Engine Co. 115	Eligible
1455 W. 120th Street	1919	Single-Family	Not Eligible
738 W. 129th Place	1951	Single-Family	Not Eligible
743 W. 129th Place	1952	Single-Family	Not Eligible
814 W. 129th Place	1953	Single-Family	Not Eligible
817 W. 129th Place	1956	Single-Family	Not Eligible
1215 S. Ada Street	2000	Industrial	Modern
12015 S. Bishop Street	1914	Single-Family	Not Eligible
12050 S. Bishop Street	1889	Single-Family	Not Eligible

Address	Year Built	Description	Eligibility
11727 S. Calumet Avenue	1893	Single-Family	Not Eligible
11824 S. Emerald Avenue	1927	Multi-Family	Not Eligible
12012 S. Emerald Avenue	1904	Multi-Family	Not Eligible
12110 S. Emerald Avenue	1949	Single-Family	Not Eligible
12206 S. Emerald Avenue	1923	Craftsman Style Residence	Not Eligible
12254 S. Emerald Avenue	1904	Multi-Family	Not Eligible
12300 S. Emerald Avenue	1915	Mixed-Use	Not Eligible
12350 S. Emerald Avenue	1931	Craftsman Style Residence	Not Eligible
12400 S. Emerald Avenue	1924	Craftsman Style Residence	Not Eligible
12446 S. Emerald Avenue	1950	Single-Family	Not Eligible
12552 S. Emerald Avenue	1942	Single-Family	Not Eligible
12608 S. Emerald Avenue	1925	Single-Family	Not Eligible
12650 S. Emerald Avenue	1943	Single-Family	Not Eligible
12706 S. Emerald Avenue	1957	Single-Family	Not Eligible
12814 S. Emerald Avenue	1952	Single-Family	Not Eligible
12842 S. Emerald Avenue	1954	Single-Family	Not Eligible
12904 S. Emerald Avenue	1955	Single-Family	Not Eligible
11730-11736 S. Front Avenue	1952-1962	Industrial Complex	Not Eligible
12143 S. Green Street	1909	Flat	Not Eligible
12257 S. Green Street	1911	Single-Family	Not Eligible
12713 S. Green Street	1953	Single-Family	Not Eligible
12817 S. Green Street	1952	Single-Family	Not Eligible
12819 S. Green Street	1952	Single-Family	Not Eligible
12823 S. Green Street	1952	Single-Family	Not Eligible
12825 S. Green Street	1952	Single-Family	Not Eligible
12829 S. Green Street	1952	Single-Family	Not Eligible
12831 S. Green Street	1952	Single-Family	Not Eligible
12835 S. Green Street	1952	Single-Family	Not Eligible
12837 S. Green Street	1952	Single-Family	Not Eligible
12851 S. Green Street	1951	Single-Family	Not Eligible
12877 S. Green Street	1952	Single-Family	Not Eligible
11600 S. Halsted Street	1962	Commercial	Not Eligible
11601 S. Halsted Street	1987	Commercial	Modern
11642 S. Halsted Street	1925	Chicago Style Bungalow	Not Eligible
11753 S. Halsted Street	1914	Craftsman Style Residence	Not Eligible
11756 S. Halsted Street	1931	Galloy & Van Etten Stone Contractors	Eligible
11763 S. Halsted Street	1904	Multi-Family	Not Eligible
11800 S. Halsted Street	1922	Former Coal Yard Storage	Not Eligible

Address	Year Built	Description	Eligibility
11932 S. Halsted Street	1893	Commercial	Not Eligible
11934-11938 S. Halsted Street	1926	Commercial	Not Eligible
11944 S. Halsted Street	1926	Mixed-Use	Not Eligible
11946 S. Halsted Street	1926	Commercial	Not Eligible
11948-11950 S. Halsted Street	1926	Former Feed Store	Not Eligible
11958 S. Halsted Street	1894	Mixed-Use	Not Eligible
12000 S. Halsted Street	1939	Art Deco Commercial	Not Eligible
12001-12003 S. Halsted Street	1894	Commercial	Not Eligible
12018 S. Halsted Street	1916	Mixed-Use	Not Eligible
12022 S. Halsted Street	1898	Mixed-Use	Not Eligible
12033 S. Halsted Street	1914	Multi-Family	Not Eligible
12048 S. Halsted Street	1901	Mixed-Use	Not Eligible
12142 S. Halsted Street	1942	Single-Family	Not Eligible
12155 S. Halsted Street	1920	Multi-Family	Not Eligible
12156 S. Halsted Street	1937	Commercial	Not Eligible
12212-12220 S. Halsted Street	1955	Commercial	Not Eligible
12217 S. Halsted Street	1928	Mixed-Use	Not Eligible
12246 S. Halsted Street	1929	Industrial	Not Eligible
12309 S. Halsted Street	1953	Commercial	Not Eligible
12345 S. Halsted Street	1959	Commercial	Not Eligible
12433-14239 S. Halsted Street	1958	S.S. Peter & Paul Catholic Church	Eligible
12717 S. Halsted Street	1952	Mixed-Use	Not Eligible
12730 S. Halsted Street	1957	Religious	Not Eligible
12746-12804 S. Halsted Street	1952	Commercial	Not Eligible
12747 S. Halsted Street	1968	Commercial	Modern
12801-12811 S. Halsted Street	1957	Commercial	Not Eligible
12825 S. Halsted Street	1970	Industrial	Modern
12841 S. Halsted Street	1955	Commercial	Not Eligible
12856-12900 S. Halsted Street	1952-1962	Religious	Not Eligible
11615-11617 S. Indiana Avenue	1964-1973	Public Building	Modern
11708 S. Indiana Avenue	1908	Multi-Family	Not Eligible
11709 S. Indiana Avenue	1908	Single-Family	Not Eligible
11715 S. Indiana Avenue	1908	Multi-Family	Not Eligible
11740 S. Indiana Avenue	1888	Single-Family (vacant)	Not Eligible
112 E. Kensington Avenue	1900	Flat	Not Eligible
121 E. Kensington Avenue	1900	Flat	Not Eligible
121 1/2 E. Kensington Avenue	1888	Multi-Family	Not Eligible

Address	Year Built	Description	Eligibility
133-139 E. Kensington Avenue	1925	Commercial Building (former Venetian Hall)	Eligible
11528 S. Lafayette Avenue	1889	Single-Family	Not Eligible
11532 S. Lafayette Avenue	1888	Single-Family	Not Eligible
11557 S. Lafayette Avenue	1883	Multi-Family	Not Eligible
12018 S. Loomis Street	1904	Single-Family	Not Eligible
11563-11565 S. Michigan Avenue	1900/1962	Industrial	Not Eligible
11592 S. Michigan Avenue	1888	Commercial	Not Eligible
11593 S. Michigan Avenue	1883	Mixed-Use	Not Eligible
11601-11603 S. Michigan Avenue	1966	Religious	Modern
11611 S. Michigan Avenue	1888	Multi-Family	Not Eligible
11835 S. Morgan Street	1971	Single-Family	Modern
9939 S. Normal Avenue	1939	Single-Family	Not Eligible
11701 S. Peoria Street	1904	Multi-Family	Not Eligible
11805 S. Peoria Street	1913	Flat	Not Eligible
11842 S. Peoria Street	1890	Single-Family	Not Eligible
12139 S. Peoria Street	1951	Industrial (vacant)	Not Eligible
11515 S. Perry Avenue	1965	Single-Family	Not Eligible
11516 S. Perry Avenue	1913	Craftsman Style Residence	Not Eligible
11521 S. Perry Avenue	1879	Multi-Family	Not Eligible
11630 S. Prairie Avenue	1898	Single-Family	Not Eligible
11632 S. Prairie Avenue	1888	Multi-Family	Not Eligible
11634 S. Prairie Avenue	1927	Multi-Family	Not Eligible
11718 S. Prairie Avenue	1885	Single-Family	Not Eligible
11814 S. Prairie Avenue	1926	Chicago Style Bungalow	Not Eligible
11801 S. Sangamon Street	1909	Religious	Not Eligible
11820 S. Sangamon Street	1904	Multi-Family	Not Eligible
11546 S. State Street	1901	Single-Family	Not Eligible
11548 S. State Street	1889	Single-Family	Not Eligible
11567 S. State Street	1908	Multi-Family (vacant)	Not Eligible
11569 S. State Street	1898	Single-Family	Not Eligible
11571 S. State Street	1898	Single-Family	Not Eligible
11573 S. State Street	1908	Single-Family	Not Eligible
11575 S. State Street	1908	Single-Family (vacant)	Not Eligible
11583 S. State Street	1926	Single-Family	Not Eligible
11594 S. State Street	1924	Religious Building	Not Eligible
741 W. Vermont Street	1954	Single-Family	Not Eligible
814 W. Vermont Street	1953	Single-Family	Not Eligible

Address	Year Built	Description	Eligibility
817 W. Vermont Street	1956	Single-Family	Not Eligible
821 W. Vermont Street	1956	Single-Family	Not Eligible
825 W. Vermont Street	1956	Single-Family	Not Eligible
11572 S. Wabash Avenue	1903	Multi-Family	Not Eligible
11573 S. Wabash Avenue	1910	Garage	Not Eligible
11574 S. Wabash Avenue	1922	Multi-Family	Not Eligible
11578 S. Wabash Avenue	1893	Multi-Family	Not Eligible

5.4.2.1 Resources Eligible for National Register of Historic Places

Of the 172 buildings surveyed within the West Pullman portion of the RLE APE, 4 were identified as eligible for listing on the NRHP. These are described briefly below.

Galloy & Van Etten Stone Contractors, 11756 S. Halsted Street

This two-story light industrial building in the West Pullman community was built in 1931 and is home to the Flagstone Veneer Stone/Galloy & Van Etten Inc. Cut Stone Contractors business. The building has a one-story wing at its south end; both the main building and wing have flat roofs. A line of buttresses divides the building's long Halsted Street elevation into a series of 13 bays; large windows have all been filled in with synthetic materials. One of these bays features an overhead garage door. The front (south) elevation of the one-story office wing has a hollow-core metal door with a filled in transom, three non-original one-over-one aluminum-sash windows, and two large window openings filled with concrete block. An additional flat-roofed one-and-a-half-story wing is situated along the rear of the main building block. Its west elevation features a series of windows and overhead doors. Detailing includes concrete stringcourses and applied letters.

Shown in Figure 5-11, this industrial building is eligible for NRHP listing under Criterion A for Industry. Dutch immigrant Abram Van Etten and his partner George Galloy established the stone fabricating company in 1899. It has been in operation at its current location for nearly 100 years. Located in a community that experienced a collapse of its industrial base in the 1970s and considerable disinvestment since that time, the building serves as an important and rare example of an early 20th century industrial building in West Pullman that retains its original use and ownership. It retains the majority of its original materials with the exception of fenestration along Halsted Street, where it appears that the windows have either been covered or removed.

Figure 5-11: South Facade of Galloy & Van Etten Industrial Building

Fire Department Engine Company 115, 931 W. 120th Street

This two-story firehouse in the West Pullman community was built circa 1897–1911 and has a flat roof and parapet. The building is shown in Figure 5-12. The front elevation is clad in brown face brick and has a centrally located overhead metal door flanked by single one-over-one windows on the first floor. Four non-original one-over-one windows are on the second floor. The overhead opening for the station's fire truck features a Classical stone surround with Ionic columns atop low pedestals, a frieze band incised with the words "Fire Department," and a pediment. Detailing includes a circular motif in stone, stone sills, sill courses, and a metal cornice. This is an excellent example of a neighborhood fire station that still functions in its original use and has very good integrity. It is individually eligible for listing on the NRHP under Criterion C.

Figure 5-12: East Facade of Fire Department Engine Company 115 at 931 W. 120th Street

S.S. Peter & Paul Roman Catholic Church, 12433–12439 S. Halsted Street

This Mid-Century Modern church at the northeast corner of 125th and Halsted Streets in the West Pullman community was built in 1958 for the parish of Saints Peter and Paul. Shown in Figure 5-13, the church is clad with orange face brick and stone veneer. The building has a steeply pitched gable roof, deep roof overhangs along the front elevation, and a square hip-roofed corner tower with a vertical strip of leaded glass windows. The front elevation has a central pavilion flanked by projecting full-height brick piers, three sets of original double doors divided by concrete piers and topped with a concrete spandrel with incised lettering that reads "S.S. Peter and Paul," and an expansive area above which is glazed with leaded glass. The side elevations feature a series of narrow windows that appear to be double-hung.

This building was identified as individually eligible for NRHP listing under Criterion C for architecture as an excellent and rare example of a Mid-Century Modern church in West Pullman.

Figure 5-13: South Facade of S.S. Peter & Paul Catholic Church at 12433-12439 S. Halsted Street

Venetian Hall, 133–139 E Kensington Avenue

The two-story performance hall was built for cultural and recreational purposes, although it has long since been repurposed as a church. The 1938 Sanborn map shows the hall with a stage, balcony, and place for storage of scenery. The street entrance was flanked by two storefronts in 1938, as it is today.

Shown in Figure 5-14, the 1925 building is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a flat roof and a shaped parapet with concrete coping. The first floor of the front elevation has a recessed, centrally located bay with three pairs of multi-light wood doors and in-filled transoms. This central bay is flanked by two original storefronts with central recessed doors and flanking display windows that are covered with wood and topped by transoms that have been filled in with glass block. Separating the central bay from the two flanking storefronts and providing access to the second floor are two doors with transoms. The spandrel area directly above the central entrance bay has a concrete sign plate with incised lettering that reads "Venetian Hall." Fenestration on the second floor features six-over-one and three-over-one wood-sash windows arranged in pairs and in groups of three, topped by round-arch stone lintels with rosette motifs. The parapet features a series of Classical shields and swags.

Figure 5-14: Front Facade of Venetian Hall

The exterior of this building has good overall integrity, although elements of the original storefront materials are no longer extant. It does not display sufficient distinguishing architectural features to qualify as individually eligible for listing on the NRHP for its architecture. Instead, is recommended for individual listing under Criterion A for its original use

as a social venue for area residents in the early 20th century. Local theater houses such as the Venetian Hall were jewels within the local communities. It is rare to see an early 20th century neighborhood social hall that retains its original storefronts and is set within a residential area of workers' housing, rather than along a commercial thoroughfare. The opening of Illinois Terra Cotta Works in the first half of the 20th century brought Italians to Kensington; the area gradually became a center of South Side Italian-American life with the establishment of Venetian Hall and the nearby San Antonio de Padua (patron saint of Venice) Roman Catholic Church.

5.4.2.2 Properties Surveyed but Determined Ineligible

Beyond the properties that were identified as individually eligible for NRHP listing, a number of properties were surveyed that did not meet the criteria. Generally, these properties have had subsequent alterations that compromise their historic integrity or do not feature a level of distinctive architectural detailing necessary to qualify for the NRHP.

5.5 Riverdale Community

The following subsections include a description of the historic context for the development of the Riverdale community within Chicago (**Section 5.5.1**) and an overview of historic properties that were surveyed (**Section 5.5.2**).

5.5.1 Historic Context

The community of Riverdale—distinct from the adjacent Village of Riverdale to the southwest—is approximately 16 miles south of Chicago's Loop. It is bounded by the Bishop Ford Expressway (I-94) on the east, the Illinois Central Railroad on the west, 115th Street on the north, and the Chicago city limits (138th Street) on the south. The northern two-thirds of the community is occupied by rail yards, industry, and the Calumet Sewage Treatment Plant, while residential development is concentrated south of 130th Street and east of Indiana Avenue.

<u>Riverdale Development in the 19th Century</u>
The earliest settler in the Riverdale area was George Dolton, who arrived with his wife and seven children in 1835. He was joined near the banks of the Little Calumet River by several other pioneers over the next few years, including J. C. Matthews. Dolton and Matthews operated a ferryboat across the river starting in 1836. In 1836, Dolton and another settler, Levi Osterhoudt, built a toll bridge across the river, which they operated until 1842 when it was purchased by the county (Goodspeed and Healy 1909:317). The area grew slowly as a truck farming community that provided produce to Chicago. Early farmers were soon joined by Dutch and Swedish railroad workers during construction of the Illinois Central tracks through the area from 1850 to 1852 (Andreas 1884:601-602).

Riverdale became part of Hyde Park Township in 1867, the year a small frame school was built in the community. The following year George Dolton commissioned David Andrews, an early resident of West Pullman, to make the first plat of Riverdale. The name Riverdale came into common use in 1873 when the first post office was opened. Prior to that time, the area had been called Dolton or Dolton Junction. A larger school building replaced the earlier one in 1874. By

1884 the Riverdale settlement had a population of just 600, and settlement was concentrated around the railroad station and post office on West 137th Street (Andreas 1884:602).

Riverdale was annexed to Chicago in 1889. During the 1880s and 1890s the fledgling community consisted mostly of small frame cottages. Surviving homes of this period can be found at 231 E. 136th Street and 13778 S. Leyden Avenue. A storefront building with flats above from the 1880s at 136176 S. Indiana Avenue recalls the early Indiana Avenue commercial district that was shared with the Village of Riverdale to the west. A *Chicago Tribune* article (1891b) about Riverdale's volunteer fire department noted, "The town consists of only a few dozen scattered houses and a few stores, and its comparative insignificance, coupled with the fact that it lies just on the edge of the corporation line, has caused the Fire Department to overlook its needs for fire protection." The population of Riverdale became more mixed as Irish groups moved into the area to work on the railroads and in the factories. A group of Russians of German descent settled north of the Little Calumet River between 133rd and 136th Streets (Chicago Fact Book Consortium 1995:163).

Riverdale's industrial development had its beginnings in the 1860s, when widespread truck farming gave rise to establishments that processed foods, such as a sugar beet refinery founded in 1865. The Union Copper Distilling Company of Chicago established the Riverdale Distillery in 1871, and by 1883 the company employed an average of 50 men and boasted a profit of $1.5 million. In the late 19th century Riverdale was also home to lumber yards and planing mills operated by the Riverdale Lumber Company, which was established in 1879, and by the Calumet Lumber Company (Andreas 1884:602). Several railroads were built through the area between 1852 and 1880, claiming large parcels of land for their ROWs and yards. In addition to the Illinois Central, the railroads included the Pittsburg, Cincinnati, Chicago and St. Louis Railroad and the Chicago and Eastern Line.

The Pullman Company owned substantial acreage in the northern section of Riverdale, upon which they operated several businesses including a farm, a brickyard, and a paint company. Lake Calumet was dredged to supply clay for the brick-making operation that by 1893 reportedly manufactured from 20 to 30 million bricks a year. The Calumet Paint Company on 116th Street manufactured the paint used in Pullman's shops and factories. The paint company was purchased by Sherwin-Williams in 1888. The 140-acre Pullman Farm was fertilized by the sewage from George M. Pullman's self-sustaining, planned community; the farm's most profitable crops were onions, cabbage, and celery (Doty 1893:31-32, 155).

Riverdale Development: 1900 to 1950

By the start of the 20th century, the land in the northern two-thirds of the community had become increasingly industrialized. In 1902, Sherwin-Williams enlarged its 116th Street facility with new buildings on an additional 10 acres purchased that year from the Pullman Land Company. Over the next half century, the company's Riverdale plant grew to encompass 100 acres, which included land once used by the Pullman Farm. It became one of the largest paint factories in the world, capable of making the complete product, from raw material to container (*Chicago Tribune* 1902, Sherwin-Williams 2008). Other industries that moved into the area

included Chicago Drop Forge, the Illinois Terra Cotta Works, and the Swift and Knickerbocker ice plants (Keating 2008:259).

Industries dumped wastes into Calumet waterways, and sewers deposited human wastes in increasing amounts as factories and population grew. The currents flowing into the lake were inadequate to remove sewage and industrial wastes, and frequent dredging was necessary to keep channels open. The dredging and widening of the Little Calumet River to make it navigable for barges and the building of the Cal-Sag Channel (1911–1922) by the Sanitary District of Chicago (now Metropolitan Water Reclamation District of Greater Chicago) spurred further industrialization of the Calumet area during the first decades of the 20th century. The Cal-Sag Canal channel was dug between the Little Calumet River and the Sanitary and Ship Canal, altering the flow of the rivers and diverting wastes to the Illinois River and away from Lake Michigan. In 1922 the Sanitary District located a sewage treatment plant in Riverdale to service the growing communities on Chicago's Far South Side.

Riverdale's population did not keep pace with its burgeoning industries due to its remoteness from downtown Chicago and lack of accessible public transit. By 1920 the community had a population of just 1,207, which was concentrated between 133rd and 138th Streets. Its small housing stock consisted mainly of single-family frame cottages and bungalows. By 1940 there were only 1,500 residents and Riverdale was widely considered a place to work, but not to live (Chicago Fact Book Consortium 1995:163).

World War II revitalized industries on Chicago's Far South Side and stimulated demand for low-cost war-worker housing for African-Americans. The response of the federal government and the Chicago Housing Authority (CHA) was construction of the Altgeld Gardens public housing project on an immense 157-acre tract of vacant land between 130th and 133rd Streets, from Langley to Greenwood Avenues. Construction started in November 1943 and the complex was dedicated before a crowd of 5,000 people on August 26, 1945. It was developed and managed by CHA in conjunction with the National Housing Agency and the Federal Public Housing Authority. Ownership was originally held by the federal government but was transferred to CHA in 1956 (*Chicago Tribune* 1945, Bowly 1978:42).

Built at a cost of $9 million, Altgeld Gardens featured 1,500 apartments that housed 7,000 people in 162 two-story row houses. The complex was designed by the modernist Chicago firm of Naess and Murphy. Its architects Sigurd Naess and Charles Murphy subsequently designed Chicago's first major skyscraper in the post-war era, the Prudential Building (1952-55). The row houses are constructed of common brick with concrete canopies over the front doors, and each house features a front lawn and rear yard (Bowly 1978:43-44).

Because Altgeld Gardens was created at an isolated location far from the established residential sections of the city, it lacked easy access to mass transit except for limited bus service. Provision had to be made for many community facilities including a Board of Health station, public library, nursery school, auditorium, and a community center. The Chicago Board of Education built four one-story school buildings for elementary and high school classes. Included in the center of the

development were privately owned businesses including a grocery store, bakery, barber and beauty shops, and a drug store. An interdenominational church was built in 1950 under the sponsorship of the Church Federation of Greater Chicago (Bowly 1978:45, *Chicago Tribune* 1944). Residents were served by the adjacent 16-acre Carver Park with its indoor gymnasium, swimming pool, fitness center, boxing ring, and multi-purpose clubrooms. Outside, the park offers a playground, baseball diamonds, and basketball courts. Carver High School—named for African-American scientist and educator George Washington Carver—was built in 1947 at 13100 S. Doty Avenue (Chicago Park District 2012).

Riverdale Development: 1950 to Present

The creation of Altgeld Gardens dramatically altered life in Riverdale as its population more than quadrupled by 1950 to 9,790 residents. In 1954 the CHA built the Philip Murray Homes as a 500-unit extension of Altgeld Gardens. Its two-story row houses, also designed by Naess and Murphy, were similar to, if somewhat simpler than, the adjacent houses of Altgeld Gardens. The new complex boosted Riverdale's population to more than 11,000 in 1960, 90 percent of whom were African-Americans residing in public housing.

In 1967–1968, the 800-unit Eden Green was built as the nation's first majority African-American owned and operated apartment and town house complex. The federally financed project, built on a 50-acre tract along Indiana Avenue between 130th and 133rd Streets, was sponsored by the Antioch Missionary Baptist Church of Englewood through the Antioch Foundation and targeted low and moderate-income families. The series of low-rise buildings were designed by architect Charles Edward Stade and featured housing that ranges in size from one-bedroom garden apartments to four-bedroom town houses (*Chicago Tribune* 1967a, 1967b, 1968).

Riverdale's population reached a peak of 15,018 by 1970, despite the fact that several hundred white residents moved out. The area has lost both population and jobs since that time. A long history of heavy industrial use throughout the community—factories, railroads, landfills, and a wastewater treatment facility—has likely contaminated large tracts of land; additional information about hazardous materials and contaminations is presented in the *Hazardous Materials Technical Memorandum*. By 1990 only 10,821 people lived in Riverdale and two-thirds of its households lived in poverty. By 2000, the population had dropped to 9,809 residents and nearly all Riverdale residents are African-American (Keating 2008:260). Riverdale still lacks basic commercial amenities; most residents shop in retail areas in Roseland or in the south suburbs. Roseland Community Hospital on 111th Street is the nearest major medical facility.

Limited educational options for Riverdale children led to the 2009 construction of the Chicago International Lloyd Bond Charter School in Altgeld Gardens, which serves kindergarten through eighth grade. The school is named for Lloyd Bond, a Johns Hopkins-trained psychologist who grew up in Altgeld on the same block where the school now stands. The school replaced the private Our Lady of the Gardens, which was a fixture in the complex since its inception (Mack 2009). Particularly problematic for the community was the transformation of Carver High School to a selective high school military academy in 2000. This meant that high school students from Altgeld Gardens had to travel about 5 miles to Fenger High School in the Roseland community,

the next closest school. A long-running feud between Altgeld and Fenger students culminated in the death of a Fenger student in 2009 (Ahmed 2009). Escalating tensions finally prompted the Chicago Public Schools to build the Larry Hawkins Charter School in Altgeld Gardens, which opened in time for the 2010–2011 school year and serves grades 7 to 12.

A more than decade-long grassroots campaign by residents and community groups—including a young community organizer named Barack Obama—to have asbestos removed from apartments at Altgeld Gardens culminated in the 2003 asbestos abatement program funded by the federal government. In 1992, Altgeld Gardens was determined eligible for listing on the National Register by the Preservation Services staff of the Illinois Historic Preservation Agency.

Riverdale's most significant natural amenity is the 135-acre Beaubien Preserve, part of the Forest Preserve District of Cook County, which is in the southeastern corner of the community. The wooded preserve features large oaks that are over 100 years old with a few pockets of remnant prairie that harbor native species. At the center of the preserve is Flatfoot Lake, a popular fishing spot in the region. In recent years the Forest Preserve District of Cook County has worked to rehabilitate the area around the lake by cleaning up debris, testing water quality, restocking the lake with fish, refurbishing facilities, and establishing access to the waterway.

5.5.2 Surveyed Resources

As part of the fieldwork for the RLE Project, one building within the Riverdale portion of the APE was surveyed: 501 E. 130th Street. Altgeld Gardens, which was identified as an NRHP-eligible resource independent of the RLE Project, also lies within the Riverdale community. Maps in Appendix A present these findings graphically.

5.5.2.1 Resources Eligible for National Register of Historic Places

Altgeld Gardens, which was identified as NRHP-eligible independent of the RLE Project, was not surveyed as part of the RLE Project but lies within the Riverdale community.

5.5.2.2 Properties Surveyed but Determined Ineligible

The one surveyed property, a commercial property at 501 E. 130th Street, is too recent (constructed circa 1974–1988) to be eligible for inclusion on the NRHP.

5.6 Village of Calumet Park

The following subsections include a description of the historic context for the development of the Village of Calumet Park (**Section 5.6.1**) and an overview of historic properties that were surveyed (**Section 5.6.2**). No NRHP-listed sites or districts fall within the RLE APE in the Village of Calumet Park.

5.6.1 Historic Context

The Village of Calumet Park is approximately 15 miles south of Chicago's Loop. It is roughly bounded by 123rd Street on the north, with a parcel west of I-57 that extends to 119th Street; the

Metra train tracks on the west; Halsted Street, Racine Avenue, and Morgan Street to the east; and the Chicago city limits (138th Street) to the south.

Village of Calumet Park Development: 1900 to 1950

The Village of Calumet Park, settled by 200 to 300 residents representing a variety of ethnicities, was incorporated in 1912 as the Village of De Young (*Chicago Tribune* 1962). By 1914, the name had changed to Burr Oak. Throughout the first half of the 20th century it remained a sparsely settled, virtually lawless area that was mainly associated in the public's mind with vice and crime. A search of the *Chicago Tribune* historical archive for the Village of Burr Oak during the 1910s and 1920s revealed dozens of articles regarding notorious road houses, taverns, and poolrooms, mainly in the north section of the community, that were havens of drugs and gambling and locations for shootouts with outside authorities. The most infamous of these was the Burr Oak Inn at 119th and Wood Streets, a tavern and dance hall known as the "Crime Castle" in news accounts. It featured secret escape tunnels, concealed opium dens, and underground arsenals before it burned to the ground in 1920 (*Chicago Tribune* 1918a, 1918b, 1920).

Regular raids of the village seemingly did little to curb its illicit activities. During a January 1922 raid of four saloons and poolrooms in which four slot machines were confiscated, the Chief Deputy Sheriff admitted, "these places have been raided before," and vowed to "continue these raids, one after the other, until all gambling is stopped" (*Chicago Tribune* 1921). The most lucrative activity in the village during the 1920s era of Prohibition was bootlegging. A July 1924 raid of 11941 S. Wood Street revealed a moonshine layout, which Chief Raider Otto Grewuch described as "the most wonderful I've ever seen," that was in full operation. Three truckloads of moonshining equipment were confiscated, including 100-gallon stills and 100 barrels of mash (*Chicago Tribune* 1924b). In one 1927 raid, 35 prohibition agents discovered stills ranging from 50 gallons to 500 gallons at various locations throughout the village. A vat of 3,500 gallons of newly brewed beer was still simmering at 12402 S. Green Street (*Chicago Tribune* 1927).

The unsavory reputation of their village led residents to petition the mayor and the board of trustees for a name change from Burr Oak to Calumet Park in 1925 (*Chicago Tribune* 1925). Among the earliest residential subdivisions was Calumet Highlands, a 40-acre tract bounded by Ashland Avenue, Loomis Street, 125th Street, and 127th Street. The tract was owned by the National Realty Association, which in 1924 announced its intention to build approximately 200 bungalows and two-flat residential buildings at a cost of $1.5 million (*Chicago Tribune* 1924a). The Village of Calumet Park received its first recreational amenity in 1938 with the opening of the 23-acre Raceway Park at the southeast corner of Ashland Avenue and Vermont Street (*Chicago Tribune* 1938). This ¼-mile stock car racetrack, which operated for decades, mainly featured midget car racing during the late 1930s and early 1940s. Calumet Park remained largely undeveloped during the first half of the 20th century and did not have a single religious institution within its boundaries. By 1940 it had a population of just 1,593 (Biggott 2005).

Village of Calumet Park Development: 1950 to Present

The Village of Calumet Park experienced its greatest period of growth during the 1950s, a decade that saw its population more than double from 2,500 in 1950 to an estimated 5,600 in 1955

(*Chicago Tribune* 1955a). By 1959 the population had nearly doubled again to approximately 9,000 residents (Bliss 1959c). During this decade streetscapes began to fill with small, one-story brick-clad tract homes that remain the predominant building type in the village, along with split-level homes and some small apartment buildings. Calumet Park still featured large tracts of undeveloped land in the late 1950s, as evidenced by a 1959 Chicago Tribune article about a proposed 90-home development in the vicinity of 124th and Bishop Streets (*Chicago Tribune* 1959a). Although the area had been subdivided, it was unpaved and lacked sewer and water mains.

In 1951 Calumet Park received its first religious edifice with the construction of the Church of the Seven Holy Founders at 124th and Ada Streets. The brick building of modernist design included five classrooms for the parish's 300 Polish and Irish Catholic families, who had worshipped in the Village Hall since 1949 (*Chicago Tribune* 1951). In 1956, the Community Covenant Church of Calumet Park erected an educational building at 125th and Loomis Streets. Designed by Whitehead, Billman and Associates, the one-story brick building housed a large fellowship hall intended for worship services and 15 classrooms for its congregation of 100, which the pastor expected to double within the year (*Chicago Tribune* 1955b).

The growing suburb retained its reputation for vice, however. In 1959, the *Chicago Tribune* ran a series of articles on the village, noting that it had replaced Calumet City as the center of gambling by organized crime in the south suburbs. The village at that time lacked a full-time police force, although it had 26 part-time men on the payroll at $1.25 an hour. Its part-time police chief worked during the day as a clerk in the office of the Cook County Recorder of Deeds. The most elaborate and profitable gambling enterprise in the village at that time was the Club Corral at 12906 S. Ashland Avenue, which one reporter referred to as the "mob's newest gaming den," doing business that "far exceeded the hopes of the syndicate." According to one gambler who patronized its four roulette wheels, four dice tables, two blackjack tables, and faro and poker games, the Corral handled more money in one night than any single gambling room in Las Vegas. The swanky club, with its plush bar and attractive restaurant, attracted customers of the "mink coat set" from Chicago's North Shore suburbs (Bliss 1959a).

Business at the Club Corral was booming seven nights a week until it was shut down following a July 1959 exposé on the establishment. Illegal gambling run by the crime syndicate was not, however, confined to one establishment. On an ordinary afternoon, hundreds of factory workers and housewives could be found making horse race bets and gambling in numerous taverns and other buildings throughout the village. For example, the second floor of a large garage at 1129 W. 127th Street hosted a busy gaming operation run by George (Babe) Tuffanelli, the gambling power in the south Cook County area. And a tavern at the southwest corner of 123rd and Green Streets had so many customers for its gaming operations in 1959 that residents had to park two and three blocks from their homes (Bliss 1959e).

Village President John Swalec's reaction to newspaper revelations of widespread gambling aroused the ire of residents when he stated at an August 1959 public meeting, "he never heard of gambling in the village until he read about it in the Tribune." In response, one woman shouted:

"Our town has the biggest crap game in the country" (*Chicago Tribune* 1959b). Four Calumet Park trustees, who were elected on a "good government" platform, pressed for reform and vowed they would work for an end to gaming in the village (Bliss 1959b). Swalec's subsequent clampdown on church bingo games was widely viewed by residents as a vindictive measure (Bliss 1959d).

The decade of the 1960s saw construction of the I-57 expressway through the west side of Calumet Park. The Burr Oak Elementary School at 1440 W. 125th Street received a four-room addition in 1964 (*Chicago Tribune* 1964a). In the same year, the Calumet Park recreation association built a public swimming pool at 124th and Morgan Streets, and the village established a small public library in rented quarters at 12545 S. Ashland Avenue (*Chicago Tribune* 1964b). By 1970 the population reached 10,069 with 60 businesses, most of which were along the commercial strips of 127th Street and Ashland Avenue (Biggott 2005). The lack of diversity among these commercial establishments—which featured numerous fast food restaurants, motels, and automotive services—led residents to depend on larger neighbors such as Blue Island for jobs and shopping.

As late as 1978 the village's population was 80 percent white, 5 percent African-American, and 15 percent Latino (Gaspar 1978). By 1992 African-Americans accounted for 72 percent of the population (Biggott 2005). The transition from a white to a black suburb produced conflict. In the summer of 1992 two black prisoners died in the village jail within weeks of each other, allegedly by suicide. The incidents attracted the attention of Chicago Alderman Robert Shaw and led to rallies and protests against the community's all-white police force (Kirby 1992). Buster Porch was elected in 1996 as the first African-American mayor of Calumet Park.

Despite its dip in population from 8,516 to 7,835 between 2000 and 2010, Calumet Park has experienced some development over the past decade, including two large condominium buildings erected in 1998 on 127th Street west of I-57 and at 123rd and Laflin Streets (Kukec 1998). In the same year, 17 single-family homes were erected near 129th and Aberdeen Streets. Raceway Park continued in operation through the 20th century, featuring many types of motorsport activity over the decades including stock car and motorcycle racing and demolition derbies. The racetrack closed in 2000 and was subsequently replaced by the Raceway Park Shopping Center.

5.6.2 Surveyed Resources

As part of the fieldwork for the RLE Project, seven buildings within the Calumet Park portion of the APE were surveyed. These properties, along with their construction date and an assessment of their eligibility for listing on the NRHP, are presented in Table 5-5, alphabetized by street name. Properties determined individually eligible are highlighted. A series of maps in Appendix A graphically present these findings; individual inventory sheets for surveyed properties are presented in Appendix B.

Table 5-5: Seven Surveyed Properties in Calumet Park

Address	Year Built	Description	Eligibility
12317 S. Green Street	1907	Single-Family	Not Eligible
12359 S. Green Street	1949	Single-Family	Not Eligible
12409 S. Green Street	1925	Single-Family	Not Eligible
12308 S. Halsted Street	1950	Commercial	Not Eligible
12338 S. Halsted Street	1938-1952	Public	Not Eligible
12352 S. Halsted Street	1924	Single-Family	Not Eligible
12540 S. Halsted Street	1923	Cedar Park Cemetery Entryway and Gatehouse	Eligible

5.6.2.1 Resources Eligible for National Register of Historic Places

Of the seven resources surveyed within the Calumet Park portion of the RLE APE, one was identified as eligible for listing on the NRHP.

Gatehouse and Entryway to Cedar Park Cemetery, 12540 S. Halsted Street

The Cedar Park Cemetery, founded in the early 20th century, comprises a formal landscape on 94.5 acres at 12540 S. Halsted Street. Plantings include large deciduous shade trees, as well as ornamental shrubs and mowed lawn. Grave markers are mounted flush with the lawn. Extant buildings and structures include the office/gatehouse with ornamental gate and fence, an obelisk, three mausoleums, and a cinder block building.

Overall, the landscape is not exceptional, nor does it contain any distinctive design features; the cemetery does not warrant listing on the NRHP. Of the extant structures, only the gatehouse and adjacent fenced entryway were identified as NRHP-eligible. The unusual stonework that is not readily seen in the area, the high quality of craftsmanship in their construction, and the high level of integrity the resource retains in regards to location, materials, design, setting, workmanship, and feeling, make the building, piers, and gates locally eligible for NRHP listing under Criterion C for architecture.

Cedar Park Cemetery's one-story Romanesque Revival style gatehouse, shown in Figure 5-15, is at its Halsted Street entrance. The entrance features two pairs of massive stone gateposts and metal entrance gates. Original metal fencing extends along the length of the cemetery's Halsted Street boundary, which also features several stone piers. The gatehouse, gateposts, and piers are built of grey, brown, and pink stones that are randomly laid. The building and piers have excellent integrity and were likely installed circa 1923, along with the metal entrance gates and fencing along Halsted Street, when the Cedar Park Cemetery Association purchased its original 53-acre site. The building, piers, and gates are locally eligible for NRHP listing under Criterion C for architecture due to their high quality craftsmanship and unusual stonework.

Figure 5-15: Cedar Park Cemetery Gatehouse

The gatehouse has a flat roof, parapet, and stone cornice. All windows have stone sills and stone lintels with a type of scallop shell motif. The Halsted Street elevation has four windows: a small stained glass window in its projecting bay, a single window with round-arched transoms on either side of the bay, and a small, round-arched window flanked by slender colonettes in the parapet gable. The Halsted Street elevation bay is topped with stone banding incised with the words "Cedar Park Cemetery." The north elevation has a centrally located pair of wood French doors and six wood sash windows, three each on either side of the entrance. The south elevation has a centrally located, multi-paned wood door with sidelights flanked by slender engaged columns. The south elevation's four windows include a single one-over-one window on one side of the door and a group of three windows—a single pane flanked by one-over-one windows—on the other. Doors on both the north and south elevations are topped by flat stone lintels and accessed via concrete steps flanked by stone piers. The rear elevation has five one-over-one windows: a single, centrally located window with a pair of windows on either side.

Elsewhere in the cemetery, the three granite-clad mausoleums appear to date from the middle to late 20th century. One of these features a chapel, which hosts non-denominational funeral services. The cinder block building, accessed by a secondary entrance just north of 125th Street, is utilitarian in nature and may serve as a maintenance building and/or as a crematorium. Neither the mausoleums nor the cinder block building are eligible for inclusion on the NRHP.

5.6.2.2 Properties Surveyed but Determined Ineligible

Beyond the properties that were identified as individually eligible for NRHP listing, a number of properties were surveyed that did not meet the criteria. Generally, these properties have had subsequent alterations that compromise their historic integrity or do not feature a level of distinctive architectural detailing necessary to qualify for the NRHP.

5.7 Summary of CHRS Resources

Independent of the evaluation process described above, several resources within the APE were evaluated as part of the CHRS. Those rated as Red or Orange in the survey are subject to the City's Demolition Delay Ordinance. Red- and Orange-rated properties within the RLE APE are listed in Table 5-6, alphabetized by street name.

Table 5-6: Chicago Historic Resources Survey Red/Orange Properties in the Area of Potential Effects

Address	CHRS Rating
Chicago Fire Department, 324 W. 104th Street (Alternate: 328-330 W. 104th Street)	Orange
Roseland Pumping Station, 351 W. 104th Street	Orange
1000-1120 W. 120th Street (Note: Demolished since CHRS completed)	Orange
House, 11310 S. Emerald Avenue	Orange
Substation, 10227 S. Halsted Street	Orange
St. Salomea Church, 11800-11808 S. Indiana Avenue	Orange
Commercial Building, 11206 S. Michigan Avenue	Orange
First Christian Reform Church, 10920 S. Princeton Avenue (Alternate: 10914 S. Princeton Avenue)	Orange

5.8 Parks as Historic Resources

Eight parks fall within the RLE APE. They are summarized in Table 5-7 and shown graphically in Figure 5-16. Cultural historians conducted archival research, drawing largely from recent work by Julia Bachrach of the Chicago Park District, and visited these sites in fall 2012 to assess their eligibility according to NRHP guidelines. Of the eight parks, none are recommended eligible for NRHP listing; however, each will be described in the separate *Section 4(f) Technical Memorandum* for the RLE Project.

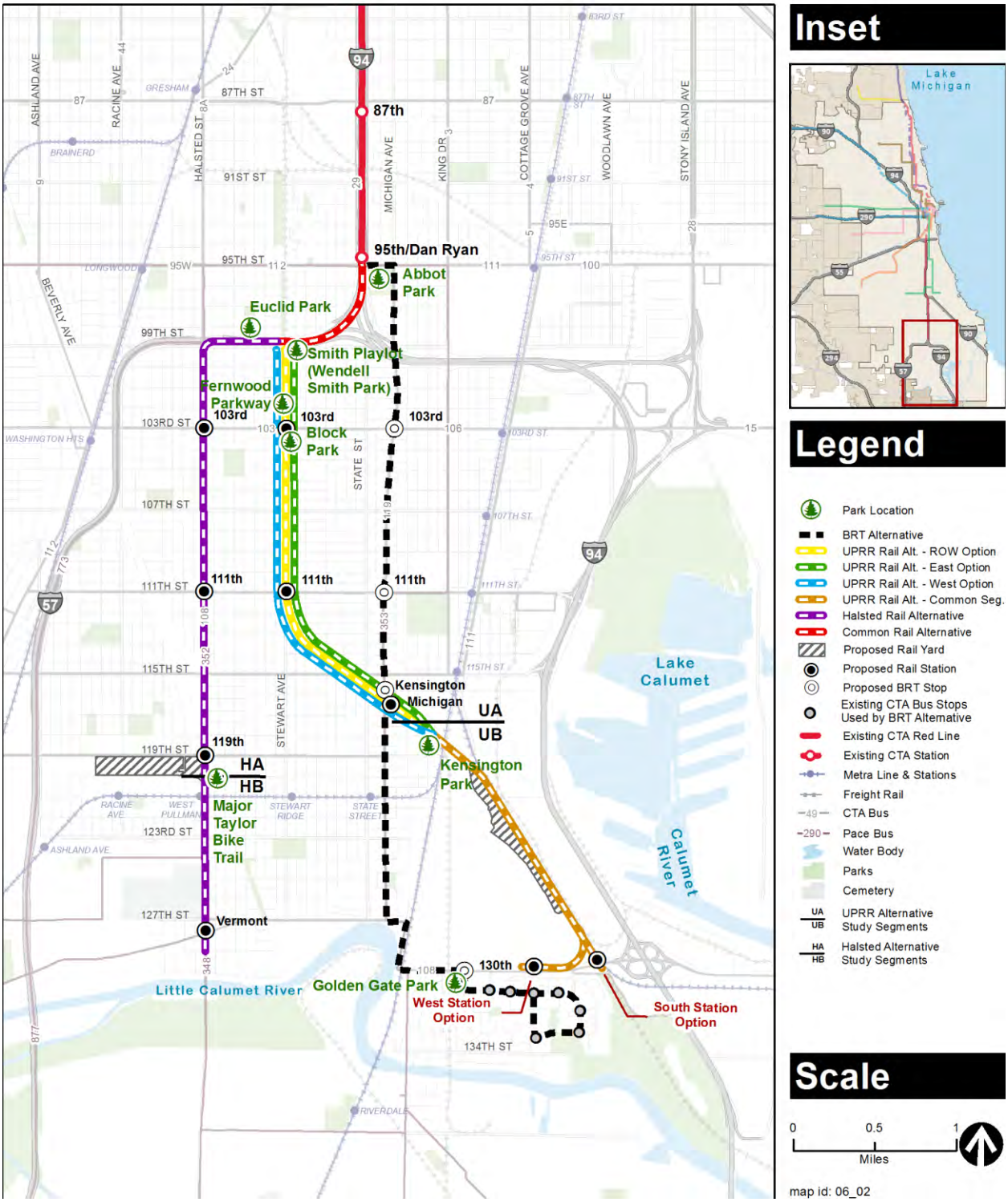

Figure 5-16: Surveyed Parks within the Area of Potential Effects

Table 5-7: Eight Surveyed Parks in the Area of Potential Effects

Park	Address*	Date Open	Eligibility
Abbot Park	49 E. 95th Street	1950	Not Eligible: Lacks Historic Integrity
Block Park	341 W. 104th Street	1912	Not Eligible: Building Razed
Euclid Park	9800 S. Parnell Avenue	1926	Not Eligible: Lacks Historic Integrity
Fernwood Parkway	9501 S. Eggleston Avenue	1887	Not Eligible: Lacks Historic Integrity
Golden Gate Park	13000 S. Eberhart Avenue	1969	Not Eligible: Less than 50 years
Kensington Park	345 E. 118th Street	1942	Not Eligible
Major Taylor Bike Trail	117th to 122nd Streets	2007	Not Eligible: Less than 50 years
Smith Playlot (Wendell Smith Park)	9912 S. Princeton Avenue	1970	Not Eligible: Less than 50 years

* Based on Chicago Park District files

Three of the parks within the APE do not meet the 50-year age threshold for listing in the NRHP. The five older parks have had modern alterations that compromise their historic integrity, as summarized below:

- Abbot Park, which opened in 1950, is home to modern recreational amenities including baseball diamonds, tennis courts, a volleyball court, a basketball court, a swimming pool, walking trails, and playground equipment. Two structures on the property are over 50 years in age; neither has distinguishing architectural features. Overall, the historic integrity of the park has been compromised by modern alterations.

- Block Park, which opened in 1912, originally included the Griffith Natatorium and Roseland Park. The natatorium was razed in 1998; today the park includes open space with benches and walking paths. Overall, the historic integrity of the park has been compromised by the demolition of the structure.

- Euclid Park, which opened in 1926, originally contained open space and ball fields. The park was rehabilitated in the 1960s, when the original structure was replaced with a new fieldhouse. Overall, the historic integrity of the park has been compromised by modern modifications.

- Fernwood Parkway, which was established in 1887, originally included green space planted with trees and lawn. In the early 20th century the park was replanted and a wading lagoon was added, but was removed in the 1920s. Additional alterations occurred in the 1960s and 1970s including planting, lighting, and grading. Although Fernwood Parkway was the first parkland in the neighborhood and has long been a defining feature of the Roseland community and Fernwood area, the park site lacks integrity and sufficient historical significance to be considered eligible for NRHP listing.

- Kensington Park, which was purchased by the City in 1942, contains a number of recreational amenities: a mid-20th century field house that is no longer in use, modern playground equipment, a splash pad, a paved basketball court, a horseshoe pit, and baseball fields. Although the fieldhouse is over 50 years in age, it lacks any distinguishing architectural features. The remaining elements of the park are modern additions. Overall, the historic integrity of the park has been compromised by modern alterations.

Section 6
Effects and Mitigations

The following subsections describe the effect findings following consultation with the SHPO and consulting parties. Figure 6-1 presents the locations of each NRHP-eligible resource in relation to the proposed project alternatives; maps in **Appendix D**, prepared for the *Displacements and Relocations of Existing Uses Technical Memorandum*, depict the relationship between each alternative alignment and nearby historic resources at a larger scale.

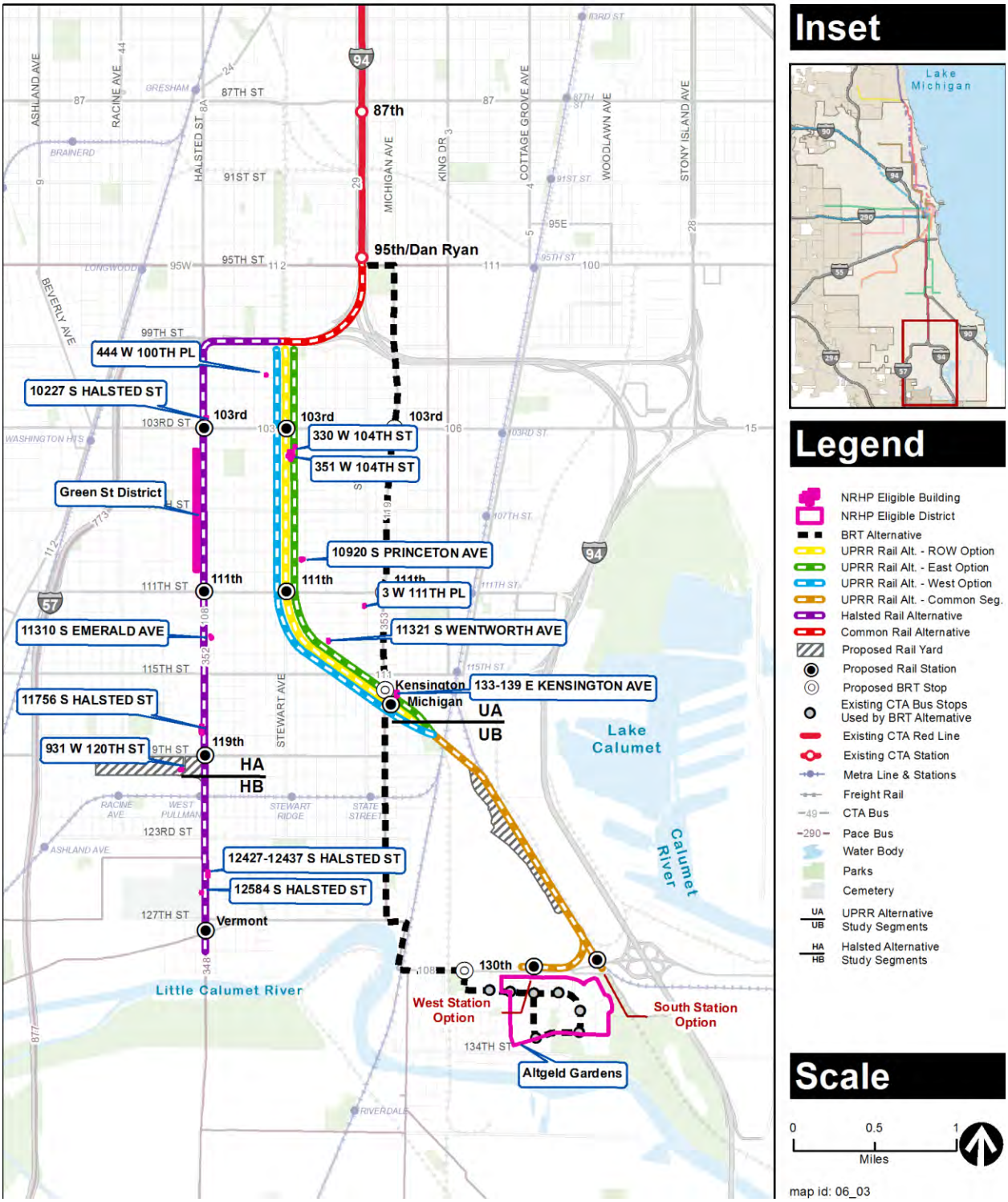

Figure 6-1: NRHP Eligible Sites within the Area of Potential Effects

6.1 No Build Alternative

No adverse effects to historic resources are anticipated to occur as a result of the No Build Alternative.

6.2 Bus Rapid Transit Alternative

Three resources near the BRT corridor have been identified as NRHP-eligible: the Bethany Reformed Church Manse at Three West 111th Place, the Venetian Hall at 133–139 East Kensington Avenue, and the Altgeld Gardens Housing Project. None are anticipated to be adversely affected by the BRT Alternative. Table 6-1 summarizes effects for each historic resource.

Table 6-1: Effects Findings (BRT Alternative)

NRHP Eligible Resource	Effect Finding
Bethany Reformed Church Manse, 3 W. 111th Place	No Effect
Former Venetian Hall, 133-139 E. Kensington Avenue	No Adverse Effect
Altgeld Gardens Housing Project	No Effect

Bethany Reformed Church Manse: No Effect
This Craftsman style residence was home to pioneer media evangelist Reverend Harry J. Hager; it is eligible under Criterion B for its association with Reverend Hager. Under the BRT Alternative, a surface parking lot would be constructed to the east of the building.

The Bethany Reformed Church Manse would not be displaced by the BRT Alternative. Technical analyses suggest that the property would not be subject to visual, noise, or vibratory effects. Construction activities would not affect the characteristics that qualify the resource for inclusion on the NRHP; therefore, the finding is that the BRT Alternative would have no effect on the Bethany Reformed Church Manse.

Former Venetian Hall: No Adverse Effect
This former social venue and performance hall for Italian-Americans has been converted to a church; it is eligible under Criterion A for its original use as a social venue for area residents in the early 20th century. Under the BRT Alternative, a three-story parking structure would be constructed to the south and west of the building.

The former Venetian Hall would not be displaced by the BRT Alternative. While the construction of the parking structure would alter the local setting visually, it would not adversely affect the characteristics that qualify the property for inclusion on the NRHP. Technical analyses suggest that the former Venetian Hall would not be subject to noise or vibratory effects. While construction activities would likely be perceptible at the hall, it would not adversely affect the characteristics that qualify the resource for inclusion on the NRHP; therefore, the finding is that the BRT Alternative would have no adverse effect on the Venetian Hall.

Altgeld Gardens Housing Project: No Effect
This large housing project was built in the early 1940s and is eligible as a district for NRHP listing

under Criterion A for its association with community development, planning, and social history. Under the BRT Alternative, buses would travel between the 95th Street Terminal and 130th Street before continuing to circulate through Altgeld Gardens.

The Altgeld Gardens public housing project would not be displaced or have any direct effects due to implementation of the BRT Alternative. No visual, noise, vibration, or construction effects would affect the characteristics that qualify the resource for inclusion on the NRHP; therefore, the finding is that the BRT Alternative would have no effect on the Altgeld Gardens public housing project as a historic resource.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

Seven resources near the UPRR corridor have been identified as NRHP-eligible: the Eclectic Neo-Traditional Home at 444 W. 100th Place, the fire station at 324 W. 104th Street, the Roseland Pumping Station at 351 W.104th Street, the Romanesque revival church at 10920 S. Princeton Avenue, the Venetian Hall at 133–139 E. Kensington Avenue, the Roseland Community Hospital Nurses Home at 11321 S. Wentworth Avenue, and the Altgeld Gardens Housing Project. None are anticipated to be adversely affected by the UPRR Rail Alternative; Table 6-2 summarizes effects for each historic resource. With the exception of one property (the Roseland Pumping Station), effects for all three UPRR Rail Alternative options (ROW, East, and West) would be the same.

Table 6-2: Effects Findings (UPRR Rail Alternative - ROW Option)

NRHP Eligible Resource	Effect Finding
Eclectic Neo-Traditional Home, 444 W. 100th Place	No Effect
Fire Department Engine Co. 93, 324 W. 104th Street	No Effect
Roseland Pumping Station, 351 W. 104th Street	No Effect
Romanesque Revival Church, 10920 S. Princeton Avenue	No Effect
Roseland Community Hospital Nurses Home, 11321 S. Wentworth Avenue	No Effect
Former Venetian Hall, 133-139 E. Kensington Avenue	No Effect
Altgeld Gardens Housing Project	No Effect/No Adverse Effect[1]

[1] No Effect finding for South Station Option; No Adverse Effect for West Station Option

Archaeological sites may be uncovered during construction activities. If this occurs, additional investigations will be necessary to determine the eligibility of sites and whether the project would lead to an adverse effect.

6.3.1 Segment UA

Six of the seven resources fall within the northern portion of the route, Segment UA.

Eclectic Neo-Traditional Home: No Effect
The Eclectic Neo-Traditional Home at 444 W. 100th Place is NRHP-eligible under Criterion C for its architecture. The UPRR Rail Alternative ROW Option corridor would be approximately one block east of the property.

The Eclectic Neo-Traditional Home would not be displaced by the UPRR Rail Alternative. No visual, noise, vibration, or construction effects would affect the characteristics that qualify the resource for inclusion on the NRHP; therefore, the finding is that the UPRR Rail Alternative ROW Option would have no effect on this residence.

Fire Department Engine Company 93: No Effect
The fire station at 324 W. 104th Street is NRHP-eligible under Criterion C for its architecture. The UPRR Rail Alternative ROW Option corridor would be approximately 200 feet east of the property.

The Fire Department Engine Company 93 station would not be displaced by the UPRR Rail Alternative. No visual, noise, vibration, or construction effects would affect the characteristics that qualify the resource for inclusion on the NRHP; therefore, the finding is that the UPRR Rail Alternative ROW Option would have no effect on this property.

Roseland Pumping Station: No Effect
The Roseland Pumping Station is NRHP-eligible under Criterion C for its architecture. The UPRR Rail Alternative ROW Option corridor would be immediately east of the property.

The pumping station would not be displaced or directly affected by the UPRR Rail Alternative. No visual, noise, vibration, or construction effects would affect the characteristics that qualify the resource for inclusion on the NRHP. The close proximity of the proposed alternative to the resource is offset by the presence of the existing UPRR freight line; implementation of the UPRR Rail Alternative would not alter the setting or feeling of the resource. Therefore, the finding is that the UPRR Rail Alternative ROW Option would have no effect on this resource.

Romanesque Revival Church: No Effect
The church at 10920 S. Princeton Avenue is NRHP-eligible under Criterion A for its association with the community's former Dutch population and under Criterion C for its architecture. The UPRR Rail Alternative ROW Option corridor would be over ½ block west of the property.

The church would not be displaced or directly affected by the UPRR Rail Alternative. No visual, noise, vibration, or construction effects would affect the characteristics that qualify the resource for inclusion on the NRHP; therefore, the finding is that the UPRR Rail Alternative ROW Option would have no effect on the church.

Roseland Community Hospital Nurses Home: No Effect
Built by the Roseland Community Hospital, this former nurses' home served as an educational facility for nurses; it is NRHP-eligible under Criterion A for its association with education. The UPRR Rail Alternative ROW Option corridor would be over 350 feet southwest of the property, separated from the line by numerous smaller residential buildings.

The Roseland Community Hospital Nurses Home would not be displaced by the UPRR Rail Alternative. No visual, noise, vibration, or construction effects would affect the characteristics

that qualify the resource for inclusion on the NRHP; therefore, the finding is that the UPRR Rail Alternative ROW Option would have no effect on this resource.

Former Venetian Hall: No Effect
This former social venue and performance hall for Italian-Americans has been converted to a church; it is NRHP-eligible under Criterion A. The UPRR Rail Alternative ROW Option corridor would be over 150 feet southwest of the property, separated from the line by smaller buildings and a vacant surface lot.

The former Venetian Hall would not be displaced by the UPRR Rail Alternative. No visual, noise, vibration, or construction effects would affect the characteristics that qualify the resource for inclusion on the NRHP; therefore, the finding is that the UPRR Rail Alternative ROW Option would have no effect on this resource.

6.3.2 Segment UB

One of the seven resources falls within the southern portion of the route, Segment UB.

Altgeld Gardens Housing Project: No Effect for South Station Option; No Adverse Effect for West Station Option
This large housing project was built in the early 1940s and is eligible for NRHP listing under Criterion A for its association with community development, planning, and social history. Under the UPRR Rail Alternative, an at-grade station to provide access to Altgeld Gardens would be constructed in one of two locations: a South Station Option or a West Station Option. Either station location option is separated from Altgeld Gardens Historic District by a multi-lane street (i.e., E. 130th Street and/or E. 130th Place). Preliminary plans for each terminal station option would include parking for 2,300 vehicles through a combination of a parking structure and surface parking lots.

The complex would not be displaced or directly affected by the UPRR Rail Alternative.

The South Station Option parking structure for the UPRR 130th Street Station is approximately 800 feet from Altgeld Gardens Historic District at its closest point; the parking structure would not be visible from within the historic district and would not affect the historic district.

The West Station Option parking structure for the UPRR 130th Street Station is approximately 400 feet from Altgeld Gardens Historic District at its closest point and would only be visible from the outer line of buildings on the north side of the Altgeld Gardens development. This outer row of buildings would obstruct the view of the parking structure from interior buildings and streets. The construction of the West Station Option would not adversely affect the characteristics that qualify the district as eligible for NRHP listing, i.e., its association with community development, planning, and social history.

Therefore, the finding is that the South Station Option would have no effect on this resource, and the West Station Option would have no adverse effect on this resource.

6.3.3 120th Street Yard and Shop

No properties identified as NRHP-eligible lie in the vicinity of the proposed yard and shop location; therefore, no effects are anticipated.

6.4 Union Pacific Railroad Rail Alternative - East Option

For six of the seven properties, findings for effects on historic properties under the UPRR Rail Alternative East Option are the same as those presented in **Section 6.3** for the ROW Option:

6.4.1 Segment UA

- Eclectic Neo-Traditional Home at 444 W. 100th Place, No Effect
- Fire Department Engine Company 93 at 324 W. 104th Street, No Effect
- Roseland Pumping Station at 351 W. 104th Street, No Adverse Effect - discussed below
- Romanesque Revival Church at 10920 S. Princeton Avenue, No Effect
- Roseland Community Hospital Nurses Home at 11321 S. Wentworth Avenue, No Effect
- Former Venetian Hall at 133-139 E. Kensington Avenue, No Effect

6.4.2 Segment UB

- Altgeld Gardens Housing Project, No Effect

Because of the proximity of the East Option to the Roseland Pumping Station, the project is anticipated to have no adverse effect. Based on conceptual designs, the track structure is approximately 8.8 feet from the side of the building at its nearest point. It should be noted that an existing at-grade freight line runs in close proximity to this location. The pumping station would not be displaced or directly affected by the UPRR Rail Alternative. The changes in the setting (visual, noise, vibration, etc.) would not adversely affect the characteristics that qualify the resource as eligible for NRHP listing, i.e., its architecture.

Archaeological sites may be uncovered during construction activities. If this occurs, additional investigations will be necessary to determine the eligibility of sites and whether the project would lead to an adverse effect.

6.4.3 120th Street Yard and Shop

No properties identified as NRHP-eligible lie in the vicinity of the proposed yard and shop location; therefore, no effects are anticipated.

6.5 Union Pacific Railroad Rail Alternative - West Option

Findings for effects on historic properties under the UPRR Rail Alternative West Option are the same as those presented in **Section 6.3** for the ROW Option:

6.5.1 Segment UA

- Eclectic Neo-Traditional Home at 444 W. 100th Place, No Effect
- Fire Department Engine Company 93 at 324 W. 104th Street, No Effect
- Roseland Pumping Station at 351 W. 104th Street, No Effect
- Romanesque Revival Church at 10920 S. Princeton Avenue, No Effect
- Roseland Community Hospital Nurses Home at 11321 S. Wentworth Avenue, No Effect
- Former Venetian Hall at 133-139 E. Kensington Avenue, No Effect

6.5.2 Segment UB

- Altgeld Gardens Housing Project, No Effect

Archaeological sites may be uncovered during construction activities. If this occurs, additional investigations will be necessary to determine the eligibility of sites and whether the project would lead to an adverse effect.

6.5.3 120th Street Yard and Shop

No properties identified as NRHP-eligible lie in the vicinity of the proposed yard and shop location; therefore, no effects are anticipated.

6.6 Halsted Rail Alternative

6.6.1 Rail Corridor

Seven resources near the Halsted Rail Alternative corridor have been identified as NRHP-eligible: the Green Street Historic District, the former substation at 10227 S. Halsted Street, the French Eclectic residence at 11310 S. Emerald Avenue, the Galloy and Van Etten industrial building at 11756 S. Halsted Street, the church at 12427 S. Halsted Street, the fire station at 931 W. 120th Street, and the Cedar Park Cemetery entryway and gatehouse at 12540 S. Halsted Street. The fire station lies within the footprint of the proposed rail yard and is discussed separately in **Section 6.6.2**. Four resources are anticipated to be adversely affected by the alternative. Table 6-3 summarizes effects for each historic resource.

Table 6-3: Effects Findings (Halsted Rail Alternative)

NRHP Eligible Resource	Effects Finding
Green Street Historic District	No Adverse Effect
Former Classic Revival Substation, 10227 S. Halsted Street	Adverse Effect
French Eclectic Home, 11310 S. Emerald Avenue	No Adverse Effect
Galloy & Van Etten Stone Contractors, 11756 S. Halsted Street	No Adverse Effect
S.S. Peter & Paul Catholic Church, 12433-12439 S. Halsted Street	Adverse Effect
Cedar Park Cemetery Entryway and Gatehouse, 12540 S. Halsted Street	Adverse Effect
Fire Department Engine Co. 115, 931 W. 120th Street	Adverse Effect

Archaeological sites may be uncovered during construction activities. If this occurs, additional investigations will be necessary to determine the eligibility of sites and whether the project would lead to an adverse effect.

Green Street Historic District: No Adverse Effect
This district along Green Street between 104th and 109th Streets is eligible under Criterion C as a cohesive collection of 1950s and 1960s homes. The Halsted Rail Alternative corridor would be over 100 feet west of the property, generally screened by commercial properties along the western side of Halsted Street.

No homes within the Green Street Historic District would be displaced or directly affected by the Halsted Rail Alternative. Construction of the track structure would alter the setting along Halsted Street; this change would be visible from some locations within the district and would lead to a severe noise impact along Green Street. With the installation of noise walls, the noise impact would be reduced to moderate. These changes in setting along Halsted Street would not adversely affect the characteristics that qualify the district for inclusion on the NRHP. Technical analyses suggest that the homes would not be subject to vibratory effects. While construction activities would likely be perceptible within the district, they would not adversely affect the characteristics that qualify the resource for inclusion on the NRHP. The finding is that the Halsted Rail Alternative would not have an adverse effect on this resource.

Classical Revival Substation: Adverse Effect
The Classical Revival style substation at 10227 S. Halsted Street is eligible under Criterion C for its architecture. The Halsted Rail Alternative corridor would be immediately adjacent to the property.

Although the former substation would not be demolished as a result of implementing the Halsted Rail Alternative, the elevated track structure would be located a few feet from the front facade. This resource would be subject to an adverse visual impact due to construction of the Halsted Rail Alternative. Short-term effects due to construction activities may also lead to adverse effects, depending on the construction techniques employed. Neither noise nor vibratory effects would affect the characteristics that qualify the resource for inclusion on the NRHP. The finding is that the Halsted Rail Alternative would have an adverse effect on this resource.

French Eclectic Home: No Adverse Effect
The home at 11310 S. Emerald Avenue is NRHP-eligible under Criterion C for its architecture. The Halsted Rail Alternative corridor would be over 150 feet west of the property, screened by vegetation and a commercial property on Halsted Street.

The home would not be displaced or directly affected by the Halsted Rail Alternative. Changes in the setting along Halsted Street would not adversely affect the characteristics that qualify the French Eclectic Home as eligible for NRHP listing, i.e., its architecture. The property stands away from the proposed track structure and would be screened by the intervening space, vegetation, and buildings along Halsted Street; therefore, the finding is that the Halsted Rail Alternative would have no adverse effect on this resource.

Galloy and Van Etten Stone Contractors: No Adverse Effect
The industrial building at 11756 S. Halsted Street is eligible under Criterion A for its association with industry. The Halsted Rail Alternative corridor would be immediately adjacent to the property.

Although the property would not be demolished as a result of implementing the Halsted Rail Alternative, the elevated track structure would be located a few feet from the side of the building. While it would be subject to visual, noise, and construction impacts due to implementation of this alternative, these changes would not adversely affect the characteristics that qualify the resource for inclusion on the NRHP. Technical analyses suggest that the property would not be subject to vibratory effects. The finding is that the Halsted Rail Alternative would have no adverse effect on this resource.

S.S. Peter & Paul Catholic Church: Adverse Effect
The modernistic church at 12427 S. Halsted Street is eligible under Criterion C for its architecture. The Halsted Rail Alternative corridor would be immediately adjacent to the property.

Although the church would not be demolished as a result of implementing the Halsted Rail Alternative, the elevated track structure would be located a few feet from the facade. This resource would be subject to an adverse visual impact due to construction of the Halsted Rail Alternative and an adverse noise impact due to its operation, which would alter the feeling and setting associated with the quieter atmosphere anticipated within a religious building. With the installation of noise walls, the severity of the noise impact would be reduced. Short-term effects due to construction activities may also lead to adverse effects, depending on the construction techniques employed. Vibratory effects would not affect the characteristics that qualify the resource for inclusion on the NRHP. The finding is that the Halsted Rail Alternative would have an adverse effect on this resource.

Cedar Park Cemetery Gatehouse and Entryway: Adverse Effect
The Cedar Park Cemetery entryway and gatehouse, at 12540 S. Halsted Street, is NRHP-eligible under Criterion C for its architecture. The Halsted Rail Alternative corridor would be immediately adjacent to the property.

Although the entrance would not be demolished as a result of implementing the Halsted Rail Alternative, the elevated track structure would be located a few feet in front of the resource. This resource would be subject to an adverse visual impact due to construction of the Halsted Rail Alternative. Short-term effects due to construction activities may also lead to adverse effects, depending on the construction techniques employed. Noise and vibratory effects would not affect the characteristics that qualify the resource for inclusion on the NRHP. The finding is that the Halsted Rail Alternative would have an adverse effect on this resource.

6.6.2 119th Street Yard and Shop

The fire station at 931 W. 120th Street lies within the footprint of the proposed yard. The Fire Department Engine Company 115 is eligible under Criterion C for its architecture. Although the fire station would not be demolished as a result of implementing the alternative, it would be surrounded by track on three sides, in close proximity to the west. This resource would be subject to an adverse visual impact due to construction of the Halsted Rail Alternative. Short-term effects due to construction activities may also lead to adverse effects, depending on the construction techniques employed. Neither noise nor vibratory effects would affect the characteristics that qualify the resource for inclusion on the NRHP. The finding is that the Halsted Rail Alternative would have an adverse effect on this resource.

Section 7
Effects Remaining After Mitigation

Due to the scale and proximity of construction of the Halsted Rail Alternative, it is unlikely that the anticipated adverse effects on these resources could be resolved; however, consultation with the SHPO and other interested parties may identify measures to mitigate effects. This may include, but would not be limited to, structural documentation, interpretative signage, further study to identify noise mitigation options for the church, and special provisions regarding construction in the vicinity. Measures mentioned by consulting parties at the May 2014 effects meeting included reconsidering the design and scale of proposed garages and incorporating the former Classic Revival substation into the Halsted 103rd Street Station designs.

Table 7-1 summarizes the effect findings following consultation with the SHPO and consulting parties. Properties are rated as experiencing No Effect (NE), No Adverse Effect (NAE), or an Adverse Effect (AE) as defined under the NHPA.

Table 7-1: Effects Findings

NRHP Eligible Resource	No Build	Bus Rapid Transit	Union Pacific Railroad Rail	Halsted Rail
Bethany Reformed Church Manse, 3 W. 111th Place	NE	NE	NE	NE
Eclectic Neo-Traditional Home, 444 W. 100th Place	NE	NE	NE	NE
Fire Department Engine Co. 93, 324 W. 104th Street	NE	NE	NE	NE
Roseland Pumping Station, 351 W. 104th Street	NE	NE	NE/NAE[1]	NE
Romanesque Revival Church, 10920 S. Princeton Avenue	NE	NE	NE	NE
Roseland Community Hospital Nurses Home, 11321 S. Wentworth Avenue	NE	NE	NE	NE
Former Venetian Hall, 133-139 E. Kensington Avenue	NE	NAE	NE	NE
Altgeld Gardens Housing Project	NE	NE	NE/NAE[2]	NE
Green Street Historic District	NE	NE	NE	NAE
Former Classic Revival Substation, 10227 S. Halsted Street	NE	NE	NE	AE
French Eclectic Home, 11310 S. Emerald Avenue	NE	NE	NE	NAE
Galloy & Van Etten Stone Contractors, 11756 S. Halsted Street	NE	NE	NE	NAE
S.S. Peter & Paul Catholic Church, 12433-12439 S. Halsted Street	NE	NE	NE	AE
Cedar Park Cemetery Entryway and Gatehouse, 12540 S. Halsted Street	NE	NE	NE	AE
Fire Department Engine Co. 115, 931 W. 120th Street	NE	NE	NE	AE

NE = No Effect; NAE = No Adverse Effect; AE = Adverse Effect
[1] No Effect finding for ROW and West Options; No Adverse Effect for East Option
[2] No Effect finding for South Station Option; No Adverse Effect for West Station Option

Section 8
Section 106 Consultation Process

In accordance with requirements for consultation established in Section 106 of the NHPA, four distinct rounds of coordination occurred during the RLE Project: initiation activities, identification of historic properties, assessment of effects, and resolution of adverse effects. Each outreach effort is described in the following sections.

8.1 Initiation Activities

8.1.1 Invitations to Participate

In August 2012 FTA sent invitation letters to 11 Native American tribes to inform them of the process and request assistance in identifying areas with potential cultural and/or religious significance. Letters were sent to the following nations: the Ho-Chunk Nation, the Miami Tribe of Oklahoma, the Peoria Tribe of Indians of Oklahoma, the Sac and Fox Nation of Oklahoma, the Pokagon Band of Potawatomi Indians, the Prairie Band of the Potawatomi Nation, the Citizen Potawatomi Nation, the Forest County Potawatomi Nation, the Potawatomi Nation, the Sac and Fox Nation of Mississippi in Iowa, and the Sac and Fox Nation of Missouri.

Also in August 2012, CTA sent invitation letters to 20 state and local level preservation interest groups to inform them of the project and invite them to participate in the upcoming consultation process. Invitation letters were sent to the following groups: the SHPO, the Advisory Council on Historic Preservation, the Illinois State Museum, Illinois State Archaeological Survey, the City of Chicago Historic Preservation Division Department of Housing and Economic Development, Preservation Chicago, Landmarks Illinois, the Chicago Historical Society, the Ridge Historical Society, the Beverly Area Planning Association, the East Beverly Association, the Rosemoor Community Association, the Cottage Grove Heights Community Coalition, the Historic Pullman Foundation, the South Suburban Genealogical and Historical Society, Chicago Neighborhood Initiatives, Neighborhood Housing Services of Chicago, Mercy Housing Lakefront, and Friends of the Parks. Nine groups indicated they would like to participate in the process. Accordingly, materials and meeting notices were sent to the SHPO, the City of Chicago Historic Preservation Division Department of Housing and Economic Development, Preservation Chicago, Landmarks Illinois, the Ridge Historical Society, the Rosemoor Community Association, Chicago Neighborhood Initiatives, and Friends of the Parks. The list of organizations that accepted the invitation to participate in the consultation process is included in **Appendix C**.

8.1.2 Section 106 Kickoff Webinar

On October 24, 2012, a kickoff webinar was held. The webinar included an overview of the Section 106 process, a description of the project and the build alternatives, and an outline of the schedule for the consultation process over the coming months. A full summary of this meeting is provided in **Appendix C**.

8.2 Identification of Historic Properties

On January 30, 2013, the project team held a meeting at CTA to discuss the identification of historic properties, specifically those that were recommended as eligible for listing on the NRHP. A CD containing a summary table, maps of the resources, and individual site forms was mailed to consulting parties on January 5, 2013. A full summary of the meeting is provided in **Appendix C**. The meeting was followed by an informal tour of the corridor that afternoon.

As part of this phase of coordination, written comments were received from six consulting parties. A summary of these comments and copies of the individual letters are included in **Appendix C**.

8.3 Assessment of Effects

On May 8, 2014, the project team held a meeting at CTA to discuss potential project effects on NRHP historic properties. A Draft Effects Report was mailed to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. A full summary of the meeting is provided in **Appendix C**.

As part of this phase of coordination, written comments were received from four consulting parties. A summary of these comments and copies of the individual letters are included in **Appendix C**.

8.4 Resolution of Adverse Effects

This stage of consultation has not yet occurred.

Section 9
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Appendix A
Maps of Properties Surveyed

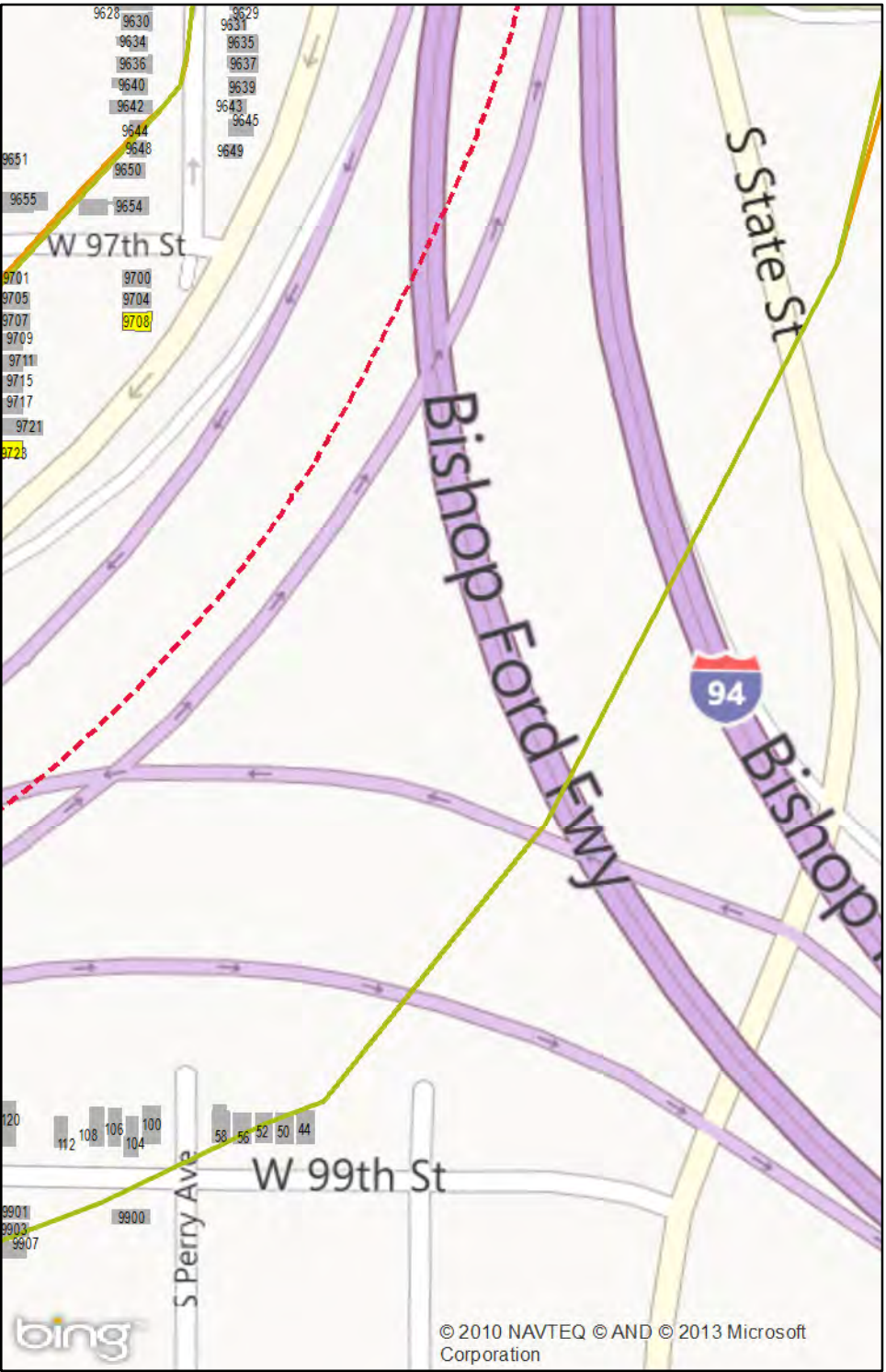

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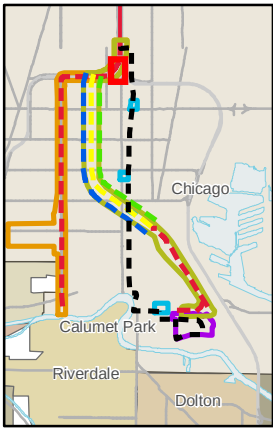

Legend

- Proposed Rail Station
- Proposed BRT Stop
- Existing Rail Alignment / Station
- Proposed BRT Route
- Halsted Alternative
- Union Pacific (UPRR); East, West & right of Way Optsions
- CHRS Orange Property
- NRHP Eligible District
- 106 APE for UPRR Alternative
- 106 APE for BRT Alternative
- 106 APE for Halsted Alternative
- NRHP Eligible Building
- Other Properties Surveyed
- Building Footprint

Scale

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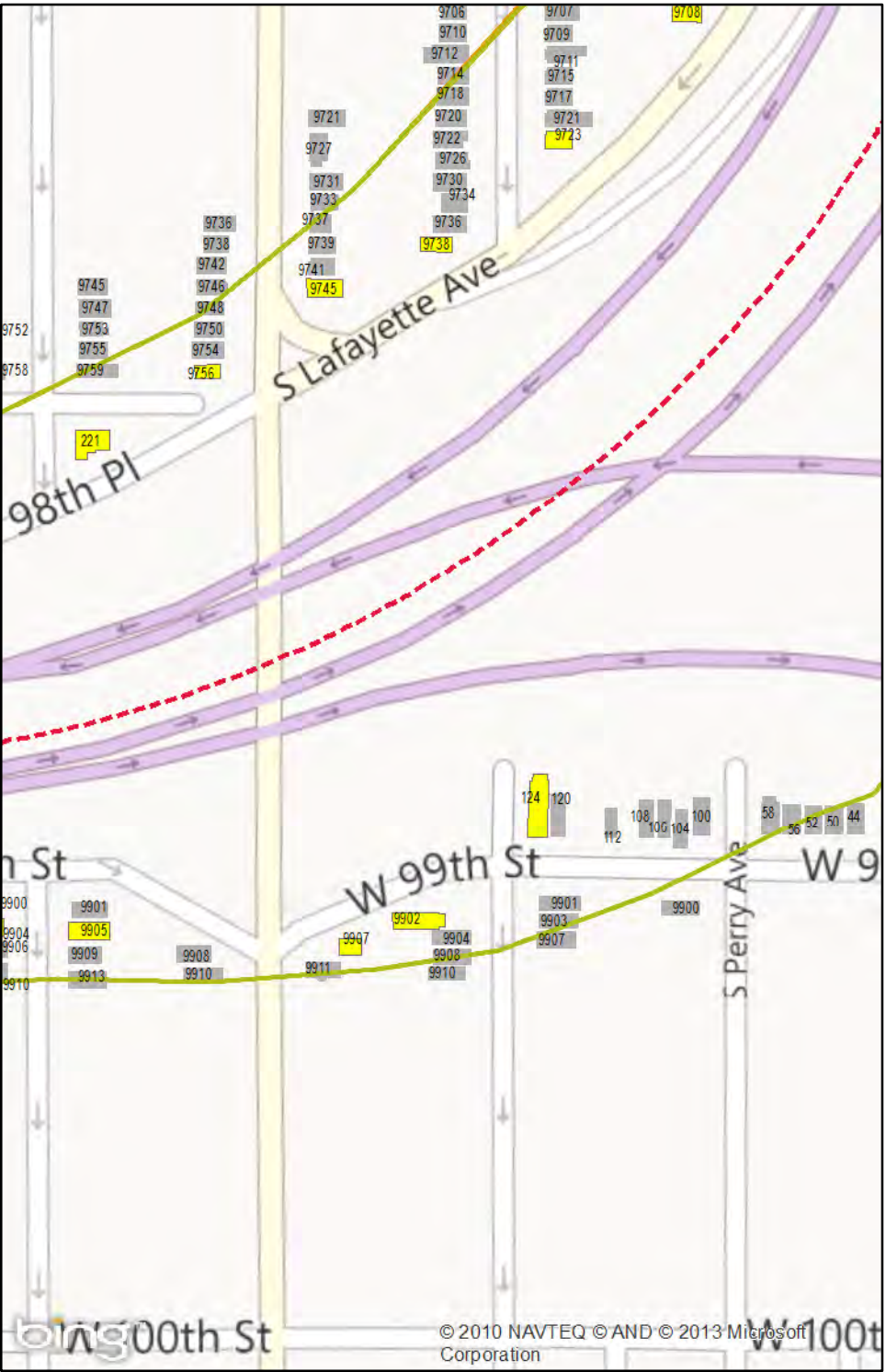

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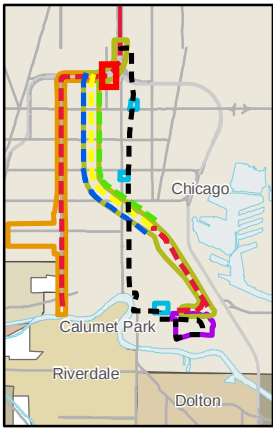

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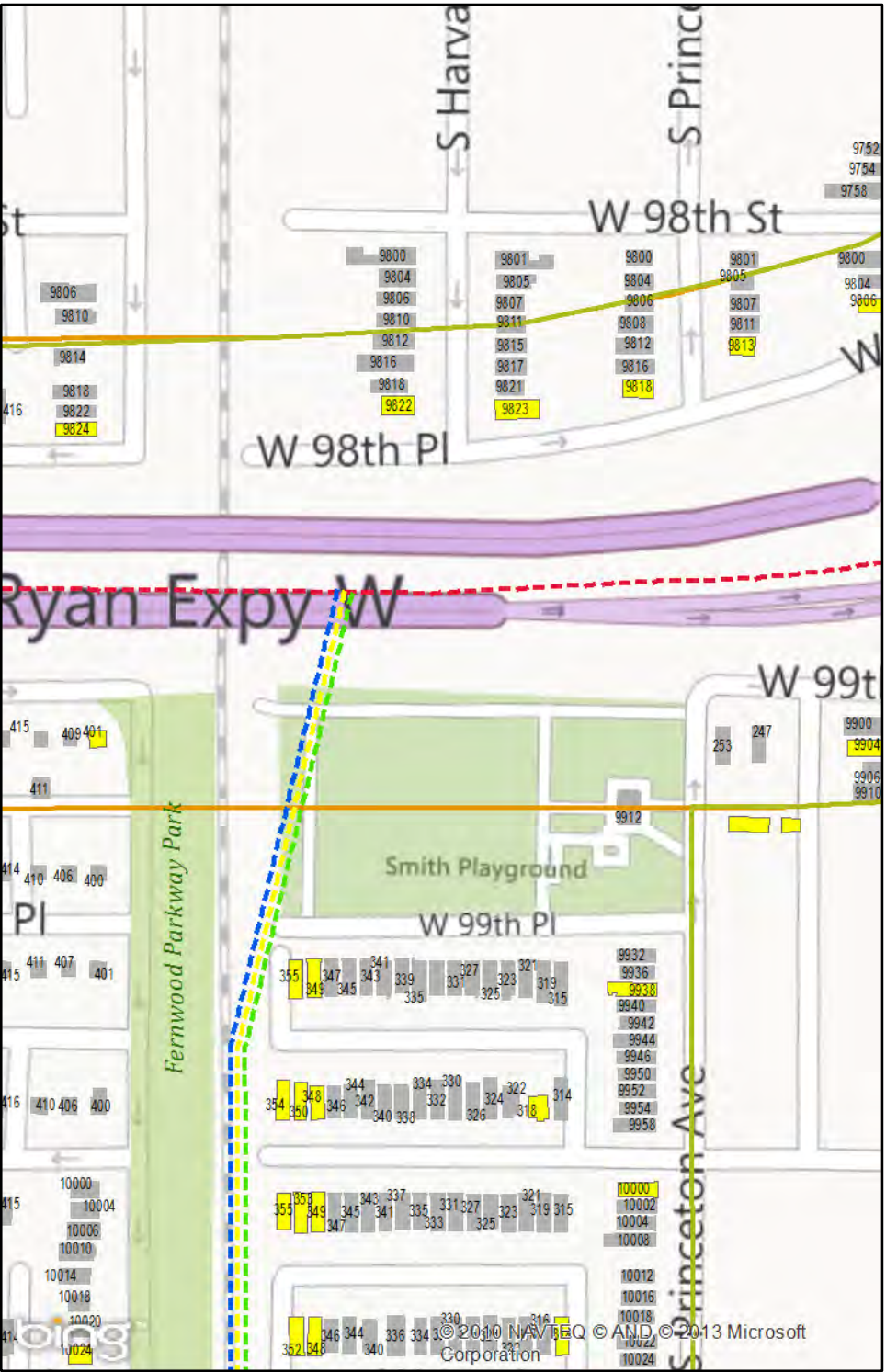

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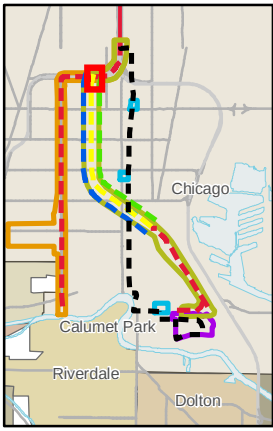

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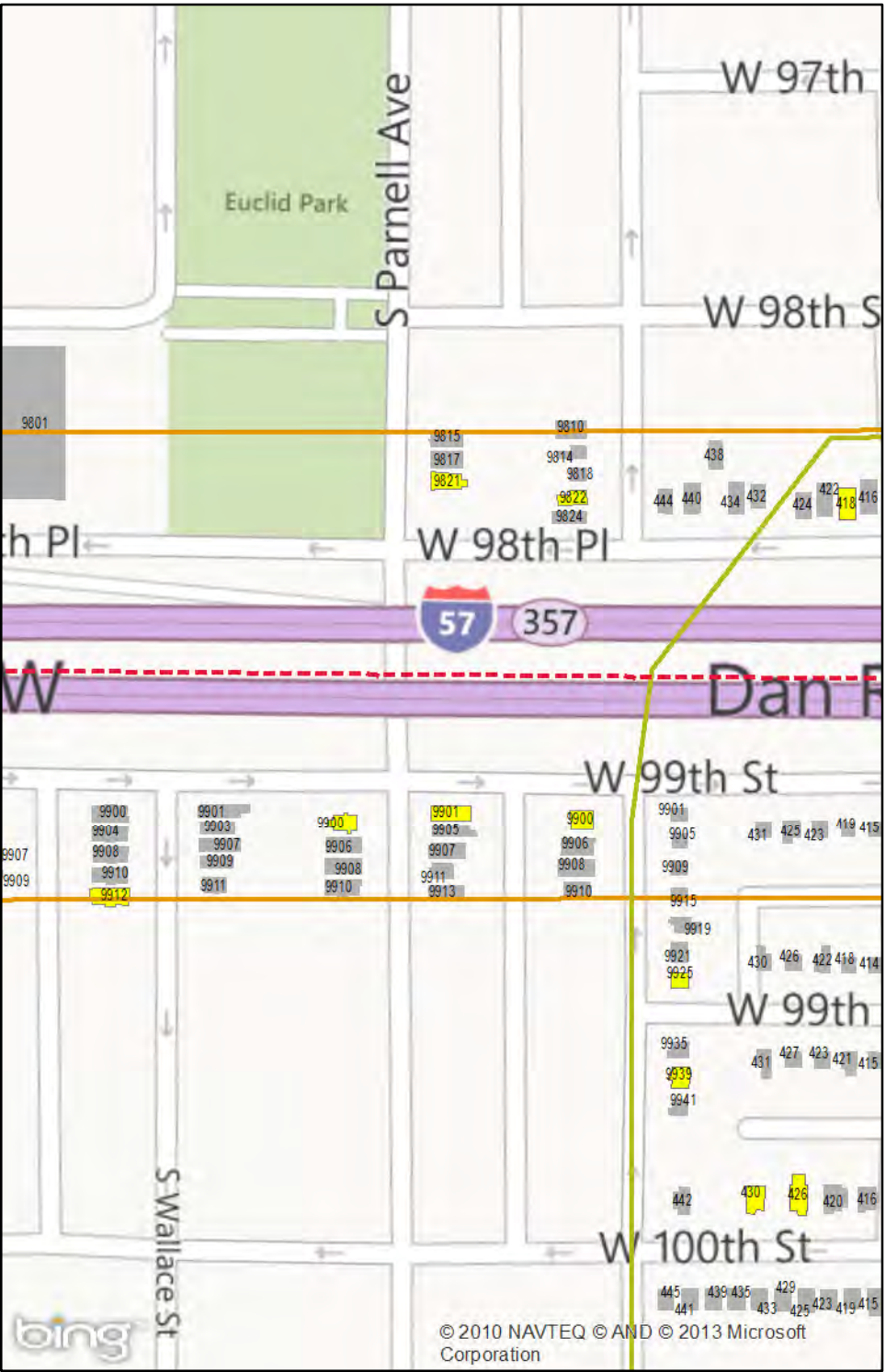

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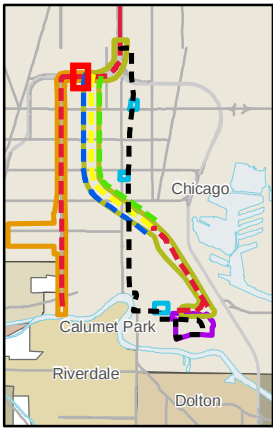

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- Other Properties Surveyed
- Building Footprint

Scale

1:3,000

0 120 240

Feet

NRHPeligible.mxd

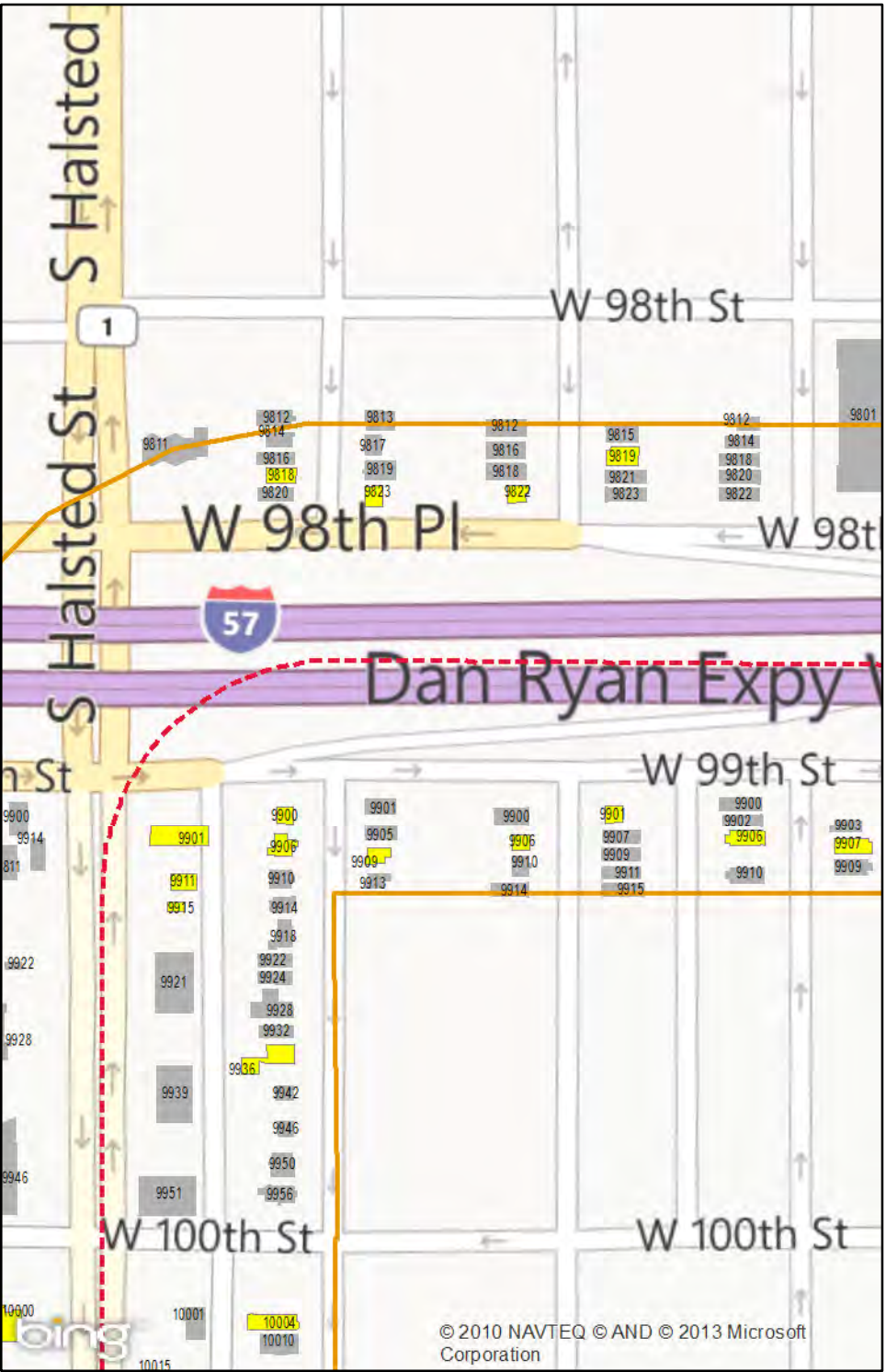

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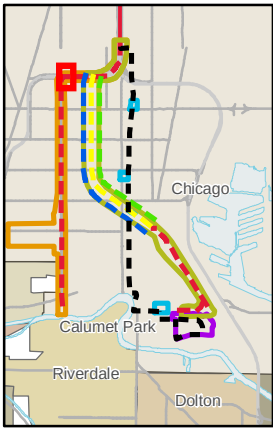

Legend

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Feet

NRHPeligible.mxd

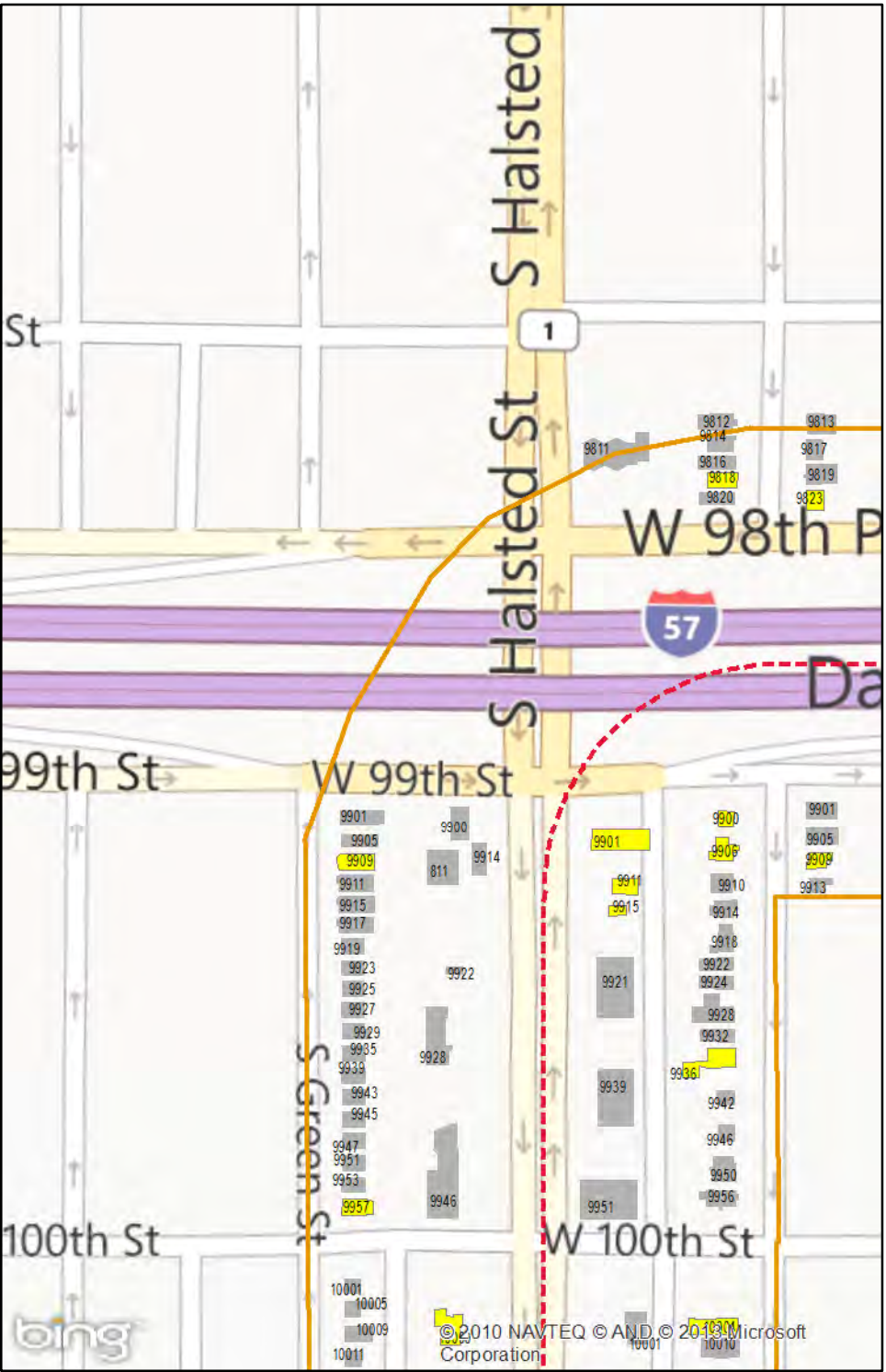

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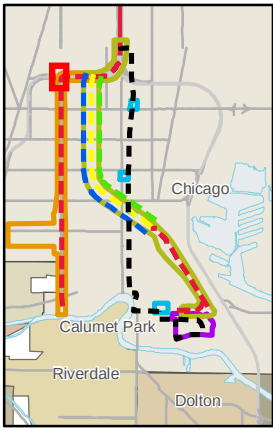

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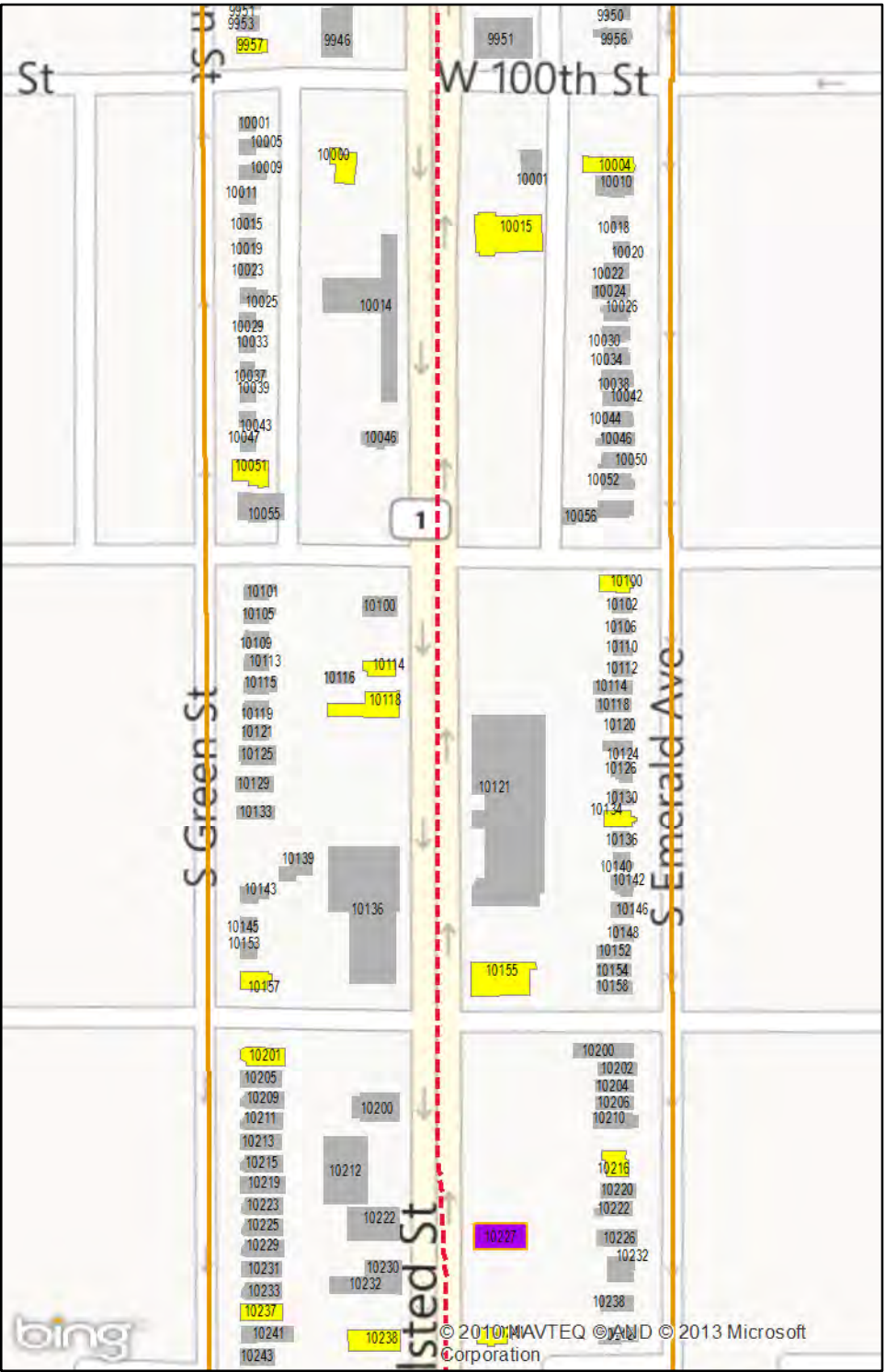

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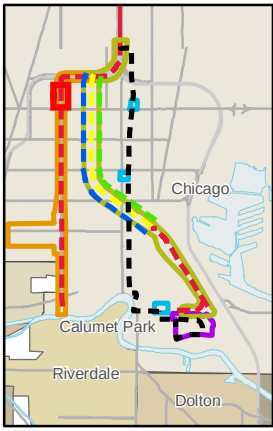

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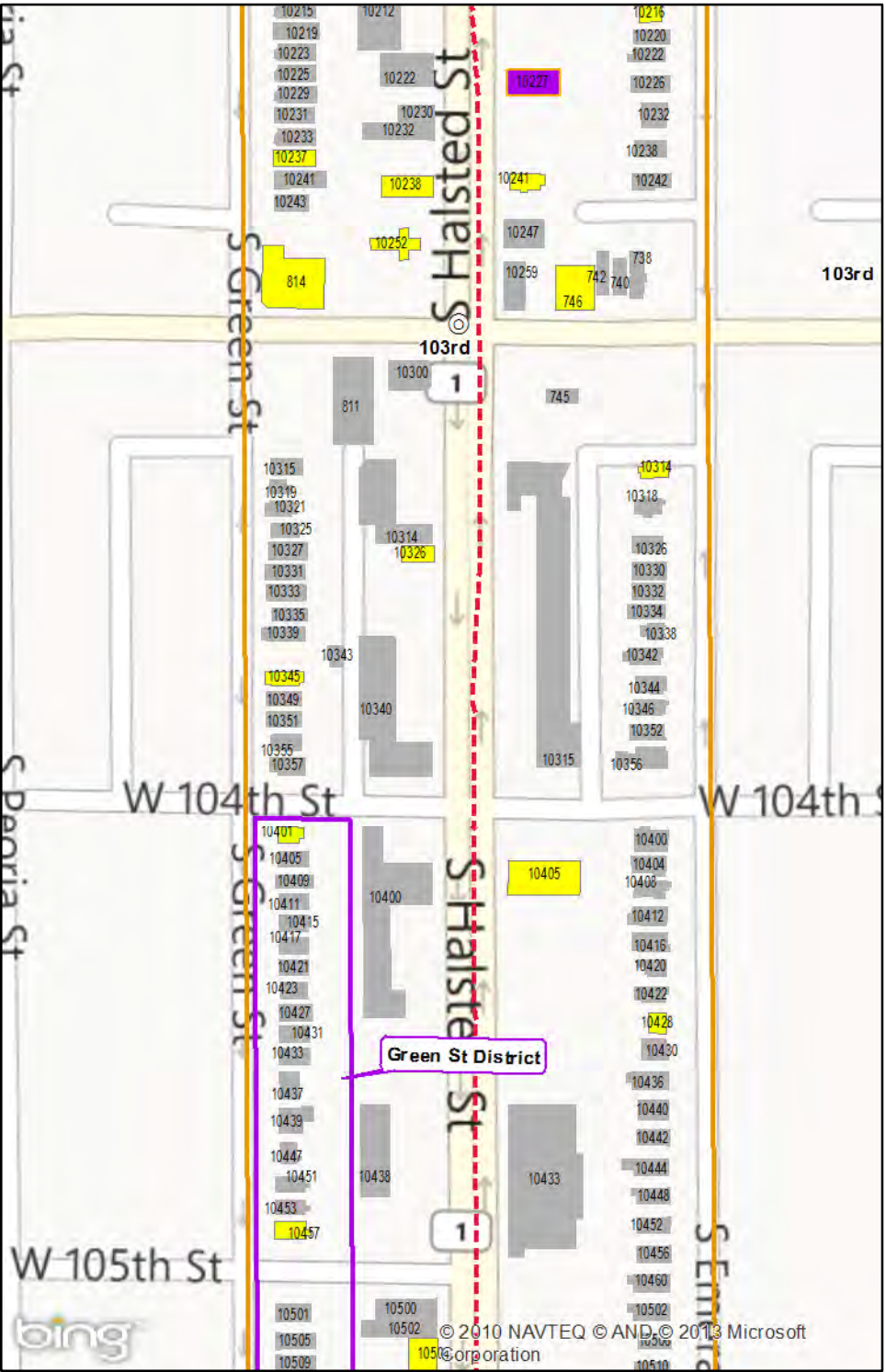

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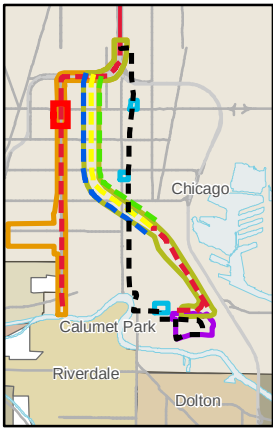

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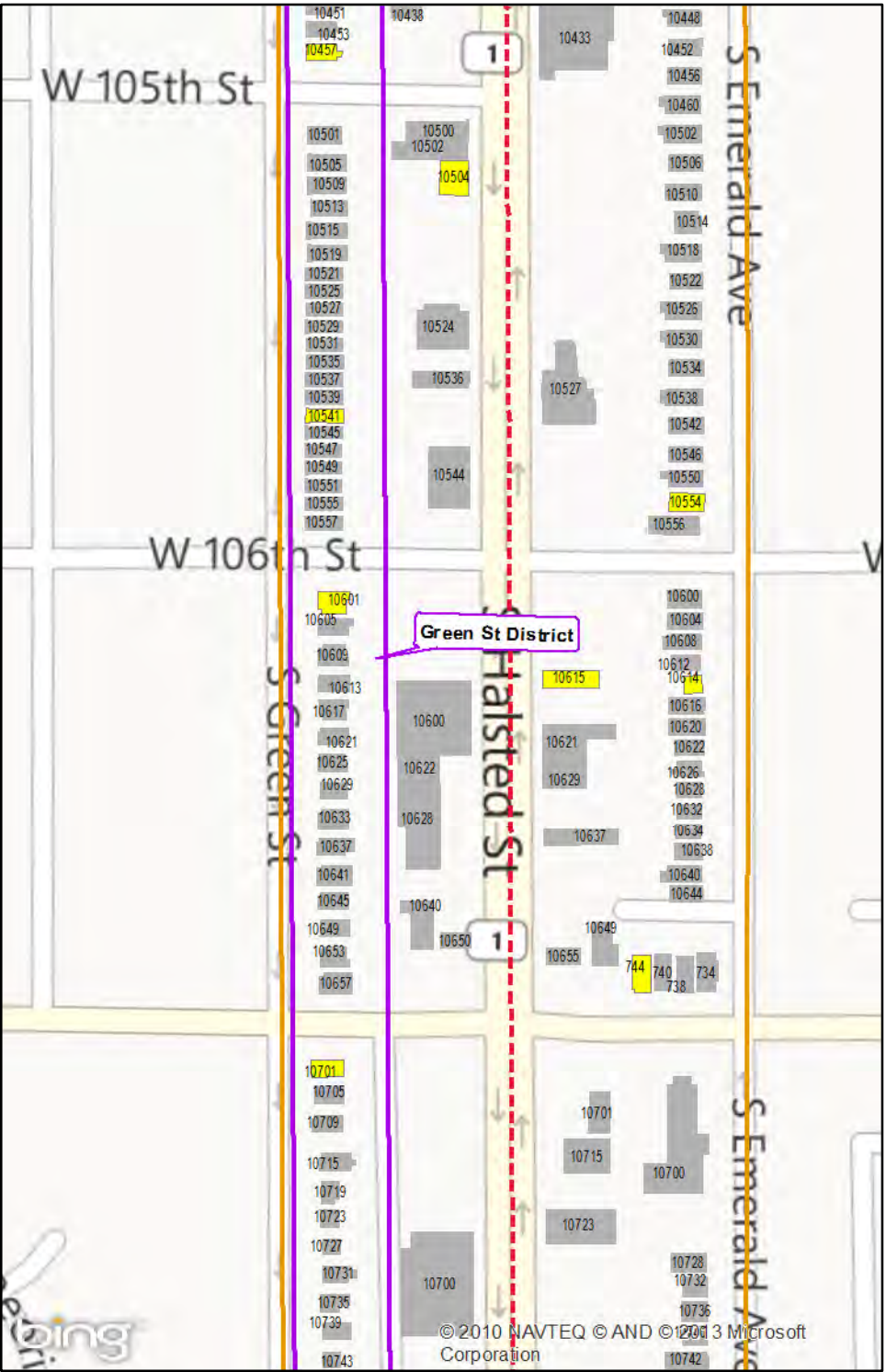

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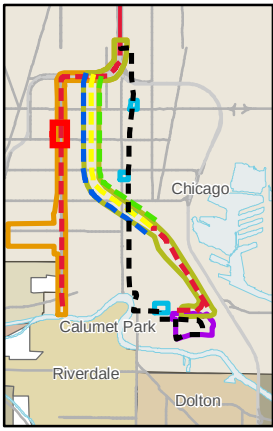

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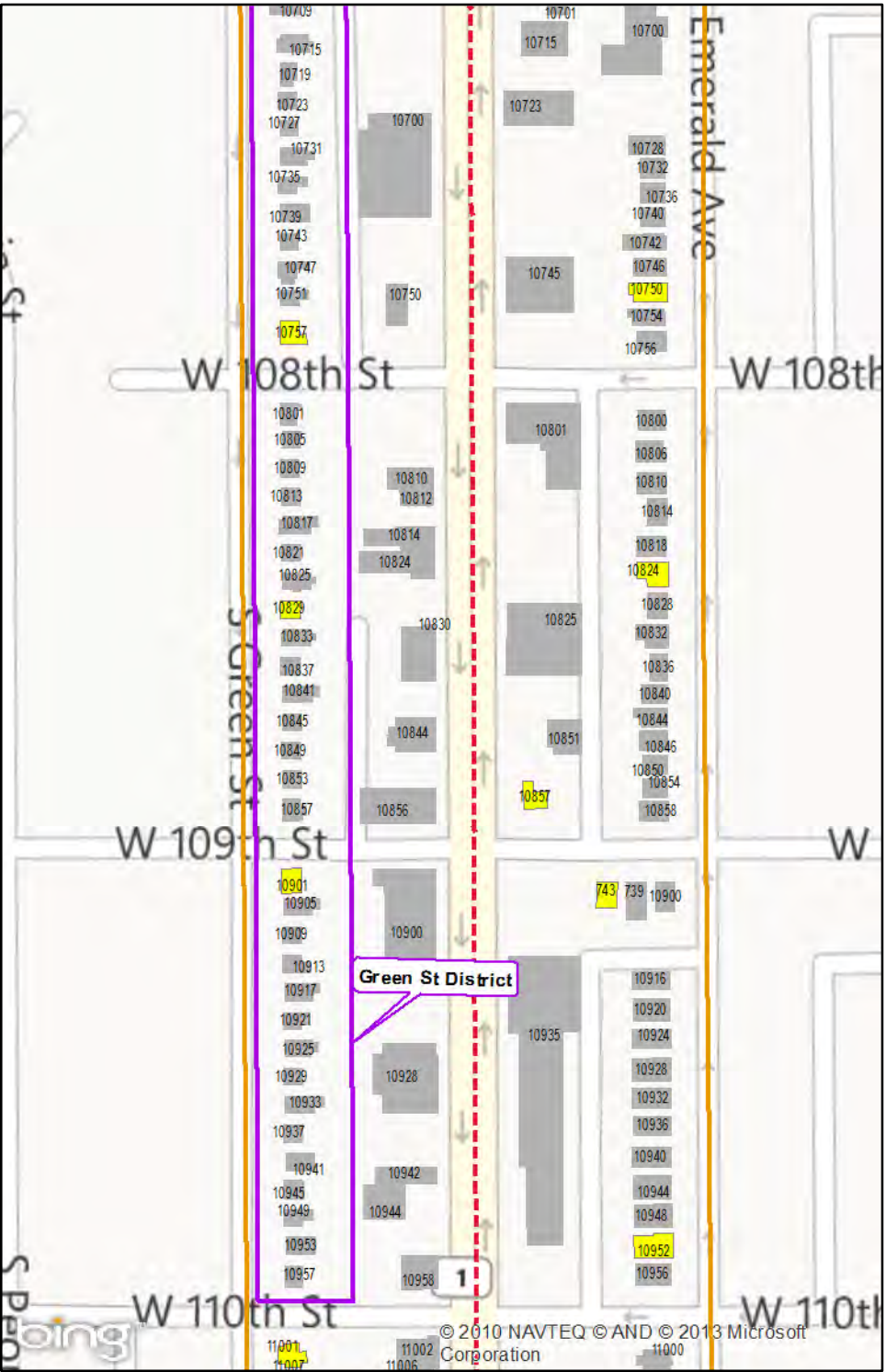

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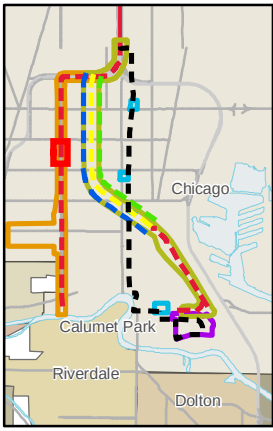

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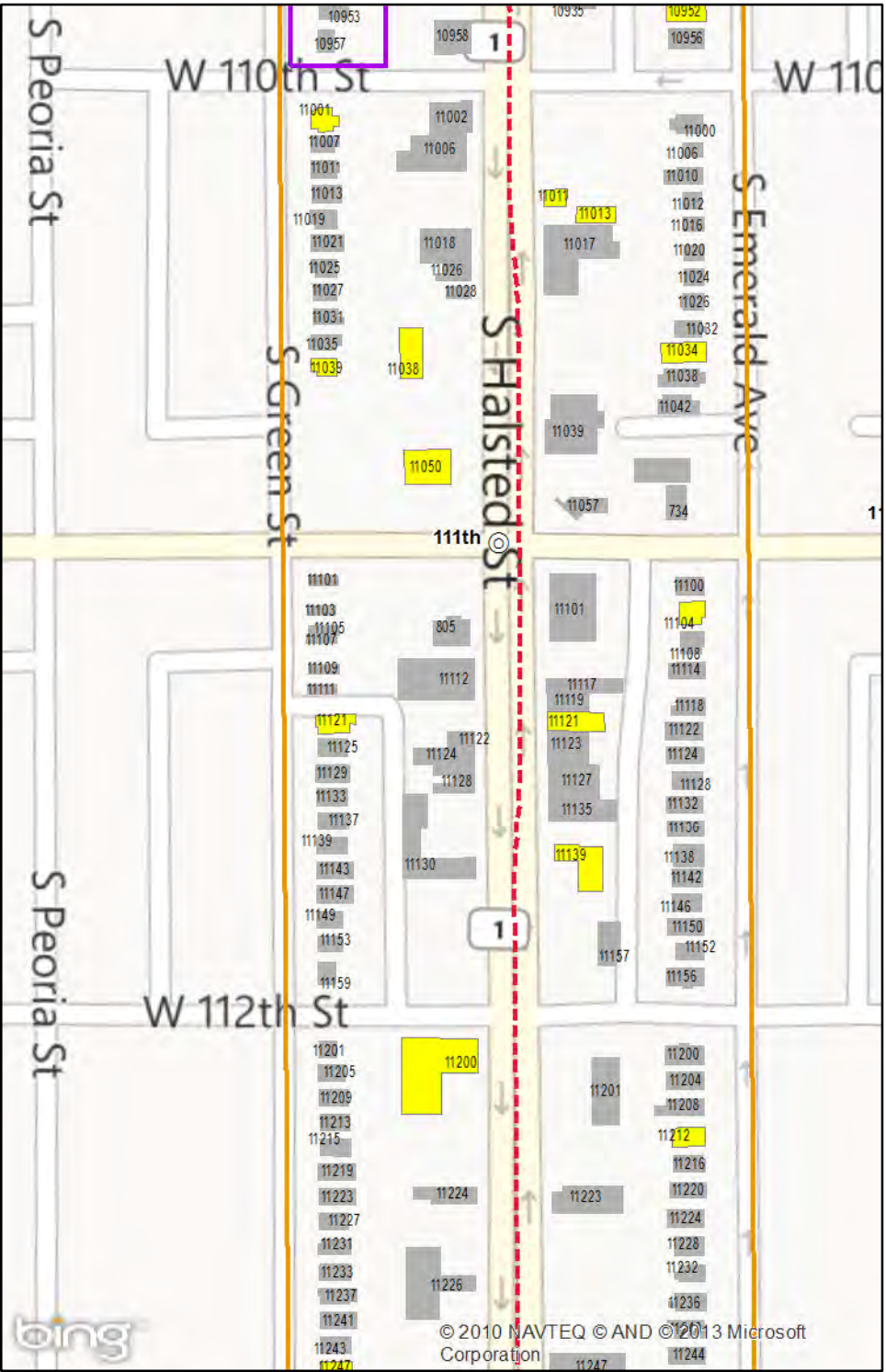

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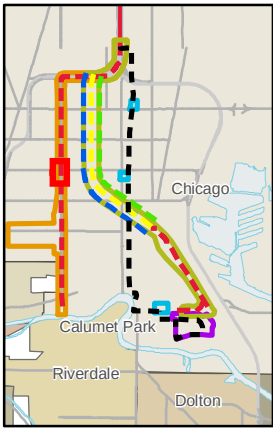

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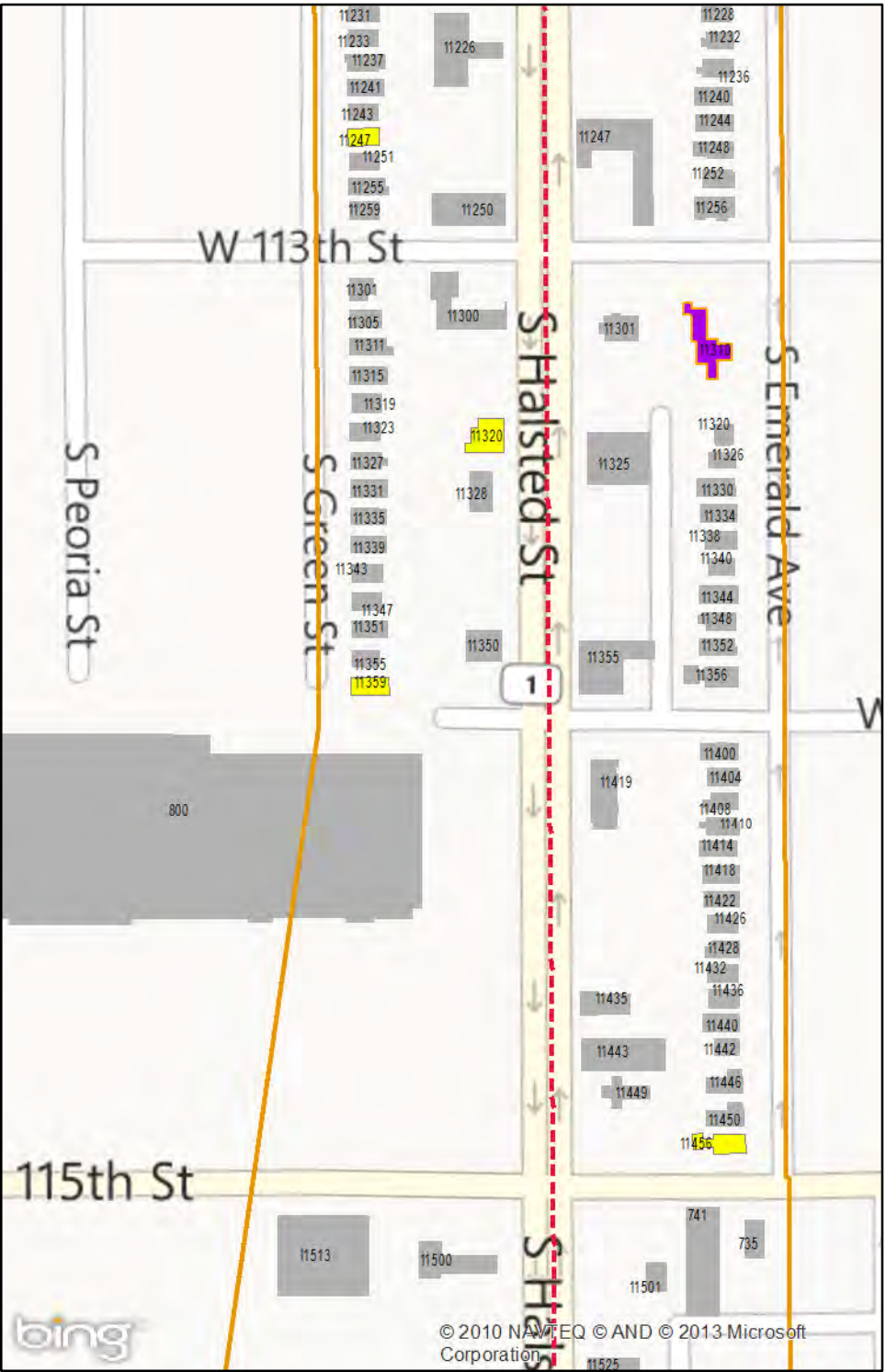

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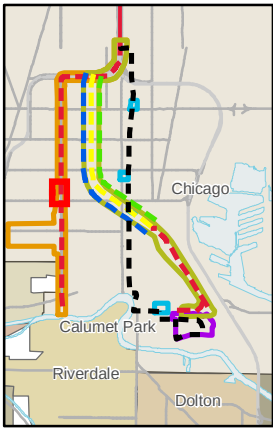

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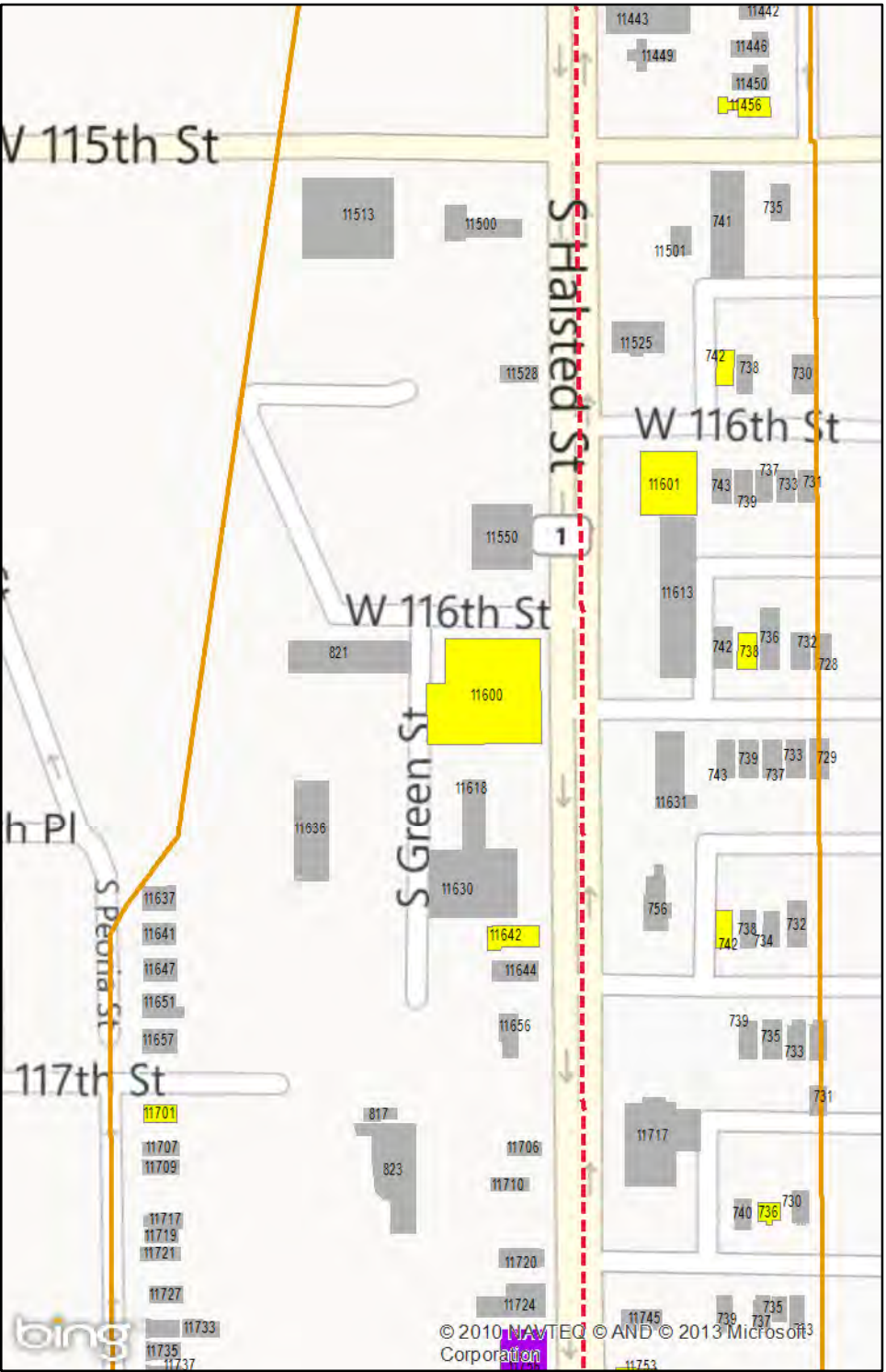

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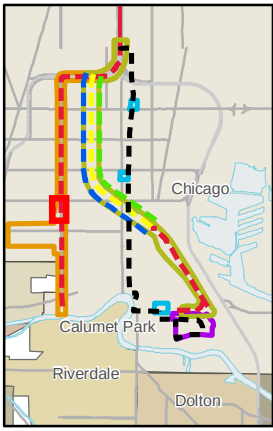

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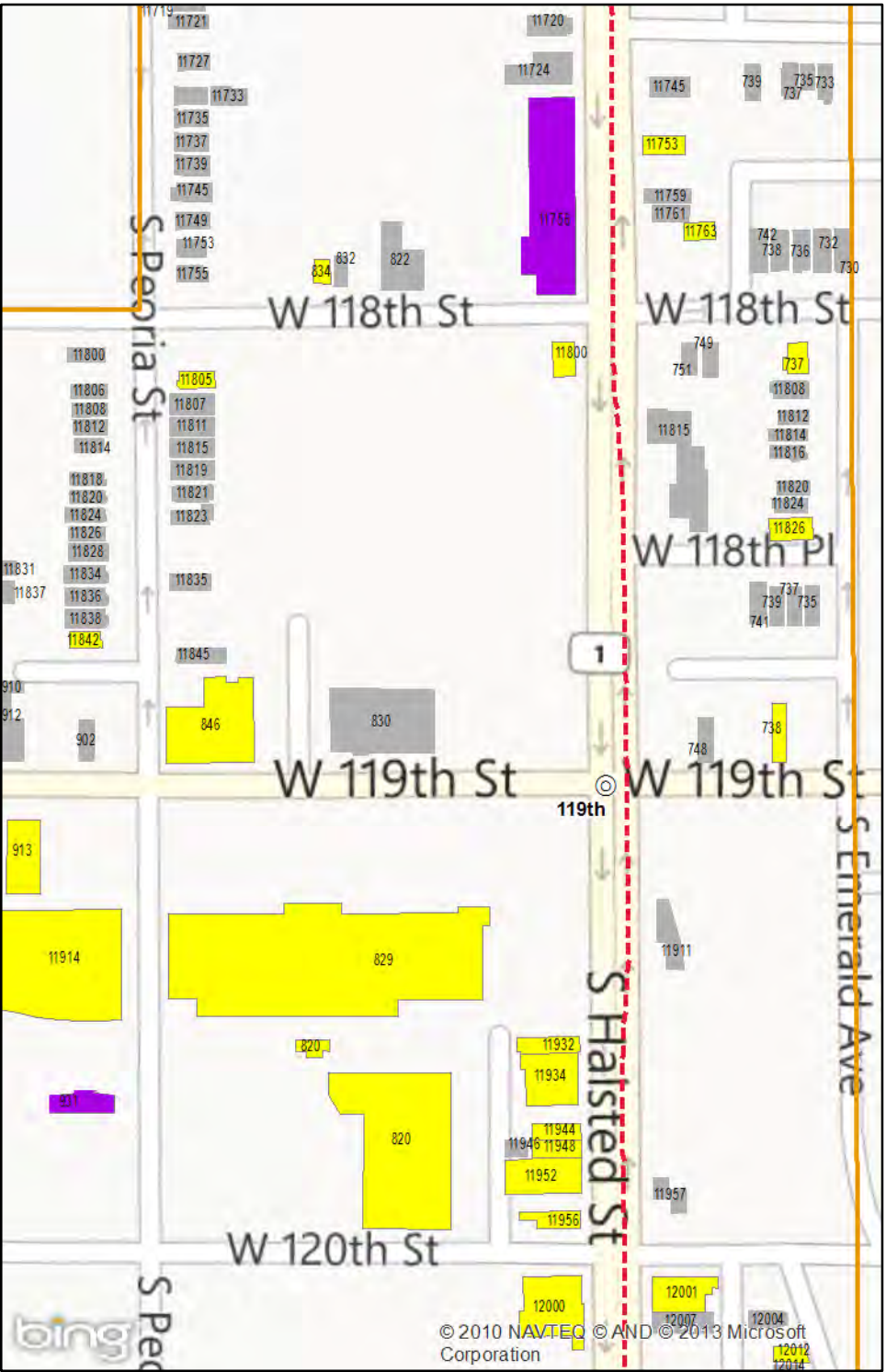

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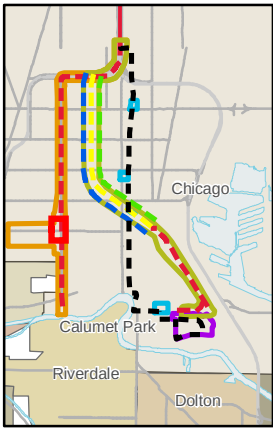

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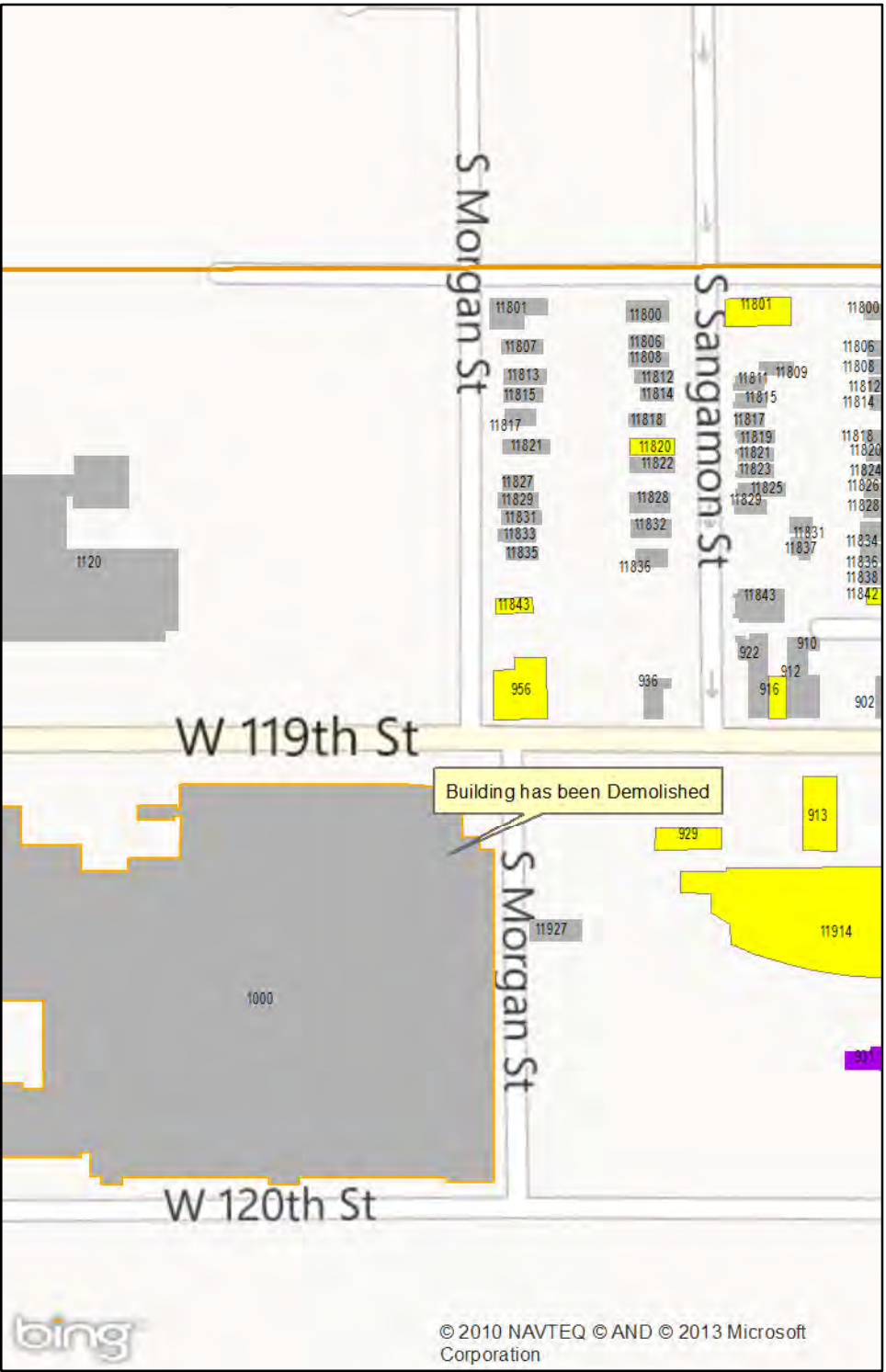

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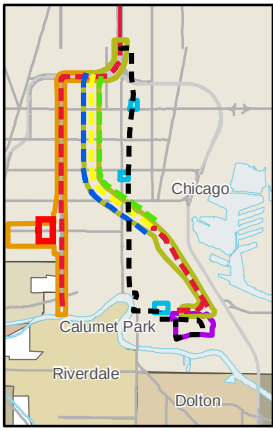

Legend

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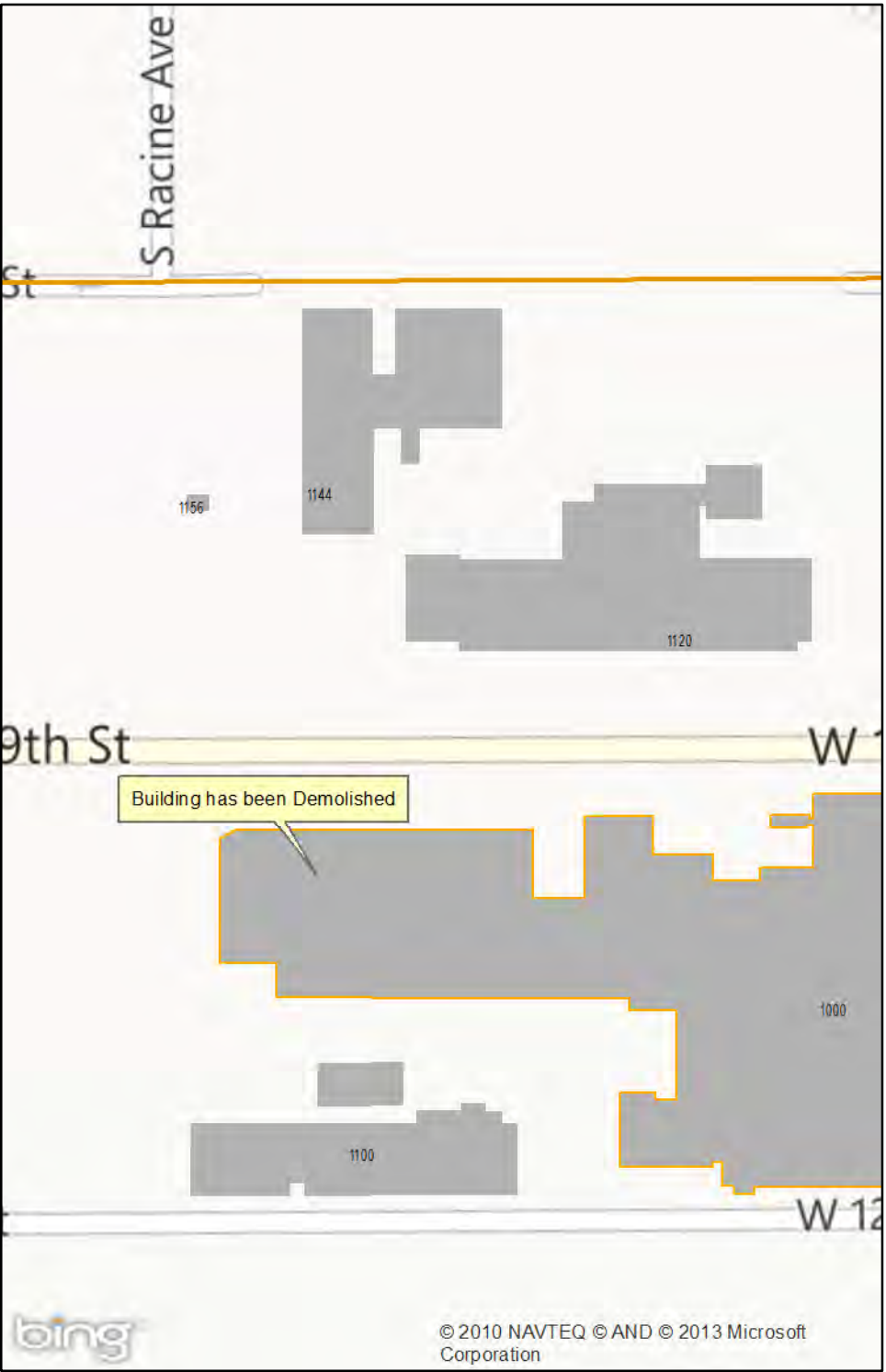

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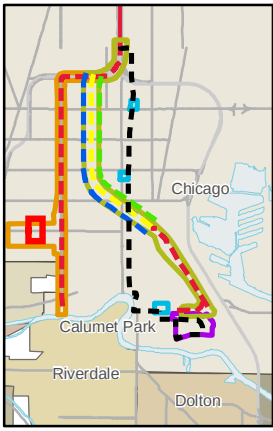

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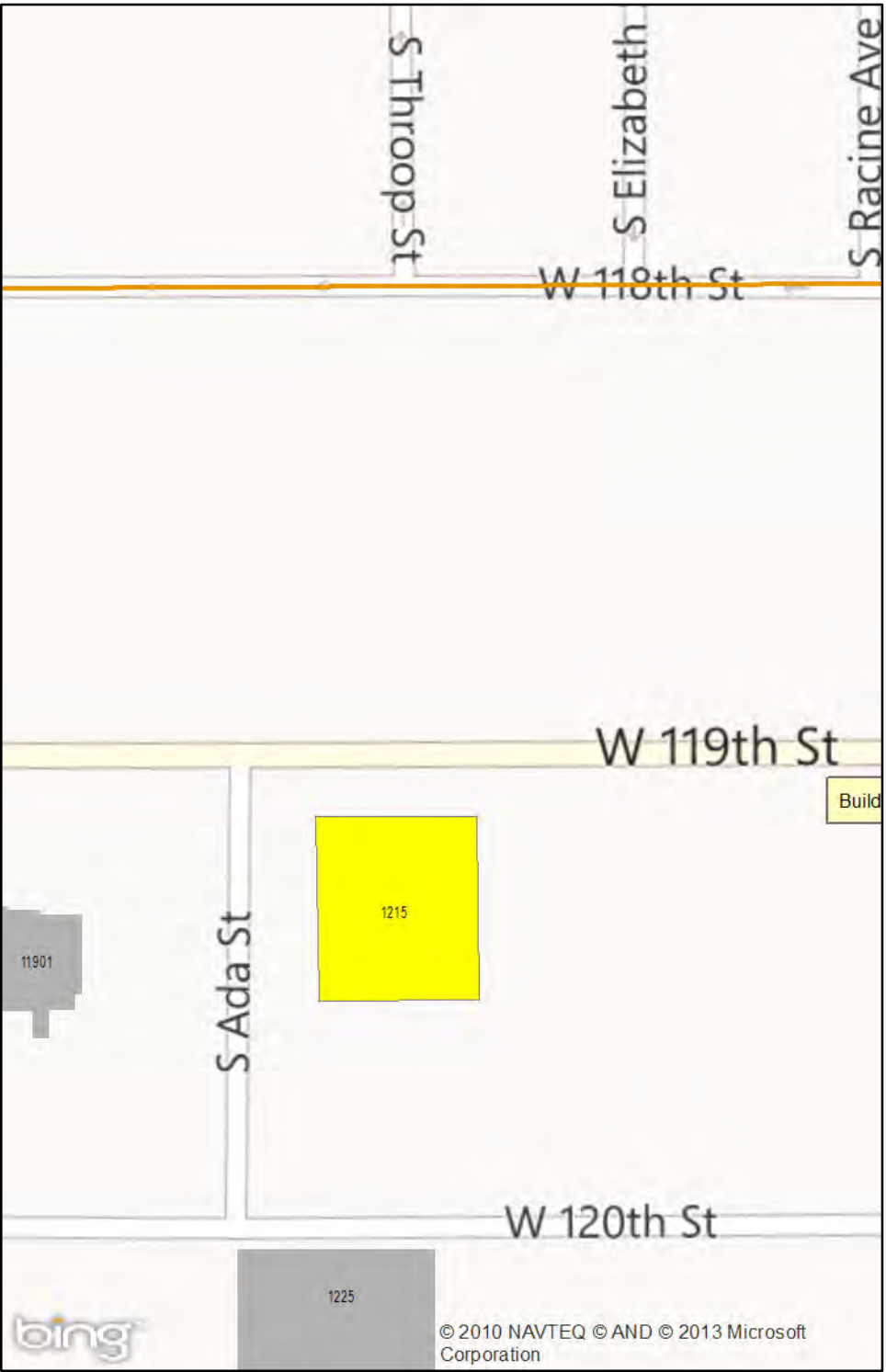

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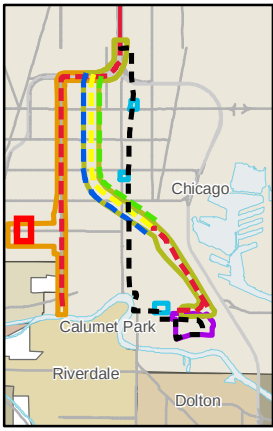

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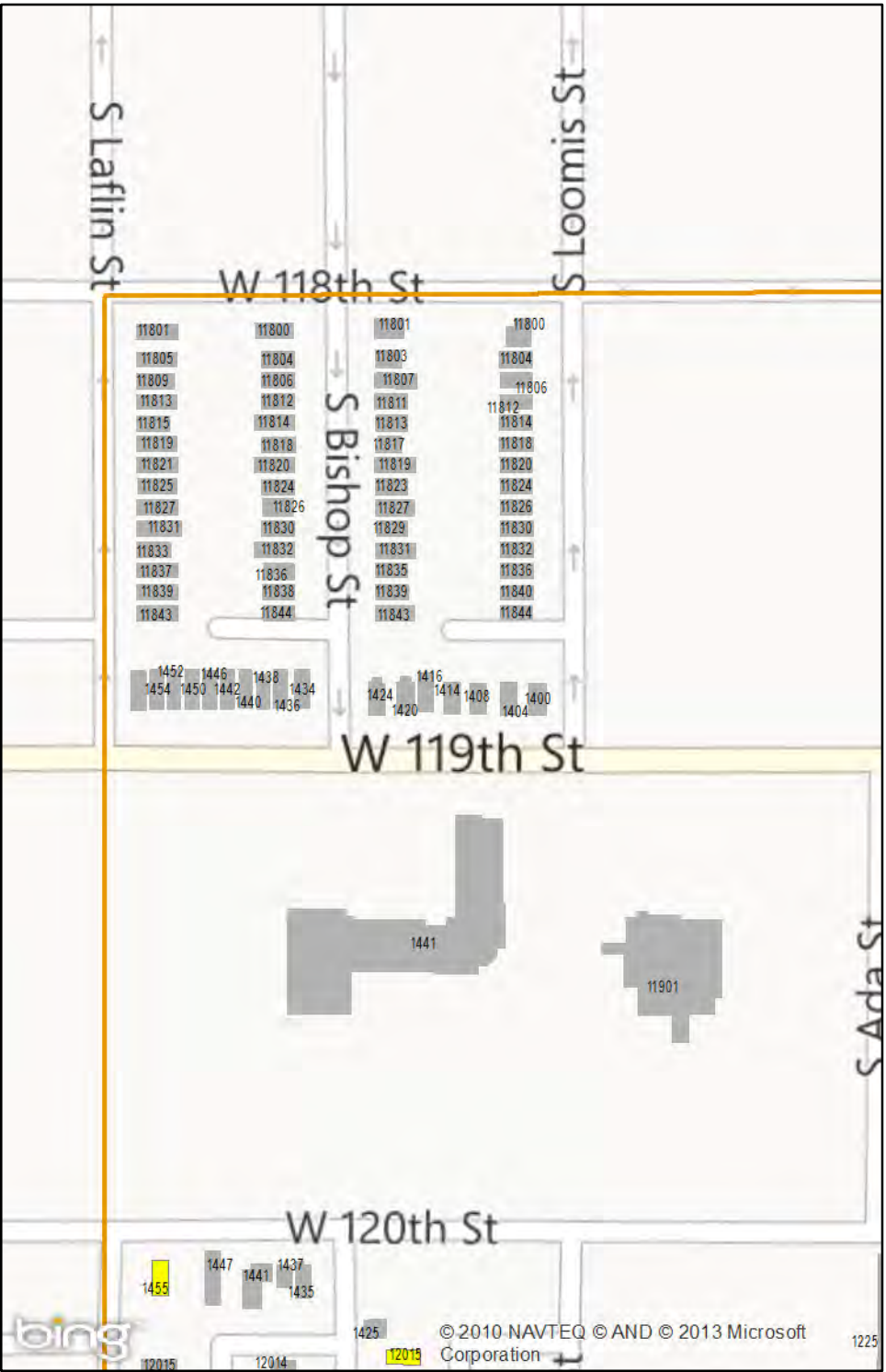

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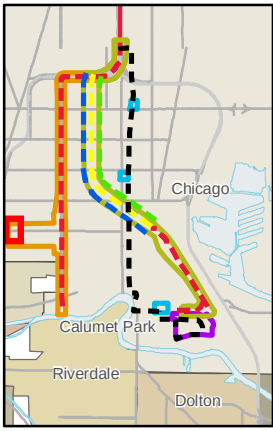

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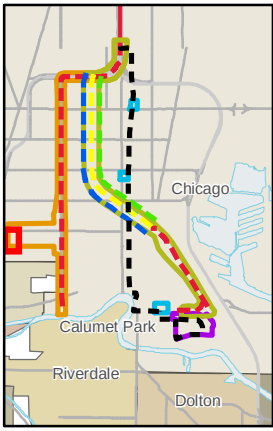

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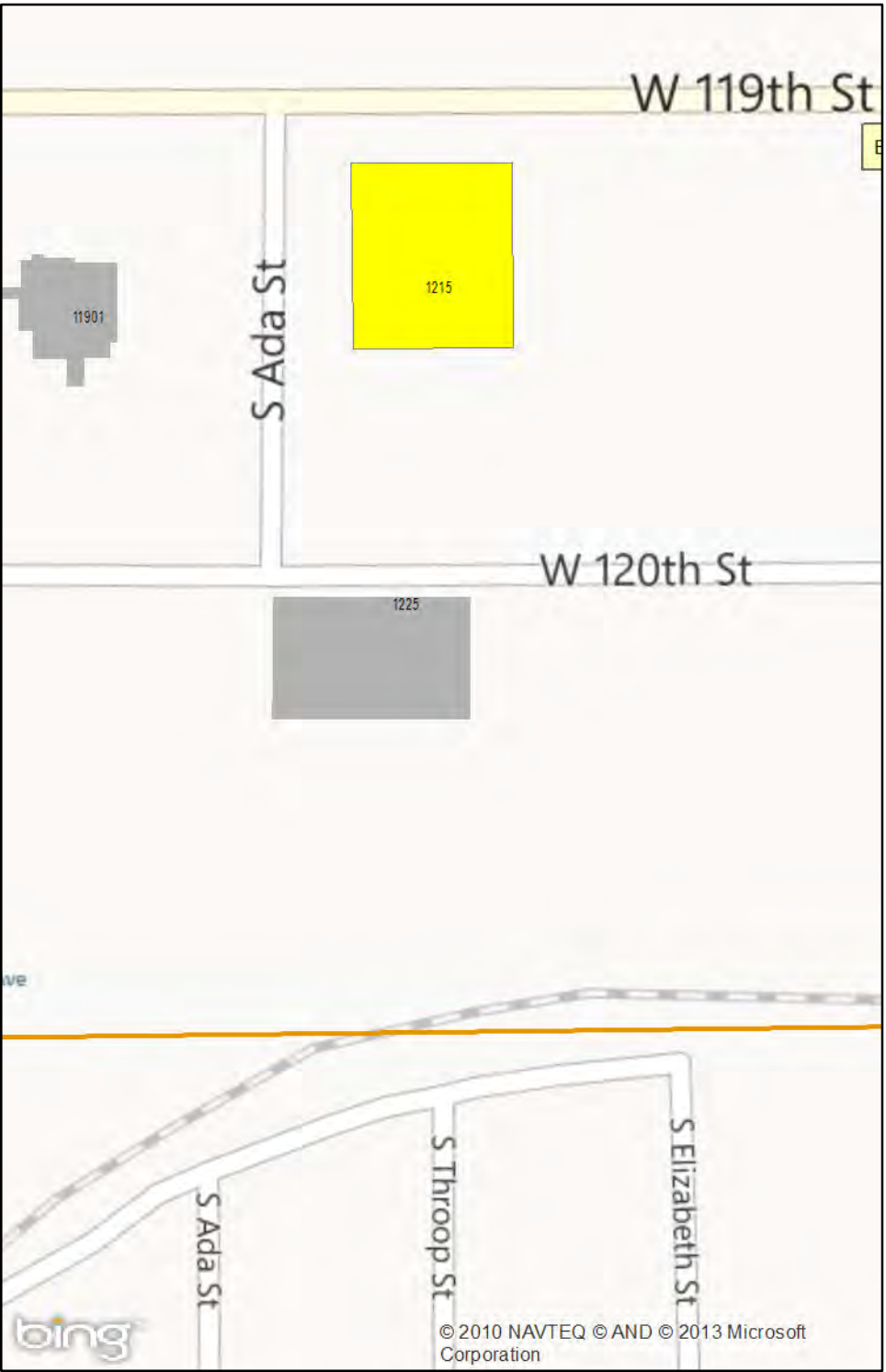

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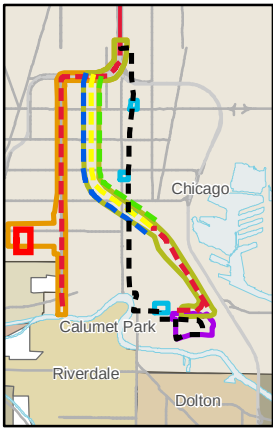

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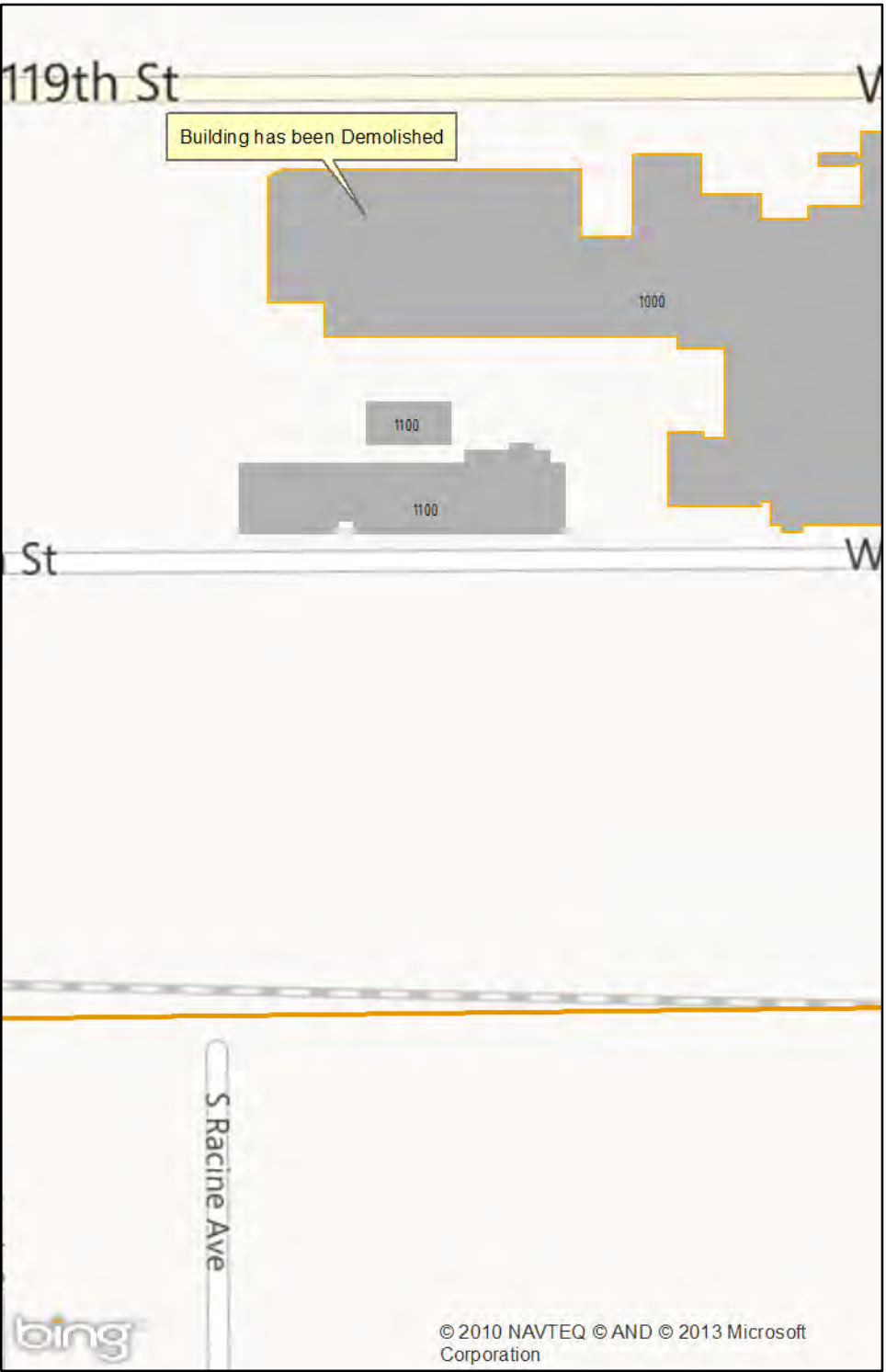

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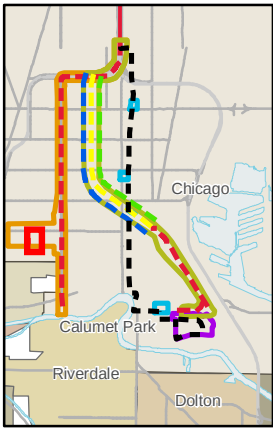

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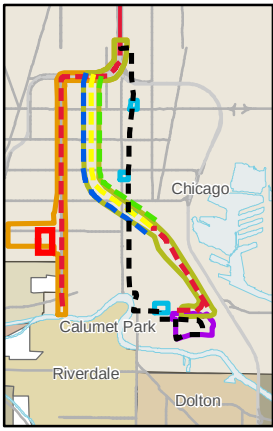

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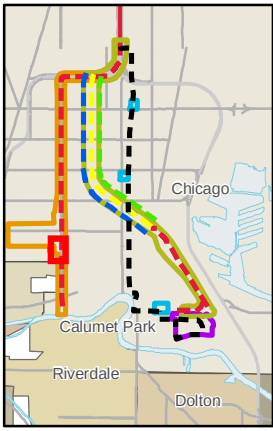

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- Building Footprint

Scale

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Feet

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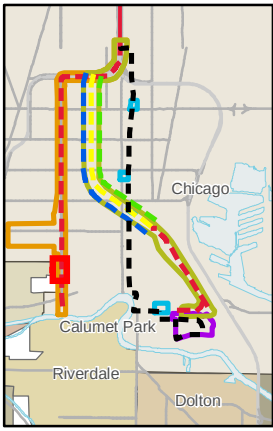

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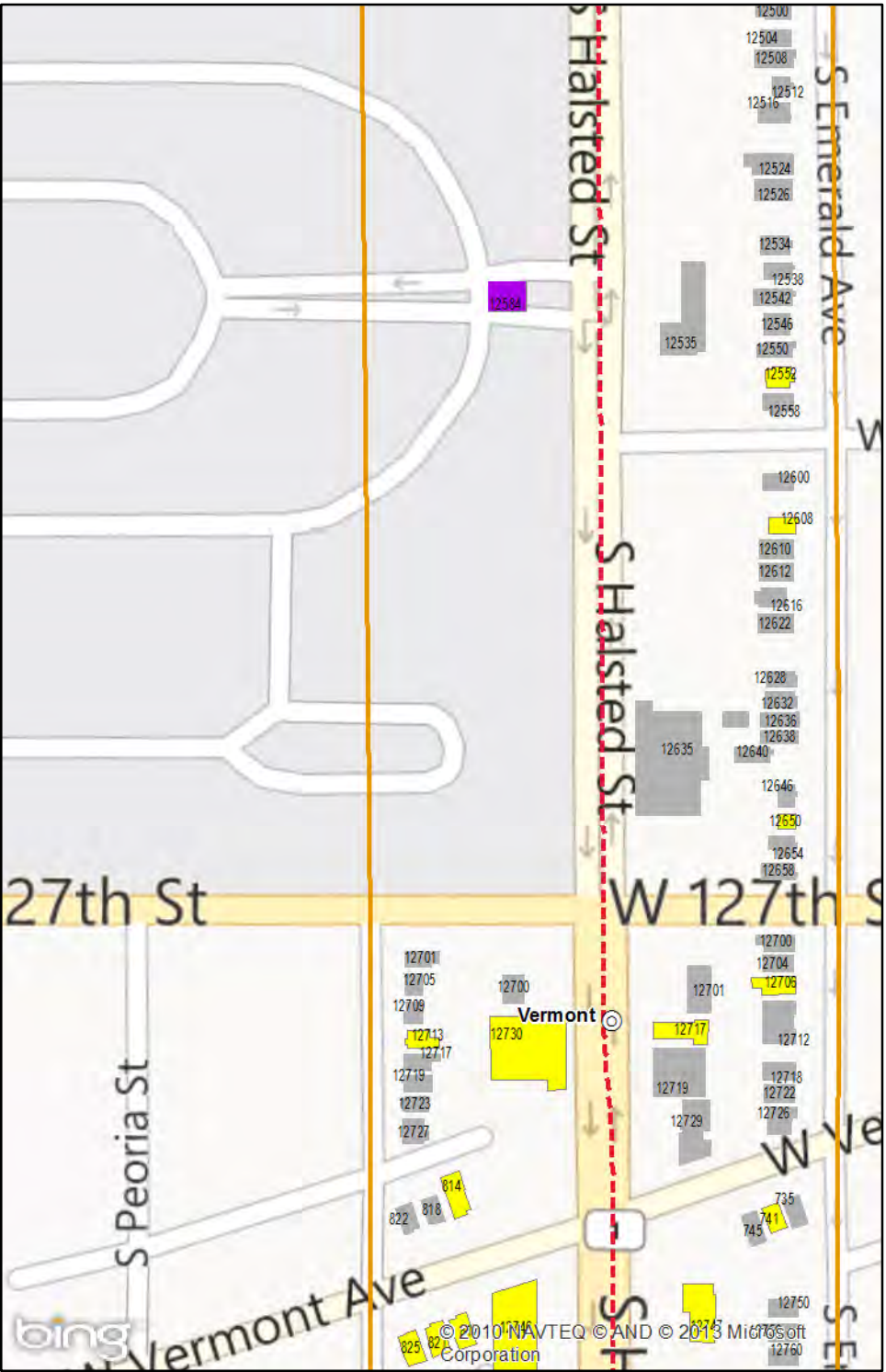

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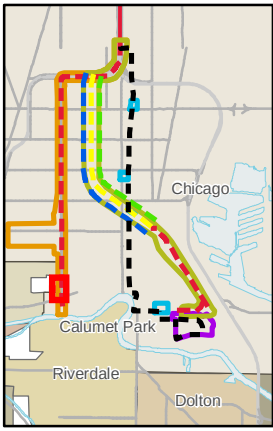

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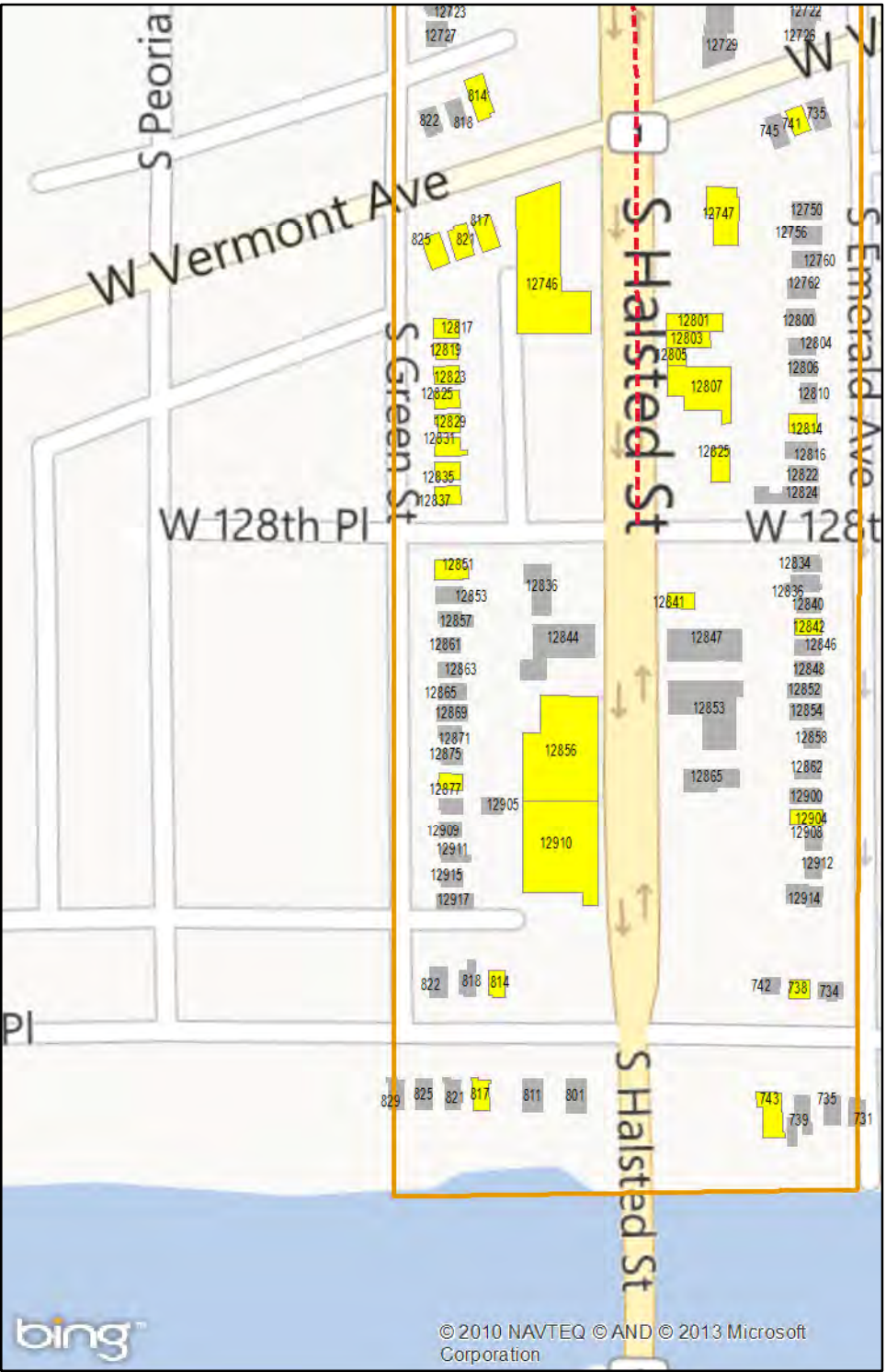

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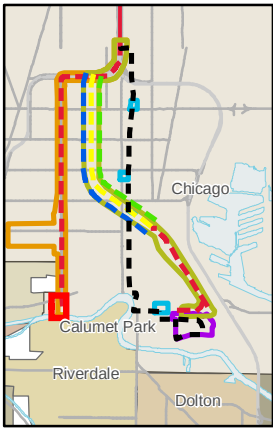

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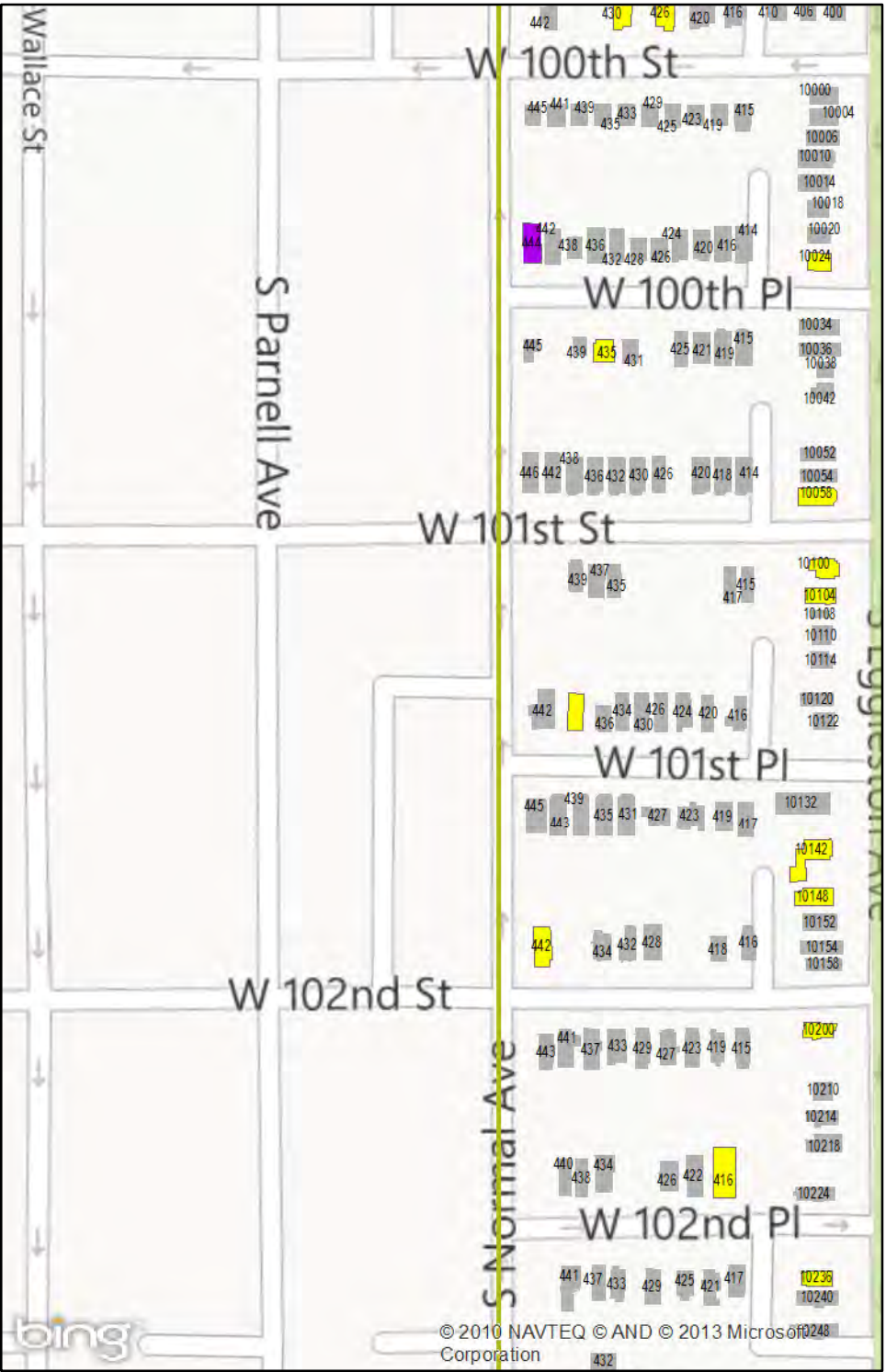

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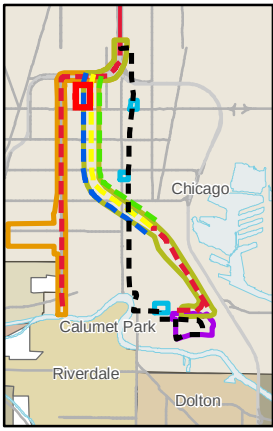

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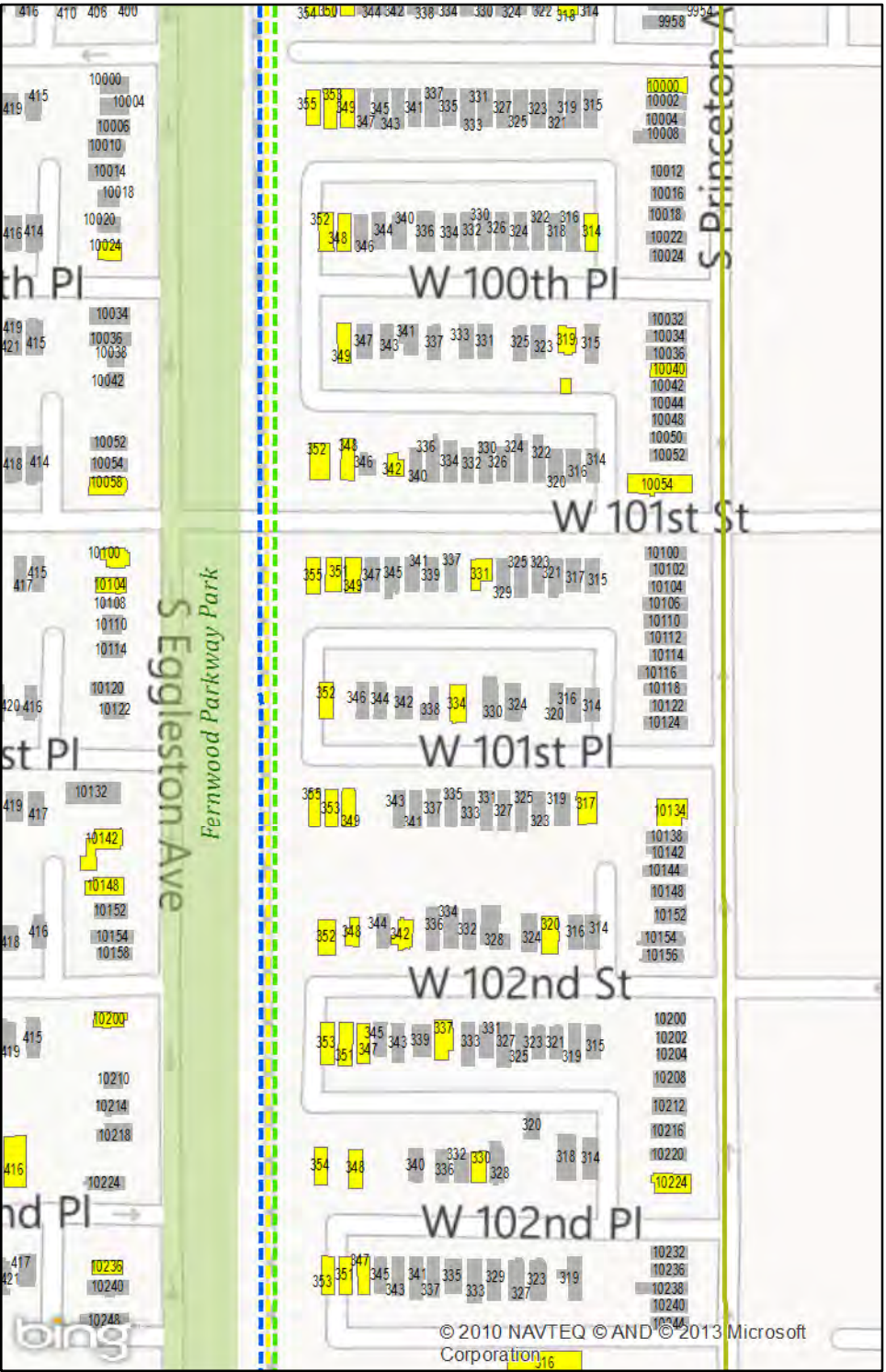

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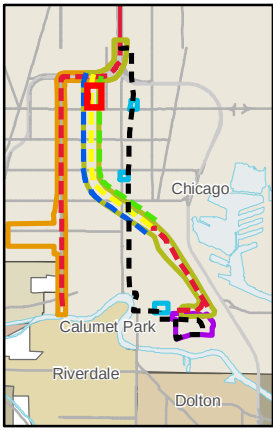

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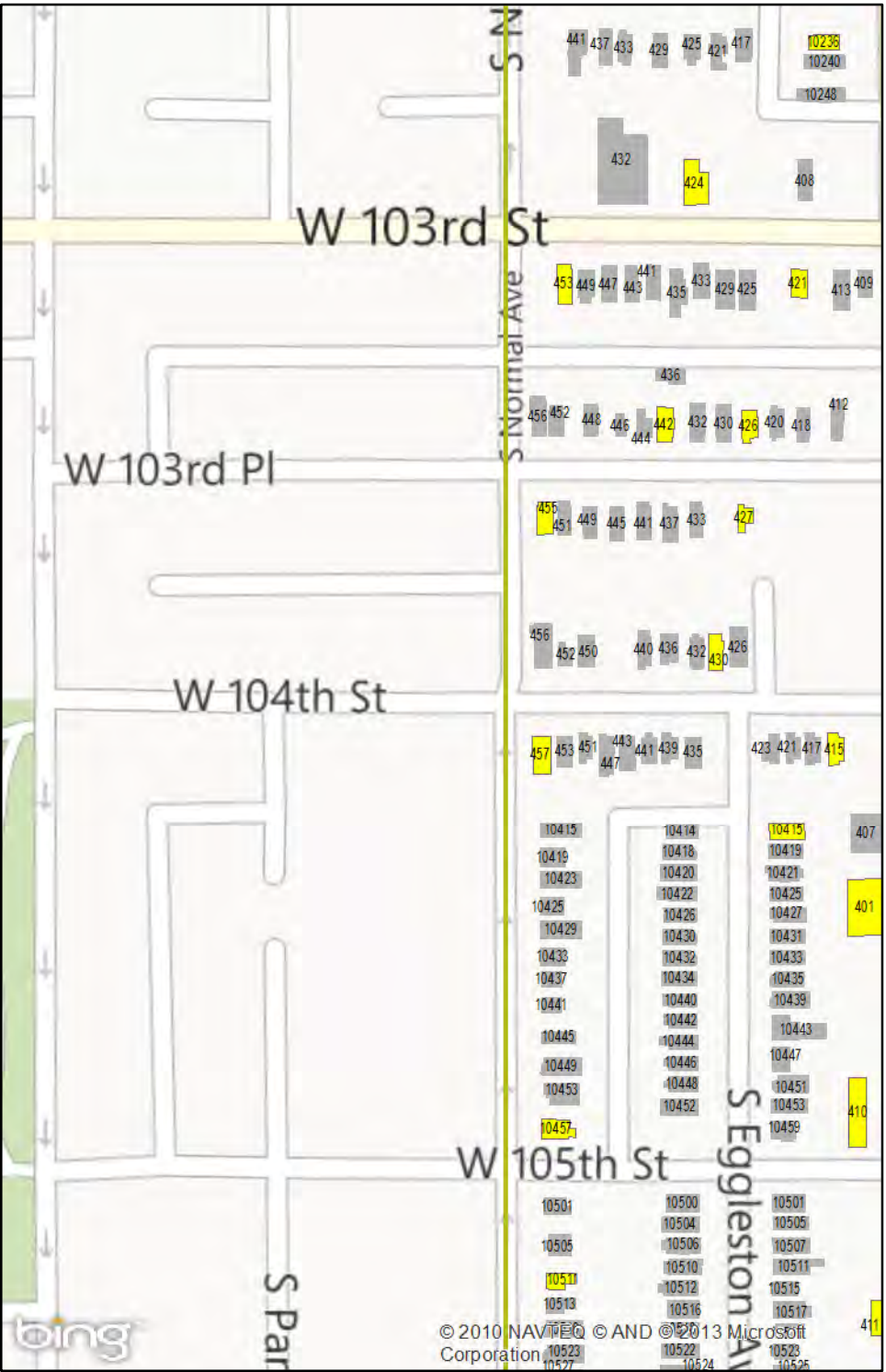

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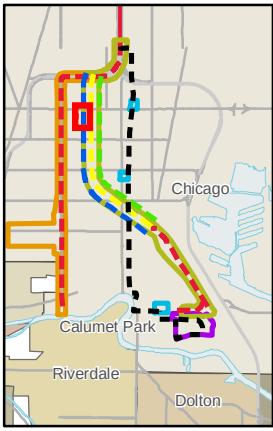

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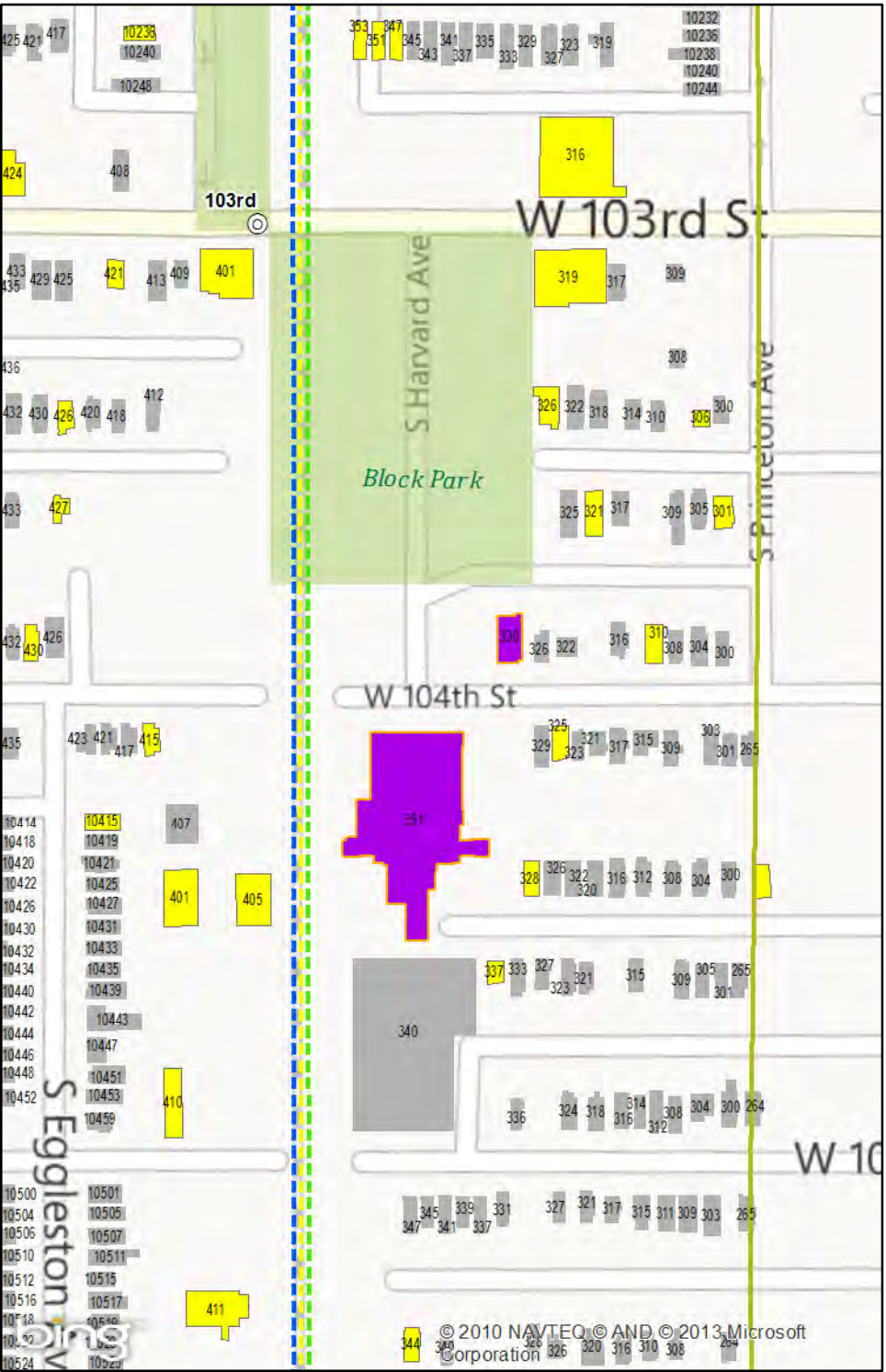

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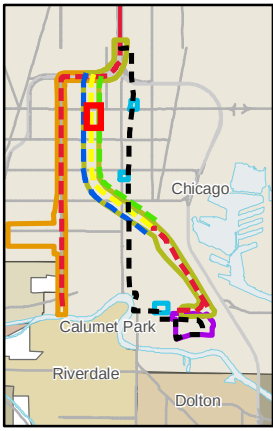

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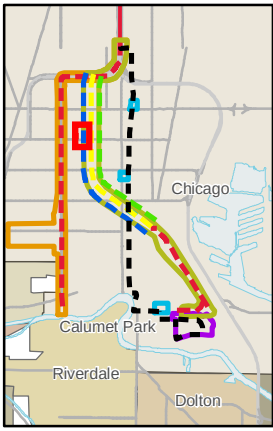

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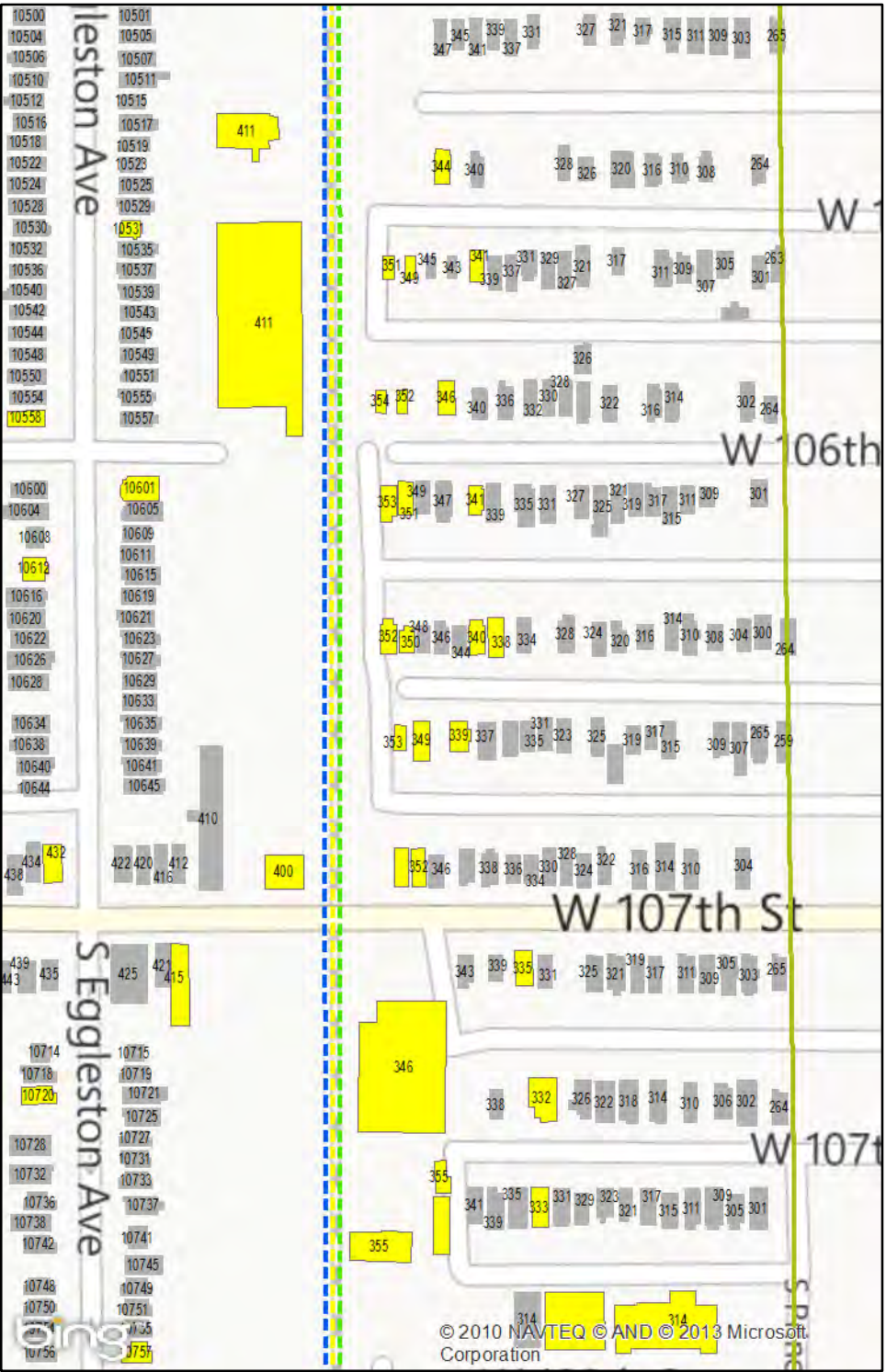

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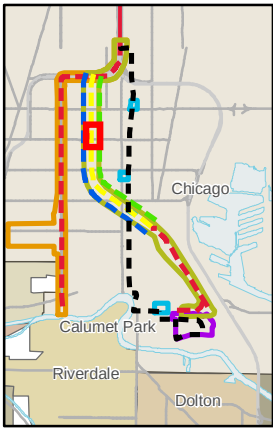

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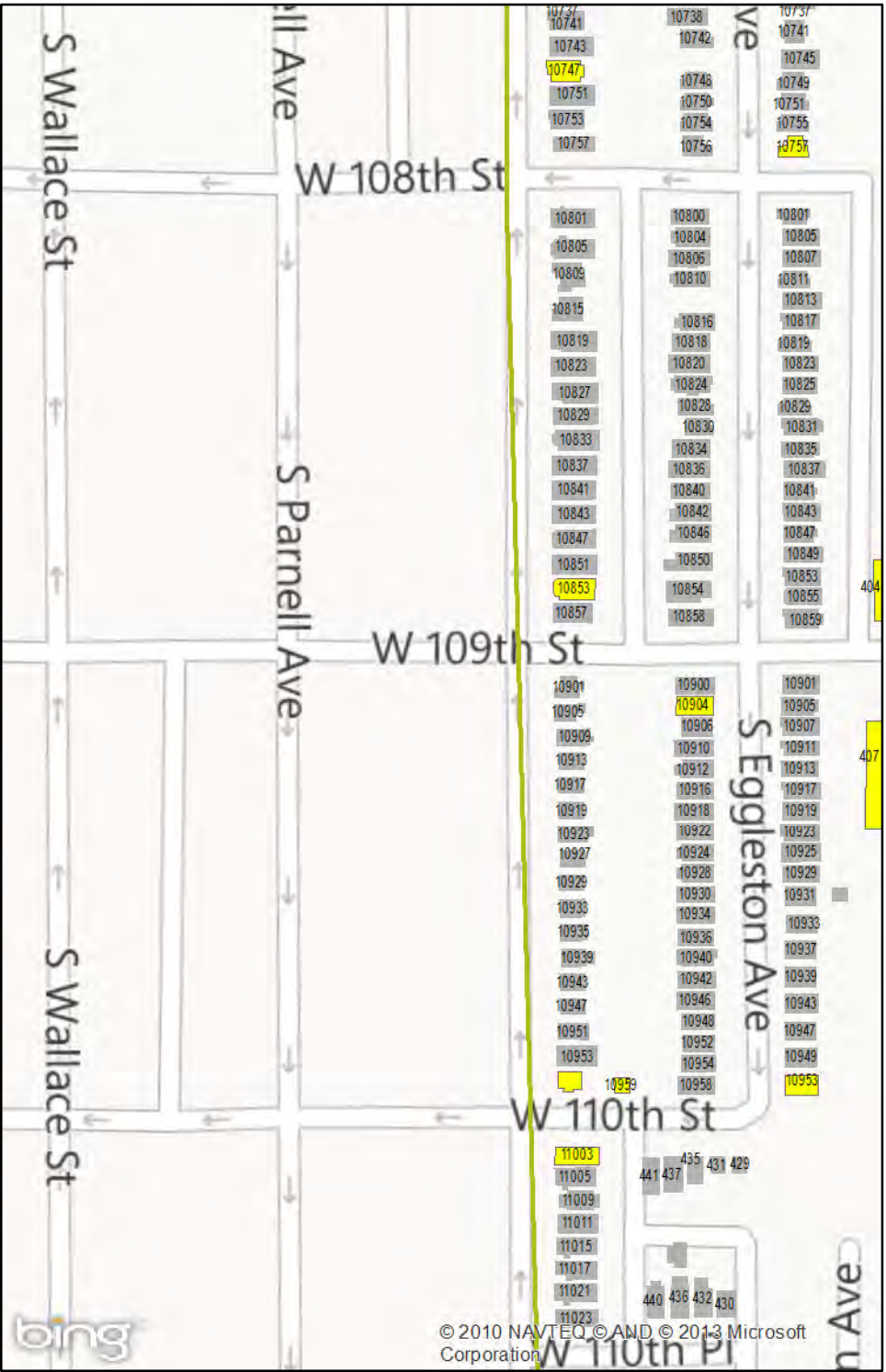

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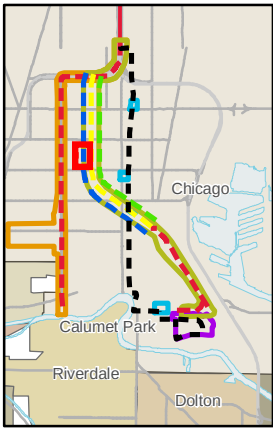

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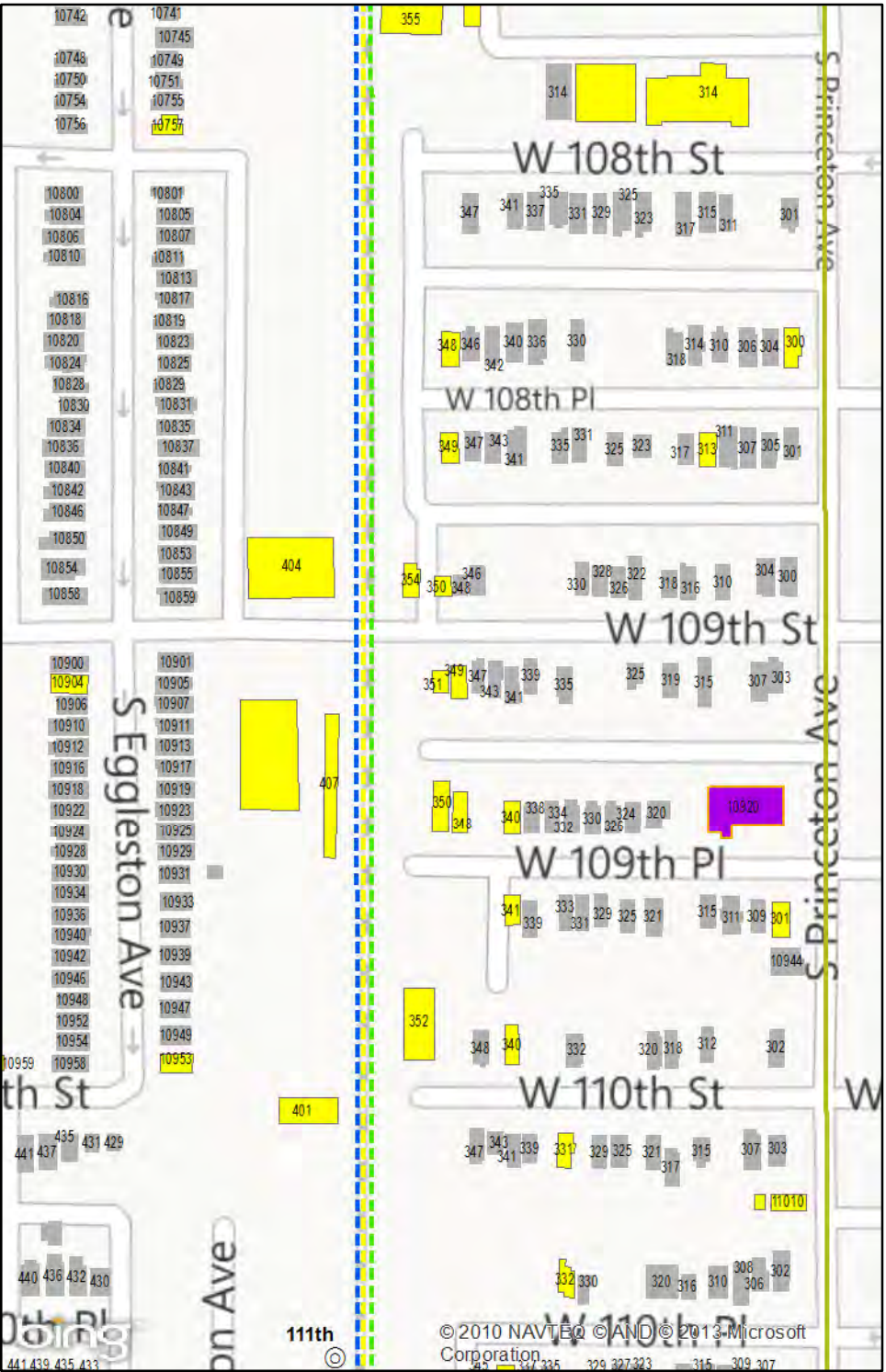

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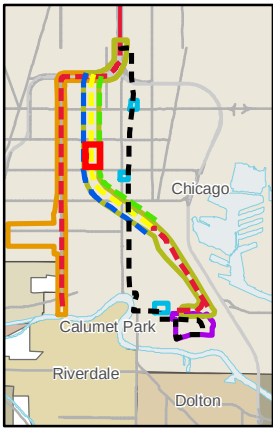

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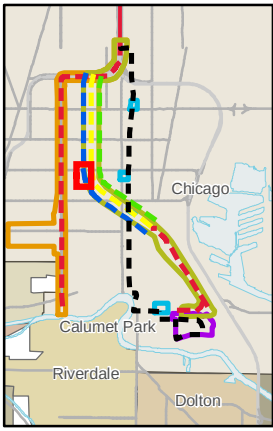

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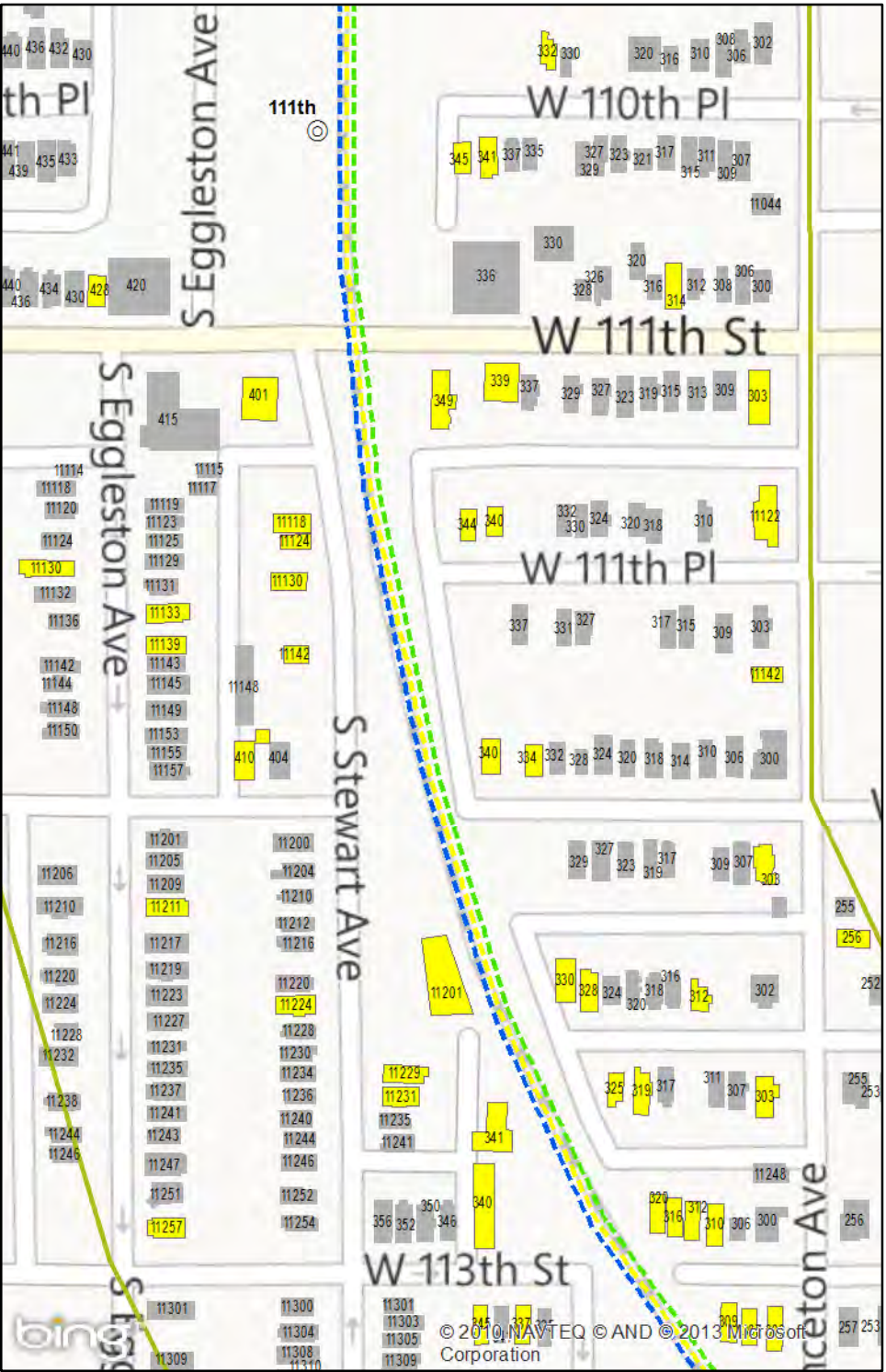

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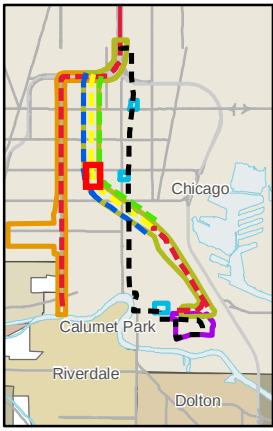

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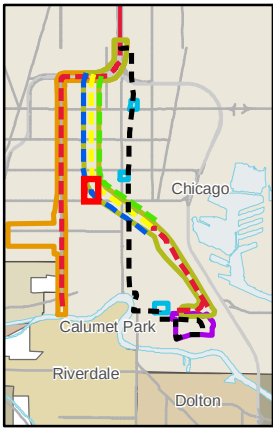

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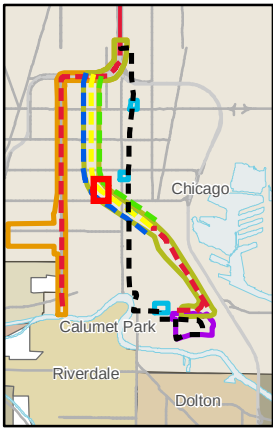

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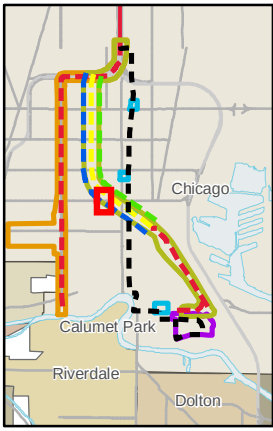

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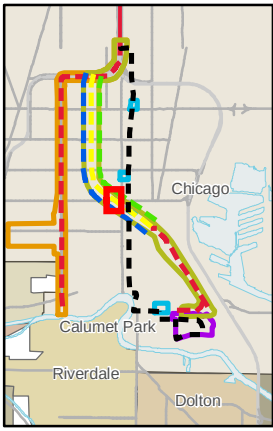

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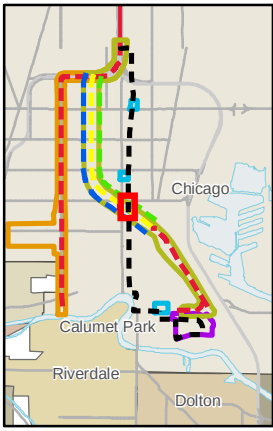

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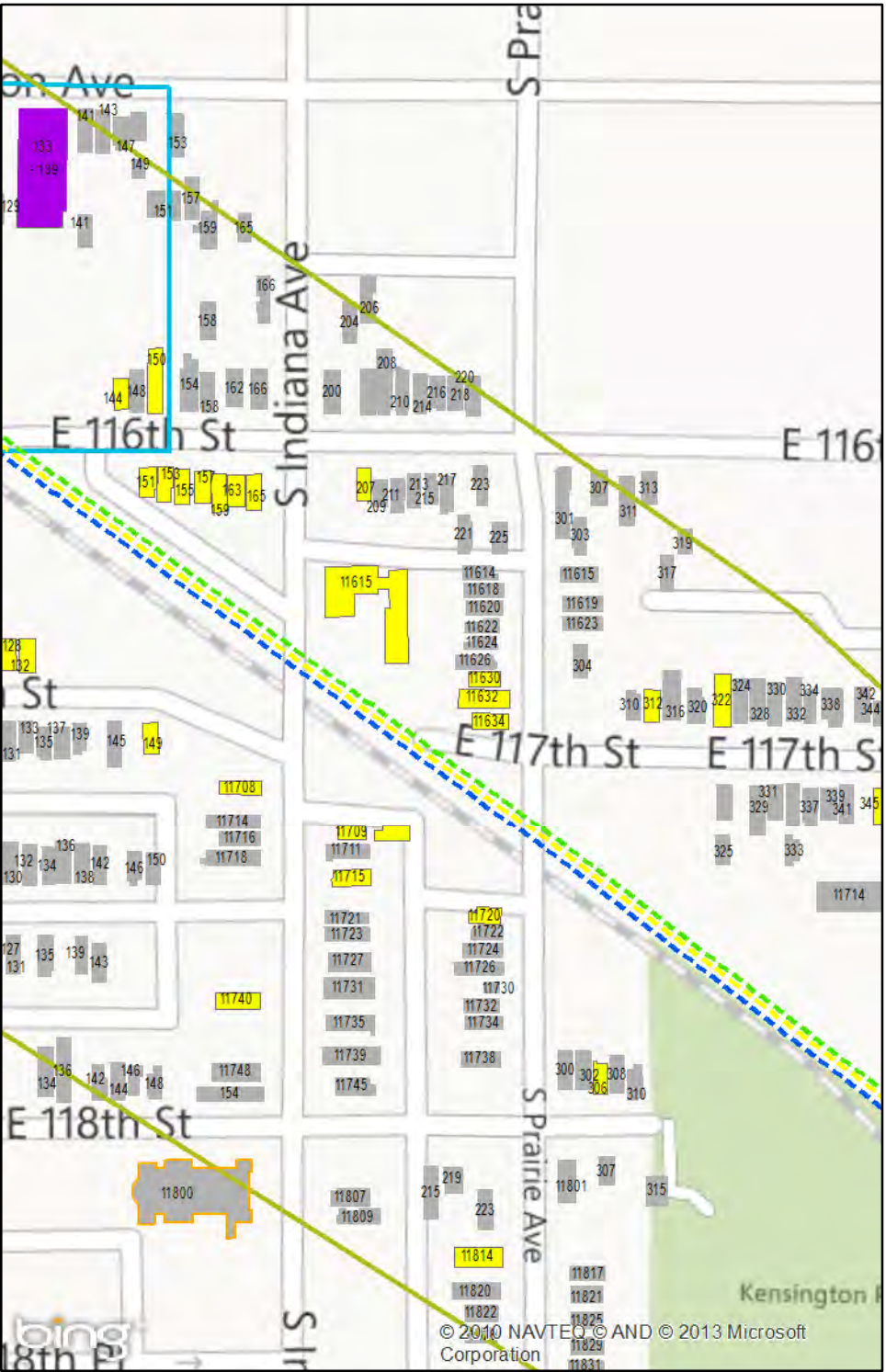

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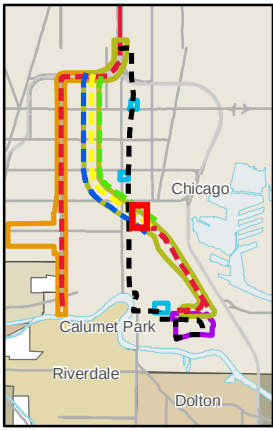

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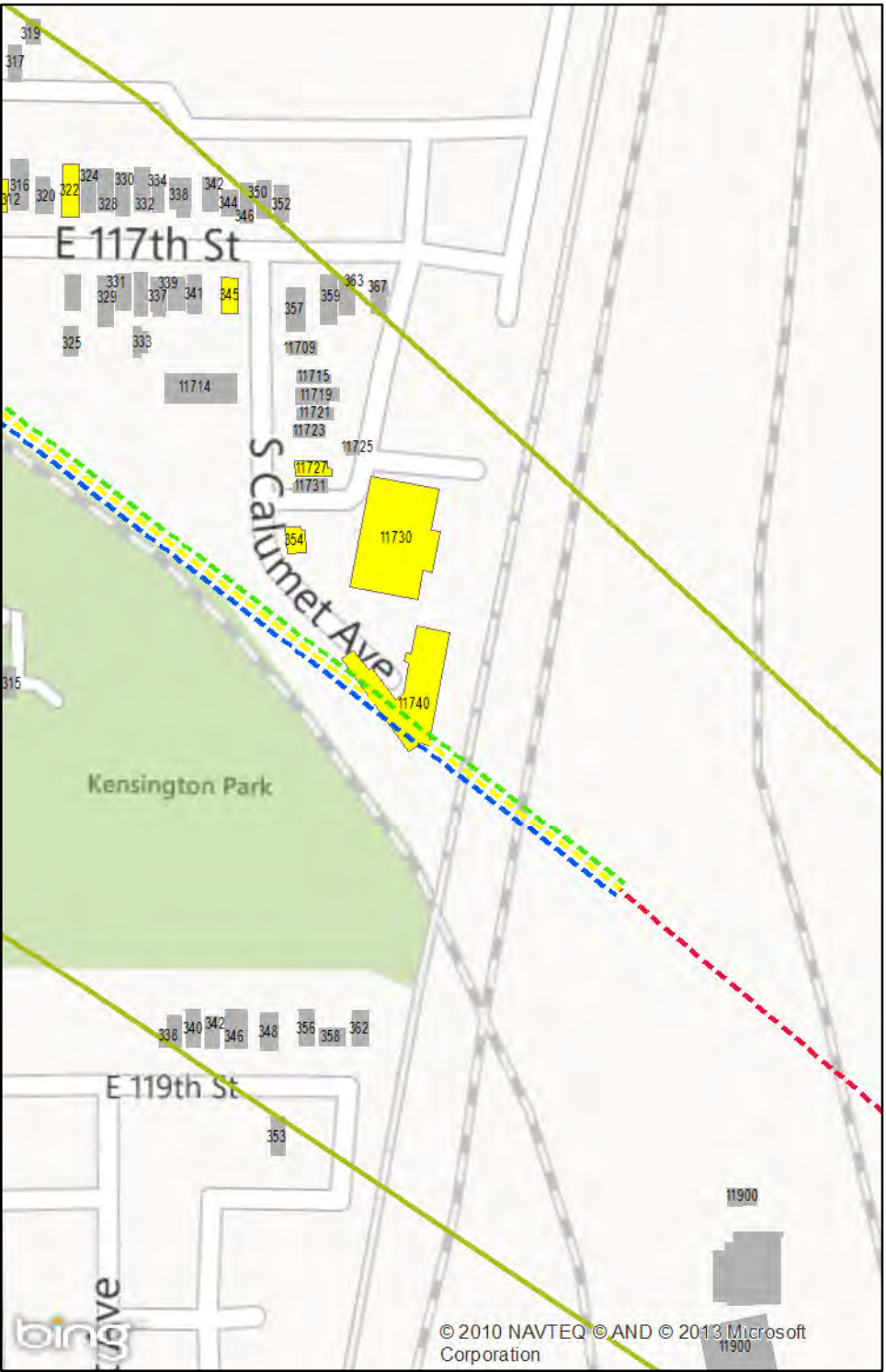

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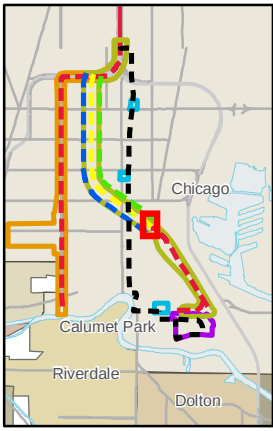

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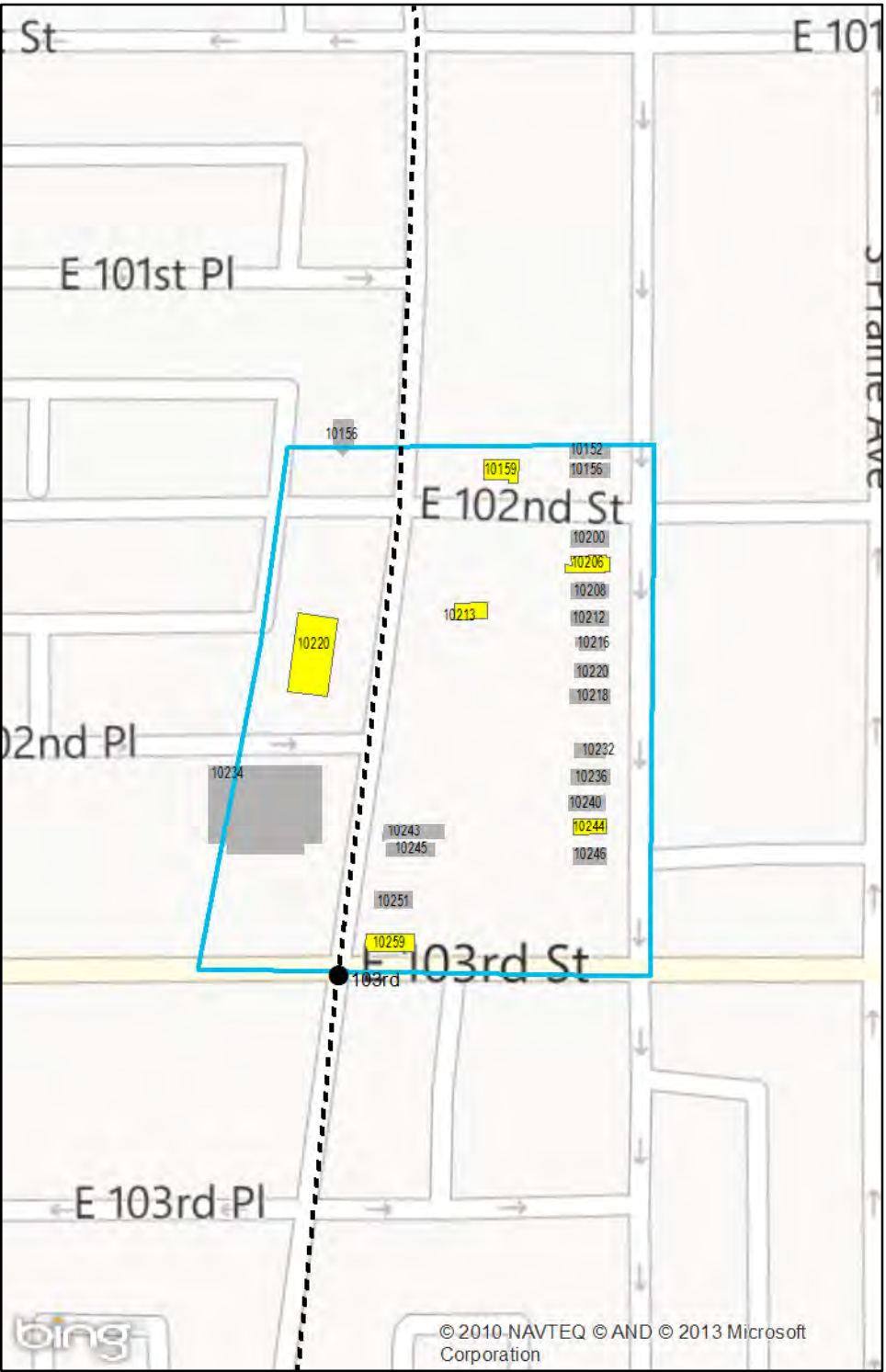

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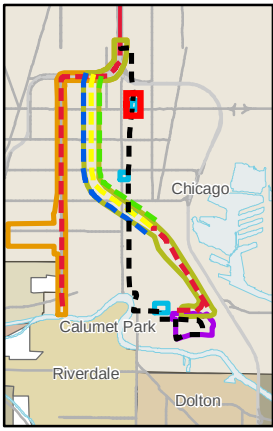

Legend

- Proposed Rail Station
- Proposed BRT Stop
- Existing Rail Alignment / Station
- Proposed BRT Route
- Halsted Alternative
- Union Pacific (UPRR); East, West & right of Way Optsions
- CHRS Orange Property
- NRHP Eligible District
- 106 APE for UPRR Alternative
- 106 APE for BRT Alternative
- 106 APE for Halsted Alternative
- NRHP Eligible Building
- Other Properties Surveyed
- Building Footprint

Scale

1:3,000

0 120 240

Feet

NRHPeligible.mxd

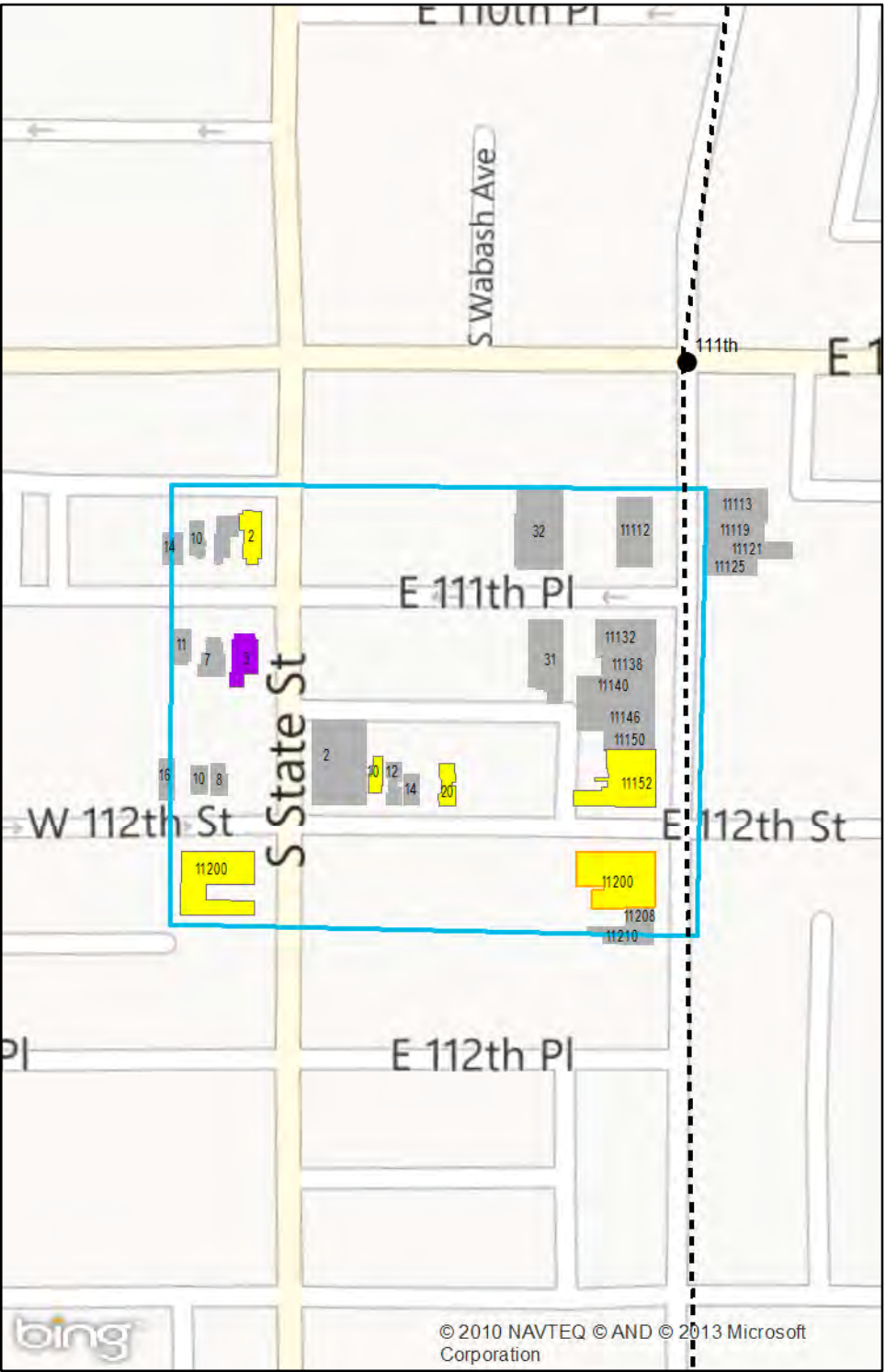

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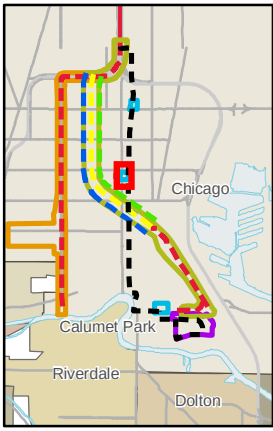

Legend

- Proposed Rail Station
- Proposed BRT Stop
- Existing Rail Alignment / Station
- Proposed BRT Route
- Halsted Alternative
- Union Pacific (UPRR); East, West & right of Way Optsions
- CHRS Orange Property
- NRHP Eligible District
- 106 APE for UPRR Alternative
- 106 APE for BRT Alternative
- 106 APE for Halsted Alternative
- NRHP Eligible Building
- Other Properties Surveyed
- Building Footprint

Scale

1:3,000

0 120 240

Feet

NRHPeligible.mxd

Inset

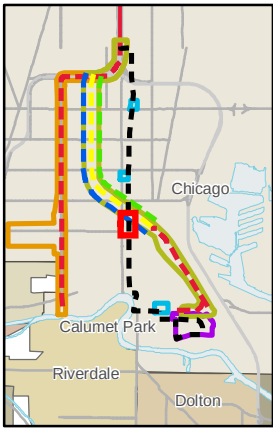

Legend

- Proposed Rail Station
- Proposed BRT Stop
- Existing Rail Alignment / Station
- Proposed BRT Route
- Halsted Alternative
- Union Pacific (UPRR); East, West & right of Way Optsions
- CHRS Orange Property
- NRHP Eligible District
- 106 APE for UPRR Alternative
- 106 APE for BRT Alternative
- 106 APE for Halsted Alternative
- NRHP Eligible Building
- Other Properties Surveyed
- Building Footprint

Scale

1:3,000

0 120 240

Feet

NRHPeligible.mxd

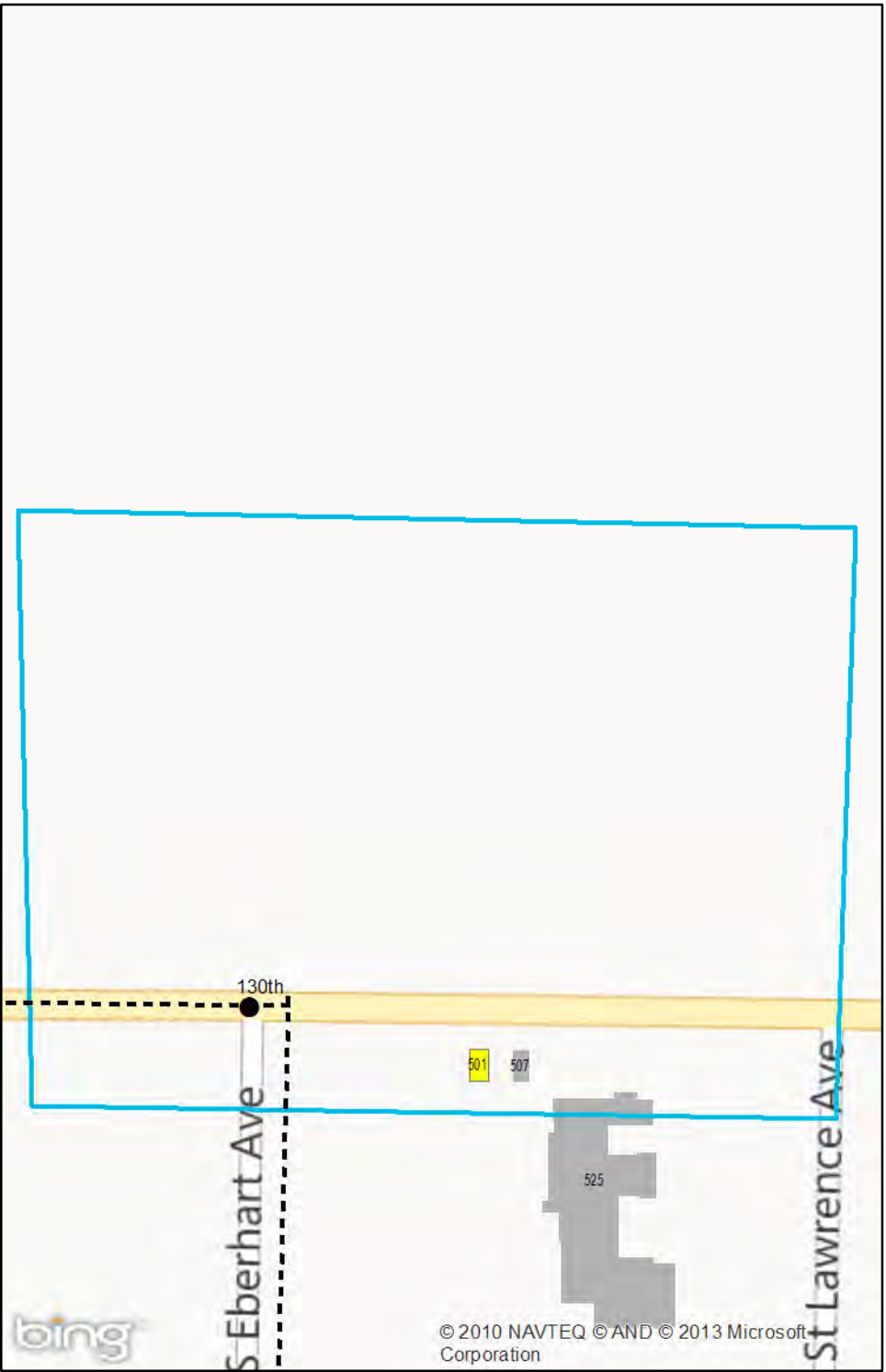

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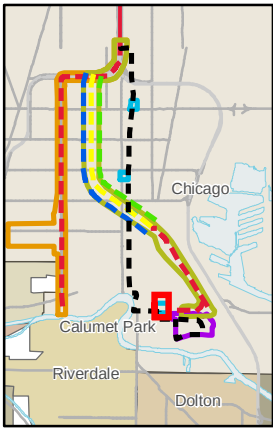

Legend

- Proposed Rail Station
- Proposed BRT Stop
- Existing Rail Alignment / Station
- Proposed BRT Route
- Halsted Alternative
- Union Pacific (UPRR); East, West & right of Way Optsions
- CHRS Orange Property
- NRHP Eligible District
- 106 APE for UPRR Alternative
- 106 APE for BRT Alternative
- 106 APE for Halsted Alternative
- NRHP Eligible Building
- Other Properties Surveyed
- Building Footprint

Scale

1:3,000

0 120 240

Feet

NRHPeligible.mxd

Appendix B
Inventory Sheets for Properties Surveyed

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

418 W. 98th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1931

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
South façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick bungalow in the Washington Heights community is clad with tan face brick on its front elevation, common brick on its side elevations, and synthetic siding on its rear elevation. It has a steeply pitched hip roof covered with asphalt shingles and synthetic-clad, hip roof dormers with paired one-over-one windows on both the front and rear elevations. The front elevation has a recessed corner porch with round-arch opening, low brick sidewalls, and concrete steps. The residence also includes a door tucked into the side of the living room bay and four one-over-one windows, three of which are grouped together under a segmental arch. All windows are modern replacements with aluminum sashes. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (rear)	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Segmental arch, round arch porch opening			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

221 W. 98th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, split-level, single family residence.

Property Description: **Stories:** Spilt-level

This split-level home in the Roseland community is clad with buff brick and synthetic siding, has a shed roof with exposed rafters above its one-story section and a gable roof above its two-story section. It has centrally located wood double-doors topped by two large fixed-pane windows; other windows are arranged in groups of three along its front elevation. Windows are one-over-one aluminum-sash. This split-level home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable, shed	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

124 W. 99th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with glass block windows, is clad with buff brick, and has a hip roof covered with asphalt shingles and overhanging eaves. Its front elevation is fronted by a faux stone planter. It has an off-center door and sidelight comprised of glass blocks, two decorative glass block inserts, a picture window flanked by one-over-one aluminum-sash windows, and concrete steps behind a low faux stone wall. An attached two-car hip roof garage clad in the same buff brick is situated along the home's rear elevation. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Planter, glass block inserts, faux stone wall at entry			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Attached two-car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

401 W. 99th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a brick, two-story, single family residence

Property Description: **Stories:** 2

This two-story, brick clad house in the Washington Heights community is situated on a raised brick basement with glass block windows. The house has a hip roof covered with asphalt shingles. Its front elevation has a partial-width, hip roof, brick clad, enclosed porch with a metal storm door. It has concrete steps, metal railings, a pair of windows on the first floor and two single windows on the second floor. Windows throughout the house are non-original one-over-one aluminum-sash. Detailing includes concrete sills and orange brick banding that contrasts with the brown face brick cladding. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

314 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of split-level, single-family residence.

Property Description: **Stories:** Split-level

This back-split home in the Roseland community has a hip roof on both levels covered with asphalt shingles. The front elevation is clad with faux stone below the concrete sill line and brown brick above. This elevation has an off-center hollow core metal door, a picture window flanked by one-over-one aluminum-sash windows, and two decorative glass block inserts. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (lower façade)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Glass block inserts			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

319 W. 100th Place

Alternate: 321 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, single-family residence.

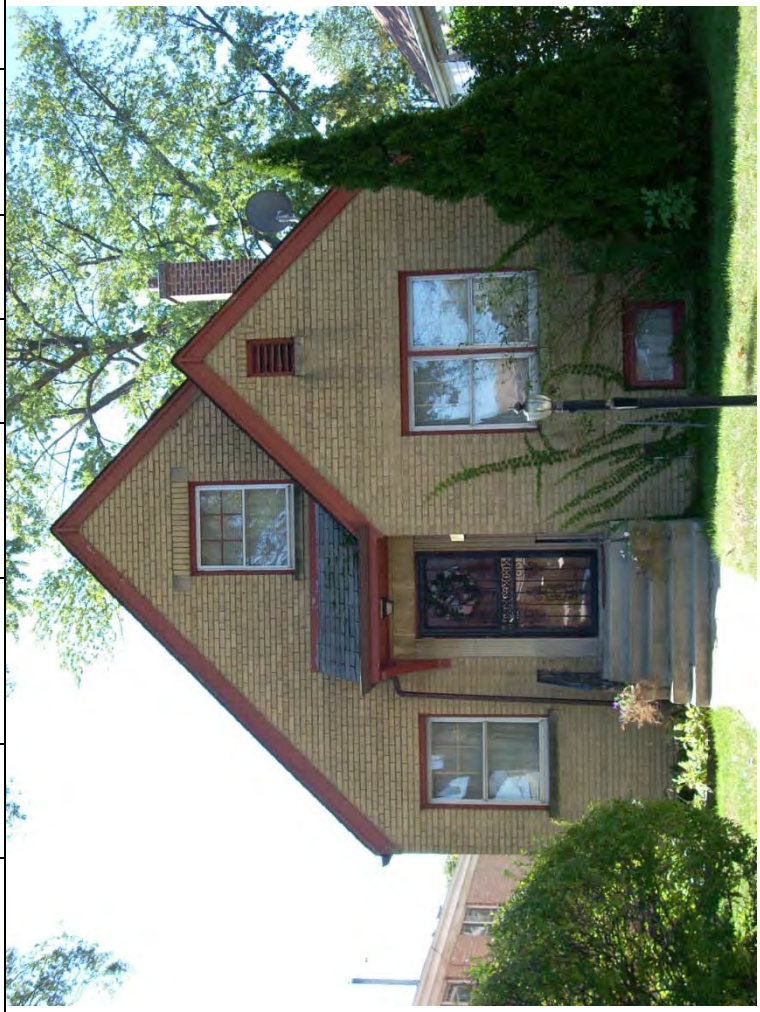

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised brick basement and has a front gable roof covered with asphalt shingles. Its front elevation is clad with buff brick and has a projecting gabled living room bay. This elevation also has a centrally located entrance with a metal storm door, concrete steps, metal railings, a bracketed shed-roofed door hood, and four six-over-one windows: three on the first floor and one in the gable. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete sills			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

435 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is clad with polychromatic brick and has a side-gabled roof covered with asphalt shingles. End gable walls are clad in aluminum siding. Its front elevation features a gabled pavilion with a strip of three non-original one-over-one aluminum-sash windows and a gabled entrance vestibule featuring a wood door with diamond pane window, concrete steps, and metal railings. A single non-original one-over-one aluminum-sash window is located in the corner of the front elevation. A small ventilating louver is situated in the gable. Detailing includes concrete sills and lintels with keystones. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding in gable ends
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Side gable	
Ornamental Architectural Details Concrete sills and lintels with keystones			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

444 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Eclectic Neo-Traditional

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a brick one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community sits on a raised basement. It is clad with polychromatic brick and has a side gabled roof covered with asphalt shingles. Its front elevation has a gabled living room bay pavilion with paired basement windows that appear to be casements. There is a group of three non-original one-over-one windows with concrete sills and brick arch lintels that are separated by colonettes with acanthus leaf capitals. A small round-arched window is located in the gable. The house has a recessed corner porch with a metal storm door, round-arch openings, a Neo-Gothic castellated top, concrete steps, and brick sidewalls. This house has very good integrity in terms of its materials and detailing, and its Eclectic Neo-Traditional ornamentation makes it stand out among the vernacular, stripped-down brick and frame bungalows and cottages that comprise the predominant building stock in the Washington Heights community. As a result, it is recommended as individually eligible for National Register listing under Criterion C for architecture.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Castellated porch roofline	**Roof Type** Gable	
Ornamental Architectural Details Concrete sills, brick arched lintels, colonettes, arched window with keystone, stone insets, decorative brickwork, porch with castellated roofline			**Windows** Double-hung, fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** The Eclectic Neo-Traditional ornamentation stands out among the vernacular, stripped-down brick and frame residences that comprise the predominant building stock in the Washington Heights community.

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

318 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, brick, single family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story brick-clad home has a steeply pitched side gable roof covered with asphalt shingles, an exterior brick chimney, and two aluminum-clad shed dormers, each of which has a single one-over-one aluminum-sash window (non-original). Its front elevation has a centrally located gabled front vestibule with brick quoins, a door with wood surround and pediment, and concrete steps with metal railings. The entrance is flanked by three-sided window bays, which feature six-over-one windows with decorative brick corbelling beneath. It does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, dormer windows, and siding
Condition: Excellent Good Poor			
Additional Alterations Dormers may be post-construction addition.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side gable	
Ornamental Architectural Details Brick quoins and corbelling; stone quoins and inserts			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

426 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1943

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story house in the Washington Heights community is situated on a raised basement that is covered with siding and has glass block windows. The house is clad with synthetic siding and has a hip roof covered with asphalt shingles, overhanging eaves, and gable dormers on the front and side elevations. Its front elevation has an off-center hollow-core metal door and a partial-width hip-roof porch with wood steps and open metal supports. There are three windows on the first floor and two in its gabled wall dormer, all of which are non-original one-over-one aluminum-sash. This house lacks integrity, does not display distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

430 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and west façades of a one-story, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the Washington Heights community sits on a raised basement with glass block windows. It has a hip roof covered with asphalt shingles. Its front elevation is clad with faux stone and its side and rear elevations are clad with synthetic siding and stucco. Its front elevation has a partial-width gabled porch with concrete steps and non-original open metal supports. It also has an off-center entrance with a metal storm door and two non-original one-over-one aluminum-sash windows. This house lacks integrity, does not feature distinguishing architectural elements, and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch supports, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (sides), faux stone (façade), stucco (sides)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

334 W. 101st Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a hip roof covered with asphalt shingles and a projecting gable-roofed living room. The front elevation is clad with brownish-orange face brick. Its off-center entrance features a metal storm door and a porch with concrete steps, metal railings and open metal posts supporting a metal awning. The front elevation has a window grouping that is partially obscured by a low metal canopy but appears to be a picture window flanked by double-hung windows. The side elevations are clad with common brick. Detailing includes a brick arch with stone keystone above the front elevation window group and stone blocks surrounding the door. This house does not feature sufficient distinguishing architectural elements to be individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick arch with stone keystone, stone blocks at entrance			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 101st Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 4 September 2012

Photos with Captions:
North façade of brick, single family residence.

Property Description: **Stories:** 1

This one-story house has gable front roof covered with asphalt shingles. Its front façade is sheltered by an overhang and is clad orange face brick, stone, and clapboards. A bow window with casements fronts the street façade. The off-center metal core door is accessed via a concrete stoop with metal hand rails. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick and stone (façade), clapboard (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

438 W. 101st Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

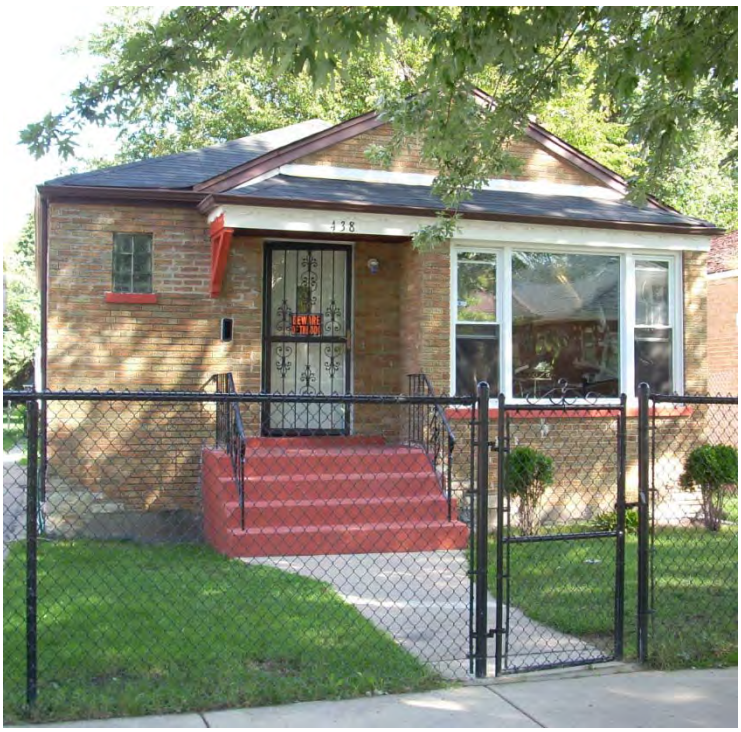

Property Description: **Stories:** 1

This one-story, brick-clad house in the Washington Heights community is situated on a raised basement with glass block windows and has a gable-on-hip roof covered with asphalt shingles. Its front elevation features an off-center hollow core metal door, concrete steps with metal railings, a projecting living room bay with a non-original picture window flanked by one-over-one aluminum-sash windows, a pent roof with bracket, and a small glass block window. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable-on-hip	
Ornamental Architectural Details Bracket under pent roof			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

331 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a side gable roof covered with asphalt shingles. It is clad with brick on the first floor and with synthetic siding in the gables. The front elevation has a gabled projecting living room, an off-center door with concrete steps and metal railings, a picture window flanked by non-original one-over-one aluminum-sash windows, and a single non-original one-over-one aluminum-sash window. Detailing includes stone insert blocks flanking the door and several decorative glass insert blocks. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows on street elevation
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Side-gable	
Ornamental Architectural Details Stone insert blocks around door, decorative glass insert blocks			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

342 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of two-story, brick, single-family residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised brick basement and has a hip roof covered with asphalt shingles. Its front elevation is clad with buff brick. This elevation has an off-center hollow core metal door, a porch with concrete steps and metal railings, open metal supports, and a metal awning roof. It has a three-sided first floor bay with central multi-light fixed-pane window flanked by non-original one-over-one aluminum-sash windows and two non-original one-over-one aluminum-sash windows on the second floor. Detailing includes brick quoins and faux stone insert blocks flanking the door and beneath the window bay. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick quoins, faux stone insert blocks			**Windows** Double hung, fixed-pane
Outbuildings (*Number and Description*) Storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of brick, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in brown face brick and common brick along its front and side elevations, respectively. It has a hip roof covered with asphalt shingles. Its front elevation has an off-center door and a porch with concrete steps, metal railings, open metal supports, and metal awning roof. The front façade features a strip of three non-original one-over-one windows with concrete sills and a gable dormer with two single-pane windows. Glass block windows provide light in the basement. This building lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 4 September 2012

Photos with Captions:
North and west façades of a one-story, brick single family residence.

Property Description: **Stories:** 1

This one-story house is situated on a raised basement. It has a rectangular footprint, a hip roof covered with asphalt shingles, and a hip roof dormer with paired windows. Its front façade is clad in brown face brick with concrete block inserts and has a strip of three three-over-one windows. Its off-center metal core door is accessed via a short flight of concrete steps with metal railings. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete block inserts			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 4 September 2012

Photos with Captions:
South and east façades of one-story, brick story single family residence.

Property Description: **Stories:** 1

This one-story house is situated on a raised basement. It has a rectangular footprint, a hip roof covered with asphalt shingles, and overhanging eaves. Its front façade is clad in buff face brick and has a strip of three windows, which appears to be one large picture window flanked by double-hung windows, beneath a metal awing. The off-center metal core front door is accessed via a flight of concrete steps with metal railings. Two large decorative glass blocks are situated next to the door. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Gablet	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

330 W. 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community has a hip roof covered with asphalt shingles and a hip dormer with a non-original one-over-one aluminum-sash window. The front elevation is clad with light brown face brick and has a hip-roofed porch with brick sidewalls, concrete steps, short wood Doric columns and frieze band. This elevation also has a strip of three non-original one-over-one aluminum-sash windows. Detailing includes a stone sill course, a brick soldier course with stone insert blocks above the windows, and decorative scrolled stone brackets. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Doric columns and frieze band, stone sill course, brick soldier course with stone insert block, stone brackets			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 21 September 2012

Photos with Captions:
South and west façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in Roseland is clad in synthetic siding, sits atop a raised basement, and has a front gable roof covered with asphalt shingles. The front elevation features a projecting, enclosed, gable roofed sun porch also clad in synthetic siding with one-over-one windows and an off-center front door accessed by a flight of concrete steps with metal railings. This home does not have distinguishing architectural features and is covered with synthetic siding, both of which preclude it from individual listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

416 W. 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and east façades of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised basement with glass block windows. It is clad with brown brick and has a hip roof covered with asphalt shingles and overhanging eaves. There are hip-on-gable dormers on the front and side elevations, each of which has a strip of non-original one-over-one aluminum-sash windows. The house features a recessed corner porch with a single-light oak door, concrete steps, low brick sidewalls, and a brick corner pier. The front elevation's rounded living room bay has a series of casement windows and transoms. Detailing includes a brickwork soldier course above windows with decorative stone insert blocks and concrete sills. This is a good example of a brick Chicago Style Bungalow, a building type that was produced in the thousands throughout the city's undeveloped areas and in nearby suburbs during the 1910s and 1920s. This house does not feature sufficient distinguishing architectural features to be individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier courses above windows, stone insert blocks, concrete sills			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

320 W 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding, has a hip-on-gable roof covered with asphalt shingles, and has overhanging eaves in front with aluminum soffits. The front elevation features a recessed corner porch with wood steps, railings, and corner post. A pair of casement windows is located within the porch. There is a strip of four windows on the first floor and a pair of windows in the gable. All windows are non-original one-over-one aluminum-sash. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

337 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a hip-on-gable roof covered with asphalt shingles. The front elevation features a recessed porch with concrete steps, metal railings, and a corner support consisting of a faux stone pier with open metal post above. This elevation also has overhanging eaves with aluminum soffits and decorative exposed rafters, an off-center recessed door with a metal storm door, and a strip of three windows on the first floor and a pair of windows in the gable, all of which are non-original one-over-one aluminum-sash. This residence does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

342 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1940

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, 1.5-story, single family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community has a cross-gable roof covered with asphalt shingles and is clad with brown face brick. Its front elevation has an off-center, gable roofed entrance vestibule with a metal storm door sheltered by a metal awning, concrete steps, metal railings, and paired double-hung windows on both the first and second floors that are partially obscured by low metal awnings. A one-story hip roof covered side entrance is situated along the west elevation. Detailing includes concrete sills, a keystone above the entrance, and brick soldier course lintels. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Cross-gable	
Ornamental Architectural Details Concrete sills, keystone above the entrance, brick soldier course lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: J. Martinez

Date: September 2012

Photos with Captions:
South façade of brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story, brick-clad house in Roseland has a square footprint and a hip roof covered with asphalt shingles. An off-center, projecting, gable-roofed vestibule with front door is accessed via a short flight of concrete steps with metal railings. The front elevation has a three-sided bay with a central eight-over-one window flanked by four-over-one windows, and the second floor has two one-over-one windows with wood shutters. Windows are modern replacements. Detailing includes brick banding on the second floor and concrete bands in the vestibule gable meant to simulate half-timbering. This house lacks architectural distinction; as a result, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete bands for half-timber look			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 102nd St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 21 September 2012

Photos with Captions:
South façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in synthetic siding and has a hipped roof with asphalt shingles and overhanging eaves. The front elevation features a centrally located front door flanked by two one-over-one aluminum-sash windows and has a hipped roof dormer with paired one-over-one windows. Windows are modern replacements; replacement windows in the dormer are smaller than the original windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

444 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Washington Heights community is situated on a raised concrete block basement. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation features a hip-roofed full-width screened-in porch with concrete steps, metal pipe railings, a faux stone base, and supports comprised of faux stone pedestals topped by squat Doric columns. A pair of windows sheltered by a metal awning is situated in the gable. A two-story, gable-roofed, bay pavilion is situated along one of the side elevations. Windows throughout the house are non-original one-over-one aluminum-sash. This house lacks integrity, does not display distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations Porch screened in			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

301 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1921

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East (Princeton) façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow is situated at the southwest corner of 103rd Place and Princeton Avenue in the Roseland community. It has a hip-on-gable roof covered with asphalt shingles and overhanging eaves with decorative knee braces located on the front gable section of the roof. The central portion of the house retains its original wood clapboard siding; the areas above and below are clad with wood shingles. Its 103rd Place elevation has a strip of three one-over-one windows, a strip of three casements, and a strip of three windows in the gable that appear to be casements. Its Princeton Street elevation has a metal storm door topped by a gabled hood with two knee braces, glass block basement windows, a strip of three one-over-one windows, a single one-over-one window, and a pair of casements. This house does not have sufficient distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood clapboards and shingles	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Knee braces			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

306 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1941

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community is clad with synthetic siding, has a side-gabled roof covered with asphalt shingles, and has two gable dormers with double-hung multi-sash windows that are visually connected with aluminum siding. The front elevation has an off-center door covered with plywood and a Classical surround consisting of simple wood pilasters and unadorned entablature. The front elevation also has concrete steps with metal railings and paired windows that are covered with plywood. This home does not have distinguishing features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Side-gable	
Ornamental Architectural Details Pilasters at surround			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

321 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is clad with synthetic siding, has a hip roof covered with asphalt shingles, and a hip dormer with three one-over-one windows beneath a metal awning. The front elevation has a recessed corner porch with concrete steps, metal railings, and an open metal corner post. It also features an off-center entrance with metal storm door, a small casement window within the porch, and a large picture window beneath a metal awning. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

326 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of 1.5-story, multi-family, frame residence.

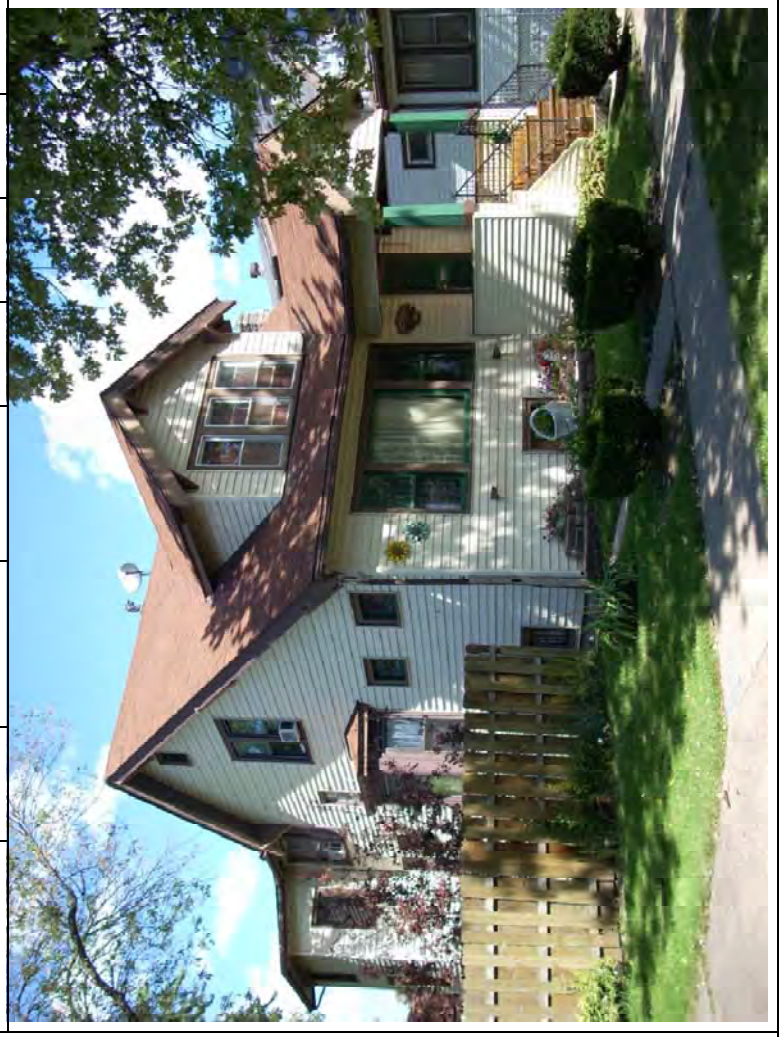

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised brick basement with glass block windows. It is clad with aluminum siding and has a side-gabled roof covered with asphalt shingles. The house also has a gable dormer with a strip of one-over-one windows and decorative knee braces. Its front elevation has a partial-width, off-center, gable-roofed, wood porch with two squat Doric column supports atop aluminum-clad sidewalls, a door with metal storm, and a picture window flanked by one-over-one windows. Its western elevation has a three-sided window bay as well as a large shed roofed addition. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations Shed roof addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side-gable	
Ornamental Architectural Details Doric columns, knee braces			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Two-car garage with hipped roof			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

426 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with faux stone and synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center entrance with metal storm door and a flat-roofed, partial-width porch with a wood deck, wooden steps, metal railings, and open metal posts. There is a strip of three windows on the first floor and three on the second. All windows are non-original one-over-one aluminum sash. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

427 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a 1.5-story, frame multi-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center, enclosed, gabled roof vestibule with a metal storm door and concrete steps with metal railings. There is a multi-paned bow window on the first floor and a pair of non-original one-over-one aluminum-sash windows in the gable. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

436 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised basement with glass block windows and is covered with aluminum siding. The building has a front-gable roof covered with asphalt shingles. The front elevation has a full-width, hip-roof, wood porch with straight railings and three supports consisting of faux stone piers topped by squat, squared wood Doric columns. The residence also includes an off-center metal storm door, a three-sided bay window on the first floor and paired windows in the gable, all of which feature non-original one-over-one aluminum sashes. The door and adjacent window bay are each topped by a cornice. The west elevation has a large shed-roofed dormer and the east elevation has a three-sided window bay on the first floor topped by a gable wall dormer. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Squared columns			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

440 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a side-gabled roof covered with asphalt shingles. The front elevation has an off-center metal storm door topped by a metal awning, non-original wood steps and railings, and a pair of non-original one-over-one aluminum-sash windows. This house lacks integrity and any distinguishing architectural features and is not eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

455 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof porch with wood steps, boxed supports, and low aluminum-clad walls. This elevation also has an off-center hollow core metal paneled door with fanlight, a strip of three windows on the first floor, and a pair of windows in the gable. All windows above the raised basement are non-original one-over-one aluminum-sash. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Structural Survey

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

316 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and east façades of one-story, brick supermarket.

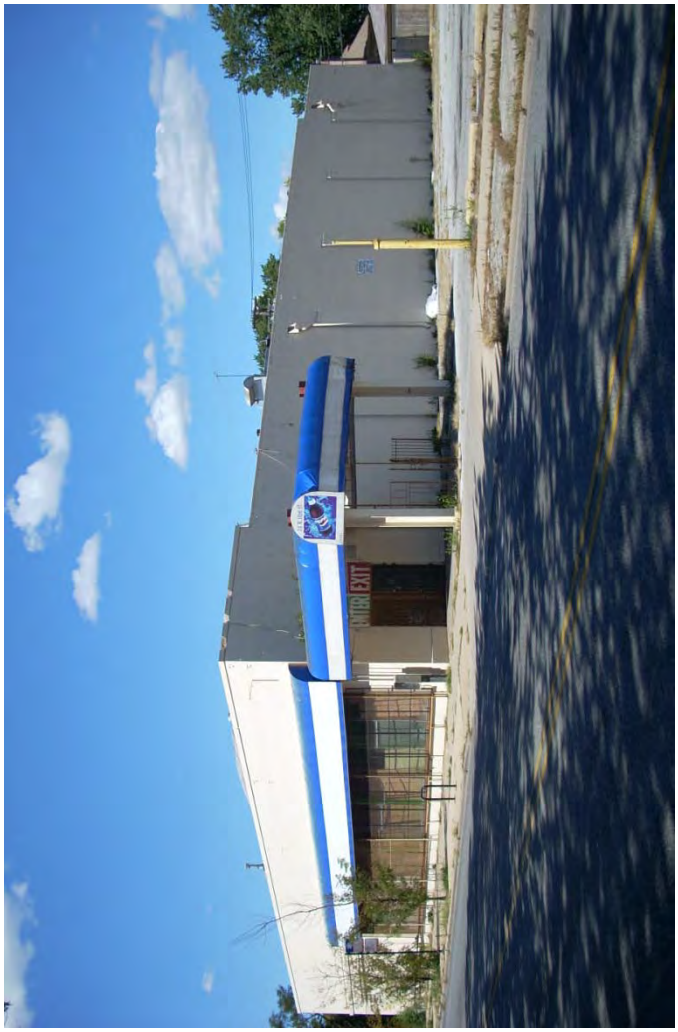

Property Description: **Stories:** 1

This one-story brick-clad former supermarket in the Roseland community has a flat roof, a parapet and a strip of large fixed-pane display windows along its 103rd Street elevation. It has a pair of doors along its east elevation, which are sheltered by a nylon canopy supported by two metal I-beam posts. This building does not have any distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

319 W. 103rd Street

Alternate: 327 W. 103rd St

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Chazap Barber College

Property Use

Historic: Commercial

Current: Educational

Date of Construction: 1953

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, brick property

Property Description: **Stories:** 1

This one-story brick-clad barber college building in the Roseland community has a flat roof and parapet. A single course of limestone surrounds its former storefront area, which has been in-filled with red brick, a recessed entrance with metal door, and a continuous strip of glass block windows. The eastern end of the building's front elevation has a metal overhead door and a single glass door. This building does not feature sufficient integrity to be individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** In-filled windows, modified storefront
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Hay, Grain & Feed (1905)

Common/Current: Unknown

Property Address:

403-405 W. 103rd St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1900

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of a brick, commercial building.

Property Description: **Stories:** 2

The two-story commercial portion of this building is identified as a "Hay, Grain & Feed" shop in the 1905 Sanborn while the one-story portion is identified as used for related storage. The buildings were joined at a later date. Both are clad in brown face brick and have flat roofs and parapets. The two-story section has an off-center entrance with an original wood door, sidelights, transom, and a stone surround with cornice, as well as a metal cornice. The glass panes in the sidelights and door have been removed and their openings in-filled with wood. It has bay windows on the first and second floors and an additional window opening above the entrance bay. All windows are comprised of one-over-one wood-sash. Detailing includes brick banding and a stone cornice. The one-story part has altered door and window openings, including one large window opening that has been in-filled with glass blocks. Side elevations are clad in common brick. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some window openings in-filled with wood and glass block
Condition: Excellent Good Poor			
Additional Alterations Two buildings connected after 1905			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone cornice and surround at entrance, brick banding, metal cornice			**Windows** Glass block, double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

421 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and east façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center door, concrete steps and metal railings, and faux stone cladding below the first floor sill line and surrounding the door. There is a three-sided window bay on the first floor and a pair of windows in the gable. Both side elevations feature shed-roofed dormers. Windows throughout the house are non-original one-over-one aluminum-sash. This house does not feature sufficient integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement widows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

424 W. 103rd Street
Alternate: 440 W. 103rd Street (CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Loving Spirit M.B. Church

Property Use

Historic: Commercial

Current: Religious

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a two-story, frame, religious building.

Property Description: **Stories:** 2

This two-story frame building in the Washington Heights community has a gable roof covered with asphalt shingles that is obscured by a false front with faux stone siding and high stepped parapet. The first floor has two large window openings that are in-filled with glass block. The second floor has a non-original picture window flanked by one-over-one aluminum-sash windows. The building has a one-story flat-roofed wing. The wing's front elevation is clad with vertically laid wood boards above a brick base. It has a pair of non-original hollow core metal paneled doors with fanlights. The wing also features decorative modern angled wood pylons at its corner and along its side elevation. This building does not feature sufficient integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, brick, faux stone	
Roof Material Asphalt shingle	**Roof Features** Parapet	**Roof Type** Gable, flat	
Ornamental Architectural Details Stepped parapet			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

453 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1878

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, frame, single-family residence.

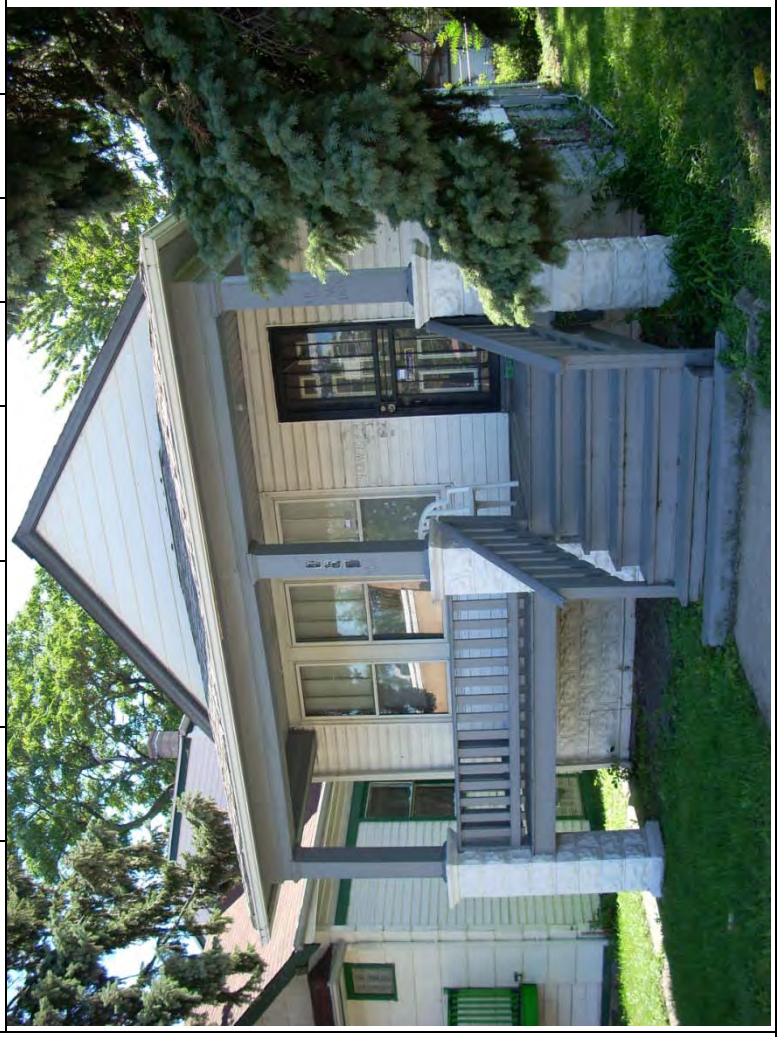

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community sits on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation features a full-width wood porch with wooden steps, wooden railing, and supports consisting of faux stone piers topped by squat, square columns. It has an off-center hollow core metal door and a strip of three non-original three-over-one windows. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Square columns			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name **Historic:** Bldg. not labeled, not in CHRS **Common/Current:** Unknown	**Photos with Captions:** South façade of a brick, one-story, commercial building.
Property Address: 748 W. 103rd Street	
HAARGIS Number: Not in database	
Present Owner and /or Occupant: Vacant	
Property Use **Historic:** Commercial **Current:** Commercial	
Date of Construction: 1928 **Architect's Name:** Not in CHRS **Builder/Contractor:** Not in CHRS	
Architectural Style: Vernacular	
Prepared By: J. Martinez, M. C. Bird, J. Guarino **Photo By:** S. Katz **Date:** 24 October 2012	

Property Description: **Stories:** 1

This one-story brick-clad commercial building in the Washington Heights community has a flat roof and shaped parapet with concrete coping. Its front elevation has three storefronts that have been covered with plywood and three non-original glass doors with transoms that have largely been covered with plywood as well. Detailing includes brick panels with stone insert blocks. The rear elevation windows have been in-filled with brick. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Structural Survey

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Rear windows in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Shaped parapet with concrete coping, brick panels, stone insert blocks			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

814-824 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Gee-Gees, Nu-Era, Tiquisi, Bomber

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1958

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East and south façades of one-story, brick commercial property.

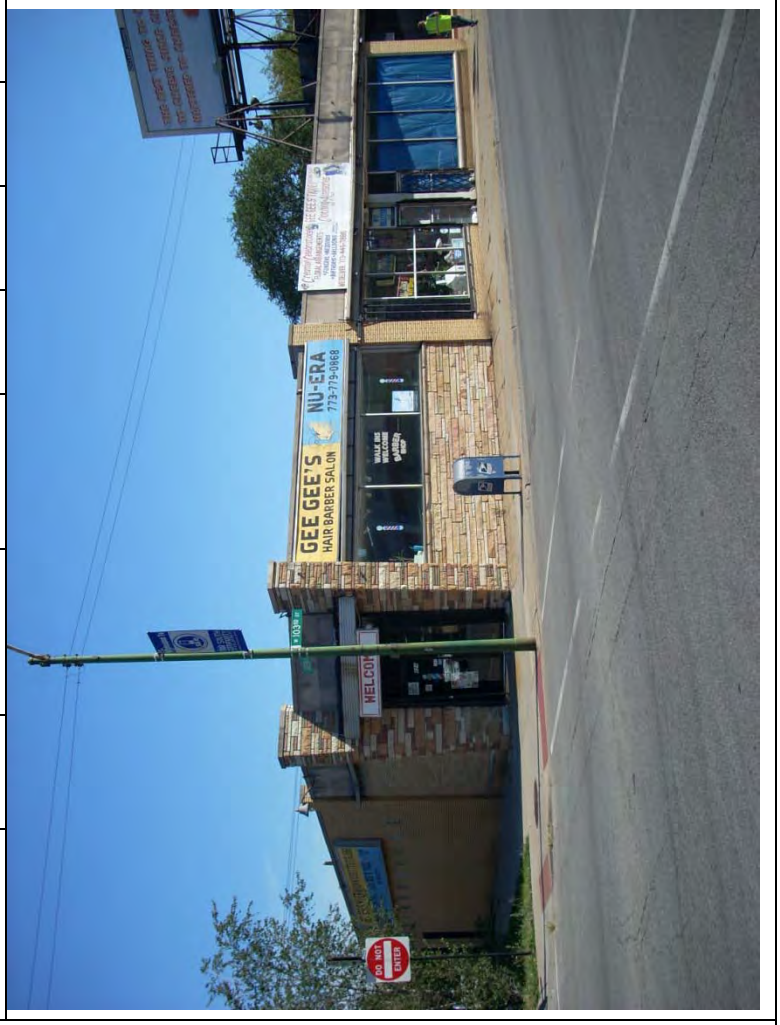

Property Description: **Stories:** 1

This one-story, brick-clad, commercial building at the corner of 103rd and Green streets in the Washington Heights community has a flat roof, parapet, and three storefronts with non-original windows and glass doors. The corner storefront has been re-clad with faux stone and has two piers flanking its glass double-doors. This building does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone, brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

262 W. 104th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1910

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a one-and-a-half-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with either synthetic siding or wide wood shingles. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, flat-roofed, wood porch with a frieze band and non-original straight railings and posts. There is an off-center entrance with a metal storm door and non-original windows: a strip of three double-hung windows on the first floor and paired double-hung windows in the gable. The east elevation has a gable wall dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows.
Condition: Excellent Good Poor			
Additional Alterations Unclear whether cladding is original			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding or Wood shingles	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Frieze band			**Windows** Double-hung, glass blok
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

328 W. 104th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised basement and clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and overhanging eaves with decorative rafters. Its roof overhangs to shelter the full-width wood porch with supports consisting of low square wood columns atop synthetic-clad porch walls. The front elevation has an off-center non-original hollow core metal paneled door, a strip of three non-original double-hung windows, and an original wood casement window in the attic gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Exposed rafters, square columns on porch			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

335 W 104th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

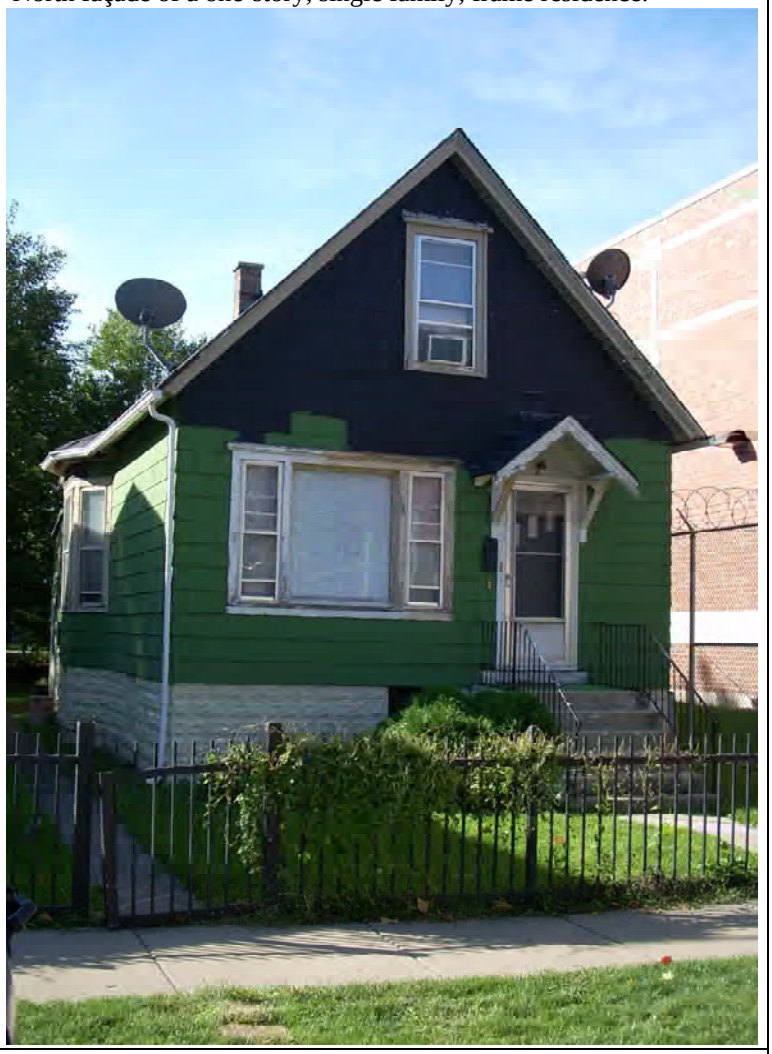

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with shingles. The building has a front gable roof covered with asphalt shingles. The front elevation has an off-center door with bracketed gable hood, concrete steps with metal railings, a picture window flanked by double-hung windows, and a non-original one-over-one window in the gable. The east elevation has a three-sided bay window. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations Some windows have aluminum storms			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood shingles	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed hood above entrance			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

310 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. The residence is clad with synthetic siding, has a hip roof covered with asphalt shingles, overhanging eaves, and a gable dormer with three original wood casement windows. The front elevation features a strip of four one-over-one wood-sash windows and a recessed corner porch with a hollow core metal door, an adjacent casement window, wood steps, metal railings, and a corner support consisting of a low faux stone pier topped by a short open metal post. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Chicago Fire Department. Engine Company #93

Property Address:

324 W. 104th Street
Alternate: 328-330 W. 104th Street

HAARGIS Number:

140602

Present Owner and /or Occupant:

Chicago Fire Department

Property Use

Historic: Public

Current: Public

Date of Construction: 1917

Architect's Name: Charles W. Kallal

Builder/Contractor: Butler & Co. General Contractors

Architectural Style:

Classical Revival

Prepared By: J. Martinez, M. C. Bird, J. Gaurino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
South façade of a brick, two-story, fire station (above), HAARGIS (below)

Property Description: **Stories:** 2

This two-story firehouse in the Roseland community is clad with light brown face brick and has a flat roof and a parapet with concrete coping. Its front elevation has a two-story projecting pavilion, an overhead garage door, two window openings, an off-center hollow core metal door on the first floor, and a strip of three windows and a single window on the second floor. All windows are non-original one-over-one aluminum sash. The spandrel area between the garage door and the windows above features a large stone sign plate inscribed with the words, “City of Chicago Fire Department.” The spandrel area between the corner door and window above has a metal plate identifying the 1917 construction date and the names of a series of people associated with the building’s construction, including the mayor, alderman, city architect, and contractor. Detailing includes stone door and window surrounds on the first floor, bracketed stone window lintels, concrete belt courses, and brick pilasters topped by stone panels with the City of Chicago’s “Y” motif and decorative scrolls. The “Y” motif is also situated above the off-center door. This building is

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

recommended as eligible for individual listing on the National Register under Criterion C for architecture. It is a rare extant example of an early twentieth-century neighborhood firehouse in Roseland, has largely retained its original building materials and detailing, and still functions as a firehouse.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping, stone sign plate, metal info plate, bracketed stone window lintels, concrete belt courses, brick pilasters with stone panels (including city motif and scrolls)			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Rare example of an early twentieth century firehouse in Roseland.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

325 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles. The front elevation has a recessed corner porch with wood steps, metal railings, and an open metal corner post. Additional features include a front door tucked into the side of the living room bay, a casement window, a strip of four non-original one-over-one aluminum-sash windows on the first floor, and a strip of three single-pane casement windows in the gable. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Roseland Pumping Station

Common/Current: Roseland Pumping Station

Property Address:

351 W 104th Street

HAARGIS Number:

140603

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1911

Architect's Name: William G. Krieg

Builder/Contractor: Not in CHRS

Architectural Style:

Prairie

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz, HAARGIS

Date: 24 September 2012

Photos with Captions:
North façade of brick pumping station (above), north and east facades of pumping station from HAARGIS (below).

Property Description: **Stories:** 2

The two-story Prairie style Roseland Pumping Station is clad in brown brick. It has a high limestone watertable, a flat roof, parapet, and two square towers at the corners of the front (Roseland) elevation. The front elevation features a projecting, two-story flat-roofed entrance pavilion with a pair of centrally located glass double-doors, sidelights, and a stone panel above that features the City of Chicago's "Y" emblem in metal. The entrance has a smooth stone surround. Above the entrance is a limestone panel incised with the words: "City of Chicago Roseland Pumping Station." Detailing on the entrance pavilion includes brick pilasters with stone bases, coping, and geometric motifs. The parapet is clad in limestone and features decorative geometric motifs. The building's fenestration is largely comprised of multi-paned steel sash windows, some of which have transoms.

This is an excellent intact example of a community pumping station with fine integrity that still functions in its original use. It is recommended as individually eligible for the National Register under Criterion C for architecture as a well-preserved example of a community pumping station designed in the Prairie style.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** View of some windows obscured by aluminum storms; others are original steel sash
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Entrance pavilion with brick pilasters; stone bases, coping, cornice, banding, and geometric motifs			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Excellent example of a well-preserved community pumping station designed in the Prairie style that still functions in its original use.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

415 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story T-Plan house in the Roseland community is clad with synthetic siding and has a cross-gabled roof covered with asphalt shingles. Its front elevation has a centrally located wood door with a diamond-shaped window located in a projecting gable front bay with concrete steps with metal railings. There are two window openings on the front façade, one of which is covered with plywood. The other window is fixed-pane or casement. Side elevation window openings are also covered with plywood. This house lacks integrity, does not feature any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Fixed-pane or casement; others covered with plywood
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

430 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 10 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad house in the Roseland community is situated on a raised brick basement with glass block windows. It has a hip roof covered with asphalt shingles, an aluminum-clad front gable dormer with a pair of sliding glass windows, and a set-back synthetic-clad gable-roofed addition on the second story. The front elevation has a strip of three one-over-one aluminum-sash windows, a metal storm door, and a recessed corner porch with concrete steps, low brick side walls, and a brick corner pier support. Detailing includes decorative concrete block inserts. This house does not feature distinguishing architectural features, does not retain its integrity, and, therefore, is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and new cladding
Condition: Excellent Good Poor			
Additional Alterations Second story addition at rear			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (dormers)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip, Gable	
Ornamental Architectural Details Concrete block inserts			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

457 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. The front elevation has a strip of three non-original one-over-one windows, a recessed corner porch with a metal storm door and adjacent casement window, wood steps, and low aluminum-clad sidewalls topped by two squat wood columns supporting the porch's gabled roof. Decorative knee braces are situated beneath the eaves of the front elevation. The pair of windows in the gable appears to be casements. This house does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and some windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Brackets under eaves			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

343 W. 105th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story, frame bungalow in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles and a hip dormer with three original wood casement windows. Its front elevation has an off-center door with a metal storm door, non-original wood steps and railings, and a strip of four double-hung windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and railings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

344 W. 105th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a gable dormer with three small casement windows. Its front elevation features a strip of four non-original one-over-one aluminum-sash windows and a recessed corner porch with metal storm door, wood steps and railings, and a corner support consisting of a low faux stone pier topped by a short aluminum-clad post. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

411 W. 105th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

AT&T

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1960/2005

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 25 September 2012

Photos with Captions:
South façade of two, brick, one-story light industrial buildings. The building dating to 1960 is shown in the top photo while the building dating to 2005 is shown in the bottom photo.

Property Description: **Stories:** 1

These one-story brick-clad flat-roofed light industrial buildings in Roseland have overhead garage doors and a hinged hollow metal door opening. The earlier building has a parapet with tile coping. Original window openings along the side elevations have been in-filled with brick or glass blocks with central casement windows. The newer building has a flat roof. These buildings lack any architectural distinction and are not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Bricked over windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

416 W. 105th Street
Alternate: 410 W 105th St

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial (Warehouse, 1938)

Current: Mixed-Use

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story building in the Roseland community, a former warehouse later converted to residential use and now abandoned, has a flat roof and shaped parapet with concrete coping. Its front elevation is clad in brown face brick and its side and rear elevations are clad with common brick. The front elevation has an off-center door opening with transom, a garage door opening, and two window openings, all of which are covered with plywood. A portion of one of these window openings is visible and reveals a multi-paned upper sash. The second floor has a pair of window openings and a strip of three window openings, all of which have had their glass panes removed. Detailing includes concrete sills and insert blocks between the first floor openings, two brick soldier courses, and brick stringcourses at the parapet level. This building does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Abandoned building with broken windows, partially secured with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and insert blocks, brick soldier courses, and brick stringcourses, shaped parapet			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

338 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width, hip-roof, wood porch with low, synthetic-clad walls, boxed supports, and side-facing steps. The residence also has an off-center metal storm door, a three-sided bay window on the first floor, and paired windows in the gable, all of which feature non-original one-over-one aluminum sashes. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story, Craftsman style, frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer with three casement windows. The front elevation has a recessed corner porch with a concrete block corner pier, a front door tucked into the north side of the living room bay, wood steps with wood railings, and a strip of non-original one-over-one aluminum-sash windows. This is an example of a frame Craftsman bungalow, a residential building type that was produced during the 1910s and 1920s. This house does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

343 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1907

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a pent roof, off-center door with a metal storm door, concrete steps with metal railings, a large picture window on the first floor, and a pair of non-original one-over-one aluminum sash windows in the gable. Its east elevation has a three-sided window bay with a projecting gable wall dormer directly above. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch railings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
North façade of a brick and vinyl, one-story, single family residence.

Property Description: **Stories:** 1

This building consists of a central, hipped-roof, brick clad structure on a raised basement that was constructed in 1914. Later, shed-roof, vinyl clad additions were constructed on the front and rear of the central brick portion. The front elevation features an off-center porch with concrete steps, metal railings and supports topped by a metal awning roof. It also has a hollow metal front door and a five-sided bow window. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Additions to front and rear			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (original part), Vinyl (front and rear additions)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip, shed	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

350 W 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
South façade of vinyl-sided, one-and-a-half-story, single-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half story home in the Roseland community is situated on a raised basement, is clad in aluminum siding, and has a front-gabled roof covered with asphalt shingles. Its front elevation features an off-center, gable-roofed porch with wood steps, railings, and posts. It has a front door that appears to be hollow metal, a picture window on the first floor, and paired one-over-one windows on the second floor. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows; new porch
Condition: Excellent Good Poor			
Additional Alterations Fixed-pane picture window replaces original windows			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed- pane, double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 25 September 2012

Photos with Captions:
South façade of one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised basement and clad with stone (first floor) and synthetic siding (dormer). It has a hip roof covered with asphalt shingles and a gable-roofed dormer with three windows that appear to be casements. Its front façade features a recessed porch with concrete steps, metal railings, and a metal corner support; it also has a leaded glass casement window and a strip of four one-over-one windows. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding on dormer
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone, synthetic siding (dormer)	
Roof Material Asphalt	**Roof Features** Gabled dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and two large non-original flat-roofed side elevation dormers with one-over-one aluminum-sash windows. The front elevation has an off-center non-original hollow core metal door, steps obscured by foliage with metal railings, and a strip of three non-original one-over-one aluminum-sash windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Side dormers added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable, flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

346 W. 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows and has a hip roof covered with asphalt shingles. Its front elevation is clad with red brick on one side and buff brick on the other, has an off-center hollow core metal door, concrete steps with metal railings, and a picture window flanked by one-over-one aluminum-sash windows. Detailing includes three decorative glass blocks and concrete inserts flanking the front door. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, concrete inserts at entrance			**Windows** Double-hung, fixed-pane, glass blcok
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of a one story, single-family residence.

Property Description: **Stories:** 1

This one story home in Roseland has a front gable roof with asphalt shingles. Its front façade is clad in both vinyl and faux stone siding; it has a flat-roofed enclosed porch with an off-center entrance covered with plywood. The two first floor window openings are in-filled with wood and the gable features a pair of one-over-one aluminum-sash windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl, faux stone	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, in-filled
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

353 W 106th Street
Alternate: 355 W 106th Street, per Assessor

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of vinyl and stone, one-story single-family residence.

Property Description: **Stories:** 1

This one-story home in Roseland is situated on a raised basement. It has a hip roof with asphalt shingles and a gable-roofed dormer with sliding glass windows. Its front elevation is clad in synthetic stone and features an off-center hollow metal paneled door with fanlight, accessed via a short flight of wood steps with wood railings. Its strip of three windows features a picture window flanked by one-over-one windows. The side elevations are clad in vinyl siding. Alterations include the installation of siding and replacement windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl (sides and rear), Faux stone (façade)	
Roof Material Asphalt	**Roof Features** Gabled dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

332 W. 107th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad house in the Roseland community sits on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a large hip-roofed rear wing. Its projecting gable-roofed front wing has a recessed corner porch with low brick walls, a brick corner pier, concrete steps with metal railings, and a door tucked into the side of the living room bay. Its front elevation features two large picture windows, a glass block window, and a bulls-eye window in the gable. Other windows are non-original double-hung. Detailing includes faux stonework at the corners of the basement, concrete sills, glass blocks, and keystone-like blocks surrounding the bulls-eye window. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stonework at corners, concrete sills, bull's eye window with stone accents			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Detached three car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

333 W. 107th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised brick basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer with a pair of original wood casement windows and decorative rafters. Its roof overhangs to shelter a full-width wood porch with straight railings and posts. The front elevation has an off-center non-original hollow-core metal door and a strip of three non-original one-over-one aluminum-sash windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

346 W. 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows and has a hip roof covered with asphalt shingles. Its front elevation is clad with red brick on one side and buff brick on the other, has an off-center hollow core metal door, concrete steps with metal railings, and a picture window flanked by one-over-one aluminum-sash windows. Detailing includes three decorative glass blocks and concrete inserts flanking the front door. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, concrete inserts at entrance			**Windows** Double-hung, fixed-pane, glass blcok
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

335 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and a shed dormer along its west elevation. It has a full-width, gable-roof, wood porch with low walls and three boxed supports all covered with aluminum siding. The front elevation has an off-center door with a metal storm door, a strip of three windows on the first floor and a pair of windows in the attic, all of which are non-original one-over-one aluminum-sash. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

400 W 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
South façade of a one-story, concrete block, light industrial building.

Property Description: **Stories:** 1

This one-story, concrete block, light industrial building has a flat roof with parapet. Its front elevation has an off-center entrance with a non-original metal core door with surround and transom, a strip of one-over-one windows, and three glass block windows. Detailing includes drip molds above the entrance and windows. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Drip molds above entrance and windows			**Windows** Glass block, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

415 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1920

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
North and east façades of a brick, one story, commercial building.

Property Description: **Stories:** 1

This one-story commercial building in the Roseland community has a flat roof, castellated parapet, a brick panel at the cornice line, and concrete coping. Its front elevation is clad in yellow face brick and has a recessed, off-center hollow core metal door that is non-original. Aluminum siding has replaced this door's original transom and its original storefront has been in-filled with a strip of fixed pane windows with aluminum siding above and below. The north portion of its east elevation is also clad in yellow face brick and has been altered with the insertion of an overhead metal door that is surrounded by aluminum siding. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good <u>Poor</u>			
Additional Alterations Garage door opening inserted on east facade			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (infill)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick panel			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

432 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South façade of a masonry, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home at the northwest corner of 107th Street and Eggleston Avenue in the Roseland community is situated on a raised brick basement. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front elevation is clad with faux stone below the sill line and red brick above. The building has an off-center door behind a metal storm, concrete steps with metal railings, and a picture window flanked by one-over-one aluminum-sash windows. Detailing includes faux stone blocks flanking the front door and two horizontal strips of faux stone, each with a glass block, on the front elevation. The side (Eggleston) elevation is clad in red brick and has two pairs of four-over-one windows. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (below sill)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone panels with glass blocks, stone surround at entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

744 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
South façade of a one-story, single family, brick residence.

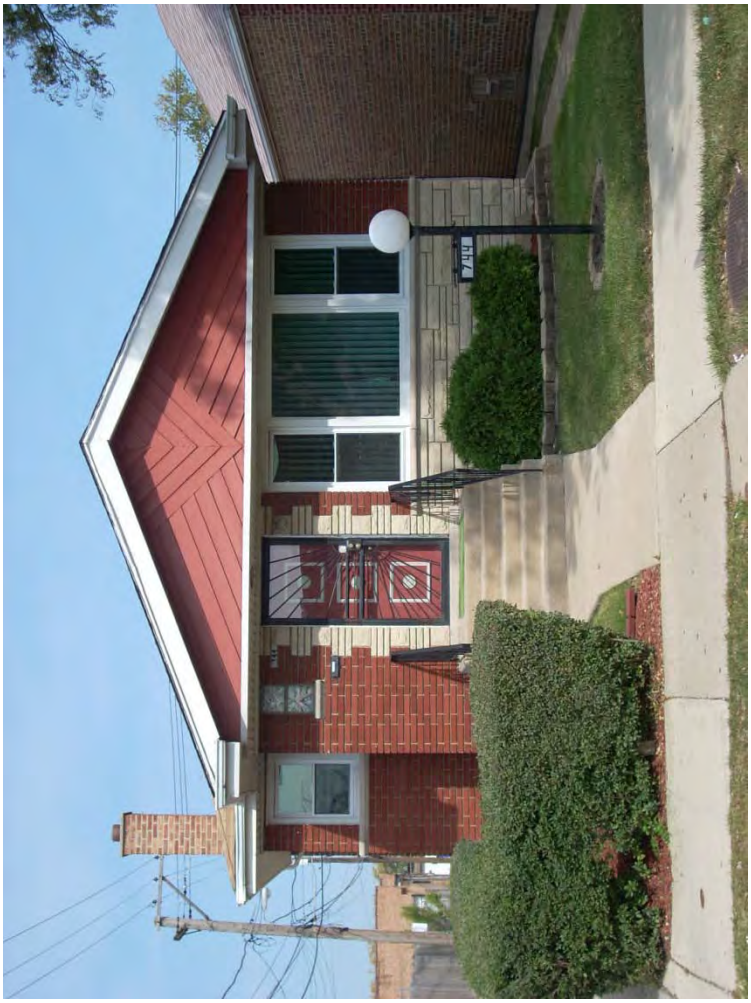

Property Description: **Stories:** 1

This one-story brick-clad house in the Roseland community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a projecting, gable-front pavilion that spans nearly the entire width of the front elevation. The front elevation is clad with orange brick with stone below the sill line and synthetic siding in the gable end. The gabled pavilion has a metal storm door, concrete steps with metal railings, and a non-original picture window flanked by one-over-one aluminum-sash windows. A single one-over-one aluminum-sash window is situated in the recessed corner of the front elevation. Detailing includes decorative faux stones flanking the door and two adjacent glass blocks. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding in gable
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), faux stone (below sill), synthetic (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, stone surround at entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

300 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz (too much foliage), Cook County Assessor (2007)

Date: 17 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This 1.5-story house at the northwest corner of 108th Street and Princeton Avenue in the Roseland community is situated on a raised brick basement and is clad with synthetic siding. The building has a gambrel roof covered with asphalt shingles. Its front (108th Street) elevation has a full-width, hip-roofed, wood porch with frieze band and supports consisting of three brick piers topped by squat wood posts. The building has an off-center door and a single double-hung window on the first floor. A pair of double-hung windows and a small casement window provide light to the attic space. Its Princeton Avenue elevation has a three-sided window bay. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding; possibly some of the windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** gambrel	
Ornamental Architectural Details Frieze band			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

313 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1918

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North and west façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a gable roof covered with asphalt shingles. Its front elevation features an off-center non-original hollow core metal door, concrete steps with metal railings, a three-sided window bay on the first floor, and a pair of windows in the gable. Windows are non-original one-over-one aluminum-sash. The house has a shed-roofed second story addition at the rear of its west elevation and a gable dormer along its east elevation. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, steps, and railing
Condition: Excellent Good Poor			
Additional Alterations Second story shed roof addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South and west façades of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story, frame home in the Roseland community is situated on a raised basement and clad with synthetic siding. It has a hip roof covered with asphalt shingles and a dormer with two one-over-one windows. Its front elevation has a projecting living room bay with replacement one-over-one windows, an off-center hollow metal door, and concrete steps with metal railing. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
North façade of 1 story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is situated on a raised concrete block basement, is clad with aluminum siding, and has a front-gabled roof covered with asphalt shingles. Glass blocks in-fill the window openings in the basement. The front elevation of the residence features an off-center hollow metal door topped by a bracketed gabled hood and concrete steps with metal railings. It also features paired, non-original, sliding glass windows on the first floor and a one-over-one, non-original window in the gable. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, windows, and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed gabled hood			**Windows** Double-hung, sliding, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Roseland Christian School

Common/Current: Roseland Christian School

Property Address:

234 W. 108th Street
Alternate: 314 W 108th St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Roseland Christian School

Property Use

Historic: Education

Current: Education

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a brick, three-story school.

Property Description: **Stories:** 3

This three-story school in the Roseland community is clad in brown face brick. The building has a flat roof, shaped parapet with concrete coping, and corner pavilions. Full height brick pilasters divide the front elevation into a series of bays, each of which contains a strip of three one-over-one windows. The main entrance features a pair of non-original hollow core metal doors topped by a stone sign plate inscribed with the words, “Roseland Christian School.” Detailing includes decorative brick panels in the spandrels, concrete sills and lintels. This school lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Parapet with concrete coping, corner pavilions, brick pilasters, stone sign, brick panels, concrete sills and lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

301 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1905

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and is clad in red brick. The building has a flat roof and parapet. The front elevation has a full-width shed-roofed porch with wood posts and steps but no railings, an off-center door, an adjacent glass block window, and a group of three windows on the first floor. The second floor of the front elevation has a group of three windows and a single window. Nearly all windows are covered with plywood, with the exception of two non-original one-over-one aluminum-sash windows. The east elevation has a full-height window bay pavilion. Detailing includes stone sills, lintels, coping, and cornice. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills, lintels, coping, and cornice			**Windows** Double-hung, glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles, overhanging eaves, and decorative rafters. It has a recessed corner porch with a door tucked into the side, a faux stone corner pier, and wood steps with metal railings sheltered by a flat-roofed metal canopy supported by two wood posts. Its front elevation features a casement window within the recessed porch, a strip of four double-hung wood-sash windows on the first floor, and a strip of three wood casement windows in the attic. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has an off-center door behind a metal storm door, non-original wood steps and railings, and five non-original one-over-one aluminum-sash windows: four on the first floor and one in the gable. Review of the 1938 Sanborn and the assessor's 2007 photograph suggests that while the front and rear porches are original to the house, a second story was added to the residence between 1938 and 2007. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and railings
Condition: Excellent Good Poor			
Additional Alterations Second story added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Sanborn map 4228.

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South façade of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad with synthetic siding. It has a hip roof covered with asphalt shingles and a gabled dormer with two windows that appear to be casements. Its front façade features an off-center door within a recessed porch with concrete steps, metal railings and corner support, and a picture window flanked by double-hung windows. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

350 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South façade of two-story multi-family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community has “cemented” cladding material, which is original per the 1911 Sanborn map. Its front elevation has an enclosed, full-façade, flat-roofed porch with an off-center metal core door, concrete steps and metal railings, and a strip of four windows that appear to be sliding windows. The second floor of the front elevation has four one-over-one windows. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch enclosed
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Cement	
Roof Material None	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Sliding, double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
North and west façades of 1-story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is clad with aluminum siding, has a gambrel roof covered with asphalt shingles, and rests on a concrete block foundation. Its front elevation features an off-center door and porch with concrete steps, metal railings and supports, a metal awning roof, and a strip of three one-over-one windows on the first floor and a one-over-one window above. Window openings in the basement are filled with glass blocks surrounding a central, casement window. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, no in CHRS

Common/Current: Unknown

Property Address:

354 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South and east façades of 1 -story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is clad with synthetic siding, has has a front-gabled roof covered with asphalt shingles, and rests on a concrete block foundation. Its front elevation features an off-center door and porch with concrete steps, metal railings and supports, and metal awning roof. It has a strip of three one-over-one windows on the first floor and a small single-pane window in the gable. Glass blocks with a central casement infill the basement window openings. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows in basement
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: South Shore Iron Works

Common/Current: South Shore Iron Works

Property Address:

404-410 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz (top photo, photo pg. 3), CCA (bottom photo)

Date: 5 September 2012

Photos with Captions:

East façade of industrial, brick and metal storage shed.

South and east façades of industrial, brick and metal storage shed.

Property Description: **Stories:** 1

This one-story, side-gabled, metal shed on the vacated South Shore Iron Works property is partially obscured by foliage. The front elevation is clad in buff brick and contains a series of hollow metal doors, each flanked by three windows to one side; many are covered with plywood. A full width metal canopy is present on the front façade. The gable ends and rear elevation are clad in corrugated sheet metal. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Window openings covered with boards
Condition: Excellent Good Poor			Abandoned, overgrown, and rusting
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (façade), metal (rear)	
Roof Material Metal	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Detail photo of door:

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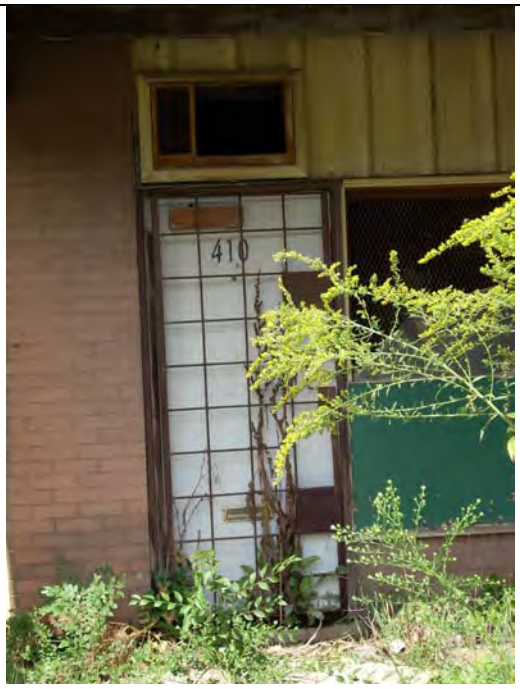

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

407-409 W 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

South Shore Iron Works

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz, Cook County Assessor

Date: 5 September 2012

Photos with Captions:
North and east façades of metal sheds and concrete block building.

Property Description: **Stories:** 2

This property includes a two story, flat-roofed concrete block building associated with South Shore Iron Works, manufacturers of structural steel. The building is difficult to see from the public right-of-way. The first floor has one-over-one windows below a metal awning and the second floor has glass block windows. Portion of the building has had its roof raised, creating more height for the interior workspace. The Cook County Assessor's photo shows large sliding metal doors on the warehouse façade. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Roof height raised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Metal	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Sheet metal storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

743 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1954

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
North façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a front gable roof covered with asphalt shingles. Its front elevation is clad with brown brick and has a synthetic-clad gable, a central metal storm door with metal awning and concrete stoop. The door is flanked on either side by a pair of large windows and a strip of three smaller windows, all of which are non-original one-over-one aluminum-sash. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and gable cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

332 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has an off-center non-original hollow core metal door, a partial width, flat-roofed wood corner porch, and a non-original picture window flanked by double-hung windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, porch rails and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a one-story, single family, stucco residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and is covered with stucco. The building has a gable roof with cornice returns and is covered with asphalt shingles. Its front elevation has a gable-roofed wood porch, an off-center hollow core metal door, a glass block window and a rounded window bay on the first floor, and a pair of windows in the gable end, all of which are one-over-one vinyl-sash. The east elevation has a rounded window bay and gable wall dormer. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

347 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1892

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center hollow core metal door with partial-width, gable-roofed, wood porch. There is a strip of three one-over-one wood-sash windows on the first floor and a pair of two-over-two wood-sash windows in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

301 W. 110th Street
Alternate: 11010 S Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a gable roof covered with asphalt shingles. Both side elevations have wide shed dormers, each of which features three non-original one-over-one aluminum-sash windows. The front elevation has a group of three windows on both the first and second floors, all of which are non-original one-over-one aluminum-sash with the exception of the central window on the first floor. The front door is situated along the west elevation, which has wood steps and railings. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations Dormers may be a later addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed pane, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

331 W. 110th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a pent roof, off-center door, wood steps with wood railings, and single windows on the first floor and in the attic, both of which are non-original one-over-one aluminum-sash. The east elevation has a three-sided window bay with a gable wall dormer above. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 110th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a 1.5- story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a gable roof with cornice returns and is covered with asphalt shingles. The front elevation has a pent roof with scalloped trim, an off-center door, and wood steps with wood railings. There is a group of windows on the first floor (fixed-pane flanked by four-over-four), and a pair of non-original four-over-four windows in the gable end. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns, scalloped trim			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

Two W. 111th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Apartment building

Current: Apartment building

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a brick, three-story apartment building.

Detail of stone surround on east façade.

Property Description: **Stories:** 3

This three-story apartment building at the northwest corner of 111th Place and State Street in the Roseland community is situated on a raised basement and is clad with brown face brick on its two street elevations. The building has a flat roof and a shaped parapet above the three-story enclosed full-height sun porch pavilion along its south (111th Place) elevation. Each floor on this elevation has a window group comprising a picture window flanked by one-over-one windows. The front (State Street) elevation has a hollow core metal door with a stone surround; each floor has a series of single one-over-one aluminum-sash windows. The door and windows are non-original. Detailing includes concrete sills, sill courses, insert blocks, and coping. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills, sill courses, coping, insert blocks, stone door surround			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

3 W. 111th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1934

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman, Gothic Revival wing

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012, 8 March 2013

Photos with Captions:
East façade of a brick, two-story, single family residence (above) and one-story wing (below).

Property Description: **Stories:** 2

This Craftsman house at the southwest corner of 111th Place and State Street in the Roseland community sits on a raised basement and is clad with brown face brick. The building has a hip roof covered with asphalt shingles, overhanging eaves with knee braces, and a hip dormer along the 111th Place elevation. The main block of the house has two additions: a one-story Gothic Revival style east wing with a flat roof and battlemented parapet and a one-story hipped-roof sun porch to the west that is surrounded by double-hung windows. Both wings are also clad in brown face brick. The home's front elevation (111th Place) has a centrally-located single-light wood door with sidelights, brick piers, concrete steps with low brick sidewalls, and a flat-roofed wood canopy. The front entrance is flanked on either side by a group of three windows: a picture window flanked by double-hung windows. The second floor of the front elevation features a series of double-hung windows. The front elevation of the Gothic Revival style wing has an off-center metal storm door with slit windows on either side, as well as a picture window flanked by double-hung windows. The door and window group have stone quoins and drip molding. Detailing also includes stone insert blocks.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

residence is recommended as individually eligible for National Register listing under Criterion B due to its association with Reverend Harry J. Hager (1899-1983), a pioneer in media evangelism in Chicago during the mid-twentieth-century. Rev. Hager served as pastor of the adjacent Bethany Reformed Church for 44 years (1929-1975). He was a pioneer in the emerging media ministry, beginning in 1933 with the weekly Bethany Bible Broadcast on the FM station WHIP. Starting in 1944, Rev. Hager's preaching reached a national audience when Chicago's high-powered AM station WCFL began broadcasting his Sunday evening services across America.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions**
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip		
Ornamental Architectural Details Knee braces, battlemented parapet; stone quoins, inserts, and drip molding				**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Associated with Rev. Harry J. Hager, a pioneer in media evangelism in Chicago during the Mid-Century.

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

340 W. 111th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a flat roof and parapet. Its front elevation has a full-width hipped-roof wood porch with square wood posts and a straight railing balustrade. The porch sits atop piers of rusticated concrete block. The porch also features an off-center door with a metal storm door. There are two slightly rounded window bays—one on the first floor and one on the second—and an additional single window on the second floor. Windows are non-original one-over-one aluminum sash. Detailing includes an aluminum-covered cornice. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails, posts, and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Cornice			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

344 W 111th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South and east façades of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is situated on a raised basement, is clad with synthetic siding, and has a gambrel roof covered with asphalt shingles with wall dormers. Its front elevation features a non-original, flat-roofed, full-façade wood porch with straight railings and posts. The home also features an off-center door, a three-sided window bay on the first floor, and paired casement windows on the second floor. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, siding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt Shingles	**Roof Features** Dormers	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

303 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North and west façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding and wood shingles. The building has a side hip-on-gable roof, overhanging eaves. There are decorative wood brackets and a hip-on-gable dormer with bracketed, overhanging eaves. There are three double-hung wood-sash windows with aluminum storms in the gable. Asphalt shingles clad the roof and the dormer. The roof has a wide overhang that serves as the roof for a full-width wood porch that has faux stone piers and wood railings, but no steps. The front elevation has a centrally located door that appears to be oak with a glass pane, which is flanked by three windows on either side, all of which are double-hung wood-sash with aluminum storms. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Aluminum storms added, replacement siding on lower level
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (lower), Wood shingles (upper), Asphalt shingles (dormer)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side hip-on-gable	
Ornamental Architectural Details Bracketed eaves			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

316 W. 111th St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles and overhanging eaves. Its front elevation has an off-center entrance with metal storm door and concrete steps with metal railing. Sidelights and a window group on the first floor are covered with plywood. There are five double-hung windows on the second floor, arranged in a pair and in a group of three. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding, steps and railing
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: St. Mary Church of Prayer

Property Address:

339-341 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

St. Mary Church of Prayer

Property Use

Historic: Commercial (Tin Shop, 1938)

Current: Mixed-Use

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story former commercial building (now a storefront church) in the Roseland community is clad with painted brick and has a flat roof and a stepped parapet. The first floor of the front elevation has two storefronts with strips of single-pane windows and non-original doors with transoms. The second floor has two groups of picture windows flanked by one-over-one windows and two pairs of one-over-one aluminum-sash windows. Detailing includes concrete coping and sills, a brick stringcourse, and a brick panel along the cornice line. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and coping, brick stringcourse, brick panel			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1917

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South façade of two-flat greystone residential building.

Property Description: **Stories:** 2

This two-flat greystone residential building in the Roseland community has a flat roof and parapet. Its front elevation features a full-height window bay pavilion with fenestration comprised of one-over-one replacement windows. It has an off-center porch with two entrances that feature non-original wood doors, stone steps, metal and stone railings, and wood columns supporting a flat wood roof with dentil molding. Detailing includes a stone sill courses, lintels, beltcourses, and cornice.

The City of Chicago has recognized this building type through its Historic Greystone Initiative, which promotes the preservation of Chicago's ornate, limestone-clad homes by offering technical assistance and financial resources to property owners. Although this is an example of the greystone residential building type, it does not possess sufficient distinguishing architectural characteristics to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details Stone sill courses, lintels, beltcourses, cornice, and railings			**Windows** Double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

401 W 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Roseland Tune-Up Center

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South and east façades of one-story, brick garage.

Property Description: **Stories:** 1

This one-story, brick-clad garage in the Roseland neighborhood has a flat roof and a front elevation that features three garage door openings with metal overhead doors. The fourth bay features an off-center plate glass door with transom in-filled with wood and flanking single-pane windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Transom in-filled with wood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

428 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is clad with buff brick on its front elevation and common brick on its side and rear elevations. The building has a raised basement and a hip roof covered with asphalt shingles. Its front elevation has a projecting three-sided living room bay with a picture window flanked by one-over-one aluminum-sash windows, an off-center entrance with a metal storm door, and concrete steps with metal railings. The gable's cladding material has been removed. Detailing includes two decorative glass blocks adjacent to the front door. It does not display distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows; cladding removed from the gable
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

256 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of single-family, 1.5-story, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles and a small dormer. The front elevation has a centrally located, partial-width, hipped-roof porch with scallop detailing at the roofline, an aluminum-clad base, straight wood posts and railings (non-original), and steps on the side. It has a centrally located entrance with a metal storm door flanked by a window on either side and has a single window in the gable. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows, cladding, and porch rails and posts
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Scallop detailing on porch roofline			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

303 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, brick residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house at the southwest corner of 112th Place and Princeton Avenue is situated on a raised concrete block basement with glass block windows and is clad with light brown face brick. The building has a front gable roof covered with asphalt shingles. Its front elevation has a partial-width, flat-roofed porch with wood steps and open metal railings, an off-center door with transom, and a three sided bay window on the first floor. The upper floor of the front elevation has a pair of windows and two single windows. Windows are non-original one-over-one aluminum-sash. The home's east elevation has a three-sided, full-height window bay pavilion and its west elevation has a gable wall dormer. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Two garages			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

312 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single-family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S .Katz

Date: 16 September 2012

Photos with Captions:
South and east façades of single story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with casement windows. The building has original wood clapboard siding and a cross-gambrel roof with asphalt shingles. The roof extends forward to serve as the roof over the full-façade wood porch with supports consisting of faux stone piers topped by wood columns. The front elevation has an off-center wood door and a window covered with plywood on the first floor. There are two one-over-one windows on the second floor. Above the basement, windows are one-over-one, some with aluminum storms. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some windows have aluminum storms
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

319 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, multi-family home in the Roseland community is situated on a raised concrete block basement with a glass block window. It is clad with synthetic siding and has a gambrel roof with cornice returns, covered with asphalt shingles. Its full-width hip-roof wood porch has cast concrete pier supports. The first floor has two doors and a three-sided bay with non-original one-over-one windows. The second floor has four one-over-one windows and the attic level has a pair of single-pane windows that may be casements. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations Conversion from single family to multi-family residence after 1939 (Sanborn)			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

325 W 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised basement with glass block windows. It is clad with aluminum siding and has a gable roof covered with asphalt shingles. The front elevation has a partial-width hip roof concrete porch with metal railings and open metal supports. An off-center door with transom and a three-sided bay comprised of non-original one-over-one windows are also included on the front elevation. A single one-over-one window is situated in the gable. This building does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

328 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and clad with aluminum siding above. It has a hip roof covered with asphalt shingles and a hip dormer with three, single-pane, casement windows. Glass block windows provide light for the basement. The front elevation has an off-center hollow metal panel door with sidelights, wood steps and railings, and four one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Hipped dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, fixed-pane, glass block
Outbuildings (*Number and Description*)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

339 W. 112th Place
Alternate: 341 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1908/post 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a brick, two-story industrial building.

Property Description: **Stories:** 2

This two-story, brick-clad, light industrial building in the Roseland community has a flat roof, parapet with coping, and a T-shaped footprint. The front segment of the building was a one-story building erected in 1908. Sometime after 1939, a second story and a rear wing were added. The original segment has an off-center door and the outline of three former window openings (with brick arched lintels and stone sills) that have been in-filled with brick. The second floor and the rear wing have glass block window openings with small ventilating louvers. This building lacks integrity and distinguishing architectural features; it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Windows in-filled with brick (front segment)
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Addition to rear and second story added after 1939			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick arched lintels			**Windows** Glass-block with central casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

Ten E. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This vacant, two-story house in the Roseland community is situated on a raised concrete block basement with glass block windows. The building has a front gable roof covered with asphalt shingles. Its front elevation is largely faced with faux brick over original wood clapboard siding, which is visible near the apex of the gable. Other portions are also clad in clapboard siding. The front elevation features a three-sided window bay on the first floor; window openings are covered with plywood. Two non-original one-over-one windows are present on the second floor. This elevation also has a non-original front door with a shed-roofed canopy that is situated in a recessed, side-gabled, full-height pavilion. The front door is accessed via concrete steps with metal railings. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding, windows, door, and rails
Condition: Excellent Good Poor			
Additional Alterations Hoods over second story windows removed.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding over wood clapboards	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

20 E. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Classic Cuts Beauty & Barber Shop Salon

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a brick, three-story mixed-use, building.

Property Description: **Stories:** 3

This three-story commercial building in the Roseland community is clad with face brick on its front elevation and common brick along its side and rear elevations. The building has a flat roof and a parapet that is rounded at the center. The front elevation has a non-original storefront comprised of a metal storm door flanked by paired one-over-one windows, as well as an off-center hollow core metal door with a transom that provides access to the upper floors. The second and third floors each feature five non-original one-over-one aluminum sash windows, arranged on each floor in a group of three and in pairs. Detailing includes concrete sills, belt courses, and decorative insert blocks at the parapet level. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills, belt courses, insert blocks, and coping			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

303 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip-on-gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, half of which is enclosed, covered with synthetic siding, and surrounded by non-original multi-paned aluminum-sash windows with some original wood-sash windows. The open corner of the porch has a wood post, wood steps and railings (non-original), and an entrance with a metal storm door that is surrounded by faux stone siding. The hip-gable area has a strip of three double-hung windows. Both side elevations have shed-roofed wall dormers. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Detached two-car garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

334 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1912

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, half of which has been enclosed with synthetic siding and is surrounded by non-original multi-paned aluminum-sash windows. The open corner of the porch has a wood post, wood steps and railings (non-original), and an entrance with a metal storm door. There is a pair of non-original one-over-one aluminum-sash windows in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch posts, rails, and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current:N/A Historic: N/A		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat apartment building is situated on a raised basement and has a hip roof covered with asphalt shingles. Its front façade is clad in buff brick and has an off-center metal door, a vertical strip of decorative glass blocks above the porch hood, and six window openings: two each in the basement, first, and second floors. All window openings are covered with metal panels. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Opening covered with metal panels
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Contrasting colored brick panels			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

410 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story brick bungalow in the Roseland community is situated on a raised basement with glass block windows and is clad with brown face brick. The building has a hip roof covered with asphalt shingles, a hip dormer with two windows on its front elevation, and a shed dormer with three windows on its west elevation. Both dormers are covered with synthetic siding. The front elevation has a strip of five windows. Windows throughout the house are non-original one-over-one aluminum-sash of varying sizes with the exception of a casement window along the east elevation. The main entrance is situated along the east elevation and consists of a hollow core metal door topped by a bracketed wood gabled hood. Detailing includes brick corner pilasters, concrete sills, and decorative square insert blocks. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations Shed dormer is a later addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (shed dormer)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Bracketed hood, brick corner pilasters, concrete sills and insert blocks			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

139 W. 113th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of two-story, brick, four-flat residence.

Property Description: **Stories:** 2

This two-story four-flat apartment building in the Roseland community has a flat roof and castellated parapet with concrete coping. The front elevation is clad with brown face brick, has two full-height enclosed sun porch pavilions, and a centrally located entrance with sidelights that have been boarded over. The first floor windows have been covered with plywood. Second floor fenestration features two strips of three-over-one wood-sash windows. An additional three-over-one wood-sash window is situated above the entrance. Detailing includes brick soldier courses with stone coping and insert blocks. This building lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone coping and insert blocks, brick soldier courses			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

228 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single-family residence

Current: Single family residence

Date of Construction: 1890

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a gambrel roof covered with asphalt shingles that overhangs the side elevations. The front elevation has a gable-roofed full-width porch, most of which is enclosed and covered with synthetic siding. Windows on all three sides of the house are covered with plywood. The off-center door is also covered with plywood and accessed via concrete steps with metal railings. There is a synthetic-clad addition on the rear elevation. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations Porch enclosed, rear addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

235 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1905

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house at the southwest corner of 113th Street and Yale Avenue in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, most of which is enclosed with synthetic siding and surrounded on all three sides by one-over-one aluminum-sash windows. The off-center entrance with metal storm door is set within the open corner of the porch. The open part of the porch has a non-original wood support, steps and railings. A pair of windows is situated in the gable. Windows throughout the house are non-original one-over-one aluminum sash. The east elevation has a first floor window bay and both shed and gable wall dormers. The west elevation has a shed wall dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

303 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement and clad with wood siding. It has a hip roof covered with asphalt shingles and gable dormers. It has a full-width, hip-roof, wood porch with metal railings, an unadorned frieze band, and supports consisting of two faux stone corner piers and one low faux stone pedestal topped by a square wood pier. Its front façade has an off-center door and a strip of three non-original double-hung windows. Both the front and side dormers each feature a strip of three windows, although those on the front façade dormer are covered with plywood. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, some in-filled with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood	
Roof Material Asphalt	**Roof Features** Gable dormers	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

307 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1917

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This multi-family residential building in the Roseland community is clad with synthetic siding and has a flat roof and parapet. Its front façade has an off-center door with a sidelight in-filled with plywood. It has strips of three, non-original, single-pane windows on the first and second floors that appear to be casements and a single one-over-one window on the second floor, directly above the entrance. Doric columns support the hip roof of the porch. The wood rails and steps do not appear to be original. A plain wood cornice is situated directly above the second floor windows. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, cladding, and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

309 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is clad with synthetic siding. It has a hip-on-gable roof covered with asphalt shingles and side elevations with gable wall dormers. It has a full-width, gabled-roof wood porch with supports consisting of wood posts atop faux stone pedestals. The front elevation has an off-center non-original, hollow core, paneled, metal door with fanlight. There are a pair of non-original one-over-one windows on the first floor and three non-original one-over-one windows on the second floor, including two that are paired. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hipped gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

310 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of 1.5 -story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one and a half-story house in the Roseland community is clad with synthetic siding and has a cross-gabled roof covered with asphalt shingles. It has a full-width, gable-roofed, wood porch with supports consisting of low faux stone pedestals topped by square wood piers. The front elevation also features an off-center hollow core paneled metal door with fanlight, two window openings on the first floor and paired windows on the second floor. All front elevation window openings have been covered with plywood. This home is in deteriorated condition, lacks integrity, and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding, windows covered with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-Gable	
Ornamental Architectural Details None			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

312 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and has a hip roof covered with asphalt shingles and a front overhang. Its front elevation is clad in buff brick, has an off-center door with concrete steps and metal railings, and features a picture window flanked by one-over-one windows. Glass block windows provide light to the basement. Contrasting orange-colored brick trims the entrance. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

316 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement, has a front gable roof covered with asphalt shingles, and a front overhang. Its front elevation is clad in buff brick below the sill line and orange brick above. It has an off-center door with concrete steps and metal railings and a picture window flanked by one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

320 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and has a hip roof covered with asphalt shingles and a front overhang. Its front elevation is clad with orange face brick, has an off-center door with concrete steps and metal railings, and a picture window flanked by one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

337 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1910

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and east façades of 1.5-story, frame, single-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a gable roof covered with asphalt shingles. The front elevation has a hip-roof, full-width porch with faux stone piers topped by squat squared wood column supports, wood steps and straight wood railings. It also has an off-center entrance with a metal storm door, a strip of three windows on the first floor, and two windows on the second. Windows throughout the house are non-original one-over-one aluminum-sash. The east elevation has a three-sided bay window on the first floor with a gable wall dormer above. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial (Sanborn, 1939)

Current: Multi-family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, two-story, multi-family residence (above), outbuilding (garage) below.

Property Description: **Stories:** 2

This two-story residential building in the Roseland community has a flat roof and crenellated parapet with concrete coping. Its front elevation is clad in brown face brick and its side elevations are clad in common brick. The front elevation features two hollow core metal doors, the outline of a former storefront that has been in-filled with faux stone and two glass block windows, and six three-over-one wood-sash windows on the second floor. The original off-center entrance that provides access to the second floor apartment has a transom that is in-filled with faux stone. Detailing includes a concrete sill course, inset brick panels, and a parapet that features small decorative concrete insert blocks and a centrally located stone panel with shield. This building lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, storefront windows in-filled, transom in-filled
Condition: Excellent Good Poor			
Additional Alterations None			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sill course, insert blocks and stone panel with shield on parapet			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) One-story brick garage with parapet (tile coping)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

345 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1911

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and west façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a hip-roof full-width porch with faux stone piers beneath the wood deck, squared wood column supports, wood steps, and straight wood railings. There is an off-center non-original hollow core metal door, a strip of three windows on the first floor, and two windows on the second. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, porch rails and supports
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

41 W. 114th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles and a second story rear shed-roof addition. It has a full-width, gable-roof sun porch, half of which is enclosed and has three non-original one-over-one aluminum-sash windows on the front elevation. The open half of the porch is accessed via concrete steps with metal railings. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations Shed roof addition to rear of building.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

62 W. 114th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction:

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This vacant one-story, frame bungalow in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a recessed wood corner porch with a faux stone corner pier topped by a squat, squared wood column. the door and first floor windows are covered with plywood. There are two original wood casement windows in the attic. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns			**Windows** Casement, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

131 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement, is clad in synthetic siding, and has a side gable roof covered with asphalt shingles. The peaks of the side gables are clad in wood board-and-batten. The front façade of the home has a projecting gabled entrance vestibule with a small casement window, concrete steps with metal railings, and a larger window opening that is partially obscured by a low metal awning. Non-original double-hung windows are used elsewhere. Scalloped verge boards frame the projecting gable. A rear, dormer addition is visible from the street. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations Rear dormer addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

135 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Now Faith Church of God Holiness

Property Use

Historic: Industrial

Current: Religious

Date of Construction: circa 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of one-story religious building.

Property Description: **Stories:** 1

This one-story, brick-clad, former industrial building in the Roseland community has a flat roof and a stepped parapet with tile coping. The front façade displays the outline of a former overhead door opening that has been in-filled with brick. One of the side elevations features three metal core doors that provide access to the Now Faith of God Holiness Church, the building's current occupant. Decorative details include brick stringcourses. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Brick in-fills old service garage entrance
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stepped parapet with tile coping, brick stringcourses.			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

138 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof wood porch with non-original straight posts and railings, an off-center entrance with a metal storm door, and two non-original one-over-one aluminum-sash windows. A small ventilating louver is situated in the attic gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails and posts
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

235 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house at the southwest corner of 114th Street and Yale Avenue in the Roseland community is situated on a raised brick basement and is clad with yellow face brick along its street elevations. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front elevation has a picture window flanked by one-over-one aluminum-sash windows and an off-center door. This elevation also has a partial-width porch with open metal posts covered by the wide roof overhang, concrete steps, and metal railings. Detailing includes stones flanking the front door and decorative glass blocks on both street elevations. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, stone flanking entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

324 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1907

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South and west façades of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with casement windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. Its front elevation has two off-center doors and a partial-width shed-roof porch with wood steps, metal railings and open metal supports. It also has a three-sided bay window on the first floor and a pair of windows in the gable. Windows are non-original one-over-one aluminum-sash. The central window of the bay features a transom. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from single family to multi-family after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable roof	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane (transom), casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

One W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1907

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Queen Anne

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story Queen Anne style commercial building at the southwest corner of 115th and State streets in the West Pullman community is clad with brick and has a flat roof and parapet. The first floor of both street elevations has been drastically altered by the removal of the corner storefront and the infill of virtually all door, window, and round-arch transom openings with brick. The first floor of the front (115th Street) elevation currently features a single, non-original, off-center hollow core metal door. The first floor of the State Street elevation has a centrally-located non-original hollow core metal door and a single non-original one-over-one aluminum-sash window. The second floor, however, retains its original metal corner turret with conical roof and a three-sided metal window bay on the State Street elevation. Both bays have rectangular panels at their bases and dentil molding, and the turret features decorative pilasters. However, the windows in both the bay and turret are non-original. The second floor of the 115th street elevation has a non-original glass block window and an aluminum-sash window, both of which have stone sills and lintels. The second floor of the State Street elevation has a series of non-original one-over-one aluminum-sash windows with rounded transoms that have been in-filled with brick. This building lacks integrity and is not

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

individually eligible for listing on the National Register.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Replacement windows, storefronts, openings in-filled
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Metal turret with conical roof and pilasters, metal bays with panels and dentil molding, stone lintels and sills, cornice				**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

8 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a greystone, two-flat residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and is clad with rusticated limestone on its front elevation and common brick along its side and rear elevations. The building has a flat roof and parapet. Its front elevation has a full-height three-sided window bay pavilion, a partial-width stone porch with Corinthian columns and balustrade, and an off-center entrance with metal storm door. There is a secondary entrance to the lower level. The first floor window bay has a non-original central fixed-pane window with multiple lights and flanking nine-over-one windows. The second floor of the front elevation has four non-original one-over-one aluminum-sash windows—three on the bay and one above the entrance. Casement windows provide light to the basement. Detailing includes smooth stone sill courses, belt courses, and a cornice with dentil molding.

This is an example of a greystone, a building type that the City of Chicago has recognized through its Historic Greystone Initiative. However, there are thousands of greystone residential buildings in Chicago and this particular example does not stand out among the city's stock of this residential building type. As a result, it does not qualify as

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

individually eligible for listing on the National Register.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Replacement windows & door
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone (façade), Brick (sides and rear)		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Corinthian columns and stone balustrade, stone sill courses, belt courses, and cornice with dentils				**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

17 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat

Date of Construction: 1897

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North and east façades of two-flat greystone residence.

Property Description: **Stories:** 2

This two-flat residential building in the West Pullman community is situated on a raised basement and has a front façade clad with limestone; common brick cover both the sides and rear. The building has a full-height three-sided window bay pavilion, flat roof, and a shaped parapet with a pediment above the bay. Its off-center, flat-roofed porch has concrete steps, metal railings, Doric columns, and a non-original metal door with transom. Windows are non-original one-over-one and those on the second floor feature transoms. Detailing includes continuous banding in rusticated limestone and a metal cornice.

This is an example of a greystone, a popular historic residential building type that the City of Chicago has recognized through its Historic Greystone Initiative, which offers technical assistance and financial resources to property owners to encourage their preservation. This building does not possess sufficient distinguishing architectural characteristics to qualify for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone (façade), Brick (sides and rear)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Metal cornice, stone banding, Doric columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

23 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is clad with synthetic siding, has a limestone foundation, and has a gable front roof crossed by hip-on-gable sides. The front elevation has a full-width hip roof porch, a portion of which is enclosed. A shed roof dormer is visible on a side elevation. The open portion of the porch has wood steps and railings, a wood post, and a door opening covered with plywood. Windows are one-over-one aluminum-sash, some of which are covered with plywood. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows, enclosed porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable/Hipped gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

35 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Donald's Auto Repairs

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1936

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, sheet metal and brick clad, commercial building.

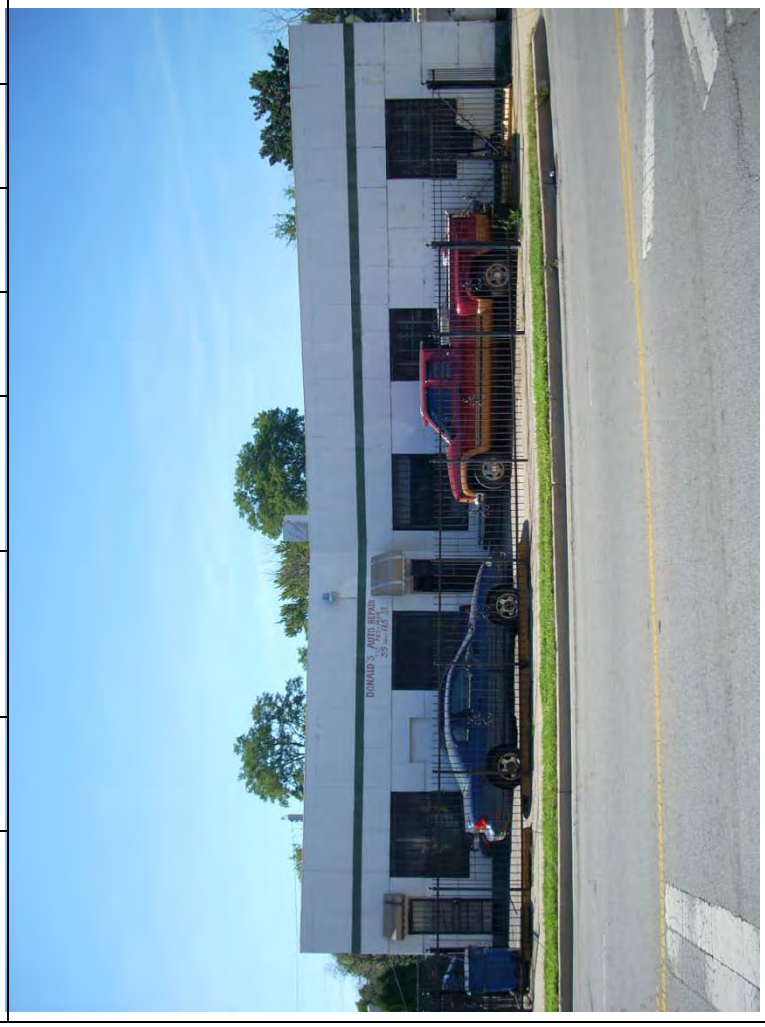

Property Description: **Stories:** 1

This one-story auto repair building at the corner of 115th Street and Lafayette Avenue in the West Pullman community has a flat roof and a V-shaped footprint. Its street elevations are clad with white sheet metal and its rear elevations are clad in common brick. Overhead metal garage doors are situated on either end of the building while the bent front elevation along 115th Street features two metal doors and a series of fixed-pane steel sash windows. Windows along the rear of the building are covered with corrugated metal. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors; rear windows covered
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Metal (front and sides), Brick (rear)	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: None

Property Address:

40 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Multi-family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions

South façade of two-story, multi-family, frame residence (former commercial building).

Property Description: **Stories:** 2

This two-story residential building in the Roseland community has a flat roof and parapet. Its front façade is mostly clad in synthetic faux stone siding with contrasting colors around the doors and windows. The lowest portion of the façade is covered in stucco; the upper portion is clad in synthetic siding. The front elevation has two hollow metal core doors, Chicago-style windows on the first and second floors, and a single one-over-one window on the second floor. A pent roof is situated above the second floor windows and a bracketed wood cornice is situated at the parapet level. This building lacks integrity, does not have sufficient distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from commercial building to residential use			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone, stucco	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

42 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
South and west façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement with glass block windows. The home is clad with synthetic siding and has a front gable roof covered with asphalt shingles. It has a full-width hip-roof wood porch with wood slat railings, and supports consisting of three concrete block piers topped by open metal posts. Its front façade has an off-center door with transom, a picture window flanked by one-over-one windows, and a single-pane window in the dormer. This home lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** New porch columns & rails, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

112 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of one-story, brick industrial building.

Property Description: **Stories:** 1

This one-story industrial building in the Roseland community has a flat roof and stepped parapet. Its front elevation is clad with red face brick and has a concrete water table, a wide overhead metal garage door, entrance that has been replaced with a non-original hollow core metal door and plywood, and a window opening that has been covered with plywood and replacement windows. Detailing in cream-colored terra cotta includes coping and geometric panels on either end of the parapet that feature foliate motifs. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and garage door; openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stepped parapet with terra-cotta coping and decorative panels.			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

116 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, multi-family residential building in the Roseland community is clad with synthetic siding, is situated on a raised limestone foundation, and has a flat roof with an overhanging eave. Its front elevation features a non-original, partial width wood porch with metal railings, open metal supports, and a metal awning roof. It has a full-height three-sided pavilion with non-original one-over-one windows and a single, non-original, one-over-one window on the second floor directly above the entrance. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: N A Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

120 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-half-story home in the Roseland community is situated on a raised brick basement, clad with synthetic siding, and has a gable roof covered with asphalt shingles. The front façade has a partial-width flat-roofed porch with non-original metal railings open metal supports and an off-center door. Windows are non-original one-over-one: there is a three-sided bay on the first floor and are two additional windows centered on the second floor. One of the side elevations has a three-sided bay window and gable wall dormer above. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

143 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1911

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with a wall dormer on the side elevation. The house has a two-story hip-roof front addition. The front elevation has an off-center recessed entrance with a metal storm door, a non-original picture window flanked by one-over-one aluminum-sash windows on the first floor, and a single non-original one-over-one aluminum-sash window on the second floor addition. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Addition to front of building			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

738 W. 116th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame bungalow in the West Pullman community has a hip roof covered with asphalt shingles, overhanging eaves with exposed rafters, and a hip dormer with a single-pane window. Its front elevation is clad with a stone veneer and has six non-original one-over-one aluminum-sash windows, arranged in two groups of three. Synthetic siding clads the sides and rear of the building. The front door is located along one of the side elevations. This home lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone (façade), Synthetic siding (sides and rear)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

8 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement that features multi-pane casement windows. It is clad with brick painted white and has a gable roof covered with asphalt shingles. It front elevation features a full-width, hip roof, wood porch with concrete steps, metal railings, and brick pier supports. It has an off-center door and one-over-one windows with aluminum storms: a strip of three on the first floor and one in the gable. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Aluminum storms
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has cornice returns and a cross-gable roof covered with asphalt shingles. It front elevation features a full-width, flat roof, wood porch with non-original slat railing, thin wood posts, and an off-center door. There is a three-sided bay with one-over-one double-hung windows on the first floor and a strip of three single-pane windows on the second floor that may be sliding glass. This house lacks sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

16 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1902

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

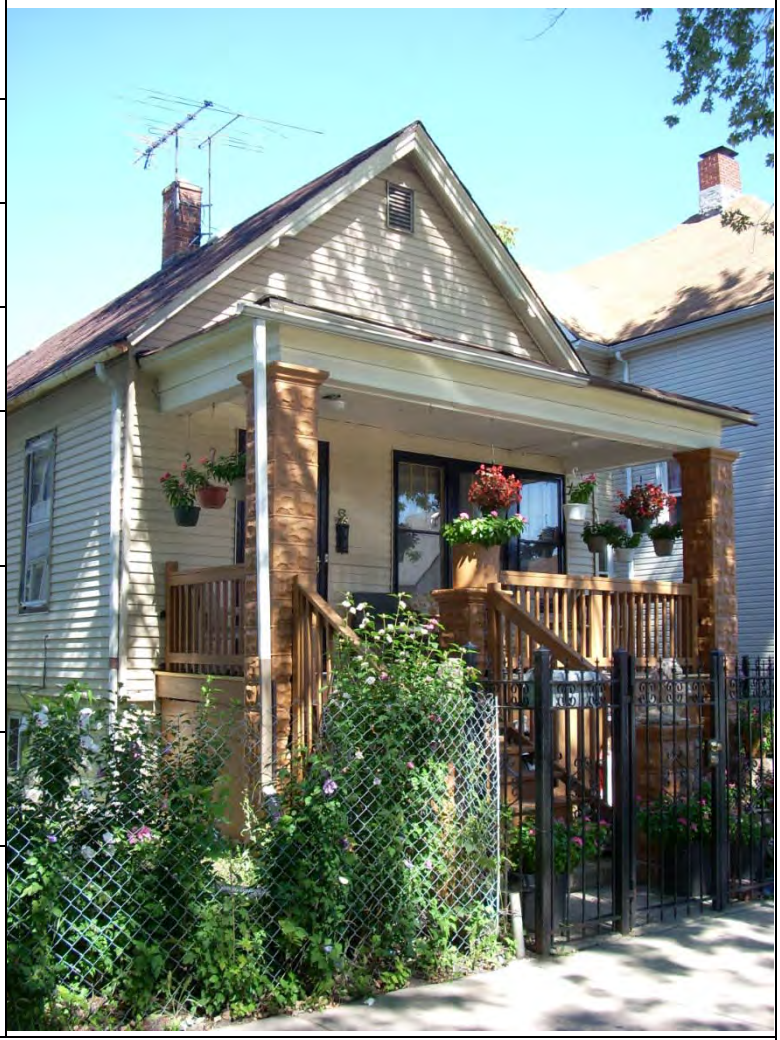

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip roof, wood porch with faux stone pier supports and replacement wood railing. The front also has an off-center front door and a strip of three one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, new porch rails, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage behind residence			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

20 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Queen Anne

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of two-story, single-family, frame residence.

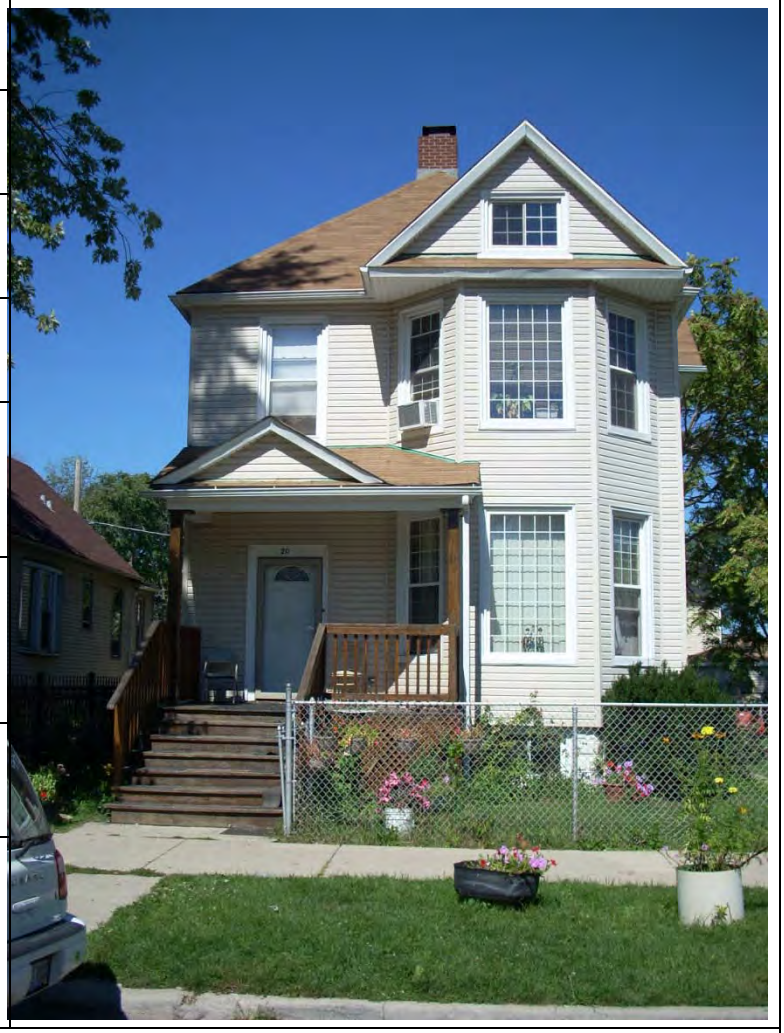

Property Description: **Stories:** 2

This two-story Queen Anne style house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, has full-height window bay pavilions with pediment and gable dormers on its front elevation and side elevations, and has a hip roof covered with asphalt shingles. The front elevation has a shed-roofed partial-width wood porch with pediment and metal hollow core paneled door. Fenestration is non-original on the front elevation bays and features fixed-pane windows with multiple lights, multi-paned double-hung windows, and a single one-over-one window on the second floor, directly above the porch. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Pediments at gables			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

32 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Garage

Current: Garage

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story brick garage.

Property Description: **Stories:** 1

This one-story, four-car garage building in the West Pullman community is clad in common brick and features two pairs of hinged metal garage doors with a continuous wooden lintel along its front elevation. A side (alley) elevation displays the outlines of dormer door openings that have been in-filled with brick as well as a hinged metal garage door. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows in-filled, metal doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

36 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1918

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of brick, two-flat residence.

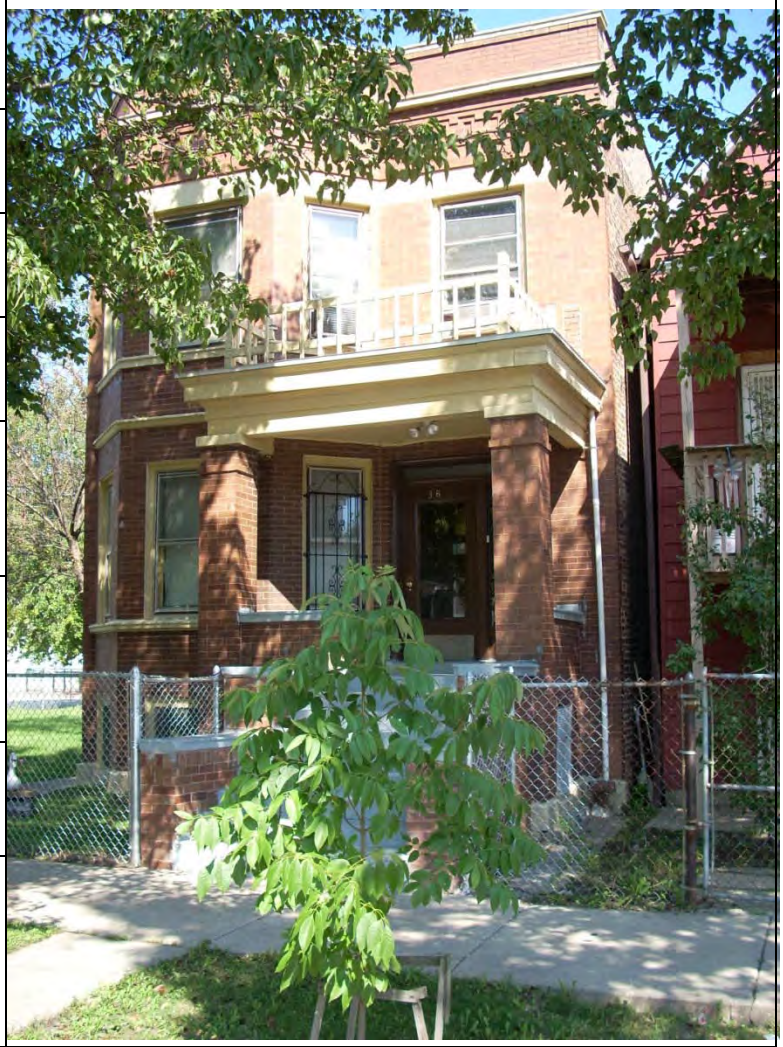

Property Description: **Stories:** 2

This two-flat residential building in the West Pullman community is situated on a raised basement and has a front façade clad with orange face brick. It has a full-height three-sided window bay pavilion, flat roof, and parapet. Its off-center flat-roofed porch has concrete steps, brick piers, and a single-light oak door with sidelight. Fenestration is comprised of one-over-one windows. Detailing includes stone sill courses, beltcourse, a cornice, as well as decorative brickwork on the parapet. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sill courses, beltcourse, cornice, decorative brickwork on cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

38 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South and east façades of 2.5-story, multi-family, frame residence.

Property Description: **Stories:** 2.5

This two-and-a-half-story, multi-family house in the West Pullman community is clad with synthetic siding and has a cross gable roof covered with asphalt shingles. Its front elevation has off-center doors on the first and second floors and an elevated, flat-roofed, full-width, non-original wood porch with straight railings and posts. Fenestration on the front and side elevations is comprised of one-over-one windows. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, doors, porch, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

144 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame residential building in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Both floors of the front elevation are partially obscured by a full-width wood porch with exterior steps leading to a second floor balcony. Both floors also have a hollow core metal door and non-original double-hung windows: three on the first floor and two on the second. A third window on the second floor has been in-filled. There is a single-pane window in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Exterior stairs are not original			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

150 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1891

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community sits on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width hip-roof porch with wood steps, metal railings, and open metal posts. The off-center hollow core metal door is non-original as is the strip of three one-over-one windows on the first floor. There is an in-filled window opening in the attic, above which is a small ventilating louver. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

151 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is on a raised concrete block basement and is clad with rolled asphalt shingle siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a hip roof porch with concrete steps, metal railings and open metal posts. It also features an off-center non-original door and one-over-one windows: three each on the first and second floors. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Asphalt shingle siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

153 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has a centrally located door with concrete steps and metal railings. It has non-original three-over-one windows: three on the first floor and one on the second, plus an additional pair of sliding glass windows on the second floor and a small single-pane window in the gable. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

155 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single-family, concrete block residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is clad with rusticated concrete block and has a flat roof and parapet with a stringcourse along the cornice. Its front elevation features a three-sided bay with non-original one-over-one windows and a flat-roof, partial width porch with concrete steps, metal railings, and open metal posts. The hollow core metal door is non-original. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stringcourse			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

157 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. The front elevation has a flat-roofed, full-width porch with concrete steps, metal railings, and open metal posts. It also has an off-center hollow metal core door, two non-original Chicago-style windows (one on each floor), and an additional one-over-one window on the second floor. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

159 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a full-width hipped-roof wood porch, a three-sided bow window with non-original casements, and an off-center door. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

163 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story frame house in the West Pullman community is clad with synthetic siding and has a gable roof covered with asphalt shingles. The front elevation has a hip-roofed partial-width wood porch with wood posts and railings. It has an off-center non-original hollow metal core door and a pair of non-original one-over-one windows on both the first and second floors. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

165 E 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a partial-width porch with concrete steps, metal railings, and open metal posts supporting a metal canopy roof. It has a centrally located door and four non-original one-over-one windows: three on the first floor and one in the gable. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

207 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 22 October 2012

Photos with Captions:
North façade of a 2.5-story, multi-family, frame residence.

Property Description: **Stories:** 2.5

This two-and-a-half-story frame house in the West Pullman community is clad in rusticated concrete bock on the first floor and in synthetic siding above. The building has a front gable roof with asphalt shingles. It has a two-story full-width, hip-roof wood porch/balcony with faux stone piers and wood posts as supports on the first and second floors, respectively. A non-original stairway leads to the second floor balcony. Both first and second floors have off-center non-original hollow core metal doors. Windows on the front elevation are non-original and include one on the first floor that is obscured by the staircase, a picture window flanked by one-over-one aluminum-sash windows on the second floor, and a single one-over-one aluminum-sash window in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations External stairway added during conversion from single family home.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block (lower), Synthetic siding (upper)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

742 W. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the West Pullman community is covered with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has a bracketed pent roof, an off-center hollow core metal door, concrete steps with metal railings. Windows are non-original and include a picture window flanked by six-over-one aluminum-sash windows and a one-over-one aluminum-sash window in the gable. This home lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

120 E. 117th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South facade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof wood porch with straight posts and an off-center entrance with a metal storm door. It has two windows on the first floor and a pair of windows in the gable, all of which are non-original one-over-one aluminum sash. A decorative wood truss is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Wood truss			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

736 W. 117th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1946

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad cottage in the West Pullman community has a side-gabled roof covered with asphalt shingles. Its front elevation has a central, gabled, brick-clad vestibule with a non-original hollow core metal door topped by a bracketed gabled hood and concrete steps with metal railings. There are two pairs of six-over-one wood sash windows. Detailing includes a vertical strip of three glass blocks on either side of the front door. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed hood, decorative glass blocks			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Detached, two-car, frame garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

126 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic materials and has a gable roof covered with asphalt shingles and gable dormers along the side elevations. The front elevation has a strip of three windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. The front door has been moved to the side elevation. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door and windows
Condition: Excellent Good Poor			
Additional Alterations Entrance moved to side elevation			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

128 E 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South façade of a one-and-a-half-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. The front elevation has a non-original, full-width, flat-roofed, wood porch and a non-original off-center hollow core metal panel door with a fanlight. There is a large non-original picture window flanked by double-hung windows on the first floor and a pair of non-original one-over-one aluminum-sash windows in the gable. This house lacks integrity, does not have any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

132 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South and east façades of a one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the West Pullman community is on a raised concrete block basement with glass block windows, is clad with synthetic materials (possibly fiberboard), has a gable roof covered with asphalt shingles, and has gable dormers along the side elevations. The front elevation has a strip of three windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. The front door has been moved to the side elevation. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations Entrance relocated to side elevation			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (possibly fiberboard)	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

149 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof porch with side-facing concrete steps, metal railings, and open metal posts. This elevation also has an off-center metal storm door, a non-original picture window flanked by one-over-one aluminum-sash windows on the first floor, and a single-pane window in the attic. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

312 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1891

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community sits on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center metal storm door, concrete steps with metal railings, a picture window flanked by one-over-one aluminum-sash windows on the first floor, and a pair of one-over-one aluminum-sash windows in the gable, all of which are non-original. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

322 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1878

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the West Pullman community is situated on a raised brick basement and has a hip-on-gable roof covered with asphalt shingles. Its front elevation is clad with brown face brick and has a central hollow core metal door flanked by a pair of one-over-one aluminum sash windows on one side and a strip of three casement windows on the other. The gable has a pair of one-over-one aluminum-sash windows. This elevation also has side-facing concrete steps faced with faux stone and metal railings. Detailing includes brick pilasters flanking the door, concrete sills, flat arch window lintels with square stone inserts, and a lintel above the door that reads: “FAM.TOVALIN.E.322.” This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Brick pilasters, concrete sills, flat arch window lintels with stone inserts, inscribed lintel above entrance			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

345 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residece.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center wood door with wood steps, metal railings, and a metal awning. This elevation also has a rounded bow window with four casements on the first floor and a pair of small casement windows in the attic, each with four lights. A small triangular ventilating louver is located at the apex of the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

742 W. 117th Street
Alternate: 722 W. 117th Street (per CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame bungalow in the West Pullman community sits on a raised concrete block basement with sliding windows and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, a gable dormer, and overhanging eaves. The front elevation has a recessed corner porch with low synthetic-clad sidewalls, a squat wood post supporting the corner, and wood steps. The front door is on the west wall of the living room bay. Windows on the front elevation are non-original and include four one-over-one aluminum-sash—a strip of three in the living room bay and one in the recessed porch—and a strip of four single-pane windows in the gable dormer. The east elevation has a gabled through-the-cornice wall dormer. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

306 E. 118th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. It has a full-width flat-roof porch, half of which is enclosed and features a single one-over-one aluminum-sash window. The open portion of the porch has a door, a pair of non-original sliding windows, wood posts, steps, and railings. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

354 E. 118th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1886

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 2 October 2012

Photos with Captions:
North and west façades of two-story, single-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows, is clad with synthetic siding, and has a gable roof with asphalt shingles. The fenestration pattern has been altered with the moving of the main entrance from the 118th Street elevation and the windows, which feature non-original casements and one-over-one non-original aluminum varieties on both the first and second floors. This house lacks integrity, does not have visible distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) Detached two-car garage with pyramidal roof and vinyl siding.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

737 W. 118th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1897

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:

North (118th) façade of a brick, two story, multi-family residence.

East (Emerald) façade of the residence.

Property Description: **Stories:** 2

This two-story house at the southwest corner of 118th Street and Emerald Avenue in the West Pullman community is clad with orange-brown face brick and is situated on a raised basement with glass block windows. The building has a gable-on-hip roof covered with asphalt shingles. Its front elevation has a full-width shed-roof porch with brick piers. The areas between the piers have been in-filled with synthetic siding and non-original single-pane windows. A non-original hollow core metal door with metal awning is located on the wood-covered north side of this porch and accessed via concrete steps. The second floor of the front elevation has two one-over-one windows and an additional window is located in the synthetic-clad gable. The east elevation has a full-height rounded window bay pavilion topped by a conical roof. Side elevation windows are non-original one-over-one aluminum-sash. A stringcourse with brick dentils is situated near the roofline and extends around the building. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows; porch enclosed
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic (gable)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable-on-hip	
Ornamental Architectural Details Bay pavilion with conical roof, brick stringcourse with dentils			**Windows** Double-hung, fixed pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

834 W. 118th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is covered with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation has a partial-width hip-roof porch with metal posts and a hollow core metal door. Windows are non-original and include a picture window flanked by one-over-one aluminum-sash windows on the first floor, and a pair of one-over-one aluminum-sash windows in the gable. Both sets of windows are partially obscured by low metal awnings. The porch steps and railings are obscured by foliage. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

738 W. 119th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Multi-family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South façade of a brick, two-story building.

Property Description: **Stories:** 2

This two-story brick-clad building in the West Pullman community has a flat roof and parapet. Its storefront area has been in-filled with faux stone, a non-original door, and a small window. A secondary off-center non-original hollow core metal door that provides access to the second floor apartments is flanked by original buttresses and topped by small arches, the interiors of which have been in-filled with wood. The second floor has two pairs of windows that appear to be casements. Detailing includes a belt course, cornice, finial-like molding flanking the second story windows, and a continuous arcade across the parapet level, the openings of which have been in-filled with wood. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows; storefronts and arcades in-filled with wood
Condition: Excellent Good Poor			
Additional Alterations Converted from commercial to apartments after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (storefront)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Buttresses, arches, arcade, belt course, cornice, finial-like molding			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

846 W. 119th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Weinberg Plumbing Co. Inc.

Property Use

Historic: Industrial (Steam Laundry, 1938)

Current: Industrial

Date of Construction: 1915

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South façade of a brick, one-story, industrial building.

Property Description: **Stories:** 1

This one-story commercial building in the West Pullman community has a flat roof, parapet, and a pent roof across the length of the front elevation. The front façade is clad with white glazed brick on its east side and in pale yellow brick on its west side. The front elevation features a series of tall windows that are trimmed in green brick and have been in-filled, some with glass block and some with brick. The windows are topped by decorative round-arches of green bricks with stone keystones. The building has a hollow core metal double-door with a Classical stone surround comprising fluted pilasters and entablature. Two non-original overhead garage doors have also been inserted into the front elevation, one of which has replaced two window openings. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** In-filled windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details Green brick trim on arches, keystones, Classical surround at entrance			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

918 W. 119th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Multi-family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-story former commercial building in the West Pullman community has a front elevation that is clad with brown face brick. The building includes a concrete water table, flat roof, and a shaped parapet with concrete coping. Its former storefront has a recessed door with an in-filled transom, and its flanking windows and wall area have been covered with wood boards and tile, respectively. Original first floor cladding is extant in the corner piers, including those with stone coping that flank the off-center entrance. The entrance has an aluminum-core metal door and transom that provides access to the upper level apartment. The second floor has non-original one-over-one aluminum-sash windows arranged in a group of three and in a pair. Detailing includes concrete sills, coping, panel and diamond-shaped insert blocks at the parapet level, brick panels and soldier course lintels. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, cladding (1st floor)
Condition: Excellent Good Poor			
Additional Alterations Converted from commercial to residential post 1938 (Sanborn); ongoing remodeling as well.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, tile	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping, piers with stone coping, panel, and insert blocks, concrete sills; brick panels and soldier course lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: First Holy Miracle Mt. Zion Baptist Church

Property Address:

956 W. 119th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

First Holy Miracle Mt. Zion Baptist Church

Property Use

Historic: Industrial

Current: Religious

Date of Construction: 1906

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
South and east facades of a brick, two-story, religious building.

Property Description: **Stories:** 2

This two-story former light industrial building in the West Pullman community is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a gable roof. The front elevation has a raised, truncated-gabled parapet with clay tile coping and corbelling. It features a centrally located pair of glass double doors and five segmental-arched window openings that have been in-filled with glass block and brick. The second floor of the front elevation has a group of three window openings that feature wood louvers and brick infill. The parapet level features decorative brickwork while brick piers flank the building's façade. Side elevation windows are in-filled with glass block. This building lacks sufficient integrity and distinguishing architectural features to qualify for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and infill
Condition: Excellent Good Poor			
Additional Alterations Converted from industrial production to religious services.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** Parapet	**Roof Type** Gable	
Ornamental Architectural Details Clay tile coping, segmental arched windows, decorative brickwork including corbelling and piers			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Fire Department

Common/Current: Fire Department Engine House 115 (Sanborn, 1911)

Property Address:

931 W. 120th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Chicago Fire Department

Property Use

Historic: Public

Current: Public

Date of Construction: 1897-1911

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
South façade of two-story, brick fire house.

Property Description: **Stories:** 2

This two-story firehouse in the West Pullman community has a flat roof and parapet. Its front elevation is clad in brown face brick and has a centrally located overhead metal door flanked by single one-over-one windows on the first floor. Four one-over-one windows (non-original) are situated on the second floor. The overhead opening for the station's fire truck features a Classical stone surround with Ionic columns atop low pedestals, a frieze band incised with the words "Fire Department," and a pediment. Detailing includes a circular motif in stone, stone sills, sill courses, and a metal cornice. This is an excellent example of a neighborhood fire station that still functions in its original use and has very good integrity. It is individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, stone	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone circular motif, sills, sill courses; metal cornice, pediment, columns, frieze band reading "Fire Department"			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** This building has excellent integrity and is a rare surviving example of an early 20th century fire station in West Pullman.

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

1455 W. 120th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

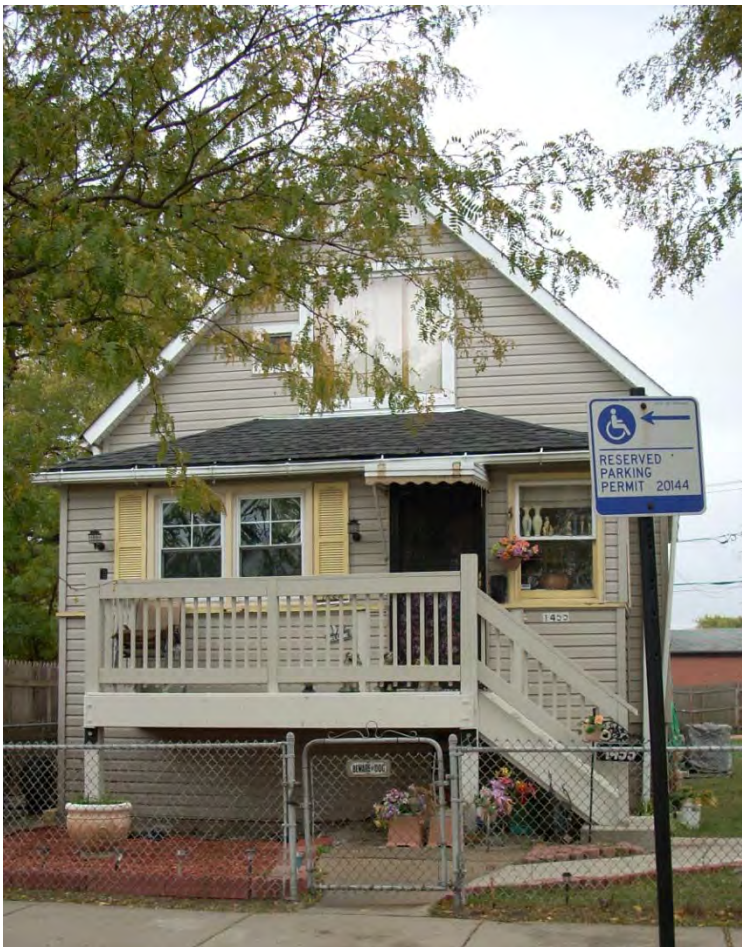

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, hip roof, synthetic-clad enclosed porch with a metal storm door, wood steps and railings, and three non-original double-hung aluminum-sash windows. Two non-original windows are located in the gable—a large picture window and an adjacent small single-pane window. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

738 W. 129th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1951

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
South façade of a one-story, brick, single story residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is clad with tan face brick on its front elevation and common brick on its side and rear elevations. The building has a side-gabled roof covered with asphalt shingles. The front elevation has a centrally located metal storm door with a concrete surround, concrete steps with metal railings, and a projecting living room bay. The façade includes a picture window flanked by casements, and a single window that is obscured by a low metal awning and shrubs. A pent roof spans the door and living room bay. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete door surround			**Windows** Fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

743 W. 129th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
North façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community sits on a raised basement and is clad with tan brick on its front elevation and common brick on its side and rear elevations. The building has a hip roof covered with asphalt shingles and overhanging eaves. A one-story addition extends the living room to the west. The front elevation has an off-center metal storm door, a concrete porch with metal railings, two picture windows (one with a stone lintel), and a bulls-eye window with stone accents. The projecting living room bay has a synthetic-clad front-facing gable that extends over adjacent the living room bay addition. It does not feature sufficient integrity or distinguishing architectural features to be individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding (gable end)
Condition: Excellent Good Poor			
Additional Alterations Living room addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Bulls eye window with stone accents, stone lintel			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

814 W. 129th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1953

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
South façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is clad with tan brick on its front elevation and common brick on its side and rear elevations. The building has a gable-on-hip roof covered with asphalt shingles and a projecting living room bay. The front elevation has an off-center metal storm door, an adjacent glass block window, wood steps with straight wood railings, and a picture window flanked by one-over-one wood-sash windows. A pent roof spans the door and living room bay and decorative stones flank the door. Bricks in the gable end are painted. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable-on-hip	
Ornamental Architectural Details Decorative stones at entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

817 W. 129th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
North façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is clad with tan brick and synthetic siding on its front elevation and common brick on its side and rear elevations. The building has a front gable roof covered with asphalt shingles and overhanging eaves along its side elevations. The front elevation has a partial-width pent roof, a centrally located metal storm door, concrete steps with metal railings, a pair of casement windows in one corner, and a pair of two vertically-oriented picture windows in the other. The residence does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable end and partial façade)	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12015 S. Bishop Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a single story, single family, frame residence.

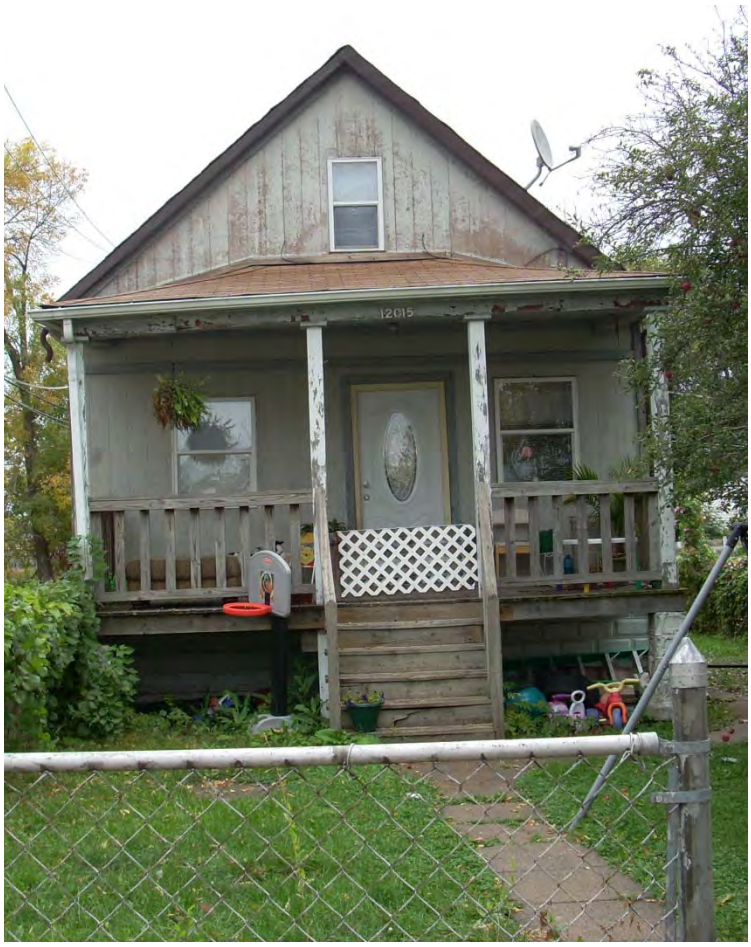

Property Description: **Stories:** 1

This one- story cottage in the West Pullman community is situated on a raised concrete block basement and is clad with wood boards laid vertically. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width, hip-roof wood porch with straight railings and squared posts, a hollow core metal door, and three non-original one-over-one aluminum-sash windows—two on the first floor and one in the gable. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12050 S. Bishop Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East and north façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community sits on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width hip-roof porch with four squared column supports, straight wood railings, a metal storm door, and three non-original one-over-one windows: two on the first floor and one in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11727 S. Calumet Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, stucco residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised basement and is covered with stucco. The building has a front gable roof covered with asphalt shingles and a gable dormer along its south elevation. It has a partial-width flat-roofed porch that appears to be concrete, with solid sidewalls, straight posts, and a stepped parapet. Its front elevation has an off-center non-original hollow core metal door and a three-sided window bay with single-pane window and transom in the center flanked by one-over-one aluminum-sash windows. There is a pair of sliding aluminum-sash windows in the gable with a lunette fixed-pane window above. Windows are modern replacements. While the stucco cladding is somewhat unusual for this community's housing stock, this particular house lacks integrity as well as architectural features that are distinctive enough to merit individual inclusion on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Lunette window, stepped parapet, decorative accent blocks			**Windows** Double-hung, fixed-pane, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9824 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house at the northwest corner of Eggleston Avenue and Fernwood Parkway in the Washington Heights community is situated on a raised basement and is clad with red face brick on its two street elevations. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front (Eggleston) elevation has an off-center metal storm door, concrete steps with metal railings, and a picture window flanked by casements. The Fernwood Parkway elevation has both casements and glass block windows. It lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casements, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10024 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1943

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
East façade of a two-story, brick and frame, single family residence.

Property Description: **Stories:** 2

This two-story cottage in the Washington Heights community has a gable roof covered with asphalt shingles and large, non-original, flat-roofed, aluminum-clad dormers on both side elevations transforming the original one-story building into a two-story residence. The front elevation is clad with orange face brick, the gables are clad with aluminum siding, and the lower side elevations are clad with common brick. The front elevation has a centrally located hollow core metal paneled door with fanlight, three concrete steps with metal railings, two pairs of windows on the first floor and a single window in the gable. Windows are non-original one-over-one aluminum sash. The front door and windows are sheltered by metal awnings. Detailing includes concrete sills and brick lintel arches. This house does not feature distinguishing architectural elements or sufficient integrity to be individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement front door and windows
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Dormers added to expand the home into two stories			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (lower), synthetic siding (gable ends and dormers)	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Flat, gable	
Ornamental Architectural Details Concrete sills, brick lintel arches			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10058 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Chicago Style Bungalow

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story bungalow at the northwest corner of Eggleston and 101st Street in the Washington Heights community is situated on a raised basement and is clad with brown face brick along its two street elevations. It has a hip roof covered with asphalt shingles and hip dormers along both its front and rear elevations. Its front elevation has a curved window group in the basement level with frosted glass casement windows. It has a recessed corner porch with carpeted concrete steps and corner brick pier support, a metal storm door, and a projecting living room bay with one-over-one windows that are partially obscured by a low metal awning. Detailing includes stone block inserts and a planter box. Its 101st Street elevation has glass block basement windows and one-over-one windows on the first floor. This house does not have sufficient distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows in basement
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Stone block inserts, planter box with brackets			**Windows** Casement, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10100 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame house at the southwest corner of Eggleston and 101st Street in the Washington Heights community is situated on a raised stone block basement with glass block windows. It is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front elevation has a metal storm door and a partial-width porch with concrete steps, metal railings, and open metal posts supporting a metal awning roof. Windows are non-original double-hung and come in varying sizes. Both side elevations feature window bays. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, siding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10104 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a two-story, frame, single family residence.

Property Description: **Stories:** 2

This two-story frame house in the Washington Heights community is situated on a raised concrete block basement, is clad with synthetic siding, and has a cross-gabled roof covered with asphalt shingles. The front elevation has a hip-roofed, enclosed corner vestibule at its south end with a hollow core metal door. It also has a non-original shed-roofed wood porch with straight railings and posts and two pairs of non-original one-over-one aluminum-sash windows: one on the first floor and one on the second. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Cross-gabled	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10142 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised brick basement with glass block windows. It has a cross-gable roof with asphalt shingles; the front wing features a hip-on-gable. The front elevation is clad with red face brick and the side elevations are clad with common brick. The first floor of the front elevation has an off-center entrance with a metal storm door, metal awning, concrete steps and railings. The first floor also has a one-over-one window and a picture window flanked by one-over-one windows. A single one-over-one window is situated in the gable. All double-hung windows are non-original aluminum-sash. Detailing features concrete sills and a vertical strip of four glass blocks adjacent to the front door. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** Hip-on-gable	**Roof Type** Cross gable,	
Ornamental Architectural Details Decorative glass blocks, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10148 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz (lower); CCA (upper 2007)

Date: 31 October 2012

Photos with Captions:
East and north façades of a two-story, single family residence.

Property Description: **Stories:** 2

This two-story house in the Washington Heights community is clad with stucco and has a hip roof covered in asphalt shingles with overhanging eaves. Its front elevation has a large picture window, an off-center door with concrete steps, and a pair of windows on the second floor. Glass block and non-original double-hung windows are visible on the side elevation. The second story and rear one-story addition with a shed roof represent later additions. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Second story added after 1938 (Sanborn). Rear addition also post-dates 1938.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Detached garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10200 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 10 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house on the southwest corner of Eggleston and 102nd Street in the Washington Heights community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has a gabled roof, enclosed porch with a hollow core metal core, wood steps and railings, five windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. This house lacks integrity, does not feature distinguishing architectural elements, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10236 S. Eggleston Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Washington Heights community is situated on a raised concrete block basement with glass block windows. It is clad with wood boards laid vertically and has a gable roof covered with asphalt shingles. There is decorative vertical stickwork in the gable. The residence has a recessed corner porch with a hollow-core metal paneled door, concrete steps, and non-original wood railings and posts. A picture window is on the front elevation and one-over-one aluminum-sash windows on the side elevations (non-original). This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, siding, and porch railing
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stickwork above porch			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10415 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a hip roof covered with asphalt shingles and a hip dormer with two windows that appear to be casements. The front elevation has a strip of four non-original one-over-one aluminum-sash windows and a recessed corner porch with a metal storm door, wood steps, metal railings, and an open metal corner post. This house does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10531 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1940

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: J. Martinez, M. C. Bird, J. Gaurino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad cottage in the Roseland community is situated on a raised brick basement and has a side gable roof covered with asphalt shingles. It has and a non-original flat-roofed aluminum-clad dormer with two non-original one-over-one aluminum-sash windows. The front elevation has an off-center entrance with a metal storm door, concrete steps with metal railings, and a hip-roof living room bay with six-over-one wood-sash windows. Detailing includes decorative stone at the basement level and surrounding the front door. This building does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows
Condition: Excellent Good Poor			
Additional Alterations Dormer added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side gable	
Ornamental Architectural Details Stone accents at basement level and around entrance			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10558 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East faced of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow at the northwest corner of Eggleston Avenue and 106th Street in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, decorative rafters, and a hip dormer. The residence has a recessed corner porch with a wood door, wood steps and railings, and a corner support consisting of a faux stone pedestal topped by a Doric column. The front (Eggleston) elevation has a picture window flanked by one-over-one aluminum-sash windows (non-original). The hip dormer has sliding windows, one of which is partially enclosed by plywood. The 106th Street elevation has a gabled pavilion, non-original one-over-one aluminum-sash windows, and a single casement window. This building does not have sufficient distinguishing architectural features or integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Exposed rafters, Doric column			**Windows** Double-hung, sliding, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10601 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised basement with glass block windows. The building is clad in brown brick, has a hip roof covered with asphalt shingles, and has overhanging eaves. The front and both side elevations feature large gable dormers and the rear elevation has a shed dormer, all of which are clad with aluminum siding. The house features a recessed corner porch with a metal storm door, concrete steps, low brick sidewalls, a brick corner pier, and arched front and side openings. The front elevation's three-sided living room bay has six windows and the front gable dormer has three windows, all of which are non-original one-over-one aluminum-sash. Detailing includes brick soldier courses above and below the living room bay windows, decorative stone insert blocks, and concrete sills. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding in dormers
Condition: Excellent Good Poor			
Additional Alterations Dormers may have been a later addition.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Aluminum siding (dormers)	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills and insert blocks, brick soldier courses			**Windows** Double-hung, fixed-pane, stained glass
Outbuildings (*Number and Description*) Detached two-car garage with pyramidal roof behind residence.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10612 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community area is clad with tan face brick on its front elevation and common brick on its side elevations. The building has a steeply-pitched side-gable roof covered with asphalt shingles and two synthetic-clad gable dormers with one-over-one windows. Its front elevation has a centrally located, gabled, brick-clad entrance vestibule, a metal storm door with an unadorned wood surround, concrete steps with metal railings, and two nine-over-nine windows. It lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main); Synthetic siding (dormers)	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10720 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. The front elevation has a partial-width porch with gable roof, aluminum-clad sidewalls, and wood posts, steps, and railings. Its front door and flanking windows are covered with plywood. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross gable	
Ornamental Architectural Details One tapered wood column			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10757 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house at the northwest corner of Eggleston Avenue and 108th Street in the Roseland community is situated on a raised basement, is clad with synthetic siding, and has a hip roof covered with asphalt shingles. Its front elevation is partially clad with faux stone siding and has a partial-width porch with gable roof, wood deck, and post supports. The porch steps and railings have been removed; the front door and all window openings are covered with plywood. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, steps removed
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (main), Faux stone (entrance)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10904 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and clad with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles and overhanging eaves with wood brackets. The front elevation has a recessed corner porch with concrete steps, metal railings, a single wood corner post, and an entrance with a metal storm door. Windows are non-original and include a small casement window adjacent to the front door, a strip of three one-over-one windows on the first floor, and a pair of one-over-one aluminum-sash windows in the attic. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip on Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10953 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community with a raised basement is clad with buff brick on its front elevation and common brick on its side and rear elevations. The building has a front gable roof covered with asphalt shingles and has overhanging eaves. Its front elevation has a projecting three-sided living room bay with a picture window flanked by one-over-one aluminum-sash windows that are sheltered by a metal awning. The residence has an off-center entrance with a metal storm door, concrete steps with metal railings, and an wood-clad gable laid in diagonal patterns. Detailing includes two decorative glass blocks adjacent to the front door and scalloped trim around the gable. It does not feature distinctive architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Wood (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Glass block detail near entrance, diagonal pattern for gable clapboards			**Windows** Double-hung
Outbuildings (*Number and Description*) Detached, one-car, frame garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11130 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of two-story, concrete block, two-flat residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and made of rusticated concrete block. The building has a flat roof and parapet. It features a flat-roofed full-width porch, half of which is enclosed and covered with aluminum siding. The enclosed porch has a strip of three non-original one-over-one aluminum-sash windows on its front elevation. The open half of the porch has an entrance with metal storm door, a faux stone corner support, and wood steps flanked by concrete block half-walls. The second floor of the front elevation has a strip of three windows and a single window, which are non-original one-over-one aluminum-sash and have stone sills and lintels. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Porch partially enclosed after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills and lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11133 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This 1.5-story frame house in the Roseland community is situated on a raised basement and is covered with synthetic siding. The building has an original, full-width, hip-roofed wrap-around wood porch with turned posts and straight railings. It has a cross-gable-on-hip roof covered with asphalt shingles. Its front elevation has an off-center door with transom and two one-over-one windows. The second floor of the front elevation has two pairs of double-hung windows, one of which features nine-over-nine sashes. Windows are modern replacements. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Turned columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11139 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1915

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised brick basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width porch with low, aluminum-covered sidewalls and squat squared wood column supports. The entrance is off-center and has a metal storm door. There is a strip of three non-original double-hung windows on the first floor and a strip of three original wood casement windows in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and first floor windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11211 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised brick basement and is clad with wood clapboards with wood shingles in the gabled ends. The building has a front gable roof covered with asphalt shingles and overhanging eaves with exposed rafters and decorative knee braces. The front elevation features a partial-width, front-gable, wood porch with squat, squared Doric columns and a boxed cornice. The porch door and adjacent window opening are covered with plywood. There is a group of four one-over-one windows on the first floor and a pair of original wood casement windows in the attic. This is an example of a Craftsman bungalow, an exceedingly common style during the 1910s and 1920s but lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows (first floor)
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding and shingles	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, exposed rafters, squared columns			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11257 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West and south façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, and a hip dormer with two casement windows. The front elevation features a full-width, gable-roof, synthetic-clad sun porch surrounded by non-original one-over-one aluminum-sash windows and a centrally located door with sidelights. There is also an open shed-roof porch with concrete steps, metal railings, and open metal posts. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9818 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East façade of 1.5-story, single family, frame residence.

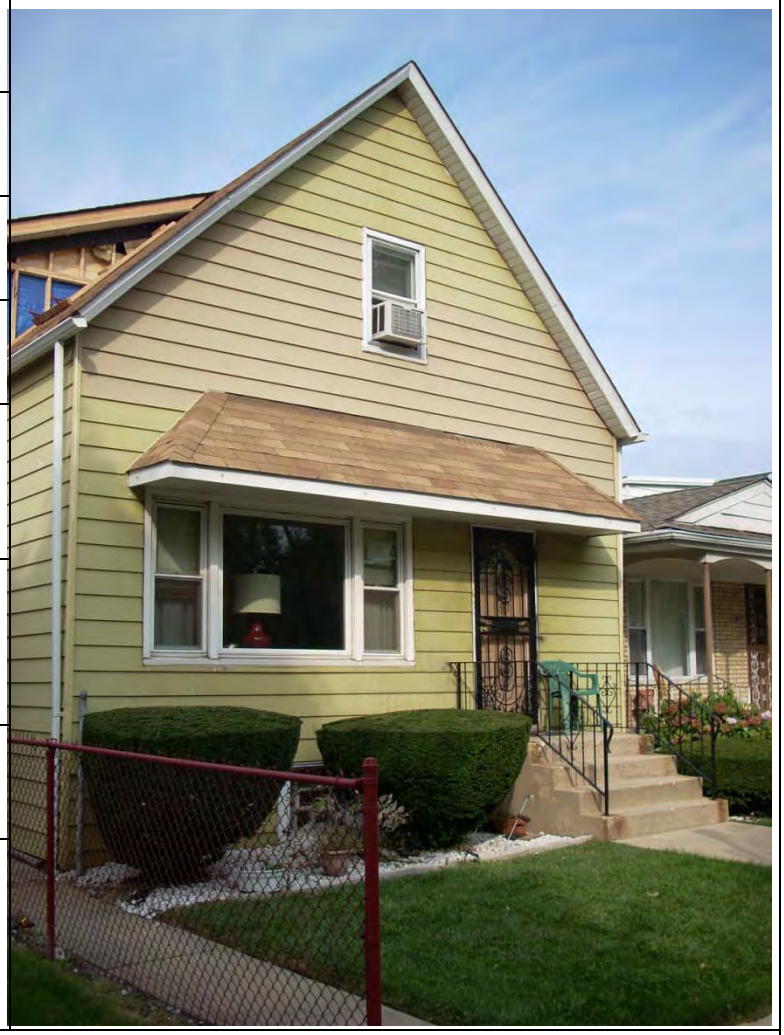

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Washington Heights community sits on a raised basement and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and an upper story shed-roofed addition along its south elevation. Its front elevation has a pent roof, an off-center hollow core metal door, concrete steps with metal railings, a picture window flanked by one-over-one aluminum-sash windows on the first floor, and a single one-over-one aluminum-sash window in the gable. The door, windows, cladding, and stair rails are non-original. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent Good Poor			
Additional Alterations Shed-roofed addition under construction.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9823 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1944

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, single family, brick residence.

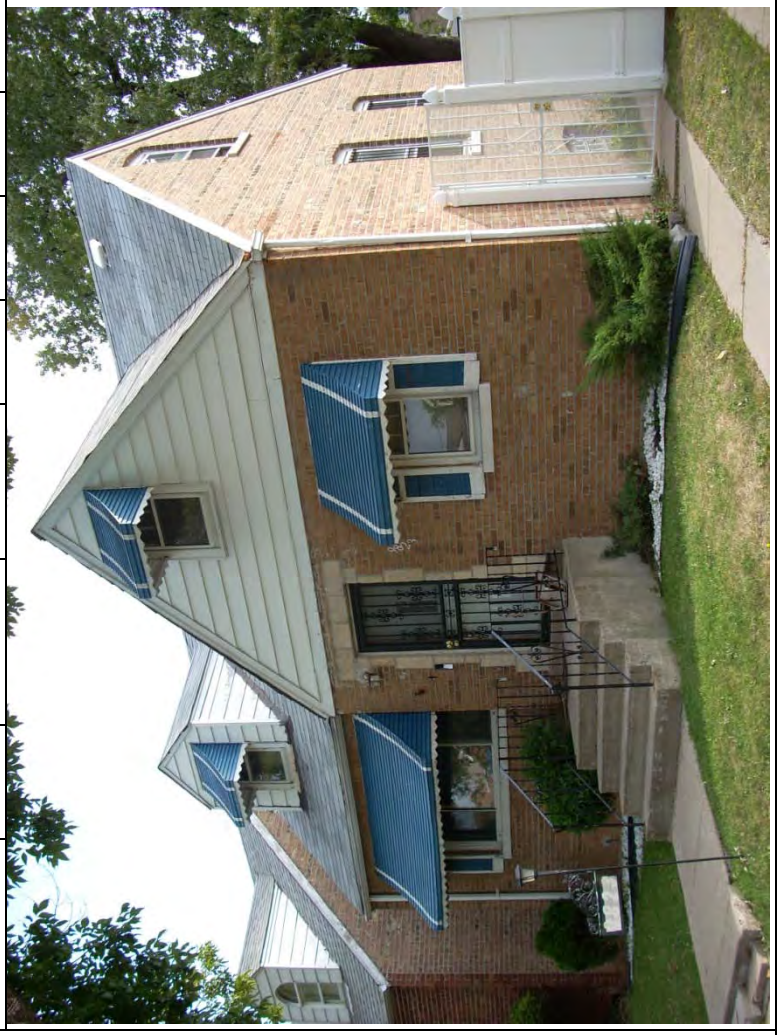

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is clad with light brown face brick and has a side-gable roof covered with asphalt shingles. Its front elevation has a partial-width gable pavilion with a synthetic-sided gable, a synthetic-clad gable dormer, a central hollow core metal door surrounded by stone, and concrete steps with metal railings. There is a picture window on the first floor and three non-original double-hung aluminum sash windows: one on the first floor and one each in the gable pavilion and gable dormer. All front elevation windows have metal awnings. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows.
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Stone surrounding the entrance			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9900 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 11 September 2012

Photos with Captions:
North and west façades of brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story brick-clad house in the Washington Heights community has a hip roof covered with asphalt shingles. Its front façade has an off-center door with concrete steps and metal railings, a three-sided bay window with hip roof on the first floor, and two six-over-one windows on the second floor. Details include concrete sills, a concrete door surround, brick stringcourses, and a scalloped wood panel above the windows in the bay. This is a standard post-World War II era and does not feature distinguishing architectural elements. Therefore, it is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Pyramid	
Ornamental Architectural Details Brick stringcourses, concrete sills and door surround, scalloped wood panel above windows in bay			**Windows** Double-hung
Outbuildings (*Number and Description*) Storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9906 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 11 September 2012

Photos with Captions:
North and west façade of 1.5-story, brick, single-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story brick-clad house in the Washington Heights community has a side gable roof covered with asphalt shingles, gable dormer, and an attached flat-roofed one-car garage with a rooftop balcony. Its front façade has a gable wall dormer and a porch with concrete steps, metal railings, and open metal posts supporting a metal canopy roof. The front elevation also features an off-center door surrounded by decorative stones and a pair of one-over-one windows. Stones also decorate the wall dormer and the garage cornice line. This post-World War II era home does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Stone around door, stone inserts on garage and wall dormer.			**Windows** Double-hung
Outbuildings (*Number and Description*)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9909 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1944

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East façade of two-story, brick, single-family residence.

Property Description: **Stories:** 2

This two-story house in the Washington Heights community is situated on a raised basement and is clad with light orange face brick on its front elevation and in common brick along its side and rear elevations. The building has a hip roof covered with asphalt shingles. Its front elevation has a partial-width, gable-roof, enclosed porch with a hollow core metal door, concrete steps, and metal railings. There is a picture window on the first floor and two one-over-one aluminum-sash windows on the second floor. The front door and windows are non-original. Detailing includes a decorative brick and stone door surround and concrete sills. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative door surround, concrete sills			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9936 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Modernist

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story, brick-clad, Modernist style house in the Washington Heights community has a flat roof and a pair of single-pane windows with transoms on the front elevation. The south elevation features a centrally located door and a small porch with concrete steps, metal railings, and two open metal posts supporting a metal awning roof. There are three groups of windows, including a strip of three casements. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Casement, fixed-pane
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10004 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East façade of brick two-flat.

Property Description: **Stories:** 2

This two-flat residential building in the Washington Heights community is situated on a raised basement with glass block windows and is clad with brown/orange face brick on its front elevation and with common brick along its side and rear elevations. The building has a full-height, three-sided window bay pavilion, a flat roof, and parapet. Its front elevation features a pair of off-center non-original hollow core metal doors and a hip-roof porch with concrete steps, metal railings, and open metal supports. The pavilion's central windows are single-pane, while the remaining windows in the pavilion and the single window above the entrance are one-over-one aluminum-sash. Windows are modern replacements. Detailing includes concrete sills, lintels, and brick corbelling at the parapet level. This two-flat lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Corbelling, concrete sills and lintels			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10100 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1940

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Neo-Tudor

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West and north façades of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story, brick-clad, Neo-Tudor style house at the southwest corner of Emerald Avenue and 101st Street in the Washington Heights community is situated on a raised basement and has a steeply pitched cross-gable roof covered with asphalt shingles. The front elevation has a round-arched door, concrete steps with metal railings, and a non-original one-over-one aluminum-sash window. Detailing includes rusticated stone surrounding the door and at the corners of the house, concrete sills, and a stone insert in the gable end. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details Rusticated stone at entrance and corners of house, concrete sills and inserts			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10134 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad cottage in the Washington Heights community has a side-gable roof covered with asphalt shingles. Its front elevation has a partial-width gable pavilion with stone cladding, a round arch window in the gable, and a central metal storm door topped by a metal canopy. The door is flanked by two additional small, round-arch fixed-pane windows. There are concrete steps with metal railings and two non-original one-over-one aluminum sash windows with concrete sills. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight modifications Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Stone (pavilion)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone pavilion, round arch windows, concrete sills			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Common/Current: Unknown

Property address:

10216 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:

West façade of one-story, brick, single-family residence.

North façade of the residence showing the addition.

Property Description: **Stories:** 1

This one-story brick-clad house in the Washington Heights community has a side gable roof covered with asphalt shingles. The front door is tucked into the side of the projecting gable-roof living room bay with synthetic-clad pediment. A shed-roofed addition to the rear portion of the residence rises above the living room. The front elevation has two groups of single pane windows flanked by casements on each corner and a small glass block window. The porch includes a concrete stoop and open metal post. A stone-clad exterior chimney fronts Emerald. The rear addition has two small, single-pane, casement windows along its front elevation. Detailing includes decorative stonework at the corners of the house and concrete sills. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Addition to rear roofline			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable ends and addition)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable (main), shed (addition)	
Ornamental Architectural Details Decorative stonework, concrete sills			**Windows** Casement, fixed-pane, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional comments

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10316 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community has aluminum-covered side elevations, a faux stone-clad front elevation, a hip roof covered with asphalt shingles, and a hip dormer with a pair of single-pane sliding windows. The front elevation has a recessed corner porch with a squat, squared wood column support at the corner, a metal storm door, concrete steps with metal railings, and a living room bay featuring a strip of non-original one-over-one aluminum-sash windows that are partially obscured by a metal awning. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone (façade), Synthetic siding (sides and rear)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Squat column on porch			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10428 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1941

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the Roseland community has a side-gabled roof covered with asphalt shingles and has two gable dormers with non-original aluminum siding, each with a six-over-one window. The front elevation has a centrally located, gabled, brick-clad projecting vestibule with a metal storm door, concrete steps, and metal railings. It is flanked by a window group on either side, both of which are obscured by metal shades. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10554 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front elevation is clad with buff brick and in faux stone below the sill line. The south half of the front elevation is recessed and has a metal storm door, concrete steps with metal railings, and an open metal corner support. The living room bay has a picture window flanked by one-over-one aluminum-sash windows. Detailing includes two decorative glass blocks adjacent to the front door. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Aluminum sashes may be original
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (below sill)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10614 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community has a hip roof covered with asphalt shingles. Its front elevation is clad in orange-brown face brick. It has an off-center metal storm door with fluted pilasters, concrete steps with metal railings, a three-sided window bay obscured by tall bushes and a low metal awning, and two non-original one-over-one aluminum-sash windows with metal awnings and wood shutters on the second floor. Detailing includes a vertical strip of three glass blocks adjacent to the door, concrete sills, and a brick stringcourse. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows; windows in bay obscured
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Fluted pilasters, decorative glass blocks, concrete sills, brick stringcourses			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10750 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the Roseland community has a gable roof covered with asphalt shingles, a metal storm door, concrete steps with metal railings, a five-paned bow window with casements, and a double-hung window in its recessed corner. Detailing includes decorative faux stone flanking the entrance and three adjacent glass blocks. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, Synthetic siding (gable)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone around entrance, decorative glass blocks			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10824 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a side gable roof, is clad with orange brick, and features synthetic cladding in the gabled ends and above the sill line of the front elevation. The front elevation has an off-center hollow core metal door, a strip of three windows largely obscured by tall bushes and a low, metal awning, a glass block window, and a pair of rectangular sliding glass windows. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable ends and above sill)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Sliding, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10952 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a split-level, single family, brick residence.

Property Description: **Stories:** Split-level

This back-split house in the Roseland community is clad with buff brick; the front elevation of the back portion of the split is covered with synthetic siding. Both portions of the house have hip roofs covered with asphalt shingles and have wide, overhanging eaves. The front elevation has five large single-pane windows, three of which have matching single pane windows below the sill line, creating floor-to-ceiling glazing. The front door is situated along the south elevation, which has an exterior buff brick chimney and one-over-one aluminum-sash windows. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (front section façade), synthetic siding (rear section)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Sill line			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11034 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a two-story, single family, brick residence.

Property Description: **Stories:** 2

This two-story brick-clad bungalow in the Roseland community is situated on a raised basement. The building has a hip roof covered with asphalt shingles, overhanging eaves, an aluminum-clad gable dormer with a strip of single-pane sliding windows partially covered by a metal awning. A two-story aluminum-clad gable-roof second story addition is visible. The three-sided front elevation encompasses the living room bay and features a central strip of three windows and flanking single windows, all of which are non-original one-over-one aluminum sash. The front door is situated along the south elevation and has a metal awning. Detailing includes concrete sills, sill courses, and decorative insert blocks flanking the central strip of windows. This is an example of a Chicago bungalow, a building type that the City of Chicago has recognized through its Historic Chicago Bungalow Initiative. However, this house has been modified with the second story addition, lacks distinctive architectural features, and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and dormer cladding
Condition: Excellent Good Poor			
Additional Alterations Second story added.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (original section), synthetic siding (dormer and addition)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip, gable	
Ornamental Architectural Details Concrete sills and sill courses, decorative insert blocks			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11104 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1951

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

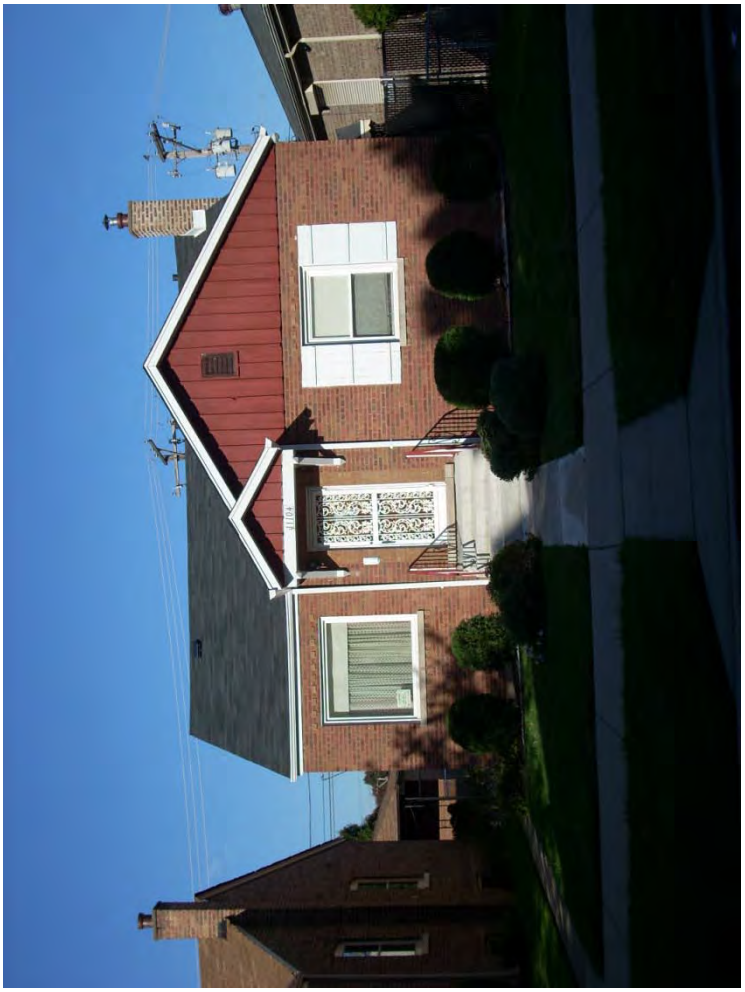

Property Description: **Stories:** 1

This one-story brick-clad house in the Roseland community has a side-gabled roof covered with asphalt shingles and a front-facing projecting gabled pavilion with non-original aluminum siding in the gable. It sits atop a raised basement. The front elevation has a metal storm door with a bracketed gable hood and concrete steps with metal railings. There are two windows, both non-original: a picture window and a one-over-one aluminum-sash window both with concrete sills. It does not feature distinguishing architectural characteristics and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and gable cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed gable hood, concrete sills			**Windows** Double-hung, fixedpane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11212 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1951

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East and north façades of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised basement with glass block windows and is clad with orange brick on the front elevation and common brick on the side and rear elevations. The building has a steeply pitched front gable roof covered with asphalt shingles. The front elevation has a pent roof, an off-center metal storm door surrounded by yellow brick, concrete steps with metal railings, and an adjacent glass block window. The projecting living room bay features a non-original picture window flanked by one-over-one aluminum-sash windows that are partially obscured by a low metal awning. This bay is clad in faux stone below the sill line. A pair of non-original one-over-one aluminum-sash windows is situated in the gable, and all windows have concrete sills. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (below sill line)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete sills, contrasting brick around entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: CAR-LA HSE

Property Address:

11310 S. Emerald Avenue

HAARGIS Number:

140613

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

French Eclectic

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
North and east façades of a brick, two-story single family residence.

Property Description: **Stories:** 2

This two-story asymmetrical French Eclectic style house in the Roseland community was built for Stuart Colman. It is clad with brownish-orange face brick. The building has a steeply pitched roof covered with slate, a pair of gabled pavilions along its north elevation, and an L-shaped footprint with a one-story side-gabled wing that features two flat-roofed dormers. The front elevation of the main block has two windows on the first floor that are obscured by metal grates and two through-the-cornice wall dormers with paired casement windows. The recessed front door has a smooth stone surround and a stone-clad upper story oriel is situated at the juncture between the front wing and its adjacent gabled pavilion. Attic windows in the paired gable pavilions are surrounded by stone quoins. Fenestration appears to be mainly casement windows. This is an unusual example of a French Eclectic style home in Roseland and stands as a visual landmark among the predominant building stock of cottages and bungalows. Although windows appear to be replacements, overall it has very good integrity and is recommended as individually eligible for National Register listing.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Slate	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Stone oriel, stone quoins, surround			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Unusual example of a French Eclectic house and visual landmark among the cottage and bungalow housing stock in Roseland.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11456 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1951

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad cottage at the northwest corner of Emerald Avenue and 115th Street in the Roseland community has a side gable roof covered with asphalt shingles and a rear gabled wing. The front elevation has a projecting living room bay with a multi-light window flanked by adjacent non-original one-over-one aluminum sash windows, an off-center hollow core metal door, ceramic tile steps with metal railings, and a bulls-eye window. A pent roof spans the living room bay and front door. This house does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bulls-eye window			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11824 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman neighborhood is situated on a raised brick basement that has been covered with concrete. Above, the house is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. Its front elevation has a partial-width wood porch; its hipped-roof of which spans the full façade to also shelter the adjacent three-sided window bay, which has a central non-original fixed-pane window with transom flanked by non-original one-over-one aluminum-sash windows. The porch has an off-center non-original hollow core metal door with a transom, wood posts, steps and straight railings. There are two windows on the second floor of the front elevation and one in the gable, all of which are non-original one-over-one aluminum-sash. The south elevation has a two-story three-sided window bay. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12012 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a two-story, brick, multi-family residence.

Property Description: **Stories:** 2

This two-story, brick-clad residential building in the West Pullman community has a flat roof and parapet. Its front elevation has an off-center pair of non-original hollow core metal doors, each with a transom. Windows are non-original and include a pair of one-over-one aluminum-sash windows on the first floor, a three-sided aluminum-clad window bay on the second floor with a central fixed-pane window and two one-over-one aluminum-sash windows, and a single fixed-pane window on the second floor. Detailing includes concrete sill courses, soldier course arched lintels, and decorative brickwork along the cornice. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor			
Additional Alterations Second story bay added after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (window bay)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Decorative brickwork including lintels and cornice line, concrete sills			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12110 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East facade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is clad with orange-brown face brick on its front elevation and common brick on its side and rear elevations. The building has a side-gable roof covered with asphalt shingles and a gabled one-story rear wing. The front elevation has an off-center, brick-clad, gabled vestibule with a hollow core metal door with a smooth surround, a bracketed metal awning, concrete steps with metal railings, a small glass block window, and a strip of three one-over-one windows. Detailing includes inserts at the gabled roof of the vestibule, a soldier course lintel, and concrete sills. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations The rear wing appears to be original.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Inserts under the gable end of the vestibule, soldier course lintels, concrete sills, surround			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12206 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story Craftsman bungalow in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles and overhanging eaves with knee braces. The front elevation has a full-width, gable-roofed wood porch with straight railings and faux stone piers supports topped by squat wood columns. The porch shelters an off-center door, a large window group and a small window opening on the first floor that are covered with plywood. There is a pair of double-hung wood-sash windows in the gable. Side elevation window openings are covered with plywood. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic (asphalt shingles)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Knee braces			**Windows** Double-hung, glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12254 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story multi-family residential building in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width, hip-roof porch with a concrete deck and steps, metal railings, and open metal posts. It also contains a pair of off-center doors and a two-story hip-roof window bay pavilion. There are three windows in the first floor bay, four windows on the second floor, including three in the window bay, and a pair of windows in the gable. Windows throughout the house are non-original one-over-one aluminum sash with the exception of the two central windows in the two-story window bay, which are fixed-pane, and the glass block in the basement. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Detached two-car frame car with hip roof.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12300 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Cards, Gifts & Things, The Crowning Glory Barber & Beauty Salon

Property Use

Historic: Commercial

Current: Mixed Use

Date of Construction: 1915

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
North and east facades of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story mixed-use building at the southwest corner of Emerald Avenue and 123rd Street in the West Pullman community is clad with brown face brick along its two street elevations. The building has a flat roof and a parapet that is rounded at the center of the Emerald Avenue elevation. The building has a non-original corner storefront with synthetic siding, a strip of three fixed-pane windows, and a mirrored glass corner door in the recessed corner entrance vestibule. The Emerald Avenue elevation has an off-center doorway with a non-original door that provides access to the second floor. An additional entrance with a non-original hollow core metal door is situated along the 123rd Street elevation. The first floor of the 123rd Street elevation and the building's second floor features one-over-one wood-sash windows arranged by themselves, in pairs, and in groups of three. One of these openings on the first floor has been in-filled with glass block. Detailing includes concrete sills, decorative square insert blocks at the parapet level, and brick stringcourses. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and storefronts
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (corner storefront)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sill and insert blocks, brick stringcourses			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12350 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1931

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the West Pullman community is situated on a raised concrete block basement with casement windows and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer with a strip of three wood casement windows. The front elevation has a recessed corner porch with a corner support consisting of a faux stone pier topped by a squat wood column. The porch has wood steps with metal railings, an off-center metal storm door, and a strip of three non-original double-hung windows. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some windows replaced
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Squat column			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) Two-car, detached, frame garage with hip roof			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12400 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer with a strip of three single-pane sliding windows. The front elevation has a recessed corner porch with corner support consisting of a faux stone pier topped by a squat wood column, wood steps with straight wood railings, and an off-center hollow core metal door. There is also a strip of three double-hung wood-sash windows. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Square column on porch			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12446 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1950

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East and south façades of a 1.5- story, single family, brick residence.

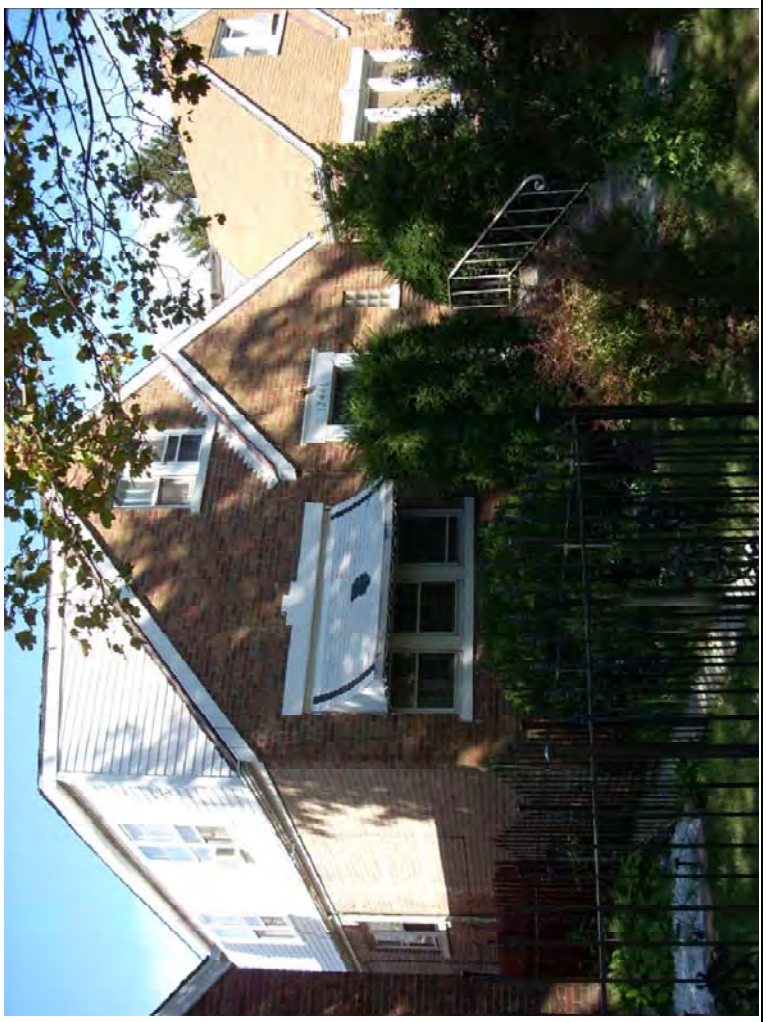

Property Description: **Stories:** 1.5

This one-and-a-half-story in the West Pullman community is situated on a raised basement and is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a front gable roof covered with asphalt shingles and a wide, shed-roofed, synthetic-clad dormer addition along the south slope of the roof. The front elevation has a slightly projecting gabled entrance vestibule with a non-original hollow core metal door and a Classical wood surround consisting of fluted pilasters and cornice. The building also includes concrete steps with metal railings, a strip of three double-hung windows with metal awning and a lintel on the first floor, and a pair of three-over-one wood-sash windows in the gable. Windows feature concrete sills. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, addition
Condition: Excellent Good Poor			
Additional Alterations Dormer addition on south side of roof			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (addition)	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Fluted pilasters and cornice at entrance, concrete sills, lintel			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12552 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the West Pullman community is clad with a stone veneer on the front elevation with asbestos or wood shingles on the other elevations. The building has a side-gabled roof covered with asphalt shingles and two gable dormers, each of which has a non-original one-over-one aluminum-sash window. The front elevation has a centrally located gabled vestibule with a metal storm door, concrete steps with metal railings, and paired windows on either side. One pair features original six-over-one wood-sash windows and the other has non-original one-over-one aluminum sash. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows; possible non-original cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone (façade), wood or asbestos shingles (sides and rear)	
Roof Material Asphalt shingles	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12608 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has an off-center hollow core metal door with a wood bracketed boxed gable hood, and concrete steps with metal railings. There is a group of three windows on the first floor (fixed-pane flanked by double-hung sashes) and a single pane window in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and brackets on hooded entrance
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Brackets on hood			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12650 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1943

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised basement and is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a hip roof covered with asphalt shingles. The front elevation has an off-center metal storm door, concrete steps with metal railings, a picture window on the first floor, and two one-over-one windows on the second floor. Detailing includes a concrete door surround, a vertical strip of three glass blocks adjacent to the door, brick lintels, a brick stringcourse, and concrete sills. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, brick stringcourses, concrete sills, brick lintels			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12706 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised basement and is clad with buff brick on its front elevation and common brick on its side and rear elevations. The building has a front gable roof covered with asphalt shingles and a wood-clad gabled end. The front elevation has a recessed corner porch with a door tucked into the side of the living room bay, a corner window, concrete steps with metal railings, and a non-original picture window flanked by one-over-one aluminum-sash windows. Detailing includes three decorative glass blocks on the living room bay and concrete sills. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Wood (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Decorative glass block, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12814 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised basement and is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a hip roof covered with asphalt shingles. The front elevation has a centrally-located metal storm door, concrete steps with metal railings, a large picture window in one corner, and a pair of one-over-one aluminum-sash windows in the other corner. All windows have concrete sills. The house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12842 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1954

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised basement and is clad with orange face brick on its front elevation and common brick on its side and rear elevations. The building has a front gable roof covered with asphalt shingles. The front elevation has an off-center hollow core metal door with a concrete surround, concrete steps with metal railings, and a non-original picture window flanked by one-over-one aluminum-sash windows over a concrete sill. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete door surround, concrete sills			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12904 S. Emerald Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised basement with glass block windows and is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a hip roof covered with asphalt shingles and has a projecting gabled living room bay. One-half of the front elevation is recessed beneath the overhanging eaves and has a hollow core metal door with concrete surround, concrete steps with metal railings, and a small adjacent glass block window. The gabled living room bay has a non-original picture window flanked by one-over-one aluminum-sash windows and is clad with a stone veneer beneath the sill line of this window group. The residence has a ventilating louver in the gable. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), stone veneer (façade below sill)	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Concrete door surround, sill line			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11730-11736 S. Front Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1952-1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
Looking south at light industrial complex.

Property Description: **Stories:** 1

This concrete block, Quonset utility outbuilding in the West Pullman community is set back from the public right-of-way and has a front elevation with a centrally located garage door opening flanked by a one-over-one window on either side. The 1962 aerial photograph shows two buildings on the property, the extant Quonset and a larger building. The larger building was razed between 2007 and 2012. A one-story building and a trailer standing on the remaining concrete slab from the larger, razed building are also part of this complex but too far from the road for evaluation. Windows appear to be fixed-pane on all buildings within the complex. This building complex does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Extant buildings that are visible from the public ROW remain unchanged
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Barrel	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9909 S. Green Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of brick, one-story, single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad bungalow in the Washington Heights community sits on a raised basement. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a gable dormer with a pair of single-pane windows. The door is tucked into one side of the three-sided living room bay, which has a non-original central picture window flanked by one-over-one aluminum-sash windows. Its front elevation also has a recessed corner porch with two round-arch openings, concrete steps with low brick sidewalls, and a casement window. Details include an archway on the porch, decorative brickwork, and stone inserts above and below the window bay.

This is an example of a brick "Chicago Style Bungalow," a building type that the City of Chicago has recognized through its Historic Chicago Bungalow Initiative. However, this house lacks distinctive architecture features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Soldier brick archway, stone inserts			**Windows** Fixed pane, double-hung, casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, note in CHRS

Common/Current: Unknown

Property address:

9957 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad cottage at the northeast corner of Green and 100th streets in the Washington Heights community is situated on a raised basement and has a front gable roof covered with asphalt shingles. Its front elevation has a brick-clad gable entrance vestibule with a metal storm door topped by a metal awning and concrete steps with metal railings. Windows include a small glass block window by the door, a bow window with four casements on the first floor, and a single six-over-six window in the gable. Detailing includes decorative stones flanking the door and at the apex of the gable. The side (100th Street) elevation includes a flat-roof wall dormer with a small glass block window, a side door with a metal storm door, a concrete stoop with metal railings, and a metal awning. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight modifications Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, Synthetic siding (gable)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Stones at entrance and at gable			**Windows** Casement, double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

100051 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, masonry, single family residence.

Property Description: **Stories:** 1

This single story Craftsman bungalow in the Washington Heights community is situated on a raised basement and is clad in faux stone, brick, stucco, and synthetic siding. The building has a side-gable roof with asphalt shingles, overhanging eaves with the brackets removed, and a front-gable dormer with a strip of non-original one-over-one aluminum-sash windows. The front elevation is clad with faux stone and stucco. The roof extends forward to shelter a full-width porch that has faux stone corner piers, low sidewalls, and concrete steps. The centrally located front door is flanked by a strip of three double-hung non-original windows on either side. The side elevations are clad in brown brick and have stucco-covered gables. The south elevation has an original hip-roof living room bay, behind which is a synthetic-clad, two-story addition. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, and cladding on the two-story bay extension
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco (upper façade), faux stone (lower façade), brick (sides), synthetic siding (2-story bay)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Brackets removed from under eaves of dormer.			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10157 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West facade of brick, one-story, single-family residence.

Property Description: **Stories:** 1

This one-story house at the northeast corner of Green and 102nd streets in the Washington Heights community is situated on a raised basement with glass block windows and is clad in yellow brick on its two street elevations. The building has a front gable clad in diagonally installed synthetic siding and framed by scalloped verge boards; asphalt shingles cover the roof. Its front elevation has a projecting living room bay with a bow window comprising four casements. It has a metal storm door with a stone surround, a small glass block window, and a partial-width porch with concrete steps, metal railings and open metal supports. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic cladding (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone surround at entrance, scalloped verge boards			**Windows** Casement, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional comments

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS.

Common/Current: Unknown

Property address:

10201 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S .Katz

Date: September 2012

Photos with Captions:
West facade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad bungalow at the southeast corner of Green and 102nd streets in the Washington Heights community is situated on a raised basement with glass block windows. The building has a hip roof with asphalt shingles, overhanging eaves, and hip dormers with paired non-original single-pane sliding windows along its front and north elevations. The front elevation has a flat roof projecting living room bay surrounded by non-original double-hung windows, the central grouping of which is partially covered by a metal awning. It also has a decorative off-center metal storm door with a metal awning, concrete steps with low brick sidewalls, and metal railings. Detailing includes brick panels along the base of the living room bay, soldier brick lintels, and square concrete insert blocks used as decorative accents. This is an example of a Chicago Style Bungalow, a building type that the City of Chicago has recognized through its Historic Chicago Bungalow Initiative. However, this house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills and inserts, brick panels and soldier course lintel			**Windows** Double-hung, sliding, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10237 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad bungalow in the Washington Heights community is situated on a raised basement with glass block windows. The building has a hip roof with asphalt shingles, overhanging eaves, and hip dormers with infilled openings along its front and rear elevations. The three-sided front elevation is surrounded by non-original double-hung windows that are partially covered by metal awnings. The front door is located along the south elevation. Detailing includes brick panels along the base of the living room bay, a soldier brick course, and square concrete insert blocks used as decorative accents. This is an example of a Chicago Style Bungalow, a building type that the City of Chicago has recognized through its Historic Chicago Bungalow Initiative. However, this house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications Major Alteration			**Additional Notes/Descriptions** Replacement windows, dormer window in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Brick panels, soldier brick course, concrete insert blocks			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10345 S. Green Street
Alternate: 10345 S. Alpine Drive

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Washington Heights community is situated on a raised brick basement and is covered with synthetic siding. The building has a hip-on-gable roof with a dormer. The front elevation has a full-width, flat-roofed porch, half of which is enclosed as a sunroom with a door tucked into its side. The open half of the porch has a metal corner support, metal railings and a clay tile deck with two steps. Fenestration on the front elevation includes a pair of non-original one-over-one aluminum-sash windows and a non-original picture window flanked by one-over-one aluminum-sash windows. A low, light brown colored brick planter stretches across the width of the sun porch. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and porch rails
Condition: Excellent Good Poor			
Additional Alterations Porch partially enclosed after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip on gable	
Ornamental Architectural Details Brick planter			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10401 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad house at the southeast corner of Green and 104th streets in the Washington Heights community is situated on a raised basement with glass block windows. The building has a steeply pitched front gable roof with asphalt shingles and a shed dormer along its south elevation. Its front elevation has a slightly projecting off-center entrance vestibule topped by a pediment. The vestibule has a metal storm door, concrete steps and railings, and bracketed metal awning. The first floor has a three-sided window bay with a central picture window flanked by non-original one-over-one aluminum-sash windows and a smooth stone base. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. Detailing includes decorative brickwork at the corners and concrete sills. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations Shed dormer may be a later addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Entrance with pediment and bracketed awning, concrete sills, stone base under bay, decorative brickwork			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10457 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad house at the northeast corner of Green and 105th streets in the Washington Heights community is situated on a raised basement. The building has a front gable roof covered with asphalt shingles. The north half of the front elevation is recessed and has a metal storm door, concrete steps with metal railings, and a small glass block window. The living room bay has a non-original picture window flanked by one-over-one aluminum-sash windows that are partially obscured by a metal awning. Detailing includes concrete sills below both windows and stone inserts at the basement corner. The front elevation's gable is clad with synthetic siding. This standard home does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details concrete sills, stone inserts at corner			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10541 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the Washington Heights community sits on a raised basement with glass block window. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front elevation is clad in orange face brick and in faux stone below the sill line. It has an off-center metal storm door, concrete steps with metal railings, and a picture window flanked by one-over-one aluminum-sash windows that are partially obscured by a metal awning. Detailing includes two decorative glass blocks adjacent to the front door. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Aluminum sashes may be original
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, Faux stone (below sill)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10601 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1954

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised basement with glass block windows and is clad with tan-brown brick. The building has a front gable roof covered with asphalt shingles. The front elevation has a projecting living room bay with a non-original picture window flanked by one-over-one aluminum-sash windows that are partially obscured by a low, metal awning. The residence includes an off-center metal storm door flanked by fluted concrete molding, concrete steps with metal railings, and a single four-over-four corner window. A pent roof spans the living room bay and front door. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Fluted concrete molding around door			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10701 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1950

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad cottage in the Morgan Park community is situated on a raised basement with glass block windows and has a steeply pitched side-gable roof. Its front elevation has a slightly projecting brick-clad gabled entrance vestibule with a metal storm door and a small adjacent glass block window. The porch has concrete steps, metal railings, open metal supports and metal awning roof. This elevation has a picture window flanked by double-hung windows that are partially obscured by a low, metal awning. Detailing includes decorative stone flanking the door and used as accents on the entrance vestibule. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone at entrance and as accents			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10757 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad cottage in the Morgan Park community has a cross-gable roof covered with asphalt shingles. The front elevation has metal storm door with sunburst motif and bracketed metal awning, concrete steps with metal railings, a picture window flanked by one-over-one windows, and a single one-over-one window. An additional one-over-one window is situated in the gable. All windows are non-original and have metal awnings. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10829 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story house is situated on a raised basement in the Morgan Park community and is clad with faced brick on its front elevation and common brick on its side and rear elevations. The building has a hip roof covered with asphalt shingles. Its front elevation has a slightly projecting off-center entrance with a metal storm door, concrete steps, and metal railings. Windows on the front elevation are non-original and include a picture window flanked by one-over-one aluminum-sash windows on the first floor and two one-over-one aluminum-sash windows on the second floor. Detailing includes brick stringcourses with soldier course lintels and concrete sills. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Tack strips, that once secured awnings, remain above the windows.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick stringcourses, soldier course lintels, concrete sills			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10901 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a single story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad cottage in the Morgan Park community is situated on a raised basement and has a cross-gable roof covered with asphalt shingles. The front elevation has a metal storm door with a concrete surround consisting of fluted pilasters and a smooth lintel, concrete steps with metal railings, a sixteen-light window flanked by one-over-one aluminum-sash windows, and two six-over-one aluminum-sash windows: one on the first floor and one in the gable. Windows are modern replacements. Detailing includes decorative brickwork above the windows, concrete sills, and faux stone at the water table. It does not feature distinguishing architectural characteristics and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details Stone lintel at entrance, fluted pilasters, decorative brickwork above windows, concrete sills, faux stone at water table			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11001 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Neo-Tudor

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story single family, brick residence.

Property Description: **Stories:** 1

This one-story, brick clad house in the Morgan Park community is situated on a raised basement with glass block windows. The building has a hip-on-gable roof with a gable garage facing the street. The house's front entrance is located within a vestibule that is topped by a shed-roof, is brick-clad, and is located in the ell created by the main section of the house and the gable garage. It has a hollow core metal door, concrete steps, and metal railings. The front elevation has a non-original aluminum-clad first floor bay window and two additional pairs of non-original aluminum-sash windows: one on the first floor and one in the gable. The north elevation has an overhead garage door and a one-over-one aluminum-sash window. Detailing includes decorative stonework at the corners of the house, vertical half-timbering in the north gable (much of which has been removed), and concrete sills. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Ghost lines on the garage suggest that window shutters and other trim may have been removed.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Decorative brickwork, stonework, half-timbering, concrete sills			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11039 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
West and south façades of two-story, brick and frame, single-family residence.

Property Description: **Stories:** 2

This two-story house in the Morgan Park community has a brick-clad first floor, a synthetic-clad second floor, and a gable roof covered with asphalt shingles. The front elevation has a hip-roofed enclosed front porch with a side entrance door, concrete steps, and metal railing. There are three one-over-one aluminum-sash windows and one glass block window on the first floor front façade and a single one-over-one on the second. Detailing includes a stone sill course and buff brick stringcourses. The second floor on this house is a later addition. This home does not feature sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered_ Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, roof raised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (lower), Synthetic siding (upper)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone sill course, brick stringcourses			**Windows** Double hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11121 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family residence

Current: Multi-family residence

Date of Construction: 1959

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a two-story, brick, multi-family residence.

Property Description: **Stories:** 2

This two-story residential building in the Morgan Park community is situated on a raised basement with glass block windows and is clad with buff brick along the front elevation and with common brick along the side and rear elevations. The building has a flat roof and parapet. The north half of the front elevation has a full-height rectangular pavilion, both floors of which feature a window group comprised of a picture window flanked by one-over-one aluminum-sash windows with metal awnings. The south half of the front elevation has an off-center hollow core metal door, a flat-roofed canopy with two open metal supports, and a concrete stoop. Detailing includes decorative glass blocks adjacent to the door and three horizontal strips of glass blocks on the second floor, above the entrance. This building lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door; windows may be original
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Decorative glass blocks			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11247 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1950

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad cottage in the Morgan Park community has a side gable roof covered with asphalt shingles and a rear gabled wing. The residence is on a raised basement. The front elevation has a slightly projecting gabled brick-clad vestibule with a metal storm door surrounded by stone quoins, a metal awning, a small adjacent glass block window, and concrete steps with metal railings. The living room bay has a picture window flanked by one-over-one aluminum sash windows that are partially obscured by a metal awning. Detailing included decorative brick above and below the windows. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone surrounding the entrance, decorative brick around windows			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11359 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1951

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the Morgan Park community has a front gable roof covered with asphalt shingles. Its front elevation features an off-center metal storm door with a concrete surround and a porch with concrete steps, metal railings, two open metal supports, and a metal awning roof. It has a small glass block window and a picture window flanked by non-original one-over-one aluminum-sash windows. A small bulls-eye window is situated in the attic gable. Detailing includes contrasting brick around the bulls-eye window and both above and below the other window group. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Contrasting brick around the windows, bulls-eye window			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12143 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 October 2012

Photos with Captions:
West façade of a two-story, two-flat, frame residence.

Property Description: **Stories:** 2

This two-flat residential building in the West Pullman community sits on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a flat roof with parapet. The front elevation has a partial-width, flat-roofed, wood porch with an off-center door, straight railings and posts, and a full-height three-sided window bay pavilion with six non-original one-over-one aluminum-sash windows: three on the first floor and three on the second floor. The second floor also has a single non-original one-over-one aluminum-sash window above the porch. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12257 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1911

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 October 2012

Photos with Captions:
West façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a non-original, full-width, gable-roofed, enclosed porch covered with synthetic siding. The porch has an off-center hollow core metal door, concrete steps with metal railings, and a strip of three non-original one-over-one aluminum-sash windows. A pair of double-hung windows is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Porch enclosed			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12317 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1907

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in Calumet Park is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. The front elevation has a full-width, hip-roof wood porch with metal railings and open metal supports, an off-center metal storm door, a picture window flanked by one-over-one aluminum-sash windows, and a single one-over-one aluminum-sash window in the gable. Windows are modern replacements. This house lacks integrity and distinctive architectural features; therefore, it is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12359 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 October 2012

Photos with Captions:
West and south façades of a one-story, single family residence

Property Description: **Stories:** 1

This one-story frame bungalow at the northeast corner of Green and 124th streets in Calumet Park is situated on a raised concrete block basement and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles. Its front (Green Street) elevation has an off-center door with a bracketed gabled hood, concrete steps with metal railings, and a small casement window adjacent to the door. The elevation also has a gabled projecting living room bay with a bracketed, hip-roofed, three-sided bay window with multi-light glazing that is partially obscured by a low metal awning. There is a small window with a metal awning in the gable. The side elevation (124th Street) also has a bracketed, hip-roofed, three-sided bay window with multi-light glazing that is partially obscured by a low metal awning and a side entrance door with bracketed gabled hood. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Bracketed gable hoods, brackets under the bays			**Windows** Casement, fixed-pane
Outbuildings (*Number and Description*) Detached, two-car, frame garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12409 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 October 2012

Photos with Captions:
West and north façades of a two-story, single family residence.

Property Description: **Stories:** 2

This two-story frame house in Calumet Park is covered with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center non-original hollow core metal door with a concrete stoop and a picture window flanked by one-over-one aluminum-sash windows on the first floor. There is a three-sided bay window and a single window on the second floor and a pair of windows in the gable; these windows are all non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12713 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1953

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
West façade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the West Pullman community is situated on a raised basement with glass block windows and is clad with face brick on the front elevation and common brick on the side and rear elevations. The building has a front gable roof covered with asphalt shingles. The front elevation has a hollow core metal door, concrete steps with metal railings, a small glass block window, and a projecting living room bay surrounded on three sides by multi-paned windows, the central group of which is partially obscured by a low metal awning. A pair of one-over-one windows with metal awning is situated in the gable. All windows have concrete sills. A bracketed pent roof spans the door and living room bay. It does not feature any distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed pent roof, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12817 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of two-story brick and frame single-family residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is clad with brick on the first floor and synthetic siding on the second floor. It has a hip roof covered with asphalt shingles. Its front façade has a centrally located front door, concrete steps with metal railings, two pairs of one-over one windows on the first floor, and two one-over-one-windows on the second floor. This house does not feature distinguishing features and is not eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (lower), Synthetic siding (upper)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hipped	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12819 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 3 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the West Pullman community has a front gable roof covered with asphalt shingles. Its front façade is clad with face brick; it has a gabled projecting living room, a hollow metal paneled door, a pair of non-original windows, and a picture window. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (lower), Synthetic siding (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Sliding or casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12823 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East and south façades of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the West Pullman community has a front gable roof covered with asphalt shingles. Its front façade is clad with face brick and has a hollow metal door on one side of a flat-roofed projection of the living room. It also has a picture window and a pair of one-over-one windows on the first floor, and a pair of sliding glass windows in the gable, all of which are non-original. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, sliding
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12825 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East and south façades of 1.5-story, brick, single family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story brick-clad house in the West Pullman community has a front gable roof covered with asphalt shingles. Its front façade is clad with face brick. It has a hollow metal door on one side of a shed-roofed projection of the living room, two pairs of one-over-one windows on the first floor, and a pair of sliding glass windows in the gable (all non-original). It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12829 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East and south façades of 1.5 story, brick single-family residence.

Property Description: **Stories:** 1.5

This 1.5 story, brick clad house in the West Pullman community has a front gable roof covered with asphalt shingles. Its front façade is clad with face brick, has a hollow metal door on one side of a flat-roofed projection of the living room. It has two sets of windows on the first floor—a fixed-pane flanked by double-hung windows and a pair of sliding glass windows. An additional pair of sliding glass windows is situated in the gable. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, sliding
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12831 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East and south façades of 1.5-story, brick, single-family residence.

Property Description: **Stories:** 1.5

This 1.5-story brick-clad house in the West Pullman community has a front gable roof covered with asphalt shingles. Its front elevation is clad with brown face brick and has two strips of windows on the first floor, one of which is situated within a shed-roofed window bay, plus a single window in the gable. The windows are located below low metal awnings but appear to be casement. The door is situated along the north side of the house. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Windows may be replacements
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12835 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East and south façades of 1.5-story, brick, single family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story brick-clad house in the West Pullman community has a gable roof covered with asphalt shingles. Its front façade is clad with face brick and has a hollow metal door on one side of a shed-roofed projection of the living room. A fixed-pane window and two one-over-one windows occupy the first floor and there is a pair of one-over-one windows in the gable. Detailing includes the use of contrasting-colored brick around the windows. It does not contain distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Buff-colored brick frame windows			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12837 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz and CCA

Date: 13 September 2012

Photos with Captions:
North and east façades of one-story, brick single family residence (top and bottom, respectively).

Property Description: **Stories:** 1

This one-story brick-clad house in the West Pullman community has a side gable roof covered with asphalt shingles. The front façade has a centrally located door and an asymmetrical array of windows—a sliding window on one side with a picture window flanked by one-over-one sashes on the other side. Fenestration on the side elevation is comprised of a one-over-one window, a single-pane window, and sliding windows in the gable. This standard post-WWII home does not feature any distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12851 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1951

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad house at the southeast corner of Green Street and 128th Place in the West Pullman community has a hip roof with overhanging eaves and asphalt shingles. The front (128th Place) elevation has a centrally-located metal storm door, concrete steps with metal railings, a pair of windows that appear to be casements, and a non-original picture window flanked by one-over-one aluminum-sash windows. The Green Street elevation has a projecting brick bay and two pairs of casement windows. All windows have concrete sills. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills			**Windows** Casement, fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12877 S. Green Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community sits on a raised basement; it is clad with face brick on its front elevation and common brick on its side and rear elevations. The hip roofed building has a front-facing gabled pavilion with synthetic-clad gable and scalloped verge boards. The front elevation has a centrally located metal storm door, concrete steps with metal railings, and two non-original one-over-one aluminum-sash windows with concrete sills. It does not feature distinguishing architectural characteristics and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Scalloped verge boards, concrete sills			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Bell Bros. Cleaners

Property address:

10004 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Bell Bros. Cleaning

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West and north façades of one-story, commercial property.

Property Description: **Stories:** 1

This one-story, flat-roofed, metal-clad, concrete block commercial building at the corner of Halsted and 100th streets in the Washington Heights community has a plate glass door and large display windows. There are also metal double doors and glass block windows. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Metal-clad concrete block	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10114 S. Halsted Street

HAARGIS Number:

None

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East and north façades of one-story, multi-family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Washington Heights community is situated on a raised basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a pent roof, an off-center metal storm door, and concrete side-facing steps with metal railings. There is a picture window flanked by one-over-one aluminum-sash windows on the first floor and a single one-over-one aluminum-sash window in the gable, all of which are non-original. The north elevation has a wide aluminum-clad shed dormer with windows. Windows on the side elevations are non-original one-over-one sash of varying sizes. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations Conversion from single family residence after 1938 (Sanborn)			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10116 S. Halsted Street

HAARGIS Number:

None

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Mixed use

Current: Multi-family residence

Date of Construction: 1937

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East façade of one-story, brick multi-family residence

Property Description: **Stories:** 1

This one-story brick-clad building in the Washington Heights community has been converted from a commercial structure to a multi-family residence. It has a concrete water table, flat roof, and parapet with concrete coping and inserts. Brick stringcourses traverse the cornice. Its front elevation has a centrally located recessed metal door with an in-filled transom, a strip of storefront display windows to the south, and a strip of non-original one-over-one aluminum-sash windows to the north. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Converted to multi-family residence			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Patterned brickwork, brick stringcourses, concrete coping and inserts			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional comments

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Rehoboth Apostolic Worship Church

Property address:

10159 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Rehoboth Apostolic Worship Church

Property Use

Historic: Religious building

Current: Religious building

Date of Construction: circa 1952-62

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, brick, religious building.

Property Description: **Stories:** 1

This one-story brick-clad church building at the northeast corner of Halsted and 102nd streets in the Washington Heights community has a flat roof and a tall, protruding brick sidewall that rises above the roofline. The front (Halsted) elevation is glazed with a continuous series of tall windows and has an off-center hollow core metal door. Detailing is limited to an insert block. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modifications Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Tar	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details Insert block			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional comments

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: CITY OF CHICAGO DEP'T OF GAS & ELECTRICITY

Common/Current: Southwest Substation

Property address:

10227 S. Halsted Street

HAARGIS Number:

142827

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1919-1920

Architect's Name: Charles W. Kallal

Builder/Contractor: Unknown

Architectural Style:

Classical Revival

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of two-story, brick substation.

Property Description: **Stories:** 2

This vacant, two-story, Classical Revival style substation building in the Washington Heights community has a stone water table and a flat roof with parapet. The front façade is clad with dark brown-colored brick that accents the façade with stringcourses, soldier courses, and cruciform patterns against the reddish brown-colored brick. The sides and rear feature common brick. The front elevation features a centrally located entrance with a Classical surround that includes Ionic columns and an entablature with a segmental pediment and frieze band with incised lettering that reads, "Southwest Substation." The original door, sidelight and transom have been removed and their openings covered with plywood. Directly above the entrance is a strip of three plywood-covered window openings with stone casing. Decorative detailing includes full-height brick corner pilasters, a stone belt course above the windows, and a stone cornice with widely spaced dentils. Directly beneath the cornice is a stone panel with incised lettering that reads, "City of Chicago Dep't of Gas & Electricity." Nearly all of the side elevation window openings are covered with plywood. This is a rare extant example of a Classical Revival substation building in the Washington Heights community. It has retained its decorative detailing, and it is possible that original windows may be extant behind the

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

wood covering. Assuming that the interior has retained interior fabric, this building is recommended as individually eligible for listing on the National Register under Criterion C for architecture.

Structural Survey

Integrity: Unaltered Slight modifications Major Alteration			**Additional Notes/Descriptions** Visible elements are unaltered
Condition: Excellent Good Poor			
Additional Alterations Openings covered with plywood.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Classical surround at entrance, stone casings, corner pilasters, stone belt course, stone cornice with dentils, inscribed stone panel, decorative brickwork utilizing contrasting colored bricks			**Windows** covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? Yes	**A** **B** **C**	**Significance:** Rare example of an intact Classical Revival substation in the community

Additional comments

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10238-10240 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Trinity African Hair Braiding

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of two-story, mixed-use, brick building.

Property Description: **Stories:** 2

This two-story, flat-roofed, mixed-use building in the Washington Heights community has a front façade clad with limestone on the first floor and light brown and orange-colored face brick above. The first floor has two non-original large central display windows and doors on either end. The second floor has two strips of three non-original one-over-one windows with stone casing. Art Deco detailing includes limestone banding with chevron and zigzag patterns on the first and second floors and fluted pilasters that terminate in scrolls flanking the two doors. This building does not feature sufficient distinguishing features to qualify eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Limestone banding, fluted pilasters with scrolls, brick stringcourse along cornice			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10241 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West and south façades of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Washington Heights community is covered with synthetic siding and has a front gable roof covered with asphalt shingles. The front elevation has an off-center non-original hollow core metal door with a non-original horizontal window strip above; there are tall, paired, non-original one-over-one windows, each with a cornice, on the first floor and in the gable. New wood steps and metal rails provide access to the residence. The north elevation has a hip-roof three-sided window bay with double-hung, non-original aluminum sashes. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight modifications Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations One-story segment at rear is original according to the Sanborn maps.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Cornice above windows			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10326 S. Halsted Street
(10328 S. Halsted CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

House of Derrion

Property Use

Historic: Mixed-Use

Current: Mixed Use

Date of Construction: circa 1940s or 1950s

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story commercial building in the Washington Heights community has a flat roof and parapet with concrete coping. Its front elevation is covered with a stone veneer on the first floor and in patterned buff brick above. It has two storefronts with angled display windows flanked by plate glass doors with glass transoms. A third hollow core metal door with glass transom provides access to the second floor space. The second floor has two window groups: a pair of non-original one-over-one aluminum-sash windows and a non-original picture window flanked by one-over-one aluminum-sash windows, both of which are partially obscured by metal awnings. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement commercial doors and second floor windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (upper) Faux stone (lower)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Patterned brickwork			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10401-10419 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

The Way Of Holiness Mission Ministries

Property Use

Historic: Commercial

Current: Religious

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Mid-Century Modern

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a brick, one-story, religious building.

Property Description: **Stories:** 1

This one-story flat-roofed building in the Roseland community has a front elevation that is clad with buff brick and has a projecting corner bay and an angled corner pier that are covered with a stone veneer. It has a wide door opening and four windows, all of which are covered with metal shades. This Mid-Century modern building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (façade), faux stone (corner pier and bay)	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name	**Photos with Captions:** East façade of a brick, one-story, commercial building.
Historic: Bldg. not labeled, not in CHRS **Common/Current:** Unknown	
Property Address: 10506 S. Halsted Street	
HAARGIS Number: Not in database	
Present Owner and /or Occupant: J & R Fashion	
Property Use **Historic:** Commercial **Current:** Commercial	
Date of Construction: 1955 **Architect's Name:** Not in CHRS **Builder/Contractor:** Not in CHRS	
Architectural Style: Vernacular	
Prepared By: J. Martinez, M. C. Bird, J. Guarino **Photo By:** S. Katz **Date:** 23 October 2012	

Property Description: **Stories:** 1

This one-story concrete-block commercial building in the Washington Heights community has a flat roof and parapet. Its front elevation is clad with orange brick, has an off-center plate glass door, an adjacent glass block window, and two strips of display windows. Endwalls extend above the roofline. Detailing includes concrete banding and coping. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete banding and coping			**Windows** Fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name **Historic:** Bldg. not labeled, not in CHRS **Common/Current:** Unknown	**Photos with Captions:** West façade of a one-story, brick, commercial building.
Property Address: 10615 S. Halsted Street	
HAARGIS Number: Not in database	
Present Owner and /or Occupant: D&P Jones Insurance Agency Inc., Safeco	
Property Use **Historic:** Commercial **Current:** Commercial	
Date of Construction: 1954 **Architect's Name:** Not in CHRS **Builder/Contractor:** Not in CHRS	
Architectural Style: Vernacular	
Prepared By: J. Martinez, M. C. Bird, J. Guarino **Photo By:** S. Katz **Date:** 23 October 2012	

Property Description: **Stories:** 1

This one-story commercial building in the Roseland community has a flat roof and parapet. Its front elevation is clad with red brick and has faux stone corner piers, an off-center plate glass door, a horizontal strip of four single-pane windows, and concrete coping. The side and rear elevations are clad with common brick. This building does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Faux stone corner piers, concrete coping			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Hot Spot

Property Address:

10861 S. Halsted St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Hot Spot

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1954

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
South and east façades of a one-story, commercial building.

Property Description: **Stories:** 1

This one-story concrete block fast food restaurant in the Roseland community has a flat roof with a flared metal boxed parapet, hollow core metal doors, and single-pane windows. The roof extends to the north to serve as a flat-roofed canopy for the drive-through that is supported by two boxed piers. This building does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11011 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1961

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
West façade of one-story, concrete block, commercial property.

Property Description: **Stories:** 1

This one-story gable-roofed commercial building in the Roseland community has a front elevation that is clad in buff brick, a centrally located recessed glass door, and flanking display windows that are largely covered with plywood. The gable includes a large wood signboard. The two non-gable elevations are painted concrete block and extend above the roofline. The lower portions of the roofline have been built up along the non-gable sides. A rear addition is present. This building does not feature sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Boarded-up, conditions unknown
Condition: Excellent Good <u>Poor</u>			Brick cladding falling off
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11013 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1879

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of 1.5-story, frame, multi-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with casement windows and is clad with wood boards laid vertically on the first floor and synthetic siding on the second floor. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center non-original hollow core metal door beneath a gabled wooden hood, wood steps with railings, a raised wood deck (non-original), and two window openings on the first floor, both of which are covered with plywood. There is a strip of non-original one-over-one windows in the gable and a wide, shed-roofed wall dormer on the north elevation. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood, synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Professional Dental Building

Common/Current: Professional Dental Building

Property Address:

11139 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Professional Dental Building

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Modernistic

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a brick, one-story, commercial building.

Property Description: **Stories:** 1

This one-story, Mid-Century Modern office building at the Roseland community is clad with light orange face brick and has an L-shaped footprint with a shed-roofed front wing and a flat-roofed rear wing. The Halsted elevation of the rear wing has three rectangular glass block windows while the south elevation of the front wing has an off-center door and floor-to-ceiling windows covered with large metal shades. This building lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass-block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11200 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Morgan Park Auto Service

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
North and east façades of a brick, one-story, commercial building.

Property Description: **Stories:** 1

This one-story commercial building at the southwest corner of Halsted and 112th streets in the Morgan Park community is clad with yellow brick along its two street elevations. The building has a granite water table, a flat roof, and a crenellated parapet with terra cotta coping. The central section of the Halsted elevation is covered with wood boards laid vertically and spanned by a horizontal strip of rectangular single-pane windows. This elevation has doors on either end that are surrounded by cream-colored terra cotta and topped by ogee arches. The 112th Street elevation has three garage door openings and glass block windows. The storefronts have been completely altered and in-filled. Detailing includes terra cotta finals, decorative panels, and banding at the parapet level. This building lacks integrity and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Remodeled storefronts, openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), granite (water table), terra cotta (accents)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Crenellated parapet, terra cotta coping, finials, ogee arches, banding, and panels			**Windows** Fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11320-11322 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Mixed-Use

Current: Mixed-Use

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Modernistic

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story commercial building in the Morgan Park community has a flat roof, parapet, concrete banding, and projecting corner piers covered with faux stone on the first floor and yellow brick above. Its front elevation is clad with yellow face brick and has a central hollow core metal door flanked by two storefronts, each with central doors and angled display windows. The recessed second floor has a central door and four groups of windows, each of which is comprised of a picture window and flanking one-over-one aluminum-sash windows. Although an example of a Mid-Century Modern commercial building, it does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), faux stone (piers)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete banding, projecting piers			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11600 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Karastan Rugs & Carpets

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
North and east façades of a brick, one-story, commercial building

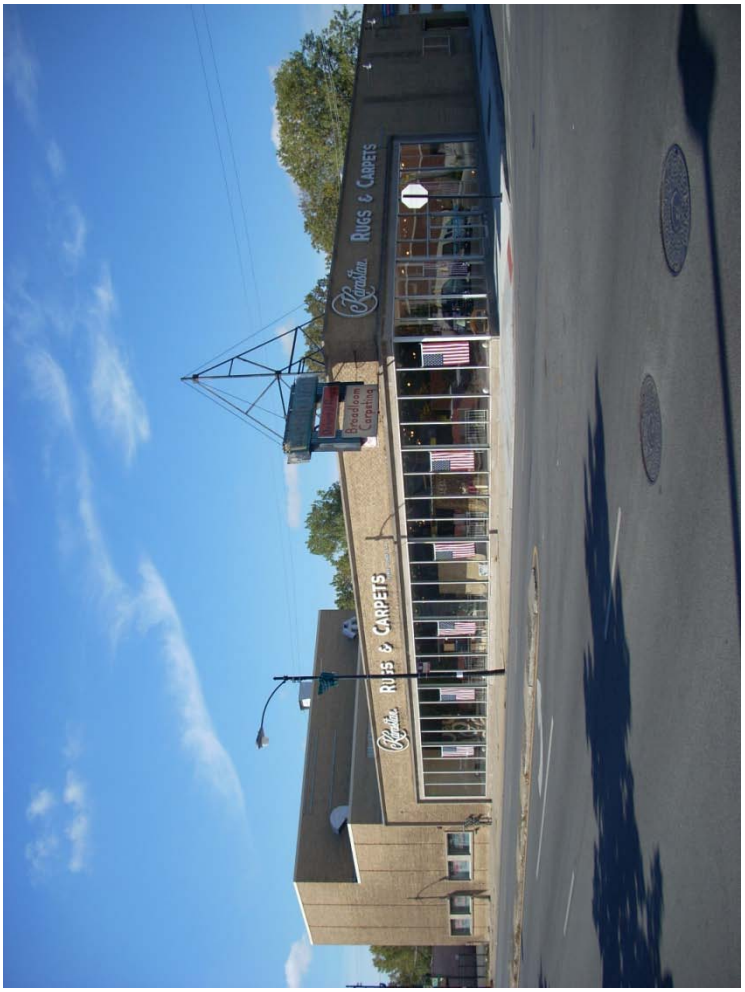

Property Description: **Stories:** 1-2

This one-story retail commercial building at the corner of Halsted and 116th streets in the West Pullman community has a flat roof and parapet; it is clad with light brown face brick. The two street elevations feature a series of tall plate glass display windows that span nearly the entire length of the Halsted Street elevation. A two-story flat-roofed wing situated at the south end of its Halsted Street elevation is clad with the same light brown face brick and has four single-pane windows on the first floor. This building lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11642 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story brick-clad bungalow in the West Pullman community is situated on a raised basement and has a hip roof covered with asphalt shingles, a hip dormer, and overhanging eaves. The front elevation has a recessed corner porch with a metal storm door, low brick sidewalls, a corner brick pier support, and concrete steps with metal railings. Windows on the front elevation include a non-original picture window flanked by one-over-one aluminum-sash windows in the living room bay, and a strip of three window openings in the dormer. The house has a synthetic-clad addition at the rear. Detailing includes square insert blocks used as decorative accents and concrete sills. This is an example of a Chicago bungalow, a building type that the City of Chicago has recognized through its Historic Chicago Bungalow Initiative. However, this house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Addition at rear			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Insert blocks, concrete sills			**Windows** Double-hung, sliding or casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11753 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This vacant one-story brick-clad house in the West Pullman community is situated on a raised basement. The building has a hip roof covered with asphalt shingles, a hip dormer with a pair of window openings that only retain their upper sashes, and overhanging eaves. The front elevation has a full-width gabled wood porch with brick pier supports, an off-center hollow core metal door, a small casement window, and a strip of three non-original windows that include two with single panes and one that is double-hung. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Flagstone Veneer Stone Galloy &Van Etten Inc. Cut Stone Contractors

Property Address:

11756 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Flagstone Veneer Stone Galloy &Van Etten Inc. Cut Stone Contractors

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1931

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 October 2012

Photos with Captions:
South façade of a masonry, two-story, industrial building.

Property Description: **Stories:** 2

This two-story concrete block light industrial building in the West Pullman community has a one-story wing at its south end; both the main building and wing have flat roofs. A line of buttresses divide the building's long Halsted Street elevation into a series of thirteen bays; large windows have all been in-filled with synthetic materials. One of these bays features an overhead garage door. The front (south) elevation of the one-story office wing has a hollow core metal door with an in-filled transom, three non-original one-over-one aluminum-sash windows, and two large window openings in-filled with concrete block. An additional flat-roofed one-and-a-half-story wing is situated along the rear of the main building block. Its west elevation features a series of windows and overhead doors. Detailing includes concrete stringcourses and applied letters.

This industrial building is recommended for National Register listing under Criterion A for Industry. Dutch immigrant

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Abram Van Etten and his partner George Galloy established the stone fabricating company in 1899. Located in a community that experienced a collapse of its industrial base in the 1970s and considerable disinvestment since that time, the building serves as an important, and rare, example of an early twentieth-century industrial building in West Pullman that retains its original use and ownership. It retains the majority of its original materials with the exception of fenestration along Halsted Street, where it appears that the windows have either been covered or removed.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, some openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Buttresses, stringcourses, lettering			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** An important and rare example of an early twentieth century industrial building in West Pullman that retains its original use and ownership.

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11763 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a one-story, multi-family residence.

Property Description: **Stories:** 1

This one-story frame house in the West Pullman community has a raised brick basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof wood porch that contains a gable accent above the door. The porch roof is supported with straight posts and railings, and an off-center door and two one-over-one windows on both the raised basement and the first floor levels. The first floor door has a transom: both the door and first floor windows retain their original wood casings with pilasters and cornices. An octagonal ventilating louver is situated in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Gable accent on porch roof, window pilasters and cornices			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11800 S. Halsted St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial (Oils & Misc. Storage at Coal Yard, 1939)

Current: Commercial

Date of Construction: 1922

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
South and east façades of one-story, brick, commercial building.

Property Description: **Stories:** 1

This one-story brick-clad flat-roofed commercial building at the southwest corner of Halsted and 118th streets in the West Pullman community has a metal door, a glass block window, and a pair of windows along its front (Halsted) elevation, and five window openings along its 118th Street elevation. Fenestration is comprised of one-over-one-windows, three of which are covered with plywood. Both street elevations feature brick corbelling. This building does not feature sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details Corbelling			**Windows** Double-hung, some boarded up
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Converted from commercial to residential according to the Sanborn map and CCA records

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11932 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Currency Exchange

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East and north façades of two-story, brick commercial building.

Property Description: **Stories:** 2

This two-story commercial building in the West Pullman community has a flat roof and shaped parapet. The first floor of its front elevation is clad in faux stone and has two centrally located display windows and two non-original doors, one at either end: one is glass and the other is metal. The storefront level is topped by a full-width wood signboard and the upper level is clad in brown face brick and has two windows, one of which is in-filled with glass blocks. Detailing includes concrete sills, flat arches, and diamond-shaped stone inserts at the parapet level. All side elevation windows are covered with wood. This building does not feature sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement storefront, replacement or bricked windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stepped parapet, concrete sills, flat arches, stone inserts			**Windows** Fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Garage (Sanborn, 1939)

Common/Current: Action Auto Collision Center

Property Address:

11934-11938 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Action Auto Collision Center

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of one-story, brick commercial building.

Property Description: **Stories:** 1

This one-story auto repair shop in the West Pullman community has a flat roof and a shaped parapet that is rounded in the center. Its three-bay façade is clad with brown face brick and has an overhead metal garage door in the center and strips of fixed-pane windows on its flanking bays. The south bay also has a metal door with transom. All three bays feature metal signboards. Detailing includes concrete banding, coping, and inserts. This building does not feature sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and garage doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Shaped parapet, concrete banding, coping, and inserts			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11944 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of mixed-use, two-story, brick building.

Property Description: **Stories:** 2

This two-story mixed-use building in the West Pullman community has a flat roof and parapet. Its front elevation is clad in red face brick and has an off-center metal door with transom. The storefront has maintained its original design with recessed door and flanking display windows. The second floor has five non-original one-over-one aluminum-sash windows. Detailing includes stone coping with foliate motifs atop first floor brick piers, two spandrel panels with decorative brickwork, stone banding on one-half of the second floor, and a parapet with decorative square terra cotta panels and corner brick panels with corbelling. One-half of the brickwork on the second floor of the front elevation is non-original. This building does not feature sufficient integrity to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Modifications to half of the second story brickwork
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone coping, brick piers, terra cotta panels, corbelling			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11946 S Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of two-story, brick-clad, commercial building.

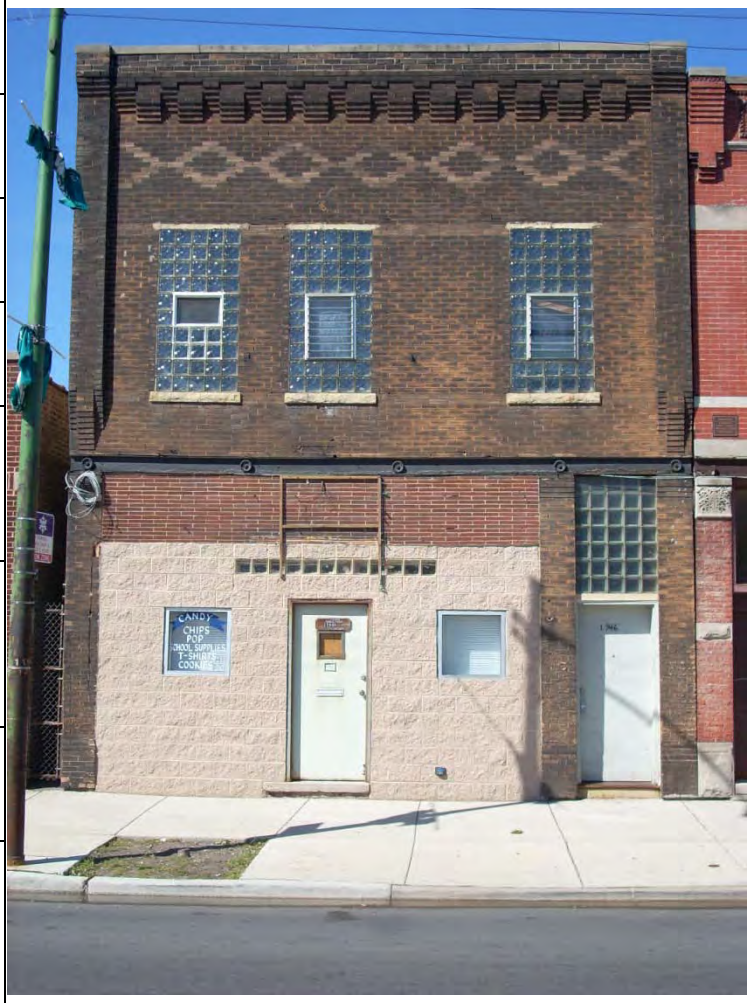

Property Description: **Stories:** 2

This two-story commercial building in the West Pullman community has a flat roof and parapet, and is clad with brown face brick. The building's former storefront has been in-filled with concrete block and brick and has a hollow metal door and two non-original square single-pane windows. An off-center entrance that provides access to the second floor has a non-original hollow metal door and its transom has been in-filled with glass blocks. The three window openings on the second floor have been in-filled with glass blocks and ventilating louvers and feature stone sills. Detailing includes corner pilasters with corbelling on the second floor level, buff brickwork arranged in a diamond pattern above the second floor windows, and brick corbelling at the parapet level. This building has experienced a loss of integrity and does not feature sufficient distinctive architectural features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Original storefront in-filled with; new doors; window openings in-filled
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Corner pilasters with corbelling, buff brickwork, corbelling			**Windows** Fixed-pane, glass-block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Feed store (Sanborn, 1939)

Common/Current: Action Auto Rebuilder

Property Address:

11948-11950 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Action Auto Rebuilder

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of one-story, brick, commercial building.

Property Description: **Stories:** 1

This one-story auto-repair shop in the West Pullman community has a flat roof and triangular shaped parapet with concrete coping. Its front elevation is clad in brown brick and has a centrally located metal overhead garage door, an adjacent metal door with transom, and large flanking window openings that have been in-filled with glass blocks. Detailing includes concrete sills, coping, insert blocks, brick banding, and a panel displaying the business name. This building does not feature sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Shaped parapet with concrete coping, concrete inserts, sills, concrete panel in parapet, brick banding, panel displaying the business name			**Windows** Fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11958 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Mixed-use

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of two-story, brick mixed-use building.

Property Description: **Stories:** 2

This two-story mixed-use building at the northwest corner of Halsted and 120th streets in the West Pullman community has a flat roof and shaped parapet with stone inserts and brick stringcourses. The building fabric at the street corner of the first floor has been removed so that the non-original corner door, which is covered in metal, is deeply recessed. A secondary entrance at the opposite end of the front elevation features a hollow core metal door and transom in-filled with wood and is flanked by original brown brick cladding. The remainder of the first floor along both street elevations features non-original brick cladding. The second floor of the front elevation features a large fixed-pane window flanked by casements and a separate pair of casements, all of which are non-original. Windows and door openings along the 120th Street elevation have been altered and the second floor of this elevation features a series of one-over-one windows. One of these windows is in-filled with glass block. This building does not feature sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors, altered first floor
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Shaped parapet, stone inserts, and brick stringcourses			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12000 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Sure-Way Missionary Baptist Church

Property Use

Historic: Commercial

Current: Religious

Date of Construction: 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Art Deco

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of one-story, masonry religious building.

Property Description: **Stories:** 1

This Art Deco style one-story church at the southwest corner of Halsted and 120th streets in the West Pullman community has a flat roof and parapet. Its front elevation is clad in smooth limestone and has a centrally located recessed entrance with glass double-doors, a transom, and fluted side walls. The entrance is flanked by two large glass block windows. Detailing includes two flattened stone reliefs featuring eagle motifs, dentils, and banding at the parapet level. A mid-century modern, one-story, flat-roofed wing clad in faux stone and buff brick is situated along the south side of the original building (bottom of photo). It features three large picture windows along its front elevation and wide roof overhangs.

This is a nice example of a stripped down Art Deco façade and a mid-century modern wing. However, the alternation of the two large window openings with glass block infill compromises the integrity of this small building, which no longer serves it original use. As a result, this building does not qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Post WWII addition on south side			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone (façade), Brick (sides and rear)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Eagles in relief, fluted side walls and parapet with dentils and banding			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: C. J. Butler's Auto Repair

Property Address:

12001-12003 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

C. J. Butler's Auto Repair

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a one-story, brick, commercial building.

Property Description: **Stories:** 1

This one-story commercial building in the West Pullman community is clad with orange-brown face brick on its 120th Street elevation and synthetic siding on its Halsted elevation. The building has a flat roof and a crenellated parapet with concrete coping. The parapet is obscured by a continuous metal sign plate. The recessed corner entrance has a non-original plate glass door with an in-filled transom. The Halsted Street elevation has been altered with installation of a series of fixed-pane windows and an off-center glass door. However, this elevation retains four original brick piers with stone coping and geometric motifs as well as a portion of original brick cladding in the center, which includes a stone lintel above the outline of a former door opening now in-filled with brick. The 120th Street elevation includes two non-original doors, three double-hung wood-sash windows, and brick corbelling at the roofline. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, cladding & windows; openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Crenellated parapet, concrete coping, brick piers with stone coping and geometric motifs, stone lintel, brick corbelling			**Windows** Fixed pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12018 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of two-story, mixed-use, brick building.

Property Description: **Stories:** 2

This two-story mixed-use building in the West Pullman community has a flat roof and shaped parapet. Its front elevation is clad in brown and buff-colored face brick and has a storefront with recessed glass door flanked by display windows with transoms that are in-filled. A secondary entrance has a non-original hollow metal door and provides access to the upper level apartment. The second floor of the front elevation has five non-original one-over-one aluminum-sash windows. Detailing includes flat arches, stick-like molding in stone at the parapet level and a stone panel with decorative shield and swags motif. This building does not feature sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement window and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Shaped parapet, flat arches, stone molding, stone panel with shield and swags, stone inserts			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12022 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Pick-a-Tool Rentals

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of two-story, brick, mixed-use building.

Property Description: **Stories:** 2

This two-story mixed-use building in the West Pullman community has a flat roof and shaped parapet. Its front elevation is clad in brown and orange-colored brick and has a storefront with a recessed glass door flanked by display windows and transoms covered with signage. A secondary entrance with wood door and transom provides access to the upper level apartment. This door's original glass has been replaced with wood. The second floor of the front elevation has five three-over-one wood-sash windows. Detailing includes rows of vertical bricks, stone sills, and concrete coping. This building does not feature sufficient distinguishing features to quality as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills, inserts, coping, and brick stringcourses			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12033 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Multi-family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-story residence in the West Pullman community is situated on a raised basement and is clad with brown face brick on the front elevation and common brick on the side and rear elevations. The building has a gambrel roof covered with asphalt shingles. The front elevation has a full-width hip-roofed wood porch, one-half of which has been enclosed with synthetic siding and has a picture window. The open half of the porch has an off-center doorway that has been in-filled with brick, wood steps, and a corner tapered wood column at the corner. The entrance into the home is through the enclosed porch. The second floor of the front elevation has a bay with a picture window flanked by one-over-one aluminum-sash windows and a pair of one-over-one aluminum-sash windows. The attic level has a pair of windows. The side elevations feature one-over-one aluminum-sash windows of varying sizes and a small dormer. All windows are modern replacements. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and door
Condition: Excellent Good Poor			
Additional Alterations Front porch enclosed			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main) Synthetic siding (porch)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12048 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1901

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a two-story, masonry, mixed-use building.

Property Description: **Stories:** 2

This two-story mixed-use building in the West Pullman community has a flat roof and parapet. Its front elevation is clad with non-original brick below the display windows, rusticated limestone up to the parapet level, and orange brick above. The side and rear elevations are clad in orange brick. The front elevation has a pent roof, a strip of display windows, a non-original off-center door on the first floor, and four non-original one-over-one aluminum-sash windows, three of which are grouped together, on the second floor. Detailing includes a stone panel with foliate motif on the second floor. The south elevation has first floor windows that are in-filled with glass block and a series of one-over-one wood-sash windows on the second floor. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding; some openings infilled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Stone (partial façade)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone panel with foliate motif			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12142 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a one-story single family residence.

Property Description: **Stories:** 1

This one-story home in the West Pullman community sits atop a raised basement and is clad with face brick on the front elevation and common brick on the side and rear elevations. The building has a side-gabled roof covered with asphalt shingles and two synthetic-clad gable dormers, each of which has a non-original one-over-one aluminum-sash window. Its front elevation has a gabled, brick-clad vestibule with a metal storm door and concrete steps with metal railings. The vestibule is flanked by paired non-original one-over-one aluminum-sash windows on either side. Detailing includes soldier course lintels and a brick door surround. The residence does not display distinguishing architectural features and is not individually eligible for listing on the National Register

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding (dormers)
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (dormers)	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Lintels, surround			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12155 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1920

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center hollow core metal door, a partial-width flat-roofed porch with wood posts and railings, and concrete steps. The building also has a two-story, three-sided window bay pavilion and a single window on the second floor, and one window in the gable. The cladding, doors, railings, and windows non-original; above the basement, windows are one-over-one aluminum-sash. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12156 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Battery Sales Inc.

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1937

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East faced of a one-story, brick, commercial building.

Property Description: **Stories:** 1

This one-story flat-roofed commercial building in the West Pullman community has a three-bay front elevation with four brick piers and a clay tile parapet. The central bay is in-filled with concrete block and has a hollow core metal door. The flanking bay to the south has two single-pane windows. The bay to the north has a pair of wood doors. Other window openings along the side elevations have been in-filled with concrete block. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** In-filled window openings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12212-12220 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

FWC Fabricating and Welding Co.

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East and north façades of the one-story, brick, commercial buildings at 11212 (left) and 11216 (right).

East façade of the one-story, brick, commercial building at 11220.

Property Description: **Stories:** 1

This address consists of three commercial buildings in the West Pullman community that share common party walls. The 12212 building is a one-story, flat-roofed, concrete block building with brick laid in a running bond on its Halsted elevation; it features a pair of plate-glass double doors and the outlines of two former window openings and a door opening that have been in-filled with brick. The 12216 building is a one-story flat-roofed building with a brick front, an off-center door, a strip of three window openings (one in-filled and two fixed pane), and concrete banding above the windows and at the roofline. The 12220 building is a one-story flat-roofed building that is set back from the sidewalk; it has a south-facing front elevation with a pair of plate-glass double doors and a Mid-Century modern shed-roofed canopy supported by wood posts embedded in faux stone planters. The lower portion of 12220's east (Halsted) and south elevations are faced with wood boards that are vertically laid. These buildings lack distinctive architectural features and are not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some window openings in-filled with brick
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, Concrete block	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details Concrete banding (12216), canopy (12220)			**Windows** Fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12217 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Magnolias Sports Bar

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story mixed-use building in the West Pullman neighborhood is clad with multi-colored face brick (laid in a pattern) on the front elevation and common brick along the side and rear elevations. The building has a flat roof and shaped parapet. The front elevation has a concrete water table with decorative glass blocks, a storefront with recessed central entrance and flanking display windows, and an off-center door that provides access to the second floor. Transoms above storefront windows and the off-center entry have been in-filled. Second floor windows include five non-original one-over-one aluminum-sash windows arranged in a pair and in a group of three. Detailing includes insert blocks, a concrete panel with shield motif, coping, brick stringcourse, brick recessed panel, and concrete sills. Additional detailing includes concrete inserts along the storefront façade. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete insert blocks, panel, coping, patterned bricks, panels, stringcourse, concrete sills, glass blocks			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Structural Steel Shop

Common/Current: Fabricating & Welding Corp.

Property Address:

12246 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Fabricating & Welding Corp.

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a brick, two-story, industrial building.

Property Description: **Stories:** 2

The industrial building in the West Pullman community is clad with face brick along the Halsted elevation. It features a shaped parapet, symmetrical façade, and central entrance with a concrete surround featuring scrolled brackets and a lintel with curvilinear motifs. The building includes two garage door openings with brick arches and stone keystones; one of the garage bays is in-filled with concrete block. Detailing includes four brick pilasters, a concrete belt course, concrete panels, a brick arch with keystone spanning the width of the garage door opening, and concrete coping and sills. Former window openings on the first floor are in-filled with decorative stone. Three of the five second-floor window openings are in-filled with glass block, two are double-hung aluminum sash. This building lacks integrity and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Door and window openings infilled with concrete block and stone
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick pilasters, concrete belt courses, brick arches, keystone, concrete coping, sills, and panels, concrete surround at entrance, lintels, brick panels			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12308 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1950

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a brick, one-story, commercial building.

Property Description: **Stories:** 1

This one-story, flat-roofed, commercial building in Calumet Park is clad with orange face brick along its Halsted Street elevation and with common brick along its side and rear elevations. Its front elevation has a central plate glass door flanked by strips of three single-pane windows on either side. Detailing is limited to concrete coping, sills, and inserts blocks. Brackets and shadows on the façade suggest that a sign plate has been removed. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations Sign plate may have been present.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping, sills, and insert blocks			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12309 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

AAMCO Transmissions

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1953

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
West façade of a brick, one-story, commercial building.

Property Description: **Stories:** 1

This one-story flat-roofed commercial building in the West Pullman community is clad with brown face brick on its front elevation and common brick along its side and rear elevations. The front elevation has a concrete water table and a recessed, centrally located hollow core metal door with an in-filled transom. There are four large window openings with concrete sills, two of which are in-filled and two of which are fixed-pane. It has a stepped parapet with concrete coping. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some windows in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping, sills			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12338 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Chicago South Community Development Organization

Property Use

Historic: Commercial

Current: Public

Date of Construction: 1938-1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 October 2012

Photos with Captions:
East façade of a brick, one-story, public building.

Property Description: **Stories:** 1

This one-story brick building in Calumet Park has a concrete water table, flat roof, and stepped parapet with concrete coping. The storefront level has been altered with the installation of non-original buff brick cladding. The alteration has replaced original windows and doors; there are now plate glass double-doors in the centrally-located recessed entrance vestibule and two small single-pane windows. The parapet features decorative brickwork and square insert blocks. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement storefront façade, windows, doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stepped parapet with concrete coping, decorative panels, insert blocks, soldier course, concrete water table			**Windows** Fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: The New Halsted Bowl

Property Address:

12345 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

The New Halsted Bowl

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1959

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
West and south facades if a one-story, brick, commercial building.

Property Description: **Stories:** 1

This one-story bowling alley at the northeast corner of Halsted and 124th streets in the West Pullman community has a flat roof with a shallow domed area on its north side. Both street elevations are clad with alternating bands of yellow and orange colored face brick and are largely unadorned, except for the south end of the Halsted Street elevation, which is clad with a stone veneer and has glass double-doors and three double-hung windows. The stone veneer turns the corner to cover a small portion of the 124th Street elevation, which is pierced by an in-filled window opening. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** One in-filled window opening
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (entrance)	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat, domed	
Ornamental Architectural Details Banded brick colors			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12352 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 October 2012

Photos with Captions:
East façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in Calumet Park is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles and shed dormers along its side elevations. The front elevation has a full-width, hip-roof wood porch with supports made of faux stone piers topped by squat boxed columns. The porch shelters an off-center door and three non-original one-over-one aluminum-sash windows. There are two non-original one-over-one aluminum-sash windows in the gable. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: S.S. Peter and Paul Church

Common/Current: S.S. Peter and Paul Church

Property Address:

12433-12439 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and/or Occupant:

S.S. Peter & Paul Roman Catholic Church and Rectory

Property Use

Historic: Religious

Current: Religious

Date of Construction: 1958-1959

Architect's Name: Fox & Fox

Builder/Contractor: Not in CHRS

Architectural Style:

Modernistic

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
South façade of brick, one-story, religious building.

Property Description: **Stories:** 1

This Mid-Century Modern church at the northeast corner of Halsted and 125th streets in the West Pullman community was built for the parish of Saints Peter and Paul. The church is clad with orange face brick and stone veneer, has a steeply pitched front gable roof, deep roof overhangs along the front elevation, and a square hip-roof corner tower with a vertical strip of leaded glass windows. The front elevation has a central pavilion flanked by projecting full-height brick piers, three sets of original double doors divided by concrete piers and topped with a concrete spandrel with incised lettering that reads “S.S. Peter and Paul,” and features an expansive area above which is glazed with leaded glass. The side elevations feature a series of narrow windows that appear to be double-hung. This building is recommended as individually eligible for National Register listing under Criterion C for architecture as an excellent and rare example of a Mid-Century Modern church in West Pullman.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Stone veneer (façade)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Tower, brick piers, concrete piers and spandrel, incised lettering			**Windows** Fixed-pane, casement, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** An excellent and rare example of a Mid-Century Modern church in West Pullman.

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name	**Photos with Captions:** East façade of cemetery entrance showing office/gatehouse.
Historic: Cedar Park Cemetery **Common/Current:** Cedar Park Cemetery	
Property address: 12540 S. Halsted Street	
HAARGIS Number: NA	
Present Owner and /or Occupant: Cedar Park Cemetery	
Property Use **Historic:** Cemetery **Current:** Cemetery	
Date of Construction: 1923 **Architect's Name:** Unknown **Builder/Contractor:** Unknown	
Architectural Style: Romanesque Revival	
Prepared By: M. C. Bird, J. Guarino **Photo By:** S. Katz **Date:** 28 February 2013	

Property Description: **Stories:** 1

Cedar Park Cemetery, founded in the early twentieth century, comprises a formal landscape on 94.5 acres at 12540 S. Halsted Street. Plantings include large deciduous shade trees as well as ornamental shrubs and mowed lawn. Grave markers are mounted flush with the lawn. The landscape is not exceptional nor does it contain any distinctive design features and does not warrant listing on the National Register of Historic Places.

Extant buildings and structures include the office/gatehouse with ornamental gate and fence, an obelisk, three mausoleums, and a cinder block building. Cedar Park Cemetery's one-story Romanesque Revival style gatehouse is located at its Halsted Street entrance. The entrance features two pairs of massive stone gateposts and metal entrance gates. Original metal fencing extends along the length of the cemetery's Halsted Street boundary, which also features several stone piers. The gatehouse, gateposts, and piers are built of grey, brown, and pink stones that are randomly laid. The building and piers have excellent integrity and were likely installed circa 1923, along with the metal entrance gates and fencing along Halsted Street, when the Cedar Park Cemetery Association purchased its original 53-acre site. The building, piers, and gates are locally eligible for National Register listing under Criterion C for architecture due to their high quality craftsmanship and unusual stonework.

The gatehouse has a flat roof, parapet, and stone cornice. All windows have stone sills and stone lintels with a type of

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

scallop shell motif. The Halsted Street elevation has four windows: a small stained glass window in its projecting bay, a single window with round-arched transoms on either side of the bay, and a small, round-arched window flanked by slender colonettes in the parapet gable. The Halsted elevation bay is topped with stone banding incised with the words "Cedar Park Cemetery." The north elevation has a centrally located pair of wood French doors and six wood-sash windows: three each on either side of the entrance. The south elevation has a centrally located multi-paned wood door with sidelights flanked by slender engaged columns. The south elevation's four windows include a single one-over-one window on one side of the door and a group of three windows—a single pane flanked by one-over-one windows—on the other. Doors on both the north and south elevations are topped by flat stone lintels and accessed via concrete steps flanked by stone piers. The rear elevation has five one-over-one windows: a single, centrally-located window with a pair of windows on either side.

The three granite-clad mausoleums (the location of one is obscured by trees) appear to date from the middle to late twentieth-century. One of them features a chapel, which hosts non-denominational funeral services. The cinder block building, accessed by a secondary entrance just north of 125th Street, is utilitarian in nature and may serve as a maintenance building and/or as a crematorium. Neither the mausoleums nor the cinder block building appear to be eligible for inclusion on the National Register of Historic Places.

Structural Survey

Integrity: Unaltered Slight modifications Major Alteration				**Additional Notes/Descriptions**
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: Metal gates, obelisk Historic: Metal gates, obelisk		**Exterior Wall Surface** Stone		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Stone sills and lintels with shell motif, arched windows, colonettes, French doors, incised stone banding "Cedar Park Cemetery," engaged columns				**Windows** Art glass, double-hung, fixed-pane
Outbuildings (*Number and Description*) Three mausoleums (granite-clad) and cinder block building				

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? Yes	**A** **B** **C**	**Significance:** The building, piers, and gates are eligible for architecture due to their high quality craftsmanship and unusual stonework.

Additional comments

Additional photographs:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Jack's Lounge

Property Address:

12717 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Jack's Lounge

Property Use

Historic: Mixed-Use

Current: Mixed-Use

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
West and north façades of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story building in the West Pullman community has a flat roof and parapet. The first floor of its front elevation is surrounded with a stone veneer and has two non-original doors with transoms. The two former display window areas have been in-filled with buff brick and small windows. The second floor is clad with face brick and has two window groups: a picture window flanked by one-over-one windows and a pair of one-over-one windows. The side and rear elevations are clad with common brick. Detailing includes a fluted concrete cornice, concrete sills, and a brick stringcourse. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** storefront in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, faux stone	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Fluted concrete cornice, concrete sills, brick stringcourse			**Windows** Double-hung, fixed pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Although the building looks older than 1952, review of the aerial photographs supports the date.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Christ Spiritual Way of Truth Universal Church

Property Address:

12730 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Christ Spiritual Way of Truth Universal

Property Use

Historic: Commercial

Current: Religious

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
North and east façades of a one-story, brick religious building.

Property Description: **Stories:** 1

This one-story brick-clad church building in the West Pullman community has a roof that is mainly flat with a shallow domed area and is covered with a smooth material that appears to be shotcrete along its east (Halsted) and south elevations. The Halsted elevation has three strips of four single-pane windows, a plate glass door at its north end, and a large single-pane window at its south end. The building's front entrance is along the south elevation, facing its parking lot, and has a pair of double doors at its east end that are sheltered by a flat-roofed metal canopy supported by two metal posts. A tall sign that signified the church's name is situated at the southeast corner of the building. This building does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Shotcrete (façade) Brick (secondary elevations)	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat, Dome	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12746-12804 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

King Food & Grocery, Lowe's Barbers, Olnia's Soul Food, World of Suds

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
East façade of one-story, brick commercial building.

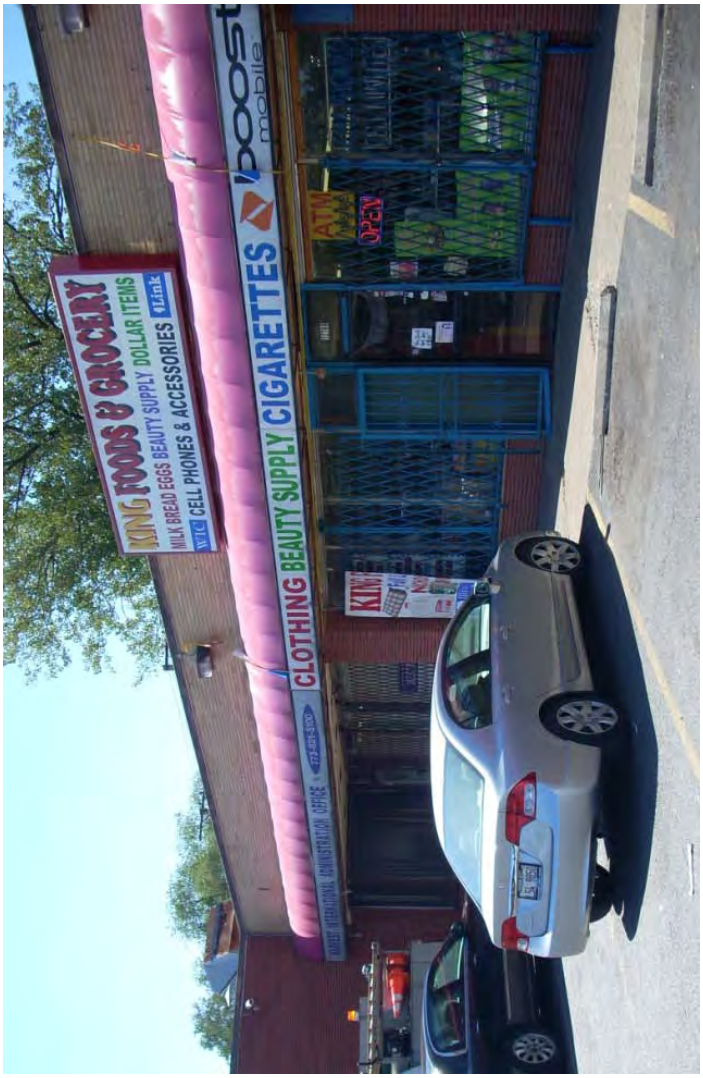

Property Description: **Stories:** 1

This one-story brick-clad strip mall in the West Pullman community has a flat-roof, parapet, and an L-shaped footprint. It is set back from the street, allowing for parking in front. Its Halsted Street elevation features a series of storefronts with glass doors and display windows, some of which are vacant and covered with plywood. This building does not feature any distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some storefronts covered with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12801-12811 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Children's Center Day Care

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
West façade of one-story, brick commercial building.

Property Description: **Stories:** 1

This one-story brick-clad building in the West Pullman community, which accommodates a day care center, has a flat roof and parapet. Its front elevation features faux stone piers, three of which are projecting and rise above the roofline, dividing the front (Halsted) elevation into five bays that feature glass doors and fenestration that includes picture windows and double-hung windows of varying shapes and sizes. This building does not feature distinguishing architectural elements to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Faux stone piers			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12841 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
West façade of a one-story, brick, commercial building.

Property Description: **Stories:** 1

This one-story commercial building in the West Pullman community has a flat roof and parapet. The front elevation has a buff brick parapet, corner piers clad with a stone veneer, and two central doors with in-filled transoms. One of its former display windows has been in-filled with wood boards while the other has been in-filled with buff brick and a rectangular window. The side and rear elevations are clad with common brick. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement storefront
Condition: <u>Excellent</u> Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Faux stone in piers			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: New Creation Binding and Loosing Ministries

Property Address:

12856-12900 S. Halsted Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

New Creation Binding and Loosing Ministries

Property Use

Historic: Commercial

Current: Religious

Date of Construction: 1952-1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
North and east façades of a two-story, brick religious building.

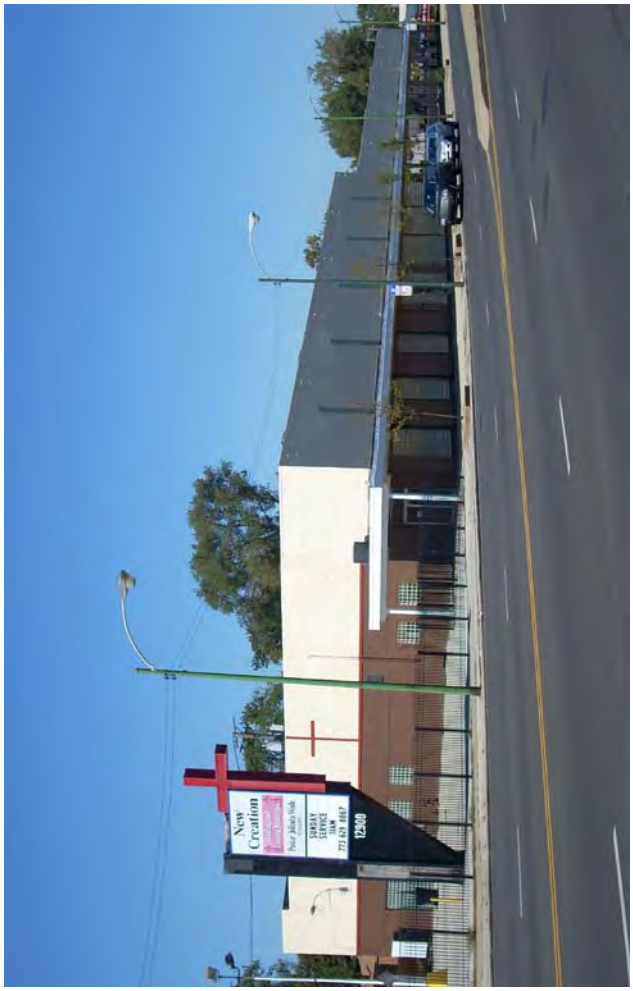

Property Description: **Stories:** 2

This expansive two-story, flat-roofed, brick-clad building has a one-story wing to the north. The building appears to have been built as a chain store or supermarket, but now serves as a church. A flat-roofed canopy extends along the entire length of the building's front (Halsted) elevation and shelters a pair of plate glass double-doors with transom and a continuous series of nearly floor-to-ceiling window openings that are in-filled with glass blocks and separated by wood cladding that is vertically laid. The second floor of the front elevation's two-story block has a series of narrow glass block windows. The front elevation of the one-story north wing is clad with wood that is vertically laid and a pair of wood double-doors but no windows. The building's south elevation has a pair of plate-glass double-doors with transom at its eastern end and a series of glass block windows. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), wood boards	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9820 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1959

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of split-level, brick, single family residence.

Property Description: **Stories:** Split-level

This back-split home in the Roseland community has a hip roof on both levels that are covered with asphalt shingles. The front elevation is clad with orange face brick and has a centrally located hollow core metal door, two pairs of casement windows, and metal steps and railings. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) Detached two-car garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9823 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1915

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades, of 1.5-story, single family, brick residence.

Property Description: **Stories:** 1.5

This 1.5-story home in the Roseland community is situated on a raised brick basement with glass block windows and has a front gable roof covered with asphalt shingles. Its front elevation is clad with brown face brick, as is its enclosed, full-width, hip roof porch that has concrete lintels and sills. The front elevation has an off-center door with sidelights, metal steps and railings, and two first-floor window groups that are covered with metal screens, as were the paired windows in the gable. Some windows on the side elevation are in-filled with brick and glass block. This home lacks integrity and does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, enclosed porch, metal storm shutters, window openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete lintels and sills			**Windows** Glass block, covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11314 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with faux stone on the front elevation. The building has a hip roof covered with asphalt shingles and a hip dormer with three small non-original one-over-one aluminum-sash windows. The front elevation has a recessed corner porch with wood steps, railings, and a corner post. The front door and all first floor windows have been covered with plywood. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone (front) Synthetic siding (sides)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11356 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial (1938 Sanborn)

Current: Multi-family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story building at the northwest corner of Harvard Avenue and 114th Street in the Roseland community is clad with wood board vertically laid on the first floor and with synthetic siding on the second floor. The building has a flat roof and parapet. The front (Harvard Avenue) elevation has an off-center door and a group of three first floor windows that have been covered with plywood and are sheltered by a metal awning. The second floor of the front elevation has four windows—a group of three and a single window—that were formerly three-over-one wood-sash, although most of the glass panes are now gone. The front elevation is topped by a bracketed unadorned wood cornice. The windows on the 114th Street elevation have been covered with plywood on the first floor and have missing glass panes on the second floor. This former commercial building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from commercial to residential after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (upper), Wood (lower)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11415 S. Harvard Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a two-story, four-flat, frame residence.

Property Description: **Stories:** 2

This two-story four-flat building in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a flat roof and parapet. Its front elevation has four centrally located doorways that lack doors, a partial-width wood porch with a gable-on-shed roof, non-original straight posts and railings. There are two window groups on the first floor that are covered with plywood and six non-original one-over-one aluminum-sash windows on the second floor. The parapet level features a bracketed unadorned cornice. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10204 S. Indiana Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a single story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland neighborhood is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width, hip roof, synthetic-clad porch with an off-center door, wood steps with straight wood railings, and three non-original windows—two one-over-one aluminum-sash and one small single-pane. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. The south elevation has a three-sided bay window topped by a through-the-cornice gabled wall dormer. The north elevation has a shed dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations Enclosed porch			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10242 S. Indiana Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1906

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a two-story window bay pavilion and a partial-width, shed-roof porch. The porch has a non-original hollow core metal door with a transom, wood steps, metal railings, and two open metal supports. There are three windows in the first floor bay, four windows on the second floor, including three in the bay, and a pair of windows in the gable, all of which are non-original one-over-one aluminum-sash. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Structural Survey

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, porch rails and supports
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, including faux stone below with bay sill	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11708 S. Indiana Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house at the southwest corner of Indiana Avenue and 117th Street in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, flat-roof, enclosed sun porch with an off-center metal storm door, concrete steps with metal railings (non-original), and a strip of three windows on the first floor. The second floor of the front elevation has a strip of three windows and a single window, and the attic level has a pair of windows. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11709 S. Indiana Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
North and west façades of two story, single family residence (above), concrete block outbuilding (below)

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof with asphalt shingles. The front elevation features a two-story flat-roofed addition and a single story, shed-roofed, enclosed porch. Fenestration is comprised of non-original one-over-one aluminum-sash windows, many of which are covered with plywood. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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505 North State Street
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Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement doors, cladding and windows
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Addition on front façade, enclosed porch			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable, Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Two-car, gable-roofed, concrete block garage with glass block and louvered windows, and asphalt shingles			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11715 S. Indiana Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J.Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat, multi-family residential building in the West Pullman community is situated on a raised basement with glass block windows and is clad with face brick on the front elevation and common brick on the side and rear elevations. The building has a full-height window bay pavilion, a flat roof, and parapet. The front elevation has a partial-width porch with concrete steps and open metal posts supporting a metal shed-roof. A pair of off-center storm doors is located under the porch roof. There are seven non-original one-over-one windows: three on the first floor bay and four on the second floor, including three on its window bay. Detailing includes concrete sills, belt courses, brick cornice with corbelling, and brick dentils. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and belt courses; brick cornice with corbelling, brick dentils			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11740 S. Indiana Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with what appears to be roofing paper. The front elevation has a full-width, hip-roof, wood porch with a synthetic-clad base, straight wood railings and posts, and an off-center door. A group of three windows on the first floor are partially obscured by plywood. There are four windows on the second floor (three of which are grouped together) and a pair of windows in the gable. Above the basement, windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Roofing paper	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

112 E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1900

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a brick, two-story, multi-family (Flat) residence.

Property Description: **Stories:** 2

This two-story brick-clad flat residential building in the West Pullman community has a flat roof and parapet. Its front elevation is clad with face brick, has two centrally-located plate glass doors with transoms, and twelve non-original one-over-one aluminum-sash windows: six on the first floor and six on the second. Detailing includes recessed brick panels with dentils at the parapet level, concrete sills, coping, and a concrete stringcourse. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Recessed brick panels with dentils; concrete stringcourse, coping, and sills			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

121 E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, frame, two-flat residential building in the West Pullman community is covered with synthetic siding. The building has a two-story, three-sided window bay pavilion on its front elevation and a front gable roof covered with asphalt shingles. The front elevation has an off-center pair of hollow core metal doors topped by a bracketed pent roof. There are three windows on the first floor, four windows on the second floor, and a single window in the gable. All windows are non-original one-over-one aluminum-sash. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed pent roof			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

121 ½ E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North and west façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story residential building in the West Pullman community is clad with synthetic siding and has a flat roof and parapet. The first floor of its front elevation has an off-center storm door and a group of three windows sheltered by a full-width hip roof that is supported by three wood posts. The second floor of the front elevation has four windows, three of which are grouped together. Windows are non-original one-over-one aluminum sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Venetian Hall (Sanborn 1938)

Common/Current: Unknown

Property Address:

133-139 E .Kensington Avenue
(137 E. Kensington CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Miracle Temple Faith Church

Property Use

Historic: Commercial

Current: Religious Building

Date of Construction: 1924-1926

Architect's Name: Arthur F Hughes

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a brick, two-story, religious building.

Property Description: **Stories:** 2

This two-story building in the West Pullman community (formerly part of Kensington) was originally called "Venetian Hall." The performance hall was built for a cultural/recreational purpose, although it has long since been repurposed as a church. The 1938 Sanborn shows the hall with a stage, balcony, and place for storage of scenery. The street entrance was flanked by two storefronts in 1938, as it is now.

The building is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a flat roof and a shaped parapet with concrete coping. The first floor of the front elevation has a recessed centrally located bay with three pairs of multi-light wood doors and in-filled transoms. This central bay is flanked by two original storefronts with central recessed doors and flanking display windows that are covered with wood and topped by transoms that have been in-filled with glass block. Separating the central bay from the two flanking storefronts are two doors with transoms that provide access to the second floor. The spandrel area directly above the

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

central entrance bay has a concrete sign plate with incised lettering that reads: “Venetian Hall.” Fenestration on the second floor features six-over-one and three-over-one wood-sash windows arranged in pairs and in groups of three, topped by round-arch stone lintels with rosette motifs. The parapet features a series of Classical shields and swags.

The exterior of this building has good overall integrity, although elements of the original storefronts materials are no longer extant. However, it does not display sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register for its architecture. Instead, is recommended for individual listing under Criterion A for its original use as a social venue for area residents in the early twentieth century. Local theater houses, such as the Venetian Hall, were jewels within the local communities. It's rare to see an early twentieth century neighborhood social hall that retains its original storefronts and is set within a residential area comprised of worker’s housing, rather than along a commercial thoroughfare. The opening of Illinois Terra Cotta works in the first half of the twentieth century brought Italians to Kensington; the area gradually became a center of South Side Italian-American life with the establishment of Venetian Hall and the nearby San Antonio de Padua (patron saint of Venice) Roman Catholic Church.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Some original storefront materials no longer extant
Condition: Excellent Good Poor				
Additional Alterations Converted to use as a church.				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Concrete coping, incised name plate, stone lintels, Classical shields and swags				**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None				

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? Yes	**A** **B** **C**	**Significance:** Good overall integrity and important social gathering place for Italian-American residents of Kensington in the early twentieth century.

Additional Comments:

"Venetian Hall" in 1938 Sanborn.

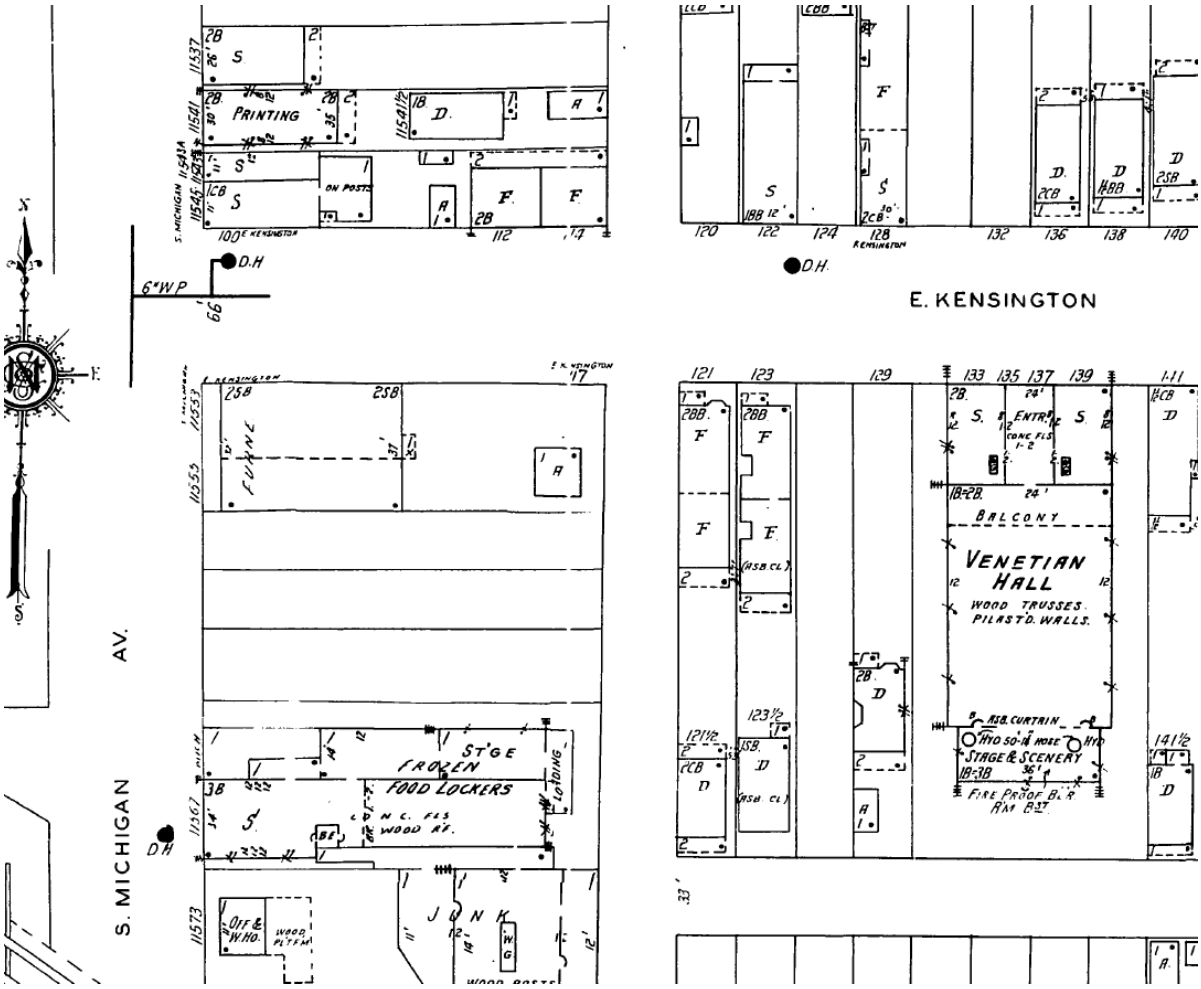

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9723 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with casement windows and has a gable-on-hip roof clad with asphalt shingles. The front elevation has a pent roof, an off-center door, concrete steps with metal railings, a small glass block window, and a picture window flanked by casements. This window group is partially obscured by a low metal awning. Detailing includes a diamond-shaped tile insert in the gable end, stone quoins near the base of the residence, concrete sills, and scalloped boards above and below the pent roof. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable-on-hip	
Ornamental Architectural Details Diamond-shaped tile insert, stone quoins, concrete sills, and scalloped boards			**Windows** Fixed-pane, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9738 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This home in the Roseland community is clad with orange face brick and has a hip roof covered with asphalt shingles. The hip roof extends beyond the front elevation to serve as the roof of the second floor balcony, which is situated above the flat-roofed full-façade porch. Both levels feature open metal supports and railings. The porch has concrete steps. The front elevation features off-center doors trimmed with stone on both floors, a picture window flanked by double-hung windows on the first floor, and a pair of double-hung windows on the second floor. This building does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone at entrances.			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9902 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised brick basement with glass block windows, is clad with aluminum siding, and has a front gable roof covered with asphalt shingles. A non-original, full-width, enclosed front porch covered with lattice obscures the original front elevation of the house. The porch has a horizontal strip of square, non-original windows and an off-center door. The side elevations have one-over-one windows. This home does not have sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Addition to front façade			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*)			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9706 S. Lafayette Avenue
Alternate: 9708 S Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement and has a front gable roof covered with asphalt shingles. Its front elevation is clad with faux stone below the sill line, orange face brick above, and synthetic siding in the gable. It has a centrally-located door, concrete steps with metal railings, a single-pane window flanked by a casement, and what appears to be a pair of casement windows. Windows are partially obscured by low metal awnings. This standard 1950s era house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable end)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11528 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
East and south façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised brick basement, is clad with aluminum siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a gable-roofed, full-width, enclosed porch with an off-center door, metal steps and railings, and two non-original one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11532 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
East façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a flat-roofed, full-width, wood porch with wood slats and posts. It also has an off-center hollow core metal door and a strip of three non-original one-over-one aluminum sash windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11557 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, hip-roof, enclosed porch with non-original synthetic siding, an off-center entrance with metal storm door and metal awning, and a first floor group of sliding windows that is partially obscured by a metal awning. The second floor of the front elevation has a strip of three windows and a single window, all of which are non-original one-over-one aluminum-sash with metal awnings. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12018 S. Loomis Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a 1.5-story, single family, brick residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is situated on a raised basement and is clad with red face brick and synthetic siding. The building has a steeply pitched front gable roof with front-facing synthetic-clad gable. Its front elevation has a full-width, hip roof, synthetic-clad, enclosed porch with a metal storm door, concrete steps with metal railings, and a picture window flanked by one-over-one windows. The second floor of the front elevation has a pair of one-over-one windows that extend through the cornice into the synthetic-clad gable. A single one-over-one window is situated at the apex of the gable. All windows are modern replacements with aluminum sashes. The south elevation has a through-the-cornice shed dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations Porch enclosed			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable end and porch)	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Detached, two-car, frame garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9906 S. Lowe Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Washington Heights community is situated on a raised basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, hip-roof, enclosed porch with an off-center door, four non-original one-over-one aluminum-sash windows, wood steps, and metal railings. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. Detailing includes corner porch pilasters and an engaged Doric column flanking the door. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Enclosed porch, replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: N/A Historic: N/A		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Pilasters, Doric column			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9907 S. Lowe Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Washington Heights community is situated on a raised basement and is covered with synthetic siding. The building has a bracketed front gable roof covered with asphalt shingles and overhanging eaves with decorative rafters and brackets. The front elevation has a recessed corner porch with hollow core metal door, wood steps and railings, a faux stone corner pier support topped by a squat wood column, and bracketed gable hood. Windows include a strip of three-over-one original wood-sash windows on the first floor and a strip of three casement windows in the gable. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Brackets under eaves and hood			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10159 S. Michigan Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1918

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a one-story single family residence.

Property Description: **Stories:** 1

This one-story brick-clad Craftsman bungalow at the northeast corner of Michigan Avenue and 102nd Street in the Roseland community has a hip roof with asphalt shingles, overhanging eaves, and three hip dormers with original paired wood casement windows. The front elevation wide roof overhang shelters the full-façade porch, which has a wood deck, side-facing wood steps with straight railings, and supports comprised of three brick piers topped by squat Doric columns. The front elevation features a metal storm door flanked by a single non-original one-over-one aluminum-sash window on either side. The 102nd Street elevation has two groups of three non-original one-over-one aluminum-sash windows and a gabled porch at its eastern end. This porch has a wood deck, side-facing wood steps with straight railings, and supports comprised of two brick piers topped by squat Doric columns. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Doric columns			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10213 S. Michigan Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 3 October 2012

Photos with Captions:
South and west façades of 1.5- story, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story house in the Roseland community is situated on a raised foundation and clad with synthetic siding. It has a gable roof covered with asphalt shingles and gable wall dormers on its side elevations. Its front elevation features an enclosed hip-roofed porch with an off-center door, wood steps, and railings. There are two pairs of windows on the first floor and one pair of windows on the second; windows are modern replacements, including one-over-one, sliding glass, and glass block windows of varying sizes. An exterior wood staircase leads to a non-original door situated in the gable wall dormer of the south elevation. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations External staircase added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10259 S. Michigan Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Hill-Top Liquors

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and west facades of a brick, two-story, commercial building.

Property Description: **Stories:** 2

This two-story commercial building at the northeast corner of Michigan Avenue and 103rd Street in the Roseland community is clad with a stone veneer (lower) and synthetic siding (upper) along both street elevations. The building has a flat roof, a corner entrance door, an off-center door along its Michigan Avenue elevation, and window openings along the first floor of both street elevations. All openings are secured with rolling, corrugated metal blinds. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Security blinds added, cladding
Condition: Excellent Good Poor			
Additional Alterations Second story covered by signs; first floor windows covered with siding.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone veneer, synthetic siding	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11156 S. Michigan Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Taurus Flavors, Fashion Corner

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a brick, two-story, commercial building.

Property Description: **Stories:** 2

This two-story commercial building at the northwest corner of Michigan Avenue and 112th Street in the Roseland community is clad with brown face brick on its front elevation and common brick on its side elevations. The building has a flat roof and parapet. The front elevation features a centrally located entrance pavilion with a round-arch entrance and paired windows directly above surrounded by terra cotta with Classical motifs, including pilasters, shields, and swags. The entrance features original single-light wood double doors with round-arch transom. A pair of windows on the north end of the front elevation is also surrounded by terra cotta with Classical motifs, including scrolled brackets, shields, and swags. The first floor's original storefront configuration is visible but most storefront bays, which are separated by brick and tile pilasters, have either been retrofitted with non-original doors and windows or in-filled with brick. The southernmost entrance is flanked by multi-light, fixed-pane windows. The nineteen window openings that stretch across the second story front elevation have all been covered with plywood. Other detailing includes terra cotta belt courses. Although this building has retained some nice terra cotta detailing, it does not feature sufficient overall integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor			
Additional Alterations Some openings covered with plywood and others in-filled with brick.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Terra cotta pilasters, brackets, shields, belt courses, and swags, brick pilasters, surround			**Windows** Fixed-pane, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11200-11206 S. Michigan Avenue

HAARGIS Number:

140649

Present Owner and /or Occupant:

Fashion Gear, Top Gold, Gucci Foot Mart, Beyond Urban Art Gallery

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular (11200), Queen Anne (11206)

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:

North and east façades of two brick, two-story mixed-use buildings.

East façade of southern end of buildings.

Property Description: **Stories:** 2

This address comprises two conjoined buildings. The building at 11200 (top photo) is a two-story brick-clad, flat-roofed commercial building at the southwest corner of Michigan Avenue and 112th Street in the Roseland community. The first floor has three non-original Michigan Avenue storefronts, including one at the corner, which has plate glass display windows and plate-glass double-doors. The middle storefront has plate glass display windows and a plate glass door. The southernmost storefront is hidden behind a roll-down corrugated metal covering. The second floor window openings on both street elevations of this building are in-filled with what appears to be wood. Detailing includes second floor pilasters, brick stringcourses, and a metal cornice.

The building at 11206 is the adjacent two-story, brick-clad, flat-roofed Queen Anne style commercial building to the south. Its non-original storefront has a recessed plate glass door and flanking plate glass display windows. An off-center wood paneled door with a transom provides access to the second floor, which has a three-sided metal bay and a single window; all window openings on the second floor have been in-filled with wood. Detailing includes swags at

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

the parapet level and a metal cornice with dentil molding with decorative designs above the bay as well. These two buildings lack integrity and distinguishing architectural features and are not individually eligible for listing on the National Register.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Pilasters, metal cornice, brick stringcourses, swags and geometric designs, dentil molding			**Windows** Fixed-pane, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

CHRS coded orange: 11206 S Michigan Ave property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11563-11565 S. Michigan Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1900 (1962 addition)

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North and east façades of two-story, brick, industrial building.

Property Description: **Stories:** 2

This two-story industrial building in West Pullman has a flat roof and parapet. A one-story, flat-roofed north wing is a later addition (1962). The original building has been drastically altered with new brick cladding on the first floor and the removal of original doors and windows on the front elevation. The first floor of the front elevation currently features two small non-original windows. The original window openings on the second floor of the front elevation have been in-filled with brick. Two one-over-one windows have been installed on either side. Window openings on the side elevations have all been altered as well. The parapet retains original decorative brick corbelling along the front and side elevations. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, openings in-filled, later addition
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick corbelling			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11592 S. Michigan Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

EZ Phone

Property Use

Historic: Mixed-use

Current: Mixed-use

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of two-story, frame building.

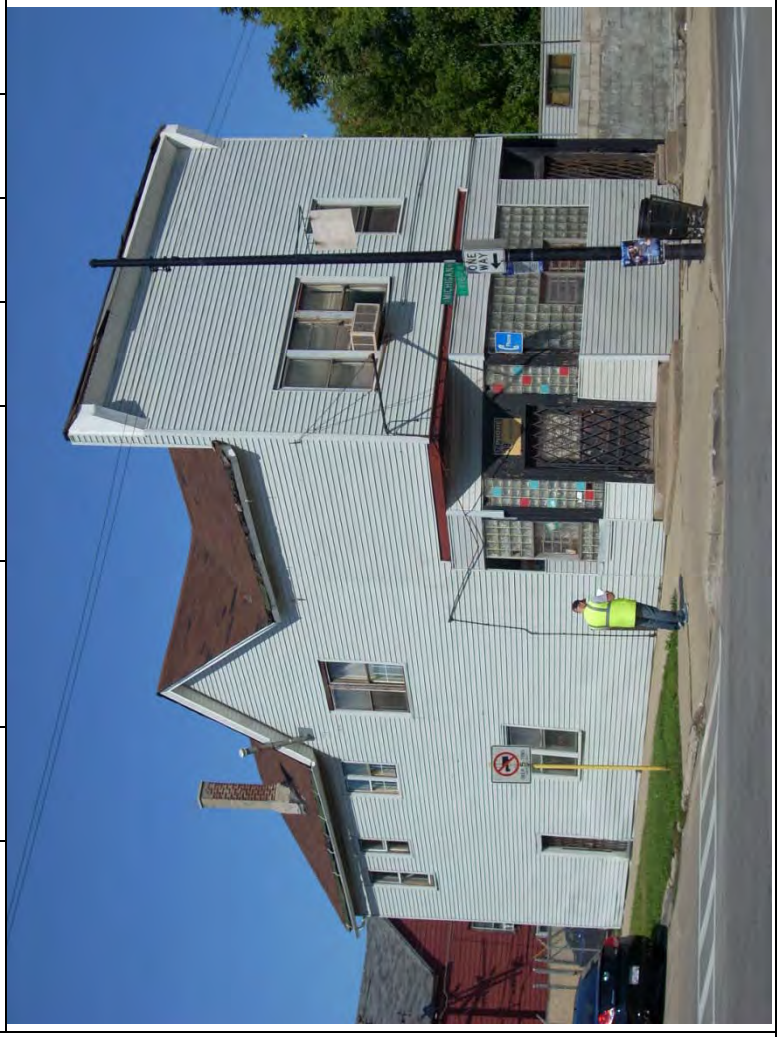

Property Description: **Stories:** 2

This two-story frame building at the northwest corner of Michigan Avenue and 116th Street in the West Pullman community is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front (Michigan Avenue) elevation features a tall false front, a recessed corner storefront entrance flanked by non-original glass block windows, an off-center metal door with transom that provides access to second floor apartments, and four one-over-one windows. Fenestration along the 116th Street elevation is also comprised of one-over-one windows. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Parapet	**Roof Type** Cross-Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11593 S Michigan Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Step of Faith

Property Use

Historic: Commercial (Upholstery, 1938)

Current: Mixed-Use

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
West façade of two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story, frame, mixed-use building at the northeast corner of Michigan Ave. and 116th Street in the West Pullman community is clad with synthetic siding (upper) and brick (lower) and has a front gable roof with asphalt shingles. The front elevation has a recessed brick storefront with an entrance at corner and one at the opposite end, which is covered with plywood. Neither the doors nor the windows appear to be original. The cornice above the first floor includes wood brackets. The second floor on both street elevations features non-original one-over-one aluminum-sash windows. This building lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (upper), Brick (lower)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Wood brackets along first floor cornice line			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11611 S. Michigan Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
West and north façades of two-story, multi-family, frame building.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features an off-center non-original hollow core metal door fronted by a concrete stoop with metal railings and open metal posts supporting a metal canopy. There are two windows on the first floor and two on the second, all of which are non-original one-over-one aluminum sash.

The 1938 Sanborn shows this residence as a 1.5-story building with a round bay pavilion. Subsequent alterations, including the addition of a full second floor have heavily altered this building. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows and siding, removal of bay pavilion, addition of a second floor
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Appendix Q (continued)

Historic and Cultural Resources Technical Memorandum

- Draft EIS Appendix Q, Historic and Cultural Resources Technical Memorandum, September 2015
  - Appendix B – Inventory sheets for Properties Surveyed
  - Appendix C – Consultation and Correspondence
  - Appendix D – Displacement Maps
  - Appendix E – 2014-2015 Red Line Extension Project Update

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9822 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East and south façades of split-level, brick, single family residence.

Property Description: **Stories:** Split-level

This back-split house at the northwest corner of Normal Avenue and 98th Place in the Washington Heights community is clad with buff brick, while the front façade of the split is covered with synthetic siding. The rear portion of the house has a hip roof, while the front portion has a gable-on-hip roof with a synthetic-covered gable. The front elevation has an off-center hollow core metal door, a picture window flanked by non-original one-over-one aluminum-sash windows with a decorative lacey metal panel beneath, and a wide overhang supported by three brick piers. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (upper)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip/Gable	
Ornamental Architectural Details Decorative panels			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9900 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1953

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home at the southwest corner of Normal Avenue and 99th Street in the Washington Heights community sits on a raised basement and is clad with face brick. The building has a side-gabled roof covered with asphalt shingles and synthetic-clad gabled ends. The front elevation has an off-center hollow core metal door, concrete steps with metal railings, a centrally located three-sided multi-light window bay, and two strips of three casement windows. Detailing includes stone quoins at the base of the window bay, decorative buff brick flanking the door, and concrete sills. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding in gable end
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone quoins, brick at entrance, and concrete sills			**Windows** Fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9925 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1946

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of two-story, brick, single-family residence.

Property Description: **Stories:** 2

This two-story brick-clad house at the southeast corner of Normal Avenue and 99th Place in the Washington Heights community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles. Its front elevation has an off-center non-original hollow core metal door, a small adjacent glass block window, concrete steps with metal railings, a pair of non-original double-hung windows on the first floor, and two non-original double-hung windows on the second floor. The door and all front elevation windows have metal awnings. Details include a brick stringcourse and corbelling above first floor window. The difference in the brick colors relates to the removal of shutters. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick stringcourse and corbelling, decorative glass block			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9939 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the Washington Heights community is situated on a raised brick basement with glass block windows. It has a side-gabled roof covered with asphalt shingles. Its front elevation has a centrally located hollow metal paneled door with fanlight, concrete steps with metal railings, two sets of paired windows, and two aluminum-clad gabled dormers, each of which has one window. Windows are non-original one-over-one aluminum-sash. All front elevation windows and the front door feature metal awnings. Detailing includes concrete sills, lintels, and quoins surrounding the door. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding on dormers
Condition: Excellent Good Poor			
Additional Alterations Dormers may be a later addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormers	**Roof Type** Side gable	
Ornamental Architectural Details Quoins at entrance, concrete sills and lintels			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10457 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Dutch Colonial

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South and west façades of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story Dutch Colonial style house at the northeast corner of Normal Avenue and 105th Street in the Roseland community is situated on a raised basement and is clad with red face brick. The building has a side-gambrel roof covered with asphalt shingles, a one-story flat-roofed enclosed sun porch surrounded by four-over-one wood-sash windows along its east elevation, and exterior chimneys on both side elevations. The front (105th Street) elevation has a centrally located non-original hollow core metal paneled door, concrete steps, and metal railings. The door was once flanked by fluted pilasters with geometric capitals. The shaft of one of these pilasters has been removed as has the base of the extant pilaster. The door is topped by an unadorned frieze band and a broken pediment and is flanked by strips of three six-over-one and four-over-one wood-sash windows on either side. The shed-roofed second floor of the front elevation has three non-original one-over-one aluminum-sash windows. This house does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and some windows; pilasters compromised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Side-gambrel	
Ornamental Architectural Details Door surround (frieze band, pediment, pilasters)			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10511 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story brick-clad house in the Roseland community is situated on a raised basement with glass block windows and has a hip roof covered with asphalt shingles. Its front elevation features a pent roof that spans the three-sided living room bay and an off-center hollow core metal door that is accessed by concrete steps with metal railings. The living room bay features a picture window flanked by non-original one-over-one aluminum-sash windows that are sheltered by a metal awning. The second floor of the front elevation has two non-original one-over-one aluminum-sash windows. Detailing includes concrete sills and decorative stones at the basement level. It does not feature distinguishing architectural features nor does it retain sufficient integrity, therefore, is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone accents at basement level, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10641 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised basement with glass block windows and clad with brown brick. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer, the windows of which were obscured by foliage. The house features a recessed corner porch with a hollow core metal door, concrete steps, low brick sidewalls, and a brick corner pier. The front elevation's projecting living room bay has a series of double-hung windows, a decorative brick soldier course, stone insert blocks, and concrete sills. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier course, stone insert blocks, concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10701 S. Normal Avenue
Alternate: 459 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Ranch

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story Ranch house at the corner of Normal Avenue and 107th Street in the Roseland community is situated on a raised basement and is clad with orange face brick below the sill line and buff brick above. The building has a cross-gable roof covered with asphalt shingles; gable ends are clad in synthetic siding. A gabled rear wing contains an attached two-car garage. The front (Normal Ave.) elevation has an off-center metal storm door sheltered by a roof overhang supported by a corner open metal post, concrete steps with metal railings, two pairs of non-original one-over-one aluminum-sash windows, and a non-original picture window flanked by one-over-one aluminum-sash windows on the main block. The front elevation of the rear wing has an off-center metal storm door, a roof overhang supported by two open metal posts, and a large glass block window. The side (107th Street) elevation has corner windows that are obscured by foliage but appear to be casements. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main) Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block, casement
Outbuildings (*Number and Description*) Attached two-car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10747 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a one-story, single family residence.

Property Description: **Stories:** 1

This one-story Craftsman cottage in the Roseland community has a side-gable roof with overhanging eaves and decorative knee braces. The building is made of masonry units with aluminum siding in its gabled ends. Its front elevation has a recessed corner porch with overhanging gable roof with rafter tails, low walls, and squat, squared wood column supports. The building features a front door tucked into the side of the living room bay, a strip of three casements, and a picture window flanked by what appear to be casements. All windows on the front elevation feature concrete sills. Side elevation windows appear to be non-original one-over-one aluminum-sash. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Masonry (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, rafter tails, squared columns, concrete sills			**Windows** Double-hung, casement, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10853 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows and is clad with brown brick. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip-on-gable dormer with three original wood casement windows. The house features a recessed corner porch with a metal storm door, concrete steps, low brick sidewalls, a brick corner pier, and arched front and side openings. The front elevation's projecting living room bay has a series of double-hung windows, a decorative brick soldier course, stone insert blocks, and concrete sills. This house does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier courses, stone insert blocks, concrete sills			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10959 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, brick single-family residence.

Property Description: **Stories:** 2

This two-story house at the corner of Normal Avenue and 110th Street in the Roseland community is clad with buff brick and has a hip roof covered with asphalt shingles, an exterior buff brick chimney, and a raised basement. Its front elevation features a centrally located hipped-roof entrance vestibule with a door that is surrounded by decorative stones. A vertical strip of glass blocks adjacent to the door accents the façade. Concrete steps and metal railings lead to the entrance. There are five windows—two on the first floor and three on the second. The first floor windows are non-original one-over-one aluminum-sash while the second floor windows are six-over-one. Detailing includes concrete sills and brick flat arch window lintels. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone around entrance, concrete sills, brick flat arch window lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11001 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: circa 1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, brick single-family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows. The building has a front elevation clad with buff face brick, a hip roof covered with asphalt shingles, and overhanging eaves. Its front elevation has an off-center entrance with a metal storm door sheltered by a metal awning, concrete steps with metal railings, and a window group with a large decorative faux stone panel beneath. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Faux stone panel			**Windows** Glass block, covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11035 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:

West façade of one-story, single family, frame residence.

West and north façades of residence.

Property Description: **Stories:** 1

This single story frame house at the southeast corner of Normal Avenue and 110th Place in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a side gable roof covered with asphalt shingles and flared, bracketed, overhanging eaves. It features both front and rear gable dormers. It has a recessed corner porch with non-original hollow core metal door, a faux stone corner pier topped by a squat squared wood column, and wood steps and railings. The front elevation has a strip of four windows on the first floor and three in the gable. Above the basement, windows are non-original one-over-one aluminum-sash. A small hip-roofed porch is situated along the 110th Place elevation with hollow core metal door (non-original), concrete steps with metal railings, and open metal supports. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Squat, square column, bracketed eaves			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9821 S. Parnell Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1961

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised basement and is clad with orange face brick on its front elevation and in common brick along its side and rear elevations. The building has a hip roof covered with asphalt shingles. Its front elevation has an off-center wood door, concrete steps with metal railing, and a window group that is covered by a metal shade. Detailing includes a concrete sill and three decorative glass blocks. The side elevation windows are covered with plywood. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Metal shades added, windows not visible
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Concrete sill, decorative glass blocks			**Windows** covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9900 S. Parnell Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1950

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
North façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad house at the southwest corner of Parnell Avenue and 99th Street in the Washington Heights community has a raised basement and a hip roof covered with asphalt shingles. The front elevation has a centrally located non-original hollow core metal door and three non-original one-over-one aluminum-sash windows—a pair on its south end and one on its north end. Access to the door, which is sheltered by a hipped porch hood, is by concrete steps with a metal rail. Its 99th Street elevation has two picture windows—one on either end. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9901 S. Parnell Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1966

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, single-family, brick residence.

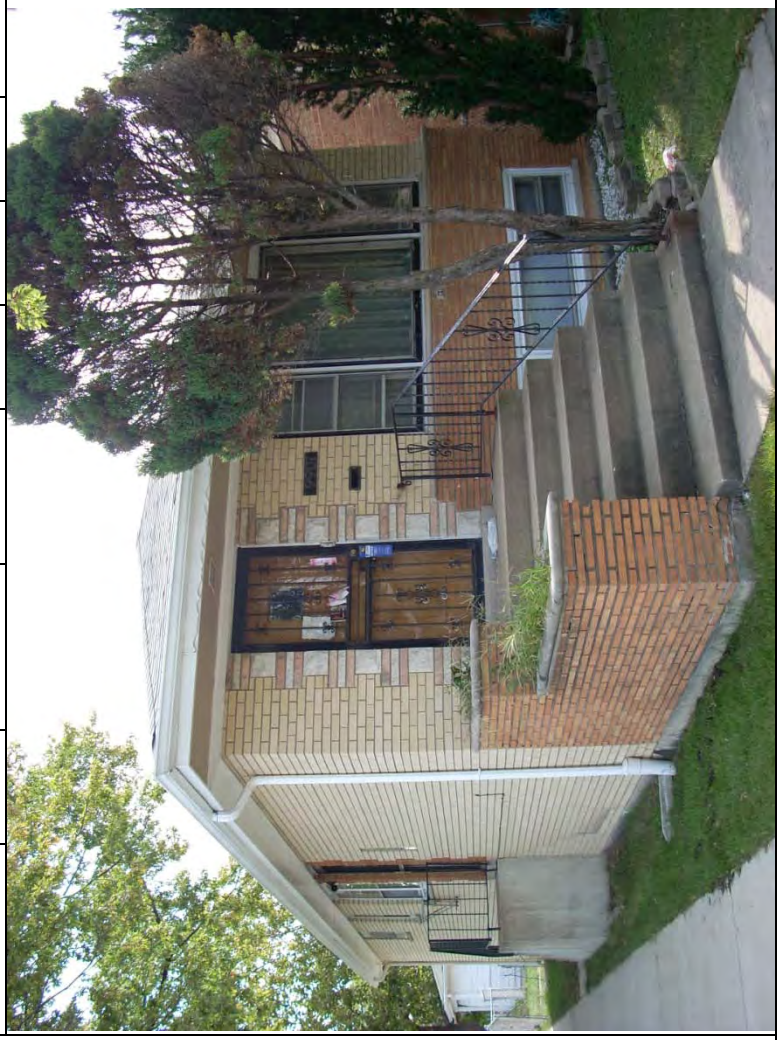

Property Description: **Stories:** 1

The one-story house at the southeast corner of Parnell Avenue and 99th Street in the Washington Heights community is situated on a raised basement and has a hip roof covered with asphalt shingles. The front elevation is clad with orange brick below the sill line and in buff brick above with decorative stone around the entrance. The front elevation has a wide roof overhang, an off-center wood door, concrete steps with a metal railing, and a picture window flanked by one-over-one aluminum-sash windows. The side (99th Street) elevation is clad with buff brick, has an off-center wood door with concrete steps and metal railings, and four one-over-one aluminum-sash windows of varying sizes. This standard type of home does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone surround at entrance			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11701 S. Peoria Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house at the southeast corner of Peoria and 117th streets in the West Pullman community sits on a raised concrete block basement and is clad with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles. Its front elevation has an off-center non-original hollow core metal door with a bracketed gabled hood and concrete steps with metal pipe railings. Windows are non-original and include a picture window flanked by double-hung windows on the first floor and three double-hung windows on the second floor. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Bracketed hood			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11805 S. Peoria Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
West façade of a brick, two story, three-flat residence.

Property Description: **Stories:** 2

This three-flat residential building in the West Pullman community has flat roof and parapet. Its front elevation is clad with brown face brick and has a full-height three-sided window bay pavilion. The building also includes a hollow core metal door on both the garden apartment and the first floor above. A hip-roof porch with two brick piers, and a wood deck, steps, and railings shelter the entrance. Each floor of the window bay pavilion has a central, single-pane mirrored glass window flanked by one-over-one aluminum sash windows (non-original). Detailing includes concrete sill courses and belt courses, a stone cornice with brick dentil molding, and concrete coping. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sill and belt courses, stone cornice with brick dentil molding, concrete coping			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11842 S. Peoria Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1890

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
East façade of a two-story, frame, single family residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has a non-original partial-width shed-roofed porch with wood steps and straight railings and posts. Windows are non-original; the first floor of the front elevation has a picture window flanked by one-over-one aluminum-sash windows and the second floor has five: a group of three one-over-one aluminum-sash windows and a pair of casements. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12139 S. Peoria Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1951

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz (2012), CCA (2007)

Date: 26 October 2012

Photos with Captions:

West façade of a one-story industrial building (2012).

West façade of industrial building (2007).

Property Description: **Stories:** 1

This one-story flat-roofed commercial building in the West Pullman community has a street elevation clad with face brick. It features a series of window and door openings that are covered with metal security shades. The 2007 photo from the Cook County Assessor shows multi-pane, steel frame windows. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Openings covered with security shades
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11426 S. Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

R. E. Russell Paint Company

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: circa 1920s

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 11 September 2012

Photos with Captions
East façades of brick building in industrial complex.

Property Description: **Stories:** 2

This two-story industrial building in the Roseland community has a flat roof and parapet. It sits within an industrial complex bounded by South Perry Avenue, an alley, and the Union Pacific Railroad line. Its front elevation is clad in painted brick. It has a hollow core metal door with in-filled transom and window openings on the first and second floors that are in-filled with glass block with louvered or casement insets. Most of the face brick at the parapet level has been replaced by a stucco-like material. The uppermost portion of the stepped parapet has bricks arranged as decorative dentils. Other buildings within the paint company complex include one-story sheet metal and brick buildings. These buildings lack integrity, do not have distinguishing architectural features, and are not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: N A Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Dentils along cornice			**Windows** Glass block, louvered or casement
Outbuildings (*Number and Description)* Sheet metal warehouse on Perry Avenue, paint production plant and storage areas along railroad.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

In CCA database, age give as 26 years, which was when partial improvements occurred. Structure probably dates to 1900-1930, based on style. Buildings shown on following page are part of the industrial complex.

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Brick and sheet metal industrial buildings within complex.

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11439 S. Perry Avenue
Alternate: 11439 Pippin Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1892

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 11 September 2012

Photos with Captions
South façade of "building A" in a set of three joined industrial buildings. (Additional photographs appended).

Property Description: **Stories:** various

This industrial complex of buildings in the Roseland community includes three conjoined brick buildings: a two-story gable-roofed building (A, photo above), a collapsed brick building (B, photos on page 3), and a two-story flat-roofed brick building (C, photos on page 3). Building A has first floor clad in brick with a one-story, flat-roofed, brick commercial wing in front. The upper half of this building is clad in synthetic siding covering clapboards. It is vacant, deteriorated, and many of its window openings have been covered with particle board. Windows along the south side on the first floor are sliding or double-hung. Building B has collapsed. Building C at the far north has a parapet and is clad with red face brick and common brick. The windows with arched lintels have been in-filled with wood and brick. A new door pierces the façade. This complex of building lacks integrity, does not have any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations <u>Major Alterations</u>			**Additional Notes/Descriptions** In-filled windows, replacement garage doors and siding, new door added, collapsed walls
Condition: Excellent Good <u>Poor</u>			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Sliding, double-hung
Outbuildings (*Number and Description)* None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Additional photos:
Two photos at left: west façade of middle section (Building B), struck by lightning
Right photo: north façade of Building C

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11515 S. Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
West façade of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community has a gable roof covered with asphalt shingles, overhanging eaves, and a flat-roofed attached one-car garage. Glass blocks with stone sills and brick planter boxes decorate the front of the garage. The front elevation of the house is clad with light orange face brick and features two picture windows, one of which is flanked by narrow one-over-one windows. A stone panel separates the two picture windows. The front gable is clad with synthetic siding in a decorative pattern. The entrance is located along the side elevation and accessed via a flight of concrete steps with metal railings. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone panel, glass block with stone sills, brick planter boxes, clapboards in gable			**Windows** Fixed-pane, glass block, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11516 S. Perry Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

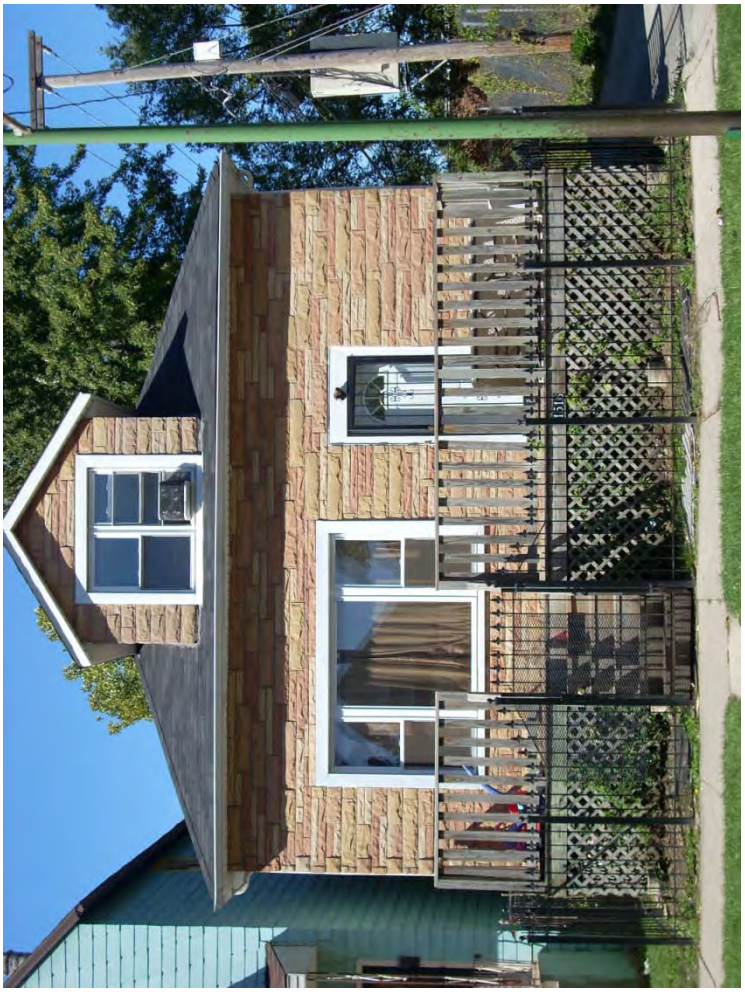

Property Description: **Stories:** 1

This one-story bungalow in the West Pullman community is situated on a raised concrete block basement and is covered with faux stone siding. The building has a hip roof covered with asphalt shingles and a gable dormer with a pair of non-original one-over-one aluminum-sash windows. The front elevation has a full-width porch with a wood deck, steps, and straight railings. This elevation has an off-center hollow core metal door, and a non-original picture window flanked by one-over-one aluminum-sash windows. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11521 S. Perry Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1879

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has a full-width wood porch with a flat roof that is supported by faux stone piers topped by short Doric columns. The façade features an off-center non-original hollow core metal door and five non-original one-over-one aluminum-sash windows: three on the first floor and two on the second. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11630 S. Prairie Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of one-and-a-half-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised brick basement, is clad with synthetic siding, and has a front gable roof with asphalt shingles. Its front elevation features a flat-roofed enclosed porch with concrete steps with metal railings. It also has a hollow metal core door, four non-original windows on the first floor—one casement and a strip of three one-over-one windows—and two paired windows on the second floor, one of which is in-filled with plywood. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11632 S. Prairie Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family

Current: Multi-family

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, frame, multi-family residential building in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features two off-center non-original hollow core metal doors, three windows on the first floor and four windows on the second floor, all of which are non-original one-over-one aluminum sash. A small single-pane window is situated in the gable. This building lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11634 S. Prairie Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East and south façades of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features an off-center, non-original, hollow core metal door, three windows on the first floor, five windows on the second floor, and one in the gable, all of which are non-original one-over-one aluminum sash. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11718 S. Prairie Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1885

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised brick basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The second story was added in the last few years. Its front elevation has a partial-width, hip-roof wood porch with straight posts and railings, an off-center non-original hollow core metal door, and five multi-paned double-hung windows: three on the first floor and two on the second, all non-original. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Second story added after 2007			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11814 S. Prairie Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad bungalow in the West Pullman community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles, overhanging eaves, and gable dormers along its front and rear elevations. The front elevation has a recessed corner porch with a brick pier support at the corner, concrete steps, and a metal railing. Above the basement, windows have been covered with plywood. Detailing includes soldier brick lintels, concrete sills, and concrete insert blocks used as decorative accents. This is an example of a Chicago bungalow, a building type that the City of Chicago has recognized through its Historic Chicago Bungalow Initiative. However, this house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Brick lintels, concrete sills and insert blocks			**Windows** Glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9815 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a steeply pitched front gable roof covered with asphalt shingles. Its front elevation is clad with brown and orange face brick on the first floor and synthetic siding in the gable. It has an off-center door, concrete steps with metal railings, a decorative perforated screen, a picture window flanked by one-over-one aluminum-sash windows on the first floor, and a one-over-one aluminum-sash window in the gable. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Perforated screen			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9818 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community has a gable-on-hip roof clad with asphalt shingles. The front elevation is clad with red face brick on the first floor and synthetic siding in the gable. It has a centrally located door, a decorative perforated screen, and a picture window flanked by what appear to be casements. This window group is partially obscured by a low metal awning. The wood ramp is non-original. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations Wood ramp appended to residence but has not altered the building.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Perforated screen			**Windows** Casement, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9915 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
West façade of a one-story, masonry, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland neighborhood has a hip roof covered with asphalt shingles that extends beyond the front elevation to serve as the roof of the low porch, which is supported by open metal posts and has three concrete steps and metal railings. The front elevation is clad with buff face brick and faux stone. It has an off-center door and a large single pane window flanked by smaller panes of glass. Double-hung windows are utilized on the side elevations. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, faux stone	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10054 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family residence

Current: Multi-family residence

Date of Construction: 1934

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, multi-family residence.

Property Description: **Stories:** 2

This two-story multi-family building at the northwest corner of 100th Street and Princeton Avenue in the Roseland community is clad with brown face brick along its two street elevations. It has a raised brick basement with glass block windows, a hip roof covered with asphalt shingles with overhanging eaves, a shed dormer along its 100th Street elevation, and a hip dormer along its rear elevation. The front elevation has an off-center hollow core metal door with two strips of three windows—one on the first floor and one on the second—along with an additional window on the second floor. Fenestration along both street elevations is comprised of three-over-one wood-sash windows. Detailing includes concrete sills, window surrounds with soldier bricks and square concrete insert blocks, and a course of soldier bricks above the first floor windows that spans both street elevations. The brick panels above both the front and side doors feature the same decorative basketweave pattern. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Dormer appears to be a later addition
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills, soldier bricks, concrete insert blocks, brick panels			**Windows** Double hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10136 S Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1954

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of split-level, brick single family residence.

North façade of split-level showing roofline.

Property Description: **Stories:** 1

This split-level home in the Roseland community has a cross-gabled roof covered with asphalt shingles and is clad with buff and orange face brick. The front elevation's gable is clad with aluminum and has a deep overhang that is supported by two open metal posts. The roofline exhibits an overhanging shed roof along the ridgeline, running the width of the house. The eave of this overhang is clad in vinyl siding. The front elevation's windows and door are obscured by high foliage. Three of the four side elevation windows are covered with plywood. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gabled	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10224 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised brick basement. It is clad with brown face brick and has a cross-gable roof covered with asphalt shingles. Its front elevation has an arched basement window group, an off-center door with a metal storm, a corner recessed porch with concrete steps and metal railings, a projecting three-sided hip-roofed living room bay with five double hung sash windows, and a strip of three one-over-one windows on the second floor. Detailing includes a stone sill course and a decorative soldier course with stone insert blocks above the living room bay windows, decorative scrolled stone brackets below the living room bay windows, and a porch archway with stone keystone. The side elevation has a shed-roofed window bay with large glass block window opening. The rear elevation's original roofline has been raised with a shed-roofed addition. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Rear elevation roofline raised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable, shed	
Ornamental Architectural Details Stone sill course, brick soldier course with stone insert blocks, scrolled stone brackets, archway with stone keystone, arched basement window group			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: First Christian Reform Church of Roseland

Common/Current: Mary Magdalene Missionary Baptist Church

Property Address:

10920 S. Princeton Avenue
Alternate: 10914 S. Princeton Ave.
Alternate: 318 W 109th Place

HAARGIS Number:

140670

Present Owner and /or Occupant:

Mary Magdalene Missionary Baptist Church

Property Use

Historic: Religious

Current: Religious

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Romanesque Revival

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
East façade of two-story religious building (above), south and east facades from HAARGIS (below).

Property Description: **Stories:** 2

This Romanesque Revival style church in the Roseland community has a front elevation and two flanking towers clad with brown face brick, while the remainder of the side elevation and the rear elevation are clad with common brick. It has a gable roof covered with asphalt shingles and gable wall dormers with shaped parapets on both side elevations. The east tower has a flat roof and a shaped parapet while the west tower has a peaked roof with overhanging eaves and exposed rafters and is topped by a finial. The central bay of the front elevation has a broad, round-arched entrance with stone surround and two sets of single-light oak double-doors. The central bay also contains a strip of double-hung windows situated within a broad arch and a rose window with tracery. Fenestration on the both towers and along the side elevations comprises round-arch windows with tracery. It is unknown whether the original stained glass for all of these windows is extant inside the church. Both towers also feature paired casement windows. Window openings at the top of the west tower have been boarded-over. Detailing includes stone sills, belt courses, brick

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

pilasters and keystones. A one-story brick-clad entrance vestibule is situated along the rear of the west elevation. Built as the First Reformed Church of Roseland, this church is recommended as individually eligible for National Register listing under Criterion A for its association with the community's once-dominant Dutch population and under Criterion C as fine example of a Romanesque Revival style church in Roseland.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Square tower brick infilled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Parapet, Towers, Dormers	**Roof Type** Gable	
Ornamental Architectural Details Stone sills, belt courses, brick pilasters, and keystones, shaped parapet, rose window			**Windows** Double-hung, fixed-pane, glass block (raised basement)
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? Yes	**A** **B** **C**	**Significance:** A fine example of a Romanesque Revival style church in the Roseland community associated with the community's once-dominant Dutch population

Additional comments

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11122 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Apartment building

Current: Apartment building

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a brick, two-story, apartment building.

Property Description: **Stories:** 2

This two-story apartment building at the northwest corner of Princeton Avenue and 111th Place in the Roseland community is situated on a raised basement with glass block windows and is clad with brown face brick on its two street elevations. The building has a flat roof and shaped parapet with concrete coping. Windows are original three-over-one wood-sash windows arranged singly, in pairs, or in groups of four. The Princeton Avenue elevation also features four leaded glass casement windows. Each street elevation has an entrance with a non-original hollow core metal door. Detailing includes concrete sills and brick soldier courses with square stone inserts blocks. This building lacks sufficient distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Windows in garden apartments in-filled with glass blocks
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping and sills, stone insert blocks, brick soldier courses			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11142 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat (Single family, CCA)

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of concrete block, two-flat residence.

Property Description: **Stories:** 2

This two-flat rusticated concrete block residential building in the Roseland community is situated on a raised basement. The building has a flat roof and parapet. Its front elevation has a pair of off-center hollow core metal doors, a partial-width hipped-roof wood porch with straight posts and railings, and five non-original one-over-one aluminum-sash windows: two on the first floor and three on the second. Detailing includes stone sills and lintels. The south (alley) elevation has a full-height window bay pavilion. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills and lintels			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11319 S Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised concrete block basement. Its front façade has an off-center, non-original, hollow metal paneled door and a porch with concrete steps, metal railings, and metal supports with a metal canopy roof. Fenestration is comprised of non-original one-over-one windows: a strip of three on the first floor and two on the second floor. One of the side elevations has a three-sided window bay on the first floor. This home lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11321 S Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised basement. Its front façade has an off-center hollow metal paneled door and a porch with wood steps and straight wood railings. The first floor of the front façade has a large picture window and the second floor has paired, double-hung windows. This home lacks integrity and distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11325 S. Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised concrete block basement. Its front façade has an off-center, non-original, hollow, metal paneled door and a porch with wood steps and straight wood railings. Both the first and second floors of the front façade feature a large picture window flanked by one-over-one windows. The second floor has an additional one-over-one window situated directly above the entrance. This home lacks integrity and distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11327 S Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
West façade one-story, single family, frame residence

Property Description: **Stories:** 1

The one-story home in the Roseland community is clad with synthetic siding and has a flat roof. Its front façade has an off-center door, wood steps and railings, and a strip of three, non-original one-over-one windows. It lacks integrity and any distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11340 S. Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of two-story, brick, single family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with face brick and common brick on the front and side elevations, respectively, and has a hip roof covered with asphalt shingles. The front façade has a three-sided bay window on the first floor and casement windows at each corner of the second floor, each topped by an awning. Details include concrete quoins on the bay and concrete sills. The main entrance is located along the side elevation, which contains an entryway porch topped by a flat roof supported by metal pole. Decorative lattice is present at the entrance. This building lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hipped	
Ornamental Architectural Details Concrete quoins and sills, lattice at entry			**Windows** Fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11801 S. Sangamon Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Redeeming Grace Evangelistic

Property Use

Historic: Industrial

Current: Religious

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 24 October 2012

Photos with Captions:
North and west façade of a brick, one-story, former commercial building.

Property Description: **Stories:** 1

This one-story, former industrial building at the corner of Sangamon and 118th streets in the West Pullman community is clad with brown face brick along its two street elevations and has a flat roof and parapet with brick pediment. The corner entrance has a non-original plate glass door with sidelight and a transom that has been in-filled with wood. The window openings along both street elevations have been in-filled with glass block. The Sangamon Street elevation has an off-center hollow core metal door and a transom that has been in-filled with wood. Detailing along both street elevations includes square insert blocks used as decorative accents, rectangular brick panels at the base and parapet level, concrete sill course, and a metal cornice. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, window openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Insert blocks, brick panels, concrete sill course and coping, metal cornice, brick pediment			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11820 S. Sangamon Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised brick basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a non-original, full-width, hip-roofed, synthetic-clad, enclosed porch with an off-center hollow core metal door, wood steps with straight wood railings, and five non-original double-hung windows. There are four windows on the second floor of the front elevation and one in the gable, all of which are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Presbyterian Church of Roseland

Common/Current: Cornerstone Presbyterian Church

Property Address:

11210 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Cornerstone Presbyterian Church

Property Use

Historic: Religious

Current: Religious

Date of Construction: 1910, 1936

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Gothic Revival

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a two-story, brick religious building.

Property Description: **Stories:** 2

This 1910 Gothic Revival style church at the southwest corner of State and 112th streets in the Roseland community is situated on a raised basement with glass block windows and is clad with tan face brick on its front elevation and common brick on its side and rear elevations. The church has a gable roof covered with asphalt shingles and a parapet with concrete coping. The gable front elevation has brick corner buttresses. A pair of wood double-doors each topped by a stone tympanum is located at either end of the gable front. The doors are accessed by concrete steps with low stone sidewalls. Windows at the gable end include a central bay with three large windows separated by stone buttresses and topped by a large stained glass window with pointed arch. Single windows are also situated above both front entrances. Most of the gable fenestration appears to be stained glass. The side elevations feature through-the-cornice gabled wall dormers with brick buttresses flanked by a series of double-hung windows. Additional detailing includes stone window hoods and sills, stone door surrounds with foliate motif, stone buttresses, and a panel inscribed "Presbyterian Church of Roseland." The church is attached via a flat-roofed wing to a 1936 three-story flat-roofed school. The front (State Street) elevation of the school is clad with tan face brick and has vertical slit windows on the

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

second and third floors and concrete spandrels. The school's first floor elevation is obscured by a brick wall. This building does not stand out as one of the best examples of a Gothic Revival church in Roseland; other churches in this style that are more distinctive in terms of their architectural features, craftsmanship and detailing are is the area. As a result, this church is not recommended as eligible for individual listing on the National Register.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions**
Condition: Excellent Good Poor				
Additional Alterations 1936 wing added				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Asphalt shingle	**Roof Features** Parapet	**Roof Type** Gable (church), flat (school)		
Ornamental Architectural Details Brick buttresses, parapet with concrete coping; stone buttresses, hoods, sills, panels, and door surrounds				**Windows** Fixed pane, stained glass, glass block. double-hung
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11546 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1901

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West and north façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with wood slat railings and wood posts. It also has an off-center door, a multi-light fixed-pane window on the first floor, and a pair of non-original one-over-one windows in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement cladding, door, and windows in gable
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Not in CHRS

Property Address:

11548 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West and south façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a gable roof covered with asphalt shingles and a shed roof dormer on its south elevation. Its front elevation features a full-width, hip-roof, wood porch with open metal railings and posts, an off-center door, a bay window on the first floor, and a single non-original one-over-one window in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows, doors, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Not in CHRS

Property Address:

11567 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a front gable roof covered with asphalt shingles and an enclosed hip roof porch. The front door and all window openings are covered with plywood. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and doors covered with plywood, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11569 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement with a stone veneer. Above, it is clad with aluminum siding and has a gable roof covered with asphalt shingles. Its front elevation features a pent roof with decorative knee braces, an off-center door, concrete steps with metal railings and a strip of three non-original one-over-one windows. The window opening in the gable contains a pair of narrow casements. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces supporting porch roof			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11571 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with Doric columns and metal pipe railings. It also has an off-center door, a strip of three non-original one-over-one windows, and a single-pane window in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11573 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with square porch supports and non-original railings. It has an off-center metal hollow core paneled door with fanlight and a picture window flanked by non-original one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11575 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
South façade of one-story, single-family frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a front gable roof covered with asphalt shingles and a flat-roofed dormer along one of its side elevations. Its front elevation features a full-width porch with wood steps and support consisting of brick piers topped by squat Doric columns. The porch deck and railings have been removed and the door and all windows openings are covered with plywood. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and doors covered, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11583 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South and east façades of single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised basement with glass block windows and is clad with common brick. It has a steeply pitched hip roof covered with asphalt shingles and a shed dormer with sliding glass windows. Its front elevation features a centrally located hollow metal paneled door (non-original) flanked by paired, double-hung windows. The porch has concrete steps, metal railings and supports, and a metal canopy roof. Detailing includes rusticated stonework at the basement corners and around the door. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Rusticated stonework at corners and around the entrance			**Windows** Double-hung, sliding, glass block
Outbuildings (*Number and Description*) None.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Trinity Italian Reformed Church (1938)

Common/Current: New Christian Joy F.G.B.C.

Property Address:

11594 S. State Street
Alternate: 11588 S State Street (per CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

New Christian Joy F.G.B.C.

Property Use

Historic: Religious

Current: Religious

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a brick, 1.5-story religious building.

Property Description: **Stories:** 1.5

This church at the corner of State and 116th streets is clad in buff face brick on a concrete block foundation. The building has a raised basement, gable roof covered with asphalt shingles, and a square corner tower with a hip roof. Its front (State Street) elevation has a centrally located hip-roof entrance pavilion with metal stairs on both sides and a gable wall dormer above. The pavilion features a cross of glass blocks and the flanking walls each have a single square leaded glass window. The side (116th Street) elevation features one large and two small pointed arch windows. This church lacks sufficient distinctive architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Square tower, cruciform-shaped glass blocks, pointed windows, leaded glass			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11118 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Benson & Son Construction Contractor

Property Use

Historic: Industrial (Sash & Screen Door Factory, 1939)

Current: Garage

Date of Construction: 1922

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz, CCA

Date: 6 September 2012

Photos with Captions:
East and north facades of a one-story, concrete block garage.
Cook County Assessor's photo (top), MARS, Inc. photo (bottom):

Property Description: **Stories:** 1

This one-story concrete block garage has a flat roof and parapet. Its front elevation has been covered with what appears to be shotcrete and has an off-center hollow metal door. The structure has a series of overhead garage door openings along one of its side elevations. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Re-clad with shotcrete
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Business office attached (11124 S. Stewart Ave.)

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11130 S Stewart Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad with synthetic siding; it has a hip roof covered with asphalt shingles and a hipped roof dormer with louver. The front elevation has an off-center door, wood steps and railings, and a pair of windows that appear to be casements. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11142 S. Stewart Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: circa 1950

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade two-story, brick light industrial building.

Property Description: **Stories:** 2

This two-story light industrial building is clad with face brick and common brick along its front and side elevations, respectively, and has a flat roof and parapet. The front elevation has an off-center entrance with no door, a large window opening on the first floor that is obscured by foliage, and window openings on the second floor that have been in-filled with both wood and brick. The buff brick between the first and second floors and at the parapet level contrasts with the red brick cladding of the front elevation and may be non-original. Detailing includes dentil molding on the parapet, banding in brick, and stone sills. Side elevation windows are in-filled with glass block. This building lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** In-filled windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Parapet with dentil molding, banding, sills			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11224 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of 1.5-story, frame, single family residence.

Property Description: **Stories:** 1.5

This 1.5-story house in the Roseland community is situated on a raised brick basement with glass block windows. The building has a front gable roof covered with asphalt shingles and overhanging eaves with decorative knee braces. The front elevation is covered with faux stone to the top of the first floor windows and in vertical synthetic siding above. It has a partially recessed gable-roofed corner porch with sidewalls covered with synthetic siding, two low squared wood column supports, and wood steps. A glass block window and hollow core metal door are tucked into one side of the porch. A strip of four windows on the first floor and a pair of windows in the gable are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (including faux stone)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, square column on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11229 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
West façade of one-story, single family frame residence.

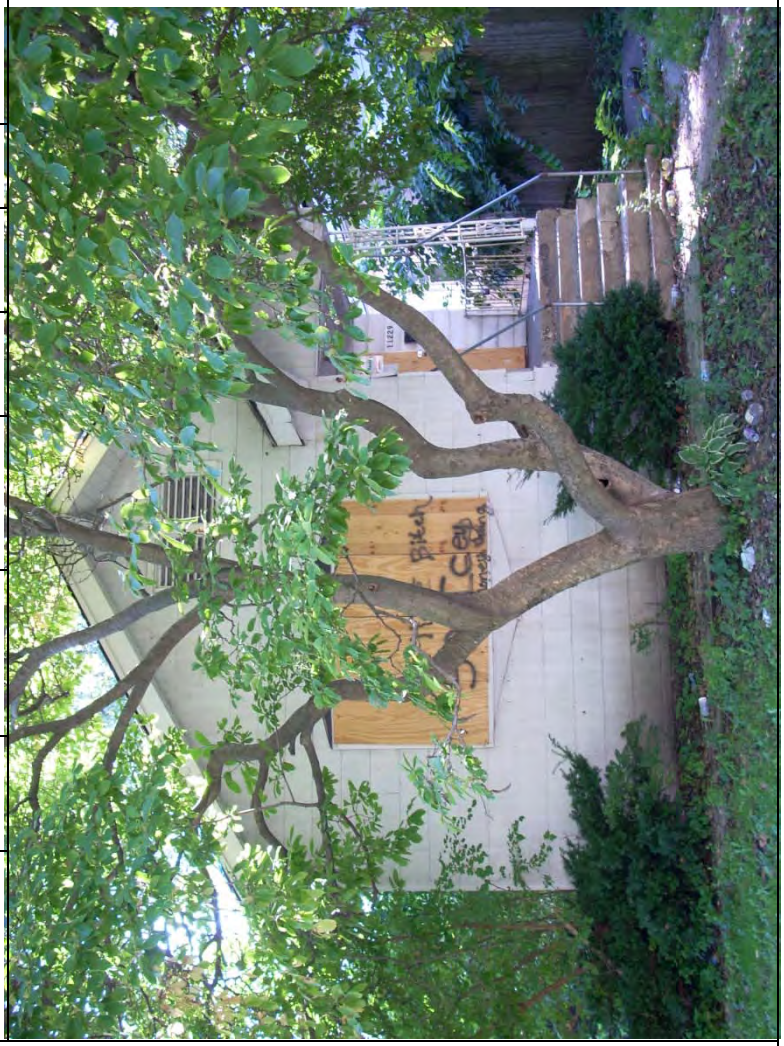

Property Description: **Stories:** 1

This one-story frame home in the Roseland community is clad with synthetic siding and has a front-gabled roof covered with asphalt shingles. Its off-center recessed porch with gabled hood has concrete steps, metal railings, and a corner support, plus a door opening that has been covered with plywood. The bow window on the front elevation and window openings along the side elevations have all been covered with plywood. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, covered window and door openings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Gabled hood at entrance			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11231 S. Stewart Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
West façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland neighborhood is clad with aluminum siding. It has a cross-gable roof covered with asphalt shingles, overhanging eaves, extended rafter ends, and decorative knee brace supports. Its recessed corner porch features wood steps, a wood post, a paneled hollow core metal door with fanlight, and a decorative gable hood with knee brace supports. Its front façade has a strip of four one-over-one windows and a pair of single-pane windows in the attic gable that may be casements. This home does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details Extended rafters, knee braces			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9819 S. Union Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised basement and is clad with yellow face brick on its front elevation and in common brick along its side and rear elevations. The building has a hip roof covered with asphalt shingles. Its front elevation has a door tucked into the side of the projecting living room bay and a partial-width porch with concrete steps, metal railings and an open metal post that is sheltered by the wide roof overhang. Front elevation fenestration consists of a picture window flanked by casements and a pair of windows that are either sliding glass or casement. Detailing includes a concrete sill course and two decorative glass blocks. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass block, concrete sills			**Windows** Fixed-pane, casement, sliding?
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9822 S. Union Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1944

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East façade of two-story, brick, single family residence.

Property Description: **Stories:** 2

This two-story house at the northwest corner of Union Avenue and 98th Place in the Washington Heights community is situated on a raised basement and is clad with yellow face brick on its front elevation and in common brick along its side and rear elevations. The building has a hip roof covered with asphalt shingles. Its front elevation has a partial-width, hip-roof, enclosed porch with a non-original hollow core metal door, concrete steps with metal railings, and five six-over-one original wood-sash windows: a strip of three on the first floor and two on the second floor. Detailing includes decorative stone flanking the front door, a small glass block window, brick banding, and concrete sills. This is a standard type of home that was produced during the post-World War II era. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone around the entrance, concrete sills, brick banding			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9901 S. Union Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
East façade of two-story, brick single-family residence.

Property Description: **Stories:** 2

This two-story brick-clad house in the Washington Heights community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles. Its front elevation has an off-center non-original hollow core metal door, concrete steps and metal railings, and a three-sided window bay comprised of a picture window flanked by casements on the first floor. There are two casement windows on the second floor. Detailing includes a smooth stone door surround, concrete sills, and decorative stones beneath the bay. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone door surround, concrete sills, decorative stones under bay			**Windows** Fixed-pane, casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9906 S. Union Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of two-story, brick, single-family residence.

Property Description: **Stories:** 2

This two-story brick-clad house in the Washington Heights community has a hip roof covered with asphalt shingles. Its front elevation has an off-center hollow core metal door, woods steps and railings, a picture window on the first floor, and two one-over-one aluminum-sash windows on the second floor. Windows and the front door are non-original. Detailing includes a smooth stone door surround, a vertical strip of five glass blocks, brick banding, and concrete sills. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

741 W. Vermont Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1954

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
North façade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised basement and is clad with face brick on the front elevation and common brick on the side and rear elevations. The building has a hip roof covered with asphalt shingles and a front-facing gabled pediment with bracket. The front elevation has a metal storm door flanked by decorative yellow bricks, concrete steps with metal railings, and a small glass block window. There is a projecting living room bay with a non-original picture window flanked by one-over-one aluminum-sash windows. All windows have concrete sills. A pent roof spans the door and living room bay. The house does not feature any distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Contrasting brick at entrance, concrete sills, bracket			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

814 W. Vermont Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1953

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
South façade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is clad with face brick on the front elevation and common brick on the side and rear elevations. The building has a hip roof with asphalt shingles, and a partial-width projecting front pavilion with a synthetic-clad gable. The front elevation has a centrally located metal storm door flanked by decorative faux stones, concrete steps with metal railings, and two groups of three non-original casement windows. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone surrounding entrance			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

817 W. Vermont Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
North façade of one-story single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the West Pullman community has a front gable roof covered with asphalt shingles. Its front façade is clad with face brick and non-original synthetic siding. It has a gable canopy supported by open metal posts, a hollow metal paneled door, and non-original one-over-one windows. It does not feature any distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (lower), Synthetic siding (upper)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

821 W. Vermont Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
North façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the West Pullman community has a front gable roof covered with asphalt shingles. Its front façade is clad with face brick and synthetic siding and has a shed-roofed canopy sheltering the entrance, a hollow metal paneled door, and casement windows. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable end)	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

825 W. Vermont Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 13 September 2012

Photos with Captions:
North façade of one-story, brick single-family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the West Pullman community has a front gable roof covered with asphalt shingles. Its front façade is clad with face brick and synthetic siding. It has a gable canopy sheltering the entrance, a hollow metal paneled door, and two pairs of non-original windows that are either sliding glass or casements. It does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable end and trim)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement or sliding
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11572 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-half-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation has a metal core door and two one-over-one windows on the first floor and sliding glass doors on the second floor. All doors and windows are non-original. The metal stairway and balconies are non-original. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, & cladding
Condition: Excellent Good Poor			
Additional Alterations Metal stairway and balconies added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage and storage shed behind residence.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11573 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

XOXXOX Charter Bus, Inc.

Property Use

Historic: Warehouse (Sanborn, 1938)

Current: Garage

Date of Construction: 1910

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of brick bus garage building.

Property Description: **Stories:** 1

This one-story former warehouse in the West Pullman community is clad with common brick and has a flat roof, parapet, and a shed-roofed frame wing. Its front façade features the outline of an original door opening that has been in-filled with brick, a non-original overhead metal door, a metal door with transom, and a former door opening that has been in-filled with wood panels and two horizontal strips of small fixed-pane windows. One of the side elevations displays the outlines of former window openings that have been in-filled with brick while the other features an overhead metal garage door. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and door openings in-filled, small addition
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11574 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised basement and clad with synthetic siding. It has a hip roof covered with asphalt shingles and a hip dormer with a pair of single-pane casement windows. The front elevation features a full-width, hip roof wood porch with faux stone pier supports, an off-center door, and non-original one-over-one windows arranged in strips of two and three on the first and second floors, respectively. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, porch railing
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11578 S. Wabash Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. The front elevation features a full-width flat-roofed wood porch with supports consisting of low faux stone pedestals topped by wood Doric columns, an off-center wood paneled door, and strips of three one-over-one non-original windows on both the first and second floors. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch railings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9912 S. Wallace Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 29 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Washington Heights community is covered with synthetic siding and has a front gable roof covered with asphalt shingles and overhanging eaves. The front elevation has a partial-width, synthetic-clad, gabled entrance vestibule with a metal storm door topped by a metal awning and wood steps with straight wood railings. There are five non-original one-over-one aluminum-sash windows, including a strip of three in the living room that are partially obscured by a metal awning, and one each flanking the door. There is a pair of one-over-one aluminum-sash windows in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9745 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with glass block windows. It is clad with buff brick and has a hip roof covered with asphalt shingles. Its front elevation has an off-center hollow core metal door, a casement window, a picture window flanked by one-over-one aluminum-sash windows, concrete steps with metal railings and a small patio area. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not in CHRS database.

Common/Current: Not in CHRS database

Property address:

11321 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

A Little Bit of Heaven

Property Use

Historic: Apartment building

Current: Public

Date of Construction: circa 1924-1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of the four-story, brick building

Property Description: **Stories:** 4

This four-story building at the northeast corner of Wentworth Avenue and 113th Place in the Roseland community has a flat roof and parapet. Its symmetrical front (Wentworth Avenue) elevation is clad with brown face brick and has a centrally located entrance with a glass door and stone surround topped by two stone owls holding books. Windows are non-original one-over-one aluminum-sash; those directly above the entrance have stone casings. Detailing includes stone sills, coping, insert blocks, sill courses, cornice, panels, and pinnacles at the parapet level.

This building is recommended locally significant for National Register listing under Criterion A for Education. Formerly the Roseland Community Hospital Nurses Home, it was built by the hospital as a dormitory and educational facility for its nurses. Closely affiliated with Roseland Community Hospital, which has served as an important institution in the Roseland area since its establishment in 1924, the Nurses Home is an excellent example of this building type on Chicago's South Side. The exterior of the building has very good integrity and the interior—which now functions as a homeless shelter—appears to retain classrooms and other spaces associated with its original use.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone casings, sills, cornice, panels, inserts, and pinnacles; stone surround with owls at entrance			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Built as a dormitory for Roseland Community Hospital nurses and served as an important educational facility for women training in this profession.

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11334 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1906

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised concrete block basement with casement windows and is covered with synthetic siding. The building has a gable roof with asphalt shingles. The front elevation has a hipped-roof wood porch with Doric columns, an off-center entrance with a hollow core metal panel door, a three-sided bay window on the first floor, and a strip of three windows in the gable. With the exception of the basement, windows are non-original one-over-one aluminum-sash. The north elevation has a hipped-roof wall dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric columns			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11352 S. Wentworth Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1897

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, has a flat-roofed dormer along one of its side elevations, and is situated on a raised concrete block basement with glass block windows. Its front elevation has a full-width gable roof porch, a portion of which is enclosed with synthetic siding and features a strip of non-original one-over-one windows. The open portion of the porch has a corner support consisting of a low faux stone pedestal topped by a wood Doric column, a window opening that has been covered, wood steps, and metal railings. A pair of non-original one-over-one windows with original wood casing is situated in the gable. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations Dormer and rear addition may be non-original			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric column on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11428 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 22 October 2012

Photos with Captions:
East façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story cottage in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. Its front elevation has a three-sided bay with plywood-covered windows, a partial-width shed-roofed porch with straight wood railings and posts, and a plywood-covered door. A single non-original one-over-one aluminum-sash window is situated in the gable. The north elevation has a synthetic-clad gable dormer with a single window. Side elevation windows are non-original one-over-one aluminum sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9808 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, two story, single family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is situated on a raised brick basement and has a hip roof covered with asphalt shingles. Its front elevation is clad with buff and orange brick with linear concrete inserts and sills. It has an off-center door, a flat-roofed partial-width porch with brick sidewalls, concrete steps and metal railings. It has a picture window flanked by one-over-one aluminum-sash windows on the first floor and two one-over-one aluminum-sash windows on the second floor. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Structural Survey

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete inserts and sills			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9904 S Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement, is clad with synthetic siding, and has a hip-on-gable roof covered with asphalt shingles with overhanging eaves and exposed rafters. The front elevation has a pent roof that extends forward above the front windows and door, and is supported by open metal posts. The porch has concrete steps and metal railings. The front elevation also features an off-center door and a picture window flanked by non-original one-over-one aluminum-sash windows on either side. This home does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Pent roof	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9905 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised basement, is clad with brick, and has a side-gabled roof covered with asphalt shingles and overhanging eaves. Its side-gabled elevations are clad with synthetic siding, as is the gable dormer along the front elevation. The roof extends beyond the front elevation to serve as the roof of the porch, which is supported by open metal posts and has metal railings, a wooden deck, and wooden steps. The front elevation features an off-center hollow core metal door, a leaded glass casement window, and two strips of non-original double-hung aluminum-sash windows: one on the first floor and one in the dormer. This home does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable ends and dormers)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Side-gabled	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11319 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. It has a hip-roofed, full-width porch with faux stone supports beneath the deck, wood columns, railings, and steps. The front elevation's off-center door and first floor window group are covered with plywood; paired windows in the gable are non-original one-over-one aluminum-sash. The south elevation has a shed dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current :NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11330 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front façade has a three-sided window bay comprised of non-original one-over-one windows, a recessed front door, and a full-width hipped-roof wood porch with supports consisting of low faux stone pedestals topped by open metal posts. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11334 S Yale Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is situated on a raised basement, clad in synthetic siding, has a hip roof covered with asphalt shingles and overhanging eaves. It features a full-width, hip-roof, wood porch. The front façade has an off-center door, three-sided window bays on the first and second floors comprised of non-original one-over-one windows, and a single one-over-one window on the second floor directly above the door. Its hip dormer has three window openings: two comprised of single-pane windows and a third that is covered with plywood. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11336 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story home in the Roseland community is situated on a raised basement and clad in two layers of synthetic siding. It has a gable roof covered with asphalt shingles and a full-width, hip-roof wood porch with non-original, wooden, square columns and rails. The front façade has an off-center, non-original, hollow metal core panel door with fanlight. It also has a three-sided window bay on the first floor comprised of non-original one-over-one windows and a strip of three, non-original one-over-one windows on the second floor. One of the side elevations has a three-sided bay window and gable wall dormer above. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11343 S. Yale Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: Jay Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 1 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. Above, it is clad with synthetic siding on the sides and clapboards on the front. It has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer. The roofline extends forward to shelter the full-width, hipped-roof, wood porch that is supported by low faux stone pedestals topped by squat wood Doric columns. The front elevation has an off-center door opening and a three-sided window bay. The door and all window openings have been covered with plywood. This building does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Openings covered with plywood, synthetic siding on sides
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Clapboard (front), Synthetic siding (sides)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Doric columns on porch			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11413 S. Yale Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1920

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
West and south façades of single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. It has a hip roof covered with asphalt shingles and a hip dormer with a pair of single-pane or sliding windows. Its roof overhangs to shelter the full-width wood porch with supports consisting of faux stone pedestals topped by squared wood columns. The front façade has an off-center front door, an adjacent single-pane window, and a strip of four double-hung windows. Windows appear to be original wood-sash. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Square pillars on porch			**Windows** Double-hung, fixed-pane or sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11417 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised brick basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width porch with a mansard-like roof that is partially enclosed and covered with synthetic siding. This elevation of the porch also has a strip of three non-original one-over-one aluminum sash windows. The open portion of the porch has a metal storm door, concrete steps with metal railings, and an open metal corner post. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding.
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Appendix C
Consultation and Correspondence

RLE Mailing List for S106 Consulting Parties

Accept	AGENCY	CONTACT	ADDRESS	EMAIL
X	Illinois Historic Preservation Agency (SHPO)	Anne Haaker	One Old State Capitol Plaza Springfield, IL 62701	anne.haaker@illinois.gov
X	Chicago Historic Preservation Div. Dept of Housing & Economic Development	Terry Tatum	33 N. La Salle Street, #1600 Chicago, IL 60602	ttatum@cityofchicago.org
X	Preservation Chicago	Jonathan Fine, Executive Director	4410 N. Ravenswood Chicago, IL 60640	jfine@preservationchicago.org
X	Landmarks Illinois	Bonnie McDonald or L. DiChiera	53 W. Jackson Blvd., # 1315 Chicago, IL 60604	DiChieraL@lpci.org
X	Ridge Historical Society	Jennifer Kenny	9927 S Longwood Dr. Chicago, IL 60643	jennifer.kenny@mindspring.com
X	Rosemoor Community Association	Gloria Cosey, President	10205 S. King Drive Chicago, IL 60628	rosemoorchicago@yahoo.com
X	Friends of the Park	Erma Tranter, President Tim Jeffries	17 N State Street, #1450 Chicago, IL 60602-3315	trantere@fotp.org jeffriest@fotp.org
X	Chicago Neighborhood Initiatives	Angelica Marks	1000 E 111th Street - 10th Floor Chicago, IL 60628	amarks@cnigroup.org
X	Neighborhood Housing Services of Chicago Citywide office	Matt Cole	1279 N. Milwaukee Avenue, 5th Floor Chicago, Illinois 60622	MCole@nhschicago.org
X	Peoria Tribe of Indians of Oklahoma	Frank Hecksher	P.O. Box 1527 Miami, OK 74355	
X	Forest County Potawatomi	Melissa Cook, THPO	P. O. Box 340 Crandon, WI 54520	Melissa.Cook@fcpotawatomi-nsn.gov
X	Miami Tribe of Oklahoma	George Strack, THPO	202 S. Eight Tribes Trail Miami, OK 74354	gstrack@miamination.com
PARTIES ADDED LATER				
X	DCP	Gwendolyn Rice Executive Director	212 E 95th Street Chicago, IL 60619-7208	gmrice@dcpchicago.com

MEETING NOTES

RE: **Section 106 Kick-off Meeting**
Red Line Extension EIS

DATE: **October 24, 2012**

LOCATION: **Conference Call/Webinar**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	**Organization**
Sonali Tandon	CTA
Reggie Arkell	FTA
Anne Haaker	IHPA (SHPO)
Jonathan Fine	Preservation Chicago
Terry Tatum	Chicago Historic Preservation Division
Lisa DiChiera	Landmarks Illinois
Erma Tranter	Friends of the Park
Helene Kornblatt	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group

PREPARED BY: Rebecca Thompson

ISSUE DATE: October 24, 2012

Meeting called to order at 1:00 pm CT

Objective: Red Link Extension Kickoff Meeting for Section 106 Consultation

Item No.	*Item Description*	*Responsibility*	*Due Date*
1	**Welcome/Intro** Sonali welcomed attendees and callers introduced themselves.		
2	**Overview of Section 106 Process** John Mettille provided an overview of the four-step Section 106 process. Reggie Arkell explained that FTA is overseeing the consultation process, working in conjunction with CTA. FTA will make determinations regarding eligibility and effects, referencing recommendations prepared by the consultant and considering input from consulting parties, including the SHPO. John discussed the roles of consulting parties and identified ground rules to ensure everyone has a fair chance to provide meaningful input.		

Item No.	Item Description	Responsibility	Due Date
3	**Project Info & Alternatives** Sonali provided a brief overview of the project area, the No Build alternative, and the three Build alternatives that are being considered: UPRR rail, Halsted rail, and Bus Rapid Transit. John presented the Area of Potential Effects (APE), which defines the geographic boundary where the analysis of historic resources will occur. A larger scale APE map is attached to the meeting summary.		
4	**Schedule/Next Steps** John explained the next steps in the process. Work is underway to identify potential historic properties. We are tentatively planning to hold a meeting to discuss the eligibility of resources in December. A meeting to discuss effects will occur in early 2013.		
5	**Question/Answer** - Jonathan: Is the purple segment on the alternatives map new or existing? It would be a new structure in the median of the expressway. - Reggie: What is the pier spacing for the Halsted Alternative? Spans between piers would typically be 60 to 100 feet, and as long as 140 feet. Span length would be based on site conditions, geometrics, and clearance requirements. - Jonathan: What advantages does the Halsted Alternative offer over the No Build Alternative? Halsted would extend the red line south to serve additional transit markets. The No Build Alternative includes improvements at the 95th Street station which are currently being planned but would not include an extension of the route or other improvements. - Jonathan: Which alternative has the least impacts on historic resources? That is part of what we will determine through this process. - Lisa: Is documentation of the previous study available online? Yes, the project website is http://www.transitchicago.com/redeis Please use following links to access specific materials: Locally Preferred Alternative Report and Scoping Report (http://www.transitchicago.com/Redeis/documents.aspx); Alternatives Analysis Materials (http://www.transitchicago.com/news_initiatives/planning/redextend.aspx) - Lisa: If we have additional information about resources, should we send it to the team? Yes, please direct it to Sonali at STandon@transitchicago.com. - Erma: Are parks covered in the 106 process too? Parks are protected under Section 4(f) regulation, which is a separate law; they will be addressed in the project EIS. The Section 106 process will deal with historic resources; if any parks in the area or park facilities are determined to be historic, they will be considered during the 106 process. If any historic resources are used by the project, they will be addressed under Section 4(f) as well. Parks that are not historic are subject to the 4(f).		

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days.

As requested, contact information for participants is below:

Name	Organization	Email
Sonali Tandon	CTA	STandon@transitchicago.com
Reggie Arkell	FTA	Reginald.Arkell@dot.gov
Anne Haaker	IHPA (SHPO)	Anne.Haaker@Illinois.gov
Jonathan Fine	Preservation Chicago	JFine@preservationchicago.org
Terry Tatum	Chicago Historic Preservation Division	TTatum@cityofchicago.org
Lisa DiChiera	Landmarks Illinois	DiChieraL@lpci.org
Erma Tranter	Friends of the Park	TranterE@FOTP.org
Helene Kornblatt	CWC Transit Group	KornblattHK@cdmsmith.com
John Mettille	CWC Transit Group	MettilleJL@cdmsmith.com
Rebecca Thompson	CWC Transit Group	ThompsonRD@cdmsmith.com
Robert Ball	CWC Transit Group	BallRW@cdmsmith.com

cc: Attendees

MEETING NOTES

RE: **Section 106 Eligibility Meeting**
Red Line Extension EIS

DATE: **January 30, 2013**

LOCATION: **CTA/Conference Call**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	Organization
Sonali Tandon	CTA
George Coleman	CTA
Joseph Iacobucci	CTA
Reggie Arkell	FTA
Mark Assam	FTA
David Halpin	IHPA
Jonathan Fine	Preservation Chicago
Terry Tatum	Historic Preservation Division, Dept. of Housing and Economic Development
Lisa DiChiera	Landmarks Illinois
Erma Tranter	Friends of the Park
Jennifer Kenny	Ridge Historical Society
Gloria Cosey	Rosemoor Community Association
Angelica Marks	Chicago Neighborhood Initiatives
Matt Cole	Neighborhood Housing Services of Chicago, Inc.
Gwendolyn Rice	DCP
Rev. Mitchell Johnson	DCP
Phyllis Palmer	DCP
Helene Kornblatt	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group
Jean Guarino	CWC Transit Group

PREPARED BY: Rebecca Thompson

ISSUE DATE: January 31, 2013

Meeting called to order at 10:30 am CT

Objective: Red Link Extension Eligibility Meeting for Section 106 Consultation

Item No.	*Item Description*	*Responsibility*	*Due Date*
1	**Welcome/Intro** Sonali welcomed attendees. Reggie Arkell explained FTA's oversight role on the project. John Mettille reviewed the agenda.		
2	**Background & Regulations** John Mettille provided an overview of the four-step Section 106 process, which is intended to assess historic resources and their eligibility for listing on the National Register of Historic Places (NRHP). John identified ground rules to ensure everyone has a fair chance to provide meaningful input.		
3	**Review of Area of Potential Effects (APE)** John presented the APE, which defines the geographic boundary where the analysis of historic resources will occur. The area includes over 1,400 acres and 7,000 buildings.		
4	**Methodology for Identification of Historic Properties** The team developed historic contexts for each community in the APE to frame the evaluation of historic properties. The team also conducted field surveys and archival research for over 500 individual properties within the APE. The survey sample included all buildings that would be demolished by one or more alternatives and a sample of other properties; sample properties were concentrated in areas that are likely to experience greater effects. Based on this, eligibility recommendations were developed for individual properties. - Q: Did you look at properties less than 50 years in age that could be significant to the community? A: We primarily examined properties over 50, but we did look for overall significant properties as well as potential historic districts. - Q: Are Chicago Historic Resources Survey (CHRS) red/orange properties shown? A: They are noted in the summary table in section 3 of the handout packet. - Q: What research was done on the social history of the area? For example, what about identifying community meeting places or locations significant in the lives of civil rights leaders? Of the 7,000 buildings in the APE, it is concerning that only 10 are identified as eligible.		

Item No.	Item Description	Responsibility	Due Date
	A: The team developed historic contexts for each of the communities represented in the APE but these focused primarily on the built environment. Part of the intent of the consultation process is to gather your input about what additional resources are out there, particularly from organizations more familiar with the immediately vicinity and social history. If you have information about potentially significant resources, please let us know during the comment period.		
5	**Overview of Surveyed Properties** Nine properties were recommended eligible for NRHP listing. - Residence at 444 W 100th Place - Former substation at 10227 S Halsted Street (gas & electric for the city) - Fire Department at 324 W 104th Street - Roseland Pumping Station (still in use) - Residence at 11310 S Emerald Avenue - Church at 10920 S Princeton Avenue (currently Mary Magdalena Missionary Baptist Church) - Fire Department at 931 W 120th Street - Church at 12433-12439 S Halsted Street - Venetian Hall at 133-139 E Kensington Avenue (currently used as church and shelter) *Note: the address is correct but the property lies in the West Pullman community.* In addition, Altgeld Gardens was determined NRHP eligible in 1992 independent of the project. - Q: How do you account for the fact that the community is under surveyed and underserved? Underrepresentation undercuts the intention of the project. A: The team prepared historic contexts for each community, consistent with the state of the practice. Beyond that, we rely on your input. Once you provide your comments, the team will establish a strategy to move forward. We will respond to comments received and keep you informed. - Q: Does the list of surveyed properties fully cover the area to be considered in the historic/social context? (DCP agreed that it does not.) A: The APE covers the area that could be impacted by the project; it forms the limits for our analysis. - Q: Is there a separate involvement process for Section 4(f)? A: There is a public involvement element if these resources are affected. It isn't a committee, but there is a mechanism to gather input from agencies and others. - Kensington Park along the UPRR corridor should be added to the table on slide 29. *Note: information for Fernwood Parkway was included in the table although the name was mistakenly presented as "Fernwood Park" instead. Wendell-Smith Park is presented as "Smith Playlot" in the table, consistent with the Chicago Parks Department naming convention.*	CWC	3/1

Item No.	Item Description	Responsibility	Due Date
6	**Schedule & Next Steps** John Mettille reviewed the schedule and next steps. - Q: Can you describe the effects for each eligible property? A: We will cover this in the next phase of the process, probably in Spring 2013. - Q: What is the third alternative shown? A: The Halsted Alternative was added during the scoping process to look for options to minimize the impacts on parks and other 4(f) resources. The UPRR Alternative is the locally preferred alternative; we will define a National Environmental Policy Act (NEPA) preferred alternative as part of the NEPA process. - Q: Can the UPRR alternative fall anywhere inside the APE boundary? A: No, it will follow or run adjacent to the existing UPRR alignment. The APE includes a buffer to account for visual, noise, and other indirect effects. - Q: What source did you use for the architects and construction dates? A: CHRS and the County Assessor website. - Two of the photos on slide 26 could be considered contributing within a district. There are enough "Ranchalows" that they could be considered a housing style. The team will provide a full survey map and consulting party list as requested by attendees. Materials will be revised to clarify that properties referenced in Riverdale lie in the Riverdale Community in Chicago rather than Riverdale, Illinois. Please submit written comments on the eligibility materials by February 18.	CWC/CTA	2/6

Following the morning presentation, a number of attendees participated in a driving tour of the project area. Please notify Sonali Tandon of the minutes of any corrections and/or clarifications within five (5) business days.

cc: Attendees

Red Line Extension (RLE) Summary of Eligibility Comments received from Consulting Parties and Responses from Project Team

The following paragraphs briefly summarize comments received from the consulting parties on the eligibility of historic resources for the RLE Project and corresponding responses from the project team. Under the Section 106 consultation process, CTA undertook an extensive data collection and analysis effort during Fall 2012 to identify historic resources located within the Area of Potential Effect (APE) for the three built alternatives that are under evaluation in the RLE Draft Environmental Impact Statement (EIS). This analysis culminated in recommendations regarding the potential eligibility of historic resources pursuant to the National Historic Preservation Act of 1966. These recommendations were presented to the ten consulting parties, including the Illinois Historic Preservation Agency (SHPO), during a meeting on January 30, 2013. Participants were asked to provide relevant information from their perspective that may supplement the National Register of Historic Places (NRHP) evaluations contained within the RLE Draft EIS. Written comments were received from the following six organizations:

- Anne Haaker, Illinois Historic Preservation Agency
- Jennifer Kenny, Ridge Historical Society
- Jonathan Fine, Preservation Chicago
- Lisa DiChiera, Landmarks Illinois
- Matt Cole, Neighborhood Housing Services of Chicago
- Terry Tatum, Chicago Historic Preservation Division, Department of Housing and Economic Development

Based on local knowledge and input from the consulting parties, additional analysis was undertaken regarding historic resources within the APE. The original recommendations presented in January will be revised as described below and presented in the RLE Draft EIS. In addition to the written comments received by CTA, comments from the January 30 meeting will also be incorporated into the Draft EIS to provide additional clarification. Comments and responses are presented by general topic below.

Comments requesting additional surveys:

Several comments requested that the team evaluate additional sites for NRHP eligibility. These additional sites and their evaluations are summarized below, including both individual properties (Comments #1-6) and potential districts (Comments #7-12).

1. American Ideal Cleaning Building at 10343 South Michigan Avenue
   This building falls beyond the APE boundaries.
2. Lilydale Progressive Missionary Baptist Church at 10716 South Michigan Avenue
   This building falls beyond the APE boundaries.
3. Greystone building at 11445-11447 South Michigan Avenue
   This building falls beyond the APE boundaries.
4. Entrance gate and structure at Cedar Park Cemetery at 12584 South Halsted Street
   These structures were field surveyed in February 2013 and are recommended eligible for the NRHP under Criterion C for the high quality craftsmanship and unusual stonework. A site form is attached.

5. Kensington Park
   The Park was field surveyed and, following archival research is not recommended eligible for the NRHP. Purchased by the City in 1942, Kensington Park has been updated throughout the decades and currently contains a number of contemporary recreational amenities that give it a recent appearance: a mid-twentieth century field house that is no longer in use, playground equipment, a splash pad, a paved basketball court, a horseshoe pit, and baseball fields. Although the field house is over 50 years in age, it lacks distinguishing architectural features. As a publicly-owned park, Kensington Park will be addressed in the NEPA document as a Section 4(f) resource.
6. Two-story commercial building at 11206 South Michigan Avenue
   The building was surveyed and is not recommended eligible for the NRHP due to its lack of integrity and distinguishing architectural features. The site form is included on the Eligibility CD as 11200-11206 S Michigan Avenue.

Note: A number of sources consulted during the archival research phase – including the City of Chicago GIS database, Illinois Historic Preservation Agency's HARGIS database, County Assessor Records, and others – present building addresses inconsistently. Street numbers may differ by several addresses: the church at 12433-12439 South Halsted Street is called 12427 South Halsted Street by a different agency, though both refer to the same building. To aid comparisons, the summary table notes alternate addresses for several properties when these inconsistencies were identified during the eligibility assessments.

7. Potential historic district/grouping of cast stone-faced residences on South Eggleston Avenue between 111th & 112th Streets
   Numerous buildings in this location were surveyed as part of the representative sample set, including one cast stone-faced residence on South Eggleston Avenue (11130 South Eggleston Avenue). Individually, this building was not recommended eligible for the NRHP due to its lack of integrity and distinguishing architectural features. Along South Eggleston Avenue near West 111th Street and West 112th Street, there appear to be only two cast stone-faced residences within the APE, which is not sufficient for these properties to be considered as a potential historic district or multiple property grouping.
8. Could groupings of ranchelows contribute to a future NRHP district (between 103rd St, 104th Pl, UPRR, and Princeton Ave)?
   A number of raised ranches were surveyed as part of the representative sample set; none were found to merit individual listing for the NRHP. Although the area (between 103rd St, 104th Pl, UPRR line, and Princeton Ave) contains numerous residences with similar architectural styles, massing, setbacks, and construction dates, architectural historians confirmed that these properties do not retain sufficient integrity for the NRHP as a district due to contemporary - alterations (e.g., replacement siding, porches, windows, and doors). Numerous vacant lots and recent construction, such as the post-1980 Langston Hughes Elementary School that encompasses an entire city block, disrupts the visual cohesiveness of this area.
9. Potential district of Residential Railroad Suburbs or Historic Streetcar Communities, e.g. along the Chicago & Eastern Illinois RR; the Chicago & Great Eastern RR; the Illinois Central RR 121st Street spur; or streetcars along Michigan Ave, 103rd St, 111th St, 115th St, and 119th St.
   After additional fieldwork, no cohesive groupings of historic commercial buildings or community centers were identified along the primary thoroughfares that supported streetcar lines, railroad

lines, or spurs. Therefore, the suggested areas are not recommended as a district or multiple property group.

10. Potential district/group of properties associated with the former Village of Fernwood, generally located between 90th St, 103rd St, Stewart Ave, and Morgan/Halsted Street
    As part of the original fieldwork effort, a handful of these resources were surveyed within the APE. As noted in the letter, many have integrity issues. Many of Fernwood's signature buildings are located outside the APE or have been demolished. Further, the amount of contemporary infill has compromised the historic setting of the residential suburb. Therefore, this area is not recommended as a district or multiple property group.
11. Potential district/group of historic automobile-related buildings along major thoroughfares (e.g. Halsted and Michigan Ave)
    Although a number of auto-related resources were surveyed within the APE, none exhibited sufficient historic integrity to qualify as eligible for the NRHP either individually or as a contributing resource within a multiple property group. All of the surveyed automotive service buildings exhibit contemporary alterations.
12. Chicago Georgian and Raised Ranch Historic Districts
    The Ridge Historical Society and other consulting parties suggested these styles be considered as part of the eligibility discussions for the Section 106 process. Review by architectural historians confirmed that a cluster of these properties exists along an approximately five block area on the east side of Green Street between 104th Street and 109th Street. The streetscape has a cohesive grouping of vernacular homes that is representative of residences that were constructed in the outlying areas of Chicago during the post-World War II era. Although such neighborhoods are common throughout the city, these five blocks include hipped-roof ranch homes, front-gabled cottages, and Chicago Georgian style homes with little to no contemporary infill. The residences date from the 1950s and 1960s with consistent setbacks and similar brick cladding; they appear to be well-maintained. Therefore, the portion of Green Street between 104th Street and 109th Street is recommended as eligible for the NRHP as a historic district for architecture (Criterion C).

<u>Comments requesting reconsideration of surveyed properties:</u>
Several comments requested that the team reconsider properties that were surveyed but recommended not eligible for NRHP listing at the January meeting. These additional properties and their evaluations are summarized below.

13. Sure-Way M.B. Church at the southwest corner of Halsted Street and 120th Street
    The building is not recommended eligible for the NRHP due to lack of integrity and because it no longer serves its original use. The site form is included on the Eligibility CD as 12000 S Halsted Street.
14. Fernwood Parkway
    Fernwood Parkway was evaluated against NRHP criteria and is recommended not eligible for NRHP listing. However, as a publicly-owned park, it will be addressed in the NEPA document as a Section 4(f) resource.
15. Roseland Auto Sales & Service at 11200 South Halsted Street
    The building is not recommended eligible for the NRHP due to its lack of integrity. The setting is compromised by contemporary infill and the exterior has been clad in modern materials. The site form is included on the Eligibility CD as 11200 S Halsted Street.

16. Bethany Reformed Church Manse at Three West 111th Place
    The building was not originally recommended eligible due to its lack of distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society, the resource is recommended eligible for the NRHP under Criterion B due to its association with Reverend Harry J. Hager (1899-1983), a pioneer in media evangelism in Chicago during the mid-twentieth century. A revised site form is attached.
17. Pridjian & Co Building at 11600 South Halsted Street
    The building is not recommended eligible due to its lack of distinguishing architectural features. While the Pridjian & Company business has been in operation for decades, the property does not reach the level of significance required by the NRHP. The site form is included on the Eligibility CD as 11600 S Halsted Street.
18. Roseland Community Hospital Nurse's Home at 11321 South Wentworth Avenue
    The building was surveyed and was not originally recommended eligible due to its lack of distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society during the eligibility discussions for the Section 106 process, the resource could be considered locally significant under Criterion A for Education based on its use as a dormitory for its nurses and as an important nurse training facility. A revised site form is attached.
19. Galloy & Van Etten Cut Stone Contractors Building at 11756 South Halsted Street
    The building was not originally recommended eligible under Criterion C due to its lack of integrity and distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society during the eligibility discussions for the Section 106 process, the resource could be considered locally significant under Criterion A for its longstanding association with the local construction industry as a 113-year old stone contracting company. A revised site form is attached.
20. Would the substation at 10227 South Halsted Street be eligible under Criterion A as well?
    Yes: the substation is recommended eligible under Criterion A for its association with utilities infrastructure within the city of Chicago. At the January 2013 meeting, it was recommended as NRHP eligible under Criterion C. A revised site form is attached indicating this building as eligible both under Criterion A and Criterion C.
21. Although noted architect Murray Hetherington designed the house at 11001 S Green Street, the resource was only evaluated based on its integrity.
    Numerous residences designed by Hetherington that exhibit greater integrity exist today, including 2078 West Hopkins Place, 8918 South Hamilton Avenue, and 8929 South Hamilton Avenue. Due to the compromised integrity of the Green Street property, it is not recommended as NRHP eligible. The site form is included on the Eligibility CD as 11001 S Green St.

<u>Comments regarding assessment of effects:</u>
The following comments expressed concern about the assessment of effects, which will be covered in the next phase of the consultation process. Noted below, these will be considered in the next phase of the analysis.

22. We object to historic properties being purchased and demolished for construction staging.
23. The proposed BRT route would affect the fewest cultural resources. The UPRR route will affect fewer resources than the proposed Halsted line.

24. Building an elevated rail line down Halsted Street would have negative consequences for the tranquil and bucolic atmosphere of the Cedar Park Cemetery.

Comments requesting minor amendments to the summary table and/or site forms:
The following comments identified minor amendments to the summary table and/or site forms for individual properties. None of these modifications change the NRHP eligibility recommendations. Noted below, these edits will be incorporated; revised materials will be provided along with the effects materials prior to the next phase of the consultation process.

25. The Fire Department Engine Co. 93 building at 324 West 104th Street (alternate address: 328-330 W. 104th St.) is CHRS Orange
26. The Roseland Pumping Station at 351 West 104th Street is CHRS Orange
27. The French Eclectic style house at 11310 South Emerald Avenue was listed as a "local landmark" but is not designated; it is CHRS Orange.
28. The Romanesque Revival style Church at 10920 South Princeton Street is CHRS Orange
29. The two-story commercial building at 11206 South Michigan Avenue is CHRS Orange
30. The architectural firm of Fox & Fox designed the church at 12433-1439 South Halsted Street, which was built in 1958-1959.
31. The Venetian Hall at 133-139 East Kensington Avenue was built in 1925-1926 and designed by Arthur F Hughes.
32. The house at 11310 South Emerald Avenue was built 1927-1928 for Stuart Colman. Inventory form should specify this resource is individually eligible.
33. Property listed as 748 East 103rd Street should be 748 West 103rd Street.
34. The substation at 10227 South Halsted Street was built in 1919-1920.

Other Comments:
Additional comments received are discussed below.

35. There should be a separate category in the spreadsheet for Chicago properties rated as "orange" on the Chicago Historic Resources Survey (CHRS).
    CHRS Orange properties were noted in the summary table provided to consulting parties on January 5, 2013. These properties will be discussed separately within the project's Environmental Impact Statement.
36. We [SHPO] generally concur with the findings of the architectural surveys. It is expected that additional resources suggested will be considered once the final route is selected.
    Comment noted.
37. While we agree that the house at 444 West 100th Place is NRHP eligible, we disagree about the Neo-Traditional style description and are concerned that the replacement of the original tile roof jeopardizes integrity.
    Based on the ornamentation (Neo-Gothic castellated porch roof, Classical colonettes, and arched lintels), the house was identified as an early example of the Neo-Traditional style. It is recommended as NRHP eligible and will be assessed for effects in the next phase of the consultation process.
38. Use of catch-all architectural style descriptors was inconsistent and difficult to sort/review.
    Many of the residential resources are stripped-down brick and frame bungalows and cottages representing the predominant building stock for the study area. Likewise, commercial resources

contain little ornamentation or detailing. The broad term "vernacular" was used whenever a resource did not exhibit a particular architectural style. This approach is consistent with the current state-of-the-practice.

39. Historic functions should match NRHP categories.
    While official NRHP functions were not used on the survey forms, easily identifiable equivalent terms were used to improve comprehension for a broader audience. This approach is consistent with the current state-of-the-practice.
40. Construction dates listed in the Cook County Assessor Records are less reliable than dates listed in building permit records.
    Numerous varied sources were used to establish and cross-check construction dates: County Assessor records, GIS database layers provided by the City of Chicago, the HARGIS database maintained by the Illinois Historic Preservation Agency, Sanborn mapping, etc. This approach is consistent with the current state-of-the-practice.
41. The church at 10920 South Princeton Avenue is currently called Mary Magdalene Missionary Baptist Church.
    The church at 10920 South Princeton Avenue was identified by both its historic name (First Christian Reform Church of Roseland) and its current name (Mary Magdalene Missionary Baptist Church) on the inventory form. The property is eligible for the NRHP due in part to its association with early Dutch settlement in the area, so the historic name was referenced in the presentation.

Illinois Historic
Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • www.illinois-history.gov

Cook County
Chicago
From Existing 95th Street Station to Approximately 130th St. and Halsted St.

PLEASE REFER TO: IHPA LOG #001010713

CTA
Red Line Extension

February 4, 2013

Sonali Tandon
Chicago Transit Authority
567 W. Lake St.
Chicago, IL 60661-1498

Dear Ms. Tandon:

Thank you for requesting comments from our office concerning the possible effects of the referenced project on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We appreciated information provided during the meeting at the CTA on January 30, 2013, and the tour that augmented the architectural surveys and introduced the three routes proposed by the CTA. In general we concur with the findings of the architectural surveys submitted to this office prior to the meeting and tour, but during the tour is was noted that resources identified on the Chicago Historic Resources Survey were not identified and that structures such as those located within Cedar Park Cemetery were excluded from the sample. It is likely that our preservation partners present at the meeting will have additional resources that they would like to see included in the survey. It is expected that these additional resources will be considered once a final route has been selected.

In our opinion, the proposed expansion of the BRT route will affect the least amount of cultural resources located within its APE. We also believe the UPRR route that is often adjacent to existing railroad tracks will affect fewer resources than the line proposed on Halsted Street.

We look forward to reviewing the final historic resources report once the comments of our preservation partners have been considered.

If you have questions please contact David J. Halpin, Cultural Resources Manger, at 217-785-4998.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer
AEH:DJH

cc: Marisol R. Simon, U.S. Department of Transportation
Lisa DiChiera, Landmarks Illinois
Terry Tatum, City of Chicago, Illinois

From: Tandon, Sonali [STandon@transitchicago.com]
Sent: Friday, February 15, 2013 4:33 PM
To: Thompson, Rebecca D.; Kornblatt, Helene B.; Lea, Claudia
Cc: 'Bojan, Sharon'
Subject: FW: Red LIne Extension Section 106 - comments on historic resource identification
Attachments: Michigan 11206 S_CHRS orange_dataform.pdf; Michigan 11206 S_CHRS orange.xps

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From: Tatum, Terry [mailto:Terry.Tatum@cityofchicago.org]
Sent: Friday, February 15, 2013 3:13 PM
To: Tandon, Sonali
Subject: Red LIne Extension Section 106 - comments on historic resource identification

Dear Ms. Tandon:

Thank you for the opportunity to comment on historic resource identification efforts for the Red Line Extension Project as part of the ongoing Section 106 consultation process for this project. Our office appreciates the scale and importance of this undertaking, and we commend the CTA's efforts to incorporate historic preservation issues and concerns into its larger planning efforts. We hope to work with you to minimize the effect of the Red Line Extension Project on historic properties.

As part of the Section 106 process, we wish to bring to your attention both general observations on this historic resource identification effort, as well as comments on specific properties that may be impacted by the project.

Chicago Historic Resources Survey red- and orange-rated properties

With the help of your consultant team, you have preliminarily identified properties that are eligible for NR listing. These properties have been listed in the "RLE Draft Eligibility Findings for Surveyed Properties" spreadsheet.

Our office believes that there should be a separate category in the spreadsheet for Chicago properties rated as "orange" on the Chicago Historic Resources Survey. (There are no CHRS "red-rated" buildings in the Red Line Extension's APEs.) Conducted between 1983 and 1995, this city-wide survey identified properties constructed prior to 1940 that were perceived to have, within at least the context of their neighborhoods, some historic significance to these neighborhoods. These buildings were either color-coded red or orange, depending upon the level of their historical and architectural significance as known at the time of the survey.

Although not designated Chicago Landmarks, these CHRS "red" and "orange"-rated properties are covered by the City's Demolition-Delay Ordinance, enacted by City Council in 2003, which allows for an up-to-90-day hold on building permit applications for demolition by the Department of Housing and Economic Development (DHED) for these properties. (More information on this ordinance can be found at http://www.cityofchicago.org/city/en/depts/dcd/supp_info/demolition_delay.html.) Even where such properties have also been determined eligible for National Register listing, we believe that it is prudent of the CTA to separately identify all CHRS orange-rated properties within the APEs on the historic resources spreadsheet. The effect of the Red Line Extension Project on these "orange" properties can then be determined and, if necessary, mitigated through direct discussions with DHED as early in the project as possible.

Observations concerning individual properties located in the APEs

1. Several buildings identified as "orange-rated" in the Chicago Historic Resources Survey (CHRS) were sampled by the CTA's historic resources consultants.

The **Classical Revival substation** at 10227 S. Halsted St. (Map 7) was determined eligible for National Register listing. It is a CHRS "orange-rated" building and was noted as such on the spreadsheet.

The **Fire Department Engine Co. 93 building** at 324 W. 104th St. (alternate: 328-330 W. 104th St.) (Map 30) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

The **Roseland Pumping Station** at 351 W. 104th St. (Map 30) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

The **French Eclectic style house** at 11310 S. Emerald Ave. (Map 12) was listed as a "local landmark" and preliminarily determined eligible of NR listing. However, it is not a designated Chicago Landmark. Instead, it is an "orange-rated" building in the CHRS, but was not noted as such on the spreadsheet It should be so noted.

The **Romanesque Revival style Church** at 10920 S. Princeton St. (Map 34) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

2. In addition, one building identified as "orange-rated" on the CHRS and located within the APE for the BRT option was not identified and sampled. The **two-story commercial building** at 11206 S. Michigan Ave. (listed as 11208 S. Michigan on Map 45) was not sampled by the historic resource survey. It is an "orange-rated" building in the CHRS (CHRS data form and Google Earth photo attached) and should be noted as such on the spreadsheet. It should also be separately evaluated for National Register eligibility.

I would be pleased to assist the CTA's consultant team as they gather additional information on historic resources within the APEs for this project.

Sincerely,

Terry

Terry Tatum
Coordinating Planner I
Historic Preservation Division, Dept. of Housing and Economic Development
33 N. LaSalle St., Room 1600
Chicago, IL 60602
312-744-9147
312-744-9140 (fax)
ttatum@cityofchicago.org
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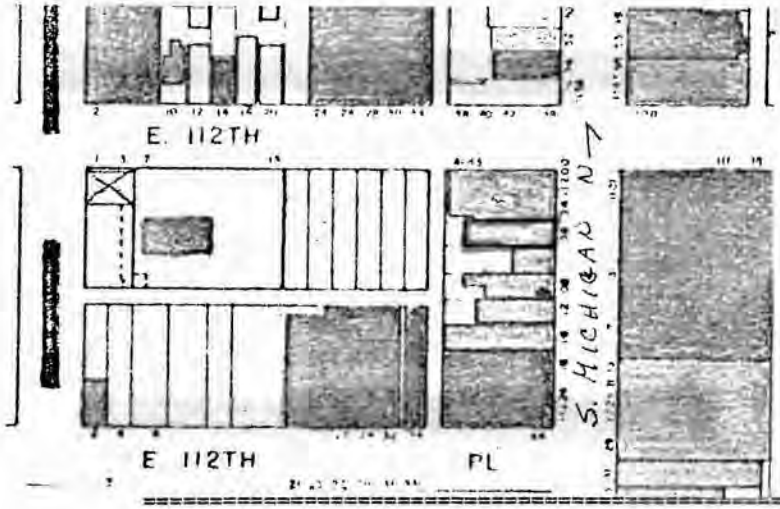

PHOTOGRAPH:

roll no. 9-R4
frame no. 3
orientation: E
photographer: TW
date: 9-28-83

Address: 11206 S Michigan Av
Color Coded: Orange

COMMISSION ON CHICAGO HISTORICAL AND ARCHITECTURAL LANDMARKS
INDIVIDUAL RESOURCE FORM

Common Name (or major tenant): Excellent Fashions for Men
Historic Name:
Orientation: (circle) N S (E) W NE SE NW SW
Classification: [✓] Building [ ] Site [ ] Structure [ ] Object
[ ] Other:

Evaluation: Potential

	N/I	N/D	C/I	C/D	I/I
F	[ ]	[ ]	[ ]	[ ]	[ ]
A	[ ]	[ ]	[ ]	[ ]	[ ]
H	[ ]	[ ]	[ ]	[ ]	[ ]

Building Type: Commercial, Residential
Style: overall: N/A
details: CLASSICAL
Roof Type: N/V
Stories: TWO
Approximate dimensions 25 feet (W) x 88 feet (D).
Original Use: Commercial, Residential
Present Use: Commercial, Residential

Approximate Period of Construction:
[ ] pre-1870 [ ] 1910-1919
[ ] 1871-1879 [ ] 1920-1929
[ ] 1880-1889 [ ] 1930-1939
[✓] 1890-1899 [ ] post-1940
[ ] 1900-1909

Materials (including color):
foundation: N/V
walls: BRICK (Red)
trim: Stone (Gray) Metal/Painted (Mustard yellow) Wood/Painted (mustard yellow)
roof: N/V
porches: N/A
other: N/A

Physical Condition:

	E	G	F	P	NV
foundation:	[ ]	[ ]	[ ]	[ ]	[✓]
walls:	[ ]	[✓]	[ ]	[ ]	[ ]
roof:	[ ]	[ ]	[ ]	[ ]	[✓]
porches:	[ ]	[ ]	[ ]	[ ]	[ ]
other: BAY	[ ]	[✓]	[ ]	[ ]	[ ]
____	[ ]	[ ]	[ ]	[ ]	[ ]
overall:	[ ]	[✓]	[ ]	[ ]	[ ]

Alterations, Additions:
One bay window covered w/ wood
Modern 1950s 1st Floor storefront alterations

Noteworthy Features of Resource/Site:
metal dentil cornice w/ garland motif above
metal fascia w/ garland and masks.
Metal 3-sided bay

Rationale for Landmark Potential:
Noteworthy because of the intricate detailing on the fascia.

Relation to Streetscape(s):
Flanked to the S. by modern one story & altered historic 2 story commercial bldg. Flanked to the north by contemporary 2 story commercial bldg and to the east by 1 story modern commercial bldg on a heavily trafficked street.

Field notes:

District Form No: ___
Form No: 49-9-21-019
No. Cont. Sheets: ___
Surveyors: TW/CR
Date: 9-28-83

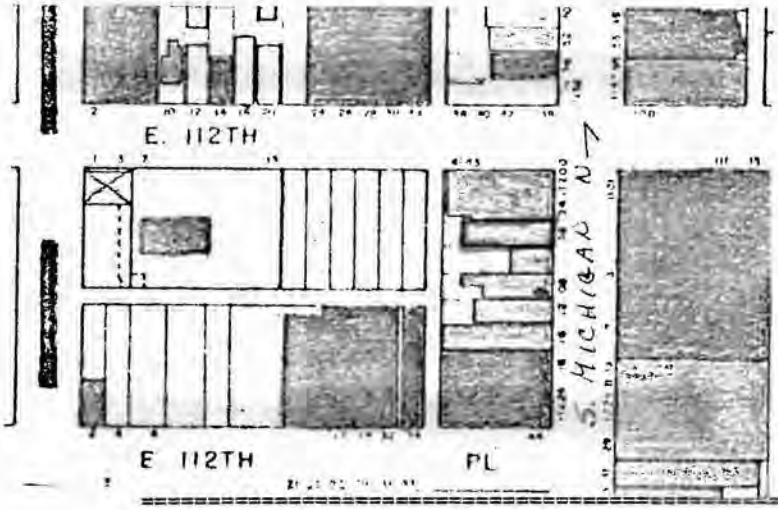

PHOTOGRAPH:

roll no. 9-R4
frame no. 3
orientation: E
photographer: TW
date: 9-28-83

Address: 11206 S Michigan AV
Color Coded: Orange
District Form No:
Form No: 49-9-21-019
No. Cont. Sheets:
Surveyors: TW/CR
Date: 9-28-83

COMMISSION ON CHICAGO HISTORICAL AND ARCHITECTURAL LANDMARKS
INDIVIDUAL RESOURCE FORM

Common Name (or major tenant): Excellent Fashions for Men
Historic Name:
Orientation: (circle) N S (E) W NE SE NW SW
Classification: [✓] Building [ ] Site [ ] Structure [ ] Object
[ ] Other:

Evaluation: Potential

	N/I	N/D	C/I	C/D	I/I
F	[ ]	[ ]	[ ]	[ ]	[ ]
A	[ ]	[ ]	[ ]	[ ]	[ ]
H	[ ]	[ ]	[ ]	[ ]	[ ]

Building Type: Commercial, Residential
Style: overall: N/A
details: CLASSICAL
Roof Type: N/V
Stories: TWO
Approximate dimensions 25 feet (W) x 88 feet (D).
Original Use: Commercial, Residential
Present Use: Commercial, Residential

Approximate Period of Construction:
[ ] pre-1870 [ ] 1910-1919
[ ] 1871-1879 [ ] 1920-1929
[ ] 1880-1889 [ ] 1930-1939
[✓] 1890-1899 [ ] post-1940
[ ] 1900-1909

Materials (including color):
foundation: N/V
walls: BRICK (Red)
trim: ~~Stone (Gray)~~ Metal/Painted (Mustard Yellow) wood/Painted (mustard yellow)
roof: N/V
porches: N/A
other: N/A

Physical Condition:

	E	G	F	P	NV
foundation:	[ ]	[ ]	[ ]	[ ]	[✓]
walls:	[ ]	[✓]	[ ]	[ ]	[ ]
roof:	[ ]	[ ]	[ ]	[ ]	[✓]
porches:	[ ]	[ ]	[ ]	[ ]	[ ]
other: BAY	[ ]	[✓]	[ ]	[ ]	[ ]
	[ ]	[ ]	[ ]	[ ]	[ ]
overall:	[ ]	[✓]	[ ]	[ ]	[ ]

Alterations, Additions:
One bay window covered w/ wood
Modern 1950s 1st Floor storefront alterations

Noteworthy Features of Resource/Site:
metal dentil cornice w/ garland motif above
metal fascia w/ garland and masks.
Metal 3-sided bay

Rationale for Landmark Potential:
Noteworthy because of the intricate detailing on the fascia.

Relation to Streetscape(s):
Flanked to the s. by modern one story & altered historic 2 story commercial bldg. Flanked to the north by contemporary 2 story commercial bldg and to the east by 1 story modern commercial bldg on a heavily trafficed street.

Field notes:

IDENTIFICATION ON EXISTING SURVEYS:

Date:	Survey:	Listing:
[11/2/83]	[ ] Chicago Landmark (CL)	
[11/2/83]	[ ] Potential CL	
[11/2/83]	[ ] National Register (NR)	
[11/2/83]	[ ] NR Eligible	
[11/2/83]	[ ] Illinois Register	
[11/2/83]	[ ] State Survey	
[/ /]	[ ] HABS	
[/ /]	[ ] HAER	
[/ /]	[ ] LPCI Inventory	
[/ /]	[ ] Federal Agency Inventory	
[/ /]	[ ] Other:	
[/ /]	[ ]	
[/ /]	[ ]	

LEGAL DESCRIPTION:

TAX NUMBER: 25.22.105.029.0000

ZONING DESIGNATION: B3-3

AREAS OF SIGNIFICANCE:

BUILDING HISTORY:

[ ] Original Site

[ ] Moved

Date:

Source No(s):

Original Location:

Prepared by:

Source No(s):

Date:

(1) Permit No. NW744 Date: 10-8-1901 SUNDRY. Permit # 112357 File # 296521 8-17-330

File No.

Book No. Pg. COST: $4800 (2)

HISTORICAL SIGNIFICANCE:

Original Owner: D BASS

Source No(s): 2

Prepared by:

Source No(s):

Date:

ARCHITECTURAL/ENGINEERING SIGNIFICANCE:

Architect: Source No.

Builder: WILLIAM C WOOD Source No. 2

Engineer: Source No.

Other: Source No.

Source No.

Date of Construction: Source No.

Structural system: BRICK Source No. 2

Prepared by:

Source No(s):

Date:

SOURCES: 1 "Ancient Permit File Index," Department of Inspectional Services, City Hall, Chicago.
2 "Permit Ledgers," Department of Inspectional Services, City Hall, Chicago.

Google earth

ihhw 43

p hwhuv 8

February 18, 2013

Sonali Tandon, Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake St
Chicago, IL 60661

RE: Red Line Extension– NR eligible properties in APE

Dear Ms. Tandon,

As requested, we have reviewed the APE boundaries and the properties identified within the APE that are listed in or "eligible" for listing in the National Register of Historic Places by the Red Line Extension project team.

We are very pleased to see the numerous properties identified and acknowledged as historic. However we have the following observations:

- We recommend including all properties that are orange-rated in the Chicago Historic Resources Survey (CHRS) in a separate category due to the fact that they will require an additional mitigation process through the city's demolition delay ordinance.
- During the driving tour of the preferred Red Line Extension routes, I took note of the following properties that were not included in the project team's list of eligible properties that looked as if they could be of possible architectural significance.
    - The American Ideal Cleaning Building at 10343 S. Michigan – a mid-century commercial building
    - The Lilydale Progressive M.B. Church at 10716 S. Michigan
    - City Sports store commercial block at 11102 S. Michigan
    - 11445-47 S. Michigan – Commercial/residential side by side Greystone – rated orange in CHRS
    - 11451 S. Michigan – one story commercial Art Deco building – rated orange in CHRS
    - Sure-Way Missionary Baptist Church at S.W. corner of Halsted and 120th. Art Deco corner building with a mid-century addition on the south side
    - Entrance gates and structure to Cedar Park Cemetery, 12584 S. Halsted
- Based on precedent with the Brown Line renovation project, we object to historic properties being purchased and demolished to make way for construction staging. We hope the team will specifically identify historic properties in the areas where construction staging may be planned to help identify alternative locations.

Thank you for the opportunity to review the findings by your team for this project. Please let me know if we can be of further assistance before the next consultation.

Sincerely,

Lisa DiChiera

Lisa DiChiera
Director of Advocacy

cc: Anne Haaker, IHPA
Jonathan Fine, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago
Matt Cole, NHS

LANDMARKS ILLINOIS

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February 19, 2013

Ms. Sonali Tandon
Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: Red Line Extension – National Register eligible properties in APE

Dear Ms. Tandon,

As a housing and community development organization with longstanding ties to the greater Roseland area, we appreciate CTA inviting Neighborhood Housing Services of Chicago, Inc. (NHS) to participate in the Section 106 review for the proposed Red Line Extension routes. NHS believes the Red Line Extension project will ultimately enhance the livability and well-being of Roseland and surrounding neighborhoods by increasing transit access for residents. At the same time, we wish to ensure that the project minimizes any undue impacts on the existing residential, community, and historic buildings that make these neighborhoods great and that our experience has shown can be important community-building and engagement assets. Therefore, NHS would like to submit the following comments regarding the National Register eligible properties surveyed by the Red Line Extension project team in the APE:

- We recommend re-evaluating the exclusion of raised ranches – colloquially referred to "ranchelows" for looking like a cross between a Chicago bungalow and a ranch-style home – from the survey. While currently not a formally recognized form of Chicago vernacular architecture, these homes define the look and character of large stretches of the APE adjacent to UPRR right-of-way. We would encourage the CTA project team to determine if groupings of "ranchelows" in the APE could contribute to a future National Register district.
- During the van tour of the preferred Red Line Extension routes on January 30th, we also took note of the following areas that warrant additional surveying/review by the project team:
    - 111th & 112th South Eggleston: A few cast stone-faced residences were observed on or adjacent to these blocks, including one home immediately adjacent to the UPRR right-of-way. These buildings, which look similar to Chicago greystones, are relatively rare and should be evaluated for National Register eligibility.
    - 103rd Street to 104th Place between the UPRR and Princeton Avenue: This area includes the previously identified, National Register-eligible Roseland Pumping Station and Roseland Fire Station properties. However, the blocks also include a largely intact and well-maintained grouping of Chicago bungalows and frame

cottages. We would encourage the project team to conduct a more detailed survey of these blocks to determine if these residential properties could contribute to a future National Register district.

- Though not directly applicable to the survey of National Register-eligible properties, we encourage the project team to carefully evaluate the potential impact of the Red Line Extension on the Fernwood Parkway that runs immediately west of the existing UPRR right-of-way. Albeit simply landscaped, the parkway provides a nice amenity to homes along Eggleston Avneue between 99th and 104th Streets.

In addition to these observations, we fully concur with the recommendations from Lisa DiChiera, Director of Advocacy, at Landmarks Illinois regarding specifically calling out "orange-rated" properties listed on the Chicago Historic Resources Survey; the additional commercial, religious, and community buildings that should be evaluated on Michigan Avenue and Halsted Street; and avoiding the demolition of any historic properties to make way for construction staging.

Thank you again for inviting NHS to participate in the Section 106 review for the Red Line Extension project. Please let us know if we can be of further assistance before the next scheduled consultation.

Best,

Matt Cole
Project Coordinator
Neighborhood Housing Services of Chicago, Inc.

CC: Ed Jacob, NHS
Deborah Moore, NHS
Robert Tucker, NHS
Christopher Smith, NHS
Anne Hacker, IHPA
Lisa DiChiera, Landmarks Illinois
Jonathan Fine, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago

Preservation Chicago

Citizens advocating for the preservation of Chicago's historic architecture

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Executive Director

Stacey Pfingsten
Communications Mgr.

February 20, 2013

Sonali Tandon, Project Manager
Strategic Planning & Policy
CTA
567 West Lake Street
Chicago, IL 60661

Re: Red Line Extension – Possible negative effects to historic properties with in the proposed APE

Dear Ms. Tandon,

Thank you for facilitating the recent driving tour of the three proposed routes for the Red Line extension. I am writing in response to concerns our organization has regarding possible destruction of historic buildings or landscapes with the APE.

I have had a chance to review the comments being submitted by Landmarks Illinois and we agree with and support all of their concerns.

In addition, we are concerned about the negative consequences that building an elevated rail line down the middle of South Halsted Street would have on the tranquil and bucolic atmosphere of Cedar Park Cemetery.

Thank you for your consideration. We look forward to continuing our partnership on this exciting project.

Sincerely,

Jonathan Fine

Jonathan Fine
Executive Director
Preservation Chicago

cc: Anne Haaker, IHPA
Terry Tatum, Historic Preservation Division, DHED
Lisa DiChiera, Landmarks Illinois
Matt Cole, NHS

4410 N. Ravenswood Ave., Chicago, IL 60640 773 334 8800 (O) 773 334 8803 (F)
www.preservationchicago.org

THE RIDGE HISTORICAL SOCIETY
10621 SOUTH SEELEY AVENUE
CHICAGO, IL 60643
773-881-1675
e-mail: ridgehistory@hotmail.com
www.ridgehistoricalsociety.org

February 20, 2013

Sonali Tandon
Chicago Transit Authority
567 West Lake Street, 10th Floor
Chicago, IL 60661

Dear Sonali,

Thanks for the opportunity to be a consulting party to the CTA's Red Line Extension (RLE) Section 106 eligibility process.

The Ridge Historical Society (RHS) serves the Beverly, Morgan Park and Washington Heights community areas on Chicago's south side. For this reason, we are particularly interested in the RLE impact upon historic properties in the APE situated within the Morgan Park and Washington Heights community areas. Both the Halsted Street and Union Pacific Railroad APE are located at the easternmost boundary of our service area. Please note that we do maintain an archival collection that reaches beyond our service area since our history does overlap with nearby areas, including West Pullman and Roseland. We reserve the right to comment on historic resources in other community areas just outside of our service area.

I have reviewed the materials and inventory forms submitted by the consulting team and offer the following comments.

IDENTIFIED NR ELIGIBLE PROPERTIES

The Ridge Historical Society agrees with the National Register (NR) eligibility of the two properties identified by the study in the Washington Heights community areas (our service area) – 10227 S. Halsted Street and 444 West 100th Place. Unfortunately, the team did not identify any NR eligible properties in the Morgan Park community area.

1. We agree that the City of Chicago Department of Gas and Electricity, Southwest Substation, at **10227 South Halsted Street** is NR eligible under C for its architecture, as a rare remaining example of a city government public works building. As stated on the study's inventory form, it is an orange rated building in the Chicago Historic Resource Survey (CHRS). The CHRS did supply a date of construction, 1919-20, that does not appear on the inventory form. I am wondering if this public works building is also NR eligible under A.
2. We agree that the single family dwelling at **444 West 100th Place**, built 1931, is potentially NR eligible under C for its architecture, as a rare brick Bungalow in

Washington Heights with striking Tudor Revival and Mediterranean Revival detailing. The Bungalow sports a handsome crenellated entry, decorative arches, and colonettes. I would not call this building Neo-Traditional, which is an architectural style reserved for late 20th-century buildings. I am concerned that this home once had a clay tile roof, perhaps jeopardizing its integrity. A similar house, designed by architect John Hoche, can be found in Beverly at 1762 W. 94th Street.

Additionally, I am providing architectural and historic info on other properties in the APE flagged as NR eligible by the team:

- The architectural firm of Fox and Fox designed S. S. Peter and Paul Church, **12433-12439 S. Halsted Street**, 1958-59. Architect John J. Fox, Jr. was a longtime resident of Beverly-Morgan Park and a noted local Roman Catholic church designer. He died in 2003.
- Venetian Hall, **133-139 E. Kensington Avenue**, was built in 1925-26 and designed by architect Arthur F. Hughes. Hughes is a local architect who designed a number of striking historic revival style homes in Beverly-Morgan Park.
- **11310 South Emerald Avenue** was built in 1927-28 for owner Stuart Colman. Note: the Individually Eligible category on page 2 of the inventory form says No when it should say Yes.

<u>ADDITIONAL INDIVIDUAL PROPERTIES THAT MAY BE POTENTIALLY ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES</u>

The Ridge Historical Society would like the team to consider the following buildings for NR eligibility:

Roseland Auto Sales and Service Building (Allinone Auto Sales Building)
11200 South Halsted Street (Morgan Park)
Built 1927 for Henry T. Vollmer
Doerr, Lindquist and Doerr, architects

Potentially eligible under Criterion C for architecture as a rare remaining example of a garage and auto sales building from the early 20th-century in Morgan Park. Both Beverly-Morgan Park and Roseland were once major centers of auto sales on Chicago's south side, with dealerships along major area thoroughfares. Building is best known historically as a satellite salesroom for Roseland Auto Sales, featuring Studebakers. Additionally, Midland Terra Cotta Company provided the handsome terra cotta ornament for the one-story brick store building. Its integrity was likely questioned by its wood paneled storefront, but the original storefront may be behind the vertical boards If not individually eligible, perhaps eligible as part of a multiple property listing (see below).

Bethany Reformed Church Manse
3 West 111th Place
Craftsman-style single family residence
Built 1923-24
Purchased by church and addition built in 1928

Potentially eligible under criterion B for its historic associations with Reverend Harry J. Hager, pastor of Bethany Reformed Church from 1929-1975. Hager was a pioneer in media evangelism in Chicago during the mid 20th-century through his Sunday radio ministry broadcasts on local stations WHIP and WCFL. This church-related residence in the Craftsman style retains a high degree of architectural integrity, including a Gothic Revival style entry porch that likely dates to Hager's residency.

K. A. Pridjian and Company Building
11600 South Halsted Street
Built 1960

Potentially eligible under Criterion A for its historic associations with longtime local business, K. A. Pridjian and Company, Rug Cleaning and Sales. Established in 1924 in Roseland, Pridjian first operated at 54 West 111th Street. Owner K. A. Pridjian (d. May 6, 1965) had the facility built specially for his rug operation. Building retains much of its integrity in its mid-century storefront design, materials, and signage. (side note: Almost everyone in Beverly-Morgan Park has their rugs cleaned by Pridjian!)

Roseland Community Hospital Nurses Home
11321 South Wentworth Avenue
Built 1923-24
E. Hall, architect.

Potentially eligible under Criterion C for its architecture as a rare remaining example of a unique education-related building type in Chicago, a hospital-affiliated nurses' home. The three-story brick, Roseland Community Hospital Nurses' Home provided housing and educational opportunities for women training in the nursing profession. The interior may still reflect dormitory rooms, classrooms, and other spaces essential for nurses' training during the early 20th-century. Not sure how many of these building types are left in Chicago, but might be one of the only on the south side.

Galloy and Van Etten Cut Stone Contractors Building
11756 South Halsted Street
Built over time – 1921, 1928, 1946 and 1950

Potentially eligible under Criteria C for its associations with the Van Etten family, prominent local builders on Chicago's south side. Galloy and Van Etten, a longtime cut stone contracting business near the Panhandle railroad tracks, has operated continuously at this site from at least 1909. The cut stone exterior of the buildings within the complex reflects its occupant's trade. Founder Abe Van Etten was the brother of Simon and Henry Van Etten, whose contracting firm known as Van Etten Brothers built monumental residences and religious buildings on the south side. Galloy and Van Etten likely provided the cut stone used in many of these buildings.

NR ELIGIBLE CONTIGUOUS HISTORIC DISTRICTS OR MULTIPLE PROPERTIES

The Ridge Historical Society urges the team to revisit any groupings of historic properties that may be potentially NR eligible as contiguous districts or as multiple property listings The APE is located in a section on Chicago's south side that has been under surveyed in the past, and as a result, little data is available and very few historic resources have been proactively designated as local landmarks or listed in the National Register of Historic Places. Perhaps our community areas need a different approach in this type of study, especially when conducting cultural resource surveys. For example, surveyors could relax harsh integrity standards or look at broader patterns that might lead to multiple property nominations.

Here are some suggestions:

1. Would any of the Historic Residential Railroad Suburbs or Historic Streetcar Communities in the APE be NR eligible as multiple property listings? Since suburban development was extensive outside of nineteenth-century Chicago, perhaps the team could take a second look at the communities that were stimulated and developed along the area's railroads and streetcars in 19th-century Calumet Township and Chicago's early 20th-century neighborhoods. Especially important are those along the Chicago and Eastern Illinois, which came through in 1880-81 (UPRR APE); the Chicago and Great Eastern Railroad, an early subsidiary of the Pittsburgh, Cleveland, Chicago and St. Louis Railway who constructed tracks in 1865 (Halsted APE); and the Illinois Central Railroad who operated an east-west spur at 121st Street. Streetcars were operating along Michigan Avenue, 103rd Street, 111th Street, 115th Street and 119th Street, and stimulating residential and commercial development.

   Properties Associated with the former suburban Village of Fernwood. Fernwood is now part of the Washington Heights community area and within the RHS service area.

   Fernwood, a station stop on the Chicago and Eastern Indiana Railroad was first incorporated as a village in 1886 and annexed to the City of Chicago in Spring of 1891. Focused on a station at the 103rd Street crossing (then Tracy Avenue), Fernwood was mostly a residential district, with a few locally serving commercial buildings. Its boundaries ran from 90th Street on the north, 103rd Street on the south, Stewart Avenue on the East, and Morgan

and Halsted on the west. Developers E. L. Gillette and Henry L. Hill, along with S. Montgomery Smith, laid out Fernwood in 1883 for residential development with an adjacent public park, approximately 75 feet wide along the tracks from 99th Street to 103rd Street. This park, now known as Fernwood Parkway, played a significant role in the development of this railroad suburb. This landscape feature marks the importance of open space, trees, and grassy public space to a growing residential suburb. Within the APE, a number of frame homes on suburban size lots remain, particularly along Eggleston Avenue, representing this period of development. Yet, these residences may have integrity issues (see 10100 South Eggleston Avenue), and many of Fernwood's signature buildings are either outside of the APE (including churches and a public school) or have been demolished (such as the Fernwood Station and Gillette Hall).

2. **Historic automobile-related buildings along major thoroughfares, including service stations, garages and car sales dealerships**. In reviewing the inventory forms in the APE, the team recorded a large number of auto-related buildings, although not contiguous. Halsted Street and Michigan Avenue were both major thoroughfares for the area, and as stated above, both Beverly-Morgan Park and Roseland were once major centers of auto sales on Chicago's south side. Could these buildings be NR eligible as a multiple property nomination?

3. **Chicago Georgian and Raised Ranch Historic Districts**. Just like the Chicago Bungalow Multiple Property Listing and subsequent NR districts, perhaps a multiple property listing is imminent for neighborhoods of Chicago Georgians and Raised Ranches. Both are mid 20th-century vernacular types which evolved from the earlier designs and plans of the American Foursquare and Bungalow respectively. Rows of raised ranches (also known as Bungalow Ranches) are found in the Halsted APE.

<u>GENERAL COMMENTS AND CORRECTIONS</u>:

1. Usage of catch-all architectural styles and types. Most every building I reviewed was labeled vernacular. Architectural styles, when used, were inconsistent. Using catch all categories makes it quite difficult to sort, review and compare important architectural specimens. Upon request, I can provide corrections to architectural styles and types in the Washington Heights and Morgan Park community areas.
2. Historic and current functions and uses should match National Register categories.
3. Construction dates for historic buildings in the APE came from an unreliable source–Cook County Assessor lists. A better primary source, such as City of Chicago building permit records, should be used for those properties determined NR eligible. It is disappointing that the team did not conduct basic research on the very small number of buildings (9) determined eligible in the study under NR Criterion C for architecture. Construction dates, owners, architects and builders would surely add to the historic context and story.

4. 748 E. 103rd Street (Washington Heights) should be **748 W. 103rd Street**.
5. Noted Beverly-Morgan Park architect Murray Hetherington designed the Tudor Revival-style residence at **11001 South Green Street** (Morgan Park), built 1940-41. Although a handsome, small scale Tudor Revival house, strict integrity standards were applied by the team.

Please contact me with further questions.

Sincerely,

Jennifer R. Kenny
Architectural Historian, Ridge Historical Society
773-429-9831
jennifer.kenny@mindspring.com

MEETING NOTES

RE: **Section 106 Effects Meeting**
Red Line Extension Environmental Impact Statement (EIS)

DATE: **May 8, 2014**

LOCATION: **CTA**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	Organization
Sonali Tandon	CTA
Mike Connelly	CTA
Marlise Fratinardo	CTA
Kevin O'Malley	CTA
Gerald Nichols	CTA
Tony Greep	FTA
Mark Assam	FTA
Anne Haaker	IHPA (by phone)
David Halpin	IHPA
Ward Miller	Preservation Chicago
Terry Tatum	Historic Preservation Division, Dept. of Housing and Economic Development
Lisa DiChiera	Landmarks Illinois
Matt Cole	Neighborhood Housing Services of Chicago, Inc.
Jenifer Palmer	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group
Virginia Jackson	CWC Transit Group
Erika Sellke	Chicago Park District
Sylvia Jones	Friends of the Parks
Maria Stone	Friends of the Parks

PREPARED BY: Rebecca Thompson

ISSUE DATE: June 6, 2014

Meeting called to order at 10:00 am CT

Objective: Red Line Extension Effects Meeting for Section 106 Consultation

Item No.	Item Description
1	**Welcome/Intro** Mike Connelly welcomed attendees. JM reviewed the agenda and informed attendees that a public Open House is scheduled for May 13.
2	**Review of Project and Previous Section 106 Tasks** ST explained the overall purpose of the project and alternatives. JM provided an overview of the four-step Section 106 process, which is intended to assess project effects on historic resources (those previously identified as eligible for National Register of Historic Places [NRHP] listing). JM identified ground rules and reviewed previous coordination efforts undertaken to date as part of the Project. In response to comments received after the eligibility consultation in January 2013, Kensington Park was surveyed but was not recommended as eligible. Six potential historic districts were suggested; Green Street is recommended as eligible. Nine individual resources were suggested for reconsiderations. Of these, four resources are recommended as eligible based on supplemental information.
3	**Overview of Alternatives** JM presented an overview of the four alternatives that will be evaluated in the EIS: No Action, Bus Rapid Transit (BRT) along Michigan Avenue, the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative. - Q: Is the BRT park-and-ride lot on the north side of 130th Street? A: Yes. - Q: Why are the garages shown as three levels? As shown, it looks like a huge impact on Altgeld Gardens. A: Preliminary ridership analysis indicates park-and-ride demand, which is why we are proposing such large structures. As we fine tune the design moving forward, we'll re-evaluate the garage sizes and incorporate some urban design elements to mitigate the impact. - Q: How many properties would be removed along the Halsted route? A: We'll discuss this at the individual community meetings and Open House. The focus of this meeting is effects on historic resources. - Q: Are the piers for the Halsted line in the sidewalk or street? A: That will be determined in future engineering phases. The straddle bent piers could encroach into the parking lane. - Q: Would the Halsted piers have a similar placement to the structure at the Morgan/Lake? A: Halsted Street has two travel lanes and a parking lane in each direction and is wider than the configuration at Lake Street. The pier type chosen will make a difference on placement too. There could be impacts on parking spaces. *Follow up note: All traffic impacts would be covered in the Transportation section of the Draft EIS.* - Q: How high is the structure along Halsted? A: It varies – roughly 23-30 feet above ground level; the necessary height is determined based on the street clearance requirements. - Comment: In talking with business owners at Galloy & Van Etten Stone Contractors, they are worried about their large trucks being able to access their sites.
4	**Section 106 Effects on National Register of Historic Places Eligible Resources** The team developed effects recommendations based on the conceptual alternatives described previously. JM stepped through each resource. The criteria for determining effects are defined in 36 CFR 800.5. For the three options of Union Pacific Railroad (UPRR) Alternative, the team examined the option that is closest to the historic resource, to represent the worst case analysis. - Q: Will you be sending a copy of the slides? A: The Effects Report provides general information and distances and CTA will have additional

Item No.	Item Description
	boards at the Open House, which will also be posted on CTA website. The effects slides contain preliminary deliberative materials so CTA will not be circulating copies. - Comment: The Cottage/Bungalow District that Neighborhood Housing Services of Chicago (NHS) commented on in the eligibility comments shows up in the map near the Pump Station. - WM: How close is the East Option UPRR track structure to the Pumping Station? A: It is close and almost adjacent– we'll have to look it up. *Follow-up note: Horizontally, it is about 8.8 feet between the pump station and track structure in the UPRR East Option. However this distance is based on conceptual engineering and can change slightly as additional detailed engineering is performed.* - Comment: If there is a future expansion along the UPRR line, we want to be sure that there is ample room to accommodate it. It would be good if the alternative were further from the building; I question whether it is actually a "No Effect" as shown. Response: It is a tight site at the Pumping Station. We are required to be outside of UPRR right-of-way. - Q: Does the analysis include staging areas as well? A: Yes. These are included in the footprints. - Q: How tall is the BRT garage by the Venetian Hall? A: 2 stories *Correction: it is 3 stories with some space for retail and community facilities at ground floor.* - Q: Are there any buildings in the footprint of the proposed garage? A: We looked at all the potential displacements associated with each alternative. There are no structures within the garage footprint that would be displaced. - Q: Is it a possibility to adopt/restore the Venetian Hall as part of the adjacent garage? Or incorporate similar elements in the garage design? A: If there is an adverse effect, we will try to mitigate that. We will look at improving the view of the garage and making it more street friendly. CTA can take this under consideration. - Q: NHS' eligibility comments included the cast masonry structures, one of which appears immediately south of the Venetian Hall. What was the determination there? A: Those were determined non-eligible; several were surveyed and lacked integrity and/or distinguishing architectural features. There wasn't a cohesive grouping either. - Q: What is the building across from the garage, next to Altgeld Gardens? A: There is a park; the buildings next to the park may be part of Golden Gate. - Q: What is the station like for UPRR at the west option? A: Trains stop, unload/load, and turn back. There is no yard or additional tracks at this location – the yard is proposed further north at 120th Street. - Comment: The garage could have a visual impact. Nothing else nearby is built at that scale/height. There may be an impact on the Altgeld Garden Historic District, which will likely gain historic significance into the future due to its association with President Obama. CTA should consider a more modest garage design. - Comment: Several parties would like to see a view of the West Terminal station option from directly across 130th Street at Altgeld. Response: Early communications with community members indicated a local preference for the South Station option, which would have an entrance south of 130th Street. - Comment: Both 130th UPRR station options need further study – there will be impacts to transportation, people's homes, etc. *Follow-up note: All other impacts will be discussed in the Draft EIS.* - Q: How difficult is it to cross from the south station to Altgeld or Philip Homes? A: 130th Street is on a viaduct that allows the tracks and platforms to extend under 130th Street. You wouldn't have to cross 130th Street to get to the Station, only a local street. - Q: Are the viaducts safe for travel?

Item No.	Item Description
	A: Vehicles travel on the 130th Street viaduct today. - Q: Will a station include CTA/CDOT landscaping improvements to link to Altgeld? A: Definitely. A study was conducted focusing on access and connectivity at 130th Street Station. CTA has coordinated and will continue to coordinate with CHA to integrate plans. - Comment: At the Green Street Historic District, track structure will certainly be visible and audible. - Q: What level of noise impacts are anticipated along Green Street? A: Noise mitigation measures (e.g. noise walls, closed deck, etc.) have been incorporated into preliminary designs to mitigate impacts. *Follow-up: Based on the general level noise analysis conducted per FTA guidance, the Green Street Historic District lies at the edge of the moderate noise impact zone, assuming the project includes 3-4 foot high noise barriers and a closed deck structure. Historic experts will reexamine potential effects on the Green Street Historic District.* - Comment: I think property owners who live within the Green Street Historic District would be adversely affected by the Halsted Alternative. Response: That will definitely be looked at as part of the National Environment Policy Act (NEPA) analysis. - Comment: As you look at this more, it would be nice to have a rendering showing how close the tracks are and what the relationship will look like between the Halsted line and Green Street district. - Comment: The former substation is city-owned and vacant. Consider incorporating it into the station. Maybe it could be an entry point. This provides a good opportunity to give back to the community by adopting some of the Chicago Historic Resources Survey Orange buildings, similar to measures at the Wilson station. - Comment: The French Eclectic House would experience the same impacts as Green Street. There are several nice homes within this block, possibly nicer than the resources along Green Street, though they lack the consistency of Green Street. Scale and noise will be issues. These areas could be negatively impacted, driving people to move out of the area. - Comment: Galloy and van Etten is a family business and has been in the area since 1899. Photos show the building dating to 1909; it is a huge resource for the area. The business owner feels like they would be so adversely affected by the Halsted Alternative that they would have to relocate. It is a fourth generation family-owned business and provides a lot of employment. They are also concerned about the proximity to the 119th Street yard. - Comment: A lot of businesses are within the 119th Street yard. It used to feed all of Roseland with jobs. Many of the buildings have been demolished but some are left and could be negatively impacted. Response: CTA is coordinating with Far South Community Development Corporation regarding potential impacts on businesses. - Comment: Several consulting parties requested renderings for the four adversely affected resources along Halsted. - Q: What about impacts on the rest of the cemetery? A: Only the gatehouse/entryway is considered eligible. Comment: The impacts on the cemetery will be assessed as part of NEPA analysis. - Q: Is the fire station within the rail yard still accessible? A: Yes. - Comment: By placing the tracks so close to the resource, are you precluding future viability of the resource to function? This is an issue at the fire station and the St. Peter & Paul Church in particular. TT: The fire station's current location isn't particularly viable as it is today. Perhaps relocating this building should be a consideration as part of mitigation, although we don't typically like to

Item No.	Item Description
	move structures. The fire station would be more viable on an arterial. The trend city-wide has been to close a number of these smaller structures. - Comment: We've heard some good ideas regarding mitigation, but there are a few steps between now and then. We still have to have a selected alternative before developing detailed mitigation measures.
5	**Schedule and Next Steps** There is an open house next week. A Draft EIS is being prepared, which will include additional analyses and public involvement opportunities. - Q: When would a single preferred alternative be selected? A: The Final EIS would be prepared on a single alternative. - Q: Is there a way to understand whether any of the resources we identified in the eligibility phase that were not determined eligible would be affected? A: They were not examined as part of this analysis since we evaluated only eligible buildings or districts for Effects determination. - Comment: Please resend the responses to eligibility comments.

Please notify ST of any corrections and/or clarifications to the minutes within five (5) business days.

cc: Attendees

Red Line Extension (RLE) Summary of Effects Comments received from the Consulting Parties and Responses from the Project Team

The following paragraphs briefly summarize comments received from the consulting parties regarding the project effects on historic resources for the RLE Project and corresponding responses from the project team. Under the Section 106 consultation process, the Chicago Transit Authority (CTA) undertook an extensive data collection and analysis effort during fall 2012 to identify historic resources located within the Area of Potential Effect (APE) for the three build alternatives that are under evaluation in the RLE Draft Environmental Impact Statement (EIS). This analysis culminated in recommendations regarding the potential eligibility of historic resources pursuant to the National Historic Preservation Act of 1966. These recommendations were presented to the ten consulting parties, including the Illinois Historic Preservation Agency (IHPA), during a meeting on January 30, 2013. Input from consulting parties was considered throughout 2013, resulting in 13 individual properties and two historic districts being identified as eligible under the National Register of Historic Places (NRHP) criteria.

Following this step in the consultation process, CTA undertook an analysis of effects on NRHP-eligible historic properties in accordance with criteria established in 36 CFR 800.5. This analysis culminated in recommendations regarding the potential effects on historic resources, which were mailed to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. An in-person meeting was conducted on May 8, 2014 to discuss these recommendations. Participants were asked to provide relevant information from their perspective that may supplement the effects recommendations summarized in the April 18 packet. Written comments were received from the following four organizations:

- Anne Haaker, Illinois Historic Preservation Agency (IHPA)
- Lisa DiChiera, Landmarks Illinois
- Matt Cole, Neighborhood Housing Services of Chicago
- Terry Tatum, City of Chicago, Department of Planning and Development, Historic Preservation Division

Comments and responses are presented by general topic below. Based on local knowledge and input from the consulting parties, additional analysis was undertaken regarding historic resources within the APE. The original recommendations presented in April/May 2014 will be revised as described below and presented in the RLE Draft EIS.

The CTA announced on August 10, 2014 that as part of its planning process to extend rail service to 130th Street on the far South Side, it has narrowed down the alternatives to two preliminary options for the proposed RLE Project. Based on feedback received from the public this spring and summer via community meetings and comments provided to the agency, the CTA is now focusing on one “preferred alternative” with two possible variations from the three build alternatives that have been under consideration. The CTA believes these options would best serve communities and residents on the Far South Side:

- Union Pacific Railroad Rail (UPRR) Alternative, East Option. Under this option, CTA tracks would be placed immediately east of the Union Pacific railroad right-of-way from 99th Street to 118th Street

- UPRR Alternative, West Option. Under this option, CTA tracks would be placed immediately west of Union Pacific's right-of-way from 99th Street to north of 118th Street.

The proposed alignment of the rapid transit line would be the same for the two East and West options north of 99th Street and south of 118th Street.

Eligibility Reconsideration Requests

1. Resurvey the grouping of Chicago bungalows and frame cottages at 103rd Street to 104th Place between the UPRR line and Princeton Avenue.
   Nine resources (Chicago bungalows and frame cottages) were surveyed as part of the representative sample of surveys. Although the area contains numerous residences with similar architectural styles, massing, setbacks, and construction dates, architectural historians verified that these properties do not retain sufficient integrity for the NRHP as a district due to contemporary alterations (e.g., replacement siding, porches, windows, and doors). None were found to merit individual listing for the NRHP due to their integrity. Numerous vacant lots disrupt the visual cohesiveness of this area. Despite the general consistency in property types, the collection of bungalows and frame cottages is broadly representative of residential areas on the South Side, lacking the distinguishing elements to qualify as NRHP eligible. Please refer to forms 301, 306, 321, or 326 W 103rd Place; 262, 328, or 335 W 104th Place; or 310 or 325 W 104th Street on the Eligibility DVD provided to consulting parties on January 4, 2013 for specific examples.

2. Reconsider eligibility determinations for cast stone-faced residences adjacent to the UPRR right-of-way, including the property adjacent to the Venetian Hall.
   The properties adjacent to the Venetian Hall are a brick two-flat (129 E Kensington Ave on southwest side) and a vinyl-clad multi-residence (141 E Kensington Ave on the east side). Neither building exhibits distinctive architectural features or sufficient integrity for inclusion on the NRHP. Likewise, the two cast stone-faced houses facing the Venetian Hall (122 and 136 E Kensington Ave) do not feature distinctive architectural elements or sufficient integrity for inclusion on the NRHP. Architectural historians verified that these properties do not retain sufficient integrity for the NRHP due to contemporary alterations (e.g., replacement porch, windows, and doors), compromising the historic materials and workmanship. No cohesive set of similar properties has been identified in the vicinity that would merit consideration as a potential historic district or multiple property grouping.

3. Reassess the area around 111th Street at Emerald Avenue for a potential district.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The area around 111th Street at Emerald Avenue is distant from the UPRR Alterative corridor and would not be affected by the RLE Project.

Effects Reconsideration Requests

4. Reevaluate the visual, noise, and economic effects of the Halsted Alternative on the Green Street Historic District, which could have a significant impact on the quality of life without proper mitigation.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The Green Street Historic District is distant from the UPRR Alterative

corridor and would not be affected by the RLE Project.

5. Reassess No Effect finding for the Altgeld Gardens Historic District based on the UPRR Alternative. The proposed station and garage would alter the landscape; a rendering should be developed.
   Altgeld Gardens Historic District is eligible for NRHP listing under Criterion A (i.e., events that have made a significant contribution to the broad patterns of American history on a local, state, and/or national level) based on its association with community development, planning, and social history. As defined by 36 CFR 800.5, an adverse effect on this resource would be an "alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the NRHP." While the UPRR Rail Alternative would increase transportation choices and improve access for this geographically isolated area, none of the proposed infrastructure improvements in the vicinity would significantly alter the characteristics that qualify the district as eligible for NRHP listing. As part of the UPRR Rail Alternative, an at-grade station and parking facilities would be constructed in one of two locations to provide access to the Altgeld Gardens Housing Project: a South Station Option or a West Station Option. Either station location option is separated from Altgeld Gardens Historic District by a multi-lane street (i.e., E. 130th Street and/or E. 130th Place). Preliminary plans for each terminal station option would include parking for 2,300 vehicles through a combination of a parking structure and surface parking lots.

   The South Station Option parking structure for the UPRR 130th Street Station is approximately 800 feet from Altgeld Gardens Historic District at its closest point; the parking structure would not be visible from within the historic district and would not adversely affect the historic district.

   The West Station Option parking structure for the UPRR 130th Street Station is approximately 400 feet from Altgeld Gardens Historic District at its closest point and would only be visible from the outer line of buildings on the north side of the Altgeld Gardens development. This outer row of buildings would obstruct the view of the parking structure from interior buildings and streets. The construction of the West Station Option would not adversely affect the characteristics that qualify the district as eligible for NRHP listing, i.e. its association with community development, planning, and social history.

   As the project would not adversely affect the integrity of the district or its association with community development, planning, and social history, any visual simulation rendering and any appropriate mitigation measures identified would occur independent of the formal Section 106 consultation process for this resource.

   The UPRR Alternative has been selected as the National Environmental Policy Act (NEPA) Preferred Alternative, and an additional rendering of the station will be developed and presented as part of the Draft EIS to assist local stakeholders in understanding the extent of visual impacts created by the project.

6. Reassess No Effect finding for the Roseland Pumping Station based on the UPRR Alternative.
   For the UPRR East Option, the track structure is approximately 8.8 feet from the side of the building at its nearest point. It should be noted that an existing at-grade freight line runs in close proximity to this location. The pumping station would not be displaced or directly affected by the UPRR Rail Alternative. The changes in the setting (e.g., visual, noise, vibration, etc.) would

not adversely affect the characteristics that qualify the resource as eligible for NRHP listing, i.e. its architecture.

The UPRR West Option would also not affect the characteristics that qualify the resource as eligible for NRHP listing.

7. CTA should develop appropriate renderings for all properties in the APE where there was a finding of No Adverse Effect or Adverse Effect.
   CTA will develop additional visual simulation renderings, for inclusion in the Draft EIS, of the UPRR Alternative, which has been selected as the NEPA Preferred Alternative. Renderings are particularly helpful in understanding the extent of visual impacts and in developing appropriate mitigation measures for any adversely affected historic resources.

   At the current stage of Effects consultation, additional renderings would not change the effects findings for NRHP-eligible resources. Justification for effects findings was provided in the effects report mailed to consulting parties and additional justification is included in this document. As a reminder, the key consideration is whether the project would alter the specific characteristics that qualify a resource as eligible for the NRHP.

   In addition to the Historic impacts, the Draft EIS will also include a discussion of the potential visual impacts of the RLE Project alternatives, including general renderings of the alternatives that were prepared to assess those impacts. Some of those renderings were also presented at the May 13th CTA open house and the exhibit boards can be viewed at http://www.transitchicago.com/assets/1/red_ahead/MS_CWC_CL_RLE_Exhibit_Boards_lowres_FINAL_20140515.pdf

8. Renderings should be developed for any NRHP or Chicago Historic Resources Survey (CHRS) Orange properties potentially impacted by the close proximity of the proposed elevated track structures.
   See Response #7.

9. The property owner of the Galloy and Van Etten Stone Contractors business is concerned about their access and viability if the Halsted Alternative is built.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The Galloy and Van Etten Stone Contractors business is distant from the UPRR Alternative corridor and would not be impacted.

10. Noise studies should be undertaken to demonstrate that the introduction of the elevated rail structure on Halsted would not adversely affect historic resources within the APE of that route.
    CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. Noise analysis has been conducted per Federal Transit Administration (FTA) guidance and mitigation measures have been identified, which will be presented in the Draft EIS.

11. The French Eclectic House would experience the same impacts as Green Street. Scale and noise would be issues. These areas could be negatively impacted, driving people to move out of the area.

CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The French Eclectic House is distant from the UPRR Alterative corridor and would not be affected by the RLE Project.

Other Comments

12. In general, we [IHPA] concur with the findings concerning historic architectural resources presented in the draft report. The Bus Rapid Transit (BRT) Alternative would have the least impacts, followed by the UPRR Alternative.

13. The potential to encounter archaeological resources needs to be addressed. If the potential for undisturbed archaeological resources exists, a survey will be required.
    No previously recorded archaeological sites fall within the RLE APE and therefore the project would produce no effect on known archaeological resources. The need for and extent of further archaeological investigations will be determined in consultation with IHPA.

14. CTA should consider incorporating the city-owned, vacant historic substation (10227 S. Halsted Street) into plans for the nearby station.
    CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued; the vacant historic substation would not be affected by the RLE Project.

Illinois Historic
Preservation Agency

FAX (217) 524-7525

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • www.illinois-history.gov

Cook County
Chicago
Red Line Extension
From Existing 95th Street Station to Approximately 130th St. and Halsted St.
IHPA Log #001010713

May 22, 2014

Sonali Tandon
Chicago Transit Authority
567 W. Lake St.
Chicago, IL 60661-1498

Dear Ms. Tandon:

Thank you for requesting comments from our office concerning the possible effects of the referenced project on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We are in receipt of the 2014 *Draft Effects Report*, and appreciated the opportunity to participate in the May 8, 2014 meeting at the CTA where your findings were presented. In general we concur with the findings concerning historic architectural resources presented in the draft report. However, the report indicates that noise walls will reduce the amount of noise that resources such as the proposed Green Street Historic District will experience. Noise studies that include current conditions will need to be undertaken to demonstrate that the introduction of the elevated rail structure on Halstead will not adversely affect historic resources located within the APE of that route.

It was noted in the report that archaeological resources may be uncovered during construction activities and that they would be investigated once found. At a minimum, the potential to encounter archaeological resources needs to be addressed and the results need to be presented to this office for review. If the potential for undisturbed archaeological resources exists within the areas of potential effect, a survey will be required.

As previously stated, it is our opinion that the proposed BRT route will affect the least amount of cultural resources located within its APE. We also believe the UPRR route that is often adjacent to existing railroad tracks will affect fewer resources than the elevated line proposed on Halsted Street.

We look forward to reviewing the final historic resources report once the preferred alternative has been selected and all cultural resource surveys have been completed.

If you have questions please contact David J. Halpin, Cultural Resources Manager, at 217-785-4998.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer

c: Lisa DiChiera, Landmarks Illinois
Terry Tatum, City of Chicago, Illinois
Marisol R. Simon, U.S. Department of Transportation
Mark Assam, U.S. Department of Transportation
Marlise Fratinardo, Chicago Transit Authority
Ward Miller, Preservation Chicago

May 22, 2014

Sonali Tandon, Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake St
Chicago, IL 60661

RE: Red Line Extension – Potential Effects Consultation Comments

Dear Ms. Tandon,

Thank you for the opportunity to review on May 8th the Red Line Extension team's findings and recommendations regarding historic properties in the APE. We are pleased to see some additions made to the list of National Register-eligible properties and the identification of orange-rated buildings in the Chicago Historic Resources Survey (CHRS) based on our February 18, 2013 letter.

From the May 8th meeting, we have the following comments:

- We strongly recommend that better renderings are produced to illustrate the potential impact of a UPRR West Station and four-story parking garage on 130th Street and the adjacent Altgeld Gardens Historic District.
- We agree with comments made during the meeting that the "No Effect" determination made for the Roseland Pumping Station, 351 W. 104th St., and Altgeld Gardens Housing Project Historic District, under the UPRR Rail scenario, should be reassessed as potentially having an "Adverse Effect" determination.
- We recommend producing renderings that will illustrate the "Adverse Effect" on National Register-eligible properties in the Halsted Rail scenario. This is particularly important if the proximity of rail tracks could potentially make these properties less viable in the future. These properties include:
    - The Former Classic Revival Substation, 10227 S. Halsted St.
    - The S.S. Peter & Paul Catholic Church at 12433-12439 S. Halsted St.
    - Cedar Park Cemetery Entryway and Gatehouse, 12540 S. Halsted St.
    - Fire Department Engine Company 115, 931 W. 120th St.
- While we understand that the design phase of a Halsted Rail scenario, if selected, will be some time later, we would like consideration to be made of incorporating the city-owned and vacant historic substation at 10227 S. Halsted St. into plans for a station that was indicated would be built in that vicinity.
- Lastly, we support the reassessments suggested by Matt Cole of Neighborhood Housing Services in his May 14, 2014 letter.

Again, thank you for the opportunity to review the findings by your team for this project.

Sincerely,

Lisa Di Chiera

Lisa DiChiera
Director of Advocacy

cc: Anne Haaker, IHPA
David Halpin, IHPA
Ward Miller, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago
Matt Cole, NHS

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1279 N. Milwaukee Ave., 5th Floor
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773 329-4010
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www.nhschicago.org

May 14, 2014

Ms. Sonali Tandon
Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: Red Line Extension – Potential Impacts to National Register Eligible Properties in APE

Dear Ms. Tandon,

Thank you again for inviting NHS to participate in the Section 106 review process for the Red Line Extension project. We believe that extending the Red Line will ultimately enhance the livability and well-being of the greater Roseland-area. At the same time, as an organization rooted in the use of asset-based community development strategies, we wish to ensure that the project minimizes any undue impacts on the existing residential, community, and historic buildings that make these neighborhoods great and that our experience has shown can be important community-building and engagement assets. Therefore, based on the information presented in the May 9th Effects Meeting, we recommend that the following additional actions be undertaken by the project team before any mitigation planning is undertaken:

- Develop appropriate and assessable renderings for all properties in the APE where there was a finding of No Adverse Effect or Adverse Effect. This currently includes the Former Venetian Hall, the Green Street Historic District, the Former Classical Revival Substation, Galloy and Van Etten Stone Contractors, S.S. Peter & Paul Catholic Church, Cedar Park Cemetary Entryway and Gatehouse, and Fire Department Engine Company 115. We also believe that such renderings should be created, as necessary, based on our recommendations below (e.g, re: Altgeld Garden Historic District).

- Re-Survey 103rd Street to 104th Place between the UPRR and Princeton Avenue: This area includes the previously identified, National Register-eligible Roseland Pumping Station and Roseland Fire Station properties. However, the blocks also include a largely intact and well-maintained grouping of Chicago bungalows and frame cottages. We would encourage the project team re-survey these blocks to determine if these residential properties could contribute to a future National Register district, as well as any potential impact that a UPRR-located elevated train line would have on such a district.

- Reassess Determination that Cast Stone-faced Residences in APE are not National Register Eligible: Several of these buildings, which look similar to Chicago Greystones and are relatively rare, were observed adjacent to the UPRR right-of-way. This includes the 2-flat on Kensington Avenue immediately east of the Former Venetian Hall.

- Reassess Finding of No Adverse Effect on Potential Green Street Historic District: Re-evaluate visual, noise, and economic effects of a Halsted-located elevated train line on homes along Green

Street. While such train lines do run through other residential areas of Chicago (e.g., Pink Line), this corridor would be new and could have a significant impact on the quality of life of the area without proper mitigation.

- Reassess Area Around 111th Street and Emerald Avenue for Potential Historic District: Re-survey area around 11310 South Emerald (Emerald, Union, and Wallace Avenues) for eligibility as a historic district. If determined eligible, assess effect of a Halsted-located elevated train line on the district.

- Reassess Finding of No Effect of a UPRR West Station on Altgeld Gardens Historic District: The proposed station, station house, and four-story parking garage would be located immediately to the north of Altgeld Gardens. The height of the parking garage would be taller than any other properties in the area and would likely loom above the landscaped tree line of 130th Street. The existing rendering of the proposed station developed by project team is inadequate to assess the effect of the station due to its oblique view from the west.

Thank you again for inviting NHS to participate in the Section 106 review for the Red Line Extension project. Please let us know if we can be of further assistance before the next scheduled consultation.

Best,

Matt Cole
Project Coordinator
Neighborhood Housing Services of Chicago, Inc.

CC: Ed Jacob, NHS
Deborah Moore, NHS
Robert Tucker, NHS
Phillip Snorden, NHS
Anne Hacker, IHPA
Lisa DiChiera, Landmarks Illinois
Ward Miller, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago

From: Tatum, Terry [mailto:Terry.Tatum@cityofchicago.org]
Sent: Tuesday, May 20, 2014 4:16 PM
To: Tandon, Sonali
Cc: Halpin, David
Subject: Red Line Extension Historic Properties Consultation

Dear Ms. Tandon,

Thank you for hosting the consulting parties meeting held at CTA headquarters on May 8, 2014 for the Red Line Extension Historic Properties Consultation. We appreciate the opportunity to comment on the draft effects to historic properties that were discussed at that meeting.

Based on information provided, our comments are as follows:

1. Properties determined to be historic and/or color coded orange in the Chicago Historic Resources Survey and that would be potentially impacted by close proximity of elevated tracks under any of the alternative routes being considered should have photo renderings executed to show the effect of such close proximity of tracks. This would mainly include properties along the Halsted St. alternative, but would also include the UPRR east alternative route as it would affect the Roseland Pumping Station.

Our office looks forward to continuing to work with you on this exciting undertaking.

Sincerely,

Terry Tatum
Coordinating Planner I
Historic Preservation Division
Department of Planning and Development
City Hall, 121 N. LaSalle St., Room 1101
Chicago, IL 60602
312-744-9147 (phone)
312-744-9140 (fax)
Terry.Tatum@cityofchicago.org

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Appendix D
Displacement Maps

Note: *The displacement maps for the East and West Option in this appendix have been superseced by the maps included in Appendix I of the Displacements and Relocation of Existing Uses Technical Memorandum.*

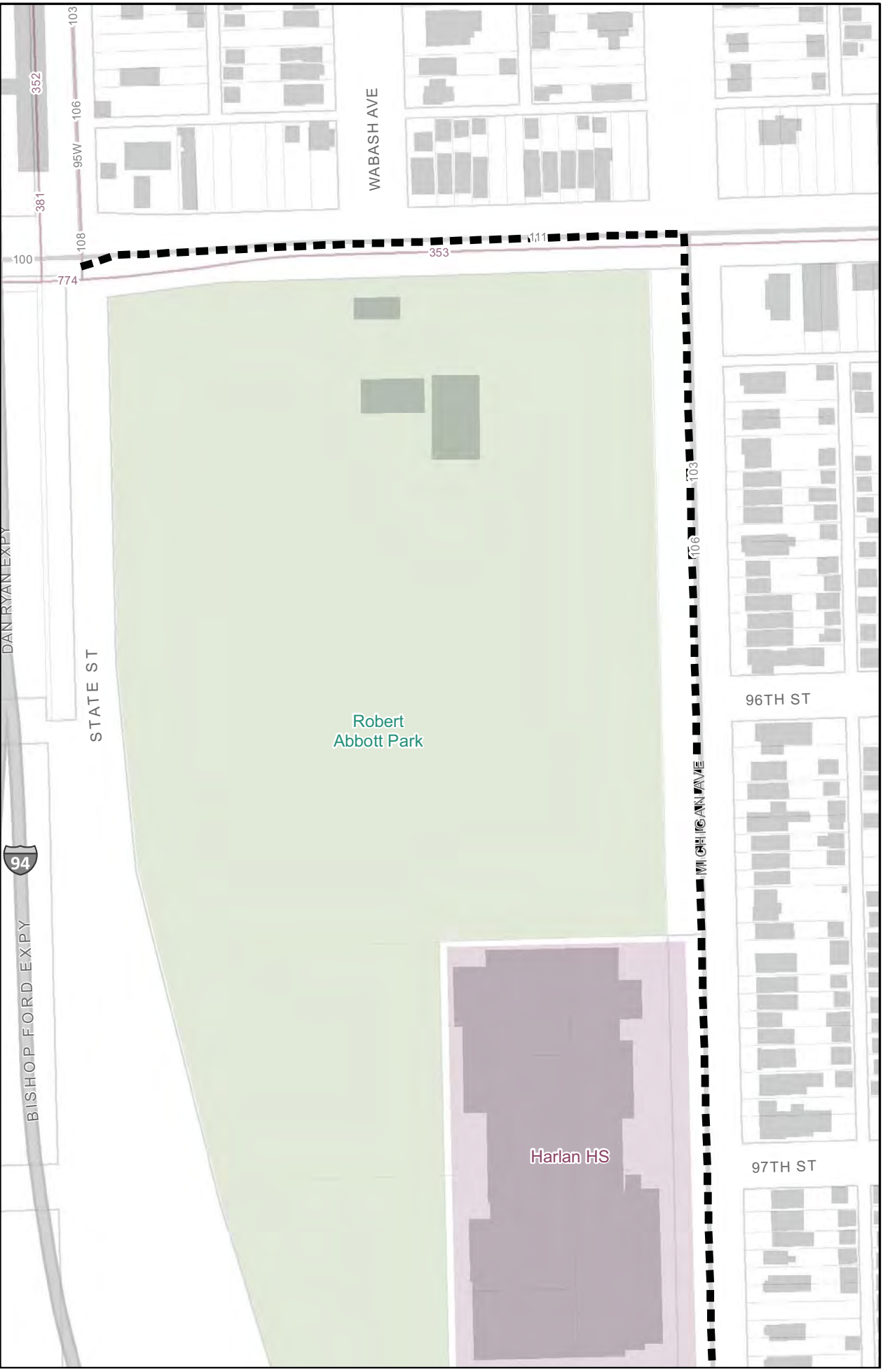

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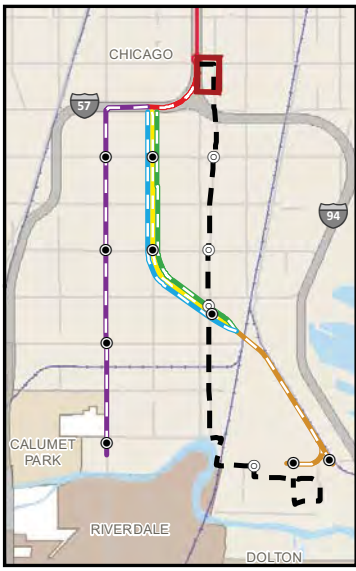

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BRT Alternative

Sheet 1 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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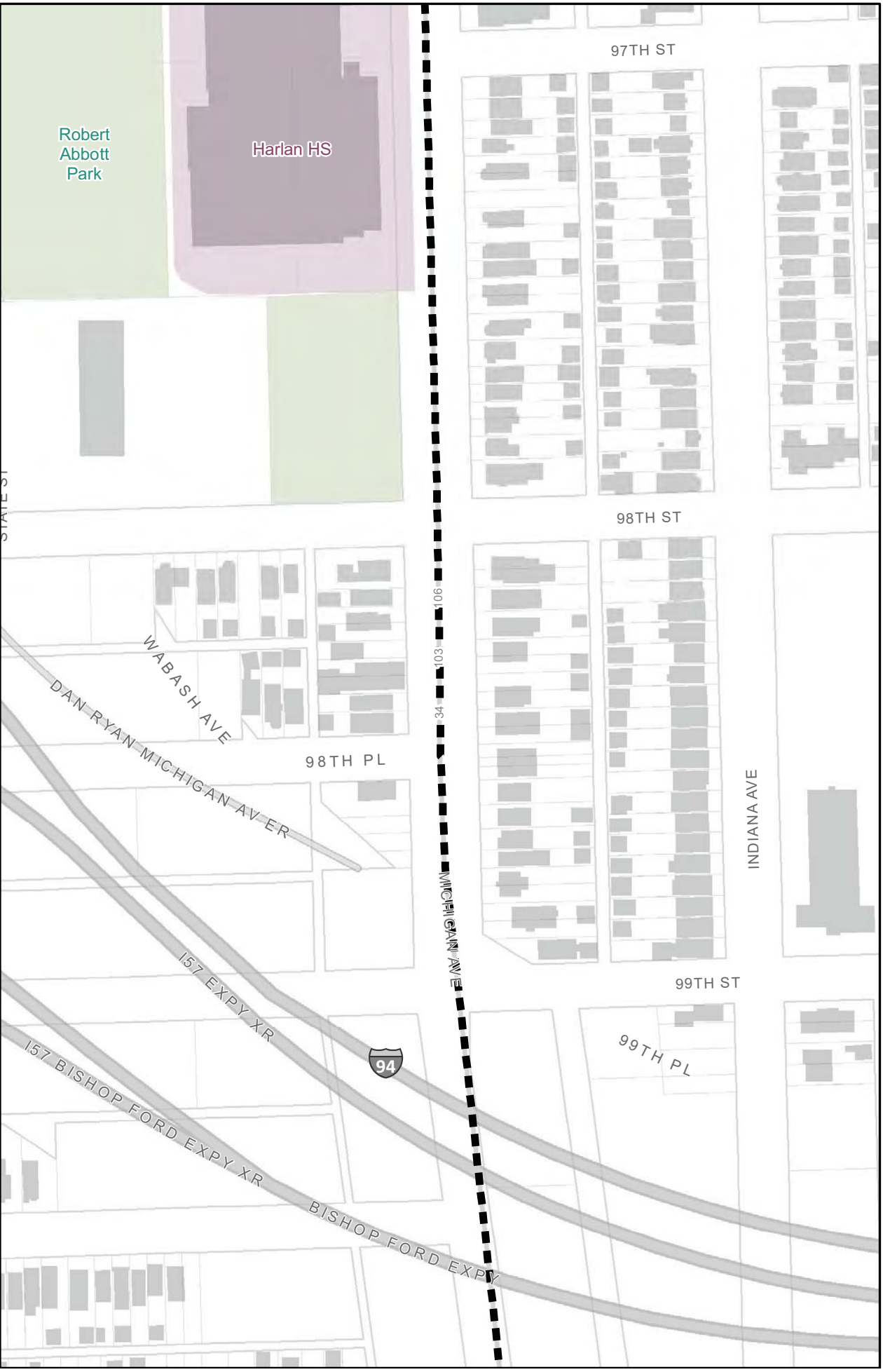

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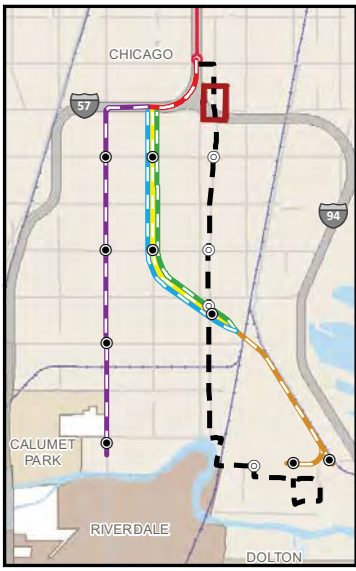

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BRT Alternative

Sheet 2 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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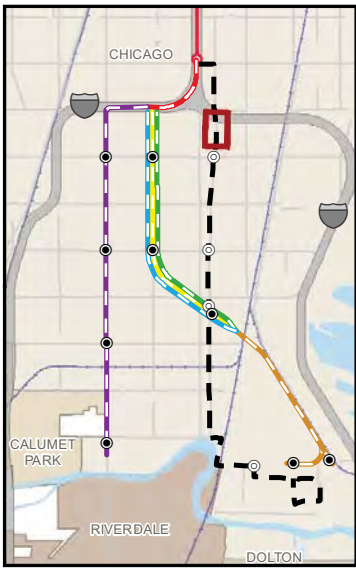

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BRT Alternative

Sheet 3 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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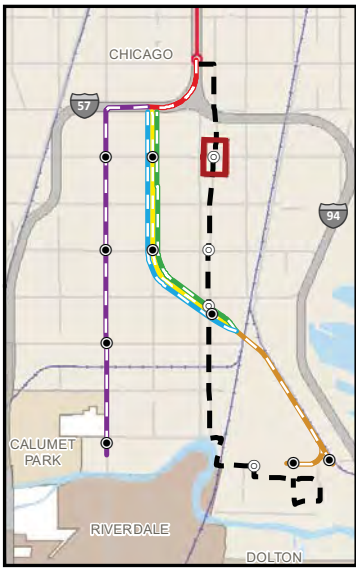

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BRT Alternative

Sheet 4 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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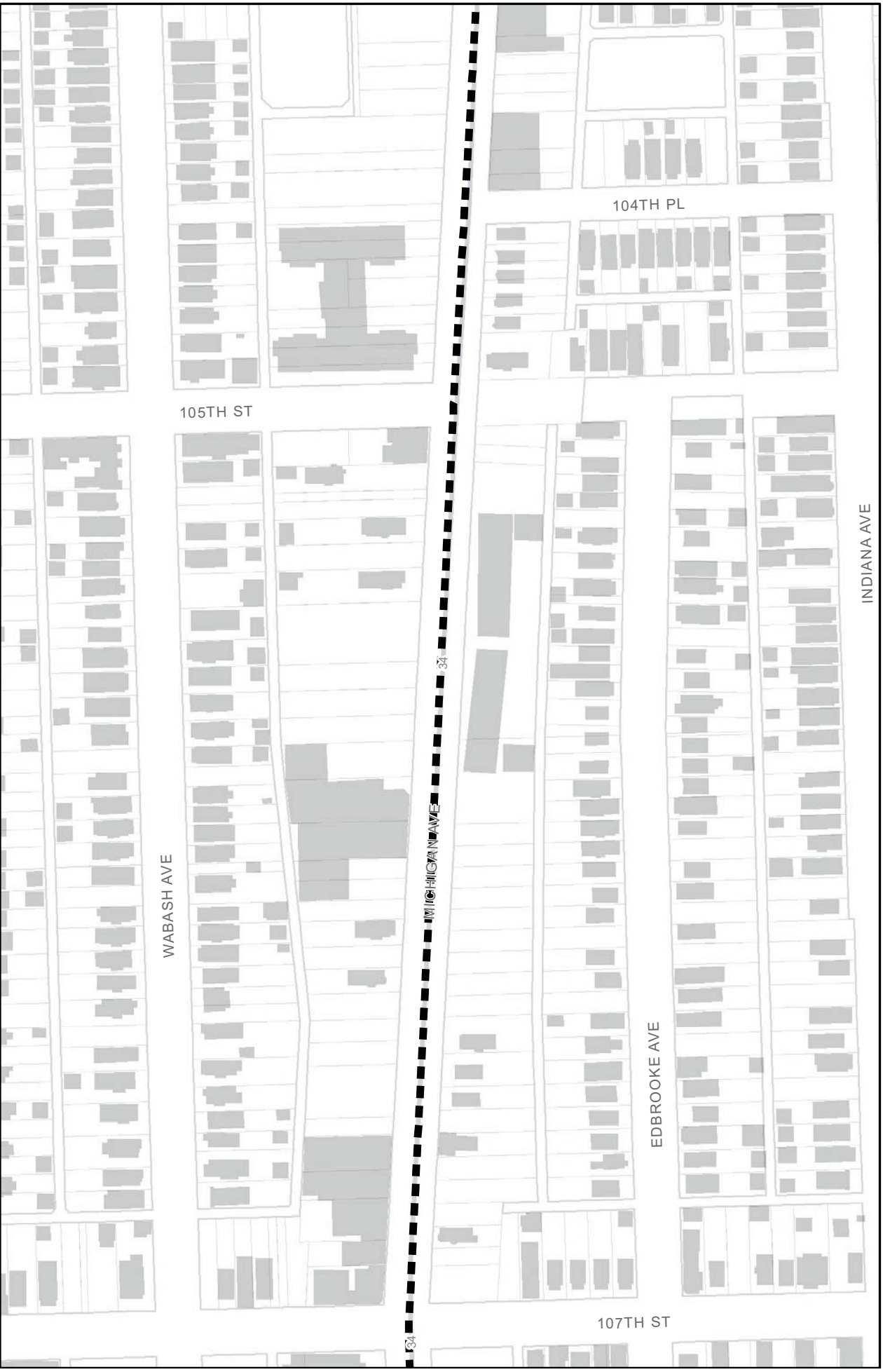

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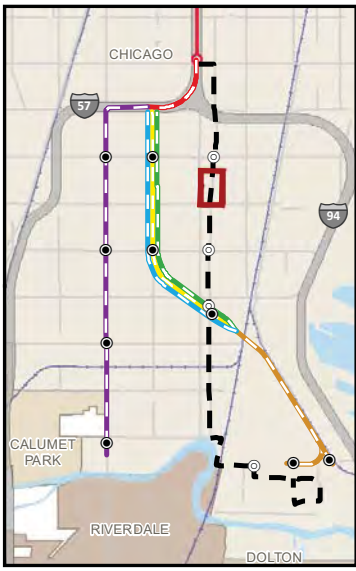

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BRT Alternative

Sheet 5 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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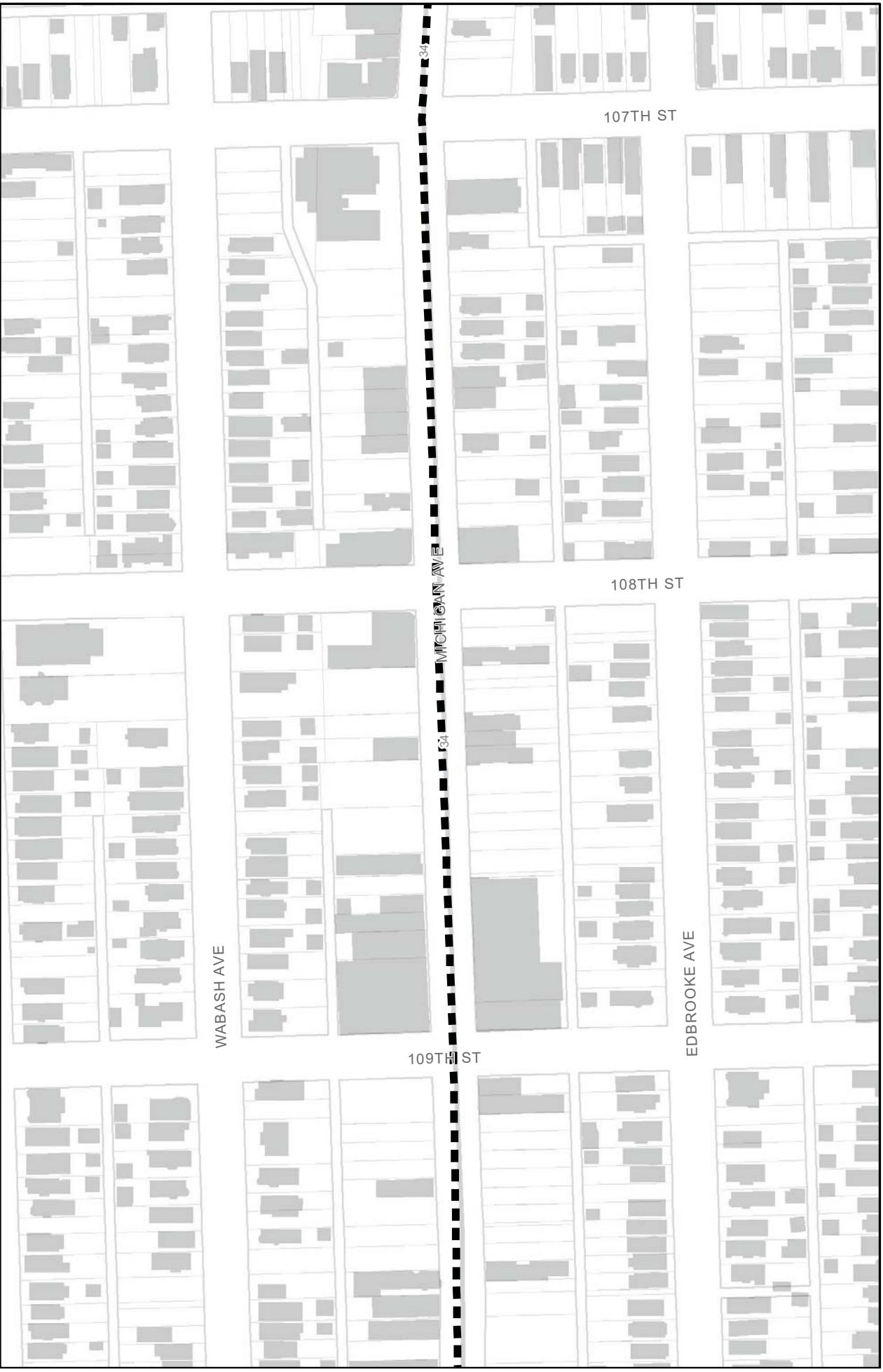

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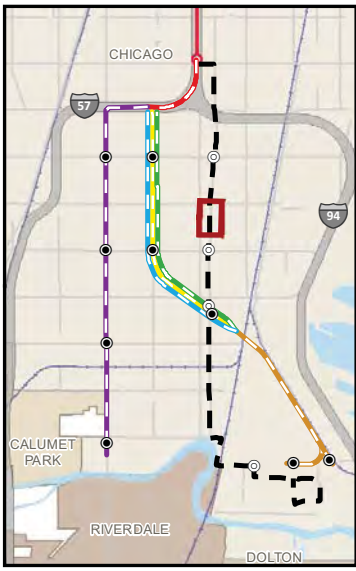

Legend

BRT Alternative

Sheet 6 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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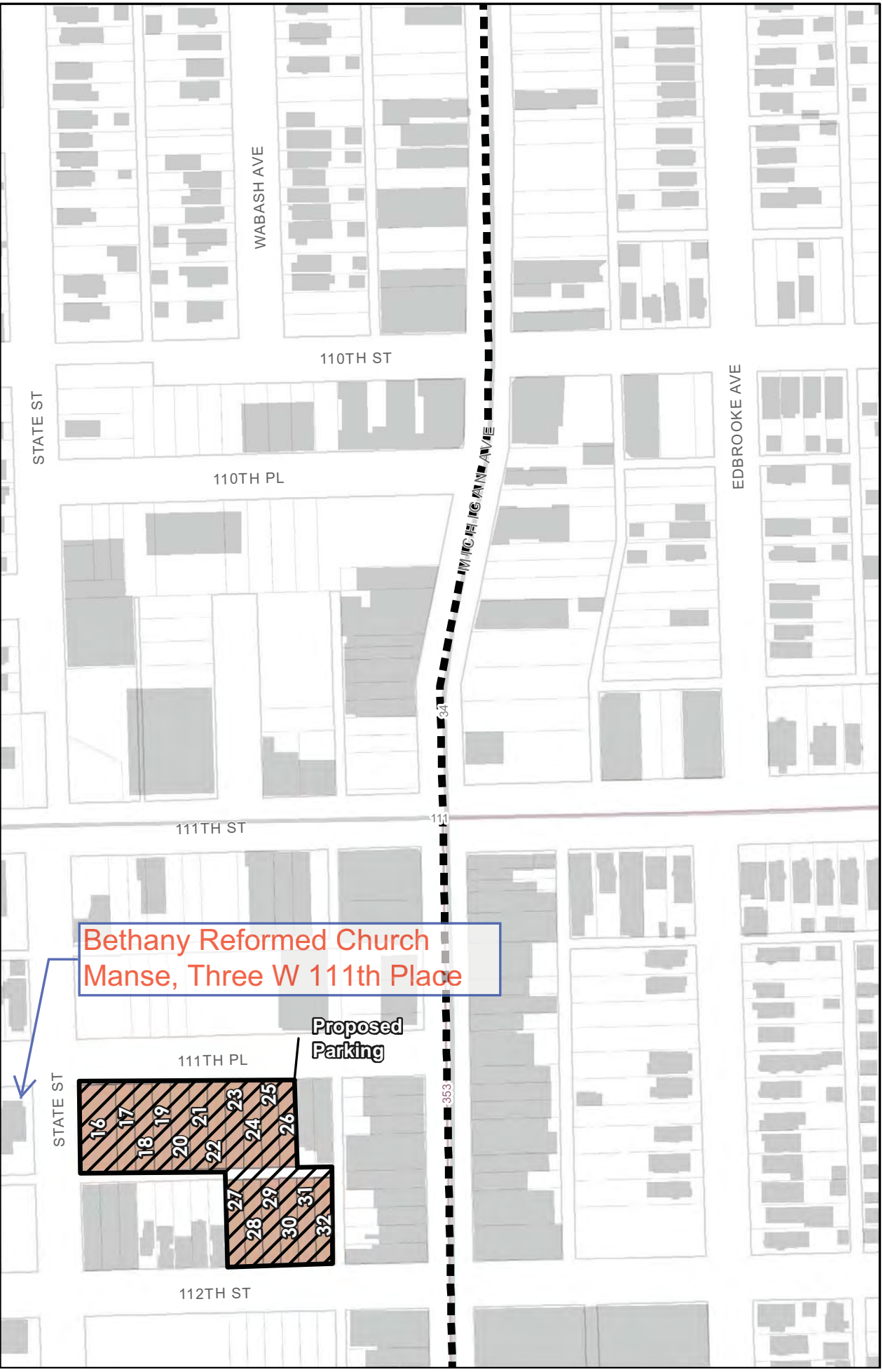

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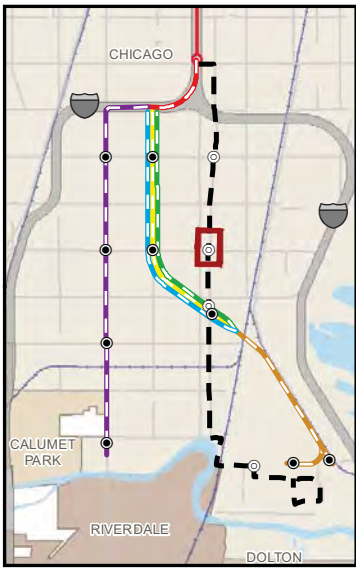

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BRT Alternative

Sheet 7 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
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- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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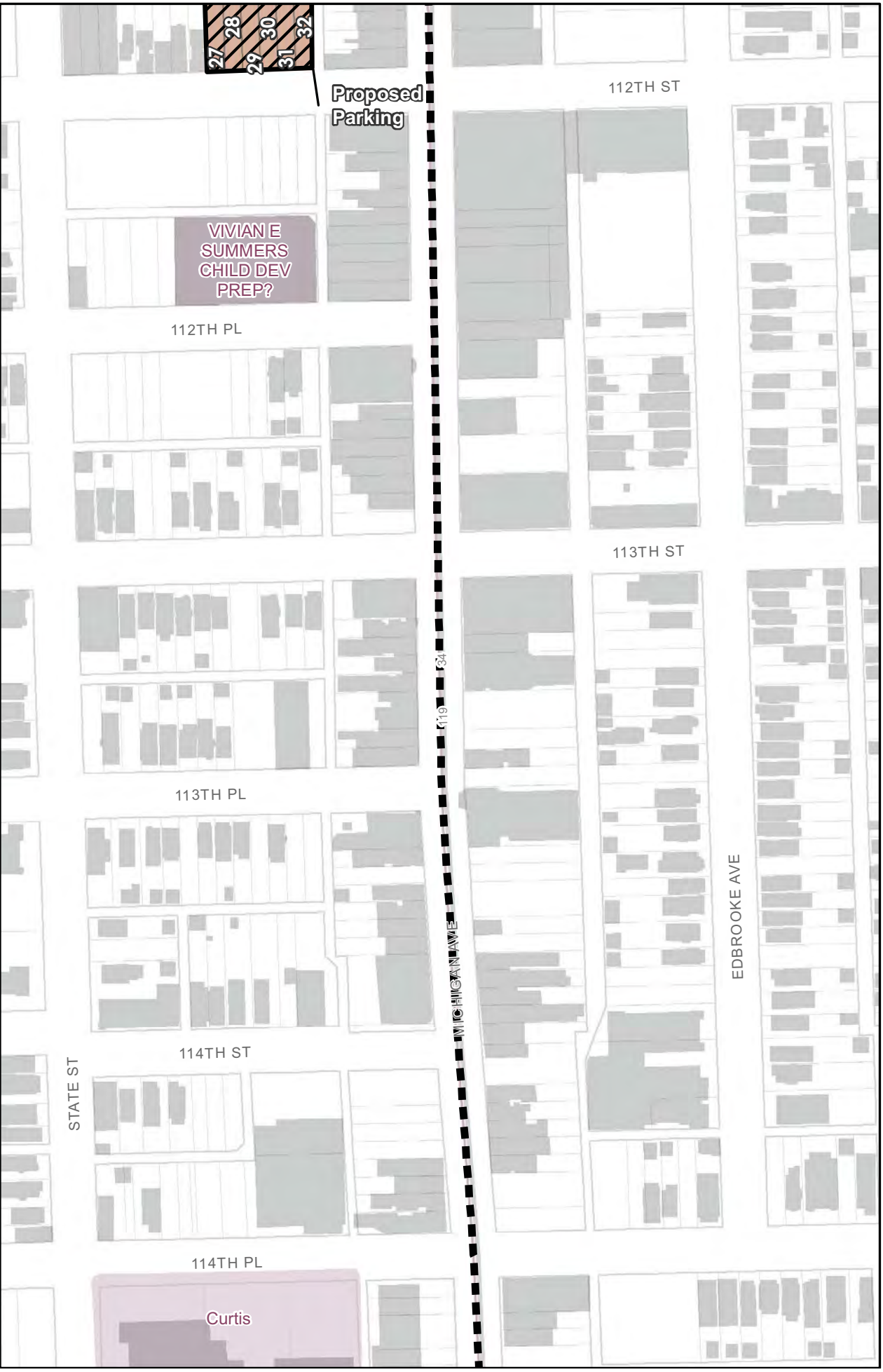

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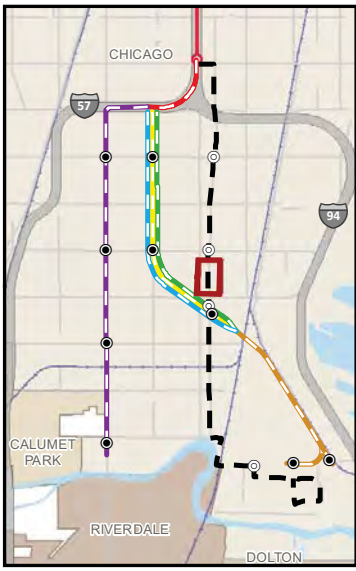

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BRT Alternative

Sheet 8 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
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- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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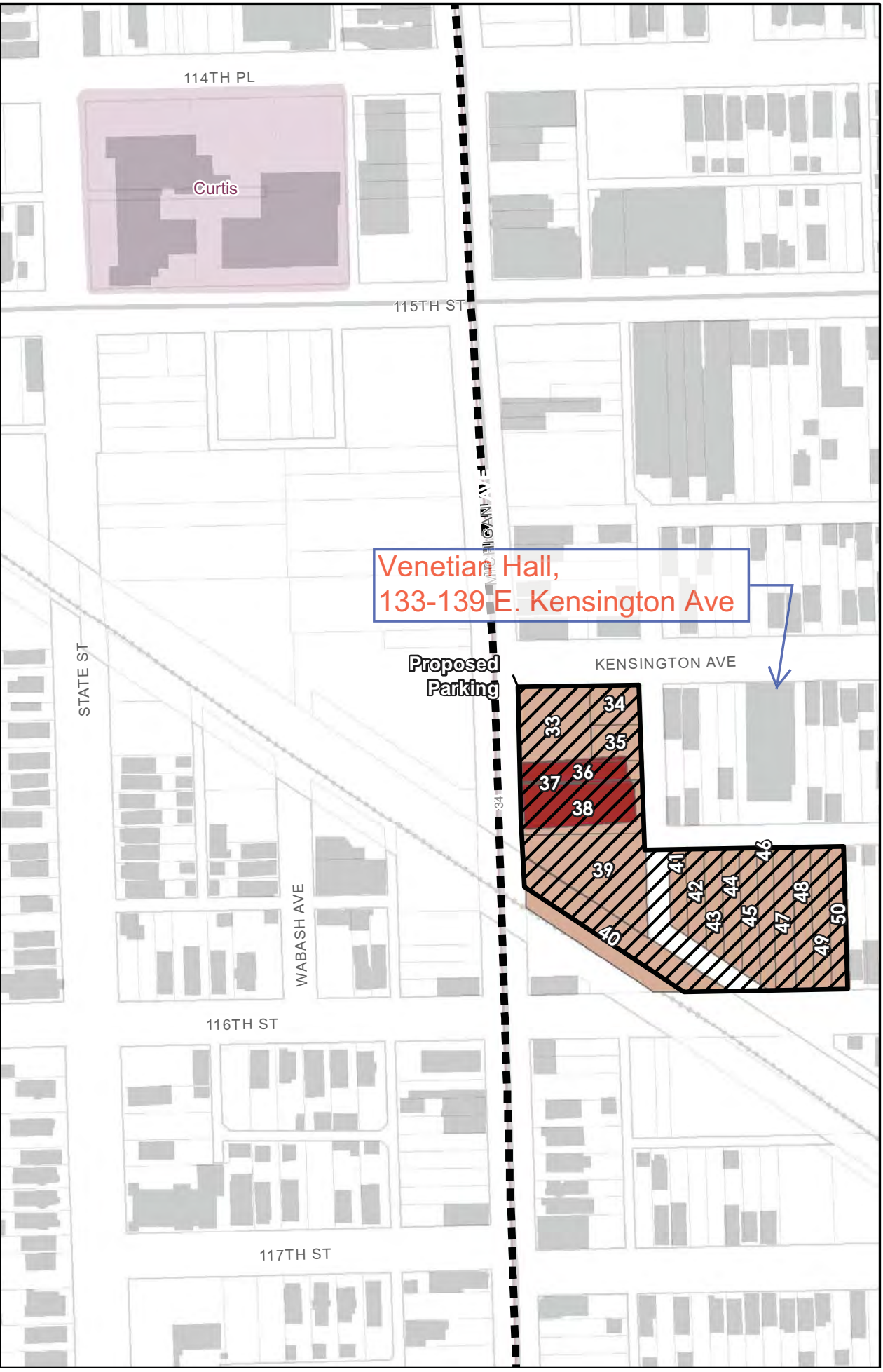

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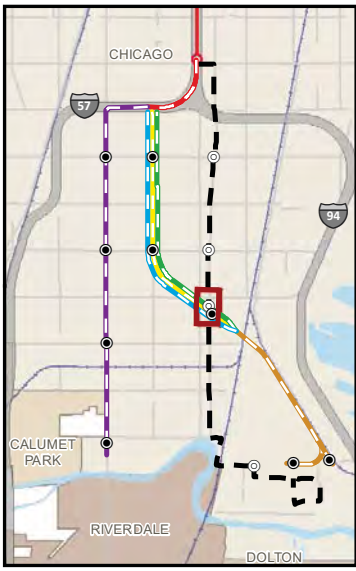

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BRT Alternative

Sheet 9 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
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- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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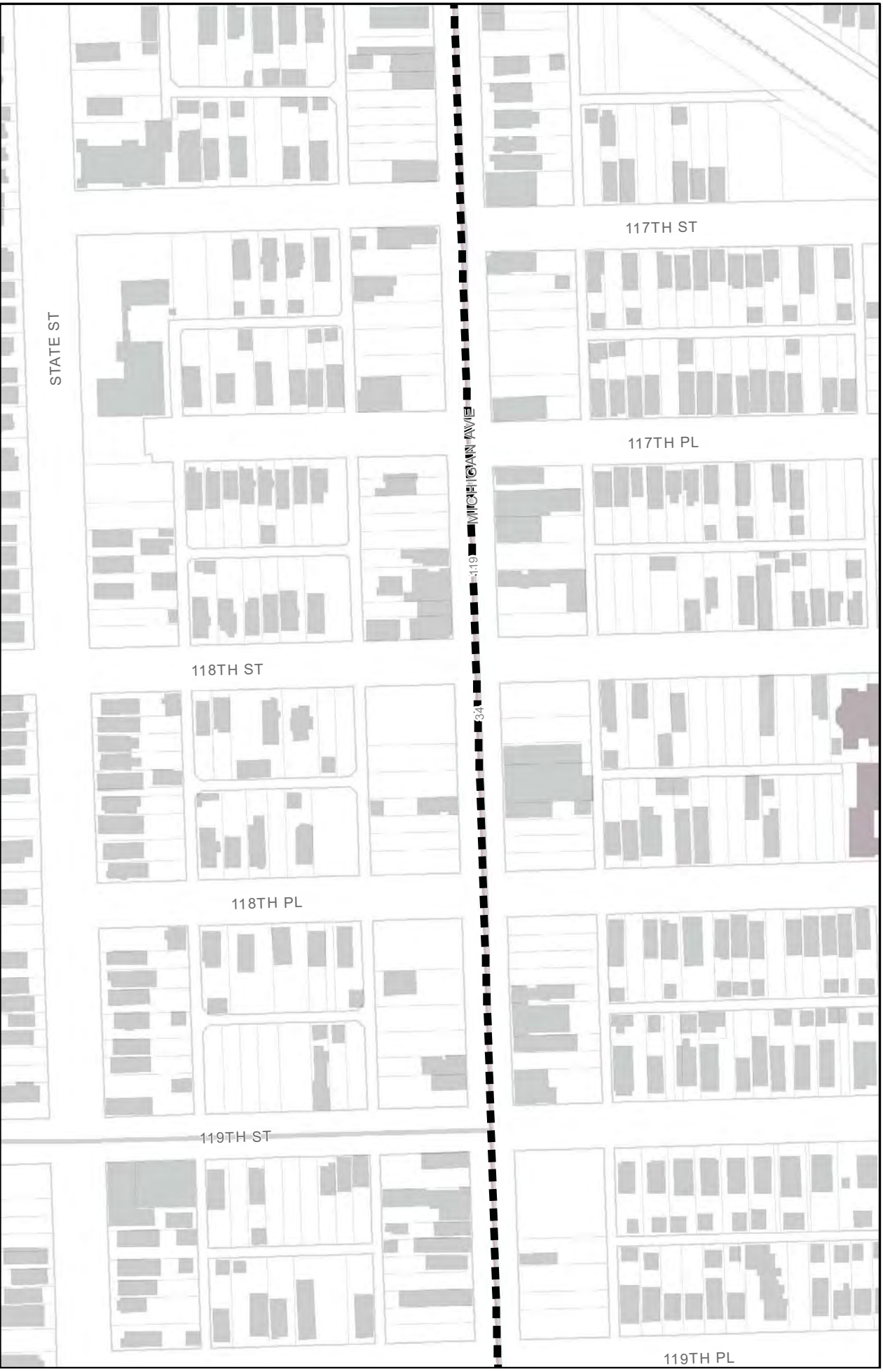

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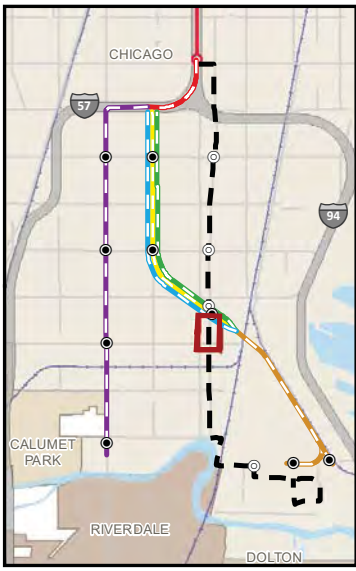

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BRT Alternative

Sheet 10 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
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- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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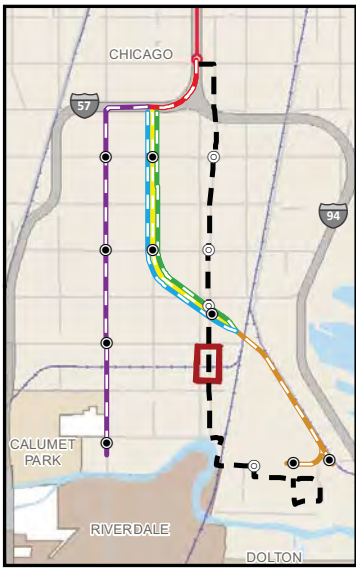

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BRT Alternative

Sheet 11 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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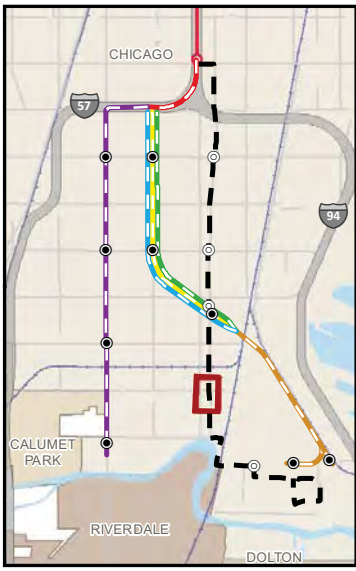

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BRT Alternative

Sheet 12 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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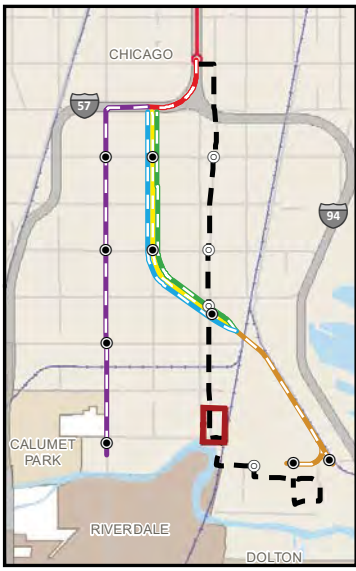

Legend

BRT Alternative

Sheet 13 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.13

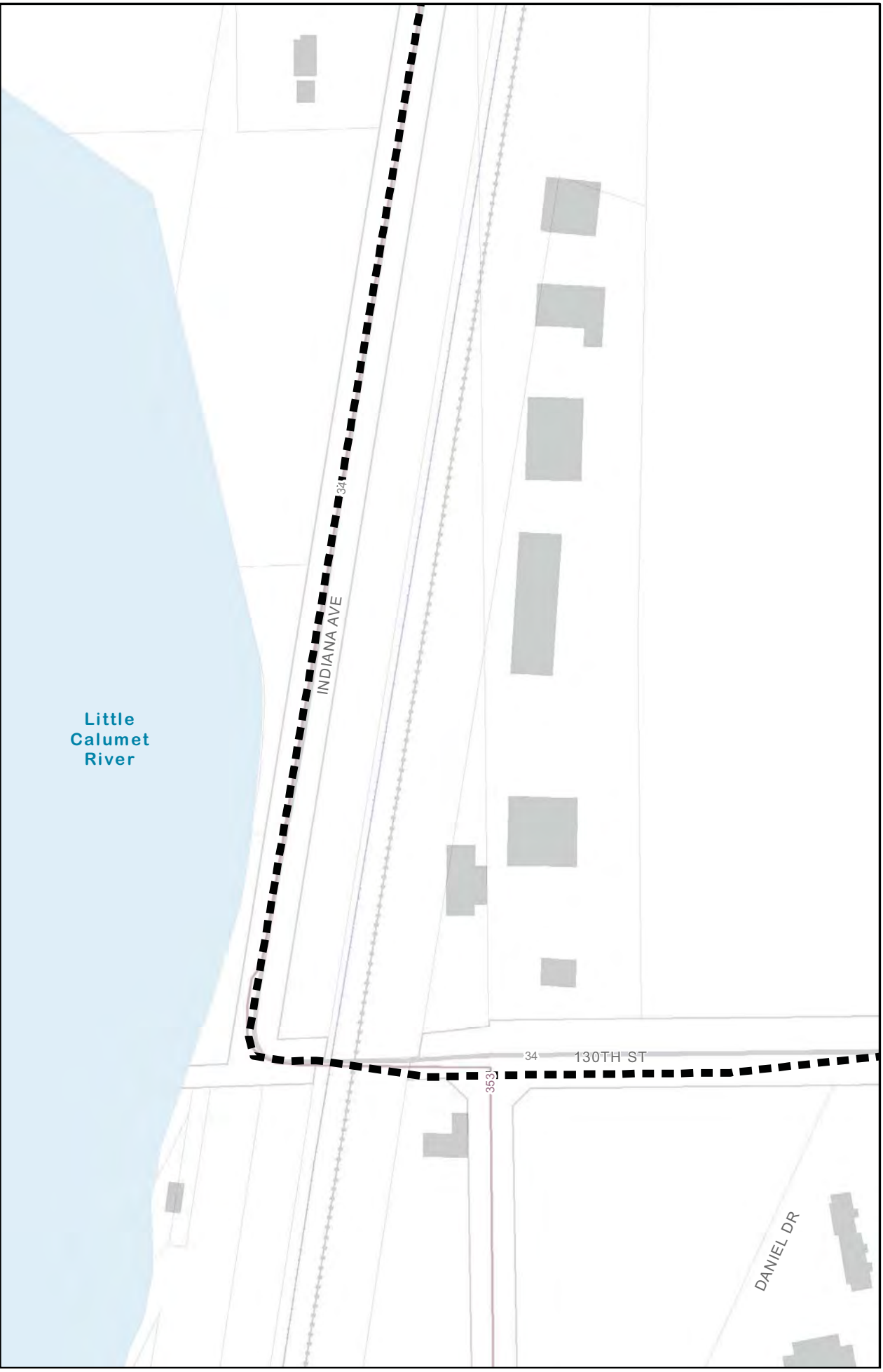

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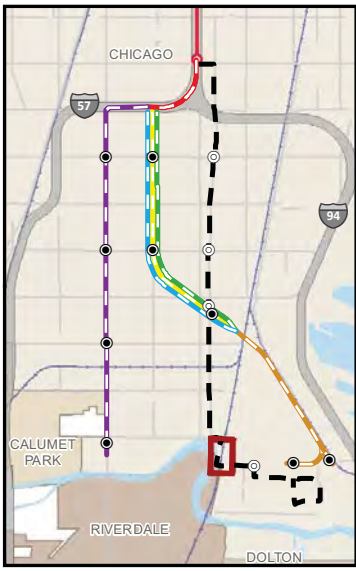

Legend

BRT Alternative

Sheet 14 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.14

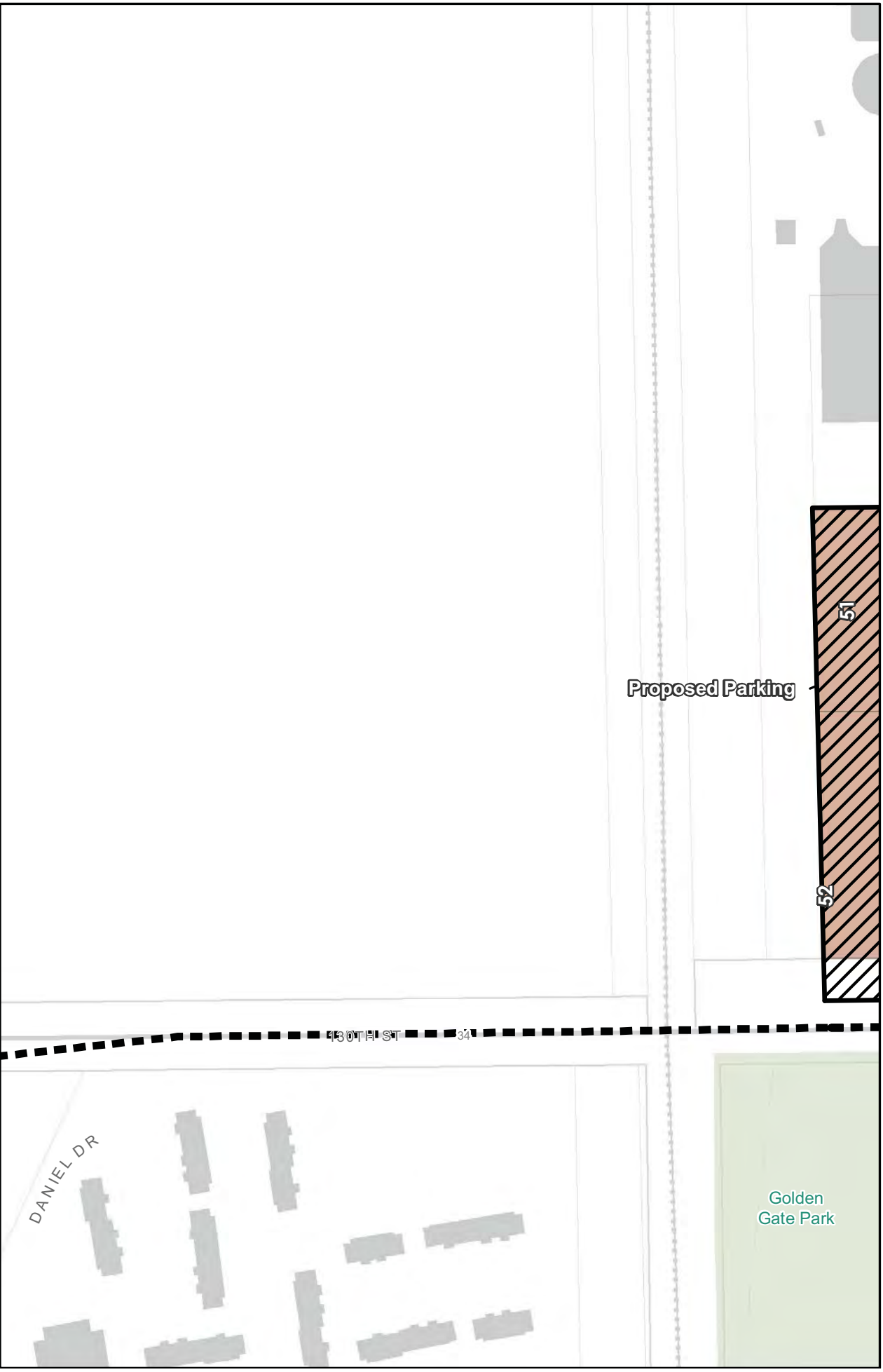

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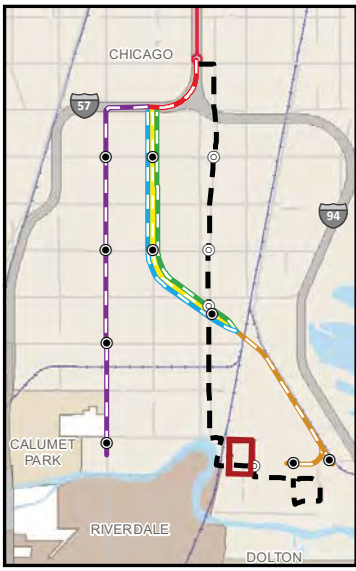

Legend

BRT Alternative

Sheet 15 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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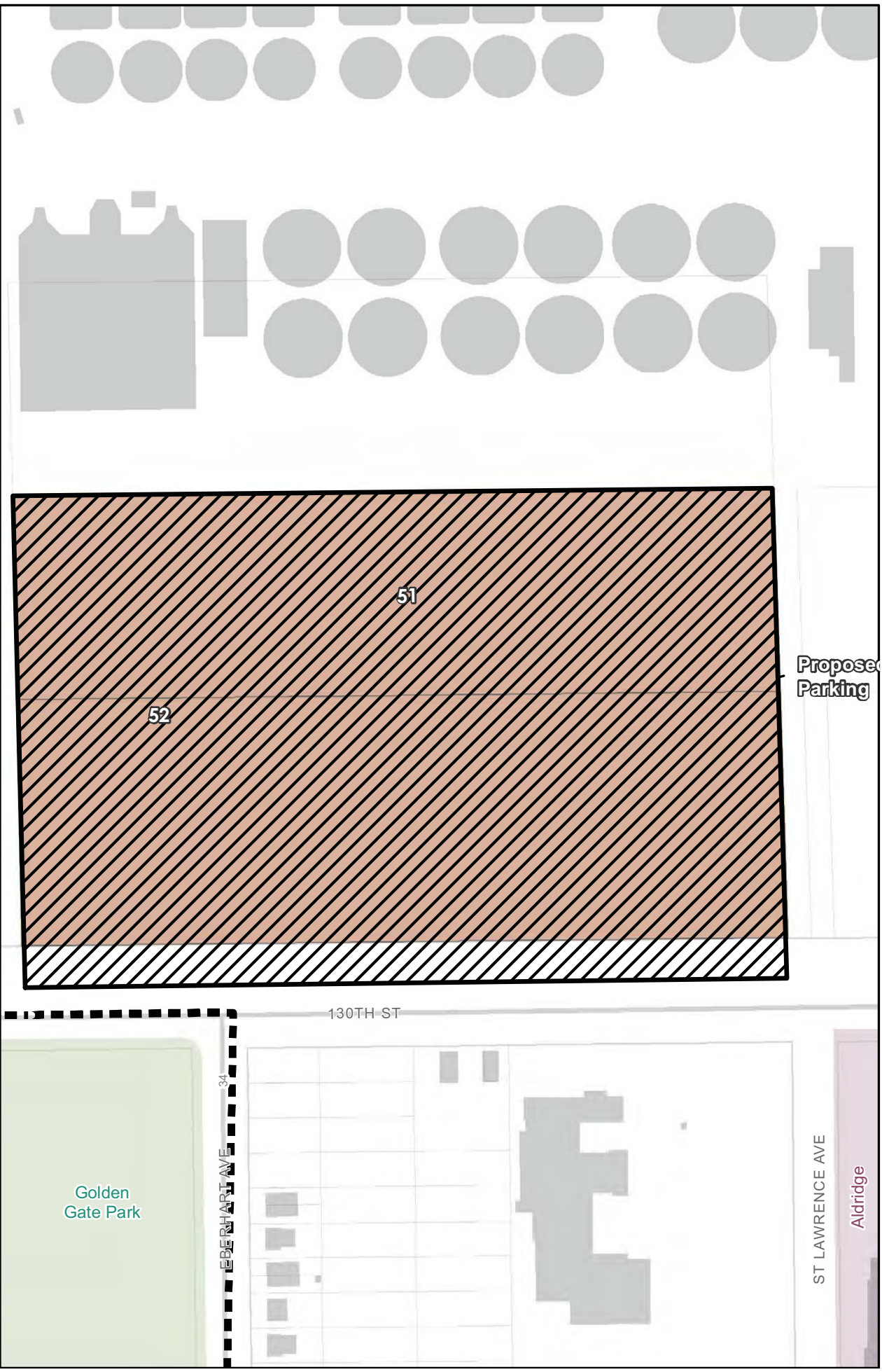

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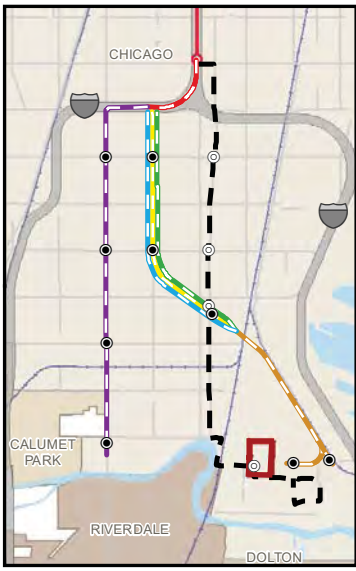

Legend

BRT Alternative

Sheet 16 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.16

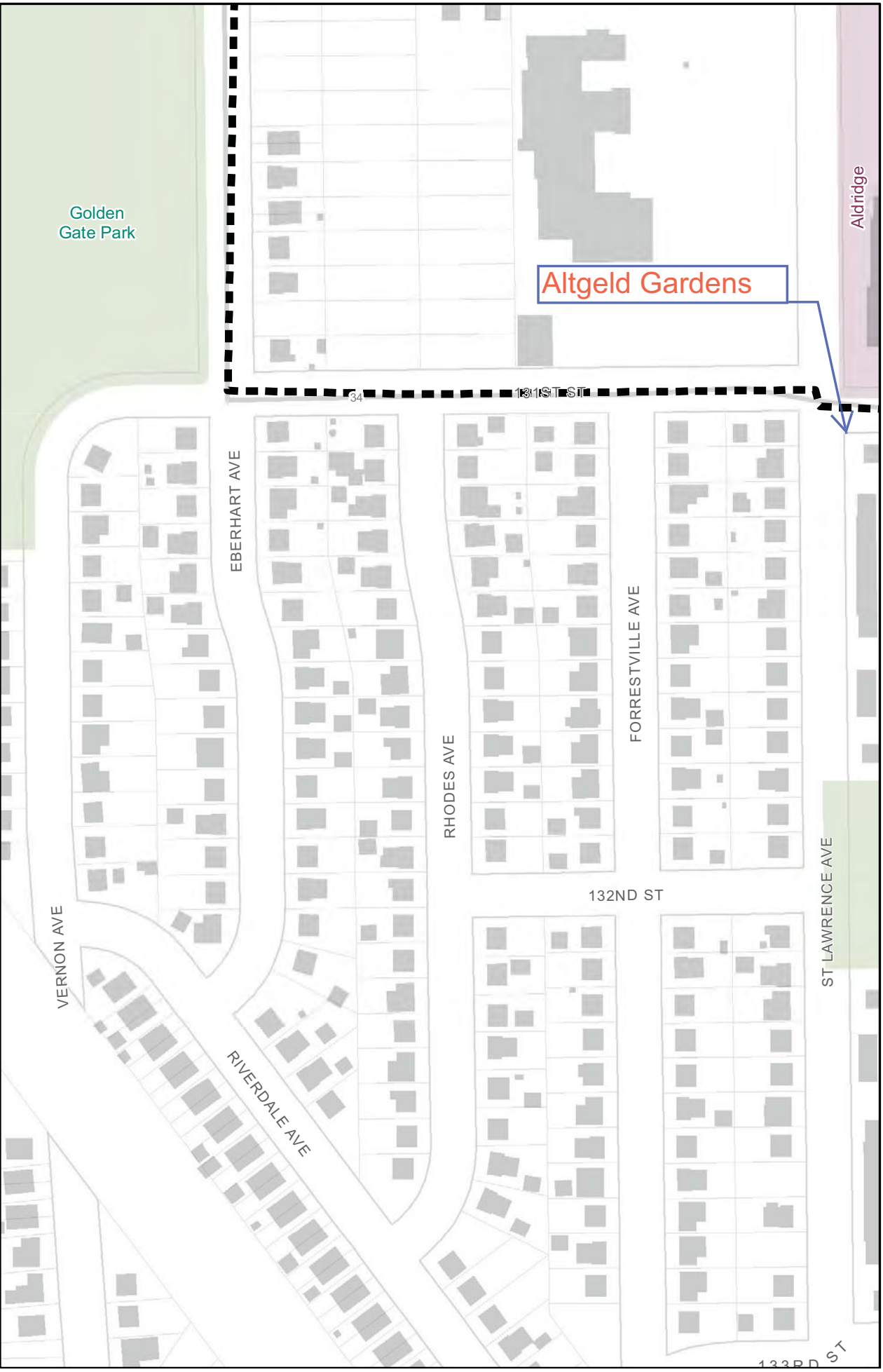

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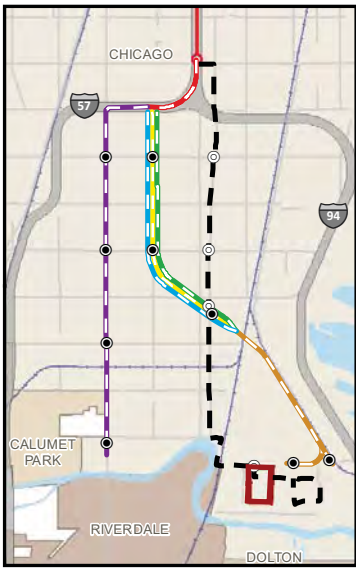

Legend

BRT Alternative

Sheet 17 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.17

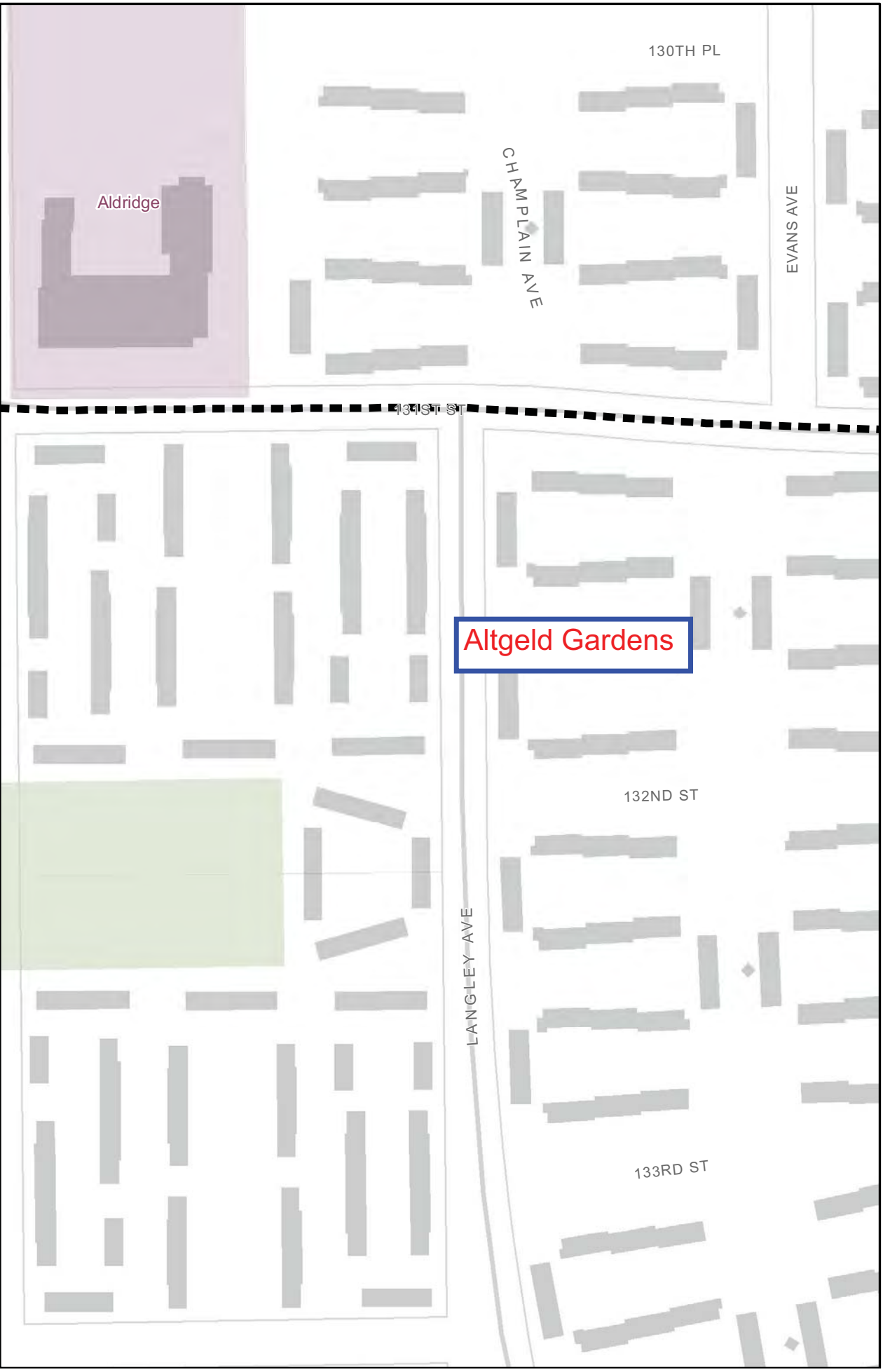

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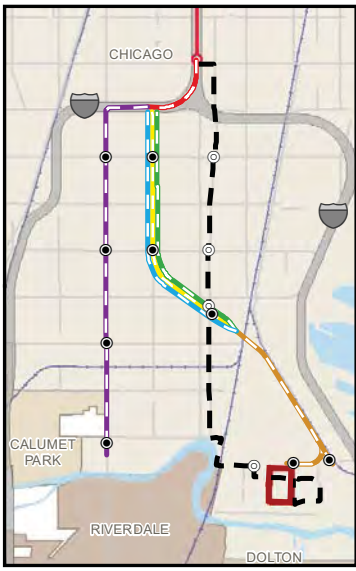

Legend

BRT Alternative

Sheet 18 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.18

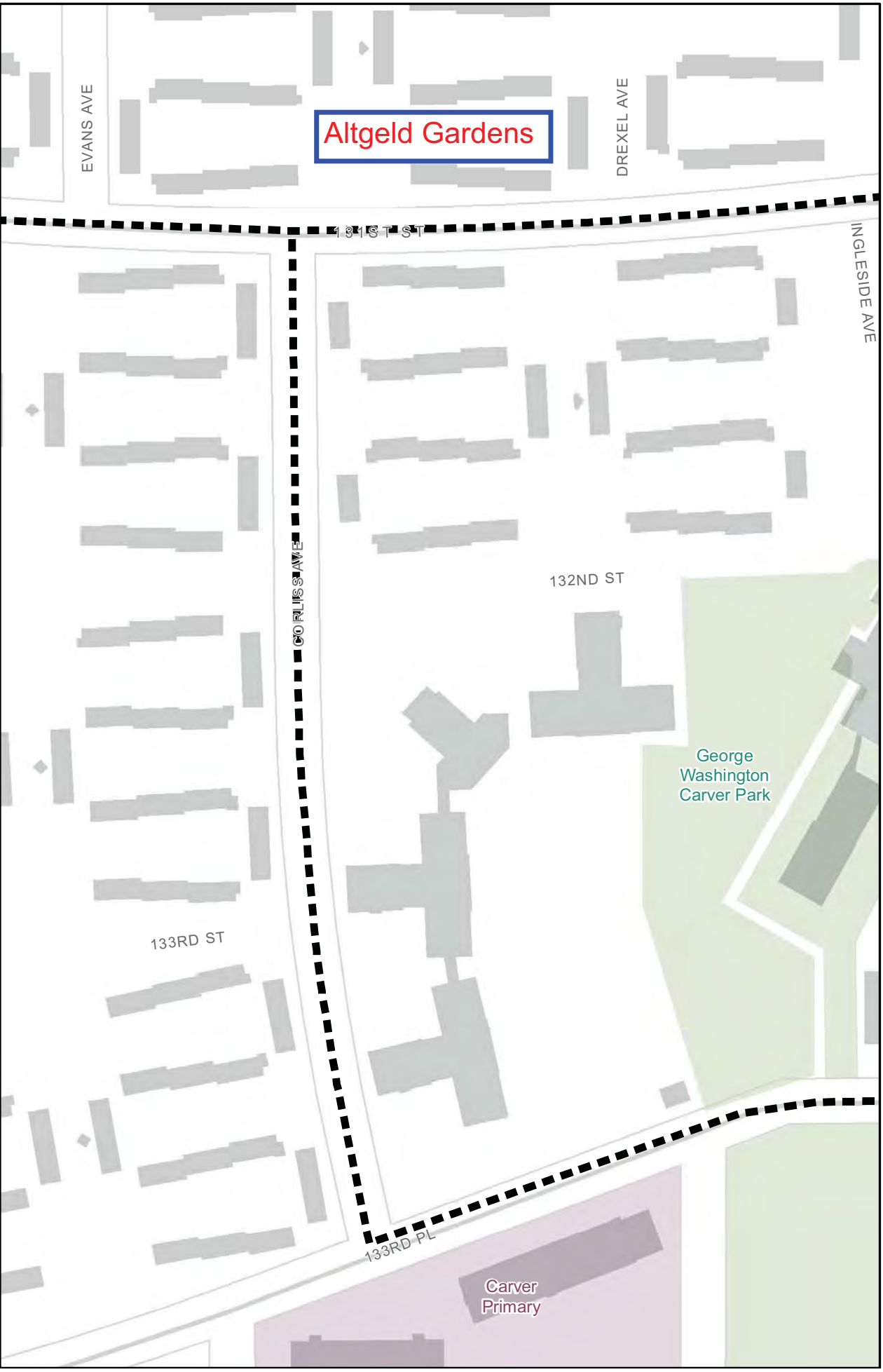

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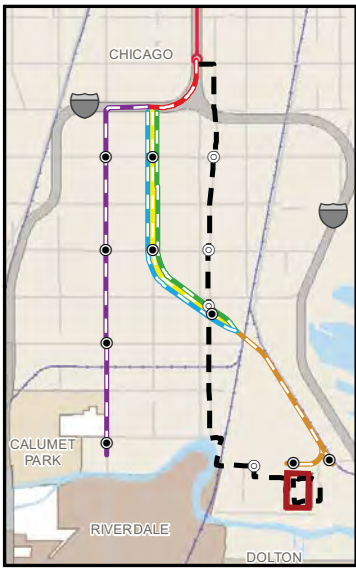

Legend

BRT Alternative

Sheet 19 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.19

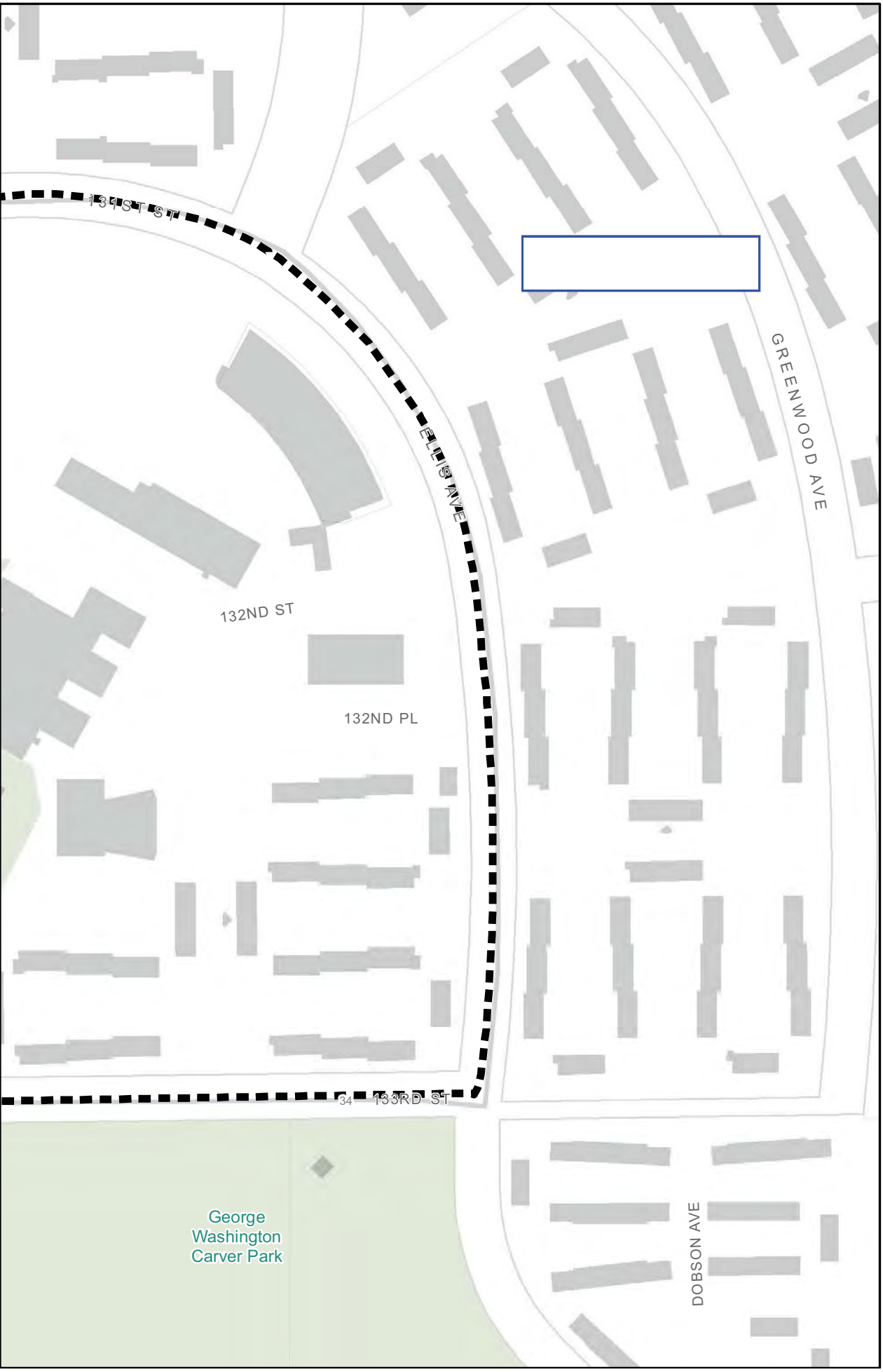

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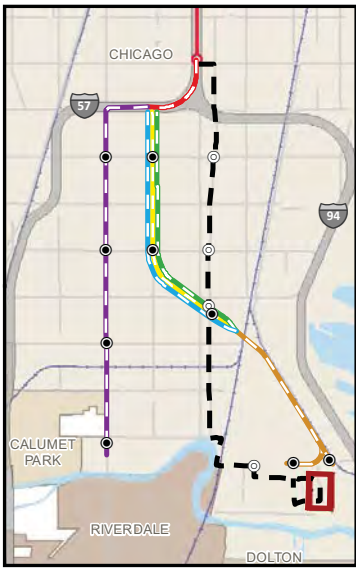

Legend

BRT Alternative

Sheet 20 of 20

- BRT Alternative
- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_08.20

Appendix D-2:
UPRR ROW Option Displacement Maps

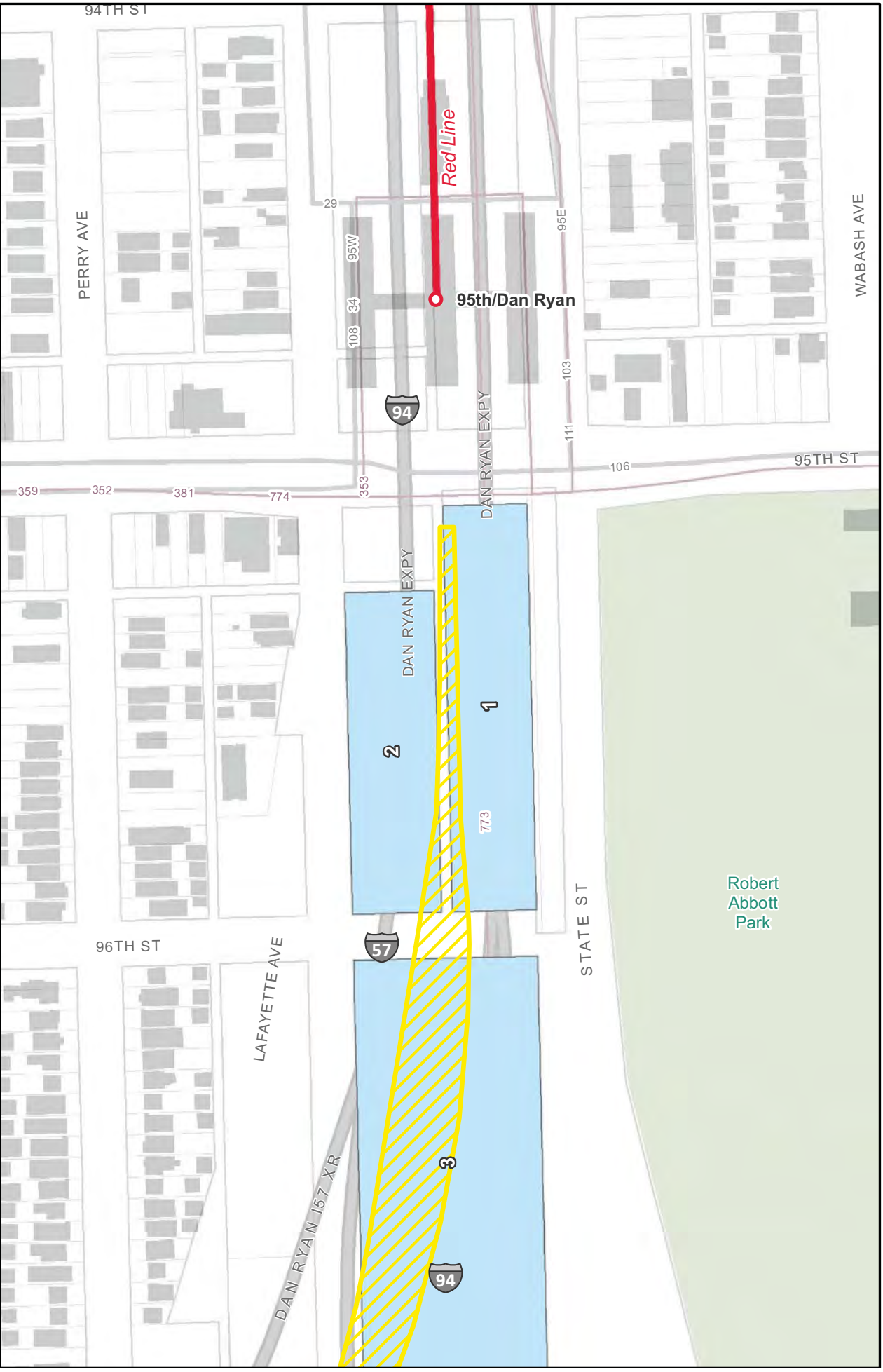

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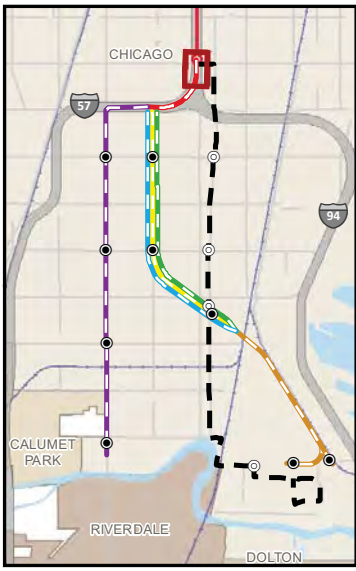

Legend

UPRR Rail Alternative ROW Option

Sheet 1 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.1

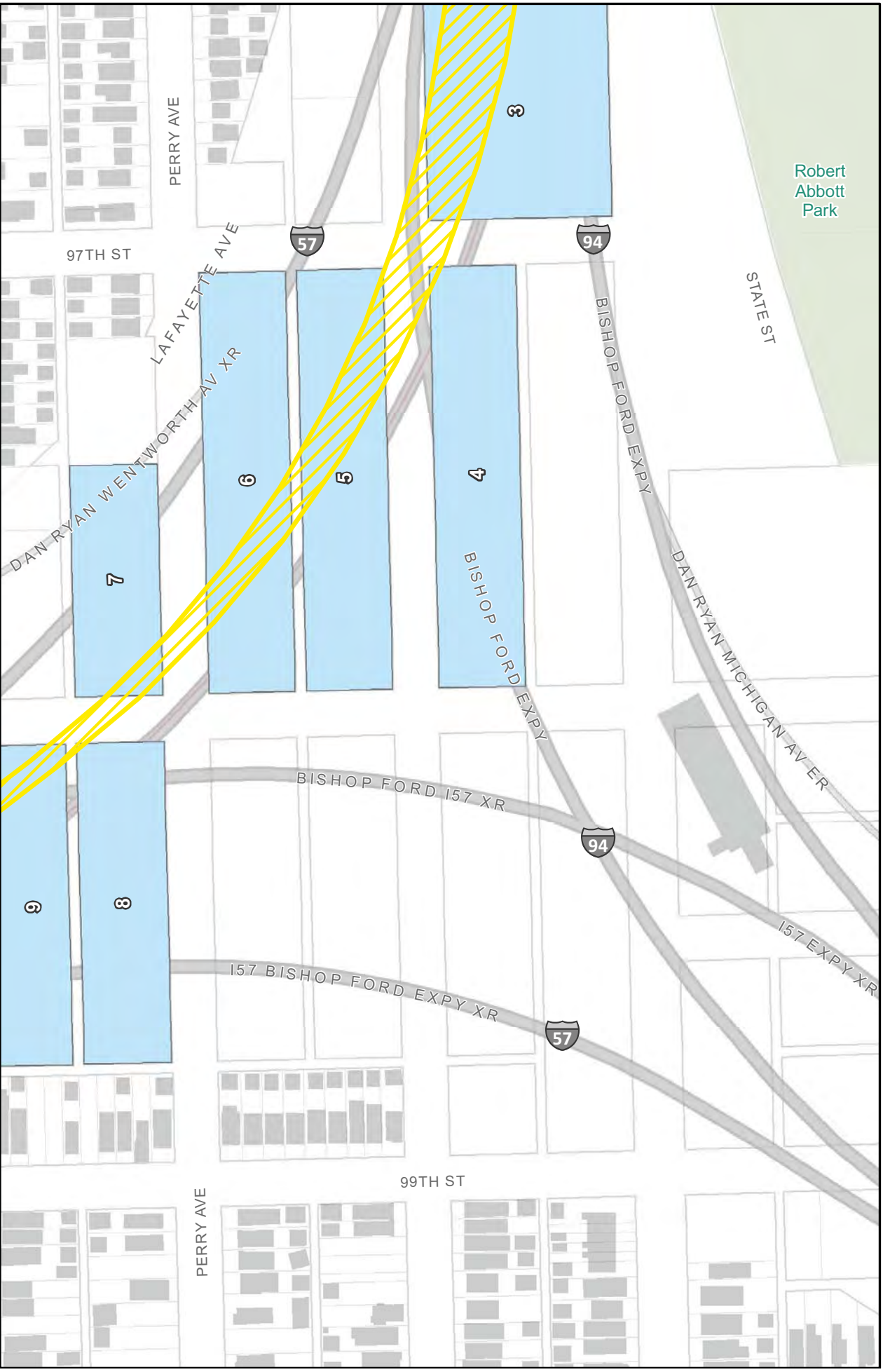

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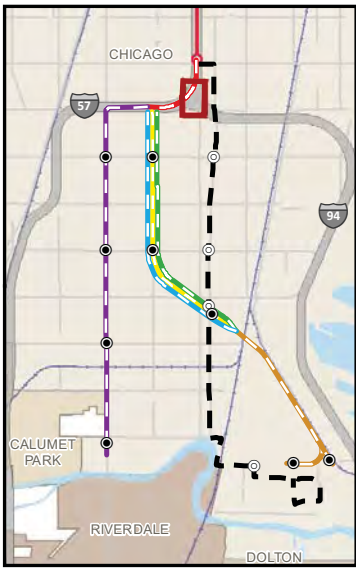

Legend

UPRR Rail Alternative ROW Option

Sheet 2 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.2

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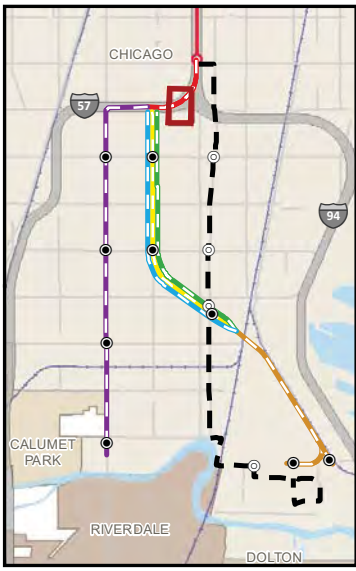

Legend

UPRR Rail Alternative ROW Option

Sheet 3 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.3

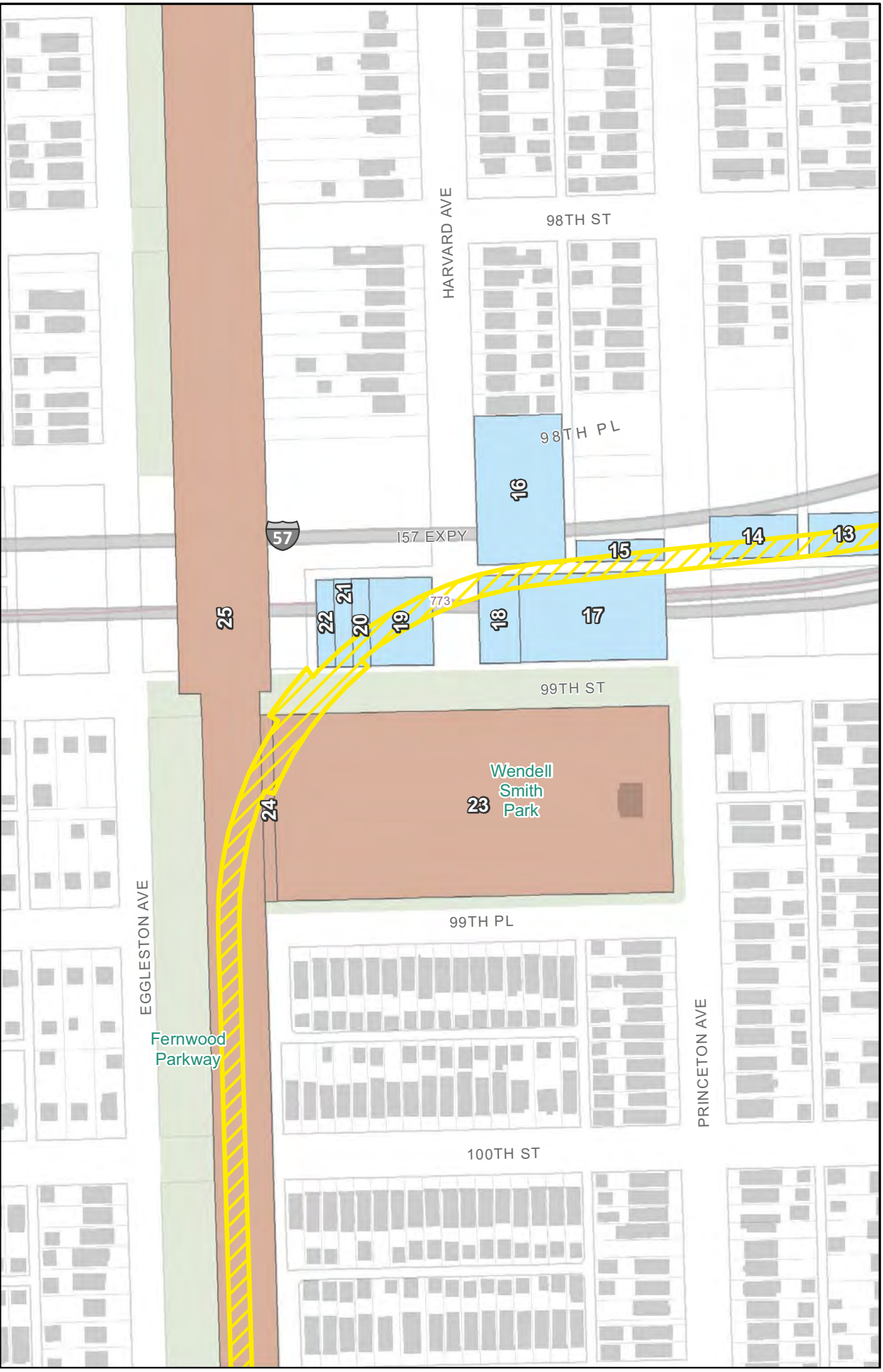

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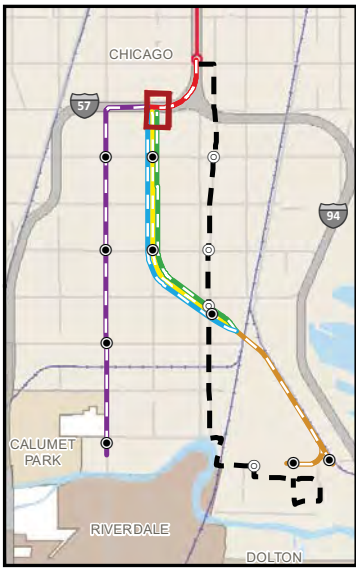

Legend

UPRR Rail Alternative ROW Option

Sheet 4 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.4

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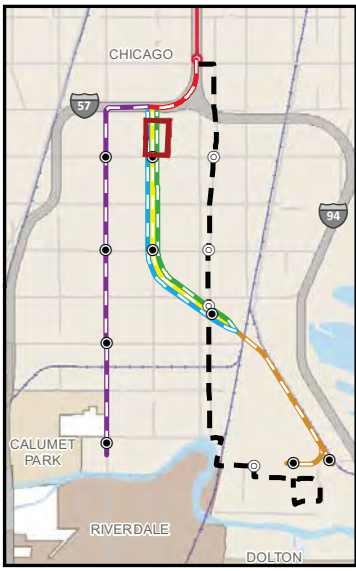

Legend

UPRR Rail Alternative ROW Option

Sheet 5 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.5

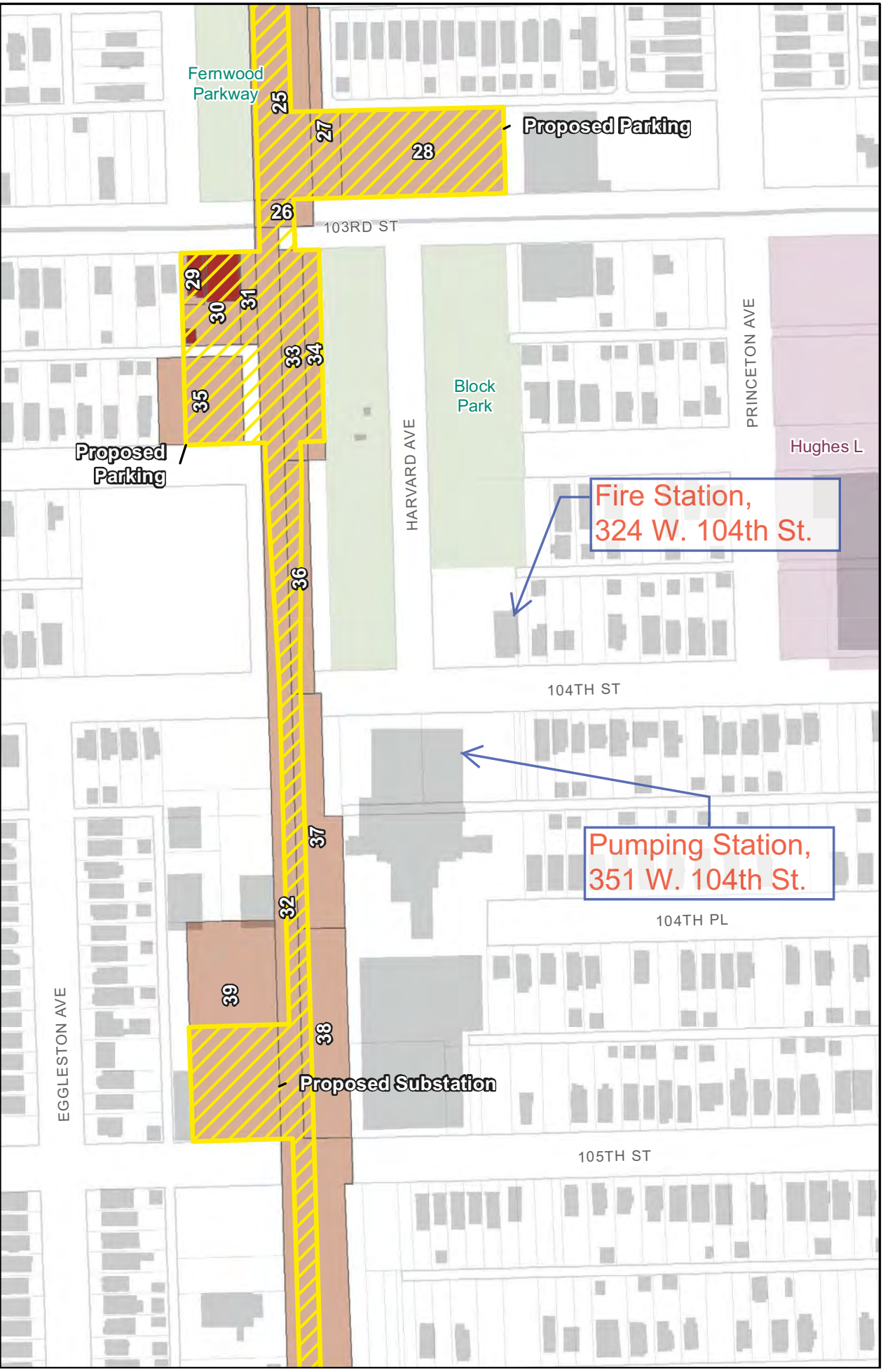

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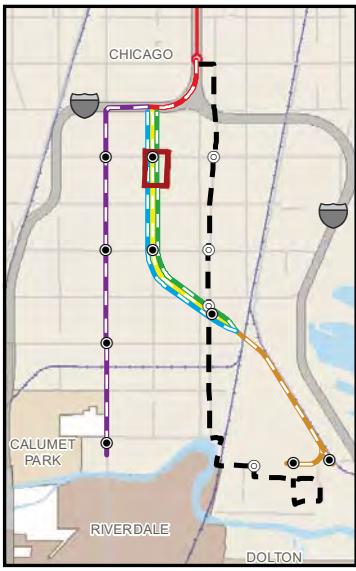

Legend

UPRR Rail Alternative ROW Option

Sheet 6 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.6

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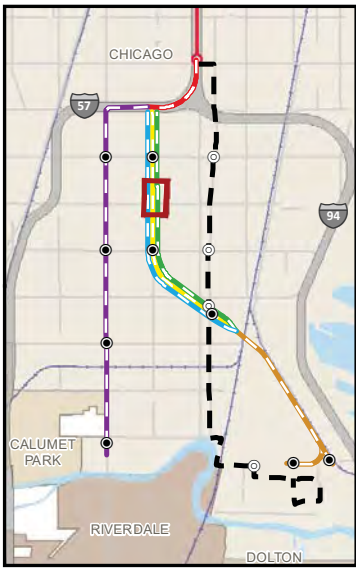

Legend

UPRR Rail Alternative ROW Option

Sheet 7 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.7

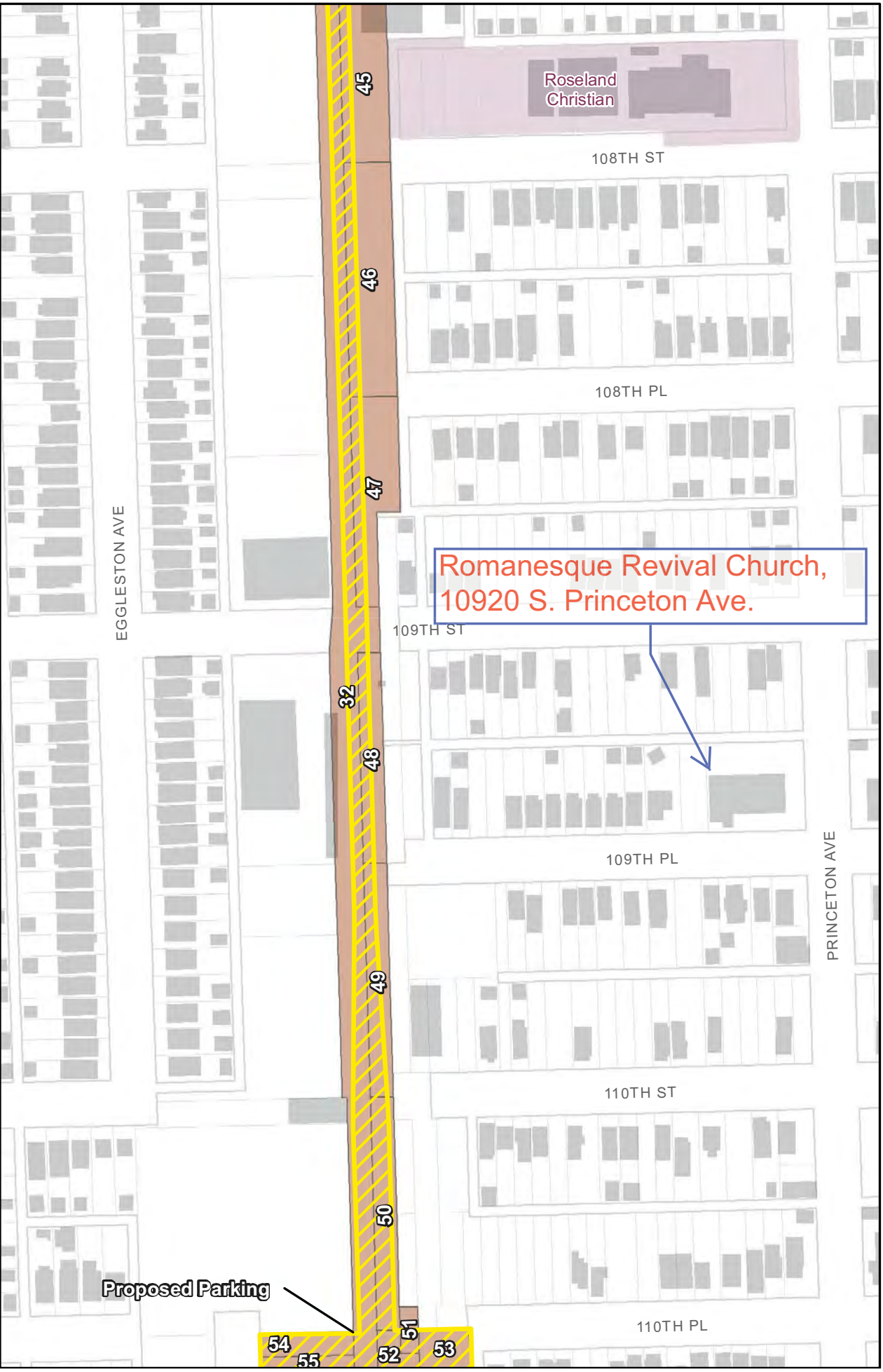

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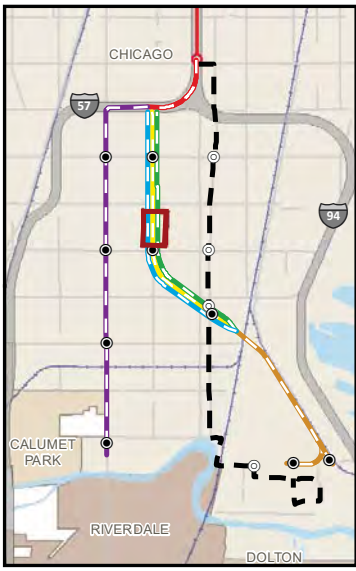

Legend

UPRR Rail Alternative ROW Option

Sheet 8 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.8

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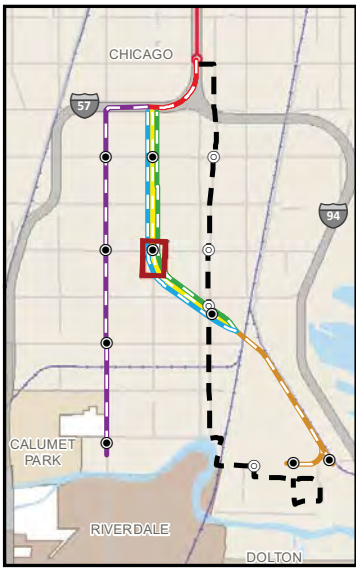

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UPRR Rail Alternative ROW Option

Sheet 9 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.9

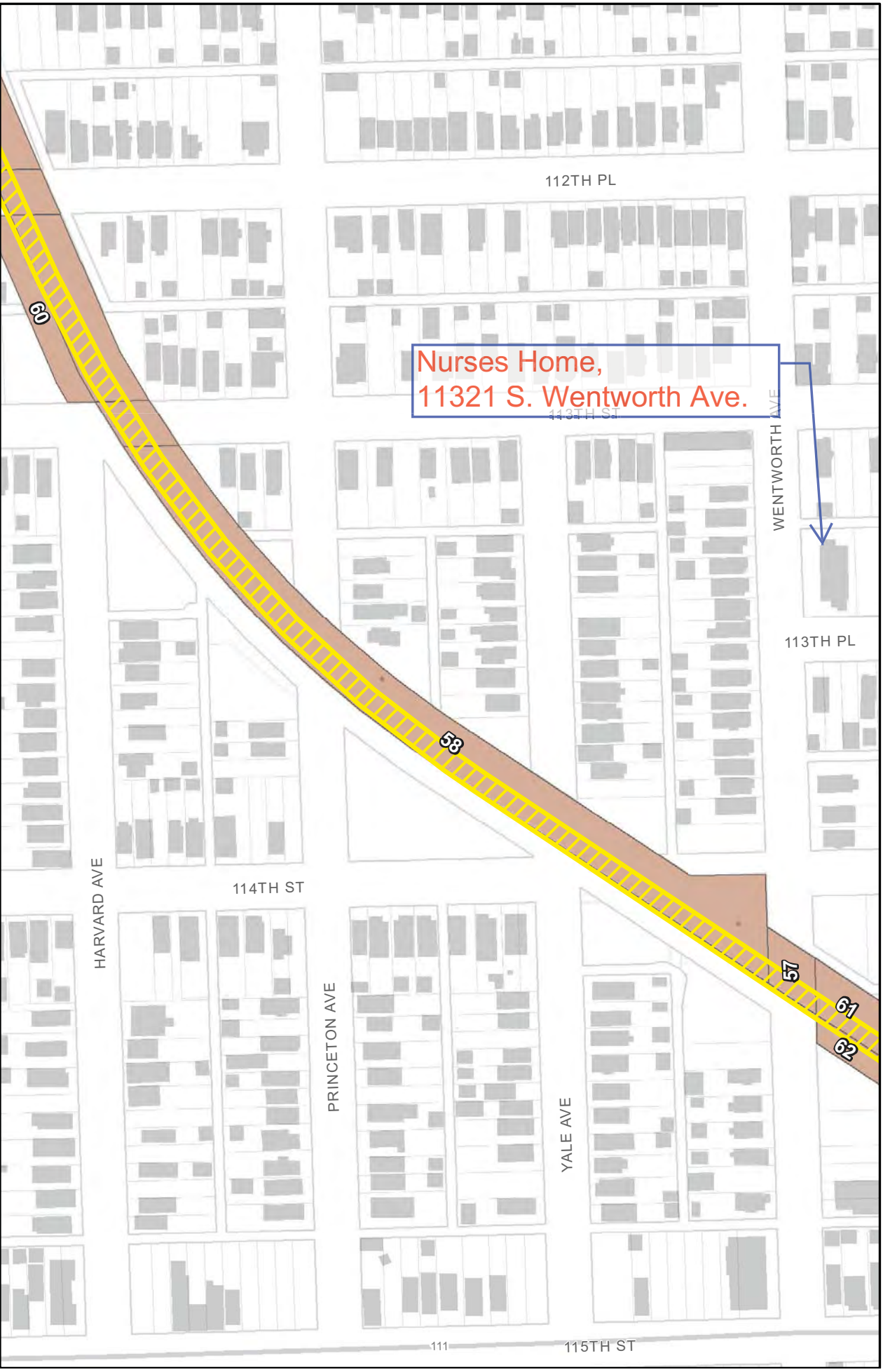

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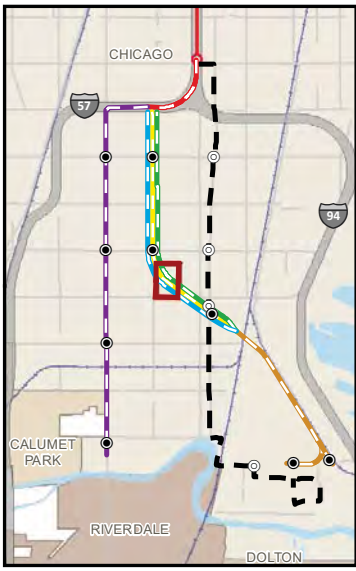

Legend

UPRR Rail Alternative ROW Option

Sheet 10 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.10

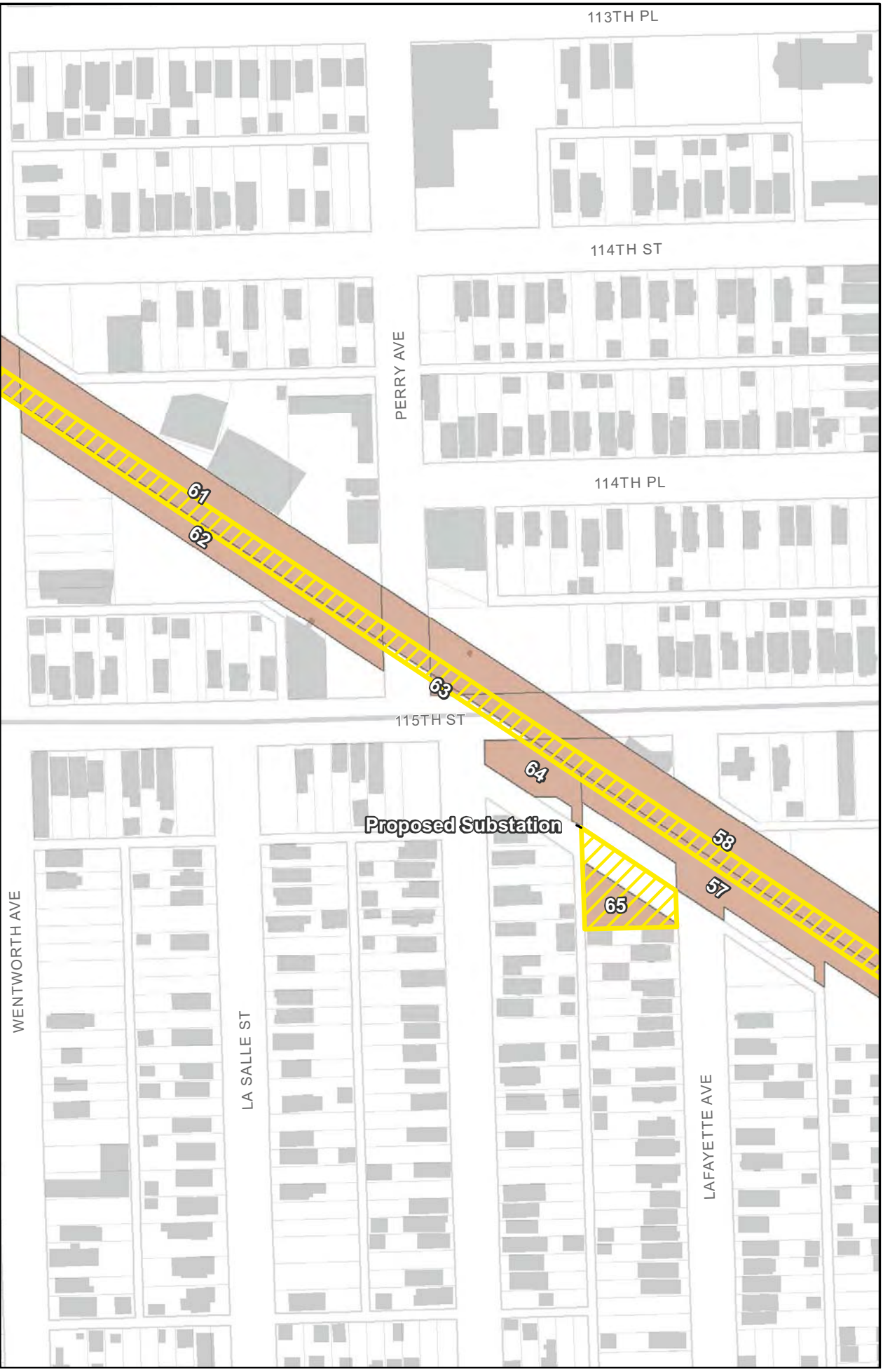

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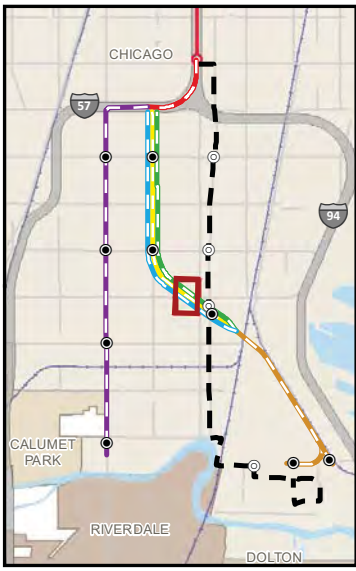

Legend

UPRR Rail Alternative ROW Option

Sheet 11 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.11

Venetian Hall,
133 139 E. Kensington Ave

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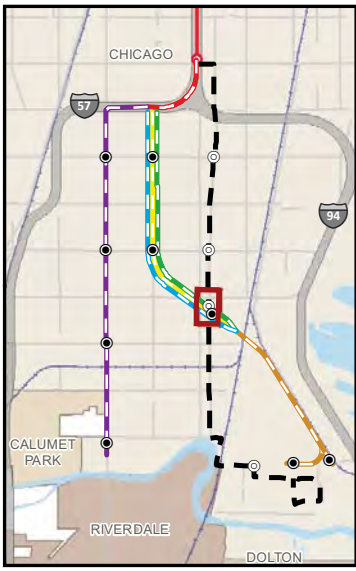

Legend

UPRR Rail Alternative ROW Option

Sheet 12 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.12

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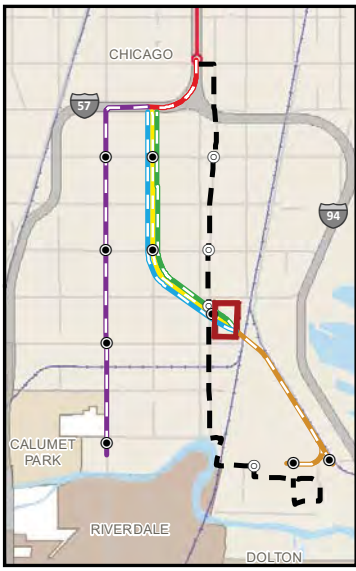

Legend

UPRR Rail Alternative ROW Option

Sheet 13 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.13

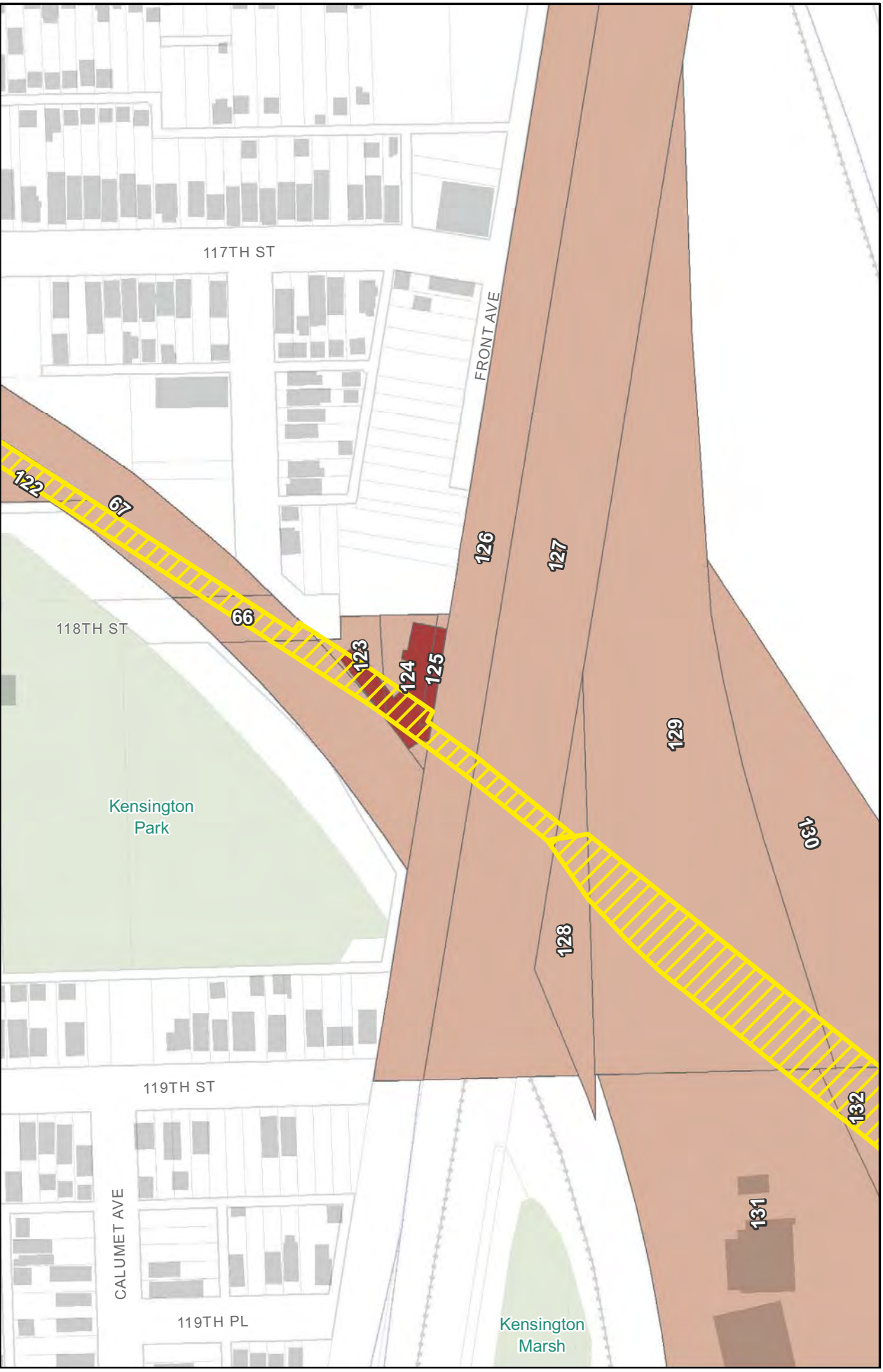

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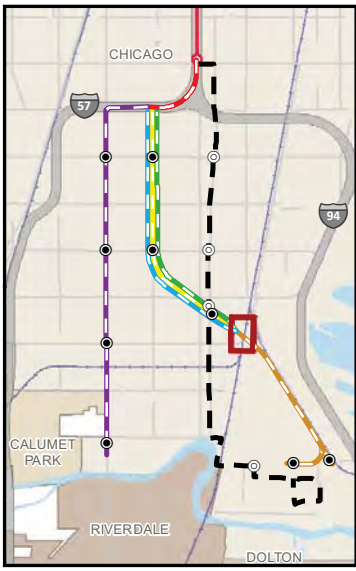

Legend

UPRR Rail Alternative ROW Option

Sheet 14 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.14

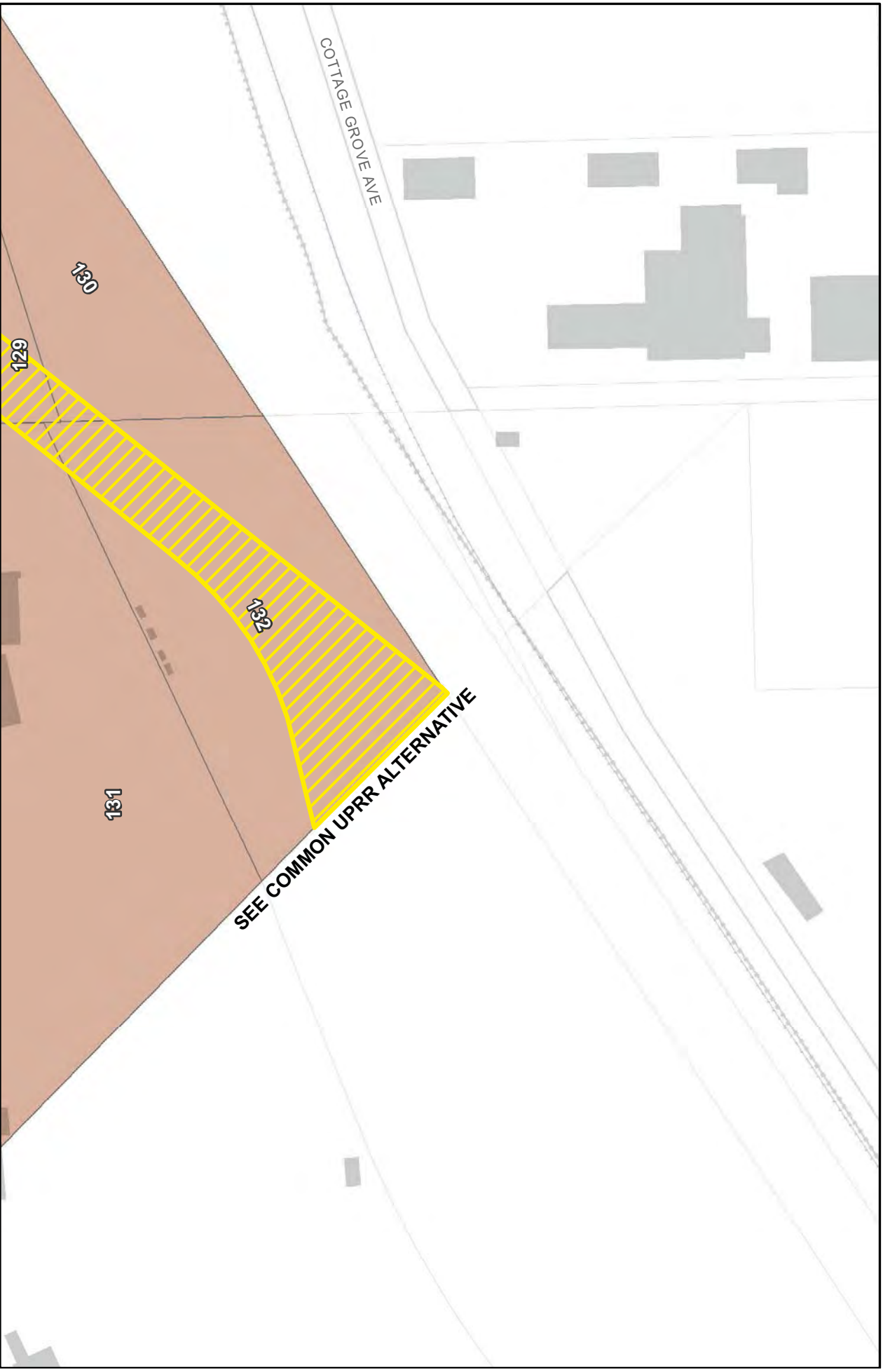

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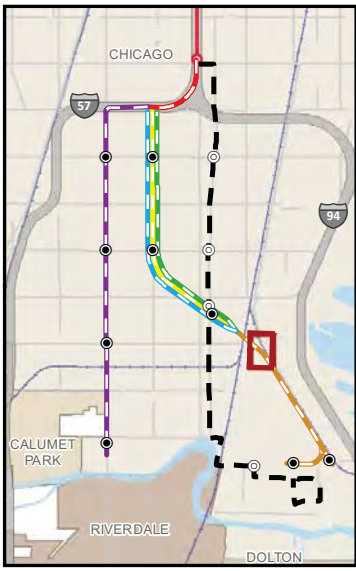

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UPRR Rail Alternative ROW Option

Sheet 15 of 15

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_03.15

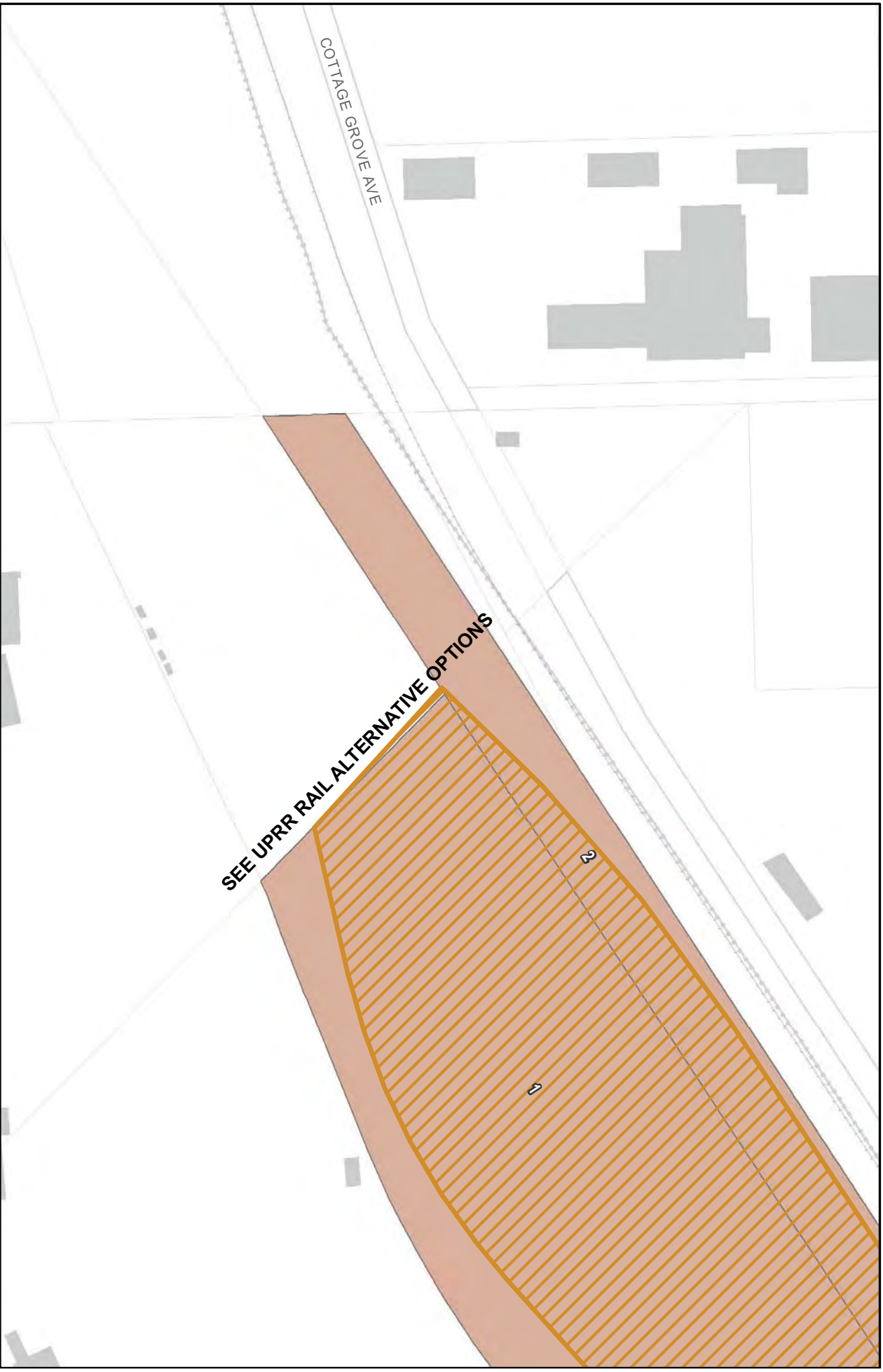

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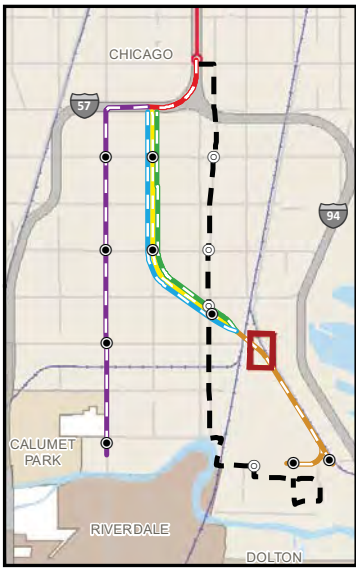

Legend

Common UPRR Rail Alternative

Sheet 1 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.1

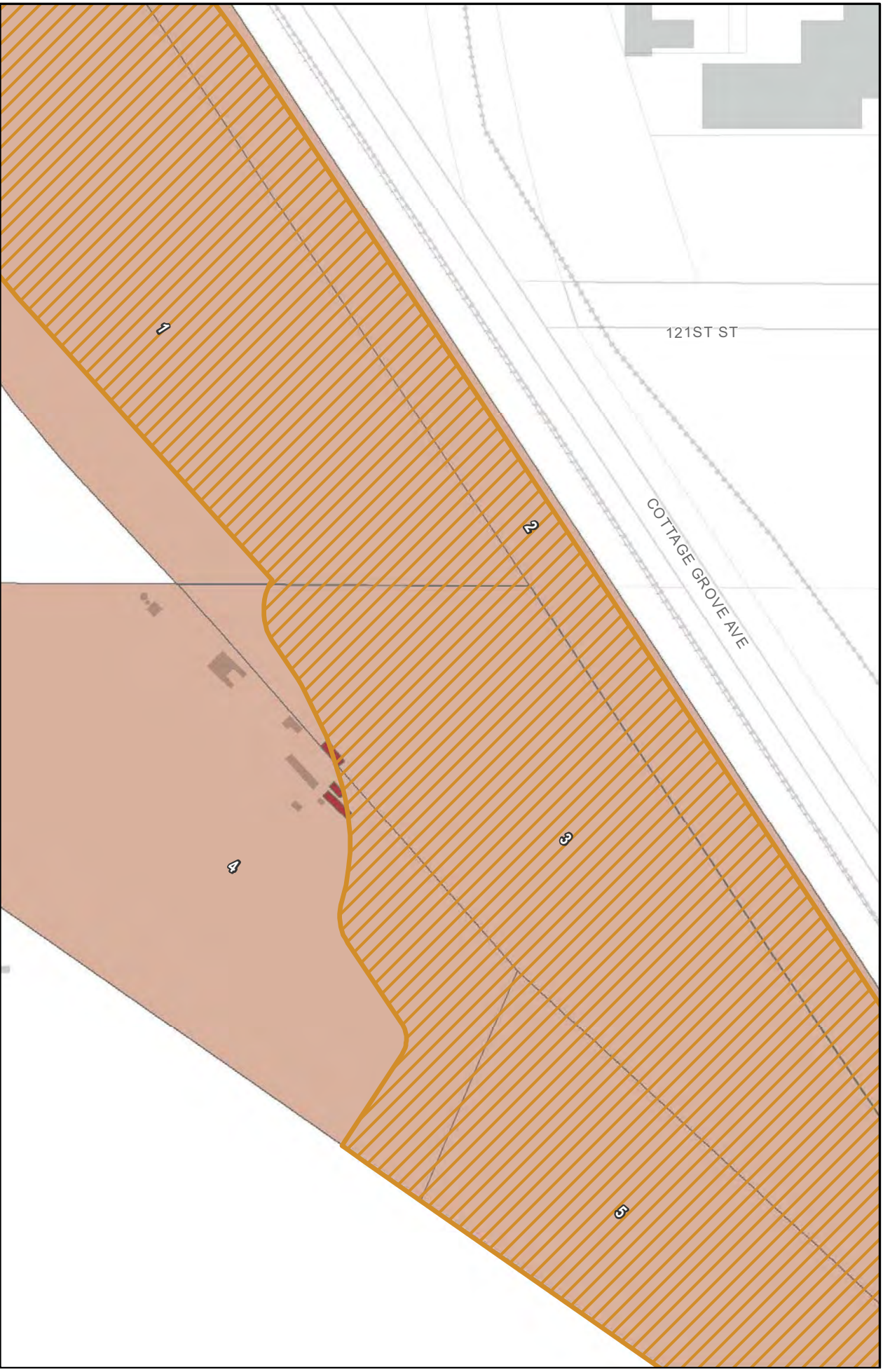

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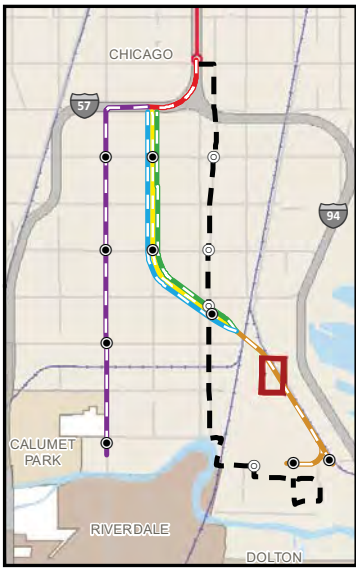

Legend

Common UPRR Rail Alternative

Sheet 2 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.2

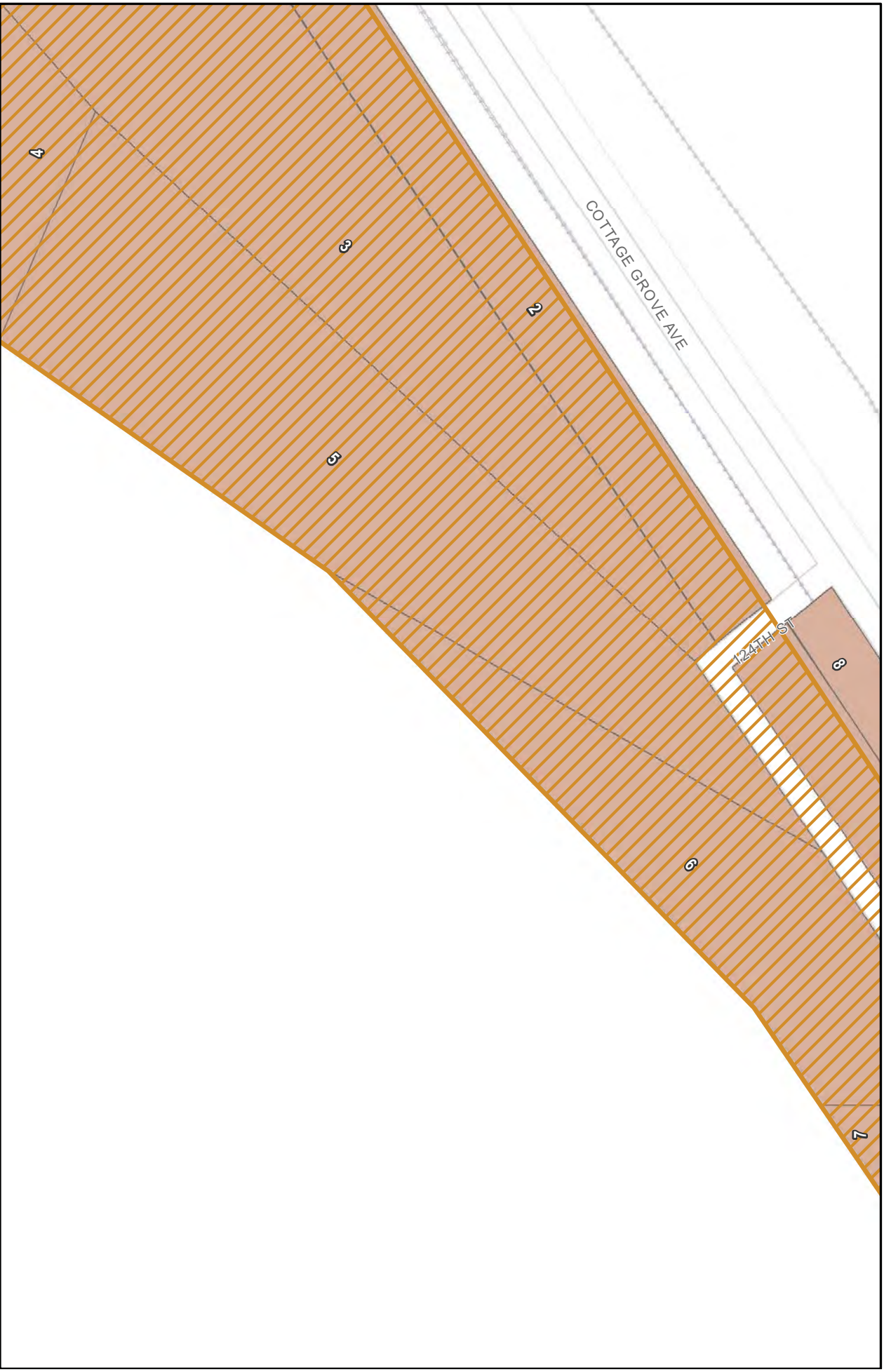

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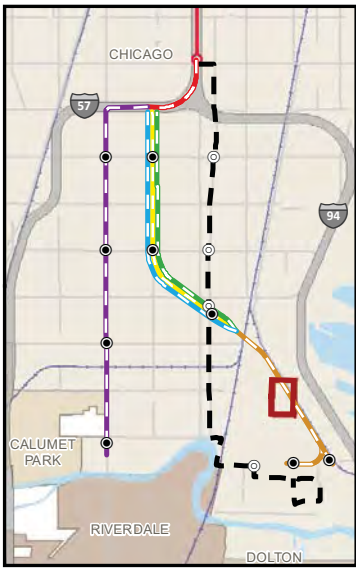

Legend

Common UPRR Rail Alternative

Sheet 3 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.3

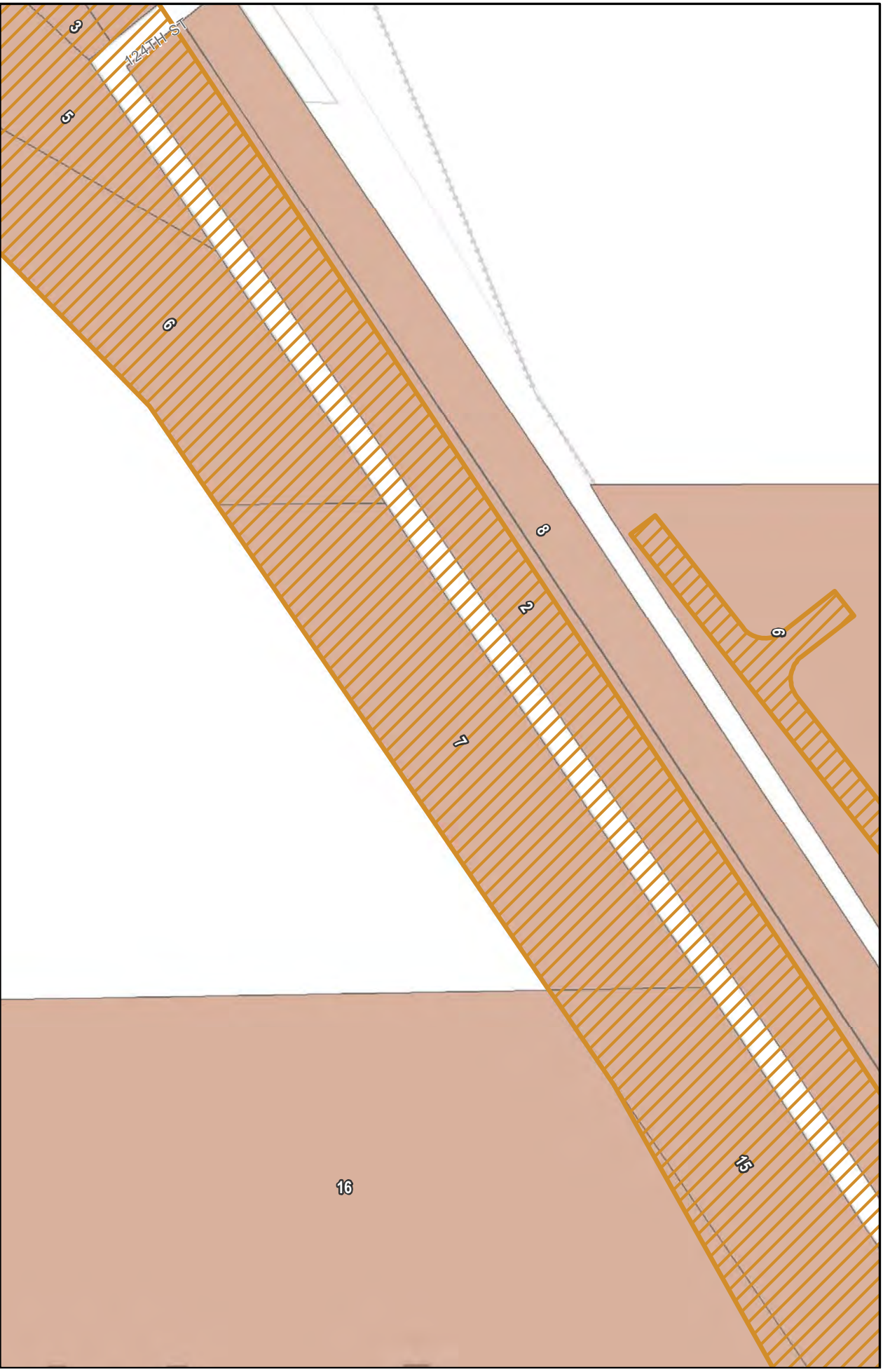

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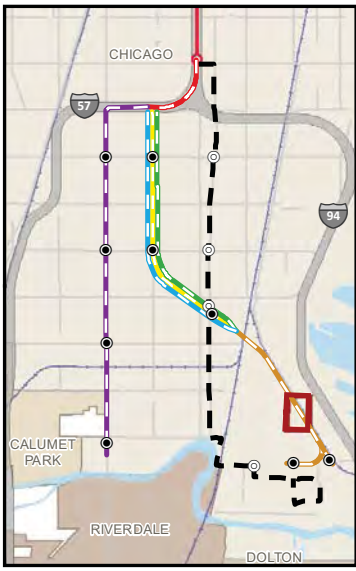

Legend

Common UPRR Rail Alternative

Sheet 4 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.4

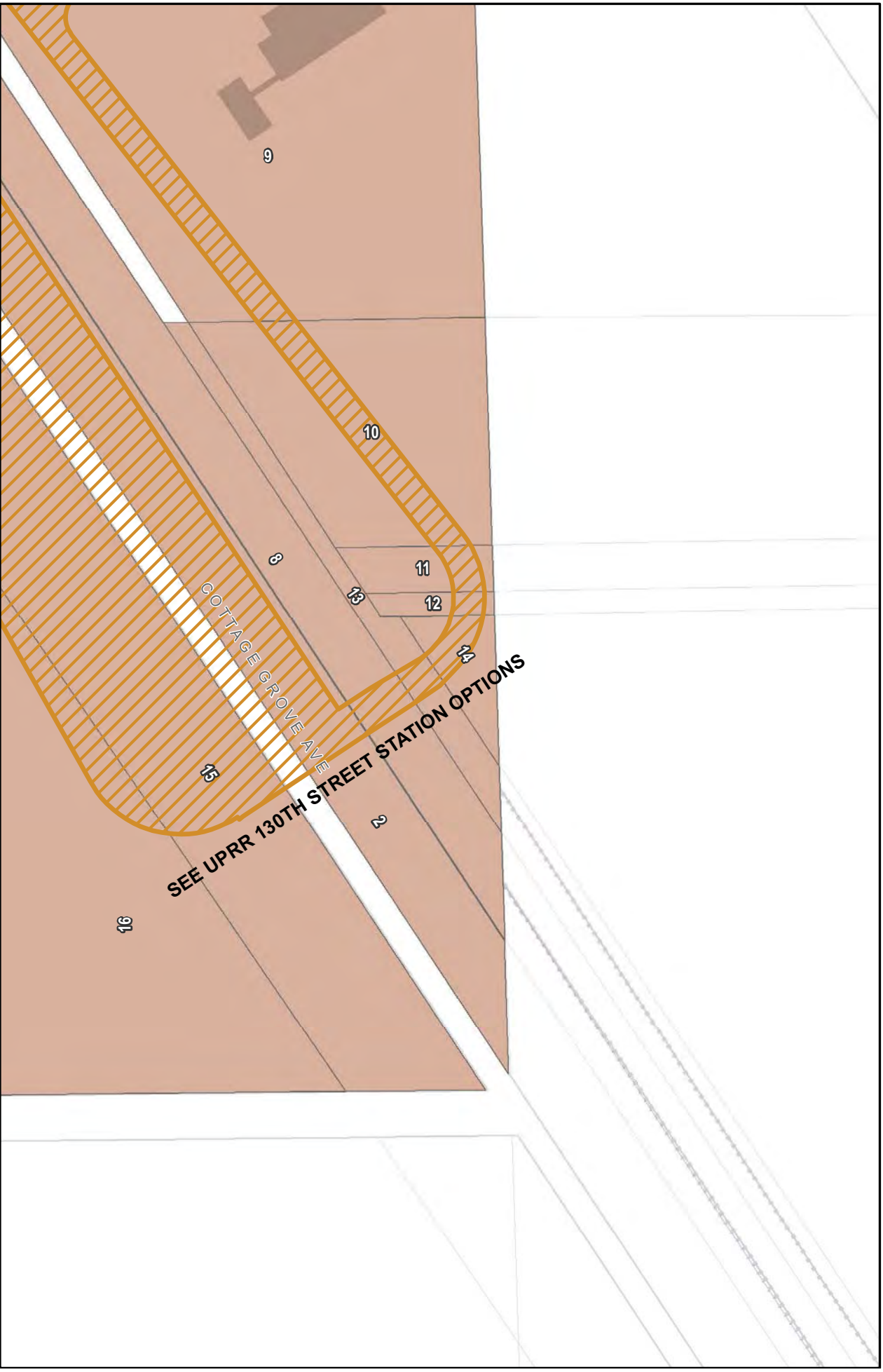

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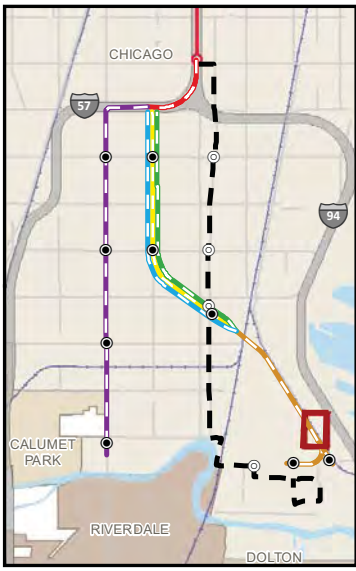

Legend

Common UPRR Rail Alternative

Sheet 5 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.5

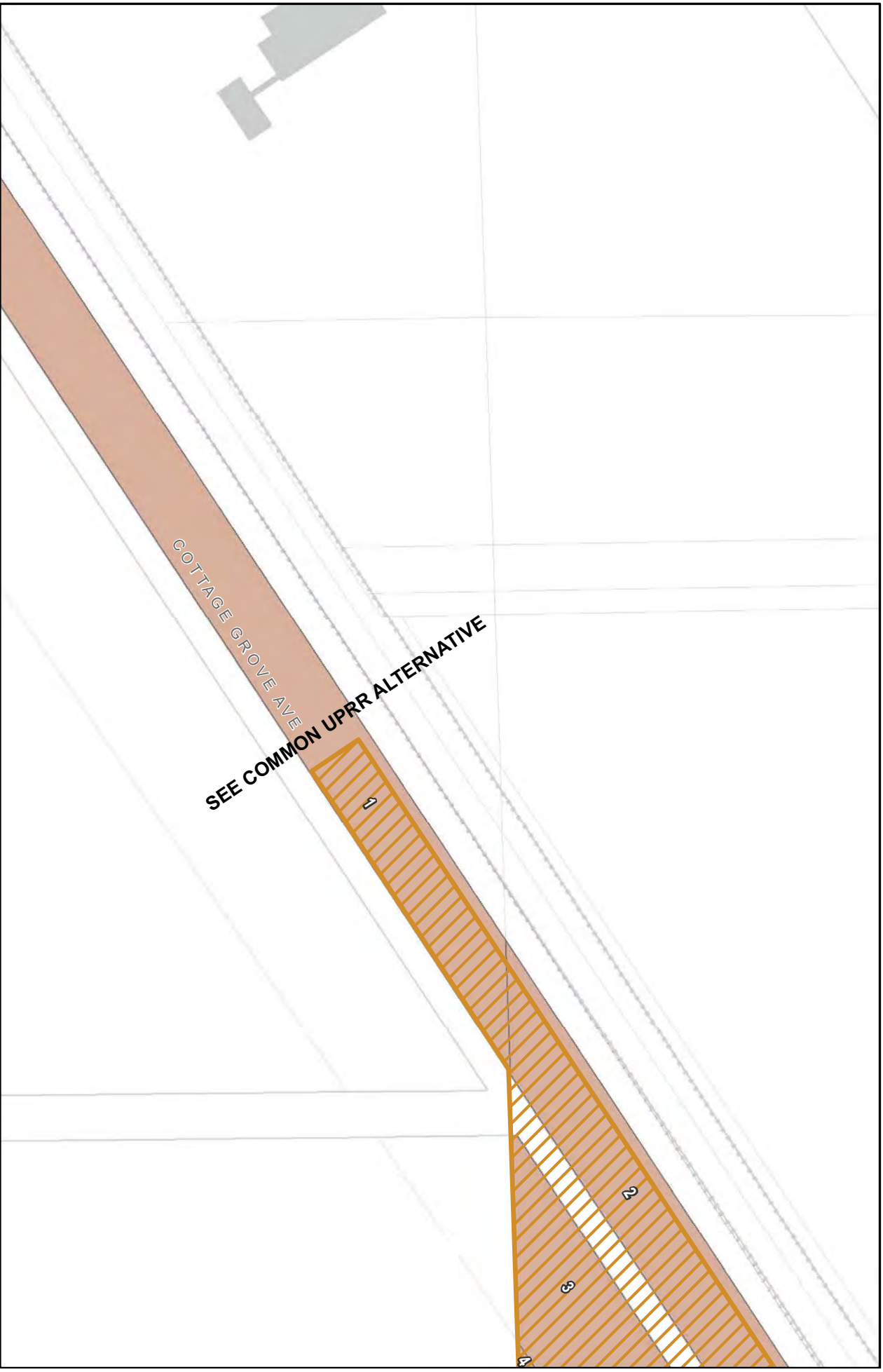

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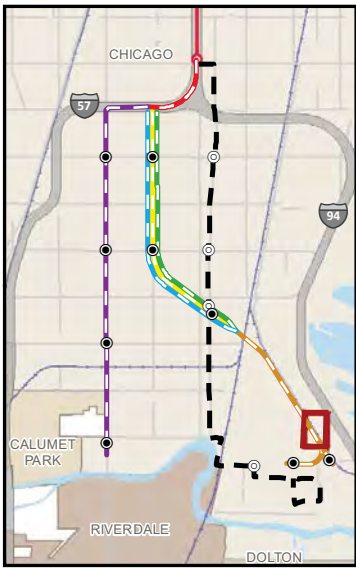

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 1 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.1

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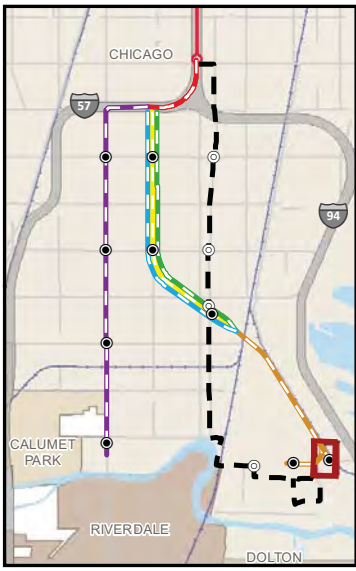

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 2 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.2

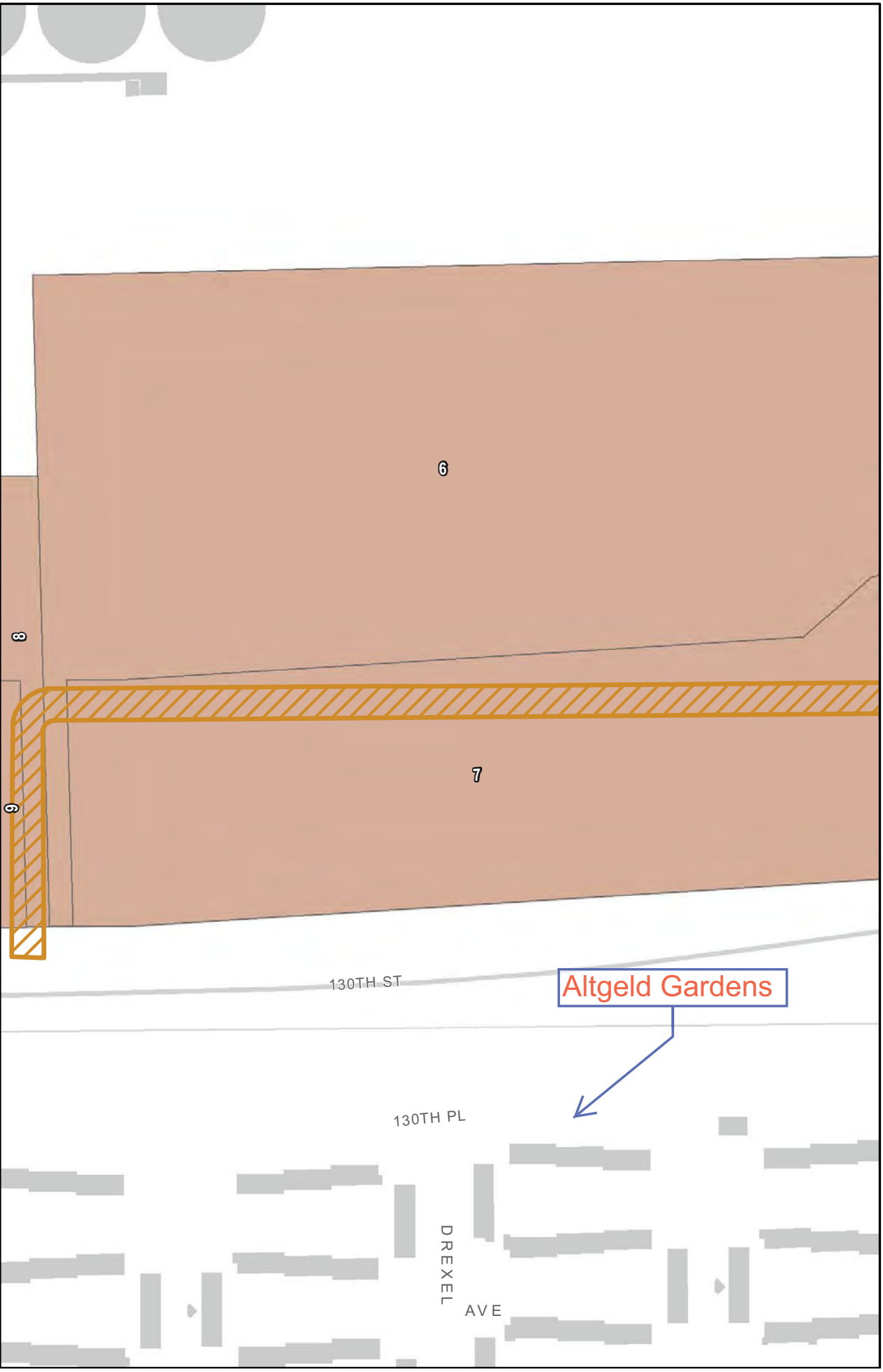

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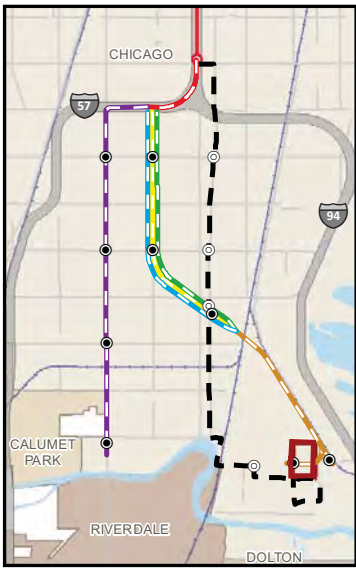

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 3 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.3

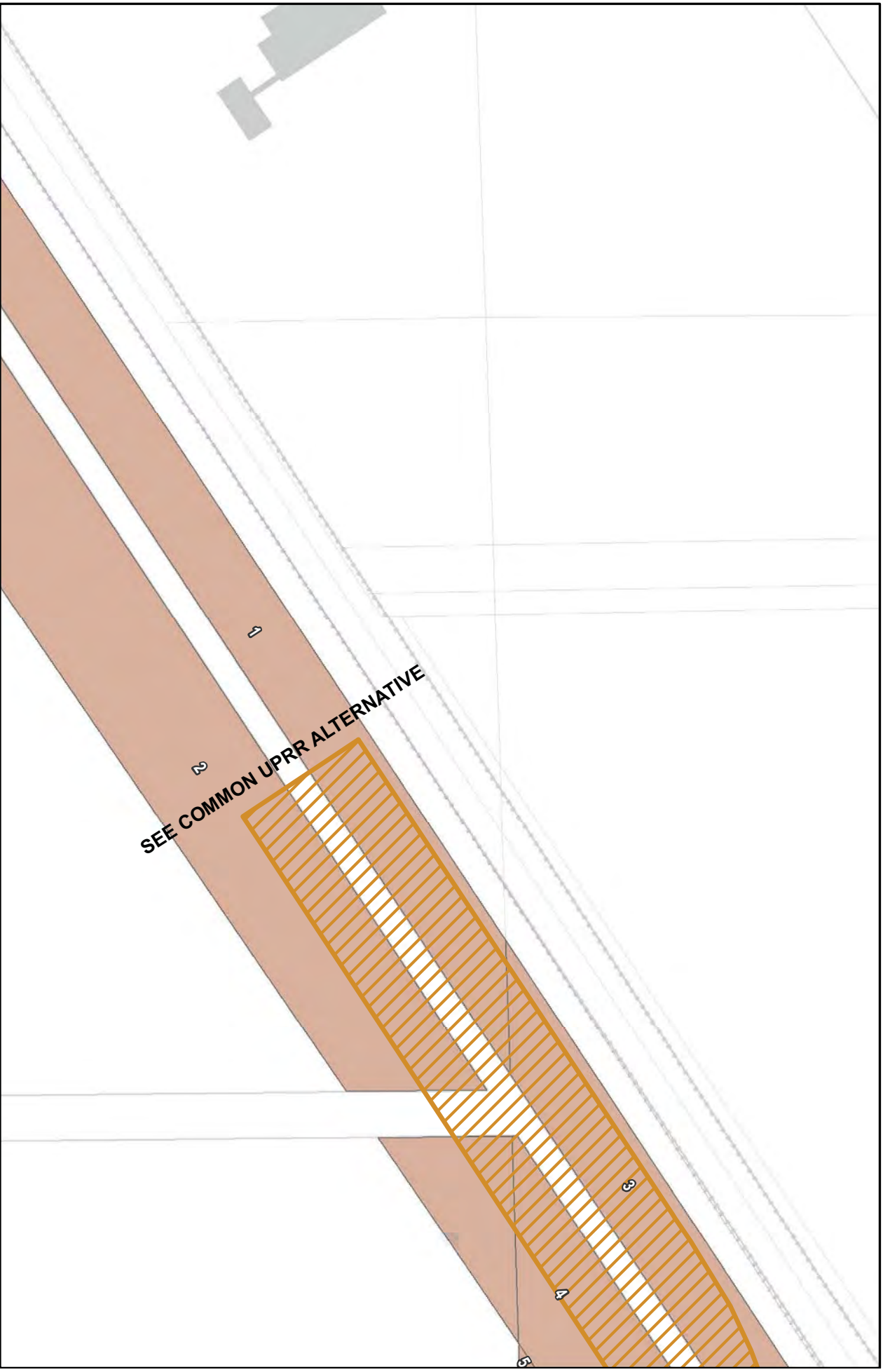

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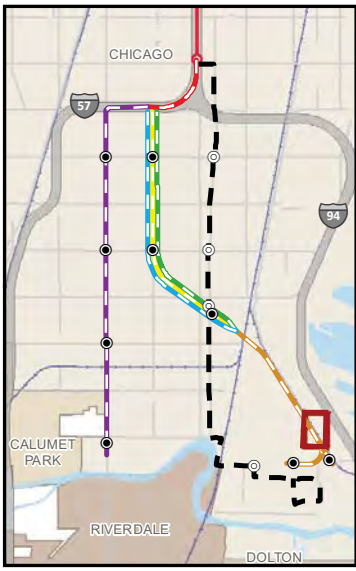

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 1 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.1

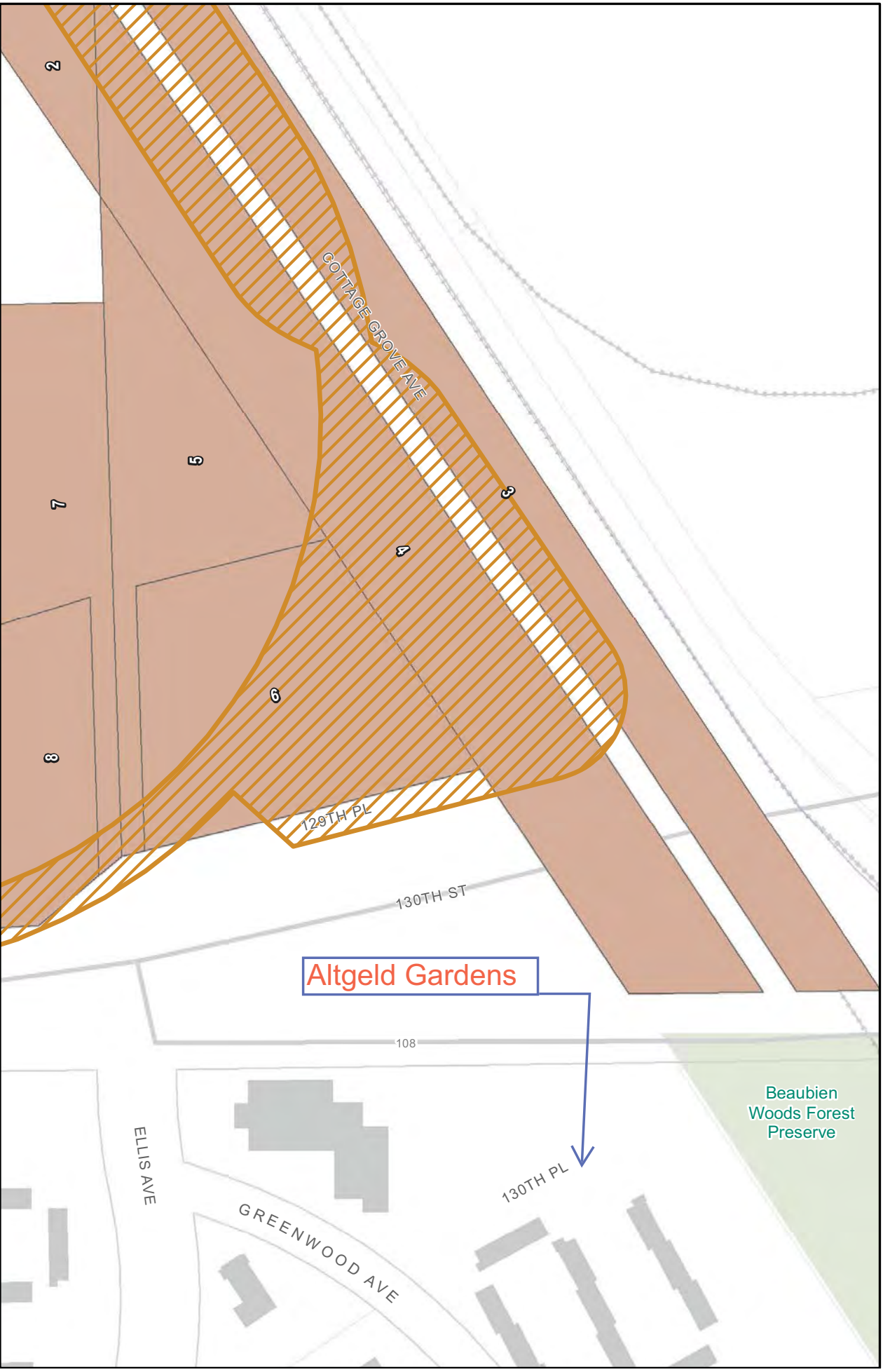

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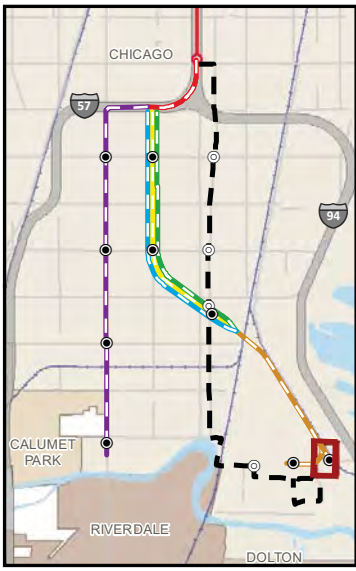

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 2 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.2

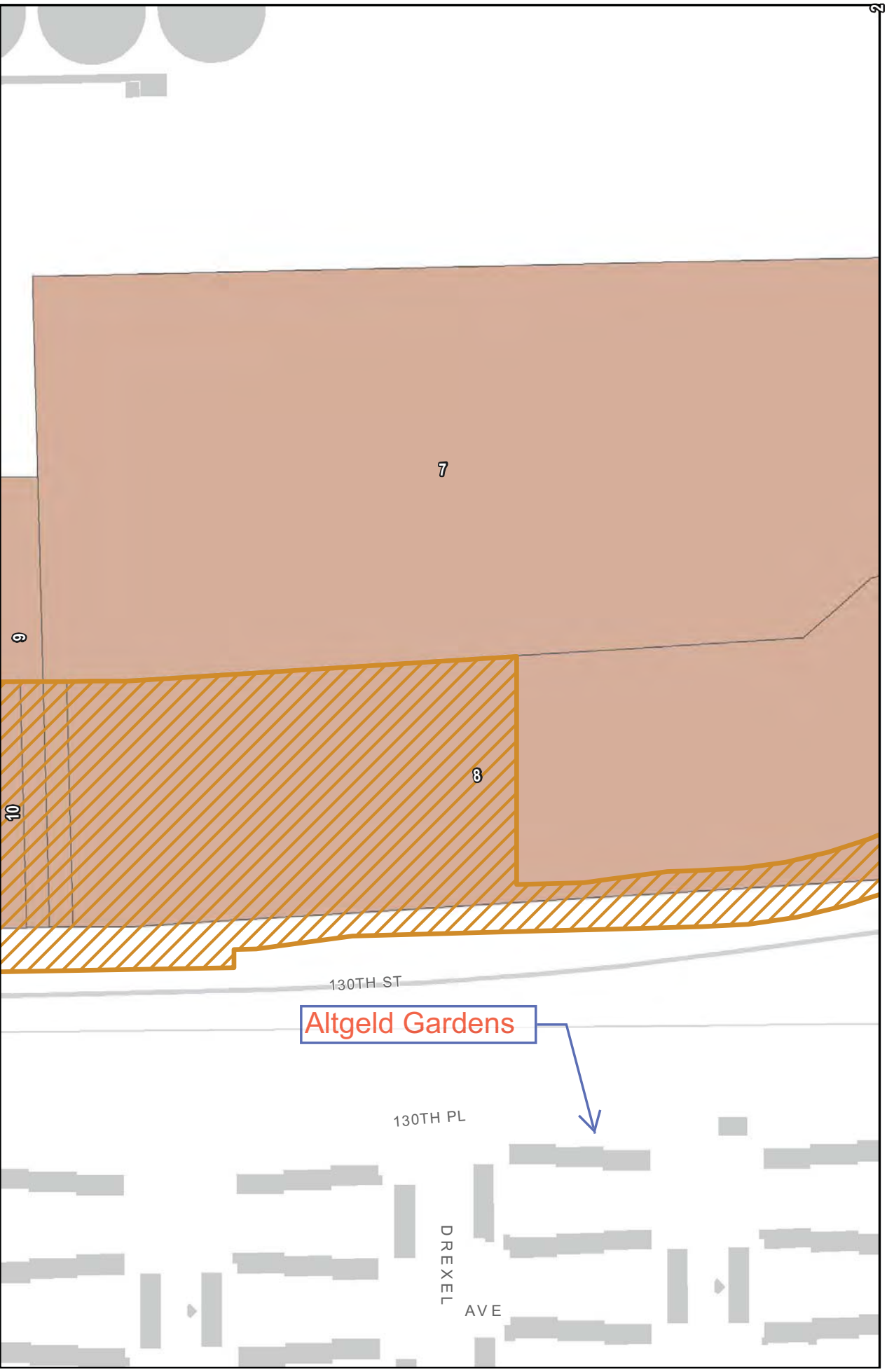

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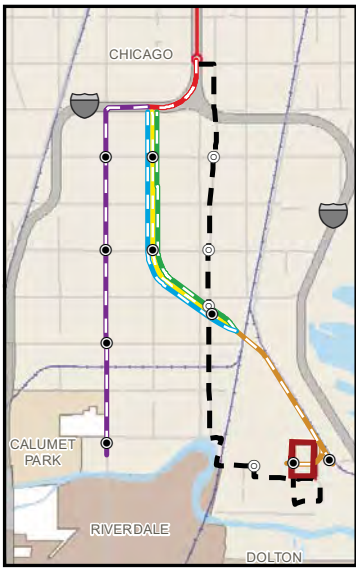

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 3 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.3

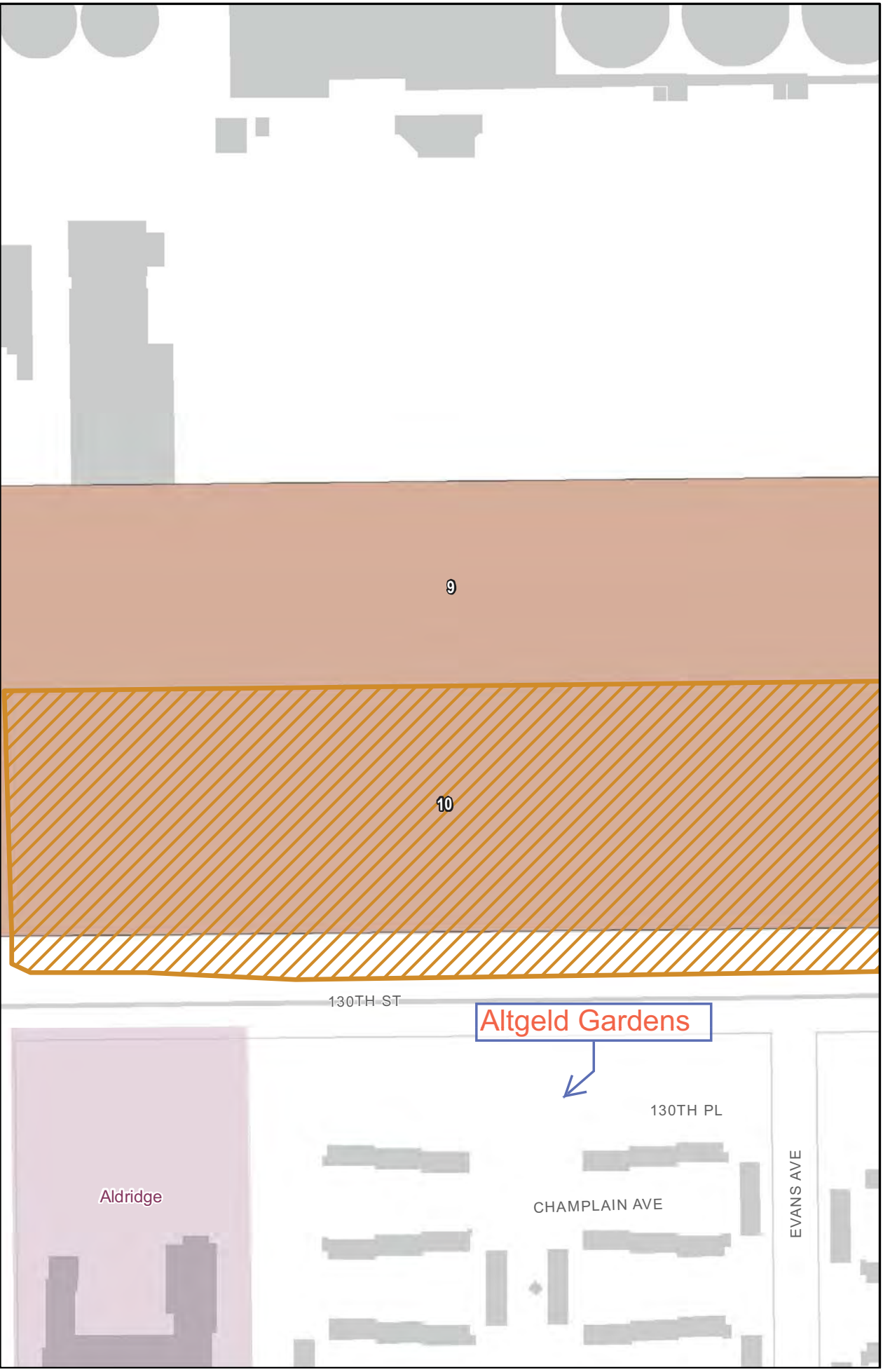

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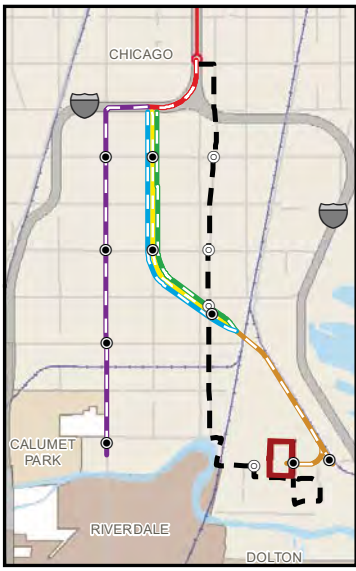

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 4 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.4

Appendix D-3:
UPRR East Option Displacement Maps

Note: The displacement maps for the East and West Option in this appendix have been superseced by the maps included in Appendix I of the Displacements and Relocation of Existing Uses Technical Memorandum.

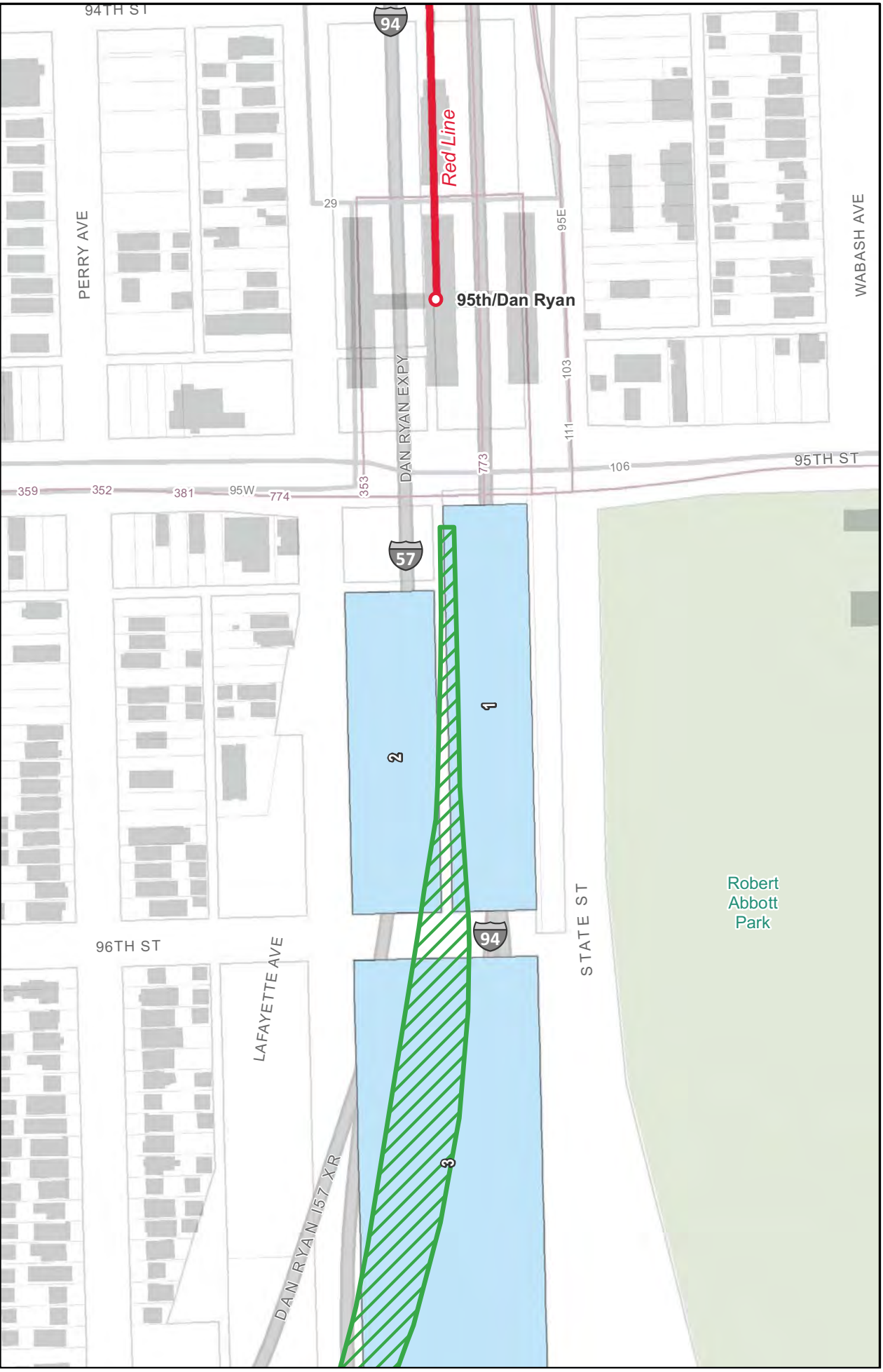

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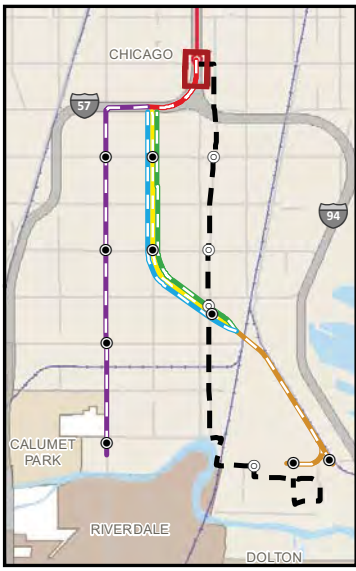

Legend

UPRR Rail Alternative East Option

Sheet 1 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.1

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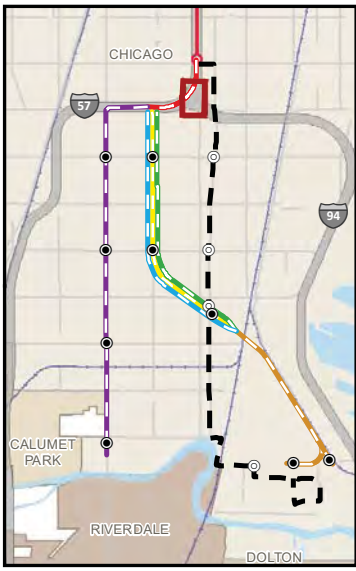

Legend

UPRR Rail Alternative East Option

Sheet 2 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.2

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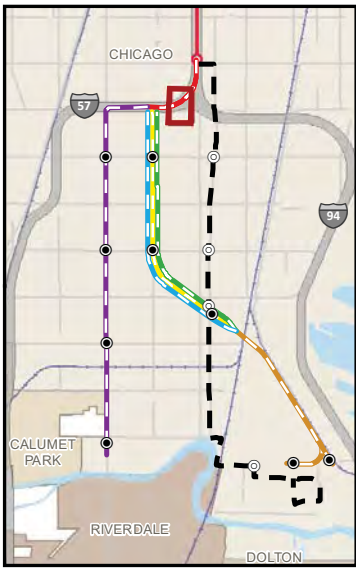

Legend

UPRR Rail Alternative East Option

Sheet 3 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.3

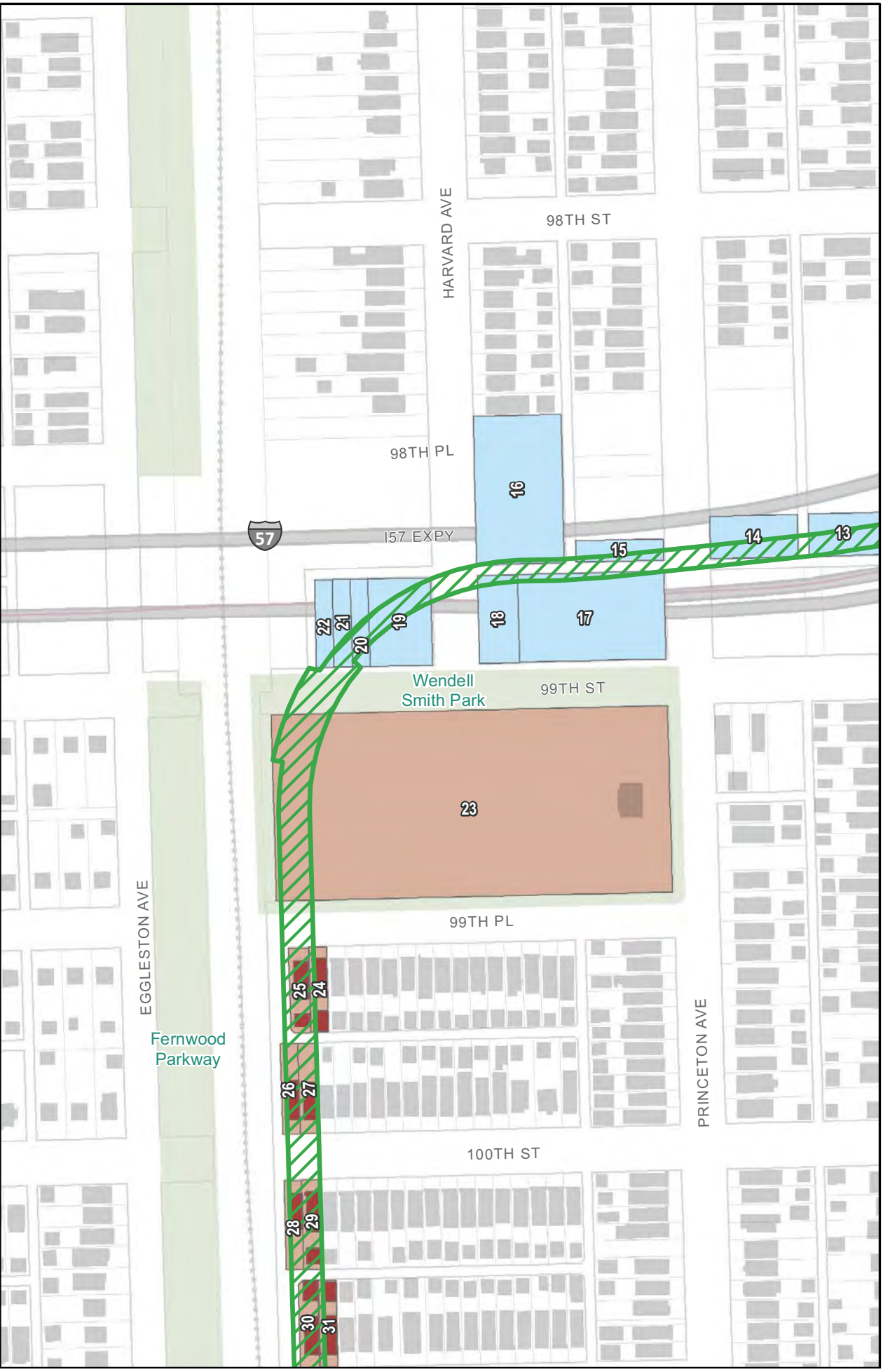

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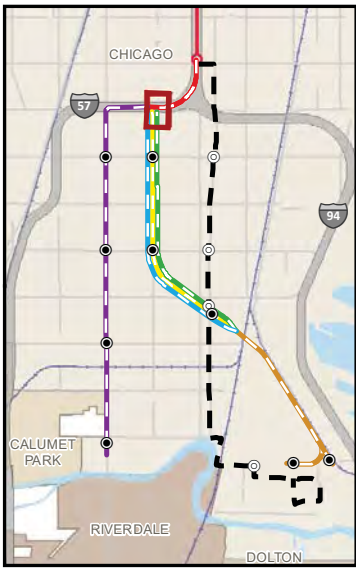

Legend

UPRR Rail Alternative East Option

Sheet 4 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.4

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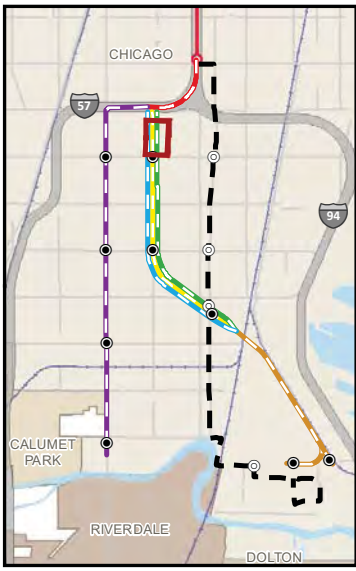

Legend

UPRR Rail Alternative East Option

Sheet 5 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.5

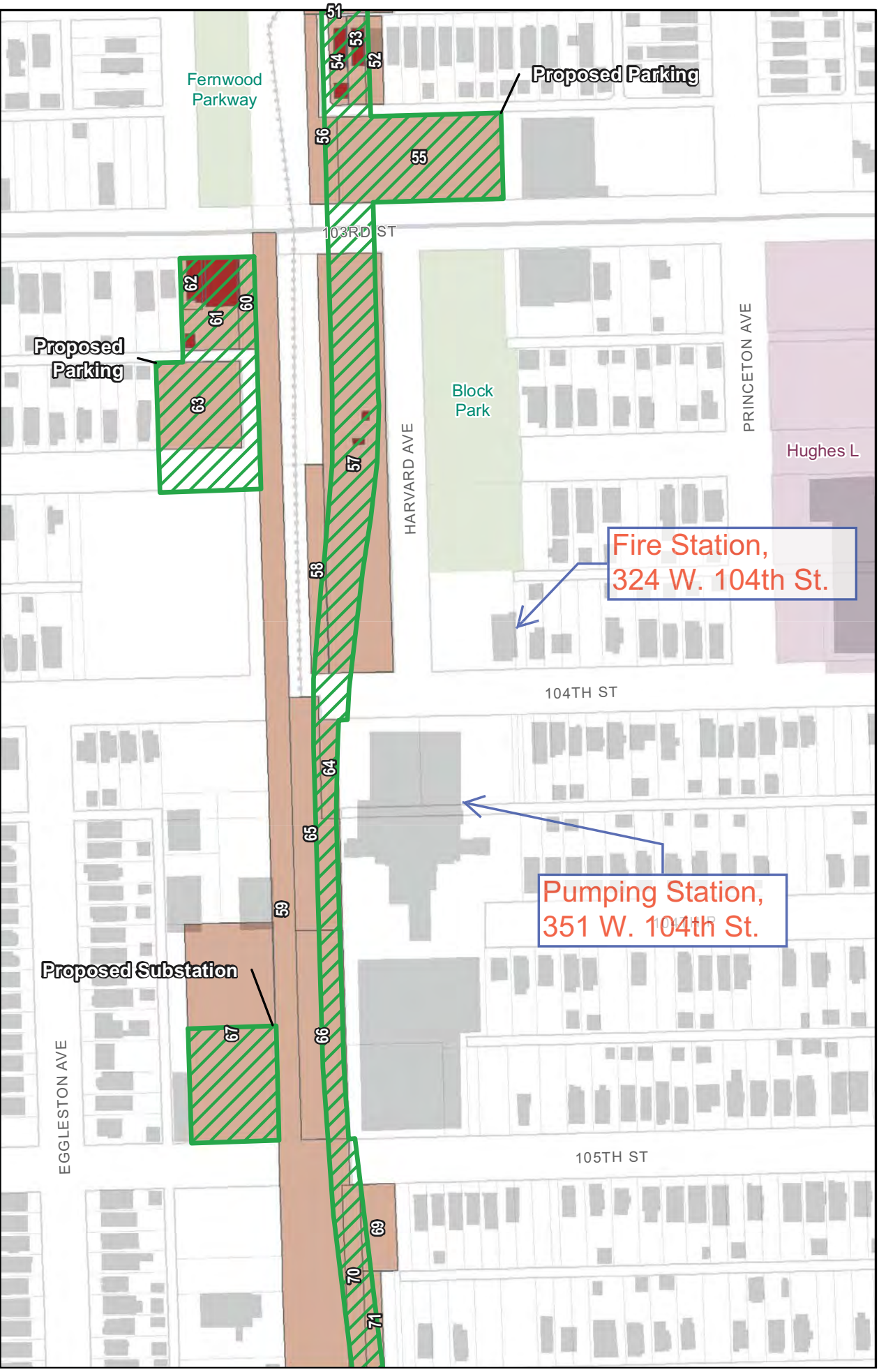

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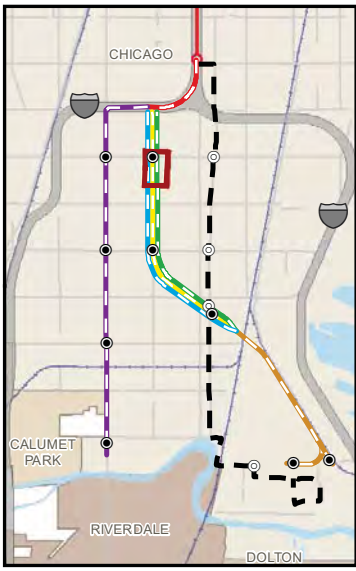

Legend

UPRR Rail Alternative East Option

Sheet 6 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.6

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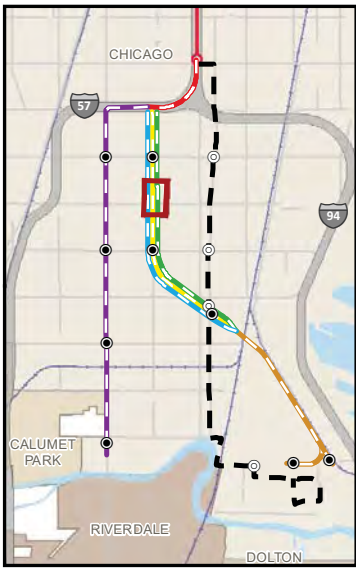

Legend

UPRR Rail Alternative East Option

Sheet 7 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.7

Romanesque Revival church,
10920 S. Princeton Ave.

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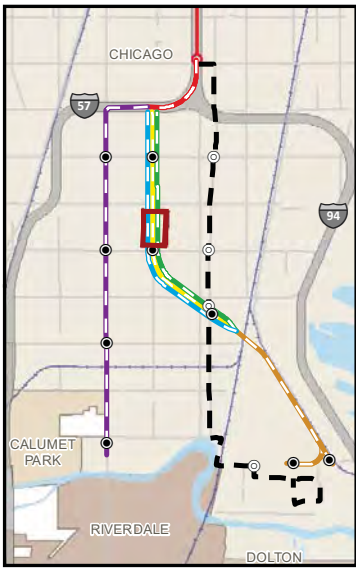

Legend

UPRR Rail Alternative East Option

Sheet 8 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.8

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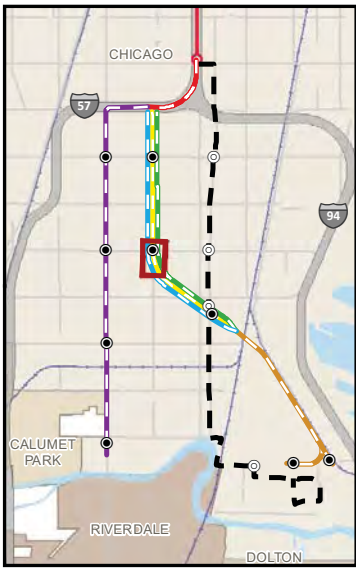

Legend

UPRR Rail Alternative East Option

Sheet 9 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.9

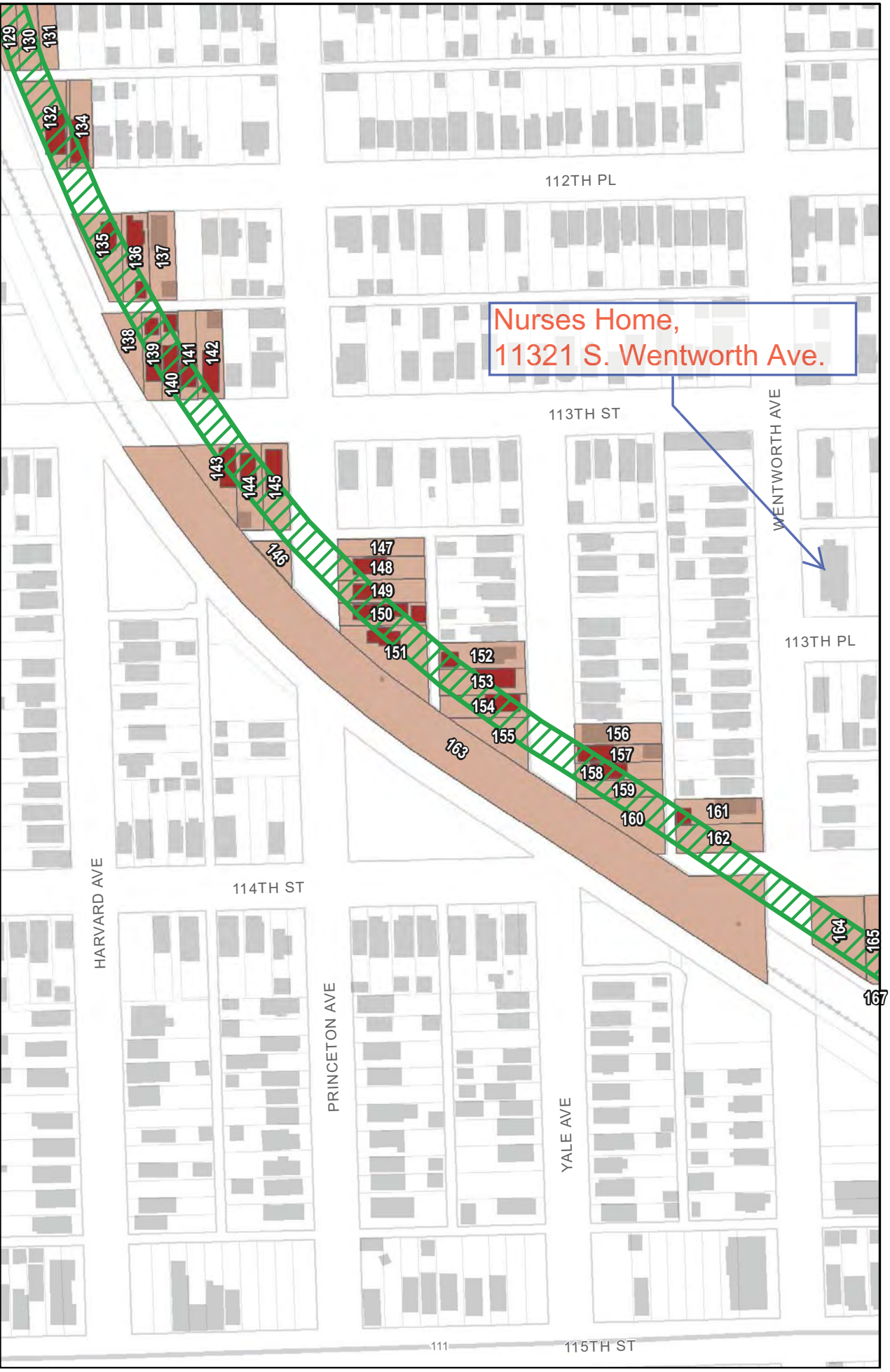

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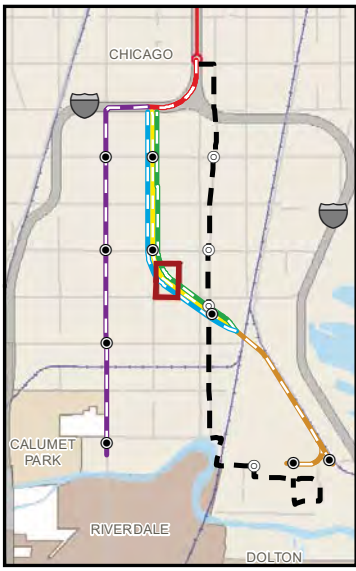

Legend

UPRR Rail Alternative East Option

Sheet 10 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.10

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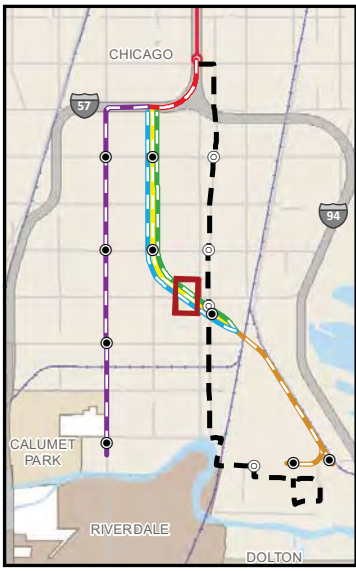

Legend

UPRR Rail Alternative East Option

Sheet 11 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.11

Venetian Hall,
133-139 E. Kensington Ave

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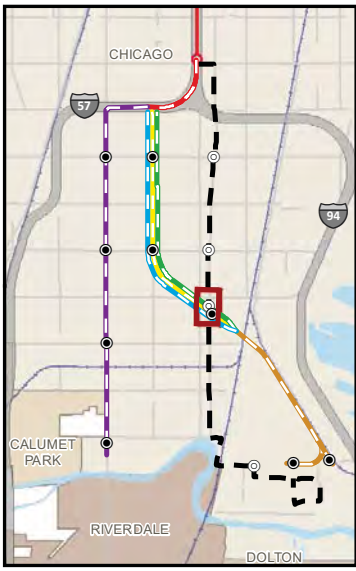

Legend

UPRR Rail Alternative East Option

Sheet 12 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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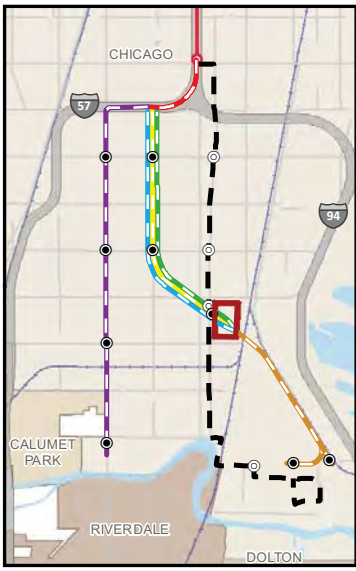

Legend

UPRR Rail Alternative East Option

Sheet 13 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.13

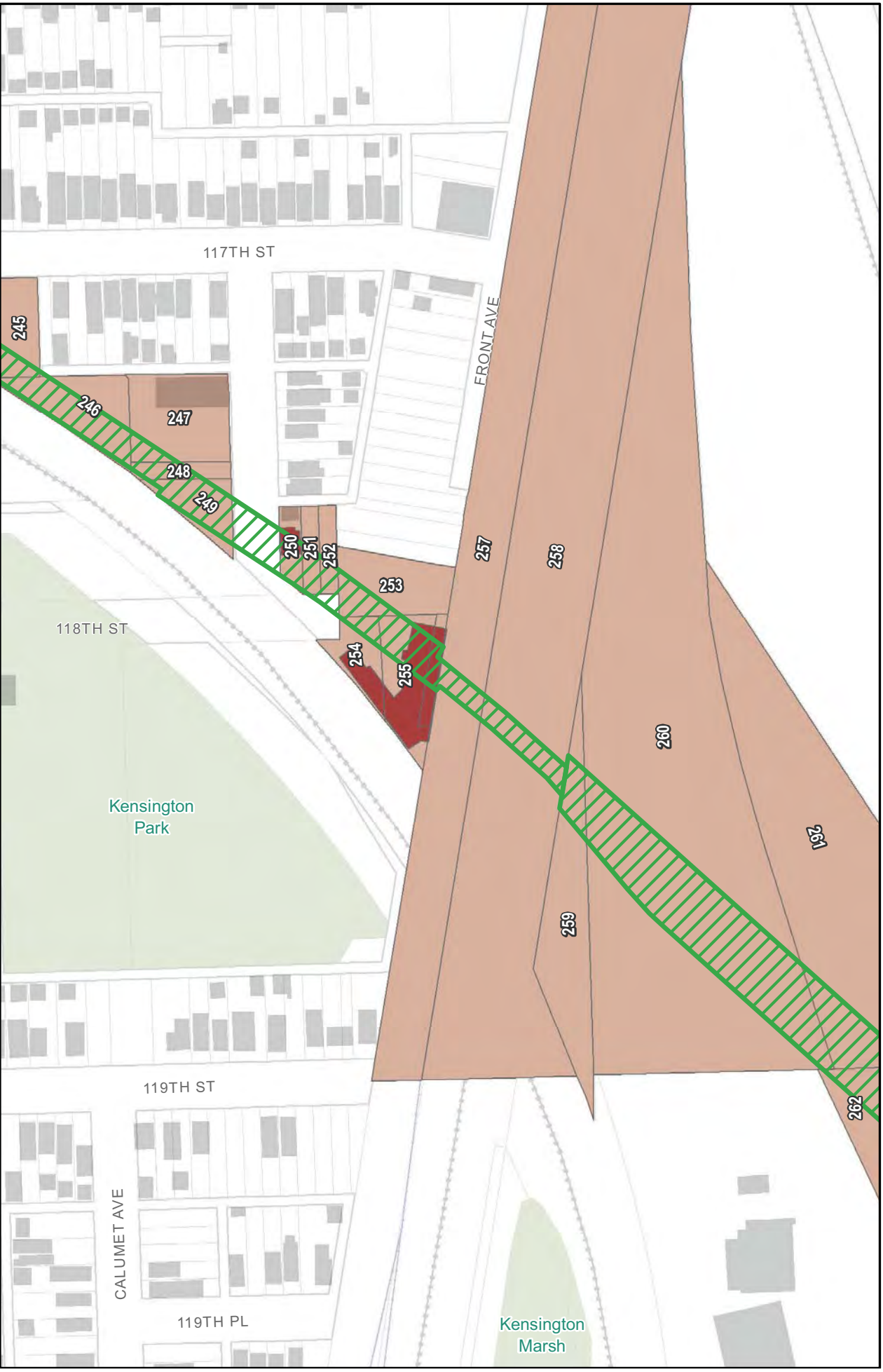

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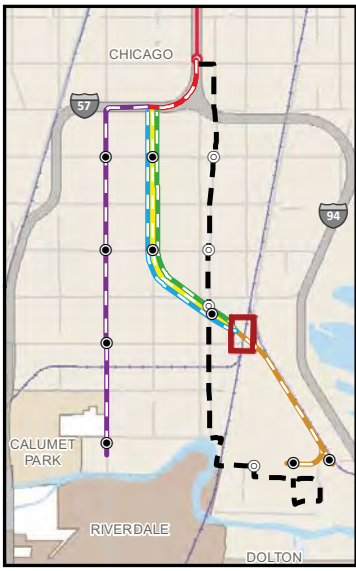

Legend

UPRR Rail Alternative East Option

Sheet 14 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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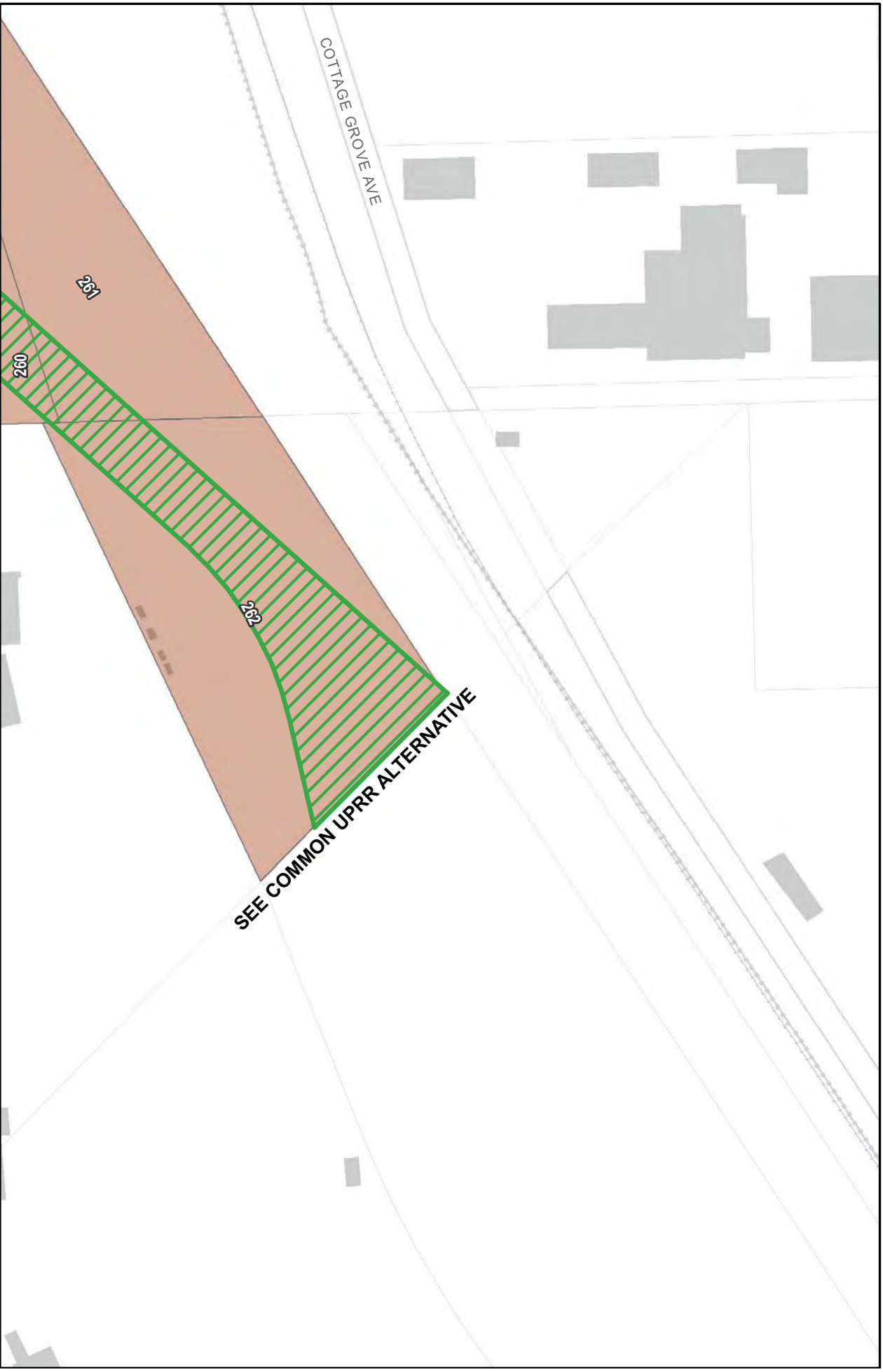

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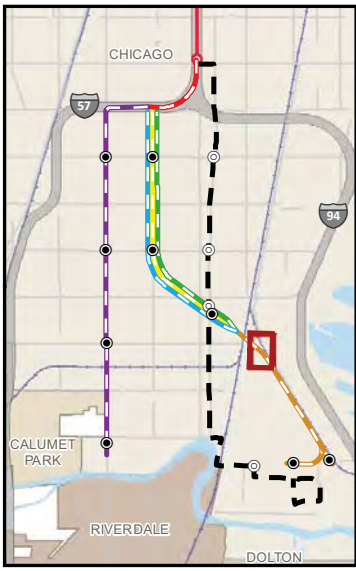

Legend

UPRR Rail Alternative East Option

Sheet 15 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_01.15

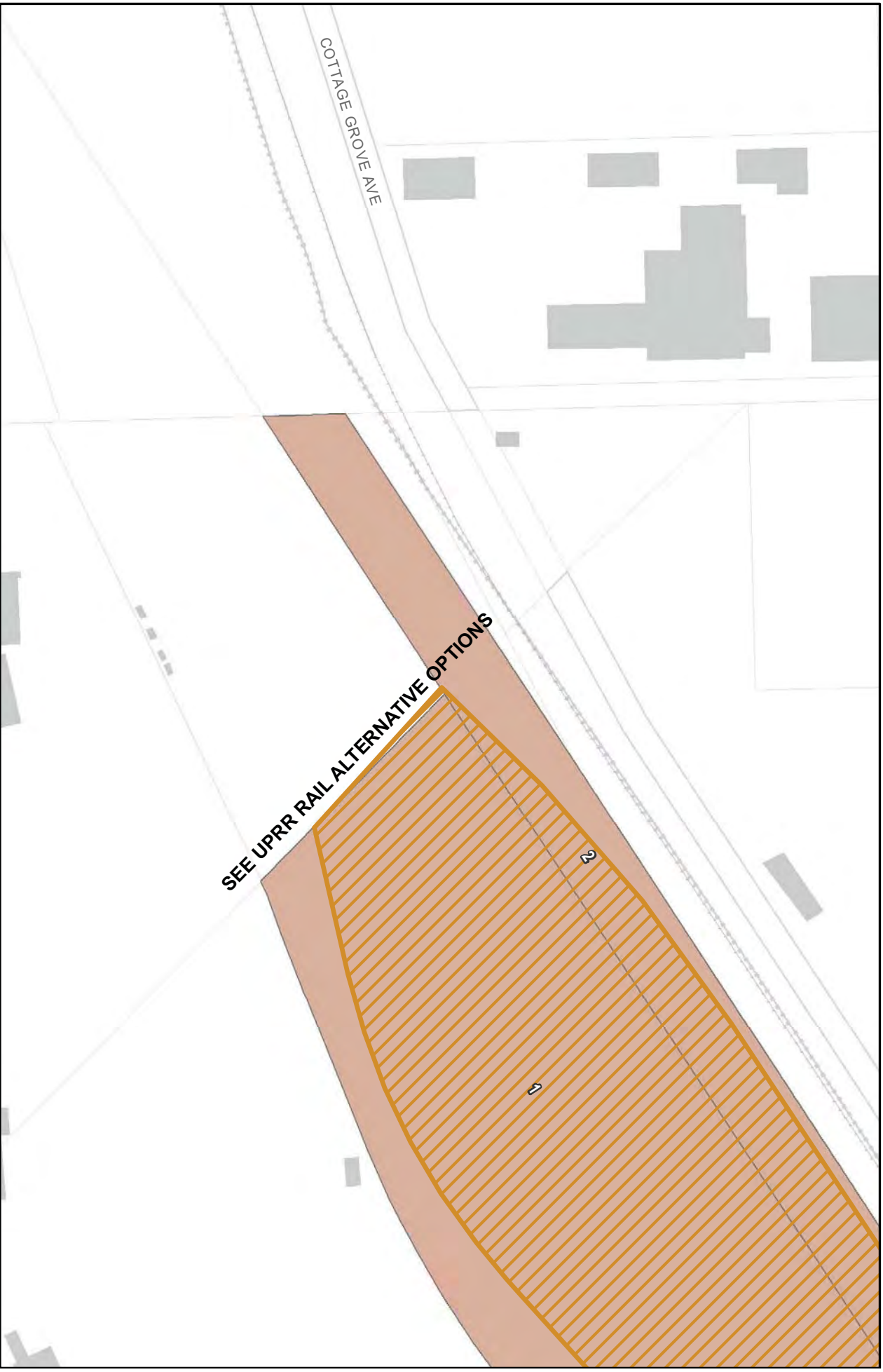

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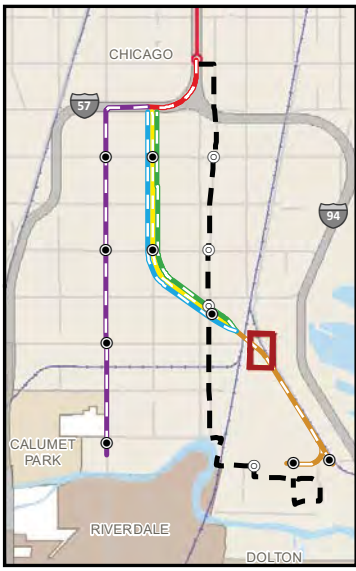

Legend

Common UPRR Rail Alternative

Sheet 1 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.1

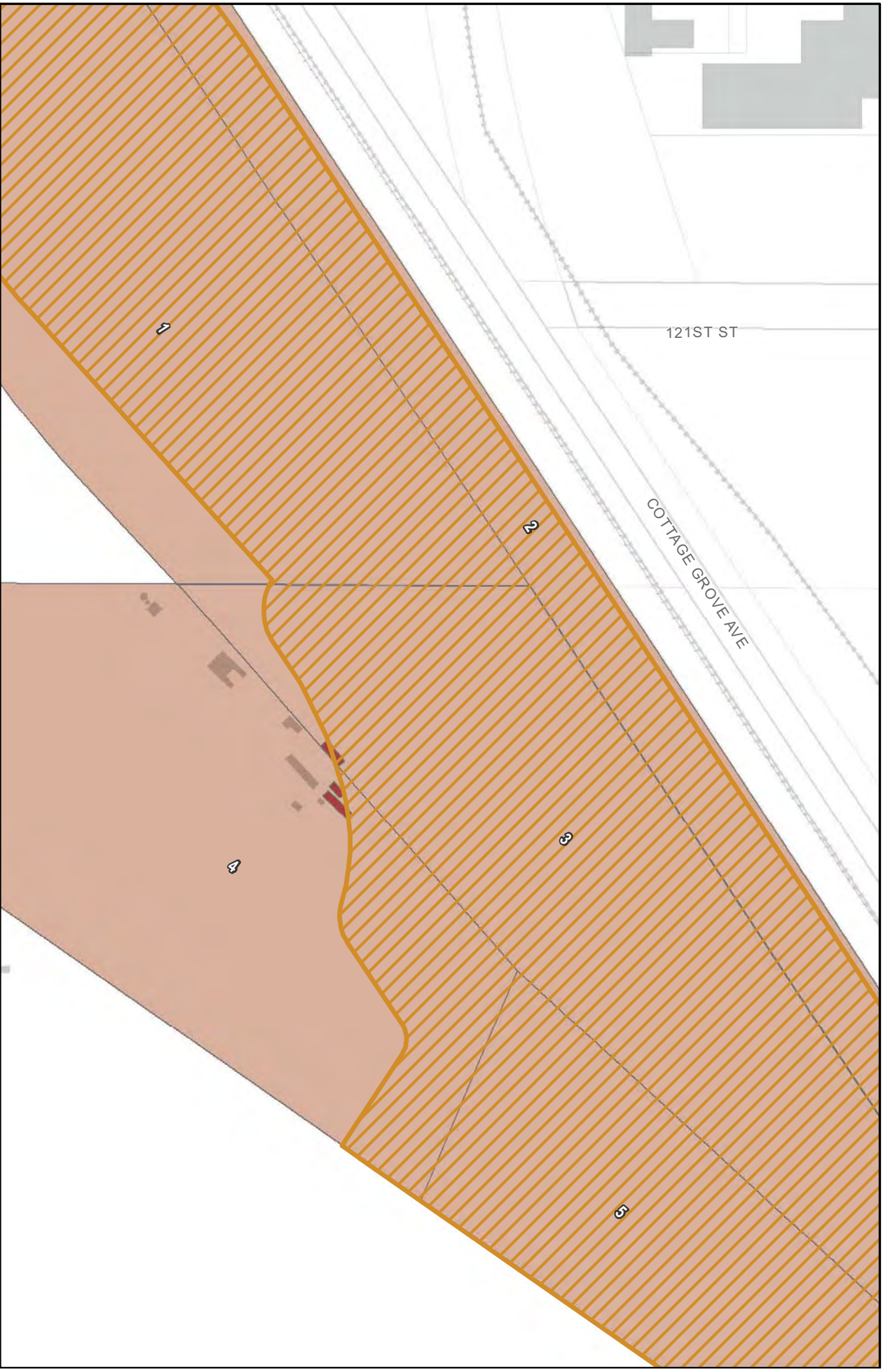

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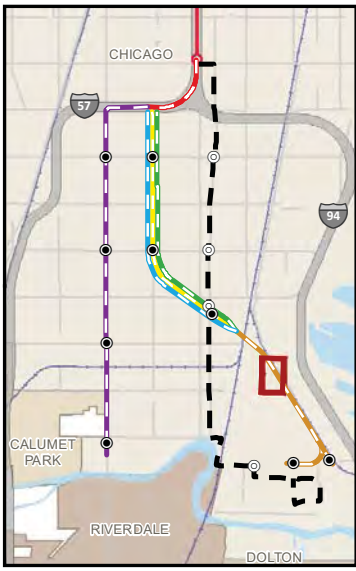

Legend

Common UPRR Rail Alternative

Sheet 2 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.2

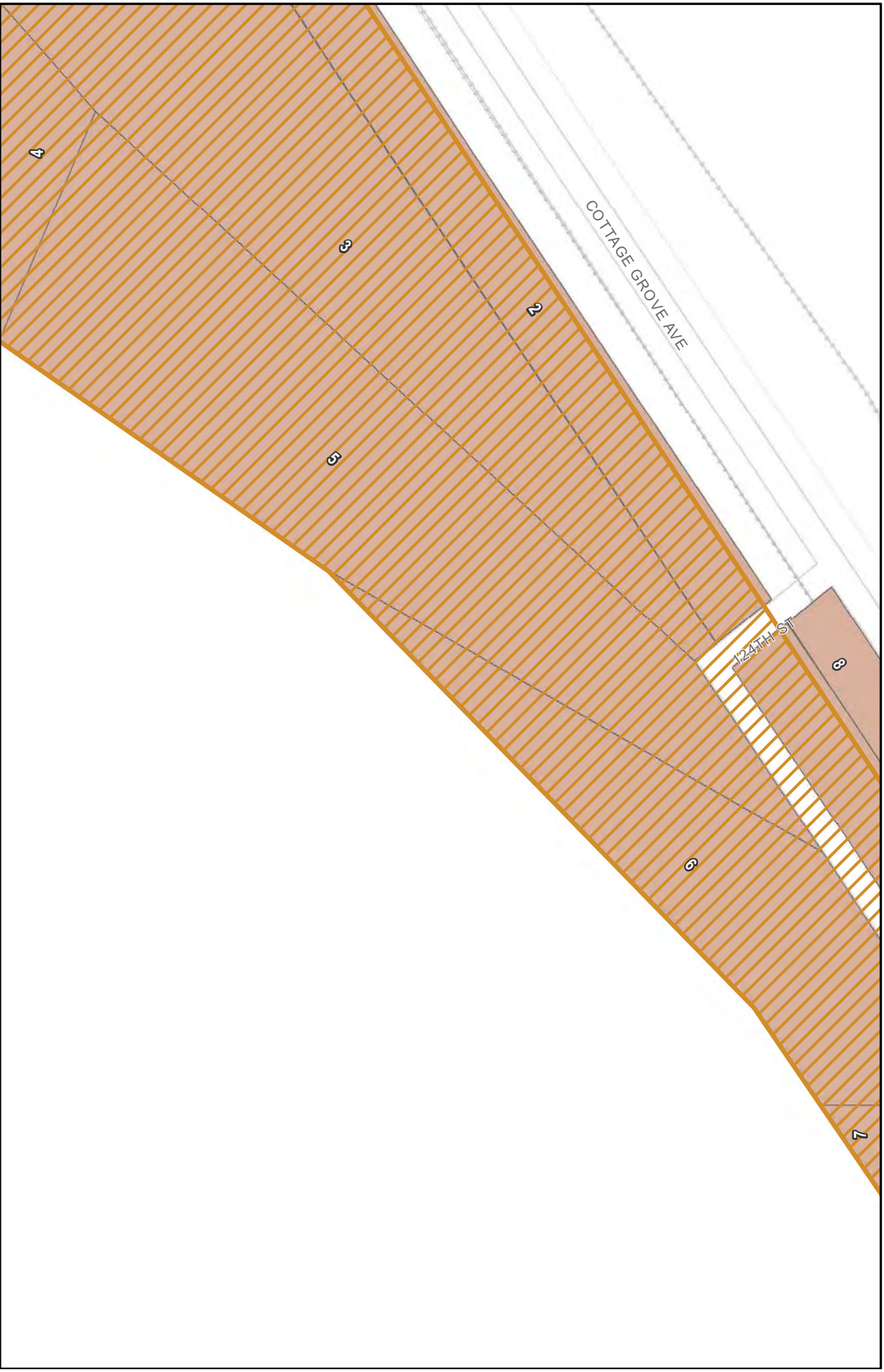

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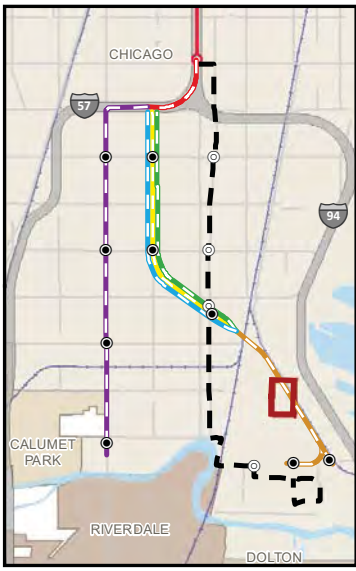

Legend

Common UPRR Rail Alternative

Sheet 3 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.3

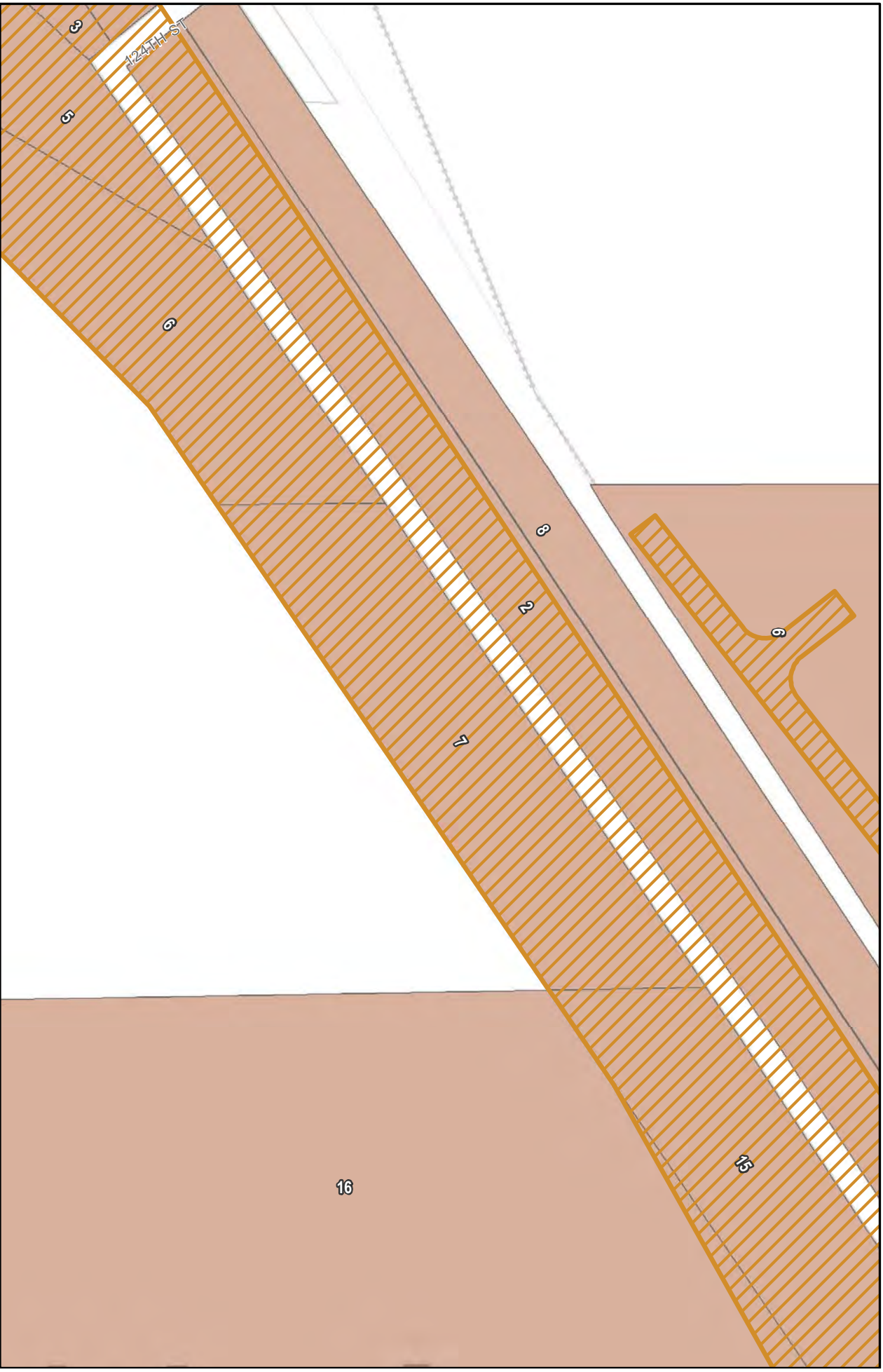

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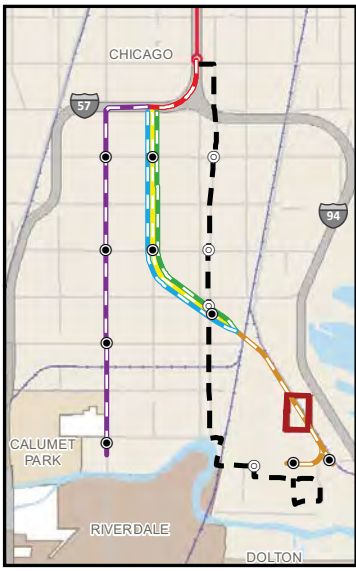

Legend

Common UPRR Rail Alternative

Sheet 4 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.4

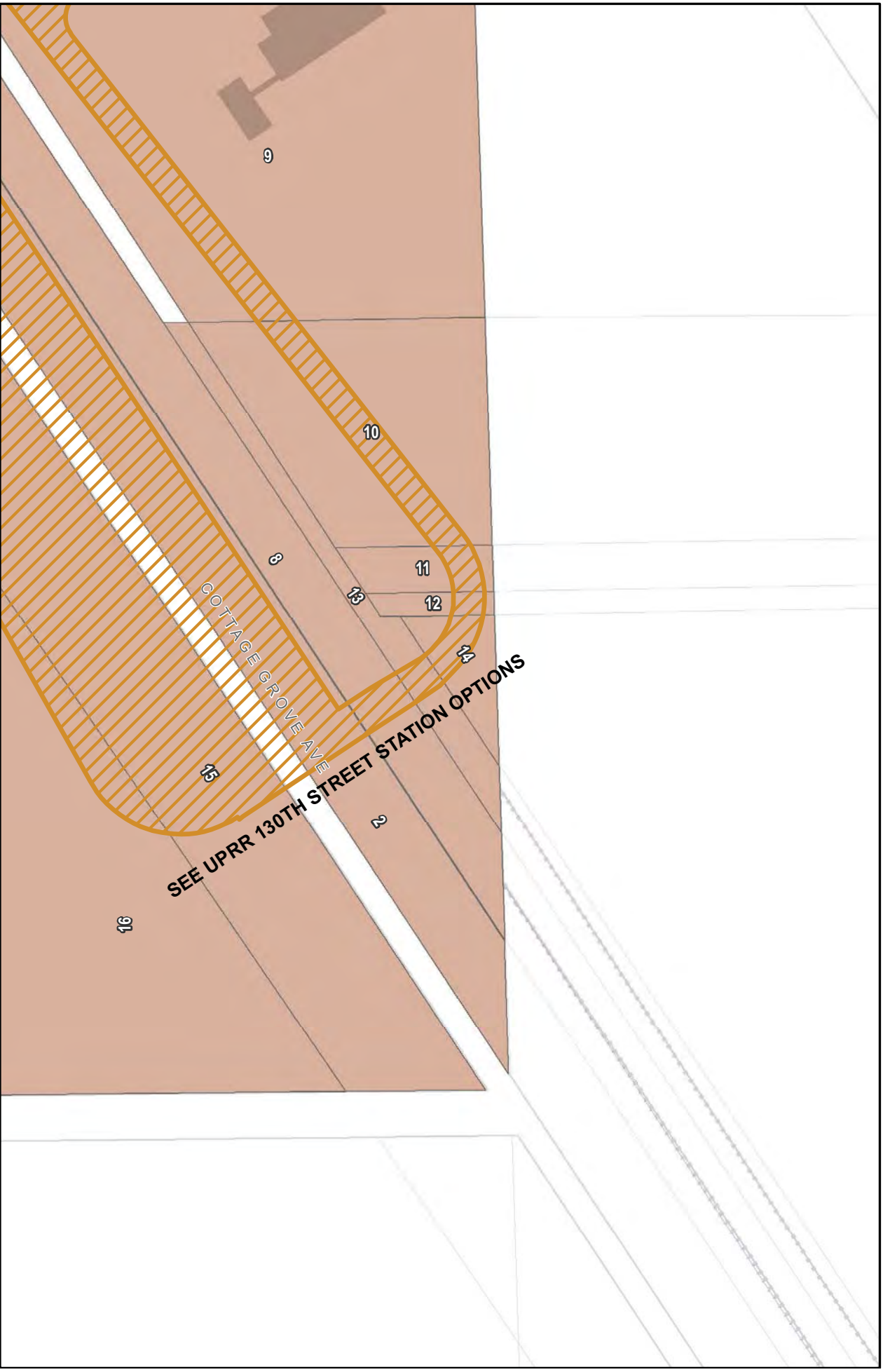

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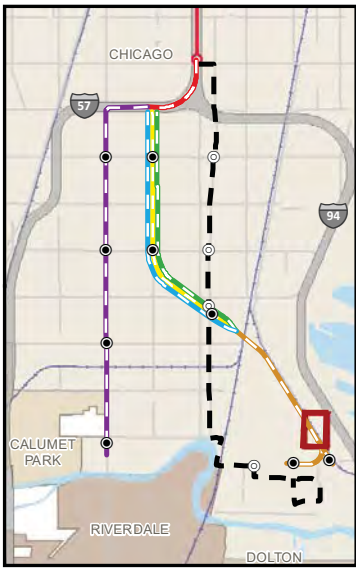

Legend

Common UPRR Rail Alternative

Sheet 5 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.5

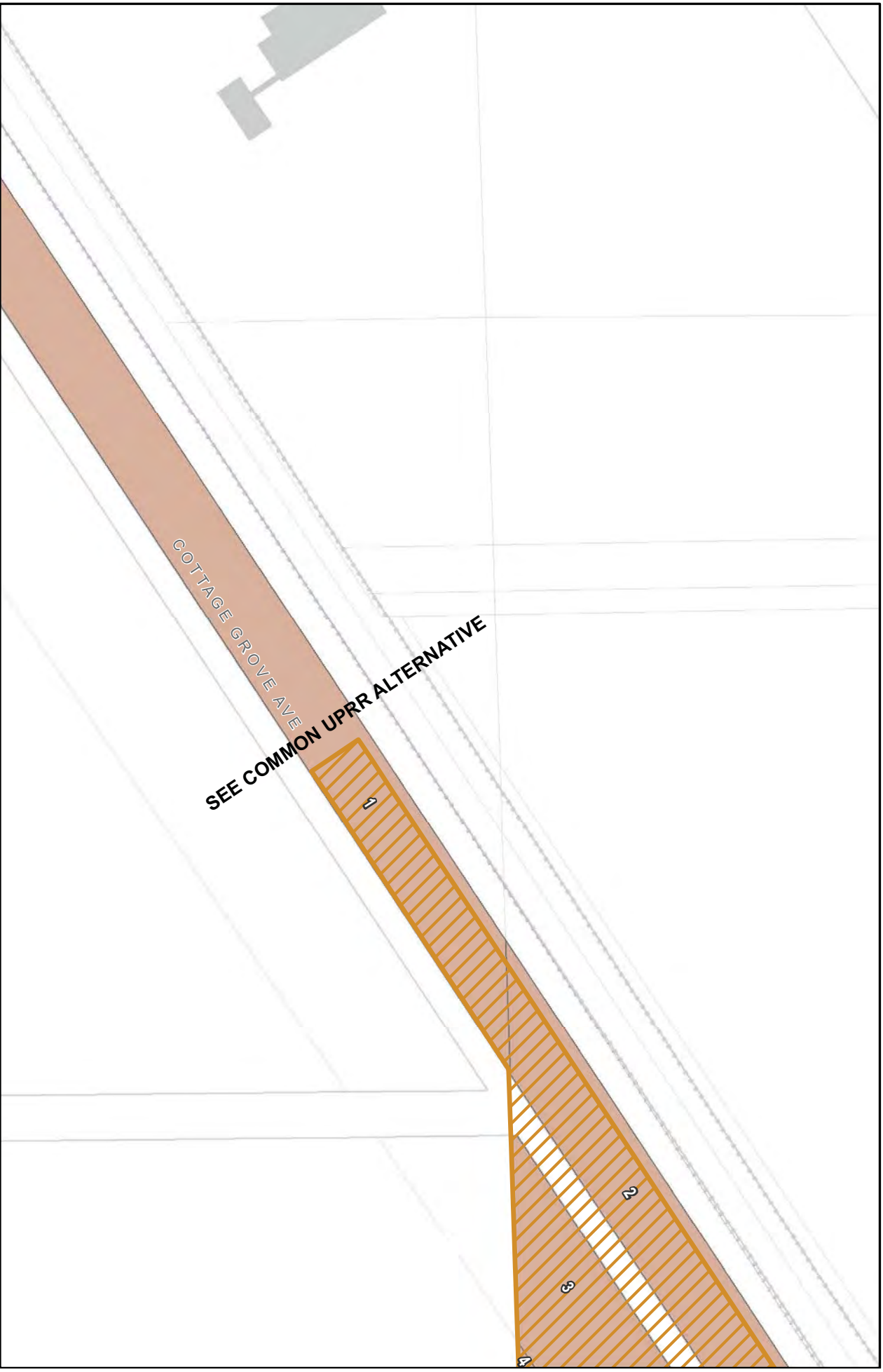

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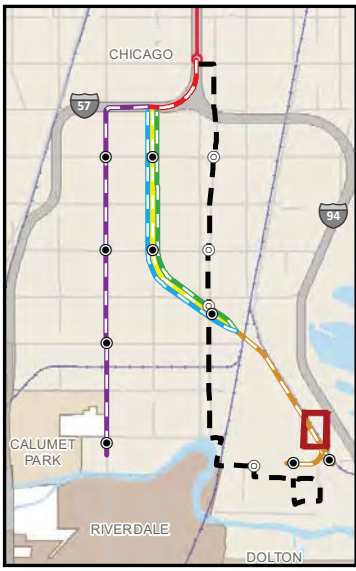

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 1 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.1

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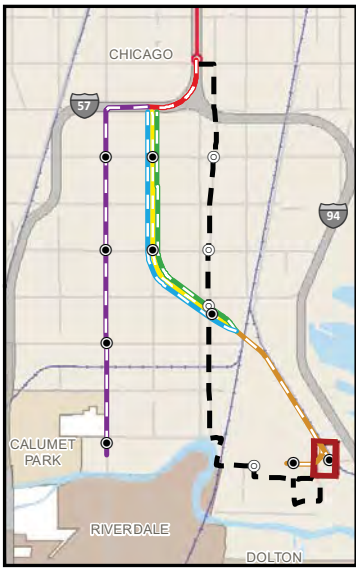

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 2 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.2

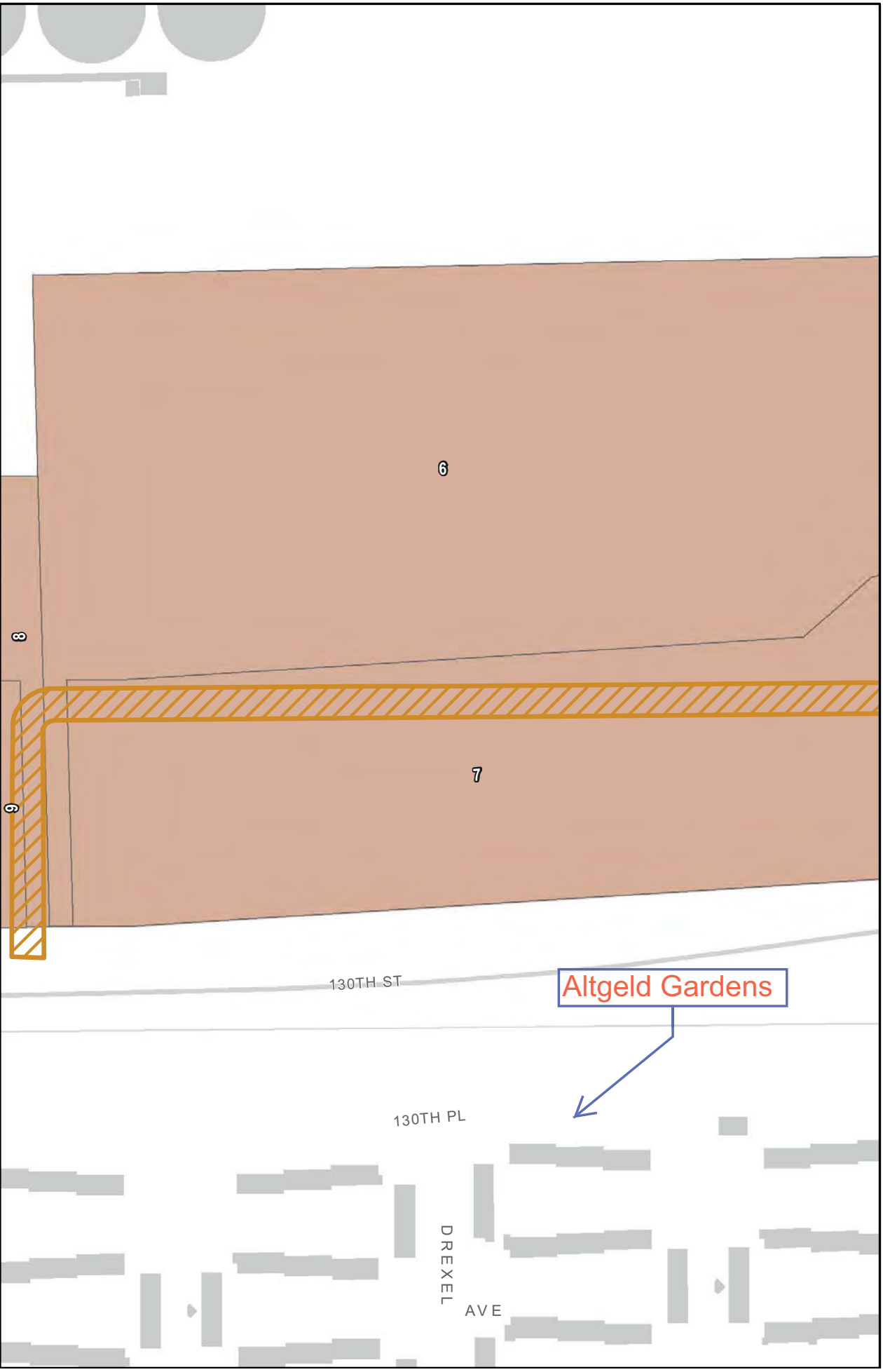

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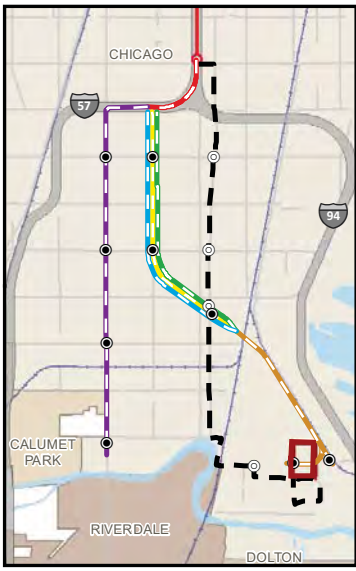

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 3 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.3

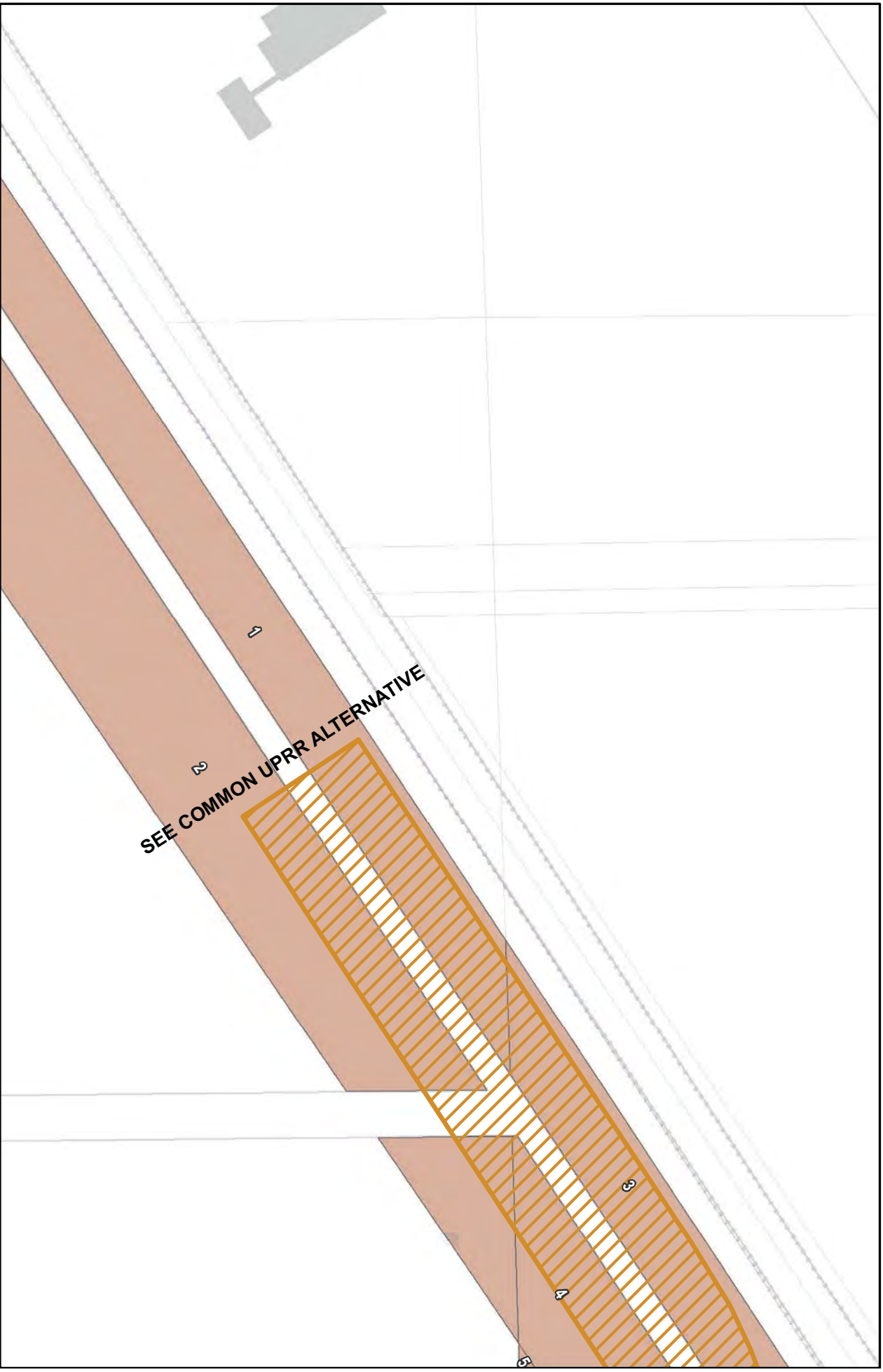

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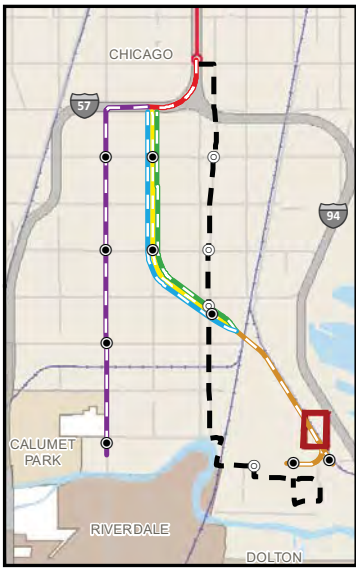

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 1 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.1

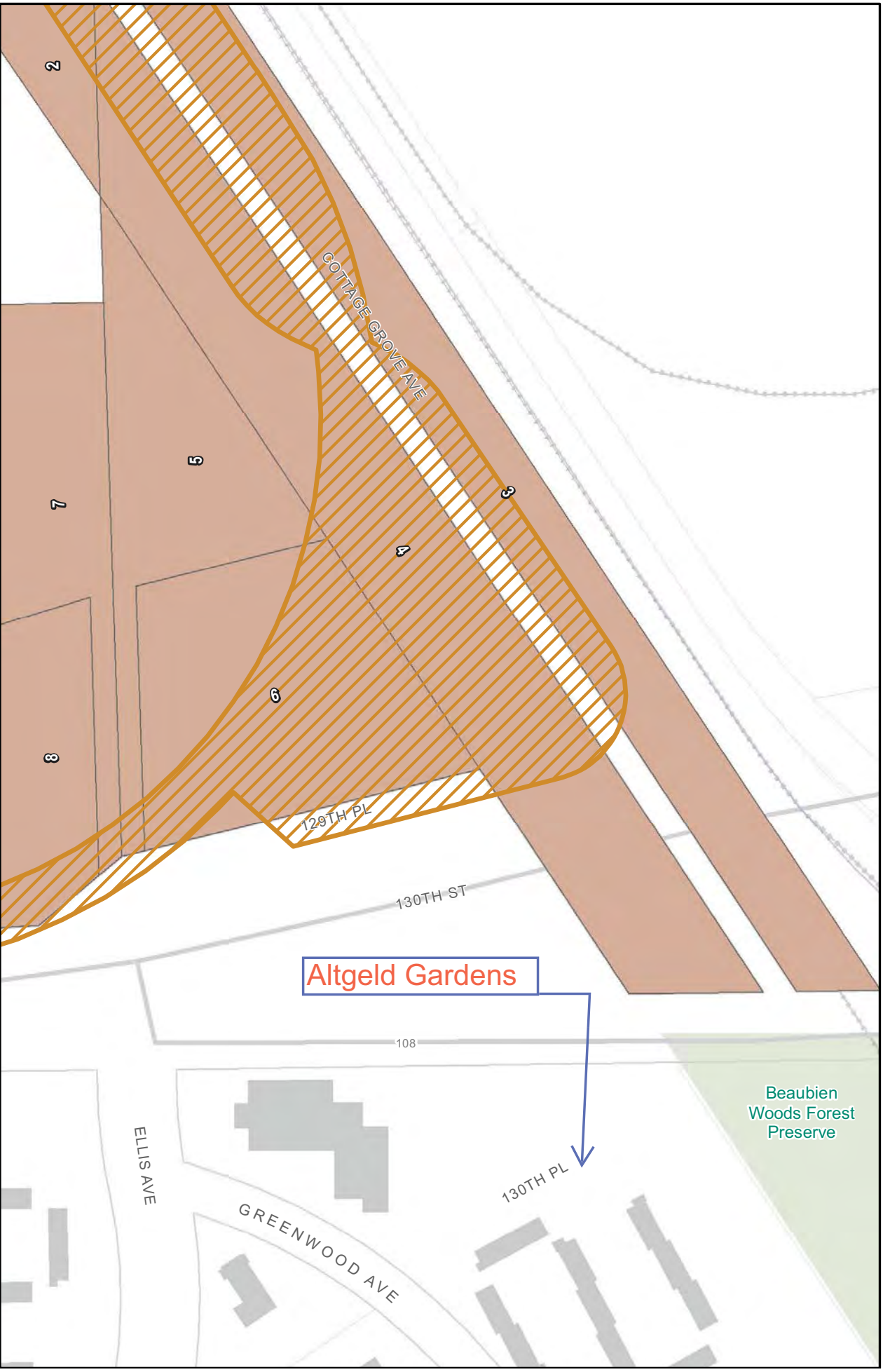

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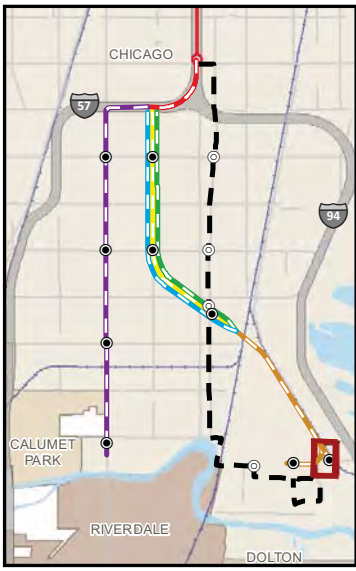

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 2 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.2

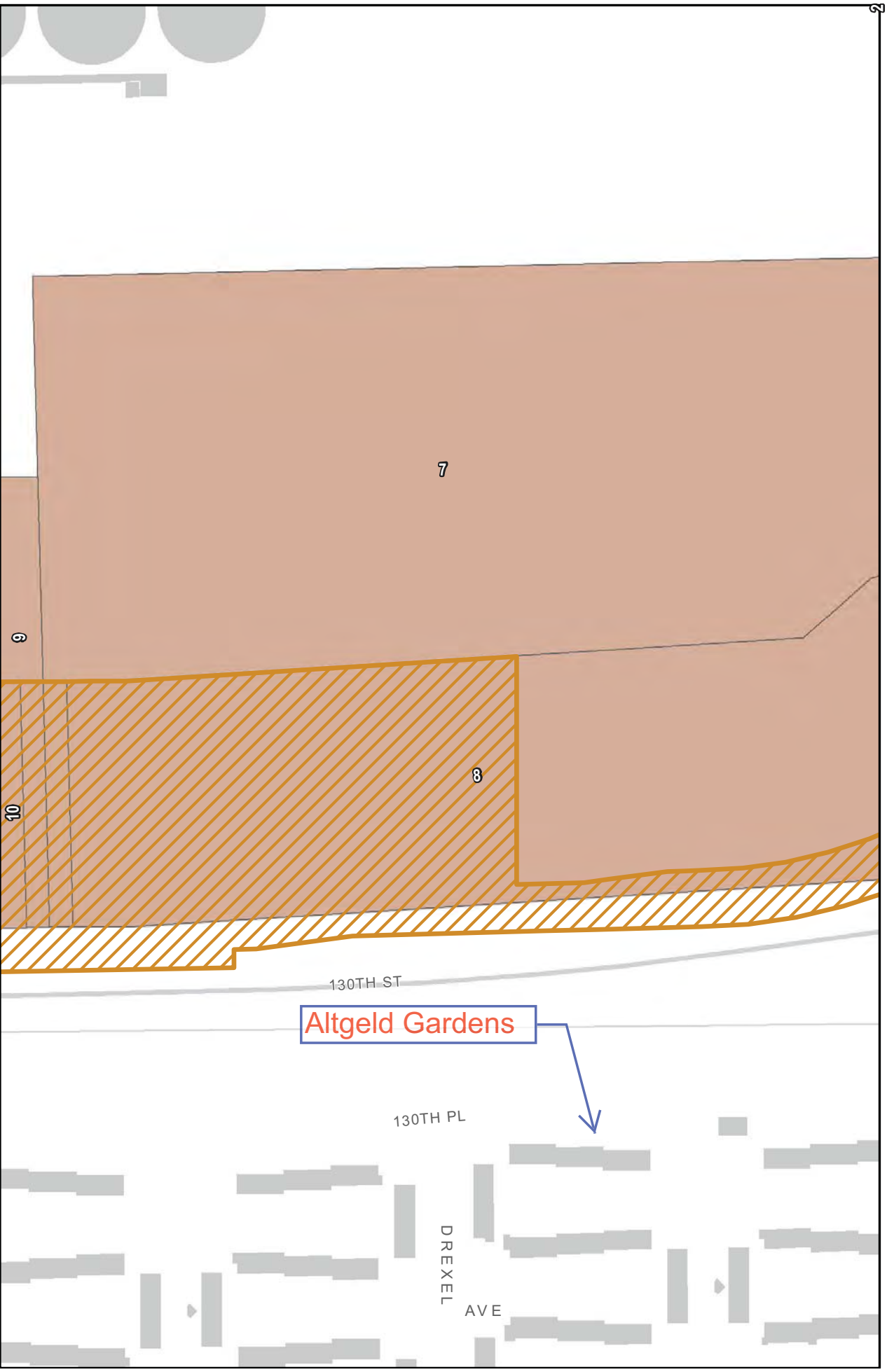

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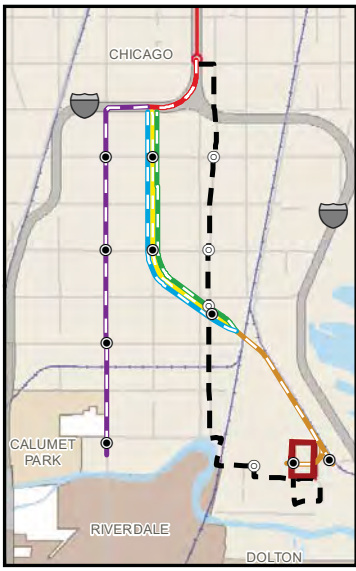

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 3 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.3

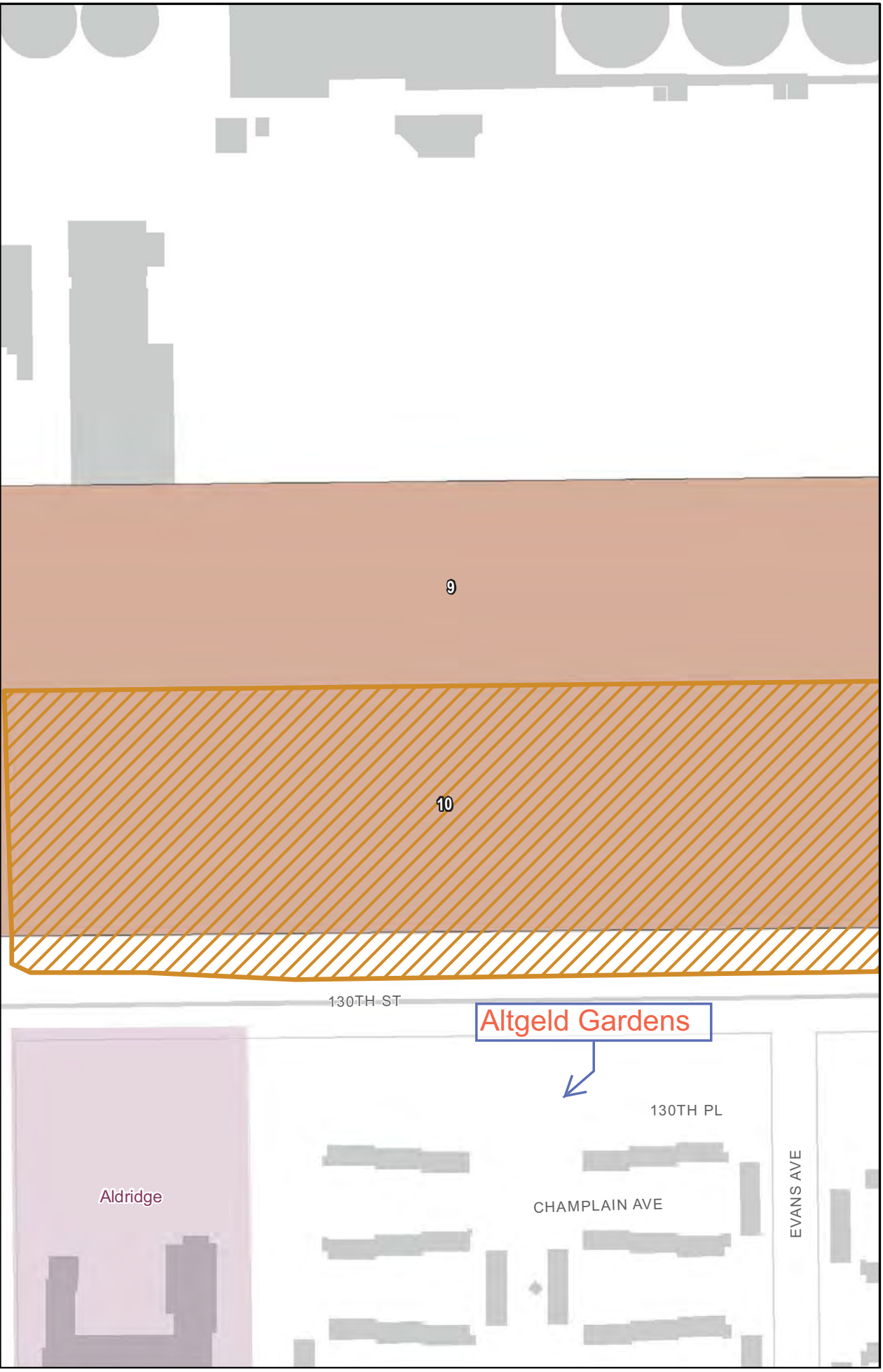

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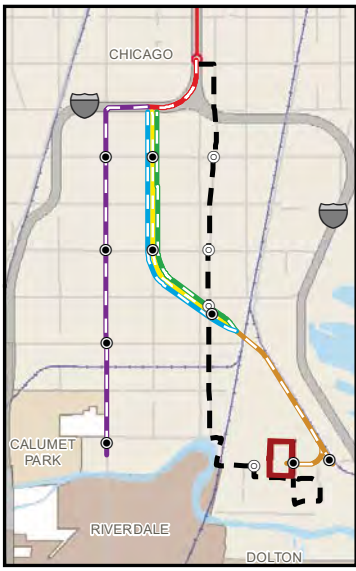

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 4 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.4

Appendix D-4:
UPRR West Option Displacement Maps

Note: The displacement maps for the East and West Option in this appendix have been superseced by the maps included in Appendix I of the Displacements and Relocation of Existing Uses Technical Memorandum.

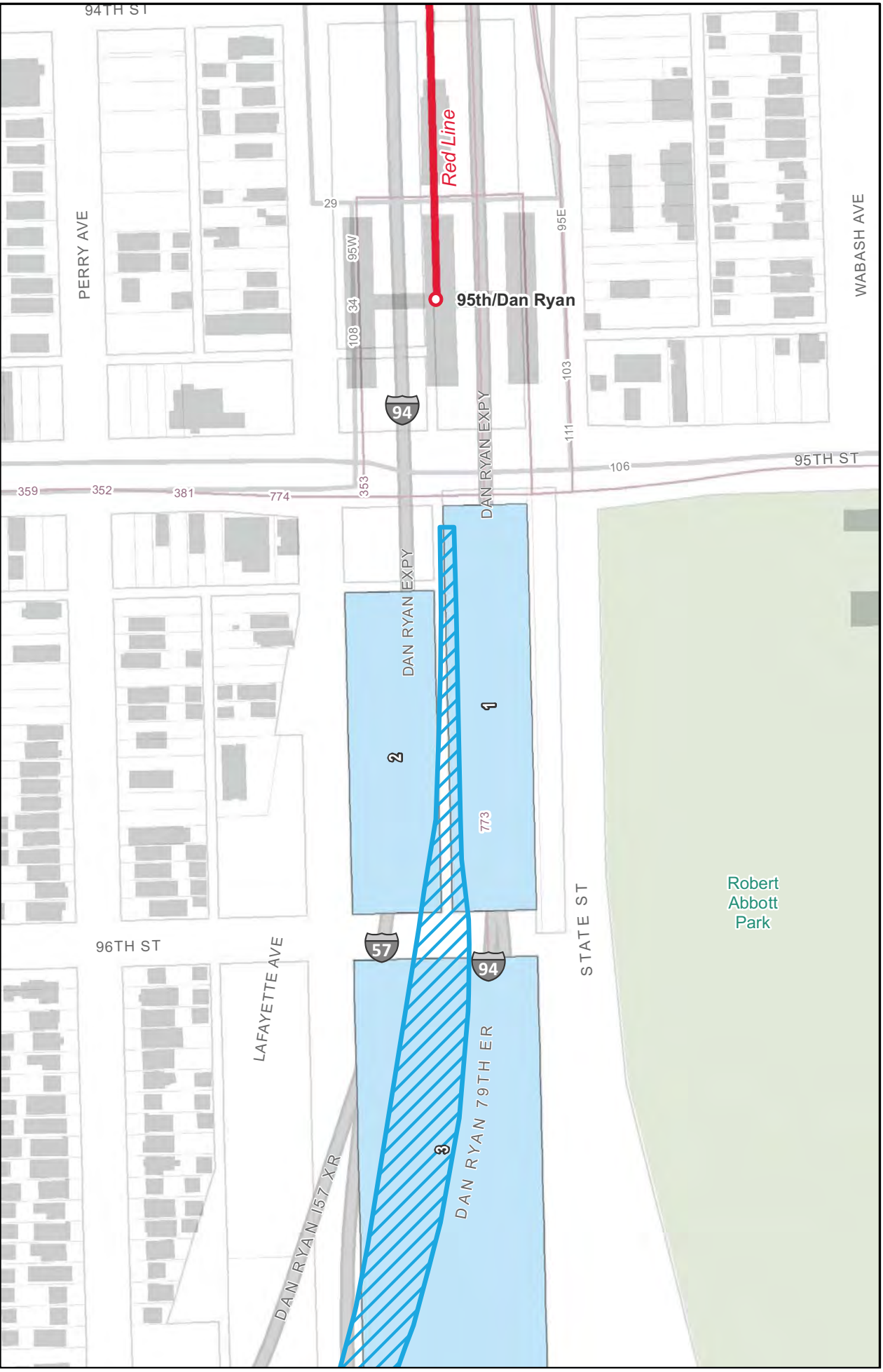

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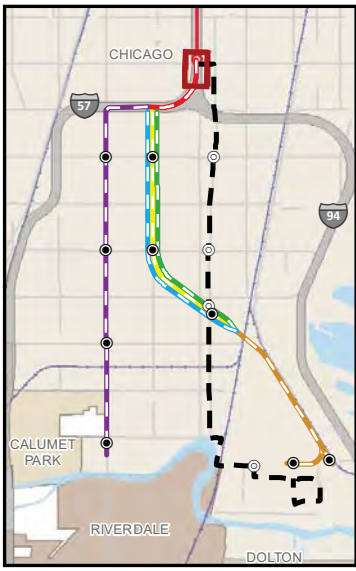

Legend

UPRR Rail Alternative
West Option

Sheet 1 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_02.1

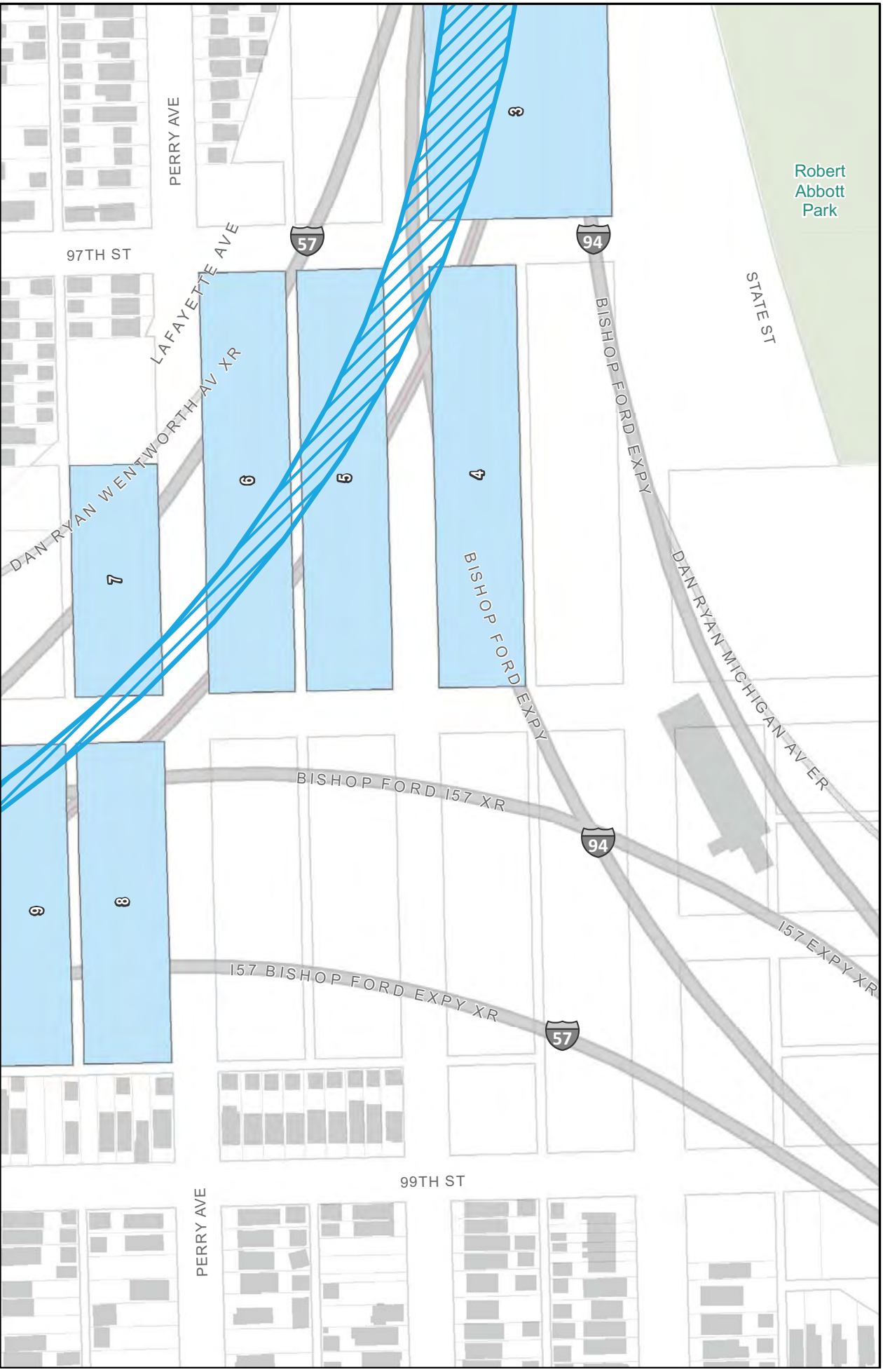

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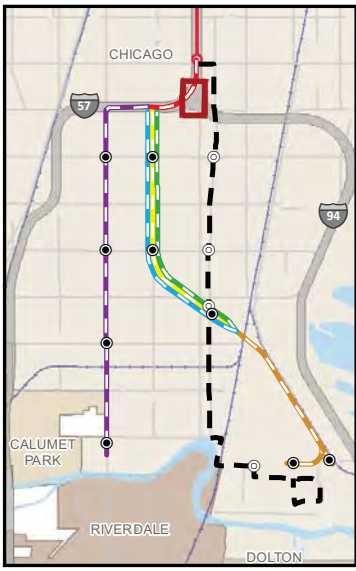

Legend

UPRR Rail Alternative West Option

Sheet 2 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.2

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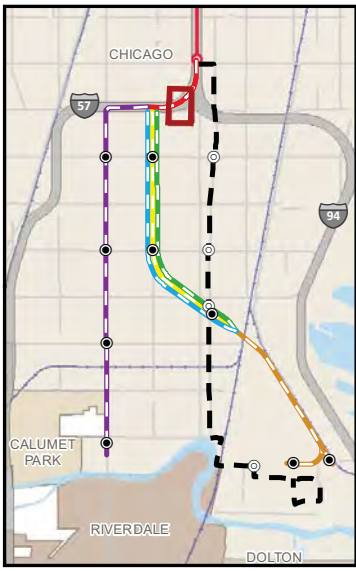

Legend

UPRR Rail Alternative
West Option

Sheet 3 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_02.3

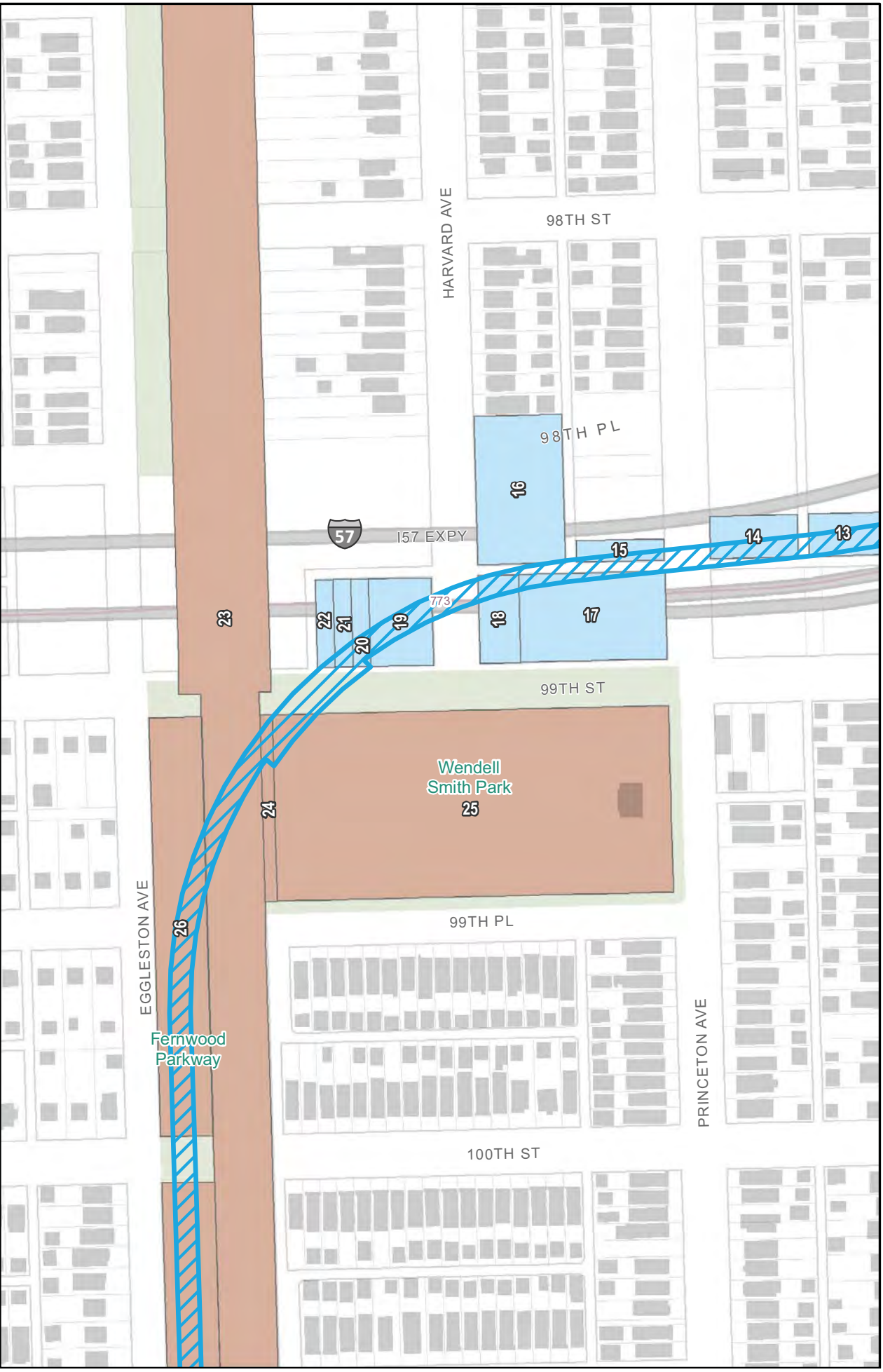

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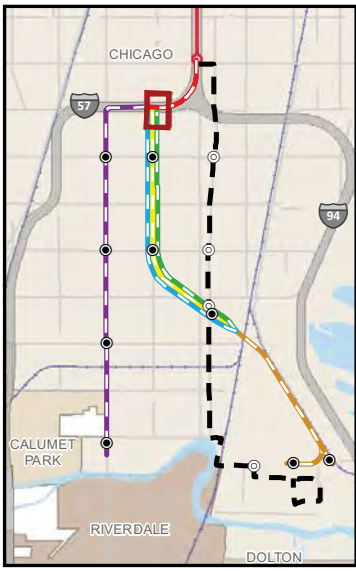

Legend

UPRR Rail Alternative
West Option

Sheet 4 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_02.4

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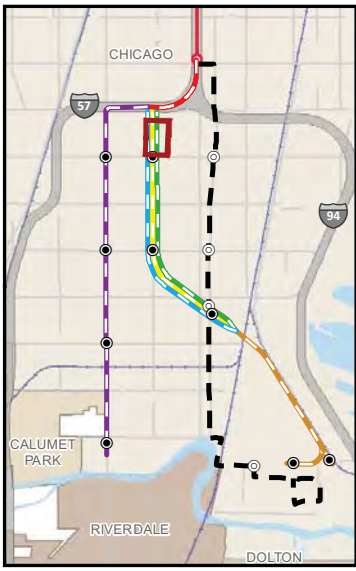

Legend

UPRR Rail Alternative West Option

Sheet 5 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.5

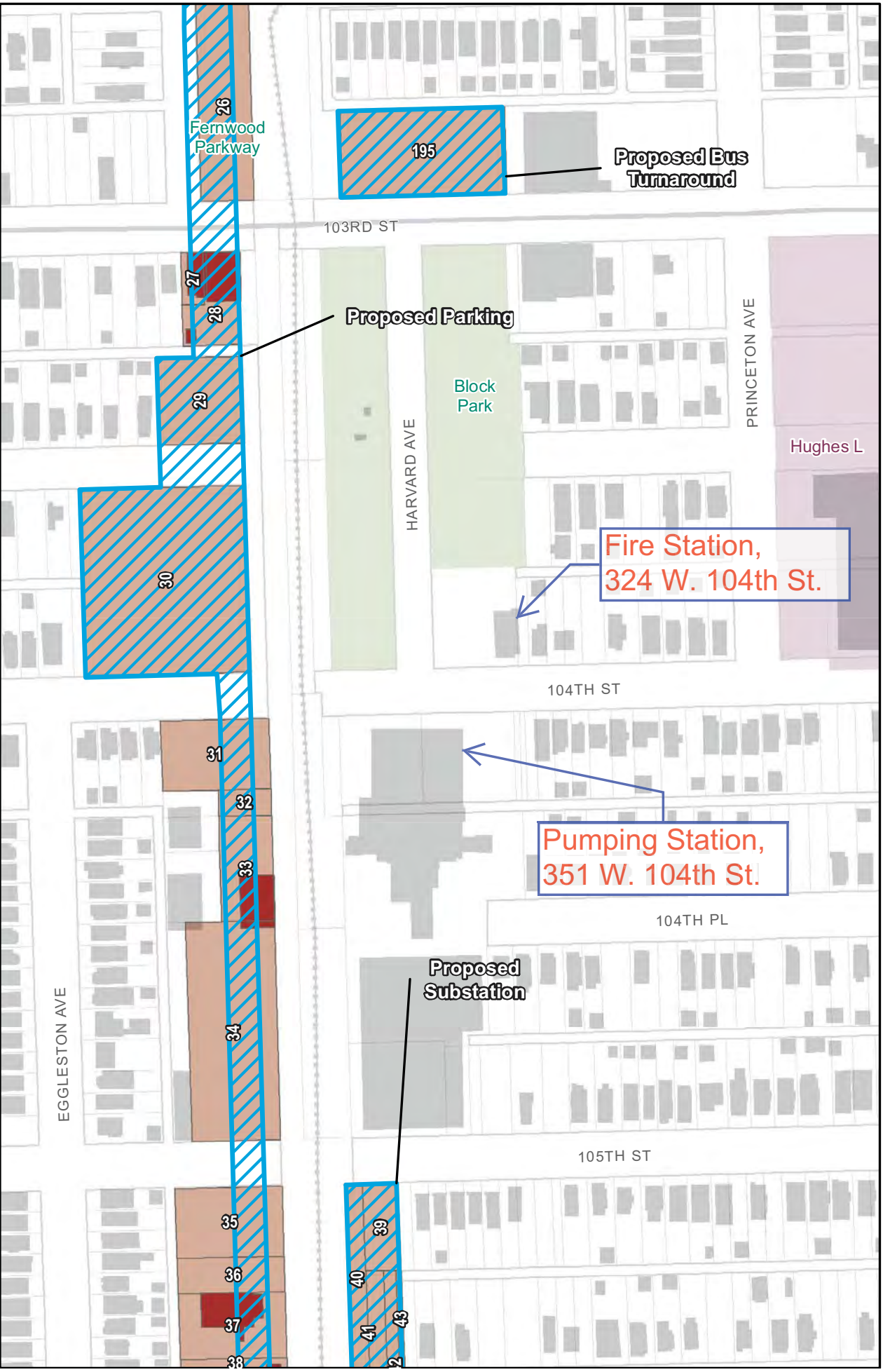

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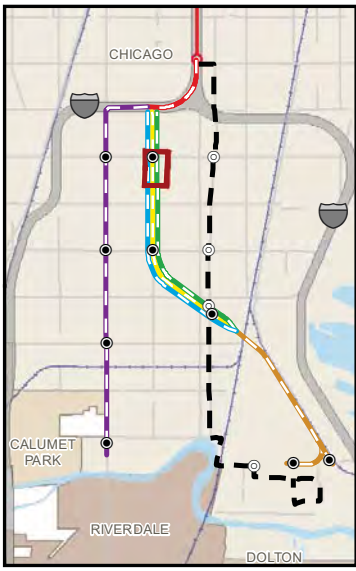

Legend

UPRR Rail Alternative
West Option

Sheet 6 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_02.6

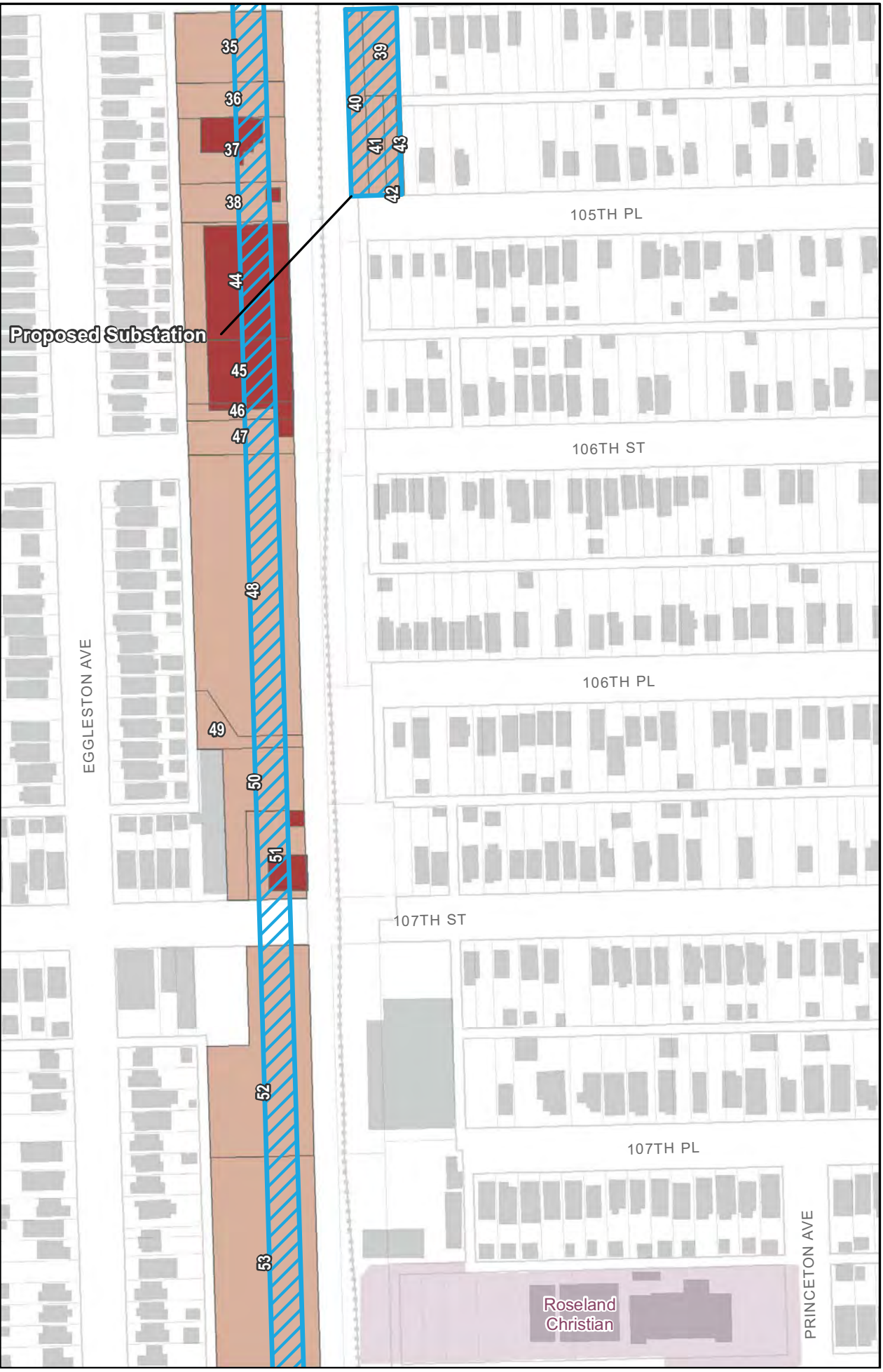

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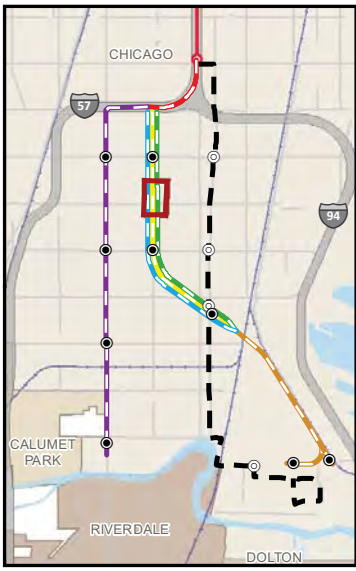

Legend

UPRR Rail Alternative West Option

Sheet 7 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.7

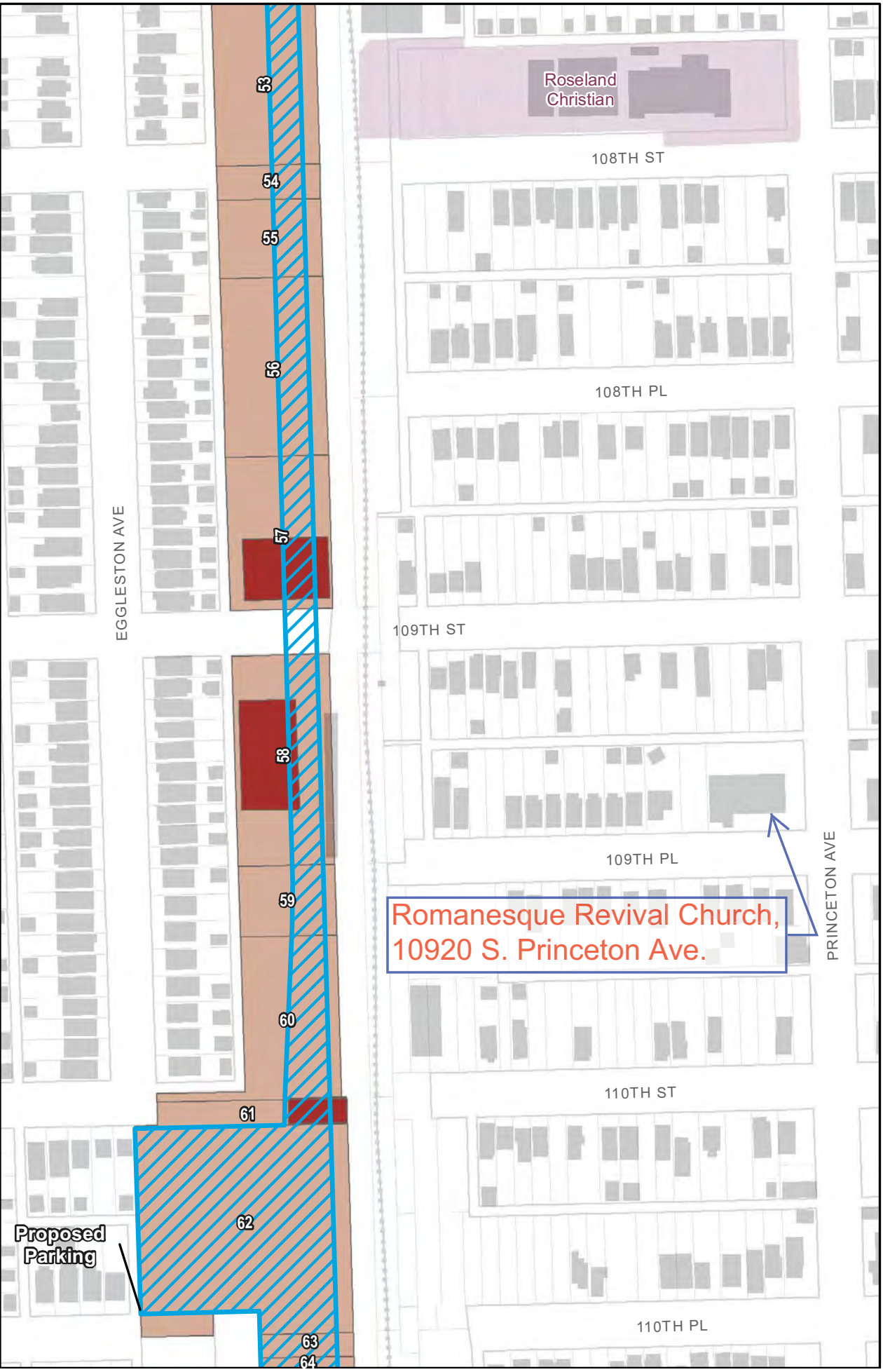

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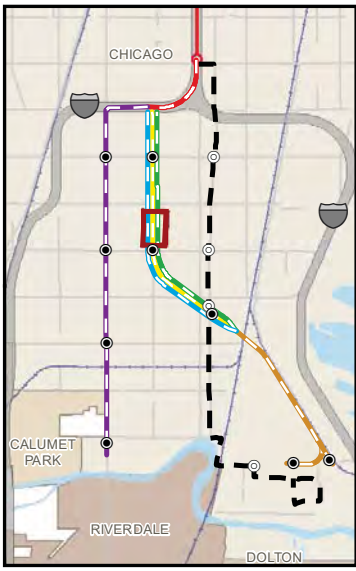

Legend

UPRR Rail Alternative West Option

Sheet 8 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.8

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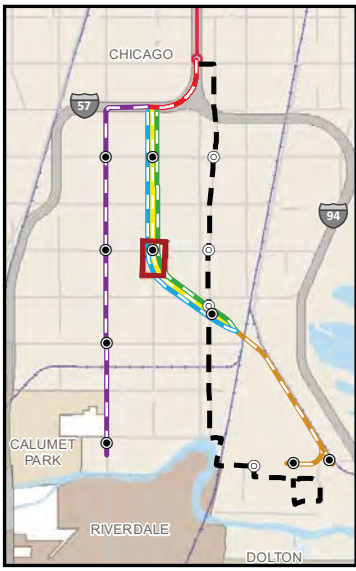

Legend

UPRR Rail Alternative
West Option

Sheet 9 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_02.9

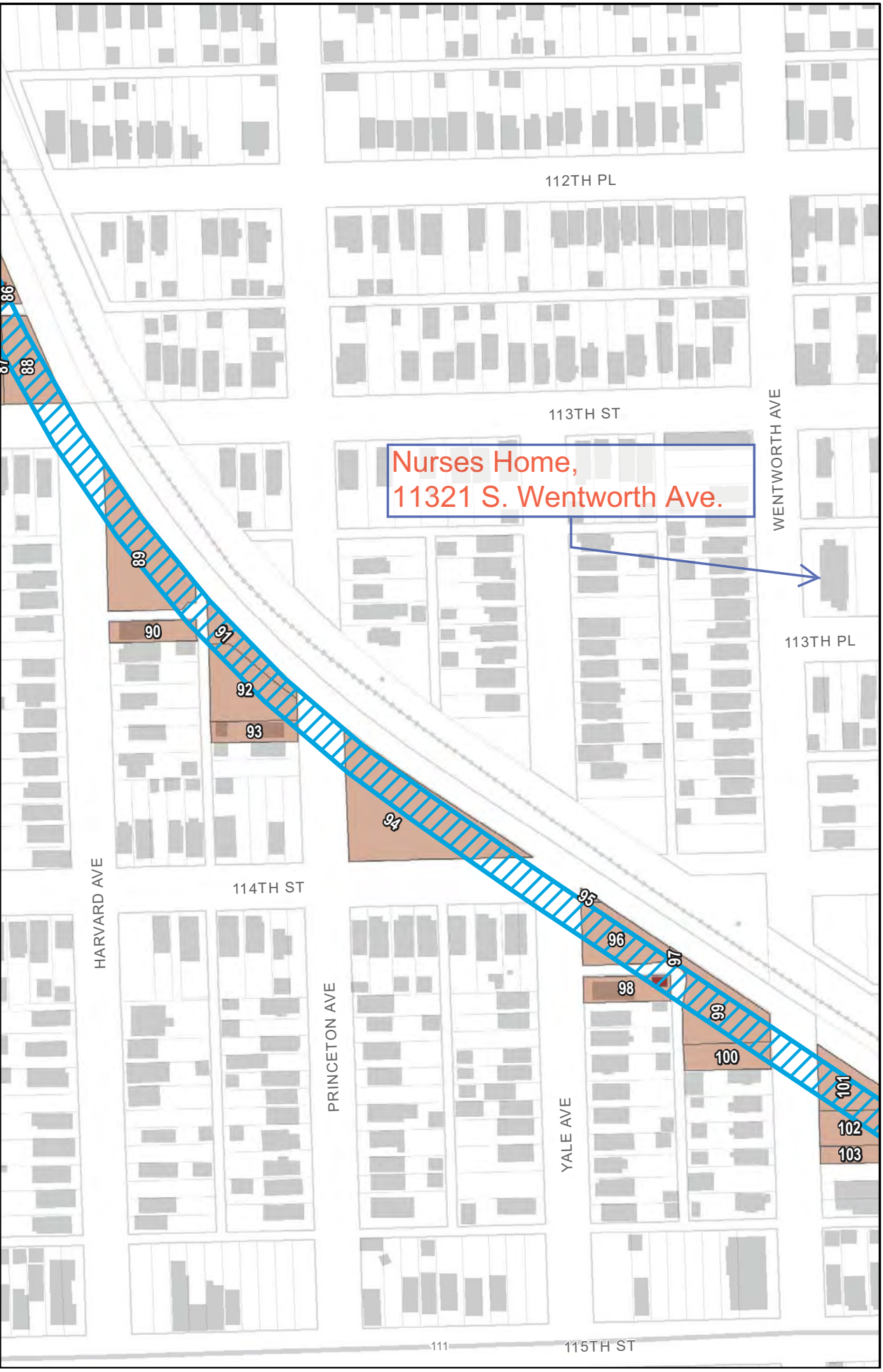

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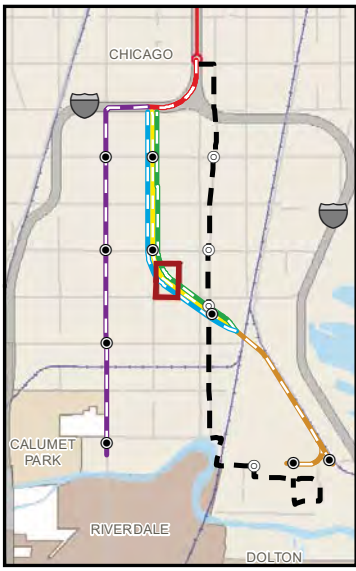

Legend

UPRR Rail Alternative
West Option

Sheet 10 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_02.10

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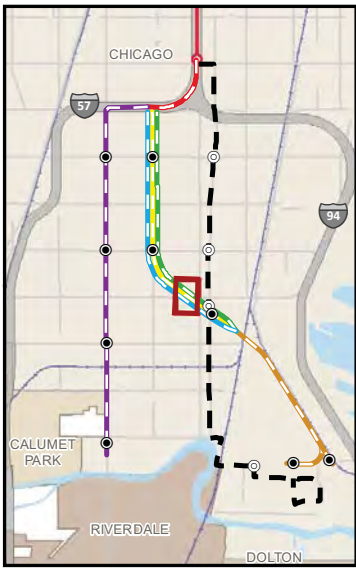

Legend

UPRR Rail Alternative West Option

Sheet 11 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.11

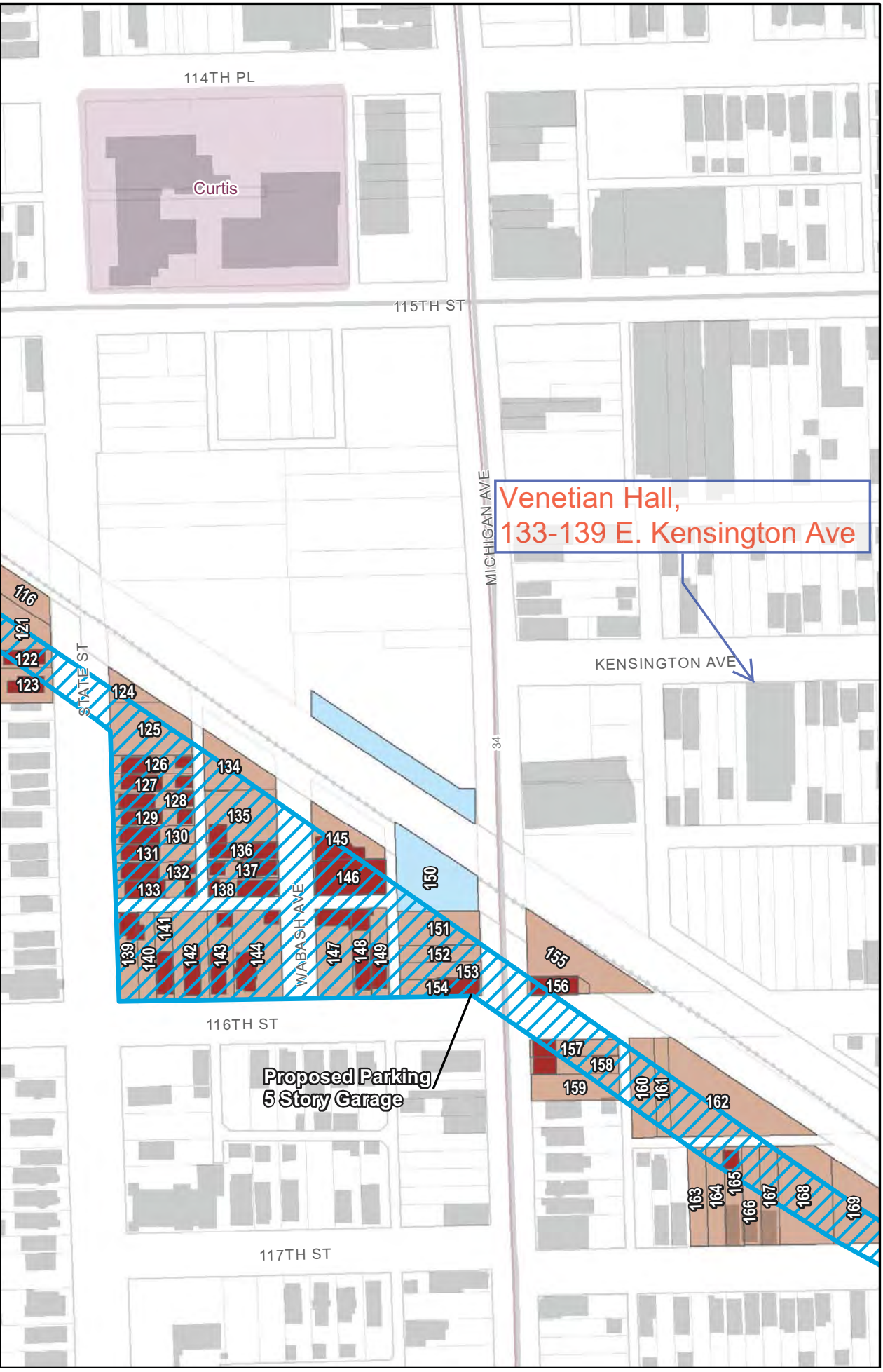

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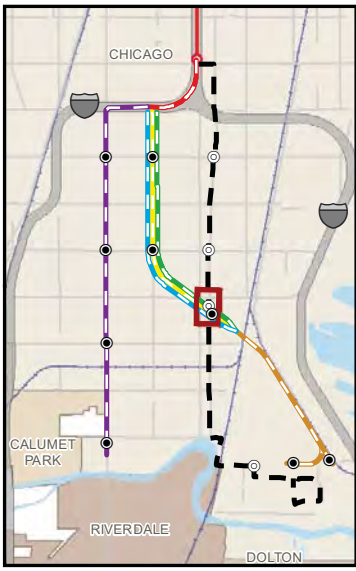

Legend

UPRR Rail Alternative
West Option

Sheet 12 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_02.12

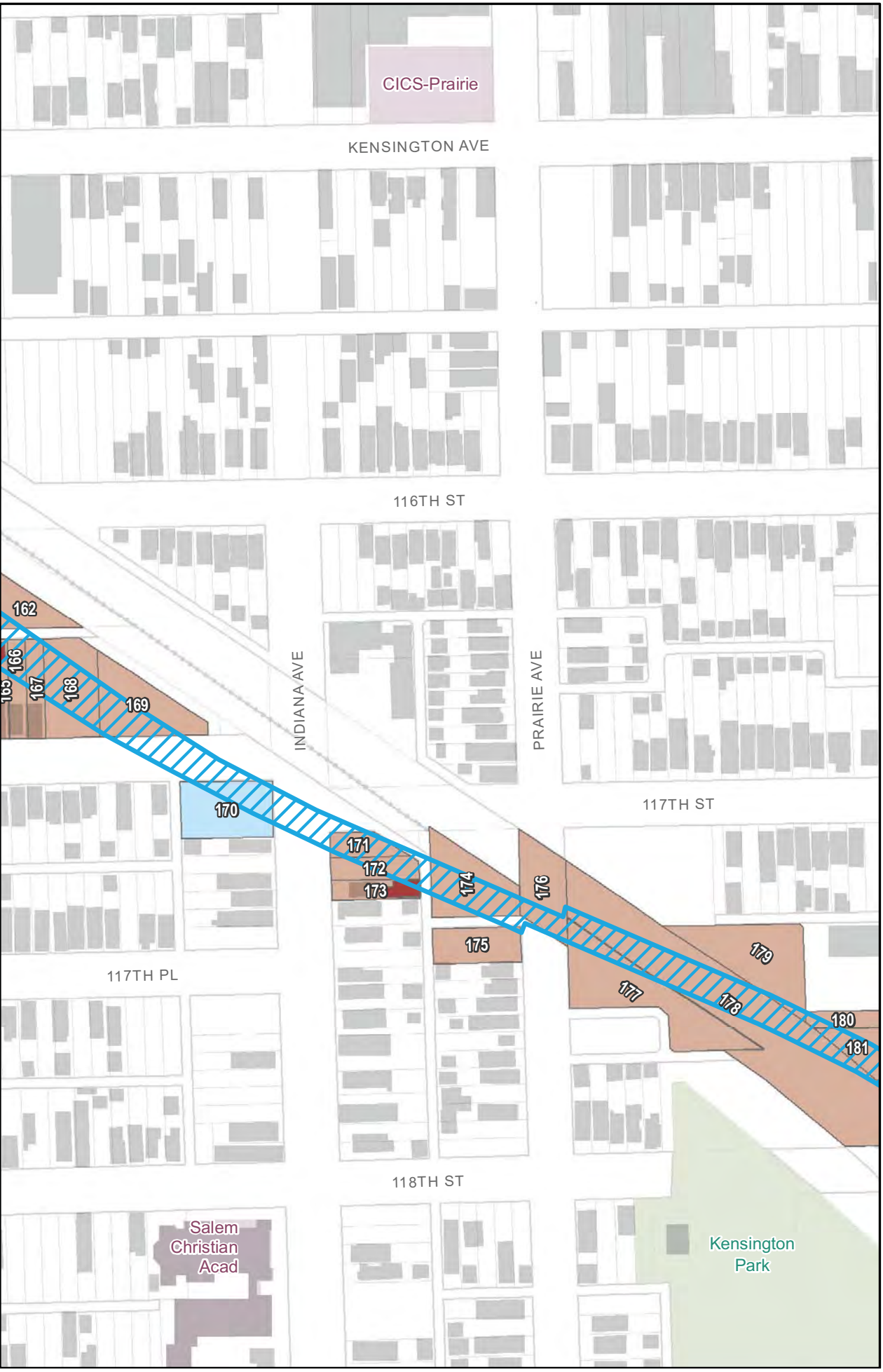

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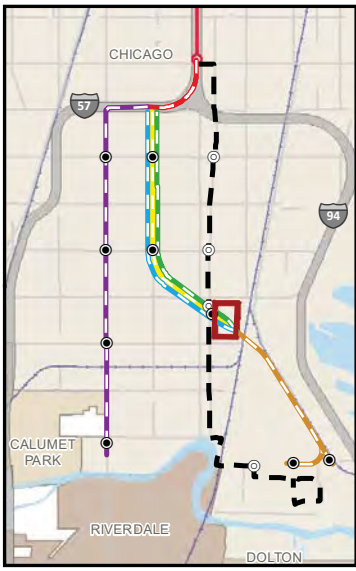

Legend

UPRR Rail Alternative West Option

Sheet 13 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.13

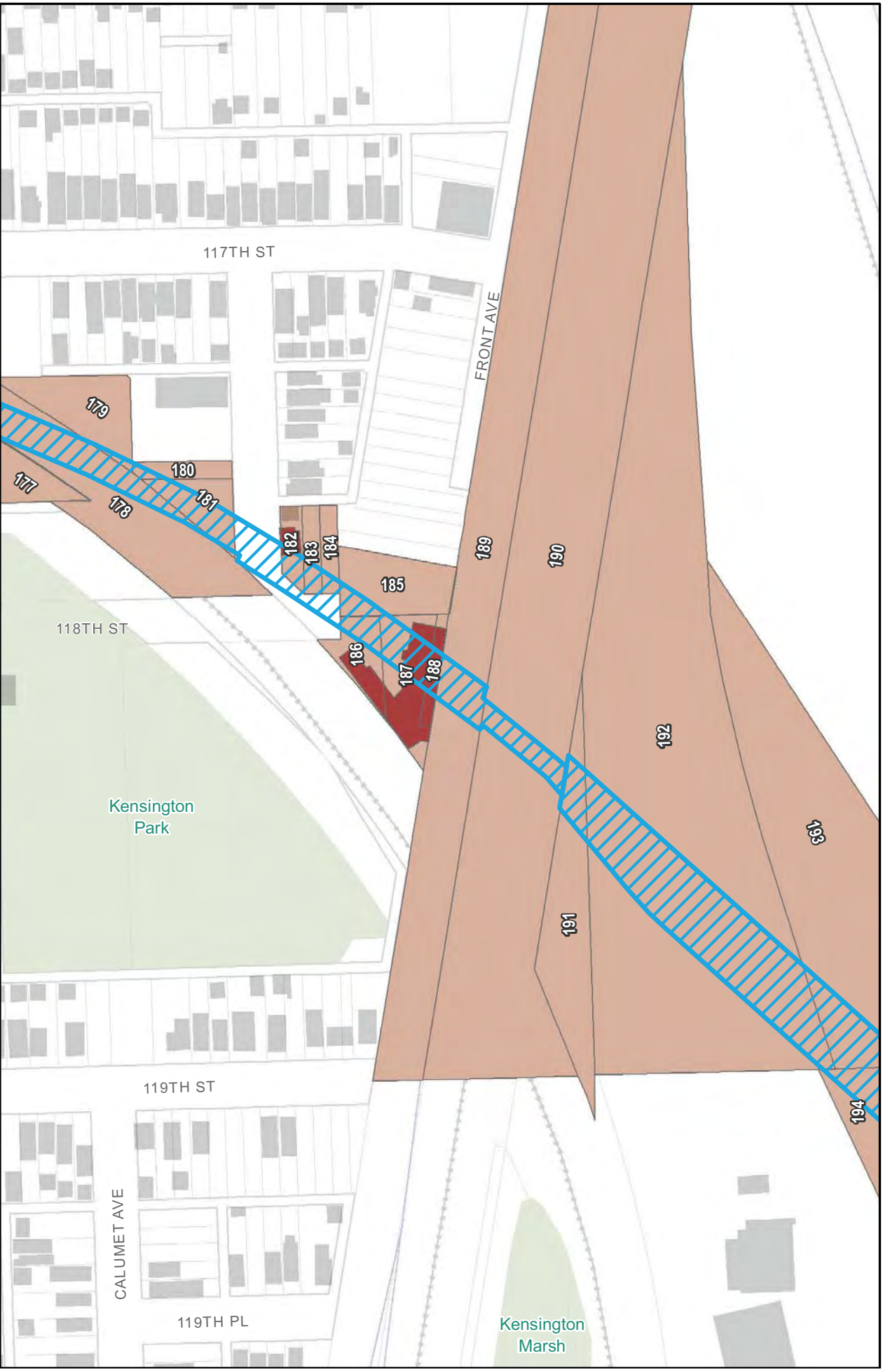

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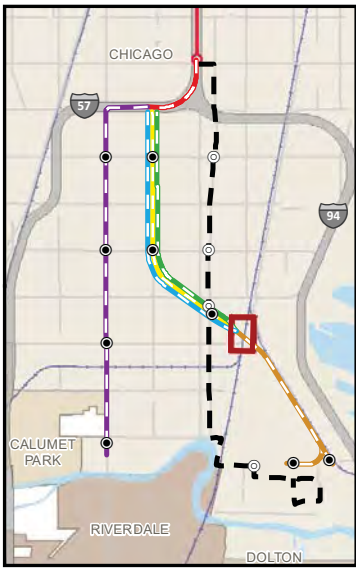

Legend

UPRR Rail Alternative West Option

Sheet 14 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.14

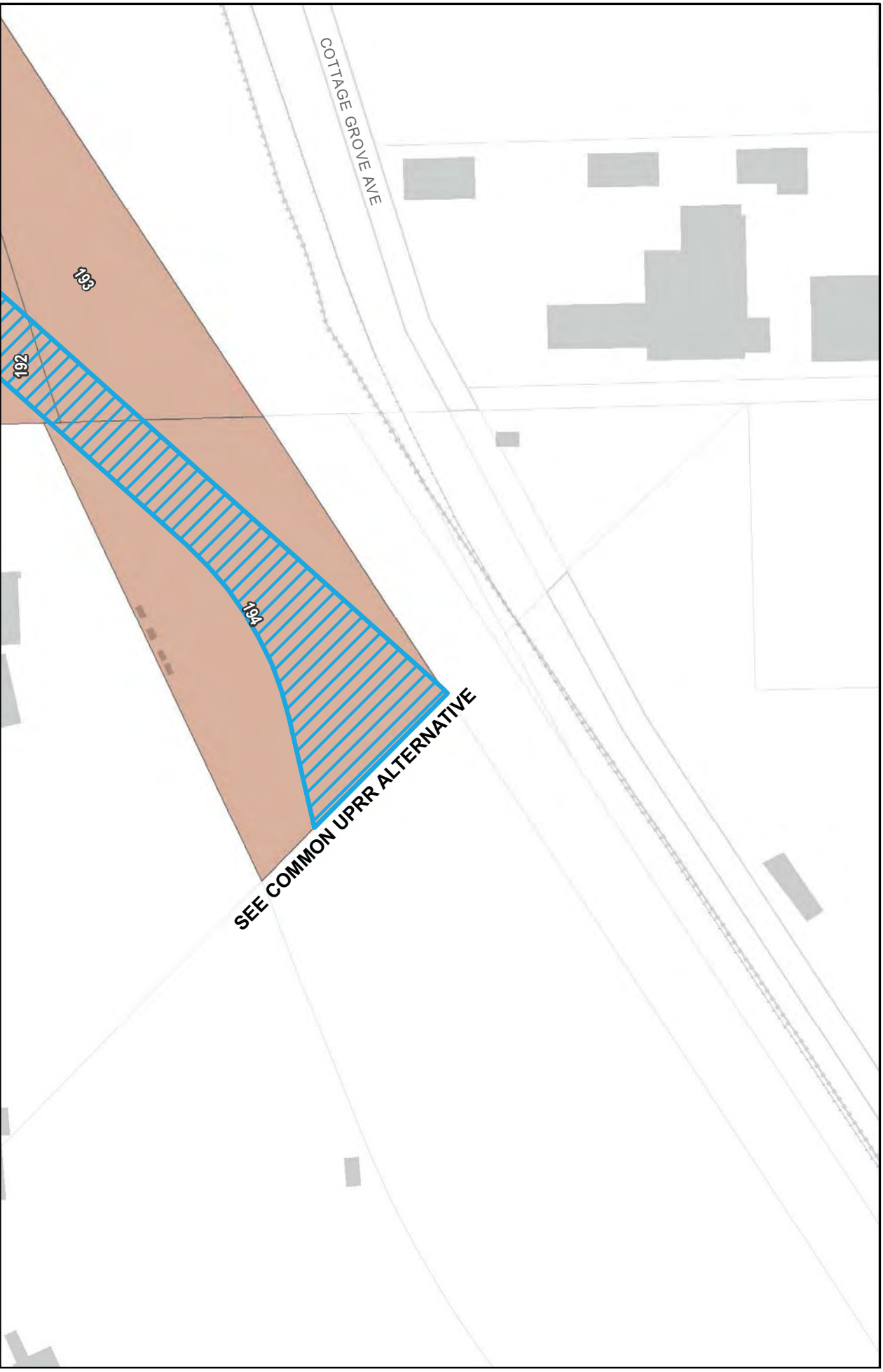

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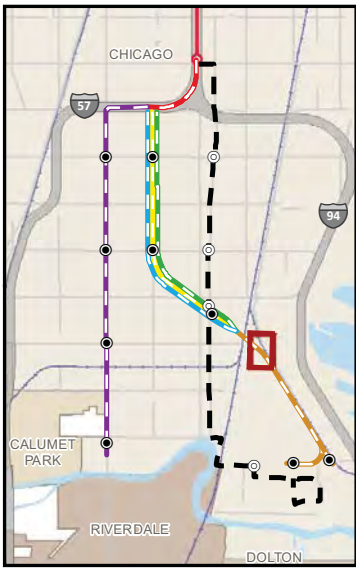

Legend

UPRR Rail Alternative
West Option

Sheet 15 of 15

- Proposed Permanent Envelope
- Parcel Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_02.15

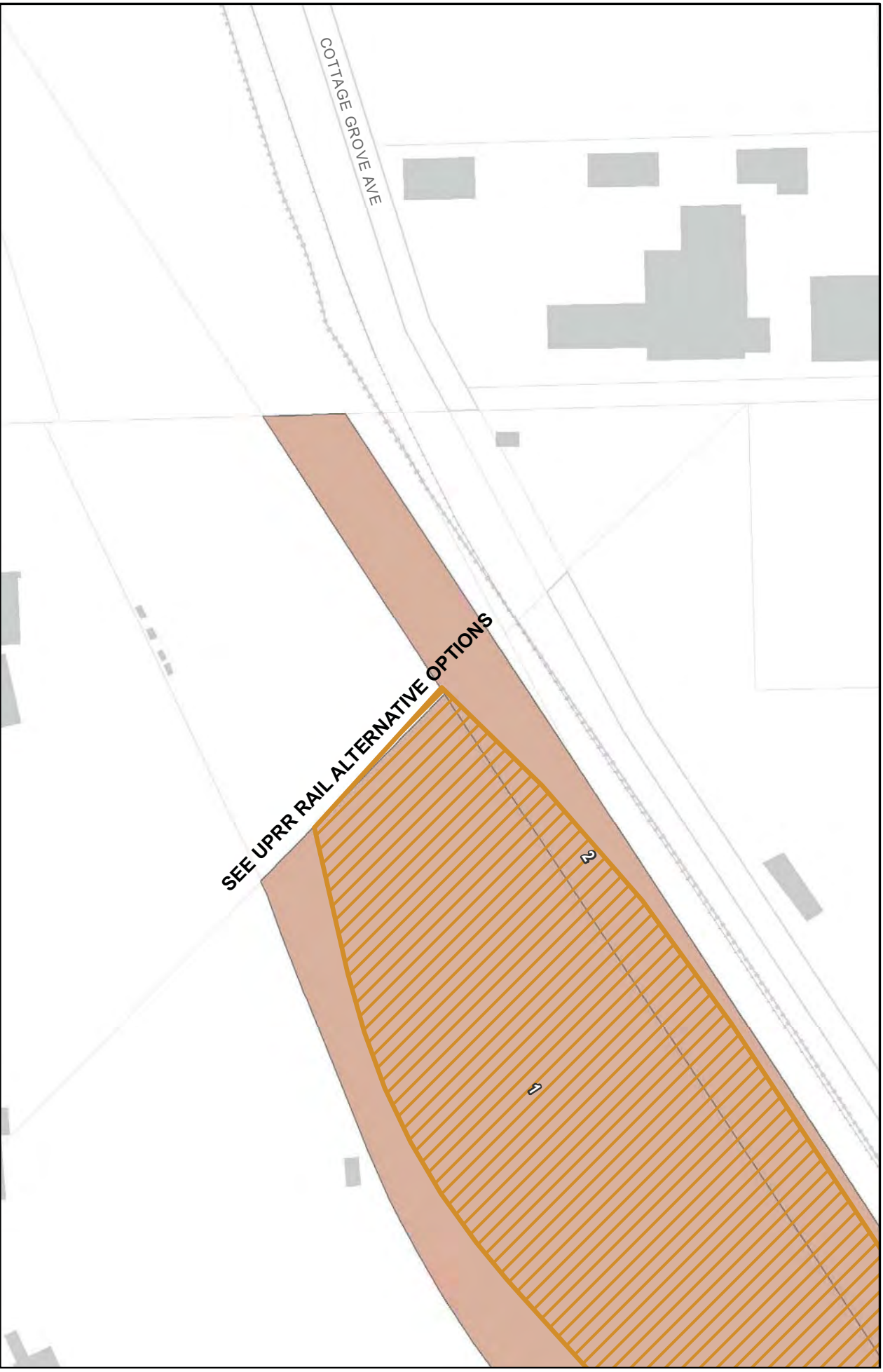

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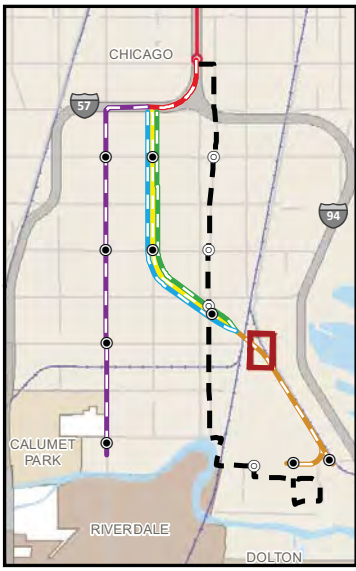

Legend

Common UPRR Rail Alternative

Sheet 1 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.1

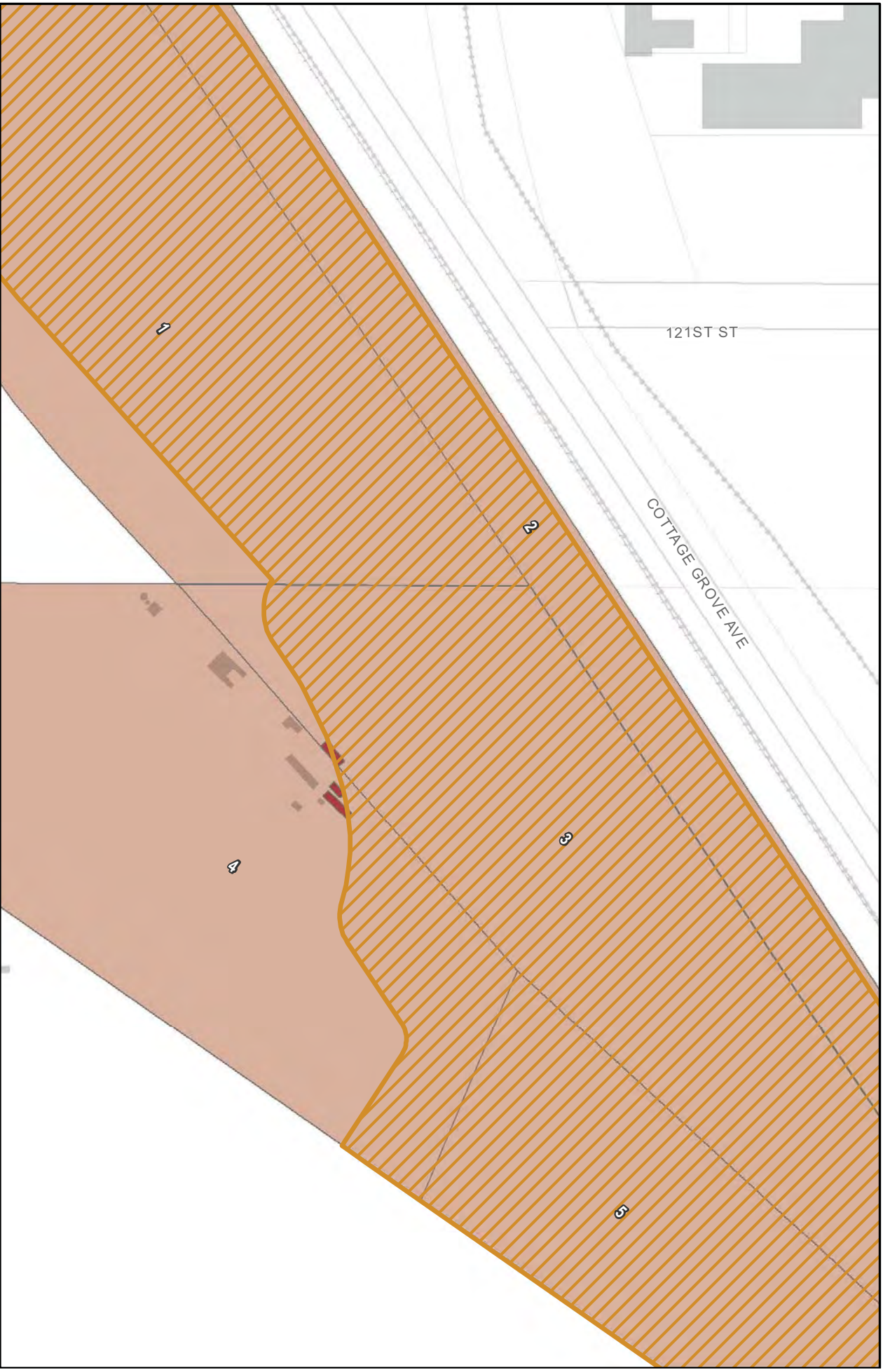

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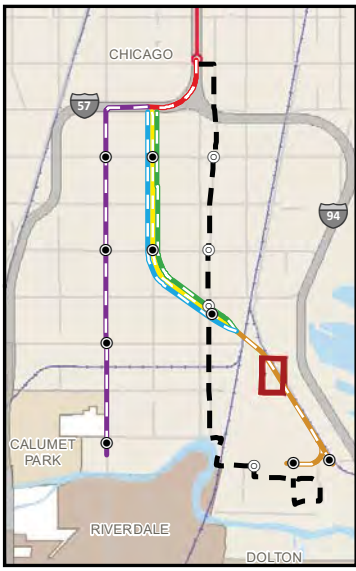

Legend

Common UPRR Rail Alternative

Sheet 2 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.2

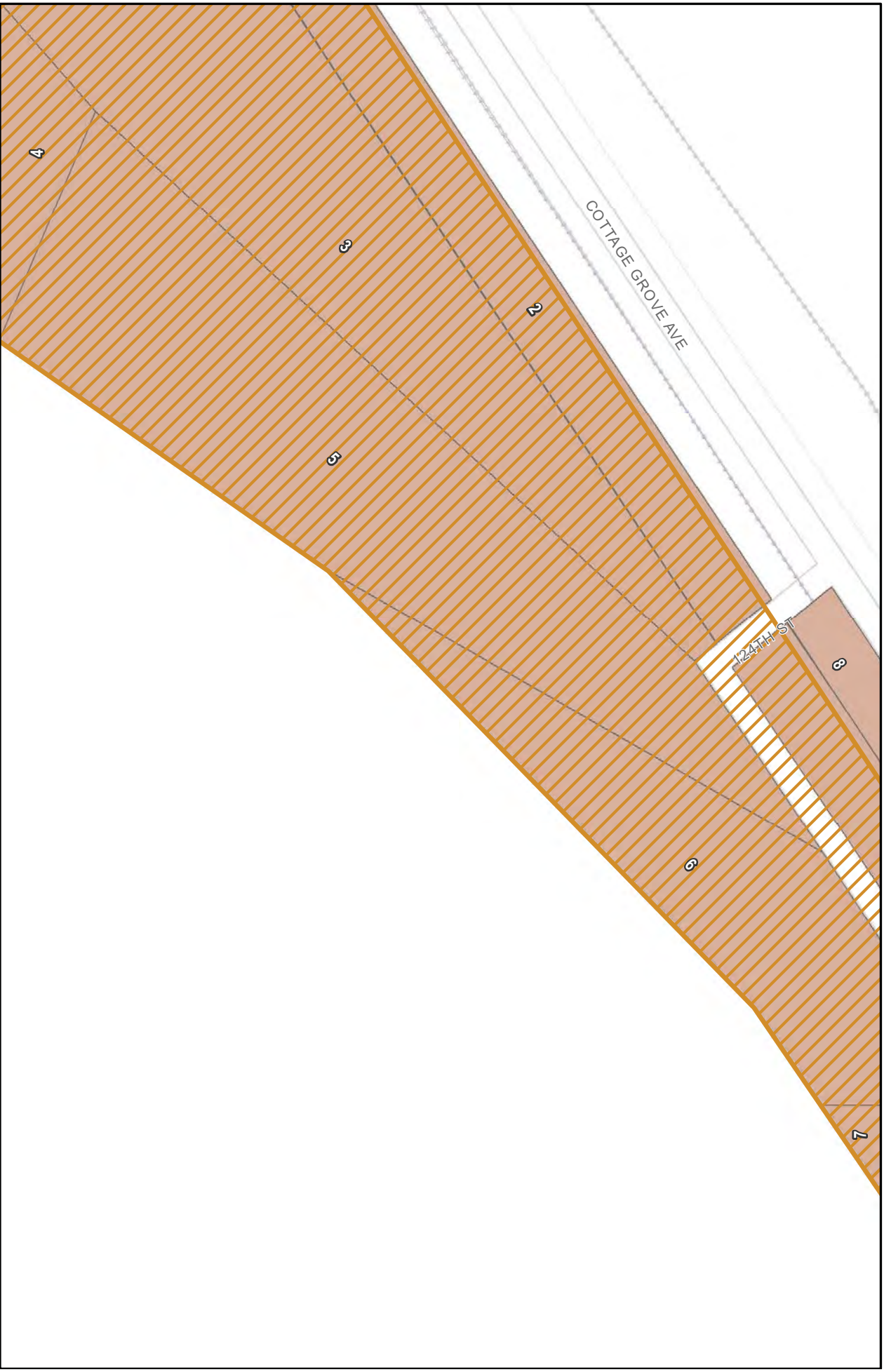

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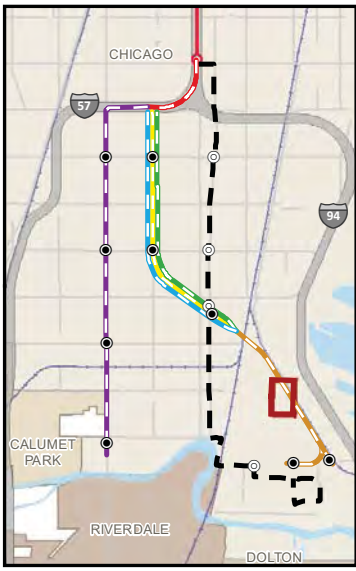

Legend

Common UPRR Rail Alternative

Sheet 3 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.3

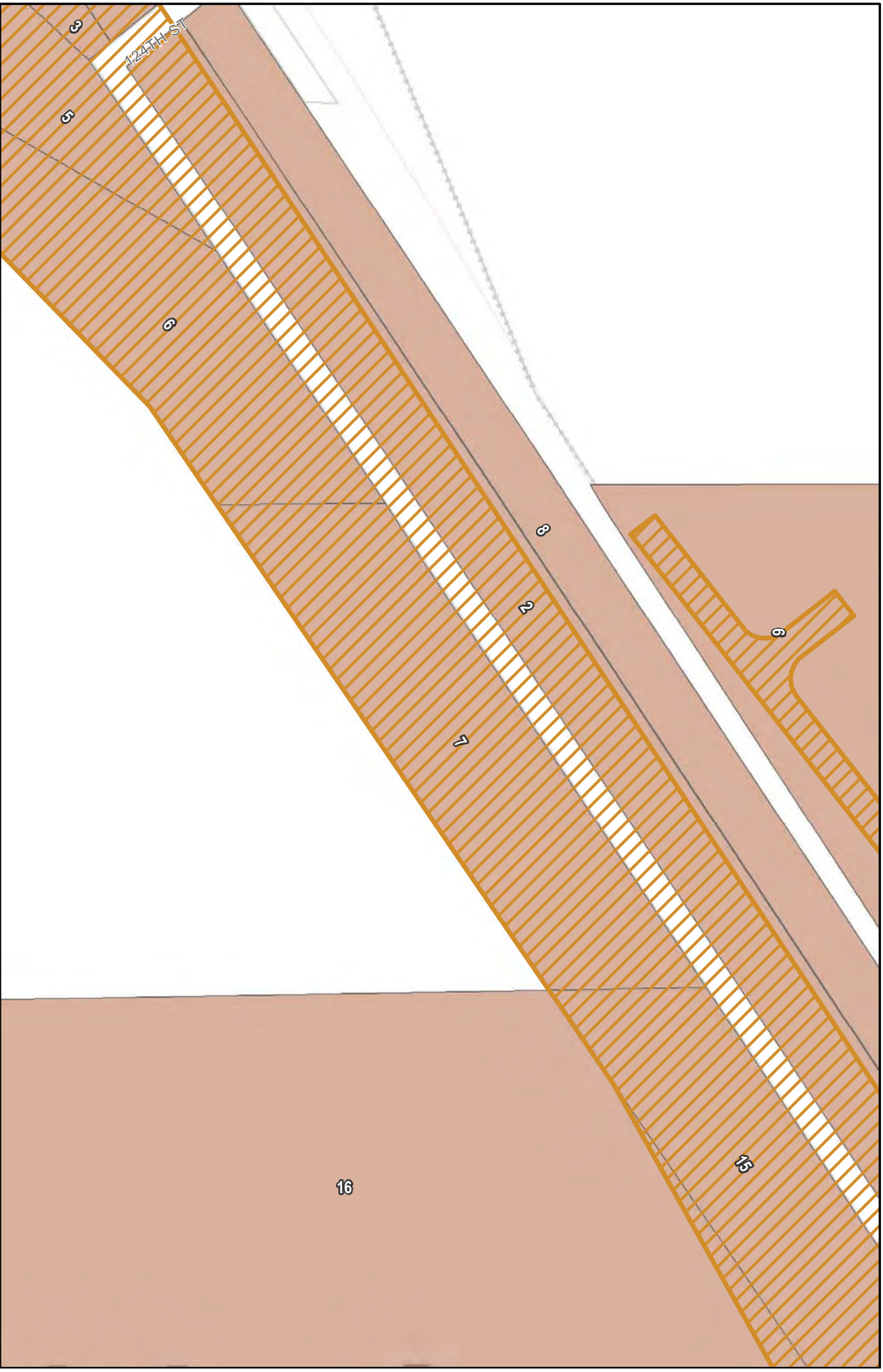

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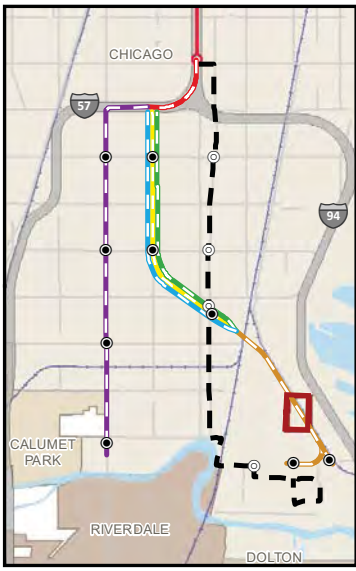

Legend

Common UPRR Rail Alternative

Sheet 4 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.4

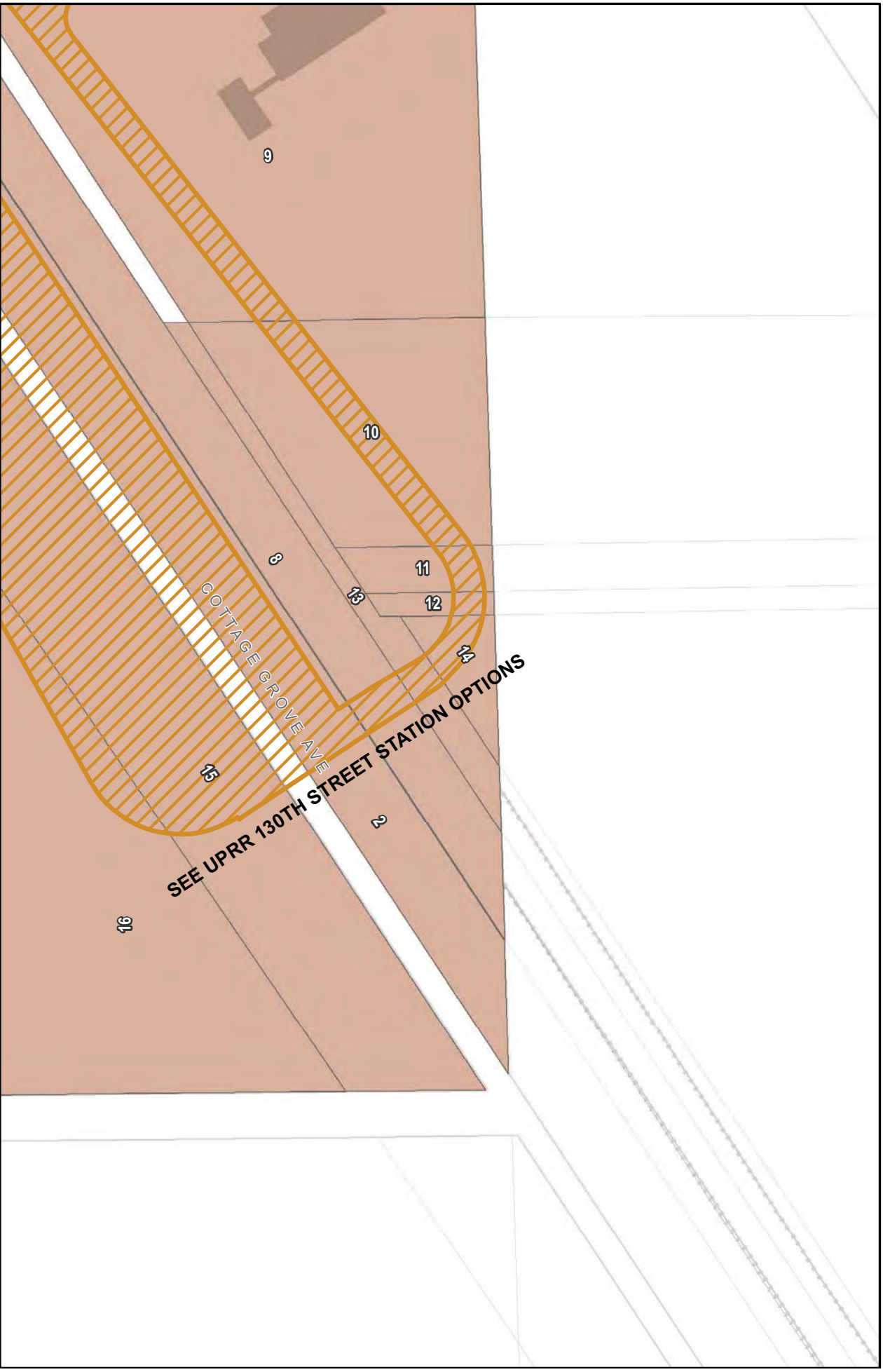

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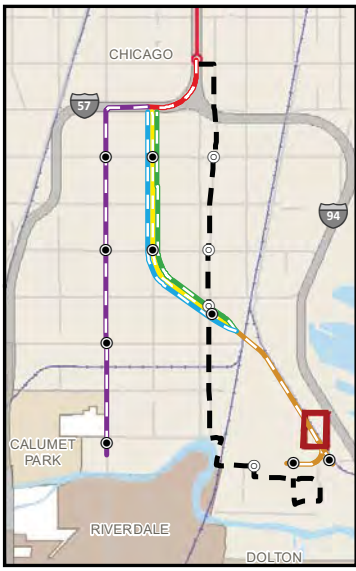

Legend

Common UPRR Rail Alternative

Sheet 5 of 5

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_04.5

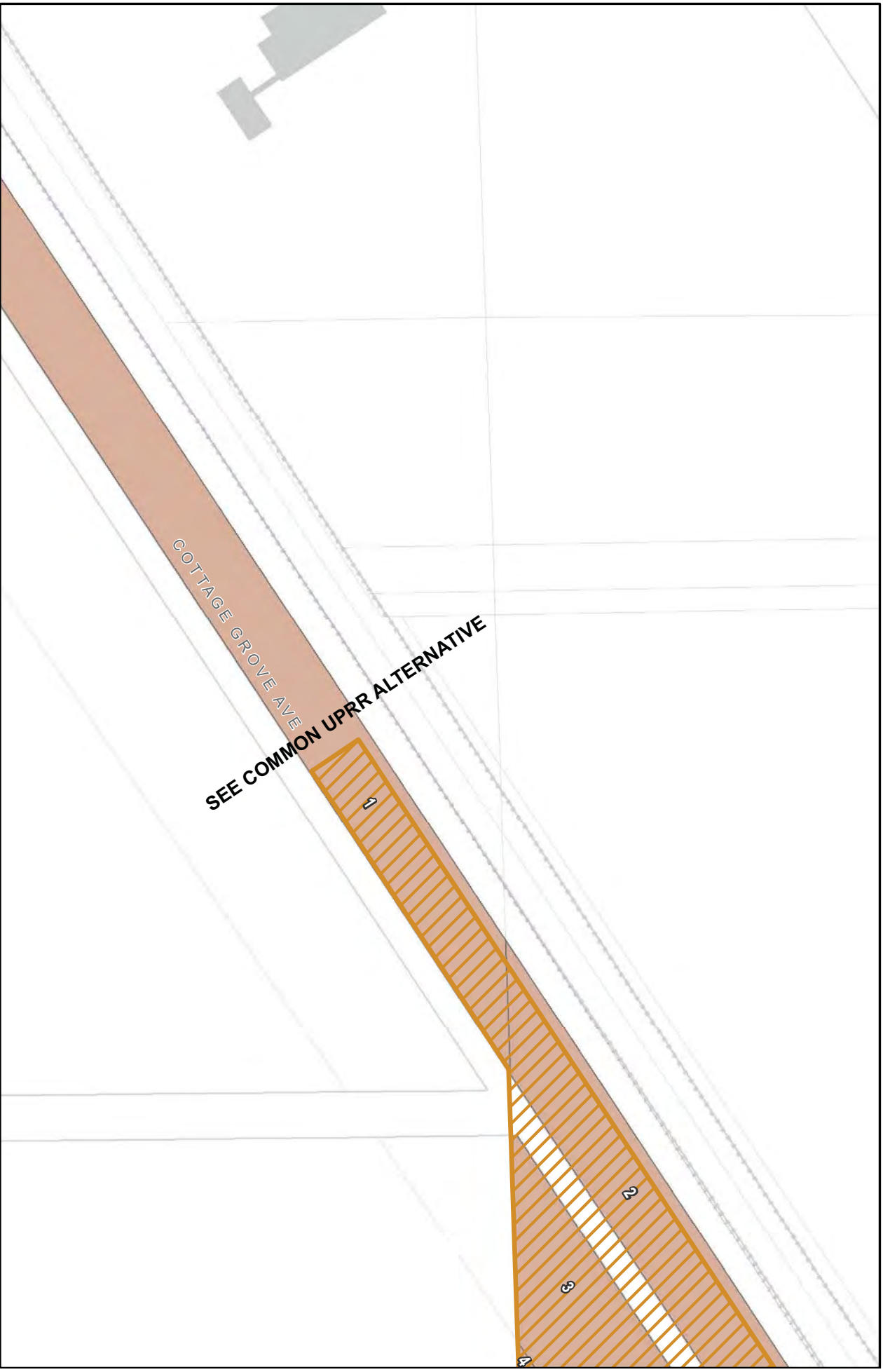

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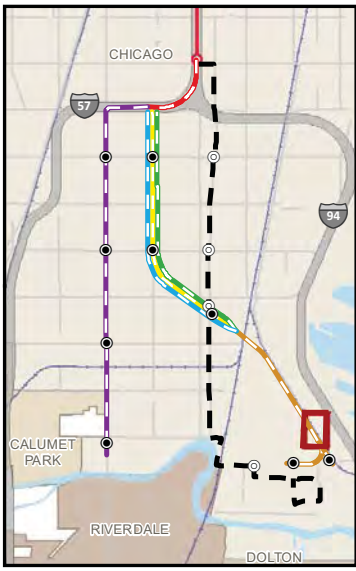

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 1 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.1

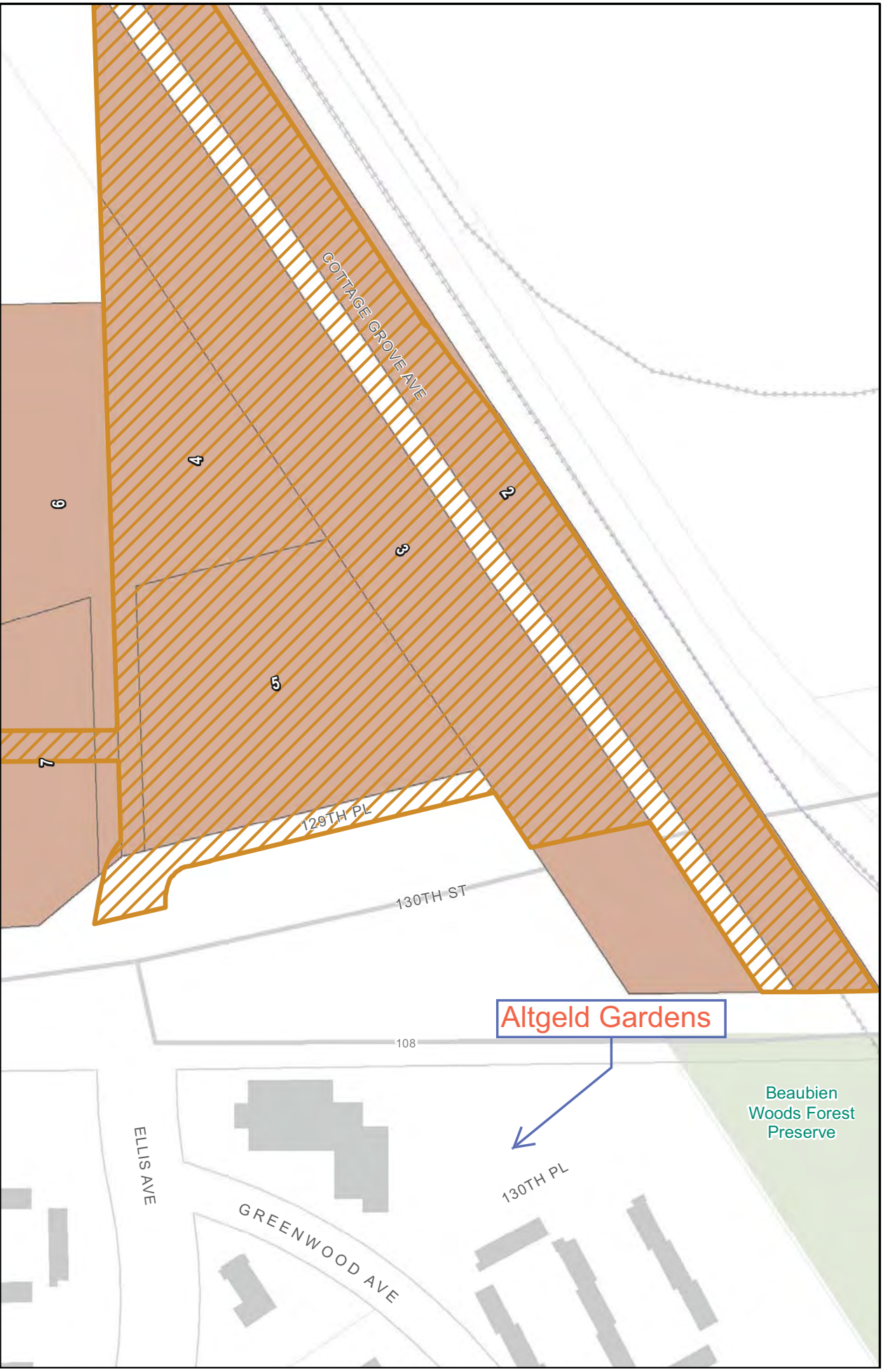

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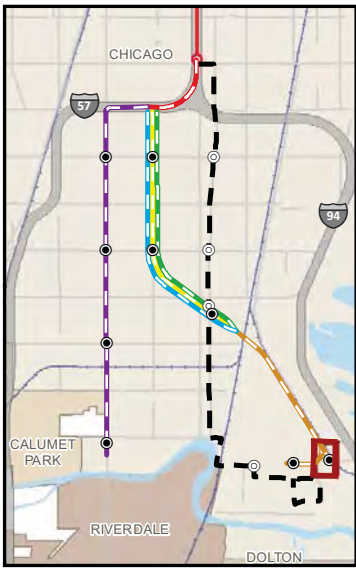

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 2 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.2

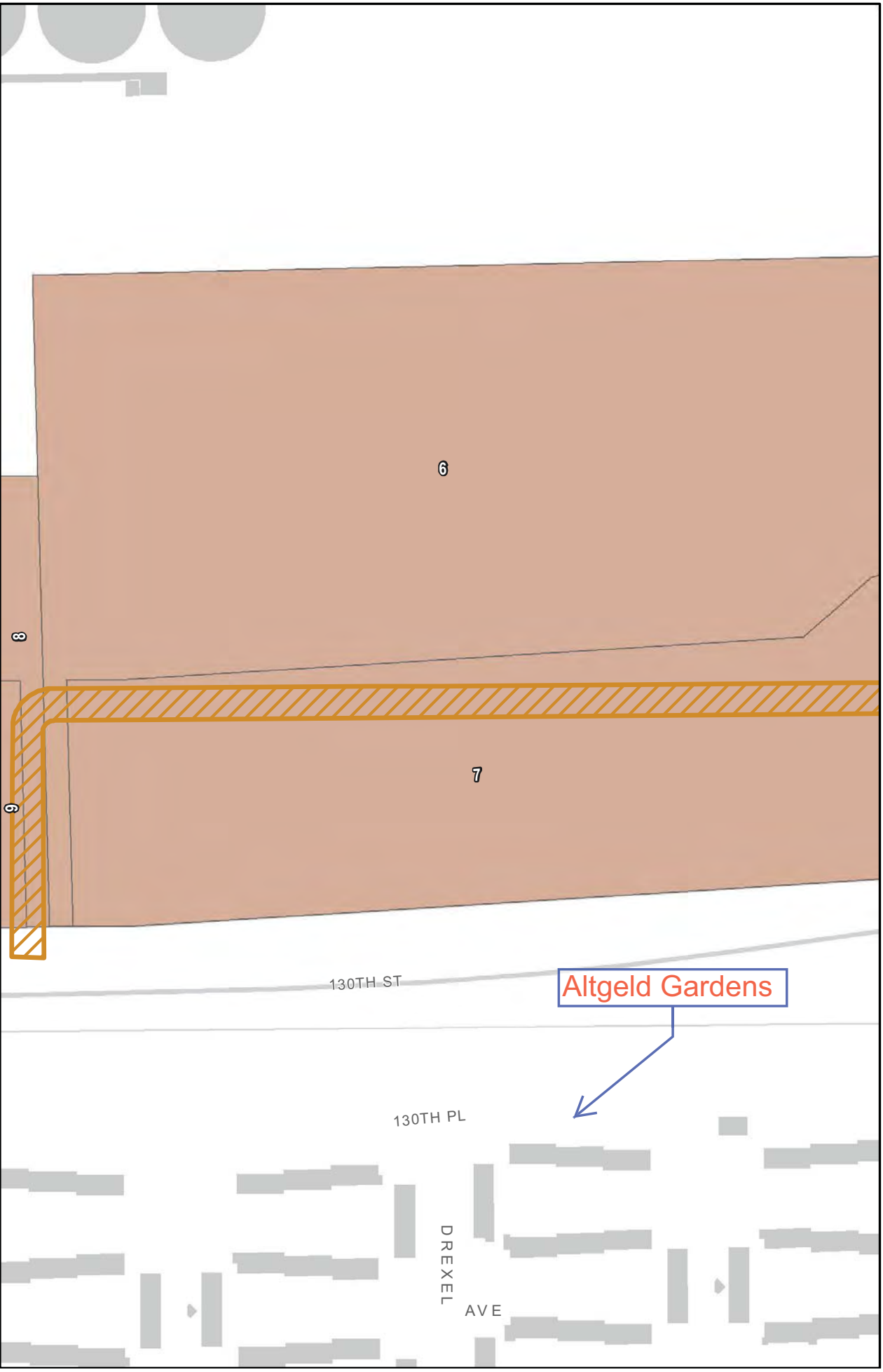

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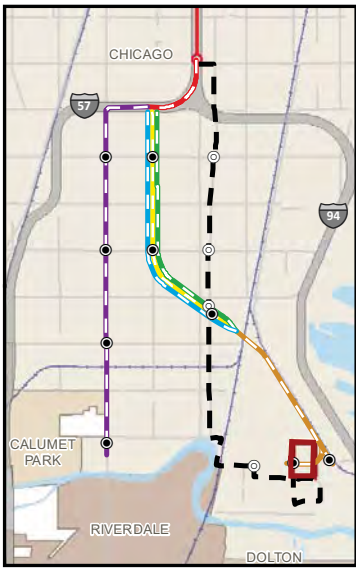

Legend

UPRR Rail Alternative
130th Street Station
South Option

Sheet 3 of 3

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_05.3

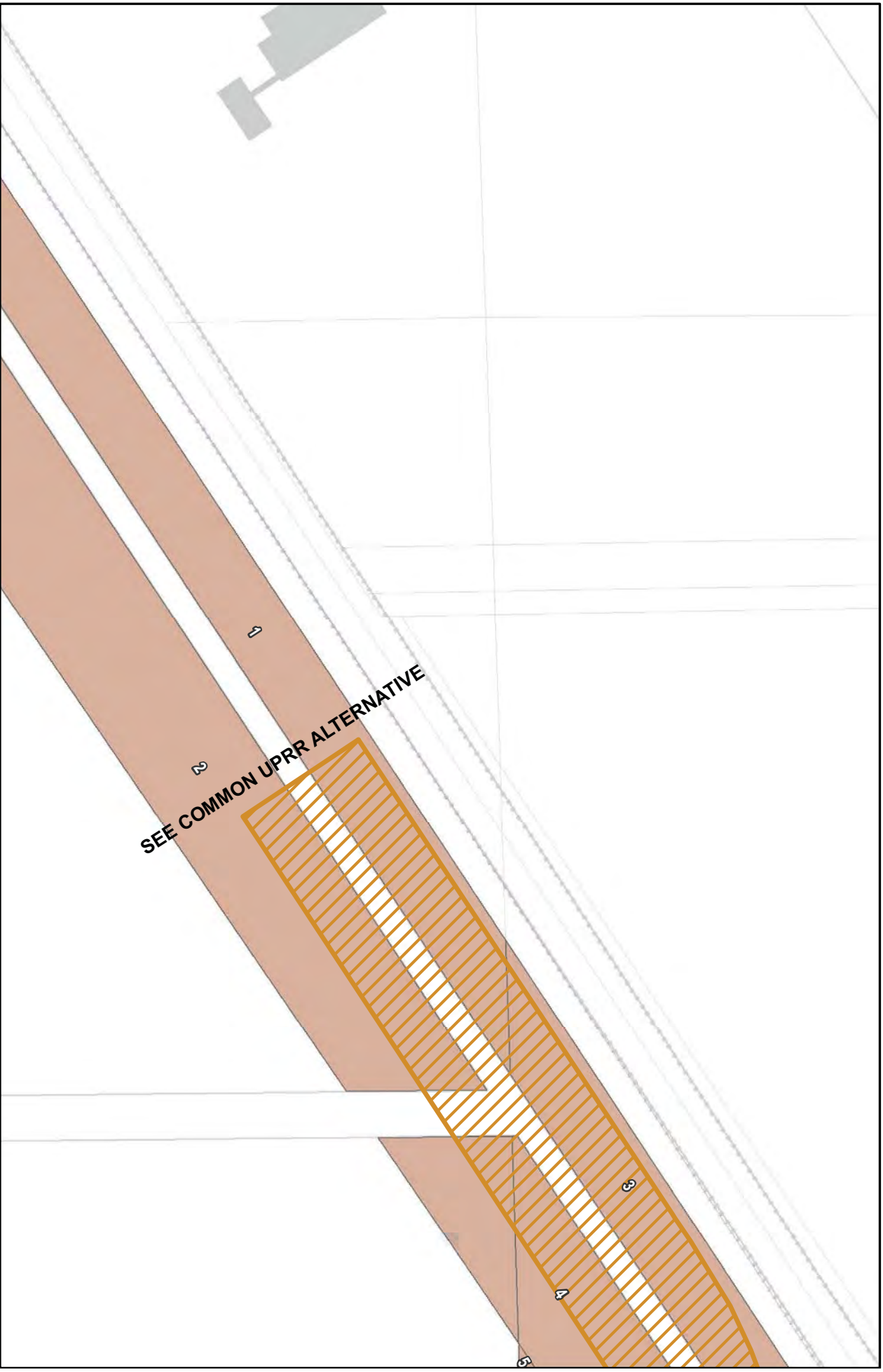

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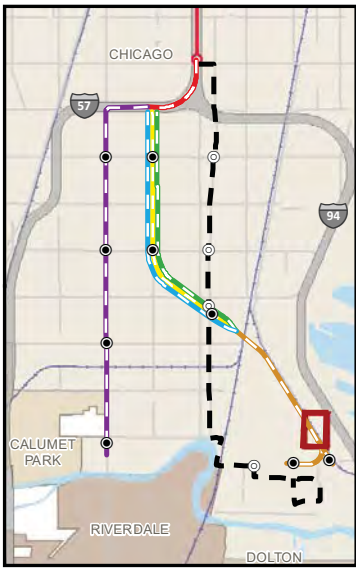

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 1 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.1

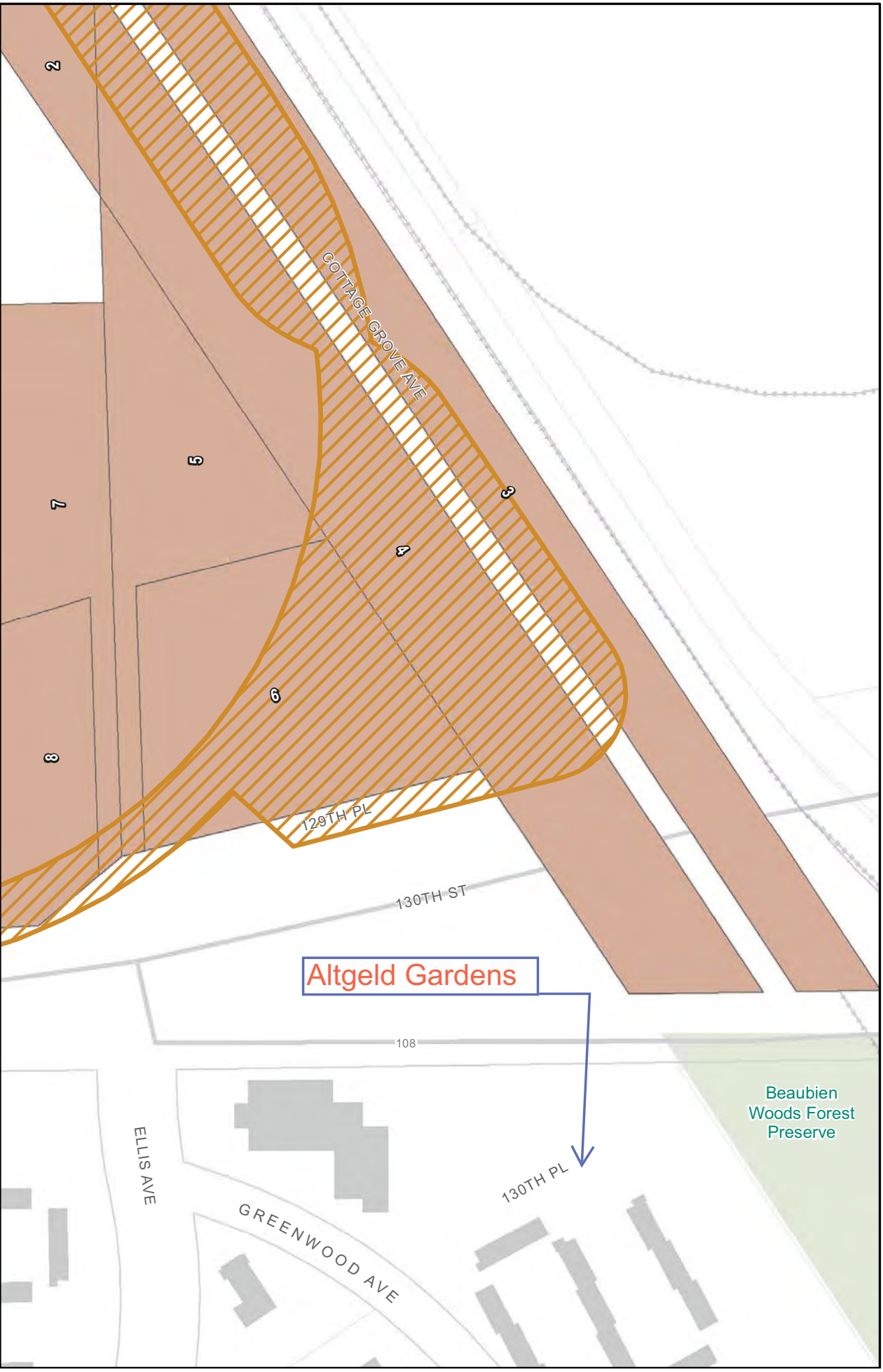

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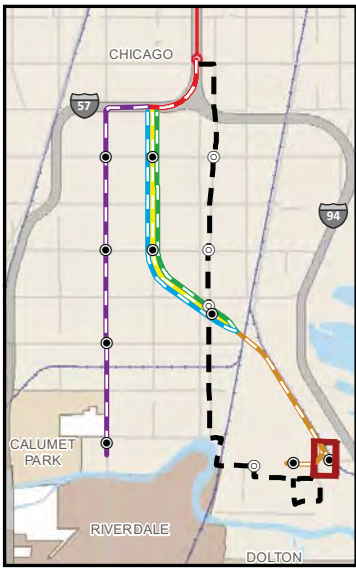

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 2 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.2

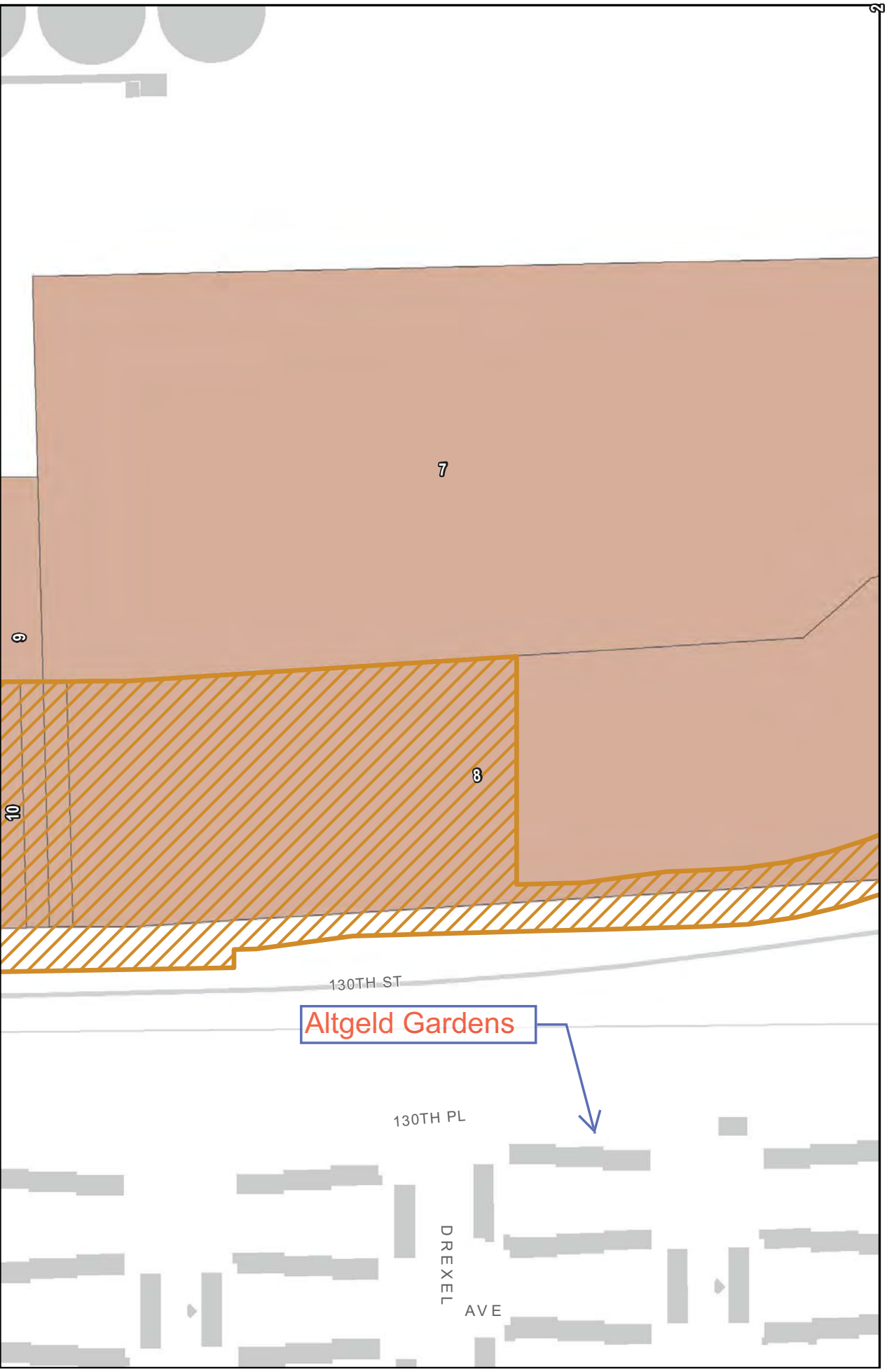

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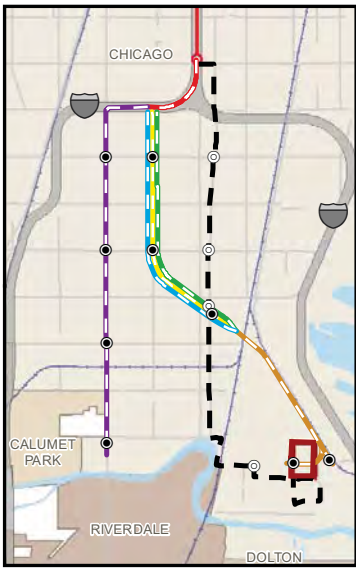

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 3 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.3

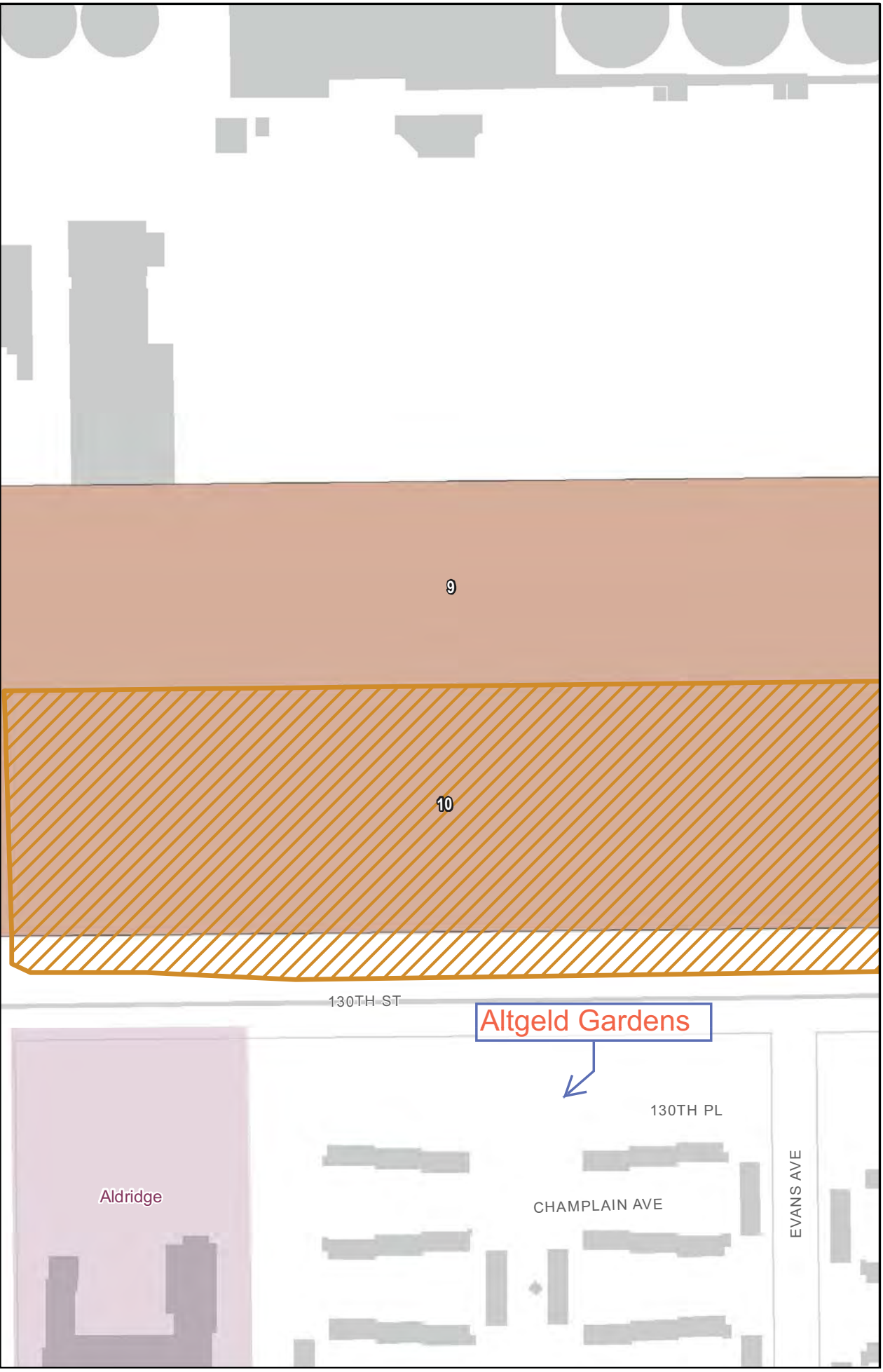

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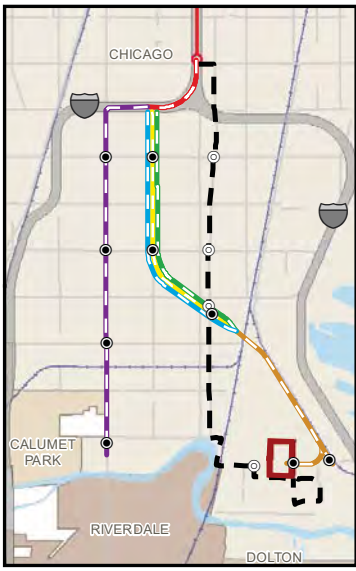

Legend

UPRR Rail Alternative
130th Street Station
West Option

Sheet 4 of 4

- Proposed Permanent Envelope
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250
Feet

map id: 03_06.4

Appendix D-5:
Halsted Rail Displacement Maps

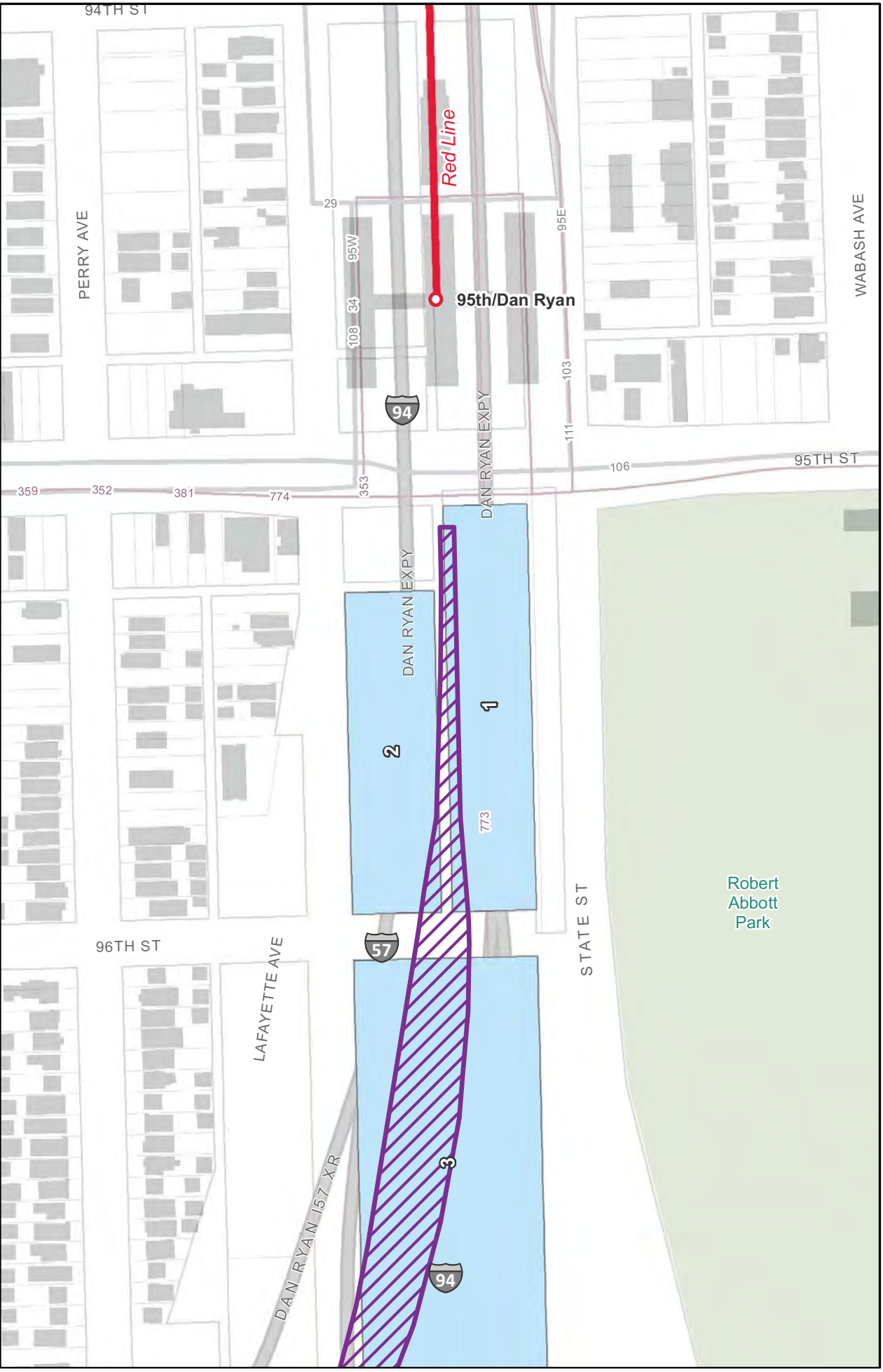

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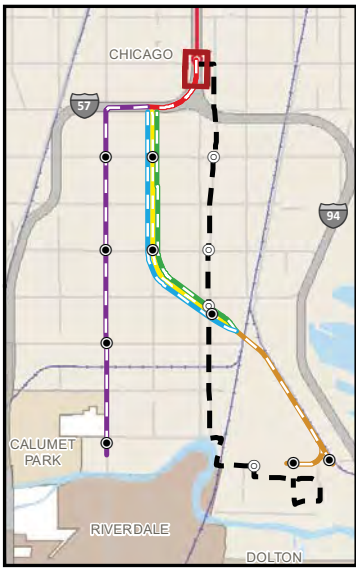

Legend

Halsted Rail Alternative

Sheet 1 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.1

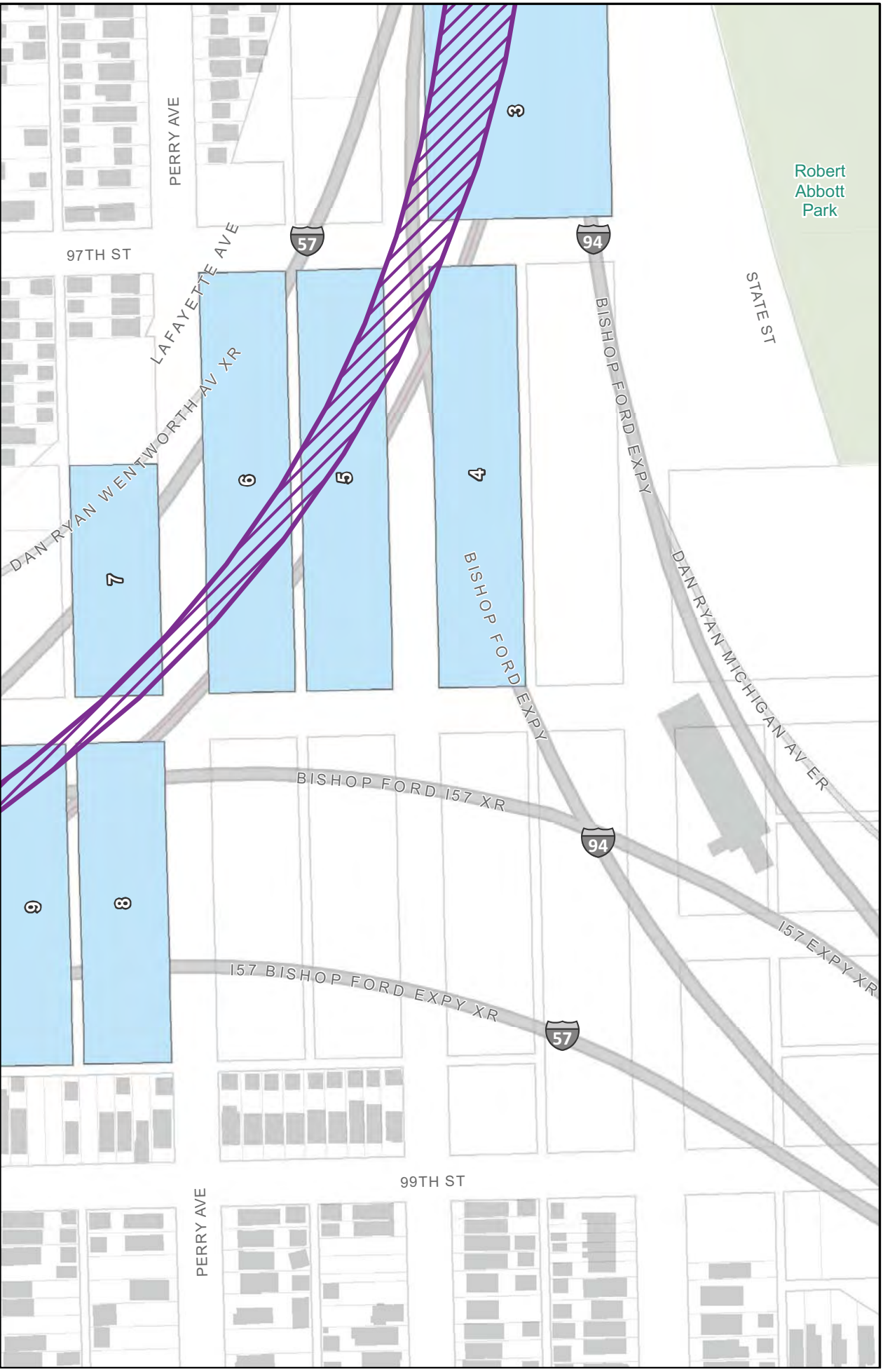

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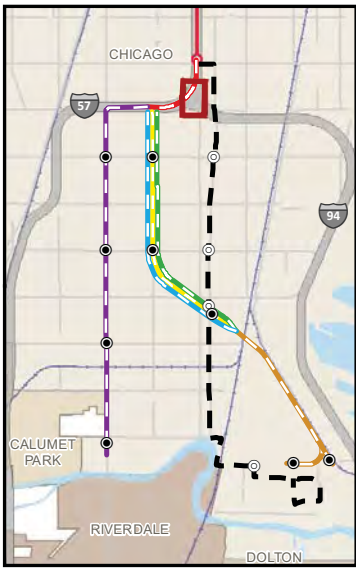

Legend

Halsted Rail Alternative

Sheet 2 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.2

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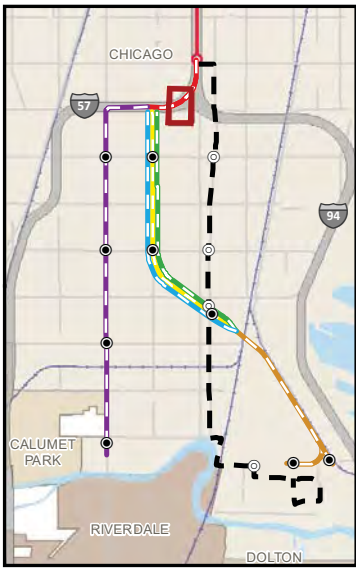

Legend

Halsted Rail Alternative

Sheet 3 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.3

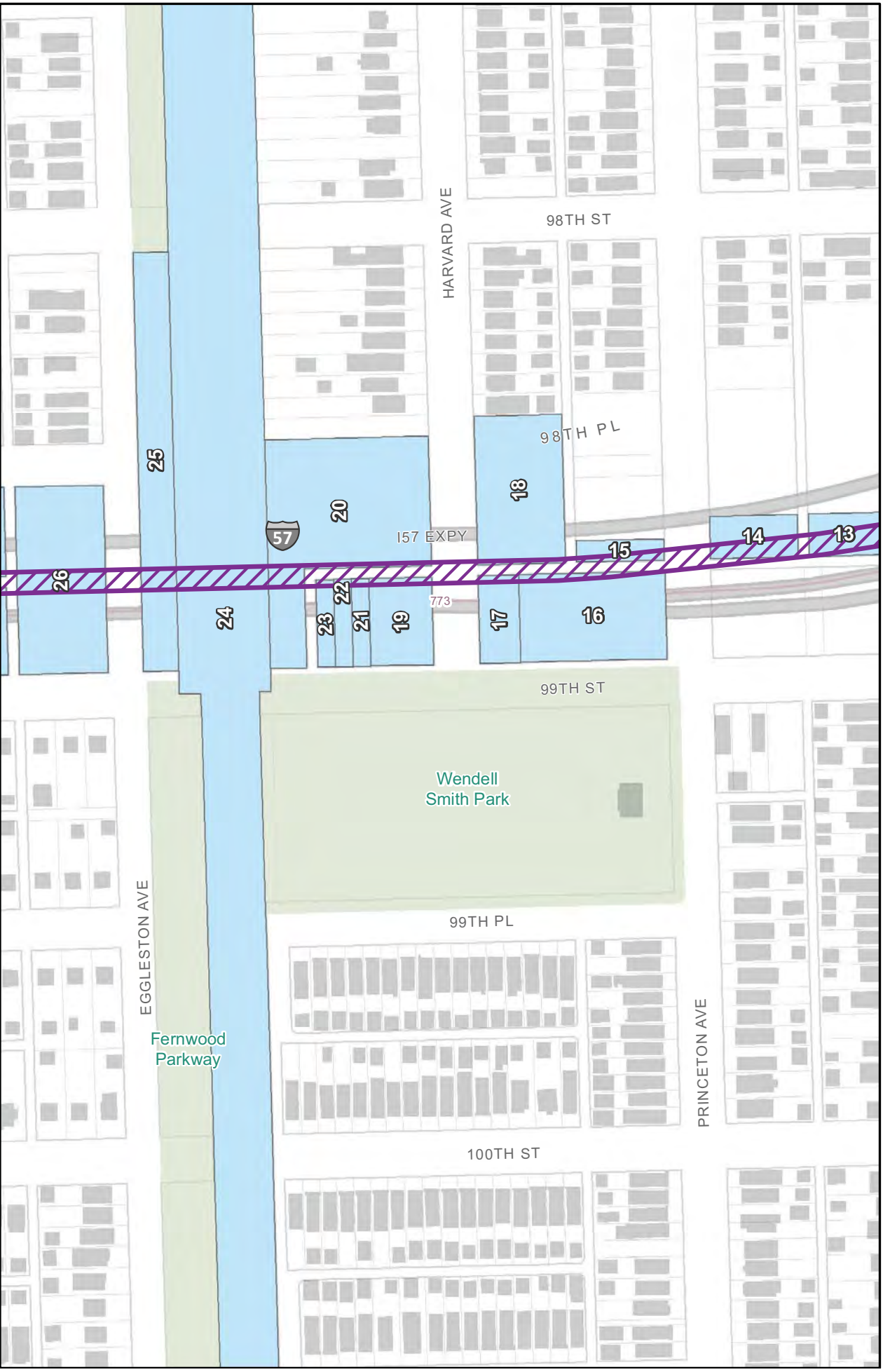

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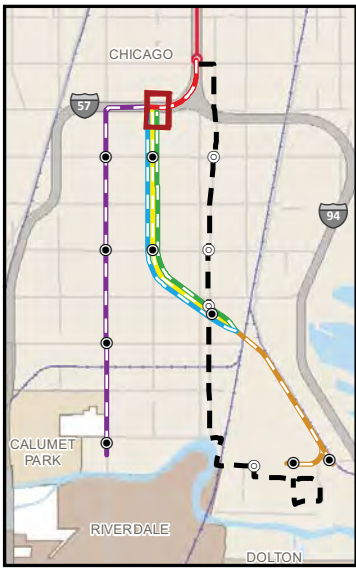

Legend

Halsted Rail Alternative

Sheet 4 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.4

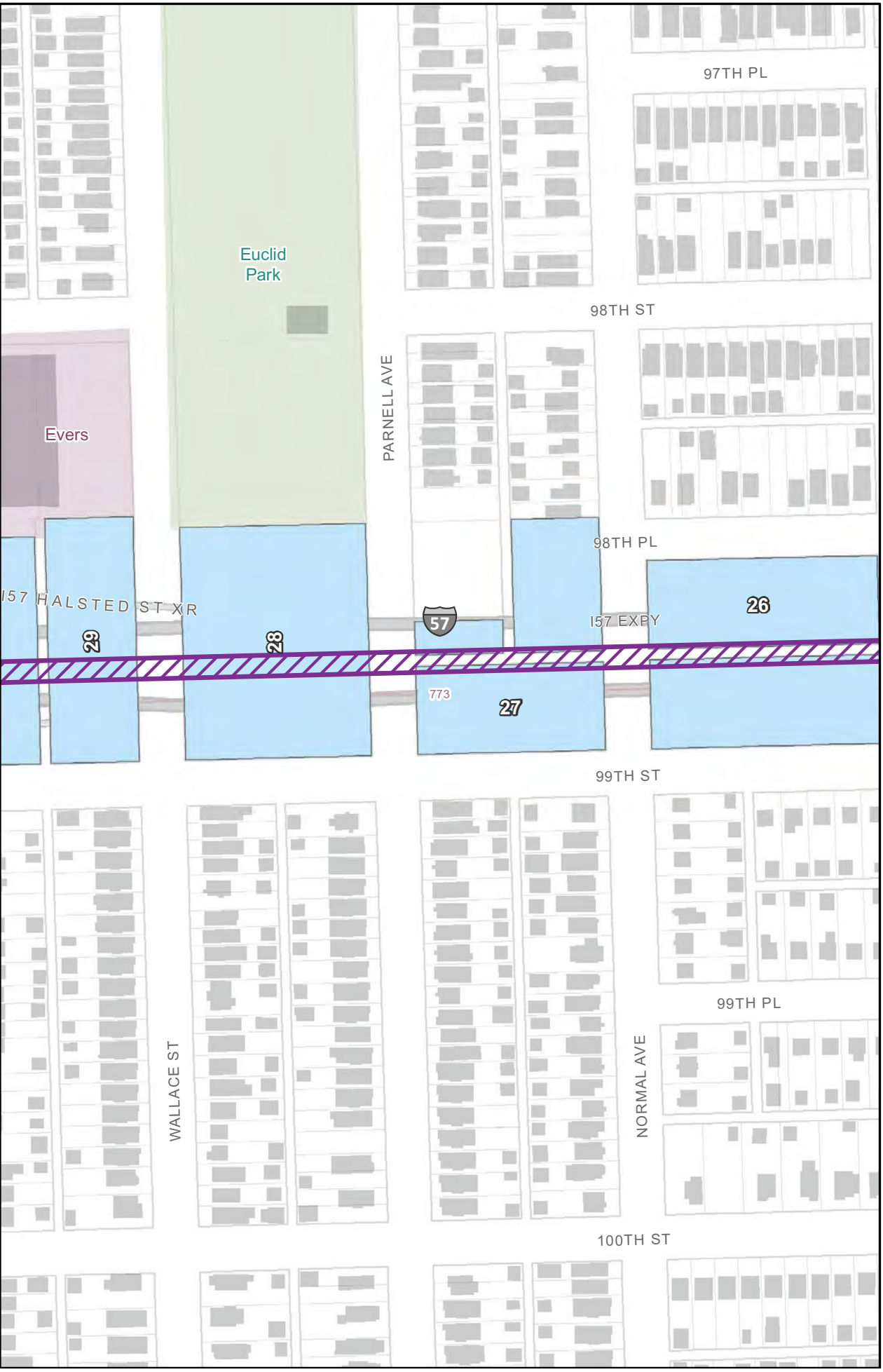

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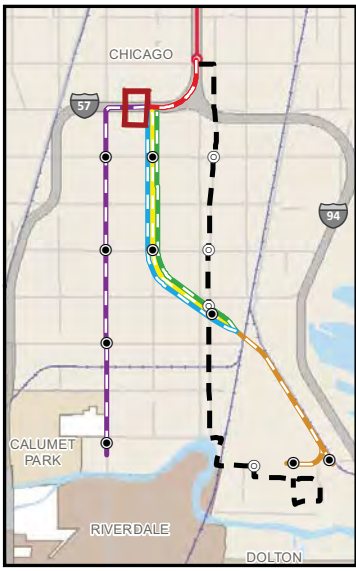

Legend

Halsted Rail Alternative

Sheet 5 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.5

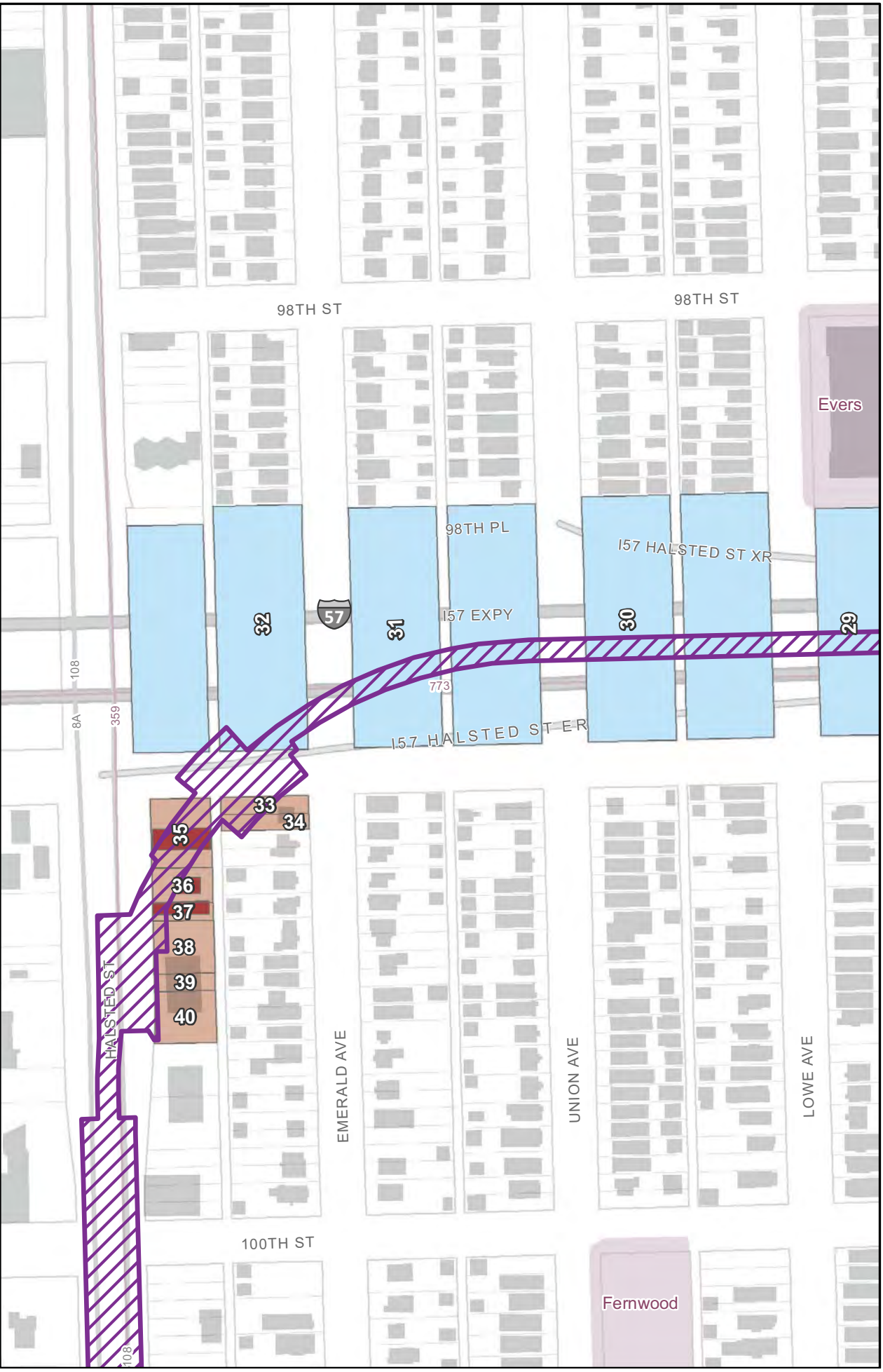

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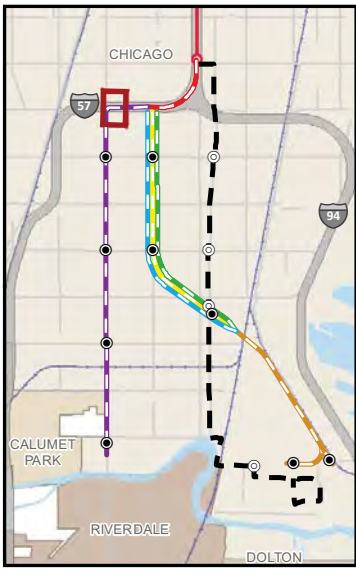

Legend

Halsted Rail Alternative

Sheet 6 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.6

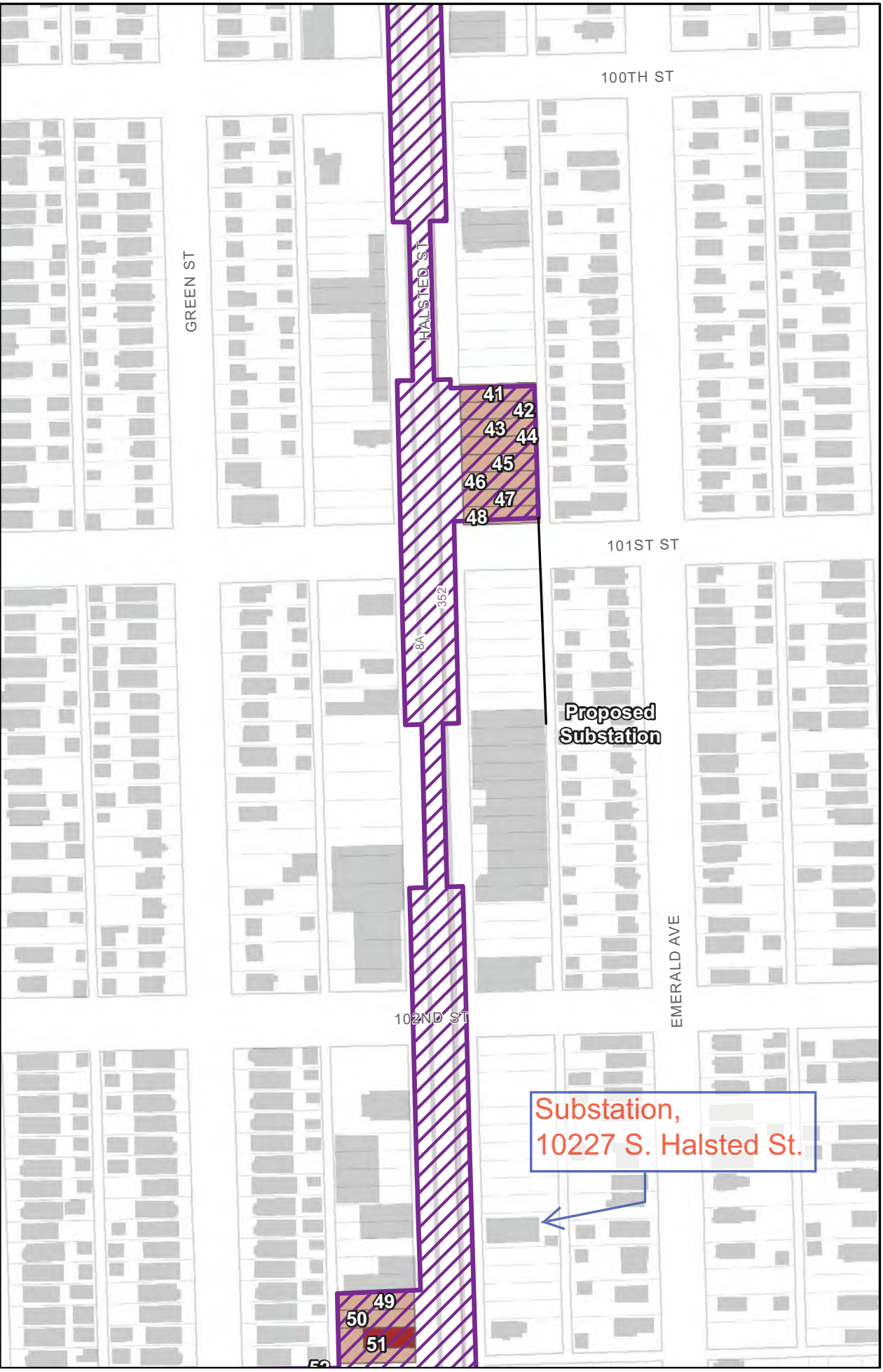

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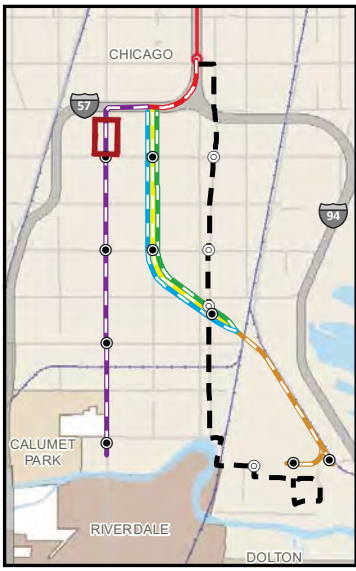

Legend

Halsted Rail Alternative

Sheet 7 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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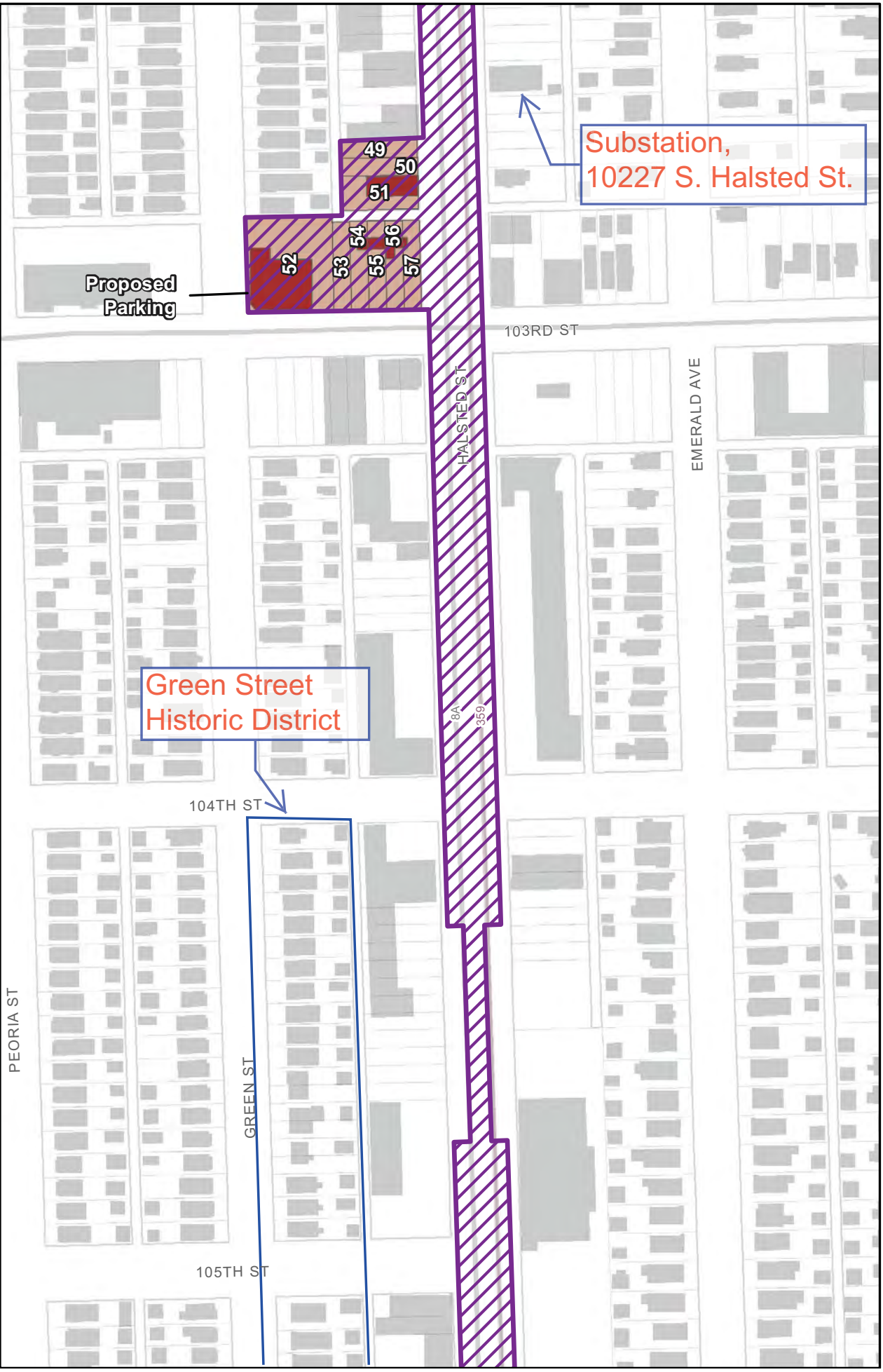

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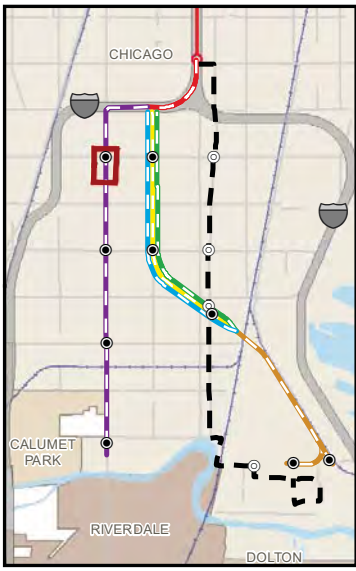

Legend

Halsted Rail Alternative

Sheet 8 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

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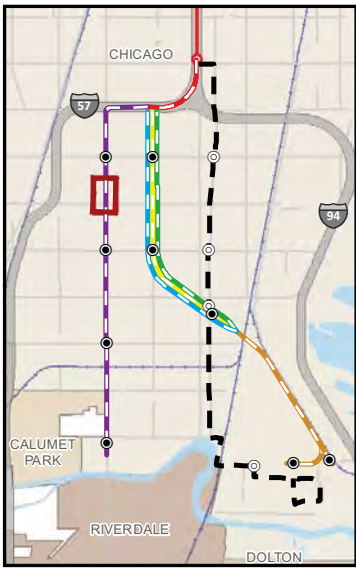

Legend

Halsted Rail Alternative

Sheet 9 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.9

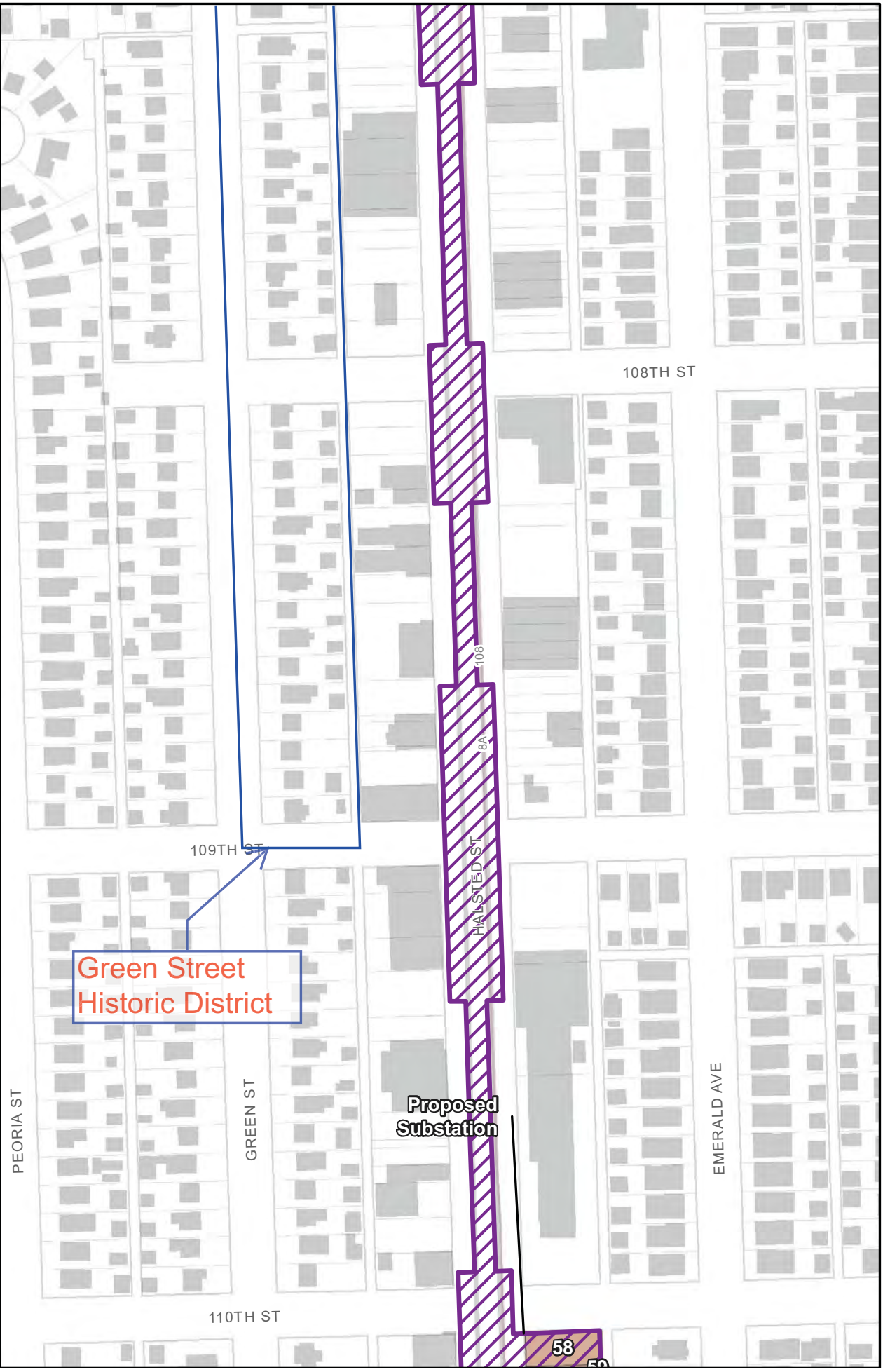

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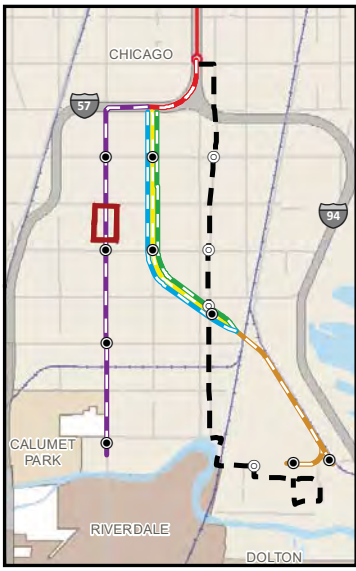

Legend

Halsted Rail Alternative

Sheet 10 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.10

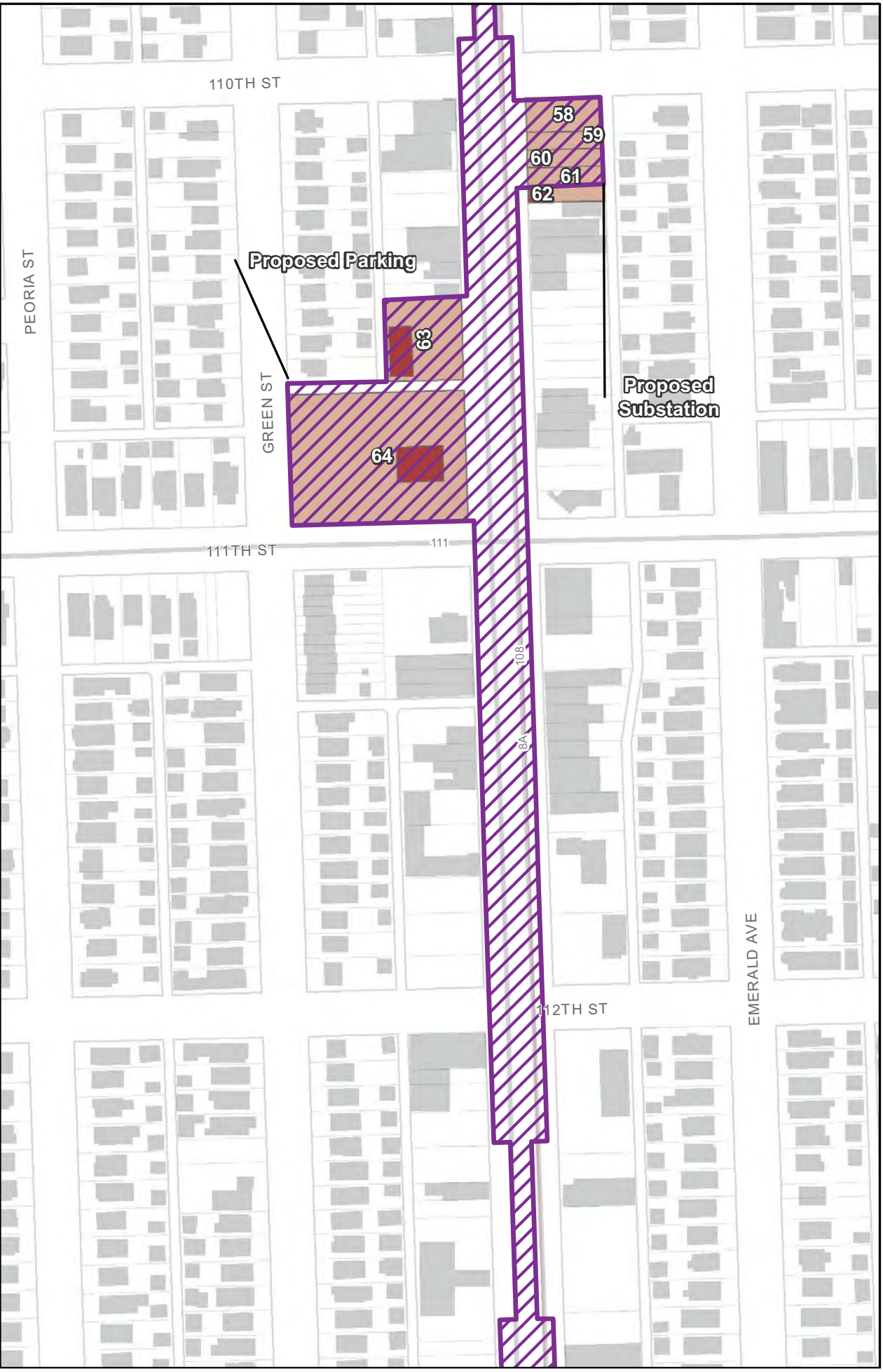

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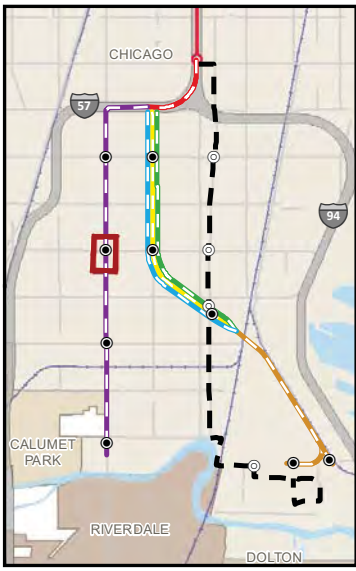

Legend

Halsted Rail Alternative

Sheet 11 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.11

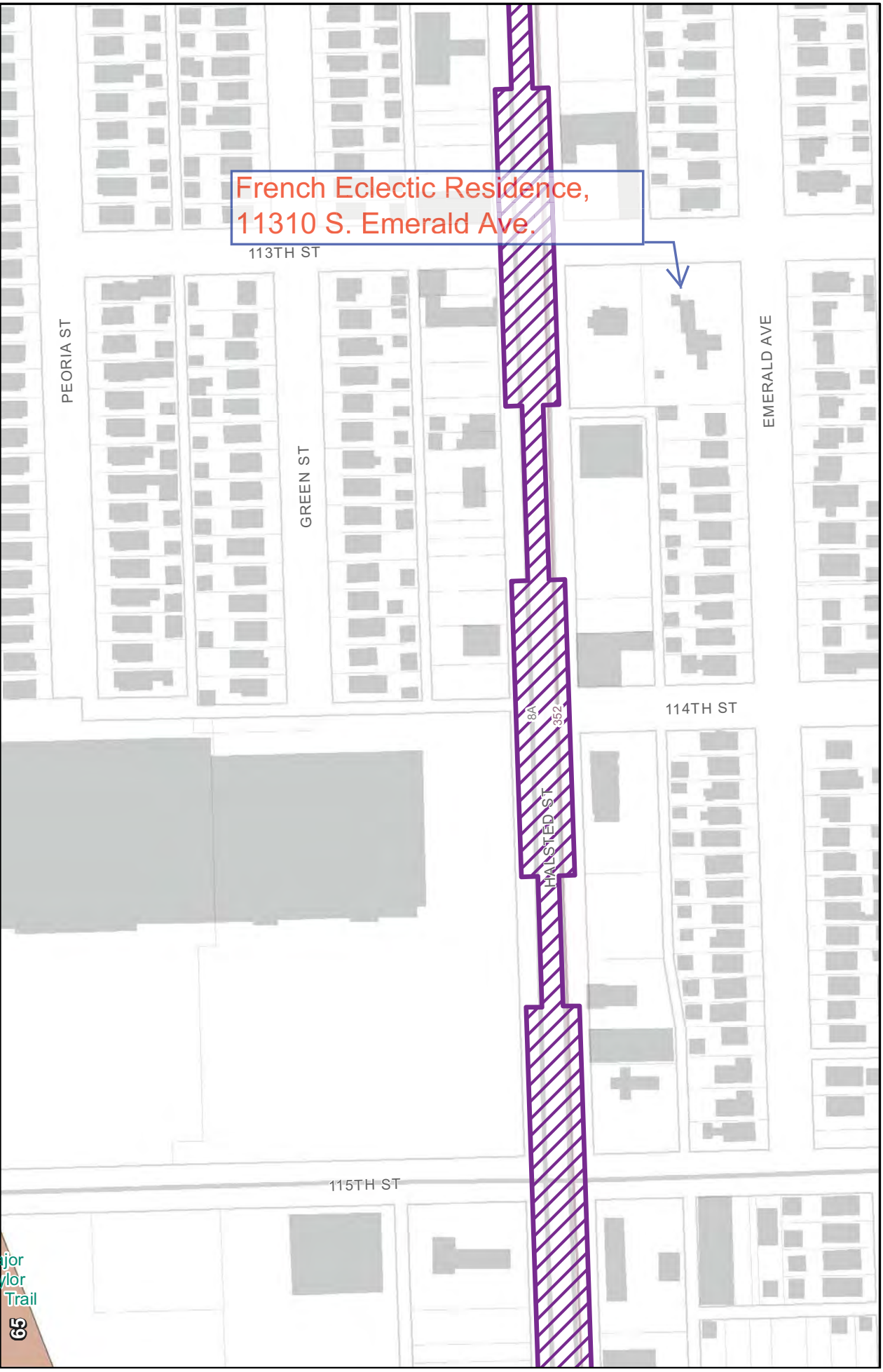

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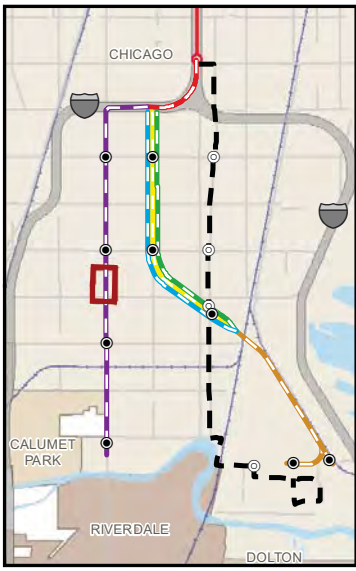

Legend

Halsted Rail Alternative

Sheet 12 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.12

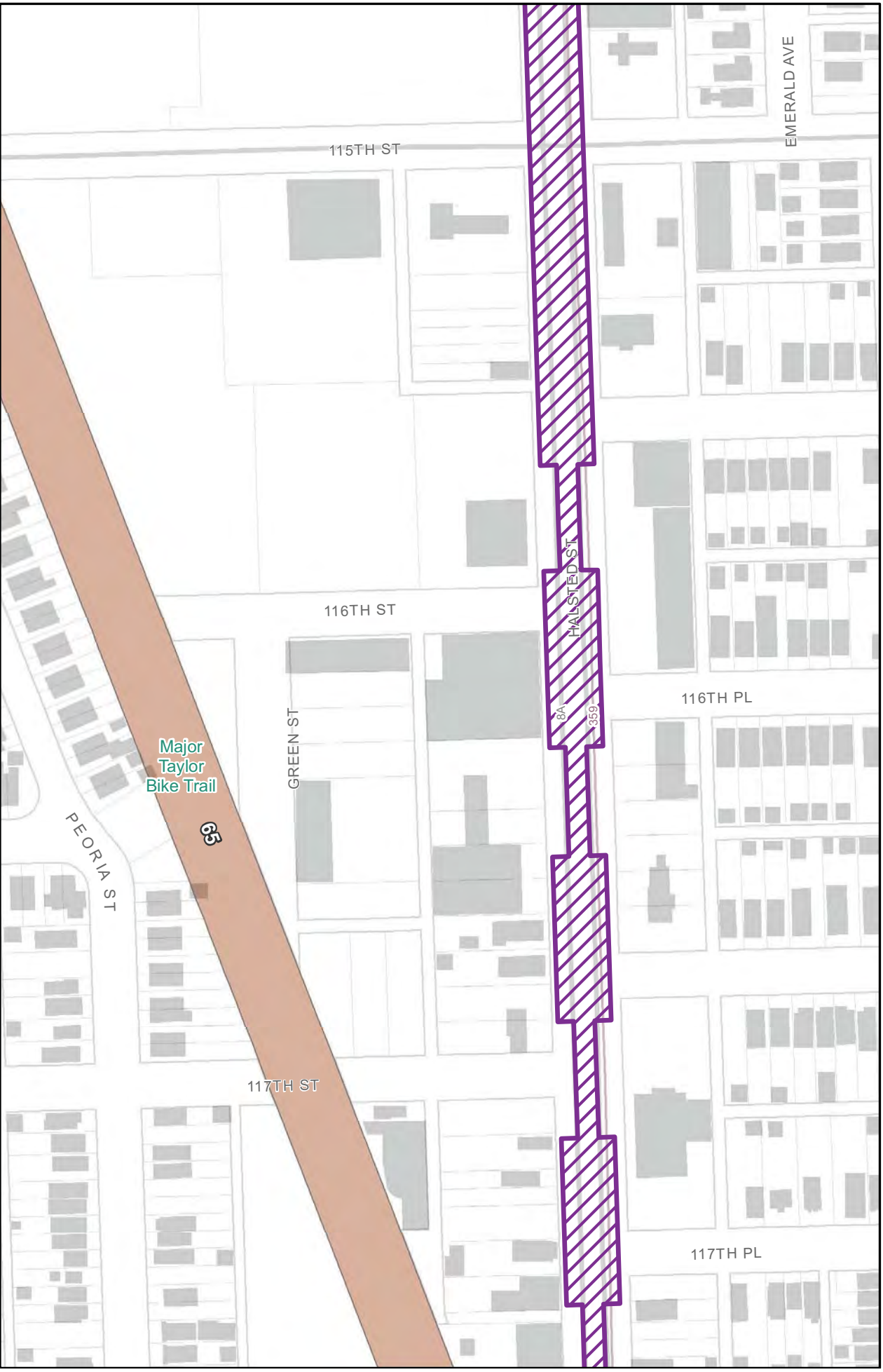

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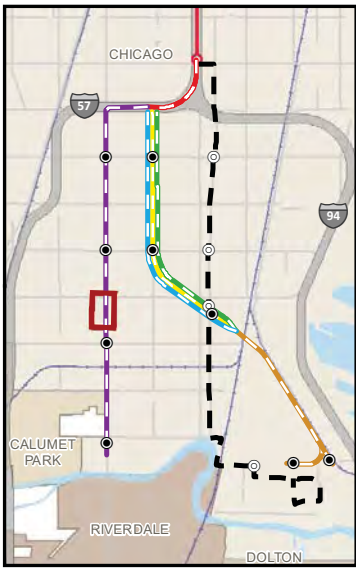

Legend

Halsted Rail Alternative

Sheet 13 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.13

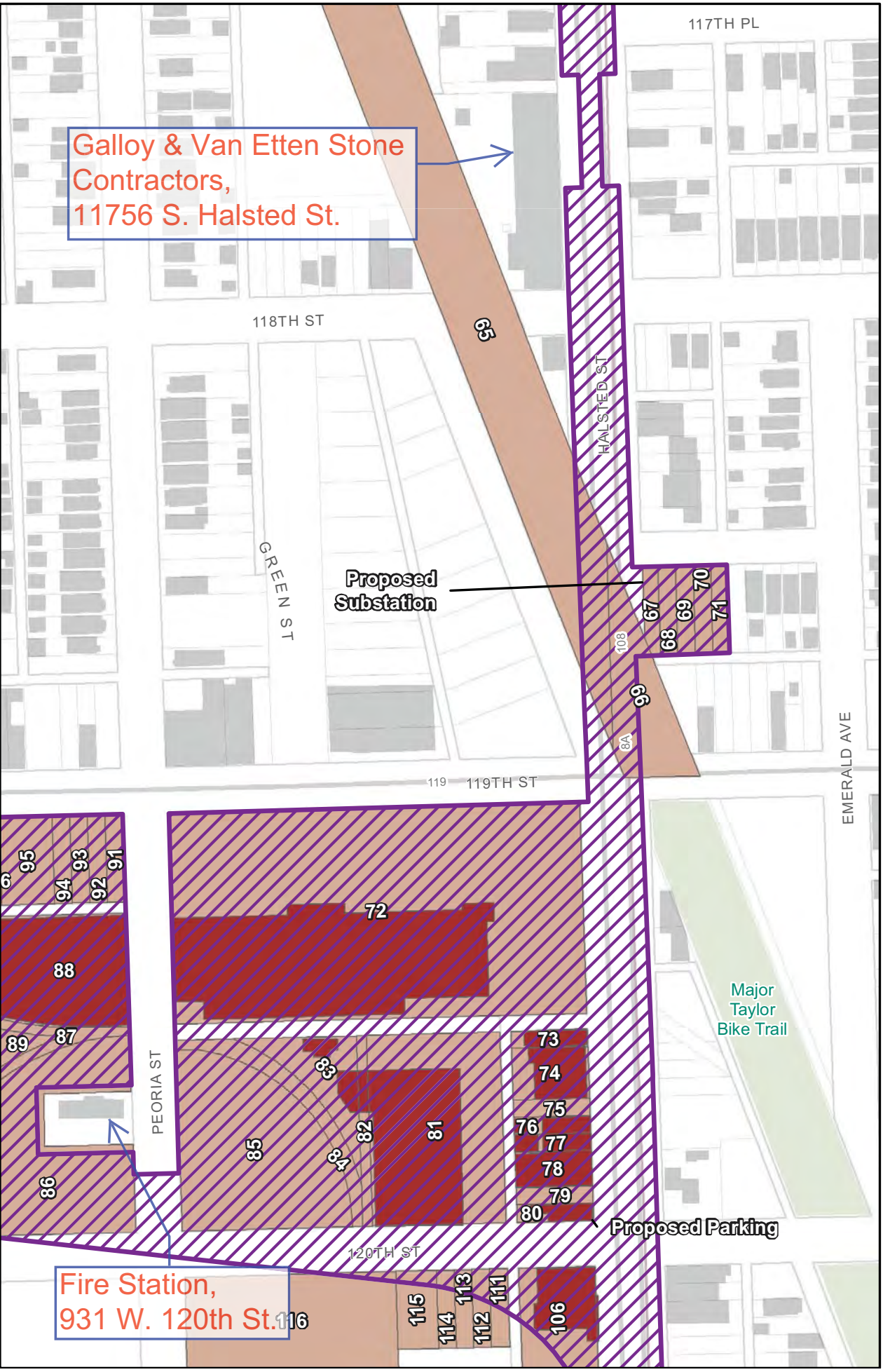

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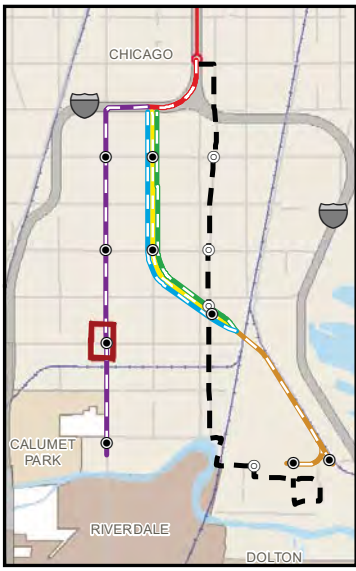

Legend

Halsted Rail Alternative

Sheet 14 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.14

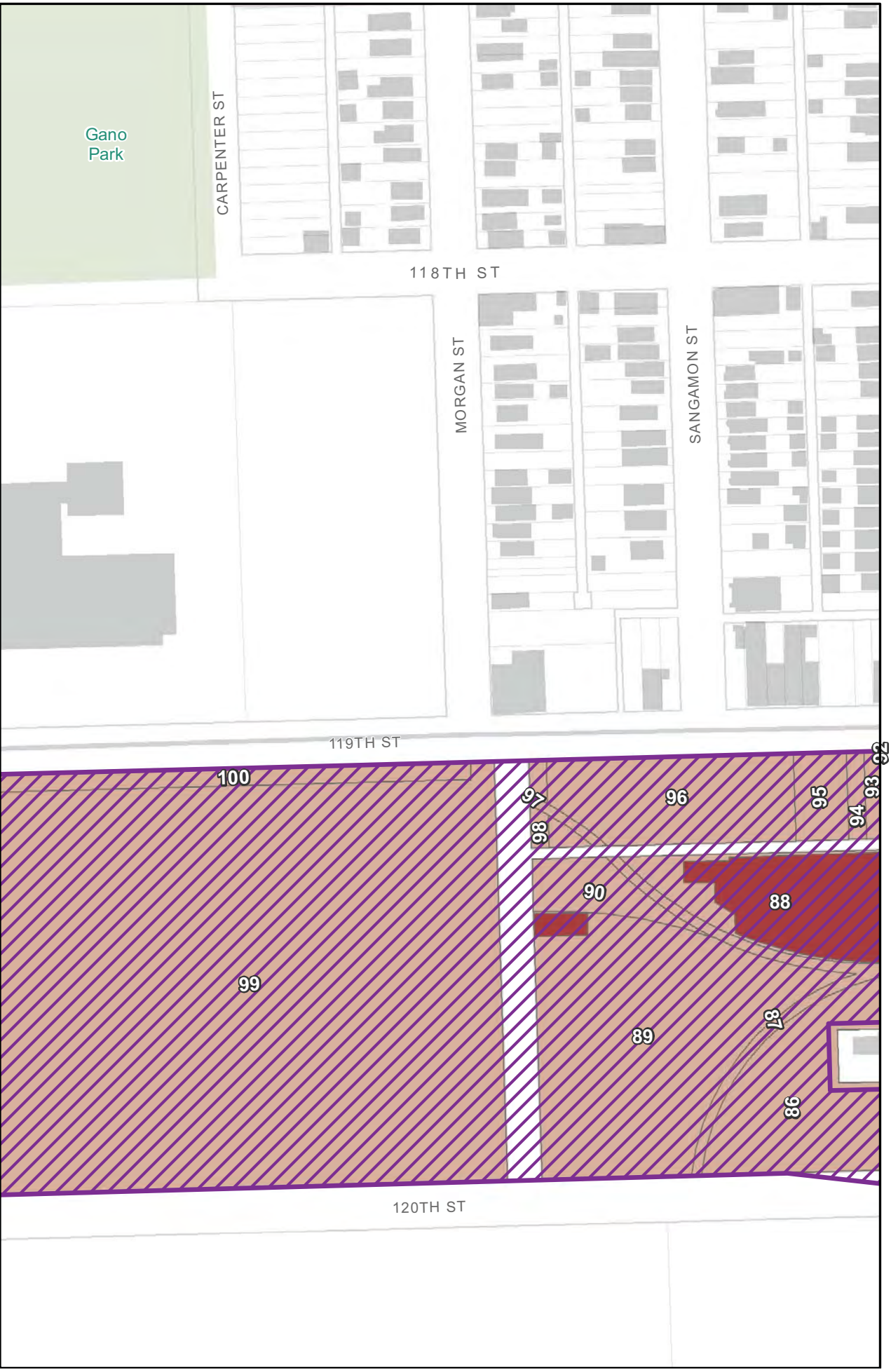

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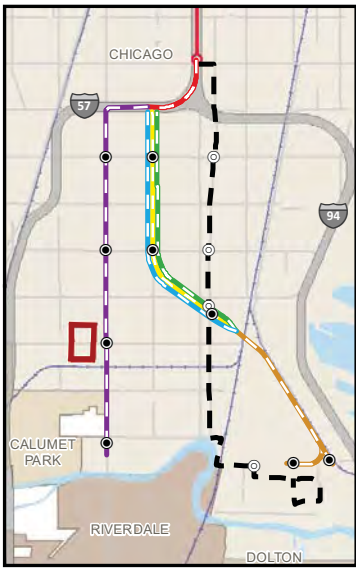

Legend

Halsted Rail Alternative

Sheet 15 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.15

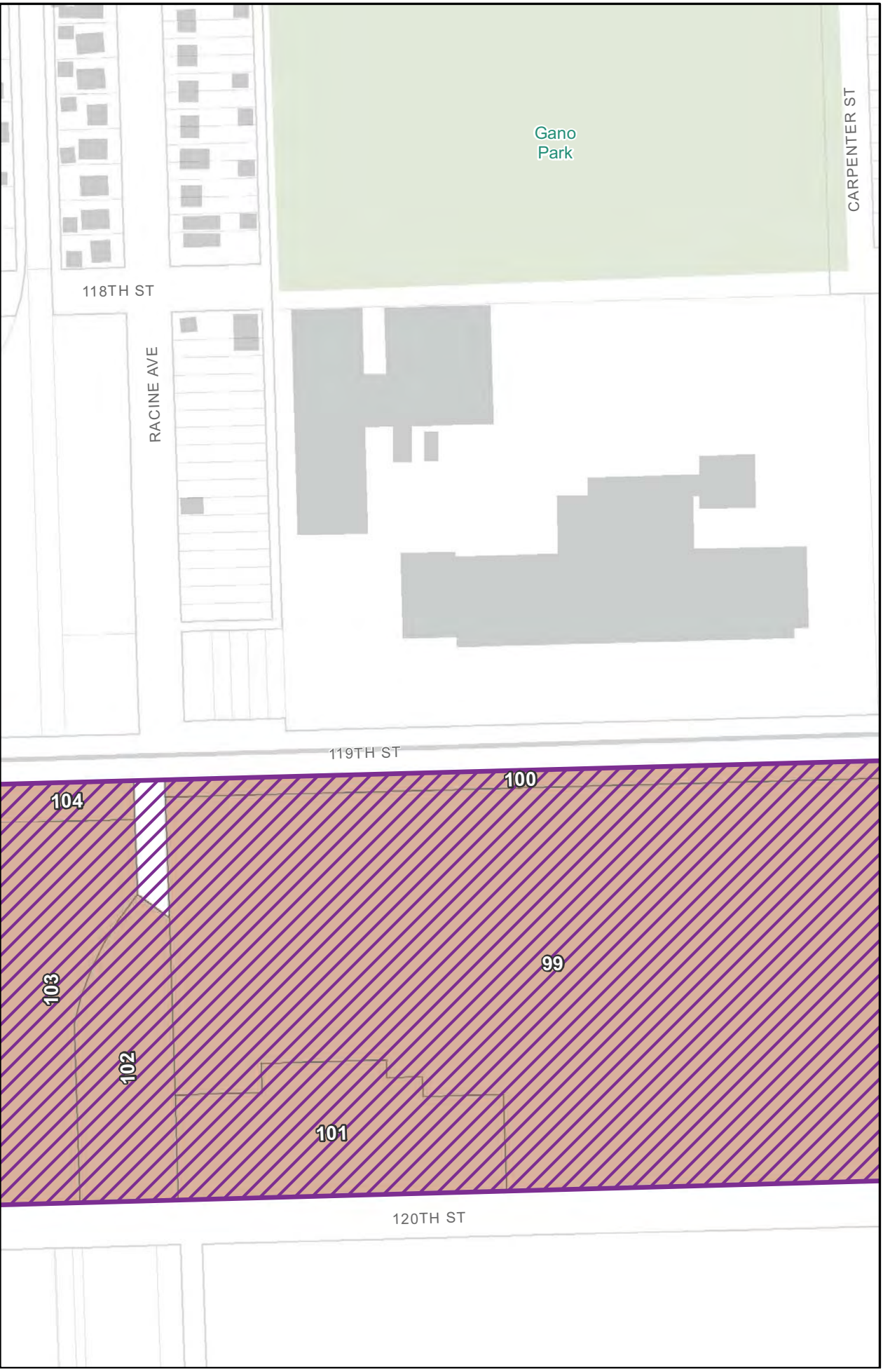

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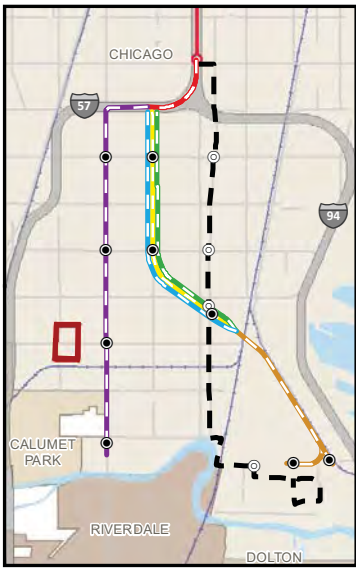

Legend

Halsted Rail Alternative

Sheet 16 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.16

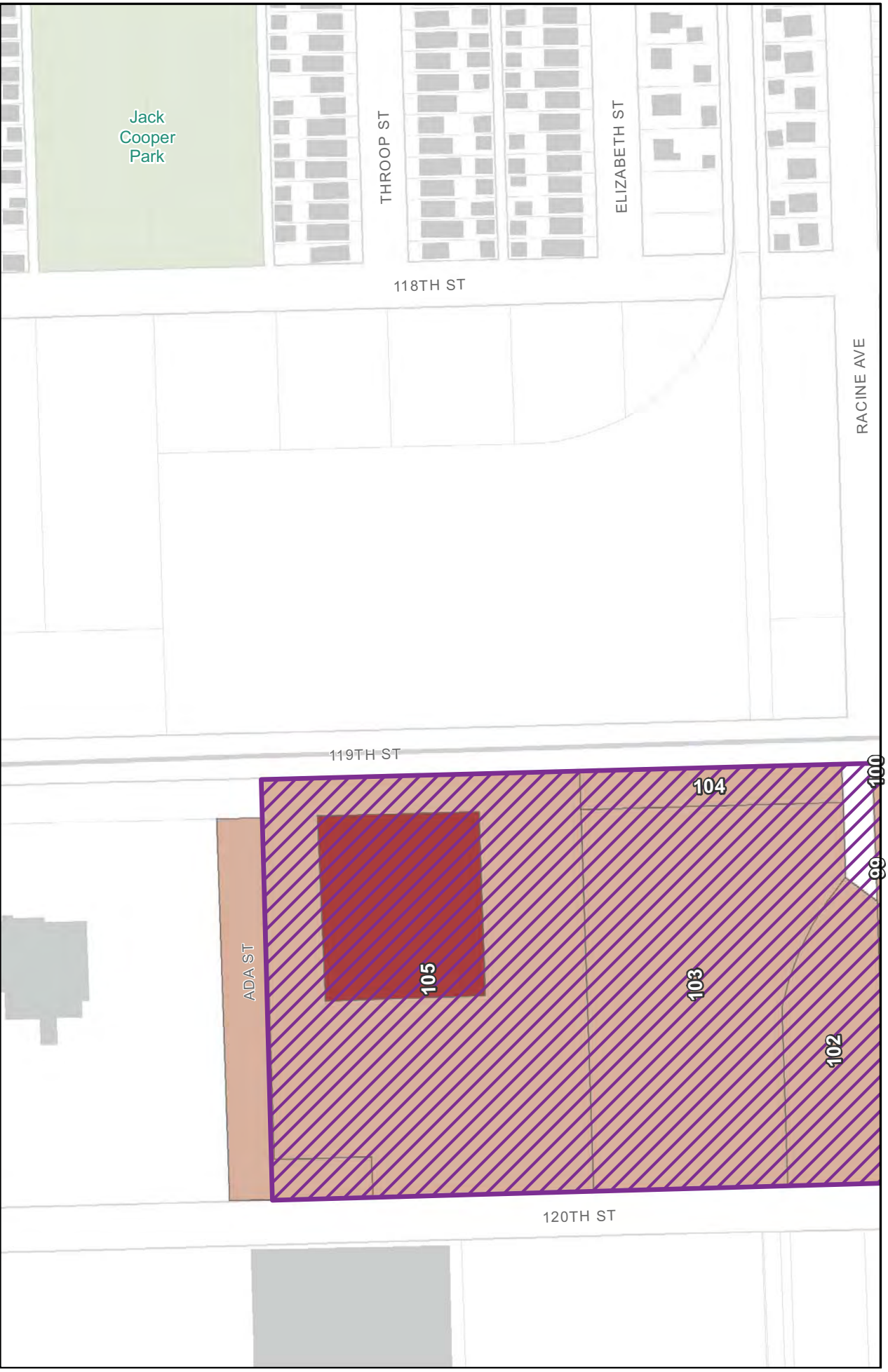

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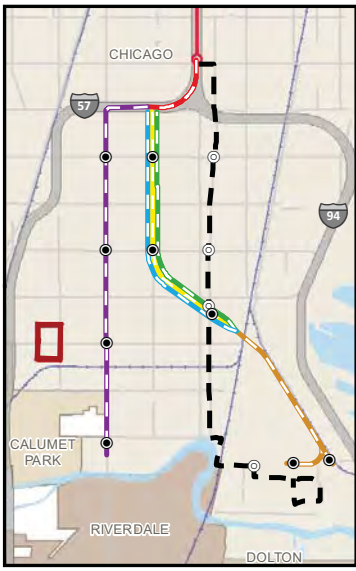

Legend

Halsted Rail Alternative

Sheet 17 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.17

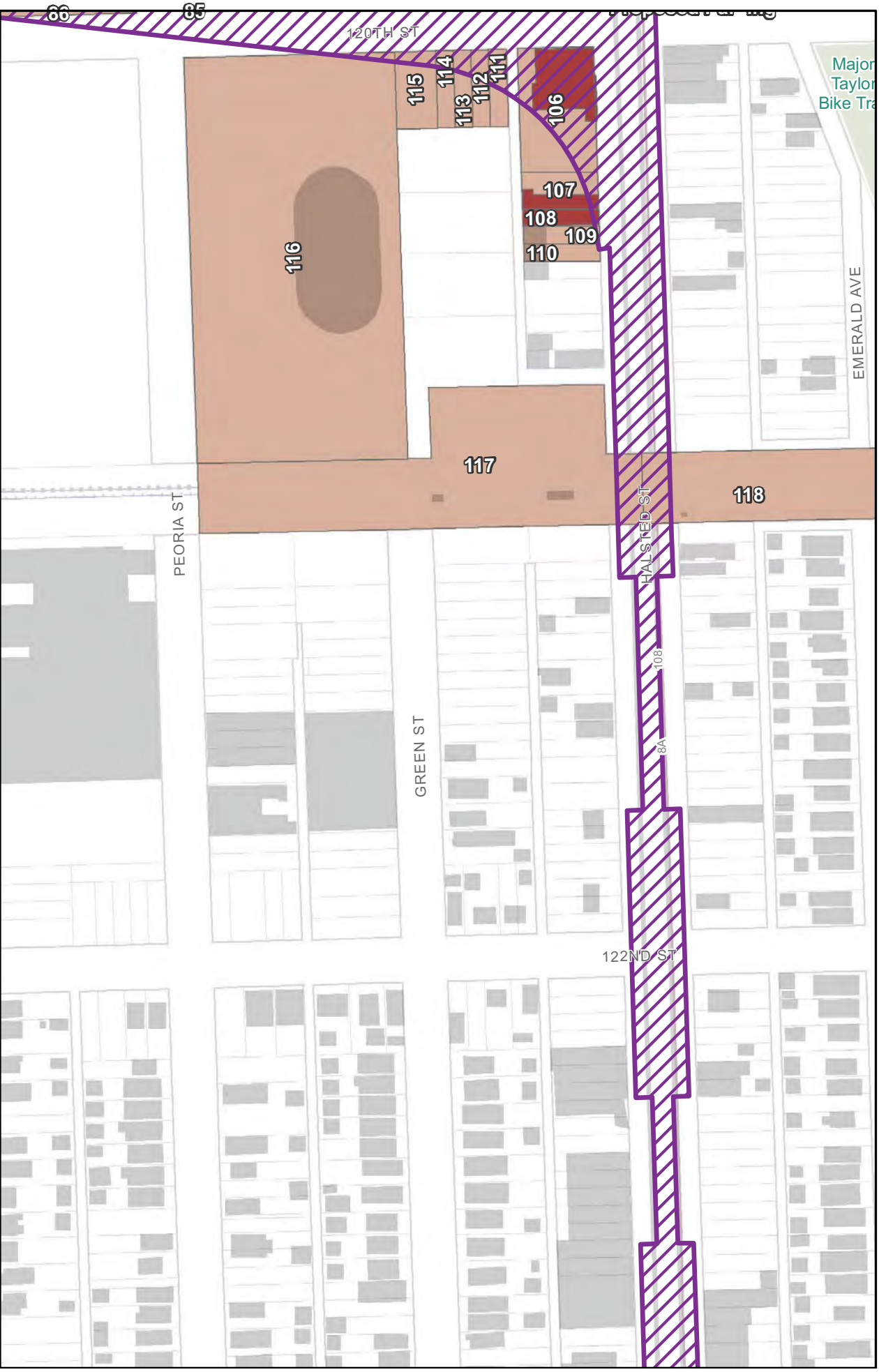

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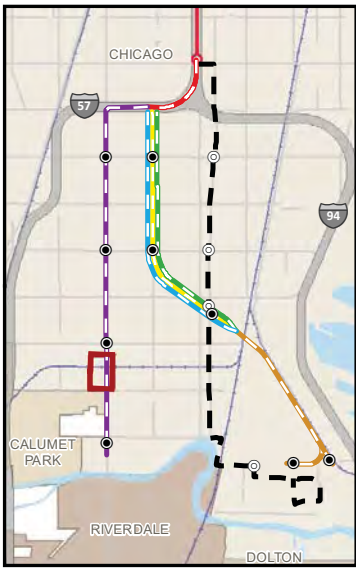

Legend

Halsted Rail Alternative

Sheet 18 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.18

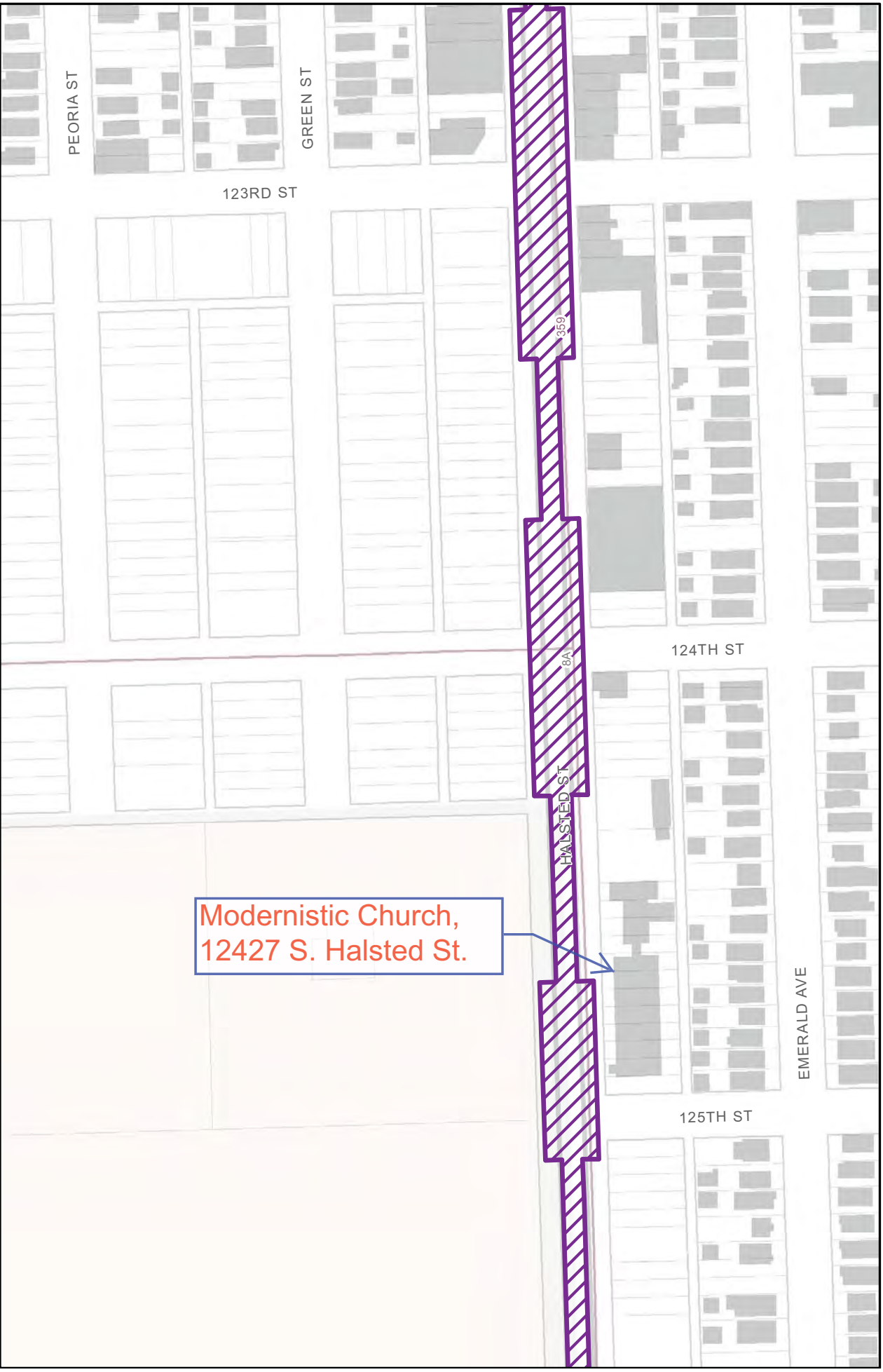

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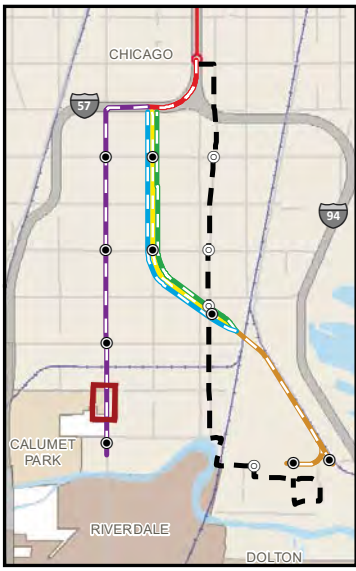

Legend

Halsted Rail Alternative

Sheet 19 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

0 125 250

Feet

map id: 03_07.19

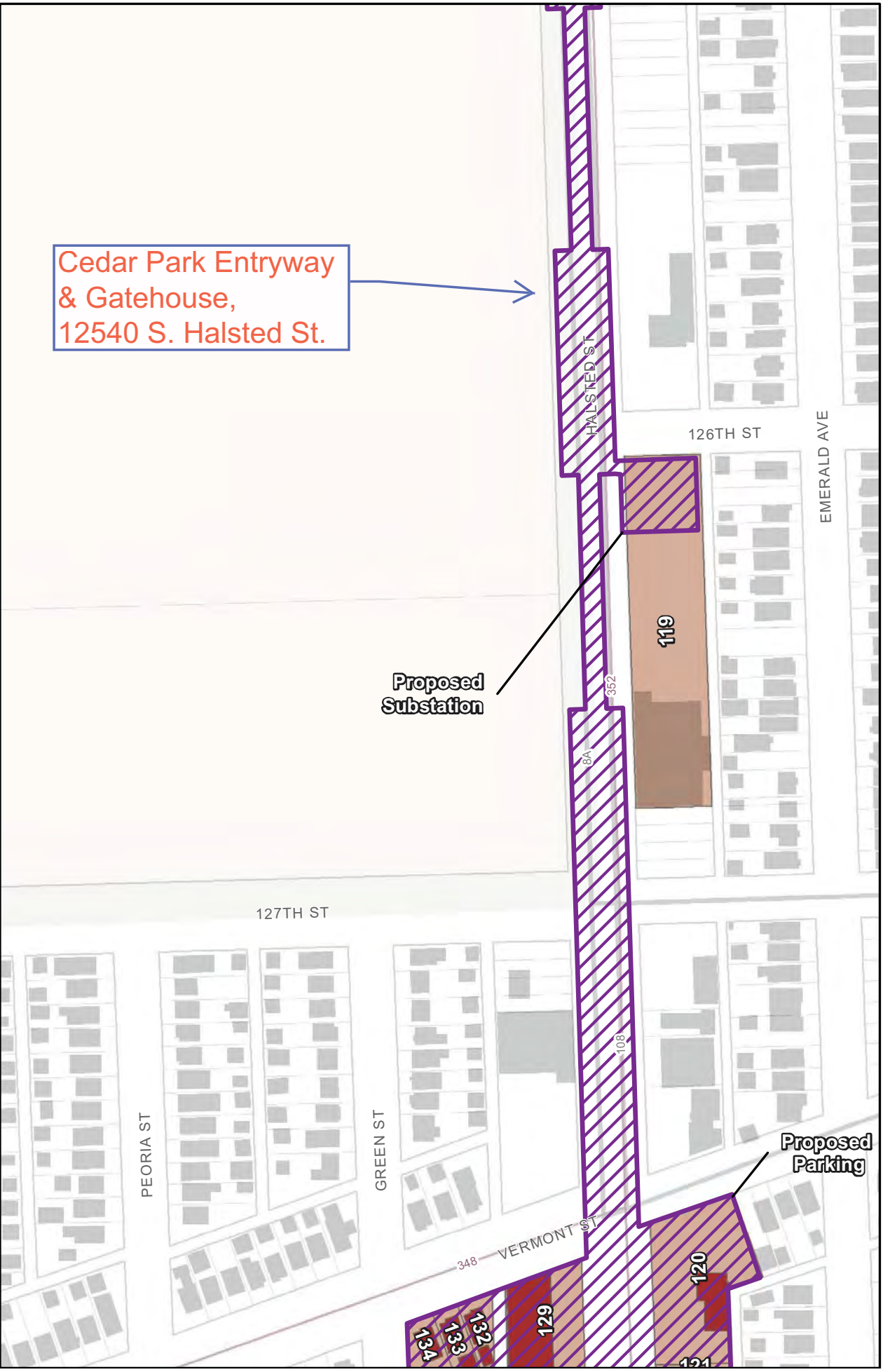

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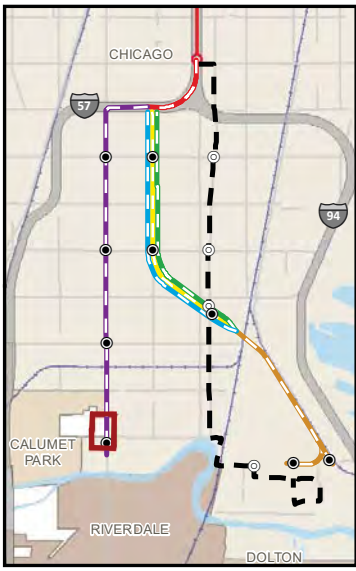

Legend

Halsted Rail Alternative

Sheet 20 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
- Building Displacement
- Building Footprint
- Parcels
- Parks
- Schools
- Freight Rail
- 49 CTA Bus
- 290 Pace Bus

Scale

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Feet

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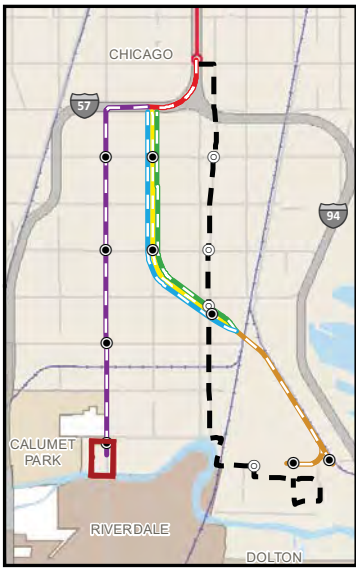

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Halsted Rail Alternative

Sheet 21 of 21

- Proposed Permanent Envelope
- Easement
- Parcel Affected by Proposed Permanent Envelope
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Scale

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Feet

map id: 03_07.21

Appendix E
2014–2015 Red Line Extension Project Update

2014-2015 Red Line Extension Project Update

From 2012-2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012-2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative–the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Historic and Cultural Resources

The refined alignment did not create any additional or different effects on historic resources.

Based on feedback from Section 106 consulting parties, CTA prepared two additional photo simulations. **Figure 1** shows a photo simulation of the elevated track structure adjacent to the Roseland Pumping Station under the East Option.

Figure 1: Photo of Existing Conditions and Photo Simulation of the Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue

CTA also prepared a photo simulation of the 130th Street Station and parking garage as viewed from Altgeld Gardens, included as **Figure 2**.

In addition, Appendix D-3 of the *Historic and Cultural Resources Technical Memorandum* includes displacement maps. Please see Appendix I of the *Displacements and Relocation of Existing Uses Technical Memorandum* for displacement maps for the refined alignment.

U.S. Department
of Transportation
**Federal Transit
Administration**

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Illinois, Indiana,
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Ohio, Wisconsin

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September 21, 2016

Illinois Historic Preservation Agency
Attn: Dr. Rachel Leibowitz
Deputy State Historic Preservation Officer
1 Old State Capitol Plaza
Springfield, Illinois 62701-1507

**RE: CTA Red Line Extension Project, IHPA Log 001010713
FTA Section 106 Eligibility and Effects Determination**

Dear Dr. Leibowitz:

As part of its responsibilities under 36 C.F.R. § 800-Protection of Historic Properties, and the National Historic Preservation Act (NHPA), the Federal Transit Administration (FTA) is providing an update on the Section 106 consultation process for CTA's Red Line Extension (RLE) Project (Project) and requesting concurrence on determinations. The proposed Project will extend CTA's Red Line service an additional 5.3 miles from the Red Line's existing 95th Street Terminal to the vicinity of 130th Street. The extension would include three new intermediate stations with bus and parking facilities as well as a new terminal station. The Project is one part of CTA's Red Ahead Program to extend and enhance the entire Red Line.

FTA has previously determined that the Project will be a Federal undertaking as defined in § 800.16(y) and that it is a type of activity that has the potential to cause effects on historic properties. Over the past four years, FTA and CTA have conducted a Section 106 consultation process in coordination with the Illinois Historic Preservation Agency (IHPA) and other Consulting Parties. The following provides a chronology of these activities:

- 6/25/2012: FTA sent a letter to IHPA authorizing CTA to initiate the consultation process for the RLE Project.
- 7/20/2012: Conference call hosted by FTA and CTA with IHPA to introduce the Project, and discuss the Area of Potential Effects (APE), including a representative sampling methodology for surveying resources within the APE.
- 8/13/2012: FTA and CTA sent invitations to local organizations to become a Section 106 Consulting Party for the Project.
- 10/24/2012: FTA and CTA held a kickoff webinar with the Section 106 Consulting Parties. Items discussed included an overview of the Section 106 process, Consulting Parties' roles

in the process, general project information, the proposed Project APE, and Project alternatives.

- 1/30/2013: FTA and CTA held a Section 106 Eligibility Meeting with IHPA and Consulting Parties.
- 10/10/2013: FTA and CTA sent a Response to Comments to Consulting Parties and IHPA regarding findings on the eligibility of historic resources within the then current Project APE.
- 5/8/2014: FTA and CTA held a Section 106 Effects Meeting with IHPA and Consulting Parties to discuss the Draft Effects Report.
- 11/24/2014: FTA and CTA sent a Response to Comments to Consulting Parties and IHPA regarding findings on the effects on historic resources within the Project APE.

As part of the Project's National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) documentation, FTA and CTA have prepared the RLE Historic & Cultural Resources Eligibility and Effects Summary Report (the Summary Report) for the Project with appendices that include relevant materials from the Section 106 consultation process. A copy of the Summary Report is enclosed on a CD for your review.

In August 2014, based on the technical analysis, revised project Purpose and Need, and public input received to that point, CTA announced the NEPA Preferred Alternative—the UPRR Alternative, featuring an East and West Option. Eliminated from further review and analysis were the Bus Rapid Transit (BRT) Alternative, Union Pacific Railroad (UPRR) Alternative – Right-of-Way Option, and the Halsted Alternative, as well as the UPRR Alternative – West Station Option for the 130th Street station. As a result of these project changes, the APE has been revised to only incorporate the area around the UPRR Alternative (East and West Options). See Figure 2-4 in the Summary Report provided for the revised APE.

As described in the chronology above, on November 24, 2014, CTA provided responses to all comments received from the Consulting Parties in May of 2014. This comment response communication noted that the Project alternatives had been further narrowed, and that the UPRR Alternative (East and West Options) were proposed to move forward as the NEPA Preferred Alternative. Additional details on the Project alternatives development process and history, including the entirety of alternatives evaluated between 2012 and 2014 as part of the Section 106 consultation process for this project, are provided in Attachment 1 of the Summary Report.

Based on research conducted by CTA and documented in the Summary Report and its appendices, FTA has determined the following for the RLE Project:

280 resources over 50 years of age are located within the revised Project APE. Of these, 7 are eligible for the National Register of Historic Places (NRHP), including 6 individual buildings and 1 historic district. As summarized in the table below, of the 7 NRHP-eligible resources within the APE, 6 will experience **No Historic Properties Affected** and 1, the Roseland Pumping Station, will have **No Adverse Effect** as a result of the RLE Project.

ID	Description	Union Pacific Railroad Alternative East Option Effects Finding	Union Pacific Railroad Alternative West Option Effects Finding
1	Eclectic Neo-Traditional Home	No Historic Properties Affected	No Historic Properties Affected
2	Fire Department Engine Company 93	No Historic Properties Affected	No Historic Properties Affected
3	Roseland Pumping Station	No Adverse Effect	No Historic Properties Affected
4	Romanesque Revival-Style Church	No Historic Properties Affected	No Historic Properties Affected
5	Roseland Community Hospital Nurses Home	No Historic Properties Affected	No Historic Properties Affected
6	Former Venetian Hall	No Historic Properties Affected	No Historic Properties Affected
7	Altgeld Gardens Historic District	No Historic Properties Affected	No Historic Properties Affected

NRHP = National Register of Historic Places

As a result of these determinations, no mitigation measures would be required, and consultation with Consulting Parties is considered complete. Coordination with IHPA will continue through the remainder of the project.

Pursuant to the Section 106 implementing regulations at 36 C.F.R. § 800, FTA is seeking State Historic Preservation Officer (SHPO) concurrence with the revised APE, as well as the above eligibility and effects determinations, within 30 days of receipt of this letter.

If FTA can provide any assistance or additional information which would aid in your prompt reply, please feel free to contact Mark Assam, Environmental Protection Specialist at 312-353-4070. Thank you for your assistance.

Sincerely,

Jay M. Ciavarella
Director, Office of Planning & Program Development

Enclosure: RLE Historic & Cultural Resources Eligibility and Effects Summary Report

CC: Tony Greep, FTA
Mark Assam, FTA
Sonali Tandon, CTA
Carole Morey, CTA

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Eligibility and Effects Summary Report

September 19, 2016

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
CWE Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Summary 1
1.1 Regulatory Framework 1
1.2 Section 106 Consultation History and Evolution 3
1.3 Organization of this Report 4

Section 2 Project Description and Area of Potential Effect 5
2.1 No Build Alternative 6
2.2 Build Alternative 6
2.2.1 Alignment 6
2.2.2 Stations 9
2.2.3 Park & Ride Facilities 10
2.2.4 Yard and Shop 11
2.2.5 Substations 11
2.2.6 Operating Plan 11
2.3 Area of Potential Effect 12

Section 3 Methodology for Identification of Resources 14
3.1 Identification of Historic Resources 14
3.1.1 Background Research/Historic Context 14
3.1.2 Surveys of Historic Resources 15
3.2 Identification of Archaeological Resources 16

Section 4 Eligible Historic and Archaeological Resources 17
4.1 Historic Resources 17
4.1.1 NRHP-Eligible Resources 17
4.1.2 CHRS Orange-Rated Properties 27
4.2 Archaeological Resources 27

Section 5 Effects Determinations and Mitigation 28
5.1 Effect Analysis Thresholds 28
5.2 No Build Alternative 28
5.3 Build Alternative - UPRR Alternative 29
5.3.1 East Option 29
5.3.2 West Option 31

Section 6 Consultation Process 32
6.1 Initiation Activities 32
6.1.1 Invitations to Participate 32
6.1.2 Section 106 Kickoff Webinar 33
6.2 Identification of Historic Properties 33
6.3 Assessment of Effects 34
6.4 Resolution of Adverse Effects 34

Attachments

Attachment 1: Alternatives Refinement Process

Attachment 2: Historic Survey Inventory Sheets

Attachment 3: Section 106 Consultation Supporting Documentation

Figures

Figure 2-1: Red Line Extension Project Build Alternative 8
Figure 2-2: Photo Simulation of Union Pacific Railroad Alternative East Option at 111th Street Facing West - Typical Proposed Elevated Structure 9
Figure 2-3: Photo Simulation of Union Pacific Railroad Alternative East Option at 103rd Street Facing Northwest - Typical Proposed Elevated Station.....10
Figure 2-4: RLE Project Area of Potential Effect 13
Figure 4-1: NRHP-Eligible Resources in the Area of Potential Effects 18
Figure 4-2: South Facade of the Eclectic Neo-Traditional Home at 444 W. 100th Place 19
Figure 4-3: South Facade of Chicago Fire Department Engine Company 93.....20
Figure 4-4: North Facade of the City of Chicago Roseland Pumping Station 21
Figure 4-5: East and North Facades of Church at 10920 S. Princeton Avenue 22
Figure 4-6: Front Facade of Nurses Home at 11321 S. Wentworth Avenue.....23
Figure 4-7: Front Facade of Venetian Hall 24
Figure 4-8: Photo of Altgeld Gardens 26
Figure 5-1: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue 30
Figure 5-2: Photo of Existing Conditions and Photo Simulation of the 130th Street Station and Parking Garage, Facing Northeast on 130th Place.....31

Tables

Table 2-1: Summary of Park & Ride Facilities.....11
Table 4-1: NRHP-Eligible Resources in the Area of Potential Effects 17
Table 5-1: NRHP-Eligible Resources in the Area of Potential Effects - Union Pacific Railroad Alternative East and West Options 29

Section 1
Summary

This document summarizes information previously provided on the results of technical analysis on potential historic and cultural resources affected by the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project and consultation conducted under Section 106 of the National Historic Preservation Act (NHPA). Because CTA narrowed the selection of alternatives under evaluation during project development (see **Attachment 1**) after Section 106 consultation had significantly progressed, this document has been developed to provide the Illinois Historic Preservation Agency (IHPA) with a streamlined and concise summary of the Area of Potential Effect (APE) for the project and eligibility and effects determinations made to date by the Federal Transit Administration (FTA). All Section 106 findings on alternatives considered that are presented in this document are consistent with previous correspondence and materials provided during the Section 106 consultation process.

1.1 Regulatory Framework

Cultural and historic resources are protected by various federal regulations; Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider effects on historic resources from their actions and to balance preservation needs with the need for the actions. As provided in 36 CFR § 800, the Section 106 process "seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation" (36 CFR § 800.1(a)). The goal of the consultation is to identify historic properties potentially affected by the undertaking, assess project effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

For the Section 106 assessment of historic and archaeological resources, FTA and CTA conducted a four-step process following requirements of 36 CFR § 800:

1. **Define the Area of Potential Effects** - FTA and CTA first determined an APE for cultural/historic resources. The APE is defined as the geographic area within which the project may cause alterations in the character or use of historic properties. Development of the APE involved site visits and a review of aerial photography images and conceptual engineering drawings for the alternative.

2. **Identify Historic and Archaeological Resources** - After an extensive records check, representative samples within the APE footprint were field-surveyed to identify any archaeological resources and historic resources that meet National Register of Historic Places (NRHP) criteria. Representative samples were used to determine effects on similar properties on a block-by-block basis. The properties included in the representative sample were determined using GIS databases provided by the City of Chicago, the Historic and Architectural Resources Geographic Information System, online mapping resources, State Historic Preservation Office (SHPO) records, and field visits. Additional details about the definition of the representative sample, and resources in it, are included in **Section 3** of

this report. NRHP criteria are defined in 36 CFR § 60.4 and apply to districts, sites, buildings, structures, or objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association with one or more of the following four criteria:

- Criterion A - Events that have made a significant contribution to the broad patterns of American history on a federal, state, and/or local level
- Criterion B - Lives of persons significant in the history of the city, state, and/or the United States
- Criterion C - Distinctive characteristics of a type, period, or method of construction, or the work of a master, or high artistic values, or a significant and distinguishable entity whose components may lack individual distinction
- Criterion D - Information important in prehistory or history

FTA and CTA identified properties listed on the NRHP, local landmarks, and Chicago Historic Resources Survey (CHRS) "Red" and "Orange"-rated[1] buildings (properties with locally designated historic importance). FTA and CTA conducted background research to assist this process, using the Historic and Architectural Resources Geographic Information System and city records, fire insurance and other historic maps, the CHRS, previous architectural studies in the area, and other relevant scholarly publications. No properties or districts currently listed on the NRHP are present in the APE.

3. **Assess Effects on Historic and Archaeological Resources** - FTA and CTA assessed effects for each evaluated resource that was listed in the NRHP or determined eligible for listing. The effects analysis included review of specific direct and indirect impacts that were evaluated for the project (for topics such as displacements, noise, and visual impacts) and focused on how the alternative might alter the characteristics that qualify properties for inclusion in the NRHP.

4. **Resolve any Adverse Effects** - FTA and CTA will develop any necessary mitigation measures through consultation with the SHPO and other consulting parties to address adverse effect determinations. Based on the results of the assessment of effects conducted, there would be no adverse effects to historic properties resulting from the project and no additional mitigation measures are proposed.

[1] The CHRS is an inventory of architecturally and historically significant buildings in the City of Chicago that uses a color-coded ranking system used to identify historic and architectural significance relative to age, degree of external physical integrity, and level of possible significance. The two highest color codes are "Red" and "Orange." These types of local historic resources are subject to the City of Chicago's Demolition-Delay Ordinance. "Red" or "Orange"-rated properties were identified as possessing some architectural feature or historical association that made them potentially significant in the context of the surrounding community.

1.2 Section 106 Consultation History and Evolution

In accordance with requirements for consultation established in Section 106 of the NHPA, three distinct rounds of coordination occurred during the RLE Project: initiation activities, identification of historic properties, and assessment of effects. In August 2012, FTA and CTA invited 11 Native American tribes and 19 state and local preservation interest groups to participate in the upcoming consultation process. At present, 11 groups are participating in the process. On October 24, 2012, FTA and CTA held a webinar on RLE historic properties to introduce the project and initiate the consultation process.

As part of the eligibility phase, CTA surveyed 541 potentially eligible resources within the APEs for all alternatives being studied at the time (Bus Rapid Transit [BRT], Union Pacific Railroad [UPRR], and Halsted Alternatives). FTA and CTA provided draft materials on the identification of NRHP-eligible properties to consulting parties on January 4, 2013 and followed it with an in-person meeting on January 30, 2013. As a result of the field investigations and comments received from consulting parties on potentially eligible resources, for all alternatives, 15 total resources were identified as eligible for inclusion on the NRHP, including 13 individual buildings and 2 historic districts.

FTA and CTA mailed a Draft Effects Report to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. On May 8, 2014, FTA and CTA met with consulting parties to discuss potential project effects on NRHP-eligible historic properties.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Alternative.

CTA had originally considered three alignment options for the UPRR Alternative: the Right-of-Way Option, the East Option, and the West Option. In 2014, the Right-of-Way Option was removed from consideration as it is no longer feasible. This option was added in 2012 in response to the CDOT feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible. Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Alternative.

Additional conceptual engineering was conducted on the UPRR Alternative to refine the East and West Option alignments. In addition, CTA is now considering only the South Station Option of the 130th Street Station.

CTA provided responses to all consulting party comments received in May 2014 on November 23, 2014. Responses noted that the alternatives had been further narrowed and that the UPRR Alternative (East and West Options) were proposed to move forward as the NEPA Preferred Alternative.

1.3 Organization of this Report

The following sections of this report provide further details on development of the APE and eligibility and effects determinations made and presented during the Section 106 consultation process for this project.

Section 2 of this report provides a brief description of the No Build and Build Alternative (the UPRR Alternative) under consideration and details on identification of the APE.

Section 3 of this report provides a summary of the methodology undertaken to identify potentially affected historic and archaeological resources.

Section 4 of this report provides details on eligible historic and archaeological resources identified.

Section 5 provides details on the effects determinations for the East and West Options of the Build Alternative.

Section 6 summarizes the Section 106 consultation process conducted at each stage of the four-step Section 106 consultation process.

Section 2
Project Description and Area of Potential Effect

The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Alternative as the Locally Preferred Alternative on August 12, 2009. During 2012–2014 and as part of the Draft EIS analysis, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the BRT Alternative (along Michigan Avenue), the UPRR Alternative, and the Halsted Alternative. CTA evaluated three options for the UPRR Alternative: the Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Alternative 130th Street station: a South Station Option and a West Station Option. The Section 106 analysis and consultation was performed during 2012–2014,on all those alternatives and options. As further described in **Section 2.3**, CTA developed separate APEs for each alternative.

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. While CTA had originally considered a UPRR Right-of-Way Option, this was subsequently removed as it is no longer feasible. This option was added in 2012 in response to the CDOT feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible.

Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Alternative. CTA has chosen to move forward with the South Station Option at 130th Street based on technical analysis and public feedback. As further described in **Section 6**, the consulting parties were notified of the NEPA Preferred Alternative in November 2014 as part of the responses to consulting party comments on assessments of effect.

Additional details on the alternatives development process and history, including the entirety of alternatives evaluated between 2012 and 2014 as part of the Section 106 consultation process for this project, are provided in **Attachment 1**.

The Draft EIS focuses on the following alternatives, which emerged from the Alternatives Analysis, NEPA scoping process, and additional technical analysis and public input:

- No Build Alternative
- UPRR Alternative
  - East Option
  - West Option

2.1 No Build Alternative

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the UPRR Alternative.

The No Build Alternative represents future conditions if the UPRR Alternative were not implemented. The No Build Alternative includes all projects currently included in the fiscally constrained portion of the CMAP FY 2014–2019 Transportation Improvement Program (TIP). Projects in the TIP in the project area include renovation of the 95th Street Terminal, rail line maintenance and improvements, preservation of the North Pullman historic area, road resurfacing, coordination of traffic signal timing, and construction of a new bicycle/pedestrian facility. Impacts related to the construction and operation of the 95th Street Terminal are documented in the approved *95th Street Terminal Improvement Project Environmental Assessment* (CTA 2013b). FTA issued a Finding of No Significant Impact for the 95th Street Terminal Improvement Project in April 2013, and an Amended Finding of No Significant Impact in July 2013. FTA performed an Environmental Assessment Re-Evaluation in July 2016, which confirmed that the Amended Finding of No Significant Impact dated July 2013 remains valid. No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

2.2 Build Alternative

The UPRR Alternative is shown in **Figure 2-1** and would extend the heavy rail Red Line 5.3 miles from the existing 95th Street Terminal to 130th Street. As noted above, the Chicago Transit Board designated the UPRR Alternative as the LPA at its August 12, 2009 board meeting. The UPRR Alternative would reduce transit travel times from the project area to points on the Red Line north of 95th Street (from 130th Street to 95th Street) from 28 minutes to approximately 14 minutes (CTA 2009). The following describe major aspects of the proposed alignment options under consideration, stations, park & ride facilities, 120th Street yard and shop, substations, and overview of the operations plan.

2.2.1 Alignment

Two alignment options adjacent to the UPRR are considered for this alternative: the East Option and the West Option. The CTA elevated structure would be located either east or west of the existing UPRR corridor. The alignment would follow the UPRR corridor to Prairie Avenue, where

it would cross over the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street. South of this point, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation (Conrail) right-of-way to the terminus (end) of the RLE at 130th Street.

As described, two UPRR Alternative options for the segment of the proposed alignment between I-57 and the CN/ME tracks near 119th Street are studied in the Draft EIS:

- East Option - The CTA elevated structure would be placed immediately adjacent to the east side of the UPRR right-of-way.
- West Option - The CTA elevated structure would be placed immediately adjacent to the west side of the UPRR right-of-way.

In the UPRR Alternative, the tracks would be on a new elevated (aerial) track structure from the 95th Street Terminal through the CN/ME track crossing near 119th Street. South of this elevated crossing, the tracks would transition to an at-grade profile (they would continue at ground level).

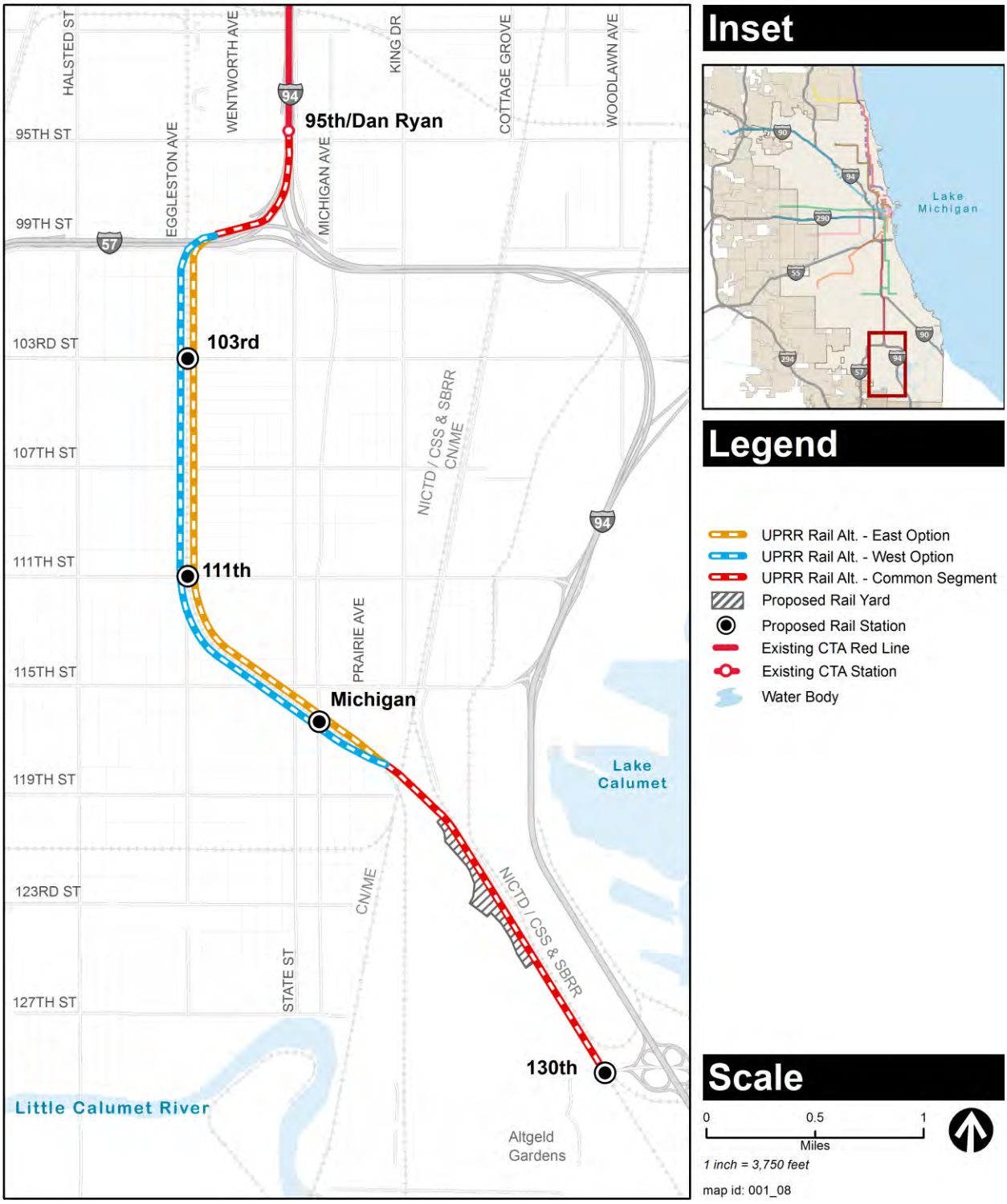

Figure 2-1: Red Line Extension Project Build Alternative

The proposed elevated structure would be a closed-deck, steel and concrete, aerial track structure with direct-fixation track and welded rail (welded at joints). With direct-fixation track, rails are mounted to specially designed concrete blocks fixed to the concrete deck. Noise barriers (approximately 4 feet in height, measured from the top surface of the concrete deck) are proposed for portions of the structure on both sides of the track deck to reduce noise transmission at and below track level. The structure would vary in height from 14 feet 9 inches to 40 feet above existing grade, depending on required clearances above existing roadways and railroads. The two tracks would have a spacing of 13 feet (13 feet between the track centerlines). The elevated deck, on which the tracks would run, would vary in width from approximately 30 feet to approximately 52 feet at stations

Figure 2-2 is a photo simulation of a typical proposed elevated structure above the UPRR right-of-way. The design shown is conceptual, and the actual design would vary based on further engineering and community input.

Figure 2-2: Photo Simulation of Union Pacific Railroad Alternative East Option at 111th Street Facing West - Typical Proposed Elevated Structure

2.2.2 Stations

As part of the UPRR Alternative, four new stations would be constructed at the following locations along the proposed alignment:

- 103rd Street (elevated station)
- 111th Street (elevated station)
- Michigan Avenue (elevated station)
- 130th Street (at-grade station)

Each station would have a center platform, approximately 26 feet wide and 520 feet long. Platforms would accommodate ten-car trains. Each station would be Americans with Disabilities

Act (ADA) accessible with elevators. Each station area would include areas for bus boarding, new crosswalks where needed to accommodate pedestrian traffic, and park & ride facilities. **Figure 2-3** is a photo simulation of a typical proposed station. The design shown is conceptual, and the actual design would vary based on further engineering and community input.

Figure 2-3: Photo Simulation of Union Pacific Railroad Alternative East Option at 103rd Street Facing Northwest - Typical Proposed Elevated Station

The 130th Street station would be located immediately west of the NICTD/CSS & SBRR right-of-way at 130th Street. Pedestrians from Altgeld Gardens would access the station from 130th Place. Pedestrians would not need to cross 130th Street to access the station because 130th Street goes over 130th Place and the railroad tracks.

2.2.3 Park & Ride Facilities

To accommodate passengers arriving at the UPRR Alternative stations by car, park & ride facilities would be constructed near each station, as described in **Table 2-1**. A total of 3,700 parking spaces would be available along the corridor. CTA estimated parking demand based on travel demand modeling performed in 2009. Bus turnarounds would be provided in the parking areas. The ground floor of the parking structure at the Michigan Avenue station would contain space for retail and community facilities.

Table 2-1: Summary of Park & Ride Facilities

Station	Number of Parking Spaces	Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
103rd Street	200	Divided between two surface parking lots (one on the east side of the tracks and one on the west side of the tracks)	One surface parking lot
111th Street	200	Divided between two surface parking lots (one on the east side of the tracks and one on the west side of the tracks)	One surface parking lot
Michigan Avenue	1,000	Divided between a three-story parking structure and a surface parking lot (a surface parking lot on the east of the tracks and a parking structure on the west of the tracks)	Five-story parking structure
130th Street	2,300	Seven-story parking structure	

2.2.4 Yard and Shop

The 120th Street yard and shop, with a capacity of 340 train cars, would be sited on a combination of industrial and vacant land east of the CN/ME tracks and west of the NICTD/CSS & SBRR tracks near 120th Street and Cottage Grove Avenue. The yard would be entirely at grade. Parking spaces for CTA employees would be included at the yard.

2.2.5 Substations

Substations are buildings along the alignment that house equipment to regulate the flow of electricity to the third rail, which supplies power to the trains. Substations would be placed approximately 0.8 to 1 mile apart along the alignment. Six new and upgraded substation locations are proposed: 98th Street Yard and Shop, near 101st Street, near 107th Street, near Lafayette Avenue, within the 120th Street yard and shop area, and near the 130th Street station. CTA would confirm the need and location for substations during future design phases.

2.2.6 Operating Plan

The UPRR Alternative would operate 24 hours a day, each day of the year. Service frequency is anticipated to be the same as with the current service (April 2016) at 95th Street—approximately 6-minute headways during morning peak hours and approximately 3-minute headways during afternoon peak hours. Headways at night (between 1 AM and 4 AM) are approximately 13–15 minutes. Service frequency would be adjusted to accommodate demand once the RLE service has been implemented. Train frequencies would vary throughout the day (like existing Red Line service), and late night service would operate approximately every 15 minutes.

Train sets would be eight cars long. Stations and track alignment would accommodate ten-car trains to maintain the option of running ten-car trains in the future. With the extension of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations.

2.3 Area of Potential Effect

In the context of Section 106, the APE is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 CFR 800.16.d). The APE for the RLE Project was delineated after considering the location of the proposed alternative; the potential for ground disturbance, destruction, or property taking; locations from which the undertaking may be visible and/or audible; and the scale and setting of the project. The APE was developed in consultation with CTA, FTA, and IHPA.

Cultural resource specialists developed the APE boundaries for the BRT, UPRR, and Halsted Alternatives in 2012 after conducting site visits and reviewing the aerial maps and engineering details (such as alignment locations, elevation of the proposed rail line, expected right-of-way limits, and the locations of the yard, stations, and parking facilities) for the Build Alternatives. SHPO concurred on the APE boundaries on July 20, 2012.

Generally, the APEs for the UPRR and Halsted Alternatives contain parcels within one block of the centerline of the alignment. The APE widens to accommodate the locations of each park & ride and the proposed yard and shop beyond the one-block boundary. The APE for the BRT Alternative includes the area immediately surrounding park & ride facilities.

As described above, in August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. In late 2014, CTA also conducted additional conceptual engineering on the UPRR Alternative to refine the East and West Option alignments. FTA and CTA revised the APE for the UPRR Alternative accordingly and as shown in **Figure 2-4**. The revised APE presents no new effects from the UPRR Alternative than what was presented during consultation. Because the BRT and Halsted Alternatives are no longer under consideration, those APEs are no longer discussed.

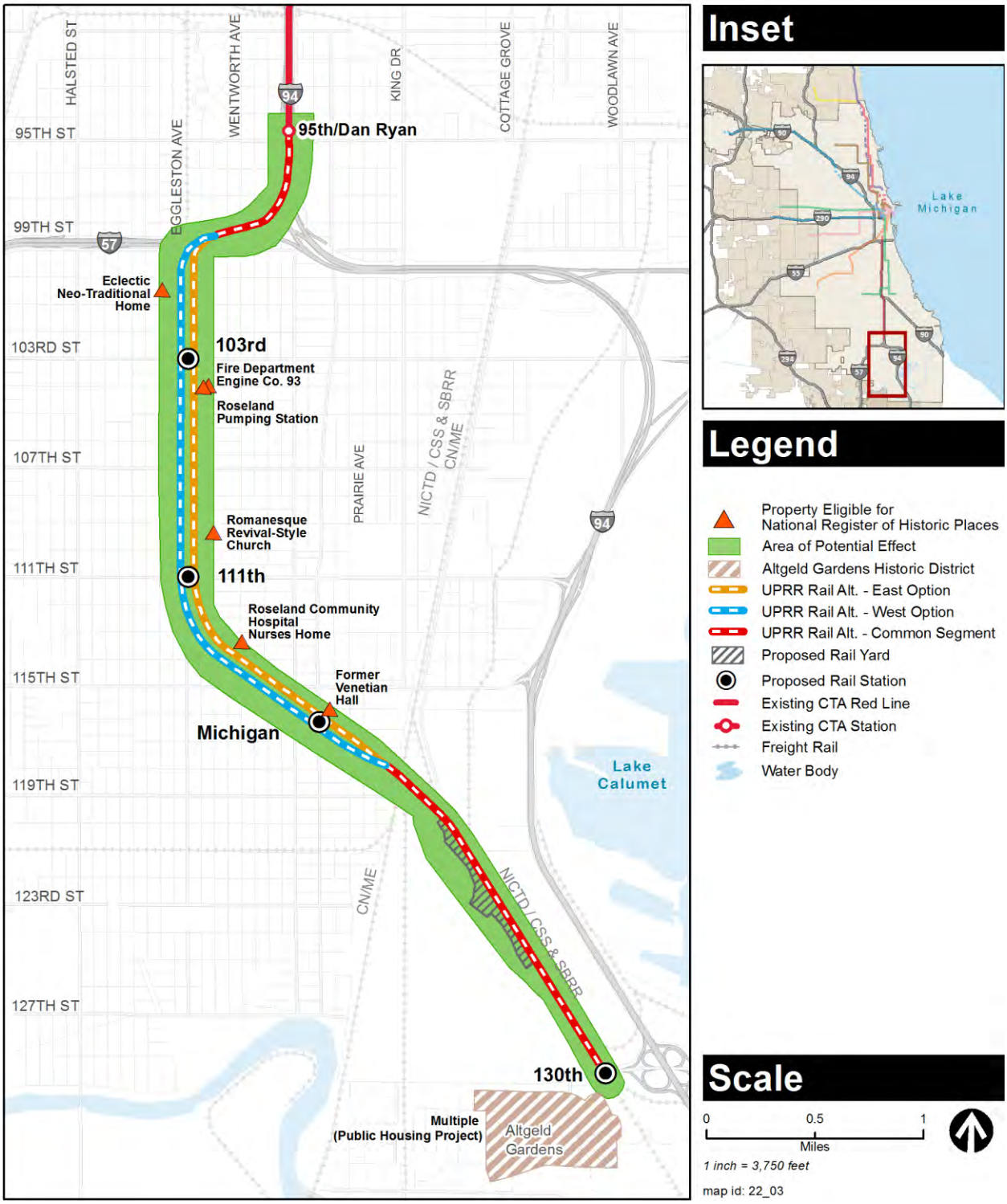

Figure 2-4: RLE Project Area of Potential Effect

Section 3
Methodology for Identification of Resources

3.1 Identification of Historic Resources

3.1.1 Background Research/Historic Context

Background research was conducted to describe the historic context for the project area. Understanding the historic context is essential in establishing the significance of individual properties, and by extension, and NRHP eligibility for the built environment. The following resources were consulted in developing the historic context and identifying known sites:

- The Historic Architectural Resources Geographic Information System (**HARGIS) database** was created by the IHPA in 2003 to manage information about Illinois historic properties; this database documents the state's built environment. The HARGIS database includes data gathered as a result of three statewide survey projects: the Illinois Historic Structures Survey, the Illinois Historic Landmarks Survey, and the Illinois Rural Survey (conducted 1970–1987). The HARGIS database also includes properties identified as part of a NRHP nomination, surveys by local preservation groups, and information from the Illinois Department of Transportation's Bridge Survey. The database includes data forms, photographs, background documentation, and spatial information within a geographical context for each historic property and historic district within the dataset.

- The **CHRS** is an inventory of buildings that was compiled during 1983–1995. The Chicago Department of Housing and Economic Development published its findings in a report titled *Chicago Historic Resources Survey: An Inventory of Architecturally and Historically Significant Structures* in 1996. Organized according to Chicago's 77 neighborhoods, the inventory lists over 17,000 architecturally and historically significant buildings and structures that predate 1940. The information is also available online and is searchable by neighborhood, building address, decade of construction, architect's name, building style and type, survey ranking, and landmark status.

- **Sanborn Fire Insurance maps** contain a wealth of information on the built environment in urban areas. Originally created and maintained to assess fire insurance liability, the maps provide dated contexts in which to describe the development of neighborhoods as well as the compositional components and historical use of individual buildings. Data especially useful for this project include the building footprint, number of stories, foundation material, and cladding material. The Sanborn maps are available online through subscription.

- **NRHP nomination forms** for individually listed historic properties and districts provide a wealth of contextual information for the individual properties and the historic districts. They include construction dates for most historic properties discussed therein and identify the architect in most instances.

Architectural datasets at the local level were reviewed as well, including information from the Commission on Chicago Landmarks.

The Commission on Chicago Landmarks recommends individual buildings, sites, objects, or entire districts to the Mayor and City Council for designation as Chicago Landmarks. To be recommended by the Commission for landmark designation, these resources must meet at least two criteria: (1) being valuable as an example of city, state, or national heritage, and (2) being historically significant—the site of a significant historic event, association with a significant person, architecturally significant, the work of a significant architect or designer, association with a significant historic theme, or a having unique visual feature. In addition, the potential landmark must maintain integrity in light of its location, design, setting, materials, workmanship, and ability to express such historic, community, architectural, or aesthetic interest or value. The Commission reviews any proposed alteration, demolition, or new construction affecting individual landmarks or properties in landmark districts as part of the permit review process. The Commission produces two new publications each year, one for individual landmarks and landmark districts and another for Chicago listings on the NRHP.

Using information in HARGIS and the other sources listed above, a list of previously identified historic and archaeologically-sensitive properties within the RLE APE was compiled and mapped. This effort included the identification of NRHP-listed districts and structures, and any properties identified as local landmarks in Chicago.

3.1.2 Surveys of Historic Resources

After the development of the APE and historic contexts, cultural resources specialists conducted field surveys on two distinct categories of properties: properties that would likely be displaced or demolished as a result of one or more alternatives, and a representative sample of other properties within the APE.

For both categories of properties that were surveyed, cultural resource specialists conducted archival research and photo-documented the exterior of each structure from the public ROW. Each property was assessed for NRHP eligibility using the data gathered during the fieldwork and research phases of the investigation.

The following subsection identifies how the representative sample in the latter category was identified. Because of the developed urban environment and linear nature of the project, effects on properties would be similar for adjacent properties. This method is consistent with November 2011 guidance provided by the Advisory Council on Historic Preservation regarding the "Reasonable and Good Faith Identification Standard in Section 106 Review."

Defining the Representative Sample

To determine the properties to be included in the representative sample, the team's architectural historian relied on the GIS database provided by the City of Chicago, the HARGIS database,

online mapping resources, SHPO records, and field reconnaissance. Examining the APE block by block, the historic character of each block was considered, including the following:

- What age are the buildings?
- What types of buildings are present?
- What function(s) do they serve?
- What architectural styles are apparent?
- How does the structure fit the context of the larger neighborhood?

In light of the neighborhood and block level contexts, analysts selected one or more properties per block to represent the range of buildings over 50 years in age throughout the area. In areas where the project would likely cause more substantial effects, a greater concentration of sample properties was selected. More sample properties were selected for heterogeneous blocks (e.g., blocks having a mix of property types and ages) than homogenous blocks. Where multiple similar buildings exist within the block, analysts selected the building with the greatest integrity or most distinguishing architectural features.

For example, block A contains only residential buildings, both Craftsman style bungalows and Minimal Traditional brick homes. Structures date to the 1920s and 1930s. The project would cause moderate effects on the adjacent block, but block A would be screened from the transit line by an existing row of buildings. Analysts therefore selected one bungalow and one Minimal Traditional house from this block. Alternatively, Block B contains a mix of residential and commercial properties, dating from 1902 through the 1950s, plus some modern infill. A mix of architectural styles is present. In this case, analysts selected five structures on this block to represent the cross-section of existing structures.

This process was repeated along the entire APE corridor.

3.2 Identification of Archaeological Resources

Cultural resource specialists conducted a records search to identify archaeological sites within the vicinity of the project area. The **Illinois State Archaeological Survey** (ISAS) GIS database and supporting documentation provides the most comprehensive source for archival background information on archaeological resources. The ISAS conducts multiple-scale field and laboratory research projects that concentrate on interpreting the archaeological heritage of Illinois. Data sources include the Illinois Department of Transportation Historic Bridge Survey and the Cultural Resource Management Archaeological Report Archive, as well as more detailed supporting information including archeological survey data.

This background research included review of artifacts collected by amateur archaeologists Albert Scharf, Oscar Biedes, and Ed Lace, as well as professional investigations completed by the Illinois State Archaeological Survey.

No known archaeological resources were identified within the project APE.

Section 4
Eligible Historic and Archaeological Resources

4.1 Historic Resources

4.1.1 NRHP-Eligible Resources

Figure 4-1 is a map of the APE and the seven identified NRHP-eligible resources. No properties or districts currently listed on the NRHP are present in the APE. **Table 4-1** summarizes historic resources within the APE. The following subsections provide further details on these historic properties. **Attachment 2** provides inventory sheets for NRHP-eligible properties.

Table 4-1: NRHP-Eligible Resources in the Area of Potential Effects

ID	Address	Description	NRHP Eligibility Criteria	Community Area
1	444 W. 100th Place	Eclectic Neo-Traditional Home (built 1930)	Criterion C	Washington Heights
2	324 W. 104th Street	Fire Department Engine Company 93 (built 1917)	Criterion C	Roseland
3	351 W. 104th Street	Roseland Pumping Station (built 1911)	Criterion C	Roseland
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church (built 1916)	Criteria A and C	Roseland
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home (built 1930s)	Criterion A	Roseland
6	133-139 E. Kensington Avenue	Former Venetian Hall (built 1925)	Criterion A	Riverdale
7	Multiple (Public Housing Project)	Altgeld Gardens Historic District (built 1945)	Criterion A	Riverdale

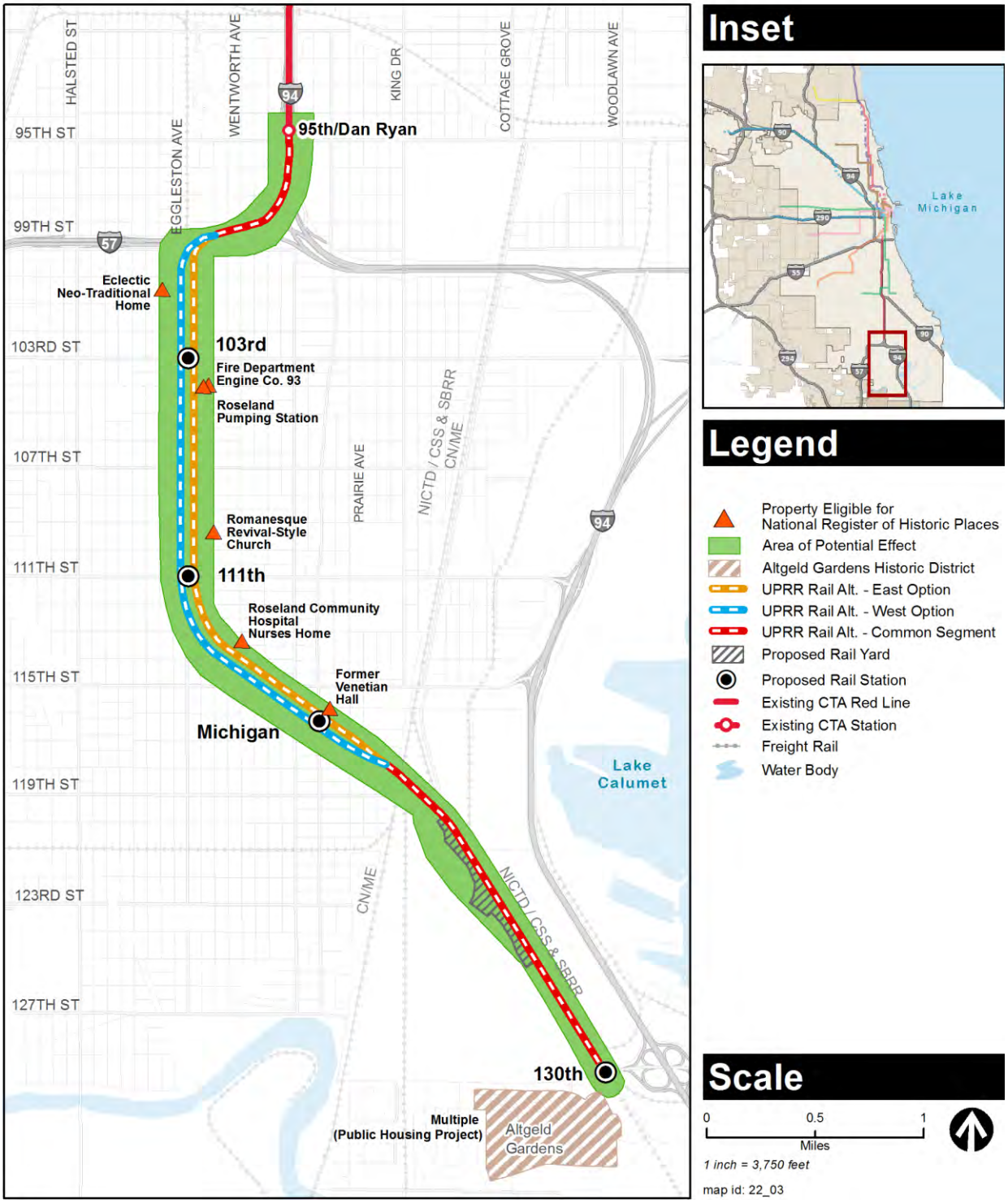

Figure 4-1: NRHP-Eligible Resources in the Area of Potential Effects

Eclectic Neo-Traditional Home, 444 W. 100th Place

This one-story home in the Washington Heights community area rests on a raised basement as shown in **Figure 4-2**. Built in 1930, it is clad with polychromatic brick and has a side gabled roof covered with asphalt shingles. Its front elevation has a gabled living room bay pavilion with paired basement windows, a group of three non-original one-over-one windows with concrete sills, brick arch lintels, colonettes with acanthus leaf capitals, and a small round-arched window in the gable. The house has a recessed corner porch with a metal storm door, round-arch openings, a Neo-Gothic castellated top, concrete steps, and brick sidewalls. The integrity of its materials and detailing is very good. Its Eclectic Neo-Traditional ornamentation makes it stand out among the vernacular, stripped-down brick and frame bungalows and cottages that comprise the predominant building stock in the Washington Heights community area. As a result, it was identified as individually eligible for NRHP listing under Criterion C for its architecture.

Figure 4-2: South Facade of the Eclectic Neo-Traditional Home at 444 W. 100th Place

Fire Department Engine Company 93, 324 W. 104th Street

This two-story firehouse in the Roseland community area is clad with light brown face brick, as shown in **Figure 4-3**. The building has a flat roof and a parapet with concrete coping. The front elevation has a two-story projecting pavilion, an overhead garage door, two window openings, an off-center, hollow-core metal door on the first floor, and a strip of three windows and a single window on the second floor. All windows are non-original, one-over-one aluminum sash. The spandrel area between the garage door and the windows above features a large stone sign plate inscribed with the words, "City of Chicago Fire Department." The spandrel area between the corner door and window above has a metal plate identifying the 1917 construction date and the names of a series of people associated with the building's construction, including the mayor, alderman, city architect (Charles W. Kallal), and contractor (Butler & Co.). Detailing includes stone door and window surrounds on the first floor, bracketed stone window lintels, concrete belt courses, and brick pilasters topped by stone panels with the City of Chicago's "Y" emblem and decorative scrolls. The "Y" emblem is also repeated above the off-center door.

This building is eligible for individual listing on the NRHP under Criterion C for architecture. It is a rare extant example of an early 20th century neighborhood firehouse in Roseland, has largely retained its original building materials and detailing, and still functions as a firehouse.

Figure 4-3: South Facade of Chicago Fire Department Engine Company 93

Roseland Pumping Station, 351 W. 104th Street

The two-story Prairie style Roseland Pumping Station, designed by architect William G. Kreig in 1911, is clad in brown brick, as shown in **Figure 4-4**. The building has a high limestone water table, a flat roof, parapet, and two square towers at the corners of the front elevation. The front elevation features a projecting, two-story, flat roofed entrance pavilion with a pair of centrally located glass double doors, sidelights, and a stone panel above that features the City of Chicago's "Y" emblem in metal. The entrance has a smooth stone surround. Above the entrance is a limestone panel incised with the words "City of Chicago Roseland Pumping Station." Detailing on the entrance pavilion includes brick pilasters with stone bases and coping and geometric motifs. The parapet is clad in limestone and features decorative geometric motifs. The building's fenestration is largely composed of multi-paned, steel-sash windows, some of which have transoms.

This is an excellent intact example of a neighborhood pumping station with fine integrity that still functions in its original use. It was identified as individually eligible for the NRHP under Criterion C for architecture, as it stands as an excellent, well-preserved example of a neighborhood pumping station designed in the Prairie style.

Figure 4-4: North Facade of the City of Chicago Roseland Pumping Station

Romanesque Revival Style Church, 10920 S. Princeton Avenue

This circa 1916 Romanesque Revival style church in the Roseland community area has a front elevation and two flanking towers clad with brown face brick, while the remainder of the side elevation and the rear elevation are clad with common brick. Shown in **Figure 4-5**, the church has a gable roof covered with asphalt shingles and gable wall dormers with shaped parapets on both side elevations. The east tower has a flat roof and a shaped parapet while the west tower has a peaked roof with overhanging eaves and exposed rafters and is topped by a finial. The central bay of the front elevation has a broad, round-arched entrance with a stone surround and two sets of single-light oak double doors. A strip of double-hung windows is within a broad arch and there is a rose window with tracery. Windows on both towers and along the side elevations include round-arch windows with tracery. It is unknown whether the original stained glass for all of these windows is extant inside the church. Both towers also feature paired casement windows. Window openings at the top of the west tower have been boarded over. Detailing includes stone sills, belt courses, brick pilasters, and keystones. A one-story, brick-clad entrance vestibule is along the rear of the west elevation.

Built as the First Reformed Church of Roseland, this church was identified as individually eligible for NRHP listing under Criterion A for its association with the community's once-dominant Dutch population and under Criterion C as a fine example of a Romanesque Revival style church in Roseland.

Figure 4-5: East and North Facades of Church at 10920 S. Princeton Avenue

Roseland Community Hospital Nurses Home, 11321 S. Wentworth Avenue

Shown in **Figure 4-6**, this four-story building has a flat roof and parapet. Its symmetrical front elevation is clad with brown face brick and has a centrally located entrance with a glass door and stone surround topped by two stone owls holding books. Windows are non-original one-over-one aluminum sash; those directly above the entrance have stone casings. Detailing includes stone sills, coping, insert blocks, sill courses, cornice, panels, and pinnacles at the parapet level.

This building is locally significant and eligible for NRHP listing under Criterion A for Education. Formerly the Roseland Community Hospital Nurses Home, it was built by the hospital as a dormitory and educational facility for its nurses. Closely affiliated with Roseland Community Hospital, which has served as an important institution in the Roseland area since its establishment in 1924, the Nurses Home is an excellent example of this building type on Chicago's South Side. The exterior of the building has very good integrity and the interior—which now functions as a homeless shelter—appears to retain classrooms and other spaces associated with its original use.

Figure 4-6: Front Facade of Nurses Home at 11321 S. Wentworth Avenue

Venetian Hall, 133–139 E. Kensington Avenue

The two-story performance hall was built for cultural and recreational purposes, although it has long since been repurposed as a church. The 1938 Sanborn map shows the hall with a stage, balcony, and place for storage of scenery. The street entrance was flanked by two storefronts in 1938, as it is today.

Shown in **Figure 4-7**, the 1925 building is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a flat roof and a shaped parapet with concrete coping. The first floor of the front elevation has a recessed, centrally located bay with three pairs of multi-light wood doors and in-filled transoms. This central bay is flanked by two original storefronts with central recessed doors and flanking display windows that are covered with wood and topped by transoms that have been filled in with glass block. Separating the central bay from the two flanking storefronts and providing access to the second floor are two doors with transoms. The spandrel area directly above the central entrance bay has a concrete sign plate with incised lettering that reads "Venetian Hall." Fenestration on the second floor features six-over-one and three-over-one wood-sash windows arranged in pairs and in groups of three, topped by round-arch stone lintels with rosette motifs. The parapet features a series of Classical shields and swags.

Figure 4-7: Front Facade of Venetian Hall

The exterior of this building has good overall integrity, although elements of the original storefront materials are no longer extant. It does not display sufficient distinguishing architectural features to qualify as individually eligible for listing on the NRHP for its architecture. Instead, it is recommended for individual listing under Criterion A for its original

use as a social venue for area residents in the early 20th century. Local theater houses such as the Venetian Hall were jewels within the local communities. It is rare to see an early 20th century neighborhood social hall that retains its original storefronts and is set within a residential area of workers' housing, rather than along a commercial thoroughfare. The opening of Illinois Terra Cotta Works in the first half of the 20th century brought Italians to Kensington; the area gradually became a center of South Side Italian-American life with the establishment of Venetian Hall and the nearby San Antonio de Padua (patron saint of Venice) Roman Catholic Church.

Altgeld Gardens Historic District

This large public housing project was built between 1943–1945 and is shown in **Figure 4-8**. Designed by architects Naess & Murphy, it was originally comprised of 1,498 units located on over 190 acres. Altgeld Gardens is mainly comprised of two-story buildings that are topped with side gable roofs covered in asphalt shingles. The buildings are clad in brick with stepped parapet walls along the gable elevations. A series of single entry doors are located on the front facade. A combination of original and replacement windows are found throughout the complex. Groups of seven units are clustered around central courtyards.

This resource was determined eligible as a district in 1992 by IHPA under Criterion A for its association with community development, planning, and social history.

Figure 4-8: Photo of Altgeld Gardens

4.1.2 CHRS Orange-Rated Properties

Beyond the NRHP-eligible resources, four properties within the APE are identified as notable "Orange" in the CHRS, three of which have also been identified as NRHP-eligible:

- Fire Department Engine Company 93 at 324 W. 104th Street (NRHP-eligible, ID #3)
- Roseland Pumping Station at 351 W. 104th Street (NRHP-eligible, ID #4)
- Romanesque Revival-style church at 10920 S. Princeton Avenue (NRHP-eligible, ID #5)
- St. Salomea Church at 11800–11808 S. Indiana Avenue

These CHRS "Orange"-rated resources are protected by the City's 2003 Demolition-Delay Ordinance. As none of the CHRS "Orange"-rated resources are proposed for demolition under either the East or West Option, this ordinance is not discussed further.

4.2 Archaeological Resources

A records search was conducted by cultural resource specialists and no known archaeological sites exist within the APE. Although the landscape through which the transit lines would pass is developed, additional archaeological sites may remain undiscovered within protected locations such as parks and gardens. Once the project design has been further refined and before the Final EIS is published, archaeological investigations will occur within areas of ground disturbance for the selected option to determine whether potential resources are present. These investigations will follow the guidelines issued by the State of Illinois.

Section 5
Effects Determinations and Mitigation

5.1 Effect Analysis Thresholds

The NHPA establishes qualitative criteria that define whether a historic property would be subject to an adverse effect: when a project "may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" (36 CFR 800.5.a). Based on this regulatory framework, an adverse effect finding will be applied to any historic property that would be subject to one or more of the following (36 CFR 800.5.a.2):

- Physical destruction or damage to all or part of the archaeological resource or historic property
- Alteration that is inconsistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*
- Removal of the property from its historic location
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant features
- Change to the character of the property's use or the physical features within the property's setting that contribute to its significance
- Neglect of a property that causes deterioration
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation

Effects can be direct, indirect, or cumulative. If an adverse effect is found, the Federal Transit Administration (FTA) would consult with the Illinois Historic Preservation Agency (the SHPO for Illinois) and other interested parties to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on the resource (36 CFR 800.6.a).

Effects determinations from the No Build and Build Alternative are provided below.

5.2 No Build Alternative

No adverse effects on historic and cultural resources would result from implementation of the No Build Alternative; therefore, no mitigation measures would be required.

5.3 Build Alternative – UPRR Alternative

Table 5-1 summarizes the effects findings for each historic resource in the APE for both the East and West Options.

Table 5-1: NRHP-Eligible Resources in the Area of Potential Effects - Union Pacific Railroad Alternative East and West Options

ID	Description	Union Pacific Railroad Alternative East Option Effects Finding	Union Pacific Railroad Alternative West Option Effects Finding
1	Eclectic Neo-Traditional Home	No Historic Properties Affected	No Historic Properties Affected
2	Fire Department Engine Company 93	No Historic Properties Affected	No Historic Properties Affected
3	Roseland Pumping Station	No Adverse Effect	No Historic Properties Affected
4	Romanesque Revival-Style Church	No Historic Properties Affected	No Historic Properties Affected
5	Roseland Community Hospital Nurses Home	No Historic Properties Affected	No Historic Properties Affected
6	Former Venetian Hall	No Historic Properties Affected	No Historic Properties Affected
7	Altgeld Gardens Historic District	No Historic Properties Affected	No Historic Properties Affected

NRHP = National Register of Historic Places

5.3.1 East Option

The East Option would cause displacements and visual, noise, and other environmental effects within the APE, but none of these effects would alter the characteristics that qualify any of the identified historic resources for inclusion on the NRHP. No mitigation measures would be required. Because none of the NRHP-eligible resources in the APE would be directly affected (they would not be displaced), each resource was evaluated for potential visual effects from the aerial structure, stations, and parking facilities.

Figure 5-1 is a photo simulation of the East Option track structure adjacent to the Roseland Pumping Station. Although the track structure would be approximately 9 feet west of the Roseland Pumping Station at its nearest point, the East Option is anticipated to have no adverse effect. The pumping station would not be displaced or directly affected by the UPRR Alternative. The resource was recommended eligible under Criterion C for its architecture as an excellent example of a well-preserved community pumping station designed in the Prairie Style that still functions in its original use. The building retains much of its original design, materials, and workmanship, including its projecting two-story flat-roofed entrance pavilion with geometric limestone details and coping. The proposed project would not affect these characteristics and would preserve the property's entrance approach. The changes in setting and feeling brought on by the proposed project would not detract from the architectural aspects of the building that qualify the resource as eligible for NRHP listing. Pile-driving activities would be avoided in the vicinity of the pumping station.

Figure 5-1: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue

The 130th Street station would be approximately 800 feet from Altgeld Gardens Historic District at its closest point and the parking garage at the 130th Street station would be located at a distance away from Altgeld Gardens where the size of the structure would not create a visual impact; therefore, the 130th Street station and parking garage would not affect the Altgeld Gardens Historic District. **Figure 5-2** shows a view of the 130th Street station and parking structure from Altgeld Gardens.

Figure 5-2: Photo of Existing Conditions and Photo Simulation of the 130th Street Station and Parking Garage, Facing Northeast on 130th Place

5.3.2 West Option

Like the East Option, the West Option would cause displacements and visual, noise, and other environmental effects within the APE, but none of these effects would alter the characteristics that qualify any of the identified historic resources for inclusion on the NRHP. No mitigation measures would be required.

Section 6
Consultation Process

In accordance with requirements for consultation established in Section 106 of the NHPA, three distinct rounds of coordination occurred during the RLE Project: initiation activities, identification of historic properties, and assessment of effects. Because there would be no adverse effects as a result of this project, no additional coordination for resolution of adverse effects was needed. Each outreach effort is described in the following sections. **Attachment 3** contains copies of meeting notes from each of these meetings, comments received from consulting parties, and responses to comments.

6.1 Initiation Activities

6.1.1 Invitations to Participate

In August 2012, FTA sent invitation letters to 11 Native American tribes to inform them of the process and request assistance in identifying areas with potential cultural and/or religious significance. Also in August 2012, CTA sent invitation letters to 19 state and local preservation interest groups to inform them of the project and invite them to participate in the upcoming consultation process. FTA and CTA sent invitation letters to the following recipients:

Native American Tribes
- Ho-Chunk Nation
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Sac and Fox Nation of Oklahoma
- Pokagon Band of Potawatomi Indians
- Prairie Band of the Potawatomi Nation
- Citizen Potawatomi Nation
- Forest County Potawatomi Nation
- Potawatomi Nation
- Sac and Fox Nation of Mississippi in Iowa
- Sac and Fox Nation of Missouri

State and Local Preservation Groups
- SHPO
- Advisory Council on Historic Preservation
- Illinois State Museum
- Illinois State Archaeological Survey
- City of Chicago Department of Planning and Development's Historic Preservation Division
- Preservation Chicago
- Landmarks Illinois
- Chicago Historical Society
- Ridge Historical Society
- Beverly Area Planning Association
- East Beverly Association
- Rosemoor Community Association
- Cottage Grove Cottage Grove Heights Community Coalition
- Historic Pullman Foundation
- South Suburban Genealogical and Historical Society
- Chicago Neighborhood Initiatives
- Neighborhood Housing Services of Chicago
- Mercy Housing Lakefront
- Friends of the Parks

At present, 11 groups are participating in the process. The consulting parties include the SHPO, the City of Chicago Department of Planning and Development's Historic Preservation Division, Preservation Chicago, Landmarks Illinois, the Ridge Historical Society, the Rosemoor Community Association, Friends of the Parks, Chicago Neighborhood Initiatives, Neighborhood Housing Services of Chicago, DCP, and the Chicago Park District.

6.1.2 Section 106 Kickoff Webinar

On October 24, 2012, FTA and CTA held a webinar on RLE historic properties to introduce the project and initiate the consultation process. During the eligibility phase of consultation, properties and districts that were identified as eligible for listing on the NRHP were discussed. Properties over 50 years old in the APE were evaluated to determine whether they are NRHP-eligible under one of the four National Park Service Criteria for Evaluation.

6.2 Identification of Historic Properties

FTA and CTA provided draft materials on the identification of NRHP-eligible properties to consulting parties on January 4, 2013, in compliance with Section 106 of the NHPA. A 30-day comment period followed, with an in-person meeting on January 30, 2013 to facilitate discussion among consulting parties. The meeting was followed by an informal tour of the corridor that afternoon. As part of this phase of coordination, CTA received written comments from six consulting parties.

Comments received from consulting parties in regards to eligibility focused on requesting additional surveys of resources, potential districts that should be considered recommended as eligible, reconsideration of surveyed properties and their eligibility, and the importance of looking at resources in the historical/social context.

As part of the eligibility phase, CTA surveyed 541 potentially eligible resources within the APEs for all alternatives being studied at the time (BRT, UPRR, and Halsted Alternatives). As a result of the field investigations and comments received from consulting parties on potentially eligible resources, for all alternatives, 15 total resources were identified as eligible for inclusion on the NRHP, including 13 individual buildings and 2 historic districts.

Specifically for the UPRR Alternative, CTA surveyed 280 potentially eligible resources within the UPRR Alternative APE. As a result of the field investigations and comments received from consulting parties on potentially eligible resources, for the UPRR Alternative, 7 total resources were identified as eligible for inclusion on the NRHP, including 6 individual buildings and 1 historic district.

6.3 Assessment of Effects

FTA and CTA mailed a Draft Effects Report to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. On May 8, 2014, FTA and CTA met with consulting parties to discuss potential project effects on NRHP-eligible historic properties. CTA received written comments from four consulting parties.

Comments received from consulting parties in regards to assessments of effect included eligibility reconsiderations, effects reconsiderations, and requests for renderings for properties in the APE. Comments also related to effects associated with the Halsted Alternative and 130th Street West Station Option, both of which have been eliminated from further consideration.

As discussed above in Section 2, in August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. Additional conceptual engineering was conducted on the UPRR Alternative to refine the East and West Option alignments. In addition, CTA is now considering only the South Station Option of the 130th Street Station. Further details on the alternatives evaluated and eliminated through the Draft EIS process are provided in **Attachment 1**.

CTA provided responses to all consulting party comments received in May 2014 on November 23, 2014. Responses noted that the alternatives had been further narrowed and that the UPRR Alternative (East and West Options) were proposed to move forward as the NEPA Preferred Alternative. The consulting parties requested renderings at the Roseland Pumping Station and the 130th Street station near Altgeld Gardens, which are included in the Draft EIS.

6.4 Resolution of Adverse Effects

Based on the assessment of effects and review of consulting party comments, CTA recommends that no adverse effects on historic resources would occur because of the RLE Project (East or West

Option); no mitigation measures would be required and therefore consultation with consulting parties is complete. Coordination with the SHPO will continue through the remainder of the project.

Attachments

Attachment 1: Alternatives Development Process

Attachment 2: Historic Survey Inventory Sheets

Attachment 3: Section 106 Consultation Supporting Documentation

Attachment 1
Alternatives Development Process

CTA began developing the alternatives studied in the Draft EIS during the Alternatives Analysis (AA), which took place during 2006–2009. Starting with multiple modes and corridor options, CTA developed and screened alternatives through a combination of conceptual engineering, public input (open house and stakeholder meetings), and preliminary analysis of potential impacts and costs. A three-level, detailed screening process was used to evaluate the alternatives and identify an LPA. The LPA Report provides detailed documentation of the Screen 1, Screen 2, and Screen 3 evaluations.

The Screen 1 evaluation began by identifying the universe of alternatives, which included a wide range of transit modes (such as bus, rail, or streetcar), project area corridors, and profiles (where the transit line is in relation to the ground). Combinations of 11 modes, 9 corridors, and 4 profiles were evaluated against the purpose and need. Based on this evaluation, the following alternatives were carried forward for further analysis in Screen 2: two bus rapid transit (BRT) alternatives along Halsted Street and Michigan Avenue; six heavy rail transit (HRT) alternatives along Halsted Street, the Union Pacific Railroad (UPRR), and Michigan Avenue; the No Build Alternative; and a "low cost" alternative (formerly required for FTA analyses known as the Transportation System Management [TSM] Alternative).

The alternatives carried through to the Screen 2 evaluation were more thoroughly defined to include mapping of a more defined alignment, identification of potential station locations, and preliminary service plans. Station spacing was determined by the type of alternative proposed, project area needs, and consistency with the purpose and need. The eight evaluation factors for the Screen 2 included a mix of qualitative and quantitative factors intended to further evaluate the performance of each alternative with respect to the project goals and objectives. Specific evaluation factors included physical constraints; right-of-way requirements; social and economic factors; demographics and employment; environmental factors; noise, visual, natural, and cultural resource impacts; transportation factors; and travel time, transit connectivity, and traffic.

Based on the results of the Screen 2 evaluation, a BRT alternative along Halsted Street (operating on dedicated lanes), two HRT alternatives along Halsted Street and the UPRR, the No Build Alternative, and the TSM Alternative were recommended for further evaluation in Screen 3. In addition to the alternatives carried forward from the Screen 2 evaluation and based on discussions with FTA, CTA combined the TSM Alternative with a BRT alternative (operating on existing right-of-way rather than dedicated lanes as proposed in Screen 2) along Michigan Avenue to form a single alternative (called the BRT Alternative) for evaluation in Screen 3. Because the Michigan Avenue BRT Alternative would operate in the existing right-of-way, it would require fewer property acquisitions than BRT on dedicated lanes. Screen 3 was a two-step evaluation process that included the further definition and refinement of alternatives, including conceptual design and the evaluation of these alternatives. Nine evaluation factors were used to evaluate the alternatives as part of Screen 3, including physical constraints, public support, social and

economic factors, environmental factors, transportation factors, capital cost comparison, operating and maintenance cost comparison, ridership potential, and FTA's Cost Effectiveness Index. The result of the Screen 3 evaluation was a recommendation for the LPA: the UPRR Alternative.

Based on the results of the AA and considerable public support for the corridor, including a 2004 referendum where 38,000 residents in the 9th and 34th Wards supported the UPRR corridor for the RLE Project, the UPRR Alternative was recommended as the LPA, indicating that it is the alternative that would best meet the purpose and need of the project while addressing potential impacts and other potential constraints. The UPRR Alternative would provide access to the most densely populated portions of the study area, which are primarily residential and transit supportive. The Chicago Transit Board designated the UPRR Alternative as the LPA on August 12, 2009. **Figure 1** summarizes the AA process.

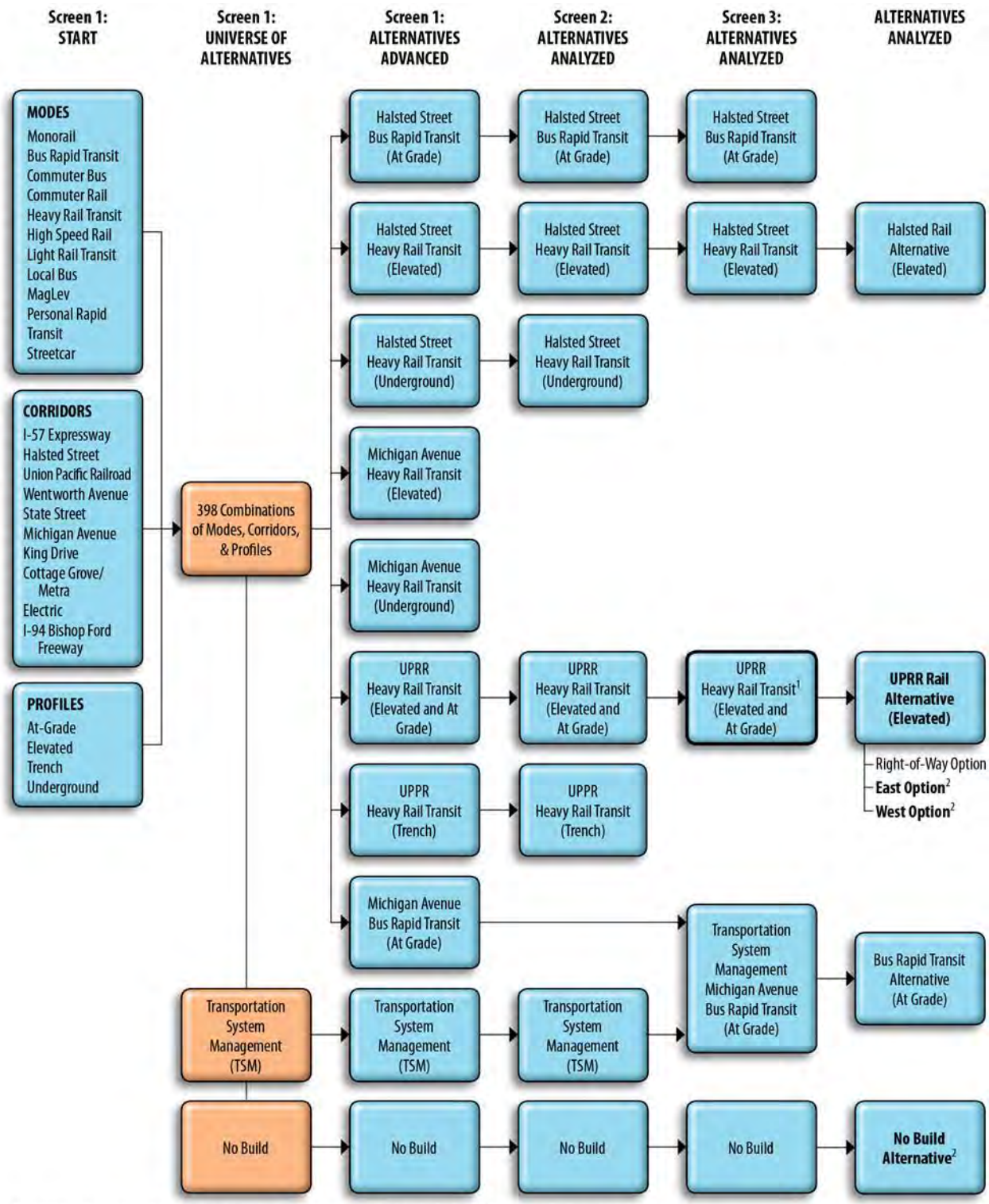

[1]The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009.
[2]This Draft EIS presents impacts of the No Build Alternative and two options of the UPRR Rail Alternative: the East Option and the West Option.

EIS = Environmental Impact Statement, UPRR = Union Pacific Railroad

Figure 1: Alternatives Development Summary

After the AA, CTA further refined the alternatives for presentation during the NEPA scoping process and study in the Draft EIS. At the conclusion of the AA process, the UPRR Alternative was anticipated to be located adjacent to the east or west edge of the UPRR right-of-way. In 2012, CTA learned of a Chicago Department of Transportation (CDOT) feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. By moving UPRR freight operations out of the existing UPRR corridor, CTA could use the existing UPRR right-of-way for the RLE Project. CTA evaluated this new option of the UPRR Alternative, known as the Right-of-Way Option, in preparation of the Draft EIS. Subsequent coordination between local agencies and the railroads indicated that relocating UPRR freight operations from this corridor presents considerable challenges and would not be feasible.

During 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the BRT Alternative (along Michigan Avenue), the UPRR Alternative, and the Halsted Alternative. CTA evaluated three options for the UPRR Alternative: the Right-of-Way Option, East Option, and West Option. CTA also evaluated two options for the UPRR Alternative 130th Street station: a South Station Option and a West Station Option.

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Alternative. CTA has chosen to move forward with the South Station Option at 130th Street based on technical analysis and public feedback. Additional information about the BRT Alternative, UPRR Right-of-Way Option, UPRR West Station Option for the 130th Street station, and Halsted Alternative is presented below in the discussion of alternatives considered but not pursued.

Alternatives Considered but Not Pursued

During development of the project, CTA fully evaluated the BRT Alternative, the Right-of-Way Option for the UPRR Alternative, and the Halsted Rail Alternative (Halsted Alternative). In addition, CTA fully evaluated a West Station Option for the 130th Street station. These alternatives and the station option were analyzed as part of the technical memoranda preparation for the Draft EIS, but are not included in the Draft EIS. They were eliminated from analysis based on public input, technical constraints, potential impacts, and the extent to which they met the project's purpose and need.

CTA also evaluated a variation of the UPRR Alternative where the tracks would be at grade rather than elevated, described below.

Bus Rapid Transit Alternative

CTA considered a BRT Alternative along Michigan Avenue between 95th Street Terminal and Altgeld Gardens. This limited-stop enhanced bus route along the existing #34 South Michigan Avenue bus route would have transit signal priority along Michigan Avenue. The alternative included four stops, each with park & ride facilities. Although the BRT Alternative was a lower-cost alternative than the UPRR Alternative, it was eliminated in August 2014 based on public feedback including the following concerns:

- The BRT Alternative would have minimal travel time improvements compared to the No Build Alternative (23 minutes from 130th Street to 95th Street under the BRT Alternative, compared to 28 minutes for existing conditions or 14 minutes for the UPRR Alternative over the same distance).
- Approximately 1 million riders per year were anticipated for the BRT Alternative (in comparison to 13 million riders per year anticipated for the UPRR Alternative).
- The BRT buses would not have traveled on a dedicated lane along Michigan Avenue because of limited right-of-way. Although transit signal priority was planned, additional travel time savings would not have been realized without dedicated lanes for BRT buses.

Union Pacific Railroad Alternative

The Draft EIS summarizes the benefits and impacts of the East and West Options. In preparation of the Draft EIS, CTA fully evaluated the Right-of-Way Option and the 130th Street Station West Station Option. CTA also considered an at-grade (rather than elevated) track structure for the UPRR Alternative.

Right-of-Way Option

As part of the UPRR Right-of-Way Option, the elevated CTA structure would have been placed in the UPRR right-of-way. This option was added in 2012 in response to the CDOT feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible. Estimated travel times and ridership were the same for the Right-of-Way Option as for the East and West Options. Because the elevated CTA structure would have been placed in the UPRR right-of-way, the Right-of-Way Option would have resulted in fewer displaced properties than either the East or West Option.

130th Street Station - West Station Option

CTA initially considered two options for the 130th Street station: a South Station Option and a West Station Option. The South Station Option would be located immediately west of the

Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way at 130th Street. The West Station Option would be located along the north side of 130th Street at Evans Avenue. Pedestrians from Altgeld Gardens would access the West Station Option through a pedestrian crosswalk on 130th Street. A traffic signal would be required at this intersection to allow pedestrians to safely cross 130th Street.

The South Station Option is supported by the community and the Chicago Housing Authority because it would be more accessible from Altgeld Gardens. The West Station Option would incur additional costs because it would require approximately 1,100 feet of additional track due to its location, and would require intersection improvements to allow pedestrians to safely cross the street. The South Station Option would provide the best opportunity for a future connection to NICTD, improving regional rail connections and linkages to other modes of public transportation. Based on public feedback and technical analysis, CTA is considering only the South Station Option for 130th Street station.

At-Grade Track Structure

CTA considered a variation of the UPRR Alternative in which the RLE tracks would run at grade along the UPRR rail corridor (between I-57 and Prairie Avenue). In this variation, the existing east-west roadways would run either above or below the new at-grade CTA tracks and the existing at-grade UPRR tracks. Like the proposed UPRR Alternative, this variation would be elevated from the 95th Street Terminal to south of I-57, then at grade from I-57 to Prairie Avenue, elevated to cross the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street, then at grade near the proposed yard and shop and 130th Street station. CTA evaluated potential impacts and cost implications to run the east-west roadways both above (using overpasses) and below (using underpasses) the at-grade UPRR tracks and the proposed at-grade CTA tracks.

Roadway Overpasses

For an at-grade track structure, one option would be to use overpasses to carry roadways over the tracks. If roadway overpasses were used, they would need to be constructed at eight locations. More than 100 properties (primarily residential homes) would be displaced due to the overpass footprint, elimination of access to existing alleyways or driveways, and proximity of the embankment structure to the residential homes. The overpass structure and associated embankment could be as high as 30 feet, creating a substantial visual impact on the adjacent one-story residential buildings. In addition, permanent north-south residential street closures would be required where the streets would intersect with the embankment, which would disrupt neighborhood connectivity. Utilities that currently run within the street rights-of-way would have to be relocated. The potential construction cost savings between the elevated track structure and the at-grade structure would be insignificant when the cost of additional right-of-way acquisition and utility relocations is included. Roadway overpasses would also increase community impacts.

Roadway Underpasses

A second option for an at-grade track structure would be to use underpasses to carry roadways under the tracks. If underpasses were used, they would need to be constructed at eight locations. The underpass variation would have property displacements and community impacts similar to

those of the roadway overpass option except a large retaining wall would be located in front of the residential homes. Because the cost of a roadway underpass structure may be as much as double the cost of an overpass structure, this variation would provide no additional cost savings over the elevated track structure alternative and would have significantly more community impacts and right-of-way costs.

Based on the property displacements and community impacts that would be created by grade-separating the roadways from the proposed CTA tracks (through either roadway overpasses or underpasses), CTA eliminated this variation from further consideration.

Halsted Alternative

CTA considered the Halsted Alternative, which would extend the Red Line from 95th Street Terminal along I-57, and south along Halsted Avenue to Vermont Avenue on a new elevated structure. The Halsted Alternative would run above Halsted Avenue with center piers, except at the station locations where the structures would span Halsted Avenue. The Halsted Alternative would result in travel times similar to those of the UPRR Alternative. The alternative included four stations, each with park & ride facilities. Construction costs for the Halsted Alternative were approximately 6 percent higher than for the UPRR Alternative. The Halsted Alternative was eliminated in August 2014 based on technical analysis and public feedback including the following concerns:

- The Halsted Alternative would not have the potential for a direct connection to other regional transit services[2] like the UPRR Alternative would; therefore, it would not meet the purpose and need for the project.
- The Halsted Alternative would affect four historic resources, resulting in adverse effects on historic properties, while the UPRR Alternative would not affect any historic resources.
- The proposed seven-story parking structure at Vermont Avenue would result in adverse visual impacts because of its location within a neighborhood with single-family homes.
- The Halsted Alternative would not directly serve as many affordable housing locations in the project area as the UPRR Alternative would serve, including Altgeld Gardens.
- The public expressed concern that implementation of the Halsted Alternative would be disruptive to the surrounding community and would increase shadows, crime, and noise along the Halsted Street.

[2] Although the Halsted Alternative intersects the ME Blue Island branch, the southern terminus of that branch is less than 3 miles from the intersection at Halsted Street and is located just to the west of the project area. The northern terminus of the ME Blue Island branch is only two blocks from the Red Line in the Loop. Intersection with the ME Blue Island branch would not provide regional service.

- The Halsted Alternative did not receive the considerable public support before and during scoping in 2009 that the UPRR Alternative received.

Attachment 2
Historic Survey Inventory Sheets

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

418 W. 98th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1931

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
South façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick bungalow in the Washington Heights community is clad with tan face brick on its front elevation, common brick on its side elevations, and synthetic siding on its rear elevation. It has a steeply pitched hip roof covered with asphalt shingles and synthetic-clad, hip roof dormers with paired one-over-one windows on both the front and rear elevations. The front elevation has a recessed corner porch with round-arch opening, low brick sidewalls, and concrete steps. The residence also includes a door tucked into the side of the living room bay and four one-over-one windows, three of which are grouped together under a segmental arch. All windows are modern replacements with aluminum sashes. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (rear)	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Segmental arch, round arch porch opening			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

221 W. 98th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, split-level, single family residence.

Property Description: **Stories:** Spilt-level

This split-level home in the Roseland community is clad with buff brick and synthetic siding, has a shed roof with exposed rafters above its one-story section and a gable roof above its two-story section. It has centrally located wood double-doors topped by two large fixed-pane windows; other windows are arranged in groups of three along its front elevation. Windows are one-over-one aluminum-sash. This split-level home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable, shed	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

124 W. 99th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with glass block windows, is clad with buff brick, and has a hip roof covered with asphalt shingles and overhanging eaves. Its front elevation is fronted by a faux stone planter. It has an off-center door and sidelight comprised of glass blocks, two decorative glass block inserts, a picture window flanked by one-over-one aluminum-sash windows, and concrete steps behind a low faux stone wall. An attached two-car hip roof garage clad in the same buff brick is situated along the home's rear elevation. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Planter, glass block inserts, faux stone wall at entry			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Attached two-car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

401 W. 99th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a brick, two-story, single family residence

Property Description: **Stories:** 2

This two-story, brick clad house in the Washington Heights community is situated on a raised brick basement with glass block windows. The house has a hip roof covered with asphalt shingles. Its front elevation has a partial-width, hip roof, brick clad, enclosed porch with a metal storm door. It has concrete steps, metal railings, a pair of windows on the first floor and two single windows on the second floor. Windows throughout the house are non-original one-over-one aluminum-sash. Detailing includes concrete sills and orange brick banding that contrasts with the brown face brick cladding. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

314 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of split-level, single-family residence.

Property Description: **Stories:** Split-level

This back-split home in the Roseland community has a hip roof on both levels covered with asphalt shingles. The front elevation is clad with faux stone below the concrete sill line and brown brick above. This elevation has an off-center hollow core metal door, a picture window flanked by one-over-one aluminum-sash windows, and two decorative glass block inserts. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (lower façade)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Glass block inserts			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

319 W. 100th Place

Alternate: 321 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, single-family residence.

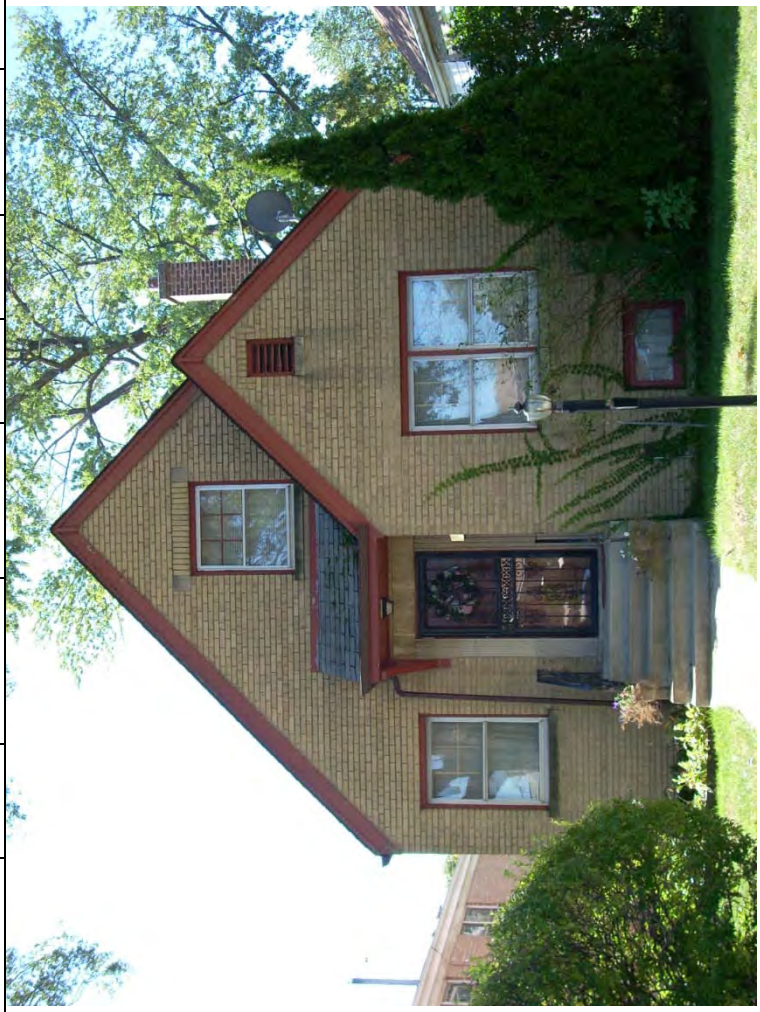

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised brick basement and has a front gable roof covered with asphalt shingles. Its front elevation is clad with buff brick and has a projecting gabled living room bay. This elevation also has a centrally located entrance with a metal storm door, concrete steps, metal railings, a bracketed shed-roofed door hood, and four six-over-one windows: three on the first floor and one in the gable. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete sills			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

435 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1942

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is clad with polychromatic brick and has a side-gabled roof covered with asphalt shingles. End gable walls are clad in aluminum siding. Its front elevation features a gabled pavilion with a strip of three non-original one-over-one aluminum-sash windows and a gabled entrance vestibule featuring a wood door with diamond pane window, concrete steps, and metal railings. A single non-original one-over-one aluminum-sash window is located in the corner of the front elevation. A small ventilating louver is situated in the gable. Detailing includes concrete sills and lintels with keystones. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding in gable ends
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Side gable	
Ornamental Architectural Details Concrete sills and lintels with keystones			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

444 W. 100th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Eclectic Neo-Traditional

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a brick one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community sits on a raised basement. It is clad with polychromatic brick and has a side gabled roof covered with asphalt shingles. Its front elevation has a gabled living room bay pavilion with paired basement windows that appear to be casements. There is a group of three non-original one-over-one windows with concrete sills and brick arch lintels that are separated by colonettes with acanthus leaf capitals. A small round-arched window is located in the gable. The house has a recessed corner porch with a metal storm door, round-arch openings, a Neo-Gothic castellated top, concrete steps, and brick sidewalls. This house has very good integrity in terms of its materials and detailing, and its Eclectic Neo-Traditional ornamentation makes it stand out among the vernacular, stripped-down brick and frame bungalows and cottages that comprise the predominant building stock in the Washington Heights community. As a result, it is recommended as individually eligible for National Register listing under Criterion C for architecture.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Castellated porch roofline	**Roof Type** Gable	
Ornamental Architectural Details Concrete sills, brick arched lintels, colonettes, arched window with keystone, stone insets, decorative brickwork, porch with castellated roofline			**Windows** Double-hung, fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** The Eclectic Neo-Traditional ornamentation stands out among the vernacular, stripped-down brick and frame residences that comprise the predominant building stock in the Washington Heights community.

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

318 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, brick, single family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story brick-clad home has a steeply pitched side gable roof covered with asphalt shingles, an exterior brick chimney, and two aluminum-clad shed dormers, each of which has a single one-over-one aluminum-sash window (non-original). Its front elevation has a centrally located gabled front vestibule with brick quoins, a door with wood surround and pediment, and concrete steps with metal railings. The entrance is flanked by three-sided window bays, which feature six-over-one windows with decorative brick corbelling beneath. It does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, dormer windows, and siding
Condition: Excellent Good Poor			
Additional Alterations Dormers may be post-construction addition.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side gable	
Ornamental Architectural Details Brick quoins and corbelling; stone quoins and inserts			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

426 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1943

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story house in the Washington Heights community is situated on a raised basement that is covered with siding and has glass block windows. The house is clad with synthetic siding and has a hip roof covered with asphalt shingles, overhanging eaves, and gable dormers on the front and side elevations. Its front elevation has an off-center hollow-core metal door and a partial-width hip-roof porch with wood steps and open metal supports. There are three windows on the first floor and two in its gabled wall dormer, all of which are non-original one-over-one aluminum-sash. This house lacks integrity, does not display distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

430 W. 100th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and west façades of a one-story, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the Washington Heights community sits on a raised basement with glass block windows. It has a hip roof covered with asphalt shingles. Its front elevation is clad with faux stone and its side and rear elevations are clad with synthetic siding and stucco. Its front elevation has a partial-width gabled porch with concrete steps and non-original open metal supports. It also has an off-center entrance with a metal storm door and two non-original one-over-one aluminum-sash windows. This house lacks integrity, does not feature distinguishing architectural elements, and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch supports, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (sides), faux stone (façade), stucco (sides)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

334 W. 101st Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a hip roof covered with asphalt shingles and a projecting gable-roofed living room. The front elevation is clad with brownish-orange face brick. Its off-center entrance features a metal storm door and a porch with concrete steps, metal railings and open metal posts supporting a metal awning. The front elevation has a window grouping that is partially obscured by a low metal canopy but appears to be a picture window flanked by double-hung windows. The side elevations are clad with common brick. Detailing includes a brick arch with stone keystone above the front elevation window group and stone blocks surrounding the door. This house does not feature sufficient distinguishing architectural elements to be individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick arch with stone keystone, stone blocks at entrance			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 101st Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 4 September 2012

Photos with Captions:
North façade of brick, single family residence.

Property Description: **Stories:** 1

This one-story house has gable front roof covered with asphalt shingles. Its front façade is sheltered by an overhang and is clad orange face brick, stone, and clapboards. A bow window with casements fronts the street façade. The off-center metal core door is accessed via a concrete stoop with metal hand rails. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick and stone (façade), clapboard (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

331 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1952

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a side gable roof covered with asphalt shingles. It is clad with brick on the first floor and with synthetic siding in the gables. The front elevation has a gabled projecting living room, an off-center door with concrete steps and metal railings, a picture window flanked by non-original one-over-one aluminum-sash windows, and a single non-original one-over-one aluminum-sash window. Detailing includes stone insert blocks flanking the door and several decorative glass insert blocks. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows on street elevation
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Side-gable	
Ornamental Architectural Details Stone insert blocks around door, decorative glass insert blocks			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) Storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

342 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of two-story, brick, single-family residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised brick basement and has a hip roof covered with asphalt shingles. Its front elevation is clad with buff brick. This elevation has an off-center hollow core metal door, a porch with concrete steps and metal railings, open metal supports, and a metal awning roof. It has a three-sided first floor bay with central multi-light fixed-pane window flanked by non-original one-over-one aluminum-sash windows and two non-original one-over-one aluminum-sash windows on the second floor. Detailing includes brick quoins and faux stone insert blocks flanking the door and beneath the window bay. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick quoins, faux stone insert blocks			**Windows** Double hung, fixed-pane
Outbuildings (*Number and Description*) Storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of brick, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in brown face brick and common brick along its front and side elevations, respectively. It has a hip roof covered with asphalt shingles. Its front elevation has an off-center door and a porch with concrete steps, metal railings, open metal supports, and metal awning roof. The front façade features a strip of three non-original one-over-one windows with concrete sills and a gable dormer with two single-pane windows. Glass block windows provide light in the basement. This building lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 4 September 2012

Photos with Captions:
North and west façades of a one-story, brick single family residence.

Property Description: **Stories:** 1

This one-story house is situated on a raised basement. It has a rectangular footprint, a hip roof covered with asphalt shingles, and a hip roof dormer with paired windows. Its front façade is clad in brown face brick with concrete block inserts and has a strip of three three-over-one windows. Its off-center metal core door is accessed via a short flight of concrete steps with metal railings. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete block inserts			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 101st Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 4 September 2012

Photos with Captions:
South and east façades of one-story, brick story single family residence.

Property Description: **Stories:** 1

This one-story house is situated on a raised basement. It has a rectangular footprint, a hip roof covered with asphalt shingles, and overhanging eaves. Its front façade is clad in buff face brick and has a strip of three windows, which appears to be one large picture window flanked by double-hung windows, beneath a metal awing. The off-center metal core front door is accessed via a flight of concrete steps with metal railings. Two large decorative glass blocks are situated next to the door. The side elevations are clad in common brick. This home does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Gablet	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

330 W. 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community has a hip roof covered with asphalt shingles and a hip dormer with a non-original one-over-one aluminum-sash window. The front elevation is clad with light brown face brick and has a hip-roofed porch with brick sidewalls, concrete steps, short wood Doric columns and frieze band. This elevation also has a strip of three non-original one-over-one aluminum-sash windows. Detailing includes a stone sill course, a brick soldier course with stone insert blocks above the windows, and decorative scrolled stone brackets. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Doric columns and frieze band, stone sill course, brick soldier course with stone insert block, stone brackets			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 21 September 2012

Photos with Captions:
South and west façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in Roseland is clad in synthetic siding, sits atop a raised basement, and has a front gable roof covered with asphalt shingles. The front elevation features a projecting, enclosed, gable roofed sun porch also clad in synthetic siding with one-over-one windows and an off-center front door accessed by a flight of concrete steps with metal railings. This home does not have distinguishing architectural features and is covered with synthetic siding, both of which preclude it from individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

416 W. 102nd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South and east façades of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised basement with glass block windows. It is clad with brown brick and has a hip roof covered with asphalt shingles and overhanging eaves. There are hip-on-gable dormers on the front and side elevations, each of which has a strip of non-original one-over-one aluminum-sash windows. The house features a recessed corner porch with a single-light oak door, concrete steps, low brick sidewalls, and a brick corner pier. The front elevation's rounded living room bay has a series of casement windows and transoms. Detailing includes a brickwork soldier course above windows with decorative stone insert blocks and concrete sills. This is a good example of a brick Chicago Style Bungalow, a building type that was produced in the thousands throughout the city's undeveloped areas and in nearby suburbs during the 1910s and 1920s. This house does not feature sufficient distinguishing architectural features to be individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier courses above windows, stone insert blocks, concrete sills			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

320 W 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding, has a hip-on-gable roof covered with asphalt shingles, and has overhanging eaves in front with aluminum soffits. The front elevation features a recessed corner porch with wood steps, railings, and corner post. A pair of casement windows is located within the porch. There is a strip of four windows on the first floor and a pair of windows in the gable. All windows are non-original one-over-one aluminum-sash. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

337 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a hip-on-gable roof covered with asphalt shingles. The front elevation features a recessed porch with concrete steps, metal railings, and a corner support consisting of a faux stone pier with open metal post above. This elevation also has overhanging eaves with aluminum soffits and decorative exposed rafters, an off-center recessed door with a metal storm door, and a strip of three windows on the first floor and a pair of windows in the gable, all of which are non-original one-over-one aluminum-sash. This residence does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

342 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1940

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a brick, 1.5-story, single family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community has a cross-gable roof covered with asphalt shingles and is clad with brown face brick. Its front elevation has an off-center, gable roofed entrance vestibule with a metal storm door sheltered by a metal awning, concrete steps, metal railings, and paired double-hung windows on both the first and second floors that are partially obscured by low metal awnings. A one-story hip roof covered side entrance is situated along the west elevation. Detailing includes concrete sills, a keystone above the entrance, and brick soldier course lintels. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Cross-gable	
Ornamental Architectural Details Concrete sills, keystone above the entrance, brick soldier course lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: J. Martinez

Date: September 2012

Photos with Captions:
South façade of brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story, brick-clad house in Roseland has a square footprint and a hip roof covered with asphalt shingles. An off-center, projecting, gable-roofed vestibule with front door is accessed via a short flight of concrete steps with metal railings. The front elevation has a three-sided bay with a central eight-over-one window flanked by four-over-one windows, and the second floor has two one-over-one windows with wood shutters. Windows are modern replacements. Detailing includes brick banding on the second floor and concrete bands in the vestibule gable meant to simulate half-timbering. This house lacks architectural distinction; as a result, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete bands for half-timber look			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 102nd St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 21 September 2012

Photos with Captions:
South façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in synthetic siding and has a hipped roof with asphalt shingles and overhanging eaves. The front elevation features a centrally located front door flanked by two one-over-one aluminum-sash windows and has a hipped roof dormer with paired one-over-one windows. Windows are modern replacements; replacement windows in the dormer are smaller than the original windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

444 W. 102nd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Washington Heights community is situated on a raised concrete block basement. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation features a hip-roofed full-width screened-in porch with concrete steps, metal pipe railings, a faux stone base, and supports comprised of faux stone pedestals topped by squat Doric columns. A pair of windows sheltered by a metal awning is situated in the gable. A two-story, gable-roofed, bay pavilion is situated along one of the side elevations. Windows throughout the house are non-original one-over-one aluminum-sash. This house lacks integrity, does not display distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations Porch screened in			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

301 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1921

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East (Princeton) façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow is situated at the southwest corner of 103rd Place and Princeton Avenue in the Roseland community. It has a hip-on-gable roof covered with asphalt shingles and overhanging eaves with decorative knee braces located on the front gable section of the roof. The central portion of the house retains its original wood clapboard siding; the areas above and below are clad with wood shingles. Its 103rd Place elevation has a strip of three one-over-one windows, a strip of three casements, and a strip of three windows in the gable that appear to be casements. Its Princeton Street elevation has a metal storm door topped by a gabled hood with two knee braces, glass block basement windows, a strip of three one-over-one windows, a single one-over-one window, and a pair of casements. This house does not have sufficient distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood clapboards and shingles	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Knee braces			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

306 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1941

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community is clad with synthetic siding, has a side-gabled roof covered with asphalt shingles, and has two gable dormers with double-hung multi-sash windows that are visually connected with aluminum siding. The front elevation has an off-center door covered with plywood and a Classical surround consisting of simple wood pilasters and unadorned entablature. The front elevation also has concrete steps with metal railings and paired windows that are covered with plywood. This home does not have distinguishing features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Side-gable	
Ornamental Architectural Details Pilasters at surround			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

321 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is clad with synthetic siding, has a hip roof covered with asphalt shingles, and a hip dormer with three one-over-one windows beneath a metal awning. The front elevation has a recessed corner porch with concrete steps, metal railings, and an open metal corner post. It also features an off-center entrance with metal storm door, a small casement window within the porch, and a large picture window beneath a metal awning. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

326 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of 1.5-story, multi-family, frame residence.

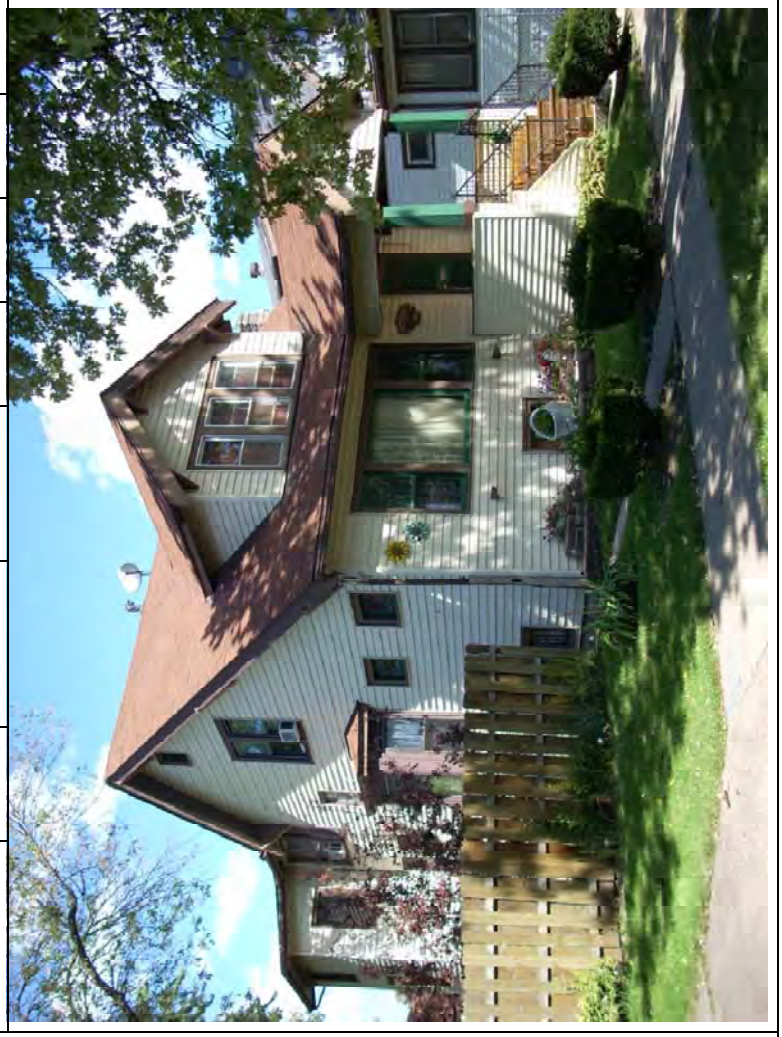

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised brick basement with glass block windows. It is clad with aluminum siding and has a side-gabled roof covered with asphalt shingles. The house also has a gable dormer with a strip of one-over-one windows and decorative knee braces. Its front elevation has a partial-width, off-center, gable-roofed, wood porch with two squat Doric column supports atop aluminum-clad sidewalls, a door with metal storm, and a picture window flanked by one-over-one windows. Its western elevation has a three-sided window bay as well as a large shed roofed addition. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations Shed roof addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side-gable	
Ornamental Architectural Details Doric columns, knee braces			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Two-car garage with hipped roof			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

426 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with faux stone and synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center entrance with metal storm door and a flat-roofed, partial-width porch with a wood deck, wooden steps, metal railings, and open metal posts. There is a strip of three windows on the first floor and three on the second. All windows are non-original one-over-one aluminum sash. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

427 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a 1.5-story, frame multi-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center, enclosed, gabled roof vestibule with a metal storm door and concrete steps with metal railings. There is a multi-paned bow window on the first floor and a pair of non-original one-over-one aluminum-sash windows in the gable. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

440 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a side-gabled roof covered with asphalt shingles. The front elevation has an off-center metal storm door topped by a metal awning, non-original wood steps and railings, and a pair of non-original one-over-one aluminum-sash windows. This house lacks integrity and any distinguishing architectural features and is not eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

455 W. 103rd Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof porch with wood steps, boxed supports, and low aluminum-clad walls. This elevation also has an off-center hollow core metal paneled door with fanlight, a strip of three windows on the first floor, and a pair of windows in the gable. All windows above the raised basement are non-original one-over-one aluminum-sash. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Structural Survey

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

316 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and east façades of one-story, brick supermarket.

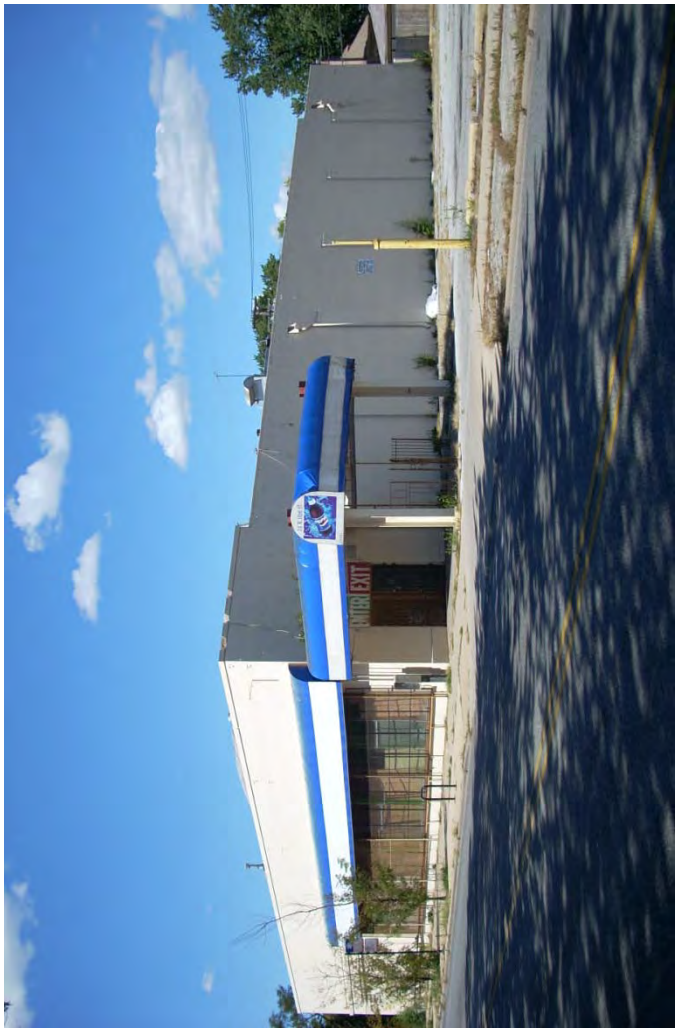

Property Description: **Stories:** 1

This one-story brick-clad former supermarket in the Roseland community has a flat roof, a parapet and a strip of large fixed-pane display windows along its 103rd Street elevation. It has a pair of doors along its east elevation, which are sheltered by a nylon canopy supported by two metal I-beam posts. This building does not have any distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

319 W. 103rd Street

Alternate: 327 W. 103rd St

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Chazap Barber College

Property Use

Historic: Commercial

Current: Educational

Date of Construction: 1953

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, brick property

Property Description: **Stories:** 1

This one-story brick-clad barber college building in the Roseland community has a flat roof and parapet. A single course of limestone surrounds its former storefront area, which has been in-filled with red brick, a recessed entrance with metal door, and a continuous strip of glass block windows. The eastern end of the building's front elevation has a metal overhead door and a single glass door. This building does not feature sufficient integrity to be individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** In-filled windows, modified storefront
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Hay, Grain & Feed (1905)

Common/Current: Unknown

Property Address:

403-405 W. 103rd St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1900

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of a brick, commercial building.

Property Description: **Stories:** 2

The two-story commercial portion of this building is identified as a "Hay, Grain & Feed" shop in the 1905 Sanborn while the one-story portion is identified as used for related storage. The buildings were joined at a later date. Both are clad in brown face brick and have flat roofs and parapets. The two-story section has an off-center entrance with an original wood door, sidelights, transom, and a stone surround with cornice, as well as a metal cornice. The glass panes in the sidelights and door have been removed and their openings in-filled with wood. It has bay windows on the first and second floors and an additional window opening above the entrance bay. All windows are comprised of one-over-one wood-sash. Detailing includes brick banding and a stone cornice. The one-story part has altered door and window openings, including one large window opening that has been in-filled with glass blocks. Side elevations are clad in common brick. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some window openings in-filled with wood and glass block
Condition: Excellent Good Poor			
Additional Alterations Two buildings connected after 1905			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone cornice and surround at entrance, brick banding, metal cornice			**Windows** Glass block, double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

421 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and east façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has an off-center door, concrete steps and metal railings, and faux stone cladding below the first floor sill line and surrounding the door. There is a three-sided window bay on the first floor and a pair of windows in the gable. Both side elevations feature shed-roofed dormers. Windows throughout the house are non-original one-over-one aluminum-sash. This house does not feature sufficient integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement widows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

424 W. 103rd Street
Alternate: 440 W. 103rd Street (CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Loving Spirit M.B. Church

Property Use

Historic: Commercial

Current: Religious

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
South façade of a two-story, frame, religious building.

Property Description: **Stories:** 2

This two-story frame building in the Washington Heights community has a gable roof covered with asphalt shingles that is obscured by a false front with faux stone siding and high stepped parapet. The first floor has two large window openings that are in-filled with glass block. The second floor has a non-original picture window flanked by one-over-one aluminum-sash windows. The building has a one-story flat-roofed wing. The wing's front elevation is clad with vertically laid wood boards above a brick base. It has a pair of non-original hollow core metal paneled doors with fanlights. The wing also features decorative modern angled wood pylons at its corner and along its side elevation. This building does not feature sufficient integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, brick, faux stone	
Roof Material Asphalt shingle	**Roof Features** Parapet	**Roof Type** Gable, flat	
Ornamental Architectural Details Stepped parapet			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

453 W. 103rd Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1878

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of one-story, frame, single-family residence.

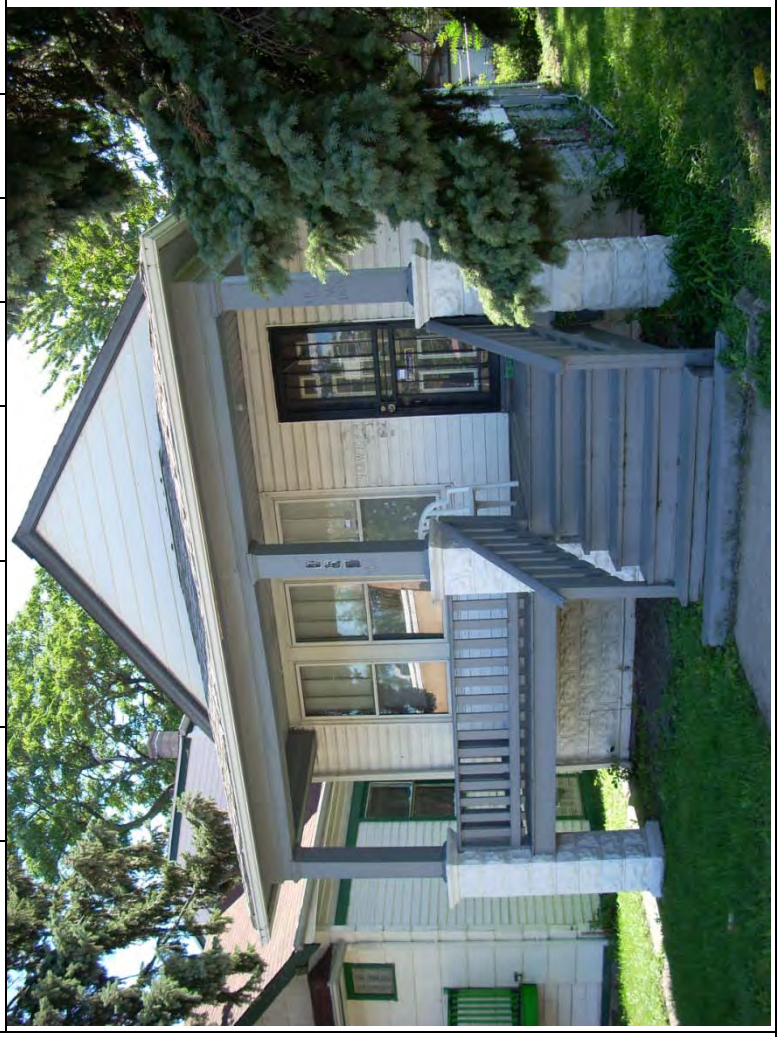

Property Description: **Stories:** 1

This one-story frame cottage in the Roseland community sits on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. Its front elevation features a full-width wood porch with wooden steps, wooden railing, and supports consisting of faux stone piers topped by squat, square columns. It has an off-center hollow core metal door and a strip of three non-original three-over-one windows. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Square columns			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

328 W. 104th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised basement and clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and overhanging eaves with decorative rafters. Its roof overhangs to shelter the full-width wood porch with supports consisting of low square wood columns atop synthetic-clad porch walls. The front elevation has an off-center non-original hollow core metal paneled door, a strip of three non-original double-hung windows, and an original wood casement window in the attic gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Exposed rafters, square columns on porch			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

335 W 104th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

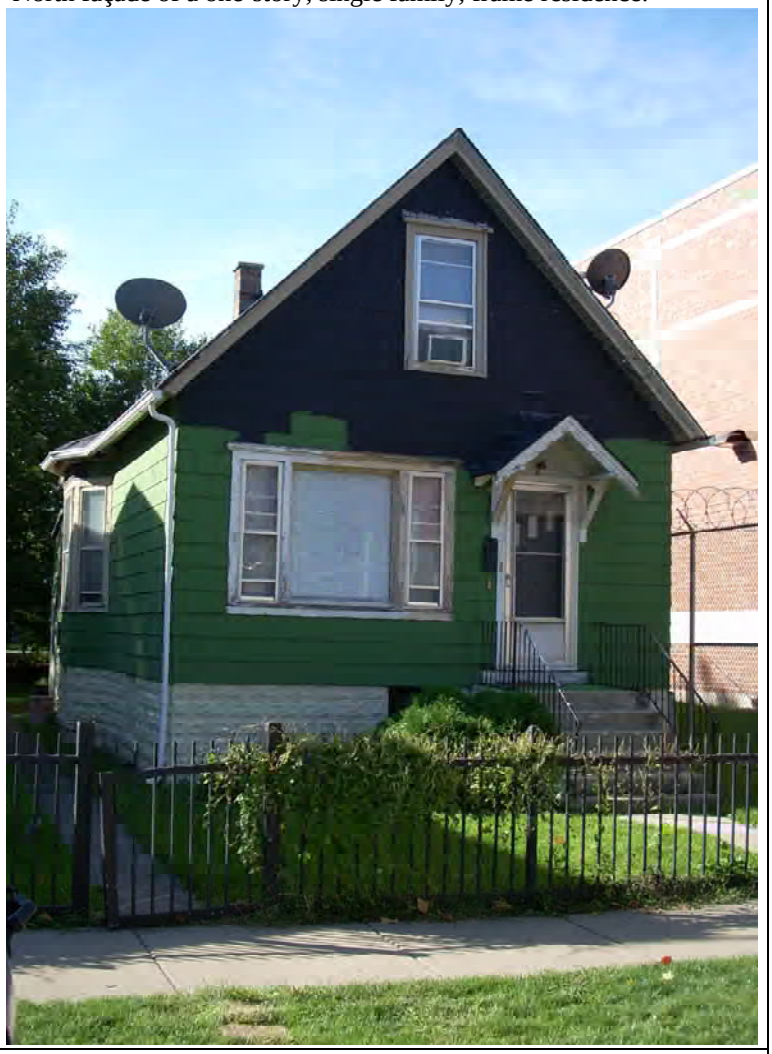

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with shingles. The building has a front gable roof covered with asphalt shingles. The front elevation has an off-center door with bracketed gable hood, concrete steps with metal railings, a picture window flanked by double-hung windows, and a non-original one-over-one window in the gable. The east elevation has a three-sided bay window. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations Some windows have aluminum storms			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood shingles	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed hood above entrance			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

310 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. The residence is clad with synthetic siding, has a hip roof covered with asphalt shingles, overhanging eaves, and a gable dormer with three original wood casement windows. The front elevation features a strip of four one-over-one wood-sash windows and a recessed corner porch with a hollow core metal door, an adjacent casement window, wood steps, metal railings, and a corner support consisting of a low faux stone pier topped by a short open metal post. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Chicago Fire Department. Engine Company #93

Property Address:

324 W. 104th Street
Alternate: 328-330 W. 104th Street

HAARGIS Number:

140602

Present Owner and /or Occupant:

Chicago Fire Department

Property Use

Historic: Public

Current: Public

Date of Construction: 1917

Architect's Name: Charles W. Kallal

Builder/Contractor: Butler & Co. General Contractors

Architectural Style:

Classical Revival

Prepared By: J. Martinez, M. C. Bird, J. Gaurino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
South façade of a brick, two-story, fire station (above), HAARGIS (below)

Property Description: **Stories:** 2

This two-story firehouse in the Roseland community is clad with light brown face brick and has a flat roof and a parapet with concrete coping. Its front elevation has a two-story projecting pavilion, an overhead garage door, two window openings, an off-center hollow core metal door on the first floor, and a strip of three windows and a single window on the second floor. All windows are non-original one-over-one aluminum sash. The spandrel area between the garage door and the windows above features a large stone sign plate inscribed with the words, “City of Chicago Fire Department.” The spandrel area between the corner door and window above has a metal plate identifying the 1917 construction date and the names of a series of people associated with the building’s construction, including the mayor, alderman, city architect, and contractor. Detailing includes stone door and window surrounds on the first floor, bracketed stone window lintels, concrete belt courses, and brick pilasters topped by stone panels with the City of Chicago’s “Y” motif and decorative scrolls. The “Y” motif is also situated above the off-center door. This building is

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

recommended as eligible for individual listing on the National Register under Criterion C for architecture. It is a rare extant example of an early twentieth-century neighborhood firehouse in Roseland, has largely retained its original building materials and detailing, and still functions as a firehouse.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Concrete coping, stone sign plate, metal info plate, bracketed stone window lintels, concrete belt courses, brick pilasters with stone panels (including city motif and scrolls)				**Windows** Double-hung
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Rare example of an early twentieth century firehouse in Roseland.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

325 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles. The front elevation has a recessed corner porch with wood steps, metal railings, and an open metal corner post. Additional features include a front door tucked into the side of the living room bay, a casement window, a strip of four non-original one-over-one aluminum-sash windows on the first floor, and a strip of three single-pane casement windows in the gable. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Chicago Fire Department. Engine Company #93

Property Address:

324 W. 104th Street
Alternate: 328-330 W. 104th Street

HAARGIS Number:

140602

Present Owner and /or Occupant:

Chicago Fire Department

Property Use

Historic: Public

Current: Public

Date of Construction: 1917

Architect's Name: Charles W. Kallal

Builder/Contractor: Butler & Co. General Contractors

Architectural Style:

Classical Revival

Prepared By: J. Martinez, M. C. Bird, J. Gaurino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
South façade of a brick, two-story, fire station (above), HAARGIS (below)

Property Description: **Stories:** 2

This two-story firehouse in the Roseland community is clad with light brown face brick and has a flat roof and a parapet with concrete coping. Its front elevation has a two-story projecting pavilion, an overhead garage door, two window openings, an off-center hollow core metal door on the first floor, and a strip of three windows and a single window on the second floor. All windows are non-original one-over-one aluminum sash. The spandrel area between the garage door and the windows above features a large stone sign plate inscribed with the words, “City of Chicago Fire Department.” The spandrel area between the corner door and window above has a metal plate identifying the 1917 construction date and the names of a series of people associated with the building’s construction, including the mayor, alderman, city architect, and contractor. Detailing includes stone door and window surrounds on the first floor, bracketed stone window lintels, concrete belt courses, and brick pilasters topped by stone panels with the City of Chicago’s “Y” motif and decorative scrolls. The “Y” motif is also situated above the off-center door. This building is

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

recommended as eligible for individual listing on the National Register under Criterion C for architecture. It is a rare extant example of an early twentieth-century neighborhood firehouse in Roseland, has largely retained its original building materials and detailing, and still functions as a firehouse.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Replacement doors and windows
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Concrete coping, stone sign plate, metal info plate, bracketed stone window lintels, concrete belt courses, brick pilasters with stone panels (including city motif and scrolls)				**Windows** Double-hung
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Rare example of an early twentieth century firehouse in Roseland.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Roseland Pumping Station

Common/Current: Roseland Pumping Station

Property Address:

351 W 104th Street

HAARGIS Number:

140603

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1911

Architect's Name: William G. Krieg

Builder/Contractor: Not in CHRS

Architectural Style:

Prairie

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz, HAARGIS

Date: 24 September 2012

Photos with Captions:
North façade of brick pumping station (above), north and east facades of pumping station from HAARGIS (below).

Property Description: **Stories:** 2

The two-story Prairie style Roseland Pumping Station is clad in brown brick. It has a high limestone watertable, a flat roof, parapet, and two square towers at the corners of the front (Roseland) elevation. The front elevation features a projecting, two-story flat-roofed entrance pavilion with a pair of centrally located glass double-doors, sidelights, and a stone panel above that features the City of Chicago's "Y" emblem in metal. The entrance has a smooth stone surround. Above the entrance is a limestone panel incised with the words: "City of Chicago Roseland Pumping Station." Detailing on the entrance pavilion includes brick pilasters with stone bases, coping, and geometric motifs. The parapet is clad in limestone and features decorative geometric motifs. The building's fenestration is largely comprised of multi-paned steel sash windows, some of which have transoms.

This is an excellent intact example of a community pumping station with fine integrity that still functions in its original use. It is recommended as individually eligible for the National Register under Criterion C for architecture as a well-preserved example of a community pumping station designed in the Prairie style.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** View of some windows obscured by aluminum storms; others are original steel sash
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Entrance pavilion with brick pilasters; stone bases, coping, cornice, banding, and geometric motifs			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Excellent example of a well-preserved community pumping station designed in the Prairie style that still functions in its original use.

Additional Comments:

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

415 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story T-Plan house in the Roseland community is clad with synthetic siding and has a cross-gabled roof covered with asphalt shingles. Its front elevation has a centrally located wood door with a diamond-shaped window located in a projecting gable front bay with concrete steps with metal railings. There are two window openings on the front façade, one of which is covered with plywood. The other window is fixed-pane or casement. Side elevation window openings are also covered with plywood. This house lacks integrity, does not feature any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Fixed-pane or casement; others covered with plywood
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

430 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 10 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad house in the Roseland community is situated on a raised brick basement with glass block windows. It has a hip roof covered with asphalt shingles, an aluminum-clad front gable dormer with a pair of sliding glass windows, and a set-back synthetic-clad gable-roofed addition on the second story. The front elevation has a strip of three one-over-one aluminum-sash windows, a metal storm door, and a recessed corner porch with concrete steps, low brick side walls, and a brick corner pier support. Detailing includes decorative concrete block inserts. This house does not feature distinguishing architectural features, does not retain its integrity, and, therefore, is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and new cladding
Condition: Excellent Good Poor			
Additional Alterations Second story addition at rear			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (dormers)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip, Gable	
Ornamental Architectural Details Concrete block inserts			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

457 W. 104th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. The front elevation has a strip of three non-original one-over-one windows, a recessed corner porch with a metal storm door and adjacent casement window, wood steps, and low aluminum-clad sidewalls topped by two squat wood columns supporting the porch's gabled roof. Decorative knee braces are situated beneath the eaves of the front elevation. The pair of windows in the gable appears to be casements. This house does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and some windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Brackets under eaves			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

344 W. 105th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a gable dormer with three small casement windows. Its front elevation features a strip of four non-original one-over-one aluminum-sash windows and a recessed corner porch with metal storm door, wood steps and railings, and a corner support consisting of a low faux stone pier topped by a short aluminum-clad post. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

416 W. 105th Street
Alternate: 410 W 105th St

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial (Warehouse, 1938)

Current: Mixed-Use

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story building in the Roseland community, a former warehouse later converted to residential use and now abandoned, has a flat roof and shaped parapet with concrete coping. Its front elevation is clad in brown face brick and its side and rear elevations are clad with common brick. The front elevation has an off-center door opening with transom, a garage door opening, and two window openings, all of which are covered with plywood. A portion of one of these window openings is visible and reveals a multi-paned upper sash. The second floor has a pair of window openings and a strip of three window openings, all of which have had their glass panes removed. Detailing includes concrete sills and insert blocks between the first floor openings, two brick soldier courses, and brick stringcourses at the parapet level. This building does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Abandoned building with broken windows, partially secured with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and insert blocks, brick soldier courses, and brick stringcourses, shaped parapet			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

411 W. 105th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

AT&T

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1960/2005

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 25 September 2012

Photos with Captions:
South façade of two, brick, one-story light industrial buildings. The building dating to 1960 is shown in the top photo while the building dating to 2005 is shown in the bottom photo.

Property Description: **Stories:** 1

These one-story brick-clad flat-roofed light industrial buildings in Roseland have overhead garage doors and a hinged hollow metal door opening. The earlier building has a parapet with tile coping. Original window openings along the side elevations have been in-filled with brick or glass blocks with central casement windows. The newer building has a flat roof. These buildings lack any architectural distinction and are not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Bricked over windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

338 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width, hip-roof, wood porch with low, synthetic-clad walls, boxed supports, and side-facing steps. The residence also has an off-center metal storm door, a three-sided bay window on the first floor, and paired windows in the gable, all of which feature non-original one-over-one aluminum sashes. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story, Craftsman style, frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer with three casement windows. The front elevation has a recessed corner porch with a concrete block corner pier, a front door tucked into the north side of the living room bay, wood steps with wood railings, and a strip of non-original one-over-one aluminum-sash windows. This is an example of a frame Craftsman bungalow, a residential building type that was produced during the 1910s and 1920s. This house does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
North façade of a brick and vinyl, one-story, single family residence.

Property Description: **Stories:** 1

This building consists of a central, hipped-roof, brick clad structure on a raised basement that was constructed in 1914. Later, shed-roof, vinyl clad additions were constructed on the front and rear of the central brick portion. The front elevation features an off-center porch with concrete steps, metal railings and supports topped by a metal awning roof. It also has a hollow metal front door and a five-sided bow window. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Additions to front and rear			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (original part), Vinyl (front and rear additions)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip, shed	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

350 W 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
South façade of vinyl-sided, one-and-a-half-story, single-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half story home in the Roseland community is situated on a raised basement, is clad in aluminum siding, and has a front-gabled roof covered with asphalt shingles. Its front elevation features an off-center, gable-roofed porch with wood steps, railings, and posts. It has a front door that appears to be hollow metal, a picture window on the first floor, and paired one-over-one windows on the second floor. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows; new porch
Condition: Excellent Good Poor			
Additional Alterations Fixed-pane picture window replaces original windows			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed- pane, double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

352 W. 106th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 25 September 2012

Photos with Captions:
South façade of one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised basement and clad with stone (first floor) and synthetic siding (dormer). It has a hip roof covered with asphalt shingles and a gable-roofed dormer with three windows that appear to be casements. Its front façade features a recessed porch with concrete steps, metal railings, and a metal corner support; it also has a leaded glass casement window and a strip of four one-over-one windows. This home lacks both integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding on dormer
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone, synthetic siding (dormer)	
Roof Material Asphalt	**Roof Features** Gabled dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and two large non-original flat-roofed side elevation dormers with one-over-one aluminum-sash windows. The front elevation has an off-center non-original hollow core metal door, steps obscured by foliage with metal railings, and a strip of three non-original one-over-one aluminum-sash windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Side dormers added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable, flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

346 W. 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows and has a hip roof covered with asphalt shingles. Its front elevation is clad with red brick on one side and buff brick on the other, has an off-center hollow core metal door, concrete steps with metal railings, and a picture window flanked by one-over-one aluminum-sash windows. Detailing includes three decorative glass blocks and concrete inserts flanking the front door. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, concrete inserts at entrance			**Windows** Double-hung, fixed-pane, glass blcok
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W 106th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of a one story, single-family residence.

Property Description: **Stories:** 1

This one story home in Roseland has a front gable roof with asphalt shingles. Its front façade is clad in both vinyl and faux stone siding; it has a flat-roofed enclosed porch with an off-center entrance covered with plywood. The two first floor window openings are in-filled with wood and the gable features a pair of one-over-one aluminum-sash windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl, faux stone	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, in-filled
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

353 W 106th Street
Alternate: 355 W 106th Street, per Assessor

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 24 September 2012

Photos with Captions:
North façade of vinyl and stone, one-story single-family residence.

Property Description: **Stories:** 1

This one-story home in Roseland is situated on a raised basement. It has a hip roof with asphalt shingles and a gable-roofed dormer with sliding glass windows. Its front elevation is clad in synthetic stone and features an off-center hollow metal paneled door with fanlight, accessed via a short flight of wood steps with wood railings. Its strip of three windows features a picture window flanked by one-over-one windows. The side elevations are clad in vinyl siding. Alterations include the installation of siding and replacement windows. This structure lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Vinyl (sides and rear), Faux stone (façade)	
Roof Material Asphalt	**Roof Features** Gabled dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

332 W. 107th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad house in the Roseland community sits on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a large hip-roofed rear wing. Its projecting gable-roofed front wing has a recessed corner porch with low brick walls, a brick corner pier, concrete steps with metal railings, and a door tucked into the side of the living room bay. Its front elevation features two large picture windows, a glass block window, and a bulls-eye window in the gable. Other windows are non-original double-hung. Detailing includes faux stonework at the corners of the basement, concrete sills, glass blocks, and keystone-like blocks surrounding the bulls-eye window. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stonework at corners, concrete sills, bull's eye window with stone accents			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Detached three car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

333 W. 107th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised brick basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer with a pair of original wood casement windows and decorative rafters. Its roof overhangs to shelter a full-width wood porch with straight railings and posts. The front elevation has an off-center non-original hollow-core metal door and a strip of three non-original one-over-one aluminum-sash windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

335 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles and a shed dormer along its west elevation. It has a full-width, gable-roof, wood porch with low walls and three boxed supports all covered with aluminum siding. The front elevation has an off-center door with a metal storm door, a strip of three windows on the first floor and a pair of windows in the attic, all of which are non-original one-over-one aluminum-sash. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

400 W 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 25 September 2012

Photos with Captions:
South façade of a one-story, concrete block, light industrial building.

Property Description: **Stories:** 1

This one-story, concrete block, light industrial building has a flat roof with parapet. Its front elevation has an off-center entrance with a non-original metal core door with surround and transom, a strip of one-over-one windows, and three glass block windows. Detailing includes drip molds above the entrance and windows. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Drip molds above entrance and windows			**Windows** Glass block, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

415 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1920

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
North and east façades of a brick, one story, commercial building.

Property Description: **Stories:** 1

This one-story commercial building in the Roseland community has a flat roof, castellated parapet, a brick panel at the cornice line, and concrete coping. Its front elevation is clad in yellow face brick and has a recessed, off-center hollow core metal door that is non-original. Aluminum siding has replaced this door's original transom and its original storefront has been in-filled with a strip of fixed pane windows with aluminum siding above and below. The north portion of its east elevation is also clad in yellow face brick and has been altered with the insertion of an overhead metal door that is surrounded by aluminum siding. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good <u>Poor</u>			
Additional Alterations Garage door opening inserted on east facade			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (infill)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick panel			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

432 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South façade of a masonry, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home at the northwest corner of 107th Street and Eggleston Avenue in the Roseland community is situated on a raised brick basement. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front elevation is clad with faux stone below the sill line and red brick above. The building has an off-center door behind a metal storm, concrete steps with metal railings, and a picture window flanked by one-over-one aluminum-sash windows. Detailing includes faux stone blocks flanking the front door and two horizontal strips of faux stone, each with a glass block, on the front elevation. The side (Eggleston) elevation is clad in red brick and has two pairs of four-over-one windows. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Faux stone (below sill)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone panels with glass blocks, stone surround at entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

300 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz (too much foliage), Cook County Assessor (2007)

Date: 17 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This 1.5-story house at the northwest corner of 108th Street and Princeton Avenue in the Roseland community is situated on a raised brick basement and is clad with synthetic siding. The building has a gambrel roof covered with asphalt shingles. Its front (108th Street) elevation has a full-width, hip-roofed, wood porch with frieze band and supports consisting of three brick piers topped by squat wood posts. The building has an off-center door and a single double-hung window on the first floor. A pair of double-hung windows and a small casement window provide light to the attic space. Its Princeton Avenue elevation has a three-sided window bay. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding; possibly some of the windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** gambrel	
Ornamental Architectural Details Frieze band			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

313 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1918

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North and west façades of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a gable roof covered with asphalt shingles. Its front elevation features an off-center non-original hollow core metal door, concrete steps with metal railings, a three-sided window bay on the first floor, and a pair of windows in the gable. Windows are non-original one-over-one aluminum-sash. The house has a shed-roofed second story addition at the rear of its west elevation and a gable dormer along its east elevation. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, steps, and railing
Condition: Excellent Good Poor			
Additional Alterations Second story shed roof addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South and west façades of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story, frame home in the Roseland community is situated on a raised basement and clad with synthetic siding. It has a hip roof covered with asphalt shingles and a dormer with two one-over-one windows. Its front elevation has a projecting living room bay with replacement one-over-one windows, an off-center hollow metal door, and concrete steps with metal railing. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W. 108th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
North façade of 1 story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is situated on a raised concrete block basement, is clad with aluminum siding, and has a front-gabled roof covered with asphalt shingles. Glass blocks in-fill the window openings in the basement. The front elevation of the residence features an off-center hollow metal door topped by a bracketed gabled hood and concrete steps with metal railings. It also features paired, non-original, sliding glass windows on the first floor and a one-over-one, non-original window in the gable. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, windows, and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed gabled hood			**Windows** Double-hung, sliding, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Roseland Christian School

Common/Current: Roseland Christian School

Property Address:

234 W. 108th Street
Alternate: 314 W 108th St.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Roseland Christian School

Property Use

Historic: Education

Current: Education

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a brick, three-story school.

Property Description: **Stories:** 3

This three-story school in the Roseland community is clad in brown face brick. The building has a flat roof, shaped parapet with concrete coping, and corner pavilions. Full height brick pilasters divide the front elevation into a series of bays, each of which contains a strip of three one-over-one windows. The main entrance features a pair of non-original hollow core metal doors topped by a stone sign plate inscribed with the words, “Roseland Christian School.” Detailing includes decorative brick panels in the spandrels, concrete sills and lintels. This school lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Parapet with concrete coping, corner pavilions, brick pilasters, stone sign, brick panels, concrete sills and lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

301 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1905

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and is clad in red brick. The building has a flat roof and parapet. The front elevation has a full-width shed-roofed porch with wood posts and steps but no railings, an off-center door, an adjacent glass block window, and a group of three windows on the first floor. The second floor of the front elevation has a group of three windows and a single window. Nearly all windows are covered with plywood, with the exception of two non-original one-over-one aluminum-sash windows. The east elevation has a full-height window bay pavilion. Detailing includes stone sills, lintels, coping, and cornice. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills, lintels, coping, and cornice			**Windows** Double-hung, glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles, overhanging eaves, and decorative rafters. It has a recessed corner porch with a door tucked into the side, a faux stone corner pier, and wood steps with metal railings sheltered by a flat-roofed metal canopy supported by two wood posts. Its front elevation features a casement window within the recessed porch, a strip of four double-hung wood-sash windows on the first floor, and a strip of three wood casement windows in the attic. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has an off-center door behind a metal storm door, non-original wood steps and railings, and five non-original one-over-one aluminum-sash windows: four on the first floor and one in the gable. Review of the 1938 Sanborn and the assessor's 2007 photograph suggests that while the front and rear porches are original to the house, a second story was added to the residence between 1938 and 2007. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and railings
Condition: Excellent Good Poor			
Additional Alterations Second story added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Sanborn map 4228.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

348 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South façade of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad with synthetic siding. It has a hip roof covered with asphalt shingles and a gabled dormer with two windows that appear to be casements. Its front façade features an off-center door within a recessed porch with concrete steps, metal railings and corner support, and a picture window flanked by double-hung windows. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

350 W. 109th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South façade of two-story multi-family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community has “cemented” cladding material, which is original per the 1911 Sanborn map. Its front elevation has an enclosed, full-façade, flat-roofed porch with an off-center metal core door, concrete steps and metal railings, and a strip of four windows that appear to be sliding windows. The second floor of the front elevation has four one-over-one windows. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch enclosed
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Cement	
Roof Material None	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Sliding, double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

351 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
North and west façades of 1-story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is clad with aluminum siding, has a gambrel roof covered with asphalt shingles, and rests on a concrete block foundation. Its front elevation features an off-center door and porch with concrete steps, metal railings and supports, a metal awning roof, and a strip of three one-over-one windows on the first floor and a one-over-one window above. Window openings in the basement are filled with glass blocks surrounding a central, casement window. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, no in CHRS

Common/Current: Unknown

Property Address:

354 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 5 September 2012

Photos with Captions:
South and east façades of 1 -story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is clad with synthetic siding, has has a front-gabled roof covered with asphalt shingles, and rests on a concrete block foundation. Its front elevation features an off-center door and porch with concrete steps, metal railings and supports, and metal awning roof. It has a strip of three one-over-one windows on the first floor and a small single-pane window in the gable. Glass blocks with a central casement infill the basement window openings. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows in basement
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: South Shore Iron Works

Common/Current: South Shore Iron Works

Property Address:

404-410 W. 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz (top photo, photo pg. 3), CCA (bottom photo)

Date: 5 September 2012

Photos with Captions:

East façade of industrial, brick and metal storage shed.

South and east façades of industrial, brick and metal storage shed.

Property Description: **Stories:** 1

This one-story, side-gabled, metal shed on the vacated South Shore Iron Works property is partially obscured by foliage. The front elevation is clad in buff brick and contains a series of hollow metal doors, each flanked by three windows to one side; many are covered with plywood. A full width metal canopy is present on the front façade. The gable ends and rear elevation are clad in corrugated sheet metal. This building lacks architectural distinction and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Window openings covered with boards
Condition: Excellent Good Poor			Abandoned, overgrown, and rusting
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (façade), metal (rear)	
Roof Material Metal	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Detail photo of door:

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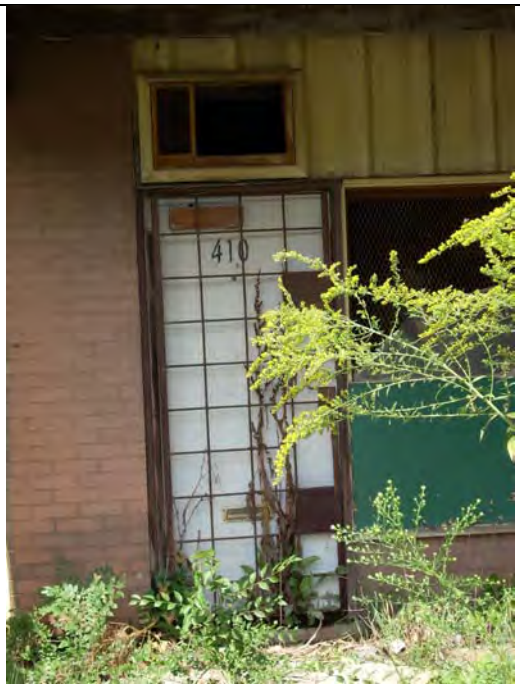

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

407-409 W 109th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

South Shore Iron Works

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1956

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz, Cook County Assessor

Date: 5 September 2012

Photos with Captions:
North and east façades of metal sheds and concrete block building.

Property Description: **Stories:** 2

This property includes a two story, flat-roofed concrete block building associated with South Shore Iron Works, manufacturers of structural steel. The building is difficult to see from the public right-of-way. The first floor has one-over-one windows below a metal awning and the second floor has glass block windows. Portion of the building has had its roof raised, creating more height for the interior workspace. The Cook County Assessor's photo shows large sliding metal doors on the warehouse façade. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Roof height raised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Metal	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Sheet metal storage shed			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

332 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has an off-center non-original hollow core metal door, a partial width, flat-roofed wood corner porch, and a non-original picture window flanked by double-hung windows. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, porch rails and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

341 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a one-story, single family, stucco residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and is covered with stucco. The building has a gable roof with cornice returns and is covered with asphalt shingles. Its front elevation has a gable-roofed wood porch, an off-center hollow core metal door, a glass block window and a rounded window bay on the first floor, and a pair of windows in the gable end, all of which are one-over-one vinyl-sash. The east elevation has a rounded window bay and gable wall dormer. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

347 W. 110th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1892

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center hollow core metal door with partial-width, gable-roofed, wood porch. There is a strip of three one-over-one wood-sash windows on the first floor and a pair of two-over-two wood-sash windows in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

331 W. 110th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a pent roof, off-center door, wood steps with wood railings, and single windows on the first floor and in the attic, both of which are non-original one-over-one aluminum-sash. The east elevation has a three-sided window bay with a gable wall dormer above. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 110th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
South façade of a 1.5- story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a gable roof with cornice returns and is covered with asphalt shingles. The front elevation has a pent roof with scalloped trim, an off-center door, and wood steps with wood railings. There is a group of windows on the first floor (fixed-pane flanked by four-over-four), and a pair of non-original four-over-four windows in the gable end. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns, scalloped trim			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

340 W. 111th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a flat roof and parapet. Its front elevation has a full-width hipped-roof wood porch with square wood posts and a straight railing balustrade. The porch sits atop piers of rusticated concrete block. The porch also features an off-center door with a metal storm door. There are two slightly rounded window bays—one on the first floor and one on the second—and an additional single window on the second floor. Windows are non-original one-over-one aluminum sash. Detailing includes an aluminum-covered cornice. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails, posts, and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Cornice			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

344 W 111th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South and east façades of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one story home in the Roseland community is situated on a raised basement, is clad with synthetic siding, and has a gambrel roof covered with asphalt shingles with wall dormers. Its front elevation features a non-original, flat-roofed, full-façade wood porch with straight railings and posts. The home also features an off-center door, a three-sided window bay on the first floor, and paired casement windows on the second floor. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, siding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt Shingles	**Roof Features** Dormers	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

303 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North and west façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding and wood shingles. The building has a side hip-on-gable roof, overhanging eaves. There are decorative wood brackets and a hip-on-gable dormer with bracketed, overhanging eaves. There are three double-hung wood-sash windows with aluminum storms in the gable. Asphalt shingles clad the roof and the dormer. The roof has a wide overhang that serves as the roof for a full-width wood porch that has faux stone piers and wood railings, but no steps. The front elevation has a centrally located door that appears to be oak with a glass pane, which is flanked by three windows on either side, all of which are double-hung wood-sash with aluminum storms. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Aluminum storms added, replacement siding on lower level
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (lower), Wood shingles (upper), Asphalt shingles (dormer)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side hip-on-gable	
Ornamental Architectural Details Bracketed eaves			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: St. Mary Church of Prayer

Property Address:

339-341 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

St. Mary Church of Prayer

Property Use

Historic: Commercial (Tin Shop, 1938)

Current: Mixed-Use

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
North façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story former commercial building (now a storefront church) in the Roseland community is clad with painted brick and has a flat roof and a stepped parapet. The first floor of the front elevation has two storefronts with strips of single-pane windows and non-original doors with transoms. The second floor has two groups of picture windows flanked by one-over-one windows and two pairs of one-over-one aluminum-sash windows. Detailing includes concrete coping and sills, a brick stringcourse, and a brick panel along the cornice line. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and coping, brick stringcourse, brick panel			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

349 W 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1917

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South façade of two-flat greystone residential building.

Property Description: **Stories:** 2

This two-flat greystone residential building in the Roseland community has a flat roof and parapet. Its front elevation features a full-height window bay pavilion with fenestration comprised of one-over-one replacement windows. It has an off-center porch with two entrances that feature non-original wood doors, stone steps, metal and stone railings, and wood columns supporting a flat wood roof with dentil molding. Detailing includes a stone sill courses, lintels, beltcourses, and cornice.

The City of Chicago has recognized this building type through its Historic Greystone Initiative, which promotes the preservation of Chicago's ornate, limestone-clad homes by offering technical assistance and financial resources to property owners. Although this is an example of the greystone residential building type, it does not possess sufficient distinguishing architectural characteristics to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details Stone sill courses, lintels, beltcourses, cornice, and railings			**Windows** Double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

401 W 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Roseland Tune-Up Center

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
South and east façades of one-story, brick garage.

Property Description: **Stories:** 1

This one-story, brick-clad garage in the Roseland neighborhood has a flat roof and a front elevation that features three garage door openings with metal overhead doors. The fourth bay features an off-center plate glass door with transom in-filled with wood and flanking single-pane windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Transom in-filled with wood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

428 W. 111th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is clad with buff brick on its front elevation and common brick on its side and rear elevations. The building has a raised basement and a hip roof covered with asphalt shingles. Its front elevation has a projecting three-sided living room bay with a picture window flanked by one-over-one aluminum-sash windows, an off-center entrance with a metal storm door, and concrete steps with metal railings. The gable's cladding material has been removed. Detailing includes two decorative glass blocks adjacent to the front door. It does not display distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows; cladding removed from the gable
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

256 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of single-family, 1.5-story, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles and a small dormer. The front elevation has a centrally located, partial-width, hipped-roof porch with scallop detailing at the roofline, an aluminum-clad base, straight wood posts and railings (non-original), and steps on the side. It has a centrally located entrance with a metal storm door flanked by a window on either side and has a single window in the gable. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows, cladding, and porch rails and posts
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Scallop detailing on porch roofline			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

303 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, brick residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house at the southwest corner of 112th Place and Princeton Avenue is situated on a raised concrete block basement with glass block windows and is clad with light brown face brick. The building has a front gable roof covered with asphalt shingles. Its front elevation has a partial-width, flat-roofed porch with wood steps and open metal railings, an off-center door with transom, and a three sided bay window on the first floor. The upper floor of the front elevation has a pair of windows and two single windows. Windows are non-original one-over-one aluminum-sash. The home's east elevation has a three-sided, full-height window bay pavilion and its west elevation has a gable wall dormer. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Two garages			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

312 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single-family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S .Katz

Date: 16 September 2012

Photos with Captions:
South and east façades of single story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with casement windows. The building has original wood clapboard siding and a cross-gambrel roof with asphalt shingles. The roof extends forward to serve as the roof over the full-façade wood porch with supports consisting of faux stone piers topped by wood columns. The front elevation has an off-center wood door and a window covered with plywood on the first floor. There are two one-over-one windows on the second floor. Above the basement, windows are one-over-one, some with aluminum storms. This house lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some windows have aluminum storms
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gambrel	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

319 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, multi-family home in the Roseland community is situated on a raised concrete block basement with a glass block window. It is clad with synthetic siding and has a gambrel roof with cornice returns, covered with asphalt shingles. Its full-width hip-roof wood porch has cast concrete pier supports. The first floor has two doors and a three-sided bay with non-original one-over-one windows. The second floor has four one-over-one windows and the attic level has a pair of single-pane windows that may be casements. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations Conversion from single family to multi-family residence after 1939 (Sanborn)			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

325 W 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised basement with glass block windows. It is clad with aluminum siding and has a gable roof covered with asphalt shingles. The front elevation has a partial-width hip roof concrete porch with metal railings and open metal supports. An off-center door with transom and a three-sided bay comprised of non-original one-over-one windows are also included on the front elevation. A single one-over-one window is situated in the gable. This building does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

328 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and clad with aluminum siding above. It has a hip roof covered with asphalt shingles and a hip dormer with three, single-pane, casement windows. Glass block windows provide light for the basement. The front elevation has an off-center hollow metal panel door with sidelights, wood steps and railings, and four one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Hipped dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, fixed-pane, glass block
Outbuildings (*Number and Description*)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

339 W. 112th Place
Alternate: 341 W. 112th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1908/post 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a brick, two-story industrial building.

Property Description: **Stories:** 2

This two-story, brick-clad, light industrial building in the Roseland community has a flat roof, parapet with coping, and a T-shaped footprint. The front segment of the building was a one-story building erected in 1908. Sometime after 1939, a second story and a rear wing were added. The original segment has an off-center door and the outline of three former window openings (with brick arched lintels and stone sills) that have been in-filled with brick. The second floor and the rear wing have glass block window openings with small ventilating louvers. This building lacks integrity and distinguishing architectural features; it is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Windows in-filled with brick (front segment)
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Addition to rear and second story added after 1939			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick arched lintels			**Windows** Glass-block with central casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

303 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip-on-gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, half of which is enclosed, covered with synthetic siding, and surrounded by non-original multi-paned aluminum-sash windows with some original wood-sash windows. The open corner of the porch has a wood post, wood steps and railings (non-original), and an entrance with a metal storm door that is surrounded by faux stone siding. The hip-gable area has a strip of three double-hung windows. Both side elevations have shed-roofed wall dormers. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip-on-gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Detached two-car garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

334 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single-family residence

Current: Single-family residence

Date of Construction: 1912

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, half of which has been enclosed with synthetic siding and is surrounded by non-original multi-paned aluminum-sash windows. The open corner of the porch has a wood post, wood steps and railings (non-original), and an entrance with a metal storm door. There is a pair of non-original one-over-one aluminum-sash windows in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch posts, rails, and steps
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current:N/A Historic: N/A		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat apartment building is situated on a raised basement and has a hip roof covered with asphalt shingles. Its front façade is clad in buff brick and has an off-center metal door, a vertical strip of decorative glass blocks above the porch hood, and six window openings: two each in the basement, first, and second floors. All window openings are covered with metal panels. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Opening covered with metal panels
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Contrasting colored brick panels			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

410 W. 112th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South and west façades of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story brick bungalow in the Roseland community is situated on a raised basement with glass block windows and is clad with brown face brick. The building has a hip roof covered with asphalt shingles, a hip dormer with two windows on its front elevation, and a shed dormer with three windows on its west elevation. Both dormers are covered with synthetic siding. The front elevation has a strip of five windows. Windows throughout the house are non-original one-over-one aluminum-sash of varying sizes with the exception of a casement window along the east elevation. The main entrance is situated along the east elevation and consists of a hollow core metal door topped by a bracketed wood gabled hood. Detailing includes brick corner pilasters, concrete sills, and decorative square insert blocks. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations Shed dormer is a later addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (shed dormer)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Bracketed hood, brick corner pilasters, concrete sills and insert blocks			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

139 W. 113th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of two-story, brick, four-flat residence.

Property Description: **Stories:** 2

This two-story four-flat apartment building in the Roseland community has a flat roof and castellated parapet with concrete coping. The front elevation is clad with brown face brick, has two full-height enclosed sun porch pavilions, and a centrally located entrance with sidelights that have been boarded over. The first floor windows have been covered with plywood. Second floor fenestration features two strips of three-over-one wood-sash windows. An additional three-over-one wood-sash window is situated above the entrance. Detailing includes brick soldier courses with stone coping and insert blocks. This building lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone coping and insert blocks, brick soldier courses			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

228 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single-family residence

Current: Single family residence

Date of Construction: 1890

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a gambrel roof covered with asphalt shingles that overhangs the side elevations. The front elevation has a gable-roofed full-width porch, most of which is enclosed and covered with synthetic siding. Windows on all three sides of the house are covered with plywood. The off-center door is also covered with plywood and accessed via concrete steps with metal railings. There is a synthetic-clad addition on the rear elevation. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations Porch enclosed, rear addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gambrel	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

235 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1905

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house at the southwest corner of 113th Street and Yale Avenue in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. The front elevation has a gable-roofed full-width porch, most of which is enclosed with synthetic siding and surrounded on all three sides by one-over-one aluminum-sash windows. The off-center entrance with metal storm door is set within the open corner of the porch. The open part of the porch has a non-original wood support, steps and railings. A pair of windows is situated in the gable. Windows throughout the house are non-original one-over-one aluminum sash. The east elevation has a first floor window bay and both shed and gable wall dormers. The west elevation has a shed wall dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

303 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade of a one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement and clad with wood siding. It has a hip roof covered with asphalt shingles and gable dormers. It has a full-width, hip-roof, wood porch with metal railings, an unadorned frieze band, and supports consisting of two faux stone corner piers and one low faux stone pedestal topped by a square wood pier. Its front façade has an off-center door and a strip of three non-original double-hung windows. Both the front and side dormers each feature a strip of three windows, although those on the front façade dormer are covered with plywood. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, some in-filled with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood	
Roof Material Asphalt	**Roof Features** Gable dormers	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

307 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1917

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This multi-family residential building in the Roseland community is clad with synthetic siding and has a flat roof and parapet. Its front façade has an off-center door with a sidelight in-filled with plywood. It has strips of three, non-original, single-pane windows on the first and second floors that appear to be casements and a single one-over-one window on the second floor, directly above the entrance. Doric columns support the hip roof of the porch. The wood rails and steps do not appear to be original. A plain wood cornice is situated directly above the second floor windows. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, cladding, and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

309 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
North façade a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is clad with synthetic siding. It has a hip-on-gable roof covered with asphalt shingles and side elevations with gable wall dormers. It has a full-width, gabled-roof wood porch with supports consisting of wood posts atop faux stone pedestals. The front elevation has an off-center non-original, hollow core, paneled, metal door with fanlight. There are a pair of non-original one-over-one windows on the first floor and three non-original one-over-one windows on the second floor, including two that are paired. This home lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hipped gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

310 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of 1.5 -story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one and a half-story house in the Roseland community is clad with synthetic siding and has a cross-gabled roof covered with asphalt shingles. It has a full-width, gable-roofed, wood porch with supports consisting of low faux stone pedestals topped by square wood piers. The front elevation also features an off-center hollow core paneled metal door with fanlight, two window openings on the first floor and paired windows on the second floor. All front elevation window openings have been covered with plywood. This home is in deteriorated condition, lacks integrity, and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding, windows covered with plywood
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-Gable	
Ornamental Architectural Details None			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

312 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and has a hip roof covered with asphalt shingles and a front overhang. Its front elevation is clad in buff brick, has an off-center door with concrete steps and metal railings, and features a picture window flanked by one-over-one windows. Glass block windows provide light to the basement. Contrasting orange-colored brick trims the entrance. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

316 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement, has a front gable roof covered with asphalt shingles, and a front overhang. Its front elevation is clad in buff brick below the sill line and orange brick above. It has an off-center door with concrete steps and metal railings and a picture window flanked by one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

320 W 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement and has a hip roof covered with asphalt shingles and a front overhang. Its front elevation is clad with orange face brick, has an off-center door with concrete steps and metal railings, and a picture window flanked by one-over-one windows. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

337 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1910

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and east façades of 1.5-story, frame, single-family residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a gable roof covered with asphalt shingles. The front elevation has a hip-roof, full-width porch with faux stone piers topped by squat squared wood column supports, wood steps and straight wood railings. It also has an off-center entrance with a metal storm door, a strip of three windows on the first floor, and two windows on the second. Windows throughout the house are non-original one-over-one aluminum-sash. The east elevation has a three-sided bay window on the first floor with a gable wall dormer above. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

340 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial (Sanborn, 1939)

Current: Multi-family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
South façade of a brick, two-story, multi-family residence (above), outbuilding (garage) below.

Property Description: **Stories:** 2

This two-story residential building in the Roseland community has a flat roof and crenellated parapet with concrete coping. Its front elevation is clad in brown face brick and its side elevations are clad in common brick. The front elevation features two hollow core metal doors, the outline of a former storefront that has been in-filled with faux stone and two glass block windows, and six three-over-one wood-sash windows on the second floor. The original off-center entrance that provides access to the second floor apartment has a transom that is in-filled with faux stone. Detailing includes a concrete sill course, inset brick panels, and a parapet that features small decorative concrete insert blocks and a centrally located stone panel with shield. This building lacks integrity and does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, storefront windows in-filled, transom in-filled
Condition: Excellent Good Poor			
Additional Alterations None			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sill course, insert blocks and stone panel with shield on parapet			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) One-story brick garage with parapet (tile coping)			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

345 W. 113th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1911

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North and west façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a hip-roof full-width porch with faux stone piers beneath the wood deck, squared wood column supports, wood steps, and straight wood railings. There is an off-center non-original hollow core metal door, a strip of three windows on the first floor, and two windows on the second. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, porch rails and supports
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

41 W. 114th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles and a second story rear shed-roof addition. It has a full-width, gable-roof sun porch, half of which is enclosed and has three non-original one-over-one aluminum-sash windows on the front elevation. The open half of the porch is accessed via concrete steps with metal railings. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations Shed roof addition to rear of building.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

62 W. 114th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction:

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This vacant one-story, frame bungalow in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a recessed wood corner porch with a faux stone corner pier topped by a squat, squared wood column. the door and first floor windows are covered with plywood. There are two original wood casement windows in the attic. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns			**Windows** Casement, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

131 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement, is clad in synthetic siding, and has a side gable roof covered with asphalt shingles. The peaks of the side gables are clad in wood board-and-batten. The front façade of the home has a projecting gabled entrance vestibule with a small casement window, concrete steps with metal railings, and a larger window opening that is partially obscured by a low metal awning. Non-original double-hung windows are used elsewhere. Scalloped verge boards frame the projecting gable. A rear, dormer addition is visible from the street. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations Rear dormer addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

135 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Now Faith Church of God Holiness

Property Use

Historic: Industrial

Current: Religious

Date of Construction: circa 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of one-story religious building.

Property Description: **Stories:** 1

This one-story, brick-clad, former industrial building in the Roseland community has a flat roof and a stepped parapet with tile coping. The front façade displays the outline of a former overhead door opening that has been in-filled with brick. One of the side elevations features three metal core doors that provide access to the Now Faith of God Holiness Church, the building's current occupant. Decorative details include brick stringcourses. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Brick in-fills old service garage entrance
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stepped parapet with tile coping, brick stringcourses.			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

138 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof wood porch with non-original straight posts and railings, an off-center entrance with a metal storm door, and two non-original one-over-one aluminum-sash windows. A small ventilating louver is situated in the attic gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails and posts
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

235 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house at the southwest corner of 114th Street and Yale Avenue in the Roseland community is situated on a raised brick basement and is clad with yellow face brick along its street elevations. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front elevation has a picture window flanked by one-over-one aluminum-sash windows and an off-center door. This elevation also has a partial-width porch with open metal posts covered by the wide roof overhang, concrete steps, and metal railings. Detailing includes stones flanking the front door and decorative glass blocks on both street elevations. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Decorative glass blocks, stone flanking entrance			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

324 W. 114th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1907

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South and west façades of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the Roseland community is situated on a raised concrete block basement with casement windows and is covered with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. Its front elevation has two off-center doors and a partial-width shed-roof porch with wood steps, metal railings and open metal supports. It also has a three-sided bay window on the first floor and a pair of windows in the gable. Windows are non-original one-over-one aluminum-sash. The central window of the bay features a transom. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from single family to multi-family after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable roof	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane (transom), casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

One W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Mixed-Use

Date of Construction: 1907

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Queen Anne

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a brick, two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story Queen Anne style commercial building at the southwest corner of 115th and State streets in the West Pullman community is clad with brick and has a flat roof and parapet. The first floor of both street elevations has been drastically altered by the removal of the corner storefront and the infill of virtually all door, window, and round-arch transom openings with brick. The first floor of the front (115th Street) elevation currently features a single, non-original, off-center hollow core metal door. The first floor of the State Street elevation has a centrally-located non-original hollow core metal door and a single non-original one-over-one aluminum-sash window. The second floor, however, retains its original metal corner turret with conical roof and a three-sided metal window bay on the State Street elevation. Both bays have rectangular panels at their bases and dentil molding, and the turret features decorative pilasters. However, the windows in both the bay and turret are non-original. The second floor of the 115th street elevation has a non-original glass block window and an aluminum-sash window, both of which have stone sills and lintels. The second floor of the State Street elevation has a series of non-original one-over-one aluminum-sash windows with rounded transoms that have been in-filled with brick. This building lacks integrity and is not

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

individually eligible for listing on the National Register.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Replacement windows, storefronts, openings in-filled
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Metal turret with conical roof and pilasters, metal bays with panels and dentil molding, stone lintels and sills, cornice				**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

8 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a greystone, two-flat residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and is clad with rusticated limestone on its front elevation and common brick along its side and rear elevations. The building has a flat roof and parapet. Its front elevation has a full-height three-sided window bay pavilion, a partial-width stone porch with Corinthian columns and balustrade, and an off-center entrance with metal storm door. There is a secondary entrance to the lower level. The first floor window bay has a non-original central fixed-pane window with multiple lights and flanking nine-over-one windows. The second floor of the front elevation has four non-original one-over-one aluminum-sash windows—three on the bay and one above the entrance. Casement windows provide light to the basement. Detailing includes smooth stone sill courses, belt courses, and a cornice with dentil molding.

This is an example of a greystone, a building type that the City of Chicago has recognized through its Historic Greystone Initiative. However, there are thousands of greystone residential buildings in Chicago and this particular example does not stand out among the city's stock of this residential building type. As a result, it does not qualify as

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

individually eligible for listing on the National Register.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Replacement windows & door
Condition: Excellent Good Poor				
Additional Alterations				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone (façade), Brick (sides and rear)		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Corinthian columns and stone balustrade, stone sill courses, belt courses, and cornice with dentils				**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None				

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

17 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat

Date of Construction: 1897

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North and east façades of two-flat greystone residence.

Property Description: **Stories:** 2

This two-flat residential building in the West Pullman community is situated on a raised basement and has a front façade clad with limestone; common brick cover both the sides and rear. The building has a full-height three-sided window bay pavilion, flat roof, and a shaped parapet with a pediment above the bay. Its off-center, flat-roofed porch has concrete steps, metal railings, Doric columns, and a non-original metal door with transom. Windows are non-original one-over-one and those on the second floor feature transoms. Detailing includes continuous banding in rusticated limestone and a metal cornice.

This is an example of a greystone, a popular historic residential building type that the City of Chicago has recognized through its Historic Greystone Initiative, which offers technical assistance and financial resources to property owners to encourage their preservation. This building does not possess sufficient distinguishing architectural characteristics to qualify for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stone (façade), Brick (sides and rear)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Metal cornice, stone banding, Doric columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

23 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is clad with synthetic siding, has a limestone foundation, and has a gable front roof crossed by hip-on-gable sides. The front elevation has a full-width hip roof porch, a portion of which is enclosed. A shed roof dormer is visible on a side elevation. The open portion of the porch has wood steps and railings, a wood post, and a door opening covered with plywood. Windows are one-over-one aluminum-sash, some of which are covered with plywood. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows, enclosed porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable/Hipped gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

35 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Donald's Auto Repairs

Property Use

Historic: Commercial

Current: Commercial

Date of Construction: 1936

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, sheet metal and brick clad, commercial building.

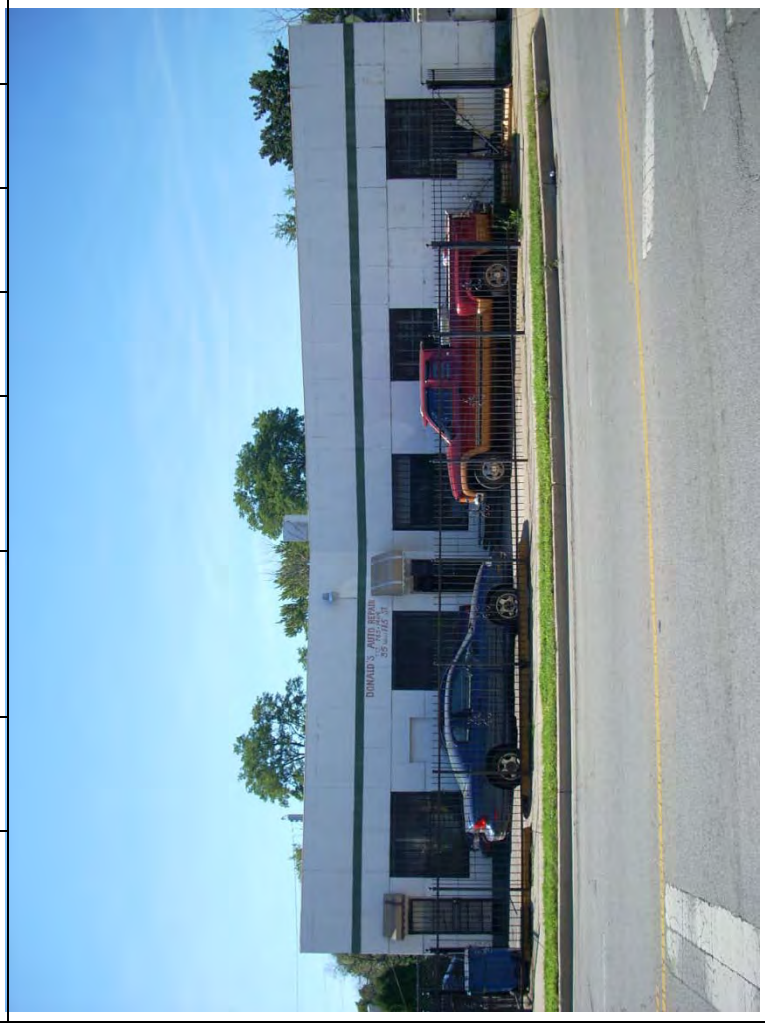

Property Description: **Stories:** 1

This one-story auto repair building at the corner of 115th Street and Lafayette Avenue in the West Pullman community has a flat roof and a V-shaped footprint. Its street elevations are clad with white sheet metal and its rear elevations are clad in common brick. Overhead metal garage doors are situated on either end of the building while the bent front elevation along 115th Street features two metal doors and a series of fixed-pane steel sash windows. Windows along the rear of the building are covered with corrugated metal. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors; rear windows covered
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Metal (front and sides), Brick (rear)	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: None

Property Address:

40 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Commercial

Current: Multi-family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions

South façade of two-story, multi-family, frame residence (former commercial building).

Property Description: **Stories:** 2

This two-story residential building in the Roseland community has a flat roof and parapet. Its front façade is mostly clad in synthetic faux stone siding with contrasting colors around the doors and windows. The lowest portion of the façade is covered in stucco; the upper portion is clad in synthetic siding. The front elevation has two hollow metal core doors, Chicago-style windows on the first and second floors, and a single one-over-one window on the second floor. A pent roof is situated above the second floor windows and a bracketed wood cornice is situated at the parapet level. This building lacks integrity, does not have sufficient distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from commercial building to residential use			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding, faux stone, stucco	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

42 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
South and west façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised concrete block basement with glass block windows. The home is clad with synthetic siding and has a front gable roof covered with asphalt shingles. It has a full-width hip-roof wood porch with wood slat railings, and supports consisting of three concrete block piers topped by open metal posts. Its front façade has an off-center door with transom, a picture window flanked by one-over-one windows, and a single-pane window in the dormer. This home lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** New porch columns & rails, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

112 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of one-story, brick industrial building.

Property Description: **Stories:** 1

This one-story industrial building in the Roseland community has a flat roof and stepped parapet. Its front elevation is clad with red face brick and has a concrete water table, a wide overhead metal garage door, entrance that has been replaced with a non-original hollow core metal door and plywood, and a window opening that has been covered with plywood and replacement windows. Detailing in cream-colored terra cotta includes coping and geometric panels on either end of the parapet that feature foliate motifs. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and garage door; openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stepped parapet with terra-cotta coping and decorative panels.			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

116 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, multi-family residential building in the Roseland community is clad with synthetic siding, is situated on a raised limestone foundation, and has a flat roof with an overhanging eave. Its front elevation features a non-original, partial width wood porch with metal railings, open metal supports, and a metal awning roof. It has a full-height three-sided pavilion with non-original one-over-one windows and a single, non-original, one-over-one window on the second floor directly above the entrance. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: N A Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

120 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1899

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-half-story home in the Roseland community is situated on a raised brick basement, clad with synthetic siding, and has a gable roof covered with asphalt shingles. The front façade has a partial-width flat-roofed porch with non-original metal railings open metal supports and an off-center door. Windows are non-original one-over-one: there is a three-sided bay on the first floor and are two additional windows centered on the second floor. One of the side elevations has a three-sided bay window and gable wall dormer above. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, porch, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

143 W. 115th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1911

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with a wall dormer on the side elevation. The house has a two-story hip-roof front addition. The front elevation has an off-center recessed entrance with a metal storm door, a non-original picture window flanked by one-over-one aluminum-sash windows on the first floor, and a single non-original one-over-one aluminum-sash window on the second floor addition. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Addition to front of building			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

8 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement that features multi-pane casement windows. It is clad with brick painted white and has a gable roof covered with asphalt shingles. It front elevation features a full-width, hip roof, wood porch with concrete steps, metal railings, and brick pier supports. It has an off-center door and one-over-one windows with aluminum storms: a strip of three on the first floor and one in the gable. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Aluminum storms
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

12 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has cornice returns and a cross-gable roof covered with asphalt shingles. It front elevation features a full-width, flat roof, wood porch with non-original slat railing, thin wood posts, and an off-center door. There is a three-sided bay with one-over-one double-hung windows on the first floor and a strip of three single-pane windows on the second floor that may be sliding glass. This house lacks sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Cornice returns			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

16 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1902

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story, single family, frame residence.

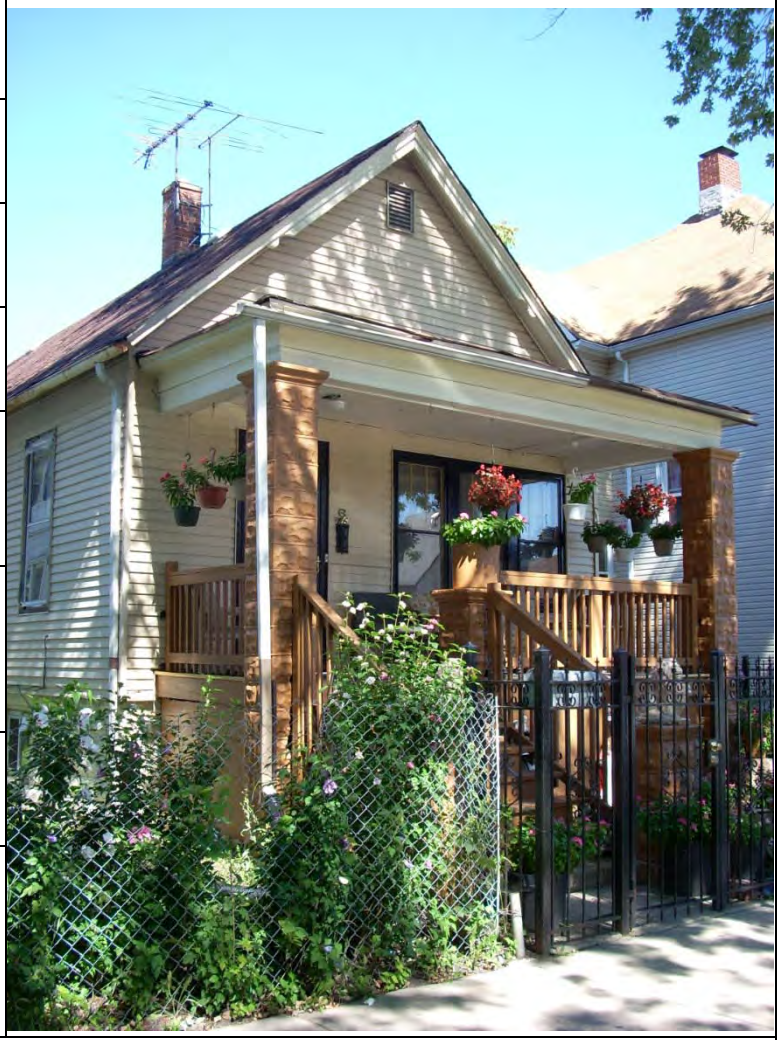

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip roof, wood porch with faux stone pier supports and replacement wood railing. The front also has an off-center front door and a strip of three one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, new porch rails, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage behind residence			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

20 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Queen Anne

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of two-story, single-family, frame residence.

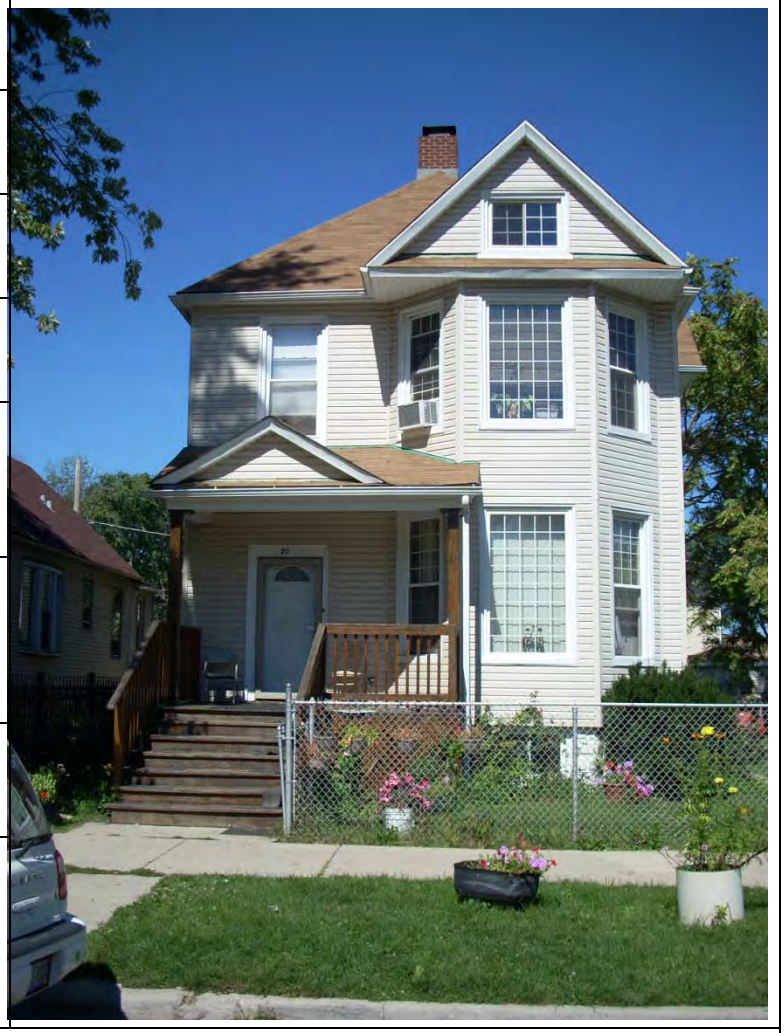

Property Description: **Stories:** 2

This two-story Queen Anne style house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, has full-height window bay pavilions with pediment and gable dormers on its front elevation and side elevations, and has a hip roof covered with asphalt shingles. The front elevation has a shed-roofed partial-width wood porch with pediment and metal hollow core paneled door. Fenestration is non-original on the front elevation bays and features fixed-pane windows with multiple lights, multi-paned double-hung windows, and a single one-over-one window on the second floor, directly above the porch. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Pediments at gables			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

32 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Garage

Current: Garage

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North façade of one-story brick garage.

Property Description: **Stories:** 1

This one-story, four-car garage building in the West Pullman community is clad in common brick and features two pairs of hinged metal garage doors with a continuous wooden lintel along its front elevation. A side (alley) elevation displays the outlines of dormer door openings that have been in-filled with brick as well as a hinged metal garage door. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows in-filled, metal doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

36 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1918

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of brick, two-flat residence.

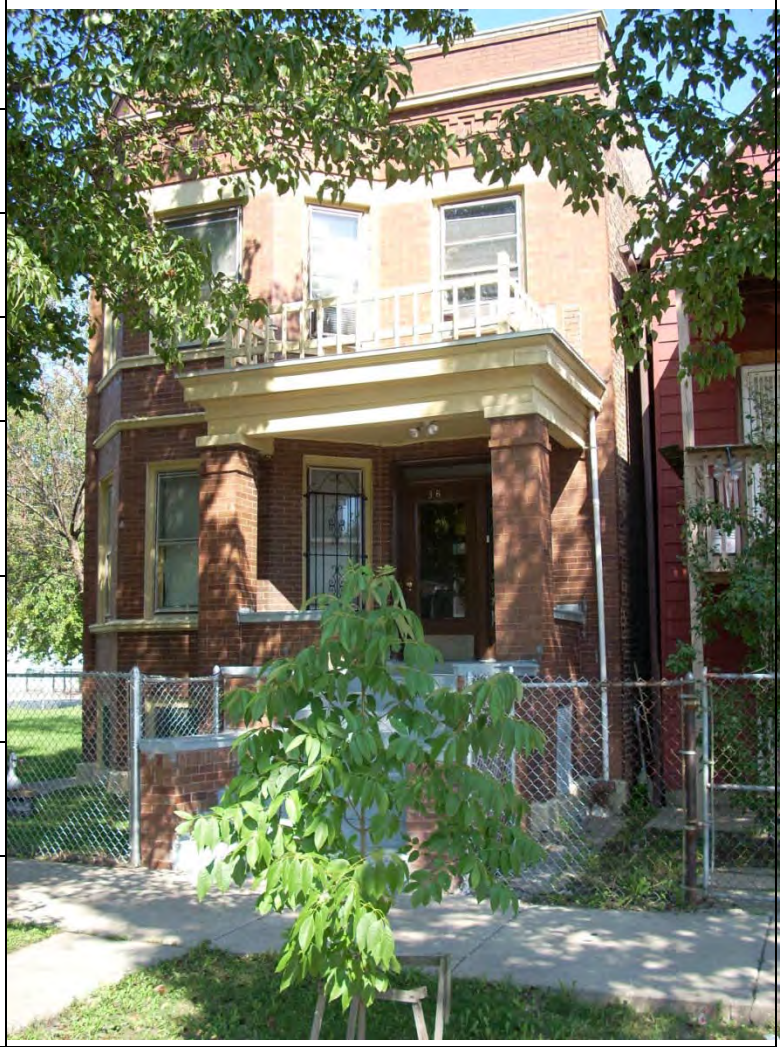

Property Description: **Stories:** 2

This two-flat residential building in the West Pullman community is situated on a raised basement and has a front façade clad with orange face brick. It has a full-height three-sided window bay pavilion, flat roof, and parapet. Its off-center flat-roofed porch has concrete steps, brick piers, and a single-light oak door with sidelight. Fenestration is comprised of one-over-one windows. Detailing includes stone sill courses, beltcourse, a cornice, as well as decorative brickwork on the parapet. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sill courses, beltcourse, cornice, decorative brickwork on cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

38 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South and east façades of 2.5-story, multi-family, frame residence.

Property Description: **Stories:** 2.5

This two-and-a-half-story, multi-family house in the West Pullman community is clad with synthetic siding and has a cross gable roof covered with asphalt shingles. Its front elevation has off-center doors on the first and second floors and an elevated, flat-roofed, full-width, non-original wood porch with straight railings and posts. Fenestration on the front and side elevations is comprised of one-over-one windows. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows, doors, porch, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

144 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame residential building in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Both floors of the front elevation are partially obscured by a full-width wood porch with exterior steps leading to a second floor balcony. Both floors also have a hollow core metal door and non-original double-hung windows: three on the first floor and two on the second. A third window on the second floor has been in-filled. There is a single-pane window in the gable. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations Exterior stairs are not original			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

150 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1891

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community sits on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width hip-roof porch with wood steps, metal railings, and open metal posts. The off-center hollow core metal door is non-original as is the strip of three one-over-one windows on the first floor. There is an in-filled window opening in the attic, above which is a small ventilating louver. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

151 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is on a raised concrete block basement and is clad with rolled asphalt shingle siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a hip roof porch with concrete steps, metal railings and open metal posts. It also features an off-center non-original door and one-over-one windows: three each on the first and second floors. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Asphalt shingle siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

153 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has a centrally located door with concrete steps and metal railings. It has non-original three-over-one windows: three on the first floor and one on the second, plus an additional pair of sliding glass windows on the second floor and a small single-pane window in the gable. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

155 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single-family, concrete block residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is clad with rusticated concrete block and has a flat roof and parapet with a stringcourse along the cornice. Its front elevation features a three-sided bay with non-original one-over-one windows and a flat-roof, partial width porch with concrete steps, metal railings, and open metal posts. The hollow core metal door is non-original. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stringcourse			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

157 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof covered with asphalt shingles. The front elevation has a flat-roofed, full-width porch with concrete steps, metal railings, and open metal posts. It also has an off-center hollow metal core door, two non-original Chicago-style windows (one on each floor), and an additional one-over-one window on the second floor. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

159 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a full-width hipped-roof wood porch, a three-sided bow window with non-original casements, and an off-center door. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

163 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story frame house in the West Pullman community is clad with synthetic siding and has a gable roof covered with asphalt shingles. The front elevation has a hip-roofed partial-width wood porch with wood posts and railings. It has an off-center non-original hollow metal core door and a pair of non-original one-over-one windows on both the first and second floors. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

165 E 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a partial-width porch with concrete steps, metal railings, and open metal posts supporting a metal canopy roof. It has a centrally located door and four non-original one-over-one windows: three on the first floor and one in the gable. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

207 E. 116th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 22 October 2012

Photos with Captions:
North façade of a 2.5-story, multi-family, frame residence.

Property Description: **Stories:** 2.5

This two-and-a-half-story frame house in the West Pullman community is clad in rusticated concrete bock on the first floor and in synthetic siding above. The building has a front gable roof with asphalt shingles. It has a two-story full-width, hip-roof wood porch/balcony with faux stone piers and wood posts as supports on the first and second floors, respectively. A non-original stairway leads to the second floor balcony. Both first and second floors have off-center non-original hollow core metal doors. Windows on the front elevation are non-original and include one on the first floor that is obscured by the staircase, a picture window flanked by one-over-one aluminum-sash windows on the second floor, and a single one-over-one aluminum-sash window in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations External stairway added during conversion from single family home.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block (lower), Synthetic siding (upper)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

120 E. 117th Place

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South facade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof wood porch with straight posts and an off-center entrance with a metal storm door. It has two windows on the first floor and a pair of windows in the gable, all of which are non-original one-over-one aluminum sash. A decorative wood truss is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Wood truss			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

126 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic materials and has a gable roof covered with asphalt shingles and gable dormers along the side elevations. The front elevation has a strip of three windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. The front door has been moved to the side elevation. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door and windows
Condition: Excellent Good Poor			
Additional Alterations Entrance moved to side elevation			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

128 E 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South façade of a one-and-a-half-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. The front elevation has a non-original, full-width, flat-roofed, wood porch and a non-original off-center hollow core metal panel door with a fanlight. There is a large non-original picture window flanked by double-hung windows on the first floor and a pair of non-original one-over-one aluminum-sash windows in the gable. This house lacks integrity, does not have any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

132 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guairno

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
South and east façades of a one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the West Pullman community is on a raised concrete block basement with glass block windows, is clad with synthetic materials (possibly fiberboard), has a gable roof covered with asphalt shingles, and has gable dormers along the side elevations. The front elevation has a strip of three windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. The front door has been moved to the side elevation. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations Entrance relocated to side elevation			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (possibly fiberboard)	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

149 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width hip-roof porch with side-facing concrete steps, metal railings, and open metal posts. This elevation also has an off-center metal storm door, a non-original picture window flanked by one-over-one aluminum-sash windows on the first floor, and a single-pane window in the attic. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

312 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1891

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the West Pullman community sits on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center metal storm door, concrete steps with metal railings, a picture window flanked by one-over-one aluminum-sash windows on the first floor, and a pair of one-over-one aluminum-sash windows in the gable, all of which are non-original. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

322 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1878

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the West Pullman community is situated on a raised brick basement and has a hip-on-gable roof covered with asphalt shingles. Its front elevation is clad with brown face brick and has a central hollow core metal door flanked by a pair of one-over-one aluminum sash windows on one side and a strip of three casement windows on the other. The gable has a pair of one-over-one aluminum-sash windows. This elevation also has side-facing concrete steps faced with faux stone and metal railings. Detailing includes brick pilasters flanking the door, concrete sills, flat arch window lintels with square stone inserts, and a lintel above the door that reads: “FAM.TOVALIN.E.322.” This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Brick pilasters, concrete sills, flat arch window lintels with stone inserts, inscribed lintel above entrance			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

345 E. 117th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
North façade of a one-story, single family, frame residece.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has an off-center wood door with wood steps, metal railings, and a metal awning. This elevation also has a rounded bow window with four casements on the first floor and a pair of small casement windows in the attic, each with four lights. A small triangular ventilating louver is located at the apex of the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

306 E. 118th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
South façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. It has a full-width flat-roof porch, half of which is enclosed and features a single one-over-one aluminum-sash window. The open portion of the porch has a door, a pair of non-original sliding windows, wood posts, steps, and railings. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

354 E. 118th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1886

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 2 October 2012

Photos with Captions:
North and west façades of two-story, single-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows, is clad with synthetic siding, and has a gable roof with asphalt shingles. The fenestration pattern has been altered with the moving of the main entrance from the 118th Street elevation and the windows, which feature non-original casements and one-over-one non-original aluminum varieties on both the first and second floors. This house lacks integrity, does not have visible distinguishing architectural features, and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) Detached two-car garage with pyramidal roof and vinyl siding.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11727 S. Calumet Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
West façade of a one-story, single family, stucco residence.

Property Description: **Stories:** 1

This one-story frame cottage in the West Pullman community is situated on a raised basement and is covered with stucco. The building has a front gable roof covered with asphalt shingles and a gable dormer along its south elevation. It has a partial-width flat-roofed porch that appears to be concrete, with solid sidewalls, straight posts, and a stepped parapet. Its front elevation has an off-center non-original hollow core metal door and a three-sided window bay with single-pane window and transom in the center flanked by one-over-one aluminum-sash windows. There is a pair of sliding aluminum-sash windows in the gable with a lunette fixed-pane window above. Windows are modern replacements. While the stucco cladding is somewhat unusual for this community's housing stock, this particular house lacks integrity as well as architectural features that are distinctive enough to merit individual inclusion on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Lunette window, stepped parapet, decorative accent blocks			**Windows** Double-hung, fixed-pane, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9824 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 31 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house at the northwest corner of Eggleston Avenue and Fernwood Parkway in the Washington Heights community is situated on a raised basement and is clad with red face brick on its two street elevations. The building has a hip roof covered with asphalt shingles and overhanging eaves. The front (Eggleston) elevation has an off-center metal storm door, concrete steps with metal railings, and a picture window flanked by casements. The Fernwood Parkway elevation has both casements and glass block windows. It lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casements, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10024 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1943

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
East façade of a two-story, brick and frame, single family residence.

Property Description: **Stories:** 2

This two-story cottage in the Washington Heights community has a gable roof covered with asphalt shingles and large, non-original, flat-roofed, aluminum-clad dormers on both side elevations transforming the original one-story building into a two-story residence. The front elevation is clad with orange face brick, the gables are clad with aluminum siding, and the lower side elevations are clad with common brick. The front elevation has a centrally located hollow core metal paneled door with fanlight, three concrete steps with metal railings, two pairs of windows on the first floor and a single window in the gable. Windows are non-original one-over-one aluminum sash. The front door and windows are sheltered by metal awnings. Detailing includes concrete sills and brick lintel arches. This house does not feature distinguishing architectural elements or sufficient integrity to be individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement front door and windows
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Dormers added to expand the home into two stories			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (lower), synthetic siding (gable ends and dormers)	
Roof Material Asphalt	**Roof Features** Dormers	**Roof Type** Flat, gable	
Ornamental Architectural Details Concrete sills, brick lintel arches			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10058 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Chicago Style Bungalow

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Bungalow

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story bungalow at the northwest corner of Eggleston and 101st Street in the Washington Heights community is situated on a raised basement and is clad with brown face brick along its two street elevations. It has a hip roof covered with asphalt shingles and hip dormers along both its front and rear elevations. Its front elevation has a curved window group in the basement level with frosted glass casement windows. It has a recessed corner porch with carpeted concrete steps and corner brick pier support, a metal storm door, and a projecting living room bay with one-over-one windows that are partially obscured by a low metal awning. Detailing includes stone block inserts and a planter box. Its 101st Street elevation has glass block basement windows and one-over-one windows on the first floor. This house does not have sufficient distinguishing features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows in basement
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Stone block inserts, planter box with brackets			**Windows** Casement, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10100 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame house at the southwest corner of Eggleston and 101st Street in the Washington Heights community is situated on a raised stone block basement with glass block windows. It is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front elevation has a metal storm door and a partial-width porch with concrete steps, metal railings, and open metal posts supporting a metal awning roof. Windows are non-original double-hung and come in varying sizes. Both side elevations feature window bays. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, siding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10104 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1904

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a two-story, frame, single family residence.

Property Description: **Stories:** 2

This two-story frame house in the Washington Heights community is situated on a raised concrete block basement, is clad with synthetic siding, and has a cross-gabled roof covered with asphalt shingles. The front elevation has a hip-roofed, enclosed corner vestibule at its south end with a hollow core metal door. It also has a non-original shed-roofed wood porch with straight railings and posts and two pairs of non-original one-over-one aluminum-sash windows: one on the first floor and one on the second. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, porch, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Cross-gabled	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10142 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Washington Heights community is situated on a raised brick basement with glass block windows. It has a cross-gable roof with asphalt shingles; the front wing features a hip-on-gable. The front elevation is clad with red face brick and the side elevations are clad with common brick. The first floor of the front elevation has an off-center entrance with a metal storm door, metal awning, concrete steps and railings. The first floor also has a one-over-one window and a picture window flanked by one-over-one windows. A single one-over-one window is situated in the gable. All double-hung windows are non-original aluminum-sash. Detailing features concrete sills and a vertical strip of four glass blocks adjacent to the front door. This house does not have sufficient integrity or distinguishing features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** Hip-on-gable	**Roof Type** Cross gable,	
Ornamental Architectural Details Decorative glass blocks, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10148 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz (lower); CCA (upper 2007)

Date: 31 October 2012

Photos with Captions:
East and north façades of a two-story, single family residence.

Property Description: **Stories:** 2

This two-story house in the Washington Heights community is clad with stucco and has a hip roof covered in asphalt shingles with overhanging eaves. Its front elevation has a large picture window, an off-center door with concrete steps, and a pair of windows on the second floor. Glass block and non-original double-hung windows are visible on the side elevation. The second story and rear one-story addition with a shed roof represent later additions. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Second story added after 1938 (Sanborn). Rear addition also post-dates 1938.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Stucco	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) Detached garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10200 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 10 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house on the southwest corner of Eggleston and 102nd Street in the Washington Heights community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a front gable roof covered with asphalt shingles. Its front elevation has a gabled roof, enclosed porch with a hollow core metal core, wood steps and railings, five windows on the first floor and one in the gable, all of which are non-original one-over-one aluminum-sash. This house lacks integrity, does not feature distinguishing architectural elements, and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10236 S. Eggleston Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story frame cottage in the Washington Heights community is situated on a raised concrete block basement with glass block windows. It is clad with wood boards laid vertically and has a gable roof covered with asphalt shingles. There is decorative vertical stickwork in the gable. The residence has a recessed corner porch with a hollow-core metal paneled door, concrete steps, and non-original wood railings and posts. A picture window is on the front elevation and one-over-one aluminum-sash windows on the side elevations (non-original). This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, siding, and porch railing
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stickwork above porch			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10415 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a hip roof covered with asphalt shingles and a hip dormer with two windows that appear to be casements. The front elevation has a strip of four non-original one-over-one aluminum-sash windows and a recessed corner porch with a metal storm door, wood steps, metal railings, and an open metal corner post. This house does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10531 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1940

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: J. Martinez, M. C. Bird, J. Gaurino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story, brick-clad cottage in the Roseland community is situated on a raised brick basement and has a side gable roof covered with asphalt shingles. It has and a non-original flat-roofed aluminum-clad dormer with two non-original one-over-one aluminum-sash windows. The front elevation has an off-center entrance with a metal storm door, concrete steps with metal railings, and a hip-roof living room bay with six-over-one wood-sash windows. Detailing includes decorative stone at the basement level and surrounding the front door. This building does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Some replacement windows
Condition: Excellent Good Poor			
Additional Alterations Dormer added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Side gable	
Ornamental Architectural Details Stone accents at basement level and around entrance			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10558 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East faced of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow at the northwest corner of Eggleston Avenue and 106th Street in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with synthetic siding. The building has a hip roof covered with asphalt shingles, overhanging eaves, decorative rafters, and a hip dormer. The residence has a recessed corner porch with a wood door, wood steps and railings, and a corner support consisting of a faux stone pedestal topped by a Doric column. The front (Eggleston) elevation has a picture window flanked by one-over-one aluminum-sash windows (non-original). The hip dormer has sliding windows, one of which is partially enclosed by plywood. The 106th Street elevation has a gabled pavilion, non-original one-over-one aluminum-sash windows, and a single casement window. This building does not have sufficient distinguishing architectural features or integrity to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Exposed rafters, Doric column			**Windows** Double-hung, sliding, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10601 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised basement with glass block windows. The building is clad in brown brick, has a hip roof covered with asphalt shingles, and has overhanging eaves. The front and both side elevations feature large gable dormers and the rear elevation has a shed dormer, all of which are clad with aluminum siding. The house features a recessed corner porch with a metal storm door, concrete steps, low brick sidewalls, a brick corner pier, and arched front and side openings. The front elevation's three-sided living room bay has six windows and the front gable dormer has three windows, all of which are non-original one-over-one aluminum-sash. Detailing includes brick soldier courses above and below the living room bay windows, decorative stone insert blocks, and concrete sills. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding in dormers
Condition: Excellent Good Poor			
Additional Alterations Dormers may have been a later addition.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Aluminum siding (dormers)	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills and insert blocks, brick soldier courses			**Windows** Double-hung, fixed-pane, stained glass
Outbuildings (*Number and Description*) Detached two-car garage with pyramidal roof behind residence.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10612 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1947

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community area is clad with tan face brick on its front elevation and common brick on its side elevations. The building has a steeply-pitched side-gable roof covered with asphalt shingles and two synthetic-clad gable dormers with one-over-one windows. Its front elevation has a centrally located, gabled, brick-clad entrance vestibule, a metal storm door with an unadorned wood surround, concrete steps with metal railings, and two nine-over-nine windows. It lacks distinguishing architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main); Synthetic siding (dormers)	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10720 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. The front elevation has a partial-width porch with gable roof, aluminum-clad sidewalls, and wood posts, steps, and railings. Its front door and flanking windows are covered with plywood. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross gable	
Ornamental Architectural Details One tapered wood column			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10757 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house at the northwest corner of Eggleston Avenue and 108th Street in the Roseland community is situated on a raised basement, is clad with synthetic siding, and has a hip roof covered with asphalt shingles. Its front elevation is partially clad with faux stone siding and has a partial-width porch with gable roof, wood deck, and post supports. The porch steps and railings have been removed; the front door and all window openings are covered with plywood. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, steps removed
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (main), Faux stone (entrance)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10904 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement and clad with synthetic siding. The building has a hip-on-gable roof covered with asphalt shingles and overhanging eaves with wood brackets. The front elevation has a recessed corner porch with concrete steps, metal railings, a single wood corner post, and an entrance with a metal storm door. Windows are non-original and include a small casement window adjacent to the front door, a strip of three one-over-one windows on the first floor, and a pair of one-over-one aluminum-sash windows in the attic. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip on Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10953 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1960

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade one-story, brick, single-family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community with a raised basement is clad with buff brick on its front elevation and common brick on its side and rear elevations. The building has a front gable roof covered with asphalt shingles and has overhanging eaves. Its front elevation has a projecting three-sided living room bay with a picture window flanked by one-over-one aluminum-sash windows that are sheltered by a metal awning. The residence has an off-center entrance with a metal storm door, concrete steps with metal railings, and an wood-clad gable laid in diagonal patterns. Detailing includes two decorative glass blocks adjacent to the front door and scalloped trim around the gable. It does not feature distinctive architectural elements and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Wood (gable end)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Glass block detail near entrance, diagonal pattern for gable clapboards			**Windows** Double-hung
Outbuildings (*Number and Description*) Detached, one-car, frame garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11130 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of two-story, concrete block, two-flat residence.

Property Description: **Stories:** 2

This two-flat residential building in the Roseland community is situated on a raised basement and made of rusticated concrete block. The building has a flat roof and parapet. It features a flat-roofed full-width porch, half of which is enclosed and covered with aluminum siding. The enclosed porch has a strip of three non-original one-over-one aluminum-sash windows on its front elevation. The open half of the porch has an entrance with metal storm door, a faux stone corner support, and wood steps flanked by concrete block half-walls. The second floor of the front elevation has a strip of three windows and a single window, which are non-original one-over-one aluminum-sash and have stone sills and lintels. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations Porch partially enclosed after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills and lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11133 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of 1.5-story, single-family, frame residence.

Property Description: **Stories:** 1.5

This 1.5-story frame house in the Roseland community is situated on a raised basement and is covered with synthetic siding. The building has an original, full-width, hip-roofed wrap-around wood porch with turned posts and straight railings. It has a cross-gable-on-hip roof covered with asphalt shingles. Its front elevation has an off-center door with transom and two one-over-one windows. The second floor of the front elevation has two pairs of double-hung windows, one of which features nine-over-nine sashes. Windows are modern replacements. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Turned columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11139 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1915

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised brick basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The front elevation has a full-width porch with low, aluminum-covered sidewalls and squat squared wood column supports. The entrance is off-center and has a metal storm door. There is a strip of three non-original double-hung windows on the first floor and a strip of three original wood casement windows in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding and first floor windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Squat, square columns			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11211 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised brick basement and is clad with wood clapboards with wood shingles in the gabled ends. The building has a front gable roof covered with asphalt shingles and overhanging eaves with exposed rafters and decorative knee braces. The front elevation features a partial-width, front-gable, wood porch with squat, squared Doric columns and a boxed cornice. The porch door and adjacent window opening are covered with plywood. There is a group of four one-over-one windows on the first floor and a pair of original wood casement windows in the attic. This is an example of a Craftsman bungalow, an exceedingly common style during the 1910s and 1920s but lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows (first floor)
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Wood siding and shingles	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, exposed rafters, squared columns			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11257 S. Eggleston Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West and south façades of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a hip roof covered with asphalt shingles, and a hip dormer with two casement windows. The front elevation features a full-width, gable-roof, synthetic-clad sun porch surrounded by non-original one-over-one aluminum-sash windows and a centrally located door with sidelights. There is also an open shed-roof porch with concrete steps, metal railings, and open metal posts. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11730-11736 S. Front Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1952-1962

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
Looking south at light industrial complex.

Property Description: **Stories:** 1

This concrete block, Quonset utility outbuilding in the West Pullman community is set back from the public right-of-way and has a front elevation with a centrally located garage door opening flanked by a one-over-one window on either side. The 1962 aerial photograph shows two buildings on the property, the extant Quonset and a larger building. The larger building was razed between 2007 and 2012. A one-story building and a trailer standing on the remaining concrete slab from the larger, razed building are also part of this complex but too far from the road for evaluation. Windows appear to be fixed-pane on all buildings within the complex. This building complex does not have distinguishing architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Extant buildings that are visible from the public ROW remain unchanged
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Barrel	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9820 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1959

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of split-level, brick, single family residence.

Property Description: **Stories:** Split-level

This back-split home in the Roseland community has a hip roof on both levels that are covered with asphalt shingles. The front elevation is clad with orange face brick and has a centrally located hollow core metal door, two pairs of casement windows, and metal steps and railings. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) Detached two-car garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9823 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1915

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades, of 1.5-story, single family, brick residence.

Property Description: **Stories:** 1.5

This 1.5-story home in the Roseland community is situated on a raised brick basement with glass block windows and has a front gable roof covered with asphalt shingles. Its front elevation is clad with brown face brick, as is its enclosed, full-width, hip roof porch that has concrete lintels and sills. The front elevation has an off-center door with sidelights, metal steps and railings, and two first-floor window groups that are covered with metal screens, as were the paired windows in the gable. Some windows on the side elevation are in-filled with brick and glass block. This home lacks integrity and does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, enclosed porch, metal storm shutters, window openings in-filled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Concrete lintels and sills			**Windows** Glass block, covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11314 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story frame bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows and is clad with faux stone on the front elevation. The building has a hip roof covered with asphalt shingles and a hip dormer with three small non-original one-over-one aluminum-sash windows. The front elevation has a recessed corner porch with wood steps, railings, and a corner post. The front door and all first floor windows have been covered with plywood. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone (front) Synthetic siding (sides)	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11356 S. Harvard Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Commercial (1938 Sanborn)

Current: Multi-family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story building at the northwest corner of Harvard Avenue and 114th Street in the Roseland community is clad with wood board vertically laid on the first floor and with synthetic siding on the second floor. The building has a flat roof and parapet. The front (Harvard Avenue) elevation has an off-center door and a group of three first floor windows that have been covered with plywood and are sheltered by a metal awning. The second floor of the front elevation has four windows—a group of three and a single window—that were formerly three-over-one wood-sash, although most of the glass panes are now gone. The front elevation is topped by a bracketed unadorned wood cornice. The windows on the 114th Street elevation have been covered with plywood on the first floor and have missing glass panes on the second floor. This former commercial building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations Converted from commercial to residential after 1938 (Sanborn).			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (upper), Wood (lower)	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11415 S. Harvard Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a two-story, four-flat, frame residence.

Property Description: **Stories:** 2

This two-story four-flat building in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a flat roof and parapet. Its front elevation has four centrally located doorways that lack doors, a partial-width wood porch with a gable-on-shed roof, non-original straight posts and railings. There are two window groups on the first floor that are covered with plywood and six non-original one-over-one aluminum-sash windows on the second floor. The parapet level features a bracketed unadorned cornice. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Bracketed cornice			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11708 S. Indiana Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house at the southwest corner of Indiana Avenue and 117th Street in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, flat-roof, enclosed sun porch with an off-center metal storm door, concrete steps with metal railings (non-original), and a strip of three windows on the first floor. The second floor of the front elevation has a strip of three windows and a single window, and the attic level has a pair of windows. Windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11709 S. Indiana Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
North and west façades of two story, single family residence (above), concrete block outbuilding (below)

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof with asphalt shingles. The front elevation features a two-story flat-roofed addition and a single story, shed-roofed, enclosed porch. Fenestration is comprised of non-original one-over-one aluminum-sash windows, many of which are covered with plywood. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement doors, cladding and windows
Condition: Excellent <u>Good</u> Poor			
Additional Alterations Addition on front façade, enclosed porch			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable, Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Two-car, gable-roofed, concrete block garage with glass block and louvered windows, and asphalt shingles			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11715 S. Indiana Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J.Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a brick, two-story, multi-family residence.

Property Description: **Stories:** 2

This two-flat, multi-family residential building in the West Pullman community is situated on a raised basement with glass block windows and is clad with face brick on the front elevation and common brick on the side and rear elevations. The building has a full-height window bay pavilion, a flat roof, and parapet. The front elevation has a partial-width porch with concrete steps and open metal posts supporting a metal shed-roof. A pair of off-center storm doors is located under the porch roof. There are seven non-original one-over-one windows: three on the first floor bay and four on the second floor, including three on its window bay. Detailing includes concrete sills, belt courses, brick cornice with corbelling, and brick dentils. This building lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete sills and belt courses; brick cornice with corbelling, brick dentils			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11740 S. Indiana Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
East façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with what appears to be roofing paper. The front elevation has a full-width, hip-roof, wood porch with a synthetic-clad base, straight wood railings and posts, and an off-center door. A group of three windows on the first floor are partially obscured by plywood. There are four windows on the second floor (three of which are grouped together) and a pair of windows in the gable. Above the basement, windows are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Roofing paper	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

112 E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1900

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South façade of a brick, two-story, multi-family (Flat) residence.

Property Description: **Stories:** 2

This two-story brick-clad flat residential building in the West Pullman community has a flat roof and parapet. Its front elevation is clad with face brick, has two centrally-located plate glass doors with transoms, and twelve non-original one-over-one aluminum-sash windows: six on the first floor and six on the second. Detailing includes recessed brick panels with dentils at the parapet level, concrete sills, coping, and a concrete stringcourse. This building lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Recessed brick panels with dentils; concrete stringcourse, coping, and sills			**Windows** Double-hung, fixed pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

121 E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Flat

Current: Flat

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, frame, two-flat residential building in the West Pullman community is covered with synthetic siding. The building has a two-story, three-sided window bay pavilion on its front elevation and a front gable roof covered with asphalt shingles. The front elevation has an off-center pair of hollow core metal doors topped by a bracketed pent roof. There are three windows on the first floor, four windows on the second floor, and a single window in the gable. All windows are non-original one-over-one aluminum-sash. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Bracketed pent roof			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

121 ½ E. Kensington Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North and west façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story residential building in the West Pullman community is clad with synthetic siding and has a flat roof and parapet. The first floor of its front elevation has an off-center storm door and a group of three windows sheltered by a full-width hip roof that is supported by three wood posts. The second floor of the front elevation has four windows, three of which are grouped together. Windows are non-original one-over-one aluminum sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Venetian Hall (Sanborn 1938)

Common/Current: Unknown

Property Address:

133-139 E .Kensington Avenue
(137 E. Kensington CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Miracle Temple Faith Church

Property Use

Historic: Commercial

Current: Religious Building

Date of Construction: 1924-1926

Architect's Name: Arthur F Hughes

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
North façade of a brick, two-story, religious building.

Property Description: **Stories:** 2

This two-story building in the West Pullman community (formerly part of Kensington) was originally called "Venetian Hall." The performance hall was built for a cultural/recreational purpose, although it has long since been repurposed as a church. The 1938 Sanborn shows the hall with a stage, balcony, and place for storage of scenery. The street entrance was flanked by two storefronts in 1938, as it is now.

The building is clad with face brick on its front elevation and common brick on its side and rear elevations. The building has a flat roof and a shaped parapet with concrete coping. The first floor of the front elevation has a recessed centrally located bay with three pairs of multi-light wood doors and in-filled transoms. This central bay is flanked by two original storefronts with central recessed doors and flanking display windows that are covered with wood and topped by transoms that have been in-filled with glass block. Separating the central bay from the two flanking storefronts are two doors with transoms that provide access to the second floor. The spandrel area directly above the

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

central entrance bay has a concrete sign plate with incised lettering that reads: “Venetian Hall.” Fenestration on the second floor features six-over-one and three-over-one wood-sash windows arranged in pairs and in groups of three, topped by round-arch stone lintels with rosette motifs. The parapet features a series of Classical shields and swags.

The exterior of this building has good overall integrity, although elements of the original storefronts materials are no longer extant. However, it does not display sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register for its architecture. Instead, is recommended for individual listing under Criterion A for its original use as a social venue for area residents in the early twentieth century. Local theater houses, such as the Venetian Hall, were jewels within the local communities. It's rare to see an early twentieth century neighborhood social hall that retains its original storefronts and is set within a residential area comprised of worker’s housing, rather than along a commercial thoroughfare. The opening of Illinois Terra Cotta works in the first half of the twentieth century brought Italians to Kensington; the area gradually became a center of South Side Italian-American life with the establishment of Venetian Hall and the nearby San Antonio de Padua (patron saint of Venice) Roman Catholic Church.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration				**Additional Notes/Descriptions** Some original storefront materials no longer extant
Condition: Excellent Good Poor				
Additional Alterations Converted to use as a church.				
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick		
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat		
Ornamental Architectural Details Concrete coping, incised name plate, stone lintels, Classical shields and swags				**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None				

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? Yes	**A** **B** **C**	**Significance:** Good overall integrity and important social gathering place for Italian-American residents of Kensington in the early twentieth century.

Additional Comments:

"Venetian Hall" in 1938 Sanborn.

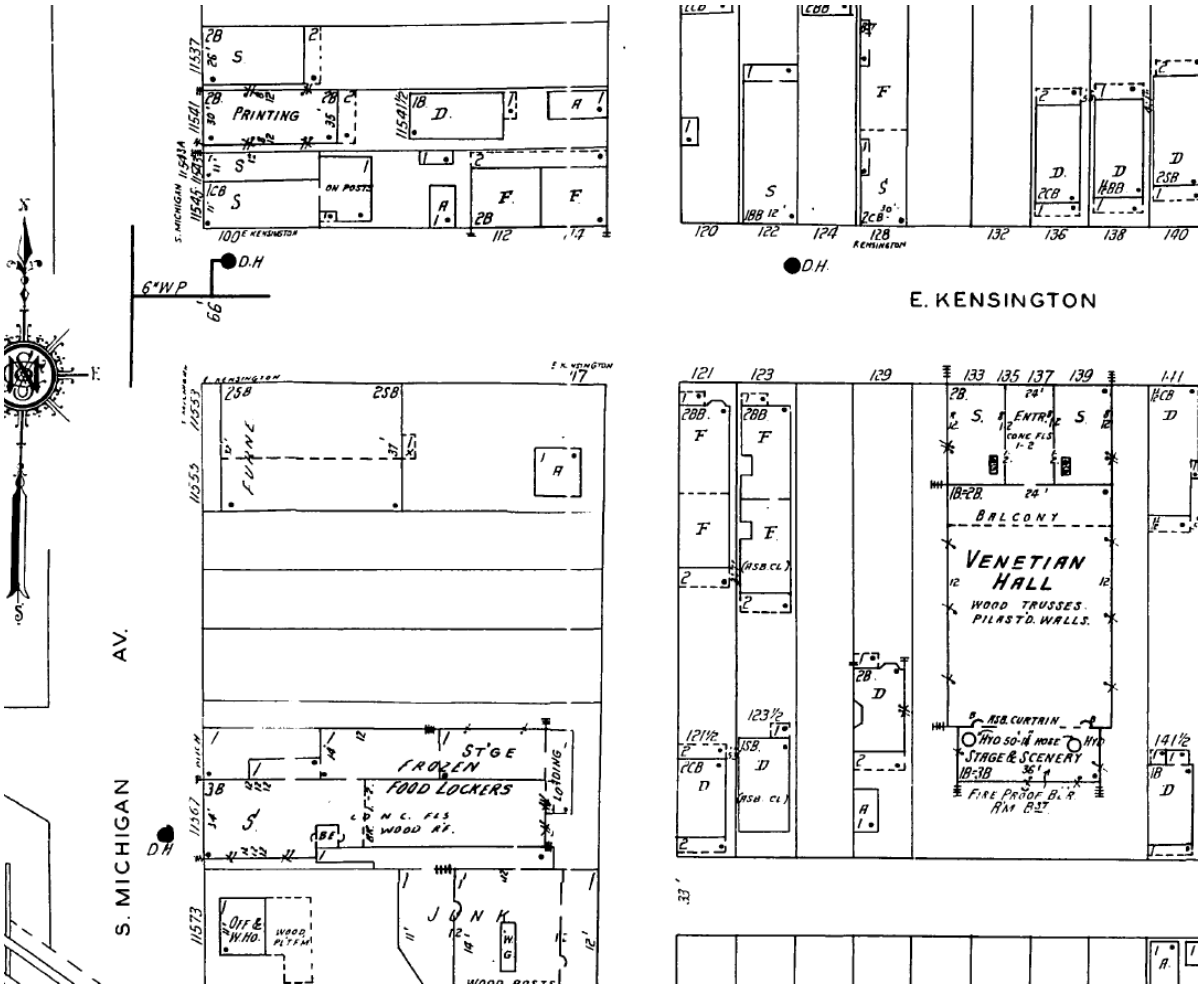

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9723 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with casement windows and has a gable-on-hip roof clad with asphalt shingles. The front elevation has a pent roof, an off-center door, concrete steps with metal railings, a small glass block window, and a picture window flanked by casements. This window group is partially obscured by a low metal awning. Detailing includes a diamond-shaped tile insert in the gable end, stone quoins near the base of the residence, concrete sills, and scalloped boards above and below the pent roof. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable-on-hip	
Ornamental Architectural Details Diamond-shaped tile insert, stone quoins, concrete sills, and scalloped boards			**Windows** Fixed-pane, glass block, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9738 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This home in the Roseland community is clad with orange face brick and has a hip roof covered with asphalt shingles. The hip roof extends beyond the front elevation to serve as the roof of the second floor balcony, which is situated above the flat-roofed full-façade porch. Both levels feature open metal supports and railings. The porch has concrete steps. The front elevation features off-center doors trimmed with stone on both floors, a picture window flanked by double-hung windows on the first floor, and a pair of double-hung windows on the second floor. This building does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone at entrances.			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9902 S. La Salle Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1919

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised brick basement with glass block windows, is clad with aluminum siding, and has a front gable roof covered with asphalt shingles. A non-original, full-width, enclosed front porch covered with lattice obscures the original front elevation of the house. The porch has a horizontal strip of square, non-original windows and an off-center door. The side elevations have one-over-one windows. This home does not have sufficient integrity or distinguishing features to qualify as eligible for individual listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Addition to front façade			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*)			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9706 S. Lafayette Avenue
Alternate: 9708 S Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1957

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement and has a front gable roof covered with asphalt shingles. Its front elevation is clad with faux stone below the sill line, orange face brick above, and synthetic siding in the gable. It has a centrally-located door, concrete steps with metal railings, a single-pane window flanked by a casement, and what appears to be a pair of casement windows. Windows are partially obscured by low metal awnings. This standard 1950s era house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), Synthetic siding (gable end)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Casement, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11528 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
East and south façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised brick basement, is clad with aluminum siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a gable-roofed, full-width, enclosed porch with an off-center door, metal steps and railings, and two non-original one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11532 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
East façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a flat-roofed, full-width, wood porch with wood slats and posts. It also has an off-center hollow core metal door and a strip of three non-original one-over-one aluminum sash windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11557 S. Lafayette Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width, hip-roof, enclosed porch with non-original synthetic siding, an off-center entrance with metal storm door and metal awning, and a first floor group of sliding windows that is partially obscured by a metal awning. The second floor of the front elevation has a strip of three windows and a single window, all of which are non-original one-over-one aluminum-sash with metal awnings. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11563-11565 S. Michigan Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1900 (1962 addition)

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
North and east façades of two-story, brick, industrial building.

Property Description: **Stories:** 2

This two-story industrial building in West Pullman has a flat roof and parapet. A one-story, flat-roofed north wing is a later addition (1962). The original building has been drastically altered with new brick cladding on the first floor and the removal of original doors and windows on the front elevation. The first floor of the front elevation currently features two small non-original windows. The original window openings on the second floor of the front elevation have been in-filled with brick. Two one-over-one windows have been installed on either side. Window openings on the side elevations have all been altered as well. The parapet retains original decorative brick corbelling along the front and side elevations. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, openings in-filled, later addition
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Brick corbelling			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11592 S. Michigan Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

EZ Phone

Property Use

Historic: Mixed-use

Current: Mixed-use

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of two-story, frame building.

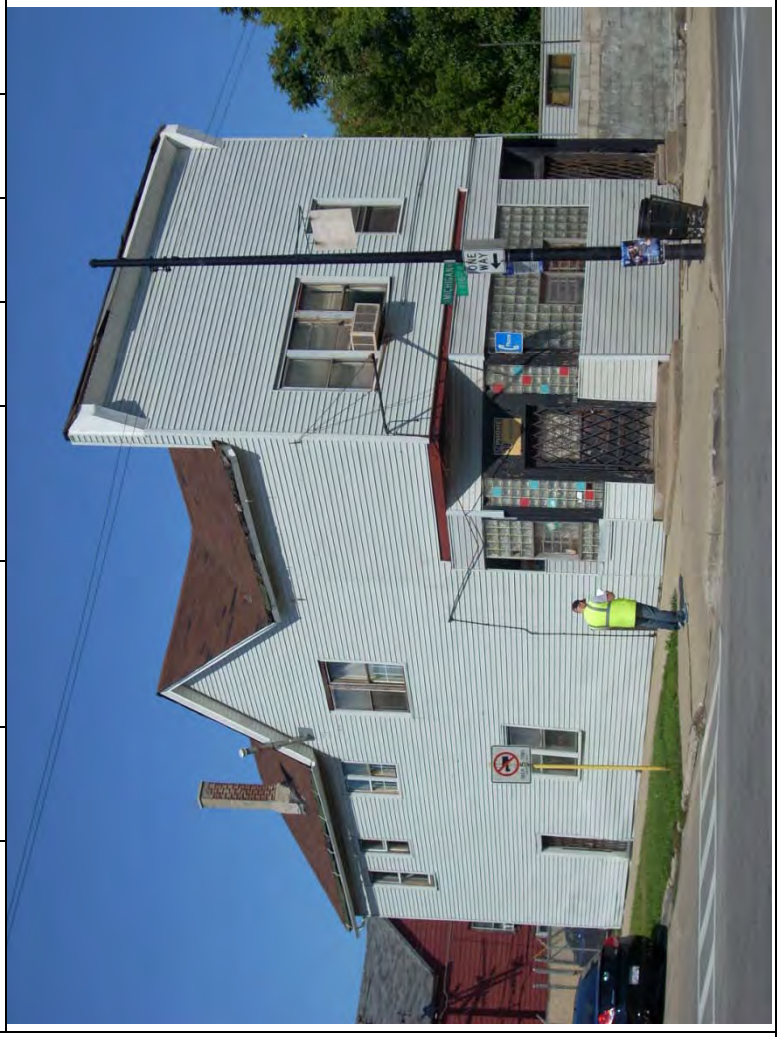

Property Description: **Stories:** 2

This two-story frame building at the northwest corner of Michigan Avenue and 116th Street in the West Pullman community is clad with synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front (Michigan Avenue) elevation features a tall false front, a recessed corner storefront entrance flanked by non-original glass block windows, an off-center metal door with transom that provides access to second floor apartments, and four one-over-one windows. Fenestration along the 116th Street elevation is also comprised of one-over-one windows. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Parapet	**Roof Type** Cross-Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11593 S Michigan Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Step of Faith

Property Use

Historic: Commercial (Upholstery, 1938)

Current: Mixed-Use

Date of Construction: 1883

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
West façade of two-story, mixed-use building.

Property Description: **Stories:** 2

This two-story, frame, mixed-use building at the northeast corner of Michigan Ave. and 116th Street in the West Pullman community is clad with synthetic siding (upper) and brick (lower) and has a front gable roof with asphalt shingles. The front elevation has a recessed brick storefront with an entrance at corner and one at the opposite end, which is covered with plywood. Neither the doors nor the windows appear to be original. The cornice above the first floor includes wood brackets. The second floor on both street elevations features non-original one-over-one aluminum-sash windows. This building lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows, doors, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (upper), Brick (lower)	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Wood brackets along first floor cornice line			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11611 S. Michigan Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 2 October 2012

Photos with Captions:
West and north façades of two-story, multi-family, frame building.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features an off-center non-original hollow core metal door fronted by a concrete stoop with metal railings and open metal posts supporting a metal canopy. There are two windows on the first floor and two on the second, all of which are non-original one-over-one aluminum sash.

The 1938 Sanborn shows this residence as a 1.5-story building with a round bay pavilion. Subsequent alterations, including the addition of a full second floor have heavily altered this building. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement windows and siding, removal of bay pavilion, addition of a second floor
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

9925 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1946

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: September 2012

Photos with Captions:
West façade of two-story, brick, single-family residence.

Property Description: **Stories:** 2

This two-story brick-clad house at the southeast corner of Normal Avenue and 99th Place in the Washington Heights community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles. Its front elevation has an off-center non-original hollow core metal door, a small adjacent glass block window, concrete steps with metal railings, a pair of non-original double-hung windows on the first floor, and two non-original double-hung windows on the second floor. The door and all front elevation windows have metal awnings. Details include a brick stringcourse and corbelling above first floor window. The difference in the brick colors relates to the removal of shutters. It does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick stringcourse and corbelling, decorative glass block			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9939 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1939

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story brick-clad house in the Washington Heights community is situated on a raised brick basement with glass block windows. It has a side-gabled roof covered with asphalt shingles. Its front elevation has a centrally located hollow metal paneled door with fanlight, concrete steps with metal railings, two sets of paired windows, and two aluminum-clad gabled dormers, each of which has one window. Windows are non-original one-over-one aluminum-sash. All front elevation windows and the front door feature metal awnings. Detailing includes concrete sills, lintels, and quoins surrounding the door. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding on dormers
Condition: Excellent Good Poor			
Additional Alterations Dormers may be a later addition			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormers	**Roof Type** Side gable	
Ornamental Architectural Details Quoins at entrance, concrete sills and lintels			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10457 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Dutch Colonial

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
South and west façades of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story Dutch Colonial style house at the northeast corner of Normal Avenue and 105th Street in the Roseland community is situated on a raised basement and is clad with red face brick. The building has a side-gambrel roof covered with asphalt shingles, a one-story flat-roofed enclosed sun porch surrounded by four-over-one wood-sash windows along its east elevation, and exterior chimneys on both side elevations. The front (105th Street) elevation has a centrally located non-original hollow core metal paneled door, concrete steps, and metal railings. The door was once flanked by fluted pilasters with geometric capitals. The shaft of one of these pilasters has been removed as has the base of the extant pilaster. The door is topped by an unadorned frieze band and a broken pediment and is flanked by strips of three six-over-one and four-over-one wood-sash windows on either side. The shed-roofed second floor of the front elevation has three non-original one-over-one aluminum-sash windows. This house does not have sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and some windows; pilasters compromised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Side-gambrel	
Ornamental Architectural Details Door surround (frieze band, pediment, pilasters)			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10511 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1949

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story brick-clad house in the Roseland community is situated on a raised basement with glass block windows and has a hip roof covered with asphalt shingles. Its front elevation features a pent roof that spans the three-sided living room bay and an off-center hollow core metal door that is accessed by concrete steps with metal railings. The living room bay features a picture window flanked by non-original one-over-one aluminum-sash windows that are sheltered by a metal awning. The second floor of the front elevation has two non-original one-over-one aluminum-sash windows. Detailing includes concrete sills and decorative stones at the basement level. It does not feature distinguishing architectural features nor does it retain sufficient integrity, therefore, is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door and windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone accents at basement level, concrete sills			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10641 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 15 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story bungalow in the Roseland community is situated on a raised basement with glass block windows and clad with brown brick. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer, the windows of which were obscured by foliage. The house features a recessed corner porch with a hollow core metal door, concrete steps, low brick sidewalls, and a brick corner pier. The front elevation's projecting living room bay has a series of double-hung windows, a decorative brick soldier course, stone insert blocks, and concrete sills. This house does not display distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier course, stone insert blocks, concrete sills			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10701 S. Normal Avenue
Alternate: 459 W. 107th Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1955

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Ranch

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story Ranch house at the corner of Normal Avenue and 107th Street in the Roseland community is situated on a raised basement and is clad with orange face brick below the sill line and buff brick above. The building has a cross-gable roof covered with asphalt shingles; gable ends are clad in synthetic siding. A gabled rear wing contains an attached two-car garage. The front (Normal Ave.) elevation has an off-center metal storm door sheltered by a roof overhang supported by a corner open metal post, concrete steps with metal railings, two pairs of non-original one-over-one aluminum-sash windows, and a non-original picture window flanked by one-over-one aluminum-sash windows on the main block. The front elevation of the rear wing has an off-center metal storm door, a roof overhang supported by two open metal posts, and a large glass block window. The side (107th Street) elevation has corner windows that are obscured by foliage but appear to be casements. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main) Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block, casement
Outbuildings (*Number and Description*) Attached two-car garage.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10747 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1928

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 30 October 2012

Photos with Captions:
South and east façades of a one-story, single family residence.

Property Description: **Stories:** 1

This one-story Craftsman cottage in the Roseland community has a side-gable roof with overhanging eaves and decorative knee braces. The building is made of masonry units with aluminum siding in its gabled ends. Its front elevation has a recessed corner porch with overhanging gable roof with rafter tails, low walls, and squat, squared wood column supports. The building features a front door tucked into the side of the living room bay, a strip of three casements, and a picture window flanked by what appear to be casements. All windows on the front elevation feature concrete sills. Side elevation windows appear to be non-original one-over-one aluminum-sash. This house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Masonry (main), Synthetic siding (gable ends)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, rafter tails, squared columns, concrete sills			**Windows** Double-hung, casement, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10853 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1929

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 12 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows and is clad with brown brick. The building has a hip roof covered with asphalt shingles, overhanging eaves, and a hip-on-gable dormer with three original wood casement windows. The house features a recessed corner porch with a metal storm door, concrete steps, low brick sidewalls, a brick corner pier, and arched front and side openings. The front elevation's projecting living room bay has a series of double-hung windows, a decorative brick soldier course, stone insert blocks, and concrete sills. This house does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Brick soldier courses, stone insert blocks, concrete sills			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10959 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Minimal Traditional

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, brick single-family residence.

Property Description: **Stories:** 2

This two-story house at the corner of Normal Avenue and 110th Street in the Roseland community is clad with buff brick and has a hip roof covered with asphalt shingles, an exterior buff brick chimney, and a raised basement. Its front elevation features a centrally located hipped-roof entrance vestibule with a door that is surrounded by decorative stones. A vertical strip of glass blocks adjacent to the door accents the façade. Concrete steps and metal railings lead to the entrance. There are five windows—two on the first floor and three on the second. The first floor windows are non-original one-over-one aluminum-sash while the second floor windows are six-over-one. Detailing includes concrete sills and brick flat arch window lintels. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Stone around entrance, concrete sills, brick flat arch window lintels			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11001 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: circa 1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, brick single-family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community is situated on a raised basement with glass block windows. The building has a front elevation clad with buff face brick, a hip roof covered with asphalt shingles, and overhanging eaves. Its front elevation has an off-center entrance with a metal storm door sheltered by a metal awning, concrete steps with metal railings, and a window group with a large decorative faux stone panel beneath. This house lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Faux stone panel			**Windows** Glass block, covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11035 S. Normal Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:

West façade of one-story, single family, frame residence.

West and north façades of residence.

Property Description: **Stories:** 1

This single story frame house at the southeast corner of Normal Avenue and 110th Place in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a side gable roof covered with asphalt shingles and flared, bracketed, overhanging eaves. It features both front and rear gable dormers. It has a recessed corner porch with non-original hollow core metal door, a faux stone corner pier topped by a squat squared wood column, and wood steps and railings. The front elevation has a strip of four windows on the first floor and three in the gable. Above the basement, windows are non-original one-over-one aluminum-sash. A small hip-roofed porch is situated along the 110th Place elevation with hollow core metal door (non-original), concrete steps with metal railings, and open metal supports. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Gable	
Ornamental Architectural Details Squat, square column, bracketed eaves			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11426 S. Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

R. E. Russell Paint Company

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: circa 1920s

Architect's Name: Not in CHRS database

Builder/Contractor: Not in CHRS database

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 11 September 2012

Photos with Captions
East façades of brick building in industrial complex.

Property Description: **Stories:** 2

This two-story industrial building in the Roseland community has a flat roof and parapet. It sits within an industrial complex bounded by South Perry Avenue, an alley, and the Union Pacific Railroad line. Its front elevation is clad in painted brick. It has a hollow core metal door with in-filled transom and window openings on the first and second floors that are in-filled with glass block with louvered or casement insets. Most of the face brick at the parapet level has been replaced by a stucco-like material. The uppermost portion of the stepped parapet has bricks arranged as decorative dentils. Other buildings within the paint company complex include one-story sheet metal and brick buildings. These buildings lack integrity, do not have distinguishing architectural features, and are not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: N A Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Dentils along cornice			**Windows** Glass block, louvered or casement
Outbuildings (*Number and Description)* Sheet metal warehouse on Perry Avenue, paint production plant and storage areas along railroad.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

In CCA database, age give as 26 years, which was when partial improvements occurred. Structure probably dates to 1900-1930, based on style. Buildings shown on following page are part of the industrial complex.

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Brick and sheet metal industrial buildings within complex.

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11439 S. Perry Avenue
Alternate: 11439 Pippin Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: 1892

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 11 September 2012

Photos with Captions
South façade of "building A" in a set of three joined industrial buildings. (Additional photographs appended).

Property Description: **Stories:** various

This industrial complex of buildings in the Roseland community includes three conjoined brick buildings: a two-story gable-roofed building (A, photo above), a collapsed brick building (B, photos on page 3), and a two-story flat-roofed brick building (C, photos on page 3). Building A has first floor clad in brick with a one-story, flat-roofed, brick commercial wing in front. The upper half of this building is clad in synthetic siding covering clapboards. It is vacant, deteriorated, and many of its window openings have been covered with particle board. Windows along the south side on the first floor are sliding or double-hung. Building B has collapsed. Building C at the far north has a parapet and is clad with red face brick and common brick. The windows with arched lintels have been in-filled with wood and brick. A new door pierces the façade. This complex of building lacks integrity, does not have any distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations <u>Major Alterations</u>			**Additional Notes/Descriptions** In-filled windows, replacement garage doors and siding, new door added, collapsed walls
Condition: Excellent Good <u>Poor</u>			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Sliding, double-hung
Outbuildings (*Number and Description)* None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Additional photos:
Two photos at left: west façade of middle section (Building B), struck by lightning
Right photo: north façade of Building C

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505 North State Street
Marengo, Illinois 60152
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Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11515 S. Perry Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1965

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
West façade of one-story, brick, single family residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community has a gable roof covered with asphalt shingles, overhanging eaves, and a flat-roofed attached one-car garage. Glass blocks with stone sills and brick planter boxes decorate the front of the garage. The front elevation of the house is clad with light orange face brick and features two picture windows, one of which is flanked by narrow one-over-one windows. A stone panel separates the two picture windows. The front gable is clad with synthetic siding in a decorative pattern. The entrance is located along the side elevation and accessed via a flight of concrete steps with metal railings. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Stone panel, glass block with stone sills, brick planter boxes, clapboards in gable			**Windows** Fixed-pane, glass block, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11516 S. Perry Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1913

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a one-story, single family, frame residence.

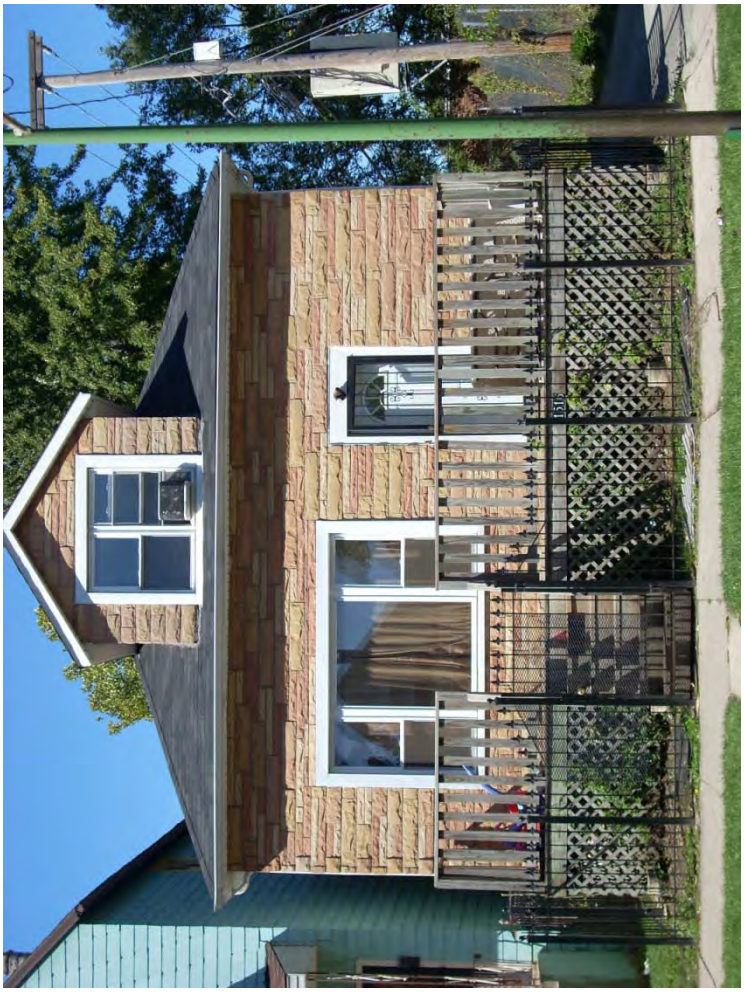

Property Description: **Stories:** 1

This one-story bungalow in the West Pullman community is situated on a raised concrete block basement and is covered with faux stone siding. The building has a hip roof covered with asphalt shingles and a gable dormer with a pair of non-original one-over-one aluminum-sash windows. The front elevation has a full-width porch with a wood deck, steps, and straight railings. This elevation has an off-center hollow core metal door, and a non-original picture window flanked by one-over-one aluminum-sash windows. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Faux stone	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11521 S. Perry Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1879

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. The building has a cross-gable roof covered with asphalt shingles. The front elevation has a full-width wood porch with a flat roof that is supported by faux stone piers topped by short Doric columns. The façade features an off-center non-original hollow core metal door and five non-original one-over-one aluminum-sash windows: three on the first floor and two on the second. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11630 S. Prairie Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of one-and-a-half-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame house in the West Pullman community is situated on a raised brick basement, is clad with synthetic siding, and has a front gable roof with asphalt shingles. Its front elevation features a flat-roofed enclosed porch with concrete steps with metal railings. It also has a hollow metal core door, four non-original windows on the first floor—one casement and a strip of three one-over-one windows—and two paired windows on the second floor, one of which is in-filled with plywood. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11632 S. Prairie Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family

Current: Multi-family

Date of Construction: 1888

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story, frame, multi-family residential building in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features two off-center non-original hollow core metal doors, three windows on the first floor and four windows on the second floor, all of which are non-original one-over-one aluminum sash. A small single-pane window is situated in the gable. This building lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement doors, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11634 S. Prairie Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1927

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East and south façades of a two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story frame house in the West Pullman community is clad with synthetic siding and has a front gable roof with asphalt shingles. Its front elevation features an off-center, non-original, hollow core metal door, three windows on the first floor, five windows on the second floor, and one in the gable, all of which are non-original one-over-one aluminum sash. This house lacks integrity, does not have distinguishing architectural features, and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11718 S. Prairie Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1885

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised brick basement and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. The second story was added in the last few years. Its front elevation has a partial-width, hip-roof wood porch with straight posts and railings, an off-center non-original hollow core metal door, and five multi-paned double-hung windows: three on the first floor and two on the second, all non-original. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: <u>Excellent</u> Good Poor			
Additional Alterations Second story added after 2007			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11814 S. Prairie Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Chicago Style Bungalow

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 23 October 2012

Photos with Captions:
East façade of a one-story, single family, brick residence.

Property Description: **Stories:** 1

This one-story brick-clad bungalow in the West Pullman community is situated on a raised basement with glass block windows. The building has a hip roof covered with asphalt shingles, overhanging eaves, and gable dormers along its front and rear elevations. The front elevation has a recessed corner porch with a brick pier support at the corner, concrete steps, and a metal railing. Above the basement, windows have been covered with plywood. Detailing includes soldier brick lintels, concrete sills, and concrete insert blocks used as decorative accents. This is an example of a Chicago bungalow, a building type that the City of Chicago has recognized through its Historic Chicago Bungalow Initiative. However, this house lacks distinctive architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormers	**Roof Type** Hip	
Ornamental Architectural Details Brick lintels, concrete sills and insert blocks			**Windows** Glass block, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9815 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story house in the Roseland community has a steeply pitched front gable roof covered with asphalt shingles. Its front elevation is clad with brown and orange face brick on the first floor and synthetic siding in the gable. It has an off-center door, concrete steps with metal railings, a decorative perforated screen, a picture window flanked by one-over-one aluminum-sash windows on the first floor, and a one-over-one aluminum-sash window in the gable. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Perforated screen			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9818 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community has a gable-on-hip roof clad with asphalt shingles. The front elevation is clad with red face brick on the first floor and synthetic siding in the gable. It has a centrally located door, a decorative perforated screen, and a picture window flanked by what appear to be casements. This window group is partially obscured by a low metal awning. The wood ramp is non-original. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations Wood ramp appended to residence but has not altered the building.			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick, synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Perforated screen			**Windows** Casement, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10054 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Multi-family residence

Current: Multi-family residence

Date of Construction: 1934

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
South façade of two-story, multi-family residence.

Property Description: **Stories:** 2

This two-story multi-family building at the northwest corner of 100th Street and Princeton Avenue in the Roseland community is clad with brown face brick along its two street elevations. It has a raised brick basement with glass block windows, a hip roof covered with asphalt shingles with overhanging eaves, a shed dormer along its 100th Street elevation, and a hip dormer along its rear elevation. The front elevation has an off-center hollow core metal door with two strips of three windows—one on the first floor and one on the second—along with an additional window on the second floor. Fenestration along both street elevations is comprised of three-over-one wood-sash windows. Detailing includes concrete sills, window surrounds with soldier bricks and square concrete insert blocks, and a course of soldier bricks above the first floor windows that spans both street elevations. The brick panels above both the front and side doors feature the same decorative basketweave pattern. This building does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Dormer appears to be a later addition
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingles	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Concrete sills, soldier bricks, concrete insert blocks, brick panels			**Windows** Double hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

10136 S Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1954

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of split-level, brick single family residence.

North façade of split-level showing roofline.

Property Description: **Stories:** 1

This split-level home in the Roseland community has a cross-gabled roof covered with asphalt shingles and is clad with buff and orange face brick. The front elevation's gable is clad with aluminum and has a deep overhang that is supported by two open metal posts. The roofline exhibits an overhanging shed roof along the ridgeline, running the width of the house. The eave of this overhang is clad in vinyl siding. The front elevation's windows and door are obscured by high foliage. Three of the four side elevation windows are covered with plywood. This house does not feature distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gabled	
Ornamental Architectural Details None			**Windows** Covered
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

10224 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1930

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, two-story, single family residence.

Property Description: **Stories:** 2

This two-story house in the Roseland community is situated on a raised brick basement. It is clad with brown face brick and has a cross-gable roof covered with asphalt shingles. Its front elevation has an arched basement window group, an off-center door with a metal storm, a corner recessed porch with concrete steps and metal railings, a projecting three-sided hip-roofed living room bay with five double hung sash windows, and a strip of three one-over-one windows on the second floor. Detailing includes a stone sill course and a decorative soldier course with stone insert blocks above the living room bay windows, decorative scrolled stone brackets below the living room bay windows, and a porch archway with stone keystone. The side elevation has a shed-roofed window bay with large glass block window opening. The rear elevation's original roofline has been raised with a shed-roofed addition. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Rear elevation roofline raised
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Cross-gable, shed	
Ornamental Architectural Details Stone sill course, brick soldier course with stone insert blocks, scrolled stone brackets, archway with stone keystone, arched basement window group			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: First Christian Reform Church of Roseland

Common/Current: Mary Magdalene Missionary Baptist Church

Property Address:

10920 S. Princeton Avenue
Alternate: 10914 S. Princeton Ave.
Alternate: 318 W 109th Place

HAARGIS Number:

140670

Present Owner and /or Occupant:

Mary Magdalene Missionary Baptist Church

Property Use

Historic: Religious

Current: Religious

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Romanesque Revival

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 17 October 2012

Photos with Captions:
East façade of two-story religious building (above), south and east facades from HAARGIS (below).

Property Description: **Stories:** 2

This Romanesque Revival style church in the Roseland community has a front elevation and two flanking towers clad with brown face brick, while the remainder of the side elevation and the rear elevation are clad with common brick. It has a gable roof covered with asphalt shingles and gable wall dormers with shaped parapets on both side elevations. The east tower has a flat roof and a shaped parapet while the west tower has a peaked roof with overhanging eaves and exposed rafters and is topped by a finial. The central bay of the front elevation has a broad, round-arched entrance with stone surround and two sets of single-light oak double-doors. The central bay also contains a strip of double-hung windows situated within a broad arch and a rose window with tracery. Fenestration on the both towers and along the side elevations comprises round-arch windows with tracery. It is unknown whether the original stained glass for all of these windows is extant inside the church. Both towers also feature paired casement windows. Window openings at the top of the west tower have been boarded-over. Detailing includes stone sills, belt courses, brick

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

pilasters and keystones. A one-story brick-clad entrance vestibule is situated along the rear of the west elevation. Built as the First Reformed Church of Roseland, this church is recommended as individually eligible for National Register listing under Criterion A for its association with the community's once-dominant Dutch population and under Criterion C as fine example of a Romanesque Revival style church in Roseland.

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Square tower brick infilled
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Parapet, Towers, Dormers	**Roof Type** Gable	
Ornamental Architectural Details Stone sills, belt courses, brick pilasters, and keystones, shaped parapet, rose window			**Windows** Double-hung, fixed-pane, glass block (raised basement)
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? Yes	**A** **B** **C**	**Significance:** A fine example of a Romanesque Revival style church in the Roseland community associated with the community's once-dominant Dutch population

Additional comments

CHRS coded orange: property possesses some architectural feature or historical association that made it potentially significant in the context of the surrounding community.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11122 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Apartment building

Current: Apartment building

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
South façade of a brick, two-story, apartment building.

Property Description: **Stories:** 2

This two-story apartment building at the northwest corner of Princeton Avenue and 111th Place in the Roseland community is situated on a raised basement with glass block windows and is clad with brown face brick on its two street elevations. The building has a flat roof and shaped parapet with concrete coping. Windows are original three-over-one wood-sash windows arranged singly, in pairs, or in groups of four. The Princeton Avenue elevation also features four leaded glass casement windows. Each street elevation has an entrance with a non-original hollow core metal door. Detailing includes concrete sills and brick soldier courses with square stone inserts blocks. This building lacks sufficient distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Windows in garden apartments in-filled with glass blocks
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Concrete coping and sills, stone insert blocks, brick soldier courses			**Windows** Double-hung, casement, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11142 S. Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Flat (Single family, CCA)

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
North façade of concrete block, two-flat residence.

Property Description: **Stories:** 2

This two-flat rusticated concrete block residential building in the Roseland community is situated on a raised basement. The building has a flat roof and parapet. Its front elevation has a pair of off-center hollow core metal doors, a partial-width hipped-roof wood porch with straight posts and railings, and five non-original one-over-one aluminum-sash windows: two on the first floor and three on the second. Detailing includes stone sills and lintels. The south (alley) elevation has a full-height window bay pavilion. This building lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone sills and lintels			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11319 S Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised concrete block basement. Its front façade has an off-center, non-original, hollow metal paneled door and a porch with concrete steps, metal railings, and metal supports with a metal canopy roof. Fenestration is comprised of non-original one-over-one windows: a strip of three on the first floor and two on the second floor. One of the side elevations has a three-sided window bay on the first floor. This home lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement front door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11321 S Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised basement. Its front façade has an off-center hollow metal paneled door and a porch with wood steps and straight wood railings. The first floor of the front façade has a large picture window and the second floor has paired, double-hung windows. This home lacks integrity and distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11325 S. Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
West façade two-story, single family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, and is situated on a raised concrete block basement. Its front façade has an off-center, non-original, hollow, metal paneled door and a porch with wood steps and straight wood railings. Both the first and second floors of the front façade feature a large picture window flanked by one-over-one windows. The second floor has an additional one-over-one window situated directly above the entrance. This home lacks integrity and distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11327 S Princeton Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
West façade one-story, single family, frame residence

Property Description: **Stories:** 1

The one-story home in the Roseland community is clad with synthetic siding and has a flat roof. Its front façade has an off-center door, wood steps and railings, and a strip of three, non-original one-over-one windows. It lacks integrity and any distinguishing architectural features; therefore, it is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification <u>Major Alteration</u>			**Additional Notes/Descriptions** Replacement door, windows, and cladding
Condition: Excellent <u>Good</u> Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **<u>N</u>**	
National Register Historic Places	**Y** **<u>N</u>**	
National Register Historic District	**Y** **<u>N</u>**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11340 S. Princeton Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1948

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of two-story, brick, single family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is clad with face brick and common brick on the front and side elevations, respectively, and has a hip roof covered with asphalt shingles. The front façade has a three-sided bay window on the first floor and casement windows at each corner of the second floor, each topped by an awning. Details include concrete quoins on the bay and concrete sills. The main entrance is located along the side elevation, which contains an entryway porch topped by a flat roof supported by metal pole. Decorative lattice is present at the entrance. This building lacks sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Hipped	
Ornamental Architectural Details Concrete quoins and sills, lattice at entry			**Windows** Fixed-pane, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y** **N**	
National Register Historic Places	**Y** **N**	
National Register Historic District	**Y** **N**	**Name:**
Individually Eligible? No	**A** **B** **C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11546 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1901

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West and north façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with wood slat railings and wood posts. It also has an off-center door, a multi-light fixed-pane window on the first floor, and a pair of non-original one-over-one windows in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement cladding, door, and windows in gable
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Not in CHRS

Property Address:

11548 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1889

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West and south façades of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a gable roof covered with asphalt shingles and a shed roof dormer on its south elevation. Its front elevation features a full-width, hip-roof, wood porch with open metal railings and posts, an off-center door, a bay window on the first floor, and a single non-original one-over-one window in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Alterations Major Alterations			**Additional Notes/Descriptions** Replacement windows, doors, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Not in CHRS

Property Address:

11567 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a front gable roof covered with asphalt shingles and an enclosed hip roof porch. The front door and all window openings are covered with plywood. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and doors covered with plywood, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11569 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement with a stone veneer. Above, it is clad with aluminum siding and has a gable roof covered with asphalt shingles. Its front elevation features a pent roof with decorative knee braces, an off-center door, concrete steps with metal railings and a strip of three non-original one-over-one windows. The window opening in the gable contains a pair of narrow casements. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces supporting porch roof			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11571 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1898

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a front gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with Doric columns and metal pipe railings. It also has an off-center door, a strip of three non-original one-over-one windows, and a single-pane window in the gable. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11573 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
West façade of one-story, single-family frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation features a full-width, hip-roof, wood porch with square porch supports and non-original railings. It has an off-center metal hollow core paneled door with fanlight and a picture window flanked by non-original one-over-one windows. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Fixed-pane, double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11575 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions
South façade of one-story, single-family frame residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised concrete block basement and is clad with synthetic siding. It has a front gable roof covered with asphalt shingles and a flat-roofed dormer along one of its side elevations. Its front elevation features a full-width porch with wood steps and support consisting of brick piers topped by squat Doric columns. The porch deck and railings have been removed and the door and all windows openings are covered with plywood. This house lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and doors covered, replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11583 S. State Street

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1926

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
South and east façades of single family, brick residence.

Property Description: **Stories:** 1

This one-story house in the West Pullman community is situated on a raised basement with glass block windows and is clad with common brick. It has a steeply pitched hip roof covered with asphalt shingles and a shed dormer with sliding glass windows. Its front elevation features a centrally located hollow metal paneled door (non-original) flanked by paired, double-hung windows. The porch has concrete steps, metal railings and supports, and a metal canopy roof. Detailing includes rusticated stonework at the basement corners and around the door. This house does not feature sufficient distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement windows and door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Rusticated stonework at corners and around the entrance			**Windows** Double-hung, sliding, glass block
Outbuildings (*Number and Description*) None.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Trinity Italian Reformed Church (1938)

Common/Current: New Christian Joy F.G.B.C.

Property Address:

11594 S. State Street
Alternate: 11588 S State Street (per CCA)

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

New Christian Joy F.G.B.C.

Property Use

Historic: Religious

Current: Religious

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
East façade of a brick, 1.5-story religious building.

Property Description: **Stories:** 1.5

This church at the corner of State and 116th streets is clad in buff face brick on a concrete block foundation. The building has a raised basement, gable roof covered with asphalt shingles, and a square corner tower with a hip roof. Its front (State Street) elevation has a centrally located hip-roof entrance pavilion with metal stairs on both sides and a gable wall dormer above. The pavilion features a cross of glass blocks and the flanking walls each have a single square leaded glass window. The side (116th Street) elevation features one large and two small pointed arch windows. This church lacks sufficient distinctive architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Square tower, cruciform-shaped glass blocks, pointed windows, leaded glass			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11118 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Benson & Son Construction Contractor

Property Use

Historic: Industrial (Sash & Screen Door Factory, 1939)

Current: Garage

Date of Construction: 1922

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz, CCA

Date: 6 September 2012

Photos with Captions:
East and north facades of a one-story, concrete block garage.
Cook County Assessor's photo (top), MARS, Inc. photo (bottom):

Property Description: **Stories:** 1

This one-story concrete block garage has a flat roof and parapet. Its front elevation has been covered with what appears to be shotcrete and has an off-center hollow metal door. The structure has a series of overhead garage door openings along one of its side elevations. This structure lacks architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Re-clad with shotcrete
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Concrete block	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Business office attached (11124 S. Stewart Ave.)

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11130 S Stewart Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad with synthetic siding; it has a hip roof covered with asphalt shingles and a hipped roof dormer with louver. The front elevation has an off-center door, wood steps and railings, and a pair of windows that appear to be casements. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11142 S. Stewart Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Industrial

Current: Industrial

Date of Construction: circa 1950

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade two-story, brick light industrial building.

Property Description: **Stories:** 2

This two-story light industrial building is clad with face brick and common brick along its front and side elevations, respectively, and has a flat roof and parapet. The front elevation has an off-center entrance with no door, a large window opening on the first floor that is obscured by foliage, and window openings on the second floor that have been in-filled with both wood and brick. The buff brick between the first and second floors and at the parapet level contrasts with the red brick cladding of the front elevation and may be non-original. Detailing includes dentil molding on the parapet, banding in brick, and stone sills. Side elevation windows are in-filled with glass block. This building lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** In-filled windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Parapet with dentil molding, banding, sills			**Windows** NA
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11224 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East façade of 1.5-story, frame, single family residence.

Property Description: **Stories:** 1.5

This 1.5-story house in the Roseland community is situated on a raised brick basement with glass block windows. The building has a front gable roof covered with asphalt shingles and overhanging eaves with decorative knee braces. The front elevation is covered with faux stone to the top of the first floor windows and in vertical synthetic siding above. It has a partially recessed gable-roofed corner porch with sidewalls covered with synthetic siding, two low squared wood column supports, and wood steps. A glass block window and hollow core metal door are tucked into one side of the porch. A strip of four windows on the first floor and a pair of windows in the gable are non-original one-over-one aluminum-sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding (including faux stone)	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Knee braces, square column on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) Garage			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11229 S. Stewart Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Unknown

Builder/Contractor: Unknown

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
West façade of one-story, single family frame residence.

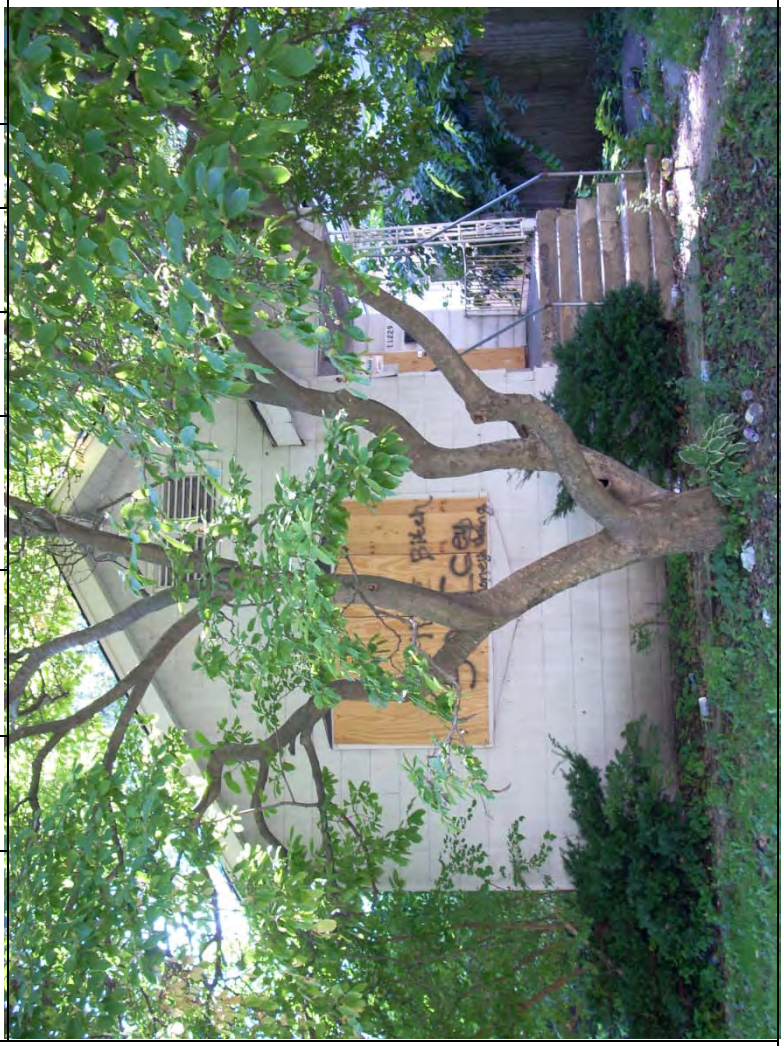

Property Description: **Stories:** 1

This one-story frame home in the Roseland community is clad with synthetic siding and has a front-gabled roof covered with asphalt shingles. Its off-center recessed porch with gabled hood has concrete steps, metal railings, and a corner support, plus a door opening that has been covered with plywood. The bow window on the front elevation and window openings along the side elevations have all been covered with plywood. This home lacks integrity and architectural distinction and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement siding, covered window and door openings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Gabled hood at entrance			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11231 S. Stewart Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1925

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 26 September 2012

Photos with Captions:
West façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland neighborhood is clad with aluminum siding. It has a cross-gable roof covered with asphalt shingles, overhanging eaves, extended rafter ends, and decorative knee brace supports. Its recessed corner porch features wood steps, a wood post, a paneled hollow core metal door with fanlight, and a decorative gable hood with knee brace supports. Its front façade has a strip of four one-over-one windows and a pair of single-pane windows in the attic gable that may be casements. This home does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Cross-gable	
Ornamental Architectural Details Extended rafters, knee braces			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11572 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1903

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-half-story house in the West Pullman community is situated on a raised concrete block basement, is clad with synthetic siding, and has a gable roof covered with asphalt shingles. Its front elevation has a metal core door and two one-over-one windows on the first floor and sliding glass doors on the second floor. All doors and windows are non-original. The metal stairway and balconies are non-original. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, doors, & cladding
Condition: Excellent Good Poor			
Additional Alterations Metal stairway and balconies added			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) Garage and storage shed behind residence.			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11573 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

XOXXOX Charter Bus, Inc.

Property Use

Historic: Warehouse (Sanborn, 1938)

Current: Garage

Date of Construction: 1910

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East façade of brick bus garage building.

Property Description: **Stories:** 1

This one-story former warehouse in the West Pullman community is clad with common brick and has a flat roof, parapet, and a shed-roofed frame wing. Its front façade features the outline of an original door opening that has been in-filled with brick, a non-original overhead metal door, a metal door with transom, and a former door opening that has been in-filled with wood panels and two horizontal strips of small fixed-pane windows. One of the side elevations displays the outlines of former window openings that have been in-filled with brick while the other features an overhead metal garage door. This building does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Windows and door openings in-filled, small addition
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details None			**Windows** Fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11574 S. Wabash Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story house in the West Pullman community is situated on a raised basement and clad with synthetic siding. It has a hip roof covered with asphalt shingles and a hip dormer with a pair of single-pane casement windows. The front elevation features a full-width, hip roof wood porch with faux stone pier supports, an off-center door, and non-original one-over-one windows arranged in strips of two and three on the first and second floors, respectively. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, porch railing
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11578 S. Wabash Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1893

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 10 September 2012

Photos with Captions:
East and south façades of 1.5-story, multi-family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story house in the West Pullman community is situated on a raised concrete block basement with glass block windows. It is clad with synthetic siding and has a gable roof covered with asphalt shingles. The front elevation features a full-width flat-roofed wood porch with supports consisting of low faux stone pedestals topped by wood Doric columns, an off-center wood paneled door, and strips of three one-over-one non-original windows on both the first and second floors. This house does not feature sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alterations			**Additional Notes/Descriptions** Replacement door, windows, cladding, and porch railings
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details Doric columns on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9745 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1964

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is situated on a raised brick basement with glass block windows. It is clad with buff brick and has a hip roof covered with asphalt shingles. Its front elevation has an off-center hollow core metal door, a casement window, a picture window flanked by one-over-one aluminum-sash windows, concrete steps with metal railings and a small patio area. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung, fixed-pane, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Not in CHRS database.

Common/Current: Not in CHRS database

Property address:

11321 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

A Little Bit of Heaven

Property Use

Historic: Apartment building

Current: Public

Date of Construction: circa 1924-1938

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of the four-story, brick building

Property Description: **Stories:** 4

This four-story building at the northeast corner of Wentworth Avenue and 113th Place in the Roseland community has a flat roof and parapet. Its symmetrical front (Wentworth Avenue) elevation is clad with brown face brick and has a centrally located entrance with a glass door and stone surround topped by two stone owls holding books. Windows are non-original one-over-one aluminum-sash; those directly above the entrance have stone casings. Detailing includes stone sills, coping, insert blocks, sill courses, cornice, panels, and pinnacles at the parapet level.

This building is recommended locally significant for National Register listing under Criterion A for Education. Formerly the Roseland Community Hospital Nurses Home, it was built by the hospital as a dormitory and educational facility for its nurses. Closely affiliated with Roseland Community Hospital, which has served as an important institution in the Roseland area since its establishment in 1924, the Nurses Home is an excellent example of this building type on Chicago's South Side. The exterior of the building has very good integrity and the interior—which now functions as a homeless shelter—appears to retain classrooms and other spaces associated with its original use.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and doors
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Unknown	**Roof Features** Parapet	**Roof Type** Flat	
Ornamental Architectural Details Stone casings, sills, cornice, panels, inserts, and pinnacles; stone surround with owls at entrance			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? Yes	**A B C**	**Significance:** Built as a dormitory for Roseland Community Hospital nurses and served as an important educational facility for women training in this profession.

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11334 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1906

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
East and north façades of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story frame cottage in the Roseland community is situated on a raised concrete block basement with casement windows and is covered with synthetic siding. The building has a gable roof with asphalt shingles. The front elevation has a hipped-roof wood porch with Doric columns, an off-center entrance with a hollow core metal panel door, a three-sided bay window on the first floor, and a strip of three windows in the gable. With the exception of the basement, windows are non-original one-over-one aluminum-sash. The north elevation has a hipped-roof wall dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, door, & cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric columns			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11352 S. Wentworth Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1897

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
East façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story home in the Roseland community is clad with synthetic siding, has a gable roof covered with asphalt shingles, has a flat-roofed dormer along one of its side elevations, and is situated on a raised concrete block basement with glass block windows. Its front elevation has a full-width gable roof porch, a portion of which is enclosed with synthetic siding and features a strip of non-original one-over-one windows. The open portion of the porch has a corner support consisting of a low faux stone pedestal topped by a wood Doric column, a window opening that has been covered, wood steps, and metal railings. A pair of non-original one-over-one windows with original wood casing is situated in the gable. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows & cladding
Condition: Excellent Good Poor			
Additional Alterations Dormer and rear addition may be non-original			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details Doric column on porch			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11428 S. Wentworth Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1908

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S.Katz

Date: 22 October 2012

Photos with Captions:
East façade of a 1.5- story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-a-half-story cottage in the Roseland community is situated on a raised concrete block basement and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. Its front elevation has a three-sided bay with plywood-covered windows, a partial-width shed-roofed porch with straight wood railings and posts, and a plywood-covered door. A single non-original one-over-one aluminum-sash window is situated in the gable. The north elevation has a synthetic-clad gable dormer with a single window. Side elevation windows are non-original one-over-one aluminum sash. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows, cladding, and porch rails
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9808 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1963

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 9 October 2012

Photos with Captions:
East façade of a brick, two story, single family residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is situated on a raised brick basement and has a hip roof covered with asphalt shingles. Its front elevation is clad with buff and orange brick with linear concrete inserts and sills. It has an off-center door, a flat-roofed partial-width porch with brick sidewalls, concrete steps and metal railings. It has a picture window flanked by one-over-one aluminum-sash windows on the first floor and two one-over-one aluminum-sash windows on the second floor. It does not feature distinguishing architectural elements and is not individually eligible for listing on the National Register.

Structural Survey

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Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions**
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Hip	
Ornamental Architectural Details Brick banding, concrete inserts and sills			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9904 S Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1923

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
East façade of a one-story, frame, single family residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement, is clad with synthetic siding, and has a hip-on-gable roof covered with asphalt shingles with overhanging eaves and exposed rafters. The front elevation has a pent roof that extends forward above the front windows and door, and is supported by open metal posts. The porch has concrete steps and metal railings. The front elevation also features an off-center door and a picture window flanked by non-original one-over-one aluminum-sash windows on either side. This home does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Pent roof	**Roof Type** Hip-on-gable	
Ornamental Architectural Details Exposed rafters			**Windows** Double-hung, fixed-pane
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
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Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

9905 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1924

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 8 October 2012

Photos with Captions:
West façade of a brick, one-story, single family residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised basement, is clad with brick, and has a side-gabled roof covered with asphalt shingles and overhanging eaves. Its side-gabled elevations are clad with synthetic siding, as is the gable dormer along the front elevation. The roof extends beyond the front elevation to serve as the roof of the porch, which is supported by open metal posts and has metal railings, a wooden deck, and wooden steps. The front elevation features an off-center hollow core metal door, a leaded glass casement window, and two strips of non-original double-hung aluminum-sash windows: one on the first floor and one in the dormer. This home does not feature sufficient distinguishing features to qualify as eligible for individual listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Brick (main), synthetic siding (gable ends and dormers)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Side-gabled	
Ornamental Architectural Details None			**Windows** Double-hung, casement
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property address:

11319 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1909

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 16 September 2012

Photos with Captions:
West façade of one-story, single-family, frame residence.

Property Description: **Stories:** 1

This one-story frame house in the Roseland community is situated on a raised concrete block basement with glass block windows and is covered with synthetic siding. The building has a front gable roof with asphalt shingles. It has a hip-roofed, full-width porch with faux stone supports beneath the deck, wood columns, railings, and steps. The front elevation's off-center door and first floor window group are covered with plywood; paired windows in the gable are non-original one-over-one aluminum-sash. The south elevation has a shed dormer. This house lacks integrity and distinguishing architectural features and is not individually eligible for listing on the National Register.

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505 North State Street
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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current :NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, covered
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11330 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1916

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story home in the Roseland community is clad in synthetic siding and has a cross-gable roof covered with asphalt shingles. Its front façade has a three-sided window bay comprised of non-original one-over-one windows, a recessed front door, and a full-width hipped-roof wood porch with supports consisting of low faux stone pedestals topped by open metal posts. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement windows and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Marengo, Illinois 60152
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11334 S Yale Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Multi-family residence

Date of Construction: 1922

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of two-story, multi-family, frame residence.

Property Description: **Stories:** 2

This two-story home in the Roseland community is situated on a raised basement, clad in synthetic siding, has a hip roof covered with asphalt shingles and overhanging eaves. It features a full-width, hip-roof, wood porch. The front façade has an off-center door, three-sided window bays on the first and second floors comprised of non-original one-over-one windows, and a single one-over-one window on the second floor directly above the door. Its hip dormer has three window openings: two comprised of single-pane windows and a third that is covered with plywood. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Phone (815) 568- 0680

Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11336 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1894

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 1 October 2012

Photos with Captions:
East façade of 1.5-story, single family, frame residence.

Property Description: **Stories:** 1.5

This one-and-one-half-story home in the Roseland community is situated on a raised basement and clad in two layers of synthetic siding. It has a gable roof covered with asphalt shingles and a full-width, hip-roof wood porch with non-original, wooden, square columns and rails. The front façade has an off-center, non-original, hollow metal core panel door with fanlight. It also has a three-sided window bay on the first floor comprised of non-original one-over-one windows and a strip of three, non-original one-over-one windows on the second floor. One of the side elevations has a three-sided bay window and gable wall dormer above. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and siding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11343 S. Yale Ave

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Vacant

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: Jay Martinez, M. C. Bird, J. Guarino

Photo By: Steve Katz

Date: 1 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman bungalow in the Roseland community is situated on a raised concrete block basement with glass block windows. Above, it is clad with synthetic siding on the sides and clapboards on the front. It has a hip roof covered with asphalt shingles, overhanging eaves, and a hip dormer. The roofline extends forward to shelter the full-width, hipped-roof, wood porch that is supported by low faux stone pedestals topped by squat wood Doric columns. The front elevation has an off-center door opening and a three-sided window bay. The door and all window openings have been covered with plywood. This building does not have sufficient integrity or distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Openings covered with plywood, synthetic siding on sides
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Clapboard (front), Synthetic siding (sides)	
Roof Material Asphalt	**Roof Features** Dormer	**Roof Type** Hip	
Ornamental Architectural Details Doric columns on porch			**Windows** Unknown
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

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505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11413 S. Yale Ave.

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1920

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Craftsman

Prepared By: C. Tolmie, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 6 September 2012

Photos with Captions:
West and south façades of single family, frame residence.

Property Description: **Stories:** 1

This one-story Craftsman style bungalow in the Roseland community is situated on a raised concrete block basement and is clad with synthetic siding. It has a hip roof covered with asphalt shingles and a hip dormer with a pair of single-pane or sliding windows. Its roof overhangs to shelter the full-width wood porch with supports consisting of faux stone pedestals topped by squared wood columns. The front façade has an off-center front door, an adjacent single-pane window, and a strip of four double-hung windows. Windows appear to be original wood-sash. This building lacks sufficient integrity and distinguishing architectural features to qualify as individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement cladding
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** Dormer	**Roof Type** Hipped	
Ornamental Architectural Details Square pillars on porch			**Windows** Double-hung, fixed-pane or sliding
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Midwest Archaeological Research Services, Inc.
505 North State Street
Marengo, Illinois 60152
Phone (815) 568- 0680

Historical Resource Recordation Form

Property Name

Historic: Bldg. not labeled, not in CHRS

Common/Current: Unknown

Property Address:

11417 S. Yale Avenue

HAARGIS Number:

Not in database

Present Owner and /or Occupant:

Unknown

Property Use

Historic: Single family residence

Current: Single family residence

Date of Construction: 1914

Architect's Name: Not in CHRS

Builder/Contractor: Not in CHRS

Architectural Style:

Vernacular

Prepared By: J. Martinez, M. C. Bird, J. Guarino

Photo By: S. Katz

Date: 22 October 2012

Photos with Captions:
West façade of a one-story, single family, frame residence.

Property Description: **Stories:** 1

This one-story cottage in the Roseland community is situated on a raised brick basement with glass block windows and is covered with synthetic siding. The building has a front gable roof covered with asphalt shingles. Its front elevation has a full-width porch with a mansard-like roof that is partially enclosed and covered with synthetic siding. This elevation of the porch also has a strip of three non-original one-over-one aluminum sash windows. The open portion of the porch has a metal storm door, concrete steps with metal railings, and an open metal corner post. A pair of non-original one-over-one aluminum-sash windows is situated in the gable. This house lacks integrity and distinctive architectural features and is not individually eligible for listing on the National Register.

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Structural Survey

Integrity: Unaltered Slight Modification Major Alteration			**Additional Notes/Descriptions** Replacement door, windows, and cladding.
Condition: Excellent Good Poor			
Additional Alterations			
Structure Usage Current: NA Historic: NA		**Exterior Wall Surface** Synthetic siding	
Roof Material Asphalt shingle	**Roof Features** None	**Roof Type** Gable	
Ornamental Architectural Details None			**Windows** Double-hung, glass block
Outbuildings (*Number and Description*) None			

Local Landmark	**Y N**	
National Register Historic Places	**Y N**	
National Register Historic District	**Y N**	**Name:**
Individually Eligible? No	**A B C**	**Significance:**

Additional Comments:

Attachment 3
Section 106 Consultation Supporting Documentation

RLE Mailing List for S106 Consulting Parties

Accept	AGENCY	CONTACT	ADDRESS	EMAIL
X	Illinois Historic Preservation Agency (SHPO)	Anne Haaker	One Old State Capitol Plaza Springfield, IL 62701	anne.haaker@illinois.gov
X	Chicago Historic Preservation Div. Dept of Housing & Economic Development	Terry Tatum	33 N. La Salle Street, #1600 Chicago, IL 60602	ttatum@cityofchicago.org
X	Preservation Chicago	Jonathan Fine, Executive Director	4410 N. Ravenswood Chicago, IL 60640	jfine@preservationchicago.org
X	Landmarks Illinois	Bonnie McDonald or L. DiChiera	53 W. Jackson Blvd., # 1315 Chicago, IL 60604	DiChieraL@lpci.org
X	Ridge Historical Society	Jennifer Kenny	9927 S Longwood Dr. Chicago, IL 60643	jennifer.kenny@mindspring.com
X	Rosemoor Community Association	Gloria Cosey, President	10205 S. King Drive Chicago, IL 60628	rosemoorchicago@yahoo.com
X	Friends of the Park	Erma Tranter, President Tim Jeffries	17 N State Street, #1450 Chicago, IL 60602-3315	trantere@fotp.org jeffriest@fotp.org
X	Chicago Neighborhood Initiatives	Angelica Marks	1000 E 111th Street - 10th Floor Chicago, IL 60628	amarks@cnigroup.org
X	Neighborhood Housing Services of Chicago Citywide office	Matt Cole	1279 N. Milwaukee Avenue, 5th Floor Chicago, Illinois 60622	MCole@nhschicago.org
X	Peoria Tribe of Indians of Oklahoma	Frank Hecksher	P.O. Box 1527 Miami, OK 74355	
X	Forest County Potawatomi	Melissa Cook, THPO	P. O. Box 340 Crandon, WI 54520	Melissa.Cook@fcpotawatomi-nsn.gov
X	Miami Tribe of Oklahoma	George Strack, THPO	202 S. Eight Tribes Trail Miami, OK 74354	gstrack@miamination.com
PARTIES ADDED LATER				
X	DCP	Gwendolyn Rice Executive Director	212 E 95th Street Chicago, IL 60619-7208	gmrice@dcpchicago.com

MEETING NOTES

RE: **Section 106 Kick-off Meeting**
Red Line Extension EIS

DATE: **October 24, 2012**

LOCATION: **Conference Call/Webinar**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	**Organization**
Sonali Tandon	CTA
Reggie Arkell	FTA
Anne Haaker	IHPA (SHPO)
Jonathan Fine	Preservation Chicago
Terry Tatum	Chicago Historic Preservation Division
Lisa DiChiera	Landmarks Illinois
Erma Tranter	Friends of the Park
Helene Kornblatt	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group

PREPARED BY: Rebecca Thompson

ISSUE DATE: October 24, 2012

Meeting called to order at 1:00 pm CT

Objective: Red Link Extension Kickoff Meeting for Section 106 Consultation

Item No.	*Item Description*	*Responsibility*	*Due Date*
1	**Welcome/Intro** Sonali welcomed attendees and callers introduced themselves.		
2	**Overview of Section 106 Process** John Mettille provided an overview of the four-step Section 106 process. Reggie Arkell explained that FTA is overseeing the consultation process, working in conjunction with CTA. FTA will make determinations regarding eligibility and effects, referencing recommendations prepared by the consultant and considering input from consulting parties, including the SHPO. John discussed the roles of consulting parties and identified ground rules to ensure everyone has a fair chance to provide meaningful input.		

Item No.	Item Description	Responsibility	Due Date
3	**Project Info & Alternatives** Sonali provided a brief overview of the project area, the No Build alternative, and the three Build alternatives that are being considered: UPRR rail, Halsted rail, and Bus Rapid Transit. John presented the Area of Potential Effects (APE), which defines the geographic boundary where the analysis of historic resources will occur. A larger scale APE map is attached to the meeting summary.		
4	**Schedule/Next Steps** John explained the next steps in the process. Work is underway to identify potential historic properties. We are tentatively planning to hold a meeting to discuss the eligibility of resources in December. A meeting to discuss effects will occur in early 2013.		
5	**Question/Answer** - Jonathan: Is the purple segment on the alternatives map new or existing? It would be a new structure in the median of the expressway. - Reggie: What is the pier spacing for the Halsted Alternative? Spans between piers would typically be 60 to 100 feet, and as long as 140 feet. Span length would be based on site conditions, geometrics, and clearance requirements. - Jonathan: What advantages does the Halsted Alternative offer over the No Build Alternative? Halsted would extend the red line south to serve additional transit markets. The No Build Alternative includes improvements at the 95th Street station which are currently being planned but would not include an extension of the route or other improvements. - Jonathan: Which alternative has the least impacts on historic resources? That is part of what we will determine through this process. - Lisa: Is documentation of the previous study available online? Yes, the project website is http://www.transitchicago.com/redeis Please use following links to access specific materials: Locally Preferred Alternative Report and Scoping Report (http://www.transitchicago.com/Redeis/documents.aspx); Alternatives Analysis Materials (http://www.transitchicago.com/news_initiatives/planning/redextend.aspx) - Lisa: If we have additional information about resources, should we send it to the team? Yes, please direct it to Sonali at STandon@transitchicago.com. - Erma: Are parks covered in the 106 process too? Parks are protected under Section 4(f) regulation, which is a separate law; they will be addressed in the project EIS. The Section 106 process will deal with historic resources; if any parks in the area or park facilities are determined to be historic, they will be considered during the 106 process. If any historic resources are used by the project, they will be addressed under Section 4(f) as well. Parks that are not historic are subject to the 4(f).		

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days.

As requested, contact information for participants is below:

Name	Organization	Email
Sonali Tandon	CTA	STandon@transitchicago.com
Reggie Arkell	FTA	Reginald.Arkell@dot.gov
Anne Haaker	IHPA (SHPO)	Anne.Haaker@Illinois.gov
Jonathan Fine	Preservation Chicago	JFine@preservationchicago.org
Terry Tatum	Chicago Historic Preservation Division	TTatum@cityofchicago.org
Lisa DiChiera	Landmarks Illinois	DiChieraL@lpci.org
Erma Tranter	Friends of the Park	TranterE@FOTP.org
Helene Kornblatt	CWC Transit Group	KornblattHK@cdmsmith.com
John Mettille	CWC Transit Group	MettilleJL@cdmsmith.com
Rebecca Thompson	CWC Transit Group	ThompsonRD@cdmsmith.com
Robert Ball	CWC Transit Group	BallRW@cdmsmith.com

cc: Attendees

MEETING NOTES

RE: **Section 106 Eligibility Meeting**
Red Line Extension EIS

DATE: **January 30, 2013**

LOCATION: **CTA/Conference Call**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	Organization
Sonali Tandon	CTA
George Coleman	CTA
Joseph Iacobucci	CTA
Reggie Arkell	FTA
Mark Assam	FTA
David Halpin	IHPA
Jonathan Fine	Preservation Chicago
Terry Tatum	Historic Preservation Division, Dept. of Housing and Economic Development
Lisa DiChiera	Landmarks Illinois
Erma Tranter	Friends of the Park
Jennifer Kenny	Ridge Historical Society
Gloria Cosey	Rosemoor Community Association
Angelica Marks	Chicago Neighborhood Initiatives
Matt Cole	Neighborhood Housing Services of Chicago, Inc.
Gwendolyn Rice	DCP
Rev. Mitchell Johnson	DCP
Phyllis Palmer	DCP
Helene Kornblatt	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group
Jean Guarino	CWC Transit Group

PREPARED BY: Rebecca Thompson

ISSUE DATE: January 31, 2013

Meeting called to order at 10:30 am CT

Objective: Red Link Extension Eligibility Meeting for Section 106 Consultation

Item No.	*Item Description*	*Responsibility*	*Due Date*
1	**Welcome/Intro** Sonali welcomed attendees. Reggie Arkell explained FTA's oversight role on the project. John Mettille reviewed the agenda.		
2	**Background & Regulations** John Mettille provided an overview of the four-step Section 106 process, which is intended to assess historic resources and their eligibility for listing on the National Register of Historic Places (NRHP). John identified ground rules to ensure everyone has a fair chance to provide meaningful input.		
3	**Review of Area of Potential Effects (APE)** John presented the APE, which defines the geographic boundary where the analysis of historic resources will occur. The area includes over 1,400 acres and 7,000 buildings.		
4	**Methodology for Identification of Historic Properties** The team developed historic contexts for each community in the APE to frame the evaluation of historic properties. The team also conducted field surveys and archival research for over 500 individual properties within the APE. The survey sample included all buildings that would be demolished by one or more alternatives and a sample of other properties; sample properties were concentrated in areas that are likely to experience greater effects. Based on this, eligibility recommendations were developed for individual properties. - Q: Did you look at properties less than 50 years in age that could be significant to the community? A: We primarily examined properties over 50, but we did look for overall significant properties as well as potential historic districts. - Q: Are Chicago Historic Resources Survey (CHRS) red/orange properties shown? A: They are noted in the summary table in section 3 of the handout packet. - Q: What research was done on the social history of the area? For example, what about identifying community meeting places or locations significant in the lives of civil rights leaders? Of the 7,000 buildings in the APE, it is concerning that only 10 are identified as eligible.		

Item No.	Item Description	Responsibility	Due Date
	A: The team developed historic contexts for each of the communities represented in the APE but these focused primarily on the built environment. Part of the intent of the consultation process is to gather your input about what additional resources are out there, particularly from organizations more familiar with the immediately vicinity and social history. If you have information about potentially significant resources, please let us know during the comment period.		
5	**Overview of Surveyed Properties** Nine properties were recommended eligible for NRHP listing. - Residence at 444 W 100th Place - Former substation at 10227 S Halsted Street (gas & electric for the city) - Fire Department at 324 W 104th Street - Roseland Pumping Station (still in use) - Residence at 11310 S Emerald Avenue - Church at 10920 S Princeton Avenue (currently Mary Magdalena Missionary Baptist Church) - Fire Department at 931 W 120th Street - Church at 12433-12439 S Halsted Street - Venetian Hall at 133-139 E Kensington Avenue (currently used as church and shelter) *Note: the address is correct but the property lies in the West Pullman community.* In addition, Altgeld Gardens was determined NRHP eligible in 1992 independent of the project. - Q: How do you account for the fact that the community is under surveyed and underserved? Underrepresentation undercuts the intention of the project. A: The team prepared historic contexts for each community, consistent with the state of the practice. Beyond that, we rely on your input. Once you provide your comments, the team will establish a strategy to move forward. We will respond to comments received and keep you informed. - Q: Does the list of surveyed properties fully cover the area to be considered in the historic/social context? (DCP agreed that it does not.) A: The APE covers the area that could be impacted by the project; it forms the limits for our analysis. - Q: Is there a separate involvement process for Section 4(f)? A: There is a public involvement element if these resources are affected. It isn't a committee, but there is a mechanism to gather input from agencies and others. - Kensington Park along the UPRR corridor should be added to the table on slide 29. *Note: information for Fernwood Parkway was included in the table although the name was mistakenly presented as "Fernwood Park" instead. Wendell-Smith Park is presented as "Smith Playlot" in the table, consistent with the Chicago Parks Department naming convention.*	CWC	3/1

Item No.	Item Description	Responsibility	Due Date
6	**Schedule & Next Steps** John Mettille reviewed the schedule and next steps. - Q: Can you describe the effects for each eligible property? A: We will cover this in the next phase of the process, probably in Spring 2013. - Q: What is the third alternative shown? A: The Halsted Alternative was added during the scoping process to look for options to minimize the impacts on parks and other 4(f) resources. The UPRR Alternative is the locally preferred alternative; we will define a National Environmental Policy Act (NEPA) preferred alternative as part of the NEPA process. - Q: Can the UPRR alternative fall anywhere inside the APE boundary? A: No, it will follow or run adjacent to the existing UPRR alignment. The APE includes a buffer to account for visual, noise, and other indirect effects. - Q: What source did you use for the architects and construction dates? A: CHRS and the County Assessor website. - Two of the photos on slide 26 could be considered contributing within a district. There are enough "Ranchalows" that they could be considered a housing style. The team will provide a full survey map and consulting party list as requested by attendees. Materials will be revised to clarify that properties referenced in Riverdale lie in the Riverdale Community in Chicago rather than Riverdale, Illinois. Please submit written comments on the eligibility materials by February 18.	CWC/CTA	2/6

Following the morning presentation, a number of attendees participated in a driving tour of the project area. Please notify Sonali Tandon of the minutes of any corrections and/or clarifications within five (5) business days.

cc: Attendees

Red Line Extension (RLE) Summary of Eligibility Comments received from Consulting Parties and Responses from Project Team

The following paragraphs briefly summarize comments received from the consulting parties on the eligibility of historic resources for the RLE Project and corresponding responses from the project team. Under the Section 106 consultation process, CTA undertook an extensive data collection and analysis effort during Fall 2012 to identify historic resources located within the Area of Potential Effect (APE) for the three built alternatives that are under evaluation in the RLE Draft Environmental Impact Statement (EIS). This analysis culminated in recommendations regarding the potential eligibility of historic resources pursuant to the National Historic Preservation Act of 1966. These recommendations were presented to the ten consulting parties, including the Illinois Historic Preservation Agency (SHPO), during a meeting on January 30, 2013. Participants were asked to provide relevant information from their perspective that may supplement the National Register of Historic Places (NRHP) evaluations contained within the RLE Draft EIS. Written comments were received from the following six organizations:

- Anne Haaker, Illinois Historic Preservation Agency
- Jennifer Kenny, Ridge Historical Society
- Jonathan Fine, Preservation Chicago
- Lisa DiChiera, Landmarks Illinois
- Matt Cole, Neighborhood Housing Services of Chicago
- Terry Tatum, Chicago Historic Preservation Division, Department of Housing and Economic Development

Based on local knowledge and input from the consulting parties, additional analysis was undertaken regarding historic resources within the APE. The original recommendations presented in January will be revised as described below and presented in the RLE Draft EIS. In addition to the written comments received by CTA, comments from the January 30 meeting will also be incorporated into the Draft EIS to provide additional clarification. Comments and responses are presented by general topic below.

<u>Comments requesting additional surveys:</u>
Several comments requested that the team evaluate additional sites for NRHP eligibility. These additional sites and their evaluations are summarized below, including both individual properties (Comments #1-6) and potential districts (Comments #7-12).

1. American Ideal Cleaning Building at 10343 South Michigan Avenue
   This building falls beyond the APE boundaries.
2. Lilydale Progressive Missionary Baptist Church at 10716 South Michigan Avenue
   This building falls beyond the APE boundaries.
3. Greystone building at 11445-11447 South Michigan Avenue
   This building falls beyond the APE boundaries.
4. Entrance gate and structure at Cedar Park Cemetery at 12584 South Halsted Street
   These structures were field surveyed in February 2013 and are recommended eligible for the NRHP under Criterion C for the high quality craftsmanship and unusual stonework. A site form is attached.

5. Kensington Park
   The Park was field surveyed and, following archival research is not recommended eligible for the NRHP. Purchased by the City in 1942, Kensington Park has been updated throughout the decades and currently contains a number of contemporary recreational amenities that give it a recent appearance: a mid-twentieth century field house that is no longer in use, playground equipment, a splash pad, a paved basketball court, a horseshoe pit, and baseball fields. Although the field house is over 50 years in age, it lacks distinguishing architectural features. As a publicly-owned park, Kensington Park will be addressed in the NEPA document as a Section 4(f) resource.
6. Two-story commercial building at 11206 South Michigan Avenue
   The building was surveyed and is not recommended eligible for the NRHP due to its lack of integrity and distinguishing architectural features. The site form is included on the Eligibility CD as 11200-11206 S Michigan Avenue.

Note: A number of sources consulted during the archival research phase – including the City of Chicago GIS database, Illinois Historic Preservation Agency's HARGIS database, County Assessor Records, and others – present building addresses inconsistently. Street numbers may differ by several addresses: the church at 12433-12439 South Halsted Street is called 12427 South Halsted Street by a different agency, though both refer to the same building. To aid comparisons, the summary table notes alternate addresses for several properties when these inconsistencies were identified during the eligibility assessments.

7. Potential historic district/grouping of cast stone-faced residences on South Eggleston Avenue between 111th & 112th Streets
   Numerous buildings in this location were surveyed as part of the representative sample set, including one cast stone-faced residence on South Eggleston Avenue (11130 South Eggleston Avenue). Individually, this building was not recommended eligible for the NRHP due to its lack of integrity and distinguishing architectural features. Along South Eggleston Avenue near West 111th Street and West 112th Street, there appear to be only two cast stone-faced residences within the APE, which is not sufficient for these properties to be considered as a potential historic district or multiple property grouping.
8. Could groupings of ranchelows contribute to a future NRHP district (between 103rd St, 104th Pl, UPRR, and Princeton Ave)?
   A number of raised ranches were surveyed as part of the representative sample set; none were found to merit individual listing for the NRHP. Although the area (between 103rd St, 104th Pl, UPRR line, and Princeton Ave) contains numerous residences with similar architectural styles, massing, setbacks, and construction dates, architectural historians confirmed that these properties do not retain sufficient integrity for the NRHP as a district due to contemporary - alterations (e.g., replacement siding, porches, windows, and doors). Numerous vacant lots and recent construction, such as the post-1980 Langston Hughes Elementary School that encompasses an entire city block, disrupts the visual cohesiveness of this area.
9. Potential district of Residential Railroad Suburbs or Historic Streetcar Communities, e.g. along the Chicago & Eastern Illinois RR; the Chicago & Great Eastern RR; the Illinois Central RR 121st Street spur; or streetcars along Michigan Ave, 103rd St, 111th St, 115th St, and 119th St.
   After additional fieldwork, no cohesive groupings of historic commercial buildings or community centers were identified along the primary thoroughfares that supported streetcar lines, railroad

lines, or spurs. Therefore, the suggested areas are not recommended as a district or multiple property group.

10. Potential district/group of properties associated with the former Village of Fernwood, generally located between 90th St, 103rd St, Stewart Ave, and Morgan/Halsted Street
    As part of the original fieldwork effort, a handful of these resources were surveyed within the APE. As noted in the letter, many have integrity issues. Many of Fernwood's signature buildings are located outside the APE or have been demolished. Further, the amount of contemporary infill has compromised the historic setting of the residential suburb. Therefore, this area is not recommended as a district or multiple property group.
11. Potential district/group of historic automobile-related buildings along major thoroughfares (e.g. Halsted and Michigan Ave)
    Although a number of auto-related resources were surveyed within the APE, none exhibited sufficient historic integrity to qualify as eligible for the NRHP either individually or as a contributing resource within a multiple property group. All of the surveyed automotive service buildings exhibit contemporary alterations.
12. Chicago Georgian and Raised Ranch Historic Districts
    The Ridge Historical Society and other consulting parties suggested these styles be considered as part of the eligibility discussions for the Section 106 process. Review by architectural historians confirmed that a cluster of these properties exists along an approximately five block area on the east side of Green Street between 104th Street and 109th Street. The streetscape has a cohesive grouping of vernacular homes that is representative of residences that were constructed in the outlying areas of Chicago during the post-World War II era. Although such neighborhoods are common throughout the city, these five blocks include hipped-roof ranch homes, front-gabled cottages, and Chicago Georgian style homes with little to no contemporary infill. The residences date from the 1950s and 1960s with consistent setbacks and similar brick cladding; they appear to be well-maintained. Therefore, the portion of Green Street between 104th Street and 109th Street is recommended as eligible for the NRHP as a historic district for architecture (Criterion C).

<u>Comments requesting reconsideration of surveyed properties:</u>
Several comments requested that the team reconsider properties that were surveyed but recommended not eligible for NRHP listing at the January meeting. These additional properties and their evaluations are summarized below.

13. Sure-Way M.B. Church at the southwest corner of Halsted Street and 120th Street
    The building is not recommended eligible for the NRHP due to lack of integrity and because it no longer serves its original use. The site form is included on the Eligibility CD as 12000 S Halsted Street.
14. Fernwood Parkway
    Fernwood Parkway was evaluated against NRHP criteria and is recommended not eligible for NRHP listing. However, as a publicly-owned park, it will be addressed in the NEPA document as a Section 4(f) resource.
15. Roseland Auto Sales & Service at 11200 South Halsted Street
    The building is not recommended eligible for the NRHP due to its lack of integrity. The setting is compromised by contemporary infill and the exterior has been clad in modern materials. The site form is included on the Eligibility CD as 11200 S Halsted Street.

16. Bethany Reformed Church Manse at Three West 111th Place
    The building was not originally recommended eligible due to its lack of distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society, the resource is recommended eligible for the NRHP under Criterion B due to its association with Reverend Harry J. Hager (1899-1983), a pioneer in media evangelism in Chicago during the mid-twentieth century. A revised site form is attached.
17. Pridjian & Co Building at 11600 South Halsted Street
    The building is not recommended eligible due to its lack of distinguishing architectural features. While the Pridjian & Company business has been in operation for decades, the property does not reach the level of significance required by the NRHP. The site form is included on the Eligibility CD as 11600 S Halsted Street.
18. Roseland Community Hospital Nurse's Home at 11321 South Wentworth Avenue
    The building was surveyed and was not originally recommended eligible due to its lack of distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society during the eligibility discussions for the Section 106 process, the resource could be considered locally significant under Criterion A for Education based on its use as a dormitory for its nurses and as an important nurse training facility. A revised site form is attached.
19. Galloy & Van Etten Cut Stone Contractors Building at 11756 South Halsted Street
    The building was not originally recommended eligible under Criterion C due to its lack of integrity and distinguishing architectural features. However, as a result of additional information provided by Ridge Historical Society during the eligibility discussions for the Section 106 process, the resource could be considered locally significant under Criterion A for its longstanding association with the local construction industry as a 113-year old stone contracting company. A revised site form is attached.
20. Would the substation at 10227 South Halsted Street be eligible under Criterion A as well?
    Yes: the substation is recommended eligible under Criterion A for its association with utilities infrastructure within the city of Chicago. At the January 2013 meeting, it was recommended as NRHP eligible under Criterion C. A revised site form is attached indicating this building as eligible both under Criterion A and Criterion C.
21. Although noted architect Murray Hetherington designed the house at 11001 S Green Street, the resource was only evaluated based on its integrity.
    Numerous residences designed by Hetherington that exhibit greater integrity exist today, including 2078 West Hopkins Place, 8918 South Hamilton Avenue, and 8929 South Hamilton Avenue. Due to the compromised integrity of the Green Street property, it is not recommended as NRHP eligible. The site form is included on the Eligibility CD as 11001 S Green St.

<u>Comments regarding assessment of effects:</u>
The following comments expressed concern about the assessment of effects, which will be covered in the next phase of the consultation process. Noted below, these will be considered in the next phase of the analysis.

22. We object to historic properties being purchased and demolished for construction staging.
23. The proposed BRT route would affect the fewest cultural resources. The UPRR route will affect fewer resources than the proposed Halsted line.

24. Building an elevated rail line down Halsted Street would have negative consequences for the tranquil and bucolic atmosphere of the Cedar Park Cemetery.

Comments requesting minor amendments to the summary table and/or site forms:
The following comments identified minor amendments to the summary table and/or site forms for individual properties. None of these modifications change the NRHP eligibility recommendations. Noted below, these edits will be incorporated; revised materials will be provided along with the effects materials prior to the next phase of the consultation process.

25. The Fire Department Engine Co. 93 building at 324 West 104th Street (alternate address: 328-330 W. 104th St.) is CHRS Orange
26. The Roseland Pumping Station at 351 West 104th Street is CHRS Orange
27. The French Eclectic style house at 11310 South Emerald Avenue was listed as a "local landmark" but is not designated; it is CHRS Orange.
28. The Romanesque Revival style Church at 10920 South Princeton Street is CHRS Orange
29. The two-story commercial building at 11206 South Michigan Avenue is CHRS Orange
30. The architectural firm of Fox & Fox designed the church at 12433-1439 South Halsted Street, which was built in 1958-1959.
31. The Venetian Hall at 133-139 East Kensington Avenue was built in 1925-1926 and designed by Arthur F Hughes.
32. The house at 11310 South Emerald Avenue was built 1927-1928 for Stuart Colman. Inventory form should specify this resource is individually eligible.
33. Property listed as 748 East 103rd Street should be 748 West 103rd Street.
34. The substation at 10227 South Halsted Street was built in 1919-1920.

Other Comments:
Additional comments received are discussed below.

35. There should be a separate category in the spreadsheet for Chicago properties rated as "orange" on the Chicago Historic Resources Survey (CHRS).
    CHRS Orange properties were noted in the summary table provided to consulting parties on January 5, 2013. These properties will be discussed separately within the project's Environmental Impact Statement.
36. We [SHPO] generally concur with the findings of the architectural surveys. It is expected that additional resources suggested will be considered once the final route is selected.
    Comment noted.
37. While we agree that the house at 444 West 100th Place is NRHP eligible, we disagree about the Neo-Traditional style description and are concerned that the replacement of the original tile roof jeopardizes integrity.
    Based on the ornamentation (Neo-Gothic castellated porch roof, Classical colonettes, and arched lintels), the house was identified as an early example of the Neo-Traditional style. It is recommended as NRHP eligible and will be assessed for effects in the next phase of the consultation process.
38. Use of catch-all architectural style descriptors was inconsistent and difficult to sort/review.
    Many of the residential resources are stripped-down brick and frame bungalows and cottages representing the predominant building stock for the study area. Likewise, commercial resources

contain little ornamentation or detailing. The broad term "vernacular" was used whenever a resource did not exhibit a particular architectural style. This approach is consistent with the current state-of-the-practice.

39. Historic functions should match NRHP categories.
    While official NRHP functions were not used on the survey forms, easily identifiable equivalent terms were used to improve comprehension for a broader audience. This approach is consistent with the current state-of-the-practice.
40. Construction dates listed in the Cook County Assessor Records are less reliable than dates listed in building permit records.
    Numerous varied sources were used to establish and cross-check construction dates: County Assessor records, GIS database layers provided by the City of Chicago, the HARGIS database maintained by the Illinois Historic Preservation Agency, Sanborn mapping, etc. This approach is consistent with the current state-of-the-practice.
41. The church at 10920 South Princeton Avenue is currently called Mary Magdalene Missionary Baptist Church.
    The church at 10920 South Princeton Avenue was identified by both its historic name (First Christian Reform Church of Roseland) and its current name (Mary Magdalene Missionary Baptist Church) on the inventory form. The property is eligible for the NRHP due in part to its association with early Dutch settlement in the area, so the historic name was referenced in the presentation.

Illinois Historic
Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • www.illinois-history.gov

Cook County PLEASE REFER TO: IHPA LOG #001010713
Chicago
From Existing 95th Street Station to Approximately 130th St. and Halsted St.

CTA
Red Line Extension

February 4, 2013

Sonali Tandon
Chicago Transit Authority
567 W. Lake St.
Chicago, IL 60661-1498

Dear Ms. Tandon:

Thank you for requesting comments from our office concerning the possible effects of the referenced project on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We appreciated information provided during the meeting at the CTA on January 30, 2013, and the tour that augmented the architectural surveys and introduced the three routes proposed by the CTA. In general we concur with the findings of the architectural surveys submitted to this office prior to the meeting and tour, but during the tour is was noted that resources identified on the Chicago Historic Resources Survey were not identified and that structures such as those located within Cedar Park Cemetery were excluded from the sample. It is likely that our preservation partners present at the meeting will have additional resources that they would like to see included in the survey. It is expected that these additional resources will be considered once a final route has been selected.

In our opinion, the proposed expansion of the BRT route will affect the least amount of cultural resources located within its APE. We also believe the UPRR route that is often adjacent to existing railroad tracks will affect fewer resources than the line proposed on Halsted Street.

We look forward to reviewing the final historic resources report once the comments of our preservation partners have been considered.

If you have questions please contact David J. Halpin, Cultural Resources Manger, at 217-785-4998.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer
AEH:DJH

cc: Marisol R. Simon, U.S. Department of Transportation
Lisa DiChiera, Landmarks Illinois
Terry Tatum, City of Chicago, Illinois

From: Tandon, Sonali [STandon@transitchicago.com]
Sent: Friday, February 15, 2013 4:33 PM
To: Thompson, Rebecca D.; Kornblatt, Helene B.; Lea, Claudia
Cc: 'Bojan, Sharon'
Subject: FW: Red LIne Extension Section 106 - comments on historic resource identification
Attachments: Michigan 11206 S_CHRS orange_dataform.pdf; Michigan 11206 S_CHRS orange.xps

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From: Tatum, Terry [mailto:Terry.Tatum@cityofchicago.org]
Sent: Friday, February 15, 2013 3:13 PM
To: Tandon, Sonali
Subject: Red LIne Extension Section 106 - comments on historic resource identification

Dear Ms. Tandon:

Thank you for the opportunity to comment on historic resource identification efforts for the Red Line Extension Project as part of the ongoing Section 106 consultation process for this project. Our office appreciates the scale and importance of this undertaking, and we commend the CTA's efforts to incorporate historic preservation issues and concerns into its larger planning efforts. We hope to work with you to minimize the effect of the Red Line Extension Project on historic properties.

As part of the Section 106 process, we wish to bring to your attention both general observations on this historic resource identification effort, as well as comments on specific properties that may be impacted by the project.

Chicago Historic Resources Survey red- and orange-rated properties

With the help of your consultant team, you have preliminarily identified properties that are eligible for NR listing. These properties have been listed in the "RLE Draft Eligibility Findings for Surveyed Properties" spreadsheet.

Our office believes that there should be a separate category in the spreadsheet for Chicago properties rated as "orange" on the Chicago Historic Resources Survey. (There are no CHRS "red-rated" buildings in the Red Line Extension's APEs.) Conducted between 1983 and 1995, this city-wide survey identified properties constructed prior to 1940 that were perceived to have, within at least the context of their neighborhoods, some historic significance to these neighborhoods. These buildings were either color-coded red or orange, depending upon the level of their historical and architectural significance as known at the time of the survey.

Although not designated Chicago Landmarks, these CHRS "red" and "orange"-rated properties are covered by the City's Demolition-Delay Ordinance, enacted by City Council in 2003, which allows for an up-to-90-day hold on building permit applications for demolition by the Department of Housing and Economic Development (DHED) for these properties. (More information on this ordinance can be found at http://www.cityofchicago.org/city/en/depts/dcd/supp_info/demolition_delay.html.) Even where such properties have also been determined eligible for National Register listing, we believe that it is prudent of the CTA to separately identify all CHRS orange-rated properties within the APEs on the historic resources spreadsheet. The effect of the Red Line Extension Project on these "orange" properties can then be determined and, if necessary, mitigated through direct discussions with DHED as early in the project as possible.

Observations concerning individual properties located in the APEs

1. Several buildings identified as "orange-rated" in the Chicago Historic Resources Survey (CHRS) were sampled by the CTA's historic resources consultants.

The **Classical Revival substation** at 10227 S. Halsted St. (Map 7) was determined eligible for National Register listing. It is a CHRS "orange-rated" building and was noted as such on the spreadsheet.

The **Fire Department Engine Co. 93 building** at 324 W. 104th St. (alternate: 328-330 W. 104th St.) (Map 30) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

The **Roseland Pumping Station** at 351 W. 104th St. (Map 30) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

The **French Eclectic style house** at 11310 S. Emerald Ave. (Map 12) was listed as a "local landmark" and preliminarily determined eligible of NR listing. However, it is not a designated Chicago Landmark. Instead, it is an "orange-rated" building in the CHRS, but was not noted as such on the spreadsheet It should be so noted.

The **Romanesque Revival style Church** at 10920 S. Princeton St. (Map 34) was preliminarily determined eligible for National Register listing. It is a CHRS "orange-rated" building, but was not noted as such on the spreadsheet. It should be so noted.

2. In addition, one building identified as "orange-rated" on the CHRS and located within the APE for the BRT option was not identified and sampled. The **two-story commercial building** at 11206 S. Michigan Ave. (listed as 11208 S. Michigan on Map 45) was not sampled by the historic resource survey. It is an "orange-rated" building in the CHRS (CHRS data form and Google Earth photo attached) and should be noted as such on the spreadsheet. It should also be separately evaluated for National Register eligibility.

I would be pleased to assist the CTA's consultant team as they gather additional information on historic resources within the APEs for this project.

Sincerely,

Terry

Terry Tatum
Coordinating Planner I
Historic Preservation Division, Dept. of Housing and Economic Development
33 N. LaSalle St., Room 1600
Chicago, IL 60602
312-744-9147
312-744-9140 (fax)
ttatum@cityofchicago.org
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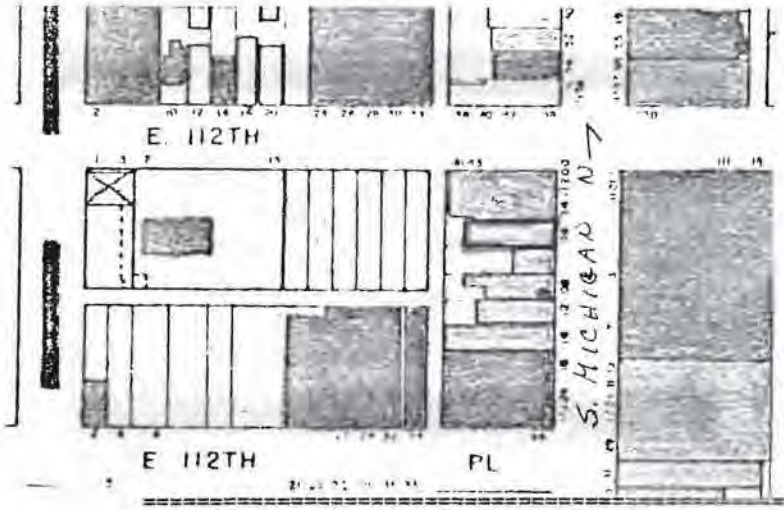

PHOTOGRAPH:

roll no. 9-R4
frame no. 3
orientation: E
photographer: TW
date: 9-28-83

Address: 11206 S. Michigan AV
Color Coded: Orange

District Form No: ___
Form No: 49-9-21-019
No. Cont. Sheets: ___
Surveyors: TW/CR
Date: 9-28-83

COMMISSION ON CHICAGO HISTORICAL AND ARCHITECTURAL LANDMARKS
INDIVIDUAL RESOURCE FORM

Common Name (or major tenant): Excellent Fashions for Men
Historic Name:
Orientation: (circle) N S (E) W NE SE NW SW
Classification: [✓] Building [ ] Site [ ] Structure [ ] Object
[ ] Other:

Evaluation: Potential

	N/I	N/D	C/I	C/D	I/I
F	[ ]	[ ]	[ ]	[ ]	[ ]
A	[ ]	[ ]	[ ]	[ ]	[ ]
H	[ ]	[ ]	[ ]	[ ]	[ ]

Building Type: Commercial, Residential
Style: overall: N/A
details: CLASSICAL
Roof Type: N/✓
Stories: TWO
Approximate dimensions 25 feet (W) x 88 feet (D).
Original Use: Commercial, Residential
Present Use: Commercial, Residential

Approximate Period of Construction:

[ ] pre-1870 [ ] 1910-1919
[ ] 1871-1879 [ ] 1920-1929
[ ] 1880-1889 [ ] 1930-1939
[✓] 1890-1899 [ ] post-1940
[ ] 1900-1909

Materials (including color):
foundation: N/✓
walls: BRICK (Red)
trim: Stone (Gray) Metal/Painted (Mustard Yellow) Wood/Painted (Mustard yellow)
roof: N/✓
porches: N/A
other: N/A

Physical Condition:

	E	G	F	P	NV
foundation:	[ ]	[ ]	[ ]	[ ]	[✓]
walls:	[ ]	[✓]	[ ]	[ ]	[ ]
roof:	[ ]	[ ]	[ ]	[ ]	[✓]
porches:	[ ]	[ ]	[ ]	[ ]	[ ]
other:					
BAY	[ ]	[✓]	[ ]	[ ]	[ ]
____	[ ]	[ ]	[ ]	[ ]	[ ]
overall:	[ ]	[✓]	[ ]	[ ]	[ ]

Alterations, Additions:
One bay window covered w/ wood
Modern 1950s 1st Floor storefront alterations

Noteworthy Features of Resource/Site:
metal dentil cornice w/ garland motif above
metal fascia w/ garland and masks.
Metal 3-sided bay

Rationale for Landmark Potential:
Noteworthy because of the intricate detailing on the fascia.

Relation to Streetscape(s):
Flanked to the S. by modern one story & altered historic 2 story commercial bldg. Flanked to the north by contemporary 2 story commercial bldg and to the east by 1 story modern commercial bldg on a heavily trafficked street.

Field notes:

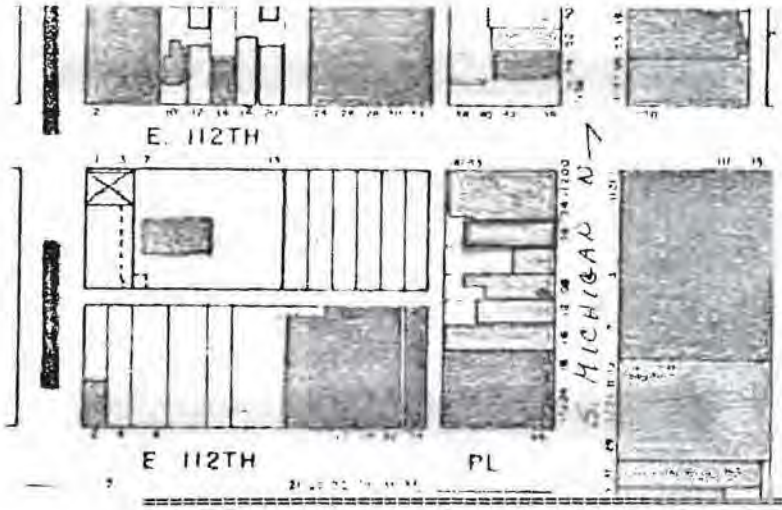

PHOTOGRAPH:

roll no. 9-R4
frame no. 3
orientation: E
photographer: TW
date: 9-28-83

Address: 11206 S. Michigan AV
Color Coded: Orange

COMMISSION ON CHICAGO HISTORICAL AND ARCHITECTURAL LANDMARKS
INDIVIDUAL RESOURCE FORM

Common Name (or major tenant): Excellent Fashions for Men
Historic Name:
Orientation: (circle) N S (E) W NE SE NW SW
Classification: [✓] Building [ ] Site [ ] Structure [ ] Object
[ ] Other:

Evaluation: Potential

	N/I	N/D	C/I	C/D	I/I
F	[ ]	[ ]	[ ]	[ ]	[ ]
A	[ ]	[ ]	[ ]	[ ]	[ ]
H	[ ]	[ ]	[ ]	[ ]	[ ]

Building Type: Commercial, Residential
Style: overall: N/A
details: CLASSICAL
Roof Type: N/✓
Stories: TWO
Approximate dimensions 25 feet (W) x 88 feet (D).
Original Use: Commercial, Residential
Present Use: Commercial, Residential

Approximate Period of Construction:

[ ] pre-1870 [ ] 1910-1919
[ ] 1871-1879 [ ] 1920-1929
[ ] 1880-1889 [ ] 1930-1939
[✓] 1890-1899 [ ] post-1940
[ ] 1900-1909

Materials (including color):
foundation: N/V
walls: BRICK (Red)
trim: Stone (Gray) Metal/Painted (Mustard Yellow) wood/Painted (mustard yellow)
roof: N/V
porches: N/A
other: N/A

Physical Condition:

	E	G	F	P	NV
foundation:	[ ]	[ ]	[ ]	[ ]	[✓]
walls:	[ ]	[✓]	[ ]	[ ]	[ ]
roof:	[ ]	[ ]	[ ]	[ ]	[✓]
porches:	[ ]	[ ]	[ ]	[ ]	[ ]
other:					
BAY	[ ]	[✓]	[ ]	[ ]	[ ]
____	[ ]	[ ]	[ ]	[ ]	[ ]
overall:	[ ]	[✓]	[ ]	[ ]	[ ]

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Metal 3-sided bay

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District Form No: ___
Form No: 49-9-21-019
No. Cont. Sheets: ___
Surveyors: TW/CR
Date: 9-28-83

Field notes:

IDENTIFICATION ON EXISTING SURVEYS:

Date:	Survey:	Listing:
[11/2/83]	[ ] Chicago Landmark (CL).	
[11/2/83]	[ ] Potential CL	
[11/2/83]	[ ] National Register (NR)	
[11/2/83]	[ ] NR Eligible	
[11/2/83]	[ ] Illinois Register.	
[11/2/83]	[ ] State Survey	
[/ /]	[ ] HABS	
[/ /]	[ ] HAER	
[/ /]	[ ] LPCI Inventory.	
[/ /]	[ ] Federal Agency Inventory	
[/ /]	[ ] Other: _____	
[/ /]	[ ] _____	
[/ /]	[ ] _____	

LEGAL DESCRIPTION:

TAX NUMBER: 25.22.105.029.0000

ZONING DESIGNATION: B3-3

AREAS OF SIGNIFICANCE:

BUILDING HISTORY:

[ ] Original Site

[ ] Moved

Date: _____

Source No(s): _____

Original Location: _____

Prepared by: _____

Source No(s): _____

Date: _____

(1) Permit No. NW744 Date: 10-8-1901 SUNDRY. Permit # 112357 File # 296521 8-17-33(1)

File No.

Book No. Pg. COST: $4800 (2)

HISTORICAL SIGNIFICANCE:

Original Owner: O BASS

Source No(s): 2

Prepared by: _____

Source No(s): _____

Date: _____

ARCHITECTURAL/ENGINEERING SIGNIFICANCE:

Architect:		Source No.
Builder:	WILLIAM C WOOD	Source No. 2
Engineer:		Source No.
Other:		Source No.
		Source No.
Date of Construction:		Source No.
Structural system:	BRICK	Source No. 2

Prepared by: _____

Source No(s): _____

Date: _____

SOURCES: [1] "Ancient Permit File Index," Department of Inspectional Services, City Hall, Chicago.
[2] "Permit Ledgers," Department of Inspectional Services, City Hall, Chicago.

Google earth

ihhw 43

p hwhuv 8

February 18, 2013

Sonali Tandon, Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake St
Chicago, IL 60661

RE: Red Line Extension– NR eligible properties in APE

Dear Ms. Tandon,

As requested, we have reviewed the APE boundaries and the properties identified within the APE that are listed in or "eligible" for listing in the National Register of Historic Places by the Red Line Extension project team.

We are very pleased to see the numerous properties identified and acknowledged as historic. However we have the following observations:

- We recommend including all properties that are orange-rated in the Chicago Historic Resources Survey (CHRS) in a separate category due to the fact that they will require an additional mitigation process through the city's demolition delay ordinance.
- During the driving tour of the preferred Red Line Extension routes, I took note of the following properties that were not included in the project team's list of eligible properties that looked as if they could be of possible architectural significance.
    - The American Ideal Cleaning Building at 10343 S. Michigan – a mid-century commercial building
    - The Lilydale Progressive M.B. Church at 10716 S. Michigan
    - City Sports store commercial block at 11102 S. Michigan
    - 11445-47 S. Michigan – Commercial/residential side by side Greystone – rated orange in CHRS
    - 11451 S. Michigan – one story commercial Art Deco building – rated orange in CHRS
    - Sure-Way Missionary Baptist Church at S.W. corner of Halsted and 120th. Art Deco corner building with a mid-century addition on the south side
    - Entrance gates and structure to Cedar Park Cemetery, 12584 S. Halsted
- Based on precedent with the Brown Line renovation project, we object to historic properties being purchased and demolished to make way for construction staging. We hope the team will specifically identify historic properties in the areas where construction staging may be planned to help identify alternative locations.

Thank you for the opportunity to review the findings by your team for this project. Please let me know if we can be of further assistance before the next consultation.

Sincerely,

Lisa DiChiera

Lisa DiChiera
Director of Advocacy

cc: Anne Haaker, IHPA
Jonathan Fine, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago
Matt Cole, NHS

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www.nhschicago.org

February 19, 2013

Ms. Sonali Tandon
Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: Red Line Extension – National Register eligible properties in APE

Dear Ms. Tandon,

As a housing and community development organization with longstanding ties to the greater Roseland area, we appreciate CTA inviting Neighborhood Housing Services of Chicago, Inc. (NHS) to participate in the Section 106 review for the proposed Red Line Extension routes. NHS believes the Red Line Extension project will ultimately enhance the livability and well-being of Roseland and surrounding neighborhoods by increasing transit access for residents. At the same time, we wish to ensure that the project minimizes any undue impacts on the existing residential, community, and historic buildings that make these neighborhoods great and that our experience has shown can be important community-building and engagement assets. Therefore, NHS would like to submit the following comments regarding the National Register eligible properties surveyed by the Red Line Extension project team in the APE:

- We recommend re-evaluating the exclusion of raised ranches – colloquially referred to "ranchelows" for looking like a cross between a Chicago bungalow and a ranch-style home – from the survey. While currently not a formally recognized form of Chicago vernacular architecture, these homes define the look and character of large stretches of the APE adjacent to UPRR right-of-way. We would encourage the CTA project team to determine if groupings of "ranchelows" in the APE could contribute to a future National Register district.
- During the van tour of the preferred Red Line Extension routes on January 30th, we also took note of the following areas that warrant additional surveying/review by the project team:
    - 111th & 112th South Eggleston: A few cast stone-faced residences were observed on or adjacent to these blocks, including one home immediately adjacent to the UPRR right-of-way. These buildings, which look similar to Chicago greystones, are relatively rare and should be evaluated for National Register eligibility.
    - 103rd Street to 104th Place between the UPRR and Princeton Avenue: This area includes the previously identified, National Register-eligible Roseland Pumping Station and Roseland Fire Station properties. However, the blocks also include a largely intact and well-maintained grouping of Chicago bungalows and frame

cottages. We would encourage the project team to conduct a more detailed survey of these blocks to determine if these residential properties could contribute to a future National Register district.

- Though not directly applicable to the survey of National Register-eligible properties, we encourage the project team to carefully evaluate the potential impact of the Red Line Extension on the Fernwood Parkway that runs immediately west of the existing UPRR right-of-way. Albeit simply landscaped, the parkway provides a nice amenity to homes along Eggleston Avneue between 99th and 104th Streets.

In addition to these observations, we fully concur with the recommendations from Lisa DiChiera, Director of Advocacy, at Landmarks Illinois regarding specifically calling out "orange-rated" properties listed on the Chicago Historic Resources Survey; the additional commercial, religious, and community buildings that should be evaluated on Michigan Avenue and Halsted Street; and avoiding the demolition of any historic properties to make way for construction staging.

Thank you again for inviting NHS to participate in the Section 106 review for the Red Line Extension project. Please let us know if we can be of further assistance before the next scheduled consultation.

Best,

Matt Cole
Project Coordinator
Neighborhood Housing Services of Chicago, Inc.

CC: Ed Jacob, NHS
Deborah Moore, NHS
Robert Tucker, NHS
Christopher Smith, NHS
Anne Hacker, IHPA
Lisa DiChiera, Landmarks Illinois
Jonathan Fine, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago

Preservation Chicago

Citizens advocating for the preservation of Chicago's historic architecture

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* Executive Committee

Staff
Jonathan Fine
Executive Director

Stacey Pfingsten
Communications Mgr.

February 20, 2013

Sonali Tandon, Project Manager
Strategic Planning & Policy
CTA
567 West Lake Street
Chicago, IL 60661

Re: Red Line Extension – Possible negative effects to historic properties with in the proposed APE

Dear Ms. Tandon,

Thank you for facilitating the recent driving tour of the three proposed routes for the Red Line extension. I am writing in response to concerns our organization has regarding possible destruction of historic buildings or landscapes with the APE.

I have had a chance to review the comments being submitted by Landmarks Illinois and we agree with and support all of their concerns.

In addition, we are concerned about the negative consequences that building an elevated rail line down the middle of South Halsted Street would have on the tranquil and bucolic atmosphere of Cedar Park Cemetery.

Thank you for your consideration. We look forward to continuing our partnership on this exciting project.

Sincerely,

Jonathan Fine

Jonathan Fine
Executive Director
Preservation Chicago

cc: Anne Haaker, IHPA
Terry Tatum, Historic Preservation Division, DHED
Lisa DiChiera, Landmarks Illinois
Matt Cole, NHS

4410 N. Ravenswood Ave., Chicago, IL 60640 773 334 8800 (O) 773 334 8803 (F)
www.preservationchicago.org

THE RIDGE HISTORICAL SOCIETY
10621 SOUTH SEELEY AVENUE
CHICAGO, IL 60643
773-881-1675
e-mail: ridgehistory@hotmail.com
www.ridgehistoricalsociety.org

February 20, 2013

Sonali Tandon
Chicago Transit Authority
567 West Lake Street, 10th Floor
Chicago, IL 60661

Dear Sonali,

Thanks for the opportunity to be a consulting party to the CTA's Red Line Extension (RLE) Section 106 eligibility process.

The Ridge Historical Society (RHS) serves the Beverly, Morgan Park and Washington Heights community areas on Chicago's south side. For this reason, we are particularly interested in the RLE impact upon historic properties in the APE situated within the Morgan Park and Washington Heights community areas. Both the Halsted Street and Union Pacific Railroad APE are located at the easternmost boundary of our service area. Please note that we do maintain an archival collection that reaches beyond our service area since our history does overlap with nearby areas, including West Pullman and Roseland. We reserve the right to comment on historic resources in other community areas just outside of our service area.

I have reviewed the materials and inventory forms submitted by the consulting team and offer the following comments.

IDENTIFIED NR ELIGIBLE PROPERTIES

The Ridge Historical Society agrees with the National Register (NR) eligibility of the two properties identified by the study in the Washington Heights community areas (our service area) – 10227 S. Halsted Street and 444 West 100th Place. Unfortunately, the team did not identify any NR eligible properties in the Morgan Park community area.

1. We agree that the City of Chicago Department of Gas and Electricity, Southwest Substation, at **10227 South Halsted Street** is NR eligible under C for its architecture, as a rare remaining example of a city government public works building. As stated on the study's inventory form, it is an orange rated building in the Chicago Historic Resource Survey (CHRS). The CHRS did supply a date of construction, 1919-20, that does not appear on the inventory form. I am wondering if this public works building is also NR eligible under A.
2. We agree that the single family dwelling at **444 West 100th Place**, built 1931, is potentially NR eligible under C for its architecture, as a rare brick Bungalow in

Washington Heights with striking Tudor Revival and Mediterranean Revival detailing. The Bungalow sports a handsome crenellated entry, decorative arches, and colonettes. I would not call this building Neo-Traditional, which is an architectural style reserved for late 20th-century buildings. I am concerned that this home once had a clay tile roof, perhaps jeopardizing its integrity. A similar house, designed by architect John Hoche, can be found in Beverly at 1762 W. 94th Street.

Additionally, I am providing architectural and historic info on other properties in the APE flagged as NR eligible by the team:

- The architectural firm of Fox and Fox designed S. S. Peter and Paul Church, **12433-12439 S. Halsted Street**, 1958-59. Architect John J. Fox, Jr. was a longtime resident of Beverly-Morgan Park and a noted local Roman Catholic church designer. He died in 2003.
- Venetian Hall, **133-139 E. Kensington Avenue**, was built in 1925-26 and designed by architect Arthur F. Hughes. Hughes is a local architect who designed a number of striking historic revival style homes in Beverly-Morgan Park.
- **11310 South Emerald Avenue** was built in 1927-28 for owner Stuart Colman. Note: the Individually Eligible category on page 2 of the inventory form says No when it should say Yes.

ADDITIONAL INDIVIDUAL PROPERTIES THAT MAY BE POTENTIALLY ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES

The Ridge Historical Society would like the team to consider the following buildings for NR eligibility:

Roseland Auto Sales and Service Building (Allinone Auto Sales Building)
11200 South Halsted Street (Morgan Park)
Built 1927 for Henry T. Vollmer
Doerr, Lindquist and Doerr, architects

Potentially eligible under Criterion C for architecture as a rare remaining example of a garage and auto sales building from the early 20th-century in Morgan Park. Both Beverly-Morgan Park and Roseland were once major centers of auto sales on Chicago's south side, with dealerships along major area thoroughfares. Building is best known historically as a satellite salesroom for Roseland Auto Sales, featuring Studebakers. Additionally, Midland Terra Cotta Company provided the handsome terra cotta ornament for the one-story brick store building. Its integrity was likely questioned by its wood paneled storefront, but the original storefront may be behind the vertical boards If not individually eligible, perhaps eligible as part of a multiple property listing (see below).

Bethany Reformed Church Manse
3 West 111th Place
Craftsman-style single family residence
Built 1923-24
Purchased by church and addition built in 1928

Potentially eligible under criterion B for its historic associations with Reverend Harry J. Hager, pastor of Bethany Reformed Church from 1929-1975. Hager was a pioneer in media evangelism in Chicago during the mid 20th-century through his Sunday radio ministry broadcasts on local stations WHIP and WCFL. This church-related residence in the Craftsman style retains a high degree of architectural integrity, including a Gothic Revival style entry porch that likely dates to Hager's residency.

K. A. Pridjian and Company Building
11600 South Halsted Street
Built 1960

Potentially eligible under Criterion A for its historic associations with longtime local business, K. A. Pridjian and Company, Rug Cleaning and Sales. Established in 1924 in Roseland, Pridjian first operated at 54 West 111th Street. Owner K. A. Pridjian (d. May 6, 1965) had the facility built specially for his rug operation. Building retains much of its integrity in its mid-century storefront design, materials, and signage. (side note: Almost everyone in Beverly-Morgan Park has their rugs cleaned by Pridjian!)

Roseland Community Hospital Nurses Home
11321 South Wentworth Avenue
Built 1923-24
E. Hall, architect.

Potentially eligible under Criterion C for its architecture as a rare remaining example of a unique education-related building type in Chicago, a hospital-affiliated nurses' home. The three-story brick, Roseland Community Hospital Nurses' Home provided housing and educational opportunities for women training in the nursing profession. The interior may still reflect dormitory rooms, classrooms, and other spaces essential for nurses' training during the early 20th-century. Not sure how many of these building types are left in Chicago, but might be one of the only on the south side.

Galloy and Van Etten Cut Stone Contractors Building
11756 South Halsted Street
Built over time – 1921, 1928, 1946 and 1950

Potentially eligible under Criteria C for its associations with the Van Etten family, prominent local builders on Chicago's south side. Galloy and Van Etten, a longtime cut stone contracting business near the Panhandle railroad tracks, has operated continuously at this site from at least 1909. The cut stone exterior of the buildings within the complex reflects its occupant's trade. Founder Abe Van Etten was the brother of Simon and Henry Van Etten, whose contracting firm known as Van Etten Brothers built monumental residences and religious buildings on the south side. Galloy and Van Etten likely provided the cut stone used in many of these buildings.

NR ELIGIBLE CONTIGUOUS HISTORIC DISTRICTS OR MULTIPLE PROPERTIES

The Ridge Historical Society urges the team to revisit any groupings of historic properties that may be potentially NR eligible as contiguous districts or as multiple property listings The APE is located in a section on Chicago's south side that has been under surveyed in the past, and as a result, little data is available and very few historic resources have been proactively designated as local landmarks or listed in the National Register of Historic Places. Perhaps our community areas need a different approach in this type of study, especially when conducting cultural resource surveys. For example, surveyors could relax harsh integrity standards or look at broader patterns that might lead to multiple property nominations.

Here are some suggestions:

1. Would any of the Historic Residential Railroad Suburbs or Historic Streetcar Communities in the APE be NR eligible as multiple property listings? Since suburban development was extensive outside of nineteenth-century Chicago, perhaps the team could take a second look at the communities that were stimulated and developed along the area's railroads and streetcars in 19th-century Calumet Township and Chicago's early 20th-century neighborhoods. Especially important are those along the Chicago and Eastern Illinois, which came through in 1880-81 (UPRR APE); the Chicago and Great Eastern Railroad, an early subsidiary of the Pittsburgh, Cleveland, Chicago and St. Louis Railway who constructed tracks in 1865 (Halsted APE); and the Illinois Central Railroad who operated an east-west spur at 121st Street. Streetcars were operating along Michigan Avenue, 103rd Street, 111th Street, 115th Street and 119th Street, and stimulating residential and commercial development.

   Properties Associated with the former suburban Village of Fernwood. Fernwood is now part of the Washington Heights community area and within the RHS service area.

   Fernwood, a station stop on the Chicago and Eastern Indiana Railroad was first incorporated as a village in 1886 and annexed to the City of Chicago in Spring of 1891. Focused on a station at the 103rd Street crossing (then Tracy Avenue), Fernwood was mostly a residential district, with a few locally serving commercial buildings. Its boundaries ran from 90th Street on the north, 103rd Street on the south, Stewart Avenue on the East, and Morgan

and Halsted on the west. Developers E. L. Gillette and Henry L. Hill, along with S. Montgomery Smith, laid out Fernwood in 1883 for residential development with an adjacent public park, approximately 75 feet wide along the tracks from 99th Street to 103rd Street. This park, now known as Fernwood Parkway, played a significant role in the development of this railroad suburb. This landscape feature marks the importance of open space, trees, and grassy public space to a growing residential suburb. Within the APE, a number of frame homes on suburban size lots remain, particularly along Eggleston Avenue, representing this period of development. Yet, these residences may have integrity issues (see 10100 South Eggleston Avenue), and many of Fernwood's signature buildings are either outside of the APE (including churches and a public school) or have been demolished (such as the Fernwood Station and Gillette Hall).

2. **Historic automobile-related buildings along major thoroughfares, including service stations, garages and car sales dealerships**. In reviewing the inventory forms in the APE, the team recorded a large number of auto-related buildings, although not contiguous. Halsted Street and Michigan Avenue were both major thoroughfares for the area, and as stated above, both Beverly-Morgan Park and Roseland were once major centers of auto sales on Chicago's south side. Could these buildings be NR eligible as a multiple property nomination?

3. **Chicago Georgian and Raised Ranch Historic Districts**. Just like the Chicago Bungalow Multiple Property Listing and subsequent NR districts, perhaps a multiple property listing is imminent for neighborhoods of Chicago Georgians and Raised Ranches. Both are mid 20th-century vernacular types which evolved from the earlier designs and plans of the American Foursquare and Bungalow respectively. Rows of raised ranches (also known as Bungalow Ranches) are found in the Halsted APE.

<u>GENERAL COMMENTS AND CORRECTIONS</u>:

1. Usage of catch-all architectural styles and types. Most every building I reviewed was labeled vernacular. Architectural styles, when used, were inconsistent. Using catch all categories makes it quite difficult to sort, review and compare important architectural specimens. Upon request, I can provide corrections to architectural styles and types in the Washington Heights and Morgan Park community areas.
2. Historic and current functions and uses should match National Register categories.
3. Construction dates for historic buildings in the APE came from an unreliable source–Cook County Assessor lists. A better primary source, such as City of Chicago building permit records, should be used for those properties determined NR eligible. It is disappointing that the team did not conduct basic research on the very small number of buildings (9) determined eligible in the study under NR Criterion C for architecture. Construction dates, owners, architects and builders would surely add to the historic context and story.

4. 748 E. 103rd Street (Washington Heights) should be **748 W. 103rd Street**.
5. Noted Beverly-Morgan Park architect Murray Hetherington designed the Tudor Revival-style residence at **11001 South Green Street** (Morgan Park), built 1940-41. Although a handsome, small scale Tudor Revival house, strict integrity standards were applied by the team.

Please contact me with further questions.

Sincerely,

Jennifer R. Kenny
Architectural Historian, Ridge Historical Society
773-429-9831
jennifer.kenny@mindspring.com

MEETING NOTES

RE: **Section 106 Effects Meeting**
Red Line Extension Environmental Impact Statement (EIS)

DATE: **May 8, 2014**

LOCATION: **CTA**

TO: **Distribution and All Attendees**

ATTENDEES:

Name	Organization
Sonali Tandon	CTA
Mike Connelly	CTA
Marlise Fratinardo	CTA
Kevin O'Malley	CTA
Gerald Nichols	CTA
Tony Greep	FTA
Mark Assam	FTA
Anne Haaker	IHPA (by phone)
David Halpin	IHPA
Ward Miller	Preservation Chicago
Terry Tatum	Historic Preservation Division, Dept. of Housing and Economic Development
Lisa DiChiera	Landmarks Illinois
Matt Cole	Neighborhood Housing Services of Chicago, Inc.
Jenifer Palmer	CWC Transit Group
John Mettille	CWC Transit Group
Rebecca Thompson	CWC Transit Group
Robert Ball	CWC Transit Group
Virginia Jackson	CWC Transit Group
Erika Sellke	Chicago Park District
Sylvia Jones	Friends of the Parks
Maria Stone	Friends of the Parks

PREPARED BY: Rebecca Thompson

ISSUE DATE: June 6, 2014

Meeting called to order at 10:00 am CT

Objective: Red Line Extension Effects Meeting for Section 106 Consultation

Item No.	Item Description
1	**Welcome/Intro** Mike Connelly welcomed attendees. JM reviewed the agenda and informed attendees that a public Open House is scheduled for May 13.
2	**Review of Project and Previous Section 106 Tasks** ST explained the overall purpose of the project and alternatives. JM provided an overview of the four-step Section 106 process, which is intended to assess project effects on historic resources (those previously identified as eligible for National Register of Historic Places [NRHP] listing). JM identified ground rules and reviewed previous coordination efforts undertaken to date as part of the Project. In response to comments received after the eligibility consultation in January 2013, Kensington Park was surveyed but was not recommended as eligible. Six potential historic districts were suggested; Green Street is recommended as eligible. Nine individual resources were suggested for reconsiderations. Of these, four resources are recommended as eligible based on supplemental information.
3	**Overview of Alternatives** JM presented an overview of the four alternatives that will be evaluated in the EIS: No Action, Bus Rapid Transit (BRT) along Michigan Avenue, the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative. - Q: Is the BRT park-and-ride lot on the north side of 130th Street? A: Yes. - Q: Why are the garages shown as three levels? As shown, it looks like a huge impact on Altgeld Gardens. A: Preliminary ridership analysis indicates park-and-ride demand, which is why we are proposing such large structures. As we fine tune the design moving forward, we'll re-evaluate the garage sizes and incorporate some urban design elements to mitigate the impact. - Q: How many properties would be removed along the Halsted route? A: We'll discuss this at the individual community meetings and Open House. The focus of this meeting is effects on historic resources. - Q: Are the piers for the Halsted line in the sidewalk or street? A: That will be determined in future engineering phases. The straddle bent piers could encroach into the parking lane. - Q: Would the Halsted piers have a similar placement to the structure at the Morgan/Lake? A: Halsted Street has two travel lanes and a parking lane in each direction and is wider than the configuration at Lake Street. The pier type chosen will make a difference on placement too. There could be impacts on parking spaces. *Follow up note: All traffic impacts would be covered in the Transportation section of the Draft EIS.* - Q: How high is the structure along Halsted? A: It varies – roughly 23-30 feet above ground level; the necessary height is determined based on the street clearance requirements. - Comment: In talking with business owners at Galloy & Van Etten Stone Contractors, they are worried about their large trucks being able to access their sites.
4	**Section 106 Effects on National Register of Historic Places Eligible Resources** The team developed effects recommendations based on the conceptual alternatives described previously. JM stepped through each resource. The criteria for determining effects are defined in 36 CFR 800.5. For the three options of Union Pacific Railroad (UPRR) Alternative, the team examined the option that is closest to the historic resource, to represent the worst case analysis. - Q: Will you be sending a copy of the slides? A: The Effects Report provides general information and distances and CTA will have additional

Item No.	Item Description
	boards at the Open House, which will also be posted on CTA website. The effects slides contain preliminary deliberative materials so CTA will not be circulating copies. - Comment: The Cottage/Bungalow District that Neighborhood Housing Services of Chicago (NHS) commented on in the eligibility comments shows up in the map near the Pump Station. - WM: How close is the East Option UPRR track structure to the Pumping Station? A: It is close and almost adjacent– we'll have to look it up. *Follow-up note: Horizontally, it is about 8.8 feet between the pump station and track structure in the UPRR East Option. However this distance is based on conceptual engineering and can change slightly as additional detailed engineering is performed.* - Comment: If there is a future expansion along the UPRR line, we want to be sure that there is ample room to accommodate it. It would be good if the alternative were further from the building; I question whether it is actually a "No Effect" as shown. Response: It is a tight site at the Pumping Station. We are required to be outside of UPRR right-of-way. - Q: Does the analysis include staging areas as well? A: Yes. These are included in the footprints. - Q: How tall is the BRT garage by the Venetian Hall? A: 2 stories *Correction: it is 3 stories with some space for retail and community facilities at ground floor.* - Q: Are there any buildings in the footprint of the proposed garage? A: We looked at all the potential displacements associated with each alternative. There are no structures within the garage footprint that would be displaced. - Q: Is it a possibility to adopt/restore the Venetian Hall as part of the adjacent garage? Or incorporate similar elements in the garage design? A: If there is an adverse effect, we will try to mitigate that. We will look at improving the view of the garage and making it more street friendly. CTA can take this under consideration. - Q: NHS' eligibility comments included the cast masonry structures, one of which appears immediately south of the Venetian Hall. What was the determination there? A: Those were determined non-eligible; several were surveyed and lacked integrity and/or distinguishing architectural features. There wasn't a cohesive grouping either. - Q: What is the building across from the garage, next to Altgeld Gardens? A: There is a park; the buildings next to the park may be part of Golden Gate. - Q: What is the station like for UPRR at the west option? A: Trains stop, unload/load, and turn back. There is no yard or additional tracks at this location – the yard is proposed further north at 120th Street. - Comment: The garage could have a visual impact. Nothing else nearby is built at that scale/height. There may be an impact on the Altgeld Garden Historic District, which will likely gain historic significance into the future due to its association with President Obama. CTA should consider a more modest garage design. - Comment: Several parties would like to see a view of the West Terminal station option from directly across 130th Street at Altgeld. Response: Early communications with community members indicated a local preference for the South Station option, which would have an entrance south of 130th Street. - Comment: Both 130th UPRR station options need further study – there will be impacts to transportation, people's homes, etc. *Follow-up note: All other impacts will be discussed in the Draft EIS.* - Q: How difficult is it to cross from the south station to Altgeld or Philip Homes? A: 130th Street is on a viaduct that allows the tracks and platforms to extend under 130th Street. You wouldn't have to cross 130th Street to get to the Station, only a local street. - Q: Are the viaducts safe for travel?

Item No.	Item Description
	A: Vehicles travel on the 130th Street viaduct today. - Q: Will a station include CTA/CDOT landscaping improvements to link to Altgeld? A: Definitely. A study was conducted focusing on access and connectivity at 130th Street Station. CTA has coordinated and will continue to coordinate with CHA to integrate plans. - Comment: At the Green Street Historic District, track structure will certainly be visible and audible. - Q: What level of noise impacts are anticipated along Green Street? A: Noise mitigation measures (e.g. noise walls, closed deck, etc.) have been incorporated into preliminary designs to mitigate impacts. *Follow-up: Based on the general level noise analysis conducted per FTA guidance, the Green Street Historic District lies at the edge of the moderate noise impact zone, assuming the project includes 3-4 foot high noise barriers and a closed deck structure. Historic experts will reexamine potential effects on the Green Street Historic District.* - Comment: I think property owners who live within the Green Street Historic District would be adversely affected by the Halsted Alternative. Response: That will definitely be looked at as part of the National Environment Policy Act (NEPA) analysis. - Comment: As you look at this more, it would be nice to have a rendering showing how close the tracks are and what the relationship will look like between the Halsted line and Green Street district. - Comment: The former substation is city-owned and vacant. Consider incorporating it into the station. Maybe it could be an entry point. This provides a good opportunity to give back to the community by adopting some of the Chicago Historic Resources Survey Orange buildings, similar to measures at the Wilson station. - Comment: The French Eclectic House would experience the same impacts as Green Street. There are several nice homes within this block, possibly nicer than the resources along Green Street, though they lack the consistency of Green Street. Scale and noise will be issues. These areas could be negatively impacted, driving people to move out of the area. - Comment: Galloy and van Etten is a family business and has been in the area since 1899. Photos show the building dating to 1909; it is a huge resource for the area. The business owner feels like they would be so adversely affected by the Halsted Alternative that they would have to relocate. It is a fourth generation family-owned business and provides a lot of employment. They are also concerned about the proximity to the 119th Street yard. - Comment: A lot of businesses are within the 119th Street yard. It used to feed all of Roseland with jobs. Many of the buildings have been demolished but some are left and could be negatively impacted. Response: CTA is coordinating with Far South Community Development Corporation regarding potential impacts on businesses. - Comment: Several consulting parties requested renderings for the four adversely affected resources along Halsted. - Q: What about impacts on the rest of the cemetery? A: Only the gatehouse/entryway is considered eligible. Comment: The impacts on the cemetery will be assessed as part of NEPA analysis. - Q: Is the fire station within the rail yard still accessible? A: Yes. - Comment: By placing the tracks so close to the resource, are you precluding future viability of the resource to function? This is an issue at the fire station and the St. Peter & Paul Church in particular. TT: The fire station's current location isn't particularly viable as it is today. Perhaps relocating this building should be a consideration as part of mitigation, although we don't typically like to

Item No.	Item Description
	move structures. The fire station would be more viable on an arterial. The trend city-wide has been to close a number of these smaller structures. - Comment: We've heard some good ideas regarding mitigation, but there are a few steps between now and then. We still have to have a selected alternative before developing detailed mitigation measures.
5	**Schedule and Next Steps** There is an open house next week. A Draft EIS is being prepared, which will include additional analyses and public involvement opportunities. - Q: When would a single preferred alternative be selected? A: The Final EIS would be prepared on a single alternative. - Q: Is there a way to understand whether any of the resources we identified in the eligibility phase that were not determined eligible would be affected? A: They were not examined as part of this analysis since we evaluated only eligible buildings or districts for Effects determination. - Comment: Please resend the responses to eligibility comments.

Please notify ST of any corrections and/or clarifications to the minutes within five (5) business days.

cc: Attendees

Red Line Extension (RLE) Summary of Effects Comments received from the Consulting Parties and Responses from the Project Team

The following paragraphs briefly summarize comments received from the consulting parties regarding the project effects on historic resources for the RLE Project and corresponding responses from the project team. Under the Section 106 consultation process, the Chicago Transit Authority (CTA) undertook an extensive data collection and analysis effort during fall 2012 to identify historic resources located within the Area of Potential Effect (APE) for the three build alternatives that are under evaluation in the RLE Draft Environmental Impact Statement (EIS). This analysis culminated in recommendations regarding the potential eligibility of historic resources pursuant to the National Historic Preservation Act of 1966. These recommendations were presented to the ten consulting parties, including the Illinois Historic Preservation Agency (IHPA), during a meeting on January 30, 2013. Input from consulting parties was considered throughout 2013, resulting in 13 individual properties and two historic districts being identified as eligible under the National Register of Historic Places (NRHP) criteria.

Following this step in the consultation process, CTA undertook an analysis of effects on NRHP-eligible historic properties in accordance with criteria established in 36 CFR 800.5. This analysis culminated in recommendations regarding the potential effects on historic resources, which were mailed to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. An in-person meeting was conducted on May 8, 2014 to discuss these recommendations. Participants were asked to provide relevant information from their perspective that may supplement the effects recommendations summarized in the April 18 packet. Written comments were received from the following four organizations:

- Anne Haaker, Illinois Historic Preservation Agency (IHPA)
- Lisa DiChiera, Landmarks Illinois
- Matt Cole, Neighborhood Housing Services of Chicago
- Terry Tatum, City of Chicago, Department of Planning and Development, Historic Preservation Division

Comments and responses are presented by general topic below. Based on local knowledge and input from the consulting parties, additional analysis was undertaken regarding historic resources within the APE. The original recommendations presented in April/May 2014 will be revised as described below and presented in the RLE Draft EIS.

The CTA announced on August 10, 2014 that as part of its planning process to extend rail service to 130th Street on the far South Side, it has narrowed down the alternatives to two preliminary options for the proposed RLE Project. Based on feedback received from the public this spring and summer via community meetings and comments provided to the agency, the CTA is now focusing on one “preferred alternative” with two possible variations from the three build alternatives that have been under consideration. The CTA believes these options would best serve communities and residents on the Far South Side:

≠ Union Pacific Railroad Rail (UPRR) Alternative, East Option. Under this option, CTA tracks would be placed immediately east of the Union Pacific railroad right-of-way from 99th Street to 118th Street

≠ UPRR Alternative, West Option. Under this option, CTA tracks would be placed immediately west of Union Pacific's right-of-way from 99th Street to north of 118th Street.

The proposed alignment of the rapid transit line would be the same for the two East and West options north of 99th Street and south of 118th Street.

Eligibility Reconsideration Requests

1. Resurvey the grouping of Chicago bungalows and frame cottages at 103rd Street to 104th Place between the UPRR line and Princeton Avenue.
   Nine resources (Chicago bungalows and frame cottages) were surveyed as part of the representative sample of surveys. Although the area contains numerous residences with similar architectural styles, massing, setbacks, and construction dates, architectural historians verified that these properties do not retain sufficient integrity for the NRHP as a district due to contemporary alterations (e.g., replacement siding, porches, windows, and doors). None were found to merit individual listing for the NRHP due to their integrity. Numerous vacant lots disrupt the visual cohesiveness of this area. Despite the general consistency in property types, the collection of bungalows and frame cottages is broadly representative of residential areas on the South Side, lacking the distinguishing elements to qualify as NRHP eligible. Please refer to forms 301, 306, 321, or 326 W 103rd Place; 262, 328, or 335 W 104th Place; or 310 or 325 W 104th Street on the Eligibility DVD provided to consulting parties on January 4, 2013 for specific examples.

2. Reconsider eligibility determinations for cast stone-faced residences adjacent to the UPRR right-of-way, including the property adjacent to the Venetian Hall.
   The properties adjacent to the Venetian Hall are a brick two-flat (129 E Kensington Ave on southwest side) and a vinyl-clad multi-residence (141 E Kensington Ave on the east side). Neither building exhibits distinctive architectural features or sufficient integrity for inclusion on the NRHP. Likewise, the two cast stone-faced houses facing the Venetian Hall (122 and 136 E Kensington Ave) do not feature distinctive architectural elements or sufficient integrity for inclusion on the NRHP. Architectural historians verified that these properties do not retain sufficient integrity for the NRHP due to contemporary alterations (e.g., replacement porch, windows, and doors), compromising the historic materials and workmanship. No cohesive set of similar properties has been identified in the vicinity that would merit consideration as a potential historic district or multiple property grouping.

3. Reassess the area around 111th Street at Emerald Avenue for a potential district.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The area around 111th Street at Emerald Avenue is distant from the UPRR Alterative corridor and would not be affected by the RLE Project.

Effects Reconsideration Requests

4. Reevaluate the visual, noise, and economic effects of the Halsted Alternative on the Green Street Historic District, which could have a significant impact on the quality of life without proper mitigation.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The Green Street Historic District is distant from the UPRR Alterative

corridor and would not be affected by the RLE Project.

5. Reassess No Effect finding for the Altgeld Gardens Historic District based on the UPRR Alternative. The proposed station and garage would alter the landscape; a rendering should be developed.
   Altgeld Gardens Historic District is eligible for NRHP listing under Criterion A (i.e., events that have made a significant contribution to the broad patterns of American history on a local, state, and/or national level) based on its association with community development, planning, and social history. As defined by 36 CFR 800.5, an adverse effect on this resource would be an "alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the NRHP." While the UPRR Rail Alternative would increase transportation choices and improve access for this geographically isolated area, none of the proposed infrastructure improvements in the vicinity would significantly alter the characteristics that qualify the district as eligible for NRHP listing. As part of the UPRR Rail Alternative, an at-grade station and parking facilities would be constructed in one of two locations to provide access to the Altgeld Gardens Housing Project: a South Station Option or a West Station Option. Either station location option is separated from Altgeld Gardens Historic District by a multi-lane street (i.e., E. 130th Street and/or E. 130th Place). Preliminary plans for each terminal station option would include parking for 2,300 vehicles through a combination of a parking structure and surface parking lots.

   The South Station Option parking structure for the UPRR 130th Street Station is approximately 800 feet from Altgeld Gardens Historic District at its closest point; the parking structure would not be visible from within the historic district and would not adversely affect the historic district.

   The West Station Option parking structure for the UPRR 130th Street Station is approximately 400 feet from Altgeld Gardens Historic District at its closest point and would only be visible from the outer line of buildings on the north side of the Altgeld Gardens development. This outer row of buildings would obstruct the view of the parking structure from interior buildings and streets. The construction of the West Station Option would not adversely affect the characteristics that qualify the district as eligible for NRHP listing, i.e. its association with community development, planning, and social history.

   As the project would not adversely affect the integrity of the district or its association with community development, planning, and social history, any visual simulation rendering and any appropriate mitigation measures identified would occur independent of the formal Section 106 consultation process for this resource.

   The UPRR Alternative has been selected as the National Environmental Policy Act (NEPA) Preferred Alternative, and an additional rendering of the station will be developed and presented as part of the Draft EIS to assist local stakeholders in understanding the extent of visual impacts created by the project.

6. Reassess No Effect finding for the Roseland Pumping Station based on the UPRR Alternative.
   For the UPRR East Option, the track structure is approximately 8.8 feet from the side of the building at its nearest point. It should be noted that an existing at-grade freight line runs in close proximity to this location. The pumping station would not be displaced or directly affected by the UPRR Rail Alternative. The changes in the setting (e.g., visual, noise, vibration, etc.) would

not adversely affect the characteristics that qualify the resource as eligible for NRHP listing, i.e. its architecture.

The UPRR West Option would also not affect the characteristics that qualify the resource as eligible for NRHP listing.

7. CTA should develop appropriate renderings for all properties in the APE where there was a finding of No Adverse Effect or Adverse Effect.
   CTA will develop additional visual simulation renderings, for inclusion in the Draft EIS, of the UPRR Alternative, which has been selected as the NEPA Preferred Alternative. Renderings are particularly helpful in understanding the extent of visual impacts and in developing appropriate mitigation measures for any adversely affected historic resources.

   At the current stage of Effects consultation, additional renderings would not change the effects findings for NRHP-eligible resources. Justification for effects findings was provided in the effects report mailed to consulting parties and additional justification is included in this document. As a reminder, the key consideration is whether the project would alter the specific characteristics that qualify a resource as eligible for the NRHP.

   In addition to the Historic impacts, the Draft EIS will also include a discussion of the potential visual impacts of the RLE Project alternatives, including general renderings of the alternatives that were prepared to assess those impacts. Some of those renderings were also presented at the May 13th CTA open house and the exhibit boards can be viewed at http://www.transitchicago.com/assets/1/red_ahead/MS_CWC_CL_RLE_Exhibit_Boards_lowres_FINAL_20140515.pdf

8. Renderings should be developed for any NRHP or Chicago Historic Resources Survey (CHRS) Orange properties potentially impacted by the close proximity of the proposed elevated track structures.
   See Response #7.

9. The property owner of the Galloy and Van Etten Stone Contractors business is concerned about their access and viability if the Halsted Alternative is built.
   CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The Galloy and Van Etten Stone Contractors business is distant from the UPRR Alternative corridor and would not be impacted.

10. Noise studies should be undertaken to demonstrate that the introduction of the elevated rail structure on Halsted would not adversely affect historic resources within the APE of that route.
    CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. Noise analysis has been conducted per Federal Transit Administration (FTA) guidance and mitigation measures have been identified, which will be presented in the Draft EIS.

11. The French Eclectic House would experience the same impacts as Green Street. Scale and noise would be issues. These areas could be negatively impacted, driving people to move out of the area.

CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued. The French Eclectic House is distant from the UPRR Alterative corridor and would not be affected by the RLE Project.

Other Comments

12. In general, we [IHPA] concur with the findings concerning historic architectural resources presented in the draft report. The Bus Rapid Transit (BRT) Alternative would have the least impacts, followed by the UPRR Alternative.

13. The potential to encounter archaeological resources needs to be addressed. If the potential for undisturbed archaeological resources exists, a survey will be required.
    No previously recorded archaeological sites fall within the RLE APE and therefore the project would produce no effect on known archaeological resources. The need for and extent of further archaeological investigations will be determined in consultation with IHPA.

14. CTA should consider incorporating the city-owned, vacant historic substation (10227 S. Halsted Street) into plans for the nearby station.
    CTA has narrowed down the alternatives for the RLE Project and the Halsted Alternative is no longer being pursued; the vacant historic substation would not be affected by the RLE Project.

Illinois Historic
Preservation Agency

FAX (217) 524-7525

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • www.illinois-history.gov

Cook County
Chicago
Red Line Extension
From Existing 95th Street Station to Approximately 130th St. and Halsted St.
IHPA Log #001010713

May 22, 2014

Sonali Tandon
Chicago Transit Authority
567 W. Lake St.
Chicago, IL 60661-1498

Dear Ms. Tandon:

Thank you for requesting comments from our office concerning the possible effects of the referenced project on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We are in receipt of the 2014 *Draft Effects Report*, and appreciated the opportunity to participate in the May 8, 2014 meeting at the CTA where your findings were presented. In general we concur with the findings concerning historic architectural resources presented in the draft report. However, the report indicates that noise walls will reduce the amount of noise that resources such as the proposed Green Street Historic District will experience. Noise studies that include current conditions will need to be undertaken to demonstrate that the introduction of the elevated rail structure on Halstead will not adversely affect historic resources located within the APE of that route.

It was noted in the report that archaeological resources may be uncovered during construction activities and that they would be investigated once found. At a minimum, the potential to encounter archaeological resources needs to be addressed and the results need to be presented to this office for review. If the potential for undisturbed archaeological resources exists within the areas of potential effect, a survey will be required.

As previously stated, it is our opinion that the proposed BRT route will affect the least amount of cultural resources located within its APE. We also believe the UPRR route that is often adjacent to existing railroad tracks will affect fewer resources than the elevated line proposed on Halsted Street.

We look forward to reviewing the final historic resources report once the preferred alternative has been selected and all cultural resource surveys have been completed.

If you have questions please contact David J. Halpin, Cultural Resources Manager, at 217-785-4998.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer

c: Lisa DiChiera, Landmarks Illinois
Terry Tatum, City of Chicago, Illinois
Marisol R. Simon, U.S. Department of Transportation
Mark Assam, U.S. Department of Transportation
Marlise Fratinardo, Chicago Transit Authority
Ward Miller, Preservation Chicago

May 22, 2014

Sonali Tandon, Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 W. Lake St
Chicago, IL 60661

RE: Red Line Extension – Potential Effects Consultation Comments

Dear Ms. Tandon,

Thank you for the opportunity to review on May 8th the Red Line Extension team's findings and recommendations regarding historic properties in the APE. We are pleased to see some additions made to the list of National Register-eligible properties and the identification of orange-rated buildings in the Chicago Historic Resources Survey (CHRS) based on our February 18, 2013 letter.

From the May 8th meeting, we have the following comments:

- We strongly recommend that better renderings are produced to illustrate the potential impact of a UPRR West Station and four-story parking garage on 130th Street and the adjacent Altgeld Gardens Historic District.
- We agree with comments made during the meeting that the "No Effect" determination made for the Roseland Pumping Station, 351 W. 104th St., and Altgeld Gardens Housing Project Historic District, under the UPRR Rail scenario, should be reassessed as potentially having an "Adverse Effect" determination.
- We recommend producing renderings that will illustrate the "Adverse Effect" on National Register-eligible properties in the Halsted Rail scenario. This is particularly important if the proximity of rail tracks could potentially make these properties less viable in the future. These properties include:
    - The Former Classic Revival Substation, 10227 S. Halsted St.
    - The S.S. Peter & Paul Catholic Church at 12433-12439 S. Halsted St.
    - Cedar Park Cemetery Entryway and Gatehouse, 12540 S. Halsted St.
    - Fire Department Engine Company 115, 931 W. 120th St.
- While we understand that the design phase of a Halsted Rail scenario, if selected, will be some time later, we would like consideration to be made of incorporating the city-owned and vacant historic substation at 10227 S. Halsted St. into plans for a station that was indicated would be built in that vicinity.
- Lastly, we support the reassessments suggested by Matt Cole of Neighborhood Housing Services in his May 14, 2014 letter.

Again, thank you for the opportunity to review the findings by your team for this project.

Sincerely,

Lisa Di Chiera

Lisa DiChiera
Director of Advocacy

cc: Anne Haaker, IHPA
David Halpin, IHPA
Ward Miller, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago
Matt Cole, NHS

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May 14, 2014

Ms. Sonali Tandon
Project Manager
Strategic Planning & Policy
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: Red Line Extension – Potential Impacts to National Register Eligible Properties in APE

Dear Ms. Tandon,

Thank you again for inviting NHS to participate in the Section 106 review process for the Red Line Extension project. We believe that extending the Red Line will ultimately enhance the livability and well-being of the greater Roseland-area. At the same time, as an organization rooted in the use of asset-based community development strategies, we wish to ensure that the project minimizes any undue impacts on the existing residential, community, and historic buildings that make these neighborhoods great and that our experience has shown can be important community-building and engagement assets. Therefore, based on the information presented in the May 9th Effects Meeting, we recommend that the following additional actions be undertaken by the project team before any mitigation planning is undertaken:

- Develop appropriate and assessable renderings for all properties in the APE where there was a finding of No Adverse Effect or Adverse Effect. This currently includes the Former Venetian Hall, the Green Street Historic District, the Former Classical Revival Substation, Galloy and Van Etten Stone Contractors, S.S. Peter & Paul Catholic Church, Cedar Park Cemetary Entryway and Gatehouse, and Fire Department Engine Company 115. We also believe that such renderings should be created, as necessary, based on our recommendations below (e.g, re: Altgeld Garden Historic District).

- Re-Survey 103rd Street to 104th Place between the UPRR and Princeton Avenue: This area includes the previously identified, National Register-eligible Roseland Pumping Station and Roseland Fire Station properties. However, the blocks also include a largely intact and well-maintained grouping of Chicago bungalows and frame cottages. We would encourage the project team re-survey these blocks to determine if these residential properties could contribute to a future National Register district, as well as any potential impact that a UPRR-located elevated train line would have on such a district.

- Reassess Determination that Cast Stone-faced Residences in APE are not National Register Eligible: Several of these buildings, which look similar to Chicago Greystones and are relatively rare, were observed adjacent to the UPRR right-of-way. This includes the 2-flat on Kensington Avenue immediately east of the Former Venetian Hall.

- Reassess Finding of No Adverse Effect on Potential Green Street Historic District: Re-evaluate visual, noise, and economic effects of a Halsted-located elevated train line on homes along Green

Street. While such train lines do run through other residential areas of Chicago (e.g., Pink Line), this corridor would be new and could have a significant impact on the quality of life of the area without proper mitigation.

- Reassess Area Around 111th Street and Emerald Avenue for Potential Historic District: Re-survey area around 11310 South Emerald (Emerald, Union, and Wallace Avenues) for eligibility as a historic district. If determined eligible, assess effect of a Halsted-located elevated train line on the district.

- Reassess Finding of No Effect of a UPRR West Station on Altgeld Gardens Historic District: The proposed station, station house, and four-story parking garage would be located immediately to the north of Altgeld Gardens. The height of the parking garage would be taller than any other properties in the area and would likely loom above the landscaped tree line of 130th Street. The existing rendering of the proposed station developed by project team is inadequate to assess the effect of the station due to its oblique view from the west.

Thank you again for inviting NHS to participate in the Section 106 review for the Red Line Extension project. Please let us know if we can be of further assistance before the next scheduled consultation.

Best,

Matt Cole
Project Coordinator
Neighborhood Housing Services of Chicago, Inc.

CC: Ed Jacob, NHS
Deborah Moore, NHS
Robert Tucker, NHS
Phillip Snorden, NHS
Anne Hacker, IHPA
Lisa DiChiera, Landmarks Illinois
Ward Miller, Preservation Chicago
Terry Tatum, Historic Preservation Division, HED, City of Chicago

From: Tatum, Terry [mailto:Terry.Tatum@cityofchicago.org]
Sent: Tuesday, May 20, 2014 4:16 PM
To: Tandon, Sonali
Cc: Halpin, David
Subject: Red Line Extension Historic Properties Consultation

Dear Ms. Tandon,

Thank you for hosting the consulting parties meeting held at CTA headquarters on May 8, 2014 for the Red Line Extension Historic Properties Consultation. We appreciate the opportunity to comment on the draft effects to historic properties that were discussed at that meeting.

Based on information provided, our comments are as follows:

1. Properties determined to be historic and/or color coded orange in the Chicago Historic Resources Survey and that would be potentially impacted by close proximity of elevated tracks under any of the alternative routes being considered should have photo renderings executed to show the effect of such close proximity of tracks. This would mainly include properties along the Halsted St. alternative, but would also include the UPRR east alternative route as it would affect the Roseland Pumping Station.

Our office looks forward to continuing to work with you on this exciting undertaking.

Sincerely,

Terry Tatum
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Appendix R

Hazardous Materials Technical Memorandum

- Final EIS Addendum R, Hazardous Materials Technical Memorandum, July 2022
    - Attachment A: Final Corridor Level Phase 1 Environmental Site Assessment Report, June 2021

Chicago Red Line Extension Project

Hazardous Materials

Final EIS Addendum R

July 2022

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
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Table of Contents

Section 1 - Summary **1-1**
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Methods 3-3
Section 4 - Affected Environment **4-1**
4.1 Phase I Environmental Site Assessment 4-1
4.2 Phase II Environmental Site Assessment 4-8
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-1
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative – Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS) 2-4
Figure 4-1: RECs Identified during the Site- Specific Phase I ESA Investigations (Page 1 of 3) 4-5
Figure 4-2: RECs Identified during the Site-Specific Phase I ESA Investigations (Page 2 of 3) 4-6
Figure 4-3: RECs Identified during the Site-Specific Phase I ESA Investigations (Page 3 of 3) 4-7
Figure 4-4: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (Page 1 of 3) 4-9
Figure 4-5: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided(Page 2 of 3) 4-10
Figure 4-6: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (Page 3 of 3) 4-11

Tables

Table 1-1: Summary of Soil Management by Grouping 1-2
Table 4-1: Groupings Containing Potentially Hazardous or Regulated Materials 4-1
Table 4-2: Summary of Recognized Environmental Conditions (RECs) Where Access Has Not Been Provided.....4-2
Table 4-3: Summary of Phase II ESA Investigations and Soil Remediation Objective Exceedances.....4-12
Table 4-4: Groundwater Remediation Objective Exceedances.....4-14
Table 4-5: Hazardous Materials Survey Summary.....4-15

Attachments

Attachment A Corridor Level Phase I Environmental Site Assessment

Abbreviations

ACM	Asbestos-Containing Materials
AIS	Assets, Information and Services
API	Area of Potential Impact
AST	Aboveground Storage Tank
BMP	Best Management Practices
CCDD	Clean Construction or Demolition Debris
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHA	Chicago Housing Authority
CN/MED	Canadian National/Metra Electric District
CTA	Chicago Transit Authority
CREC	Controlled Recognized Environmental Condition
DOT	Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESA	Environmental Site Assessment
FPCC	Forest Preserves of Cook County
FTA	Federal Transit Administration
GPR	Ground Penetrating Radar
GRO	Groundwater Remediation Objectives
HREC	Historical Recognized Environmental Condition
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency

LBP	Lead-Based Paint
LUST	Leaking Underground Storage Tank
MAC	Maximum Allowable Concentrations
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NS	Norfolk Southern Railway
OSFM	Office of the State Fire Marshal
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyls
PNA	Polynuclear Aromatic Hydrocarbons
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
RLE	Red Line Extension
RO	Remediation Objectives
SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act
SOP	Standard Operating Procedure
SPCC	Spill Prevention, Control and Countermeasure
SRO	Soil Remediation Objectives
SRP	Site Remediation Program
SVOC	Semi-volatile Organic Compound
SWPPP	Stormwater Pollution Prevention Plan
TACO	Tiered Approach to Corrective Action Objectives
TAL	Target Analyte List
UPRR	Union Pacific Railroad
USEPA	Unites States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

Section 1 - Summary

This technical memorandum analyzes the potential impacts on hazardous materials for the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative. Consistent with the conclusions outlined in **Appendix R** of the Draft Environmental Impact Statement (EIS), the Red Line Extension (RLE) Project would result in adverse and beneficial impacts on hazardous materials on properties that would be acquired or used for the RLE Project.

The Chicago Transit Authority (CTA) conducted a Corridor Level Phase I Environmental Site Assessment (ESA) on parcels of properties that would be needed for the 5.6-mile extension of the Red Line. The findings of the Corridor Level Phase I ESA were used to determine where site-specific Phase I ESAs should be conducted to further evaluate the potential for recognized environmental conditions (RECs). The site-specific Phase I ESAs were conducted for 53 groupings of properties. The groupings were determined by parcels of property that have the same ownership and are contiguous. The 53 groupings included a total of 99 parcels of property.

Phase II ESAs were then conducted on the groupings of properties where RECs were identified in the site-specific Phase I ESAs. The Phase II ESAs included the collection of soil and groundwater samples and, when needed, ground penetrating radar (GPR) surveys to investigate the RECs identified for that grouping. The soil and groundwater samples were compared to the appropriate Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) Tier 1 remediation objectives (ROs) for residential and industrial/commercial properties as well as the construction worker population presented in 35 Illinois Administrative Code (IAC) Part 742. Soil analytical results were also compared to the Maximum Allowable Concentrations (MAC) outlined in 35 IAC Part 1100. Groundwater analytical results were compared to the Tier 1 groundwater remediation objectives (GRO) applicable to Class I and Class II groundwater resources presented in 35 IAC Part 742.

The results of the Phase II ESAs indicated the presence of soil that exceeded the comparison values and would require special disposal or some level of additional remedial action to address potential exposure. The type of exceedance of the ROs or the MAC was used to determine groupings that contain uncontaminated or contaminated soil and how the soil excavated from those groupings would be handled, either through reuse or off-site disposal. In general, contaminated soil would be disposed off-site at a CTA-approved licensed disposal facility following the applicable local, state, and federal laws. Locations where soil was determined to meet the criteria for uncontaminated materials could be reused on the RLE Project or disposed off-site at a clean construction or demolition debris (CCDD) facility. **Table 1-1** is a summary of how the soil at a grouping should be managed based on the results of the Phase I and Phase II ESAs. CTA did make assumptions for the

groupings where a Phase II ESA was recommended but not conducted and used the RECs identified in the Phase I ESA to determine the likely presence of contaminated soils within that grouping.

Table 1-1: Summary of Soil Management by Grouping

Grouping Name	Contaminated Soil within a Grouping
Groupings 1-6, 37, and 38 (yard and shop location)	Yes - Presumed
Grouping 7	Yes - Presumed
Grouping 8	Yes
Grouping 9	Yes - Presumed
Grouping 10	Yes - Presumed
Grouping 11	Yes - Presumed
Grouping 12	Yes
Grouping 13	Yes - Presumed
Grouping 14	Yes - Presumed
Grouping 15	Yes
Grouping 16	Yes
Grouping 17	Yes
Grouping 20	Yes
Grouping 21	Yes
Grouping 22	Yes
Grouping 23	Yes - Presumed
Grouping 24	Yes

Grouping Name	Contaminated Soil within a Grouping
Grouping 25	Yes
Grouping 26	Yes
Grouping 27	Yes
Grouping 29	Yes
Grouping 31	Yes
Grouping 34	Yes
Grouping 36	Yes
Grouping 39	No
Grouping 49	Yes - Presumed
Grouping 57	Yes
Grouping 58	Yes
Grouping 59	Yes
Grouping 60	Yes

CTA conducted hazardous materials surveys at eight groupings that had buildings present during the time that Phase II ESAs were conducted. Sampling was conducted for asbestos-containing materials (ACM) and lead-based paint (LBP) within building, and an inventory was completed for other universal waste and hazardous materials. The roofs of the buildings were not sampled and are assumed to contain asbestos until tested and proven otherwise. ACM, LBP, universal waste and hazardous materials were found within some of the buildings including fluorescent light bulbs, fluorescent light ballasts, thermostats, and chemical materials.

Section 2 - Project Description and Background

CTA, as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the National Environmental Policy Act (NEPA) Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th

Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure, providing for a smoother overall profile.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad. This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling property and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid

Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

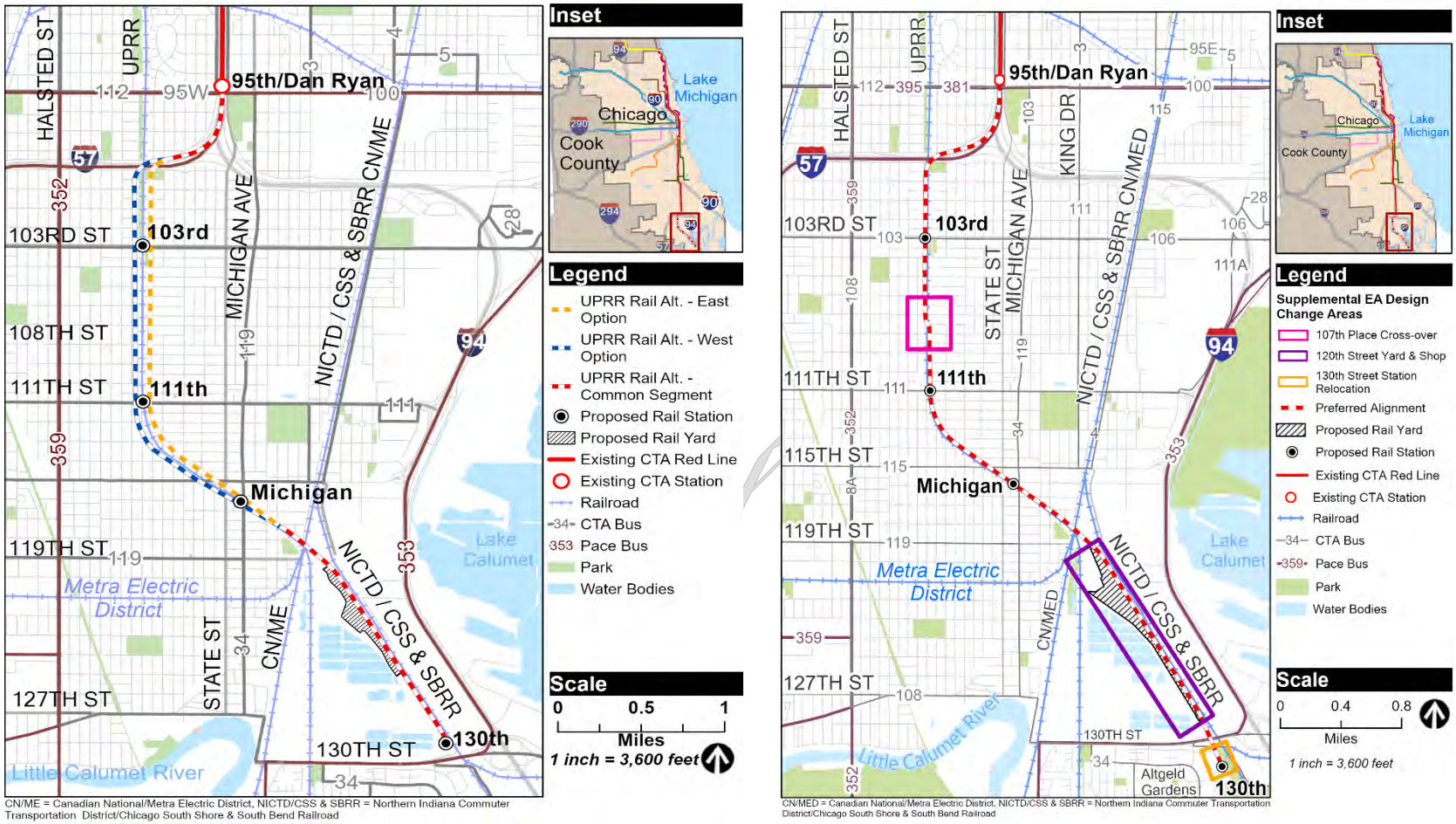

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

3.1 Regulatory Framework

The following sections describe the regulatory framework applicable to the jurisdictions in the project area.

3.1.1 Federal

The U.S. Environmental Protection Agency (USEPA) is the lead federal agency responsible for enforcing federal regulations regarding hazardous materials. One exception is the transport of hazardous materials, which is regulated by the U.S. Department of Transportation (DOT). The primary federal legislation governing hazardous materials includes the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Superfund Amendments and Reauthorization Act (SARA), and the Hazardous Materials Transportation Act. These federal regulations have not changed and are still in effect since the publication of the Draft EIS and would still apply to the RLE Project.

3.1.2 State

3.1.2.1 Illinois Environmental Protection Act

The Illinois Environmental Protection Act (the Act) is Illinois' primary statute for protecting and restoring the environment. The Illinois Pollution Control Board, an independent agency created by the Act, is responsible for adopting Illinois' environmental regulations and deciding contested environmental cases. In addition, the Act created the IEPA, the primary state agency responsible for the regulation of hazardous materials in Illinois.

The IEPA's Bureau of Land is responsible for the protection and restoration of land and groundwater resources in the State of Illinois. It administers a broad variety of solid and hazardous waste management cleanup programs, including the Leaking Underground Storage Tank (LUST) program, the Site Remediation Program (SRP), and RCRA Part B Permits and Closure Plans. The IEPA's cleanup programs use IEPA's TACO (35 IAC Part 742).

The TACO provides procedures for evaluating the risk to human health posed by environmental conditions and developing remediation objectives that achieve acceptable risk levels in soil and groundwater. The first step of TACO is a Tier 1 evaluation, which compares concentrations of contaminants detected at a site to a standard set of objectives, known as the Tier 1 remediation

objectives (ROs). The TACO process and Tier 1 ROs incorporate the results of a polynuclear aromatic hydrocarbon (PNA) study conducted by the City of Chicago. This study determined background concentrations of PNAs within City of Chicago limits.

Effective August 27, 2012, the IEPA amended the CCDD Fill Operations (35 IAC Part 1100) to among other things, include standards for the MAC of chemical constituents in uncontaminated soil generated during construction or demolition activities that can be used as fill material at CCDD facilities and uncontaminated soil fill operations.

3.1.2.2 Office of the State Fire Marshal

The Office of the State Fire Marshal (OSFM) also has responsibility regarding hazardous material regulation. The OSFM's Division of Petroleum & Chemical Safety manages the problems caused by the thousands of aboveground (AST) and underground storage tank (UST) systems containing petroleum or hazardous chemicals. The division regulates petroleum and chemical ASTs and USTs through registration to ensure the protection of public health and safety.

3.1.2.3 Illinois Occupational Safety and Health Program

At the state level, Illinois operates only a public sector occupational safety and health program under a plan approved by the U.S. Department of Labor. This program is administered by the Illinois Department of Labor and provides safety and health protections to state and local government employees within the state. Private sector workers in Illinois are covered by the Occupational Safety and Health Administration (OSHA) at the federal level.

3.1.3 Local

The following local jurisdictions and departments regulate and oversee issues related to hazardous materials within the project area:

- City of Chicago Fire Department, Hazardous Materials Unit
- City of Chicago, Department of Public Health, Environmental Permits & Regulation
- City of Chicago, Department of Assets, Information and Services (AIS)

3.2 Methods

3.2.1 Phase I Environmental Site Assessments

CTA conducted a Corridor Level Phase I ESA for the Preferred Alignment. The site reconnaissance, as part of the Phase I ESA, was conducted from June 8 to June 10, 2020. The Phase I ESA was performed in order to satisfy the requirements of FTA through Standard Operating Procedure (SOP) 19. A copy of the Corridor Level Phase I ESA Report (Environmental Design International Inc. 2020) is provided in **Attachment A**.

The Corridor Level Phase I ESA generally followed the American Society for Testing and Materials International Standard E1527-13, *Standard Practice for Environmental Site Assessments* (the Practice). Limitations and exceptions from the Practice are defined as data gaps. The Practice defines data gaps as a lack of, or inability to obtain, required information despite good faith efforts of the environmental professional. The Practice requires the environmental professional to comment on the impact of significant data gaps on their ability to identify recognized environmental conditions (RECs). Data gaps identified in the Phase I ESA were determined not significant. The data gaps are presented in the Corridor Level Phase I ESA. The goal of the Practice is to identify RECs in connection with the RLE Preferred Alignment. The purpose of the Practice is to define good commercial and customary processes for conducting a Phase I ESA.

The Corridor Level Phase I ESA was conducted on the properties within the area of potential impact (API) that was defined for the Preferred Alignment. The API for the Corridor Level Phase I ESA included parcels of property along the 5.6-mile corridor of the Preferred Alignment that would be acquired. The properties included in the Corridor Level Phase I ESA were based on the level of engineering that was completed during the timeframe the document was completed. The API for the Corridor Level Phase I ESA is provided as part of the report included in **Attachment A**.

CTA then prepared site-specific Phase I ESAs on groupings of parcels that had RECs identified within the Corridor Level Phase I ESA and on properties that were identified as being needed for the RLE Project after the Corridor Level Phase I ESA report was completed. The site-specific Phase I ESAs were conducted according to groupings of property with contiguous parcels and the same owner. Some site-specific Phase I ESAs were prepared for multiple parcels. Therefore, the Phase I ESA reports were prepared according to groupings and are identified according to grouping number. CTA prepared 53 site-specific Phase I ESAs that covered 99 parcels of property to further identify the potential for RECs associated with properties that would be acquired for the RLE Project. The site-specific Phase I ESAs followed the Practice and identified data gaps where

appropriate. If a site-specific Phase I ESA identified a data gap, the significance of the data gap was identified and discussed within the individual report.

3.2.2 Phase II Environmental Site Assessments

CTA conducted Phase II ESAs on properties that had site-specific risks and identified actions to minimize these risks. The Phase II ESAs investigated the presence of contamination and identified restrictions associated with the potential soil reuse based on the IEPA regulations. The sites chosen for Phase II ESAs had identified RECs on-site, off-site, or both on and off-site and included locations that required full acquisition, partial acquisition, or was identified as mitigation for the RLE Project.

The Phase II ESAs were conducted using CTA-developed SOPs to be followed specifically for the RLE Project. Sampling and Analysis Plans (SAPs) were also prepared for each Phase II ESA performed for the RLE Project. As part of the Phase II ESA, soil borings and temporary monitoring wells were installed, soil and groundwater samples were collected, and the samples were analyzed for appropriate analytical parameters including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, pH, and Target Analyte List (TAL) inorganics as per the approved SAP. Select soil and groundwater samples were analyzed for Resource Conservation and Recovery Act (RCRA) waste characterization (Code R) and the Metropolitan Water Reclamation District of Greater Chicago (MWRD) discharge parameters. Some Phase II ESAs included conducting ground penetrating radar (GPR) surveys and collecting industrial hygiene samples, including asbestos and LBP within buildings, and conducting an inventory of the remaining universal waste and hazardous materials present, such as chemical wastes, lighting ballasts, and thermostats. The Phase II ESAs were conducted from March through May 2022. The Phase II ESAs were conducted by grouping, which may have included multiple parcels of property that were contiguous and have the same owner.

The Phase I and Phase II ESA investigation results were used to determine how soil would be managed within the boundaries of a particular grouping. The soil would be managed using two categories. The categories are based on the types and levels of contamination encountered, if any, and defined based on regulatory levels and guidelines, where established by the IEPA. The results from the samples collected as part of the Phase II ESAs were compared to the appropriate IEPA TACO Tier 1 ROs for residential and industrial/commercial properties as well as the construction worker population presented in 35 IAC Part 742. Soil analytical results were also compared to the MACs outlined in 35 IAC Part 1100. Groundwater analytical results were compared to the Tier I GROs applicable to Class I and Class II groundwater resources presented in 35 IAC Part 742.

Based on the results of the Phase II ESAs, CTA will use the following two categories for soil management for the RLE Project:

- **Uncontaminated Soil:** Soil meeting all Tier 1 SROs and MAC levels to be classified as uncontaminated soil that can be either reused on the RLE Project, disposed of at an approved CCDD facility, or used as fill material at an uncontaminated soil fill operation (35 IAC 1100, Subpart F).

- **Contaminated Soil:** Soil exceeding the Tier 1 SROs and MAC for one or more contaminants. The soil is considered impacted, and any material removed as part of RLE Project construction is required to be disposed at a landfill permitted to accept the material.

Section 4 - Affected Environment

4.1 Phase I Environmental Site Assessment

Potentially contaminated properties are often located in previously developed industrial and commercial areas, which are typical land uses within the RLE Project area. These properties were investigated through Phase I and Phase II ESAs.

The Corridor Level Phase I ESA was conducted on the 5.6-mile corridor and included the parcels of property that were identified as needed for construction of the RLE Project. The Corridor Level Phase I ESA identified a total of 48 locations of potential concern or parcels of property that had RECs: 26 on-site RECs, 18 off-site RECs, 1 controlled REC (CREC), and 3 historical RECs (HREC) for the Preferred Alignment. Additionally, six *de minimis* conditions were identified in the Corridor Level Phase I ESA. See **Attachment A** for details regarding the RECs identified within the Corridor Level Phase I ESA.

The site-specific Phase I ESAs were conducted on properties identified in the Corridor Level Phase I ESA and investigated further to identify if RECs were present for these properties. In addition, site-specific Phase I ESAs were conducted on parcels of property that were not included in the Corridor Level Phase I ESA. CTA conducted 53 site-specific Phase I ESAs. The Phase I ESAs may include groupings of properties based on ownership and if the parcels were contiguous. Therefore, the Phase I ESA reports were prepared according to groupings and are referred to as groupings and are identified according to grouping number. **Table 4-1** and **Figures 4-1** through **4-3** show the number of groupings for the Preferred Alignment containing RECs - based on the 53 site-specific Phase I ESAs.

Table 4-1: Groupings Containing Potentially Hazardous or Regulated Materials

Type of Recognized Environmental Condition	Number of Groupings
On-Site and Off-Site RECs	32
On-Site RECs Only	1
Off-Site RECs Only	14
None	6
Total Groupings	**53**

Source: CDM Smith 2021; EDI 2021, 2022; Wight & Company 2022

On-site RECs included USTs that may not have been removed or documentation was not available to determine the status of the UST. On-site RECs were also identified based on the current use of the grouping, the presence of railroad sidings, or the historic use of the grouping for industrial/commercial purposes. The majority of the off-site RECs included the existence of railroad property, past use of adjacent properties as industrial/commercial, and/or unresolved USTs. If a REC was identified, a Phase II ESA was recommended.

CTA has reached out and continues to work with the property owners to gain access to complete the Phase II ESAs; however, some owners have not provided access. CTA has had to make assumptions regarding these sites based on the results of the site-specific Phase I ESAs. **Table 4-2** summarizes the RECs identified in the site-specific Phase I ESAs and how CTA would treat the soil excavated from these groupings based on the findings of the site-specific Phase I ESAs. CTA will continue to do their due diligence for these groupings by completing Phase II ESAs during the land acquisition process.

Table 4-2: Summary of Recognized Environmental Conditions (RECs) Where Access Has Not Been Provided

Grouping Name	Summary of RECs identified in the Phase I ESAs	Assumed Remediation*
Yard and shop (Groupings 1-6, 37, and 38)	On-site RECs include the former use as a railroad yard that includes presence of piles of railroad ties and railroad tracks. On-site RECs also include the reported historic use as a hazardous waste dump site. Off-site RECs include an apparent generator of hazardous waste under several waste codes and history of a gasoline and fuel release with contamination allowed to remain in place subject to institutional controls; scrap metal processing facility with a history of enforcement action for penalty, a former status as a Large Quantity Generator of hazardous waste, and an apparent presence of unremedied releases of diesel fuel; facility used as an apparent auto junkyard with a reported open status of a LUST incident; facility with a historical use as an industrial chemical waste receiver, with landfilling and burial of chemical-related wastes, and with a reported presence of SVOCs and pesticide contamination remaining at the facility; facility with a historic and active use for manufacturing paint and paint-related products, historic landfilling activities, and ongoing and planned remediation; facility with a reported use as an asphalt plant with records of at least seven ASTs containing diesel fuel, used oil, and other products as well as a reported use or storage of various hazardous substances in volumes sufficient to require Tier II	Excavated materials disposed off-site to a regulated landfill

Grouping Name	Summary of RECs identified in the Phase I ESAs	Assumed Remediation*
	reporting; facility that conducts primary, secondary, and tertiary water treatment operations with sources of wastewater entering the facility including commercial and industrial operations, management of solids, and reported presence of landfills; facility with a reported historic landfill activity; facility related to the Calumet Reclamation Plant (sewage treatment plant), listed as a closed landfill in the SWF/LF database, and identified as an inactive landfill used for disposal of sand, gravel, and grit from sewage treatment.	
Grouping 7	Off-site REC that is a substation with transformers and other related electrical equipment that may contains PCBs.	Excavated materials disposed off-site to a regulated landfill
Grouping 9	On-site RECs include automotive repair activity, oil staining, and presence of waste materials; historical presence of a coal yard or coal shed. Off-site RECs include historical presence of a fuel warehouse, fuel storage, coal storage, and a junk yard, presence of railroad tracks.	Excavated materials disposed off-site to a regulated landfill
Grouping 10	On-site RECs include the former use as a fuel storage warehouse and off-site RECs that include a former coal yard or coal shed with railroad spur, presence of railroad tracks.	Excavated materials disposed off-site to a regulated landfill
Grouping 11	On-site RECs include a coal yard/junk yard with illegal dumping of tires and debris, historical presence of fuel oil USTs, presence of a concrete structure used as storage of multiple ASTs. Off-site RECs include former coal yard or coal shed with railroad spur, presence of railroad tracks, potential presence of four fuel oil USTs with no records of removal.	Excavated materials disposed off-site to a regulated landfill
Grouping 13	On-site RECs include automotive and equipment repair; former presence of six USTs, removal records were identified for four of them with the continued presence of two USTs.	Excavated materials disposed off-site

Grouping Name	Summary of RECs identified in the Phase I ESAs	Assumed Remediation*
	Off-site RECs include former hazardous materials storage building with presence of one unlabeled 55-gallon drum, railroad tracks, former presence of a metal plating facility, presence of four abandoned USTs, presence of a fuel UST, historical cement block factory and a cleaning compound industrial manufacturing facility.	to a regulated landfill
Grouping 14	On-site RECs include the presence of one fuel UST with no records of removal and off-site RECs that include presence of an automotive and equipment repair facility; former presence of six USTs, removal records were identified for four of them with the continued presence of two USTs; historical presence of a cement block factory and a cleaning compound industrial manufacturing facility; presence of railroad tracks; former hazardous materials storage building with presence of one unlabeled 55-gallon drum; former presence of a metal plating facility; presence of four abandoned USTs.	Excavated materials disposed off-site to a regulated landfill
Grouping 23	On-site RECs include the historic and current industrial use with presence of a storage yard containing a pile of soil and debris from historic fencing projects of an unknown source.	Excavated materials disposed off-site to a regulated landfill
Grouping 49	Off-site RECs include the potential presence of three USTs with no records of removal and presence of railroad tracks.	Excavated materials disposed off-site to a regulated landfill

Source: EDI 2021, 2022; Wight & Company 2022
Notes: * CTA used the findings of the site-specific Phase I ESA reports to develop an assumed level of remediation that would be needed for these groupings.

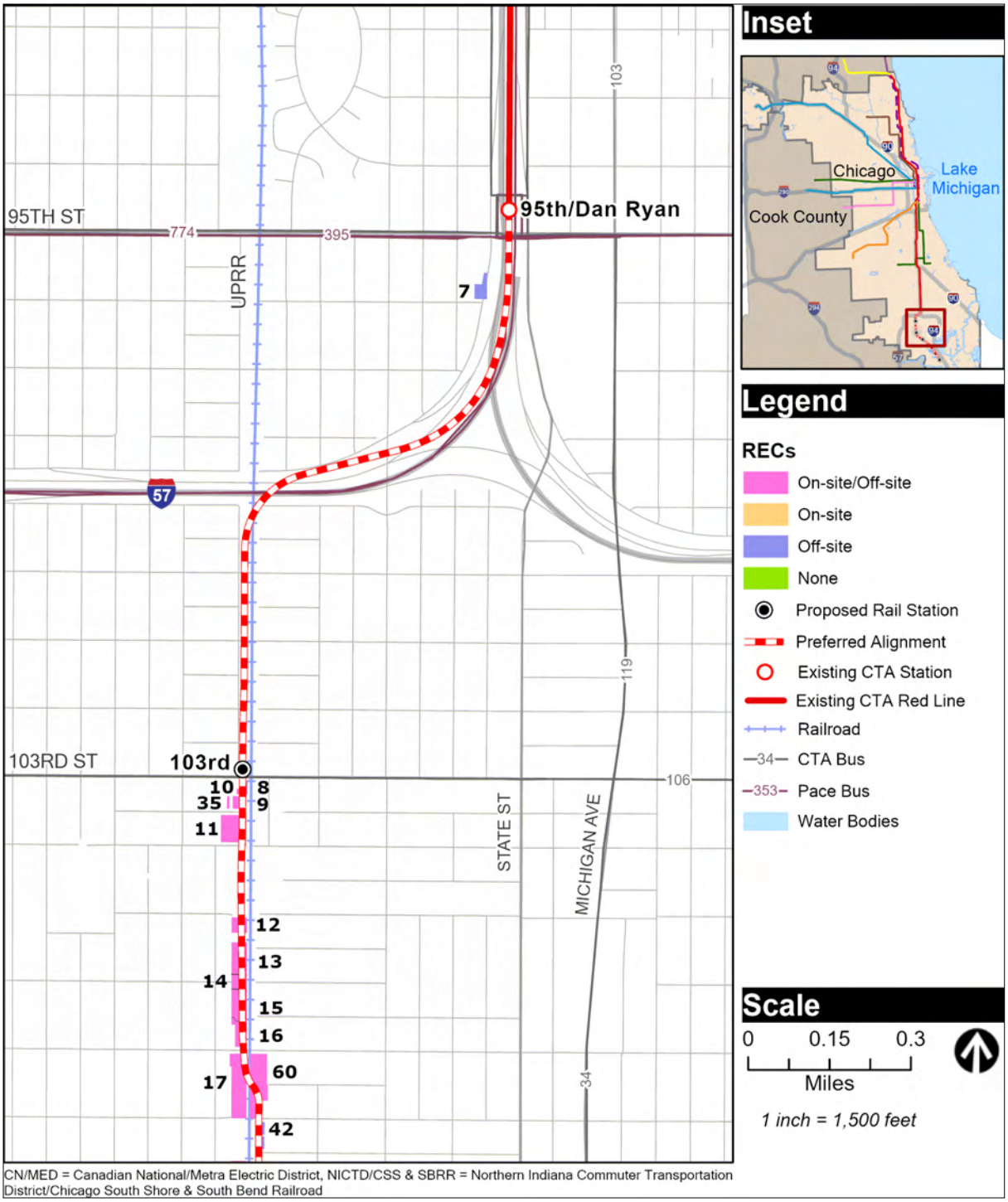

Figure 4-1: RECs Identified during the Site-Specific Phase I ESA Investigations (Page 1 of 3)

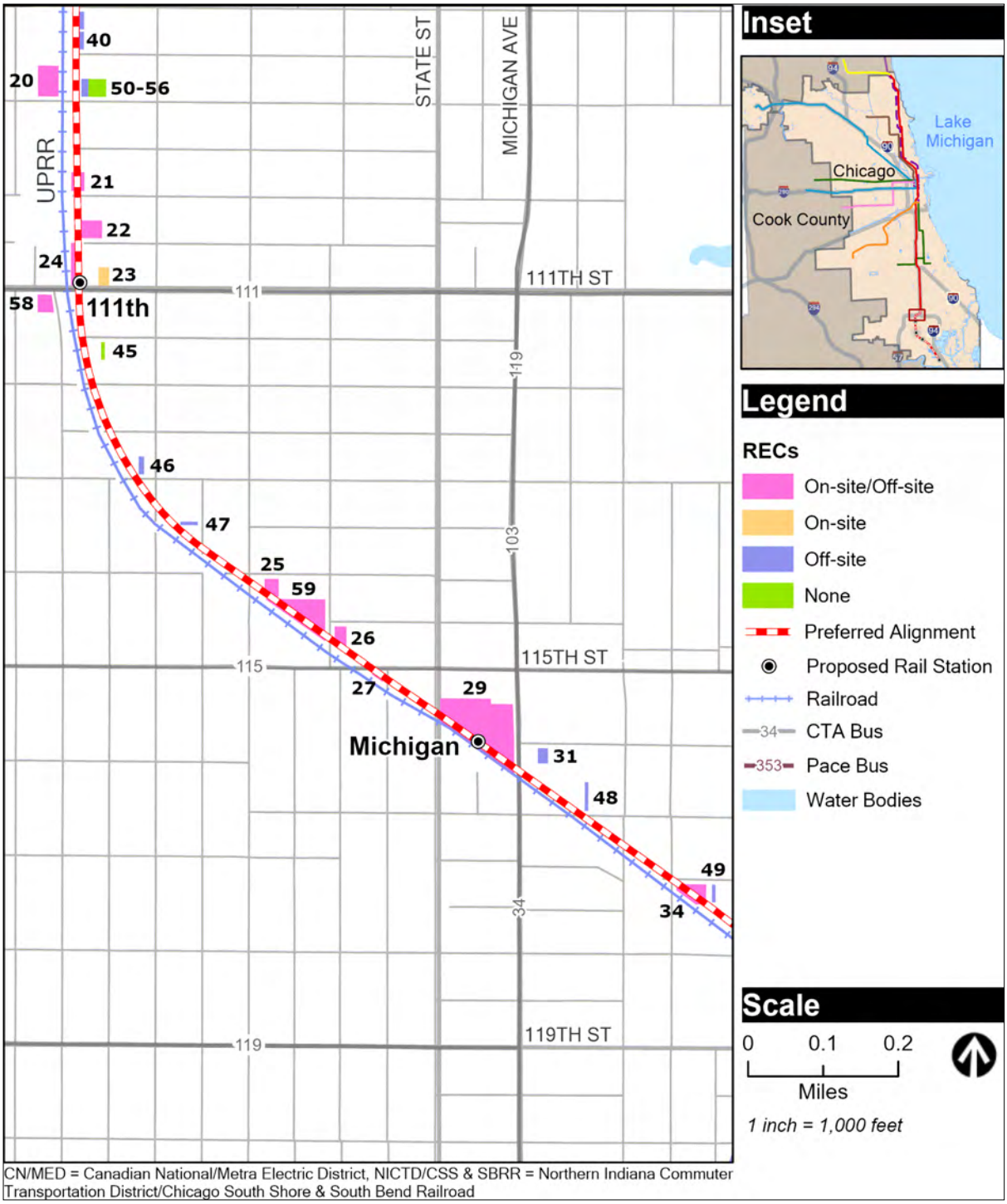

Figure 4-2: RECs Identified during the Site-Specific Phase I ESA Investigations (Page 2 of 3)

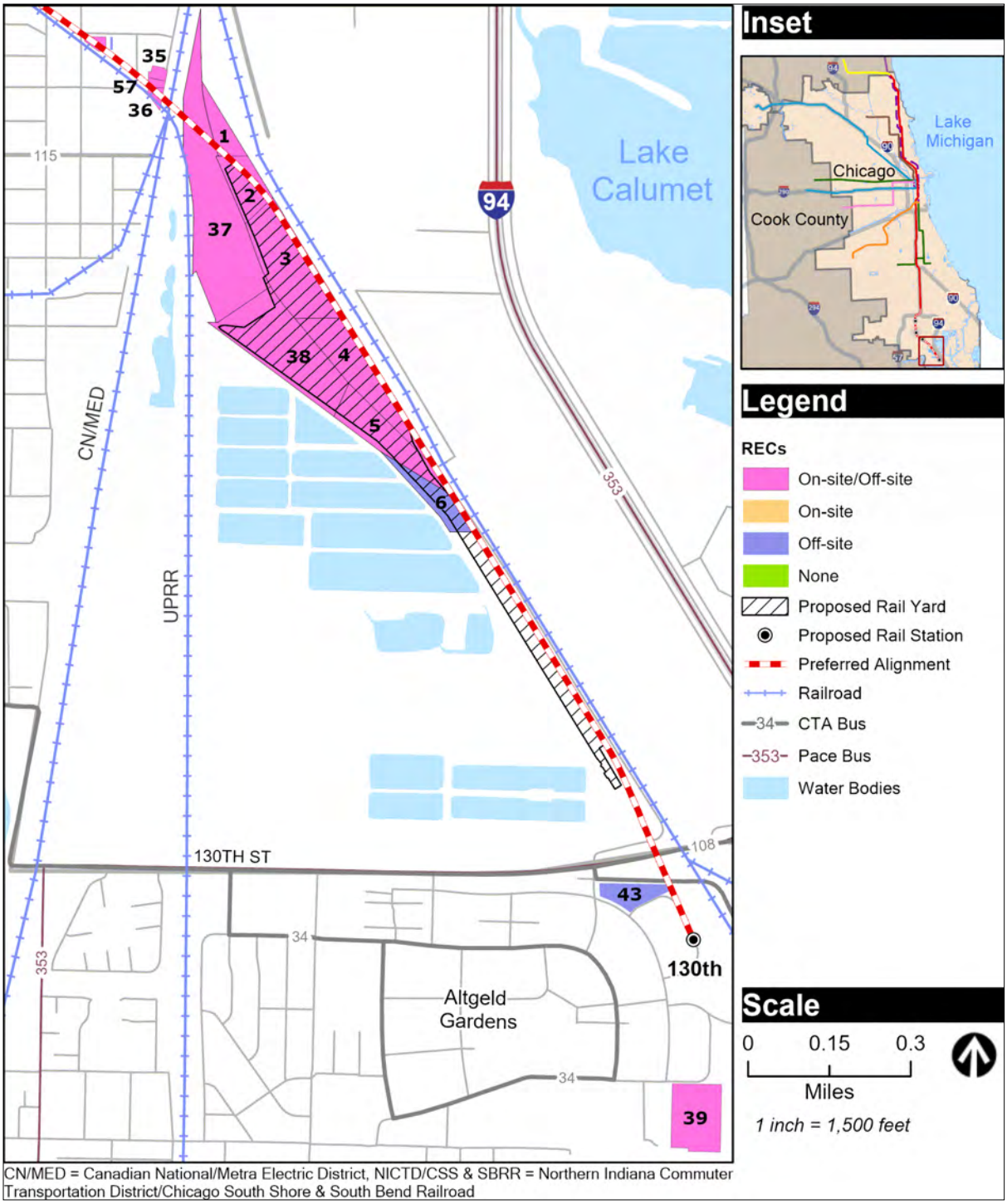

Figure 4-3: RECs Identified during the Site-Specific Phase I ESA Investigations (Page 3 of 3)

4.2 Phase II Environmental Site Assessment

Of the 53 site-specific Phase I ESAs, there were 31 groupings for a total of 78 parcels of land identified as needing a Phase II ESA. The site-specific Phase I ESA results in **Table 4-1** were used to evaluate impacts for the Preferred Alignment. **Figures 4-4** through **4-6** show the groupings where Phase II ESAs were conducted, and the groupings where CTA has not been provided access; and therefore, a Phase II ESA has not been conducted to date. The Phase II ESA work is ongoing as the CTA gain access to properties.

Results of the Phase II ESAs were compared to the applicable TACO Tier 1 ROs for residential and industrial/commercial properties and MAC. In addition, the results were compared to TACO Tier 1 ROs for the construction worker population to determine if construction worker protection would be needed during construction activities.

Contaminants detected in soil analytical samples were typical of an urban area and included VOCs, TAL inorganics, and PNAs. **Table 4-3** indicates if exceedances of the ROs or MAC were found at a grouping. **Table 4-4** summarizes the GRO exceedances for Class I and Class II groundwater. It should be noted that the RLE Project is located with the city limits of Chicago that is governed by the City of Chicago Groundwater Ordinance that prohibits the use and installation of potable wells. This ordinance essentially mitigates the risk from exposure due to the groundwater ingestion exposure pathway.

Grouping 39 is identified as the two parcels that would be transferred to the Forest Preserves of Cook County (FPCC) as a mitigation measure for impacts to the Beaubien Woods Forest Preserve. The results of the Phase II ESA indicated that there were no RO exceedances and remediation is not needed. The Phase II ESA was conducted at this grouping under conditions of the mitigation measure coordination with the FPCC.

GPR surveys were conducted at areas within some of the groupings to locate utilities to clear soil boring locations and investigate for the potential presence of buried objects, such as USTs or former railroad sidings. The GPR surveys indicated the presence of potential USTs at Groupings 16, 29, 59, and 60. The GPR survey for Grouping 12 was limited to portions of the site that were accessible.

CTA continues to work with the property owners to gain access for Phase II ESAs. For the groupings that CTA has not be able to gain access to conduct a Phase II ESA for inclusion into this Final EIS, CTA would continue to do their due diligence for these groupings by completing Phase II ESAs during the land acquisition process. CTA will follow a Contaminated Soil Management Plan and characterize the soil at those locations prior to construction and follow the state and federal regulations for mitigation or disposal of any contaminated soil.

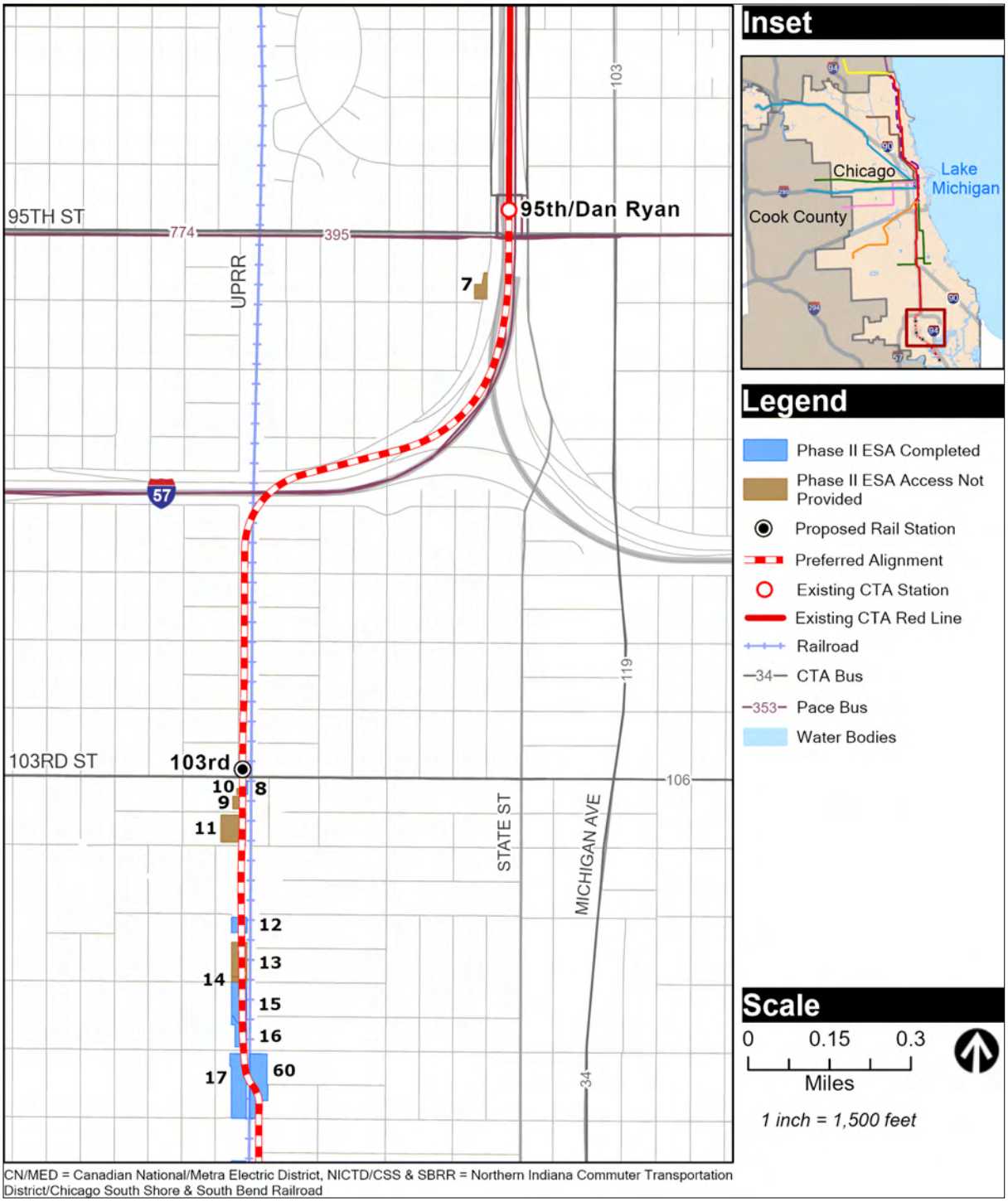

Figure 4-4: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (Page 1 of 3)

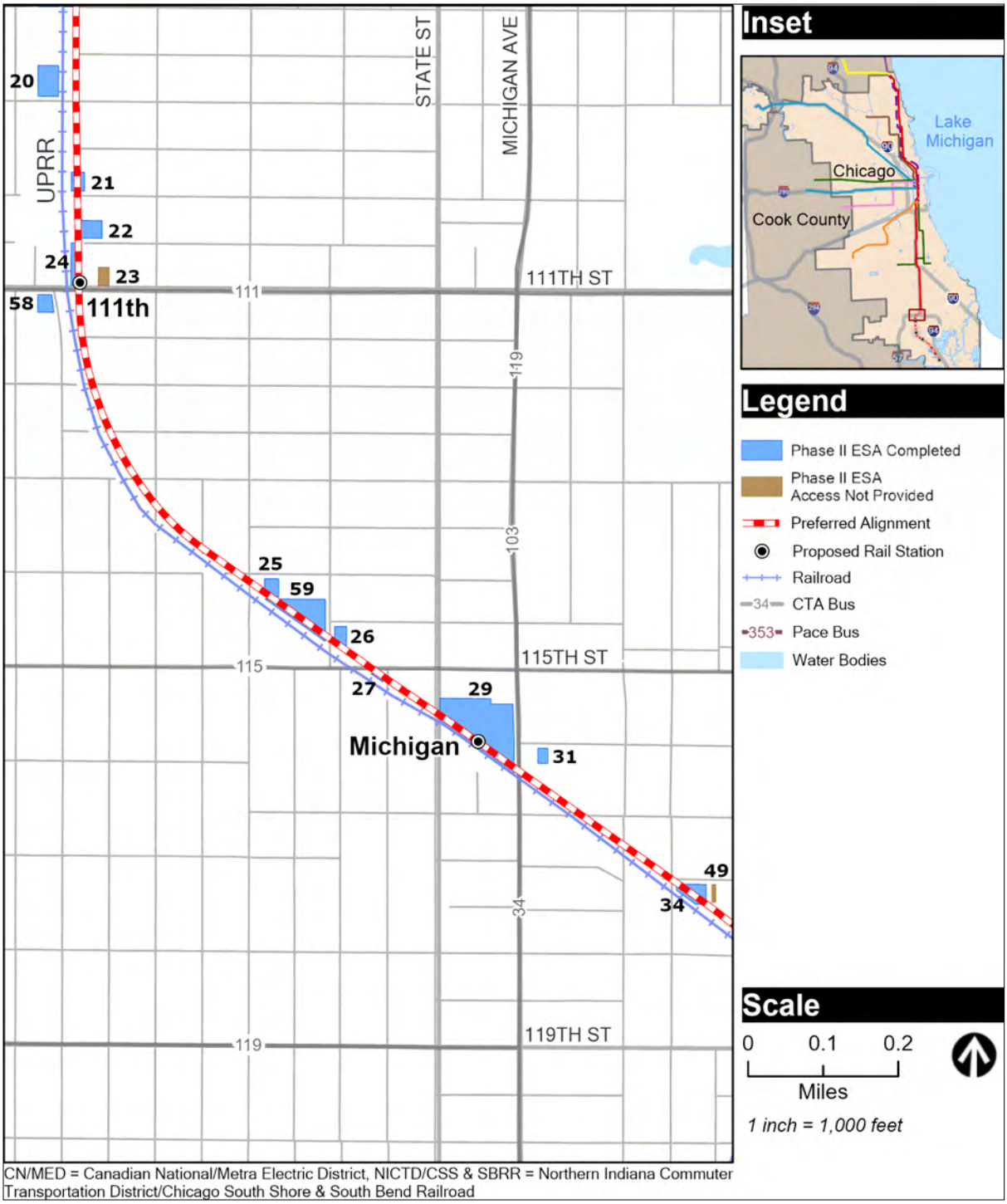

Figure 4-5: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (Page 2 of 3)

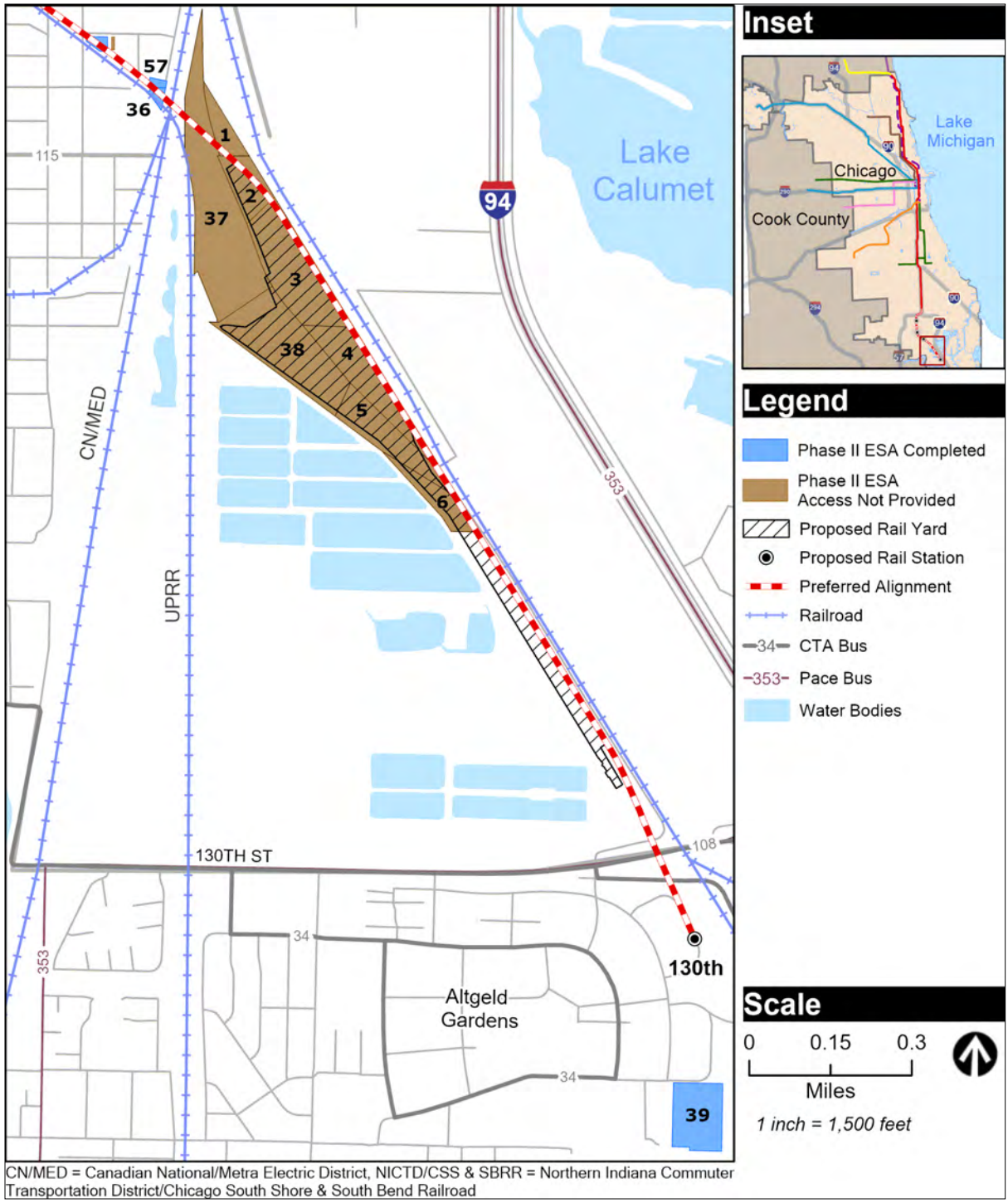

Figure 4-6: Locations Where Phase II ESA Investigations Were Conducted and Locations Where Access Has Not Been Provided (Page 3 of 3)

Table 4-3: Summary of Phase II ESA Investigations and Soil Remediation Objective Exceedances

Grouping Name	# Of Soil Samples	# Of Groundwater Samples	Waste Disposal Analysis	Ground Penetrating Radar Survey Conducted	Exceeds TACO Tier 1 Residential ROs	Exceeds TACO Tier 1 Industrial / Commercial ROs	Exceeds Tier 1 Construction Worker ROs	Exceeds Maximum Allowable Concentrations
Grouping 8	7	2	1	No	Yes	Yes	Yes	Yes
Grouping 12	8	2	1	Yes	Yes	Yes	No	Yes
Grouping 15	14	2	1	Yes	Yes	Yes	Yes	Yes
Grouping 16	12	1	1	Yes	Yes	Yes	No	Yes
Grouping 17	12	1	1	Yes	Yes	Yes	Yes	Yes
Grouping 20	10	3	1	No	Yes	Yes	Yes	Yes
Grouping 21	12	3	1	No	No	No	No	Yes
Grouping 22	15	1	1	Yes	Yes	Yes	Yes	Yes
Grouping 24	14	1	1	No	Yes	Yes	No	Yes
Grouping 25	8	2	1	No	Yes	Yes	Yes	Yes
Grouping 26	10	0	1	No	Yes	No	Yes	Yes
Grouping 27	6	0	1	Yes	Yes	Yes	Yes	Yes
Grouping 29	35	3	1	Yes	Yes	Yes	Yes	Yes
Grouping 31	5		1	No	Yes	Yes	Yes	Yes

Grouping Name	# Of Soil Samples	# Of Groundwater Samples	Waste Disposal Analysis	Ground Penetrating Radar Survey Conducted	Exceeds TACO Tier 1 Residential ROs	Exceeds TACO Tier 1 Industrial / Commercial ROs	Exceeds Tier 1 Construction Worker ROs	Exceeds Maximum Allowable Concentrations
Grouping 34	12	2	1	No	Yes	Yes	Yes	Yes
Grouping 36	12	0	1	No	Yes	No	Yes	Yes
Grouping 39	11	3	0	No	No	No	No	No
Grouping 57	10	1	1	No	Yes	Yes	Yes	Yes
Grouping 58	10	1	1	No	Yes	Yes	Yes	Yes
Grouping 59	15	3	1	Yes	Yes	Yes	Yes	Yes
Grouping 60	12	2	1	Yes	Yes	Yes	Yes	Yes

Table 4-4: Groundwater Remediation Objective Exceedances

Grouping Name	Exceeds Class I Groundwater GROs	Exceeds Class II Groundwater GROs	Exceeds MWRD Discharge Limits
Grouping 8	Yes	Yes	NA
Grouping 12	Yes	Yes	Yes
Grouping 15	Yes	Yes	Yes
Grouping 16	Yes	Yes	NA
Grouping 17	No	No	NA
Grouping 20	Yes	Yes	No
Grouping 21	Yes	No	No
Grouping 22	Yes	Yes	Yes
Grouping 24	Yes	Yes	Yes
Grouping 25	Yes	Yes	Yes
Grouping 26	NA	NA	NA
Grouping 27	NA	NA	NA
Grouping 29	Yes	Yes	No
Grouping 31	NA	NA	NA
Grouping 34	Yes	Yes	Yes
Grouping 36	NA	NA	NA
Grouping 39	Yes	No	NA
Grouping 57	Yes	Yes	No
Grouping 58	Yes	No	No
Grouping 59	Yes	Yes	Yes
Grouping 60	Yes	Yes	Yes

Note: NA - Groundwater samples were not collected for this grouping due to lack of groundwater in the wells and no recharge from the formation or an MWRD discharge analysis was not conducted due to insufficient groundwater volume.

There were exceedances of the GROs for some VOCs, PNAs and TAL inorganics.

The MWRD discharge parameter analysis exceedances were mostly for TAL inorganics. However, some groupings had exceedances for oil and grease, including Groupings 34 and 59.

CTA conducted hazardous materials surveys at eight groupings that had buildings present during the time that Phase II ESAs were conducted. Sampling was conducted for ACM and LBP within a building, and an inventory was completed for other universal waste and hazardous materials. The roofs of the buildings were not sampled and are assumed to contain asbestos until tested and proven otherwise. **Table 4-5** summarizes the results of the hazardous materials surveys. ACM, LBP, universal waste, and hazardous materials were found within some of the buildings including fluorescent light bulbs and ballasts, thermostats, and chemical materials.

Table 4-5: Hazardous Materials Survey Summary

Grouping Name	Presence of ACM	Presence of LBP	Presence of Universal Waster Hazardous Materials
Grouping 16	No	No	Yes
Grouping 21	Yes	Yes	Yes
Grouping 25	No	No	Yes
Grouping 27	Yes	No	Yes
Grouping 36	Yes	Yes	Yes
Grouping 58	No	No	Yes
Grouping 59	No	Yes	Yes
Grouping 60	Yes	Yes	Yes

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories: permanent, construction and cumulative impacts.

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present or near future projects within the area of potential impact for hazardous materials, which includes the properties that would be acquired for the RLE Project.

This section also documents any new or revised mitigation measures for project impacts identified under the Draft EIS, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East or West Options of the UPRR Alternative evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning Transportation Improvement Program. No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Section 5.1** of **Appendix R** in the Draft EIS, there would be no adverse impacts to hazardous materials from the No Build Alternative.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

The impacts and mitigation for the Preferred Alignment are based on additional data obtained at specific sites along the Preferred Alignment. The impacts and mitigation are the same as described in **Appendix R** of the Draft EIS except as noted below.

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

Implementation of the Preferred Alignment would result in beneficial impacts through the cleanup and/or removal of contaminated material (soil and groundwater) during construction. Demolition of buildings would result in beneficial impacts through cleanup and/or removal of ACM and LBP. Without implementation of the Preferred Alignment, this cleanup and removal would occur either at a later date or not at all.

Daily operations or maintenance activities under the RLE Project that require earthmoving in contaminated areas would have the potential to result in hazardous material impacts from accidental spills or hazardous material releases. Spills are most likely to occur during activities such as equipment and grounds maintenance. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, pesticides, and creosote. Examples of maintenance that could require earthmoving include at-grade track repair, underground utility work, and foundation repairs, although these activities are not expected to occur within the first 10–20 years.

The Preferred Alignment also has the potential for hazardous material impacts associated with adjacent freight rail lines. Due to the proximity of the freight lines to the Preferred Alignment, hazardous material spills or releases that occur along these railroads would have the potential to migrate and affect the Preferred Alignment API. These materials potentially exist along the railroad currently, but the Preferred Alignment would bring transit vehicles closer to them. Spills along the freight lines could occur from the use of chemicals for ground maintenance along the tracks. In addition, because these are freight lines, releases could occur from creosote used to preserve wood railroad ties; PNA deposition from diesel exhaust; asbestos dust from brakes; and previous releases of coal ash from engines. Freight lines might also transport hazardous material cargo, which could be released if there were a spill or accident. Releases from adjacent freight lines could affect transit passengers or operations. If adjacent freight lines have a release of hazardous materials, transit operations may need to be stopped to avoid traveling through the release area. First responders would follow the procedures and protocols for hazardous materials incidents established by the Hazardous Materials Unit of the City of Chicago Fire Department.

Impacts associated with the adjacent freight lines would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 Code of Federal Regulations § 171–180) that among other things, specify requirements for the safe transportation of hazardous materials by rail and require rail carriers to conduct a security and safety risk analysis, to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route.

The Preferred Alignment would not have permanent adverse impacts related to hazardous materials. Although there would be no permanent adverse impacts related to hazardous materials, CTA would adhere to all applicable federal, state, and local regulations, as well as existing system-wide hazardous material usage, storage, and disposal plans and procedures, further minimizing the potential for hazardous material impacts.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

Construction of the Preferred Alignment would include subsurface excavation, which would result in the generation of a large quantity of soil that may contain contaminants at concentrations requiring off-site disposal. The results of the Phase II ESAs show the locations of where contaminated materials would be encountered and indicate how the materials should be handled. Hazardous materials typically used during construction, such as paints, solvents, fuels, and hydraulic fluids, could also be released accidentally during construction. In addition, there is the potential for encountering contaminated groundwater during construction.

Construction would require the demolition of existing structures that were likely constructed before 1978–1979. These structures may contain ACM and LBP that could result in a release of asbestos fibers and lead dust during construction. Prior to demolition of any structures, CTA would test for lead and asbestos and remediate, as necessary.

Maintenance and operation of railroad corridors typically include the use of fuel, oil, paints, herbicides, pesticides, creosote, and PNAs. Therefore, construction activities within or adjacent to existing railroad corridors may encounter these materials. There would be adverse construction-related impacts associated with the Preferred Alignment, but the impacts would be mitigated by implementing the best management practices (BMP) and standard practices discussed below.

CTA would follow federal, state, and local laws and regulations regarding hazardous materials before and during construction. The following BMPs, at a minimum, would be implemented before and during construction to avoid and minimize the potential for impacts before and during construction:

- CTA would continue to conduct Phase II ESAs on properties identified as having RECs in the site-specific Phase I ESAs. The assessments would include characterization and evaluation of the potential for encountering hazardous materials and contaminated soil.
- CTA would prepare a Soil Management Plan for the RLE Project.

- CTA would manage soil by two categories, uncontaminated and contaminated soil. Uncontaminated soils meet all Tier 1 SROs and MAC levels that can be either reused on or off the RLE Project, disposed of at an approved CCDD facility, or used as fill material at an uncontaminated soil fill operation (35 IAC 1100, Subpart F). Contaminated soil exceeds the Tier 1 SROs and MAC for one or more contaminants. The soil is considered impacted, and any material removed as part of RLE Project construction is required to be disposed at a landfill permitted to accept the material.
- CTA would remove and dispose of creosote railroad ties that are encountered during construction at an approved disposal facility.
- CTA would require that any USTs encountered during construction or previously identified during the Phase II ESAs be removed and disposed and any UST that was determined to be leaking would go through closure through the appropriate regulatory agency.
- CTA would close out any open leaking UST sites and obtain a No Further Remediation Letter from the appropriate regulatory agency.
- ACM, LBP, and hazardous material surveys of buildings or structures would be required before demolition to identify any ACM, LBP, ASTs, USTs, refrigerants, universal and hazardous materials, such as PCBs or mercury-containing equipment. Any ACM, LBP, ASTs, and hazardous materials identified would be abated and disposed of in accordance with federal, state, and local regulations. Removal, abatement, and disposal of these materials would be completed by specialists that are trained and certified to conduct such activities.

The following specific plans would be developed before construction to further minimize or avoid the potential for hazardous material impacts:

- A Contaminated Material Management Plan that provides the procedures for identifying, characterizing, managing, storing, and disposing of contaminated soil and groundwater encountered during construction activities would be required. The plan would comply with all applicable federal and state cleanup standards and would cover the entire RLE Project using the results of the Phase II ESAs.
- If required, Spill Prevention, Control and Countermeasure (SPCC) Plans to address the use, storage, and disposal of materials such as asphalt, fuel, paint, solvents, and cleaning agents would be developed. The SPCC Plans would provide BMPs to limit the potential for accidental releases of potentially hazardous materials.

- Construction Stormwater Pollution Prevention Plans (SWPPP), which describe methods to prevent or minimize stormwater runoff from encountering contaminated soil or other hazardous materials, would be required.
- Health and Safety Plans for construction activities would be developed by the contractors and approved by CTA before starting any work. The Health and Safety Plans would identify potential contaminants of concern, required personal protective equipment and procedures, and emergency response procedures.

Construction-related impacts would not be adverse after the implementation of the BMPs and standard practices.

5.2.3 Cumulative Impacts and Mitigation – Preferred Alignment

Cumulative impacts could occur if there were a release of hazardous materials during ongoing and future projects in the area (described in the *Cumulative Impacts Technical Memorandum* [**Appendix T**]); however, compliance with local, state, and federal laws and regulations would result in these cumulative impacts being less than adverse. There are no changes to cumulative impacts on hazardous materials from the Draft EIS.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no permanent, construction, or cumulative impacts on hazardous materials associated with the No Build Alternative. Therefore, there would be no impacts remaining after mitigation.

6.2 Union Pacific Railroad Alternative – Preferred Alignment

After BMPs and standard practices are implemented, the Preferred Alignment would not have permanent or construction-related adverse impacts due to hazardous materials. Implementation of the Preferred Alignment could also result in beneficial impacts through the cleanup and/or removal of contaminated materials during construction.

Results of the Phase II ESAs indicated the presence of uncontaminated and contaminated soil. Contaminated materials would be disposed off-site at a CTA-approved licensed disposal facility following the applicable local, state, and federal laws. Uncontaminated soils could be reused on the RLE Project or disposed off-site at a CCDD facility.

Section 7 - References Cited

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Attachment A – Corridor Level Phase I Environmental Site Assessment

Red Line Extension Project

Red Line Extension Preferred Alignment, approximately 5.6-mile corridor from the 95th Street Terminal to 132nd Street

Corridor Level Phase I Environmental Site Assessment Report

June 2021

Prepared by:
Federal Transit Administration
Chicago Transit Authority

Version 1.0

Table of Contents

Environmental Professional's Statement ..... **iv**

Executive Summary **1**

Conclusions 1

Format 33

Section 1 - Introduction **34**

1.1 Project Overview 34

1.2 Reliance 38

Section 2 - Scope and Methodology **40**

2.1 Purpose of Services 40

2.2 Methodology and Scope of Work 40

2.3 Significant Assumptions and Limitations 40

Section 3 - User Provided Information **42**

3.1 Suggested Information 42

3.2 Lien and AUL Results 42

3.3 Helpful Documents 42

Section 4 - Physical Setting **49**

4.1 Summary of Physical Setting 49

Section 5 - Site Reconnaissance **51**

5.1 General Subject Property Setting 51

5.2 Observations of Subject Property 59

5.3 Observations of Adjoining Properties 65

Section 6 - Historic Information **69**

6.1 Prior Investigations 69

6.2 Summary of Records 69

6.3 Historical Summary of Subject and Adjoining Properties 69

Section 7 - Regulatory Review **84**

7.1 Regulatory Agency Inquiries 84
7.2 Database Findings 85
Section 8 - Vapor Encroachment Screening 136
8.1 Method 136
8.2 Results 137
8.3 Limitations 154
Section 9 - Conclusions 155
RECs 155
CRECs 174
HRECs 174
De Minimis Conditions 175
VECs 177
Appendix A - Figures .....
Appendix B - References .....
Appendix C - Site Photographs .....
Appendix D - Environmental Database Report .....
Appendix E - Historical Research Documents .....
Appendix F - Additional Documentation .....
Appendix G - Qualifications .....

Figures

Figure ES-1: 95th Street through 107th Place 30
Figure ES-2: 107th Place through 118th Street 31
Figure ES-3: 118th Street through 132nd Place 32
Figure 1-1: Subject Property Location 35
Figure 7-1: EDR Area/Corridor Report Key Map 86

Tables

Table ES-1: On-Site RECs 2
Table ES-2: Off-Site RECs 12
Table ES-3: CRECs 21
Table ES-4: HRECs 21
Table ES-5: *De Minimis* Conditions 23
Table ES-6: VECs 24
Table ES-7: Format Mapping 33
Table 1-1: Adjoining Property Use 37
Table 3-1: Summary of Helpful Documents 43
Table 4-1: Summary of Physical Setting 49
Table 5-1: Subject Property Setting 51
Table 5-2: Subject Property PINs and Addresses 52
Table 5-3: Subject Property Observations 59
Table 5-4: Adjoining Property Observations 65
Table 6-1: Summary of Records 69
Table 6-2: Historical Summary 70
Table 7-1: Subject Property Database Summary 87
Table 7-2: Adjoining Property Database Summary 113
Table 8-1: VES Search Distances 137
Table 8-2: VES Results Summary 138
Table 9-1: On-Site RECs 155
Table 9-2: Off-Site RECs 165
Table 9-3: CRECs 174
Table 9-4: HRECs 175
Table 9-5: *De Minimis* Conditions 176
Table 9-6: VECs 177

Environmental Professional's Statement

Environmental Design International inc. (EDI) prepared this Phase I Environmental Site Assessment (ESA) of the Red Line Extension Preferred Alignment located 11 miles south of the Chicago Business District (commonly referred to as the Loop) in the City of Chicago, Illinois (the Subject Property). This assessment was completed to comply with our subcontract agreement with T.Y. Lin International Great Lakes, Inc. (T.Y. Lin) dated March 20, 2020, who is the prime contractor selected by the Chicago Transit Authority (the Client) to provide professional services for Contract No. C19FC102326216, Red Line Extension Final EIS and Preliminary Engineering. The specific scope of services requested for this Phase I ESA was detailed in the RLE Final Environmental Impact Statement (EIS) and Preliminary Engineering, Scope of Services, Task 4.4 (a); which was provided as an attachment to the subcontract agreement between EDI and T.Y Lin. The Phase I ESA was completed generally following the American Society for Testing and Materials (ASTM) International Standard E1527-13, Standard Practice for Environmental Site Assessments (the Practice). Section 1.1.4 of the report presents the limiting conditions and exceptions from the practice. Based on the requested scope of services, the Phase I ESA does not meet the requirements for all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

The conclusions stated in this Phase I ESA represent EDI's professional judgment based on information and data readily available at the time of preparation, EDI's scope of services, EDI's observations made at the time of the site reconnaissance, as well as information provided by the Client and others. In preparing this Phase I ESA, the standard of care for all professional services performed or furnished by EDI was the skill and care used by members of EDI's profession practicing under similar circumstances at the same time and in the same locality. EDI makes no warranties, express or implied, in connection with EDI's services.

Site Reconnaissance: Britten Adams, Environmental Scientist

Akilah Townsend, Environmental Scientist

Report Preparer: Sydney Miller, Environmental Scientist

Environmental Professional: Jason Janssen, QA/QC Manager

A summary of our qualifications is included in Appendix G.

Executive Summary

At the request of the Chicago Transit Authority (the Client), Environmental Design International inc. (EDI) performed a limited Phase I Environmental Site Assessment (ESA) of the Red Line Extension Preferred Alignment located 11 miles south of the Chicago Business District (commonly referred to as the Loop) in the City of Chicago, Illinois (the Subject Property). The Subject Property extends along an approximately 5.6-mile corridor from the existing 95th Street Terminal to 132nd Street. The Executive Summary provides a summary of the findings of this Phase I ESA. It should be noted that although the Executive Summary is an integral part of a report, it does not substitute for reading the entire report. The complete report must be read in its entirety to obtain a more complete understanding of the findings and potential environmental concerns associated with the Subject Property, as well as to aid in any decisions made or actions taken based on this information.

Conclusions

EDI performed a Phase I ESA of the Subject Property generally following the American Society for Testing and Materials (ASTM) International Standard E1527-13, Standard Practice for Environmental Site Assessments (the Practice). Section 1.1.4 of the report presents the limiting conditions and exceptions from the Practice.

The following conclusions have been made in relation to the Subject Property and are summarized in Tables ES-1 through ES-6. It should be noted that an identification number was assigned to each geographically discrete condition identified in Tables ES-1 through ES-6. This was done to allow the user the ability to identify the approximate location of the discrete condition in the noted corresponding figure. Certain conditions were found in broad areas throughout the Subject Property, or adjoining area, or that were not interpreted to be geographically discrete by EDI. In these instances, these conditions were not assigned an individual identification number. The assignment of identification numbers to conditions was done generally in a north to south fashion along the alignment and does not represent a ranking of the hazard, severity, or potential impact of the condition. The noted figures are presented at the end of the tables in this executive summary, as well as in Appendix A.

Recognized Environmental Conditions (RECs)

A Recognized Environmental Condition (REC) is defined by the Practice as the presence or likely presence of any hazardous substances or petroleum products in, on, or at the Subject Property: (1) due to a release to the environment; (2) under conditions indicative of a release to the

environment; or (3) under conditions that pose a material threat of a future release to the environment. A total of 26 on-site RECs and 18 off-site RECs were identified in connection with the Subject Property.

As noted previously, an identification number was assigned to each geographically discrete REC identified in Tables ES-1 and ES-2. This was done to allow the user the ability to identify the approximate location of the discrete condition in the noted corresponding figure. Certain conditions were found in broad areas throughout the Subject Property, or adjoining area, or that were not interpreted to be geographically discrete by EDI. In these instances, these conditions were not assigned an individual identification number. The assignment of identification numbers to conditions (RECs, CRECs, HRECs, and *de minimis*) was done generally in a north to south fashion along the alignment and does not represent a ranking of the hazard, severity, or potential impact of the condition.

On-Site RECs

Table ES-1 lists the on-site RECs that were identified in connection with the Subject Property.

Table ES-1: On-Site RECs

No.	Figure	Name	Description
--	--	Railroad Tracks	Railroad tracks were observed on and adjacent to the Subject Property throughout the area. These tracks exist at various locations on elevated embankments. The source of the fill material used to make the embankments is unknown. Most of these rail lines are also used to transport freight, which may include hazardous materials or petroleum products. Spills or releases that occurred on or along these tracks may have impacted the Subject Property. Railroad rights of way are also typically maintained using herbicides for weed control. The Client should be aware that routine application of herbicides over time may result in elevated concentrations of chemicals in the surface soil and/or surface run off. Furthermore, releases may have occurred from creosote treated railroad ties or coal ash releases from historic steam train operations. Therefore, the presence of railroad tracks is evidence of a REC.

No.	Figure	Name	Description
Subject Property – 103rd Street station to 111th Street station			
4	ES-1	403 W. 103rd Place	Historical Sanborn Fire Insurance (Sanborn) maps depict a fuel warehouse at the rear of this facility in 1950. The historical presence of a fuel warehouse at this facility is a REC.
5	ES-1	400 W. 103rd Place	Sanborn maps depict a coal yard at this facility from 1911 to 1950. The historical presence of a coal yard at this facility is a REC.
6	ES-1	B Van Dir Meer & Sons 400 W. 104th Street	Records from the City identified work permits issued in 1956 to inspect three 20,000-gallon fuel oil underground storage tanks (USTs) and to remove an unspecified number of existing tanks at this facility. No corresponding records indicating the three 20,000-gallon USTs have been removed were identified. Sanborn maps from this time period depict the facility with a building labeled fuel storage and coal yard. Sanborn maps from 1989 depict this facility as a junk yard. The historical presence of a junk yard, coal yard, and fuel oil tanks at this facility with tanks that may remain in the ground is a REC.
7	ES-1	Fred Syhora 401 W. 105th Street	This facility was identified with records for the installation and subsequent abandonment of four USTs. The tanks were reportedly installed in 1957 and consisted of two 15,000-gallon USTs with unspecified contents and two 3,500-gallon USTs for used motor oil. In 1970, two 15,000-gallon USTs and two 4,000-gallon USTs were reportedly abandoned in place by filling with sand. The reported presence of four abandoned USTs at this facility that may remain in place is a REC.
8	ES-1	10514 S. Stewart Avenue	Evidence of automotive and equipment repair was observed at this facility during the site reconnaissance. Automotive and equipment repair typically generate wastes in the form of waste oil and other waste fluids as well as handle and store some amount of petroleum products or hazardous materials such as fuels, oils, paints, solvents, and other grease and oils. The use of this facility for automotive and equipment repair is a REC.

No.	Figure	Name	Description
9	ES-1	Illinois Bell Telephone/ AT&T IL 413 W. 105th Street	Six USTs were reportedly installed at the facility between 1950 and 1974. Corresponding records for the removal of four USTs in 1988 were identified, along with a reported leaking UST (LUST) incident. As noted in the Hazardous Materials Technical Memorandum, dated August 21, 2013 and prepared by CWC Transit Group, the LUST incident relates to contamination from the four USTs removed in 1988. A review of the Illinois Environmental Protection Agency's (IEPA) online LUST database and document explorer database identified that a No Further Remediation (NFR) letter was issued for the LUST incident in March of 2005. Among the terms and conditions of the NFR letter, a land use restriction was specified, which noted that use of the facility was limited to industrial or commercial purposes. The issuance of an NFR letter for the LUST incident with land use restrictions would normally be considered evidence of a Controlled REC (CREC). However, the potential continued presence of two USTs in the subsurface at this facility is a REC.
9	ES-1	Cement Block Factory 10638 S. Stewart Avenue	This facility was identified as a cement block factory in the 1950 Sanborn map with a gasoline storage tank and five 50-foot-tall coal silos. Cement block factories typically use large quantities of concrete and aggregate, which is then mixed with water to form the blocks. The formed blocks are then cured in a kiln typically heated by coal or petroleum products. Aggregate used in cement block typically include sand, stone, and gravel. Blast-furnace slag, fly ash, and coal cinders have also been typically added to reduce the weight of the finished product. Historical sources indicate this facility was present from 1938 to the early 1960s. Cross-referencing Cook County records to the Sanborn maps indicates this facility was present at the noted address. The historical presence of a cement block factory is evidence of a REC.
10	ES-1	Midland Chemical Corporation/ Atlan Inc	This facility was identified with a history of four USTs, which may remain in place. City records indicate one 3,000-gallon UST and one 7,000-gallon UST were inspected in 1962. In 1975, one 2,000-gallon and one

No.	Figure	Name	Description
		400 W. 107th Street	4,000-gallon mineral spirits USTs were reportedly installed. No corresponding records of UST removals was identified. The 1989 Sanborn map notes a manufacturing facility with slag bin and several USTs. City records also identified a history of enforcement actions and inspections at the facility for the presence of "auto parts and oil on the ground." Observations during the site reconnaissance also noted evidence of auto related repair. The historical presence of manufacturing on the property with the reported presence of what appears to be four separate USTs at this facility and the reported issuance of violations for the presence of oil on the ground is a REC.
11	ES-1	407 - 411 W. 107th Street	This facility was identified as a coal yard in the 1950 Sanborn map with several gasoline storage tanks depicted. This facility was listed under several addresses in City records for complaints and subsequent inspections by City staff that appear to be related to what was a reported auto junk yard with complaints detailing that "the rear and side lots [are] filled with car parts and junk, and that a large quantity fluids and grease are present." The reported presence of an auto junk yard with large quantities of fluids and greases being present is a REC.
13	ES-2	Harris Transmission 410 W. 109th Street	The facility was identified in records as an automotive transmission repair shop from approximately 1991 to 2000. Automotive and equipment repair facilities typically generate wastes in the form of waste oil and other waste fluids as well as handle and store some amount of petroleum products or hazardous materials such as fuels, oils, paints, solvents, and other grease and oils. The reported historical use of the facility for auto repair operations is a REC.
Subject Property – 111th Street station to Michigan Avenue station			
14	ES-2	William Ransom Transport	The facility was identified with a record of one 6,000-gallon gasoline UST that was reported as removed with a corresponding LUST incident being reported in February 1999 and assigned incident number 990399. A review of IEPA records identified that 20- and 45-day reports were

No.	Figure	Name	Description
		352 W. 110th Street	submitted for the incident, but that no NFR letter has been issued. Based on the 45-day report, the UST appears to have been located south adjacent to the existing building. The reported presence of an open unresolved LUST incident for a gasoline release at the facility is a REC.
15	ES-2	340-350 W. 110th Place	This facility was identified as a contractor's yard in Sanborn maps from 1950 and 1989 with a gasoline storage tank and oil storage being noted. The historical presence of a contractor's yard with a tank and oil storage is a REC.
16	ES-2	Chatham Coal and Coke Co. 356 W. 111th Street	This facility was depicted as a coal yard in Sanborn maps from 1950. The historical presence of a coal yard is a REC.
26	ES-2	SRM Motors 11429 - 11439 S. Perry Avenue	The facility was identified in records as an automobile repair shop starting in the early 2000s. Observations during the site reconnaissance noted the continued presence of an auto repair facility at this location. The presence of auto repair operations at this facility since the early 2000s is a REC.
28	ES-2	Triangle Transmission 35 W. 115th Street	Records identified the presence of this automotive repair facility since at least 1977. Observations during the site reconnaissance noted the continued presence of this facility under the name Donald's Auto Repair. This facility was listed in the UST databases with record of two 1,000-gallon gasoline tanks that were reported as removed in 1999. An associated LUST incident was reported and assigned incident number 992324. A review of IEPA records identified that a 20-day report was filed, but that no NFR letter has been issued, and that the IEPA does not appear to consider the issue resolved. The presence of an automotive repair facility since at least 1977 and the unresolved LUST incident for a release of gasoline is a REC.

No.	Figure	Name	Description
31	ES-2	Cuter Sefer Oil 11521 S. State Street	The 1950 Sanborn map identifies this facility as a gas station with three USTs. This facility was identified in City records for one 1,000-gallon gasoline UST when a permit was reportedly issued to replace an existing tank in 1955. City records also identified a series eight inspections spanning from December 2013 to February 2015, which noted that the facility was a vacant city owned lot where fly dumping had previously occurred, and which had been cleaned up. The inspections were conducted to observe the lot for evidence of additional fly dumping, none of which was noted. The historical presence of gas station with three USTs at the facility, combined with a lack of records indicating the USTs were removed, as well as the reported history of fly dumping at the facility is a REC.
32	ES-2	Oak Park National Bank 11500 S. Michigan Avenue	This facility was identified in City records with a history of nine USTs. Records identified that a 315-gallon UST, one 1,000-gallon UST, and one 2,000-gallon UST were reportedly installed in May of 1958. Records further identified that one 2,000-gallon UST and five 300-gallon USTs were reportedly installed in March of 1959. Aerial photographs from this time period depict the construction of a strip mall at this location. The reported historic presence of USTs being installed at the facility, with no corresponding record of their removal, is a REC.
33	ES-2	Flair Cleaners/ Betty Bright Cleaners 11518 S. Michigan Avenue	This facility was identified as dry cleaning plant under several names from 1981 to 2003 and was a registered conditionally exempt small quantity generator (CESQG) of hazardous wastes. This facility was also listed in City records relating to complaints and inspections. A complaint was filed in August 2004 that the facility was “dumping used chemical solution into the sewers throughout the area.” Records also identified a series of eight inspections of the facility by city staff that were conducted between August 2002 and March 2007. Six of these inspections appeared to be

No.	Figure	Name	Description
			regular periodic inspections of the facility and did not report issues of concern. Two of the inspection were noted to be conducted in response to the above noted complaint. These inspections were conducted on August 3, 2004 and August 12, 2004 and did not report to find evidence of the illegal disposal of materials in the sewer behind the shop. Based on the above information, the historical presence of a dry cleaning plant is a REC.
Subject Property - Michigan Avenue station to 130th Street station			
38	ES-2	The Shedd Company 301 E. 117th Street	This facility was identified in Sanborn maps from 1911 and 1950 as a manufacturer of ice cream and in 1989 as a potato chip factory. Sanborn maps depict the facility with two USTs. This facility was listed in City records with a history of USTs. City records identified that one 1,000-gallon gas tank was reportedly replaced in 1948, one 4,000-gallon fuel oil tank was reportedly installed in 1956, and one 6,000-gallon fuel oil tank was reportedly installed in 1957. The reported presence of three USTs at the facility, combined with a lack of records indicating the USTs were removed, is a REC.
39	ES-2	American Clybourn Finishing 11730 S. Front Avenue	This facility as depicted in the 1989 Sanborn map as a metal finishing facility. The facility registered as a large quantity generator (LQG) of spent halogenated solvents used in degreasing (F001) in 1980. In 1995, the facility changed its status to a CESQG. The historic presence of a metal finishing facility that was a large quantity generator of spent solvents on the Subject Property for an apparent 15-year period is evidence of a REC.
40	ES-2	Stuart Chemical and Paint Inc. 11740 Front Street	This facility was identified in Sanborn maps from 1950 as a coal yard and paint factory in the 1989 map. This facility was noted as an apparent auto junkyard with bulk containers stored outdoors during the site reconnaissance. This facility was identified with a history of seven tanks. Six 1,000-gallon tanks and one 3,000-gallon tank were reportedly removed in January of 1990 and were reported to contain the following substances: toluene, xylenes, Stoddard solvent/naphtha, light aliphatic

No.	Figure	Name	Description
			solvent naphtha, ethyl acetate, methyl isobutyl ketone, and methyl ethyl ketone. A corresponding LUST incident from 1990 was noted. A review of IEPA records indicates that the LUST incident is unresolved and that the IEPA's review of investigations undertaken at the time requested further information. Based on the reported open status of the LUST incident and continued use of this facility as an apparent auto junkyard with bulk containers being observed during this site reconnaissance, this facility is a REC.
41	ES-3	Illinois Central Track 119th Street	This facility was listed in the Bureau of Land (BOL) database. A review of the provided database information and the IEPA's BOL online database identified that the facility was listed in the states solid waste program in 1986. Based on the historical use of this facility as a railroad and for railroad operations, this listing is considered evidence of a REC.
42	ES-3	All American Recycling/ Keywell Corp/ S.G. Keywell Co. 11900 S. Cottage Grove Avenue	This facility is a scrap metal recycling entity. Historical aerial sources appear to depict this facility starting in the 1950s, and observations during the site reconnaissance note its continued presence. However, it should be noted this facility appeared to extend past its present southwestern boundary and onto the Subject Property through the 1980s on what was most recently an asphalt plant operated by K-Five Construction. The facility was listed in the Integrated Compliance Information System (ICIS) database for a formal enforcement action for penalty in 2010. The enforcement action reportedly related to Toxic Release Inventory (TRI) reporting under the Emergency Planning and Community Right-to-Know Act (EPCRA). The facility was listed in the UST database with a history of two 2,000-gallon gasoline USTs reported as removed in 1990. The facility was also listed in the LUST database with a history of a gasoline release reported in 1990 and a diesel release reporting in 1994. A review of IEPA records

No.	Figure	Name	Description
			identified that an NFR letter was recorded in 1996 for the 1990 gasoline LUST incident with no noted requirements for engineered barriers or institutional controls. Records indicate that IEPA issued a non-LUST determination letter in 1994 for the diesel release. The facility was also listed in the SPILLS database for a spill non-LUST incident occurring on July 9, 2004. The facility was listed in the Resource Conservation and Recovery Act (RCRA) database as a CESQG in 1996 and Large Quantity Generator in 1992 of ignitable waste (D001) and corrosive waste (D002). The facility reportedly changed its status to non-generator in 2018. The historic and ongoing use of the facility for scrap metal processing, history of enforcement action for penalty, the facilities former status as a Large Quantity Generator of hazardous wastes, and the apparent presence of unremedied releases of diesel fuel, this facility is a REC.
44	ES-3	Elmer Larson, Inc./ K-Five Construction/ K Five Construction 12401 S. Cottage Grove Avenue/ 12500 S. Cottage Grove Avenue	This facility was operated as an asphalt plant from approximately 1987 through 2017. Based on historical aerials, this facility appears to have been built on former portions of the All American Recycling facility. City records noted the presence of berms as part of containment systems for aboveground storage tanks (ASTs) and an outdoor drum storage area, reported occurrences of fly dumping at or near the facility, and the reported presence of seven ASTs. The ASTs were identified as one 1,000-gallon diesel AST, one 8,000-gallon prime sealer AST, two 20,000-gallon used oil ASTs, one 14,000-gallon used oil AST, one 20,000-gallon AST identified as containing “asphalt/cement”, and one 2,000-gallon AST containing “Anti-Stripper.” During the site reconnaissance, a concrete containment structure with what appeared to be support saddles for the ASTs was observed.

No.	Figure	Name	Description
			The Tier 2 database identified that the facility stored or used reportable quantities of the following hazardous chemicals in 2010 and 2014: fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil. The reported use of this facility as an asphalt plant with records of at least seven ASTs of various size (that contained diesel fuel, used oil, and other products), as well as the reported use or storage various hazardous substances (fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil) in volumes sufficient to require Tier II reporting is a REC.
48	ES-3	Penn Central Corp./ Lake Calumet Quad 810 E. 124th Street	This facility was listed in the State Sites Unit Listing (SSU) and Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) databases. The SSU database listed this facility with ID number 0316490002. A review of IEPA records indicate that a slurry wall was proposed in the late 1980s to be used at the facility to control the movement of contaminants. The documents also indicate that almost $170,000 of funds were requested by the IEPA in 2004 to allow for Patrick Engineering, Inc. to conduct a site investigation. This facility was also identified on a map in a US Scrap documentation accessed through the IEPA's document explorer database, as well as in the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 2013. The Hazardous Materials Technical Memorandum identified this facility as a hazardous waste dump site and that over 400,000 gallons of liquid waste were reportedly pumped from the basement of former on-site grain silos.

No.	Figure	Name	Description
			Given the apparent proposed slurry wall, reported historic use of the facility as a hazardous waste dump site, and requested funding for a site investigation in 2004, this facility is considered a REC.

Off-Site RECs

Table ES-2 lists the off-site RECs that were identified in connection with the Subject Property.

Table ES-2: Off-Site RECs

No.	Figure	Name	Description of REC
Off-Site RECs - 95th Street station to 103rd Street station			
1	ES-1	Shell Oil/ Mobile Gas & Food Mart/ Sims Arco 4 E. 95th Street Northeast of the Subject Property Approximately 350 feet from Subject Property	This facility was a gasoline service station. From historical aerials this facility was constructed in the 1970s and was operated as a gas station until about 2017, when the Office of the State Fire Marshal (OSFM) records indicate the Client purchased the facility. During the site reconnaissance, this facility no longer appeared to be in active use as a gas station. Records indicate the facility has a 12,000-gallon gasoline, 8,000-gallon gasoline, and 6,000-gallon diesel USTs. No corresponding records indicating the USTs were removed were identified from the obtained documents, and observations from the site reconnaissance indicate the USTs remain in place. The historical operation of this facility from the 1970s to about 2017 as a gas station with three USTs that remain in the ground is a REC.
3	ES-1	Abbott Park Fieldhouse 45 E. 95th Street Northeast of the Subject Property	The facility was listed in the LUST database for an 8,800-gallon heating oil UST removed in 1993. A review of the IEPA records identified that a pre-1974 letter was filed with the IEPA in 2007. Therefore, the release was exempted from the LUST regulations. Due to contamination from the LUST incident being allowed to apparently remain in place and no remedial action being required, the historical presence of a UST and LUST incident at the facility is a REC.

No.	Figure	Name	Description of REC
		Approximately 500 feet from Subject Property	
Off-Site RECs – 103rd Street station to 111th Street station			
17	ES-2	Roseland Tune Up Center 401 W. 111th Street West of the Subject Property Approximately 125 feet from the Subject Property	This auto repair facility was identified in records starting in the early 1980s. Observations from the site reconnaissance indicate the continued presence of an automotive repair facility with a three-bay garage. Therefore, this facility is a REC.
18	ES-2	Pentecostal Temple, Roseland Service Station 415-419 W. 111th Street West of the Subject Property Approximately 350 feet from the Subject Property	This facility was identified in records as a gasoline service station from approximately 1923 to 1928. The facility was listed in the LUST database for a used oil LUST incident on August 8, 1991, and a gasoline LUST incident on November 22, 1991. A review of IEPA records identified a letter from 2009, which essentially noted that the IEPA does not consider the LUST incidents resolved. The reported presence of open unresolved LUST incidents at the facility is a REC.
19	ES-2	Reiter Brothers 433 W. 111th Street West of the Subject Property Approximately 500 feet from the Subject Property	The facility was identified in records as a gasoline service station from the late 1920s to the 1970s. The historical presence of an auto service station for approximately 40 years is a REC.

No.	Figure	Name	Description of REC
Off-Site RECs - 111th Street station to Michigan Avenue station			
20	ES-2	CK Madderom Co. 355 W. 112th Street West of the Subject Property Approximately 100 feet from the Subject Property	This facility was depicted as a coal yard in Sanborn maps from 1911 and 1950. The historical presence of a coal yard is a REC.
21	ES-2	Sheldon Heights Service 332 W. 113th Street West Southwest of the Subject Property Approximately 100 feet from the Subject Property	The facility was identified in records as a gasoline station from at least 1950 to the 1970s. Sanborn maps from this period depict the facility with two gasoline USTs. No records indicating the USTs were removed were identified from the records obtained. The historical use of the facility as a gasoline station with two USTs is a REC.
27	ES-2	Abandoned Service/ City of Chicago/ Satriano Texaco Service 11500 S. Perry Avenue Southwest of the Subject Property Approximately 200 feet from the Subject Property	This facility was identified in records as a gasoline service station from at least the 1950 to 1993. One 6,000-gallon gasoline, two 5,000-gallon gasoline, and one 1,000-gallon used oil tanks were identified as having been removed in 2000 with a corresponding release of gasoline and used oil being reported. A review of IEPA records indicates that the LUST incident is apparently open and unresolved. The reported presence of an open unresolved LUST incident for the facility is a REC.

No.	Figure	Name	Description of REC
29	ES-2	Abandoned Gas Station/ Cox Donna 2 W. 115th Street Northwest of the Subject Property Approximately 160 feet from the Subject Property	This facility was identified with a record of one 4,000-galllon and one 3,000-gallon gasoline USTs, both of which are reported as removed. Two gasoline LUST incidents were reported, one in 1998 and a second in 2011. A review of IEPA records identified that pre-1974 letters were filed with the IEPA for both incidents. Therefore, the releases were exempted from the LUST regulations requiring cleanup. Therefore, the reported presence of two un-remediated gasoline LUST incidents at this facility is a REC.
34	ES-2	Trailer Factory/ Charter Bus Company 11575 S. Wabash Avenue Southwest of the Subject Property Approximately 70 feet from the Subject Property	This facility was identified in historical sources as a trailer factory with lacquer spraying operations by 1950. Observations during the site reconnaissance noted this facility was apparently used as an office and garage for a bus company. City records indicate that an inspection of the bus company was conducted in 2004 by City staff who reported to observe evidence of the illegal dumping of liquid wastes into the city stormwater sewer system. Obtained city records did not identify a corresponding record of enforcement action or complaints. Based on the historical use of this facility as a factory with lacquer spraying operations, the use of the property as an apparent bus garage with reported evidence of the illegal disposal of liquid wastes is a REC.
35	ES-2	Haney Khalil, Michigan Citgo/ Martin oil Service 11600 S. Michigan Avenue Southwest of the Subject Property	This facility was identified as a gasoline service station from at least 1970 to present day. The facility was listed identified with a history of a 12,000-gallon gasoline, 15,000-gallon gasoline, 12,000-gallon gasoline USTs listed as currently in use, and a 6,000-gallon kerosene UST that was reported as abandoned in place in 2017. A LUST incident corresponding to the abandonment to the kerosene UST was also noted. A review of IEPA records indicates the LUST incident is unresolved. Therefore, the operation of a gas station at this facility from at least 1970, with four USTs that remain in place and an unresolved release of kerosene is a REC.

No.	Figure	Name	Description of REC
		Approximately 280 feet from the Subject Property	
Off-Site RECs – Michigan Avenue station to 130th Street station			
43	ES-3	Bulkoa Inc./ Clean Harbors Env. Services/ Schneider Tank Lines/ Vacuum Industrial Pollution Intl/ Smith Systems Chicago Yard/ Unloading Unlimited/ Allwaste Tank Cleaning 11861-11901 S. Cottage Grove Avenue Northeast of the Subject Property Approximately 220 feet from the Subject Property	The facility was identified with a history of seven USTs that were reportedly removed in December 1997. A LUST incident was reported in 1997 for a release of diesel and gasoline. A review of IEPA records identified that an NFR letter was issued in 2003, which required institutional controls consisting of reliance of a groundwater ordinance and restricting use of the property to industrial or commercial purposes. IEPA records also identified that a Soil Vapor Extraction system was installed in 2001 at the facility to address the contamination from the release and was operated for a period of about 2 years. The facility was also listed under several different RCRA listings as a generator of hazardous waste, some with unique generator identification numbers but the same overall address and apparent physical location when reviewing historical aerials. Due to the overlapping RCRA listings, the exact status and history could not be readily determined. The facility apparently was mostly a small quantity generator of hazardous wastes, However, records identified Allwaste Tank Cleaning as a historic large quantity generator. Reported waste streams included ignitable (D001), corrosive (D002), reactive (D003), spent solvents (F001, F002, and F003), electroplating wastes (F006, F007), quenching oil bath residues (F010), quenching wastewater treatment sludges (F012), K-listed wastes (K001, K009, K010, K015, K016, K018, K019, K020, K021, K022, K023, K024, K027, K028, K030, K048, and K049), and U-listed wastes (U019, U055, U134, U140, U220, and U238). Given the reported history of this facility as an apparent generator of hazardous waste under a large variety of waste codes, this history of a gasoline and diesel fuel release with contamination allowed to remain in place

No.	Figure	Name	Description of REC
			subject to institutional controls, this facility is evidence of a REC.
45	ES-3	US Scrap/ U.S. Scrap/ U.S. Drum Disposal Co. 391 E. Kensington/ 123rd and Cottage Grove Avenue Southwest of the Subject Property Approximately 100 feet from the Subject Property	This facility is not currently listed as a National Priorities List (NPL) site for the U.S. Environmental Protection Agency's (USEPA) Superfund Program. However, the site was investigated by the USEPA for possible inclusion in the NPL starting in 1980. Records identify that the facility underwent several rounds of formal enforcement action with the USEPA starting in 1989 through at least 2013. Several actions were referred to the courts. USEPA records identified that the facility reportedly operated as an industrial chemical waste receiver from 1965 to 1975. From 1973 to 1975, the operator of the facility reportedly disposed of wastes at the facility and a related site. A landfill fire was reported at the facility in 1985, after which the USEPA conducted emergency response action, which reportedly involved excavating and removing "heavily contaminated soils" and drummed wastes from a railroad embankment on the facility. The response action reportedly only addressed a portion of the known buried wastes. A review of IEPA records identified a history of proposed investigations of the facility from 2004. A letter from the IEPA dated June 2005 to the USEPA requested a time-critical removal assessment be conducted at the facility as soil, water, and sediment samples reportedly still contained "high levels of pesticides and semi-volatile organic compounds (SVOC) contamination." Based on the reported historical use of the facility, with landfilling and burial of chemical related wastes, and the reported presence of SVOC and pesticide contamination remaining at the facility in the mid-2000s, this facility is a REC.
46	ES-3	Sherwin Williams Co.	This facility is not currently listed as a NPL site for the USEPA's Superfund Program. However, the site was investigated by the USEPA for possible inclusion in the

No.	Figure	Name	Description of REC
		11541 S. Champaign Avenue Northeast of Subject Property Approximately 500 feet from Subject Property	NPL. In 1994, a high corrective action priority was assigned by the USEPA. The facility was listed in the RCRA database as a Treatment, Storage, and Disposal (TSD) facility and Large Quantity Generator. The RCRA database listings identified a history of numerous wastes related to paint and coating production. The facility received several violations in the areas of records and reporting: final civil judicial action for compliance and/or monetary penalty, generators pre-transport, general, groundwater monitoring, financial requirements, permit application, container use and management, Land Disposal Restrictions (LDR) general, contingency plan and emergency procedures, tank system standards, federal or state statute, and closure/post closure. Institutional controls were established in 2012. Performance standards were attained with required controls in 2014. Remedy construction was planned for 2020. Due to the historic and active use of this facility for manufacturing paint and paint-related products, historic landfilling activities, and ongoing and planned remediation, this facility is considered evidence of a REC.
47	ES-3	Lake Calumet Smelting/ Inland Metals Refinery Company Incorporation 651 E. 119th Street/ 11901 S. Champlain Avenue Northeast of Subject Property Approximately 300 feet from Subject Property	IEPA records identify that this facility was operated as a smelters from 1948 until 1989 and note the confirmed presence of soil and groundwater impacts at the facility through sampling conducted in the 1990s. Records also identify that the facility is not currently listed as an NPL site in the USEPA's Superfund Program. However, the facility was evaluated for possible inclusion in the NPL. The facility was identified as a generator of hazardous waste containing lead (D008) and emission control dust/sludge from secondary lead smelting (K069). The RCRA listings identify that the facility received numerous violations in the late 1980s related to the operation of the site as a Treatment, Storage, Disposal (TSD) facility under the RCRA regulations. The facility was also historically identified as unpermitted and unauthorized solid waste disposal facility with a surface impoundment. IEPA records

No.	Figure	Name	Description of REC
			indicate this was used for the unauthorized disposal of wastes from the smelting process. Based on the reported presence of soil and groundwater contamination at the facility in the 1990s, the historic operation of this facility as a smelters, and the numerous RCRA violations reported in the 1980s, this facility is evidence of a REC in connection with the Subject Property.
50	ES-3	Cottage Grove Dump (No address provided) Northeast of Subject Property Approximately 175 feet from Subject Property	The facility was listed in the SWF/LF database as a historical landfill owned by the City and operated by the Department of Street and Sanitation. The location of the landfill was apparently reported using township and range information, so the exact location is unknown. The reported presence of a historic landfill in the vicinity of the site is evidence of a REC.
49	ES-3	MWRD Calumet Water Reclamation Plant 400 East 130th Street Southwest and northeast of Subject Property Southwest Adjoining Property	This facility is a wastewater treatment plant that services the southern portion of Cook County, which includes residential, commercial, and industrial areas. This facility reportedly conducts primary, secondary, and tertiary water treatment operations and treats 354 million gallons of wastewater on average per day. The facility also reportedly generates approximately 100 tons of dried solids every day from treating wastewater, which are managed on site. Numerous clarifiers, settling basins, and related structures were observed in aerial photographs and during the site reconnaissance. Historical records indicate the facility was established in the 1930s and was progressively expanded until sometime in the 1980s. The facility was also identified as operating landfills. The *Hazardous Materials Technical Memorandum* (CWC Transit Group 2013) identified that an inactive landfill was

No.	Figure	Name	Description of REC
			used for disposal of sand, gravel, and grit from sewage treatment. Surface samples that were reportedly collected indicated the presence of polychlorinated biphenyls (PCBs), chloroform, chlordane, chromium, lead, toluene, and 4,4-dichlorodiphenyldichloroethane (DDD). Given the reported volume of wastewater treated at the facility with the sources of wastewater entering the facility including commercial and industrial operations, the management of solids at the facility, and the reported presence of landfills, the presence of a wastewater treatment facility is a REC.
51	ES-3	Calumet NU Earth/ Calumet NU-Earth Dis 130th Street and Doty Avenue Northeast of Subject Property Approximately 200 feet from Subject Property	This facility was identified in records as a possible landfill. Records further identified that this facility is not currently listed as a NPL site for the USEPA's Superfund Program. However, the site was investigated by the USEPA for possible inclusion in the NPL in 1984 and 1985. The facility was archived by the USEPA in 1991. As this facility was identified as possible landfill, this listing is evidence of a REC.

Controlled Recognized Environmental Conditions (CRECs)

A Controlled Recognized Environmental Condition (CREC) is defined by the Practice as past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. These controls may be, but are not limited to, institutional controls or engineering barriers that are intended to prevent exposure to hazardous substances or petroleum products allowed to remain in place. These controls may limit or restrict the use of a property. By definition, the Practice considers a CREC to

also represent a REC, since residual hazardous substances or petroleum products may remain present in the subsurface.

One off-site CREC was identified in connection with the Subject Property. Table ES-3 lists the CREC identified in connection with the Subject Property.

Table ES-3: CRECs

No.	Figure	Name	Description of CREC
2	ES-1	Amoco 15459/ SS #15459/ Whalen Standard Services 36 W. 95th Street	The facility was a gasoline service station from the late 1960s to approximately 1997. The facility was identified with a history of three 10,000-gallon gasoline USTs that were reportedly removed in 1997. A gasoline LUST incident associated with the UST removal in 1997 was identified and an NFR letter closing the LUST incident was recorded in 2003. A review of IEPA records identified that the NFR letter included requirements for a highway authority agreement which extended party way into 95th Street and Lafayette Avenue. Based on the presence of an NFR letter, this listing is considered evidence of a CREC.

Historical Recognized Environmental Conditions (HRECs)

A Historical Recognized Environmental Condition (HREC) is defined by the Practice as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the Subject Property to any required controls.

A total of three HRECs were identified in connection with the Subject Property. Table ES-4 lists the HRECs identified in connection with the Subject Property.

Table ES-4: HRECs

No.	Figure	Name	Description of HREC
24	ES-2	Marquette Bank/ Vacant Building	This facility was identified with a history of a 2,000-gallon gasoline UST reportedly removed in 2001 with a corresponding LUST incident being reported. An NFR letter was issued for the LUST incident in 2002. A review of the IEPA records did not identify any engineering or institutional controls in connection with the NRF letter. Based on the

No.	Figure	Name	Description of HREC
		133-139 W. 114th Street	reported status of the NFR letter, with no noted requirements for institutional controls or engineered barriers, this facility is considered evidence of a HREC.
30	ES-2	Tadros Musa/ Goodyear Auto Service 11442 S. Michigan Avenue	This facility was identified with a history of one 500-gallon used oil tank that was reported as removed in 1996. A corresponding LUST incident was reported and was issued an NFR letter in 1998. A review of IEPA records did not identify any requirements for engineered barriers or institutional controls. Based on the reported status of the NFR letter, with no noted requirements for institutional controls or engineered barriers, this facility is considered evidence of a HREC.
36	ES-2	Clark Service Station/ Bobs Super 100/ Clark Oil and Refining 11555 S. Michigan Avenue	The facility was identified a gasoline service station with a history of two 6,000-gallon gasoline and one 7,500-gallon gasoline UST reportedly removed in 1991. A gasoline LUST incident was also reported in 1991. An NFR letter was recorded in 1995. A review of the IEPA's online LUST database did not identify any requirements for engineered barrier or institutional controls with the NFR letter. Based on the reported status of the NFR letter, with no noted requirements for institutional controls or engineered barriers, this facility is considered evidence of a HREC.

De Minimis Conditions

A *de minimis* condition is defined by the Practice as a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* conditions are not RECs and are not CRECs.

A total of six *de minimis* conditions were identified in connection with the Subject Property. Table ES-5 presents the *de minimis* conditions that were identified in connection with the Subject Property.

Table ES-5: *De Minimis* Conditions

No.	Figure	Name	Description of *De Minimis* Condition
--	--	Small auto-related spills	Site reconnaissance observations noted the presence of numerous minor staining on the paved parking and drive areas located on and adjacent to the Subject Property. The stains appear to be the result of leakage of automobile-related fluids and not the result of a large-scale spills.
--	--	Household wastes	Site reconnaissance observations identified small piles or loose trash of apparent household-related wastes that were "fly dumped" throughout the Subject Property. The observed materials did not appear to be evidence of systematic landfilling of wastes.
12	ES-2	405 W. 108th Street	Site reconnaissance observations identified two empty plastic 55-gallon drums on the ground. The drums appeared to have been fly dumped within a larger vacant grassy area on the property. The drums were located on an area of ground that appeared to have been disturbed and that was not supporting vegetative growth.
23	ES-2	11336 S. Yale Avenue	This address was listed in City records for an inspection occurred on February 4, 1998 at the facility where city staff observed a large open fire in the rear yard and a work crew removing roofing materials and disposing of it by burning. Two citations were reportedly issued. A review of Cook County Assessor records identifies this facility as a single-family home. Based on the above information, this listing is considered evidence of a *de minimis* condition.
25	ES-2	Clearwater Technology 11426 S. Perry Avenue	The facility is a former generator of hazardous waste but was not reported as a LQG of hazardous waste. The facility generated the following wastes: chromium (D007), benzene (D018), barium (D005), lead (D008), methyl ethyl ketone (D035), ignitable waste (D001), corrosive waste (D002), and halogenated solvents (F001). No records of violations were noted with the listing. The historic presence of a hazardous waste generator on the Subject Property, with no reported violations, is evidence of a *de minimis* condition.
37	ES-2	128 E. 116th Street	Site reconnaissance observation identified an approximately 275-gallon tote of unknown contents. The tote appeared discolored and displayed evidence of staining on its sides.

Vapor Encroachment Conditions (VECs)

A Vapor Encroachment Condition (VEC) is the presence or likely presence of one or more volatile chemicals of concern (COC) in the subsurface of the site caused by the release of vapors from contaminated soil or groundwater either on or near the Subject Property. As part of the Practice, the environmental professional is to evaluate the potential for the migration or encroachment of hazardous substances or petroleum products in the vapor phase within the subsurface. Within the scope of services requested by the Client, VECs were only evaluated for the locations of proposed buildings, stations, and electrical substations. While the method of the evaluation is not specified by the Practice, EDI completed the Vapor Encroachment Screening (VES) in general accordance with ASTM Standard E2600-15, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

A total of 10 on-site VECs and five off-site VECs were identified in connection with the Subject Property. Table ES-6 lists the VECs that were identified in connection with the Subject Property.

Table ES-6: VECs

No.	Figure	Name	Description of VEC
103rd Street station and substation			
6	ES-1	B Van Dir Meer & Sons 400 W. 104th Street	This facility is on the Subject Property and identifies a history of three USTs, which may remain in the subsurface. The potential continued presence of these tanks on the Subject Property and possibility of releases from them represents a VEC.
7	ES-1	Fred Syhora 401 W. 105th Street	This facility is on the Subject Property and has records of installation and subsequent abandonment of four USTs in 1970. The reported abandonment of four USTs on the Subject Property prior and possibility of releases from them represents a VEC.
9	ES-1	Illinois Bell Telephone/ AT&T IL 413 W. 105th Street	This facility is on the Subject Property and has a record of a LUST incident. The LUST incident was remediated and issued an NFR letter in 2005, prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations. The NFR letter notes contamination was allowed to remain in place subject to the restrictions of the NFR letter. The known contamination on the Subject Property represents a VEC.

No.	Figure	Name	Description of VEC
111th Street station and substation			
14	ES-2	William Ransom Transport 352 W. 110th Street	This facility is on the Subject Property and has a record of a gasoline LUST incident in 1999. IEPA records indicated the LUST incident is open and unresolved. The reported presence of an open unresolved LUST incident for a gasoline release at the facility represents a VEC.
18	ES-2	Pentecostal Temple, Roseland Service Station 415-419 W. 111th Street West of the Subject Property Approximately 350 feet from the Subject Property	The facility was listed in the LUST database for a used oil LUST incident on August 8, 1991, and a gasoline LUST incident on November 22, 1991. A review of IEPA records identified a letter from 2009, which essentially noted that the IEPA does not consider the LUST incidents resolved. The reported presence of an open unresolved LUST incidents at the facility represents a VEC.
Michigan Avenue Street station and 116th Street substation			
31	ES-2	Cuter Sefer Oil 11521 S. State Street	This facility is on the Subject Property and identified as in the 1950 Sanborn map as a gas station with three UST. City records note a UST was reportedly replaced in 1955. The reported presence of a 1,000-gallon UST at the facility, combined with a lack of records indicating the UST was removed, represents a VEC.
32	ES-2	Oak Park National Bank 11500 S. Michigan Avenue	This facility is on the Subject Property and is identified in City records with a history of nine USTs. Records identified that a 315-gallon UST, one 1,000-gallon UST, and one 2,000-gallon UST were reportedly installed in May of 1958. Records further identified that one 2,000-gallon UST and five 300-gallon USTs were reportedly installed in March of 1959. Aerial photographs from this time period depict the construction of a strip mall at this location. The reported historic presence of USTs being installed at

No.	Figure	Name	Description of VEC
			the facility, with no corresponding record of their removal, represents a VEC.
33	ES-2	Flair Cleaners, Betty Bright Cleaners 11518 S. Michigan Avenue	This facility is on the Subject Property and was identified as dry cleaning plant under several names from 1981 to 2003. This facility was also listed in City records relating to complaints and inspections. A complaint was filed in August 2004 that the facility was "dumping used chemical solution into the sewers throughout the area." Records also identified a series of eight inspections of the facility by City staff that were conducted between August 2002 and March 2007. Six of these inspections appeared to be regular periodic inspections of the facility and did not report issues of concern. Two of the inspections were noted to be conducted in response to the above noted complaint. These inspections were conducted on August 3, 2004 and August 12, 2004 and did not report to find evidence of the illegal disposal of materials in the sewer behind the shop. Based on the above information, the historical presence of a dry cleaning plant on the Subject Property represents a VEC.
36	ES-2	Clark Service Station/ Bobs Super 100/ Clark Oil and Refining 11555 S. Michigan Avenue Southwest of the Subject Property Approximately 70 feet from the Subject Property	The facility is on the Subject Property and was listed in the LUST database for a gasoline release in 1991. The LUST incident was remediated and issued an NFR letter in 2005. As the NFR letter was issued prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations, the LUST incident represents a VEC.

No.	Figure	Name	Description of VEC
120th Street yard and shop			
42	ES-3	All American Recycling/ Keywell Corp S.G/ Keywell Co./ Keywell Co. 11900 S. Cottage Grove Avenue	This facility is a scrap metal recycling entity. Historical aerial sources appear to depict this facility starting in the 1950s and observations during the site reconnaissance note its continued presence. However, it should be noted this facility appeared to extend past its present southwestern boundary and onto the Subject Property through the 1980s on what was most recently an asphalt plant operated by K-Five Construction. This facility was identified with a LUST incident in 1990. An NFR letter was subsequently reported in 1996. The facility was also listed in the SPILLS database for a non-LUST incident occurring on July 9, 2004. The facility was listed in the RCRA database as a Conditionally Exempt Small Quantity Generator in 1996 and Large Quantity Generator in 1992 of ignitable waste (D001) and corrosive waste (D002). Based on the facilities former status as a Large Quantity Generator of hazardous waste, the issuance of an NFR letter for the gasoline LUST incident prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations, this facility represents a VEC.
44	ES-3	Elmer Larson, Inc. / K-Five Construction 12401 S. Cottage Grove Avenue	This facility is on the Subject Property. The reported use of this facility as an asphalt plant with records of at least seven ASTs of various sizes that contained diesel fuel, used oil, and other products, as well as the reported use or storage of various hazardous substances (fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil) in volumes sufficient to require Tier II reporting represents a VEC.

No.	Figure	Name	Description of VEC
45	ES-3	US Scrap/ U.S. Scrap/ U.S. Drum Disposal Co. 391 E. Kensington/ 123rd Street and Cottage Grove Avenue Southwest of the Subject Property Approximately 100 feet from the Subject Property	Based on the reported historical use of the facility, with landfilling and burial of chemical related wastes, and the reported presence of semi-volatile organic compounds (SVOC) and pesticide contamination remaining at the facility in the mid-2000s, this facility represents a VEC.
48	ES-3	Penn Central Corp./ Lake Calumet Quad 810 E. 124th Street	This facility is on the Subject Property. Given the reported historic use of the facility as a hazardous waste dump site and IEPA requested funding for a site investigation in 2004, this facility represents a VEC.
49	ES-3	Chicago MSD #3 (No address provided) Southwest and northeast of Subject Property Southwest Adjoining Property	The facility is believed to be part of the larger MWRD Calumet Water Reclamation Plant facility. This facility was identified in the *Hazardous Materials Technical Memorandum* (CWC Transit Group 2013). The *Hazardous Materials Technical Memorandum* identified this facility as an inactive landfill. Surface samples that were reportedly collected indicated the presence of PCBs, chloroform, chlordane, chromium, lead, toluene, and 4,4-dichlorodiphenyldichloroethane (DDD). Based on the reported presence of volatile chemicals in surface soil samples, this facility represents a VEC.
130th Street station and substation			
49	ES-3	Chicago Metro Sanitary District #2, Chicago Metro Sanitary District #3,	The facility is believed to be part of the larger MWRD Calumet Water Reclamation Plant facility. The facility was listed in a historical inventory of solid waste sites created originally in 1986. The Northeastern Illinois Planning Commission (NIPC) report recorded

No.	Figure	Name	Description of VEC
		Chicago Metro Sanitary District #4, (No address provided) Southwest and northeast of Subject Property Southwest Adjoining Property	locations of possible landfills using township, range, and section information, so exact placement was not always assured. Due to the reported historic landfill activity at the facility, this represents a VEC.

Figure ES-1: 95th Street through 107th Place

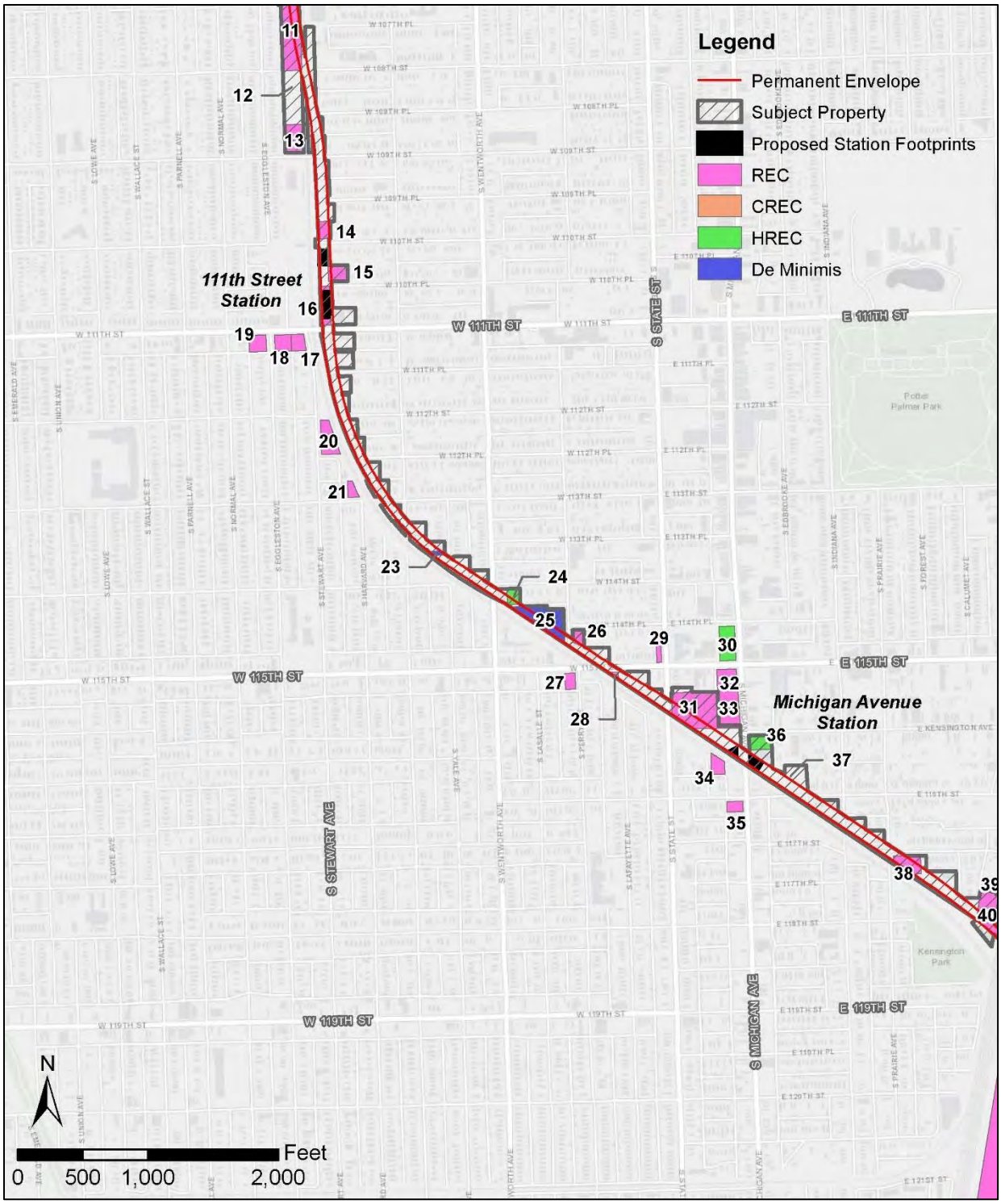

Figure ES-2: 107th Place through 118th Street

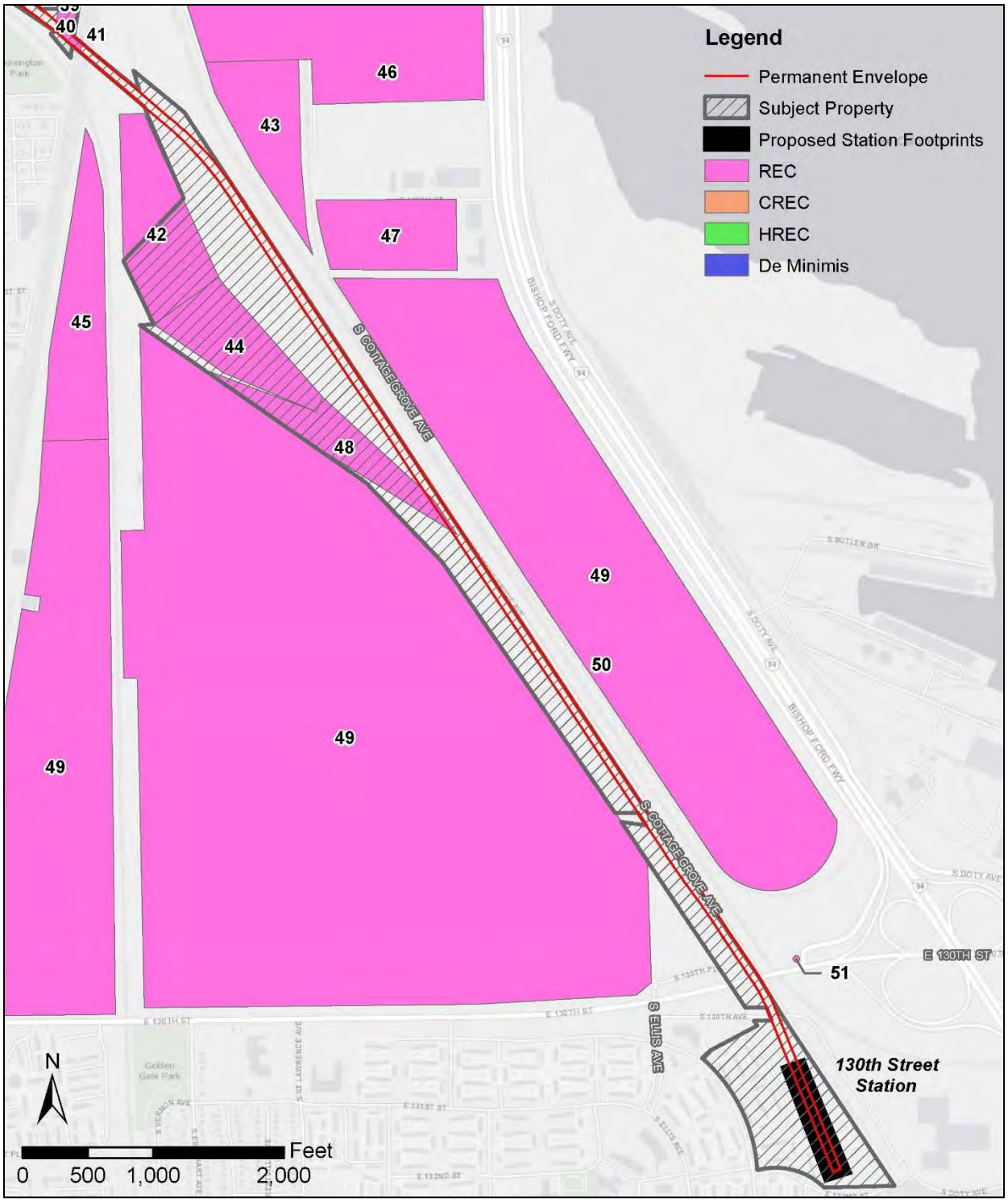

Figure ES-3: 118th Street through 132nd Place

Format

As noted above, the Phase I ESA was completed generally following the Practice. The purpose of the Practice is to define good commercial and customary process for conducting a Phase I ESA. The Practice provides a recommended, but not required, format for reports within Appendix X4 of the Practice. To efficiently meet the goals of this investigation within the requested scope of services, the recommended report format was modified. To aid technical reviewers who are familiar with Phase I ESAs, Table ES-7 summarizes the recommended report format contained in the Practice with a corresponding listing to where the equivalent section(s) may be found in this document.

Table ES-7: Format Mapping

ASTM Recommended Format	Corridor Level Phase I ESA Report Section(s)
Summary	Executive Summary
Introduction	Section 1 - Introduction Section 2 - Scope and Methodology
User Provided Information	Section 3 - User Provided Information Section 6.1 - Prior Investigations
Records Review	Section 4 - Physical Setting Section 6 - Historic Information Section 7 - Regulatory Review
Site Reconnaissance	Section 5 - Site Reconnaissance
Interviews	*No interviews were conducted within the scope of services requested by the Client.*
Evaluation	Section 9 - Conclusions
Appendices	Appendix A through Appendix G

Section 1 - Introduction

1.1 Project Overview

At the request of the Chicago Transit Authority (the Client), Environmental Design International inc. (EDI) performed a Phase I Environmental Site Assessment (ESA) of the Red Line Extension Preferred Alignment located 11 miles south of the Chicago Business District (commonly referred to as the Loop) in the City of Chicago, Illinois (the Subject Property). The Phase I ESA was completed generally following the American Society for Testing and Materials (ASTM) International Standard E1527-13, Standard Practice for Environmental Site Assessments (the Practice). Section 1.1.4 of the report presents the limiting conditions and exceptions from the practice. Based on the requested scope of services, the Phase I ESA does not meet the requirements for all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Refer to Figure 1-1 below for a map depicting the location of the Subject Property.

Figure 1-1: Subject Property Location

1.1.1 Subject Property Description and Use

According to the Draft Environmental Impact Statement (EIS) prepared by the Federal Transit Administration (FTA) and the Chicago Transit Authority (CTA) in cooperation with the Federal Highway Administration (FHWA) in October 2016, the RLE Project would extend the Red Line from the existing 95th Street Terminal to 132nd Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The overall project area has residential (primarily single-family), commercial (urban mixed-use), industrial, transportation, utility, and vacant land uses affected by the Subject Property. The Subject Property area would begin within the I-57 right-of-way, north of the southbound lanes of I-57, and would follow the Union Pacific Railroad (UPRR) track southward.

Due to overall size and length of the Subject Property, portions of the report will break the Subject Property and adjoining properties into the following approximate segments to aid in the discussion and presentation of information:

- 95th Street station to 103rd Street station
- 103rd Street station to 111th Street station
- 111th Street station to Michigan Avenue station
- Michigan Avenue station to 130th Street station

1.1.2 Adjoining Property Description and Use

The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 132nd Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. According to the Draft EIS, the surrounding land uses are primarily single-family residential properties north of I-57 and on the eastern side of the Preferred Alignment, with a mix of primarily single-family residential properties and industrial properties to the west. There are typically one or two vacant properties per block in the residential areas and large vacant parcels near Michigan Avenue, some of which are slated for development. South of 119th Street, the surrounding land uses abruptly transition to industrial, railroad, and major utility sites. The Altgeld Gardens public housing project is at the southern end of the Preferred Alignment. Table 1-1 summarizes use of the immediately adjoining properties.

Table 1-1: Adjoining Property Use

Direction	Adjoining Property Use
North	Primarily single- and multifamily residential, commercial, churches, schools, light industrial, and vacant lots
East	Primarily single- and multifamily residential, churches, schools, municipal, light industrial, and vacant lots
South	Primarily vacant lots and the Beaubien Woods.
West	Primarily single- and multifamily residential, light industrial, vacant lots, the Calumet Water Reclamation Plant, and the Altgeld Gardens public housing project

1.1.3 Historic Use of Subject Property and Adjoining Property

Since 1892, the start of the available historical record, the greater area surrounding the Subject Property has generally been developed. Early records depict the greater area with roads, rail lines, and some structures, indicating development and use of the area. As noted in the *Hazardous Materials Technical Memorandum* (CWC Transit Group 2013), rail lines have been present in or adjacent to the Subject Property since 1892. By the 1930s, the historical records depict the Subject Property, adjoining properties, and greater area as generally fully developed. Generally historical records from the 1930s to the present day depict the initial development of isolated areas or the redevelopment of isolated areas.

1.1.4 Limiting Conditions, Exceptions, and Data Gaps

The objective of the Practice is to gather the information required to satisfy the purpose of the assessment, rather than completion of specific tasks. Therefore, EDI considers limitations and exceptions from the Practice as data gaps. The Practice defines data gaps as a lack of, or inability to obtain, required information despite good faith efforts of the environmental professional. The Practice requires the environmental professional to comment on the impact of significant data gaps on their ability to identify RECs. In general, when required information was incomplete, not readily available, not provided, or not otherwise obtained, EDI attempted to use information from other sources to meet the Practices' performance objectives. When the data gaps affected the environmental professional's ability to identify RECs, EDI considered the data gap(s) to be significant.

To ensure an appropriate understanding of data gaps, all data gaps are identified below along with rationale for evaluation of their significance.

- No interviews were conducted, and no user questionnaire was submitted to the Client or completed within the scope of services requested by the Client. Within the context of the requested services, this is not a significant data gap based on the availability of previous investigations and documents provided by the Client.
- Based on the scope of services requested by the Client, the site reconnaissance was conducted from street level observations gathered from public rights-of-way within and immediately adjacent to the Subject Property. EDI was not provided with access to private property; or the interior spaces of buildings, structures, or improvements that were present on the Subject Property. Within the context of the requested scope of services, this is not a significant data gap.
- Based on the scope of services requested by the Client, EDI was not provided with land title records or the results of an environmental lien or activity and land use limitations (AULs) search. Within the context of the requested services, this is not a significant data gap.
- EDI was not able to document the historical use of the Subject Property back to first use for all areas. Readily available historic sources obtained by EDI began in 1892 and indicate development in the vicinity of the Subject Property. Given the historic developed setting of the Subject Property and that of the City of Chicago, this data failure is not considered a significant data gap.
- EDI was not able to document the historical use of the Subject Property at intervals of 5 years or less for all time periods. However, based on the available information, EDI could infer use of the Subject Property and surroundings during intervening years. Based on the available information, this is not considered a significant data gap.
- Based on the scope of services requested by the Client, VECs were only evaluated for the locations of proposed buildings, stations, and electrical substations, as these locations would be developed with enclosed ground level or below ground occupied structures. Based on EDI understanding, most of the planned development for the RLE would consist of elevated tracks on piers or tracks on ground level.

1.2 Reliance

This report was prepared for the Chicago Transit Authority (EDI's Client), who may rely on this report.

EDI's services were provided through a unique contractual relationship. This contractual relationship included an exchange of information about the Subject Property that was unique and

serves as the basis upon which this report was prepared. Therefore, EDI's assessment may not be adequate for the intended purposes of another party. Reliance or use of this report by any party, except those identified above, was not foreseeable to EDI and is prohibited without express written permission from EDI. Any unauthorized reliance on or use of this report, including any information, findings, or conclusions, will be at sole risk of the third party without recourse to EDI.

Third party reliance letters may be issued by EDI upon request from the Client and receipt of payment of the specified fee for such letters. Each letter will be addressed to an individual party identified in writing by the Client. As EDI's services were provided through a unique contractual relationship, all third parties relying on EDI's reports, by such reliance, agree that such reliance is limited by our contract. No reliance is permitted by any party without such agreement.

Section 2 - Scope and Methodology

2.1 Purpose of Services

EDI completed this Phase I ESA generally following the Practice. The goal of the Practice is to identify RECs in connection with the Subject Property. The purpose of the Practice is to define good commercial and customary process for conducting a Phase I ESA.

2.2 Methodology and Scope of Work

EDI performed a Phase I ESA of the Subject Property. Our scope of work consisted of:

- Regulatory records review
- Historical records review, consisting of a review of:
    - Historical aerial photographs
    - Historical topographic maps
    - Historical Sanborn Fire Insurance maps
- Site reconnaissance
- Vapor Encroachment Screen (VES) in general accordance with ASTM Standard E2600-15
- Preparation of this report

Section 1.1.4 presented limiting conditions and exceptions to the Practice. Section 2.3 presented significant assumptions and limitations.

This report cites the information sources that EDI used as they are presented. As appropriate, copies or excerpts of these sources are appended.

2.3 Significant Assumptions and Limitations

The Phase I ESA was conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the environmental profession under similar conditions. No other warranty or guarantee, express or implied, is included or intended in this report or otherwise. This Phase I ESA is based on our professional judgment concerning the significance of the data collected.

The observations and recommendations presented in this report are time dependent, and conditions will change. This report speaks only as of its date.

No Phase I ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. The Phase I ESA was intended to reduce but not eliminate uncertainty regarding the potential for RECs in connection with the Subject Property. This report is based on commonly known and reasonably ascertainable information, including limited ground-level visual inspection of the Subject Property (except where otherwise explicitly stated), in general conformance with the Practice. This report does not purport to encompass every report, record, or other form of documentation relevant to the Subject Property. Findings and conclusions derived from the methodologies described in the Practice contain all of the inherent limitations in the methodologies that are referred in the Practice. Furthermore, our services were not intended to be technically exhaustive. It is possible that even with the proper application of the methodologies described in the Practice, conditions may exist on the Subject Property that could not be identified within the scope of this assessment or that were not reasonably identifiable from the available information.

EDI has accepted as true, accurate, and unbiased the information provided by the Client, obtained from government sources, research firms, the public domain, interviews, and other sources. In addition, the Practice does not require EDI to independently verify information. Therefore, EDI assumes no liability for the accuracy or completeness of information provided by the Client, obtained from government sources, research firms, the public domain, interviews, and other sources.

EDI has also inferred the direction of the shallow groundwater movement at the Subject Property, and the immediate vicinity, based on the information obtained as part of this report and EDI's experience. Actual groundwater flow at the Subject Property may be locally influenced by many factors and can generally only be determined through a subsurface investigation, both of which are beyond the scope of this assessment.

EDI did not perform any drilling, exploratory probing or discovery, perform tests, collect samples, or take measurements.

Section 3 - User Provided Information

The 'User' is defined by the Practice as the party seeking to use the ASTM Standard E1527-13 to complete an environmental site assessment of the Subject Property. EDI considers our Client to be the User. As set forth in ASTM Standard E1527-13 and USEPA's All Appropriate Inquiries Final Rule, the User has specific obligations for conducting specific inquiries and successfully completing this Practice.

3.1 Suggested Information

EDI's Client provided the following suggested information described by the Practice:

- The reason for performing the Phase I ESA, which is to satisfy the requirements of the FTA through Standard Operating Procedure 19 to complete a corridor level Phase I ESA before the publication of the Final EIS.
- The complete and correct address for the Subject Property, including Parcel Index Numbers (PINs) which are listed in Table 5-2.
- Prior reports or documents concerning the Subject Property and its environmental condition which are listed and summarized in Section 3.3.
- The scope of services desired for the Phase I ESA and any assessment for business environmental risks that are outside the scope of an ASTM Standard E1527-13 Phase I ESA, which are presented in Section 2.
- Identification of all parties who will rely on this report and who are identified in Section 1.2.

3.2 Lien and AUL Results

The client did not provide EDI with land title records or the results of an environmental lien and AUL search. Section 1.1.4 evaluates this data gap.

3.3 Helpful Documents

In accordance with the Practice, EDI through the project team asked the Client, represented by Ms. Marlise Fratinardo, CTA Senior Project Manager, about helpful documents (such as prior Phase I ESAs or other environmental reports). Please note that, as presented in Section 1.1.4, no

interviews were conducted, and no user questionnaire was submitted to the Client or completed within the scope of services requested by the Client.

Table 3-1 summarizes the document(s) provided to EDI, which are appended in Appendix F. If a document is not appended, it is available for review in EDI's office by appointment during normal business hours.

Table 3-1: Summary of Helpful Documents

Document Title:	Hazardous Materials Technical Memorandum
Prepared By:	CWC Transit Group
Prepared for:	CTA
Date:	August 21, 2013 (updated July 27, 2015)
The document is a *Hazardous Materials Technical Memorandum* for the RLE Project. According to the *Hazardous Materials Technical Memorandum*, the purpose of the report was to analyze the potential impacts of the RLE Project with respect to hazardous materials and to present the regulatory framework and evaluation methods used for the analysis. It should be noted this document was prepared while the CTA was evaluating several alternative alignments for the RLE Project. Therefore, EDI's review of this document was focused to what was identified as the UPRR Rail Alternative, as this alternative includes the Subject Property. The document notes that for all alternatives a general inspection field visit was performed, and that analysis included a review of historical topographic maps, aerials, and fire insurance maps; a regulatory database search; and a review of agency files for a select number of sites. Within the document, identified sites were then ranked as no concern, low concern, moderate concern, or high concern, based on their potential to have impacts related to hazardous materials. The findings of the document noted there would be the potential for permanent and construction hazardous material impacts as a result of the UPRR Rail Alternative. In addition, the 2014-2015 RLE Project Update appended in the document noted the CTA announced the NEPA Preferred Alternative – UPRR Alternative. Furthermore, according to the 2014-2015 RLE Project Update, the alignment would have no additional or different impacts from those previously described. The document identified 17 facilities as high concern for the UPRR Alternative. These facilities include:	

Document Title:	Hazardous Materials Technical Memorandum

- Shell Oil Co. at 4 E. 95th Street for a LUST incident and three USTs listed as in use
- Abbott Park Fieldhouse at 49 E. 95th Street for two open LUST incidents, removed USTs, and reported spills
- Illinois Bell Telephone at 413 W. 105th Street for a LUST incident and removed USTs
- William Ransom Transportation/Bus Garage at 352 W. 110th Street for an open LUST incident, removed UST, reported spills, and RCRA generator status
- Pentecostal Temple Church of God at 415 to 419 W. 111th Street for two open LUST incidents, reported spills, and RCRA generator status
- Triangle Transmission at 35 W. 115th Street for an open LUST incident, two USTs, reported spills, and RCRA generator status
- City of Chicago/Abandoned Service Station at 11500 S. Perry Avenue for a LUST incident and four USTs
- Cox, Donna at 2 W. 115th Street for two LUST incidents, two USTs, and reported spills
- Stuart Industrial Coatings, Inc. at 11740 S. Front Street for an open LUST incident
- Lake Calumet Smelting at 11901 S. Champlain Avenue for listing in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database
- Bulkoa Inc./Schneider Tank Lines/Clean Harbors Env. Services at 11861 S. Cottage Grove Avenue for a LUST incident, seven USTs, and RCRA generator status
- Quala Services, LLC at 803 E 120th Street for RCRA generator status with noted violations and reported spills
- Metropolitan Water Reclamation District/Calumet Water Reclamation Plant at 400 E. 130th Street for three USTs and RCRA generator status
- Keywell, LLC at 11900 Cottage Grove Avenue for two LUST incidents, two USTs reported as removed, reported spills, and RCRA generator status

Document Title:	Hazardous Materials Technical Memorandum

- U.S. Scrap at 123rd Street and Cottage Grove Avenue for three USTs and RCRA generator status
- Metro Sanitary District #3 at 125th Street and Doty Avenue for listing in the CERCLIS database
- Penn Central Corp/Lake Calumet Quad at 810 E. 124th Street for listing in the State Site Unit and the CERCLIS database

These facilities were evaluated as potential RECs for the Subject Property. These facilities were also identified in the EDR Area/Corridor Report that is discussed detail in Section 7.2.

Document Title:	Phase I Environmental Site Assessment (Phase I ESA)
Prepared By:	Carnow, Conibear & Assoc., Ltd.
Prepared for:	Chicago Housing Authority (CHA)
Date:	July 22, 2014

The document is a Phase I ESA for a portion of the Subject Property at 130th Street station. The portions of the Subject Property at 130th Street station were identified as Altgeld Gardens - Blocks 11, 12, and 13. The Phase I ESA noted the site consisted of 26 vacant two-story brick buildings, an electrical building, parking lots, sidewalks, and landscape areas totaling approximately 17.3 acres. At the time of the former Phase I ESA, the buildings were unoccupied.

The Phase I ESA identified the presence of four incinerators on the Subject Property as a REC. In addition, in 1996 and 2000, soil samples were collected from the Subject Property and analyzed for pesticides. One soil sample contained concentrations of pesticides that exceeded the 35 IAC 742, Tiered Approach to Corrective Action Objectives (TACO) soil remediation objectives (SROs). The Illinois Department of Public Health concluded that no apparent public health hazard existed from exposure to the pesticide residuals identified in surface soils; therefore, at the time, it was reportedly concluded the concentration of pesticides detected presented a *de minimis* condition. In 2009, additional soil samples were collected, and 24 samples contained polynuclear aromatic hydrocarbons (PNAs) and/or

Document Title:	Phase I Environmental Site Assessment (Phase I ESA)
arsenic exceeding the SROs. According to the Phase I ESA, Carnow Conibear performed a 95 percent Upper Confidence Limit (UCL) evaluation of the data. The results of the analysis indicated that each 95 percent UCL concentration was below the corresponding applicable Tier 1 residential ingestion SRO for each respective analyte. Therefore, the concentrations of PNAs and arsenic detected were reportedly concluded to present a *de minimis* condition at the time.	

Document Title:	Draft Environmental Impact Statement and Section 4(F) Evaluation
Prepared By:	FTA and CTA (in cooperation with Federal Highway Administration)
Prepared for:	Chicago RLE
Date:	October 6, 2016
The document is a Draft Environmental Impact Statement and Section 4(F) Evaluation for the Subject Property. The Draft EIS details the RLE Project, which at the time the document was prepared, would extend the Red Line for 5.3 miles from the existing 95th Street Terminal to 130th Street. In addition, four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street would include bus and parking facilities. It should be noted that at the time the document was prepared, the 130th Street station was planned to be located north of 130th Street. The potential environmental impacts for the East and West Options discussed in the Draft EIS include displacements as a result of construction of the track structure and park & ride facilities and temporary construction impacts such as noise, vibration, fugitive dust, truck traffic, and roadway detours. The potential environmental benefits for the East and West Options discussed in the Draft EIS include economic revitalization and the development of more livable, transit-oriented communities near the proposed stations and increased foot traffic near stations, which would benefit local business. Regarding hazardous materials specifically, the Draft EIS discusses the potential for encountering hazardous materials in Section 4.8 of the document. The Draft EIS includes the August 21, 2013 (updated July 27, 2015) Hazardous Materials Technical Memorandum as Appendix R. The Draft EIS does not present additional information regarding the presence of potential hazardous materials on the Subject Property not captured by the Hazardous	

Materials Technical Memorandum. According to the Draft EIS, no permanent or construction-related adverse land use or economic impacts from hazardous materials would remain after mitigation efforts.

Document Title:	Phase I Environmental Site Assessment (Phase I ESA)
Prepared By:	Carnow, Conibear & Assoc., Ltd.
Prepared for:	CHA
Date:	March 3, 2017
The document is a Phase I ESA for a portion of the Subject Property at 130th Street station. The portions of the Subject Property at 130th Street station were identified as Altgeld Gardens - Blocks 11, 12, and 13. The Phase I ESA noted the site consisted of 26 vacant two-story brick buildings, an electrical building, parking lots, sidewalks, and landscape areas totaling approximately 17.3 acres. At the time of the former Phase I ESA, the buildings were unoccupied. The Phase I ESA identified the presence of five incinerators on the Subject Property as a REC. In addition, the previously identified *de minimis* conditions from the Phase I ESA conducted in July 2014 remained the same.	

Document Title:	Phase II Environmental Site Assessment (Phase II ESA)
Prepared By:	Carnow, Conibear & Assoc., Ltd.
Prepared for:	CHA
Date:	March 24, 2017
The document is a Phase II ESA for a portion of the Subject Property at 130th Street station. The portions of the Subject Property at 130th Street station were identified as Altgeld Gardens - Blocks 11, 12, and 13. The Phase II ESA was conducted to determine potential subsurface impacts at the Subject Property in relation to the former on-site incinerators identified as a REC in previous Phase I ESAs also prepared by Carnow Conibear & Assoc., Ltd.	

Document Title:	Phase II Environmental Site Assessment (Phase II ESA)
On February 27, 2017, Carnow Conibear supervised the advancement of 15 soil borings to a depth of 8 feet below ground surface near the former incinerators. Native groundwater was not encountered during the subsurface drilling. A total of five soil samples were analyzed for PNAs, RCRA metals, synthetic precipitation leaching procedure (SPLP) metals, and/or pH. Analytical results identified no PNAs above the applicable Tier 1 SROs. However, chromium and selenium were identified in exceedance of the applicable pH-Specific Tier 1 SROs for the soil component of Class I and II groundwater ingestion exposure routes. To further evaluate, SPLP analysis was performed with results below all applicable Tier 1 SROs for both Class I and Class II groundwater for chromium and selenium, which indicated the soil component of groundwater ingestion exposure route was not a concern. Based on the results of the soil sample investigation, Carnow Conibear noted no further investigation was warranted at the Subject Property in regard to the identified REC.	

Section 4 - Physical Setting

EDI reviewed physical source setting information to gather additional information about the Subject Property to assist with the interpolation of groundwater movement near the Subject Property and to assist with determining the potential for the migration of contaminants.

4.1 Summary of Physical Setting

Table 4-1: Summary of Physical Setting

Physical Feature	Note	Source
Subject Property Elevation	The Subject Property elevation ranges from 590 to 625 feet above mean sea level.	Draft Environmental Impact Statement and Section 4(F) Evaluation, and USGS Topographic Maps
Topographic Gradient	The Subject Property is generally flat with no discernible slope. The greater surrounding area slopes gently to the east towards Lake Michigan.	USGS Topographic Maps And Draft Environmental Impact Statement and Section 4(F) Evaluation
Closest Surface Water	Lake Calumet, which is located approximately 0.5 miles to the east-southeast at its closest location to the Subject Property.	USGS Topographic Maps, Google Earth
Flood plain mapped on Subject Property?	No, the Subject Property was mapped in an area identified as “Zone X,” which is an area of minimal flood hazard.	FEMA Flood Maps: 17031C0635J, 17031C0645J, 17031C0655J, 17031C0661J, 17031C0662J, and 17031C0664J Copies of the FEMA maps are provided in Appendix F

Physical Feature	Note	Source
Primary Soil Type on Subject Property	Urban Land/Urban Land-Orthents (533/534A): Urban Land/Urban Land-Orthents are clayey soils that have been reworked, constructed on or otherwise disturbed. Orthents (802A): Orthents are loamy soils, well drained, and nearly level.	U.S. Department of Agriculture Natural Resources Conservation Service Custom Soil Resource Reports Copies of the Custom Soil Resource Reports are provided in Appendix F
Interpreted Shallow Groundwater Flow Direction	Groundwater generally flows towards the east. Actual groundwater flow at the Subject Property may be locally influenced by many factors and can generally only be determined through a subsurface investigation, which is beyond the scope of this assessment.	Information obtained from the Hazardous Materials Technical Memorandum, Source Water Assessment and Protection Program, and Topographic Maps from EDR

Section 5 - Site Reconnaissance

On June 8, June 9, and June 10, 2020, Britten Adams and Akilah Townsend from EDI conducted the site reconnaissance. The weather at the time of the site visit was sunny with an average temperature of 89° Fahrenheit. As noted in Section 1.1.4, the site reconnaissance was conducted from street level observations gathered from public rights-of-way within and immediately adjacent to the Subject Property. EDI was not provided with access to private property or the interior spaces of buildings, structures, or improvements that were present on the Subject Property. EDI's assessors were not escorted during the site reconnaissance. In general, EDI systematically observed the Subject Property. Appendix C includes the photographs from the site reconnaissance.

5.1 General Subject Property Setting

Table 5-1: Subject Property Setting

General Subject Property Information	
Subject Property Name	Red Line Extension Preferred Alignment in Chicago, Illinois
Subject Property Size	Approximately 5.6-mile corridor with the proposed permanent envelope being nominally 60 feet wide
Utilities	
Water Supply	City of Chicago
Wastewater or Sewer	City of Chicago
Electricity	Commonwealth Edison (ComEd)
Natural Gas	Nicor Gas

According to the Draft EIS prepared by the FTA and the CTA, in cooperation with the FHWA in October 2016, the RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities.

Table 5-2 lists the 266 specific PINs and addresses for parcels which make up the Subject Property and that were provided to EDI.

Table 5-2: Subject Property PINs and Addresses

PIN	Address
25-09-207-050-0000	9512 S. State Street
25-09-207-049-0000	9511 W. 95th Street
25-09-215-001-0000	9600 S. Lafayette Avenue
25-09-223-043-0000	9721 S. Lafayette Avenue
25-09-222-042-0000	9720 S. Lafayette Avenue
25-09-222-041-0000	9701 S. Princeton Avenue
25-09-221-042-0000	9710 S. Perry Avenue
25-09-229-041-0000	9801 S. Lasalle Street
25-09-228-042-0000	9800 S. Lasalle Street
25-09-228-041-0000	9801 S. Wentworth Avenue
25-09-227-041-0000	9807 S. Yale Avenue
25-09-227-041-0000	9807 S. Yale Avenue
25-09-226-045-0000	9808 S. Yale Avenue
25-09-226-041-0000	9817 S. Princeton Avenue
25-09-225-047-0000	9820 S. Princeton Avenue
25-09-225-026-0000	9822 S. Princeton Avenue
25-09-225-043-0000	9824 S. Princeton Avenue
25-09-225-044-0000	9825 S. Harvard Avenue
25-09-224-019-0000	9822 S. Harvard Avenue
25-09-224-011-0000	354 W. 99th Street
25-09-224-010-0000	352 W. 99th Street
25-09-224-009-0000	350 W. 99th Street
25-09-224-020-0000	356 W. 99th Street
25-09-400-046-0000	341 W. 99th Street
25-09-500-002-0000	351 W. 99th Street
25-09-999-001-0000	No Street Address
25-09-999-001-0000	No Street Address
25-09-999-001-0000	No Street Address
25-09-999-001-0000	No Street Address
25-09-424-060-0000	340 W. 103rd Street
25-16-105-034-0000	405 W. 103rd Street
25-16-105-036-0000	401 W. 103rd Street
25-16-105-035-0000	403 W. 103rd Street
25-16-105-033-0000	400 W. 103rd Place
25-16-107-030-0000	429 W. 103rd Place
25-16-107-010-0000	401 W. 103rd Place
25-16-107-031-0000	428 W. 104th Street

PIN	Address
25-16-113-024-0000	401 W. 104th Street
25-16-113-028-0000	10413 S. Eggleston Avenue
25-16-113-029-0000	405 W. 104th Street
25-16-113-031-0000	400 W. 105th Street
25-16-121-024-0000	411 W. 105th Street
25-16-210-001-0000	317 W. 105th Street
25-16-999-001-0000	No Street Address
25-16-121-025-0000	10514 S. Stewart Avenue
25-16-500-007-0000	360 W. 105th Street
25-16-210-040-0000	232 W. 105th Street
25-16-210-039-0000	232 W. 105th Place
25-16-210-038-0000	230 W. 105th Place
25-16-121-031-0000	10520 S. Stewart Avenue
25-16-121-032-0000	10528 S. Stewart Avenue
25-16-121-022-0000	10530 S. Stewart Avenue
25-16-121-027-0000	10548 S. Stewart Avenue
25-16-121-028-0000	10552 S. Stewart Avenue
25-16-121-029-0000	10558 S. Stewart Avenue
25-16-129-030-0000	10638 S. Stewart Avenue
25-16-129-031-0000	10632 S. Stewart Avenue
25-16-129-029-0000	410 W. 107th Street
25-16-129-028-0000	400 W. 107th Street
25-16-307-025-0000	405 W. 107th Street
25-16-307-022-0000	400 W. 108th Street
25-16-315-025-0000	405 W. 108th Street
25-16-315-026-0000	405 W. 108th Street
25-16-315-027-0000	410 W. 109th Street
25-16-411-001-0000	351 W. 108th Place
25-16-315-024-0000	410 W. 109th Street
25-16-411-020-0000	350 W. 109th Street
25-16-411-019-0000	354 W. 109th Street
25-16-415-001-0000	355 W. 109th Street
25-16-415-002-0000	351 W. 109th Street
25-16-415-021-0000	354 W. 109th Place
25-16-415-022-0000	350 W. 109th Place
25-16-419-032-0000	355 W. 109th Place
25-16-419-036-0000	356 W. 110th Street
25-16-419-014-0000	352 W. 110th Street

PIN	Address
25-16-419-015-0000	350 W. 110th Street
25-16-423-036-0000	349 W. 110th Street
25-16-423-037-0000	353 W. 110th Street
25-16-329-007-0000	11026 S. Eggleston Avenue
25-16-423-024-0000	336 W. 110th Place
25-16-423-019-0000	348 W. 110th Place
25-16-423-023-0000	338 W. 110th Place
25-16-423-022-0000	340 W. 110th Place
25-16-423-021-0000	342 W. 110th Place
25-16-423-020-0000	346 W. 110th Place
25-16-423-018-0000	352 W. 110th Place
25-16-329-009-0000	11037 S. Eggleston Avenue
25-16-329-008-0000	11041 S. Eggleston Avenue
25-16-427-001-0000	356 W. 111th Street
25-16-329-005-0000	402 W. 111th Street
25-21-501-003-0000	501 E. 112th Street
25-21-200-001-0000	349 W. 111th Street
25-21-200-014-0000	348 W. 111th Place
25-21-200-015-0000	344 W. 111th Place
25-21-204-001-0000	345 W. 111th Place
25-21-204-002-0000	341 W. 111th Place
25-21-204-015-0000	340 W. 112th Street
25-21-204-016-0000	336 W. 112th Street
25-21-208-003-0000	339 W. 112th Street
25-21-208-004-0000	335 W. 112th Street
25-21-208-005-0000	333 W. 112th Street
25-21-208-016-0000	330 W. 112th Place
25-21-208-017-0000	330 W. 112th Place
25-21-208-018-0000	328 W. 112th Place
25-21-212-010-0000	325 W. 112th Place
25-21-212-011-0000	319 W. 112th Place
25-21-212-012-0000	317 W. 112th Place
25-21-212-019-0000	320 W. 113th Street
25-21-212-020-0000	320 W. 113th Street
25-21-212-021-0000	316 W. 113th Street
25-21-212-022-0000	312 W. 113th Street
25-21-212-023-0000	310 W. 113th Street
25-21-217-001-0000	309 W. 113th Street

PIN	Address
25-21-217-002-0000	307 W. 113th Street
25-21-217-003-0000	303 W. 113th Street
25-21-217-012-0000	11332 S. Princeton Avenue
25-21-218-024-0000	11315 S. Princeton Avenue
25-21-218-025-0000	11319 S. Princeton Avenue
25-21-218-026-0000	11321 S. Princeton Avenue
25-21-218-027-0000	11325 S. Princeton Avenue
25-21-218-028-0000	11327 S. Princeton Avenue
25-21-218-020-0000	11330 S. Yale Avenue
25-21-218-021-0000	11334 S. Yale Avenue
25-21-218-022-0000	11336 S. Yale Avenue
25-21-218-023-0000	11342 S. Yale Avenue
25-21-219-014-0000	11343 S. Yale Avenue
25-21-219-015-0000	11345 S. Yale Avenue
25-21-219-016-0000	11347 S. Yale Avenue
25-21-219-017-0000	11351 S. Wentworth Avenue
25-21-219-018-0000	11355 S. Wentworth Avenue
25-21-219-036-0000	11352 S. Wentworth Avenue
25-21-219-037-0000	11358 S. Wentworth Avenue
25-21-501-001-0000	401 W. 111th Street
25-21-228-001-0000	149 W. 114th Street
25-21-228-002-0000	135 W. 114th Street
25-21-228-003-0000	131 W. 114th Street
25-21-228-046-0000	11424 S. Perry Avenue
25-21-228-047-0000	11424 S. Perry Avenue
25-21-228-023-0000	11426 S. Perry Avenue
25-21-230-035-0000	11439 S. Perry Avenue
25-21-230-034-0000	52 W. 115th Street
25-21-230-036-0000	52 W. 115th Street
25-21-230-019-0000	46 W. 115th Street
25-21-230-020-0000	44 W. 115th Street
25-21-230-021-0000	42 W. 115th Street
25-21-230-022-0000	40 W. 115th Street
25-21-406-029-0000	35 W. 115th Street
25-21-407-001-0000	23 W. 115th Street
25-21-407-002-0000	17 W. 115th Street
25-21-407-003-0000	11 W. 115th Street
25-21-407-007-0000	11516 S. State Street

PIN	Address
25-21-407-029-0000	11514 S. State Street
25-21-406-030-0000	11524 S. Lafayette Avenue
25-22-300-007-0000	11527 S. State Street
25-22-300-019-0000	11562 S. Wabash Avenue
25-22-300-009-0000	11549 S. State Street
25-22-304-047-0000	113 E. Kensington Avenue
25-22-304-050-0000	11555 S. Michigan Avenue
25-22-300-068-0000	11552 S. Michigan Avenue
25-22-300-010-0000	11551 S. State Street
25-22-304-049-0000	11557 S. Michigan Avenue
25-22-300-058-0000	11578 S. Michigan Avenue
25-22-300-011-0000	11561 S. State Street
25-22-300-070-0000	11556 S. Wabash Avenue
25-22-304-005-0000	11563 S. Michigan Avenue
25-22-300-012-0000	11563 S. State Street
25-22-304-006-0000	11565 S. Michigan Avenue
25-22-300-013-0000	11567 S. State Street
25-22-304-007-0000	11567 S. Michigan Avenue
25-22-300-069-0000	11562 S. Wabash Avenue
25-22-300-014-0000	11569 S. State Street
25-22-300-015-0000	11571 S. State Street
25-22-300-071-0000	11557 S. Wabash Avenue
25-22-300-021-0000	11572 S. Wabash Avenue
25-22-300-016-0000	11573 S. State Street
25-22-300-022-0000	11574 S. Wabash Avenue
25-22-300-017-0000	11575 S. State Street
25-22-304-008-0000	11579 S. Michigan Avenue
25-22-300-049-0000	11573 S. Wabash Avenue
25-22-300-023-0000	11578 S. Wabash Avenue
25-22-300-018-0000	11579 S. State Street
25-22-304-027-0000	120 E. 116th Street
25-22-300-058-0000	11578 S. Michigan Avenue
25-22-304-028-0000	122 E. 116th Street
25-22-304-029-0000	124 E. 116th Street
25-22-304-030-0000	128 E. 116th Street
25-22-304-031-0000	130 E. 116th Street
25-22-304-032-0000	132 E. 116th Street
25-22-304-034-0000	136 E. 116th Street

PIN	Address
25-22-304-033-0000	134 E. 116th Street
25-22-300-059-0000	11582 S. Michigan Avenue
25-22-300-052-0000	38 E. 116th Street
25-22-300-051-0000	34 E. 116th Street
25-22-300-050-0000	32 E. 116th Street
25-22-300-029-0000	20 E. 116th Street
25-22-300-028-0000	16 E. 116th Street
25-22-300-060-0000	11586 S. Michigan Avenue
25-22-300-027-0000	12 E. 116th Street
25-22-300-026-0000	8 E. 116th Street
25-22-300-025-0000	11583 S. State Street
25-22-300-024-0000	11583 S. State Street
25-22-300-061-0000	11588 S. Michigan Avenue
25-22-300-062-0000	11592 S. Michigan Avenue
25-22-308-014-0000	151 E. 116th Street
25-22-308-015-0000	153 E. 116th Street
25-22-308-016-0000	155 E. 116th Street
25-22-308-017-0000	157 E. 116th Street
25-22-308-018-0000	159 E. 116th Street
25-22-308-019-0000	163 E. 116th Street
25-22-308-020-0000	165 E. 116th Street
25-22-311-013-0000	11631 S. Indiana Avenue
25-22-311-021-0000	11630 S. Prairie Avenue
25-22-311-024-0000	11632 S. Prairie Avenue
25-22-311-025-0000	11634 S. Prairie Avenue
25-22-316-001-0000	319 E. 117th Street
25-22-316-035-0000	11712 S. Calumet Avenue
25-22-316-034-0000	11722 S. Calumet Avenue
25-22-316-030-0000	11726 S. Calumet Avenue
25-22-316-031-0000	11728 S. Calumet Avenue
25-22-317-013-0000	354 E. 118th Street
25-22-317-014-0000	356 E. 118th Street
25-22-317-015-0000	358 E. 118th Street
25-22-317-030-0000	11742 S. Front Avenue
25-22-317-031-0000	11810 S. Calumet Avenue
25-22-317-032-0000	11810 S. Calumet Avenue
25-22-317-033-0000	375 E. 118th Street
25-22-317-035-0000	11800 S. Front Avenue

PIN	Address
25-22-501-005-0000	360 E. 119th Street
25-22-325-001-0000	370 E. 119th Street
25-22-400-026-0000	11600 S. Cottage Grove Avenue
25-22-400-027-0000	11600 S. Cottage Grove Avenue
25-27-108-009-0000	11900 S. Cottage Grove Avenue
25-27-502-001-0000	12330 S. Cottage Grove Avenue
25-26-300-017-0000	12807 S. Cottage Grove Avenue
25-26-300-015-0000	12813 S. Cottage Grove Avenue
25-26-300-014-0000	12817 S. Cottage Grove Avenue
25-27-301-013-0000	310 E. 130th Street
25-27-301-012-0000	325 E. 127th Street
25-27-301-011-0000	350 E. 130th Street
25-27-301-010-0000	360 E. 130th Street
25-22-401-034-0000	1355 E. 121st Street
25-27-200-007-0000	12256 S. Cottage Grove Avenue
25-27-200-009-0000	12256 S. Cottage Grove Avenue
25-27-200-010-0000	12256 S. Cottage Grove Avenue
25-27-200-012-0000	12534 S. Cottage Grove Avenue
25-27-200-013-0000	12546 S. Cottage Grove Avenue
25-27-503-001-0000	12320 S. Cottage Grove Avenue
25-27-200-004-0000	12500 S. Cottage Grove Avenue
25-27-400-003-0000	12606 S. Cottage Grove Avenue
25-27-400-002-0000	12600 S. Cottage Grove Avenue
25-27-400-007-0000	12614 S. Cottage Grove Avenue
25-27-400-005-0000	12608 S. Cottage Grove Avenue
25-27-400-006-0000	12610 S. Cottage Grove Avenue
25-27-301-007-0000	300 E. 127th Street
25-27-400-009-0000	12618 S. Cottage Grove Avenue
25-21-200-002-0000	347 W. 111th Street
25-22-311-012-0000	11633 S. Indiana Avenue
25-22-311-020-0000	11626 S. Prairie Avenue
25-22-300-006-0000	11525 S. State Street
25-16-415-003-0000	349 W. 109th Street
25-16-415-023-0000	348 W. 109th Place
25-16-500-017-0000	362 W. 108th Place
25-16-500-018-0000	364 W. 109th Street
25-16-500-028-0000	359 W. 109th Street
25-22-401-038-0000	12200 S. Cottage Grove Avenue

PIN	Address
25-22-401-037-0000	12120 S. Cottage Grove Avenue

According to the Draft EIS, the overall project area has residential (primarily single-family), commercial (urban mixed-use), industrial, transportation, utility, and vacant land uses affected by the Subject Property. The Subject Property area would begin within the I-57 right-of-way, north of the southbound lanes of I-57, and would follow the UPRR track southward. The surrounding land uses are primarily single-family residential properties north of I-57 and on the eastern side of the alignment, with a mix of primarily single-family residential properties and industrial properties to the west. There are typically one or two vacant properties per block in the residential areas and large vacant parcels near Michigan Avenue, some of which are slated for development. South of 119th Street, the surrounding land uses abruptly transition to industrial, railroad, and major utility sites. The Altgeld Gardens public housing project is at the southern end of the Preferred Alignment.

5.2 Observations of Subject Property

Table 5-3 provides a summary table of Subject Property observations. Any identified items are discussed following the table, along with an opinion about their significance. Observations of items that would fit across multiple categories are noted only once. For example, a hypothetical aboveground gasoline tank would be noted and discussed in relation to the above ground storage tank (AST) category. The hypothetical gasoline tank would then not be noted and discussed again in relation to the Use, Storage, or Disposal of Petroleum Products category.

Table 5-3: Subject Property Observations

Item Identified?	Item Description
Equipment, Activity, or Uses	
	Emergency Generator
	Elevator
	Hydraulic Lift
	Dry Cleaners or Laundromat
X	Automotive or Equipment Repair
	Grease Trap or Oil/Water Separator
	Wastewater Treatment System
	Septic or Sewage Tank
X	Transformers or Other Equipment that Could Contain PCBs

Item Identified?	Item Description
	Pipeline Markers
	Stormwater Ponds
	Quarries, Pits, Ponds, or Lagoons
	Use, Storage, or Disposal of Hazardous Substances
	Use, Storage, or Disposal of Petroleum Products
X	Aboveground Storage Tank (AST) or Underground Storage Tank (UST)
X	Drums or Other Bulk Chemical Container
	Suspect Containers or Containers with Unknown Contents
X	Drains or Sumps
	Wells - Drinking, Monitoring, or Irrigation
	Agrochemical Use/Application
X	Railroad Spur or Railroad Tracks
	Other Use or Condition of Concern
Potential Evidence of Release	
X	Interior or Pavement Stains or Corrosion
	Stained Soils or Stressed Vegetation
	Chemical Odors
	Surface Water Sheen or Discoloration
	Effluent Discharges or Unknown Pipes
X	Solid Waste Dumping or Landfilling or Suspect Fill Material
X	Construction Debris or Material Stockpiles

Automotive or Equipment Repair

Automotive and equipment repair was observed at 10514 S. Stewart Avenue, SRM Motors auto shop at 11424 and 11439 S. Perry Avenue, a vacant building at 400 W. 107th Street identified by signage as "Atlan Inc", and Donald's Auto Repair shop at 35 W. 115th Street. Automotive and equipment repair typically generate wastes in the form of waste oil and other waste fluids as well as handle and store some amount of petroleum products or hazardous materials such as fuels, oils, paints, solvents, and other grease and oils. From EDI's observations from the available vantage points on public rights-of-way, the presence of automotive and equipment repair facilities are evidence of a REC in connection with the Subject Property.

What appeared to be an automotive junk yard was observed on the Subject Property at 11730 S. Front Avenue. Automotive junk yards typically generate wastes in the form of waste oil and other waste fluids as well as handle and store some amount of petroleum products or other grease and

oils. From EDI's observations from the available vantage points on public rights-of-way, the presence of an automotive junk yard on the Subject Property is evidence of a REC.

Transformers or Other Equipment that Could Contain PCBs

Numerous pole-mounted electrical transformers were observed on the Subject Property throughout the length of the Subject Property. EDI believes the electrical equipment is the property and responsibility of ComEd, the local electrical utility company, who would be responsible for any cleanup related to the equipment that could not be attributed to tenant negligence. From the observations gathered within the limitations of the site reconnaissance, the identified electrical equipment appeared to be in good condition, with no apparent evidence of staining, leakage or corrosion noted. Based on their observed condition and the local utility ownership, the observed transformers are not considered to be evidence of a REC in connection with the Subject Property.

AST or UST

EDI did not observe evidence of USTs at the Subject Property from the observations gathered within the limitations of the site reconnaissance. However, EDI did observe several ASTs.

A vessel similar in appearance to an AST was observed at the vacant site southeast adjacent of the All American Recycling at 11900 S. Cottage Grove Avenue on the Subject Property. This location was identified as a former K-Five Construction asphalt plant in Section 7.2.1. The vessel appeared to be made of steel with double wall construction and was of an unknown capacity. The vessel appeared to be on its side, exhibited rust, and showed signs of deterioration. Evidence of significant staining indicative of a release could not be observed from the vantage points available to EDI at the time of the site reconnaissance. Given the vessels likely connection to the former asphalt plant, unknown purpose and poor condition, the vessel is considered evidence of a REC.

Two large upright ASTs were observed on the Subject Property at 11424 S. Perry Avenue. The ASTs were of an unknown capacity and the contents were not able to be determined from the vantage points available to EDI at the time of the site reconnaissance. Historical Sanborn maps depict the ASTs as part of a former facility identified as "South End Supply Co" in 1950 and 1989 maps. The Sanborn maps label the ASTs as "Concrete Sand and Stone Bins, 24' high." Based on the reported contents being sand and stone, these ASTs are not considered evidence of a REC.

Drums or Other Bulk Chemical Container

Within the Subject Property at 405 W. 108th Street, EDI observed two empty plastic 55-gallon drums on the ground. The drums appeared to have been fly dumped within a larger vacant grassy

area on the property. The drums were located on an area of ground that appeared to have been disturbed and that was not supporting vegetative growth. Based on this information, the fly dumped drums are considered to be evidence of a *de minimis* condition in connection with the Subject Property.

Within the Subject Property at 352 W. 110th Street at Ransom Transportation, EDI observed two metal 55-gallon drums of unknown contents. The area in which the drums were stored were within a fenced area to which EDI was not provided access. From the available vantage point, the containers were observed to be in good condition with no evidence of leaks or staining. Based on this information, the drums themselves are not considered to be evidence of a REC in connection with the Subject Property.

EDI observed an approximately 275-gallon tote of unknown contents on the Subject Property at 128 E. 116th Street, a vacant parcel. The tote appeared discolored and displayed evidence of staining on its sides. Given the unknown contents, discoloration, and staining, the tote is considered evidence of a *de minimis* condition.

EDI observed three approximately 275-gallon totes on the Subject Property at the above noted automotive junk yard at 11736 S. Front Avenue. The totes appeared to be stored on the junkyard site. The area in which the totes were stored were within a fenced area that EDI was not provided access to at the time of the site reconnaissance. From the available vantage points, the containers appeared to be empty. However, the condition of the totes and the ground surface around them could not be determined. The presence of the totes on an automotive junk yard is evidence of a REC in connection with the Subject Property.

What appears to be a concrete secondary containment structure was observed at the vacant site southeast adjacent of the All American Recycling at 11900 S. Cottage Grove Avenue on the Subject Property. This location was identified as a former K-Five Construction asphalt plant in Section 7.2.1. The containment structure was observed to contain several saddles that may at one time have supported several large vessels or ASTs of unknown size. The containment structure also was observed to have several piping penetrations, with stubbed piping sticking out through the floor of the structure. At the time of the site reconnaissance, the containment structure was observed to contain what is believed to be standing rainwater. The ground surface in the area of the structure was primarily gravel, concrete, and asphalt, and exhibited some signs of staining as observed by EDI during the site reconnaissance. Based on EDI's observations, the concrete secondary containment structure is evidence of a REC in connection with the Subject Property.

Drains or Sumps

Stormwater catch basins were observed in the streets and associated areas of the Subject Property. Within the limitations of the site reconnaissance, EDI did not observe evidence of unusual discoloration, staining, or improper disposal in connection with the catch basins. The catch basins are believed to flow into the local storm sewer system. Based on this information, the catch basins are not considered evidence of a REC.

Railroad Spur or Railroad Tracks

Railroad tracks were observed on and adjacent to the Subject Property. This includes the UPRR railroad tracks which run parallel to most of the Subject Property and intersect the Subject Property at several locations; the Canadian National Railway (CN) and Metra tracks which cross the Subject Property near S. Front Street and E. 118th Street; the Norfolk Southern (NS) tracks and rail yard located on the Subject Property from approximately east of the CN and Metra tracks and extend southwesterly past 130th Street. These tracks exist at various locations on elevated embankments. The source of the fill material used to make the embankments is unknown and is evidence of a REC. Most of these rail lines are also used to transport freight, which may include hazardous materials or petroleum products. Spills or releases that occurred on or along these tracks may have impacted the Subject Property and is evidence of a potential REC. Furthermore, releases may have occurred from creosote treated railroad ties or coal ash releases from steam train operations.

EDI observed a railroad spurs entering All American Recycling at 11900 S. Cottage Grove Avenue on the Subject Property. The tracks were observed to be in use and are apparently used for shipments of materials to and from the site. EDI did not observe noticeable evidence of oil and grease staining of the railroad ballast along the spur from the publicly accessible vantage points available at the time of the site reconnaissance. Based on the use of the facility to process and sort metals, the presence of railroad spurs is evidence of a REC.

Railroad rights of way are typically maintained using herbicides for weed control. Application of herbicides, provided that the herbicides are applied in accordance with manufacturer's directions and are not spilled or released as a point source, are exempt from CERCLA enforcement. However, the likely use of herbicides on the Subject Property is evidence of a potential REC. The Client should be aware that routine application of herbicides over time may result in elevated concentrations of chemicals in the surface soil and/or surface run-off.

Interior or Pavement Stains or Corrosion

EDI was not provided with access to private property; or the interior spaces of buildings, structures, or improvements that were present on the Subject Property. Therefore, EDI was unable to access interiors for the presence of stains or corrosion. However, EDI did observe areas of minor staining on the paved parking and drive areas located on the Subject Property. The stains appear to be the result of leakage of automobile related fluids and not the result of a large-scale spills. EDI considers the presence of the staining a *de minimis* condition and, by definition, not a REC in connection with the subject property.

Solid Waste Dumping or Landfilling or Suspect Fill Material

Within the limitations of the site reconnaissance, EDI did not observe landfilling or suspect fill material at the Subject Property. However, EDI did observe evidence of apparent "fly dumping" of solid waste materials at the Subject Property. At 348 W. 110th Place and 405 W. 108th Street, EDI observed several piles of apparent solid waste that may have been "fly dumped" at the Subject Property. The origin of the material comprising the piles was not readily apparent, but EDI observed cardboard and miscellaneous household items within the piles. Due to the unknown origin and contents of the apparent solid waste, the presence of the piles is evidence of a *de minimis* condition in connection with the Subject Property.

EDI also observed several small stockpiles of earthen material along the NS railroad tracks near All American Recycling at 11900 S. Cottage Grove Avenue. It was readily apparent the earthen material had been recently created by grading activities being conducted adjacent to the track as part of rail maintenance activities. Due to the material evidently originating from the Subject Property, and remaining at the Subject Property, these stockpiles are not considered evidence of a REC in connection with the Subject Property.

Construction Debris or Material Stockpiles

Within the limitations of the site reconnaissance, EDI observed stockpiles of what appeared to be metal materials at the All American Recycling facility at 11900 S. Cottage Grove Avenue on the Subject Property. Based on the observed use of the facility as a scrap metal recycling entity, the presence of the stockpiles is considered contributing evidence of a REC.

EDI also observed evidence of stockpiled broken concrete, asphalt, and gravel at the vacant site southeast adjacent of All American Recycling at 11900 S Cottage Grove Avenue on the Subject Property. This location was identified as a former K-Five Construction asphalt plant in Section 7.2.1. Based on the reported historical use of this site, the stockpiles are considered contributing evidence of a REC.

5.3 Observations of Adjoining Properties

A summary table of observations of adjoining properties is provided below. EDI's observations were gathered from the available vantage points on the Subject Property and public rights-of-way adjoining Subject Property. Any identified items are discussed following the table, along with an opinion about their significance.

Table 5-4: Adjoining Property Observations

Item Identified?	Item Description
Equipment, Activity, or Uses	
	Emergency Generator
	Elevator
	Hydraulic Lift
	Dry Cleaners or Laundromat
X	Automotive or Equipment Repair
	Grease Trap or Oil/Water Separator
X	Wastewater Treatment System
	Septic or Sewage Tank
X	Transformers or other equipment that could contain PCBs
	Pipeline Markers
	Stormwater Ponds
	Quarries, Pits, Ponds, or Lagoons
	Use, Storage, or Disposal of Hazardous Substances
	Use, Storage, or Disposal of Petroleum Products
X	AST or UST
	Drums or Other Bulk Chemical Container
	Suspect Containers or Containers with Unknown Contents
X	Drains or Sumps
	Wells - Drinking, Monitoring, or Irrigation
	Agrochemical Use/Application
X	Railroad Spur or Railroad Tracks
	Other Use or Condition of Concern
Potential Evidence of Release	
X	Exterior or Pavement Stains or Corrosion
	Stained Soils or Stressed Vegetation
	Chemical Odors
	Surface Water Sheen or Discoloration
	Effluent Discharges or Unknown Pipes

Item Identified?	Item Description
	Solid Waste Dumping or Landfilling or Suspect Fill Material
	Construction Debris or Material Stockpiles

Automotive or Equipment Repair

Automotive and equipment repair was observed at Street Southside Auto Services at 401 W. 111th Street, approximately 150 feet west of the Subject Property. Automotive and equipment repair typically generate wastes in the form of waste oil and other waste fluids as well as handle and store some amount of petroleum products or hazardous materials such as fuels, oils, paints, solvents, and other grease and oils. From EDI's observations from the available vantage points on public rights-of-way, the presence of an automotive and equipment repair facility is evidence of a REC in connection with the Subject Property.

Wastewater Treatment System

EDI observed what was identified as the Metropolitan Water Reclamation District of Greater Chicago (MWRD), Calumet Reclamation Plant adjacent to the Subject Property and north of 130th Street. According to the MWRD's website, this facility is a wastewater treatment plant that services the southern portion of Cook County, which includes residential, commercial, and industrial areas. This facility reportedly conducts primary, secondary, and tertiary water treatment operations, and treats 354 million gallons of wastewater on average per day. The facility also reportedly generates approximately 100 tons of dried solids every day, which are managed onsite and processed into bio-solids. Numerous clarifiers, settling basins, and related structures were observed by EDI. Given the reported volume of wastewater treated at the facility and solids managed, the sources of wastewater entering the facility including commercial and industrial operations, the presence of a wastewater treatment facility adjacent to the property is evidence of a REC.

Transformers or other equipment that could contain PCBs

Numerous pole-mounted electrical transformers were observed throughout the areas adjoining the Subject Property. EDI believes the electrical equipment is the property and responsibility of ComEd, the local electrical utility company, who would be responsible for any cleanup related to the equipment that could not be attributed to tenant negligence. From the observations gathered within the limitations of the site reconnaissance, the identified electrical equipment appeared to be in good condition, with no apparent evidence of staining, leakage or corrosion noted. Based on

the observed condition and the local utility ownership, the observed transformers are not considered to be evidence of a REC in connection with the Subject Property.

AST or UST

EDI observed a Citgo gas station approximately 200 feet to the southwest of the Subject Property at the intersection of E. 116th Street and S. Michigan Avenue. From the publicly available vantage points, EDI observed evidence of three USTs at this facility, which would appear to be used to dispense various grades of gasoline. The presence of a gas station with USTs is evidence of a REC in connection with the Subject Property.

Drains or Sumps

Numerous stormwater catch basins were observed in the streets and roadways adjoining the Subject Property. Within the limitations of the site reconnaissance, EDI did not observe evidence of unusual discoloration, staining, or improper disposal in connection with the catch basins. The catch basins are believed to flow into the local storm sewer system. Based on this information the catch basins are not considered evidence of a REC.

Railroad Spur or Railroad Tracks

Railroad tracks were observed on and adjacent to the Subject Property. This includes the UPRR railroad tracks which run parallel to most of the Subject Property and intersect the Subject Property at several locations, and the CN and Metra tracks which cross the Subject Property near S. Front Street and E. 118th Street. These tracks exist at various locations on elevated embankments. The source of the fill material used to make the embankments is unknown and is evidence of a REC. Most of these rail lines are also used to transport freight, which may include hazardous materials or petroleum products. Spills or releases that occurred on or along these tracks may have impacted the Subject Property and is evidence of a potential REC. Furthermore, releases may have occurred from creosote treated railroad ties or coal ash releases from steam train operations.

Railroad rights of way are typically maintained using herbicides for weed control. Application of herbicides, provided that the herbicides are applied in accordance with manufacturer's directions and are not spilled or released as a point source, are exempt from CERCLA enforcement. Therefore, the use of herbicides on the adjoining property is not considered evidence of a REC. However, the Client should be aware that routine application of herbicides over time may result in elevated concentrations of chemicals in the surface soil and/or surface run-off.

Exterior or Pavement Stains or Corrosion

Numerous areas of minor stains on paved surfaces were observed in the streets and roadways adjoining the Subject Property. The observed stains appear to be the result of leakage of automobile related fluids and not the result of a large-scale spills. EDI considers the presence of the staining a *de minimis* condition and, by definition, not evidence of a REC in connection with the Subject Property.

Section 6 - Historic Information

EDI investigated the history of the Subject Property and surrounding area in order to help identify the likelihood of past uses having led to RECs in connection with the Subject Property. In investigating the history of the Subject Property and surrounding area, EDI utilized readily available historical records obtained from a third-party data provider, as well as information obtained from any interviews. The historical records utilized by EDI are appended, when practical. If a historical record is not appended, it is available for review in EDI's office by appointment during normal business hours.

6.1 Prior Investigations

The Client provided EDI with the reports or documents presented in Section 3.3.

6.2 Summary of Records

In investigating the history of the Subject Property, EDI reviewed the following resources obtained from EDR. A copy of the EDR Historical Topo Map Report, the EDR Aerial Photo Decade Package, and the EDR Certified Sanborn® Map Report are provided in Appendix E.

Table 6-1: Summary of Records

Resource Type	Years Reviewed	Sources
USGS Topographic (topo) Maps	1892, 1893, 1900, 1901, 1929, 1948, 1953, 1956, 1960, 1963, 1965, 1973, 1977, 1978, 1991, 1993, 1997, and 2012	USGS as compiled by EDR
Aerial Photographs	1938, 1952, 1959, 1964, 1973, 1978, 1983, 1984, 1988, 1998, 1999, 2007, 2011, 2014, and 2017	Various sources as compiled by EDR
Sanborn Fire Insurance Maps	1897, 1911, 1938, 1950, 1989, and 2004	Sanborn Library as complied by EDR

6.3 Historical Summary of Subject and Adjoining Properties

A summary of the interpreted history of the Subject Property and adjacent properties is presented below.

Table 6-2: Historical Summary

Date(s)	Source(s)	Interpreted History
Subject Property – 95th Street station to 103rd Street station		
1892 – 1953	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the Subject Property as mostly vacant land, with roadways and unspecified structures. Historic Sanborn Fire Insurance Maps (Sanborns) depict the Subject Property with vacant land and parks, as well as several sheds/warehouses, a chicken house, feed warehouse, fuel warehouse, a portion of a coal yard, wagon storage/fuel storage, and a railroad spur.
1956 – 1960	Historic Topos Historic Aerials	By 1956, historic topo maps and historic aerials depict the Subject Property as a portion of the construction of the I-57, vacant land, and residential and commercial structures.
1963 – 2017	Historic Topos Historic Aerials Historic Sanborns	From 1963 to 2012, the historic topo maps, historic aerials, and historic Sanborn maps depict the Subject Property as a portion of the I-94 and I-57, vacant land/parks, a junkyard, contractor's yard, and commercial structures and warehouses.
North Adjacent – 95th Street station to 103rd Street station		
1892 – 1953	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the north adjacent properties as mostly vacant land, railroad tracks, and unspecified structures. Historic Sanborn maps depict the north adjacent properties with residential dwellings, sheds, and a private garage.
1956 - 1960	Historic Topos Historic Aerials	By 1956, historic topo maps and historic aerials depict the north adjacent properties as developed with commercial or residential structures, railroad tracks, and as a portion of the construction of the I-94 and I-57.

Date(s)	Source(s)	Interpreted History
1963 – 2017	Historic Topos Historic Aerials Historic Sanborns	By 1963, historic topo maps and historic aerials depict the north adjacent properties as developed with commercial or residential structures, railroad tracks, and as a portion of the I-94 and I-57. Historic Sanborn maps depict the north adjacent properties with residential buildings and park areas.
South Adjacent – 95th Street station to 103rd Street station		
1892 – 1953	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the south adjacent properties as mostly vacant land and railroad tracks. Historic Sanborn maps depict the south adjacent properties with residential dwellings and roadways.
1956 - 1960	Historic Topos Historic Aerials	By 1956, historic topographic maps depict the south adjacent properties as a portion of the construction of the I-94 and I-57 and with commercial or residential structures.
1963 - 2017	Historic Topos Historic Aerials Historic Sanborns	From 1963 to 2012, the historic topographic maps depict the south adjacent properties as a portion of the I-94 and I-57 and with commercial or residential structures. Historic Sanborn maps depict the south adjacent properties with a CTA repair shop, the I-94 and I-57, dwellings, and vacant/parking lots.
East Adjacent – 95th Street station to 103rd Street station		
1892 – 1953	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps depict the east adjacent properties as vacant land, roadways, a park, and unspecified structures. Historic Sanborn maps depict the east adjacent properties with roadways, a park, and railroad tracks.
1956 – 1960	Historic Topos Historic Aerials	By 1956, historic topographic maps depict the east adjacent properties with commercial or residential structures, Abbott Park and Harlan High School, and with the I-94 and I-57 under construction.

Date(s)	Source(s)	Interpreted History
1963 - 2017	Historic Topos Historic Aerials Historic Sanborns	From 1963 to 2012, historic topographic maps and aerial photographs depict the east adjacent properties with commercial or residential structures, Abbott Park and Harlan High School, Wendell Smith Park, Block Park, and the I-94 and I-57. Historic Sanborn maps depict the east adjacent properties with Abbott Park, John Marshall Harlan High School, the I-94 and I-57, railroad tracks, and roadways.
West Adjacent – 95th Street station to 103rd Street station		
1892 – 1953	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps depict the west adjacent properties as vacant land, roadways, and residential or commercial structures. Historic Sanborn maps depict the west adjacent properties with residential dwellings, a shed, a 4-car private garage, and a church.
1956 – 1960	Historic Topos Historic Aerials	By 1956, historic topographic maps depict the west adjacent properties with commercial or residential structures and with the I-94 and I-57 under construction.
1963 - 2017	Historic Topos Historic Aerials Historic Sanborns	From 1963 to 2012, the historic topographic maps depict the west adjacent properties as a portion of the I-94 and I-57 and with commercial or residential structures. Historic Sanborn maps depict the west adjacent properties with the I-94 and I-57, residential dwellings, and a church for the years 1989 and 2004.
Subject Property – 103rd Street station to 111th Street station		
1892 – 1901	Historic Topos Historic Sanborns	Historic topographic maps depict the Subject Property as mostly vacant land, with the only developments being roadways and unspecified structures. Historic Sanborn maps depict the Subject Property with portions of vacant land, a dwelling, lumber shed, coal shed, and a wood and pipe yard.

Date(s)	Source(s)	Interpreted History
1911	Historic Sanborns	Historic Sanborn maps depict the Subject Property with portions of vacant land, a contractor's yard, cement block factory, dwellings, shed, coal shed, and the Farr Brother's Co. (hay, grain, sewer, and concrete building supplies).
1929 - 1938	Historic Topos Historic Aerials	By 1929, historic topographic maps depict the Subject Property as developed with unspecified structures. By 1938, historic aerial photographs depict the Subject Property with areas of vacant land and developed with commercial and residential structures.
1950	Historic Sanborns	Historic Sanborn maps depict the Subject Property with portions of vacant land, contractor storage yards, a cement block factory, a coal yard, dwellings, contractor's warehouse, machinery storage building with a gasoline tank, miscellaneous storage, an office, garage, Chatham Coal & Coke Co. (coal yard), and Rittenhouse & Embree Co. Roseland yard.
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and aerial photographs depict the Subject Property with areas of vacant land and developed with commercial and residential structures. Historic Sanborn maps depict the Subject Property with portions of vacant land, parking lots, contractor's yards with a fuel oil tank, warehouses, a utility building (Illinois Bell Telephone Co. and later Ameritech), a manufacturing facility with tanks and a slag bin, machinery storage, and commercial buildings.
North Adjacent – 103rd Street station to 111th Street station		
1892 - 1973	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the north adjacent properties with railroad tracks and commercial and residential structures. Sanborn maps depict the north adjacent properties with railroad tracks, vacant lots, and dwellings.

Date(s)	Source(s)	Interpreted History
1978 - 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the north adjacent properties with railroad tracks, commercial and residential structures and a suspect junk yard. Historic Sanborn maps depict the north adjacent properties with railroad tracks, vacant lots, dwellings, a junk yard, and a manufacturing facility for the years 1989 and 2004.
South Adjacent – 103rd Street station to 111th Street station		
1892 - 1950	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the south adjacent properties with railroad tracks, roadways, and commercial and residential structures. Historic Sanborn maps depict the south adjacent properties with railroad tracks, roadways, and residential dwellings.
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the south adjacent properties with railroad tracks, roadways, and commercial and residential structures. The historic Sanborn maps depict the south adjacent properties with roadways, residential dwellings, a stone-cutting shop, and railroad tracks.
East Adjacent – 103rd Street station to 111th Street station		
1892 – 1911	Historic Topos Historic Sanborns	Historic topographic maps depict the east adjacent properties with vacant land, roadways, and railroad tracks. Historic Sanborn maps depict the east adjacent properties with railroad tracks, vacant lots, dwellings, a blacksmith shop, tool shed, G.J. Vendenburg (door and blind factory), and a coal shed.

Date(s)	Source(s)	Interpreted History
1929 – 1950	Historic Topos Historic Aerials Historic Sanborns	By 1900, historic topographic maps depict the east adjacent properties with unspecified structures and railroad tracks. By 1938, historic aerial photographs depict the east adjacent properties with commercial and residential structures and railroad tracks. The historic Sanborn maps depict the east adjacent properties with various warehouses, dwellings, a coal yard, and railroad tracks for the years 1938 and 1950.
1952 - 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the east adjacent properties with commercial and residential structures and railroad tracks. Historic Sanborn maps depict the east adjacent properties with a contractor's storage facility, railroad tracks, commercial buildings, a playground, residential dwellings, and a community center for the years 1989 and 2004.
West Adjacent – 103rd Street station to 111th Street station		
1892 – 1911	Historic Topos Historic Sanborns	Historic topographic maps depict the west adjacent properties with vacant land, roadways, and railroad tracks. Historic Sanborn maps depict the west adjacent properties with railroad tracks, a coal shed, and The Farr Bro's Co.
1929 – 1950	Historic Topos Historic Aerials Historic Sanborns	By 1929, historic topographic maps depict the west adjacent properties as developed with unspecified structures and railroad tracks. By 1938, historic aerial photographs depict the east adjacent properties with commercial and residential structures and railroad tracks. Historic Sanborn maps depict the west adjacent properties with warehouses, a warehouse and repair shop, contractor's yard, vacant lots, miscellaneous storage with a gasoline tank, storage and auto garage with a gasoline tank, coal yards, a planing mill, roadways, and an auto garage for the years 1938 and 1950.

Date(s)	Source(s)	Interpreted History
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the west adjacent properties with various commercial and residential structures and railroad tracks. Historic Sanborn maps depict the west adjacent properties with warehouses, parking lots, a contractor's yard, church, roadways, contractor's storage building with two (2) gasoline tanks, railroad tracks, and vacant lots for the years 1989 and 2004.
Subject Property – 111th Street station to Michigan Avenue station		
1892 – 1911	Historic Topos Historic Sanborns	Historic topographic maps depict the Subject Property as mostly vacant land, with the only developments being early roadways and unspecified structures. Historic Sanborn maps depict the Subject Property as portions of vacant land, Roseland Station, Sheldon Park Station, South End Supply Co. (coal shed), Joseph Schlitz Brewing Beer Depot, printing shop, Wacker & Birk Brewing Co. Roseland Branch Beer Depot, parochial school, St. Stephen's School, Chicago & Riverdale Lumber Co. (coal sheds), Armor & Co. (office and storage), grain and building materials, auto repair shop, an oil and tool supply house, manufacturing, warehouses, dwellings, storefronts, Rapp Bro's north yard, wood yard, and coal yards.
1929 – 1938	Historic Topos Historic Aerials	By 1929, historic topographic maps depict the Subject Property as developed with unspecified structures. By 1938, historic aerial photographs depict the Subject Property with several commercial and residential structures.

Date(s)	Source(s)	Interpreted History
1950	Historic Sanborns	Historic Sanborn maps depict the Subject Property as developed with portions of vacant lots, dwellings, storefronts, contractor's warehouse, Sheldon Park passenger station, a building material warehouse, coal yard, beer storage, multiple filling stations with gasoline tanks, auto repair shops, junk yards, Chicago & Riverdale Lumber Co., a coffee roaster, sheet metal warehouse, automobile garage with gasoline tank, trailer factory with lacquer spraying, and Kensington passenger station.
1952 – 2012	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and aerial photographs depict the Subject Property as developed with several commercial and residential structures. Historic Sanborn maps depict the Subject Property as developed with portions of vacant lots and parking lots, dwellings, auto repair shop, warehouse, several manufacturing facilities, commercial storefronts, junk yard, filling station, and a trailer factory with lacquer spraying.
2014 – 2017	Historic Aerials	Historic aerial photographs depict the former commercial or residential structures in the location of the proposed Michigan Avenue station as mostly vacant land, with the former structures razed.
North Adjacent – 111th Street station to Michigan Avenue station		
1892 - 1911	Historic Topos Historic Sanborns	Historic topographic maps depict the north adjacent properties with unspecified structures and roadways. Historic Sanborn maps depict the north adjacent properties with a hay shed, South End Supply Co., Joseph Schlitz Brewing Co. Beer Depot, various storefronts, dwellings, Curtis Public School, vacant lots, a paint shop, and a blacksmith.

Date(s)	Source(s)	Interpreted History
1929 – 1950	Historic Topos Historic Aerials Historic Sanborns	By 1929, historic topo maps depict the north adjacent properties with various unspecified structures and roadways. By 1938, historic aerial photographs depict the north adjacent properties with several commercial and residential structures. Historic Sanborn maps depict the north adjacent properties with dwellings, commercial storefronts, a warehouse, residential flats (apartments), Venetian Hall, and George William Curtis Public School for the year 1950.
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topo maps and aerial photographs depict the north adjacent properties with several commercial and residential structures. The historic Sanborns maps depict the north adjacent properties with various residential dwellings and flats, auto repair, warehouses, manufacturing, George William Curtis Public School, parking lots, commercial structures, and a church for the years 1989 and 2004.
South Adjacent – 111th Street station to Michigan Avenue station		
1892 – 1893	Historic Topos	Historic topographic maps depict the south adjacent properties as mostly vacant land, with the only developments being early roadways and railroad tracks.
1897 – 1950	Historic Topos Historic Aerials Historic Sanborns	By 1900, historic topo maps depict the south adjacent properties with unspecified structures and railroad tracks. By 1938, historic topo maps and historic aerials depict the south adjacent properties with vacant land, several commercial and residential structures, and railroad tracks. Historic Sanborn maps depict the south adjacent properties with mostly vacant lots, railroad tracks, dwellings and storefronts, and coal sheds for the year 1950.

Date(s)	Source(s)	Interpreted History
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topo maps and historic aerials depict the south adjacent properties with vacant land, several commercial and residential structures, and railroad tracks. Historic Sanborn maps depict the south adjacent properties with vacant lots, railroad tracks, dwellings and a gasoline filling station for the years 1989 and 2004.
East Adjacent – 111th Street station to Michigan Avenue station		
1892 – 1911	Historic Topos Historic Sanborns	Historic topographic maps depict the east adjacent properties as mostly vacant land, with the only developments being early roadways and unspecified structures. Historic Sanborn maps depict the east adjacent properties with a dwelling, manufacturing, vacant lots, and storefronts.
1929 - 1950	Historic Topos Historic Aerials Historic Sanborns	By 1929, historic topographic maps depict the east adjacent properties with unspecified structures. By 1938, historic topo maps and historic aerials depict the east adjacent properties with several commercial and residential structures. Historic Sanborn maps depict the east adjacent properties with a beer warehouse, beer storage, residential and commercial structures for the year 1950.
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topo maps and historic aerials depict the east adjacent properties with several commercial and residential structures. Historic Sanborn maps depict the east adjacent properties with vacant lots, residential dwellings and flats (apartments), and commercial structures for the years 1989 and 2004.
West Adjacent – 111th Street station to Michigan Avenue station		
1892 – 1929	Historic Topos Historic Sanborns	Historic topographic maps depict the west adjacent properties with vacant land, railroad tracks, and unspecified structures. Historic Sanborn maps depict the west adjacent properties with a coal yard, vacant lots, dwellings, and railroad tracks.

Date(s)	Source(s)	Interpreted History
1938 – 1950	Historic Topos Historic Aerials Historic Sanborns	By 1938, historic topo maps and historic aerials depict the west adjacent properties with several commercial and residential structures and railroad tracks. Historic Sanborn maps depict the west adjacent properties with railroad tracks, a coal yard, a machine shop, gasoline filling station, and dwellings.
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topo maps and historic aerials depict the west adjacent properties with several commercial and residential structures and railroad tracks. Historic Sanborn maps depict the west adjacent properties with railroad tracks, dwellings, a manufacturing shop, and a contractor's yard for the years 1989 and 2004.
Subject Property – Michigan Avenue station to 130th Street station		
1892 – 1901	Historic Topos	Historic topographic maps depict the Subject Property as mostly vacant land, with the only developments being early roadways and unspecified structures.
1929 – 1938	Historic Topos Historic Aerials	By 1929, historic topographic maps depict the Subject Property as developed with unspecified structures, roadways, a portion of a railyard, and vacant land. By 1938, historic aerial photographs depict the Subject Property with several commercial and residential structures, as a portion of a railyard, roadways and vacant/wooded land.
1950	Historic Sanborns	Historic Sanborn maps depict the Subject Property with portions of manufacturing, a fuel oil tank associated with The Shedd Co., a dwelling, and Beall-Thomas Coal Co. (coal yard and coal tanks.)

Date(s)	Source(s)	Interpreted History
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and historic aerial photographs depict the Subject Property as developed with portions of several commercial and residential structures, as a portion of a railyard, roadways and vacant/wooded land. Historic Sanborns depict the Subject Property with portions of vacant lots/land, dwellings, a metal storage yard, manufacturing, railroad tracks, a warehouse, and a paint factory.
North Adjacent – Michigan Avenue station to 130th Street station		
1892 - 1929	Historic Topos Historic Sanborns	Historic topographic maps depict the north adjacent properties with unspecified structures, vacant land, railroad tracks, and a portion of a railyard. Historic Sanborn maps depict the north adjacent properties with Kendall Ice Cream Co. (factory) including a gasoline tank, 33rd Ward city yard, a storefront, dwelling, and vacant lots.
1938 - 1950	Historic Aerials Historic Sanborns	By 1938, historic aerial photographs depict the north adjacent properties with several commercial and residential structures, railroad tracks, a suspect junkyard, a portion of a railyard, and vacant land. Historic Sanborn maps depict the north adjacent properties with dwellings, The Shedd Co. Manufacturers of Ice Cream (factory) including a gasoline tank, vacant lots, and Beall-Thomas Coal Co. (coal yard).
1952 – 2017	Historic Topos Historic Aerials Historic Sanborns	Historic topographic maps and aerial photographs depict the north adjacent properties with several commercial and residential structures, railroad tracks, a portion of a railyard, and vacant land. Historic Sanborn maps depict the north adjacent properties with dwellings, vacant lots, a metal storage yard, manufacturing, warehouses, railroad tracks, vacant land, and a factory for the years 1989 and 2004.

Date(s)	Source(s)	Interpreted History
South Adjacent – Michigan Avenue station to 130th Street station		
1892 – 1950	Historic Topos Historic Sanborns	Historic topographic maps depict the south adjacent properties as vacant land, unspecified structures, railroad tracks, and a portion of a railyard. By 1938, historic topo maps and historic aerial photographs depict the south adjacent properties with several commercial and residential structures, a municipal park, vacant land, railroad tracks, and a portion of a railyard. Historic Sanborn maps depict the south adjacent properties with railroad tracks and vacant land/lots.
1953 – 2017	Historic Topos Historic Aerials Historic Sanborns	By 1953, the historic topographic maps and historic aerial photographs depict the south adjacent properties with commercial and residential structures, vacant land, railroad tracks, a scrap yard, a municipal park, and the Beaubien Forest Preserve. Historic Sanborn maps depict the south adjacent properties with railroad tracks, vacant land/lots, manufacturing facility, and Kensington Park.
East Adjacent – Michigan Avenue station to 130th Street station		
1892 – 1893	Historic Topos	Historic topographic maps depict the east adjacent properties as vacant land, railroad tracks, and early roadways.
1900 – 1929	Historic Topos	By 1900, the historic topographic maps and historic aerial photographs depict the east adjacent properties with vacant land, unspecified structures and railroad tracks.
1938 – 2017	Historic Topos Historic Aerials Historic Sanborns	By 1938, the topo maps and aerial photographs depict the east adjacent properties with commercial and residential structures, vacant/wooded land, and railroad tracks. Historic Sanborn maps depict the east adjacent properties with Beaubien Forest Preserve, vacant land, and railroad tracks.
West Adjacent – Michigan Avenue station to 130th Street station		
1892 - 1911	Historic Topos Historic Sanborns	Historic topographic maps depict the west adjacent properties with vacant land, early roadways, and unspecified structures. Historic Sanborn maps

Date(s)	Source(s)	Interpreted History
		depict the west adjacent properties with vacant land and railroad tracks.
1929 – 1938	Historic Topos Historic Aerials	By 1929, historical topographic maps depict the west adjacent properties with vacant land, unspecified structures, a sewage disposal plant, and a portion of a railyard/railroad tracks.
1950 – 2017	Historic Topos Historic Aerials	Historical topographic maps depict the west adjacent properties with commercial and residential structures, sewage disposal plant, a portion of a railyard/railroad tracks, Kensington Park, and with the Altgeld Gardens residential dwellings. Historic Sanborn maps depict the west adjacent properties with the Sanitary District of Chicago (sewage treating plant) for the year 1950; and with vacant land and railroad tracks for the years 1989 and 2004.

Since 1892, the start of the available historical record, the greater area surrounding the Subject Property has generally been developed. Early records depict the greater area with roads, rail lines, and some structures, indicating development and use of the area. As noted in the Hazardous Materials Technical Memorandum, dated August 21, 2013 and prepared by CWC Transit Group, rail lines have been present in or adjacent to the Subject Property since 1892. By the 1930's, the historical records depict the Subject Property, adjoining properties, and greater area as generally fully developed. Generally historical records from the 1930's to the present day depict the initial development of isolated areas, or the redevelopment of isolated areas.

Section 7 - Regulatory Review

7.1 Regulatory Agency Inquiries

EDI requested records or information about the Subject Property or facilities in the surrounding area from the governmental agencies listed in the following sections.

7.1.1 Regulatory Agency Maintained Websites

EDI reviewed the following federal, state, or local websites or online databases in order to obtain further information about the Subject Property or facilities listed in the database report.

- City of Chicago Data Portal
- City of Chicago Department of Public Health Data Portal
- Cook County Assessor's website
- Cook County Recorder's website
- Office of the State Fire Marshals (OSFM's) website and UST database
- Illinois Environmental Protection Agency's (IEPA's) Bureau of Land (BOL) database
- IEPA's LUST database
- IEPA's Document Explorer database
- USEPA's Enforcement and Compliance History Online (ECHO) database

7.1.2 City of Chicago Records

EDI did review regulatory files published by the City through the City of Chicago Data Portal and the City of Chicago Department of Public Health Data Portal. EDI also reviewed regulatory file information obtained as part of the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 21, 2013. Instances where records were obtained or reviewed are cited as they arise in this report.

7.1.3 Illinois Environmental Protection Agency

EDI did review regulatory files published by the IEPA through the IEPA's LUST database and the IEPA's Document Explorer database. EDI also reviewed regulatory file information obtained as part of the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 21, 2013. Instances where records were obtained or reviewed are cited as they arise in this report.

7.1.4 United States Environmental Protection Agency

EDI did review regulatory files published by the USEPA through the ECHO database and related interlinking databases. EDI also reviewed regulatory file information obtained as part of the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 21, 2013. Instances where records were obtained or reviewed are cited as they arise in this report.

7.2 Database Findings

EDI obtained environmental database information for the Subject Property and the surrounding area from Environmental Data Resources, LLC (EDR) in an EDR Area/Corridor Report. EDR obtains environmental databases published by local, state, tribal, and federal agencies, EDR then compiles and maps the information. This allows for searches to be conducted and reported based on the location of the Subject Property. EDR's environmental database of information includes the Practice's Standard Environmental Records Sources and, in most cases, additional federal, state, and local record sources. A complete listing of the databases searched is available in EDR's EDR Area/Corridor Report, a copy of which is included as Appendix D.

The search of database information provided in the EDR Area/Corridor Report was performed to the Approximate Minimum Search Distances (AMSD) listed in the Practice. The EDR Area/Corridor Report identified a total of 319 mapped sites in the AMSD. Unmappable (orphan) sites (listed in the EDR Radius Map Report) were also evaluated to identify a potential location within the AMSD. Those orphan sites that could be determined to be with the AMSD were further evaluated and are discussed below as appropriate. An excerpt of the EDR Area/Corridor Report is presented below as Figure 7-1. This figure is the Key Map of the EDR Area/Corridor Report and presents the approximate locations of the sites mapped by EDR.

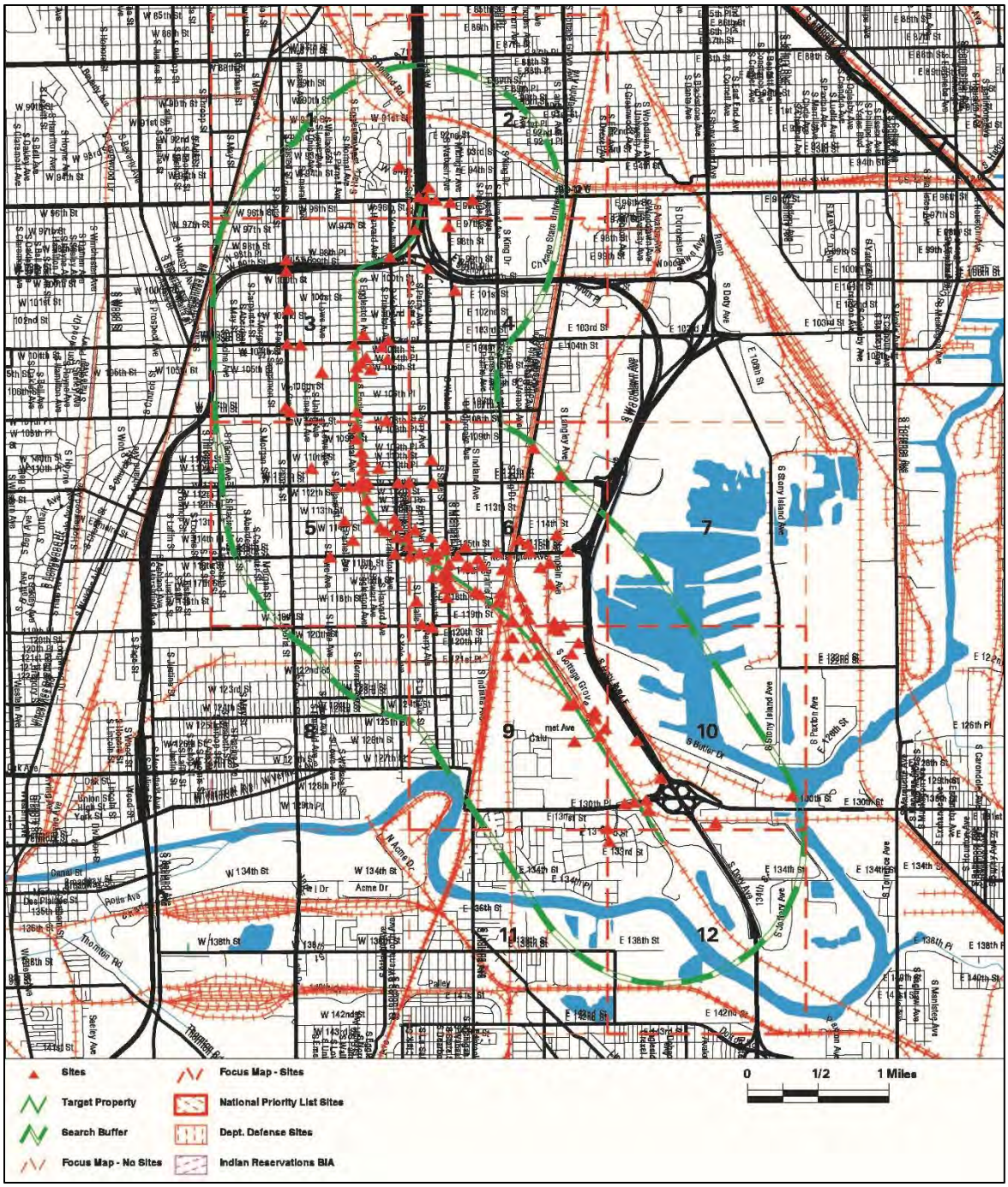

Figure 7-1: EDR Area/Corridor Report Key Map

Due to the large areas and irregular shapes of some of the listings, and the mapping methods utilized by EDR, the actual locations may not correspond to the post office addresses, and the actual distances to the site may not correspond to the database distance.

7.2.1 Subject Property

The Subject Property was listed in one or more of the databases searched by EDR and reported in the EDR Area/Corridor Report. A summary of the listing(s) is provided below.

Table 7-1: Subject Property Database Summary

Facility Name & Address	Databases	Comments
Subject Property – 95th Street station to 103rd Street station		
Chicago Park District – Lake Michigan Casino Pier 63rd Street, East of Lake Shore Drive	Facility Index System/Facility Registry System (FINDS)	This facility was mapped by EDR as being on the Subject Property. However, a review of the provided record indicates this facility is actually located approximately one-mile northeast of the Subject Property. Based on the distance from the Subject Property, this listing is not considered evidence of a REC.
Soon Lee 9832 Wentworth Avenue	EDR Historical Cleaners (EDR Hist Cleaners)	This facility was listed in the EDR Hist Cleaners database. The EDR Hist Cleaners database is a proprietary database created by EDR from a review of select city directory listings. The database was reportedly created by reviewing city directory listings for possible dry cleaning establishments. The categories of facilities reviewed and noted by EDR in creating the database reportedly included, but were not limited to, dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. Therefore, facilities identified by this database may not have actually conducted dry cleaning operations on the premise. This facility was identified as a “laundry” facility in city directory records from 1923. Given the era in which this facility operated, the identification of this facility as a “laundry”, and its mapped location within the existing

Facility Name & Address	Databases	Comments
		man-made cut for the ramps connecting I-57 and I-94, this listing is not considered evidence of a REC.
Subject Property – 103rd Street station to 111th Street station		
403 - 405 W. 103rd Street	Illinois Chicago Environmental (Chicago Env)	This address was listed in the Chicago Env database. The Chicago Env database is a lookup table to determine if environmental records exist in a Chicago Department of Public Health (CDPH) environmental dataset for a given address. This facility was noted as being listed for records relating to filed complaints and an Asbestos and Demolition Notification (NESHAPS). A review of CDPH's online databases identified a record of one complaint from 1994 described as a friendly check for ordinance violations. No corresponding record of violations was noted. The online database also noted that notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in 1996. Based on the above information, this listing is not considered evidence of a REC.
O'Connell Electric 405 W. 104th Street	FINDS, Illinois Bureau of Land (IL BOL)	This facility was listed in the FINDS and IL BOL databases. A review of the provided database information and the IEPA's BOL online database identified that the facility was listed in the states solid waste program in 1986. Based on the lack of further records, history of permits, or violations associated with the facility, this listing is not considered evidence of a REC.
B Van Dir Meer & Sons 400 W. 104th Street	Tanks, Chicago Env	This facility was listed in the Tanks and Chicago Env databases. A review of the records provided by EDR identified work in 1956 to inspect three 20,000-gallon fuel oil tanks and remove unspecified existing tanks. The historical presence of fuel oil tanks at this facility is evidence of a REC.
400 W. 105th Street	Chicago Env	This address was listed in the Chicago Env database with a record of an inspection. A review of the CDPH's online database identified records of a

Facility Name & Address	Databases	Comments
		"miscellaneous" visual inspection conducted in March of 2005 of "Calumet Tire". Based on a lack of further records for this facility and no corresponding records of violations, this listing is not considered evidence of a REC.
410 W. 105th Street	Chicago Env, FINDS	This address was listed in the Chicago Env database with a record of an inspection and NESHAPS notification. A review of the CDPH's online database identified a notice of intent for demolition or renovation that would disturb asbestos containing materials in June of 2013. An associated inspection identified that work was completed. Based on the above information this listing is not considered evidence of a REC.
Illinois Bell Telephone/ AT&T IL 413 W. 105th Street	LUST, Illinois Recovered Government Archive LUST (IL RGA LUST), Tanks, SPILLS, IL BOL, Resource Conservation and Recovery Act - No longer Generating/No Longer Reporting (RCRA-NonGen/NLR), FINDS, Enforcement and Compliance History Online (ECHO), Chicago Env	The UST database listing identifies the facility was assigned OSFM facility ID number: 2007809. A review of the listing and the OSFM's online UST database identified that two 6,000-gallon gasoline USTs and one 550-gallon used oil UST were reported as removed in 1988. According to the records obtained from EDR, a spill was reported on February 2, 1988 to IEMA by a representative of Illinois Bell who reported a release of approximately 3,500-gallons from a UST that was "taking on water". A corresponding LUST incident was generated and assigned incident number 880112. A review of the IEPA's online LUST database and document explorer database identified that a NFR letter was issued for the LUST incident in March of 2005. Among the terms and conditions of the NFR letter, a land use restriction was specified which noted that use of the facility was limited to industrial or commercial purposes. The issuance of a NFR letter for the LUST incident with land use restrictions is evidence of a CREC.

Facility Name & Address	Databases	Comments
		This facility was listed in the Chicago Env and Tanks database for records of: • Installation of one 6,700-gallon fuel oil UST in 1950 • Installation of one 1,000-gallon gas UST in 1958 • Installation of one 550-gallon fuel oil UST in 1959 • Installation of one 5,000-gallon fuel oil UST in 1971 • Installation of two 6,000-gallon fiberglass gas USTs in 1974 • Removal of one 6,000-gallon UST in February 1988 • Removal of two 6,000-gallon and one 550-gallon USTs in February 1988 The reported installation of six USTs at the facility and corresponding records of the removal of four USTs at the facility would indicate the potential presence of two USTs that still may remain in the subsurface. The potential continued presence of two USTs at the facility is evidence of a REC. The RCRA-NonGen/NLR listing identified that the facility registered as a non-generator of hazardous waste in 1984 and had no history of violations.
Fred Syhora 401 W. 105th Street	Tanks, Chicago Env.	This facility was listed in the Chicago Env and Tanks database for records of installation and subsequent abandonment of four USTs. The tanks were reportedly installed in 1957 and consisted of two 15,000-gallon USTs with unspecified contents, and two 3,500-gallon USTs for used motor oil. In 1970, two 15,000-gallon USTs and two 4,000-gallon USTs were reportedly abandoned in place by filling with sand. The reported presence of four abandoned USTs at this facility is evidence of a REC.

Facility Name & Address	Databases	Comments
JCK Auto Depot Inc. 411 W. 105th Street	IL BOL, FINDS	This facility was listed in the FINDS and IL BOL databases. A review of the provided database information and the IEPA's BOL online database identified that the facility was listed in the states solid waste program in 1984. Based on the lack of further records, history of permits, or violations associated with the facility, this listing is not considered evidence of a REC.
Midland Chemical Corporation 400 W. 107th Street	Tanks, Chicago Env	This facility was listed in the Tanks and Chicago Env database for records of UST inspection and installation. Records indicate one 3,000-gallon UST and one 7,000-gallon UST were inspected in 1962. In 1975 one 2,000-gallon and one 4,000-gallon mineral spirits USTs were reportedly installed. The Chicago Env database also identified a history of enforcement actions and inspections at the facility. A review of the CDPH's online databases for inspections and enforcement identified that on January 9, 1998 the facility was inspected by city staff who issued two violations to a Larry Brown for the presence of "auto parts and oil on the ground". A follow up inspection on February 23, 1998 noted the site to be "cleaned". The reported presence of what appears to be four separate USTs at this facility, and the reported issuance of violations for the presence of oil on the ground is evidence of a REC.
407 - 411 W. 107th Street	Chicago Env	This facility was listed under several addresses in the Chicago Env database for records of complaints and inspections that appear to be related to what was an apparent auto junk yard. The complaints filed with the city on April 3, 1996, May 6, 1996, and May 30, 1996 identified an apparent abandoned auto junk yard. Two of the complaints detailed that "the rear and side lots [are] filled with car parts and junk, and that a large quantity fluids and grease are present".

Facility Name & Address	Databases	Comments
		An inspection by city staff was conducted on February 20, 1998 noting that the "site [was] cleaned up due to accumulation of junk." An inspection of the facility by city staff was also conducted on January 21, 2000 relating to a demolition. The inspection noted the demolition was complete. The reported presence of an auto junk yard with reports of large quantities of fluids and greases being present is evidence of a REC.
AT&T Mobility 405 W. 107th Street	IL AST, Chicago Env	This facility was listed in the IL AST database for record of one AST. The Chicago Env database listing for records of a permit. A review of CDPH's online permit database identified records of an air pollution control permit being issued for an emergency generator. A search of the address on the online Cook County GIS Data Viewer identifies an aerial image of the property with a cellular communications tower. The presence of an AST, with no associated records of a release, and issuance of air control permit are not considered evidence of a REC.
355 W. 109th Street	Chicago Env	This address was listed in the Chicago Env database for records of complaints and inspections. A review of the CDPH's online complaints and inspections databases identified records of an inspection on July 23, 1998 of vacant land next to a railroad and that no violations were found. Based on the above information, this facility is not considered evidence of a REC.
355 W. 109th Place	Chicago Env	This address was listed in the Chicago Env database for records relating to NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in

Facility Name & Address	Databases	Comments
		1998. Based on the above information, this listing is not considered evidence of a REC.
Harris Transmission 410 W. 109th Street	EDR Hist Auto	The facility was listed in the EDR Hist Auto database as an automotive transmission repair shop from 1991 to 2000. This listing is considered evidence of REC.
Subject Property – 111th Street station to Michigan Avenue station		
William Ransom Transportation/ Ransom Transport/ Ransom Transport Bus Garage 352 W 110th Street	LUST, UST, Tanks, SPILLS, RCRA-Very Small Quantity Generator (VSQG), FINDS, ECHO, ERNS, Chicago Env	The facility was listed in the UST and Tanks database with a record of one 6,000-gallon gasoline UST that was reported as removed. CDPH online database records indicate the tank was installed in 1972. The facility was listed in the ERNS database for a reported spill of an estimated 20-gallons of gasoline that occurred on January 20, 1999 that overflowed from a storage tank. The responsible party was listed as Avalon Petroleum Co. The facility was listed in the LUST and SPILLS database for a release of gasoline that was reported on February 19, 1999 and was assigned incident number 990399. A review of the IEPA's online LUST and document explorer databases identified that 20 and 45-day reports were submitted for the incident, but that no NFR letter has been issued, and that the IEPA does not appear to consider the issue resolved. Based on the 45-day report, the UST appears to have been located south adjacent to the existing building. The RCRA-VSQG listing identified that the facility apparently registered as a generator of hazardous waste in 1999 and was a generator of ignitable wastes (Waste Code D001). No violations were reported with the RCRA-VSQG listing.

Facility Name & Address	Databases	Comments
		The facility was listed in the Chicago Env database for records relating to complaints, permits, and tanks. A review of the CDPH's online databases identified records associated with the above described UST and LUST incident. The reported presence of an open unresolved LUST incident for a gasoline release at the facility is evidence of a REC.
349 W. 110th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to complaints and inspections. A review of the CDPH's online databases identified a complaint for "junkyard issues" that was reported on January 8, 1998. An inspection by city staff on January 12, 1998 reportedly "found no such address". Based on the above information, this listing is not considered evidence of a REC.
348 W. 110th Place	Chicago Env	This address was listed in the Chicago Env database for records relating to NESHAPS notification and inspections. A review of the CDPH's online database identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in 2001. Three inspections in March and April of 2001 by city staff did not identify any violations or apparent issues. Based on the above information, this listing is not considered evidence of a REC.
356 W. 111th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in 1994. Based on the above information, this listing is not considered evidence of a REC.
347 W 111th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to complaints and inspections. A review of the CDPH's online databases identified that

Facility Name & Address	Databases	Comments
		a complaint was filed with the city on October 6, 2005 that detailed a business was burning something with very strong odors that was making the complainant feel ill. The complainant noted the odors were coming from a stack at the facility. On October 6, 2005 city staff conducted an inspection and observed unusual odors from the stack. However, city staff were unable to gain access to the facility. The incident was reportedly referred to the Air Pollution Prevention Group for follow up. A review of the Cook County online GIS data viewer for the given address identified this facility as part of a side yard for the west adjacent residential property. Based on the above information, a lack of additional records of complaints, inspections, or other environmental related items, this listing is not considered evidence of a REC.
348 W. 111th Place	Chicago Env	This address was listed in the Chicago Env database for records relating to NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in 1998. Based on the above information, this listing is not considered evidence of a REC.
336 W. 112th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in 2001. Based on the above information, this listing is not considered evidence of a REC.
11325 S. Princeton Avenue	Chicago Env	This address was listed in the Chicago Env database for records relating to NESHAPS notification. A review of the CDPH's online databases identified that two notices of intent for demolition or renovation that would disturb asbestos containing materials were recorded in 2016. Based on the above information, this listing is not considered evidence of a REC.

Facility Name & Address	Databases	Comments
11336 S. Yale Avenue	Chicago Env	This address was listed in the Chicago Env database for records relating to enforcement and inspections. A review of the CDPH's online databases identified that an inspection occurred on February 4, 1998 at the facility where city staff observed a large open fire in the rear yard and that a work crew was removing roofing materials and disposing of it by burning. Two citations were reportedly issued. A review of the Cook County online GIS data viewer for the given address identifies this facility as a single-family home. Based on the above information and the apparent burning of roofing materials on the ground, this listing is considered evidence of a *de minimis* condition.
11401 S. Wentworth Avenue	Chicago Env, FINDS	This address was listed in the Chicago Env database for records relating to complaints, inspections, and NESHAPS notification. A review of the CDPH's online databases identified a history of two complaints. One complaint filed on August 31, 1995 identified that a truck dumped a load of used tires at the property and left. A second complaint filed on January 8, 1998 identified possible "junkyard issues". A follow up inspection by city staff on February 4, 1998 did not apparently identify any issues. Two notices of intent for demolition or renovation that would disturb asbestos containing materials were recorded in April 2012. A subsequent inspection by city staff in May 2012 noted that demolition of the facility was completed to grade. Based on the above information, this listing is not considered evidence of a REC.
Clearwater Technology 11426 S. Perry Avenue	RCRA-NonGen/NLR, FINDS, ECHO	This facility was mapped by EDR as being adjacent to the Subject Property. However, by address it is located on the Subject Property. The facility first apparently registered as a generator of hazardous waste in 1980 but was not reported as a LQG of hazardous waste. The facility was a generator of the following hazardous wastes: chromium (D007),

Facility Name & Address	Databases	Comments
		benzene (D018), barium (D005), lead (D008), methyl ethyl ketone (D035), ignitable waste (D001), corrosive waste (D002), and halogenated solvents (F001). No records of violations were noted with the listing. The historic presence of a generator on the Subject Property is evidence of a *de minimis* condition.
11443 S. Perry Avenue and 52 W. 115th Street	Chicago Env, FINDS	This facility was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in February 2007 for the address of 52 W. 115th Street. A notation with the record identified that the facility also had an additional address of 11443 S. Perry Avenue. City staff conducted an inspection on March 1, 2007 and noted that the site was "100% grade level." A second inspection was conducted on May 18, 2007 that was noted to be a "C&D recycling permit compliance follow up." A search of CDPH's online database records for permits and enforcement of the given addresses did not identify a corresponding record of a permit or record of enforcement actions. Based on the above information, this listing is not considered evidence of a REC.
42 W. 115th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in August 2013.
48 W. 115th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to complaints, inspections, and NESHAPS notification. A review of the CDPH's online databases identified that a complaint was filed on May 7, 2001 related to an abandoned building being a

Facility Name & Address	Databases	Comments
		hazard. An associated inspection by city staff on May 7, 2001 identified that the building needed to be secured until demolition occurs. A notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in November 2006. Two subsequent inspections occurred in November 2006 by city staff which noted the demolition of the building. Based on the above information, this listing is not considered evidence of a REC.
115th and State Street	ERNS	This address was listed in the ERNS database for an incident reported to occur on May 14, 2013 where a freight train struck a pedestrian who was on the Union Pacific Railroad tracks. The incident was reported as a “railroad non-release.” Based on the above information, this listing is not considered evidence of a REC.
101 E 115th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH’s online databases identified that three notices of intent for demolition or renovation that would disturb asbestos containing materials were recorded in 2000 and 2003. Subsequent inspections by city staff occurred which note the demolition of structures. Based on the above information this listing is not considered evidence of a REC.
35 E. 115th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to inspections. A review of the CDPH’s online databases identified that a NESHAPS inspection by city staff occurred on January 7, 2005. The inspector noted that “no activity” was occurring. Based on the above information this listing is not considered evidence of a REC.
23 E. 115th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to inspections. A review of the CDPH’s online databases identified that a demolition related inspection by city staff occurred on October

Facility Name & Address	Databases	Comments
		21, 1997. The inspector noted that the building to be demolished was still standing. Based on the above information this listing is not considered evidence of a REC.
1 E. 115th Street	Chicago Env	This address was listed in the Chicago Env database for records relating to inspections. A review of the CDPH's online databases identified that inspections by city staff occurred on May 6, 2011 and May 17, 2011 related to apparent unsatisfactory condition of construction fencing. Based on the above information this listing is not considered evidence of a REC.
Church 17 E. 115th Street	Chicago Env, FINDS	This facility was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition was recorded in April 2012. A subsequent inspection by city staff on April 12, 2012 identified that the demolition was complete. Based on the above information this listing is not considered evidence of a REC.
Triangle Transmission 35 W. 115th Street	LUST, RGA LUST, UST, Tanks, RCRA-NonGen/ NLR, FINDS, ECHO, EDR Hist Auto, Spills, BOL, Chicago Env	The EDR Hist Auto listing identified the presence of this facility from 1977 to 2000. Observations during the site reconnaissance noted the continued presence of this facility under the name Donald's Auto Repair. This facility was listed in the UST databases with record of two 1,000-gallon gasoline tanks that were reported as removed on October 13, 1999. An associated LUST incident was reported on October 13, 1999 and assigned incident number 992324. A review of the IEPA's online LUST and document explorer databases identified that a 20-day report was filed, but that no NFR letter has been issued, and that the IEPA does not appear to consider the issue resolved.

Facility Name & Address	Databases	Comments
		The RCRA-NonGen/NLR listing identified that the facility registered as a small quantity generator in 1999 of ignitable wastes (D001). The facility reportedly changed its status to non-generator in 2019. No violations were noted in association with the listing. The Tanks listings identified that in 1959 that work to replace one 1,000-gallon gas UST and remove two 500-gallon USTs reportedly occurred. In 1966 work was conducted to reportedly inspect one 2,000-gallon gas tank and remove one 1,000-gallon tank. This facility was listed in the Chicago Env database for records relating to complaints, inspections, permits and tanks. A review of the CDPH's online databases identified that a complaint was filed on June 6, 1996 for "Triangle Transmission Oil Dumped." No associated records for inspection or enforcement for this incident were identified. The records relating to inspections, permits, and tanks relate to remove of the above noted USTs in 1999. The presence of an automotive repair facility since at least 1977, the unresolved LUST incident for a release of gasoline, as well a record of a reported release of oil is evidence of a REC.
13 E. 115th Street	Chicago Env.	This address was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in 1996 and 2011. An inspection by city staff in 2011 noted the demolition. Based on the above information this listing is not considered evidence of a REC.

Facility Name & Address	Databases	Comments
Asdooraian Danl 25 E. 115th Street	Hist Cleaners, Chicago Env, FINDS	This address was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in December 2008. A subsequent inspection by city staff in January 2009 identified that the demolition was complete. Based on the above information the Chicago Env listing is not considered evidence of a REC. This facility was listed in the Hist Cleaners database and identified as a "carpet cleaners" in city directory records from 1928. Given the era in which this facility operated and the identification of this facility in a single year of records, this listing is not considered evidence of a REC.
29 E. 115th Street	Chicago Env, FINDS	This address was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in December 2008. A subsequent inspection by city staff in January 2009 identified that the demolition was complete. Based on the above information this listing is not considered evidence of a REC.
11505 S. State Street	Chicago Env.	This address was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in December 2008. A subsequent inspection by city staff in December 2008 identified that the demolition was complete. Based on the above information this listing is not considered evidence of a REC.

Facility Name & Address	Databases	Comments
11507 S. State Street	Chicago Env	This address was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in December 2008. A subsequent inspection by city staff in December 2008 identified that the demolition was complete. Based on the above information this listing is not considered evidence of a REC.
11511 S. State Street	Chicago Env	This address was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in December 2008. A subsequent inspection by city staff in January 2009 identified that the demolition was complete. Based on the above information this listing is not considered evidence of a REC.
11515 S. State Street	Chicago Env	This address was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in December 2008. A subsequent inspection by city staff in December 2008 identified that the demolition was complete. Based on the above information this listing is not considered evidence of a REC.
Cuter Sefer Oil 11521 S. State Street	Tanks, Chicago Env	The 1950 Sanborn Map identifies this facility as a gas station with three USTs. This facility was listed in the Chicago Env and Tanks databases. The Tanks listing identified that one 1,000-gallon gas UST was reportedly replaced in 1955. The Chicago Env database listing for this facility identified records relating to inspections and tanks. A review of the

Facility Name & Address	Databases	Comments
		CDPH's online database identified that the tank record was for the above noted UST. The CDPH's online databases identified a series eight inspections spanning from December 2013 to February 2015 which noted that the facility was a vacant city owned lot where fly dumping had previously occurred, and which had been cleaned up. The inspections were conducted to observe the lot for evidence of additional fly dumping – none of which was noted. The reported presence of a 1,000-gallon UST at the facility, combined with a lack of records indicating the UST was removed, as well as the reported history of fly dumping at the facility is evidence of a REC.
11517 S. State Street	Chicago Env	This address was listed in the Chicago Env database for records relating to inspections. A review of the CDPH's online databases identified that a reported demolition inspection was conducted by city staff in February 2006, which noted "no demo activity." Based on the above information this listing is not considered evidence of a REC.
11581 S. State Street	Chicago Env	This address was listed in the Chicago Env database for records relating to complaints and inspections. A review of the CDPH's online databases identified that a complaint was filed in May 2012 and November 2013 for fly dumping of materials. Subsequent inspection by city staff in June 2012 identified a "small pile" of bricks and concrete in the public way. A subsequent inspection by city staff in November 2013 identified four garbage bags of leaves. In both instances the material was referred to streets and sanitation for pickup. Based on the above information this listing is not considered evidence of a REC.
Former Roseland Plaza	FINDS	This facility was listed in the FINDS database with an Agency Compliance and Enforcement System (ACES) record. ACES is the Illinois EPA Project to facilitate permitting. This listing did not note or indicate

Facility Name & Address	Databases	Comments
11500-11582 S. Michigan Avenue		any permit type for the property. Based on the above information this listing is not considered evidence of a REC.
Oak Park National Bank 11500 S. Michigan Avenue	Tanks, Chicago Env	This facility was listed in the Tanks database with two records as well as the Chicago Env database. The first tank related record identified that 315-gallon USTs, one 1,000-gallon UST, one 2,000-gallon UST were reportedly installed in May of 1958. The second tank record indicates one 2,000-gallon UST and five 300-gallon USTs were reportedly installed in March of 1959. The facility was listed in the Chicago Env database for records relating to complaints, NESHAPS notification, inspections, and tanks. A review of the CDPH's online databases identified that a complaint was filed in September of 1996 for fly dumping in a residential area. An inspection by city staff at the time noted the given address was a drug store in a strip mall and that the inspector was unable to establish if fly dumping occurred. A complaint was filed in February 2000 relating to an oil tank being present in office space in the basement level of House of Peace bookstore. An inspection by city staff at the time noted that they observed the entire basement but did not observe an oil tank. CHPH's online records identified that notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in 2006. A series of subsequent inspections noted the progressive demolition of the structure. The reported historic presence of USTs being installed at the facility, with no corresponding record of their removal, is evidence of a REC.
Flair Cleaners/ Betty Bright Cleaners	Hist Cleaners, RCRA-VSQG, Chicago Env,	This facility was listed in the Hist Cleaners database under several names from 1981 to 2003 and was noted as a dry cleaning plant.

Facility Name & Address	Databases	Comments
11518 S. Michigan Avenue	AIRS, BOL, FINDS, ECHO	The facility registered as a conditionally except small quantity generator (CESQG) of hazardous waste in 2000. Wastes generated were reported to consist of undefined wastes (D000), tetrachloroethylene (D039), trichloroethylene (D040), and various spent halogenated solvents (F002). No RCRA violations were noted in association with the listing. This facility was listed in the Chicago Env database for records relating to complaints and inspections. A review of CDPH's online databases identified that a complaint was filed in August 2004 that the facility was "dumping used chemical solution into the sewers throughout the area." CHPH records also identified a series of eight inspections of the facility by city staff that were conducted between August 2002 and March 2007. Six of these inspections appeared to be regular periodic inspections of the facility and did not report issues of concern. Two of the inspection were noted to be conducted in response to the above complaint. These inspections were conducted on August 3, 2004 and August 12, 2004 and did not report to find evidence of the illegal disposal of materials in the sewer behind the shop. Based on the above information, the historical presence of a dry cleaning plant is evidence of a REC.
11552 S. Michigan Avenue	Chicago Env	This address was listed in the Chicago Env database for records relating to complaints and inspections. A review of the CDPH's online databases identified that a complaint was filed in August 2003 against a Church's Chicken restaurant. The complaint detailed that smoke from a broken exhaust system was entering a residence. A subsequent air quality inspection by city staff was conducted on September 2, 2003 with a note that the restaurant had reportedly

Facility Name & Address	Databases	Comments
		replaced the broken exhaust system. Based on the above information this listing is not considered evidence of a REC.
Clark Service Station/ Bobs Super 100/ Clark Oil and Refining 11555 S. Michigan Avenue	UST, LUST, EDR Hist Auto	The facility was listed in the UST database with a history of two 6,000-gallon gasoline and one 7,500-gallon gasoline UST reportedly removed in 1991. The facility was identified in the EDR Historic Auto database as a gasoline service station from 1982 to 1992. A gasoline LUST incident occurred on September 5, 1991. An NFR letter was recorded January 9, 1995. A review of the IEPA's online LUST database did not identify any requirements for engineered barrier or institutional controls with the NFR letter. Based on the reported status of the NFR letter, with no noted requirements for institutional controls or engineered barriers, this listing is considered evidence of a HREC.
11564 S. Michigan Avenue	Chicago Env	This address was listed in the Chicago Env database for records relating to complaints. A review of the CDPH's online databases identified that a complaint was filed in August 1994 for reported fly dumping in the area. No corresponding record of subsequent inspection by city staff was identified. Based on the above information this listing is not considered evidence of a REC.
11592 S. Michigan Avenue	Chicago Env	This address was listed in the Chicago Env Database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that notices of intent for demolition or renovation that would disturb asbestos containing materials were recorded in December 2018. An inspection by city staff in December 2018 identified that the demolition was complete. Based on the above

Facility Name & Address	Databases	Comments
		information this listing is not considered evidence of a REC.
Subject Property - Michigan Avenue station to 130th Street station		
11634 S. Prairie Avenue	Chicago Env	This address was listed in the Chicago Env database for records relating to complaints and inspections. A review of the CDPH's online databases identified that two complaint were filed in October 2011 related to reported strong sewer like odors in the area. Subsequent inspection by City staff did not identify unusual odors. Based on the above information this listing is not considered evidence of a REC.
The Shedd Company 301 E. 117th Street	Tanks, Chicago Env	This facility was listed in the Chicago Env and Tanks databases. The Tanks listing identified that one 1,000-gallon gas tank was reportedly replaced in 1948, one 4,000-gallon fuel oil tank was reportedly installed in 1956, and one 6,000-gallon fuel oil tank was reportedly installed in 1957. The Chicago Env database listing for this facility identified records relating to NESHAPS notification and tanks. A review of the CDPH's online database identified that the tank records were for the above noted USTs, while the NESHAPS record identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in April 1997. The reported presence of a 1,000-gallon gas, a 4,000-gallon fuel oil, and 6,000-gallon fuel oil USTs at the facility, combined with a lack of records indicating the UST were removed, is evidence of a REC.
American Clybourn Finishing 11730 S. Front Avenue	RCRA-VSQG, FINDS, ECHO	This facility as depicted in the 1989 Sanborn map as a metal finishing facility. The facility registered as a large quantity generator of spent halogenated solvents used in degreasing (F001) in 1980. In 1995 the facility changed its status to a conditionally exempt small quantity generator. No violations were found. The presence of a large quantity generator on the

Facility Name & Address	Databases	Comments
		Subject Property for an apparent 15-year period is evidence of a REC.
Chemical/ Stuarts Industrial Coatings/ Stuart Chemical and Paint Inc. 11740 Front Street	UST, LUST, RCRA-SQG, FINDS, ECHO, AIRS, BOL	This facility was mapped by EDR at several locations under different listings but is believed to be the same single facility. This facility was listed in the UST database with a history of seven tanks. Six 1,000-gallon tanks and one 3,000-gallon tank. A review of the OSFM's online UST database identified that the USTs were removed in January of 1990, and were reported to contain the following substances: • Toluene (CAS# 108-88-3) • Xylenes (CAS# 1330-20-7) • Stoddard Solvent/naphtha (CAS# 64742-88-7) • Light aliphatic solvent naphtha (CAS# 64742-89-8) • Ethyl acetate (CAS# 141-78-6) • Methyl isobutyl ketone (CAS# 108-10-1) • Methyl ethyl ketone (CAS# 78-93-3) The facility was listed in the LUST database with a history of a release for a non-petroleum product on January 5 ,1990. A review of the IEPA document explorer database indicates that the LUST incident is unresolved and that the IEPA's review of investigations undertaken at the time requested further information about the incident. The facility registered as a RCRA-SQG in 1991 as a generator of ignitable wastes (D001) and spent halogenated solvents (F003 and F005). No violations were reported with the listing. Based on the apparent status of the LUST incident in connection with the removal of seven USTs from the

Facility Name & Address	Databases	Comments
		facility, this listing is evidence of a REC in connection with the Subject Property.
Illinois Central Track 119th Street	BOL	This facility was listed in the BOL database. A review of the provided database information and the IEPA's BOL online database identified that the facility was listed in the states solid waste program in 1986. Based on the historical use of this facility as a railroad and for railroad operation, this listing is considered evidence of a REC.
All American Recycling/ Keywell Corp/ S.G. Keywell Co. 11900 S. Cottage Grove Ave	RCRA-NonGen/NLR, ICIS, US AIRS, FINDS, NY Manifest, UST, LUST, SPILLS	This facility was mapped by EDR as being adjacent to the Subject Property but was observed to be a scrap yard with portions located on the Subject Property during the site reconnaissance. The facility was listed in the ICIS database for a formal enforcement action for penalty in 2010. The enforcement action reportedly related to Toxic Release Inventory (TRI) reporting under the Emergency Planning and Community Right-to-Know Act (EPCRA). A review of the EPA's online ECHO database did not identify further records relating to this enforcement action. The facility was listed in the UST database with a history of two 2,000-gallon gasoline USTs reported as removed in 1990. The facility was also listed in the LUST database with a history of a gasoline release reported in 1990 and a diesel release reporting in 1994. A review of the IEPA's online LUST database identified that an NFR letter is recorded on January 24, 1996 for the 1990 gasoline LUST incident with no note requirements for engineered barriers or institutional controls. Records indicate that a non-LUST determination letter was issued by the IEPA in 1994 for the diesel release. The facility was also listed in the SPILLS database for a spill non-LUST incident occurring on July 9, 2004.

Facility Name & Address	Databases	Comments
		The facility was listed in the RCRA database as a Conditionally Exempt Small Quantity Generator in 1996 and Large Quantity Generator in 1992 of ignitable waste (D001) and corrosive waste (D002). The facility reportedly changed its status to non-generator in 2018. No violations were identified in connection with the RCRA listing. The history of enforcement action for penalty at this facility, the facilities former status as a Large Quantity Generator of ignitable (D001) and corrosive (D002) hazardous wastes, and the apparent presence of unremedied releases of diesel fuel, is evidence of a REC in connection with the Subject Property.
Penn Central Corp./ Lake Calumet Quad 810 E. 124th Street	Illinois States Sites Unit (SSU), CERCLIS	This facility was listed in the SSU and CERCLIS databases. The SSU database listed this facility with ID number 0316490002. A review of the IEPA document explorer database identified four documents totaling seven pages. The four documents indicate that a slurry wall was proposed in the late 1980's to be used at the facility to control the movement of contaminants. The documents also indicate that almost $170,000 of funds were requested in 2004 to allow for Patrick Engineering, Inc. to conduct a site investigation. This facility was also identified on a map in a US Scrap documentation accessed through the IEPA's document explorer database, as well as in the *Hazardous Materials Technical Memorandum* (CWC Transit Group 2013.) The *Hazardous Materials Technical Memorandum* identified this facility as a hazardous waste dump site and that over 400,000 gallons of liquid waste were reportedly pumped from the basement of on-site grain silos.

Facility Name & Address	Databases	Comments
		Given the apparent proposed slurry wall, reported historic use of the facility as a hazardous waste dump site, and requested funding for a site investigation in 2004, this listing is considered a REC.
Elmer Larson, Inc./ K-Five Construction/ K Five Construction 12401 S. Cottage Grove Avenue/ 12500 S. Cottage Grove Avenue	Tier 2, BOL, Chicago Env, Integrated Compliance Information System (ICIS), FINDS, RCRA-NonGen/NLR, FINDS, ECHO, AIRS,	This facility was listed in the FINDS, ECHO, AIRS, Tier 2, BOL, Chicago Env, ICIS, and FINDS databases. A review of the databases identified that this facility was operated as an asphalt plant from at least 1987. A review of the provided BOL database information and the IEPA's BOL online database identified that the facility was listed in the states air permit program, and water permit program for an NPDES permit. The FINDS and AIRS listings identified the facility was issued air pollution control permits and was regulated for air emissions from at least 1987 through 2018, with reported emissions of various pollutants. A review of the ICIS database listing identified that the facility was issued an informal notice of violation related to air emissions. The Tier 2 database identified that the facility stored or used reportable quantities of the following hazardous chemicals in 2010 and 2014: fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil. The Chicago Env database listings for this facility identified records relating to complaints, inspections, and permits. A review of CDPH's online databases identified a history of five permits having been issued to the facility, four air permits and one waste handling permit, which appeared to relate to the operation of the facility as an asphalt plant. A review of the

Facility Name & Address	Databases	Comments
		CDPH's online databases identified a history of 168 inspections conducted by City staff between 1998 and 2018. A brief review of the inspections note that the facility was used as an asphalt plant, which contained a rock crusher to breakup asphalt and concrete materials for reuse; the presence of berms as part of containment systems for ASTs and an outdoor drum storage area; reported occurrences of fly dumping at or near the facility; and the reported presence of one 1,000-gallon diesel AST, one 8,000-gallon prime sealer AST, two 20,000 gallon used oil ASTs, one 14,000-gallon used oil AST, one 20,000-gallon AST identified as containing "asphalt/cement", and one 2,000-gallon AST containing "Anti-Stripper". A review of the CDPH's online databases identified a history of five complaints between 1993 and 2003 reportedly related to checks for ordinance violations, odors, possible USTs, and use of a crusher at the facility. The facility was listed in the RCRA database. The listing identified that the facility registered as a non-generator in 1986. No violations were reported in connection with the listing. The reported use of this facility as an asphalt plant with records of at least seven ASTs of various size (that contained diesel fuel, used oil, and other products), as well as the reported use or storage various hazardous substances (fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil) in volumes sufficient to require Tier II reporting is evidence of a REC.

7.2.2 Surrounding Property

A number of listings were identified within the databases searched by EDR and reported in the EDR Area/Corridor Report. Those listings that are adjacent to the Subject Property, or which in EDI's opinion warranted further evaluation, are summarized below. EDI considered the remaining listings unlikely to impact the Subject Property based upon factors including, but not limited to:

- The nature of the listing
- The use of the facility represented by the listing
- The status of the facility reported in the listing
- The development density of the setting
- The distances between the listing and the Subject Property
- The likelihood of releases or spills migrating to the Subject Property based on soil types at the Subject Property, local topography, subsurface conditions, or inferred groundwater movement
- The presence of intervening drainage divides

Table 7-2: Adjoining Property Database Summary

Facility Name & Address	Direction & Distance	Databases	Comments
Adjoining Properties – 95th Street station to 103rd Street station			
Arco Am-Pm 12/ Atlantic Richfield C 1 E. 95th Street	Northeast 265-feet	UST, EDR Hist Auto	This facility was listed in the EDR Hist Auto database as a gasoline service station from 1989 to 1993. The facility was also listed in the UST database with a history of a 550-gallon used oil UST that was removed in 1986. By address, EDR maps this facility as being on the south side of 95th Street. However, historical sources during this time do not depict a gas station at this location. These records are believed to relate to a gas station at 4 E. 95th Street that is discussed below.
Shell Oil/ Mobile Gas &	Northeast	UST, LUST, EDR Hist Auto	This facility was listed in the EDR Historic Auto database as a gasoline service station

Facility Name & Address	Direction & Distance	Databases	Comments
Food Mart/ Sims Arco 4 E. 95th Street	351-feet		from 1981 to 2014. The facility was listed in the LUST database for a gasoline LUST incident on October 29, 1987. The incident was apparently later determined to be a non-LUST in 1996. The facility was also listed in the UST database with a history of a 12,000-gallon gasoline, 8,000-gallon gasoline, and 6,000-gallon diesel USTs that were last reportedly used in 2018. During the site reconnaissance, this facility no longer appeared to be in active use as a gas station. No corresponding records indicating the USTs were removed were identified from the obtained documents. Therefore, given the historical use of this facility as a gas station, the possibility that tanks remain in the ground at this location, and the historical release of gasoline, is evidence of a REC in connection with the Subject Property.
Amoco 15459/ SS #15459/ Whalen Standard Services 36 W. 95th Street	Northwest 367-feet	EDR Hist Auto, RCRA-NonGen/NLR, FINDS, ECHO, LUST	The facility was listed in the EDR Hist Auto database as a gasoline service station from 1969 to 1994. The facility was identified with a history of three 10,000-gallon gasoline USTs that were reportedly removed in 1997. A gasoline LUST incident occurred on June 24, 1997 and an NFR letter was recorded on July 17, 2003. A review of the IEPA's LUST database and online document explorer identified that the NFR letter included requirements for a highway authority agreement which extended partly into 95th Street and Lafayette Avenue. Based on the presence of a NFR letter, this listing is considered evidence of a CREC.
Abbott Park Fieldhouse	Northeast 593-feet	LUST, BOL, Chicago Env	The facility was listed in the LUST database for an 8,800-gallon heating oil UST removed on August 12, 1993. A 20-day report was

Facility Name & Address	Direction & Distance	Databases	Comments
45 E. 95th Street			filed in 1993 as well. A review of the IEPA's LUST database identified that a pre-1974 letter was filed with the IEPA in 2007. Therefore, the release was exempt from the LUST regulations. The facility was also identified in the Chicago Env database for a closed UST removal permit issued on July 23, 1993 and a closed air pollution control permit on July 7, 2003. Due to contamination from the LUST incident being allowed to remain in place and no remedial action being required, the historical presence of a UST and LUST incident is evidence of a REC.
ComEh Jonathan 337 W. 102nd Place	East 329-feet	EDR Hist Cleaners	The facility was listed in the EDR Hist Cleaners database as a garment pressing business from 2002 to 2005. A review of the Cook County Assessor's website identified this address as a single-family home. Based on this information, this listing is unlikely to have conducted dry cleaning operations on the premise. Therefore, this listing is not evidence of a REC.
City of Chicago/ Roseland Pumping Station 351 West 104th Street	East 220-feet	UST, LUST	This facility was listed in the UST database with a record of a 550-gallon diesel UST that was removed in 1994. A corresponding LUST incident was report in 1994 with a NFR letter issued in September 1995. A review of the IEPA's online LUST database did not note any requirements for engineered barriers or institutional controls. Given the reported product, and lack of required controls, this listing is not considered evidence of a REC.

Facility Name & Address	Direction & Distance	Databases	Comments
Adjoining Properties – 103rd Street station to 111th Street station			
New Langston Hughes 10320 S. Wentworth Avenue	East 1,002-feet	SRP, Eng Controls, Inst Controls	This facility was listed in the SRP, Eng Controls, and Inst Controls databases. Based on a review of IEPA's document explorer database, this facility was issued a comprehensive NFR letter in 2009 which noted that land use was restricted to commercial or industrial purposes, a requirement for three-foot clean fill engineered barriers, and a construction worker caution. From IEPA records, PNA's were identified as the primary contaminants of concern. Given the reported contaminants of concern and distance, this listing is not considered to represent a REC.
400 W. 108th Street	West 75-feet	AST, Chicago Env	The facility was listed in the AST database for a tank installed as part of a backup generator. According to the Chicago Environment database, a 210-gallon diesel tank was installed April 20, 2018. A Verizon wireless antenna was mounted on the property. Due to the lack of a reported leak or release in connection with this AST, this is not a REC.
Fizer S Fencing & Security 330 W. 111th Street	East 180-feet	EDR Hist Cleaners	The facility was listed in the EDR Hist Cleaners database as a carpet and rug cleaner in 2003. Based on the reported name of the business implying fencing and security services, this listing is not considered evidence of a REC.
Pentecostal Temple, Roseland Service Station	West 352-feet	LUST, EDR Hist Auto	This facility was listed in the EDR Hist Auto database as a gasoline and oil service station from 1923 to 1928.

Facility Name & Address	Direction & Distance	Databases	Comments
415-419 W. 111th Street			The facility was listed in the LUST database for a used oil LUST incident on August 8, 1991, and a gasoline LUST incident on November 22, 1991. A review of the IEPA's document explorer website identified a letter from 2009 which essentially noted that the IEPA does not consider the LUST incident resolved. The reported presence of an open unresolved LUST incident at the facility is evidence of a REC.
Roseland Tune Up Center 401 W. 111th Street	West 125-feet	EDR Historical Automotive (EDR Hist Auto)	This facility was mapped by EDR as being on the Subject Property. However, observations during the site reconnaissance place this facility approximately 125-feet to the west of the Subject Property. This facility was listed in the EDR Hist Auto database. The EDR Hist Auto database is a proprietary database created by EDR from a review of select city directory listings. The database was reportedly created by reviewing city directory listings for possible gas station, filling station, or service station establishments. The categories of facilities reviewed and noted by EDR in creating the database reportedly included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. Therefore, facilities identified by this database may not have actually conducted automotive related operations on the premise. The listing identified that Roseland Tune Up was present in city directory listings from 1982 to 2014. Observations from the site

Facility Name & Address	Direction & Distance	Databases	Comments
			reconnaissance indicate the continued presence of an automotive repair facility with a three-bay garage. Therefore, this listing is evidence of a REC.
Reiter Brothers 433 W. 111th Street	West 516-feet	EDR Hist Auto	The facility was listed in the EDR Historic Auto database as a gasoline and oil service station in 1928 to 1970. The historical presence of an auto service station for approximately 40 years is evidence of a REC.
Adjoining Properties – 111th Street station to Michigan Avenue station			
Sheldon Heights Service 332 W. 113th Street	West-Southwest 199-feet	EDR Historic Auto	The facility was listed in the EDR Historic Auto database as a gasoline station from 1969 to 1973. This listing is evidence of a REC in connection with the Subject Property.
Illinois Bell Telephone/ Pullman Company 65 West 113th Place	Northeast 665-feet	RCRA-NonGen/NLR, FINDS, ECHO, LUST, UST, IL TIER 2	The facility was listed in the UST database with a record of three USTs, two of which were listed as removed. A LUST incident was reported in 1990 for a release of diesel fuel. An NFR letter was recorded on May 4, 2004. The facility registered as a Small Quantity Generator of an ignitable waste (D001), corrosive waste (D002), and lead (D008). No violations were reported. The facility was listed in the Tier II database for storing diesel fuel, lead, and sulfuric acid on site. Based on the above information, this listing is not considered evidence of a REC.
Vacant Building 11321 S. Wentworth Avenue	Northeast 420-feet	UST	The facility was listed in the UST database with a history of a 1,000-gallon and 2,000-gallon, heating oil UST removed in 1997. Based on the distance, this listing is not considered evidence of a REC.
3 W. 114th Street	Northeast 681-feet	Brownfields, FINDS	This facility was listed in the Brownfields database. The Brownfields listing identifies that a Phase I ESA was completed for the facility in 2011 using grant funds for

Facility Name & Address	Direction & Distance	Databases	Comments
			suspected petroleum sites. The database listing identifies that the site in 2011 was a vacant corner lot and a suspect abandoned service station. In 1998, the City of Chicago demolished the structures on the property. Given the reported use of the facility and distance from the Subject Property, this listing is not considered evidence of a REC.
Marquette Bank/ Vacant Building 135-39 W. 114th Street/ 133-137 W. 114th Street	Northeast 81-feet	UST, LUST	The facility was listed in the UST database with a history of a 2,000-gallon gasoline UST removed on September 28, 2001. The facility was listed in the LUST database for a gasoline LUST incident on October 3, 2001. An NFR letter was recorded January 25, 2002. A review of the IEPA's document explorer database did not identify any engineering or institutional controls in connection with the NRF letter. Due to the status of this listing, this is considered evidence of a HREC in connection with the Subject Property.
SRM Motors 11429 S. Perry Avenue	East 70-feet	EDR Hist Auto	The facility was listed in the EDR Hist Auto database as an automobile repair and service shop in 2003. This listing is evidence of a REC.
Abandoned Service/ City of Chicago/ Satriano Texaco Service 11500 S. Perry	Southwest 204-feet	UST, LUST, Brownfields, FINDS, EDR Hist Auto	This facility was listed in the UST, LUST, EDR Hist Auto, and Brownfields databases. This facility was a gasoline service station in city directory records from 1973 to 1993. One 6,000-gallon gasoline, two 5,000-gallon gasoline, and one 1,000-gallon used oil tanks were identified as having been removed in 2000 with a corresponding release of gasoline and used oil being reported.

Facility Name & Address	Direction & Distance	Databases	Comments
			The Brownfields listing identifies that a Phase I ESA was completed for the facility in 2011 using grant funds. According to the Brownfields listing, the property is currently vacant and is an abandoned service station. An approximately 60-foot by 25-foot concrete pad remains on the site. The listing further identifies that soil was reportedly impacted and that cleanup was identified as being needed. The reported presence of an open unresolved LUST incident for the facility is evidence of a REC.
D&D Service Station 202 W. 115th Street	Southwest 500-feet	EDR Hist Auto	The facility was listed in the EDR Historic Auto database as a gasoline station from 1970 to 1973. Based on the distance, this listing is not considered evidence of a REC.
Petri Konstantin 113 W. 115th Street	Southwest 265-feet	EDR Hist Cleaners	The facility was listed in the EDR Historic Cleaner database as a garments, curtains, and draperies cleaners in 1928. Given the era in which this facility operated and the identification of this facility in a single year of records, this listing is not considered evidence of a REC.
Abandoned Gas Station/ Cox Donna 2 W. 115th Street	Northwest 160-feet	LUST, UST, RCRA-NonGen/NLR, FINDS, ECHO	This facility is identified in the UST database with a record of one 4,000-galllon and one 3,000-gallon gasoline USTs, both of which are reported as removed. Two gasoline LUST incidents were reported, one in 1998, and a second in 2011. A review of the IEPAs LUST database identified that pre-1974 letters were filed with the IEPA for both incidents. Therefore, the release was exempt from the LUST regulations. The reported presence of two gasoline LUST incidents that are not

Facility Name & Address	Direction & Distance	Databases	Comments
			remediated near the Subject Property is evidence of a REC.
11501 S. State Street	Northeast 225-feet	Chicago Env	This facility was mapped by EDR as being on the Subject Property. However, based on the provided address and historical Sanborn maps, this facility is located approximately 225 northeast of the Subject Property. This facility was listed in the Chicago Env database for records relating to inspections and NESHAPS notification. A review of the CDPH's online databases identified that a notice of intent for demolition or renovation that would disturb asbestos containing materials was recorded in 2008. Subsequent inspections by city staff occurred which note the demolition. Based on the above information this listing is not considered evidence of a REC.
Charter Bus Company 11575 S. Wabash Avenue	Southwest 100-feet	Chicago Env	This facility was mapped by EDR as being on the Subject Property. However, a review of County records indicates this facility is actually located approximately 100-feet southwest of the Subject Property. This address was listed in the Chicago Env database for records relating to inspections. A review of the CDPH's online databases identified that an inspection was conducted on October 6, 2004 by city staff. The inspectors reported to observed evidence of the illegal dumping of liquid wastes into the city stormwater sewer system. The inspector's narrative noted that the lead investigator from the Department of Streets and Sanitation stated that he would take no further action until instructed to do so by management of his department at which time

Facility Name & Address	Direction & Distance	Databases	Comments
			the CDPH inspector would also take further action. A review of CDPH's online records did not identify a corresponding record of enforcement action or complaints. Based on the above information this listing is considered evidence of a REC.
Roseland Gasoline St 11420 S. Michigan Avenue	North 418-feet	EDR Hist Auto	The facility was listed in the EDR Historic Auto database as a gasoline station in 1923 and 1928. Based on the distance, this listing is not considered evidence of a REC.
Tadros Musa/ Goodyear Auto Service 11442 S. Michigan Avenue	North 203-feet	LUST, RCRA-NonGen/NLR, FINDS, ECHO	This facility was listed in the UST and LUST databases. One 500-gallon used oil tank was reported as removed in 1996. A corresponding LUST incident was reported and was issued a NFR letter in 1998. A review of the IEPAs online LUST database did not identify any requirements for engineered barriers or institutional controls. The facility was identified in the RCRA database as a small quantity generator of waste oils (X001), and an ignitable waste (D001). No violations are recorded. Due to the status of this listing, this is considered evidence of a HREC in connection with the Subject Property.
Ray S Cleaners 11501 S. Michigan	East 70-feet	EDR Hist Cleaners	The facility was listed in the EDR Historic Cleaners database as a cleaners in 1981. Given the identification of this facility in a single year of records, this listing is not considered evidence of a REC.
Montana Jigamian	Northeast 225-feet	EDR Hist Cleaners	This facility was mapped by EDR as being on the Subject Property. However, based on the provided address and historical Sanborn maps, this facility was actually located

Facility Name & Address	Direction & Distance	Databases	Comments
11503 S. Michigan Avenue			approximately 225-feet northeast of the Subject Property. This facility was listed in the Hist Cleaners database and identified as a cleaner of garments, curtains, and draperies in city directory records from 1928. Given the era in which this facility operated and the identification of this facility in a single year of records, this listing is not considered evidence of a REC.
Irvings Standard 11533 S. Michigan Avenue	East 75-feet	EDR Hist Auto	The facility was listed in the EDR Hist Auto database as a gasoline service station from 1996 to 2000. This listing is believed to relate to the listing for Clark Service Station/ Bob's Super 100/ Clark Oil and Refining at 11555 S. Michigan Avenue that was reviewed previously.
Wah Louis 11535 S. Michigan Avenue	East 76-feet	EDR Hist Cleaners	The facility was listed in the EDR Hist Cleaners database as a "chinese laundry" in 1923. Given the era in which this facility operated, the identification of this facility and a single year of records, this listing is not considered evidence of a REC.
Gorgodian Samuel 11453 S. Michigan Avenue	North 268-feet	EDR Hist Cleaners	The facility was listed in the Hist Cleaners as a hat cleaner in 1923. Given the era in which this facility operated and the identification of this facility in a single year of records, this listing is not considered evidence of a REC.
Haney Khalil, Michigan Citgo/ Martin oil Service	Southeast 281-feet	UST, LUST, SPILLS, EDR Hist Auto, Chicago Env	The facility was listed in the EDR Hist Auto database from 1970 to 2014 as a gasoline station under various names. The facility was also observed to be active during the site reconnaissance. The facility was listed in the UST database with a history of a 12,000-

Facility Name & Address	Direction & Distance	Databases	Comments
11600 S. Michigan Avenue			gallon gasoline, 15,000-gallon gasoline, 12,000–gallon gasoline USTs listed as currently in use. The UST database also noted a 6,000-gallon kerosene UST that was reported as abandoned in place in 2017. The SPILL and LUST listings identified a release reported on April 4, 2017. The SPILL listing identified the release as kerosine while the LUST listing identified the material as heating oil. A review of the IEPA's online LUST and document explorer database identifies that a release of kerosine occurred from a 6,000-gallon tank. The kerosine tank was red-tagged by the OSFM in 2015 and the tank was required to be removed or abandoned. 20 and 45-Day Reports were filed with the IEPA, but the 45-Day Report was denied as early action sampling was not done in accordance with regulations. Based on the above information, the operation of a gas station at this facility from least 1970, with four USTs that remain in place, and an unresolved release of kerosine is evidence of a REC in connection with the Subject Property.
Clothes Mate Dry Cleaners 11625 S. Michigan Avenue	Southeast 339-feet	EDR Hist Cleaners	The facility was listed in the Hist Cleaners database as a garment pressing and cleaners from 1997 to 1999. Based on the distance of the listing, the identification of this facility in three years of records, and corresponding lack of additional record sources for this facility, this listing is not considered evidence of a REC.
Curtis School	Northeast	UST, Tanks, BOL, RCRA-	This facility was mapped by EDR as being on the Subject Property. However, this facility is

Facility Name & Address	Direction & Distance	Databases	Comments
32 E. 115th Street	200 feet	VSQG, Chicago Env, FINDS, ECHO, AIRS	actually located approximately 200-feet northeast of the Subject Property at the northeast corner of 115th Street and State Street. The facility was listed in the UST and Tanks databases with a history of one 5,000-gallon heating oil tank that was reportedly removed in April 2001. A review of the OSFM's online UST database for the facility did not note a LUST incident in connection with the UST. The facility registered as a small quantity generator in 1998 and generated hazardous waste under codes cadmium (D006), lead (D008), and mercury (D009). No record of violations was reported in connection with the RCRA listing. The facility was listed in the Chicago Env database for records relating to complaints, inspections, permits, tanks, and NESHAPS notification. A review of the CDPH's online databases identified a history of two complaints. A complaint filed on September 21, 1995 identified a record of apparent spray-painting causing fumes that in turn caused sore throats and headaches in teachers and students. The second complaint related to asbestos removal from the school. A review of permits identified records of a permit to remove the above noted 5,000-gallon tank, as well as series of permits to install furnace equipment and clean the exterior of the building.

Facility Name & Address	Direction & Distance	Databases	Comments
			Given the above information, and distance from the Subject Property, this listing is not evidence of a REC.
Dumac Garage 131 E. 115th Street	East 353-feet	EDR Hist Auto	The facility was listed in the EDR Historic Auto database as an auto garage, auto repairing shop, and towing services from 1923 to 2005. Based on the distance, downgradient location, and lack of reported release, this listing is not considered evidence of a REC.
Calumet Coach Co 135 E. 115th Street	East 387-feet	RCRA Non-Gen/NLR, FINDS, ECHO	The facility registered as a generator of hazardous waste in 1986 under waste codes: ignitable waste (D001), spent halogenated solvents (F002), spent nonhalogenated solvents (F003), and spent halogenated solvents (F005). No violations were identified. Based on the distance and lack of violations, this listing is not considered evidence of a REC.
Tony's Autobody 157 E. Kensington	Northeast 458-feet	RCRA-VSQC, FINDS	The facility registered as a VSQC of an ignitable waste (D001) and spent nonhalogenated solvents (F003 and F005). No violations were found. Based on the above information, this listing is not considered evidence of a REC.
Adjoining Properties – Michigan Avenue station to 130th Street station			
US Scrap/ U.S. Scrap/ U.S. Drum Disposal Co. 391 E. Kensington/ 123rd and Cottage Grove Avenue	Southwest 100-feet	Superfund Enterprise Management System (SEMS), Superfund Consent Decrees (Consent), Potentially Responsible	This facility was listed in numerous databases under several variant names and was mapped by EDR at several locations. However, based on available documentation, this facility is reportedly located approximately 100-feet from the Subject Property. The SEMS listing identified that the facility is not currently listed as a National Priorities List (NPL) site for the USEPA's Superfund

Facility Name & Address	Direction & Distance	Databases	Comments
		Party (PRP), SSU, SWF/LF, BOL, RCRA-NonGen/NLR, ICIS, FINDS, ECHO, Surface impoundments (IMPDMENT)	Program. However, the site was investigated by the USEPA for possible inclusion in the NPL starting in 1980. The Consent, ICIS, ECHO, and FINDS databases identify that the facility underwent several rounds of formal enforcement action with the USEPA starting in 1989 through at least 2013. With several actions referred to the courts. The facility reportedly entered into a court ordered consent decree in 2011. A review of the Civil Enforcement Case Report available through the USEPA's ECHO website provided a case summary, which identified that the facility reportedly operated as an industrial chemical waste receiver from 1965 to 1975. From 1973 to 1975 the operator of the facility reportedly disposed of wastes at the facility and a related site. A landfill fire was reported at the facility in 1985, after which the USEPA conducted emergency response action which reportedly involved excavating and removing "heavily contaminated soils" and drummed wastes from a railroad embankment on the facility. The response action reportedly only addressed a portion of the known buried wastes. A review of the IEPA's document explorer database identified a history of proposed investigations of the facility from 2004, which included maps depicting the apparent location of the facility. A letter from the IEPA dated June 2005 to the USEPA requested a time-critical removal assessment be conducted at the facility as soil, water, and

Facility Name & Address	Direction & Distance	Databases	Comments
			sediment samples reportedly still contained "high levels of pesticides and SVOC contamination." The facility was listed in the IMPDMENT database, a record of surface impoundments created in 1980 by the IEPA as part of an assessment of potential contamination of shallow aquifers in the state. According to the database, the purpose for the impoundment is waste storage. Also, according to the database, there was no bottom of liner. Based on the reported historical use of the facility, landfilling and burial of chemical related wastes, and the presence of SVOC and pesticide contamination remaining at the site in the mid 2000's, this facility is a REC.
Sherwin Williams Co. 11541 S. Champaign	Northeast 1,989-feet	CORRACTS, RCRA-TSDF, RCRA-LQG, LUST, SEMS, ECHO	The facility was listed in the CORRACTS database with a history of paint and coating manufacturing from 1989 to 2019. In 1994 a high corrective action priority was assigned. The facility was listed in the RCRA database as a TSD facility and Large Quantity Generator. The RCRA database listings identified a history of numerous wastes related to paint and coating production. The facility received several violations in the areas of records and reporting, final civil judicial action for compliance and/or monetary penalty, generators pre-transport, general, groundwater monitoring, financial requirements, permit application, container use and management, LDR general, contingency plan and emergency procedures, tank system standards, federal

Facility Name & Address	Direction & Distance	Databases	Comments
			or state statute, and closure/post closure. Institutional controls were established in 2012. Performance standards were attained with required controls in 2014. Remedy construction is planned in 2020. Due to the active use of this facility for manufacturing, historic landfilling activities, and ongoing and planned remediation, this facility is considered evidence of a REC.
Bulkoa Inc./ Clean Harbors Env. Services/ Schneider Tank Lines/ Vacuum Industrial Pollution Intl/ Smith Systems Chicago Yard/ Unloading Unlimited/ Allwaste Tank Cleaning 11861 - 11901 S. Cottage Grove Avenue.	Northeast 520-feet	LUST, UST, RCRA-Nongen/NLR, RCRA-SQG, FINDS, ECHO	The facility was listed in the UST database with a history of seven USTs that were reportedly removed in December 1997. A review of the OSFM's online UST database identified that one of the tanks reportedly contained gasoline, three reportedly contained diesel fuel, and three did not have a product reported. A LUST incident was reported in 1997 for a release of diesel and gasoline. A review of the IEPA's online LUST database identified that an NFR letter issued in 2003 for the release required institutional controls consisting of reliance of a groundwater ordinance and restricting use of the property to industrial or commercial purposes. A review of the IEPA document explorer database identified that a Soil Vapor Extraction system was installed in 2001 at the facility to address the contamination from the release and was operated for a period of about 2 years. The facility was also listed under several different RCRA listings as a generator of hazardous waste, some with unique generator identification numbers but the

Facility Name & Address	Direction & Distance	Databases	Comments
			same overall address. Due to the overlapping RCRA listings, the exact status and history could not be readily determined. The facility apparently was mostly a small quantity generator of hazardous wastes, but records identified Allwaste Tank Cleaning as a historic large quantity generator. Reported waste streams included: ignitable (D001), corrosive (D002), reactive (D003), spent solvents (F001, F002, F003), electroplating wastes (F006, F007), quenching oil bath residues (F010), quenching wastewater treatment sludges (F012), K-listed wastes (K001, K009, K010, K015, K016, K018, K019, K020, K021, K022, K023, K024, K027, K028, K030, K048, K049), and U-listed wastes (U019, U055, U134, U140, U220, and U238). Given the reported history of this facility as an apparent generator of hazardous waste under a large variety of waste codes, this history of a gasoline and diesel fuel release with contamination allowed to remain in place subject to institutional controls, this facility is evidence of a REC.
Allwaste Tank Cleaning 11901 S. Cottage Grove Ave	Northeast 214-feet	RCRA Non-Gen/NLR, FINDS, ECHO	The facility was listed in the RCRA Non-Generator database as a former Large Quantity Generator of spent nonhalogenated solvents (F003). The facility originally registered as a large quantity generator in 1981. The facility changed is status to non-generator in 2006. The facility received three violations for pre-transport regulations. The violations received compliance by 1991. The presence of a former large quantity generator of solvent wastes with violations is evidence

Facility Name & Address	Direction & Distance	Databases	Comments
			of a REC in connection with the Subject Property.
Lake Calumet Smelting/ Inland Metals Refinery Company Incorporation 651 E. 119th Street/ 11901 S. Champlain Avenue	Northeast 500-feet	SWF/LF, NIPC, UST, BOL, SEMS, CORRACTS, SSU, RCRA-NonGen/NLR, ICIS, LEAD SMELTERS, FINDS, ECHO	This facility was mapped by EDR at several locations under different listings but is believed to be the same single facility. A review of the IEPA document explorer database identified two documents from the State Site Unit written to the agency's file. These documents identify that this facility was operated by Lake Calumet Smelting from 1948 until the 1970's, and then by Inland Metals until 1989. These documents identify the facility at the noted addresses, Maps and written descriptions provided with the documents indicate this facility was approximately 500-feet northeast of the Subject Property, and not the 1,000 or more feet reported by EDR. These documents also note the confirmed presence of soil and groundwater impacts at the facility through sampling conducted in the 1990's. The SEMS listing identified that the facility is not currently listed as a NPL site for the USEPA's Superfund Program. However, the facility was evaluated for possible inclusion in the NPL in the 1980's. The SEMS and CORRATS listings identify that the facility was assigned a medium corrective action priority in 1991 and was then archived. The SEMS listing for Lake Calumet Smelting identified that the facility was apparently again evaluated for possible inclusion in the NPL in the early 2000's but was referred for removal in late 2013. Lake Calumet Smelting

Facility Name & Address	Direction & Distance	Databases	Comments
			was listed in the ICIS database for an apparent court ordered warrant to access the property in May 2013. A review of the EPAs online ECHO database Civil Enforcement Case Report did not identify additional information. The facility was listed in the SWF/LF database as unpermitted and unauthorized solid waste disposal facility with a surface impoundment. The facility was listed in the RCRA database as a generator of hazardous waste containing lead (D008) and emission control dust/sludge from secondary lead smelting (K069). The RCRA listings identify that the facility received numerous violations in the late 1980's related to the operation of the site as a Transportation, Storage, Disposal (TSD) facility. These violations apparently achieved compliance in 1993. Based on the reported presence of soil and groundwater contamination at the facility in the 1990's, the historic operation of this facility as a smelters, and the numerous RCRA violations reported in the 1980's, this facility is evidence of a REC in connection with the Subject Property.
Cottage Grove Dump (No Address)	Northeast 173-feet	SWF/LF	The facility was listed in the SWF/LF database as a historical landfill owned by the City of Chicago and operated by the Department of Street and Sanitation. The location of the landfill was apparently reported using township and range information, so the exact location is unknown.

Facility Name & Address	Direction & Distance	Databases	Comments
			The reported presence of a landfill in the vicinity of the site is evidence of a REC.
Chicago MSD #3 (No Address)	Southwest 73-feet	IL SWF/LF	The facility was listed in the SWF/LF database as a closed landfill. The facility was also noted in the in the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 2013. The Hazardous Materials Technical Memorandum identified this facility as an inactive landfill that was used for disposal of sand, gravel, and grit from sewage treatment by MWRD. Surface samples that were reportedly collected indicated the presence of PCBs, chloroform, chlordane, chromium, lead, toluene, and 4,4-dichlorodiphenyldichloroethane (DDD). As no reported removal or cleanup had occurred, the Hazardous Materials Technical Memorandum identified this site is a High Concern. Based on the above information, this facility is evidence of a REC.
Chicago Metro Sanitary/ Metropolitan Sanitation District Greater Chicago/ Chicago Metro Sanitary District #2, Chicago Metro Sanitary District #3, Chicago Metro Sanitary District #4 (No Address)	Southwest 200-feet	NIPC, IMPDMENT	This facility was mapped by EDR at several locations under different listings but is believed to be the same single facility that is generally located approximately 200-feet from the proposed permanent envelope. The facility was listed in the IMPDMENT database, a record of surface impoundments created in 1980 by the IEPA as part of an assessment of potential contamination of shallow aquifers in the state. According to the database, the facility type is municipal. The facility was listed multiple times in the NIPC database, a historical inventory of solid waste sites created originally in 1986. The

Facility Name & Address	Direction & Distance	Databases	Comments
			NIPC report recorded locations of possible landfills using township, range, and section information, so exact placement was not always assured. Based on the name and location, this facility is believed to be related to the Calumet Reclamation Plant observed during the site reconnaissance and relate to the Chicago MSD #3 facility noted above and described in the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 2013. Due to the reported historic landfill activity at the facility, this is evidence of a REC in connection with the Subject Property.
Land & Lakes Transfer 1258-1300 E. 130th Street	Southwest 95-feet	RCRA-NonGen/NLR, FINDS, ECHO	The facility was listed in the RCRA Non-Generator database with a history as a Small Quantity Generator of an undefined waste (D000), selenium (D010), and benzene (D018). No violations are recorded. Due to the lack of violations, this is not a REC.
Calumet NU Earth/ Calumet NU-Earth Dis 130th and Doty Avenue	Northeast 192-feet	NIPC, SEMS	This facility was mapped by EDR at several locations under different listings but is believed to be the same single facility. The SEMS listing identified that the facility is not currently listed as a NPL site for the USEPA's Superfund Program. However, the site was investigated by the USEPA for possible inclusion in the NPL in 1984 and 1985. The facility was archived by the USEPA in 1991. The facility was listed in the NIPC database, a historical inventory of solid waste sites

Facility Name & Address	Direction & Distance	Databases	Comments
			created originally in 1986. The NIPC report recorded locations of possible landfills using township, range, and section information, so exact placement was not always assured. Due to the historic landfill activity at the facility, this is evidence of a REC in connection with the Subject Property.
City of Chicago 110 E 130th Place	Southwest 418-feet	RCRA-SQG	The facility was listed in the RCRA database as a Small Quantity Generator of an ignitable waste (D001). No violations were identified. Due to the status and distance of the listing, this listing is not considered evidence of a REC.
Altgeld Library 955 E. 131st Street	Southwest 1,462-feet	SRP	The facility was listed in the SRP database. A review of the IEPA's document explorer database for the facility identified that an NFR letter has not been issued for the facility. However, reports indicate that the facility was enrolled into the SRP to address PNA and metal soil contamination, and that contaminants were not expected to migrate off-site. Therefore, based on this information, this listing is not considered evidence of a REC.
Dolton Municipal Dolton, IL	Northeast 3,000-feet	IL NIPC	The facility was mapped by EDR within 500-feet of the Subject Property. However, the listing indicates this facility is in Dolton, IL, which is approximately 1/2 mile to the south, across the Calumet River. Given the distance from the Subject Property and intervening drainage divide, this listing is not considered evidence of a REC.

Section 8 - Vapor Encroachment Screening

8.1 Method

Vapor encroachment is an evolving concern associated with the potential for volatile chemicals (such as petroleum fuels and chlorinated solvents) to migrate into occupied structures through the gas phase. More specifically, the concern is the potential migration of volatile chemicals that have entered the gas phase into an occupied structure (thereby exposing the occupants of that structure to the chemical) from contaminated soil or contaminated groundwater that may be present at, or near, a given site.

As noted previously in this report, a VEC is the presence or likely presence of one or more volatile chemicals of concern (COCs) in the subsurface of the site caused by the release of vapors from contaminated soil or contaminated groundwater either on or near the Subject Property. As part of the Practice, the Environmental Professional is to evaluate the potential for the migration or encroachment of hazardous substances or petroleum products in the vapor phase within the subsurface. Based on the scope of services requested by the Client, Vapor Encroachment Conditions (VECs) were only evaluated for the locations of proposed buildings, stations, and electrical substations, as these locations will be developed with enclosed ground level or below ground occupied structures. While the method of the evaluation is not specified by the Practice, EDI completed a VES in general accordance with ASTM Standard E2600-15, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions. The VES utilize information gathered as part of this Phase I ESA and no additional information was gathered.

If a VEC is identified or cannot be ruled out, the environmental professional must determine whether the VEC represents evidence of a REC in connection with the Subject Property within the context of this Phase I ESA. It should be noted that the identification of a VEC on the Subject Property does not necessarily indicate that a potential for migration of vapors into existing or proposed structures on the Subject Property is likely. The actual migration of vapors into a given structure are governed by a large variety of site-specific factors which is beyond the scope of this assessment to evaluate.

Default search distances for a VES in general accordance with ASTM Standard E2600-15 are listed in the table below by record source. Default search distances for petroleum related COCs are approximately 0.1 miles and the default search distance for other COCs are approximately 0.33 miles.

Table 8-1: VES Search Distances

Standard Environmental Record Sources	Default Approximate Minimum Search Distance (Miles)	
	COC	Petroleum Related COC
Federal		
NPL site list	1/3	1/10
CERCLIS list	1/3	1/10
RCRA CORRACTS facilities	1/3	1/10
RCRA non-CORRACTS TSD facilities	1/3	1/10
RCRA generators	Property Only	Property Only
Institutional or engineering control registries	Property Only	Property Only
ERNS list	Property Only	Property Only
State- and tribal-equivalents		
NPL	1/3	1/10
CERCLIS	1/3	1/10
Landfill and/or solid waste disposal site lists	1/3	1/10
Leaking storage tank lists	1/3	1/10
Registered storage tank lists	Property Only	Property Only
Institutional or engineering control registries	Property Only	Property Only
Voluntary cleanup sites	1/3	1/10
Brownfield sites	1/3	1/10

The search distances may be expanded or reduced in the upgradient, cross-gradient, or downgradient directions based on EDI's professional judgment relating to factors such as groundwater flow direction, subsurface characteristics (such as low-permeability soil, such as soil high in clay or silt content), surficial features (such as wetlands, rivers or streams), and man-made features (such as utility corridors).

8.2 Results

Based on the available information, EDI identified the following site(s) of potential concern within the VES search distances established for the Subject Property. These sites are summarized below.

Table 8-2: VES Results Summary

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
103rd Street station and substation			
B Van Dir Meer & Sons 400 W. 104th Street	Subject Property	Yes	This facility was listed in the Tanks and Chicago Env databases. A review of the records provided by EDR identified work in 1956 to inspect three 20,000-gallon fuel oil tanks and remove unspecified existing tanks. The potential presence of these tanks on the Subject Property represents a VEC.
Illinois Bell Telephone/AT&T IL 413 W. 105th Street	Subject Property	Yes	This facility has a reported record of the installation of six USTs at and corresponding records of the removal of only four USTs. In addition, a LUST incident was reported and eventually issued an NFR letter in March of 2005, prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations. Furthermore, the NFR letter notes contamination was allowed to remain in place subject to the restrictions of the NFR letter. Therefore, the known contamination and USTs on the Subject Property represent a VEC.
Fred Syhora 401 W. 105th Street	Subject Property	Yes	This facility was listed in the Chicago Env and Tanks database for records of installation and subsequent abandonment of four USTs. In 1970, two 15,000-gallon USTs and two 4,000-gallon USTs were reportedly abandoned in place by filling with

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			sand. The reported abandonment of four USTs on the Subject Property prior to modern UST regulations represent a VEC.
JCK Auto Depot Inc. 411 W. 105th Street	Subject Property	No	This facility was listed in the FINDS and IL BOL databases. A review of the provided database information and the IEPA's BOL online database identified that the facility was listed in the states solid waste program in 1984. Based on the lack of further records, history of permits, or violations associated with the facility, this listing is not considered to represent a VEC.
City of Chicago/ Roseland Pumping Station 351 W. 104th Street	East 220-feet Same	No	This facility was listed in the UST database with a record of a 550-gallon diesel UST that was removed in 1994. A corresponding LUST incident was report in 1994 with a NFR letter issued in September 1995. A review of the IEPA's online LUST database did not note any requirements for engineered barriers or institutional controls. Given the reported product, lack of required controls, distance, and typically clayey soils in the area of the Subject Property, this listing is not considered to represent a VEC.
Chicago Fire Department Engine #93	East 420-feet Same	No	This facility was listed in the UST database with a pre-1974 heating oil tank. Given the absence of a reported release, distance, and typically clayey soils in the area of

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
330 W. 104th Street			the Subject Property, this listing is not considered to represent a VEC.
New Langston Hughes Elementary School 10320 S. Wentworth Avenue	East 1,000-feet Same	No	This facility was listed in the SRP, Eng Controls, and Inst Controls databases. Based on a review of the document explorer database, this facility was issued a comprehensive NFR letter in 2009 which noted that land use was restricted to commercial or industrial purposes, a requirement for three-foot clean fill engineered barriers, and a construction worker caution. From IEPA records, PNA's were identified as the primary contaminants of concern. Given the reported contaminants of concern, distance, and typically clayey soils in the area of the Subject Property, this listing is not considered to represent a VEC.
111th Street station and substation			
William Ransom Transportation/ Ransom Transport/ Ransom Transport Bus Garage 352 W 110th Street	Subject Property	Yes	The facility was listed in the UST and Tanks database with a record of one 6,000-gallon gasoline UST that was reported as removed. CDPH online database records indicate the tank was installed in 1972. The facility was listed in the LUST and SPILLS database for a release of gasoline that was reported on February 19, 1999 and was assigned incident number 990399. A review of the IEPA's online LUST and document explorer databases

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			identified that 20- and 45-day reports were submitted for the incident, but that no NFR letter has been issued, and that the IEPA does not appear to consider the issue resolved. Based on the 45-day report, the UST appears to have been located south adjacent to the existing building. The reported presence of an open unresolved LUST incident for a gasoline release at the facility is evidence of a VEC.
Pentecostal Temple, Roseland Service Station 415-419 W. 111th Street	West 352-feet Same	Yes	This facility was identified in records as a gasoline service station from approximately 1923 to 1928. The facility was listed in the LUST database for a used oil LUST incident on August 8, 1991, and a gasoline LUST incident on November 22, 1991. A review of IEPA records identified a letter from 2009 which essentially noted that the IEPA does not consider the LUST incident resolved. The reported presence of an open unresolved LUST incident at the facility is evidence of a VEC.
Lakefront Supporting Housing 11023-11045 S. Wentworth	East 1,309-feet Same	No	This facility was listed in the SRP, Eng Controls, and Inst Controls databases. The SRP database listing identified that the facility was issued a focused

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			NFR letter in 2005. The NFR letter reportedly included requirements for engineered barriers, institutional controls, and a groundwater use restriction. A review of the IEPA document explorer database identified that the NFR was issued for contamination related to VOCs and lead only. According to the IEPA's Project Summary notes, soil impacts were limited to the facility, and groundwater impacts were only modeled to extend into the streets adjoining the facility. Therefore, based on the reported distance, modeled extent of impacts, and typically clayey soils in the area of the Subject Property, this listing is not considered to represent a VEC.
Michigan Avenue station and 116th Street substation			
Clark Service Station / Bobs Super 100 / Clark Oil and Refining 11555 S. Michigan Avenue	Subject Property	Yes	The facility was listed in the UST database with a history of two 6,000-gallon gasoline and one 7,500-gallon gasoline UST reportedly removed in 1991. The facility was identified in the EDR Historic Auto database as a gasoline service station from 1982 to 1992. A gasoline LUST incident occurred on September 5, 1991. An NFR letter was recorded January 9, 1995. A review of the IEPA's online LUST database did not identify any requirements for engineered barrier

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			or institutional controls with the NFR letter. As the NFR letter was issued prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations the LUST incident represents a VEC.
Cuter Sefer Oil 11521 S. State Street	Subject Property	Yes	This facility was identified in the 1950 Sanborn map as a gas station with three UST. This facility was listed in the Tanks databases. The Tanks listing identified that one 1,000-gallon gas UST was reportedly replaced in 1955. The historical presence of a gas station with three USTs, that may remain in the ground is evidence of a VEC.
Flair Cleaners, Betty Bright Cleaners 11518 S. Michigan Avenue	Subject Property	Yes	This facility was listed in the Hist Cleaners database under several names from 1981 to 2003 and was noted as a dry cleaning plant. The facility registered as a CESQG of hazardous waste in 2000. Wastes generated were reported to consist of undefined wastes (D000), tetrachloroethylene (D039), trichloroethylene (D040), and various spent halogenated solvents (F002). No RCRA violations were noted in association with the listing.

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			This facility was listed in the Chicago Env database for records relating to complaints and inspections. A review of CDPH's online databases identified that a complaint was filed in August 2004 that the facility was "dumping used chemical solution into the sewers throughout the area." CHPH records also identified a series of eight inspections of the facility by city staff that were conducted between August 2002 and March 2007. Six of these inspections appeared to be regular periodic inspections of the facility and did not report issues of concern. Two of the inspection were noted to be conducted in response to the above complaint. These inspections were conducted on August 3, 2004 and August 12, 2004 and did not report to find evidence of the illegal disposal of materials in the sewer behind the shop. Based on the above information, the historical presence of a dry cleaning plant on the Subject Property is evidence of a VEC.
Oak Park National Bank 11500 S. Michigan Avenue	Subject Property	Yes	This facility was listed in the Tanks database with two records. The first tank related record identified that 315-gallon USTs, one 1,000-gallon UST, one 2,000-gallon UST were reportedly installed in May of 1958.

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			The second tank record indicates one 2,000-gallon UST and five 300-gallon USTs were reportedly installed in March of 1959. The reported historic presence of USTs being installed at the facility on the Subject Property, with no corresponding record of their removal, is evidence of a VEC.
Triangle Transmission 35 W. 115th Street	Subject Property	No	This facility was listed in the UST databases with record of two 1,000-gallon gasoline tanks that were reported as removed on October 13, 1999. An associated LUST incident was reported on October 13, 1999 and assigned incident number 992324. A review of the IEPA's online LUST and document explorer databases identified that a 20-day report was filed, but that no NFR letter has been issued, and that the IEPA does not appear to consider the issue resolved. While this facility is on the Subject Property, this facility is located over 600 feet from a proposed building, station, or electrical substation. Therefore, this listing is not considered evidence of a VEC based on the reported material released, distance, and typically clayey soils in the area of the Subject Property.

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
The Shedd Company 301 E. 117th Street	Subject Property	No	This facility was listed in the Tanks database. The Tanks listing identified that one 1,000-gallon gas tank was reportedly replaced in 1948, one 4,000-gallon fuel oil tank was reportedly installed in 1956, and one 6,000-gallon fuel oil tank was reportedly installed in 1957. While this facility is on the Subject Property, this facility is located over 500-feet from a proposed building, station, or electrical substation. Therefore, this listing is not considered evidence of a VEC based on the reported material held in the tanks, distance, and typically clayey soils in the area of the Subject Property.
Abandoned Gas Station, Cox Donna 2 W. 115th Street	North 160-feet Same	No	This facility is identified in the UST database with a record of one 4,000-galllon and one 3,000-gallon gasoline USTs, both of which are reported as removed. Two gasoline LUST incidents were reported, one in 1998, and a second in 2011. A review of the IEPAs LUST database identified that pre-1974 letters were filed with the IEPA for both incidents. Therefore, the release was exempt from the LUST regulations. While this facility is identified as approximately 160-feet from the Subject Property, this facility is located over 600-feet from a

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			proposed building, station, or electrical substation. Therefore, this listing is not considered evidence of a VEC based on the reported material released, distance, and typically clayey soils in the area of the Subject Property.
Musa Tadros, Goodyear Tire and Rubber 11442 S. Michigan Avenue	North 203-feet Same	No	This facility was listed in the UST and LUST databases. One 500-gallon used oil tank was reported as removed in 1996. A corresponding LUST incident was reported and was issued a NFR letter in 1998. A review of the IEPAs online LUST database did not identify any requirements for engineered barriers or institutional controls. While this facility is identified as approximately 203-feet from the Subject Property, this facility is located over 600 feet from a proposed building, station, or electrical substation. Therefore, this listing is not considered evidence of a VEC based on the reported material released, distance, and typically clayey soils in the area of the Subject Property.
Abandoned Service Station, City of Chicago, Satriano Texaco Service	South-southwest 204-feet Same	No	This facility was listed in the UST, LUST, EDR Hist Auto, and Brownfields databases. This facility was a gasoline service station in city directory records from 1973 to 1993. One 6,000-gallon gasoline, two

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
11500 S. Perry Avenue			5,000-gallon gasoline, and one 1,000-gallon used oil tanks were identified as having been removed in 2000 with a corresponding release of gasoline and used oil being reported. The Brownfields listing identifies that a Phase I ESA was completed for the facility in 2011 using grant funds. The listing further identifies that soil was reportedly impacted and that cleanup is needed. While this facility is identified as approximately 204 feet from the Subject Property, this facility is located over 600 feet from a proposed building, station, or electrical substation. Therefore, this listing is not considered evidence of a VEC based on the reported material released, distance, and typically clayey soils in the area of the Subject Property.
3 W. 114th Street	North 681-feet Same	No	This address was listed in the Brownfields database. The brownfields listing identifies that a Phase I ESA was completed for the facility in 2011 using grant funds for suspected petroleum sites. The database listing identifies that the site in 2011 was a vacant corner lot

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			and a suspect abandoned service station. Based on the suspected former use as a service station with potential petroleum related impacts, distance, and typically clayey soils in the area of the Subject Property, this listing is not considered evidence of a VEC.
120th Street Yard and Shop			
Elmer Larson, Inc. / K-Five Construction 12401 S. Cottage Grove Avenue	Subject Property	Yes	This facility was listed in the FINDS, ECHO, AIRS, Tier 2, BOL, Chicago Env, ICIS, and FINDS databases. The reported use of this facility as an asphalt plant with records of at least 7 ASTs of various size (that contained diesel fuel, used oil, and other products), as well as the reported use or storage various hazardous substances (fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil) in volumes sufficient to require Tier II reporting is evidence of a VEC.
Penn Central Corp. / Lake Calumet Quad 810 E. 124th Street	Subject Property	Yes	This facility was listed in the SSU and CERCLIS databases. Documents indicate that a slurry wall was proposed in the late 1980's to be used at the facility to control the movement of contaminants. The documents also indicate that almost $170,000 of funds were requested in

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			2004 to allow for Patrick Engineering, Inc. to conduct a site investigation. This facility was also identified on a map in US Scrap documentation accessed through the IEPA's document explorer database, as well as in the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 2013. The Hazardous Materials Technical Memorandum identified this facility as a hazardous waste dump site and that over 400,000 gallons of liquid waste were reportedly pumped from the basement of on-site grain silos. Given the apparent proposed slurry wall, reported historic use of the facility as a hazardous waste dump site, and requested funding for a site investigation in 2004, this facility is considered evidence of a VEC.
Chicago MSD #3 (No address provided)	West-Southwest 73-feet Same	Yes	The facility was listed in the SWF/LF database as a closed landfill. The facility was also noted in the in the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 2013. The Hazardous Materials Technical Memorandum identified this facility as an inactive landfill that was used for disposal of sand,

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			gravel, and grit from sewage treatment by MWRD. Surface samples that were reportedly collected indicated the presence of PCBs, chloroform, chlordane, chromium, lead, toluene, and 4,4-dichlorodiphenyldichloroethane (DDD). As no reported removal or cleanup had occurred, the Hazardous Materials Technical Memorandum identified this site is a High Concern. Based on the reported presence of volatile chemicals in surface soil samples this facility is evidence of a VEC.
All American Recycling/ Keywell Corp/ S.G. Keywell Co. 11900 S. Cottage Grove Ave	Subject Property	Yes	This facility was listed in the LUST database with a history of a gasoline LUST incident in 1990. An NFR letter was subsequently reported in 1996. The facility was also listed in the SPILLS database for a non-LUST incident occurring on July 9, 2004. The facility was listed in the RCRA database as a Conditionally Exempt Small Quantity Generator in 1996 and Large Quantity Generator in 1992 of ignitable waste (D001) and corrosive waste (D002). No violations were identified in connection with the RCRA listing. Based on the facilities former status as a Large Quantity Generator of

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			hazardous waste, the issuance of a NFR letter for the gasoline LUST incident prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations, this listing is considered evidence of a VEC.
US Scrap 123rd & Cottage Grove Avenue	Southwest 100-feet Same	Yes	This facility was listed in the SEMS, Consent, PRP, ICIS, ECHO, and FINDS databases. Records identify that the facility reportedly operated as an industrial chemical waste receiver from 1965 to 1975. From 1973 to 1975 the operator of the facility reportedly disposed of wastes at the facility and a related site. A landfill fire was reported at the facility in 1985, after which the USEPA conducted emergency response action which reportedly involved excavating and removing "heavily contaminated soils" and drummed wastes from a railroad embankment on the facility. The response action reportedly only addressed a portion of the known buried wastes. A letter from the IEPA dated June 2005 to the USEPA requested a time-critical removal assessment be conducted at the facility as soil, water, and sediment samples reportedly still contained "high levels

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			of pesticides and SVOC contamination." Based on the reported historical use of the facility, and the presence of contamination remaining at the site in the mid 2000's, this facility is evidence of a VEC.
130th Street Station and Substation			
Chicago Metro Sanitary District #2, Chicago Metro Sanitary District #3, Chicago Metro Sanitary District #4, (No address provided)	East-Northeast 330-feet Same	Yes	The facility was listed in the NIPC database, a historical inventory of solid waste sites created originally in 1986. The NIPC report recorded locations of possible landfills using township, range, and section information, so exact placement was not always assured. No additional records were found of the property. Due to the reported historic landfill activity at the facility, this is evidence of a VEC.
Calumet NU-Earth Dis N. 130th & Dotty	Northeast 302-feet Same	No	The facility was listed in the SEMS database as an archived site active from 1984 to 1991. No additional records were found. Due to lack of additional information, this facility is not evidence of a VEC.
Altgeld Library 955 E. 131 Street	Southwest 1,462-feet Same	No	The facility was listed in the SRP database. A review of the IEPA's document explorer database for the facility identified that an NFR letter has not been issued for the facility. However, reports indicate that the facility was enrolled into the SRP to address PNA and metal soil

Facility Name & Address	Direction, Distance, Gradient Position Relative to Subject Property	Represent a VEC?	Comment
			contamination, and that contaminants were not expected to migrate off-site. Therefore, based on this information, this listing is not considered evidence of a REC.

8.3 Limitations

No VES can wholly eliminate uncertainty regarding the identification of VECs in connection with the Subject Property. The VES is intended to reduce, but not eliminate, uncertainty regarding whether or not a VEC exists in connection with a property, and the VES is not meant to be an exhaustive screening.

Section 9 - Conclusions

EDI performed a Phase I ESA of the Subject Property generally following the Practice. Limiting Conditions and exceptions from the Practice are presented in Section 1.1.4. of the report. The following conclusions have been made in relation to the Subject Property and are presented in Tables 9-1 through 9-6.

It should be noted that an identification number was assigned to each geographically discrete condition (RECs, CRECs, HRECs, and *de minimis*) identified in Tables 9-1 through 9-6. This was done to allow the user the ability to identify the approximate location of the discrete condition in the noted corresponding figure. Certain conditions were found in broad areas throughout the Subject Property, or adjoining area, or that were not interpreted to be geographically discrete by EDI. In these instances, these conditions were not assigned an individual identification number. The assignment of identification numbers to conditions was done generally in a north to south fashion along the alignment and does not represent a ranking of the hazard, severity, or potential impact of the condition. The noted figures are presented in Appendix A.

RECs

A REC is defined by the Practice as the presence or likely presence of any hazardous substances or petroleum products in, on, or at the Subject Property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. A total of 26 on-site RECs and 18 off-site RECs were identified in connection with the Subject Property.

On-Site RECs

Table 9-1 lists the on-site RECs that were identified in connection with the Subject Property.

Table 9-1: On-Site RECs

No.	Figure	Name	Description
--	--	Railroad Tracks	Railroad tracks were observed on and adjacent to the Subject Property throughout the area. These tracks exist at various locations on elevated embankments. The source of the fill material used to make the embankments is unknown. Most of these rail lines are also used to transport freight, which may include hazardous materials or petroleum products. Spills or releases that occurred on

No.	Figure	Name	Description
			or along these tracks may have impacted the Subject. Railroad rights of way are also typically maintained using herbicides for weed control. The Client should be aware that routine application of herbicides over time may result in elevated concentrations of chemicals in the surface soil and/or surface run off. Furthermore, releases may have occurred from creosote treated railroad ties or coal ash releases from historic steam train operations. Therefore, the presence of railroad tracks is evidence of a REC.
Subject Property – 103rd Street station to 111th Street station			
4	ES-1	403 W. 103rd Place	Historical Sanborn Fire Insurance (Sanborn) maps depict a fuel warehouse at the rear of this facility in 1950. The historical presence of a fuel warehouse at this facility is a REC.
5	ES-1	400 W. 103rd Place	Sanborn maps depict a coal yard at this facility from 1911 to 1950. The historical presence of a coal yard at this facility is a REC.
6	ES-1	B Van Dir Meer & Sons 400 W. 104th Street	Records from the City identified work permits issued in 1956 to inspect three 20,000-gallon fuel oil underground storage tanks (USTs) and to remove an unspecified number of existing tanks at this facility. No corresponding records indicating the three 20,000-gallon USTs have been removed were identified. Sanborn maps from this time period depict the facility with a building labeled fuel storage and coal yard. Sanborn maps from 1989 depict this facility as a junk yard. The historical presence of a junk yard, coal yard, and fuel oil tanks at this facility with tanks that may remain in the ground is a REC.
7	ES-1	Fred Syhora 401 W. 105th Street	This facility was identified with records for the installation and subsequent abandonment of four USTs. The tanks were reportedly installed in 1957 and consisted of two 15,000-gallon USTs with unspecified contents and two 3,500-gallon USTs for used motor oil. In 1970, two 15,000-gallon USTs and two 4,000-gallon USTs were reportedly abandoned in place by filling with sand. The reported presence of four abandoned USTs at this facility that may remain in place is a REC.

No.	Figure	Name	Description
8	ES-1	10514 S. Stewart Avenue	Evidence of automotive and equipment repair was observed at this facility during the site reconnaissance. Automotive and equipment repair typically generate wastes in the form of waste oil and other waste fluids as well as handle and store some amount of petroleum products or hazardous materials such as fuels, oils, paints, solvents, and other grease and oils. The use of this facility for automotive and equipment repair is a REC.
9	ES-1	Illinois Bell Telephone/ AT&T IL 413 W. 105th Street	Six USTs were reportedly installed at the facility between 1950 and 1974. Corresponding records for the removal of four USTs in 1988 were identified, along with a reported leaking UST (LUST) incident. As noted in the Hazardous Materials Technical Memorandum, dated August 21, 2013 and prepared by CWC Transit Group, the LUST incident relates to contamination from the four USTs removed in 1988. A review of the Illinois Environmental Protection Agency's (IEPA) online LUST database and document explorer database identified that a No Further Remediation (NFR) letter was issued for the LUST incident in March of 2005. Among the terms and conditions of the NFR letter, a land use restriction was specified, which noted that use of the facility was limited to industrial or commercial purposes. The issuance of an NFR letter for the LUST incident with land use restrictions would normally be considered evidence of a Controlled REC (CREC). However, the potential continued presence of two USTs in the subsurface at this facility is a REC.
9	ES-1	Cement Block Factory 10638 S. Stewart Avenue	This facility was identified a cement block factory in the 1950 Sanborn map with gasoline storage tank and five 50-foot-tall coal silos. Cement block factories typically use large quantities of concrete and aggregate, which is then mixed with water to form the blocks. The formed blocks are then cured in a kiln typically heated by coal or petroleum products. Aggregate used in cement block typically include sand, stone, and gravel. Blast-furnace slag, fly ash, and coal cinders have also been typically added to reduce the weight of the finished product. Historical sources indicate this facility was present from

No.	Figure	Name	Description
			1938 to the early 1960s. Cross-referencing Cook County records to the Sanborn maps indicates this facility was present at the noted address. The historical presence of a cement block factory is evidence of a REC.
10	ES-1	Midland Chemical Corporation/ Atlan Inc 400 W. 107th Street	This facility was identified with a history of four USTs, which may remain in place. City records indicate one 3,000-gallon UST and one 7,000-gallon UST were inspected in 1962. In 1975, one 2,000-gallon and one 4,000-gallon mineral spirits USTs were reportedly installed. No corresponding records of UST removals was identified. The 1989 Sanborn map notes a manufacturing facility with slag bin and several USTs. City records also identified a history of enforcement actions and inspections at the facility for the presence of "auto parts and oil on the ground." Observations during the site reconnaissance also noted evidence of auto related repair. The historical presence of manufacturing on the property with the reported presence of what appears to be four separate USTs at this facility and the reported issuance of violations for the presence of oil on the ground is a REC.
11	ES-1	407 - 411 W. 107th Street	This facility was identified as a coal yard in the 1950 Sanborn map with several gasoline storage tanks depicted. This facility was listed under several addresses in City records for complaints and subsequent inspections by City staff that appear to be related to what was a reported auto junk yard with complaints detailing that "the rear and side lots [are] filled with car parts and junk, and that a large quantity fluids and grease are present." The reported presence of an auto junk yard with large quantities of fluids and greases being present is a REC.
13	ES-2	Harris Transmission 410 W. 109th Street	The facility was identified in records as an automotive transmission repair shop from approximately 1991 to 2000. Automotive and equipment repair facilities typically generate wastes in the form of waste oil and other waste fluids as well as handle and store some amount of petroleum products or hazardous materials such as fuels, oils, paints, solvents, and other grease and oils. The

No.	Figure	Name	Description
			reported historical use of the facility for auto repair operations is a REC.
Subject Property – 111th Street station to Michigan Avenue station			
14	ES-2	William Ransom Transport 352 W. 110th Street	The facility was identified with a record of one 6,000-gallon gasoline UST that was reported as removed with a corresponding LUST incident being reported in February 1999 and assigned incident number 990399. A review of IEPA records identified that 20- and 45-day reports were submitted for the incident, but that no NFR letter has been issued. Based on the 45-day report, the UST appears to have been located south adjacent to the existing building. The reported presence of an open unresolved LUST incident for a gasoline release at the facility is a REC.
15	ES-2	340-350 W. 110th Place	This facility was identified as a contractor's yard in Sanborn maps from 1950 and 1989 with a gasoline storage tank and oil storage being noted. The historical presence of a contractor's yard with a tank and oil storage is a REC.
16	ES-2	Chatham Coal and Coke Co. 356 W. 111th Street	This facility was depicted as a coal yard in Sanborn maps from 1950. The historical presence of a coal yard is a REC.
26	ES-2	SRM Motors 11429 - 11439 S. Perry Avenue	The facility was identified in records as an automobile repair shop starting in the early 2000s. Observations during the site reconnaissance noted the continued presence of an auto repair facility at this location. The presence of auto repair operations at this facility since the early 2000s is a REC.
28	ES-2	Triangle Transmission 35 W. 115th Street	Records identified the presence of this automotive repair facility since at least 1977. Observations during the site reconnaissance noted the continued presence of this facility under the name Donald's Auto Repair.

No.	Figure	Name	Description
			This facility was listed in the UST databases with record of two 1,000-gallon gasoline tanks that were reported as removed in 1999. An associated LUST incident was reported and assigned incident number 992324. A review of IEPA records identified that a 20-day report was filed, but that no NFR letter has been issued, and that the IEPA does not appear to consider the issue resolved. The presence of an automotive repair facility since at least 1977 and the unresolved LUST incident for a release of gasoline is a REC.
31	ES-2	Cuter Sefer Oil 11521 S. State Street	The 1950 Sanborn map identifies this facility as a gas station with three USTs. This facility was identified in City records for one 1,000-gallon gasoline UST when a permit was reportedly issued to replace an existing tank in 1955. City records also identified a series eight inspections spanning from December 2013 to February 2015, which noted that the facility was a vacant city owned lot where fly dumping had previously occurred, and which had been cleaned up. The inspections were conducted to observe the lot for evidence of additional fly dumping, none of which was noted. The historical presence of gas station with three USTs at the facility, combined with a lack of records indicating the USTs were removed, as well as the reported history of fly dumping at the facility is a REC.
32	ES-2	Oak Park National Bank 11500 S. Michigan Avenue	This facility was identified in City records with a history of nine USTs. Records identified that a 315-gallon UST, one 1,000-gallon UST, and one 2,000-gallon UST were reportedly installed in May of 1958. Records further identified that one 2,000-gallon UST and five 300-gallon USTs were reportedly installed in March of 1959. Aerial photographs from this time period depict the construction of a strip mall at this location. The reported historic presence of USTs being installed at the facility, with no corresponding record of their removal, is a REC.

No.	Figure	Name	Description
33	ES-2	Flair Cleaners/ Betty Bright Cleaners 11518 S. Michigan Avenue	This facility was identified as dry cleaning plant under several names from 1981 to 2003 and was a registered conditionally exempt small quantity generator (CESQG) of hazardous wastes. This facility was also listed in City records relating to complaints and inspections. A complaint was filed in August 2004 that the facility was "dumping used chemical solution into the sewers throughout the area." Records also identified a series of eight inspections of the facility by city staff that were conducted between August 2002 and March 2007. Six of these inspections appeared to be regular periodic inspections of the facility and did not report issues of concern. Two of the inspection were noted to be conducted in response to the above noted complaint. These inspections were conducted on August 3, 2004 and August 12, 2004 and did not report to find evidence of the illegal disposal of materials in the sewer behind the shop. Based on the above information, the historical presence of a dry cleaning plant is a REC.
Subject Property - Michigan Avenue station to 130th Street station			
38	ES-2	The Shedd Company 301 E. 117th Street	This facility was identified in Sanborn maps from 1911 and 1950 as a manufacturer of ice cream and in 1989 as a potato chip factory. Sanborn maps depict the facility with two USTs. This facility was listed in City records with a history of USTs. City records identified that one 1,000-gallon gas tank was reportedly replaced in 1948, one 4,000-gallon fuel oil tank was reportedly installed in 1956, and one 6,000-gallon fuel oil tank was reportedly installed in 1957. The reported presence of three USTs at the facility, combined with a lack of records indicating the USTs were removed, is a REC.
39	ES-2	American Clybourn Finishing	This facility as depicted in the 1989 Sanborn map as a metal finishing facility. The facility registered as a large quantity generator of spent halogenated solvents used in degreasing (F001) in 1980. In 1995, the facility changed its status to a CESQG. The historic presence of a metal

No.	Figure	Name	Description
		11730 S. Front Avenue	finishing facility that was a LQG of spent solvents on the Subject Property for an apparent 15-year period is evidence of a REC..
40	ES-2	Stuart Chemical and Paint Inc. 11740 Front Street	This facility was identified in Sanborn maps from 1950 as a coal yard and paint factory in the 1989 map. This facility was noted as an apparent auto junkyard with bulk containers stored outdoors during the site reconnaissance. This facility was identified with a history of seven tanks. Six 1,000-gallon tanks and one 3,000-gallon tank were reportedly removed in January of 1990 and were reported to contain the following substances: toluene, xylenes, Stoddard solvent/naphtha, light aliphatic solvent naphtha, ethyl acetate, methyl isobutyl ketone, and methyl ethyl ketone. A corresponding LUST incident from 1990 was noted. A review of IEPA records indicates that the LUST incident is unresolved and that the IEPA's review of investigations undertaken at the time requested further information. Based on the reported open status of the LUST incident and continued use of this facility as an apparent auto junkyard with bulk containers being observed during this site reconnaissance, this facility is a REC.
41	ES-3	Illinois Central Track 119th Street	This facility was listed in the Bureau of Land (BOL) database. A review of the provided database information and the IEPA's BOL online database identified that the facility was listed in the states solid waste program in 1986. Based on the historical use of this facility as a railroad and for railroad operations, this listing is considered evidence of a REC.
42	ES-3	All American Recycling/ Keywell Corp/ S.G. Keywell Co. 11900 S. Cottage	This facility is a scrap metal recycling entity. Historical aerial sources appear to depict this facility starting in the 1950s, and observations during the site reconnaissance note its continued presence. However, it should be noted this facility appeared to extend past its present southwestern boundary and onto the Subject Property through the 1980s on what was most recently an asphalt plant operated by K-Five Construction.

No.	Figure	Name	Description
		Grove Avenue	The facility was listed in the Integrated Compliance Information System (ICIS) database for a formal enforcement action for penalty in 2010. The enforcement action reportedly related to Toxic Release Inventory (TRI) reporting under the Emergency Planning and Community Right-to-Know Act (EPCRA). The facility was listed in the UST database with a history of two 2,000-gallon gasoline USTs reported as removed in 1990. The facility was also listed in the LUST database with a history of a gasoline release reported in 1990 and a diesel release reporting in 1994. A review of IEPA records identified that an NFR letter was recorded in 1996 for the 1990 gasoline LUST incident with no noted requirements for engineered barriers or institutional controls. Records indicate that IEPA issued a non-LUST determination letter in 1994 for the diesel release. The facility was also listed in the SPILLS database for a spill non-LUST incident occurring on July 9, 2004. The facility was listed in the Resource Conservation and Recovery Act (RCRA) database as a CESQG in 1996 and Large Quantity Generator in 1992 of ignitable waste (D001) and corrosive waste (D002). The facility reportedly changed its status to non-generator in 2018. The historic and ongoing use of the facility for scrap metal processing, history of enforcement action for penalty, the facilities former status as a Large Quantity Generator of hazardous wastes, and the apparent presence of unremedied releases of diesel fuel, this facility is a REC.
44	ES-3	Elmer Larson, Inc./ K-Five Construction/ K Five Construction	This facility was operated as an asphalt plant from approximately 1987 through 2017. Based on historical aerials, this facility appears to have been built on former portions of the All American Recycling facility. City records noted the presence of berms as part of containment systems for ASTs and an outdoor drum

No.	Figure	Name	Description
		12401 S. Cottage Grove Avenue/ 12500 S. Cottage Grove Avenue	storage area, reported occurrences of fly dumping at or near the facility, and the reported presence of seven ASTs. The ASTs were identified as one 1,000-gallon diesel AST, one 8,000-gallon prime sealer AST, two 20,000-gallon used oil ASTs, one 14,000-gallon used oil AST, one 20,000-gallon AST identified as containing "asphalt/cement", and one 2,000-gallon AST containing "Anti-Stripper." During the site reconnaissance, a concrete containment structure with what appeared to be support saddles for the ASTs was observed. The Tier 2 database identified that the facility stored or used reportable quantities of the following hazardous chemicals in 2010 and 2014: fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil. The reported use of this facility as an asphalt plant with records of at least seven ASTs of various size (that contained diesel fuel, used oil, and other products), as well as the reported use or storage various hazardous substances (fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil) in volumes sufficient to require Tier II reporting is a REC.
48	ES-3	Penn Central Corp./ Lake Calumet Quad 810 E. 124th Street	This facility was listed in the State Sites Unit Listing (SSU) and Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) databases. The SSU database listed this facility with ID number 0316490002. A review of IEPA records indicate that a slurry wall was proposed in the late 1980s to be used at the facility to control the movement of contaminants. The documents also indicate that almost $170,000 of funds were requested by the IEPA in 2004 to allow for Patrick Engineering, Inc. to conduct a site investigation.

No.	Figure	Name	Description
			This facility was also identified on a map in a US Scrap documentation accessed through the IEPA's document explorer database, as well as in the Hazardous Materials Technical Memorandum prepared by CWC Transit Group and dated August 2013. The Hazardous Materials Technical Memorandum identified this facility as a hazardous waste dump site and that over 400,000 gallons of liquid waste were reportedly pumped from the basement of former on-site grain silos. Given the apparent proposed slurry wall, reported historic use of the facility as a hazardous waste dump site, and requested funding for a site investigation in 2004, this facility is considered a REC.

Off-Site RECs

Table 9-2 lists the off-site RECs that were identified in connection with the Subject Property.

Table 9-2: Off-Site RECs

No.	Figure	Name	Description of REC
Off-Site RECs - 95th Street station to 103rd Street station			
1	ES-1	Shell Oil/ Mobile Gas & Food Mart/ Sims Arco 4 E. 95th Street Northeast of the Subject Property Approximately 350 feet from Subject Property	This facility was a gasoline service station. From historical aerials this facility was constructed in the 1970s and was operated as a gas station until about 2017, when the Office of the State Fire Marshal (OSFM) records indicate the Client purchased the facility. During the site reconnaissance, this facility no longer appeared to be in active use as a gas station. Records indicate the facility has a 12,000-gallon gasoline, 8,000-gallon gasoline, and 6,000-gallon diesel USTs. No corresponding records indicating the USTs were removed were identified from the obtained documents, and observations from the site reconnaissance indicate the USTs remain in place. The historical operation of

No.	Figure	Name	Description of REC
			this facility from the 1970s to about 2017 as a gas station with three USTs that remain in the ground is a REC.
3	ES-1	Abbott Park Fieldhouse 45 E. 95th Street Northeast of the Subject Property Approximately 500 feet from Subject Property	The facility was listed in the LUST database for an 8,800-gallon heating oil UST removed in 1993. A review of the IEPA records identified that a pre-1974 letter was filed with the IEPA in 2007. Therefore, the release was exempted from the LUST regulations. Due to contamination from the LUST incident being allowed to apparently remain in place and no remedial action being required, the historical presence of a UST and LUST incident at the facility is a REC.
Off-Site RECs – 103rd Street station to 111th Street station			
17	ES-2	Roseland Tune Up Center 401 W. 111th Street West of the Subject Property Approximately 125 feet from the Subject Property	This auto repair facility was identified in records starting in the early 1980s. Observations from the site reconnaissance indicate the continued presence of an automotive repair facility with a three-bay garage. Therefore, this facility is a REC.
18	ES-2	Pentecostal Temple, Roseland Service Station 415-419 W. 111th Street West of the Subject Property Approximately 350 feet from the Subject Property	This facility was identified in records as a gasoline service station from approximately 1923 to 1928. The facility was listed in the LUST database for a used oil LUST incident on August 8, 1991, and a gasoline LUST incident on November 22, 1991. A review of IEPA records identified a letter from 2009, which essentially noted that the IEPA does not consider the LUST incidents resolved. The reported presence of open unresolved LUST incidents at the facility is a REC.

No.	Figure	Name	Description of REC
19	ES-2	Reiter Brothers 433 W. 111th Street West of the Subject Property Approximately 500 feet from the Subject Property	The facility was identified in records as a gasoline service station from the late 1920s to the 1970s. The historical presence of an auto service station for approximately 40 years is a REC.
Off-Site RECs – 111th Street station to Michigan Avenue station			
20	ES-2	CK Madderom Co. 355 W. 112th Street West of the Subject Property Approximately 100 feet from the Subject Property	This facility was depicted as a coal yard in Sanborn maps from 1911 and 1950. The historical presence of a coal yard is a REC.
21	ES-2	Sheldon Heights Service 332 W. 113th Street West Southwest of the Subject Property Approximately 100 feet from the Subject Property	The facility was identified in records as a gasoline station from at least 1950 to the 1970s. Sanborn maps from this period depict the facility with two gasoline USTs. No records indicating the USTs were removed were identified from the records obtained. The historical use of the facility as a gasoline station with two USTs is a REC.
27	ES-2	Abandoned Service/ City of Chicago/ Satriano Texaco Service	This facility was identified in records as a gasoline service station from at least the 1950 to 1993. One 6,000-gallon gasoline, two 5,000-gallon gasoline, and one 1,000-gallon used oil tanks were identified as having been removed in 2000 with a corresponding release of gasoline and used oil being reported. A review of IEPA

No.	Figure	Name	Description of REC
		11500 S. Perry Avenue Southwest of the Subject Property Approximately 200 feet from the Subject Property	records indicates that the LUST incident is apparently open and unresolved. The reported presence of an open unresolved LUST incident for the facility is a REC.
29	ES-2	Abandoned Gas Station/ Cox Donna 2 W. 115th Street Northwest of the Subject Property Approximately 160 feet from the Subject Property	This facility was identified with a record of one 4,000-galllon and one 3,000-gallon gasoline USTs, both of which are reported as removed. Two gasoline LUST incidents were reported, one in 1998 and a second in 2011. A review of IEPA records identified that pre-1974 letters were filed with the IEPA for both incidents. Therefore, the releases were exempted from the LUST regulations requiring cleanup. Therefore, the reported presence of two un-remediated gasoline LUST incidents at this facility is a REC.
34	ES-2	Trailer Factory/ Charter Bus Company 11575 S. Wabash Avenue Southwest of the Subject Property Approximately 70 feet from the Subject Property	This facility was identified in historical sources as a trailer factory with lacquer spraying operations by 1950. Observations during the site reconnaissance noted this facility was apparently used as an office and garage for a bus company. City records indicate that an inspection of the bus company was conducted in 2004 by City staff who reported to observe evidence of the illegal dumping of liquid wastes into the city stormwater sewer system. Obtained city records did not identify a corresponding record of enforcement action or complaints. Based on the historical use of this facility as a factory with lacquer spraying operations, the use of the property as an apparent bus garage with reported evidence of the illegal disposal of liquid wastes is a REC.
35	ES-2	Haney Khalil, Michigan Citgo/ Martin oil Service	This facility was identified as a gasoline service station from at least 1970 to present day. The facility was listed identified with a history of a 12,000-gallon gasoline,

No.	Figure	Name	Description of REC
		11600 S. Michigan Avenue Southwest of the Subject Property Approximately 280 feet from the Subject Property	15,000-gallon gasoline, 12,000-gallon gasoline USTs listed as currently in use, and a 6,000-gallon kerosene UST that was reported as abandoned in place in 2017. A LUST incident corresponding to the abandonment to the kerosene UST was also noted. A review of IEPA records indicates the LUST incident is unresolved. Therefore, the operation of a gas station at this facility from at least 1970, with four USTs that remain in place and an unresolved release of kerosene is a REC.
Off-Site RECs – Michigan Avenue station to 130th Street station			
43	ES-3	Bulkoa Inc./ Clean Harbors Env. Services/ Schneider Tank Lines/ Vacuum Industrial Pollution Intl/ Smith Systems Chicago Yard/ Unloading Unlimited/ Allwaste Tank Cleaning 11861-11901 S. Cottage Grove Avenue Northeast of the Subject Property Approximately 220 feet from the Subject Property	The facility was identified with a history of seven USTs that were reportedly removed in December 1997. A LUST incident was reported in 1997 for a release of diesel and gasoline. A review of IEPA records identified that an NFR letter was issued in 2003, which required institutional controls consisting of reliance of a groundwater ordinance and restricting use of the property to industrial or commercial purposes. IEPA records also identified that a Soil Vapor Extraction system was installed in 2001 at the facility to address the contamination from the release and was operated for a period of about 2 years. The facility was also listed under several different RCRA listings as a generator of hazardous waste, some with unique generator identification numbers but the same overall address and apparent physical location when reviewing historical aerials. Due to the overlapping RCRA listings, the exact status and history could not be readily determined. The facility apparently was mostly a small quantity generator of hazardous wastes, However, records identified Allwaste Tank Cleaning as a historic large quantity generator. Reported waste streams included ignitable (D001), corrosive (D002), reactive (D003), spent solvents (F001, F002, and F003), electroplating wastes (F006, F007), quenching oil bath residues (F010), quenching wastewater treatment

No.	Figure	Name	Description of REC
			sludges (F012), K-listed wastes (K001, K009, K010, K015, K016, K018, K019, K020, K021, K022, K023, K024, K027, K028, K030, K048, and K049), and U-listed wastes (U019, U055, U134, U140, U220, and U238). Given the reported history of this facility as an apparent generator of hazardous waste under a large variety of waste codes, this history of a gasoline and diesel fuel release with contamination allowed to remain in place subject to institutional controls, this facility is evidence of a REC.
45	ES-3	US Scrap/ U.S. Scrap/ U.S. Drum Disposal Co. 391 E. Kensington/ 123rd and Cottage Grove Avenue Southwest of the Subject Property Approximately 100 feet from the Subject Property	This facility is not currently listed as a National Priorities List (NPL) site for the U.S. Environmental Protection Agency's (USEPA) Superfund Program. However, the site was investigated by the USEPA for possible inclusion in the NPL starting in 1980. Records identify that the facility underwent several rounds of formal enforcement action with the USEPA starting in 1989 through at least 2013. Several actions were referred to the courts. USEPA records identified that the facility reportedly operated as an industrial chemical waste receiver from 1965 to 1975. From 1973 to 1975, the operator of the facility reportedly disposed of wastes at the facility and a related site. A landfill fire was reported at the facility in 1985, after which the USEPA conducted emergency response action, which reportedly involved excavating and removing "heavily contaminated soils" and drummed wastes from a railroad embankment on the facility. The response action reportedly only addressed a portion of the known buried wastes. A review of IEPA records identified a history of proposed investigations of the facility from 2004. A letter from the IEPA dated June 2005 to the USEPA requested a time-critical removal assessment be conducted at the facility as soil, water, and sediment samples reportedly still contained "high levels of pesticides and semi-volatile organic compounds (SVOC) contamination."

No.	Figure	Name	Description of REC
			Based on the reported historical use of the facility, with landfilling and burial of chemical related wastes, and the reported presence of SVOC and pesticide contamination remaining at the facility in the mid-2000s, this facility is a REC.
46	ES-3	Sherwin Williams Co. 11541 S. Champaign Avenue Northeast of Subject Property Approximately 500 feet from Subject Property	This facility is not currently listed as a NPL site for the USEPA's Superfund Program. However, the site was investigated by the USEPA for possible inclusion in the NPL. In 1994, a high corrective action priority was assigned by the USEPA. The facility was listed in the RCRA database as a Treatment, Storage, and Disposal (TSD) facility and Large Quantity Generator. The RCRA database listings identified a history of numerous wastes related to paint and coating production. The facility received several violations in the areas of records and reporting: final civil judicial action for compliance and/or monetary penalty, generators pre-transport, general, groundwater monitoring, financial requirements, permit application, container use and management, Land Disposal Restrictions (LDR) general, contingency plan and emergency procedures, tank system standards, federal or state statute, and closure/post closure. Institutional controls were established in 2012. Performance standards were attained with required controls in 2014. Remedy construction was planned for 2020. Due to the historic and active use of this facility for manufacturing paint and paint-related products, historic landfilling activities, and ongoing and planned remediation, this facility is considered evidence of a REC.
47	ES-3	Lake Calumet Smelting/ Inland Metals Refinery Company Incorporation	IEPA records identify that this facility was operated as a smelters from 1948 until 1989 and note the confirmed presence of soil and groundwater impacts at the facility through sampling conducted in the 1990s. Records also identify that the facility is not currently listed as an NPL site in the USEPA's Superfund Program. However, the facility was evaluated for possible inclusion in the NPL. The facility was identified as a generator of hazardous

No.	Figure	Name	Description of REC
		651 E. 119th Street/ 11901 S. Champlain Avenue Northeast of Subject Property Approximately 300 feet from Subject Property	waste containing lead (D008) and emission control dust/sludge from secondary lead smelting (K069). The RCRA listings identify that the facility received numerous violations in the late 1980s related to the operation of the site as a Treatment, Storage, Disposal (TSD) facility under the RCRA regulations. The facility was also historically identified as unpermitted and unauthorized solid waste disposal facility with a surface impoundment. IEPA records indicate this was used for the unauthorized disposal of wastes from the smelting process. Based on the reported presence of soil and groundwater contamination at the facility in the 1990s, the historic operation of this facility as a smelters, and the numerous RCRA violations reported in the 1980s, this facility is evidence of a REC in connection with the Subject Property.
50	ES-3	Cottage Grove Dump (No address provided) Northeast of Subject Property Approximately 175 feet from Subject Property	The facility was listed in the SWF/LF database as a historical landfill owned by the City and operated by the Department of Street and Sanitation. The location of the landfill was apparently reported using township and range information, so the exact location is unknown. The reported presence of a historic landfill in the vicinity of the site is evidence of a REC.
49	ES-3	MWRD Calumet Water Reclamation Plant 400 East 130th Street Southwest and northeast of Subject Property	This facility is a wastewater treatment plant that services the southern portion of Cook County, which includes residential, commercial, and industrial areas. This facility reportedly conducts primary, secondary, and tertiary water treatment operations and treats 354 million gallons of wastewater on average per day. The facility also reportedly generates approximately 100 tons of dried solids every day from treating wastewater, which are managed on site. Numerous clarifiers, settling basins, and related structures were observed in aerial

No.	Figure	Name	Description of REC
		Southwest Adjoining Property	photographs and during the site reconnaissance. Historical records indicate the facility was established in the 1930s and was progressively expanded until sometime in the 1980s. The facility was also identified as operating landfills. The *Hazardous Materials Technical Memorandum* (CWC Transit Group 2013) identified that an inactive landfill was used for disposal of sand, gravel, and grit from sewage treatment. Surface samples that were reportedly collected indicated the presence of polychlorinated biphenyls (PCBs), chloroform, chlordane, chromium, lead, toluene, and 4,4-dichlorodiphenyldichloroethane (DDD). Given the reported volume of wastewater treated at the facility with the sources of wastewater entering the facility including commercial and industrial operations, the management of solids at the facility, and the reported presence of landfills, the presence of a wastewater treatment facility is a REC.
51	ES-3	Calumet NU Earth/ Calumet NU-Earth Dis 130th Street and Doty Avenue Northeast of Subject Property Approximately 200 feet from Subject Property	This facility was identified in records as a possible landfill. Records further identified that this facility is not currently listed as a NPL site for the USEPA's Superfund Program. However, the site was investigated by the USEPA for possible inclusion in the NPL in 1984 and 1985. The facility was archived by the USEPA in 1991. As this facility was identified as possible landfill, this listing is evidence of a REC.

CRECs

A CREC is defined by the Practice as past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. These controls may be, but are not limited to, institutional controls or engineering barriers that are intended to prevent exposure to hazardous substances or petroleum products allowed to remain in place. These controls may limit or restrict the use of a property. By definition, the Practice considers a CREC to also represent a REC, since residual hazardous substances or petroleum products may remain present in the subsurface.

One off-site CREC was identified in connection with the Subject Property. Table 9-3 lists the CRECs identified in connection with the Subject Property.

Table 9-3: CRECs

No.	Figure	Name	Description of CREC
2	ES-1	Amoco 15459/ SS #15459/ Whalen Standard Services 36 W. 95th Street	The facility was a gasoline service station from the late 1960s to approximately 1997. The facility was identified with a history of three 10,000-gallon gasoline USTs that were reportedly removed in 1997. A gasoline LUST incident associated with the UST removal in 1997 was identified and an NFR letter closing the LUST incident was recorded in 2003. A review of IEPA records identified that the NFR letter included requirements for a highway authority agreement which extended party way into 95th Street and Lafayette Avenue. Based on the presence of an NFR letter, this listing is considered evidence of a CREC.

HRECs

A HREC is defined by the Practice as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the Subject Property to any required controls.

A total of three HRECs were identified in connection with the Subject Property. Table 9-4 lists the HRECs identified in connection with the Subject Property.

Table 9-4: HRECs

No.	Figure	Name	Description of HREC
24	ES-2	Marquette Bank/ Vacant Building 133-139 W. 114th Street	This facility was identified with a history of a 2,000-gallon gasoline UST reportedly removed in 2001 with a corresponding LUST incident being reported. An NFR letter was issued for the LUST incident in 2002. A review of the IEPA records did not identify any engineering or institutional controls in connection with the NRF letter. Based on the reported status of the NFR letter, with no noted requirements for institutional controls or engineered barriers, this facility is considered evidence of a HREC.
30	ES-2	Tadros Musa/ Goodyear Auto Service 11442 S. Michigan Avenue	This facility was identified with a history of one 500-gallon used oil tank that was reported as removed in 1996. A corresponding LUST incident was reported and was issued an NFR letter in 1998. A review of IEPA records did not identify any requirements for engineered barriers or institutional controls. Based on the reported status of the NFR letter, with no noted requirements for institutional controls or engineered barriers, this facility is considered evidence of a HREC.
36	ES-2	Clark Service Station/ Bobs Super 100/ Clark Oil and Refining 11555 S. Michigan Avenue	The facility was identified a gasoline service station with a history of two 6,000-gallon gasoline and one 7,500-gallon gasoline UST reportedly removed in 1991. A gasoline LUST incident was also reported in 1991. An NFR letter was recorded in 1995. A review of the IEPA's online LUST database did not identify any requirements for engineered barrier or institutional controls with the NFR letter. Based on the reported status of the NFR letter, with no noted requirements for institutional controls or engineered barriers, this facility is considered evidence of a HREC.

De Minimis Conditions

A *de minimis* condition is defined by the Practice as a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an

enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* conditions are not RECs and are not CRECs.

A total of six *de minimis* conditions were identified in connection with the Subject Property. Table 9-5 presents the *de minimis* conditions that were identified in connection with the Subject Property.

Table 9-5: *De Minimis* Conditions

No.	Figure	Name	Description of *De Minimis* Condition
--	--	Small auto-related spills	Site reconnaissance observations noted the presence of numerous minor staining on the paved parking and drive areas located on and adjacent to the Subject Property. The stains appear to be the result of leakage of automobile-related fluids and not the result of a large-scale spills.
--	--	Household wastes	Site reconnaissance observations identified small piles or loose trash of apparent household-related wastes that were "fly dumped" throughout the Subject Property. The observed materials did not appear to be evidence of systematic landfilling of wastes.
12	ES-2	405 W. 108th Street	Site reconnaissance observations identified two empty plastic 55-gallon drums on the ground. The drums appeared to have been fly dumped within a larger vacant grassy area on the property. The drums were located on an area of ground that appeared to have been disturbed and that was not supporting vegetative growth.
23	ES-2	11336 S. Yale Avenue	This address was listed in City records for an inspection occurred on February 4, 1998 at the facility where city staff observed a large open fire in the rear yard and a work crew removing roofing materials and disposing of it by burning. Two citations were reportedly issued. A review of Cook County Assessor records identifies this facility as a single-family home. Based on the above information, this listing is considered evidence of a *de minimis* condition.
25	ES-2	Clearwater Technology 11426 S. Perry Avenue	The facility is a former generator of hazardous waste. The facility generated the following wastes: chromium (D007), benzene (D018), barium (D005), lead (D008), methyl ethyl ketone (D035), ignitable waste (D001), corrosive waste (D002), and halogenated solvents (F001). No records of violations were noted with the listing. The historic presence of

No.	Figure	Name	Description of *De Minimis* Condition
			a hazardous waste generator on the Subject Property, with no reported violations, is evidence of a *de minimis* condition.
37	ES-2	128 E. 116th Street	Site reconnaissance observation identified an approximately 275-gallon tote of unknown contents. The tote appeared discolored and displayed evidence of staining on its sides.

VECs

A VEC is the presence or likely presence of one or more volatile chemicals of concern (COC) in the subsurface of the site caused by the release of vapors from contaminated soil or groundwater either on or near the Subject Property. As part of the Practice, the environmental professional is to evaluate the potential for the migration or encroachment of hazardous substances or petroleum products in the vapor phase within the subsurface. Within the scope of services requested by the Client, VECs were only evaluated for the locations of proposed buildings, stations, and electrical substations. While the method of the evaluation is not specified by the Practice, EDI completed the VES in general accordance with ASTM Standard E2600-15, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

A total of 10 on-site VECs and five off-site VECs were identified in connection with the Subject Property. Table 9-6 lists the VECs that were identified in connection with the Subject Property.

Table 9-6: VECs

No.	Figure	Name	Description of VEC
103rd Street station and substation			
6	ES-1	B Van Dir Meer & Sons 400 W. 104th Street	This facility is on the Subject Property and identifies a history of three USTs, which may remain in the subsurface. The potential continued presence of these tanks on the Subject Property and possibility of releases from them represents a VEC.
7	ES-1	Fred Syhora 401 W. 105th Street	This facility is on the Subject Property and has records of installation and subsequent abandonment of four USTs in 1970. The reported abandonment of four USTs on the Subject Property prior and possibility of releases from them represents a VEC.
9	ES-1	Illinois Bell Telephone/ AT&T IL	This facility is on the Subject Property and has a record of a LUST incident. The LUST incident was remediated

No.	Figure	Name	Description of VEC
		413 W. 105th Street	and issued an NFR letter in 2005, prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations. The NFR letter notes contamination was allowed to remain in place subject to the restrictions of the NFR letter. The known contamination on the Subject Property represents a VEC.
111th Street station and substation			
14	ES-2	William Ransom Transport 352 W. 110th Street	This facility is on the Subject Property and has a record of a gasoline LUST incident in 1999. IEPA records indicated the LUST incident is open and unresolved. The reported presence of an open unresolved LUST incident for a gasoline release at the facility represents a VEC.
18	ES-2	Pentecostal Temple, Roseland Service Station 415-419 W. 111th Street West of the Subject Property Approximately 350 feet from the Subject Property	The facility was listed in the LUST database for a used oil LUST incident on August 8, 1991, and a gasoline LUST incident on November 22, 1991. A review of IEPA records identified a letter from 2009, which essentially noted that the IEPA does not consider the LUST incidents resolved. The reported presence of an open unresolved LUST incidents at the facility represents a VEC.
Michigan Avenue Street station and 116th Street substation			
31	ES-2	Cuter Sefer Oil 11521 S. State Street	This facility is on the Subject Property and identified as in the 1950 Sanborn map as a gas station with three UST. City records note a UST was reportedly replaced in 1955. The reported presence of a 1,000-gallon UST at the facility, combined with a lack of records indicating the UST was removed, represents a VEC.
32	ES-2	Oak Park National Bank 11500 S. Michigan Avenue	This facility is on the Subject Property and is identified in City records with a history of nine USTs. Records identified that a 315-gallon UST, one 1,000-gallon UST, and one 2,000-gallon UST were reportedly installed in May of 1958. Records further identified that one 2,000-

No.	Figure	Name	Description of VEC
			gallon UST and five 300-gallon USTs were reportedly installed in March of 1959. Aerial photographs from this time period depict the construction of a strip mall at this location. The reported historic presence of USTs being installed at the facility, with no corresponding record of their removal, represents a VEC.
33	ES-2	Flair Cleaners, Betty Bright Cleaners 11518 S. Michigan Avenue	This facility is on the Subject Property and was identified as dry cleaning plant under several names from 1981 to 2003. This facility was also listed in City records relating to complaints and inspections. A complaint was filed in August 2004 that the facility was "dumping used chemical solution into the sewers throughout the area." Records also identified a series of eight inspections of the facility by City staff that were conducted between August 2002 and March 2007. Six of these inspections appeared to be regular periodic inspections of the facility and did not report issues of concern. Two of the inspections were noted to be conducted in response to the above noted complaint. These inspections were conducted on August 3, 2004 and August 12, 2004 and did not report to find evidence of the illegal disposal of materials in the sewer behind the shop. Based on the above information, the historical presence of a dry cleaning plant on the Subject Property represents a VEC.
36	ES-2	Clark Service Station/ Bobs Super 100/ Clark Oil and Refining 11555 S. Michigan Avenue Southwest of the Subject Property	The facility is on the Subject Property and was listed in the LUST database for a gasoline release in 1991. The LUST incident was remediated and issued an NFR letter in 2005. As the NFR letter was issued prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations, the LUST incident represents a VEC.

No.	Figure	Name	Description of VEC
		Approximately 70 feet from the Subject Property	
120th Street yard and shop			
42	ES-3	All American Recycling/ Keywell Corp S.G/ Keywell Co./ Keywell Co. 11900 S. Cottage Grove Avenue	This facility is a scrap metal recycling entity. Historical aerial sources appear to depict this facility starting in the 1950s and observations during the site reconnaissance note its continued presence. However, it should be noted this facility appeared to extend past its present southwestern boundary and onto the Subject Property through the 1980s on what was most recently an asphalt plant operated by K-Five Construction. This facility was identified with a LUST incident in 1990. An NFR letter was subsequently reported in 1996. The facility was also listed in the SPILLS database for a non-LUST incident occurring on July 9, 2004. The facility was listed in the RCRA database as a Conditionally Exempt Small Quantity Generator in 1996 and Large Quantity Generator in 1992 of ignitable waste (D001) and corrosive waste (D002). Based on the facilities former status as a Large Quantity Generator of hazardous waste, the issuance of an NFR letter for the gasoline LUST incident prior to the inclusion of the indoor inhalation route as a potential pathway in the IEPA's cleanup regulations, this facility represents a VEC.
44	ES-3	Elmer Larson, Inc. / K-Five Construction 12401 S. Cottage Grove Avenue	This facility is on the Subject Property. The reported use of this facility as an asphalt plant with records of at least seven ASTs of various sizes that contained diesel fuel, used oil, and other products, as well as the reported use or storage of various hazardous substances (fuel oil, oil black, asphalt cements, emulsion 212, fatty acids, tall oil, polymers with glycerol, maleic anhydride, phthalic anhydride, and soybean oil) in volumes sufficient to require Tier II reporting represents a VEC.

No.	Figure	Name	Description of VEC
45	ES-3	US Scrap/ U.S. Scrap/ U.S. Drum Disposal Co. 391 E. Kensington/ 123rd Street and Cottage Grove Avenue Southwest of the Subject Property Approximately 100 feet from the Subject Property	Based on the reported historical use of the facility, with landfilling and burial of chemical related wastes, and the reported presence of semi-volatile organic compounds (SVOC) and pesticide contamination remaining at the facility in the mid-2000s, this facility represents a VEC.
48	ES-3	Penn Central Corp./ Lake Calumet Quad 810 E. 124th Street	This facility is on the Subject Property. Given the reported historic use of the facility as a hazardous waste dump site and IEPA requested funding for a site investigation in 2004, this facility represents a VEC.
49	ES-3	Chicago MSD #3 (No address provided) Southwest and northeast of Subject Property Southwest Adjoining Property	The facility is believed to be part of the larger MWRD Calumet Water Reclamation Plant facility. This facility was identified in the *Hazardous Materials Technical Memorandum* (CWC Transit Group 2013). The *Hazardous Materials Technical Memorandum* identified this facility as an inactive landfill. Surface samples that were reportedly collected indicated the presence of PCBs, chloroform, chlordane, chromium, lead, toluene, and 4,4-dichlorodiphenyldichloroethane (DDD). Based on the reported presence of volatile chemicals in surface soil samples, this facility represents a VEC.
130th Street station and substation			
49	ES-3	Chicago Metro Sanitary District #2, Chicago Metro Sanitary District #3,	The facility is believed to be part of the larger MWRD Calumet Water Reclamation Plant facility. The facility was listed in a historical inventory of solid waste sites created originally in 1986. The Northeastern Illinois Planning Commission (NIPC) report recorded locations

No.	Figure	Name	Description of VEC
		Chicago Metro Sanitary District #4, (No address provided) Southwest and northeast of Subject Property Southwest Adjoining Property	of possible landfills using township, range, and section information, so exact placement was not always assured. Due to the reported historic landfill activity at the facility, this represents a VEC.

Appendix A - Figures

Environmental Design International inc.
Civil, Survey, Environmental and Construction Inspection Services
33 W. MONROE STREET, SUITE 1825, CHICAGO, IL 60603
Ph. (312) 345-1400 Fax (312) 345-0529
www.envdesigni.com

Excellence, Dedication, Innovation

Figure 1

Subject Property Location

PROJ. No: 2008.005
DATE: 03/01/2021
DRAWN BY: JRJ
APPROVED BY:

Document Path: L:\2008 TY Lin\2008.005 CTA RLE FEIS & PE Support\Env\GIS DATA ARCHIVE\Cooridor Phase I figures\Site Location Map.mxd

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Figure ES-1

REC Location

PROJ. No: 2008.005

DATE: 03/01/2021

DRAWN BY: JRJ

APPROVED BY:

Document Path: L:\2008 TY Lin\2008.005 CTA RLE FEIS & PE Support\Env\GIS DATA ARCHIVE\Coorridor Phase I figures\REC Location Map 1.mxd

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Figure ES-2

REC Location

PROJ. No: 2008.005

DATE: 03/01/2021

DRAWN BY: JRJ

APPROVED BY:

Document Path: L:\2008 TY Lin\2008.005 CTA RLE FEIS & PE Support\Env\GIS DATA ARCHIVE\Coorridor Phase I figures\REC Location Map 2.mxd

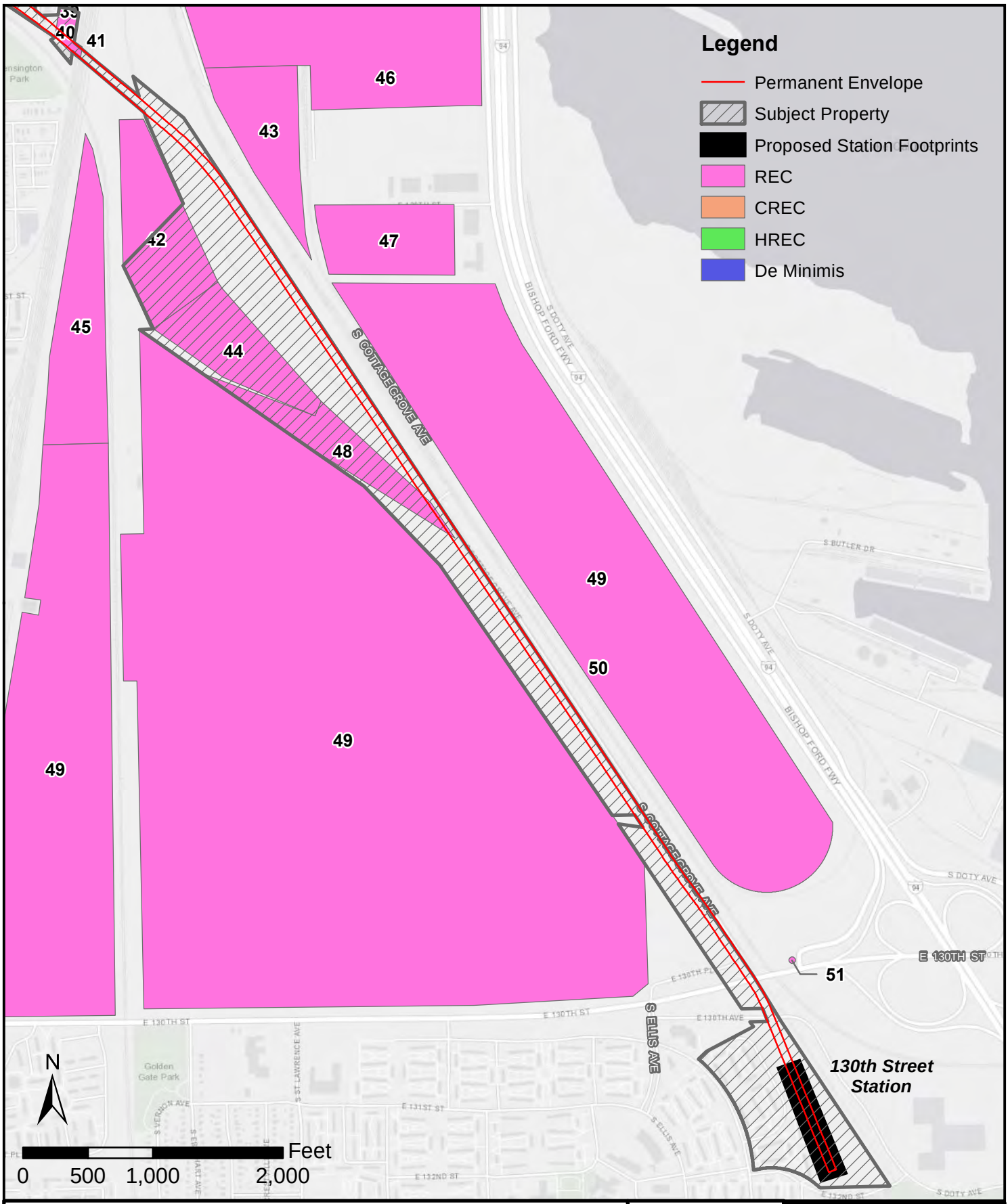

Environmental Design International inc.
Civil, Survey, Environmental and Construction Inspection Services
33 W. MONROE STREET, SUITE 1825, CHICAGO, IL 60603
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Figure ES-3

REC Location

PROJ. No: 2008.005

DATE: 03/01/2021

DRAWN BY: JRJ

APPROVED BY:

Document Path: L:\2008 TY Lin\2008.005 CTA RLE FEIS & PE Support\Env\GIS DATA ARCHIVE\Coorridor Phase I figures\REC Location Map 3.mxd

Appendix B - References

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Appendix C - Site Photographs

Photo 1. 403 W. 103rd Street. Looking south, photo shows commercial and residential brick building.

Photo 2. 400 W. 103rd Place. Looking north, photo shows a vacant lot with multiple cars parked in the lot.

Photo 3. 400 W. 103rd Place. Looking east, photo shows yellow school buses and truck parked at the dead end.

Photo 4. 400 W. 103rd Place. Looking north, photo shows a vacant lot next to railroad tracks and the back of the commercial and residential building at 403 W. 103rd Street.

Photo 5. 401 W. 103rd Place. Looking north, photo shows a vacant lot with a cement structure in the middle of the lot.

Photo 6. 418-412 W. 103rd Place. Looking north, photo shows vacant single-family homes on Subject Property.

Photo 7. 411 W. 105th Street. Looking south, a vacant lot with a RV.

Photo 8. 10514 S. Stewart Avenue. Looking east, private property with drums, cars, and heavy equipment onsite.

Photo 9. 10530 S. Stewart Avenue. Looking southeast, commercial property containing "Auto Bumper House and Parts".

Photo 10. 317 W. 105th Street. Looking south, vacant lot with miscellaneous household trash.

Photo 11. 400 W. 107th Street. Looking northeast, vacant building identified by signage as "Atlan Inc.", an apparent former body shop.

Photo 12. 400 W. 107th Street. Looking north, rear lot behind vacant building identified by signage as "Atlan Inc.", an apparent former body shop.

Photo 13. 405 W. 108th Street. Looking east, a vacant property with two 55-gallon drums.

Photo 14. 355 W. 109th Place. Looking east, an apparent vacant lot.

Photo 15. 352 W. 110th Street. Looking west, drum and other material stored at facility identified by signage as named Ransom Transportation.

Photo 16. 348 W. 110th Place. Looking west, a vacant property with some "fly dumped" household wastes visible.

Photo 17. 1041 S. Eggleston Avenue. Looking north, a vacant area.

Photo 18. 401 W. 111th Street. Looking south, at building housing Southside Auto Services.

Photo 19. 401 W. 110th Street. Looking east, two fuel ASTs with dispensing pumps on the fenced property.

Photo 20. 11424 S. Perry Avenue. Looking west, an auto repair facility. Note light blue tank visible to left of photo.

Photo 21. 11439 S. Perry Avenue. Looking southeast, a property identified by signage as SRM Motors auto shop.

Photo 22. 35 W. 115th Street. Looking west, a property identified as Donald's Auto Repair shop.

Photo 23. 11534 S. Michigan Avenue. Looking east, a vacant lot. Note pole-mounted transformers.

Photo 24. 11534 S. Michigan Avenue. Looking south, a semi-truck parked on property.

Photo 25. 11549 S. State Street through 11583 S. State Street. Looking east, residential homes

Photo 26. 11588 S. Michigan Avenue. Looking north, a fenced lot with cell phone tower.

Photo 27. 61 E. 116th Street. Looking south, a Citgo Gas station.

Photo 28. 11512 S. State Street. Looking north, vacant lot with parked cars.

Photo 29. 128 E. 116th Street. Looking west, a 275-gallon tote in vacant lot.

Photo 30. 165 E. 116th Street. Looking southeast, area contains residential housing.

Photo 31. 11726 S. Calumet Avenue. Looking northwest, a vacant lot with parked cars.

Photo 32. 11736 S. Front Avenue. Looking south, an auto junk yard. Note three approximately 275-gallon totes.

Photo 33. 11900 S. Cottage Grove Avenue. Looking east, photo shows fly dumped materials near All American Recycling.

Photo 34. 12256 S. Cottage Grove Avenue. Looking northwest, a vacant lot that was former K-Five asphalt plant.

Photo 35. 12256 S. Cottage Grove Avenue. Looking north, note pole-mounted transformers and approximately 275-gallon totes.

Photo 36. 12256 S. Cottage Grove Avenue. Looking north, a vessel on its side.

Photo 37. 12256 S. Cottage Grove Avenue. Looking west, a concrete containment structure with saddles for former ASTs.

Photo 38. Norfolk Southern tracks near 11900 S. Cottage Grove Avenue. Looking south, photo shows tracks and pile of earthen material from apparent grading activities as part of track maintenance.

Photo 39. 12807 S. Cottage Grove Avenue. Looking east, vacant area.

Appendix D - Environmental Database Report

Redline Expansion
Redline Expansion
Palos Heights, IL 60463

Inquiry Number: 06062945.9r
May 13, 2020

EDR Area / Corridor Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Mapped Sites Summary	2
Key Map	10
Map Findings Summary	11
Focus Maps	15
Map Findings	44
Orphan Summary	OR-1
Government Records Searched/Data Currency Tracking	GR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

SUBJECT PROPERTY INFORMATION

ADDRESS

REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

TARGET PROPERTY SEARCH RESULTS

The Target Property was identified in the following databases.

Page Numbers and Map Identifcations refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

A review of the RCRA-VSQG list, as provided by EDR, and dated 12/16/2019 has revealed that there are 3 RCRA-VSQG sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
RANSOM TRANSPORT EPA ID:: ILR000060863	***352 W 110TH ST***	***E42 / 5***	***64***
CURTIS SCHOOL-CHI. B EPA ID:: ILR000056796	***32 E 115TH ST***	***L65 / 6***	***77***
BETTY BRITE CLEANERS EPA ID:: ILD981954753	***11518 S. MICHIGAN AV***	***M103 / 6***	***101***

Federal ERNS list

ERNS: Emergency Response Notification System

A review of the ERNS list, as provided by EDR, and dated 12/16/2019 has revealed that there are 2 ERNS sites within the requested target property.

EXECUTIVE SUMMARY

Site	Address	Map ID / Focus Map(s)	Page
Not reported NRC Report #: 154212 Incident Date Time: 1993-01-20 09:30:00	352 WEST 110 ST	E46 / 5	68
Not reported NRC Report #: 1047465 Incident Date Time: 2013-05-14 22:55:00		N71 / 6	84

State and tribal leaking storage tank lists

IL LUST: Leaking Underground Storage Tank Sites

A review of the IL LUST list, as provided by EDR, and dated 01/21/2020 has revealed that there are 3 IL LUST sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
ILLINOIS BELL TELEPH NFA/NFR Letter: 2005-03-21 Incident Num: 880112 IL EPA Id: 316495016	***413 WEST 105TH STREE***	***C28 / 3***	***57***
WILLIAM RANSOM TRANS Incident Num: 990399 IL EPA Id: 316495116	352 WEST 110TH ST.	E47 / 5	69
TRIANGLE TRANSMISSIO Incident Num: 992324 IL EPA Id: 316495120	***35 W 115TH ST***	***K79 / 6***	***86***

State and tribal registered storage tank lists

IL UST: Underground Storage Tank Facility List

A review of the IL UST list, as provided by EDR, and dated 01/21/2020 has revealed that there are 4 IL UST sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
IL BELL TELEPHONE CO Tank Status: Removed Status: CLOSED Facility Id: 2007809	413 W 105TH	C24 / 3	54
RANSOM TRANSPORT BUS Tank Status: Removed Status: CLOSED Facility Id: 2000983	352 W 110TH ST	E50 / 5	70
CURTIS SCHOOL Tank Status: Removed Status: EXEMPT Facility Id: 2040500	***32 E 115TH ST***	***L66 / 6***	***79***
TRIANGLE TRANSMISSIO	***35 W 115TH ST***	***K79 / 6***	***86***

Tank Status: Removed
Status: EXEMPT
Facility Id: 2039271

IL AST: Above Ground Storage Tanks

A review of the IL AST list, as provided by EDR, and dated 10/03/2019 has revealed that there is 1 IL AST site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
AT&T MOBILITY- TANK#	405 WEST 107TH STREE	D38 / 3	62
Occupancy Number: -CS-059-1463677821753			
Occupancy Number: CS-059-1463677821753			

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

IL TANKS: CDPH Storage Tanks Listing

A review of the IL TANKS list, as provided by EDR, and dated 12/11/2019 has revealed that there are 24 IL TANKS sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
B VAN DIR MEER & SON	400 W 104TH ST	B8 / 3	45
ILLINOIS BELL TELEPH	413 W 105TH ST	C12 / 3	47
ILLINOIS BELL TELEPH	413 W 105TH ST	C15 / 3	49
ILLINOIS BELL TELEPH	413 W 105TH ST	C16 / 3	50
ILLINOIS BELL TELEPH	413 W 105TH ST	C17 / 3	50
ILLINOIS BELL TELEPH	413 W 105TH ST	C19 / 3	52
ILLINOIS BELL TELEPH	413 W 105TH ST	C20 / 3	52
ILLINOIS BELL TELEPH	413 W 105TH ST	C21 / 3	53
FRED SYHORA	401 W 105TH ST	C22 / 3	53
FRED SYHORA	401 W 105TH ST	C26 / 3	56
MIDLAND CHEMICAL COR	400 W 107TH ST	D33 / 3	60
MIDLAND CHEMICAL COR	400 W 107TH ST	D34 / 3	61
RANSOM TRANSPORT BUS	352 W 110TH ST	E44 / 5	66
FRANCIS T. SHEA	352 W 110TH ST	E48 / 5	69
CURTIS SCHOOL	32 E 115TH ST	L67 / 6	81
GEORGE THOSS	35 W 115TH ST	K81 / 6	90
TRIANGLE TRANSMISSIO	35 W 115TH ST	K83 / 6	92
GEORGE THOSS	35 W 115TH ST	K86 / 6	94
OAK PARK NATIONAL BA	11500 S MICHIGAN AVE	M88 / 6	95
OAK PARK NATIONAL BA	11500 S MICHIGAN AVE	M89 / 6	96
CUTER SEFER OIL	11521 S STATE ST	O111 / 6	108
THE SHEDD COMPANY	301 E 117TH ST	Q119 / 6	111
THE SHEDD COMPANY	301 E 117TH ST	Q121 / 6	112
THE SHEDD COMPANY	301 E 117TH ST	Q122 / 6	112

EXECUTIVE SUMMARY

Records of Emergency Release Reports

IL SPILLS: State spills

A review of the IL SPILLS list, as provided by EDR, has revealed that there are 6 IL SPILLS sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
ILLINOIS BELL TELEPH	***413 WEST 105TH STREE***	***C28 / 3***	***57***
Database: SPILLS, Date of Government Version: 02/28/2020 Incident ID: NL880112			
Not reported	413 WEST 105TH STREE	C29 / 3	58
Database: IEMA SPILLS, Date of Government Version: 01/27/2020			
Not reported	352 W 110TH ST	E43 / 5	66
Database: SPILLS, Date of Government Version: 02/28/2020 Incident ID: 19990399			
Not reported	***352 W 110TH ST***	***E45 / 5***	***67***
Database: IEMA SPILLS, Date of Government Version: 01/27/2020			
TRIANGLE TRANSMISSIO	***35 W 115TH ST***	***K82 / 6***	***91***
Database: SPILLS, Date of Government Version: 02/28/2020 Incident ID: 19992324			
Not reported	35 W 115TH ST	K85 / 6	93
Database: IEMA SPILLS, Date of Government Version: 01/27/2020			

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/16/2019 has revealed that there are 2 RCRA NonGen / NLR sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
ILLINOIS BELL DBA AT	***413 W 105TH ST***	***C14 / 3***	***48***
EPA ID:: ILD980904817			
TRIANGLE TRANSMISSIO	***35 W 115TH ST***	***K79 / 6***	***86***
EPA ID:: ILR000067009			

ICIS: Integrated Compliance Information System

A review of the ICIS list, as provided by EDR, and dated 11/18/2016 has revealed that there is 1 ICIS site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
K-FIVE CONSTRUCTION	***12401 SOUTH COTTAGE***	***R133 / 9***	***377***
FRS ID:: 110001289980			

EXECUTIVE SUMMARY

US AIRS: Aerometric Information Retrieval System Facility Subsystem

A review of the US AIRS list, as provided by EDR, has revealed that there is 1 US AIRS site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
K-FIVE CONSTRUCTION	***12401 SOUTH COTTAGE***	***R133 / 9***	***377***
Database: US AIRS MINOR, Date of Government Version: 10/12/2016 EPA plant ID:: 110001289980			

FINDS: Facility Index System/Facility Registry System

A review of the FINDS list, as provided by EDR, and dated 11/22/2019 has revealed that there are 19 FINDS sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
CHICAGO PARK DIST-LA Registry ID:: 110055411950	63RD ST, E OF LAKE S	1 / 4	43
O CONNELL ELECTRIC Registry ID:: 110018335309	405 W 104TH ST	B5 / 3	44
410 W 105TH Registry ID:: 110055960928	410 W 105TH	C11 / 3	46
ILLINOIS BELL DBA AT Registry ID:: 110005853585	***413 W 105TH ST***	***C14 / 3***	***48***
JCK AUTO DEPOT INC Registry ID:: 110018475265	411 W 105TH ST	C31 / 3	60
RANSOM TRANSPORT Registry ID:: 110003048522	***352 W 110TH ST***	***E42 / 5***	***64***
11401 S WENTWORTH Registry ID:: 110046090804	11401 S WENTWORTH	I60 / 5	75
CURTIS SCHOOL-CHI. B Registry ID:: 110001851256	***32 E 115TH ST***	***L65 / 6***	***77***
FORMER ROSELAND PLAZ Registry ID:: 110037149751	11500-82 S MICHIGAN	M70 / 6	83
52 W 115TH & 11443 S Registry ID:: 110028285727	52 W 115TH & 11443 S	K72 / 6	84
CHURCH Registry ID:: 110045522788	17 E 115TH	L77 / 6	86
TRIANGLE TRANSMISSIO Registry ID:: 110003052730	***35 W 115TH ST***	***K79 / 6***	***86***
25 E 115TH ST Registry ID:: 110037885189	25 E 115TH ST	L95 / 6	98
29 E 115TH ST Registry ID:: 110037885198	29 E 115TH ST	L97 / 6	99
FLAIR CLEANERS Registry ID:: 110038678507	***11518 SO MICHIGAN***	***M101 / 6***	***100***
BETTY BRITE CLEANERS Registry ID:: 110007057139	***11518 S. MICHIGAN AV***	***M103 / 6***	***101***
FLAIR CLEANERS	***11518 S MICHIGAN***	***M104 / 6***	***104***

Registry ID:: 110018244559			
ELMER LARSON, INC. Registry ID:: 110006819407	***12401 SOUTH COTTAGE***	***R124 / 9***	***113***
K-FIVE CONSTRUCTION Registry ID:: 110001289980	***12401 SOUTH COTTAGE***	***R133 / 9***	***377***

ECHO: Enforcement & Compliance History Information

A review of the ECHO list, as provided by EDR, and dated 01/05/2020 has revealed that there are 7 ECHO sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
ILLINOIS BELL DBA AT Registry ID: 110005853585	***413 W 105TH ST***	***C14 / 3***	***48***
RANSOM TRANSPORT Registry ID: 110003048522	***352 W 110TH ST***	***E42 / 5***	***64***
CURTIS SCHOOL-CHI. B Registry ID: 110001851256	***32 E 115TH ST***	***L65 / 6***	***77***
TRIANGLE TRANSMISSIO Registry ID: 110003052730	***35 W 115TH ST***	***K79 / 6***	***86***
FLAIR CLEANERS Registry ID: 110038678507	***11518 SO MICHIGAN***	***M101 / 6***	***100***
BETTY BRITE CLEANERS Registry ID: 110007057139	***11518 S. MICHIGAN AV***	***M103 / 6***	***101***
ELMER LARSON, INC. Registry ID: 110001289980 Registry ID: 110006819407	***12401 SOUTH COTTAGE***	***R124 / 9***	***113***

IL AIRS: Air Inventory Listing

A review of the IL AIRS list, as provided by EDR, and dated 12/03/2019 has revealed that there are 5 IL AIRS sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
CURTIS SCHOOL Facility Id: 3604	***32 E 115TH ST***	***L66 / 6***	***79***
BETTY BRITE CLEANERS Facility Id: 13681	***11518 S. MICHIGAN AV***	***M103 / 6***	***101***
FLAIR CLEANERS Facility Id: 3128	***11518 S MICHIGAN***	***M104 / 6***	***104***
K-FIVE CONSTRUCTION Facility Id: 12133 Facility Id: 3820	***12401 S COTTAGE GROV***	***R125 / 9***	***114***
K-FIVE CONSTRUCTION Facility Id: 13077	12401 COTTAGE GROVE	R126 / 9	374

EXECUTIVE SUMMARY

IL BOL: Bureau of Land Inventory Database

A review of the IL BOL list, as provided by EDR, and dated 02/26/2020 has revealed that there are 16 IL BOL sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
O'CONNELL ELECTRIC Site Id: 170000527990 Inv Num: 0316495011	405 W 104TH ST	B6 / 3	44
ILLINOIS BELL DBA AT Site Id: 170000242645 Inv Num: 031600HHS	413 W 105TH ST	C13 / 3	47
ILLINOIS BELL DBA AT Site Id: 170000242645 Inv Num: 0316495016	***413 W 105TH ST***	***C18 / 3***	***51***
JCK AUTO DEPOT INC Site Id: 170000495738 Inv Num: 0316005422	411 W 105TH ST	C30 / 3	59
CURTIS SCHOOL Site Id: 170000052519 Inv Num: 0316495110	***32 E 115TH ST***	***L66 / 6***	***79***
CURTIS REILLY SCHOOL Site Id: 170000052519 Inv Num: 031600EQZ	32 E 115TH ST	L68 / 6	81
TRIANGLE TRANSMISSIO Site Id: 170000183441 Inv Num: 0316495120	***35 W 115TH ST***	***K82 / 6***	***91***
BETTY BRITE CLEANERS Site Id: 170000047526 Inv Num: 0316495006	***11518 S. MICHIGAN AV***	***M103 / 6***	***101***
FLAIR CLEANERS Site Id: 170000047526 Inv Num: 031600CYH	11518 S MICHIGAN	M106 / 6	106
BETTY BRITE CLEANERS Site Id: 170000058817 Inv Num: 031600FUT	11518 S MICHIGAN AVE	M107 / 6	106
ILLINOIS CENTRAL TRA Site Id: 170000529505 Inv Num: 0316530002	119TH ST	123 / 6	113
ELMER LARSON INC Site Id: 170000057630 Inv Num: 031600FQE	12401 S COTTAGE GROV	R127 / 9	374
K-FIVE CONSTRUCTION Site Id: 170000054759 Inv Num: 031600FEQ	12401 S COTTAGE GROV	R129 / 9	376
K-FIVE CONSTRUCTION Site Id: 170000054759 Inv Num: W0316000642	12401 S COTTAGE GROV	R130 / 9	376
K-FIVE CONSTRUCTION Site Id: 170000054759	12401 S COTTAGE GROV	R131 / 9	376

Inv Num: 031600FSD			
K-FIVE CONSTRUCTION Site Id: 170000054759 Inv Num: ILR004249	12401 S COTTAGE GROV	R132 / 9	377

IL CHICAGO ENV: Environmental Records Dataset

A review of the IL CHICAGO ENV list, as provided by EDR, and dated 12/11/2019 has revealed that there are 55 IL CHICAGO ENV sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
Not reported	405 W 103RD ST	A3 / 3	43
Not reported	403 W 103RD ST	A4 / 3	44
Not reported	400 W 104TH ST	B7 / 3	45
Not reported	400 W 105TH ST	C9 / 3	46
Not reported	410 W 105TH ST	C10 / 3	46
ILLINOIS BELL DBA AT	***413 W 105TH ST***	***C18 / 3***	***51***
Not reported	401 W 105TH ST	C27 / 3	56
Not reported	400 W 107TH ST	D32 / 3	60
Not reported	411 W 107TH ST	D35 / 3	61
Not reported	407 W 107TH ST	D36 / 3	62
Not reported	401 W 107TH ST	D37 / 3	62
Not reported	405 W 107TH ST	D39 / 3	63
Not reported	355 W 109TH ST	40 / 5	63
Not reported	355 W 109TH PL	E41 / 5	64
Not reported	***352 W 110TH ST***	***E45 / 5***	***67***
Not reported	349 W 110TH ST	F51 / 5	71
Not reported	348 W 110TH PL	F52 / 5	71
Not reported	356 W 111TH ST	53 / 5	72
Not reported	347 W 111TH ST	G54 / 5	72
Not reported	348 W 111TH PL	G55 / 5	72
Not reported	336 W 112TH ST	56 / 5	73
Not reported	11325 S PRINCETON AV	57 / 5	73
Not reported	11336 S YALE AVE	H58 / 5	73
Not reported	11401 S WENTWORTH AV	I61 / 5	75
Not reported	11443 S PERRY AVE	J62 / 6	76
Not reported	52 W 115TH ST	J63 / 6	76
Not reported	42 W 115TH ST	K64 / 6	76
CURTIS SCHOOL	***32 E 115TH ST***	***L66 / 6***	***79***
Not reported	48 W 115TH ST	K69 / 6	83
Not reported	101 E 115TH ST	M73 / 6	84
Not reported	35 E 115TH ST	L74 / 6	85
Not reported	23 E 115TH ST	L75 / 6	85
Not reported	1 E 115TH ST	N76 / 6	85
Not reported	17 E 115TH ST	L78 / 6	86
TRIANGLE TRANSMISSIO	***35 W 115TH ST***	***K82 / 6***	***91***
Not reported	11501 S STATE ST	L87 / 6	95
Not reported	11500 S MICHIGAN AVE	M90 / 6	96
Not reported	13 E 115TH ST	L91 / 6	97
Not reported	11505 S STATE ST	L93 / 6	97
Not reported	25 E 115TH ST	L96 / 6	98
Not reported	29 E 115TH ST	L98 / 6	99
Not reported	11507 S STATE ST	L99 / 6	99
Not reported	11511 S STATE ST	L100 / 6	100
Not reported	11518 S MICHIGAN AVE	M105 / 6	105

EXECUTIVE SUMMARY

Site	Address	Map ID / Focus Map(s)	Page
Not reported	11515 S STATE ST	O109 / 6	107
Not reported	11521 S STATE ST	O110 / 6	108
Not reported	11517 S STATE ST	O112 / 6	108
Not reported	11552 S MICHIGAN AVE	P113 / 6	109
Not reported	11564 S MICHIGAN AVE	114 / 6	109
Not reported	11581 S STATE ST	115 / 6	110
Not reported	11575 S WABASH AVE	116 / 6	110
Not reported	11592 S MICHIGAN AVE	117 / 6	110
Not reported	11634 S PRAIRIE AVE	118 / 6	111
Not reported	301 E 117TH ST	Q120 / 6	111
Not reported	12401 S COTTAGE GROV	R128 / 9	375

CA HAZNET: Facility and Manifest Data

A review of the CA HAZNET list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 CA HAZNET site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
BETTY BRITE CLEANERS GEPAID: ILD981954753	11518 S MICHIGAN AVE	M108 / 6	107

IL TIER 2: Tier 2 Information Listing

A review of the IL TIER 2 list, as provided by EDR, and dated 12/31/2018 has revealed that there is 1 IL TIER 2 site within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
K-FIVE CONSTRUCTION	***12401 S COTTAGE GROV***	***R125 / 9***	***114***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR Exclusive Historical Auto Stations

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
ROSELAND TUNE UP CNT	401 W 111TH ST	H59 / 5	74
TRIANGLE TRANSMISSIO	35 W 115TH ST	K80 / 6	90

EXECUTIVE SUMMARY

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 4 EDR Hist Cleaner sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
SOONG LEE	9832 WENWORTH AV	2 / 3	43
MONTANA JIGAMIAN	11503 S MICH AV	M92 / 6	97
ASDOORAIAN DANL	25 E 115TH	L94 / 6	98
BETTY BRITE CLNRS	11518 S MICHIGAN	M102 / 6	101

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

IL RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

A review of the IL RGA LUST list, as provided by EDR, has revealed that there are 4 IL RGA LUST sites within the requested target property.

Site	Address	Map ID / Focus Map(s)	Page
ILLINOIS BELL TELEPH Facility ID: 880112	413 WEST 105TH ST.	C23 / 3	54
ILLINOIS BELL TELEPH Facility ID: 880112	413 WEST 105TH STREE	C25 / 3	56
WILLIAM RANSOM TRANS Facility ID: 990399	352 WEST 110TH ST.	E49 / 5	70
TRIANGLE TRANSMISSIO Facility ID: 992324	35 WEST 115TH ST.	K84 / 6	92

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Page Numbers and Map Identifcations refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

SEMS: Superfund Enterprise Management System

A review of the SEMS list, as provided by EDR, and dated 01/30/2020 has revealed that there are 3

EXECUTIVE SUMMARY

SEMS sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
LAKE CALUMET SMELTIN Site ID: 0509228 EPA Id: ILN000509228	***11901 S. CHAMPLAIN A***	***NE 1/8 - 1/4 (0.179 mi.)***	***244 / 9***	***569***
SHERWIN WILLIAMS COM Site ID: 0500202 EPA Id: ILD005456439	***11541 SOUTH CHAMPLAI***	***NE 1/4 - 1/2 (0.377 mi.)***	***AU293 / 6***	***824***
109TH PLACE TEAR GAS Site ID: 0507320 EPA Id: IL0000027714	***SG WEST 109TH PLACE***	***E 1/4 - 1/2 (0.489 mi.)***	***310 / 6***	***845***

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 01/30/2020 has revealed that there are 2 SEMS-ARCHIVE sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
CALUMET NU-EARTH DIS Site ID: 0500927 EPA Id: ILD980903686	NORTH 130TH ST & DOT	ENE 0 - 1/8 (0.057 mi.)	AA180 / 10	438
INLAND METAL REFININ Site ID: 0500577 EPA Id: ILD980503213	***651 EAST 119TH STREE***	***NE 1/8 - 1/4 (0.212 mi.)***	***AP262 / 6***	***593***

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

A review of the CORRACTS list, as provided by EDR, and dated 12/16/2019 has revealed that there are 5 CORRACTS sites within approximately1 mile of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
INLAND METAL REFININ EPA ID:: ILD980503213	***651 EAST 119TH STREE***	***NE 1/8 - 1/4 (0.212 mi.)***	***AP262 / 6***	***593***
SHERWIN WILLIAMS CO EPA ID:: ILD005456439	***11541 S CHAMPLAIN AV***	***NE 1/4 - 1/2 (0.377 mi.)***	***AU291 / 6***	***728***
CHICAGO SPECIALTIES EPA ID:: ILD981091291	***735 E 115TH ST***	***NE 1/2 - 1 (0.634 mi.)***	***AY315 / 6***	***852***
LIQUID DYNAMICS INC EPA ID:: ILD074410390	***655 E 114TH ST***	***NE 1/2 - 1 (0.674 mi.)***	***316 / 6***	***883***
SHERWIN WILLIAMS CO EPA ID:: ILD000672451	***10909 S COTTAGE GROV***	***NE 1/2 - 1 (0.975 mi.)***	***318 / 6***	***898***

EXECUTIVE SUMMARY

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

A review of the RCRA-TSDF list, as provided by EDR, and dated 12/16/2019 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
SHERWIN WILLIAMS CO EPA ID:: ILD005456439	***11541 S CHAMPLAIN AV***	***NE 1/4 - 1/2 (0.377 mi.)***	***AU291 / 6***	***728***

Federal RCRA generators list

RCRA-SQG: RCRA - Small Quantity Generators

A review of the RCRA-SQG list, as provided by EDR, and dated 12/16/2019 has revealed that there are 5 RCRA-SQG sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
STUART CHEMICAL & PA EPA ID:: ILD984845073	***11740 S FRONT ST***	***NE 0 - 1/8 (0.030 mi.)***	***T150 / 6***	***402***
CHICAGO, CITY OF EPA ID:: ILR000122952	1100 E 130TH PL	WSW 0 - 1/8 (0.079 mi.)	198 / 10	453
CLEAN HARBORS ENV SE EPA ID:: ILR000065797	***11861 COTTAGE GROVE-***	***NE 0 - 1/8 (0.098 mi.)***	***AG215 / 6***	***480***
BRENAN SCHOOL EPA ID:: ILR000027656	11411 EGGLESTON	SW 1/8 - 1/4 (0.210 mi.)	260 / 5	590
STAR CLEANERS EPA ID:: ILR000144154	149 W 111TH ST	E 1/8 - 1/4 (0.237 mi.)	AR270 / 5	707

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

A review of the RCRA-VSQG list, as provided by EDR, and dated 12/16/2019 has revealed that there are 7 RCRA-VSQG sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
AMERICAN CLYBOURN FI EPA ID:: ILT180010019	***11730 S. FRONT AVE.***	***NE 0 - 1/8 (0.041 mi.)***	***T167 / 6***	***426***
TONYS AUTOBODY EPA ID:: ILR000014456	***157 E KENNSINGTON***	***NE 0 - 1/8 (0.087 mi.)***	***AE207 / 6***	***465***
ROSELAND AUTO SALES EPA ID:: ILR000040303	***271 E 110TH ST***	***E 0 - 1/8 (0.116 mi.)***	***230 / 5***	***544***
SONGHAI LEARNING INS EPA ID:: ILR000059832	11725 S PERRY AVE	SW 1/8 - 1/4 (0.185 mi.)	246 / 6	573
HARLAN COMMUNITY ACA EPA ID:: ILR000056994	9652 S MICHIGAN AVE	ESE 1/8 - 1/4 (0.220 mi.)	264 / 4	673
CHICAGO TRANSIT AUTH	***9800 S STATE ST***	***SE 1/8 - 1/4 (0.221 mi.)***	***265 / 4***	***675***

EPA ID:: ILD984774190				
LANGSTON HUGHES SCHO EPA ID:: ILD984868745	***226 W 104TH ST***	***E 1/8 - 1/4 (0.229 mi.)***	***266 / 3***	***701***

Federal institutional controls / engineering controls registries

US INST CONTROLS: Institutional Controls Sites List

A review of the US INST CONTROLS list, as provided by EDR, and dated 11/22/2019 has revealed that there is 1 US INST CONTROLS site within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
SHERWIN WILLIAMS CO EPA ID:: ILD005456439	***11541 S CHAMPLAIN AV***	***NE 1/4 - 1/2 (0.377 mi.)***	***AU291 / 6***	***728***

State- and tribal - equivalent CERCLIS

IL SSU: State Sites Unit Listing

A review of the IL SSU list, as provided by EDR, and dated 11/07/2019 has revealed that there are 4 IL SSU sites within approximately1 mile of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
PENN CENTRAL CORP. SSU Status: Transferred Facility Id: 0316490002	810 EAST 124TH STREE	WSW 0 - 1/8 (0.032 mi.)	153 / 9	409
INLAND METAL REFININ SSU Status: Backlog Facility Id: 0316500001 Facility Id: 0316500001	***651 EAST 119TH STREE***	***NE 1/8 - 1/4 (0.212 mi.)***	***AP262 / 6***	***593***
U.S. SCRAP SSU Status: Transferred Facility Id: 0316000022 Facility Id: 0316000022	391 EAST KENSINGTON	NE 1/8 - 1/4 (0.243 mi.)	AS273 / 6	710
CHICAGO SPECIALTIES, SSU Status: Completed Facility Id: 0316495004	***735 EAST 115TH STREE***	***NE 1/2 - 1 (0.634 mi.)***	***AY314 / 6***	***850***

State and tribal landfill and/or solid waste disposal site lists

IL SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

A review of the IL SWF/LF list, as provided by EDR, has revealed that there are 4 IL SWF/LF sites within approximately 0.5 miles of the requested target property.

EXECUTIVE SUMMARY

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
CHICAGO MSD #3 Database: LF WMRC, Date of Government Version: 12/31/2001 Operational Status: CLOSED FINAL COVER IEPA ID Number: 316000021		WSW 0 - 1/8 (0.014 mi.)	137 / 9	390
COTTAGE GROVE DUMP Database: LF WMRC, Date of Government Version: 12/31/2001 IEPA ID Number: 316000023		ENE 0 - 1/8 (0.033 mi.)	154 / 9	409
INLAND METALS REFINI Database: LF WMRC, Date of Government Version: 12/31/2001 Operational Status: CLOSED IEPA ID Number: 316500001		NE 1/8 - 1/4 (0.200 mi.)	AN254 / 9	586
US SCRAP Database: LF WMRC, Date of Government Version: 12/31/2001 Operational Status: CLOSED NO FINAL COVER IEPA ID Number: 316000022	***391 E KENSINGTON***	***NE 1/8 - 1/4 (0.243 mi.)***	***AS275 / 6***	***712***

IL NIPC: Solid Waste Landfill Inventory

A review of the IL NIPC list, as provided by EDR, and dated 08/01/1988 has revealed that there are 12 IL NIPC sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
CALUMET NU EARTH (13		ENE 0 - 1/8 (0.036 mi.)	157 / 10	413
CHGO METRO SANITARY		ENE 0 - 1/8 (0.062 mi.)	AA182 / 10	440
CHGO METYRO SANITARY		ENE 0 - 1/8 (0.062 mi.)	AA183 / 10	440
CHGO METRO SANITARY		ENE 0 - 1/8 (0.062 mi.)	AA184 / 10	440
DOLTON MUNICIPAL		ENE 0 - 1/8 (0.081 mi.)	206 / 9	464
COTTAGE GROVE LANDFI		ENE 0 - 1/8 (0.105 mi.)	219 / 9	488
UNITED STATES SCRAP		WSW 0 - 1/8 (0.110 mi.)	221 / 9	488
INLAND METALS REFINI		ENE 1/8 - 1/4 (0.206 mi.)	AN257 / 9	588
95TH/MICHIGAN AVE		E 1/8 - 1/4 (0.208 mi.)	259 / 2	590
93RD/WENTWORTH AVE		NNW 1/4 - 1/2 (0.328 mi.)	287 / 1	726
PALUMBO EXCAVATING		ENE 1/4 - 1/2 (0.399 mi.)	295 / 10	827
114TH/COTTAGE GROVE		NE 1/4 - 1/2 (0.481 mi.)	308 / 6	844

State and tribal leaking storage tank lists

IL LUST: Leaking Underground Storage Tank Sites

A review of the IL LUST list, as provided by EDR, and dated 01/21/2020 has revealed that there are 46 IL LUST sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
CLARK OIL & REFINING NFA/NFR Letter: 1995-01-09 Incident Num: 912512 IL EPA Id: 316535008	11555 SOUTH MICHIGAN	E 0 - 1/8 (0.015 mi.)	P144 / 6	394
MARQUETTE BANK	135-39 WEST 114TH ST	NNE 0 - 1/8 (0.015 mi.)	I145 / 5	395

NFA/NFR Letter: 2002-01-25 Incident Num: 20011638 IL EPA Id: 316495139				
ABANDONED GAS STATIO Incident Num: 980685 Incident Num: 20111008 IL EPA Id: 316495103	***2 WEST 115TH STREET***	***NW 0 - 1/8 (0.030 mi.)***	***N151 / 6***	***405***
TADROS, MUSA NFA/NFR Letter: 1998-01-27 Incident Num: 960704 IL EPA Id: 316500008	11442 SOUTH MICHIGAN	N 0 - 1/8 (0.038 mi.)	M159 / 6	413
CHICAGO, CITY OF Incident Num: 20002342 IL EPA Id: 316495135	11500 SOUTH PERRY	SSW 0 - 1/8 (0.039 mi.)	V164 / 6	421
CHICAGO, CITY OF NFA/NFR Letter: 1995-09-19 Incident Num: 942419 IL EPA Id: 316495048	351 WEST 104TH ST.	E 0 - 1/8 (0.042 mi.)	W168 / 3	428
KHALIL, HANEY Incident Num: 20170257 IL EPA Id: 316615198	***11600 SOUTH MICHIGAN***	***SSE 0 - 1/8 (0.053 mi.)***	***Z177 / 6***	***432***
SHELL OIL CO. Incident Num: 871758 IL EPA Id: 316445022	4 EAST 95TH ST.	NNE 0 - 1/8 (0.066 mi.)	X187 / 2	441
PENTICOSTAL TEMPLE Incident Num: 912233 Incident Num: 913417 IL EPA Id: 316205006	419 WEST 111TH ST.	W 0 - 1/8 (0.067 mi.)	U189 / 5	443
AMOCO SERVICE STATIO NFA/NFR Letter: 2003-05-07 Incident Num: 971123 IL EPA Id: 316490013	36 WEST 95TH ST.	NNW 0 - 1/8 (0.070 mi.)	AC195 / 2	449
KEYWELL CO. NFA/NFR Letter: 1996-01-24 Incident Num: 902351 Incident Num: 942202 IL EPA Id: 316495035	***11900 SOUTH COTTAGE***	***SW 0 - 1/8 (0.080 mi.)***	***AD205 / 9***	***463***
BULKOA INC NFA/NFR Letter: 2003-04-08 Incident Num: 971905 IL EPA Id: 316515005	***11861 S COTTAGE GROV***	***NE 0 - 1/8 (0.098 mi.)***	***AG217 / 6***	***485***
STUARTS CHEMICAL & P Incident Num: 900054 IL EPA Id: 316005286	11740 FRONT ST.	NE 0 - 1/8 (0.102 mi.)	218 / 6	487
ABBOTT Incident Num: 932467 IL EPA Id: 316445035	45 EAST 95TH ST.	ENE 0 - 1/8 (0.107 mi.)	AH220 / 2	488
ABBOTT Incident Num: 932446 IL EPA Id: 316445035	49 EAST 95TH ST.	ENE 0 - 1/8 (0.112 mi.)	AH225 / 2	537
KENSINGTON SERV STAT	***162 E KENSINGTON***	***NE 0 - 1/8 (0.115 mi.)***	***AE226 / 6***	***538***

Incident Num: 960207 IL EPA Id: 316505018				
ILLINOIS BELL TELEPH NFA/NFR Letter: 2004-05-04 Incident Num: 903598 IL EPA Id: 316495033	65 WEST 113TH PL.	NNE 1/8 - 1/4 (0.126 mi.)	AI234 / 6	548
QUALITY CAR WASH NFA/NFR Letter: 1997-04-08 Incident Num: 951097 IL EPA Id: 316445040	9417 SOUTH STATE ST.	NNE 1/8 - 1/4 (0.145 mi.)	AJ241 / 2	566
34 WARD OFFICE/CITY NFA/NFR Letter: 2004-08-24 Incident Num: 20040732 IL EPA Id: 316616397	***507 WEST 111TH STREE***	***W 1/8 - 1/4 (0.166 mi.)***	***AK242 / 5***	***566***
UNIVERSITY OF IL AT NFA/NFR Letter: 2003-02-27 Incident Num: 20021330 IL EPA Id: 316005597	711 WEST 13TH ST.	WSW 1/8 - 1/4 (0.189 mi.)	AL248 / 5	576
METHODIST YOUTH SERV NFA/NFR Letter: 2005-11-23 Incident Num: 20050964 IL EPA Id: 316745060	11515 SOUTH PRAIRIE	NE 1/8 - 1/4 (0.205 mi.)	AO256 / 6	588
ONE HOUR MARTENIZING NFA/NFR Letter: 1991-02-27 Incident Num: 903286 Incident Num: 903655 IL EPA Id: 316495013	201 WEST 103RD ST.	E 1/8 - 1/4 (0.244 mi.)	AQ277 / 3	716
HUFF & HUFF INC. Incident Num: 891954 IL EPA Id: 316280047	651 EAST 179TH ST.	NE 1/4 - 1/2 (0.252 mi.)	279 / 6	721
PSC CONTAINER SERVIC Incident Num: 930641 IL EPA Id: 316535003	803 EAST 120TH ST.	ENE 1/4 - 1/2 (0.273 mi.)	280 / 9	722
CHICAGO HOUSING AUTH NFA/NFR Letter: 2007-09-10 Incident Num: 20070682 IL EPA Id: 316545003	940 EAST 132ND STREE	WSW 1/4 - 1/2 (0.317 mi.)	282 / 12	723
GREATER CANAAN BAPTI NFA/NFR Letter: 2007-12-12 Incident Num: 20061440 IL EPA Id: 316495172	38 WEST 119TH STREET	SSW 1/4 - 1/2 (0.318 mi.)	283 / 6	723
FRIESON, PHYLLIS NFA/NFR Letter: 2007-05-29 Incident Num: 20061096 IL EPA Id: 316495171	342 EAST 115TH STREE	NE 1/4 - 1/2 (0.319 mi.)	284 / 6	724
ROSELAND MEDICAL CEN NFA/NFR Letter: 2008-01-25 Incident Num: 20070049 IL EPA Id: 316495173	100-136 WEST 111TH S	E 1/4 - 1/2 (0.325 mi.)	285 / 5	725
CHICAGO, CITY OF	11900 SOUTH STATE ST	S 1/4 - 1/2 (0.327 mi.)	286 / 9	725

Incident Num: 982290 IL EPA Id: 316495107				
MEDLEY'S MOVING & ST NFA/NFR Letter: 2000-11-15 Incident Num: 20000774 IL EPA Id: 318993017	251 EAST 95TH ST.-B	E 1/4 - 1/2 (0.367 mi.)	AT289 / 2	726
MEDLEY'S MOVING & ST NFA/NFR Letter: 2011-06-23 Incident Num: 20001183 Incident Num: 930643 IL EPA Id: 318993017	251 EAST 95TH ST.	E 1/4 - 1/2 (0.367 mi.)	AT290 / 2	727
SHERWIN WILLIAMS CO. NFA/NFR Letter: 2002-06-14 NFA/NFR Letter: 2013-08-12 Incident Num: 20011967 Incident Num: 922759 IL EPA Id: 316500003	11541 SOUTH CHAMPLAI	NE 1/4 - 1/2 (0.377 mi.)	AU292 / 6	823
HARDY CORP Incident Num: 942827 IL EPA Id: 316495065	***711 W 103RD ST***	***W 1/4 - 1/2 (0.386 mi.)***	***294 / 3***	***825***
SHERWIN WILLIAMS PAI Incident Num: 20080830 IL EPA Id: 316495039	***549 115TH STREET***	***SW 1/4 - 1/2 (0.409 mi.)***	***296 / 5***	***828***
ROSELAND MARATHON Incident Num: 20080184 IL EPA Id: 316495042	***2 WEST 111TH STREET***	***NNE 1/4 - 1/2 (0.461 mi.)***	***AV299 / 6***	***833***
SHELL OIL CO. NFA/NFR Letter: 1999-09-07 Incident Num: 880583 IL EPA Id: 316495044	***10655 SOUTH HALSTED***	***W 1/4 - 1/2 (0.464 mi.)***	***300 / 3***	***835***
HESTER, FRANNY NFA/NFR Letter: 2016-09-15 Incident Num: 991953 IL EPA Id: 316495119	10101-03 SOUTH HALST	W 1/4 - 1/2 (0.466 mi.)	301 / 3	837
MOBIL OIL STATION #0 NFA/NFR Letter: 2017-06-16 Incident Num: 980630 IL EPA Id: 316535005	9901 SOUTH HALSTED	W 1/4 - 1/2 (0.466 mi.)	AW302 / 3	838
LAKESIDE BANK TRUST Incident Num: 20190992 IL EPA Id: 316495064	***10007 SOUTH MICHIGAN***	***SE 1/4 - 1/2 (0.468 mi.)***	***AX303 / 4***	***838***
TOWN & COUNTRY GAS M NFA/NFR Letter: 2009-01-27 Incident Num: 942453 IL EPA Id: 316495064	10007 SOUTH MICHIGAN	SE 1/4 - 1/2 (0.468 mi.)	AX304 / 4	842
YMCA NFA/NFR Letter: 2009-02-24 Incident Num: 911600 IL EPA Id: 316495043	4 EAST 111TH ST.	NNE 1/4 - 1/2 (0.472 mi.)	AV305 / 6	842
MUSTAFA, KHADIM	10301 SOUTH HALSTED	W 1/4 - 1/2 (0.480 mi.)	306 / 3	843

NFA/NFR Letter: 2008-11-21 NFA/NFR Letter: 2008-07-30 Incident Num: 20031090 Incident Num: 20080221 IL EPA Id: 316495046				
AMOCO OIL CO. #15525 Incident Num: 941074 IL EPA Id: 316535007	99TH & HALSTED	W 1/4 - 1/2 (0.481 mi.)	AW307 / 3	844
SHERWIN WILLIAMS PAI Incident Num: 910450 IL EPA Id: 316495039	115TH ST. & KINSINGT	NE 1/4 - 1/2 (0.488 mi.)	309 / 6	845
EQUILON ENTERPRISES NFA/NFR Letter: 2005-09-14 Incident Num: 990295 IL EPA Id: 316495059	9811 HALSTED	WNW 1/4 - 1/2 (0.493 mi.)	311 / 3	847
GEORGE O'DAY'S SHOP NFA/NFR Letter: 1994-07-22 Incident Num: 912416 IL EPA Id: 316005805	526 EAST 114TH PL.	NE 1/4 - 1/2 (0.493 mi.)	312 / 6	847

State and tribal registered storage tank lists

IL UST: Underground Storage Tank Facility List

A review of the IL UST list, as provided by EDR, and dated 01/21/2020 has revealed that there are 28 IL UST sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
0707 CLARK SER STATI Tank Status: Removed Status: CLOSED Facility Id: 2010017	11555 S MICHIGAN AVE	E 0 - 1/8 (0.015 mi.)	P142 / 6	392
STUART INDUSTRIAL CO Tank Status: Removed Status: CLOSED Facility Id: 2008210	11740 S FRONT ST	NE 0 - 1/8 (0.030 mi.)	T148 / 6	398
ABANDONED GAS STATIO Tank Status: Removed Status: EXEMPT Facility Id: 2037063	***2 WEST 115TH STREET***	***NW 0 - 1/8 (0.030 mi.)***	***N151 / 6***	***405***
GOODYEAR TIRE & RUBB Tank Status: Removed Status: CLOSED Facility Id: 2012823	11442 S MICHIGAN AVE	N 0 - 1/8 (0.038 mi.)	M161 / 6	416
ABANDONED SERVICE ST Tank Status: Removed Status: EXEMPT Facility Id: 2040244	11500 S PERRY	SSW 0 - 1/8 (0.039 mi.)	V162 / 6	416
ROSELAND PUMPING STA	351 W 104TH ST	E 0 - 1/8 (0.042 mi.)	W169 / 3	429

Tank Status: Removed Status: EXEMPT Facility Id: 2020701				
ATLANTIC RICHFIELD C Tank Status: Removed Status: CLOSED Facility Id: 2011489	1 E 95TH ST	NE 0 - 1/8 (0.050 mi.)	X172 / 2	430
VACANT BUILDING Tank Status: Removed Status: EXEMPT Facility Id: 2040973	133-37 W 114TH ST TH	NNE 0 - 1/8 (0.050 mi.)	175 / 5	431
MICHIGAN CITGO Tank Status: Currently in use Tank Status: Abandoned in place Status: ACTIVE Facility Id: 2017681	11600 S. MICHIGAN AV	SSE 0 - 1/8 (0.053 mi.)	Z178 / 6	435
MOBIL GAS & FOOD MAR Tank Status: Condemned Tank Status: INACTIVE Facility Id: 2007056	4 EAST 95TH STREET	NNE 0 - 1/8 (0.066 mi.)	X188 / 2	442
SS#15459 FAC#10443 Tank Status: Removed Status: CLOSED Facility Id: 2023039	36 W. 95TH ST.	NNW 0 - 1/8 (0.070 mi.)	AC196 / 2	449
CHICAGO FIRE DEPARTM Tank Status: Pre 1974 Status: EXEMPT Facility Id: 2030538	330 WEST 104TH STREE	E 0 - 1/8 (0.080 mi.)	200 / 3	455
VACANT BULDING Tank Status: Removed Status: EXEMPT Facility Id: 2035824	11321 S WENTWORTH AV	NNE 0 - 1/8 (0.080 mi.)	201 / 5	456
S G KEYWELL CO Tank Status: Removed Status: CLOSED Facility Id: 2012567	11900 S COTTAGE GROV	SW 0 - 1/8 (0.080 mi.)	AD204 / 9	462
BULKOA INC Tank Status: Removed Status: CLOSED Facility Id: 2023462	11861 S COTTAGE GROV	NE 0 - 1/8 (0.098 mi.)	AG216 / 6	482
ABBOTT PARK FIELDHOU Tank Status: Removed Status: CLOSED Facility Id: 2030829	***49 E 95TH ST***	***ENE 0 - 1/8 (0.112 mi.)***	***AH224 / 2***	***536***
KENSINGTON SERVICE S Tank Status: Removed Status: CLOSED Facility Id: 2034581	162 E KENSINGTON	NE 0 - 1/8 (0.115 mi.)	AE228 / 6	542
PULLMAN CO Tank Status: Removed Tank Status: Currently in use	***65 WEST 113TH PLACE***	***NNE 1/8 - 1/4 (0.126 mi.)***	***AI235 / 6***	***548***

Status: ACTIVE Facility Id: 2007786				
CITGO SUPER WASH & W Tank Status: Removed Tank Status: Out of service Status: INACTIVE Facility Id: 2034153	9417 S. STATE STREET	NNE 1/8 - 1/4 (0.145 mi.)	AJ240 / 2	563
34 WARD OFFICE/CITY Tank Status: Removed Status: EXEMPT Facility Id: 2042211	***507 WEST 111TH STREE***	***W 1/8 - 1/4 (0.166 mi.)***	***AK242 / 5***	***566***
UIS PARKING Tank Status: Removed Status: EXEMPT Facility Id: 2041303	711 W. 13TH STREET T	WSW 1/8 - 1/4 (0.189 mi.)	AL249 / 5	577
CATHOLIC CONVENT Tank Status: Removed Status: EXEMPT Facility Id: 2042879	11515 S. PRAIRIE AVE	NE 1/8 - 1/4 (0.205 mi.)	AO255 / 6	587
VACANT RESIDENTIAL B Tank Status: Removed Status: CLOSED Facility Id: 2039223	226-248 W 107TH PLAC	E 1/8 - 1/4 (0.207 mi.)	258 / 3	589
INLAND METALS REFINI Tank Status: Removed Status: CLOSED Facility Id: 2013533	***651 E 119TH ST***	***NE 1/8 - 1/4 (0.212 mi.)***	***AP261 / 6***	***591***
J AND A GAS MART, IN Tank Status: Currently in use Status: ACTIVE Facility Id: 2040667	210 W. 103RD STREET	E 1/8 - 1/4 (0.236 mi.)	AQ267 / 3	703
CONTINENTAL GRAIN CO Tank Status: Removed Status: CLOSED Facility Id: 2008867	127TH & DOTY AVE	ENE 1/8 - 1/4 (0.236 mi.)	268 / 10	705
FERNWOOD PLAYGROUND Tank Status: Pre 1974 Status: EXEMPT Facility Id: 2032287	10436 S WALLACE	W 1/8 - 1/4 (0.236 mi.)	269 / 3	706
MCCORMICK PLACE VACA Tank Status: Removed Status: EXEMPT Facility Id: 2042068	201-217 E. CERMAK RD	E 1/8 - 1/4 (0.239 mi.)	AQ272 / 3	709

IL AST: Above Ground Storage Tanks

A review of the IL AST list, as provided by EDR, and dated 10/03/2019 has revealed that there is 1 IL AST site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
Not reported	***400 W 108TH ST***	***W 0 - 1/8 (0.014 mi.)***	***140 / 5***	***392***

EXECUTIVE SUMMARY

Occupancy Number: CS-059-1531169535875

State and tribal institutional control / engineering control registries

IL ENG CONTROLS: Sites with Engineering Controls

A review of the IL ENG CONTROLS list, as provided by EDR, and dated 12/30/2019 has revealed that there are 4 IL ENG CONTROLS sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
NEW LANGSTON HUGHES Illinois Epa Id: 316505045	***10320 SOUTH WENTWORT***	***E 1/8 - 1/4 (0.190 mi.)***	***253 / 3***	***584***
LAKEFRONT SUPPORTING Illinois Epa Id: 316495014	***11023-11045 S WENTWO***	***E 1/8 - 1/4 (0.248 mi.)***	***AR278 / 5***	***717***
SHERWIN-WILLIAMS COM Illinois Epa Id: 316500003	***603 EAST KENSINGTON***	***NE 1/4 - 1/2 (0.420 mi.)***	***297 / 6***	***830***
BETTY BRITE CLEANERS Illinois Epa Id: 316495007	***10630 SOUTH HALSTED***	***W 1/4 - 1/2 (0.499 mi.)***	***313 / 3***	***848***

IL INST CONTROL: Institutional Controls

A review of the IL INST CONTROL list, as provided by EDR, and dated 12/30/2019 has revealed that there are 5 IL INST CONTROL sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
NEW LANGSTON HUGHES Illinois EPA Id: 316505045	***10320 SOUTH WENTWORT***	***E 1/8 - 1/4 (0.190 mi.)***	***253 / 3***	***584***
LAKEFRONT SUPPORTING Illinois EPA Id: 316495014	***11023-11045 S WENTWO***	***E 1/8 - 1/4 (0.248 mi.)***	***AR278 / 5***	***717***
SHERWIN-WILLIAMS COM Illinois EPA Id: 316500003	***603 EAST KENSINGTON***	***NE 1/4 - 1/2 (0.420 mi.)***	***297 / 6***	***830***
CHICAGO FAMILY HEALT Illinois EPA Id: 316505067	***556-580 EAST 115TH S***	***NE 1/4 - 1/2 (0.459 mi.)***	***298 / 6***	***832***
BETTY BRITE CLEANERS Illinois EPA Id: 316495007	***10630 SOUTH HALSTED***	***W 1/4 - 1/2 (0.499 mi.)***	***313 / 3***	***848***

State and tribal voluntary cleanup sites

IL SRP: Site Remediation Program Database

A review of the IL SRP list, as provided by EDR, and dated 12/30/2019 has revealed that there are 7 IL SRP sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
NEW LANGSTON HUGHES	***10320 SOUTH WENTWORT***	***E 1/8 - 1/4 (0.190 mi.)***	***253 / 3***	***584***

IL EPA Id: 316505045				
LAKEFRONT SUPPORTING IL EPA Id: 316495014	***11023-11045 S WENTWO***	***E 1/8 - 1/4 (0.248 mi.)***	***AR278 / 5***	***717***
ALTGELD LIBRARY IL EPA Id: 316545003	955 EAST 131 STREET	WSW 1/4 - 1/2 (0.277 mi.)	281 / 10	722
COMED 119TH STREET D IL EPA Id: 316495192	739 WEST 110TH STREE	W 1/4 - 1/2 (0.360 mi.)	288 / 5	726
SHERWIN-WILLIAMS COM IL EPA Id: 316500003	***603 EAST KENSINGTON***	***NE 1/4 - 1/2 (0.420 mi.)***	***297 / 6***	***830***
CHICAGO FAMILY HEALT IL EPA Id: 316505067	***556-580 EAST 115TH S***	***NE 1/4 - 1/2 (0.459 mi.)***	***298 / 6***	***832***
BETTY BRITE CLEANERS IL EPA Id: 316495007	***10630 SOUTH HALSTED***	***W 1/4 - 1/2 (0.499 mi.)***	***313 / 3***	***848***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/02/2019 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
11500 S PERRY ACRES property ID: 133625 Cleanup Completion Date: -	***11500 S PERRY***	***SSW 0 - 1/8 (0.039 mi.)***	***V163 / 6***	***418***
3 W 114TH ST ACRES property ID: 133623 Cleanup Completion Date: -	***3 W 114TH ST***	***N 1/8 - 1/4 (0.129 mi.)***	***236 / 6***	***556***

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/16/2019 has revealed that there are 32 RCRA NonGen / NLR sites within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
CLEARWATER TECHNOLOG EPA ID:: ILD043912583	***11426 S PERRY AVE***	***NNE 0 - 1/8 (0.011 mi.)***	***J134 / 6***	***386***
LAND & LAKES TRANSFE EPA ID:: ILR000081000	***1258-1300 E 130TH ST***	***WSW 0 - 1/8 (0.018 mi.)***	***146 / 10***	***396***
COX DONNA (ABANDONED	***2 W 115TH ST***	***NW 0 - 1/8 (0.030 mi.)***	***N152 / 6***	***407***

EPA ID:: ILR000048611				
CHICAGO DEPT OF ENV EPA ID:: ILR000157560	11100 S STEWART AVE	W 0 - 1/8 (0.036 mi.)	U156 / 5	411
GOODYEAR AUTO SERVIC EPA ID:: ILD149985640	***11442 S MICHIGAN AVE***	***N 0 - 1/8 (0.038 mi.)***	***M160 / 6***	***414***
ALLWASTE TANK CLEANI EPA ID:: ILD980607105	***11901 S COTTAGE GROV***	***NE 0 - 1/8 (0.041 mi.)***	***166 / 9***	***422***
PENTECOSTAL TEMPLE C EPA ID:: ILD984831958	***415 THRU 419 W 111TH***	***W 0 - 1/8 (0.067 mi.)***	***U191 / 5***	***445***
AMOCO 15459 EPA ID:: ILD984924860	***36 W 95TH AND LAFAYE***	***NNW 0 - 1/8 (0.070 mi.)***	***AC194 / 2***	***447***
CALUMET COACH CO EPA ID:: ILD981798499	***135 E 115TH ST***	***E 0 - 1/8 (0.073 mi.)***	***AB197 / 6***	***451***
ALL AMERICAN RECYCLI EPA ID:: ILD984804831	***11900 COTTAGE GROVE***	***SW 0 - 1/8 (0.080 mi.)***	***AD202 / 9***	***457***
K FIVE CONSTRUCTION EPA ID:: ILD981191349	***12500 COTTAGE GROVE***	***ENE 0 - 1/8 (0.097 mi.)***	***209 / 9***	***467***
UNLOADING UNLIMITED EPA ID:: ILD000646869	11861 S COTTAGE GROV	NE 0 - 1/8 (0.098 mi.)	AG211 / 6	469
SMITH SYSTEMS CHICAG EPA ID:: IL0000148601	11861 S COTTAGE GROV	NE 0 - 1/8 (0.098 mi.)	AG212 / 6	470
VACUUM INDUSTRIAL PO EPA ID:: ILD980684245	***11861 S COTTAGE GROV***	***NE 0 - 1/8 (0.098 mi.)***	***AG213 / 6***	***473***
SCHNEIDER TANK LINES EPA ID:: ILD981789035	11861 S COTTAGE GROV	NE 0 - 1/8 (0.098 mi.)	AG214 / 6	479
BULKOA INC EPA ID:: ILD000667154	***11861 S COTTAGE GROV***	***NE 0 - 1/8 (0.098 mi.)***	***AG217 / 6***	***485***
CHICAGO, CITY OF-ROS EPA ID:: ILR000013250	***351 W 104TH ST***	***E 0 - 1/8 (0.111 mi.)***	***222 / 3***	***489***
KENSINGTON SERV STAT EPA ID:: ILR000015131	***162 E KENSINGTON***	***NE 0 - 1/8 (0.115 mi.)***	***AE226 / 6***	***538***
ILLINOIS BELL EPA ID:: ILR000056697	***65 W 113TH PL***	***NNE 1/8 - 1/4 (0.126 mi.)***	***AI233 / 6***	***546***
CITY OF CHICAGO EPA ID:: ILR000110445	***11700 S COTTAGE GROV***	***NE 1/8 - 1/4 (0.133 mi.)***	***238 / 6***	***560***
SWIFT TIRES EPA ID:: ILR000108571	***11432 S INDIANA***	***ENE 1/8 - 1/4 (0.143 mi.)***	***239 / 6***	***561***
CITY OF CHICAGO EPA ID:: ILR000022111	11700 S COTTAGE GROV	NE 1/8 - 1/4 (0.169 mi.)	243 / 6	567
GONNELLA BAKING CO EPA ID:: ILR000049858	318 E KENSINGTON	NE 1/8 - 1/4 (0.181 mi.)	245 / 6	572
SEW CLEAN EPA ID:: ILD013428487	***519 W 111TH ST***	***W 1/8 - 1/4 (0.189 mi.)***	***AK250 / 5***	***578***
BULKMATIC TRANSPORT EPA ID:: ILD053220711	***12000 S DOTY AVE***	***ENE 1/8 - 1/4 (0.190 mi.)***	***AM251 / 9***	***580***
AIRCO INDUSTRIAL GAS	12000S DOTY AVE	ENE 1/8 - 1/4 (0.190 mi.)	AM252 / 9	582

EPA ID:: ILD057833063				
INLAND METAL REFININ EPA ID:: ILD980503213	***651 EAST 119TH STREE***	***NE 1/8 - 1/4 (0.212 mi.)***	***AP262 / 6***	***593***
INLAND METAL REFININ EPA ID:: ILT180011744	651 E 119TH	NE 1/8 - 1/4 (0.212 mi.)	AP263 / 6	672
CHICAGO DEPT OF ENVI EPA ID:: ILR000158501	12600 S DOTY AVE	ENE 1/8 - 1/4 (0.238 mi.)	271 / 10	708
U S DRUM DISPOSAL CO EPA ID:: ILD085866788	***391 E KENSINGTON AVE***	***NE 1/8 - 1/4 (0.243 mi.)***	***AS274 / 6***	***710***
F & R QUALITY CLEANE EPA ID:: ILD982065310	***201 W. 103RD ST.***	***E 1/8 - 1/4 (0.244 mi.)***	***AQ276 / 3***	***714***
LAKEFRONT SUPPORTING EPA ID:: ILD981960537	***11023-11045 S WENTWO***	***E 1/8 - 1/4 (0.248 mi.)***	***AR278 / 5***	***717***

FUDS: Formerly Used Defense Sites

A review of the FUDS list, as provided by EDR, and dated 11/12/2019 has revealed that there is 1 FUDS site within approximately1 mile of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
CALUMET HARBOR YARDS		ENE 1/2 - 1 (0.971 mi.)	317 / 10	897

IL IMPDMENT: Surface Impoundment Inventory

A review of the IL IMPDMENT list, as provided by EDR, and dated 12/31/1980 has revealed that there are 2 IL IMPDMENT sites within approximately 0.5 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
METROPOL SANT DIST G		WSW 1/8 - 1/4 (0.133 mi.)	237 / 9	559
U S SCRAP CORP		SW 1/8 - 1/4 (0.187 mi.)	247 / 9	575

NY MANIFEST: Facility and Manifest Data

A review of the NY MANIFEST list, as provided by EDR, and dated 01/01/2019 has revealed that there is 1 NY MANIFEST site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
KEYWELL CORP EPA ID: ILD984803601	11900 S COTTAGE GROV	SW 0 - 1/8 (0.080 mi.)	AD203 / 9	460

WI MANIFEST: Hazardous Waste Manifest Data

A review of the WI MANIFEST list, as provided by EDR, and dated 05/31/2018 has revealed that there is 1 WI MANIFEST site within approximately 0.25 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
STUART INDUSTRIAL CO	11740 SOUTH FRONT ST	NE 0 - 1/8 (0.030 mi.)	T149 / 6	401

EXECUTIVE SUMMARY

ACT Status: A
EPA ID: ILD984845073

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately1 mile of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
PEOPLES GAS AND LIGH	700-750 EAST 111TH S	NE 1/2 - 1 (0.983 mi.)	319 / 6	910

EDR Hist Auto: EDR Exclusive Historical Auto Stations

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 20 EDR Hist Auto sites within approximately 0.125 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
SRM MOTORS	11439 S PERRY AVE	NNE 0 - 1/8 (0.011 mi.)	J135 / 6	389
IRVINGS STANDARD	11533 S MICHIGAN AVE	E 0 - 1/8 (0.014 mi.)	S139 / 6	391
BOBS SUPER 100	11555 S MICHIGAN	E 0 - 1/8 (0.015 mi.)	P143 / 6	394
HARRIS TRANSMISSION	410 W 109TH ST	WSW 0 - 1/8 (0.027 mi.)	147 / 5	397
SHELDON HEIGHTS SERV	332 W 113TH ST	WSW 0 - 1/8 (0.038 mi.)	158 / 5	413
SATRIANO TEXACO SERV	11500 S PERRY AVE	SSW 0 - 1/8 (0.039 mi.)	V165 / 6	422
WELKES SINCLAIR STAT	11515 S PERRY	SSW 0 - 1/8 (0.043 mi.)	V170 / 6	429
HAHN STANLEY	11624 S MICH AV	S 0 - 1/8 (0.050 mi.)	171 / 6	430
ARCO AM-PM 12	1 E 95TH ST	NE 0 - 1/8 (0.050 mi.)	X173 / 2	431
MARTIN OIL SERVICE I	11600 S MICHIGAN	SSE 0 - 1/8 (0.053 mi.)	Z179 / 6	437
SIMS ARCO	4 E 95TH ST	NNE 0 - 1/8 (0.066 mi.)	X186 / 2	441
ROSELAND SERVICE STA	419 W 111TH	W 0 - 1/8 (0.067 mi.)	U190 / 5	444
DUMAC GARAGE	131 E 115TH	E 0 - 1/8 (0.067 mi.)	AB192 / 6	446
WHALEN STANDARD SERV	36 W 95TH ST	NNW 0 - 1/8 (0.070 mi.)	AC193 / 2	447
ROSELAND GASOLINE ST	11420 S MICH AV	N 0 - 1/8 (0.079 mi.)	Y199 / 6	455
D & D SERVICE STATIO	202 W 115TH	SSW 0 - 1/8 (0.095 mi.)	208 / 5	467
REITER BROS	433 W 111TH ST	W 0 - 1/8 (0.098 mi.)	AF210 / 5	469
WENTWORTH SERVICE ST	200 W 113TH	NE 0 - 1/8 (0.112 mi.)	223 / 5	535
LOU S SERVICE STA	162 E KENSINGTON A	NE 0 - 1/8 (0.115 mi.)	AE227 / 6	541
DEPENDENT SERVICE ST	11724 S MICH AV	S 0 - 1/8 (0.116 mi.)	229 / 6	543

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 10 EDR Hist Cleaner sites within approximately 0.125 miles of the requested target property.

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
RAY S CLEANERS	11501 S MICHIGAN A	E 0 - 1/8 (0.013 mi.)	M136 / 6	389
BETTY BRIGHT CLEANER	11533 S MICHIGAN AVE	E 0 - 1/8 (0.014 mi.)	S138 / 6	391
WAH LOUIS	11535 S MICH AV	E 0 - 1/8 (0.014 mi.)	S141 / 6	392

EXECUTIVE SUMMARY

Site	Address	Direction / Distance	Map ID / Focus Map(s)	Page
FIZER S FENCING & SE	330 W 111TH ST	E 0 - 1/8 (0.034 mi.)	155 / 5	410
PETRI KONSTANTIN	113 W 115TH	SSW 0 - 1/8 (0.050 mi.)	V174 / 6	431
GORGODIAN SAMUEL	11453 S MICH AV	N 0 - 1/8 (0.051 mi.)	Y176 / 6	432
COMEH JONATHAN	337 W 102ND PL	E 0 - 1/8 (0.062 mi.)	181 / 3	439
CLOTHES MATE DRY CLE	11625 S MICHIGAN AVE	SSE 0 - 1/8 (0.064 mi.)	Z185 / 6	440
MORNING CLEANERS R	445 W 111TH	W 0 - 1/8 (0.121 mi.)	AF231 / 5	545
YONG CHARLEY	214 KENSINGTON AV	NE 0 - 1/8 (0.122 mi.)	232 / 6	546

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
1 / 4	CHICAGO PARK DIST-LA	63RD ST, E OF LAKE S	FINDS	TP
2 / 3	SOONG LEE	9832 WENWORTH AV	EDR Hist Cleaner	TP
A3 / 3		405 W 103RD ST	IL CHICAGO ENV	TP
A4 / 3		403 W 103RD ST	IL CHICAGO ENV	TP
B5 / 3	O CONNELL ELECTRIC	405 W 104TH ST	FINDS	TP
B6 / 3	O'CONNELL ELECTRIC	405 W 104TH ST	IL BOL	TP
B7 / 3		400 W 104TH ST	IL CHICAGO ENV	TP
B8 / 3	B VAN DIR MEER & SON	400 W 104TH ST	IL TANKS	TP
C9 / 3		400 W 105TH ST	IL CHICAGO ENV	TP
C10 / 3		410 W 105TH ST	IL CHICAGO ENV	TP
C11 / 3	410 W 105TH	410 W 105TH	FINDS	TP
C12 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C13 / 3	ILLINOIS BELL DBA AT	413 W 105TH ST	IL BOL	TP
C14 / 3	ILLINOIS BELL DBA AT	413 W 105TH ST	RCRA NonGen / NLR, FINDS, ECHO	TP
C15 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C16 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C17 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C18 / 3	ILLINOIS BELL DBA AT	413 W 105TH ST	IL BOL, IL CHICAGO ENV	TP
C19 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C20 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C21 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C22 / 3	FRED SYHORA	401 W 105TH ST	IL TANKS	TP
C23 / 3	ILLINOIS BELL TELEPH	413 WEST 105TH ST.	IL RGA LUST	TP
C24 / 3	IL BELL TELEPHONE CO	413 W 105TH	IL UST	TP
C25 / 3	ILLINOIS BELL TELEPH	413 WEST 105TH STREE	IL RGA LUST	TP
C26 / 3	FRED SYHORA	401 W 105TH ST	IL TANKS	TP
C27 / 3		401 W 105TH ST	IL CHICAGO ENV	TP
C28 / 3	ILLINOIS BELL TELEPH	413 WEST 105TH STREE	IL LUST, IL SPILLS	TP
C29 / 3		413 WEST 105TH STREE	IL SPILLS	TP
C30 / 3	JCK AUTO DEPOT INC	411 W 105TH ST	IL BOL	TP
C31 / 3	JCK AUTO DEPOT INC	411 W 105TH ST	FINDS	TP
D32 / 3		400 W 107TH ST	IL CHICAGO ENV	TP
D33 / 3	MIDLAND CHEMICAL COR	400 W 107TH ST	IL TANKS	TP
D34 / 3	MIDLAND CHEMICAL COR	400 W 107TH ST	IL TANKS	TP
D35 / 3		411 W 107TH ST	IL CHICAGO ENV	TP
D36 / 3		407 W 107TH ST	IL CHICAGO ENV	TP
D37 / 3		401 W 107TH ST	IL CHICAGO ENV	TP
D38 / 3	AT&T MOBILITY- TANK#	405 WEST 107TH STREE	IL AST	TP
D39 / 3		405 W 107TH ST	IL CHICAGO ENV	TP

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
40 / 5		355 W 109TH ST	IL CHICAGO ENV	TP
E41 / 5		355 W 109TH PL	IL CHICAGO ENV	TP
E42 / 5	RANSOM TRANSPORT	352 W 110TH ST	RCRA-VSQG, FINDS, ECHO	TP
E43 / 5		352 W 110TH ST	IL SPILLS	TP
E44 / 5	RANSOM TRANSPORT BUS	352 W 110TH ST	IL TANKS	TP
E45 / 5		352 W 110TH ST	IL SPILLS, IL CHICAGO ENV	TP
E46 / 5		352 WEST 110 ST	ERNS	TP
E47 / 5	WILLIAM RANSOM TRANS	352 WEST 110TH ST.	IL LUST	TP
E48 / 5	FRANCIS T. SHEA	352 W 110TH ST	IL TANKS	TP
E49 / 5	WILLIAM RANSOM TRANS	352 WEST 110TH ST.	IL RGA LUST	TP
E50 / 5	RANSOM TRANSPORT BUS	352 W 110TH ST	IL UST	TP
F51 / 5		349 W 110TH ST	IL CHICAGO ENV	TP
F52 / 5		348 W 110TH PL	IL CHICAGO ENV	TP
53 / 5		356 W 111TH ST	IL CHICAGO ENV	TP
G54 / 5		347 W 111TH ST	IL CHICAGO ENV	TP
G55 / 5		348 W 111TH PL	IL CHICAGO ENV	TP
56 / 5		336 W 112TH ST	IL CHICAGO ENV	TP
57 / 5		11325 S PRINCETON AV	IL CHICAGO ENV	TP
H58 / 5		11336 S YALE AVE	IL CHICAGO ENV	TP
H59 / 5	ROSELAND TUNE UP CNT	401 W 111TH ST	EDR Hist Auto	TP
I60 / 5	11401 S WENTWORTH	11401 S WENTWORTH	FINDS	TP
I61 / 5		11401 S WENTWORTH AV	IL CHICAGO ENV	TP
J62 / 6		11443 S PERRY AVE	IL CHICAGO ENV	TP
J63 / 6		52 W 115TH ST	IL CHICAGO ENV	TP
K64 / 6		42 W 115TH ST	IL CHICAGO ENV	TP
L65 / 6	CURTIS SCHOOL-CHI. B	32 E 115TH ST	RCRA-VSQG, FINDS, ECHO	TP
L66 / 6	CURTIS SCHOOL	32 E 115TH ST	IL UST, IL AIRS, IL BOL, IL CHICAGO ENV	TP
L67 / 6	CURTIS SCHOOL	32 E 115TH ST	IL TANKS	TP
L68 / 6	CURTIS REILLY SCHOOL	32 E 115TH ST	IL BOL	TP
K69 / 6		48 W 115TH ST	IL CHICAGO ENV	TP
M70 / 6	FORMER ROSELAND PLAZ	11500-82 S MICHIGAN	FINDS	TP
N71 / 6			ERNS	TP
K72 / 6	52 W 115TH & 11443 S	52 W 115TH & 11443 S	FINDS	TP
M73 / 6		101 E 115TH ST	IL CHICAGO ENV	TP
L74 / 6		35 E 115TH ST	IL CHICAGO ENV	TP
L75 / 6		23 E 115TH ST	IL CHICAGO ENV	TP
N76 / 6		1 E 115TH ST	IL CHICAGO ENV	TP
L77 / 6	CHURCH	17 E 115TH	FINDS	TP
L78 / 6		17 E 115TH ST	IL CHICAGO ENV	TP

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
K79 / 6	TRIANGLE TRANSMISSIO	35 W 115TH ST	IL LUST, IL UST, RCRA NonGen / NLR, FIND...	TP
K80 / 6	TRIANGLE TRANSMISSIO	35 W 115TH ST	EDR Hist Auto	TP
K81 / 6	GEORGE THOSS	35 W 115TH ST	IL TANKS	TP
K82 / 6	TRIANGLE TRANSMISSIO	35 W 115TH ST	IL SPILLS, IL BOL, IL CHICAGO ENV	TP
K83 / 6	TRIANGLE TRANSMISSIO	35 W 115TH ST	IL TANKS	TP
K84 / 6	TRIANGLE TRANSMISSIO	35 WEST 115TH ST.	IL RGA LUST	TP
K85 / 6		35 W 115TH ST	IL SPILLS	TP
K86 / 6	GEORGE THOSS	35 W 115TH ST	IL TANKS	TP
L87 / 6		11501 S STATE ST	IL CHICAGO ENV	TP
M88 / 6	OAK PARK NATIONAL BA	11500 S MICHIGAN AVE	IL TANKS	TP
M89 / 6	OAK PARK NATIONAL BA	11500 S MICHIGAN AVE	IL TANKS	TP
M90 / 6		11500 S MICHIGAN AVE	IL CHICAGO ENV	TP
L91 / 6		13 E 115TH ST	IL CHICAGO ENV	TP
M92 / 6	MONTANA JIGAMIAN	11503 S MICH AV	EDR Hist Cleaner	TP
L93 / 6		11505 S STATE ST	IL CHICAGO ENV	TP
L94 / 6	ASDOORAIAN DANL	25 E 115TH	EDR Hist Cleaner	TP
L95 / 6	25 E 115TH ST	25 E 115TH ST	FINDS	TP
L96 / 6		25 E 115TH ST	IL CHICAGO ENV	TP
L97 / 6	29 E 115TH ST	29 E 115TH ST	FINDS	TP
L98 / 6		29 E 115TH ST	IL CHICAGO ENV	TP
L99 / 6		11507 S STATE ST	IL CHICAGO ENV	TP
L100 / 6		11511 S STATE ST	IL CHICAGO ENV	TP
M101 / 6	FLAIR CLEANERS	11518 SO MICHIGAN	FINDS, ECHO	TP
M102 / 6	BETTY BRITE CLNRS	11518 S MICHIGAN	EDR Hist Cleaner	TP
M103 / 6	BETTY BRITE CLEANERS	11518 S. MICHIGAN AV	RCRA-VSQG, FINDS, ECHO, IL AIRS, IL BOL	TP
M104 / 6	FLAIR CLEANERS	11518 S MICHIGAN	FINDS, IL AIRS	TP
M105 / 6		11518 S MICHIGAN AVE	IL CHICAGO ENV	TP
M106 / 6	FLAIR CLEANERS	11518 S MICHIGAN	IL BOL	TP
M107 / 6	BETTY BRITE CLEANERS	11518 S MICHIGAN AVE	IL BOL	TP
M108 / 6	BETTY BRITE CLEANERS	11518 S MICHIGAN AVE	CA HAZNET	TP
O109 / 6		11515 S STATE ST	IL CHICAGO ENV	TP
O110 / 6		11521 S STATE ST	IL CHICAGO ENV	TP
O111 / 6	CUTER SEFER OIL	11521 S STATE ST	IL TANKS	TP
O112 / 6		11517 S STATE ST	IL CHICAGO ENV	TP
P113 / 6		11552 S MICHIGAN AVE	IL CHICAGO ENV	TP
114 / 6		11564 S MICHIGAN AVE	IL CHICAGO ENV	TP
115 / 6		11581 S STATE ST	IL CHICAGO ENV	TP
116 / 6		11575 S WABASH AVE	IL CHICAGO ENV	TP
117 / 6		11592 S MICHIGAN AVE	IL CHICAGO ENV	TP

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
118 / 6		11634 S PRAIRIE AVE	IL CHICAGO ENV	TP		
Q119 / 6	THE SHEDD COMPANY	301 E 117TH ST	IL TANKS	TP		
Q120 / 6		301 E 117TH ST	IL CHICAGO ENV	TP		
Q121 / 6	THE SHEDD COMPANY	301 E 117TH ST	IL TANKS	TP		
Q122 / 6	THE SHEDD COMPANY	301 E 117TH ST	IL TANKS	TP		
123 / 6	ILLINOIS CENTRAL TRA	119TH ST	IL BOL	TP		
R124 / 9	ELMER LARSON, INC.	12401 SOUTH COTTAGE	FINDS, ECHO	TP		
R125 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL AIRS, IL TIER 2	TP		
R126 / 9	K-FIVE CONSTRUCTION	12401 COTTAGE GROVE	IL AIRS	TP		
R127 / 9	ELMER LARSON INC	12401 S COTTAGE GROV	IL BOL	TP		
R128 / 9		12401 S COTTAGE GROV	IL CHICAGO ENV	TP		
R129 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL BOL	TP		
R130 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL BOL	TP		
R131 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL BOL	TP		
R132 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL BOL	TP		
R133 / 9	K-FIVE CONSTRUCTION	12401 SOUTH COTTAGE	ICIS, US AIRS, FINDS	TP		
J134 / 6	CLEARWATER TECHNOLOG	11426 S PERRY AVE	RCRA NonGen / NLR, FINDS, ECHO	59	0.011	NNE
J135 / 6	SRM MOTORS	11439 S PERRY AVE	EDR Hist Auto	59	0.011	NNE
M136 / 6	RAY S CLEANERS	11501 S MICHIGAN A	EDR Hist Cleaner	70	0.013	East
137 / 9	CHICAGO MSD #3		IL SWF/LF	73	0.014	WSW
S138 / 6	BETTY BRIGHT CLEANER	11533 S MICHIGAN AVE	EDR Hist Cleaner	75	0.014	East
S139 / 6	IRVINGS STANDARD	11533 S MICHIGAN AVE	EDR Hist Auto	75	0.014	East
140 / 5		400 W 108TH ST	IL AST, IL CHICAGO ENV	75	0.014	West
S141 / 6	WAH LOUIS	11535 S MICH AV	EDR Hist Cleaner	76	0.014	East
P142 / 6	0707 CLARK SER STATI	11555 S MICHIGAN AVE	IL UST	79	0.015	East
P143 / 6	BOBS SUPER 100	11555 S MICHIGAN	EDR Hist Auto	79	0.015	East
P144 / 6	CLARK OIL & REFINING	11555 SOUTH MICHIGAN	IL LUST	79	0.015	East
I145 / 5	MARQUETTE BANK	135-39 WEST 114TH ST	IL LUST	81	0.015	NNE
146 / 10	LAND & LAKES TRANSFE	1258-1300 E 130TH ST	RCRA NonGen / NLR, FINDS, ECHO	95	0.018	WSW
147 / 5	HARRIS TRANSMISSION	410 W 109TH ST	EDR Hist Auto	143	0.027	WSW
T148 / 6	STUART INDUSTRIAL CO	11740 S FRONT ST	IL UST	159	0.030	NE
T149 / 6	STUART INDUSTRIAL CO	11740 SOUTH FRONT ST	WI MANIFEST	159	0.030	NE
T150 / 6	STUART CHEMICAL & PA	11740 S FRONT ST	RCRA-SQG, FINDS, ECHO, IL AIRS, IL BOL	159	0.030	NE
N151 / 6	ABANDONED GAS STATIO	2 WEST 115TH STREET	IL LUST, IL UST	160	0.030	NW
N152 / 6	COX DONNA (ABANDONED	2 W 115TH ST	RCRA NonGen / NLR, FINDS, ECHO	160	0.030	NW
153 / 9	PENN CENTRAL CORP.	810 EAST 124TH STREE	IL SSU	170	0.032	WSW
154 / 9	COTTAGE GROVE DUMP		IL SWF/LF	173	0.033	ENE
155 / 5	FIZER S FENCING & SE	330 W 111TH ST	EDR Hist Cleaner	180	0.034	East
U156 / 5	CHICAGO DEPT OF ENV	11100 S STEWART AVE	RCRA NonGen / NLR	191	0.036	West

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
157 / 10	CALUMET NU EARTH (13		IL NIPC	192	0.036	ENE
158 / 5	SHELDON HEIGHTS SERV	332 W 113TH ST	EDR Hist Auto	199	0.038	WSW
M159 / 6	TADROS, MUSA	11442 SOUTH MICHIGAN	IL LUST	203	0.038	North
M160 / 6	GOODYEAR AUTO SERVIC	11442 S MICHIGAN AVE	RCRA NonGen / NLR, FINDS, ECHO	203	0.038	North
M161 / 6	GOODYEAR TIRE & RUBB	11442 S MICHIGAN AVE	IL UST	203	0.038	North
V162 / 6	ABANDONED SERVICE ST	11500 S PERRY	IL UST	204	0.039	SSW
V163 / 6	11500 S PERRY	11500 S PERRY	US BROWNFIELDS, FINDS	204	0.039	SSW
V164 / 6	CHICAGO, CITY OF	11500 SOUTH PERRY	IL LUST	204	0.039	SSW
V165 / 6	SATRIANO TEXACO SERV	11500 S PERRY AVE	EDR Hist Auto	204	0.039	SSW
166 / 9	ALLWASTE TANK CLEANI	11901 S COTTAGE GROV	RCRA NonGen / NLR, FINDS, ECHO	214	0.041	NE
T167 / 6	AMERICAN CLYBOURN FI	11730 S. FRONT AVE.	RCRA-VSQG, FINDS, ECHO	218	0.041	NE
W168 / 3	CHICAGO, CITY OF	351 WEST 104TH ST.	IL LUST	220	0.042	East
W169 / 3	ROSELAND PUMPING STA	351 W 104TH ST	IL UST	220	0.042	East
V170 / 6	WELKES SINCLAIR STAT	11515 S PERRY	EDR Hist Auto	228	0.043	SSW
171 / 6	HAHN STANLEY	11624 S MICH AV	EDR Hist Auto	263	0.050	South
X172 / 2	ATLANTIC RICHFIELD C	1 E 95TH ST	IL UST	265	0.050	NE
X173 / 2	ARCO AM-PM 12	1 E 95TH ST	EDR Hist Auto	265	0.050	NE
V174 / 6	PETRI KONSTANTIN	113 W 115TH	EDR Hist Cleaner	265	0.050	SSW
175 / 5	VACANT BUILDING	133-37 W 114TH ST TH	IL UST	266	0.050	NNE
Y176 / 6	GORGODIAN SAMUEL	11453 S MICH AV	EDR Hist Cleaner	268	0.051	North
Z177 / 6	KHALIL, HANEY	11600 SOUTH MICHIGAN	IL LUST, IL SPILLS, IL CHICAGO ENV	281	0.053	SSE
Z178 / 6	MICHIGAN CITGO	11600 S. MICHIGAN AV	IL UST	281	0.053	SSE
Z179 / 6	MARTIN OIL SERVICE I	11600 S MICHIGAN	EDR Hist Auto	281	0.053	SSE
AA180 / 10	CALUMET NU-EARTH DIS	NORTH 130TH ST & DOT	SEMS-ARCHIVE	302	0.057	ENE
181 / 3	COMEH JONATHAN	337 W 102ND PL	EDR Hist Cleaner	329	0.062	East
AA182 / 10	CHGO METRO SANITARY		IL NIPC	330	0.062	ENE
AA183 / 10	CHGO METYRO SANITARY		IL NIPC	330	0.062	ENE
AA184 / 10	CHGO METRO SANITARY		IL NIPC	330	0.062	ENE
Z185 / 6	CLOTHES MATE DRY CLE	11625 S MICHIGAN AVE	EDR Hist Cleaner	339	0.064	SSE
X186 / 2	SIMS ARCO	4 E 95TH ST	EDR Hist Auto	351	0.066	NNE
X187 / 2	SHELL OIL CO.	4 EAST 95TH ST.	IL LUST	351	0.066	NNE
X188 / 2	MOBIL GAS & FOOD MAR	4 EAST 95TH STREET	IL UST	351	0.066	NNE
U189 / 5	PENTICOSTAL TEMPLE	419 WEST 111TH ST.	IL LUST	352	0.067	West
U190 / 5	ROSELAND SERVICE STA	419 W 111TH	EDR Hist Auto	352	0.067	West
U191 / 5	PENTECOSTAL TEMPLE C	415 THRU 419 W 111TH	RCRA NonGen / NLR, FINDS, ECHO	352	0.067	West
AB192 / 6	DUMAC GARAGE	131 E 115TH	EDR Hist Auto	353	0.067	East
AC193 / 2	WHALEN STANDARD SERV	36 W 95TH ST	EDR Hist Auto	367	0.070	NNW
AC194 / 2	AMOCO 15459	36 W 95TH AND LAFAYE	RCRA NonGen / NLR, FINDS, ECHO	367	0.070	NNW
AC195 / 2	AMOCO SERVICE STATIO	36 WEST 95TH ST.	IL LUST	367	0.070	NNW

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.)		DIRECTION
AC196 / 2	SS#15459 FAC#10443	36 W. 95TH ST.	IL UST	367	0.070	NNW
AB197 / 6	CALUMET COACH CO	135 E 115TH ST	RCRA NonGen / NLR, FINDS, ECHO	387	0.073	East
198 / 10	CHICAGO, CITY OF	1100 E 130TH PL	RCRA-SQG	418	0.079	WSW
Y199 / 6	ROSELAND GASOLINE ST	11420 S MICH AV	EDR Hist Auto	418	0.079	North
200 / 3	CHICAGO FIRE DEPARTM	330 WEST 104TH STREE	IL UST	420	0.080	East
201 / 5	VACANT BULDING	11321 S WENTWORTH AV	IL UST	420	0.080	NNE
AD202 / 9	ALL AMERICAN RECYCLI	11900 COTTAGE GROVE	RCRA NonGen / NLR, ICIS, US AIRS, FINDS	421	0.080	SW
AD203 / 9	KEYWELL CORP	11900 S COTTAGE GROV	NY MANIFEST	421	0.080	SW
AD204 / 9	S G KEYWELL CO	11900 S COTTAGE GROV	IL UST	421	0.080	SW
AD205 / 9	KEYWELL CO.	11900 SOUTH COTTAGE	IL LUST, IL SPILLS	421	0.080	SW
206 / 9	DOLTON MUNICIPAL		IL NIPC	427	0.081	ENE
AE207 / 6	TONYS AUTOBODY	157 E KENNSINGTON	RCRA-VSQG, FINDS, ECHO	458	0.087	NE
208 / 5	D & D SERVICE STATIO	202 W 115TH	EDR Hist Auto	500	0.095	SSW
209 / 9	K FIVE CONSTRUCTION	12500 COTTAGE GROVE	RCRA NonGen / NLR, FINDS, ECHO	514	0.097	ENE
AF210 / 5	REITER BROS	433 W 111TH ST	EDR Hist Auto	516	0.098	West
AG211 / 6	UNLOADING UNLIMITED	11861 S COTTAGE GROV	RCRA NonGen / NLR	520	0.098	NE
AG212 / 6	SMITH SYSTEMS CHICAG	11861 S COTTAGE GROV	RCRA NonGen / NLR	520	0.098	NE
AG213 / 6	VACUUM INDUSTRIAL PO	11861 S COTTAGE GROV	RCRA NonGen / NLR, FINDS, ECHO	520	0.098	NE
AG214 / 6	SCHNEIDER TANK LINES	11861 S COTTAGE GROV	RCRA NonGen / NLR	520	0.098	NE
AG215 / 6	CLEAN HARBORS ENV SE	11861 COTTAGE GROVE-	RCRA-SQG, FINDS, ECHO	520	0.098	NE
AG216 / 6	BULKOA INC	11861 S COTTAGE GROV	IL UST	520	0.098	NE
AG217 / 6	BULKOA INC	11861 S COTTAGE GROV	IL LUST, RCRA NonGen / NLR	520	0.098	NE
218 / 6	STUARTS CHEMICAL & P	11740 FRONT ST.	IL LUST	540	0.102	NE
219 / 9	COTTAGE GROVE LANDFI		IL NIPC	553	0.105	ENE
AH220 / 2	ABBOTT	45 EAST 95TH ST.	IL LUST	567	0.107	ENE
221 / 9	UNITED STATES SCRAP		IL NIPC	583	0.110	WSW
222 / 3	CHICAGO, CITY OF-ROS	351 W 104TH ST	RCRA NonGen / NLR, US AIRS, IL AIRS, IL ...	586	0.111	East
223 / 5	WENTWORTH SERVICE ST	200 W 113TH	EDR Hist Auto	592	0.112	NE
AH224 / 2	ABBOTT PARK FIELDHOU	49 E 95TH ST	IL UST, IL BOL, IL CHICAGO ENV	593	0.112	ENE
AH225 / 2	ABBOTT	49 EAST 95TH ST.	IL LUST	593	0.112	ENE
AE226 / 6	KENSINGTON SERV STAT	162 E KENSINGTON	IL LUST, RCRA NonGen / NLR, FINDS, ECHO	608	0.115	NE
AE227 / 6	LOU S SERVICE STA	162 E KENSINGTON A	EDR Hist Auto	608	0.115	NE
AE228 / 6	KENSINGTON SERVICE S	162 E KENSINGTON	IL UST	608	0.115	NE
229 / 6	DEPENDENT SERVICE ST	11724 S MICH AV	EDR Hist Auto	610	0.116	South
230 / 5	ROSELAND AUTO SALES	271 E 110TH ST	RCRA-VSQG, FINDS, ECHO	610	0.116	East
AF231 / 5	MORNING CLEANERS R	445 W 111TH	EDR Hist Cleaner	638	0.121	West
232 / 6	YONG CHARLEY	214 KENSINGTON AV	EDR Hist Cleaner	644	0.122	NE
AI233 / 6	ILLINOIS BELL	65 W 113TH PL	RCRA NonGen / NLR, FINDS, ECHO	665	0.126	NNE
AI234 / 6	ILLINOIS BELL TELEPH	65 WEST 113TH PL.	IL LUST	665	0.126	NNE

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
AI235 / 6	PULLMAN CO	65 WEST 113TH PLACE	IL UST, IL TIER 2	665	0.126	NNE
236 / 6	3 W 114TH ST	3 W 114TH ST	US BROWNFIELDS, FINDS	681	0.129	North
237 / 9	METROPOL SANT DIST G		IL IMPDMENT	702	0.133	WSW
238 / 6	CITY OF CHICAGO	11700 S COTTAGE GROV	RCRA NonGen / NLR, FINDS, ECHO	704	0.133	NE
239 / 6	SWIFT TIRES	11432 S INDIANA	RCRA NonGen / NLR, FINDS, ECHO	754	0.143	ENE
AJ240 / 2	CITGO SUPER WASH & W	9417 S. STATE STREET	IL UST	763	0.145	NNE
AJ241 / 2	QUALITY CAR WASH	9417 SOUTH STATE ST.	IL LUST	763	0.145	NNE
AK242 / 5	34 WARD OFFICE/CITY	507 WEST 111TH STREE	IL LUST, IL UST	876	0.166	West
243 / 6	CITY OF CHICAGO	11700 S COTTAGE GROV	RCRA NonGen / NLR	892	0.169	NE
244 / 9	LAKE CALUMET SMELTIN	11901 S. CHAMPLAIN A	SEMS, ICIS, LEAD SMELTERS, FINDS, ECHO	946	0.179	NE
245 / 6	GONNELLA BAKING CO	318 E KENSINGTON	RCRA NonGen / NLR	956	0.181	NE
246 / 6	SONGHAI LEARNING INS	11725 S PERRY AVE	RCRA-VSQG	977	0.185	SW
247 / 9	U S SCRAP CORP		IL IMPDMENT	989	0.187	SW
AL248 / 5	UNIVERSITY OF IL AT	711 WEST 13TH ST.	IL LUST	997	0.189	WSW
AL249 / 5	UIS PARKING	711 W. 13TH STREET T	IL UST	997	0.189	WSW
AK250 / 5	SEW CLEAN	519 W 111TH ST	RCRA NonGen / NLR, FINDS, ECHO	998	0.189	West
AM251 / 9	BULKMATIC TRANSPORT	12000 S DOTY AVE	RCRA NonGen / NLR, FINDS, ECHO	1001	0.190	ENE
AM252 / 9	AIRCO INDUSTRIAL GAS	12000S DOTY AVE	RCRA NonGen / NLR	1001	0.190	ENE
253 / 3	NEW LANGSTON HUGHES	10320 SOUTH WENTWORT	IL ENG CONTROLS, IL INST CONTROL, IL SRP	1002	0.190	East
AN254 / 9	INLAND METALS REFINI		IL SWF/LF	1056	0.200	NE
AO255 / 6	CATHOLIC CONVENT	11515 S. PRAIRIE AVE	IL UST	1080	0.205	NE
AO256 / 6	METHODIST YOUTH SERV	11515 SOUTH PRAIRIE	IL LUST	1080	0.205	NE
AN257 / 9	INLAND METALS REFINI		IL NIPC	1087	0.206	ENE
258 / 3	VACANT RESIDENTIAL B	226-248 W 107TH PLAC	IL UST	1091	0.207	East
259 / 2	95TH/MICHIGAN AVE		IL NIPC	1096	0.208	East
260 / 5	BRENAN SCHOOL	11411 EGGLESTON	RCRA-SQG	1107	0.210	SW
AP261 / 6	INLAND METALS REFINI	651 E 119TH ST	IL UST, IL BOL	1117	0.212	NE
AP262 / 6	INLAND METAL REFININ	651 EAST 119TH STREE	SEMS-ARCHIVE, CORRACTS, IL SSU, RCRA Non...	1117	0.212	NE
AP263 / 6	INLAND METAL REFININ	651 E 119TH	RCRA NonGen / NLR	1117	0.212	NE
264 / 4	HARLAN COMMUNITY ACA	9652 S MICHIGAN AVE	RCRA-VSQG	1162	0.220	ESE
265 / 4	CHICAGO TRANSIT AUTH	9800 S STATE ST	RCRA-VSQG, ICIS, FINDS, ECHO	1165	0.221	SE
266 / 3	LANGSTON HUGHES SCHO	226 W 104TH ST	RCRA-VSQG, FINDS, ECHO	1211	0.229	East
AQ267 / 3	J AND A GAS MART, IN	210 W. 103RD STREET	IL UST	1245	0.236	East
268 / 10	CONTINENTAL GRAIN CO	127TH & DOTY AVE	IL UST	1246	0.236	ENE
269 / 3	FERNWOOD PLAYGROUND	10436 S WALLACE	IL UST	1246	0.236	West
AR270 / 5	STAR CLEANERS	149 W 111TH ST	RCRA-SQG	1250	0.237	East
271 / 10	CHICAGO DEPT OF ENVI	12600 S DOTY AVE	RCRA NonGen / NLR	1259	0.238	ENE
AQ272 / 3	MCCORMICK PLACE VACA	201-217 E. CERMAK RD	IL UST	1263	0.239	East
AS273 / 6	U.S. SCRAP	391 EAST KENSINGTON	IL SSU	1281	0.243	NE

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.)		DIRECTION
AS274 / 6	U S DRUM DISPOSAL CO	391 E KENSINGTON AVE	RCRA NonGen / NLR, FINDS, ECHO	1281	0.243	NE
AS275 / 6	US SCRAP	391 E KENSINGTON	IL SWF/LF, FINDS, IL BOL	1281	0.243	NE
AQ276 / 3	F & R QUALITY CLEANE	201 W. 103RD ST.	RCRA NonGen / NLR, FINDS, ECHO	1289	0.244	East
AQ277 / 3	ONE HOUR MARTENIZING	201 WEST 103RD ST.	IL LUST	1289	0.244	East
AR278 / 5	LAKEFRONT SUPPORTING	11023-11045 S WENTWO	IL ENG CONTROLS, IL INST CONTROL, IL SRP...	1309	0.248	East
279 / 6	HUFF & HUFF INC.	651 EAST 179TH ST.	IL LUST	1333	0.252	NE
280 / 9	PSC CONTAINER SERVIC	803 EAST 120TH ST.	IL LUST	1443	0.273	ENE
281 / 10	ALTGELD LIBRARY	955 EAST 131 STREET	IL SRP	1462	0.277	WSW
282 / 12	CHICAGO HOUSING AUTH	940 EAST 132ND STREE	IL LUST	1672	0.317	WSW
283 / 6	GREATER CANAAN BAPTI	38 WEST 119TH STREET	IL LUST	1680	0.318	SSW
284 / 6	FRIESON, PHYLLIS	342 EAST 115TH STREE	IL LUST	1682	0.319	NE
285 / 5	ROSELAND MEDICAL CEN	100-136 WEST 111TH S	IL LUST	1716	0.325	East
286 / 9	CHICAGO, CITY OF	11900 SOUTH STATE ST	IL LUST	1725	0.327	South
287 / 1	93RD/WENTWORTH AVE		IL NIPC	1731	0.328	NNW
288 / 5	COMED 119TH STREET D	739 WEST 110TH STREE	IL SRP	1903	0.360	West
AT289 / 2	MEDLEY'S MOVING & ST	251 EAST 95TH ST.-B	IL LUST	1938	0.367	East
AT290 / 2	MEDLEY'S MOVING & ST	251 EAST 95TH ST.	IL LUST	1938	0.367	East
AU291 / 6	SHERWIN WILLIAMS CO	11541 S CHAMPLAIN AV	CORRACTS, RCRA-TSDF, RCRA-LQG, US INST C..	1989	0.377	NE
AU292 / 6	SHERWIN WILLIAMS CO.	11541 SOUTH CHAMPLAI	IL LUST	1989	0.377	NE
AU293 / 6	SHERWIN WILLIAMS COM	11541 SOUTH CHAMPLAI	SEMS, ECHO	1989	0.377	NE
294 / 3	HARDY CORP	711 W 103RD ST	IL LUST, RCRA NonGen / NLR, FINDS, ECHO	2036	0.386	West
295 / 10	PALUMBO EXCAVATING		IL NIPC	2105	0.399	ENE
296 / 5	SHERWIN WILLIAMS PAI	549 115TH STREET	IL LUST, IL SPILLS, IL ASBESTOS	2159	0.409	SW
297 / 6	SHERWIN-WILLIAMS COM	603 EAST KENSINGTON	IL ENG CONTROLS, IL INST CONTROL, IL SRP	2220	0.420	NE
298 / 6	CHICAGO FAMILY HEALT	556-580 EAST 115TH S	IL INST CONTROL, IL SRP	2426	0.459	NE
AV299 / 6	ROSELAND MARATHON	2 WEST 111TH STREET	IL LUST, IL UST	2432	0.461	NNE
300 / 3	SHELL OIL CO.	10655 SOUTH HALSTED	IL LUST, IL SPILLS, IL BOL	2451	0.464	West
301 / 3	HESTER, FRANNY	10101-03 SOUTH HALST	IL LUST	2458	0.466	West
AW302 / 3	MOBIL OIL STATION #0	9901 SOUTH HALSTED	IL LUST	2461	0.466	West
AX303 / 4	LAKESIDE BANK TRUST	10007 SOUTH MICHIGAN	IL LUST, IL TANKS, IL SPILLS	2470	0.468	SE
AX304 / 4	TOWN & COUNTRY GAS M	10007 SOUTH MICHIGAN	IL LUST	2470	0.468	SE
AV305 / 6	YMCA	4 EAST 111TH ST.	IL LUST	2494	0.472	NNE
306 / 3	MUSTAFA, KHADIM	10301 SOUTH HALSTED	IL LUST	2532	0.480	West
AW307 / 3	AMOCO OIL CO. #15525	99TH & HALSTED	IL LUST	2540	0.481	West
308 / 6	114TH/COTTAGE GROVE		IL NIPC	2541	0.481	NE
309 / 6	SHERWIN WILLIAMS PAI	115TH ST. & KINSINGT	IL LUST	2579	0.488	NE
310 / 6	109TH PLACE TEAR GAS	SG WEST 109TH PLACE	SEMS, PRP	2582	0.489	East
311 / 3	EQUILON ENTERPRISES	9811 HALSTED	IL LUST	2603	0.493	WNW
312 / 6	GEORGE O'DAY'S SHOP	526 EAST 114TH PL.	IL LUST	2605	0.493	NE

MAPPED SITES SUMMARY

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
313 / 3	BETTY BRITE CLEANERS	10630 SOUTH HALSTED	IL ENG CONTROLS, IL INST CONTROL, IL SRP	2633	0.499	West
AY314 / 6	CHICAGO SPECIALTIES,	735 EAST 115TH STREE	IL SSU, IL ENG CONTROLS, IL INST CONTROL...	3348	0.634	NE
AY315 / 6	CHICAGO SPECIALTIES	735 E 115TH ST	CORRACTS, IL SPILLS, RCRA NonGen / NLR, ...	3348	0.634	NE
316 / 6	LIQUID DYNAMICS INC	655 E 114TH ST	SEMS-ARCHIVE, CORRACTS, RCRA NonGen / NL..	3559	0.674	NE
317 / 10	CALUMET HARBOR YARDS		FUDS	5129	0.971	ENE
318 / 6	SHERWIN WILLIAMS CO	10909 S COTTAGE GROV	CORRACTS, RCRA NonGen / NLR	5147	0.975	NE
319 / 6	PEOPLES GAS AND LIGH	700-750 EAST 111TH S	EDR MGP	5190	0.983	NE

Key Map - 06062945.9r

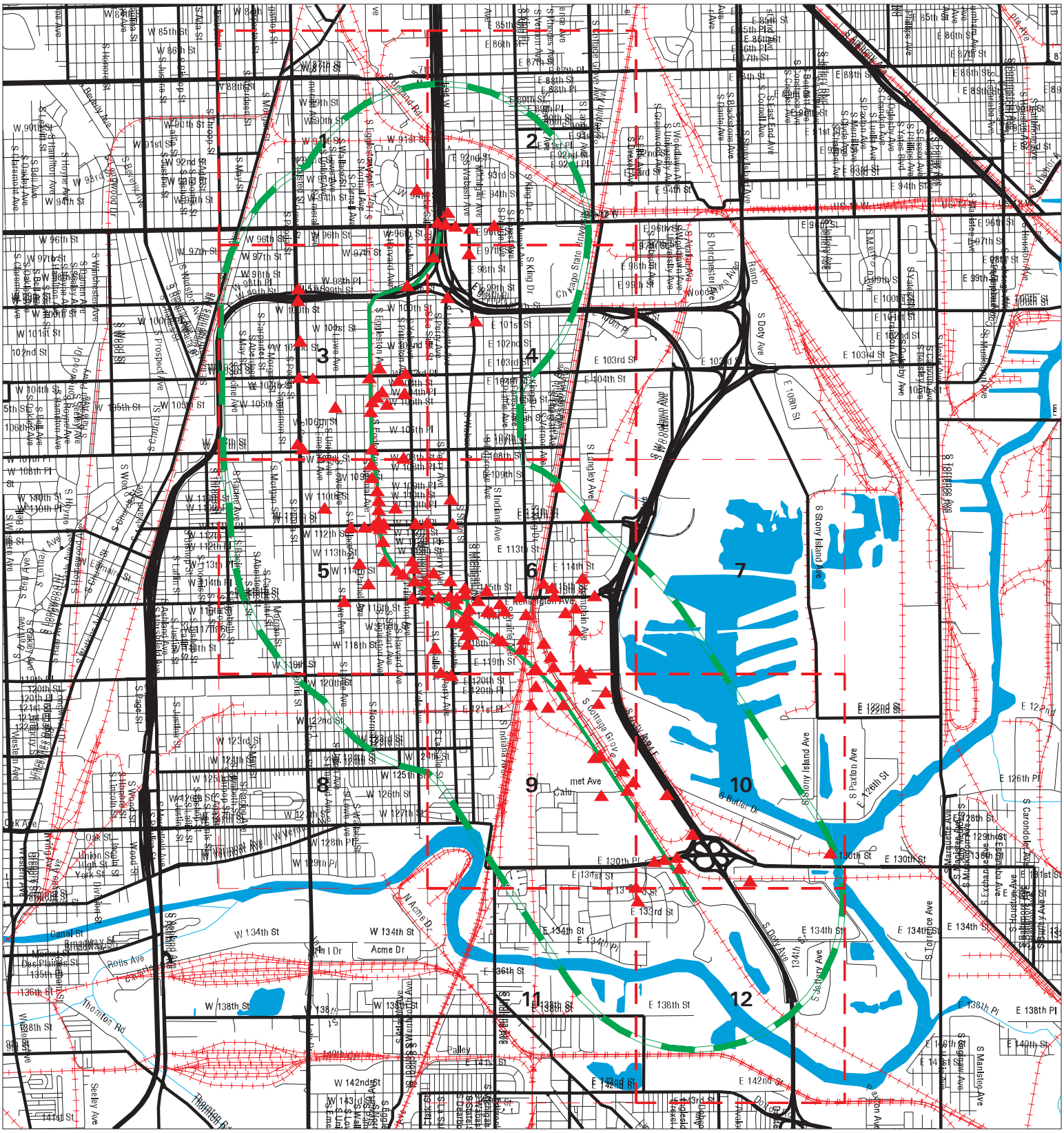

- Sites
- Target Property
- Search Buffer
- Focus Map - No Sites
- Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA

0 1/2 1 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20 1:54 PM

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	1	2	NR	NR	3
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		1	1	0	NR	NR	2
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	1	1	3	NR	5
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	1	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		3	2	NR	NR	NR	5
RCRA-VSQG	0.250	3	3	4	NR	NR	NR	10
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	1	NR	NR	1
Federal ERNS list								
ERNS	TP	2	NR	NR	NR	NR	NR	2
State- and tribal - equivalent CERCLIS								
IL SSU	1.000		1	2	0	1	NR	4
State and tribal landfill and/or solid waste disposal site lists								
IL CCDD	0.500		0	0	0	NR	NR	0
IL SWF/LF	0.500		2	2	0	NR	NR	4
IL LF SPECIAL WASTE	0.500		0	0	0	NR	NR	0
IL NIPC	0.500		7	2	3	NR	NR	12
State and tribal leaking storage tank lists								
IL LUST	0.500	3	16	6	24	NR	NR	49

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
IL LUST TRUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
IL UST	0.250	4	17	11	NR	NR	NR	32
IL AST	0.250	1	1	0	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
IL ENG CONTROLS	0.500		0	2	2	NR	NR	4
IL INST CONTROL	0.500		0	2	3	NR	NR	5
State and tribal voluntary cleanup sites								
IL SRP	0.500		0	2	5	NR	NR	7
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
IL BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		1	1	0	NR	NR	2
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
IL CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
IL TANKS	TP	24	NR	NR	NR	NR	NR	24
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
IL SPILLS	TP	6	NR	NR	NR	NR	NR	6
IL SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	2	18	14	NR	NR	NR	34

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	1	NR	1
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP	1	NR	NR	NR	NR	NR	1
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP	1	NR	NR	NR	NR	NR	1
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	19	NR	NR	NR	NR	NR	19
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP	7	NR	NR	NR	NR	NR	7
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
IL AIRS	TP	5	NR	NR	NR	NR	NR	5
IL ASBESTOS	TP		NR	NR	NR	NR	NR	0
IL BOL	TP	16	NR	NR	NR	NR	NR	16
IL CHICAGO ENV	TP	55	NR	NR	NR	NR	NR	55
IL COAL ASH	0.500		0	0	0	NR	NR	0
IL DRYCLEANERS	0.250		0	0	NR	NR	NR	0
IL Financial Assurance	TP		NR	NR	NR	NR	NR	0
CA HAZNET	TP	1	NR	NR	NR	NR	NR	1
IL HWAR	TP		NR	NR	NR	NR	NR	0
IL IMPDMENT	0.500		0	2	0	NR	NR	2
NY MANIFEST	0.250		1	0	NR	NR	NR	1
WI MANIFEST	0.250		1	0	NR	NR	NR	1
IL NPDES	TP		NR	NR	NR	NR	NR	0
IL PIMW	0.250		0	0	NR	NR	NR	0
IL TIER 2	TP	1	NR	NR	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
IL UIC	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	1	NR	1
EDR Hist Auto	0.125	2	20	NR	NR	NR	NR	22
EDR Hist Cleaner	0.125	4	10	NR	NR	NR	NR	14
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
IL RGA HWS	TP		NR	NR	NR	NR	NR	0
IL RGA LF	TP		NR	NR	NR	NR	NR	0
IL RGA LUST	TP	4	NR	NR	NR	NR	NR	4
- Totals --		161	102	55	42	6	0	366

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Focus Map - 1 - 06062945.9r

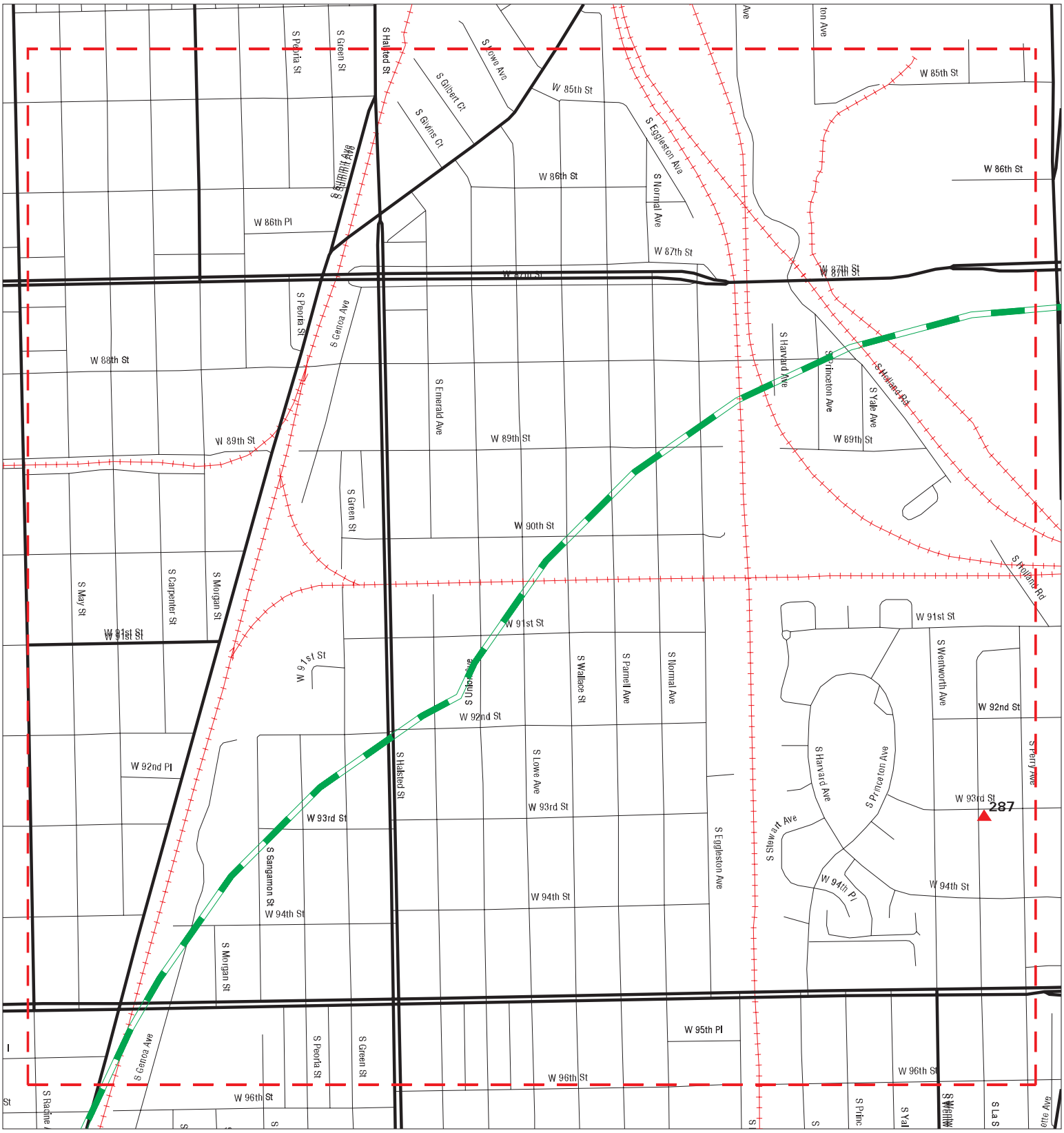

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 1

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
287 / 1	93RD/WENTWORTH AVE		IL NIPC	1731 0.328 NNW

Focus Map - 2 - 06062945.9r

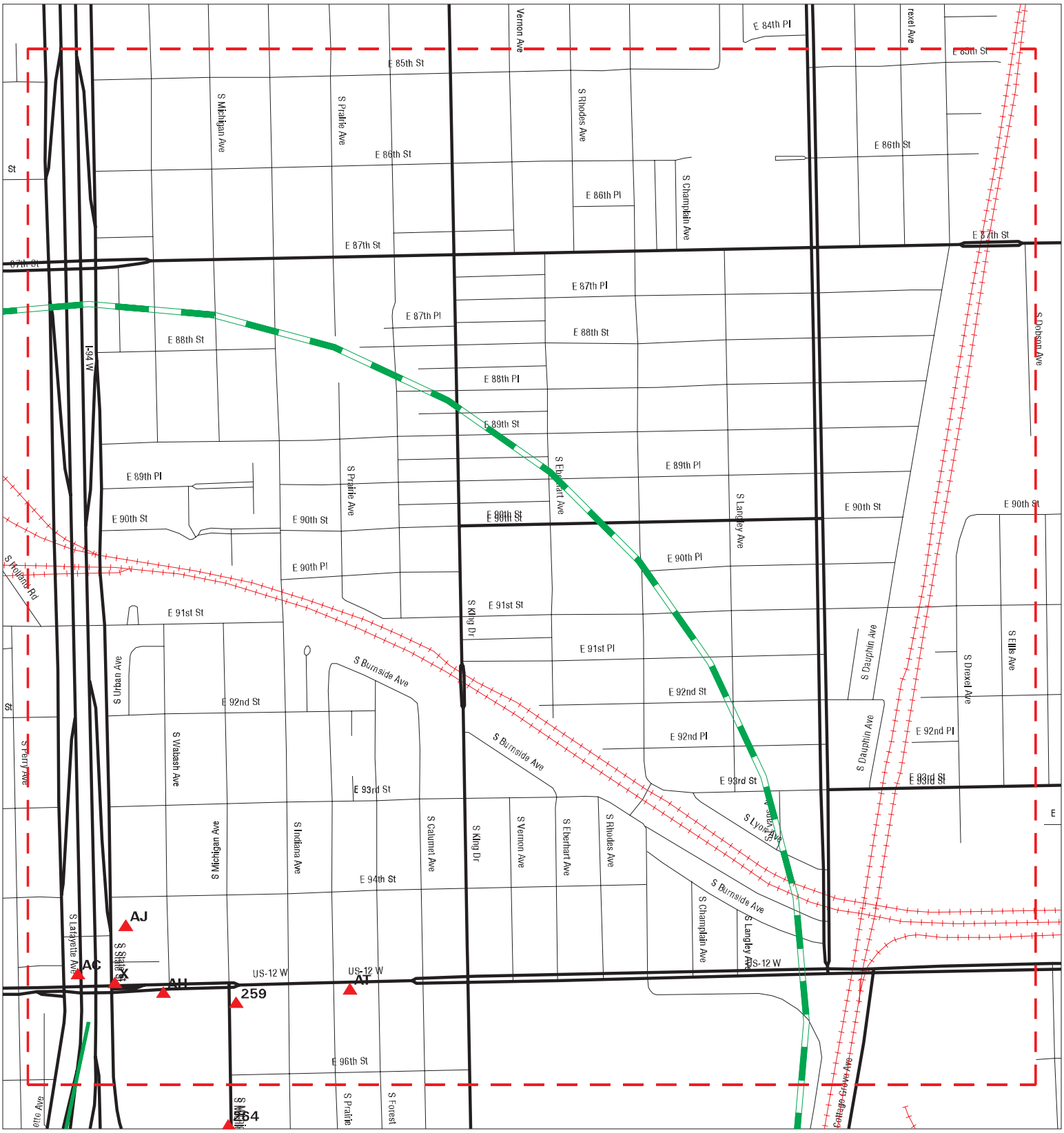

Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int I Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 2

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
X172 / 2	ATLANTIC RICHFIELD C	1 E 95TH ST	IL UST	265	0.050	NE
X173 / 2	ARCO AM-PM 12	1 E 95TH ST	EDR Hist Auto	265	0.050	NE
X186 / 2	SIMS ARCO	4 E 95TH ST	EDR Hist Auto	351	0.066	NNE
X187 / 2	SHELL OIL CO.	4 EAST 95TH ST.	IL LUST	351	0.066	NNE
X188 / 2	MOBIL GAS & FOOD MAR	4 EAST 95TH STREET	IL UST	351	0.066	NNE
AC193 / 2	WHALEN STANDARD SERV	36 W 95TH ST	EDR Hist Auto	367	0.070	NNW
AC194 / 2	AMOCO 15459	36 W 95TH AND LAFAYE	RCRA NonGen / NLR, FINDS, ECHO	367	0.070	NNW
AC195 / 2	AMOCO SERVICE STATIO	36 WEST 95TH ST.	IL LUST	367	0.070	NNW
AC196 / 2	SS#15459 FAC#10443	36 W. 95TH ST.	IL UST	367	0.070	NNW
AH220 / 2	ABBOTT	45 EAST 95TH ST.	IL LUST	567	0.107	ENE
AH224 / 2	ABBOTT PARK FIELDHOU	49 E 95TH ST	IL UST, IL BOL, IL CHICAGO ENV	593	0.112	ENE
AH225 / 2	ABBOTT	49 EAST 95TH ST.	IL LUST	593	0.112	ENE
AJ240 / 2	CITGO SUPER WASH & W	9417 S. STATE STREET	IL UST	763	0.145	NNE
AJ241 / 2	QUALITY CAR WASH	9417 SOUTH STATE ST.	IL LUST	763	0.145	NNE
259 / 2	95TH/MICHIGAN AVE		IL NIPC	1096	0.208	East
AT289 / 2	MEDLEY'S MOVING & ST	251 EAST 95TH ST.-B	IL LUST	1938	0.367	East
AT290 / 2	MEDLEY'S MOVING & ST	251 EAST 95TH ST.	IL LUST	1938	0.367	East

Focus Map - 3 - 06062945.9r

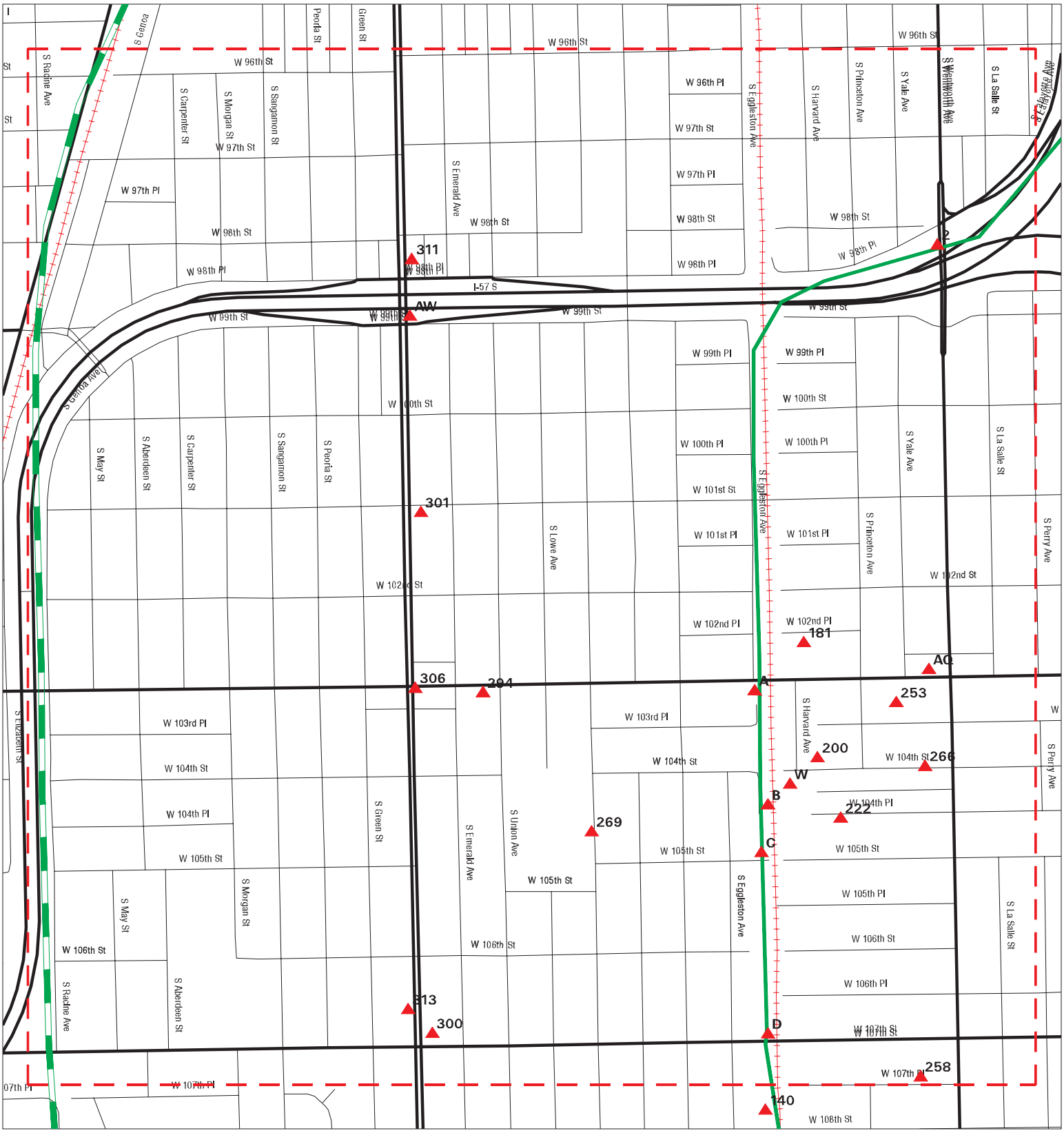

Sites	Focus Map - Sites
Target Property	National Priority List Sites
Search Buffer	Dept. Defense Sites
Focus Map - No Sites	Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int I Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 3

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
2 / 3	SOONG LEE	9832 WENWORTH AV	EDR Hist Cleaner	TP
A3 / 3		405 W 103RD ST	IL CHICAGO ENV	TP
A4 / 3		403 W 103RD ST	IL CHICAGO ENV	TP
B5 / 3	O CONNELL ELECTRIC	405 W 104TH ST	FINDS	TP
B6 / 3	O'CONNELL ELECTRIC	405 W 104TH ST	IL BOL	TP
B7 / 3		400 W 104TH ST	IL CHICAGO ENV	TP
B8 / 3	B VAN DIR MEER & SON	400 W 104TH ST	IL TANKS	TP
C9 / 3		400 W 105TH ST	IL CHICAGO ENV	TP
C10 / 3		410 W 105TH ST	IL CHICAGO ENV	TP
C11 / 3	410 W 105TH	410 W 105TH	FINDS	TP
C12 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C13 / 3	ILLINOIS BELL DBA AT	413 W 105TH ST	IL BOL	TP
C14 / 3	ILLINOIS BELL DBA AT	413 W 105TH ST	RCRA NonGen / NLR, FINDS, ECHO	TP
C15 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C16 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C17 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C18 / 3	ILLINOIS BELL DBA AT	413 W 105TH ST	IL BOL, IL CHICAGO ENV	TP
C19 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C20 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C21 / 3	ILLINOIS BELL TELEPH	413 W 105TH ST	IL TANKS	TP
C22 / 3	FRED SYHORA	401 W 105TH ST	IL TANKS	TP
C23 / 3	ILLINOIS BELL TELEPH	413 WEST 105TH ST.	IL RGA LUST	TP
C24 / 3	IL BELL TELEPHONE CO	413 W 105TH	IL UST	TP
C25 / 3	ILLINOIS BELL TELEPH	413 WEST 105TH STREE	IL RGA LUST	TP
C26 / 3	FRED SYHORA	401 W 105TH ST	IL TANKS	TP
C27 / 3		401 W 105TH ST	IL CHICAGO ENV	TP
C28 / 3	ILLINOIS BELL TELEPH	413 WEST 105TH STREE	IL LUST, IL SPILLS	TP
C29 / 3		413 WEST 105TH STREE	IL SPILLS	TP
C30 / 3	JCK AUTO DEPOT INC	411 W 105TH ST	IL BOL	TP
C31 / 3	JCK AUTO DEPOT INC	411 W 105TH ST	FINDS	TP
D32 / 3		400 W 107TH ST	IL CHICAGO ENV	TP
D33 / 3	MIDLAND CHEMICAL COR	400 W 107TH ST	IL TANKS	TP
D34 / 3	MIDLAND CHEMICAL COR	400 W 107TH ST	IL TANKS	TP
D35 / 3		411 W 107TH ST	IL CHICAGO ENV	TP
D36 / 3		407 W 107TH ST	IL CHICAGO ENV	TP
D37 / 3		401 W 107TH ST	IL CHICAGO ENV	TP
D38 / 3	AT&T MOBILITY- TANK#	405 WEST 107TH STREE	IL AST	TP
D39 / 3		405 W 107TH ST	IL CHICAGO ENV	TP
W168 / 3	CHICAGO, CITY OF	351 WEST 104TH ST.	IL LUST	220 0.042 East

MAPPED SITES SUMMARY - FOCUS MAP 3

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
W169 / 3	ROSELAND PUMPING STA	351 W 104TH ST	IL UST	220	0.042	East
181 / 3	COMEH JONATHAN	337 W 102ND PL	EDR Hist Cleaner	329	0.062	East
200 / 3	CHICAGO FIRE DEPARTM	330 WEST 104TH STREE	IL UST	420	0.080	East
222 / 3	CHICAGO, CITY OF-ROS	351 W 104TH ST	RCRA NonGen / NLR, US AIRS, IL AIRS, IL ...	586	0.111	East
253 / 3	NEW LANGSTON HUGHES	10320 SOUTH WENTWORT	IL ENG CONTROLS, IL INST CONTROL, IL SRP	1002	0.190	East
258 / 3	VACANT RESIDENTIAL B	226-248 W 107TH PLAC	IL UST	1091	0.207	East
266 / 3	LANGSTON HUGHES SCHO	226 W 104TH ST	RCRA-VSQG, FINDS, ECHO	1211	0.229	East
AQ267 / 3	J AND A GAS MART, IN	210 W. 103RD STREET	IL UST	1245	0.236	East
269 / 3	FERNWOOD PLAYGROUND	10436 S WALLACE	IL UST	1246	0.236	West
AQ272 / 3	MCCORMICK PLACE VACA	201-217 E. CERMAK RD	IL UST	1263	0.239	East
AQ276 / 3	F & R QUALITY CLEANE	201 W. 103RD ST.	RCRA NonGen / NLR, FINDS, ECHO	1289	0.244	East
AQ277 / 3	ONE HOUR MARTENIZING	201 WEST 103RD ST.	IL LUST	1289	0.244	East
294 / 3	HARDY CORP	711 W 103RD ST	IL LUST, RCRA NonGen / NLR, FINDS, ECHO	2036	0.386	West
300 / 3	SHELL OIL CO.	10655 SOUTH HALSTED	IL LUST, IL SPILLS, IL BOL	2451	0.464	West
301 / 3	HESTER, FRANNY	10101-03 SOUTH HALST	IL LUST	2458	0.466	West
AW302 / 3	MOBIL OIL STATION #0	9901 SOUTH HALSTED	IL LUST	2461	0.466	West
306 / 3	MUSTAFA, KHADIM	10301 SOUTH HALSTED	IL LUST	2532	0.480	West
AW307 / 3	AMOCO OIL CO. #15525	99TH & HALSTED	IL LUST	2540	0.481	West
311 / 3	EQUILON ENTERPRISES	9811 HALSTED	IL LUST	2603	0.493	WNW
313 / 3	BETTY BRITE CLEANERS	10630 SOUTH HALSTED	IL ENG CONTROLS, IL INST CONTROL, IL SRP	2633	0.499	West

Focus Map - 4 - 06062945.9r

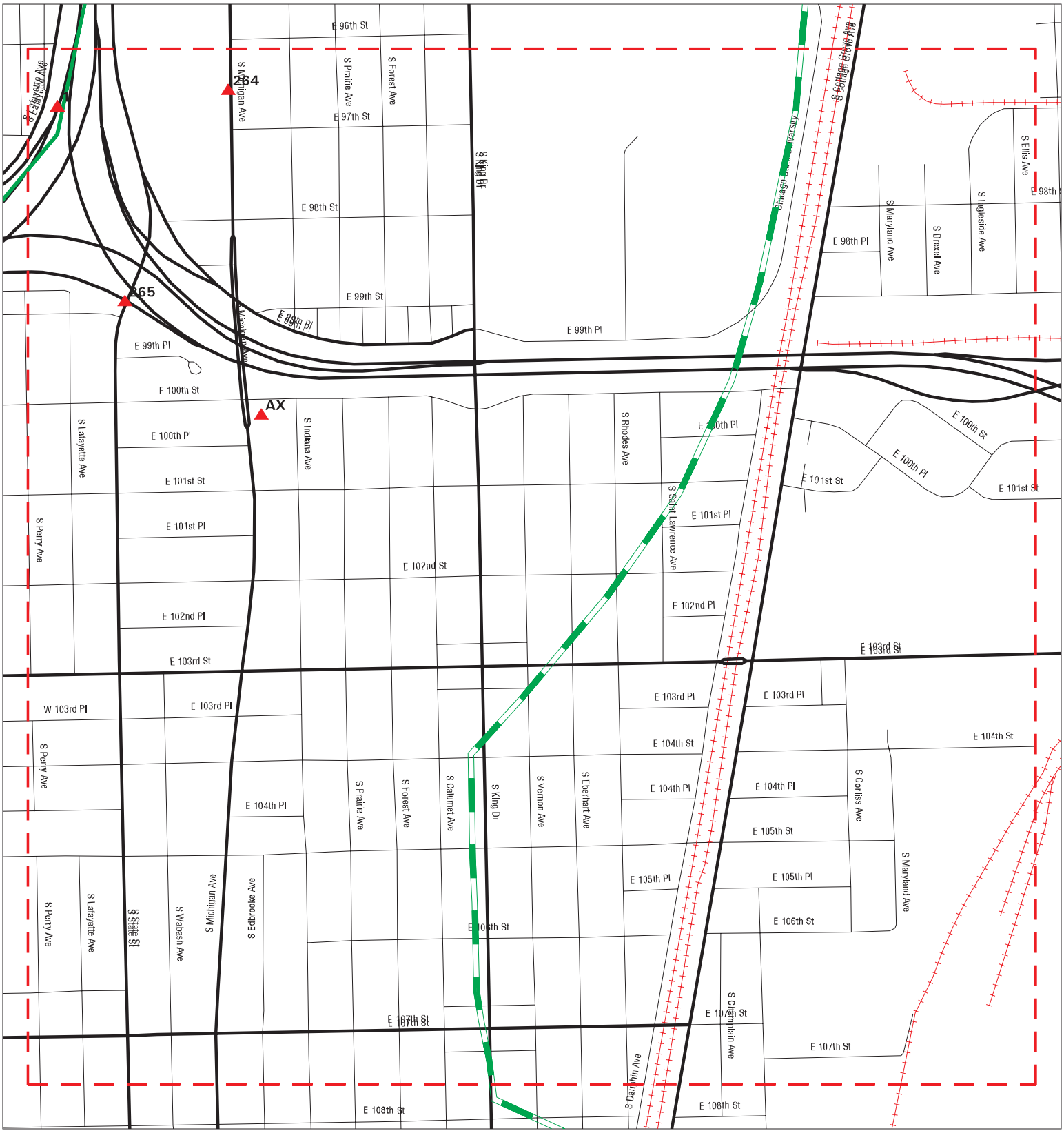

Sites	Focus Map - Sites
Target Property	National Priority List Sites
Search Buffer	Dept. Defense Sites
Focus Map - No Sites	Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 4

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
1 / 4	CHICAGO PARK DIST-LA	63RD ST, E OF LAKE S	FINDS	TP		
264 / 4	HARLAN COMMUNITY ACA	9652 S MICHIGAN AVE	RCRA-VSQG	1162	0.220	ESE
265 / 4	CHICAGO TRANSIT AUTH	9800 S STATE ST	RCRA-VSQG, ICIS, FINDS, ECHO	1165	0.221	SE
AX303 / 4	LAKESIDE BANK TRUST	10007 SOUTH MICHIGAN	IL LUST, IL TANKS, IL SPILLS	2470	0.468	SE
AX304 / 4	TOWN & COUNTRY GAS M	10007 SOUTH MICHIGAN	IL LUST	2470	0.468	SE

Focus Map - 5 - 06062945.9r

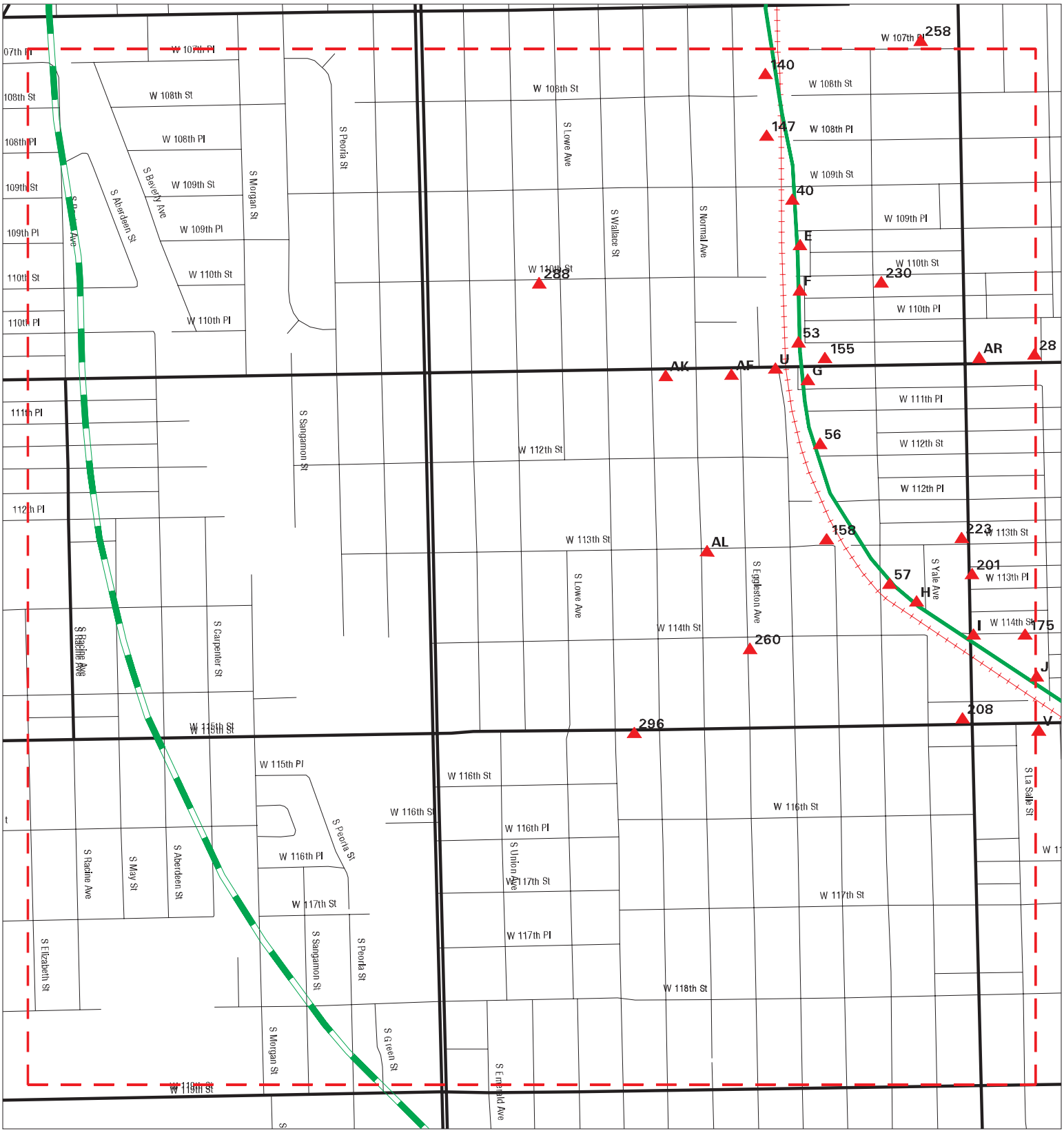

Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 5

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
40 / 5		355 W 109TH ST	IL CHICAGO ENV	TP		
E41 / 5		355 W 109TH PL	IL CHICAGO ENV	TP		
E42 / 5	RANSOM TRANSPORT	352 W 110TH ST	RCRA-VSQG, FINDS, ECHO	TP		
E43 / 5		352 W 110TH ST	IL SPILLS	TP		
E44 / 5	RANSOM TRANSPORT BUS	352 W 110TH ST	IL TANKS	TP		
E45 / 5		352 W 110TH ST	IL SPILLS, IL CHICAGO ENV	TP		
E46 / 5		352 WEST 110 ST	ERNS	TP		
E47 / 5	WILLIAM RANSOM TRANS	352 WEST 110TH ST.	IL LUST	TP		
E48 / 5	FRANCIS T. SHEA	352 W 110TH ST	IL TANKS	TP		
E49 / 5	WILLIAM RANSOM TRANS	352 WEST 110TH ST.	IL RGA LUST	TP		
E50 / 5	RANSOM TRANSPORT BUS	352 W 110TH ST	IL UST	TP		
F51 / 5		349 W 110TH ST	IL CHICAGO ENV	TP		
F52 / 5		348 W 110TH PL	IL CHICAGO ENV	TP		
53 / 5		356 W 111TH ST	IL CHICAGO ENV	TP		
G54 / 5		347 W 111TH ST	IL CHICAGO ENV	TP		
G55 / 5		348 W 111TH PL	IL CHICAGO ENV	TP		
56 / 5		336 W 112TH ST	IL CHICAGO ENV	TP		
57 / 5		11325 S PRINCETON AV	IL CHICAGO ENV	TP		
H58 / 5		11336 S YALE AVE	IL CHICAGO ENV	TP		
H59 / 5	ROSELAND TUNE UP CNT	401 W 111TH ST	EDR Hist Auto	TP		
I60 / 5	11401 S WENTWORTH	11401 S WENTWORTH	FINDS	TP		
I61 / 5		11401 S WENTWORTH AV	IL CHICAGO ENV	TP		
140 / 5		400 W 108TH ST	IL AST, IL CHICAGO ENV	75	0.014	West
I145 / 5	MARQUETTE BANK	135-39 WEST 114TH ST	IL LUST	81	0.015	NNE
147 / 5	HARRIS TRANSMISSION	410 W 109TH ST	EDR Hist Auto	143	0.027	WSW
155 / 5	FIZER S FENCING & SE	330 W 111TH ST	EDR Hist Cleaner	180	0.034	East
U156 / 5	CHICAGO DEPT OF ENV	11100 S STEWART AVE	RCRA NonGen / NLR	191	0.036	West
158 / 5	SHELDON HEIGHTS SERV	332 W 113TH ST	EDR Hist Auto	199	0.038	WSW
175 / 5	VACANT BUILDING	133-37 W 114TH ST TH	IL UST	266	0.050	NNE
U189 / 5	PENTICOSTAL TEMPLE	419 WEST 111TH ST.	IL LUST	352	0.067	West
U190 / 5	ROSELAND SERVICE STA	419 W 111TH	EDR Hist Auto	352	0.067	West
U191 / 5	PENTECOSTAL TEMPLE C	415 THRU 419 W 111TH	RCRA NonGen / NLR, FINDS, ECHO	352	0.067	West
201 / 5	VACANT BULDING	11321 S WENTWORTH AV	IL UST	420	0.080	NNE
208 / 5	D & D SERVICE STATIO	202 W 115TH	EDR Hist Auto	500	0.095	SSW
AF210 / 5	REITER BROS	433 W 111TH ST	EDR Hist Auto	516	0.098	West
223 / 5	WENTWORTH SERVICE ST	200 W 113TH	EDR Hist Auto	592	0.112	NE
230 / 5	ROSELAND AUTO SALES	271 E 110TH ST	RCRA-VSQG, FINDS, ECHO	610	0.116	East
AF231 / 5	MORNING CLEANERS R	445 W 111TH	EDR Hist Cleaner	638	0.121	West
AK242 / 5	34 WARD OFFICE/CITY	507 WEST 111TH STREE	IL LUST, IL UST	876	0.166	West

MAPPED SITES SUMMARY - FOCUS MAP 5

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
AL248 / 5	UNIVERSITY OF IL AT	711 WEST 13TH ST.	IL LUST	997	0.189	WSW
AL249 / 5	UIS PARKING	711 W. 13TH STREET T	IL UST	997	0.189	WSW
AK250 / 5	SEW CLEAN	519 W 111TH ST	RCRA NonGen / NLR, FINDS, ECHO	998	0.189	West
260 / 5	BRENAN SCHOOL	11411 EGGLESTON	RCRA-SQG	1107	0.210	SW
AR270 / 5	STAR CLEANERS	149 W 111TH ST	RCRA-SQG	1250	0.237	East
AR278 / 5	LAKEFRONT SUPPORTING	11023-11045 S WENTWO	IL ENG CONTROLS, IL INST CONTROL, IL SRP...	1309	0.248	East
285 / 5	ROSELAND MEDICAL CEN	100-136 WEST 111TH S	IL LUST	1716	0.325	East
288 / 5	COMED 119TH STREET D	739 WEST 110TH STREE	IL SRP	1903	0.360	West
296 / 5	SHERWIN WILLIAMS PAI	549 115TH STREET	IL LUST, IL SPILLS, IL ASBESTOS	2159	0.409	SW

Focus Map - 6 - 06062945.9r

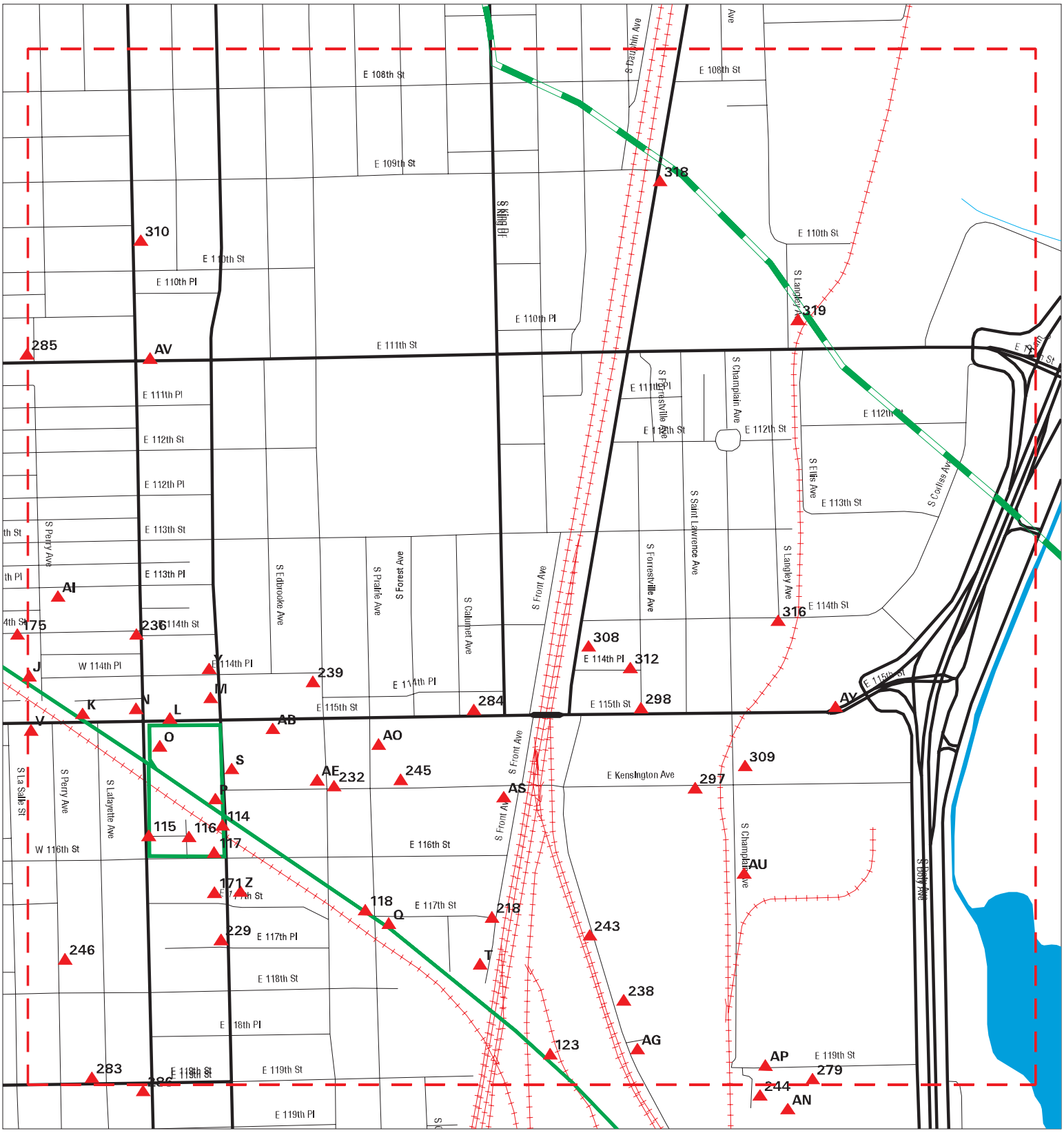

Sites	Focus Map - Sites
Target Property	National Priority List Sites
Search Buffer	Dept. Defense Sites
Focus Map - No Sites	Indian Reservations BIA

0 1/8 1/4 Miles

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MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
J62 / 6		11443 S PERRY AVE	IL CHICAGO ENV	TP
J63 / 6		52 W 115TH ST	IL CHICAGO ENV	TP
K64 / 6		42 W 115TH ST	IL CHICAGO ENV	TP
L65 / 6	CURTIS SCHOOL-CHI. B	32 E 115TH ST	RCRA-VSQG, FINDS, ECHO	TP
L66 / 6	CURTIS SCHOOL	32 E 115TH ST	IL UST, IL AIRS, IL BOL, IL CHICAGO ENV	TP
L67 / 6	CURTIS SCHOOL	32 E 115TH ST	IL TANKS	TP
L68 / 6	CURTIS REILLY SCHOOL	32 E 115TH ST	IL BOL	TP
K69 / 6		48 W 115TH ST	IL CHICAGO ENV	TP
M70 / 6	FORMER ROSELAND PLAZ	11500-82 S MICHIGAN	FINDS	TP
N71 / 6			ERNS	TP
K72 / 6	52 W 115TH & 11443 S	52 W 115TH & 11443 S	FINDS	TP
M73 / 6		101 E 115TH ST	IL CHICAGO ENV	TP
L74 / 6		35 E 115TH ST	IL CHICAGO ENV	TP
L75 / 6		23 E 115TH ST	IL CHICAGO ENV	TP
N76 / 6		1 E 115TH ST	IL CHICAGO ENV	TP
L77 / 6	CHURCH	17 E 115TH	FINDS	TP
L78 / 6		17 E 115TH ST	IL CHICAGO ENV	TP
K79 / 6	TRIANGLE TRANSMISSIO	35 W 115TH ST	IL LUST, IL UST, RCRA NonGen / NLR, FIND...	TP
K80 / 6	TRIANGLE TRANSMISSIO	35 W 115TH ST	EDR Hist Auto	TP
K81 / 6	GEORGE THOSS	35 W 115TH ST	IL TANKS	TP
K82 / 6	TRIANGLE TRANSMISSIO	35 W 115TH ST	IL SPILLS, IL BOL, IL CHICAGO ENV	TP
K83 / 6	TRIANGLE TRANSMISSIO	35 W 115TH ST	IL TANKS	TP
K84 / 6	TRIANGLE TRANSMISSIO	35 WEST 115TH ST.	IL RGA LUST	TP
K85 / 6		35 W 115TH ST	IL SPILLS	TP
K86 / 6	GEORGE THOSS	35 W 115TH ST	IL TANKS	TP
L87 / 6		11501 S STATE ST	IL CHICAGO ENV	TP
M88 / 6	OAK PARK NATIONAL BA	11500 S MICHIGAN AVE	IL TANKS	TP
M89 / 6	OAK PARK NATIONAL BA	11500 S MICHIGAN AVE	IL TANKS	TP
M90 / 6		11500 S MICHIGAN AVE	IL CHICAGO ENV	TP
L91 / 6		13 E 115TH ST	IL CHICAGO ENV	TP
M92 / 6	MONTANA JIGAMIAN	11503 S MICH AV	EDR Hist Cleaner	TP
L93 / 6		11505 S STATE ST	IL CHICAGO ENV	TP
L94 / 6	ASDOORAIAN DANL	25 E 115TH	EDR Hist Cleaner	TP
L95 / 6	25 E 115TH ST	25 E 115TH ST	FINDS	TP
L96 / 6		25 E 115TH ST	IL CHICAGO ENV	TP
L97 / 6	29 E 115TH ST	29 E 115TH ST	FINDS	TP
L98 / 6		29 E 115TH ST	IL CHICAGO ENV	TP
L99 / 6		11507 S STATE ST	IL CHICAGO ENV	TP
L100 / 6		11511 S STATE ST	IL CHICAGO ENV	TP

MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
M101 / 6	FLAIR CLEANERS	11518 SO MICHIGAN	FINDS, ECHO	TP		
M102 / 6	BETTY BRITE CLNRS	11518 S MICHIGAN	EDR Hist Cleaner	TP		
M103 / 6	BETTY BRITE CLEANERS	11518 S. MICHIGAN AV	RCRA-VSQG, FINDS, ECHO, IL AIRS, IL BOL	TP		
M104 / 6	FLAIR CLEANERS	11518 S MICHIGAN	FINDS, IL AIRS	TP		
M105 / 6		11518 S MICHIGAN AVE	IL CHICAGO ENV	TP		
M106 / 6	FLAIR CLEANERS	11518 S MICHIGAN	IL BOL	TP		
M107 / 6	BETTY BRITE CLEANERS	11518 S MICHIGAN AVE	IL BOL	TP		
M108 / 6	BETTY BRITE CLEANERS	11518 S MICHIGAN AVE	CA HAZNET	TP		
O109 / 6		11515 S STATE ST	IL CHICAGO ENV	TP		
O110 / 6		11521 S STATE ST	IL CHICAGO ENV	TP		
O111 / 6	CUTER SEFER OIL	11521 S STATE ST	IL TANKS	TP		
O112 / 6		11517 S STATE ST	IL CHICAGO ENV	TP		
P113 / 6		11552 S MICHIGAN AVE	IL CHICAGO ENV	TP		
114 / 6		11564 S MICHIGAN AVE	IL CHICAGO ENV	TP		
115 / 6		11581 S STATE ST	IL CHICAGO ENV	TP		
116 / 6		11575 S WABASH AVE	IL CHICAGO ENV	TP		
117 / 6		11592 S MICHIGAN AVE	IL CHICAGO ENV	TP		
118 / 6		11634 S PRAIRIE AVE	IL CHICAGO ENV	TP		
Q119 / 6	THE SHEDD COMPANY	301 E 117TH ST	IL TANKS	TP		
Q120 / 6		301 E 117TH ST	IL CHICAGO ENV	TP		
Q121 / 6	THE SHEDD COMPANY	301 E 117TH ST	IL TANKS	TP		
Q122 / 6	THE SHEDD COMPANY	301 E 117TH ST	IL TANKS	TP		
123 / 6	ILLINOIS CENTRAL TRA	119TH ST	IL BOL	TP		
J134 / 6	CLEARWATER TECHNOLOG	11426 S PERRY AVE	RCRA NonGen / NLR, FINDS, ECHO	59	0.011	NNE
J135 / 6	SRM MOTORS	11439 S PERRY AVE	EDR Hist Auto	59	0.011	NNE
M136 / 6	RAY S CLEANERS	11501 S MICHIGAN A	EDR Hist Cleaner	70	0.013	East
S138 / 6	BETTY BRIGHT CLEANER	11533 S MICHIGAN AVE	EDR Hist Cleaner	75	0.014	East
S139 / 6	IRVINGS STANDARD	11533 S MICHIGAN AVE	EDR Hist Auto	75	0.014	East
S141 / 6	WAH LOUIS	11535 S MICH AV	EDR Hist Cleaner	76	0.014	East
P142 / 6	0707 CLARK SER STATI	11555 S MICHIGAN AVE	IL UST	79	0.015	East
P143 / 6	BOBS SUPER 100	11555 S MICHIGAN	EDR Hist Auto	79	0.015	East
P144 / 6	CLARK OIL & REFINING	11555 SOUTH MICHIGAN	IL LUST	79	0.015	East
T148 / 6	STUART INDUSTRIAL CO	11740 S FRONT ST	IL UST	159	0.030	NE
T149 / 6	STUART INDUSTRIAL CO	11740 SOUTH FRONT ST	WI MANIFEST	159	0.030	NE
T150 / 6	STUART CHEMICAL & PA	11740 S FRONT ST	RCRA-SQG, FINDS, ECHO, IL AIRS, IL BOL	159	0.030	NE
N151 / 6	ABANDONED GAS STATIO	2 WEST 115TH STREET	IL LUST, IL UST	160	0.030	NW
N152 / 6	COX DONNA (ABANDONED	2 W 115TH ST	RCRA NonGen / NLR, FINDS, ECHO	160	0.030	NW
M159 / 6	TADROS, MUSA	11442 SOUTH MICHIGAN	IL LUST	203	0.038	North
M160 / 6	GOODYEAR AUTO SERVIC	11442 S MICHIGAN AVE	RCRA NonGen / NLR, FINDS, ECHO	203	0.038	North

MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.)		DIRECTION
M161 / 6	GOODYEAR TIRE & RUBB	11442 S MICHIGAN AVE	IL UST	203	0.038	North
V162 / 6	ABANDONED SERVICE ST	11500 S PERRY	IL UST	204	0.039	SSW
V163 / 6	11500 S PERRY	11500 S PERRY	US BROWNFIELDS, FINDS	204	0.039	SSW
V164 / 6	CHICAGO, CITY OF	11500 SOUTH PERRY	IL LUST	204	0.039	SSW
V165 / 6	SATRIANO TEXACO SERV	11500 S PERRY AVE	EDR Hist Auto	204	0.039	SSW
T167 / 6	AMERICAN CLYBOURN FI	11730 S. FRONT AVE.	RCRA-VSQG, FINDS, ECHO	218	0.041	NE
V170 / 6	WELKES SINCLAIR STAT	11515 S PERRY	EDR Hist Auto	228	0.043	SSW
171 / 6	HAHN STANLEY	11624 S MICH AV	EDR Hist Auto	263	0.050	South
V174 / 6	PETRI KONSTANTIN	113 W 115TH	EDR Hist Cleaner	265	0.050	SSW
Y176 / 6	GORGODIAN SAMUEL	11453 S MICH AV	EDR Hist Cleaner	268	0.051	North
Z177 / 6	KHALIL, HANEY	11600 SOUTH MICHIGAN	IL LUST, IL SPILLS, IL CHICAGO ENV	281	0.053	SSE
Z178 / 6	MICHIGAN CITGO	11600 S. MICHIGAN AV	IL UST	281	0.053	SSE
Z179 / 6	MARTIN OIL SERVICE I	11600 S MICHIGAN	EDR Hist Auto	281	0.053	SSE
Z185 / 6	CLOTHES MATE DRY CLE	11625 S MICHIGAN AVE	EDR Hist Cleaner	339	0.064	SSE
AB192 / 6	DUMAC GARAGE	131 E 115TH	EDR Hist Auto	353	0.067	East
AB197 / 6	CALUMET COACH CO	135 E 115TH ST	RCRA NonGen / NLR, FINDS, ECHO	387	0.073	East
Y199 / 6	ROSELAND GASOLINE ST	11420 S MICH AV	EDR Hist Auto	418	0.079	North
AE207 / 6	TONYS AUTOBODY	157 E KENNSINGTON	RCRA-VSQG, FINDS, ECHO	458	0.087	NE
AG211 / 6	UNLOADING UNLIMITED	11861 S COTTAGE GROV	RCRA NonGen / NLR	520	0.098	NE
AG212 / 6	SMITH SYSTEMS CHICAG	11861 S COTTAGE GROV	RCRA NonGen / NLR	520	0.098	NE
AG213 / 6	VACUUM INDUSTRIAL PO	11861 S COTTAGE GROV	RCRA NonGen / NLR, FINDS, ECHO	520	0.098	NE
AG214 / 6	SCHNEIDER TANK LINES	11861 S COTTAGE GROV	RCRA NonGen / NLR	520	0.098	NE
AG215 / 6	CLEAN HARBORS ENV SE	11861 COTTAGE GROVE-	RCRA-SQG, FINDS, ECHO	520	0.098	NE
AG216 / 6	BULKOA INC	11861 S COTTAGE GROV	IL UST	520	0.098	NE
AG217 / 6	BULKOA INC	11861 S COTTAGE GROV	IL LUST, RCRA NonGen / NLR	520	0.098	NE
218 / 6	STUARTS CHEMICAL & P	11740 FRONT ST.	IL LUST	540	0.102	NE
AE226 / 6	KENSINGTON SERV STAT	162 E KENSINGTON	IL LUST, RCRA NonGen / NLR, FINDS, ECHO	608	0.115	NE
AE227 / 6	LOU S SERVICE STA	162 E KENSINGTON A	EDR Hist Auto	608	0.115	NE
AE228 / 6	KENSINGTON SERVICE S	162 E KENSINGTON	IL UST	608	0.115	NE
229 / 6	DEPENDENT SERVICE ST	11724 S MICH AV	EDR Hist Auto	610	0.116	South
232 / 6	YONG CHARLEY	214 KENSINGTON AV	EDR Hist Cleaner	644	0.122	NE
AI233 / 6	ILLINOIS BELL	65 W 113TH PL	RCRA NonGen / NLR, FINDS, ECHO	665	0.126	NNE
AI234 / 6	ILLINOIS BELL TELEPH	65 WEST 113TH PL.	IL LUST	665	0.126	NNE
AI235 / 6	PULLMAN CO	65 WEST 113TH PLACE	IL UST, IL TIER 2	665	0.126	NNE
236 / 6	3 W 114TH ST	3 W 114TH ST	US BROWNFIELDS, FINDS	681	0.129	North
238 / 6	CITY OF CHICAGO	11700 S COTTAGE GROV	RCRA NonGen / NLR, FINDS, ECHO	704	0.133	NE
239 / 6	SWIFT TIRES	11432 S INDIANA	RCRA NonGen / NLR, FINDS, ECHO	754	0.143	ENE
243 / 6	CITY OF CHICAGO	11700 S COTTAGE GROV	RCRA NonGen / NLR	892	0.169	NE
245 / 6	GONNELLA BAKING CO	318 E KENSINGTON	RCRA NonGen / NLR	956	0.181	NE

MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
246 / 6	SONGHAI LEARNING INS	11725 S PERRY AVE	RCRA-VSQG	977	0.185	SW
AO255 / 6	CATHOLIC CONVENT	11515 S. PRAIRIE AVE	IL UST	1080	0.205	NE
AO256 / 6	METHODIST YOUTH SERV	11515 SOUTH PRAIRIE	IL LUST	1080	0.205	NE
AP261 / 6	INLAND METALS REFINI	651 E 119TH ST	IL UST, IL BOL	1117	0.212	NE
AP262 / 6	INLAND METAL REFININ	651 EAST 119TH STREE	SEMS-ARCHIVE, CORRACTS, IL SSU, RCRA Non...	1117	0.212	NE
AP263 / 6	INLAND METAL REFININ	651 E 119TH	RCRA NonGen / NLR	1117	0.212	NE
AS273 / 6	U.S. SCRAP	391 EAST KENSINGTON	IL SSU	1281	0.243	NE
AS274 / 6	U S DRUM DISPOSAL CO	391 E KENSINGTON AVE	RCRA NonGen / NLR, FINDS, ECHO	1281	0.243	NE
AS275 / 6	US SCRAP	391 E KENSINGTON	IL SWF/LF, FINDS, IL BOL	1281	0.243	NE
279 / 6	HUFF & HUFF INC.	651 EAST 179TH ST.	IL LUST	1333	0.252	NE
283 / 6	GREATER CANAAN BAPTI	38 WEST 119TH STREET	IL LUST	1680	0.318	SSW
284 / 6	FRIESON, PHYLLIS	342 EAST 115TH STREE	IL LUST	1682	0.319	NE
AU291 / 6	SHERWIN WILLIAMS CO	11541 S CHAMPLAIN AV	CORRACTS, RCRA-TSDF, RCRA-LQG, US INST C..	1989	0.377	NE
AU292 / 6	SHERWIN WILLIAMS CO.	11541 SOUTH CHAMPLAI	IL LUST	1989	0.377	NE
AU293 / 6	SHERWIN WILLIAMS COM	11541 SOUTH CHAMPLAI	SEMS, ECHO	1989	0.377	NE
297 / 6	SHERWIN-WILLIAMS COM	603 EAST KENSINGTON	IL ENG CONTROLS, IL INST CONTROL, IL SRP	2220	0.420	NE
298 / 6	CHICAGO FAMILY HEALT	556-580 EAST 115TH S	IL INST CONTROL, IL SRP	2426	0.459	NE
AV299 / 6	ROSELAND MARATHON	2 WEST 111TH STREET	IL LUST, IL UST	2432	0.461	NNE
AV305 / 6	YMCA	4 EAST 111TH ST.	IL LUST	2494	0.472	NNE
308 / 6	114TH/COTTAGE GROVE		IL NIPC	2541	0.481	NE
309 / 6	SHERWIN WILLIAMS PAI	115TH ST. & KINSINGT	IL LUST	2579	0.488	NE
310 / 6	109TH PLACE TEAR GAS	SG WEST 109TH PLACE	SEMS, PRP	2582	0.489	East
312 / 6	GEORGE O'DAY'S SHOP	526 EAST 114TH PL.	IL LUST	2605	0.493	NE
AY314 / 6	CHICAGO SPECIALTIES,	735 EAST 115TH STREE	IL SSU, IL ENG CONTROLS, IL INST CONTROL...	3348	0.634	NE
AY315 / 6	CHICAGO SPECIALTIES	735 E 115TH ST	CORRACTS, IL SPILLS, RCRA NonGen / NLR, ...	3348	0.634	NE
316 / 6	LIQUID DYNAMICS INC	655 E 114TH ST	SEMS-ARCHIVE, CORRACTS, RCRA NonGen / NL..	3559	0.674	NE
318 / 6	SHERWIN WILLIAMS CO	10909 S COTTAGE GROV	CORRACTS, RCRA NonGen / NLR	5147	0.975	NE
319 / 6	PEOPLES GAS AND LIGH	700-750 EAST 111TH S	EDR MGP	5190	0.983	NE

Focus Map - 7 - 06062945.9r

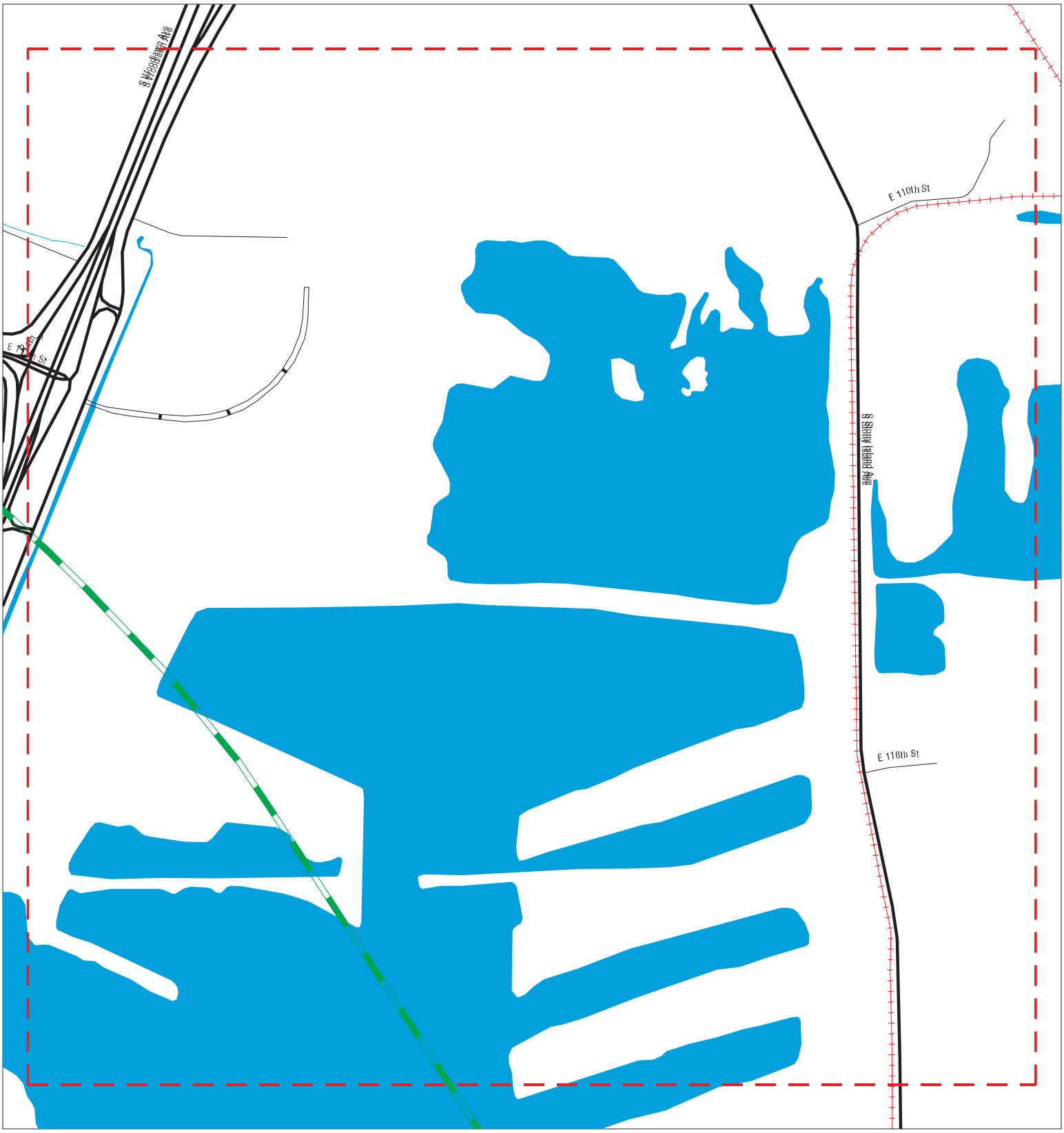

Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 7

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

Focus Map - 8 - 06062945.9r

Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int I Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 8

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

Focus Map - 9 - 06062945.9r

Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 9

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
R124 / 9	ELMER LARSON, INC.	12401 SOUTH COTTAGE	FINDS, ECHO	TP		
R125 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL AIRS, IL TIER 2	TP		
R126 / 9	K-FIVE CONSTRUCTION	12401 COTTAGE GROVE	IL AIRS	TP		
R127 / 9	ELMER LARSON INC	12401 S COTTAGE GROV	IL BOL	TP		
R128 / 9		12401 S COTTAGE GROV	IL CHICAGO ENV	TP		
R129 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL BOL	TP		
R130 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL BOL	TP		
R131 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL BOL	TP		
R132 / 9	K-FIVE CONSTRUCTION	12401 S COTTAGE GROV	IL BOL	TP		
R133 / 9	K-FIVE CONSTRUCTION	12401 SOUTH COTTAGE	ICIS, US AIRS, FINDS	TP		
137 / 9	CHICAGO MSD #3		IL SWF/LF	73	0.014	WSW
153 / 9	PENN CENTRAL CORP.	810 EAST 124TH STREE	IL SSU	170	0.032	WSW
154 / 9	COTTAGE GROVE DUMP		IL SWF/LF	173	0.033	ENE
166 / 9	ALLWASTE TANK CLEANI	11901 S COTTAGE GROV	RCRA NonGen / NLR, FINDS, ECHO	214	0.041	NE
AD202 / 9	ALL AMERICAN RECYCLI	11900 COTTAGE GROVE	RCRA NonGen / NLR, ICIS, US AIRS, FINDS	421	0.080	SW
AD203 / 9	KEYWELL CORP	11900 S COTTAGE GROV	NY MANIFEST	421	0.080	SW
AD204 / 9	S G KEYWELL CO	11900 S COTTAGE GROV	IL UST	421	0.080	SW
AD205 / 9	KEYWELL CO.	11900 SOUTH COTTAGE	IL LUST, IL SPILLS	421	0.080	SW
206 / 9	DOLTON MUNICIPAL		IL NIPC	427	0.081	ENE
209 / 9	K FIVE CONSTRUCTION	12500 COTTAGE GROVE	RCRA NonGen / NLR, FINDS, ECHO	514	0.097	ENE
219 / 9	COTTAGE GROVE LANDFI		IL NIPC	553	0.105	ENE
221 / 9	UNITED STATES SCRAP		IL NIPC	583	0.110	WSW
237 / 9	METROPOL SANT DIST G		IL IMPDMENT	702	0.133	WSW
244 / 9	LAKE CALUMET SMELTIN	11901 S. CHAMPLAIN A	SEMS, ICIS, LEAD SMELTERS, FINDS, ECHO	946	0.179	NE
247 / 9	U S SCRAP CORP		IL IMPDMENT	989	0.187	SW
AM251 / 9	BULKMATIC TRANSPORT	12000 S DOTY AVE	RCRA NonGen / NLR, FINDS, ECHO	1001	0.190	ENE
AM252 / 9	AIRCO INDUSTRIAL GAS	12000S DOTY AVE	RCRA NonGen / NLR	1001	0.190	ENE
AN254 / 9	INLAND METALS REFINI		IL SWF/LF	1056	0.200	NE
AN257 / 9	INLAND METALS REFINI		IL NIPC	1087	0.206	ENE
280 / 9	PSC CONTAINER SERVIC	803 EAST 120TH ST.	IL LUST	1443	0.273	ENE
286 / 9	CHICAGO, CITY OF	11900 SOUTH STATE ST	IL LUST	1725	0.327	South

Focus Map - 10 - 06062945.9r

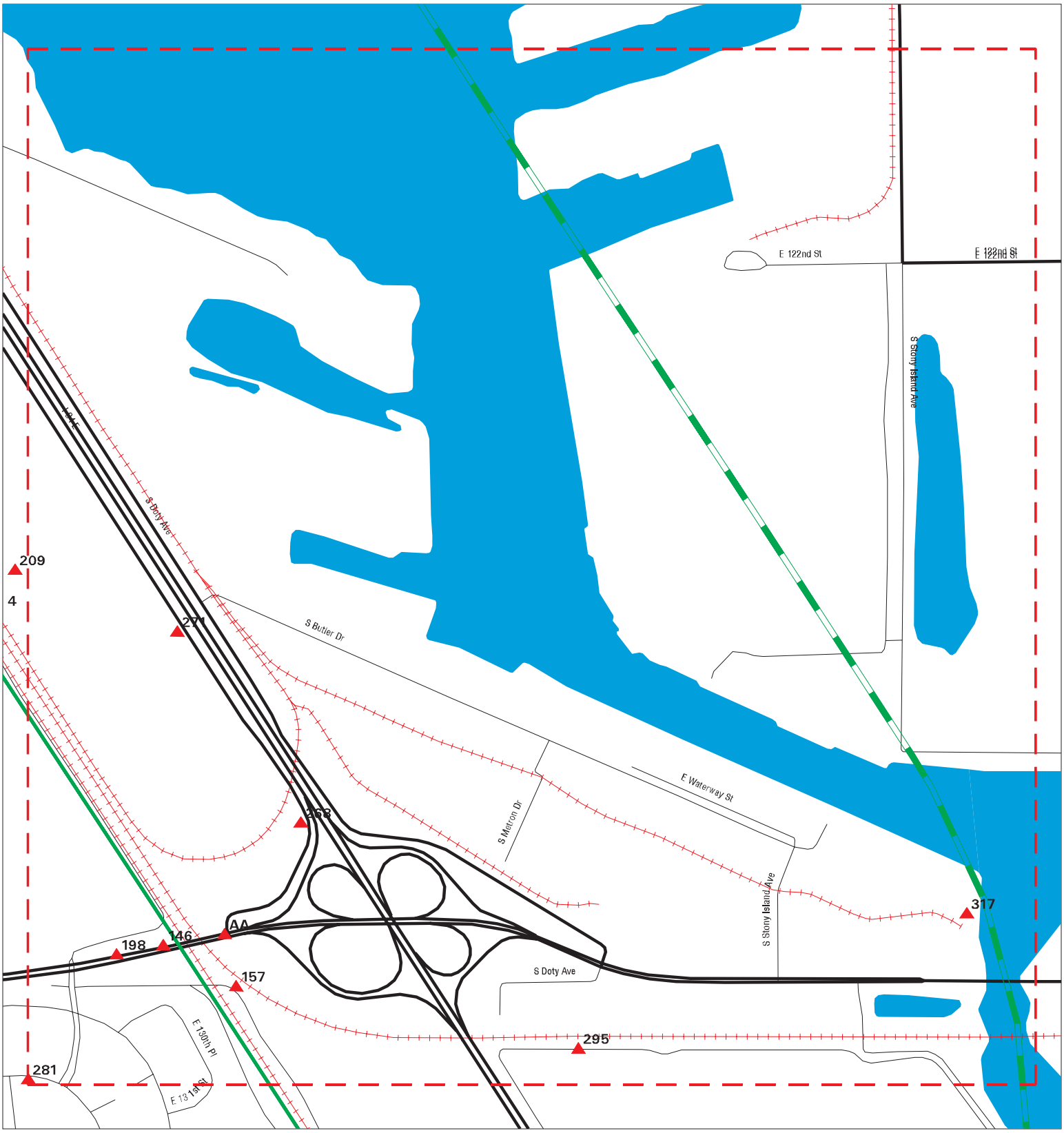

Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 10

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
146 / 10	LAND & LAKES TRANSFE	1258-1300 E 130TH ST	RCRA NonGen / NLR, FINDS, ECHO	95	0.018	WSW
157 / 10	CALUMET NU EARTH (13		IL NIPC	192	0.036	ENE
AA180 / 10	CALUMET NU-EARTH DIS	NORTH 130TH ST & DOT	SEMS-ARCHIVE	302	0.057	ENE
AA182 / 10	CHGO METRO SANITARY		IL NIPC	330	0.062	ENE
AA183 / 10	CHGO METYRO SANITARY		IL NIPC	330	0.062	ENE
AA184 / 10	CHGO METRO SANITARY		IL NIPC	330	0.062	ENE
198 / 10	CHICAGO, CITY OF	1100 E 130TH PL	RCRA-SQG	418	0.079	WSW
268 / 10	CONTINENTAL GRAIN CO	127TH & DOTY AVE	IL UST	1246	0.236	ENE
271 / 10	CHICAGO DEPT OF ENVI	12600 S DOTY AVE	RCRA NonGen / NLR	1259	0.238	ENE
281 / 10	ALTGELD LIBRARY	955 EAST 131 STREET	IL SRP	1462	0.277	WSW
295 / 10	PALUMBO EXCAVATING		IL NIPC	2105	0.399	ENE
317 / 10	CALUMET HARBOR YARDS		FUDS	5129	0.971	ENE

Focus Map - 11 - 06062945.9r

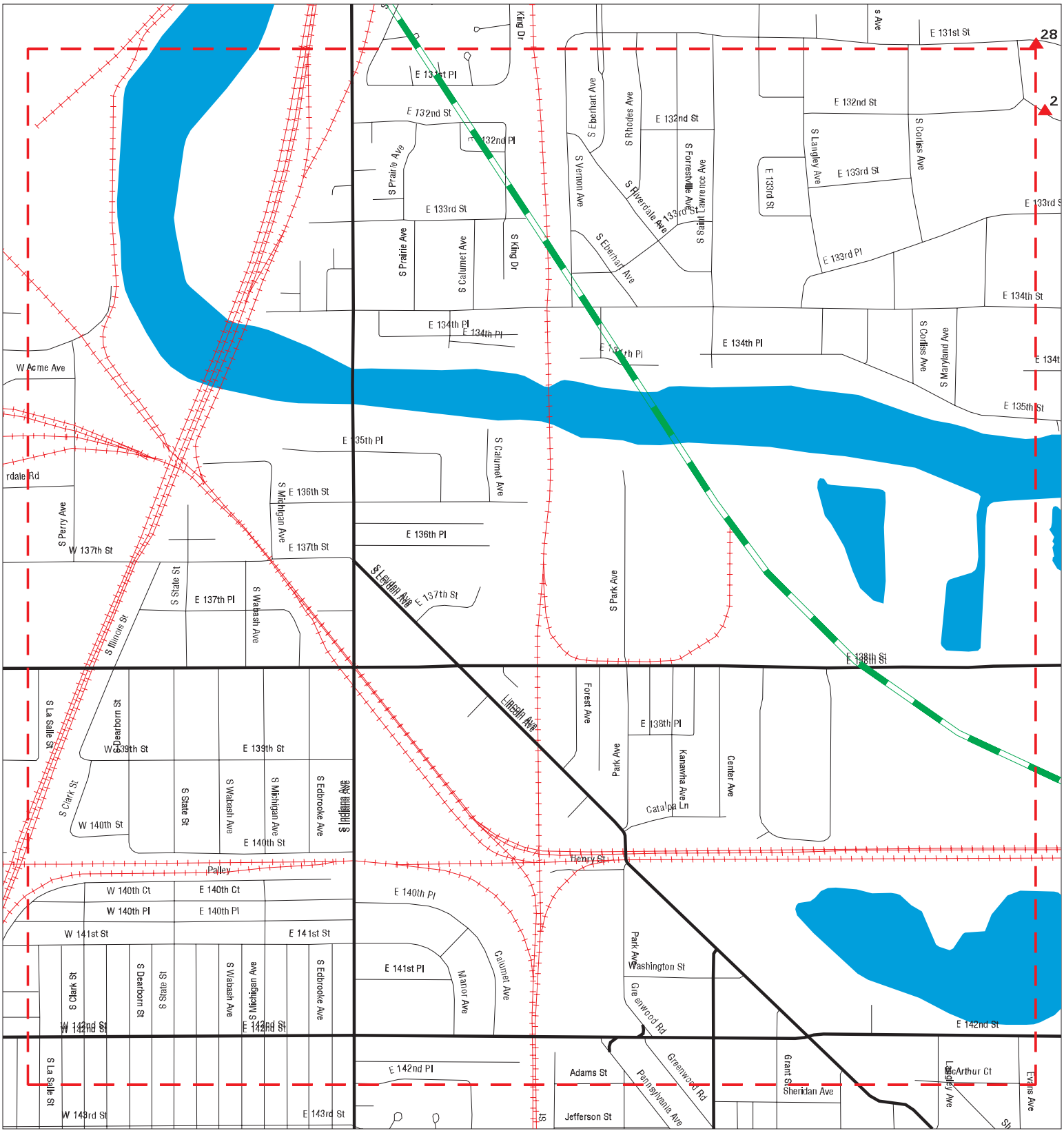

Sites
Target Property
Search Buffer
Focus Map - No Sites
Focus Map - Sites
National Priority List Sites
Dept. Defense Sites
Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 11

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION

NO MAPPED SITES FOUND

Focus Map - 12 - 06062945.9r

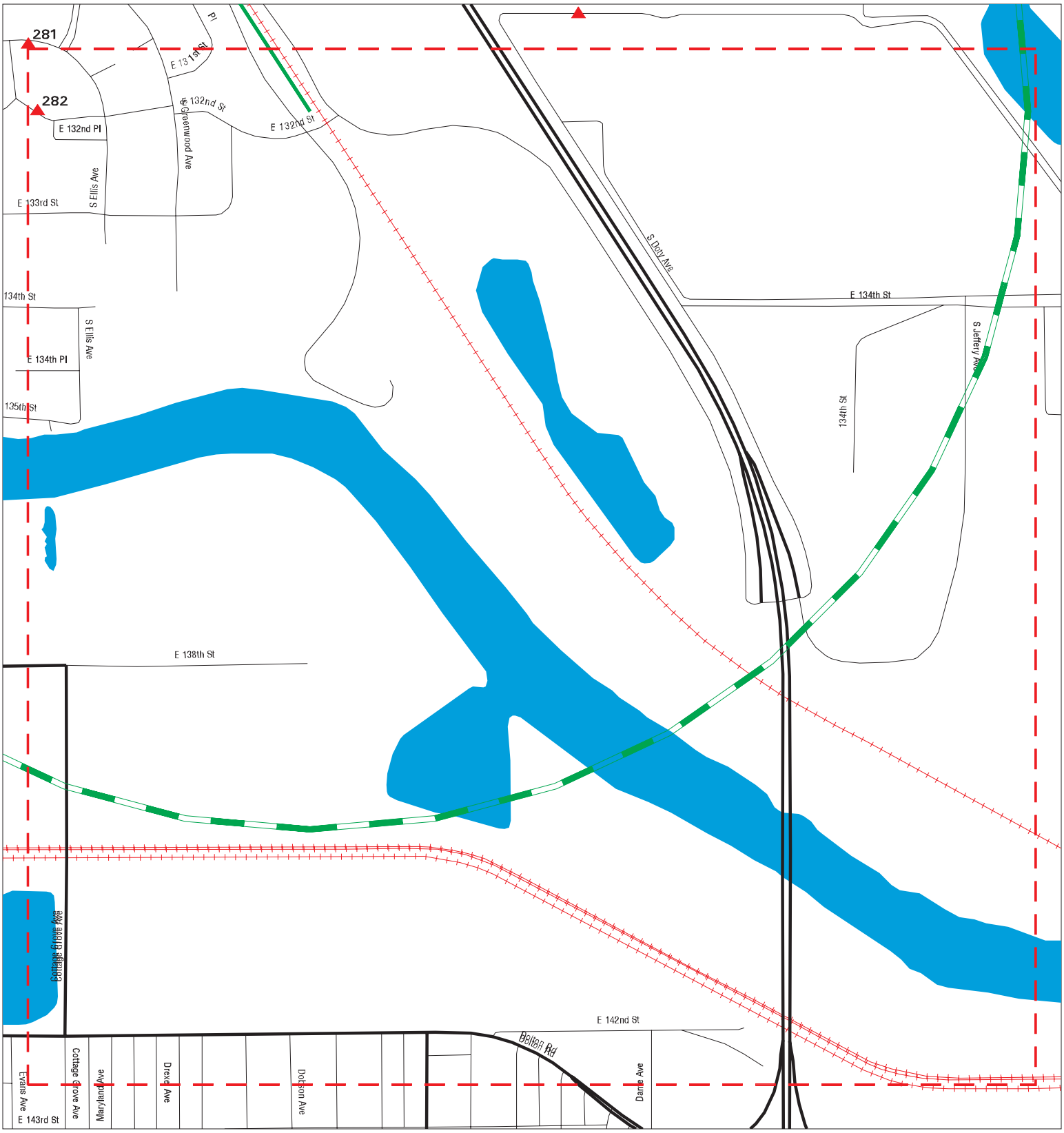

- Sites
- Target Property
- Search Buffer
- Focus Map - No Sites
- Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA

0 1/8 1/4 Miles

SITE NAME: Redline Expansion	CLIENT: Environmental Design Int l Inc
ADDRESS: Redline Expansion	CONTACT: Jjanssen@envdesigni.com
CITY/STATE: Palos Heights IL	INQUIRY #: 06062945.9r
ZIP: 60463	DATE: 05/13/20

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MAPPED SITES SUMMARY - FOCUS MAP 12

Target Property:
REDLINE EXPANSION
PALOS HEIGHTS, IL 60463

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
282 / 12	CHICAGO HOUSING AUTH	940 EAST 132ND STREE	IL LUST	1672 0.317 WSW

1
Target Property
Actual: 589 ft.
Focus Map: 4

CHICAGO PARK DIST-LAKE MICHIGAN CASINO PIER 63RD S
63RD ST, E OF LAKE SHORE DR
CHICAGO, IL 60621

FINDS **1016406377**
N/A

FINDS:
Registry ID: 110055411950
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110055411950

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

2
Target Property
Actual: 590 ft.
Focus Map: 3

SOONG LEE
9832 WENWORTH AV
CHICAGO, IL

EDR Hist Cleaner **1009216136**
N/A

EDR Hist Cleaner

Year:	Name:	Type:
1923	SOONG LEE	LAUNDRIES (CHINESE)

A3
Target Property
Actual: 601 ft.
Focus Map: 3

405 W 103RD ST
CHICAGO, IL

IL CHICAGO ENV **S116614710**
N/A

Site 1 of 2 in cluster A

CHICAGO ENV:

Name:	Not reported
Address:	405 W 103RD ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63355278760687 41.706928082398434)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.706928082398434
Longitude:	-87.63355278760687

A4 **IL CHICAGO ENV** **S116614651**
Target Property **403 W 103RD ST** **N/A**
CHICAGO, IL

Site 2 of 2 in cluster A

Actual: 602 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	403 W 103RD ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.6333526539513 41.70693036655445)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.70693036655445
Longitude:	-87.6333526539513

B5 **O CONNELL ELECTRIC** **FINDS** **1008136832**
Target Property **405 W 104TH ST** **N/A**
CHICAGO, IL 60628

Site 1 of 4 in cluster B

Actual: 604 ft.
Focus Map: 3

FINDS:

Registry ID:	110018335309
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110018335309

Environmental Interest/Information System:

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

B6 **O'CONNELL ELECTRIC** **IL BOL** **S113272296**
Target Property **405 W 104TH ST** **N/A**
CHICAGO, IL 60628

Site 2 of 4 in cluster B

Actual: 604 ft.
Focus Map: 3

BOL:

Name:	O'CONNELL ELECTRIC
Address:	405 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000527990
Inv Num:	0316495011
Interest Name:	O'connell Electric
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.704510
Longitude:	-87.633690

Name:	O'CONNELL ELECTRIC
Address:	405 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628

O'CONNELL ELECTRIC (Continued) **S113272296**

Site Id:	170000527990
Inv Num:	0316495011
Interest Name:	O'Connell Electric
Interest Type:	SOLID WASTE
Media Code:	LAND
Latitude:	41.704510
Longitude:	-87.633690

B7 **IL CHICAGO ENV** **S116614505**
Target Property **400 W 104TH ST** **N/A**
CHICAGO, IL

Site 3 of 4 in cluster B

Actual: 604 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	400 W 104TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63328604605901 41.70532951244444)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.70532951244444
Longitude:	-87.63328604605901

B8 **B VAN DIR MEER & SONS** **IL TANKS** **S121851739**
Target Property **400 W 104TH ST** **N/A**
CHICAGO, IL

Site 4 of 4 in cluster B

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	400W1041956-01-20
Name:	B VAN DIR MEER & SONS
Address:	400 W 104TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	01/20/1956
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MOSBECK OIL EQUIPMENT; INSPECT 3-20K F.O., REMOVE EXISTING TANKS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.705329512
Longitude:	-87.633286046

C9 **IL CHICAGO ENV** **S116614506**
Target Property **400 W 105TH ST** **N/A**
CHICAGO, IL

Site 1 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	400 W 105TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63364308950882 41.70346411493507)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.70346411493507
Longitude:	-87.63364308950882

C10 **IL CHICAGO ENV** **S116614790**
Target Property **410 W 105TH ST** **N/A**
CHICAGO, IL

Site 2 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	410 W 105TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63364308950882 41.70346411493507)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.70346411493507
Longitude:	-87.63364308950882

C11 **410 W 105TH** **FINDS** **1016440942**
Target Property **410 W 105TH** **N/A**
CHICAGO, IL 60618

Site 3 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

FINDS:

Registry ID:	110055960928
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110055960928

Environmental Interest/Information System:

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

~~Click this hyperlink~~ while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

C12 Target Property | **ILLINOIS BELL TELEPHONE** | **IL TANKS** | **S121852291** | **N/A**
413 W 105TH ST
CHICAGO, IL

Site 4 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	413W1051988-02-04
Name:	ILLINOIS BELL TELEPHONE
Address:	413 W 105TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	02/04/1988
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: PETROCHEM SERVICES; REMOVE 1-6K TANK
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.703275097
Longitude:	-87.633793906

C13 Target Property | **ILLINOIS BELL DBA AT&T IL** | **IL BOL** | **S125258399** | **N/A**
413 W 105TH ST
CHICAGO, IL 60628

Site 5 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

BOL:

Name:	ILLINOIS BELL DBA AT&T IL
Address:	413 W 105TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000242645
Inv Num:	031600HHS
Interest Name:	Beverly garage Co - ground floor
Interest Type:	ASBESTOS/NESHAP
Media Code:	AIR
Latitude:	41.703320
Longitude:	-87.634040

Name:	ILLINOIS BELL DBA AT&T IL
Address:	413 W 105TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000242645
Inv Num:	031600HHS
Interest Name:	Illinois Bell DBA AT&T IL
Interest Type:	BOA
Media Code:	AIR
Latitude:	41.703320
Longitude:	-87.634040

C14 Target Property | **ILLINOIS BELL DBA AT&T IL**
413 W 105TH ST
CHICAGO, IL 60628 | **RCRA NonGen / NLR**
FINDS
ECHO | **1000104610**
ILD980904817

Site 6 of 23 in cluster C

Actual: 604 ft.

Focus Map: 3

RCRA NonGen / NLR:

Date form received by agency:	1984-05-17 00:00:00.0
Facility name:	ILL BELL TEL CO BEVERLY AMPCELLSITE
Facility address:	413 W 105TH ST CHICAGO, IL 60628
EPA ID:	ILD980904817
Mailing address:	225 W RANDOLPH ST HQ 17E CHICAGO, IL 60606
Contact:	AL HAMILTON
Contact address:	225 W RANDOLPH ST HQ 17E CHICAGO, IL 60606
Contact country:	US
Contact telephone:	312-471-8412
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No

ILLINOIS BELL DBA AT&T IL (Continued) **1000104610**

On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:
Registry ID: 110005853585
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005853585

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000104610
Registry ID: 110005853585
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005853585
Name: ILLINOIS BELL DBA AT&T IL
Address: 413 W 105TH ST
City,State,Zip: CHICAGO, IL 60628

C15 Target Property | **ILLINOIS BELL TELEPHONE** | **IL TANKS** | **S121852292**
413 W 105TH ST | **N/A**
CHICAGO, IL

Site 7 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:
Facility ID: 413W1051988-02-23
Name: ILLINOIS BELL TELEPHONE
Address: 413 W 105TH ST
City: CHICAGO
State: IL
Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 02/23/1988
Removal Date: Not reported

ILLINOIS BELL TELEPHONE (Continued) **S121852292**

Last Used Date:	Not reported
Comments:	WORK BY: A. B. D. TANK & PUMP; REMOVE 2-6K & 1-550G
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.703275097
Longitude:	-87.633793906

C16 Target Property **ILLINOIS BELL TELEPHONE** **IL TANKS** **S121852286**
413 W 105TH ST **N/A**
CHICAGO, IL

Site 8 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	413W1051950-06-18
Name:	ILLINOIS BELL TELEPHONE
Address:	413 W 105TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	06/18/1950
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: BLAKE VORMARD; INSTALL 1-6.7K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.703275097
Longitude:	-87.633793906

C17 Target Property **ILLINOIS BELL TELEPHONE** **IL TANKS** **S121852287**
413 W 105TH ST **N/A**
CHICAGO, IL

Site 9 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	413W1051958-09-24
Name:	ILLINOIS BELL TELEPHONE
Address:	413 W 105TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/24/1958
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: P.R. STREICH; INSTALL 1-1K GAS

ILLINOIS BELL TELEPHONE (Continued) **S121852287**

Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.703275097
Longitude: -87.633793906

C18 Target Property **ILLINOIS BELL DBA AT&T IL**
413 W 105TH ST
CHICAGO, IL 60628

IL BOL **S113272300**
IL CHICAGO ENV **N/A**

Site 10 of 23 in cluster C

Actual: 604 ft.

Focus Map: 3

BOL:

Name: ILLINOIS BELL DBA AT&T IL
Address: 413 W 105TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000242645
Inv Num: 0316495016
Interest Name: Illinois Bell DBA AT&T IL
Interest Type: BOL
Media Code: LAND
Latitude: 41.703320
Longitude: -87.634040

Name: ILLINOIS BELL DBA AT&T IL
Address: 413 W 105TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000242645
Inv Num: 0316495016
Interest Name: Illinois Bell DBA AT&T IL
Interest Type: LUST
Media Code: LAND
Latitude: 41.703320
Longitude: -87.634040

Name: ILLINOIS BELL DBA AT&T IL
Address: 413 W 105TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000242645
Inv Num: 0316495016
Interest Name: Illinois Bell DBA AT&T IL
Interest Type: RCRA
Media Code: LAND
Latitude: 41.703320
Longitude: -87.634040

Name: ILLINOIS BELL DBA AT&T IL
Address: 413 W 105TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000242645
Inv Num: 0316495016
Interest Name: Illinois Bell DBA AT&T IL
Interest Type: SOLID WASTE
Media Code: LAND
Latitude: 41.703320
Longitude: -87.634040

CHICAGO ENV:

Name: Not reported

ILLINOIS BELL DBA AT&T IL (Continued) **S113272300**

Address:	413 W 105TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63379390568126 41.703275097254405)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.703275097254405
Longitude:	-87.63379390568126

C19 Target Property **ILLINOIS BELL TELEPHONE** **IL TANKS** **S121852290**
413 W 105TH ST **N/A**
CHICAGO, IL

Site 11 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	413W1051974-05-22
Name:	ILLINOIS BELL TELEPHONE
Address:	413 W 105TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	05/22/1974
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: AETNA TANK & PUMP; INSTALL 2-6K FIBERGLASS GAS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.703275097
Longitude:	-87.633793906

C20 Target Property **ILLINOIS BELL TELEPHONE** **IL TANKS** **S121852289**
413 W 105TH ST **N/A**
CHICAGO, IL

Site 12 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	413W1051971-11-04
Name:	ILLINOIS BELL TELEPHONE
Address:	413 W 105TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported

ILLINOIS BELL TELEPHONE (Continued) **S121852289**

Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	11/04/1971
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: KELLCHER INC.; INSTALL 1-5K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.703275097
Longitude:	-87.633793906

C21 Target Property **ILLINOIS BELL TELEPHONE** **IL TANKS** **S121852288**
413 W 105TH ST **N/A**
CHICAGO, IL

Site 13 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	413W1051959-06-30
Name:	ILLINOIS BELL TELEPHONE
Address:	413 W 105TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	06/30/1959
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: BADGER HEATING; INSTALL 1-550G F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.703275097
Longitude:	-87.633793906

C22 Target Property **FRED SYHORA** **IL TANKS** **S121851816**
401 W 105TH ST **N/A**
CHICAGO, IL

Site 14 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	401W1051957-03-08
Name:	FRED SYHORA
Address:	401 W 105TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported

FRED SYHORA (Continued) **S121851816**

Tank Capacity:	Not reported
Install Date:	03/08/1957
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: OWNER; INSTALL 2-15K, 2-3.5K USED MOTOR OIL
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.703277511
Longitude:	-87.633797419

C23 Target Property **ILLINOIS BELL TELEPHONE** **IL RGA LUST** **S115508718**
413 WEST 105TH ST. **N/A**
CHICAGO, IL

Site 15 of 23 in cluster C

Actual: 604 ft.

Focus Map: 3

RGA LUST:

2008	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.
2007	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.
2006	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.
2005	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.
2004	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.
2003	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.
2002	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.
2001	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.
2000	ILLINOIS BELL TELEPHONE	413 WEST 105TH ST.

C24 Target Property **IL BELL TELEPHONE CO** **IL UST** **U001142608**
413 W 105TH **N/A**
CHICAGO, IL 60628

Site 16 of 23 in cluster C

Actual: 604 ft.

Focus Map: 3

UST:

Name:	IL BELL TELEPHONE CO
Address:	413 W 105TH
City:	CHICAGO
Zip:	60628
Facility ID:	2007809
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Id:	U0007227
Owner Name:	Ameritech d/b/a AT&T
Owner Address:	308 South Akard, Room 1701
Owner City,St,Zip:	Dallas, TX 75202
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/8/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported

IL BELL TELEPHONE CO (Continued) **U001142608**

Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	3/24/1988
Abandoned Date:	Not reported

Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/8/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	3/24/1988
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1988
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported

IL BELL TELEPHONE CO (Continued) **U001142608**

Last Passing Date: Not reported
Test Expire Date: Not reported
Removed Date: 3/24/1988
Abandoned Date: Not reported

C25 **ILLINOIS BELL TELEPHONE** **IL RGA LUST** **S115508719**
Target Property **413 WEST 105TH STREET** **N/A**
CHICAGO, IL

Site 17 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

RGA LUST:

2012	ILLINOIS BELL TELEPHONE	413 WEST 105TH STREET
2011	ILLINOIS BELL TELEPHONE	413 WEST 105TH STREET
2010	ILLINOIS BELL TELEPHONE	413 WEST 105TH STREET
2009	ILLINOIS BELL TELEPHONE	413 WEST 105TH STREET

C26 **FRED SYHORA** **IL TANKS** **S121851817**
Target Property **401 W 105TH ST** **N/A**
CHICAGO, IL

Site 18 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID: 401W1051970-07-08
Name: FRED SYHORA
Address: 401 W 105TH ST
City: CHICAGO
State: IL
Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 07/08/1970
Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: ROBERT YOUNG INC.; SANDFILL 2-15K & 2-4K W.O. TANKS
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.703277511
Longitude: -87.633797419

C27 **IL CHICAGO ENV** **S116614586**
Target Property **401 W 105TH ST** **N/A**
CHICAGO, IL

Site 19 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

CHICAGO ENV:

Name: Not reported
Address: 401 W 105TH ST
City,State,Zip: CHICAGO, IL
Map Location: POINT (-87.63379741919952 41.703277510578516)
Complaints: Not reported

(Continued) **S116614586**

Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.703277510578516
Longitude:	-87.63379741919952

C28 Target Property | **ILLINOIS BELL TELEPHONE**
413 WEST 105TH STREET
CHICAGO, IL 60628 | **IL LUST** **IL SPILLS** | **S104528083** **N/A**

Site 20 of 23 in cluster C

Actual: 604 ft.

Focus Map: 3

LUST:

Name:	ILLINOIS BELL TELEPHONE
Address:	413 WEST 105TH STREET
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	880112
IL EPA Id:	316495016
Product:	Not reported
IEMA Date:	1988-02-02
Project Manager:	Tucka
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Illinois Bell Telephone
PRP Contact:	Thomas Scheer
PRP Address:	900 North Villa
PRP City,St,Zip:	Villa Park, IL 60181
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**2005-03-21**
NFR Date Recorded:	2014-08-26
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

SPILLS:

Name:	Not reported
City,State,Zip:	CHICAGO, IL
Incident ID:	NL880112
Incident Date:	Not reported
Date Received:	02/02/1988
Lust Ind:	Not reported
Facility Address:	413 WEST 105TH STREET
Facility City:	CHICAGO
PRP Name:	ILLINOIS BELL
AC:	Not reported
Source Table:	dbo_OCIN_INDCIDENTHIS

C29 **IL SPILLS** **S115719283**
Target Property **413 WEST 105TH STREET** **N/A**
CHICAGO, IL

Site 21 of 23 in cluster C

Actual: 604 ft.

Focus Map: 3

IEMA SPILLS:

Name:	Not reported
Address:	413 WEST 105TH STREET
City,State,Zip:	CHICAGO, IL
Incident Number:	880112
Incident Report Date:	02/02/1988
Street Address Of Incident Location:	413 West 105th Street
Incident Location City:	CHICAGO
Incident Location County:	COOK
Entered By:	Not reported
Date Entered:	Not reported
Data Input Status:	CLOSED
Leaking Underground Storage Tank (Lust)?:	Not reported
Caller:	GERRY VOLL
Caller Represents:	ILLINOIS BELL
Hazmat Incident Type:	OTHER
Date/Time Occurred:	Not reported
Mile Post:	Not reported
Section:	Not reported
Township:	Not reported
Range:	Not reported
Area Involved:	Not reported
Media/Medium Into Which Release Occurred:	Not reported
Temp:	Not reported
Wind:	Not reported
Material Name:	WATER
Type:	UNKNOWN
Chris Code:	Not reported
CAS#:	Not reported
UN/NA #:	Not reported
302(A) Extremely Hazardous Substance?:	Not reported
Is This A RCRA Hazardous Waste?:	Not reported
Is This A RCRA Regulated Facility?:	Not reported
Container Type:	UNDERGROUND TANK
Container Size:	UNDERGROUND TANK
Amount Released:	3500
Rate Of Release/Min:	Not reported
Duration Of Release:	Not reported
Cause Of Release:	TANK TAKING ON WATER
Estimated Spill Extent:	Not reported
Spill Extent Units:	Not reported
Date/Time Incident Occurred:	Not reported
Check If Unknown (Occurrence):	Not reported
Date/Time Discovered:	1988-01-19 00:00:00
Check If Unknown (Discovered):	Not reported
Where Taken:	NONE
On Scene Contact:	Not reported
Public Health Risks/Precautions Taken:	Not reported
Number Of People Evacuated:	NONE
Assistance Needed From State Agencies:	Not reported
Containment/Cleanup Actions And Plans:	PETRO CHEM TO EMPTY TANK
Responsible Name:	ILLINOIS BELL
Facility Manager:	Not reported

(Continued) **S115719283**

Facility Manager Phone #:	Not reported
Street1:	212 W. WASHINGTON CHICAGO,IL. 60606
Contacted ESDA?:	Not reported
ESDA On Scene?:	Not reported
Specific ESDA Agency Contacted:	Not reported
Contacted Fire Department?:	Not reported
Fire Department On Scene?:	Not reported
Name Of Fire Department Contacted:	Not reported
Contacted Police Department?:	Not reported
Police Department On Scene?:	Not reported
Name Of Police Department Contacted:	Not reported
Sheriff Police Department?:	Not reported
Sheriff Department On Scene?:	Not reported
Name Of Sheriff Department Contacted:	Not reported
Was An Agency Other Than ESDA:	Not reported
Fire Police Or Sheriff Contacted?:	Not reported
Was This Other Agency On Scene?:	Not reported
Name Of Other Agency Contacted:	Not reported
Agency Notified Name:	NONE
Date/Time Agency Notified:	Not reported
Narrative:	Not reported
Follow Up:	Not reported

C30 **JCK AUTO DEPOT INC** **IL BOL** **S113266109**
Target **411 W 105TH ST** **N/A**
Property **CHICAGO, IL 60628**

Site 22 of 23 in cluster C

Actual:
604 ft.

Focus Map:
3

BOL:

Name:	JCK AUTO DEPOT INC
Address:	411 W 105TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000495738
Inv Num:	0316005422
Interest Name:	JCK Auto Depot Inc
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.703140
Longitude:	-87.633720

Name:	JCK AUTO DEPOT INC
Address:	411 W 105TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000495738
Inv Num:	0316005422
Interest Name:	JCK Auto Depot Inc
Interest Type:	SOLID WASTE
Media Code:	LAND
Latitude:	41.703140
Longitude:	-87.633720

C31 Target Property | **JCK AUTO DEPOT INC**
411 W 105TH ST
CHICAGO, IL 60628 | **FINDS** | **1008150706**
N/A

Site 23 of 23 in cluster C

Actual: 604 ft.
Focus Map: 3

FINDS:
Registry ID: 110018475265
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110018475265

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

D32 Target Property | **400 W 107TH ST**
CHICAGO, IL | **IL CHICAGO ENV** | **S116614507**
N/A

Site 1 of 8 in cluster D

Actual: 605 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	400 W 107TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63297479180375 41.699863536561)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Y
Inspections:	Y
Permits:	Not reported
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.699863536561
Longitude:	-87.63297479180375

D33 Target Property | **MIDLAND CHEMICAL CORPORATION**
400 W 107TH ST
CHICAGO, IL | **IL TANKS** | **S121851741**
N/A

Site 2 of 8 in cluster D

Actual: 605 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	400W1071975-12-05
Name:	MIDLAND CHEMICAL CORPORATION
Address:	400 W 107TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	12/05/1975
Removal Date:	Not reported

MIDLAND CHEMICAL CORPORATION (Continued) **S121851741**

Last Used Date:	Not reported
Comments:	WORK BY: SYSTEMS TANK & PIPING; INSTALL 1-2K, 1-4K MINERAL SPIRITS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.699863537
Longitude:	-87.632974792

D34 Target Property | **MIDLAND CHEMICAL CORPORATION** | **IL TANKS** | **S121851740**
400 W 107TH ST | **N/A**
CHICAGO, IL

Site 3 of 8 in cluster D

Actual: 605 ft.
Focus Map: 3

CHICAGO TANKS:

Facility ID:	400W1071962-10-08
Name:	MIDLAND CHEMICAL CORPORATION
Address:	400 W 107TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	10/08/1962
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: OWNER; INSPECT 1-3K, 1-7K SWEEPING COMP. OIL
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.699863537
Longitude:	-87.632974792

D35 Target Property | **IL CHICAGO ENV** | **S116614831**
411 W 107TH ST | **N/A**
CHICAGO, IL

Site 4 of 8 in cluster D

Actual: 605 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	411 W 107TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63347536126973 41.69963877952303)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.69963877952303
Longitude:	-87.63347536126973

D36 **IL CHICAGO ENV** **S116614748**
Target Property **407 W 107TH ST** **N/A**
CHICAGO, IL

Site 5 of 8 in cluster D

Actual: 605 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	407 W 107TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63333335220891 41.69964021414261)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.69964021414261
Longitude:	-87.63333335220891

D37 **IL CHICAGO ENV** **S116614588**
Target Property **401 W 107TH ST** **N/A**
CHICAGO, IL

Site 6 of 8 in cluster D

Actual: 605 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	401 W 107TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63297002224333 41.69964402665773)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Y
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.69964402665773
Longitude:	-87.63297002224333

D38 **AT&T MOBILITY- TANK#1-224** **IL AST** **A100415857**
Target Property **405 WEST 107TH STREET** **N/A**
CHICAGO, IL 60628

Site 7 of 8 in cluster D

Actual: 605 ft.
Focus Map: 3

AST:

Name:	AT&T MOBILITY- TANK#1-224
Address:	405 WEST 107TH STREET
City,State,Zip:	CHICAGO, IL 60628
City,State,Zip:	CHICAGO, IL 60628
Occupancy Number:	-CS-059-1463677821753
Occupant Type:	059 - ABOVE GROUND BULK STORAGE
Section Number:	CS
Property Owner Name:	AT&T MOBILITY
Type:	TANK - ABOVE GROUND BUL

AT&T MOBILITY- TANK#1-224 (Continued) **A100415857**

Name:	AT&T MOBILITY- TANK#1-224
Address:	405 WEST 107TH STREET
City,State,Zip:	CHICAGO, IL 60628
City,State,Zip:	CHICAGO, IL 60628
Occupancy Number:	-CS-059-1463677821753
Occupant Type:	059 - ABOVE GROUND BULK STORAGE
Section Number:	CS
Property Owner Name:	AT&T MOBILITY
Type:	TANK - ABOVE GROUN

Name:	AT&T MOBILITY-TANK#1-224
Address:	405 WEST 107TH STREET
City,State,Zip:	CHICAGO, IL 60628
City,State,Zip:	CHICAGO, IL 60628
Occupancy Number:	CS-059-1463677821753
Occupant Type:	059 - ABOVE GROUND BULK STORAGE
Section Number:	CS
Property Owner Name:	AT&T MOBILITY
Type:	TANK - ABOVE GROUND BULK G

D39 **IL CHICAGO ENV** **S117322630**
Target Property **405 W 107TH ST** **N/A**
CHICAGO, IL

Site 8 of 8 in cluster D

Actual: 605 ft.
Focus Map: 3

CHICAGO ENV:

Name:	Not reported
Address:	405 W 107TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.6332123783946 41.69964143613257)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Y
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.69964143613257
Longitude:	-87.6332123783946

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40 **IL CHICAGO ENV** **S116613596**
Target Property **355 W 109TH ST** **N/A**
CHICAGO, IL

Actual: 605 ft.
Focus Map: 5

CHICAGO ENV:

Name:	Not reported
Address:	355 W 109TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63256482558248 41.69600647547805)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported

(Continued) **S116613596**

Holds and Lust Nfr:	Not reported
Latitude:	41.69600647547805
Longitude:	-87.63256482558248

E41 **IL CHICAGO ENV** **S116613595**
Target Property **355 W 109TH PL** **N/A**
CHICAGO, IL

Site 1 of 10 in cluster E

Actual: 605 ft.
Focus Map: 5

CHICAGO ENV:

Name:	Not reported
Address:	355 W 109TH PL
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63236358619608 41.69509523234086)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.69509523234086
Longitude:	-87.63236358619608

E42 **RANSOM TRANSPORT** **RCRA-VSQG** **1004696953**
Target Property **352 W 110TH ST** **FINDS** **ILR000060863**
CHICAGO, IL 60628 **ECHO**

Site 2 of 10 in cluster E

Actual: 605 ft.
Focus Map: 5

RCRA-VSQG:

Date form received by agency:	1999-01-28 00:00:00.0
Facility name:	RANSOM TRANSPORT
Facility address:	352 W 110TH ST CHICAGO, IL 60628
EPA ID:	ILR000060863
Contact:	WILLIAM RANSOM
Contact address:	352 W 110TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	773-785-8480
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of

RANSOM TRANSPORT (Continued) **1004696953**

any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	RANSOM TRANSORT
Owner/operator address:	352 W 110TH ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	773-785-8480
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003048522
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110003048522

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

RANSOM TRANSPORT (Continued) **1004696953**

ECHO:

Envid:	1004696953
Registry ID:	110003048522
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110003048522
Name:	RANSOM TRANSPORT
Address:	352 W 110TH ST
City,State,Zip:	CHICAGO, IL 60628

E43 **IL SPILLS** **S111903849**
Target Property **352 W 110TH ST** **N/A**
CHICAGO, IL

Site 3 of 10 in cluster E

Actual: 605 ft.
Focus Map: 5

SPILLS:

Name:	Not reported
City,State,Zip:	CHICAGO, IL
Incident ID:	19990399
Incident Date:	Not reported
Date Received:	02/19/1999
Lust Ind:	Yes
Facility Address:	352 W 110TH ST
Facility City:	CHICAGO
PRP Name:	WILLIAM RANSOM TRANSPORTATION
AC:	Not reported
Source Table:	dbo_OCIN_INCIDENTCUR

E44 **RANSOM TRANSPORT BUS GARAGE** **IL TANKS** **S121837017**
Target Property **352 W 110TH ST** **N/A**
CHICAGO, IL

Site 4 of 10 in cluster E

Actual: 605 ft.
Focus Map: 5

CHICAGO TANKS:

Facility ID:	2000983
Name:	RANSOM TRANSPORT BUS GARAGE
Address:	352 W 110TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	6000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	352 W 110TH ST, REMOVED, Historic data from former Dept. of Environment [Stage 2: Y;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.694405817
Longitude:	-87.632400998

E45
Target Property

352 W 110TH ST
CHICAGO, IL

IL SPILLS **S115752316**
IL CHICAGO ENV **N/A**

Site 5 of 10 in cluster E

Actual: 605 ft.

Focus Map: 5

IEMA SPILLS:

Name:	Not reported
Address:	352 W 110TH ST
City,State,Zip:	CHICAGO, IL
Incident Number:	990399
Incident Report Date:	02/19/1999
Street Address Of Incident Location:	352 W 110TH ST
Incident Location City:	CHICAGO
Incident Location County:	COOK
Entered By:	Not reported
Date Entered:	Not reported
Data Input Status:	CLOSED
Leaking Underground Storage Tank (Lust)?:	Not reported
Caller:	WILLIAM RANSOM, SR
Caller Represents:	WILLIAM RANSOM TRANSPORTA
Hazmat Incident Type:	LEAK
Date/Time Occurred:	Not reported
Mile Post:	Not reported
Section:	Not reported
Township:	Not reported
Range:	Not reported
Area Involved:	FIXED FACILITY
Media/Medium Into Which Release Occurred:	Not reported
Temp:	Not reported
Wind:	Not reported
Material Name:	GASOLINE
Type:	UNKNOWN
Chris Code:	Not reported
CAS#:	Not reported
UN/NA #:	Not reported
302(A) Extremely Hazardous Substance?:	Not reported
Is This A RCRA Hazardous Waste?:	Not reported
Is This A RCRA Regulated Facility?:	Not reported
Container Type:	UNDERGROUND TANK
Container Size:	UNDERGROUND TANK
Amount Released:	UNKNOWN
Rate Of Release/Min:	Not reported
Duration Of Release:	Not reported
Cause Of Release:	SPILLS
Estimated Spill Extent:	Not reported
Spill Extent Units:	Not reported
Date/Time Incident Occurred:	Not reported
Check If Unknown (Occurrence):	Not reported
Date/Time Discovered:	Not reported
Check If Unknown (Discovered):	Not reported
Where Taken:	NONE
On Scene Contact:	Not reported
Public Health Risks/Precautions Taken:	NONE
Number Of People Evacuated:	NONE
Assistance Needed From State Agencies:	Not reported
Containment/Cleanup Actions And Plans:	Not reported
Responsible Name:	WILLIAM RANSOM TRANSPORTATION
Facility Manager:	Not reported

(Continued) **S115752316**

Facility Manager Phone #:	Not reported
Street1:	Not reported
Contacted ESDA?:	Not reported
ESDA On Scene?:	Not reported
Specific ESDA Agency Contacted:	Not reported
Contacted Fire Department?:	Not reported
Fire Department On Scene?:	Not reported
Name Of Fire Department Contacted:	Not reported
Contacted Police Department?:	Not reported
Police Department On Scene?:	Not reported
Name Of Police Department Contacted:	Not reported
Sheriff Police Department?:	Not reported
Sheriff Department On Scene?:	Not reported
Name Of Sheriff Department Contacted:	Not reported
Was An Agency Other Than ESDA:	Not reported
Fire Police Or Sheriff Contacted?:	Not reported
Was This Other Agency On Scene?:	Not reported
Name Of Other Agency Contacted:	Not reported
Agency Notified Name:	Not reported
Date/Time Agency Notified:	Not reported
Narrative:	Not reported
Follow Up:	Not reported

CHICAGO ENV:

Name:	Not reported
Address:	352 W 110TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63240099765174 41.694405817075406)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Y
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.694405817075406
Longitude:	-87.63240099765174

E46 **ERNS** **93154212**
Target Property **352 WEST 110 ST** **N/A**
CHICAGO, IL

Site 6 of 10 in cluster E

Actual:
605 ft.

Focus Map:
5

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

E47 Target Property | **WILLIAM RANSOM TRANSPORTATION**
352 WEST 110TH ST.
CHICAGO, IL 60628 | **IL LUST** | **S104529463**
N/A

Site 7 of 10 in cluster E

Actual: 605 ft.

Focus Map: 5

LUST:

Name:	WILLIAM RANSOM TRANSPORTATION
Address:	352 WEST 110TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	990399
IL EPA Id:	316495116
Product:	Gasoline
IEMA Date:	1999-02-19
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	William Ransom Transportation
PRP Contact:	William Ransom, Sr.
PRP Address:	352 West 110th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7737858480
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1999-03-23
45 Report Received:	1999-05-21
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

E48 Target Property | **FRANCIS T. SHEA**
352 W 110TH ST
CHICAGO, IL | **IL TANKS** | **S121849969**
N/A

Site 8 of 10 in cluster E

Actual: 605 ft.

Focus Map: 5

CHICAGO TANKS:

Facility ID:	352W1101972-11-15
Name:	FRANCIS T. SHEA
Address:	352 W 110TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	11/15/1972
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: STANDARD TANK; INSTALL 1-6K GAS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.694405817
Longitude:	-87.632400998

E49 Target Property | **WILLIAM RANSOM TRANSPORTATION**
352 WEST 110TH ST.
CHICAGO, IL | **IL RGA LUST** | **S115522878**
N/A

Site 9 of 10 in cluster E

Actual: 605 ft.

Focus Map: 5

RGA LUST:

2012	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2011	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2010	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2009	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2008	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2007	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2006	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2005	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2004	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2003	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2002	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2001	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.
2000	WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.

E50 Target Property | **RANSOM TRANSPORT BUS GARAGE**
352 W 110TH ST
CHICAGO, IL 60628 | **IL UST** | **U001142423**
N/A

Site 10 of 10 in cluster E

Actual: 605 ft.

Focus Map: 5

UST:

Name:	RANSOM TRANSPORT BUS GARAGE
Address:	352 W 110TH ST
City:	CHICAGO
Zip:	60628
Facility ID:	2000983
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Id:	U0004730
Owner Name:	Eloyse Carney School Bus Ser
Owner Address:	352 W 110Th St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	6/1/1998
OSFM First Notify Date:	1/21/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported

RANSOM TRANSPORT BUS GARAGE (Continued) **U001142423**

Removed Date: 2/19/1999
Abandoned Date: Not reported

F51 **IL CHICAGO ENV** **S116613367**
Target Property **349 W 110TH ST** **N/A**
CHICAGO, IL

Site 1 of 2 in cluster F

Actual: 605 ft.
Focus Map: 5

CHICAGO ENV:

Name:	Not reported
Address:	349 W 110TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63224720258725 41.69418813292212)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.69418813292212
Longitude:	-87.63224720258725

F52 **IL CHICAGO ENV** **S116613350**
Target Property **348 W 110TH PL** **N/A**
CHICAGO, IL

Site 2 of 2 in cluster F

Actual: 605 ft.
Focus Map: 5

CHICAGO ENV:

Name:	Not reported
Address:	348 W 110TH PL
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63209659202685 41.69349502936478)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.69349502936478
Longitude:	-87.63209659202685

53 **IL CHICAGO ENV** **S116613635**
Target Property **356 W 111TH ST** **N/A**
CHICAGO, IL

Actual: 605 ft.
Focus Map: 5

CHICAGO ENV:

Name:	Not reported
Address:	356 W 111TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63252214170453 41.692582905655996)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.692582905655996
Longitude:	-87.63252214170453

G54 **IL CHICAGO ENV** **S116613343**
Target Property **347 W 111TH ST** **N/A**
CHICAGO, IL

Site 1 of 2 in cluster G

Actual: 606 ft.
Focus Map: 5

CHICAGO ENV:

Name:	Not reported
Address:	347 W 111TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63214482650876 41.6923678527347)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.6923678527347
Longitude:	-87.63214482650876

G55 **IL CHICAGO ENV** **S116613351**
Target Property **348 W 111TH PL** **N/A**
CHICAGO, IL

Site 2 of 2 in cluster G

Actual: 606 ft.
Focus Map: 5

CHICAGO ENV:

Name:	Not reported
Address:	348 W 111TH PL
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63218429254928 41.691678954318185)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported

(Continued) **S116613351**

Latitude: 41.691678954318185
Longitude: -87.63218429254928

---

56 **IL CHICAGO ENV** **S116612958**
Target Property **336 W 112TH ST** **N/A**
CHICAGO, IL

Actual: 607 ft.
Focus Map: 5

CHICAGO ENV:
Name: Not reported
Address: 336 W 112TH ST
City,State,Zip: CHICAGO, IL
Map Location: POINT (-87.63168955851121 41.69077922057385)
Complaints: Not reported
Neshaps and Demolition Notices: Y
Enforcement: Not reported
Inspections: Not reported
Permits: Not reported
Tanks: Not reported
Holds and Lust Nfr: Not reported
Latitude: 41.69077922057385
Longitude: -87.63168955851121

---

57 **IL CHICAGO ENV** **S120933450**
Target Property **11325 S PRINCETON AVE** **N/A**
CHICAGO, IL

Actual: 607 ft.
Focus Map: 5

CHICAGO ENV:
Name: Not reported
Address: 11325 S PRINCETON AVE
City,State,Zip: CHICAGO, IL
Map Location: POINT (-87.63004054894037 41.688201916616364)
Complaints: Not reported
Neshaps and Demolition Notices: Y
Enforcement: Not reported
Inspections: Not reported
Permits: Not reported
Tanks: Not reported
Holds and Lust Nfr: Not reported
Latitude: 41.688201916616364
Longitude: -87.63004054894037

H58 **IL CHICAGO ENV** **S117459611**
Target Property **11336 S YALE AVE** **N/A**
CHICAGO, IL

Site 1 of 2 in cluster H

Actual: 606 ft.
Focus Map: 5

CHICAGO ENV:
Name: Not reported
Address: 11336 S YALE AVE
City,State,Zip: CHICAGO, IL
Map Location: POINT (-87.62911649547384 41.687796497998335)
Complaints: Not reported
Neshaps and Demolition Notices: Not reported
Enforcement: Y

(Continued) **S117459611**

Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.687796497998335
Longitude:	-87.62911649547384

H59 **ROSELAND TUNE UP CNTR** **EDR Hist Auto** **1009071760**
Target **401 W 111TH ST** **N/A**
Property **CHICAGO, IL**

Site 2 of 2 in cluster H

Actual: EDR Hist Auto
606 ft.

Focus Map:
5

Year:	Name:	Type:
1982	ROSELAND TUNE-UP	General Automotive Repair Shops
1983	ROSELAND TUNE-UP	General Automotive Repair Shops
1985	ROSELAND TUNE-UP	General Automotive Repair Shops
1986	ROSELAND TUNE-UP	General Automotive Repair Shops
1987	ROSELAND TUNE-UP	General Automotive Repair Shops
1988	ROSELAND TUNE-UP	General Automotive Repair Shops
1989	ROSELAND TUNE-UP	General Automotive Repair Shops
1990	ROSELAND TUNE-UP	General Automotive Repair Shops
1991	ROSELAND TUNE-UP	General Automotive Repair Shops
1992	ROSELAND TUNE-UP	General Automotive Repair Shops
1993	ROSELAND TUNE-UP	General Automotive Repair Shops
1994	ROSELAND TUNE-UP	General Automotive Repair Shops
1995	ROSELAND TUNE-UP	General Automotive Repair Shops
1996	ROSELAND TUNE-UP	General Automotive Repair Shops
1997	ROSELAND TUNE-UP	General Automotive Repair Shops
1998	ROSELAND TUNE-UP	General Automotive Repair Shops
1999	ROSELAND TUNE-UP	General Automotive Repair Shops
2000	ROSELAND TUNE-UP	General Automotive Repair Shops
2001	ROSELAND TUNE-UP	General Automotive Repair Shops
2002	ROSELAND TUNE-UP	General Automotive Repair Shops
2003	ROSELAND TUNE UP CNTR	AUTOMOBILE REPAIR AND SERVICE
2003	ROSELAND TUNEUP	General Automotive Repair Shops
2004	ROSELAND TUNEUP	General Automotive Repair Shops
2005	ROSELAND TUNEUP	General Automotive Repair Shops
2006	ROSELAND TUNEUP	General Automotive Repair Shops
2007	ROSELAND TUNEUP	General Automotive Repair Shops
2008	ROSELAND TUNEUP	General Automotive Repair Shops
2009	ROSELAND TUNEUP	General Automotive Repair Shops
2010	ROSELAND TUNEUP	General Automotive Repair Shops
2011	ROSELAND TUNEUP	General Automotive Repair Shops
2012	ROSELAND TUNEUP	General Automotive Repair Shops
2013	ROSELAND TUNEUP	General Automotive Repair Shops
2014	ROSELAND TUNEUP	General Automotive Repair Shops

I60 Target Property | **11401 S WENTWORTH**
11401 S WENTWORTH
CHICAGO, IL 60620 | **FINDS** | **1015928371**
N/A

Site 1 of 3 in cluster I

Actual: 606 ft.
Focus Map: 5

FINDS:
Registry ID: 110046090804
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110046090804

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

I61 Target Property | **11401 S WENTWORTH AVE**
CHICAGO, IL | **IL CHICAGO ENV** | **S117459821**
N/A

Site 2 of 3 in cluster I

Actual: 606 ft.
Focus Map: 5

CHICAGO ENV:

Name:	Not reported
Address:	11401 S WENTWORTH AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62759237730982 41.6870622311157)
Complaints:	Y
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.6870622311157
Longitude:	-87.62759237730982

Name:	Not reported
Address:	11401 S WENTWORTH AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62759237730982 41.6870622311157)
Complaints:	Y
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.6870622311157
Longitude:	-87.62759237730982

J62 **IL CHICAGO ENV** **S117886067**
Target Property **11443 S PERRY AVE** **N/A**
CHICAGO, IL

Site 1 of 4 in cluster J

Actual: 606 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11443 S PERRY AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62547857465792 41.685883403048685)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.685883403048685
Longitude:	-87.62547857465792

J63 **IL CHICAGO ENV** **S116616873**
Target Property **52 W 115TH ST** **N/A**
CHICAGO, IL

Site 2 of 4 in cluster J

Actual: 606 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	52 W 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62495602636119 41.6854050369089)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.6854050369089
Longitude:	-87.62495602636119

K64 **IL CHICAGO ENV** **S116615024**
Target Property **42 W 115TH ST** **N/A**
CHICAGO, IL

Site 1 of 11 in cluster K

Actual: 606 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	42 W 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62456397345625 41.6854098787688)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported

(Continued) **S116615024**

Tanks: Not reported
Holds and Lust Nfr: Not reported
Latitude: 41.6854098787688
Longitude: -87.62456397345625

L65 Target Property | **CURTIS SCHOOL-CHI. BD. OF EDUC.**
32 E 115TH ST
CHICAGO, IL 60628 | **RCRA-VSQG FINDS ECHO** | **1004696709 ILR000056796**

Site 1 of 18 in cluster L

Actual: 605 ft.

Focus Map: 6

RCRA-VSQG:
Date form received by agency: 1998-10-27 00:00:00.0
Facility name: CURTIS ELEMENTARY
Facility address: 32 E 115TH ST
CHICAGO, IL 60628
EPA ID: ILR000056796
Mailing address: 8501 W 191ST ST
PO BOX 10
MOKENA, IL 60448
Contact: THOMAS CONNELLY
Contact address: 8501 W 191ST ST PO BOX 10
MOKENA, IL 60448
Contact country: US
Contact telephone: 708-923-0202
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 1819 W PERSHING ROAD 6WW
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: 773-535-7038
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

CURTIS SCHOOL-CHI. BD. OF EDUC. (Continued) **1004696709**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Violation Status: No violations found

FINDS:
Registry ID: 110001851256
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110001851256

Environmental Interest/Information System:
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
AIR MINOR

CURTIS SCHOOL-CHI. BD. OF EDUC. (Continued) **1004696709**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1004696709
Registry ID:	110001851256
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001851256
Name:	CURTIS SCHOOL-CHI. BD. OF EDUC.
Address:	32 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628

L66 Target Property | **CURTIS SCHOOL** | **IL UST** | **1002889106**
32 E 115TH ST | **IL AIRS** | **N/A**
CHICAGO, IL 60628 | **IL BOL**
IL CHICAGO ENV

Site 2 of 18 in cluster L

Actual: 605 ft.

Focus Map: 6

UST:

Name:	CURTIS SCHOOL
Address:	32 E 115TH ST
City:	CHICAGO
Zip:	60628
Facility ID:	2040500
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0028313
Owner Name:	Chicago Public Schools
Owner Address:	125 S. Clark, 17th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	4/16/2001
Abandoned Date:	Not reported

AIRS:

Name:	CURTIS SCHOOL
Address:	32 E 115TH ST

CURTIS SCHOOL (Continued) **1002889106**

City,State,Zip:	CHICAGO, IL
2nd Address:	Not reported
Facility ID:	3604
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600EQZ
Cease Operation Date:	4/23/2001
SIC Code:	8211
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

BOL:

Name:	CURTIS REILLY SCHOOL
Address:	32 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000052519
Inv Num:	0316495110
Interest Name:	George Curtis Elementary
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.685430
Longitude:	-87.622120

Name:	CURTIS REILLY SCHOOL
Address:	32 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000052519
Inv Num:	0316495110
Interest Name:	George Curtis Elementary
Interest Type:	RCRA
Media Code:	LAND
Latitude:	41.685234
Longitude:	-87.622047

Name:	CURTIS REILLY SCHOOL
Address:	32 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000052519
Inv Num:	0316495110
Interest Name:	George Curtis Elementary
Interest Type:	SOLID WASTE
Media Code:	LAND
Latitude:	41.685234
Longitude:	-87.622047

CURTIS SCHOOL (Continued) **1002889106**

CHICAGO ENV:

Name:	Not reported
Address:	32 E 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62166147911621 41.68544574589458)
Complaints:	Y
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Y
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.68544574589458
Longitude:	-87.62166147911621

L67 Target Property **CURTIS SCHOOL**
32 E 115TH ST
CHICAGO, IL

IL TANKS **S121841267**
N/A

Site 3 of 18 in cluster L

Actual: 605 ft.

Focus Map: 6

CHICAGO TANKS:

Facility ID:	2040500
Name:	CURTIS SCHOOL
Address:	32 E 115TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	5000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	12/31/1973
Comments:	32 E 115TH ST, REMOVED 04/16/01, Historic data from former Dept. of Environment [Associated Permit Numbers: 106162 106162;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.685445746
Longitude:	-87.621661479

L68 Target Property **CURTIS REILLY SCHOOL**
32 E 115TH ST
CHICAGO, IL 60628

IL BOL **S125256788**
N/A

Site 4 of 18 in cluster L

Actual: 605 ft.

Focus Map: 6

BOL:

Name:	CURTIS REILLY SCHOOL
Address:	32 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000052519
Inv Num:	031600EQZ
Interest Name:	Curtis Reilly School - Basement/Boiler Room

CURTIS REILLY SCHOOL (Continued) **S125256788**

Interest Type: ASBESTOS/NESHAP
Media Code: AIR
Latitude: 41.685234
Longitude: -87.622047

Name: CURTIS REILLY SCHOOL
Address: 32 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000052519
Inv Num: 031600EQZ
Interest Name: Curtis Reilly School - various area of the school
Interest Type: ASBESTOS/NESHAP
Media Code: AIR
Latitude: 41.685430
Longitude: -87.622120

Name: CURTIS REILLY SCHOOL
Address: 32 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000052519
Inv Num: 031600EQZ
Interest Name: Curtis School
Interest Type: BOA
Media Code: AIR
Latitude: 41.685234
Longitude: -87.622047

Name: CURTIS REILLY SCHOOL
Address: 32 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000052519
Inv Num: 031600EQZ
Interest Name: Curtis School
Interest Type: PERMIT
Media Code: AIR
Latitude: 41.685430
Longitude: -87.622120

Name: CURTIS REILLY SCHOOL
Address: 32 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000052519
Inv Num: 031600EQZ
Interest Name: Curtis School - Boiler Rm
Interest Type: ASBESTOS/NESHAP
Media Code: AIR
Latitude: 41.685234
Longitude: -87.622047

Name: CURTIS REILLY SCHOOL
Address: 32 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000052519
Inv Num: 031600EQZ
Interest Name: George W Curtis Elem School
Interest Type: ASBESTOS/NESHAP
Media Code: AIR

CURTIS REILLY SCHOOL (Continued) **S125256788**

Latitude: 41.685234
Longitude: -87.622047

Name: CURTIS REILLY SCHOOL
Address: 32 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000052519
Inv Num: 031600EQZ
Interest Name: Pulaski Academy 1st, 2nd, 3rd flr classrooms & washrooms
Interest Type: ASBESTOS/NESHAP
Media Code: AIR
Latitude: 41.685430
Longitude: -87.622120

K69 **IL CHICAGO ENV** **S116616173**
Target Property **48 W 115TH ST** **N/A**
CHICAGO, IL

Site 2 of 11 in cluster K

Actual: 606 ft.
Focus Map: 6

CHICAGO ENV:
Name: Not reported
Address: 48 W 115TH ST
City,State,Zip: CHICAGO, IL
Map Location: POINT (-87.62479908039805 41.68540687555742)
Complaints: Y
Neshaps and Demolition Notices: Y
Enforcement: Not reported
Inspections: Y
Permits: Not reported
Tanks: Not reported
Holds and Lust Nfr: Not reported
Latitude: 41.68540687555742
Longitude: -87.62479908039805

M70 **FORMER ROSELAND PLAZA** **FINDS** **1011852805**
Target Property **11500-82 S MICHIGAN AVE 11517-31 S STATE** **N/A**
CHICAGO, IL 60605

Site 1 of 18 in cluster M

Actual: 609 ft.
Focus Map: 6

FINDS:
Registry ID: 110037149751
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110037149751

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

N71
Target Property
CHICAGO, IL

ERNS **2013047465**
N/A

Site 1 of 4 in cluster N

Actual:
605 ft.

Focus Map:
6

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

K72
Target Property
52 W 115TH & 11443 S PERRY
52 W 115TH & 11443 S PERRY
CHICAGO, IL 60608

FINDS **1010013091**
N/A

Site 3 of 11 in cluster K

Actual:
606 ft.

Focus Map:
6

FINDS:

Registry ID:	110028285727
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110028285727

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

M73
Target Property
101 E 115TH ST
CHICAGO, IL

IL CHICAGO ENV **S116603245**
N/A

Site 2 of 18 in cluster M

Actual:
609 ft.

Focus Map:
6

CHICAGO ENV:

Name:	Not reported
Address:	101 E 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62066551195502 41.685237132232466)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.685237132232466
Longitude:	-87.62066551195502

L74 **IL CHICAGO ENV** **S116613373**
Target Property **35 E 115TH ST** **N/A**
CHICAGO, IL

Site 5 of 18 in cluster L

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	35 E 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.6215065258307 41.68522800919667)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68522800919667
Longitude:	-87.6215065258307

L75 **IL CHICAGO ENV** **S116609482**
Target Property **23 E 115TH ST** **N/A**
CHICAGO, IL

Site 6 of 18 in cluster L

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	23 E 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62195734551518 41.68522290021317)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68522290021317
Longitude:	-87.62195734551518

N76 **IL CHICAGO ENV** **S117885785**
Target Property **1 E 115TH ST** **N/A**
CHICAGO, IL

Site 2 of 4 in cluster N

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	1 E 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62278345666142 41.68521317822689)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported

(Continued) **S117885785**

Tanks: Not reported
Holds and Lust Nfr: Not reported
Latitude: 41.68521317822689
Longitude: -87.62278345666142

L77 **CHURCH** **FINDS** **1015828713**
Target **17 E 115TH** **N/A**
Property **CHICAGO, IL 60628**

Site 7 of 18 in cluster L

Actual:
605 ft.
Focus Map:
6

FINDS:
Registry ID: 110045522788
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110045522788

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

L78 **IL CHICAGO ENV** **S116607074**
Target **17 E 115TH ST** **N/A**
Property **CHICAGO, IL**

Site 8 of 18 in cluster L

Actual:
605 ft.
Focus Map:
6

CHICAGO ENV:
Name: Not reported
Address: 17 E 115TH ST
City,State,Zip: CHICAGO, IL
Map Location: POINT (-87.62218253462831 41.685220287055934)
Complaints: Not reported
Neshaps and Demolition Notices: Y
Enforcement: Not reported
Inspections: Y
Permits: Not reported
Tanks: Not reported
Holds and Lust Nfr: Not reported
Latitude: 41.685220287055934
Longitude: -87.62218253462831

K79 **TRIANGLE TRANSMISSION** **IL LUST** **1001493094**
Target **35 W 115TH ST** **IL UST** **ILR000067009**
Property **CHICAGO, IL 60628** **RCRA NonGen / NLR**
FINDS
Site 4 of 11 in cluster K **ECHO**

Actual:
605 ft.
Focus Map:
6

LUST:
Name: TRIANGLE TRANSMISSIONS
Address: 35 WEST 115TH ST.
City,State,Zip: CHICAGO, IL 60628
Incident Num: 992324
IL EPA Id: 316495120

TRIANGLE TRANSMISSION (Continued) **1001493094**

Product:	Gasoline
IEMA Date:	1999-10-13
Project Manager:	Urish
Project Manager Phone:	(217) 524-5596
Email:	Matt.Urish@illinois.gov
PRP Name:	Triangle Transmissions
PRP Contact:	Pheron Aytch
PRP Address:	35 West 115th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7734680054
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1999-10-21
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

UST:

Name:	TRIANGLE TRANSMISSON
Address:	35 W 115TH ST
City:	CHICAGO
Zip:	60628
Facility ID:	2039271
Facility Status:	EXEMPT
Facility Type:	**GOLF COURSE**
Owner Id:	U0029023
Owner Name:	Triangle Transmission
Owner Address:	35 W 115th St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/21/1999
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	99-2324
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	10/13/1999
Abandoned Date:	Not reported

TRIANGLE TRANSMISSION (Continued) **1001493094**

Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/21/1999
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	10/13/1999
Abandoned Date:	Not reported

RCRA NonGen / NLR:

Date form received by agency:	2019-12-13 00:00:00.0
Facility name:	TRIANGLE TRANSMISSION
Facility address:	35 W 115TH ST CHICAGO, IL 60628
EPA ID:	ILR000067009
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	TRIANGLE TRANSMISSION
Owner/operator address:	35 W 115TH ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	773-458-0054
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

TRIANGLE TRANSMISSION (Continued) **1001493094**

Mixed waste (haz. and radioactive):	Not reported
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	1999-08-27 00:00:00.0
Site name:	TRIANGLE TRANSMISSION
Classification:	Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110003052730
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110003052730

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001493094
Registry ID:	110003052730
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110003052730
Name:	TRIANGLE TRANSMISSION
Address:	35 W 115TH ST
City,State,Zip:	CHICAGO, IL 60628

K80 Target Property | **TRIANGLE TRANSMISSION SERVICE**
35 W 115TH ST
CHICAGO, IL 60628 | **EDR Hist Auto** | **1021586660**
N/A

Site 5 of 11 in cluster K

Actual: 605 ft.

Focus Map: 6

EDR Hist Auto

Year:	Name:	Type:
1977	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1978	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1979	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1980	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1982	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1983	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1985	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1986	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1987	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1988	TRIANGLE TRANSMISSION SERVICE	Automotive Repair Shops, NEC
1989	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1990	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1991	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1992	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1993	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1994	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1995	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1996	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1997	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1998	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
1999	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops
2000	TRIANGLE TRANSMISSION SERVICE	Automotive Transmission Repair Shops

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K81 Target Property | **GEORGE THOSS**
35 W 115TH ST
CHICAGO, IL | **IL TANKS** | **S121849861**
N/A

Site 6 of 11 in cluster K

Actual: 605 ft.

Focus Map: 6

CHICAGO TANKS:

Facility ID:	35115ST1959-08-20
Name:	GEORGE THOSS
Address:	35 W 115TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	08/20/1959
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: NAT GAS & OIL; REPLACE 1-1K GAS, REMOVE 2-500G
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.685194551
Longitude:	-87.624244534

K82 Target Property | **TRIANGLE TRANSMISSION**
35 W 115TH ST
CHICAGO, IL 60628 | **IL SPILLS**
IL BOL
IL CHICAGO ENV | **S111905773**
N/A

Site 7 of 11 in cluster K

Actual: 605 ft.

Focus Map: 6

SPILLS:

Name:	Not reported
City,State,Zip:	CHICAGO, IL
Incident ID:	19992324
Incident Date:	Not reported
Date Received:	10/13/1999
Lust Ind:	Yes
Facility Address:	35 W 115TH ST
Facility City:	CHICAGO
PRP Name:	TRIANGLE TRANSMISSIONS
AC:	Not reported
Source Table:	dbo_OCIN_INCIDENTCUR

BOL:

Name:	TRIANGLE TRANSMISSION
Address:	35 W 115TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000183441
Inv Num:	0316495120
Interest Name:	Triangle Transmission
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.685140
Longitude:	-87.623550

Name:	TRIANGLE TRANSMISSION
Address:	35 W 115TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000183441
Inv Num:	0316495120
Interest Name:	Triangle Transmission
Interest Type:	LUST
Media Code:	LAND
Latitude:	41.685140
Longitude:	-87.623550

CHICAGO ENV:

Name:	Not reported
Address:	35 W 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62424453434282 41.68519455071199)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Y
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.68519455071199
Longitude:	-87.62424453434282

K83 Target Property | **TRIANGLE TRANSMISSION**
35 W 115TH ST
CHICAGO, IL | **IL TANKS** | **S121840911**
N/A

Site 8 of 11 in cluster K

Actual: 605 ft.

Focus Map: 6

CHICAGO TANKS:

Facility ID:	2039271
Name:	TRIANGLE TRANSMISSION
Address:	35 W 115TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	2
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	1000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	35 W 115TH ST, REMOVED 10/13/99, Historic data from former Dept. of Environment [Associated Permit Numbers: 105150;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.685194551
Longitude:	-87.624244534

Facility ID:	2039271
Name:	TRIANGLE TRANSMISSION
Address:	35 W 115TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	1000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	35 W 115TH ST, REMOVED 10/13/99, Historic data from former Dept. of Environment [Associated Permit Numbers: 105150;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.685194551
Longitude:	-87.624244534

K84 Target Property | **TRIANGLE TRANSMISSIONS**
35 WEST 115TH ST.
CHICAGO, IL | **IL RGA LUST** | **S115520953**
N/A

Site 9 of 11 in cluster K

Actual: 605 ft.

Focus Map: 6

RGA LUST:

2012	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2011	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2010	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2009	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.

TRIANGLE TRANSMISSIONS (Continued) **S115520953**

2008	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2007	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2006	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2005	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2004	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2003	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2002	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2001	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.
2000	TRIANGLE TRANSMISSIONS	35 WEST 115TH ST.

K85 **IL SPILLS** **S115754240**
Target Property **35 W 115TH ST** **N/A**
CHICAGO, IL

Site 10 of 11 in cluster K

Actual: 605 ft.

Focus Map: 6

IEMA SPILLS:

Name:	Not reported
Address:	35 W 115TH ST
City,State,Zip:	CHICAGO, IL
Incident Number:	992324
Incident Report Date:	10/13/1999
Street Address Of Incident Location:	35 W 115TH ST
Incident Location City:	CHICAGO
Incident Location County:	COOK
Entered By:	Not reported
Date Entered:	Not reported
Data Input Status:	CLOSED
Leaking Underground Storage Tank (Lust)?:	Not reported
Caller:	PHERON AYTCH
Caller Represents:	TRIANGLE TRANSMISSION
Hazmat Incident Type:	LEAK OR SPILL
Date/Time Occurred:	Not reported
Mile Post:	Not reported
Section:	Not reported
Township:	Not reported
Range:	Not reported
Area Involved:	FIXED FACILITY
Media/Medium Into Which Release Occurred:	Not reported
Temp:	Not reported
Wind:	Not reported
Material Name:	GASOLINE
Type:	UNKNOWN
Chris Code:	Not reported
CAS#:	Not reported
UN/NA #:	Not reported
302(A) Extremely Hazardous Substance?:	Not reported
Is This A RCRA Hazardous Waste?:	Not reported
Is This A RCRA Regulated Facility?:	Not reported
Container Type:	UNDERGROUND TANK
Container Size:	UNDERGROUND TANK
Amount Released:	UNK
Rate Of Release/Min:	Not reported
Duration Of Release:	Not reported
Cause Of Release:	HOLE IN THE TANK
Estimated Spill Extent:	Not reported
Spill Extent Units:	Not reported
Date/Time Incident Occurred:	Not reported
Check If Unknown (Occurrence):	Not reported

(Continued) **S115754240**

Date/Time Discovered:	Not reported
Check If Unknown (Discovered):	Not reported
Where Taken:	-0-
On Scene Contact:	Not reported
Public Health Risks/Precautions Taken:	NONE
Number Of People Evacuated:	-0-
Assistance Needed From State Agencies:	Not reported
Containment/Cleanup Actions And Plans:	Not reported
Responsible Name:	TRIANGLE TRANSMISSION
Facility Manager:	Not reported
Facility Manager Phone #:	Not reported
Street1:	Not reported
Contacted ESDA?:	Not reported
ESDA On Scene?:	Not reported
Specific ESDA Agency Contacted:	Not reported
Contacted Fire Department?:	Not reported
Fire Department On Scene?:	Not reported
Name Of Fire Department Contacted:	Not reported
Contacted Police Department?:	Not reported
Police Department On Scene?:	Not reported
Name Of Police Department Contacted:	Not reported
Sheriff Police Department?:	Not reported
Sheriff Department On Scene?:	Not reported
Name Of Sheriff Department Contacted:	Not reported
Was An Agency Other Than ESDA:	Not reported
Fire Police Or Sheriff Contacted?:	Not reported
Was This Other Agency On Scene?:	Not reported
Name Of Other Agency Contacted:	Not reported
Agency Notified Name:	Not reported
Date/Time Agency Notified:	Not reported
Narrative:	Not reported
Follow Up:	Not reported

K86 Target Property **GEORGE THOSS** **IL TANKS** **S121849862**
35 W 115TH ST **N/A**
CHICAGO, IL

Site 11 of 11 in cluster K

Actual: 605 ft.

Focus Map: 6

CHICAGO TANKS:

Facility ID:	35115ST1966-04-06
Name:	GEORGE THOSS
Address:	35 W 115TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	04/06/1966
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: STANDARD TANK; INSPECT 1-2K GAS, REMOVE 1-1K
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.685194551

GEORGE THOSS (Continued) **S121849862**

Longitude: -87.624244534

L87 **IL CHICAGO ENV** **S117460135**
Target Property **11501 S STATE ST** **N/A**
CHICAGO, IL

Site 9 of 18 in cluster L

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11501 S STATE ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62274166846514 41.68526486565458)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68526486565458
Longitude:	-87.62274166846514

M88 **OAK PARK NATIONAL BANK** **IL TANKS** **S121832336**
Target Property **11500 S MICHIGAN AVE** **N/A**
CHICAGO, IL

Site 3 of 18 in cluster M

Actual: 607 ft.
Focus Map: 6

CHICAGO TANKS:

Facility ID:	11500MI1958-05-28
Name:	OAK PARK NATIONAL BANK
Address:	11500 S MICHIGAN AVE
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	05/28/1958
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: FRED SHIRROW; INSTALL 2-315, 1-1K, 1-2K/ENCLOSE 5-315 F.O. UST
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.685271223
Longitude:	-87.620947158

M89 **OAK PARK NATIONAL BANK** **IL TANKS** **S121832337**
Target **11500 S MICHIGAN AVE** **N/A**
Property **CHICAGO, IL**

Site 4 of 18 in cluster M

Actual:
607 ft.

Focus Map:
6

CHICAGO TANKS:

Facility ID:	11500MI1959-03-18
Name:	OAK PARK NATIONAL BANK
Address:	11500 S MICHIGAN AVE
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/18/1959
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: BADGER HEATING; INSTALL 1-2K & 5-300 GAL FUEL OIL TANKS FINAL N/G
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.685271223
Longitude:	-87.620947158

M90 **IL CHICAGO ENV** **S117460122**
Target **11500 S MICHIGAN AVE** **N/A**
Property **CHICAGO, IL**

Site 5 of 18 in cluster M

Actual:
607 ft.

Focus Map:
6

CHICAGO ENV:

Name:	Not reported
Address:	11500 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62094715838595 41.68527122290357)
Complaints:	Y
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.68527122290357
Longitude:	-87.62094715838595

L91 **IL CHICAGO ENV** **S116604965**
Target Property **13 E 115TH ST** **N/A**
CHICAGO, IL

Site 10 of 18 in cluster L

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	13 E 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62233233853021 41.6852185408399)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.6852185408399
Longitude:	-87.62233233853021

M92 **MONTANA JIGAMIAN** **EDR Hist Cleaner** **1009206159**
Target Property **11503 S MICH AV** **N/A**
CHICAGO, IL

Site 6 of 18 in cluster M

Actual: 608 ft.
Focus Map: 6

EDR Hist Cleaner

Year:	Name:	Type:
1928	MONTANA JIGAMIAN	CLEANERS GARMENTS CURTAINS AND DRAPERIES

L93 **IL CHICAGO ENV** **S117460138**
Target Property **11505 S STATE ST** **N/A**
CHICAGO, IL

Site 11 of 18 in cluster L

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11505 S STATE ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62273892609863 41.68515832827373)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68515832827373
Longitude:	-87.62273892609863

L94 Target Property | **ASDOORAIAN DANL**
25 E 115TH
CHICAGO, IL | **EDR Hist Cleaner** | **1009207055**
N/A

Site 12 of 18 in cluster L

Actual: 606 ft.
Focus Map: 6

EDR Hist Cleaner

Year:	Name:	Type:
1928	ASDOORAIAN DANL	CARPET CLEANERS AND LAYERS

L95 Target Property | **25 E 115TH ST**
25 E 115TH ST
CHICAGO, IL 60628 | **FINDS** | **1011982590**
N/A

Site 13 of 18 in cluster L

Actual: 606 ft.
Focus Map: 6

FINDS:

Registry ID: 110037885189
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110037885189

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

L96 Target Property | **25 E 115TH ST**
CHICAGO, IL | **IL CHICAGO ENV** | **S116610272**
N/A

Site 14 of 18 in cluster L

Actual: 606 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	25 E 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62188240795481 41.68522376661323)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68522376661323
Longitude:	-87.62188240795481

L97 **29 E 115TH ST** **FINDS** **1011982466**
Target **29 E 115TH ST** **N/A**
Property **CHICAGO, IL 60628**

Site 15 of 18 in cluster L

Actual:
606 ft.

Focus Map:
6

FINDS:

Registry ID:	110037885198
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110037885198

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

L98 **IL CHICAGO ENV** **S116611414**
Target **29 E 115TH ST** **N/A**
Property **CHICAGO, IL**

Site 16 of 18 in cluster L

Actual:
606 ft.

Focus Map:
6

CHICAGO ENV:

Name:	Not reported
Address:	29 E 115TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62173227353775 41.68522540892377)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68522540892377
Longitude:	-87.62173227353775

L99 **IL CHICAGO ENV** **S117460141**
Target **11507 S STATE ST** **N/A**
Property **CHICAGO, IL**

Site 17 of 18 in cluster L

Actual:
605 ft.

Focus Map:
6

CHICAGO ENV:

Name:	Not reported
Address:	11507 S STATE ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62273755253021 41.68510529453397)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68510529453397
Longitude:	-87.62273755253021

L100 Target Property | **11511 S STATE ST CHICAGO, IL** | **IL CHICAGO ENV** | **S117460152 N/A**

Site 18 of 18 in cluster L

Actual: 605 ft.

Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11511 S STATE ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62273450609179 41.684998761792535)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.684998761792535
Longitude:	-87.62273450609179

M101 Target Property | **FLAIR CLEANERS 11518 SO MICHIGAN CHICAGO, IL 60628** | **FINDS ECHO** | **1012090164 N/A**

Site 7 of 18 in cluster M

Actual: 607 ft.

Focus Map: 6

FINDS:

Registry ID:	110038678507
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110038678507

Environmental Interest/Information System:

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1012090164
Registry ID:	110038678507
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110038678507
Name:	FLAIR CLEANERS
Address:	11518 SO MICHIGAN
City,State,Zip:	CHICAGO, IL 60628

M102 Target Property | **BETTY BRITE CLNRS**
11518 S MICHIGAN
CHICAGO, IL | **EDR Hist Cleaner** | **1009184846**
N/A

Site 8 of 18 in cluster M

Actual: 607 ft.

Focus Map: 6

EDR Hist Cleaner

Year:	Name:	Type:
1981	BETTY BRITE CLNRS	CLEANERS
1981	ROSE PLAZA LAUNDERETTE	LAUNDRIES SELF SERVICE
1988	BETTY BRITE CLEANERS #3	Drycleaning Plants, Except Rugs
1989	BETTY BRITE CLEANERS 3	Drycleaning Plants, Except Rugs, NEC
1991	BETTY BRITE CLEANERS 4	Drycleaning Plants, Except Rugs
1992	BETTY BRITE CLEANERS 4	Drycleaning Plants, Except Rugs
1993	BETTY BRITE CLEANERS 4	Drycleaning Plants, Except Rugs
1994	BETTY BRITE CLEANERS 4	Drycleaning Plants, Except Rugs
1995	BETTY BRITE CLEANERS 4	Drycleaning Plants, Except Rugs
1996	BETTY BRITE CLEANERS 4	Drycleaning Plants, Except Rugs
1997	BETTY BRITE CLEANERS 4	Drycleaning Plants, Except Rugs
1999	LEE CLEANERS & LAUNDRY INC	Garment Pressing And Cleaners' Agents
2003	AUTOMATIC WASHBOARD INC	LAUNDRIES SELF SERVICE

M103 Target Property | **BETTY BRITE CLEANERS**
11518 S. MICHIGAN AVENUE
CHICAGO, IL 60628 | **RCRA-VSQG**
FINDS
ECHO
IL AIRS
IL BOL | **1004693025**
ILD981954753

Site 9 of 18 in cluster M

Actual: 607 ft.

Focus Map: 6

RCRA-VSQG:

Date form received by agency:	2000-03-29 00:00:00.0
Facility name:	BETTY BRITE CLEANERS
Facility address:	11518 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILD981954753
Contact:	MIKE HUSSAIN
Contact address:	11518 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	773-821-9379
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

BETTY BRITE CLEANERS (Continued) **1004693025**

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: HUSSAIN HABIB
Owner/operator address: 11518 S MICHIGAN AVE
CHICAGO, IL 60628
Owner/operator country: Not reported
Owner/operator telephone: 773-821-9379
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

BETTY BRITE CLEANERS (Continued) **1004693025**

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:
Registry ID: 110007057139
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110007057139

Environmental Interest/Information System:
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004693025
Registry ID: 110007057139
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110007057139
Name: BETTY BRITE CLEANERS
Address: 11518 S. MICHIGAN AVENUE
City,State,Zip: CHICAGO, IL 60628

AIRS:
Name: BETTY BRITE CLEANERS
Address: 11518 S MICHIGAN AVE
City,State,Zip: CHICAGO, IL
2nd Address: Not reported
Facility ID: 13681
Year: Not reported
Contact Name: Not reported
Contact Title: Not reported

BETTY BRITE CLEANERS (Continued) **1004693025**

Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FUT
Cease Operation Date:	6/23/1995
SIC Code:	Not reported
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

BOL:

Name:	FLAIR CLEANERS
Address:	11518 S MICHIGAN
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000047526
Inv Num:	0316495006
Interest Name:	Betty Brite Cleaners
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.684560
Longitude:	-87.620810

Name:	FLAIR CLEANERS
Address:	11518 S MICHIGAN
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000047526
Inv Num:	0316495006
Interest Name:	Betty Brite Cleaners
Interest Type:	RCRA
Media Code:	LAND
Latitude:	41.685034
Longitude:	-87.620047

M104 Target Property | **FLAIR CLEANERS**
11518 S MICHIGAN
CHICAGO, IL 60628 | **FINDS** **1008127799**
IL AIRS **N/A**

Site 10 of 18 in cluster M

Actual: 607 ft.

Focus Map: 6

FINDS:

Registry ID:	110018244559
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110018244559

Environmental Interest/Information System:

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

FLAIR CLEANERS (Continued) **1008127799**

AIRS:

Name:	FLAIR CLEANERS
Address:	11518 S MICHIGAN
City,State,Zip:	CHICAGO, IL
2nd Address:	Not reported
Facility ID:	3128
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600CYH
Cease Operation Date:	12/24/1992
SIC Code:	7216
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

M105 **IL CHICAGO ENV** **S117460165**
Target Property **11518 S MICHIGAN AVE** **N/A**
CHICAGO, IL

Site 11 of 18 in cluster M

Actual: 607 ft.

Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11518 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62090634226263 41.68477122461603)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68477122461603
Longitude:	-87.62090634226263

M106 Target Property | **FLAIR CLEANERS**
11518 S MICHIGAN
CHICAGO, IL 60628 | **IL BOL** | **S125256286**
N/A

Site 12 of 18 in cluster M

Actual: 607 ft.

Focus Map: 6

BOL:

Name:	FLAIR CLEANERS
Address:	11518 S MICHIGAN
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000047526
Inv Num:	031600CYH
Interest Name:	Flair Cleaners
Interest Type:	BOA
Media Code:	AIR
Latitude:	41.685034
Longitude:	-87.620047

Name:	FLAIR CLEANERS
Address:	11518 S MICHIGAN
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000047526
Inv Num:	031600CYH
Interest Name:	Flair Cleaners
Interest Type:	PERMIT
Media Code:	AIR
Latitude:	41.685034
Longitude:	-87.620047

M107 Target Property | **BETTY BRITE CLEANERS**
11518 S MICHIGAN AVE
CHICAGO, IL 60628 | **IL BOL** | **S125257419**
N/A

Site 13 of 18 in cluster M

Actual: 607 ft.

Focus Map: 6

BOL:

Name:	BETTY BRITE CLEANERS
Address:	11518 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000058817
Inv Num:	031600FUT
Interest Name:	Betty Brite Cleaners
Interest Type:	BOA
Media Code:	AIR
Latitude:	41.684534
Longitude:	-87.620547

Name:	BETTY BRITE CLEANERS
Address:	11518 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000058817
Inv Num:	031600FUT
Interest Name:	Betty Brite Cleaners
Interest Type:	PERMIT
Media Code:	AIR
Latitude:	41.684534
Longitude:	-87.620547

M108 Target Property | **BETTY BRITE CLEANERS**
11518 S MICHIGAN AVE
CHICAGO, IL 60628 | **CA HAZNET** | **S123783683**
N/A

Site 14 of 18 in cluster M

Actual: 607 ft.
Focus Map: 6

HAZNET:

Name:	BETTY BRITE CLEANERS
Address:	11518 S MICHIGAN AVE
Address 2:	Not reported
City,State,Zip:	CHICAGO, IL 606280000
Contact:	MIKE HUSSAIN
Telephone:	7733821937
Mailing Name:	Not reported
Mailing Address:	11518 S MICHIGAN AVE
Year:	1991
Gepaid:	ILD981954753
TSD EPA ID:	CAD981397417
CA Waste Code:	251 - Still bottoms with halogenated organics
Disposal Method:	01 -
Tons:	0.0625
Year:	1991
Gepaid:	ILD981954753
TSD EPA ID:	CAD981397417
CA Waste Code:	211 - Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method:	01 -
Tons:	0.1125
Year:	1991
Gepaid:	ILD981954753
TSD EPA ID:	CAD981397417
CA Waste Code:	351 - Organic solids with halogens
Disposal Method:	01 -
Tons:	0.2

O109 Target Property | **11515 S STATE ST**
CHICAGO, IL | **IL CHICAGO ENV** | **S117460158**
N/A

Site 1 of 4 in cluster O

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11515 S STATE ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62273145966098 41.68489222904912)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68489222904912
Longitude:	-87.62273145966098

O110 **IL CHICAGO ENV** **S117460185**
Target Property **11521 S STATE ST** **N/A**
CHICAGO, IL

Site 2 of 4 in cluster O

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11521 S STATE ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62272639107564 41.68473288427334)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.68473288427334
Longitude:	-87.62272639107564

O111 **CUTER SEFER OIL** **IL TANKS** **S121832403**
Target Property **11521 S STATE ST** **N/A**
CHICAGO, IL

Site 3 of 4 in cluster O

Actual: 605 ft.
Focus Map: 6

CHICAGO TANKS:

Facility ID:	11521ST1955-03-01
Name:	CUTER SEFER OIL
Address:	11521 S STATE ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/01/1955
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: ROBERT YOUNG INC; REPLACE 1-1K GAS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.684732884
Longitude:	-87.622726391

O112 **IL CHICAGO ENV** **S117460162**
Target Property **11517 S STATE ST** **N/A**
CHICAGO, IL

Site 4 of 4 in cluster O

Actual: 605 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11517 S STATE ST
City,State,Zip:	CHICAGO, IL

(Continued) **S117460162**

Map Location:	POINT (-87.62272993991003 41.684838953517435)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.684838953517435
Longitude:	-87.62272993991003

P113 **IL CHICAGO ENV** **S117460266**
Target Property **11552 S MICHIGAN AVE** **N/A**
CHICAGO, IL

Site 1 of 4 in cluster P

Actual: 606 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11552 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62083914112307 41.68377212112769)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68377212112769
Longitude:	-87.62083914112307

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114 **IL CHICAGO ENV** **S117460282**
Target Property **11564 S MICHIGAN AVE** **N/A**
CHICAGO, IL

Actual: 609 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11564 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62082987516715 41.68343694351082)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68343694351082
Longitude:	-87.62082987516715

115 **IL CHICAGO ENV** **S117460318**
Target Property **11581 S STATE ST** **N/A**
CHICAGO, IL

Actual: 609 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11581 S STATE ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62267098186011 41.68301317863966)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68301317863966
Longitude:	-87.62267098186011

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116 **IL CHICAGO ENV** **S117460307**
Target Property **11575 S WABASH AVE** **N/A**
CHICAGO, IL

Actual: 609 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11575 S WABASH AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62159283866467 41.68313276674733)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68313276674733
Longitude:	-87.62159283866467

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117 **IL CHICAGO ENV** **S123206536**
Target Property **11592 S MICHIGAN AVE** **N/A**
CHICAGO, IL

Actual: 607 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11592 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62080727299713 41.6826334434608)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.6826334434608
Longitude:	-87.62080727299713

118 **IL CHICAGO ENV** **S117460431**
Target Property **11634 S PRAIRIE AVE** **N/A**
CHICAGO, IL

Actual: 597 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	11634 S PRAIRIE AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.6168280173916 41.68150056751619)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.68150056751619
Longitude:	-87.6168280173916

Q119 **THE SHEDD COMPANY** **IL TANKS** **S121847506**
Target Property **301 E 117TH ST** **N/A**
CHICAGO, IL

Site 1 of 4 in cluster Q

Actual: 598 ft.
Focus Map: 6

CHICAGO TANKS:

Facility ID:	301117T1948-03-30
Name:	THE SHEDD COMPANY
Address:	301 E 117TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/30/1948
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: AUTOMATIC TANK WORKS; REPLACE 1-1K GAS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.681273535
Longitude:	-87.616577049

Q120 **IL CHICAGO ENV** **S116611735**
Target Property **301 E 117TH ST** **N/A**
CHICAGO, IL

Site 2 of 4 in cluster Q

Actual: 598 ft.
Focus Map: 6

CHICAGO ENV:

Name:	Not reported
Address:	301 E 117TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.61657704882458 41.68127353515702)
Complaints:	Not reported

(Continued) **S116611735**

Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Not reported
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.68127353515702
Longitude:	-87.61657704882458

Q121 Target Property **THE SHEDD COMPANY** **IL TANKS** **S121847507**
301 E 117TH ST **N/A**
CHICAGO, IL

Site 3 of 4 in cluster Q

Actual: 598 ft.
Focus Map: 6

CHICAGO TANKS:

Facility ID:	301117T1956-07-02
Name:	THE SHEDD COMPANY
Address:	301 E 117TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	07/02/1956
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MISHUDO BROTHERS; INSTALL 1-4K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.681273535
Longitude:	-87.616577049

Q122 Target Property **THE SHEDD COMPANY** **IL TANKS** **S121847508**
301 E 117TH ST **N/A**
CHICAGO, IL

Site 4 of 4 in cluster Q

Actual: 598 ft.
Focus Map: 6

CHICAGO TANKS:

Facility ID:	301117T1957-06-27
Name:	THE SHEDD COMPANY
Address:	301 E 117TH ST
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	06/27/1957

THE SHEDD COMPANY (Continued) **S121847508**

Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: WINDSOR HEATING; INSTALL 1-6K F.O.
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.681273535
Longitude: -87.616577049

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123 Target Property | **ILLINOIS CENTRAL TRACK** | **IL BOL** | **S113272598**
119TH ST | **N/A**
CHICAGO, IL 60628

Actual: 595 ft.
Focus Map: 6

BOL:

Name: ILLINOIS CENTRAL TRACK
Address: 119TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000529505
Inv Num: 0316530002
Interest Name: Illinois Central Track
Interest Type: BOL
Media Code: LAND
Latitude: 41.678611
Longitude: -87.611944

Name: ILLINOIS CENTRAL TRACK
Address: 119TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000529505
Inv Num: 0316530002
Interest Name: Illinois Central Track
Interest Type: SOLID WASTE
Media Code: LAND
Latitude: 41.678611
Longitude: -87.611944

R124 Target Property | **ELMER LARSON, INC.** | **FINDS ECHO** | **1005636907**
12401 SOUTH COTTAGE GROVE | **N/A**
CHICAGO, IL 60628

Site 1 of 10 in cluster R

Actual: 590 ft.
Focus Map: 9

FINDS:

Registry ID: 110006819407
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110006819407

Environmental Interest/Information System:

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

ELMER LARSON, INC. (Continued) **1005636907**

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1005636907
Registry ID:	110001289980
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001289980
Name:	K-FIVE CONSTRUCTION CO
Address:	12401 SOUTH COTTAGE GROVE AVENUE
City,State,Zip:	CHICAGO, IL 60628

Envid:	1005636907
Registry ID:	110006819407
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110006819407
Name:	ELMER LARSON, INC.
Address:	12401 SOUTH COTTAGE GROVE
City,State,Zip:	CHICAGO, IL 60628

R125 **K-FIVE CONSTRUCTION CO** **IL AIRS** **S107741729**
Target **12401 S COTTAGE GROVE AVE** **IL TIER 2** **N/A**
Property **CHICAGO, IL 60628**

Site 2 of 10 in cluster R

Actual: 590 ft.

Focus Map: 9

AIRS:

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0.104075

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999
Year:	2008
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	3.3929999999999998
Year:	2008
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0.27150000000000002
Year:	2010
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.3340000000000001
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	1914
Year:	2009
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2016
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	4.3769999999999998E-3
Year:	2014
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	2014
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	1.67347
Year:	2014
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	2014
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	0.001727
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.001335
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	9.3999999999999997E-4
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0.000203
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	1.8320000000000001E-3
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	4.4419999999999998E-3
Year:	2014
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	9.9999999999999995E-7
Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2010
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2012
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999
Year:	2008
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.9305000000000001
Year:	2008
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	3.3239999999999998
Year:	2009
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2009
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	1.3340000000000001
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	8.1000000000000003E-2
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	3.3639999999999999
Year:	2009
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0.69599999999999995
Year:	2009
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	3.3929999999999998
Year:	2008
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	7.54
Year:	2009
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	7.6050000000000004
Year:	2008
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	5.0000000000000001E-3
Year:	2009
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	3.2175000000000002
Year:	2008
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.70199999999999996
Year:	2008
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	1.8560000000000001
Year:	2009
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.9139999999999999
Year:	2009
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	1914
Year:	2009
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0.001
Year:	2009
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2014
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PART
ID Number:	031600FEQ

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Tons Per Year:	0
Year:	2015
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	Not reported
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	0.001727
Year:	Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2018
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2009
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	4.0000000000000001E-3
Year:	2010
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	8.1000000000000003E-2
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2016
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2016
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NOX

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2016
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	324121
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM10
ID Number:	031600FEQ

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Tons Per Year:	0
Year:	2015
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	Not reported
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	0.001727
Year:	Not reported
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.001335
Year:	Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2018
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: 2014
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4
Name:	ELMER LARSON INC
Address:	12401 S COTTAGE GROVE
City,State,Zip:	CHICAGO, IL
2nd Address:	Not reported
Facility ID:	12133
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FQE
Cease Operation Date:	11/19/1993
SIC Code:	Not reported
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	3820
Year:	2007
Contact Name:	John Sullivan
Contact Title:	Not reported
Contact Telephone:	630-832-4213
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Type: Not reported
Status: Not reported
Status Date: Not reported
Expiration Date: Not reported
Latitude: Not reported
Longitude: Not reported

Detail:

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2018
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: Not reported
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	3.3929999999999998
Year:	2008
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	7.54
Year:	2009
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	7.6050000000000004
Year:	2008
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	5.0000000000000001E-3
Year:	2009
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	3.2175000000000002
Year:	2008
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.70199999999999996
Year:	2008
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	1.8560000000000001
Year:	2009
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.9139999999999999
Year:	2009
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	1914
Year:	2009
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0.001

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2009
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	5.0000000000000001E-3
Year:	2009
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	3.3639999999999999
Year:	2009
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	3.2175000000000002
Year:	2008
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.69599999999999995
Year:	2009
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0.70199999999999996
Year:	2008
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2009
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0.001
Year:	2009
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	5.9999999999999995E-4
Year:	2010
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	906.63599999999997
Year:	2010
Pollutant Code:	CO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2012
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	9.9999999999999995E-7
Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	SO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	3820
Year:	2006
Contact Name:	John Sullivan
Contact Title:	Not reported
Contact Telephone:	630-832-4213
Contact Fax:	630-832-4221
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Expiration Date: Not reported
Latitude: 41.660000
Longitude: -87.597100

Detail:

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999
Year:	2008
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	3.3929999999999998
Year:	2008
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0.27150000000000002
Year:	2010
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.3340000000000001

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2016
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2016
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2016
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	4.3769999999999998E-3
Year:	2014
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	2014
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	1.67347
Year:	2014
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	2014
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	0.001727
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.001335
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	9.3999999999999997E-4
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0.000203
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	1.8320000000000001E-3
Year:	2014
Pollutant Code:	SO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
2nd Address:	Not reported
Facility ID:	Not reported
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	324121
Type Code:	Not reported
Permit:	06020089
Type:	CONSTRUCTION
Status:	GRANTED
Status Date:	08/22/2006
Expiration Date:	Not reported
Latitude:	Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Longitude: Not reported

Detail:

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2017
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2017
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
2nd Address:	Not reported
Facility ID:	Not reported
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	324121
Type Code:	Not reported
Permit:	86100045
Type:	FESOP
Status:	GRANTED
Status Date:	11/20/2014
Expiration Date:	08/12/2024
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Tons Per Year: 0
Year: 2015
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2018
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2008
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	7.54
Year:	2009
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	7.6050000000000004
Year:	2008
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	5.0000000000000001E-3
Year:	2009
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	3.2175000000000002
Year:	2008
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.70199999999999996
Year:	2008
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	1.8560000000000001
Year:	2009
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.9139999999999999
Year:	2009
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	1914
Year:	2009
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0.001
Year:	2009
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2016
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	9.9999999999999995E-7
Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2011
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2012
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999
Year:	2008
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.9305000000000001
Year:	2008
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	3.3239999999999998
Year:	2009
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2009
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	1.3340000000000001
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	8.1000000000000003E-2
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	3.3639999999999999
Year:	2009
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0.69599999999999995
Year:	2009
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	3.3929999999999998
Year:	2008
Pollutant Code:	SO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2009
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	3.2175000000000002
Year:	2008
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.69599999999999995
Year:	2009
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0.70199999999999996
Year:	2008
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2009
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0.001
Year:	2009
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	5.9999999999999995E-4
Year:	2010
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	906.63599999999997
Year:	2010
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	1.8560000000000001
Year:	2009
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.7537
Year:	2010
Pollutant Code:	SO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2017
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2017
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2008
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Tons Per Year:	0
Year:	2015
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999
Year:	2008
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	3.3929999999999998
Year:	2008
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0.27150000000000002
Year:	2010
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.3340000000000001
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	1914
Year:	2009
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2016
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	4.3769999999999998E-3
Year:	2014
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	2014
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	1.67347
Year:	2014
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	2014
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	0.001727
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.001335
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	9.3999999999999997E-4
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0.000203
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	1.8320000000000001E-3
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	4.4419999999999998E-3
Year:	2014
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	9.9999999999999995E-7
Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2017
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	324121
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	7.54
Year:	2009
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	7.6050000000000004
Year:	2008
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	5.0000000000000001E-3
Year:	2009
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	3.2175000000000002
Year:	2008
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.70199999999999996
Year:	2008
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	1.8560000000000001
Year:	2009
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.9139999999999999
Year:	2009
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	1914
Year:	2009
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0.001
Year:	2009
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2017
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2017
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	9.9999999999999995E-7

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2015
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2015
Pollutant Code: CF4

Name: K-FIVE CONSTRUCTION CO
Address: 12401 S COTTAGE GROVE AVE
City,State,Zip: CHICAGO, IL 60628
2nd Address: Not reported
Facility ID: Not reported
Year: 2014
Contact Name: Not reported
Contact Title: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Ext: Not reported
Contact Email: Not reported
ID Number: 031600FEQ
Cease Operation Date: Not reported
SIC Code: 2951
NAICS: 324121
Type Code: Not reported
Permit: Not reported
Type: Not reported
Status: Not reported
Status Date: Not reported
Expiration Date: Not reported
Latitude: Not reported
Longitude: Not reported

Detail:
ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PART

ID Number: 031600FEQ

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Tons Per Year:	0
Year:	2015
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	Not reported
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	0.001727
Year:	Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	9.9999999999999995E-7
Year:	Not reported
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4
Year:	Not reported
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	Not reported
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	Not reported
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2018
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2018
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2018
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	4.3769999999999998E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2015
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	324121
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: N2O

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3
Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NOX

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2017
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2017
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	9.9999999999999995E-7
Year:	2014
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	1.2799999999999999E-4

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2012
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM10
ID Number:	031600FEQ

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Tons Per Year: 0
Year: 2015
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2018
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999
Year:	2008
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	3.3929999999999998
Year:	2008
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0.27150000000000002
Year:	2010
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.3340000000000001
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	1914
Year:	2009
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2010
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	1.9305000000000001
Year:	2008
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0.80430000000000001

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.69599999999999995
Year: 2009
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2009
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 5.9999999999999995E-4
Year: 2010
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 906.63599999999997
Year: 2010
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.7537
Year: 2010
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.2999999999999999E-3
Year: 2010
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 2.9999999999999997E-4
Year: 2010
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 4.0000000000000001E-3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2010
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2014
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	1.67347
Year:	2014
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0.104075
Year:	2014
Pollutant Code:	CO2E
ID Number:	031600FEQ
Tons Per Year:	0.001727
Year:	2014
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.001335
Year:	2014
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	9.3999999999999997E-4
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0.000203
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	1.8320000000000001E-3
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	4.4419999999999998E-3
Year:	2014
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	PM2_5

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2016
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: 2014
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	3.9999999999999998E-6
Year:	2014
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2014
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2015
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2017
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FEQ
Cease Operation Date:	Not reported
SIC Code:	2951
NAICS:	324121
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2015

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: Not reported
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: Not reported
Pollutant Code: PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: Not reported
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: Not reported
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: Not reported
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: Not reported
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: Not reported
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: Not reported
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6
Year: Not reported
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: Not reported
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2018
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2018
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2018
Pollutant Code: METHANE

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2018
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FEQ
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2012
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	1.871999
Year:	2008
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.9305000000000001

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2008
Pollutant Code:	PART
ID Number:	031600FEQ
Tons Per Year:	3.3239999999999998
Year:	2009
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2009
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	1.3340000000000001
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	8.1000000000000003E-2
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	3.3639999999999999
Year:	2009
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0.69599999999999995
Year:	2009
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FEQ
Tons Per Year:	3.3929999999999998
Year:	2008
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	1.3454999999999999
Year:	2008
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	7.54
Year:	2009
Pollutant Code:	CO
ID Number:	031600FEQ
Tons Per Year:	7.6050000000000004
Year:	2008
Pollutant Code:	CO

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002
Year: 2008
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.70199999999999996
Year: 2008
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 1.8560000000000001
Year: 2009
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.001
Year: 2009
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 1.871999
Year: 2008
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 3.3929999999999998
Year: 2008
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0.27150000000000002
Year: 2010
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 1.3340000000000001
Year: 2009
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1914
Year: 2009
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2010
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 1.9305000000000001
Year: 2008
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0.80430000000000001
Year: 2010
Pollutant Code: PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.9139999999999999
Year: 2009
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 1.4245000000000001
Year: 2010
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 3.3239999999999998
Year: 2009
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.55859999999999999
Year: 2010
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 7.6050000000000004
Year: 2008
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 3.1539999999999999
Year: 2010
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 7.54
Year: 2009
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 5.0000000000000001E-3
Year: 2009
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 3.3639999999999999
Year: 2009
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 1.3454999999999999
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 3.2175000000000002

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2008
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0.69599999999999995
Year:	2009
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0.70199999999999996
Year:	2008
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2009
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0.001
Year:	2009
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	5.9999999999999995E-4
Year:	2010
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	906.63599999999997
Year:	2010
Pollutant Code:	CO2
ID Number:	031600FEQ
Tons Per Year:	1.8560000000000001
Year:	2009
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	1.7537
Year:	2010
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	1.2999999999999999E-3
Year:	2010
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	2.9999999999999997E-4
Year:	2010
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	4.0000000000000001E-3
Year:	2010
Pollutant Code:	NH3

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 8.1000000000000003E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2016
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2016
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 4.3769999999999998E-3
Year: 2014
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 1.67347
Year: 2014
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0.104075
Year: 2014
Pollutant Code: CO2E

ID Number: 031600FEQ
Tons Per Year: 0.001727
Year: 2014
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0.001335
Year: 2014
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 9.3999999999999997E-4
Year: 2014
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0.000203
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 1.8320000000000001E-3
Year: 2014
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 4.4419999999999998E-3
Year: 2014
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2011
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2011
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2011
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	LEAD
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	METHANE
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	NH3
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2017
Pollutant Code:	N2O
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PM2_5
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	SO2
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	VOM
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	NOX
ID Number:	031600FEQ
Tons Per Year:	0
Year:	2016
Pollutant Code:	PART

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2016
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2017
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2017
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2017
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 9.9999999999999995E-7
Year: 2014
Pollutant Code: N2O

ID Number: 031600FEQ
Tons Per Year: 1.2799999999999999E-4
Year: 2014
Pollutant Code: METHANE

ID Number: 031600FEQ
Tons Per Year: 3.9999999999999998E-6

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year: 2014
Pollutant Code: NH3

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2014
Pollutant Code: LEAD

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: NOX

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PART

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM10

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: SO2

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2012
Pollutant Code: VOM

ID Number: 031600FEQ
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FEQ
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: CO

ID Number: 031600FEQ
Tons Per Year: 0
Year: 2015
Pollutant Code: CO2

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

ID Number:	031600FEQ
Tons Per Year:	COG
Year:	2015
Pollutant Code:	COG

ID Number:	031600FEQ
Tons Per Year:	CF4
Year:	2015
Pollutant Code:	CF4

TIER 2:

Year:	2014
Corporate Name:	K-Five Construction
Latitude:	41.6693
Longitude:	-87.6027
Facility Fax:	7732640510
Fire Dept:	Not reported
LEPC:	City of Chicago
Owner:	K-Five Construction
Owner Phone:	6302575600
Owner Street:	13769 Main Street
Owner City/State/ZipCode:	Lemont, IL 60439
Mailing Name:	K-Five Construction
Mailing Street:	13769 Main Street
Mailing City/State/ZipCode:	Lemont, IL 60439
Chemical Name:	FATTY ACIDS, TALL OIL, POLYMERS WITH GLYCEROL, MALEIC ANHYDRIDE, PHTHALIC ANHYDRIDE, AND SOYBEAN OIL
CAS Number:	68015418
Chemical EHS:	No
Chemical Contents:	Pure
Chemical Health Hazards:	Liquid
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Delayed
Max Daily Range:	Not reported

Year:	2014
Corporate Name:	K-Five Construction
Latitude:	41.6693
Longitude:	-87.6027
Facility Fax:	7732640510
Fire Dept:	Not reported
LEPC:	City of Chicago
Owner:	K-Five Construction
Owner Phone:	6302575600
Owner Street:	13769 Main Street
Owner City/State/ZipCode:	Lemont, IL 60439
Mailing Name:	K-Five Construction
Mailing Street:	13769 Main Street
Mailing City/State/ZipCode:	Lemont, IL 60439
Chemical Name:	FUEL OIL, [NO. 2]
CAS Number:	68476302
Chemical EHS:	No
Chemical Contents:	Pure
Chemical Health Hazards:	Liquid
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Fire

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Max Daily Range:	Not reported

Year:	2014
Corporate Name:	K-Five Construction
Latitude:	41.6693
Longitude:	-87.6027
Facility Fax:	7732640510
Fire Dept:	Not reported
LEPC:	City of Chicago
Owner:	K-Five Construction
Owner Phone:	6302575600
Owner Street:	13769 Main Street
Owner City/State/ZipCode:	Lemont, IL 60439
Mailing Name:	K-Five Construction
Mailing Street:	13769 Main Street
Mailing City/State/ZipCode:	Lemont, IL 60439
Chemical Name:	OIL BLACK 2020
CAS Number:	8005025
Chemical EHS:	No
Chemical Contents:	Mixture
Chemical Health Hazards:	Liquid
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Delayed
Max Daily Range:	Not reported

Year:	2014
Corporate Name:	K-Five Construction
Latitude:	41.6693
Longitude:	-87.6027
Facility Fax:	7732640510
Fire Dept:	Not reported
LEPC:	City of Chicago
Owner:	K-Five Construction
Owner Phone:	6302575600
Owner Street:	13769 Main Street
Owner City/State/ZipCode:	Lemont, IL 60439
Mailing Name:	K-Five Construction
Mailing Street:	13769 Main Street
Mailing City/State/ZipCode:	Lemont, IL 60439
Chemical Name:	EMULSION 212
CAS Number:	13674878
Chemical EHS:	No
Chemical Contents:	Mixture
Chemical Health Hazards:	Liquid
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Delayed
Max Daily Range:	Not reported

Year:	2014
Corporate Name:	K-Five Construction
Latitude:	41.6693
Longitude:	-87.6027
Facility Fax:	7732640510
Fire Dept:	Not reported
LEPC:	City of Chicago
Owner:	K-Five Construction
Owner Phone:	6302575600

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Owner Street:	13769 Main Street
Owner City/State/ZipCode:	Lemont, IL 60439
Mailing Name:	K-Five Construction
Mailing Street:	13769 Main Street
Mailing City/State/ZipCode:	Lemont, IL 60439
Chemical Name:	ASPHALT CEMENTS
CAS Number:	8052424
Chemical EHS:	No
Chemical Contents:	Pure
Chemical Health Hazards:	Liquid
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Fire
Max Daily Range:	Not reported

Year:	2010
Corporate Name:	K-Five Construction
Latitude:	41.669274000000001
Longitude:	-87.602705999999898
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	EMULSION 212
CAS Number:	13674878
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	0-99

Year:	2010
Corporate Name:	K-Five Construction
Latitude:	41.669274000000001
Longitude:	-87.602705999999898
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ASPHALT CEMENTS
CAS Number:	8052424
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Year:	2010
Corporate Name:	K-Five Construction
Latitude:	41.669274000000001
Longitude:	-87.602705999999898
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	FUEL OIL, [NO. 2]
CAS Number:	68476302
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100-999

Year:	2010
Corporate Name:	K-Five Construction
Latitude:	41.669274000000001
Longitude:	-87.602705999999898
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL BLACK 2020
CAS Number:	8005025
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	K-Five Construction
Latitude:	41.669274000000001
Longitude:	-87.602705999999898
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported

K-FIVE CONSTRUCTION CO (Continued) **S107741729**

Chemical Name:	FATTY ACIDS, TALL OIL, POLYMERS WITH GLYCEROL, MALEIC ANHYDRIDE, PHTHALIC ANHYDRIDE, AND SOYBEAN OIL
CAS Number:	68015418
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	0-99

R126 **K-FIVE CONSTRUCTION CORP** **IL AIRS** **S107743276**
Target **12401 COTTAGE GROVE AVE** **N/A**
Property **CHICAGO, IL**

Site 3 of 10 in cluster R

Actual:
590 ft.

Focus Map:
9

AIRS:

Name:	K-FIVE CONSTRUCTION CORP
Address:	12401 COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL
2nd Address:	Not reported
Facility ID:	13077
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FSD
Cease Operation Date:	10/9/1997
SIC Code:	Not reported
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

R127 **ELMER LARSON INC** **IL BOL** **S125257300**
Target **12401 S COTTAGE GROVE** **N/A**
Property **CHICAGO, IL 60628**

Site 4 of 10 in cluster R

Actual:
590 ft.

Focus Map:
9

BOL:

Name:	ELMER LARSON INC
Address:	12401 S COTTAGE GROVE
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000057630
Inv Num:	031600FQE
Interest Name:	Elmer Larson Inc
Interest Type:	BOA

ELMER LARSON INC (Continued) **S125257300**

Media Code: AIR
Latitude: 41.666935
Longitude: -87.601146

Name: ELMER LARSON INC
Address: 12401 S COTTAGE GROVE
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000057630
Inv Num: 031600FQE
Interest Name: Elmer Larson Inc
Interest Type: PERMIT
Media Code: AIR
Latitude: 41.666935
Longitude: -87.601146

R128 **IL CHICAGO ENV** **S117462106**
Target Property **12401 S COTTAGE GROVE AVE** **N/A**
CHICAGO, IL

Site 5 of 10 in cluster R

Actual: 590 ft.

Focus Map: 9

CHICAGO ENV:

Name:	Not reported
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.60345074801894 41.6700239308862)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Y
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.6700239308862
Longitude:	-87.60345074801894

Name:	Not reported
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.60345074801894 41.6700239308862)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Y
Permits:	Y
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.6700239308862
Longitude:	-87.60345074801894

R129 Target Property | **K-FIVE CONSTRUCTION CO**
12401 S COTTAGE GROVE AVE
CHICAGO, IL 60628 | **IL BOL** | **S125257012**
N/A

Site 6 of 10 in cluster R

Actual: 590 ft.
Focus Map: 9

BOL:

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
Site Id:	170000054759
Inv Num:	031600FEQ
Interest Name:	K-Five Construction Co
Interest Type:	BOA
Media Code:	AIR
Latitude:	41.672980
Longitude:	-87.608071

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
Site Id:	170000054759
Inv Num:	031600FEQ
Interest Name:	K-Five Construction Co
Interest Type:	PERMIT
Media Code:	AIR
Latitude:	41.666935
Longitude:	-87.601146

R130 Target Property | **K-FIVE CONSTRUCTION CO**
12401 S COTTAGE GROVE AVE
CHICAGO, IL 60628 | **IL BOL** | **S125286851**
N/A

Site 7 of 10 in cluster R

Actual: 590 ft.
Focus Map: 9

BOL:

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
Site Id:	170000054759
Inv Num:	W0316000642
Interest Name:	K-Five Construction Corp
Interest Type:	BOW
Media Code:	WATER
Latitude:	41.666935
Longitude:	-87.601146

R131 Target Property | **K-FIVE CONSTRUCTION CO**
12401 S COTTAGE GROVE AVE
CHICAGO, IL 60628 | **IL BOL** | **S125257351**
N/A

Site 8 of 10 in cluster R

Actual: 590 ft.
Focus Map: 9

BOL:

Name:	K-FIVE CONSTRUCTION CO
Address:	12401 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628-6916
Site Id:	170000054759

K-FIVE CONSTRUCTION CO (Continued) **S125257351**

Inv Num: 031600FSD
Interest Name: K-Five Construction Corp
Interest Type: PERMIT
Media Code: AIR
Latitude: 41.666935
Longitude: -87.601146

R132 Target Property **K-FIVE CONSTRUCTION CO**
12401 S COTTAGE GROVE AVE
CHICAGO, IL 60628

IL BOL **S125282261**
N/A

Site 9 of 10 in cluster R

Actual: 590 ft.
Focus Map: 9

BOL:
Name: K-FIVE CONSTRUCTION CO
Address: 12401 S COTTAGE GROVE AVE
City,State,Zip: CHICAGO, IL 60628-6916
Site Id: 170000054759
Inv Num: ILR004249
Interest Name: K-Five Construction Corp
Interest Type: NPDES
Media Code: WATER
Latitude: 41.666935
Longitude: -87.601146

R133 Target Property **K-FIVE CONSTRUCTION CO**
12401 SOUTH COTTAGE GROVE AVENUE
CHICAGO, IL 60628

ICIS **1004479866**
US AIRS **N/A**
FINDS

Site 10 of 10 in cluster R

Actual: 590 ft.
Focus Map: 9

ICIS:
Enforcement Action ID: IL000A0000170310222000002
FRS ID: 110001289980
Action Name: K-FIVE CONSTRUCTION CO 170310222000002
Facility Name: K-FIVE CONSTRUCTION CO
Facility Address: 12401 S COTTAGE GROVE AVE
CHICAGO, IL 60628
Enforcement Action Type: Notice of Violation
Facility County: COOK
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 2951
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 41.67298
Longitude in Decimal Degrees: -87.608071
Permit Type Desc: Not reported
Program System Acronym: IL000031600FEQ
Facility NAICS Code: 324121
Tribal Land Code: Not reported

US AIRS MINOR:
Envid: 1004479866
Region Code: 05

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
D and B Number: Not reported
Primary SIC Code: 2951
NAICS Code: 324121
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:
Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1987-07-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1987-08-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1988-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1988-10-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1989-10-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1990-06-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1990-11-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1992-05-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1993-05-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1994-05-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1994-11-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1996-06-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards
Activity Date: 1996-06-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: New Source Performance Standards

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Activity Date:	1996-07-23 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600FEQ
Facility Registry ID:	110001289980
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	New Source Performance Standards
Activity Date:	1986-10-03 00:00:00
Activity Status Date:	1986-10-03 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Informal
Activity Status:	Achieved

Region Code:	05
Programmatic ID:	AIR IL000031600FEQ
Facility Registry ID:	110001289980
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1996-05-03 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Information Request
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600FEQ
Facility Registry ID:	110001289980
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2015-08-05 00:00:00
Activity Status Date:	2015-09-18 11:47:02
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	05
Programmatic ID:	AIR IL000031600FEQ
Facility Registry ID:	110001289980
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1986-09-17 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600FEQ
Facility Registry ID:	110001289980

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1987-08-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1988-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1988-10-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1989-10-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1990-06-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1990-11-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1992-05-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1993-09-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-05-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-11-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-06-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-06-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-07-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1997-06-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Activity Date: 1998-08-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2003-04-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-09-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-04-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600FEQ
Facility Registry ID: 110001289980
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1986-10-03 00:00:00
Activity Status Date: 1986-10-03 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

FINDS:
Registry ID: 110001289980

K-FIVE CONSTRUCTION CO (Continued) **1004479866**

Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110001289980

Environmental Interest/Information System:
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
AIR EMISSIONS CLASSIFICATION UNKNOWN
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

J134 **CLEARWATER TECHNOLOGIES GROUP** **RCRA NonGen / NLR** **1000379620**
NNE **11426 S PERRY AVE** **FINDS** **ILD043912583**
< 1/8 **CHICAGO, IL 60628** **ECHO**
0.011 mi.
59 ft. **Site 3 of 4 in cluster J**

Actual:
605 ft.

Focus Map:
6

RCRA NonGen / NLR:

Date form received by agency:	2009-08-12 00:00:00.0
Facility name:	CLEARWATER TECHNOLOGIES GROUP
Facility address:	11426 S PERRY AVE CHICAGO, IL 60628
EPA ID:	ILD043912583
Contact:	GENE FINCH
Contact address:	11426 S PERRY AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	773-821-6765
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	ROBERT E RUSSELL
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

CLEARWATER TECHNOLOGIES GROUP (Continued) **1000379620**

Owner/operator name:	CLEARWATER TECHNOLOGIES GROUP
Owner/operator address:	11426 S PERRY AVE CHICAGO, IL 60628
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	2006-10-25 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	CLEARWATER TECHNOLOGIES GROUP
Owner/operator address:	11426 S PERRY AVE CHICAGO, IL 60628
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	2006-10-25 00:00:00.
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

CLEARWATER TECHNOLOGIES GROUP (Continued) **1000379620**

Historical Generators:
Date form received by agency: 2006-10-25 00:00:00.0
Site name: CLEARWATER TECHNOLOGIES GROUP
Classification: Not a generator, verified

Date form received by agency: 1980-09-26 00:00:00.0
Site name: RUSSELL & SON
Classification: Not a generator, verified

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

CLEARWATER TECHNOLOGIES GROUP (Continued) **1000379620**

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:
Registry ID: 110005827908
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005827908

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000379620
Registry ID: 110005827908
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005827908
Name: CLEARWATER TECHNOLOGIES GROUP
Address: 11426 S PERRY
City,State,Zip: CHICAGO, IL 60628

J135 **SRM MOTORS** **EDR Hist Auto** **1009071770**
NNE **11439 S PERRY AVE** **N/A**
< 1/8 **CHICAGO, IL**
0.011 mi.
59 ft. **Site 4 of 4 in cluster J**

Actual:
606 ft.
EDR Hist Auto

Focus Map:
6

Year:	Name:	Type:
2003	SRM MOTORS	AUTOMOBILE REPAIR AND SERVICE

M136 **RAY S CLEANERS** **EDR Hist Cleaner** **1009184237**
East **11501 S MICHIGAN AVE** **N/A**
< 1/8 **CHICAGO, IL**
0.013 mi.
70 ft. **Site 15 of 18 in cluster M**

Actual:
607 ft.
EDR Hist Cleaner

Focus Map:
6

Year:	Name:	Type:
1981	RAY S CLEANERS	CLEANERS

137 WSW | **CHICAGO MSD #3** | **IL SWF/LF** | **S108111041**
< 1/8 | **CHICAGO, IL 60160** | **N/A**
0.014 mi.
73 ft.

Actual:
594 ft.

Focus Map:
9

IL WMRC_LF:

Region:	WMRC
General:	X
IEPA ID Number:	316000021
Municipal Waste:	Not reported
Provisional IEPA ID:	Not reported
Septic:	Not reported
NIPC Map Number:	132
Animal:	Not reported
Owner Name:	CHICAGO MSD
Pathological:	Not reported
Operator:	CHICAGO MSD
Industrial:	Not reported
PO Box:	Not reported
Foundry Sand:	Not reported
Incinerator Ash:	Not reported
Slag:	Not reported
Hazardous:	Not reported
Hazardous Liquid:	Not reported
Radiation:	Not reported
Demolition:	Not reported
Lat/Long:	414030/873630
Landscaping:	Not reported
Oil Field:	Not reported
Primemer ID:	3
Special:	Not reported
Township:	37N
Other:	Not reported
Range:	14E
Unknown:	Not reported
Section:	27
Quarter Section1:	SW
Quarter Section2:	NE
Quarter Section3:	Not reported
Quarter Section4:	Not reported
IEPA:	X
ISGS:	Not reported
PollutionControlBoard:	Not reported
IDM&M:	Not reported
DPH:	Not reported
Operational Status:	CLOSED FINAL COVER
Local Agency:	Not reported
Permit Status:	UNPERMITTED UNAUTHORIZED
Agency:	NIPC
IEPA Permit Date:	Not reported
Source Other:	Not reported
Close Date:	112274
Reaction:	Not reported
RCRA Facility:	Not reported
Date Discover:	Not reported
GW Monitoring:	NO
Date Cleaned:	Not reported
FD Site:	Not reported

CHICAGO MSD #3 (Continued) **S108111041**

Offsite Waste:	Not reported
Landfill Size:	Not reported
Random Dump:	Not reported
Size Fill:	Not reported
Open Dump:	Not reported
Leachate Collected:	Not reported
Abandonment:	Not reported
Other:	Not reported
Recompacted Clay:	Not reported
In-situ Clay:	Not reported
Secured Containers:	Not reported
Combination:	Not reported
Landfill:	X
None:	Not reported
Incineration:	Not reported
Other:	Not reported
Survace Impoundment:	Not reported
Land Application:	Not reported

S138 **BETTY BRIGHT CLEANERS** **EDR Hist Cleaner** **1019939046**
East **11533 S MICHIGAN AVE** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.014 mi.
75 ft. **Site 1 of 3 in cluster S**

Actual:
604 ft.

EDR Hist Cleaner

Focus Map:
6

Year:	Name:	Type:
2005	BETTY BRIGHT CLEANERS	Drycleaning Plants, Except Rugs, NEC
2006	BETTY BRIGHT CLEANERS	Drycleaning Plants, Except Rugs, NEC
2007	BETTY BRIGHT CLEANERS	Drycleaning Plants, Except Rugs, NEC
2008	BETTY BRIGHT CLEANERS	Drycleaning Plants, Except Rugs, NEC

S139 **IRVINGS STANDARD** **EDR Hist Auto** **1020808688**
East **11533 S MICHIGAN AVE** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.014 mi.
75 ft. **Site 2 of 3 in cluster S**

Actual:
604 ft.

EDR Hist Auto

Focus Map:
6

Year:	Name:	Type:
1996	IRVINGS STANDARD	Gasoline Service Stations
1997	IRVINGS STANDARD	Gasoline Service Stations
1998	IRVINGS STANDARD	Gasoline Service Stations
1999	IRVINGS STANDARD	Gasoline Service Stations
2000	IRVINGS STANDARD	Gasoline Service Stations

140
West
< 1/8
0.014 mi.
75 ft.

400 W 108TH ST
CHICAGO, IL

IL AST **S120934180**
IL CHICAGO ENV **N/A**

Actual:
605 ft.

Focus Map:
5

AST:

Name:	VERIZON WIRELESS-TANK#1-210
Address:	400 WEST 108TH STREET
City,State,Zip:	CHICAGO, IL 60628
City,State,Zip:	CHICAGO, IL 60628
Occupancy Number:	CS-059-1531169535875
Occupant Type:	059 - ABOVE GROUND BULK STORAGE
Section Number:	CS
Property Owner Name:	VERIZON WIRELESS
Type:	TANK - ABOVE GROUND BULK GENERATOR

CHICAGO ENV:

Name:	Not reported
Address:	400 W 108TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.6335999695739 41.69805549206227)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Y
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.69805549206227
Longitude:	-87.6335999695739

S141
East
< 1/8
0.014 mi.
76 ft.

WAH LOUIS
11535 S MICH AV
CHICAGO, IL

EDR Hist Cleaner **1009216151**
N/A

Site 3 of 3 in cluster S

Actual:
603 ft.

Focus Map:
6

EDR Hist Cleaner

Year:	Name:	Type:
1923	WAH LOUIS	LAUNDRIES (CHINESE)

P142
East
< 1/8
0.015 mi.
79 ft.

0707 CLARK SER STATION
11555 S MICHIGAN AVE
CHICAGO, IL 60628

IL UST **U000172648**
N/A

Site 2 of 4 in cluster P

Actual:
602 ft.

Focus Map:
6

UST:

Name:	0707 CLARK SER STATION
Address:	11555 S MICHIGAN AVE
City:	CHICAGO
Zip:	60628
Facility ID:	2010017
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Id:	U0003073

0707 CLARK SER STATION (Continued) **U000172648**

Owner Name:	Clark Retail Enterprises, Inc.
Owner Address:	3003 Butterfield Road, Suite 300
Owner City,St,Zip:	Oak Brook, IL 60523
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	9/1/1991
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	9/1/1991
Abandoned Date:	Not reported
Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	7500

0707 CLARK SER STATION (Continued) **U000172648**

Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	9/1/1991
Abandoned Date:	Not reported

P143 **BOBS SUPER 100** **EDR Hist Auto** **1021501225**
East **11555 S MICHIGAN** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.015 mi.
79 ft. **Site 3 of 4 in cluster P**

Actual:
602 ft.

Focus Map:
6

EDR Hist Auto

Year:	Name:	Type:
1982	BOBS SUPER 100	Gasoline Service Stations
1983	BOBS SUPER 100	Gasoline Service Stations
1985	BOBS SUPER 100	Gasoline Service Stations
1986	BOBS SUPER 100	Gasoline Service Stations
1987	BOBS SUPER 100	Gasoline Service Stations
1988	BOBS SUPER 100	Gasoline Service Stations
1989	BOBS SUPER 100	Gasoline Service Stations
1990	BOBS SUPER 100	Gasoline Service Stations
1991	BOBS SUPER 100	Gasoline Service Stations
1992	BOBS SUPER 100	Gasoline Service Stations

P144 **CLARK OIL & REFINING** **IL LUST** **S104525658**
East **11555 SOUTH MICHIGAN AVE.** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.015 mi.
79 ft. **Site 4 of 4 in cluster P**

Actual:
602 ft.

Focus Map:
6

LUST:

Name:	CLARK OIL & REFINING
Address:	11555 SOUTH MICHIGAN AVE.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	912512
IL EPA Id:	316535008
Product:	Gasoline
IEMA Date:	1991-09-05
Project Manager:	Lowder

CLARK OIL & REFINING (Continued) **S104525658**

Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Clark Oil & Refining
PRP Contact:	Johnna VanKeuran
PRP Address:	8182 Maryland Ave.
PRP City,St,Zip:	Clayton, MO 63105-3721
PRP Phone:	3147520533
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	1992-05-28
NFA/NFR Letter:	**1995-01-09**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

I145 **MARQUETTE BANK** **IL LUST** **S105155384**
NNE **135-39 WEST 114TH ST.** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.015 mi.
81 ft. **Site 3 of 3 in cluster I**

Actual:
606 ft.

Focus Map:
5

LUST:

Name:	MARQUETTE BANK
Address:	135-39 WEST 114TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20011638
IL EPA Id:	316495139
Product:	Gasoline
IEMA Date:	2001-10-03
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Marquette Bank
PRP Contact:	James McDonough
PRP Address:	8020 South Harlem Ave.
PRP City,St,Zip:	Bridgeview, IL 60455
PRP Phone:	7739184541
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2001-10-17
45 Report Received:	2001-11-16
NFA/NFR Letter:	**2002-01-25**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

146 WSW < 1/8 0.018 mi. 95 ft. | **LAND & LAKES TRANSFER STATION**
1258-1300 E 130TH ST
CHICAGO, IL 60827 | **RCRA NonGen / NLR**
FINDS
ECHO | **1004697781**
ILR000081000

Actual: 615 ft.

Focus Map: 10

RCRA NonGen / NLR:

Date form received by agency:	2019-12-13 00:00:00.0
Facility name:	LAND & LAKES TRANSFER STATION
Facility address:	1258-1300 E 130TH ST CHICAGO, IL 60827
EPA ID:	ILR000081000
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	MARINA DEVELOPMENTS INC
Owner/operator address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Owner/operator country:	Not reported
Owner/operator telephone:	847-825-5000
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Not reported
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	2000-09-01 00:00:00.0
Site name:	LAND & LAKES TRANSFER STATION
Classification:	Small Quantity Generator

LAND & LAKES TRANSFER STATION (Continued) **1004697781**

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

FINDS:
Registry ID: 110003059831
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110003059831

Environmental Interest/Information System:
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Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004697781
Registry ID: 110003059831
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003059831
Name: LAND & LAKES TRANSFER STATION
Address: 1258-1300 E 130TH ST
City,State,Zip: CHICAGO, IL 60827

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147 WSW < 1/8 0.027 mi. 143 ft. | **HARRIS TRANSMISSION CO**
410 W 109TH ST
CHICAGO, IL 60628 | **EDR Hist Auto** | **1021083291**
N/A

Actual: 605 ft. EDR Hist Auto

Focus Map: 5

Year:	Name:	Type:
1991	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
1992	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
1993	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
1994	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
1995	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
1996	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
1997	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
1998	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
1999	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops
2000	HARRIS TRANSMISSION CO	Automotive Transmission Repair Shops

T148 NE < 1/8 0.030 mi. 159 ft. | **STUART INDUSTRIAL COATINGS INC**
11740 S FRONT ST
CHICAGO, IL 60628
Site 1 of 4 in cluster T | **IL UST** | **U001143189**
N/A

Actual: 592 ft.

Focus Map: 6

UST:

Name:	STUART INDUSTRIAL COATINGS INC
Address:	11740 S FRONT ST
City:	CHICAGO
Zip:	60628
Facility ID:	2008210
Facility Status:	CLOSED
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Id:	U0014654
Owner Name:	Stuart Industrial Coatings Inc
Owner Address:	11740 S Front St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	3000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/9/1990
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

STUART INDUSTRIAL COATINGS INC (Continued) **U001143189**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/9/1990
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/9/1990
Abandoned Date:	Not reported

Tank Number:	4
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/9/1990

STUART INDUSTRIAL COATINGS INC (Continued) **U001143189**

Abandoned Date:	Not reported

Tank Number:	5
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/9/1990
Abandoned Date:	Not reported

Tank Number:	6
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/9/1990
Abandoned Date:	Not reported

Tank Number:	7
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Not reported

STUART INDUSTRIAL COATINGS INC (Continued) **U001143189**

Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/9/1990
Abandoned Date:	Not reported

T149 **STUART INDUSTRIAL COATINGS** **WI MANIFEST** **S110352444**
NE **11740 SOUTH FRONT STREET** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.030 mi.
159 ft. **Site 2 of 4 in cluster T**

Actual:
592 ft.

Focus Map:
6

WI MANIFEST:

Name:	STUART INDUSTRIAL COATINGS
Address:	11740 SOUTH FRONT STREET
City,State,Zip:	CHICAGO, IL 60628
Year:	2009
EPA ID:	ILD984845073
FID:	Not reported
ACT Code:	201
ACT Status:	A
ACT Code 1:	201
ACT Name:	HW Generator - Large
Contact Title:	Not reported
Contact Name:	Not reported
Contact Address:	Not reported
Contact City/State/Zip:	Not reported
Contact Telephone:	Not reported
Contact EMail Address:	Not reported

Shipped:

Year:	2009
Manifest Doc Id:	001380495JJK
Copy Type:	TSDCOPY
Gen EPA ID:	ILD984845073
Gen Date:	04/30/2009
GEN Copy Revd Date:	Not reported
TSD Date:	05/04/2009
TSD EPA ID:	WID988580056
TSD Copy Revd Date:	06/04/2009

Year:	2009
Manifest Doc Id:	001380496JJK

STUART INDUSTRIAL COATINGS (Continued) **S110352444**

Copy Type:	TSDCOPY
Gen EPA ID:	ILD984845073
Gen Date:	04/30/2009
GEN Copy Revd Date:	Not reported
TSD Date:	05/04/2009
TSD EPA ID:	WID988580056
TSD Copy Revd Date:	06/04/2009

T150 **STUART CHEMICAL & PAINT INC.** **RCRA-SQG** **1000614197**
NE **11740 S FRONT ST** **FINDS** **ILD984845073**
< 1/8 **CHICAGO, IL 60628** **ECHO**
0.030 mi. **IL AIRS**
159 ft. **Site 3 of 4 in cluster T** **IL BOL**

Actual:
592 ft.

Focus Map:
6

RCRA-SQG:

Date form received by agency:	1991-11-19 00:00:00.0
Facility name:	STUART INDUSTRIAL COATINGS INC
Facility address:	11740 S FRONT ST CHICAGO, IL 60628
EPA ID:	ILD984845073
Contact:	CHARLES KOWALSKI
Contact address:	11740 S FRONT ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	312-928-0202
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	KOWALSKI CHARLES J
Owner/operator address:	11740 S FRONT ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	312-928-0202
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No

STUART CHEMICAL & PAINT INC. (Continued) **1000614197**

On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:
Registry ID: 110001677347
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110001677347

Environmental Interest/Information System:
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource

STUART CHEMICAL & PAINT INC. (Continued) **1000614197**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000614197
Registry ID:	110001677347
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001677347
Name:	STUART CHEMICAL & PAINT INC.
Address:	11740 S FRONT ST
City,State,Zip:	CHICAGO, IL 60628

AIRS:

Name:	STUART CHEMICAL & PAINT INC
Address:	11740 S FRONT ST
City,State,Zip:	CHICAGO, IL
2nd Address:	Not reported
Facility ID:	2879
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600CEH
Cease Operation Date:	1/11/2002
SIC Code:	2851
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

BOL:

Name:	STUART CHEMICAL & PAINT INC
Address:	11740 S FRONT ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000044887
Inv Num:	0316005286
Interest Name:	Stuart Ind Coatings Inc
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.842233
Longitude:	-87.704454

Name: STUART CHEMICAL & PAINT INC

STUART CHEMICAL & PAINT INC. (Continued) **1000614197**

Address:	11740 S FRONT ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000044887
Inv Num:	0316005286
Interest Name:	Stuart Ind Coatings Inc
Interest Type:	LUST
Media Code:	LAND
Latitude:	41.842233
Longitude:	-87.704454

Name:	STUART CHEMICAL & PAINT INC
Address:	11740 S FRONT ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000044887
Inv Num:	0316005286
Interest Name:	Stuart Ind Coatings Inc
Interest Type:	RCRA
Media Code:	LAND
Latitude:	41.842233
Longitude:	-87.704454

N151 **ABANDONED GAS STATION** **IL LUST** **U003668168**
NW **2 WEST 115TH STREET** **IL UST** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.030 mi.
160 ft. **Site 3 of 4 in cluster N**

Actual:
605 ft.

Focus Map:
6

LUST:

Name:	COX, DONNA
Address:	2 WEST 115TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	980685
IL EPA Id:	316495103
Product:	Gasoline
IEMA Date:	1998-03-30
Project Manager:	Harlow
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Donna Cox
PRP Contact:	Not reported
PRP Address:	345 South Sacramento
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	7737223797
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

Name:	COX, DONNA
Address:	2 WEST 115TH STREET
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20111008

ABANDONED GAS STATION (Continued) **U003668168**

IL EPA Id:	316495103
Product:	Gasoline
IEMA Date:	2011-09-22
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Donna Cox
PRP Contact:	Not reported
PRP Address:	1913 College Vista
PRP City,St,Zip:	Walnut, CA 91789
PRP Phone:	7732095456
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

UST:

Name:	ABANDONED GAS STATION
Address:	2 WEST 115TH STREET
City:	CHICAGO
Zip:	60628
Facility ID:	2037063
Facility Status:	EXEMPT
Facility Type:	**GOLF COURSE**
Owner Id:	U0027202
Owner Name:	Cox Donna
Owner Address:	345 S Sacramento
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	3/23/1998
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	11-1008
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	3/19/1998

ABANDONED GAS STATION (Continued) **U003668168**

Abandoned Date: Not reported

Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	11-1008
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	9/22/2011
Abandoned Date:	Not reported

N152 **COX DONNA (ABANDONED GAS STATI** **RCRA NonGen / NLR** **1001218777**
NW **2 W 115TH ST** **FINDS** **ILR000048611**
< 1/8 **CHICAGO, IL 60628** **ECHO**
0.030 mi.
160 ft. **Site 4 of 4 in cluster N**

Actual:
605 ft.

Focus Map:
6

RCRA NonGen / NLR:

Date form received by agency:	1998-03-17 00:00:00.0
Facility name:	ABANDONED GAS STATION
Facility address:	2 W 115TH ST CHICAGO, IL 60628
EPA ID:	ILR000048611
Mailing address:	345 S SACREMENTO CHICAGO, IL 60612
Contact:	DONNA COX
Contact address:	345 S SACREMENTO CHICAGO, IL 60612
Contact country:	US
Contact telephone:	773-722-3797
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	COX DONNA
Owner/operator address:	345 S SACREMENTO CHICAGO, IL 60612
Owner/operator country:	Not reported
Owner/operator telephone:	773-722-3797

COX DONNA (ABANDONED GAS STATI (Continued) **1001218777**

Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:
Registry ID: 110005962592
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005962592

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001218777
Registry ID: 110005962592
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005962592
Name: COX DONNA (ABANDONED GAS STATI
Address: 2 W 115TH ST
City,State,Zip: CHICAGO, IL 60628

153 WSW < 1/8 0.032 mi. 170 ft. | **PENN CENTRAL CORP. 810 EAST 124TH STREET CHICAGO, IL** | **IL SSU** | **S101467236 N/A**

Actual: 590 ft.

Focus Map: 9

SSU:

Name:	PENN CENTRAL CORP.
Address:	810 EAST 124TH STREET
City,State,Zip:	CHICAGO, IL
Facility ID:	0316490002
Facility Type:	Grain Elevator - Abandoned
Directions:	Not reported
Region:	Des Plaines
Current Program:	OSE
Project Manager:	Nickell
Community Relations:	Not reported
SSU Status:	Transferred
FOS:	NA
Year Completed:	Not reported
Site Size:	24
Lat/Long:	Not reported

---

154 ENE < 1/8 0.033 mi. 173 ft. | **COTTAGE GROVE DUMP CHICAGO, IL 60628** | **IL SWF/LF** | **S108111120 N/A**

Actual: 589 ft.

Focus Map: 9

IL WMRC_LF:

Region:	WMRC
General:	Not reported
IEPA ID Number:	316000023
Municipal Waste:	Not reported
Provisional IEPA ID:	Not reported
Septic:	Not reported
NIPC Map Number:	133
Animal:	Not reported
Owner Name:	CITY OF CHICAGO
Pathological:	Not reported
Operator:	DEPARTMENT OF STREETS
Industrial:	Not reported
PO Box:	Not reported
Foundry Sand:	Not reported
Incinerator Ash:	Not reported
Slag:	Not reported
Hazardous:	Not reported
Hazardous Liquid:	Not reported
Radiation:	Not reported
Demolition:	Not reported
Lat/Long:	414000/873600
Landscaping:	Not reported
Oil Field:	Not reported
Primemer ID:	3
Special:	Not reported
Township:	37N
Other:	Not reported
Range:	14E
Unknown:	Not reported
Section:	27

COTTAGE GROVE DUMP (Continued) **S108111120**

Quarter Section1:	NE
Quarter Section2:	SW
Quarter Section3:	Not reported
Quarter Section4:	Not reported
IEPA:	X
ISGS:	Not reported
PollutionControlBoard:	Not reported
IDM&M:	Not reported
DPH:	Not reported
Operational Status:	Not reported
Local Agency:	Not reported
Permit Status:	Not reported
Agency:	NIPC
IEPA Permit Date:	Not reported
Source Other:	Not reported
Close Date:	Not reported
Reaction:	Not reported
RCRA Facility:	Not reported
Date Discover:	10174
GW Monitoring:	Not reported
Date Cleaned:	Not reported
FD Site:	Not reported
Offsite Waste:	Not reported
Landfill Size:	Not reported
Random Dump:	X
Size Fill:	Not reported
Open Dump:	Not reported
Leachate Collected:	Not reported
Abandonment:	Not reported
Other:	Not reported
Recompacted Clay:	Not reported
In-situ Clay:	Not reported
Secured Containers:	Not reported
Combination:	Not reported
Landfill:	X
None:	Not reported
Incineration:	Not reported
Other:	Not reported
Survace Impoundment:	Not reported
Land Application:	Not reported

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155 East < 1/8 0.034 mi. 180 ft. **FIZER S FENCING & SECURITY** **EDR Hist Cleaner** **1009185339**
330 W 111TH ST **N/A**
CHICAGO, IL

Actual: 605 ft. EDR Hist Cleaner

Focus Map: 5

Year:	Name:	Type:
2003	FIZER S FENCING & SECURITY	CARPET AND RUG CLEANERS

U156 West < 1/8 0.036 mi. 191 ft. | **CHICAGO DEPT OF ENV (SPILL)**
11100 S STEWART AVE
CHICAGO, IL 60628
Site 1 of 4 in cluster U | **RCRA NonGen / NLR** | **1015742592**
ILR000157560

Actual: 606 ft.

Focus Map: 5

RCRA NonGen / NLR:

Date form received by agency:	2010-03-09 00:00:00.0
Facility name:	CHICAGO DEPT OF ENV (SPILL)
Facility address:	11100 S STEWART AVE CHICAGO, IL 60628
EPA ID:	ILR000157560
Mailing address:	30 N LASALLE CHICAGO, IL 60616
Contact:	KEVIN SCHNOES
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	312-744-4034
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO DEPT OF ENV
Owner/operator address:	30 N LASALLE CHICAGO, IL 60616
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	2009-01-01 00:00:00.
Owner/Op end date:	Not reported
Owner/operator name:	CHICAGO DEPT OF ENVIRONMENT
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	2009-05-13 00:00:00.
Owner/Op end date:	Not reported
Owner/operator name:	CHICAGO DEPT OF ENV
Owner/operator address:	30 N LASALLE CHICAGO, IL 60616
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported

CHICAGO DEPT OF ENV (SPILL) (Continued) **1015742592**

Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: 2009-01-01 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: CHICAGO DEPT OF ENVIRONMENT
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 2009-05-13 00:00:00.
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2010-03-09 00:00:00.0
Site name: CHICAGO DEPT OF ENVIRONMENT
Classification: Not a generator, verified

Date form received by agency: 2010-03-01 00:00:00.0
Site name: CHICAGO DEPT OF ENV (SPILL)
Classification: Large Quantity Generator

Date form received by agency: 2009-05-13 00:00:00.0
Site name: CHICAGO DEPT OF ENVIRONMENT
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

CHICAGO DEPT OF ENV (SPILL) (Continued) **1015742592**

Violation Status: No violations found

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157 ENE < 1/8 0.036 mi. 192 ft. **CALUMET NU EARTH (130TH/DOTY)** **IL NIPC** **S100790125 N/A**

CHICAGO, IL

Actual: 589 ft.

Focus Map: 10

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158 WSW < 1/8 0.038 mi. 199 ft. **SHELDON HEIGHTS SERVICE STN** **EDR Hist Auto** **1020559979 N/A**

332 W 113TH ST
CHICAGO, IL 60628

Actual: 608 ft.

Focus Map: 5

EDR Hist Auto

Year:	Name:	Type:
1969	SHELDON HEIGHTS SERVICE STN	Gasoline Service Stations
1970	SHELDON HEIGHTS SERVICE STN	Gasoline Service Stations
1971	SHELDON HEIGHTS SERVICE STN	Gasoline Service Stations
1972	SHELDON HEIGHTS SERVICE STN	Gasoline Service Stations
1973	SHELDON HEIGHTS SERVICE STN	Gasoline Service Stations

M159 North < 1/8 0.038 mi. 203 ft. **TADROS, MUSA** **IL LUST** **S104522099 N/A**

11442 SOUTH MICHIGAN AVE.
CHICAGO, IL 60628

Site 16 of 18 in cluster M

Actual: 606 ft.

Focus Map: 6

LUST:

Name:	TADROS, MUSA
Address:	11442 SOUTH MICHIGAN AVE.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	960704
IL EPA Id:	316500008
Product:	Used Oil
IEMA Date:	1996-04-30
Project Manager:	Blumhorst
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Musa Tadros
PRP Contact:	Not reported
PRP Address:	655 North La Grange Rd.
PRP City,St,Zip:	Frankfort, IL 60423
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1996-05-16

TADROS, MUSA (Continued) **S104522099**

45 Report Received: 1997-04-02
NFA/NFR Letter: 1998-01-27
NFR Date Recorded: 1998-10-21
Heating Oil Date: Not reported
Non-Lust LR Date: Not reported

M160 North < 1/8 0.038 mi. 203 ft. **GOODYEAR AUTO SERVICE CTR** **RCRA NonGen / NLR** **1000194572**
11442 S MICHIGAN AVE **FINDS** **ILD149985640**
CHICAGO, IL 60628 **ECHO**

Site 17 of 18 in cluster M

Actual: 606 ft.

Focus Map: 6

RCRA NonGen / NLR:
Date form received by agency: 2019-12-13 00:00:00.0
Facility name: GOODYEAR AUTO SERVICE CTR
Facility address: 11442 S MICHIGAN AVE
CHICAGO, IL 60628
EPA ID: ILD149985640
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: GOODYEAR TIRE AND RUBBER CO
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No

GOODYEAR AUTO SERVICE CTR (Continued) **1000194572**

Mixed waste (haz. and radioactive): Not reported
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1986-11-03 00:00:00.0
Site name: GOODYEAR AUTO SERVICE CTR
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: X001
. Waste name: WASTE OILS

Violation Status: No violations found

FINDS:
Registry ID: 110007532811
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110007532811

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000194572
Registry ID: 110007532811
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110007532811
Name: GOODYEAR AUTO SERVICE CTR
Address: 11442 S MICHIGAN AVE
City,State,Zip: CHICAGO, IL 60628

M161 North < 1/8 0.038 mi. 203 ft. | **GOODYEAR TIRE & RUBBER**
11442 S MICHIGAN AVE
CHICAGO, IL 60628
Site 18 of 18 in cluster M | **IL UST** | **U000865244**
N/A

Actual: 606 ft.
Focus Map: 6

UST:

Name:	GOODYEAR TIRE & RUBBER
Address:	11442 S MICHIGAN AVE
City:	CHICAGO
Zip:	60628
Facility ID:	2012823
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Id:	U0024861
Owner Name:	American Bank & Trust #120064-09
Owner Address:	733 Spruce Rd
Owner City,St,Zip:	Frankfort, IL 60423
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	500
Tank Substance:	Used Oil
Last Used Date:	1/1/1993
OSFM First Notify Date:	4/15/1986
Red Tag Issue Date:	Not reported
Install Date:	1/1/1969
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	96-0704
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	4/29/1996
Abandoned Date:	Not reported

V162 SSW < 1/8 0.039 mi. 204 ft. | **ABANDONED SERVICE STATION**
11500 S PERRY
CHICAGO, IL 60628
Site 1 of 6 in cluster V | **IL UST** | **U003762980**
N/A

Actual: 606 ft.
Focus Map: 6

UST:

Name:	ABANDONED SERVICE STATION
Address:	11500 S PERRY
City:	CHICAGO
Zip:	60628
Facility ID:	2040244
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0028125
Owner Name:	City of Chicago Department of Housing and Economic Development
Owner Address:	121 N La Salle St 10th Fl

ABANDONED SERVICE STATION (Continued) **U003762980**

Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	00-2342
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/11/2000
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	5000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	00-2342
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/11/2000
Abandoned Date:	Not reported
Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	5000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973

ABANDONED SERVICE STATION (Continued) **U003762980**

OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	00-2342
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/11/2000
Abandoned Date:	Not reported

Tank Number:	4
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	00-2342
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/11/2000
Abandoned Date:	Not reported

V163 **11500 S PERRY** **US BROWNFIELDS** **1016359765**
SSW **11500 S PERRY** **FINDS** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.039 mi.
204 ft. **Site 2 of 6 in cluster V**

Actual:
606 ft.

Focus Map:
6

US BROWNFIELDS:

Name:	11500 S PERRY
Address:	11500 S PERRY
City,State,Zip:	CHICAGO, IL 60628
Recipient Name:	Chicago, City of
Grant Type:	Assessment
Property Number:	22-21-405-007-0000
Parcel size:	0.22

11500 S PERRY (Continued) **1016359765**

Latitude:	41.6852596
Longitude:	-87.6253311
HCM Label:	Address Matching-House Number
Map Scale:	-
Point of Reference:	Entrance Point of a Facility or Station
Highlights:	-
Datum:	North American Datum of 1983
Acres Property ID:	133625
IC Data Access:	-
Start Date:	-
Redev Completition Date:	-
Completed Date:	-
Acres Cleaned Up:	-
Cleanup Funding:	-
Cleanup Funding Source:	-
Assessment Funding:	2500
Assessment Funding Source:	EPA
Redevelopment Funding:	-
Redev. Funding Source:	-
Redev. Funding Entity Name:	-
Redevelopment Start Date:	-
Assessment Funding Entity:	US EPA - Brownfields Assessment Cooperative Agreement
Cleanup Funding Entity:	-
Grant Type:	Petroleum
Accomplishment Type:	Phase I Environmental Assessment
Accomplishment Count:	Y
Cooperative Agreement Number:	00E68301
Start Date:	12-Apr-11
Ownership Entity:	Government
Completion Date:	2-May-11
Current Owner:	City of Chicago
Did Owner Change:	N
Cleanup Required:	Y
Video Available:	-
Photo Available:	Y
Institutional Controls Required:	U
IC Category Proprietary Controls:	-
IC Cat. Info. Devices:	-
IC Cat. Gov. Controls:	-
IC Cat. Enforcement Permit Tools:	-
IC in place date:	-
IC in place:	-
State/tribal program date:	-
State/tribal program ID:	-
State/tribal NFA date:	-
Air cleaned:	-
Asbestos found:	-
Asbestos cleaned:	-
Controled substance found:	-
Controled substance cleaned:	-
Drinking water affected:	-
Drinking water cleaned:	-
Groundwater affected:	-
Groundwater cleaned:	-
Lead contaminant found:	-
Lead cleaned up:	-
No media affected:	-

11500 S PERRY (Continued) **1016359765**

Unknown media affected:	-
Other cleaned up:	-
Other metals found:	-
Other metals cleaned:	-
Other contaminants found:	-
Other contams found description:	-
PAHs found:	-
PAHs cleaned up:	-
PCBs found:	-
PCBs cleaned up:	-
Petro products found:	-
Petro products cleaned:	-
Sediments found:	-
Sediments cleaned:	-
Soil affected:	Y
Soil cleaned up:	-
Surface water cleaned:	-
VOCs found:	-
VOCs cleaned:	-
Cleanup other description:	-
Num. of cleanup and re-dev. jobs:	-
Past use greenspace acreage:	-
Past use residential acreage:	-
Surface Water:	-
Past use commercial acreage:	0.22
Past use industrial acreage:	-
Future use greenspace acreage:	-
Future use residential acreage:	-
Future use commercial acreage:	-
Future use industrial acreage:	-
Superfund Fed. landowner flag:	N
Arsenic cleaned up:	-
Cadmium cleaned up:	-
Chromium cleaned up:	-
Copper cleaned up:	-
Iron cleaned up:	-
mercury cleaned up:	-
Nickel Cleaned Up:	-
No clean up:	-
Pesticides cleaned up:	-
Selenium cleaned up:	-
SVOCs cleaned up:	-
Unknown clean up:	-
Arsenic contaminant found:	-
Cadmium contaminant found:	-
Chromium contaminant found:	-
Copper contaminant found:	-
Iron contaminant found:	-
Mercury contaminant found:	-
Nickel contaminant found:	-
No contaminant found:	-
Pesticides contaminant found:	-
Selenium contaminant found:	-
SVOCs contaminant found:	-
Unknown contaminant found:	-
Future Use: Multistory	-
Media affected Bluiding Material:	-

11500 S PERRY (Continued) **1016359765**

Media affected indoor air: -
Building material media cleaned up: -
Indoor air media cleaned up: -
Unknown media cleaned up: -
Past Use: Multistory -
Property Description: The property is currently vacant and is an abandoned service station property. An ~ 60' by 25' concrete pad remains on the site and no other improvements remain on the site. Until the 1920's, the site was occupied by two two-story structures, a dwelling structure and a stable/garage. From ~ 1927 -1950, the buildings were razed and replaced by a gas filling station. In 1953, the existing gas filling station was demolished and replaced with a new facility. The property operated as a gas filling station until the late 1980's. In 2000, the City of Chicago used its enforcement powers to remove non-compliant USTs and demolished the remaining buildings. The City of Chicago demolished the remaining structure. The City of Chicago foreclosed on demolition lien and acquired the property.
Below Poverty Number: 3216
Below Poverty Percent: 35.82
Meidan Income: 12745
Meidan Income Number: 5764
Meidan Income Percent: 64.19
Vacant Housing Number: 964
Vacant Housing Percent: 27.61
Unemployed Number: 738
Unemployed Percent: 8.22

FINDS:
Registry ID: 110044215444
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110044215444

Environmental Interest/Information System:
US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

V164 **CHICAGO, CITY OF** **IL LUST** **S104872169**
SSW **11500 SOUTH PERRY** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.039 mi.
204 ft. **Site 3 of 6 in cluster V**

Actual:
606 ft.

Focus Map:
6

LUST:
Name: CHICAGO, CITY OF
Address: 11500 SOUTH PERRY
City,State,Zip: CHICAGO, IL 60628
Incident Num: 20002342
IL EPA Id: 316495135
Product: Gasoline, Used Oil
IEMA Date: 2000-12-12
Project Manager: Tucka
Project Manager Phone: Not reported
Email: Not reported
PRP Name: City of Chicago
PRP Contact: Dave Graham

CHICAGO, CITY OF (Continued) **S104872169**

PRP Address:	30 North LaSalel St., 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127443639
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2001-04-20
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	2001-04-20

V165 **SATRIANO TEXACO SERVICE** **EDR Hist Auto** **1021187973**
SSW **11500 S PERRY AVE** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.039 mi.
204 ft. **Site 4 of 6 in cluster V**

Actual:
606 ft.

Focus Map:
6

EDR Hist Auto

Year:	Name:	Type:
1973	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1974	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1975	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1976	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1977	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1978	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1979	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1980	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1982	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1983	SATRIANO TEXACO SERVICE	Gasoline Service Stations
1989	DUNLAP SON SERVICE STAT	General Automotive Repair Shops
1990	DUNLAP SON SERVICE STAT	General Automotive Repair Shops
1991	DUNLAP SON SERVICE STAT	General Automotive Repair Shops
1992	DUNLAP SON SERVICE STAT	General Automotive Repair Shops
1993	DUNLAP SON SERVICE STAT	General Automotive Repair Shops

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166 **ALLWASTE TANK CLEANING INC** **RCRA NonGen / NLR** **1000435365**
NE **11901 S COTTAGE GROVE** **FINDS** **ILD980607105**
< 1/8 **CHICAGO, IL 60628** **ECHO**
0.041 mi.
214 ft.

Actual:
594 ft.

Focus Map:
9

RCRA NonGen / NLR:

Date form received by agency:	2006-04-01 00:00:00.0
Facility name:	ALLWASTE TANK CLEANING INC
Facility address:	11901 S COTTAGE GROVE CHICAGO, IL 60628
EPA ID:	ILD980607105
Contact:	ENV COORDINATOR
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	773-995-5500

ALLWASTE TANK CLEANING INC (Continued) **1000435365**

Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	ALLWASTE TANK CLEANING INC
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	1900-01-01 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	ALLWASTE TANK CLEANING INC
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	1900-01-01 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	ALLWASTE TANK CLEANING INC
Owner/operator address:	ADDRESS NOT REPORTED
	CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED
	CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported

ALLWASTE TANK CLEANING INC (Continued) **1000435365**

Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1992-03-01 00:00:00.0
Site name: ALLWASTE TANK CLEANING INC
Classification: Large Quantity Generator

Date form received by agency: 1990-02-26 00:00:00.0
Site name: TRI-CITY TANK WASH
Classification: Large Quantity Generator

Date form received by agency: 1981-09-09 00:00:00.0
Site name: ALLWASTE TANK CLEANING INC
Classification: Not a generator, verified

Date form received by agency: 1981-09-09 00:00:00.0
Site name: ALLWASTE TANK CLEANING INC
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:
Regulation violated: SR - 722.134(c)
Area of violation: Generators - Pre-transport
Date violation determined: 1990-09-28 00:00:00.0
Date achieved compliance: 1991-02-08 00:00:00.0

ALLWASTE TANK CLEANING INC (Continued) **1000435365**

Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1990-11-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1990-09-28 00:00:00.0
Date achieved compliance: 1991-02-08 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1990-11-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 1990-09-28 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1991-02-08 00:00:00.0
Evaluation lead agency: State

FINDS:
Registry ID: 110005851890
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005851890

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000435365
Registry ID: 110005851890
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005851890
Name: ALLWASTE TANK CLEANING INC
Address: 11901 S COTTAGE GROVE
City,State,Zip: CHICAGO, IL 60628

T167	**AMERICAN CLYBOURN FINISHING**	**RCRA-VSQG**	**1000359773**
NE	**11730 S. FRONT AVE.**	**FINDS**	**ILT180010019**
< 1/8	**CHICAGO, IL 60628**	**ECHO**	
0.041 mi.			
218 ft.	**Site 4 of 4 in cluster T**		

Actual:
592 ft.

Focus Map:
6

RCRA-VSQG:

Date form received by agency:	1995-04-14 00:00:00.0
Facility name:	AMERICAN CLYBOURN FINISHING CO
Facility address:	11730 S FRONT ST CHICAGO, IL 60628
EPA ID:	ILT180010019
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	FRANK J COLLINS
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private

AMERICAN CLYBOURN FINISHING (Continued) **1000359773**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1980-08-19 00:00:00.0
Site name: AMERICAN CLYBOURN FINISHING CO
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:
Registry ID: 110001290068
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110001290068

Environmental Interest/Information System:
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AMERICAN CLYBOURN FINISHING (Continued) **1000359773**

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000359773
Registry ID:	110001290068
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001290068
Name:	AMERICAN CLYBOURN FINISHING
Address:	11730 S. FRONT AVE.
City,State,Zip:	CHICAGO, IL 60628

W168 **CHICAGO, CITY OF** **IL LUST** **S105225778**
East **351 WEST 104TH ST.** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.042 mi.
220 ft. **Site 1 of 2 in cluster W**

Actual:
603 ft.

Focus Map:
3

LUST:

Name:	CHICAGO, CITY OF
Address:	351 WEST 104TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	942419
IL EPA Id:	316495048
Product:	Diesel
IEMA Date:	1994-10-27
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	City of Chicago
PRP Contact:	Richard Wojcieszak
PRP Address:	1000 East Ohio St.
PRP City,St,Zip:	Chicago, IL 60611
PRP Phone:	Not reported
Site Classification:	NFA
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1994-11-07
45 Report Received:	1995-03-08
NFA/NFR Letter:	**1995-09-19**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

W169 **ROSELAND PUMPING STATION** **IL UST** **U001142169**
East **351 W 104TH ST** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.042 mi.
220 ft. **Site 2 of 2 in cluster W**

Actual:
603 ft.

Focus Map:
3

UST:

Name:	ROSELAND PUMPING STATION
Address:	351 W 104TH ST
City:	CHICAGO
Zip:	60628
Facility ID:	2020701
Facility Status:	EXEMPT
Facility Type:	**CITY / TOWN**
Owner Id:	U0020652
Owner Name:	City of Chicago
Owner Address:	121 North LaSalle Street Commissioners Office
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	550
Tank Substance:	Diesel Fuel
Last Used Date:	6/1/1981
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	10/27/1994
Abandoned Date:	Not reported

V170 **WELKES SINCLAIR STATION** **EDR Hist Auto** **1020444596**
SSW **11515 S PERRY** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.043 mi.
228 ft. **Site 5 of 6 in cluster V**

Actual:
606 ft.

Focus Map:
6

EDR Hist Auto

Year:	Name:	Type:
1971	WELKES SINCLAIR STATION	Gasoline Service Stations

171 South < 1/8 0.050 mi. 263 ft. | **HAHN STANLEY**
11624 S MICH AV
CHICAGO, IL | **EDR Hist Auto** | **1009102486**
N/A

Actual: 608 ft.

Focus Map: 6

EDR Hist Auto

Year:	Name:	Type:
1923	HAHN STANLEY	AUTOMOBILE GARAGES
1923	HAHN STANLEY	AUTOMOBILE REPAIRING
1928	KUNKEL JOS	AUTOMOBILE REPAIRING

X172 NE < 1/8 0.050 mi. 265 ft. | **ATLANTIC RICHFIELD CO**
1 E 95TH ST
CHICAGO, IL 60628
Site 1 of 5 in cluster X | **IL UST** | **U003559028**
N/A

Actual: 595 ft.

Focus Map: 2

UST:

Name:	ATLANTIC RICHFIELD CO
Address:	1 E 95TH ST
City:	CHICAGO
Zip:	60628
Facility ID:	2011489
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Id:	U0000926
Owner Name:	Atlantic Richfield Co
Owner Address:	515 S Flower St
Owner City,St,Zip:	Los Angeles, CA 90071
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	1/1/1979
OSFM First Notify Date:	4/28/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	Not reported

X173 NE < 1/8 0.050 mi. 265 ft. — **ARCO AM-PM 12**, **1 E 95TH ST**, **CHICAGO, IL 60619** — **EDR Hist Auto** — **1020959267** / **N/A**

Site 2 of 5 in cluster X

Actual: 595 ft. EDR Hist Auto

Focus Map: 2

Year:	Name:	Type:
1989	ARCO AM-PM 12	Gasoline Service Stations
1990	ARCO AM-PM 12	Gasoline Service Stations
1991	ARCO AM-PM 12	Gasoline Service Stations
1992	ARCO AM-PM 12	Gasoline Service Stations
1993	ARCO AM-PM 12	Gasoline Service Stations

V174 SSW < 1/8 0.050 mi. 265 ft. — **PETRI KONSTANTIN**, **113 W 115TH**, **CHICAGO, IL** — **EDR Hist Cleaner** — **1009204912** / **N/A**

Site 6 of 6 in cluster V

Actual: 605 ft. EDR Hist Cleaner

Focus Map: 6

Year:	Name:	Type:
1928	PETRI KONSTANTIN	CLEANERS GARMENTS CURTAINS AND DRAPERIES

---

175 NNE < 1/8 0.050 mi. 266 ft. — **VACANT BUILDING**, **133-37 W 114TH ST THRID PARTY REMOVAL**, **CHICAGO, IL 60628** — **IL UST** — **U003853337** / **N/A**

Actual: 606 ft.

Focus Map: 5

UST:

Name:	VACANT BUILDING
Address:	133-37 W 114TH ST THRID PARTY REMOVAL
City:	CHICAGO
Zip:	60628
Facility ID:	2040973
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0030607
Owner Name:	Marquette Bank
Owner Address:	8020 S Harlem Ave
Owner City,St,Zip:	Bridgeview, IL 60455
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/18/2001
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported

VACANT BUILDING (Continued) **U003853337**

Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	9/28/2001
Abandoned Date:	Not reported

Y176 **GORGODIAN SAMUEL** **EDR Hist Cleaner** **1009215955**
North **11453 S MICH AV** **N/A**
< 1/8 **CHICAGO, IL**
0.051 mi.
268 ft. **Site 1 of 2 in cluster Y**

Actual:
609 ft.

EDR Hist Cleaner

Focus Map:
6

Year:	Name:	Type:
1923	GORGODIAN SAMUEL	HAT CLEANERS

Z177 **KHALIL, HANEY** **IL LUST** **S117460365**
SSE **11600 SOUTH MICHIGAN AVENUE** **IL SPILLS** **N/A**
< 1/8 **CHICAGO, IL 60609** **IL CHICAGO ENV**
0.053 mi.
281 ft. **Site 1 of 4 in cluster Z**

Actual:
603 ft.

LUST:

Focus Map:
6

Name:	KHALIL, HANEY
Address:	11600 SOUTH MICHIGAN AVENUE
City,State,Zip:	CHICAGO, IL 60609
Incident Num:	20170257
IL EPA Id:	316615198
Product:	Fuel Oil
IEMA Date:	2017-04-04
Project Manager:	Dilbaitis
Project Manager Phone:	(217) 785-8378
Email:	Bradley.Dilbaitis@illinois.gov
PRP Name:	Khalil, Haney
PRP Contact:	Haney Khalil
PRP Address:	11600 South Michigan Avenue
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	(708) 257-1201
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2017-04-19
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

KHALIL, HANEY (Continued) **S117460365**

IEMA SPILLS:

Name:	Not reported
Address:	11600 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL
Incident Number:	H-2017-0257
Incident Report Date:	04/04/2017
Street Address Of Incident Location:	11600 S Michigan Ave
Incident Location City:	Chicago
Incident Location County:	Cook
Entered By:	Kirgan, Ken (IEMA)
Date Entered:	Not reported
Data Input Status:	Closed
Leaking Underground Storage Tank (Lust)?:	Yes
Caller:	Dana Rose
Caller Represents:	Adept Environmental
Hazmat Incident Type:	Leak or spill
Date/Time Occurred:	Not reported
Mile Post:	N/A
Section:	N/A
Township:	N/A
Range:	N/A
Area Involved:	Fixed Facility
Media/Medium Into Which Release Occurred:	Ground
Temp:	n/a
Wind:	n/a
Material Name:	kerosene
Type:	Liquid
Chris Code:	Unknown
CAS#:	Unknown
UN/NA #:	Unknown
302(A) Extremely Hazardous Substance?:	Unknown
Is This A RCRA Hazardous Waste?:	Unknown
Is This A RCRA Regulated Facility?:	Unknown
Container Type:	Under ground storage tank
Container Size:	1-6,000 gallons
Amount Released:	unknown
Rate Of Release/Min:	unknown
Duration Of Release:	unknown
Cause Of Release:	unknown
Estimated Spill Extent:	Unknown
Spill Extent Units:	Not reported
Date/Time Incident Occurred:	Not reported
Check If Unknown (Occurrence):	v
Date/Time Discovered:	2017-04-04 09:00:00
Check If Unknown (Discovered):	Not reported
Where Taken:	none
On Scene Contact:	Dana Rose
Public Health Risks/Precautions Taken:	none
Number Of People Evacuated:	0
Assistance Needed From State Agencies:	none
Containment/Cleanup Actions And Plans:	tank to be abandoned in place and will define the extent of contamination
Responsible Name:	Haney Khalil
Facility Manager:	Haney Khalil
Facility Manager Phone #:	708/257-1201
Street1:	11600 S Michigan Ave
Contacted ESDA?:	Not reported

KHALIL, HANEY (Continued) **S117460365**

ESDA On Scene?:	Not reported
Specific ESDA Agency Contacted:	none
Contacted Fire Department?:	Not reported
Fire Department On Scene?:	Not reported
Name Of Fire Department Contacted:	none
Contacted Police Department?:	Not reported
Police Department On Scene?:	Not reported
Name Of Police Department Contacted:	none
Sheriff Police Department?:	Not reported
Sheriff Department On Scene?:	Not reported
Name Of Sheriff Department Contacted:	none
Was An Agency Other Than ESDA:	Not reported
Fire Police Or Sheriff Contacted?:	emailed
Was This Other Agency On Scene?:	Not reported
Name Of Other Agency Contacted:	none
Agency Notified Name:	IEPA, NRTP, OSFM, CFD, IEMA Region 4
Date/Time Agency Notified:	2017-04-04 10:23:00
Narrative:	Not reported
Follow Up:	Not reported

SPILLS:

Name:	Not reported
City,State,Zip:	CHICAGO, IL
Incident ID:	20170257
Incident Date:	04/04/2017
Date Received:	Not reported
Lust Ind:	Yes
Facility Address:	11600 S. MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	Adept Environmental
AC:	Not reported
Source Table:	dbo_tbl_CONSTRUCTION101

CHICAGO ENV:

Name:	Not reported
Address:	11600 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62080340282495 41.68250990843376)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Y
Inspections:	Y
Permits:	Y
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.68250990843376
Longitude:	-87.62080340282495

Name:	Not reported
Address:	11600 S MICHIGAN AVE
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.62080340282495 41.68250990843376)
Complaints:	Y
Neshaps and Demolition Notices:	Not reported
Enforcement:	Y
Inspections:	Y

KHALIL, HANEY (Continued) **S117460365**

Permits:	Y
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.68250990843376
Longitude:	-87.62080340282495

Z178 **MICHIGAN CITGO** **IL UST** **U001142786**
SSE **11600 S. MICHIGAN AVE.** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.053 mi.
281 ft. **Site 2 of 4 in cluster Z**

Actual:
603 ft.

Focus Map:
6

UST:

Name:	MICHIGAN CITGO
Address:	11600 S. MICHIGAN AVE.
City:	CHICAGO
Zip:	60628
Facility ID:	2017681
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Id:	U0038924
Owner Name:	116th & Michigan, LLC
Owner Address:	11600 S. Michigan Avenue
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Status:	**Currently in use**
Tank Capacity:	12000
Tank Substance:	Gasoline - Premium
Last Used Date:	Not reported
OSFM First Notify Date:	3/17/1986
Red Tag Issue Date:	Not reported
Install Date:	3/17/1969
Green Tag Decal:	**U003585**
Green Tag Issue Date:	**11/4/2019**
Green Tag Expire Date:	**12/31/2021**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	10/31/2019
Motor Fuel Permit Expiration Date:	12/31/2021
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	17-0257 ;20170257
Equipment Type:	Corrosion Prot - Piping
Equipment:	Sacrificial Anode Flex Connector
Last Passing Date:	9/23/2019
Test Expire Date:	9/23/2022
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	2
Tank Status:	**Currently in use**
Tank Capacity:	15000
Tank Substance:	Gasoline - Regular
Last Used Date:	Not reported
OSFM First Notify Date:	3/17/1986
Red Tag Issue Date:	Not reported
Install Date:	3/17/1969

MICHIGAN CITGO (Continued) **U001142786**

Green Tag Decal:	**U003585**
Green Tag Issue Date:	**11/4/2019**
Green Tag Expire Date:	**12/31/2021**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	10/31/2019
Motor Fuel Permit Expiration Date:	12/31/2021
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Sacrificial Anode Flex Connector
Last Passing Date:	9/23/2019
Test Expire Date:	9/23/2022
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Currently in use**
Tank Capacity:	12000
Tank Substance:	Gasoline - Regular
Last Used Date:	Not reported
OSFM First Notify Date:	3/17/1986
Red Tag Issue Date:	Not reported
Install Date:	3/17/1969
Green Tag Decal:	**U003585**
Green Tag Issue Date:	**11/4/2019**
Green Tag Expire Date:	**12/31/2021**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	10/31/2019
Motor Fuel Permit Expiration Date:	12/31/2021
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Sacrificial Anode Flex Connector
Last Passing Date:	9/23/2019
Test Expire Date:	9/23/2022
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	4
Tank Status:	**Abandoned in place**
Tank Capacity:	6000
Tank Substance:	Kerosene
Last Used Date:	1/21/2010
OSFM First Notify Date:	12/19/1986
Red Tag Issue Date:	Not reported
Install Date:	11/10/1986
Green Tag Decal:	**U003585**
Green Tag Issue Date:	**11/4/2019**
Green Tag Expire Date:	**12/31/2021**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	10/31/2019
Motor Fuel Permit Expiration Date:	12/31/2021
MOTOR FUEL TYPE:	SelfSrv

MICHIGAN CITGO (Continued) **U001142786**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Flexible Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	5/18/2017

Z179 **MARTIN OIL SERVICE INC** **EDR Hist Auto** **1009077702**
SSE **11600 S MICHIGAN** **N/A**
< 1/8 **CHICAGO, IL**
0.053 mi.
281 ft. **Site 3 of 4 in cluster Z**

Actual: EDR Hist Auto
603 ft.

Focus Map:
6

Year:	Name:	Type:
1970	MARTIN OIL OF INDIANA INC	Gasoline Service Stations
1974	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1975	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1976	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1977	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1978	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1979	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1979	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1980	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1981	MARTIN OIL SERVICE INC	SERVICE STATIONS GASOLINE AND OIL
1982	RONS MARTIN SERVICE STATION	Gasoline Service Stations
1983	RONS MARTIN SERVICE STATION	Gasoline Service Stations
2000	GAS CITY LIMITED	Gasoline Service Stations
2001	GAS CITY LIMITED	Gasoline Service Stations
2002	GAS CITY LIMITED	Gasoline Service Stations
2003	GAS CITY LIMITED	Gasoline Service Stations
2004	GAS CITY LIMITED	Gasoline Service Stations
2005	GAS CITY LIMITED	Gasoline Service Stations
2006	GAS CITY LIMITED	Gasoline Service Stations
2007	GAS CITY LTD	Gasoline Service Stations
2008	GAS CITY LTD	Gasoline Service Stations
2008	116TH & MICHIGAN LLC	Gasoline Service Stations
2009	GAS CITY LTD	Gasoline Service Stations
2010	116TH & MICHIGAN LLC	Gasoline Service Stations
2010	GAS CITY LTD	Gasoline Service Stations
2011	116TH & MICHIGAN LLC	Gasoline Service Stations
2011	GAS CITY LTD	Gasoline Service Stations
2012	116TH & MICHIGAN LLC	Gasoline Service Stations
2012	GAS CITY LTD	Gasoline Service Stations
2013	116TH & MICHIGAN LLC	Gasoline Service Stations
2013	GAS CITY LTD	Gasoline Service Stations
2014	116TH & MICHIGAN LLC	Gasoline Service Stations
2014	GAS CITY LTD	Gasoline Service Stations

AA180 ENE < 1/8 0.057 mi. 302 ft. | **CALUMET NU-EARTH DIST CENTER NORTH 130TH ST & DOTY AVE CHICAGO, IL 60628** | **SEMS-ARCHIVE** | **1003870307 ILD980903686**

Site 1 of 4 in cluster AA

Actual: 616 ft.

Focus Map: 10

SEMS Archive:

Site ID:	0500927
EPA ID:	ILD980903686
Name:	CALUMET NU-EARTH DIST CENTER
Address:	NORTH 130TH ST & DOTY AVE
Address 2:	Not reported
City,State,Zip:	CHICAGO, IL 60628
Cong District:	01
FIPS Code:	17031
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	05
Site ID:	0500927
EPA ID:	ILD980903686
Site Name:	CALUMET NU-EARTH DIST CENTER
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1991-10-31 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	05
Site ID:	0500927
EPA ID:	ILD980903686
Site Name:	CALUMET NU-EARTH DIST CENTER
NPL:	N
FF:	N
OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	Not reported
Finish Date:	1985-12-20 06:00:00
Qual:	N
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500927
EPA ID:	ILD980903686
Site Name:	CALUMET NU-EARTH DIST CENTER
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1

CALUMET NU-EARTH DIST CENTER (Continued) **1003870307**

Start Date:	Not reported
Finish Date:	1985-09-20 05:00:00
Qual:	N
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500927
EPA ID:	ILD980903686
Site Name:	CALUMET NU-EARTH DIST CENTER
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1984-12-01 06:00:00
Finish Date:	1984-12-01 06:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500927
EPA ID:	ILD980903686
Site Name:	CALUMET NU-EARTH DIST CENTER
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1984-12-01 06:00:00
Qual:	L
Current Action Lead:	St Perf

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181 **COMEH JONATHAN** **EDR Hist Cleaner** **1018512053**
East **337 W 102ND PL** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.062 mi.
329 ft.

Actual:
600 ft.
EDR Hist Cleaner

Focus Map:
3

Year:	Name:	Type:
2002	COMEH JONATHAN	Garment Pressing
2003	COMEH JONATHAN	Garment Pressing
2004	COMEH JONATHAN	Garment Pressing
2005	COMEH JONATHAN	Garment Pressing

AA182 **CHGO METRO SANITARY DIST #3** **IL NIPC** **S100790008**
ENE **N/A**
< 1/8 **CHICAGO, IL**
0.062 mi.
330 ft. **Site 2 of 4 in cluster AA**

Actual:
617 ft.

Focus Map:
10

AA183 **CHGO METYRO SANITARY DIST #2** **IL NIPC** **S100789996**
ENE **N/A**
< 1/8 **CHICAGO, IL**
0.062 mi.
330 ft. **Site 3 of 4 in cluster AA**

Actual:
617 ft.

Focus Map:
10

AA184 **CHGO METRO SANITARY DIST #4** **IL NIPC** **S100790026**
ENE **N/A**
< 1/8 **CHICAGO, IL**
0.062 mi.
330 ft. **Site 4 of 4 in cluster AA**

Actual:
617 ft.

Focus Map:
10

Z185 **CLOTHES MATE DRY CLEANING** **EDR Hist Cleaner** **1018531369**
SSE **11625 S MICHIGAN AVE** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.064 mi.
339 ft. **Site 4 of 4 in cluster Z**

Actual: EDR Hist Cleaner
603 ft.

Focus Map:
6

Year:	Name:	Type:
1997	CLOTHES MATE DRY CLEANING	Garment Pressing And Cleaners' Agents
1998	CLOTHES MATE DRY CLEANING	Garment Pressing And Cleaners' Agents
1999	CLOTHES MATE DRY CLEANING	Garment Pressing And Cleaners' Agents

X186 NNE < 1/8 0.066 mi. 351 ft. | **SIMS ARCO**
4 E 95TH ST
CHICAGO, IL
Site 3 of 5 in cluster X | **EDR Hist Auto** | **1009073406**
N/A

Actual: 596 ft.
Focus Map: 2

EDR Hist Auto

Year:	Name:	Type:
1981	SIMS ARCO	SERVICE STATIONS GASOLINE AND OIL
1981	ARCO AM PM MINI MART	SERVICE STATIONS GASOLINE AND OIL
2003	HORIZON ENTERPRISES	SERVICE STATIONS GAS AND OIL
2010	HORIZON ENTERPRISES 95TH MOBIL	Gasoline Service Stations, NEC
2011	HORIZON ENTERPRISES 95TH MOBIL	Gasoline Service Stations, NEC
2012	HORIZON ENTERPRISES 95TH MOBIL	Gasoline Service Stations, NEC
2013	HORIZON ENTERPRISES 95TH MOBIL	Gasoline Service Stations, NEC
2014	HORIZON ENTERPRISES 95TH MOBIL	Gasoline Service Stations, NEC

X187 NNE < 1/8 0.066 mi. 351 ft. | **SHELL OIL CO.**
4 EAST 95TH ST.
CHICAGO, IL 60619
Site 4 of 5 in cluster X | **IL LUST** | **S104528096**
N/A

Actual: 596 ft.
Focus Map: 2

LUST:

Name:	SHELL OIL CO.
Address:	4 EAST 95TH ST.
City,State,Zip:	CHICAGO, IL 60619
Incident Num:	871758
IL EPA Id:	316445022
Product:	Gasoline
IEMA Date:	1987-10-29
Project Manager:	Rife
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Equilon Enterprises LLC
PRP Contact:	Lisa Schoedel
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1996-01-22
20 Report Received:	1987-12-11
45 Report Received:	1990-10-15
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	1996-01-22

X188 **MOBIL GAS & FOOD MART** **IL UST** **U000174484**
NNE **4 EAST 95TH STREET** **N/A**
< 1/8 **CHICAGO, IL 60620**
0.066 mi.
351 ft. **Site 5 of 5 in cluster X**

Actual:
596 ft.

Focus Map:
2

UST:

Name:	MOBIL GAS & FOOD MART
Address:	4 EAST 95TH STREET
City:	CHICAGO
Zip:	60620
Facility ID:	2007056
Facility Status:	INACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Id:	U0002908
Owner Name:	Chicago Transit Authority
Owner Address:	567 W. Lake St
Owner City,St,Zip:	Chicago, IL 60661
Tank Number:	1
Tank Status:	**Condemned Tank**
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	1/11/2018
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	4/25/1982
Green Tag Decal:	**R000723**
Green Tag Issue Date:	**11/15/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	11/15/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	87-1758
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Condemned Tank**
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/11/2018
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	4/25/1982
Green Tag Decal:	**R000723**
Green Tag Issue Date:	**11/15/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	11/15/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv

MOBIL GAS & FOOD MART (Continued) **U000174484**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Condemned Tank**
Tank Capacity:	6000
Tank Substance:	Diesel Fuel
Last Used Date:	1/11/2018
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	4/25/1982
Green Tag Decal:	**R000723**
Green Tag Issue Date:	**11/15/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	11/15/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

U189 **PENTICOSTAL TEMPLE** **IL LUST** **S104525751**
West **419 WEST 111TH ST.** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.067 mi.
352 ft. **Site 2 of 4 in cluster U**

Actual:
606 ft.

Focus Map:
5

LUST:

Name:	PENTICOSTAL TEMPLE CHURCH
Address:	419 WEST 111TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	912233
IL EPA Id:	316205006
Product:	Used Oil
IEMA Date:	1991-08-09
Project Manager:	Chappel
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Penticostal Temple Church of God & Christ
PRP Contact:	Rev. Edward
PRP Address:	10819 South Morgan St.
PRP City,St,Zip:	Chicago, IL 60643
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731

PENTICOSTAL TEMPLE (Continued) **S104525751**

Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

Name:	PENTICOSTAL TEMPLE
Address:	419 WEST 111TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	913417
IL EPA Id:	316205006
Product:	Gasoline
IEMA Date:	1991-11-22
Project Manager:	Chappel
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Penticostal Temple
PRP Contact:	Pastor Edwards
PRP Address:	419 West 111th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

U190 **ROSELAND SERVICE STA** **EDR Hist Auto** **1009116821**
West **419 W 111TH** **N/A**
< 1/8 **CHICAGO, IL**
0.067 mi.
352 ft. **Site 3 of 4 in cluster U**

Actual:
606 ft.
EDR Hist Auto

Focus Map:
5

Year:	Name:	Type:
1923	ANDERSON JOHN	AUTOMOBILE REPAIRING
1928	ROSELAND SERVICE STA	GASOLINE AND OIL SERVICE STATIONS

U191 **PENTECOSTAL TEMPLE CHURCH OF GOD** **RCRA NonGen / NLR** **1000703753**
West **415 THRU 419 W 111TH ST** **FINDS** **ILD984831958**
< 1/8 **CHICAGO, IL 60643** **ECHO**
0.067 mi.
352 ft. **Site 4 of 4 in cluster U**

Actual:
606 ft.

Focus Map:
5

RCRA NonGen / NLR:

Date form received by agency:	2019-12-13 00:00:00.0
Facility name:	PENTECOSTAL TEMPLE CHURCH OF GOD
Facility address:	415 THRU 419 W 111TH ST CHICAGO, IL 60643
EPA ID:	ILD984831958
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	REV RICHARD EDWARDS
Owner/operator address:	10819 S MORGAN CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	312-785-0117
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Not reported
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	1991-07-25 00:00:00.0
Site name:	PENTECOSTAL TEMPLE CHURCH OF GOD
Classification:	Small Quantity Generator

PENTECOSTAL TEMPLE CHURCH OF GOD (Continued) **1000703753**

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:
Registry ID: 110005895120
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005895120

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000703753
Registry ID: 110005895120
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005895120
Name: PENTECOSTAL TEMPLE CHURCH OF GOD
Address: 415 THRU 419 W 111TH ST
City,State,Zip: CHICAGO, IL 60643

AB192 **DUMAC GARAGE** **EDR Hist Auto** **1009102484**
East **131 E 115TH** **N/A**
< 1/8 **CHICAGO, IL**
0.067 mi.
353 ft. **Site 1 of 2 in cluster AB**

Actual:
595 ft.
EDR Hist Auto

Focus Map:
6

Year:	Name:	Type:
1923	DUMAC GARAGE	AUTOMOBILE GARAGES
1928	KUEHN NICHOLAS	AUTOMOBILE REPAIRING
1995	SUPER J TOWING INC	Towing Services
1996	SUPER J TOWING INC	Towing Services
1997	SUPER J TOWING INC	Towing Services
1998	SUPER J TOWING INC	Towing Services
1999	SUPER J TOWING INC	Towing Services
2000	SUPER J TOWING INC	Towing Services
2001	SUPER J TOWING INC	Towing Services
2002	SUPER J TOWING INC	Towing Services
2003	SUPER J TOWING INC	Towing Services
2004	SUPER J TOWING INC	Towing Services
2005	SUPER J TOWING INC	Towing Services

AC193 **WHALEN STANDARD SERVICE** **EDR Hist Auto** **1020329610**
NNW **36 W 95TH ST** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.070 mi.
367 ft. **Site 1 of 4 in cluster AC**

Actual:
589 ft.

Focus Map:
2

EDR Hist Auto

Year:	Name:	Type:
1969	WHALEN STANDARD SERVICE	Gasoline Service Stations
1970	WHALEN STANDARD SERVICE	Gasoline Service Stations
1971	WHALEN STANDARD SERVICE	Gasoline Service Stations
1972	WHALEN STANDARD SERVICE	Gasoline Service Stations
1973	WHALEN STANDARD SERVICE	Gasoline Service Stations
1974	WHALEN STANDARD SERVICE	Gasoline Service Stations
1975	WHALEN STANDARD SERVICE	Gasoline Service Stations
1988	WHALEN STANDARD	Gasoline Service Stations
1989	WHALEN STANDARD	Gasoline Service Stations, NEC
1990	WHALEN STANDARD	Gasoline Service Stations, NEC
1991	WHALEN STANDARD	Gasoline Service Stations, NEC
1992	WHALEN STANDARD	Gasoline Service Stations, NEC
1993	WHALEN STANDARD	Gasoline Service Stations, NEC
1994	WHALEN STANDARD	Gasoline Service Stations, NEC

AC194 **AMOCO 15459** **RCRA NonGen / NLR** **1000862583**
NNW **36 W 95TH AND LAFAYETTE** **FINDS** **ILD984924860**
< 1/8 **CHICAGO, IL 60628** **ECHO**
0.070 mi.
367 ft. **Site 2 of 4 in cluster AC**

Actual:
589 ft.

Focus Map:
2

RCRA NonGen / NLR:

Date form received by agency:	2019-12-13 00:00:00.0
Facility name:	AMOCO 15459
Facility address:	36 W 95TH AND LAFAYETTE CHICAGO, IL 60628
EPA ID:	ILD984924860
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	AMOCO OIL CO
Owner/operator address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Owner/operator country:	Not reported
Owner/operator telephone:	708-990-2277
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

AMOCO 15459 (Continued) **1000862583**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Not reported
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	1993-09-02 00:00:00.0
Site name:	AMOCO 15459
Classification:	Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110007552031
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110007552031

Environmental Interest/Information System:

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000862583
Registry ID:	110007552031
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110007552031
Name:	AMOCO 15459
Address:	36 W 95TH AND LAFAYETTE
City,State,Zip:	CHICAGO, IL 60628

AC195 NNW < 1/8 0.070 mi. 367 ft. | **AMOCO SERVICE STATION #15459.**
36 WEST 95TH ST.
CHICAGO, IL 60628
Site 3 of 4 in cluster AC | **IL LUST** | **S105059046**
N/A

Actual: 589 ft.
Focus Map: 2

LUST:

Name:	AMOCO SERVICE STATION #15459.
Address:	36 WEST 95TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	971123
IL EPA Id:	316490013
Product:	Unleaded Gas
IEMA Date:	1997-06-24
Project Manager:	Piggush
Project Manager Phone:	(217) 782-3101
Email:	Michael.Piggush@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1997-06-27
45 Report Received:	1997-08-01
NFA/NFR Letter:	**2003-05-07**
NFR Date Recorded:	2003-07-17
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AC196 NNW < 1/8 0.070 mi. 367 ft. | **SS#15459 FAC#10443**
36 W. 95TH ST.
CHICAGO, IL 60628
Site 4 of 4 in cluster AC | **IL UST** | **U000864621**
N/A

Actual: 589 ft.
Focus Map: 2

UST:

Name:	SS#15459 FAC#10443
Address:	36 W. 95TH ST.
City:	CHICAGO
Zip:	60628
Facility ID:	2023039
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Id:	U0023834
Owner Name:	BP Amoco
Owner Address:	28100 Torch Parkway Suite 300
Owner City,St,Zip:	Warrenville, IL 60555
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported

SS#15459 FAC#10443 (Continued) **U000864621**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	97-1123
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	6/18/1997
Abandoned Date:	Not reported

Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	6/18/1997
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

SS#15459 FAC#10443 (Continued) **U000864621**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	6/18/1997
Abandoned Date:	Not reported

AB197 **CALUMET COACH CO** **RCRA NonGen / NLR** **1000426242**
East **135 E 115TH ST** **FINDS** **ILD981798499**
< 1/8 **CHICAGO, IL 60628** **ECHO**
0.073 mi.
387 ft. **Site 2 of 2 in cluster AB**

Actual:
595 ft.

Focus Map:
6

RCRA NonGen / NLR:

Date form received by agency:	1986-11-04 00:00:00.0
Facility name:	CALUMET COACH CO
Facility address:	135 E 115TH ST CHICAGO, IL 60628
EPA ID:	ILD981798499
Mailing address:	BOX 1369 150 E DOLTON RD CALUMET CITY, IL 60409
Contact:	K ENGLUND
Contact address:	BOX 1369 150 E DOLTON RD CALUMET CITY, IL 60409
Contact country:	US
Contact telephone:	312-868-5070
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	VALLEY NATIONAL BANK
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator

CALUMET COACH CO (Continued) **1000426242**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

CALUMET COACH CO (Continued) **1000426242**

Violation Status: No violations found

FINDS:
Registry ID: 110005858615
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005858615

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000426242
Registry ID: 110005858615
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005858615
Name: CALUMET COACH CO
Address: 135 E 115TH ST
City,State,Zip: CHICAGO, IL 60628

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198 **CHICAGO, CITY OF** **RCRA-SQG** **1006930428**
WSW **1100 E 130TH PL** **ILR000122952**
< 1/8 **CHICAGO, IL 60628**
0.079 mi.
418 ft.

Actual:
600 ft.

Focus Map:
10

RCRA-SQG:
Date form received by agency: 2003-07-31 00:00:00.0
Facility name: CHICAGO, CITY OF
Facility address: 1100 E 130TH PL
CHICAGO, IL 60628
EPA ID: ILR000122952
Mailing address: 30 N LASALLE 25TH FL
CHICAGO, IL 60602
Contact: TERRY SHEAHAN
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 312-742-4806
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CITY OF CHICAGO
Owner/operator address: Not reported

CHICAGO, CITY OF (Continued) **1006930428**

	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	2003-07-31 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	2003-07-31 00:00:00.
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

. Waste code:	D001
. Waste name:	IGNITABLE WASTE

Violation Status: No violations found

Y199 North < 1/8 0.079 mi. 418 ft. | **ROSELAND GASOLINE STA**
11420 S MICH AV
CHICAGO, IL
Site 2 of 2 in cluster Y | **EDR Hist Auto** | **1009110515**
N/A

Actual: 607 ft.

Focus Map: 6

EDR Hist Auto

Year:	Name:	Type:
1923	FISCHER GUMPAL	GASOLINE SERVICE STATIONS
1928	ROSELAND GASOLINE STA	GASOLINE AND OIL SERVICE STATIONS

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200 East < 1/8 0.080 mi. 420 ft. | **CHICAGO FIRE DEPARTMENT ENGINE #93**
330 WEST 104TH STREET
CHICAGO, IL 60622 | **IL UST** | **U004128232**
N/A

Actual: 602 ft.

Focus Map: 3

UST:

Name:	CHICAGO FIRE DEPARTMENT ENGINE #93
Address:	330 WEST 104TH STREET
City:	CHICAGO
Zip:	60622
Facility ID:	2030538
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0020004
Owner Name:	City of Chicago, Department of Environment
Owner Address:	30 North LaSalle Street, #300
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Pre 1974**
Tank Capacity:	0
Tank Substance:	Heating Oil
Last Used Date:	9/1/1968
OSFM First Notify Date:	6/30/1992
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	Not reported

201 NNE < 1/8 0.080 mi. 420 ft. | **VACANT BULDING**
11321 S WENTWORTH AVENUE
CHICAGO, IL 60603 | **IL UST** | **U003193590**
N/A

Actual: 606 ft.

Focus Map: 5

UST:

Name:	VACANT BULDING
Address:	11321 S WENTWORTH AVENUE
City:	CHICAGO
Zip:	60603
Facility ID:	2035824
Facility Status:	EXEMPT
Facility Type:	**PRIVATE INSTITUTION**
Owner Id:	U0026078
Owner Name:	Chicago Assoc For Retarded Citizens
Owner Address:	8South Michigan Avenue
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	5/30/1997
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/15/1997
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	5/30/1997
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

VACANT BULDING (Continued) **U003193590**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	5/20/1997
Abandoned Date:	Not reported

AD202 **ALL AMERICAN RECYCLING INC** **RCRA NonGen / NLR** **1004693217**
SW **11900 COTTAGE GROVE AVE** **ICIS** **ILD984804831**
< 1/8 **CHICAGO, IL 60628** **US AIRS**
0.080 mi. **FINDS**
421 ft. **Site 1 of 4 in cluster AD**

Actual:
598 ft.

Focus Map:
9

RCRA NonGen / NLR:

Date form received by agency:	2018-06-28 00:00:00.0
Facility name:	ALL AMERICAN RECYCLING INC
Facility address:	11900 COTTAGE GROVE AVE CHICAGO, IL 60628
EPA ID:	ILD984804831
Contact:	TOM BOCHEHEK
Contact address:	11900 COTTAGE GROVE AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	773-701-6696
Contact email:	TOMB@AARECYCLES.COM
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	ALL AMERICAN RECYCLING
Owner/operator address:	11900 COTTAGE GROVE AVE CHICAGO, IL 60628
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	2014-11-14 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	ALL AMERICAN RECYCLING
Owner/operator address:	11900 COTTAGE GROVE AVE CHICAGO, IL 60628
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	2014-11-14 00:00:00.
Owner/Op end date:	Not reported

ALL AMERICAN RECYCLING INC (Continued) **1004693217**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:1996-01-29 00:00:00.0
Site name: KEYWELL LLC
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency:1992-03-01 00:00:00.0
Site name: KEYWELL CORP
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Violation Status: No violations found

ICIS:

Enforcement Action ID:	HQ-2010-5024
FRS ID:	110002125673
Action Name:	Keywell, LLC
Facility Name:	KEYWELL CORP
Facility Address:	11900 S. COTTAGE GROVE AVE. CHICAGO, IL 60628
Enforcement Action Type:	EPCRA 325 Action For Penalty
Facility County:	COOK
Program System Acronym:	TRIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	325
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.67886
Longitude in Decimal Degrees:	-87.60993
Permit Type Desc:	Not reported
Program System Acronym:	60628SGKYW11900
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

ALL AMERICAN RECYCLING INC (Continued) **1004693217**

US AIRS MINOR:

Envid:	1004693217
Region Code:	05
Programmatic ID:	AIR IL000031600GYT
Facility Registry ID:	110002125673
D and B Number:	Not reported
Primary SIC Code:	5093
NAICS Code:	423930
Default Air Classification Code:	MIN
Facility Type of Ownership Code:	POF
Air CMS Category Code:	Not reported
HPV Status:	Not reported

US AIRS MINOR:

Region Code:	05
Programmatic ID:	AIR IL000031600GYT
Facility Registry ID:	110002125673
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2014-03-21 00:00:00
Activity Status Date:	2014-03-24 15:31:44
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	05
Programmatic ID:	AIR IL000031600GYT
Facility Registry ID:	110002125673
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-09-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600GYT
Facility Registry ID:	110002125673
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2014-03-21 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

FINDS:

Registry ID:	110002125673
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110002125673

Environmental Interest/Information System:

ALL AMERICAN RECYCLING INC (Continued) **1004693217**

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
AIR EMISSIONS CLASSIFICATION UNKNOWN
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
AIR MINOR
ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

AD203 **KEYWELL CORP** **NY MANIFEST** **1009221555**
SW **11900 S COTTAGE GROVE AVE** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.080 mi.
421 ft. **Site 2 of 4 in cluster AD**

Actual:
598 ft.

Focus Map:
9

NY MANIFEST:

Name:	KEYWELL CORP
Address:	11900 S COTTAGE GROVE AVE
City,State,Zip:	CHICAGO, IL 60628
Country:	USA

KEYWELL CORP (Continued) **1009221555**

EPA ID:	ILD984803601
Facility Status:	Not reported
Location Address 1:	11900 S COTTAGE GROVE AVE
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	CHICAGO
Location State:	IL
Location Zip:	60628
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	ILD984803601
Mailing Name:	KEYWELL CORP
Mailing Contact:	RON GOSTEK
Mailing Address 1:	11900 S COTTAGE GROVE AVE
Mailing Address 2:	Not reported
Mailing City:	CHICAGO
Mailing State:	IL
Mailing Zip:	60628
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	3126602060

NY MANIFEST:

Document ID:	NYB5488029
Manifest Status:	K
seq:	Not reported
Year:	1993
Trans1 State ID:	1159PNY
Trans2 State ID:	Not reported
Generator Ship Date:	02/08/1993
Trans1 Recv Date:	03/05/1993
Trans2 Recv Date:	/ /
TSD Site Recv Date:	03/16/1993
Part A Recv Date:	03/30/1993
Part B Recv Date:	03/29/1993
Generator EPA ID:	ILD984803601
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD048148175
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D006 - CADMIUM 1.0 MG/L TCLP
Waste Code:	Not reported
Waste Code:	Not reported

KEYWELL CORP (Continued) **1009221555**

Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	04315
Units:	P - Pounds
Number of Containers:	003
Container Type:	DM - Metal drums, barrels
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	100

AD204 **S G KEYWELL CO** **IL UST** **U001143038**
SW **11900 S COTTAGE GROVE AVE** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.080 mi.
421 ft. **Site 3 of 4 in cluster AD**

Actual:
598 ft.

Focus Map:
9

UST:

Name:	S G KEYWELL CO
Address:	11900 S COTTAGE GROVE AVE
City:	CHICAGO
Zip:	60628
Facility ID:	2012567
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Id:	U0013327
Owner Name:	S G Keywell Co
Owner Address:	11900 S Cottage Grove Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	8/1/1990
OSFM First Notify Date:	4/23/1986
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	8/16/1990
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	2000

S G KEYWELL CO (Continued) **U001143038**

Tank Substance:	Gasoline
Last Used Date:	8/1/1990
OSFM First Notify Date:	4/23/1986
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	8/22/1990
Abandoned Date:	Not reported

AD205 **KEYWELL CO.** **IL LUST** **S108045374**
SW **11900 SOUTH COTTAGE GROVE AVE.** **IL SPILLS** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.080 mi.
421 ft. **Site 4 of 4 in cluster AD**

Actual:
598 ft.

Focus Map:
9

LUST:

Name:	KEYWELL CO.
Address:	11900 SOUTH COTTAGE GROVE AVE.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	902351
IL EPA Id:	316495035
Product:	Unleaded Gas
IEMA Date:	1990-08-16
Project Manager:	Rife
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Keywell Co.
PRP Contact:	Ron Gostek
PRP Address:	11900 South Cottage Grove Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1992-02-29
45 Report Received:	1992-02-29
NFA/NFR Letter:	**1996-01-24**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

Name:	KEYWELL CORP.
Address:	11900 SOUTH COTTAGE GROVE
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	942202

KEYWELL CO. (Continued) **S108045374**

IL EPA Id:	316495035
Product:	Diesel
IEMA Date:	1994-09-26
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Keywell Corp.
PRP Contact:	Ron Gostek
PRP Address:	11900 South Cottage Grove Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1994-11-01
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	1994-11-01

SPILLS:

Name:	Not reported
City,State,Zip:	CHICAGO, IL
Incident ID:	20040961
Incident Date:	07/09/2004
Date Received:	07/09/2004
Lust Ind:	No
Facility Address:	11900 COTTAGE GROVE
Facility City:	CHICAGO
PRP Name:	BIG O MOVERS AND STORAGE INC
AC:	Not reported
Source Table:	dbo_OCIN_INCIDENTCUR

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206 ENE < 1/8 0.081 mi. 427 ft.

Actual: 590 ft.

Focus Map: 9

DOLTON MUNICIPAL **IL NIPC** **S100789913**
N/A

DOLTON, IL

AE207 NE < 1/8 0.087 mi. 458 ft. | **TONYS AUTOBODY 157 E KENNSINGTON CHICAGO, IL 60628** | **RCRA-VSQG FINDS ECHO** | **1004695306 ILR000014456**

Site 1 of 4 in cluster AE

Actual: 594 ft.

Focus Map: 6

RCRA-VSQG:

Date form received by agency:	1996-01-09 00:00:00.0
Facility name:	TONY'S AUTO BODY
Facility address:	157 E KENNSINGTON CHICAGO, IL 60628
EPA ID:	ILR000014456
Contact:	ANTHONY D LAFRANO
Contact address:	157 E KENNSINGTON CHICAGO, IL 60628
Contact country:	US
Contact telephone:	312-928-4670
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	ANTHONY D LOFRANO
Owner/operator address:	157 E KENNSINGTON CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	312-928-4670
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

TONYS AUTOBODY (Continued) **1004695306**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:
Registry ID: 110005939440
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005939440

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004695306
Registry ID: 110005939440
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005939440

TONYS AUTOBODY (Continued) **1004695306**

Name: TONYS AUTOBODY
Address: 157 E KENNSINGTON
City,State,Zip: CHICAGO, IL 60628

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208 SSW < 1/8 0.095 mi. 500 ft. **D & D SERVICE STATION** **EDR Hist Auto** **1020751649**
202 W 115TH **N/A**
CHICAGO, IL 60628

Actual: 606 ft.
Focus Map: 5

EDR Hist Auto

Year:	Name:	Type:
1970	D & D SERVICE STATION	Gasoline Service Stations
1972	BEVERLY AUTO REBUILDERS	General Automotive Repair Shops
1973	BEVERLY AUTO REBUILDERS	General Automotive Repair Shops

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209 ENE < 1/8 0.097 mi. 514 ft. **K FIVE CONSTRUCTION CORP** **RCRA NonGen / NLR** **1000265138**
12500 COTTAGE GROVE AVE **FINDS** **ILD981191349**
CHICAGO, IL 60628 **ECHO**

Actual: 589 ft.
Focus Map: 9

RCRA NonGen / NLR:

Date form received by agency:	1986-01-30 00:00:00.0
Facility name:	K FIVE CONSTRUCTION CORP
Facility address:	12500 COTTAGE GROVE AVE CHICAGO, IL 60628
EPA ID:	ILD981191349
Mailing address:	1801 MAIN ST LEMONT, IL 60439
Contact:	V MARSMAKER
Contact address:	1801 MAIN ST LEMONT, IL 60439
Contact country:	US
Contact telephone:	312-257-5600
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	K FIVE CONSTRUCTION CORP
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name: NAME NOT REPORTED

K FIVE CONSTRUCTION CORP (Continued) **1000265138**

Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:
Registry ID: 110005855253
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005855253

Environmental Interest/Information System:
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000265138
Registry ID: 110005855253

K FIVE CONSTRUCTION CORP (Continued) **1000265138**

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005855253
Name: K-FIVE CONSTRUCTION CORPORATIO
Address: 12500 COTTAGE GROVE AVE
City,State,Zip: CHICAGO, IL 60628

AF210 **REITER BROS** **EDR Hist Auto** **1009096099**
West **433 W 111TH ST** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.098 mi.
516 ft. **Site 1 of 2 in cluster AF**

Actual:
608 ft.

Focus Map:
5

EDR Hist Auto

Year:	Name:	Type:
1928	REITER BROS	GASOLINE AND OIL SERVICE STATIONS
1970	REITER BROS	Gasoline Service Stations

AG211 **UNLOADING UNLIMITED** **RCRA NonGen / NLR** **1000327575**
NE **11861 S COTTAGE GROVE AVE** **ILD000646869**
< 1/8 **CHICAGO, IL 60628**
0.098 mi.
520 ft. **Site 1 of 7 in cluster AG**

Actual:
590 ft.

Focus Map:
6

RCRA NonGen / NLR:
Date form received by agency: 1980-08-11 00:00:00.0
Facility name: UNLOADING UNLIMITED
Facility address: 11861 S COTTAGE GROVE AVE
CHICAGO, IL 60628
EPA ID: ILD000646869
Mailing address: 12000 S D0TY AVE
CHICAGO, IL 60628
Contact: PAUL KORUNA
Contact address: 12000 S D0TY AVE
CHICAGO, IL 60628
Contact country: US
Contact telephone: 312-568-1300
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED

UNLOADING UNLIMITED (Continued) **1000327575**

Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

AG212 **SMITH SYSTEMS CHICAGO YARD** **RCRA NonGen / NLR** **1000861617**
NE **11861 S COTTAGE GROVE AVE** **IL0000148601**
< 1/8 **CHICAGO, IL 60628**
0.098 mi.
520 ft. **Site 2 of 7 in cluster AG**

Actual:
590 ft.

Focus Map:
6

RCRA NonGen / NLR:

Date form received by agency:	2014-01-02 00:00:00.0
Facility name:	SMITH SYSTEMS CHICAGO YARD
Facility address:	11861 S COTTAGE GROVE AVE CHICAGO, IL 60628
EPA ID:	IL0000148601
Mailing address:	PO BOX 2455 SCOTTSBLUFF, NE 69363-2455
Contact:	MONTE W SMITH
Contact address:	PO BOX 2455 SCOTTSBLUFF, NE 69363-2455
Contact country:	US
Contact telephone:	308-632-5148
Contact email:	MONTE@SMITHSYSTEMS.US
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	BULKOA INC
Owner/operator address:	11861 S COTTAGE GROVE AVE

SMITH SYSTEMS CHICAGO YARD (Continued) **1000861617**

	CHICAGO, IL 60628
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	2008-08-11 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	STEVE BUTLER
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	2008-08-11 00:00:00.
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	2011-07-11 00:00:00.0
Site name:	SMITH SYSTEMS CHICAGO YARD
Classification:	Not a generator, verified

Date form received by agency:	1994-03-08 00:00:00.0
Site name:	MIDLAND TRANSPORT INC
Classification:	Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D005

SMITH SYSTEMS CHICAGO YARD (Continued) **1000861617**

. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F004

SMITH SYSTEMS CHICAGO YARD (Continued) **1000861617**

. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

AG213 **VACUUM INDUSTRIAL POLLUTION INTL INC** **RCRA NonGen / NLR** **1000428801**
NE **11861 S COTTAGE GROVE** **FINDS** **ILD980684245**
< 1/8 **CHICAGO, IL 60628** **ECHO**
0.098 mi.
520 ft. **Site 3 of 7 in cluster AG**

Actual:
590 ft.

Focus Map:
6

RCRA NonGen / NLR:
Date form received by agency: 2009-08-18 00:00:00.0
Facility name: VACUUM INDUSTRIAL POLLUTION INTL INC
Facility address: 11861 S COTTAGE GROVE
CHICAGO, IL 60628
EPA ID: ILD980684245
Contact: LES GRANT
Contact address: 11861 S COTTAGE GROVE
CHICAGO, IL 60628
Contact country: US
Contact telephone: 312-821-6700
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: VACUUM INDUSTRIAL POLLUTION INTL
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998

VACUUM INDUSTRIAL POLLUTION INTL INC (Continued) **1000428801**

Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1983-05-02 00:00:00.0
Site name: VACUUM INDUSTRIAL POLLUTION INTL INC
Classification: Not a generator, verified

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

VACUUM INDUSTRIAL POLLUTION INTL INC (Continued) **1000428801**

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

. Waste code: F007
. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS.

. Waste code: F010
. Waste name: QUENCHING BATH RESIDUES FROM OIL BATHS FROM METAL HEAT TREATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: F012
. Waste name: QUENCHING WASTEWATER TREATMENT SLUDGES FROM METAL HEAT TREATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: K001
. Waste name: BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATERS FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL.

. Waste code: K009
. Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF ACETALDEHYDE FROM ETHYLENE.

. Waste code: K010
. Waste name: DISTILLATION SIDE CUTS FROM THE PRODUCTION OF ACETALDEHYDE FROM ETHYLENE.

. Waste code: K015
. Waste name: STILL BOTTOMS FROM THE DISTILLATION OF BENZYL CHLORIDE.

VACUUM INDUSTRIAL POLLUTION INTL INC (Continued) **1000428801**

. Waste code: K016
. Waste name: HEAVY ENDS OR DISTILLATION RESIDUES FROM THE PRODUCTION OF CARBON TETRACHLORIDE.

. Waste code: K018
. Waste name: HEAVY ENDS FROM THE FRACTIONATION COLUMN IN ETHYL CHLORIDE PRODUCTION.

. Waste code: K019
. Waste name: HEAVY ENDS FROM THE DISTILLATION OF ETHYLENE DICHLORIDE IN ETHYLENE DICHLORIDE PRODUCTION.

. Waste code: K020
. Waste name: HEAVY ENDS FROM THE DISTILLATION OF VINYL CHLORIDE IN VINYL CHLORIDE MONOMER PRODUCTION.

. Waste code: K021
. Waste name: AQUEOUS SPENT ANTIMONY CATALYST WASTE FROM FLUOROMETHANE PRODUCTION.

. Waste code: K022
. Waste name: DISTILLATION BOTTOM TARS FROM THE PRODUCTION OF PHENOL/ACETONE FROM CUMENE.

. Waste code: K023
. Waste name: DISTILLATION LIGHT ENDS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM NAPHTHALENE.

. Waste code: K024
. Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM NAPHTHALENE.

. Waste code: K027
. Waste name: CENTRIFUGE AND DISTILLATION RESIDUES FROM TOLUENE DIISOCYANATE PRODUCTION.

. Waste code: K028
. Waste name: SPENT CATALYST FROM THE HYDROCHLORINATOR REACTOR IN THE PRODUCTION OF 1,1,1-TRICHLOROETHANE.

. Waste code: K030
. Waste name: COLUMN BOTTOMS OR HEAVY ENDS FROM THE COMBINED PRODUCTION OF TRICHLOROETHYLENE AND PERCHLOROETHYLENE.

. Waste code: K048
. Waste name: DISSOLVED AIR FLOTATION (DAF) FLOAT FROM THE PETROLEUM REFINING INDUSTRY.

. Waste code: K049
. Waste name: SLOP OIL EMULSION SOLIDS FROM THE PETROLEUM REFINING INDUSTRY.

. Waste code: U019
. Waste name: BENZENE (I,T)

. Waste code: U055
. Waste name: BENZENE, (1-METHYLETHYL)- (I) (OR) CUMENE (I)

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

VACUUM INDUSTRIAL POLLUTION INTL INC (Continued) **1000428801**

. Waste code: U140
. Waste name: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U238
. Waste name: CARBAMIC ACID, ETHYL ESTER (OR) ETHYL CARBAMATE (URETHANE)

Violation Status: No violations found

FINDS:
Registry ID: 110009365418
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110009365418

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Registry ID: 110009365481
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110009365481

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.
Registry ID: 110011884247
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110011884247

Environmental Interest/Information System:
NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions,

VACUUM INDUSTRIAL POLLUTION INTL INC (Continued) **1000428801**

and settlements.
Registry ID: 110009373169
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110009373169

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Registry ID: 110009374006
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110009374006

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

~~Click this hyperlink~~ while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000428801
Registry ID: 110009365418
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009365418
Name: UNLOADING UNLIMITED
Address: 11861 S COTTAGE GROVE AVE
City,State,Zip: CHICAGO, IL 60628

Envid: 1000428801
Registry ID: 110009374006
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009374006
Name: SCHNEIDER TANK LINES
Address: 11861 S COTTAGE GROVE AVE
City,State,Zip: CHICAGO, IL 60628

Envid: 1000428801
Registry ID: 110009365481
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009365481
Name: ARRO TRANSPORTATION LLC
Address: 11861 S COTTAGE GROVE AVE
City,State,Zip: CHICAGO, IL 60628

Envid: 1000428801
Registry ID: 110009373169
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009373169
Name: VACUUM INDUSTRIAL POLLUTION INTL INC
Address: 11861 S COTTAGE GROVE
City,State,Zip: CHICAGO, IL 60628

AG214 **SCHNEIDER TANK LINES** **RCRA NonGen / NLR** **1000312551**
NE **11861 S COTTAGE GROVE AVE** **ILD981789035**
< 1/8 **CHICAGO, IL 60628**
0.098 mi.
520 ft. **Site 4 of 7 in cluster AG**

Actual:
590 ft.

Focus Map:
6

RCRA NonGen / NLR:

Date form received by agency:	2019-12-13 00:00:00.0
Facility name:	SCHNEIDER TANK LINES
Facility address:	11861 S COTTAGE GROVE AVE CHICAGO, IL 60628
EPA ID:	ILD981789035
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	BULKOA
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Not reported
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

SCHNEIDER TANK LINES (Continued) **1000312551**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1986-10-02 00:00:00.0
Site name: SCHNEIDER TANK LINES
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

AG215 **CLEAN HARBORS ENV SERVICES** **RCRA-SQG** **1001487584**
NE **11861 COTTAGE GROVE-BLDG 13** **FINDS** **ILR000065797**
< 1/8 **CHICAGO, IL 60628** **ECHO**
0.098 mi.
520 ft. **Site 5 of 7 in cluster AG**

Actual:
590 ft.

Focus Map:
6

RCRA-SQG:
Date form received by agency: 2007-12-17 00:00:00.0
Facility name: CLEAN HARBORS ENV SERVICES
Facility address: 11861 COTTAGE GROVE-BLDG 13
CHICAGO, IL 60628
EPA ID: ILR000065797
Contact: RON PFEIFER
Contact address: 11861 COTTAGE GROVE-BLDG 13
CHICAGO, IL 60628
Contact country: US
Contact telephone: 773-468-1186
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: MARLEY COOLING
Owner/operator address: 11861 COTTAGE GROVE/10
CHICAGO, IL 60620
Owner/operator country: Not reported
Owner/operator telephone: 773-995-0611
Owner/operator email: Not reported
Owner/operator fax: Not reported

CLEAN HARBORS ENV SERVICES (Continued) **1001487584**

Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency:1999-07-19 00:00:00.0
Site name: MARLEY COOLING
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:
Registry ID: 110003051928
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110003051928

Environmental Interest/Information System:
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

CLEAN HARBORS ENV SERVICES (Continued) **1001487584**

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
AIR MINOR

~~Click this hyperlink~~ while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001487584
Registry ID:	110003051928
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110003051928
Name:	MARLEY COOLING TOWER
Address:	11861 COTTAGE GROVE-BLDG 13
City,State,Zip:	CHICAGO, IL 60628

AG216 **BULKOA INC** **IL UST** **U003152281**
NE **11861 S COTTAGE GROVE AVE** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.098 mi.
520 ft. **Site 6 of 7 in cluster AG**

Actual:
590 ft.

Focus Map:
6

UST:

Name:	BULKOA INC
Address:	11861 S COTTAGE GROVE AVE
City:	CHICAGO
Zip:	60628
Facility ID:	2023462
Facility Status:	CLOSED
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Id:	U0025760
Owner Name:	Bulkoa Inc
Owner Address:	11861 S Cottage Grove Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	97-1905
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/9/1997
Abandoned Date:	Not reported

BULKOA INC (Continued) **U003152281**

Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/9/1997
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/9/1997
Abandoned Date:	Not reported

Tank Number:	4
Tank Status:	**Removed**
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Red Tag Issue Date:	Not reported

BULKOA INC (Continued) **U003152281**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/9/1997
Abandoned Date:	Not reported

Tank Number:	5
Tank Status:	**Removed**
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/2002
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/9/1997
Abandoned Date:	Not reported

Tank Number:	6
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/2002
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported

BULKOA INC (Continued) **U003152281**

MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/9/1997
Abandoned Date:	Not reported

Tank Number:	7
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/1902
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/9/1997
Abandoned Date:	Not reported

AG217 **BULKOA INC** **IL LUST** **1000271640**
NE **11861 S COTTAGE GROVE AVE** **RCRA NonGen / NLR** **ILD000667154**
< 1/8 **CHICAGO, IL 60628**
0.098 mi.
520 ft. **Site 7 of 7 in cluster AG**

Actual:
590 ft.

Focus Map:
6

LUST:

Name:	BULKOA
Address:	11861 SOUTH COTTAGE GROVE
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	971905
IL EPA Id:	316515005
Product:	Gasoline, Diesel
IEMA Date:	1997-10-07
Project Manager:	Wallace
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Bulkoa
PRP Contact:	Patrick Gaughan
PRP Address:	11861 South Cottage Grove
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7732642200
Site Classification:	HIGH

BULKOA INC (Continued) **1000271640**

Section 57.5(g) Letter: 732
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 1997-10-20
45 Report Received: 1998-01-20
NFA/NFR Letter: 2003-04-08
NFR Date Recorded: 2003-07-28
Heating Oil Date: Not reported
Non-Lust LR Date: Not reported

RCRA NonGen / NLR:
Date form received by agency: 1980-08-18 00:00:00.0
Facility name: BULKOA INC
Facility address: 11861 S COTTAGE GROVE AVE
CHICAGO, IL 60628
EPA ID: ILD000667154
Contact: PAUL KORUNA
Contact address: 11861 S COTTAGE GROVE AVE
CHICAGO, IL 60628
Contact country: US
Contact telephone: 312-568-1300
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No

BULKOA INC (Continued) **1000271640**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

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218 NE < 1/8 0.102 mi. 540 ft. **STUARTS CHEMICAL & PAINT 11740 FRONT ST. CHICAGO, IL 60628** **IL LUST** **S104002394 N/A**

Actual: 592 ft.

Focus Map: 6

LUST:

Name:	STUARTS CHEMICAL & PAINT
Address:	11740 FRONT ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	900054
IL EPA Id:	316005286
Product:	Non-Petroleum Product
IEMA Date:	1990-01-05
Project Manager:	Heaton
Project Manager Phone:	(217) 524-3312
Email:	Mike.Heaton@illinois.gov
PRP Name:	Stuarts Ind.
PRP Contact:	Marla Kowlaski
PRP Address:	11740 Front St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

219 ENE < 1/8 0.105 mi. 553 ft. | **COTTAGE GROVE LANDFILL** | **IL NIPC** | **S100789917** **N/A**

CHICAGO, IL

Actual: 589 ft.

Focus Map: 9

AH220 ENE < 1/8 0.107 mi. 567 ft. | **ABBOTT** | **IL LUST** | **S104523621** **N/A**

45 EAST 95TH ST.
CHICAGO, IL 60619

Site 1 of 3 in cluster AH

Actual: 597 ft.

Focus Map: 2

LUST:

Name:	ABBOTT
Address:	45 EAST 95TH ST.
City,State,Zip:	CHICAGO, IL 60619
Incident Num:	932467
IL EPA Id:	316445035
Product:	Used Oil
IEMA Date:	1993-09-15
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Park Dist.
PRP Contact:	Robin Minor
PRP Address:	425 East McFetridge Dr.
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

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221 WSW < 1/8 0.110 mi. 583 ft. | **UNITED STATES SCRAP** | **IL NIPC** | **S100790009** **N/A**

CHICAGO, IL

Actual: 593 ft.

Focus Map: 9

222 East < 1/8 0.111 mi. 586 ft.

Actual: 603 ft.

Focus Map: 3

CHICAGO, CITY OF-ROSELAND STA
351 W 104TH ST
CHICAGO, IL 60628

RCRA NonGen / NLR
US AIRS
IL AIRS
IL ASBESTOS
IL BOL
IL CHICAGO ENV

1001077005
ILR000013250

RCRA NonGen / NLR:

Date form received by agency:	2009-03-02 00:00:00.0
Facility name:	CHICAGO, CITY OF-ROSELAND STA
Facility address:	351 W 104TH ST CHICAGO, IL 60628
EPA ID:	ILR000013250
Mailing address:	1000 E OHIO ST CHICAGO, IL 60611
Contact:	DARYL MATERRE
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	312-744-3675
Contact email:	Not reported
EPA Region:	05
Land type:	Municipal
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO, CITY OF, WATER DEPT
Owner/operator address:	1000 E OHIO ST CHICAGO, IL 60611
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	1912-07-04 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	CHICAGO, CITY OF, WATER DEPT
Owner/operator address:	1000 E OHIO ST CHICAGO, IL 60611
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	1912-07-04 00:00:00.
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2008-03-01 00:00:00.0
Site name: CHICAGO, CITY OF-ROSELAND STA
Classification: Large Quantity Generator

Date form received by agency: 2006-04-01 00:00:00.0
Site name: ROSELAND PUMPING STATION
Classification: Not a generator, verified

Date form received by agency: 1996-03-01 00:00:00.0
Site name: ROSELAND PUMPING STATION
Classification: Large Quantity Generator

Date form received by agency: 1995-11-29 00:00:00.0
Site name: ROSELAND PUMPING STATION
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D002
. Waste name: CORROSIVE WASTE

Facility Has Received Notices of Violations:
Regulation violated: SR - 722.141(a)
Area of violation: Generators - Records/Reporting
Date violation determined: 1997-07-10 00:00:00.0
Date achieved compliance: 1997-10-22 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1997-08-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 1997-07-10 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Records/Reporting
Date achieved compliance: 1997-10-22 00:00:00.0
Evaluation lead agency: State

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

US AIRS MINOR:

Envid:	1001077005
Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
D and B Number:	Not reported
Primary SIC Code:	4941
NAICS Code:	221310
Default Air Classification Code:	MIN
Facility Type of Ownership Code:	POF
Air CMS Category Code:	Not reported
HPV Status:	Not reported

US AIRS MINOR:

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1982-05-13 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1983-07-22 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1989-09-27 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1990-09-25 00:00:00

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1991-06-25 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1992-05-26 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1993-08-24 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1993-11-16 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported

Region Code:	05
Programmatic ID:	AIR IL000031600CFH
Facility Registry ID:	110000833787
Air Operating Status Code:	OPR

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-02-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600CFH
Facility Registry ID: 110000833787
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-05-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600CFH
Facility Registry ID: 110000833787
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1997-03-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 05
Programmatic ID: AIR IL000031600CFH
Facility Registry ID: 110000833787
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-03-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

AIRS:
Name: ROSELAND PUMPING STATION
Address: 351 W 104TH ST
City,State,Zip: CHICAGO, IL 60628
2nd Address: Not reported
Facility ID: Not reported
Year: 2008
Contact Name: Not reported
Contact Title: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Ext: Not reported

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Contact Email:	Not reported
ID Number:	031600CFH
Cease Operation Date:	Not reported
SIC Code:	4941
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600CFH
Tons Per Year:	0.36312899999999998
Year:	2009
Pollutant Code:	CO
ID Number:	031600CFH
Tons Per Year:	100.485
Year:	2008
Pollutant Code:	CO2
ID Number:	031600CFH
Tons Per Year:	4.2721000000000002E-2
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600CFH
Tons Per Year:	6.0900000000000003E-2
Year:	2008
Pollutant Code:	PM10
ID Number:	031600CFH
Tons Per Year:	0.51765000000000005
Year:	2008
Pollutant Code:	CO
ID Number:	031600CFH
Tons Per Year:	2.9770000000000001E-2
Year:	2009
Pollutant Code:	PART
ID Number:	031600CFH
Tons Per Year:	3.8448999999999997E-2
Year:	2009
Pollutant Code:	VOM
ID Number:	031600CFH
Tons Per Year:	5.4809999999999998E-2
Year:	2008
Pollutant Code:	VOM
ID Number:	031600CFH
Tons Per Year:	1.3670720000000001
Year:	2009

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: Not reported
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: Not reported
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: Not reported
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PART

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: Not reported
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 49.214550000000003
Year: 2012
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.25352999999999998
Year: 2012
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 0.5176500000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: 2014
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: 2014
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: 2014
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: 2014
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: 2014
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.95446399999999998

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2012
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 2.0788999999999998E-2
Year: 2012
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 8.4400000000000002E-4
Year: 2012
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.026844
Year: 2012
Pollutant Code: VOM

Name: ROSELAND PUMPING STATION
Address: 351 W 104TH ST
City,State,Zip: CHICAGO, IL 60628
2nd Address: Not reported
Facility ID: Not reported
Year: 2014
Contact Name: Not reported
Contact Title: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Ext: Not reported
Contact Email: Not reported
ID Number: 031600CFH
Cease Operation Date: Not reported
SIC Code: 4941
NAICS: Not reported
Type Code: Not reported
Permit: Not reported
Type: Not reported
Status: Not reported
Status Date: Not reported
Expiration Date: Not reported
Latitude: Not reported
Longitude: Not reported

Detail:
ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: Not reported
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: Not reported
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: Not reported
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: Not reported
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 49.214550000000003
Year: 2012
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.25352999999999998
Year: 2012
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2014
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: 2014
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: 2014
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: 2014
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: 2014
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.95446399999999998
Year: 2012
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 2.0788999999999998E-2
Year: 2012
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM2_5

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number:	031600CFH
Tons Per Year:	8.4400000000000002E-4
Year:	2012
Pollutant Code:	SO2
ID Number:	031600CFH
Tons Per Year:	0.026844
Year:	2012
Pollutant Code:	VOM
Name:	ROSELAND PUMPING STATION
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	2893
Year:	2007
Contact Name:	Chief Operating Engineer
Contact Title:	Not reported
Contact Telephone:	312-747-1024
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600CFH
Cease Operation Date:	Not reported
SIC Code:	4941
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600CFH
Tons Per Year:	0.36312899999999998
Year:	2009
Pollutant Code:	CO
ID Number:	031600CFH
Tons Per Year:	100.485
Year:	2008
Pollutant Code:	CO2
ID Number:	031600CFH
Tons Per Year:	4.2721000000000002E-2
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600CFH
Tons Per Year:	6.0900000000000003E-2
Year:	2008
Pollutant Code:	PM10
ID Number:	031600CFH

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: Not reported
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: Not reported
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: Not reported
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: Not reported
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 49.214550000000003
Year: 2012
Pollutant Code: CO2

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 0.25352999999999998
Year: 2012
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: 2014
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM2_5

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number:	031600CFH
Tons Per Year:	7.3800000000000004E-2
Year:	2014
Pollutant Code:	SO2

ID Number:	031600CFH
Tons Per Year:	2.2919999999999999E-2
Year:	2014
Pollutant Code:	VOM

ID Number:	031600CFH
Tons Per Year:	6.7528800000000002
Year:	2014
Pollutant Code:	CO2

ID Number:	031600CFH
Tons Per Year:	0.12551999999999999
Year:	2014
Pollutant Code:	CO

ID Number:	031600CFH
Tons Per Year:	0.95446399999999998
Year:	2012
Pollutant Code:	NOX

ID Number:	031600CFH
Tons Per Year:	2.0788999999999998E-2
Year:	2012
Pollutant Code:	PART

ID Number:	031600CFH
Tons Per Year:	2.9826999999999999E-2
Year:	2012
Pollutant Code:	PM10

ID Number:	031600CFH
Tons Per Year:	2.9826999999999999E-2
Year:	2012
Pollutant Code:	PM2_5

ID Number:	031600CFH
Tons Per Year:	8.4400000000000002E-4
Year:	2012
Pollutant Code:	SO2

ID Number:	031600CFH
Tons Per Year:	0.026844
Year:	2012
Pollutant Code:	VOM

Name:	ROSELAND PUMPING STATION
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2009

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600CFH
Cease Operation Date:	Not reported
SIC Code:	4941
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600CFH
Tons Per Year:	0.36312899999999998
Year:	2009
Pollutant Code:	CO
ID Number:	031600CFH
Tons Per Year:	100.485
Year:	2008
Pollutant Code:	CO2
ID Number:	031600CFH
Tons Per Year:	4.2721000000000002E-2
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600CFH
Tons Per Year:	6.0900000000000003E-2
Year:	2008
Pollutant Code:	PM10
ID Number:	031600CFH
Tons Per Year:	0.51765000000000005
Year:	2008
Pollutant Code:	CO
ID Number:	031600CFH
Tons Per Year:	2.9770000000000001E-2
Year:	2009
Pollutant Code:	PART
ID Number:	031600CFH
Tons Per Year:	3.8448999999999997E-2
Year:	2009
Pollutant Code:	VOM
ID Number:	031600CFH
Tons Per Year:	5.4809999999999998E-2
Year:	2008

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: Not reported
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: Not reported
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: Not reported
Pollutant Code: NOX

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: Not reported
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 49.214550000000003
Year: 2012
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.25352999999999998
Year: 2012
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: 2014
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: 2014
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: 2014
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: 2014
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year:	2014
Pollutant Code:	CO
ID Number:	031600CFH
Tons Per Year:	0.95446399999999998
Year:	2012
Pollutant Code:	NOX
ID Number:	031600CFH
Tons Per Year:	2.0788999999999998E-2
Year:	2012
Pollutant Code:	PART
ID Number:	031600CFH
Tons Per Year:	2.9826999999999999E-2
Year:	2012
Pollutant Code:	PM10
ID Number:	031600CFH
Tons Per Year:	2.9826999999999999E-2
Year:	2012
Pollutant Code:	PM2_5
ID Number:	031600CFH
Tons Per Year:	8.4400000000000002E-4
Year:	2012
Pollutant Code:	SO2
ID Number:	031600CFH
Tons Per Year:	0.026844
Year:	2012
Pollutant Code:	VOM

Name:	ROSELAND PUMPING STATION
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	2893
Year:	2006
Contact Name:	Chief Operating Engineer
Contact Title:	Not reported
Contact Telephone:	312-747-1024
Contact Fax:	312-747-1010
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600CFH
Cease Operation Date:	Not reported
SIC Code:	4941
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	41.704850

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Longitude: -87.632300

Detail:

ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: Not reported
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: Not reported
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: Not reported
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: Not reported
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: Not reported
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 49.214550000000003
Year: 2012
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.25352999999999998
Year: 2012
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: 2014
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: 2014
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: 2014
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: 2014
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: 2014
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.95446399999999998
Year: 2012
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 2.0788999999999998E-2
Year: 2012
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM10

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 8.4400000000000002E-4
Year: 2012
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.026844
Year: 2012
Pollutant Code: VOM

Name: ROSELAND PUMPING STATION
Address: 351 W 104TH ST
City,State,Zip: CHICAGO, IL 60628
2nd Address: Not reported
Facility ID: Not reported
Year: Not reported
Contact Name: Not reported
Contact Title: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Ext: Not reported
Contact Email: Not reported
ID Number: 031600CFH
Cease Operation Date: Not reported
SIC Code: 4941
NAICS: Not reported
Type Code: Not reported
Permit: Not reported
Type: Not reported
Status: Not reported
Status Date: Not reported
Expiration Date: Not reported
Latitude: Not reported
Longitude: Not reported

Detail:
ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: Not reported
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: Not reported
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: Not reported
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: Not reported
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 49.214550000000003
Year: 2012
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.25352999999999998
Year: 2012
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.36312899999999998

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: 2014
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM10

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: 2014
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: 2014
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: 2014
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: 2014
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.95446399999999998
Year: 2012
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 2.0788999999999998E-2
Year: 2012
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 8.4400000000000002E-4
Year: 2012
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.026844
Year: 2012
Pollutant Code: VOM

Name: ROSELAND PUMPING STATION

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2012
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600CFH
Cease Operation Date:	Not reported
SIC Code:	4941
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600CFH
Tons Per Year:	0.36312899999999998
Year:	2009
Pollutant Code:	CO
ID Number:	031600CFH
Tons Per Year:	100.485
Year:	2008
Pollutant Code:	CO2
ID Number:	031600CFH
Tons Per Year:	4.2721000000000002E-2
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600CFH
Tons Per Year:	6.0900000000000003E-2
Year:	2008
Pollutant Code:	PM10
ID Number:	031600CFH
Tons Per Year:	0.51765000000000005
Year:	2008
Pollutant Code:	CO
ID Number:	031600CFH
Tons Per Year:	2.9770000000000001E-2
Year:	2009
Pollutant Code:	PART
ID Number:	031600CFH
Tons Per Year:	3.8448999999999997E-2
Year:	2009

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002
Year: Not reported
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: Not reported
Pollutant Code: CO

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: Not reported
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: Not reported
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 49.214550000000003
Year: 2012
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.25352999999999998
Year: 2012
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600CFH
Tons Per Year: COG

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2014
Pollutant Code: COG

ID Number: 031600CFH
Tons Per Year: 1.9488000000000001
Year: 2008
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 1.2080000000000001E-3
Year: 2009
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.001722
Year: 2008
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 1.3670720000000001
Year: 2009
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 6.0900000000000003E-2
Year: 2008
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 0.36312899999999998
Year: 2009
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 100.485
Year: 2008
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 70.489699999999999
Year: 2009
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 4.2721000000000002E-2
Year: 2009
Pollutant Code: PM10

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

ID Number: 031600CFH
Tons Per Year: 3.8448999999999997E-2
Year: 2009
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 5.4809999999999998E-2
Year: 2008
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 0.51765000000000005
Year: 2008
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 2.9770000000000001E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 4.2446999999999999E-2
Year: 2008
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 0.98255999999999999
Year: 2014
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 5.8799999999999998E-3
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 7.3800000000000004E-2
Year: 2014
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 2.2919999999999999E-2
Year: 2014
Pollutant Code: VOM

ID Number: 031600CFH
Tons Per Year: 6.7528800000000002

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Year: 2014
Pollutant Code: CO2

ID Number: 031600CFH
Tons Per Year: 0.12551999999999999
Year: 2014
Pollutant Code: CO

ID Number: 031600CFH
Tons Per Year: 0.95446399999999998
Year: 2012
Pollutant Code: NOX

ID Number: 031600CFH
Tons Per Year: 2.0788999999999998E-2
Year: 2012
Pollutant Code: PART

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM10

ID Number: 031600CFH
Tons Per Year: 2.9826999999999999E-2
Year: 2012
Pollutant Code: PM2_5

ID Number: 031600CFH
Tons Per Year: 8.4400000000000002E-4
Year: 2012
Pollutant Code: SO2

ID Number: 031600CFH
Tons Per Year: 0.026844
Year: 2012
Pollutant Code: VOM

ASBESTOS:
Site ID: 170000045038
Name: ROSELAND PUMPING STATION
Address: 351 W 104TH ST
City,State,Zip: CHICAGO, IL 60628-2511
Notification Type: Original
Received Date: 04/10/2015
Postmark Date: 04/07/2015
Start Date: 04/21/2015
End Date: 05/08/2015
Resubmission Date: Not reported
Pipe AMT: 1100
SA AMT: Not reported
OFC AMT: Not reported
Type: Not reported
Fee Amt : Not reported
Fee Payment Method: Not reported
Check # or EPAY code. #: Not reported

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

Fee Comment:	Not reported
Additional Property:	Not reported
Asbestos Contractor Name:	Not reported
Demo Contractor Name:	Not reported
Asbestos Y/N:	Not reported
Demo Order Gov Y/N:	Not reported
Emerg. Reno Y/N:	Not reported
Compliance Review Y/N:	Not reported
Compliance Initials:	Not reported
Compliance Review Comments:	Not reported

BOL:

Name:	ROSELAND PUMPING STATION
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628-2511
Site Id:	170000045038
Inv Num:	0316495048
Interest Name:	Chicago, City of-Roseland Pumping Station
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.705190
Longitude:	-87.632460

Name:	ROSELAND PUMPING STATION
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628-2511
Site Id:	170000045038
Inv Num:	0316495048
Interest Name:	Chicago, City of-Roseland Pumping Station
Interest Type:	RCRA
Media Code:	LAND
Latitude:	41.705190
Longitude:	-87.632460

Name:	ROSELAND PUMPING STATION
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628-2511
Site Id:	170000045038
Inv Num:	0316495048
Interest Name:	Chicago, City of-Roseland Pumping Station
Interest Type:	SOLID WASTE
Media Code:	LAND
Latitude:	41.705190
Longitude:	-87.632460

Name:	ROSELAND PUMPING STATION
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL 60628-2511
Site Id:	170000045038
Inv Num:	0316495048
Interest Name:	Chicago, City of-Roseland Sta
Interest Type:	LUST
Media Code:	LAND
Latitude:	41.705190
Longitude:	-87.632460

CHICAGO, CITY OF-ROSELAND STA (Continued) **1001077005**

CHICAGO ENV:

Name:	Not reported
Address:	351 W 104TH PL
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63180957660111 41.704215836336736)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Not reported
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.704215836336736
Longitude:	-87.63180957660111

Name:	Not reported
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63275122983563 41.705110271796016)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Y
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.705110271796016
Longitude:	-87.63275122983563

Name:	Not reported
Address:	351 W 104TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.63275122983563 41.705110271796016)
Complaints:	Not reported
Neshaps and Demolition Notices:	Y
Enforcement:	Not reported
Inspections:	Y
Permits:	Y
Tanks:	Y
Holds and Lust Nfr:	Not reported
Latitude:	41.705110271796016
Longitude:	-87.63275122983563

---

223 **WENTWORTH SERVICE STA** **EDR Hist Auto** **1009095942**
NE **200 W 113TH** **N/A**
< 1/8 **CHICAGO, IL**
0.112 mi.
592 ft.

Actual:
606 ft.

EDR Hist Auto

Focus Map:
5

Year:	Name:	Type:
1928	WENTWORTH SERVICE STA	GASOLINE AND OIL SERVICE STATIONS
1986	JOHNNYS AUTO BODY	General Automotive Repair Shops
1987	JOHNNYS AUTO BODY	General Automotive Repair Shops
1996	JAC AUTO SERVICES	General Automotive Repair Shops
1997	JAC AUTO SERVICES	General Automotive Repair Shops

AH224 ABBOTT PARK FIELDHOUSE **IL UST** **U000864953**
ENE 49 E 95TH ST **IL BOL** **N/A**
< 1/8 CHICAGO, IL 60619 **IL CHICAGO ENV**
0.112 mi.
593 ft. Site 2 of 3 in cluster AH

Actual:
596 ft.

Focus Map:
2

UST:

Name:	ABBOTT PARK FIELDHOUSE
Address:	49 E 95TH ST
City:	CHICAGO
Zip:	60619
Facility ID:	2030829
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Id:	U0002888
Owner Name:	Chicago Park District
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	8800
Tank Substance:	Heating Oil
Last Used Date:	1/1/1974
OSFM First Notify Date:	7/1/1992
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	8/12/1993
Abandoned Date:	Not reported

BOL:

Name:	ABBOTT
Address:	49 E 95TH ST
City,State,Zip:	CHICAGO, IL 60619
Site Id:	170000527213
Inv Num:	0316445035
Interest Name:	Abbott
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.721540
Longitude:	-87.622120
Name:	ABBOTT
Address:	49 E 95TH ST
City,State,Zip:	CHICAGO, IL 60619
Site Id:	170000527213

ABBOTT PARK FIELDHOUSE (Continued) **U000864953**

Inv Num:	0316445035
Interest Name:	Abbott
Interest Type:	LUST
Media Code:	LAND
Latitude:	41.721540
Longitude:	-87.622120

Name:	ABBOTT
Address:	49 E 95TH ST
City,State,Zip:	CHICAGO, IL 60619
Site Id:	170000527213
Inv Num:	0316445035
Interest Name:	Abbott
Interest Type:	SOLID WASTE
Media Code:	LAND
Latitude:	41.721540
Longitude:	-87.622120

CHICAGO ENV:

Name:	Not reported
Address:	49 E 95TH ST
City,State,Zip:	CHICAGO, IL
Map Location:	POINT (-87.621752171201 41.72165238704908)
Complaints:	Not reported
Neshaps and Demolition Notices:	Not reported
Enforcement:	Not reported
Inspections:	Not reported
Permits:	Y
Tanks:	Not reported
Holds and Lust Nfr:	Not reported
Latitude:	41.72165238704908
Longitude:	-87.621752171201

AH225 **ABBOTT** **IL LUST** **S104523631**
ENE **49 EAST 95TH ST.** **N/A**
< 1/8 **CHICAGO, IL 60619**
0.112 mi.
593 ft. **Site 3 of 3 in cluster AH**

Actual:
596 ft.

Focus Map:
2

LUST:

Name:	ABBOTT
Address:	49 EAST 95TH ST.
City,State,Zip:	CHICAGO, IL 60619
Incident Num:	932446
IL EPA Id:	316445035
Product:	Fuel Oil
IEMA Date:	1993-09-13
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Park Dist.
PRP Contact:	Masood Razvi
PRP Address:	425 East McFetridge Dr.
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732

ABBOTT (Continued) **S104523631**

Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1993-09-22
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AE226 **KENSINGTON SERV STATION** **IL LUST** **1001086793**
NE **162 E KENSINGTON** **RCRA NonGen / NLR** **ILR000015131**
< 1/8 **CHICAGO, IL 60628** **FINDS**
0.115 mi. **ECHO**
608 ft. **Site 2 of 4 in cluster AE**

Actual:
594 ft.

Focus Map:
6

LUST:

Name:	KENSINGTON SERVICE STATION
Address:	162 EAST KENSINGTON AVE.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	960207
IL EPA Id:	316505018
Product:	Gasoline
IEMA Date:	1996-02-07
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Kensington Service Station
PRP Contact:	Hector Vasquez
PRP Address:	162 East Kensington Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

RCRA NonGen / NLR:

Date form received by agency:	2006-04-01 00:00:00.0
Facility name:	KENSINGTON SERV STATION
Facility address:	162 E KENSINGTON
	CHICAGO, IL 60628
EPA ID:	ILR000015131
Contact:	ENV COORDINATOR
Contact address:	Not reported
	Not reported
Contact country:	US
Contact telephone:	773-785-7703
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Non-Generator

KENSINGTON SERV STATION (Continued) **1001086793**

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	KENSINGTON SERV STATION
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	1900-01-01 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	KENSINGTON SERV STATION
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	1900-01-01 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	VASQUEZ ALEJO
Owner/operator address:	162 E KENSINGTON
	CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	312-785-7703
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No

KENSINGTON SERV STATION (Continued) **1001086793**

Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1996-01-23 00:00:00.0
Site name: KENSINGTON SERV STATION
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Facility Has Received Notices of Violations:
Regulation violated: SR - 722.141(a)
Area of violation: Generators - Records/Reporting
Date violation determined: 1997-07-10 00:00:00.0
Date achieved compliance: 1997-10-22 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1997-08-12 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 1997-07-10 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Records/Reporting
Date achieved compliance: 1997-10-22 00:00:00.0
Evaluation lead agency: State

FINDS:
Registry ID: 110005939930
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005939930

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001086793
Registry ID: 110005939930

KENSINGTON SERV STATION (Continued) **1001086793**

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005939930
Name: KENSINGTON SERV STATION
Address: 162 E KENSINGTON
City,State,Zip: CHICAGO, IL 60628

AE227 **LOU S SERVICE STA** **EDR Hist Auto** **1009074056**
NE **162 E KENSINGTON AVE** **N/A**
< 1/8 **CHICAGO, IL**
0.115 mi.
608 ft. **Site 3 of 4 in cluster AE**

Actual:
594 ft.

EDR Hist Auto

Focus Map:
6

Year:	Name:	Type:
1969	LOUS SERVICE STATION	Gasoline Service Stations
1969	LOUS SERVICE STATION	Gasoline Service Stations
1970	LOUS SERVICE STATION	Gasoline Service Stations
1971	LOUS SERVICE STATION	Gasoline Service Stations
1972	LOUS SERVICE STATION	Gasoline Service Stations
1973	LOUS SERVICE STATION	Gasoline Service Stations
1974	LOUS SERVICE STATION	Gasoline Service Stations
1975	LOUS SERVICE STATION	Gasoline Service Stations
1981	LOU S SERVICE STA	SERVICE STATIONS GASOLINE AND OIL
1988	VASQUEZ ALEJO T/A	Gasoline Service Stations
1989	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1990	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1991	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1992	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1993	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1994	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1995	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1996	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1997	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1998	VASQUEZ ALEJO T/A	Gasoline Service Stations, NEC
1999	KENSINGTON STATION	Automotive Repair Shops, NEC
2000	KENSINGTON STATION	Automotive Repair Shops, NEC
2001	KENSINGTON STATION	Automotive Repair Shops, NEC
2002	KENSINGTON STATION	Automotive Repair Shops, NEC
2003	KENSINGTON SERVICE STATION	SERVICE STATIONS GAS AND OIL
2003	KENSINGTON STATION	Automotive Repair Shops, NEC
2004	KENSINGTON STATION	Automotive Repair Shops, NEC
2005	KENSINGTON STATION	Automotive Repair Shops, NEC
2006	KENSINGTON STATION	Automotive Repair Shops, NEC
2007	KENSINGTON STATION	Automotive Repair Shops, NEC
2008	KENSINGTON STATION	Automotive Repair Shops, NEC
2009	KENSINGTON STATION	Automotive Repair Shops, NEC
2010	KENSINGTON STATION	Automotive Repair Shops, NEC
2011	KENSINGTON STATION	Automotive Repair Shops, NEC
2012	KENSINGTON STATION	Automotive Repair Shops, NEC
2013	KENSINGTON STATION	Automotive Repair Shops, NEC
2014	KENSINGTON STATION	Automotive Repair Shops, NEC

AE228 **KENSINGTON SERVICE STATION** **IL UST** **U003042181**
NE **162 E KENSINGTON** **N/A**
< 1/8 **CHICAGO, IL 60628**
0.115 mi.
608 ft. **Site 4 of 4 in cluster AE**

Actual:
594 ft.

Focus Map:
6

UST:

Name:	KENSINGTON SERVICE STATION
Address:	162 E KENSINGTON
City:	CHICAGO
Zip:	60628
Facility ID:	2034581
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Id:	U0024426
Owner Name:	Kensington Service Station
Owner Address:	162 E Kensington
Owner City,St,Zip:	Chicago, IL 60473
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	2/7/1996
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

KENSINGTON SERVICE STATION (Continued) **U003042181**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	2/7/1996
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	2/7/1996
Abandoned Date:	Not reported

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229 South < 1/8 0.116 mi. 610 ft. | **DEPENDENT SERVICE STA**
11724 S MICH AV
CHICAGO, IL | **EDR Hist Auto** | **1009097917**
N/A

Actual: 609 ft. EDR Hist Auto

Focus Map: 6

Year:	Name:	Type:
1928	DEPENDENT SERVICE STA	GASOLINE AND OIL SERVICE STATIONS
1989	G&S AUTO REPAIR	General Automotive Repair Shops
1991	G&S AUTO REPAIR	General Automotive Repair Shops
1992	G&S AUTO REPAIR	General Automotive Repair Shops
1993	G&S AUTO REPAIR	General Automotive Repair Shops
1994	G&S AUTO REPAIR	General Automotive Repair Shops
1995	G&S AUTO REPAIR	General Automotive Repair Shops
1996	G&S AUTO REPAIR	General Automotive Repair Shops
1997	G&S AUTO REPAIR	General Automotive Repair Shops

230 East < 1/8 0.116 mi. 610 ft. | **ROSELAND AUTO SALES INC**
271 E 110TH ST
CHICAGO, IL 60628 | **RCRA-VSQG**
FINDS
ECHO | **1004696195**
ILR000040303

Actual: 604 ft.

Focus Map: 5

RCRA-VSQG:

Date form received by agency:	1997-07-02 00:00:00.0
Facility name:	ROSELAND AUTO SALES INC
Facility address:	271 E 110TH ST CHICAGO, IL 60628
EPA ID:	ILR000040303
Mailing address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Contact:	RAY ZEALEX
Contact address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	773-785-6070
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	ROSELAND AUTO SALES INC
Owner/operator address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	773-785-6070
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No

ROSELAND AUTO SALES INC (Continued) **1004696195**

On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:
Registry ID: 110005956876
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005956876

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1004696195
Registry ID:	110005956876
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005956876
Name:	ROSELAND AUTO SALES INC
Address:	271 E 110TH ST
City,State,Zip:	CHICAGO, IL 60628

AF231 **MORNING CLEANERS REPAIRERS** **EDR Hist Cleaner** **1009215929**
West **445 W 111TH** **N/A**
< 1/8 **CHICAGO, IL**
0.121 mi.
638 ft. **Site 2 of 2 in cluster AF**

Actual:
608 ft.

EDR Hist Cleaner

Focus Map:
5

Year:	Name:	Type:
1928	MORNING CLEANERS REPAIRERS	CLOTHES PRESSEERS AND CLEANERS

232 NE < 1/8 0.122 mi. 644 ft. | **YONG CHARLEY**
214 KENSINGTON AV
CHICAGO, IL | **EDR Hist Cleaner** | **1009215253**
N/A

Actual: 592 ft.

EDR Hist Cleaner

Focus Map: 6

Year:	Name:	Type:
1923	YONG CHARLEY	LAUNDRIES (CHINESE)

AI233 NNE 1/8-1/4 0.126 mi. 665 ft. | **ILLINOIS BELL**
65 W 113TH PL
CHICAGO, IL 60628 | **RCRA NonGen / NLR**
FINDS
ECHO | **1001232020**
ILR000056697

Site 1 of 3 in cluster AI

Actual: 606 ft.

Focus Map: 6

RCRA NonGen / NLR:

Date form received by agency:	2002-02-04 00:00:00.0
Facility name:	ILLINOIS BELL-Q13550
Facility address:	65 W 113TH PL CHICAGO, IL 60628
EPA ID:	ILR000056697
Mailing address:	36 SOUTH FAIRVIEW AVE PARK RIDGE, IL 60068
Contact:	MANDY BOHLMANN
Contact address:	36 SOUTH FAIRVIEW AVE PARK RIDGE, IL 60068
Contact country:	US
Contact telephone:	877-648-2073
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	IL BELL TELEPHONE
Owner/operator address:	225 W RANDOLPH ST CHICAGO, IL 60606
Owner/operator country:	Not reported
Owner/operator telephone:	312-727-2621
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No

ILLINOIS BELL (Continued) **1001232020**

Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency:1998-10-19 00:00:00.0
Site name: ILLINOIS BELL-Q13550
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

FINDS:
Registry ID: 110003045455
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110003045455

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
COMPLIANCE AND EMISSIONS REPORTING
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001232020
Registry ID: 110003045455
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003045455
Name: ILLINOIS BELL
Address: 65 W 113TH PL
City,State,Zip: CHICAGO, IL 60628

AI234 NNE 1/8-1/4 0.126 mi. 665 ft. — **ILLINOIS BELL TELEPHONE**, **65 WEST 113TH PL.**, **CHICAGO, IL 60628** — **IL LUST** — **S119030278** / **N/A**

Site 2 of 3 in cluster AI

Actual: 606 ft.

Focus Map: 6

LUST:

Name:	ILLINOIS BELL TELEPHONE
Address:	65 WEST 113TH PL.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	903598
IL EPA Id:	316495033
Product:	Diesel
IEMA Date:	1990-12-04
Project Manager:	Davis
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Illinois Bell Telephone
PRP Contact:	Thomas Scheer
PRP Address:	900 North Villa
PRP City,St,Zip:	Villa Park, IL 60181
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**2004-05-04**
NFR Date Recorded:	2004-11-05
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AI235 NNE 1/8-1/4 0.126 mi. 665 ft. — **PULLMAN CO**, **65 WEST 113TH PLACE**, **CHICAGO, IL 60628** — **IL UST**, **IL TIER 2** — **U001142600** / **N/A**

Site 3 of 3 in cluster AI

Actual: 606 ft.

Focus Map: 6

UST:

Name:	PULLMAN CO
Address:	65 WEST 113TH PLACE
City:	CHICAGO
Zip:	60628
Facility ID:	2007786
Facility Status:	ACTIVE
Facility Type:	**UTILITY**
Owner Id:	U0034340
Owner Name:	AT&T Corp. d/b/a Illinois Bell
Owner Address:	308 S. Akard, Room 1700
Owner City,St,Zip:	Dallas, TX 75202
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	12/11/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported

PULLMAN CO (Continued) **U001142600**

Green Tag Decal:	**Extend**
Green Tag Issue Date:	**4/1/2020**
Green Tag Expire Date:	**5/31/2020**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	Y
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/3/1990
Abandoned Date:	Not reported

Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	5760
Tank Substance:	Fuel Oil
Last Used Date:	1/1/1970
OSFM First Notify Date:	12/11/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Extend**
Green Tag Issue Date:	**4/1/2020**
Green Tag Expire Date:	**5/31/2020**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	Y
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/3/1990
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Currently in use**
Tank Capacity:	2500
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	2/21/1991
Red Tag Issue Date:	Not reported
Install Date:	11/28/1990
Green Tag Decal:	**Extend**
Green Tag Issue Date:	**4/1/2020**
Green Tag Expire Date:	**5/31/2020**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

PULLMAN CO (Continued) **U001142600**

Pending Nov:	Y
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

TIER 2:

Year:	2014
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	41.6889
Longitude:	-87.6248
Facility Fax:	2816649833
Fire Dept:	Not reported
LEPC:	City of Chicago
Owner:	Illinois Bell Telephone Co. - AT&T Illinois
Owner Phone:	9082346265
Owner Street:	One AT&T Way, Room 1A111B
Owner City/State/ZipCode:	Bedminster, NJ 07921
Mailing Name:	Illinois Bell Telephone Co. - AT&T Illinois
Mailing Street:	One AT&T Way, Room 1A111B
Mailing City/State/ZipCode:	Bedminster, NJ 07921
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Yes
Chemical Contents:	Pure
Chemical Health Hazards:	Liquid
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Reactivity
Max Daily Range:	Not reported

Year:	2014
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	41.6889
Longitude:	-87.6248
Facility Fax:	2816649833
Fire Dept:	Not reported
LEPC:	City of Chicago
Owner:	Illinois Bell Telephone Co. - AT&T Illinois
Owner Phone:	9082346265
Owner Street:	One AT&T Way, Room 1A111B
Owner City/State/ZipCode:	Bedminster, NJ 07921
Mailing Name:	Illinois Bell Telephone Co. - AT&T Illinois
Mailing Street:	One AT&T Way, Room 1A111B
Mailing City/State/ZipCode:	Bedminster, NJ 07921
Chemical Name:	LEAD
CAS Number:	7439921
Chemical EHS:	No
Chemical Contents:	Pure
Chemical Health Hazards:	Solid
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Reactivity
Max Daily Range:	Not reported

Year:	2014

PULLMAN CO (Continued) **U001142600**

Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	41.6889
Longitude:	-87.6248
Facility Fax:	2816649833
Fire Dept:	Not reported
LEPC:	City of Chicago
Owner:	Illinois Bell Telephone Co. - AT&T Illinois
Owner Phone:	9082346265
Owner Street:	One AT&T Way, Room 1A111B
Owner City/State/ZipCode:	Bedminster, NJ 07921
Mailing Name:	Illinois Bell Telephone Co. - AT&T Illinois
Mailing Street:	One AT&T Way, Room 1A111B
Mailing City/State/ZipCode:	Bedminster, NJ 07921
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	No
Chemical Contents:	Pure
Chemical Health Hazards:	Liquid
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Reactivity
Max Daily Range:	Not reported

Year:	2013
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	2816649833
Fire Dept:	Chicago Fire Department
LEPC:	City of Chicago
Owner:	Illinois Bell Telephone Co. - AT&T Illinois
Owner Phone:	9082346265
Owner Street:	One AT&T Way, Room 1A111B
Owner City/State/ZipCode:	Bedminster, NJ 07921
Mailing Name:	Illinois Bell Telephone Co. - AT&T Illinois
Mailing Street:	One AT&T Way, Room 1A111B
Mailing City/State/ZipCode:	Bedminster, NJ 07921
Chemical Name:	DIESEL FUEL #2 LOW SULFUR
CAS Number:	68476346
Chemical EHS:	No
Chemical Contents:	Pure, Liquid,
Chemical Health Hazards:	Fire, Immediate, Delayed,
Chemical Max Daily Amount(pounds):	1,000,000-9,999,999
Chemical Avg Daily Amount(pounds):	1,000,000-9,999,999
Max Daily Range:	Not reported

Year:	2013
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	2816649833
Fire Dept:	Chicago Fire Department
LEPC:	City of Chicago
Owner:	Illinois Bell Telephone Co. - AT&T Illinois
Owner Phone:	9082346265
Owner Street:	One AT&T Way, Room 1A111B
Owner City/State/ZipCode:	Bedminster, NJ 07921
Mailing Name:	Illinois Bell Telephone Co. - AT&T Illinois

PULLMAN CO (Continued) **U001142600**

Mailing Street:	One AT&T Way, Room 1A111B
Mailing City/State/ZipCode:	Bedminster, NJ 07921
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Yes
Chemical Contents:	Pure, Liquid,
Chemical Health Hazards:	Reactivity, Immediate, Delayed,
Chemical Max Daily Amount(pounds):	100,000-999,999
Chemical Avg Daily Amount(pounds):	100,000-999,999
Max Daily Range:	Not reported
Year:	2013
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	2816649833
Fire Dept:	Chicago Fire Department
LEPC:	City of Chicago
Owner:	Illinois Bell Telephone Co. - AT&T Illinois
Owner Phone:	9082346265
Owner Street:	One AT&T Way, Room 1A111B
Owner City/State/ZipCode:	Bedminster, NJ 07921
Mailing Name:	Illinois Bell Telephone Co. - AT&T Illinois
Mailing Street:	One AT&T Way, Room 1A111B
Mailing City/State/ZipCode:	Bedminster, NJ 07921
Chemical Name:	LEAD
CAS Number:	7439921
Chemical EHS:	No
Chemical Contents:	Pure, Solid,
Chemical Health Hazards:	Reactivity, Delayed,
Chemical Max Daily Amount(pounds):	50,000,000-99,999,999
Chemical Avg Daily Amount(pounds):	50,000,000-99,999,999
Max Daily Range:	Not reported
Year:	2012
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LEAD
CAS Number:	7439921
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported
Year:	2012

PULLMAN CO (Continued) **U001142600**

Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LEAD
CAS Number:	7439921
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sulfuric acid
CAS Number:	7664-93-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIESEL FUEL

PULLMAN CO (Continued) **U001142600**

CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Diesel Fuel
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported

PULLMAN CO (Continued) **U001142600**

LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Not reported
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIESEL FUEL #2 LOW SULFUR
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Illinois Bell Telephone Co. - AT&T Illinois
Latitude:	Not reported
Longitude:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported

PULLMAN CO (Continued) **U001142600**

Chemical Max Daily Amount(pounds): Not reported
Chemical Avg Daily Amount(pounds): Not reported
Max Daily Range: Not reported

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236 **3 W 114TH ST** **US BROWNFIELDS** **1016359764**
North **3 W 114TH ST** **FINDS** **N/A**
1/8-1/4 **CHICAGO, IL 60628**
0.129 mi.
681 ft.

Actual:
607 ft.

Focus Map:
6

US BROWNFIELDS:

Name:	3 W 114TH ST
Address:	3 W 114TH ST
City,State,Zip:	CHICAGO, IL 60628
Recipient Name:	Chicago, City of
Grant Type:	Assessment
Property Number:	25-21-230-017-0000
Parcel size:	0.14
Latitude:	41.6871301
Longitude:	-87.623027
HCM Label:	Address Matching-House Number
Map Scale:	-
Point of Reference:	Entrance Point of a Facility or Station
Highlights:	-
Datum:	North American Datum of 1983
Acres Property ID:	133623
IC Data Access:	-
Start Date:	-
Redev Completition Date:	-
Completed Date:	-
Acres Cleaned Up:	-
Cleanup Funding:	-
Cleanup Funding Source:	-
Assessment Funding:	3100
Assessment Funding Source:	EPA
Redevelopment Funding:	-
Redev. Funding Source:	-
Redev. Funding Entity Name:	-
Redevelopment Start Date:	-
Assessment Funding Entity:	US EPA - Brownfields Assessment Cooperative Agreement
Cleanup Funding Entity:	-
Grant Type:	Petroleum
Accomplishment Type:	Phase I Environmental Assessment
Accomplishment Count:	Y
Cooperative Agreement Number:	00E68301
Start Date:	1-Apr-11
Ownership Entity:	Government
Completion Date:	2-May-11
Current Owner:	City of Chicago
Did Owner Change:	N
Cleanup Required:	U
Video Available:	-
Photo Available:	-
Institutional Controls Required:	U
IC Category Proprietary Controls:	-
IC Cat. Info. Devices:	-
IC Cat. Gov. Controls:	-
IC Cat. Enforcement Permit Tools:	-

3 W 114TH ST (Continued) **1016359764**

IC in place date:	-
IC in place:	-
State/tribal program date:	-
State/tribal program ID:	-
State/tribal NFA date:	-
Air cleaned:	-
Asbestos found:	-
Asbestos cleaned:	-
Controled substance found:	-
Controled substance cleaned:	-
Drinking water affected:	-
Drinking water cleaned:	-
Groundwater affected:	-
Groundwater cleaned:	-
Lead contaminant found:	-
Lead cleaned up:	-
No media affected:	-
Unknown media affected:	-
Other cleaned up:	-
Other metals found:	-
Other metals cleaned:	-
Other contaminants found:	-
Other contams found description:	-
PAHs found:	-
PAHs cleaned up:	-
PCBs found:	-
PCBs cleaned up:	-
Petro products found:	-
Petro products cleaned:	-
Sediments found:	-
Sediments cleaned:	-
Soil affected:	Y
Soil cleaned up:	-
Surface water cleaned:	-
VOCs found:	-
VOCs cleaned:	-
Cleanup other description:	-
Num. of cleanup and re-dev. jobs:	-
Past use greenspace acreage:	-
Past use residential acreage:	0.07
Surface Water:	-
Past use commercial acreage:	0.07
Past use industrial acreage:	-
Future use greenspace acreage:	-
Future use residential acreage:	-
Future use commercial acreage:	-
Future use industrial acreage:	-
Superfund Fed. landowner flag:	N
Arsenic cleaned up:	-
Cadmium cleaned up:	-
Chromium cleaned up:	-
Copper cleaned up:	-
Iron cleaned up:	-
mercury cleaned up:	-
Nickel Cleaned Up:	-
No clean up:	-
Pesticides cleaned up:	-

3 W 114TH ST (Continued) **1016359764**

Selenium cleaned up:	-
SVOCs cleaned up:	-
Unknown clean up:	-
Arsenic contaminant found:	-
Cadmium contaminant found:	-
Chromium contaminant found:	-
Copper contaminant found:	-
Iron contaminant found:	-
Mercury contaminant found:	-
Nickel contaminant found:	-
No contaminant found:	-
Pesticides contaminant found:	-
Selenium contaminant found:	-
SVOCs contaminant found:	-
Unknown contaminant found:	-
Future Use: Multistory	-
Media affected Bluiding Material:	-
Media affected indoor air:	-
Building material media cleaned up:	-
Indoor air media cleaned up:	-
Unknown media cleaned up:	-
Past Use: Multistory	-
Property Description:	Property is a vacant corner lot and a suspect abandoned service station. The property was vacant until 1911. Records indicate a store was present on a portion of the site until ~ 1950 when a second building residential was added. The store was removed something in 1975 and the residential building and what appears to be a garge remained until 1998, when the City of Chicago demolished the remaining structure. The City of Chicago foreclosed on demolition lien and acquired the property.
Below Poverty Number:	2928
Below Poverty Percent:	33.8
Meidan Income:	12352
Meidan Income Number:	5376
Meidan Income Percent:	62.06
Vacant Housing Number:	961
Vacant Housing Percent:	27.11
Unemployed Number:	625
Unemployed Percent:	7.22

FINDS:

Registry ID:	110044215435
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110044215435

Environmental Interest/Information System:

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

237 WSW 1/8-1/4 0.133 mi. 702 ft. | **METROPOL SANT DIST GREATER CHICAGO** | **IL IMPDMENT** | **S105249055** **N/A**

, IL

Actual: 589 ft.

Focus Map: 9

SIA:

Area:	0.00000000000
Perimeter:	0.00000000000
County FIPS Code:	031
Place Code:	14000
Type of Impoundment Facility:	MUNICIPAL
SIA Number:	00556
# of impoundments at Site:	017
IEPA ID:	0
NPDES Permit #:	IL0028061
SIC Code 2:	4952
Latitude:	413958
Longitude:	0873612
Date Facility Id'd and Inventoried:	41279
Land owner street address:	100 EAST ERIE
Land Owner City,St,Zip:	CHICAGO, IL 60611
Operator of impoundment:	Not reported
Operator address:	Not reported
Operator City,St,Zip:	0
State Abbreviation:	Not reported
County FIPS Code:	Not reported
Place Code:	0
Type of Impoundment Facility 2:	Not reported
SIA Number:	Not reported
Unique impoundment Number:	Not reported
Purpose For Impoundment:	Not reported
Explanation For Above:	Not reported
Age of Impoundment in Years:	Not reported
Impoundment Currently In Use:	Not reported
# of years in Operation if In Use:	Not reported
Unique Record # assigned by S. Schock:	P0254
Last Year of Operation if Not in Use:	Not reported
Surface Area of all impoundments (acres):	Not reported
Surface Area of all impoundments (acres):	Not reported
Average Influent (Gal/day) Into Impoundment:	Not reported
Year of Record for above (influent) average:	Not reported
Average Effluent (gal/day) out of impoundment:	Not reported
Year of record for above (effluent) average:	Not reported
Year of record for above average:	Not reported
Year of record for above average:	Not reported
Avg Effluent for all Impoundments at facility:	Not reported
Year of Record for above Average:	Not reported
Bottom of Liner:	Not reported
If Liner Type ?? Above, Thickness (inches):	Not reported
Description of Liner Type If ?? Above:	Not reported
If Agricultural Impoundment, Type of Livestock:	Not reported
If Agricultural Impoundment, Average Daily # Livestock	Not reported
Number of Monitoring Wells:	Not reported
Frequency Of Groundwater Samplings:	Not reported
Explanation Of GW Sampling if Other:	Not reported
GW Quality Changes Detected:	Not reported
Seepage Affected Drnk Water Wells Within 1 Mile:	Not reported
Site Features:	Not reported

METROPOL SANT DIST GREATER CHICAGO (Continued) **S105249055**

Dun and Bradst # Identifying Facility Type 2:	Not reported
Dun and Bradst # Identifying Operator Business 2:	Not reported
Dun and Bradst # Identifying Facility Type 2:	Not reported
Dun and Bradst # Identifying Operator Business 2:	Not reported
SIC Code 2:	Not reported

238
NE
1/8-1/4
0.133 mi.
704 ft.

CITY OF CHICAGO
11700 S COTTAGE GROVE/SITE B
CHICAGO, IL 60628

RCRA NonGen / NLR **1005415947**
FINDS **ILR000110445**
ECHO

Actual:
590 ft.

Focus Map:
6

RCRA NonGen / NLR:

Date form received by agency:	2002-02-14 00:00:00.0
Facility name:	CITY OF CHICAGO
Facility address:	11700 S COTTAGE GROVE/SITE B CHICAGO, IL 60628
EPA ID:	ILR000110445
Mailing address:	30 N LASALLE 25TH FLOOR CHICAGO, IL 60602
Contact:	TERRY SHEAHAN
Contact address:	30 N LASALLE 25TH FLOOR CHICAGO, IL 60602
Contact country:	US
Contact telephone:	312-744-7674
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CITY OF CHGO
Owner/operator address:	30 N LASALLE 25TH FLOOR CHICAGO, IL 60602
Owner/operator country:	Not reported
Owner/operator telephone:	312-744-7674
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

CITY OF CHICAGO (Continued) **1005415947**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:
Registry ID: 110005944559
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005944559

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1005415947
Registry ID: 110005944559
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005944559
Name: CITY OF CHICAGO
Address: 11700 S COTTAGE GROVE/SITE B
City,State,Zip: CHICAGO, IL 60628

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239 ENE 1/8-1/4 0.143 mi. 754 ft. | **SWIFT TIRES**
11432 S INDIANA
CHICAGO, IL 60628 | **RCRA NonGen / NLR**
FINDS
ECHO | **1004698605**
ILR000108571

Actual: 595 ft.

Focus Map: 6

RCRA NonGen / NLR:
Date form received by agency: 2001-10-18 00:00:00.0
Facility name: SWIFT TIRES
Facility address: 11432 S INDIANA
CHICAGO, IL 60628
EPA ID: ILR000108571
Contact: ISAAC SMITH
Contact address: 11432 S INDIANA
CHICAGO, IL 60628
Contact country: US
Contact telephone: 773-412-3113
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

SWIFT TIRES (Continued) **1004698605**

Owner/Operator Summary:

Owner/operator name:	SMITH ISAAC JR
Owner/operator address:	11432 S INDIANA CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	773-412-3113
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID:	110012283705
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110012283705

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1004698605
Registry ID:	110012283705
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110012283705
Name:	SWIFT TIRES
Address:	11432 S INDIANA
City,State,Zip:	CHICAGO, IL 60628

AJ240 NNE 1/8-1/4 0.145 mi. 763 ft. | **CITGO SUPER WASH & WAX**
9417 S. STATE STREET
CHICAGO, IL 60617

Site 1 of 2 in cluster AJ

IL UST | **U002222575**
N/A

Actual: 598 ft.

Focus Map: 2

UST:

Name:	CITGO SUPER WASH & WAX
Address:	9417 S. STATE STREET
City:	CHICAGO
Zip:	60617
Facility ID:	2034153
Facility Status:	INACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Id:	U0002908
Owner Name:	Chicago Transit Authority
Owner Address:	567 W. Lake St
Owner City,St,Zip:	Chicago, IL 60661
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**R000702**
Green Tag Issue Date:	**5/13/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	5/13/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	5/23/1995
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**R000702**
Green Tag Issue Date:	**5/13/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	5/13/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv

CITGO SUPER WASH & WAX (Continued) **U002222575**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	5/23/1995
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**R000702**
Green Tag Issue Date:	**5/13/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	5/13/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	5/23/1995
Abandoned Date:	Not reported

Tank Number:	4
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**R000702**
Green Tag Issue Date:	**5/13/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	5/13/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	5/23/1995

CITGO SUPER WASH & WAX (Continued) **U002222575**

Abandoned Date:	Not reported

Tank Number:	5
Tank Status:	**Out of service**
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	11/1/2017
OSFM First Notify Date:	1/8/1998
Red Tag Issue Date:	Not reported
Install Date:	10/9/1997
Green Tag Decal:	**R000702**
Green Tag Issue Date:	**5/13/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	5/13/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	6
Tank Status:	**Out of service**
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	11/1/2017
OSFM First Notify Date:	1/8/1998
Red Tag Issue Date:	Not reported
Install Date:	10/9/1997
Green Tag Decal:	**R000702**
Green Tag Issue Date:	**5/13/2016**
Green Tag Expire Date:	**12/31/2018**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	5/13/2016
Motor Fuel Permit Expiration Date:	12/31/2018
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

AJ241 NNE 1/8-1/4 0.145 mi. 763 ft. | **QUALITY CAR WASH 9417 SOUTH STATE ST. CHICAGO, IL 60619** | **IL LUST** | **S104522540 N/A**

Site 2 of 2 in cluster AJ

Actual: 598 ft.

Focus Map: 2

LUST:

Name:	QUALITY CAR WASH
Address:	9417 SOUTH STATE ST.
City,State,Zip:	CHICAGO, IL 60619
Incident Num:	951097
IL EPA Id:	316445040
Product:	Gasoline
IEMA Date:	1995-05-23
Project Manager:	Piggush
Project Manager Phone:	(217) 782-3101
Email:	Michael.Piggush@illinois.gov
PRP Name:	Quality Car Wash
PRP Contact:	John Hill
PRP Address:	7936 South Vincennes
PRP City,St,Zip:	Chicago, IL 60620
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1996-11-22
45 Report Received:	1996-11-22
NFA/NFR Letter:	**1997-04-08**
NFR Date Recorded:	1998-04-14
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AK242 West 1/8-1/4 0.166 mi. 876 ft. | **34 WARD OFFICE/CITY OF CHICAGO 507 WEST 111TH STREET CHICAGO, IL 60628** | **IL LUST IL UST** | **U004128304 N/A**

Site 1 of 2 in cluster AK

Actual: 610 ft.

Focus Map: 5

LUST:

Name:	WILSON, CHESTER
Address:	507 WEST 111TH STREET
City,State,Zip:	CHICAGO, IL 60609
Incident Num:	20040732
IL EPA Id:	316616397
Product:	Other Petroleum
IEMA Date:	2004-05-21
Project Manager:	South
Project Manager Phone:	(217) 558-0347
Email:	Shirlene.South@illinois.gov
PRP Name:	Chester Wilson
PRP Contact:	Not reported
PRP Address:	507 West 111th Street
PRP City,St,Zip:	Chicago, IL 60609
PRP Phone:	7739286961
Site Classification:	Not reported
Section 57.5(g) Letter:	Not reported
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2004-06-28

34 WARD OFFICE/CITY OF CHICAGO (Continued) **U004128304**

45 Report Received:	2004-07-23
NFA/NFR Letter:	**2004-08-24**
NFR Date Recorded:	2005-05-27
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

UST:

Name:	34 WARD OFFICE/CITY OF CHICAGO
Address:	507 WEST 111TH STREET
City:	CHICAGO
Zip:	60628
Facility ID:	2042211
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0032031
Owner Name:	34 Ward Office/City of Chicago
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	550
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/15/2004
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	04-0732
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	5/21/2004
Abandoned Date:	Not reported

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243 **CITY OF CHICAGO** **RCRA NonGen / NLR** **1001112183**
NE **11700 S COTTAGE GROVE AVE** **ILR000022111**
1/8-1/4 **CHICAGO, IL 60628**
0.169 mi.
892 ft.

Actual:
590 ft.

Focus Map:
6

RCRA NonGen / NLR:

Date form received by agency:	2006-04-01 00:00:00.0
Facility name:	CITY OF CHICAGO
Facility address:	11700 S COTTAGE GROVE AVE CHICAGO, IL 60628
EPA ID:	ILR000022111
Contact:	ENV COORDINATOR
Contact address:	Not reported

CITY OF CHICAGO (Continued) **1001112183**

	Not reported
Contact country:	US
Contact telephone:	312-744-7674
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	1900-01-01 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	1900-01-01 00:00:00.
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	2002-02-14 00:00:00.0
Site name:	CITY OF CHICAGO
Classification:	Not a generator, verified

CITY OF CHICAGO (Continued) **1001112183**

Date form received by agency: 1996-05-17 00:00:00.0
Site name: CITY OF CHICAGO
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

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244 NE 1/8-1/4 0.179 mi. 946 ft. | **LAKE CALUMET SMELTING 11901 S. CHAMPLAIN AVE. CHICAGO, IL 60628** | **SEMS ICIS LEAD SMELTERS FINDS ECHO** | **1007646528 ILN000509228**

Actual: 588 ft.

Focus Map: 9

SEMS:
Site ID: 0509228
EPA ID: ILN000509228
Name: LAKE CALUMET SMELTING
Address: 11901 S. CHAMPLAIN AVE.
Address 2: Not reported
City,State,Zip: CHICAGO, IL 60628-5717
Cong District: 01
FIPS Code: 17031
Latitude: Not reported
Longitude: Not reported
FF: N
NPL: Not on the NPL
Non NPL Status: Referred to Removal - NFRAP

SEMS Detail:
Region: 05
Site ID: 0509228
EPA ID: ILN000509228
Site Name: LAKE CALUMET SMELTING
NPL: N
FF: N
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 2004-10-18 04:00:00
Finish Date: 10/18/2004
Qual: Not reported
Current Action Lead: EPA Perf

Region: 05
Site ID: 0509228
EPA ID: ILN000509228
Site Name: LAKE CALUMET SMELTING
NPL: N
FF: N
OU: 00
Action Code: RV
Action Name: RMVL
SEQ: 1
Start Date: 2013-10-07 04:00:00

LAKE CALUMET SMELTING (Continued) **1007646528**

Finish Date:	12/20/2013
Qual:	S
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0509228
EPA ID:	ILN000509228
Site Name:	LAKE CALUMET SMELTING
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	2008-04-15 04:00:00
Finish Date:	7/15/2011
Qual:	W
Current Action Lead:	St Perf

Region:	05
Site ID:	0509228
EPA ID:	ILN000509228
Site Name:	LAKE CALUMET SMELTING
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	2005-09-30 04:00:00
Finish Date:	3/20/2008
Qual:	L
Current Action Lead:	St Perf

Region:	05
Site ID:	0509228
EPA ID:	ILN000509228
Site Name:	LAKE CALUMET SMELTING
NPL:	N
FF:	N
OU:	00
Action Code:	HX
Action Name:	PRE-CERC
SEQ:	1
Start Date:	2004-09-29 04:00:00
Finish Date:	9/29/2004
Qual:	Not reported
Current Action Lead:	St Perf

ICIS:

Enforcement Action ID:	05-2013-1005
FRS ID:	110020034274
Action Name:	Lake Calumet Smelting - Warrant (CERCLA)
Facility Name:	LAKE CALUMET SMELTING
Facility Address:	11901 S. CHAMPLAIN AVE. CHICAGO, IL 60628-5717

LAKE CALUMET SMELTING (Continued) **1007646528**

Enforcement Action Type:	Access Order
Facility County:	COOK
Program System Acronym:	CERCLIS
Enforcement Action Forum Desc:	Judicial
EA Type Code:	ACC
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.67766
Longitude in Decimal Degrees:	-87.60697
Permit Type Desc:	Not reported
Program System Acronym:	ILN000509228
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Facility Name:	LAKE CALUMET SMELTING
Address:	11901 S. CHAMPLAIN AVE.
Tribal Indicator:	N
Fed Facility:	Not reported
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	LAKE CALUMET SMELTING
Address:	11901 S. CHAMPLAIN AVE.
Tribal Indicator:	N
Fed Facility:	Not reported
NAIC Code:	Not reported
SIC Code:	Not reported

Lead Smelter Sites:

Site ID:	509228
Facility Region Id:	5
Latitude:	Not reported
Longitude:	Not reported
CoC Ind:	Y
Contaminant Name:	ARSENIC
FF Ind:	N
NAI:	N
Non-Primary Site-Sub Type:	Automobiles/tires (Recycling);Metal fabrication/finishing/coating and allied industries (Manufacturing/Processing/Maintenance)
NPL:	Not on the NPL
Primary Site-Sub Type:	Municipal solid waste landfill (Waste Management)
Special Initiative:	Unrecognized Smelter per 2001 Report

Site ID:	509228
Facility Region Id:	5
Latitude:	Not reported
Longitude:	Not reported
CoC Ind:	Y
Contaminant Name:	LEAD
FF Ind:	N
NAI:	N
Non-Primary Site-Sub Type:	Automobiles/tires (Recycling);Metal fabrication/finishing/coating and allied industries (Manufacturing/Processing/Maintenance)
NPL:	Not on the NPL
Primary Site-Sub Type:	Municipal solid waste landfill (Waste Management)
Special Initiative:	Unrecognized Smelter per 2001 Report

LAKE CALUMET SMELTING (Continued) **1007646528**

Site ID:	509228
Facility Region Id:	5
Latitude:	Not reported
Longitude:	Not reported
CoC Ind:	Y
Contaminant Name:	CADMIUM
FF Ind:	N
NAI:	N
Non-Primary Site-Sub Type:	Automobiles/tires (Recycling);Metal fabrication/finishing/coating and allied industries (Manufacturing/Processing/Maintenance)
NPL:	Not on the NPL
Primary Site-Sub Type:	Municipal solid waste landfill (Waste Management)
Special Initiative:	Unrecognized Smelter per 2001 Report

FINDS:

Registry ID:	110020034274
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110020034274

Environmental Interest/Information System:
SUPERFUND (NON-NPL)

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1007646528
Registry ID:	110020034274
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110020034274
Name:	LAKE CALUMET SMELTING
Address:	11901 S. CHAMPLAIN AVE.
City,State,Zip:	CHICAGO, IL 60628

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245 NE 1/8-1/4 0.181 mi. 956 ft. | **GONNELLA BAKING CO** | **RCRA NonGen / NLR** | **1001218857** **ILR000049858**
318 E KENSINGTON
CHICAGO, IL 60628

Actual: 592 ft.

Focus Map: 6

RCRA NonGen / NLR:

Date form received by agency:	2019-12-13 00:00:00.0
Facility name:	GONNELLA BAKING CO
Facility address:	318 E KENSINGTON CHICAGO, IL 60628
EPA ID:	ILR000049858
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	GONNELA BAKING
Owner/operator address:	318 E KENSINGTON

GONNELLA BAKING CO (Continued) **1001218857**

CHICAGO, IL 60628
Owner/operator country: Not reported
Owner/operator telephone: 773-821-1783
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Not reported
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1998-04-07 00:00:00.0
Site name: GONNELLA BAKING CO
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Violation Status: No violations found

246
SW
1/8-1/4
0.185 mi.
977 ft.

SONGHAI LEARNING INSTITUTE
11725 S PERRY AVE
CHICAGO, IL 60628

RCRA-VSQG **1004696903**
ILR000059832

Actual:
607 ft.

Focus Map:
6

RCRA-VSQG:
Date form received by agency: 1998-12-15 00:00:00.0
Facility name: SONGHAI LEARNING INSTITUTE
Facility address: 11725 S PERRY AVE
CHICAGO, IL 60628
EPA ID: ILR000059832
Mailing address: 8501 W 191ST ST
BOX 10

SONGHAI LEARNING INSTITUTE (Continued) **1004696903**

	MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	708-923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	773-535-7038
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

SONGHAI LEARNING INSTITUTE (Continued) **1004696903**

Hazardous Waste Summary:

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Violation Status: No violations found

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247 SW 1/8-1/4 0.187 mi. 989 ft. **U S SCRAP CORP** **IL IMPDMENT** **S105249050 N/A**

, IL

Actual: 599 ft.

Focus Map: 9

SIA:

Area:	0.00000000000
Perimeter:	0.00000000000
County FIPS Code:	031
Place Code:	14000
Type of Impoundment Facility:	INDUSTRIAL
SIA Number:	00402
# of impoundments at Site:	001
IEPA ID:	0
NPDES Permit #:	Not reported
SIC Code 2:	4953
Latitude:	414030
Longitude:	0873645
Date Facility Id'd and Inventoried:	41279
Land owner street address:	400 EAST 123RD STREET
Land Owner City,St,Zip:	CHICAGO, IL 0
Operator of impoundment:	Not reported
Operator address:	Not reported
Operator City,St,Zip:	0
State Abbreviation:	IL
County FIPS Code:	031
Place Code:	14000
Type of Impoundment Facility 2:	INDUSTRIAL
SIA Number:	00402
Unique impoundment Number:	001
Purpose For Impoundment:	WASTE STORAGE
Explanation For Above:	Not reported
Age of Impoundment in Years:	06
Impoundment Currently In Use:	Yes
# of years in Operation if In Use:	06
Unique Record # assigned by S. Schock:	P0247
Last Year of Operation if Not in Use:	0000
Surface Area of all impoundments (acres):	000003
Surface Area of all impoundments (acres):	0000003
Average Influent (Gal/day) Into Impoundment:	000000000
Year of Record for above (influent) average:	0000
Average Effluent (gal/day) out of impoundment:	000000000
Year of record for above (effluent) average:	0000
Year of record for above average:	000000000

U S SCRAP CORP (Continued) **S105249050**

Year of record for above average:	0000
Avg Effluent for all Impoundments at facility:	000000000
Year of Record for above Average:	0000
Bottom of Liner:	NONE
If Liner Type ?? Above, Thickness (inches):	000
Description of Liner Type If ?? Above:	Not reported
If Agricultural Impoundment, Type of Livestock:	Not reported
If Agricultural Impoundment, Average Daily # Livestock	000000
Number of Monitoring Wells:	00
Frequency Of Groundwater Samplings:	Not reported
Explanation Of GW Sampling if Other:	Not reported
GW Quality Changes Detected:	Not reported
Seepage Affected Drnk Water Wells Within 1 Mile:	UNKNOWN
Site Features:	DL
Dun and Bradst # Identifying Facility Type 2:	980398713
Dun and Bradst # Identifying Operator Business 2:	Not reported
Dun and Bradst # Identifying Facility Type 2:	980398713
Dun and Bradst # Identifying Operator Business 2:	Not reported
SIC Code 2:	4953

AL248 **UNIVERSITY OF IL AT CHICAGO** **IL LUST** **S105620779**
WSW **711 WEST 13TH ST.** **N/A**
1/8-1/4 **CHICAGO, IL 60605**
0.189 mi.
997 ft. **Site 1 of 2 in cluster AL**

Actual:
612 ft.

Focus Map:
5

LUST:

Name:	UNIVERSITY OF IL AT CHICAGO
Address:	711 WEST 13TH ST.
City,State,Zip:	CHICAGO, IL 60605
Incident Num:	20021330
IL EPA Id:	316005597
Product:	Other Petroleum
IEMA Date:	2002-09-18
Project Manager:	Jones
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	University of IL at Chicago
PRP Contact:	Aileen Cassidy
PRP Address:	1140 South Morgan St., Suite B 30J
PRP City,St,Zip:	Chicago, IL 60607
PRP Phone:	3129965841
Site Classification:	Not reported
Section 57.5(g) Letter:	Not reported
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2002-10-01
45 Report Received:	2003-01-09
NFA/NFR Letter:	**2003-02-27**
NFR Date Recorded:	2003-03-17
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AL249 **UIS PARKING** **IL UST** **U003877518**
WSW **711 W. 13TH STREET THRID PARY REMOVAL** **N/A**
1/8-1/4 **CHICAGO, IL 60607**
0.189 mi.
997 ft. **Site 2 of 2 in cluster AL**

Actual:
612 ft.

Focus Map:
5

UST:

Name:	UIS PARKING
Address:	711 W. 13TH STREET THRID PARY REMOVAL
City:	CHICAGO
Zip:	60607
Facility ID:	2041303
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0015431
Owner Name:	University of Illinois at Chicago
Owner Address:	1129 S. Hermitage Ave.
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	10/11/2002
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	9/12/2002
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	10/11/2002
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

UIS PARKING (Continued) **U003877518**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	9/12/2002
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	10/11/2002
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	9/12/2002
Abandoned Date:	Not reported

AK250 **SEW CLEAN** **RCRA NonGen / NLR** **1000107577**
West **519 W 111TH ST** **FINDS** **ILD013428487**
1/8-1/4 **CHICAGO, IL 60628** **ECHO**
0.189 mi.
998 ft. **Site 2 of 2 in cluster AK**

Actual:
610 ft.

Focus Map:
5

RCRA NonGen / NLR:

Date form received by agency:	2019-12-13 00:00:00.0
Facility name:	SEW CLEAN
Facility address:	519 W 111TH ST CHICAGO, IL 60628
EPA ID:	ILD013428487
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

SEW CLEAN (Continued) **1000107577**

Owner/operator name: SMITH JEROME
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Not reported
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1989-01-27 00:00:00.0
Site name: SEW CLEAN
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

SEW CLEAN (Continued) **1000107577**

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:
Registry ID: 110005820282
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005820282

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000107577
Registry ID: 110005820282
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005820282
Name: SEW CLEAN
Address: 519 W 111TH ST
City,State,Zip: CHICAGO, IL 60628

AM251 **BULKMATIC TRANSPORT CO** **RCRA NonGen / NLR** **1000271480**
ENE **12000 S DOTY AVE** **FINDS** **ILD053220711**
1/8-1/4 **CHICAGO, IL 60628** **ECHO**
0.190 mi.
1001 ft. **Site 1 of 2 in cluster AM**

Actual:
590 ft.

Focus Map:
9

RCRA NonGen / NLR:
Date form received by agency: 2019-12-13 00:00:00.0
Facility name: BULKMATIC TRANSPORT CO
Facility address: 12000 S DOTY AVE
CHICAGO, IL 60628
EPA ID: ILD053220711
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

BULKMATIC TRANSPORT CO (Continued) **1000271480**

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	JB INC
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Not reported
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	1980-07-28 00:00:00.0
Site name:	BULKMATIC TRANSPORT CO
Classification:	Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

BULKMATIC TRANSPORT CO (Continued) **1000271480**

FINDS:
Registry ID: 110005831555
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005831555

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
Registry ID: 110010006698
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110010006698

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000271480
Registry ID: 110005831555
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005831555
Name: BULKMATIC TRANSPORT CO
Address: 12000 S DOTY AVE
City,State,Zip: CHICAGO, IL 60628

AM252 **AIRCO INDUSTRIAL GASES** **RCRA NonGen / NLR** **1000176667**
ENE **12000S DOTY AVE** **ILD057833063**
1/8-1/4 **CHICAGO, IL 60628**
0.190 mi.
1001 ft. **Site 2 of 2 in cluster AM**

Actual:
590 ft.

Focus Map:
9

RCRA NonGen / NLR:
Date form received by agency: 1995-04-14 00:00:00.0
Facility name: AIRCO INDUSTRIAL GASES
Facility address: 12000S DOTY AVE
CHICAGO, IL 60628
EPA ID: ILD057833063
Mailing address: 12000 SOUTH DOTY AVE
CHICAGO, IL 60628
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 05
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: AIRCO INCORPORATED

AIRCO INDUSTRIAL GASES (Continued) **1000176667**

Owner/operator address:	ADDRESS NOT REPORTED
	CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED
	CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	1980-08-18 00:00:00.0
Site name:	AIRCO INDUSTRIAL GASES
Classification:	Not a generator, verified

Hazardous Waste Summary:

. Waste code:	F001
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED

AIRCO INDUSTRIAL GASES (Continued) **1000176667**

IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

. Waste code: U227
. Waste name: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

Violation Status: No violations found

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253 East 1/8-1/4 0.190 mi. 1002 ft. | **NEW LANGSTON HUGHES ELEMENTARY SCHOOL**
10320 SOUTH WENTWORTH AVENUE
CHICAGO, IL 60628 | **IL ENG CONTROLS** **S108891246**
IL INST CONTROL **N/A**
IL SRP

Actual: 601 ft.

Focus Map: 3

ENGINEERING CONTROLS:

Illinois Epa Id:	316505045
NFR Letter:	08/03/2009
Date NFR Recorded:	09/10/2009
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	LeeAnn Tomas-Foster
RA Company:	Public Building Commission of Chicago
RA Address:	50 West Washington Street
RA City,St,Zip:	Chicago, IL 60602
Worker Caution:	Yes
Acres:	3
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	316505045
NFR Letter:	08/03/2009
Date NFR Recorded:	09/10/2009
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	LeeAnn Tomas-Foster
RA Company:	Public Building Commission of Chicago
RA Address:	50 West Washington Street
RA City,St,Zip:	Chicago, IL 60602
Worker Caution:	Yes
Acres:	3
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No

NEW LANGSTON HUGHES ELEMENTARY SCHOOL (Continued) **S108891246**

Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	316505045
US EPA Id:	Not reported
Longitude:	-87.629579
Latitude:	41.706533
Contact Name:	LeeAnn Tomas-Foster
Contact Address:	50 West Washington Street
Contact City,St,Zip:	Chicago, IL 60602
Date Enrolled:	09/06/2007
Point Of Contact:	Ala E. Sassila, P.E.
Consultant Company:	GSG Consultants, Inc.
Consultant Address:	855 West Adams Street
Consultant City,St,Zip:	Chicago, IL 60607
Proj Mgr Assigned:	James Baldwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Public Building Commission of Chicago

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	LeeAnn Tomas-Foster
Remediation Applicant Company:	Public Building Commission of Chicago
Remediation Applicant Address:	50 West Washington Street
Remediation Applicant City,St,Zip:	Chicago, IL 60602
Illinois EPA:	316505045
Site Name:	New Langston Hughes Elementary School
NFR Letter:	2009-08-03
NFR Letter Date Recorded:	2009-09-10
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	3

AN254 **INLAND METALS REFINING** **IL SWF/LF** **S108111859**
NE **N/A**
1/8-1/4 **CHICAGO, IL 60628**
0.200 mi.
1056 ft. **Site 1 of 2 in cluster AN**

Actual:
590 ft.

Focus Map:
9

IL WMRC_LF:

Region:	WMRC
General:	Not reported
IEPA ID Number:	316500001
Municipal Waste:	Not reported
Provisional IEPA ID:	Not reported
Septic:	Not reported
NIPC Map Number:	134
Animal:	Not reported
Owner Name:	INLAND METALS
Pathological:	Not reported
Operator:	INLAND METALS
Industrial:	Not reported
PO Box:	Not reported
Foundry Sand:	Not reported
Incinerator Ash:	Not reported
Slag:	Not reported
Hazardous:	Not reported
Hazardous Liquid:	X
Radiation:	Not reported
Demolition:	Not reported
Lat/Long:	414039/873620
Landscaping:	Not reported
Oil Field:	Not reported
Primemer ID:	3
Special:	Not reported
Township:	37N
Other:	Not reported
Range:	14E
Unknown:	Not reported
Section:	27
Quarter Section1:	NE
Quarter Section2:	NE
Quarter Section3:	Not reported
Quarter Section4:	Not reported
IEPA:	X
ISGS:	Not reported
PollutionControlBoard:	Not reported
IDM&M:	Not reported
DPH:	Not reported
Operational Status:	CLOSED
Local Agency:	Not reported
Permit Status:	UNPERMITTED/UNAUTHORIZED
Agency:	NIPC
IEPA Permit Date:	Not reported
Source Other:	Not reported
Close Date:	Not reported
Reaction:	Not reported
RCRA Facility:	Y
Date Discover:	Not reported
GW Monitoring:	Y
Date Cleaned:	Not reported
FD Site:	Not reported

INLAND METALS REFINING (Continued) **S108111859**

Offsite Waste:	Not reported
Landfill Size:	Not reported
Random Dump:	Not reported
Size Fill:	Not reported
Open Dump:	Not reported
Leachate Collected:	Not reported
Abandonment:	Not reported
Other:	Not reported
Recompacted Clay:	Not reported
In-situ Clay:	Not reported
Secured Containers:	X
Combination:	Not reported
Landfill:	Not reported
None:	Not reported
Incineration:	Not reported
Other:	Not reported
Survace Impoundment:	X
Land Application:	Not reported

AO255 **CATHOLIC CONVENT** **IL UST** **U004014199**
NE **11515 S. PRAIRIE AVENUE** **N/A**
1/8-1/4 **CHICAGO, IL 60628**
0.205 mi.
1080 ft. **Site 1 of 2 in cluster AO**

Actual:
593 ft.

Focus Map:
6

UST:

Name:	CATHOLIC CONVENT
Address:	11515 S. PRAIRIE AVENUE
City:	CHICAGO
Zip:	60628
Facility ID:	2042879
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0032855
Owner Name:	Methodist Youth Services, Inc.
Owner Address:	954 W. Washington Blvd., #4E
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1960
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported

CATHOLIC CONVENT (Continued) **U004014199**

Test Expire Date:	Not reported
Removed Date:	7/12/2005
Abandoned Date:	Not reported

AO256
NE
1/8-1/4
0.205 mi.
1080 ft.

METHODIST YOUTH SERVICES
11515 SOUTH PRAIRIE AVENUE
CHICAGO, IL 60607

Site 2 of 2 in cluster AO

IL LUST **S106984465**
N/A

Actual:
593 ft.

Focus Map:
6

LUST:

Name:	METHODIST YOUTH SERVICES
Address:	11515 SOUTH PRAIRIE AVENUE
City,State,Zip:	CHICAGO, IL 60607
Incident Num:	20050964
IL EPA Id:	316745060
Product:	Other Petroleum
IEMA Date:	2005-07-12
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Methodist Youth Services
PRP Contact:	Cynthia Jurishica
PRP Address:	954 West Washington Boulevard, 4E
PRP City,St,Zip:	Chicago, IL 60607
PRP Phone:	3127338810
Site Classification:	Not reported
Section 57.5(g) Letter:	Not reported
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2005-09-22
45 Report Received:	2005-10-31
NFA/NFR Letter:	**2005-11-23**
NFR Date Recorded:	2009-10-22
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AN257
ENE
1/8-1/4
0.206 mi.
1087 ft.

INLAND METALS REFINING
CHICAGO, IL

Site 2 of 2 in cluster AN

IL NIPC **S100790030**
N/A

Actual:
590 ft.

Focus Map:
9

258 East 1/8-1/4 0.207 mi. 1091 ft. | **VACANT RESIDENTIAL BUILDING**
226-248 W 107TH PLACE
CHICAGO, IL 60628 | **IL UST** | **U003715093**
N/A

Actual: 604 ft.

Focus Map: 3

UST:

Name:	VACANT RESIDENTIAL BUILDING
Address:	226-248 W 107TH PLACE
City:	CHICAGO
Zip:	60628
Facility ID:	2039223
Facility Status:	CLOSED
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Id:	U0028986
Owner Name:	Daniel McGovern
Owner Address:	10424 S Campbell
Owner City,St,Zip:	Chicago, IL 60655
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	4/1/1975
OSFM First Notify Date:	9/8/1999
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/21/1999
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	3500
Tank Substance:	Heating Oil
Last Used Date:	4/1/1975
OSFM First Notify Date:	9/8/1999
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

VACANT RESIDENTIAL BUILDING (Continued) **U003715093**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/21/1999
Abandoned Date:	Not reported

259
East
1/8-1/4
0.208 mi.
1096 ft.

Actual:
596 ft.

Focus Map:
2

95TH/MICHIGAN AVE
CHICAGO, IL

IL NIPC **S100790126**
N/A

260
SW
1/8-1/4
0.210 mi.
1107 ft.

Actual:
611 ft.

Focus Map:
5

BRENAN SCHOOL
11411 EGGLESTON
CHICAGO, IL 60628

RCRA-SQG **1001116740**
ILR000027656

RCRA-SQG:

Date form received by agency:	1996-09-17 00:00:00.0
Facility name:	BRENAN SCHOOL
Facility address:	11411 EGGLESTON CHICAGO, IL 60628
EPA ID:	ILR000027656
Contact:	FRANK BLAIR
Contact address:	11411 EGGLESTON CHICAGO, IL 60628
Contact country:	US
Contact telephone:	312-535-5340
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS 6WN
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	312-535-7039
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported

BRENAN SCHOOL (Continued) **1001116740**

Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

AP261 **INLAND METALS REFINING CO INC** **IL UST** **U000865355**
NE **651 E 119TH ST** **IL BOL** **N/A**
1/8-1/4 **CHICAGO, IL 60628**
0.212 mi.
1117 ft. **Site 1 of 3 in cluster AP**

Actual:
586 ft.

Focus Map:
6

UST:
Name: INLAND METALS REFINING CO INC
Address: 651 E 119TH ST
City: CHICAGO
Zip: 60628
Facility ID: 2013533
Facility Status: CLOSED
Facility Type: **NONE**
Owner Id: U0007543
Owner Name: Inland Metals Refining Co Inc
Owner Address: 651 E 119Th St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Status: **Removed**
Tank Capacity: 1000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 5/8/1986
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**

INLAND METALS REFINING CO INC (Continued) **U000865355**

Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	8/10/1989
Abandoned Date:	Not reported

BOL:

Name:	INLAND METALS REFINING CO
Address:	651 E 119TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000041728
Inv Num:	0316500001
Interest Name:	Inland Metals Refining Co Inc
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.677340
Longitude:	-87.605250

Name:	INLAND METALS REFINING CO
Address:	651 E 119TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000041728
Inv Num:	0316500001
Interest Name:	Inland Metals Refining Co Inc
Interest Type:	LFGW
Media Code:	LAND
Latitude:	41.676935
Longitude:	-87.606747

Name:	INLAND METALS REFINING CO
Address:	651 E 119TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000041728
Inv Num:	0316500001
Interest Name:	Inland Metals Refining Co Inc
Interest Type:	RCRA
Media Code:	LAND
Latitude:	41.676935
Longitude:	-87.606747

Name:	INLAND METALS REFINING CO
Address:	651 E 119TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000041728
Inv Num:	0316500001
Interest Name:	Inland Metals Refining Co Inc
Interest Type:	SOLID WASTE
Media Code:	LAND
Latitude:	41.677340

INLAND METALS REFINING CO INC (Continued) **U000865355**

Longitude: -87.605250

AP262 **INLAND METAL REFINING COMPANY INCORPORATION** **SEMS-ARCHIVE** **1000151808**
NE **651 EAST 119TH STREET** **CORRACTS** **ILD980503213**
1/8-1/4 **CHICAGO, IL 60628** **IL SSU**
0.212 mi. **RCRA NonGen / NLR**
1117 ft. **Site 2 of 3 in cluster AP** **RAATS**

Actual:
586 ft.

Focus Map:
6

SEMS Archive:

Site ID:	0500577
EPA ID:	ILD980503213
Name:	INLAND METAL REFINING COMPANY INCORPORATION
Address:	651 EAST 119TH STREET
Address 2:	Not reported
City,State,Zip:	CHICAGO, IL 60628
Cong District:	01
FIPS Code:	17031
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	05
Site ID:	0500577
EPA ID:	ILD980503213
Site Name:	INLAND METAL REFINING COMPANY INCORPORATION
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1991-10-31 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	05
Site ID:	0500577
EPA ID:	ILD980503213
Site Name:	INLAND METAL REFINING COMPANY INCORPORATION
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1980-09-01 04:00:00
Finish Date:	1980-09-01 04:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500577
EPA ID:	ILD980503213
Site Name:	INLAND METAL REFINING COMPANY INCORPORATION
NPL:	N
FF:	N

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	Not reported
Finish Date:	1986-09-23 04:00:00
Qual:	N
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500577
EPA ID:	ILD980503213
Site Name:	INLAND METAL REFINING COMPANY INCORPORATION
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	Not reported
Finish Date:	1986-09-23 04:00:00
Qual:	N
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500577
EPA ID:	ILD980503213
Site Name:	INLAND METAL REFINING COMPANY INCORPORATION
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1985-05-16 05:00:00
Qual:	H
Current Action Lead:	St Perf

CORRACTS:

EPA ID:	ILD980503213
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	1991-09-27 00:00:00.0
Action:	CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	ILD980503213
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	1987-06-01 00:00:00.0
Action:	CA050 - RFA Completed
NAICS Code(s):	Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1987-06-01 00:00:00.0
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

SSU:
Name: INLAND METALS
Address: 651 EAST 119TH STREET
City,State,Zip: CHICAGO, IL
Facility ID: 0316500001
Facility Type: Refinery
Directions: Not reported
Region: Des Plaines
Current Program: SSU
Project Manager: Kershaw
Community Relations: Frost
SSU Status: Backlog
FOS: NA
Year Completed: Not reported
Site Size: 5
Lat/Long: Not reported

RCRA NonGen / NLR:
Date form received by agency: 1992-03-11 00:00:00.0
Facility name: INLAND METALS REFINING CO INC
Facility address: 651 EAST 119
CHICAGO, IL 60628
EPA ID: ILD980503213
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 05
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler accessibilty indicator: Transferred to the program or state equivalent.

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: Yes
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1992-03-11 00:00:00.0
Site name: INLAND METALS REFINING CO INC
Classification: Not a generator, verified

Date form received by agency: 1980-11-19 00:00:00.0
Site name: INLAND METALS REFINING CO INC
Classification: Not a generator, verified

Date form received by agency: 1980-09-30 00:00:00.0
Site name: INLAND METALS REFINING CO INC
Classification: Not a generator, verified

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D008
. Waste name: LEAD

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

. Waste code: K069
. Waste name: EMISSION CONTROL DUST/SLUDGE FROM SECONDARY LEAD SMELTING.

Corrective Action Summary:
Event date: 1987-06-01 00:00:00.0
Event: RFA COMPLETED

Event date: 1987-06-01 00:00:00.0
Event: DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY

Event date: 1991-09-27 00:00:00.0
Event: CA PRIORITIZATION-MEDIUM CA PRIORITY

Facility Has Received Notices of Violations:
Regulation violated: SR - 725.115(c)
Area of violation: TSD - General Facility Standards
Date violation determined: 1988-10-18 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 1988-10-18 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(c)
Area of violation: Generators - Pre-transport
Date violation determined: 1988-10-18 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Regulation violated:	SR - 725.242(a)
Area of violation:	TSD - Financial Requirements
Date violation determined:	1988-10-18 00:00:00.0
Date achieved compliance:	1993-02-10 00:00:00.0
Violation lead agency:	State
Enforcement action:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date:	1993-02-10 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	SR - 725.152(a)
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	1988-10-18 00:00:00.0
Date achieved compliance:	1993-02-10 00:00:00.0
Violation lead agency:	State
Enforcement action:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date:	1993-02-10 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	SR - 725.115(c)
Area of violation:	TSD - General Facility Standards
Date violation determined:	1988-10-18 00:00:00.0
Date achieved compliance:	1993-02-10 00:00:00.0
Violation lead agency:	State
Enforcement action:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date:	1993-02-10 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	SR - 725.152(a)
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	1988-10-18 00:00:00.0
Date achieved compliance:	1993-02-10 00:00:00.0
Violation lead agency:	State
Enforcement action:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date:	1989-05-03 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	SR - 722.134(c)

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Area of violation: Generators - Pre-transport
Date violation determined: 1988-10-18 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(b)
Area of violation: TSD - General
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.353(a)
Area of violation: TSD - Waste Pile Standards
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.137
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.175
Area of violation: TSD - Manifest/Records/Reporting

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.151(a)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.175
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.135
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.114(c)
Area of violation: TSD - General Facility Standards
Date violation determined: 1988-01-12 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.153
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.354
Area of violation: TSD - Waste Pile Standards
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(b)
Area of violation: TSD - General
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.353(a)
Area of violation: TSD - Waste Pile Standards
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.114(a/b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.351
Area of violation: TSD - Waste Pile Standards
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.114(c)
Area of violation: TSD - General Facility Standards
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.114(a/b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.153
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1988-01-12 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement action date: 1988-01-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243(a)(2)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1988-01-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1988-01-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.244(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1987-12-01 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.251
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1987-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.244(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243(a)(2)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1987-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.244(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1987-12-01 00:00:00.0
Enf. disposition status: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.244(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1988-01-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.244(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1987-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.247(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.247(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1987-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1987-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.251
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.247(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1988-01-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.251
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1988-01-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.244(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1988-01-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243(a)(2)
Area of violation: TSD - Financial Requirements
Date violation determined: 1987-11-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.177(b)
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1986-11-21 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.177(b)
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1986-11-21 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.111
Area of violation: Generators - General
Date violation determined: 1986-11-21 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.174(b)
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1986-11-21 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1986-11-21 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.321(b)
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1986-11-21 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1986-11-21 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.321(a)
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1986-11-21 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Regulation violated: SR - 725.193(b)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(B)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1988-04-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(B)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1986-04-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(B)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192(c)

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(B)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1986-04-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(B)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(B)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1988-04-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(c)
Area of violation: TSD IS-Ground-Water Monitoring

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(d)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.190(b)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192(b)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192(d)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-02-26 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.323
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1985-11-07 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192(c)(1)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1985-08-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192(c)(1)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1985-08-19 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1985-08-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(f)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1985-04-04 00:00:00.0
Date achieved compliance: 1985-05-30 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1985-05-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.121(a)(5)
Area of violation: Generators - Manifest
Date violation determined: 1985-01-29 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1985-01-29 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.121(a)(5)
Area of violation: Generators - Manifest
Date violation determined: 1985-01-29 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-14 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1985-01-29 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-14 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192(a)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192(a)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement action date: 1988-04-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-04-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1984-04-04 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1988-04-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(a)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1988-04-15 00:00:00.0
Enf. disposition status: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(a)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.190(a)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1986-04-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1988-04-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.190(a)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.191(a)(2)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1988-04-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.191(a)(2)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(A)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1986-04-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1984-04-04 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Paid penalty amount: Not reported

Regulation violated: SR - 725.194(a)(2)(C)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1984-03-08 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1986-04-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.273(a)
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.173
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116(d)(4)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Regulation violated: SR - 725.273(a)
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.271
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(b)(1)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.273(b)
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.271

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.113(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.322
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116(d)(3)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.150
Area of violation: Generators - Records/Reporting

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.173
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.273(b)
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.152(e)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(d)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116(d)(3)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(d)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.113(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.274
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.326
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116(d)(4)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.274
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-14 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.113(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.273(a)
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 700.105(c)
Area of violation: Generators - Records/Reporting
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.326
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.322
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement action date: 1985-02-14 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.326
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(b)(1)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(b)(1)
Area of violation: TSD - General Facility Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.173
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1989-05-03 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.132(c)
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 700.105(c)
Area of violation: Generators - Records/Reporting
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.132(c)
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.152(e)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.273(a)
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1988-03-08 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.322
Area of violation: TSD - Surface Impoundment Standards
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.274
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1993-02-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.273(a)
Area of violation: TSD - Container Use and Management
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1993-02-10 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-14 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.150
Area of violation: Generators - Records/Reporting
Date violation determined: 1984-01-25 00:00:00.0
Date achieved compliance: 1990-04-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-03-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-09-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-07-06 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-07-06 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-12-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-12-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-12-09 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1992-11-09 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-01-02 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-01-02 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-01-02 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-10-18 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-12-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-04-04 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-04-04 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-12-22 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-03-30 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1989-03-30 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-10-18 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-03-29 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-03-29 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-03-16 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-03-16 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Records/Reporting
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Waste Pile Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-01-12 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-11-19 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-11-19 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-11-19 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-01-13 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-01-13 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - General
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Records/Reporting
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-11-21 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-03-25 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-03-25 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-02-26 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-02-26 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-11-07 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-11-07 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-08-19 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-08-19 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-04 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1985-05-30 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-29 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-29 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1985-01-29 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Manifest
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-29 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-29 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-29 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - Manifest
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-29 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-29 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-03-08 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-03-08 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Records/Reporting
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: Generators - Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1990-04-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0
Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-01-25 00:00:00.0

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Evaluation: STATE RCRA/REFER TO STATE SUPERF/REMEDIA
Area of violation: TSD - Surface Impoundment Standards
Date achieved compliance: 1993-02-10 00:00:00.0
Evaluation lead agency: State

RAATS:

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 1 725.271
Total No Cited: Not reported
Reg Type: State
Prop. Penalty: 67,000.00
Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 2 725.273(A)
Total No Cited: Not reported
Reg Type: State
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

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Issue Date: 09/27/1988
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Status: ALJ Decision
Additional: Not reported
Action ID: 1097

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	3 725.274
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	4 725.322
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	5 725.243
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	6 725.244
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	7 725.247
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	8 725.212(A)(2)
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 9 725.212(A)(4)
Total No Cited: Not reported
Reg Type: State
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 10 725.213
Total No Cited: Not reported
Reg Type: State
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 11 725.242

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	12 725.243
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	13 725.247
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	14 725.328
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	15 725.190
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	16 725.192(D)
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	17 725.194(A)(2)(B)
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	1 725.271
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	67,000.00
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	2 725.273(A)
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 3 725.274
Total No Cited: Not reported
Reg Type: State
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 4 725.322
Total No Cited: Not reported
Reg Type: State
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	5 725.243
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	6 725.244
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	7 725.247
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	8 725.212(A)(2)
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	9 725.212(A)(4)
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	10 725.213
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 11 725.242
Total No Cited: Not reported
Reg Type: State
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 12 725.243
Total No Cited: Not reported
Reg Type: State
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: 67,000.00
Comments: NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No: 1
Facility ID: ILD980503213
Type: Not reported
Docket No: 85-R-59
Region: 05
Issue Date: 09/27/1988
Final Date: 09/30/1985
Status: ALJ Decision
Additional: Not reported
Action ID: 1097
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 13 725.247

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	14 725.328
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	15 725.190
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	16 725.192(D)
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

Entry No:	1
Facility ID:	ILD980503213
Type:	Not reported
Docket No:	85-R-59
Region:	05
Issue Date:	09/27/1988
Final Date:	09/30/1985
Status:	ALJ Decision
Additional:	Not reported
Action ID:	1097
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	17 725.194(A)(2)(B)
Total No Cited:	Not reported
Reg Type:	State
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	67,000.00
Comments:	NO CIVIL PENALTY ASSESSED AT THIS TIME FOR REASONS SET FORTH IN ANOTHER SEPARATE INITIAL DECISION UNDER SEAL OF EVEN DATE.

AP263 **INLAND METAL REFINING CO INC** **RCRA NonGen / NLR** **1000151833**
NE **651 E 119TH** **ILT180011744**
1/8-1/4 **CHICAGO, IL 60628**
0.212 mi.
1117 ft. **Site 3 of 3 in cluster AP**

Actual:
586 ft.

Focus Map:
6

RCRA NonGen / NLR:
Date form received by agency:1980-09-30 00:00:00.0

Facility name:	INLAND METAL REFINING CO INC
Facility address:	651 E 119TH CHICAGO, IL 60628
EPA ID:	ILT180011744
Mailing address:	651 E 119TH ST CHICAGO, IL 60628
Contact:	RICHARD MULCAHY
Contact address:	651 E 119TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	312-928-6767
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

INLAND METAL REFINING CO INC (Continued) **1000151833**

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

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264 ESE 1/8-1/4 0.220 mi. 1162 ft. | **HARLAN COMMUNITY ACADEMY HS**
9652 S MICHIGAN AVE
CHICAGO, IL 60628 | **RCRA-VSQG** | **1004696723**
ILR000056994

Actual: 596 ft.

Focus Map: 4

RCRA-VSQG:

Date form received by agency:	1998-10-30 00:00:00.0
Facility name:	HARLAN COMMUNITY ACADEMY HS
Facility address:	9652 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000056994

HARLAN COMMUNITY ACADEMY HS (Continued) **1004696723**

Mailing address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	708-923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6W CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	773-535-7038
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

HARLAN COMMUNITY ACADEMY HS (Continued) **1004696723**

Hazardous Waste Summary:

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Violation Status: No violations found

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265 SE 1/8-1/4 0.221 mi. 1165 ft. | **CHICAGO TRANSIT AUTHORITY**
9800 S STATE ST
CHICAGO, IL 60628 | **RCRA-VSQG** **1000166348**
ICIS **ILD984774190**
FINDS
ECHO

Actual: 582 ft.

Focus Map: 4

RCRA-VSQG:

Date form received by agency:	2016-03-01 00:00:00.0
Facility name:	CHICAGO TRANSIT AUTHORITY
Facility address:	9800 S STATE ST CHICAGO, IL 60628
EPA ID:	ILD984774190
Mailing address:	3900 W MAYPOLE CHICAGO, IL 60624
Contact:	CHARLES WEBBER
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	773-722-4718
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO TRANSIT AUTHORITY
Owner/operator address:	3900 W MAYPOLE CHICAGO, IL 60624
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 1952-10-01 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: CHICAGO TRANSIT AUTHORITY
Owner/operator address: MERCHANDISE MART PLZ P O BOX 3555
CHICAGO, IL 60654
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: 1947-10-01 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: CHICAGO TRANSIT AUTHORITY
Owner/operator address: 9800 S STATE ST
CHICAGO, IL 60628
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: District
Owner/Operator Type: Operator
Owner/Op start date: 1947-10-01 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: CHICAGO TRANSIT AUTHORITY
Owner/operator address: 9800 S STATE ST
CHICAGO, IL 60628
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 1952-10-01 00:00:00.
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2013-03-01 00:00:00.0
Site name: CHICAGO TRANSIT AUTHORITY
Classification: Large Quantity Generator

Date form received by agency: 2006-03-01 00:00:00.0
Site name: CHICAGO TRANSIT AUTHORITY
Classification: Not a generator, verified

Date form received by agency: 2004-03-01 00:00:00.0
Site name: CHICAGO TRANSIT AUTHORITY
Classification: Large Quantity Generator

Date form received by agency: 1989-03-17 00:00:00.0
Site name: CHICAGO TRANSIT AUTHORITY
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D008
. Waste name: LEAD

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1102.6
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Regulation violated: Not reported
Area of violation: TSD IS-General Facility Standards
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2006-09-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2006-05-25 00:00:00.0
Date achieved compliance: 2009-03-23 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Enforcement action date: 2009-02-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 1102.6
Paid penalty amount: 1102.6

Evaluation Action Summary:

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-General Facility Standards
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-General Facility Standards
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-General Facility Standards
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Contingency Plan and Emergency Procedures

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2007-02-08 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-General Facility Standards
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-General Facility Standards
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-General Facility Standards
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Contingency Plan and Emergency Procedures

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-25 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-General Facility Standards
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Generators - Pre-transport
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-General Facility Standards
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: TSD IS-General Facility Standards

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Used Oil - Generators
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 2006-05-23 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: TSD IS-Contingency Plan and Emergency Procedures
Date achieved compliance: 2009-03-23 00:00:00.0
Evaluation lead agency: EPA

ICIS:
Enforcement Action ID: 05-2009-9905
FRS ID: 110005869051
Action Name: CHICAGO TRANSIT AUTHORITY
Facility Name: CHICAGO TRANSIT AUTHORITY
Facility Address: 9800 S STATE ST
CHICAGO, IL 60628
Enforcement Action Type: RCRA 3008A AO For Comp And/Or Penalty
Facility County: COOK
Program System Acronym: RCRAINFO
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 3008A
Facility SIC Code: Not reported

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.71729
Longitude in Decimal Degrees:	-87.62289
Permit Type Desc:	Not reported
Program System Acronym:	ILD984774190
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	05-200002262
FRS ID:	110005869051
Action Name:	CHICAGO TRANSIT AUTHORITY (CTA) RED LINE SERVICE CENTER
Facility Name:	CHICAGO TRANSIT AUTHORITY
Facility Address:	9800 S STATE ST CHICAGO, IL 60628
Enforcement Action Type:	Notice of Violation
Facility County:	COOK
Program System Acronym:	RCRAINFO
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	NOV
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.71729
Longitude in Decimal Degrees:	-87.62289
Permit Type Desc:	Not reported
Program System Acronym:	ILD984774190
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Facility Name:	CHICAGO TRANSIT AUTHORITY
Address:	9800 S STATE ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	CHICAGO TRANSIT AUTHORITY
Address:	9800 S STATE ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	CHICAGO TRANSIT AUTHORITY
Address:	9800 S STATE ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	CHICAGO TRANSIT AUTHORITY
Address:	9800 S STATE ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

CHICAGO TRANSIT AUTHORITY (Continued) **1000166348**

FINDS:
Registry ID: 110005869051
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005869051

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000166348
Registry ID: 110005869051
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005869051
Name: CHICAGO TRANSIT AUTHORITY
Address: 9800 S STATE ST
City,State,Zip: CHICAGO, IL 60628

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266 East 1/8-1/4 0.229 mi. 1211 ft. | **LANGSTON HUGHES SCHOOL-CHICAGO BD. OF ED** | **RCRA-VSQG FINDS ECHO** | **1000986465 ILD984868745**
226 W 104TH ST
CHICAGO, IL 60628

Actual: 602 ft.
Focus Map: 3

RCRA-VSQG:
Date form received by agency: 2009-10-22 00:00:00.0
Facility name: HUGHES LANGSTON SCHOOL
Facility address: 226 W 104TH ST
CHICAGO, IL 60628
EPA ID: ILD984868745
Mailing address: 8501 W 191ST ST BOX 10
MOKENA, IL 60448
Contact: THOMAS CONNELLY
Contact address: 8501 W 191ST ST BOX 10
MOKENA, IL 60448
Contact country: US
Contact telephone: 708-923-0202
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

LANGSTON HUGHES SCHOOL-CHICAGO BD. OF ED (Continued) **1000986465**

hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	773-535-7038
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	1998-11-04 00:00:00.0
Site name:	HUGHES LANGSTON SCHOOL
Classification:	Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

LANGSTON HUGHES SCHOOL-CHICAGO BD. OF ED (Continued) **1000986465**

. Waste code: X002
. Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

FINDS:
Registry ID: 110001802808
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110001802808

Environmental Interest/Information System:
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000986465
Registry ID: 110001802808
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001802808
Name: LANGSTON HUGHES SCHOOL-CHICAGO BD. OF ED
Address: 226 W 104TH ST
City,State,Zip: CHICAGO, IL 60628

AQ267 **J AND A GAS MART, INC.** **IL UST** **U003805663**
East **210 W. 103RD STREET** **N/A**
1/8-1/4 **CHICAGO, IL 60628**
0.236 mi.
1245 ft. **Site 1 of 4 in cluster AQ**

Actual:
600 ft.

Focus Map:
3

UST:
Name: J AND A GAS MART, INC.
Address: 210 W. 103RD STREET
City: CHICAGO
Zip: 60628
Facility ID: 2040667
Facility Status: ACTIVE
Facility Type: **SELF-SERVICE STATION**
Owner Id: U0039253
Owner Name: 103rd Petro RE, LLC

J AND A GAS MART, INC. (Continued) **U003805663**

Owner Address:	210 W. 103rd Street
Owner City,St,Zip:	Chicago, IL 69628
Tank Number:	1
Tank Status:	**Currently in use**
Tank Capacity:	15000
Tank Substance:	Gasoline - Regular
Last Used Date:	Not reported
OSFM First Notify Date:	3/12/2002
Red Tag Issue Date:	Not reported
Install Date:	11/1/2001
Green Tag Decal:	**V004067**
Green Tag Issue Date:	**2/6/2020**
Green Tag Expire Date:	**12/31/2022**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	2/6/2020
Motor Fuel Permit Expiration Date:	12/31/2022
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	2
Tank Status:	**Currently in use**
Tank Capacity:	10000
Tank Substance:	Gasoline - Premium
Last Used Date:	Not reported
OSFM First Notify Date:	3/12/2002
Red Tag Issue Date:	Not reported
Install Date:	11/1/2001
Green Tag Decal:	**V004067**
Green Tag Issue Date:	**2/6/2020**
Green Tag Expire Date:	**12/31/2022**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	2/6/2020
Motor Fuel Permit Expiration Date:	12/31/2022
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

268 ENE 1/8-1/4 0.236 mi. 1246 ft. | **CONTINENTAL GRAIN CO**
127TH & DOTY AVE
CHICAGO, IL 60633 | **IL UST** | **U000791610**
N/A

Actual: 591 ft.

Focus Map: 10

UST:

Name:	CONTINENTAL GRAIN CO
Address:	127TH & DOTY AVE
City:	CHICAGO
Zip:	60633
Facility ID:	2008867
Facility Status:	CLOSED
Facility Type:	**PORT DISTRICT**
Owner Id:	U0007390
Owner Name:	Il International Port Dist
Owner Address:	3600 E 95Th
Owner City,St,Zip:	Chicago, IL 60617
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	9/1/1995
OSFM First Notify Date:	4/30/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	10/19/1995
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	3000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	4/30/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

CONTINENTAL GRAIN CO (Continued) **U000791610**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	1/1/1901
Abandoned Date:	Not reported

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269 West 1/8-1/4 0.236 mi. 1246 ft. **FERNWOOD PLAYGROUND PARK**
10436 S WALLACE
CHICAGO, IL 60605
IL UST **U001473580**
N/A

Actual: 606 ft.

Focus Map: 3

UST:

Name:	FERNWOOD PLAYGROUND PARK
Address:	10436 S WALLACE
City:	CHICAGO
Zip:	60605
Facility ID:	2032287
Facility Status:	EXEMPT
Facility Type:	**CITY / TOWN**
Owner Id:	U0002888
Owner Name:	Chicago Park District
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Status:	**Pre 1974**
Tank Capacity:	1500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	7/7/1993
Red Tag Issue Date:	Not reported
Install Date:	1/1/1960
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	Not reported

AR270 East 1/8-1/4 0.237 mi. 1250 ft. | **STAR CLEANERS**
149 W 111TH ST
CHICAGO, IL 60628

Site 1 of 2 in cluster AR | **RCRA-SQG** | **1010317282**
ILR000144154

Actual: 605 ft.

Focus Map: 5

RCRA-SQG:

Date form received by agency:	2006-10-27 00:00:00.0
Facility name:	STAR CLEANERS
Facility address:	149 W 111TH ST CHICAGO, IL 60628
EPA ID:	ILR000144154
Contact:	KI KIM
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	217-555-1212
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STAR CLEANERS
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	2006-10-27 00:00:00.
Owner/Op end date:	Not reported

Owner/operator name:	STAR CLEANERS
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	2006-10-27 00:00:00.
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No

STAR CLEANERS (Continued) **1010317282**

Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

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271 ENE 1/8-1/4 0.238 mi. 1259 ft. | **CHICAGO DEPT OF ENVIRONMENT** | **RCRA NonGen / NLR** | **1012178774**
12600 S DOTY AVE | **ILR000158501**
CHICAGO, IL 60628

Actual: 586 ft.
Focus Map: 10

RCRA NonGen / NLR:
Date form received by agency: 2010-03-09 00:00:00.0
Facility name: CHICAGO DEPT OF ENVIRONMENT
Facility address: 12600 S DOTY AVE
CHICAGO, IL 60628
EPA ID: ILR000158501
Mailing address: 30 N LASALLE STE 2500
CHICAGO, IL 60602
Contact: TERRY SHEAHAN
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 312-742-4806
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No

CHICAGO DEPT OF ENVIRONMENT (Continued) **1012178774**

Used oil transporter: No

Historical Generators:
Date form received by agency: 2009-07-06 00:00:00.0
Site name: CHICAGO DEPT OF ENVIRONMENT
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

AQ272 **MCCORMICK PLACE VACANT LOT** **IL UST** **U003971916**
East **201-217 E. CERMAK RD.** **N/A**
1/8-1/4 **CHICAGO, IL 60616**
0.239 mi.
1263 ft. **Site 2 of 4 in cluster AQ**

Actual:
601 ft.

Focus Map:
3

UST:

Name:	MCCORMICK PLACE VACANT LOT
Address:	201-217 E. CERMAK RD.
City:	CHICAGO
Zip:	60616
Facility ID:	2042068
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0031837
Owner Name:	Metropolitan Pier & Exposition Authority
Owner Address:	301 E. Cermak Rd.
Owner City,St,Zip:	Chicago, IL 60616
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	4/13/2004
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	4/8/2004
Abandoned Date:	Not reported

AS273 **U.S. SCRAP** **IL SSU** **S101467254**
NE **391 EAST KENSINGTON** **N/A**
1/8-1/4 **CHICAGO, IL**
0.243 mi.
1281 ft. **Site 1 of 3 in cluster AS**

Actual:
592 ft.

Focus Map:
6

SSU:

Name:	U.S. SCRAP
Address:	391 EAST KENSINGTON
City,State,Zip:	CHICAGO, IL
Facility ID:	0316000022
Facility Type:	Manufacturer - Industrial
Directions:	Not reported
Region:	Des Plaines
Current Program:	USEPA
Project Manager:	Nickell
Community Relations:	McGinnis
SSU Status:	Transferred
FOS:	NA
Year Completed:	Not reported
Site Size:	9
Lat/Long:	Not reported

AS274 **U S DRUM DISPOSAL CORP** **RCRA NonGen / NLR** **1000111188**
NE **391 E KENSINGTON AVE** **FINDS** **ILD085866788**
1/8-1/4 **CHICAGO, IL 60628** **ECHO**
0.243 mi.
1281 ft. **Site 2 of 3 in cluster AS**

Actual:
592 ft.

Focus Map:
6

RCRA NonGen / NLR:

Date form received by agency:	2009-08-13 00:00:00.0
Facility name:	U S DRUM DISPOSAL CORP
Facility address:	391 E KENSINGTON AVE CHICAGO, IL 60628
EPA ID:	ILD085866788
Contact:	DAN SMITH
Contact address:	391 E KENSINGTON AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	312-785-0444
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	PAXTON LANDFILL CORP
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

U S DRUM DISPOSAL CORP (Continued) **1000111188**

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency:1980-07-10 00:00:00.0
Site name: U S DRUM DISPOSAL CORP
Classification: Not a generator, verified

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Violation Status: No violations found

FINDS:
Registry ID: 110005841410
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005841410

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

U S DRUM DISPOSAL CORP (Continued) **1000111188**

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000111188
Registry ID:	110005841410
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005841410
Name:	U S DRUM DISPOSAL CORP
Address:	391 E KENSINGTON AVE
City,State,Zip:	CHICAGO, IL 60628

AS275 **US SCRAP** **IL SWF/LF** **1008113237**
NE **391 E KENSINGTON** **FINDS** **N/A**
1/8-1/4 **CHICAGO, IL 60628** **IL BOL**
0.243 mi.
1281 ft. **Site 3 of 3 in cluster AS**

Actual:
592 ft.

Focus Map:
6

IL WMRC_LF:

Region:	WMRC
General:	Not reported
IEPA ID Number:	316000022
Municipal Waste:	Not reported
Provisional IEPA ID:	Not reported
Septic:	Not reported
NIPC Map Number:	135
Animal:	Not reported
Owner Name:	U S SCRAP
Pathological:	Not reported
Operator:	U S SCRAP
Industrial:	Not reported
PO Box:	Not reported
Foundry Sand:	Not reported
Incinerator Ash:	Not reported
Slag:	Not reported
Hazardous:	Not reported
Hazardous Liquid:	Not reported
Radiation:	Not reported
Demolition:	X
Lat/Long:	414000/873600
Landscaping:	Not reported
Oil Field:	Not reported
Primemer ID:	3
Special:	Not reported
Township:	37N
Other:	Not reported
Range:	14E
Unknown:	Not reported
Section:	27
Quarter Section1:	NW
Quarter Section2:	Not reported
Quarter Section3:	Not reported
Quarter Section4:	Not reported
IEPA:	X
ISGS:	Not reported

US SCRAP (Continued) **1008113237**

PollutionControlBoard:	Not reported
IDM&M:	Not reported
DPH:	Not reported
Operational Status:	CLOSED NO FINAL COVER
Local Agency:	Not reported
Permit Status:	UNPERMITTED UNAUTHORIZED
Agency:	NIPC
IEPA Permit Date:	10174
Source Other:	Not reported
Close Date:	73074
Reaction:	Not reported
RCRA Facility:	Not reported
Date Discover:	Not reported
GW Monitoring:	YES
Date Cleaned:	Not reported
FD Site:	Not reported
Offsite Waste:	Not reported
Landfill Size:	Not reported
Random Dump:	Not reported
Size Fill:	Not reported
Open Dump:	Not reported
Leachate Collected:	Not reported
Abandonment:	Not reported
Other:	Not reported
Recompacted Clay:	Not reported
In-situ Clay:	Not reported
Secured Containers:	Not reported
Combination:	Not reported
Landfill:	X
None:	Not reported
Incineration:	Not reported
Other:	Not reported
Survace Impoundment:	Not reported
Land Application:	Not reported

FINDS:

Registry ID:	110018098351
Facility URL:	http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110018098351

Environmental Interest/Information System:

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

BOL:

Name:	US SCRAP
Address:	391 E KENSINGTON
City,State,Zip:	CHICAGO, IL 60028
Site Id:	170000232647
Inv Num:	0316000022
Interest Name:	US Scrap
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.671270
Longitude:	-87.604700

US SCRAP (Continued) **1008113237**

Name: US SCRAP
Address: 391 E KENSINGTON
City,State,Zip: CHICAGO, IL 60028
Site Id: 170000232647
Inv Num: 0316000022
Interest Name: US Scrap
Interest Type: LFGW
Media Code: LAND
Latitude: 41.671270
Longitude: -87.604700

Name: US SCRAP
Address: 391 E KENSINGTON
City,State,Zip: CHICAGO, IL 60028
Site Id: 170000232647
Inv Num: 0316000022
Interest Name: US Scrap
Interest Type: SOLID WASTE
Media Code: LAND
Latitude: 41.671270
Longitude: -87.604700

AQ276 **F & R QUALITY CLEANERS** **RCRA NonGen / NLR** **1000117870**
East **201 W. 103RD ST.** **FINDS** **ILD982065310**
1/8-1/4 **CHICAGO, IL 60628** **ECHO**
0.244 mi.
1289 ft. **Site 3 of 4 in cluster AQ**

Actual:
601 ft.

Focus Map:
3

RCRA NonGen / NLR:
Date form received by agency: 2019-12-13 00:00:00.0
Facility name: ONE HOUR MARTINIZING
Facility address: 201 W 103RD ST
CHICAGO, IL 60628
EPA ID: ILD982065310
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: F AND R DARDEN CORP
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

F & R QUALITY CLEANERS (Continued) **1000117870**

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): Not reported
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 1987-05-12 00:00:00.0
Site name: ONE HOUR MARTINIZING
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:
Registry ID: 110001357139
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110001357139

Environmental Interest/Information System:
AFS (Aerometric Information Retrieval System (AIRS) Facility

F & R QUALITY CLEANERS (Continued) **1000117870**

Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000117870
Registry ID:	110001357139
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001357139
Name:	F & R QUALITY CLEANERS
Address:	201 W. 103RD ST.
City,State,Zip:	CHICAGO, IL 60628

AQ277 **ONE HOUR MARTENIZING** **IL LUST** **S103292372**
East **201 WEST 103RD ST.** **N/A**
1/8-1/4 **CHICAGO, IL 60628**
0.244 mi.
1289 ft. **Site 4 of 4 in cluster AQ**

Actual:
601 ft.

Focus Map:
3

LUST:

Name:	ONE HOUR MARTENIZING
Address:	201 WEST 103RD ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	903286
IL EPA Id:	316495013
Product:	Gasoline
IEMA Date:	1990-11-07
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	F & R Darden Corp.
PRP Contact:	Renee Darden
PRP Address:	201 West 103rd St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported

ONE HOUR MARTENIZING (Continued) **S103292372**

45 Report Received:	Not reported
NFA/NFR Letter:	**1991-02-27**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

Name:	F&R DARDEN CLEANERS
Address:	201 WEST 103RD
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	903655
IL EPA Id:	316495013
Product:	Gasoline
IEMA Date:	1990-12-11
Project Manager:	Nifong
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Fred Darden
PRP Contact:	Not reported
PRP Address:	201 West 103rd St.
PRP City,St,Zip:	Chicago, IL 60606
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1992-02-29
45 Report Received:	1992-02-29
NFA/NFR Letter:	**1991-02-27**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AR278 **LAKEFRONT SUPPORTING HOUSING** **IL ENG CONTROLS** **1000204428**
East **11023-11045 S WENTWORTH** **IL INST CONTROL** **ILD981960537**
1/8-1/4 **CHICAGO, IL 60628** **IL SRP**
0.248 mi. **RCRA NonGen / NLR**
1309 ft. **Site 2 of 2 in cluster AR** **FINDS**
ECHO

Actual:
605 ft.

Focus Map:
5

ENGINEERING CONTROLS:

Illinois Epa Id:	316495014
NFR Letter:	10/21/2005
Date NFR Recorded:	01/19/2006
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Robert Banta
RA Company:	Lakefront Supportive Housing
RA Address:	247 South State Street
RA City,St,Zip:	Chicago, IL 60604
Worker Caution:	No
Acres:	1.575
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes

LAKEFRONT SUPPORTING HOUSING (Continued) **1000204428**

Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	316495014
NFR Letter:	10/21/2005
Date NFR Recorded:	01/19/2006
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Robert Banta
RA Company:	Lakefront Supportive Housing
RA Address:	247 South State Street
RA City,St,Zip:	Chicago, IL 60604
Worker Caution:	No
Acres:	1.5758
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	316495014
US EPA Id:	ILD981960537
Longitude:	-87.627563
Latitude:	41.693059
Contact Name:	Robert Banta
Contact Address:	247 South State Street
Contact City,St,Zip:	Chicago, IL 60640
Date Enrolled:	05/22/2003
Point Of Contact:	Carl L. Dawes
Consultant Company:	Mostardi Platt Environmental
Consultant Address:	1520 Kensington Road
Consultant City,St,Zip:	Oak Brook, IL 60523-2139
Proj Mgr Assigned:	Greg Dunn
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Lakefront Supportive Housing

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No

LAKEFRONT SUPPORTING HOUSING (Continued) **1000204428**

BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Robert Banta
Remediation Applicant Company:	Lakefront Supportive Housing
Remediation Applicant Address:	247 South State Street
Remediation Applicant City,St,Zip:	Chicago, IL 60604
Illinois EPA:	316495014
Site Name:	Angelica Health Services
NFR Letter:	2005-10-21
NFR Letter Date Recorded:	2006-01-19
Comprehensive/Focused:	Focused
Worker Caution:	N
Acres:	1.575

RCRA NonGen / NLR:

Date form received by agency:	2007-11-01 00:00:00.0
Facility name:	LAKEFRONT SUPPORTING HOUSING
Facility address:	11023-11045 S WENTWORTH CHICAGO, IL 60628
EPA ID:	ILD981960537
Contact:	ENV COORDINATOR
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	773-561-0900
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	ANGELICA HEALTHCARE SERVICES GROUP INC
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported

LAKEFRONT SUPPORTING HOUSING (Continued) **1000204428**

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: LAKEFRONT SUPPORTING HOUSING
Owner/operator address: 11023-11045 S WENTWORTH
CHICAGO, IL 60616
Owner/operator country: US
Owner/operator telephone: 773-561-0900
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 2004-02-18 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: LAKEFRONT SUPPORTING HOUSING
Owner/operator address: 4946 N SHERIDAN RD
CHICAGO, IL 60640
Owner/operator country: US
Owner/operator telephone: 773-561-0900
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 2004-02-18 00:00:00.
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2004-02-18 00:00:00.0
Site name: LAKEFRONT SUPPORTING HOUSING
Classification: Large Quantity Generator

Date form received by agency: 1987-07-14 00:00:00.0

LAKEFRONT SUPPORTING HOUSING (Continued) **1000204428**

Site name: ANGELICA HEALTH SERVICES
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:
Registry ID: 110009374408
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110009374408

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000204428
Registry ID: 110009374408
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009374408
Name: LAKEFRONT SUPPORTING HOUSING
Address: 11023-11045 S WENTWORTH
City,State,Zip: CHICAGO, IL 60628

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279 NE 1/4-1/2 0.252 mi. 1333 ft. | **HUFF & HUFF INC. 651 EAST 179TH ST. CHICAGO, IL 60607** | **IL LUST** | **S103292398 N/A**

Actual: 589 ft.
Focus Map: 6

LUST:
Name: HUFF & HUFF INC.
Address: 651 EAST 179TH ST.
City,State,Zip: CHICAGO, IL 60607
Incident Num: 891954
IL EPA Id: 316280047
Product: Diesel
IEMA Date: 1989-10-04
Project Manager: Chappel
Project Manager Phone: Not reported
Email: Not reported
PRP Name: Huff & Huff Inc.
PRP Contact: Linda Huff
PRP Address: 512 West Burlington, Suite 100
PRP City,St,Zip: La Grange, IL 60525
PRP Phone: Not reported
Site Classification: Not reported

HUFF & HUFF INC. (Continued) **S103292398**

Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2015-03-20
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	2015-03-20

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280 ENE 1/4-1/2 0.273 mi. 1443 ft. | **PSC CONTAINER SERVICES, LLC 803 EAST 120TH ST. CHICAGO, IL 60628** | **IL LUST** | **S104524045 N/A**

Actual: 590 ft.

Focus Map: 9

LUST:

Name:	PSC CONTAINER SERVICES, LLC
Address:	803 EAST 120TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	930641
IL EPA Id:	316535003
Product:	Diesel
IEMA Date:	1993-03-17
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	PSC Container Services, LLC
PRP Contact:	Garry Risse
PRP Address:	2 South Concourse Pkwy., Suite 750
PRP City,St,Zip:	Atlanta, GA 30324
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1993-04-08
45 Report Received:	1993-05-03
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

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281 WSW 1/4-1/2 0.277 mi. 1462 ft. | **ALTGELD LIBRARY 955 EAST 131 STREET CHICAGO, IL 60827** | **IL SRP** | **S123207559 N/A**

Actual: 589 ft.

Focus Map: 10

SRP:

IL EPA Id:	316545003
US EPA Id:	ILD981098395
Longitude:	-87.598806
Latitude:	41.656681
Contact Name:	Lynn Crivello
Contact Address:	60 East Van Buren Street

ALTGELD LIBRARY (Continued) **S123207559**

Contact City,St,Zip:	Chicago, IL 60605
Date Enrolled:	11/23/2011
Point Of Contact:	Nicholas Szymanski
Consultant Company:	Environmental Design International, Inc.
Consultant Address:	33 West Monroe Street
Consultant City,St,Zip:	Chicago, IL 60603
Proj Mgr Assigned:	Tammy Smith
Sec. 4 Letter Date:	Not reported
Active:	Yes
Remediation Applicant Co:	Chicago Housing Authority

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282 WSW 1/4-1/2 0.317 mi. 1672 ft. **CHICAGO HOUSING AUTHORITY** **IL LUST** **S108649962**
940 EAST 132ND STREET **N/A**
CHICAGO, IL 60627

Actual: 587 ft.
Focus Map: 12

LUST:

Name:	CHICAGO HOUSING AUTHORITY
Address:	940 EAST 132ND STREET
City,State,Zip:	CHICAGO, IL 60627
Incident Num:	20070682
IL EPA Id:	316545003
Product:	Gasoline
IEMA Date:	2007-05-21
Project Manager:	Jones
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Housing Authority
PRP Contact:	Sanjiv Jain
PRP Address:	60 East VanBuren, 13th Floor
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	3129137358
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2007-07-12
45 Report Received:	2007-08-08
NFA/NFR Letter:	**2007-09-10**
NFR Date Recorded:	2007-10-29
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

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283 SSW 1/4-1/2 0.318 mi. 1680 ft. **GREATER CANAAN BAPTIST CHURCH** **IL LUST** **S108255716**
38 WEST 119TH STREET **N/A**
CHICAGO, IL 60628

Actual: 607 ft.
Focus Map: 6

LUST:

Name:	GREATER CANAAN BAPTIST CHURCH
Address:	38 WEST 119TH STREET
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20061440
IL EPA Id:	316495172

GREATER CANAAN BAPTIST CHURCH (Continued) **S108255716**

Product:	Other Petroleum
IEMA Date:	2006-11-15
Project Manager:	Rahman
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Greater Canaan Baptist Church
PRP Contact:	Pastor Leon Thompson
PRP Address:	35 West 119th Street
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7737852200
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2007-02-26
45 Report Received:	2007-02-26
NFA/NFR Letter:	**2007-12-12**
NFR Date Recorded:	2008-07-18
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

284
NE
1/4-1/2
0.319 mi.
1682 ft.

FRIESON, PHYLLIS **IL LUST** **S108187373**
342 EAST 115TH STREET **N/A**
CHICAGO, IL 60628

Actual:
598 ft.

Focus Map:
6

LUST:

Name:	FRIESON, PHYLLIS
Address:	342 EAST 115TH STREET
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20061096
IL EPA Id:	316495171
Product:	Fuel Oil, Other Petroleum
IEMA Date:	2006-08-29
Project Manager:	Covert
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Phyllis Frieson
PRP Contact:	Not reported
PRP Address:	7742 South Wood Street
PRP City,St,Zip:	Chicago, IL 60620
PRP Phone:	7737238158
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2007-01-29
45 Report Received:	2007-01-29
NFA/NFR Letter:	**2007-05-29**
NFR Date Recorded:	1988-08-08
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

285 East 1/4-1/2 0.325 mi. 1716 ft. | **ROSELAND MEDICAL CENTER**
100-136 WEST 111TH STREET
CHICAGO, IL 60628 | **IL LUST** | **S108282965**
N/A

Actual: 605 ft.

Focus Map: 5

LUST:

Name:	ROSELAND MEDICAL CENTER
Address:	100-136 WEST 111TH STREET
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20070049
IL EPA Id:	316495173
Product:	Other Petroleum
IEMA Date:	2007-01-18
Project Manager:	Jones
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Roseland Medical Center
PRP Contact:	Leon Walker
PRP Address:	1050 East 95th Street
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	7736432793
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2007-02-06
45 Report Received:	2007-03-02
NFA/NFR Letter:	**2008-01-25**
NFR Date Recorded:	2008-02-19
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

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286 South 1/4-1/2 0.327 mi. 1725 ft. | **CHICAGO, CITY OF**
11900 SOUTH STATE ST.
CHICAGO, IL 60628 | **IL LUST** | **S105225839**
N/A

Actual: 607 ft.

Focus Map: 9

LUST:

Name:	CHICAGO, CITY OF
Address:	11900 SOUTH STATE ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	982290
IL EPA Id:	316495107
Product:	Gasoline
IEMA Date:	1998-09-15
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	City of Chicago, Dept. of Environment
PRP Contact:	Renante Marante
PRP Address:	30 North La Salle St., 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127420123
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1998-10-08
20 Report Received:	Not reported

CHICAGO, CITY OF (Continued) **S105225839**

45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	1998-10-08

287
NNW
1/4-1/2
0.328 mi.
1731 ft.

Actual:
598 ft.

Focus Map:
1

93RD/WENTWORTH AVE **IL NIPC** **S100790118**
N/A

CHICAGO, IL

288
West
1/4-1/2
0.360 mi.
1903 ft.

Actual:
612 ft.

Focus Map:
5

COMED 119TH STREET DCZ317 SUBSTATION **IL SRP** **S121171278**
739 WEST 110TH STREET **N/A**
CHICAGO, IL 60628

SRP:

IL EPA Id:	316495192
US EPA Id:	Not reported
Longitude:	-87.640713
Latitude:	41.676984
Contact Name:	John Dennison
Contact Address:	Two Lincoln Centre
Contact City,St,Zip:	Oakbrook Terrace, IL 60181
Date Enrolled:	08/04/2017
Point Of Contact:	John Chitwood
Consultant Company:	Arcadis, US Inc.
Consultant Address:	2800 West Higgins Road
Consultant City,St,Zip:	Hoffman Estates, IL 60169
Proj Mgr Assigned:	Jeff Guy
Sec. 4 Letter Date:	Not reported
Active:	Yes
Remediation Applicant Co:	Commonwealth Edison Company

AT289
East
1/4-1/2
0.367 mi.
1938 ft.

Actual:
597 ft.

Focus Map:
2

MEDLEY'S MOVING & STORAGE **IL LUST** **S104524044**
251 EAST 95TH ST.-B **N/A**
CHICAGO, IL 60619

Site 1 of 2 in cluster AT

LUST:

Name:	MEDLEY'S MOVING & STORAGE
Address:	251 EAST 95TH ST.-B
City,State,Zip:	CHICAGO, IL 60619
Incident Num:	20000774
IL EPA Id:	318993017
Product:	Diesel

MEDLEY'S MOVING & STORAGE (Continued) **S104524044**

IEMA Date:	2000-04-27
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	Medley's Moving & Storage
PRP Contact:	Howard Medley
PRP Address:	251 East 95th St.-B
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	7738214000
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2000-05-25
45 Report Received:	2000-07-24
NFA/NFR Letter:	**2000-11-15**
NFR Date Recorded:	2001-02-01
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AT290 **MEDLEY'S MOVING & STORAGE** **IL LUST** **S104564421**
East **251 EAST 95TH ST.** **N/A**
1/4-1/2 **CHICAGO, IL 60619**
0.367 mi.
1938 ft. **Site 2 of 2 in cluster AT**

Actual:
597 ft.

Focus Map:
2

LUST:

Name:	MEDLEYS MOVING & STORAGE
Address:	251 EAST 95TH ST.
City,State,Zip:	CHICAGO, IL 60619
Incident Num:	20001183
IL EPA Id:	318993017
Product:	Fuel Oil
IEMA Date:	2000-06-21
Project Manager:	Ransdell
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Medleys Moving & Storage
PRP Contact:	Howard Medley
PRP Address:	251 East 95th St.
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	7738214000
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	2000-11-02
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	2000-11-02
Non-Lust LR Date:	Not reported

Name:	MEDLEY'S MOVING & STORAGE
Address:	251 EAST 95TH ST.
City,State,Zip:	CHICAGO, IL 60619
Incident Num:	930643
IL EPA Id:	318993017

MEDLEY'S MOVING & STORAGE (Continued) **S104564421**

Product:	Diesel
IEMA Date:	1993-03-18
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	Meadley's Moving & Storage
PRP Contact:	Howard Meadley
PRP Address:	251 East 95th St.
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**2011-06-23**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AU291 **SHERWIN WILLIAMS CO** **CORRACTS** **1000371369**
NE **11541 S CHAMPLAIN AVE** **RCRA-TSDF** **ILD005456439**
1/4-1/2 **CHICAGO, IL 60628** **RCRA-LQG**
0.377 mi. **US INST CONTROLS**
1989 ft. **Site 1 of 3 in cluster AU** **US FIN ASSUR**
2020 COR ACTION
Actual: **RAATS**
589 ft.

Focus Map: **6**

CORRACTS:

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	2019-09-20 00:00:00.0
Action:	CA077
NAICS Code(s):	325510 Paint and Coating Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	2016-08-15 00:00:00.0
Action:	CA546
NAICS Code(s):	325510 Paint and Coating Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	2016-01-29 00:00:00.0
Action:	CA546
NAICS Code(s):	325510 Paint and Coating Manufacturing
Original schedule date:	Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2014-12-11 00:00:00.0
Action: CA900CR
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2014-09-12 00:00:00.0
Action: CA546
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2014-07-11 00:00:00.0
Action: CA077
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2014-02-24 00:00:00.0
Action: CA546
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2013-08-16 00:00:00.0
Action: CA546
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2012-09-07 00:00:00.0
Action: CA550RC

SHERWIN WILLIAMS CO (Continued) **1000371369**

NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2012-08-23 00:00:00.0
Action: CA772GC
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2012-08-23 00:00:00.0
Action: CA800YE
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2007-01-22 00:00:00.0
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2004-08-25 00:00:00.0
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2004-08-25 00:00:00.0
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2001-07-20 00:00:00.0
Action: CA005EE
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1999-12-06 00:00:00.0
Action: CA200 - RFI Approved
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: 2002-05-01 00:00:00.0
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1998-10-28 00:00:00.0
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: 2000-05-01 00:00:00.0
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1998-07-22 00:00:00.0
Action: CA077
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1998-03-26 00:00:00.0
Action: CA077
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1998-03-05 00:00:00.0
Action: CA110 - RFI Workplan Received
NAICS Code(s): 325510
Paint and Coating Manufacturing

SHERWIN WILLIAMS CO (Continued) **1000371369**

Original schedule date: 1998-05-01 00:00:00.0
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1998-03-04 00:00:00.0
Action: CA110 - RFI Workplan Received
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1997-11-06 00:00:00.0
Action: CA100DC - RFI Imposition, Focused data collection required for stabilization evaluation
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1997-08-28 00:00:00.0
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1997-08-28 00:00:00.0
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1994-03-31 00:00:00.0
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1993-07-16 00:00:00.0
Action: CA016
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1992-09-28 00:00:00.0
Action: CA086
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1991-09-27 00:00:00.0
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1991-06-06 00:00:00.0
Action: CA077
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1990-07-06 00:00:00.0
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 325510
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1989-07-06 00:00:00.0
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): 325510

SHERWIN WILLIAMS CO (Continued) **1000371369**

Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

RCRA-TSDF:
Date form received by agency: 2018-03-01 00:00:00.0
Facility name: SHERWIN WILLIAMS CO
Facility address: 11541 S CHAMPLAIN AVE
CHICAGO, IL 60628
EPA ID: ILD005456439
Mailing address: 101 PROSPECT AVE NW-4M
CLEVELAND, OH 44115-1075
Contact: EDWARD CONNELL
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: 216-515-4629
Contact email: Not reported
EPA Region: 05
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 1888-01-01 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 1885-01-01 00:00:00.
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2016-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2013-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2012-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2012-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2010-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2008-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2007-12-31 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2007-08-14 00:00:00.0
Site name: SHERWIN WILLIAMS CO

SHERWIN WILLIAMS CO (Continued) **1000371369**

Classification: Large Quantity Generator

Date form received by agency: 2006-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2004-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2002-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2000-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1998-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1996-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1994-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1993-10-19 00:00:00.0
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Date form received by agency: 1992-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1991-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 1990-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1980-11-22 00:00:00.0
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 1980-08-18 00:00:00.0
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D000

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D021
. Waste name: CHLOROBENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D037
. Waste name: PENTACHLOROPHENOL

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F004
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F017
. Waste name: Not Defined

. Waste code: F018
. Waste name: Not Defined

. Waste code: K083
. Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION.

. Waste code: LABP
. Waste name: LAB PACK

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: P003
. Waste name: 2-PROPENAL (OR) ACROLEIN

. Waste code: P005
. Waste name: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL

. Waste code: P008
. Waste name: 4-AMINOPYRIDINE (OR) 4-PYRIDINAMINE

. Waste code: P011
. Waste name: ARSENIC OXIDE AS2O5 (OR) ARSENIC PENTOXIDE

. Waste code: P014
. Waste name: BENZENETHIOL (OR) THIOPHENOL

. Waste code: P019
. Waste name: Not Defined

. Waste code: P022
. Waste name: CARBON DISULFIDE

. Waste code: P028
. Waste name: BENZENE, (CHLOROMETHYL)- (OR) BENZYL CHLORIDE

. Waste code: P029
. Waste name: COPPER CYANIDE (OR) COPPER CYANIDE CU(CN)

. Waste code: P030
. Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

. Waste code: P052
. Waste name: Not Defined

. Waste code: P053
. Waste name: Not Defined

. Waste code: P054
. Waste name: AZIRIDINE (OR) ETHYLENEIMINE

. Waste code: P087
. Waste name: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE

. Waste code: P090
. Waste name: Not Defined

. Waste code: P095
. Waste name: CARBONIC DICHLORIDE (OR) PHOSGENE

. Waste code: P100
. Waste name: Not Defined

. Waste code: P101
. Waste name: ETHYL CYANIDE (OR) PROPANENITRILE

. Waste code: P105
. Waste name: SODIUM AZIDE

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U001
. Waste name: ACETALDEHYDE (I) (OR) ETHANAL (I)

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U003
. Waste name: ACETONITRILE (I,T)

. Waste code: U004
. Waste name: ACETOPHENONE (OR) ETHANONE, 1-PHENYL-

. Waste code: U006
. Waste name: ACETYL CHLORIDE (C,R,T)

. Waste code: U007
. Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE

. Waste code: U008
. Waste name: 2-PROPENOIC ACID (I) (OR) ACRYLIC ACID (I)

. Waste code: U009
. Waste name: 2-PROPENENITRILE (OR) ACRYLONITRILE

. Waste code: U012
. Waste name: ANILINE (I,T) (OR) BENZENAMINE (I,T)

. Waste code: U013
. Waste name: Not Defined

. Waste code: U017
. Waste name: BENZAL CHLORIDE (OR) BENZENE, (DICHLOROMETHYL)-

. Waste code: U019
. Waste name: BENZENE (I,T)

. Waste code: U020
. Waste name: BENZENESULFONIC ACID CHLORIDE (C,R) (OR) BENZENESULFONYL CHLORIDE (C,R)

. Waste code: U021
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE (OR) BENZIDINE

. Waste code: U023
. Waste name: BENZENE, (TRICHLOROMETHYL)- (OR) BENZOTRICHLORIDE (C,R,T)

. Waste code: U028
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER (OR) DIETHYLHEXYL PHTHALATE

. Waste code: U031
. Waste name: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

. Waste code: U032
. Waste name: CALCIUM CHROMATE (OR) CHROMIC ACID H2CRO4, CALCIUM SALT

. Waste code: U033

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste name: CARBON OXYFLUORIDE (R,T) (OR) CARBONIC DIFLUORIDE

. Waste code: U037
. Waste name: BENZENE, CHLORO- (OR) CHLOROBENZENE

. Waste code: U039
. Waste name: P-CHLORO-M-CRESOL (OR) PHENOL, 4-CHLORO-3-METHYL-

. Waste code: U048
. Waste name: O-CHLOROPHENOL (OR) PHENOL, 2-CHLORO-

. Waste code: U052
. Waste name: CRESOL (CRESYLIC ACID) (OR) PHENOL, METHYL-

. Waste code: U053
. Waste name: 2-BUTENAL (OR) CROTONALDEHYDE

. Waste code: U054
. Waste name: Not Defined

. Waste code: U055
. Waste name: BENZENE, (1-METHYLETHYL)- (I) (OR) CUMENE (I)

. Waste code: U056
. Waste name: BENZENE, HEXAHYDRO- (I) (OR) CYCLOHEXANE (I)

. Waste code: U057
. Waste name: CYCLOHEXANONE (I)

. Waste code: U067
. Waste name: ETHANE, 1,2-DIBROMO- (OR) ETHYLENE DIBROMIDE

. Waste code: U069
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER (OR) DIBUTYL PHTHALATE

. Waste code: U070
. Waste name: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

. Waste code: U071
. Waste name: BENZENE, 1,3-DICHLORO- (OR) M-DICHLOROBENZENE

. Waste code: U072
. Waste name: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

. Waste code: U073
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO- (OR) 3,3'-DICHLOROBENZIDINE

. Waste code: U074
. Waste name: 1,4-DICHLORO-2-BUTENE (I,T) (OR) 2-BUTENE, 1,4-DICHLORO- (I,T)

. Waste code: U076
. Waste name: ETHANE, 1,1-DICHLORO- (OR) ETHYLIDENE DICHLORIDE

. Waste code: U077
. Waste name: ETHANE, 1,2-DICHLORO- (OR) ETHYLENE DICHLORIDE

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U078
. Waste name: 1,1-DICHLOROETHYLENE (OR) ETHENE, 1,1-DICHLORO-

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U081
. Waste name: 2,4-DICHLOROPHENOL (OR) PHENOL, 2,4-DICHLORO-

. Waste code: U082
. Waste name: 2,6-DICHLOROPHENOL (OR) PHENOL, 2,6-DICHLORO-

. Waste code: U088
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER (OR) DIETHYL PHTHALATE

. Waste code: U092
. Waste name: DIMETHYLAMINE (I) (OR) METHANAMINE, N-METHYL- (I)

. Waste code: U102
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER (OR) DIMETHYL PHTHALATE

. Waste code: U103
. Waste name: DIMETHYL SULFATE (OR) SULFURIC ACID, DIMETHYL ESTER

. Waste code: U104
. Waste name: Not Defined

. Waste code: U105
. Waste name: 2,4-DINITROTOLUENE (OR) BENZENE, 1-METHYL-2,4-DINITRO-

. Waste code: U106
. Waste name: 2,6-DINITROTOLUENE (OR) BENZENE, 2-METHYL-1,3-DINITRO-

. Waste code: U107
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER (OR) DI-N-OCTYL PHTHALATE

. Waste code: U108
. Waste name: 1,4-DIETHYLENEOXIDE (OR) 1,4-DIOXANE

. Waste code: U110
. Waste name: 1-PROPANIMINE, N-PROPYL-(I) (OR) DIPROPYLAMINE (I)

. Waste code: U112
. Waste name: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

. Waste code: U113
. Waste name: 2-PROPENOIC ACID, ETHYL ESTER (I) (OR) ETHYL ACRYLATE (I)

. Waste code: U115
. Waste name: ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)

. Waste code: U117
. Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

. Waste code: U118
. Waste name: 2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER (OR) ETHYL METHACRYLATE

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U119
. Waste name: ETHYL METHANESULFONATE (OR) METHANESULFONIC ACID, ETHYL ESTER

. Waste code: U122
. Waste name: FORMALDEHYDE

. Waste code: U123
. Waste name: FORMIC ACID (C,T)

. Waste code: U124
. Waste name: FURAN (I) (OR) FURFURAN (I)

. Waste code: U125
. Waste name: 2-FURANCARBOXALDEHYDE (I) (OR) FURFURAL (I)

. Waste code: U126
. Waste name: GLYCIDYLALDEHYDE (OR) OXIRANECARBOXYALDEHYDE

. Waste code: U127
. Waste name: BENZENE, HEXACHLORO- (OR) HEXACHLOROBENZENE

. Waste code: U128
. Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO- (OR) HEXACHLOROBUTADIENE

. Waste code: U130
. Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO- (OR) HEXACHLOROCYCLOPENTADIENE

. Waste code: U131
. Waste name: ETHANE, HEXACHLORO- (OR) HEXACHLOROETHANE

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U135
. Waste name: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

. Waste code: U140
. Waste name: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

. Waste code: U145
. Waste name: LEAD PHOSPHATE (OR) PHOSPHORIC ACID, LEAD(2+) SALT (2:3)

. Waste code: U147
. Waste name: 2,5-FURANDIONE (OR) MALEIC ANHYDRIDE

. Waste code: U149
. Waste name: MALONONITRILE (OR) PROPANEDINITRILE

. Waste code: U150
. Waste name: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

. Waste code: U151
. Waste name: MERCURY

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U152
. Waste name: 2-PROPENENITRILE, 2-METHYL- (I,T) (OR) METHACRYLONITRILE (I,T)

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U155
. Waste name: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)- (OR) METHAPYRILENE

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U160
. Waste name: 2-BUTANONE, PEROXIDE (R,T) (OR) METHYL ETHYL KETONE PEROXIDE (R,T)

. Waste code: U161
. Waste name: 4-METHYL-2-PENTANONE (I) (OR) METHYL ISOBUTYL KETONE (I) (OR) PENTANOL, 4-METHYL-

. Waste code: U162
. Waste name: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

. Waste code: U165
. Waste name: NAPHTHALENE

. Waste code: U167
. Waste name: 1-NAPTHALENAMINE (OR) ALPHA-NAPHTHYLAMINE

. Waste code: U168
. Waste name: 2-NAPTHALENAMINE (OR) BETA-NAPHTHYLAMINE

. Waste code: U169
. Waste name: BENZENE, NITRO- (OR) NITROBENZENE (I,T)

. Waste code: U170
. Waste name: P-NITROPHENOL (I,T) (OR) PHENOL, 4-NITRO-

. Waste code: U171
. Waste name: 2-NITROPROPANE (I,T) (OR) PROPANE, 2-NITRO- (I,T)

. Waste code: U183
. Waste name: BENZENE, PENTACHLORO- (OR) PENTACHLOROBENZENE

. Waste code: U184
. Waste name: ETHANE, PENTACHLORO- (OR) PENTACHLOROETHANE

. Waste code: U185
. Waste name: BENZENE, PENTACHLORONITRO- (OR) PENTACHLORONITROBENZENE (PCNB)

. Waste code: U186
. Waste name: 1,3-PENTADIENE (I) (OR) 1-METHYLBUTADIENE (I)

. Waste code: U187
. Waste name: ACETAMIDE, N-(4-ETHOXYPHENYL)- (OR) PHENACETIN

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U188
. Waste name: PHENOL

. Waste code: U190
. Waste name: 1,3-ISOBENZOFURANDIONE (OR) PHTHALIC ANHYDRIDE

. Waste code: U194
. Waste name: 1-PROPANAMINE (I,T) (OR) N-PROPYLAMINE (I,T)

. Waste code: U196
. Waste name: PYRIDINE

. Waste code: U201
. Waste name: 1,3-BENZENEDIOL (OR) RESORCINOL

. Waste code: U202
. Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS

. Waste code: U207
. Waste name: 1,2,4,5-TETRACHLOROBENZENE (OR) BENZENE, 1,2,4,5-TETRACHLORO-

. Waste code: U208
. Waste name: 1,1,1,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,1,2-TETRACHLORO-

. Waste code: U209
. Waste name: 1,1,2,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,2,2-TETRACHLORO-

. Waste code: U210
. Waste name: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: U212
. Waste name: Not Defined

. Waste code: U213
. Waste name: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

. Waste code: U218
. Waste name: ETHANETHIOAMIDE (OR) THIOACETAMIDE

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U221
. Waste name: BENZENEDIAMINE, AR-METHYL- (OR) TOLUENEDIAMINE

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

. Waste code: U225
. Waste name: BROMOFORM (OR) METHANE, TRIBROMO-

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U227
. Waste name: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

. Waste code: U228
. Waste name: ETHENE, TRICHLORO- (OR) TRICHLOROETHYLENE

. Waste code: U229
. Waste name: Not Defined

. Waste code: U230
. Waste name: Not Defined

. Waste code: U231
. Waste name: Not Defined

. Waste code: U232
. Waste name: Not Defined

. Waste code: U234
. Waste name: 1,3,5-TRINITROBENZENE (R,T) (OR) BENZENE, 1,3,5-TRINITRO-

. Waste code: U238
. Waste name: CARBAMIC ACID, ETHYL ESTER (OR) ETHYL CARBAMATE (URETHANE)

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 59607

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 529

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

SHERWIN WILLIAMS CO (Continued) **1000371369**

Amount (Lbs): 1159

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 6435

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 165

Waste code: D008
Waste name: LEAD
Amount (Lbs): 6435

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 61

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 57094

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 55935

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 55935

Corrective Action Summary:
Event date: 1989-07-06 00:00:00.0
Event: RFA COMPLETED-ASSESSMENT WAS A RFA

Event date: 1990-07-06 00:00:00.0
Event: DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY

Event date: 1991-06-06 00:00:00.0
Event: MISC. WORKPLAN SUBMITTED

Event date: 1991-09-27 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Event:	CA PRIORITIZATION-HIGH CA PRIORITY
Event date:	1992-09-28 00:00:00.0
Event:	ENFORCEMENT REFERRAL NONCOMPLIANCE
Event date:	1993-07-16 00:00:00.0
Event:	UNILATERAL ORDER-CIVIL COMPLAINT
Event date:	1994-03-31 00:00:00.0
Event:	CA PRIORITIZATION-HIGH CA PRIORITY
Event date:	1997-08-28 00:00:00.0
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-MORE INFORMATION NEEDED
Event date:	1997-08-28 00:00:00.0
Event:	RELEASE TO GW CONTROLLED DETERMINATION-MORE INFORMATION NEEDED
Event date:	1997-11-06 00:00:00.0
Event:	RFI IMPOSITION-FOCUSED DATA COLLECTION REQ STAB EVAL
Event date:	1998-03-04 00:00:00.0
Event:	INVESTIGATION WORKPLAN RECEIVED
Event date:	1998-03-05 00:00:00.0
Event:	INVESTIGATION WORKPLAN RECEIVED
Event date:	1998-03-26 00:00:00.0
Event:	MISC. WORKPLAN SUBMITTED
Event date:	1998-07-22 00:00:00.0
Event:	MISC. WORKPLAN SUBMITTED
Event date:	1998-10-28 00:00:00.0
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	1999-12-06 00:00:00.0
Event:	INVESTIGATION COMPLETE
Event date:	2001-07-20 00:00:00.0
Event:	FEDERAL ENFORCEMENT LEAD SITE
Event date:	2004-08-25 00:00:00.0
Event:	RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	2004-08-25 00:00:00.0
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	2007-01-22 00:00:00.0
Event:	REMEDY DECISION
Event date:	2012-08-23 00:00:00.0
Event:	INSTITUTIONAL CONTROLS ESTABLISHED-GOVERNMENTAL CONTROL
Event date:	2012-08-23 00:00:00.0
Event:	READY FOR ANTICIPATED USE DETERMINATION - READY FOR ANTICIPATED USE

SHERWIN WILLIAMS CO (Continued) **1000371369**

Event date: 2012-09-07 00:00:00.0
Event: REMEDY CONSTRUCTION-REMEDY CONSTRUCTED

Event date: 2013-08-16 00:00:00.0
Event: CMI PROGRESS REPORT DUE-RECEIVED

Event date: 2014-02-24 00:00:00.0
Event: CMI PROGRESS REPORT DUE-RECEIVED

Event date: 2014-07-11 00:00:00.0
Event: MISC. WORKPLAN SUBMITTED

Event date: 2014-09-12 00:00:00.0
Event: CMI PROGRESS REPORT DUE-RECEIVED

Event date: 2014-12-11 00:00:00.0
Event: CA PERFORMANCE STANDARDS ATTAINED - CONTROLS REQUIRED

Event date: 2016-01-29 00:00:00.0
Event: CMI PROGRESS REPORT DUE-RECEIVED

Event date: 2016-08-15 00:00:00.0
Event: CMI PROGRESS REPORT DUE-RECEIVED

Event date: 2019-09-20 00:00:00.0
Event: MISC. WORKPLAN SUBMITTED

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.197
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1995-08-18 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1995-11-13 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1994-09-22 00:00:00.0
Date achieved compliance: 1995-02-14 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1994-10-24 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1994-09-22 00:00:00.0
Date achieved compliance: 1995-02-14 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1994-10-24 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

SHERWIN WILLIAMS CO (Continued) **1000371369**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

SHERWIN WILLIAMS CO (Continued) **1000371369**

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 703.181

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1987-08-05 00:00:00.0
Date achieved compliance: 1988-02-05 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1987-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.111
Area of violation: Generators - General
Date violation determined: 1986-10-10 00:00:00.0
Date achieved compliance: 1987-02-26 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1986-12-23 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(d)(4)
Area of violation: TSD IS-Ground-Water Monitoring

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date violation determined: 1986-03-31 00:00:00.0
Date achieved compliance: 1986-08-07 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1986-04-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 1986-03-27 00:00:00.0
Date achieved compliance: 1986-07-18 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1986-04-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1986-03-27 00:00:00.0
Date achieved compliance: 1986-07-18 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1986-04-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1986-01-17 00:00:00.0
Date achieved compliance: 1994-10-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 1986-01-17 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 1994-10-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116
Area of violation: TSD - General Facility Standards
Date violation determined: 1986-01-17 00:00:00.0
Date achieved compliance: 1994-10-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-04-25 00:00:00.0
Date achieved compliance: 1986-05-05 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-06-18 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-04-25 00:00:00.0
Date achieved compliance: 1986-05-05 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-05-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-04-25 00:00:00.0
Date achieved compliance: 1985-07-24 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-05-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-04-25 00:00:00.0
Date achieved compliance: 1985-07-24 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-06-18 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-01-07 00:00:00.0
Date achieved compliance: 1985-06-04 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1985-02-05 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-01-07 00:00:00.0
Date achieved compliance: 1985-06-04 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1985-01-07 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-12-14 00:00:00.0
Date achieved compliance: 1984-12-20 00:00:00.0
Violation lead agency: State

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1984-12-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-09-19 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-09-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-09-19 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-11-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-09-19 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE SCHEDULE EVALUATION
Enforcement action date: 1984-11-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-08-17 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE SCHEDULE EVALUATION

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action date: 1984-08-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-08-17 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-09-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-08-09 00:00:00.0
Date achieved compliance: 1984-09-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-08-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-07-16 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1984-07-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-07-16 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-07-19 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-05-17 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-02-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-02-15 00:00:00.0
Date achieved compliance: 1985-01-24 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-07-30 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-02-15 00:00:00.0
Date achieved compliance: 1985-01-24 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-03-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: SR - 725.191
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1983-11-03 00:00:00.0
Date achieved compliance: 1984-04-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1983-12-01 00:00:00.0
Enf. disposition status: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1983-11-03 00:00:00.0
Date achieved compliance: 1984-04-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1983-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1983-11-03 00:00:00.0
Date achieved compliance: 1984-04-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1983-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1983-11-03 00:00:00.0
Date achieved compliance: 1984-04-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1983-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 2008-07-31 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-07-31 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-06-04 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-06-04 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-03-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-03-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2007-01-23 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2007-01-23 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 1995-08-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1995-03-27 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1995-03-27 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

SHERWIN WILLIAMS CO (Continued) **1000371369**

Evaluation date: 1995-03-27 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1995-03-27 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-09-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1995-02-14 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-04-20 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-04-20 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-04-20 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-04-20 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: Permits - Application
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Tank System Standards
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Manifest/Records/Reporting

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: Generators - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: Generators - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: LDR - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: LDR - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

SHERWIN WILLIAMS CO (Continued) **1000371369**

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: Permits - Application
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Tank System Standards
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1987-08-05 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Pre-transport
Date achieved compliance: 1988-02-05 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-10-10 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 1987-02-26 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-03-31 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1986-08-07 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-03-27 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1986-07-18 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - General
Date achieved compliance: 1985-07-24 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1985-07-24 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1986-05-05 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - General
Date achieved compliance: 1986-05-05 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-07 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1985-06-04 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-12-14 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1984-12-20 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-09-19 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1984-12-21 00:00:00.0
Evaluation lead agency: State

SHERWIN WILLIAMS CO (Continued) **1000371369**

Evaluation date:	1984-08-17 00:00:00.0
Evaluation:	WRITTEN INFORMAL
Area of violation:	Generators - General
Date achieved compliance:	1984-12-21 00:00:00.0
Evaluation lead agency:	State

Evaluation date:	1984-08-09 00:00:00.0
Evaluation:	WRITTEN INFORMAL
Area of violation:	Generators - General
Date achieved compliance:	1984-09-13 00:00:00.0
Evaluation lead agency:	State

Evaluation date:	1984-07-16 00:00:00.0
Evaluation:	WRITTEN INFORMAL
Area of violation:	Generators - General
Date achieved compliance:	1984-12-21 00:00:00.0
Evaluation lead agency:	State

Evaluation date:	1984-05-17 00:00:00.0
Evaluation:	WRITTEN INFORMAL
Area of violation:	Generators - General
Date achieved compliance:	1984-12-21 00:00:00.0
Evaluation lead agency:	State

Evaluation date:	1984-02-15 00:00:00.0
Evaluation:	FINAL 3008(A) COMPLIANCE ORDER
Area of violation:	Generators - General
Date achieved compliance:	1985-01-24 00:00:00.0
Evaluation lead agency:	EPA

Evaluation date:	1984-02-15 00:00:00.0
Evaluation:	INITIAL 3008(A) COMPLIANCE
Area of violation:	Generators - General
Date achieved compliance:	1985-01-24 00:00:00.0
Evaluation lead agency:	EPA

Evaluation date:	1983-11-03 00:00:00.0
Evaluation:	WRITTEN INFORMAL
Area of violation:	TSD IS-Ground-Water Monitoring
Date achieved compliance:	1984-04-06 00:00:00.0
Evaluation lead agency:	State

RCRA-LQG:

Date form received by agency:	2018-03-01 00:00:00.0
Facility name:	SHERWIN WILLIAMS CO
Facility address:	11541 S CHAMPLAIN AVE CHICAGO, IL 60628
EPA ID:	ILD005456439
Mailing address:	101 PROSPECT AVE NW-4M CLEVELAND, OH 44115-1075
Contact:	EDWARD CONNELL
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	216-515-4629
Contact email:	Not reported
EPA Region:	05
Land type:	Private

SHERWIN WILLIAMS CO (Continued) **1000371369**

Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 1888-01-01 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 1885-01-01 00:00:00.
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No

SHERWIN WILLIAMS CO (Continued) **1000371369**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 2016-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2013-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2012-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2012-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2010-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2008-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2007-12-31 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2007-08-14 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2006-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2004-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2002-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2000-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1998-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date form received by agency:1996-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:1994-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:1993-10-19 00:00:00.0
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Date form received by agency:1992-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:1991-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency:1990-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:1980-11-22 00:00:00.0
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency:1980-08-18 00:00:00.0
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D021
. Waste name: CHLOROBENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D037
. Waste name: PENTACHLOROPHENOL

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: F004
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F017
. Waste name: Not Defined

. Waste code: F018
. Waste name: Not Defined

. Waste code: K083
. Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: P003
. Waste name: 2-PROPENAL (OR) ACROLEIN

. Waste code: P005
. Waste name: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL

. Waste code: P008
. Waste name: 4-AMINOPYRIDINE (OR) 4-PYRIDINAMINE

. Waste code: P011
. Waste name: ARSENIC OXIDE AS2O5 (OR) ARSENIC PENTOXIDE

. Waste code: P014
. Waste name: BENZENETHIOL (OR) THIOPHENOL

. Waste code: P019
. Waste name: Not Defined

. Waste code: P022
. Waste name: CARBON DISULFIDE

. Waste code: P028
. Waste name: BENZENE, (CHLOROMETHYL)- (OR) BENZYL CHLORIDE

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: P029
. Waste name: COPPER CYANIDE (OR) COPPER CYANIDE CU(CN)

. Waste code: P030
. Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

. Waste code: P052
. Waste name: Not Defined

. Waste code: P053
. Waste name: Not Defined

. Waste code: P054
. Waste name: AZIRIDINE (OR) ETHYLENEIMINE

. Waste code: P087
. Waste name: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE

. Waste code: P090
. Waste name: Not Defined

. Waste code: P095
. Waste name: CARBONIC DICHLORIDE (OR) PHOSGENE

. Waste code: P100
. Waste name: Not Defined

. Waste code: P101
. Waste name: ETHYL CYANIDE (OR) PROPANENITRILE

. Waste code: P105
. Waste name: SODIUM AZIDE

. Waste code: U001
. Waste name: ACETALDEHYDE (I) (OR) ETHANAL (I)

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U003
. Waste name: ACETONITRILE (I,T)

. Waste code: U004
. Waste name: ACETOPHENONE (OR) ETHANONE, 1-PHENYL-

. Waste code: U006
. Waste name: ACETYL CHLORIDE (C,R,T)

. Waste code: U007
. Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE

. Waste code: U008
. Waste name: 2-PROPENOIC ACID (I) (OR) ACRYLIC ACID (I)

. Waste code: U009
. Waste name: 2-PROPENENITRILE (OR) ACRYLONITRILE

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U012
. Waste name: ANILINE (I,T) (OR) BENZENAMINE (I,T)

. Waste code: U013
. Waste name: Not Defined

. Waste code: U017
. Waste name: BENZAL CHLORIDE (OR) BENZENE, (DICHLOROMETHYL)-

. Waste code: U019
. Waste name: BENZENE (I,T)

. Waste code: U020
. Waste name: BENZENESULFONIC ACID CHLORIDE (C,R) (OR) BENZENESULFONYL CHLORIDE (C,R)

. Waste code: U021
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE (OR) BENZIDINE

. Waste code: U023
. Waste name: BENZENE, (TRICHLOROMETHYL)- (OR) BENZOTRICHLORIDE (C,R,T)

. Waste code: U028
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER (OR) DIETHYLHEXYL PHTHALATE

. Waste code: U031
. Waste name: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

. Waste code: U032
. Waste name: CALCIUM CHROMATE (OR) CHROMIC ACID H2CRO4, CALCIUM SALT

. Waste code: U033
. Waste name: CARBON OXYFLUORIDE (R,T) (OR) CARBONIC DIFLUORIDE

. Waste code: U037
. Waste name: BENZENE, CHLORO- (OR) CHLOROBENZENE

. Waste code: U039
. Waste name: P-CHLORO-M-CRESOL (OR) PHENOL, 4-CHLORO-3-METHYL-

. Waste code: U048
. Waste name: O-CHLOROPHENOL (OR) PHENOL, 2-CHLORO-

. Waste code: U052
. Waste name: CRESOL (CRESYLIC ACID) (OR) PHENOL, METHYL-

. Waste code: U053
. Waste name: 2-BUTENAL (OR) CROTONALDEHYDE

. Waste code: U054
. Waste name: Not Defined

. Waste code: U055
. Waste name: BENZENE, (1-METHYLETHYL)- (I) (OR) CUMENE (I)

. Waste code: U056

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste name: BENZENE, HEXAHYDRO- (I) (OR) CYCLOHEXANE (I)

. Waste code: U057
. Waste name: CYCLOHEXANONE (I)

. Waste code: U067
. Waste name: ETHANE, 1,2-DIBROMO- (OR) ETHYLENE DIBROMIDE

. Waste code: U069
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER (OR) DIBUTYL PHTHALATE

. Waste code: U070
. Waste name: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

. Waste code: U071
. Waste name: BENZENE, 1,3-DICHLORO- (OR) M-DICHLOROBENZENE

. Waste code: U072
. Waste name: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

. Waste code: U073
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO- (OR) 3,3'-DICHLOROBENZIDINE

. Waste code: U074
. Waste name: 1,4-DICHLORO-2-BUTENE (I,T) (OR) 2-BUTENE, 1,4-DICHLORO- (I,T)

. Waste code: U076
. Waste name: ETHANE, 1,1-DICHLORO- (OR) ETHYLIDENE DICHLORIDE

. Waste code: U077
. Waste name: ETHANE, 1,2-DICHLORO- (OR) ETHYLENE DICHLORIDE

. Waste code: U078
. Waste name: 1,1-DICHLOROETHYLENE (OR) ETHENE, 1,1-DICHLORO-

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U081
. Waste name: 2,4-DICHLOROPHENOL (OR) PHENOL, 2,4-DICHLORO-

. Waste code: U082
. Waste name: 2,6-DICHLOROPHENOL (OR) PHENOL, 2,6-DICHLORO-

. Waste code: U088
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER (OR) DIETHYL PHTHALATE

. Waste code: U092
. Waste name: DIMETHYLAMINE (I) (OR) METHANAMINE, N-METHYL- (I)

. Waste code: U102
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER (OR) DIMETHYL PHTHALATE

. Waste code: U103
. Waste name: DIMETHYL SULFATE (OR) SULFURIC ACID, DIMETHYL ESTER

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U104
. Waste name: Not Defined

. Waste code: U105
. Waste name: 2,4-DINITROTOLUENE (OR) BENZENE, 1-METHYL-2,4-DINITRO-

. Waste code: U106
. Waste name: 2,6-DINITROTOLUENE (OR) BENZENE, 2-METHYL-1,3-DINITRO-

. Waste code: U107
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER (OR) DI-N-OCTYL PHTHALATE

. Waste code: U108
. Waste name: 1,4-DIETHYLENEOXIDE (OR) 1,4-DIOXANE

. Waste code: U110
. Waste name: 1-PROPANIMINE, N-PROPYL-(I) (OR) DIPROPYLAMINE (I)

. Waste code: U112
. Waste name: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

. Waste code: U113
. Waste name: 2-PROPENOIC ACID, ETHYL ESTER (I) (OR) ETHYL ACRYLATE (I)

. Waste code: U115
. Waste name: ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)

. Waste code: U117
. Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

. Waste code: U118
. Waste name: 2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER (OR) ETHYL METHACRYLATE

. Waste code: U119
. Waste name: ETHYL METHANESULFONATE (OR) METHANESULFONIC ACID, ETHYL ESTER

. Waste code: U122
. Waste name: FORMALDEHYDE

. Waste code: U123
. Waste name: FORMIC ACID (C,T)

. Waste code: U124
. Waste name: FURAN (I) (OR) FURFURAN (I)

. Waste code: U125
. Waste name: 2-FURANCARBOXALDEHYDE (I) (OR) FURFURAL (I)

. Waste code: U126
. Waste name: GLYCIDYLALDEHYDE (OR) OXIRANECARBOXYALDEHYDE

. Waste code: U127
. Waste name: BENZENE, HEXACHLORO- (OR) HEXACHLOROBENZENE

. Waste code: U128
. Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO- (OR) HEXACHLOROBUTADIENE

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U130
. Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO- (OR) HEXACHLOROCYCLOPENTADIENE

. Waste code: U131
. Waste name: ETHANE, HEXACHLORO- (OR) HEXACHLOROETHANE

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U135
. Waste name: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

. Waste code: U140
. Waste name: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

. Waste code: U145
. Waste name: LEAD PHOSPHATE (OR) PHOSPHORIC ACID, LEAD(2+) SALT (2:3)

. Waste code: U147
. Waste name: 2,5-FURANDIONE (OR) MALEIC ANHYDRIDE

. Waste code: U149
. Waste name: MALONONITRILE (OR) PROPANEDINITRILE

. Waste code: U150
. Waste name: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

. Waste code: U151
. Waste name: MERCURY

. Waste code: U152
. Waste name: 2-PROPENENITRILE, 2-METHYL- (I,T) (OR) METHACRYLONITRILE (I,T)

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U155
. Waste name: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)- (OR) METHAPYRILENE

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U160
. Waste name: 2-BUTANONE, PEROXIDE (R,T) (OR) METHYL ETHYL KETONE PEROXIDE (R,T)

. Waste code: U161
. Waste name: 4-METHYL-2-PENTANONE (I) (OR) METHYL ISOBUTYL KETONE (I) (OR) PENTANOL, 4-METHYL-

. Waste code: U162
. Waste name: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U165
. Waste name: NAPHTHALENE

. Waste code: U167
. Waste name: 1-NAPTHALENAMINE (OR) ALPHA-NAPHTHYLAMINE

. Waste code: U168
. Waste name: 2-NAPTHALENAMINE (OR) BETA-NAPHTHYLAMINE

. Waste code: U169
. Waste name: BENZENE, NITRO- (OR) NITROBENZENE (I,T)

. Waste code: U170
. Waste name: P-NITROPHENOL (I,T) (OR) PHENOL, 4-NITRO-

. Waste code: U171
. Waste name: 2-NITROPROPANE (I,T) (OR) PROPANE, 2-NITRO- (I,T)

. Waste code: U183
. Waste name: BENZENE, PENTACHLORO- (OR) PENTACHLOROBENZENE

. Waste code: U184
. Waste name: ETHANE, PENTACHLORO- (OR) PENTACHLOROETHANE

. Waste code: U185
. Waste name: BENZENE, PENTACHLORONITRO- (OR) PENTACHLORONITROBENZENE (PCNB)

. Waste code: U186
. Waste name: 1,3-PENTADIENE (I) (OR) 1-METHYLBUTADIENE (I)

. Waste code: U187
. Waste name: ACETAMIDE, N-(4-ETHOXYPHENYL)- (OR) PHENACETIN

. Waste code: U188
. Waste name: PHENOL

. Waste code: U190
. Waste name: 1,3-ISOBENZOFURANDIONE (OR) PHTHALIC ANHYDRIDE

. Waste code: U194
. Waste name: 1-PROPANAMINE (I,T) (OR) N-PROPYLAMINE (I,T)

. Waste code: U196
. Waste name: PYRIDINE

. Waste code: U201
. Waste name: 1,3-BENZENEDIOL (OR) RESORCINOL

. Waste code: U202
. Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS

. Waste code: U207
. Waste name: 1,2,4,5-TETRACHLOROBENZENE (OR) BENZENE, 1,2,4,5-TETRACHLORO-

. Waste code: U208
. Waste name: 1,1,1,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,1,2-TETRACHLORO-

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U209
. Waste name: 1,1,2,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,2,2-TETRACHLORO-

. Waste code: U210
. Waste name: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: U212
. Waste name: Not Defined

. Waste code: U213
. Waste name: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

. Waste code: U218
. Waste name: ETHANETHIOAMIDE (OR) THIOACETAMIDE

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U221
. Waste name: BENZENEDIAMINE, AR-METHYL- (OR) TOLUENEDIAMINE

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

. Waste code: U225
. Waste name: BROMOFORM (OR) METHANE, TRIBROMO-

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

. Waste code: U227
. Waste name: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

. Waste code: U228
. Waste name: ETHENE, TRICHLORO- (OR) TRICHLOROETHYLENE

. Waste code: U229
. Waste name: Not Defined

. Waste code: U230
. Waste name: Not Defined

. Waste code: U231
. Waste name: Not Defined

. Waste code: U232
. Waste name: Not Defined

. Waste code: U234
. Waste name: 1,3,5-TRINITROBENZENE (R,T) (OR) BENZENE, 1,3,5-TRINITRO-

. Waste code: U238
. Waste name: CARBAMIC ACID, ETHYL ESTER (OR) ETHYL CARBAMATE (URETHANE)

SHERWIN WILLIAMS CO (Continued) **1000371369**

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 59607

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 529

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs): 1159

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 6435

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 165

Waste code: D008
Waste name: LEAD
Amount (Lbs): 6435

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 61

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 57094

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

SHERWIN WILLIAMS CO (Continued) **1000371369**

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 55935

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 55935

Corrective Action Summary:

Event date: 1989-07-06 00:00:00.0
Event: RFA COMPLETED-ASSESSMENT WAS A RFA

Event date: 1990-07-06 00:00:00.0
Event: DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY

Event date: 1991-06-06 00:00:00.0
Event: MISC. WORKPLAN SUBMITTED

Event date: 1991-09-27 00:00:00.0
Event: CA PRIORITIZATION-HIGH CA PRIORITY

Event date: 1992-09-28 00:00:00.0
Event: ENFORCEMENT REFERRAL NONCOMPLIANCE

Event date: 1993-07-16 00:00:00.0
Event: UNILATERAL ORDER-CIVIL COMPLAINT

Event date: 1994-03-31 00:00:00.0
Event: CA PRIORITIZATION-HIGH CA PRIORITY

Event date: 1997-08-28 00:00:00.0
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-MORE INFORMATION NEEDED

Event date: 1997-08-28 00:00:00.0
Event: RELEASE TO GW CONTROLLED DETERMINATION-MORE INFORMATION NEEDED

Event date: 1997-11-06 00:00:00.0
Event: RFI IMPOSITION-FOCUSED DATA COLLECTION REQ STAB EVAL

Event date: 1998-03-04 00:00:00.0
Event: INVESTIGATION WORKPLAN RECEIVED

Event date: 1998-03-05 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Event:	INVESTIGATION WORKPLAN RECEIVED
Event date:	1998-03-26 00:00:00.0
Event:	MISC. WORKPLAN SUBMITTED
Event date:	1998-07-22 00:00:00.0
Event:	MISC. WORKPLAN SUBMITTED
Event date:	1998-10-28 00:00:00.0
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	1999-12-06 00:00:00.0
Event:	INVESTIGATION COMPLETE
Event date:	2001-07-20 00:00:00.0
Event:	FEDERAL ENFORCEMENT LEAD SITE
Event date:	2004-08-25 00:00:00.0
Event:	RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	2004-08-25 00:00:00.0
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	2007-01-22 00:00:00.0
Event:	REMEDY DECISION
Event date:	2012-08-23 00:00:00.0
Event:	INSTITUTIONAL CONTROLS ESTABLISHED-GOVERNMENTAL CONTROL
Event date:	2012-08-23 00:00:00.0
Event:	READY FOR ANTICIPATED USE DETERMINATION - READY FOR ANTICIPATED USE
Event date:	2012-09-07 00:00:00.0
Event:	REMEDY CONSTRUCTION-REMEDY CONSTRUCTED
Event date:	2013-08-16 00:00:00.0
Event:	CMI PROGRESS REPORT DUE-RECEIVED
Event date:	2014-02-24 00:00:00.0
Event:	CMI PROGRESS REPORT DUE-RECEIVED
Event date:	2014-07-11 00:00:00.0
Event:	MISC. WORKPLAN SUBMITTED
Event date:	2014-09-12 00:00:00.0
Event:	CMI PROGRESS REPORT DUE-RECEIVED
Event date:	2014-12-11 00:00:00.0
Event:	CA PERFORMANCE STANDARDS ATTAINED - CONTROLS REQUIRED
Event date:	2016-01-29 00:00:00.0
Event:	CMI PROGRESS REPORT DUE-RECEIVED
Event date:	2016-08-15 00:00:00.0
Event:	CMI PROGRESS REPORT DUE-RECEIVED

SHERWIN WILLIAMS CO (Continued) **1000371369**

Event date: 2019-09-20 00:00:00.0
Event: MISC. WORKPLAN SUBMITTED

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 2007-01-23 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2008-04-09 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Regulation violated: SR - 724.197
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1995-08-18 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1995-11-13 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1994-09-22 00:00:00.0
Date achieved compliance: 1995-02-14 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1994-10-24 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1994-09-22 00:00:00.0
Date achieved compliance: 1995-02-14 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1994-10-24 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.295

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: TSD - Tank System Standards
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 1992-02-14 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

SHERWIN WILLIAMS CO (Continued) **1000371369**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1997-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1992-02-14 00:00:00.0
Date achieved compliance: 1997-11-06 00:00:00.0
Violation lead agency: EPA
Enforcement action: CASE DEVELOPMENT INSPECTION
Enforcement action date: 1993-07-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1987-08-05 00:00:00.0
Date achieved compliance: 1988-02-05 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1987-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.111
Area of violation: Generators - General
Date violation determined: 1986-10-10 00:00:00.0
Date achieved compliance: 1987-02-26 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1986-12-23 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(d)(4)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1986-03-31 00:00:00.0
Date achieved compliance: 1986-08-07 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1986-04-03 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 1986-03-27 00:00:00.0
Date achieved compliance: 1986-07-18 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1986-04-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 1986-03-27 00:00:00.0
Date achieved compliance: 1986-07-18 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1986-04-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1986-01-17 00:00:00.0
Date achieved compliance: 1994-10-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 1986-01-17 00:00:00.0
Date achieved compliance: 1994-10-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116
Area of violation: TSD - General Facility Standards
Date violation determined: 1986-01-17 00:00:00.0
Date achieved compliance: 1994-10-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-04-25 00:00:00.0
Date achieved compliance: 1986-05-05 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-06-18 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-04-25 00:00:00.0
Date achieved compliance: 1986-05-05 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-05-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-04-25 00:00:00.0
Date achieved compliance: 1985-07-24 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-05-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-04-25 00:00:00.0
Date achieved compliance: 1985-07-24 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-06-18 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: Generators - General
Date violation determined: 1985-01-07 00:00:00.0
Date achieved compliance: 1985-06-04 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1985-02-05 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1985-01-07 00:00:00.0
Date achieved compliance: 1985-06-04 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1985-01-07 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-12-14 00:00:00.0
Date achieved compliance: 1984-12-20 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1984-12-10 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-09-19 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-09-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date violation determined: 1984-09-19 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-11-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-09-19 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE SCHEDULE EVALUATION
Enforcement action date: 1984-11-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-08-17 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE SCHEDULE EVALUATION
Enforcement action date: 1984-08-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-08-17 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-09-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-08-09 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 1984-09-13 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1984-08-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-07-16 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: 1984-07-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-07-16 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-07-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-05-17 00:00:00.0
Date achieved compliance: 1984-12-21 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-02-15 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-02-15 00:00:00.0
Date achieved compliance: 1985-01-24 00:00:00.0

SHERWIN WILLIAMS CO (Continued) **1000371369**

Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-07-30 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1984-02-15 00:00:00.0
Date achieved compliance: 1985-01-24 00:00:00.0
Violation lead agency: EPA
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1984-03-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: SR - 725.191
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1983-11-03 00:00:00.0
Date achieved compliance: 1984-04-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1983-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1983-11-03 00:00:00.0
Date achieved compliance: 1984-04-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1983-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1983-11-03 00:00:00.0
Date achieved compliance: 1984-04-06 00:00:00.0
Violation lead agency: State

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1983-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 1983-11-03 00:00:00.0
Date achieved compliance: 1984-04-06 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1983-12-01 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 2008-07-31 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-07-31 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-06-04 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-06-04 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-03-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2008-03-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Federal or State Statute

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2007-01-23 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 2007-01-23 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 1995-08-18 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1995-03-27 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1995-03-27 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1995-03-27 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1995-03-27 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-09-22 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1995-02-14 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-04-20 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

SHERWIN WILLIAMS CO (Continued) **1000371369**

Evaluation date: 1994-04-20 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-04-20 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-04-20 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: Permits - Application
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Tank System Standards
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: Generators - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: Generators - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: LDR - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Container Use and Management
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: LDR - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: Permits - Application
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Tank System Standards
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

SHERWIN WILLIAMS CO (Continued) **1000371369**

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1992-02-14 00:00:00.0
Evaluation: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD - General
Date achieved compliance: 1997-11-06 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1987-08-05 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - Pre-transport
Date achieved compliance: 1988-02-05 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-10-10 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1987-02-26 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-03-31 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1986-08-07 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-03-27 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1986-07-18 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - General
Date achieved compliance: 1985-07-24 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 1985-07-24 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-25 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1986-05-05 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-04-25 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - General
Date achieved compliance: 1986-05-05 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-01-07 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1985-06-04 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-12-14 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1984-12-20 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-09-19 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1984-12-21 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-08-17 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1984-12-21 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-08-09 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1984-09-13 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-07-16 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1984-12-21 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1984-05-17 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1984-12-21 00:00:00.0
Evaluation lead agency: State

SHERWIN WILLIAMS CO (Continued) **1000371369**

Evaluation date: 1984-02-15 00:00:00.0
Evaluation: FINAL 3008(A) COMPLIANCE ORDER
Area of violation: Generators - General
Date achieved compliance: 1985-01-24 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1984-02-15 00:00:00.0
Evaluation: INITIAL 3008(A) COMPLIANCE
Area of violation: Generators - General
Date achieved compliance: 1985-01-24 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1983-11-03 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 1984-04-06 00:00:00.0
Evaluation lead agency: State

US INST CONTROLS:
Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
Address 2: Not reported
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
Site ID: Not reported
Action Name: Not reported
Action ID: Not reported
Operable Unit: Not reported
Action Completion Date: 01/01/1900
Actual Date: 08/23/2012
Contaminated Media: Not reported
Institutional Control: Not reported
Event Code: CA772GC
Contact Name: EDWARD CONNELL
Contact Telephone: 216-515-4629
Event: INSTITUTIONAL CONTROLS ESTABLISHED-GOVERNMENTAL CONTROL

US FIN ASSUR:
Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
County: Not reported
Mechanism type: B
Mechanism Type Description: SURETY BOND GUARANTEEING PAYMENTS TO A TRUST FUND
Cost estimate: 1133500
Face value: 1193000
Effective date: 2016-03-30 00:00:00
Provider: TRAVELERS CASUALTY AND SURETY COMPANY
EPA region: 5

Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
County: Not reported
Mechanism type: B

SHERWIN WILLIAMS CO (Continued) **1000371369**

Mechanism Type Description: SURETY BOND GUARANTEEING PAYMENTS TO A TRUST FUND
Cost estimate: 1074000
Face value: 1074000
Effective date: 2018-03-30 00:00:00
Provider: TRAVELERS CASUALTY
EPA region: 5

Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
County: Not reported
Mechanism type: B
Mechanism Type Description: SURETY BOND GUARANTEEING PAYMENTS TO A TRUST FUND
Cost estimate: 1193000
Face value: 1193000
Effective date: 2016-03-30 00:00:00
Provider: TRAVELERS CASUALTY AND SURETY COMPANY
EPA region: 5

Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
County: Not reported
Mechanism type: C
Mechanism Type Description: CORPORATE GUARANTEE
Cost estimate: 1525000
Face value: 1312000
Effective date: 2014-03-28 00:00:00
Provider: THE SHERWIN COMPANY
EPA region: 5

Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
County: Not reported
Mechanism type: C
Mechanism Type Description: CORPORATE GUARANTEE
Cost estimate: 1525000
Face value: 0
Effective date: 2013-03-28 00:00:00
Provider: THE SHERWIN-WILLIAMS COMPANY
EPA region: 5

Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
County: Not reported
Mechanism type: L
Mechanism Type Description: LETTER OF CREDIT
Cost estimate: 1252000
Face value: 1252000
Effective date: 2015-03-27 00:00:00
Provider: PNC BANK

SHERWIN WILLIAMS CO (Continued) **1000371369**

EPA region: 5

Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
County: Not reported
Mechanism type: C
Mechanism Type Description: CORPORATE GUARANTEE
Cost estimate: 560656
Face value: 31463000
Effective date: 2012-03-28 00:00:00
Provider: SHERWIN-WILLIAMS
EPA region: 5

Name: SHERWIN WILLIAMS CO
Address: 11541 S CHAMPLAIN AVE
City,State,Zip: CHICAGO, IL 60628
EPA ID: ILD005456439
County: Not reported
Mechanism type: B
Mechanism Type Description: SURETY BOND GUARANTEEING PAYMENTS TO A TRUST FUND
Cost estimate: 1133500
Face value: 1133500
Effective date: 2017-03-30 00:00:00
Provider: TRAVELERS CASUALTY
EPA region: 5

2020 COR ACTION:
EPA ID: ILD005456439
Region: 5
Action: Remedy Construction

RAATS:
Entry No: 1
Facility ID: ILD005456439
Type: Not reported
Docket No: 84-R-059
Region: 05
Issue Date: 12/19/1984
Final Date: 07/27/1984
Status: Consent Agreement/Final Order
Additional: Not reported
Action ID: 1027
Action: 3008 (A)
Violation No: Not reported
Viol No Cited: 1 265.143
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: 9,500.00
Final Penalty: 8,000.00
Total Prop. Penalty: 9,500.00
Comments: NO COMPLAINT FOUND. LISTED INFORMATION FROM CAFO.

Entry No: 1
Facility ID: ILD005456439

SHERWIN WILLIAMS CO (Continued) **1000371369**

Type:	Not reported
Docket No:	84-R-059
Region:	05
Issue Date:	12/19/1984
Final Date:	07/27/1984
Status:	Consent Agreement/Final Order
Additional:	Not reported
Action ID:	1027
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	2 265.147
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	8,000.00
Total Prop. Penalty:	9,500.00
Comments:	NO COMPLAINT FOUND. LISTED INFORMATION FROM CAFO.

Entry No:	1
Facility ID:	ILD005456439
Type:	Not reported
Docket No:	84-R-059
Region:	05
Issue Date:	12/19/1984
Final Date:	07/27/1984
Status:	Consent Agreement/Final Order
Additional:	Not reported
Action ID:	1027
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	1 265.143
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	9,500.00
Final Penalty:	8,000.00
Total Prop. Penalty:	9,500.00
Comments:	NO COMPLAINT FOUND. LISTED INFORMATION FROM CAFO.

Entry No:	1
Facility ID:	ILD005456439
Type:	Not reported
Docket No:	84-R-059
Region:	05
Issue Date:	12/19/1984
Final Date:	07/27/1984
Status:	Consent Agreement/Final Order
Additional:	Not reported
Action ID:	1027
Action:	3008 (A)
Violation No:	Not reported
Viol No Cited:	2 265.147
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	8,000.00
Total Prop. Penalty:	9,500.00
Comments:	NO COMPLAINT FOUND. LISTED INFORMATION FROM CAFO.

AU292 **SHERWIN WILLIAMS CO.** **IL LUST** **S105537690**
NE **11541 SOUTH CHAMPLAIN AVE.** **N/A**
1/4-1/2 **CHICAGO, IL 60628**
0.377 mi.
1989 ft. **Site 2 of 3 in cluster AU**

Actual:
589 ft.

Focus Map:
6

LUST:

Name:	SHERWIN-WILLIAMS
Address:	11541 SOUTH CHAMPLAIN
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20011967
IL EPA Id:	316500003
Product:	Gasoline
IEMA Date:	2001-11-28
Project Manager:	McCain
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Sherwyn-Williams
PRP Contact:	Paul Barding
PRP Address:	549 East 115th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7738213102
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2001-12-10
45 Report Received:	2002-03-04
NFA/NFR Letter:	**2002-06-14**
NFR Date Recorded:	2002-07-10
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

Name:	SHERWIN WILLIAMS CO.
Address:	11541 SOUTH CHAMPLAIN AVE.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	922759
IL EPA Id:	316500003
Product:	Non-Petroleum Product
IEMA Date:	1992-09-30
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	Sherwin Williams Co.
PRP Contact:	Larry Mencin
PRP Address:	101 Prospect Ave., Northwest
PRP City,St,Zip:	Cleveland, OH 44115-1075
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1992-10-19
45 Report Received:	1992-11-12
NFA/NFR Letter:	**2013-08-12**
NFR Date Recorded:	2013-09-12
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AU293 NE 1/4-1/2 0.377 mi. 1989 ft. | **SHERWIN WILLIAMS COMPANY, THE**
11541 SOUTH CHAMPLAIN AVENUE
CHICAGO, IL 60628

SEMS **1015731030**
ECHO **ILD005456439**

Site 3 of 3 in cluster AU

Actual: 589 ft.

Focus Map: 6

SEMS:

Site ID:	0500202
EPA ID:	ILD005456439
Name:	SHERWIN WILLIAMS COMPANY, THE
Address:	11541 SOUTH CHAMPLAIN AVENUE
Address 2:	Not reported
City,State,Zip:	CHICAGO, IL 60628
Cong District:	01
FIPS Code:	17031
Latitude:	Not reported
Longitude:	Not reported
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Detail:

Region:	05
Site ID:	0500202
EPA ID:	ILD005456439
Site Name:	SHERWIN WILLIAMS COMPANY, THE
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	Not reported
Finish Date:	8/1/1980
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500202
EPA ID:	ILD005456439
Site Name:	SHERWIN WILLIAMS COMPANY, THE
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	1986-06-11 04:00:00
Finish Date:	6/11/1986
Qual:	H
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500202
EPA ID:	ILD005456439
Site Name:	SHERWIN WILLIAMS COMPANY, THE
NPL:	N
FF:	N
OU:	00
Action Code:	OO

SHERWIN WILLIAMS COMPANY, THE (Continued) **1015731030**

Action Name:	SITE REASS
SEQ:	1
Start Date:	2016-03-30 04:00:00
Finish Date:	3/7/2017
Qual:	N
Current Action Lead:	St Perf
Region:	05
Site ID:	0500202
EPA ID:	ILD005456439
Site Name:	SHERWIN WILLIAMS COMPANY, THE
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1984-09-01 05:00:00
Finish Date:	9/1/1984
Qual:	L
Current Action Lead:	St Perf

ECHO:

Envid:	1015731030
Registry ID:	110000434913
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110000434913
Name:	SHERWIN WILLIAMS COMPANY
Address:	11541 SOUTH CHAMPLAIN AVENUE
City,State,Zip:	CHICAGO, IL 60628

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294 West 1/4-1/2 0.386 mi. 2036 ft. **HARDY CORP** **711 W 103RD ST** **CHICAGO, IL 60628** **IL LUST** **RCRA NonGen / NLR** **FINDS** **ECHO** **1000979049** **IL0000958884**

Actual: 606 ft.

Focus Map: 3

LUST:

Name:	HARDY CORP.
Address:	711 WEST 103RD ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	942827
IL EPA Id:	316495065
Product:	Gasoline
IEMA Date:	1994-12-15
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	Hardy Corp.
PRP Contact:	William Hardy
PRP Address:	711 West 103rd St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported

HARDY CORP (Continued) **1000979049**

20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

RCRA NonGen / NLR:

Date form received by agency:	2019-12-13 00:00:00.0
Facility name:	HARDY CORP
Facility address:	711 W 103RD ST CHICAGO, IL 60628
EPA ID:	IL0000958884
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	HARDY CORP
Owner/operator address:	711 W 103RD ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	312-779-6600
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	Not reported
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

HARDY CORP (Continued) **1000979049**

Date form received by agency:1994-11-30 00:00:00.0
Site name: HARDY CORP
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:
Registry ID: 110005806725
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110005806725

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000979049
Registry ID: 110005806725
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005806725
Name: HARDY CORP
Address: 711 W 103RD ST
City,State,Zip: CHICAGO, IL 60628

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295 ENE 1/4-1/2 0.399 mi. 2105 ft. **PALUMBO EXCAVATING** **IL NIPC** **S100789998**
N/A
CHICAGO, IL

Actual: 592 ft.

Focus Map: 10

296 SW 1/4-1/2 0.409 mi. 2159 ft. | **SHERWIN WILLIAMS PAINT COMPANY**
549 115TH STREET
CHICAGO, IL 60628 | **IL LUST**
IL SPILLS
IL ASBESTOS | **S109167302**
N/A

Actual: 615 ft.

Focus Map: 5

LUST:

Name:	SHERWIN WILLIAMS PAINT COMPANY
Address:	549 115TH STREET
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20080830
IL EPA Id:	316495039
Product:	Fuel Oil
IEMA Date:	2008-06-11
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Sherwin Williams Paint Company
PRP Contact:	Gordon Kuntz
PRP Address:	101 Prospect Avenue NW
PRP City,St,Zip:	Cleveland, OH 44115
PRP Phone:	2165662889
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	2008-07-22
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	2008-07-22
Non-Lust LR Date:	Not reported

SPILLS:

Name:	Not reported
City,State,Zip:	CHICAGO, IL
Incident ID:	20080830
Incident Date:	Not reported
Date Received:	06/11/2008
Lust Ind:	Yes
Facility Address:	549 115TH ST
Facility City:	CHICAGO
PRP Name:	SHERWIN WILLIAMS
AC:	Not reported
Source Table:	dbo_OCIN_INCIDENTCUR

ASBESTOS:

Site ID:	031600GBL
Name:	SHERWIN WILLIAMS FACILITY (TECHNICAL CENTER)
Address:	549 115TH ST
City,State,Zip:	CHICAGO, IL
Notification Type:	Original
Received Date:	04/11/2019
Postmark Date:	04/04/2019
Start Date:	Not reported
End Date:	Not reported
Resubmission Date:	Not reported
Pipe AMT:	Not reported

SHERWIN WILLIAMS PAINT COMPANY (Continued) **S109167302**

SA AMT:	Not reported
OFC AMT:	Not reported
Type:	Renovation
Fee Amt :	$150.00
Fee Payment Method:	Check
Check # or EPAY code. #:	43281
Fee Comment:	correct-HS
Additional Property:	Not reported
Asbestos Contractor Name:	EHC Industries, Inc
Demo Contractor Name:	Not reported
Asbestos Y/N:	Yes
Demo Order Gov Y/N:	No
Emerg. Reno Y/N:	No
Compliance Review Y/N:	Yes
Compliance Initials:	HS
Compliance Review Comments:	NFA. 4/15/19

Site ID:	031600GBL
Name:	SHERWIN WILLIAMS FACILITY (PAINT PLANT 3RD FL)
Address:	549 115TH ST
City,State,Zip:	CHICAGO, IL
Notification Type:	Original
Received Date:	04/11/2019
Postmark Date:	04/04/2019
Start Date:	Not reported
End Date:	Not reported
Resubmission Date:	Not reported
Pipe AMT:	Not reported
SA AMT:	Not reported
OFC AMT:	Not reported
Type:	Renovation
Fee Amt :	$150.00
Fee Payment Method:	Check
Check # or EPAY code. #:	43280
Fee Comment:	correct-HS
Additional Property:	Not reported
Asbestos Contractor Name:	EHC Industries, Inc
Demo Contractor Name:	Not reported
Asbestos Y/N:	Yes
Demo Order Gov Y/N:	No
Emerg. Reno Y/N:	No
Compliance Review Y/N:	Yes
Compliance Initials:	HS
Compliance Review Comments:	NFA. 4/15/19

Site ID:	031600GBL
Name:	SHERWIN WILLIAMS FACILITY
Address:	549 115TH ST
City,State,Zip:	CHICAGO, IL
Notification Type:	Revision
Received Date:	07/05/2019
Postmark Date:	07/02/2019
Start Date:	Not reported
End Date:	Not reported
Resubmission Date:	Not reported
Pipe AMT:	Not reported
SA AMT:	Not reported

SHERWIN WILLIAMS PAINT COMPANY (Continued) **S109167302**

OFC AMT:	Not reported
Type:	Renovation
Fee Amt :	Not reported
Fee Payment Method:	Not reported
Check # or EPAY code. #:	Not reported
Fee Comment:	Not reported
Additional Property:	Not reported
Asbestos Contractor Name:	EHC Industries, Inc
Demo Contractor Name:	Not reported
Asbestos Y/N:	Yes
Demo Order Gov Y/N:	No
Emerg. Reno Y/N:	No
Compliance Review Y/N:	Yes
Compliance Initials:	HS
Compliance Review Comments:	Notice fine but no check if revision submitted timely. 07/09/19

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297 **SHERWIN-WILLIAMS COMPANY BOILERHOUSE COMPLE** **IL ENG CONTROLS** **S111678029**
NE **603 EAST KENSINGTON AVENUE** **IL INST CONTROL** **N/A**
1/4-1/2 **CHICAGO, IL 60628** **IL SRP**
0.420 mi.
2220 ft.

Actual:
590 ft.

Focus Map:
6

ENGINEERING CONTROLS:

Illinois Epa Id:	316500003
NFR Letter:	03/05/2013
Date NFR Recorded:	03/26/2013
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Gordon Kuntz
RA Company:	The Sherwin-Williams Company
RA Address:	101 Prospect Avenue, NW
RA City,St,Zip:	Cleveland, OH 44115
Worker Caution:	Yes
Acres:	2.87
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	316500003
NFR Letter:	03/05/2013
Date NFR Recorded:	03/26/2013
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Gordon Kuntz
RA Company:	The Sherwin-Williams Company
RA Address:	101 Prospect Avenue, NW
RA City,St,Zip:	Cleveland, OH 44115
Worker Caution:	Yes

SHERWIN-WILLIAMS COMPANY BOILERHOUSE COMPLE (Continued) **S111678029**

Acres:	2.87
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	316500003
US EPA Id:	ILD005456439
Longitude:	-87.608151
Latitude:	41.683506
Contact Name:	Gordon Kuntz
Contact Address:	101 Prospect Avenue, NW
Contact City,St,Zip:	Cleveland, OH 44115
Date Enrolled:	02/21/2012
Point Of Contact:	Jennifer Troast
Consultant Company:	Weston Solutions
Consultant Address:	750 East Bunker Court
Consultant City,St,Zip:	Vernon Hills, IL 60061
Proj Mgr Assigned:	Todd Hall
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	The Sherwin-Williams Company

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Gordon Kuntz
Remediation Applicant Company:	The Sherwin-Williams Company
Remediation Applicant Address:	101 Prospect Avenue, NW
Remediation Applicant City,St,Zip:	Cleveland, OH 44115
Illinois EPA:	316500003
Site Name:	Sherwin-Williams Company Boilerhouse Comple
NFR Letter:	2013-03-05
NFR Letter Date Recorded:	2013-03-26
Comprehensive/Focused:	Comprehensive

SHERWIN-WILLIAMS COMPANY BOILERHOUSE COMPLE (Continued) **S111678029**

Worker Caution: Y
Acres: 2.87

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298 NE 1/4-1/2 0.459 mi. 2426 ft. **CHICAGO FAMILY HEALTH CENTER**
556-580 EAST 115TH STREET
CHICAGO, IL 60628

IL INST CONTROL **S113248890**
IL SRP **N/A**

Actual: 590 ft.

Focus Map: 6

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	316505067
NFR Letter:	11/25/2013
Date NFR Recorded:	12/20/2013
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Warren Brodine
RA Company:	Chicago Family Health Center
RA Address:	9119 South Exchange Avenue
RA City,St,Zip:	Chicago, IL 60617
Worker Caution:	No
Acres:	0.656
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	316505067
US EPA Id:	Not reported
Longitude:	-87.608802
Latitude:	41.685713
Contact Name:	Warren Brodine
Contact Address:	9119 South Exchange Avenue
Contact City,St,Zip:	Chicago, IL 60617
Date Enrolled:	02/13/2013
Point Of Contact:	Jessica Madsen
Consultant Company:	K-Plus Engineering
Consultant Address:	15 Spinning Wheel Road
Consultant City,St,Zip:	Hinsdale, IL 60521
Proj Mgr Assigned:	Tammy Smith
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Chicago Family Health Center

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No

CHICAGO FAMILY HEALTH CENTER (Continued) **S113248890**

Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Warren Brodine
Remediation Applicant Company:	Chicago Family Health Center
Remediation Applicant Address:	9119 South Exchange Avenue
Remediation Applicant City,St,Zip:	Chicago, IL 60617
Illinois EPA:	316505067
Site Name:	Chicago Family Health Center
NFR Letter:	2013-11-25
NFR Letter Date Recorded:	2013-12-20
Comprehensive/Focused:	Focused
Worker Caution:	N
Acres:	0.656

AV299 **ROSELAND MARATHON** **IL LUST** **U001141893**
NNE **2 WEST 111TH STREET** **IL UST** **N/A**
1/4-1/2 **CHICAGO, IL 60628**
0.461 mi.
2432 ft. **Site 1 of 2 in cluster AV**

Actual:
609 ft.

Focus Map:
6

LUST:

Name:	BP PRODUCTS NORTH AMERICA
Address:	2 WEST 111TH STREET
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20080184
IL EPA Id:	316495042
Product:	Unleaded Gas
IEMA Date:	2008-02-07
Project Manager:	Kaiser
Project Manager Phone:	(217) 524-4650
Email:	Karl.Kaiser@illinois.gov
PRP Name:	Zahir, Mohammed
PRP Contact:	Mohammed Zahir
PRP Address:	2 West 111th Street
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	6302351947
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2008-02-29
45 Report Received:	2008-03-26
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

UST:

ROSELAND MARATHON (Continued) **U001141893**

Name:	ROSELAND MARATHON
Address:	2 WEST 111TH STREET
City:	CHICAGO
Zip:	60628
Facility ID:	2023171
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Id:	U0030411
Owner Name:	Mohammed Zahir
Owner Address:	2 W. 111th Street
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Status:	**Currently in use**
Tank Capacity:	10000
Tank Substance:	Gasoline - Premium
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**V004066**
Green Tag Issue Date:	**3/19/2020**
Green Tag Expire Date:	**12/31/2022**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	3/11/2020
Motor Fuel Permit Expiration Date:	12/31/2022
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	08-0184
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	2
Tank Status:	**Currently in use**
Tank Capacity:	10000
Tank Substance:	Gasoline - Regular
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**V004066**
Green Tag Issue Date:	**3/19/2020**
Green Tag Expire Date:	**12/31/2022**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	3/11/2020
Motor Fuel Permit Expiration Date:	12/31/2022
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A

ROSELAND MARATHON (Continued) **U001141893**

Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Currently in use**
Tank Capacity:	12000
Tank Substance:	Gasoline - Regular
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**V004066**
Green Tag Issue Date:	**3/19/2020**
Green Tag Expire Date:	**12/31/2022**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	3/11/2020
Motor Fuel Permit Expiration Date:	12/31/2022
MOTOR FUEL TYPE:	SelfSrv
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Corrosion Prot - Piping
Equipment:	Fiberglass Non-Corrosive
Last Passing Date:	N/A
Test Expire Date:	N/A
Removed Date:	Not reported
Abandoned Date:	Not reported

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300 West 1/4-1/2 0.464 mi. 2451 ft. | **SHELL OIL CO.**
10655 SOUTH HALSTED
CHICAGO, IL 60628 | **IL LUST** **S104528066**
IL SPILLS **N/A**
IL BOL

Actual: 610 ft.

Focus Map: 3

LUST:

Name:	SHELL OIL CO.
Address:	10655 SOUTH HALSTED
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	880583
IL EPA Id:	316495044
Product:	Gasoline
IEMA Date:	1988-05-06
Project Manager:	Wallace
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Equilon Enterprises LLC
PRP Contact:	Lisa Schoedel
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1988-06-26
45 Report Received:	1990-10-24
NFA/NFR Letter:	**1999-09-07**

SHELL OIL CO. (Continued) **S104528066**

NFR Date Recorded: Not reported
Heating Oil Date: Not reported
Non-Lust LR Date: Not reported

SPILLS:
Name: Not reported
City,State,Zip: CHICAGO, IL
Incident ID: NL880583
Incident Date: Not reported
Date Received: 05/06/1988
Lust Ind: Not reported
Facility Address: 10655 SOUTH HALSTED
Facility City: CHICAGO
PRP Name: SHELL OIL CO.
AC: Not reported
Source Table: dbo_OCIN_INDCIDENTHIS

BOL:
Name: EQUIVA SERVICES LLC
Address: 10655 HALSTED
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000528123
Inv Num: 031600SVI
Interest Name: Citgo
Interest Type: BOA
Media Code: AIR
Latitude: 41.699961
Longitude: -87.642232

Name: EQUIVA SERVICES LLC
Address: 10655 HALSTED
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000528123
Inv Num: 031600SVI
Interest Name: Citgo
Interest Type: PERMIT EXEMPT
Media Code: AIR
Latitude: 41.699961
Longitude: -87.642232

Name: EQUIVA SERVICES LLC
Address: 10655 HALSTED
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000528123
Inv Num: 0316495044
Interest Name: Equiva Services Llc
Interest Type: BOL
Media Code: LAND
Latitude: 41.700470
Longitude: -87.642480

Name: EQUIVA SERVICES LLC
Address: 10655 HALSTED
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000528123
Inv Num: 0316495044

SHELL OIL CO. (Continued) **S104528066**

Interest Name: Equiva Svcs LLC
Interest Type: LUST
Media Code: LAND
Latitude: 41.699961
Longitude: -87.642232

Name: EQUIVA SERVICES LLC
Address: 10655 HALSTED
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000528123
Inv Num: 0316495044
Interest Name: Equiva Svcs LLC
Interest Type: SOLID WASTE
Media Code: LAND
Latitude: 41.699961
Longitude: -87.642232

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301 West 1/4-1/2 0.466 mi. 2458 ft.

HESTER, FRANNY
10101-03 SOUTH HALSTED AVE.
CHICAGO, IL 60628

IL LUST **S104529973**
N/A

Actual: 605 ft.

Focus Map: 3

LUST:

Name:	HESTER, FRANNY
Address:	10101-03 SOUTH HALSTED AVE.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	991953
IL EPA Id:	316495119
Product:	Gasoline, Used Oil
IEMA Date:	1999-08-18
Project Manager:	Rothering
Project Manager Phone:	(217) 785-1858
Email:	Scott.Rothering@illinois.gov
PRP Name:	Franny Hester
PRP Contact:	Anna Davis
PRP Address:	2237 East 79th St.
PRP City,St,Zip:	Chicago, IL 60649
PRP Phone:	7733566300
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1999-09-02
45 Report Received:	2000-01-31
NFA/NFR Letter:	**2016-09-15**
NFR Date Recorded:	2016-10-13
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AW302 West 1/4-1/2 0.466 mi. 2461 ft. | **MOBIL OIL STATION #05-A8B**
9901 SOUTH HALSTED
CHICAGO, IL 60628
Site 1 of 2 in cluster AW | **IL LUST** | **S103688309**
N/A

Actual: 600 ft.
Focus Map: 3

LUST:

Name:	MOBIL OIL STATION #05-A8B
Address:	9901 SOUTH HALSTED
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	980630
IL EPA Id:	316535005
Product:	Gasoline
IEMA Date:	1998-03-24
Project Manager:	Weller
Project Manager Phone:	(217) 524-4647
Email:	Melinda.Weller@illinois.gov
PRP Name:	Mobil Oil Corp.
PRP Contact:	Mike Holland
PRP Address:	Joliet Refinery, I-55 & Arsenal Rd.
PRP City,St,Zip:	Channahon, IL 60410
PRP Phone:	8154237664
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1998-04-02
45 Report Received:	1998-05-08
NFA/NFR Letter:	**2017-06-16**
NFR Date Recorded:	2017-06-30
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AX303 SE 1/4-1/2 0.468 mi. 2470 ft. | **LAKESIDE BANK TRUST # 10-2374**
10007 SOUTH MICHIGAN AVENUE
CHICAGO, IL 60628
Site 1 of 2 in cluster AX | **IL LUST**
IL TANKS
IL SPILLS | **S121839247**
N/A

Actual: 596 ft.
Focus Map: 4

LUST:

Name:	LAKESIDE BANK TRUST # 10-2374
Address:	10007 SOUTH MICHIGAN AVENUE
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20190992
IL EPA Id:	316495064
Product:	Unleaded Gas
IEMA Date:	2019-09-24
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Lakeside Bank Trust # 10-2374
PRP Contact:	Attaff Moosa
PRP Address:	10007 South Michigan Avenue
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	(773) 501-0948
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2019-11-04

LAKESIDE BANK TRUST # 10-2374 (Continued) **S121839247**

45 Report Received:	2019-11-26
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

CHICAGO TANKS:

Facility ID:	2026784
Name:	TOWN & COUNTRY GAS/FOOD MART INC
Address:	10007 S MICHIGAN AVE
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	2
Tank Material:	STEEL
Tank Construction:	SINGLE
Substance:	GASOLINE-M
Tank Capacity:	4000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	IN COMPLIANCE, Historic data from former Dept. of Environment [Tank Leak Protection: Automatic Tank Gauging/ TLS 300i W/CSLD; Tank Spill Prevention: Spill Containment Manhole; Tank Corrosion Protection: Lined Tanks; Tank Overfill Protection: Alarm and/or Shutoff; Piping Type: Pressurized Piping; Piping Leak Protection: Interstitial Monitoring; Piping Corrosion Protection: FRP; Piping Wall: Single; Pipe Material: FRP; Stage 2: Y; Red Tag: N; Associated Permit Numbers: 109902 106012 109902;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.712474901
Longitude:	-87.619960826

Facility ID:	2026784
Name:	TOWN & COUNTRY GAS/FOOD MART INC
Address:	10007 S MICHIGAN AVE
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	3
Tank Material:	STEEL
Tank Construction:	SINGLE
Substance:	GASOLINE-R
Tank Capacity:	6000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	IN COMPLIANCE, Historic data from former Dept. of Environment [Tank Leak Protection: Automatic Tank Gauging/ TLS 300i W/CSLD; Tank Spill Prevention: Spill Containment Manhole; Tank Corrosion Protection: Lined Tanks; Tank Overfill Protection: Alarm and/or Shutoff; Piping Type: Pressurized Piping; Piping Leak Protection: Interstitial Monitoring; Piping Corrosion Protection: FRP; Piping Wall: Single; Pipe Material: FRP; Stage 2: Y; Red Tag: N; Associated Permit Numbers: 109902 106012 109902;]

LAKESIDE BANK TRUST # 10-2374 (Continued) **S121839247**

Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.712474901
Longitude:	-87.619960826

Facility ID:	2026784
Name:	TOWN & COUNTRY GAS/FOOD MART INC
Address:	10007 S MICHIGAN AVE
City:	CHICAGO
State:	IL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	STEEL
Tank Construction:	SINGLE
Substance:	GASOLINE-P
Tank Capacity:	4000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	IN COMPLIANCE, Historic data from former Dept. of Environment [Tank Leak Protection: Automatic Tank Gauging/ TLS 300i W/CSLD; Tank Spill Prevention: Spill Containment Manhole; Tank Corrosion Protection: Lined Tanks; Tank Overfill Protection: Alarm and/or Shutoff; Piping Type: Pressurized Piping; Piping Leak Protection: Interstitial Monitoring; Piping Corrosion Protection: FRP; Piping Wall: Single; Pipe Material: FRP; Stage 2: Y; Red Tag: N; Associated Permit Numbers: 109902 106012 109902;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.712474901
Longitude:	-87.619960826

IEMA SPILLS:

Name:	Not reported
Address:	10007 SOUTH MICHIGAN AVE.
City,State,Zip:	CHICAGO, IL
Incident Number:	H-2019-0992
Incident Report Date:	09/24/2019
Street Address Of Incident Location:	10007 South Michigan Ave.
Incident Location City:	Chicago
Incident Location County:	Cook
Entered By:	Watkins, Toni (IEMA)
Date Entered:	Not reported
Data Input Status:	Closed
Leaking Underground Storage Tank (Lust)?:	Yes
Caller:	Dana Rose
Caller Represents:	Adept Environmental Solutions
Hazmat Incident Type:	Leak or spill
Date/Time Occurred:	Not reported
Mile Post:	Not reported
Section:	Not reported
Township:	Not reported
Range:	Not reported
Area Involved:	Fixed Facility
Media/Medium Into Which Release Occurred:	Ground
Temp:	70
Wind:	unknown
Material Name:	unleaded gasoline

LAKESIDE BANK TRUST # 10-2374 (Continued) **S121839247**

Type:	Liquid
Chris Code:	Unknown
CAS#:	Unknown
UN/NA #:	unknown
302(A) Extremely Hazardous Substance?:	Unknown
Is This A RCRA Hazardous Waste?:	Unknown
Is This A RCRA Regulated Facility?:	No
Container Type:	Under ground storage tank
Container Size:	2-4,000 gal. 1-6,000
Amount Released:	unknown
Rate Of Release/Min:	Unknown
Duration Of Release:	unknown
Cause Of Release:	piping and tank leak
Estimated Spill Extent:	unknown
Spill Extent Units:	Not reported
Date/Time Incident Occurred:	Not reported
Check If Unknown (Occurrence):	v
Date/Time Discovered:	2019-09-24 01:00:00
Check If Unknown (Discovered):	Not reported
Where Taken:	0
On Scene Contact:	Attaff Moosa
Public Health Risks/Precautions Taken:	none
Number Of People Evacuated:	0
Assistance Needed From State Agencies:	none
Containment/Cleanup Actions And Plans:	hiring contractor to assess, will hire contractor for clean up
Responsible Name:	O&S Corp.
Facility Manager:	Attaff Moosa
Facility Manager Phone #:	773/501-0948
Street1:	10007 South Michigan Ave.
Contacted ESDA?:	Not reported
ESDA On Scene?:	Not reported
Specific ESDA Agency Contacted:	0
Contacted Fire Department?:	Not reported
Fire Department On Scene?:	Not reported
Name Of Fire Department Contacted:	0
Contacted Police Department?:	Not reported
Police Department On Scene?:	Not reported
Name Of Police Department Contacted:	0
Sheriff Police Department?:	Not reported
Sheriff Department On Scene?:	Not reported
Name Of Sheriff Department Contacted:	0
Was An Agency Other Than ESDA:	Not reported
Fire Police Or Sheriff Contacted?:	Not reported
Was This Other Agency On Scene?:	Not reported
Name Of Other Agency Contacted:	SFM
Agency Notified Name:	IEPA/NRTP/Reg.4/SFM/CFD
Date/Time Agency Notified:	2019-09-24 12:48:00
Narrative:	Not reported
Follow Up:	Not reported

AX304 SE 1/4-1/2 0.468 mi. 2470 ft. | **TOWN & COUNTRY GAS MART**
10007 SOUTH MICHIGAN AVE.
CHICAGO, IL 60628
Site 2 of 2 in cluster AX | **IL LUST** | **S104522883**
N/A

Actual: 596 ft.
Focus Map: 4

LUST:

Name:	TOWN & COUNTRY GAS MART
Address:	10007 SOUTH MICHIGAN AVE.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	942453
IL EPA Id:	316495064
Product:	Used Oil
IEMA Date:	1994-11-01
Project Manager:	Zuehlke
Project Manager Phone:	(217) 557-6937
Email:	Wayne.Zuehlke@illinois.gov
PRP Name:	Omar Muthane
PRP Contact:	Not reported
PRP Address:	5901 North Cicero Avenue
PRP City,St,Zip:	Chicago, IL 60646
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1995-05-01
45 Report Received:	1995-05-26
NFA/NFR Letter:	**2009-01-27**
NFR Date Recorded:	2009-03-23
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AV305 NNE 1/4-1/2 0.472 mi. 2494 ft. | **YMCA**
4 EAST 111TH ST.
CHICAGO, IL 60628
Site 2 of 2 in cluster AV | **IL LUST** | **S104525942**
N/A

Actual: 609 ft.
Focus Map: 6

LUST:

Name:	YMCA
Address:	4 EAST 111TH ST.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	911600
IL EPA Id:	316495043
Product:	Jet Fuel
IEMA Date:	1991-06-12
Project Manager:	Boring
Project Manager Phone:	(217) 558-4071
Email:	Suzanne.Boring@illinois.gov
PRP Name:	YMCA
PRP Contact:	Mike Dalgard
PRP Address:	755 West North Ave.
PRP City,St,Zip:	Chicago, IL 60610
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported

YMCA (Continued) **S104525942**

45 Report Received:	Not reported
NFA/NFR Letter:	**2009-02-24**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

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306 West 1/4-1/2 0.480 mi. 2532 ft. **MUSTAFA, KHADIM**
10301 SOUTH HALSTED
CHICAGO, IL 60628
IL LUST **S105958677**
N/A

Actual: 607 ft.

Focus Map: 3

LUST:

Name:	BP AMOCO
Address:	10301 SOUTH HALSTED
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20031090
IL EPA Id:	316495046
Product:	Gasoline
IEMA Date:	2003-07-23
Project Manager:	Hale
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	BP Products North America, Inc.
PRP Contact:	Harold Primack
PRP Address:	28100 Torch Parkway, 2S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	6308367139
Site Classification:	Not reported
Section 57.5(g) Letter:	Not reported
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2003-08-12
45 Report Received:	2003-09-08
NFA/NFR Letter:	**2008-11-21**
NFR Date Recorded:	2010-01-14
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

Name:	MUSTAFA, KHADIM
Address:	10301 SOUTH HALSTED
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	20080221
IL EPA Id:	316495046
Product:	Gasoline
IEMA Date:	2008-02-15
Project Manager:	Hale
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Khadim Mustafa c/o Integrity Environmental Services
PRP Contact:	Not reported
PRP Address:	1240 Iroquois Drive, Suite 102
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	7082430967
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported

MUSTAFA, KHADIM (Continued) **S105958677**

20 Report Received:	2008-03-31
45 Report Received:	2008-04-25
NFA/NFR Letter:	**2008-07-30**
NFR Date Recorded:	2009-04-20
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

AW307 **AMOCO OIL CO. #15525** **IL LUST** **S103687480**
West **99TH & HALSTED** **N/A**
1/4-1/2 **CHICAGO, IL 60628**
0.481 mi.
2540 ft. **Site 2 of 2 in cluster AW**

Actual:
586 ft.

Focus Map:
3

LUST:

Name:	AMOCO OIL CO. #15525
Address:	99TH & HALSTED
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	941074
IL EPA Id:	316535007
Product:	Gasoline
IEMA Date:	1994-05-13
Project Manager:	Weller
Project Manager Phone:	(217) 524-4647
Email:	Melinda.Weller@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1994-06-08
20 Report Received:	1994-06-03
45 Report Received:	1994-06-29
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	1994-06-08

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308 **114TH/COTTAGE GROVE AVE** **IL NIPC** **S100790122**
NE **N/A**
1/4-1/2 **CHICAGO, IL**
0.481 mi.
2541 ft.

Actual:
591 ft.

Focus Map:
6

309 NE 1/4-1/2 0.488 mi. 2579 ft. | **SHERWIN WILLIAMS PAINT CO.**
115TH ST. & KINSINGTON AVE.
CHICAGO, IL 60628 | **IL LUST** | **S103292506**
N/A

Actual: 590 ft.

Focus Map: 6

LUST:

Name:	SHERWIN WILLIAMS PAINT CO.
Address:	115TH ST. & KINSINGTON AVE.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	910450
IL EPA Id:	316495039
Product:	Unleaded Gas
IEMA Date:	1991-02-21
Project Manager:	Irwin
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Sherwin Williams Co.
PRP Contact:	Robert Marin
PRP Address:	11541 South Champlain Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1992-06-30
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	1992-06-30

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310 East 1/4-1/2 0.489 mi. 2582 ft. | **109TH PLACE TEAR GAS**
SG WEST 109TH PLACE
CHICAGO, IL 60628 | **SEMS** | **1000851385**
PRP | **IL0000027714**

Actual: 608 ft.

Focus Map: 6

SEMS:

Site ID:	0507320
EPA ID:	IL0000027714
Name:	109TH PLACE TEAR GAS
Address:	SG WEST 109TH PLACE
Address 2:	Not reported
City,State,Zip:	CHICAGO, IL 60628
Cong District:	02
FIPS Code:	17031
Latitude:	Not reported
Longitude:	Not reported
FF:	N
NPL:	Not on the NPL
Non NPL Status:	Referred to Removal - NFRAP

SEMS Detail:

Region:	05
Site ID:	0507320
EPA ID:	IL0000027714
Site Name:	109TH PLACE TEAR GAS
NPL:	N

109TH PLACE TEAR GAS (Continued) **1000851385**

FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1993-10-15 04:00:00
Finish Date:	10/15/1993
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0507320
EPA ID:	IL0000027714
Site Name:	109TH PLACE TEAR GAS
NPL:	N
FF:	N
OU:	00
Action Code:	RV
Action Name:	RMVL
SEQ:	1
Start Date:	1993-09-30 04:00:00
Finish Date:	1/12/1994
Qual:	C
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0507320
EPA ID:	IL0000027714
Site Name:	109TH PLACE TEAR GAS
NPL:	N
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1994-03-21 05:00:00
Finish Date:	3/25/1994
Qual:	V
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0507320
EPA ID:	IL0000027714
Site Name:	109TH PLACE TEAR GAS
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	2002-04-17 04:00:00
Finish Date:	4/17/2002
Qual:	N
Current Action Lead:	St Perf

109TH PLACE TEAR GAS (Continued) **1000851385**

PRP:
PRP Name: TRUITT, RHONDA

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311 WNW 1/4-1/2 0.493 mi. 2603 ft. **EQUILON ENTERPRISES LLC 9811 HALSTED CHICAGO, IL 60628** **IL LUST** **S104189763 N/A**

Actual: 598 ft.
Focus Map: 3

LUST:

Name:	EQUILON ENTERPRISES LLC
Address:	9811 HALSTED
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	990295
IL EPA Id:	316495059
Product:	Unleaded Gas
IEMA Date:	1999-02-10
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	John Robbins
PRP Address:	603 West Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1999-02-19
45 Report Received:	1999-02-26
NFA/NFR Letter:	**2005-09-14**
NFR Date Recorded:	2005-12-02
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

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312 NE 1/4-1/2 0.493 mi. 2605 ft. **GEORGE O'DAY'S SHOP 526 EAST 114TH PL. CHICAGO, IL 60628** **IL LUST** **S104525691 N/A**

Actual: 589 ft.
Focus Map: 6

LUST:

Name:	GEORGE O'DAY'S SHOP
Address:	526 EAST 114TH PL.
City,State,Zip:	CHICAGO, IL 60628
Incident Num:	912416
IL EPA Id:	316005805
Product:	Gasoline, Used Oil, Non-Petroleum Product
IEMA Date:	1991-08-27
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	George O'Day's Shop
PRP Contact:	Steve O'Day
PRP Address:	P.O. Box 248

GEORGE O'DAY'S SHOP (Continued) **S104525691**

PRP City,St,Zip:	Lansing, IL 60438
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1992-03-11
45 Report Received:	1992-03-11
NFA/NFR Letter:	**1994-07-22**
NFR Date Recorded:	Not reported
Heating Oil Date:	Not reported
Non-Lust LR Date:	Not reported

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313 West 1/4-1/2 0.499 mi. 2633 ft.

BETTY BRITE CLEANERS
10630 SOUTH HALSTED AVENUE
CHICAGO, IL 60628

IL ENG CONTROLS **S120826188**
IL INST CONTROL **N/A**
IL SRP

Actual: 611 ft.

Focus Map: 3

ENGINEERING CONTROLS:

Illinois Epa Id:	316495007
NFR Letter:	12/27/2016
Date NFR Recorded:	01/04/2017
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Greg Ehman
RA Company:	Betty Brite Cleaners
RA Address:	20499 Abbey Drive
RA City,St,Zip:	Frankfort, IL 60423
Worker Caution:	Yes
Acres:	0.422
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	Yes
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	316495007
NFR Letter:	12/27/2016
Date NFR Recorded:	01/04/2017
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Greg Ehman
RA Company:	Betty Brite Cleaners
RA Address:	20499 Abbey Drive
RA City,St,Zip:	Frankfort, IL 60423
Worker Caution:	Yes
Acres:	0.422
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes

BETTY BRITE CLEANERS (Continued) **S120826188**

Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	Yes
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	316495007
US EPA Id:	ILD103342267
Longitude:	-87.643072
Latitude:	41.700379
Contact Name:	Greg Ehman
Contact Address:	20499 Abbey Drive
Contact City,St,Zip:	Frankfort, IL 60423
Date Enrolled:	03/01/2004
Point Of Contact:	Michael C. Butler, P.E.
Consultant Company:	Northern Environmental Technologies, Inc.
Consultant Address:	647 Academy Drive
Consultant City,St,Zip:	Northbrook, IL 60062
Proj Mgr Assigned:	Barb Landers
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Betty Brite Cleaners

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	Yes
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Greg Ehman
Remediation Applicant Company:	Betty Brite Cleaners
Remediation Applicant Address:	20499 Abbey Drive
Remediation Applicant City,St,Zip:	Frankfort, IL 60423
Illinois EPA:	316495007
Site Name:	Betty Brite Cleaners
NFR Letter:	2016-12-27
NFR Letter Date Recorded:	2017-01-04
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.422

AY314	**CHICAGO SPECIALTIES, L.L.C.**	**IL SSU**	**S102562201**
NE	**735 EAST 115TH STREET**	**IL ENG CONTROLS**	**N/A**
1/2-1	**CHICAGO, IL 60628**	**IL INST CONTROL**	
0.634 mi.		**IL SRP**	
3348 ft.	**Site 1 of 2 in cluster AY**	**IL SPILLS**	

Actual:
588 ft.

Focus Map:
6

SSU:

Name:	SHERWIN WILLIAMS (115TH STREET CORPORATION)
Address:	735 EAST 115TH STREET
City,State,Zip:	CHICAGO, IL
Facility ID:	0316495004
Facility Type:	Manufacturer - Paint
Directions:	Not reported
Region:	Des Plaines
Current Program:	SSU-CO
Project Manager:	Dunn
Community Relations:	Not reported
SSU Status:	Completed
FOS:	Sulski
Year Completed:	2013
Site Size:	32
Lat/Long:	Not reported

ENGINEERING CONTROLS:

Illinois Epa Id:	316495004
NFR Letter:	07/24/2013
Date NFR Recorded:	08/29/2013
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Gordon Kuntz
RA Company:	The Sherwin-Williams Company
RA Address:	101 Prospect Avenue, NW
RA City,St,Zip:	Cleveland, OH 44115
Worker Caution:	Yes
Acres:	32
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	Yes
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	316495004
NFR Letter:	07/24/2013
Date NFR Recorded:	08/29/2013
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Gordon Kuntz
RA Company:	The Sherwin-Williams Company
RA Address:	101 Prospect Avenue, NW
RA City,St,Zip:	Cleveland, OH 44115
Worker Caution:	Yes

CHICAGO SPECIALTIES, L.L.C. (Continued) **S102562201**

Acres:	32
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	Yes
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	316495004
US EPA Id:	ILD981091291
Longitude:	-87.603691
Latitude:	41.682451
Contact Name:	Gordon Kuntz
Contact Address:	101 Prospect Avenue, NW
Contact City,St,Zip:	Cleveland, OH 44115
Date Enrolled:	08/25/1992
Point Of Contact:	Steven Bosko
Consultant Company:	Weston Solutions, Inc.
Consultant Address:	750 East Bunker Court
Consultant City,St,Zip:	Vernon Hills, IL 60061
Proj Mgr Assigned:	Greg Dunn
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	The Sherwin-Williams Company

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	Yes
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Gordon Kuntz
Remediation Applicant Company:	The Sherwin-Williams Company
Remediation Applicant Address:	101 Prospect Avenue, NW
Remediation Applicant City,St,Zip:	Cleveland, OH 44115
Illinois EPA:	316495004
Site Name:	Chicago Specialties, L.L.C.
NFR Letter:	2013-07-24
NFR Letter Date Recorded:	2013-08-29
Comprehensive/Focused:	Comprehensive

CHICAGO SPECIALTIES, L.L.C. (Continued) **S102562201**

Worker Caution: Y
Acres: 32

SPILLS:
Name: Not reported
City,State,Zip: CHICAGO, IL
Incident ID: NL881175
Incident Date: Not reported
Date Received: 08/30/1988
Lust Ind: Not reported
Facility Address: 735 EAST 115TH
Facility City: CHICAGO
PRP Name: PMC SPECIALITY GROUP
AC: Not reported
Source Table: dbo_OCIN_INDCIDENTHIS

AY315 **CHICAGO SPECIALTIES LLC** **CORRACTS** **1000132131**
NE **735 E 115TH ST** **IL SPILLS** **ILD981091291**
1/2-1 **CHICAGO, IL 60628** **RCRA NonGen / NLR**
0.634 mi. **2020 COR ACTION**
3348 ft. **Site 2 of 2 in cluster AY** **IL AIRS**
IL BOL
Actual: **NY MANIFEST**
588 ft. **IL NPDES**
Focus Map:
6

CORRACTS:
EPA ID: ILD981091291
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2018-01-30 00:00:00.0
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): Not reported
Original schedule date: 2018-01-30 00:00:00.0
Schedule end date: Not reported

EPA ID: ILD981091291
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2013-09-05 00:00:00.0
Action: CA550RC
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD981091291
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2013-09-05 00:00:00.0
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD981091291

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1994-03-31 00:00:00.0
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD981091291
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1991-09-27 00:00:00.0
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD981091291
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1990-07-06 00:00:00.0
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD981091291
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1989-07-06 00:00:00.0
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

SPILLS:

Name: Not reported
City,State,Zip: CHICAGO, IL
Incident ID: NL871277
Incident Date: Not reported
Date Received: 07/29/1987
Lust Ind: Not reported
Facility Address: 735 E. 115TH STREET
Facility City: CHICAGO
PRP Name: PMC SPECIALTIES
AC: Not reported
Source Table: dbo_OCIN_INDCIDENTHIS

Name: Not reported
City,State,Zip: CHICAGO, IL
Incident ID: NL890034
Incident Date: Not reported
Date Received: 01/11/1989
Lust Ind: Not reported
Facility Address: 735 E. 115TH ST.

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Facility City: CHICAGO
PRP Name: PMC SPECIALTIES GROUP
AC: Not reported
Source Table: dbo_OCIN_INDCIDENTHIS

Name: Not reported
City,State,Zip: CHICAGO, IL
Incident ID: NL891109
Incident Date: Not reported
Date Received: 06/26/1989
Lust Ind: Not reported
Facility Address: 735 E. 115TH ST.
Facility City: CHICAGO
PRP Name: PMC SPECIALTIES GROUP
AC: Not reported
Source Table: dbo_OCIN_INDCIDENTHIS

Name: Not reported
City,State,Zip: CHICAGO, IL
Incident ID: NL891765
Incident Date: Not reported
Date Received: 09/12/1989
Lust Ind: Not reported
Facility Address: 735 E. 115TH ST.
Facility City: CHICAGO
PRP Name: PMC SPECIALTIES GROUP
AC: Not reported
Source Table: dbo_OCIN_INDCIDENTHIS

RCRA NonGen / NLR:
Date form received by agency: 2007-11-01 00:00:00.0
Facility name: CHICAGO SPECIALTIES LLC
Facility address: 735 E 115TH ST
CHICAGO, IL 60628
EPA ID: ILD981091291
Contact: ENV COORDINATOR
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 773-660-4015
Contact email: Not reported
EPA Region: 05
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: P M C INC
Owner/operator address: 12234 BRANFORD ST
SUN VALLEY, CA 91353
Owner/operator country: Not reported
Owner/operator telephone: 818-896-1101
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2002-03-01 00:00:00.0
Site name: CHICAGO SPECIALTIES LLC
Classification: Large Quantity Generator

Date form received by agency: 2000-03-01 00:00:00.0
Site name: CHICAGO SPECIALTIES LLC
Classification: Large Quantity Generator

Date form received by agency: 1999-01-27 00:00:00.0
Site name: CHICAGO SPECIALTIES LLC
Classification: Large Quantity Generator

Date form received by agency: 1998-03-01 00:00:00.0
Site name: CHICAGO SPECIALTIES INC
Classification: Large Quantity Generator

Date form received by agency: 1996-03-01 00:00:00.0
Site name: 115TH ST CORP
Classification: Large Quantity Generator

Date form received by agency: 1994-06-30 00:00:00.0

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Site name: CHICAGO SPECIALTIES LLC
Classification: Not a generator, verified

Date form received by agency:1994-03-01 00:00:00.0
Site name: 115TH STREET CORP
Classification: Large Quantity Generator

Date form received by agency:1992-03-01 00:00:00.0
Site name: PMC SPECIALTIES GROUP
Classification: Large Quantity Generator

Date form received by agency:1990-02-28 00:00:00.0
Site name: PMC SPECIALTIES GROUP
Classification: Large Quantity Generator

Date form received by agency:1985-06-20 00:00:00.0
Site name: CHICAGO SPECIALTIES LLC
Classification: Not a generator, verified

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D023
. Waste name: O-CRESOL

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: D025
. Waste name: P-CRESOL

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

. Waste code: D026
. Waste name: CRESOL

. Waste code: D027
. Waste name: 1,4-DICHLOROBENZENE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F004
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

. Waste code: P003
. Waste name: 2-PROPENAL (OR) ACROLEIN

. Waste code: P095
. Waste name: CARBONIC DICHLORIDE (OR) PHOSGENE

. Waste code: U012
. Waste name: ANILINE (I,T) (OR) BENZENAMINE (I,T)

. Waste code: U052
. Waste name: CRESOL (CRESYLIC ACID) (OR) PHENOL, METHYL-

. Waste code: U070
. Waste name: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

. Waste code: U075
. Waste name: DICHLORODIFLUOROMETHANE (OR) METHANE, DICHLORODIFLUORO-

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U135
. Waste name: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

. Waste code: U151
. Waste name: MERCURY

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U188
. Waste name: PHENOL

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Corrective Action Summary:

Event date: 1989-07-06 00:00:00.0
Event: RFA COMPLETED

Event date: 1990-07-06 00:00:00.0
Event: DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY

Event date: 1991-09-27 00:00:00.0
Event: CA PRIORITIZATION-MEDIUM CA PRIORITY

Event date: 1994-03-31 00:00:00.0
Event: CA PRIORITIZATION-MEDIUM CA PRIORITY

Event date: 2013-09-05 00:00:00.0
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: 2013-09-05 00:00:00.0

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Event: REMEDY CONSTRUCTION-REMEDY CONSTRUCTED

Event date: 2018-01-30 00:00:00.0
Event: RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Facility Has Received Notices of Violations:
Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 2000-05-31 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.190(a)(2)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 2000-05-31 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Air Emission Standards - Equipment Leaks
Date violation determined: 1999-01-26 00:00:00.0
Date achieved compliance: 2003-04-11 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Air Emission Standards - Equipment Leaks
Date violation determined: 1999-01-26 00:00:00.0
Date achieved compliance: 2003-04-11 00:00:00.0
Violation lead agency: EPA
Enforcement action: SIGNIFICANT NON-COMPLIER
Enforcement action date: 2003-04-11 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 50000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Air Emission Standards - Equipment Leaks
Date violation determined: 1999-01-26 00:00:00.0
Date achieved compliance: 2003-04-11 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Air Emission Standards - Equipment Leaks
Date violation determined: 1999-01-26 00:00:00.0
Date achieved compliance: 2003-04-11 00:00:00.0
Violation lead agency: EPA
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 2003-04-11 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 50000
Paid penalty amount: Not reported

Regulation violated: SR - 725.175
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1993-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.175
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1993-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.175
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1993-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.114(c)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 1993-08-11 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.173
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.155(a)
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.152
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(c)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(d)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Paid penalty amount: Not reported

Regulation violated: SR - 725.113(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.173
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(c)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.212(a)
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Regulation violated: SR - 703.152
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.212(a)
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.155(a)
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(d)
Area of violation: TSD - General Facility Standards

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.113(a)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(c)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.113(a)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.173
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1992-02-07 00:00:00.0

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.113(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(a)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.113(a)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.155(a)
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(a)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(d)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(a)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.152
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.113(b)
Area of violation: TSD - General Facility Standards
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: FOLLOW-UP INSPECTION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.212(a)
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 1992-02-07 00:00:00.0
Date achieved compliance: 2015-03-19 00:00:00.0
Violation lead agency: State
Enforcement action: GROUNDWATER MONITORING EVALUATION
Enforcement action date: 1992-05-20 00:00:00.0

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 1991-09-11 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: EPA
Enforcement action: FOCUSED COMPLIANCE INSPECTION
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 1991-09-11 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: EPA
Enforcement action: FOCUSED COMPLIANCE INSPECTION
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.141
Area of violation: Generators - Records/Reporting
Date violation determined: 1990-07-18 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)(1)
Area of violation: TSD - General
Date violation determined: 1990-07-18 00:00:00.0
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: NON-FINANCIAL RECORD REVIEW
Enforcement action date: Not reported
Enf. disposition status: Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1990-04-17 00:00:00.0
Date achieved compliance: 1993-08-11 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1992-05-20 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1990-04-17 00:00:00.0
Date achieved compliance: 1993-08-11 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 1990-04-17 00:00:00.0
Date achieved compliance: 1993-08-11 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1990-05-25 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 1988-04-22 00:00:00.0
Date achieved compliance: 1988-11-01 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 2000-05-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2000-05-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2000-05-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - General
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2000-05-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2000-05-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1999-05-11 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD IS-Air Emission Standards - Equipment Leaks
Date achieved compliance: 2003-04-11 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1999-01-26 00:00:00.0
Evaluation: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Area of violation: TSD IS-Air Emission Standards - Equipment Leaks
Date achieved compliance: 2003-04-11 00:00:00.0
Evaluation lead agency: EPA

Evaluation date: 1994-01-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - General
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-01-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Financial Requirements

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-01-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-01-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1994-01-31 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-06-08 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-06-08 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-06-08 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-06-08 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - General
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1993-06-08 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-02-07 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Evaluation date: 1992-02-07 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-02-07 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-08-11 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-02-07 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-08-11 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-02-07 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - General
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-02-07 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1992-02-07 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 2015-03-19 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-04-17 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-08-11 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1990-04-17 00:00:00.0
Evaluation: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Area of violation: Generators - Pre-transport
Date achieved compliance: 1993-08-11 00:00:00.0
Evaluation lead agency: State

2020 COR ACTION:
EPA ID: ILD981091291
Region: 5
Action: Remedy Construction

AIRS:
Name: WESTON SOLUTIONS INC
Address: 735 E 115TH ST
City,State,Zip: CHICAGO, IL 60628

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

2nd Address:	Not reported
Facility ID:	Not reported
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600GYK
Cease Operation Date:	Not reported
SIC Code:	Not reported
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600GYK
Tons Per Year:	0.039
Year:	2012
Pollutant Code:	VOM
ID Number:	031600GYK
Tons Per Year:	4.6199999999999998E-2
Year:	Not reported
Pollutant Code:	VOM
ID Number:	031600GYK
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600GYK
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600GYK
Tons Per Year:	4.6199999999999998E-2
Year:	2014
Pollutant Code:	VOM
ID Number:	031600GYK
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600GYK
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Name:	WESTON SOLUTIONS INC
Address:	735 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2014
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600GYK
Cease Operation Date:	Not reported
SIC Code:	Not reported
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600GYK
Tons Per Year:	0.039
Year:	2012
Pollutant Code:	VOM
ID Number:	031600GYK
Tons Per Year:	4.6199999999999998E-2
Year:	Not reported
Pollutant Code:	VOM
ID Number:	031600GYK
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4
ID Number:	031600GYK
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600GYK
Tons Per Year:	4.6199999999999998E-2
Year:	2014
Pollutant Code:	VOM
ID Number:	031600GYK
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600GYK
Tons Per Year:	COG

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Year:	Not reported
Pollutant Code:	COG

Name:	WESTON SOLUTIONS INC
Address:	735 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628
2nd Address:	Not reported
Facility ID:	Not reported
Year:	2012
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600GYK
Cease Operation Date:	Not reported
SIC Code:	Not reported
NAICS:	Not reported
Type Code:	Not reported
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600GYK
Tons Per Year:	0.039
Year:	2012
Pollutant Code:	VOM

ID Number:	031600GYK
Tons Per Year:	4.6199999999999998E-2
Year:	Not reported
Pollutant Code:	VOM

ID Number:	031600GYK
Tons Per Year:	CF4
Year:	2014
Pollutant Code:	CF4

ID Number:	031600GYK
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG

ID Number:	031600GYK
Tons Per Year:	4.6199999999999998E-2
Year:	2014
Pollutant Code:	VOM

ID Number:	031600GYK
Tons Per Year:	CF4
Year:	Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Pollutant Code:	CF4
ID Number:	031600GYK
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG

Name:	CHICAGO SPECIALTIES LLC
Address:	735 E 115TH ST
City,State,Zip:	CHICAGO, IL
2nd Address:	Not reported
Facility ID:	3781
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FCV
Cease Operation Date:	10/1/2002
SIC Code:	2865
NAICS:	Not reported
Type Code:	LOC
Permit:	Not reported
Type:	Not reported
Status:	Not reported
Status Date:	Not reported
Expiration Date:	Not reported
Latitude:	Not reported
Longitude:	Not reported

BOL:

Name:	CHICAGO SPECIALTIES LLC
Address:	735 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000054358
Inv Num:	0316495004
Interest Name:	Chicago Specialties LLC
Interest Type:	BOL
Media Code:	LAND
Latitude:	41.682430
Longitude:	-87.603970

Name:	CHICAGO SPECIALTIES LLC
Address:	735 E 115TH ST
City,State,Zip:	CHICAGO, IL 60628
Site Id:	170000054358
Inv Num:	0316495004
Interest Name:	Chicago Specialties LLC
Interest Type:	RCRA
Media Code:	LAND
Latitude:	41.682430
Longitude:	-87.603970

Name: CHICAGO SPECIALTIES LLC

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Address: 735 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000054358
Inv Num: 0316495004
Interest Name: Chicago Specialties LLC
Interest Type: SOLID WASTE
Media Code: LAND
Latitude: 41.682430
Longitude: -87.603970

Name: CHICAGO SPECIALTIES LLC
Address: 735 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Site Id: 170000054358
Inv Num: 0316495004
Interest Name: Chicago Specialties LLC
Interest Type: VSRU
Media Code: LAND
Latitude: 41.685335
Longitude: -87.607847

NY MANIFEST:
Name: 115TH STREET CORP
Address: 735 E 115TH ST
City,State,Zip: CHICAGO, IL 60628
Country: USA
EPA ID: ILD981091291
Facility Status: Not reported
Location Address 1: 735 EAST 115TH ST
Code: BP
Location Address 2: Not reported
Total Tanks: Not reported
Location City: CHICAGO
Location State: IL
Location Zip: 60628
Location Zip 4: Not reported

NY MANIFEST:
EPAID: ILD981091291
Mailing Name: 115TH STREET CORP
Mailing Contact: DEBORAH MENIGOZ
Mailing Address 1: 735 EAST 115TH ST
Mailing Address 2: Not reported
Mailing City: CHICAGO
Mailing State: IL
Mailing Zip: 60628
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 3126604016

NY MANIFEST:
Document ID: INA1108206
Manifest Status: K
seq: Not reported
Year: 1996
Trans1 State ID: Not reported
Trans2 State ID: Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Generator Ship Date:	12/05/1996
Trans1 Recv Date:	12/05/1996
Trans2 Recv Date:	/ /
TSD Site Recv Date:	01/19/1997
Part A Recv Date:	/ /
Part B Recv Date:	02/14/1997
Generator EPA ID:	ILD981091291
Trans1 EPA ID:	NYX720000000
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD057770109
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00015
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00020
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00004
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00001
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00001
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00001
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100

NPDES:

State Facility Id:	G0G98A
Permit Id No:	IL0079600
Date Permit Issued:	10/27/2011
Facility Receiving Water:	UNNAMED TRIB TO LAKE CALUMET
Effective Date:	11/01/2011
Expiration Date:	09/30/2016
Current Major/Minor:	Minor
State Region:	02
State Water Body:	07120003
Perm Feature Id:	001
DMR Cognization Official:	WESTON SOLUTIONS
DMR Cognization Official Telephone	847-918-4000
Latitude:	Not reported
Longitude:	Not reported
Facility Type Description:	Privately Owned Facility

State Facility Id:	G0G98A
Permit Id No:	IL0079600
Date Permit Issued:	10/27/2011
Facility Receiving Water:	UNNAMED TRIB TO LAKE CALUMET
Effective Date:	11/01/2011
Expiration Date:	09/30/2016
Current Major/Minor:	Minor
State Region:	02
State Water Body:	07120003
Perm Feature Id:	Not reported
DMR Cognization Official:	WESTON SOLUTIONS
DMR Cognization Official Telephone	847-918-4000
Latitude:	Not reported

CHICAGO SPECIALTIES LLC (Continued) **1000132131**

Longitude: Not reported
Facility Type Description: Privately Owned Facility

316
NE
1/2-1
0.674 mi.
3559 ft.

Actual:
589 ft.

Focus Map:
6

LIQUID DYNAMICS INC
655 E 114TH ST
CHICAGO, IL 60628

SEMS-ARCHIVE **1000425056**
CORRACTS **ILD074410390**
RCRA NonGen / NLR
ICIS
FINDS
ECHO

SEMS Archive:

Site ID:	0500454
EPA ID:	ILD074410390
Name:	LIQUID DYNAMICS
Address:	655 E 114TH S
Address 2:	Not reported
City,State,Zip:	CHICAGO, IL 60628
Cong District:	01
FIPS Code:	17031
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	05
Site ID:	0500454
EPA ID:	ILD074410390
Site Name:	LIQUID DYNAMICS
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1991-11-19 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	05
Site ID:	0500454
EPA ID:	ILD074410390
Site Name:	LIQUID DYNAMICS
NPL:	N
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1990-10-25 04:00:00
Finish Date:	Not reported
Qual:	V
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500454
EPA ID:	ILD074410390
Site Name:	LIQUID DYNAMICS

LIQUID DYNAMICS INC (Continued) **1000425056**

NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1984-02-01 05:00:00
Finish Date:	1984-02-01 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500454
EPA ID:	ILD074410390
Site Name:	LIQUID DYNAMICS
NPL:	N
FF:	N
OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	Not reported
Finish Date:	1985-10-08 05:00:00
Qual:	N
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500454
EPA ID:	ILD074410390
Site Name:	LIQUID DYNAMICS
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	Not reported
Finish Date:	1984-12-01 06:00:00
Qual:	N
Current Action Lead:	EPA Perf

Region:	05
Site ID:	0500454
EPA ID:	ILD074410390
Site Name:	LIQUID DYNAMICS
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1984-07-01 05:00:00
Qual:	H
Current Action Lead:	St Perf

LIQUID DYNAMICS INC (Continued) **1000425056**

CORRACTS:

EPA ID:	ILD074410390
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	1994-03-31 00:00:00.0
Action:	CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	ILD074410390
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	1984-09-21 00:00:00.0
Action:	CA050 - RFA Completed
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported

RCRA NonGen / NLR:

Date form received by agency:	1992-03-11 00:00:00.0
Facility name:	LIQUID DYNAMICS INC
Facility address:	655 E 114TH ST CHICAGO, IL 60628
EPA ID:	ILD074410390
Mailing address:	655 E 114TH STREET CHICAGO, IL 60628
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	Yes
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

LIQUID DYNAMICS INC (Continued) **1000425056**

Historical Generators:

Date form received by agency: 1992-03-01 00:00:00.0
Site name: LIQUID DYNAMICS
Classification: Large Quantity Generator

Date form received by agency: 1980-11-18 00:00:00.0
Site name: LIQUID DYNAMICS INC
Classification: Not a generator, verified

Date form received by agency: 1980-11-18 00:00:00.0
Site name: LIQUID DYNAMICS INC
Classification: Not a generator, verified

Date form received by agency: 1980-07-24 00:00:00.0
Site name: LIQUID DYNAMICS INC
Classification: Not a generator, verified

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: F009
. Waste name: SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: F010
. Waste name: QUENCHING BATH RESIDUES FROM OIL BATHS FROM METAL HEAT TREATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: F012
. Waste name: QUENCHING WASTEWATER TREATMENT SLUDGES FROM METAL HEAT TREATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: K049
. Waste name: SLOP OIL EMULSION SOLIDS FROM THE PETROLEUM REFINING INDUSTRY.

. Waste code: K062
. Waste name: SPENT PICKLE LIQUOR FROM STEEL FINISHING OPERATIONS OF PLANTS THAT PRODUCE IRON OR STEEL.

. Waste code: K086
. Waste name: SOLVENT WASHES AND SLUDGES, CAUSTIC WASHES AND SLUDGES, OR WATER WASHES AND SLUDGES FROM CLEANING TUBS AND EQUIPMENT USED IN THE FORMULATION OF INK FROM PIGMENTS, DRIERS, SOAPS, AND STABILIZERS CONTAINING CHROMIUM AND LEAD.

Corrective Action Summary:

Event date: 1984-09-21 00:00:00.0
Event: RFA COMPLETED

Event date: 1994-03-31 00:00:00.0

LIQUID DYNAMICS INC (Continued) **1000425056**

Event: CA PRIORITIZATION-HIGH CA PRIORITY

Facility Has Received Notices of Violations:

Regulation violated: SR - 725.173
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.175
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.115(d)
Area of violation: TSD - General Facility Standards
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.297
Area of violation: TSD - Tank System Standards
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

LIQUID DYNAMICS INC (Continued) **1000425056**

Paid penalty amount: Not reported

Regulation violated: SR - 725.171(a)
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.177
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.212(a)
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

LIQUID DYNAMICS INC (Continued) **1000425056**

Regulation violated: SR - 725.116(e)
Area of violation: TSD - General Facility Standards
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 1985-02-14 00:00:00.0
Date achieved compliance: 1995-04-25 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1985-02-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 1991-01-10 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-01-10 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-01-10 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-01-10 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Tank System Standards
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1991-01-10 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1995-04-25 00:00:00.0

LIQUID DYNAMICS INC (Continued) **1000425056**

Evaluation lead agency: State

Evaluation date: 1988-11-15 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Tank System Standards
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-11-15 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-11-15 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-11-15 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1988-11-15 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-03-30 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-03-30 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-03-30 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Tank System Standards
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-03-30 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1987-03-30 00:00:00.0

LIQUID DYNAMICS INC (Continued) **1000425056**

Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-02-14 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-02-14 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - General Facility Standards
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-02-14 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Tank System Standards
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-02-14 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1985-02-14 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 1995-04-25 00:00:00.0
Evaluation lead agency: State

ICIS:
Enforcement Action ID: 05-2004-0508
FRS ID: 110000612560
Action Name: LIQUID DYNAMICS ADMIN ORDER BY CONSENT (CERCLA)
Facility Name: LIQUID DYNAMICS
Facility Address: 655 E 114TH ST
CHICAGO, IL 60628
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: COOK
Program System Acronym: CERCLIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 41.687387
Longitude in Decimal Degrees: -87.606666
Permit Type Desc: Not reported
Program System Acronym: ILD980824882
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 05-2004-0508
FRS ID: 110000612560

LIQUID DYNAMICS INC (Continued) **1000425056**

Action Name:	LIQUID DYNAMICS ADMIN ORDER BY CONSENT (CERCLA)
Facility Name:	LIQUID DYNAMICS
Facility Address:	655 E 114TH ST CHICAGO, IL 60628
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	COOK
Program System Acronym:	CERCLIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	122H
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.687387
Longitude in Decimal Degrees:	-87.606666
Permit Type Desc:	Not reported
Program System Acronym:	ILD980824882
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	05-2004-0508
FRS ID:	110000612560
Action Name:	LIQUID DYNAMICS ADMIN ORDER BY CONSENT (CERCLA)
Facility Name:	LIQUID DYNAMICS
Facility Address:	655 E 114TH ST CHICAGO, IL 60628
Enforcement Action Type:	CERCLA 104E5A AO For Access And/Or Info
Facility County:	COOK
Program System Acronym:	CERCLIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	104E5A
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.687387
Longitude in Decimal Degrees:	-87.606666
Permit Type Desc:	Not reported
Program System Acronym:	ILD980824882
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	05-2000-0664
FRS ID:	110000612560
Action Name:	PULLMAN/LIQUID DYNAMICS SITE
Facility Name:	LIQUID DYNAMICS INCORPORATED
Facility Address:	655 E 114TH ST CHICAGO, IL 60628
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	COOK
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	106
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.687387
Longitude in Decimal Degrees:	-87.606661
Permit Type Desc:	Not reported
Program System Acronym:	25966
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

LIQUID DYNAMICS INC (Continued) **1000425056**

Enforcement Action ID:	05-1988-0328
FRS ID:	110000612560
Action Name:	LIQUID DYNAMICS
Facility Name:	LIQUID DYNAMICS INCORPORATED
Facility Address:	655 E 114TH ST CHICAGO, IL 60628
Enforcement Action Type:	CERCLA 104E5A AO For Access And/Or Info
Facility County:	COOK
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	104E5A
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.687387
Longitude in Decimal Degrees:	-87.606661
Permit Type Desc:	Not reported
Program System Acronym:	25966
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	05-1983-0051
FRS ID:	110000612560
Action Name:	ENVIRONMENTAL DYNAMICS, INC.
Facility Name:	LIQUID DYNAMICS INCORPORATED
Facility Address:	655 E 114TH ST CHICAGO, IL 60628
Enforcement Action Type:	Civil Judicial Action
Facility County:	COOK
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Judicial
EA Type Code:	CIV
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.687387
Longitude in Decimal Degrees:	-87.606661
Permit Type Desc:	Not reported
Program System Acronym:	25966
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Facility Name:	LIQUID DYNAMICS
Address:	655 E 114TH ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	LIQUID DYNAMICS
Address:	655 E 114TH ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	LIQUID DYNAMICS
Address:	655 E 114TH ST

LIQUID DYNAMICS INC (Continued) **1000425056**

Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N

LIQUID DYNAMICS INC (Continued) **1000425056**

Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No

LIQUID DYNAMICS INC (Continued) **1000425056**

NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: LIQUID DYNAMICS
Address: 655 E 114TH ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

FINDS:
Registry ID: 110000612560
Facility URL: http://ofmpub.epa.gov/enviro/fii_query_detail.disp_program_facility?p_registry_id=110000612560

Environmental Interest/Information System:
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
SUPERFUND (NON-NPL)
ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to

LIQUID DYNAMICS INC (Continued) **1000425056**

replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000425056
Registry ID:	110000612560
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110000612560
Name:	LIQUID DYNAMICS
Address:	655 E 114TH ST
City,State,Zip:	CHICAGO, IL 60628

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317 ENE 1/2-1 0.971 mi. 5129 ft. | **CALUMET HARBOR YARDS** | **FUDS** | **1024900153** **N/A**

CHICAGO, IL

Actual: 585 ft.

Focus Map: 10

FUDS:

EPA Region:	5
Installation ID:	IL59799F223900
Congressional District Number:	2
Facility Name:	CALUMET HARBOR YARDS
FUDS Number:	E05IL0265
City:	CHICAGO
State:	IL
County:	COOK
USACE District:	Louisville District (LRL)
Status:	Properties with projects
Current Owner:	Private Sector
EMS Map Link:	https://fudsportal.usace.army.mil/ems/ems/inventory/map/map?id=61787
Eligibility:	Eligible
Has Projects:	Yes
NPL Status:	Not Listed
X Coord:	-87.573611109999902
Y Coord:	41.660555559999999
Latitude:	41.660555559999999
Longitude:	-87.573611110000002

318 NE 1/2-1 0.975 mi. 5147 ft. | **SHERWIN WILLIAMS CO**
10909 S COTTAGE GROVE AVE
CHICAGO, IL 60628 | **CORRACTS**
RCRA NonGen / NLR | **1000371387**
ILD000672451

Actual: 599 ft.

Focus Map: 6

CORRACTS:

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 2009-05-01 00:00:00.0
Action: CA070NO - RFA Determination Of Need For An RFI, RFI is Not Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1992-03-16 00:00:00.0
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1992-03-02 00:00:00.0
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 1992-03-02 00:00:00.0
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

RCRA NonGen / NLR:

Date form received by agency: 2007-11-01 00:00:00.0
Facility name: SHERWIN WILLIAMS CO
Facility address: 10909 S COTTAGE GROVE AVE
CHICAGO, IL 60628
EPA ID: ILD000672451
Contact: ENV COORDINATOR
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 216-515-4629
Contact email: Not reported

SHERWIN WILLIAMS CO (Continued) **1000371387**

EPA Region: 05
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: SHERWIN-WILLIAMS CO. THE
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: Not reported
Owner/operator telephone: 216-566-2000
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: SHERWIN-WILLIAMS CO. THE
Owner/operator address: 101 PROSPECT AVE NW
CITY NOT REPORTED, OH 99998
Owner/operator country: Not reported
Owner/operator telephone: 216-566-2000
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2002-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 2000-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO

SHERWIN WILLIAMS CO (Continued) **1000371387**

Classification: Large Quantity Generator

Date form received by agency: 1998-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1996-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1994-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1992-03-01 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1990-02-12 00:00:00.0
Site name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 1980-11-22 00:00:00.0
Site name: SHERWIN-WILLIAMS CO THE TECHNICAL CNTR
Classification: Not a generator, verified

Date form received by agency: 1980-08-18 00:00:00.0
Site name: SHERWIN-WILLIAMS CO THE TECHNICAL CNTR
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT

SHERWIN WILLIAMS CO (Continued) **1000371387**

MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F004
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: P003
. Waste name: 2-PROPENAL (OR) ACROLEIN

. Waste code: P005
. Waste name: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL

. Waste code: P008
. Waste name: 4-AMINOPYRIDINE (OR) 4-PYRIDINAMINE

. Waste code: P011
. Waste name: ARSENIC OXIDE AS2O5 (OR) ARSENIC PENTOXIDE

. Waste code: P014
. Waste name: BENZENETHIOL (OR) THIOPHENOL

. Waste code: P019
. Waste name: Not Defined

. Waste code: P022
. Waste name: CARBON DISULFIDE

. Waste code: P028
. Waste name: BENZENE, (CHLOROMETHYL)- (OR) BENZYL CHLORIDE

. Waste code: P029
. Waste name: COPPER CYANIDE (OR) COPPER CYANIDE CU(CN)

. Waste code: P030
. Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

. Waste code: P052

SHERWIN WILLIAMS CO (Continued) **1000371387**

. Waste name: Not Defined

. Waste code: P053
. Waste name: Not Defined

. Waste code: P054
. Waste name: AZIRIDINE (OR) ETHYLENEIMINE

. Waste code: P087
. Waste name: OSMIUM OXIDE OSO4, (T-4)- (OR) OSMIUM TETROXIDE

. Waste code: P090
. Waste name: Not Defined

. Waste code: P095
. Waste name: CARBONIC DICHLORIDE (OR) PHOSGENE

. Waste code: P101
. Waste name: ETHYL CYANIDE (OR) PROPANENITRILE

. Waste code: P105
. Waste name: SODIUM AZIDE

. Waste code: U001
. Waste name: ACETALDEHYDE (I) (OR) ETHANAL (I)

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U003
. Waste name: ACETONITRILE (I,T)

. Waste code: U004
. Waste name: ACETOPHENONE (OR) ETHANONE, 1-PHENYL-

. Waste code: U006
. Waste name: ACETYL CHLORIDE (C,R,T)

. Waste code: U007
. Waste name: 2-PROPENAMIDE (OR) ACRYLAMIDE

. Waste code: U008
. Waste name: 2-PROPENOIC ACID (I) (OR) ACRYLIC ACID (I)

. Waste code: U009
. Waste name: 2-PROPENENITRILE (OR) ACRYLONITRILE

. Waste code: U012
. Waste name: ANILINE (I,T) (OR) BENZENAMINE (I,T)

. Waste code: U013
. Waste name: Not Defined

. Waste code: U017
. Waste name: BENZAL CHLORIDE (OR) BENZENE, (DICHLOROMETHYL)-

. Waste code: U019

SHERWIN WILLIAMS CO (Continued) **1000371387**

. Waste name: BENZENE (I,T)

. Waste code: U020
. Waste name: BENZENESULFONIC ACID CHLORIDE (C,R) (OR) BENZENESULFONYL CHLORIDE (C,R)

. Waste code: U021
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE (OR) BENZIDINE

. Waste code: U023
. Waste name: BENZENE, (TRICHLOROMETHYL)- (OR) BENZOTRICHLORIDE (C,R,T)

. Waste code: U028
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER (OR) DIETHYLHEXYL PHTHALATE

. Waste code: U031
. Waste name: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

. Waste code: U032
. Waste name: CALCIUM CHROMATE (OR) CHROMIC ACID H2CRO4, CALCIUM SALT

. Waste code: U033
. Waste name: CARBON OXYFLUORIDE (R,T) (OR) CARBONIC DIFLUORIDE

. Waste code: U037
. Waste name: BENZENE, CHLORO- (OR) CHLOROBENZENE

. Waste code: U039
. Waste name: P-CHLORO-M-CRESOL (OR) PHENOL, 4-CHLORO-3-METHYL-

. Waste code: U044
. Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-

. Waste code: U045
. Waste name: METHANE, CHLORO- (I,T) (OR) METHYL CHLORIDE (I,T)

. Waste code: U048
. Waste name: O-CHLOROPHENOL (OR) PHENOL, 2-CHLORO-

. Waste code: U052
. Waste name: CRESOL (CRESYLIC ACID) (OR) PHENOL, METHYL-

. Waste code: U053
. Waste name: 2-BUTENAL (OR) CROTONALDEHYDE

. Waste code: U054
. Waste name: Not Defined

. Waste code: U055
. Waste name: BENZENE, (1-METHYLETHYL)- (I) (OR) CUMENE (I)

. Waste code: U056
. Waste name: BENZENE, HEXAHYDRO- (I) (OR) CYCLOHEXANE (I)

. Waste code: U057
. Waste name: CYCLOHEXANONE (I)

SHERWIN WILLIAMS CO (Continued) **1000371387**

. Waste code: U067
. Waste name: ETHANE, 1,2-DIBROMO- (OR) ETHYLENE DIBROMIDE

. Waste code: U069
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER (OR) DIBUTYL PHTHALATE

. Waste code: U070
. Waste name: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

. Waste code: U071
. Waste name: BENZENE, 1,3-DICHLORO- (OR) M-DICHLOROBENZENE

. Waste code: U072
. Waste name: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

. Waste code: U073
. Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO- (OR) 3,3'-DICHLOROBENZIDINE

. Waste code: U074
. Waste name: 1,4-DICHLORO-2-BUTENE (I,T) (OR) 2-BUTENE, 1,4-DICHLORO- (I,T)

. Waste code: U076
. Waste name: ETHANE, 1,1-DICHLORO- (OR) ETHYLIDENE DICHLORIDE

. Waste code: U077
. Waste name: ETHANE, 1,2-DICHLORO- (OR) ETHYLENE DICHLORIDE

. Waste code: U078
. Waste name: 1,1-DICHLOROETHYLENE (OR) ETHENE, 1,1-DICHLORO-

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U081
. Waste name: 2,4-DICHLOROPHENOL (OR) PHENOL, 2,4-DICHLORO-

. Waste code: U082
. Waste name: 2,6-DICHLOROPHENOL (OR) PHENOL, 2,6-DICHLORO-

. Waste code: U088
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER (OR) DIETHYL PHTHALATE

. Waste code: U092
. Waste name: DIMETHYLAMINE (I) (OR) METHANAMINE, N-METHYL- (I)

. Waste code: U102
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER (OR) DIMETHYL PHTHALATE

. Waste code: U103
. Waste name: DIMETHYL SULFATE (OR) SULFURIC ACID, DIMETHYL ESTER

. Waste code: U104
. Waste name: Not Defined

. Waste code: U105
. Waste name: 2,4-DINITROTOLUENE (OR) BENZENE, 1-METHYL-2,4-DINITRO-

SHERWIN WILLIAMS CO (Continued) **1000371387**

. Waste code: U106
. Waste name: 2,6-DINITROTOLUENE (OR) BENZENE, 2-METHYL-1,3-DINITRO-

. Waste code: U107
. Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER (OR) DI-N-OCTYL PHTHALATE

. Waste code: U108
. Waste name: 1,4-DIETHYLENEOXIDE (OR) 1,4-DIOXANE

. Waste code: U110
. Waste name: 1-PROPANIMINE, N-PROPYL-(I) (OR) DIPROPYLAMINE (I)

. Waste code: U112
. Waste name: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

. Waste code: U113
. Waste name: 2-PROPENOIC ACID, ETHYL ESTER (I) (OR) ETHYL ACRYLATE (I)

. Waste code: U115
. Waste name: ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)

. Waste code: U117
. Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

. Waste code: U118
. Waste name: 2-PROPENOIC ACID, 2-METHYL-, ETHYL ESTER (OR) ETHYL METHACRYLATE

. Waste code: U119
. Waste name: ETHYL METHANESULFONATE (OR) METHANESULFONIC ACID, ETHYL ESTER

. Waste code: U122
. Waste name: FORMALDEHYDE

. Waste code: U123
. Waste name: FORMIC ACID (C,T)

. Waste code: U124
. Waste name: FURAN (I) (OR) FURFURAN (I)

. Waste code: U125
. Waste name: 2-FURANCARBOXALDEHYDE (I) (OR) FURFURAL (I)

. Waste code: U126
. Waste name: GLYCIDYLALDEHYDE (OR) OXIRANECARBOXYALDEHYDE

. Waste code: U127
. Waste name: BENZENE, HEXACHLORO- (OR) HEXACHLOROBENZENE

. Waste code: U128
. Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO- (OR) HEXACHLOROBUTADIENE

. Waste code: U130
. Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO- (OR) HEXACHLOROCYCLOPENTADIENE

. Waste code: U131
. Waste name: ETHANE, HEXACHLORO- (OR) HEXACHLOROETHANE

SHERWIN WILLIAMS CO (Continued) **1000371387**

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U135
. Waste name: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

. Waste code: U140
. Waste name: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

. Waste code: U145
. Waste name: LEAD PHOSPHATE (OR) PHOSPHORIC ACID, LEAD(2+) SALT (2:3)

. Waste code: U147
. Waste name: 2,5-FURANDIONE (OR) MALEIC ANHYDRIDE

. Waste code: U149
. Waste name: MALONONITRILE (OR) PROPANEDINITRILE

. Waste code: U150
. Waste name: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

. Waste code: U151
. Waste name: MERCURY

. Waste code: U152
. Waste name: 2-PROPENENITRILE, 2-METHYL- (I,T) (OR) METHACRYLONITRILE (I,T)

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U155
. Waste name: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)- (OR) METHAPYRILENE

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U160
. Waste name: 2-BUTANONE, PEROXIDE (R,T) (OR) METHYL ETHYL KETONE PEROXIDE (R,T)

. Waste code: U161
. Waste name: 4-METHYL-2-PENTANONE (I) (OR) METHYL ISOBUTYL KETONE (I) (OR) PENTANOL, 4-METHYL-

. Waste code: U162
. Waste name: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

. Waste code: U165
. Waste name: NAPHTHALENE

. Waste code: U167
. Waste name: 1-NAPTHALENAMINE (OR) ALPHA-NAPHTHYLAMINE

SHERWIN WILLIAMS CO (Continued) **1000371387**

. Waste code: U168
. Waste name: 2-NAPTHALENAMINE (OR) BETA-NAPHTHYLAMINE

. Waste code: U169
. Waste name: BENZENE, NITRO- (OR) NITROBENZENE (I,T)

. Waste code: U170
. Waste name: P-NITROPHENOL (I,T) (OR) PHENOL, 4-NITRO-

. Waste code: U171
. Waste name: 2-NITROPROPANE (I,T) (OR) PROPANE, 2-NITRO- (I,T)

. Waste code: U183
. Waste name: BENZENE, PENTACHLORO- (OR) PENTACHLOROBENZENE

. Waste code: U184
. Waste name: ETHANE, PENTACHLORO- (OR) PENTACHLOROETHANE

. Waste code: U185
. Waste name: BENZENE, PENTACHLORONITRO- (OR) PENTACHLORONITROBENZENE (PCNB)

. Waste code: U186
. Waste name: 1,3-PENTADIENE (I) (OR) 1-METHYLBUTADIENE (I)

. Waste code: U187
. Waste name: ACETAMIDE, N-(4-ETHOXYPHENYL)- (OR) PHENACETIN

. Waste code: U188
. Waste name: PHENOL

. Waste code: U190
. Waste name: 1,3-ISOBENZOFURANDIONE (OR) PHTHALIC ANHYDRIDE

. Waste code: U194
. Waste name: 1-PROPANAMINE (I,T) (OR) N-PROPYLAMINE (I,T)

. Waste code: U196
. Waste name: PYRIDINE

. Waste code: U201
. Waste name: 1,3-BENZENEDIOL (OR) RESORCINOL

. Waste code: U202
. Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS

. Waste code: U207
. Waste name: 1,2,4,5-TETRACHLOROBENZENE (OR) BENZENE, 1,2,4,5-TETRACHLORO-

. Waste code: U208
. Waste name: 1,1,1,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,1,2-TETRACHLORO-

. Waste code: U209
. Waste name: 1,1,2,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,2,2-TETRACHLORO-

. Waste code: U210
. Waste name: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

SHERWIN WILLIAMS CO (Continued) **1000371387**

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: U212
. Waste name: Not Defined

. Waste code: U213
. Waste name: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

. Waste code: U218
. Waste name: ETHANETHIOAMIDE (OR) THIOACETAMIDE

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U221
. Waste name: BENZENEDIAMINE, AR-METHYL- (OR) TOLUENEDIAMINE

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

. Waste code: U225
. Waste name: BROMOFORM (OR) METHANE, TRIBROMO-

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

. Waste code: U227
. Waste name: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

. Waste code: U228
. Waste name: ETHENE, TRICHLORO- (OR) TRICHLOROETHYLENE

. Waste code: U229
. Waste name: Not Defined

. Waste code: U230
. Waste name: Not Defined

. Waste code: U231
. Waste name: Not Defined

. Waste code: U232
. Waste name: Not Defined

. Waste code: U234
. Waste name: 1,3,5-TRINITROBENZENE (R,T) (OR) BENZENE, 1,3,5-TRINITRO-

. Waste code: U238
. Waste name: CARBAMIC ACID, ETHYL ESTER (OR) ETHYL CARBAMATE (URETHANE)

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Corrective Action Summary:
Event date: 1992-03-02 00:00:00.0
Event: STABILIZATION MEASURES EVALUATION-FACILITY IS AMENABLE TO

SHERWIN WILLIAMS CO (Continued) **1000371387**

STABILIZATION

Event date: 1992-03-02 00:00:00.0
Event: CA PRIORITIZATION-LOW CA PRIORITY

Event date: 1992-03-16 00:00:00.0
Event: RFA COMPLETED

Event date: 2009-05-01 00:00:00.0
Event: DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NOT NECESSARY

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 1987-08-05 00:00:00.0
Date achieved compliance: 1988-02-05 00:00:00.0
Violation lead agency: State
Enforcement action: COMPLIANCE EVALUATION INSPECTION ON-SITE
Enforcement action date: 1987-11-06 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 1986-03-27 00:00:00.0
Date achieved compliance: 1986-07-18 00:00:00.0
Violation lead agency: State
Enforcement action: FINANCIAL RECORD REVIEW
Enforcement action date: 1986-05-16 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 1987-08-05 00:00:00.0
Evaluation: WRITTEN INFORMAL
Area of violation: Generators - General
Date achieved compliance: 1988-02-05 00:00:00.0
Evaluation lead agency: State

Evaluation date: 1986-03-27 00:00:00.0
Evaluation: VIOLATION NOTICE (VN)
Area of violation: TSD - Financial Requirements
Date achieved compliance: 1986-07-18 00:00:00.0
Evaluation lead agency: State

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
319 NE 1/2-1 0.983 mi. 5190 ft.	**PEOPLES GAS AND LIGHT 700-750 EAST 111TH STREET CHICAGO, IL 60628**	**EDR MGP**	**1008407342 N/A**

Actual:
591 ft.

Manufactured Gas Plants:

No additional information available

Focus Map:
6

Count: 822 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BURNHAM	2019241752		14239 STATE LINE RD		ERNS
BURNHAM	2015110233		14289 STATE LINE RD.		ERNS
BURNHAM	8857571		WEST OF TORRANCE 100 YARDS SOUTH OF LITTLE CALUMET RIVER ENT		ERNS
BURNHAM	2013008821	INDIANA HARBOR BELT RR.	INDIANA HARBOR BELT RR.	60633	HMIRS
BURNHAM	2015006992	14289 STATE LINE RD	14289 STATE LINE RD	60633	HMIRS
BURNHAM	S112360717		RIVER, CALUMET		IL SPILLS
BURNHAM	S123575337		104239 STATE LINE ROAD		IL SPILLS
BURNHAM	1016367400	NATURAL GAS PIPELINE	CALUMET 2 REPLACEMENT	60633	FINDS
CALUMET PARK	2011973076		2040 EAST 106TH ST		ERNS
CALUMET PARK	2009050854	AT 2040 EAST 106TH STREET	AT 2040 EAST 106TH STREET		HMIRS
CALUMET PARK	S111891315		130TH & ASHLAND AVE		IL SPILLS
CALUMET PARK	S111891476		130TH & S ASHLAND		IL SPILLS
CALUMET PARK	S115739820		130TH AND ASHLAND		IL SPILLS
CALUMET PARK	S115739981		130TH & SOUTH ASHLAND		IL SPILLS
CALUMET PARK	S112359198		MARTIN WAY CLEANERS , 130TH		IL SPILLS
CALUMET PARK	S111891243		LAKE MICHIGAN		IL SPILLS
CALUMET PARK	S115719034		CALUMET PARK POLICE DEPT.		IL SPILLS
CALUMET PARK	S108045399		122 STONEY ISLAND CALUMET RIVER MM: 328.1		IL SPILLS
CALUMET PARK	S115739748		LAKE MICHIGAN		IL SPILLS
CALUMET PARK	S112361138		CALUMET PARK POLICE DEPT.		IL SPILLS
CALUMET PARK	S112353457		115TH & S CHAMPLAIN		IL SPILLS
CALUMET PARK	S111897885		2040 E 106TH ST		IL SPILLS
CALUMET PARK	S115773577		2040 E. 106TH ST		IL SPILLS
CALUMET PARK	S115769786		2040 E 106TH ST		IL SPILLS
CALUMET PARK	S115746396		2040 EAST 106TH STREET		IL SPILLS
CALUMET PARK	S123083961		I-57 SB 139TH ST		IL SPILLS
CALUMET PARK	S115718589		I-57 & 127TH STREET		IL SPILLS
CALUMET PARK	S112360781		127TH & I-57		IL SPILLS
CALUMET PARK	S123420251		I-57 SB 139TH ST		IL SPILLS
CALUMET PARK	1008130750	PHILLIP MALYSA PROPERTY	130TH & S ASHLAND	60827	FINDS
CALUMET PARK	S107743961	MATERIALS SERVICE CORP YD #5	130TH AND ASHLAND AVE		IL AIRS
CALUMET PARK	S125250714	MATERIALS SERVICE CORP YD #5	130TH AND ASHLAND AVE	60827	IL BOL
CHICAGO	1015731053	PAXTON LANDFILL CORPORATION	116TH STREET & PAXTON AVENUE	60633	SEMS, RCRA NonGen / NLR
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	SEMS, PRP, CONSENT
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	SEMS-ARCHIVE
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	SEMS-ARCHIVE
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	SEMS-ARCHIVE
CHICAGO	1003870294	L.H.L. #2	116TH & N & W RR	60617	SEMS-ARCHIVE
CHICAGO	1024879853	ISTHA CONTRACT RR-17-4314	I-294 TRI STATE TOLLWAY	60628	RCRA-SQG
CHICAGO	1004695029	ARMY COE LOCK DAM 01	134TH AND CALUMET RIVER	60633	RCRA-VSQG
CHICAGO	2009897414		130TH ST		ERNS
CHICAGO	2006810974		130TH ST.		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2011995829		130TH ST		ERNS
CHICAGO	98434885		130TH STREET AND STORMY		ERNS
CHICAGO	95303576		63ST AND COTTAGE GROVE		ERNS
CHICAGO	2006809138		CALUMET RAIL YARD	60617	ERNS
CHICAGO	2018231438		CALUMET ENGINE HOUSE	60617	ERNS
CHICAGO	2003657270		CALUMET RIVER	60617	ERNS
CHICAGO	94252735		115TH STREET	60628	ERNS
CHICAGO	2004733997		45TH AND STATE ST.		ERNS
CHICAGO	2007846865		CALUMET RAILYARD		ERNS
CHICAGO	2007854400		LAKE CALUMET		ERNS
CHICAGO	2008878901		LAKE MICHIGAN		ERNS
CHICAGO	2006818594		63RD AND STATE STREET		ERNS
CHICAGO	2006789187		CALUMET RIVER		ERNS
CHICAGO	2006808077		115TH ST.		ERNS
CHICAGO	2012031112		115TH ST CROSSING		ERNS
CHICAGO	2011991495		40 MI EAST OF CHICAGO ON LAKE MICHIGAN		ERNS
CHICAGO	2012025786		CALUMET RIVER		ERNS
CHICAGO	2011990843		ENTRANCE TO CALUMET RIVER		ERNS
CHICAGO	2012016682		CALUMET RIVER		ERNS
CHICAGO	2013053035		LAKE MICHIGAN		ERNS
CHICAGO	2009919708		CALUMET YARD		ERNS
CHICAGO	2010949502		CALUMET RIVER		ERNS
CHICAGO	2009922898		115TH AND DOTY RD		ERNS
CHICAGO	2009926425		LAKE MICHIGAN		ERNS
CHICAGO	2014093076		CALUMET RIVER		ERNS
CHICAGO	2015109834		LAKE MICHIGAN		ERNS
CHICAGO	2014103748		CALUMET RIVER		ERNS
CHICAGO	2014101811		5845 25847 SOUTH CALUMET		ERNS
CHICAGO	2016145002		MICHIGAN AVE &		ERNS
CHICAGO	2016148677		CALUMET RIVER		ERNS
CHICAGO	2016141499		CALUMET/ SAG RIVER		ERNS
CHICAGO	2017188513		NORTH SIDE OF CALUMET HARBOR		ERNS
CHICAGO	2013060736		CALUMET RIVER		ERNS
CHICAGO	2014076440		CALUMET YARD		ERNS
CHICAGO	2014081906		LAKE MICHIGAN		ERNS
CHICAGO	8864519		SOUTH END OF BELMONT HARBOR LAKE MICHIGAN		ERNS
CHICAGO	2018218426		LAKE MICHIGAN		ERNS
CHICAGO	2018226109		USCG CALUMET HARBOR		ERNS
CHICAGO	2018226110		USCG CALUMET HARBOR		ERNS
CHICAGO	89100836		LAKE MICHIGAN ADJACENT ILLINOIS RIVER LOCKS		ERNS
CHICAGO	89114226		LAKE MICHIGAN, BY BANK ST		ERNS
CHICAGO	9031813		LAKE MICHIGAN		ERNS
CHICAGO	9023328		CALUMET YARD		ERNS
CHICAGO	9017776		SW CORNER LAKE MICHIGAN		ERNS
CHICAGO	873474		SOUTHBOUND FROM LOCKS BTWN CHICAGO RIVER & LAKE MICHIGAN		ERNS
CHICAGO	875664		PMC CORPORATION OR SHERWIN WILLIAMS 115TH ST AND CHAMPLAIN A		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	92121305		CALUMET RAIL YARD		ERNS
CHICAGO	95286963		CALUMET YARD		ERNS
CHICAGO	95283163		LAKE MICHIGAN		ERNS
CHICAGO	93159738		CALUMET YARD		ERNS
CHICAGO	93183680		CALUMET YARD		ERNS
CHICAGO	93188414		LAKE MICHIGAN AT		ERNS
CHICAGO	93188613		LAKE MICHIGAN		ERNS
CHICAGO	93204227		CALUMET YARD		ERNS
CHICAGO	9154749		CHICAGO CALUMET YARD		ERNS
CHICAGO	95305222		BETWEEN STATE ST AND		ERNS
CHICAGO	97383902		CALUMET PEAKERS		ERNS
CHICAGO	94229373		STATE STREET SUBWAY		ERNS
CHICAGO	94268265		MICHIGAN AND EAST WACKER		ERNS
CHICAGO	94262436		CALUMET YARD		ERNS
CHICAGO	94239566		CALUMET SAGE CHANNEL		ERNS
CHICAGO	94260847		CALUMET YARD		ERNS
CHICAGO	94234565		PERRY AVE CROSSING		ERNS
CHICAGO	94245437		MICHIGAN AVE &		ERNS
CHICAGO	99474547		51ST AND CALUMET AVE		ERNS
CHICAGO	99503071		122ND AND INDIANA		ERNS
CHICAGO	2000521948		WABASH YARD		ERNS
CHICAGO	2004735469		109TH ST AND MICHIGAN AVE		ERNS
CHICAGO	2012001140		111TH STREET		ERNS
CHICAGO	8850281		114TH ST AND TORRENCE AVE		ERNS
CHICAGO	2000551947		112TH STREET		ERNS
CHICAGO	2009900518		104TH STREET		ERNS
CHICAGO	2019236711		EAST 106TH STREET		ERNS
CHICAGO	2002592420		103RD AND KEDZIE		ERNS
CHICAGO	2015118403		102ND STREET AND		ERNS
CHICAGO	2017170401		47 WENTWORTH		ERNS
CHICAGO	8714920		100TH & EWING (ONE BLOCK EAST)		ERNS
CHICAGO	875165		99TH ST. AND AVE. J		ERNS
CHICAGO	876733		99TH ST AND CENTRAL PARK		ERNS
CHICAGO	92104008		106TH AVE AND		ERNS
CHICAGO	95300833		58TH AND WENTWORTH		ERNS
CHICAGO	98455926		106TH STREET		ERNS
CHICAGO	2018227847		147 47TH WENTWORTH AVE		ERNS
CHICAGO	99475918		99TH AND EAGLESTON / DOT		ERNS
CHICAGO	2000531564		104TH STREET		ERNS
CHICAGO	2001576475		103RD STREET AND PULASKI ROAD		ERNS
CHICAGO	2009900532		I-57 AT 99TH & HALSTEAD EXIT		ERNS
CHICAGO	2012022051		I-94 NORTH, MM 36		ERNS
CHICAGO	95290516		I-94 AND ADDISON ST		ERNS
CHICAGO	95288390		I-57 SOUTHBOUND		ERNS
CHICAGO	97383337		59TH ST ENTRANCE TO I-94		ERNS
CHICAGO	99496024		I-94 AND 130TH STREET		ERNS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	NORTH OF 122ND		IL SSU

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	U000865042	GAS SHOP & MINI MART	13547 S. INDIANA AVE.	60628	IL UST
CHICAGO	U004022836	USED APPLLIANCE STORE	342-44 E. 115TH STREET	60628	IL UST
CHICAGO	U001141972	ANGELICA HEALTHCARE SERVGROUP	100 - 140 W. 111TH STREET	60628	IL UST
CHICAGO	S121833890	CID LANDFILL	13721 S DOTY AVE		IL TANKS
CHICAGO	S121833901	WASTE MANAGEMENT	13747 S DOTY AVE		IL TANKS
CHICAGO	S121833893	CID LANDFILL	13731 S DOTY AVE		IL TANKS
CHICAGO	S121833894	CID LANDFILL	13731 S DOTY AVE		IL TANKS
CHICAGO	S121846289	MICHAEL REESE HOSPITAL	2742 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121840890	MCCORMICK PLACE/SOUTH PARKING LOT	2241 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121839855	LAKESIDE BAR	2325 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121840103	GENERAL TIRE	2247 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121842068	FORMER HOWICH PROPERTY	2412 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121842194	MCCORMICK PLACE WEST	2405 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121843937	GENERAL TIRE & RUBBER	2247 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121843936	GENERAL TIRE & RUBBER	2247 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121844424	M. CHRIST-AUTOMATIC SPECIALTY	2344 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121844468	DAVIES LAUNDRY	2349 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121844469	DAVIES LAUNDRY	2349 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121844470	DAVIES LAUNDRY	2349 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121844546	E R ROSEN	2369 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121844689	WILLIE HOLLAND	2405 S COTTAGE GROVE AVE		IL TANKS
CHICAGO	S121833807	CLARK OIL	13547 S INDIANA AVE		IL TANKS
CHICAGO	S121840862	TRIANGLE SERVICE(AUTO REPAIR	13701 S INDIANA AVE		IL TANKS
CHICAGO	S121830375	EDDIE NELSON INC.	12050 E 115TH ST		IL TANKS
CHICAGO	S121834605	NEAR NORTH SIDE MANAGEMENT COMPANY	1520 N STATE ST		IL TANKS
CHICAGO	S121837693	GAS STOP AND MINI MART	13547 S INDIANA AVE		IL TANKS
CHICAGO	S121833884	TOWN & COUNTRY SERVICE STATION	13701 S INDIANA AVE		IL TANKS
CHICAGO	S121833904	JOHN GUITSEHAW	13757 S INDIANA AVE		IL TANKS
CHICAGO	S121833906	JOHN GUITSEHAW	13757 S INDIANA AVE		IL TANKS
CHICAGO	S121833777	BLACK PRODUCTS COMPANY	13513 S CALUMET AVE		IL TANKS
CHICAGO	S121833806	CLARK OIL	13547 S INDIANA AVE		IL TANKS
CHICAGO	S121838576	TJ O'BRIEN LOCK & DAM	13400 S CALUMET		IL TANKS
CHICAGO	S121833869	CITY OF CHICAGO	13633 S INDIANA AVE		IL TANKS
CHICAGO	S121833870	CITY OF CHICAGO	13633 S INDIANA AVE		IL TANKS
CHICAGO	S121863755	SHERWIN WILLIAMS COMPANY	800 E KENSINGTON AVE		IL TANKS
CHICAGO	S121863754	SHERWIN WILLIAMS COMPANY	800 E KENSINGTON AVE		IL TANKS
CHICAGO	S121833883	TOWN & COUNTRY SERVICE STATION	13701 S INDIANA AVE		IL TANKS
CHICAGO	S121833905	JOHN GUITSEHAW	13757 S INDIANA AVE		IL TANKS
CHICAGO	S121837714	BROWN TRANSPORTATION CORP.	7526 S STATE		IL TANKS
CHICAGO	S121834735	1540 NORTH STATE PKWY TRUST	1540 N STATE ST		IL TANKS
CHICAGO	S121833885	TOWN & COUNTRY SERVICE STATION	13701 S INDIANA AVE		IL TANKS
CHICAGO	S121833892	CUSTOM CAR WASH	13723 S INDIANA AVE		IL TANKS
CHICAGO	S121833903	JOHN GUITSEHAW	13757 S INDIANA AVE		IL TANKS
CHICAGO	S121838747	LAKE SHORE PETROCORP/GAS STATION	13759 S INDIANA AVE		IL TANKS
CHICAGO	S121833775	BLACK PRODUCTS COMPANY	13513 S CALUMET AVE		IL TANKS
CHICAGO	S121833776	BLACK PRODUCTS COMPANY	13513 S CALUMET AVE		IL TANKS
CHICAGO	S121833891	STANDARD OIL	13723 S INDIANA AVE		IL TANKS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S121844820	CHECKER TAXI COMPANY	2426 S PRAIRIE AVE		IL TANKS
CHICAGO	S121844781	BARR & MILES INC	2420 S PRAIRIE AVE		IL TANKS
CHICAGO	S121844783	BARR & MILES INC	2420 S PRAIRIE AVE		IL TANKS
CHICAGO	S121848357	SHELL OIL	3200 W 115TH ST		IL TANKS
CHICAGO	S121848358	SHELL OIL	3200 W 115TH ST		IL TANKS
CHICAGO	S121845368	CITIES SERVICE OIL	2536 S INDIANA AVE		IL TANKS
CHICAGO	S121837356	BARR & MILES,INC.	2420 S PRAIRIE AVE		IL TANKS
CHICAGO	S121842014	FORMER TRIBUNE PROPERTY	2426 S PRAIRIE AVE		IL TANKS
CHICAGO	S121845390	A & H TRANSPORT COMPANY	2541 S INDIANA AVE		IL TANKS
CHICAGO	S121844782	BARR & MILES INC	2420 S PRAIRIE AVE		IL TANKS
CHICAGO	S121847331	NORRIS GRAIN COMPANY	3301 E 98TH ST		IL TANKS
CHICAGO	S121851670	FALSTAFF BREW	4001 E 103RD ST		IL TANKS
CHICAGO	2004100299		S COTTAGE GROVE		HMIRS
CHICAGO	2003130332		S COTTAGE GROVE		HMIRS
CHICAGO	92080639		124TH ST & COTTAGE GROVE AVE		HMIRS
CHICAGO	91070002		124TH ST & COTTAGE GROVE AVE		HMIRS
CHICAGO	2011002448	EAST 114TH ST.	EAST 114TH ST.	60617	HMIRS
CHICAGO	96020996		115TH ST		HMIRS
CHICAGO	97080810		115TH STREET		HMIRS
CHICAGO	9998040309		115TH STREET		HMIRS
CHICAGO	9998080743		115TH ST		HMIRS
CHICAGO	2008448164	AT 2440 EAST 106TH STREET	AT 2440 EAST 106TH STREET		HMIRS
CHICAGO	2014018703	35TH AND WENTWORTH	35TH AND WENTWORTH		HMIRS
CHICAGO	2001010257		63RD & YALE STREET		HMIRS
CHICAGO	2003122969		I-94 WESTBOUND EXIT 59 C 71ST		HMIRS
CHICAGO	2007439192	W/B I-94 AT MP 59	W/B I-94 AT MP 59		HMIRS
CHICAGO	95041061		I-94 WILSON AVE		HMIRS
CHICAGO	96070214		I-94 N 1/10 MILE OF 111TH ST		HMIRS
CHICAGO	S109700137		W DOTY AVE BETWEEN 126TH & 127TH ST		IL SPILLS
CHICAGO	S111891070		41 BRAINARD AVE TO 130TH AND STONY ISLAND AVE		IL SPILLS
CHICAGO	S111878421		S DOTY AVE		IL SPILLS
CHICAGO	S111901336		130TH & STONY ISLAND		IL SPILLS
CHICAGO	S111927317		130TH ST AND TORRENCE AVE		IL SPILLS
CHICAGO	S111902403		DOTY ST		IL SPILLS
CHICAGO	S111924749		SOUTH OF 130TH ST.		IL SPILLS
CHICAGO	S111925091		DOTY AVE. WEST BETWEEN 126TH & 127TH ST.		IL SPILLS
CHICAGO	S111918596		126TH & DOTY AVE		IL SPILLS
CHICAGO	S111908455		130TH ST		IL SPILLS
CHICAGO	S115755978		IN FRONT OF FORD PLANT ON 130TH STREET		IL SPILLS
CHICAGO	S115739575		41 BRAINARD TO 130TH AND		IL SPILLS
CHICAGO	S115767845		130TH ST. AND I 94 EAST BOUND		IL SPILLS
CHICAGO	S115749806		130TH & STONY ISLAND		IL SPILLS
CHICAGO	S115762964		130TH WEST OF TORRENCE AVE		IL SPILLS
CHICAGO	S115765424		126TH AND DOTY AVE.		IL SPILLS
CHICAGO	S115770711		AMERICAN SWEETENER 2400 EAST 130TH ST.		IL SPILLS
CHICAGO	S115770756		SOUTH OF 130TH ST		IL SPILLS
CHICAGO	S115740476		130TH ST.		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S115771109		DOTY AVENUE WEST BETWEEN 126TH AND 127TH STREET - WEST SIDE OF STREET IN DITCH		IL SPILLS
CHICAGO	S115726920		SOUTH DOTY AVENUE		IL SPILLS
CHICAGO	S115750871		DOTY ST.		IL SPILLS
CHICAGO	S112355138		130TH ST. & CHICAGO AVENUE		IL SPILLS
CHICAGO	S109550473		S OF 130TH ST		IL SPILLS
CHICAGO	S110685145		130TH ST & COTTAGE GROVE AVE		IL SPILLS
CHICAGO	S111883295		E OF COTTAGE GROVE AVE		IL SPILLS
CHICAGO	S111913243		118TH ST COTTAGE GROVE		IL SPILLS
CHICAGO	S111887832		ALWASTE COMPANY SOUTH COTTAGE GROVE		IL SPILLS
CHICAGO	S115772970		130TH ST & COTTAGE GROVE AVE		IL SPILLS
CHICAGO	S115736333		SOUTH COTTAGE GROVE		IL SPILLS
CHICAGO	S115760312		118TH ST./COTTAGE GROVE		IL SPILLS
CHICAGO	S115769211		67TH ST. AND COTTAGE GROVE AVE.		IL SPILLS
CHICAGO	S112359998		59TH COTTAGE GROVE		IL SPILLS
CHICAGO	S112358624		122ND & COTTAGE GROVE		IL SPILLS
CHICAGO	S116761625		13700 S PERRY AVE		IL SPILLS
CHICAGO	S111349402		61ST ST AND STATE		IL SPILLS
CHICAGO	S115725307		3200 W. 115TH AND KEDZIE		IL SPILLS
CHICAGO	S117566846		13700 S PERRY AVE,		IL SPILLS
CHICAGO	S115740599		2420 S. PRAIRIE AVE		IL SPILLS
CHICAGO	S111892095		2420 S PRAIRIE AVE		IL SPILLS
CHICAGO	S111876565		4001 E 95TH ST CALUMET HARBOR		IL SPILLS
CHICAGO	S111879966		SE CORNER 35TH & INDIANA		IL SPILLS
CHICAGO	S111877027		CALUMET & 319.8/TRITLEX MARINA		IL SPILLS
CHICAGO	S111877227		CHICAGO HARBOR/INDIANA		IL SPILLS
CHICAGO	S111877798		115TH & KENSINGTON		IL SPILLS
CHICAGO	S111875316		116TH & BURLING		IL SPILLS
CHICAGO	S111878642		134TH & STATE LINE		IL SPILLS
CHICAGO	S111879455		1/2 BLOCK OFF OF 115TH ST & KINSINGTON AVE		IL SPILLS
CHICAGO	S111890682		LAKE MICHIGAN		IL SPILLS
CHICAGO	S111890750		63RD & STATE ST (CONRAIL RAIL YARDS)		IL SPILLS
CHICAGO	S111901173		AVENUE 0 & 116TH ST		IL SPILLS
CHICAGO	S111894121		35TH & STATE ST		IL SPILLS
CHICAGO	S111897595		120TH S TORRENCE AVE - IN CALUMET CHANNEL		IL SPILLS
CHICAGO	S111905655		INDIANA ROAD PARK		IL SPILLS
CHICAGO	S111920473		I-55 NEAR STATE ST EXIT		IL SPILLS
CHICAGO	S111883741		83RD & STATE ST		IL SPILLS
CHICAGO	S111884000		15TH ST & LAKE MICHIGAN (MEIGS FIELD)		IL SPILLS
CHICAGO	S111887924		CHICAGO RIVER/STATE ST & WACKER DR		IL SPILLS
CHICAGO	S111927389		WABASH AVE AND CHICAGO RIVER WATERWAY		IL SPILLS
CHICAGO	S111894905		63RD & INDIANA STS (CONRAIL YARDS)		IL SPILLS
CHICAGO	S111888166		71ST & STATE ST		IL SPILLS
CHICAGO	S111891730		LAKE MICHIGAN MONTROSE HARBORS		IL SPILLS
CHICAGO	S111898477		116TH ST & S BARLEY AVE		IL SPILLS
CHICAGO	S111902392		15TH ST @LAKE MICHIGAN (MEIGGS FIELD)		IL SPILLS
CHICAGO	S111910399		ON CERMACK AVE BETWEEN WABASH & MICHIGAN AVE		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111881214		MONROE HARBOR, LAKE MICHIGAN		IL SPILLS
CHICAGO	S111888448		1 MILE E OF 4 MILE CRIB, LAKE MICHIGAN		IL SPILLS
CHICAGO	S111891884		CALUMET YARDS		IL SPILLS
CHICAGO	S111910684		(6600 SOUTH) INBOUND SKYWAY (I-90) NEAR THE STATE STREET EXIT		IL SPILLS
CHICAGO	S111881385		LITTLE CALUMET RIVER		IL SPILLS
CHICAGO	S111888696		INTERSECTION OF 37TH & STATE STS		IL SPILLS
CHICAGO	S111892394		138TH ST & CALUMET EXPRESSWAY		IL SPILLS
CHICAGO	S111895516		49TH ST & WABASH AVE		IL SPILLS
CHICAGO	S111885360		130TH ST & CALUMET EXPRESSWAY		IL SPILLS
CHICAGO	S111911416		S OF 116TH ST PROBABLY .5 TO 1 BLOCK OF 116TH STREET AND		IL SPILLS
CHICAGO	S111903862		51ST & CALUMET AVE		IL SPILLS
CHICAGO	S111922328		CALUMET YARD		IL SPILLS
CHICAGO	S111925665		LAKE MICHIGAN AT RANDOLPH AND LAKE FRONT		IL SPILLS
CHICAGO	S111882312		S OF 115TH ST SW OF GREEN ST, W OF HALSTED AVE		IL SPILLS
CHICAGO	S111882375		58 PRAIRIE ST		IL SPILLS
CHICAGO	S111885994		CALUMET RIVER		IL SPILLS
CHICAGO	S111896483		138TH ST & CALUMET EXPRESSWAY		IL SPILLS
CHICAGO	S111900155		CALUMET EXPRESSWAY AT COTTAGE GROVE AVE		IL SPILLS
CHICAGO	S111904280		MP 1.1 ON THE CALUMET RIVER LINE		IL SPILLS
CHICAGO	S111919162		67TH ST & MICHIGAN AVE		IL SPILLS
CHICAGO	S111893339		BETWEEN 8514 S KENNETH & 800 N MICHIGAN AVE		IL SPILLS
CHICAGO	S111908596		CALUMET RIVER		IL SPILLS
CHICAGO	S111886694		INTERSECTION OF 83RD & STATE ST		IL SPILLS
CHICAGO	S111890359		22TH & CALUMET		IL SPILLS
CHICAGO	S111886949		CALUMET YARD		IL SPILLS
CHICAGO	S111887079		44TH ST BETWEEN INDIAN & MICHIGAN AVE		IL SPILLS
CHICAGO	S115719172		KENSINGTON AVENUE		IL SPILLS
CHICAGO	S115721632		115TH & I94		IL SPILLS
CHICAGO	S115721833		7409 SOUTH STATE		IL SPILLS
CHICAGO	S115719731		138TH & CALUMET EXPRESSWAY		IL SPILLS
CHICAGO	S115719930		87TH & STATE		IL SPILLS
CHICAGO	S115720098		116TH STREET & BURLING AVENUE		IL SPILLS
CHICAGO	S115720738		STATE STREET & 31 35TH STREET		IL SPILLS
CHICAGO	S115721228		158TH ST. & LITTLE CALUMET RVR		IL SPILLS
CHICAGO	S115721385		138TH CALUMET EXPRESSWAY		IL SPILLS
CHICAGO	S115774590		WABASH AVE AND CHICAGO RIVER		IL SPILLS
CHICAGO	S115775916		MAIN BRANCH OF THE CHICAGO RIVER AT STATE ST.		IL SPILLS
CHICAGO	S115776001		27TH AND STATE ST		IL SPILLS
CHICAGO	S115773957		61 ST. & STATE		IL SPILLS
CHICAGO	S108047276		LAKE MICHIGAN		IL SPILLS
CHICAGO	S115758810		SOUTH OF 116TH ST. PROBABLY 1/2 TO 1 BLOCK OF 116TH S. AND A BLO		IL SPILLS
CHICAGO	S115769410		549 115TH ST.		IL SPILLS
CHICAGO	S115727953		.5BLK OFF 115TH ST.		IL SPILLS
CHICAGO	S115761721		13333 S. INDIANA		IL SPILLS
CHICAGO	S115764330		LAKE MICHIGAN		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S115764331		LAKE MICHIGAN (25 MILES NE OF O HARE)		IL SPILLS
CHICAGO	S115735194		INTERSECTION 83RD & STATE		IL SPILLS
CHICAGO	S115744993		138TH STRT. & CALUMET EXP		IL SPILLS
CHICAGO	S115752329		51ST AND CALUMET		IL SPILLS
CHICAGO	S115767231		OVER LAKE MICHIGAN AT 4000 FT ALTITUDE		IL SPILLS
CHICAGO	S115735449		CALUMET YARD		IL SPILLS
CHICAGO	S115735580		44TH ST. AT INDIANA & MIC		IL SPILLS
CHICAGO	S115738864		22ND & CALUMET		IL SPILLS
CHICAGO	S115748666		CALUMET EXPRESSWAY AND		IL SPILLS
CHICAGO	S115756293		S.E CORNER VAN BUREN AT WABASH		IL SPILLS
CHICAGO	S115769934		N OF 45TH ST & E. OF STATE ST		IL SPILLS
CHICAGO	S115728464		SE CORNER 36TH & INDIANA		IL SPILLS
CHICAGO	S115735697		14TH INDIANA		IL SPILLS
CHICAGO	S115739187		LAKE MICHIGAN NEAR		IL SPILLS
CHICAGO	S115764774		CALUMET RIVER		IL SPILLS
CHICAGO	S115725519		CALUMET/319.8		IL SPILLS
CHICAGO	S115732241		83RD & STATE ST.		IL SPILLS
CHICAGO	S115739255		63RD AND STATE ST.		IL SPILLS
CHICAGO	S115722418		ILLINOIS ST. & LOWER MICHIGAN		IL SPILLS
CHICAGO	S115725719		CHICAGO HARBOR/INDIANA		IL SPILLS
CHICAGO	S115742630		35TH & STATE STREET		IL SPILLS
CHICAGO	S115753422		13759 S. INDIANA AVE.		IL SPILLS
CHICAGO	S115753564		13701 SOUTH INDIANA		IL SPILLS
CHICAGO	S115732500		15TH ST. & LAKE MICHIGAN		IL SPILLS
CHICAGO	S115749643		AVE O & 116TH ST		IL SPILLS
CHICAGO	S115736425		STATE ST. & WACKER DR.		IL SPILLS
CHICAGO	S115768088		CALUMET YARD		IL SPILLS
CHICAGO	S115726288		115TH & KENSINGTON		IL SPILLS
CHICAGO	S115736668		71ST. & STATE ST.		IL SPILLS
CHICAGO	S115763008		45TH & STATE		IL SPILLS
CHICAGO	S115765845		67TH STREET AT MICHIGAN AVENUE		IL SPILLS
CHICAGO	S115768414		LAKE CALUMET AT THE KINDER MORGAN STOLT TERMINAL		IL SPILLS
CHICAGO	S115737198		INT. OF 37TH & STATE ST.		IL SPILLS
CHICAGO	S115740388		CALUMET YARDS		IL SPILLS
CHICAGO	S115757836		ON CERMACK AVENUE BETWEEN WABASH & MICHIGAN AVENUES		IL SPILLS
CHICAGO	S115733862		130TH ST. & CALUMET EXPRE		IL SPILLS
CHICAGO	S115723810		116TH & BURLING		IL SPILLS
CHICAGO	S115727142		134TH & STATE LINE		IL SPILLS
CHICAGO	S115740898		138TH ST. & CALUMET EXPRE		IL SPILLS
CHICAGO	S115744026		49TH STREET & WABASH AVE		IL SPILLS
CHICAGO	S115758109		(6600 SOUTH) INBOUND SKYWAY (I-90) NEAR THE STATE STREET EXIT		IL SPILLS
CHICAGO	S115768961		CALUMET RIVER		IL SPILLS
CHICAGO	S115730808		S. OF 115TH ST. & W. OF		IL SPILLS
CHICAGO	S115766614		I-55 NEAR STATE STREET EXIT		IL SPILLS
CHICAGO	S115771727		LAKE MICHIGAN AT RANDOLPH AND LAKE FRONT		IL SPILLS
CHICAGO	S115734496		MP 331.4 CALUMET RIVER		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S108046893		CALUMET RIVER		IL SPILLS
CHICAGO	S108480188		OVER LAKE MICHIGAN 4000 FT ALTITUDE		IL SPILLS
CHICAGO	S112362955		138TH AND CALUMET EXPRESSWAY		IL SPILLS
CHICAGO	S112352606		INDIANA HARBOR BELT RR,FIRE #2 MAIN		IL SPILLS
CHICAGO	S112361243		KENSINGTON AVENUE		IL SPILLS
CHICAGO	S112354074		LAKE RIVER TERMINAL CALUMET RIVER		IL SPILLS
CHICAGO	S112352810		REPUBLIC STEEL TO CALUMET RIVER		IL SPILLS
CHICAGO	S112358379		STATE LINE STATION-COM ED STATION		IL SPILLS
CHICAGO	S112358384		115TH & COTTAGE GROVE		IL SPILLS
CHICAGO	S112354293		CALUMET CITY WTP MSD		IL SPILLS
CHICAGO	S112361701		138TH & CALUMET EXPRESSWAY		IL SPILLS
CHICAGO	S112355709		SHERWIN WILLIAMS 115TH & CHAMPLAIN		IL SPILLS
CHICAGO	S112355725		N OF 79TH ST AND E OF WABASH		IL SPILLS
CHICAGO	S112360088		115TH CHAMPLAIN		IL SPILLS
CHICAGO	S112363683		ILLINOS AND LOWER MICHIGAN AVE.		IL SPILLS
CHICAGO	S112354454		SW CORNER OF INTERSECTION AT STATE&LAKES		IL SPILLS
CHICAGO	S112354474		LAKE MICHIGAN		IL SPILLS
CHICAGO	S112354476		LAKE MICHIGAN		IL SPILLS
CHICAGO	S112354477		LAKE MICHIGAN		IL SPILLS
CHICAGO	S112361862		87TH & STATE		IL SPILLS
CHICAGO	S112361865		87TH & STATE		IL SPILLS
CHICAGO	S112353146		N BOUND CALUMET & 130TH		IL SPILLS
CHICAGO	S112360215		51ST AND STATE ST.		IL SPILLS
CHICAGO	S112364125		BURNHAM HARBOR SLIP C29 [LAKE MICHIGAN]		IL SPILLS
CHICAGO	S112357372		NAVY PIER - LAKE MICHIGAN		IL SPILLS
CHICAGO	S112357406		AREA OF J & L STEEL - CALUMET HARBOR		IL SPILLS
CHICAGO	S112354713		GRAND CALUMET RIVER - 135TH & HALSTAD		IL SPILLS
CHICAGO	S112354724		LAKE MICHIGAN - FROM WILMET HARBOR		IL SPILLS
CHICAGO	S112356079		LITTLE CALUMET RIVER O'BRIEN LOCKS		IL SPILLS
CHICAGO	S112356140		MORGAN S. 2330 PRAIRIE		IL SPILLS
CHICAGO	S112359020		130TH & CALUMET RIVER		IL SPILLS
CHICAGO	S112360633		RIVER, LITTLE CALUMET		IL SPILLS
CHICAGO	S112356246		N&W CALUMET YARD 2040 E 106ST		IL SPILLS
CHICAGO	S112359138		CALUMET EXPRESSWAY AND 130TH ST.		IL SPILLS
CHICAGO	S112357735		U.S. DRUM SITE (STATE CLEANUP)		IL SPILLS
CHICAGO	S112352401		MAIN BRANCH OF CHICAGO RIVER AT STATE ST.		IL SPILLS
CHICAGO	S112356421		CALUMET RR YARD		IL SPILLS
CHICAGO	S112357824		138TH & CALUMET EXPRESSWAY		IL SPILLS
CHICAGO	S112357837		43RD & STATE ST		IL SPILLS
CHICAGO	S112359265		E Z GO - 1100 S. STATE		IL SPILLS
CHICAGO	S112357926		LAKE MICHIGAN; CHICAGO YACHT CLUB-E MONROE & LAKE MICHIGAN		IL SPILLS
CHICAGO	S123640561		CHICAGO RIVER EAST OF MICHIGAN AVE BRIDGE		IL SPILLS
CHICAGO	S123640486		CALUMET YARD		IL SPILLS
CHICAGO	S109327619		N OF 45TH ST & E OF STATE ST		IL SPILLS
CHICAGO	S113807982		27TH AND STATE ST		IL SPILLS
CHICAGO	S116405054		STARTED AT 22ND STREET MP DC29.3 STOPPING AT PERRY AVE. MP DC12		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S116761399		BETWEEN 31ST AND 42ND ST. ON LAKE MICHIGAN		IL SPILLS
CHICAGO	S123575377		EAST OF MICHIGAN AVE BRIDGE		IL SPILLS
CHICAGO	S123575258		CALUMET YARD		IL SPILLS
CHICAGO	S109092962		RIVER, CALUMET		IL SPILLS
CHICAGO	S117534050		33RD ST AND MICHIGAN AVE		IL SPILLS
CHICAGO	S117566557		22ND ST MP DC29.3 TO PERRY AVE. MP DC12,		IL SPILLS
CHICAGO	S117566577		BETWEEN 31ST AND 42ND ST. ON LAKE MICHIGAN,		IL SPILLS
CHICAGO	S117567254		33RD ST. AND MICHIGAN AVE.,		IL SPILLS
CHICAGO	S111908715		6040 W 111TH ST		IL SPILLS
CHICAGO	S123207722		INTERSECTION OF 111TH AND CROSSLAND		IL SPILLS
CHICAGO	S111880670		111TH & LANGLEY		IL SPILLS
CHICAGO	S111910210		BETWEEN 111TH & 112TH ON SOUTH AVE N		IL SPILLS
CHICAGO	S111898484		109 109TH ST & COTTAGE AVE		IL SPILLS
CHICAGO	S111899635		109TH ST		IL SPILLS
CHICAGO	S111896440		110TH ST (CROSSING)		IL SPILLS
CHICAGO	S108045299		108TH ST & STONEY ISLAND		IL SPILLS
CHICAGO	S115735169		352 W. 110TH.		IL SPILLS
CHICAGO	S115748146		109TH STREET		IL SPILLS
CHICAGO	S115758902		TORRRENCE AVE ABOUT 111TH ST		IL SPILLS
CHICAGO	S115744950		110TH STREET (CROSSING)		IL SPILLS
CHICAGO	S115765166		108TH ST AND STONEY ISLAND		IL SPILLS
CHICAGO	S115729095		4E 111TH. ST.		IL SPILLS
CHICAGO	S115729168		111TH & LANGLEY		IL SPILLS
CHICAGO	S115763070		INTERSECTION OF 109TH AND MICHIGAN AVE		IL SPILLS
CHICAGO	S115757655		BETWEEN 111TH AND 112TH ON SOUTH AVE N		IL SPILLS
CHICAGO	S115757811		135-39 W. 114TH ST		IL SPILLS
CHICAGO	S115763383		2 W 111TH		IL SPILLS
CHICAGO	S115746996		109 109TH ST @COTTAGE AVE		IL SPILLS
CHICAGO	S115768764		NP SERVICE STATION #5023, 2W 111TH ST		IL SPILLS
CHICAGO	S112358834		112TH & CALUMET RIVER		IL SPILLS
CHICAGO	S112362164		111TH STREET & LANE		IL SPILLS
CHICAGO	S112356162		110TH ST. YARD		IL SPILLS
CHICAGO	S123640368		INTERSECTION OF 111TH AND CROSSLAND		IL SPILLS
CHICAGO	S117323537		35TH & WENTWORTH		IL SPILLS
CHICAGO	S111907794		4898 E 105TH ST		IL SPILLS
CHICAGO	S112359918		7829 S. SHORE DR., TRANSFER YARD AT 103RD AND DOTY		IL SPILLS
CHICAGO	S111877819		103RD ST & STONY ISLAND AVE		IL SPILLS
CHICAGO	S111875405		103RD & HARLEM (YELLOW FREIGHT CO)		IL SPILLS
CHICAGO	S111879357		103RD & DOTY STS		IL SPILLS
CHICAGO	S111887496		CALUMET YARD/106TH ST		IL SPILLS
CHICAGO	S111890848		99TH & HALSTEAD		IL SPILLS
CHICAGO	S111920554		95TH & WENTWORTH		IL SPILLS
CHICAGO	S111880466		4001 E 103RD AVE		IL SPILLS, IL CHICAGO ENV
CHICAGO	S111880832		100TH ST BETWEEN MUSKEGON AVE & TORRENCE AVE		IL SPILLS
CHICAGO	S111894735		103RD ST & CALUMET CANAL		IL SPILLS
CHICAGO	S111898233		39 PRINCETON		IL SPILLS
CHICAGO	S111927484		CALUMET RIVER, 3259 E. 100TH ST		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111894960		#929 E 103RD ST		IL SPILLS
CHICAGO	S111902576		RR YARD, 106TH ST		IL SPILLS
CHICAGO	S111898938		103RD & SPRINGFIELD		IL SPILLS
CHICAGO	S111885320		59TH & WENTWORTH		IL SPILLS
CHICAGO	S111922136		100TH ST		IL SPILLS
CHICAGO	S111889998		106TH & AVENUE B		IL SPILLS
CHICAGO	S115718546		99TH & CENTRAL PARK		IL SPILLS
CHICAGO	S115720920		43RD & WENTWORTH		IL SPILLS
CHICAGO	S115776999		CALUMET RIVER AT 2835 E, 106TH ST		IL SPILLS
CHICAGO	S115774734		CALUMET RIVER, 3259 E. 100TH ST		IL SPILLS
CHICAGO	S108045277		103RD ST		IL SPILLS
CHICAGO	S115769309		TSS 089 BEVERLY, 1236 W 105TH ST		IL SPILLS
CHICAGO	S115738503		106TH & AVENUE B		IL SPILLS
CHICAGO	S115772109		CALUMET YARD; 2020 E. 106TH ST;		IL SPILLS
CHICAGO	S115767483		WENTWORTH AVE & CERMACK		IL SPILLS
CHICAGO	S115770152		101ST & HARLEM AVE		IL SPILLS
CHICAGO	S115735996		CALUMET YARD/106TH ST.		IL SPILLS
CHICAGO	S115739252		1100 103RD. ST.		IL SPILLS
CHICAGO	S115739353		99TH & HALSTEAD		IL SPILLS
CHICAGO	S115753062		801 107TH ST		IL SPILLS
CHICAGO	S115764936		6900 SOUTH LAFAYETTE/ RIGHT OFF DAN RYAN EXPRESSWAY		IL SPILLS
CHICAGO	S115722514		103RD STREET & CALUMET EXPWAY.		IL SPILLS
CHICAGO	S115728964		4001 E. 103RD. AVE.		IL SPILLS
CHICAGO	S115767943		100TH STREET		IL SPILLS
CHICAGO	S115726309		103RD ST. & STONEY ISLAND		IL SPILLS
CHICAGO	S115743244		103RD & CALUMET CANEL		IL SPILLS
CHICAGO	S115746745		39 PRINCETON		IL SPILLS
CHICAGO	S115750394		NEAR E .103RD. ST.		IL SPILLS
CHICAGO	S115766054		CALUMET RIVER, 3259 EAST 100TH ST		IL SPILLS
CHICAGO	S115733822		59TH & WENTWORTH		IL SPILLS
CHICAGO	S115771304		100TH AND DORCHESTER		IL SPILLS
CHICAGO	S115744222		WB I-90 TO WENTWORTH AVE		IL SPILLS
CHICAGO	S115747449		103RD & SPRINGFIELD		IL SPILLS
CHICAGO	S115755337		4898 EAST 105TH STREET		IL SPILLS
CHICAGO	S115766663		95TH AND WENTWORTH		IL SPILLS
CHICAGO	S115727855		103RD & DOTY STS.		IL SPILLS
CHICAGO	S125246367		2400 S 105TH ST		IL SPILLS
CHICAGO	S112359447		103RD AND CONSTANCE		IL SPILLS
CHICAGO	S112358155		37TH & PRINCETON @ BUREAU OF EQUIP SERV GARAGE		IL SPILLS
CHICAGO	S112358523		103RD & DOTY		IL SPILLS
CHICAGO	S112363752		103RD ST. & CALUMET EXP. [CALUMET R.R. YARD]		IL SPILLS
CHICAGO	S112356014		N & W YARDS 106TH CONSTANCE AVENUE		IL SPILLS
CHICAGO	S112356145		S OF 104TH ST E OF FIRE RD. ON GEN MIL D		IL SPILLS
CHICAGO	S112353456		106TH & HALSTEAD		IL SPILLS
CHICAGO	S112360747		99TH & CENTRAL PARK		IL SPILLS
CHICAGO	S112362604		43RD & WENTWORTH		IL SPILLS
CHICAGO	S112355021		106TH & CONSTANCE		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S112353760		99TH & CALUMET		IL SPILLS
CHICAGO	S108669706		WENTWORTH AVE & CERMACK		IL SPILLS
CHICAGO	S109327349		101ST & HARLEM AVE		IL SPILLS
CHICAGO	S116415544		CALUMET RIVER AT 2835 E, 106TH ST,CHICAGO		IL SPILLS
CHICAGO	S109953775		100TH & DORCHESTER		IL SPILLS
CHICAGO	S117566866		35TH & WENTWORTH,		IL SPILLS
CHICAGO	S110122315		I-94 EB EXIT 73		IL SPILLS
CHICAGO	S118096564		138TH ST AND I-94,		IL SPILLS
CHICAGO	S118096656		138TH ST AND I-94		IL SPILLS
CHICAGO	S121172160		4400 SOUTHBOUND I-94/I-90		IL SPILLS
CHICAGO	S111349598		I-94 AT EXIT 71		IL SPILLS
CHICAGO	S121802269		4400 SB I-94/I-90		IL SPILLS
CHICAGO	S118562701		I-94 NORTHBOUND @ 159TH ST		IL SPILLS
CHICAGO	S118562457		I-94 NORTHBOUND @ 159TH ST		IL SPILLS
CHICAGO	S111876495		I-90 & I-94 NB 1400 N		IL SPILLS
CHICAGO	S111879931		I-94 NB TO I-290 URBAN AREA		IL SPILLS
CHICAGO	S111878584		I-94 130TH ST SW QUADRAN		IL SPILLS
CHICAGO	S118359826		I-94 NEAR EXIT #41		IL SPILLS
CHICAGO	S118873759		I-57 NORTHBOUND AT HALSTED		IL SPILLS
CHICAGO	S118873857		DAN RYAN EXPRESSWAY (I-90/I-94 OUTBOUND LANES) AND 63RD ST		IL SPILLS
CHICAGO	S118874484		I-57 NORTHBOUND AT HALSTED		IL SPILLS
CHICAGO	S118874570		DAN RYAN EXPRESSWAY (I-90/I-94 OUTBOUND LANES) AND 63 RD ST		IL SPILLS
CHICAGO	S118874571		DAN RYAN EXPRESSWAY (I-90/I-94 OUTBOUND LANES) AND 63RD ST		IL SPILLS
CHICAGO	S123207683		I-94 WB LANES, MP #160		IL SPILLS
CHICAGO	S111901056		I-90 & I-94 EB		IL SPILLS
CHICAGO	S111920145		I-94 SB		IL SPILLS
CHICAGO	S111920168		I-94 S EXIT 33A		IL SPILLS
CHICAGO	S111920177		I-94 S & EXIT 33A		IL SPILLS
CHICAGO	S111920359		2 BLOCKS E OF 63RD ST & I-94		IL SPILLS
CHICAGO	S111894256		I-94 NB AT 69TH ST		IL SPILLS
CHICAGO	S111901591		I-94 115TH ST		IL SPILLS
CHICAGO	S111906274		I-94 WB BETWEEN 159TH & SIBLEY BLVD		IL SPILLS
CHICAGO	S111910037		I-94 & 130TH ST NB		IL SPILLS
CHICAGO	S111898276		I-94 & 59TH ST ENTRANCE RAMP		IL SPILLS
CHICAGO	S111902091		I-94 SB 1 N OHIO ST		IL SPILLS
CHICAGO	S111927566		I-94 & 55TH ST. EXIT		IL SPILLS
CHICAGO	S111898541		KENNEDY EXPRESSWAY NEAR FOSTER AVE. (I-90 & I-94)		IL SPILLS
CHICAGO	S111891972		130TH ST (E OF CALUMET RIVER E OF I-94)		IL SPILLS
CHICAGO	S111898774		138TH STREET & I-94		IL SPILLS
CHICAGO	S111914359		111TH W OF I-94 (BISHOP FORD)		IL SPILLS
CHICAGO	S111902895		I-94 AT 76TH ST EXIT		IL SPILLS
CHICAGO	S111903237		I-94 WB		IL SPILLS
CHICAGO	S111914933		I-94 S MM 64		IL SPILLS
CHICAGO	S111925271		I-94 NB LANES, 1/5 MILE N OF 103RD ST, 300 FEET S OF KING DR		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111925539		115TH ST & DOTY (I-94)		IL SPILLS
CHICAGO	S111885631		ON SHOULDER SB DANRYAN I-90 & I-94 AT 79TH ST		IL SPILLS
CHICAGO	S111885871		I-94 NB AT POLK ST		IL SPILLS
CHICAGO	S111915551		138TH & I-94		IL SPILLS
CHICAGO	S111890008		I-94 & LAKE/COOK RD		IL SPILLS
CHICAGO	S111893142		I-94 NB AT 133RD ST		IL SPILLS
CHICAGO	S111900160		138TH & I-94		IL SPILLS
CHICAGO	S111904380		I-94 EB @MONTROSE		IL SPILLS
CHICAGO	S111893367		I-94 NB N OF WILSON AVE		IL SPILLS
CHICAGO	S111896729		NB I-94		IL SPILLS
CHICAGO	S111893530		I-57 SB 357 MP INT OF I-94		IL SPILLS
CHICAGO	S111896931		EXIT 63, I-94 NB		IL SPILLS
CHICAGO	S111883105		I-94 & OGDEN ST		IL SPILLS
CHICAGO	S111893668		I-94 NB		IL SPILLS
CHICAGO	S115719131		I-94 NORTHBOUND & 67TH ST		IL SPILLS
CHICAGO	S115718367		I-94 NORTHBOUND		IL SPILLS
CHICAGO	S115720774		I-94 SOUTH AT 33RD STREET		IL SPILLS
CHICAGO	S115719046		I-94 S.BOUND AT 49TH ST.		IL SPILLS
CHICAGO	S115774921		I-94 & 55TTH.ST. EXIT		IL SPILLS
CHICAGO	S115775473		I-94 NB		IL SPILLS
CHICAGO	S115775619		I-94 WB, NEAR HIGHWAY 137		IL SPILLS
CHICAGO	S115775886		I-94 EB		IL SPILLS
CHICAGO	S115776261		I-94 WB MM 38		IL SPILLS
CHICAGO	S108047902		NB LANES OF I-90 AND I-94 AT ARMITAGE		IL SPILLS
CHICAGO	S115738513		I-94 & LAKE/COOK RD.		IL SPILLS
CHICAGO	S115741650		I-94 N. BOUND AT 133RD ST		IL SPILLS
CHICAGO	S115731601		I-94 & OGDEN STREET		IL SPILLS
CHICAGO	S115741876		I-94 NB AT WILSON AVE.		IL SPILLS
CHICAGO	S115756199		31ST STREET EXIT I-55 TO I-94		IL SPILLS
CHICAGO	S115728429		I-94 TO I-290 URBAN AREA		IL SPILLS
CHICAGO	S115742040		I-57 SB AT MP 357		IL SPILLS
CHICAGO	S115745239		NB I-94		IL SPILLS
CHICAGO	S115748671		138TH & I-94		IL SPILLS
CHICAGO	S115742178		I-94 NORTHBOUND		IL SPILLS
CHICAGO	S115764877		N.B. LANES OF I-90/I-94 AT ARMITAGE		IL SPILLS
CHICAGO	S115762448		EASTBOUND LANES ON I-90 & I-94, EXIT #51 (MONROE STREET)		IL SPILLS
CHICAGO	S115759724		I-94 WESTBOUND EXIT 59B		IL SPILLS
CHICAGO	S115762549		103RD ST & I-94 ENTRANCE ON RAMP		IL SPILLS
CHICAGO	S115742765		I-94 NB AT 69TH STREET		IL SPILLS
CHICAGO	S115762741		OUT BOUND BISHOP FORD EXPRESSWAY (I-94) @ 130TH ST		IL SPILLS
CHICAGO	S115765423		I-94 WEST BOUND SOUTH OF TOOGHEY AVENUE		IL SPILLS
CHICAGO	S115750060		I-94 115TH STREET		IL SPILLS
CHICAGO	S115757486		I-94 NORTH BOUND AT 130TH STREET		IL SPILLS
CHICAGO	S115757487		I-94 & 130TH STREET, NORTH BOUND		IL SPILLS
CHICAGO	S115763033		INTERSECTION OF 63RD & SOUTHBOUND I-90/I-94		IL SPILLS
CHICAGO	S115746788		I-94 @59TH ST ENTRANCE RP		IL SPILLS
CHICAGO	S115727084		I-94 130TH ST.S/W QUADRAN		IL SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S115754741		I-94 WB 159TH & SIBLEY BL		IL SPILLS
CHICAGO	S115771297		I-94 NORTHBOUND JUST SOUTH OF KING DRIVE		IL SPILLS
CHICAGO	S115771299		I-94 NB LANES; 1/5 MILE NORTH OF 103RD ST; 300 FEET SOUTH OF KING DRIVE		IL SPILLS
CHICAGO	S115763786		800 E BISHOP FORD EXPRESSWAY INBOUND LANES		IL SPILLS
CHICAGO	S115766415		I-94 SOUTHBOUND		IL SPILLS
CHICAGO	S115771622		115TH ST. AND DOTY (I-94)		IL SPILLS
CHICAGO	S115734373		I-94 NB AT POLK ST.		IL SPILLS
CHICAGO	S115751363		I-94 AT 76TH ST. EXIT		IL SPILLS
CHICAGO	S115766433		I-94 SOUTH & EXIT 33A		IL SPILLS
CHICAGO	S115766543		2 BLOCKS EAST OF 63RD ST & I-94		IL SPILLS
CHICAGO	S115751705		I-94 WB		IL SPILLS
CHICAGO	S115771860		I-94 EAST BOUND EXIT 73		IL SPILLS
CHICAGO	S108046717		800 E BISHOP FORD EXPRESSWAY INBOUND LANES		IL SPILLS
CHICAGO	S108480172		I-94 WB S OF TOUHY AVE		IL SPILLS
CHICAGO	S112361042		I-94 AND HAMLIN AVENUE - IRVING PARK		IL SPILLS
CHICAGO	S112352511		I-94 AT 87 TO 57 AND HALSTED		IL SPILLS
CHICAGO	S112359488		I-94 SOUTHBOUND @ RT. 57		IL SPILLS
CHICAGO	S112358161		I-94 S BOUND; 2 1/10 MI S OF 164		IL SPILLS
CHICAGO	S112359602		I-57 SOUTHBOUND AT 103RD STREET		IL SPILLS
CHICAGO	S112359610		I-94 [CAL. EXPY.] AND MICHIGAN AVE.		IL SPILLS
CHICAGO	S112361210		I-94 & 71ST STREET		IL SPILLS
CHICAGO	S112361372		I-94 SOUTHBOUND @ 130TH STREET		IL SPILLS
CHICAGO	S112363124		115TH AND I-94		IL SPILLS
CHICAGO	S112363131		59TH AND DAN RYAN EXP. I-94 S. BOUND		IL SPILLS
CHICAGO	S112354107		NW KENNEDY I-94 AUGUSTA OVERPASS		IL SPILLS
CHICAGO	S112359737		I-94 MONTROSE AVE. EXIT		IL SPILLS
CHICAGO	S112352808		I-94 & 22ND ST ON DAN RYAN EXPRESSWAY		IL SPILLS
CHICAGO	S112357052		I-94 AT 87TH ST. RAMP		IL SPILLS
CHICAGO	S112359932		I-94 NORTHBOUND AT 47TH ST. - FRONTAGE RD.		IL SPILLS
CHICAGO	S112361835		I-94 & 61ST STREET		IL SPILLS
CHICAGO	S112363791		I-94 N.B. @ 125TH ST.		IL SPILLS
CHICAGO	S112355850		I-94 I-90 WEST BOUND @ ILL. 19		IL SPILLS
CHICAGO	S112360211		I-94 AND 43RD SOUTHBOUND		IL SPILLS
CHICAGO	S112361945		I-94 SOUTHBOUND 8300 SOUTH		IL SPILLS
CHICAGO	S112361995		137TH STREET & I-94		IL SPILLS
CHICAGO	S112354585		I-94 N BOUND ON EXIT RAMP 68 E BOUND		IL SPILLS
CHICAGO	S112354619		I-94 AT 18TH ST		IL SPILLS
CHICAGO	S112360600		I-94 AT 95TH STREET		IL SPILLS
CHICAGO	S112352116		I-94 NB		IL SPILLS
CHICAGO	S112354895		600 FT W OF I-94 & 600 FT. S OF 150TH ST		IL SPILLS
CHICAGO	S112360735		I-57 & 143RD		IL SPILLS
CHICAGO	S112362492		I-94 SOUTH BOUND AT 33RD		IL SPILLS
CHICAGO	S112356349		I-94 TOLLWAY MP 62 1/2 SOUTHBOUND LANE		IL SPILLS
CHICAGO	S112359190		I-94 [INBOUND] @ ARMITAGE		IL SPILLS
CHICAGO	S112352378		I-94 EB		IL SPILLS
CHICAGO	S119095314		103RD RAMP WESTBOUND 34 FEET SOUTH OF I-94		IL SPILLS

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CHICAGO	S120826743		103RD RAMP WESTBOUND 34 FEET SOUTH OF I-94		IL SPILLS
CHICAGO	S123420561		I-94 WB LANES, MP #160		IL SPILLS
CHICAGO	S109366492		I-94 EB EXIT 68		IL SPILLS
CHICAGO	S113808243		I-94 WB MILE MARKER 38		IL SPILLS
CHICAGO	S116761516		I-94 AND 67 ST.		IL SPILLS
CHICAGO	S109953771		I-94 NB S OF KING DR		IL SPILLS
CHICAGO	S109953773		I-94 NB		IL SPILLS
CHICAGO	S117534038		I-94 NB. 400 NORTH OF 83RD ST		IL SPILLS
CHICAGO	S117534039		UNKNOWN LOCATION ON I-94		IL SPILLS
CHICAGO	S117566723		I-94 AND 67 ST.,		IL SPILLS
CHICAGO	S117567238		I-94 NB 400 NORTH OF 83RD ST.,		IL SPILLS
CHICAGO	S117567239		DAN RYAN I-94		IL SPILLS
CHICAGO	1001967999	CDOT/BRIDGES	I 90 BRIDGE OVER CALUMET	60617	RCRA NonGen / NLR
CHICAGO	1012178927	CHICAGO DEPT OF ENV	115TH & TORRENCE-SPILL	60617	RCRA NonGen / NLR
CHICAGO	1025436051	PAD MANUFACTURING, PBC	720 E 111TH ST	60628	SSTS
CHICAGO	1011533162	US SCRAP	123RD & COTTAGE GROVE AVE	60628	ICIS
CHICAGO	1004479895	CONTINENTAL GRAIN CO. - ELEVATOR C	127TH STREET & CALUMET	60633	ICIS, FINDS, ECHO
CHICAGO	1004476359	CONTINENTAL GRAIN ELEVATOR CO	12700 LAKE CALUMET HARBOR DR	60633	FTTS, HIST FTTS
CHICAGO	1009645996		E 56TH ST S COTTAGE GROVE AVE	0	DOT OPS
CHICAGO	1008137128	CONTINENTAL GRAIN CO	127TH & DOTY AVE	60633	FINDS
CHICAGO	1017386761	NPL CONSTRUCTION	130TH & TORRENCE AVE-B	60633	FINDS
CHICAGO	1008124548	CALUMET NU-EARTH DIST CTR	N 130TH ON DOTY AVE	60628	FINDS
CHICAGO	1008125188	SCHNEIDER NATIONAL BULK CARRIER	118615 COTTAGE GROVE	60628	FINDS
CHICAGO	1004477342	US SCRAP	123RD & COTTAGE GROVE AVE	60628	FINDS, ECHO
CHICAGO	1016189671	CDOT/BRIDGES	I 90 BRIDGE OVER CALUMET	60617	FINDS, ECHO
CHICAGO	1012301187	CHICAGO DEPT OF ENV	115TH & TORRENCE-SPILL	60617	FINDS, ECHO
CHICAGO	1008138379	CHICAGO DOT BRIDGES	I-90 & CALUMET RIVER	60617	FINDS
CHICAGO	1023200043	CALUMET REGION AREA WIDE PLANNING	CALUMET REGION	60617	FINDS
CHICAGO	1016282949	INTERLAKE SITE-WASTE MANAGEMENT OF IL	STONY ISLAND AVE 114TH ST	60617	FINDS
CHICAGO	1008150453	CHICAGO REGIONAL PORT DIST	111TH & CALUMET EXPY	60633	FINDS
CHICAGO	1025447313	ISTHA CONTRACT RR-17-4314	I-294 TRI STATE TOLLWAY	60628	FINDS
CHICAGO	1017802067	GONNELLA BAKERY	304 -30 E KENSINGTON	60628	FINDS
CHICAGO	1016069145	568 570 & 580 E 115TH ST	568 570 & 580 E 115TH ST	60628	FINDS
CHICAGO	1016277610	109TH PLACE TEAR GAS	SG WEST 109TH PLACE	60628	FINDS
CHICAGO	1008211634		SITE 3 - SE, 2701 E. 114TH ST.		FINDS
CHICAGO	1010034914	CHICAGO, CITY OF-DEPT OF WATER	LAFAYETTE AVE W 79TH ST TO W 81ST ST	60620	FINDS
CHICAGO	1017816767	COMED-MANHOLE	103RD & COTTAGE GROVE NE COR	60628	FINDS
CHICAGO	1008150615	HERITAGE ENVIRONMENTAL SERVICE	I-94 N MM 61	60619	FINDS
CHICAGO	1024722720	ISTHA CONTRACT RR-17-4314	I-294 TRI STATE TOLLWAY	60628	ECHO
CHICAGO	S116381495	GEO J BEEMSTERBOER CO INC	106TH ST & CALUMET RIVER	60617	IL AIRS
CHICAGO	S107741730	ELMER LARSON INC	1304 E INDIANA		IL AIRS
CHICAGO	S107743121	JAMES CAPE & SONS CO	LAKE MICHIGAN SHORELINE @BELMONT		IL AIRS
CHICAGO	S107743118	JAMES CAPE & SONS - ILLINOIS	LAKE MICHIGAN SHORELINE-BELMONT HARBOR		IL AIRS
CHICAGO	S107742674	HICKMAN, WILLIAMS & CO OF KENTUCKY	13513 S CALUMET AVE		IL AIRS
CHICAGO	S107741135	CONTINENTAL GRAIN CO - ELEVATOR C	127TH ST AND CALUMET		IL AIRS
CHICAGO	S107740686	CHA-STATEWAY GARDENS	STATE ST AND FEDERAL		IL AIRS
CHICAGO	S123086206	COM-ED MANHOLES CHICAGO SOUTH REGION	MADISON ST TO 130TH ST		IL ASBESTOS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S123086203	COM-ED CHICAGO SOUTH SUBSTATIONS	MADISON ST TO 130TH ST		IL ASBESTOS
CHICAGO	S123086205	COM-ED CUSTOMER VAULTS CHICAGO SOUTH REGION	MADISON ST TO 130TH ST		IL ASBESTOS
CHICAGO	S121938886	METRA STATION	9802 W 115TH	60643	IL ASBESTOS
CHICAGO	S121936552	BRIDGE	TORRENCE OVER GRAND CALUMET RIVER	60633	IL ASBESTOS
CHICAGO	S121934711	FOUNDATIONS COLLEGE PREP	1233 W 109TH	60643	IL ASBESTOS
CHICAGO	S121938057	14 E 112TH	14 E 112TH	60628	IL ASBESTOS
CHICAGO	S123086605	257 W 61ST PL/6141 S PRINCETON AVE	257 W 61ST PL/6141 S PRINCETON AVE		IL ASBESTOS
CHICAGO	S125935890	COFCO INTERNATIONAL GRAINS US LLC	DOTY & 12700 S BUTLER	60617	IL BOL
CHICAGO	S113272646	LUKE OIL CO	130TH ST & I-94	60633	IL BOL
CHICAGO	S113265963	BURLINGTON MOTOR CARRIERS	TORRENCE & 130TH	60628	IL BOL
CHICAGO	S113266342	VALLEY MOLD & IRON	108TH AND CALUMET RIVER STS	60617	IL BOL
CHICAGO	S125257076	KOCH CARBON INC	106TH & CALUMET RIVER	60617	IL BOL
CHICAGO	S125255768	VALLEY MOLD & IRON	108TH AND CALUMET RIVER STS	60617	IL BOL
CHICAGO	S113265818	CHICAGO LANDFILL-FORMERLY	103RD & DOTY AVE	60628	IL BOL
CHICAGO	S117464409		13747 S DOTY AVE		IL CHICAGO ENV
CHICAGO	S117461211		1205 S DOTY AVE		IL CHICAGO ENV
CHICAGO	S117464398		13721 S DOTY AVE		IL CHICAGO ENV
CHICAGO	S117464405		13731 S DOTY AVE		IL CHICAGO ENV
CHICAGO	S124506240		13000 S 130TH ST XR		IL CHICAGO ENV
CHICAGO	S117478167		2247 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117478283		2251 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479718		2360 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117462770		12940 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117478029		2241 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117484171		2742 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479727		2362 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117887264		2200 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117455722		100 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117464376		13700 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117464434		13800 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117477576		2220 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479070		2323 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479123		2325 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479517		2344 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479587		2349 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479745		2369 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479910		2401 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479959		2403 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117479975		2405 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S117480058		2412 S COTTAGE GROVE AVE		IL CHICAGO ENV
CHICAGO	S116604473		12050 E 115TH ST		IL CHICAGO ENV
CHICAGO	S117481780		2536 S INDIANA AVE		IL CHICAGO ENV
CHICAGO	S117532337		9168 S CALUMET AVE		IL CHICAGO ENV
CHICAGO	S117518734		6300 S PRAIRIE AVE		IL CHICAGO ENV
CHICAGO	S116610929		2701 E 116TH ST		IL CHICAGO ENV
CHICAGO	S117462883		13000 S CALUMET AVE		IL CHICAGO ENV

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CHICAGO	S117466095		1500 N STATE ST		IL CHICAGO ENV
CHICAGO	S117466562		1516 N STATE ST		IL CHICAGO ENV
CHICAGO	S117466964		1530 N STATE ST		IL CHICAGO ENV
CHICAGO	S117467214		1540 N STATE ST		IL CHICAGO ENV
CHICAGO	S117467424		1550 N STATE ST		IL CHICAGO ENV
CHICAGO	S117481852		2541 S INDIANA AVE		IL CHICAGO ENV
CHICAGO	S117487445		31 S PRAIRIE AVE		IL CHICAGO ENV
CHICAGO	S117518971		6320 S PRAIRIE AVE		IL CHICAGO ENV
CHICAGO	S117528094		800 E KENSINGTON AVE		IL CHICAGO ENV
CHICAGO	S124506991		636 E STATE ST ER		IL CHICAGO ENV
CHICAGO	S118419221		6329 S PRINCETON AVE		IL CHICAGO ENV
CHICAGO	S116614098		3801 E 100TH ST		IL CHICAGO ENV
CHICAGO	S116607631		1818 E 106TH ST		IL CHICAGO ENV
CHICAGO	S116605492		1357 W 106TH ST		IL CHICAGO ENV
CHICAGO	S116612714		3300 E 98TH ST		IL CHICAGO ENV
CHICAGO	S116612724		3301 E 98TH ST		IL CHICAGO ENV
CHICAGO	S116612838		3330 E 98TH ST		IL CHICAGO ENV
CHICAGO	S116614534		4000 E 103RD ST		IL CHICAGO ENV
CHICAGO	S117530017		8400 S WENTWORTH AVE		IL CHICAGO ENV
CHICAGO	S117531109		8700 S YALE AVE		IL CHICAGO ENV
CHICAGO	S116493780	CHICAGO FACILITY	12900 SOUTH COTTAGE GROVE	60628	IL NPDES
COOK COUNTY	2008870404		STATE ROUTE 53 N		ERNS
COOK COUNTY	2008886889		STATE ST.		ERNS
COOK COUNTY	2012032207		13700 SOUTH PERRY AVENUE		ERNS
COOK COUNTY	2014087175		CALUMET RIVER		ERNS
COOK COUNTY	8855615		STATE RT 20 UN INCORP COOK CNTY		ERNS
COOK COUNTY	8854190		LITTLE CALUMET RIVER		ERNS
COOK COUNTY	8853353		LAKE CALUMET SHED NO.2		ERNS
COOK COUNTY	89106033		CALUMET RIVER AT LANDFILL		ERNS
COOK COUNTY	93163598		CALUMET CHANNEL NEAR		ERNS
COOK COUNTY	8855439		159TH ST AND 104TH AVE / MILE WEST OF LEGRANGE ROAD		ERNS
COOK COUNTY	8866823		138 TH ST AND I-94		ERNS
COOK COUNTY	8855548		138TH ST AND I-94		ERNS
COOK COUNTY	8854800		138TH ST AND I-94		ERNS
COOK COUNTY	8855089		138TH ST AT I-94		ERNS
COOK COUNTY	8851889		138TH ST AT I-94		ERNS
COOK COUNTY	8870371		138TH ST AND I-94		ERNS
COOK COUNTY	89101863		138TH ST AND I-94		ERNS
COOK COUNTY	873508		CID PROCESSING,138 ST AND I-94		ERNS
COOK COUNTY	S117533982		739 217TH ST. / COTTAGE GROVE / OLD PLANK		IL SPILLS
COOK COUNTY	S111927768		13700 PERRY AVE.		IL SPILLS
COOK COUNTY	S115775122		13700 PERRY AVE		IL SPILLS
COOK COUNTY	S115722556		I-94, FIRST TOLL PLAZA S.BOUND		IL SPILLS
COOK COUNTY	S115740237		I-94 SB MP 58 1 1/2 MI S		IL SPILLS
DOLTON	1012209907	DOLTON HAZMAT	DOLTON AVE EXIT ON THE BISHOP FORD	60419	SEMS
DOLTON	1003870419	DOLTON MUNI LDFL	140TH ST & COTTAGE GROVE	60419	SEMS-ARCHIVE
DOLTON	95315803		COTTAGE GROVE AVE	60419	ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
DOLTON	U001629479	MARINE SERV	140TH COTTAGE GROVE	60419	IL UST
DOLTON	S115743715		633 EAST 130TH STREET		IL SPILLS
DOLTON	S111893215		15400 COTTAGE GROVE STREET		IL SPILLS
DOLTON	S111901876		COTTAGE GROVE AVENUE		IL SPILLS
DOLTON	S111906104		CORNER OF COTTAGE GROVE & LINCOLN AVENUE		IL SPILLS
DOLTON	S115776188		SB I-94 RAMP TO EB 130TH ST,		IL SPILLS
DOLTON	S108047530		SE CORNER OF 154TH AND COTTAGE GROVE AVE		IL SPILLS
DOLTON	S115741723		15400 COTTAGE GROVE STREE		IL SPILLS
DOLTON	S115750345		COTTAGE GROVE AVE. (NO		IL SPILLS
DOLTON	S115754571		COTTAGE GROVE/LINCOLN AVE		IL SPILLS
DOLTON	S115754572		COTTAGE GROVE/LINCOLN AVE		IL SPILLS
DOLTON	S115751102		15400 COTTAGE GROVE		IL SPILLS
DOLTON	1012130440	VENEZIA TRANSPORT SVCS INC	BISHOP FORD FWY & 130TH	60419	FINDS, ECHO
DOLTON	1008130001	MARINA DEVELOPMENTS INC	138TH & COTTAGE GROVE-C	60419	FINDS
DOLTON	1005570727	LAND & LAKES-RVR BEND PRAIRIE	133RD ST. & COTTAGE GROVE AVE.	60419	FINDS, ECHO
DOLTON	S125251355	LAKES-RIVERS DOLTON DOCK	140TH COTTAGE GROVE	60419	IL BOL
PALOS HEIGHTS	S111924569		STATE ROUTE 83 AND SW HIGHWAY AT THE INTERSECTION		IL SPILLS
PALOS HEIGHTS	S115770556		STATE ROUTE 83 AND SW HIGHWAY AT THE INTERSECTION		IL SPILLS
PALOS HEIGHTS	S111883984		111TH & SOUTHWEST HWY		IL SPILLS
PALOS HEIGHTS	S111924177		111TH AND ROBERTS ROAD		IL SPILLS
PALOS HEIGHTS	S111893568		8000 W. 111TH & ROBERTS RD		IL SPILLS
PALOS HEIGHTS	S115770027		111TH AND ROBERTS ROAD		IL SPILLS
PALOS HEIGHTS	S115732484		111TH & S/W HWY		IL SPILLS
PALOS HEIGHTS	S111913710		LAGRANGE ROAD BETWEEN 107TH AND 95TH STREET		IL SPILLS
PALOS HEIGHTS	S115760602		LAGRANGE RD BETWEEN 107TH AND 95TH ST		IL SPILLS
PALOS HEIGHTS	1008109943	EINODER CONSTRUCTION CO	SW RTE 7 & CALUMET CHANEL	60463	FINDS
RIVERDALE	94241814		CALUMET RIVER MILE MARKER		ERNS
RIVERDALE	S105427839	PM AG PROD. INC.	3550 SOUTH INDIANA AVE.	60827	IL LUST
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST.	60827	IL LUST
RIVERDALE	S111891758		130TH & HALSTED STR		IL SPILLS
RIVERDALE	S115740263		130TH. & HALSTED ST.		IL SPILLS
RIVERDALE	S112361167		1344 INDIANA AVENUE, RIVER, LITTLE CALUMET		IL SPILLS
RIVERDALE	S111890979		CALUMET RIVER		IL SPILLS
RIVERDALE	S115739484		CALUMET RIVER MP 322.2		IL SPILLS
RIVERDALE	S112359898		138TH AND COTTAGE GROVE		IL SPILLS
RIVERDALE	S112360101		CALUMET RIVER M.P. 322.3		IL SPILLS
RIVERDALE	S112355834		LITTLE CALUMET RIVER		IL SPILLS
RIVERDALE	S112354580		CALUMET SAG CHANNEL 130TH & HALSTAD		IL SPILLS
RIVERDALE	S112357838		CALUMET RIVER / 135TH & TERRY AVE		IL SPILLS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/04/2019
Date Data Arrived at EDR: 11/13/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 76

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/10/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/22/2019
Date Data Arrived at EDR: 11/22/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/20/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/22/2019
Date Data Arrived at EDR: 11/22/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/20/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/19/2019
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 78

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SSU: State Sites Unit Listing

The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

Date of Government Version: 11/07/2019
Date Data Arrived at EDR: 11/08/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 68

Source: Illinois Environmental Protection Agency
Telephone: 217-524-4826
Last EDR Contact: 04/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

State and tribal landfill and/or solid waste disposal site lists

CCDD: Clean Construction or Demolition Debris

Construction and demolition (C and D) debris is nonhazardous, uncontaminated material resulting from construction, remodeling, repair, or demolition of utilities, structures, and roads.

Date of Government Version: 04/11/2018
Date Data Arrived at EDR: 05/01/2018
Date Made Active in Reports: 05/30/2018
Number of Days to Update: 29

Source: Illinois EPA
Telephone: 217-524-3300
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 12/13/2019
Number of Days to Update: 45

Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Annually

LF WMRC: Waste Management & Research Center Landfill Database

The Waste Management & Research Center Landfill Database includes records from the Department of Public Health, Department of Mines & Minerals, Illinois Environmental Protection Agency, State Geological Survey, Northeastern Illinois Planning Commission and Pollution Control Board.

Date of Government Version: 12/31/2001
Date Data Arrived at EDR: 10/06/2006
Date Made Active in Reports: 11/06/2006
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 217-333-8940
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: No Update Planned

LF SPECIAL WASTE: Special Waste Site List

These landfills, as of January 1, 1990, accept non-hazardous special waste pursuant to the Illinois EPA Non-Hazardous Special Waste Definition. List A includes landfills that may receive any non-hazardous waste, Non-Regional Pollution Control Facilities are so noted. List B includes landfills designed to receive specific non-hazardous wastes. List B landfills are designated as a Regional Pollution Control Facility by RPCF, or Non-Regional Pollution Control Facility by Non-RPCF.

Date of Government Version: 01/01/1990
Date Data Arrived at EDR: 06/17/2009
Date Made Active in Reports: 07/15/2009
Number of Days to Update: 28

Source: Illinois EPA
Telephone: 217-782-9288
Last EDR Contact: 06/10/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IL NIPC: Solid Waste Landfill Inventory

Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/1988
Date Data Arrived at EDR: 08/01/1994
Date Made Active in Reports: 08/12/1994
Number of Days to Update: 11

Source: Northeastern Illinois Planning Commission
Telephone: 312-454-0400
Last EDR Contact: 05/23/2006
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 03/26/2020
Number of Days to Update: 64

Source: Illinois Environmental Protection Agency
Telephone: 217-524-3300
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Semi-Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 12/17/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/02/2020
Data Release Frequency: Varies

LUST TRUST: Underground Storage Tank Fund Payment Priority List
In case sufficient funds are not available in the Underground Storage Tank Fund, requests for payment are entered on the Payment Priority List by "queue date" order. As required by the Environmental Protection Act, the queue date is the date that a complete request for partial or final payment was received by the Agency. The queue date is "officially" confirmed at the end of the payment review process when a Final Decision Letter is sent to the site owner.

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 07/27/2016
Date Made Active in Reports: 10/18/2016
Number of Days to Update: 83

Source: Illinois EPA
Telephone: 217-782-6762
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/27/2019
Date Data Arrived at EDR: 08/28/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 75

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/19/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

UST: Underground Storage Tank Facility List
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/02/2020
Number of Days to Update: 71

Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

AST: Above Ground Storage Tanks
Listing of all aboveground tanks inspected by Office of State Fire Marshal.

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/02/2019
Date Made Active in Reports: 01/17/2020
Number of Days to Update: 46

Source: State Fire Marshal
Telephone: 217-785-1011
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/24/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Sites with Engineering Controls
Sites using of engineered barriers (e.g., asphalt or concrete paving).

Date of Government Version: 12/30/2019
Date Data Arrived at EDR: 01/02/2020
Date Made Active in Reports: 03/04/2020
Number of Days to Update: 62

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

Inst Control: Institutional Controls
Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

Date of Government Version: 12/30/2019
Date Data Arrived at EDR: 01/02/2020
Date Made Active in Reports: 03/04/2020
Number of Days to Update: 62

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

SRP: Site Remediation Program Database
The database identifies the status of all voluntary remediation projects administered through the pre-notice site cleanup program (1989 to 1995) and the site remediation program (1996 to the present).

Date of Government Version: 12/30/2019
Date Data Arrived at EDR: 01/02/2020
Date Made Active in Reports: 03/04/2020
Number of Days to Update: 62

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Semi-Annually

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/18/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Municipal Brownfields Redevelopment Grant Program Project Descriptions
The Illinois Municipal Brownfields Redevelopment Grant Program (MBRGP) offers grants worth a maximum of $240,000 each to municipalities to assist in site investigation activities, development of cleanup objectives, and performance of cleanup activities. Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment.

Date of Government Version: 02/11/2010
Date Data Arrived at EDR: 07/31/2014
Date Made Active in Reports: 09/08/2014
Number of Days to Update: 39

Source: Illinois Environmental Protection Agency
Telephone: 217-785-3486
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

BROWNFIELDS: Redevelopment Assessment Database
The Office of Site Evaluations Redevelopment Assessment database identifies the status of all properties within the State in which the Illinois EPA's Office of Site Evaluation has conducted a municipal Brownfield Redevelopment Assessment.

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 03/26/2020
Number of Days to Update: 64

Source: Illinois Environmental Protection Agency
Telephone: 217-524-1658
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/17/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/01/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: No Update Planned

CDL: Meth Drug Lab Site Listing
A listing of clandestine/meth drug lab locations.

Date of Government Version: 06/20/2019
Date Data Arrived at EDR: 10/08/2019
Date Made Active in Reports: 12/05/2019
Number of Days to Update: 58

Source: Department of Public Health
Telephone: 217-782-5750
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

CHICAGO TANKS: CDPH Storage Tanks Listing
This dataset contains Aboveground Storage Tank (AST) and Underground Storage Tank (UST) information from the Department of Public Healtha??s (CDPH) Tank Asset Database. The Tank Asset Database contains tank information from CDPH AST and UST permit applications as well as UST records imported from the historic Department of Environment (DOE) database. This dataset also includes AST records from the historic DOE and pre-1992 UST records from the Building Department.

Date of Government Version: 12/11/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 73

Source: Department of Public Health
Telephone: 312-747-2374
Last EDR Contact: 03/17/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/05/2019
Date Data Arrived at EDR: 12/06/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 70

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

SPILLS: State spills

A listing of incidents reported to the Office of Emergency Response.

Date of Government Version: 02/28/2020
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 04/22/2020
Number of Days to Update: 7

Source: Illinois EPA
Telephone: 217-782-3637
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

IEMA SPILLS: Illinois Emergency Management Agency Spills

A listing of hazardous materials incidents reported to the Illinois Emergency Management Agency.

Date of Government Version: 01/27/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/14/2020
Number of Days to Update: 77

Source: Illinois Emergency Management Agency
Telephone: 217-524-0770
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/15/2013
Number of Days to Update: 71

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 11/12/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 70

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/06/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/13/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/19/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/04/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/20/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/05/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 10/23/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 84

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/05/2019
Date Data Arrived at EDR: 11/20/2019
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 149

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/15/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/06/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 8

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 70

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019
Date Data Arrived at EDR: 10/25/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 82

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/06/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/08/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/17/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 49

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/29/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/06/2019
Date Data Arrived at EDR: 11/25/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 64

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/25/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 12/03/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/02/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/11/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 78

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/05/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/22/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 03/02/2020
Number of Days to Update: 89

Source: EPA
Telephone: (312) 353-2000
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/05/2020
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/07/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 70

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Quarterly

AIRS: Air Inventory Listing

A listing of air permits and emissions information.

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 03/03/2020
Number of Days to Update: 71

Source: Illinois EPA
Telephone: 217-557-0314
Last EDR Contact: 03/20/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

ASBESTOS: ASBESTOS

A listing of asbestos abatement & demolition project site locations in the state.

Date of Government Version: 09/25/2019
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/04/2019
Number of Days to Update: 63

Source: Illinois EPA
Telephone: 217-558-5101
Last EDR Contact: 03/02/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

BOL: Bureau of Land Inventory Database

Bureau of Land inventory for facility information. Data results are cross-linked with all on-line database system applications from IEPA - Bureau of Land as well as USEPA FRS database.

Date of Government Version: 02/26/2020
Date Data Arrived at EDR: 02/28/2020
Date Made Active in Reports: 05/05/2020
Number of Days to Update: 67

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 02/24/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

CHICAGO ENV: Environmental Records Dataset

This dataset serves as a lookup table to determine if environmental records exist in a Chicago Department of Public Health (CDPH) environmental dataset for a given address. COMPLAINTS: A "Y" indicates that one or more records exist in the CDPH Environmental Complaints dataset. NESHAPS and DEMOLITON NOTICES: A "Y" indicates that one or more records exist in the CDPH Asbestos and Demolition Notification dataset. ENFORCEMENT: A "Y" indicates that one or more records exist in the CDPH Environmental Enforcement dataset. INSPECTIONS: A "Y" indicates that one or more records exist in the CDPH Environmental Inspections dataset. PERMITS: A "Y" indicates that one or more records exist in the CDPH Environmental Permits dataset. TANKS: A "Y" indicates that one or more records exist in the CDPH Storage Tanks dataset.

Date of Government Version: 12/11/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 73

Source: Chicago Department of Public Health
Telephone: 312-745-3136
Last EDR Contact: 03/17/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Varies

COAL ASH: Coal Ash Site Listing
A listing of coal ash site lcoations.

Date of Government Version: 10/01/2011
Date Data Arrived at EDR: 03/09/2012
Date Made Active in Reports: 04/10/2012
Number of Days to Update: 32

Source: Illinois EPA
Telephone: 217-782-1654
Last EDR Contact: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Annually

DRYCLEANERS: Illinois Licensed Drycleaners
Any retail drycleaning facility in Illinois must apply for a license through the Illinois Drycleaner Environmental Response Trust Fund. Drycleaner Environmental Response Trust Fund of Illinois.

Date of Government Version: 11/17/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/09/2020
Number of Days to Update: 51

Source: Drycleaner Environmental Response Trust Fund of Illinois
Telephone: 800-765-4041
Last EDR Contact: 04/27/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

Financial Assurance: Financial Assurance Information Listing
Information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/14/2017
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 03/12/2018
Number of Days to Update: 18

Source: Illinois Environmental Protection Agency
Telephone: 217-782-9887
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: No Update Planned

HWAR: Hazard Waste Annual Report
Each year, Illinois hazardous-waste generators tell the Illinois EPA the amounts and kinds of hazardous waste they produced during the previous year. Generators indicate by code the types of wastes produced and the steps they took to manage these wastes. If some or all of these wastes were sent to commercial treatment, storage, and disposal facilities (TSDFs), that information and the identity of each receiving facility also are submitted.
Illinois TSDFs likewise report the types and quantities of wastes received from in-state and out-of-state generators; they also report the procedures they used to manage these wastes.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 04/04/2019
Number of Days to Update: 55

Source: Illinois EPA
Telephone: 217-524-3300
Last EDR Contact: 04/13/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Annually

IMPDMENT: Surface Impoundment Inventory
Statewide inventory of industrial, municipal, mining, oil & gas , and large agricultural impoundment. This study was conducted by the Illinois EPA to assess potentail for contamination of shallow aquifers. This was a one-time study. Although many of the impoundments may no longer be present, the sites may be contaminated.

Date of Government Version: 12/31/1980
Date Data Arrived at EDR: 03/08/2002
Date Made Active in Reports: 06/03/2002
Number of Days to Update: 87

Source: Illinois Waste Management & Research Center
Telephone: 217-333-8940
Last EDR Contact: 02/20/2002
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: A Listing of Active Permits
A listing of facilities currently active in the state. The types of permits are public, private, federal and state.

Date of Government Version: 04/16/2014
Date Data Arrived at EDR: 04/18/2014
Date Made Active in Reports: 05/20/2014
Number of Days to Update: 32

Source: Illinois EPA
Telephone: 217-782-0610
Last EDR Contact: 03/20/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

PIMW: Potentially Infectious Medical Waste

Potentially Infectious Medical Waste (PIMW) is waste generated in connection with the diagnosis, treatment (i.e., provision of medical services), or immunization of human beings or animals; research pertaining to the provision of medical services; or the provision or testing of biologicals.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/17/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 72

Source: Illinois EPA
Telephone: 217-524-3289
Last EDR Contact: 03/17/2020
Next Scheduled EDR Contact: 06/29/2020
Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 05/24/2019
Number of Days to Update: 10

Source: Illinois Emergency Management Agency
Telephone: 217-785-9860
Last EDR Contact: 02/10/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Annually

UIC: Underground Injection Wells

Injection wells are used for disposal of fluids by "injection" into the subsurface. The construction of injection wells range from very technical designs with twenty-four hour monitoring to simply a hole dug in the ground to control runoff. As a result of this diversity, the UIC Program divides injection wells into five different classes.

Date of Government Version: 06/25/2018
Date Data Arrived at EDR: 09/04/2018
Date Made Active in Reports: 09/11/2018
Number of Days to Update: 7

Source: Illinois EPA
Telephone: 217-782-9878
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Illinois Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Illinois Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 01/30/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 39

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/12/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 51

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/29/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/18/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/09/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Homes & Centers Listing
Source: Department of Children & Family Services
Telephone: 312-814-4150

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Illinois State Geological Survey
Telephone: 217-333-4747

STREET AND ADDRESS INFORMATION

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Appendix E - Historical Research Documents

Redline Expansion

Redline Expansion

Palos Heights, IL 60463

Inquiry Number: 6062945.5

May 14, 2020

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

05/14/20

Site Name:	Client Name:
Redline Expansion	Environmental Design Int'l Inc
Redline Expansion	33 W. Monroe St.
Palos Heights, IL 60463	Chicago, IL 60603
EDR Inquiry # 6062945.5	Contact: Jjanssen@envdesigni.com

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Environmental Design Int'l Inc were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	NA	**Latitude:**	41.65957 41° 39' 34" North
Project:	NA	**Longitude:**	-87.81006 -87° 48' 36" West
		UTM Zone:	Zone 16 North
		UTM X Meters:	432556.11
		UTM Y Meters:	4612296.72
		Elevation:	669.65' above sea level

Maps Provided:

2012	1963, 1965	1893
1997	1960	1892
1991, 1993	1956, 1960	
1991	1953	
1977, 1978	1948, 1953	
1977	1929	
1973	1901	
1965	1900	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

Lake Calumet
2012
7.5-minute, 24000

Blue Island
2012
7.5-minute, 24000

1997 Source Sheets

Lake Calumet
1997
7.5-minute, 24000
Aerial Photo Revised 1997

Blue Island
1997
7.5-minute, 24000
Aerial Photo Revised 1997

1991, 1993 Source Sheets

Lake Calumet
1991
7.5-minute, 24000
Aerial Photo Revised 1988

Blue Island
1993
7.5-minute, 24000
Aerial Photo Revised 1988

1977, 1978 Source Sheets

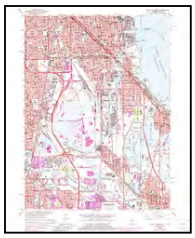

Lake Calumet
1977
7.5-minute, 24000
Aerial Photo Revised 1973

Blue Island
1978
7.5-minute, 24000
Aerial Photo Revised 1973

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1973 Source Sheets

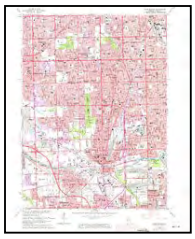

Blue Island
1973
7.5-minute, 24000
Aerial Photo Revised 1973

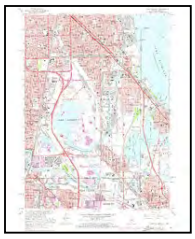

Lake Calumet
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1965 Source Sheets

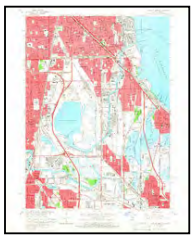

Lake Calumet
1965
7.5-minute, 24000
Aerial Photo Revised 1964

1963, 1965 Source Sheets

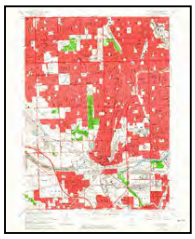

Blue Island
1963
7.5-minute, 24000
Aerial Photo Revised 1963

1960 Source Sheets

Lake Calumet
1960
7.5-minute, 24000
Aerial Photo Revised 1952

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1956, 1960 Source Sheets

Blue Island
1956
7.5-minute, 24000

1953 Source Sheets

Calumet Lake
1953
7.5-minute, 24000

1948, 1953 Source Sheets

Blue Island
1948
7.5-minute, 24000

1929 Source Sheets

Calumet Lake
1929
7.5-minute, 24000

Blue Island
1929
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1901 Source Sheets

Calumet
1901
15-minute, 62500

1900 Source Sheets

Calumet
1900
15-minute, 62500

1893 Source Sheets

Calumet
1893
15-minute, 62500

1892 Source Sheets

Calumet
1892
15-minute, 62500

Historical Topo Map

2012

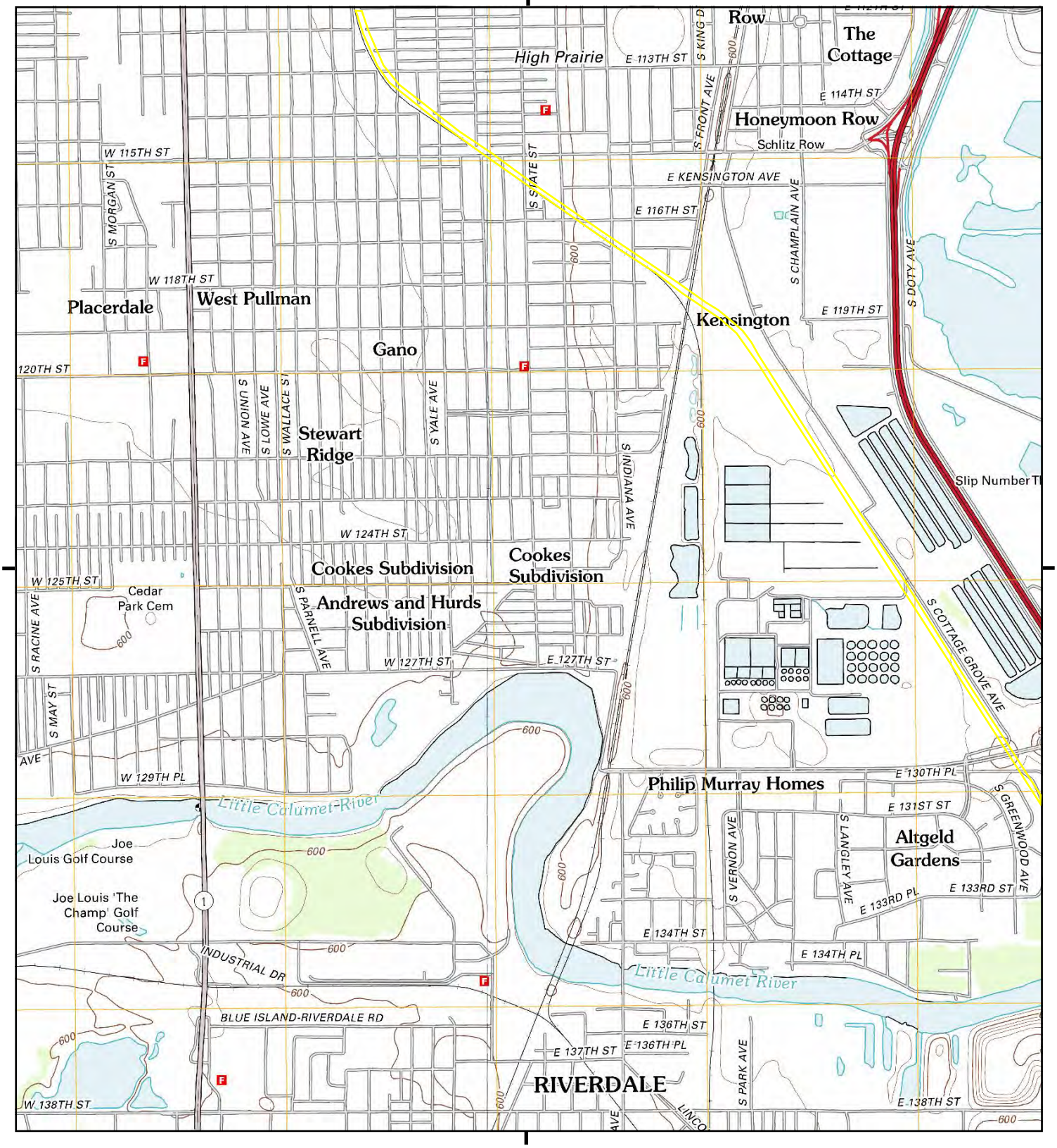

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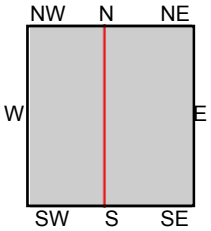

TP, Lake Calumet, 2012, 7.5-minute
W, Blue Island, 2012, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

2012

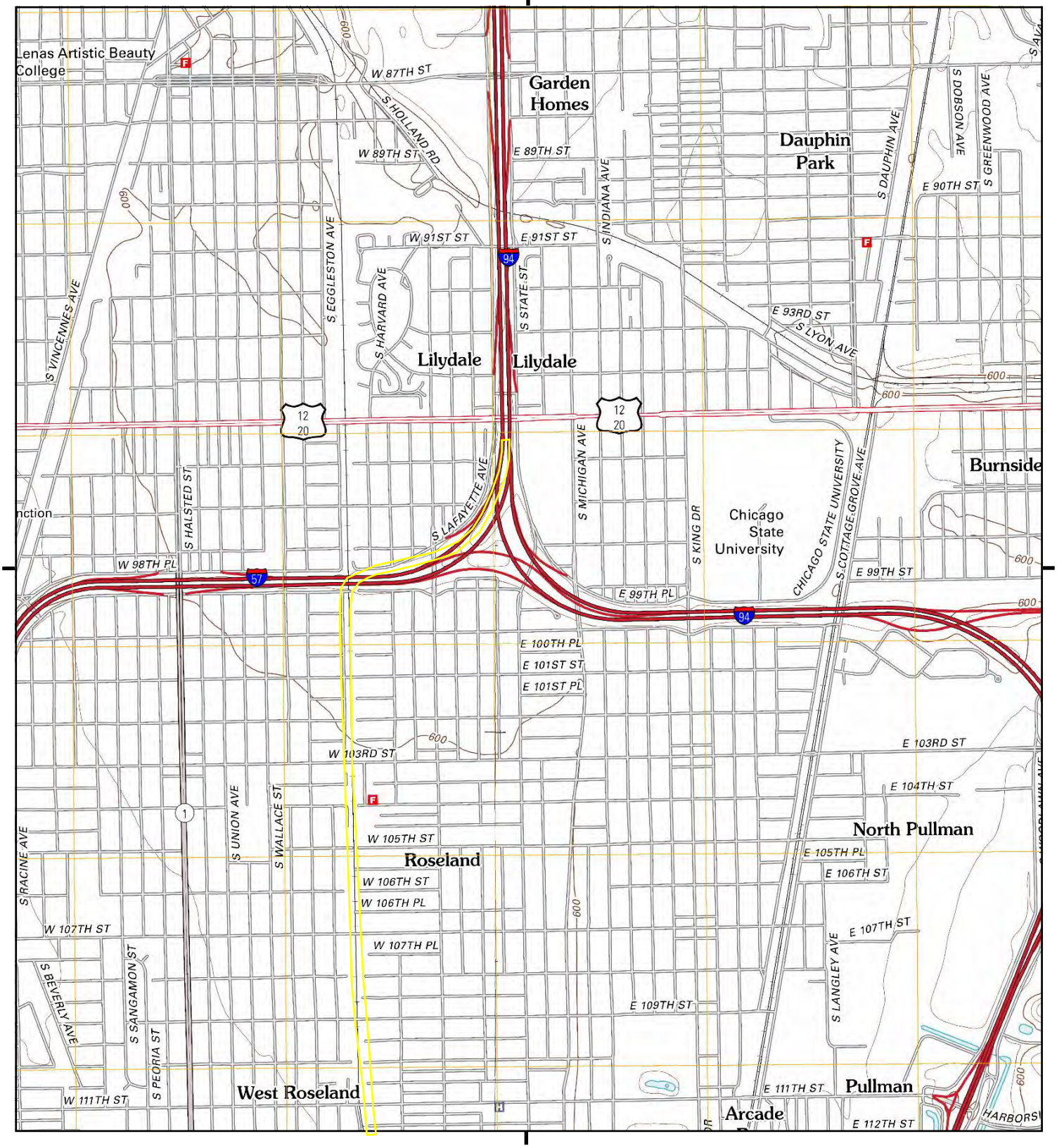

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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 2012, 7.5-minute
SW, Blue Island, 2012, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

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Historical Topo Map

2012

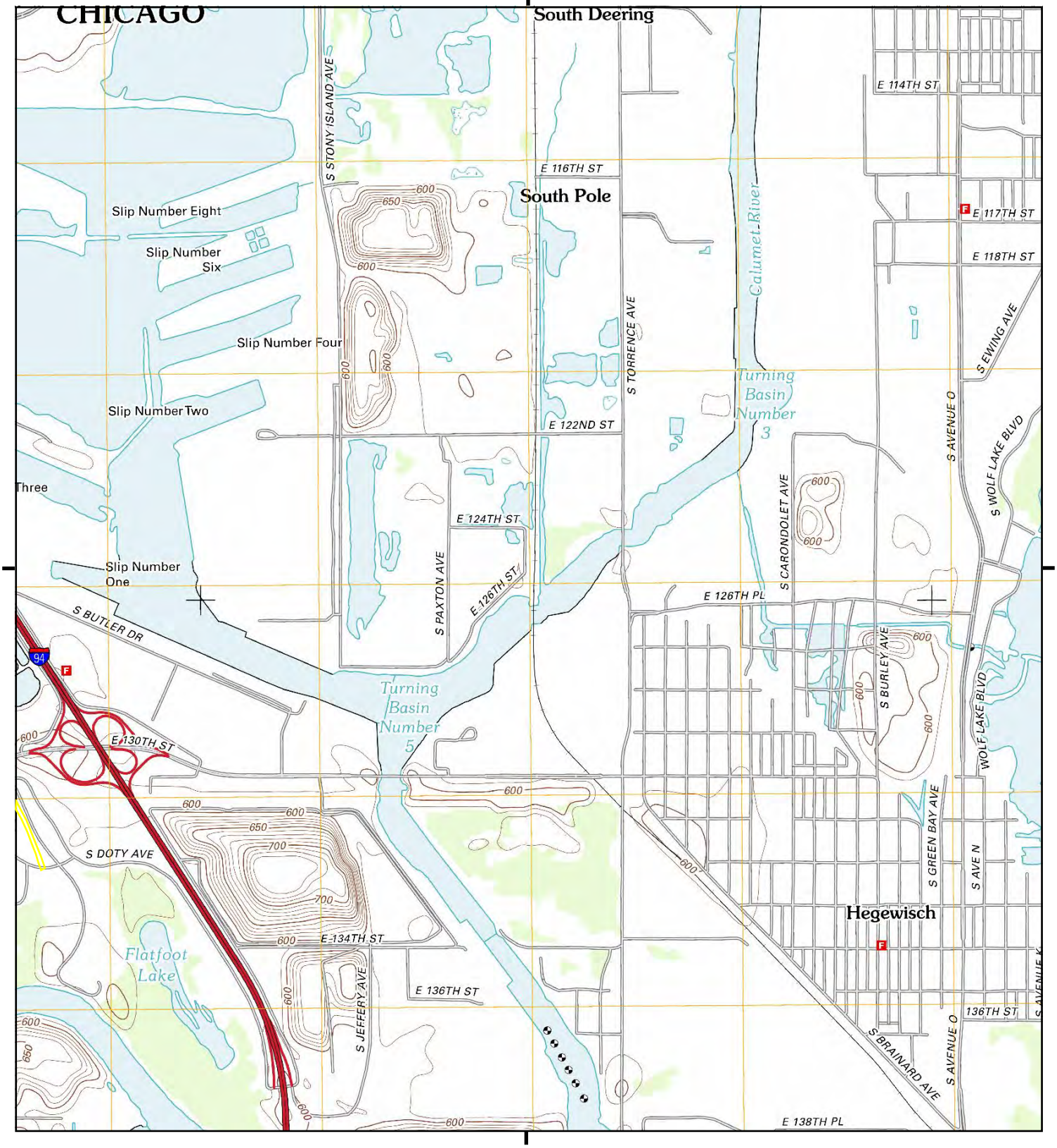

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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 2012, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1997

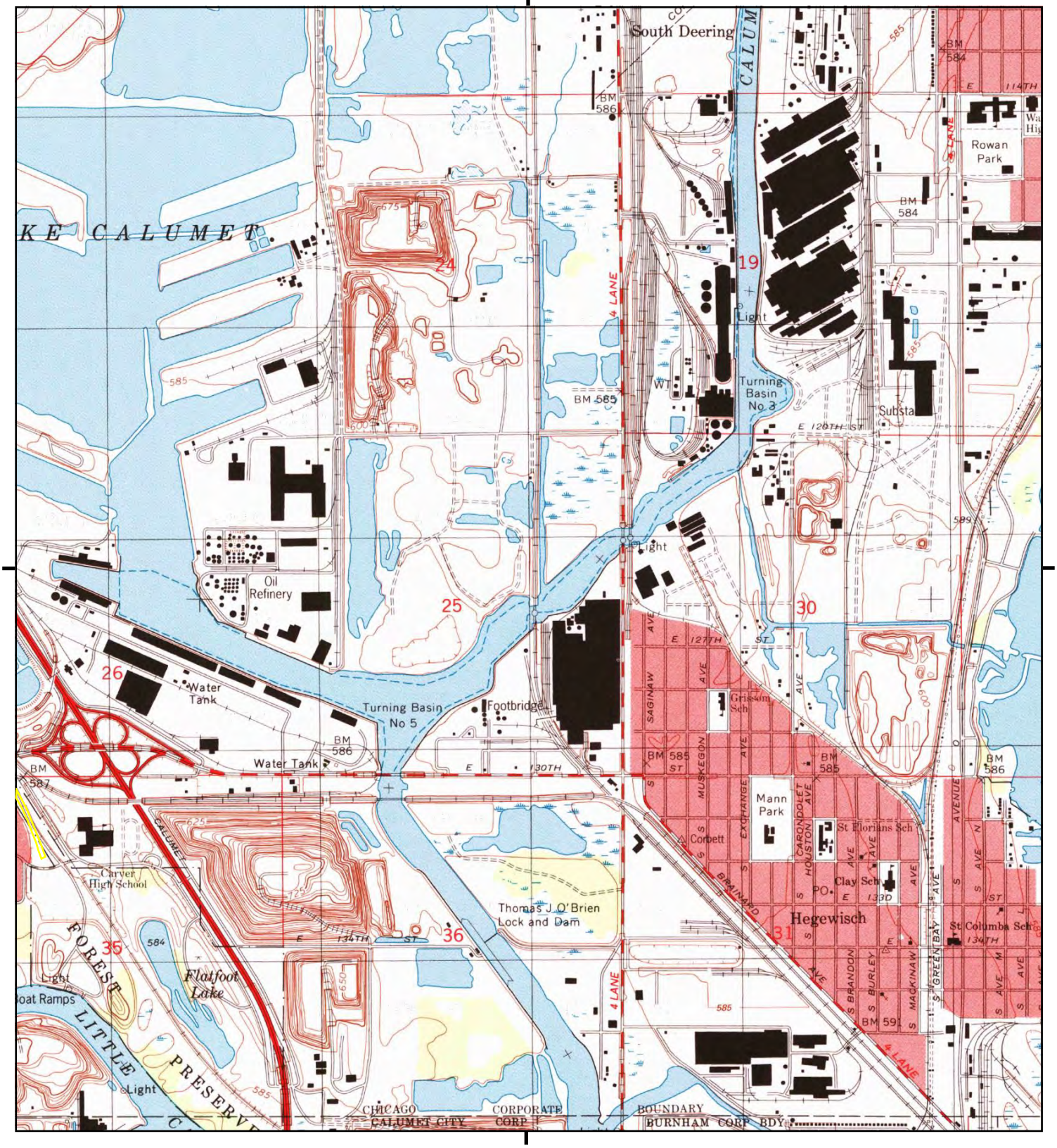

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W E
SW S SE

TP, Lake Calumet, 1997, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1997

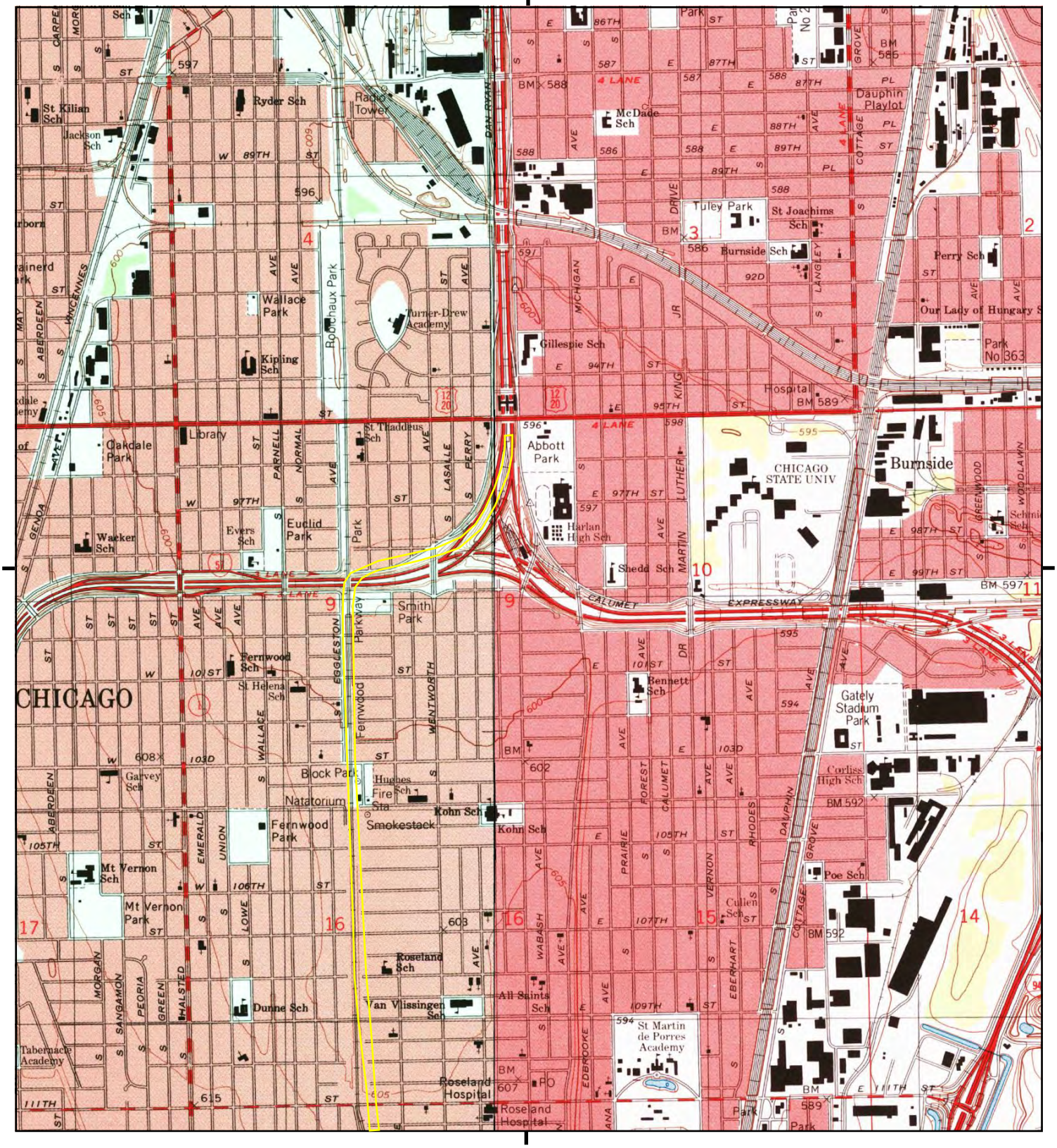

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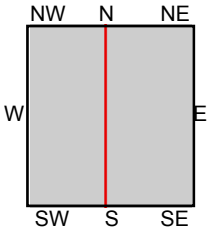

TP, Lake Calumet, 1997, 7.5-minute
SW, Blue Island, 1997, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1997

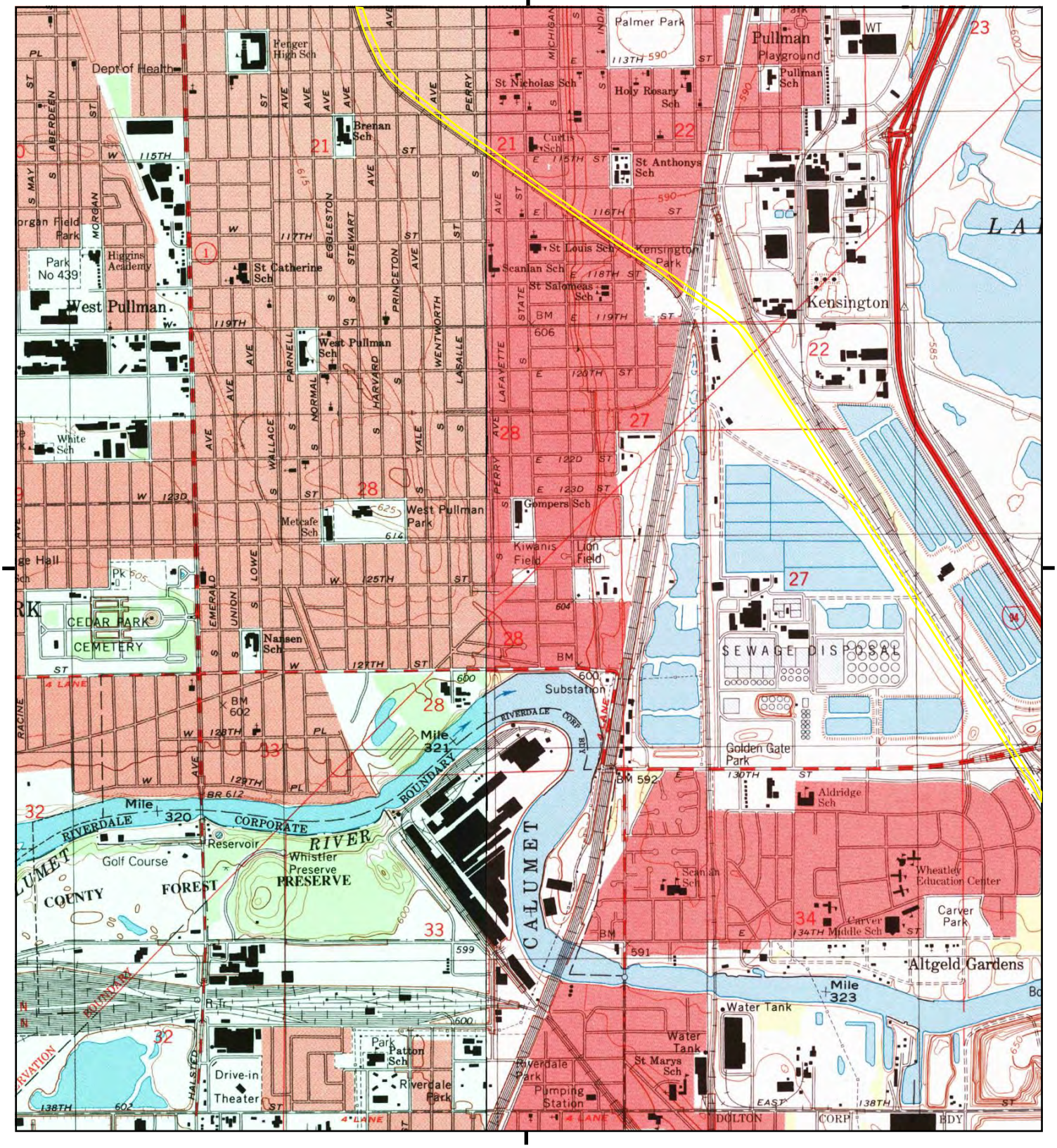

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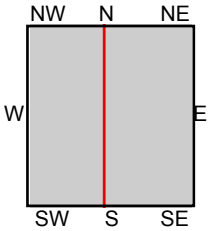

TP, Lake Calumet, 1997, 7.5-minute
W, Blue Island, 1997, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1991, 1993

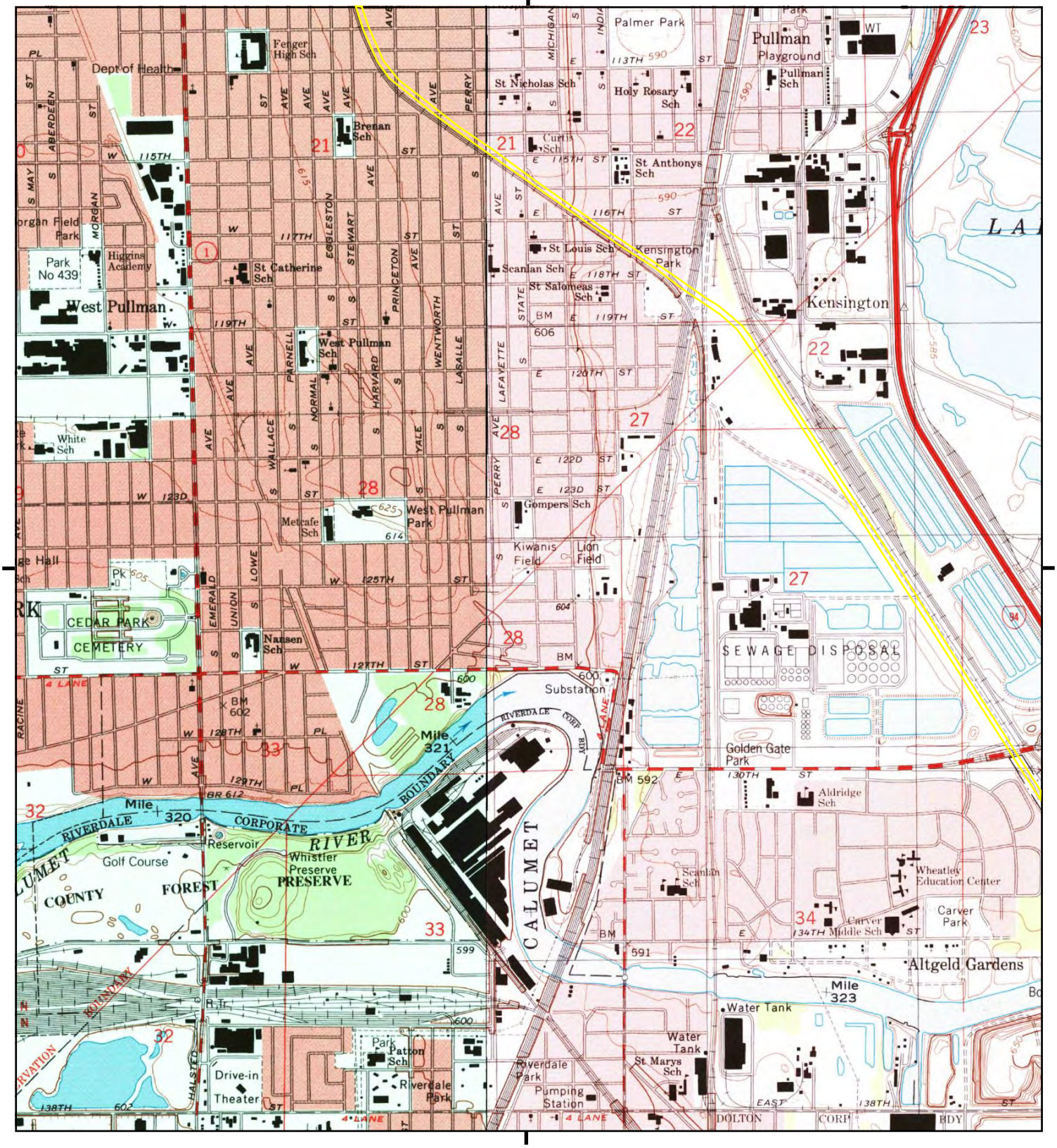

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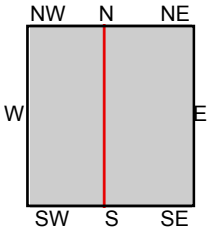

TP, Lake Calumet, 1991, 7.5-minute
W, Blue Island, 1993, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1991, 1993

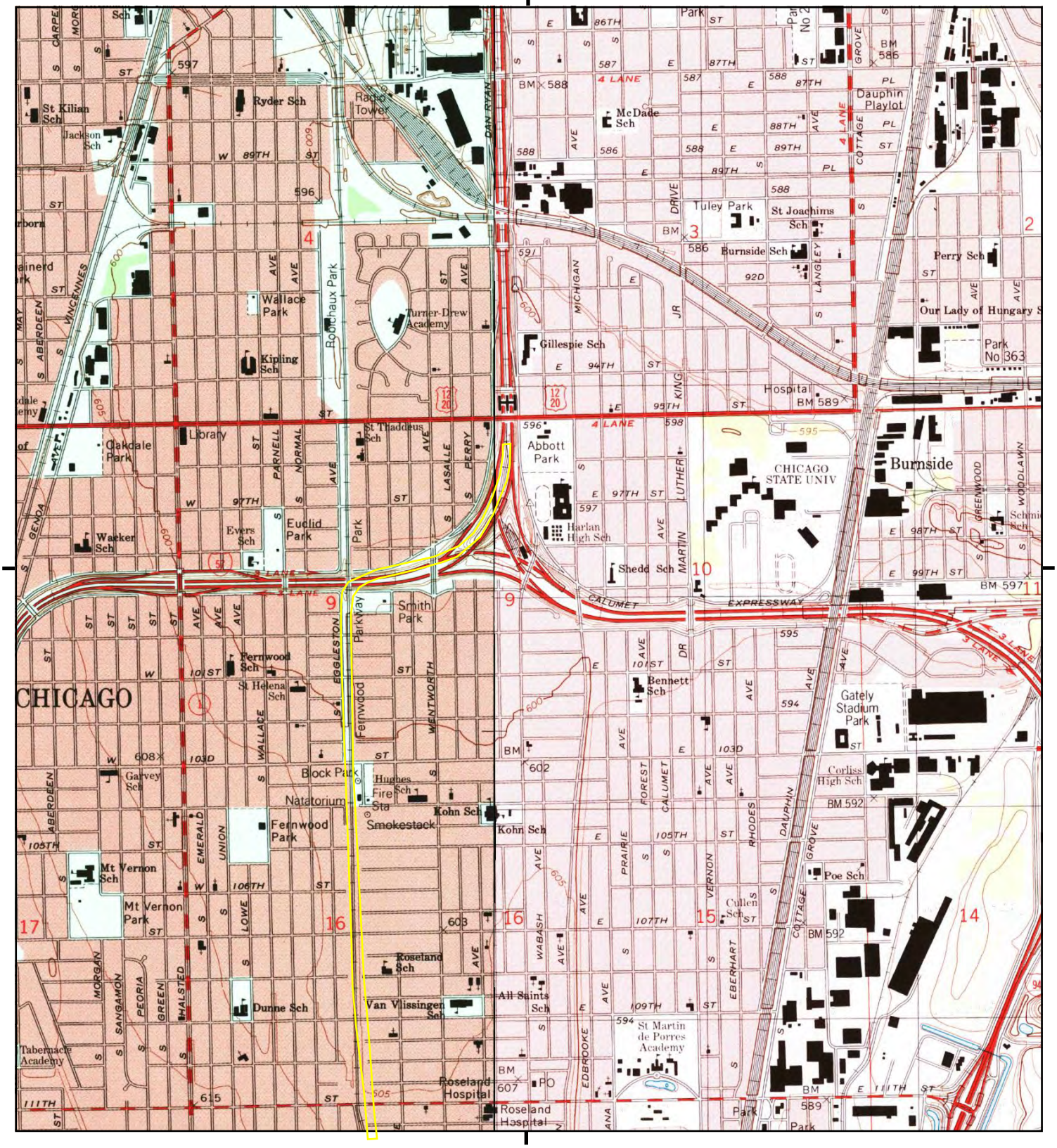

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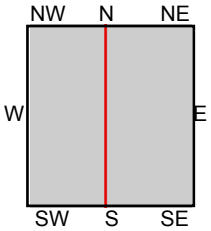

TP, Lake Calumet, 1991, 7.5-minute
SW, Blue Island, 1993, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1991

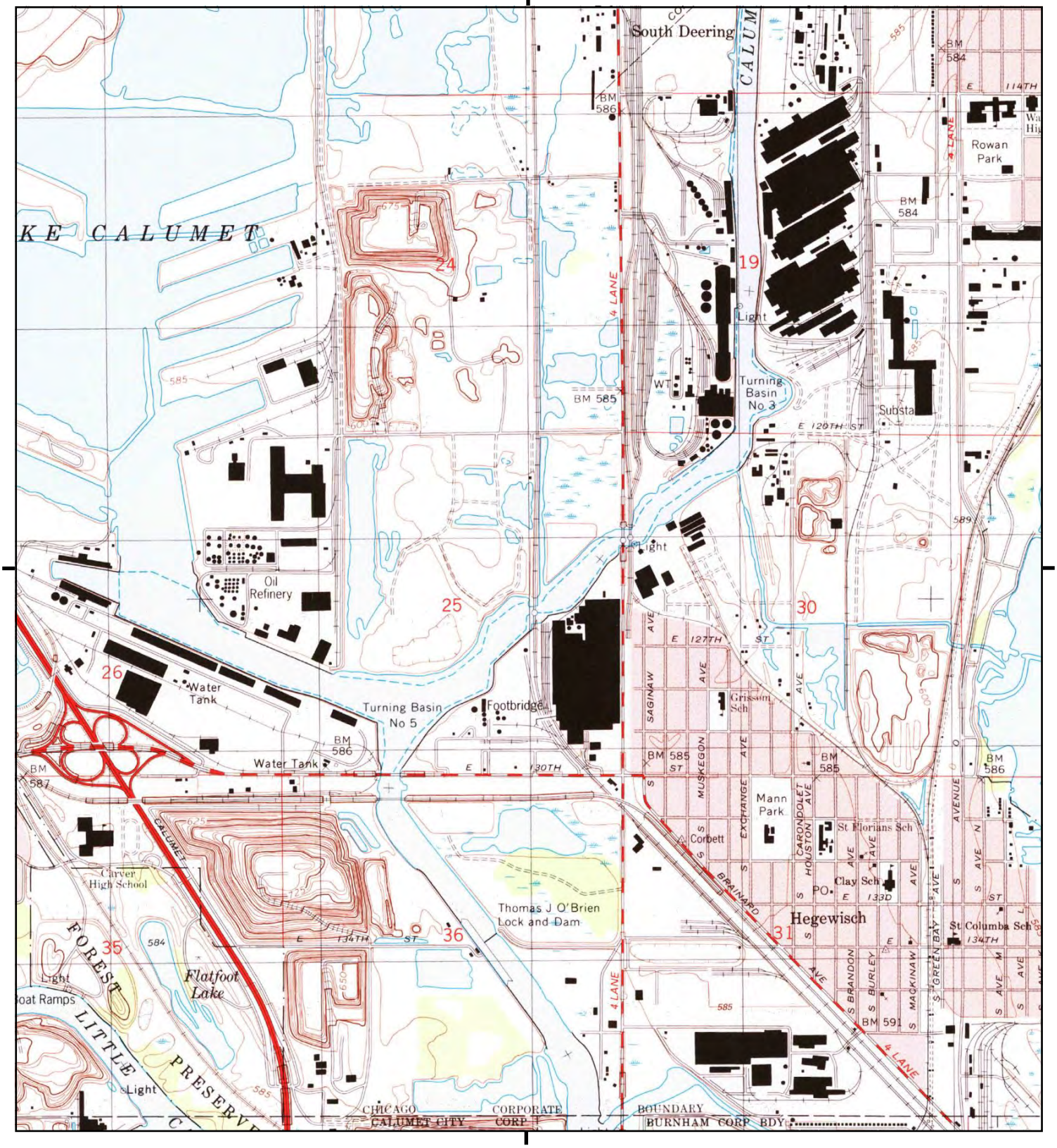

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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1991, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1977, 1978

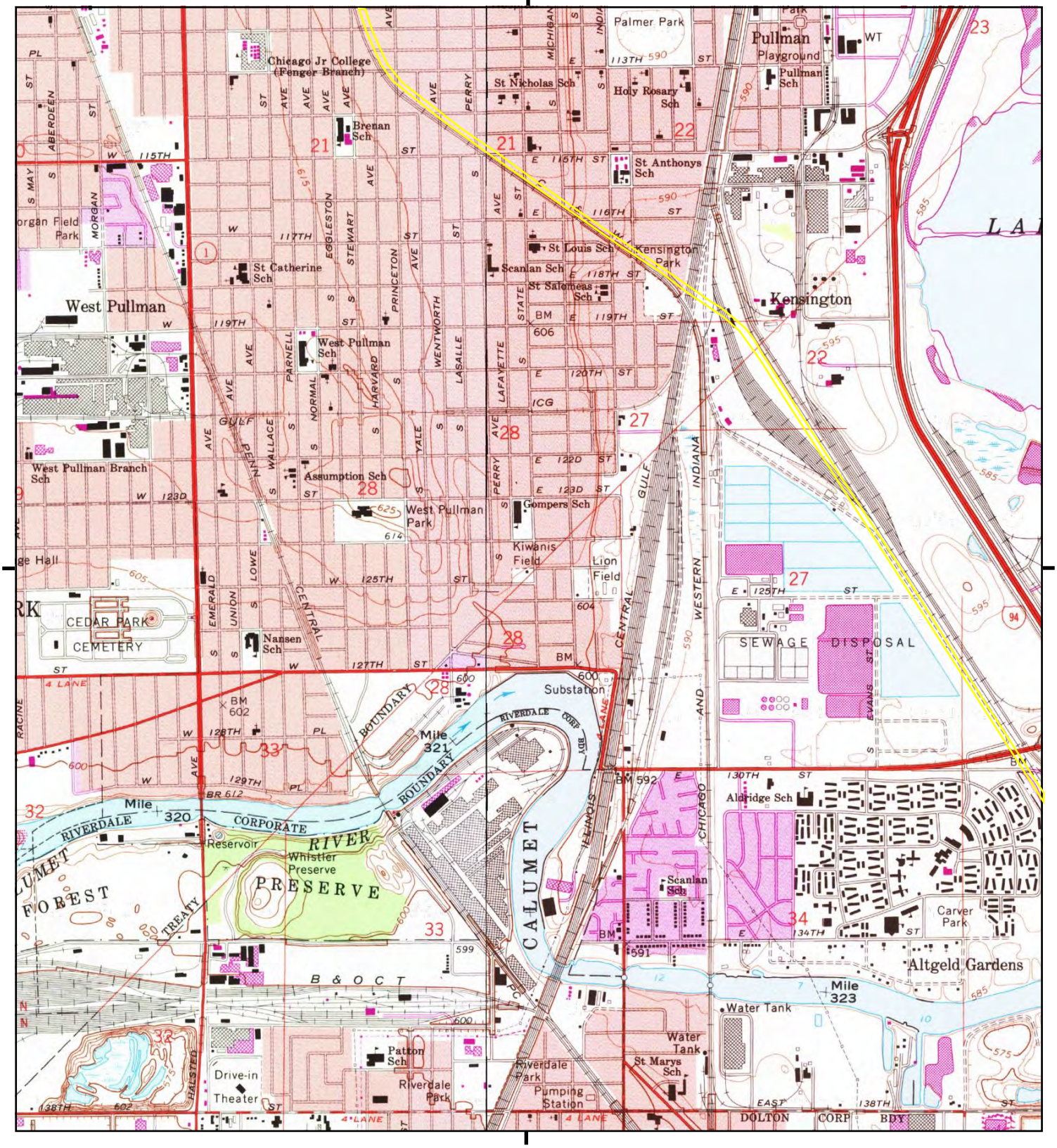

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1977, 7.5-minute
W, Blue Island, 1978, 7.5-minute

SITE NAME: Redline Expansion
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Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1977, 1978

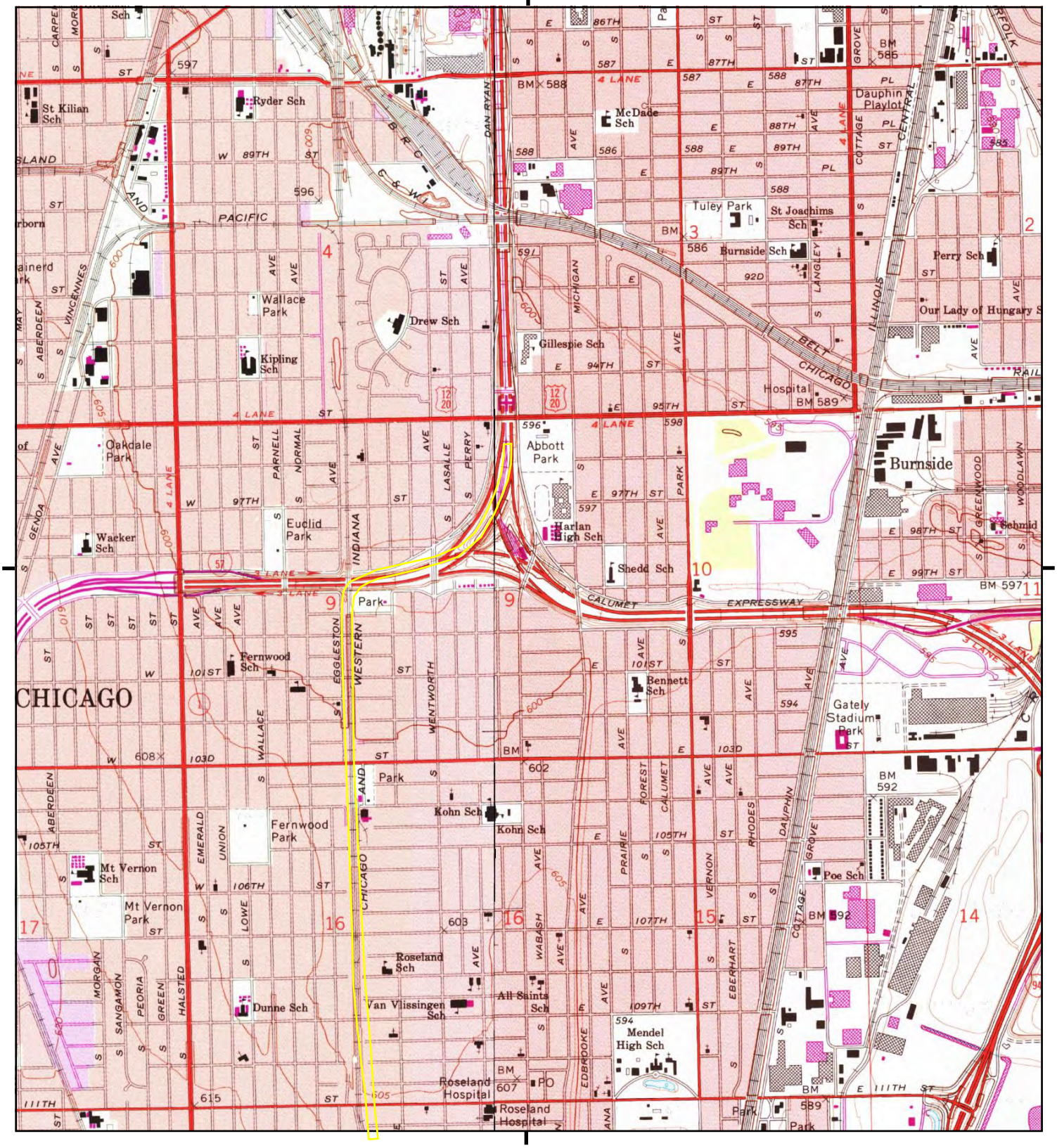

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0 Miles 0.25 0.5 1 1.5

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W E
SW S SE

TP, Lake Calumet, 1977, 7.5-minute
SW, Blue Island, 1978, 7.5-minute

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Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

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Historical Topo Map

1977

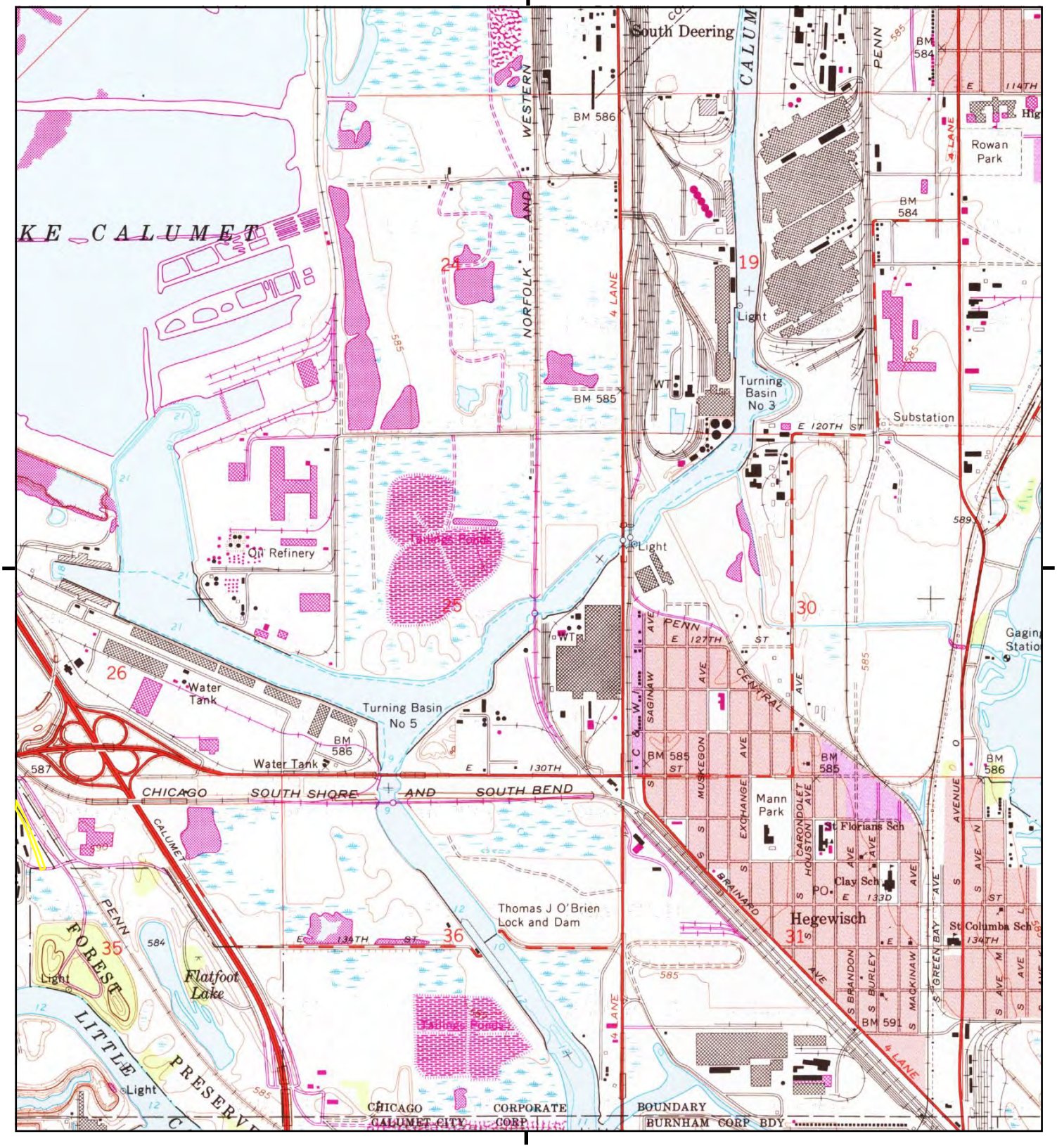

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1977, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1973

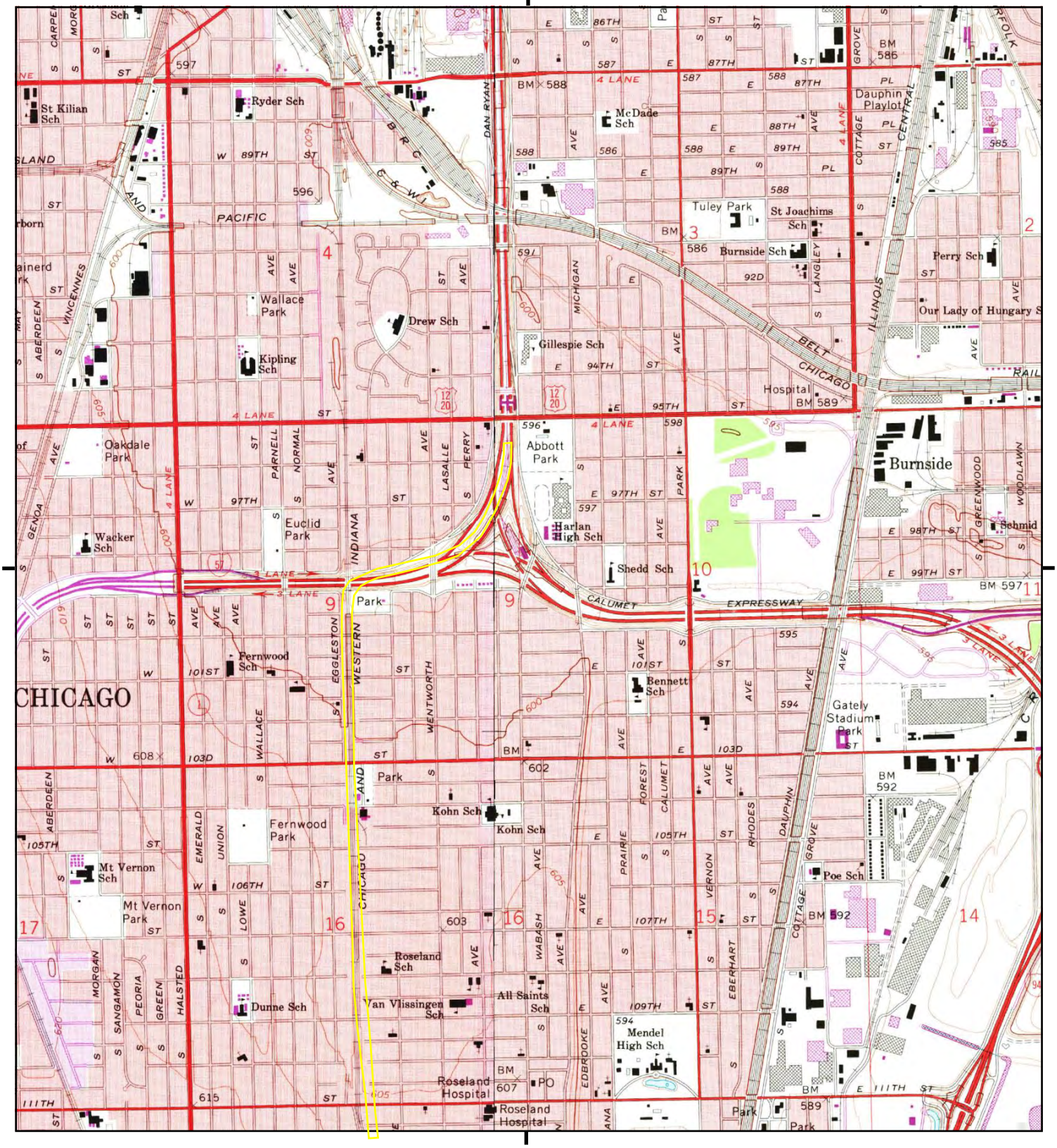

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1973, 7.5-minute
SW, Blue Island, 1973, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1973

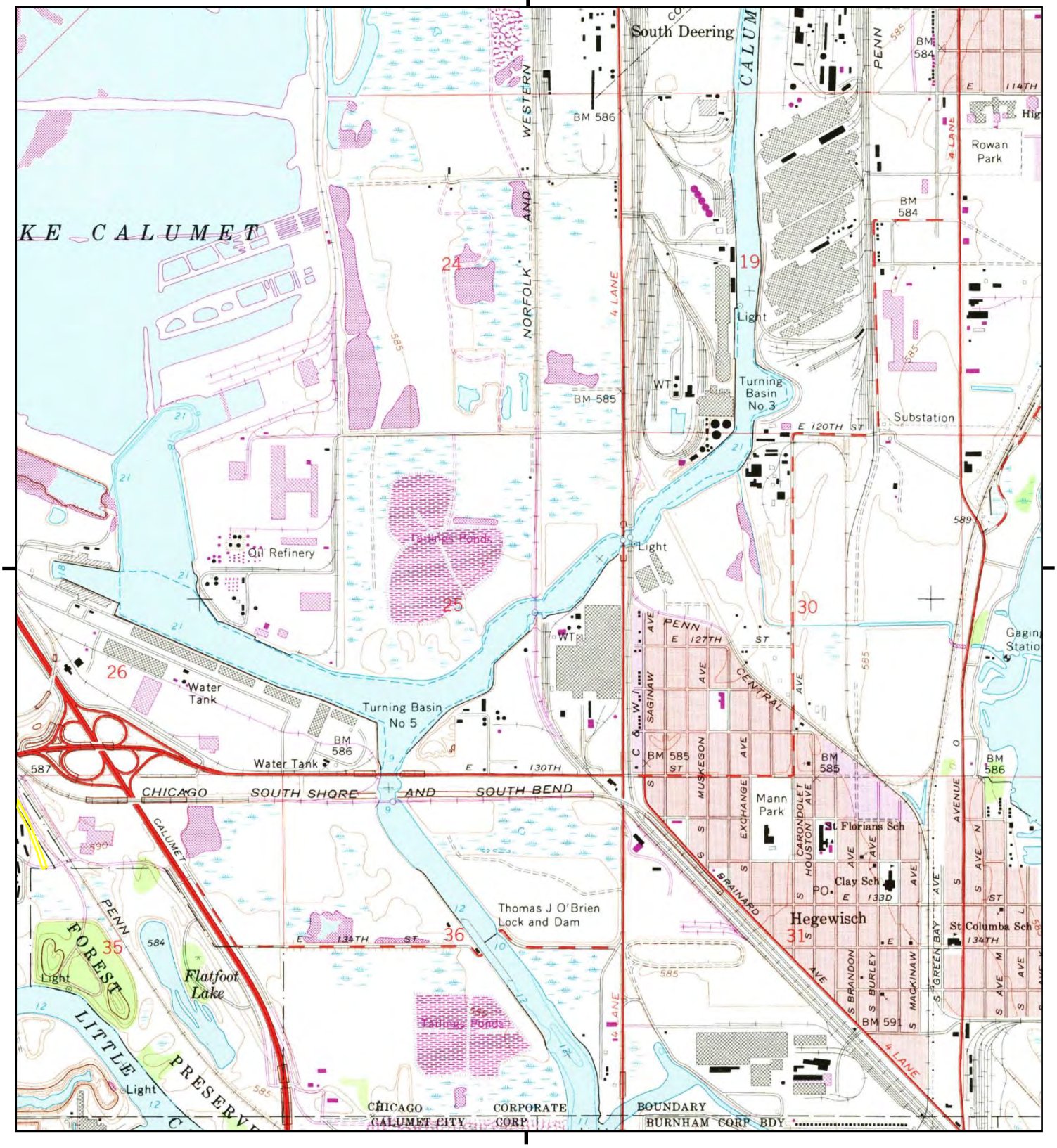

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1973, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1973

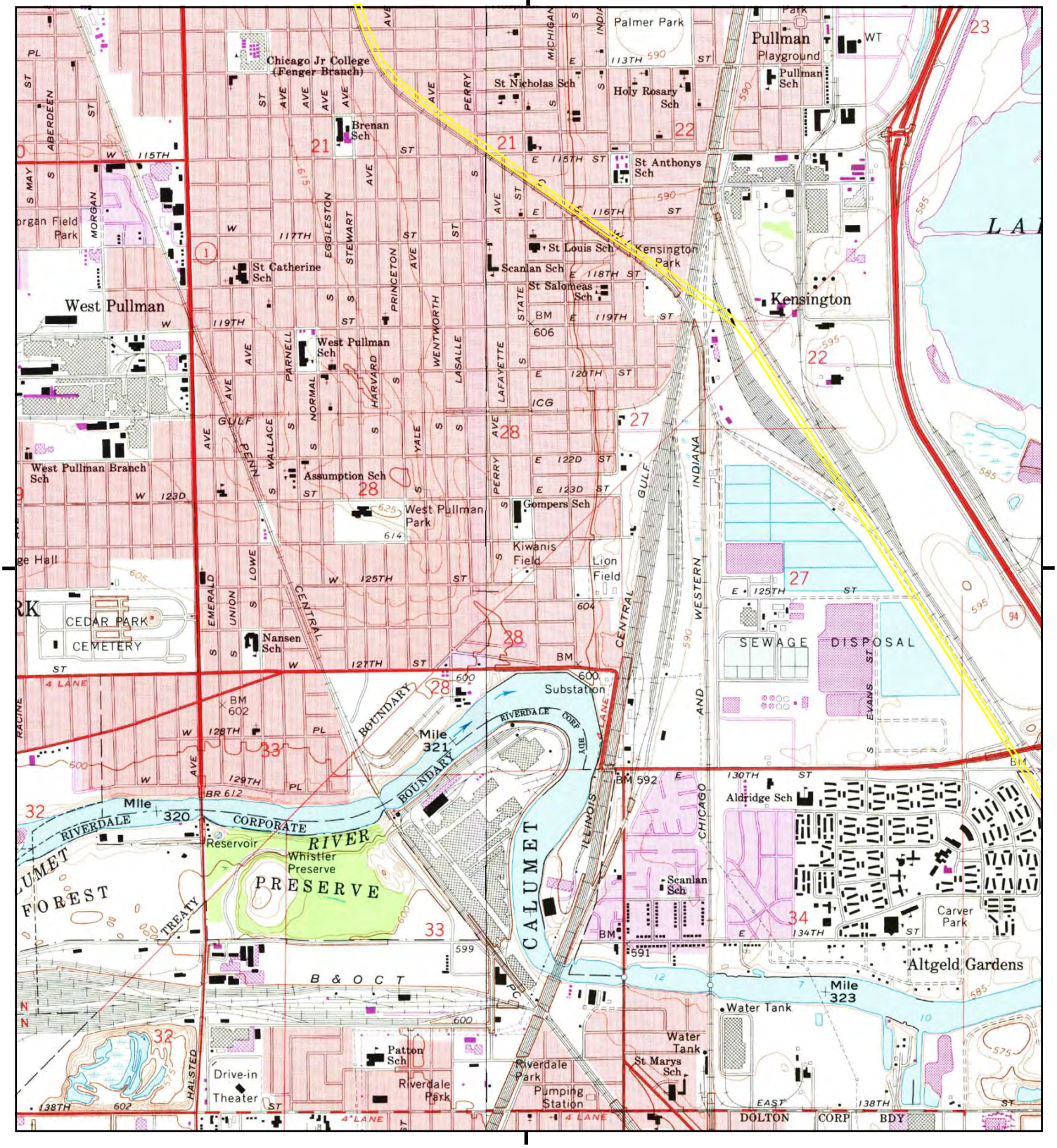

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1973, 7.5-minute
W, Blue Island, 1973, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1965

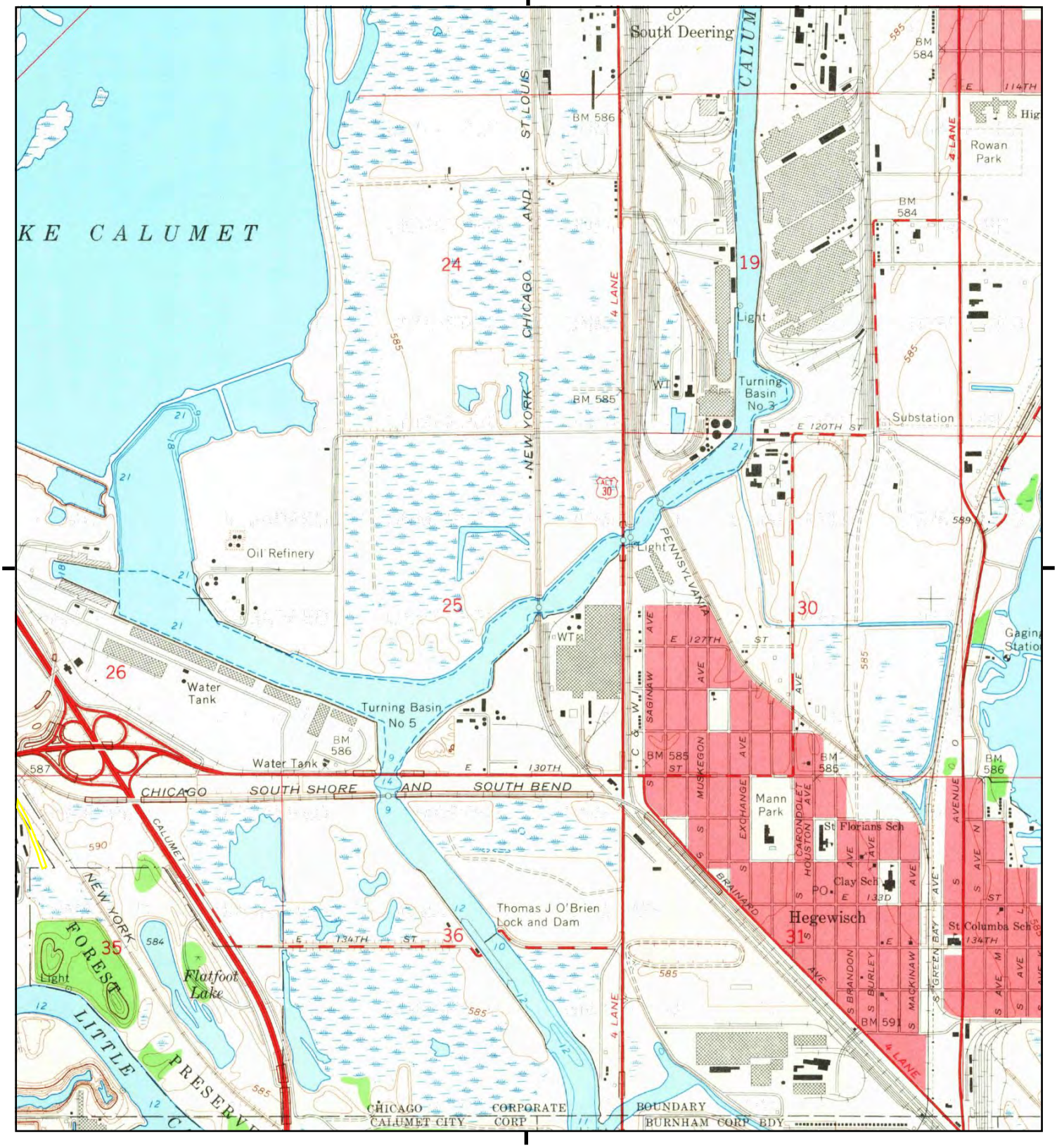

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1965, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1963, 1965

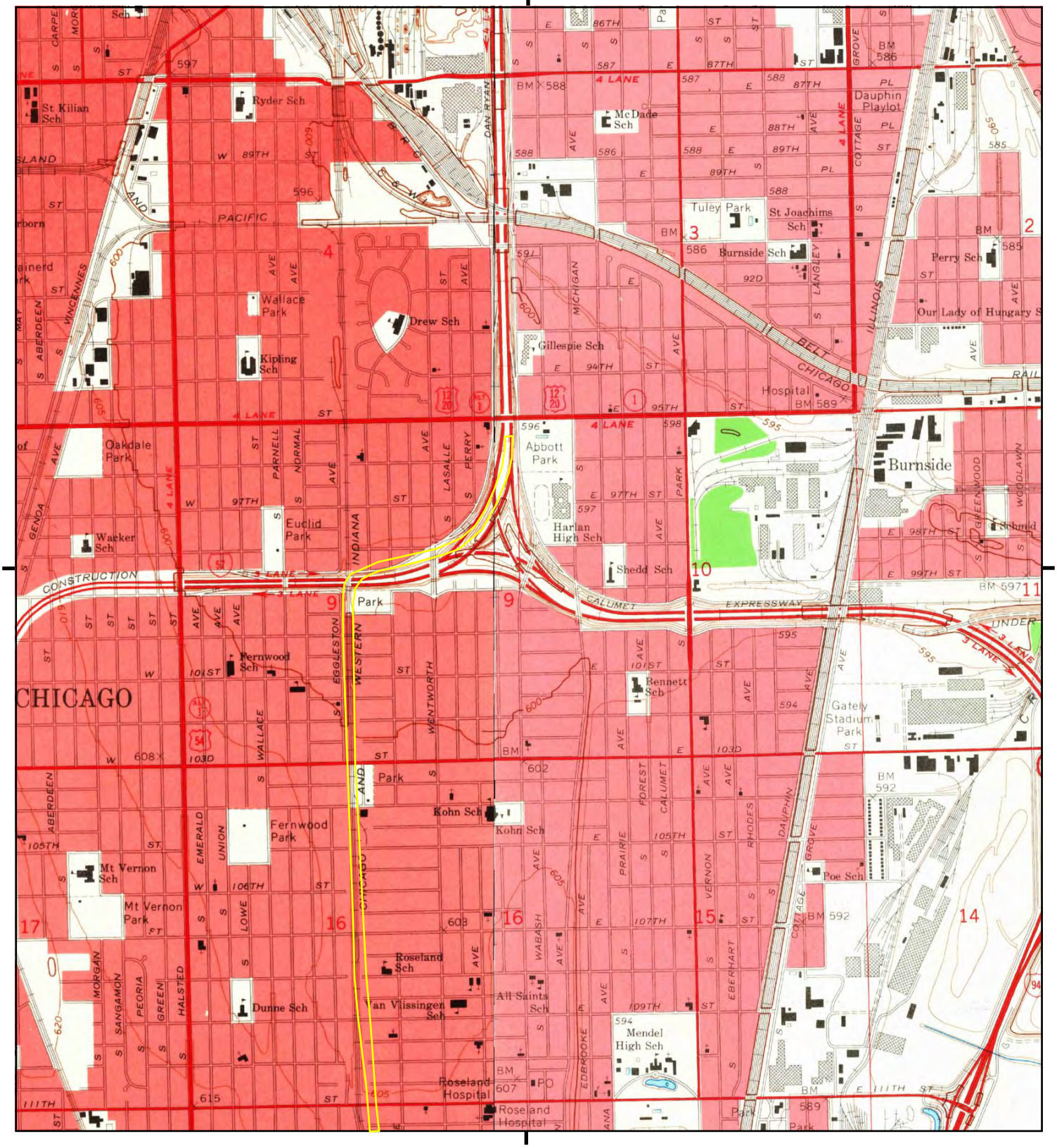

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0 Miles 0.25 0.5 1 1.5

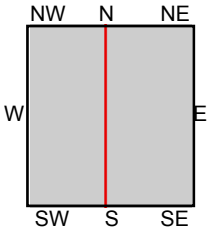

TP, Lake Calumet, 1965, 7.5-minute
SW, Blue Island, 1963, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1963, 1965

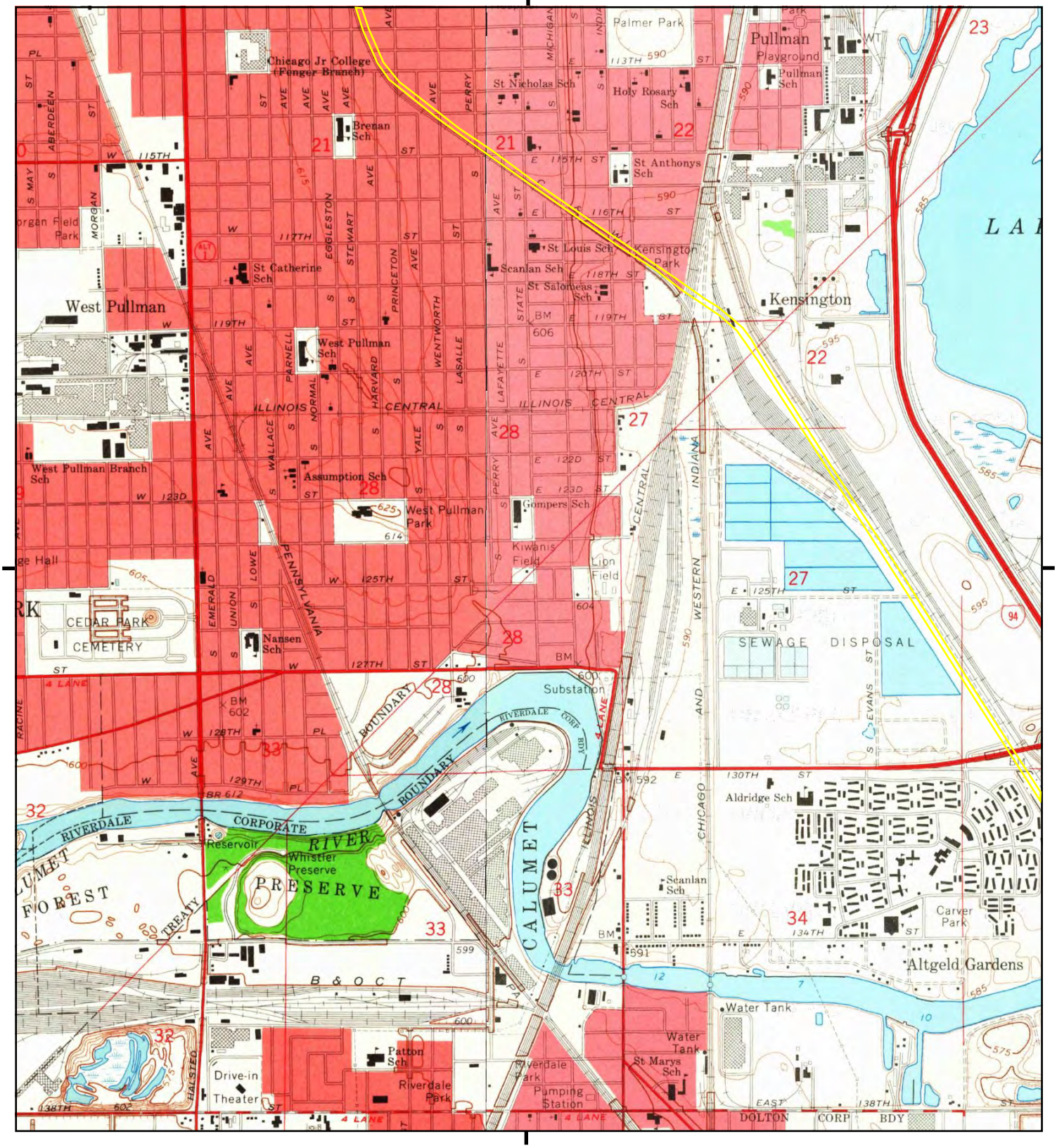

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1965, 7.5-minute
W, Blue Island, 1963, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1960

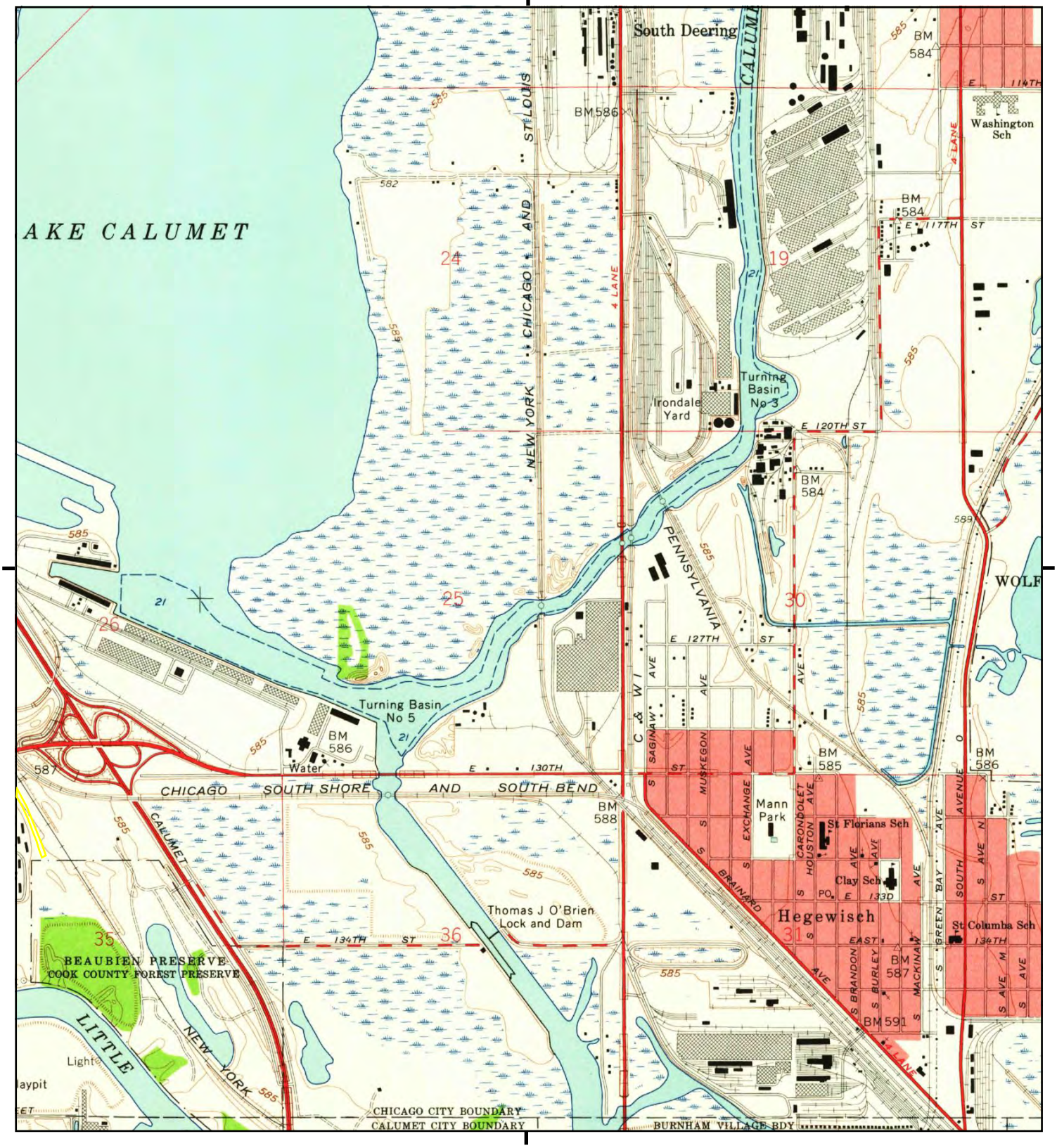

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lake Calumet, 1960, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1956, 1960

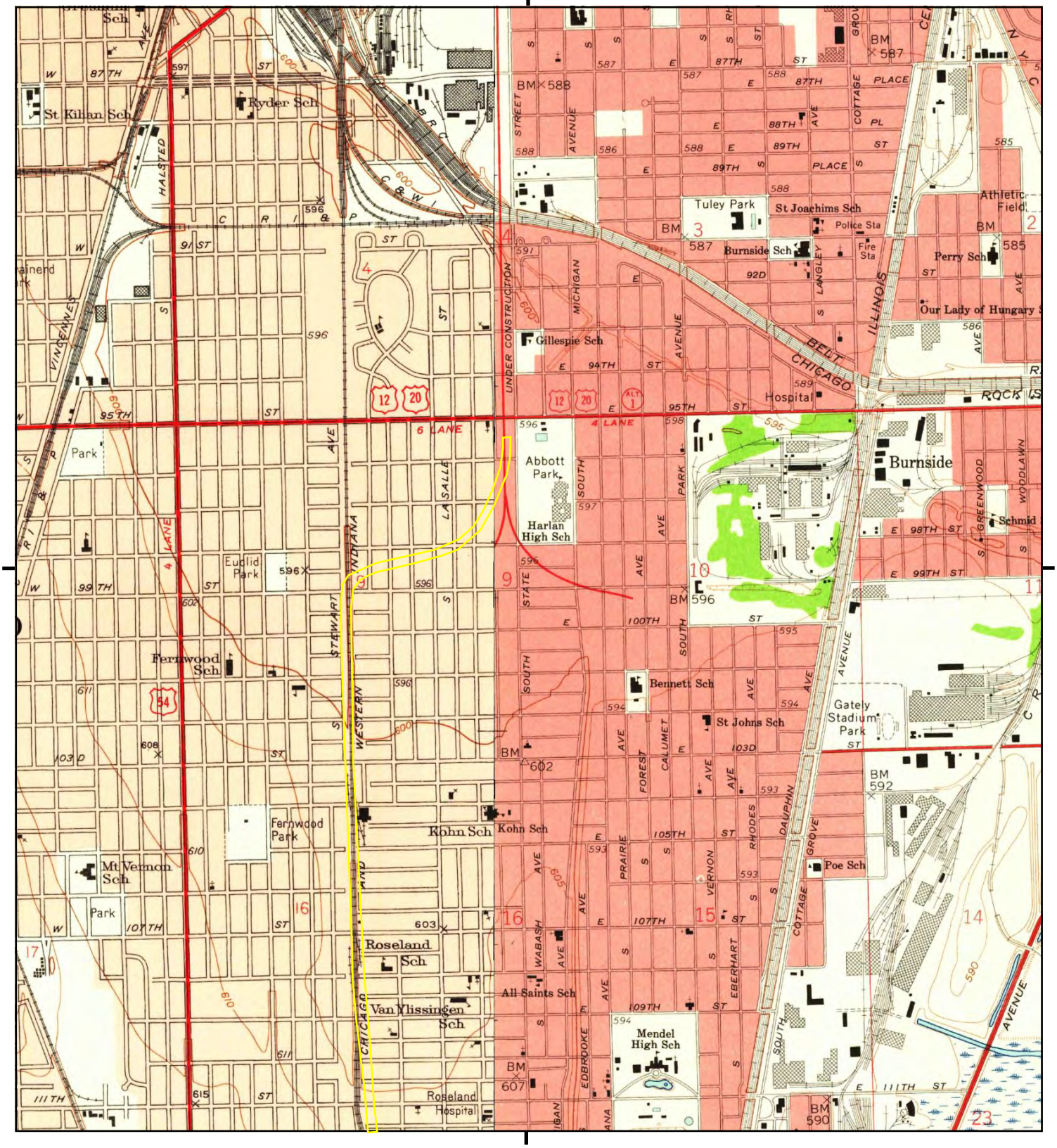

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0 Miles 0.25 0.5 1 1.5

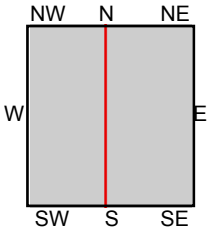

TP, Lake Calumet, 1960, 7.5-minute
SW, Blue Island, 1956, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1956, 1960

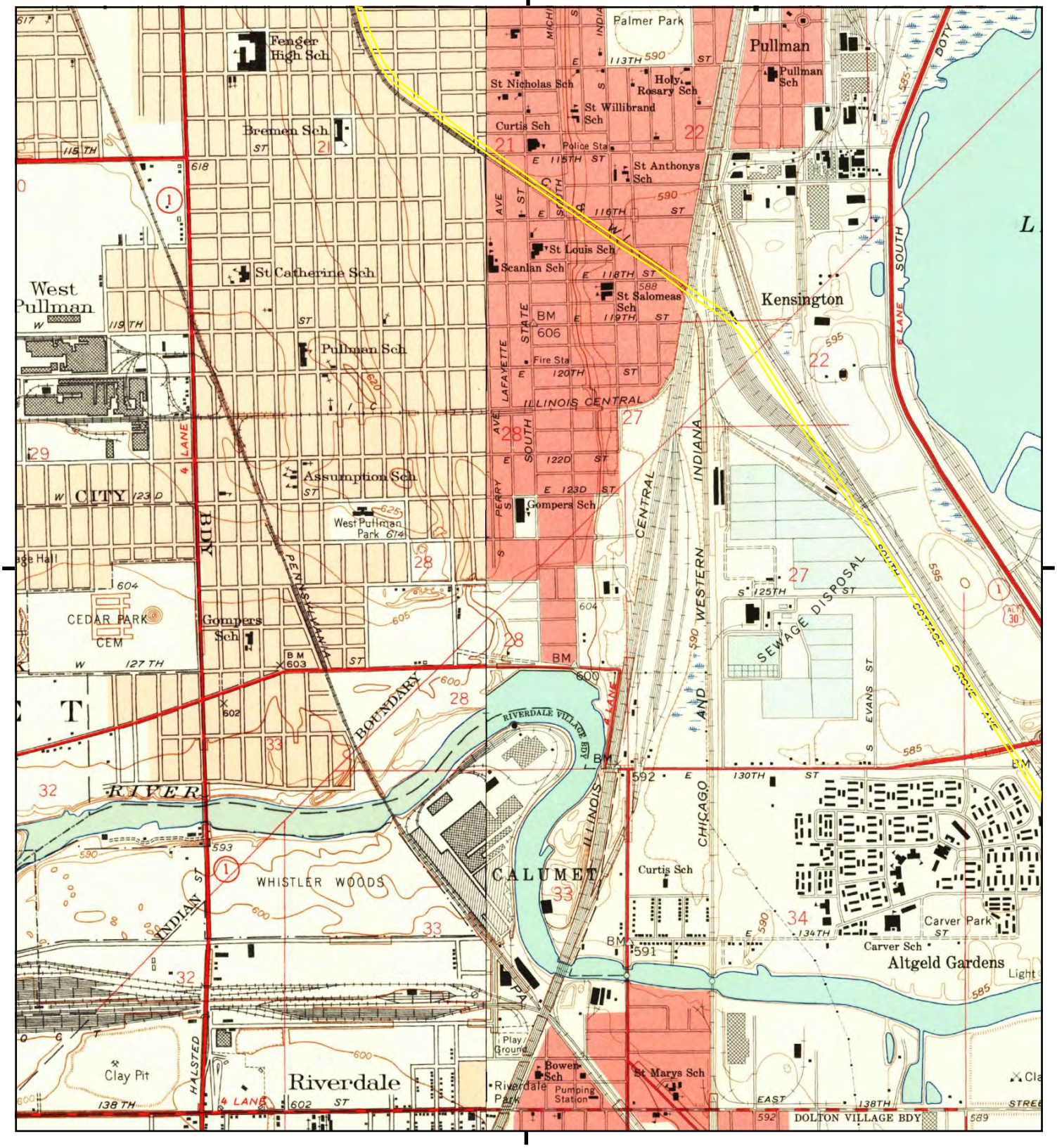

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NW N NE
W E
SW S SE

TP, Lake Calumet, 1960, 7.5-minute
W, Blue Island, 1956, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1953

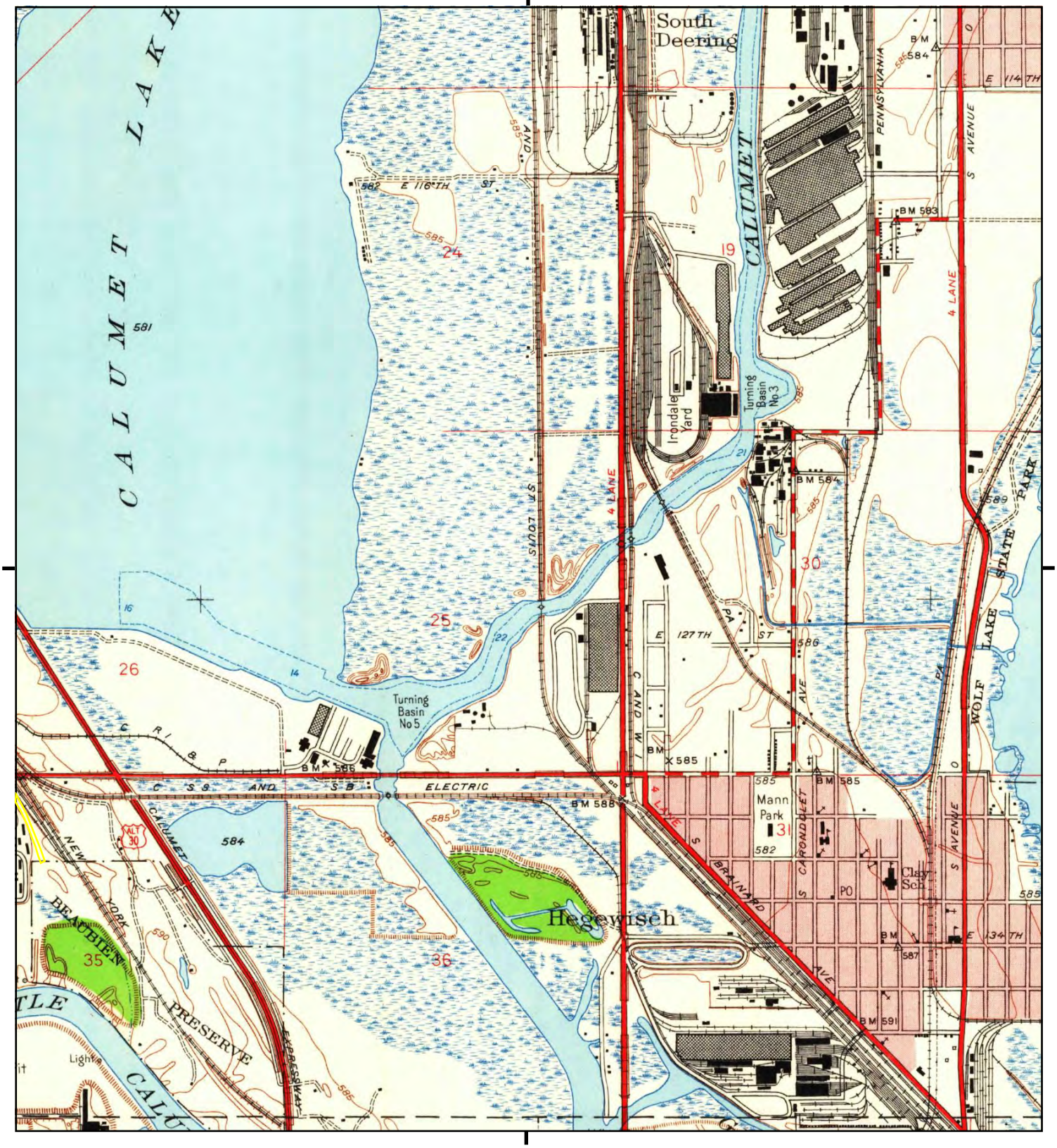

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet Lake, 1953, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1948, 1953

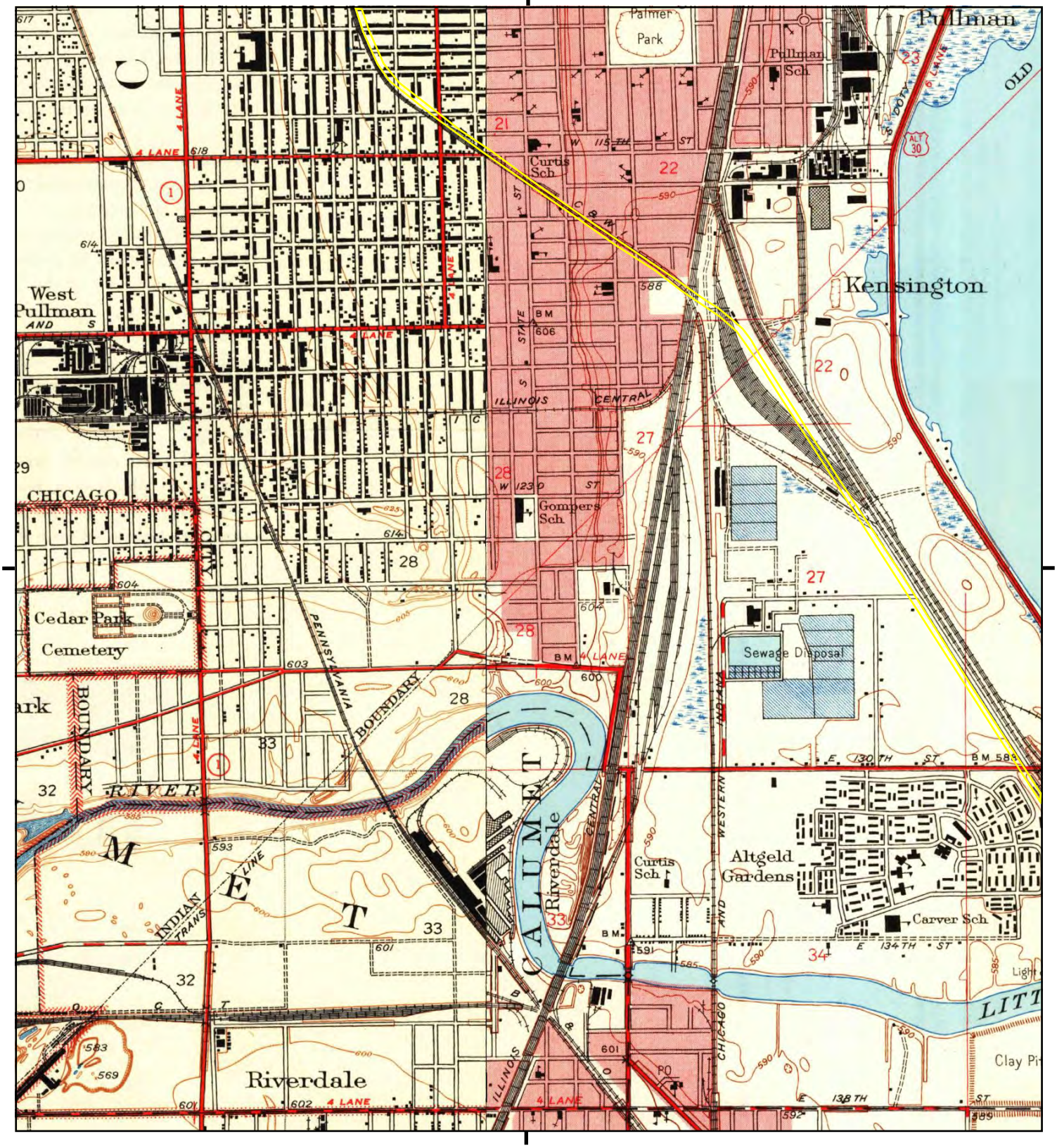

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0 Miles 0.25 0.5 1 1.5

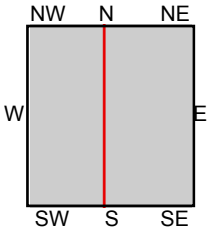

TP, Calumet Lake, 1953, 7.5-minute
W, Blue Island, 1948, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1948, 1953

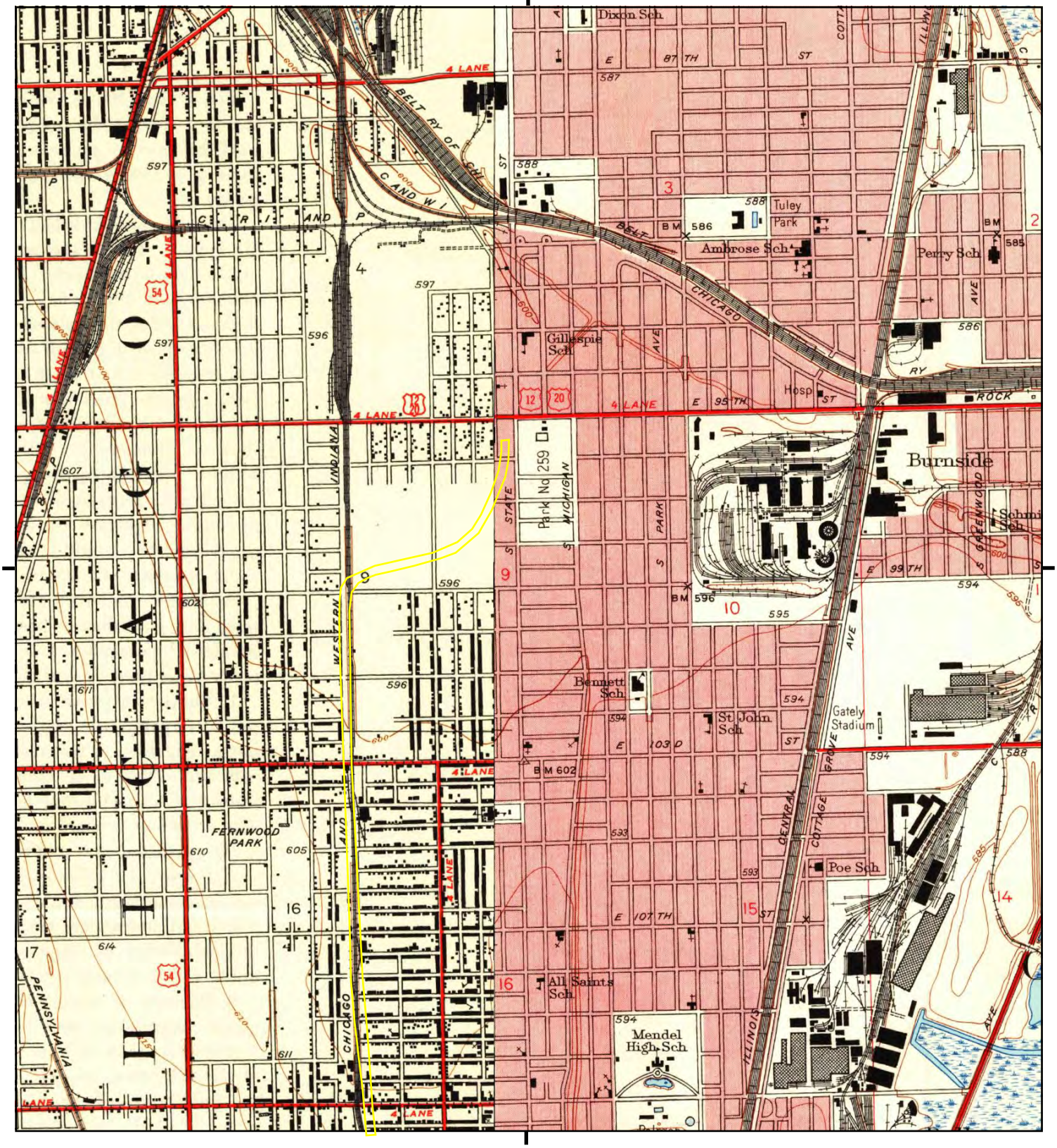

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0 Miles 0.25 0.5 1 1.5

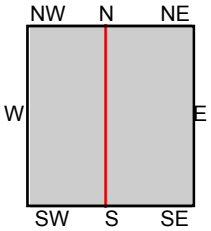

TP, Calumet Lake, 1953, 7.5-minute
SW, Blue Island, 1948, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1929

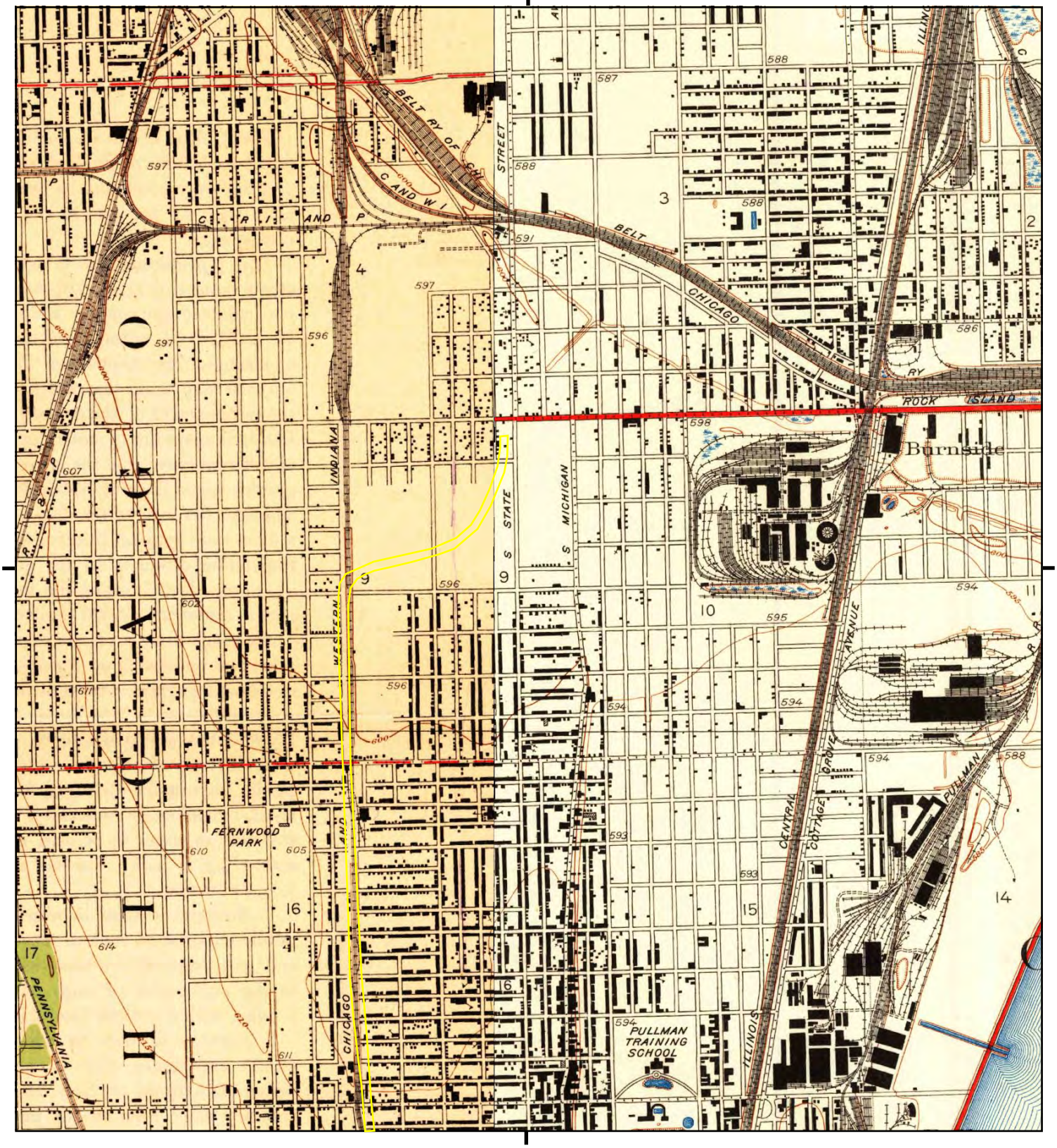

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0 Miles 0.25 0.5 1 1.5

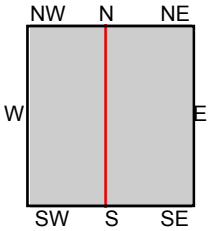

TP, Calumet Lake, 1929, 7.5-minute
SW, Blue Island, 1929, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1929

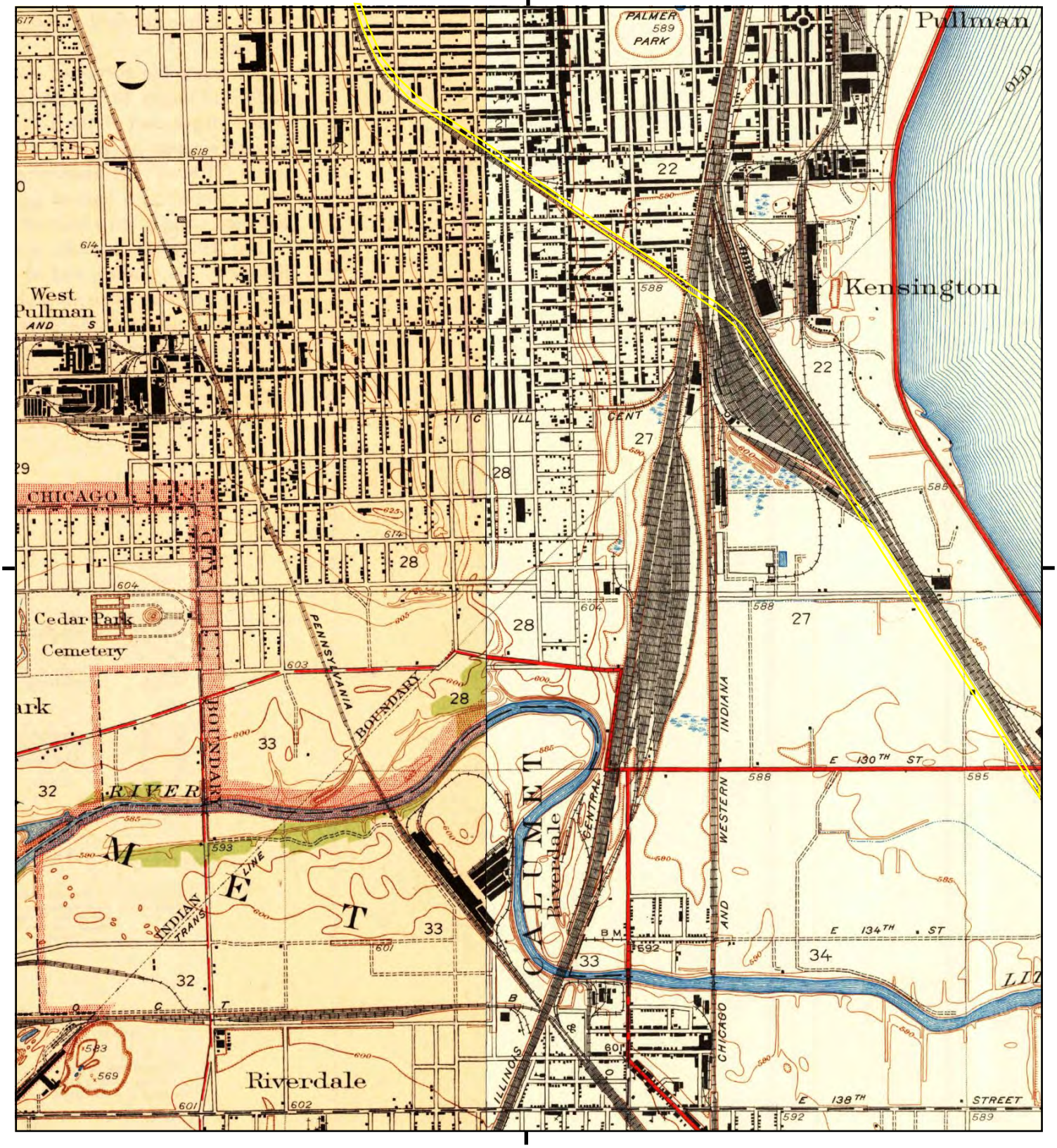

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0 Miles 0.25 0.5 1 1.5

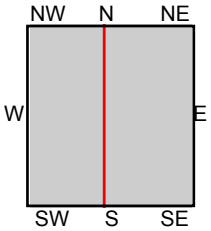

TP, Calumet Lake, 1929, 7.5-minute
W, Blue Island, 1929, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1929

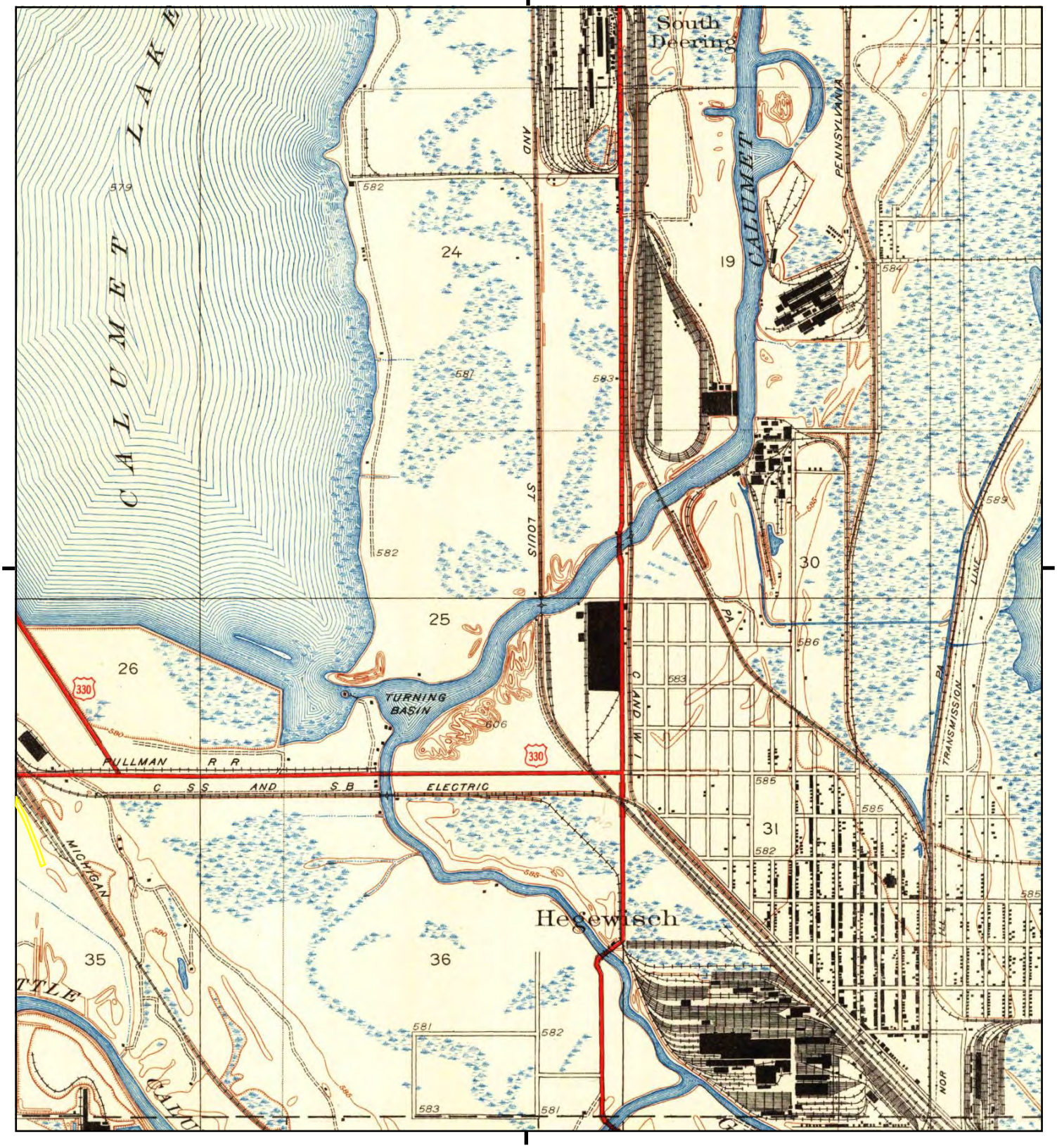

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet Lake, 1929, 7.5-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1901

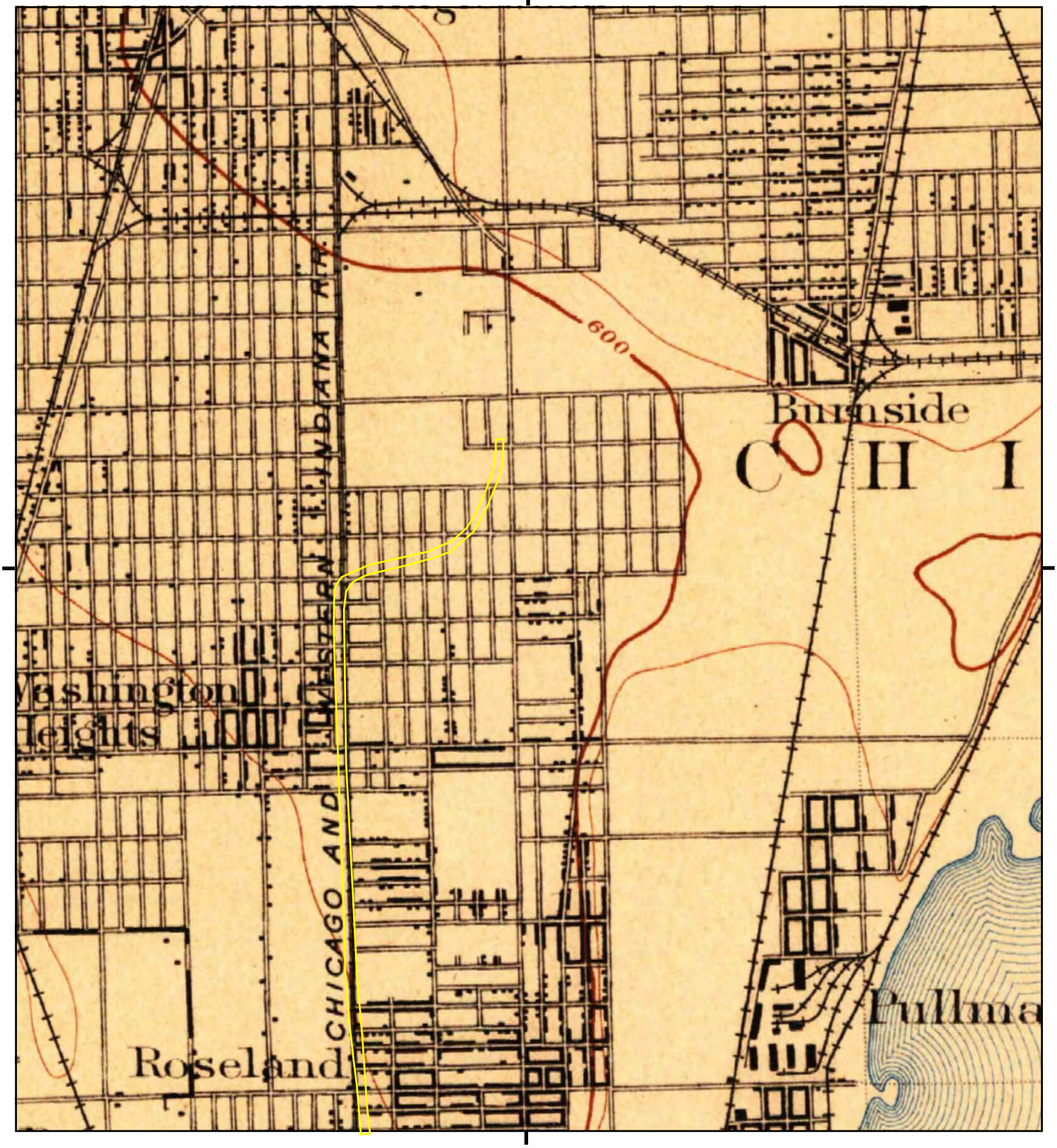

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1901, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1901

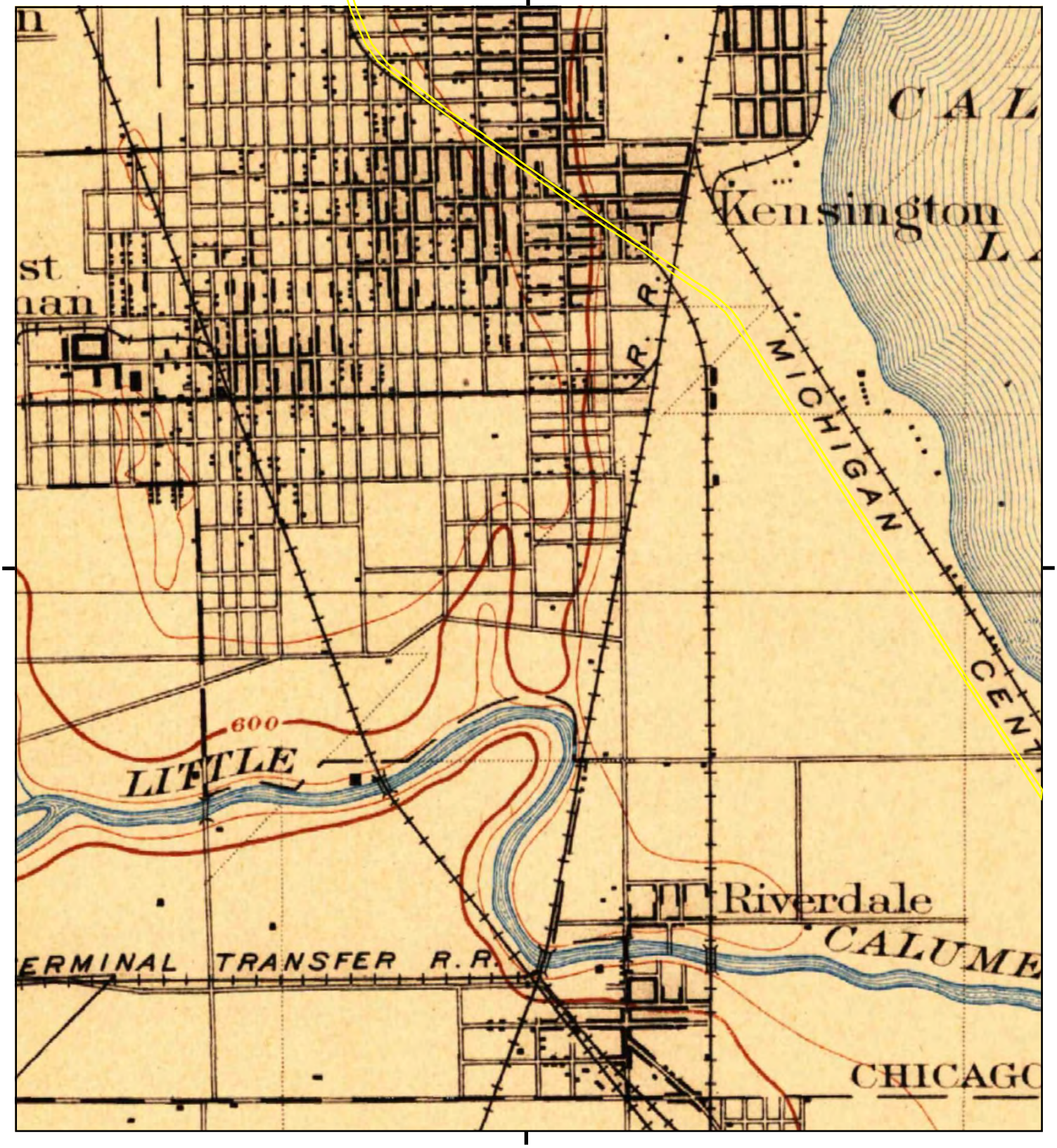

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1901, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1901

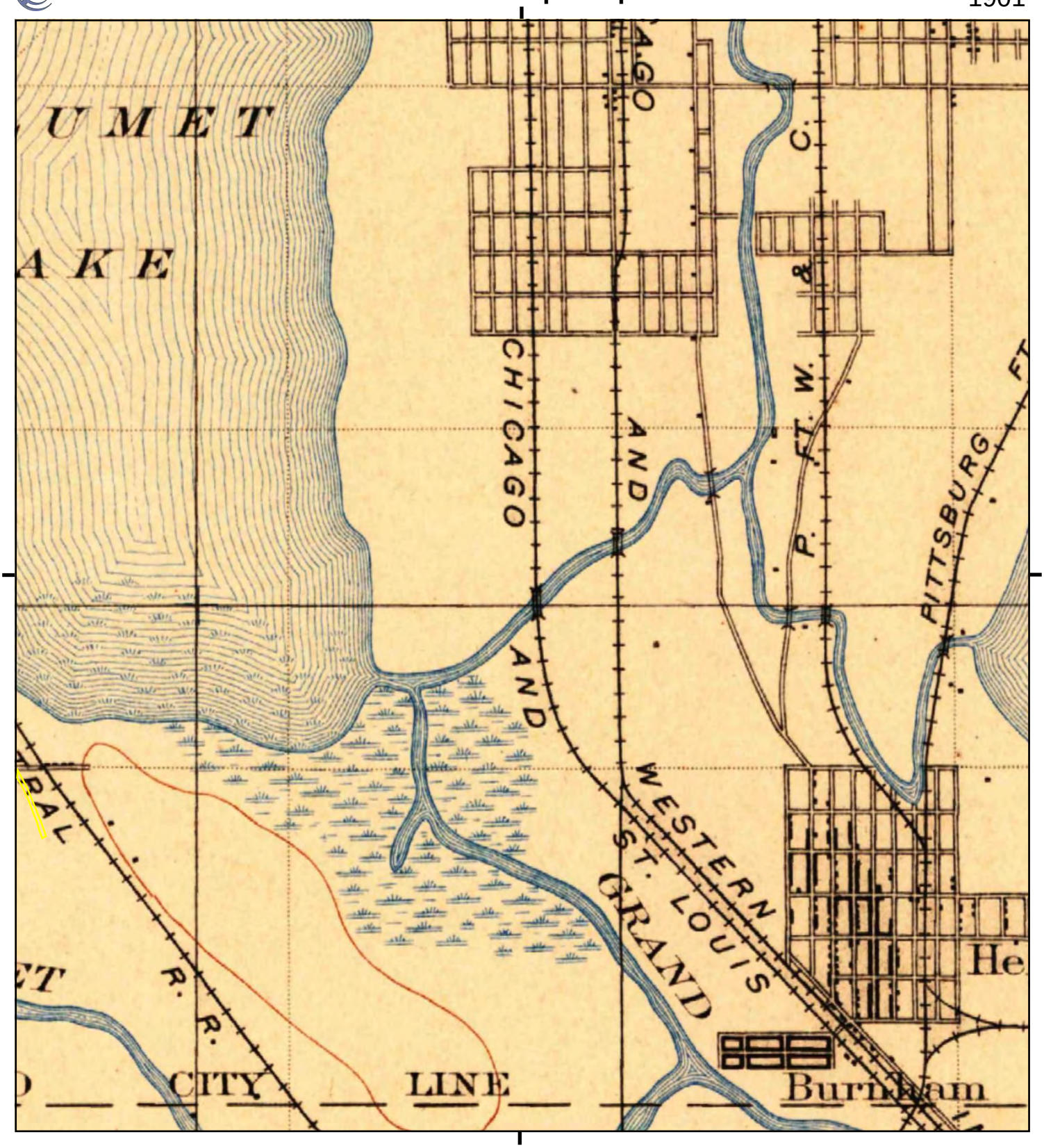

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1901, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1900

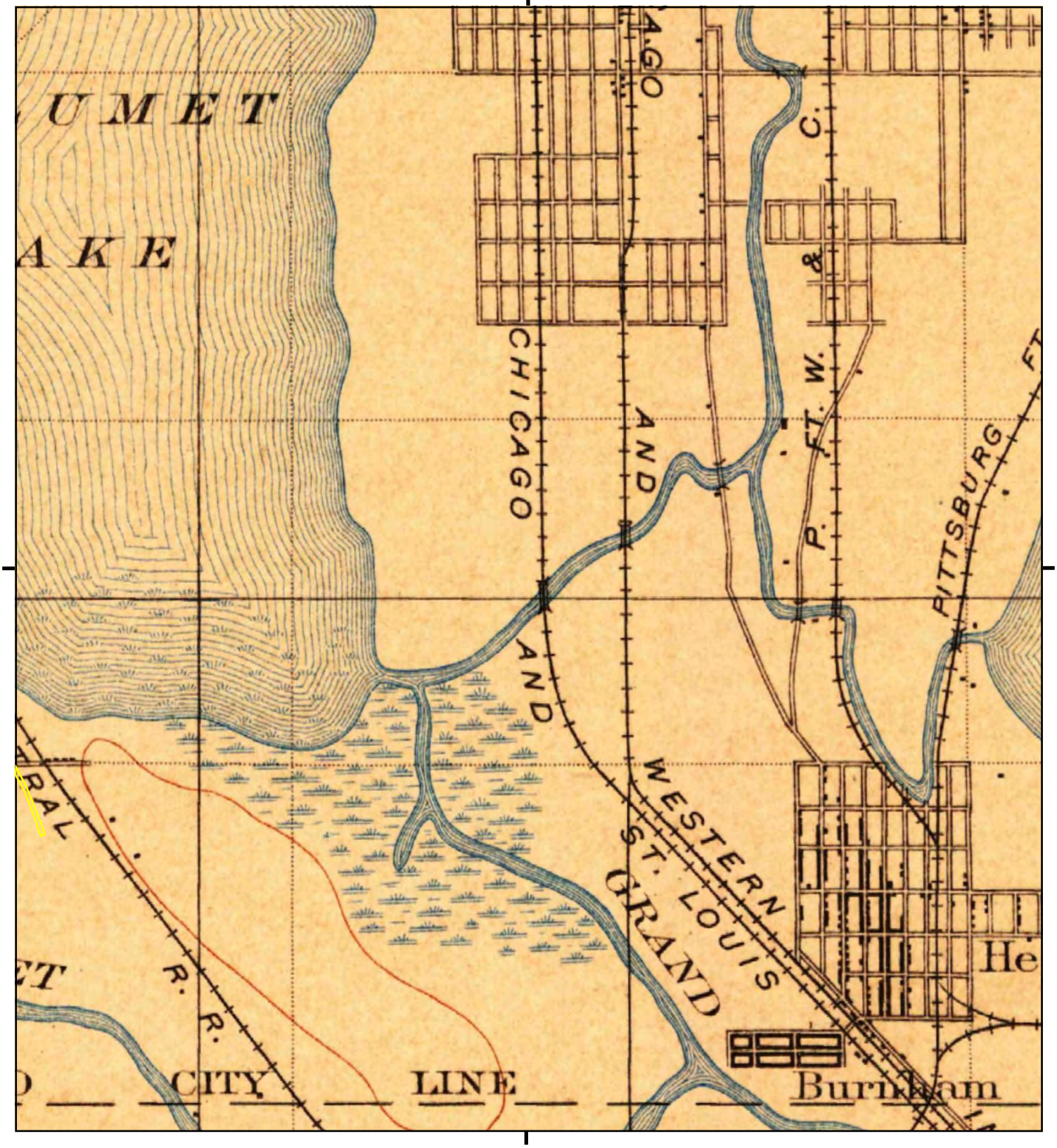

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1900, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1900

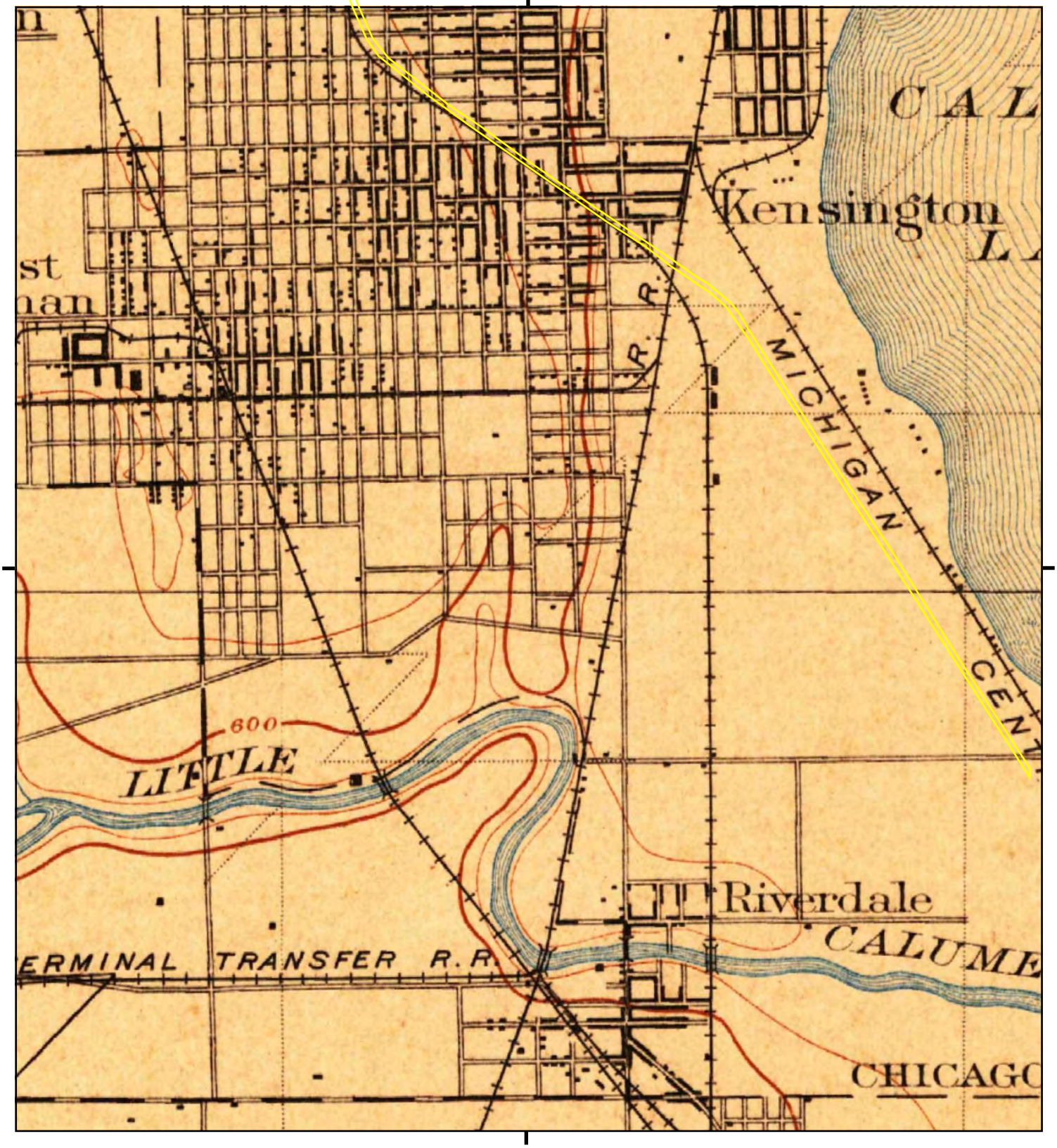

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1900, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

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Historical Topo Map

1900

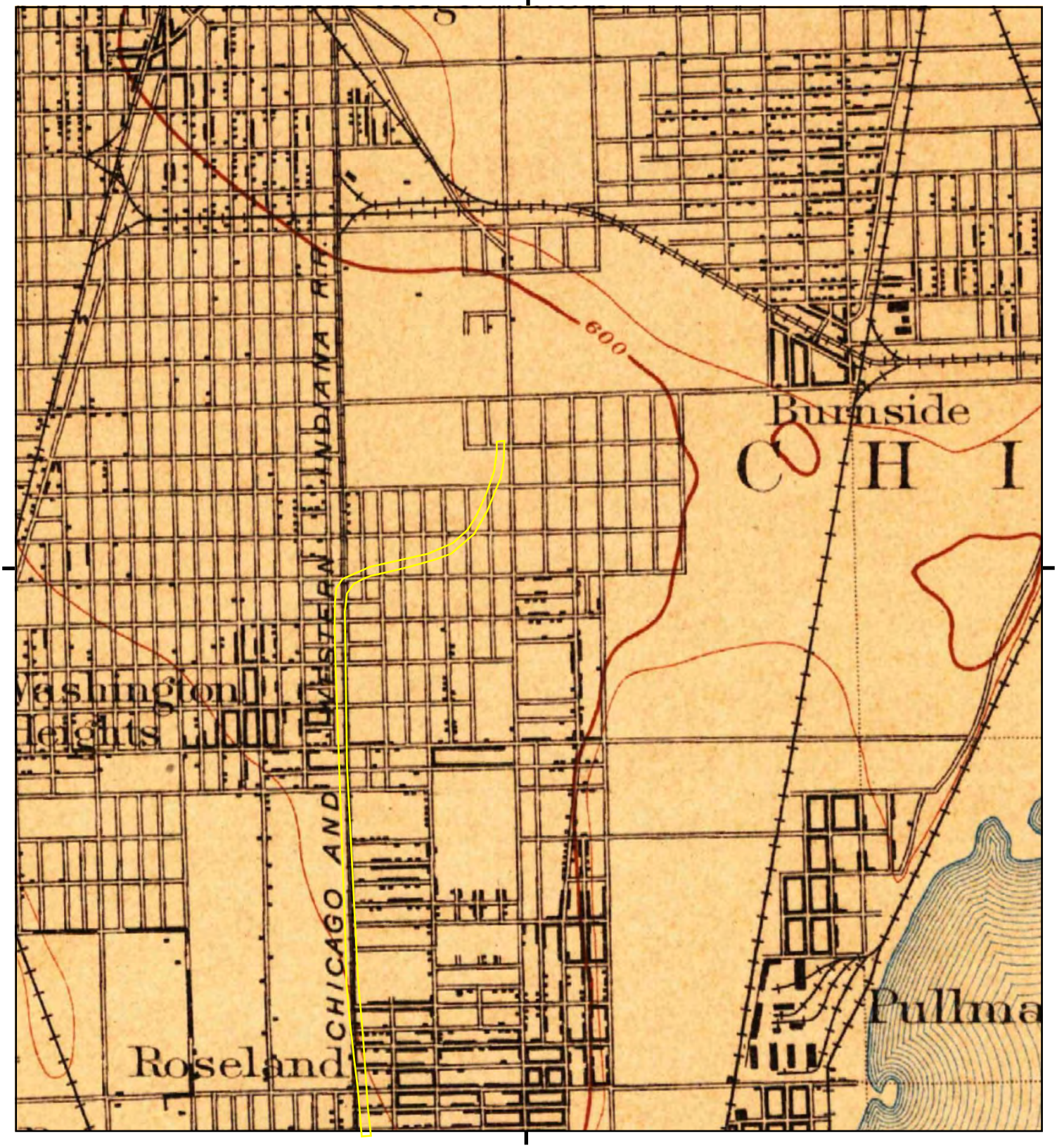

This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

TP, Calumet, 1900, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1893

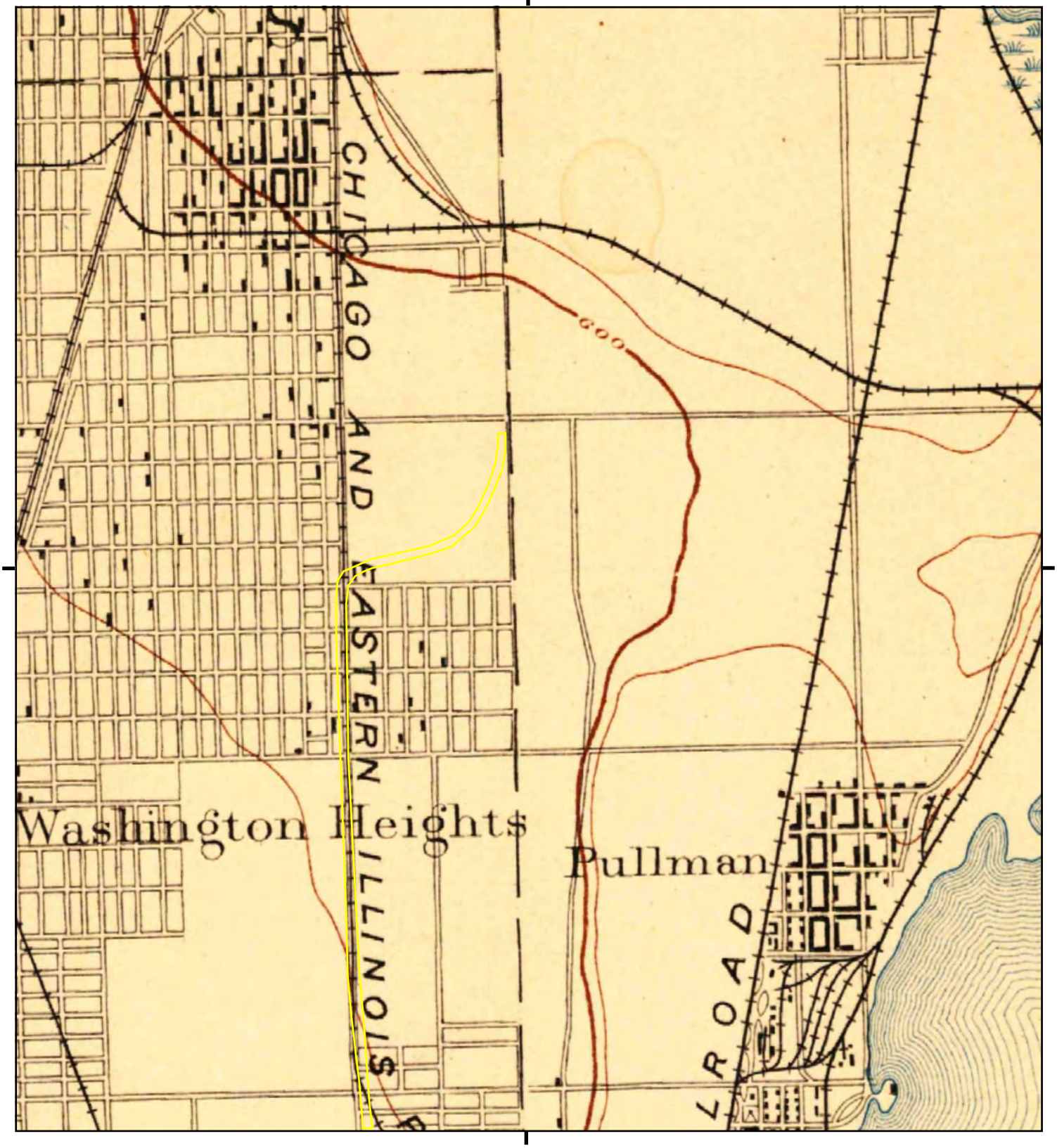

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1893, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1893

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1893, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1893

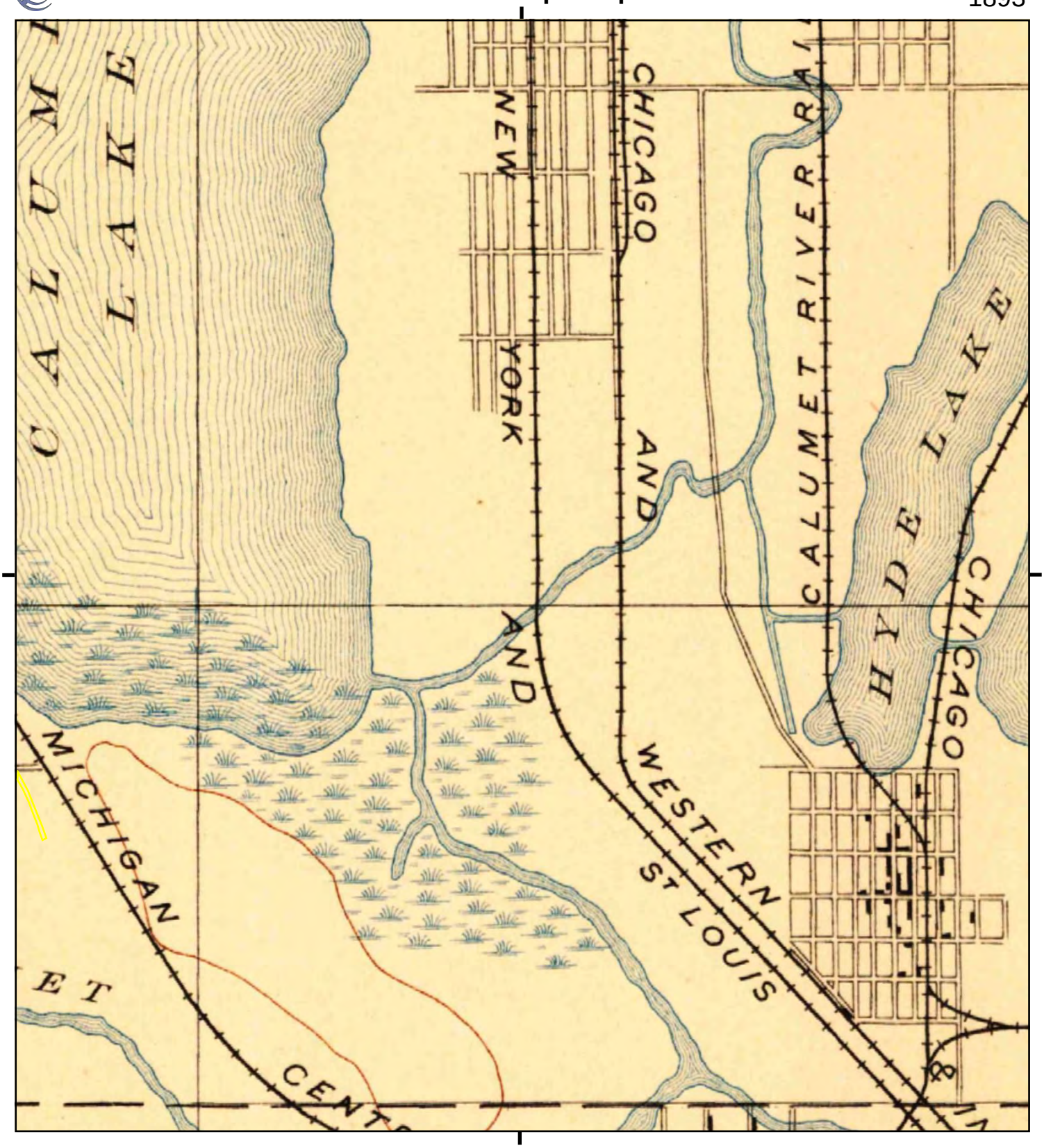

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1893, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1892

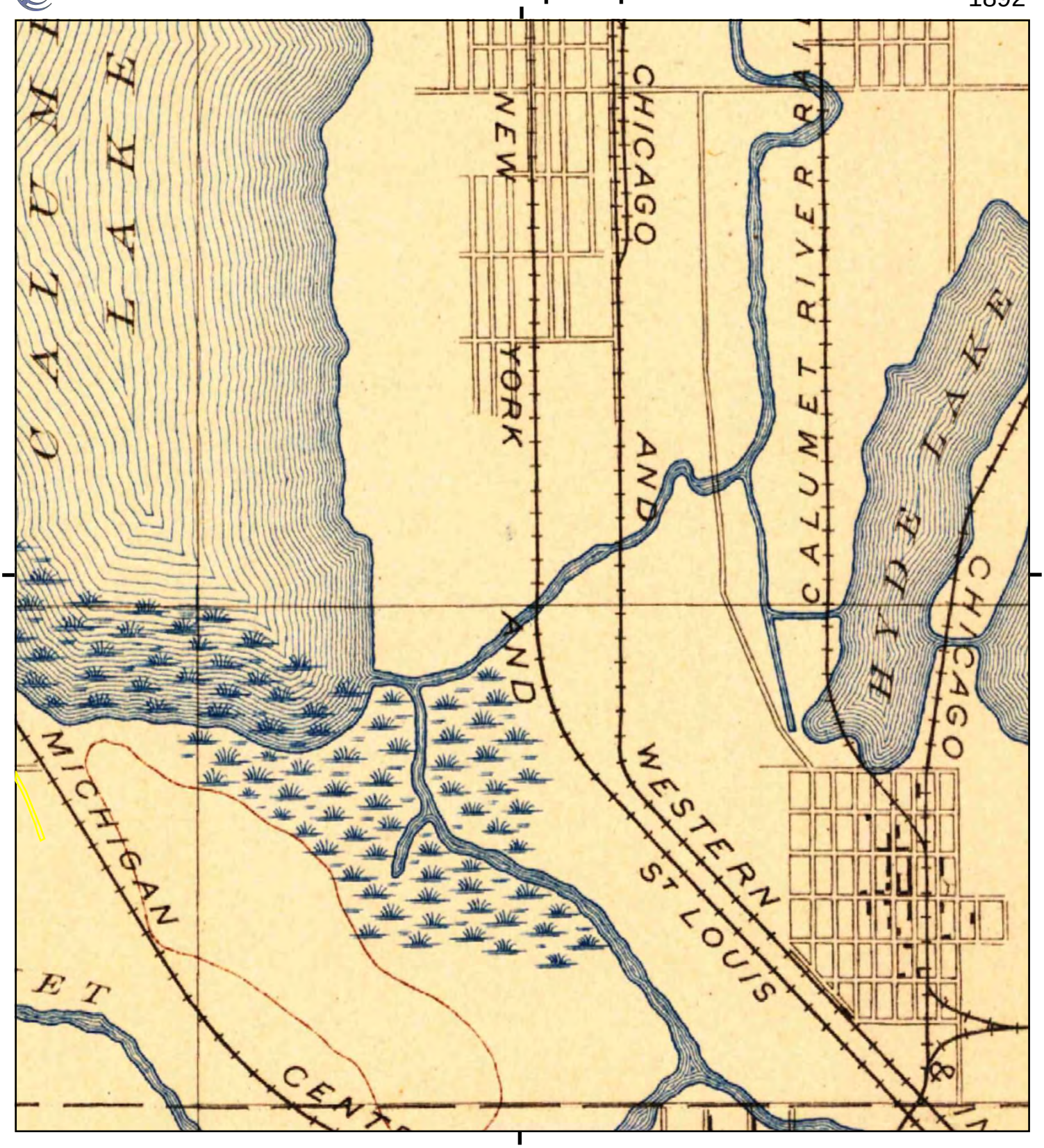

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1892, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Historical Topo Map

1892

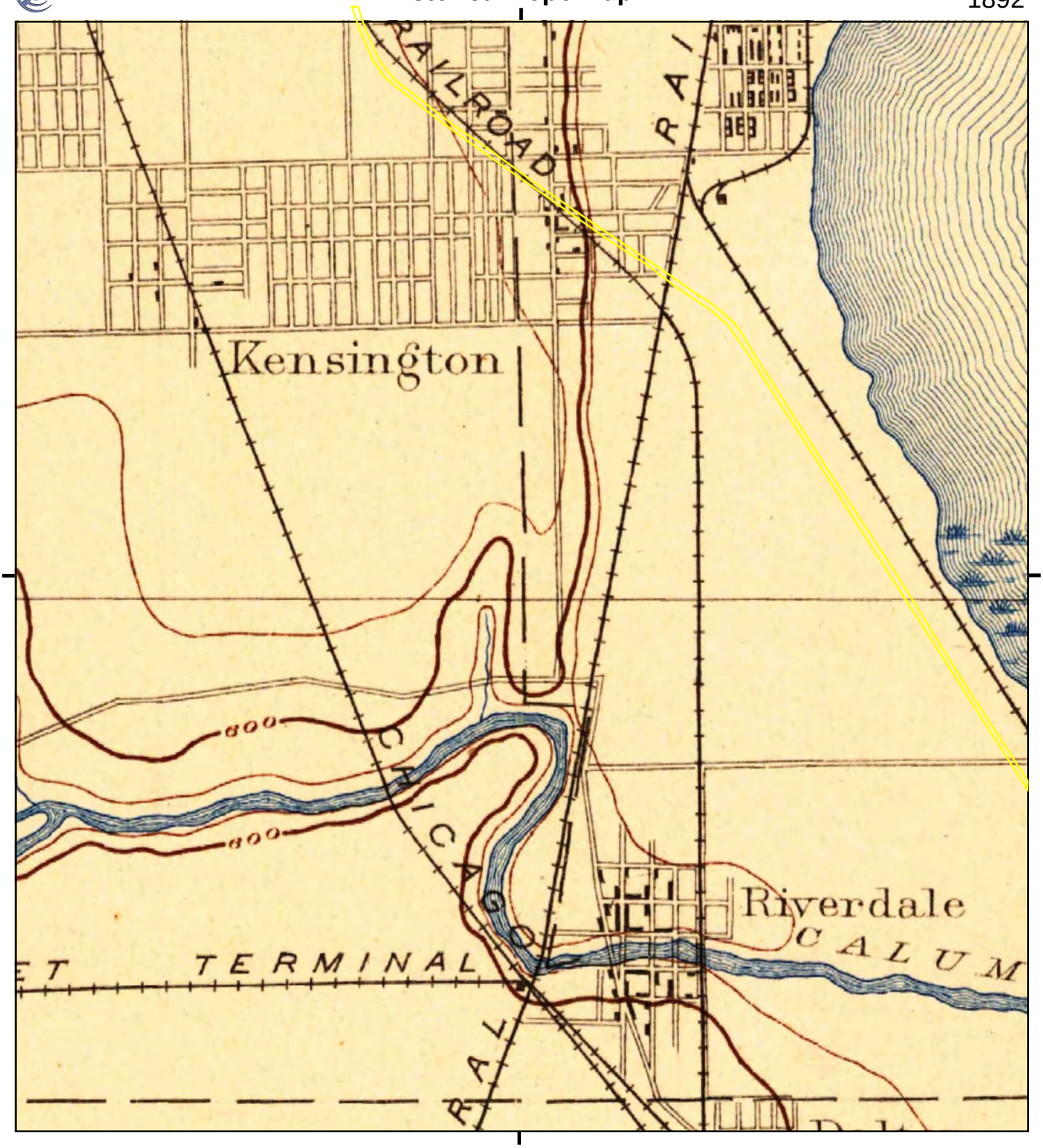

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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Calumet, 1892, 15-minute

SITE NAME: Redline Expansion
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1892

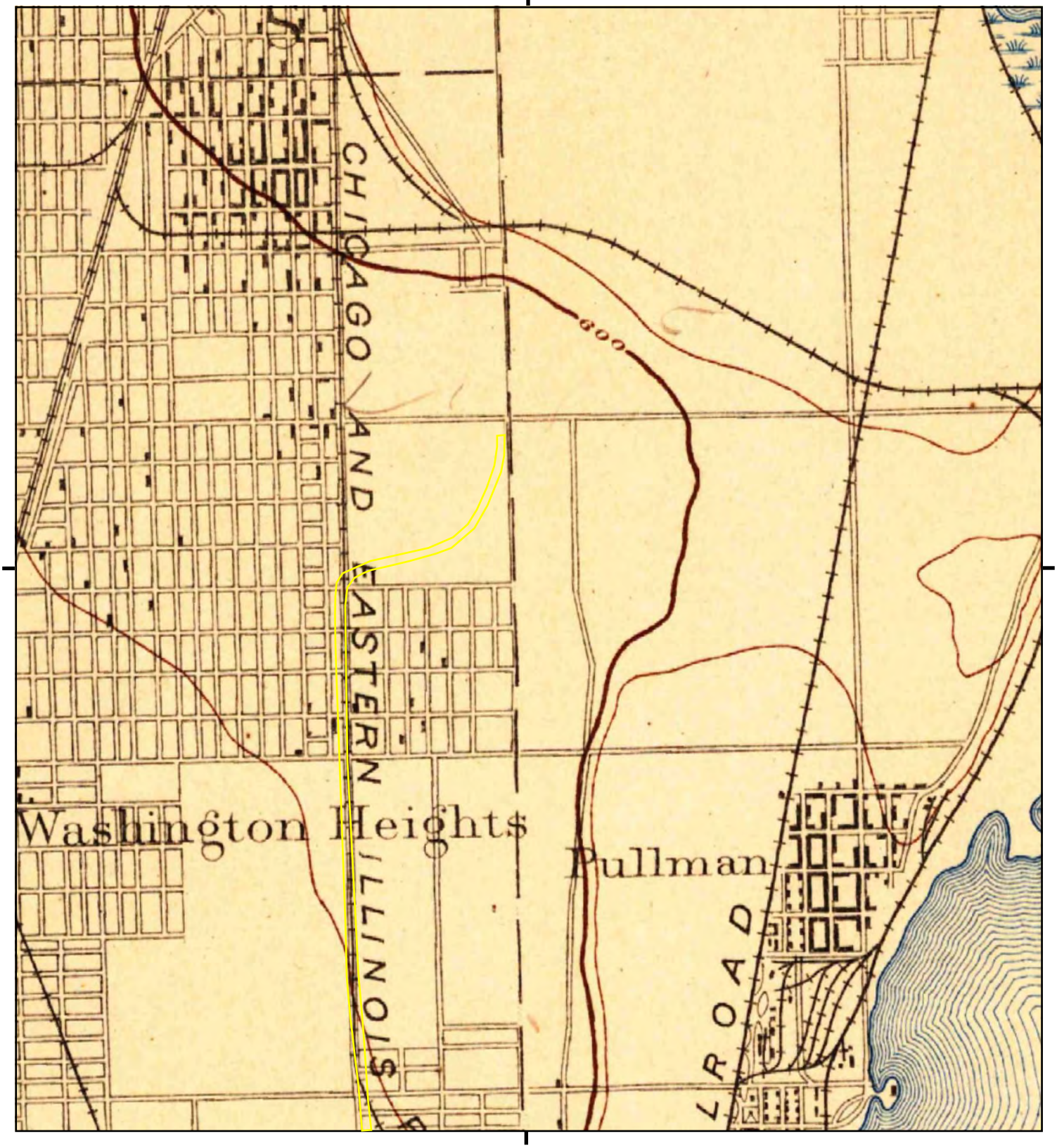

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NW N NE
W E
SW S SE

TP, Calumet, 1892, 15-minute

SITE NAME: Redline Expansion
ADDRESS: Redline Expansion
Palos Heights, IL 60463
CLIENT: Environmental Design Int'l Inc

N

Redline Expansion

Redline Expansion

Palos Heights, IL 60463

Inquiry Number: 6062945.8

May 18, 2020

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Date EDR Searched Historical Sources:

Aerial Photography May 18, 2020

Target Property:

Redline Expansion

Palos Heights, IL 60463

Year	***Scale***	***Details***	***Source***
1938	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1938	USDA
1952	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1952	USGS
1959	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1959	USGS
1964	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1964	USGS
1973	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1973	USGS
1978	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1978	USGS
1983-1984	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1983-1984	NHAP
1988	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1988	USDA
1998-1999	Aerial Photograph. Scale: 1"=1000'	Flight Year: 1998-1999	USGS/DOQQ
2007	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2007	USGS/NAIP
2011	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2011	USGS/NAIP
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2017	Aerial Photograph. Scale: 1"=1000'	Flight Year: 2017	USGS/NAIP

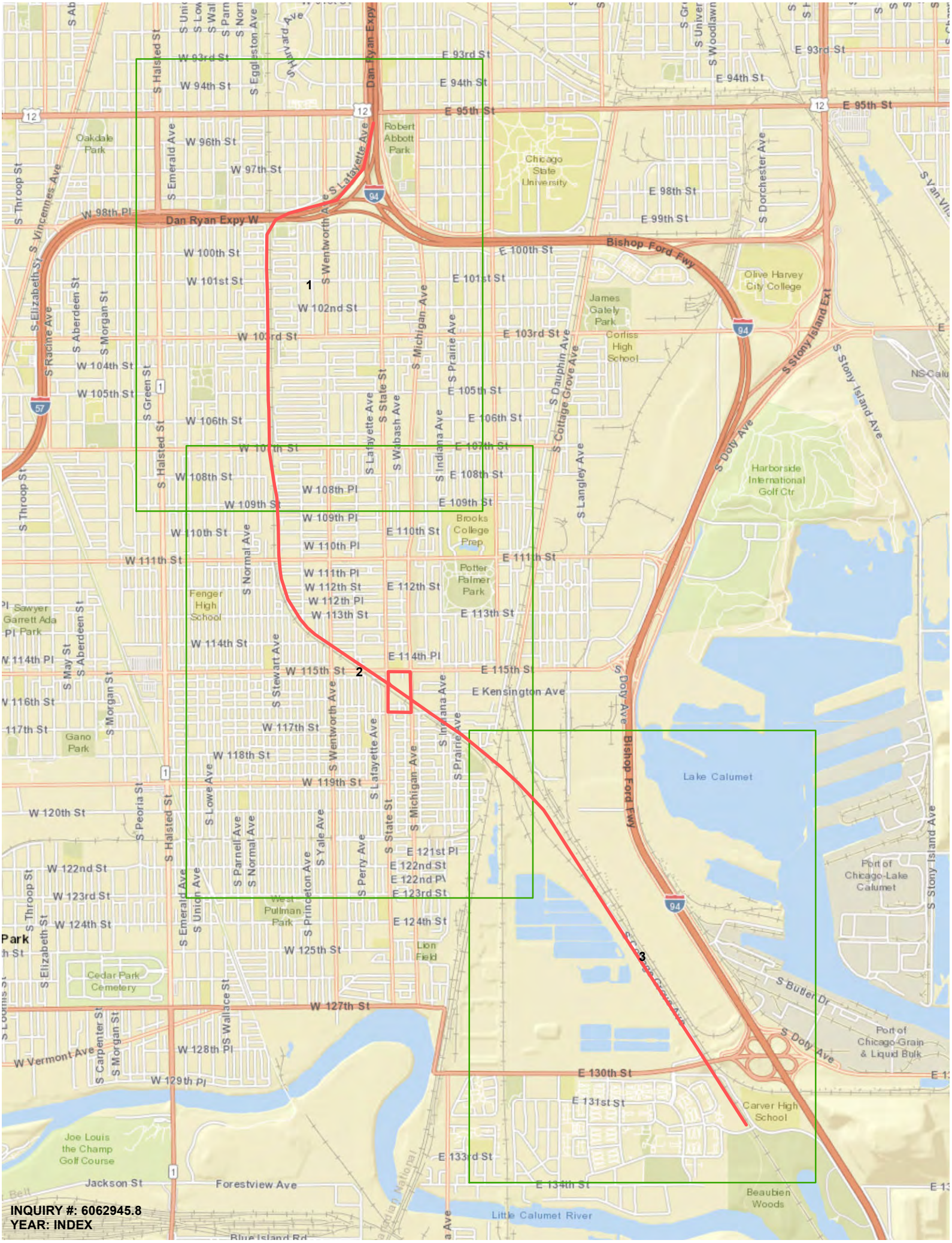

INQUIRY #: 6062945.8
YEAR: INDEX

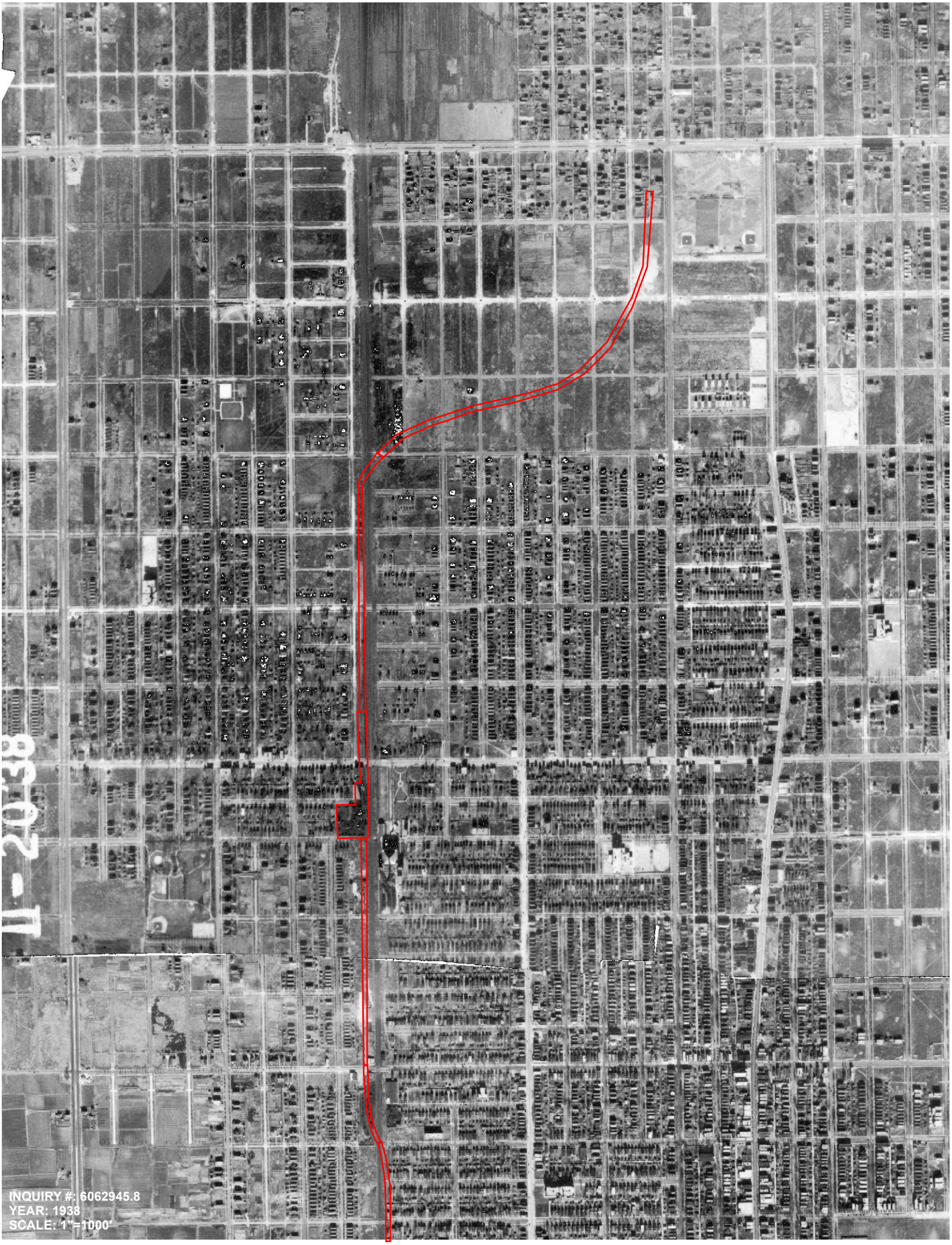
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YEAR: 1938
SCALE: 1"=1000'

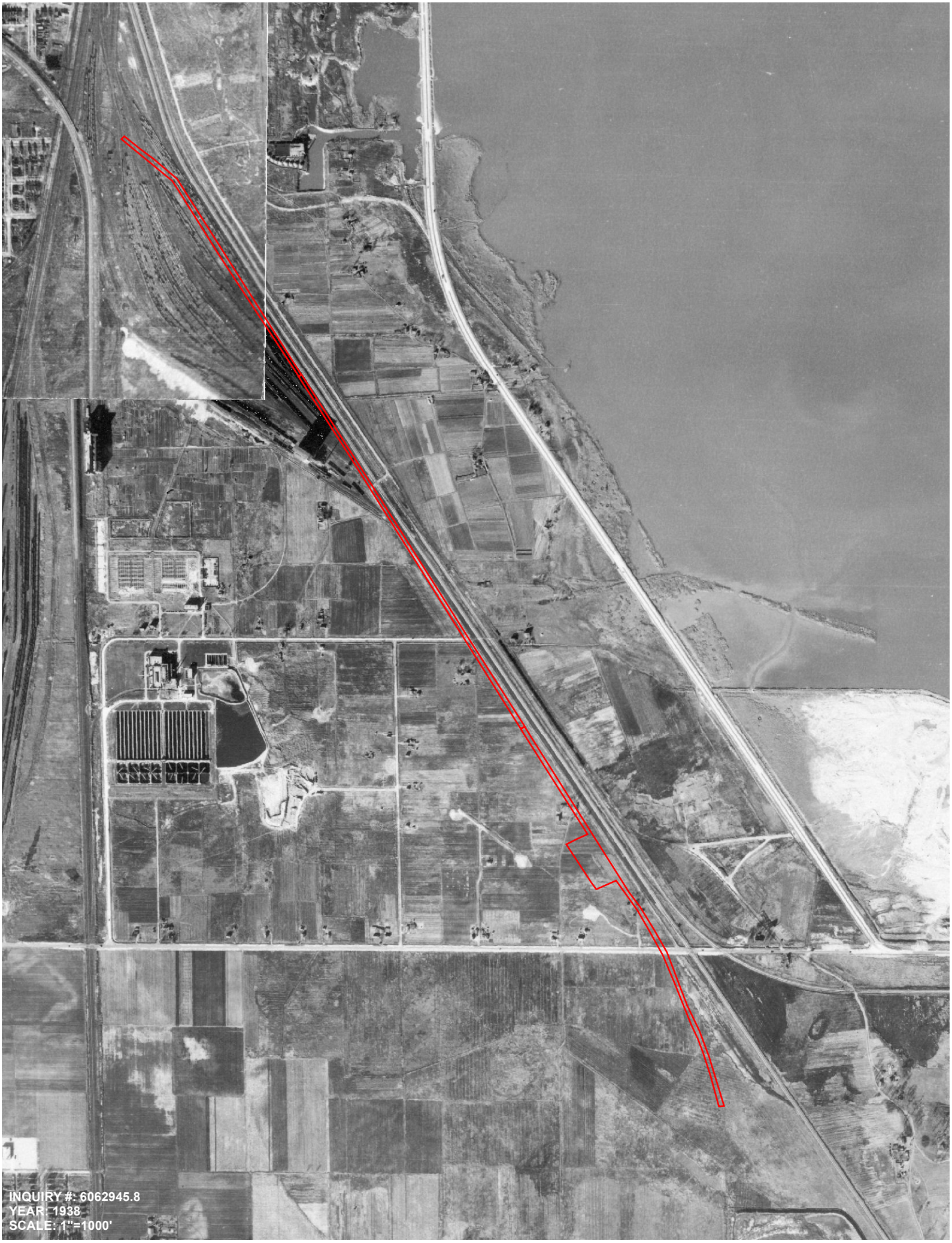
INQUIRY #: 6062945.8
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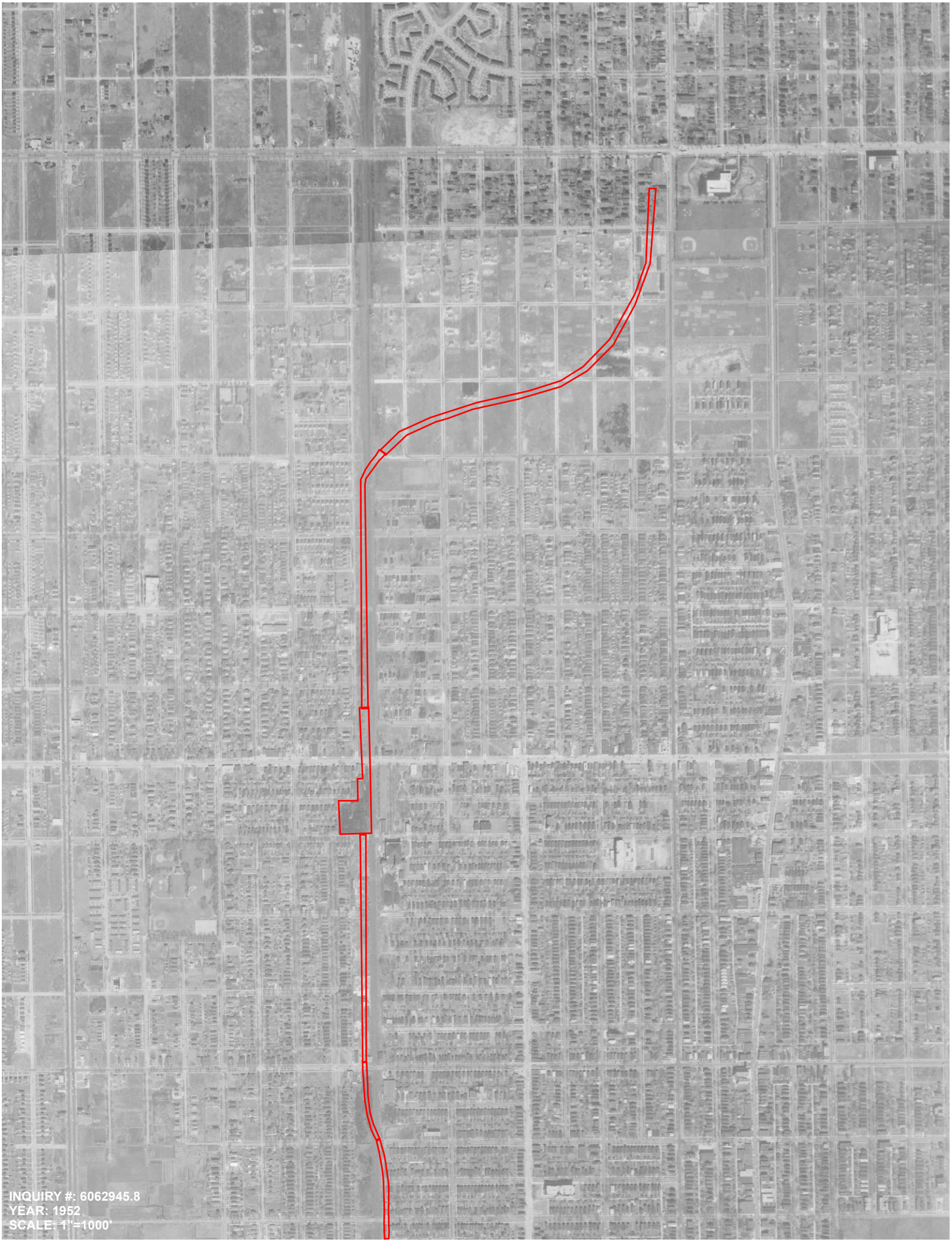
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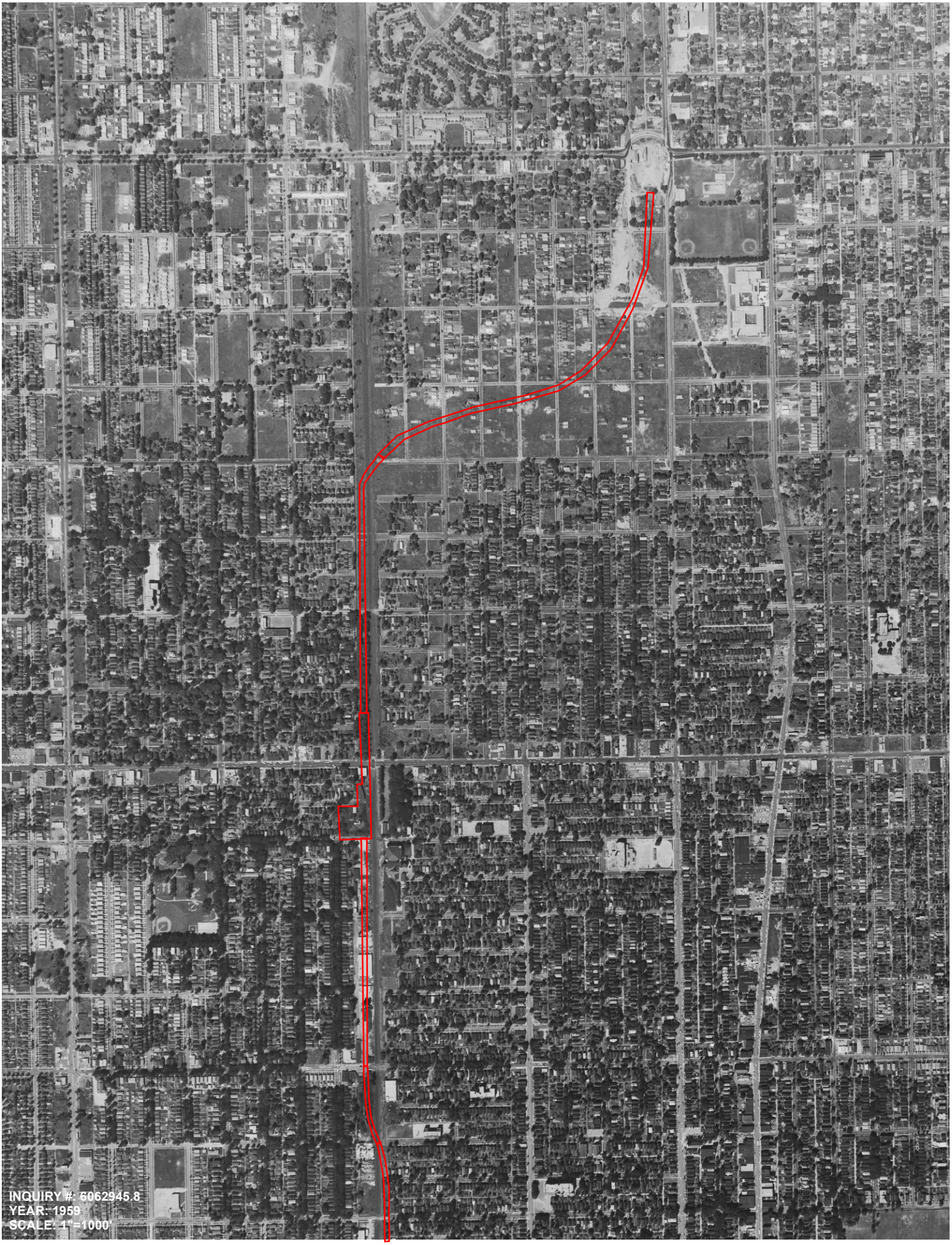
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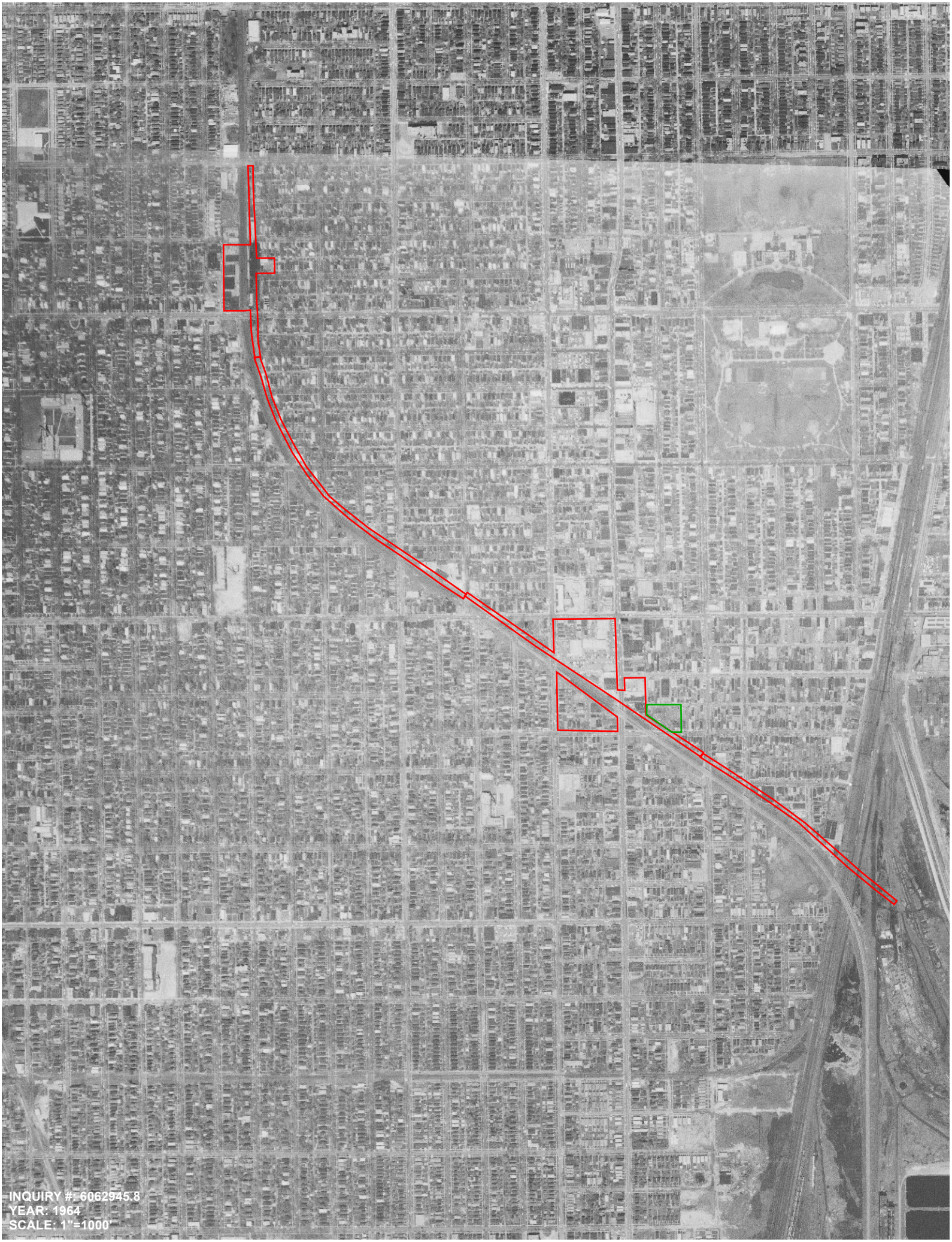
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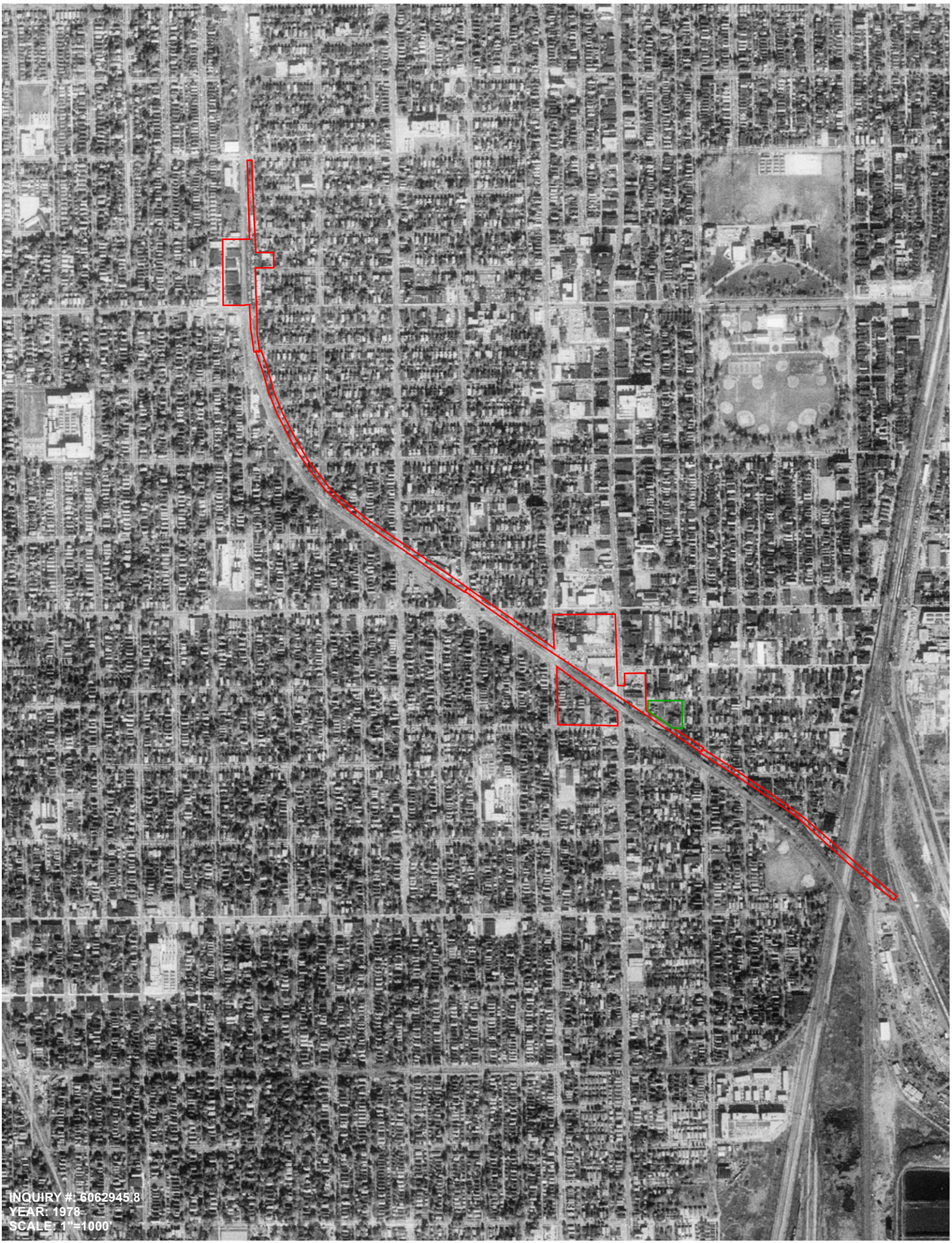
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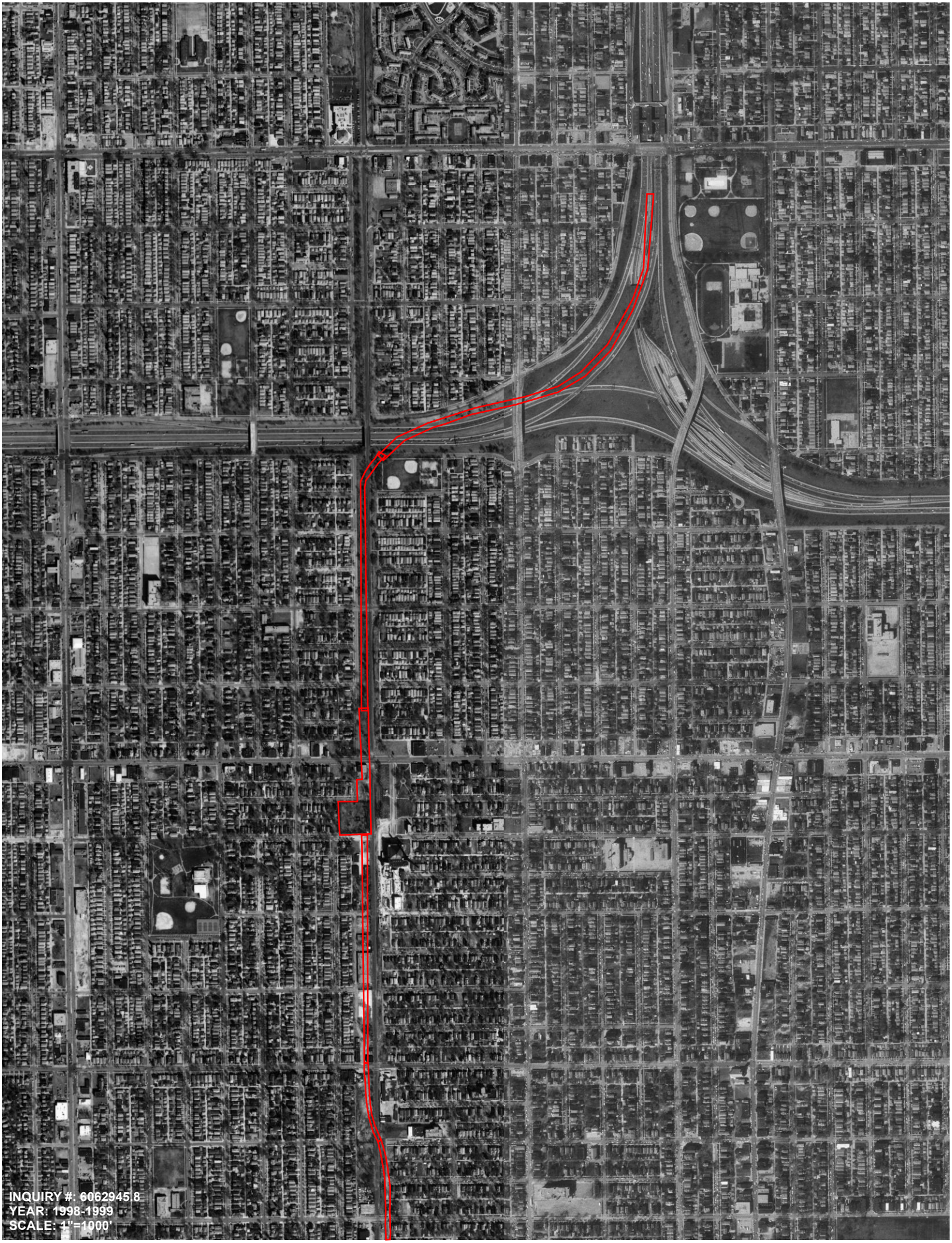
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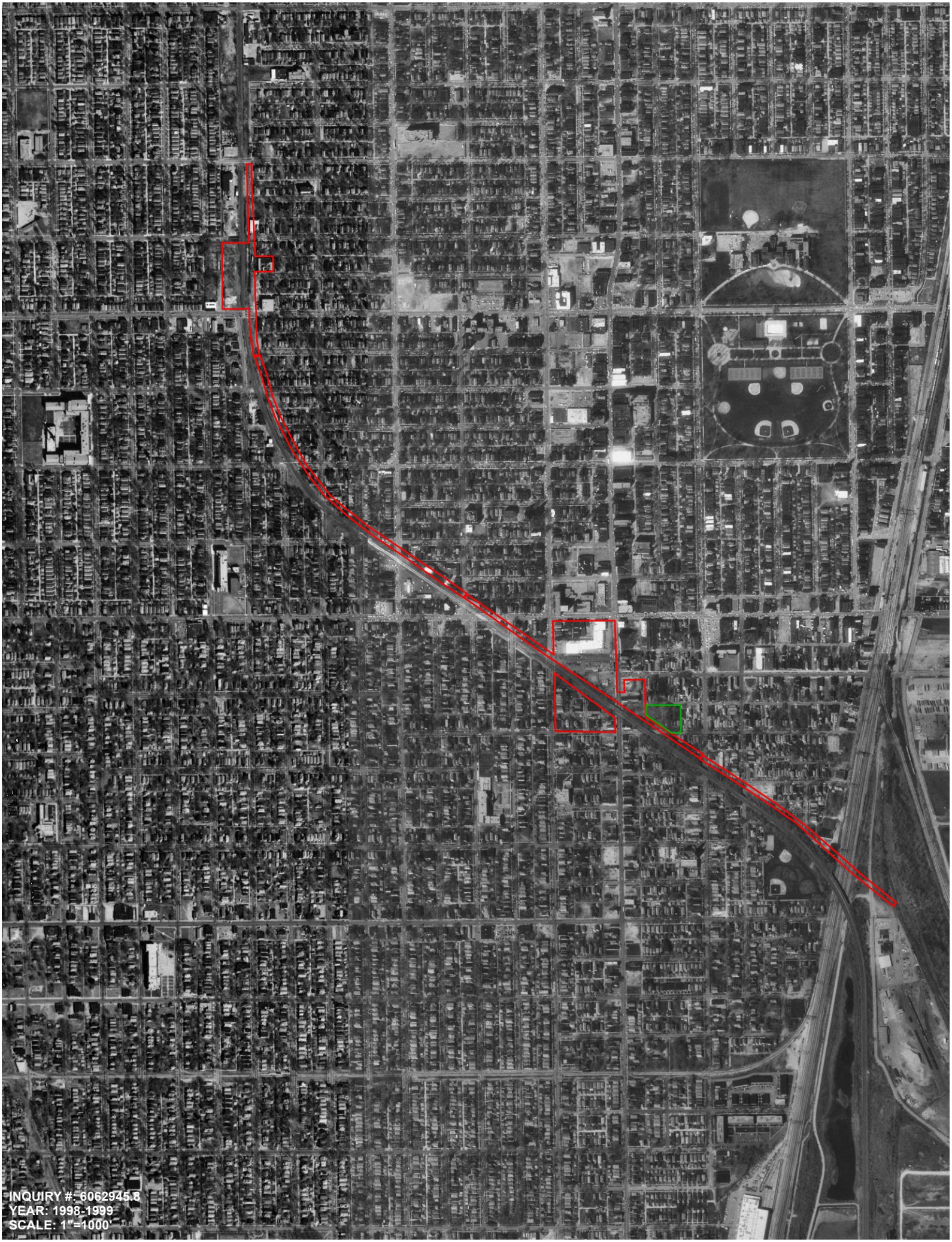
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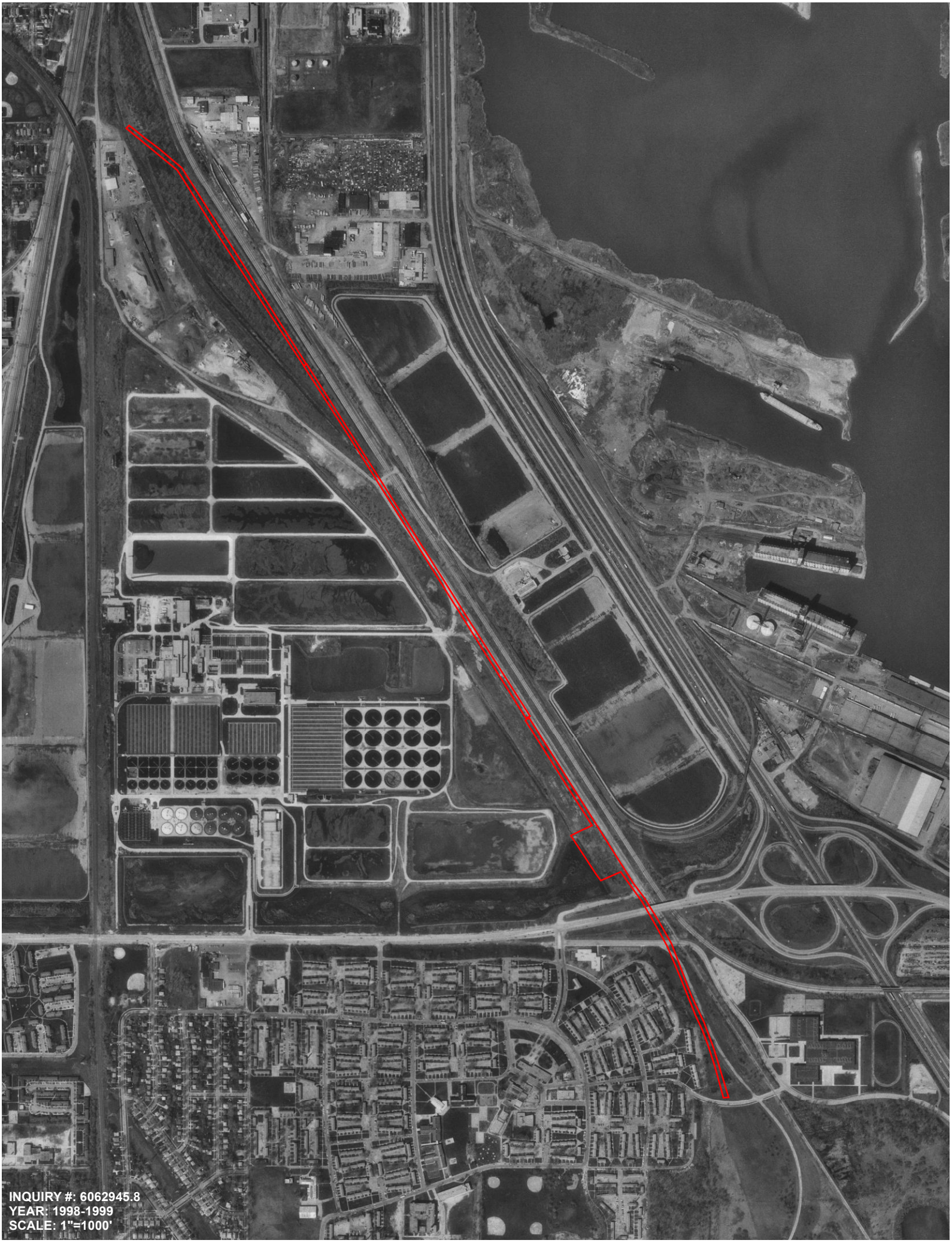
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YEAR: 2007
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YEAR: 2007
SCALE: 1"=1000'

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YEAR: 2011
SCALE: 1" =1000'

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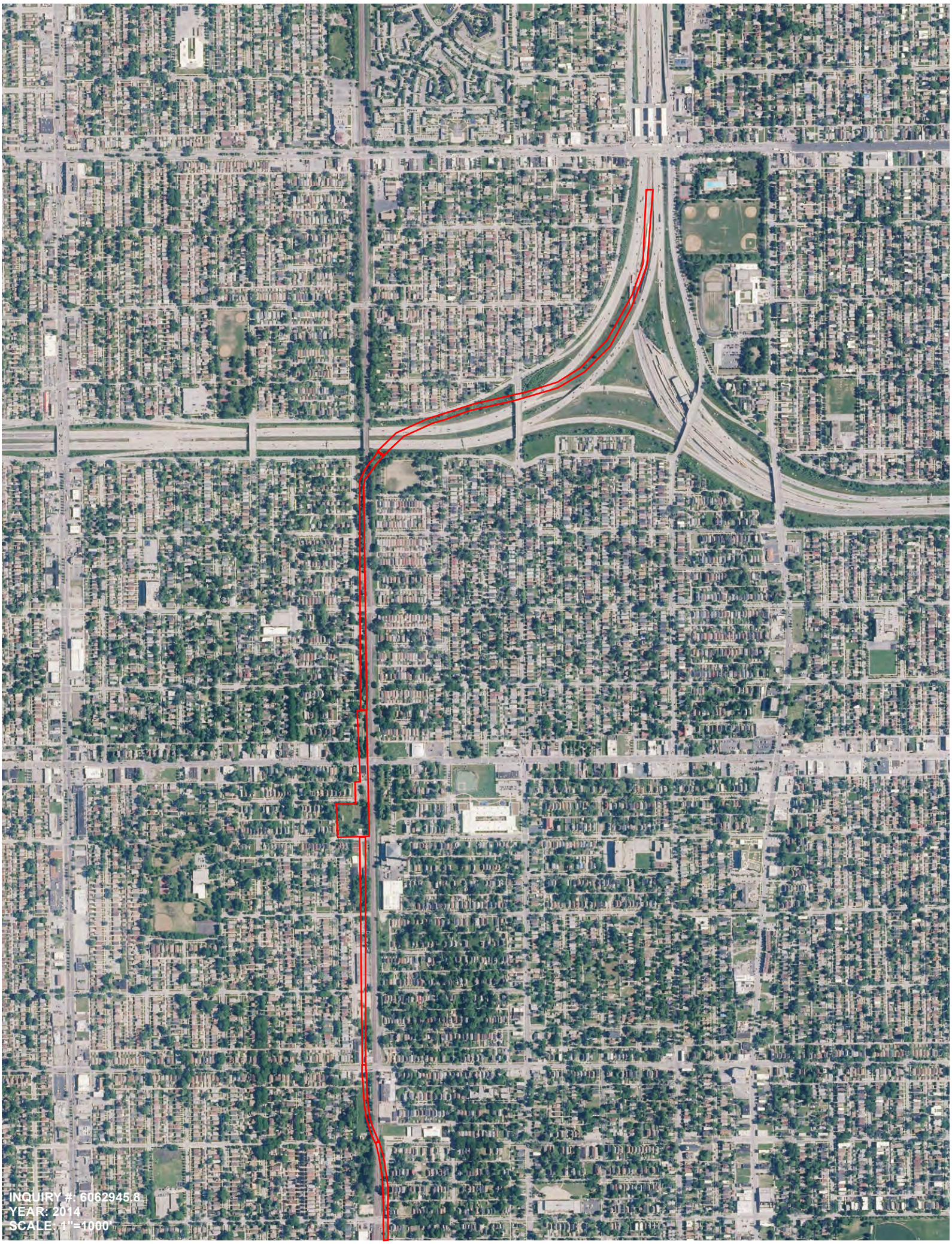
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YEAR: 2014
SCALE: 1"=1000'

INQUIRY #: 6062945.8
YEAR: 2017
SCALE: 1"=1000'

INQUIRY #: 6062945.8
YEAR: 2017
SCALE: 1" =1000'

INQUIRY #: 6062945.8
YEAR: 2017
SCALE: 1"=1000'

Attachment A – Corridor Level Phase I Environmental Site Assessment (continued)

Redline Expansion

Redline Expansion

Palos Heights, IL 60463

Inquiry Number: 6062945.6

May 18, 2020

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6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

05/18/20

Site Name:	Client Name:
Redline Expansion	Environmental Design Int'l Inc
Redline Expansion	33 W. Monroe St.
Palos Heights, IL 60463	Chicago, IL 60603
EDR Inquiry # 6062945.6	Contact: Jjanssen@envdesigni.com

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Environmental Design Int'l Inc were identified for the years listed below (selected maps only*). The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # F4A6-4A4A-932E

PO # NA

Project NA

* Environmental Data Resources, Inc. has been instructed by Environmental Design Int'l Inc to print ONLY the Sanborn Maps for the years listed below:

2004 (29)
1989 (29)
1950 (23)
1938 (6)
1911 (21)
1897 (15)

Total Maps: 123

Sanborn® Library search results

Certification #: F4A6-4A4A-932E

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

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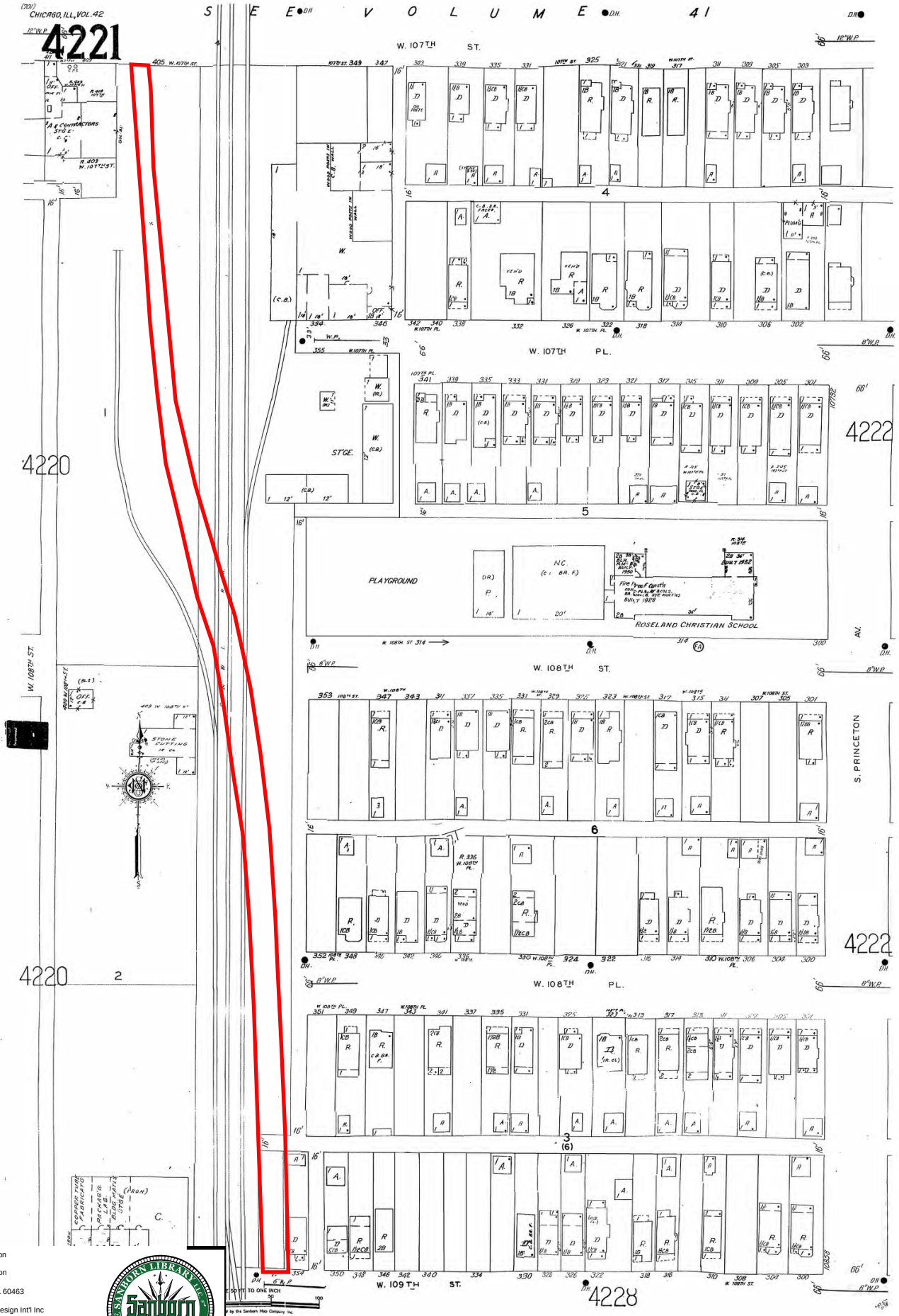

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City, ST, ZIP:	Palos Heights, IL 60463
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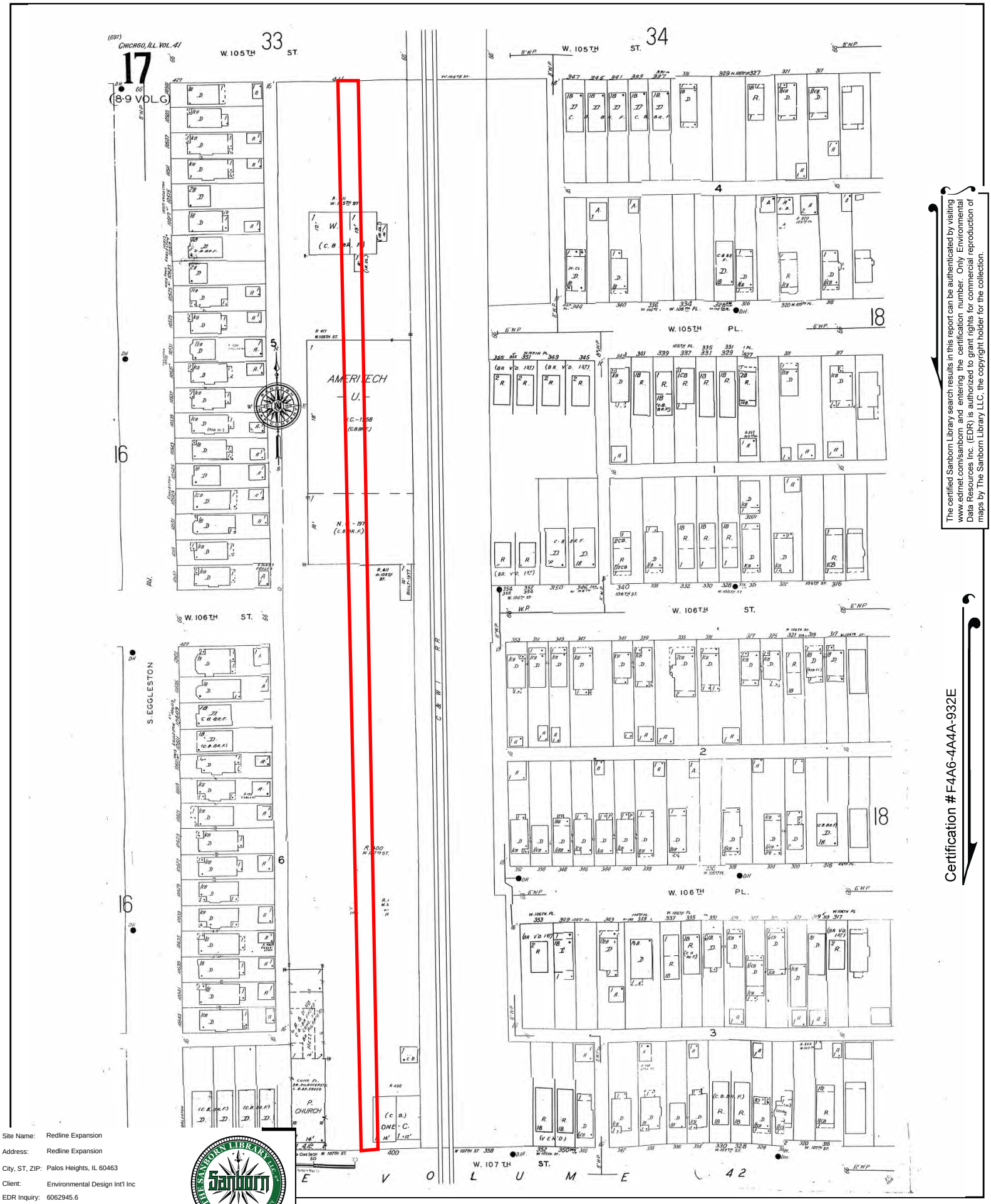

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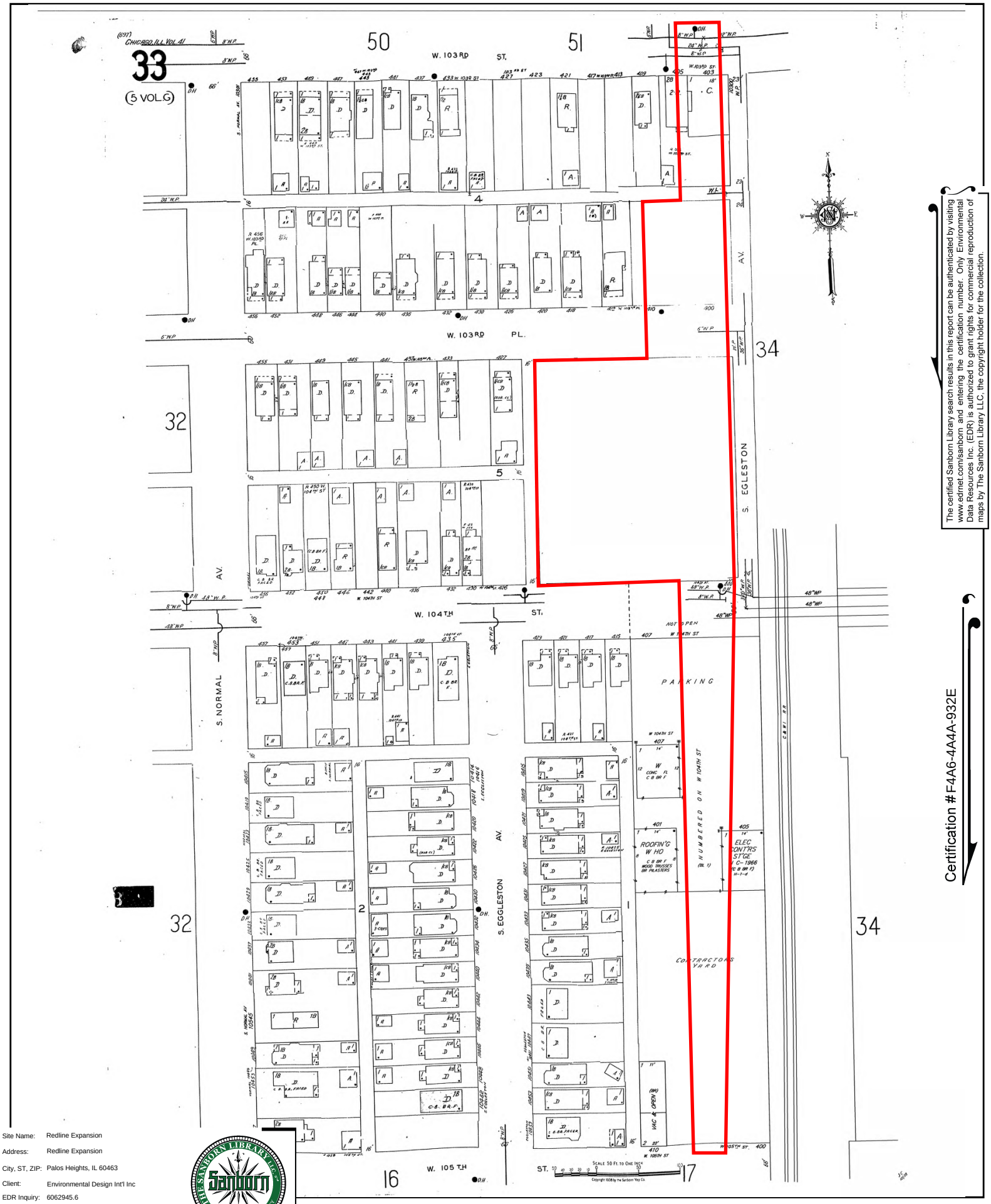

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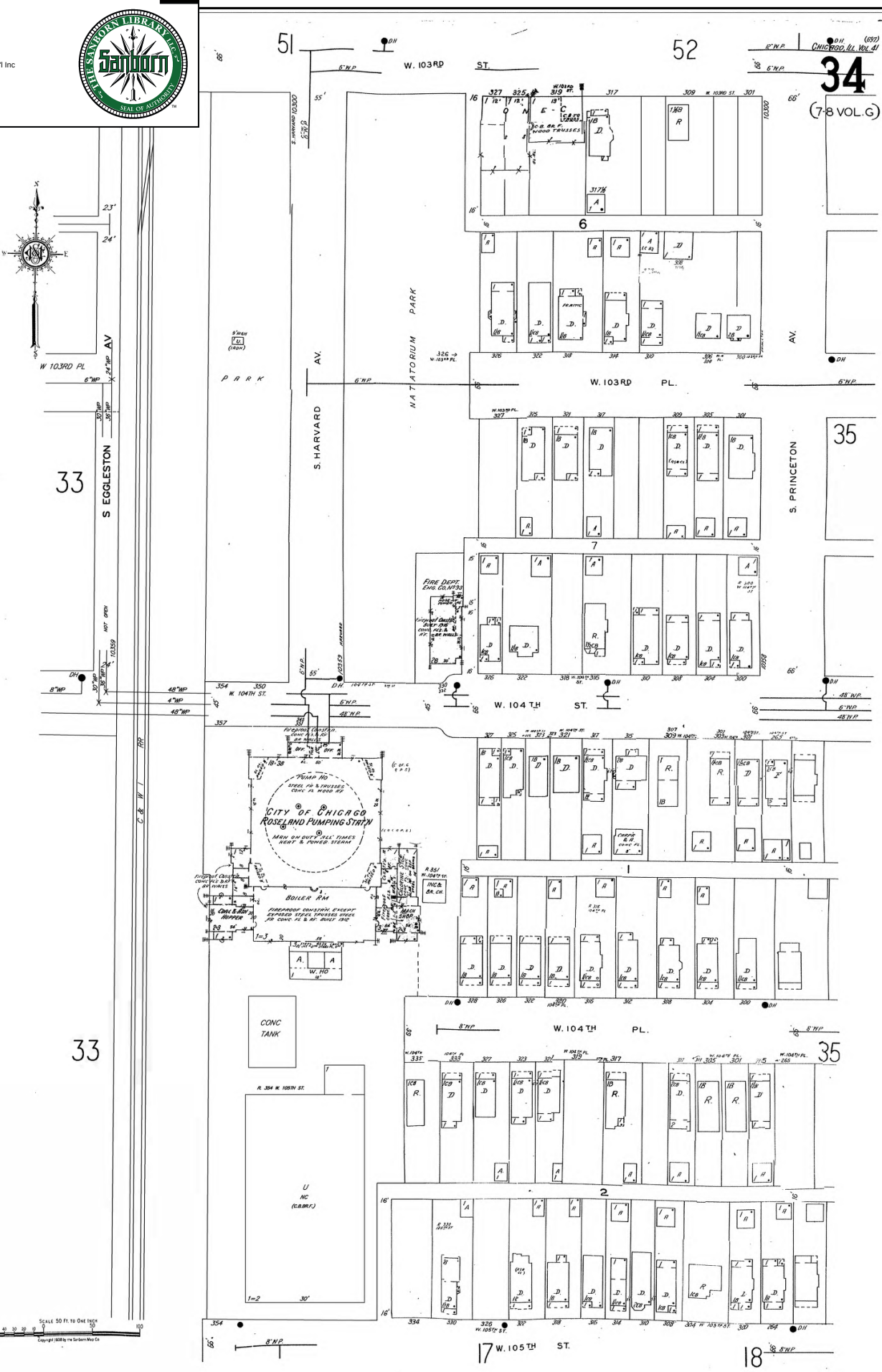

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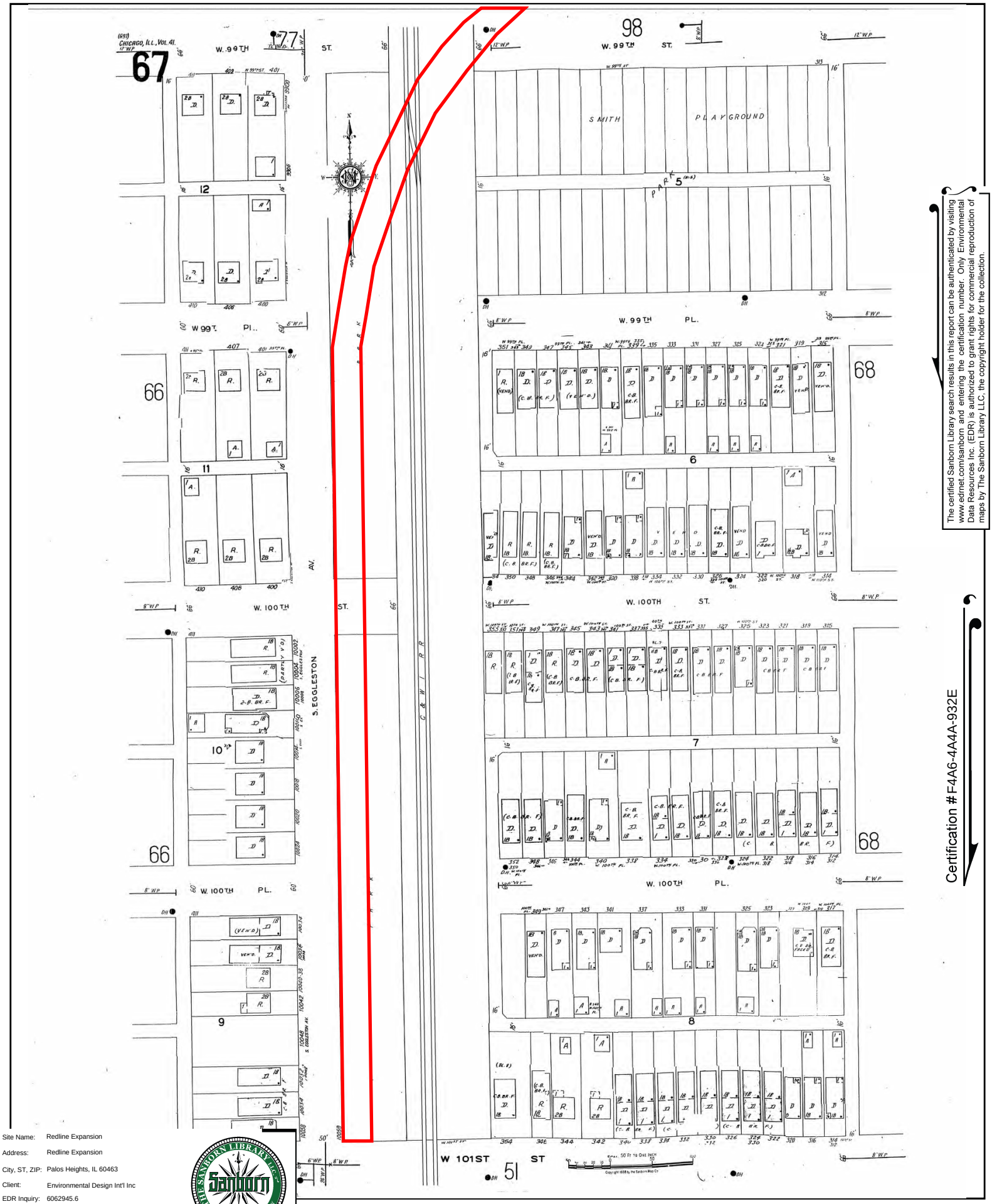

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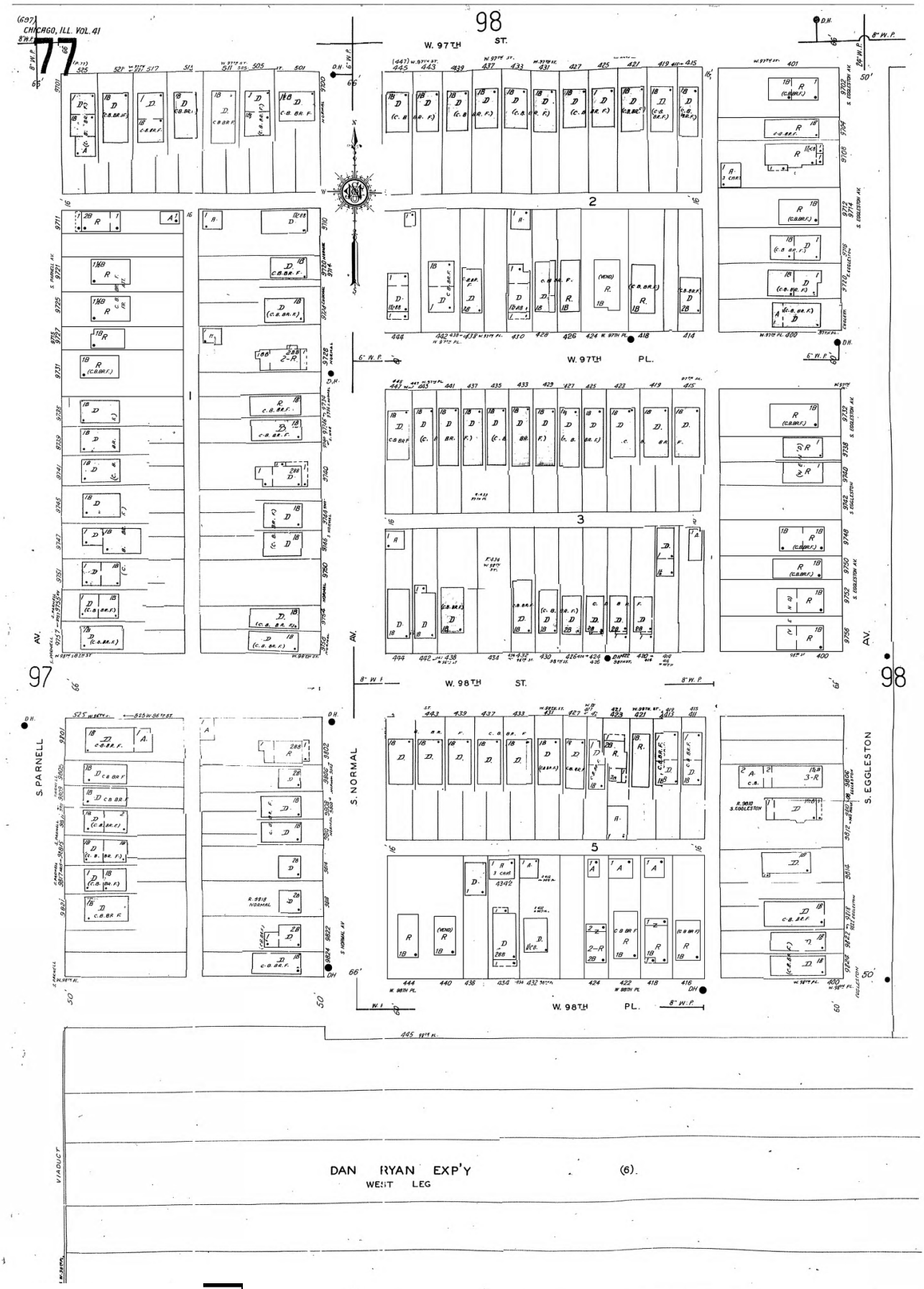

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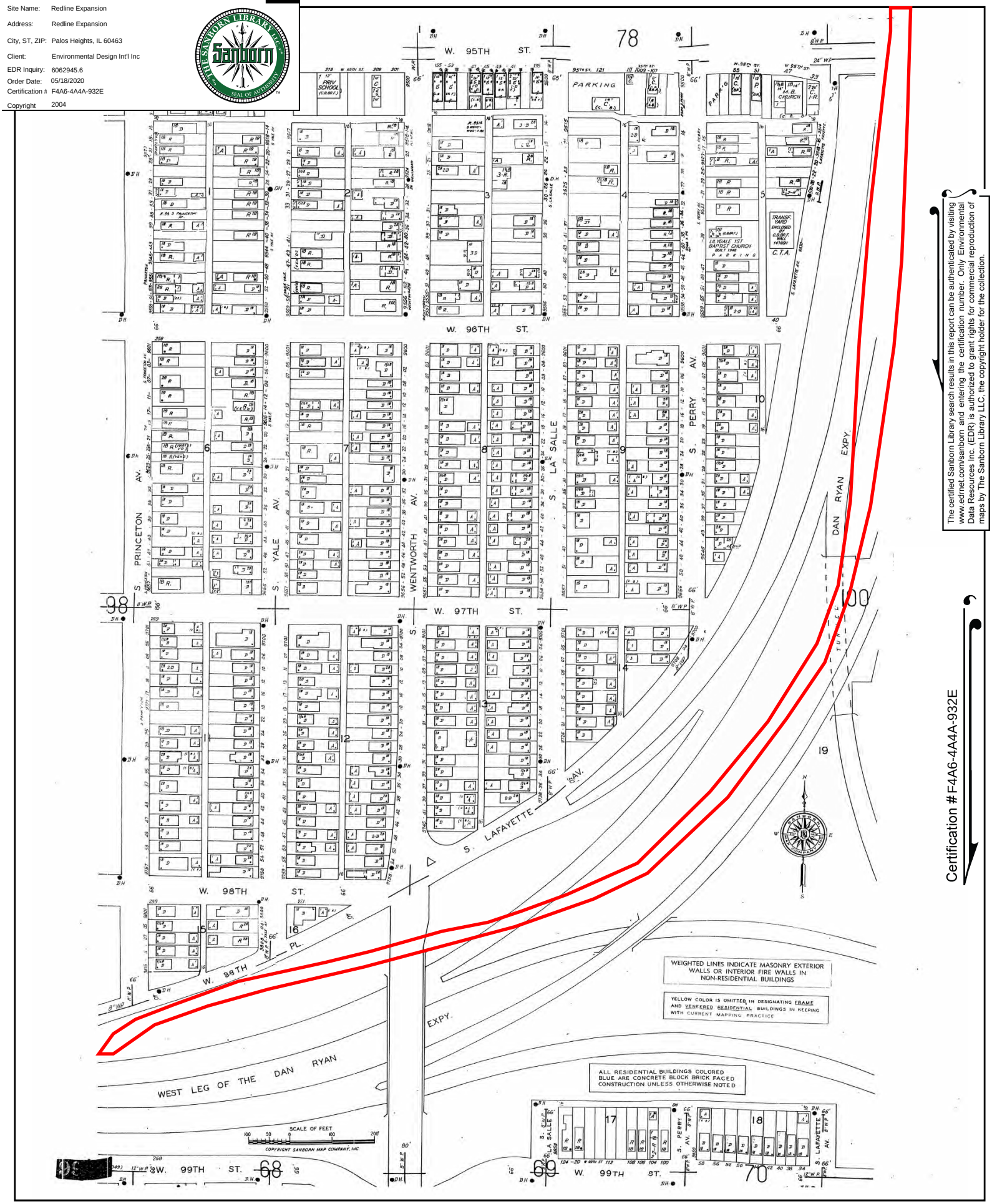

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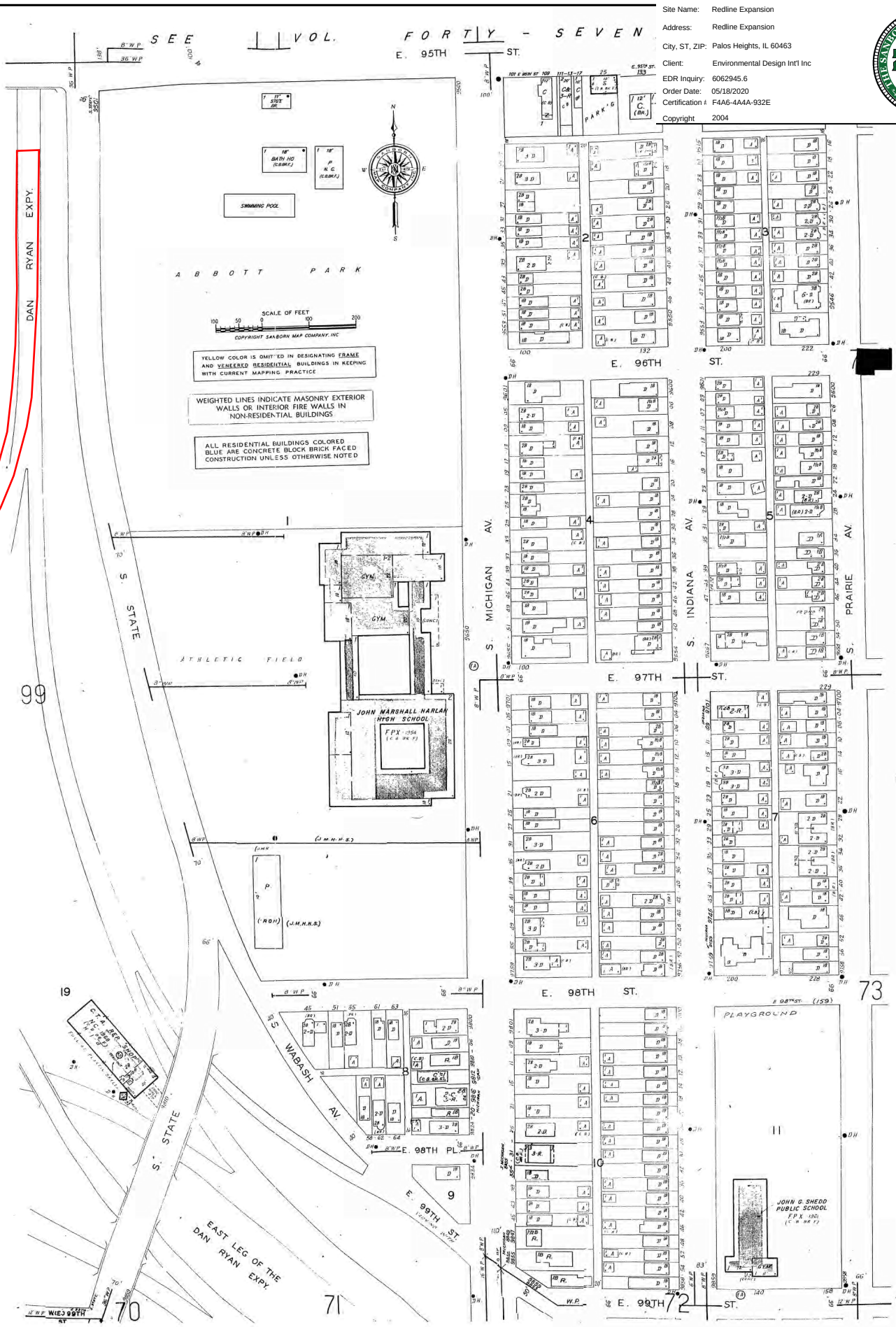

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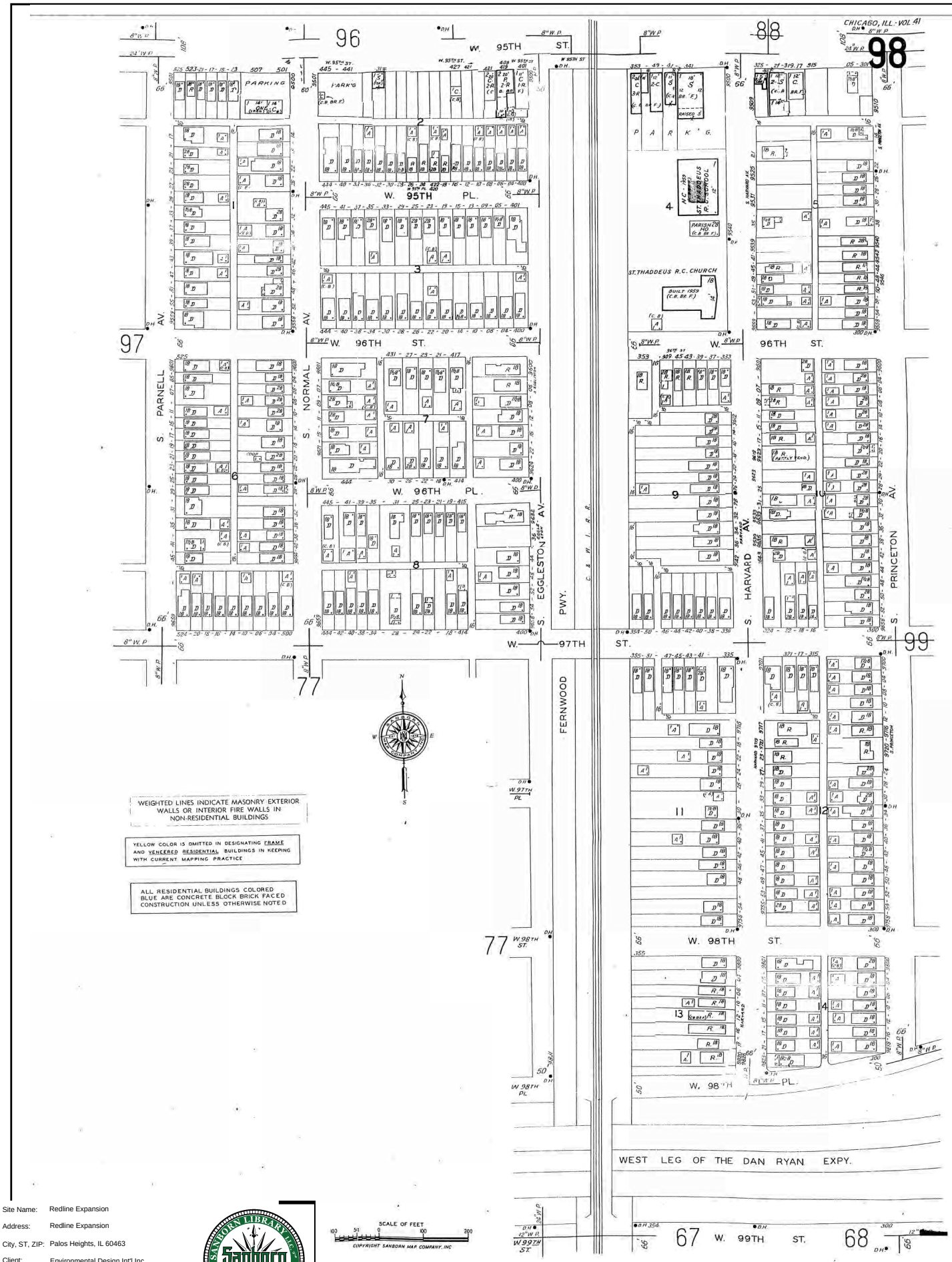

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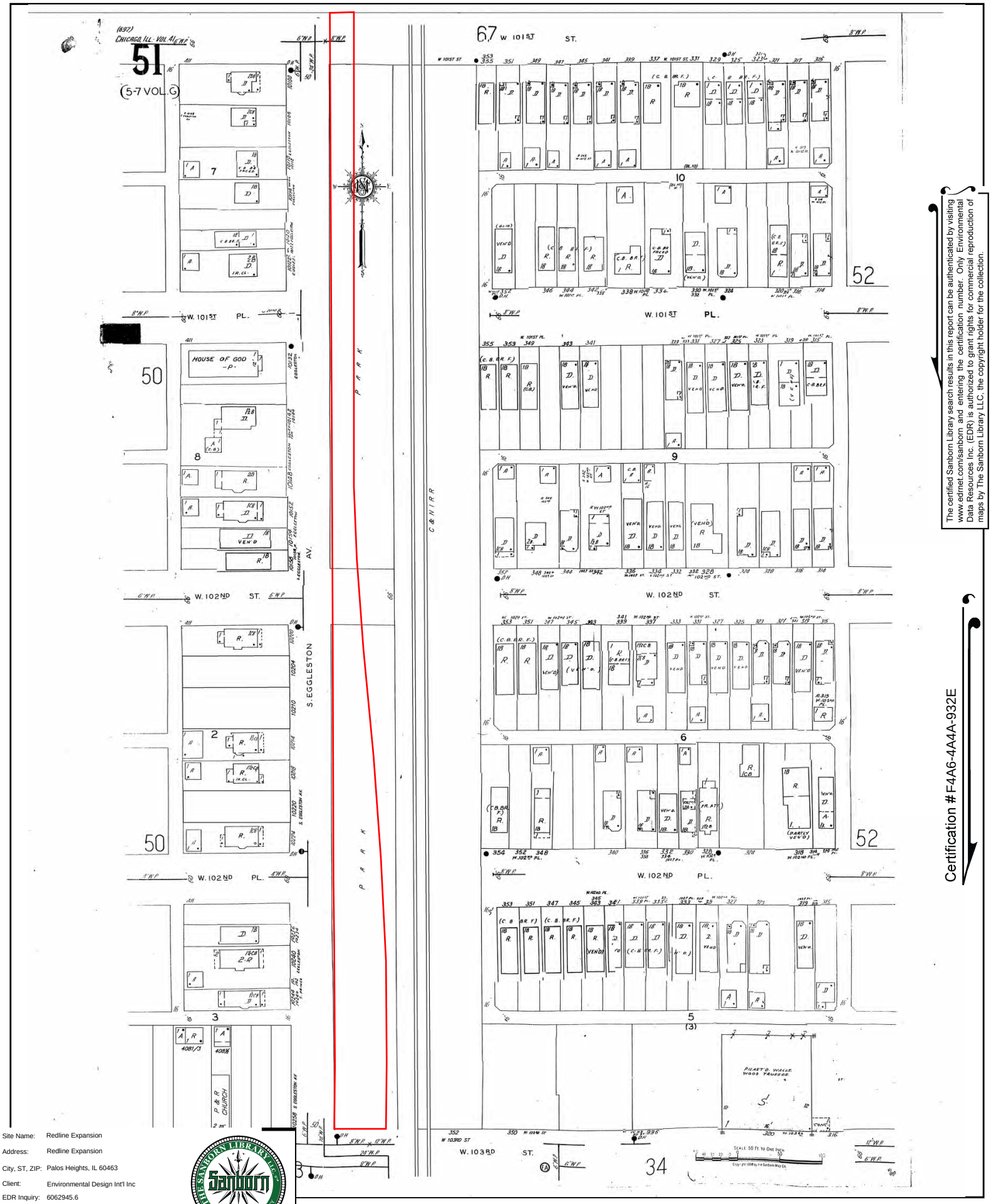

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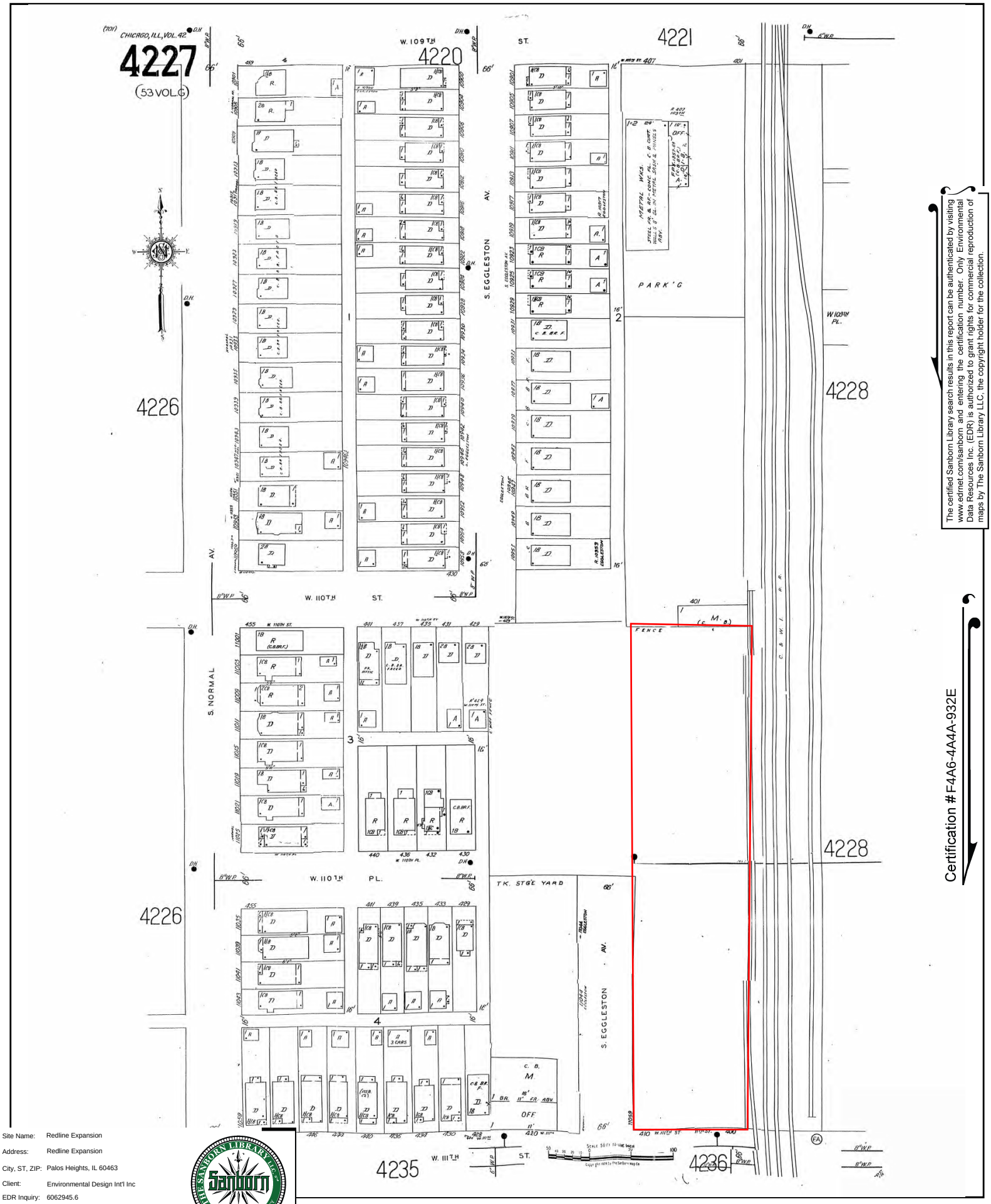

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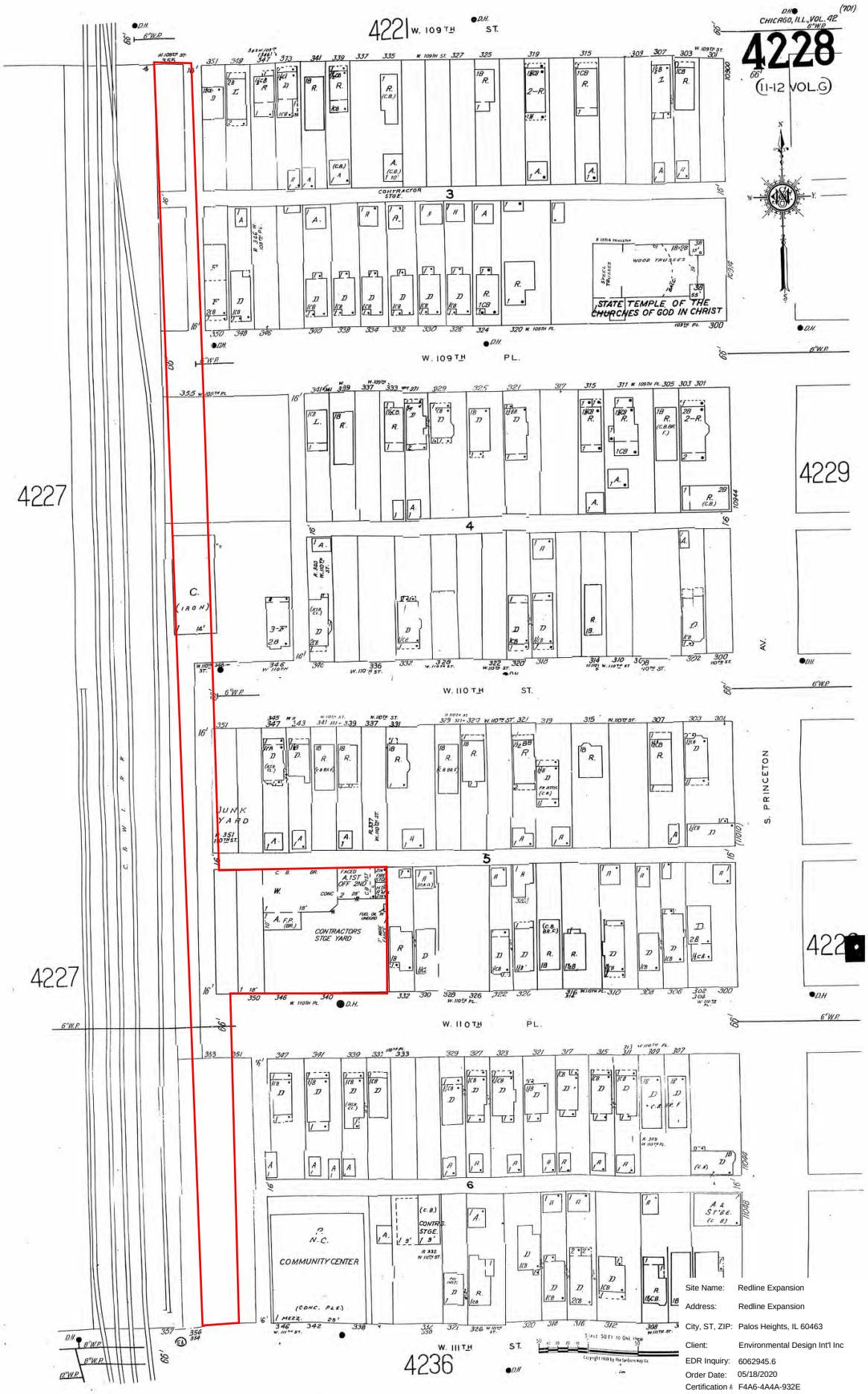

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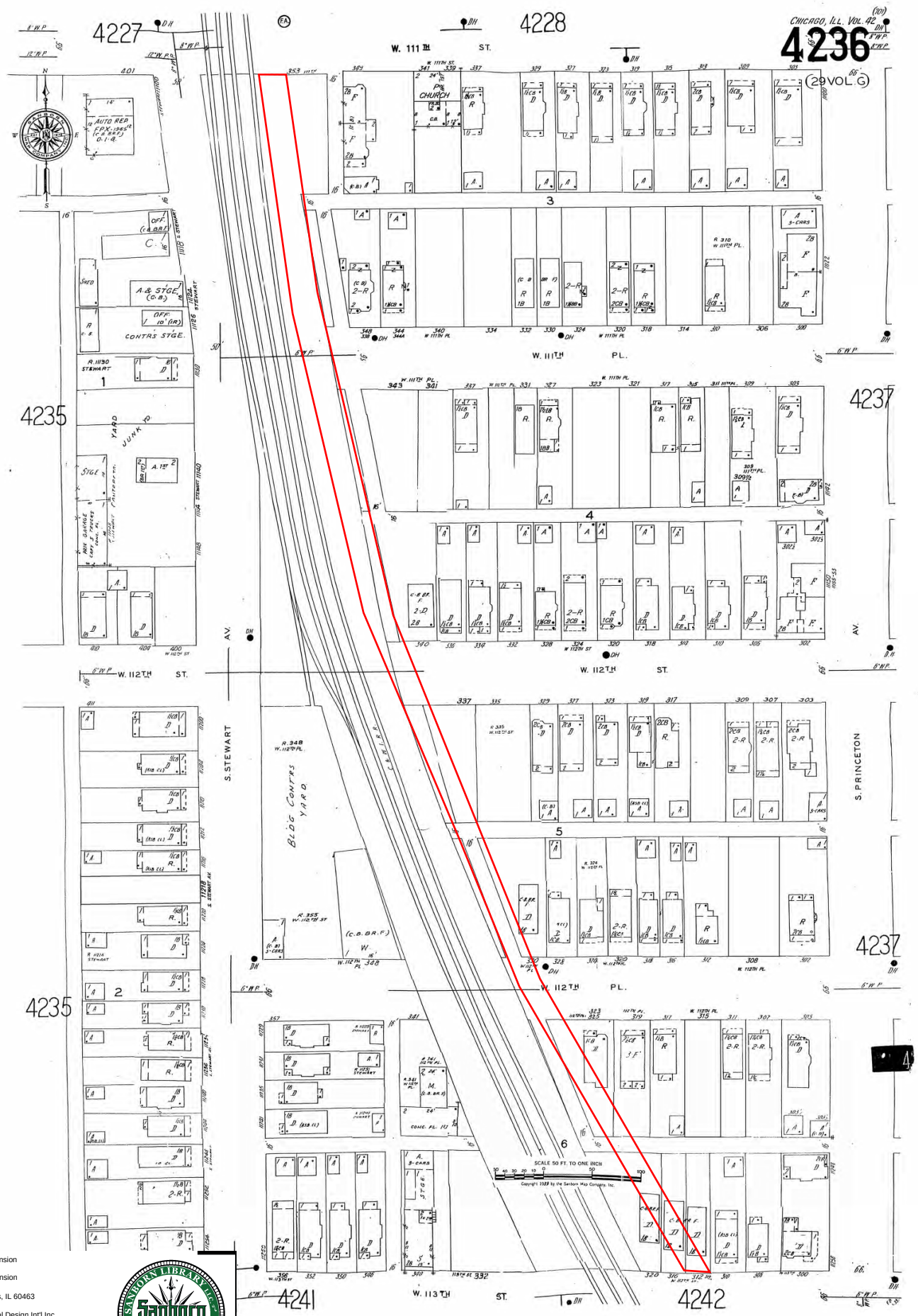

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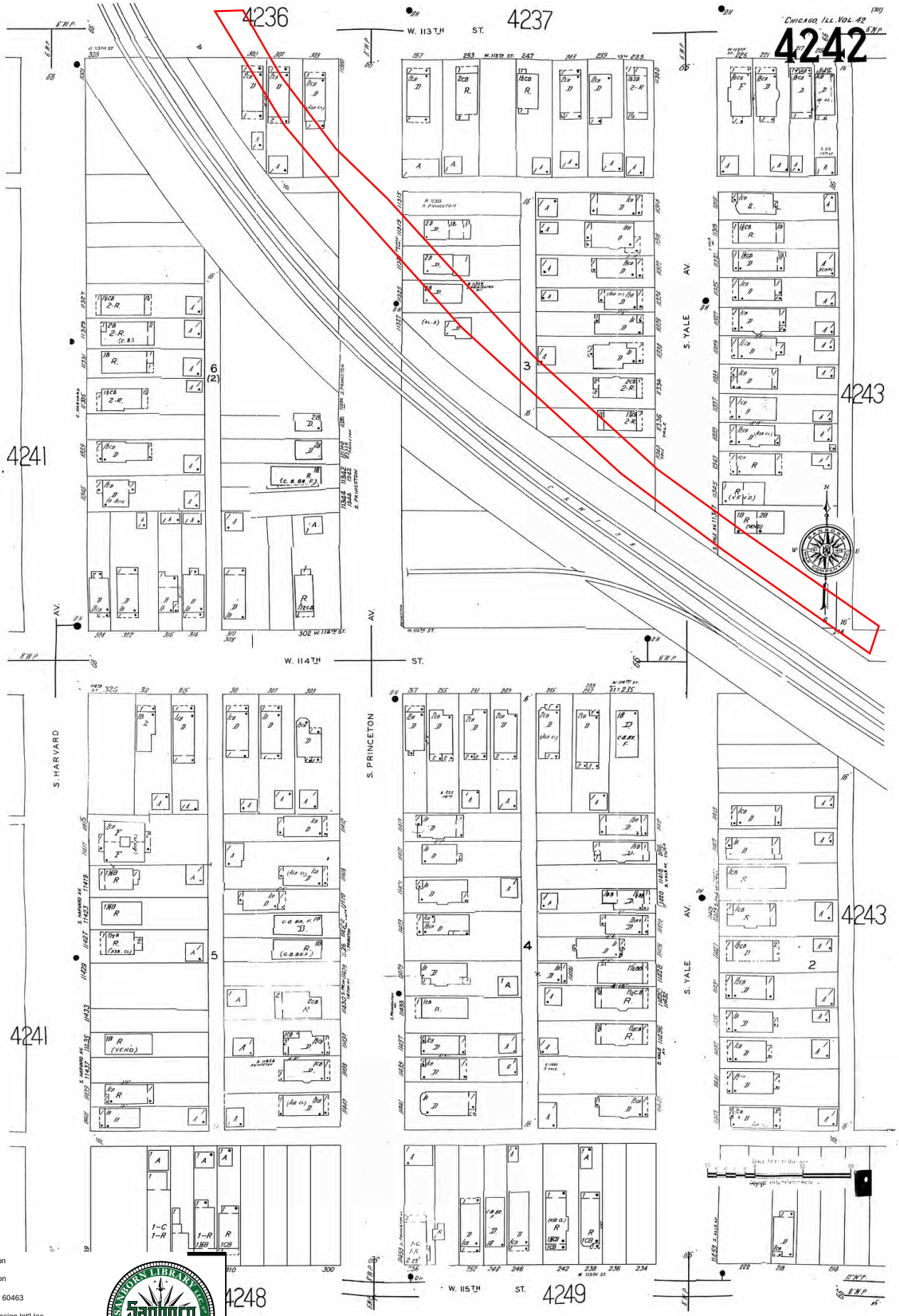

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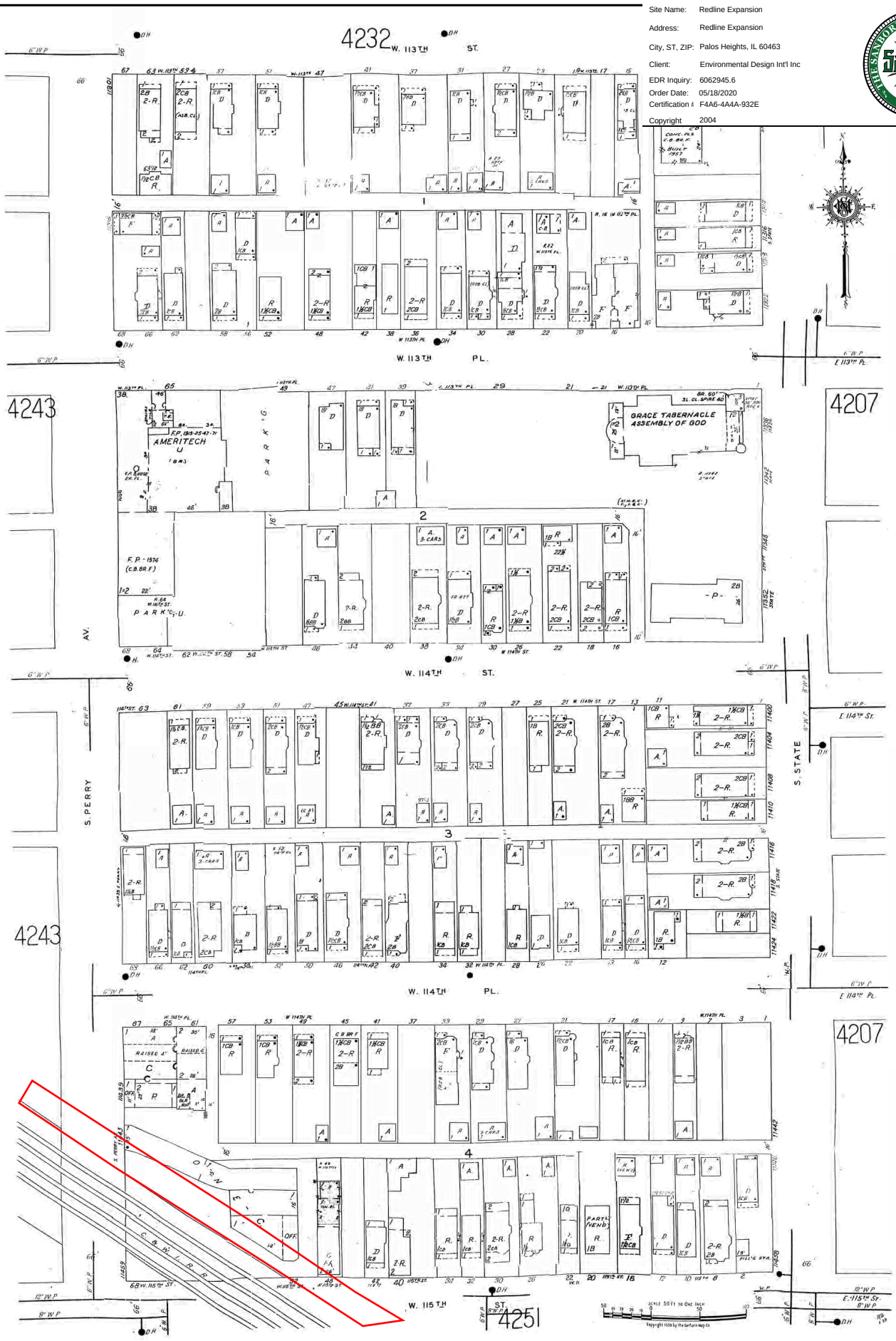

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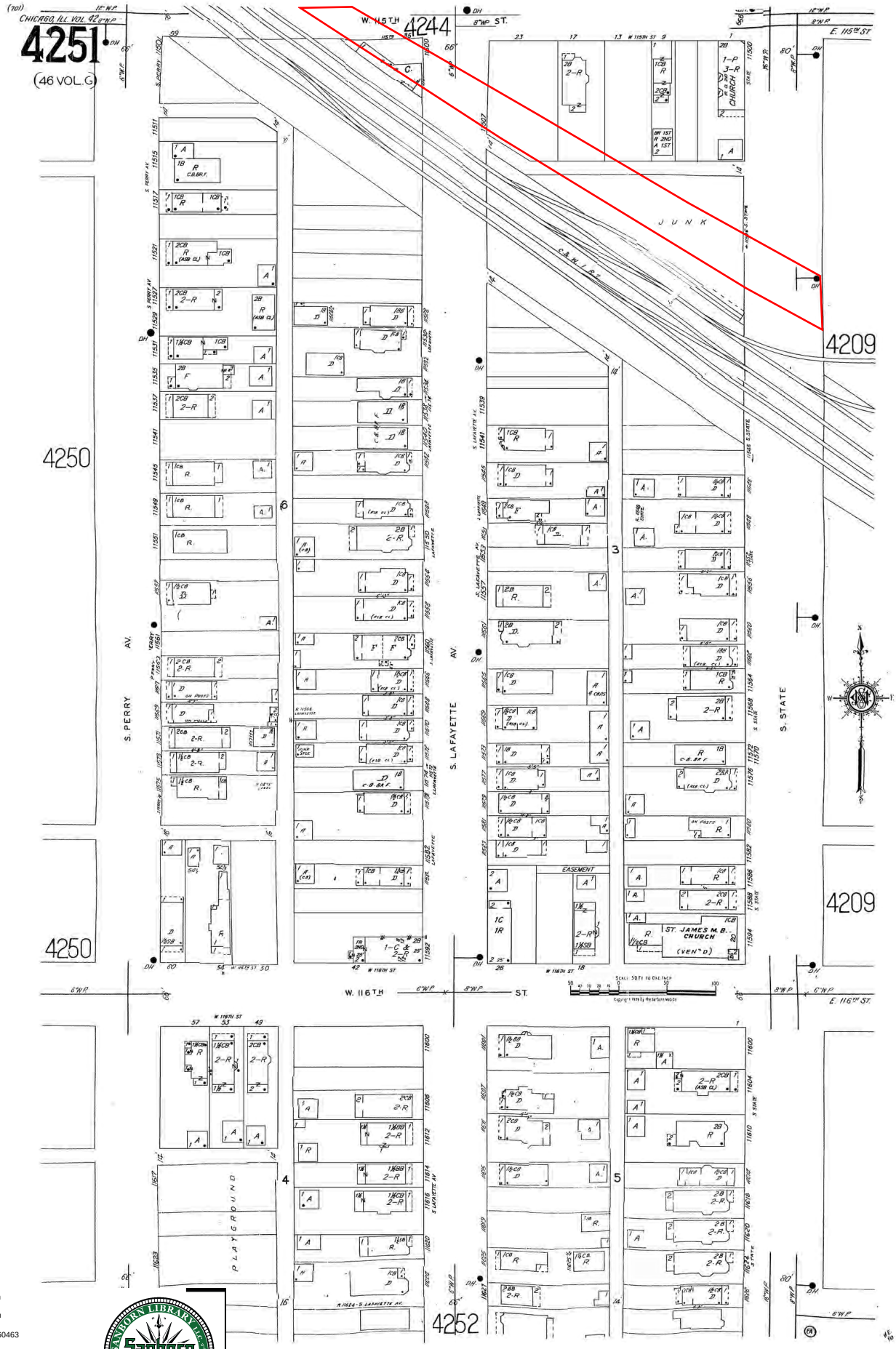

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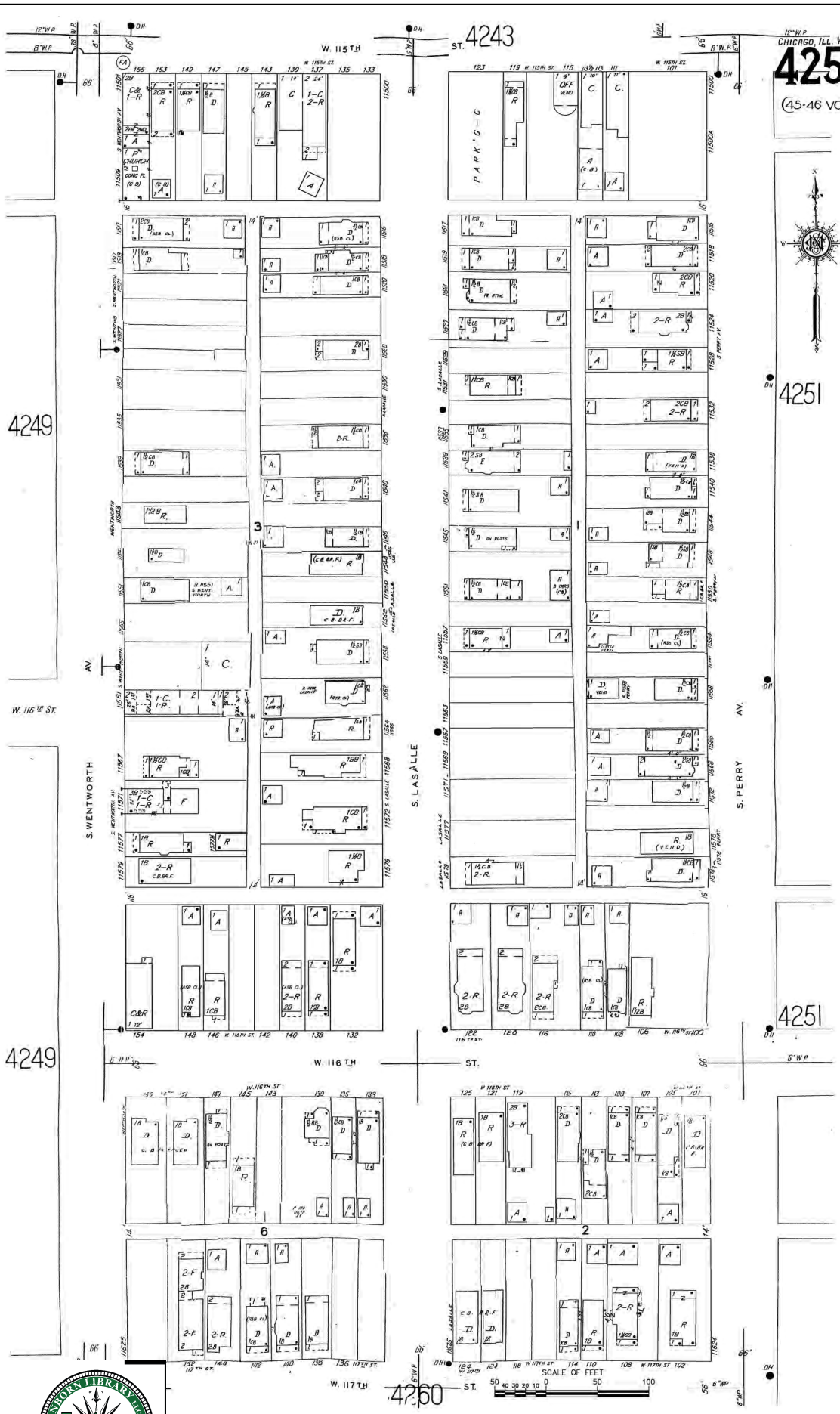

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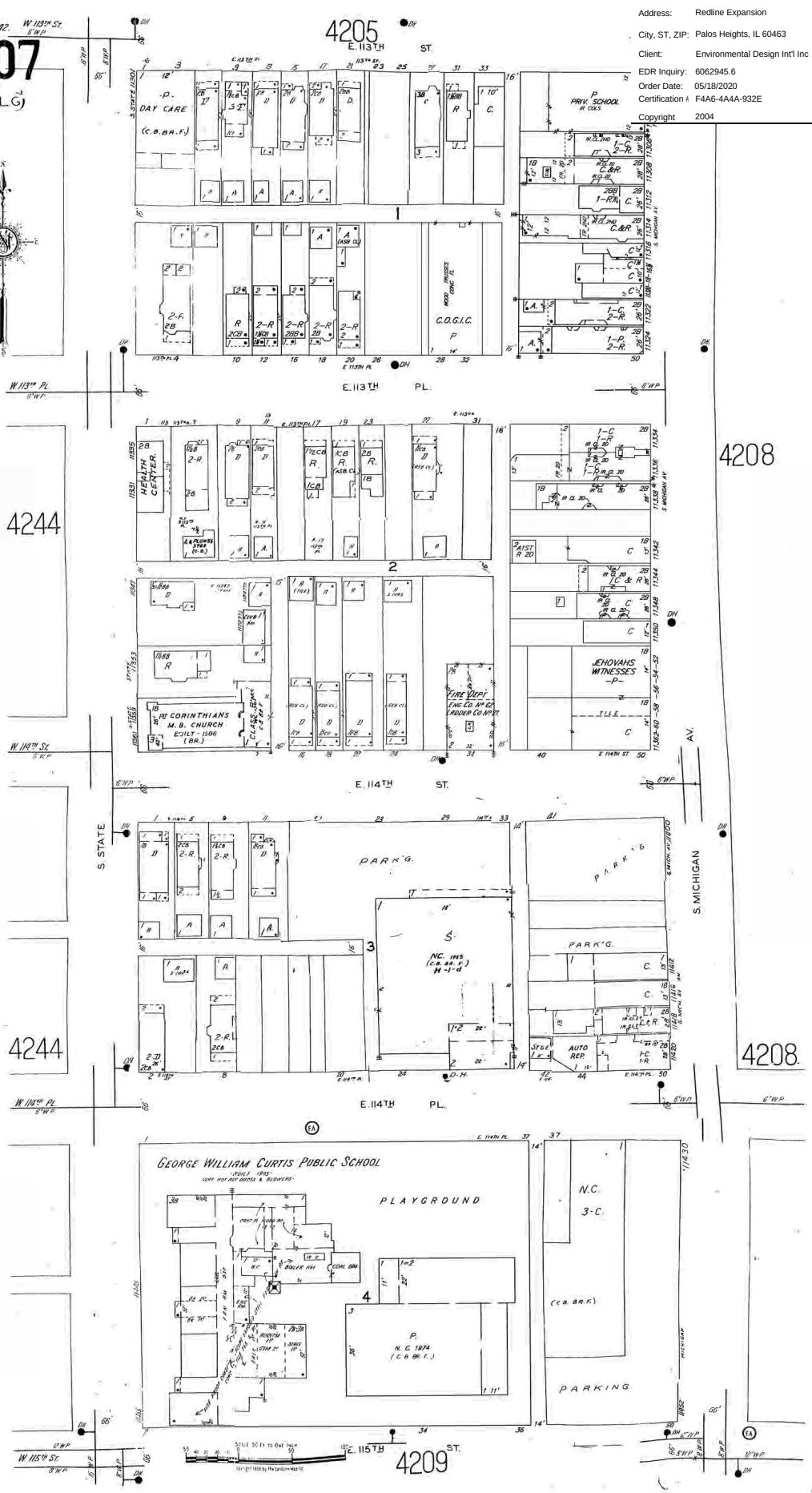

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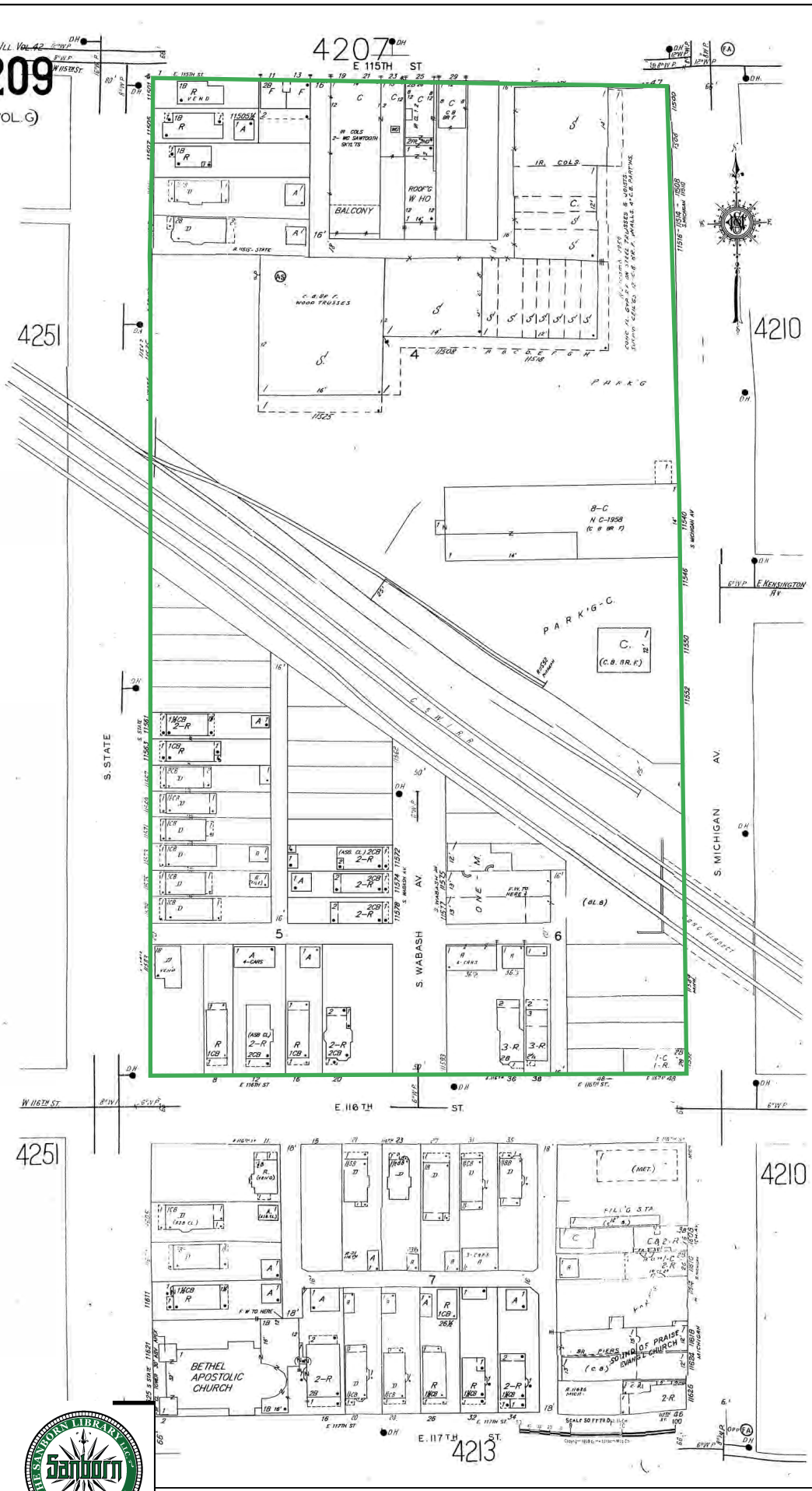

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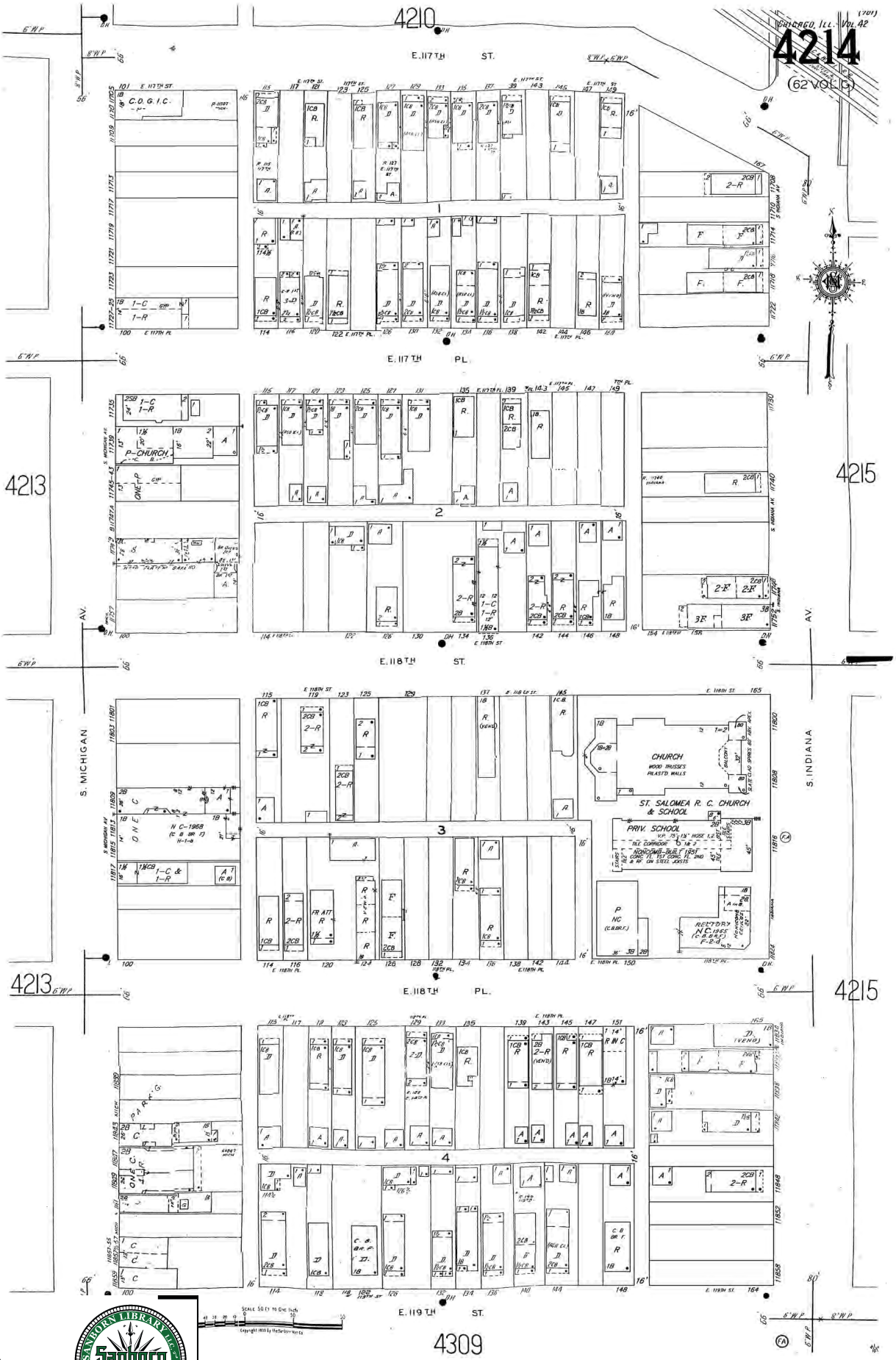

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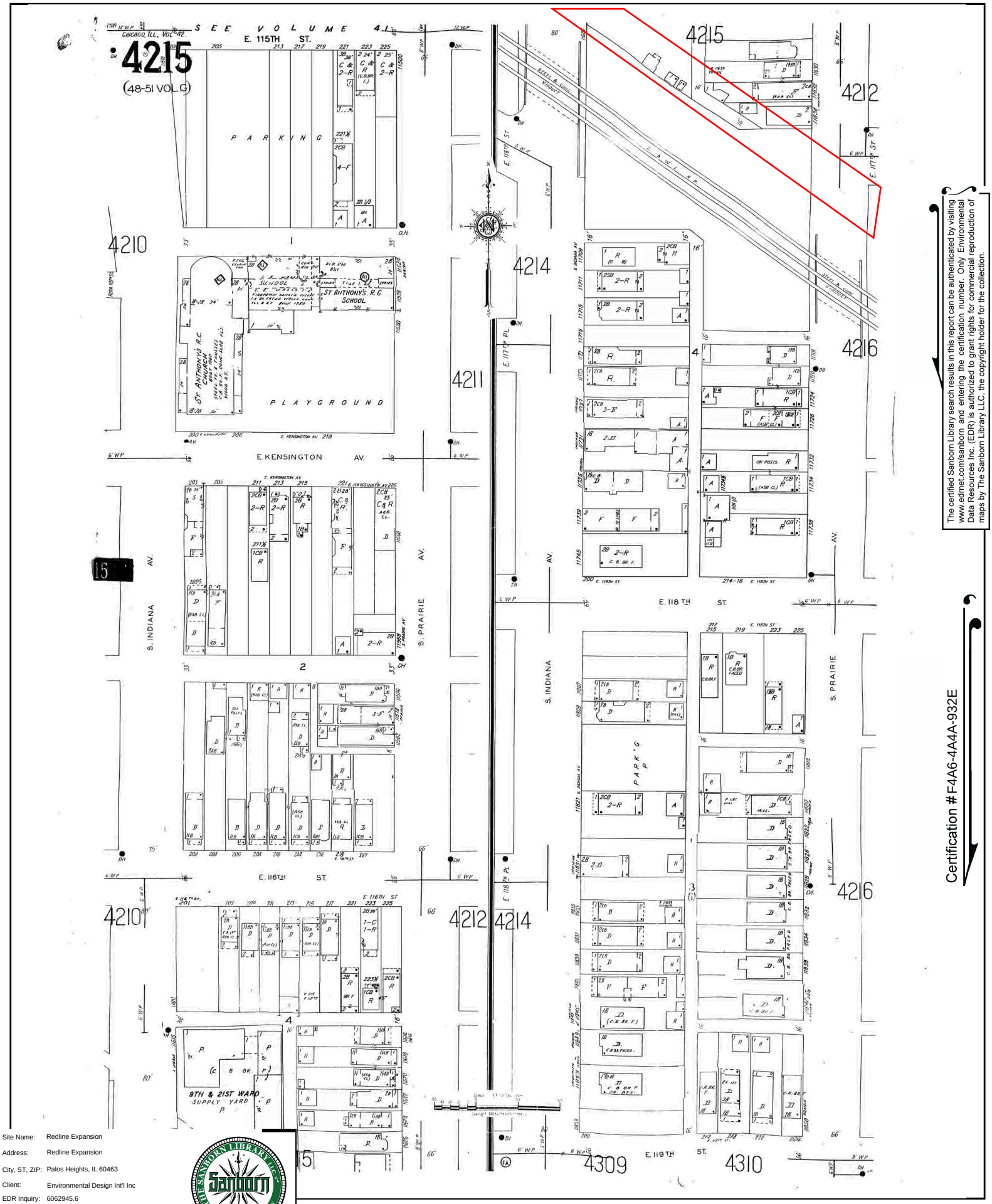

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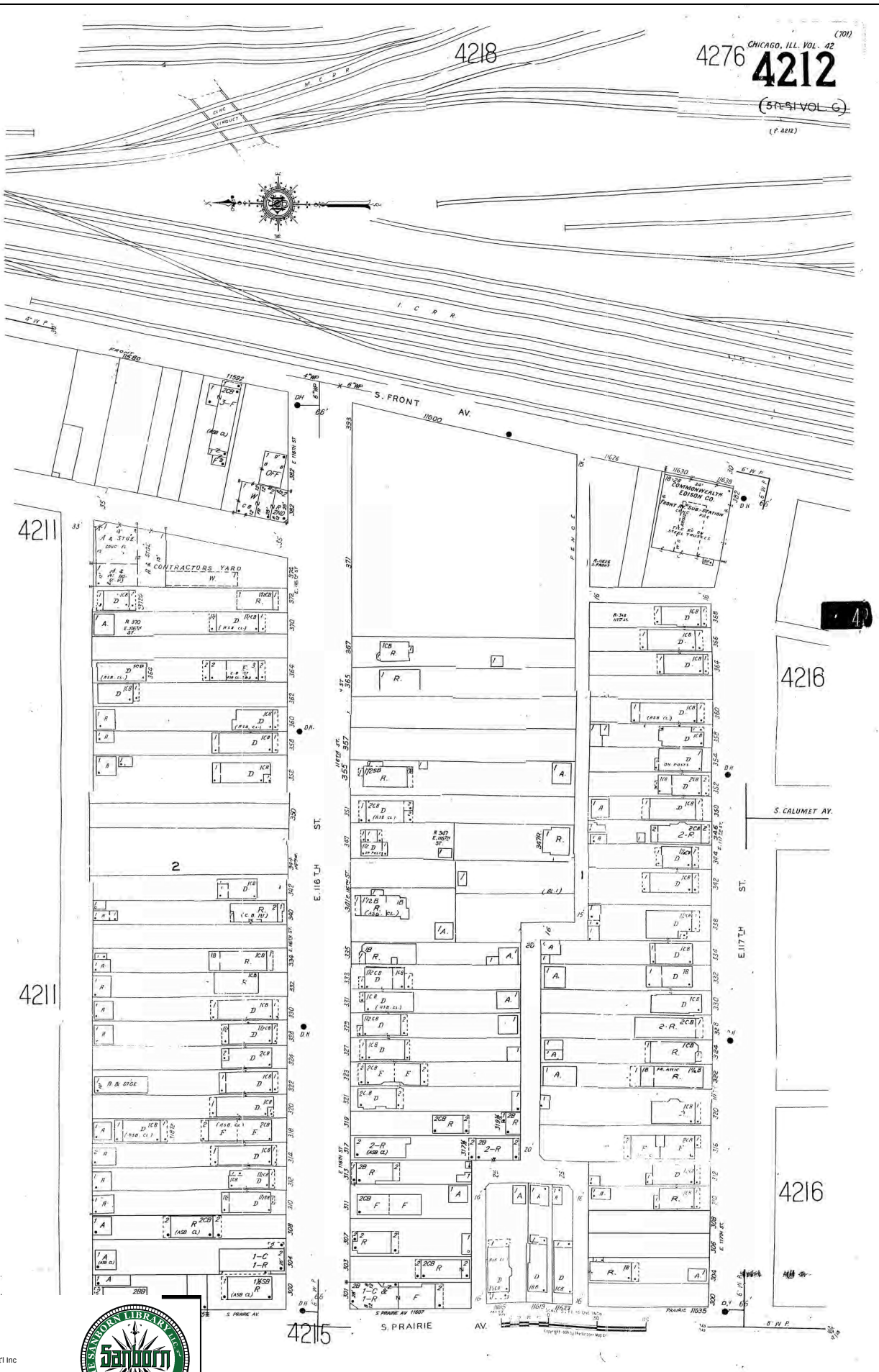

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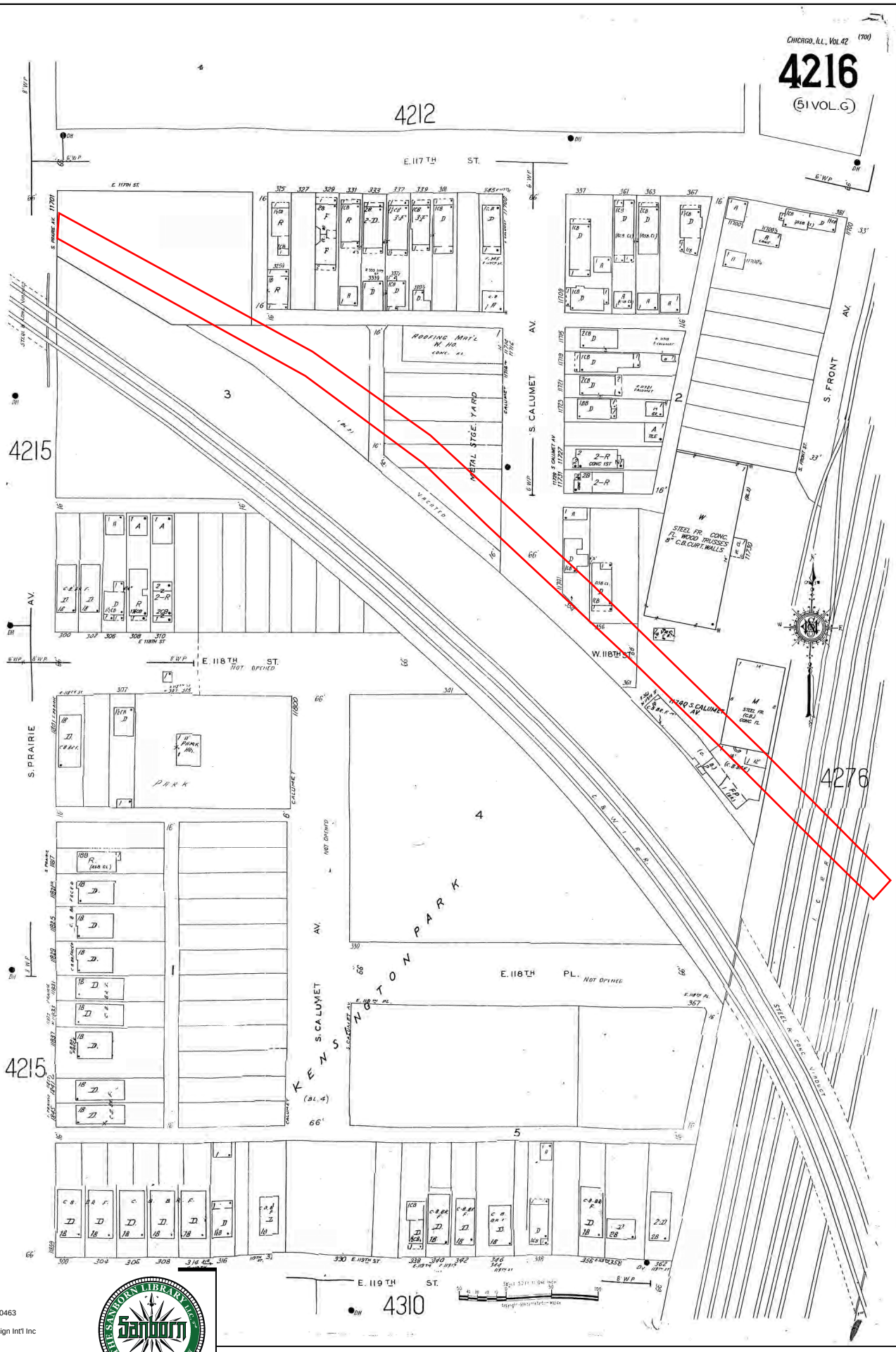

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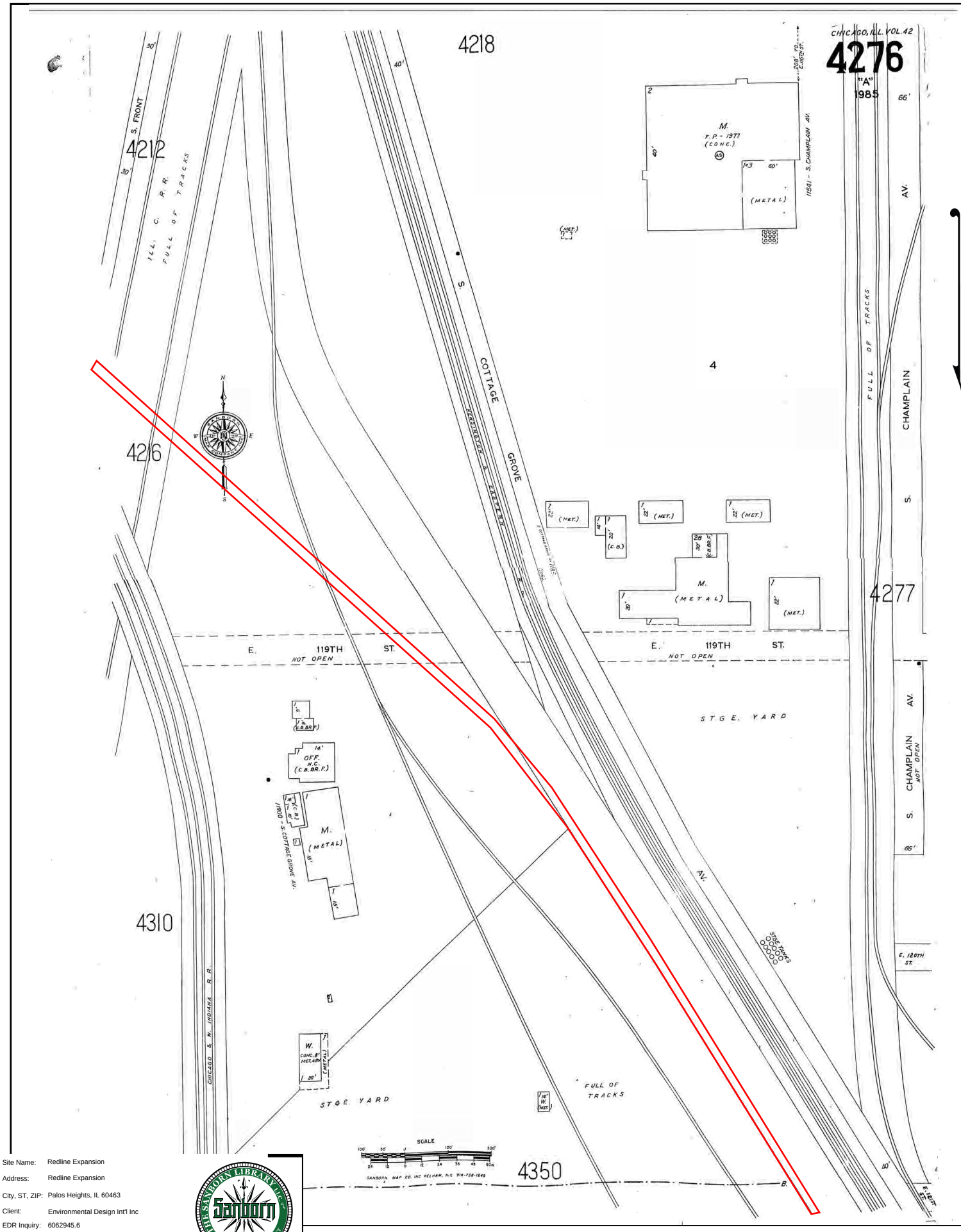

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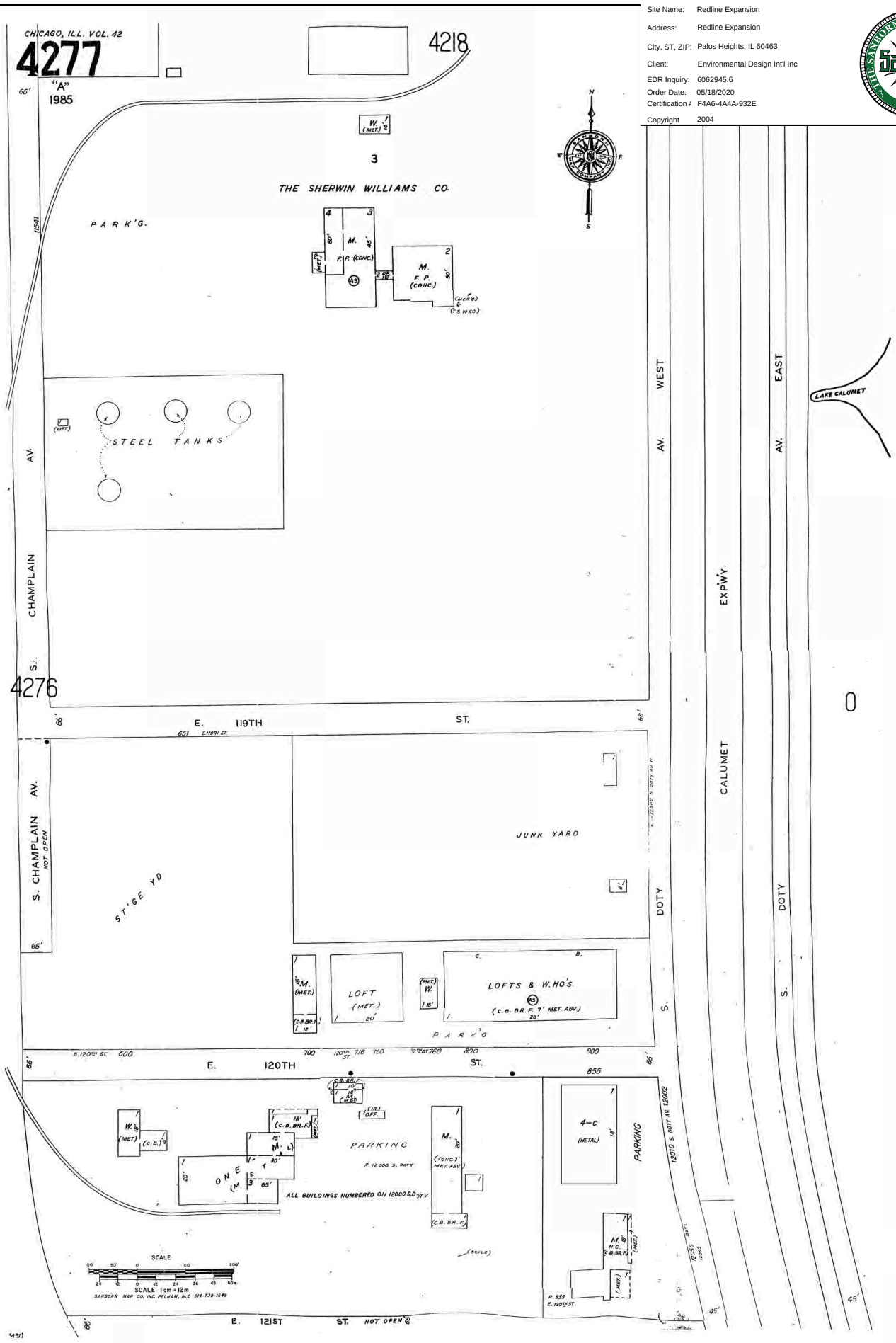

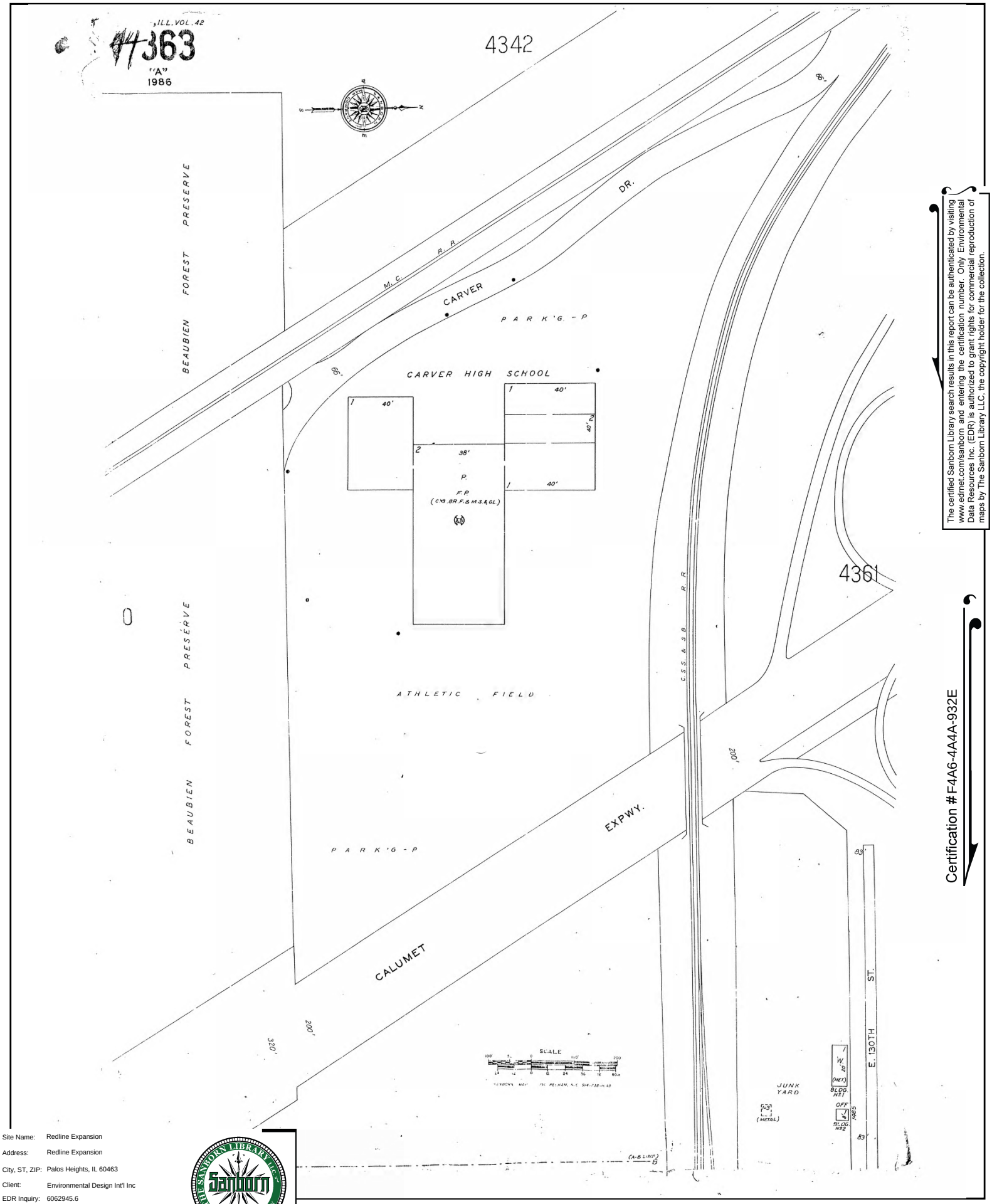

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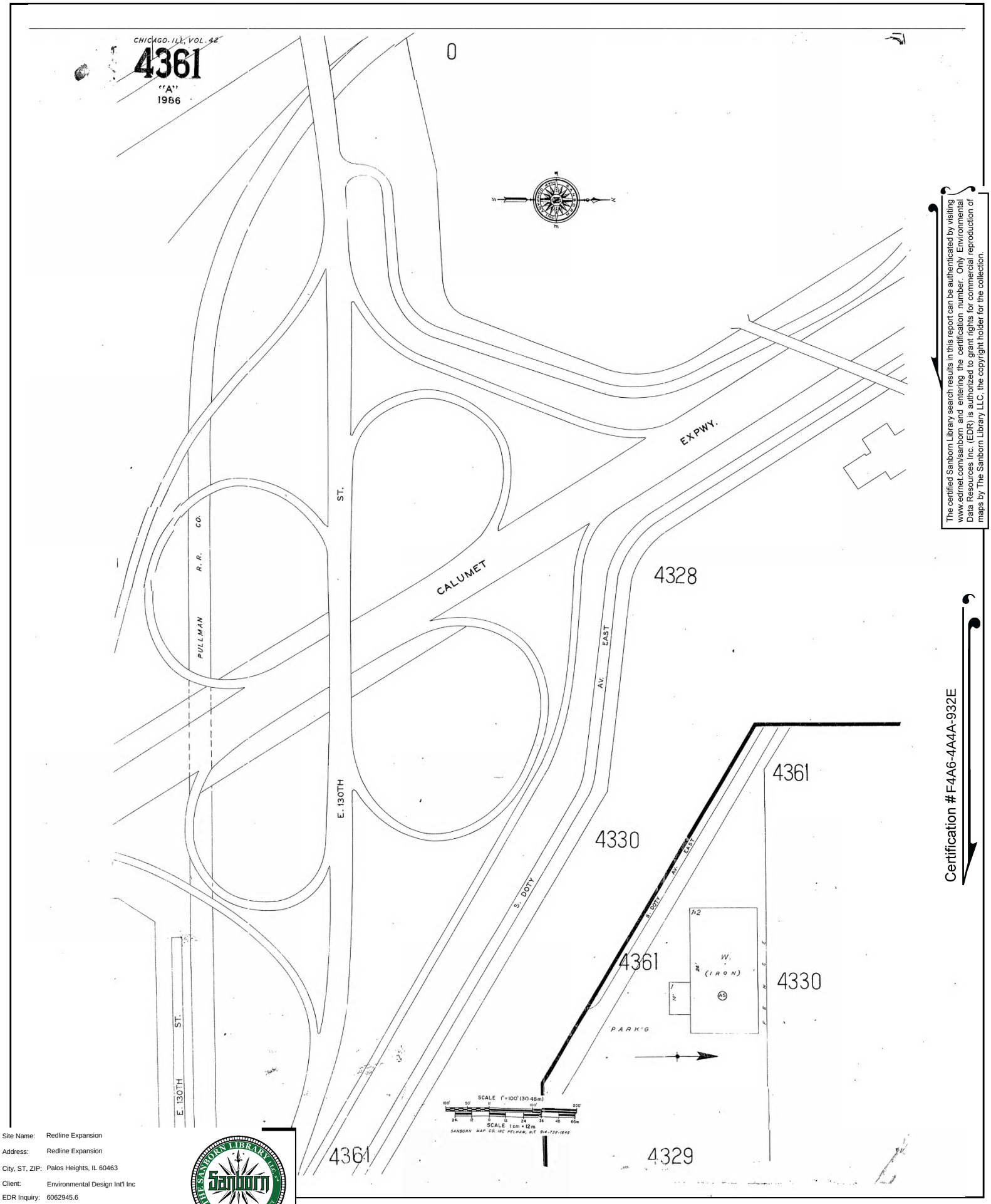

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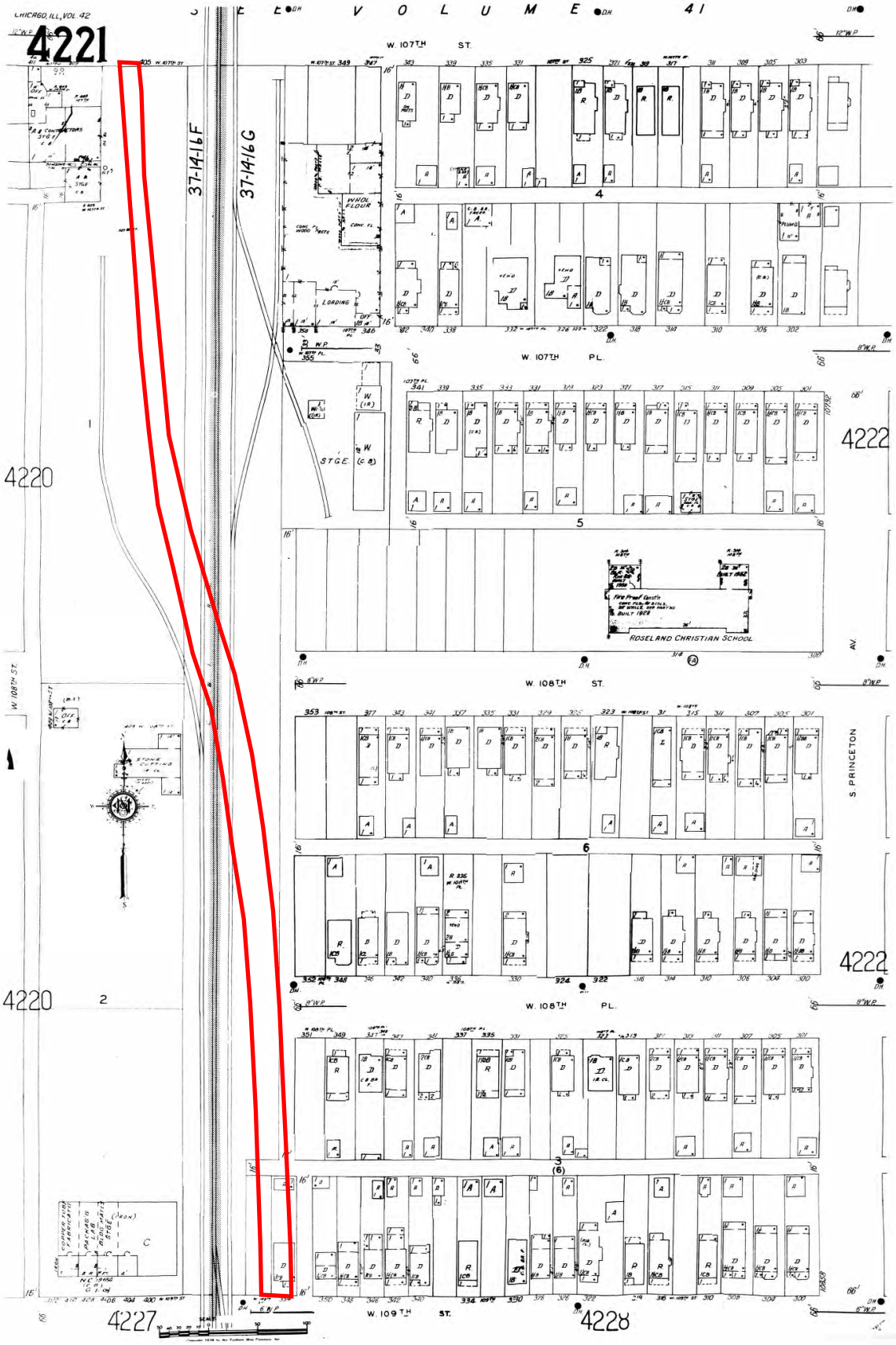

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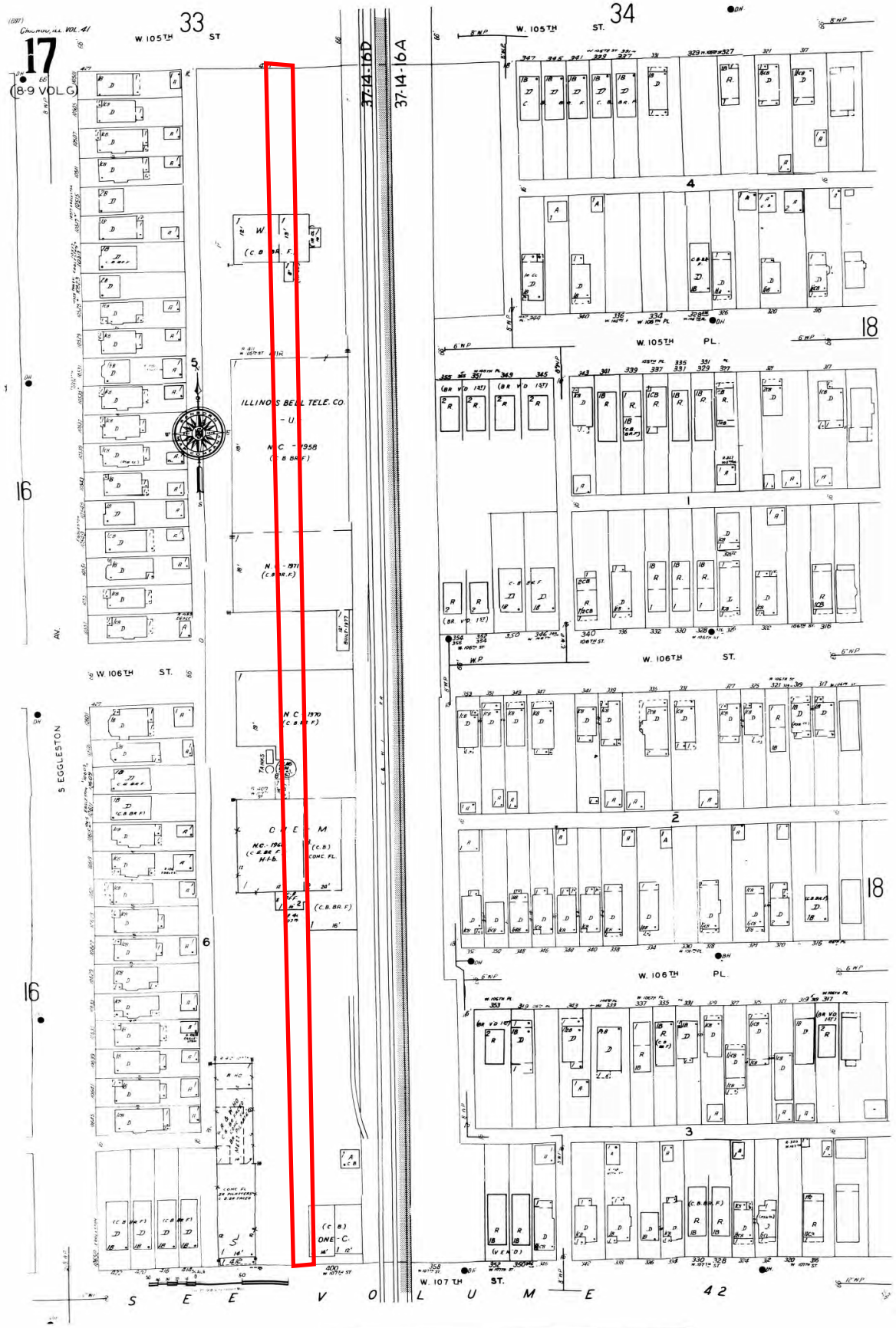

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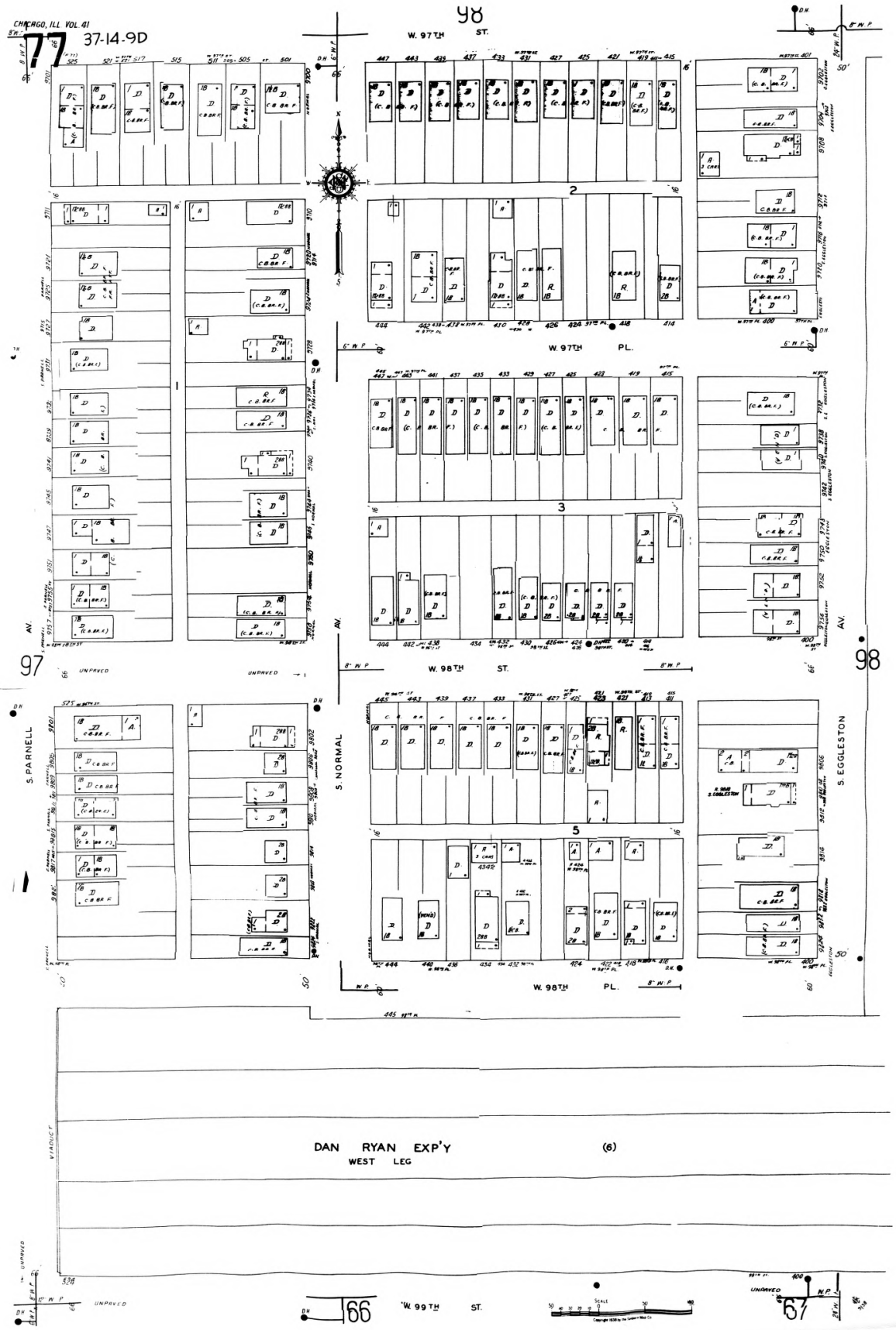

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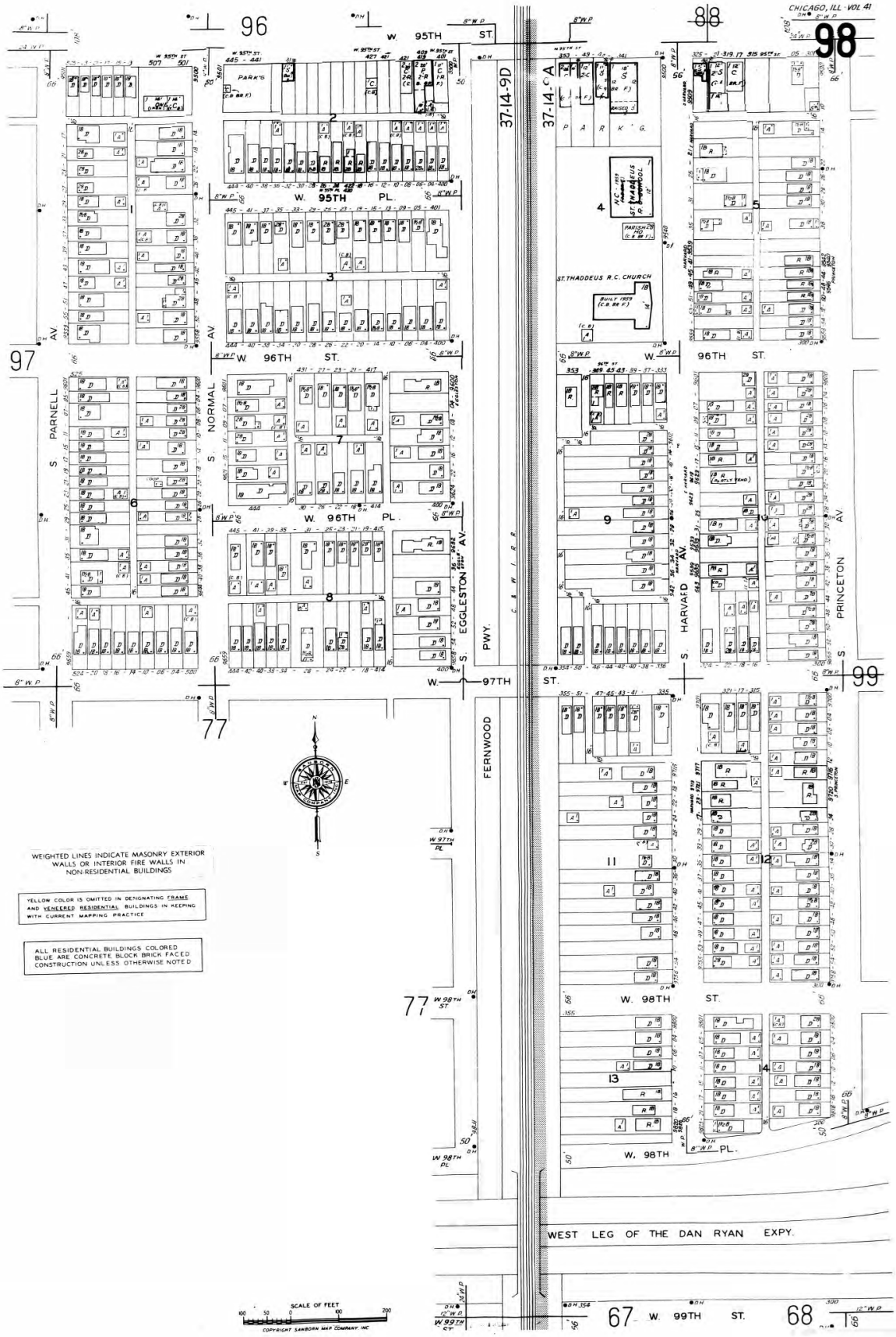

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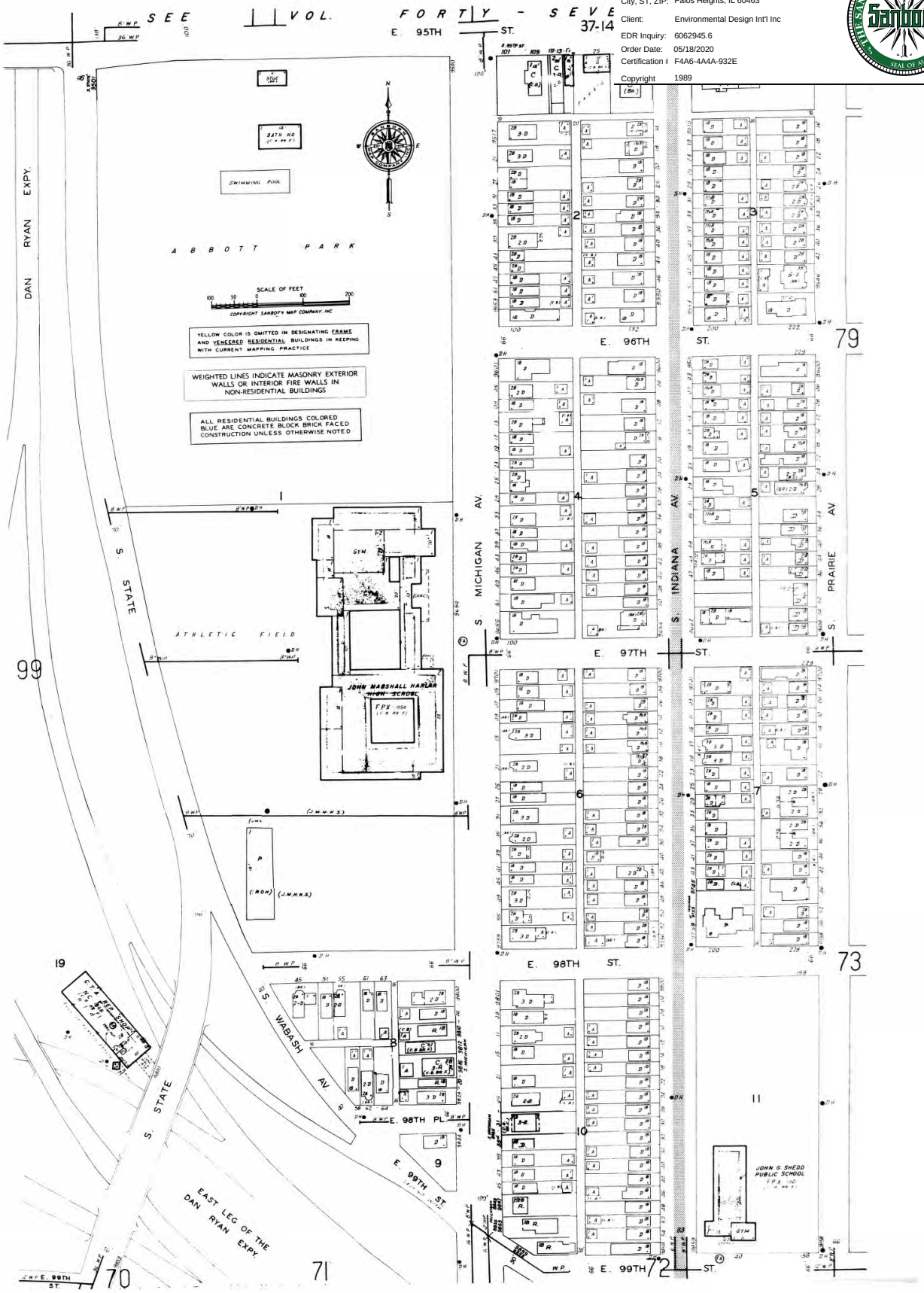

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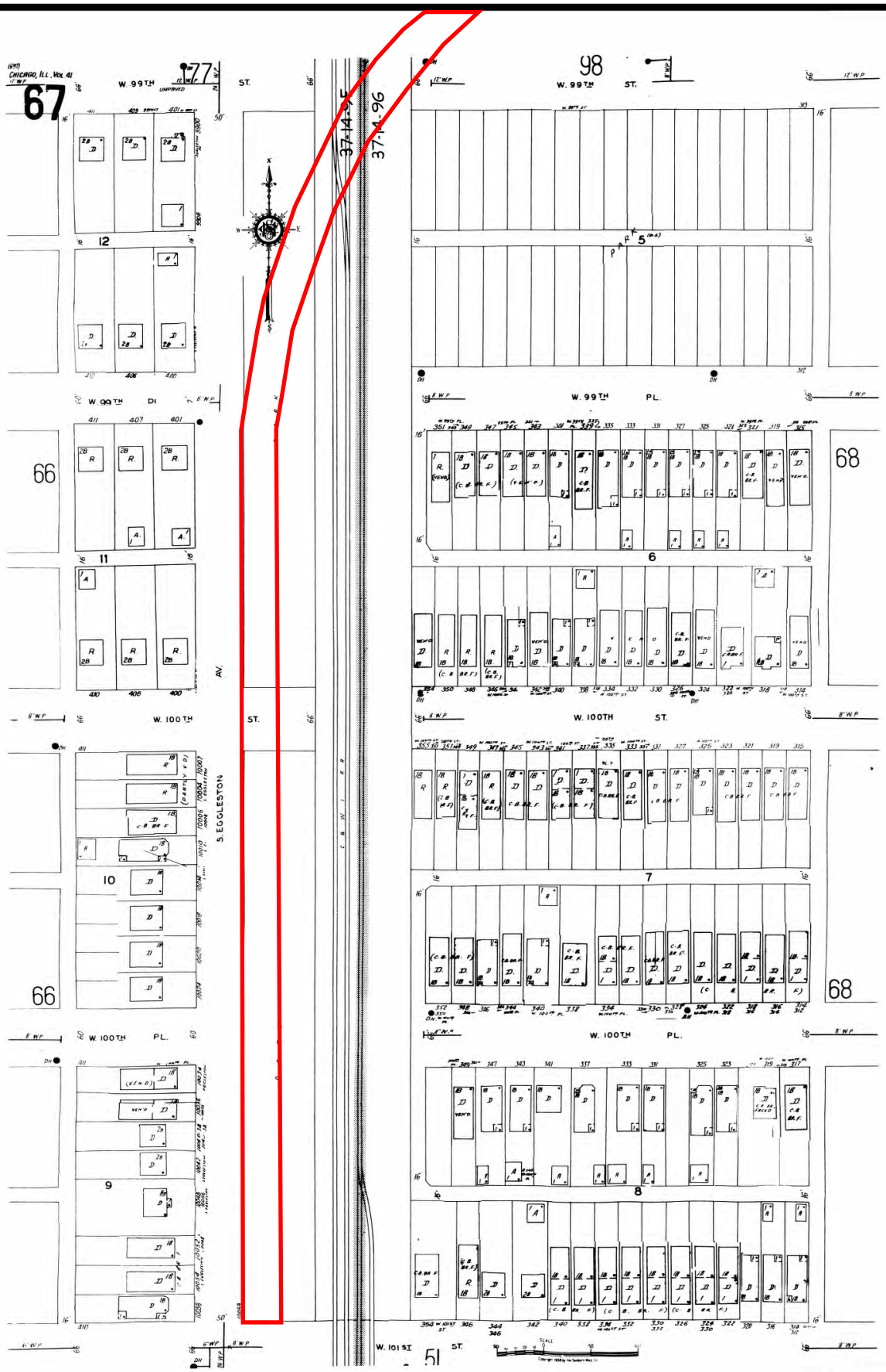

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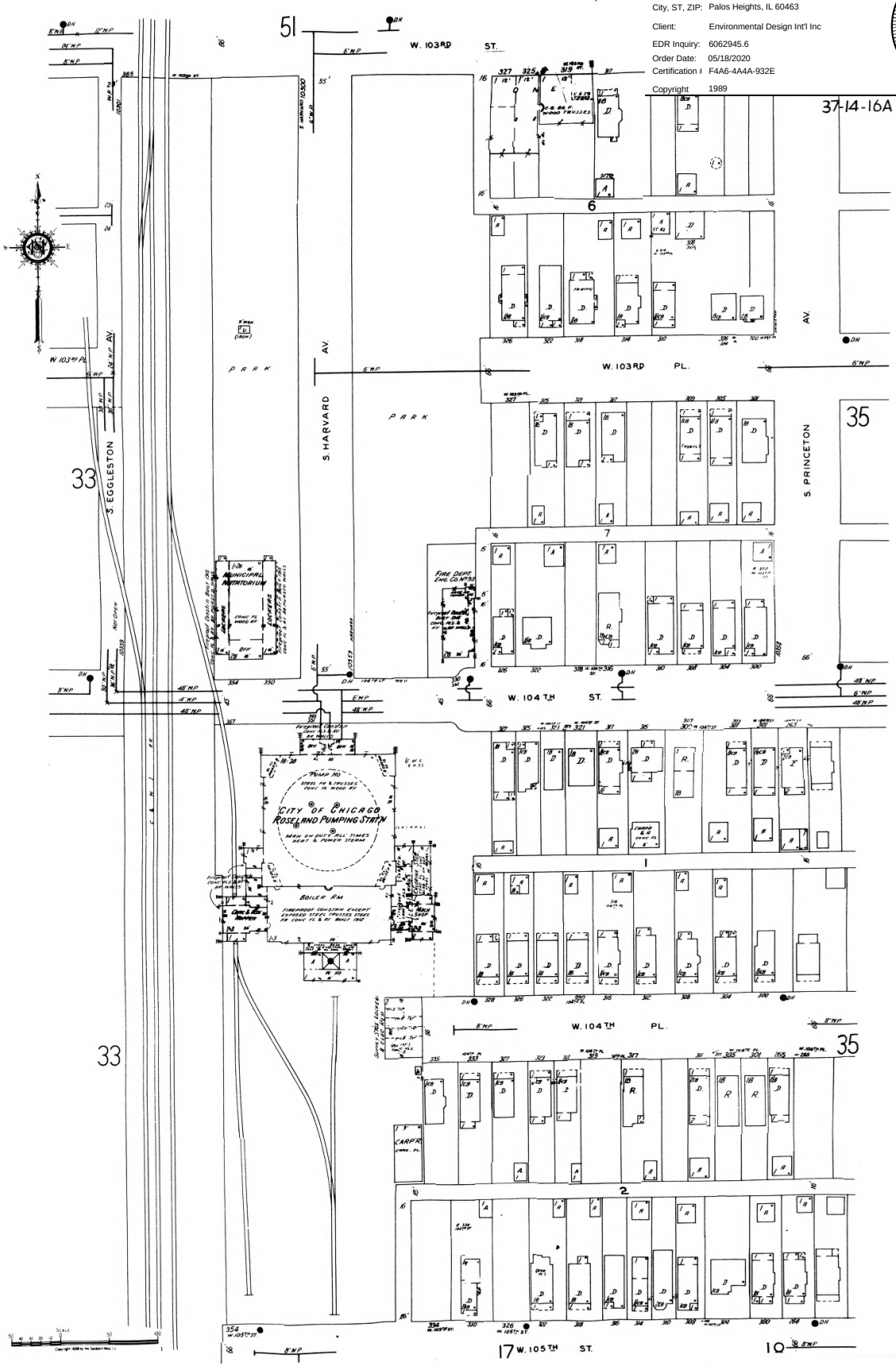

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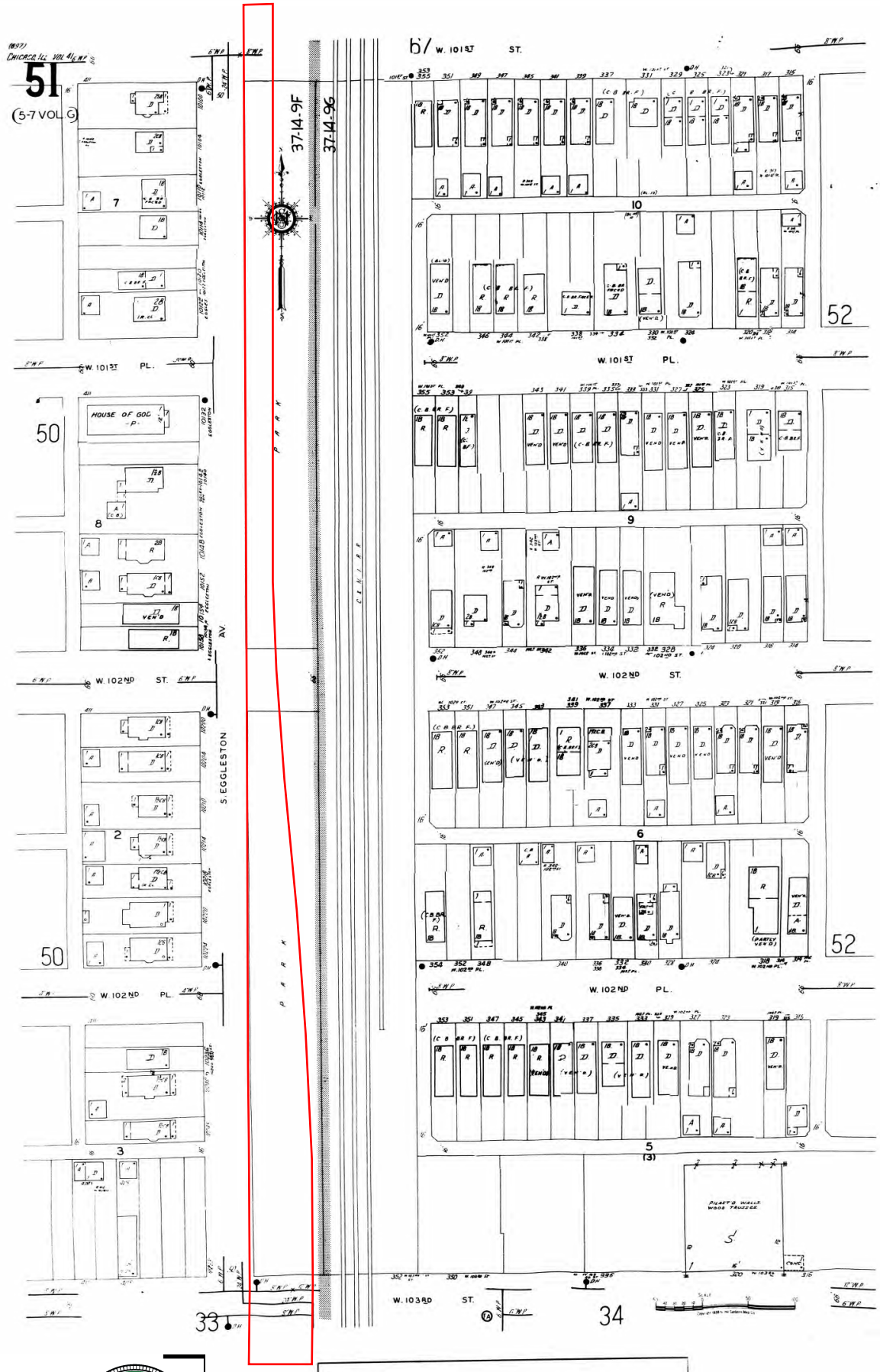

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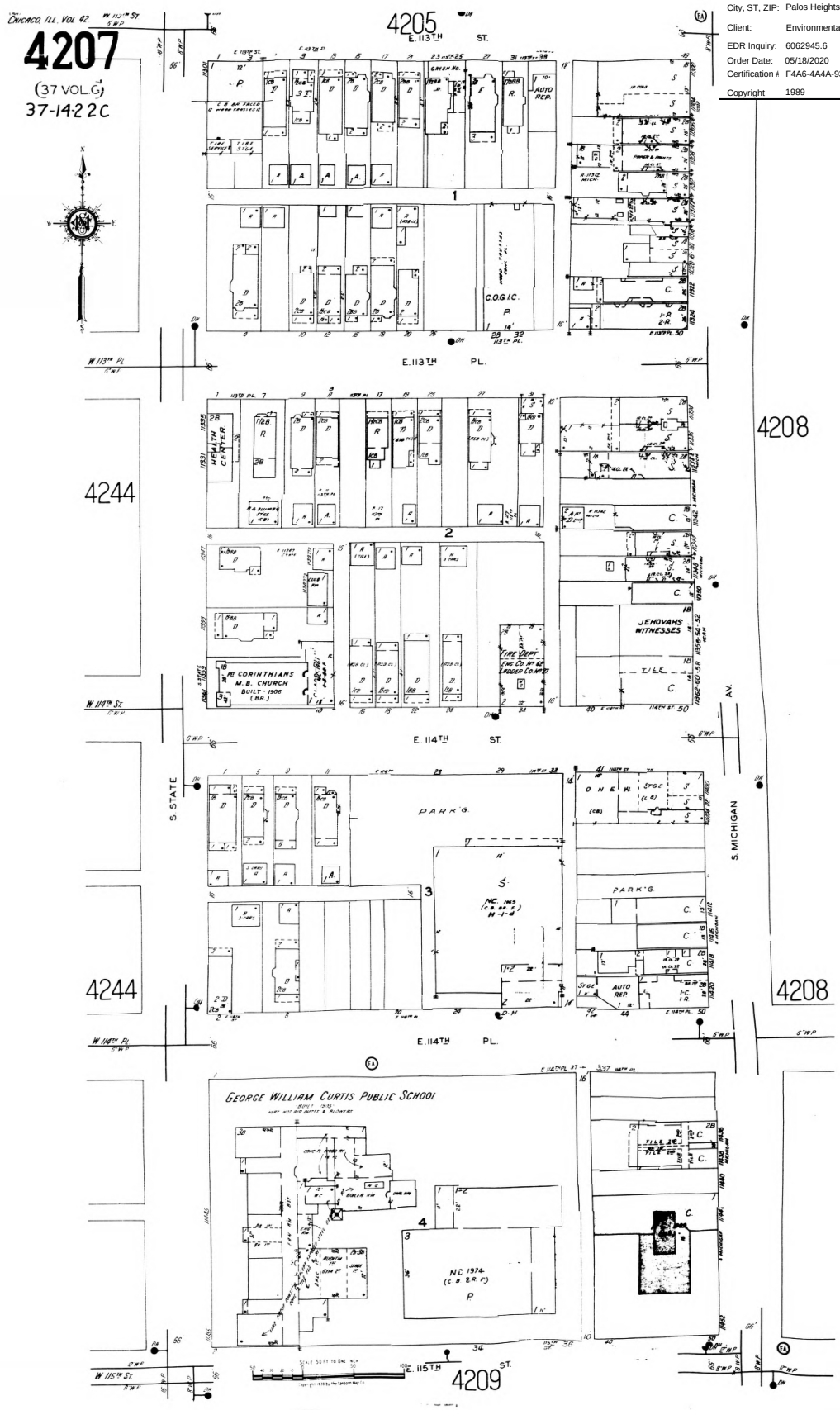

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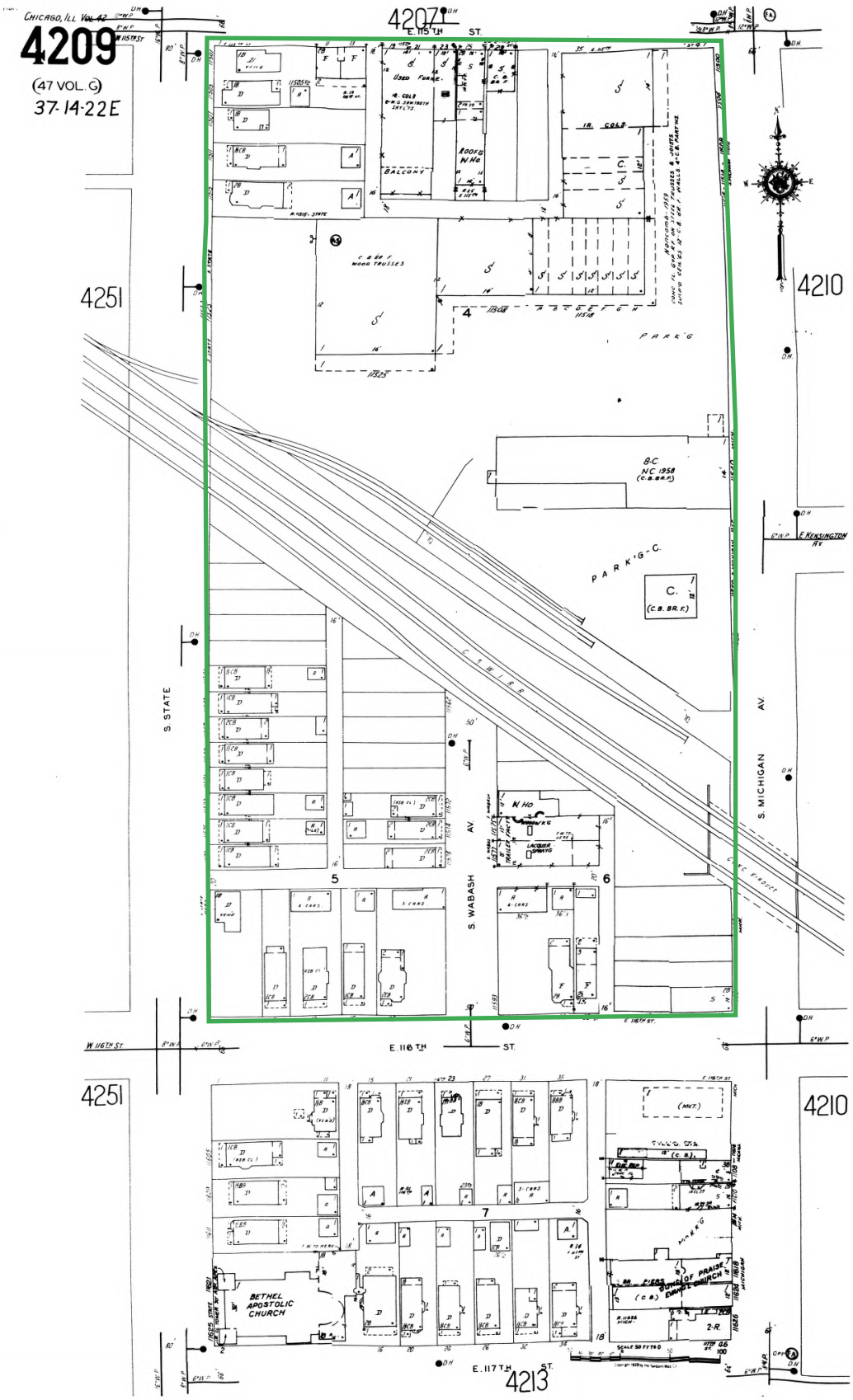

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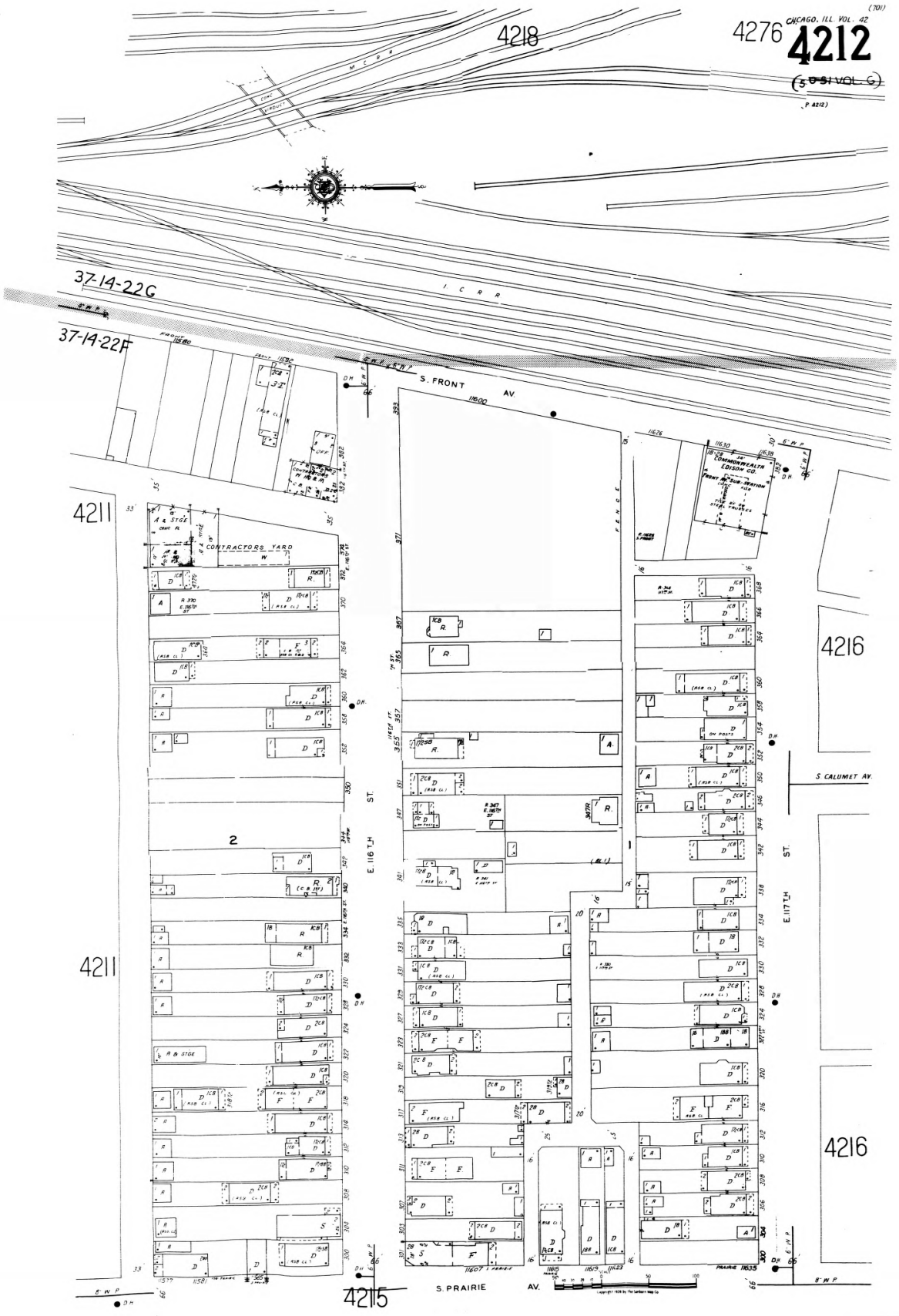

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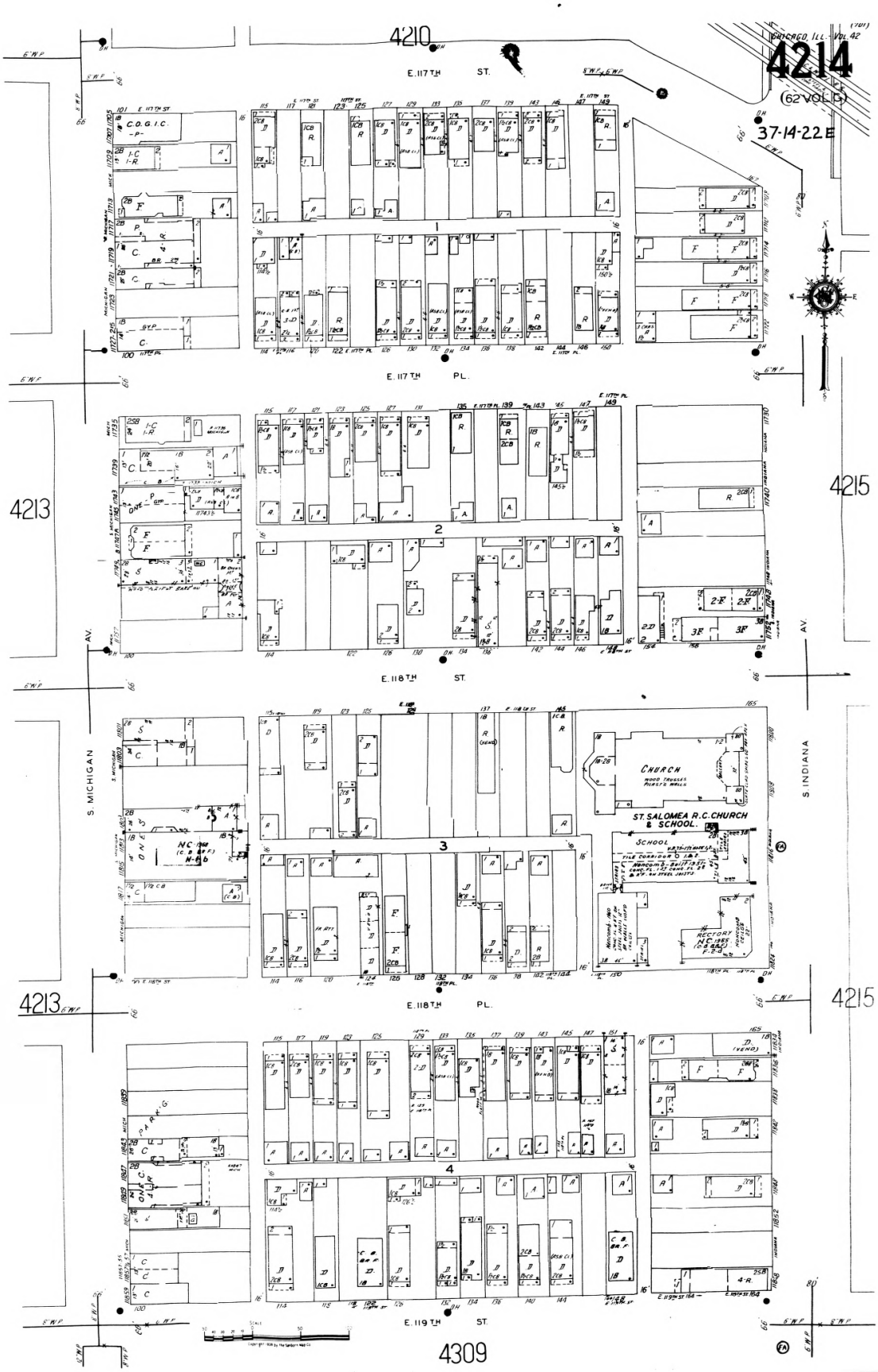

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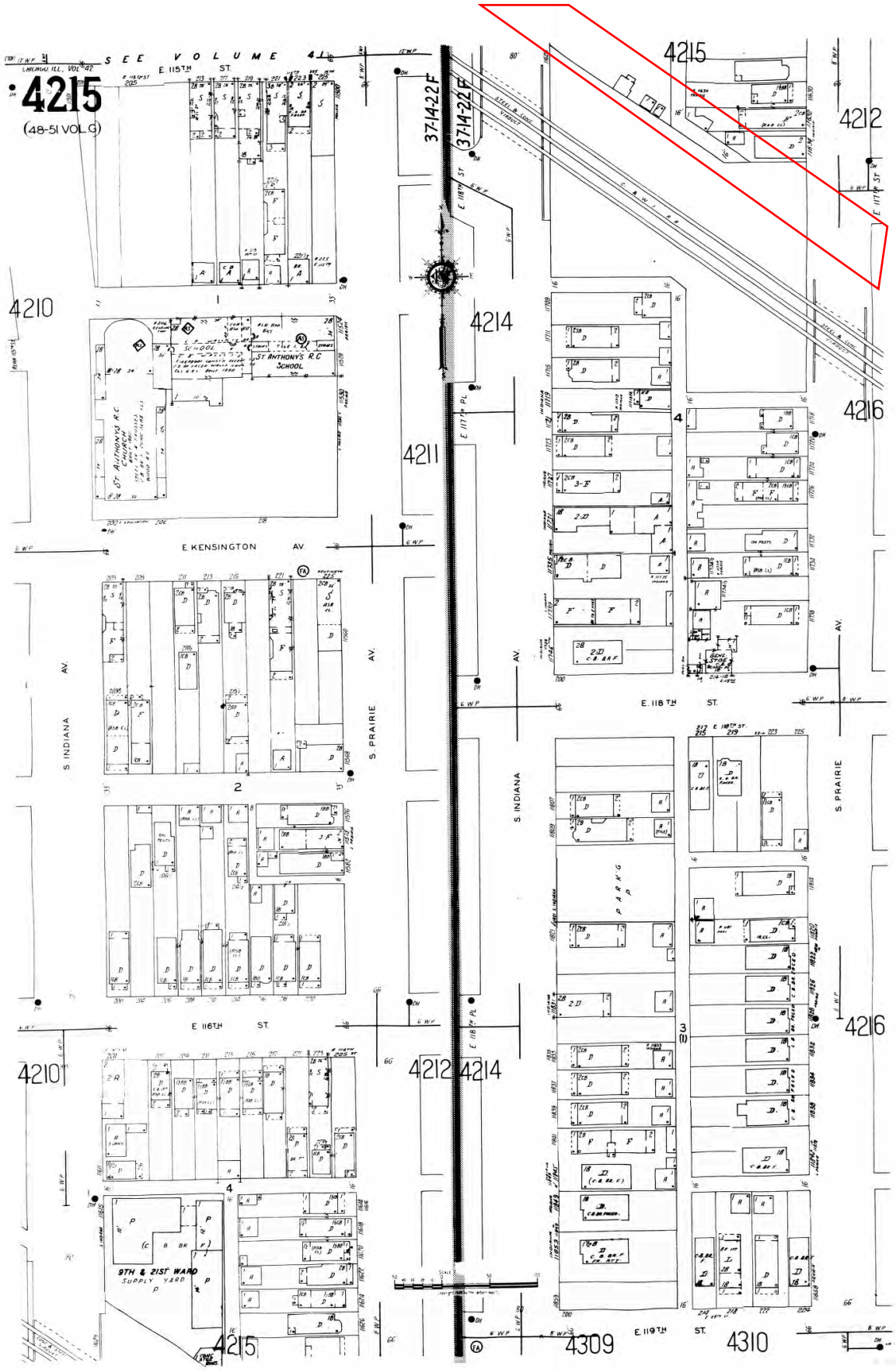

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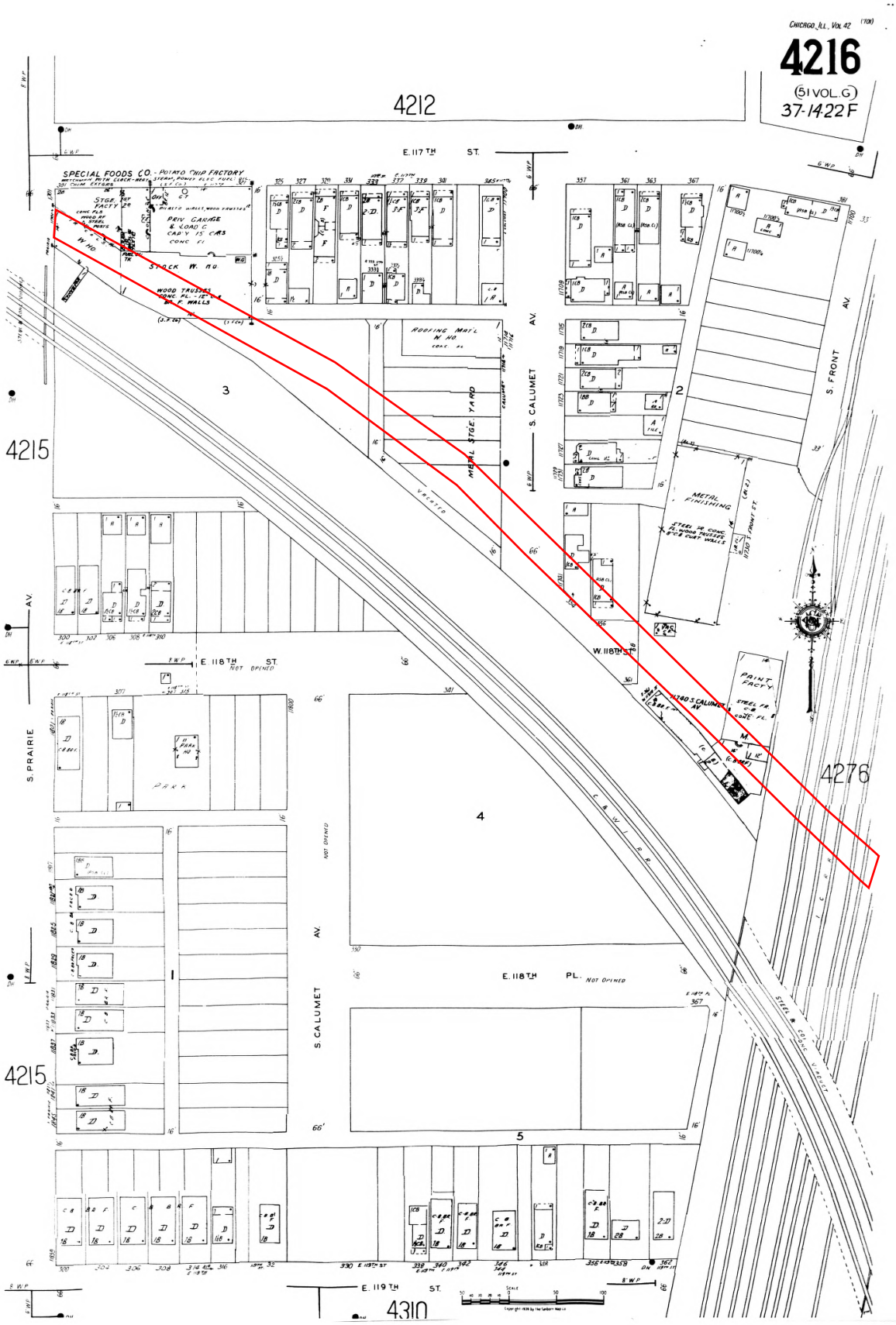

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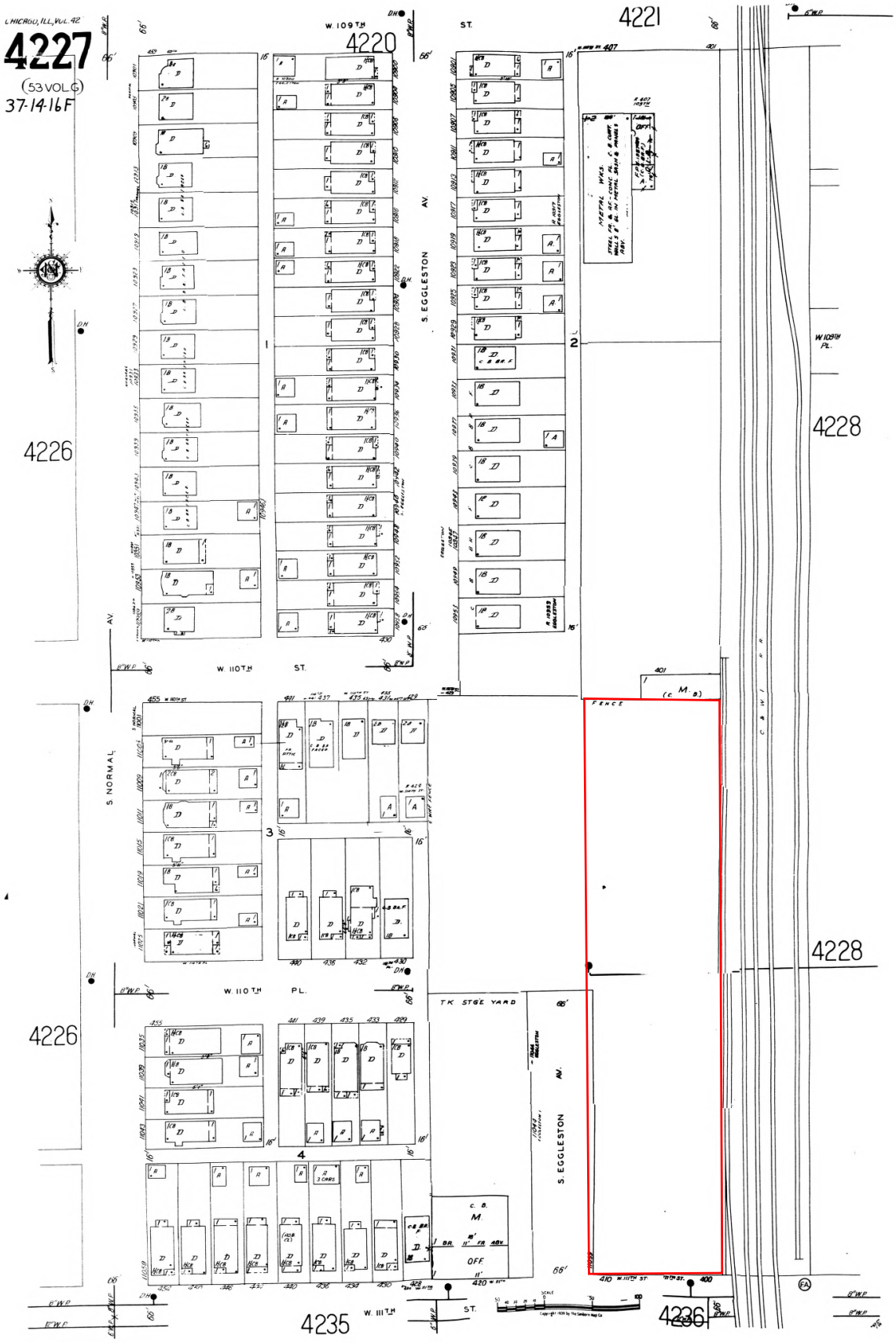

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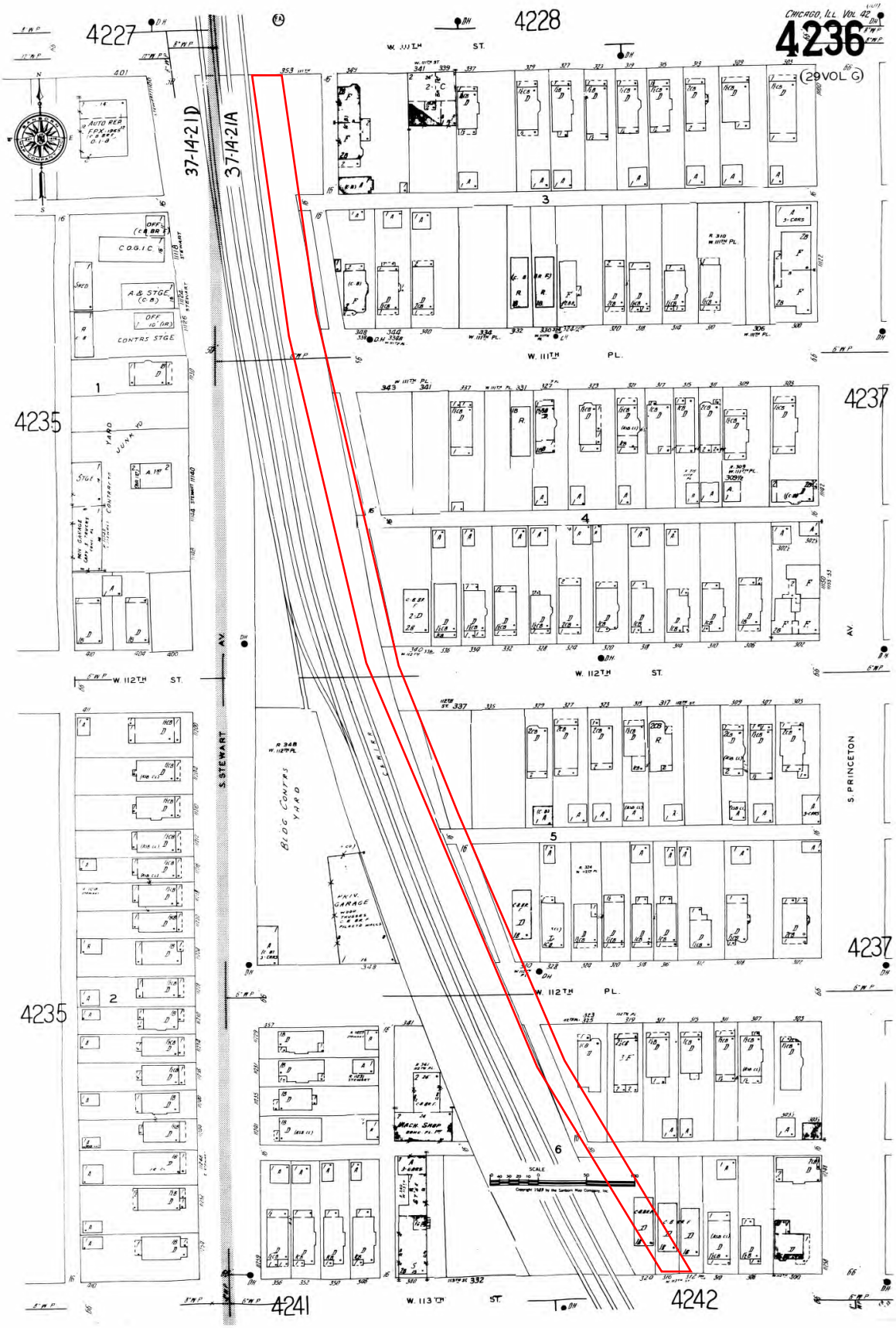

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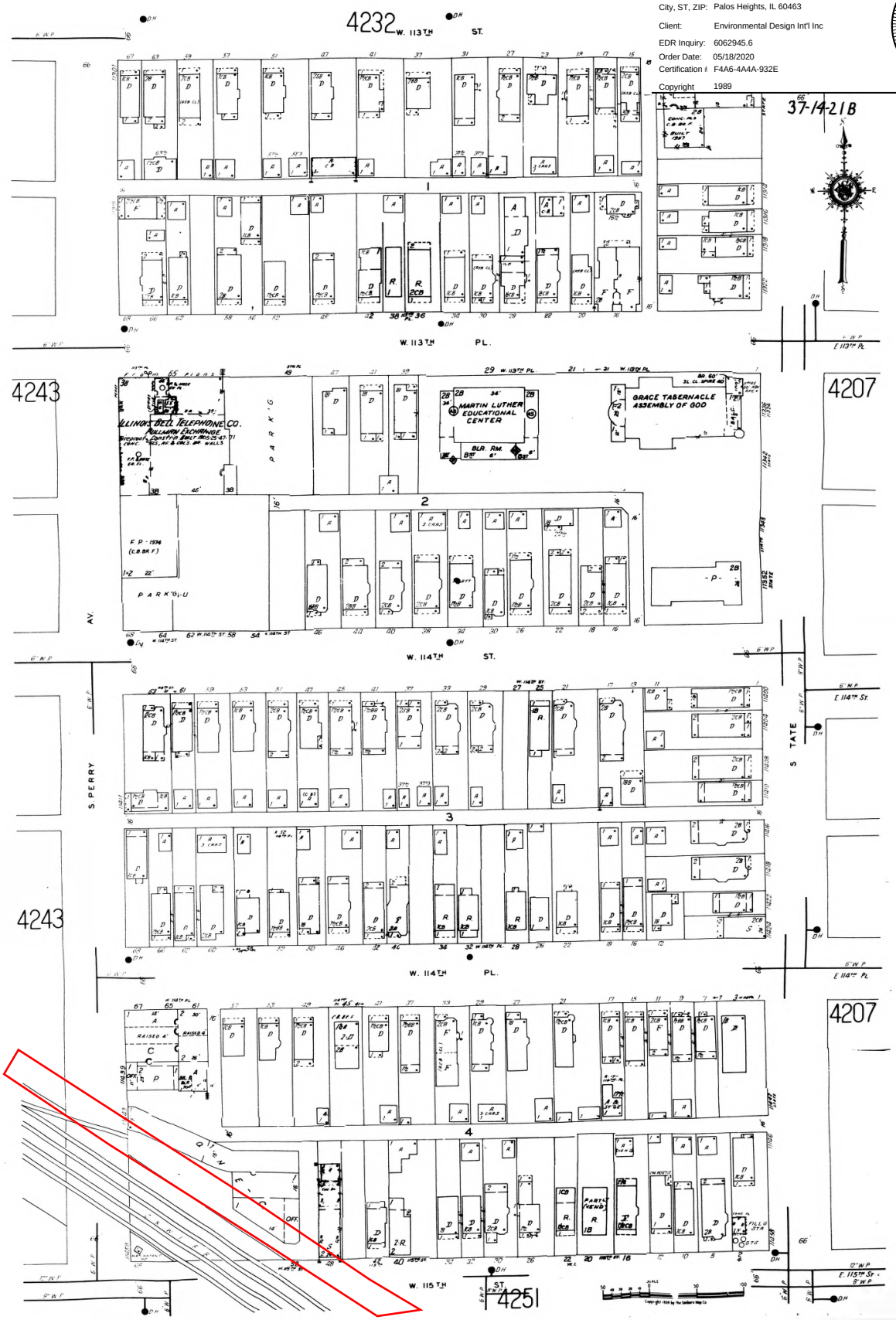

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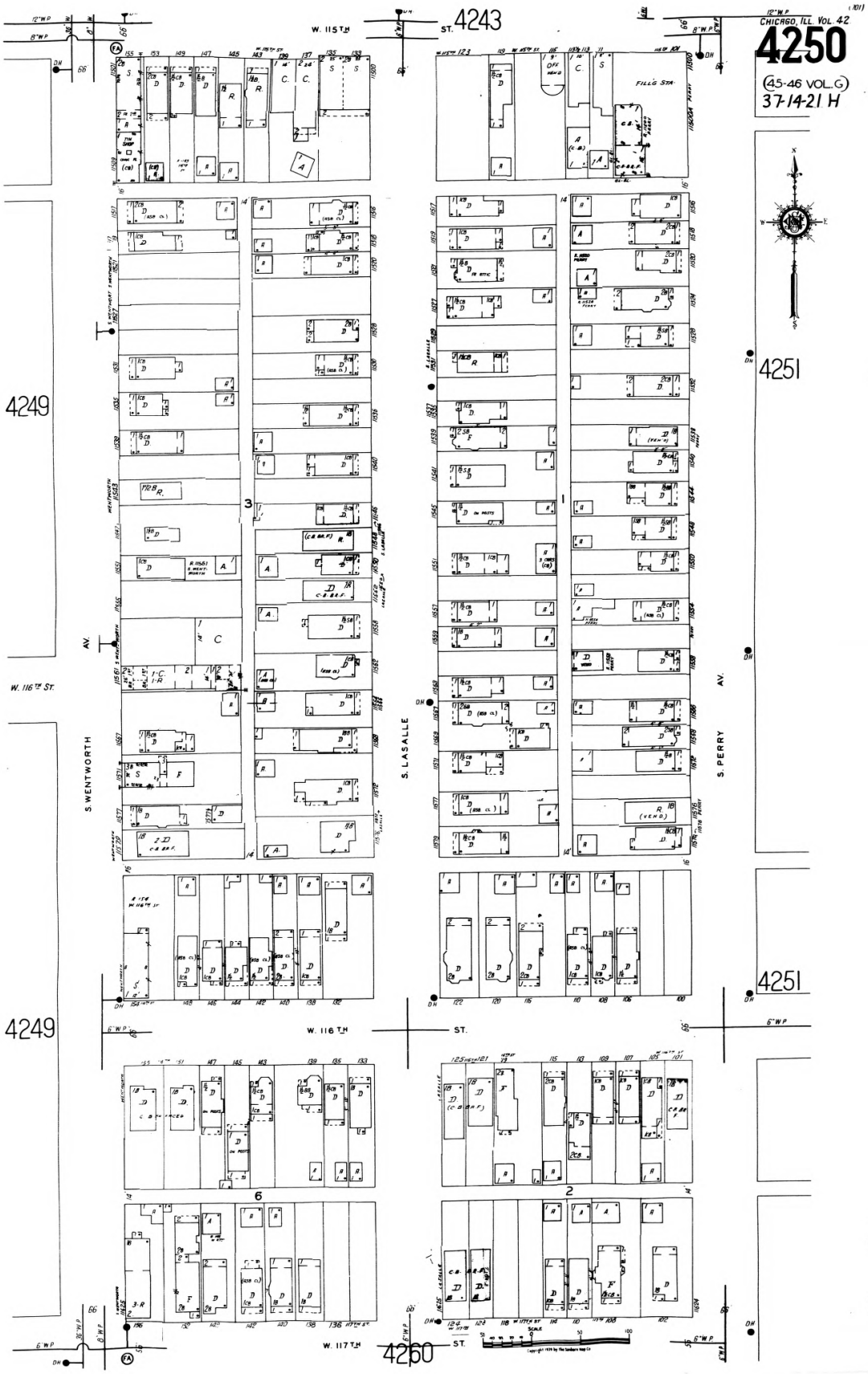

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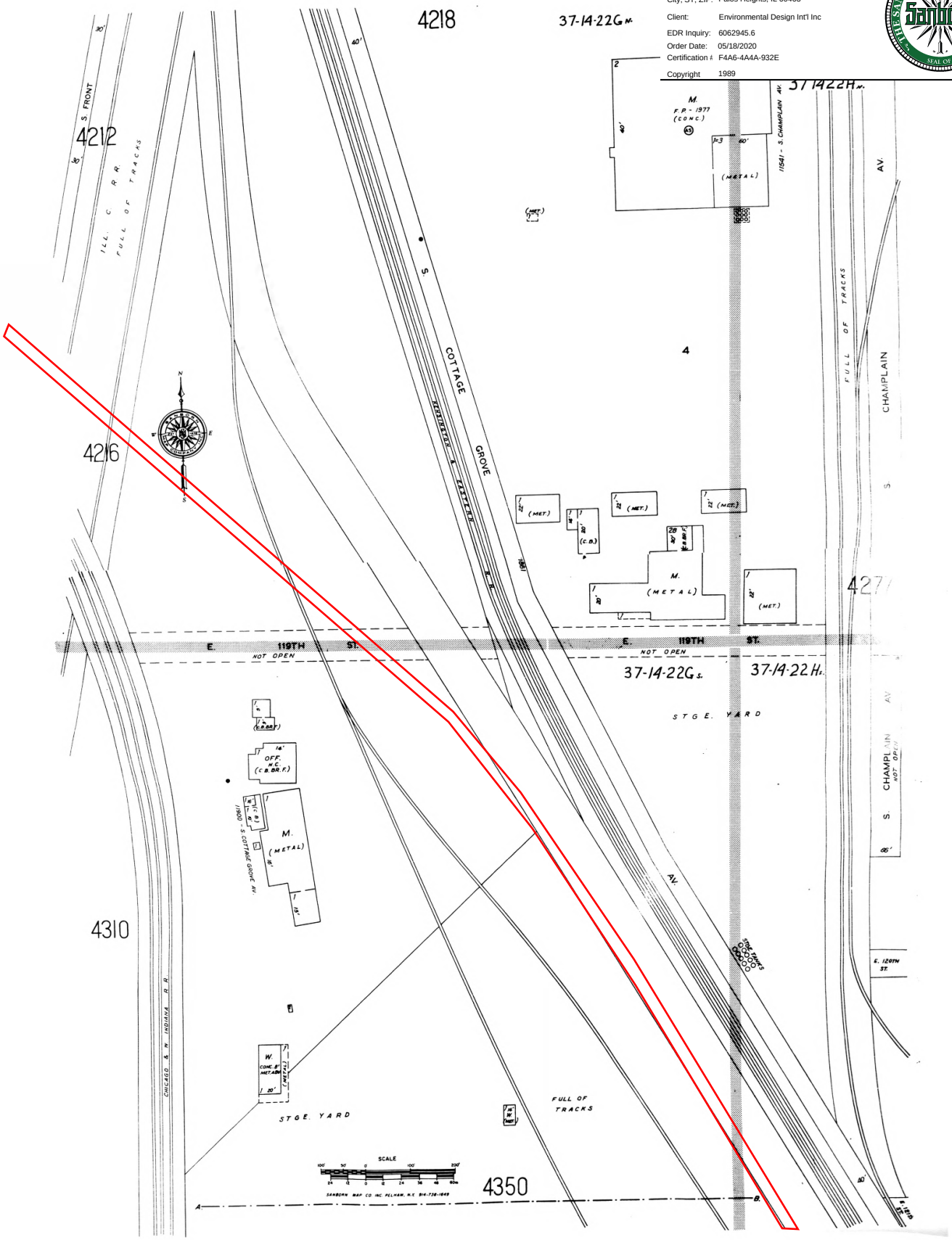

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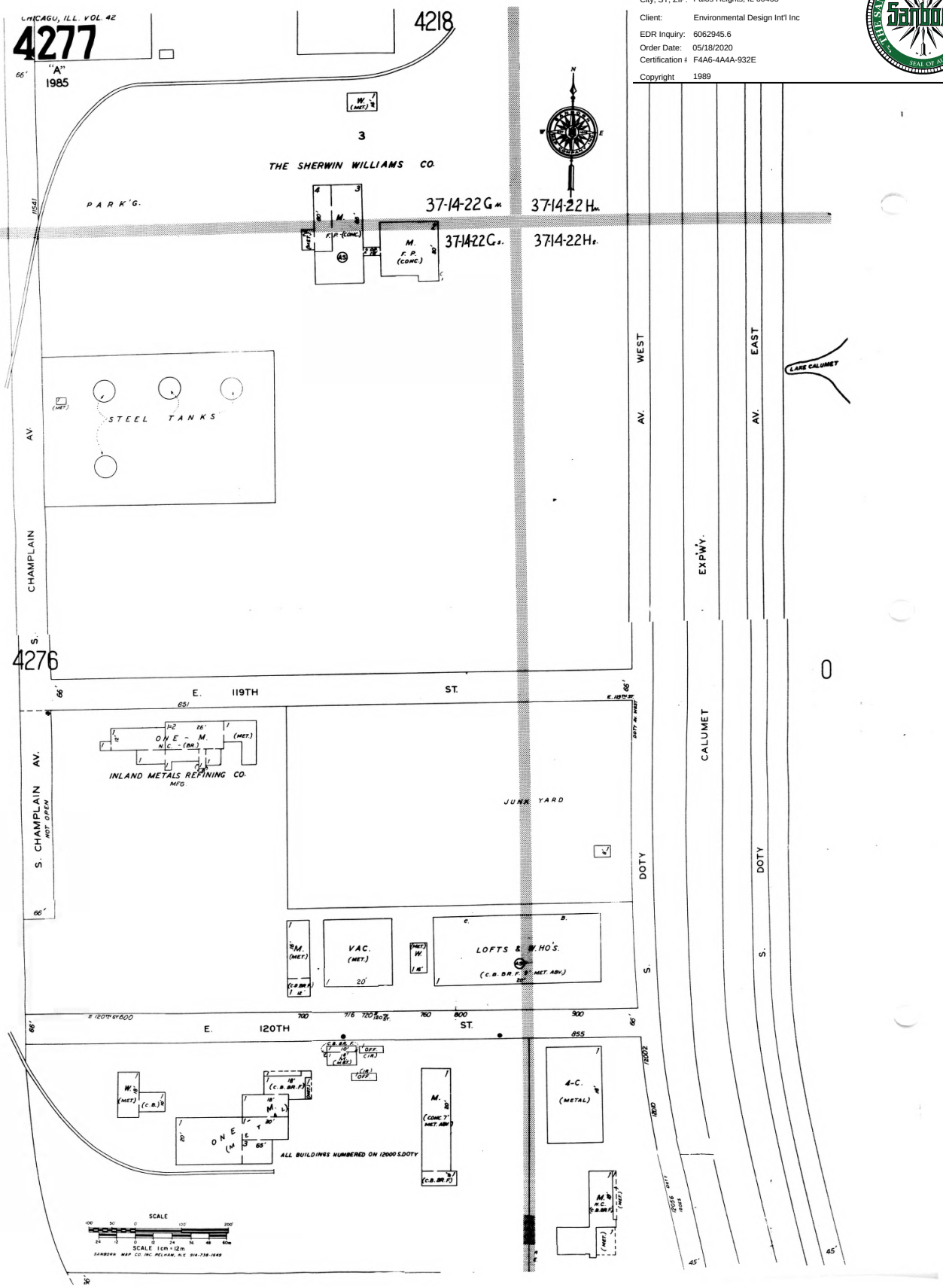

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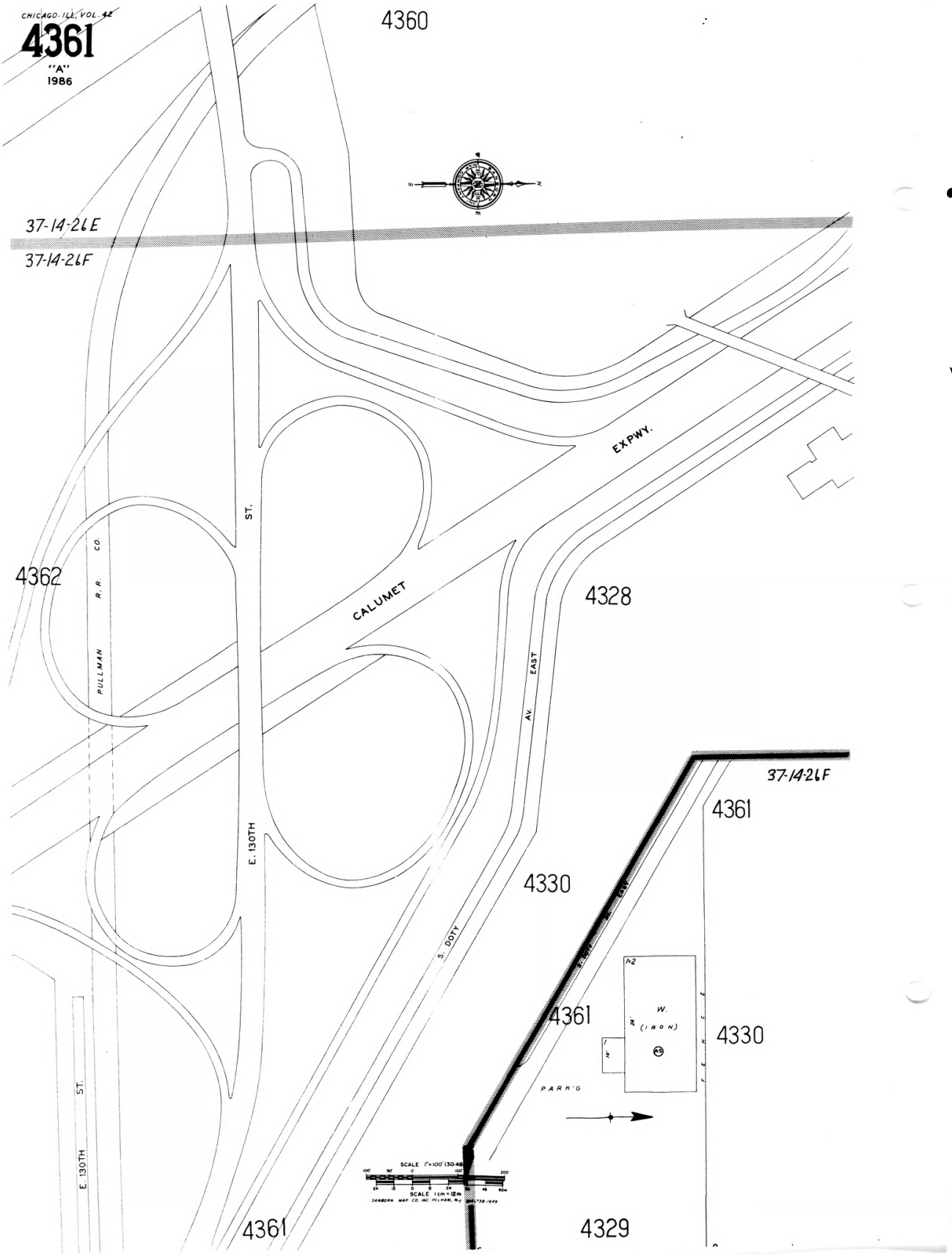

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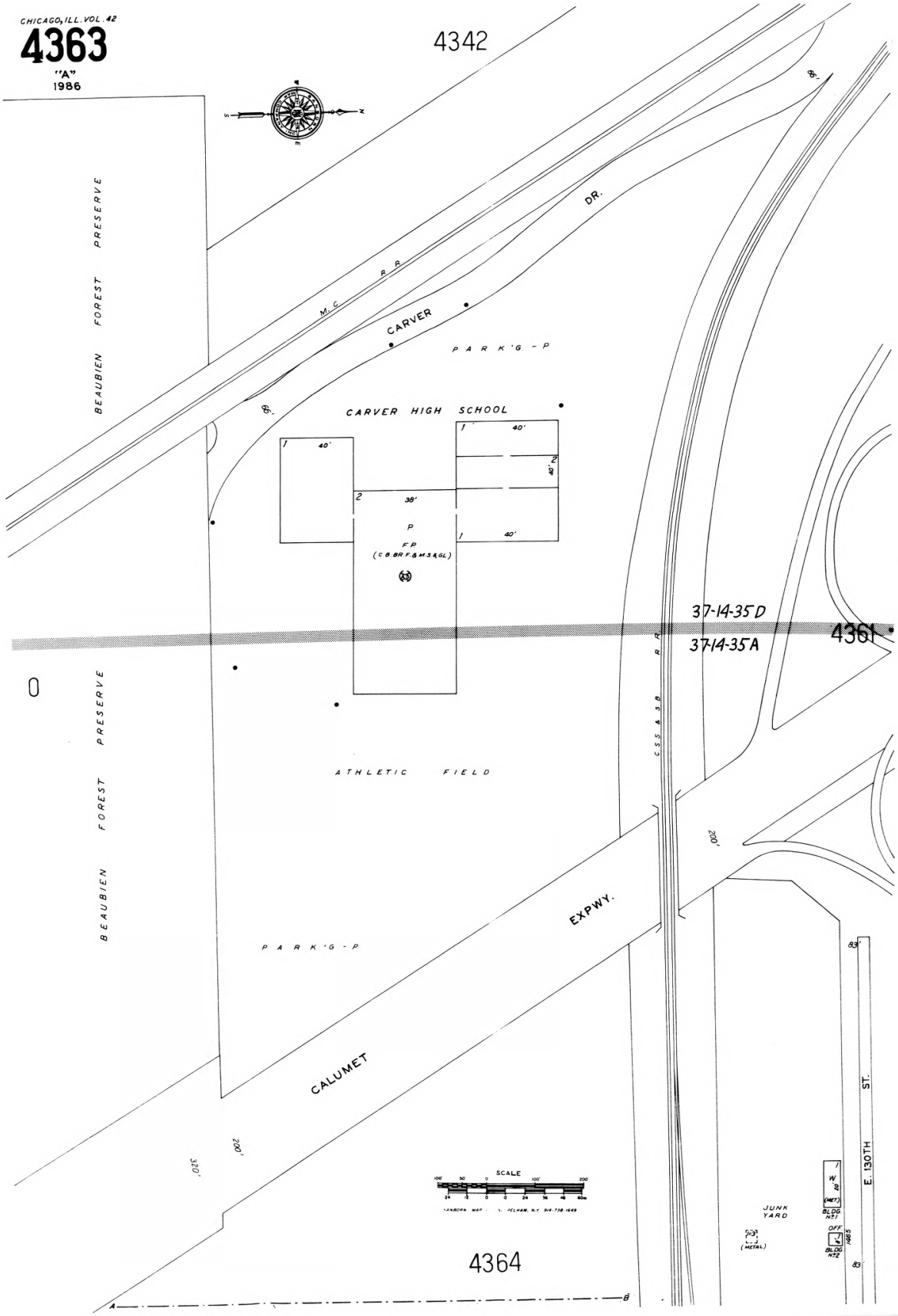

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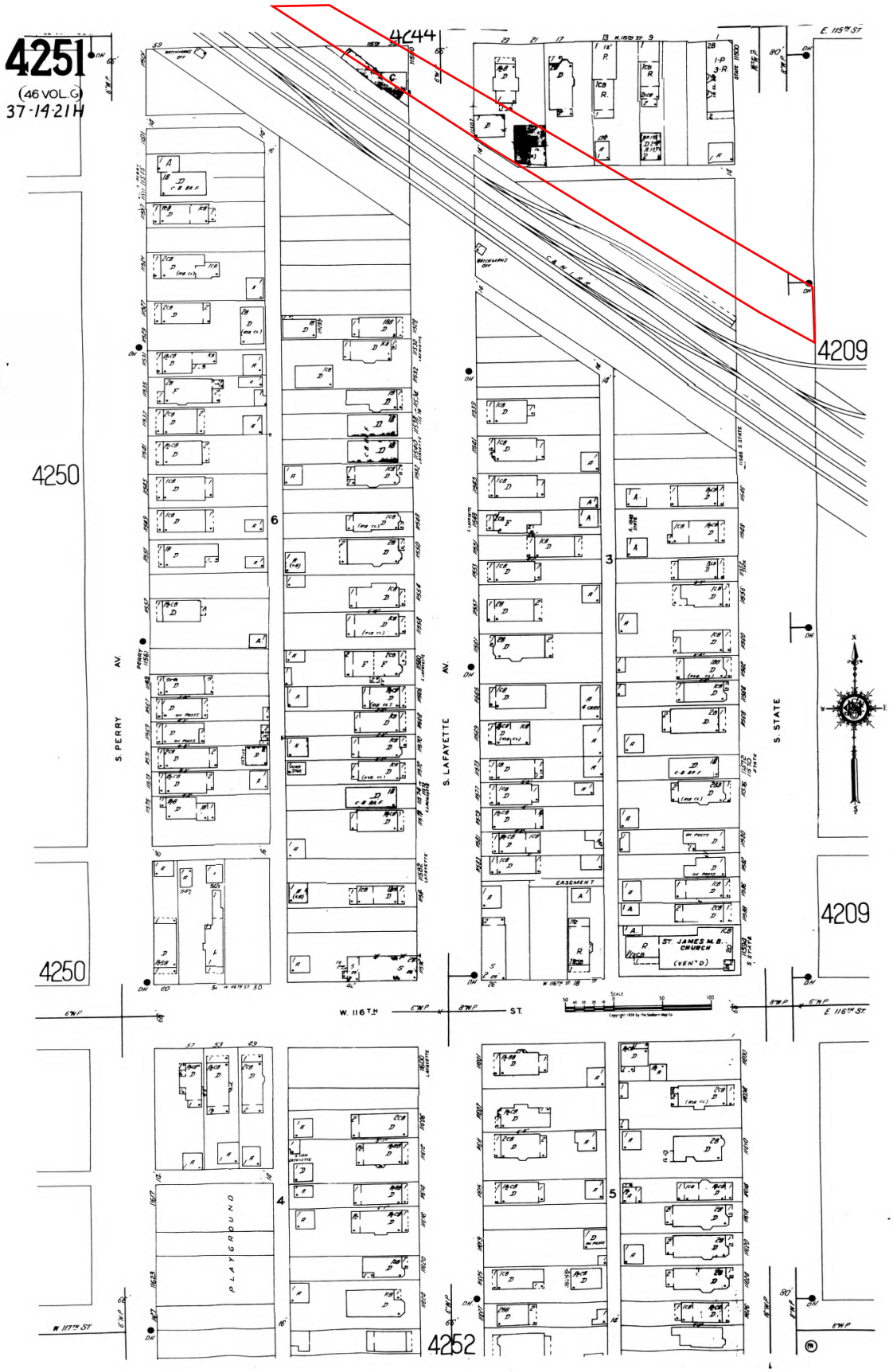

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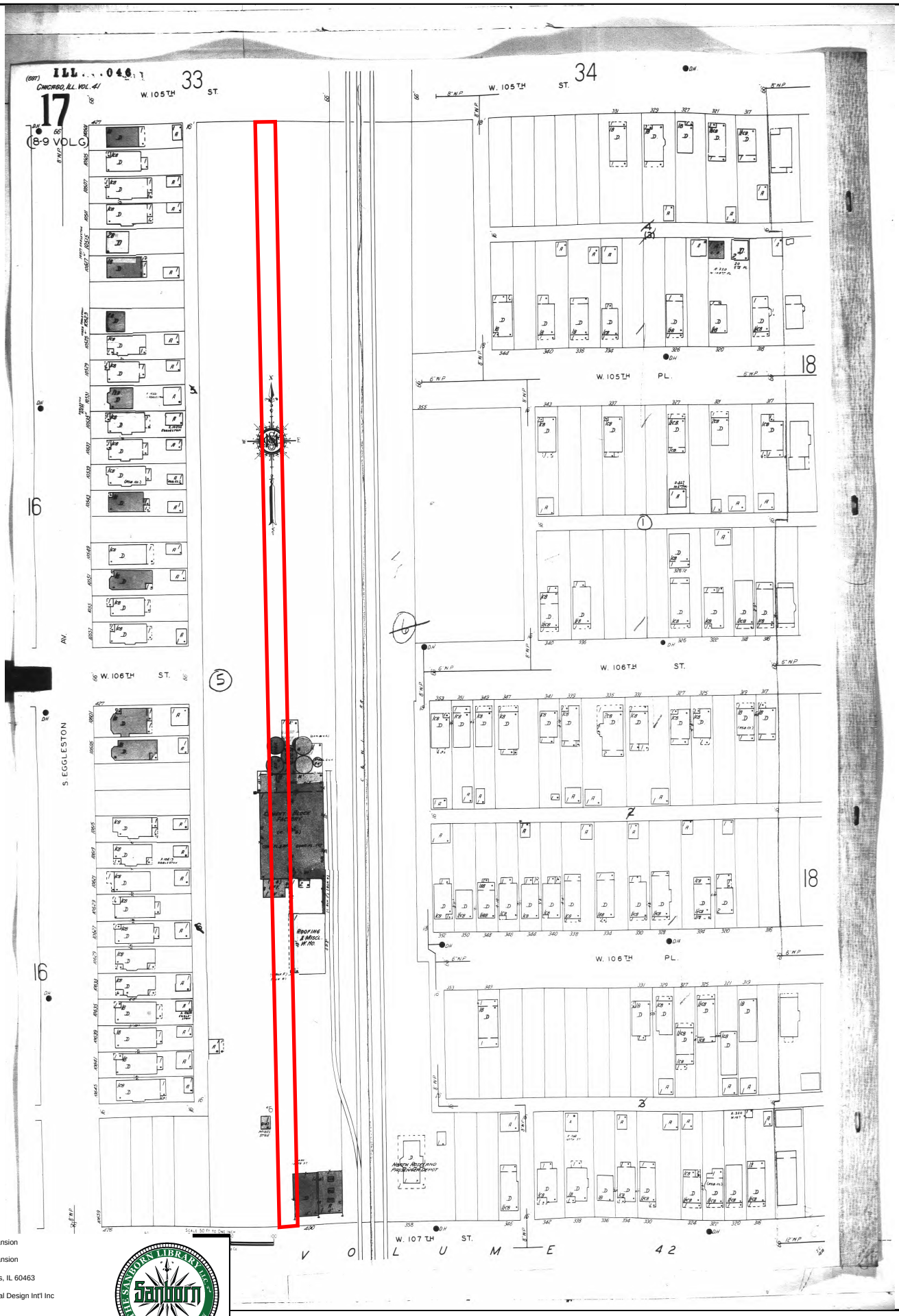

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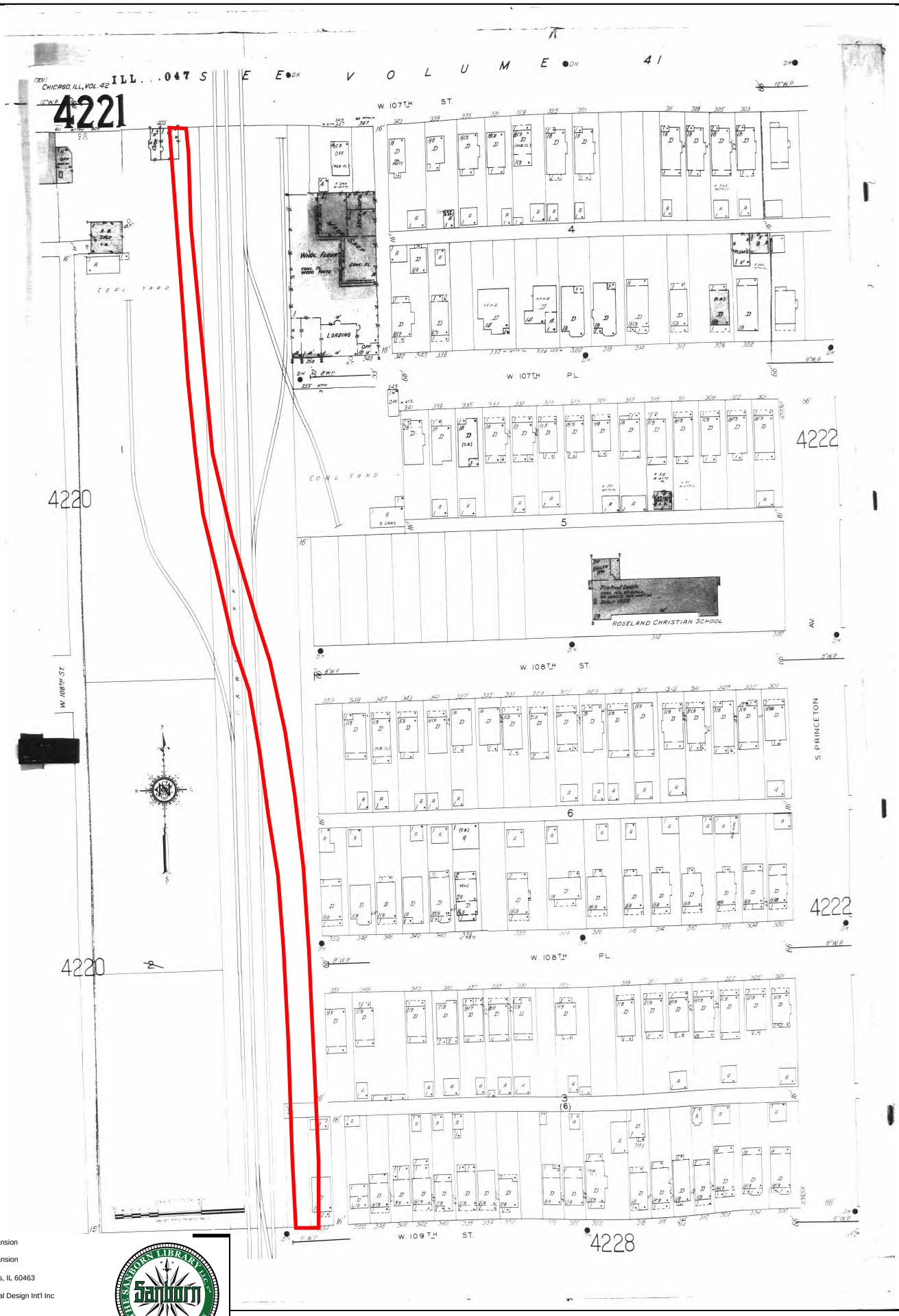

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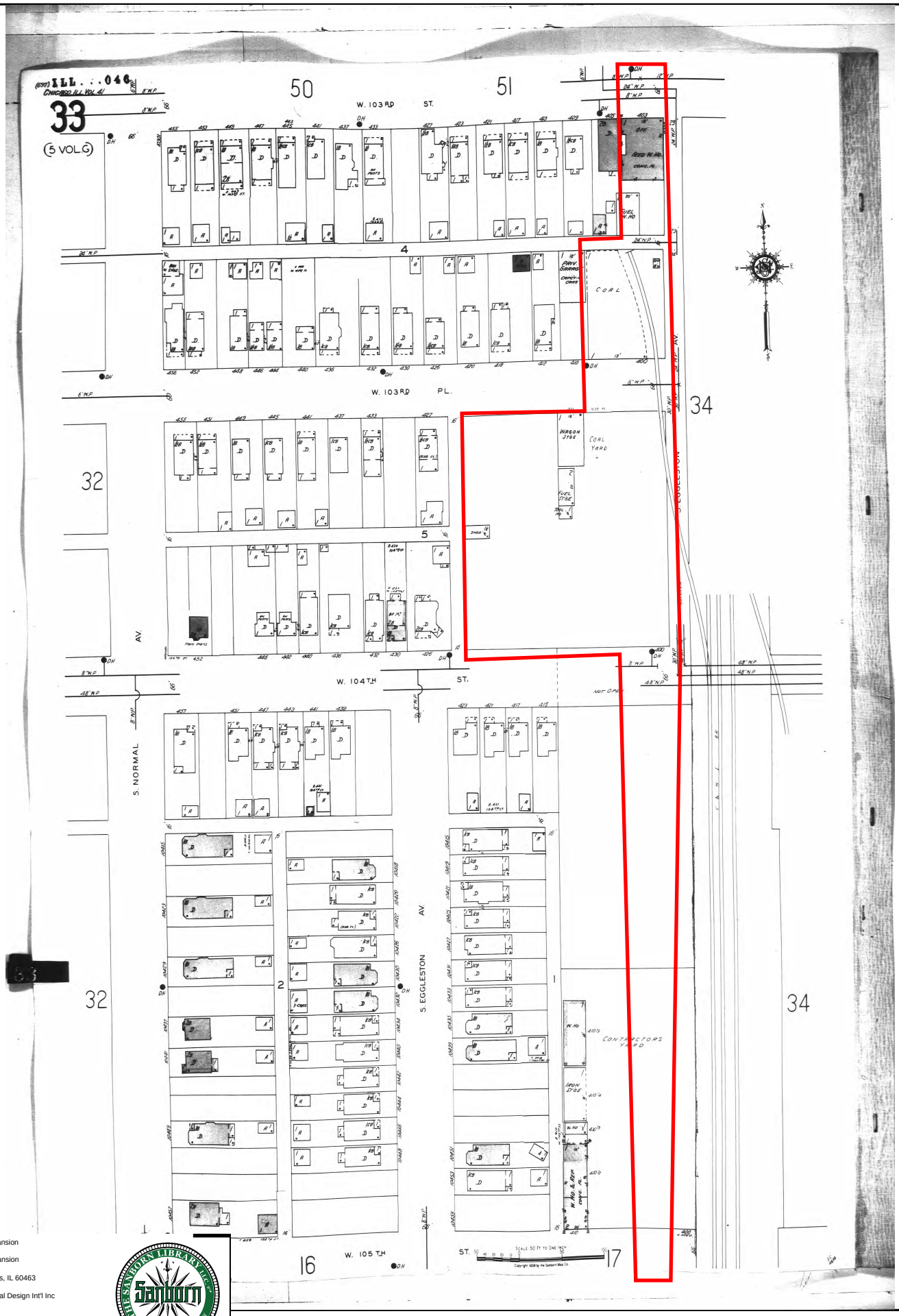

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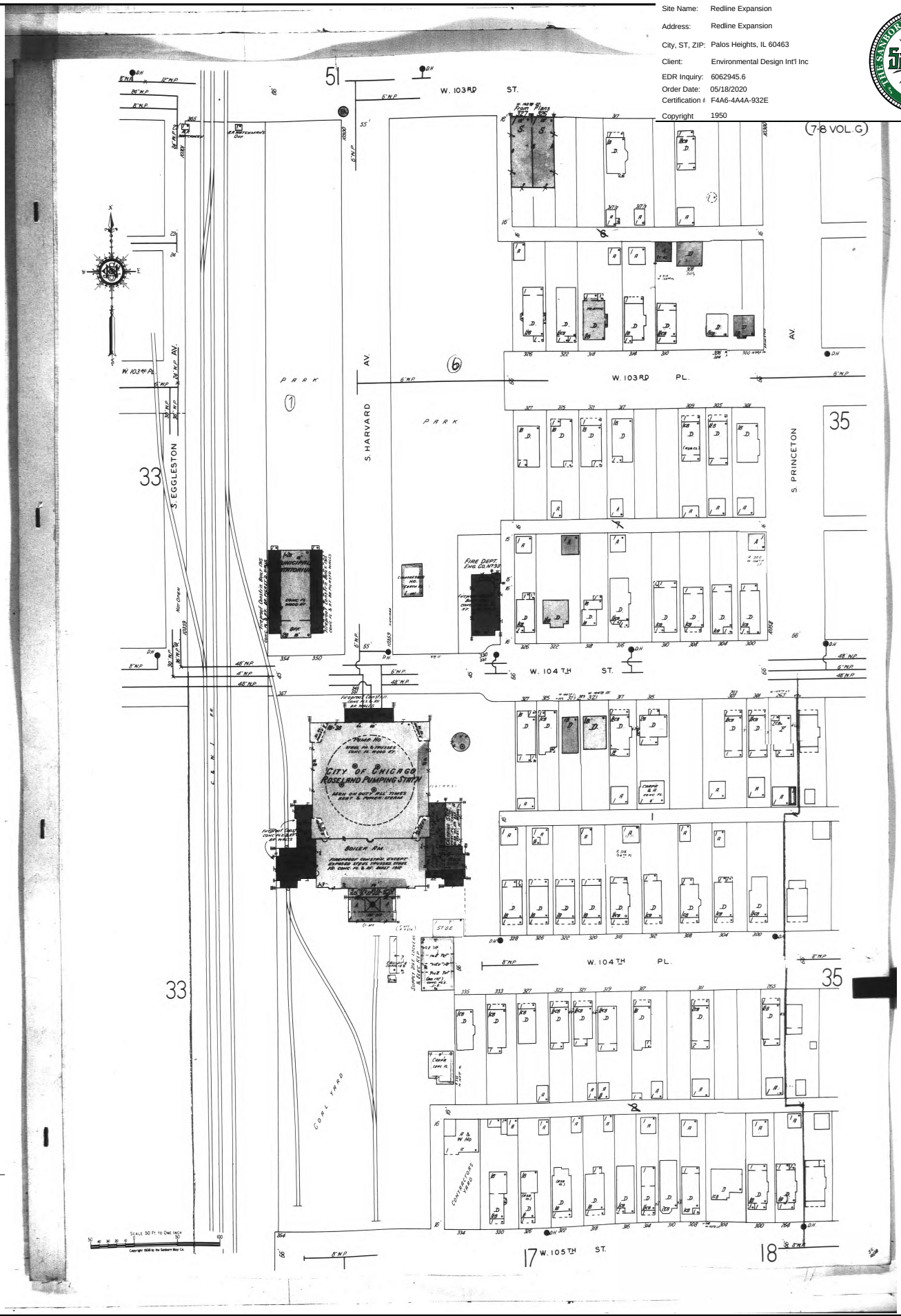

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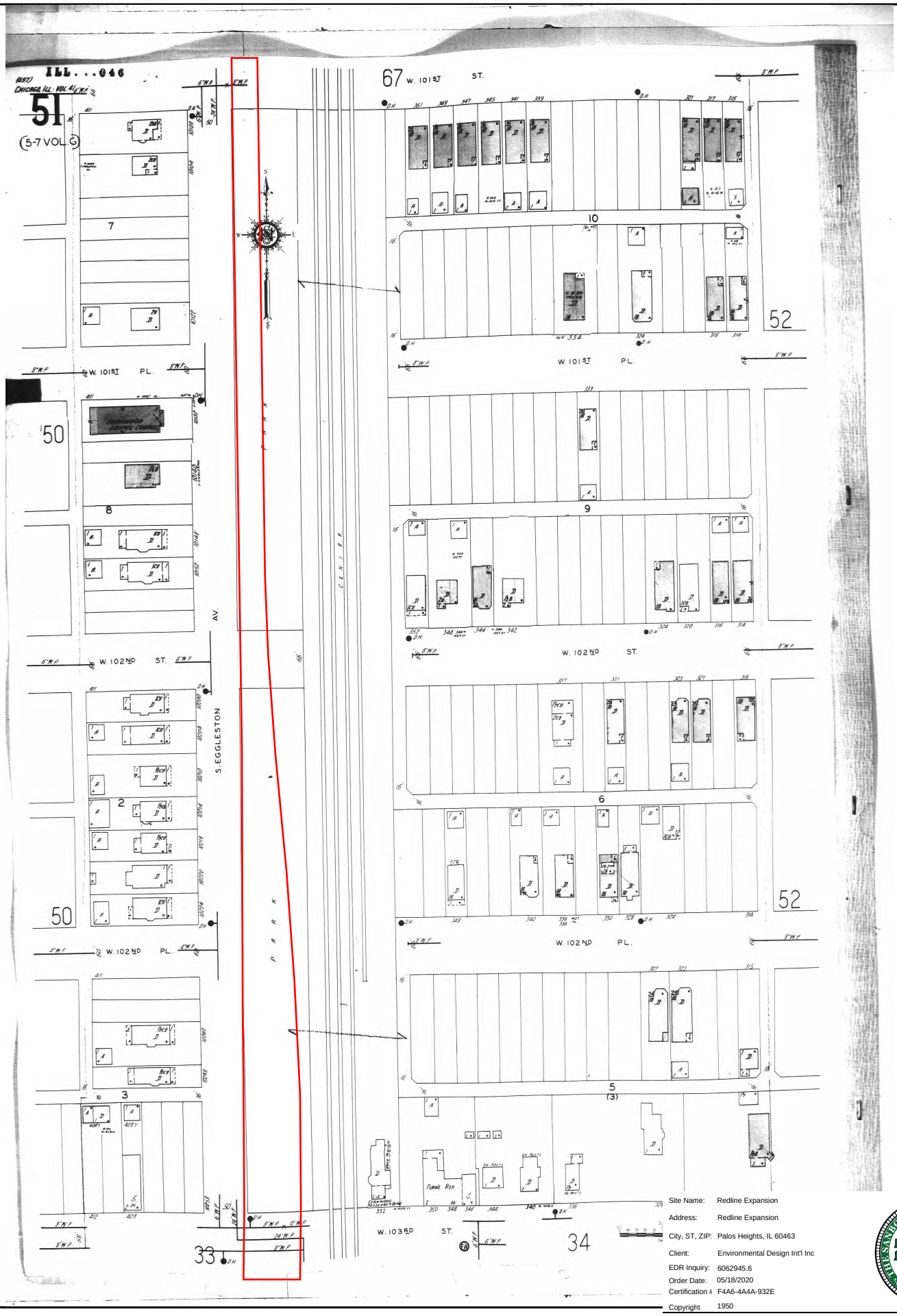

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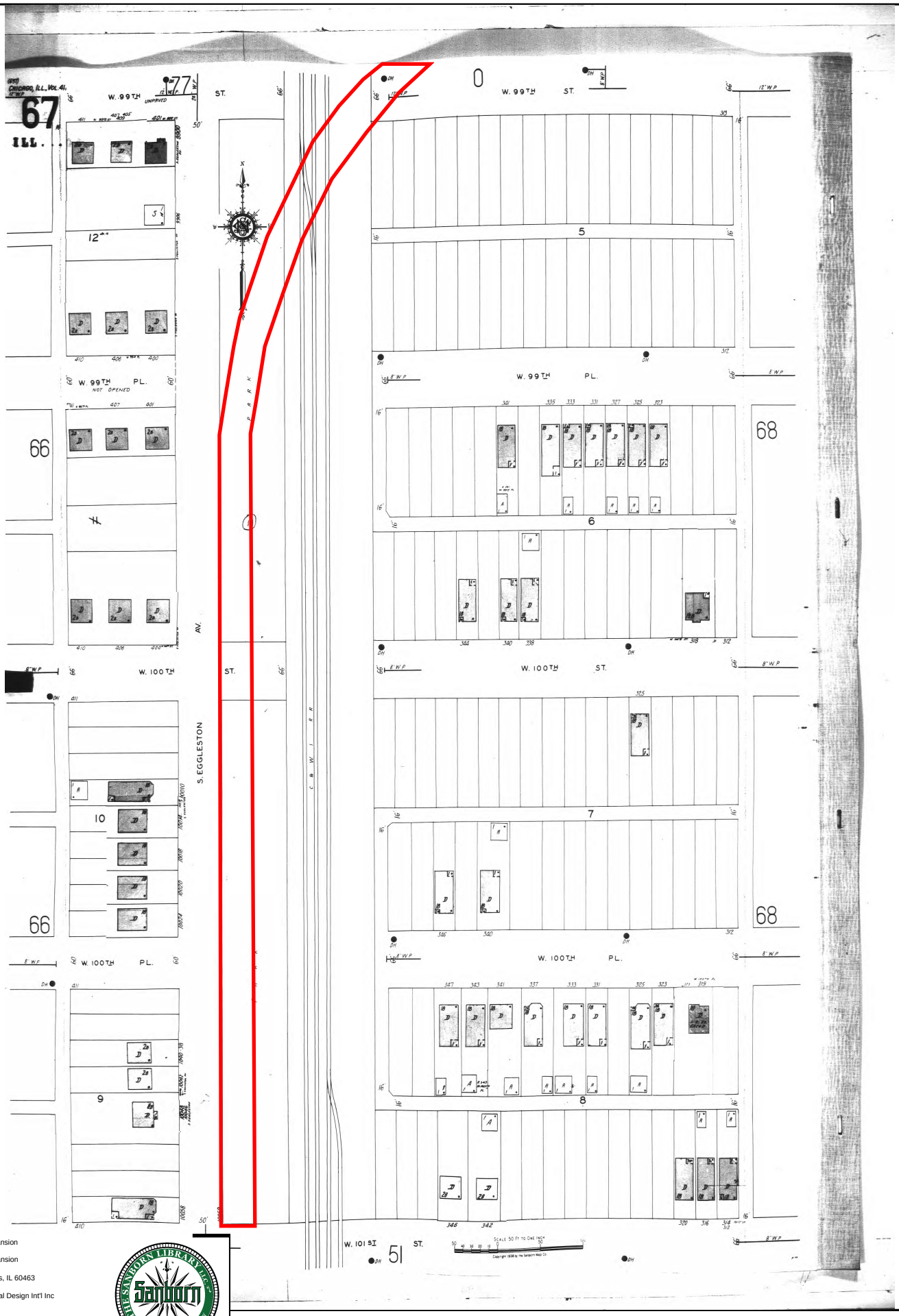

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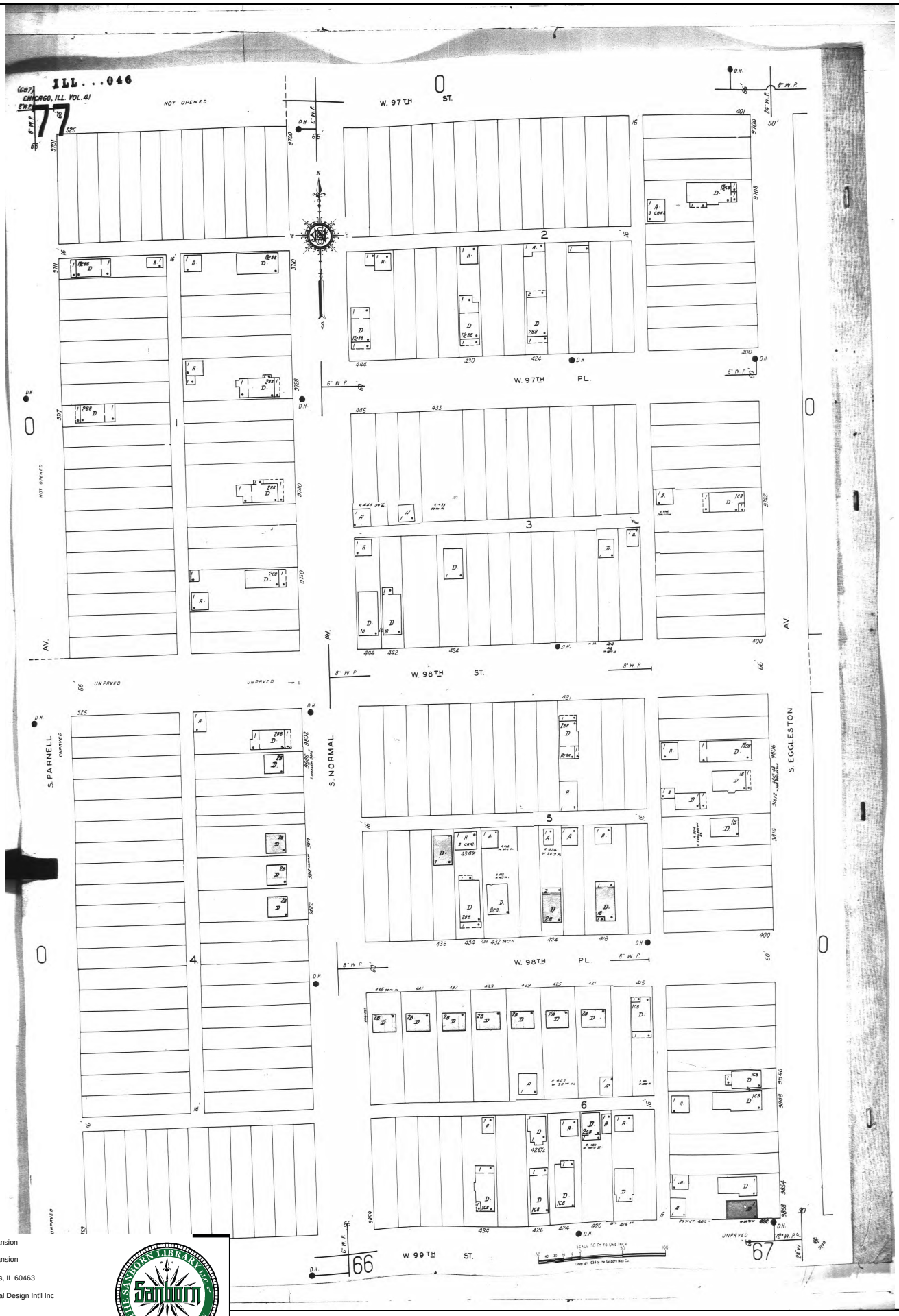

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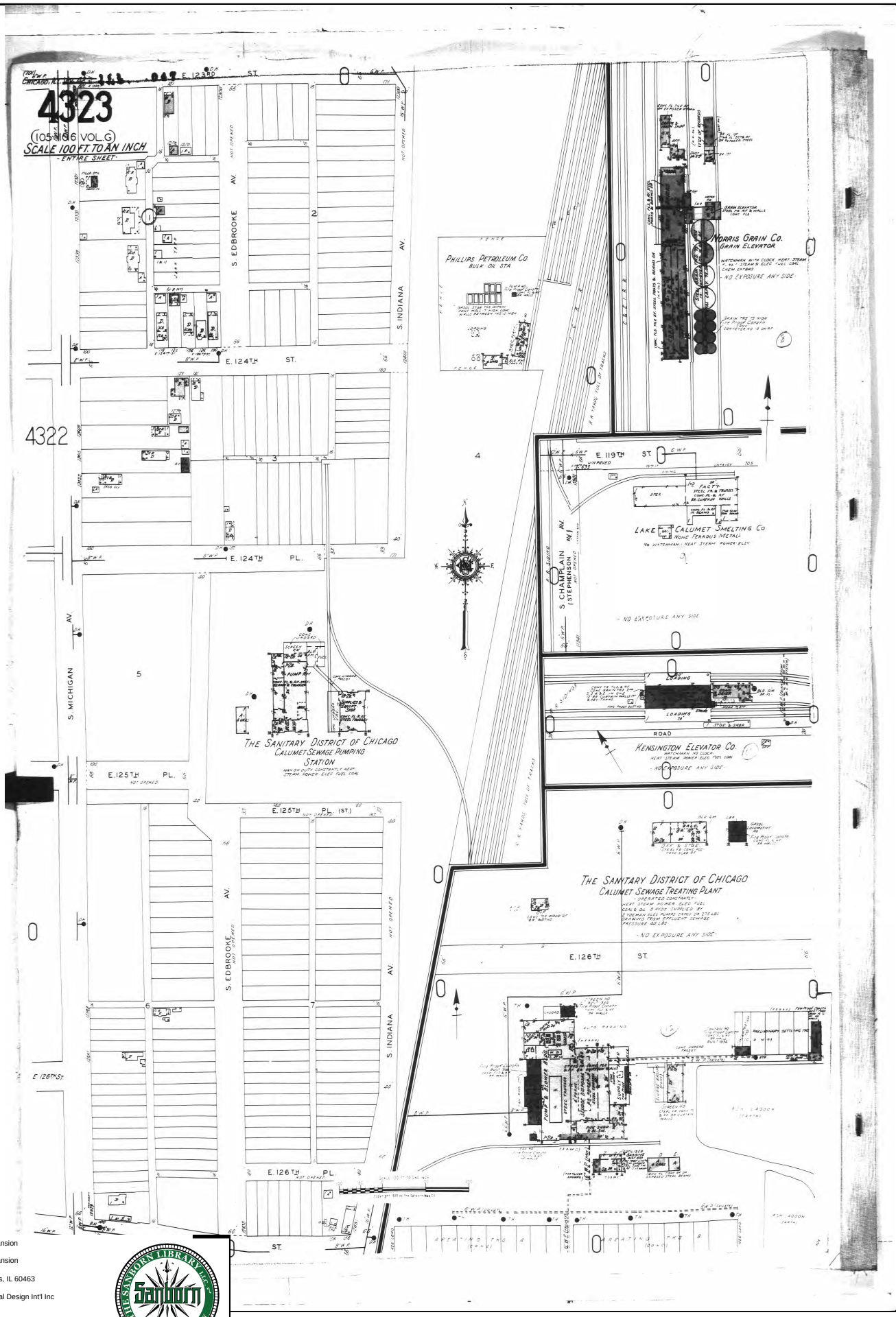

Site Name:	Redline Expansion
Address:	Redline Expansion
City, ST, ZIP:	Palos Heights, IL 60463
Client:	Environmental Design Int'l Inc
EDR Inquiry:	6062945.6
Order Date:	05/18/2020
Certification #	F4A6-4A4A-932E
Copyright	1950

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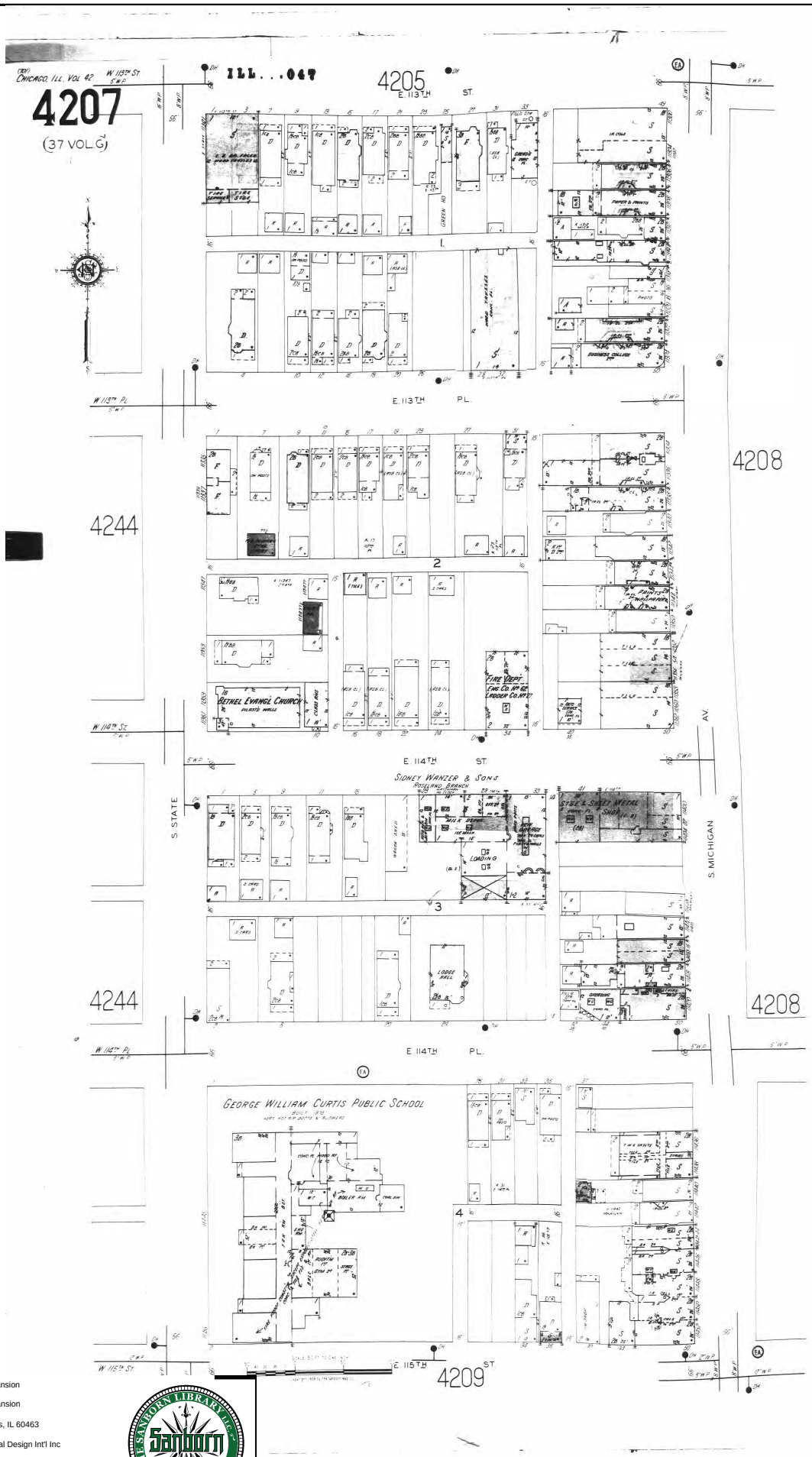

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Copyright	1950

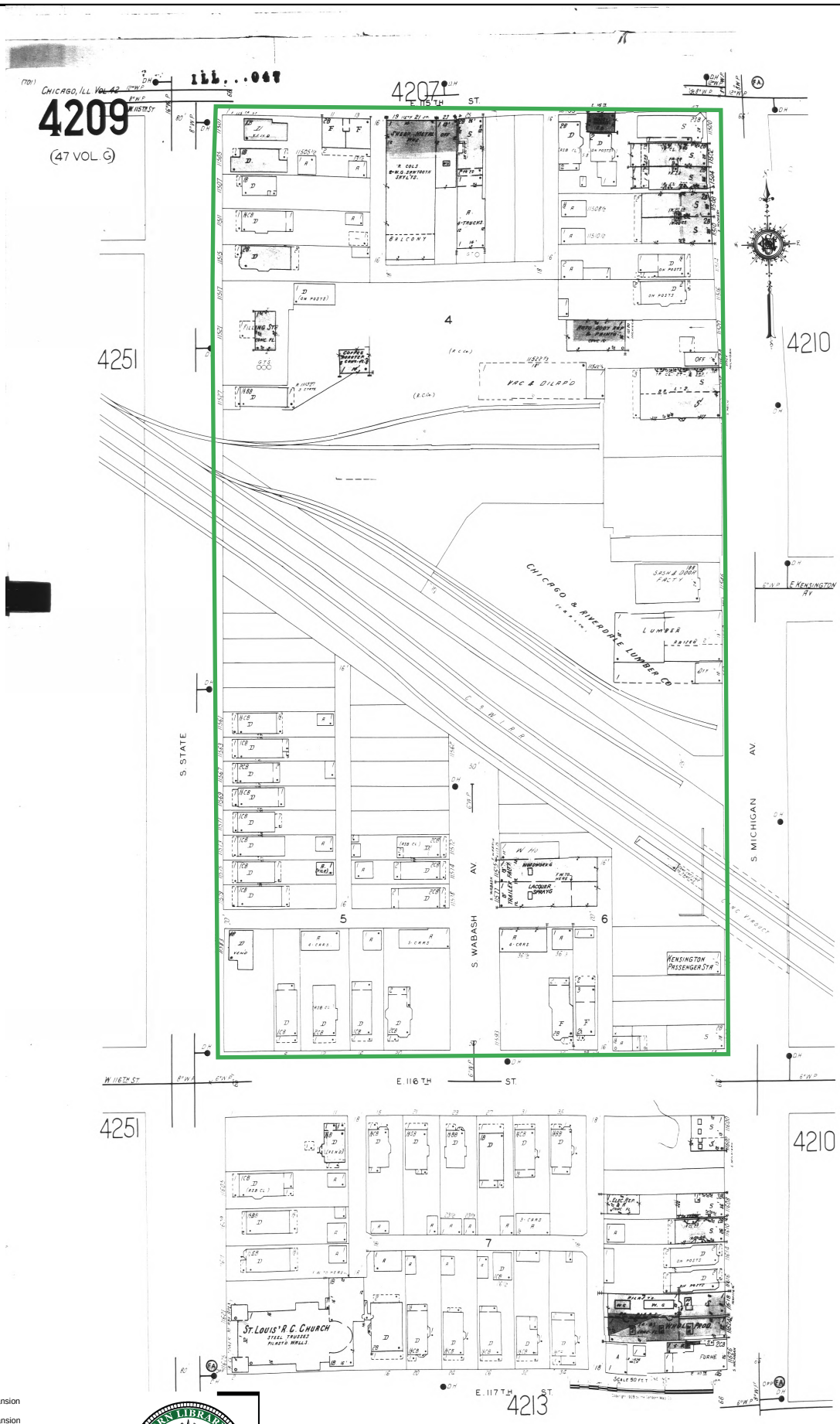

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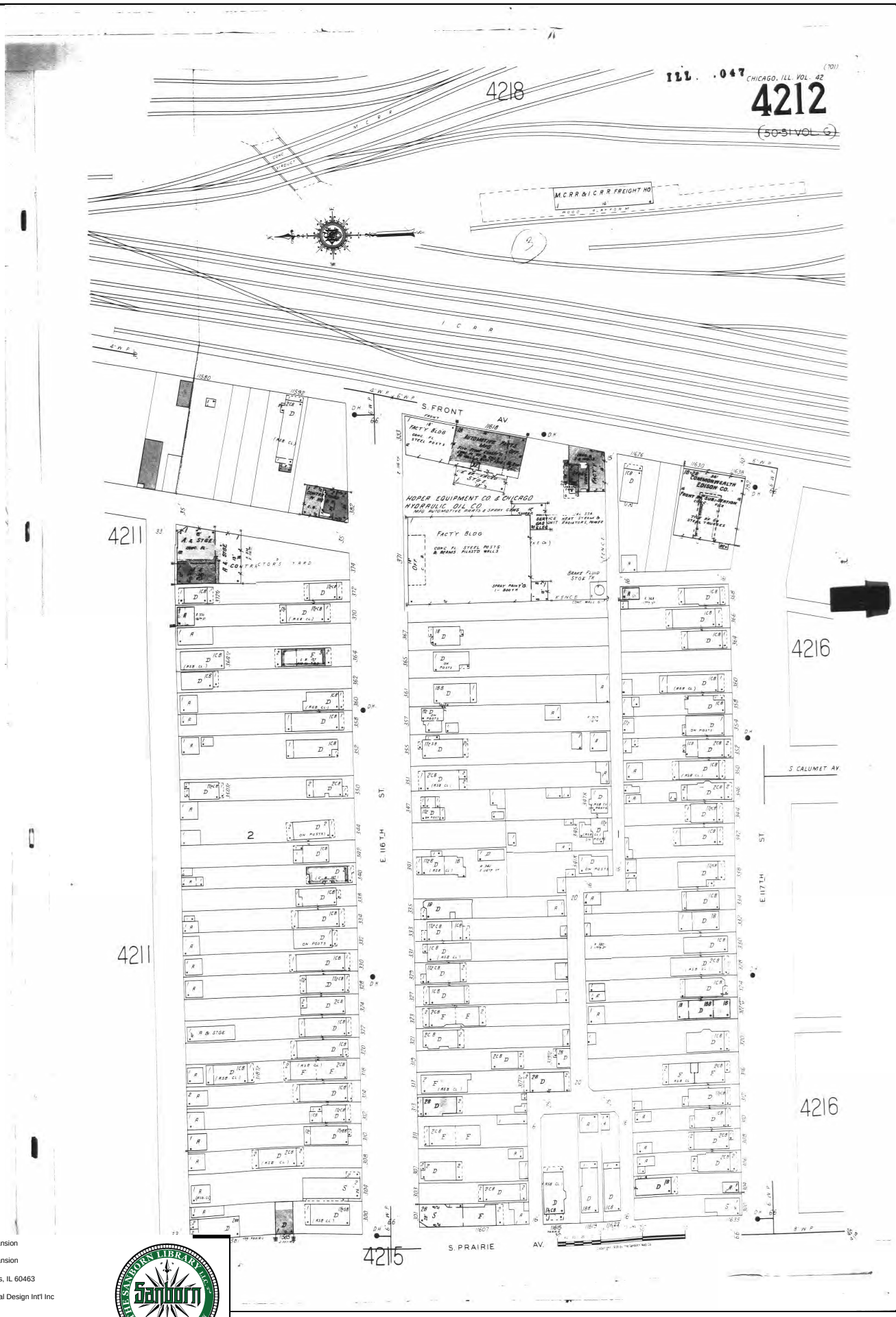

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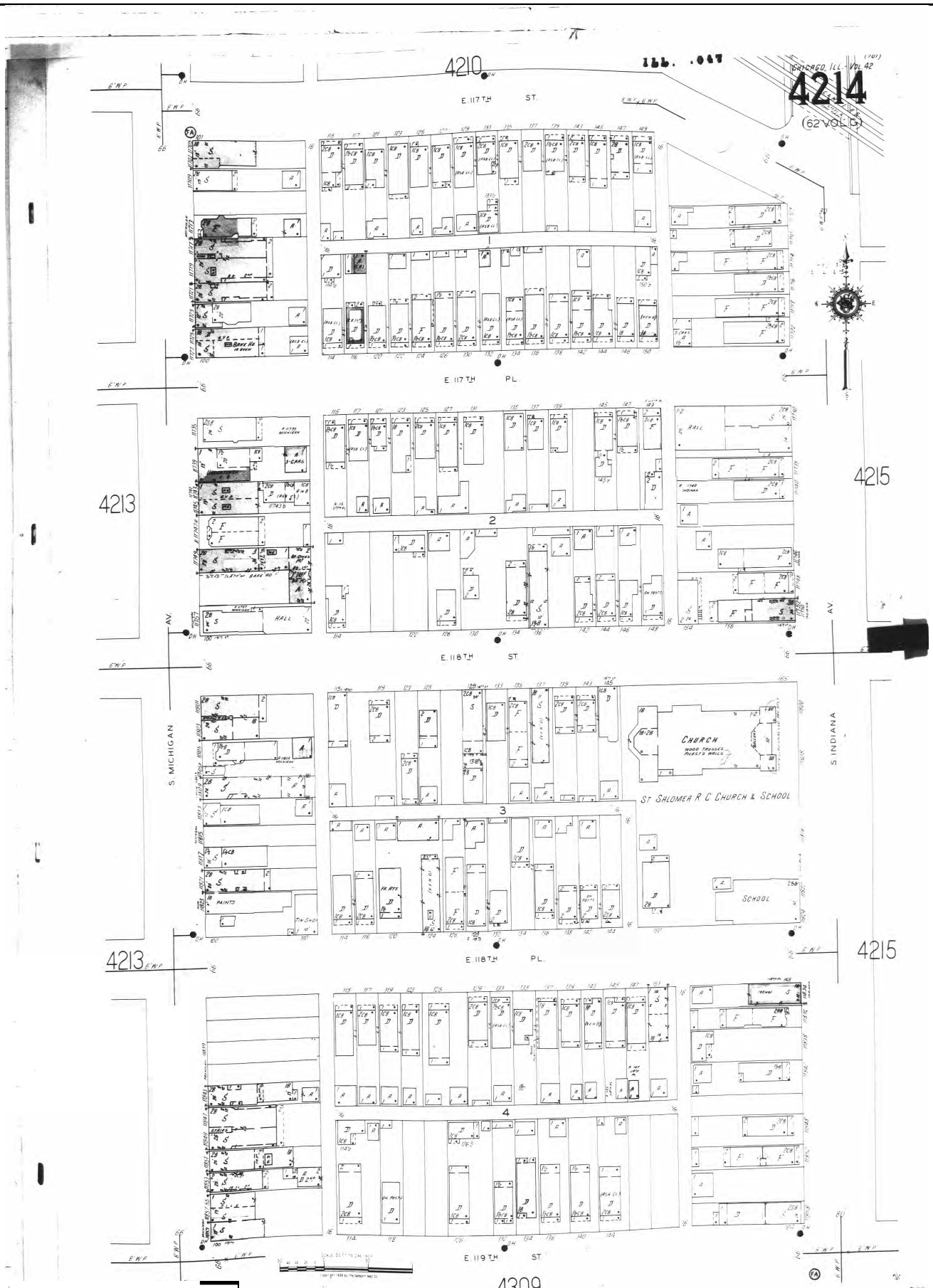

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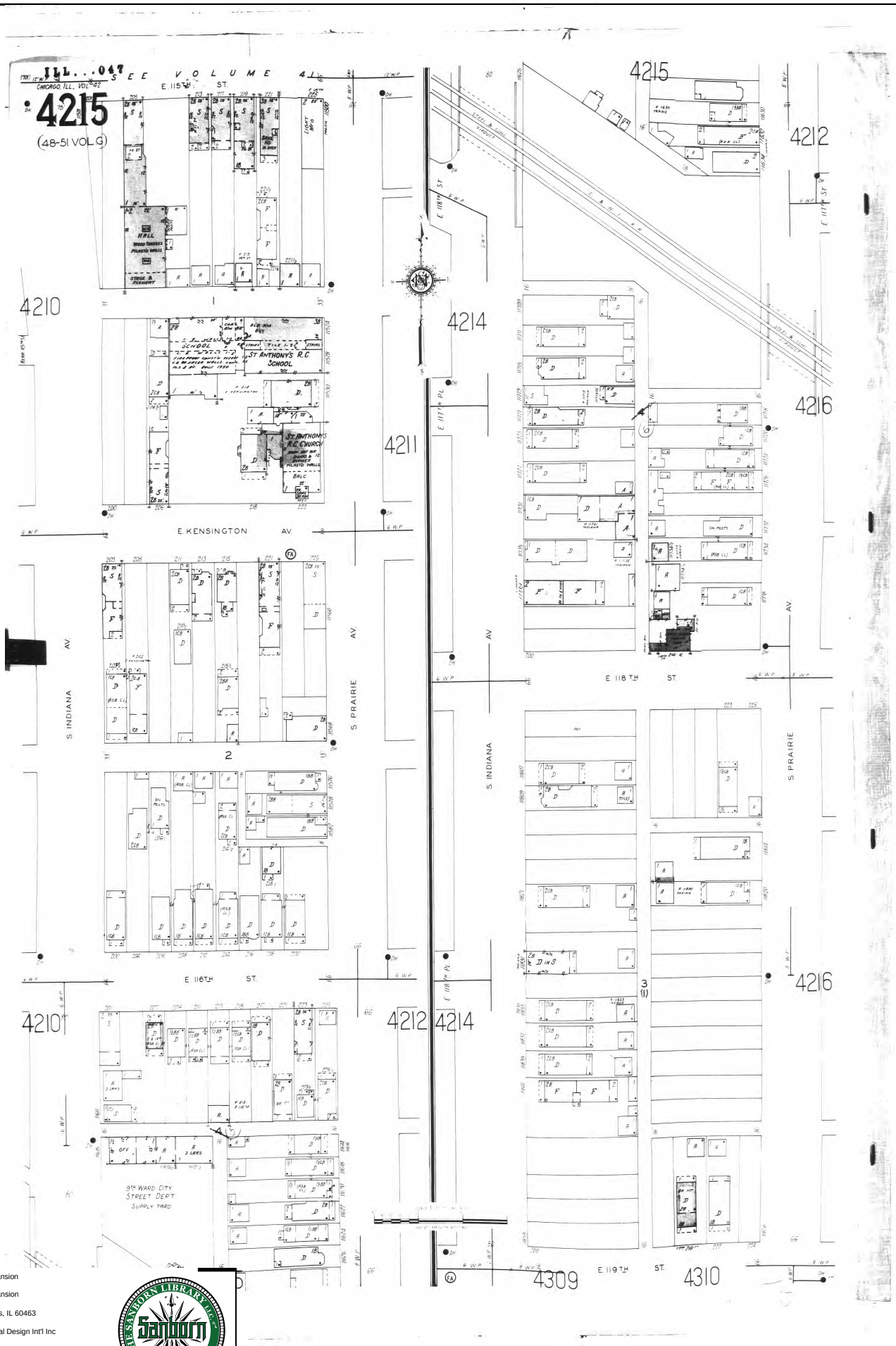

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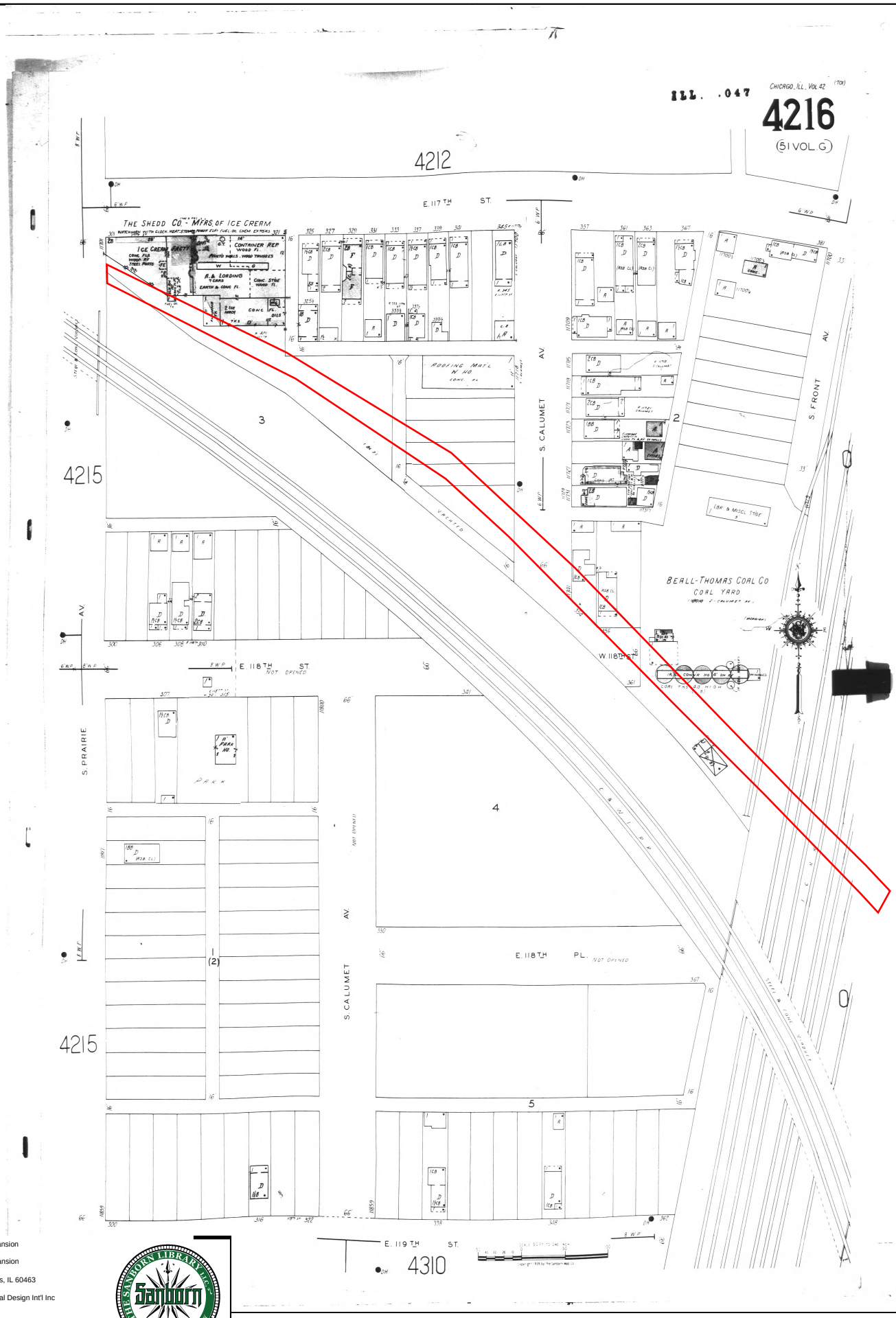

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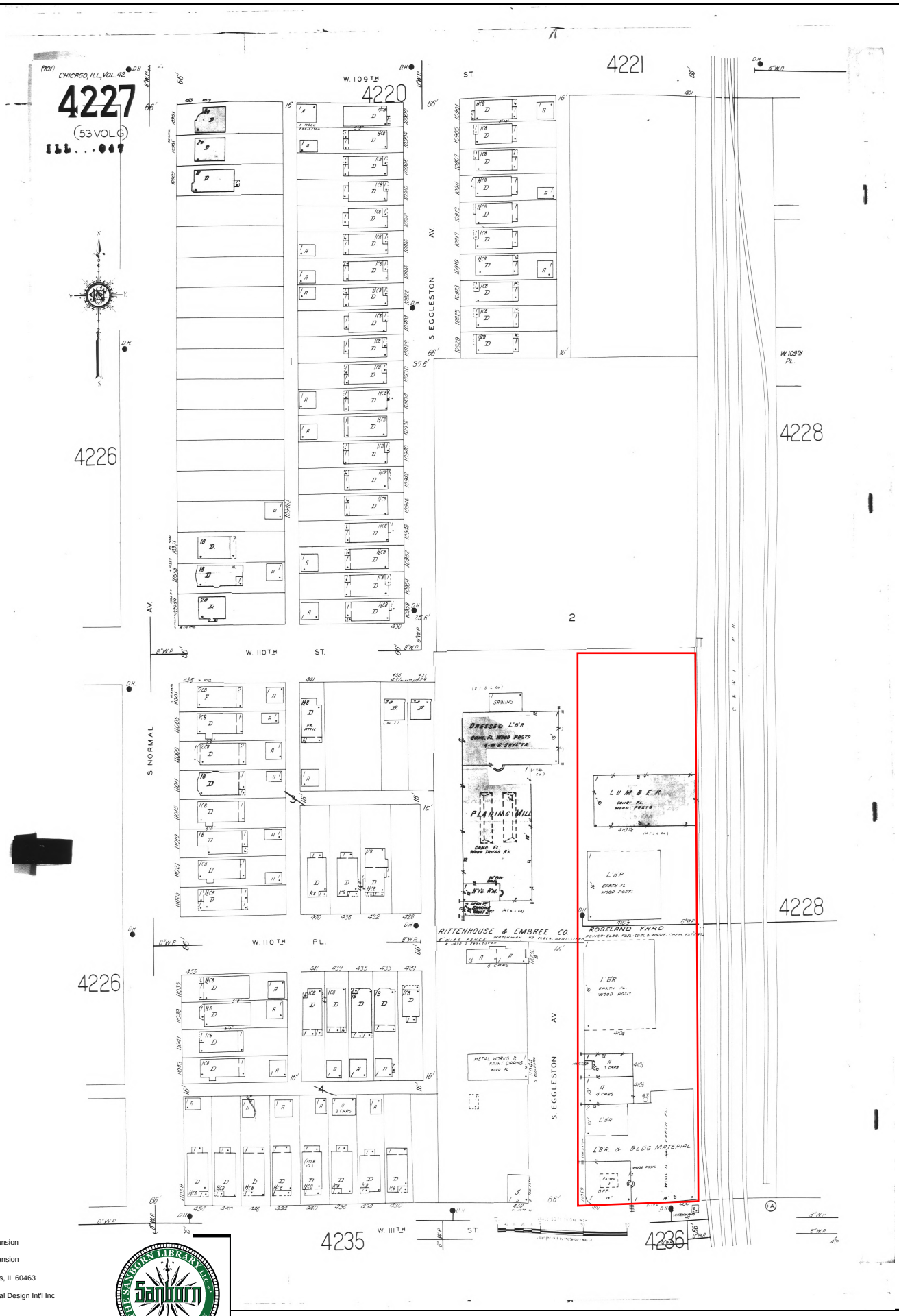

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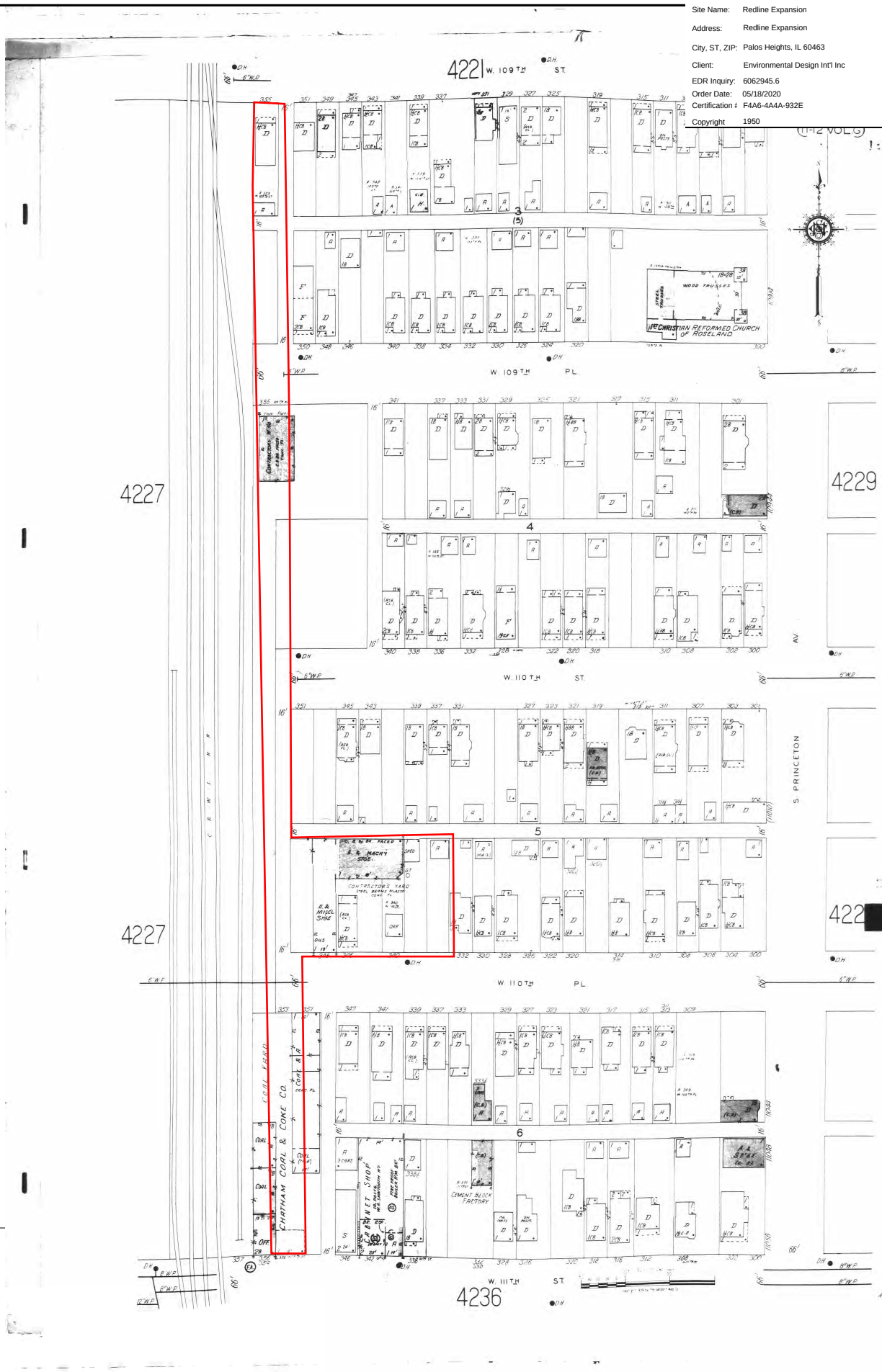

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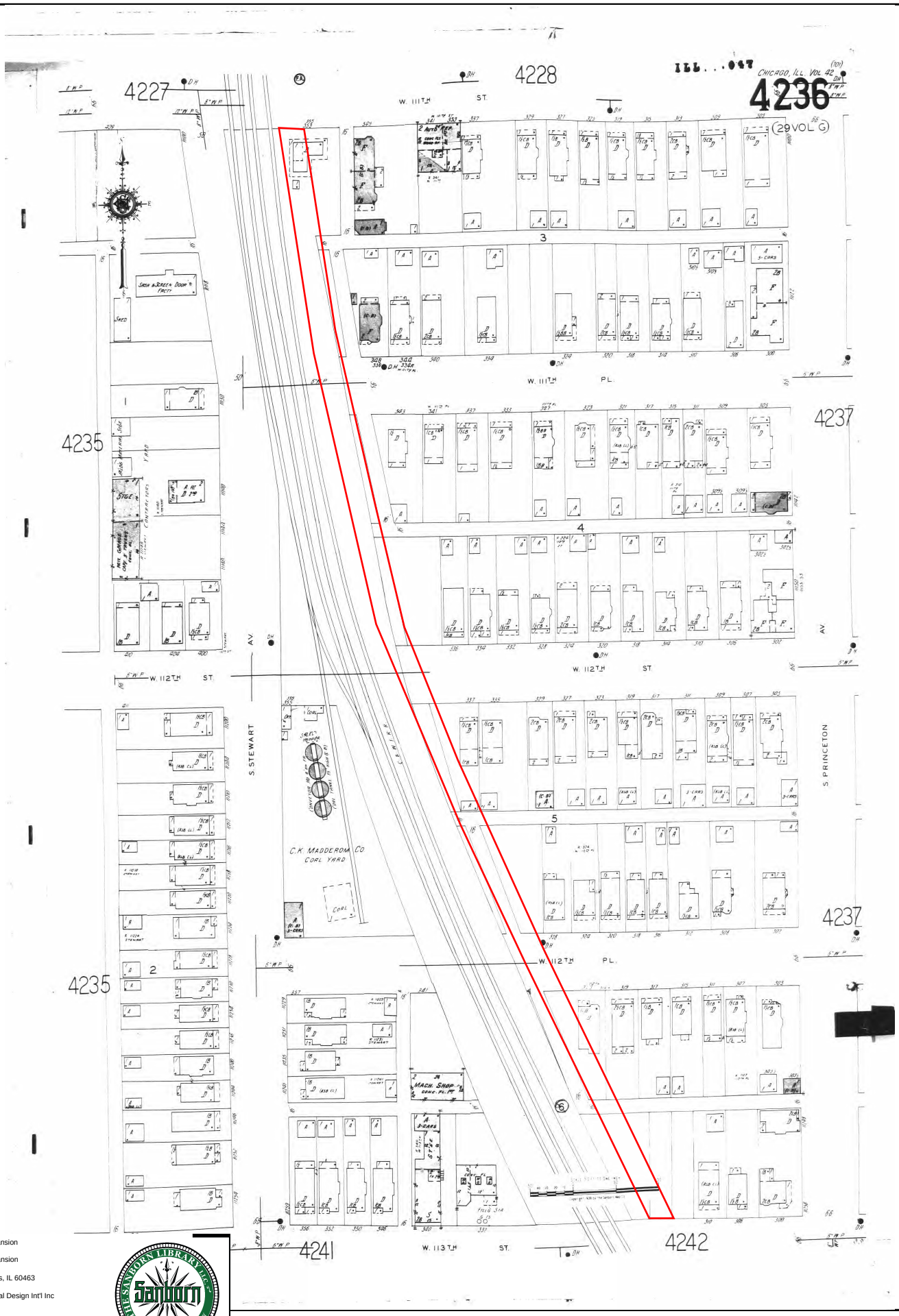

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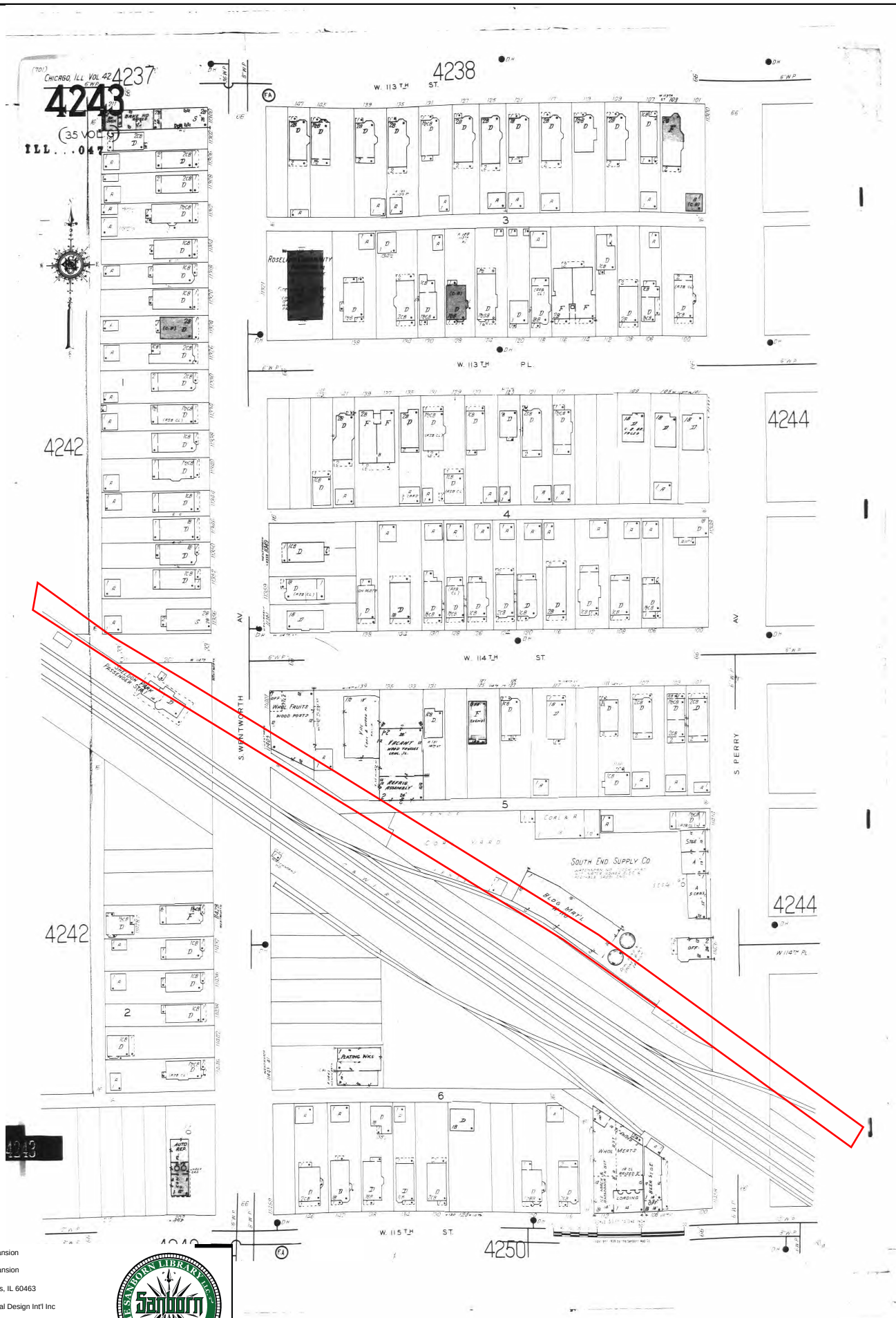

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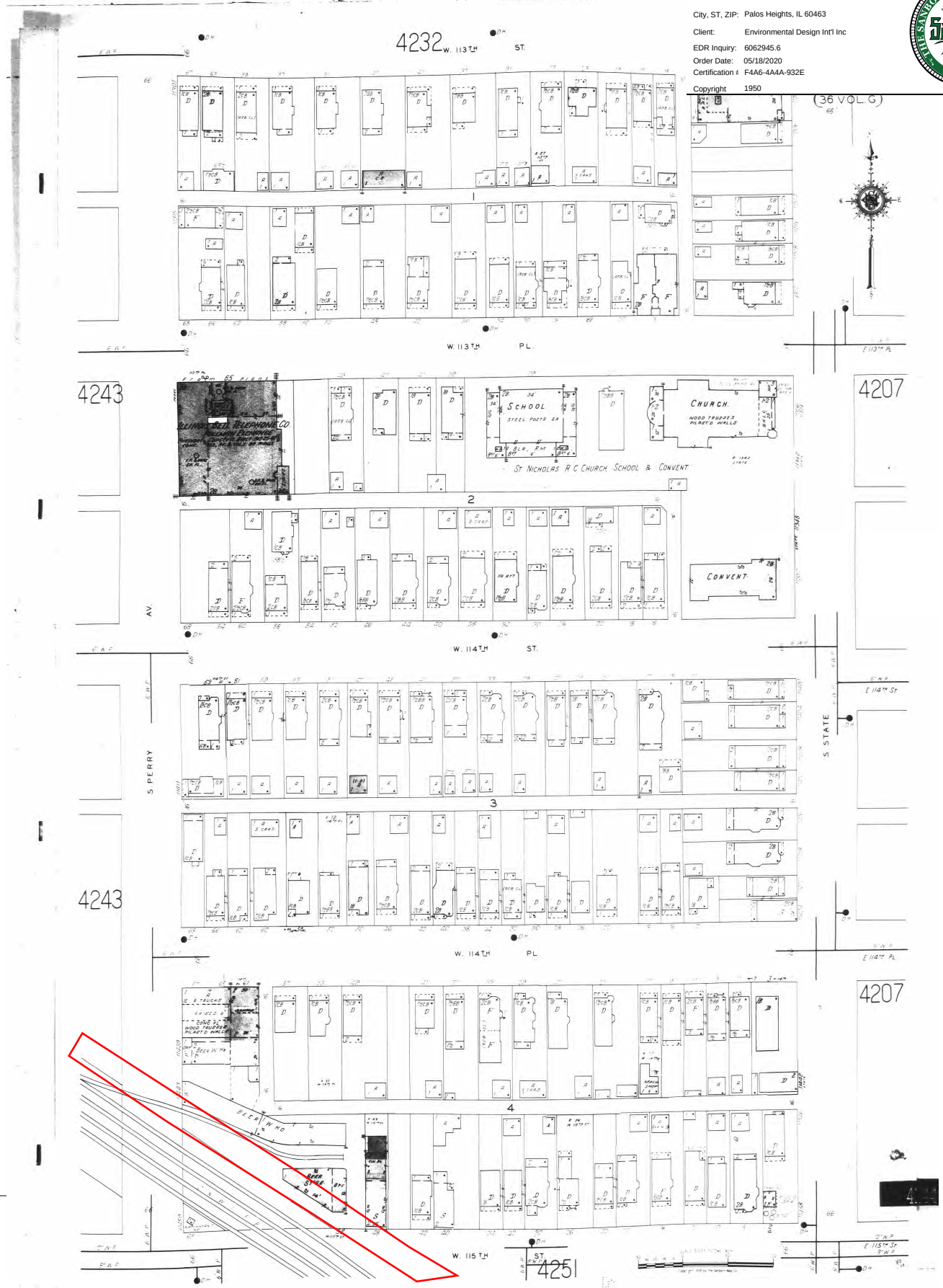

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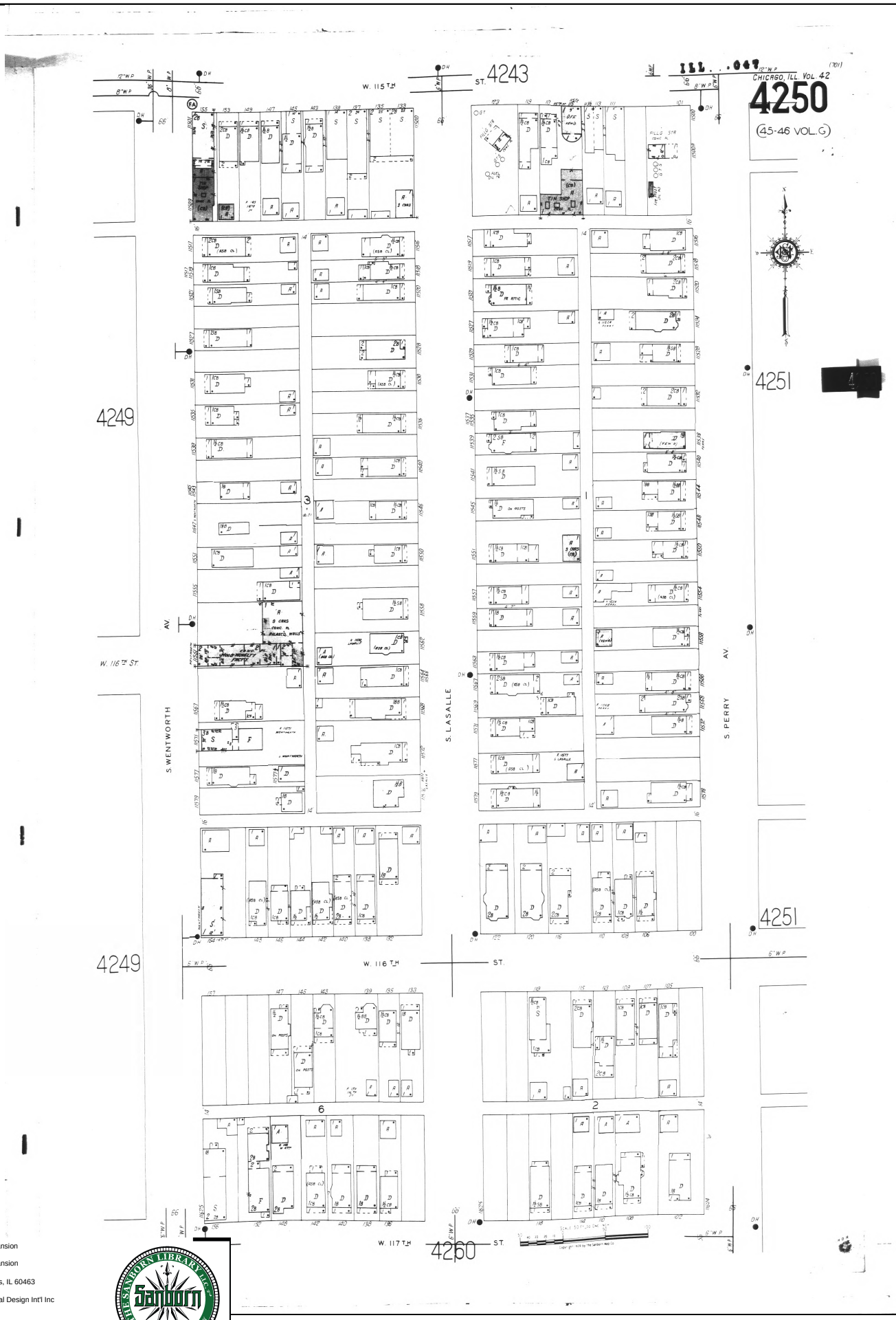

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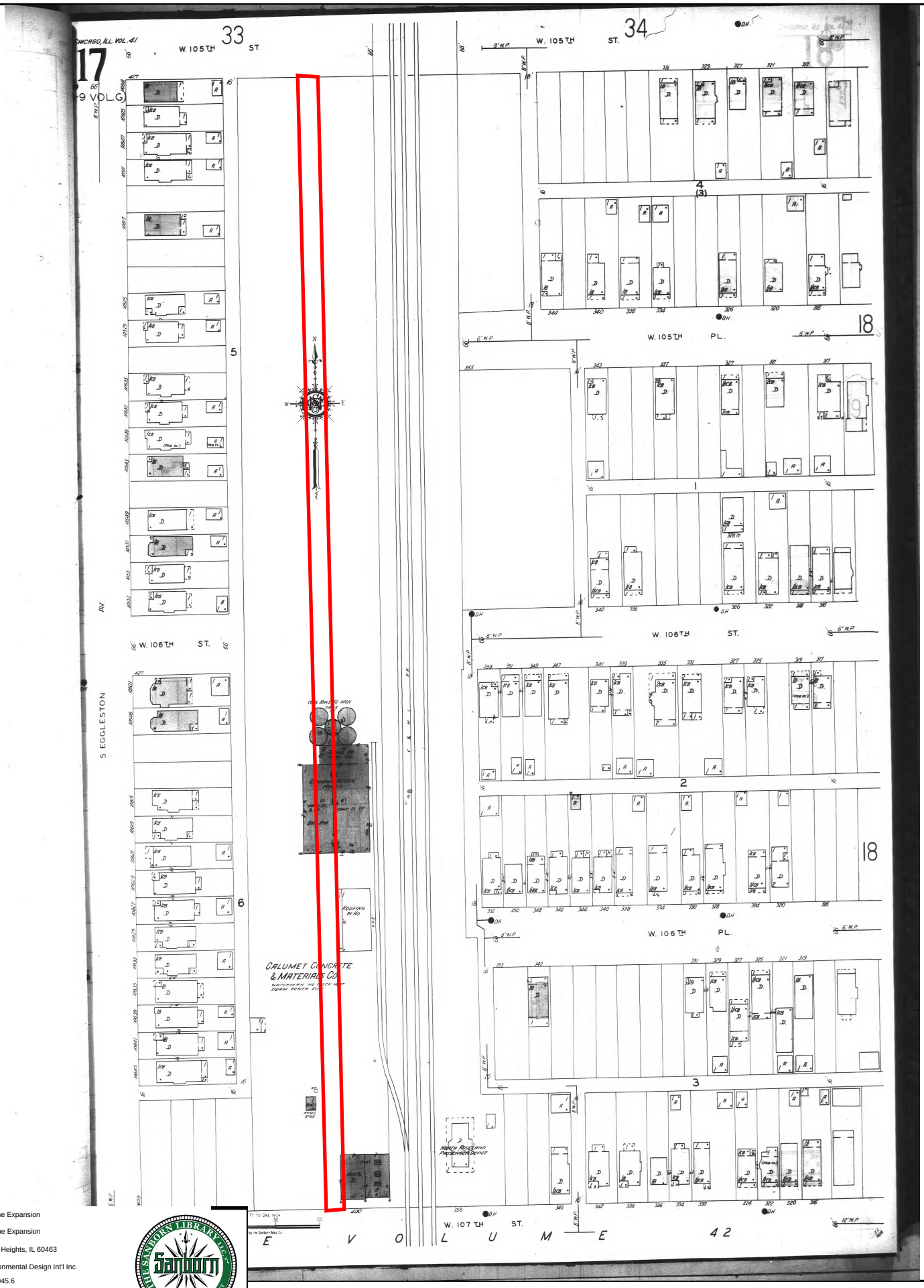

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Order Date:	05/18/2020
Certification #	F4A6-4A4A-932E
Copyright	1938

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1938

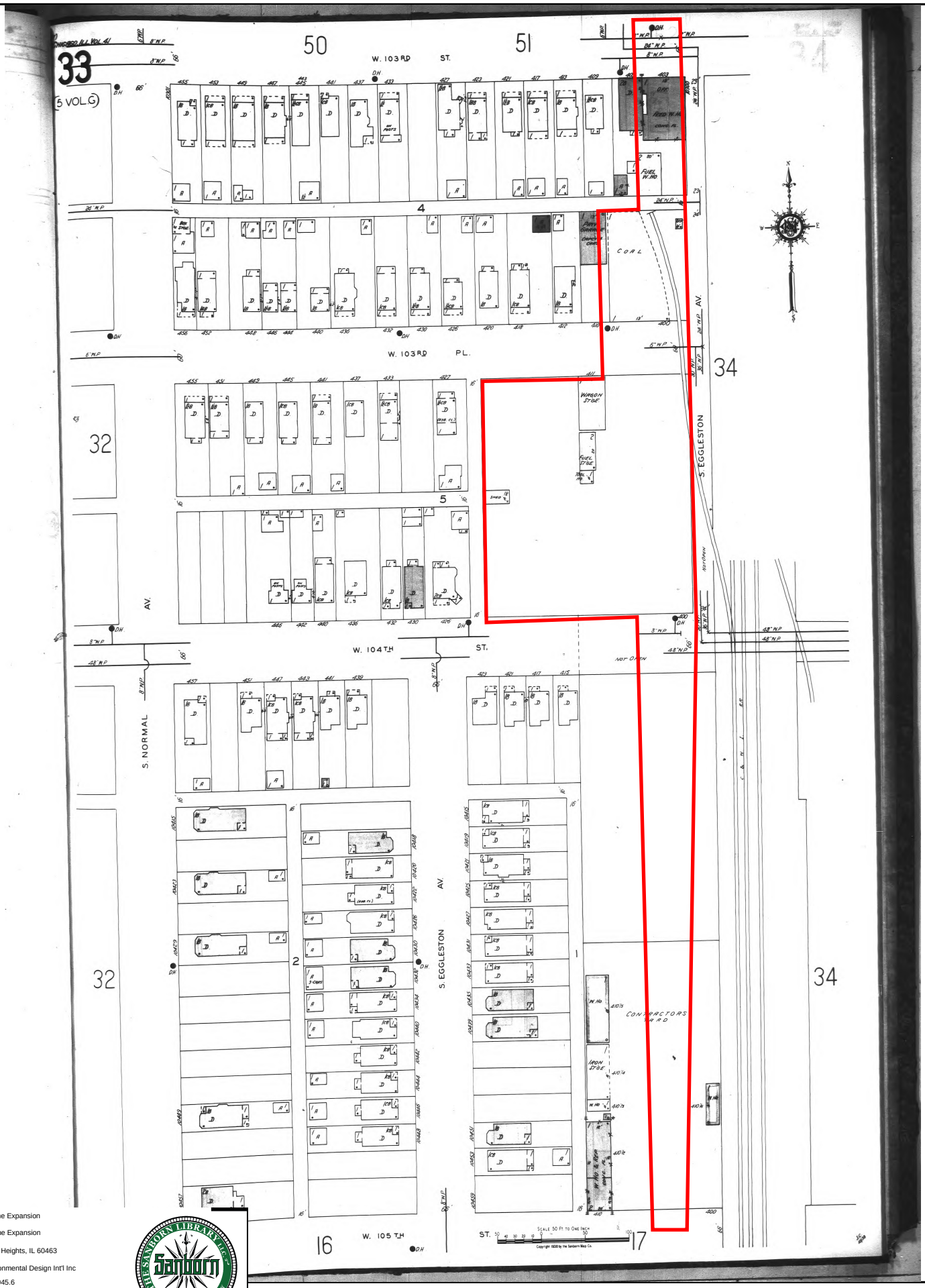

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1938

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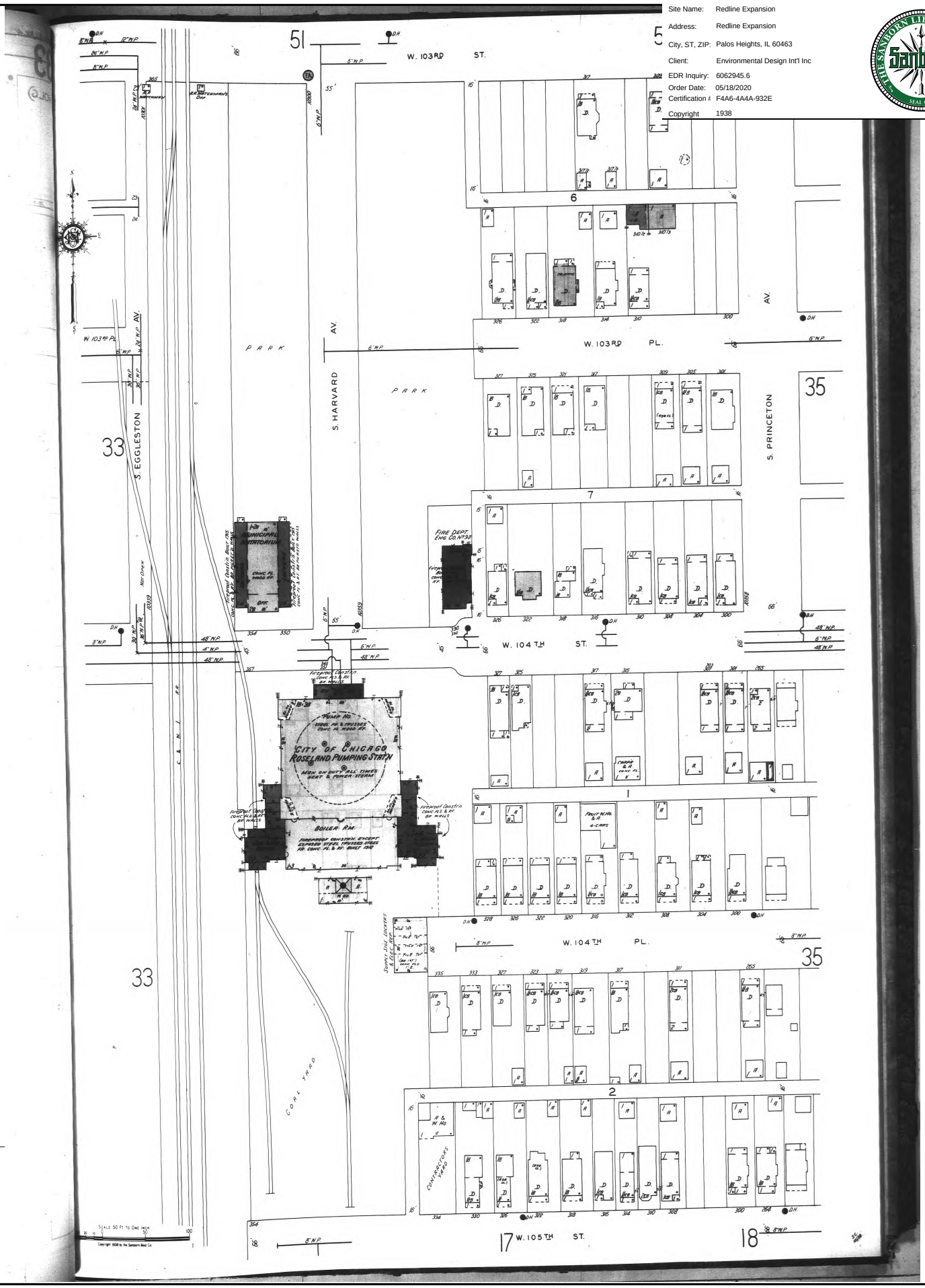

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1938

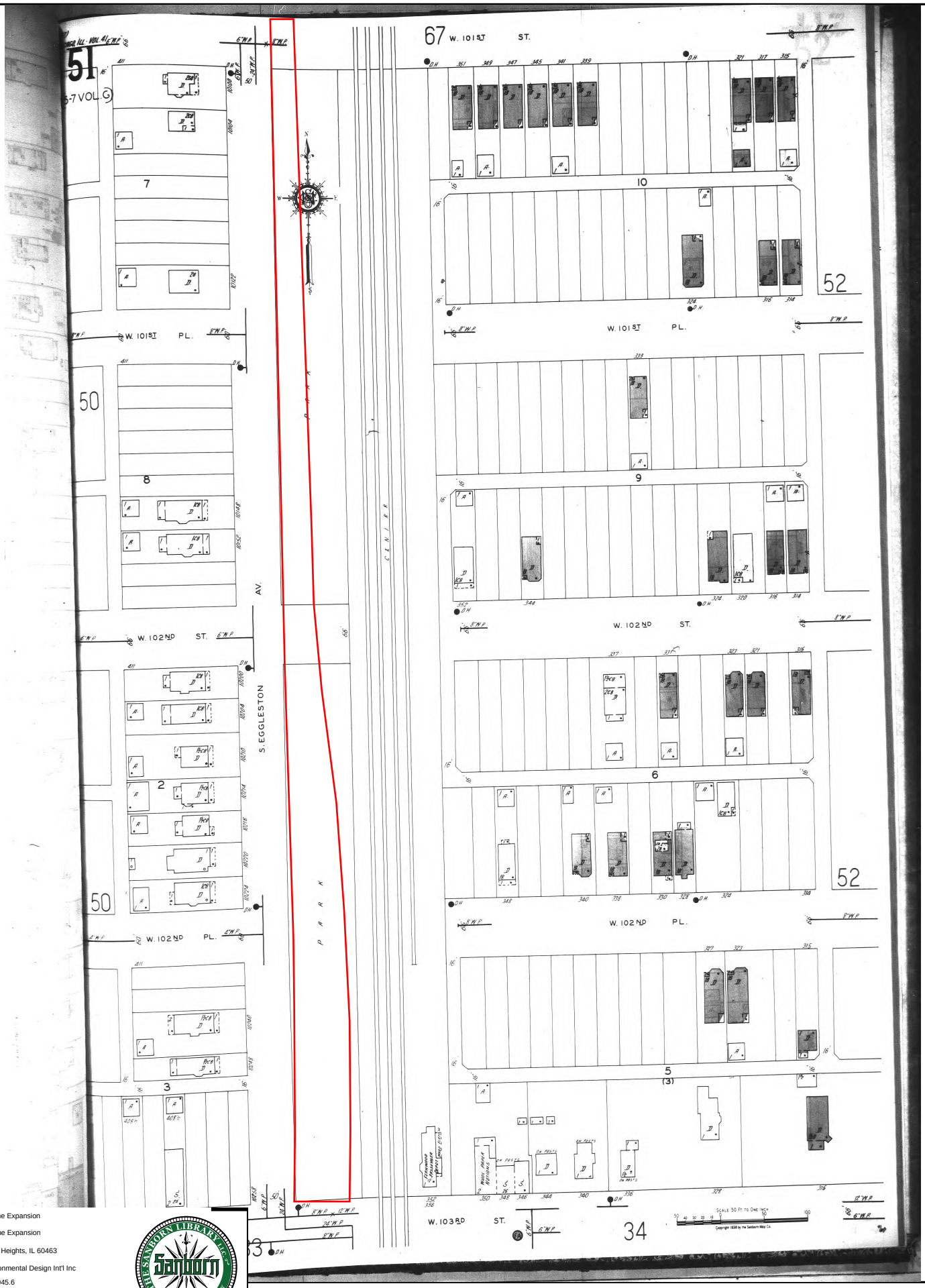

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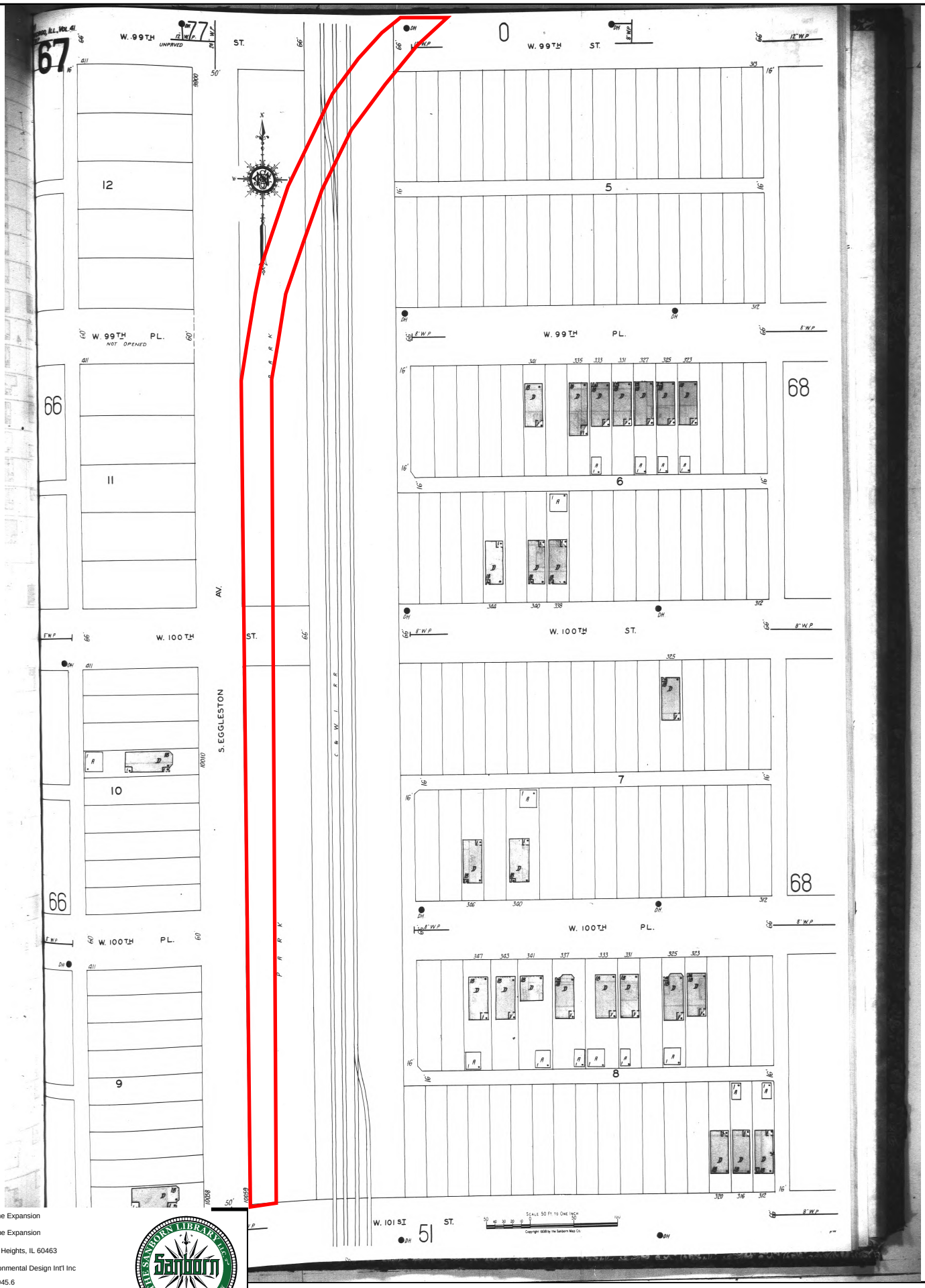

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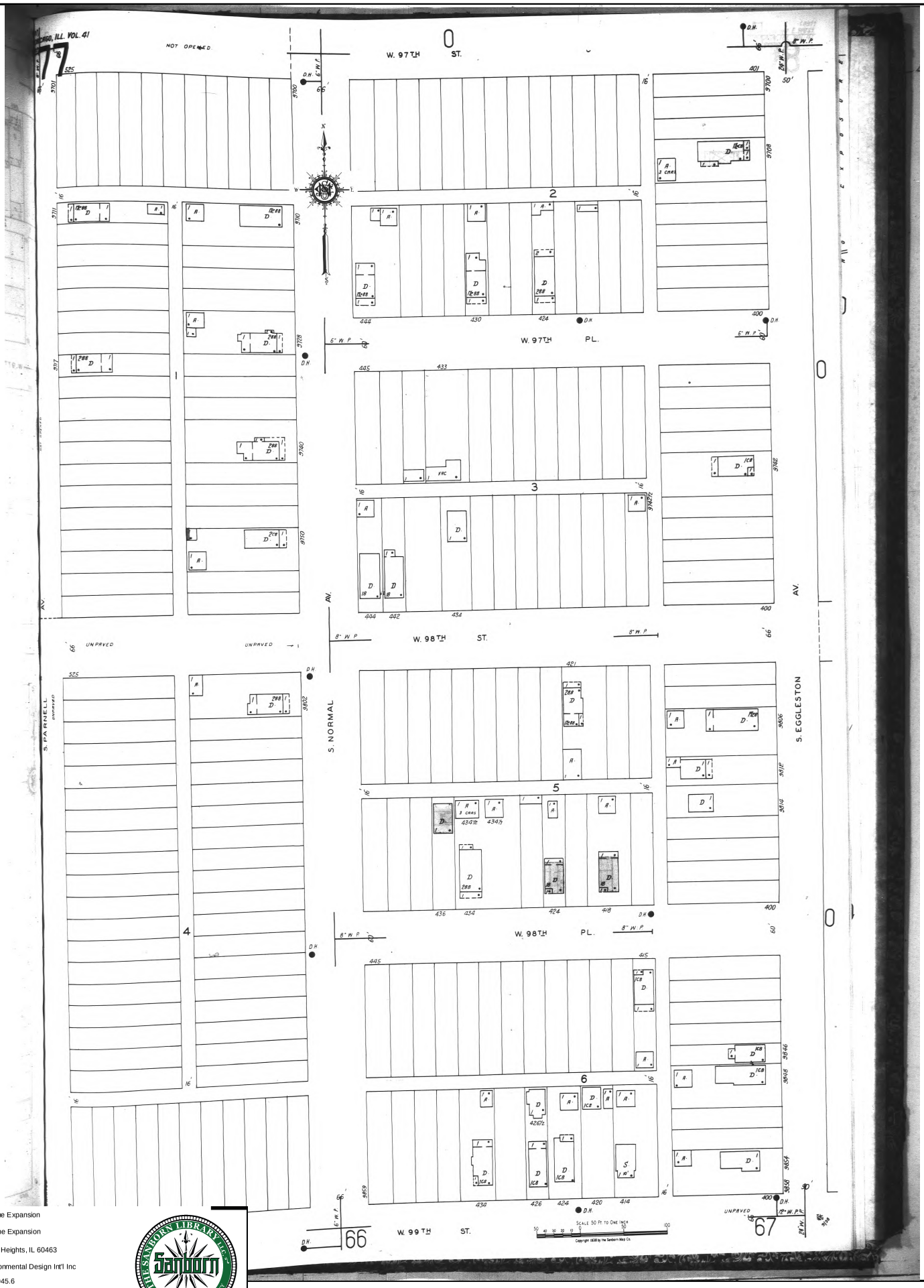

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1911

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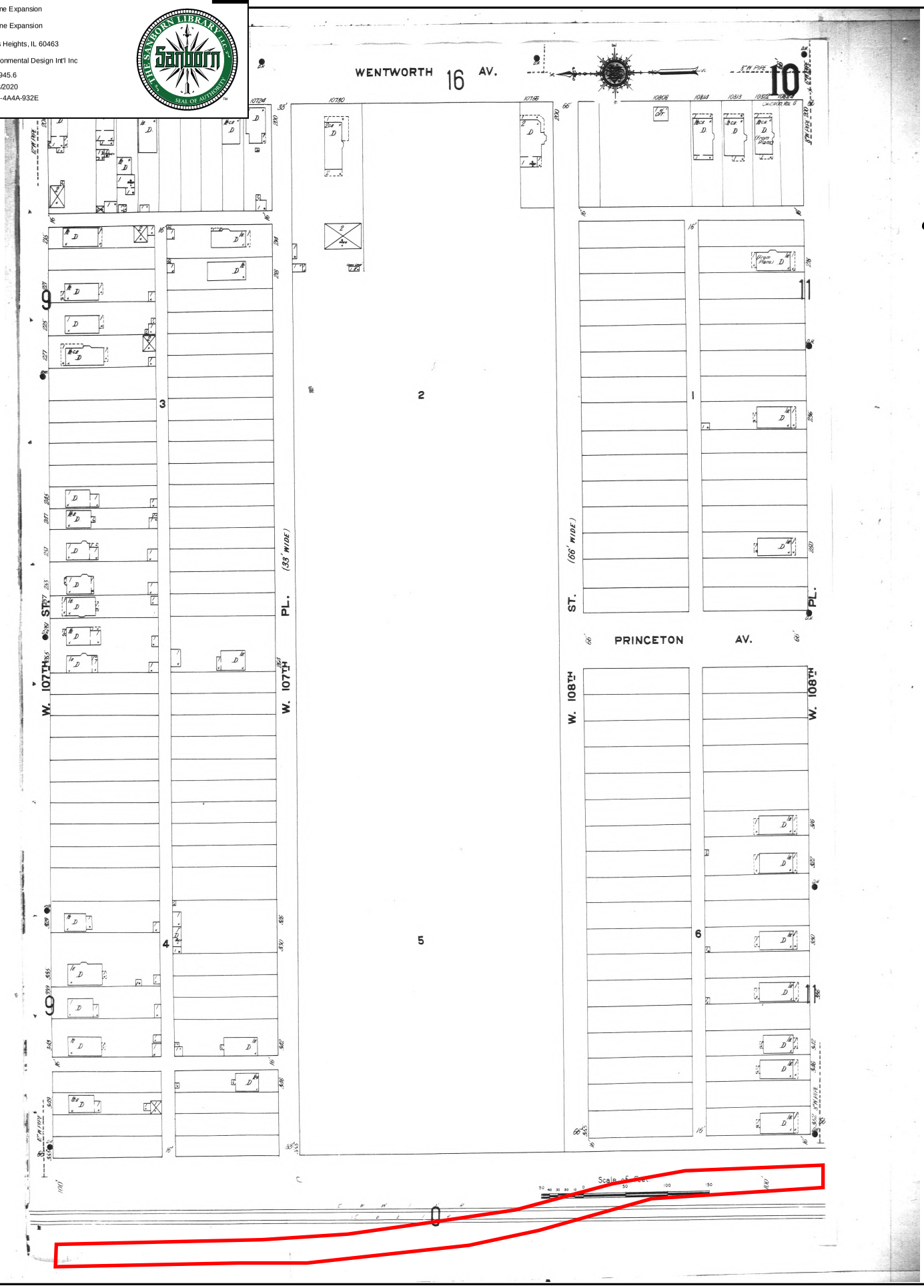

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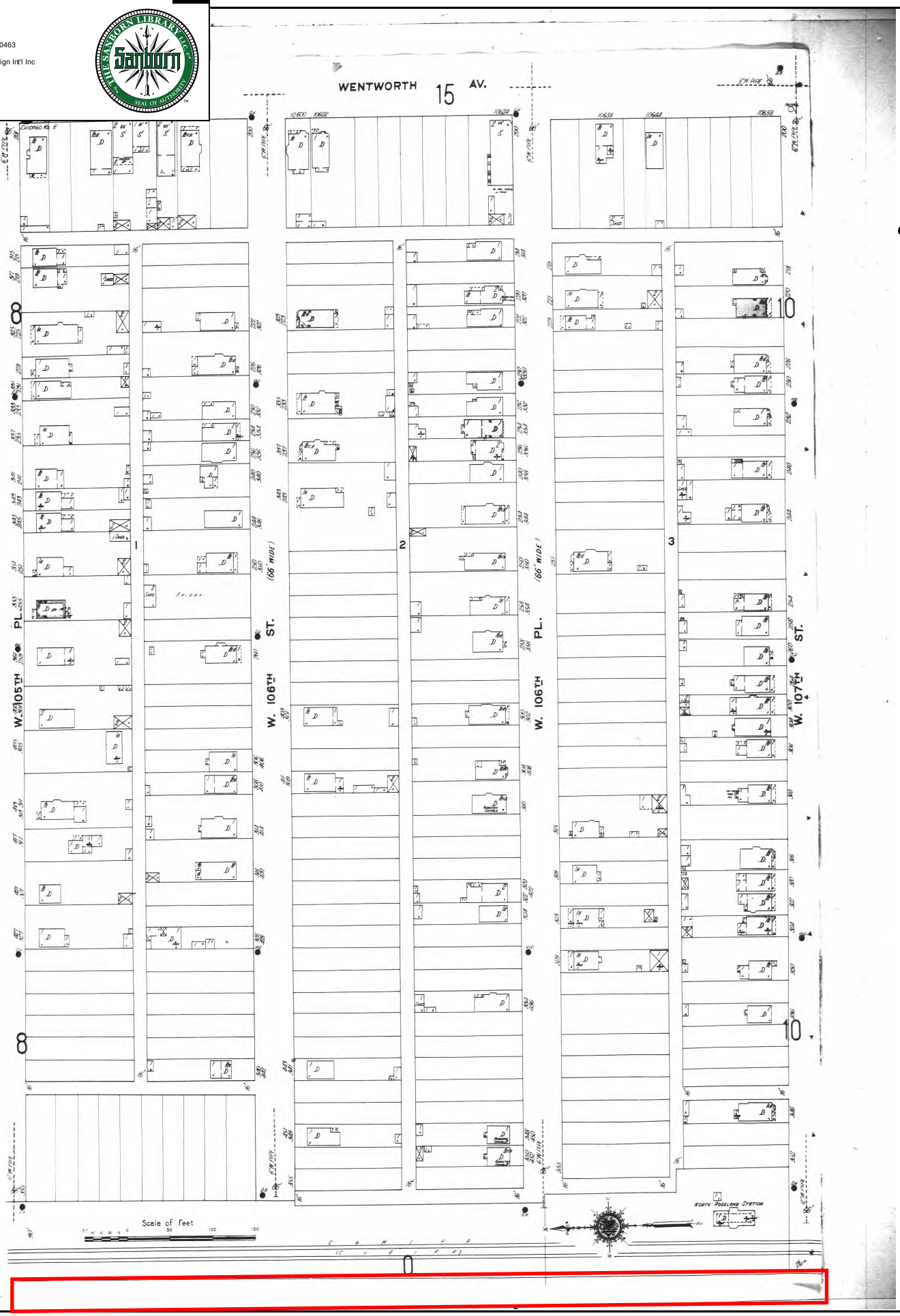

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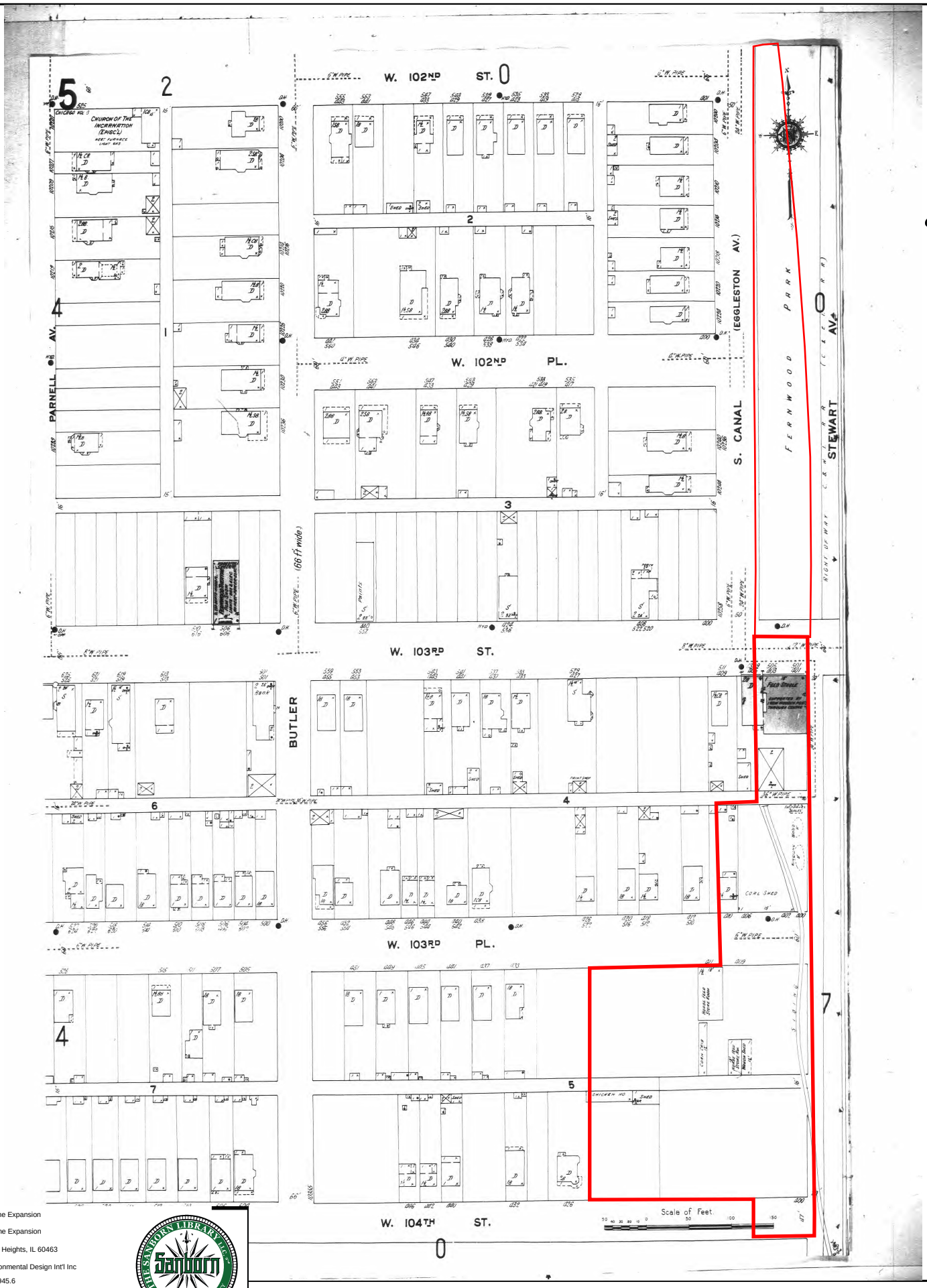

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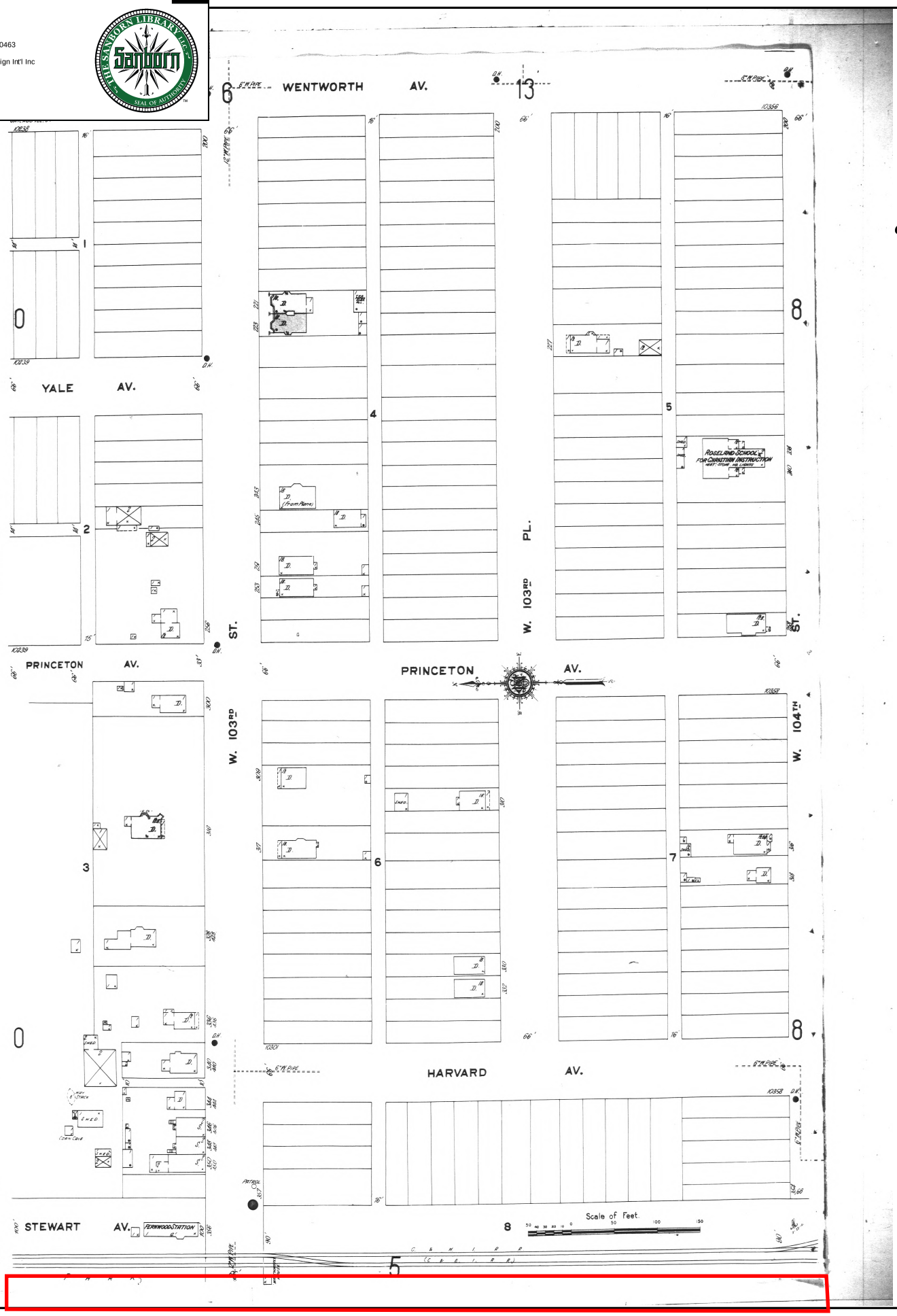

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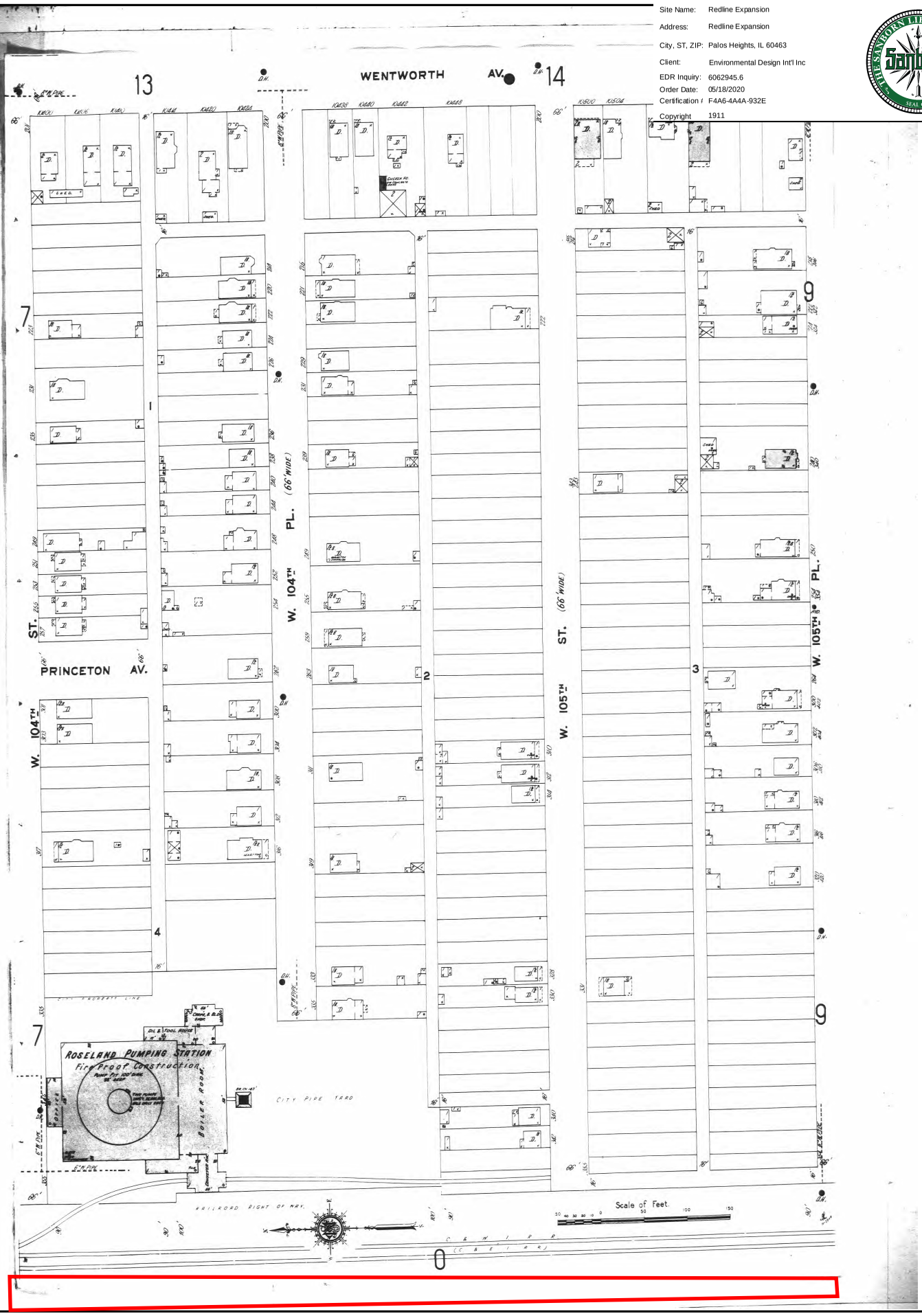

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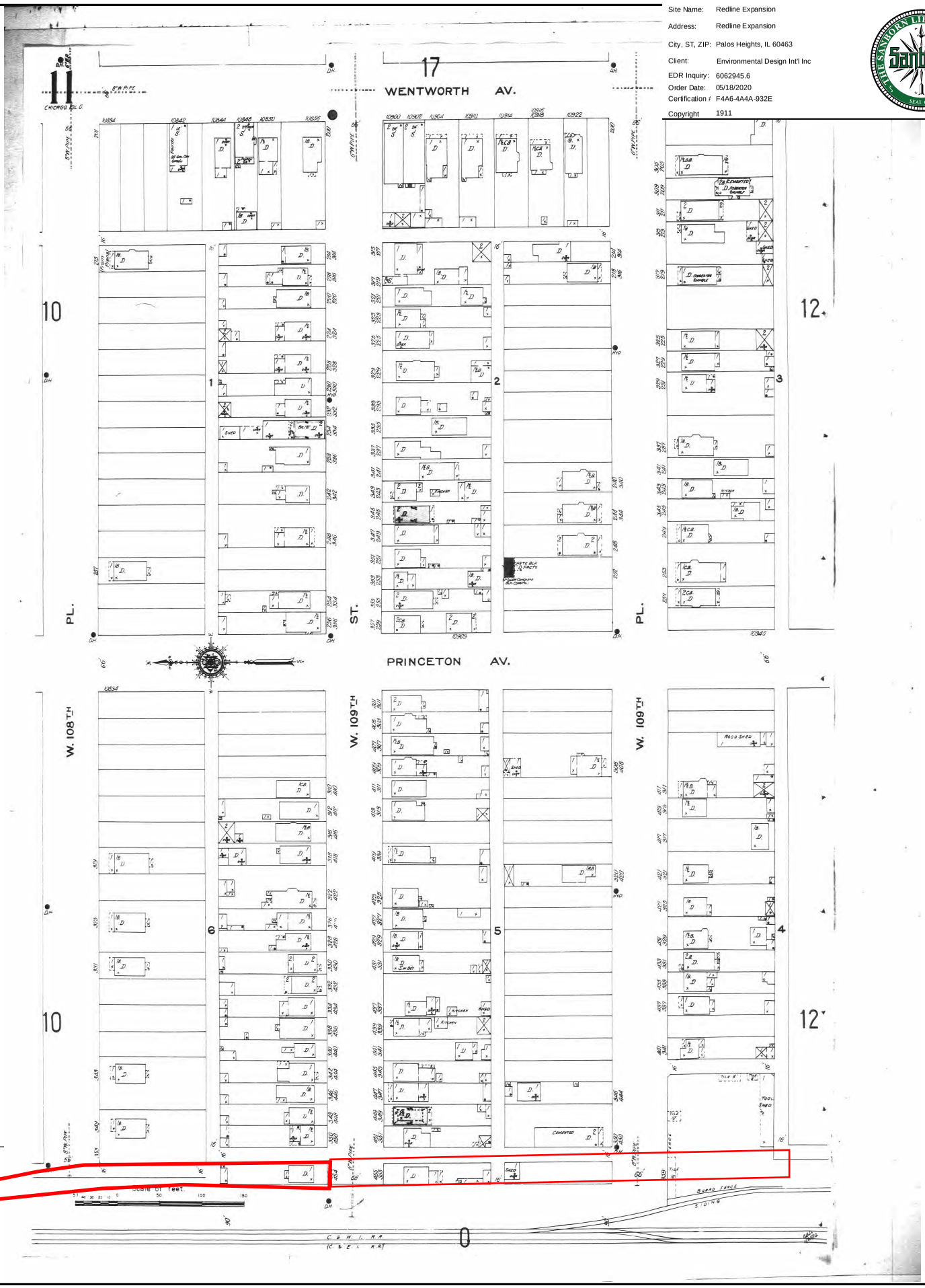

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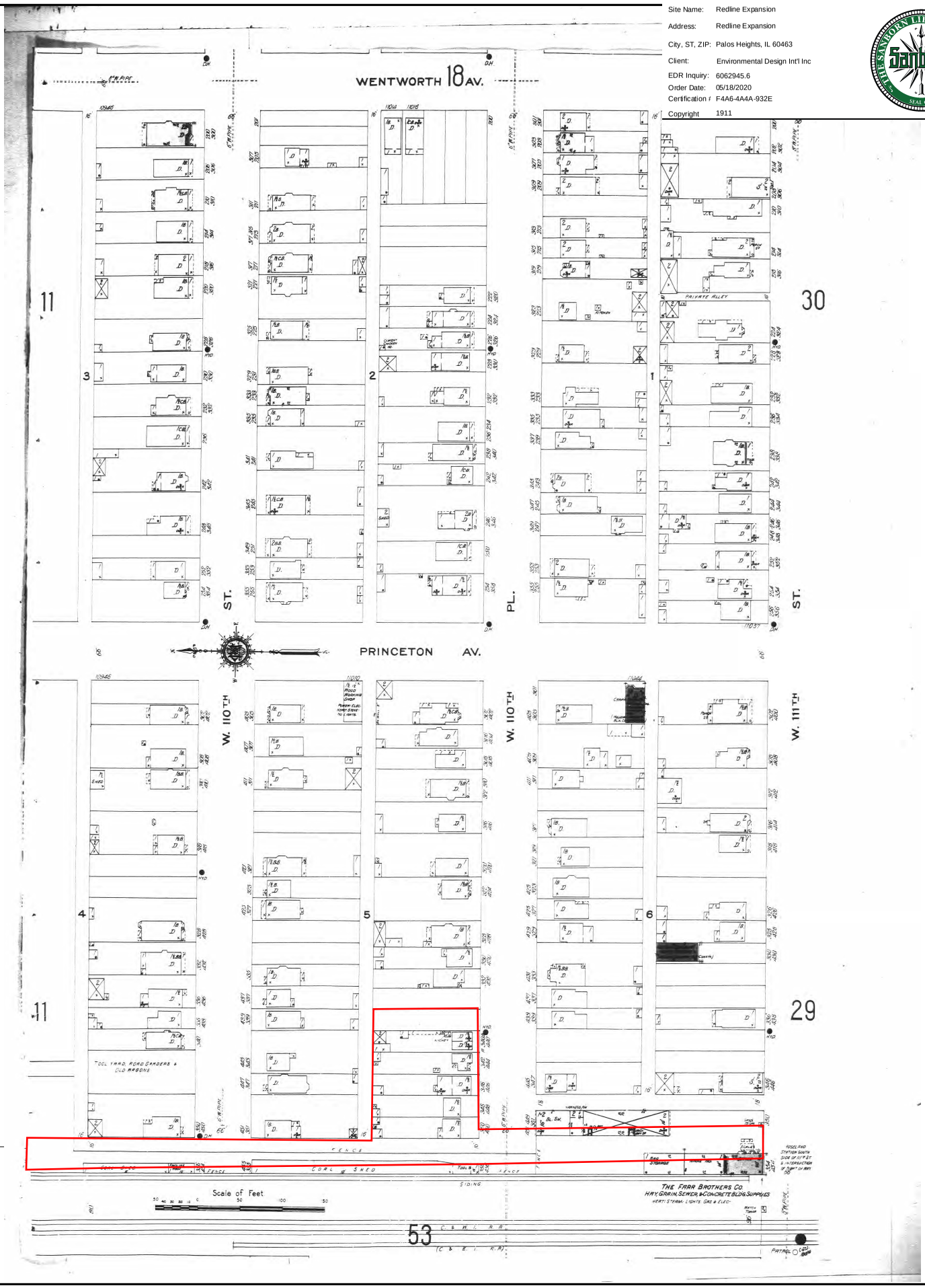

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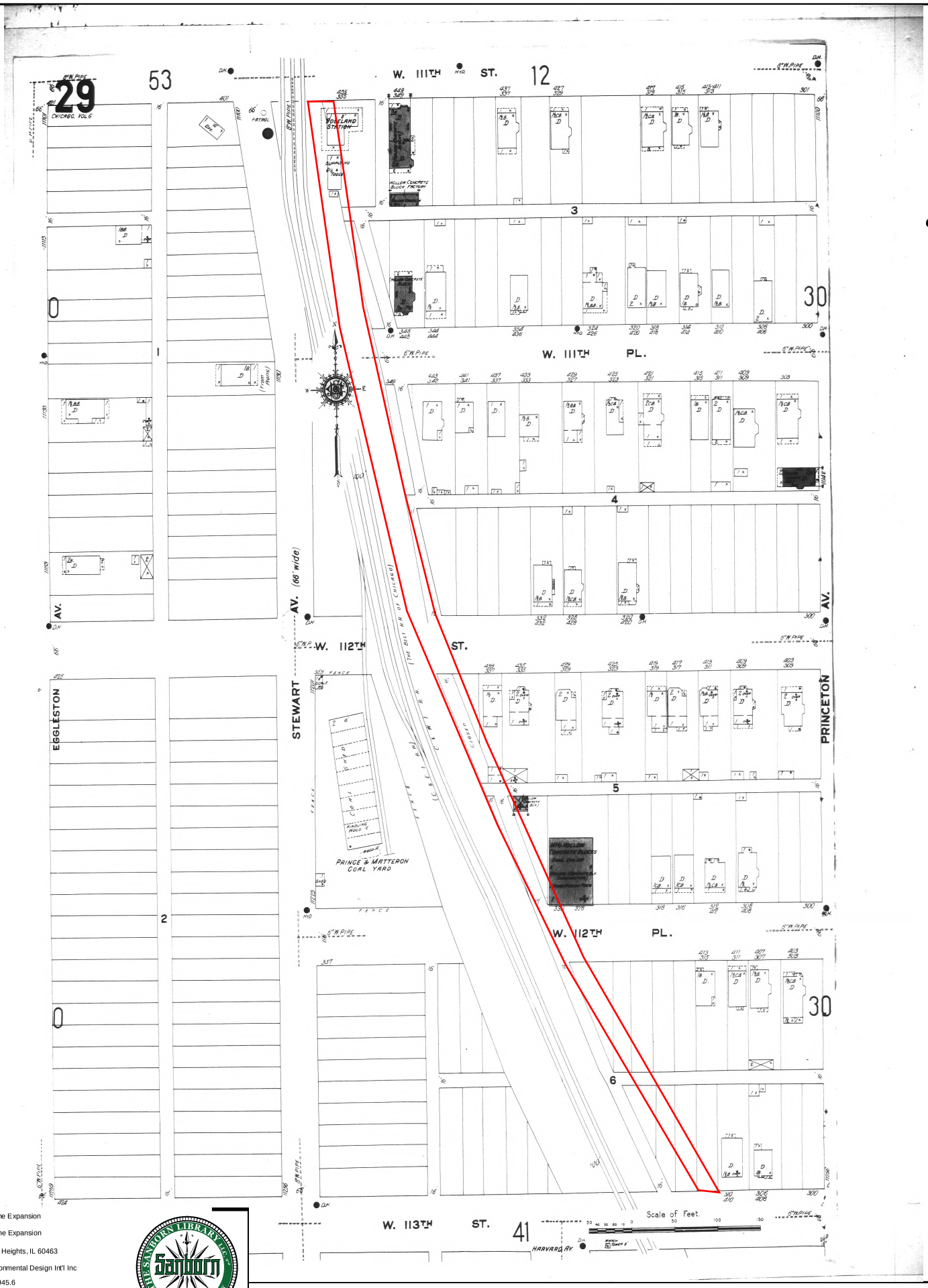

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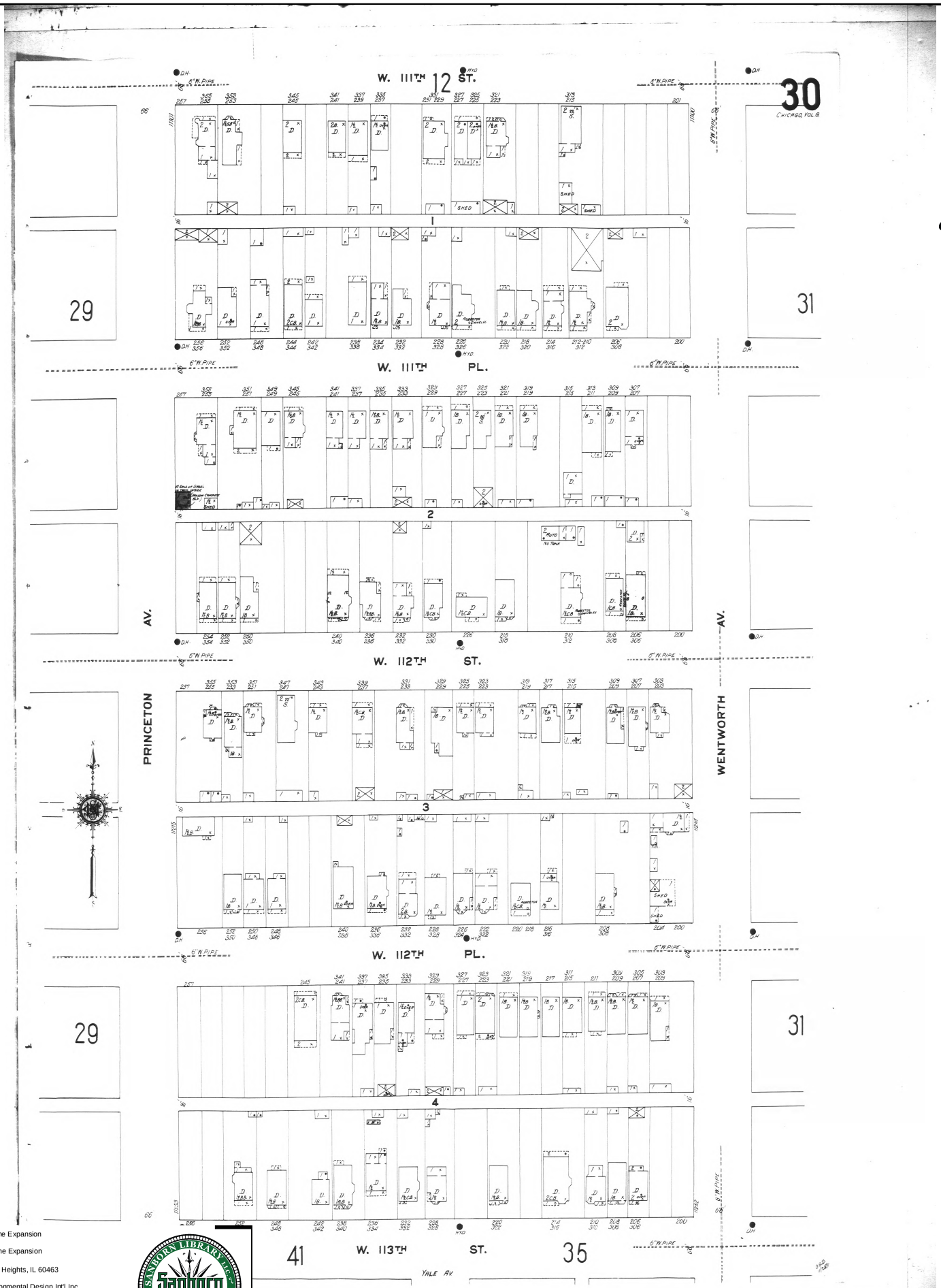

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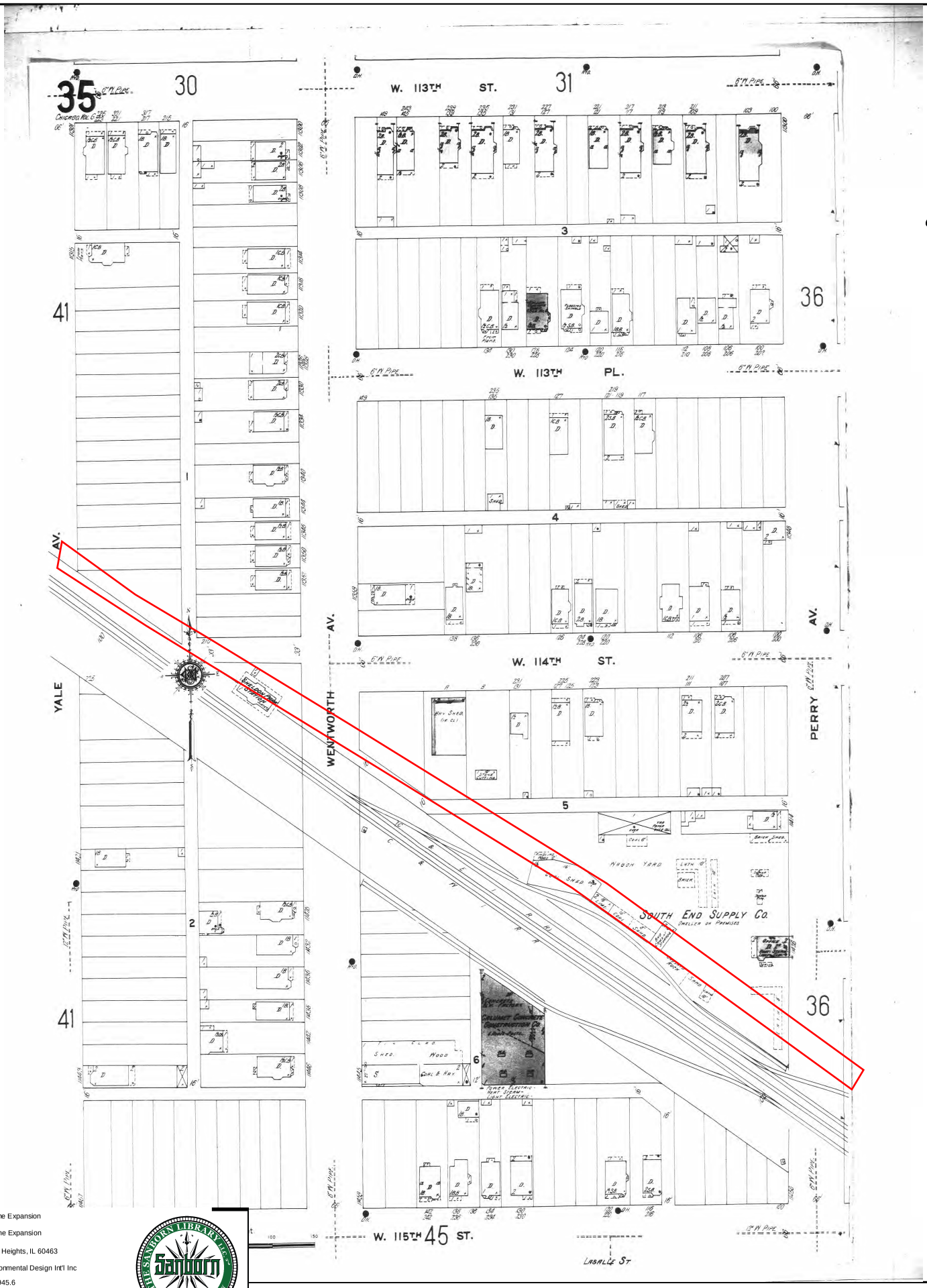

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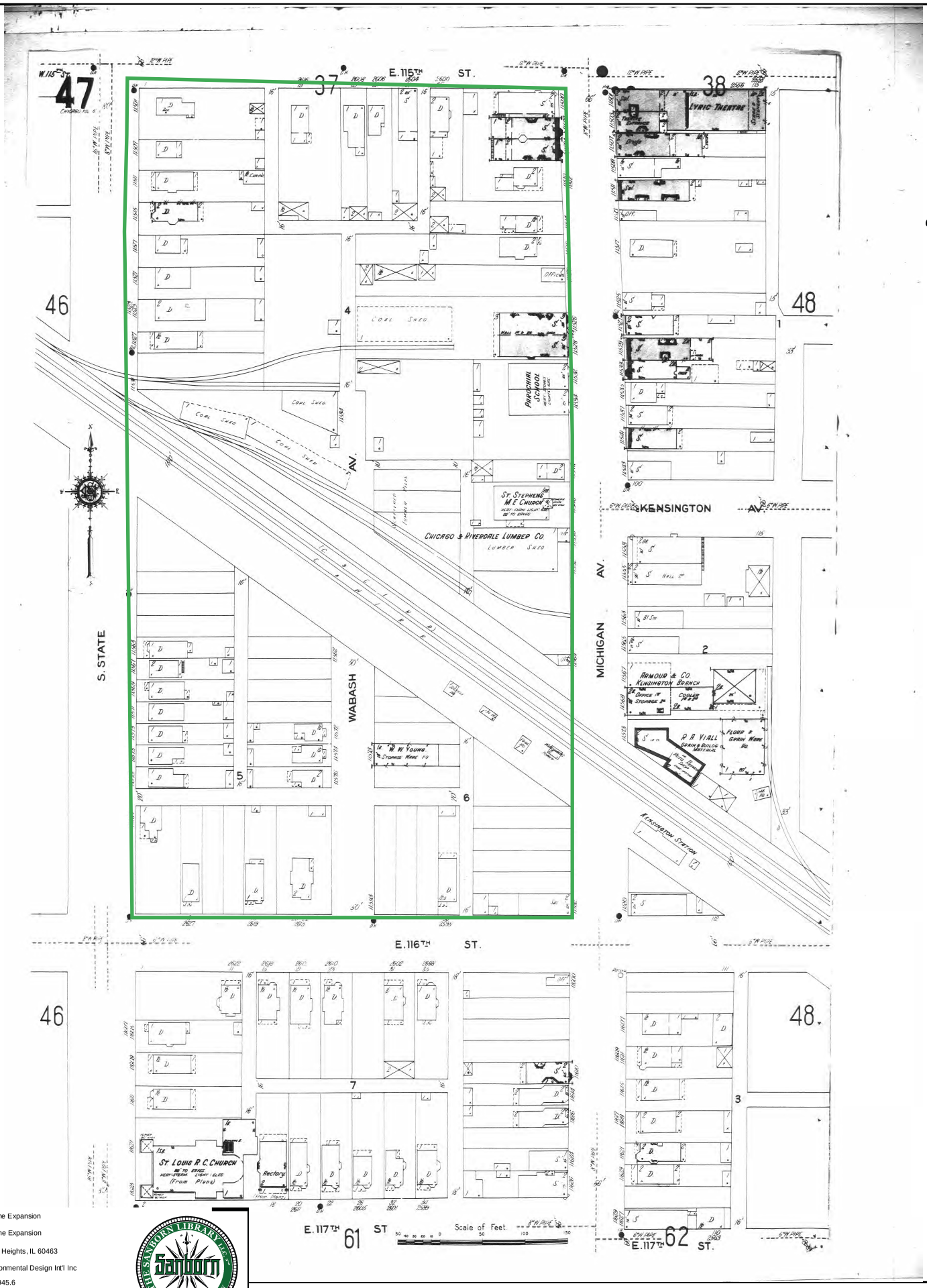

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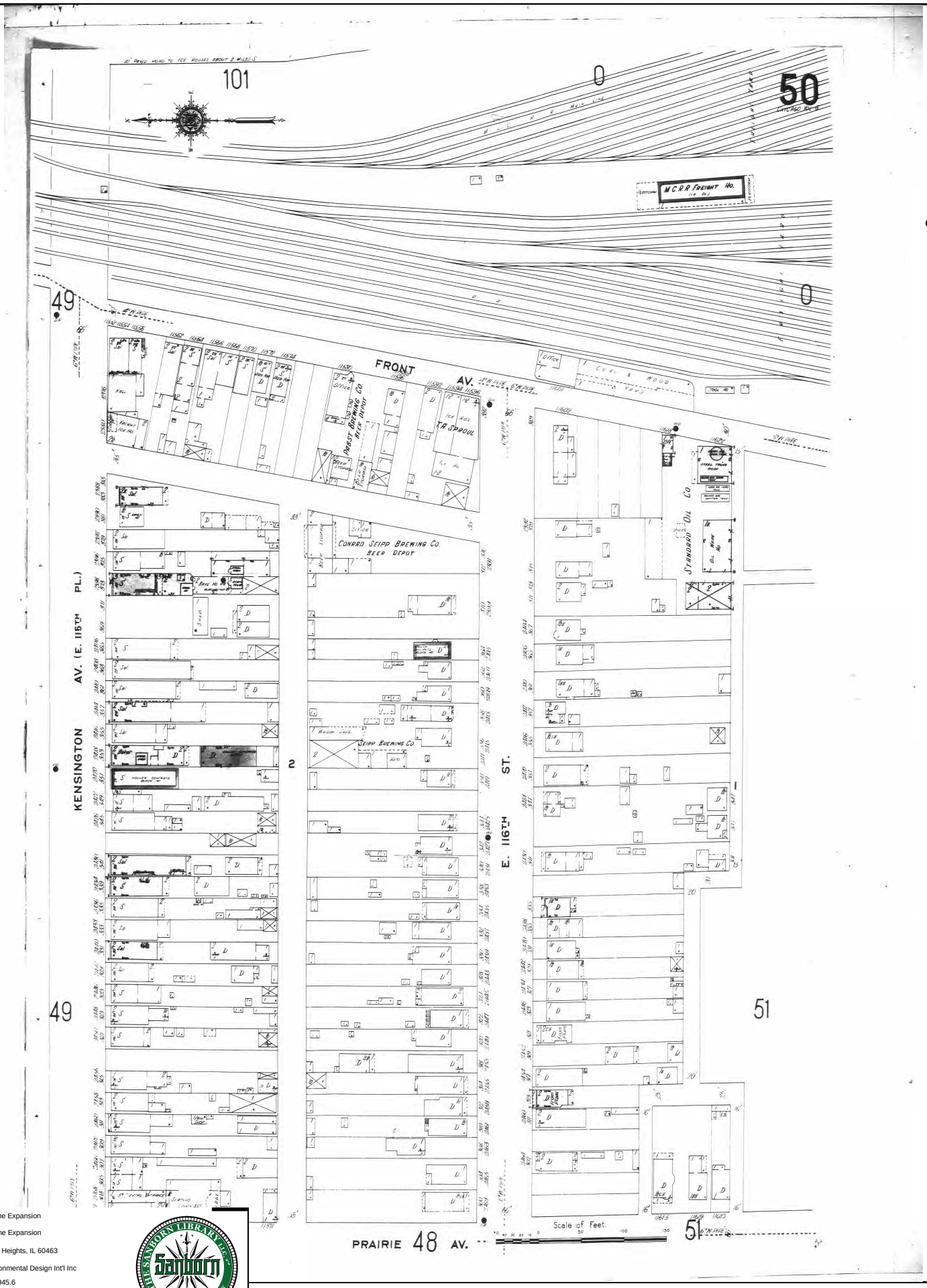

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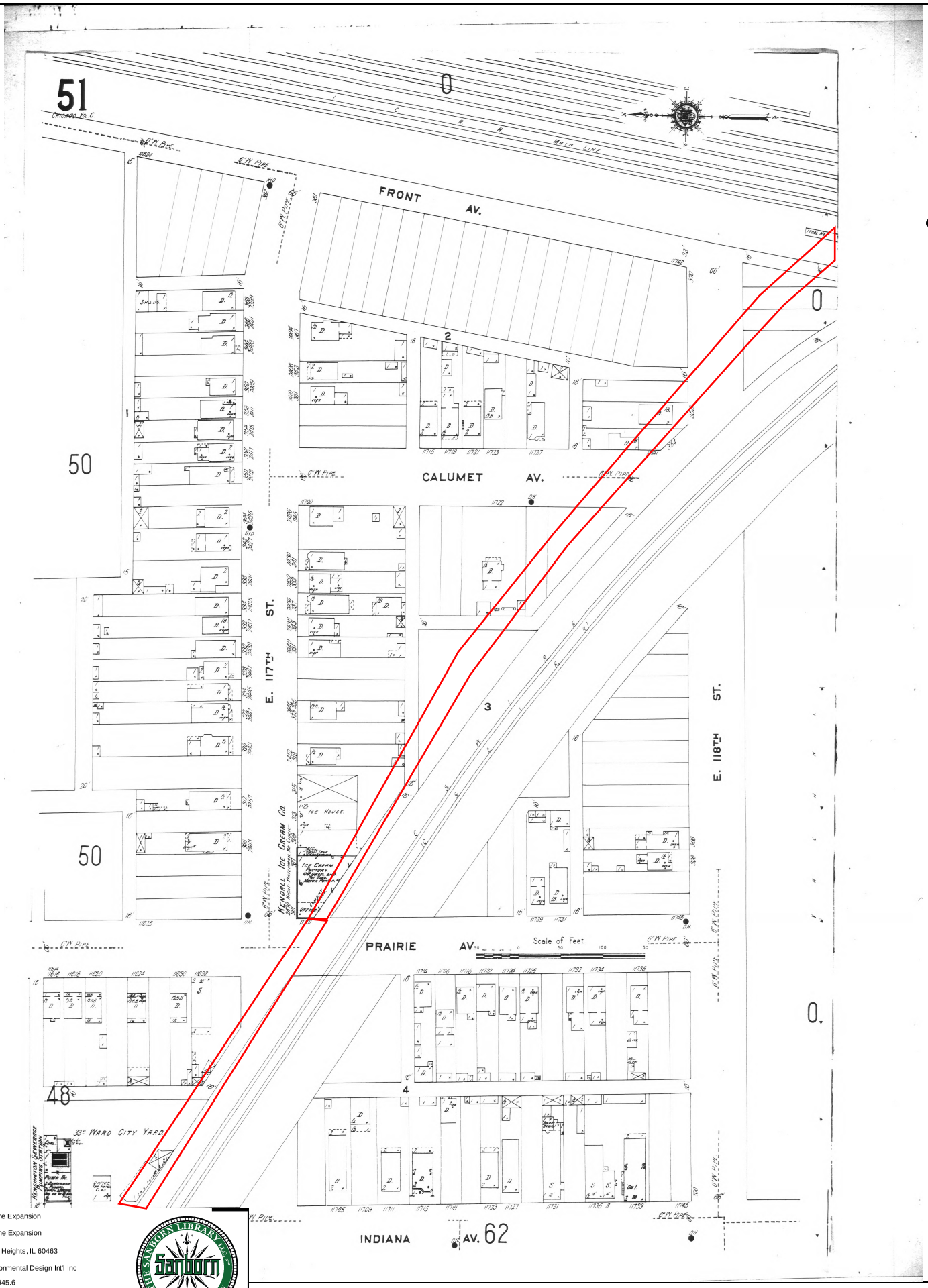

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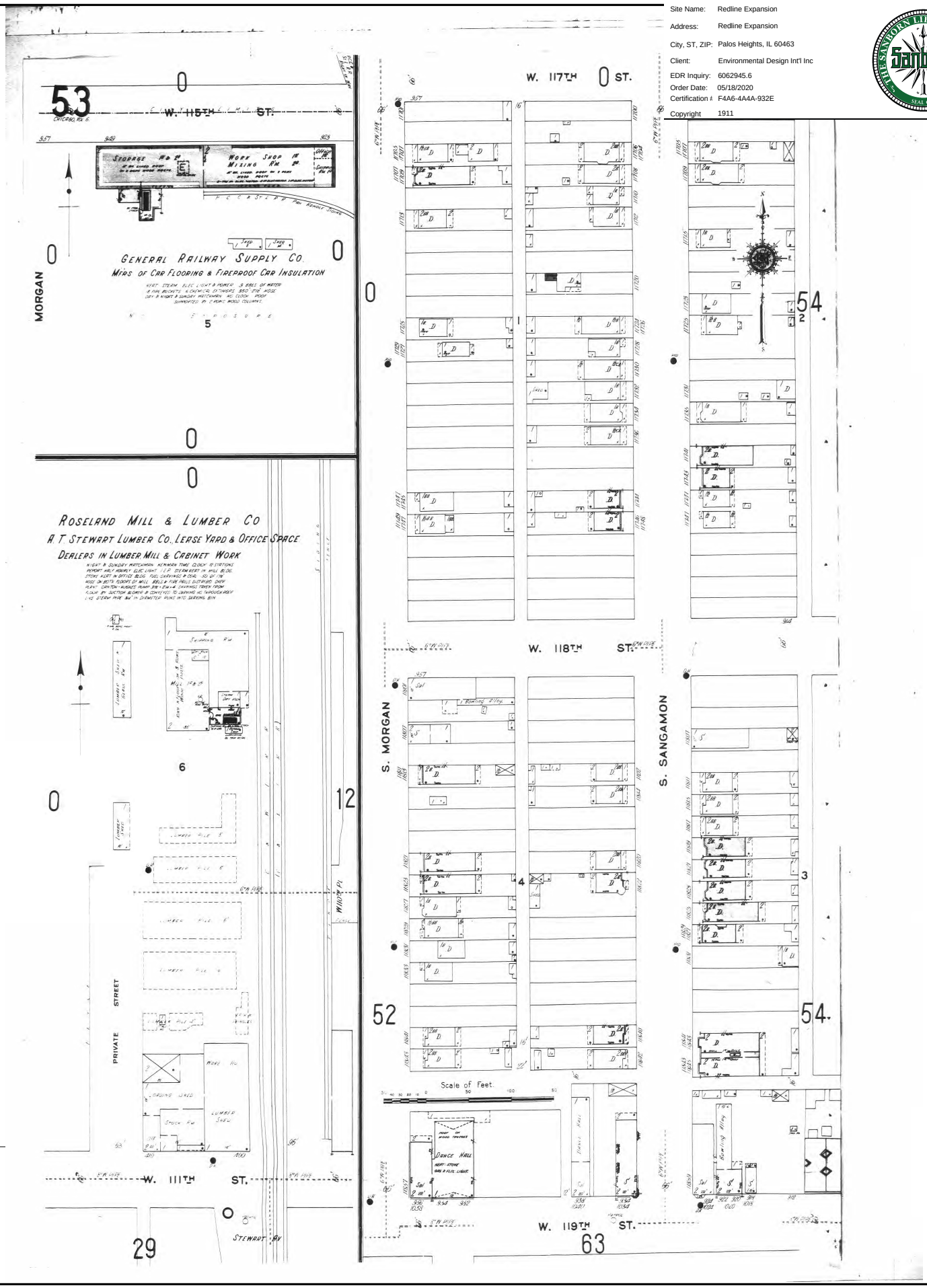

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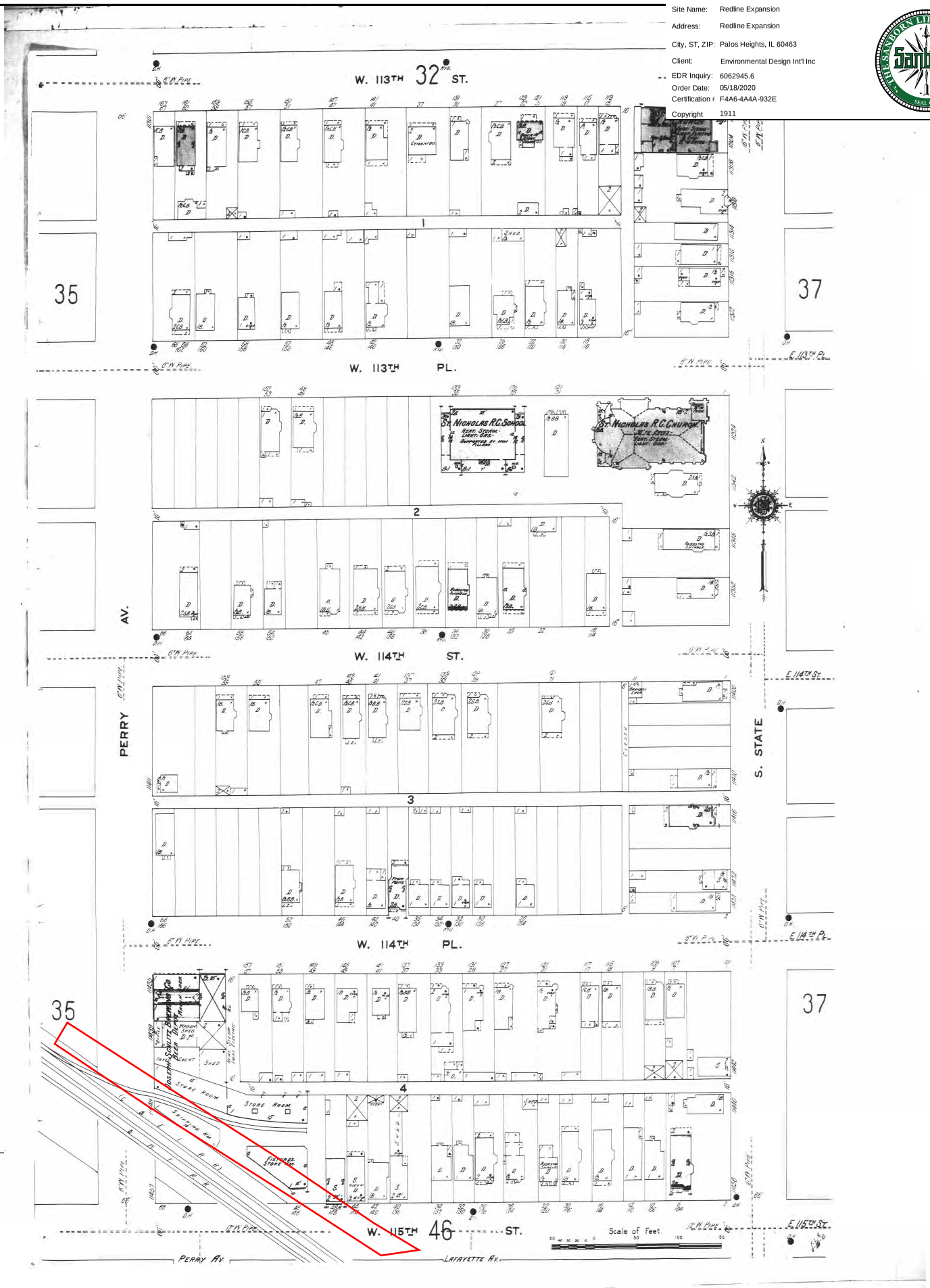

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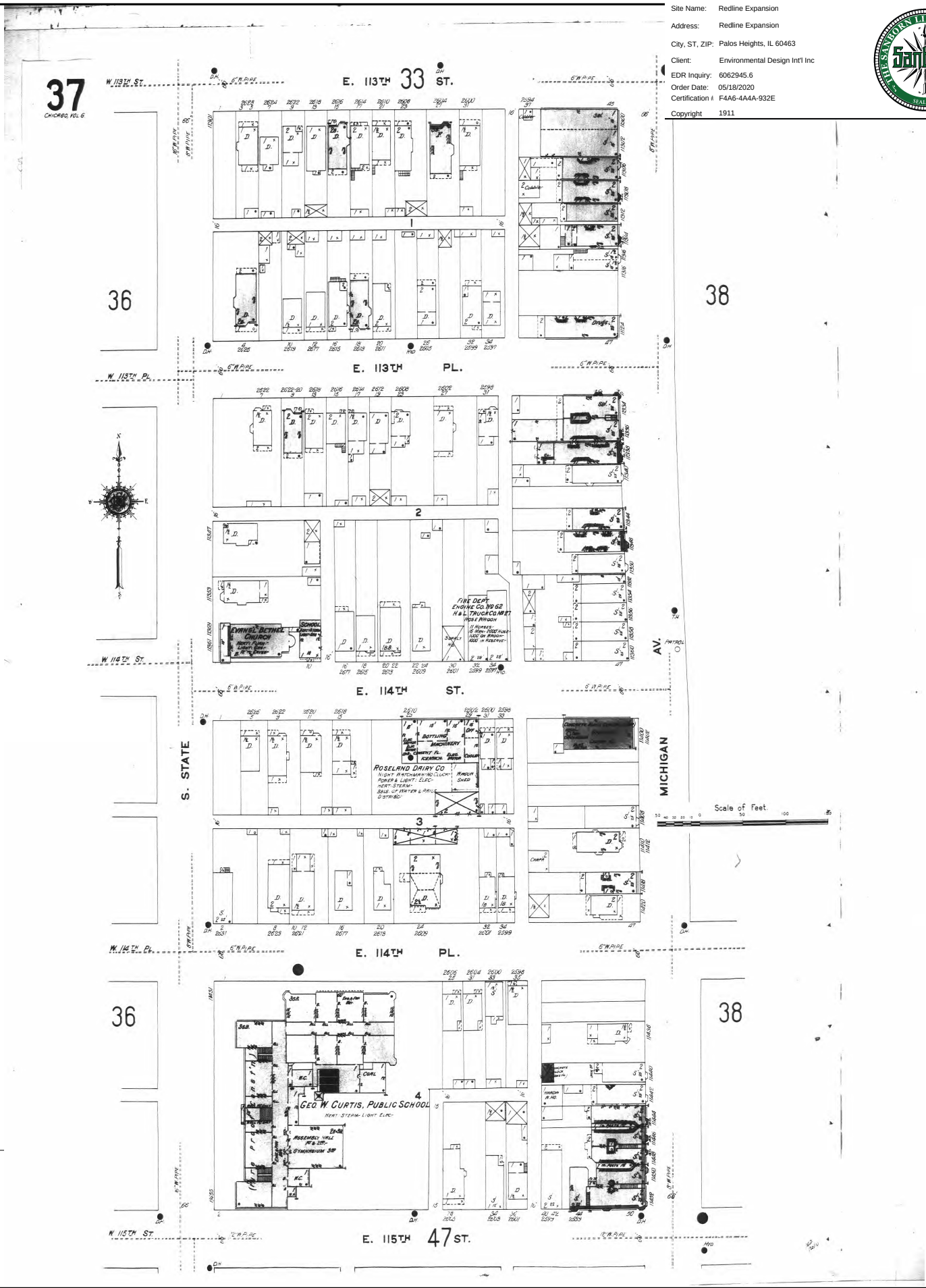

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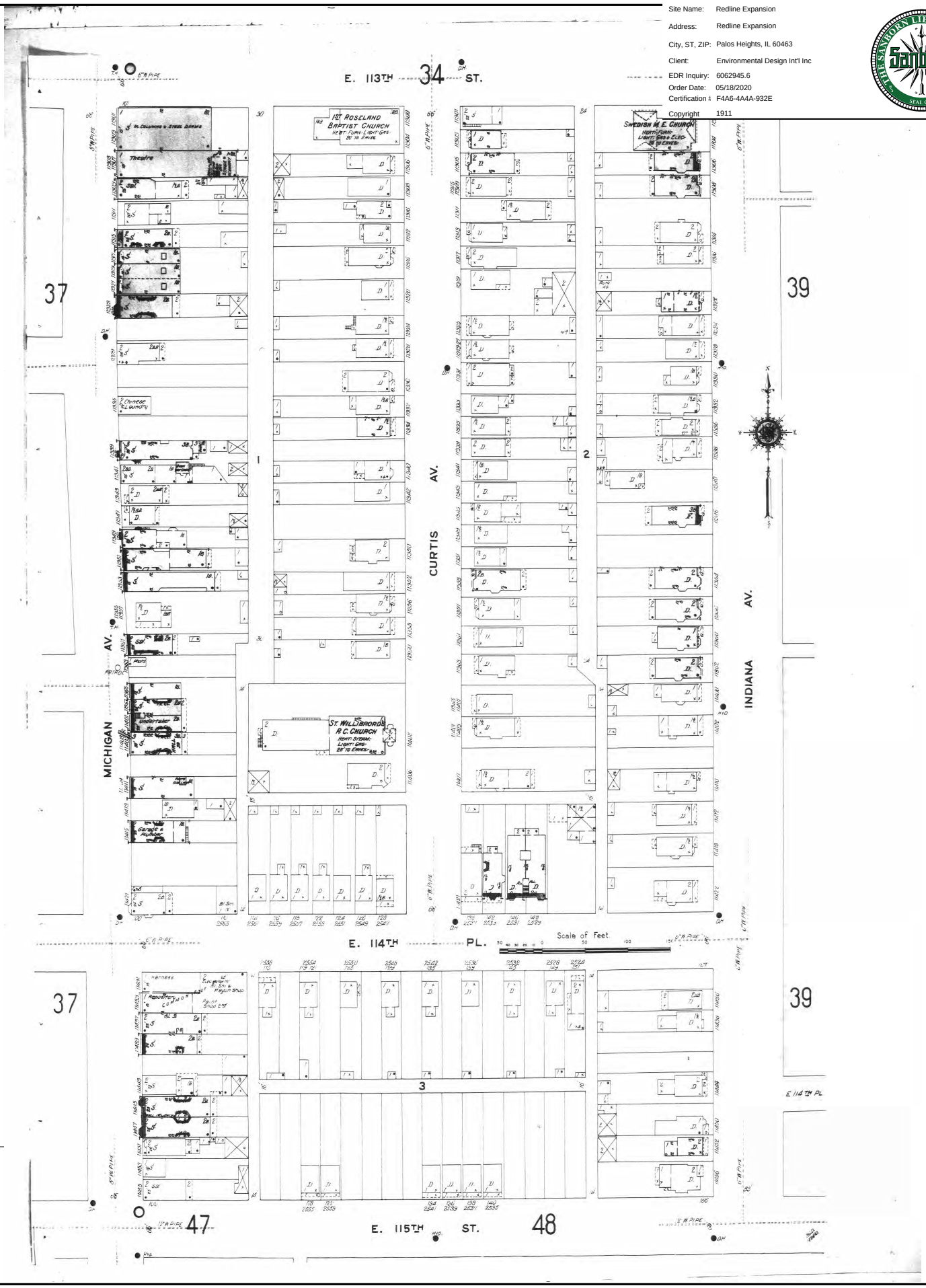

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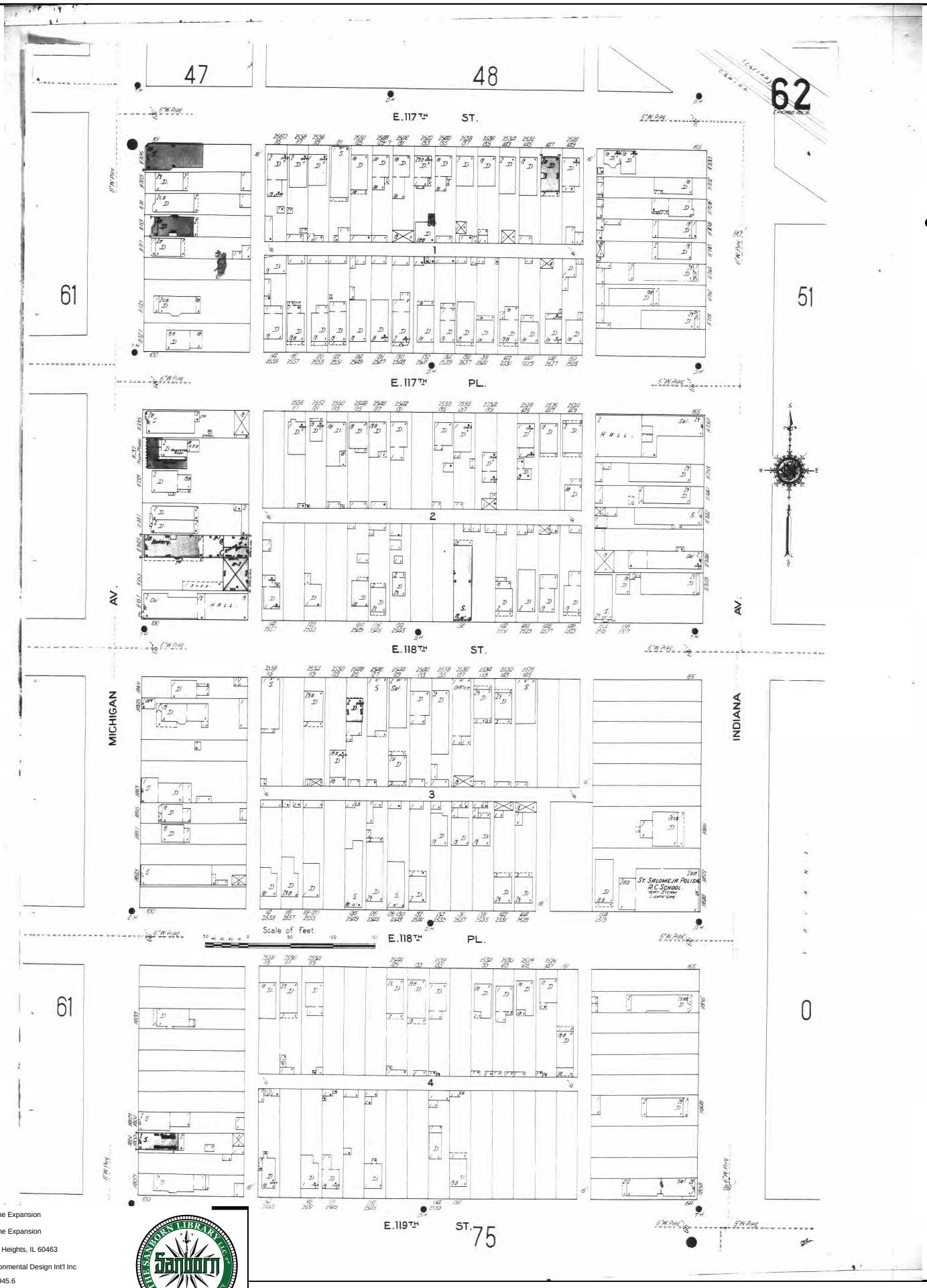

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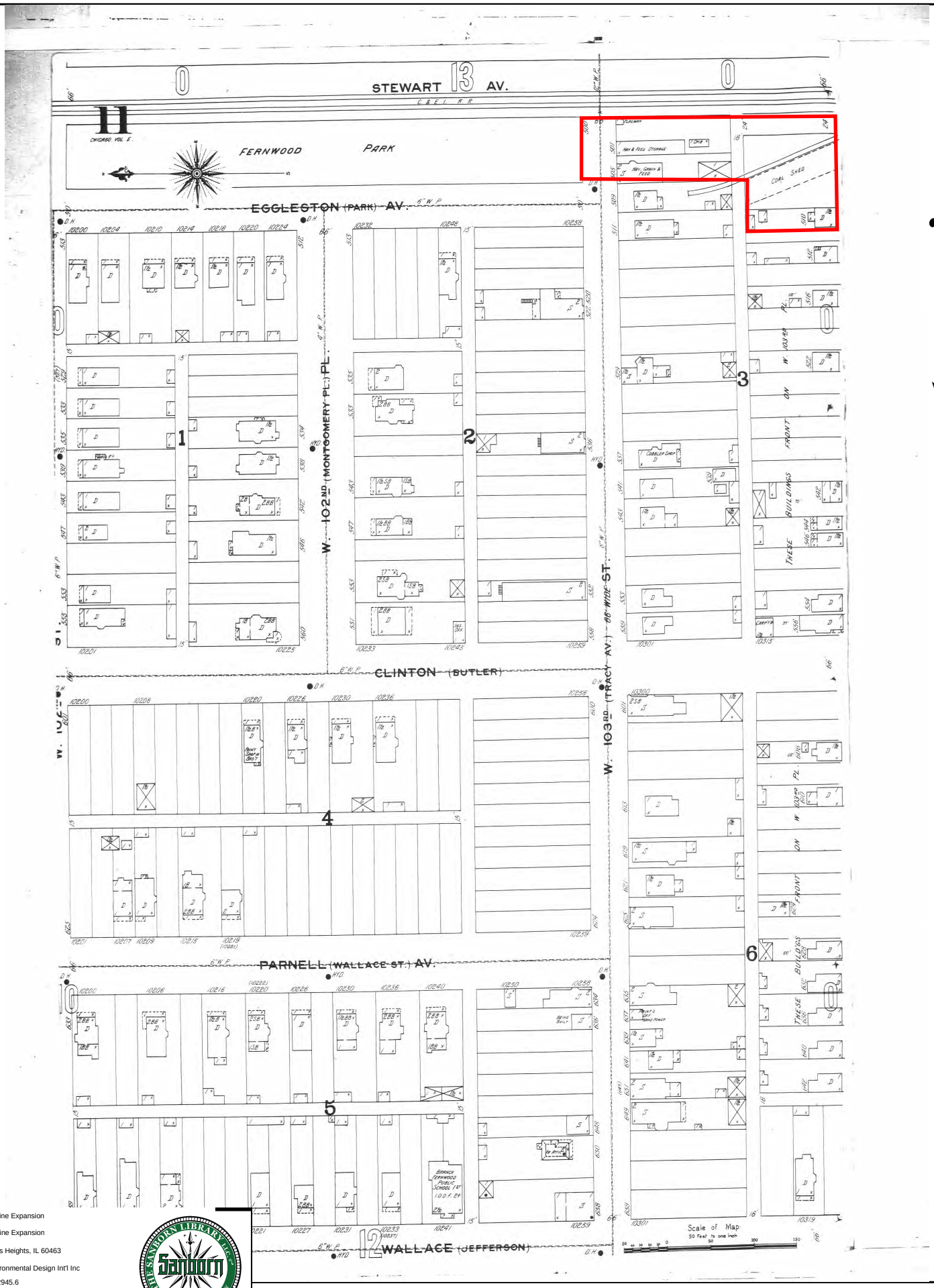

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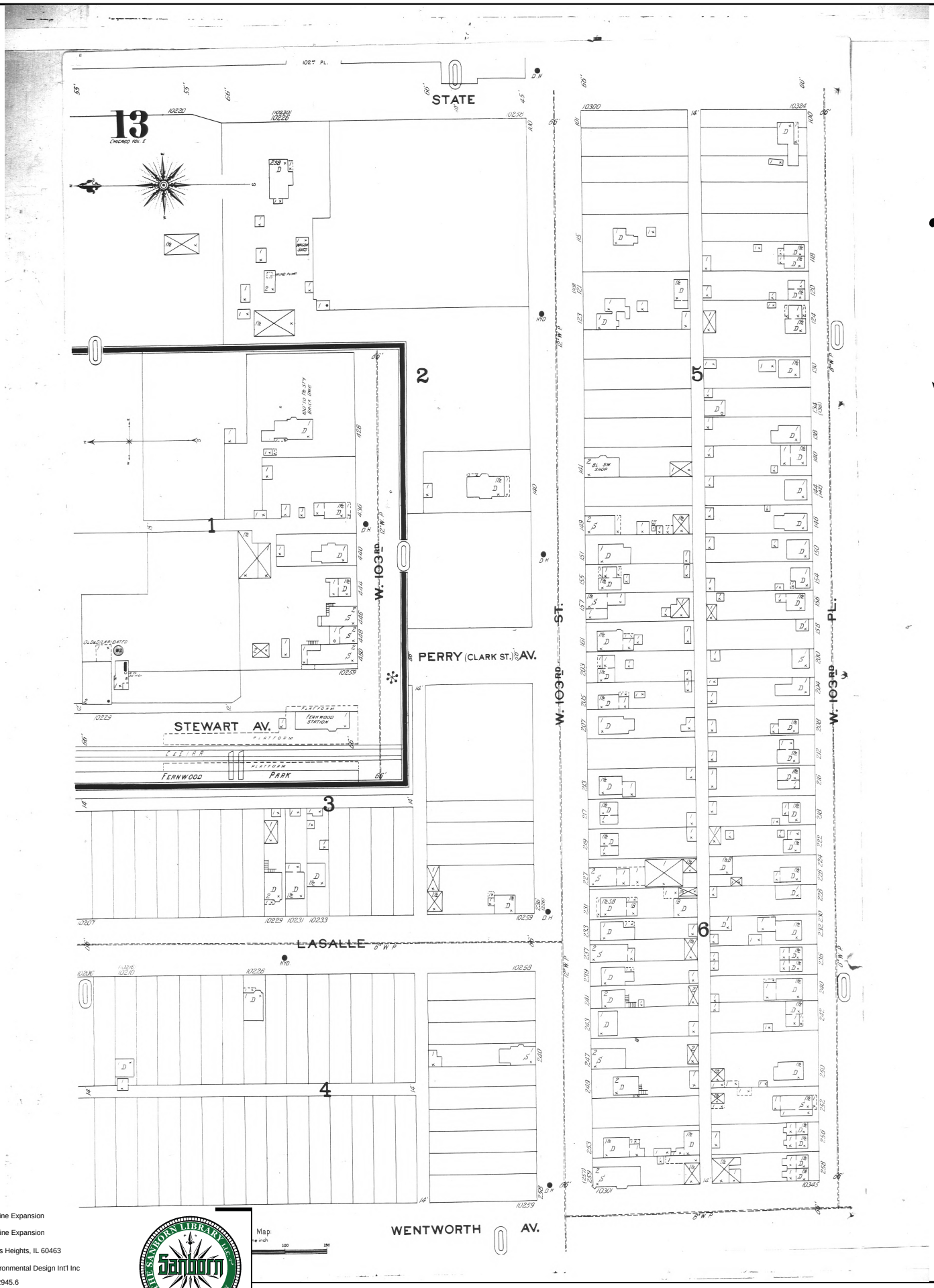

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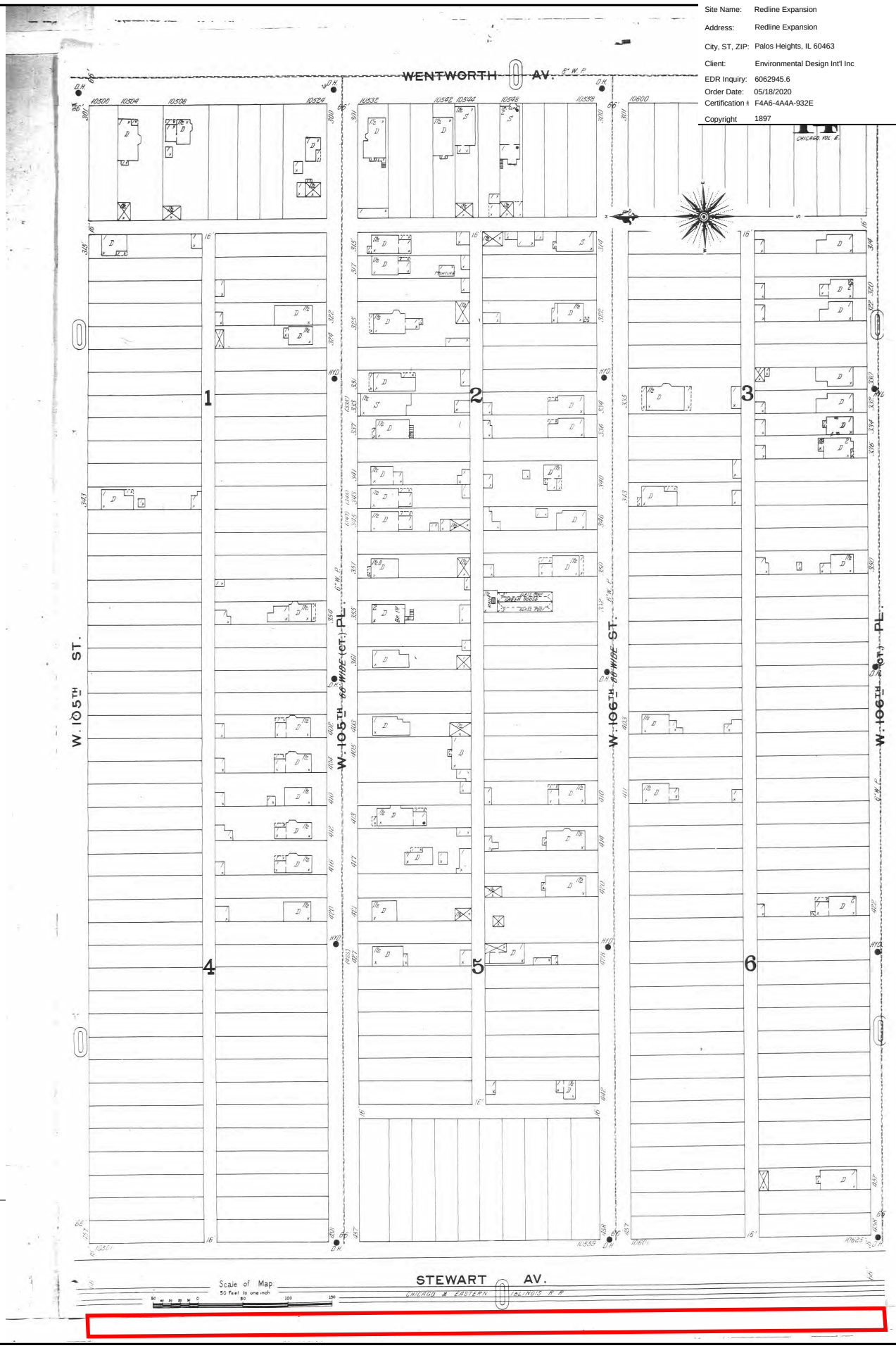

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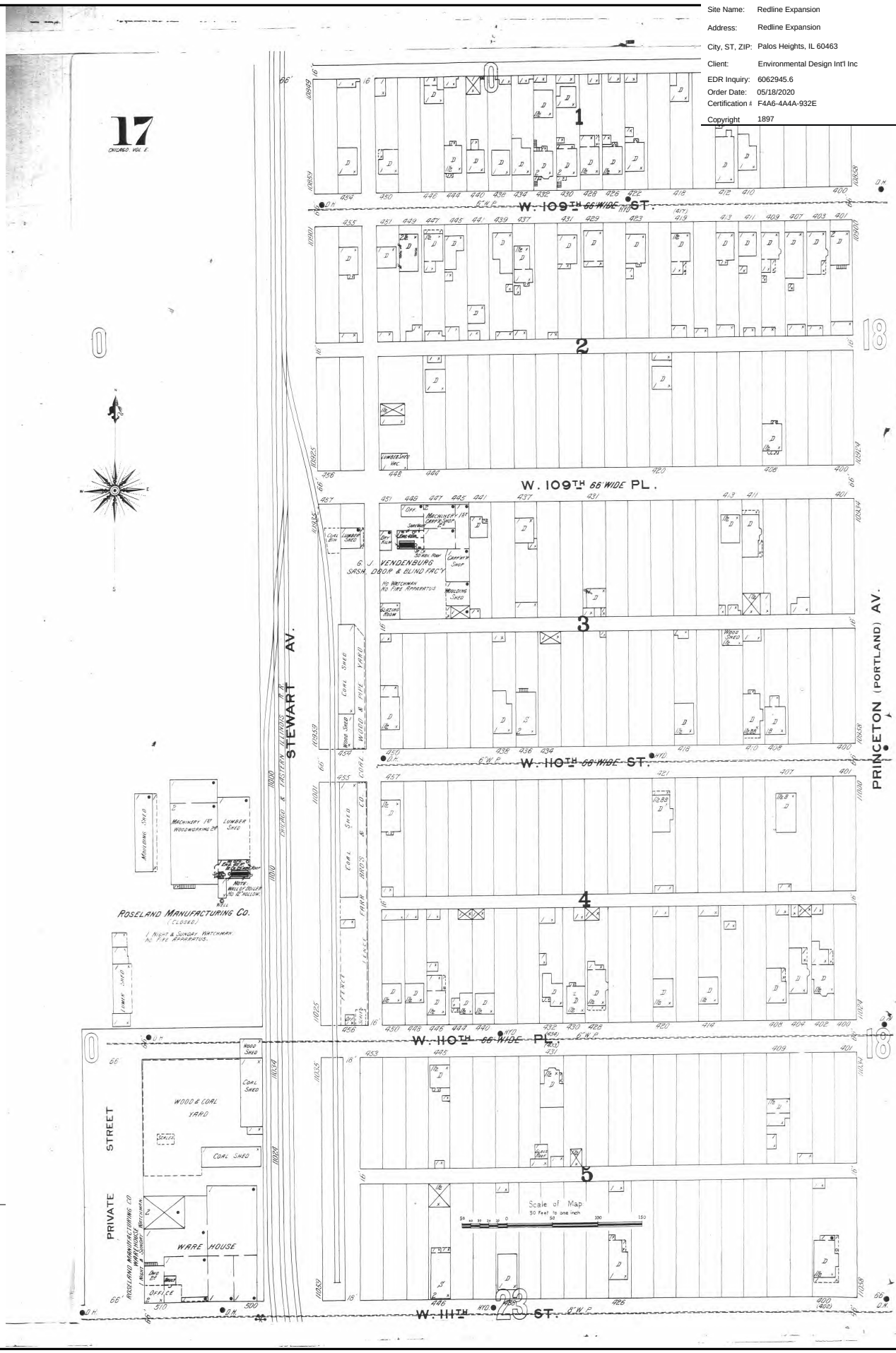

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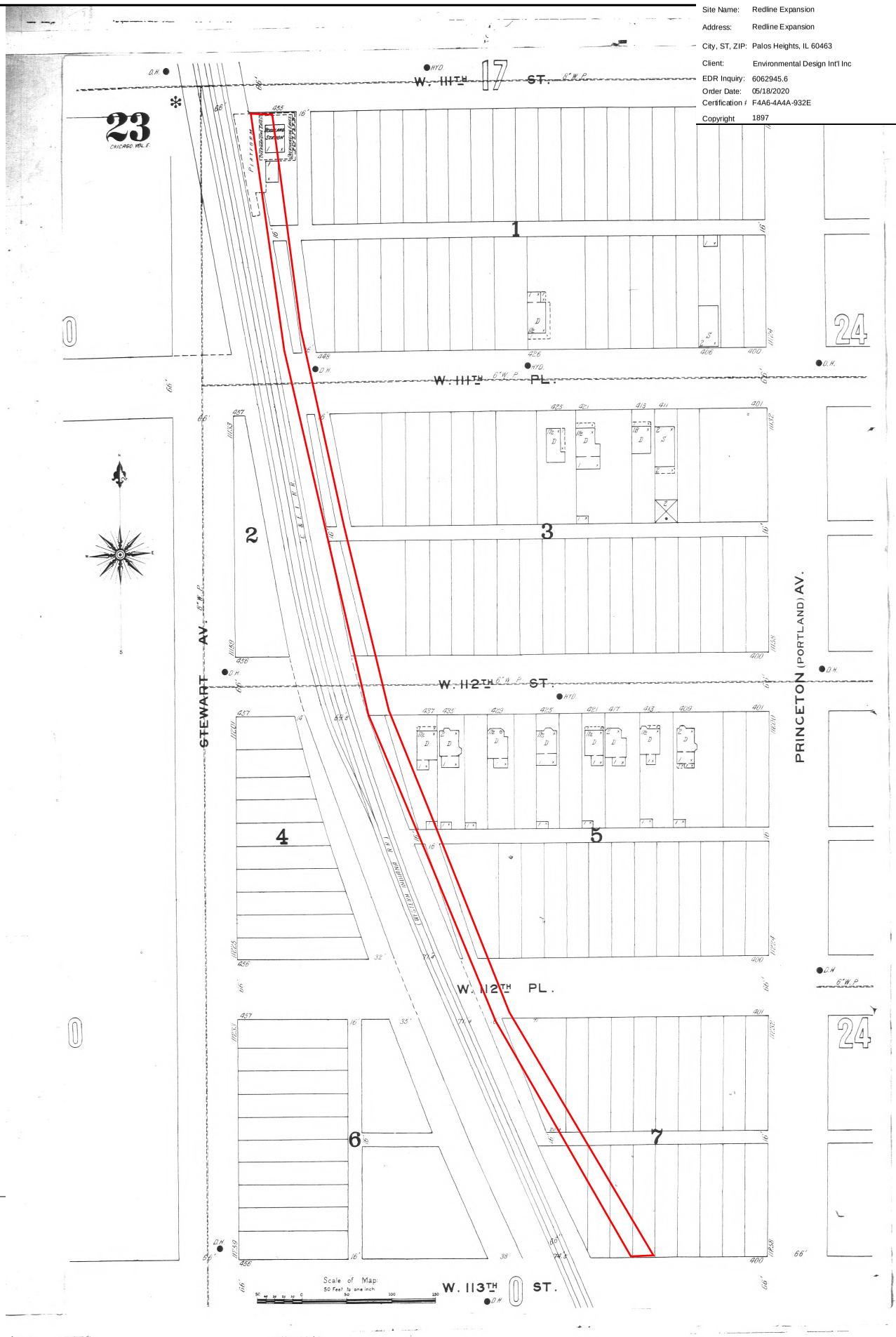

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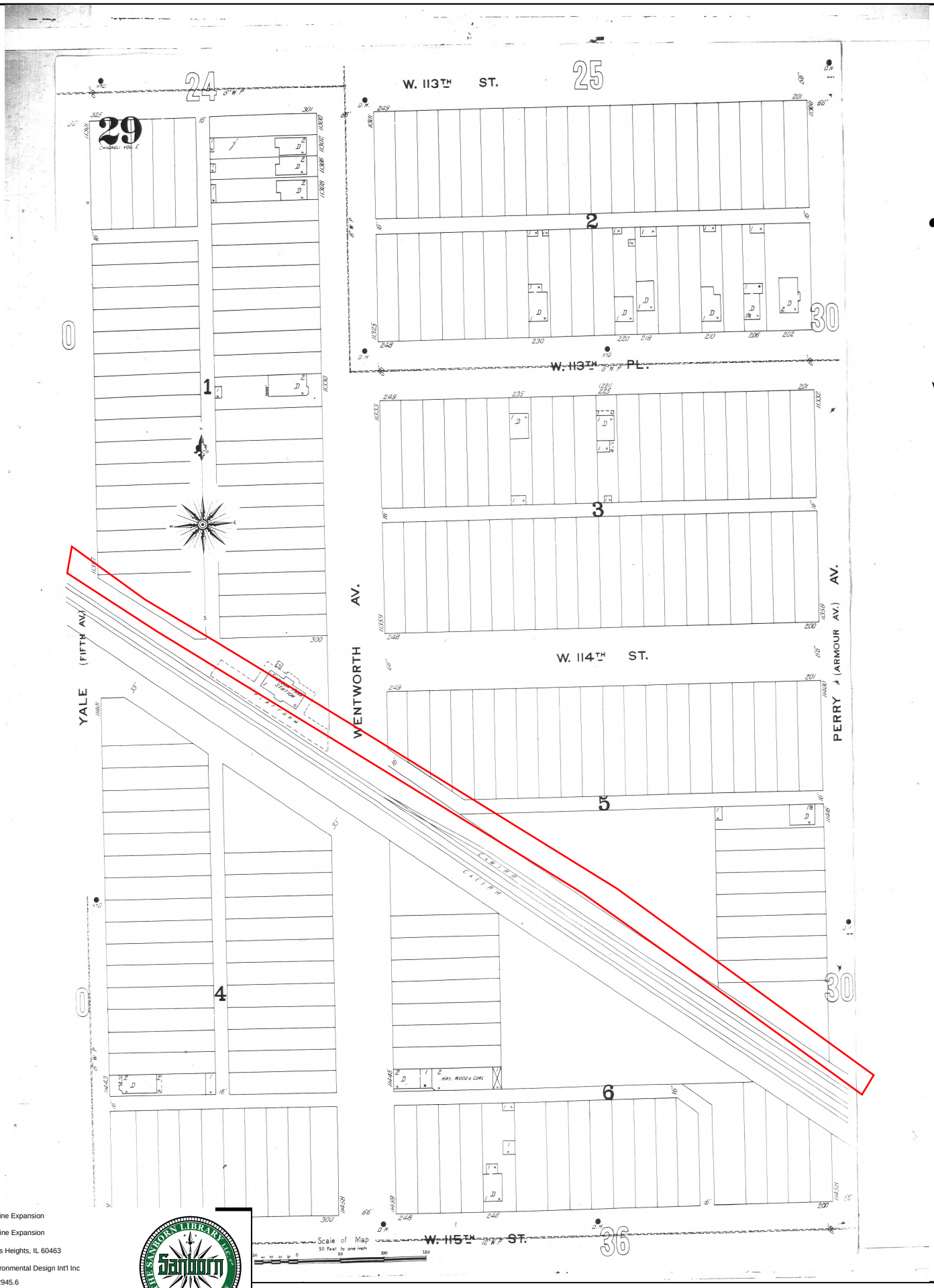

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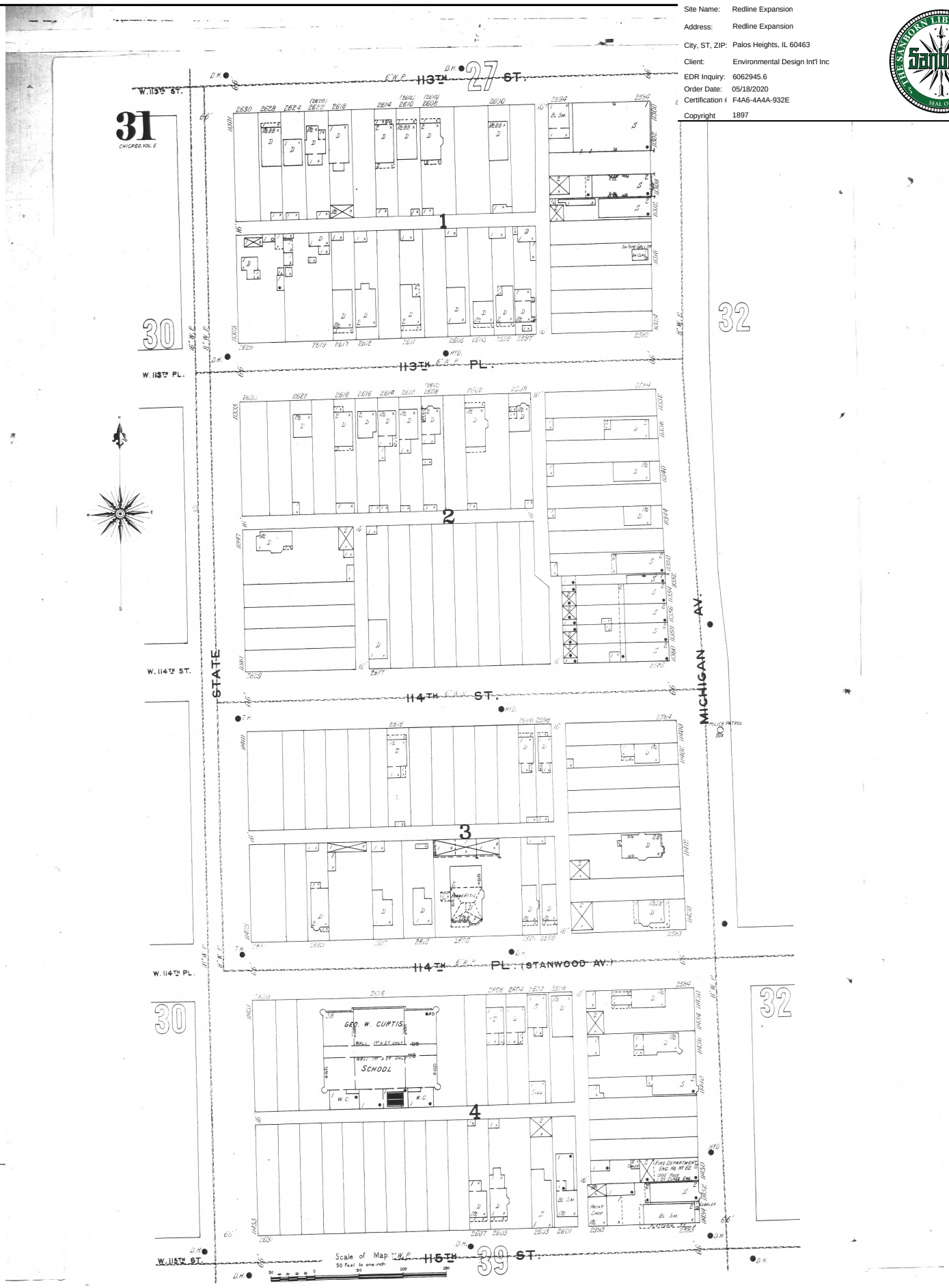

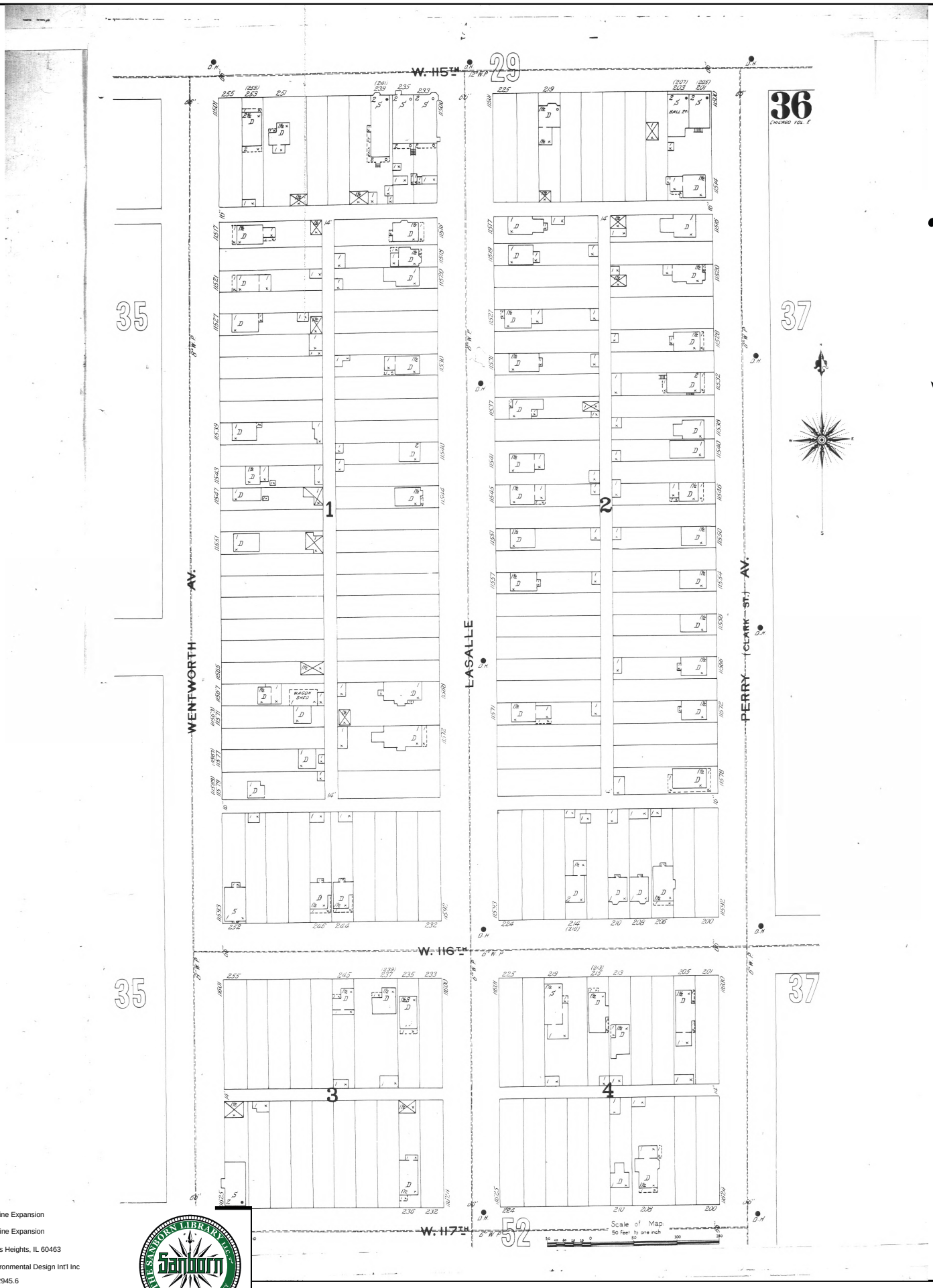

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City, ST, ZIP:	Palos Heights, IL 60463
Client:	Environmental Design Int'l Inc
EDR Inquiry:	6062945.6
Order Date:	05/18/2020
Certification #	F4A6-4A4A-932E
Copyright	1897

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Certification #F4A6-4A4A-932E

Site Name:	Redline Expansion
Address:	Redline Expansion
City, ST, ZIP:	Palos Heights, IL 60463
Client:	Environmental Design Int'l Inc
EDR Inquiry:	6062945.6
Order Date:	05/18/2020
Certification #	F4A6-4A4A-932E
Copyright	1897

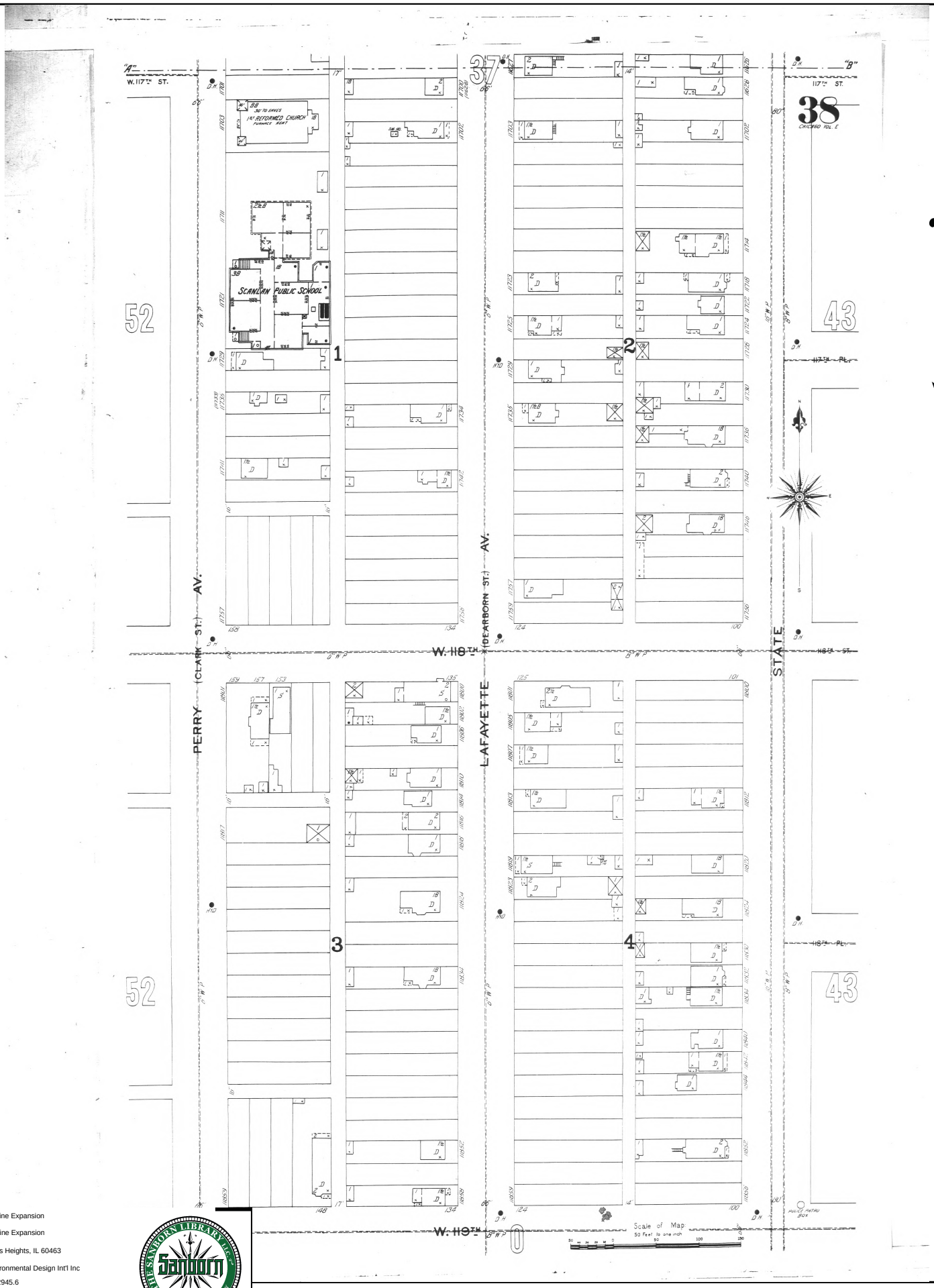

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EDR Inquiry:	6062945.6
Order Date:	05/18/2020
Certification #	F4A6-4A4A-932E
Copyright	1897

Certified Sanborn® Map

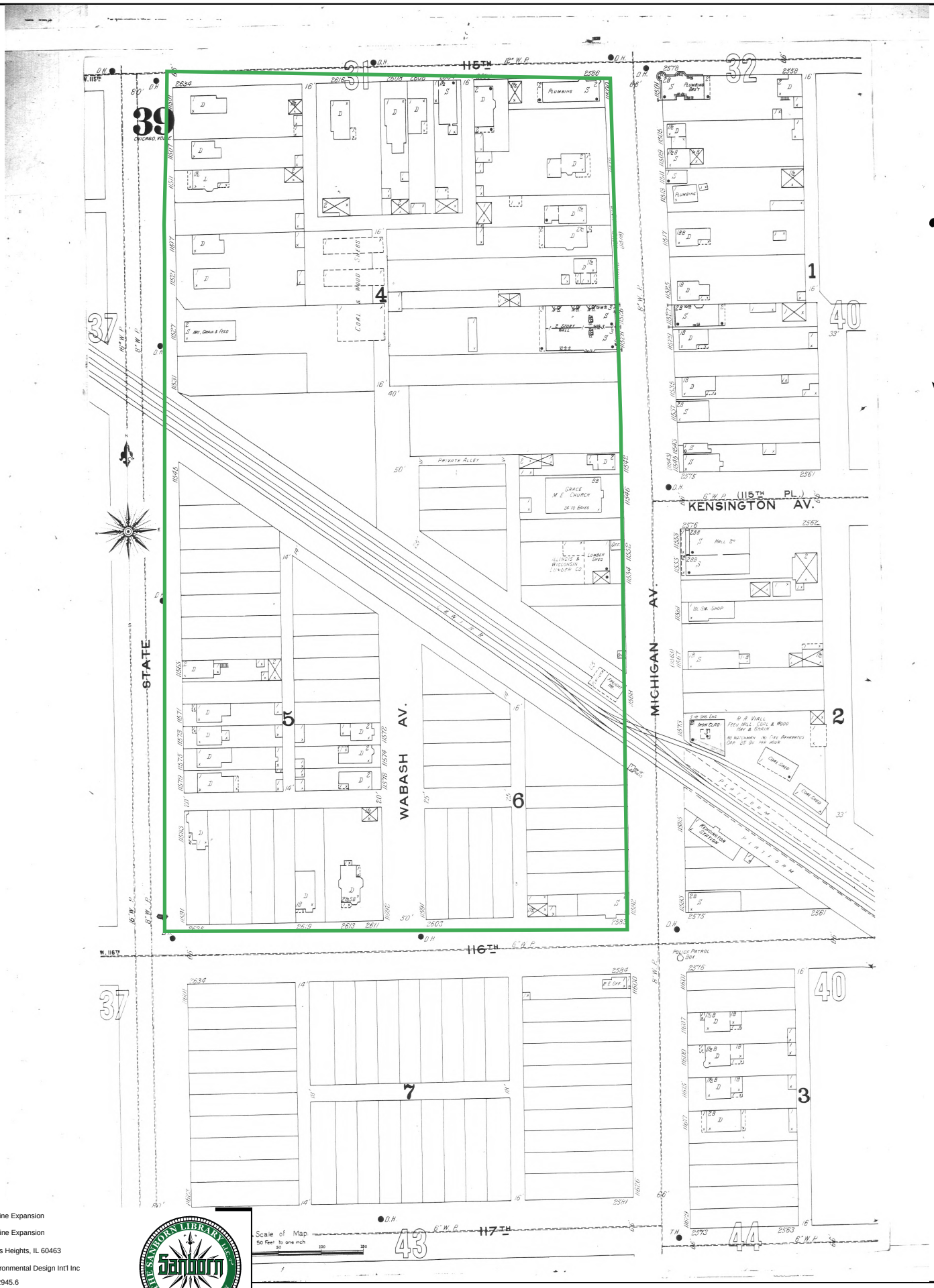

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Certification #	F4A6-4A4A-932E
Copyright	1897

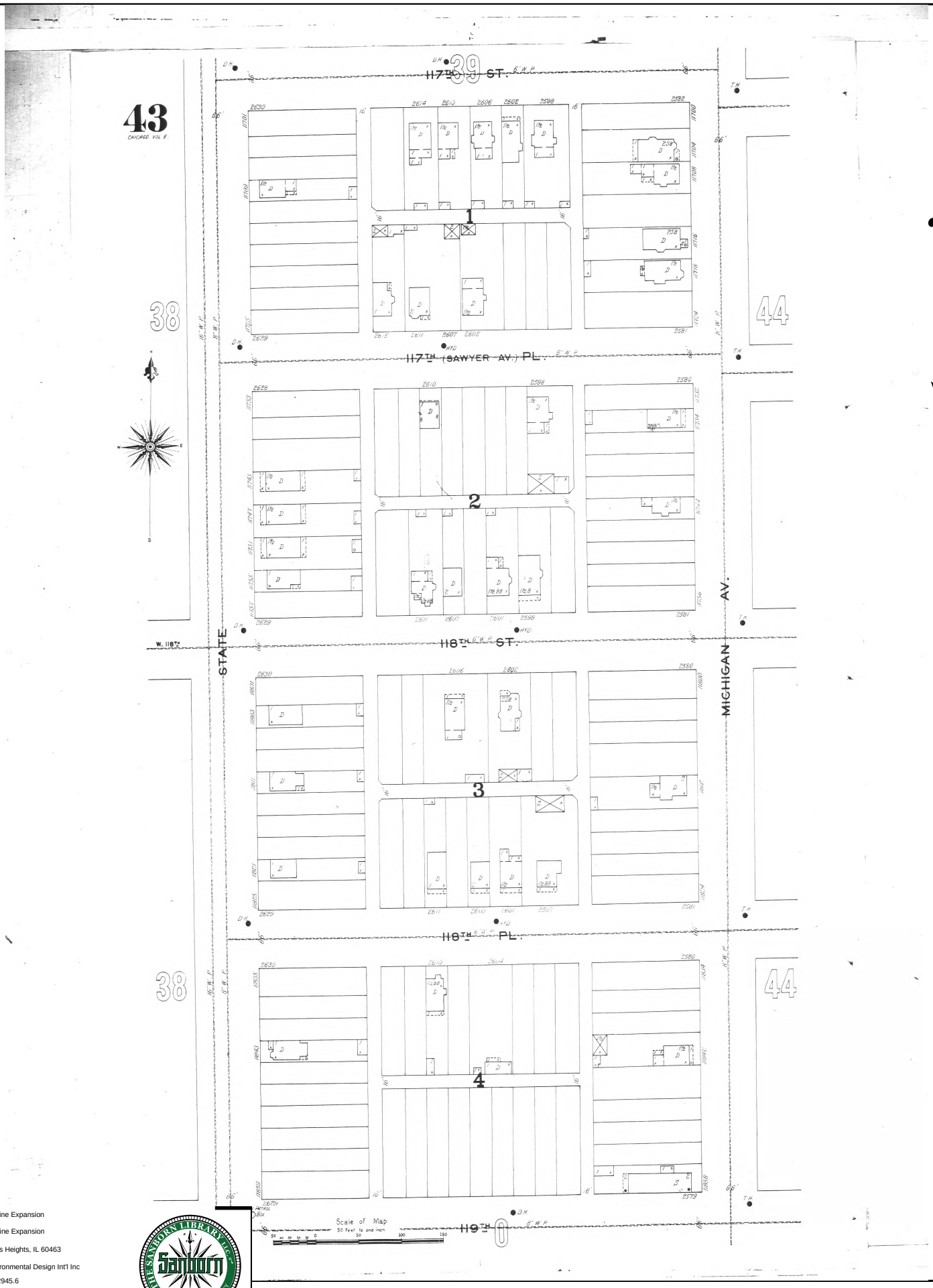

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EDR Inquiry:	6062945.6
Order Date:	05/18/2020
Certification #	F4A6-4A4A-932E
Copyright	1897

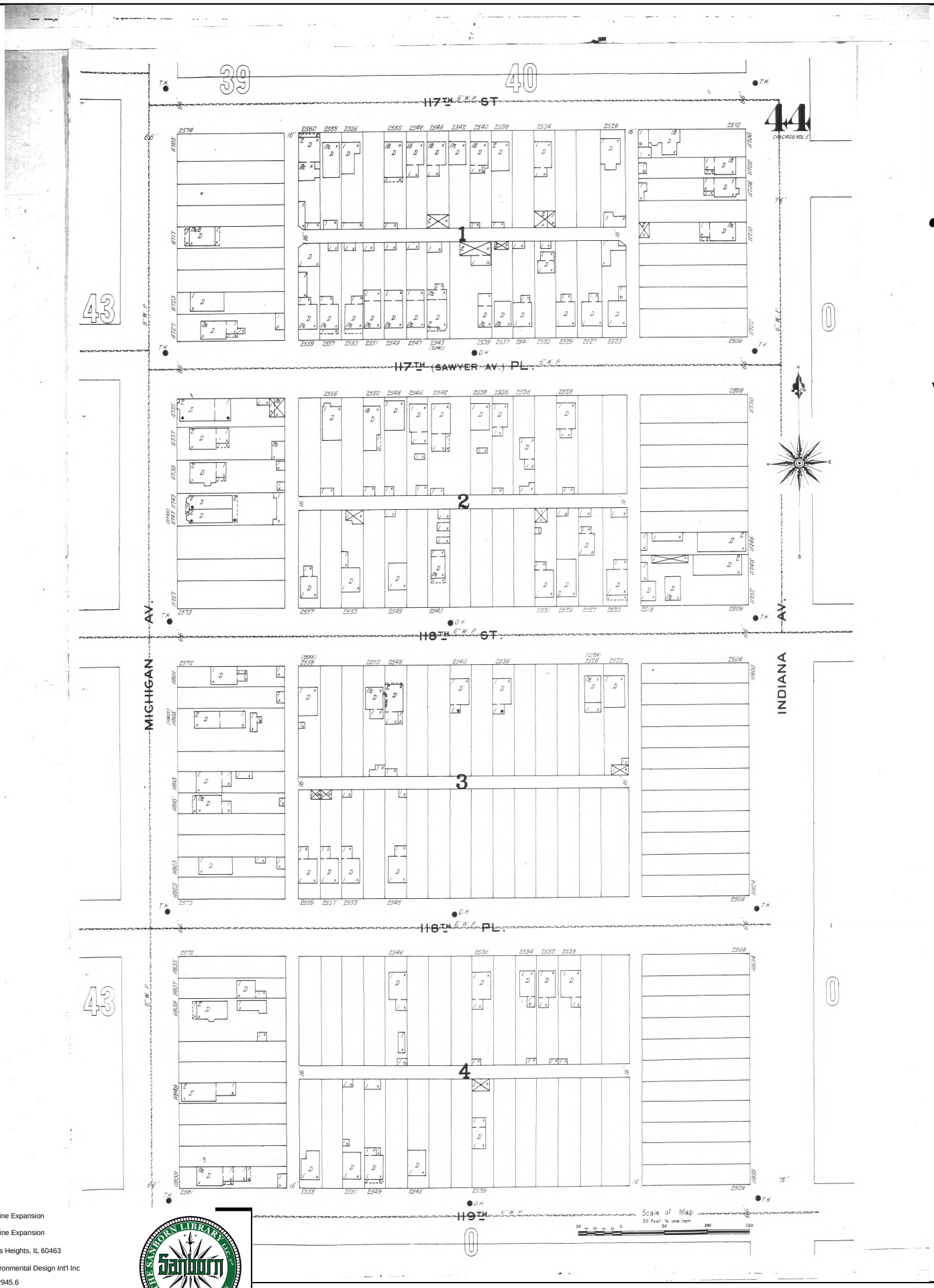

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Certification #	F4A6-4A4A-932E
Copyright	1897

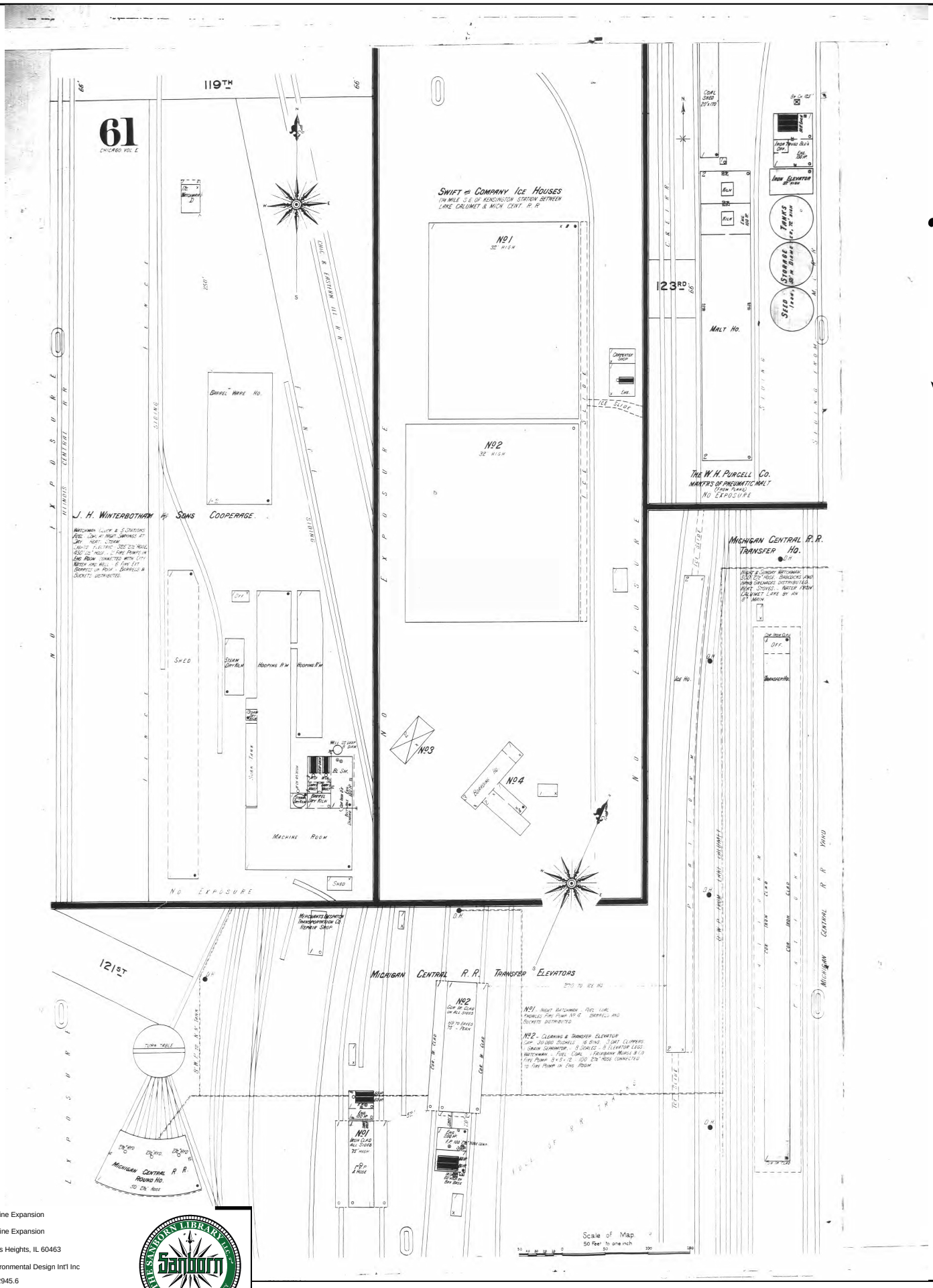

Site Name:	Redline Expansion
Address:	Redline Expansion
City, ST, ZIP:	Palos Heights, IL 60463
Client:	Environmental Design Int'l Inc
EDR Inquiry:	6062945.6
Order Date:	05/18/2020
Certification #	F4A6-4A4A-932E
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Certification #F4A6-4A4A-932E

Appendix F - Additional Documentation

National Flood Hazard Layer FIRMette

FEMA

87°37'43"W 41°43'31"N

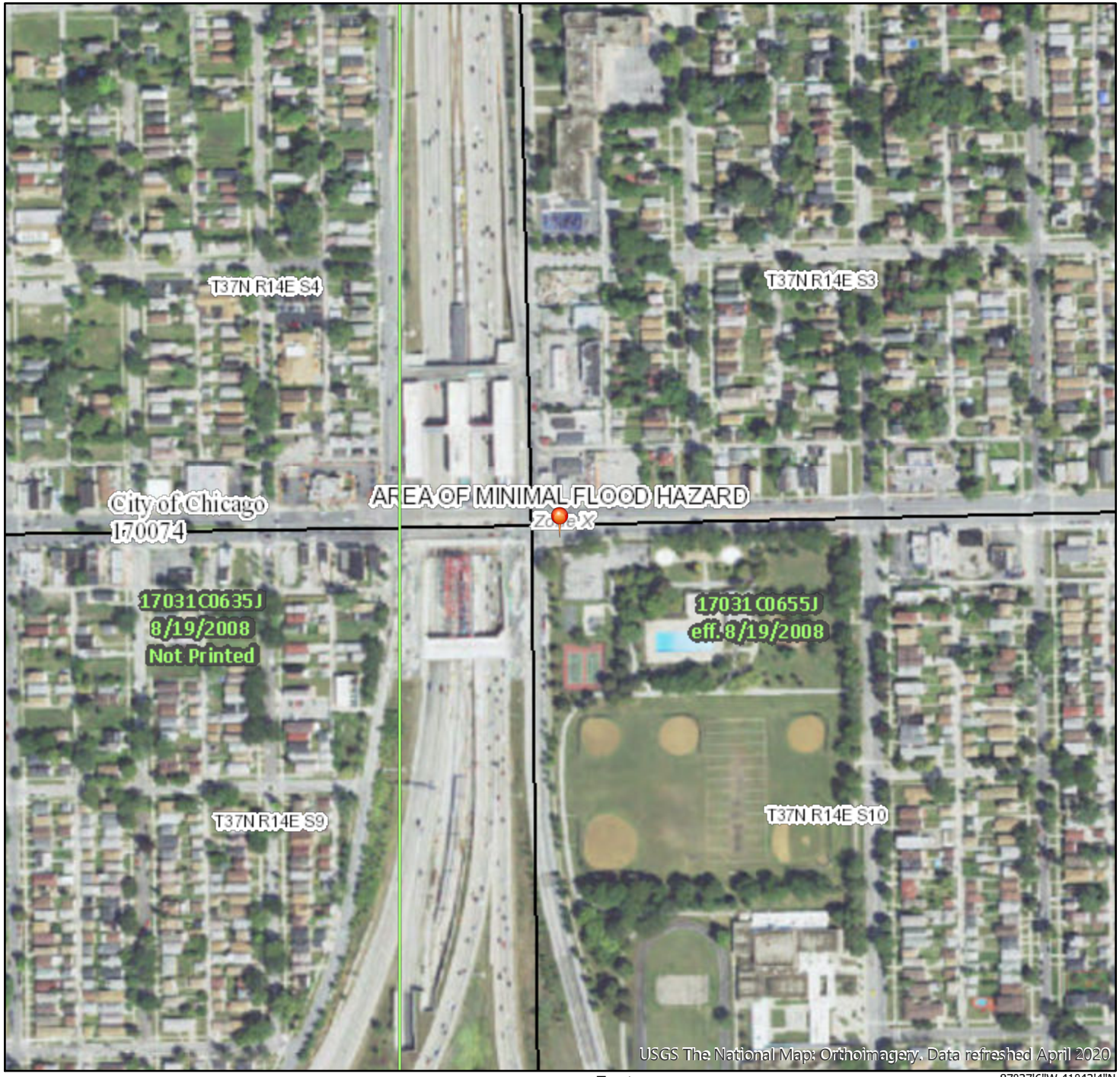

87°37'6"W 41°43'4"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/2/2020 at 5:37 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

87°38'5"W 41°43'11"N

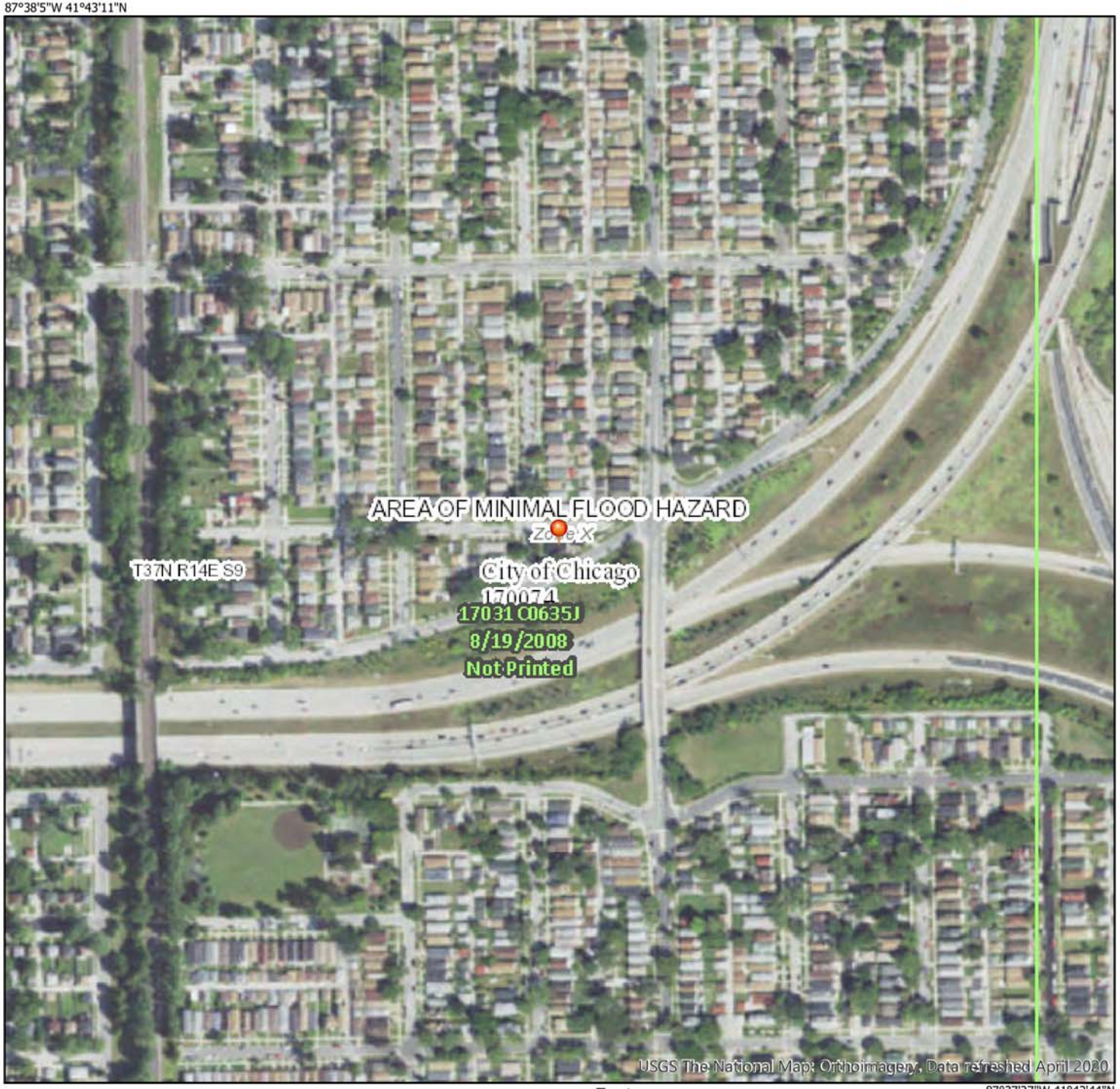

87°37'27"W 41°42'44"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/2/2020 at 5:35 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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National Flood Hazard Layer FIRMette

FEMA

87°38'17"W 41°42'58"N

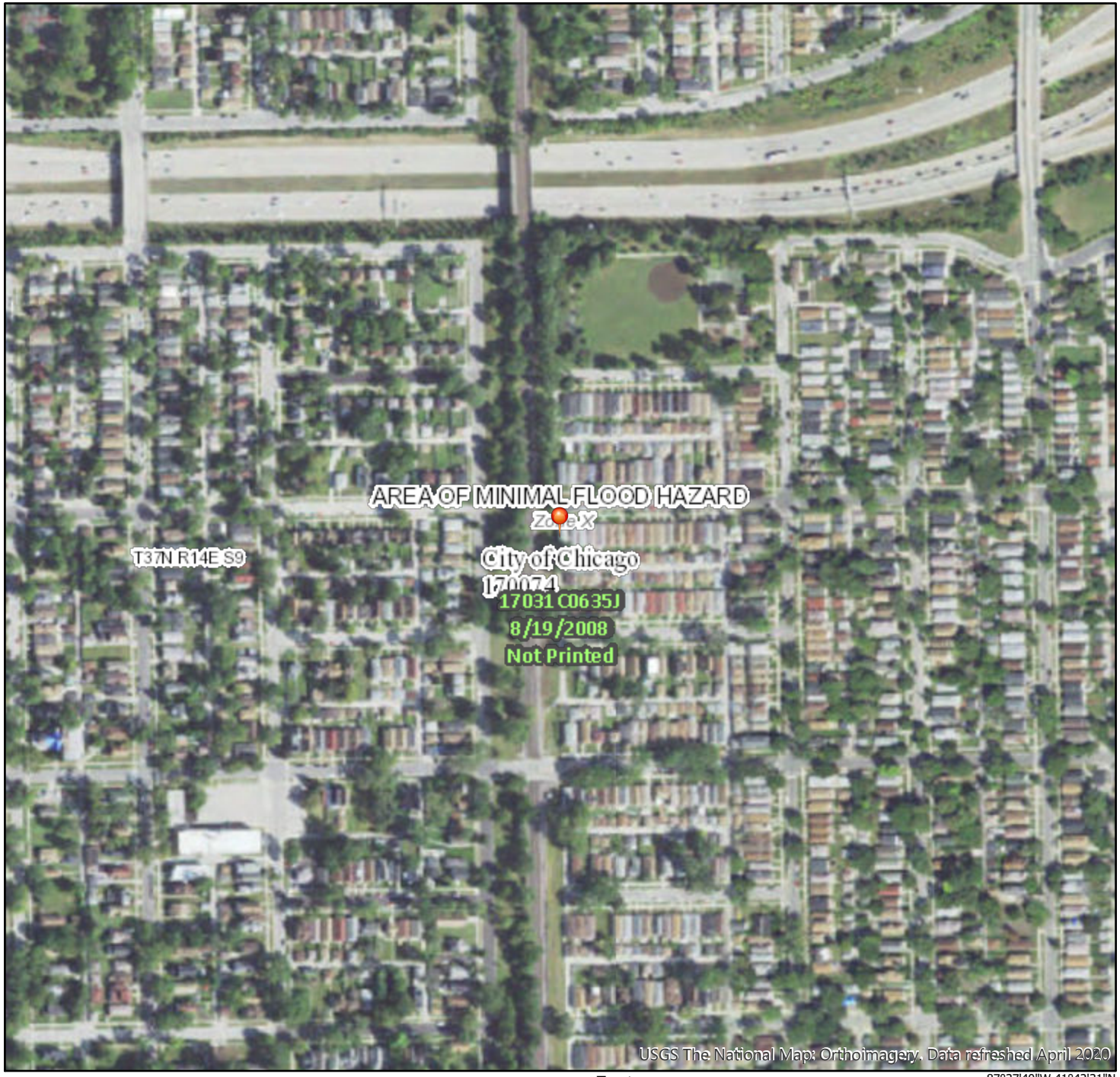

87°37'40"W 41°42'31"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/2/2020 at 6:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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National Flood Hazard Layer FIRMette

87°38'19"W 41°42'N

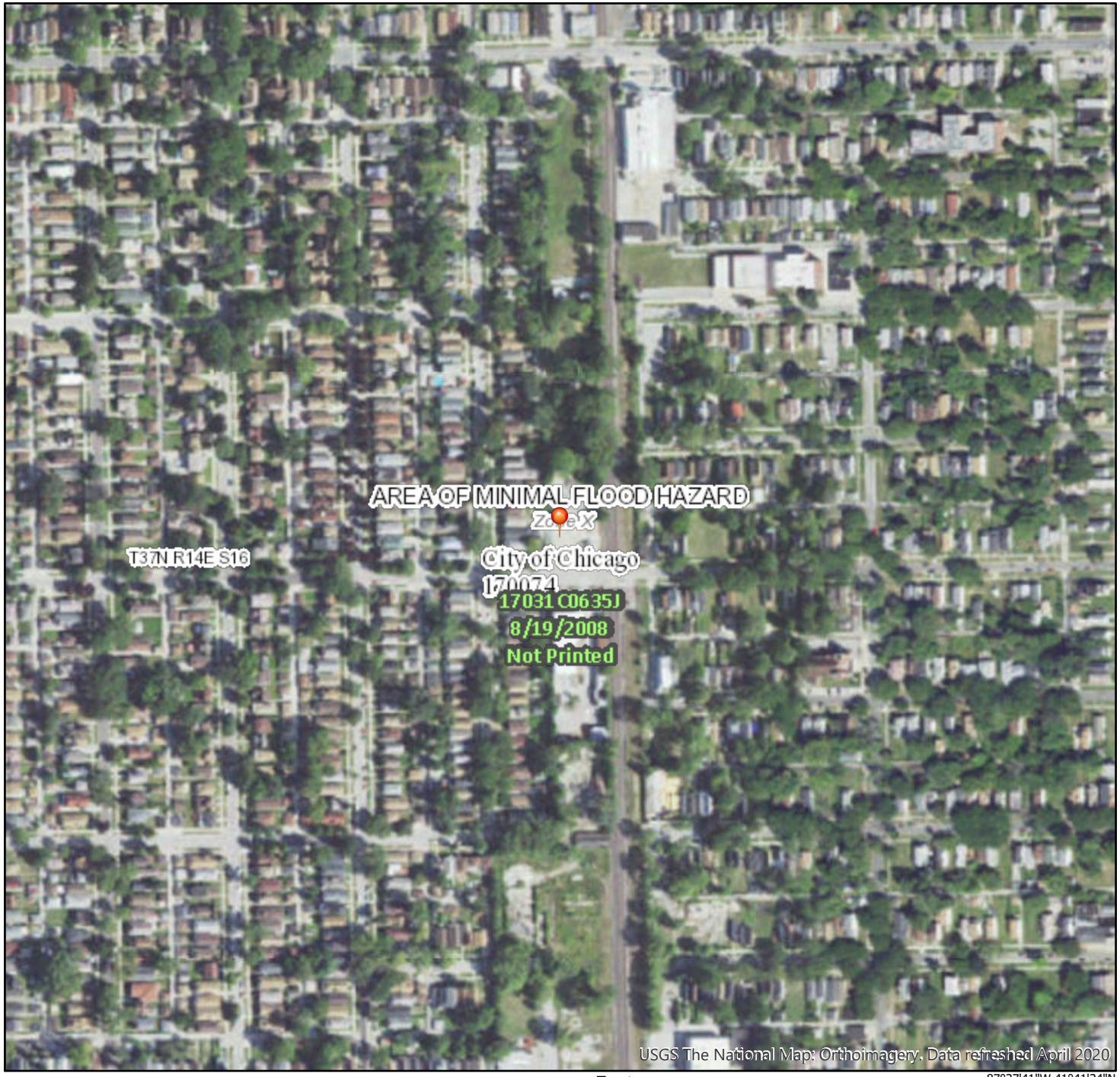

87°37'41"W 41°41'34"N

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1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/21/2020 at 5:15 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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National Flood Hazard Layer FIRMette

FEMA

87°38'15"W 41°42'41"N

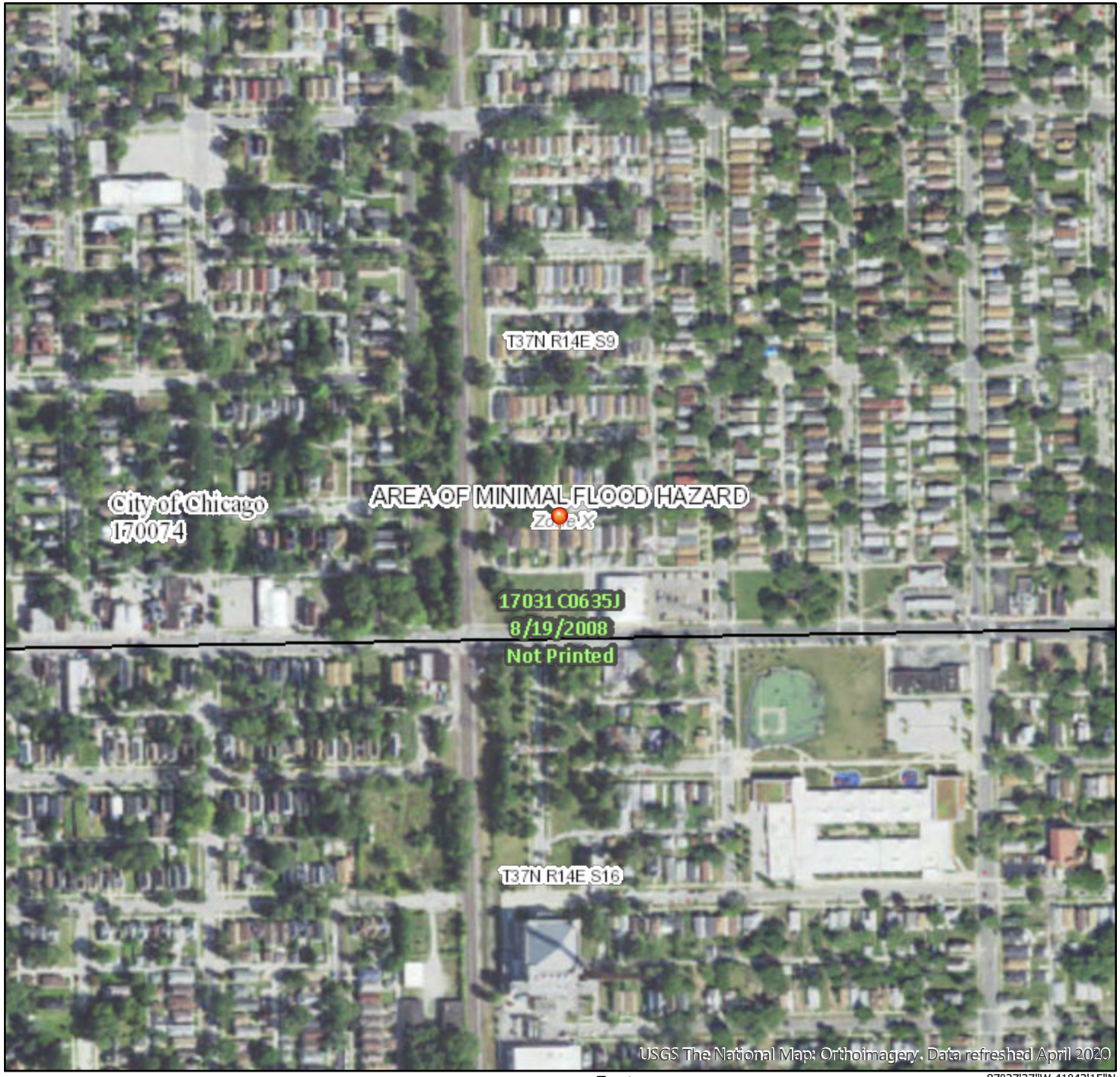

87°37'37"W 41°42'15"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/21/2020 at 3:53 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

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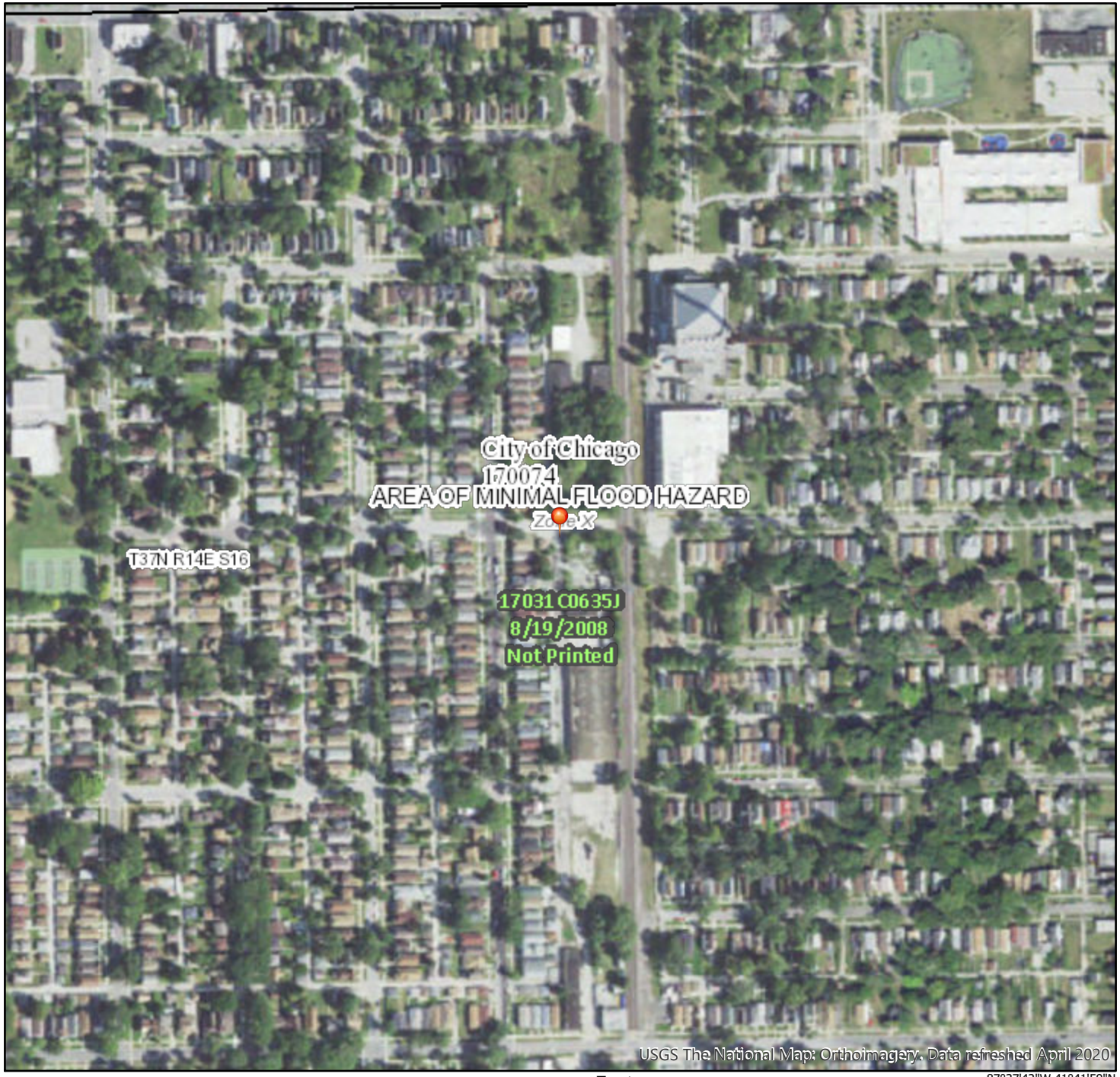

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1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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National Flood Hazard Layer FIRMette

FEMA

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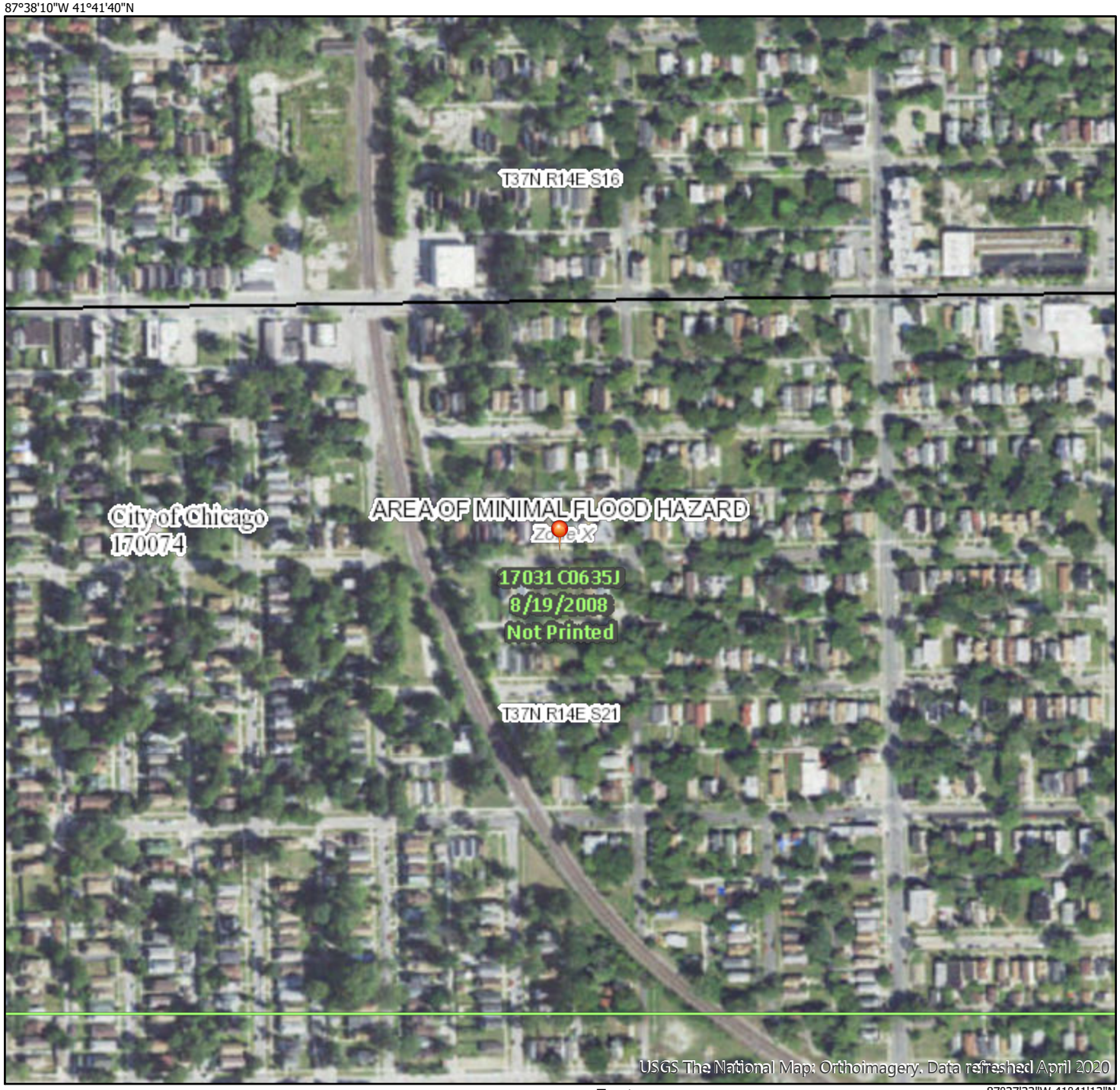

87°37'33"W 41°41'13"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

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The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/21/2020 at 5:18 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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National Flood Hazard Layer FIRMette

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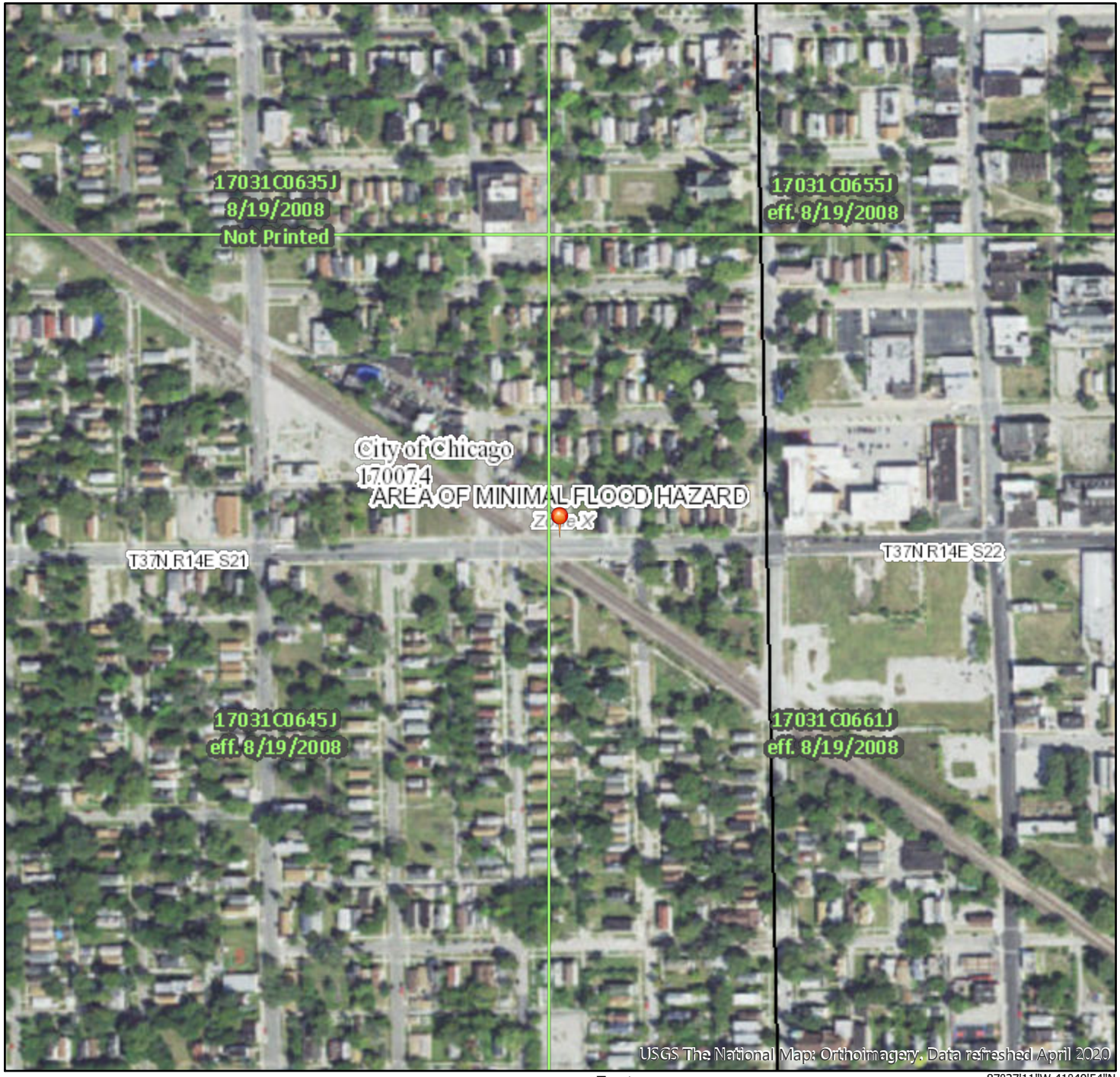

87°37'11"W 41°40'54"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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National Flood Hazard Layer FIRMette

FEMA

87°37'7"W 41°41'5"N

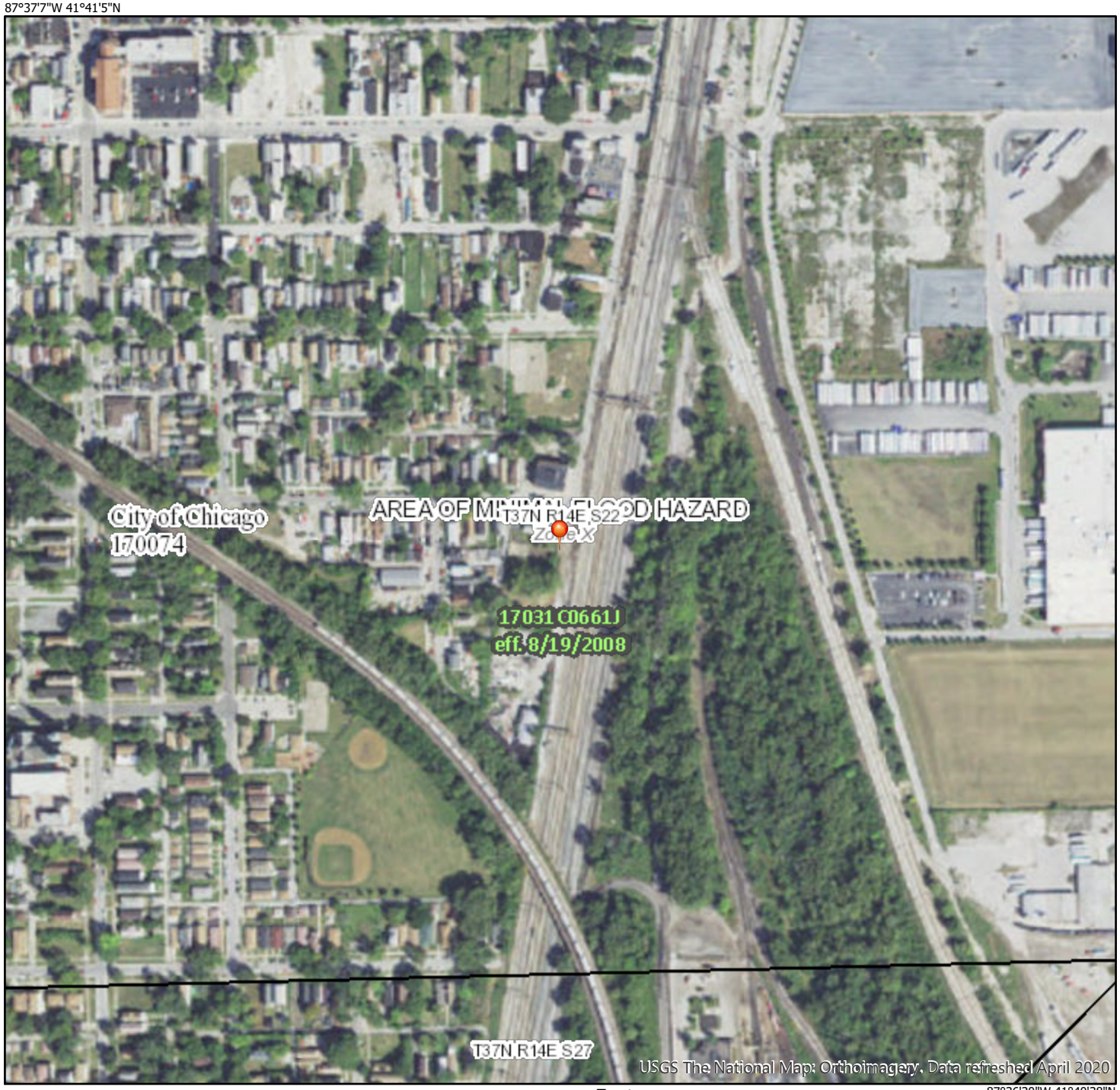

87°36'30"W 41°40'38"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

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This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

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National Flood Hazard Layer FIRMette

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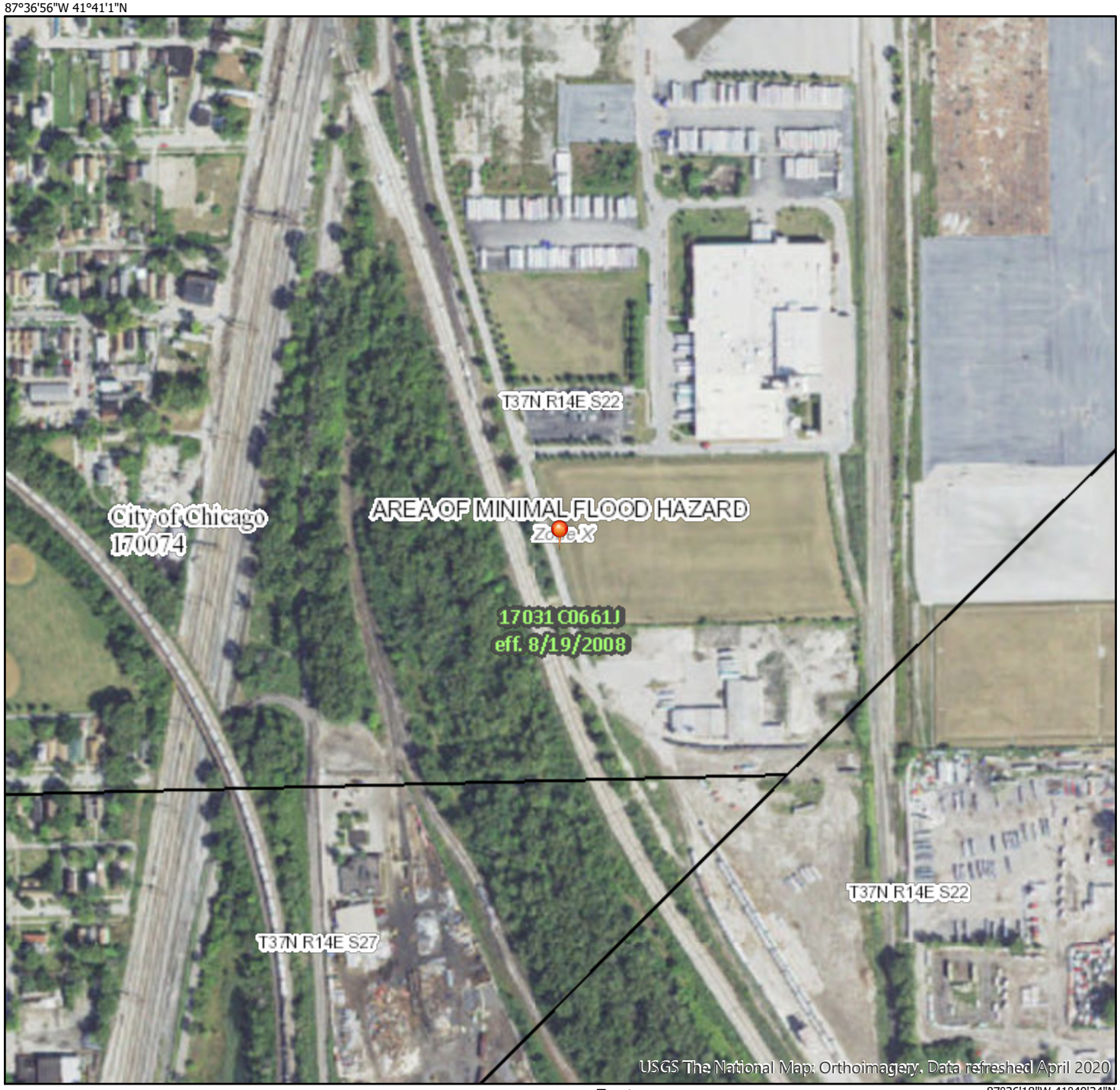

87°36'18"W 41°40'34"N

0 250 500 1,000 1,500 2,000 Feet

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Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

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- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

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- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

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OTHER FEATURES

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- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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National Flood Hazard Layer FIRMette

FEMA

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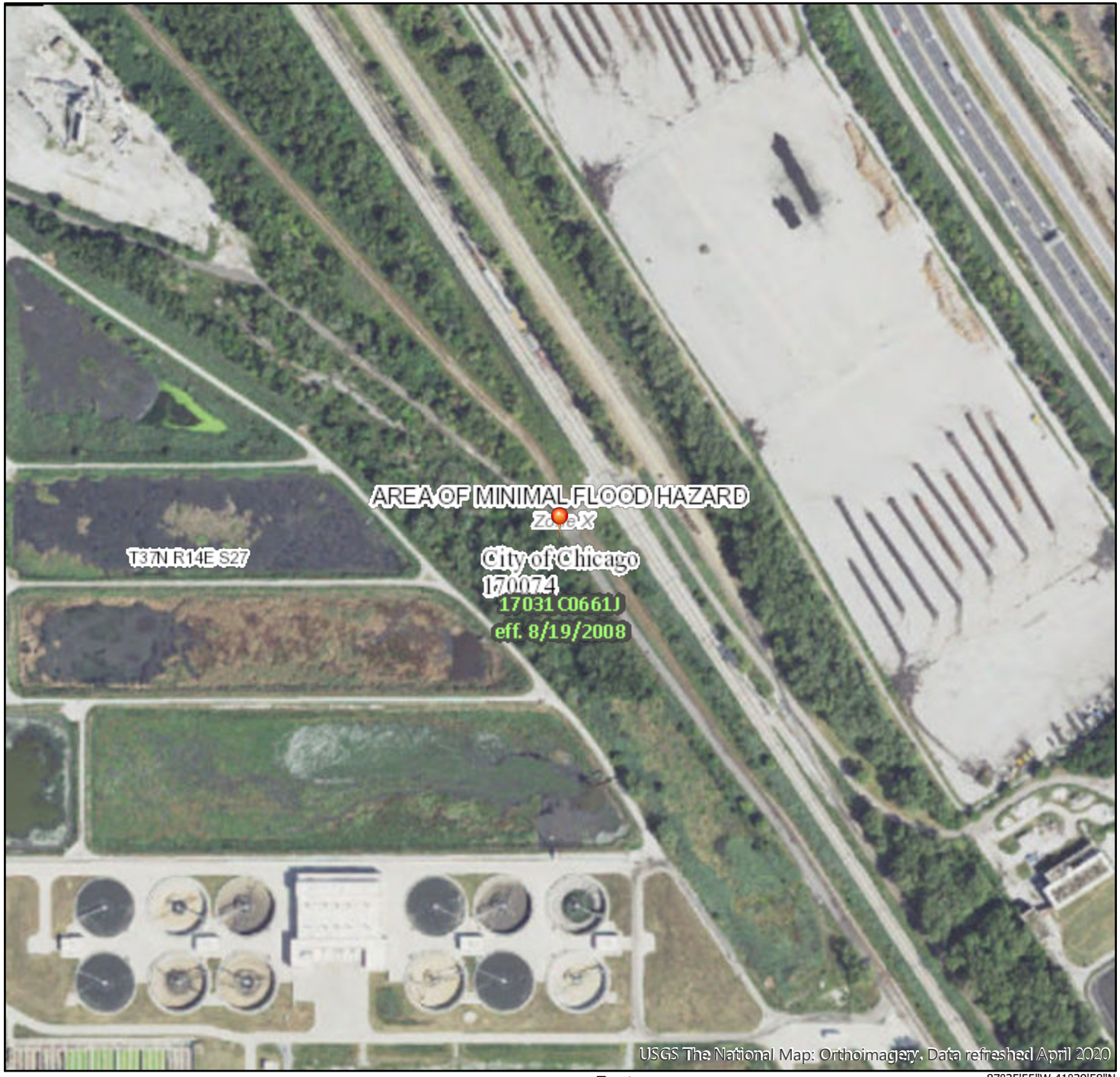

87°35'55"W 41°39'58"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

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- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

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- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

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National Flood Hazard Layer FIRMette

FEMA

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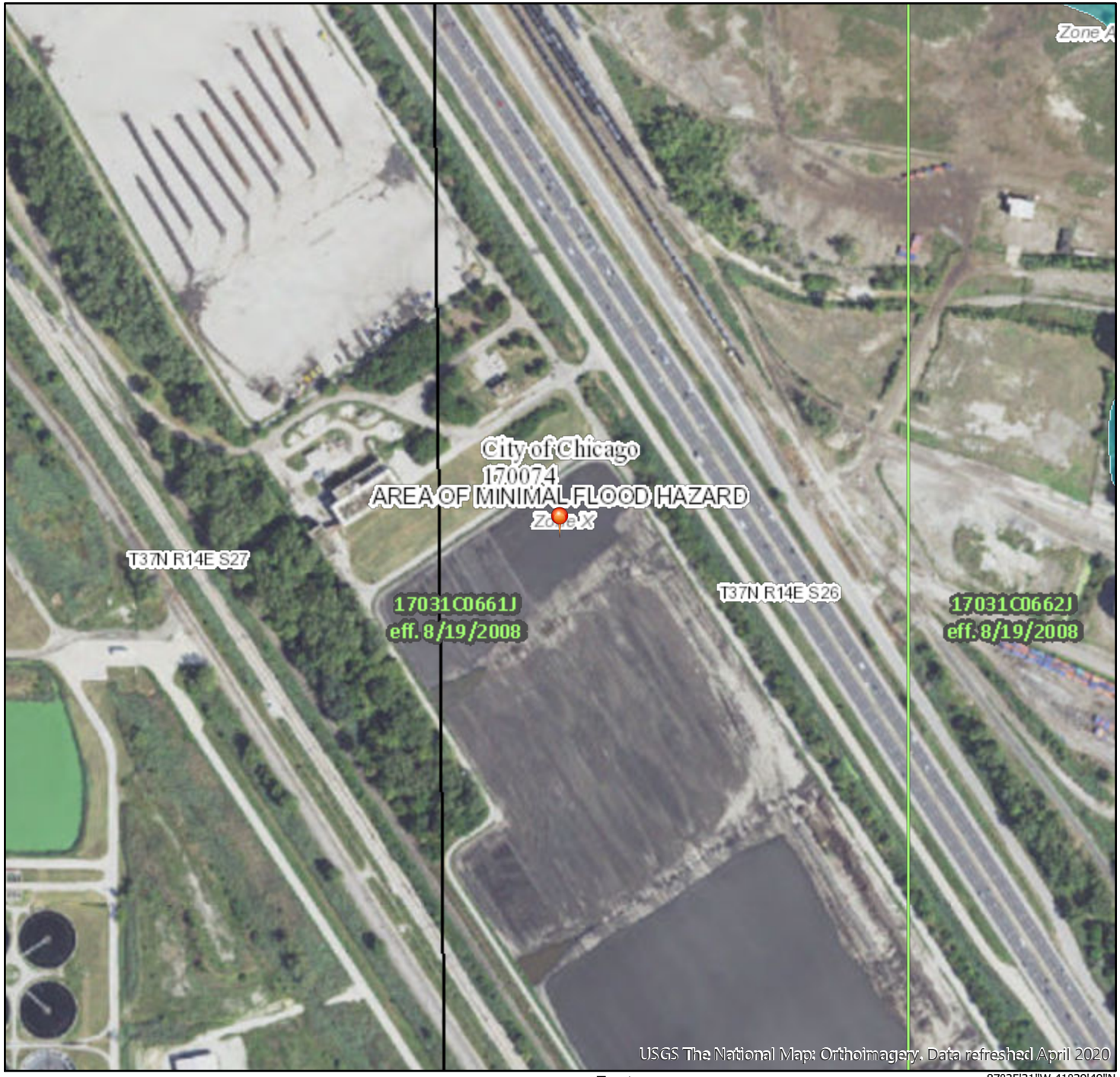

87°35'31"W 41°39'49"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
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- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

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- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

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- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

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- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

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National Flood Hazard Layer FIRMette

FEMA

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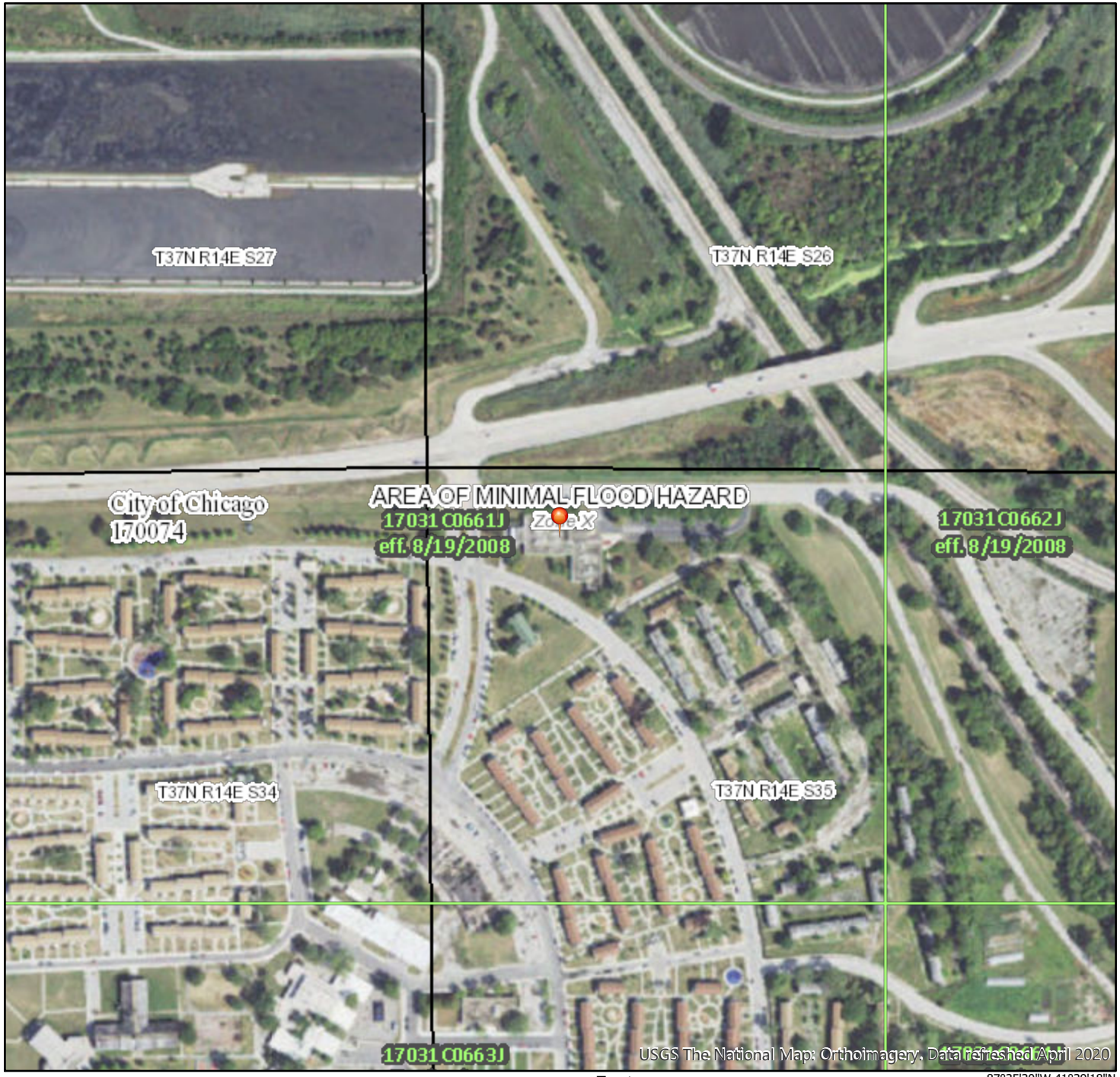

87°35'30"W 41°39'18"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

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National Flood Hazard Layer FIRMette

FEMA

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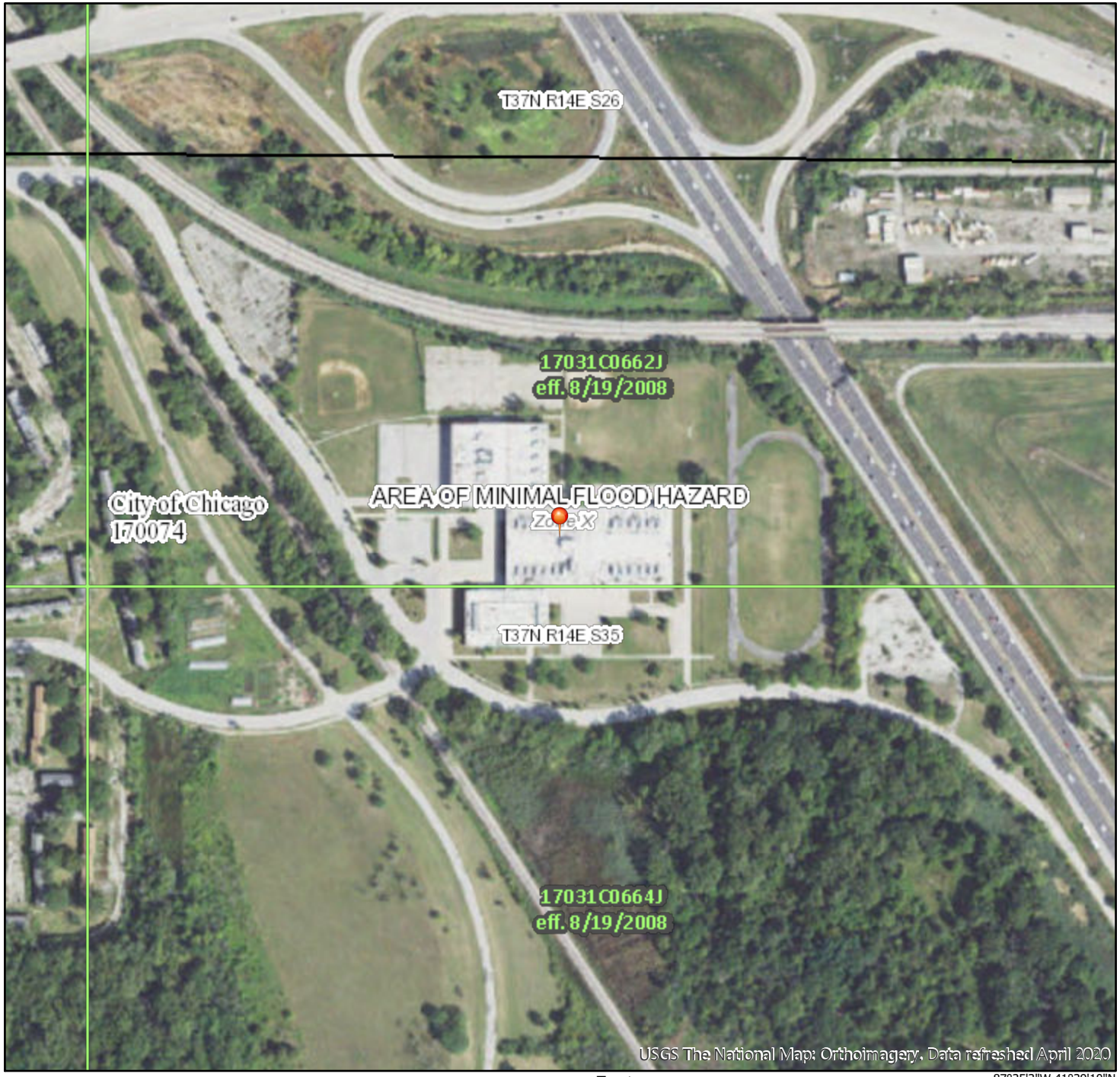

87°35'3"W 41°39'10"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

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Attachment A – Corridor Level Phase I Environmental Site Assessment (continued)

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for

Cook County, Illinois

Web Soil Survey Part 1

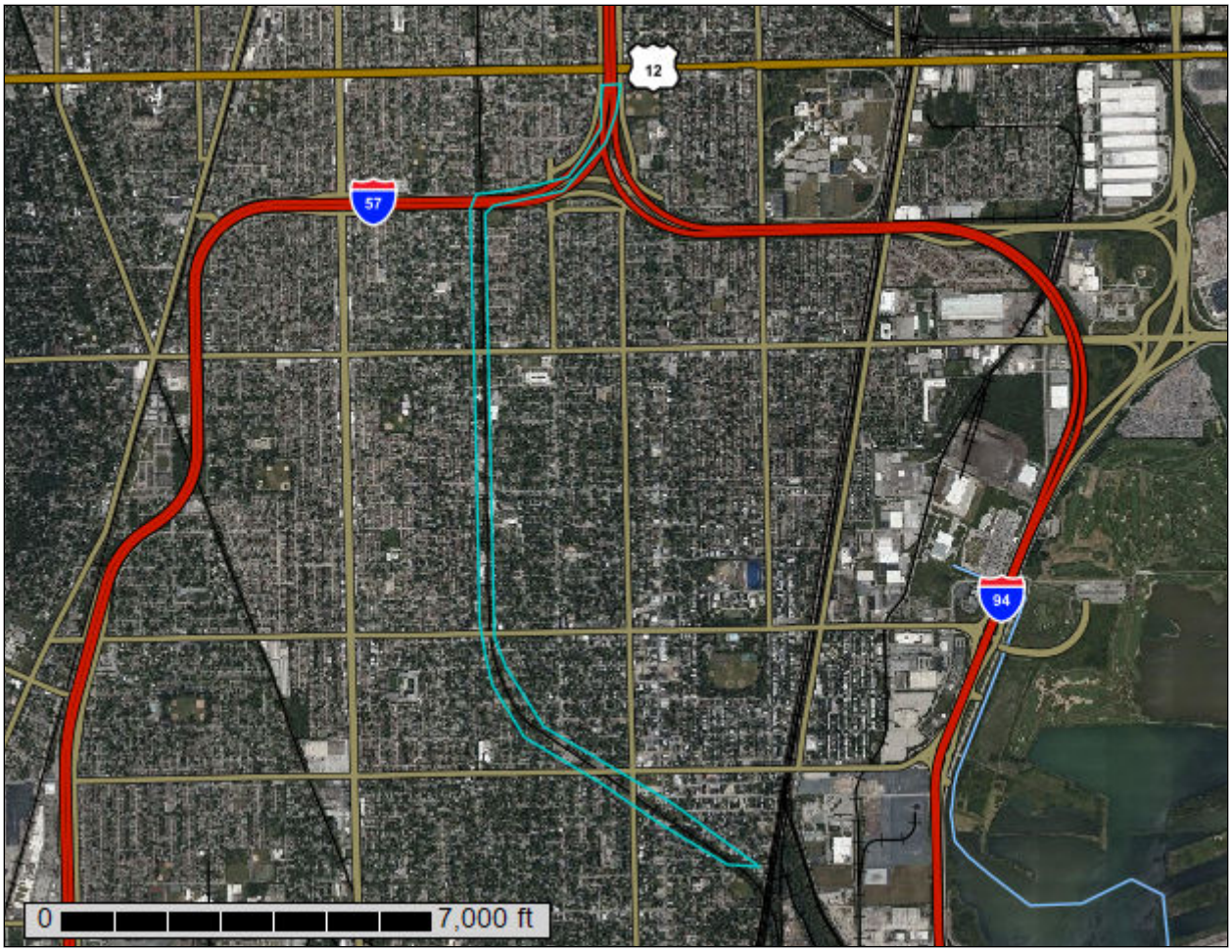

July 21, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Cook County, Illinois.....13
125A—Selma loam, 0 to 2 percent slopes.....13
533—Urban land.....14
534A—Urban land-Orthents, clayey, complex, nearly level.....15
805A—Orthents, clayey, nearly level.....17
805D—Orthents, clayey, rolling.....19
811A—Anthroportic Udorthents, 0 to 2 percent slopes.....20
2232A—Orthents, clayey-Urban land-Ashkum complex, 0 to 2 percent slopes.....21
References.....24

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

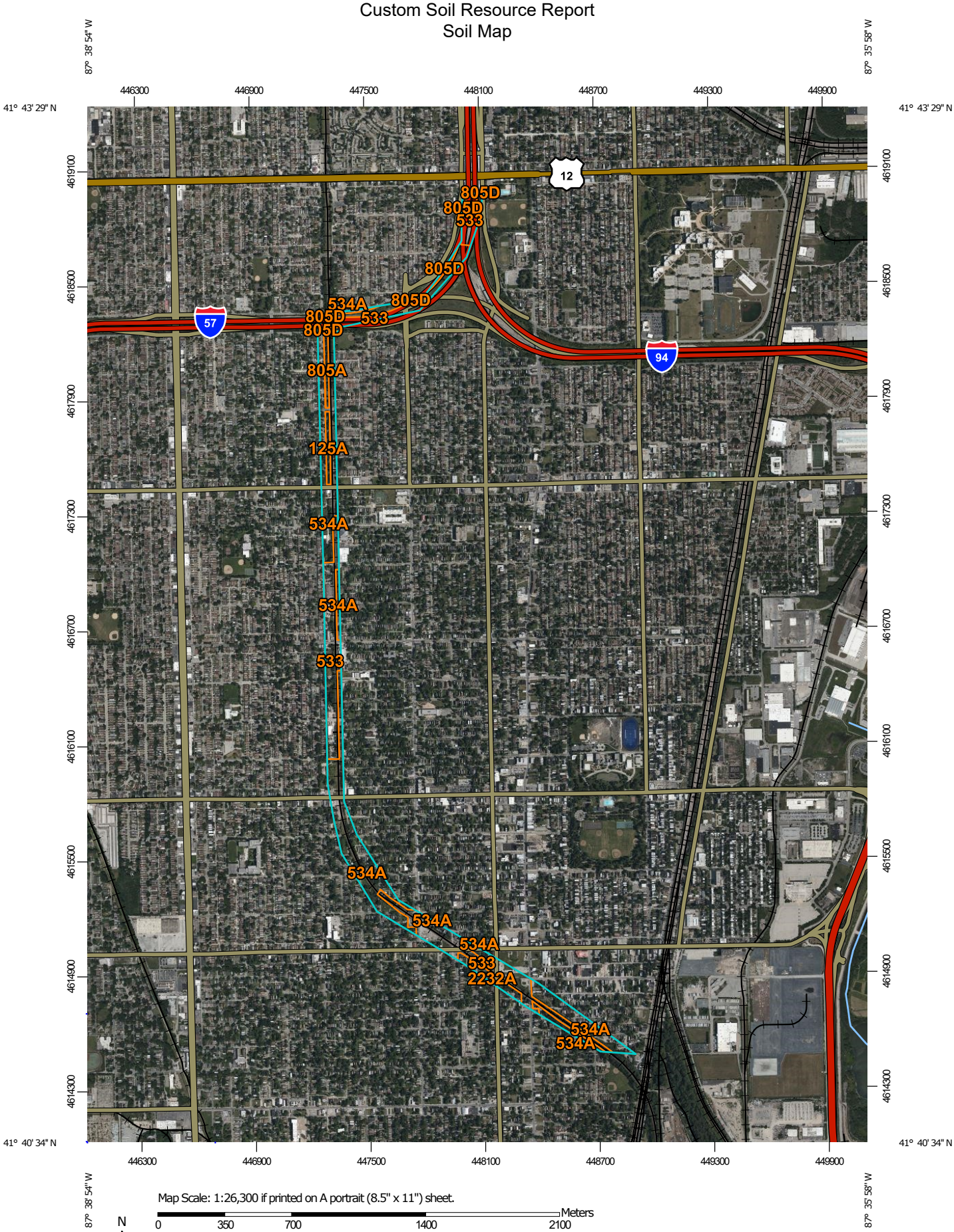

Map Scale: 1:26,300 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 350 700 1400 2100

Feet: 0 1000 2000 4000 6000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cook County, Illinois
Survey Area Data: Version 14, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 3, 2019—Sep 26, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
125A	Selma loam, 0 to 2 percent slopes	2.0	1.6%
533	Urban land	49.8	38.7%
534A	Urban land-Orthents, clayey, complex, nearly level	61.9	48.2%
805A	Orthents, clayey, nearly level	2.2	1.7%
805D	Orthents, clayey, rolling	8.5	6.6%
811A	Anthroportic Udorthents, 0 to 2 percent slopes	0.1	0.1%
2232A	Orthents, clayey-Urban land-Ashkum complex, 0 to 2 percent slopes	4.1	3.2%
Totals for Area of Interest		**128.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not

mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cook County, Illinois

125A—Selma loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2t6zr
Elevation: 450 to 960 feet
Mean annual precipitation: 34 to 40 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 155 to 190 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Selma, drained, and similar soils: 96 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Selma, Drained

Setting

Landform: Lake plains, stream terraces, outwash plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy outwash

Typical profile

Ap - 0 to 21 inches: loam
Bg - 21 to 46 inches: loam
Cg - 46 to 60 inches: stratified silt loam to loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 20 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Ecological site: Ponded Depressional Sedge Meadow (R110XY024IL)
Hydric soil rating: Yes

Minor Components

Houghton, drained

Percent of map unit: 1 percent
Landform: Depressions on outwash plains, depressions on lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: Ponded Depressional Sedge Meadow (R110XY024IL)
Hydric soil rating: Yes

Harpster, drained

Percent of map unit: 1 percent
Landform: Depressions on outwash plains, depressions on lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: Ponded Calcareous Sedge Meadow (R110XY025IL)
Hydric soil rating: Yes

Orthents, loamy

Percent of map unit: 1 percent
Landform: Outwash plains, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Urban land

Percent of map unit: 1 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

533—Urban land

Map Unit Setting

National map unit symbol: 2qhr4
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Down-slope shape: Linear
Across-slope shape: Linear

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Orthents, clayey, nearly level

Percent of map unit: 4 percent
Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, loamy, nearly level

Percent of map unit: 4 percent
Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, loamy-skeletal, nearly level

Percent of map unit: 2 percent
Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

534A—Urban land-Orthents, clayey, complex, nearly level

Map Unit Setting

National map unit symbol: 2qhr6
Elevation: 510 to 980 feet

Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 70 percent
Orthents, clayey, nearly level, and similar soils: 23 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Down-slope shape: Linear
Across-slope shape: Linear

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Description of Orthents, Clayey, Nearly Level

Setting

Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Earthy fill

Typical profile

H1 - 0 to 8 inches: silty clay
H2 - 8 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 4 to 12 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to 0.06 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 3 percent
Landform: Ground moraines, end moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

Aquents, clayey

Percent of map unit: 2 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Orthents, loamy-skeletal, nearly level

Percent of map unit: 2 percent
Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

805A—Orthents, clayey, nearly level

Map Unit Setting

National map unit symbol: 2qhr7
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Orthents, clayey, nearly level, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Clayey, Nearly Level

Setting

Landform: Lake plains, ground moraines

Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Earthy fill

Typical profile

H1 - 0 to 8 inches: silty clay
H2 - 8 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 4 to 12 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to 0.06 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Urban land

Percent of map unit: 4 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ashkum

Percent of map unit: 4 percent
Landform: Ground moraines, end moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

Aquents, clayey

Percent of map unit: 2 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

805D—Orthents, clayey, rolling

Map Unit Setting

National map unit symbol: 2qhr8
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Orthents, clayey, rolling, and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Clayey, Rolling

Setting

Landform: Ground moraines, lake plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Earthy fill

Typical profile

H1 - 0 to 6 inches: silty clay
H2 - 6 to 60 inches: silty clay

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 3 to 9 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to 0.06 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 0.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Urban land

Percent of map unit: 4 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Aquents, clayey

Percent of map unit: 1 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

811A—Anthroportic Udorthents, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2ytd9
Elevation: 570 to 660 feet
Mean annual precipitation: 37 to 40 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 150 to 185 days
Farmland classification: Not prime farmland

Map Unit Composition

Anthroportic udorthents, moderately deep water table, and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Anthroportic Udorthents, Moderately Deep Water Table

Setting

Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Human-transported material over till

Typical profile

^Au - 0 to 5 inches: silty clay loam
^Cu - 5 to 28 inches: silty clay loam
2Ab - 28 to 39 inches: silty clay loam
2ABb - 39 to 49 inches: silty clay loam
2Btb - 49 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 30 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Ashkum, drained

Percent of map unit: 4 percent
Landform: Ground moraines, lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Ponded Depressional Sedge Meadow (R110XY024IL)
Hydric soil rating: Yes

Urban land

Percent of map unit: 4 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

2232A—Orthents, clayey-Urban land-Ashkum complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2qhrz
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F

Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Orthents, clayey, and similar soils: 45 percent
Urban land: 40 percent
Ashkum and similar soils: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Clayey

Setting

Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Earthy fill

Typical profile

H1 - 0 to 8 inches: silty clay
H2 - 8 to 42 inches: silty clay
H3 - 42 to 52 inches: silty clay
H4 - 52 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 4 to 12 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to 0.06 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Urban Land

Setting

Down-slope shape: Linear
Across-slope shape: Linear

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Description of Ashkum

Setting

Landform: Ground moraines, end moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Colluvium and in the underlying till

Typical profile

H1 - 0 to 12 inches: silty clay loam
H2 - 12 to 29 inches: silty clay
H3 - 29 to 54 inches: silty clay loam
H4 - 54 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

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United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Cook County, Illinois

Web Soil Survey Part 2

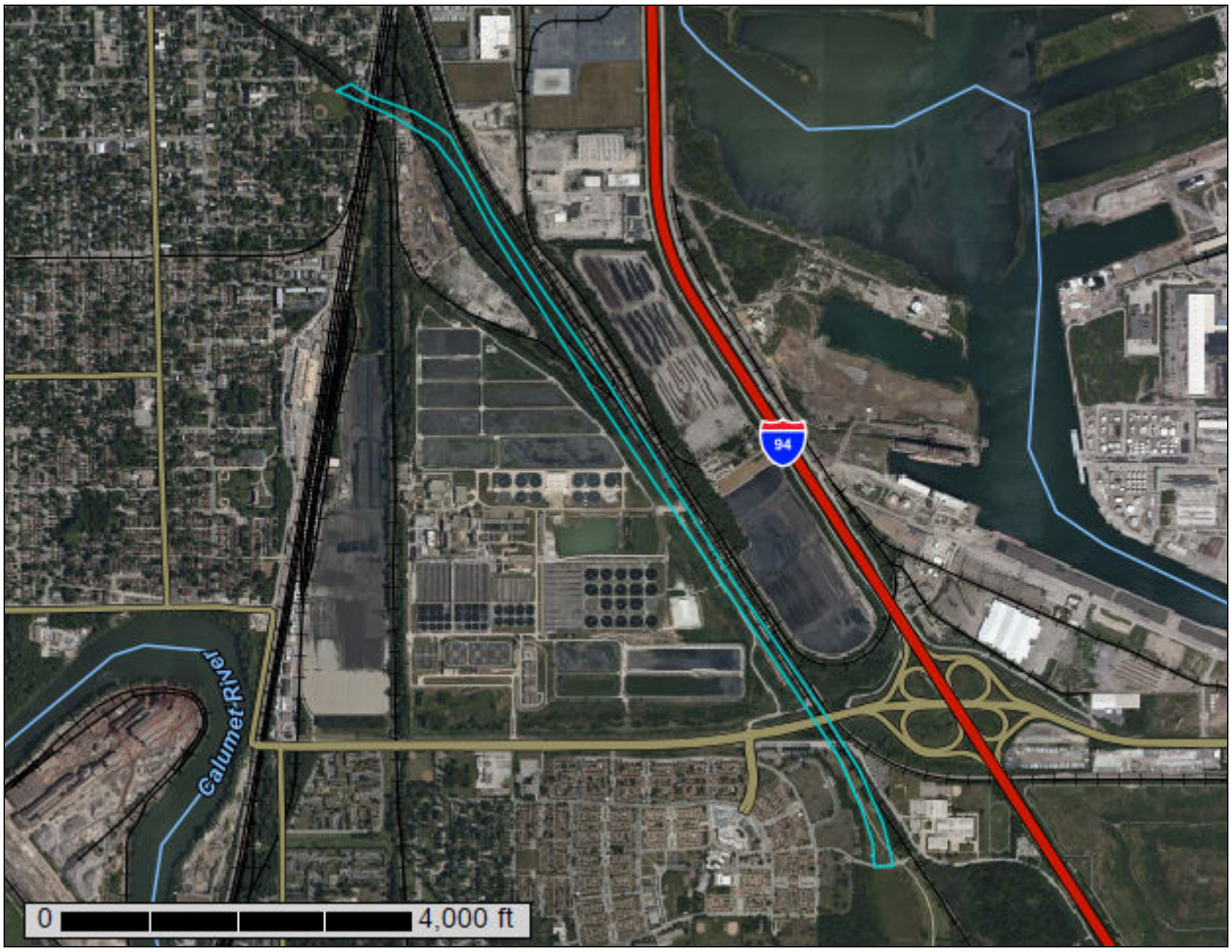

July 21, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Cook County, Illinois.....13
232A—Ashkum silty clay loam, 0 to 2 percent slopes.....13
533—Urban land.....14
534A—Urban land-Orthents, clayey, complex, nearly level.....15
802A—Orthents, loamy, nearly level.....17
805A—Orthents, clayey, nearly level.....19
805B—Orthents, clayey, undulating.....20
805D—Orthents, clayey, rolling.....22
References.....24

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

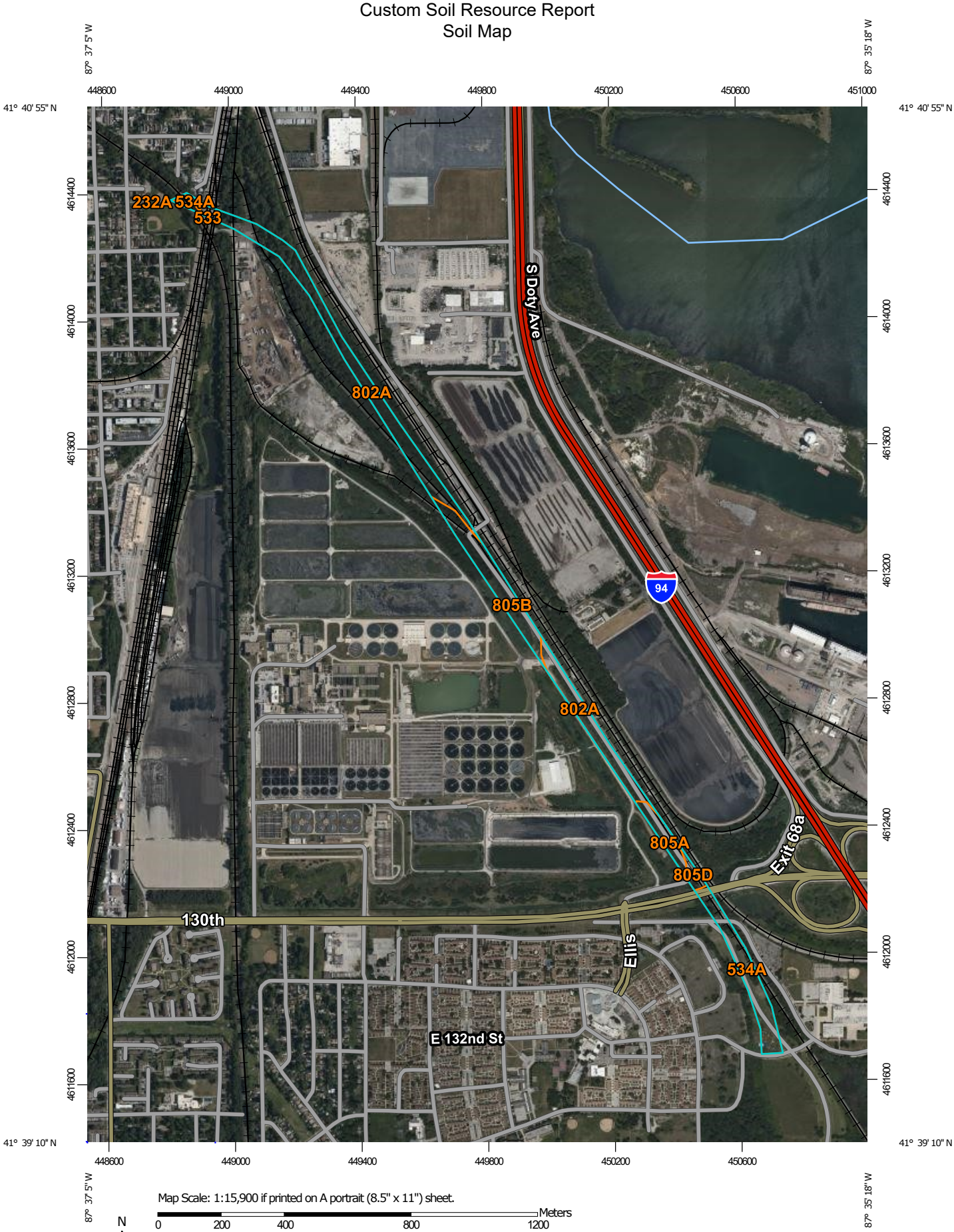

Map Scale: 1:15,900 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 200 400 800 1200

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cook County, Illinois
Survey Area Data: Version 14, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 3, 2019—Sep 26, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
232A	Ashkum silty clay loam, 0 to 2 percent slopes	0.0	0.0%
533	Urban land	0.9	2.5%
534A	Urban land-Orthents, clayey, complex, nearly level	7.1	19.7%
802A	Orthents, loamy, nearly level	17.8	49.5%
805A	Orthents, clayey, nearly level	2.3	6.4%
805B	Orthents, clayey, undulating	6.9	19.2%
805D	Orthents, clayey, rolling	0.9	2.6%
Totals for Area of Interest		**35.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cook County, Illinois

232A—Ashkum silty clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2ssrw
Elevation: 520 to 930 feet
Mean annual precipitation: 33 to 41 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 160 to 190 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Ashkum, drained, and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ashkum, Drained

Setting

Landform: Ground moraines, end moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Clayey colluvium over till

Typical profile

Ap - 0 to 12 inches: silty clay loam
Bg1 - 12 to 29 inches: silty clay
2Bg2 - 29 to 54 inches: silty clay loam
2Cg - 54 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 25 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: Ponded Depressional Sedge Meadow (R110XY024IL)
Hydric soil rating: Yes

Minor Components

Peotone, drained

Percent of map unit: 5 percent
Landform: Depressions on ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: Ponded Depressional Sedge Meadow (R110XY024IL)
Hydric soil rating: Yes

Orthents, clayey

Percent of map unit: 2 percent
Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Urban land

Percent of map unit: 1 percent
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

533—Urban land

Map Unit Setting

National map unit symbol: 2qhr4
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Down-slope shape: Linear
Across-slope shape: Linear

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Orthents, clayey, nearly level

Percent of map unit: 4 percent
Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, loamy, nearly level

Percent of map unit: 4 percent
Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, loamy-skeletal, nearly level

Percent of map unit: 2 percent
Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

534A—Urban land-Orthents, clayey, complex, nearly level

Map Unit Setting

National map unit symbol: 2qhr6
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 70 percent
Orthents, clayey, nearly level, and similar soils: 23 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Down-slope shape: Linear
Across-slope shape: Linear

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Description of Orthents, Clayey, Nearly Level

Setting

Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Earthy fill

Typical profile

H1 - 0 to 8 inches: silty clay
H2 - 8 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 4 to 12 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to 0.06 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 3 percent
Landform: Ground moraines, end moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

Aquents, clayey

Percent of map unit: 2 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Orthents, loamy-skeletal, nearly level

Percent of map unit: 2 percent
Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

802A—Orthents, loamy, nearly level

Map Unit Setting

National map unit symbol: 2qhr1
Elevation: 510 to 1,020 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Orthents, loamy, nearly level, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Loamy, Nearly Level

Setting

Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Earthy fill

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 20 percent
Available water storage in profile: Moderate (about 8.0 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Urban land
Percent of map unit: 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, clayey, nearly level
Percent of map unit: 3 percent
Landform: Ground moraines, lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orthents, loamy-skeletal, nearly level
Percent of map unit: 2 percent
Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Drummer
Percent of map unit: 1 percent
Landform: Outwash plains, ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

Pella
Percent of map unit: 1 percent
Landform: Outwash plains, ground moraines, lake plains
Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

805A—Orthents, clayey, nearly level

Map Unit Setting

National map unit symbol: 2qhr7
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Orthents, clayey, nearly level, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Clayey, Nearly Level

Setting

Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Earthy fill

Typical profile

H1 - 0 to 8 inches: silty clay
H2 - 8 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 4 to 12 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to 0.06 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Urban land

Percent of map unit: 4 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ashkum

Percent of map unit: 4 percent
Landform: Ground moraines, end moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

Aquents, clayey

Percent of map unit: 2 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

805B—Orthents, clayey, undulating

Map Unit Setting

National map unit symbol: 28sh3
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 190 days
Farmland classification: Not prime farmland

Map Unit Composition

Orthents, clayey, undulating, and similar soils: 91 percent
Minor components: 9 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Clayey, Undulating

Setting

Landform: Lake plains, ground moraines
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve

Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Earthy fill

Typical profile

H1 - 0 to 7 inches: silty clay
H2 - 7 to 60 inches: silty clay

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: 4 to 10 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to 0.06 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 0.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 3 percent
Landform: Ground moraines, end moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

Urban land

Percent of map unit: 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Bryce

Percent of map unit: 2 percent
Landform: Glacial lakes (relict), ground moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: Wet Glacial Drift Upland Prairie (R110XY008IL)
Hydric soil rating: Yes

Aquents, clayey

Percent of map unit: 1 percent
Landform: Lake plains

Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

805D—Orthents, clayey, rolling

Map Unit Setting

National map unit symbol: 2qhr8
Elevation: 510 to 980 feet
Mean annual precipitation: 28 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Orthents, clayey, rolling, and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orthents, Clayey, Rolling

Setting

Landform: Ground moraines, lake plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Earthy fill

Typical profile

H1 - 0 to 6 inches: silty clay
H2 - 6 to 60 inches: silty clay

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 3 to 9 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.02 to 0.06 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 0.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Urban land
Percent of map unit: 4 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Aquents, clayey
Percent of map unit: 1 percent
Landform: Lake plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

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RED AHEAD

Red Line Extension

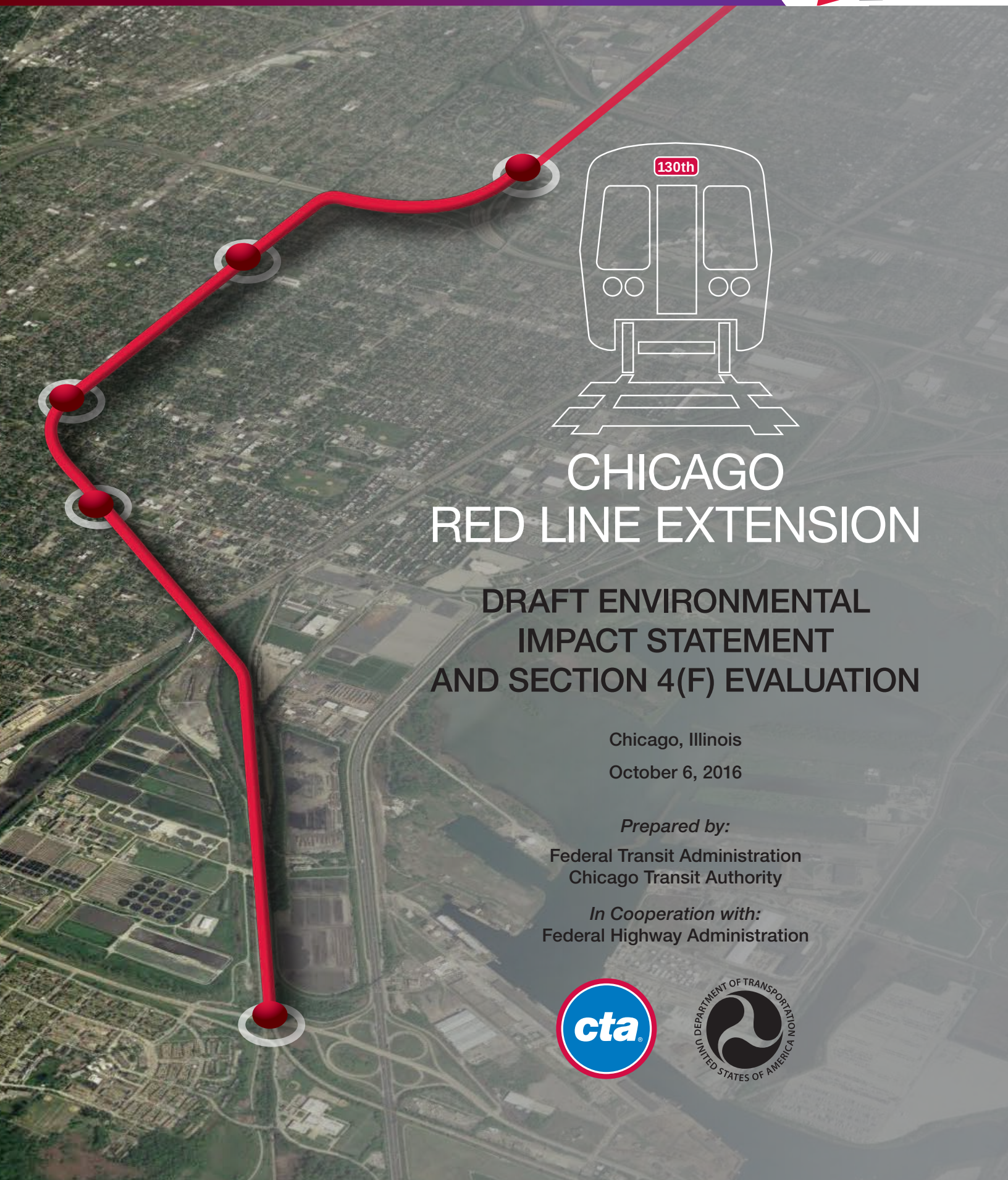

CHICAGO RED LINE EXTENSION

DRAFT ENVIRONMENTAL IMPACT STATEMENT AND SECTION 4(F) EVALUATION

Chicago, Illinois

October 6, 2016

Prepared by:

Federal Transit Administration
Chicago Transit Authority

In Cooperation with:

Federal Highway Administration

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago
Red Line Extension

Draft Environmental Impact Statement and Section 4(f) Evaluation

Chicago, Illinois

October 6, 2016

Prepared by:
Federal Transit Administration
Chicago Transit Authority

In cooperation with:
Federal Highway Administration

Draft Environmental Impact Statement and Section 4(f) Evaluation

for the

Chicago Red Line Extension

Chicago, Illinois

prepared by the

U.S. Department of Transportation
Federal Transit Administration

and the

Chicago Transit Authority

In cooperation with the

Federal Highway Administration

pursuant to:

National Environmental Policy Act of 1969 (42 USC § 4332), Efficient Environmental Reviews for Project Decisionmaking (23 USC § 139), Council on Environmental Quality Regulations for Implementing the Procedures of the National Environmental Policy Act (40 CFR § 1500-1508), FHWA/FTA Environmental Impact and Related Procedures (23 CFR § 771), and
Section 4(f) requirements (49 USC § 303 and 23 USC § 138) and regulations (23 CFR § 774)

9-22-2016
Date of Approval

Marisol Simón
Regional Administrator
U.S. Department of Transportation
Federal Transit Administration

9-30-16
Date of Approval

Carole Morey
Chief Planning Officer
Chicago Transit Authority

Draft Environmental Impact Statement

Lead Agency: U.S. Department of Transportation, Federal Transit Administration

Project Sponsor: Chicago Transit Authority

Cooperating Agency: U.S. Department of Transportation, Federal Highway Administration

Title: Chicago Red Line Extension Project Draft Environmental Impact Statement

Location: Chicago, Illinois

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Abstract:

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.3 miles south from the existing 95th Street Terminal to 130th Street on Chicago's Far South Side. CTA proposes to cover a portion of the project funding by applying for federal funds administered by FTA. FTA and CTA prepared this Red Line Extension Project Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act of 1969 (NEPA) and other applicable regulations. This project is one part of CTA's Red Ahead Program, a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most traveled rail line.

This Draft EIS looks at the benefits and impacts of implementing the NEPA Preferred Alternative—the Union Pacific Railroad Rail Alternative—on the physical, human, and natural environments along the corridor and near stations. This document considers two alignment (route) options for this alternative: the East Option and the West Option. This Draft EIS defines the options under consideration and evaluates the potential environmental, economic, and social impacts of the alternatives, specifically, impacts on transportation, land use and economic development, displacements and relocation of existing uses, neighborhoods and communities, visual and aesthetic conditions, noise and vibration, safety and security, historic and cultural resources, environmental justice, and other aspects of the environment. Potential mitigation measures are identified for adverse impacts resulting from operation or construction of the project. Financial implications of construction and operation of the proposed improvements are also disclosed. The information contained in this document will be used by FTA and CTA to decide whether to implement the project and to select an option for implementation.

Reviewers should provide their comments to CTA during the comment period of the Draft EIS. CTA will analyze and respond to comments and will use the information acquired in the preparation of the Final EIS. Comments on the Draft EIS should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (40 Code of Federal Regulations § 1503.3).

FTA intends to issue a single document that consists of the Final EIS and Record of Decision pursuant to 23 United States Code § 139(n), unless it is determined that circumstances, such as changes to the proposed action, anticipated impacts, or other new information, preclude issuance of such a combined document.

Comments on this document must be submitted by 4:30 PM on November 30, 2016.

Send comments to the following address: Red Line Extension Project, Chicago Transit Authority, 567 W. Lake Street, 10th Floor, Chicago, IL 60661-1465; e-mail: RedExtension@transitchicago.com

Table of Contents

Executive Summary ES-1
- Red Line Extension Project ES-1
- Alternatives Considered ES-1
- Environmental Benefits and Impacts ES-4
- Evaluation of Alternatives ES-9
- Public Input Requested ES-11

Chapter 1 Purpose and Need 1-1
- 1.1 Project Area Overview and Background 1-2
- 1.2 Statement of Purpose and Need 1-5
- 1.3 Justification of Purpose and Need 1-6
- 1.4 Organization of the Document 1-11

Chapter 2 Alternatives Considered 2-1
- 2.1 Alternatives Development Process 2-1
- 2.2 Alternatives Evaluated in the Draft Environmental Impact Statement 2-4
- 2.3 Summary of Construction Activities 2-10
- 2.4 Alternatives Considered but not Pursued 2-15
- 2.5 Environmental Process 2-18

Chapter 3 Transportation 3-1
- 3.1 Regulatory Framework/Methods 3-1
- 3.2 Existing Conditions 3-6
- 3.3 Environmental Consequences 3-17

Chapter 4 Environmental Impacts and Mitigation 4-1
- 4.1 Land Use and Economic Development 4-1
- 4.2 Displacements and Relocation of Existing Uses 4-8
- 4.3 Neighborhoods and Communities 4-22
- 4.4 Visual and Aesthetic Conditions 4-36
- 4.5 Noise and Vibration 4-46
- 4.6 Safety and Security 4-66
- 4.7 Historic and Cultural Resources 4-70
- 4.8 Hazardous Materials 4-80
- 4.9 Wetlands 4-89

Chapter 5 Indirect and Cumulative Impacts 5-1
- 5.1 Regulatory Framework/Methods 5-1
- 5.2 Existing Conditions 5-2
- 5.3 Environmental Consequences 5-3

Chapter 6 Resources with Limited or No Adverse Impacts 6-1
6.1 Air Quality 6-1
6.2 Water Quality 6-4
6.3 Floodplains 6-6
6.4 Vegetation and Wildlife Habitat 6-6
6.5 Threatened and Endangered Species 6-8
6.6 Geology and Soils 6-8
6.7 Energy 6-9
Chapter 7 Environmental Justice 7-1
7.1 Regulatory Framework/Methods 7-1
7.2 Existing Conditions 7-3
7.3 Specialized Outreach 7-7
7.4 Environmental Consequences 7-9
Chapter 8 Section 4(f) Evaluation 8-1
8.1 Project Description and Supporting Information 8-1
8.2 Regulatory Framework 8-2
8.3 Organization of this Chapter 8-4
8.4 Identification of Section 4(f) Properties 8-5
8.5 Union Pacific Railroad Alternative East Option Section 4(f) Evaluation 8-10
8.6 Union Pacific Railroad Alternative West Option Section 4(f) Evaluation 8-20
8.7 Next Steps 8-25
Chapter 9 Evaluation of Alternatives 9-1
9.1 Potential Capital and Operating Funding Strategies 9-1
9.2 Comparison of Alternatives 9-9
Chapter 10 Public and Agency Coordination 10-1
10.1 Public Participation Plan 10-1
10.2 Agency Coordination 10-1
10.3 Public Outreach 10-2
10.4 Public Hearing and Public Comment Period 10-5
10.5 Accommodations for Minority, Low-Income, and Disabled People 10-6
Chapter 11 List of Acronyms and Abbreviations 11-1
Chapter 12 List of References 12-1
Chapter 13 List of Preparers 13-1
Chapter 14 List of Recipients 14-1

Appendices

Appendix A: Alternatives Analysis - Locally Preferred Alternative Report
Appendix B: Scoping Report
Appendix C: Agency Coordination and Public Involvement
Appendix D: Purpose and Need Report
Appendix E: Description of Alternatives
Appendix F: Plans and Profiles
Appendix G: Description of Construction and Phasing for Build Alternatives
Appendix H: Transportation Technical Memorandum
Appendix I: Construction Impacts Technical Memorandum
Appendix J: Land Use and Economic Development Technical Memorandum
Appendix K: Displacements and Relocation of Existing Uses Technical Memorandum
Appendix L: Neighborhoods and Community Impacts Technical Memorandum
Appendix M: Parklands and Community Facilities Technical Memorandum
Appendix N: Visual and Aesthetic Conditions Technical Memorandum
Appendix O: Noise and Vibration Technical Memorandum
Appendix P: Safety and Security Technical Memorandum
Appendix Q: Historic and Cultural Resources Technical Memorandum
Appendix R: Hazardous Materials Technical Memorandum
Appendix S: Water Resources Technical Memorandum
Appendix T: Cumulative Impacts Technical Memorandum
Appendix U: Air Quality Technical Memorandum
Appendix V: Biological Resources Technical Memorandum
Appendix W: Energy Technical Memorandum
Appendix X: Environmental Justice Technical Memorandum
Appendix Y: Section 4(f) Replacement Park Analysis Technical Memorandum

Figures

Figure ES-1: Union Pacific Railroad Alternative Options....ES-3
Figure 1-1: Red Ahead Program Overview 1-2
Figure 1-2: Red Line Extension Project Area 1-4
Figure 1-3: Travel Time to Work 1-7
Figure 1-4: Environmental Impact Statement Document Organization 1-12
Figure 2-1: Alternatives Development Summary 2-3
Figure 2-2: Union Pacific Railroad Alternative Options 2-5
Figure 2-3: Photo Simulation of Union Pacific Railroad Alternative East Option at 111th Street Facing West - Typical Proposed Elevated Structure 2-7
Figure 2-4: Photo Simulation of Union Pacific Railroad Alternative East Option at 103rd Street Facing Northwest - Typical Proposed Elevated Station 2-8
Figure 2-5: Construction Segments 2-11
Figure 3-1: Study Intersections for Transportation Impact Analysis 3-3
Figure 3-2: Existing Public Transportation in the Project Area 3-8
Figure 3-3: Freight Railroads within the Area of Potential Impact 3-14
Figure 3-4: Existing and Recommended Bicycle Facilities within the Area of Potential Impact 3-16
Figure 4-1: Existing Land Uses in the Project Area 4-4
Figure 4-2: Existing Zoning in the Project Area 4-5
Figure 4-3: Union Pacific Railroad Alternative East Option Displacements (1 of 2) 4-13
Figure 4-4: Union Pacific Railroad Alternative East Option Displacements (2 of 2) 4-14
Figure 4-5: Union Pacific Railroad Alternative West Option Displacements (1 of 2) 4-19
Figure 4-6: Union Pacific Railroad Alternative West Option Displacements (2 of 2) 4-20
Figure 4-7: Photo of Residential Street near Union Pacific Railroad Corridor in Roseland 4-23
Figure 4-8: Community Areas in the Project Area and Community Resources Affected by Union Pacific Railroad Alternative East or West Options 4-25
Figure 4-9: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative West Option along Eggleston Avenue and Fernwood Parkway Facing 103rd Street 4-34
Figure 4-10: Photo Facing South from 95th Street Terminal 4-39
Figure 4-11: Photo Facing East, North of I-57 near 98th Street and Lowe Avenue 4-39
Figure 4-12: Photo Facing Southwest from 113th Street and Princeton Avenue 4-40
Figure 4-13: Photo Facing South along Michigan Avenue from 115th Street 4-40
Figure 4-14: Photo of Existing Conditions and Photo Simulation of the Elevated Track Structure in the I-57 Right-of-Way, Facing East from 98th Place and Princeton Avenue 4-42
Figure 4-15: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative East Option Viaduct Facing Southeast from 117th Street, East of Prairie Avenue 4-43

Figure 4-16: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative West Option Michigan Avenue Station and Parking Structure Facing Northwest along Michigan Avenue 4-45
Figure 4-17: Noise Impact Criteria for Transit Projects 4-49
Figure 4-18: Allowable Increase in Noise Levels 4-50
Figure 4-19: Vibration and Noise Measurement Locations and Measured Noise and Vibration Data 4-54
Figure 4-20: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours (1 of 2) 4-57
Figure 4-21: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours (2 of 2) 4-58
Figure 4-22: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours (1 of 2) 4-62
Figure 4-23: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours (2 of 2) 4-63
Figure 4-24: NRHP-Eligible Resources in the Area of Potential Effects 4-75
Figure 4-25: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue 4-79
Figure 4-26: Photo of Existing Conditions and Photo Simulation of the 130th Street Station and Parking Garage, Facing Northeast on E. 130th Place 4-80
Figure 4-27: Identified Sites of Concern 4-85
Figure 4-28: Wetland Delineation Map 4-92
Figure 6-1: Waterbodies and Floodplains in the Project Area 6-5
Figure 7-1: Minority Populations 7-4
Figure 7-2: Low-Income Populations 7-5
Figure 7-3: Percentage of Population that has Limited English Proficiency 7-6
Figure 8-1: Historic Properties in the Area of Potential Effects 8-7
Figure 8-2: Publicly Owned Park and Recreational Properties Adjacent to the Project 8-9
Figure 8-3: Photo of Entrance to Wendell Smith Park Facing West from Princeton Avenue 8-10
Figure 8-4: Photo of Wendell Smith Park Basketball Courts Facing West 8-10
Figure 8-5: Aerial Photograph of Wendell Smith Park 8-11
Figure 8-6: Impacts on Wendell Smith Park - Union Pacific Railroad Alternative East Option 8-13
Figure 8-7: Photo of Block Park with the Roseland Pumping Station in the Background (Facing South) 8-16
Figure 8-8: Photos of East Parcel (left) and West Parcel (right) of Block Park (Facing South) 8-16
Figure 8-9: Impacts on Block Park - Union Pacific Railroad Alternative East Option 8-18
Figure 8-10: Photo of Fernwood Parkway at 100th Street and Eggleston Avenue (Facing North) 8-21
Figure 8-11: Photo of Fernwood Parkway at 100th Street and Eggleston Avenue (Facing South) 8-22

Figure 8-12: Impacts on Fernwood Parkway - Union Pacific Railroad Alternative West Option 8-23
Figure 9-1: Annual Capital Cost Estimates (Year of Expenditure Dollars, in Millions) 9-4

Tables

Table ES-1: Summary of Benefits and Impacts ES-4
Table ES-2: Comparative Evaluation of Alternatives ES-10
Table 1-1: Population Decline in Red Line Extension Project Area (2000 to 2010) 1-10
Table 1-2: Employment Decline in Red Line Extension Project Area (2000 to 2010) 1-10
Table 2-1: Summary of Park & Ride Facilities..... 2-9
Table 3-1: Transportation - Impacts Summary..... 3-1
Table 3-2: Existing Bus Service..... 3-9
Table 3-3: Existing Commuter Rail Stations 3-10
Table 3-4: Existing (2012) Intersection Level of Service 3-11
Table 3-5: Existing On-Street Parking 3-17
Table 3-6: No Build Alternative - Intersection Level of Service (2012 and 2030)..... 3-18
Table 3-7: Union Pacific Railroad Alternative (2026 and 2030) Intersection Level of Service 3-19
Table 3-8: Mitigation Measures for the Union Pacific Railroad Alternative (2030) Conditions 3-20
Table 3-9: Union Pacific Railroad Alternative - Intersection Level of Service (2012 and 2030) 3-21
Table 4-1: Land Use and Economic Development - Impacts Summary 4-1
Table 4-2: Displacements and Relocation of Existing Uses - Impacts Summary..... 4-8
Table 4-3: Union Pacific Railroad Alternative East Option Displacements 4-11
Table 4-4: Union Pacific Railroad Alternative West Option Displacements 4-17
Table 4-5: Neighborhoods and Communities - Impacts Summary 4-22
Table 4-6: Visual and Aesthetic Conditions - Impacts Summary 4-36
Table 4-7: Noise and Vibration - Impacts Summary..... 4-47
Table 4-8: FTA Land Use Categories and Noise Metrics 4-48
Table 4-9: FTA Ground-Borne Vibration and Noise Impact Criteria for Annoyance..... 4-51
Table 4-10: Recommended FTA Construction Noise Limits..... 4-52
Table 4-11: Construction Vibration Damage Criteria..... 4-52
Table 4-12: Federal Transit Administration Moderate and Severe Impact Distances - Union Pacific Railroad Alternative (at 55 miles per hour) 4-56
Table 4-13: Sensitive Receivers within Moderate and Severe Noise Impact Contours - Union Pacific Railroad Alternative East Option 4-60
Table 4-14: Sensitive Receivers within Moderate and Severe Noise Impact Contours - Union Pacific Railroad Alternative West Option 4-65
Table 4-15: Safety and Security - Impacts Summary 4-66
Table 4-16: Historic and Cultural Resources - Effects Summary..... 4-70

Table 4-17: NRHP-Eligible Resources in the Area of Potential Effects 4-76
Table 4-18: NRHP-Eligible Resources in the Area of Potential Effects - Union Pacific Railroad Alternative East and West Options 4-78
Table 4-19: Hazardous Materials - Impacts Summary 4-81
Table 4-20: Identified High Concern Sites 4-83
Table 4-21: Wetlands - Impacts Summary 4-89
Table 7-1: Summary of Benefits 7-12
Table 7-2: Summary of Potential Impacts after Mitigation 7-13
Table 8-1: Historic Properties Evaluated for Section 4(f) Use 8-6
Table 8-2: Park and Recreational Properties Evaluated for Section 4(f) Use 8-8
Table 9-1: Annual Inflation Rates 9-2
Table 9-2: Preliminary Implementation Schedule Cost Curve Assumptions 9-3
Table 9-3: Key Operating Statistics - Union Pacific Railroad Alternative East and West Options Compared to the No Build Alternative 9-8
Table 9-4: Impact on Operations and Maintenance Costs for the Union Pacific Railroad Alternative East or West Option Compared to the No Build Alternative (2015 dollars, in millions) 9-9
Table 9-5: Comparative Evaluation of Alternatives 9-11
Table 10-1: Public Meetings Held to Date 10-2

Executive Summary

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.3 miles south from the existing 95th Street Terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

The National Environmental Policy Act of 1969 (NEPA) mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined (42 United States Code [USC] § 4332). FTA and CTA prepared this Red Line Extension (RLE) Project Draft Environmental Impact Statement (EIS) in accordance with NEPA and other applicable regulations.

Red Line Extension Project

The RLE Project would extend the Red Line from the existing 95th Street Terminal to 130th Street. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient car storage yard and shop facility. Supporting information on the purpose and need for this project is provided in **Chapter 1**.

Alternatives Considered

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the Union Pacific Railroad (UPRR) Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. This Draft EIS looks at the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option. Each alternative is described below.

No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning Fiscal Year 2014–2019 Transportation Improvement Program, including improvements to the 95th Street Terminal. No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

Union Pacific Railroad Rail Alternative - Locally Preferred Alternative

The proposed UPRR Rail Alternative would extend the heavy rail Red Line from the existing 95th Street Terminal to 130th Street. The UPRR Rail Alternative alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue, as shown on **Figure ES-1**. The alignment would turn south to follow the UPRR corridor. Two options are being considered for the alignment along the UPRR corridor. The CTA elevated structure would be located either east or west of the existing UPRR corridor. The alignment would follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street. South of this point, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation rights-of-way to the terminus (end) of the RLE at 130th Street.

The UPRR Rail Alternative would include the following features:

- 5.3-mile heavy rail transit line extension from 95th Street Terminal to 130th Street
- Four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street
- New park & ride and bus facilities at each station with a total of 3,700 parking spaces along the corridor
- New yard and shop at 120th Street

As noted above, this Draft EIS studies two UPRR Rail Alternative options for the segment of the proposed alignment between I-57 and the CN/ME tracks near 119th Street:

- **East Option** - The CTA elevated structure would be placed immediately adjacent to the east side of the UPRR right-of-way.
- **West Option** - The CTA elevated structure would be placed immediately adjacent to the west side of the UPRR right-of-way.

Figure ES-1 shows the alignments for these options.

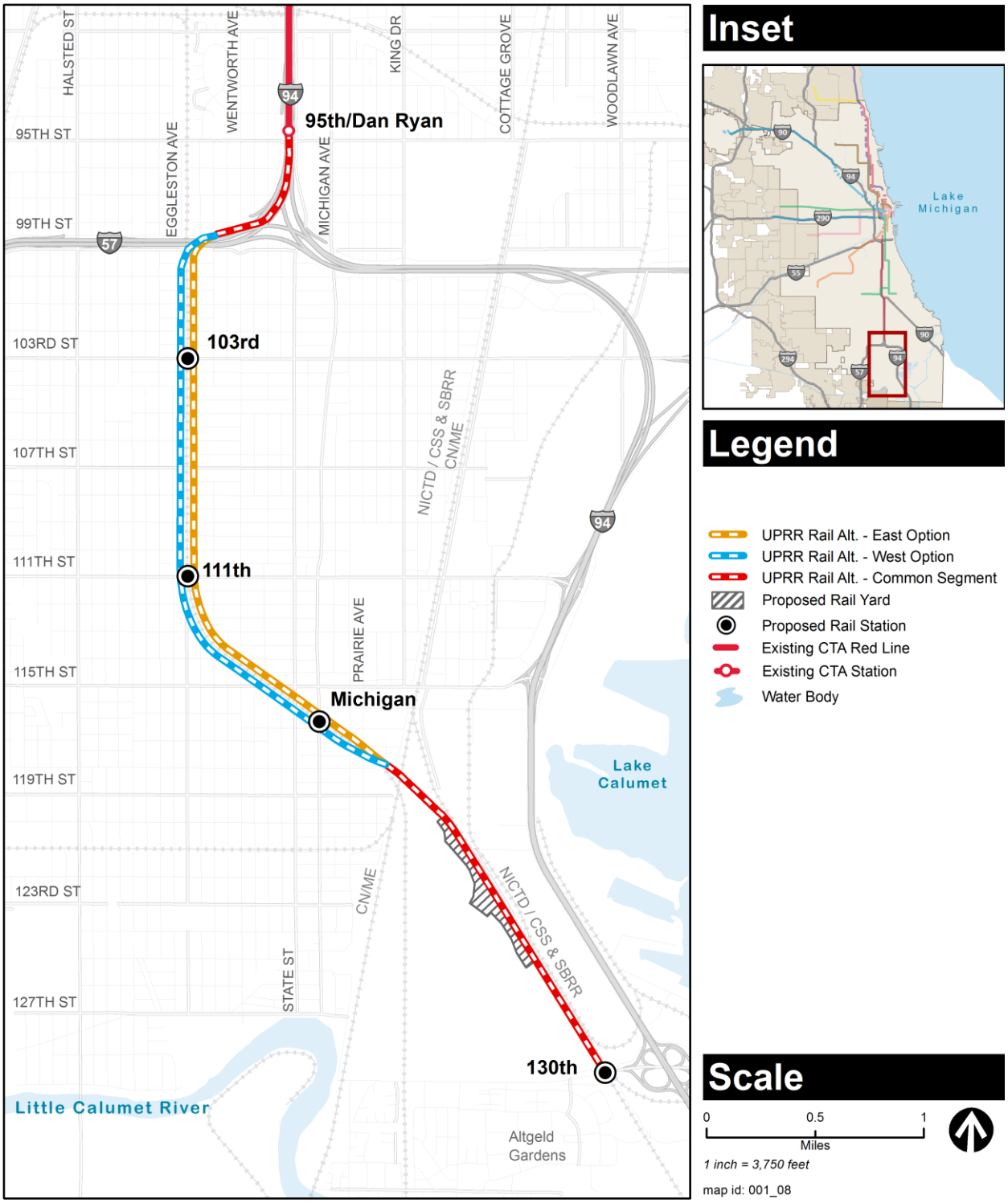

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure ES-1: Union Pacific Railroad Alternative Options

Environmental Benefits and Impacts

Potential environmental benefits and impacts are detailed in **Chapters 3–8** of the Draft EIS and are summarized in **Table ES-1**. The Draft EIS describes the best management practices (BMPs) and mitigation measures that would be employed to reduce impacts.

Table ES-1: Summary of Benefits and Impacts

No Build Alternative	Union Pacific Railroad Rail Alternative East Option	Union Pacific Railroad Rail Alternative West Option
Transportation *(Chapter 3)*		
No additional rapid rail transit service would be provided. 10 intersections would operate at level of service E/F in either the AM or PM peak hours or both in 2030. Traffic flow would continue to deteriorate.	Permanent *Public Transportation* ▪ CTA passengers would benefit from faster travel times by accessing rail service farther south. ▪ CTA passengers would benefit from reduced congested conditions at 95th Street Terminal with bus reroutes that would more directly connect passengers to new stations farther south. ▪ CTA passengers would benefit because of the new, direct rail service within the project area. ▪ CTA passengers would benefit from potential improved connections to regional commuter rail. *Vehicular Traffic* ▪ Without mitigation, 15 intersections would operate at level of service E/F in either the AM or PM peak hours or both in 2030. Permanent impacts on vehicular traffic would not be adverse after mitigation. *Pedestrians* ▪ Pedestrians would benefit from upgraded intersections immediately adjacent to stations with Americans with Disabilities Act (ADA)-accessible curb ramps and from replacement of deteriorated sidewalks. ▪ Due to the location of some park & ride facilities, passengers would need to cross an active UPRR track to reach stations, which would result in pedestrian safety impacts. ▪ Permanent impacts on pedestrians would not be adverse after mitigation. *Bicycles* ▪ Bicyclists would benefit from the addition of bicycle parking at stations. *Freight Transportation* ▪ No impacts *Parking Facilities* ▪ No impacts. Benefits would accrue by providing additional park & ride opportunities to attract passengers to transit and potentially improve connections to regional commuter rail. Construction ▪ Construction activities would temporarily affect the physical capacity of roadways and intersections subject to detours. For the city streets crossing the alignment, adjacent construction activities may require a lane closure. When performing work above the street (including beam placement), temporary detours will be required. Phasing the work will prevent simultaneous closure of adjacent city streets that cross the alignment. Work would be subject to Chicago Department of Transportation approval. ▪ Construction activities would require temporary lane closures on I-94 and I-57 as well as temporary shutdowns for all traffic. Temporary shutdowns of traffic (for overhead beam placement) would occur only at nighttime and during low-traffic-volume intervals and would be subject to Federal Highway Administration and Illinois Department of Transportation approval. ▪ Increased congestion due to construction may temporarily increase travel times along the I-94 and I-57 expressways.	

No Build Alternative	Union Pacific Railroad Rail Alternative East Option	Union Pacific Railroad Rail Alternative West Option
	▪ Flagging operations and scheduled track closures would occur during construction activities near or adjacent to railroads. Scheduling would allow for continued freight and transit operations. ▪ Because of the temporary nature of construction activities, the use of construction best management practices, implementation of a traffic management plan, and implementation of the proposed mitigation measures, construction impacts from the UPRR Alternatives would not be adverse.	
Land Use and Economic Development *(Section 4.1)*		
No impacts	Permanent ▪ The park & ride facilities at the 103rd Street, 111th Street, and Michigan Avenue stations would be inconsistent with adjacent land uses and zoning designations. ▪ The substation just north of Michigan Avenue would be inconsistent with the adjacent land uses. ▪ Land use impacts would not be adverse after mitigation. ▪ The East Option could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations. Construction ▪ Construction jobs could create short-term economic benefits. ▪ Construction could be disruptive to businesses along the alignment. Construction impacts would not be adverse after mitigation.	Permanent ▪ The elevated track structure in Fernwood Parkway would alter the open space's function as a buffer between the UPRR freight tracks and the single-family neighborhood on the west side of Eggleston Avenue. ▪ The park & ride facilities at the 103rd Street, 111th Street, and Michigan Avenue stations would be inconsistent with adjacent land uses and zoning designations. ▪ The substation just north of Michigan Avenue would be inconsistent with the adjacent land uses. ▪ Land use impacts would not be adverse after mitigation. ▪ The West Option could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations. Construction ▪ Construction jobs could create short-term economic benefits. ▪ Construction could be disruptive to businesses along the alignment. Construction impacts would not be adverse after mitigation.
Displacements and Relocation of Existing Uses *(Section 4.2)*		
No impacts	Permanent ▪ 260 parcels (106 buildings) would be acquired for the East Option to accommodate the tracks, stations, 120th Street yard and shop, and ancillary facilities. Most of the displacements would be spread evenly along the corridor between 99th Place and the Michigan Avenue station. ▪ Permanent impacts would not be adverse after mitigation. Construction ▪ No impacts	Permanent ▪ 205 parcels (46 buildings) would be acquired for the West Option to accommodate the tracks, stations, 120th Street yard and shop, and ancillary facilities. Displacements would be spread evenly along the corridor between 103rd Street and the Michigan Avenue station. ▪ Permanent impacts would not be adverse after mitigation. Construction ▪ No impacts

No Build Alternative	Union Pacific Railroad Rail Alternative East Option	Union Pacific Railroad Rail Alternative West Option
Neighborhoods and Communities *(Section 4.3)*		
No impacts	Permanent *Community Character and Cohesion* ▪ The track structure would encroach on the edges of neighborhoods by displacing residential buildings. This impact would not be adverse after mitigation. ▪ The elevated track structure would create an adverse visual impact north of I-57 and at the intersection of 117th Street and Prairie Avenue. These impacts would remain adverse despite mitigation. ▪ The noise from CTA trains would cause adverse impacts at noise-sensitive buildings. This impact would not be adverse after mitigation. *Mobility* ▪ Passengers would benefit from improved mobility with reduced travel times. *Community Resources* ▪ The East Option would displace the Now Faith Church of God Holiness and would cross portions of Wendell Smith Park and Block Park. These impacts would not be adverse after mitigation. ▪ Passengers would benefit from increased access to community resources in the project area. Construction *Community Character and Cohesion* ▪ Construction would introduce temporary, intermittent visual, noise, and dust impacts. ▪ Construction impacts would not be adverse after mitigation. *Mobility* ▪ Construction would cause truck traffic to increase, and temporary street closures and detours would be needed. ▪ Access to businesses could be temporarily limited on an intermittent basis. ▪ Construction impacts would not be adverse after mitigation.	Permanent *Community Character and Cohesion* ▪ The track structure would encroach on the edges of neighborhoods by displacing residential buildings. This impact would not be adverse after mitigation. ▪ The elevated track structure would create an adverse visual impact north of I-57 and between 99th and 103rd Streets, including 103rd Street station. This impact would remain adverse despite mitigation. ▪ The Michigan Avenue station park & ride facility would create an adverse visual impact. This impact would remain adverse despite mitigation. ▪ The noise from CTA trains would cause adverse impacts at noise-sensitive buildings. These impacts would not be adverse after mitigation. *Mobility* ▪ Passengers would benefit from improved mobility with reduced travel times. *Community Resources* ▪ The West Option would displace the Grace Temple Church of God Established in Christ and would run through Fernwood Parkway. These impacts would not be adverse after mitigation. ▪ The elevated structure would be near Wendell Smith Park. This impact would not be adverse after mitigation. ▪ Passengers would benefit from increased access to community resources in the project area. Construction *Community Character and Cohesion* ▪ Construction would introduce temporary, intermittent visual, noise, and dust impacts. ▪ Construction impacts would not be adverse after mitigation. *Mobility* ▪ Construction would cause truck traffic to increase, and temporary street closures and detours would be needed. ▪ Access to businesses could be temporarily limited on an intermittent basis. ▪ Construction impacts would not be adverse after mitigation.

No Build Alternative	Union Pacific Railroad Rail Alternative East Option	Union Pacific Railroad Rail Alternative West Option
	Community Resources ▪ Construction activities would be required in Wendell Smith Park and Block Park. ▪ Access to community resources near the construction areas may be temporarily disrupted by street closures and detours. ▪ Construction impacts would not be adverse after mitigation.	*Community Resources* ▪ Construction activities would be required in Wendell Smith Park and Fernwood Parkway. ▪ Access to community resources near the construction areas may be temporarily disrupted by street closures and detours. ▪ Construction impacts would not be adverse after mitigation.
Visual and Aesthetic Conditions *(Section 4.4)*		
No impacts	Permanent ▪ The elevated track structure would create an adverse visual impact north of I-57 and at the intersection of 117th Street and Prairie Avenue. These impacts would remain adverse despite mitigation. Construction ▪ Construction would create temporary adverse impacts due to the construction work zone. ▪ Construction impacts would not be adverse after mitigation.	Permanent ▪ The elevated track structure would create an adverse visual impact north of I-57 and between 99th and 103rd Streets, including 103rd Street station. ▪ The Michigan Avenue station park & ride facility would create an adverse visual impact. ▪ Visual impacts would remain adverse despite mitigation. Construction ▪ Construction would create temporary adverse impacts due to the construction work zone. ▪ Construction impacts would not be adverse after mitigation.
Noise and Vibration *(Section 4.5)*		
No impacts	Permanent ▪ There could be moderate noise impacts on 574 noise-sensitive receivers and severe noise impacts on 83 noise-sensitive receivers before mitigation. There would be no severe or moderate impacts after mitigation. ▪ No permanent vibration impacts. Construction ▪ Construction noise levels would not exceed the FTA-recommended construction noise limits. ▪ No construction-related vibration impacts.	Permanent ▪ There could be moderate noise impacts on 738 noise-sensitive receivers and severe noise impacts on 49 noise-sensitive receivers before mitigation. There would be no severe or moderate impacts after mitigation. ▪ No permanent vibration impacts. Construction ▪ Construction noise levels would not exceed the FTA-recommended construction noise limits. ▪ No construction-related vibration impacts.
Safety and Security *(Section 4.6)*		
No impacts	Permanent ▪ A large number of pedestrians would be expected to cross the major streets without positive traffic control (marked crosswalks or signalized intersections with pedestrian countdowns), which would be an adverse impact on pedestrian safety. ▪ Permanent safety impacts would not be adverse after mitigation. ▪ There would be no permanent security impacts. Construction ▪ There would be no construction-related safety or security impacts after mitigation.	

No Build Alternative	Union Pacific Railroad Rail Alternative East Option	Union Pacific Railroad Rail Alternative West Option
Historic and Cultural Resources *(Section 4.7)*		
No effects	▪ There would be a No Adverse Effect finding on one resource - the Roseland Pumping Station.	▪ No effects on any resources
Hazardous Materials *(Section 4.8)*		
No impacts	Permanent ▪ CTA identified six High Concern sites within the permanent envelope of the East Option and six High Concern sites within the permanent envelope of the West Option. ▪ Benefits could result from the cleanup and/or removal of contaminated material during construction. ▪ Daily operations or maintenance activities that require earthmoving in contaminated areas could result in impacts from accidental spills or releases. ▪ Hazardous material spills or releases that occur along the NICTD/CSS & SBRR railroads would have the potential to migrate and affect the project area. ▪ Permanent impacts would not be adverse after BMPs and standard practices are implemented. Construction ▪ There would be the potential to encounter hazardous materials during construction. ▪ Construction-related impacts would not be adverse after BMPs and standard practices are implemented.	
Wetlands *(Section 4.9)*		
No impacts	Permanent ▪ The East and West Options could affect approximately 15.34 acres of wetlands in the vicinity of the 120th Street yard and shop and the 130th Street station. ▪ Impacts on wetlands would be mitigated through compensatory mitigation, if required. ▪ Coordination with the U.S. Army Corps of Engineers is ongoing. Construction ▪ Construction staging areas would be sited outside of wetlands as much as possible, but if there were any temporary impacts, those areas would be restored as wetlands after construction. ▪ Impacts on wetlands would be mitigated through compensatory mitigation, if required.	
Indirect and Cumulative *(Chapter 5)*		
No impacts	Indirect ▪ Implementation of the East or West Option would have the potential for redevelopment from new employment accessibility, attraction of new development near RLE stations, and overall livability improvements. Cumulative ▪ The surrounding communities would benefit from the cumulative impacts of other planned and programmed projects in the project area because they would improve access to jobs, places of interest, and residences, and would result in a reduction of air emissions.	
Resources with Limited or No Adverse Impacts *(Chapter 6)*		
The No Build Alternative and the UPRR Rail Alternative East and West Options would have limited or no impacts on the following resource areas: air quality, water quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, geology and soils, and energy.		

No Build Alternative	Union Pacific Railroad Rail Alternative East Option	Union Pacific Railroad Rail Alternative West Option
Environmental Justice *(Chapter 7)*		
No impacts	▪ Permanent impacts on community character and permanent visual impacts would not be appreciably more severe or greater in magnitude than similar effects elsewhere in CTA's rail system. ▪ There would be no disproportionately high or adverse impacts on minority or low-income populations.	
Section 4(f) *(Chapter 8)*		
No impacts	▪ No adverse impacts on the attributes, features, or activities of Wendell Smith Park and Block Park would result from the East Option after the proposed mitigation; therefore, FTA has made a preliminary *de minimis* finding for both parks, subject to further public input as part of the Draft EIS.	▪ No adverse impacts on the attributes, features, or activities of Fernwood Parkway would result from the West Option after the proposed mitigation; therefore, FTA has made a preliminary *de minimis* finding for this park, subject to further public input as part of the Draft EIS.

After implementation of the BMPs and mitigation measures described in the Draft EIS, adverse impacts on community character and cohesion and on visual and aesthetic conditions would remain for both the East and West Options.

Evaluation of Alternatives

CTA used the following evaluation goals and criteria, based on the purpose and need, to compare the benefits and drawbacks of the East and West Options:

- Goal 1 - Reduce Transit Times
- Goal 2 - Increase Travel Choices
- Goal 3 - Increase Economic Competitiveness
- Goal 4 - Minimize Environmental Impacts
- Goal 5 - Provide the Best Value

Table ES-2 provides specific measures for the goals listed above, and compares the extent to which the East and West Options and the No Build Alternative would meet the goals.

Table ES-2: Comparative Evaluation of Alternatives

Criteria	No Build Alternative	Union Pacific Railroad Rail Alternative East Option	Union Pacific Railroad Rail Alternative West Option
Goal 1 - Reduce Transit Times			
Travel Times Between Stations[1,2]			
130th Street to 95th Street Terminal	28 minutes	14 minutes	14 minutes
130th Street to Jackson Station (Loop)	58 minutes	39 minutes	39 minutes
Would the proposed stations serve transit-dependent communities?	No	Yes	Yes
Would there be new direct service to Altgeld Gardens?	No	Yes	Yes
Goal 2 - Increase Travel Choices			
Would there be better access to regional employment centers and local commercial areas?	No	Yes	Yes
Would potential connections to other public transportation modes within the project area be possible?	No	Yes	Yes
Would geographic isolation be reduced?	No	Yes	Yes
How many stations would have Park & Ride Facilities?	0	4 of 4	4 of 4
Total Park & Ride Spaces	0	3,700	3,700
Goal 3 - Increase Economic Competitiveness			
Could nearby development be encouraged?	No	Yes	Yes
Goal 4 - Minimize Environmental Impacts			
Displacements and Relocations			
Properties	0	260	205
Buildings	0	106	46
Residential Buildings	0	90	26
Mixed-Use Buildings	0	1	2
Commercial and Industrial Buildings	0	13	17
Places of Worship	0	1	1
City-Owned Buildings	0	1	0
Noise Impacts After Mitigation	No change	Not adverse	Not adverse
Receivers with Moderate Impacts (before mitigation/after mitigation)	0	574/0	738/0
Receivers with Severe Impacts (before mitigation/after mitigation)	0	83/0	49/0
Park Impacts (Not Adverse After Mitigation)[3]			
Construction Phase	0 parks	2 parks	2 parks
Permanent	0 parks	2 parks	1 park
Permanent (acres)	0 acres	1.6 acres	1.9 acres
Would there be community character impacts after mitigation?	No	Yes	Yes
Would there be visual and aesthetic impacts after mitigation?	No	Yes	Yes
Goal 5 - Provide the Best Value			
Projected Ridership (per weekday)	0	42,000	42,000
Capital Costs[4]	$0	$2.26 Billion	$2.30 Billion
Annual Change in O&M Costs[5]	No Change	+$17.4 Million	+$17.4 Million

N/A = Not Applicable
[1] Source: CTA 2009
[2] Travel time between stations does not include wait time at 130th Street.
[3] Based on the Section 4(f) analysis. Findings contingent on continued coordination process.
[4] Year of expenditure dollars
[5] O&M = Operations and maintenance. Difference from No Build Alternative shown in year 2015 dollars

Public Input Requested

This Draft EIS serves as the primary document to facilitate public and agency review of the proposed project. CTA has established a 45-day comment period to take formal comments on the Draft EIS. The Draft EIS is available on the CTA website (www.transitchicago.com/RedEIS), and hard copies of the Draft EIS are available at the following locations during the public review period:

- CTA headquarters, 567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628
- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library, 13281 S. Corliss Avenue, Chicago, IL 60827
- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605

A public hearing is scheduled for November 1, 2016 from 5:30 to 7:30 PM at St. John Missionary Baptist Church (211 E. 115th Street, Chicago, IL 60628) to solicit comments from the community about findings presented in the Draft EIS. The location of the public hearing is ADA-compliant and accessible by public transit. Comments received during the public hearing will be submitted to FTA and will be entered into the public record. A summary of the public hearing will be included in the Final EIS. Written comments will also be accepted at any time during the public comment period via e-mail to: RedExtension@transitchicago.com and U.S. mail to: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661.

Chapter 1
Purpose and Need

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line heavy rail transit (HRT) service 5.3 miles south from the existing 95th Street Terminal to Chicago's Far South Side. The Chicago Transit Board designated the Union Pacific Railroad (UPRR) Rail Alternative, discussed further in **Chapter 2**, as the Locally Preferred Alternative (LPA) on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the National Environmental Policy Act of 1969 (NEPA) Preferred Alternative in August 2014. CTA proposes to cover a portion of the project funding by applying for federal funds administered by FTA. The Red Line Extension (RLE) Project is included in the list of fiscally constrained projects in the Fiscal Year (FY) 2014–2019 Transportation Improvement Program (TIP) of the Chicago Metropolitan Agency for Planning (CMAP) *GO TO 2040 Comprehensive Regional Plan* (*GO TO 2040*).

NEPA mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined. FTA and CTA prepared this RLE Project Draft Environmental Impact Statement (EIS) in accordance with NEPA and other applicable regulations, including Section 106 of the National Historic Preservation Act (NHPA), Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966, joint guidance and regulations from FTA and the Federal Highway Administration (FHWA), and other agency regulations and guidelines.

When the RLE Project began in 2006 it was compliant with the federal transportation funding and authorization bill: Section 6002 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). In 2012 a new transportation funding and authorization bill was passed into law—the Moving Ahead for Progress in the 21st Century Act, also known as MAP-21. In December 2015, the Fixing America's Surface Transportation (FAST) Act was signed into law. The RLE Project is compliant with SAFETEA-LU, MAP-21, and the FAST Act.

This Draft EIS looks at the benefits and impacts of implementing the No Build Alternative and the NEPA Preferred Alternative—the UPRR Rail Alternative—on the physical, human, and natural environments along the corridor and near stations. This document considers two alignment (route) options within the NEPA Preferred Alternative: the East Option and the West Option. While this document refers to the "East and West Options" for brevity, only one of the two options would be selected and implemented (not both).

This chapter describes the purpose and need for transit improvements within the project area. This purpose and need was developed from the purpose and need statement presented in the RLE Alternatives Analysis (AA) document (**Appendix A**), input received from the public during the EIS scoping process (**Appendix B**), ongoing public outreach (summarized in **Chapter 10** and **Appendix C** of this Draft EIS), and the *Red Line Extension Livability Report* (by CMAP, CTA, and Developing Communities Project, Inc. [DCP]). This chapter also describes CTA's basis for advancing the RLE Project, identifies objectives that frame the development and evaluation of the alternatives, and sets the stage for NEPA analysis leading to the agency's final decision on the

project. Additional background data supporting this statement of purpose and need is provided in the *Purpose and Need Report* (**Appendix D**).

1.1 Project Area Overview and Background

CTA's Red Ahead Program is a comprehensive initiative for maintaining, modernizing, and expanding Chicago's most-traveled rail line, the Red Line. As part of the program, FTA and CTA have been analyzing the proposed extension of the Red Line (see **Figure 1-1**).

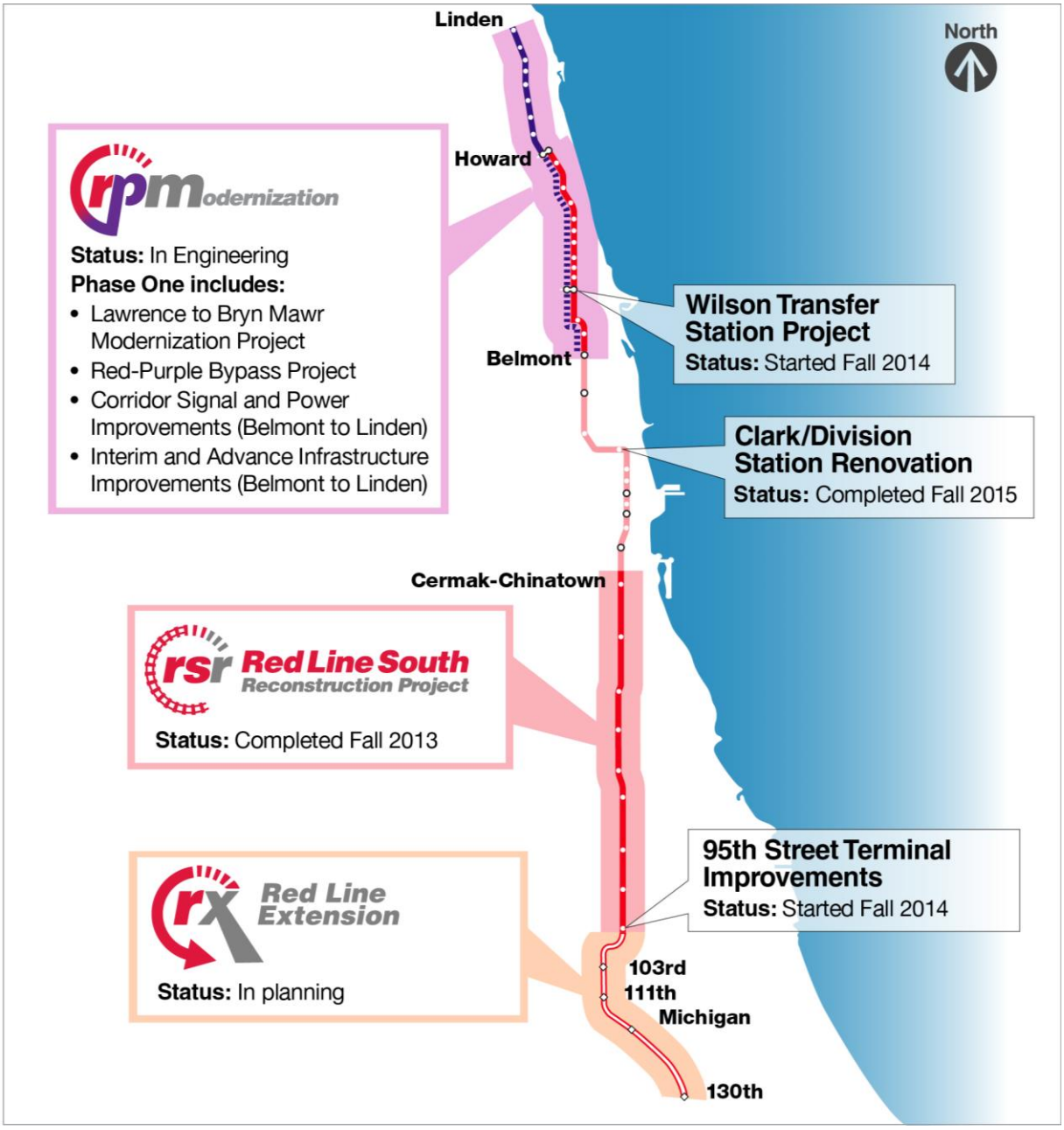

Figure 1-1: Red Ahead Program Overview

The project area for the RLE is approximately 11 miles south of the Loop (Chicago's central business district) on Chicago's Far South Side. The project area encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south (**Figure 1-2**). The project area includes expressways, regional arterials, commuter and freight railroads, intermodal connectors, local streets, bicycle facilities, and pedestrian facilities. The expressways that pass through the project area are Interstate 94 (I-94, also known as the Dan Ryan Expressway north of 95th Street and the Bishop Ford Freeway south of 95th Street) and Interstate 57 (I-57). From the northern border of the project area, I-94 runs south to 99th Street, curves east, then curves south and runs along the west side of Lake Calumet. I-57 joins I-94 at 95th Street and runs east of the Metra Rock Island District commuter rail line to 115th Street, and then curves south along the western limit of the project area.

CTA's Red Line HRT service currently terminates at the 95th Street Terminal, in the northern portion of the project area. From there, a network of CTA and Pace Suburban Bus Service (Pace) bus routes serves the surrounding Far South Side communities. The 95th Street Terminal is among CTA's busiest stations, and many residents in the project area use bus service to transfer to the Red Line, causing lengthy travel times. The Red Line operates 24 hours per day, 7 days per week, as do some of the connecting bus routes.

Metra operates commuter rail in the project area. The commuter rail lines include the Rock Island District, Electric District mainline, and Electric District Blue Island branch. The Northern Indiana Commuter Transportation District (NICTD) operates the South Shore Line, which shares tracks with the Metra Electric District (ME) mainline north of 115th Street. These commuter rail lines offer primarily peak-hour, peak-direction service to and from downtown Chicago, with infrequent service outside of peak hours.

The overall project area has residential (primarily single-family), commercial (urban mixed-use), industrial, transportation, utility, and vacant land uses. Commercial land uses are clustered around the major thoroughfares in the area, including Michigan Avenue and Halsted Street. Vacant properties are interspersed throughout most residential and commercial blocks. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park (see **Figure 1-2**). Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area also contains several schools, universities (including Chicago State University), and the Altgeld Gardens public housing project. According to census data, project area population and employment have declined during the past decade (U.S. Census Bureau 2010); however, CMAP anticipates growth in some areas by 2030 (CMAP 2010b).

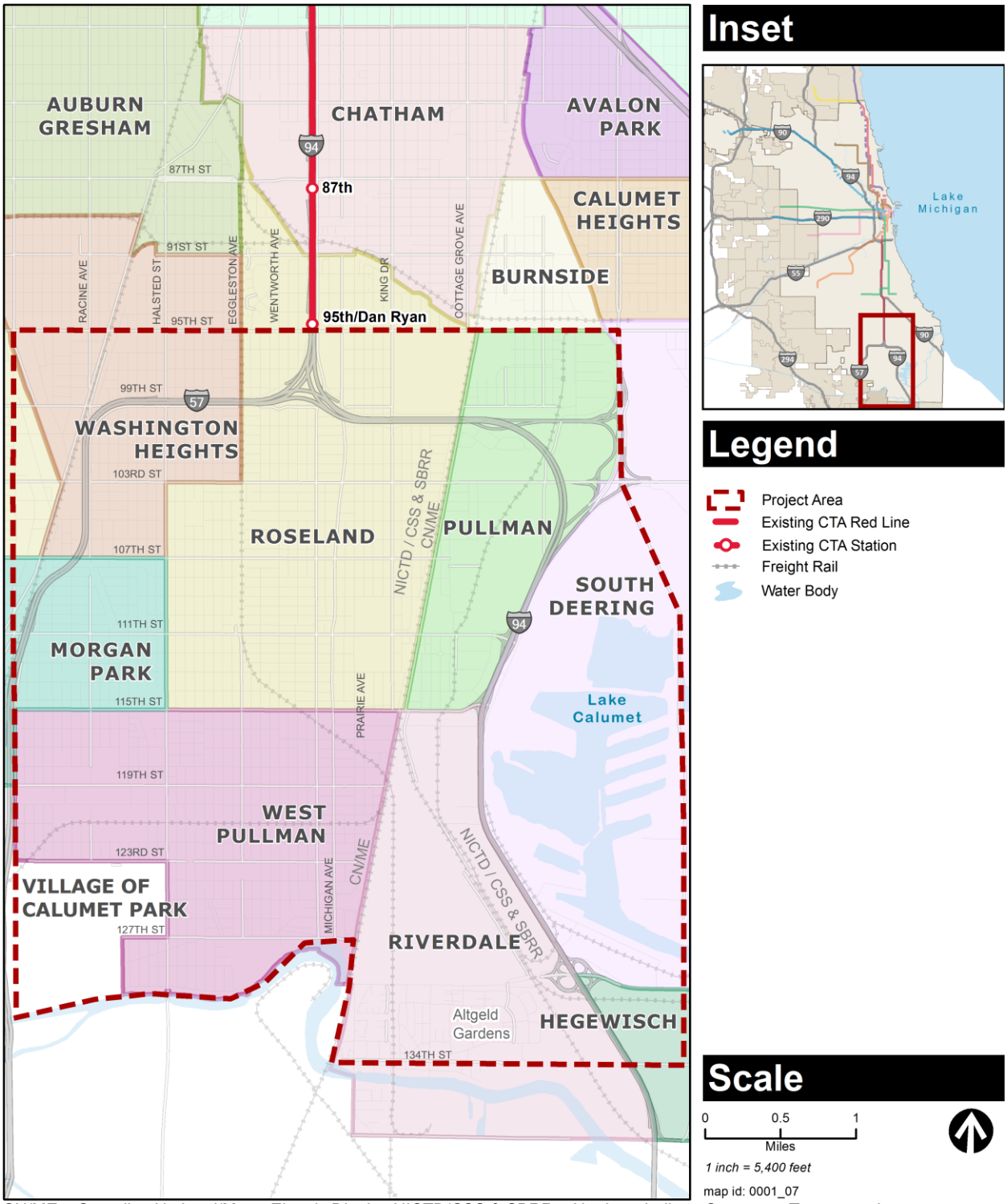

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-2: Red Line Extension Project Area

1.2 Statement of Purpose and Need

This Draft EIS builds upon the RLE AA process, which took place from 2006 through 2009. The AA process included public involvement and conceptual design and analysis to identify the project's purpose and need. The purpose and need reflects the project objectives discussed with the public during the AA process, EIS scoping (including the public scoping meetings), and ongoing public involvement activities. This Draft EIS discusses the extent to which the alternatives in **Chapter 2** meet the purpose and need, which are tied to the goals discussed in **Section 9.2**.

1.2.1 Purpose

The purpose of the RLE Project is as follows:

- Reduce commute times for residents both within and south of the project area.
- Improve mobility and accessibility for transit-dependent residents in the project area.
- Improve rapid transit rail service to isolated areas and provide viable linkages between affordable housing (e.g., the Altgeld Gardens public housing project), jobs, services, and educational opportunities, thereby enhancing livability and neighborhood vitality.
- Provide an opportunity for potential connections and linkages to other public transportation modes including regional commuter rail in the project area.
- Foster economic development in the project area, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts.
- Provide a modern, efficient rail car storage yard and shop facility to provide storage and cost-effective preventive maintenance for rail cars associated with the RLE Project, rail cars currently stored in the existing 98th Street Yard and Shop, and rail cars supporting additional Red Line expansion of service.

1.2.2 Need

The need for the RLE Project is demonstrated by the following existing conditions:

- Transit trips to jobs are longer for Far South Side residents than they are for residents in the Chicago seven-county region[1] as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.
- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, which limits access between affordable housing (e.g.,

[1] The Chicago seven-county region includes the counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will.

the Altgeld Gardens public housing project) and employment centers outside of the project area.

- Existing transit markets are underserved and transit connectivity is challenging in the project area.
- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.
- The existing 98th Street Yard does not have capacity to store rail cars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

1.3 Justification of Purpose and Need

This section documents the elements of the purpose and need for the RLE Project as identified in **Section 1.2**. Supporting data is summarized in the following sections, and more detailed supporting data is available in the *Purpose and Need Report* (**Appendix D**).

1.3.1 Long Transit Trips to Job Centers for Far South Side Residents

Project area commute times are among the longest in the city, as shown in the map inset on **Figure 1-3**. **Figure 1-3** details commute times in the project area. During 2005–2010, commute times were 24 percent longer for project area residents than for other residents in the seven-county region—approximately 39 minutes one-way for project area residents, versus 32 minutes region-wide (U.S. Census Bureau 2010). Expressway and arterial traffic congestion limit the mobility of residents in the project area, including bus passengers who are frequently stuck on the same congested roadways. *GO TO 2040* states the "region's congestion levels are among the highest in the nation, and projected increases in population, jobs, and freight traffic will only add to the pressure on our infrastructure" (CMAP 2010b). Traffic congestion in the Chicago metropolitan area has steadily increased in recent decades, and project area roadways are approaching capacity limits during the morning peak period.

Public transit passengers and those who depend on public transit for meeting their travel needs are hardest affected by these long commute times. Complex transfers to reach the 95th Street Terminal make commute times greater than 2 hours one-way for some project area residents (CMAP 2012a). Project area residents accessing the 95th Street Terminal by bus and other transportation modes experience measureable delays resulting from congestion along arterial streets. The need for improved access to job centers outside of the project area is evidenced by an unemployment rate of 19 percent in the project area (U.S. Census Bureau 2013). Some neighborhoods within the project area, such as Riverdale, have unemployment rates as high as 34 percent (U.S. Census Bureau 2013). The RLE Project would reduce transit travel times to jobs from many neighborhoods in the project area, which would help facilitate job access and result in additional viable employment opportunities.

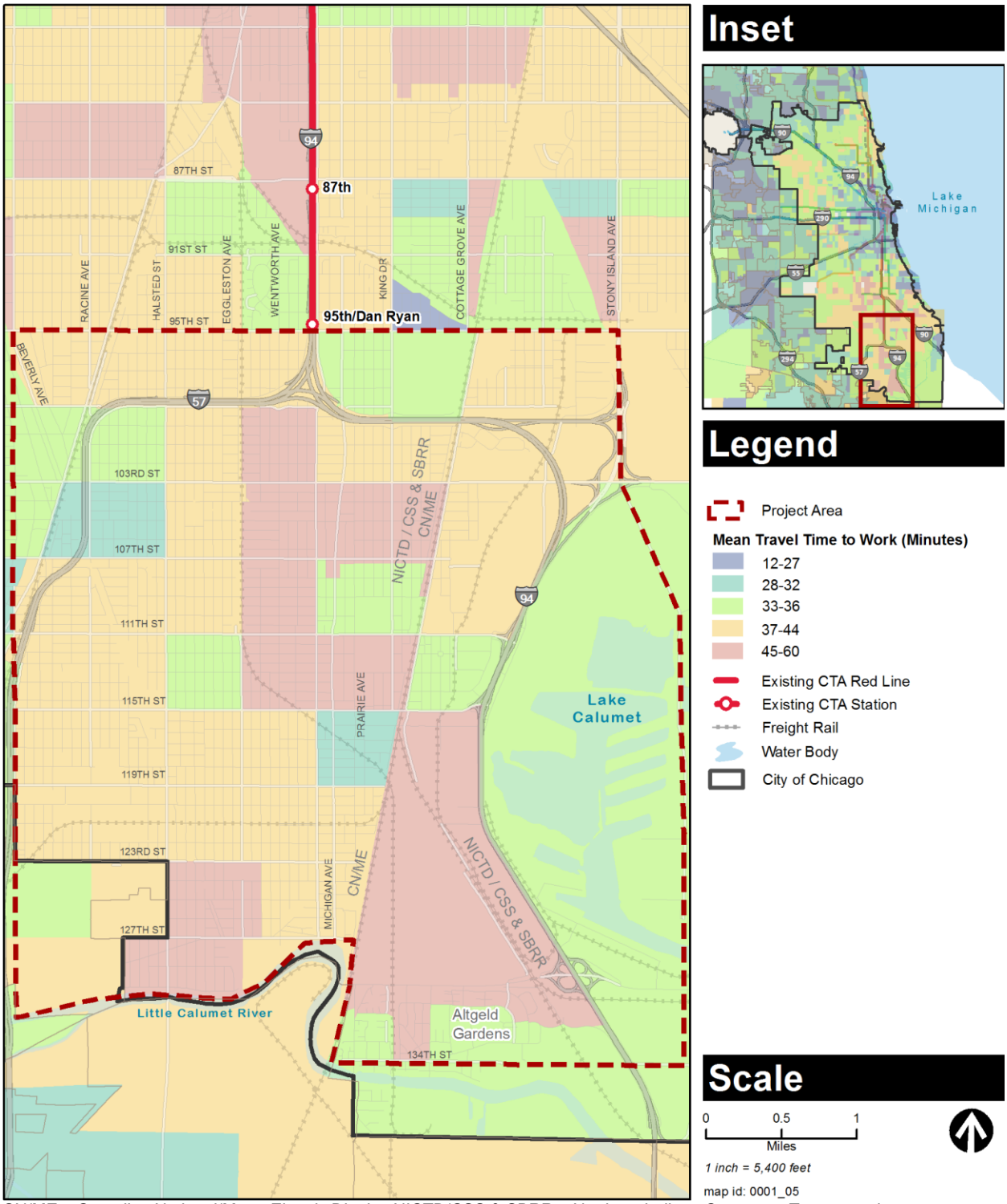

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
Source: U.S. Census Bureau 2010

Figure 1-3: Travel Time to Work

1.3.2 Transit-Dependent Populations Lack Direct Access to Rapid Transit Rail Service

A large share of the population in the project area falls within several demographic categories that typically indicate transit dependency: low-income populations, senior citizens, people who are too young to drive, people with disabilities, and people living in households without cars. For transit-dependent populations, the availability of quality transit service that connects them to job centers is particularly important. The following comparisons highlight the transit-dependent characteristics of the project area:

- The median annual household income in the project area is approximately $41,000, which is below the Chicago metropolitan area median of approximately $62,000 (U.S. Census Bureau 2010). Some community areas, such as Riverdale, have median annual household incomes as low as $11,000. The entire Chicago metropolitan area had a decline in median household income of approximately 7 percent between 2000 and 2010, but these effects have been more pronounced in the project area, which had a decline of nearly 21 percent in the same timeframe (U.S. Census Bureau 2010). Low-income households are less likely to own cars, and frequently rely on transit as their primary mode of transportation.

- Approximately 15.3 percent of project area residents are over the age of 65, compared to 10.3 percent of the Chicago metropolitan area (U.S. Census Bureau 2010). Senior citizens are more likely to be transit dependent because they may no longer be physically able to drive.

- Approximately 27 percent of the project area is under the age of 18, compared to 23 percent of the Chicago metropolitan area (U.S. Census Bureau 2010). Minors are more likely to be transit dependent because many are too young to obtain driver's licenses, or do not have the financial means to purchase a car.

- Approximately 15.4 percent of households in the project area have at least one member with a disability, compared to 11 percent region-wide (U.S. Census Bureau 2010). People with disabilities are more likely to be transit dependent if their disabilities prevent them from driving a car.

- Although the average household size in the project area (2.88 persons per household) is nearly the same as in the Chicago metropolitan area (2.84 persons), project area households have fewer vehicles on average (U.S. Census Bureau 2010). Approximately 10 percent of project area households have no vehicle available, versus 6 percent region-wide. Of the project area households that do have cars, there are generally fewer cars per person than other households in the region, causing some household members to rely on non-automobile modes of transportation.

The CTA Red Line currently serves only the northernmost portion of the project area directly. Most residents in the project area must use connecting bus service to reach the 95th Street Terminal, which results in long travel times, as described in **Section 1.3.1**. Direct access to rapid transit from a greater share of project area residences would improve job access.

1.3.3 Isolation from Major Activity Centers and Limited Viable Transportation Options

Despite the substantial amount of roadway infrastructure in the project area, expressways and arterial streets frequently become congested, thereby limiting mobility. Mobility is further inhibited by the limited options for connecting to the CTA's rail system. Although bus routes operated by CTA and Pace provide service 24 hours a day, buses in the project area are frequently delayed by congestion on arterial streets leading to the 95th Street Terminal. None of the Red Line stations along the Dan Ryan branch currently have park & ride facilities, precluding residents from accessing the stations by car unless they are dropped off. Several bus routes serve the 95th Street Terminal and Metra stations; however, the large residential tracts surrounded by local streets limit the bus network.

While the project area does have an extensive sidewalk and crosswalk system along the road network, physical divisions between communities include the ME mainline, which is on an embankment; Lake Calumet; the Little Calumet River; the UPRR right-of-way, which extends north-south from 99th Street to 119th Street; and large tracts of industrial land. These physical divisions are difficult to cross for pedestrians and bicyclists, and effectively separate the communities on either side. This geographic isolation is particularly problematic for residents of the Altgeld Gardens public housing project at the south end of the project area between 130th Street and 134th Street in the Riverdale community area. Residents in this area have limited employment opportunities and transportation choices within walking distance of their homes.

There is a high percentage of vacant homes in the project area—13 percent higher than the City of Chicago (CMAP 2012a). Several factors contribute to housing vacancy rates in a particular community. These factors include, but are not limited to, safety and security, proximity to public services, access to jobs, quality of schools, age and type of available housing units, quality of life, and the overall health of the community. In addition, there are ten affordable housing properties (with a total of almost 2,800 units) within ½ mile of the proposed alignment (National Housing Preservation Database 2015). Improved public transportation options, combined with affordable housing stock, would serve as a catalyst to bring people to the area that would not otherwise consider communities in the project area as a viable place to live. Mutual benefit for project area residents, and those seeking affordable housing, could be provided through rapid transit south of the 95th Street Terminal.

1.3.4 Underserved Transit Markets and Limited Transit Connectivity

Several groups of potential passengers ("transit markets") in the project area are underserved by the existing transit system. Transit service enhancements, including those proposed as part of the RLE Project, would improve service for these groups. The largest underserved groups are as follows:

- Project area residents who must use connecting bus routes to reach the Red Line - Most of the CTA and Pace bus routes in the project area serve the Red Line's 95th Street Terminal. As discussed above, average travel times for work trips and the number of transit-dependent residents are higher in the project area (compared to the seven-county region) due to traffic congestion and the time required to ride a bus to the 95th Terminal and transfer to the CTA

Red Line. The combination of these conditions underscores the need to improve connectivity and provide faster transit service.

- People driving to Chicago activity centers from the project area and points south - There are currently no CTA parking facilities on the Red Line Dan Ryan branch, leaving motorists coming from the project area and points south few options for parking at a Red Line station and completing their trips via transit. In addition, I-94 is congested northbound in the AM peak period and southbound in the PM peak period; during these time periods, traffic flows are more than 15 miles per hour slower than free flow speeds of 60 miles per hour (Illinois Department of Transportation [IDOT] 2015). CTA park & ride facilities near major expressways or arterial streets in the southern portions of the project area would provide new, convenient access possibilities on the Red Line. The need for park & ride facilities was confirmed based on travel demand modeling performed in 2009, as part of the RLE AA process (see **Appendix A**).

- Transit passengers traveling to other potential transit destinations - This group includes those taking reverse commute trips (residents in the central areas of the city commuting to jobs in outer communities), school trips, and trips entirely within the project area. There are several educational facilities in the project area, including Chicago State University (7,200 students), Olive-Harvey College (4,300 students), and several high schools (including Harlan, Corliss, Fenger, Julian, Brooks, and Carver High Schools) that would benefit from transit improvements in the project area.

1.3.5 Disinvestment and Limited Economic Development Have Affected Far South Side Communities

The project area has experienced ongoing disinvestment, including loss of manufacturing jobs, which has led to a decline in population, services, and job opportunities. Once-vibrant retail districts, such as Michigan Avenue and Halsted Street, now contain vacant land and storefronts. This decline is evidenced by the decrease in project area population and employment compared to the City of Chicago and the seven-county region (**Table 1-1** and **Table 1-2**).

Table 1-1: Population Decline in Red Line Extension Project Area (2000 to 2010)

Area	2000 Population	2010 Population	Change
Chicago Seven-County Region	8,146,264	8,399,893	3.0%
City of Chicago	2,895,964	2,700,741	-7.2%
Red Line Extension Project Area	147,662	128,366	-15.0%

Source: U.S. Census Bureau 2010

Table 1-2: Employment Decline in Red Line Extension Project Area (2000 to 2010)

Area	2000 Employment	2010 Employment	Change
Chicago Seven-County Area	4,083,530	4,429,414	8.5%
City of Chicago	1,358,054	1,410,294	3.8%
Red Line Extension Project Area	62,587	56,105	-11.5%

Source: U.S. Census Bureau 2010

The City of Chicago is focused on stabilizing, improving, and redeveloping communities in and around the project area. As a result, the City has designated several tax increment financing (TIF) districts, redevelopment areas, special service areas, and industrial corridors in the project area (see **Appendix D** for more information). In addition to economic revitalization initiatives, viable transportation options continue to be a key element in the success of economic development efforts and revitalization for communities within the project area. Examples of redevelopment in the project area include the Pullman District, the Method factory, and a new Walmart store (opened 2014). The Pullman District includes the Pullman factory, the Hotel Florence, and the Pullman Railroad Porters National Museum. This district was named a National Monument on February 19, 2015, making it a component of the National Park System. Building on the Pullman's community history as a manufacturing hub, Method, a manufacturer of environmentally friendly cleaning and personal care products, opened a new 150,000-square-foot factory in Pullman in April 2015, which has created approximately 100 jobs.

1.3.6 The Need for a Rail Car Storage Yard and Maintenance Facility

The existing 98th Street Yard does not have capacity to store rail cars required for any substantial increase in Red Line capacity accompanying future Red Line expansion. Two yard and shop facilities (Howard Yard at the north end of the Red Line and 98th Street Yard at the south end of the Red Line) provide storage for vehicles operating along the Red Line. Any Red Line expansion must consider the capacity of both yards. The Howard Yard and the 98th Street Yard together supply rail cars for both the northern and southern portion of the Red Line. Both yards are necessary to efficiently provide trains to meet the current and future operating plans for the entire Red Line. All northbound trains currently begin their run at 98th Street Yard, and any expansion of Red Line service would require expanded yard capacity at or near the southern end of the Red Line. The existing 98th Street Yard is landlocked between interstate ramps for I-94 and I-57. There is no room to expand the yard without major realignments of the two highways. In addition, the existing 98th Street Yard is oriented as a terminal yard for service to and north of the 95th Street Terminal. With the RLE Project expanding service to the south, use of the 98th Street Yard would lead to inefficient operations. Moving trains into and out of the existing yard, due to the orientation of the yard, would cause operational inefficiencies and potential capacity constraints to Red Line service.

1.4 Organization of the Document

This Draft EIS analyzes how well the NEPA Preferred Alternative would satisfy the purpose and need stated above. It also analyzes the potential impacts of the No Build and NEPA Preferred Alternatives. **Section 9.2** provides further analysis of the extent to which the East and West Options would satisfy the purpose and need.

NEPA documents, such as this EIS, must provide sufficient technical detail to meet a range of legal requirements and are required to be organized in a specific way, as described in 40 Code of Federal Regulations (CFR) § 1502. **Figure 1-4** provides an overview of the chapters and the major topics covered in this document.

CHAPTER 1 **Purpose and Need**	This chapter is the foundation of the document. It introduces the project, provides background information, and explains why the project is proposed and important.
CHAPTER 2 **Alternatives Considered**	This chapter reviews the planning process and alternatives considered in developing the project and describes the alternatives under further consideration in this Draft Environmental Impact Statement.
CHAPTER 3 **Transportation**	This chapter presents the potential for impacts on the transportation network. This chapter also discusses measures to avoid or minimize those impacts.
CHAPTER 4 **Environmental Impacts and Mitigation**	This chapter discusses the social, economic, and environmental resources that could be affected by the construction and operation of the project alternatives. This chapter also discusses measures to avoid or minimize those impacts.
CHAPTER 5 **Resources with Limited or No Adverse Impacts**	This chapter summarizes the resources that would have limited or no adverse impacts due to operation or construction of the project alternatives.
CHAPTER 6 **Environmental Justice**	This chapter discusses the impacts of the project alternatives on environmental justice communities in the project area.
CHAPTER 7 **Section 4(f) Evaluation**	This chapter focuses on meeting the federal requirements of Section 4(f) of the U.S. Department of Transportation Act of 1966, which protects significant historic sites, publicly owned parks, recreation areas, wildlife refuges, and waterfowl refuges that could be used by a federally funded project.
CHAPTER 8 **Evaluation of Alternatives**	This chapter presents potential capital and operations funding strategies as well as a summary evaluation of the project alternatives.
CHAPTER 9 **Public and Agency Coordination**	This chapter discusses the processes for public involvement and agency coordination and addresses public comments and suggestions.
Chapter 10 **List of Acronyms and Abbreviations**	This chapter provides definitions for the acronyms and abbreviations used within the document.
CHAPTER 11 **List of References**	This chapter provides the references used within the document.
CHAPTER 12 **List of Preparers**	This chapter lists the preparers of this document.
CHAPTER 13 **List of Recipients**	This chapter lists the agencies, local officials, and public libraries that were notified of the availability of this document.

Figure 1-4: Environmental Impact Statement Document Organization

Chapter 2
Alternatives Considered

This chapter describes the alternatives studied in this Draft EIS and discusses how they were developed. It also includes documentation of alternatives that were analyzed and subsequently eliminated from further consideration.

2.1 Alternatives Development Process

CTA began developing the alternatives studied in this Draft EIS during the AA, which took place during 2006–2009. Starting with multiple modes and corridor options, CTA developed and screened alternatives through a combination of conceptual engineering, public input (open house and stakeholder meetings), and preliminary analysis of potential impacts and costs. A three-level, detailed screening process was used to evaluate the alternatives and identify an LPA. **Appendix A** (LPA Report) provides detailed documentation of the Screen 1, Screen 2, and Screen 3 evaluations.

The Screen 1 evaluation began by identifying the universe of alternatives, which included a wide range of transit modes (such as bus, rail, or streetcar), project area corridors, and profiles (where the transit line is in relation to the ground). Combinations of 11 modes, 9 corridors, and 4 profiles were evaluated against the purpose and need. Based on this evaluation, the following alternatives were carried forward for further analysis in Screen 2: two bus rapid transit (BRT) alternatives along Halsted Street and Michigan Avenue; six HRT alternatives along Halsted Street, the UPRR, and Michigan Avenue; the No Build Alternative; and a "low cost" alternative (formerly required for FTA analyses known as the Transportation System Management [TSM] Alternative).

The alternatives carried through to the Screen 2 evaluation were more thoroughly defined to include mapping of a more defined alignment, identification of potential station locations, and preliminary service plans. Station spacing was determined by the type of alternative proposed, project area needs, and consistency with the purpose and need. The eight evaluation factors for the Screen 2 included a mix of qualitative and quantitative factors intended to further evaluate the performance of each alternative with respect to the project goals and objectives. Specific evaluation factors included physical constraints; right-of-way requirements; social and economic factors; demographics and employment; environmental factors; noise, visual, natural, and cultural resource impacts; transportation factors; and travel time, transit connectivity, and traffic.

Based on the results of the Screen 2 evaluation, a BRT alternative along Halsted Street (operating on dedicated lanes), two HRT alternatives along Halsted Street and the UPRR, the No Build Alternative, and the TSM Alternative were recommended for further evaluation in Screen 3. In addition to the alternatives carried forward from the Screen 2 evaluation and based on discussions with FTA, CTA combined the TSM Alternative with a BRT alternative (operating on existing right-of-way rather than dedicated lanes as proposed in Screen 2) along Michigan Avenue to form a single alternative (called the BRT Alternative) for evaluation in Screen 3. Because the Michigan Avenue BRT Alternative would operate in the existing right-of-way, it would require fewer property acquisitions than BRT on dedicated lanes. Screen 3 was a two-step evaluation process that included the further definition and refinement of alternatives, including conceptual design and the evaluation of these alternatives. Nine evaluation factors were used to evaluate the

alternatives as part of Screen 3, including physical constraints, public support, social and economic factors, environmental factors, transportation factors, capital cost comparison, operating and maintenance cost comparison, ridership potential, and FTA's Cost Effectiveness Index. The result of the Screen 3 evaluation was a recommendation for the LPA: the UPRR Rail Alternative.

Based on the results of the AA and considerable public support for the corridor, including a 2004 referendum where 38,000 residents in the 9th and 34th Wards supported the UPRR corridor for the RLE Project, the UPRR Rail Alternative was recommended as the LPA, indicating that it is the alternative that would best meet the purpose and need of the project while addressing potential impacts and other potential constraints. The UPRR Rail Alternative would provide access to the most densely populated portions of the study area, which are primarily residential and transit supportive. The Chicago Transit Board designated the UPRR Rail Alternative as the LPA on August 12, 2009. **Figure 2-1** summarizes the AA process.

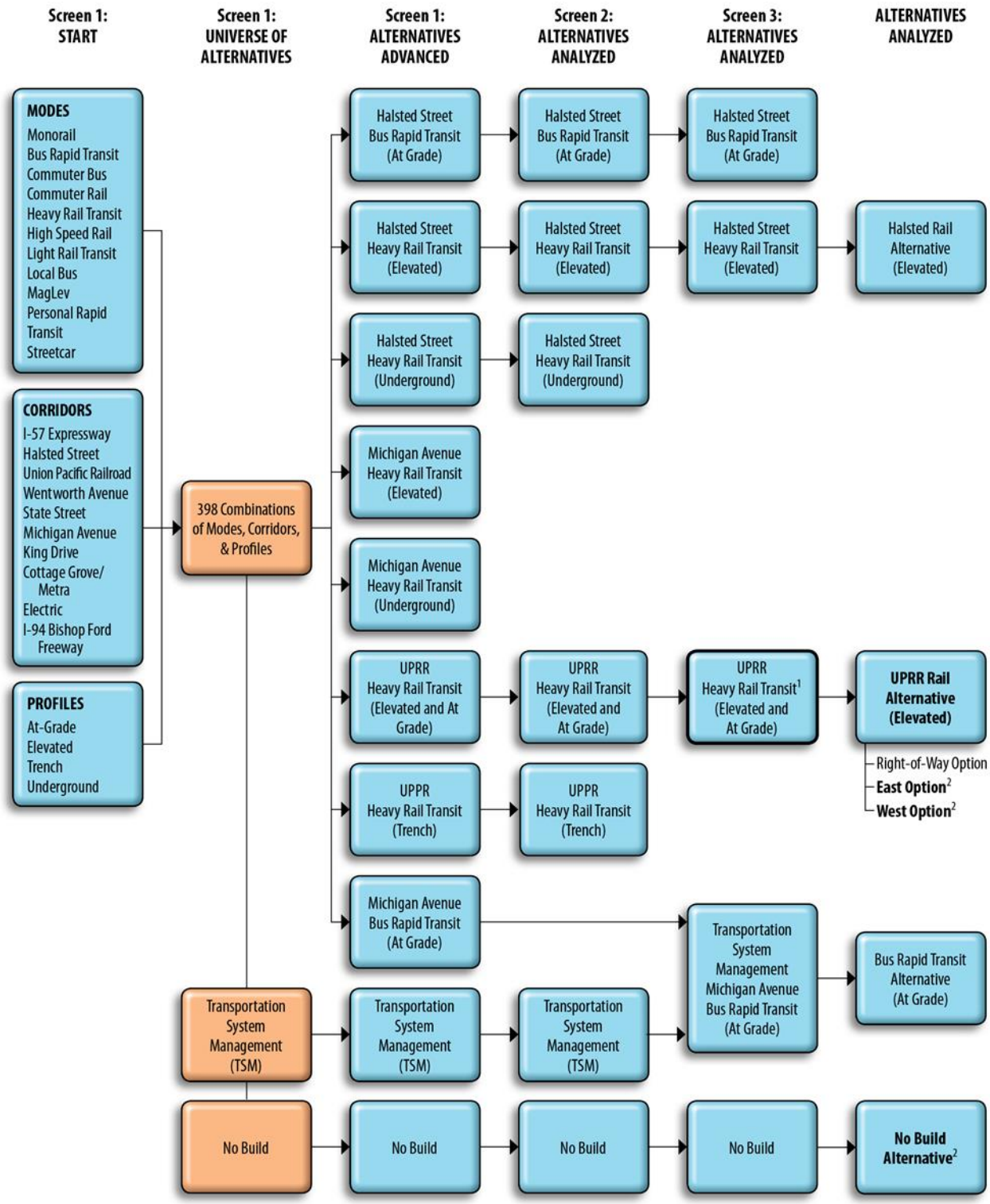

[1]The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009.
[2]This Draft EIS presents impacts of the No Build Alternative and two options of the UPRR Rail Alternative: the East Option and the West Option.

EIS = Environmental Impact Statement, UPRR = Union Pacific Railroad

Figure 2-1: Alternatives Development Summary

After the AA, CTA further refined the alternatives for presentation during the NEPA scoping process and study in this Draft EIS. At the conclusion of the AA process, the UPRR Rail Alternative was anticipated to be located adjacent to the east or west edge of the UPRR right-of-way. In 2012, CTA learned of a Chicago Department of Transportation (CDOT) feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. By moving UPRR freight operations out of the existing UPRR corridor, CTA could use the existing UPRR right-of-way for the RLE Project. CTA evaluated this new option of the UPRR Rail Alternative, known as the Right-of-Way Option, in preparation of this Draft EIS. Subsequent coordination between local agencies and the railroads indicated that relocating UPRR freight operations from this corridor presents considerable challenges and would not be feasible.

During 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the BRT Alternative (along Michigan Avenue), the UPRR Rail Alternative, and the Halsted Alternative. CTA evaluated three options for the UPRR Rail Alternative: the Right-of-Way Option, East Option, and West Option. CTA also evaluated two options for the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. **Appendix E**, *Description of Alternatives*, contains details about each of these four alternatives and both options for the 130th Street station. The supporting technical memoranda, included in this Draft EIS as **Appendices H–X**, include analysis of each of these alternatives and options.

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Because the Right-of-Way Option is not feasible, the Draft EIS evaluates only the East and West Options for the UPRR Rail Alternative. CTA has chosen to move forward with the South Station Option at 130th Street based on technical analysis and public feedback. **Section 2.4** contains additional information about the BRT Alternative, UPRR Right-of-Way Option, UPRR West Station Option for the 130th Street station, and Halsted Alternative in the discussion of alternatives considered but not pursued.

2.2 Alternatives Evaluated in the Draft Environmental Impact Statement

This Draft EIS discusses the No Build Alternative and two options of the UPRR Rail Alternative: the East Option and the West Option. **Figure 2-2** shows the UPRR Rail Alternative alignments. For simplicity, this alternative is called the "UPRR Alternative" in the remaining sections of this document and the UPRR Rail Alternative East and West Options are referred to as the "East and West Options." **Appendix F** contains plans and profiles for the East and West Options.

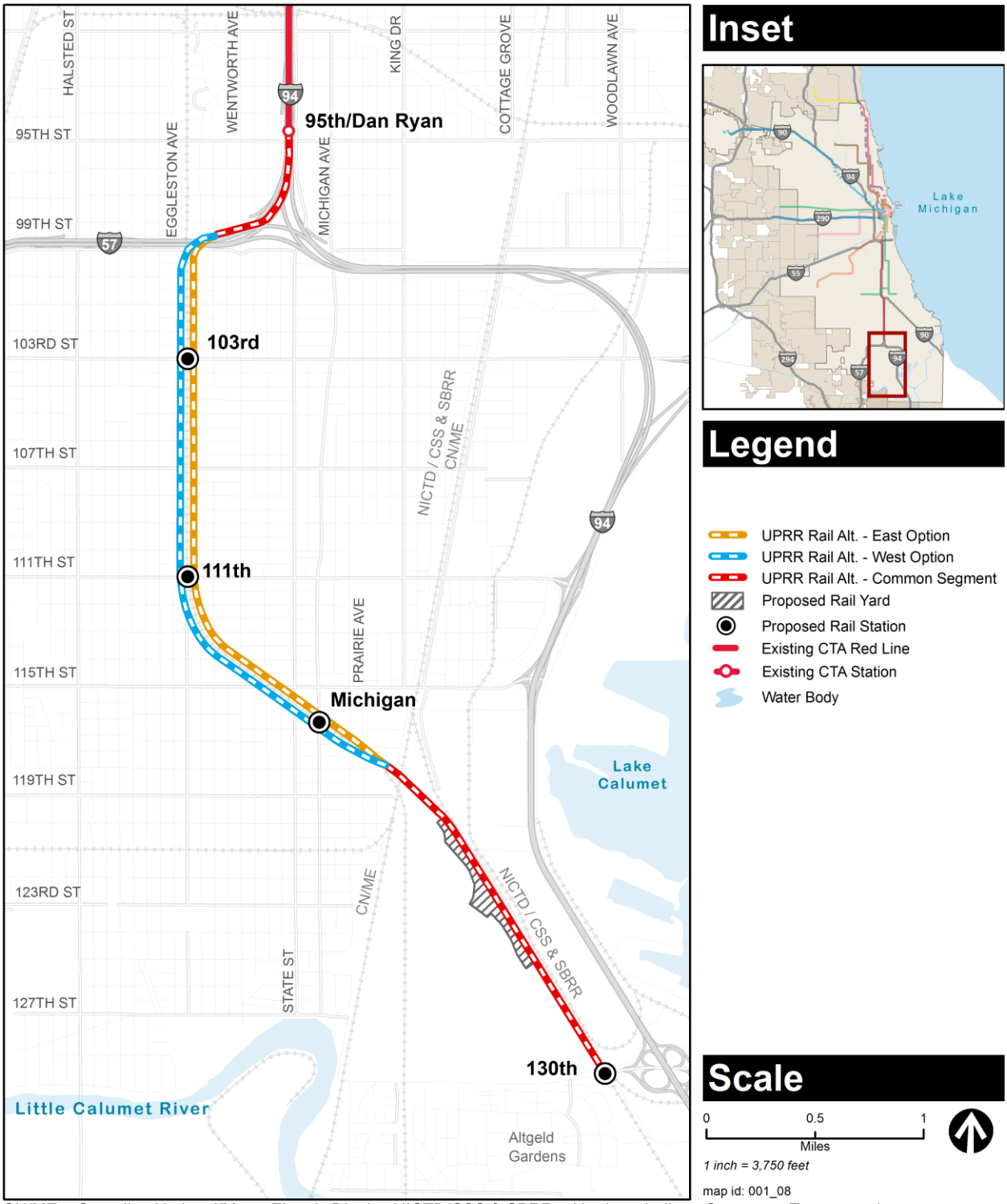

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 2-2: Union Pacific Railroad Alternative Options

2.2.1 No Build Alternative

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the UPRR Alternative.

The No Build Alternative represents future conditions if the UPRR Alternative were not implemented. The No Build Alternative includes all projects currently included in the fiscally constrained portion of the CMAP FY 2014–2019 TIP. Projects in the TIP in the project area include renovation of the 95th Street Terminal, rail line maintenance and improvements, preservation of the North Pullman historic area, road resurfacing, coordination of traffic signal timing, and construction of a new bicycle/pedestrian facility. Impacts related to the construction and operation of the 95th Street Terminal are documented in the approved *95th Street Terminal Improvement Project Environmental Assessment* (CTA 2013b). FTA issued a Finding of No Significant Impact for the 95th Street Terminal Improvement Project in April 2013 and an Amended Finding of No Significant Impact in July 2013. An Environmental Assessment Re-Evaluation performed by FTA in July 2016 confirmed that the Amended Finding of No Significant Impact dated July 2013 remains valid. No new infrastructure would be built as part of the RLE Project under the No Build Alternative.

2.2.2 Union Pacific Railroad Alternative

The UPRR Alternative would extend the heavy rail Red Line 5.3 miles from the existing 95th Street Terminal to 130th Street. As noted above, the Chicago Transit Board designated the UPRR Alternative as the LPA at its August 12, 2009 board meeting. The UPRR Alternative would reduce transit travel times from the project area to points on the Red Line north of 95th Street (from 130th Street to 95th Street) from 28 minutes to approximately 14 minutes (CTA 2009, see **Appendix D**). Two alignment options adjacent to the UPRR are considered for this alternative: the East Option and the West Option.

Alignment

The UPRR Alternative alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue, as shown on **Figure 2-2**. The alignment would turn south to follow the UPRR corridor. Two options are being considered for the alignment along the UPRR corridor. The CTA elevated structure would be located either east or west of the existing UPRR corridor. The alignment would follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street. South of this point, the East and West Options would follow the same alignment southeast along the NICTD/Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation (Conrail) right-of-way to the terminus (end) of the RLE at 130th Street.

As described, two UPRR Alternative options for the segment of the proposed alignment between I-57 and the CN/ME tracks near 119th Street are studied in this Draft EIS:

- East Option - The CTA elevated structure would be placed immediately adjacent to the east side of the UPRR right-of-way.

- West Option - The CTA elevated structure would be placed immediately adjacent to the west side of the UPRR right-of-way.

Structure and Tracks

In the UPRR Alternative, the tracks would be on a new elevated (aerial) track structure from the 95th Street Terminal through the CN/ME track crossing near 119th Street. South of this elevated crossing, the tracks would transition to an at-grade profile (they would continue at ground level).

The proposed elevated structure would be a closed-deck, steel and concrete, aerial track structure with direct-fixation track and welded rail (welded at joints). With direct-fixation track, rails are mounted to specially designed concrete blocks fixed to the concrete deck. Noise barriers (approximately 4 feet in height, measured from the top surface of the concrete deck) are proposed for portions of the structure on both sides of the track deck to reduce noise transmission at and below track level. The structure would vary in height from 14 feet 9 inches to 40 feet above existing grade, depending on required clearances above existing roadways and railroads. The two tracks would have a spacing of 13 feet (13 feet between the track centerlines). The elevated deck, on which the tracks would run, would vary in width from approximately 30 feet to approximately 52 feet at stations.

Figure 2-3 is a photo simulation of a typical proposed elevated structure above the UPRR right-of-way. The design shown is conceptual, and the actual design would vary based on further engineering and community input.

Figure 2-3: Photo Simulation of Union Pacific Railroad Alternative East Option at 111th Street Facing West - Typical Proposed Elevated Structure

Stations

As part of either the East or West Option, four new stations would be constructed at the following locations along the proposed alignment:

- 103rd Street (elevated station)
- 111th Street (elevated station)

- Michigan Avenue (elevated station)
- 130th Street (at-grade station)

At 103rd Street, 111th Street, and Michigan Avenue, East Option stations would be located east of the UPRR tracks, and West Option stations would be located west of the UPRR tracks. Each station would have a center platform, approximately 26 feet wide and 520 feet long. Platforms would accommodate ten-car trains. Each station would be Americans with Disabilities Act (ADA) accessible with elevators. Each station area would include areas for bus boarding, new crosswalks where needed to accommodate pedestrian traffic, and park & ride facilities. **Figure 2-4** is a photo simulation of a typical proposed station. The design shown is conceptual, and the actual design would vary based on further engineering and community input.

Figure 2-4: Photo Simulation of Union Pacific Railroad Alternative East Option at 103rd Street Facing Northwest - Typical Proposed Elevated Station

The 130th Street station would be located immediately west of the NICTD/CSS & SBRR right-of-way at 130th Street. Pedestrians from Altgeld Gardens would access the station from 130th Place. Pedestrians would not need to cross 130th Street to access the station because 130th Street goes over 130th Place and the railroad tracks.

Park & Ride Facilities

To accommodate passengers arriving at either the East or West Option stations by car, park & ride facilities would be constructed near each station. **Table 2-1** lists the park & ride locations, number of parking spaces at each location, and the proposed parking facilities for both the East and West Options. A total of 3,700 parking spaces would be available along the corridor. CTA estimated parking demand based on travel demand modeling performed in 2009. Bus turnarounds would be provided in the parking areas. The ground floor of the parking structure at the Michigan Avenue station would contain space for retail and community facilities.

Table 2-1: Summary of Park & Ride Facilities

Station	Number of Parking Spaces	Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
103rd Street	200	Divided between two surface parking lots (one on the east side of the tracks and one on the west side of the tracks)	One surface parking lot
111th Street	200	Divided between two surface parking lots (one on the east side of the tracks and one on the west side of the tracks)	One surface parking lot
Michigan Avenue	1,000	Divided between a three-story parking structure and a surface parking lot (a surface parking lot on the east of the tracks and a parking structure on the west of the tracks)	Five-story parking structure
130th Street	2,300	Seven-story parking structure	

Yard and Shop

The 120th Street yard and shop, with a capacity of 340 train cars, would be sited on a combination of industrial and vacant land east of the CN/ME tracks and west of the NICTD/CSS & SBRR tracks near 120th Street and Cottage Grove Avenue. The yard would be entirely at grade. Parking spaces for CTA employees would be included at the yard. The existing 98th Street Yard and Shop at the south end of the existing Red Line would be used for other purposes, such as non-revenue equipment repairs once the 120th Street yard and shop is constructed. The yard could also function as a location where trains could be turned back from south to north for irregular or emergency service.

Substations

Substations are buildings along the alignment that house equipment to regulate the flow of electricity to the third rail, which supplies power to the trains. Substations would be placed approximately 0.8 to 1 mile apart along the alignment. Six new and upgraded substation locations are proposed: 98th Street Yard and Shop, near 101st Street, near 107th Street, near Lafayette Avenue, within the 120th Street yard and shop area, and near the 130th Street station. CTA would confirm the need and location for substations during future design phases.

Operating Plan

The UPRR Alternative would operate 24 hours a day, each day of the year. Service frequency is anticipated to be the same as with the current service (April 2016) at 95th Street—approximately 6-minute headways during morning peak hours and approximately 3-minute headways during afternoon peak hours. Headways at night (between 1 AM and 4 AM) would be approximately 13–15 minutes. Service frequency would be adjusted to accommodate demand once the RLE service has been implemented. Train frequencies would vary throughout the day (like existing Red Line service), and late night service would operate approximately every 15 minutes. Based on the estimated running time for the RLE, an additional 78 rail cars would be required as part of this project. The additional 78 rail cars would include 64 rail cars to meet the peak period schedule, plus 14 spare rail cars. Train sets would be eight cars long. Stations and track alignment would accommodate ten-car trains to maintain the option of running ten-car trains in the future. With

the extension of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations.

2.3 Summary of Construction Activities

This section summarizes the construction that would be needed for the UPRR Alternative. The *Description of Construction and Phasing for Build Alternatives* (**Appendix G**) provides additional details. Final engineering and pre-construction activities (see **Section 2.3.3**) would occur during 2018–2021. Heavy construction work would occur during 2022–2025, which would include 1 year of testing. The tentative opening year for the RLE is 2026. The construction timeline is dependent on federal reviews and federal, state, and local funding.

2.3.1 Construction Segments and Phasing

Construction activities would be grouped by type of work and location. Overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street Yard and Shop and vehicular traffic on affected expressways and roadways.

For the purposes of describing construction activities, the RLE corridor would be divided into seven segments. **Figure 2-5** shows proposed construction segments. **Table 2-2** describes work activities for each construction segment. The construction segments and phasing plans described here are based on conceptual engineering completed to date and provide the greatest amount of flexibility for future design within a maximum envelope for evaluating environmental impacts. It is anticipated that construction of the RLE Project would be completed from north to south; however, future design phases may determine a different sequencing of construction activities.

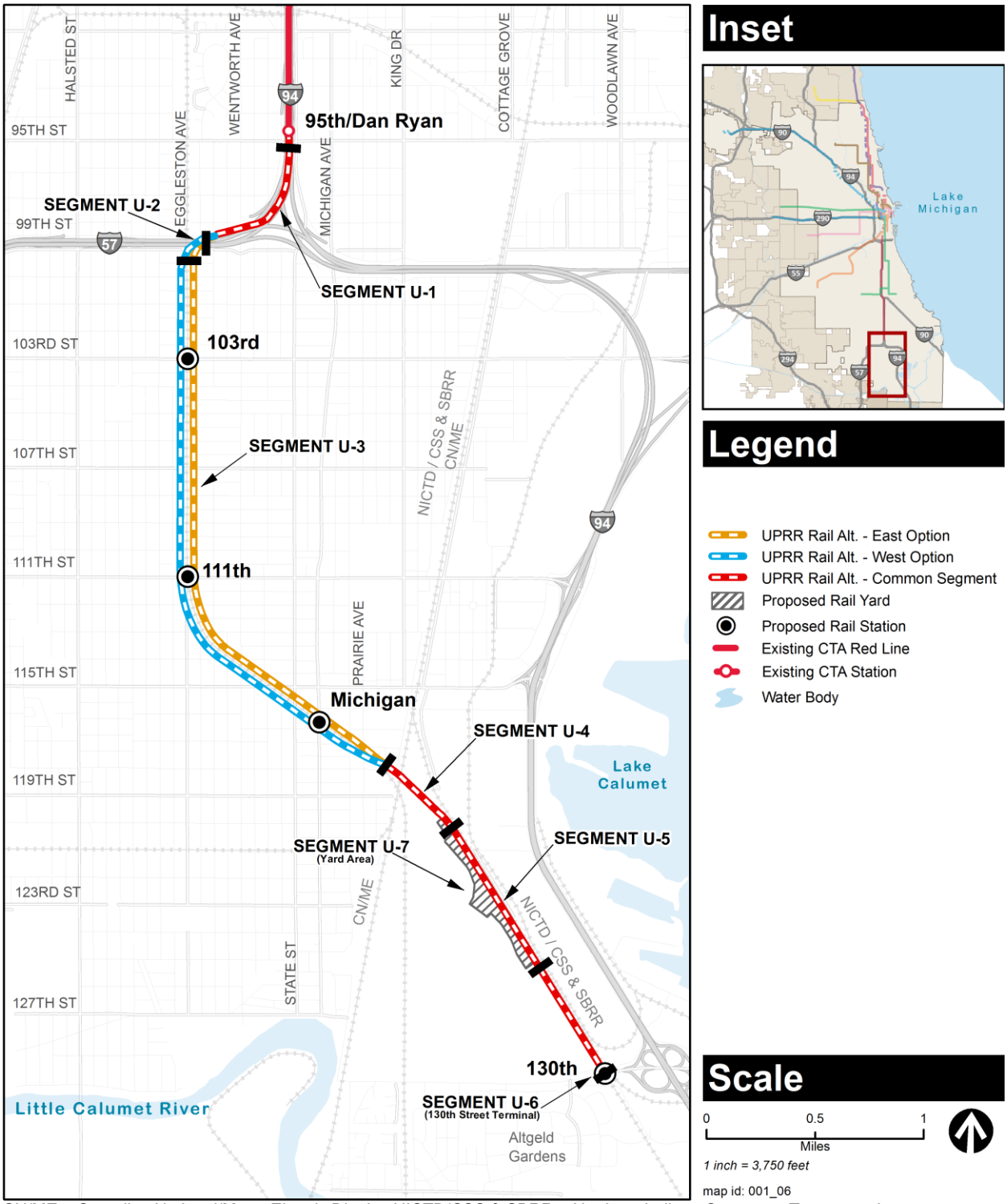

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 2-5: Construction Segments

Table 2-2: Construction Segments and Summary of Work Activities

Segment	Location	Work Activities
U-1	From the 95th Street Terminal to the beginning of the horizontal curve at the UPRR crossing	▪ Install trackwork and signals to tie into the 95th Street Terminal. Possibly relocate trackwork between the 95th Street Terminal and the 98th Street Yard and Shop. ▪ Construct approximately 500 feet of retained fill structure south of 95th Street Terminal. ▪ Construct single-track, elevated structures over existing CTA tracks leading to the 98th Street Yard and Shop and over the existing CTA/southbound I-94 tunnel. ▪ Construct the dual-track, elevated structure through the I-94/I-57 interchange, across the westbound I-57 entrance ramp from southbound I-94, and north of the southbound I-57 lane. ▪ Upgrade the substation currently serving the 98th Street Yard and Shop.
U-2	The horizontal curve at the UPRR crossing	▪ Construct the dual-track, elevated structure spanning both lanes of I-57.
U-3	From the end of the horizontal curve at the UPRR crossing to the CN/ME track crossing near 119th Street	▪ Demolish existing buildings and structures in the proposed right-of-way where necessary. ▪ Construct the dual-track, elevated structure along the UPRR corridor. ▪ Construct stations at 103rd Street, 111th Street, and Michigan Avenue. ▪ Construct parking lots/structures and bus turnarounds at stations. ▪ Construct three substations. ▪ East Option only - Relocate the Block Park communications tower.
U-4	From the CN/ME track crossing near 119th Street to the at-grade track	▪ Demolish existing buildings and structures in the proposed right-of-way where necessary. ▪ Construct the dual-track, elevated structure along the UPRR corridor and over the CN/ME tracks near 119th Street. ▪ Construct the 120th Street yard and shop track tie-in. ▪ Construct retained embankment structure to carry the elevated structure to grade. ▪ West Option only - Construct the dual-track, elevated structure along and across the UPRR corridor and Prairie Avenue.
U-5	From the end of the aerial structure crossing the CN/ME tracks near 119th Street to the lead tracks into the 130th Street station (which would begin near the south end of the proposed yard)	▪ Construct the track roadbed. ▪ Construct the MWRD access road and bridge over the RLE tracks and the NICTD/CSS & SBRR crossing.
U-6	130th Street station (including lead tracks)	▪ Construct the track roadbed. ▪ Construct the 130th Street station. ▪ Construct the parking structure for the 130th Street station. ▪ Construct bus bays and road access for the 130th Street station. ▪ Construct the MWRD access road to 130th Street. ▪ Construct the substation.
U-7	120th Street yard and shop	▪ Construct the yard and track. ▪ Construct the shop building. ▪ Construct the access road and CTA employee parking. ▪ Construct the substation.

UPRR = Union Pacific Railroad, CTA = Chicago Transit Authority, CN/ME = Canadian National/Metra Electric District, MWRD = Metropolitan Water Reclamation District of Greater Chicago, RLE = Red Line Extension, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

2.3.2 Construction Staging

Construction staging areas provide space to store equipment and materials, load trucks, and have workers perform parts of the construction process. Construction staging areas would be within the proposed right-of-way or within property acquired for stations, park & ride facilities, and the yard and shop. Nearby vacant properties and parking lots may also be used through the establishment of temporary construction easements. Staging and item assembly would be performed off-street to the fullest extent possible, to minimize traffic and community disruption. Along I-57, temporary construction easements on the expressway may be required, requiring shoulder and lane closures as well as temporary shutdown of traffic. Temporary construction easements on Metropolitan Water Reclamation District of Greater Chicago (MWRD) property near the yard and shop may be required as well.

Construction vehicles would access the staging areas on a regular basis, and would require special hauling routes and queuing locations to deliver materials and equipment, as well as remove debris. These special routes may require temporary lane closures or reconfigurations. Hauling routes would be designed to minimize impacts on noise- and dust-sensitive areas, such as residential neighborhoods, to the extent feasible. Specific design of each construction staging area would be determined during future design phases.

2.3.3 Pre-Construction Activities

Pre-construction activities would include development of construction schedules, quality plans, and procurement schedules. Utility protection and relocation information would be coordinated and verified in advance of the early construction activities. CTA and the construction contractor would initiate community notifications as early as possible to provide opportunities for community input and preparation. Demolition and building permits would be obtained during pre-construction as well. Construction mitigation measures, such as fencing, would be put in place in advance of commencing major construction activities. Materials requiring mitigation, such as asbestos, lead paint, and contaminated soil, would be identified and addressed before the start of demolition and excavation activities. The proposed UPRR alignment is in a residential area with homes, parks, schools, and businesses. Construction activities would be evaluated such that the local dynamics of the area and the needs of the property owners and businesses, as well as the end users, are incorporated into the project.

2.3.4 Traffic Rerouting

During construction, auto traffic, pedestrians, and buses may need to be rerouted around the construction sites. Rerouting of traffic is normally done by using detours and complete street closures. Street closures may include main streets, side streets, alleys, and driveways. Temporary traffic lanes and driveways would be used as needed to provide alternate access. The following activities would occur as part of traffic rerouting:

- Placement of construction signage and temporary traffic barriers
- Temporary reduction in the number of available lanes or complete street closures
- Conversion of two-way streets to one-way operation on a temporary basis

- Implementation of detours around lane and street closures
- Provision of temporary traffic lanes
- Provision of special access points for construction vehicles traveling to and from construction staging areas and the proposed rail right-of-way
- Implementation of sidewalk detours and temporary parking restrictions
- Temporary partial closure of the 95th Street Terminal and tracks leading to the 98th Street Yard and Shop, with provision of alternate bus service

Specific maintenance of traffic measures for each affected roadway and for each construction phase would be determined in a traffic management plan. The traffic management plan would be developed in the design phase of this project and would be reviewed by the agency or agencies with jurisdiction over the affected roadways.

2.3.5 Demolition

Construction of either the East or West Option would require building demolition. The demolition process would temporarily result in increased noise and debris. Work would be performed in accordance with local ordinances for construction activities. Pedestrian and vehicular traffic would not be allowed into demolition areas. The demolition process may include concrete removal, use of jackhammers, excavation, and removal of foundations. Materials requiring disposal would be stored in construction staging areas, loaded into dump trucks, and moved off-site. All materials would be handled and disposed of in a proper manner, in accordance with applicable federal, state, and local regulations.

2.3.6 Elevated Structures and Track Placement

Foundations for elevated structures and parking garages can consist of concrete and steel footings or drilled concrete shafts, depending on site conditions. A geotechnical engineer would perform exploratory borings during future design phases to determine soil type, soil capacity, and physical obstructions. The soil would be sampled to determine whether contaminants are likely to be present in the soil. All types of foundations would require excavation and removal of soil from the construction area via truck. Materials shipped off-site for disposal would be handled through approved facilities. Large cranes would be used to guide piles into position, and impact pile-driving may be needed. As described in later sections, impact pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station.

After placement of foundations for the elevated structures, reinforced cast-in-place concrete piers would be constructed. The superstructure would consist of steel or concrete girders with a concrete deck to support the tracks. Along at-grade segments, tracks would be placed on ballast and ties after grading and soil preparation.

2.3.7 Earth Retention Structures

Two general categories of earth structures may be used on this project. The first is earth embankment, which consists of compacted earth with slopes on either side of the tracks. Typically, the slopes would include vegetation. Fencing for security would also be included. Earth

embankments are appropriate in areas without right-of-way constraints, such as east of the CN/ME track crossing near 119th Street. The second category of earth structures is earth retained between concrete walls. These walls may use cast-in-place concrete or precast concrete panels. Retained embankments are appropriate in areas where additional right-of-way acquisition would cause additional impacts.

2.3.8 Temporary Shoring

During excavation, temporary shoring may be required to facilitate construction and protect adjacent structures. Shoring would consist of steel sheet piling driven into the ground. Temporary shoring for excavations may also include h-piles and lagging, cofferdams, and trench boxes. Temporary shoring of elevated structures may include temporary columns, footings, and shoring towers. Elevated structural work may include temporary protective barriers, fencing, barricades, and containments. The rig for the vibratory pile driver may be located within the construction staging areas, the permanent right-of-way for the project, or the street right-of-way depending on the space limitations and access points.

2.4 Alternatives Considered but not Pursued

During development of the project, CTA fully evaluated the BRT Alternative, the Right-of-Way Option for the UPRR Alternative, and the Halsted Rail Alternative (Halsted Alternative). In addition, CTA fully evaluated a West Station Option for the 130th Street station. These alternatives and the station option were analyzed as part of the technical memoranda preparation for the Draft EIS, but are not included in this Draft EIS. They were eliminated from analysis based on public input, technical constraints, potential impacts, and the extent to which they did not meet the project's purpose and need.

CTA also evaluated a variation of the UPRR Alternative where the tracks would be at grade rather than elevated, described in **Section 2.4.2**.

2.4.1 Bus Rapid Transit Alternative

CTA considered a BRT Alternative along Michigan Avenue between 95th Street Terminal and Altgeld Gardens. This limited-stop enhanced bus route along the existing #34 South Michigan Avenue bus route would have transit signal priority along Michigan Avenue. The alternative included four stops, each with park & ride facilities. Although the BRT Alternative was a lower-cost alternative than the UPRR Alternative, it was eliminated in August 2014 based on public feedback including the following concerns:

- The BRT Alternative would have minimal travel time improvements compared to the No Build Alternative (23 minutes from 130th Street to 95th Street under the BRT Alternative, compared to 28 minutes for existing conditions [CTA 2009] or 14 minutes for the UPRR Alternative over the same distance).

- Approximately 1 million riders per year were anticipated for the BRT Alternative—in comparison to 13 million riders per year anticipated for the UPRR Alternative (CTA 2009).

- The BRT buses would not have traveled on a dedicated lane along Michigan Avenue because of limited right-of-way. Although transit signal priority was planned, additional travel time savings would not have been realized without dedicated lanes for BRT buses.

2.4.2 Union Pacific Railroad Alternative

This Draft EIS summarizes the benefits and impacts of the East and West Options. In preparation of the Draft EIS, CTA fully evaluated the Right-of-Way Option and the 130th Street Station West Station Option. CTA also considered an at-grade (rather than elevated) track structure for the UPRR Alternative. Engineering memos, included with the plans and profiles in **Appendix F**, provide additional details on the at-grade evaluation of the UPRR Alternative.

Right-of-Way Option

As part of the UPRR Right-of-Way Option, the elevated CTA structure would have been placed in the UPRR right-of-way. This option was added in 2012 in response to the CDOT feasibility study looking at moving UPRR freight operations out of the existing UPRR corridor before the RLE Project. The Right-of-Way Option would only be feasible if the separate project were implemented before implementation of the RLE Project. Coordination between local agencies and the railroads indicted that relocation of UPRR freight operations from this corridor presents considerable challenges; therefore, this option is no longer feasible. Estimated travel times and ridership were the same for the Right-of-Way Option as for the East and West Options. Because the elevated CTA structure would have been placed in the UPRR right-of-way, the Right-of-Way Option would have resulted in fewer displaced properties than either the East or West Option.

130th Street Station - West Station Option

CTA initially considered two options for the 130th Street station: a South Station Option and a West Station Option. The South Station Option (described as part of the Build Alternative in **Section 2.2.2**) would be located immediately west of the NICTD/CSS & SBRR right-of-way at 130th Street. The West Station Option would be located along the north side of 130th Street at Evans Avenue. Pedestrians from Altgeld Gardens would access the West Station Option through a pedestrian crosswalk on 130th Street. A traffic signal would be required at this intersection to allow pedestrians to safely cross 130th Street.

The South Station Option is supported by the community and the Chicago Housing Authority because it would be more accessible from Altgeld Gardens. The West Station Option would incur additional costs because it would require approximately 1,100 feet of additional track due to its location, and would require intersection improvements to allow pedestrians to safely cross the street. The South Station Option would provide the best opportunity for a future connection to NICTD, improving regional rail connections and linkages to other modes of public transportation. Based on public feedback and technical analysis, CTA is considering only the South Station Option for 130th Street station.

At-Grade Track Structure

CTA considered a variation of the UPRR Alternative in which the RLE tracks would run at grade along the UPRR rail corridor (between I-57 and Prairie Avenue). In this variation, the existing east-west roadways would run either above or below the new at-grade CTA tracks and the existing at-grade UPRR tracks. Like the proposed UPRR Alternative, this variation would be elevated from

the 95th Street Terminal to south of I-57, then at grade from I-57 to Prairie Avenue, elevated to cross the CN/ME tracks near 119th Street, then at grade near the proposed yard and shop and 130th Street station. CTA evaluated potential impacts and cost implications to run the east-west roadways both above (using overpasses) and below (using underpasses) the at-grade UPRR tracks and the proposed at-grade CTA tracks.

Roadway Overpasses

For an at-grade track structure, one option would be to use overpasses to carry roadways over the tracks. If roadway overpasses were used, they would need to be constructed at eight locations. More than 100 properties (primarily residential homes) would be displaced due to the overpass footprint, elimination of access to existing alleyways or driveways, and proximity of the embankment structure to the residential homes. The overpass structure and associated embankment could be as high as 30 feet, creating a substantial visual impact on the adjacent one-story residential buildings. In addition, permanent north-south residential street closures would be required where the streets would intersect with the embankment, which would disrupt neighborhood connectivity. Utilities that currently run within the street rights-of-way would have to be relocated. The potential construction cost savings between the elevated track structure and the at-grade structure would be insignificant when the cost of additional right-of-way acquisition and utility relocations is included. Roadway overpasses would also increase community impacts.

Roadway Underpasses

A second option for an at-grade track structure would be to use underpasses to carry roadways under the tracks. If underpasses were used, they would need to be constructed at eight locations. The underpass variation would have property displacements and community impacts similar to those of the roadway overpass option except a large retaining wall would be located in front of the residential homes. Because the cost of a roadway underpass structure may be as much as double the cost of an overpass structure, this variation would provide no additional cost savings over the elevated track structure alternative and would have significantly more community impacts and right-of-way costs.

Based on the property displacements and community impacts that would be created by grade-separating the roadways from the proposed CTA tracks (through either roadway overpasses or underpasses), CTA eliminated this variation from further consideration.

2.4.3 Halsted Alternative

CTA considered the Halsted Alternative, which would extend the Red Line from 95th Street Terminal along I-57, and south along Halsted Avenue to Vermont Avenue on a new elevated structure. The Halsted Alternative would run above Halsted Avenue with center piers, except at the station locations where the structures would span Halsted Avenue. The Halsted Alternative would result in travel times similar to those of the UPRR Alternative. The alternative included four stations, each with park & ride facilities. Construction costs for the Halsted Alternative were approximately 6 percent higher than for the UPRR Alternative. The Halsted Alternative was eliminated in August 2014 based on technical analysis and public feedback including the following concerns:

- The Halsted Alternative would not have the potential for a direct connection to other regional transit services[2] like the UPRR Alternative would; therefore, it would not meet the purpose and need for the project.
- The Halsted Alternative would affect four historic resources, resulting in adverse effects on historic properties, while the UPRR Alternative would not affect any historic resources.
- The proposed seven-story parking structure at Vermont Avenue would result in adverse visual impacts because of its location within a neighborhood with single-family homes.
- The Halsted Alternative would not directly serve as many affordable housing locations in the project area as the UPRR Alternative would serve, including Altgeld Gardens.
- The public expressed concern that implementation of the Halsted Alternative would be disruptive to the surrounding community and would increase shadows, crime, and noise along the Halsted Street.
- The Halsted Alternative did not receive the considerable public support before and during scoping in 2009 that the UPRR Alternative received.

2.5 Environmental Process

CTA will comply with applicable environmental regulations and will responsibly and reasonably mitigate adverse environmental impacts resulting from the RLE Project to the extent feasible in accordance with NEPA and FTA guidance. This Draft EIS identifies and analyzes worst-case scenario impacts of the East and West Options and proposes candidate mitigation measures to address the potentially adverse impacts. Throughout the Draft EIS, needs have been identified for more refined analyses such as traffic and noise, to further evaluate potential impacts. This additional analysis would be specific to the option (East or West Option) that is selected after the Draft EIS public hearing. Actual impacts may be smaller in magnitude and therefore may ultimately require less mitigation. The candidate mitigation measures will be refined as part of the Final EIS process, and a final set of commitments to mitigate adverse impacts would be included in the Final EIS and adopted by FTA upon issuance of the Record of Decision (ROD). In addition, CTA would continue to avoid and minimize environmental impacts wherever feasible.

2.5.1 Draft Environmental Impact Statement Review and Comment Period

Based on the analysis prepared to date and public comments received thus far, the NEPA Preferred Alternative is the UPRR Alternative. FTA and CTA will distribute this Draft EIS to affected federal, state, and local agencies; tribes; community groups; interested individuals; and other interested parties. The document will be made available at CTA headquarters, public libraries near the project area, and in electronic format on CTA's website (www.transitchicago.com). A formal public comment period will be initiated after release of this Draft EIS. CTA will hold a public hearing during the comment period to provide information and

[2] Although the Halsted Alternative alignment would intersect the ME Blue Island branch, the southern terminus of that branch is less than 3 miles from the intersection at Halsted Street and is just west of the project area. The northern terminus of the ME Blue Island branch is only two blocks from the Red Line in the Loop. Intersection with the ME Blue Island branch would not provide regional service.

receive comments about this Draft EIS and the NEPA Preferred Alternative. Comments may also be submitted by mail or e-mail.

2.5.2 Final Environmental Impact Statement and Record of Decision

After public review of the Draft EIS, CTA and FTA will complete any additional analyses required and prepare the Final EIS. The Final EIS will include and address all of the comments received during the Draft EIS public comment period. The Final EIS will document the results of the Draft EIS process, confirm whether the East or West Option is the selected option, and include a list of committed final mitigation measures.

In accordance with the FAST Act and 23 United States Code (USC) § 139(n), FTA intends to issue a single document that consists of the Final EIS and ROD unless it is determined that circumstances, such as changes to the proposed action, anticipated impacts, or other new information, preclude issuance of such a combined document. The ROD will include the alternatives and options that FTA considered and CTA's commitments to mitigate the adverse impacts of the RLE Project. Additionally, in accordance with 40 CFR § 1505.2(b) of NEPA, the ROD will include an identification of the environmentally preferable alternative. Finally, the ROD will include a list of mitigation commitments that must be implemented when the project is initiated. FTA's issuance of the ROD concludes the NEPA environmental process and is required for federal funding and approvals to proceed.

Chapter 3 Transportation

This chapter describes the potential benefits and adverse impacts that would result from the East and West Options on the existing transportation facilities in the project area, including public transportation, vehicular and freight traffic, bicycling, pedestrians, and parking facilities. Also described here are mitigation measures to minimize adverse impacts where feasible. The information in this chapter is based on the *Transportation Technical Memorandum* (**Appendix H**). **Table 3-1** summarizes the transportation impact findings.

In this chapter, permanent and construction-related impacts are included as part of the discussion of each resource area. The *Construction Impacts Technical Memorandum* (**Appendix I**) describes how construction activities would potentially affect transportation facilities as well as the resources described in **Chapter 4**.

Table 3-1: Transportation - Impacts Summary

Alternative	Permanent Impacts						Construction Impacts
	Public Transportation	Vehicular Traffic	Pedestrians	Bicycle Facilities	Freight Transportation	Parking	
No Build	No impacts	Adverse Impacts	No impacts	No impacts	No impacts	No impacts	No impacts
Union Pacific Railroad - East Option	Benefits	Impacts would not be adverse after mitigation	Impacts would not be adverse after mitigation	Benefits	No impacts	No impacts	No impacts
Union Pacific Railroad - West Option	Benefits	Impacts would not be adverse after mitigation	Impacts would not be adverse after mitigation	Benefits	No impacts	No impacts	No impacts

3.1 Regulatory Framework/Methods

CTA conducted the transportation analysis in compliance with current FTA guidelines, NEPA regulations, and the FAST Act. Illinois state law does not require additional analysis beyond the requirements of NEPA.

CTA studied local resources to understand the existing transportation network and other planned projects near the project corridor. These resources included *GO TO 2040*, City of Chicago transportation and community plans, and IDOT studies. *GO TO 2040* provides strategies and priorities for the future development of the regional transportation network.

3.1.1 Public Transportation

CTA reviewed existing public transportation data (CTA, Metra, and Pace) within the project area. The analysis included a review of geographic coverage of service, travel time, frequency and hours of service, ridership, transit mode share, and train station and bus stop locations.

Benefits to public transportation would result from improvements in transit service. An adverse impact on public transportation would occur if there were negative changes associated with geographic areas of service and routing, travel time, frequency and hours of service, transit patronage and demand (including transit mode share), station access and circulation, and/or traffic around stations.

3.1.2 Vehicular Traffic

The RLE Project would include park & ride facilities that could cause vehicular traffic impacts because of additional vehicular traffic introduced near the new stations. CTA conducted a detailed vehicular traffic analysis at 74 locations within the area of potential impact (API). A total of 76 intersections were analyzed; two of the intersections are offset and were therefore analyzed as separate intersections near the same location. **Figure 3-1** shows the API and the intersections analyzed.

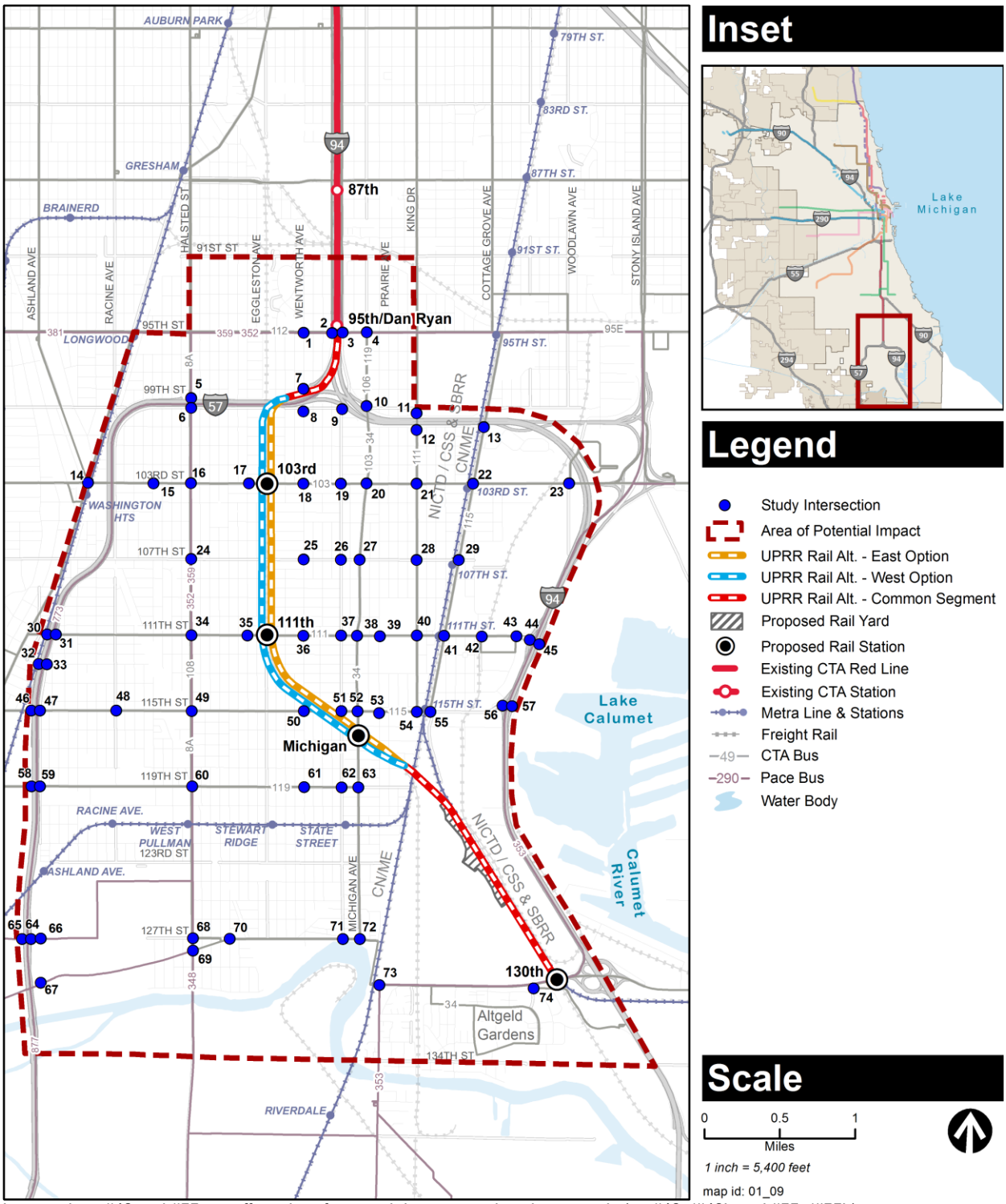

Intersections #42 and #55 are offset; therefore, each leg was analyzed separately (as #42a/#42b and #55a/#55b)
CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Study Intersections for Transportation Impact Analysis

To understand the existing vehicular traffic conditions within the project area and identify peak-hour turning movements, CTA compiled existing traffic count data from IDOT, CMAP, and CDOT. In addition, CTA collected new manual traffic counts at major intersections and intersections where existing data were not available. CTA compiled and reviewed the following traffic data:

- Traffic distribution and local circulation patterns
- Vehicle occupancy levels
- Road capacity levels
- Road peak-hour traffic volumes
- Intersection lane geometry and traffic signal timing plans
- Planned roadway improvements

CTA used the data to calculate existing intersection level of service (LOS) using Synchro 7.[3] The *Transportation Technical Memorandum* (**Appendix H**) includes peak-hour traffic volumes and lane geometry used for the intersection LOS analysis.

For this Draft EIS, construction of the RLE is anticipated to occur from the year 2022 through 2025. Project construction is dependent on the availability of project funding and approvals. For the traffic analysis, CTA used the project construction (opening) year of 2026 and the horizon year of 2030 to determine potential traffic impacts. The 2030 horizon year is consistent with the ridership analysis conducted for the RLE Project.

CTA used data from CMAP's 2030 Regional Travel Demand model (CMAP 2012c) to develop "no-project" intersection-level traffic projections. These "no-project" traffic projections accounted for the background growth in traffic due to additional regional and subregional land use development and population growth. CTA determined the background growth of traffic for roadway segments using the data from the regional model. Average annual traffic growth for roadway segments was 0–1.3 percent.

To simulate opening year (2026) conditions without the project, CTA interpolated background traffic growth between existing year (2012) and horizon year (2030) No Build Alternative conditions. The No Build Alternative traffic projections served as the baseline for evaluating the future "with project," (i.e., the build alternative - East or West Option). Conditions for the East and West Options included the generation of park & ride automobile trips to the proposed stations. The analysis did not include a mode shift from vehicles to transit, which is anticipated to occur when the project is built. The traffic analysis represents the "worst-case" scenario for impact analysis.

[3] Synchro 7 is a software package used for performing intersection capacity analysis and optimizing traffic signal timing.

The build alternative-generated trips were added to the No Build Alternative traffic projections to develop the build alternative traffic volumes. The build alternative intersection LOS analyses were conducted for the study intersections. For this Draft EIS, a traffic (passenger or freight vehicle) impact would be substantial if it would result in a degradation in peak-hour LOS at any intersection within the API that leads to a change in traffic distribution and local circulation patterns, a change in vehicle occupancy levels, a change in road capacity, or a change in road traffic volumes.

The LOS for roadway intersections typically ranges from A to F (Transportation Research Board 2010). LOS is defined as follows:

- LOS A - Virtually free flow of traffic with no congestion or delay.
- LOS B - Stable traffic flow, but other vehicles in the flow are noticeable.
- LOS C - Stable flow, but this LOS marks the beginning of the range where individual vehicles become affected by interactions with other vehicles in the traffic stream.
- LOS D - High density of traffic but stable flow.
- LOS E - Operating conditions at or near capacity level. All speeds are reduced to a low but relatively uniform flow.
- LOS F - A breakdown in the operating conditions resulting in congestion and delay.

CTA coordinated with IDOT and CDOT regarding LOS thresholds, and for this analysis a change in intersection LOS from LOS A, B, C, or D under the No Build Alternative to LOS E or F under the build alternative would result in an adverse or substantially adverse impact. CTA identified mitigation measures to reduce the impacts to a more acceptable LOS for adverse impacts caused directly by project facilities, when those impacts would not be offset by the additional transportation benefits provided by the project alternative.

3.1.3 Pedestrians

To describe existing conditions for pedestrians, CTA reviewed aerial photographs, City of Chicago geographic information system and geospatial datasets, and the *Chicago Pedestrian Plan (*City of Chicago 2012b). CTA reviewed pedestrian facilities within the immediate area of the proposed station locations for ADA accessibility and conformity to transit station planning.

For this Draft EIS, a pedestrian impact would be adverse if it were to result in the disruption of an existing or planned pedestrian pathway, if it were to limit pedestrian access to proposed station entrances, or if pedestrian access to a proposed station were limited because the vicinity around the station did not have sidewalks or the sidewalks were not ADA-accessible.

3.1.4 Bicycle Facilities

To describe existing conditions for bicycle facilities, CTA reviewed IDOT's 2012 bicycle map and existing and proposed bicycle facilities for the City of Chicago based on the *Chicago Streets for Cycling Plan 2020* (City of Chicago 2012a). CTA evaluated the relationship of the existing bicycle

facilities to the proposed station location and assessed whether the proposed station locations would conform to the objectives of the bicycle plans for an area within ½ mile of the stations.

For this Draft EIS, a bicycle facility impact would be adverse if it were to result in a disruption of existing or planned bicycle pathways or bicycle parking facilities.

3.1.5 Freight Transportation

This Draft EIS includes a qualitative discussion of impacts from the RLE Project on freight traffic (both rail and truck). CTA qualitatively examined the existing and projected freight traffic in the project area and determined whether the RLE Project would permanently interrupt freight movements. Through a coordination process, CTA and UPRR identified potential impacts and discussed them qualitatively.

For this Draft EIS, an impact on freight transportation would be adverse if the movement of goods and services would be disrupted or delayed.

3.1.6 Parking

To describe existing parking conditions, CTA reviewed community resources and aerial photographs and performed field observations. Using the No Build Alternative as the baseline, CTA analyzed the extent to which the East and West Options would affect on-street parking and off-street parking facilities. CTA reviewed parking capacity near the location of each proposed station and park & ride facility for potential impacts on the surrounding neighborhoods. Potential parking impacts would include changes in parking supply as a result of transit facility construction/service expansion, addition of park & ride facilities, and removal of existing parking spaces. To determine the potential for impacts and the intensity of those impacts, CTA developed guidelines based on standard industry practices.

For this Draft EIS, a parking impact would be adverse if it were to result in the following:

- Reduction in parking spaces by 10 to 50 spaces. A reduction by 50 or more parking spaces would be a substantially adverse impact.
- Reduction in accommodation for future programs requiring parking spaces, such as car sharing.
- Reduction in existing transit parking and park & ride capacity.
- Inadequate parking capacity for proposed transit service.

3.2 Existing Conditions

The existing transportation environment includes transit facilities for rail and bus, expressways, regional arterials (through roads), truck routes, intermodal connectors, secondary arterials, local streets, and bicycle and pedestrian facilities. Expressways in the project area include I-57 and I-94.

The 95th Street Terminal is currently the southern end of the Red Line. Many existing bus routes within the project area terminate at this location. From this station, passengers travel north on

the Red Line or transfer to a different bus route. Passengers accessing the station by bus experience delays resulting from poor performance of the surrounding roadway network. The availability of alternative modes of transportation to reach the 95th Street Terminal is limited, resulting in lengthy travel times by both auto and transit to jobs north of 95th Street, including the major employment centers in downtown Chicago. According to the American Community Survey, from 2005 to 2010 the average travel time to work for residents within the project area was 39 minutes. This number is approximately 20 percent higher than the 32-minute average commute time for the seven-county region. The current transit travel time from 130th Street to the 95th Street Terminal is 28 minutes and it is 25 minutes from the 95th Street Terminal to Jackson station (CTA 2009). The limited transit services in the project area and complex transfers to reach the 95th Street Terminal make commute times to the downtown Chicago area more than an hour for some residents. Approximately 10 percent of the project area residents (as of 2010) do not own a car and depend on transit for mobility (U.S. Census Bureau 2010). One-fourth of the trips that project area residents make between their home and work are with transit (U.S. Census Bureau 2010).

Substantial expressway congestion occurs within and surrounding the project area. The expressway network was at or over capacity during the morning peak periods in 2010 and congestion is expected to worsen by 2030. Arterial street reliability is compromised by delays from at-grade freight railroad crossings, affecting travel times to the 95th Street Terminal. ME commuter trains that operate at grade and cross several arterials in the project area also cause short traffic delays.

3.2.1 Public Transportation

The existing public transportation systems in use in the project area are CTA rail service, CTA bus routes, Pace bus routes, and Metra commuter rail service. The Red Line 95th Street Terminal is the only CTA rail station within the API and is the southern end of the CTA Red Line. Greyhound and Indian Trail intercity bus service operate from the 95th Street Terminal, with fixed routes outside the project area. The 2014 average weekday rail ridership for 95th Street Terminal was approximately 11,598 passengers (CTA 2014). Rail service is provided 24 hours per day, and rail service frequency is 6 minutes during morning peak periods and 3 minutes during afternoon peak periods. CTA and Pace bus routes are on east-west and north-south thoroughfares through the project area, with 16 CTA and 6 Pace bus routes operating within the API (not including night bus routes). Of those bus routes, 18 serve the 95th Street Terminal. **Figure 3-2** shows the existing CTA and Pace bus routes as well as Metra routes and station locations. **Table 3-2** provides a summary of existing bus service in the API.

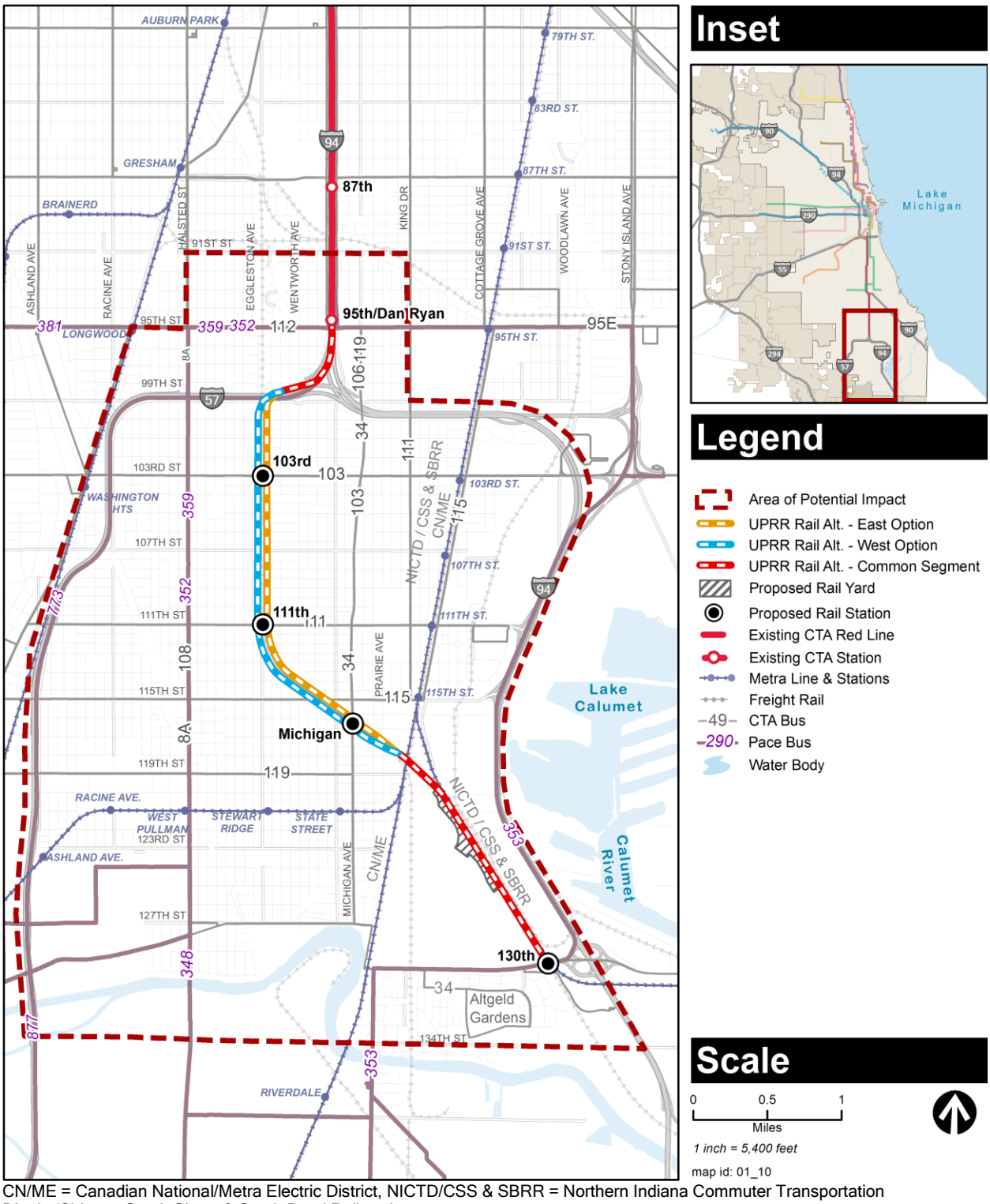

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-2: Existing Public Transportation in the Project Area

Table 3-2: Existing Bus Service

Bus Route Number and Name	Operating Agency	2014 Average Weekday Ridership	Maximum Monthly Average Weekday Ridership (October 2014)	Serves 95th Street Terminal
#3 King Drive	CTA	19,224	20,520	No
#8A South Halsted	CTA	3,238	3,674	No
#9 Ashland	CTA	26,871	29,256	Yes
#28 Stony Island	CTA	7,208	7,742	No
#29 State	CTA	13,342	13,655	Yes
#34 South Michigan	CTA	5,150	5,793	Yes
#95E 93rd/95th	CTA	3,830	4,263	Yes
#95W West 95th	CTA	2,369	2,595	Yes
#100 Jeffery Manor Express	CTA	674	700	Yes
#103 West 103rd	CTA	2,674	3,143	Yes
#106 East 103rd	CTA	1,831	2,241	Yes
#108 Halsted/95th	CTA	1,322	1,572	Yes
#111 111th/King Drive	CTA	3,763	4,338	Yes
#112 Vincennes/111th	CTA	2,289	2,700	Yes
#115 Pullman/115th	CTA	3,990	4,600	Yes
#119 Michigan/119th	CTA	4,725	5,092	Yes
#348 Harvey - Riverdale - Blue Island	Pace	333	399	No
#352 Halsted	Pace	6,100	6,574	Yes
#353 95th - Riverdale- Homewood	Pace	1,769	2,011	Yes
#359 Robbins/South Kedzie Avenue	Pace	1,461	1,643	Yes
#381 95th Street	Pace	4,038	4,593	Yes
#395 95th/Dan Ryan CTA - UPS	Pace	530	669	Yes

Source: CTA 2014, Regional Transportation Authority Asset Management System 2014
Notes:
1. #9 Ashland serves the 95th Street Terminal only with the Night Owl Service.
2. Night service route #N5 is not included in the above table.
3. Service to the 95th Street Terminal is based on route maps current as of July 2015.

NICTD/CSS & SBRR provided limited commuter rail service to the Kensington/115th Street station until early 2012, when service was discontinued at this station. Metra commuter rail service in the API includes the ME mainline, the ME Blue Island branch, and the Metra Rock Island District mainline. There are 11 commuter rail stations within the API. **Figure 3-2** shows Metra station locations. **Table 3-3** summarizes the existing commuter rail stations and ridership within the API.

Table 3-3: Existing Commuter Rail Stations

Line/Station	2014 Daily Boardings	Parking Available	Parking Spaces Available (2012)	Parking Utilization Rate (2012)
Metra Electric District Mainline				
103rd Street (Rosemoor)	43	Yes	38	5%
107th Street	31	No	-	-
111th Street (Pullman)	19	No	-	-
Kensington/115th Street	1,081	Yes	402	90%
Metra Electric District Blue Island Branch				
State Street	54	No	-	-
Stewart Ridge	37	No	-	-
West Pullman	21	Yes	27	0%
Racine Avenue	33	Yes	29	24%
Ashland Avenue	98	Yes	90	52%
Metra Rock Island Mainline				
95th Street/Longwood	85	Yes	104	51%
103rd Street/Washington Heights	168	Yes	267	30%

Source: Regional Transportation Authority Management System 2015

3.2.2 Vehicular Traffic

The following interstate, regional, and local roadways provide east-west and north-south routes within the API:

East-West
- 95th Street
- 99th Street
- 103rd Street
- 107th Street
- 111th Street
- 115th Street
- 119th Street
- 127th Street
- 130th Street

North-South
- I-57
- Halsted Street
- Wentworth Avenue
- State Street
- Michigan Avenue
- Indiana Avenue
- Martin Luther King Drive
- Cottage Grove Avenue
- I-94 (Dan Ryan Expressway/Bishop Ford Freeway)

Table 3-4 summarizes existing (2012) traffic conditions. Under existing conditions, most of the study intersections within the API operate at LOS D or better in both the AM and PM peak periods. Intersections operating at LOS E or F under existing conditions are highlighted in **Table 3-4**.

Table 3-4: Existing (2012) Intersection Level of Service

ID	Intersection	Control Type	AM Peak Hour LOS[1]	PM Peak Hour LOS[1]
1	95th Street and Wentworth Avenue	Signalized	B	B
2	95th Street and Lafayette Avenue	Signalized	D	D
3	95th Street and State Street	Signalized	C	C
4	95th Street and Michigan Avenue	Signalized	B	B
5	98th Place and Halsted Street	Signalized	**F**	**F**
6	99th Street and Halsted Street	Signalized	C	D
7	98th Place and Wentworth Avenue	Signalized	B	B
8	99th Street and Wentworth Avenue	Signalized	B	B
9	99th Street and State Street	Signalized	A	B
10	99th Street and Michigan Avenue	Signalized	B	B
11	99th Place and Martin Luther King Drive	Signalized	B	B
12	100th Street and Martin Luther King Drive	Signalized	B	A
13	100th Street and Cottage Grove Avenue	Unsignalized	A	B
14	103rd Street and Vincennes Avenue and Beverly Avenue	Signalized	D	**F**
15	103rd Street and Morgan Street	Signalized	B	B
16	103rd Street and Halsted Street	Signalized	**E**	D
17	103rd Street and Normal Avenue	Signalized	B	B
18	103rd Street and Wentworth Avenue	Signalized	B	B
19	103rd Street and State Street	Signalized	B	B
20	103rd Street and Michigan Avenue	Signalized	B	B
21	103rd Street and Martin Luther King Drive	Signalized	C	C
22	103rd Street and Cottage Grove Avenue	Signalized	B	B
23	103rd Street and Woodlawn Avenue	Signalized	A	A
24	107th Street and Halsted Street	Signalized	**F**	C
25	107th Street and Wentworth Avenue	Signalized	B	B
26	107th Street and State Street	Signalized	A	A
27	107th Street and Michigan Avenue	Signalized	B	B
28	107th Street and Martin Luther King Drive	Signalized	B	B
29	107th Street and Cottage Grove Avenue	Signalized	B	B
30	111th Street and Marshfield Avenue	Signalized	C	C
31	111th Street and Hamlet Avenue	Signalized	C	C
32	112th Place and Marshfield Avenue	Signalized	C	C
33	112th Place and Hamlet Avenue	Signalized	D	C
34	111th Street and Halsted Street	Signalized	C	C
35	111th Street and Normal Avenue	Signalized	A	A
36	111th Street and Wentworth Avenue	Signalized	A	A

ID	Intersection	Control Type	AM Peak Hour LOS[1]	PM Peak Hour LOS[1]
37	111th Street and State Street	Signalized	A	B
38	111th Street and Michigan Avenue	Signalized	B	B
39	111th Street and Indiana Avenue	Signalized	B	B
40	111th Street and Martin Luther King Drive	Signalized	B	A
41	111th Street and Cottage Grove Avenue	Signalized	B	C
42a[2]	111th Street and Langley Avenue	Signalized	B	C
42b[2]	111th Street and Ellis Avenue	Signalized	C	B
43	111th Street and Doty Avenue	Signalized	C	C
44	111th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	C	B
45	111th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	C	B
46	115th Street and Marshfield Avenue	Signalized	B	B
47	115th Street and Ashland Avenue	Signalized	B	B
48	115th Street and Racine Avenue	Signalized	B	C
49	115th Street and Halsted Street	Signalized	C	C
50	115th Street and Wentworth Avenue	Signalized	B	B
51	115th Street and State Street	Signalized	B	B
52	115th Street and Michigan Avenue	Signalized	B	C
53	115th Street and Indiana Avenue	Signalized	B	B
54	115th Street and Martin Luther King Drive	Unsignalized	D	**F**
55a[2]	115th Street and Cottage Grove Avenue	Signalized	C	C
55b[2]	115th Street and Cottage Grove Avenue East	Signalized	D	C
56	115th Street and Bishop Ford Freeway eastbound Ramps	Unsignalized	C	B
57	115th Street and Bishop Ford Freeway westbound Ramps	Unsignalized	D	B
58	119th Street and Marshfield Avenue	Signalized	D	D
59	119th Street and Ashland Avenue	Signalized	D	**F**
60	119th Street and Halsted Street	Signalized	C	C
61	119th Street and Wentworth Avenue	Signalized	B	B
62	119th Street and State Street	Signalized	B	B
63	119th Street and Michigan Avenue	Signalized	A	A
64	127th Street and Paulina Street	Signalized	C	C
65	127th Street and Marshfield Avenue	Signalized	C	B
66	127th Street and Ashland Avenue	Signalized	C	C
67	Ashland Avenue and Vermont Avenue	Signalized	C	C
68	127th Street and Halsted Street	Signalized	C	C
69	Vermont Avenue and Halsted Street	Signalized	B	B

ID	Intersection	Control Type	AM Peak Hour LOS[1]	PM Peak Hour LOS[1]
70	127th Street and Vermont Avenue and Wallace Street	Signalized	C	D
71	127th Street and State Street	Signalized	A	B
72	127th Street and Michigan Avenue	Signalized	A	B
73	130th Street and Indiana Avenue	Signalized	B	C
74	130th Street and Ellis Avenue	Signalized	A	A

LOS = level of service
[1] Signalized intersection LOS is reported as the average for all movements. Unsignalized intersection LOS reported is the LOS of the worst movement. Intersections with LOS E and F that would be worse than the No Build conditions are shown in bold.
[2] Intersections #42 and #55 are offset; therefore, each leg was analyzed separately (as #42a/42b and #55a/55b).

3.2.3 Freight Transportation

Nearly 500 freight trains per day operate in the Chicago region (Chicago Metropolis 2020, 2004). In 2007, regional rail tonnage was estimated at more than 631 million tons, with about 24,000 trailers and containers and about 16,800 carload units moving into, out of, or through the region daily (CMAP 2012b). The following active freight railways operate through the API and are identified on **Figure 3-3**:

- UPRR
- CN/ME
- NICTD/CSS & SBRR
- Norfolk Southern Railway
- Indiana Harbor Belt Railroad
- Conrail

The UPRR reported 27 freight trains per day within the API. In addition, Amtrak runs two passenger trains per day on the UPRR tracks within the API. The CN/ME tracks carry both passenger and freight trains. The NICTD/CSS & SBRR tracks converge with the CN/ME tracks between 115th Street and Kensington Avenue and both carry passenger and freight trains.

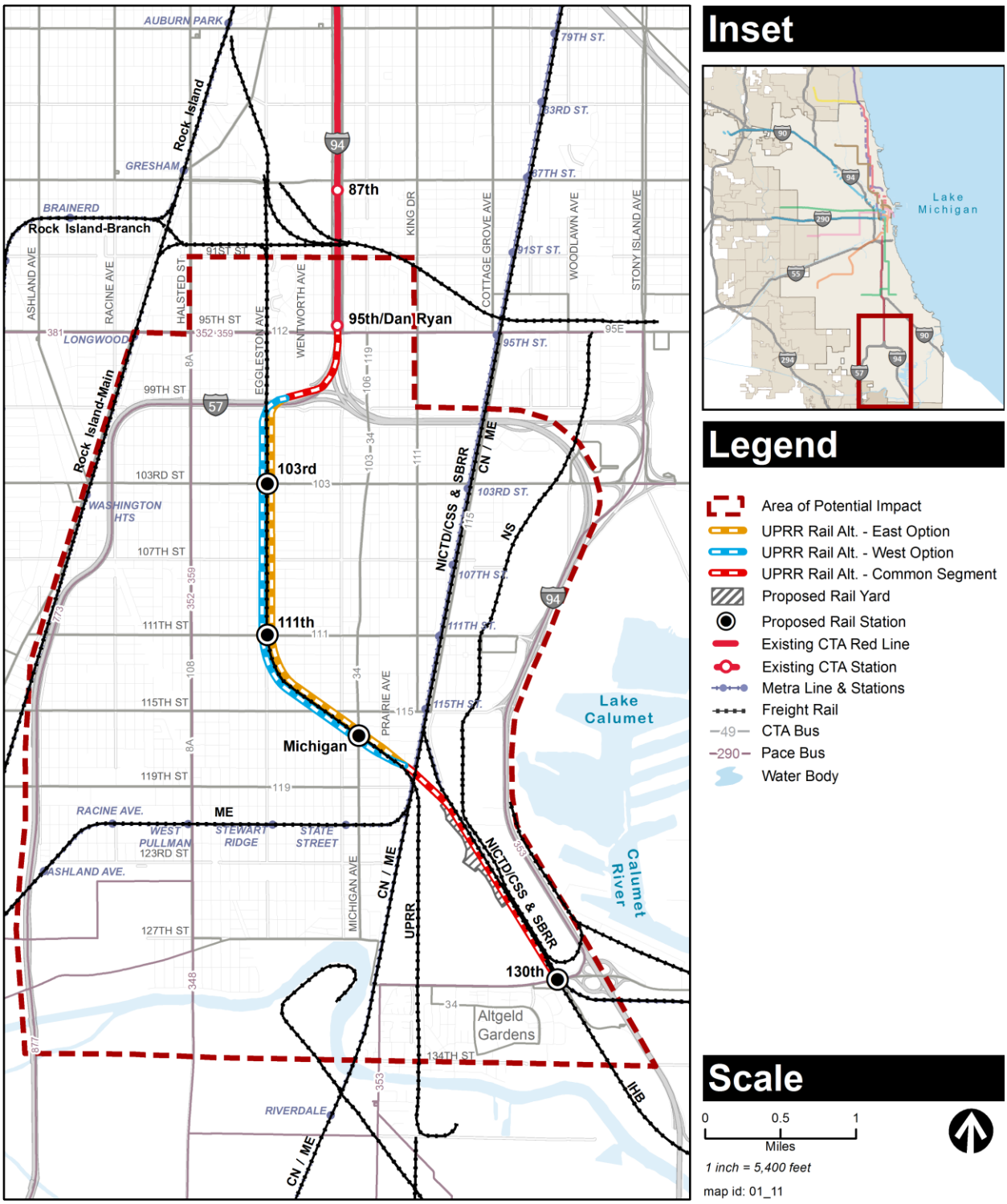

ME = Metra Electric District, UPRR = Union Pacific Railroad, CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad, NS = Norfolk Southern, IHB = Indiana Harbor Belt Railroad

Figure 3-3: Freight Railroads within the Area of Potential Impact

3.2.4 Bicycle Facilities

Chicago has over 200 miles of on-street bicycle pathways and 36 miles of trails. In addition, the city has more than 12,000 racks for bicycle parking, including racks at CTA stations (City of Chicago 2012a). The *Chicago Streets for Cycling Plan 2020* guides the development of a citywide network of innovative bicycle pathways and proposes 645 miles of on-street cycling routes. CTA identified existing bicycle facilities within ½ mile of the alternative alignments (see **Figure 3-4**). Bicycle facilities recommended in the Chicago Bike 2015 Plan (City of Chicago 2006) and pertinent recommended cycling routes from the *Chicago Streets for Cycling Plan 2020* are also shown on the figure.

Major Taylor Trail is an off-street cycling trail that runs through the project area. There are no other marked bicycle lanes within the roadway along or crossing the alternative alignments.

3.2.5 Pedestrians

Throughout the project area, sidewalks are located on both sides of most of the arterial and collector roads. CTA qualitatively reviewed sidewalks within the API. Sidewalk width varies throughout the API. Arterial streets have a standard, 6-foot-wide sidewalk and collector streets have sidewalks that are 12 to 17 feet wide. There are no pedestrian gates along the sidewalks at the existing UPRR grade crossings within the API.

The City of Chicago is continually updating intersection curb ramps to meet current ADA guidelines and design standards. There are wheelchair accessible curb ramps at most of the intersections within the API, but most of these curb ramps are not fully compliant under current ADA standards, which require detectable warning tiles for the visually impaired.

CDOT is implementing its *Chicago Pedestrian Plan* (City of Chicago 2012b). The plan aims to increase pedestrian safety, identify and eliminate gaps and barriers in the pedestrian network, increase the amount and quality of pedestrian space, and increase the number of pedestrian trips for enjoyment, school, work, and daily errands.

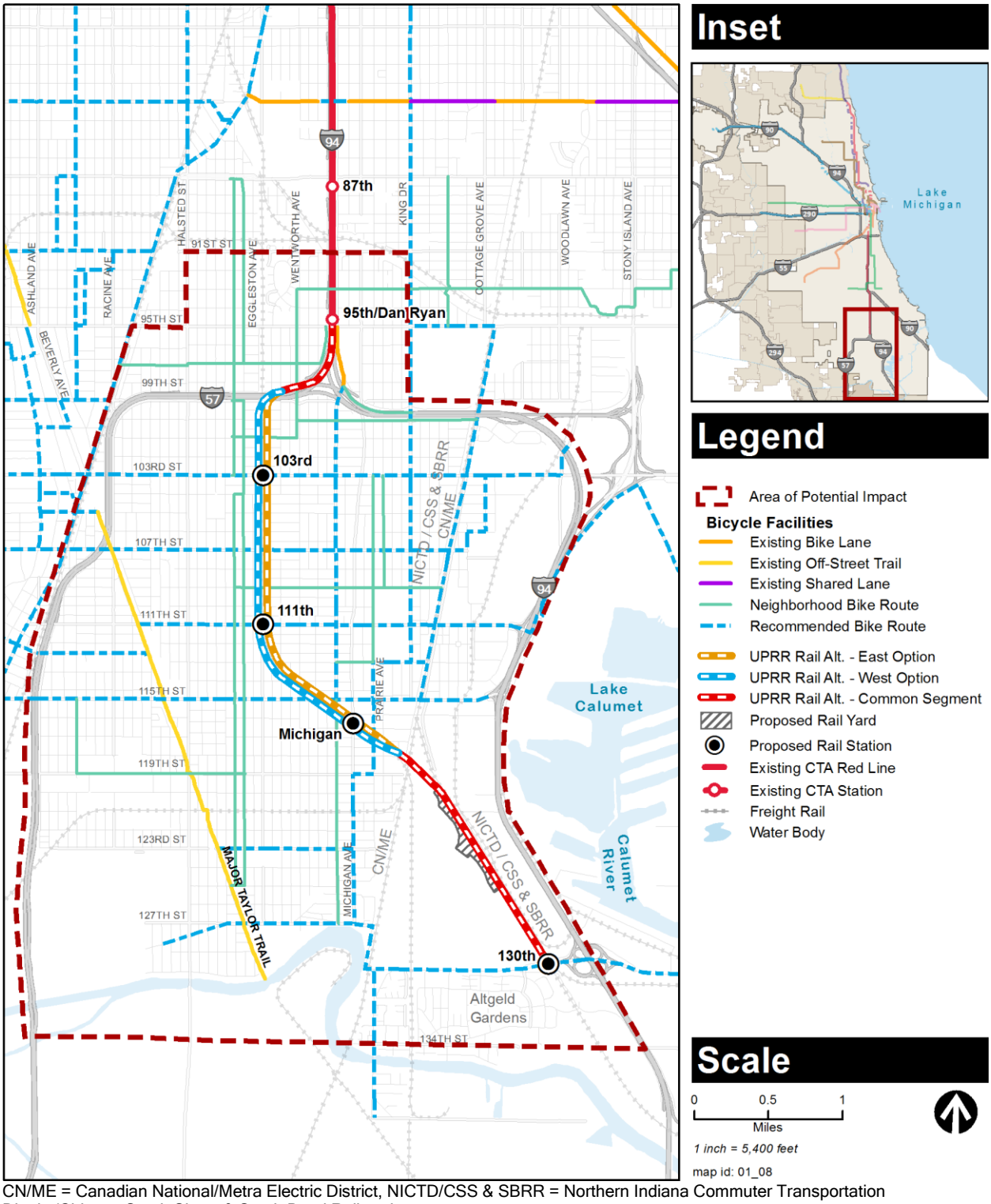

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-4: Existing and Recommended Bicycle Facilities within the Area of Potential Impact

3.2.6 Parking

Most of the streets in the API have on-street parking. **Table 3-5** summarizes the on-street parking along the major roadways along the alternative alignments. On-street parking is allowed (as posted) on most of the local streets not listed in this table. There is currently no park & ride facility at the existing 95th Street Terminal.

Table 3-5: Existing On-Street Parking

Street	Roadway Functional Class	On Street Parking
95th Street	strategic regional arterial	No
99th Street	local road or street	Yes
103rd Street	minor arterial	Yes
107th Street	major collector	No
111th Street	minor arterial	Yes
115th Street	major collector	Yes
119th Street	minor arterial	Yes
127th Street	other principal arterial	No
130th Street	other principal arterial	No
Wentworth Avenue	major collector	Yes
State Street	minor arterial	Yes
Michigan Avenue	major collector	Yes
Indiana Avenue	minor arterial	No

A permit or fee is not required to park on the streets within the API. There are no existing off-street surface parking lots or garages used for public parking within the API. Many of the commercial and retail buildings within the API have parking available either through on-street parking or parking lots associated with the buildings.

3.3 Environmental Consequences

The following sections summarize the potential transportation impacts and mitigation measures of the No Build and UPRR Alternative.

3.3.1 No Build Alternative

Under the No Build Alternative, the project would not be constructed and traffic flow in the project area would continue to deteriorate. There would be a continued lack of rapid transit rail service south of 95th Street. *GO TO 2040* calls for investment in the existing transit infrastructure in the region, and the No Build Alternative would not achieve this. **Table 3-6** summarizes 2030 baseline (No Build Alternative) LOS. The intersections shown in **Table 3-6** would operate at a LOS D or worse under the No Build Alternative by 2030. There would be an adverse impact on transportation under the No Build Alternative. There would be no major construction associated with No Build Alternative; therefore, no construction-related transportation impacts would occur.

Table 3-6: No Build Alternative - Intersection Level of Service (2012 and 2030)

ID	Intersection	2012 Conditions		2030 Baseline	
		AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
2	95th Street and Lafayette Avenue	D	D	D	D
3	95th Street and State Street	C	C	D	C
5	98th Place and Halsted Street	**F**	**F**	**F**	**F**
6	99th Street and Halsted Street	C	D	D	D
14	103rd Street and Vincennes Avenue and Beverly Avenue	D	**F**	**E**	**F**
16	103rd Street and Halsted Street	**E**	D	**F**	**E**
24	107th Street and Halsted Street	**F**	C	**F**	C
31	111th Street and Hamlet Avenue	C	C	D	D
33	112th Place and Hamlet Avenue	D	C	**E**	C
41	111th Street and Cottage Grove Avenue	B	C	C	D
44	111th Street and Bishop Ford EB Ramps	C	B	**E**	C
45	111th Street and Bishop Ford WB Ramps	C	B	**E**	B
52	115th Street and Michigan Avenue	B	C	B	D
54	115th Street and Martin Luther King Drive	D	**F**	D	**F**
55a	115th Street and Cottage Grove Avenue	C	C	D	C
55b	115th Street and Cottage Grove Avenue East	D	C	**E**	C
56	115th Street and Bishop Ford Freeway EB Ramps	C	B	D	C
57	115th Street and Bishop Ford Freeway WB Ramps	D	B	D	C
58	119th Street and Marshfield Avenue	D	D	D	D
59	119th Street and Ashland Avenue	D	**F**	D	**F**
70	127th Street and Vermont Avenue and Wallace Street	C	D	D	D

LOS = level of service, EB = eastbound, WB = westbound

3.3.2 Union Pacific Railroad Alternative - East Option

Permanent Impacts

Because the East and West Options would both run along the same corridor, the nature of transportation impacts for both options would be similar.

Public Transportation

With the extension of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations (see **Appendix H** for additional details). CTA passengers would benefit from faster travel times by accessing rail service farther south. Year 2030 average weekday projected boardings with the UPRR Alternative would total approximately 42,000 passengers (CTA 2009). These estimates were developed using computerized travel forecasting models. Project boardings include the number of boardings at each new station and the number of travelers who are on board the trains on the extension as they leave the 95th Street Terminal. Implementation of the East Option would reduce congestion at 95th Street Terminal by reducing the number of bus transfers that passengers would need because they could transfer or directly board the Red Line at the proposed stations.

Public transportation would benefit from the East Option because of the new, direct rail service within the project area. The East Option would also allow for potential connections to regional commuter rail, particularly to NICTD at the 130th Street station where the NICTD tracks would be parallel to the RLE tracks. The park & ride facility at the 130th Street station may also benefit future commuter rail passengers, such as NICTD passengers, if future connections are built.

Vehicular Traffic

Traffic impacts would arise from changed travel patterns to reach the proposed stations. Traffic impacts for both the East and West Options would be similar. Both the East and West Options would operate along an existing active freight railroad corridor and impacts would occur due to the active roadway-railroad grade crossings. Additional delay analysis for vehicular traffic due to the freight railroad operations was not conducted. Depending on the option selected, a delay analysis may be warranted. The delay analysis would include the vehicular traffic generated by the park & ride facilities and would determine the additional delay that might be created at the at-grade crossings. The delay analysis would be dependent upon projected traffic growth, projected freight traffic, and location of the park & ride facilities.

Under both the East and West Options, adverse vehicular traffic impacts (2026 and 2030) would occur under 2026 and 2030 conditions at the intersections identified in **Table 3-7**. Adverse impacts would occur because these intersections would operate at a LOS worse than they would with the No Build Alternative. All increases in traffic volumes would be related to vehicle access at park & ride facilities.

Table 3-7: Union Pacific Railroad Alternative (2026 and 2030) Intersection Level of Service

ID	Intersection	Control Type	2026 Union Pacific Railroad Alternative		2030 Union Pacific Railroad Alternative	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
16	103rd Street and Halsted Street	Signalized	**F**	**E**	**F**	**E**
41	111th Street and Cottage Grove Avenue	Signalized	C	D	C	**E**
52	115th Street and Michigan Avenue	Signalized	**F**	**E**	**F**	**E**
54	115th Street and Martin Luther King Drive	Unsignalized	D	**F**	**E**	**F**
55a	115th Street and Cottage Grove Avenue	Signalized	**F**	**F**	D	**F**
55b	115th Street and Cottage Grove Avenue East	Signalized	**E**	D	**F**	D
59	119th Street and Ashland Avenue	Signalized	D	**F**	**E**	**F**
61	119th Street and Wentworth Avenue	Signalized	B	**E**	B	**F**
62	119th Street and State Street	Signalized	**F**	**F**	**F**	**F**
63	119th Street and Michigan Avenue	Signalized	**E**	B	**E**	B
68	127th Street and Halsted Street	Signalized	**E**	**F**	**E**	**F**
70	127th Street and Vermont Avenue and Wallace Street	Signalized	**F**	**F**	**F**	**F**

ID	Intersection	Control Type	2026 Union Pacific Railroad Alternative		2030 Union Pacific Railroad Alternative	
			AM Peak Hour LOS	PM Peak Hour LOS	AM Peak Hour LOS	PM Peak Hour LOS
71	127th Street and State Street	Signalized	D	**E**	**E**	**E**
73	130th Street and Indiana Avenue	Signalized	**F**	**F**	**F**	**F**
74	130th Street and Ellis Avenue	Signalized	A	D	B	**E**

UPRR = Union Pacific Railroad, LOS = level of service
Signalized intersection LOS reported as the average for all movements. Unsignalized LOS reported is the LOS of the worst movement. Intersections with LOS E and F that would be worse than the No Build conditions are shown shaded and in bold.

Mitigation - For intersections where adverse impacts are expected, CTA has identified potential mitigation measures to offset the portion of the LOS deterioration attributable to the East Option (**Table 3-8**). Mitigation measures for intersections near the affected intersection may also be necessary to provide better flow of traffic; therefore, the proposed mitigation measures include the 15 affected intersections as well as 4 adjacent or nearby intersections. If the East Option is selected, CTA will conduct additional traffic analysis to refine and optimize the mitigation measures described in **Table 3-8**.

Table 3-8: Mitigation Measures for the Union Pacific Railroad Alternative (2030) Conditions

ID	Intersection	Mitigation Measure
16	103rd Street and Halsted Street	PM: Adjust traffic signal timing and amount of time allotted to each phase of the signal to improve traffic flow.
41	111th Street and Cottage Grove Avenue	PM: Adjust amount of time allotted to each phase of the signal to improve traffic flow.
52	115th Street and Michigan Avenue	AM: Adjust amount of time allotted to each phase of the signal to improve traffic flow. PM: Adjust traffic signal timing and amount of time allotted to each phase of the signal.
54	115th Street and Martin Luther King Drive	Remove on-street parking lane for additional eastbound/westbound through lane on 115th Street.
55a	115th Street and Cottage Grove Avenue	AM/PM: Adjust traffic signal timing. Adjust amount of time allotted to each phase of the signal in the PM.
55b	115th Street and Cottage Grove Avenue East	AM/PM: Adjust traffic signal timing. Adjust amount of time allotted to each phase of the signal in the PM.
59	119th Street and Ashland Avenue	PM: Adjust amount of time allotted to each phase of the signal.
61	119th Street and Wentworth Avenue	PM: Adjust amount of time allotted to each phase of the signal.
62	119th Street and State Street	AM/PM: Adjust amount of time allotted to each phase of the signal.
63	119th Street and Michigan Avenue	AM: Adjust amount of time allotted to each phase of the signal.
64	127th Street and Paulina Street	AM/PM: Adjust traffic signal timing and amount of time allotted to each phase of the signal.
65	127th Street and Marshfield Avenue	AM/PM: Adjust traffic signal timing and amount of time allotted to each phase of the signal.
66	127th Street and Ashland Avenue	AM/PM: Adjust traffic signal timing and amount of time allotted to each phase of the signal.

ID	Intersection	Mitigation Measure
68	127th Street and Halsted Street	AM/PM: Adjust traffic signal timing and amount of time allotted to each phase of the signal.
70	127th Street and Vermont Avenue and Wallace Street	Add an additional northeast right turn lane. Change westbound through/left lane to dedicated westbound left turn lane. Restrict northeast bound-to-northbound movement. Install traffic detection to provide green signal phases in response to traffic presence and volume. Adjust traffic signal timing and amount of time allotted to each phase of the signal.
71	127th Street and State Street	AM/PM: Adjust traffic signal timing and amount of time allotted to each phase of the signal.
72	127th Street and Michigan Avenue	PM: Adjust traffic signal timing and amount of time allotted to each phase of the signal.
73	130th Street and Indiana Avenue	AM/PM: Add northbound right turn lane. Adjust traffic signal timing and amount of time allotted to each phase of the signal.
74	130th Street and Ellis Avenue	PM: Adjust amount of time allotted to each phase of the signal.

Mitigation measures proposed for Intersections #64, #65, #66, and #72 would provide for better flow of traffic to help address traffic impacts at nearby intersections.
Traffic signal timing optimization reduces travel time, reduces total system delay, and improves mobility within the urban transportation system. The need to allocate green signal time to certain legs of an intersection changes over time as traffic volumes change. Optimum allocation of the green signal time based on the volume of traffic in each direction would reduce wait times at intersections and improve traffic flow. In a system network, optimizing the system reduces total delay along a corridor.

Under mitigated East Option 2030 conditions, some intersections would operate at LOS E or F; however, these intersections would be no worse than under No Build Alternative (2030) conditions. **Table 3-9** shows the LOS after implementation of mitigation measures. Mitigated conditions would not result in additional intersections with unacceptable LOS. There would be no adverse permanent traffic impacts from the East Option.

Table 3-9: Union Pacific Railroad Alternative - Intersection Level of Service (2012 and 2030)

ID	Intersection	2012 Conditions		2030 Baseline		2030 Union Pacific Railroad Alternative Mitigated	
		AM LOS	PM LOS	AM LOS	PM LOS	AM LOS	PM LOS
16	103rd Street and Halsted Street	**E**	D	**F**	**E**	**F**	C
41	111th Street and Cottage Grove Avenue	B	C	C	D	C	C
52	115th Street and Michigan Avenue	B	C	B	D	B	C
54	115th Street and Martin Luther King Drive	D	**F**	D	**F**	D	**F**
55a	115th Street and Cottage Grove Avenue	C	C	D	C	B	C
55b	115th Street and Cottage Grove Avenue East	D	C	**E**	C	C	B
59	119th Street and Ashland Avenue	D	**F**	D	**F**	D	**F**
61	119th Street and Wentworth Avenue	B	B	B	B	B	B
62	119th Street and State Street	B	B	B	B	C	B
63	119th Street and Michigan Avenue	A	A	A	A	C	B

ID	Intersection	2012 Conditions		2030 Baseline		2030 Union Pacific Railroad Alternative Mitigated	
		AM LOS	PM LOS	AM LOS	PM LOS	AM LOS	PM LOS
64	127th Street and Paulina Street	C	C	C	C	B	C
65	127th Street and Marshfield Avenue	C	B	C	C	C	C
66	127th Street and Ashland Avenue	C	C	C	C	C	C
68	127th Street and Halsted Street	C	C	C	C	C	D
70	127th Street and Vermont Avenue and Wallace Street	C	D	D	D	C	D
71	127th Street and State Street	A	B	B	B	B	C
72	127th Street and Michigan Avenue	A	B	A	B	B	C
73	130th Street and Indiana Avenue	B	C	C	C	D	D
74	130th Street and Ellis Avenue	A	A	A	A	B	B

LOS = level of service, N/A = not applicable

Pedestrians

Implementing the East Option would result in benefits for pedestrians at stations by upgrading the intersections immediately adjacent to the stations with ADA-accessible curb ramps and replacing deteriorated sidewalks. These improvements would provide access for all users and would increase pedestrian safety.

Park & ride facilities would be located to the east and west of the East Option alignment at the 103rd Street, 111th Street, and Michigan Avenue stations. Because of the location of the parking, passengers using the park & ride lots would need to cross the active UPRR tracks to reach the 103rd Street, 111th Street, and Michigan Avenue stations. The East Option would therefore result in pedestrian safety impacts. Pedestrians coming from the west would also need to cross the at-grade freight tracks.

Mitigation - If warranted by an engineering traffic study, CTA may install traffic signals to mitigate pedestrian safety impacts. To further mitigate impacts and improve pedestrian safety, CTA would consider installation of security surveillance cameras, alarm notifications (e.g., flashing blue lights), sidewalk lighting in the immediate vicinity of station entrances, pedestrian crossing treatments, such as refuge medians with appropriate signage, and police patrols. To mitigate adverse safety impacts at the roadway-railroad grade crossings, CTA would install safety cameras and would consider other options to increase safety. CTA would install fencing to deter pedestrians from crossing the freight railroad tracks in places other than the designated locations. Permanent impacts on pedestrians would not be adverse after mitigation.

Bicycles

Implementation of the East Option would be beneficial to bicyclists with the addition of bicycle parking at the proposed stations.

Freight Transportation and Parking Facilities

There would be no adverse impacts on freight transportation or parking facilities under the East Option. Sufficient parking capacity would be provided at all stations to avoid spillover parking into residential areas near the stations.

Construction Impacts

Construction associated with the East Option would temporarily affect the physical capacity of roadways and intersections subject to detours. These detours may lead to increased travel times and possible shifts in traffic volumes, increasing travel times for bus passengers, traffic, and pedestrians. Lane closures and detours would be implemented during off-peak traffic times to minimize construction impacts. CTA would phase construction to minimize impacts on passenger trains.

Construction within the I-94 and I-57 right-of-way would require temporary lane closures. CTA would sequence the structure construction to minimally affect traffic flow on either expressway. For erection of superstructures over expressway traffic lanes, temporary shutdown of all traffic would be required; per IDOT approval, traffic shutdowns would occur at times of low traffic volume. Increased traffic congestion due to construction may temporarily increase travel times along the expressways. During final design of the project and as a requirement for the project, CTA would prepare traffic management and maintenance of traffic plans that identify traffic detours and emergency access routes. CTA would coordinate traffic management with the FHWA, IDOT, Cook County Department of Transportation and Highways, and CDOT. Contractors would follow the Manual on Uniform Traffic Control Devices (MUTCD) design standards for temporary traffic control and would obtain required permits. The application of traffic management and maintenance of traffic plans as well as MUTCD design standards would minimize the temporary construction impacts. Contractors would also consider locations of schools, parks, and daycares when deciding where to route local traffic and construction equipment, and to the extent possible, route traffic away from places where children congregate.

Because UPRR freight operations would still be active in the UPRR right-of-way during construction of the East Option, CTA would need to move signal devices or install temporary signals to replace existing signals during construction of viaducts for the following at-grade crossings: 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, 115th Street, and State Street. Flagging operations and scheduled track closures would occur during construction activities near or adjacent to railroads.

Impacts Remaining After Mitigation

The East Option would result in permanent benefits to public transportation, pedestrians, and bicycles. Permanent impacts on vehicular traffic would not be adverse after mitigation. There would be no permanent impacts on freight transportation and parking facilities. Construction-related impacts would not be adverse.

3.3.3 Union Pacific Railroad Alternative - West Option

Permanent Impacts

Because the East and West Option alignments would run along the same corridor, the nature of impacts for each of the options would be similar.

<u>Public Transportation</u>

The West Option would have the same impacts on public transportation as the East Option. Like the East Option, the West Option would allow for potential connections to regional commuter rail, particularly to NICTD at the 130th Street station where the tracks are adjacent. The park &

ride facility at 130th Street station may also benefit future commuter rail passengers, such as NICTD passengers, if future connections are built.

Vehicular Traffic

With either the East or West Options, impacts on vehicular traffic and pedestrians would occur due to the active roadway-railroad grade crossings. If the West Option were selected, CTA would conduct additional traffic analysis to refine and optimize mitigation measures described in **Table 3-8**.

Pedestrians

Because the West Option park & ride facilities would be on the west side of the UPRR tracks, passengers using the park & ride facilities would not need to cross the active UPRR tracks to access the station, as they would for some park & ride facilities with the East Option. Some pedestrians traveling from the east would need to cross the active UPRR tracks to access the station.

Mitigation - Mitigation measures for the West Option would be same as for the East Option. Permanent impacts on pedestrians would not be adverse after mitigation.

Bicycles

Implementation of the West Option would be beneficial to bicyclists with the addition of bicycle parking at the proposed stations.

Freight Transportation and Parking Facilities

Like the East Option, the West Option would have no adverse impacts on freight transportation or parking.

Construction Impacts

Construction impacts of the West Option would be similar to those of the East Option with the exception that the West Option alignment would cross over the active UPRR tracks at two locations: Fernwood Parkway and Prairie Avenue. Construction at the crossings would be phased to minimize impacts on UPRR freight operations.

Impacts Remaining After Mitigation

The West Option would result in permanent benefits to public transportation and bicyclists. Permanent impacts on vehicular traffic and pedestrians would not be adverse after mitigation. There would be no permanent impacts on freight transportation and parking facilities. Construction-related impacts would not be adverse.

Chapter 4
Environmental Impacts and Mitigation

This chapter describes the potential benefits and adverse impacts that would result from the East and West Options along with possible mitigation measures to avoid or minimize adverse impacts where feasible. Mitigation presented in this Draft EIS consists of potential measures that are provided for public review and comment. Mitigation measures will be confirmed in the Final EIS. For each section in this chapter, a technical memorandum describes the potential environmental impacts and mitigation in more detail. The *Construction Impacts Technical Memorandum* (**Appendix I**) describes how construction activities would potentially affect many of the resources described in this chapter.

Section 4.1 Land Use and Economic Development
Section 4.2 Displacement and Relocation of Existing Uses
Section 4.3 Neighborhoods and Communities
Section 4.4 Visual and Aesthetic Conditions
Section 4.5 Noise and Vibration
Section 4.6 Safety and Security
Section 4.7 Historic and Cultural Resources
Section 4.8 Hazardous Materials
Section 4.9 Wetlands

4.1 Land Use and Economic Development

This section describes the impacts of the East and West Options on the land uses and economic development in the project area, including consistency with applicable land use plans. The information in this section is based on the *Land Use and Economic Development Technical Memorandum* (**Appendix J**). **Table 4-1** summarizes the land use and economic development impact findings.

Table 4-1: Land Use and Economic Development - Impacts Summary

Alternative	Permanent Impacts		Construction Impacts
	Land Use	Economic Development	
No Build	No impacts	No impacts	No impacts
Union Pacific Railroad - East Option	Impacts would not be adverse after mitigation	Benefits	Impacts would not be adverse after mitigation
Union Pacific Railroad - West Option	Impacts would not be adverse after mitigation	Benefits	Impacts would not be adverse after mitigation

4.1.1 Regulatory Framework/Methods

Regional and local planning bodies govern land use and zoning regulations. Within Chicago, CMAP acts as the regional planning body and defines the regional planning principles, while the City of Chicago regulates land use policies and zoning within its local jurisdictional boundaries. CTA evaluated existing land use, zoning, and relevant land use and economic development plans for parcels directly adjacent to the alignment, for the full length of the alignment, as well as those parcels within ½ mile of stations per FTA's 2004 *Guidelines and Standards for Assessing Transit-Supportive Land Use* (FTA 2004). The project could directly or indirectly affect land uses and economic development plans within ½ mile of project stations.

For this Draft EIS, a land use change may result in an adverse impact if it would be incompatible with surrounding land uses or could encourage land use and development inconsistent with local plans, goals, and objectives. An economic impact may result if one or more of the following occurs:

- Direct or indirect changes to the tax code or property taxes
- Substantial displacement of businesses (especially major employers) and individuals, defined in this analysis as those of a magnitude that would preclude relocation in the immediate area due to lack of available real estate
- Short- and/or long-term disruption of business activities
- Impacts that would influence regional construction costs

For each community area, CTA analyzed whether each option could cause adverse land use and economic impacts using the following:

- Analysis of the potential for short-term and long-term conflict with, or disruption of access to, land uses adjacent to the alternative alignments
- Identification of potential conflicts with local land use plans, policies, or regulations
- Identification of potential land use benefits of the East and West Options, such as opportunities for economic development and transit-supportive land uses

CTA analyzed whether the Build Alternative could cause land use and economic impacts. This analysis included reviewing existing land use plans and zoning maps and using field observations of the project corridor to determine consistency of the project with the goals and policies presented in the local and regional land use plans and studies of the City of Chicago and CMAP, including the following:

- CMAP - *GO TO 2040* (2010)
- City of Chicago - *Calumet Area Land Use Plan* (2002)
- City of Chicago, Chicago Park District, and Forest Preserve District of Cook County - *Cityspace: An Open Space Plan for Chicago (1998)*

- Chicago Housing Authority - *Plan Forward: Communities That Work* (2013)
- City of Chicago - *Chicago Sustainable Industries, Phase One: A Manufacturing Work Plan for the 21st Century* (2011)
- City of Chicago and CTA - *Transit-Friendly Development Guide* (2009)
- DCP, Metropolitan Planning Council, CMAP, and Center for Neighborhood Technology - *What Will Your Station Look Like?* (2010)
- CMAP, DCP, CTA - *Improving Access, Increasing Livability: The CTA Red Line South Extension* (2012)
- Cook County - *Comprehensive Economic Development Strategy Report* (2009)
- CDOT - *130th Street Station Market/Access Study* (2010)
- University of Illinois at Chicago Voorhees Center - *Transit Equity Matters: A Regional Analysis of the Red Line and Two Other Proposed CTA Transit Line Extensions* (2009)
- University of Illinois at Chicago Voorhees Center - *The Case for Transit-Oriented Development in the Greater Roseland Area* (2005)

The applicable plans promote commercial and residential development around transit stations, as well as economic development region-wide. The plans are also compatible with the project goals of strengthening the linkages between transit and the surrounding neighborhoods. Further, the plans emphasize the integral role that transit service plays in supporting livable communities. Recommendations in the plans include improvement of pedestrian facilities, zoning for transit-oriented development around stations, including affordable housing, and engaging communities in station area planning and development. The *Land Use and Economic Development Technical Memorandum* (**Appendix J**) includes additional details about these plans.

4.1.2 Existing Conditions

The overall project area has residential (primarily single-family), commercial (urban mixed-use), industrial, transportation, utility, and vacant land uses. **Figure 4-1** depicts the overall land uses affected by the RLE Project, and **Figure 4-2** shows the existing zoning.

The UPRR Alternative alignment would begin within the I-57 right-of-way, north of the southbound lanes of I-57, and would follow the UPRR track southward. The surrounding land uses are primarily single-family residential properties north of I-57 and on the eastern side of the alignment, with a mix of primarily single-family residential properties and industrial properties to the west. There are typically one or two vacant properties per block in the residential areas and large vacant parcels near Michigan Avenue, some of which are slated for development. South of 119th Street, the surrounding land uses abruptly transition to industrial, railroad, and major utility sites. The Altgeld Gardens public housing project is at the southern end of the proposed alignment. **Appendix J** contains a more detailed description.

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
Source: CMAP 2010a

Figure 4-1: Existing Land Uses in the Project Area

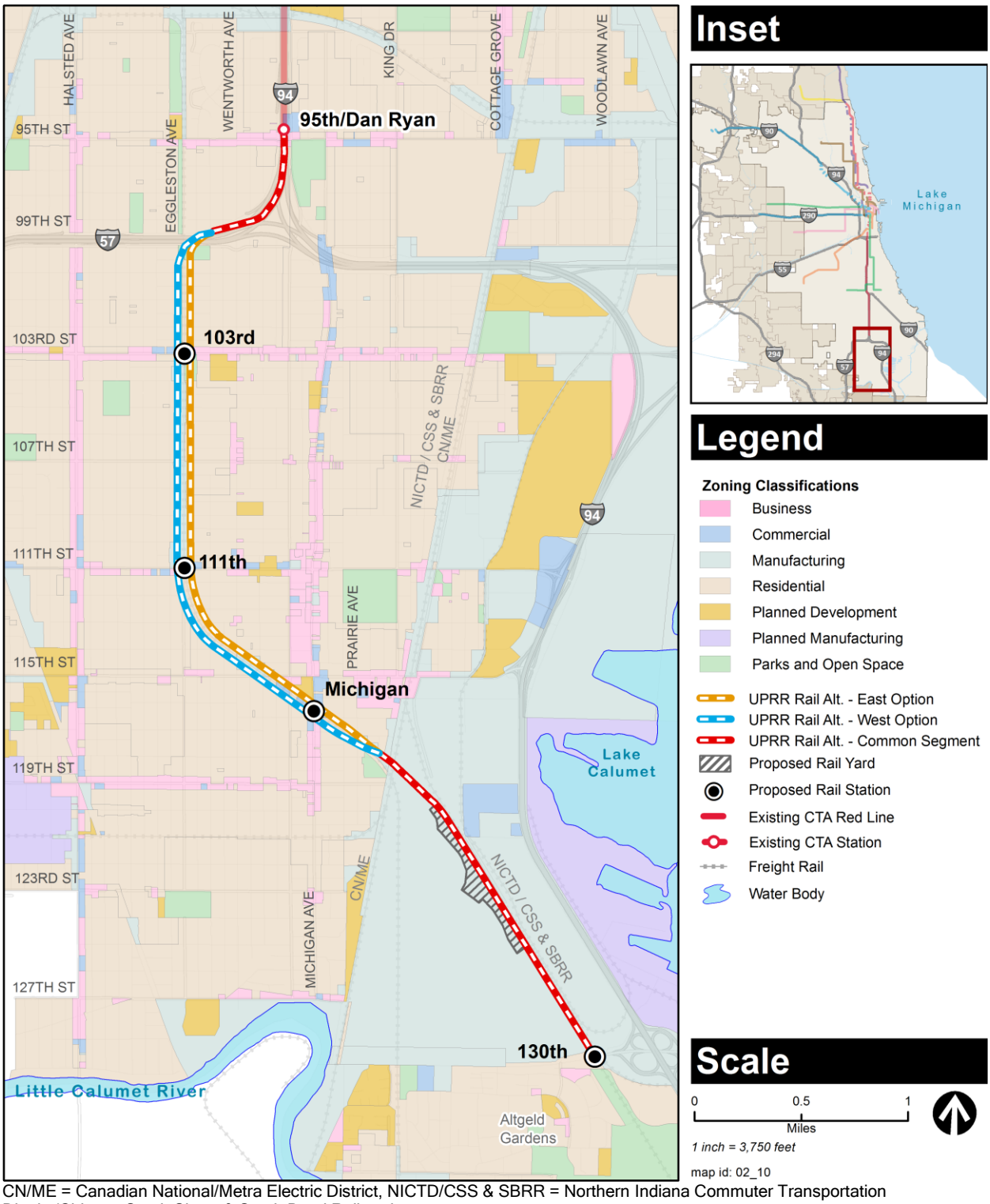

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
Source: City of Chicago 2012c

Figure 4-2: Existing Zoning in the Project Area

4.1.3 Environmental Consequences

The following sections summarize the potential land use and economic impacts of each alternative.

4.1.3.1 No Build Alternative

Although it does not recommend specific plans for redevelopment, *GO TO 2040* identifies many potential infill areas within the project area that could be developed under the No Build Alternative. *GO TO 2040* estimates that for wards 9, 21, and 34, where the project would take place, the combined population and combined employment would increase by 14 and 39 percent, respectively, if the infill were to occur. Population and employment for the city as a whole is expected to increase by 15 and 17 percent, respectively. The No Build Alternative would be inconsistent with the goals of *GO TO 2040*, which lists the RLE Project as a fiscally constrained project. The No Build Alternative would be inconsistent with Cook County's *Comprehensive Economic Development Strategy Report,* which supports the RLE Project. The No Build Alternative would not create any new inconsistencies to land uses and economic development beyond those that already exist, and therefore would have no impact on land use or economic development.

4.1.3.2 Union Pacific Railroad Alternative - East Option

Permanent Impacts

Displacements would occur as a result of the construction of the track structure and park & ride facilities (see **Section 4.2**). The proposed Michigan Avenue station parking structure would have ground-floor retail and community facility space, which could help offset the land use and economic impacts of displacements. The following potentially adverse impacts would occur:

- The park & ride facilities at the 103rd Street, 111th Street, and Michigan Avenue stations would be inconsistent with adjacent land uses, and zoning designations do not permit large, stand-alone surface parking lots or garages.

- The substation just north of Michigan Avenue would be inconsistent with the adjacent single-family land uses.

Implementation of the East Option could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations. More foot traffic near stations would benefit local businesses and encourage community development.

Mitigation - The following mitigation measures would offset the potentially adverse impacts:

- Land for parking facilities would be rezoned, and the facilities would include landscaping and lighting that is compatible with adjacent land uses. Garages would have architectural design and massing (setting back the upper floors away from the edge of the property to shield them from view from the street) that would reduce incompatibilities with adjacent land uses.

- Land for the substation would be rezoned, and the facility would include landscaping and architectural design and massing that would be compatible with adjacent land uses.

Construction Impacts

Construction would take up to 5 years, and would cause temporary impacts such as noise, vibration, fugitive dust, truck traffic, and roadway detours. There could be short-term economic benefits due to jobs created by construction. Construction could be disruptive to businesses along the alignment, which would be an adverse impact.

Mitigation - To minimize the adverse impact, CTA would work with the community, businesses, aldermen's offices, and the Chicago Department of Planning and Development to develop and implement a Construction Outreach and Coordination Plan. The plan would include a Business Outreach Program to assist local businesses and residents affected by construction. The plan would be tailored to business and community needs, and would include a series of initiatives to minimize construction disruption to businesses and the surrounding community. Examples of these initiatives include a community calendar to inform residents of the construction schedule and avoid affecting special events or festivals, advertising campaigns, any provisions for additional parking during construction, signage, and other economic incentives or tax relief measures for businesses adversely affected by construction.

Impacts Remaining After Mitigation

No permanent or construction-related adverse land use or economic impacts would remain after mitigation.

4.1.3.3 Union Pacific Railroad Alternative - West Option

Permanent Impacts

Like the East Option, the West Option would cause displacements as a result of construction of the track structure and park & ride facilities (see **Section 4.2**). The proposed Michigan Avenue station parking structure would have ground-floor retail and community facility space, which could help offset the land use and economic impacts of displacements. The following potentially adverse impacts would occur:

- The introduction of an elevated track structure in Fernwood Parkway would alter the open space's function as a buffer between the UPRR freight tracks and the single-family neighborhood on the west side of Eggleston Avenue.
- The park & ride facilities at the 103rd Street, 111th Street, and Michigan Avenue stations would be inconsistent with adjacent land uses, and zoning designations do not permit large, stand-alone surface parking lots or garages.
- The substation just north of Michigan Avenue would be inconsistent with the adjacent single-family land uses.

Like the East Option, the West Option could spur economic revitalization and the development of more livable, transit-supportive communities near the proposed stations. Many of the displacements related to the West Option would be industrial land uses, which could be relocated onto nearby vacant land.

Mitigation - The following mitigation measures would minimize and offset the potentially adverse impacts:

- CTA would plant additional trees on both sides of Eggleston Avenue to minimize visual impacts from the elevated track structure in Fernwood Parkway.
- Land for parking facilities would be rezoned, and the facilities would include landscaping and lighting that is compatible with adjacent land uses. Garages would have architectural design and massing that would be compatible with adjacent land uses.
- Land for the substations would be rezoned, and the facility would include landscaping and architectural design and massing that would be compatible with adjacent land uses.

Construction Impacts

Construction impacts and mitigation measures would be similar to those described for the East Option in **Section 4.1.3.2**.

Impacts Remaining After Mitigation

No permanent or construction-related adverse land use or economic impacts would remain after mitigation.

4.2 Displacements and Relocation of Existing Uses

Displacements and relocations may occur when land and/or structures are needed to accommodate construction or the permanent footprint of a project. This section describes the displacement and relocation impacts of the East and West Options. Displacements would occur if land and/or a structure were needed to accommodate construction or the permanent footprint (right-of-way) of the project. Displaced residents and businesses would be relocated in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended ("Uniform Act," 42 USC § 4601, et seq.) The *Displacements and Relocation of Existing Uses Technical Memorandum* (**Appendix K**) includes additional details. **Table 4-2** summarizes the displacements and relocation impact findings.

Table 4-2: Displacements and Relocation of Existing Uses - Impacts Summary

Alternative	Total Affected Parcels	Building Displacements	Permanent Impacts	Construction Impacts
No Build	0	0	No impacts	No impacts
Union Pacific Railroad - East Option	260	106	Impacts would not be adverse after mitigation	No impacts
Union Pacific Railroad - West Option	205	46	Impacts would not be adverse after mitigation	No impacts

4.2.1 Regulatory Framework/Methods

The Uniform Act (42 USC § 4601, et seq.) mandates that relocation services and payments be made available to eligible residents, businesses, and non-profit organizations displaced as a direct result of any project undertaken by a federal agency or with federal financial assistance. The Illinois Eminent Domain Act supports the Uniform Act and is the state regulation related to procedures for acquiring property through eminent domain, with similar provisions for reimbursements and relocation as the Uniform Act. The Metropolitan Transit Authority Act (70 Illinois Compiled Statutes [ILCS] § 3605(10)) provides CTA with the authority to use eminent domain to acquire property.

While there are no specific NEPA thresholds for assessing displacement impacts, the Uniform Act and the Uniform Real Property Acquisition Policy (42 USC § 4651, et seq.) include provisions for uniform and equitable treatment of people displaced from their homes or businesses by establishing uniform and equitable land acquisition policies to address impacts.

For this Draft EIS, displacements and relocations would cause an adverse impact if they would result in either of the following:

- Displacement of substantial numbers of existing housing units (a concentrated number of units in one neighborhood), particularly affordable housing, and/or employer units, necessitating the construction of replacement units elsewhere. This analysis uses the definition of affordable housing provided by the Illinois Housing Development Authority for the Chicago Metro area, which is based on data provided by the U.S. Department of Housing and Urban Development.

- Displacement of a substantial number of residents or employees, necessitating construction of replacement housing or employment locations elsewhere.

CTA used the following steps to determine whether each option would cause adverse displacement and relocation impacts:

- CTA prepared counts and locations of private property acquisitions and building displacements using the plan and profile drawings (**Appendix F**), CMAP and City of Chicago geographic information system parcel data, Cook County Assessor data, Google Earth, and aerial photographs. The plans and profiles are based on conceptual engineering and will be subject to revision in future engineering phases. Impacts presented in this section are based on conceptual engineering and represent maximum potential impacts for the East and West Options. Impacts will be confirmed in the Final EIS.

- CTA performed site reconnaissance of the project area and field observation of parcels and buildings to confirm the data. CTA assessed impacts of the potential acquisitions on the surrounding properties and community areas.

- CTA evaluated properties in the project area to determine whether vacancies would be sufficient to accommodate relocation of displaced residents and businesses nearby. CTA conducted qualitative field observations to determine the character of each affected

community area and the ability of each to absorb temporary and permanent losses in residential and commercial units.

The following terms are used to describe displacements and relocation impacts in this section:

- Affected Parcel - A partial or a full parcel that would need to be acquired
- Building Displacement - A structure that would need to be removed (the land occupied by the structure would also be counted as an affected parcel)

Publicly owned parcels that *include a roadway* are classified as "easements" for this analysis because CTA would require a use agreement with the public entity. CTA will coordinate with FHWA, IDOT, CDOT, and Cook County regarding use of these parcels. Publicly owned parcels that *do not include a roadway* are classified as affected parcels or building displacements because CTA would need to negotiate a fee simple property transfer or other agreement with the public entity.

4.2.2 Existing Conditions

Along the UPRR Alternative alignment, the existing development pattern consists primarily of single-family residential properties north of I-57 and between 99th Street and the proposed Michigan Avenue station, with some multifamily units interspersed. Between 103rd and 111th Streets, there are several vacant and light industrial properties along the western edge of the corridor. There are also neighborhood-scale commercial retail buildings near the 103rd Street, 111th Street, and Michigan Avenue station sites. South of the proposed Michigan Avenue station location, the land uses around the alignment transition to industrial, vacant, and public utility sites. The Altgeld Gardens public housing project is at the southern end of the alignment, near 130th Street. Most of the neighborhoods along the alignment have at least a few vacant buildings and parcels per block.

CTA conducted a field verification of all potentially displaced properties on March 5, 2015 and July 7–10, 2015. CTA identified numerous houses that were boarded-up and uninhabited, primarily between 105th Street and 115th Street on the east side of the corridor and along Eggleston Avenue from 107th Street to 108th Street on the west side of the corridor.

4.2.3 Environmental Consequences

The following sections summarize the potential displacement and relocation impacts of each alternative. **Appendix K** contains a full list of displacements and detailed maps.

4.2.3.1 No Build Alternative

There would be no displacements or relocations associated with the No Build Alternative. No adverse displacement and relocation impacts would occur, and no mitigation measures would be required.

4.2.3.2 Union Pacific Railroad Alternative - East Option

Permanent Impacts

UPRR requires that, for safety reasons, the CTA tracks be located at least 50 feet from the existing freight tracks. To maintain the required 50-foot distance, the CTA right-of-way would extend into the residential neighborhoods east of the UPRR right-of-way. A total of 260 parcels and 106 buildings would be acquired for the East Option to accommodate the tracks, stations, 120th Street yard and shop, and ancillary facilities. The East Option would displace more properties and buildings than the West Option. The East Option would not displace any affordable housing units (National Housing Preservation Database 2015).

Table 4-3 summarizes the land use types for the potential property and building displacements.

Table 4-3: Union Pacific Railroad Alternative East Option Displacements

Land Use Type	Total Affected Parcels (With and Without Building Displacements)	Building Displacements[1]
Vacant	50	
Single-Family Residential	87	75
Multifamily Residential	16	15
Commercial	6	3
Mixed-Use Commercial/Residential	1	1
Institutional (Place of Worship)	1	1
Institutional (School)	2	
Industrial	17	10
Utility (MWRD)	15	
Transportation (Union Pacific Railroad)	19	
Transportation (CN/ME)	3	
Transportation (Norfolk Southern Railway)	2	
Transportation (Conrail)	3	
Transportation (NICTD/CSS & SBRR)	2	
Public (City of Chicago)	34	1
Parkland	2	
Totals	**260**	**106**

MWRD = Metropolitan Water Reclamation District of Greater Chicago, CN/ME = Canadian National/Metra Electric District, Conrail = Consolidated Rail Corporation, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

[1] Building displacements are a subset of affected parcels and relate to a primary building displacement and/or an auxiliary structure (such as a garage) displacement. Building displacements are based on conceptual engineering that would be subject to revision during future design phases. Easements are not included in this table.

Figure 4-3 and **Figure 4-4** show the locations of the potential property and building displacements. **Appendix K** contains detailed information and maps of the potentially displaced properties. Displacements would occur for the following reasons:

- **99th Street to 103rd Street** - Twenty-six buildings, mostly single-family residential properties, would be removed to accommodate the right-of-way from 99th Street to 103rd Street, including the 103rd Street station and park & ride facilities.

- **103rd Street to 111th Street** - Eighteen buildings, mostly single-family residential properties with some industrial properties, would be removed to accommodate the right-of-way from 103rd Street to 111th Street, including the 111th Street station, park & ride facility, and substation.

- **111th Street to 115th Street** - Twenty-eight buildings, mostly single-family residential properties, multifamily residential properties, and industrial properties, would be removed to accommodate the right-of-way from 111th Street to 115th Street. One place of worship would also be displaced.

- **115th Street to the CN/ME Tracks near 119th Street** - Thirty-three buildings would be removed to accommodate the right-of-way from 115th Street to 117th Street. Most of the displacements would result from the Michigan Avenue station park & ride facility. Displacements would consist primarily of single-family residential and multifamily residential properties as well as two industrial buildings.

- **120th Street Yard and Shop** - The 120th Street yard and shop would require removal of one industrial building.

- **Easements** - At the north end of the project area, a total of 21 easements would be required to accommodate the East Option in the I-57 right-of-way and at the crossing of I-57 where the tracks would curve south. Five easements would also be required from 115th Street to 117th Street.

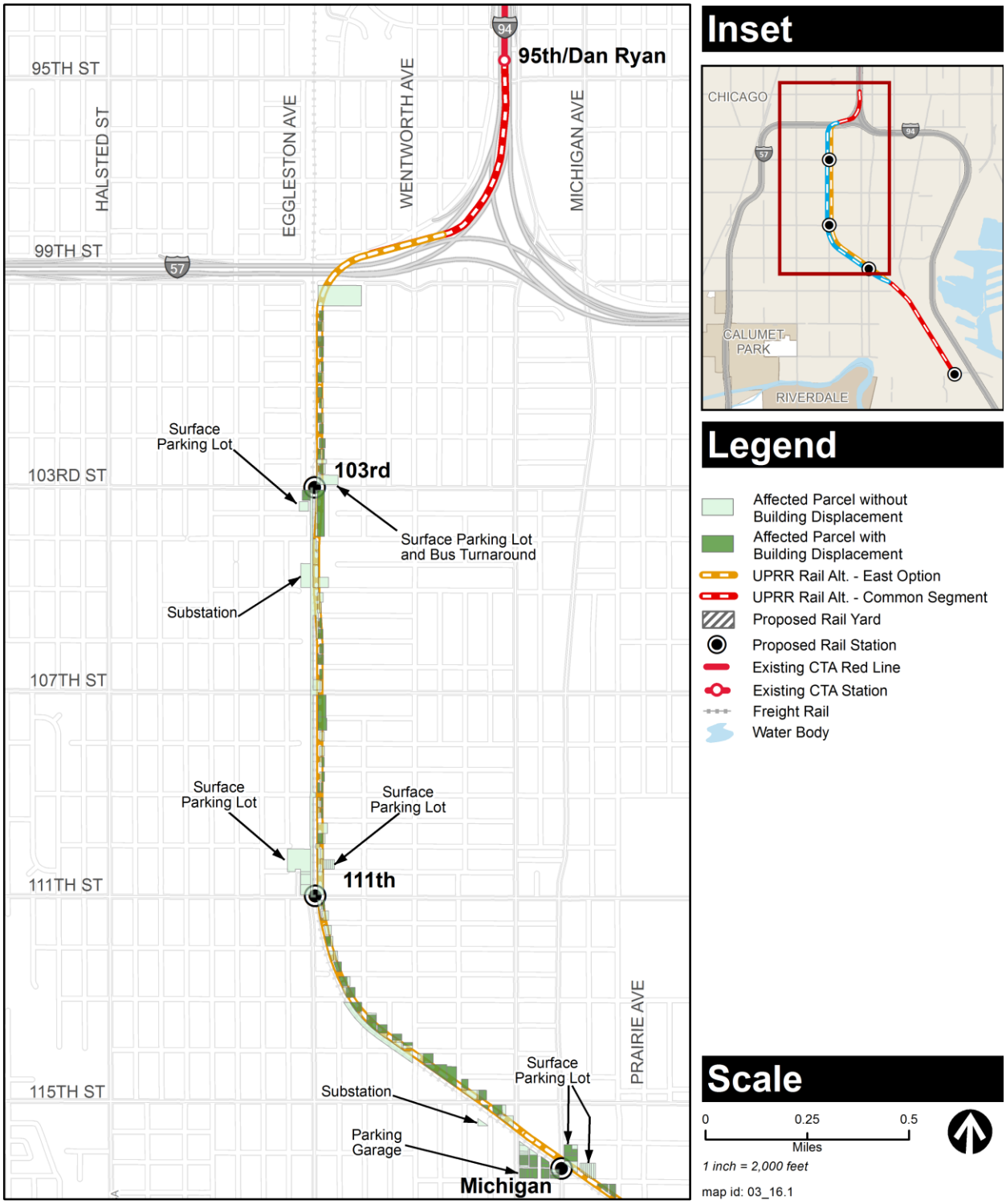

Figure 4-3: Union Pacific Railroad Alternative East Option Displacements (1 of 2)

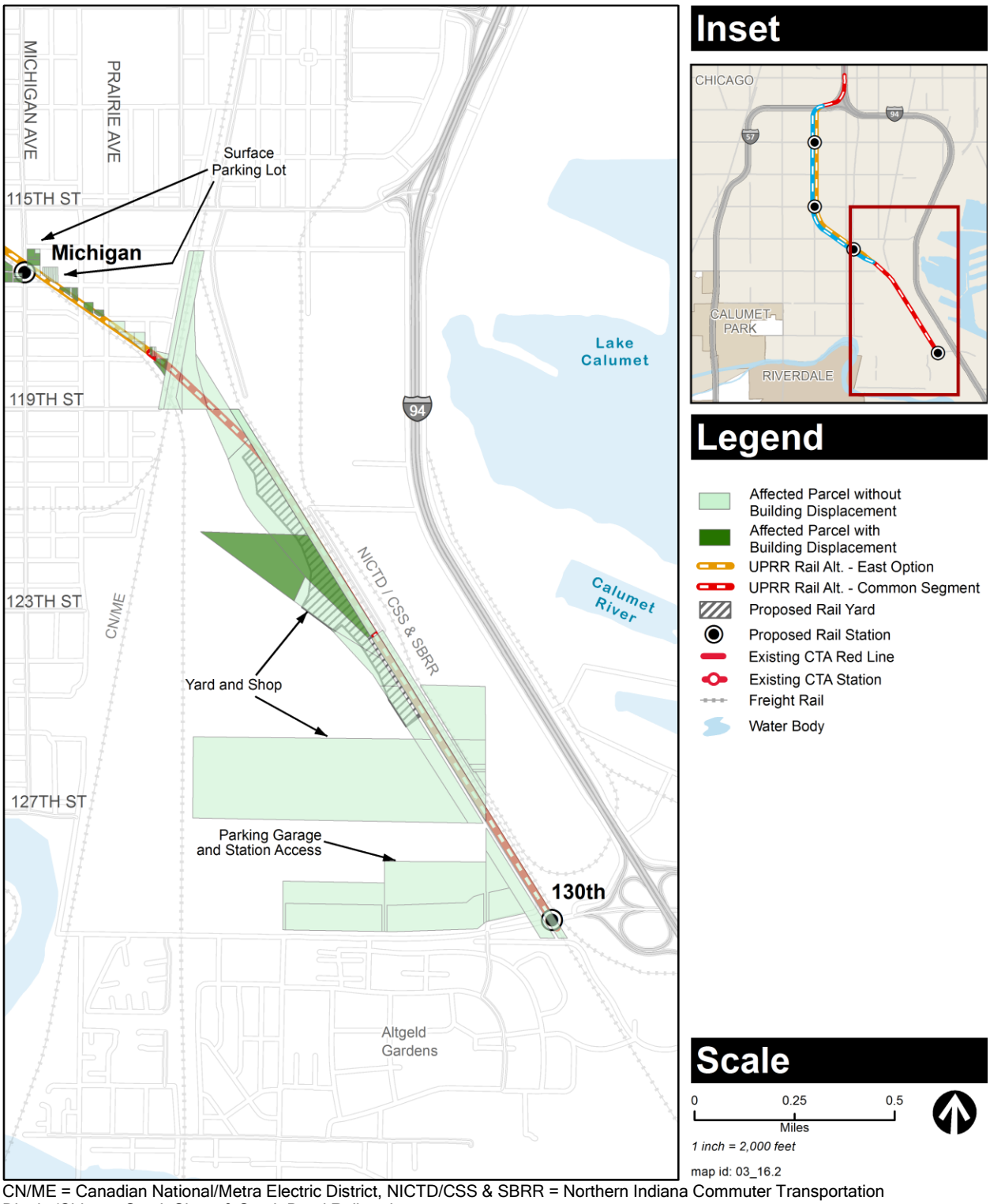

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-4: Union Pacific Railroad Alternative East Option Displacements (2 of 2)

Although the East Option would displace more buildings than the West Option, most of the displacements would be spread evenly along the corridor between 99th Place and the Michigan Avenue station. On most affected blocks, one or two houses at the end of each street adjacent to the UPRR tracks would be removed. Because the displacements would be spread evenly along the corridor, most neighborhoods would not experience a substantial concentration of displacements. The only area with a high concentration of displacements would be the block bounded by the UPRR right-of-way, State Street, 116th Street, and Michigan Avenue, where the Michigan Avenue station park & ride facility would be constructed; 30 properties would be displaced on that block. Of the 260 properties that the East Option would displace, 50 parcels are vacant. In addition, 33 of the 34 parcels owned by the City of Chicago that would be affected by the East Option are vacant. The vacant properties are dispersed throughout the corridor primarily between 99th Street and Prairie Avenue.

The East Option would affect portions of Wendell Smith Park and Block Park (4.7 acres and 1.3 acres, respectively). Of the 4.7 acres of Wendell Smith Park, approximately 0.7 acre would be overlapped by the elevated structure and its associated clearances. Of the 1.3 acres of Block Park, approximately 0.9 acre of park space would be overlapped by the elevated structure and its associated clearances. Additional information about impacts on these parks is presented in **Chapter 8**. A communications tower owned by the City of Chicago is located in Block Park and would be affected by the East Option.

CTA conducted a field verification of potentially displaced properties and availability of replacement housing, commercial buildings, and vacant parcels on March 5, 2015 and July 7–10, 2015. CTA identified numerous houses that were boarded-up and uninhabited throughout the community, primarily between 105th Street and 115th Street on the east side of the corridor and along Eggleston Avenue from 107th Street south on the west side of the corridor. At the time of the field verification, three of the residential displacements identified for the East Option were boarded up, and are not likely to adversely affect a resident.

Mitigation - The availability of replacement housing, commercial buildings, and vacant parcels would likely allow relocation of displaced businesses and residents within the project area. In addition, the new multilevel parking garage at the Michigan Avenue station would have ground-floor retail and community facility space, which would help offset displacements. The new stations would improve regional accessibility and help attract new development to the area, thereby reducing the long-term impacts of displacements. With mitigation through fair compensation and relocation assistance per the Uniform Act (42 USC § 4601, et seq.), impacts would not be adverse. CTA would coordinate with the Chicago Department of Planning and Development on local economic development and community plans during future design phases. CTA has undertaken early outreach to all potentially affected property owners by contacting each owner and lessee (based on available public records). CTA's Uniform Act public outreach specialists would provide specific outreach as a one-stop resource to potentially displaced residents and/or businesses to answer questions regarding relocation rights, requirements, processes, and anticipated timelines. CTA, in coordination with the City of Chicago and the local aldermen's offices, would provide informational resources, permitting support, and points of contact for displaced business owners to find suitable sites for relocation. CTA would coordinate with the City of Chicago regarding impacts on the communications tower and potential relocation options.

Construction Impacts

Because all construction activities would occur within the street right-of-way or on land permanently acquired for the permanent right-of-way, yard and shop, and park & ride facilities, there would be no temporary construction-related displacement or relocation impacts.

Impacts Remaining After Mitigation

With mitigation through fair compensation and relocation assistance per the Uniform Act (42 USC § 4601, et seq.), impacts would not be adverse after mitigation. No temporary, construction-related adverse displacement and relocation impacts would occur under the East Option.

4.2.3.3 Union Pacific Railroad Alternative - West Option

Permanent Impacts

Like the East Option, the West Option would be subject to the UPRR requirement that the CTA elevated structure be constructed at least 50 feet from the existing freight tracks. In the West Option, however, the CTA elevated structure would run along the west side of the UPRR right-of-way, where fewer buildings are present. As a result, the West Option would result in 46 displaced buildings, compared to 106 for the East Option, and more of the displaced buildings would be industrial and commercial rather than single-family residential, due to the predominance of industrial land uses along the west side of the UPRR right-of-way. The 46 buildings that would be removed are part of the 205 parcels that would be acquired for the West Option to accommodate the tracks, stations, 120th Street yard and shop, and ancillary facilities. The West Option would not displace any affordable housing units (National Housing Preservation Database 2015). **Table 4-4** summarizes the land use types for the potential property and building displacements.

Table 4-4: Union Pacific Railroad Alternative West Option Displacements

Land Use Type	Total Affected Parcels (With and Without Building Displacements)	Building Displacements[1]
Vacant	41	
Single-Family Residential	35	22
Multifamily Residential	4	4
Commercial	13	6
Mixed-Use (Retail/Office/Residential)	2	2
Institutional (Place of Worship)	2	1
Industrial	18	11
Utility (MWRD)	15	
Transportation (Union Pacific Railroad)	36	
Transportation (CN/ME)	3	
Transportation (Norfolk Southern Railway)	2	
Transportation (Conrail)	3	
Transportation (NICTD/CSS & SBRR)	2	
Transportation (Chicago and Western Indiana Railroad)	1	
Public (City of Chicago)	24	
Parkland	4	
Totals	**205**	**46**

MWRD = Metropolitan Water Reclamation District of Greater Chicago, CN/ME = Canadian National/Metra Electric District, Conrail = Consolidated Rail Corporation, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad

[1] Building displacements are a subset of affected parcels and relate to a primary building displacement and/or an auxiliary structure (such as a garage) displacement. Building displacements are based on conceptual engineering that would be subject to revision during future design phases. Easements are not included in this table.

Figure 4-5 and **Figure 4-6** show the locations of the potential property and building displacements. **Appendix K** contains detailed information and maps of the potentially displaced properties. Displacements would occur for the following reasons:

- **99th Street to 103rd Street** - The CTA elevated structure would be located above much of Fernwood Parkway between 99th and 103rd Streets. Park impacts are discussed further as part of the Section 4(f) analysis in **Chapter 8**. One multifamily residential property and one commercial building would be removed to accommodate the 103rd Street station.

- **103rd Street to 111th Street** - Nine buildings, all industrial and commercial, would be removed to accommodate the permanent right-of-way from 103rd Street to 111th Street.

- **111th Street to 115th Street** - Eight buildings would be removed to accommodate the permanent right-of-way between 111th Street and 115th Street. Displacements would include a mix of residential, commercial, and industrial buildings.

- **115th Street to the CN/ME Tracks near 119th Street** - Twenty-six buildings would be displaced to accommodate the right-of-way from 115th Street to 117th Street. Most of the displacements would result from the Michigan Avenue station park & ride facility. Displacements would consist primarily of single-family residential and multifamily residential properties. One place of worship and one industrial building would also be displaced.

- **120th Street Yard and Shop** - The 120th Street yard and shop would require removal of one industrial building.

- **Easements** - At the north end of the project area, a total of 23 easements would be required to accommodate the West Option in the I-57 right-of-way and at the crossing of I-57 where the tracks would curve south. One easement would also be required from 115th Street to 117th Street.

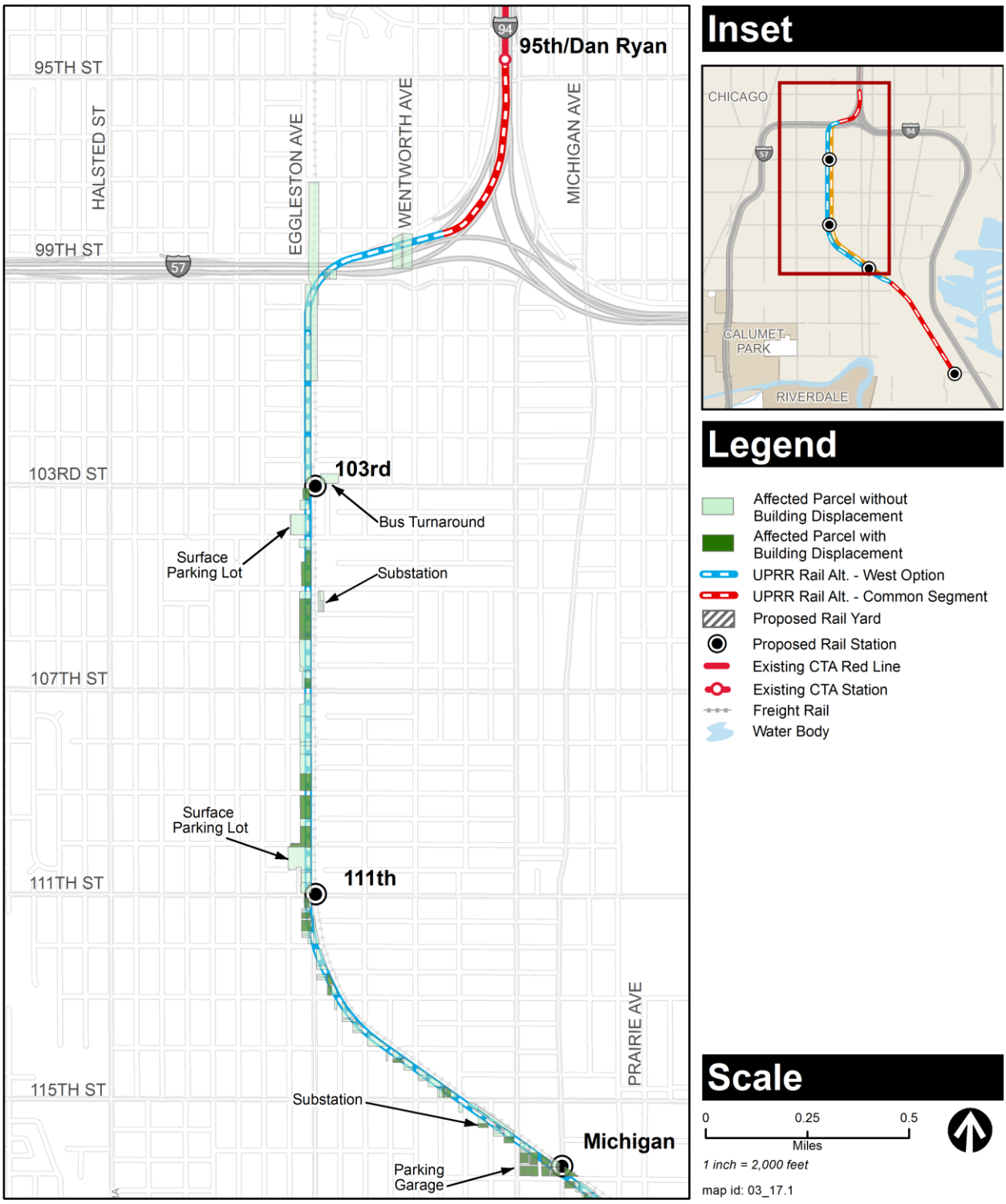

Figure 4-5: Union Pacific Railroad Alternative West Option Displacements (1 of 2)

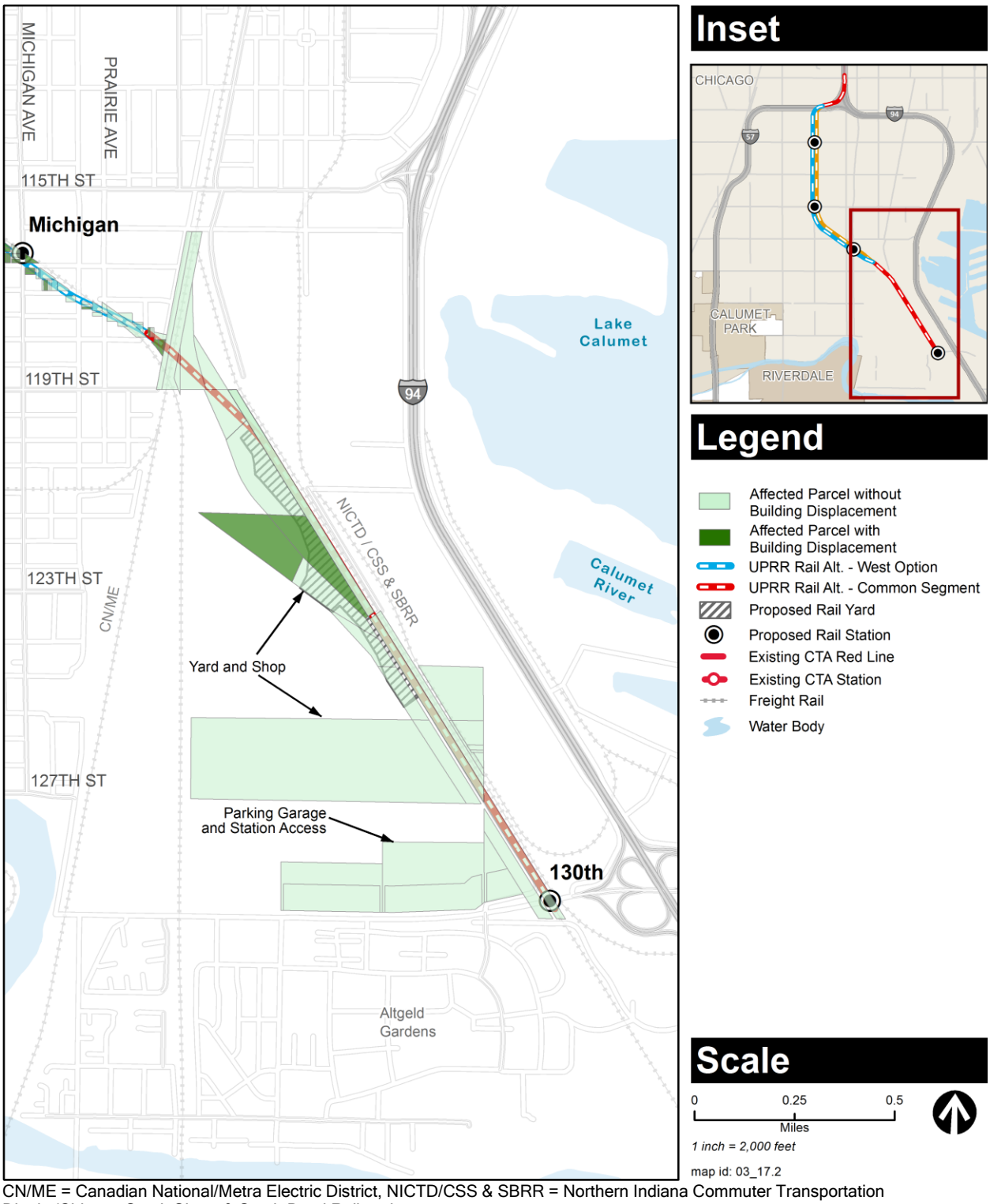

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-6: Union Pacific Railroad Alternative West Option Displacements (2 of 2)

Displacements would be spread evenly along the corridor between 103rd Street and the Michigan Avenue station. Many of the displacements would be industrial land uses, which could be relocated to nearby vacant parcels and buildings or within nearby industrial corridors. Most of the affected residential blocks would be between 111th Street and the Michigan Avenue station. On most of these blocks, one or two houses at the end of each street adjacent to the UPRR tracks would be removed. Because the displacements would be spread evenly along the corridor, most neighborhoods would not experience a substantial concentration of displacements. The only area with a high concentration of displacements would be the block bounded by the UPRR right-of-way, State Street, 116th Street, and Michigan Avenue, where the Michigan Avenue station park & ride facility would be constructed; 30 parcels would be displaced on this block. Of the 205 properties that the West Option would displace, 41 parcels are vacant. In addition, all 24 of the City of Chicago parcels that would be affected by the West Option are vacant. The vacant properties are dispersed throughout the corridor primarily between 99th Street and Prairie Avenue.

The West Option would affect Fernwood Parkway. Approximately 2.9 acres of Fernwood Parkway lies within the project corridor, and approximately 1.9 acres of the parkway would be overlapped by the elevated structure and its associated clearances. **Chapter 8** provides additional information about impacts on Fernwood Parkway.

CTA conducted a field verification of potentially displaced properties and availability of replacement housing, commercial buildings, and vacant parcels on March 5, 2015 and July 7–10, 2015. CTA identified numerous houses that were boarded-up and uninhabited throughout the community, the majority of which were between 105th Street and 115th Street on the east side of the corridor and along Eggleston Avenue from 107th Street south on the west side of the corridor. At the time of the field verification, one of the residential displacements identified for the West Option was boarded up, and is not likely to adversely affect a resident.

Mitigation - The availability of replacement housing, commercial buildings, and vacant parcels would likely allow relocation of displaced businesses and residents within the project area. In addition, the new multilevel parking garage at the Michigan Avenue station would have ground-floor retail and community facility space, which would help offset displacements. The new stations would improve regional accessibility and help attract new development to the area, thereby reducing the long-term impacts of displacements. With mitigation through fair compensation and relocation assistance per the Uniform Act (42 USC § 4601, et seq.), impacts would not be adverse. CTA would coordinate with the Chicago Department of Planning and Development on local economic development and community plans during future design phases. CTA would provide specific outreach as a one-stop resource to potentially displaced residents and/or businesses.

Construction Impacts

Because all construction activities would occur within the street right-of-way or on land permanently acquired for the permanent right-of-way, yard and shop, and park & ride facilities, there would be no temporary construction-related displacement or relocation impacts.

Impacts Remaining After Mitigation

With mitigation through fair compensation and relocation assistance per the Uniform Act (42 USC § 4601, et seq.), impacts would not be adverse after mitigation. No temporary, construction-related adverse displacement and relocation impacts would occur under the West Option.

4.3 Neighborhoods and Communities

This section describes the project impacts on the surrounding neighborhood and community resources. The analysis considered the surrounding community context and character, community mobility, and community facilities near the project corridor, such as schools, parks, and community centers. The *Neighborhood and Community Impacts Technical Memorandum* (**Appendix L**) and the *Parklands and Community Facilities Technical Memorandum* (**Appendix M**) contain additional details. **Table 4-5** summarizes the impact findings for community character and cohesion, mobility, and community resources.

Table 4-5: Neighborhoods and Communities - Impacts Summary

Alternative	Permanent Impacts			Construction Impacts
	Community Character and Cohesion	Mobility	Community Resources	
No Build	No impacts	No impacts	No impacts	No impacts
Union Pacific Railroad - East Option	▪ Washington Heights and Riverdale - Impacts would not be adverse after mitigation ▪ Roseland and West Pullman - Adverse impacts despite mitigation because of adverse visual impacts	Benefits	▪ Roseland - Impacts would not be adverse after mitigation ▪ Washington Heights, West Pullman, and Riverdale - Benefits	Impacts would not be adverse after mitigation
Union Pacific Railroad - West Option	▪ Riverdale - Impacts would not be adverse after mitigation ▪ Roseland, Washington Heights, and West Pullman - Adverse impacts despite mitigation because of adverse visual impacts	Benefits	▪ Roseland, Washington Heights, and Riverdale - Benefits ▪ West Pullman - Impacts would not be adverse after mitigation	Impacts would not be adverse after mitigation

4.3.1 Regulatory Framework/Methods

FHWA and IDOT both have Community Impact Assessment Manuals (FHWA 2008, IDOT 2007a), which CTA used to look at potential neighborhood and community impacts of the East and West Options. The analysis considers the following types of impacts:

- **Community Character and Cohesion** - Impacts due to commercial and residential displacements and changes in land use, visual/aesthetics, noise levels, and population/demographics. Community character is an attribute of a geographic area with identifiable characteristics that make it unique. Community cohesion is an attribute of a geographic area, where segmentation or division of the area would reduce its desirability to current and future residents. For this Draft EIS, an impact on community character and

cohesion would be adverse if impacts related to displacements and changes in land use, visual/aesthetics, noise levels, and population/demographics would be adverse, as discussed throughout this chapter of the Draft EIS.

- **Mobility** - Overall community impacts of changes in transportation options, travel patterns, business activity, access to jobs, and access for emergency service providers. For this Draft EIS, an impact on mobility would be adverse if transportation options, access to jobs, and access for emergency service providers would be reduced.

- **Community Resources** - Impacts on key facilities in the project area that play an important role in shaping and defining the community, such as landmarks, parks, community centers, and other places that serve as focal points or provide community services. For this Draft EIS, an impact on community resources would be adverse if key facilities in the project area would be directly affected or access to key facilities would be reduced.

The neighborhood and community impact analysis involved creating detailed demographic and community profiles based on existing community area boundaries within ½ mile of the project alignments. CTA conducted field investigations to identify physical, social, or perceived barriers within the established community. In addition, the analysis considered other potential visual, noise, and environmental impacts that could have ripple effects on the surrounding neighborhood. Potential mitigation measures are proposed to offset identified impacts, with an emphasis on community and transit-supportive solutions to address temporary construction impacts.

4.3.2 Existing Conditions

The affected environment for the neighborhood and community impacts analysis consists of the community areas through which the East or West Option alignment would pass. Each community area through which the East or West Option alignment would pass is described below. The *Neighborhood and Community Impacts Technical Memorandum* (**Appendix L**) contains additional information about each community area. **Figure 4-7** shows a typical street in the project area, and **Figure 4-8** shows the locations of the referenced community areas.

Figure 4-7: Photo of Residential Street near Union Pacific Railroad Corridor in Roseland

- Roseland - Consists primarily of single-family homes along one-way streets with block associations, similar to Washington Heights. Michigan Avenue serves as a major retail and commercial corridor, and several blocks also contain single-family and multifamily housing. Within Roseland, the greatest amount of retail activity occurs between 111th and 115th Streets, with the areas to the north consisting of automobile-oriented land uses.

- Washington Heights - Consists primarily of single-family homes along a grid of one-way streets with low- to medium-density commercial areas with off-street parking along major arterial streets. Blocks are well maintained, and many have community-organized block associations that provide neighborhood watch programs and other initiatives.

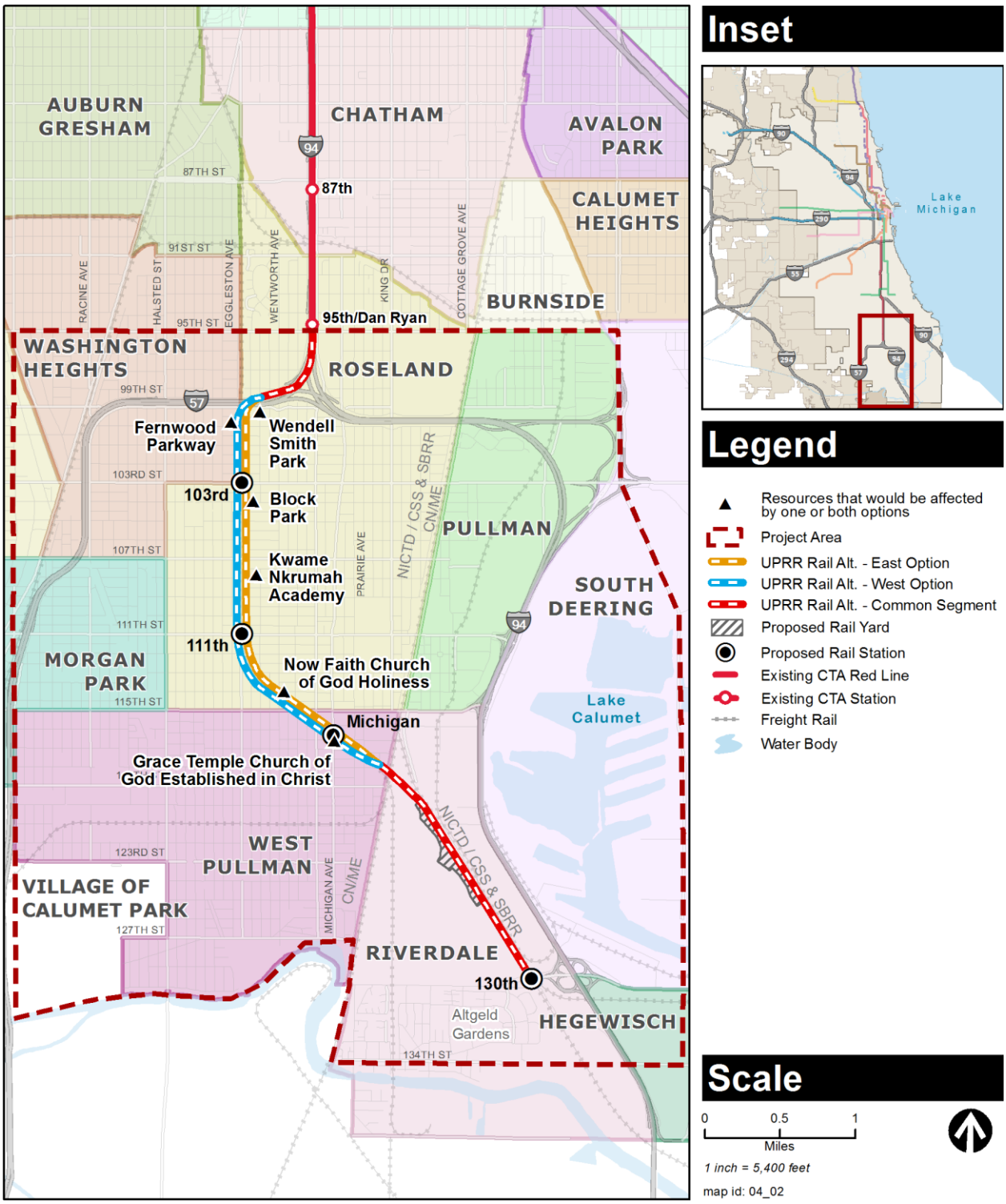

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-8: Community Areas in the Project Area and Community Resources Affected by Union Pacific Railroad Alternative East or West Options

- West Pullman - Includes portions of the Michigan Avenue commercial corridor, as well as several large industrial and utility properties. Along Michigan Avenue, many commercial buildings have residential units above. Several Spanish-speaking businesses and households are also in the area.

- Riverdale - Much of the Riverdale community area is occupied by MWRD's facility and freight railroad properties. The southern portion of Riverdale contains the Altgeld Gardens public housing project and the single-family Eden Green and Golden Gate neighborhoods. There are relatively few household-serving businesses in the area; however, Altgeld Gardens does have some of its own services, such as a school, social services, and medical facilities.

The demographic characteristics in the project area are described in detail in **Appendix L** and are summarized below (US Census Bureau 2010, 2013).

- The project area contains approximately 128,400 residents, 44,600 households, and 11,100 jobs; the numbers of all of these have been shrinking throughout recent decades. The disparity between the number of residents and jobs reflects high unemployment in the project area (19.0 percent), and a large number of residents commuting outside of the project area for work.

- Ethnicity in the project area is predominantly African American (93 percent), with the next largest percentage (4 percent) being Hispanic. All community areas in the project area have African American population percentages ranging from 83.6 percent to 97.3 percent, compared with a citywide average of 32.4 percent.

- The population is predominantly English-speaking, with some pockets of households that speak only Spanish.

- Median household income in the project area is approximately $41,000, compared to $46,900 for the City of Chicago as a whole. Some census tracks in the Riverdale community area have very low median household incomes, ranging from $2,500 to $18,000.

- Median home prices range from $75,200 in Riverdale to $113,500 in Morgan Park, which is below the City of Chicago median of $161,000.

Within ½ mile of the East and West Option alignments are 70 religious facilities, 21 public schools (including 1 charter school), 10 daycares, 7 private schools, 8 community centers, 4 healthcare centers, 2 city facilities, 2 senior centers, 1 landmark, and 1 library. In addition, the Altgeld Gardens public housing development is just southwest of the proposed 130th Street station location. The *Neighborhood and Community Impacts Technical Memorandum* (**Appendix L**) contains a full listing of the community resources, emergency services, and schools in the project area. The *Parklands and Community Facilities Technical Memorandum* (**Appendix M**) contains a full listing of the parks and other community facilities in the project area.

Wendell Smith Park is in Roseland and is approximately 4.7 acres (340 feet wide by 610 feet long). This park is an actively used facility with basketball courts, baseball fields, a play lot, recreation building, and 0.3 mile of walking trails. Regularly scheduled activities at Wendell Smith Park

include basketball tournaments, baseball/softball games, and concerts. The park is also actively used by day camps and for activities organized by the Chicago Park District.

Block Park is in Roseland and is a passive green space. Harvard Avenue divides Block Park into two parcels. The east parcel is approximately 1.4 acres (130 feet wide by 460 feet long) and includes amenities such as benches, walking paths, and sidewalks. The west parcel is approximately 1.3 acres (90 feet wide by 600 feet long) and is open space with a sidewalk and no other park amenities. In addition, a communications tower and two utility structures are on the west parcel.

Fernwood Parkway is in Roseland and is a passive green space. The parkway is divided into two parcels by 101st Street. The north parcel, from 99th Street to 101st Street, is approximately 2.4 acres (78 feet wide by 1,325 feet long). The south parcel, from 101st Street to 103rd Street, is approximately 2.9 acres (78 feet wide by 1,277 feet long). Both the north and south parcels of Fernwood Parkway serve as open space and do not contain recreational facilities or amenities such as sidewalks or benches. Some trees are planted within the parkway and a chain-link fence separates the green space from the existing at-grade UPRR tracks.

4.3.3 Environmental Consequences

The following sections summarize the potential neighborhood and community impacts of each alternative.

4.3.3.1 No Build Alternative

Under the No Build Alternative the project would not be built, and there would be no changes to community character and cohesion. The No Build Alternative would lack the mobility and livability enhancements that the East and West Options would provide. It would also fail to address the community's desire for growth initiatives that could attract new economic development interests to the area. There would be no impacts on community resources. Construction would not occur under the No Build Alternative. The No Build Alternative would not have adverse community or neighborhood impacts, and no mitigation measures would be required.

4.3.3.2 Union Pacific Railroad Alternative - East Option

Permanent Impacts

Community Character and Cohesion

The East Option alignment would be within existing highway rights-of-way and adjacent to the UPRR and NICTD/CSS & SBRR freight rail corridors. The elevated structure would not substantially differ from the existing character of the freight railroad tracks, but would encroach into the residential neighborhood and would be more prominent than the freight railroad tracks due to its height. The structure would not introduce new separations between neighborhoods, because the UPRR right-of-way already has limited grade crossings and acts as a barrier for pedestrians. The East Option would require more displacements than the West Option (see **Section 4.2**), particularly in Roseland and West Pullman.

The new transit stations would become focal points for the surrounding communities, and may attract new commercial and residential activities that would result in an overall improvement in

community character. The increased pedestrian activity around stations may help bridge the gap between communities currently separated by the freight tracks. The multistory park & ride facility at the Michigan Avenue station would include a ground-floor community facility and retail space, which would serve as a community enhancement.

The following permanent adverse impacts related to community character and cohesion would occur:

- Displacements and Relocation of Existing Uses
  - The placement of the track structure in Roseland would require acquisition of the two or three parcels closest to the eastern side of the UPRR right-of-way on every east-west street from 99th Place to 102nd Place and from 105th Place to Michigan Avenue. Most of these parcels contain single-family homes. Because the streets in this area, with the exception of major thoroughfares, end at the UPRR right-of-way, the displaced homes would be at the ends of blocks (adjacent to the UPRR tracks), and not in the center of the neighborhood. The CTA track structure would encroach on the edges of neighborhoods, but would leave the neighborhoods otherwise intact.
  - A total of 18 buildings would be removed to accommodate the Michigan Avenue station park & ride facility in West Pullman. Of the 18 buildings, 16 are residential, 1 is commercial, and 1 is industrial.
- Visual and Aesthetic Conditions
  - The elevated track structure would cause adverse visual impacts because of the change in the visual setting in the highway right-of-way along the north side of I-57 in Roseland, as shown in **Figure 4-14** in **Section 4.3.3.2**.
  - The track structure near the intersection of 117th Street and Prairie Avenue in West Pullman would displace two houses and extend into the neighborhood beyond the line of trees that currently shields view of the UPRR right-of-way. Four houses would face the structure, and the height would be out of scale with the existing character of the neighborhood. The structure's location above an intersection would make it impossible to minimize visual impacts from it with additional trees, as shown in **Figure 4-15** in **Section 4.4.3**.
- Noise
  - The noise from CTA trains combined with existing UPRR freight trains would cause adverse impacts at noise-sensitive buildings in Roseland, Washington Heights, and West Pullman. The UPRR train frequency is 27 trains per day and the headways (time between trains) for CTA trains would range from 3–6 minutes during peak periods to 15 minutes at night.

Mitigation - Mitigation measures to minimize adverse permanent impacts related to community character and cohesion would include the following:

- Displacements and Relocation of Existing Uses - CTA would provide compensation for displacements and relocation assistance in compliance with the Uniform Act (42 USC § 4601, et seq.), which would offset the neighborhood and community impacts of displacements because sufficient replacement housing, commercial buildings, and vacant parcels exist in the immediate area to accommodate affected residents and businesses.

- Visual and Aesthetic Conditions - Mitigation measures, as described in **Section 4.4.3**, would reduce the adverse visual impacts north of I-57 and near 117th Street and Prairie Avenue. Due to the proximity of the elevated track structure to residential areas, the impacts would remain adverse despite mitigation.

- Noise - CTA would build noise barriers approximately 4 feet in height along the sides of the track structures where needed to avoid adverse noise impacts (see **Section 4.5**).

Mobility

The East Option would substantially reduce travel times between the Washington Heights, Roseland, West Pullman, and Riverdale communities, and would enhance their connection with major employment and activity centers north of the project area. The East Option would result in substantial mobility benefits for Far South Side residents.

Community Resources

The East Option would displace the Now Faith Church of God Holiness (135 W. 114th Street), and would cross portions of Wendell Smith Park and Block Park, all in Roseland (see **Figure 4-8**).

The East Option alignment would run through the northwestern corner of the Wendell Smith Park. Of the 4.7 acres of the park, approximately 0.7 acre would be overlapped by the elevated structure and its associated clearances. The overlap area includes open space, trees, benches, and a portion of the park's walking trail. The outfield of an existing baseball field would be used. Piers would be located in the park, and the bottom of the elevated structure would be approximately 15 feet above ground level.

The East Option alignment would run through the west parcel of Block Park. Of the 1.3 acres of the west parcel of the park, approximately 0.9 acre would be overlapped by the elevated structure and its associated clearances. An auxiliary station entrance would also be located in the park, along its western edge. The affected parcel includes an isolated portion of the park's open space and a communications tower; no recreational features would be affected.

The East Option alignment would displace two parcels associated with the Kwame Nkrumah Academy at 314 W. 108th Street. The school building would not be affected, but a portion of the schoolyard would be displaced.

The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents, which would be beneficial overall. The RLE would provide direct transit access for residents of and visitors to Altgeld Gardens. The following permanent adverse impacts on community resources would occur:

- The elevated track structure would pass through the western portion of Wendell Smith Park in Roseland, requiring relocation of a portion of the park's walking trail.

- The elevated track structure and part of the 103rd Street station would be located in the western portion of Block Park in Roseland. The affected portion of the park contains a communications tower and no active recreational features.

- The Now Faith Church of God Holiness would be displaced.

Mitigation - Mitigation measures to minimize adverse permanent impacts on community resources would include the following:

- CTA could keep the area beneath the track structure in Wendell Smith Park and Block Park open for use, and improve park space elsewhere in the neighborhood.

- CTA would plant new trees to shield views of the structure from homes fronting Wendell Smith Park.

- In accordance with the Uniform Act (42 USC § 4601, et seq.), CTA would provide assistance for the relocation of the Now Faith Church of God Holiness to another building or parcel in the surrounding area.

Impacts on parks and proposed mitigation measures, as well as further details on coordination with the Chicago Park District to confirm park-related mitigation measures, are described in **Chapter 8** of this Draft EIS.

Construction Impacts

Community Character and Cohesion

Community disruptions would occur during construction of the East Option. Construction would be phased and would not occur at any one location for the entire construction period. Most of the construction would occur within the street right-of-way, on properties acquired as part of the permanent envelope for the project, and potentially on other nearby vacant parcels.

The following temporary construction-related adverse impacts on community character and cohesion would occur:

- Hoisting equipment might be visible above roofs, and storage of materials, equipment, and trucks would introduce temporary intermittent visual impacts.

- Temporary noise and dust impacts would occur during construction on an intermittent basis.

Mitigation - Mitigation measures to offset adverse temporary construction-related impacts on community character and cohesion would include the following:

- Construction best management practices (BMPs) would be used to limit visual, noise, and dust impacts. Examples of these BMPs include maintaining vegetation at the construction site to minimize visual impacts, limiting nighttime construction, and preparation of a Dust Control Plan to address in detail how dust would be controlled at the construction site.

- Hauling routes would be designed to minimize the number of trucks and amount of equipment passing through sensitive areas of the community, and would favor highways over local roads to the extent feasible.

- CTA would notify the community in advance of disruptive activities, such as building demolition, utility relocation, and necessary detours, and would perform work in a manner consistent with local ordinances.

- CTA would limit nighttime construction near residences to the extent practicable.

- CTA would phase construction activities to minimize impacts on CTA operations at the 95th Street Terminal and 98th Street Yard and Shop, as well as on vehicular traffic on affected expressways and roadways, minimizing disruptions to community members' day-to-day lives.

- CTA would work with the community, businesses, aldermen's offices, and the Chicago Department of Planning and Development to develop and implement a Construction Outreach and Coordination Plan, as described in **Section 4.1.3.2**.

Mobility

During construction of the UPRR Alternative, temporary closures of streets crossing the alignment might be required. Detours would be provided to maintain emergency access and access to adjacent properties, and bus service would detour around closures.

The following temporary construction-related adverse impacts on mobility would occur:

- Truck traffic would increase in the project area. Temporary street closures and detours would be needed. Lane closures, temporary parking restrictions, and temporary conversion of two-way streets to one-way streets might also be implemented.

- Access to businesses near construction sites could be temporarily limited on an intermittent basis due to construction-related detours and closures.

Mitigation - Mitigation measures to offset adverse temporary construction-related mobility impacts would include the following:

- CTA would provide adequate detours around construction sites and would minimize road and lane closures to the extent possible.

- CTA would provide a temporary advertising program to increase the visibility of adversely affected businesses during construction, for example, by providing signs that say "We Are Open" and explaining changes in access for business patrons, or by placing notifications on CTA trains and buses encouraging customers to continue to support the businesses affected by construction.

Community Resources

Construction may temporarily limit access to community resources and parks. The following adverse impacts on community resources would occur:

- Community resources adjacent to the alignment would be subject to the same impacts identified above, under "Community Character and Cohesion" and "Mobility."

- Construction activities would be required in Wendell Smith Park and Block Park in Roseland. The northwest portion of Wendell Smith Park and the west portion of Block Park would be inaccessible during construction activities.

- Access to community resources near the construction areas may be temporarily disrupted by street closures and detours.

Mitigation - Mitigation measures to offset adverse temporary construction-related impacts on community resources would include the following:

- CTA would schedule major construction activities to minimize conflicts with community events to the extent possible.

- CTA would maintain access to community resources during construction, via detours when necessary.

- CTA would coordinate with the community to avoid adverse impacts on the function of Wendell Smith Park. Nearby alternate parks, such as Robert Abbott Park and Fernwood Park, would remain available for use during construction in Wendell Smith Park.

Impacts Remaining After Mitigation

The East Option would have a permanent adverse impact on community character and cohesion that could not be mitigated, due to the visual encroachment of the elevated structure into the neighborhood north of I-57 in Roseland and at 117th Street and Prairie Avenue in West Pullman. Other permanent impacts related to neighborhoods and communities would not be adverse after implementation of mitigation measures.

Construction-related impacts on neighborhoods and communities would not be adverse after implementation of the proposed mitigation measures.

4.3.3.3 Union Pacific Railroad Alternative - West Option

Permanent Impacts

Community Character and Cohesion

Like the East Option alignment, the West Option alignment is within existing highway rights-of-way and adjacent to the UPRR and NICTD/CSS & SBRR freight rail corridors. The elevated structure would not substantially differ from the existing character of the freight railroad tracks, but would encroach into the residential neighborhood and would be more prominent than the freight railroad tracks due to its height. The structure would not introduce new separations between neighborhoods because the UPRR right-of-way already has limited grade crossings and acts as a barrier for pedestrians. The West Option would require fewer displacements than the East Option (see **Section 4.2**), particularly in Roseland and West Pullman.

The new transit stations would become focal points for the surrounding communities, and may attract new commercial and residential activities that would result in an overall improvement in

community character. The increased pedestrian activity around stations may help bridge the gap between communities currently separated by the freight tracks. The multistory park & ride facility at the Michigan Avenue station would include a ground-floor community facility and retail space, which would serve as a community enhancement.

The following permanent adverse impacts related to community character and cohesion would occur:

- Displacements and Relocation of Existing Uses
  - The placement of the track structure would require acquisition of parcels along the west side of the UPRR right-of-way between 103rd Street and the Michigan Avenue station in Roseland and West Pullman. The parcels, some of which are vacant or sparsely occupied, primarily contain a mix of industrial and residential uses. Because the streets in this area, with the exception of major thoroughfares, end at the UPRR right-of-way, the displaced parcels would be at the ends of blocks (adjacent to the UPRR tracks), and not in the center of the neighborhood. The CTA track structure would encroach on the edges of neighborhoods, but would leave the neighborhoods otherwise intact.
  - A total of 17 buildings would be removed to accommodate the Michigan Avenue station park & ride facility in West Pullman. Of the 17 buildings, 16 are residential and 1 is commercial.
- Visual and Aesthetic Conditions
  - The elevated track structure would cause adverse visual impacts because of the change in the visual setting in the highway right-of-way north of I-57 in Roseland, as shown in **Figure 4-14** in **Section 4.3.3.2**.
  - Between 99th and 103rd Streets, the elevated structure would run through Fernwood Parkway in Washington Heights. The introduction of the new elevated structure and 103rd Street station would visually change the setting of the parkway and the houses facing it along the west side of Eggleston Avenue. Although the recreational impact on the parkway could be offset, the change in visual community character could not be mitigated. **Figure 4-9** shows the view along Eggleston Avenue and Fernwood Parkway facing 103rd Street, including the existing view (top) and a photo simulation of the West Option (bottom) at the same location.
  - The construction of the Michigan Avenue station park & ride facility in West Pullman would require substantial removal of buildings to accommodate the new five-story parking structure. Despite mitigation measures, there would be adverse visual impacts in this area because the scale, density, and character of the local community would be changed.

- Noise
  - The noise from CTA trains combined with existing UPRR freight trains would cause adverse impacts at noise-sensitive buildings in Roseland, Washington Heights, and West Pullman.

Mitigation - Mitigation measures to minimize adverse permanent impacts related to community character and cohesion for the West Option would be similar to those described for the East Option. Visual impacts north of I-57 in Roseland, between 99th and 103rd Street in Washington Heights, near the 103rd Street station in Roseland and Washington Heights, and near the Michigan Avenue station park & ride in West Pullman would remain adverse despite mitigation. Unlike the East Option, the West Option would have no visual impacts from the track structure near the intersection of 117th Street and Prairie Avenue in West Pullman.

Figure 4-9: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative West Option along Eggleston Avenue and Fernwood Parkway Facing 103rd Street

Mobility

The West Option would substantially reduce travel times between the Washington Heights, Roseland, West Pullman, and Riverdale communities, and would enhance their connection with major employment and activity centers north of the project area. The West Option would result in substantial mobility benefits for Far South Side residents.

Community Resources

The West Option would displace Fernwood Parkway in Washington Heights and the Grace Temple Church of God Established in Christ (11601 S. Michigan Avenue) in West Pullman (see **Figure 4-8**).

The West Option alignment would run through two of the four parcels that make up Fernwood Parkway; the West Option alignment would affect the parcels between 101st and 103rd Streets. Of the 5.3 acres of these two affected parcels of the parkway, approximately 1.9 acres would be overlapped by the elevated structure and its associated clearances. Much of the parkway between 101st and 103rd Streets would be permanently overlapped and shaded by the structure. Elevated track structure supports would be placed permanently in the park space.

The new rail extension would facilitate access to community resources near the station locations, especially for transit-dependent residents, which would be beneficial overall. The RLE would provide direct transit access for residents of and visitors to Altgeld Gardens.

The following permanent adverse impacts on community resources would occur:

- Near Wendell Smith Park, the elevated structure would be taller as part of the West Option than it would as part of the East Option because the CTA tracks would need to cross above the UPRR right-of-way, allowing clearance for freight trains; however, the alignment would not directly affect the park.
- Between 99th and 103rd Streets, the elevated track structure would run along Fernwood Parkway in Washington Heights. Impacts are described under the "Community Character and Cohesion" heading above.
- The Grace Temple Church of God Established in Christ would be displaced; however, as of July 2015 the building is vacant.

Mitigation - Mitigation measures to offset adverse temporary construction-related impacts on community resources would include the following:

- CTA would plant new trees to shield views of the structure from homes fronting the park.
- CTA would keep the area beneath the track structure in Fernwood Parkway open for use, and improve park space elsewhere in the neighborhood.
- In accordance with the Uniform Act (42 USC § 4601, et seq.), CTA would provide relocation assistance for the Grace Temple Church of God Established in Christ to another building or parcel in the surrounding area.

Impacts on parks and proposed mitigation measures, as well as further details on coordination with the Chicago Park District to confirm park-related mitigation measures, are described in **Chapter 8** of this Draft EIS.

Construction Impacts

The West Option would have construction impacts similar to those of the East Option, as described in **Section 4.3.3.2**, except that Block Park would not be affected under the West Option. Construction activities would be needed in Wendell Smith Park in Roseland as well as Fernwood Parkway in Washington Heights. The same mitigation measures identified for the East Option in **Section 4.3.3.2** above would apply.

Impacts Remaining After Mitigation

Despite mitigation, the West Option would have a permanent adverse impact on community character and cohesion due to the visual encroachment of the elevated structure north of I-57 in Roseland, between 99th and 103rd Streets in Washington Heights, at the 103rd Street station area in Roseland and Washington Heights, and at the Michigan Avenue station park & ride facility in West Pullman. Other permanent impacts related to neighborhoods and communities would not be adverse after implementation of mitigation measures.

Construction-related impacts on neighborhoods and communities would not be adverse after implementation of the mitigation measures.

4.4 Visual and Aesthetic Conditions

This section summarizes the existing visual and aesthetic conditions in the project area and describes the visual and aesthetic impacts of the East and West Options. See also the *Visual and Aesthetic Conditions Technical Memorandum* (**Appendix N**). **Table 4-6** summarizes the visual and aesthetic impact findings.

Table 4-6: Visual and Aesthetic Conditions - Impacts Summary

Alternative	Permanent Impacts	Construction Impacts
No Build	No impacts	No impacts
Union Pacific Railroad - East Option	Adverse impacts despite mitigation north of I-57 and at 117th Street and Prairie Avenue	No adverse impacts
Union Pacific Railroad - West Option	Adverse impacts despite mitigation north of I-57, between 99th Street and 103rd Street, near the 103rd Street station, and at the Michigan Avenue station park & ride facility	No adverse impacts

4.4.1 Regulatory Framework/Methods

CTA performed the visual and aesthetic conditions analysis to be consistent with State of Illinois Public Act 093-0545, which requires projects to take the visual context of the project area into consideration. The context includes existing and proposed land uses and zoning and the potential for degradation of the existing visual character or quality of the surrounding community areas. The analysis also considered the potential for the project to create new shade or shadow effects.

CTA considered the guidelines and ordinances that govern visual integrity and quality in the City of Chicago including the Zoning Ordinance, Land Use Ordinance, and the Landmarks Ordinance.

For this analysis, CTA assessed visual and aesthetic impacts by first analyzing existing visual resources in the project area, including any sensitive views, and assessing existing visual quality of the surrounding environment. Sensitive views were determined from research and field observations as well as public comments received as part of CTA's outreach efforts (see **Chapter 10**) CTA then considered changes to the visual environment that would result from the East and West Options. The analysis included an assessment of any changes to the viewsheds or other sensitive views that would affect the essential character or context of the visual environment and any other visual quality impacts. Where any adverse visual impacts were determined to be likely in the context of the visual environment, mitigation methods were proposed.

For this Draft EIS, an impact would be adverse if it resulted in one of the following:

- A change that is inconsistent with the community's aesthetic character
- Incompatibility of a project element with the character of the area
- Incompatibility of a project element with community aesthetic goals
- A substantial degradation of the existing visual character or quality of a site and its surroundings
- Effects on a historic site through extensive remodeling or removal of buildings or their surrounding area (discussed further in **Section 4.7**)
- Creation of new shade and shadow effects

CTA categorized visual and aesthetic changes to the environment as low, moderate, or high based on the following characteristics:

- Low visual changes generally occur when the transit facility is already part of the view and there would be minor or few changes to the transit facility that would create noticeable changes in the view. Low visual changes can be beneficial; low visual changes are not considered adverse.
- Moderate visual changes occur when the existing view would be noticeably different but not substantially different. Removal of vegetation or a single property displacement would be examples of a moderate visual change. Depending on the individual case, moderate visual changes may or may not be adverse, and may be beneficial.
- High visual changes would occur when there is a substantial change to the existing view or when visually sensitive resources would have a change in view. In some cases high visual changes may improve an area. Like other visual changes, high visual changes can be beneficial or adverse.

In addition to categorizing the visual change of a view, CTA also considered the response to a view depending on the type of viewer group that would interact with the view. A viewer group's sensitivity to a change in a view could affect the level of impact on a viewshed. Major viewer groups along the project corridor include residents, passengers, business owners, recreational groups, and visitors.

- Residents are people who are very familiar with their surroundings and interact with the visual environment on a daily basis. Residents would have high viewer sensitivity because of daily interaction with the visual environment.
- Passengers interact with the visual environment on a daily basis because they travel to and from the transit facility. Passengers have less viewer sensitivity than other viewer groups because they only pass through the visual environment and do not live in it.
- Business owners are people who are very familiar with their surroundings and have a vested interest in the visual environment. Business owners would have a higher sensitivity than other groups, such as visitors or passenger groups, based on their familiarity and vested interest in the environment.
- Recreational groups are people who may walk, run, or cycle near the transit facility. Recreational groups have different expectations of the visual environment and have a higher sensitivity to scenic views or neighborhood character than other viewer groups.
- Visitors are individuals who have limited interaction with the area and are not familiar with the visual environment. Visitors have some sensitivity to the surrounding environment.

The *Visual and Aesthetic Conditions Technical Memorandum* (**Appendix N**) includes specific information on the visual assessment process. **Section 4.7** includes a discussion of potential visual effects on historic resources.

4.4.2 Existing Conditions

The visual environment that would be affected by the RLE Project includes areas that would have a view of the new facilities and areas visible from the new facilities. The overall project area has residential (primarily single-family), commercial (urban mixed-use), industrial, transportation, utility, and vacant land uses.

The UPRR Alternative alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57. This portion of the corridor has a relatively cohesive landscape and the East and West Options would be on the same alignment in this area. **Figure 4-10** and **Figure 4-11** show the existing conditions along the highway corridors.

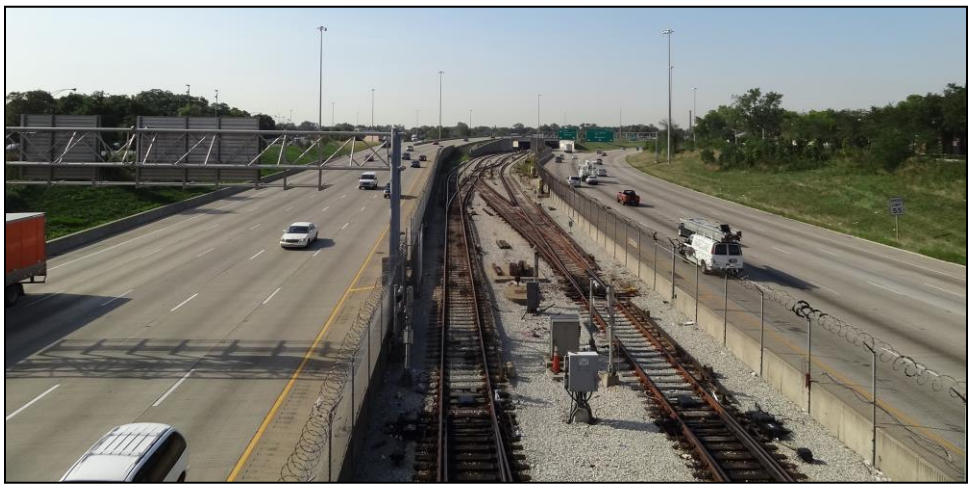

Figure 4-10: Photo Facing South from 95th Street Terminal

Figure 4-11: Photo Facing East, North of I-57 near 98th Street and Lowe Avenue

South of I-57, the UPRR Alternative corridor would run along an existing railroad corridor that is surrounded by a mix of residential and light commercial districts. The residential development consists of one- to two-story structures of similar style. Light commercial buildings are typically at intersections that meet the existing UPRR tracks at grade. A substantial portion of the development along the corridor is vacant and contains minimum architectural embellishments. The Roseland Pumping Station at 104th Street and Harvard Avenue is one of the few non-residential structures in the area with architectural character. South of 119th Street, the UPRR Alternative alignment would run along the MWRD property and end just north of Altgeld Gardens. Aside from the residences at Altgeld Gardens, this area has a light industrial character. The partially vacant neighborhood is relatively isolated between 130th Street, I-94, and Little Calumet River. **Figure 4-12** and **Figure 4-13** show typical conditions within the UPRR Alternative corridor.

Figure 4-12: Photo Facing Southwest from 113th Street and Princeton Avenue

Figure 4-13: Photo Facing South along Michigan Avenue from 115th Street

4.4.3 Environmental Consequences

The following sections summarize the potential visual and aesthetic impacts of each alternative.

4.4.3.1 No Build Alternative

There would be no visual or aesthetic impacts associated with the No Build Alternative; no mitigation measures would be required.

4.4.3.2 Union Pacific Railroad Alternative - East Option

Permanent Impacts

West of Prairie Avenue, the East Option alignment would be in existing highway right-of-way and adjacent to the freight railroad right-of-way. Property acquisition would occur as part of the East Option, and would typically be concentrated near station locations.

Shadows created by the elevated structure would change throughout the day and season. The shadows would vary depending on the height, orientation, and density of surrounding structures, vegetation, and development. A substantial portion of vegetation would be removed on the east side of the project corridor, which would introduce new shadows and light patterns on developments to the east. The majority of vegetation west of the UPRR tracks would remain and would help minimize visible light and shadow effects on residences to the west. Additional lighting would be introduced to the project area, associated with park & ride facilities, stations, substations, yard and shop facilities, and trains (which include interior/safety lighting and exterior headlights). For the East Option, light and glare associated with the alignment and trains would not have an adverse impact, because the proposed features would generally be located in the existing highway corridor or near the existing UPRR corridor—areas that currently produce transportation-related light and glare.

High and adverse visual impacts would occur north of I-57 because of the change in the visual setting due to the elevated track structure in the highway right-of-way. The elevated track structure would block the horizon for the homes or pedestrians closest to 98th Place and would also create a new shadow at street level due to the movement of the sun. The elevated track structure would change the scale, density, and character of the residential neighborhood north of I-57. **Figure 4-14** shows existing conditions and a photo simulation of the track structure in the I-57 right-of-way.

Figure 4-14: Photo of Existing Conditions and Photo Simulation of the Elevated Track Structure in the I-57 Right-of-Way, Facing East from 98th Place and Princeton Avenue

High and adverse visual impacts would occur at 117th Street and Prairie Avenue because of the elevated track structure. **Figure 4-15** shows existing conditions and a photo simulation of the East Option viaduct facing southeast from 117th Street, east of Prairie Avenue. The residential character and scale would be substantially altered by the removal of vegetation and neighborhood fabric and the addition of elevated structure east of the embankment.

Figure 4-15: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative East Option Viaduct Facing Southeast from 117th Street, East of Prairie Avenue

Mitigation - Mitigation measures would reduce the impacts north of I-57 and at 117th Street and Prairie Avenue, but due to the proximity of the elevated structure to residential areas, the impacts would remain high and adverse despite mitigation. Mitigation measures would include landscaping, using urban design techniques to reduce massing, and creating pedestrian-friendly surroundings. Techniques that may be used include planting larger trees near structures to break the sight lines, with smaller scale landscaping near the streets to mimic landscaping on the opposite side of the streets.

Construction

Construction-related visual impacts would be similar for both the East and West Options. The duration of construction for either option would vary from several months to a few years depending on the alignment location and which facilities are there. Construction-related visual

impacts would not be adverse and would include construction fencing, demolition of existing buildings, temporary walls, temporary street closures and related signage, temporary lighting or entrances, and/or shoring of concrete structures or existing viaducts.

Mitigation - Although construction-related visual impacts related to the East Option would not be adverse, CTA would maintain as much existing vegetation as practical and minimize temporary construction impacts on neighborhoods by limiting the light trespassing from night lighting. BMPs and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

Impacts Remaining After Mitigation

The East Option would have permanent high and adverse visual and aesthetic impacts north of I-57 and at 117th and Prairie Street despite implementation of mitigation measures.

4.4.3.3 Union Pacific Railroad Alternative - West Option

Permanent Impacts

General light and shadow conditions for the West Option would be similar to those discussed for the East Option. High and adverse visual impacts would occur north of I-57 because of the change in the visual setting due to the elevated track structure in the highway right-of-way. The track structure would change the scale, density, and character of the residential neighborhood north of I-57.

In addition to shadows and light patterns created by the elevated structure, the removal of vegetation along the west side of the existing railroad corridor between 99th Street and 103rd Street (along Fernwood Parkway) would alter the visual quality for developments to the west. Visual impacts between 99th Street and 103rd Street, including the 103rd Street station, would be high and adverse. Several buildings and some vegetation along the west side of the existing UPRR corridor would be removed to accommodate the new station and surface parking lot. The elevated platforms and track structure would have a high impact on the viewshed of residences adjacent to the project alignment and would create new shadows. **Figure 4-9** shows a photo simulation of the West Option along Fernwood Parkway near the 103rd Street station.

Near the Michigan Avenue station, the West Option would have high and adverse impacts similar to those of the East Option. The addition of the five-story park & ride facility and the removal of buildings and vegetation would have an adverse impact on the character and building density of the local community. **Figure 4-16** shows existing conditions and a photo simulation of how the West Option Michigan Avenue station area could look.

Figure 4-16: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative West Option Michigan Avenue Station and Parking Structure Facing Northwest along Michigan Avenue

Mitigation - Mitigation measures would reduce the impacts in the area north of I-57 and from approximately 99th Street to 103rd Street, including 103rd Street station. Mitigation measures would include providing landscaping and replanting vegetation where possible. In addition, the 103rd Street station would be designed to be consistent with the character and scale of the surrounding neighborhood. Due to the scale of the elevated structure, proposed station and its proximity to adjacent residences, impacts after mitigation would remain high and adverse.

Mitigation measures would reduce the impacts near the Michigan Avenue station park & ride facility, but due to the structure's proximity to residential areas, the impacts would remain adverse despite mitigation. Mitigation measures would include landscaping, designing the park & ride facility to match the character of the surrounding neighborhood, using urban design techniques to reduce massing, and creating pedestrian-friendly surroundings. The use of larger setbacks to accommodate wider sidewalks or pedestrian areas, architectural styles, building treatments, and facades are examples of how the design of the structure would be incorporated

into the neighborhood to minimize the visual impacts. Exterior lighting would be shielded and carefully placed when adjacent to sensitive areas such as residential communities.

Construction Impacts

The duration of construction and types of visual impacts for the West Option would be similar to those of the East Option. Construction-related impacts would not be adverse. The types of visual impacts and the proposed impact-minimizing mitigation measures for the West Option would be similar to those described for the East Option.

Impacts Remaining After Mitigation

The West Option would have high and adverse permanent visual and aesthetic impacts north of I-57, from 99th Street to 103rd Street, including the 103rd Street station, and near the Michigan Avenue station park & ride facility despite implementation of mitigation measures.

4.5 Noise and Vibration

This section summarizes the predicted noise and vibration impacts of the East and West Options.

Noise is "unwanted sound," generally measured in terms of loudness. The loudness, or magnitude, of noise determines its intensity and is measured in decibels (dB). The overall noise level from environmental sources is described in A-weighted decibels (dBA). The A-weighted decibel scale was developed to better approximate the sensitivity of human hearing. Because the decibel is based on a logarithmic scale, a 10-dB increase in noise level is generally perceived as a doubling of loudness, while a 3-dB increase in noise is just barely perceptible to the human ear (FHWA 2011).

Ground-borne vibration can be caused by the vibration of a transit structure, creating vibration waves that propagate through the soil and rock to the foundations of nearby buildings. The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, a rumble noise, or damage to buildings in extreme cases. Vibration is described in terms of velocity (L_v) and is measured in decibels (VdB), which is the root mean square vibration velocity relative to 1 microinch per second (FTA 2006).

The *Noise and Vibration Technical Memorandum* (**Appendix O**) contains additional information. **Table 4-7** summarizes the noise and vibration impact findings.

Table 4-7: Noise and Vibration - Impacts Summary

Alternative	Permanent Impacts		Construction Impacts	
	Noise	Vibration	Noise	Vibration
No Build	No impacts	No impacts	No impacts	No impacts
Union Pacific Railroad - East Option	574 moderate and 83 severe impacts on noise-sensitive receivers No impacts after mitigation	No impacts	No impacts	No impacts
Union Pacific Railroad - West Option	738 moderate and 49 severe impacts on noise-sensitive receivers No impacts after mitigation	No impacts	No impacts	No impacts

4.5.1 Regulatory Framework/Methods

CTA analyzed noise and vibration impacts from this project in accordance with the FTA (2006) *Transit Noise and Vibration Impact Assessment* guidance manual. The FTA guidance manual sets forth the basic concepts, methods, and procedures for evaluating the extent and severity of the noise and vibration impacts from transit projects.

The guidance manual describes three levels of analysis that may be applied depending on the complexity of the project. The first level is a screening procedure to determine whether noise-sensitive receivers would be present based on the land uses in the vicinity of the project. The outcomes of the screening procedure determine whether more detailed noise and vibration analysis is required. There are known sensitive receivers for the RLE Project, so further analysis was required. There are two levels of quantitative analysis for predicting impacts: a general assessment and a detailed analysis. The general assessment identifies and estimates the severity of noise and vibration impacts that could occur with implementation of the project. The general assessment provides information needed to differentiate between the East and West Options. The detailed analysis quantifies impacts through an in-depth analysis of a single design configuration.

CTA completed a general assessment for the UPRR corridor to provide basic information for comparing the severity of impacts from implementation of the East and West Options. The impacts disclosed in this Draft EIS are maximum, worst-case impacts. More detailed analysis in the Final EIS may identify areas where impacts may be further reduced through design.

The thresholds of significance for this project are based on FTA's operational and construction noise and vibration criteria, as described in the guidance manual. CTA conducted an assessment to identify the areas that could be subject to a moderate or severe impact along the proposed alternative alignments. This assessment established an impact contour as the basis for analysis, rather than individual analysis of each noise-sensitive receiver, because of the high density of residential areas abutting the East and West Option alignments. The impact contour defines the outer limit where a moderate or severe impact would occur based on the distance from the noise-

generating source (East and West Options). CTA used the contours to estimate the potential for noise and vibration impacts along each of the option alignments.

CTA further refined the general assessment to identify individual noise-sensitive receivers within the moderate and severe impact contours. As part of a field verification of noise-sensitive receiver locations, CTA counted noise-sensitive receivers within the moderate and severe impact contours unless identified as potentially displaced properties. The identified affected noise-sensitive receivers were counted individually but were mapped as noise-sensitive receiver clusters because of the small size of the individual parcels. The clusters of receivers were determined to be similar distances from the proposed tracks and in areas where the CTA operating conditions, such as train speed, were determined to be similar.

Operational Noise

Operational noise is the noise that would occur with the ongoing operation of an implemented alternative. To determine whether the noise levels from a project might affect an area, CTA compared the existing noise levels near where the Red Line trains would run to the projected future noise levels generated by the project. FTA uses three different land use categories for identifying noise-sensitive receivers (see **Table 4-8**). FTA does not consider most commercial and industrial receivers to be sensitive to transit-related noise.

Table 4-8: FTA Land Use Categories and Noise Metrics

Land Use Category[1]	Noise Level[2]	Description
1	$L_{eq}(h)$	Tracts of land set aside for serenity and quiet, such as outdoor amphitheaters, concert pavilions, and historic landmarks.
2	L_{dn}	Buildings used for sleeping, including residences, hospitals, hotels, and other areas where nighttime sensitivity to noise is of utmost importance.
3	$L_{eq}(h)$	Institutional land uses with primarily daytime and evening uses including schools, libraries, churches, museums, cemeteries, historical sites and parks, and certain recreational facilities used for study or meditation.

FTA = Federal Transit Administration
Source: FTA 2006
[1] Land Use Categories are based on sensitivity to noise intrusions.
[2] The threshold noise limits include an hourly equivalent noise level (or $L_{eq}(h)$) for Category 1 and 3 noise-sensitive receivers and the day-night noise level (or L_{dn}) for Category 2 noise-sensitive receivers. The FTA noise limits, which are based on the existing background levels, are determined using empirical formulas shown graphically in **Figure 4-17**.

FTA has two categories for its noise impact criteria: moderate impact and severe impact. The moderate impact threshold defines areas where the change in noise would be noticeable but might not be sufficient to cause a strong, adverse community reaction. The severe impact threshold defines the noise limits above which a significant percentage of the population would be highly annoyed by the change in noise.

As shown in **Figure 4-17**, the FTA noise impact criteria are defined by two curves that allow increasing project noise levels as existing noise increases up to a point, beyond which an impact would be determined based on project noise alone. Category 1 noise-sensitive receivers (such as an amphitheater or historic landmark) are represented along the left axis and are described by the

hourly equivalent noise level (hourly L_{eq}).[4] Category 2 noise-sensitive receivers (such as residences, hotels, and hospitals) are also represented along the left axis, but are described by the 24-hour day-night level (L_{dn}).[5] Category 3 noise-sensitive receivers (such as schools and churches) are represented along the right axis and are described by the hourly L_{eq} noise metric.

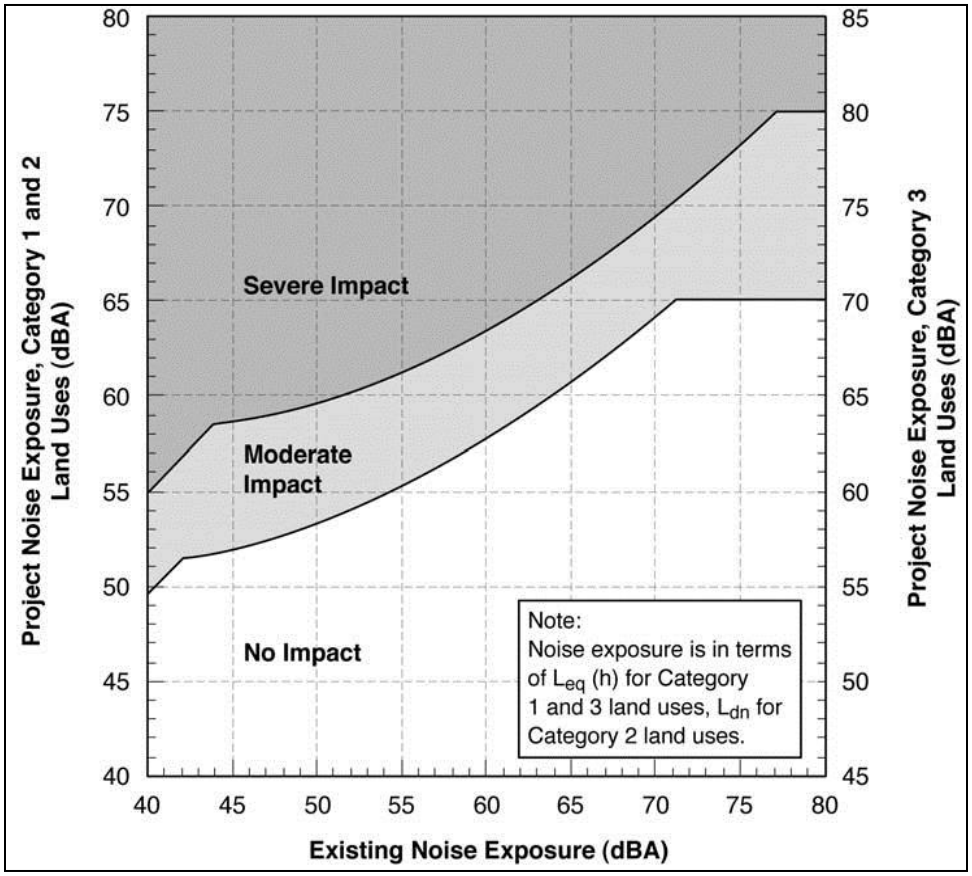

Source: FTA 2006
L_{eq}(h) = hourly equivalent noise level, L_{dn} = day-night noise level
Figure 4-17: Noise Impact Criteria for Transit Projects

Although the curves in **Figure 4-17** are defined in terms of the project noise exposure and the existing noise exposure, it is the project's increase in noise compared to existing noise levels that is the basis for the criteria. To illustrate this point, **Figure 4-18** shows the noise impact criteria for Category 1 and 2 land uses in terms of the allowable increase in the existing noise exposure. The horizontal axis is the existing noise exposure and the vertical axis is the increase in noise level due to the project. The curves in **Figure 4-18** show that the criterion for impact allows a noise exposure increase of 10 dBA if the existing noise exposure is 42 dBA or less, but only a 1-dBA

[4] L_{eq}, the hourly equivalent noise level, describes a receiver's cumulative noise exposure from all events over a 1-hour period.
[5] L_{dn}, the day-night sound level, is a measure of community noise over a 24-hour period. In the calculation of L_{dn}, noise that occurs during the nighttime hours (10:00 PM to 7:00 AM) is given a weighting that causes one train during the nighttime hours to be equivalent to 10 trains during the daytime hours.

increase when the existing noise level is 70 dBA. As the existing level of noise increases, the total amount that the community noise exposure is allowed to increase is reduced.

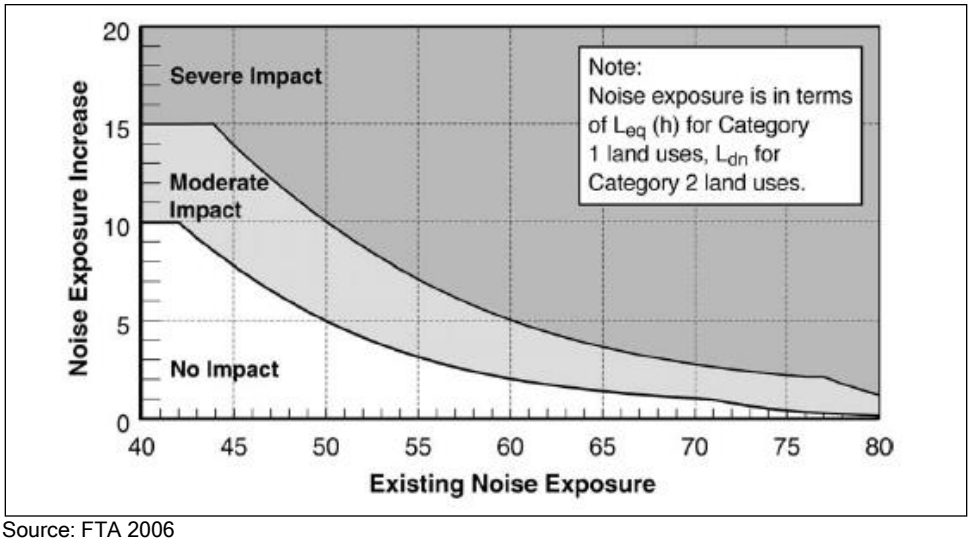

Source: FTA 2006
L_{eq}(h) = hourly equivalent noise level, L_{dn} = day-night noise level
Figure 4-18: Allowable Increase in Noise Levels

Operational Vibration

CTA used FTA criteria to assess annoyance due to vibration and ground-borne noise from transit operations. **Table 4-9** shows the FTA vibration criteria for evaluating ground-borne vibration and noise impacts from train pass-bys at nearby vibration-sensitive receivers. These vibration criteria (expressed in VdB) are related to ground-borne vibration levels that are expected to result in human annoyance. FTA's experience with community response to ground-borne vibration indicates that when there are only a few train events per day, it would take higher vibration levels to evoke the same community response that would be expected from more frequent events. This community response to ground-borne vibration is accounted for in the FTA criteria by distinguishing between projects with frequent (more than 70 train events per day), occasional (30 to 70 train events per day), and infrequent events (fewer than 30 train events per day). The vibration levels shown in **Table 4-9** are defined in terms of human annoyance for different land use categories: high sensitivity (Category 1), residential (Category 2), and institutional (Category 3). In general, the threshold of human perceptibility of vibration is 65 VdB.

The vibration levels shown in **Table 4-9** are well below the damage criteria levels of 95 to 100 VdB. It is extremely rare for vibration from transit operations to cause any sort of building damage, even minor cosmetic damage.

Table 4-9: FTA Ground-Borne Vibration and Noise Impact Criteria for Annoyance

Land Use Category Description	Ground Borne Vibration Levels (VdB)[1]			Ground Borne Noise Levels (dBA)[2]		
	Frequent Events[3]	Occasional Events[4]	Infrequent Events[5]	Frequent Events[3]	Occasional Event[4]	Infrequent Event[5]
Category 1: Buildings where low vibration is essential for interior operations	65	65	65	NA[6]	NA[6]	NA[6]
Category 2: Residences and buildings where people normally sleep	72	75	80	35	38	43
Category 3: Institutional buildings with primarily daytime use	75	78	83	40	43	48

Source: FTA 2006
[1] Root mean square vibration velocity levels are reported in decibels (or VdB) referenced to 1 microinch per second.
[2] Ground-borne noise levels are reported in A-weighted decibels (dBA) referenced to 20 micropascals.
[3] "Frequent Events" is defined as more than 70 vibration events per day.
[4] "Occasional Events" is defined as between 30 and 70 vibration events per day.
[5] "Infrequent Events" is defined as less than 30 vibration events per day.
[6] NA means "not applicable." Vibration-sensitive equipment is not sensitive to ground-borne noise.
FTA = Federal Transit Administration

While vibration criteria are generally used to assess annoyance from transit sources at the exterior faces of vibration-sensitive receivers, ground-borne noise, or the rumbling sound due to vibrating room surfaces, is typically assessed indoors. In general, the relationship between vibration and ground-borne noise depends on the dominant frequency of the vibration and the acoustical absorption characteristics of the receiving room. Due to the limited data available regarding soil and ground propagation characteristics, average or typical soil conditions (hard compacted soil) were assumed everywhere along the project corridor. According to the FTA guidance, the dominant vibration frequency from train pass-bys along typical ground and soil conditions generally occurs in the 30–60 Hertz range. The ground-borne noise levels were adjusted accordingly.

Construction Noise

During the preliminary environmental permitting phase of a project, when construction details are limited, FTA suggests evaluating proposed construction scenarios against the 1-hour L_{eq} thresholds shown in **Table 4-10**. These criteria are compared to noise levels from the two loudest pieces of equipment that, under worst-case conditions, would operate continuously for 1 hour.

Table 4-10: Recommended FTA Construction Noise Limits

Land Use Category	Construction Period[2]	
	Daytime (dBA)[1]	Nighttime (dBA)[1]
Residential	90	80
Commercial	100	100
Industrial	100	100

Source: FTA 2006
[1] The Federal Transit Administration (FTA) construction noise limits are reported for the peak 1-hour period in A-weighted decibels (or dBA).
[2] Construction noise limits are established for both daytime (7 AM-10 PM) and nighttime (10 PM-7 AM) activities. The maximum noise limits represent noise levels from the two loudest pieces of equipment operating at full power over a period of 1 hour.

Construction Vibration

For evaluating potential annoyance or interference with vibration-sensitive activities due to construction vibration, CTA used the FTA criteria in **Table 4-11**. In most cases, however, the primary concern regarding construction vibration relates to potential damage to buildings. **Table 4-11** contains the FTA guidance vibration damage criteria for various structural categories of buildings. The vibration damage criteria listed for Category IV structures include historic buildings.

Table 4-11: Construction Vibration Damage Criteria

Building Category	Peak Particle Velocity (inches/second)	Approximate VdB[1]
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA 2006
[1] Root mean square velocity in decibels (VdB) relative to 1 microinch/second

Construction vibration is generally assessed in cases where there is a substantial potential for impacts from construction activity. Such activities include blasting, pile-driving, demolition, and drilling or excavation near vibration-sensitive structures.

4.5.2 Existing Conditions

Sensitive Receivers

CTA conducted a field verification of noise-sensitive receiver locations on March 5, 2015. The land use in the vicinity of the corridor is predominantly residential (Category 2). Three parks, six schools, and four churches (Category 3) are near the corridor. During the field verification, numerous uninhabited residences were identified scattered throughout the area. Although they are not occupied and are not likely to be occupied, these properties are included in the counts of noise-sensitive receivers because they are not contiguous and are adjacent to occupied homes. The land use in the area is expected to continue to be residential, and it is possible that these properties may be resold for residential development. As such, these homes have been considered in the counts because it is anticipated that the residential land use of the area will not change. The majority of these houses were between 105th Street and 115th Street on the east side of the corridor and along Eggleston Avenue from 107th Street to 108th Street on the west side of the corridor. Although these areas would be affected and there are noise-sensitive receivers in the

area, the overall impacts would likely be few because the properties are not in use. No sensitive receivers were identified south of the CN/ME corridor, which crosses the UPRR tracks near 119th Street.

Noise Measurements

CTA obtained noise measurements during October 19–26, 2012 at four representative noise-sensitive receiver locations along the UPRR Alternative alignment. The noise measurements consisted of 24-hour noise measurements at residential locations to determine the highest hourly L_{eq} and day/night average sound level (L_{dn}) occurring along the alignment. The noise measurement locations represented sensitive receivers that might be affected by noise from the project. Noise measurements along the UPRR tracks ranged from 74 to 77 dBA.

Figure 4-19 shows the measured highest L_{eq} and L_{dn} obtained at each of the four locations. The dominant noise source along the UPRR Alternative alignment is existing freight rail operation.

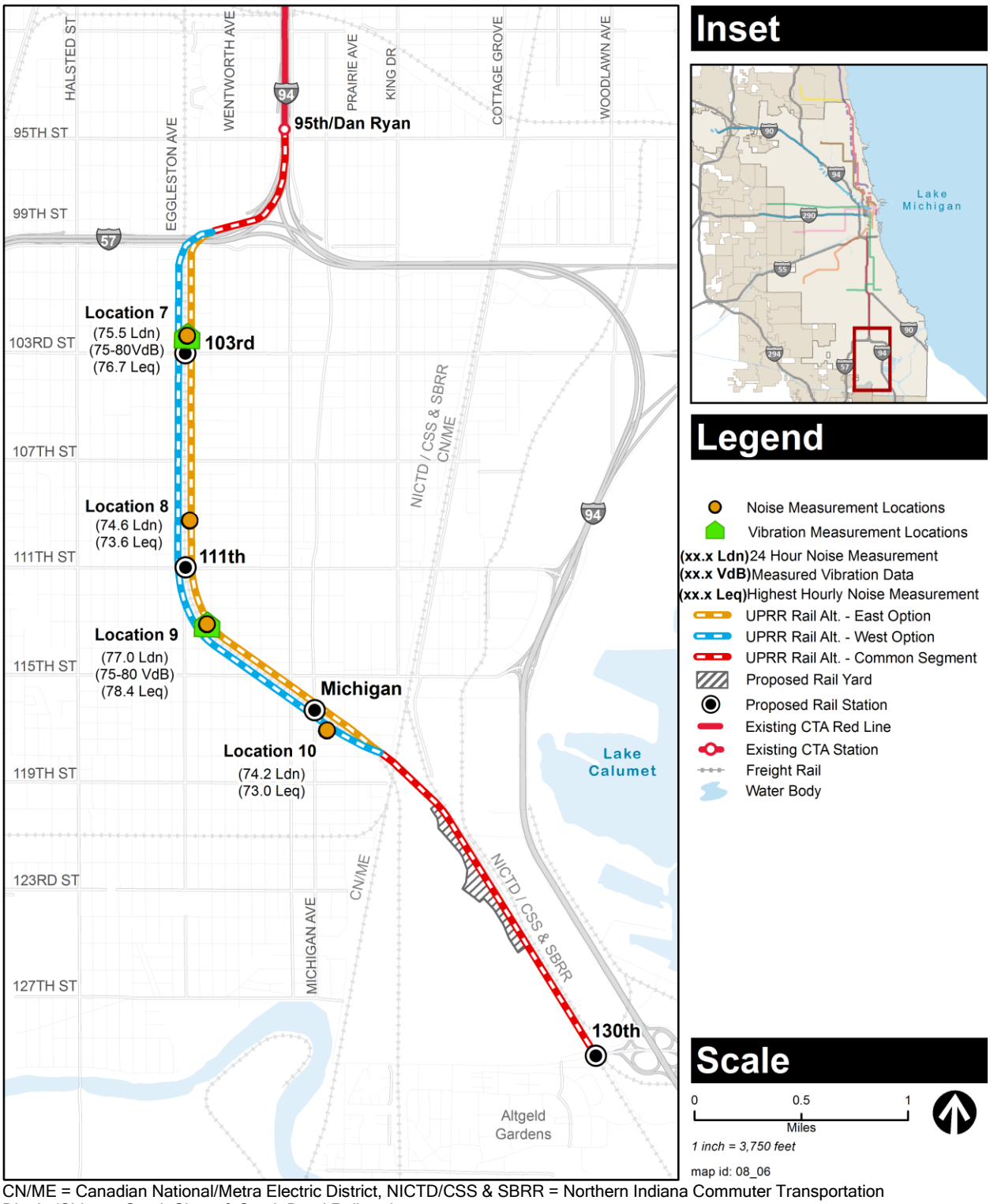

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-19: Vibration and Noise Measurement Locations and Measured Noise and Vibration Data

Vibration Measurements

CTA also obtained vibration measurements at two of the noise measurement locations to determine the existing vibration levels along the UPRR Alternative alignment. The vibration measurement locations represented sensitive receivers that might be affected by vibration from the project.

Figure 4-19 shows the measured vibration level obtained at both locations. The vibration levels measured along the UPRR rail corridor were due to freight rail operations. At a distance of approximately 100 feet from the freight train pass-bys, the measured vibration levels ranged from 75 to 80 VdB.

4.5.3 Environmental Consequences

The following sections summarize the potential noise and vibration impacts projected for each alternative.

4.5.3.1 No Build Alternative

The No Build Alternative assumes no change in the existing conditions except for renovation of CTA's 95th Street Terminal (construction is expected to be completed in 2018). All impacts related to the construction and operation of the 95th Street Terminal are documented in the approved *95th Street Terminal Improvement Project Environmental Assessment* (CTA 2013). FTA issued a Finding of No Significant Impact for the 95th Street Terminal Improvement Project in April 2013, and an Amended Finding of No Significant Impact in July 2013. An Environmental Assessment Re-Evaluation performed by FTA in July 2016 confirmed that the Amended Finding of No Significant Impact dated July 2013 remains valid and that noise impacts from the 95th Street Terminal Improvement Project would not be significant. There would be no change to the existing noise and vibration levels within the project area under the No Build Alternative. As a result, the No Build Alternative would result in no impact, and would require no mitigation.

4.5.3.2 Union Pacific Railroad Alternative - East Option

The noise analysis is based on the following UPRR Alternative components as described in **Chapter 2**: a closed-deck, steel and concrete aerial track structure with welded rail. The frequency of the proposed service is anticipated to be the same as with the current Red Line service (April 2016) at 95th Street Terminal, which ranges from 3–6 minutes during peak periods to 13–15 minutes at night, with an average daytime headway of 6.1 minutes. The UPRR train frequency is 27 trains per day. Based on the proposed RLE operations and the existing noise measurements, CTA established impact contours for moderate and severe impacts based on FTA criteria. Although the noise analysis was performed based on the 2012 Red Line operations plan, average daytime headways have not changed between 2012 and April 2016 and are consistent with the daytime average headways used in the noise analysis. **Table 4-12** lists distances from the proposed alignment (distances are the same for both the East and West Options) to the moderate and severe impact contours as well as the associated noise level criterion. CTA applied the contours throughout the entire corridor. **Figure 4-20** and **Figure 4-21** show the moderate and severe noise impact contours and the clusters of affected noise-sensitive receivers associated with the East Option. The impact contours close in near the station areas because there would be less noise from the trains as they decrease speed when approaching the stations.

Table 4-12: Federal Transit Administration Moderate and Severe Impact Distances - Union Pacific Railroad Alternative (at 55 miles per hour)

Location Number	Receiver Description/ (Area of Impact)	Measured Noise Level	FTA Moderate Impact		FTA Severe Impact	
		(L_{dn}) (Highest Hour L_{eq})	Criterion	Distance	Criterion	Distance
7	Residence at 354 W. 102nd Place (I-57 to 103rd Street)	75.5 dBA 76.7 dBA	65.0 dBA	280 feet	73.6 dBA	75 feet
8	Residence at 352 W. 109th Street (103rd Street to 111th Street)	74.6 dBA 73.6 dBA	65.0 dBA	280 feet	72.9 dBA	85 feet
9	Residence at 307 W. 113th Street (111th Street to Michigan Avenue)	77.0 dBA 78.4 dBA	65.0 dBA	280 feet	74.8 dBA	65 feet
10	Residence at 11718 S. Prairie Avenue (Michigan Avenue to Metra Rail)	74.2 dBA 73.0 dBA	65.0 dBA	280 feet	72.6 dBA	90 feet

L_{dn} = day-night average sound level, L_{eq} = hourly equivalent sound level, FTA = Federal Transit Administration, dBA = A-weighted decibel

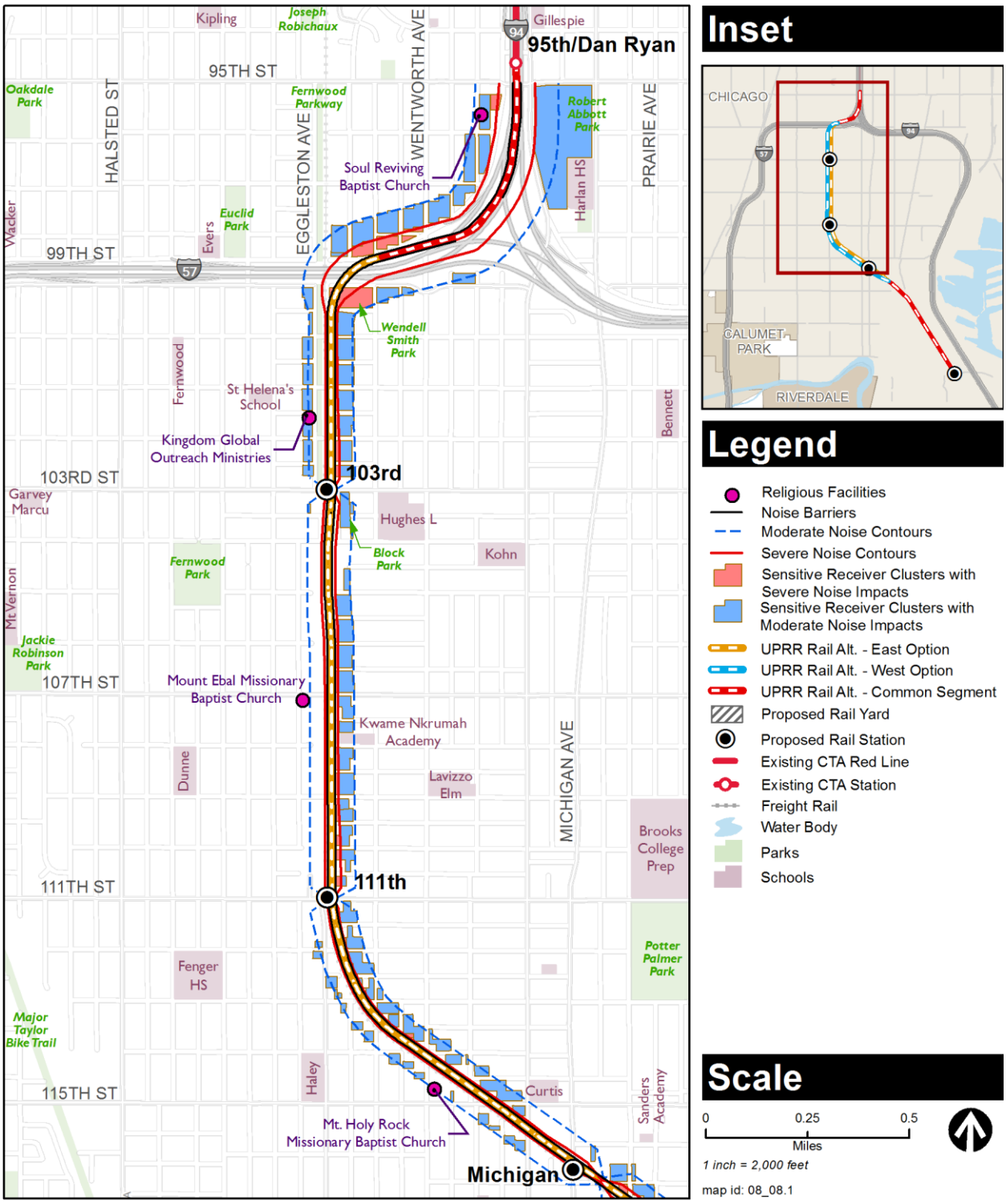

Figure 4-20: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours (1 of 2)

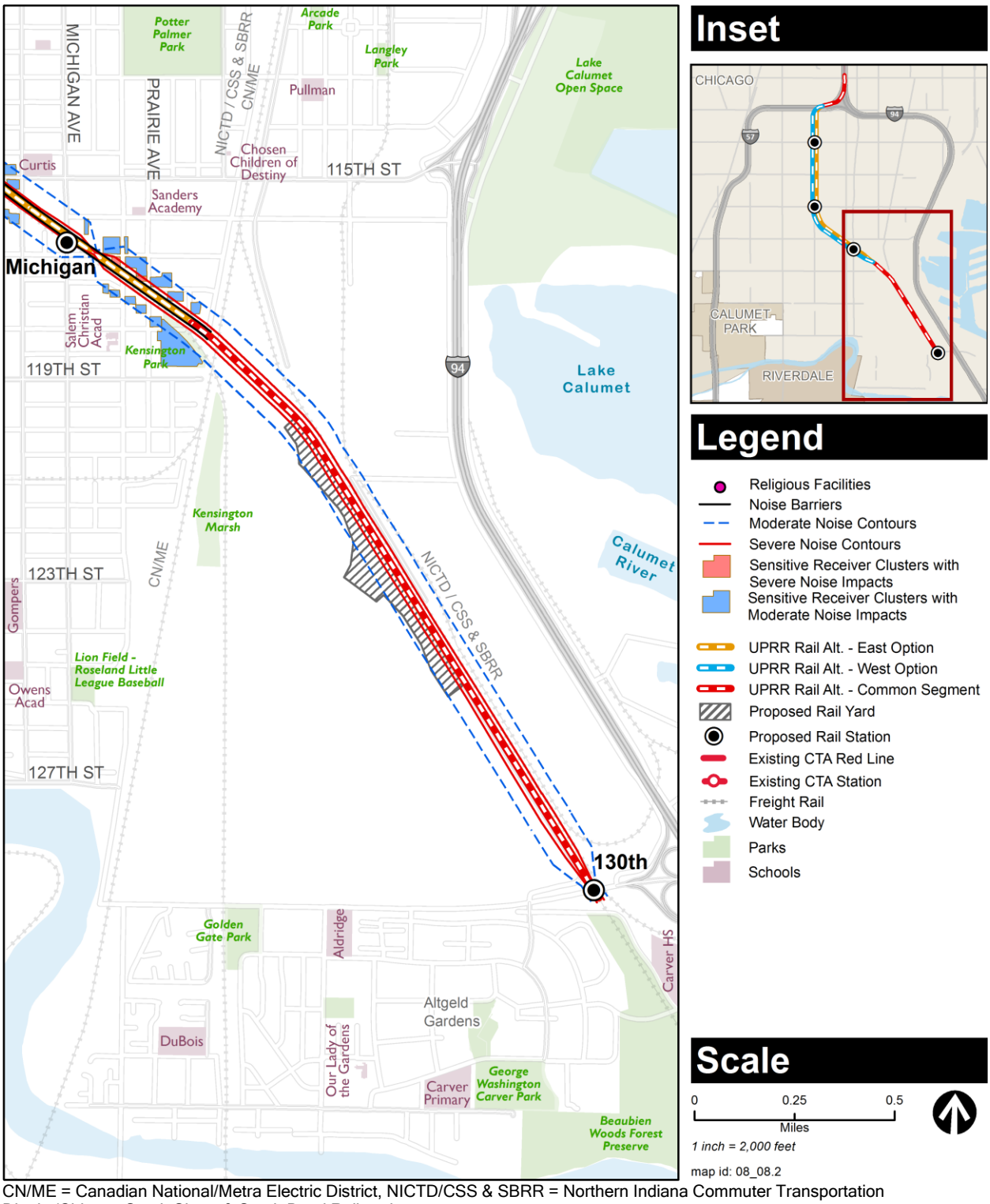

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-21: Union Pacific Railroad Alternative East Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours (2 of 2)

Permanent Noise Impacts

Residential noise-sensitive receivers fall within the moderate and severe impact contours for the East Option. There are 574 noise-sensitive receivers within the moderate impact contour: 221 on the west side of the corridor and 353 on the east side of the corridor. A total of 83 noise-sensitive receivers lie within the severe impact contours: 25 on the west side of the corridor and 58 on the east side of the corridor. Noise-sensitive receivers identified as displacements were not counted as being affected.

Noise-sensitive receivers are present within the moderate impact contour throughout the majority of the corridor from 99th Street to the CN/ME tracks near 119th Street. On the west side of the corridor the noise-sensitive receivers within the moderate impact contour are concentrated in the area northwest of the I-57/I-94 interchange. Two churches, the Soul Reviving Baptist Church (9537 S. Perry Avenue) and Kingdom Global Outreach Ministries (10132 S. Eggleston Avenue), could be subject to a moderate impact before mitigation. The remaining noise-sensitive receivers within the moderate impact contour are sparsely located between 112th Street and Prairie Avenue.

The majority of the noise-sensitive receivers within the severe impact contour are along both sides of the corridor between 99th Street and 103rd Street, and mostly along the east side between 105th Street and 111th Street. The *Noise and Vibration Technical Memorandum* (**Appendix O**) contains detailed figures showing the noise impact contours. The project could result in a severe impact on Wendell Smith Park and a moderate impact on Block Park and Kensington Park before mitigation. A portion of Wendell Smith Park would be affected by the project and the remaining portion of the park may have a severe impact before mitigation.

The property between State Street and Michigan Avenue south of 115th Street is vacant and there are no noise-sensitive receivers in this area of the corridor. The structures south of the UPRR tracks between State Street and Michigan Avenue are identified as displacements and therefore are not counted as receptors. No impacts are anticipated in the area south of the CN/ME corridor (which runs near 119th Street), because there are no sensitive receivers there. Altgeld Gardens, which is southwest of the 130th Street station location, would not be affected because it falls outside the impact area. **Table 4-13** details the number of affected noise-sensitive receivers between station areas.

Table 4-13: Sensitive Receivers within Moderate and Severe Noise Impact Contours - Union Pacific Railroad Alternative East Option

Area of Impact	West of Track Structure	East of Track Structure	Total
95th Street to 103rd Street	167 Moderate 25 Severe	108 Moderate 22 Severe	275 Moderate 47 Severe
103rd Street to 111th Street	1 Moderate 0 Severe	107 Moderate 25 Severe	108 Moderate 25 Severe
111th Street to Michigan Avenue at 116th Street	37 Moderate 0 Severe	98 Moderate 4 Severe	135 Moderate 4 Severe
Michigan Avenue to CN/ME Tracks near 119th Street	16 Moderate 0 Severe	40 Moderate 7 Severe	56 Moderate 7 Severe
Total	**221 Moderate 25 Severe**	**353 Moderate 58 Severe**	**574 Moderate 83 Severe**

Noise-affected receivers along the project corridor would require mitigation. The project could result in a moderate noise impact on three churches, three parks, and residential areas along both sides of the rail corridor. The East Option could result in a severe noise impact on one park and small, scattered residential areas along the east side of the corridor between 101st Place and 103rd Street, between 108th Street and 111th Street, just north of 11th Street and 114th Street, and just south of 116th Street. Although the schoolyard at Kwame Nkrumah Academy is within the moderate impact contour, the school building is outside the moderate impact contour; the school building would not have severe or moderate noise impacts. No other schools are within the severe or moderate noise contours.

Mitigation - To reduce noise impacts below FTA noise impact criteria, CTA would construct a noise barrier approximately 4 feet in height (measured from the top surface of the concrete deck) to reduce noise transmission at and below the height of the tracks. The 4-foot-high noise barrier would provide a 10-dBA reduction in noise along both sides of the elevated track structure from the 95th Street Terminal to the CN/ME tracks near 119th Street. All moderate or severe noise impacts would be resolved with mitigation. No moderate or severe impacts would remain after mitigation, including at Wendell Smith Park.

Permanent Vibration Impacts

The elevated track structure with continuously welded rail would result in vibration levels that would be below the FTA impact criterion of 72 VdB at the residential noise-sensitive receivers along the project corridor. The project would therefore result in no impacts from vibration and no mitigation measures would be required.

Construction Impacts

The East Option would include the construction of an elevated track structure, stations, and parking facilities at the stations. Construction noise levels are not expected to exceed the FTA-recommended construction noise limits shown in **Table 4-10**.

The construction contractor would employ noise-reducing construction BMPs. The contractor would keep all construction equipment exhaust mufflers in a state of good repair. As part of the construction specifications, the contractor would be responsible for adhering to the noise control requirements of the project. To the maximum extent possible, vehicles not in use would not

remain idling on the construction site. CTA would limit nighttime construction near residences to the extent practicable. There would be no residential noise-sensitive receivers within 150 feet of the construction activity along the I-57 right-of-way. CTA would inform community members about construction schedules, and would coordinate in advance with aldermen and local officials.

High-vibration activities during construction include demolition of buildings, construction of aerial structures, pavement breaking, and ground compaction. Vibration limits are the levels at which there is a risk for damage, not the level at which damage would occur. The impact threshold distances were calculated and it was determined from the analysis that most of the equipment can be operated without risk of damage at distances of 15 feet or greater from non-engineered timber and masonry buildings or at distances of 8 feet or greater from reinforced concrete buildings. Pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station.

Impacts Remaining After Mitigation

With a 10-dBA reduction provided by an approximately 4-foot-high noise barrier, all severe and moderate noise impacts would be resolved with mitigation. Beyond the use of noise-reducing construction BMPs, construction noise mitigation measures would not be required. There would be no vibration impacts; no mitigation measures for vibration are proposed.

4.5.3.3 Union Pacific Railroad Alternative - West Option

The noise analysis is based on the following UPRR Alternative components as described in **Chapter 2**: a closed-deck, steel and concrete aerial track structure with welded rail. The moderate and severe noise impact contour distances for the West Option are the same as for the East Option (see **Table 4-12**). **Figure 4-22** and **Figure 4-23** show the moderate and severe noise impact contours and clusters of affected noise-sensitive receivers associated with the West Option. The impact contours close in as they near the station areas because there would be less train noise as the trains decrease speeds when approaching stations.

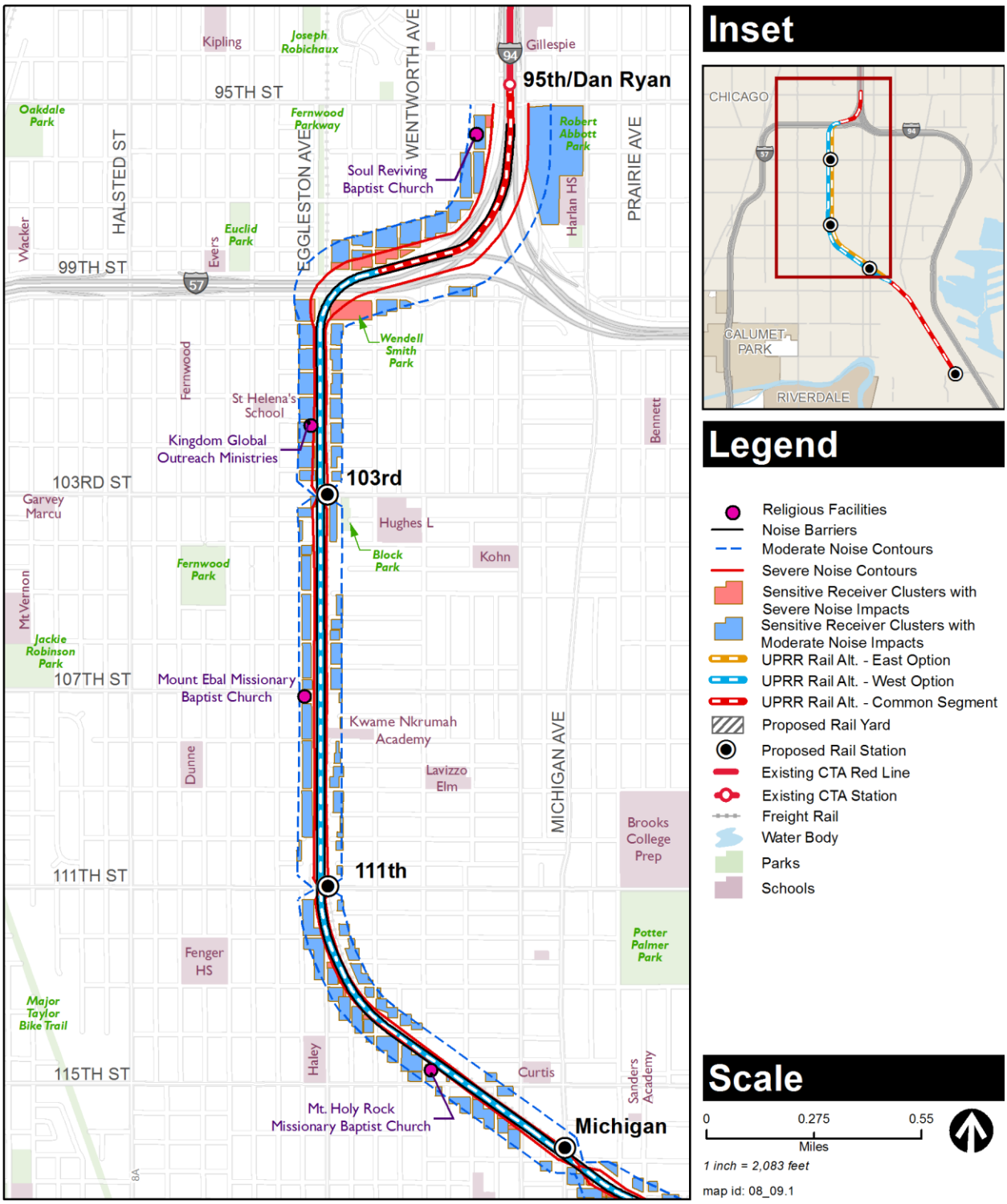

Figure 4-22: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours (1 of 2)

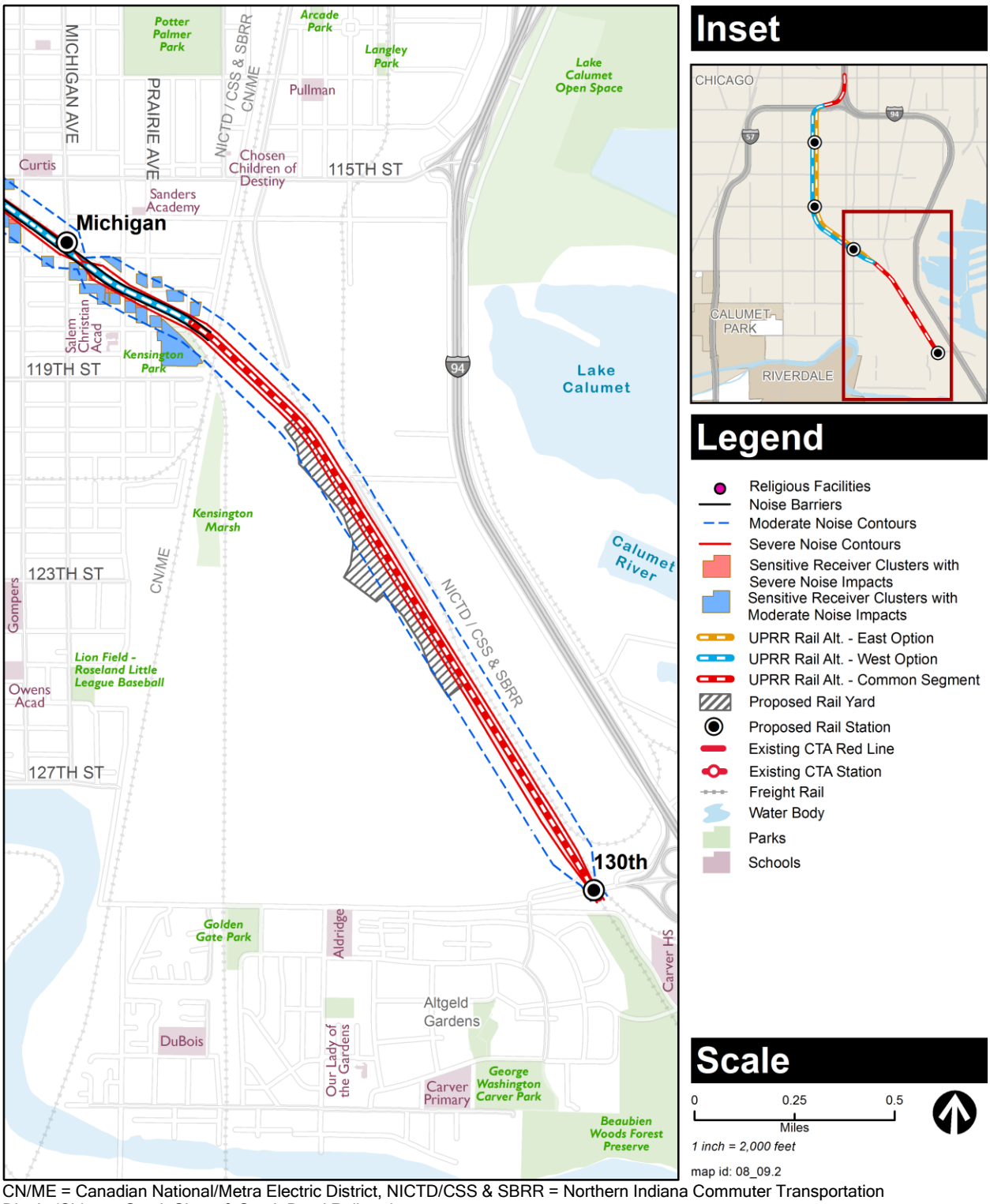

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-23: Union Pacific Railroad Alternative West Option with Moderate (in Blue) and Severe (in Red) Impact Noise Contours (2 of 2)

Permanent Noise Impacts

Residential noise-sensitive receivers on the west side of the corridor would fall within the moderate and severe impact contours of this alternative. There are 738 noise-sensitive receivers within the moderate impact contour: 520 on the west side of the corridor and 218 on the east side of the corridor. A total of 48 noise-sensitive receivers lie within the severe impact contours; all are on the west side of the corridor. Receivers identified as displacements were not counted as being affected.

Impacts on noise-sensitive receivers within the moderate impact contour would occur throughout the majority of the corridor between 99th Street and the CN/ME tracks near 119th Street but with greater concentration along the west side of the corridor. There would be no noise-sensitive residential receivers within the severe impact contour on the east side of the corridor. On the west side of the corridor the noise-sensitive receivers within the severe and moderate impact contours are concentrated in the area northwest of the I-57/I-94 interchange and south of I-57 to 103rd Street. A row of noise-sensitive receivers is within the moderate impact contour between 103rd Street and 112st Street along the east side of Eggleston Avenue. Three churches could be subject to moderate impacts: the Soul Reviving Baptist Church (9837 Perry Avenue), the Kingdom Global Outreach Ministries (10132 S. Eggleston Avenue), and the Mt. Ebal Baptist Church (425 W. 107th Street). Clusters of noise-sensitive receivers fall within the moderate impact contour along both sides of the corridor between 112th Street and the CN/ME tracks near 119th Street. In addition, a few noise-sensitive receivers fall within the severe impact contour along the west side of the corridor between 112th Street and the CN/ME tracks near 119th Street.

The project could result in a severe impact on Wendell Smith Park and a moderate impact on Block Park and Kensington Park before mitigation. Because Fernwood Parkway is identified as a displacement it is not counted as being affected.

The property between State Street and Michigan Avenue south of 115th Street is vacant and there are no noise-sensitive receivers in this area along the corridor. The structures south of the UPRR tracks between State Street and Michigan Avenue are identified as displacements and therefore are not counted as receptors. No impacts are anticipated in the area south of the CN/ME corridor (which crosses the UPRR tracks near 119th Street), because there are no sensitive receivers there. Altgeld Gardens, which is southwest of the 130th Street station location, would not be affected because it falls outside the impact area. **Table 4-14** details the number of affected noise-sensitive receivers between station areas.

Table 4-14: Sensitive Receivers within Moderate and Severe Noise Impact Contours - Union Pacific Railroad Alternative West Option

Area of Impact	West of Track Structure	East of Track Structure	Total
95th Street to 103rd Street	209 Moderate 32 Severe	81 Moderate 1 Severe	290 Moderate 33 Severe
103rd Street to 111th Street	125 Moderate 0 Severe	62 Moderate 0 Severe	187 Moderate 0 Severe
111th Street to Michigan Avenue at 116th Street	145 Moderate 9 Severe	47 Moderate 0 Severe	192 Moderate 9 Severe
Michigan Avenue to CN/ME Tracks near 119th Street	41 Moderate 7 Severe	28 Moderate 0 Severe	69 Moderate 7 Severe
Total	**520 Moderate 48 Severe**	**218 Moderate 1 Severe**	**738 Moderate 49 Severe**

Noise impacts at affected receivers along the project corridor would require mitigation. The project could result in a moderate noise impact on four churches, one park, and residential areas along both sides of the rail corridor. The West Option could result in a severe noise impact on two parks and small, scattered residential areas along the west side along W. 98th Place, between 112th Place and 114th Street, between 115th Street and 116th Street, and between 117th Street and 118th Street. Although the schoolyard at Kwame Nkrumah Academy is within the moderate impact contour, the school building is outside the moderate impact contour; the school building would not have severe or moderate noise impacts. No other schools are within the severe or moderate noise contours.

Mitigation - As described for the East Option, to reduce noise levels below FTA noise impact criteria, CTA would construct a noise barrier approximately 4 feet in height to reduce noise transmission at and below track level. The 4-foot-high noise barrier would provide a 10-dBA reduction in noise along both sides of the elevated track structure from the 95th Street Terminal to the CN/ME tracks near 119th Street. All moderate or severe noise impacts would be resolved with mitigation. No moderate or severe impacts would remain after mitigation, including at Wendell Smith Park.

Permanent Vibration Impacts

The elevated track structure with continuously welded rail would result in vibration levels that would be below the FTA impact criterion of 72 VdB at the residential noise-sensitive receivers along the project corridor. The project would therefore result in no impacts from vibration and no mitigation measures would be required.

Construction Impacts

As it would be for the East Option, the West Option would include construction of an elevated track structure, stations, and parking facilities at the stations. Construction noise impacts would be the same as for the East Option. Construction noise levels are not expected to exceed the FTA-recommended construction noise limits shown in **Table 4-10**.

The construction contractor would employ noise-reducing construction BMPs as described for the East Option. As noted above for the East Option, it was determined from analysis that most of the equipment can be operated without risk of damage from vibration at distances of 15 feet or greater from non-engineered timber and masonry buildings or at distances of 8 feet or greater

from reinforced concrete buildings. Pile-driving would be avoided in the vicinity of the historic Roseland Pumping Station.

Impacts Remaining After Mitigation

With a 10-dBA reduction provided by an approximately 4-foot-high noise barrier, all severe and moderate noise impacts would be resolved with mitigation. Beyond the use of noise-reducing construction BMPs, construction noise mitigation measures would not be required. There would be no vibration impacts; no mitigation measures for vibration are proposed.

4.6 Safety and Security

This section summarizes the safety and security impacts of the East and West Options. The *Safety and Security Technical Memorandum* (**Appendix P**) includes additional details.

Safety refers to freedom from harm resulting from unintentional acts or circumstances (49 CFR § 659.5). Unintentional acts or circumstances include all incidents within the CTA right-of-way (including areas along tracks, in yards, and at stations). Examples of incidents include collisions, derailments, fires, property damage, injuries, and fatalities. *Security* refers to freedom from harm resulting from intentional acts or circumstances (49 CFR § 659.5). Intentional harm includes crimes and must be reported if the intentional act meets thresholds for notification as specified in FTA's State Safety Oversight Rule (49 CFR § 674).

Table 4-15 summarizes safety and security impacts for the East and West Options.

Table 4-15: Safety and Security - Impacts Summary

Alternative	Permanent Impacts		Construction Impacts
	Safety	Security	
No Build	No impacts	No impacts	No impacts
Union Pacific Railroad - East Option	Impacts would not be adverse after mitigation	No adverse impacts	No adverse impacts
Union Pacific Railroad - West Option	Impacts would not be adverse after mitigation	No adverse impacts	No adverse impacts

4.6.1 Regulatory Framework/Methods

Federal safety and security requirements for rail systems are primarily provided in 49 CFR § 659, and through Occupational Safety and Health Administration (OSHA) standards and regulations for providing a safe and healthy workplace (namely the Occupational Safety and Health Act of 1970). Safety and security planning is included in the CTA's *System Safety Program Plan* and *Security Emergency Preparedness Plan*, both of which are required of CTA to comply with provisions under 49 CFR § 659. The CTA's *Infrastructure Design Criteria Manual* also addresses safety and security (CTA 2013b). The standards address system safety, security, fire protection, human factors, reliability, maintainability, configuration management, and quality control. Passenger safety is the highest priority in system safety objectives, along with the safety of CTA

employees. Construction, installation, inspection, and testing procedures are also objectives covered by the standards.

For this Draft EIS, an adverse safety and security impact is defined as one that would cause one or more of the following:

- Creation of the potential for increased major safety or security incidents reportable to FTA
- Failure to meet the applicable design standards where such failure results in a safety or security impact
- Marked increase in safety or security risks on or off the CTA system
- Marked increase in pedestrian and/or public safety incidents in the immediate vicinity of proposed CTA stations
- Marked increase in crime incidents near proposed CTA stations
- Notable increases in calls for police service and/or emergency response time

4.6.2 Existing Conditions

The affected environment for this analysis includes areas that could be affected by impacts on the CTA system (e.g., tracks, vehicles, stations, rail yards) and impacts within ½ mile of stations. The ½-mile distance is used as an approximation of the distance most patrons will walk to a station and is therefore used when evaluating general pedestrian safety and security in the surrounding neighborhood.

Groups covered in the affected environment include transit passengers, operators, employees, contractors, and the general public. Members of these groups all come in contact with the system in some way, and could be susceptible to safety and security impacts. The main pedestrian safety risk in the project area is from motor vehicle crashes.

4.6.3 Environmental Consequences

The following sections summarize the potential safety and security impacts of each alternative.

4.6.3.1 No Build Alternative

There would be no permanent or construction-related safety and security impacts for the No Build Alternative.

4.6.3.2 Union Pacific Railroad Alternative - East Option

Permanent Impacts

The proposed stations would generate a large amount of pedestrian traffic, causing an increase in the number of pedestrians crossing streets to access the stations. At most stations, the controlled intersections (signals or all-way stops) nearest to proposed station locations are approximately one block away. It is likely that pedestrians would want to cross the streets immediately adjacent to station entrances, particularly to access the nearest available bus stops (assumed to be adjacent to stations). A large number of pedestrians would be expected to cross the major streets without

positive traffic control (marked crosswalks or signalized intersections with pedestrian countdowns), which would be an adverse impact on pedestrian safety.

During the NEPA scoping process, the public expressed concern regarding the potential for increased crime surrounding proposed stations because of the higher volume of people accessing the stations. Based on data from transit stations in Chicago and across the United States, the new stations would be unlikely to have much, if any, impact on neighborhood crime (Plano 1993, Denver Regional Transportation District 2006, Liggett et al. 2003, San Diego Association of Governments 2007, Block and Davis 1996); however, research indicates that some risk would remain, particularly in low-income neighborhoods (Ihlanfeldt 2003).

Mitigation - CTA would prepare a Threat and Vulnerability Assessment, which would identify security threats in the transit system and make recommendations to reduce those threats. If warranted by an engineering traffic study, CTA may install traffic signals to mitigate pedestrian safety impacts. To further mitigate impacts and improve pedestrian safety, CTA would consider installation of security surveillance cameras, alarm notifications (e.g., flashing blue lights), sidewalk lighting in the immediate vicinity of station entrances, pedestrian crossing treatments, such as refuge medians with appropriate signage, and police patrols. To mitigate adverse safety impacts at the roadway-railroad grade crossings, CTA would install safety cameras and would consider installing additional passive or active safety devices to enhance the safety devices already in place at existing grade crossings. Additional audible warning devices or non-mountable curbs are examples of other safety measures for at-grade railroad crossings. CTA would install fencing to deter pedestrians from crossing the freight railroad tracks in places other than the designated locations. At the park & ride facilities, CTA would install surveillance cameras and controlled entry and exit access. The impacts would not be adverse after mitigation measures are implemented.

Construction Impacts

For any major capital project, CTA has a construction contract that requires the contractor to protect CTA's project site and all adjacent properties, and to take all necessary precautions for the safety of all persons on or near the project site. This requirement includes provisions to render all portions of the work secure in every respect and to decrease the possibility of, or liability for, accidents. The construction contractor would be required to have an approved Health and Safety Plan and a Safety and Security Plan in place before the start of any construction work. The Safety and Security Plan would describe protection to be provided by the contractor for its employees, CTA passengers and employees, and the general public. The project contractor would follow OSHA requirements and would comply with CTA's *Safety and Security Management Plan* (CTA 2011).

The elevated CTA rail line would be constructed adjacent to the existing, at-grade freight railroad line. Completing construction adjacent to an active freight rail line could create construction safety risks but impacts would not be adverse. The Safety and Security Plan would include the use of UPRR flaggers throughout the construction period, who would ensure that freight trains and on-track equipment pass safely through the work site without delays. The *Construction Impacts Technical Memorandum* (**Appendix I**) provides additional details regarding these potential impacts.

During the NEPA scoping process, CTA received comments regarding the ability of first responders to access construction sites and to have access through construction sites. The East Option would require lane closures on the expressways and temporary street closures during construction activities. Emergency services would have access to construction sites at all times and would access construction sites in the same way as contractors, by using various side streets and recommended detours. Emergency services wishing to cross tracks would have to use recommended detours, just as with any roadway construction project. The impacts would not be adverse.

During final design of the project and as a requirement for the project, CTA would prepare traffic management and maintenance of traffic plans that identify traffic detours and emergency access routes. CTA would coordinate traffic management with the FHWA, IDOT, Cook County Department of Transportation and Highways, the Office of Emergency Management and Communications, and CDOT. Contractors would follow the MUTCD design standards for temporary traffic control and would obtain all required local permits. Contractors would also create a public safety plan with local law enforcement officers for the construction site.

Impacts Remaining After Mitigation

Installation of new traffic signals and/or other pedestrian crossing treatments would reduce adverse impacts to a level that would be less than adverse. There would be no adverse permanent or construction-related impacts on safety and security for the East Option after mitigation measures are implemented.

4.6.3.3 Union Pacific Railroad Alternative - West Option

Permanent Impacts Remaining After Mitigation

The impacts for the West Option would be similar to those of the East Option. The park & ride facility locations would, however, differ from those of the East Option. The park & ride facilities for the West Option would be located on the same side of the railroad tracks as the proposed stations. These locations would result in fewer pedestrians crossing the railroad tracks than with the East Option. The presence of new stations adjacent to the roadway-railroad grade crossing would be an adverse impact at 103rd and 111th Streets. Like the East Option, the West Option would generate additional motor vehicle traffic and pedestrian traffic accessing the stations. The increase in traffic volume would result in increased likelihood of crashes at the roadway-railroad grade crossings. The increased likelihood of crashes would result in an adverse impact on the safety of the roadway-railroad grade crossings.

Mitigation - Mitigation measures would be same for the West Option as for the East Option. The impacts would not be adverse after mitigation measures are implemented.

Construction Impacts

The construction-related impacts would be the same for the West Option as for the East Option. As described for the East Option, the construction contractor would be required to have an approved Health and Safety Plan and a Safety and Security Plan in place before the start of any construction work.

Impacts Remaining After Mitigation

Installation of new traffic signals and/or other pedestrian crossing treatments would reduce adverse impacts to a level that would be less than adverse. There would be no adverse permanent or construction-related impacts on safety and security for the West Option after mitigation measures are implemented.

4.7 Historic and Cultural Resources

This section summarizes the draft findings under Section 106 of the National Historic Preservation Act (NHPA) and in coordination with the State Historic Preservation Office (SHPO) of the Illinois Historic Preservation Agency and consulting parties to the Section 106 process.

The structure of this section is slightly different than other sections in the Draft EIS, to fully document the process and consultation required under Section 106. In addition, the term "effects" is used in this section rather than "impacts" because of the unique requirements and terminology related to historic resources. The *Historic and Cultural Resources Technical Memorandum* (**Appendix Q**) includes additional details. **Table 4-16** summarizes the effect findings for historic and cultural resources.

Table 4-16: Historic and Cultural Resources - Effects Summary

Alternative	Effects
No Build	No effects
Union Pacific Railroad - East Option	No Adverse Effect finding for one resource
Union Pacific Railroad - West Option	No effects

4.7.1 Regulatory Framework/Methods

Cultural and historic resources are protected by various federal regulations; Section 106 of the NHPA requires federal agencies to consider effects on historic resources from their actions and to balance preservation needs with the need for the actions. As provided in 36 CFR § 800, the Section 106 process "seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation" (36 CFR § 800.1(a)). The goal of the consultation is to identify historic properties potentially affected by the undertaking, assess project effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

For the Section 106 assessment of historic and archaeological resources, FTA and CTA conducted a four-step process following requirements of 36 CFR § 800:

1. **Define the Area of Potential Effects** - FTA and CTA first determined an area of potential effects (APE) for cultural/historic resources. The APE is defined as the geographic area within which the project may cause alterations in the character or use of historic properties (36 CFR § 800.16(d)). Development of the APE involved site visits and a review of aerial photography images and conceptual engineering drawings for the alternative.

2. **Identify Historic and Archaeological Resources** - After an extensive records check, representative samples within the APE footprint were field-surveyed to identify any archaeological resources and historic resources that meet National Register of Historic Places (NRHP) criteria. Representative samples were used to determine effects on similar properties on a block-by-block basis. The properties included in the representative sample were determined using GIS databases provided by the City of Chicago, the Historic and Architectural Resources Geographic Information System, online mapping resources, SHPO records, and field visits. Additional details about the definition of the representative sample, and resources in it, are included in the *Historic and Cultural Resources Technical Memorandum* (**Appendix Q**). NRHP criteria are defined in 36 CFR § 60.4 and apply to districts, sites, buildings, structures, or objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association with one or more of the following four criteria:

   - Criterion A - Events that have made a significant contribution to the broad patterns of American history on a federal, state, and/or local level
   - Criterion B - Lives of persons significant in the history of the city, state, and/or the United States
   - Criterion C - Distinctive characteristics of a type, period, or method of construction, or the work of a master, or high artistic values, or a significant and distinguishable entity whose components may lack individual distinction
   - Criterion D - Information important in prehistory or history

   FTA and CTA identified properties listed on the NRHP, local landmarks, and Chicago Historic Resources Survey (CHRS) "Red" and "Orange"-rated[6] buildings (properties with locally designated historic importance). FTA and CTA conducted background research to assist this process, using the Historic and Architectural Resources Geographic Information System and city records, fire insurance and other historic maps, the CHRS, previous architectural studies in the area, and other relevant scholarly publications. No properties or districts currently listed on the NRHP are present in the APE.

3. **Assess Effects on Historic and Archaeological Resources** - FTA and CTA assessed effects for each evaluated resource that was listed in the NRHP or determined eligible for listing. The effects analysis referenced other technical memoranda prepared for the project (for topics such as displacements, noise, and visual impacts) and focused on how

[6] The CHRS is an inventory of architecturally and historically significant buildings in the City of Chicago that uses a color-coded ranking system used to identify historic and architectural significance relative to age, degree of external physical integrity, and level of possible significance. The two highest color codes are "Red" and "Orange." These types of local historic resources are subject to the City of Chicago's Demolition-Delay Ordinance. "Red" or "Orange"-rated properties were identified as possessing some architectural feature or historical association that made them potentially significant in the context of the surrounding community.

the alternative might alter the characteristics that qualify properties for inclusion in the NRHP.

4. **Resolve any Adverse Effects** - FTA and CTA will develop any necessary mitigation measures through consultation with the SHPO and other consulting parties to address adverse effect determinations.

A number of parties have a consultative role in a project considered an undertaking under Section 106. **Section 4.7.2** provides a summary of the consultation process conducted to date, as well as a list of invited and consulting parties.

4.7.2 Section 106 Consultation Process

In August 2012, FTA sent invitation letters to 11 Native American tribes to inform them of the process and request assistance in identifying areas with potential cultural and/or religious significance. Also in August 2012, CTA sent invitation letters to 19 state and local level preservation interest groups to inform them of the project and invite them to participate in the upcoming consultation process. FTA and CTA sent invitation letters to the following recipients:

Native American Tribes

- Ho-Chunk Nation
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Sac and Fox Nation of Oklahoma
- Pokagon Band of Potawatomi Indians
- Prairie Band of the Potawatomi Nation
- Citizen Potawatomi Nation
- Forest County Potawatomi Nation
- Potawatomi Nation
- Sac and Fox Nation of Mississippi in Iowa
- Sac and Fox Nation of Missouri

State and Local Preservation Groups

- SHPO
- Advisory Council on Historic Preservation
- Illinois State Museum
- Illinois State Archaeological Survey
- City of Chicago Department of Planning and Development's Historic Preservation Division
- Preservation Chicago
- Landmarks Illinois
- Chicago Historical Society
- Ridge Historical Society
- Beverly Area Planning Association
- East Beverly Association
- Rosemoor Community Association
- Cottage Grove Cottage Grove Heights Community Coalition
- Historic Pullman Foundation
- South Suburban Genealogical and Historical Society
- Chicago Neighborhood Initiatives
- Neighborhood Housing Services of Chicago
- Mercy Housing Lakefront
- Friends of the Parks

At present, 11 groups are participating in the process. The consulting parties include the SHPO, the City of Chicago Department of Planning and Development's Historic Preservation Division, Preservation Chicago, Landmarks Illinois, the Ridge Historical Society, the Rosemoor Community Association, Friends of the Parks, Chicago Neighborhood Initiatives, Neighborhood Housing Services of Chicago, DCP, and the Chicago Park District.

On October 24, 2012, FTA and CTA held a webinar on RLE historic properties to introduce the project and initiate the consultation process. During the eligibility phase of consultation, properties and districts that were identified as eligible for listing on the NRHP were discussed. Properties over 50 years old in the APE were evaluated to determine whether they are NRHP-eligible under one of the four National Park Service Criteria for Evaluation mentioned above.

FTA and CTA provided draft materials on the identification of NRHP-eligible properties to consulting parties on January 4, 2013, in compliance with Section 106 of the NHPA. A 30-day comment period followed, with an in-person meeting on January 30, 2013 to facilitate discussion among consulting parties. The meeting was followed by an informal tour of the corridor that afternoon. As part of this phase of coordination, CTA received written comments from six consulting parties. Comments received from consulting parties in regards to eligibility focused on requesting additional surveys of resources, potential districts that should be considered recommended as eligible, reconsideration of surveyed properties and their eligibility, and the importance of looking at resources in the historical/social context.

As part of the eligibility phase, CTA surveyed 541 potentially eligible resources within the APEs for all alternatives being studied at the time (the BRT, UPRR, and Halsted Alternatives). As a result of the field investigations and comments received from consulting parties on potentially eligible resources, for the BRT, UPRR, and Halsted Alternatives, 15 total resources were identified as eligible for inclusion on the NRHP, including 13 individual buildings and 2 historic districts. Specifically for the UPRR Alternative, CTA surveyed 280 potentially eligible resources within the UPRR Alternative APE. As a result of the field investigations and comments received from consulting parties on potentially eligible resources, 7 total resources were identified for the UPRR Alternative as eligible for inclusion on the NRHP, including 6 individual buildings and 1 historic district.

FTA and CTA mailed a Draft Effects Report to consulting parties on April 18, 2014, requesting any written comments by May 23, 2014. On May 8, 2014, FTA and CTA met with consulting parties to discuss potential project effects on NRHP-eligible historic properties. CTA received written comments from four consulting parties. Comments received from consulting parties regarding assessments of effects included eligibility reconsiderations, effects reconsiderations, and requests for renderings for properties in the APE. Comments also related to effects associated with the Halsted Alternative and UPRR 130th Street West Station Option, both of which have been eliminated from further consideration (see **Section 2.4** for additional details).

From 2012–2014, CTA evaluated and took consulting party comments on four alternatives as part of the Section 106 consultation process: the No Build Alternative, the BRT Alternative (along Michigan Avenue), the UPRR Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Alternative in the Section 106 consultation process: the Right-of-Way Option, the East Option, and the West Option. CTA also evaluated two options of the UPRR Alternative 130th Street station as part of the Section 106 consultation process: a South Station Option and a West Station Option. CTA developed separate APEs for each alternative and the Section 106 analysis and consultation was performed during 2012–2014 on all those alternatives and options.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Alternative. While CTA had originally considered a UPRR Right-of-Way Option, this option was subsequently removed, as it is no longer feasible. In addition, CTA is now considering only the South Station Option of the 130th Street Station. Further details on the alternatives evaluated and eliminated through the Draft EIS process are presented in **Section 2.4**. Additional conceptual engineering was conducted on the UPRR Alternative to refine the East and West Option alignments.

CTA provided responses to all consulting party comments received in May 2014 on November 24, 2014. Responses noted that the alternatives had been further narrowed and that the UPRR Alternative (East and West Options) were proposed to move forward as the NEPA Preferred Alternative. The consulting parties requested renderings at the Roseland Pumping Station and the 130th Street station near Altgeld Gardens. CTA has developed these renderings; they are included as **Figure 4-25** and **Figure 4-26**.

As noted above, CTA developed separate APEs for each alternative considered through the Section 106 consultation process. Based on the further narrowing of alternatives and additional conceptual engineering, FTA and CTA revised the APE accordingly as shown in **Figure 4-24**. The revised APE encompasses no new effects from the UPRR Alternative compared to what was presented during consultation. In correspondence to the SHPO dated September 21, 2016, and as described in **Section 4.7.4**, FTA described the revised project APE and made the determination that the UPRR Alternative (East and West Options) would result in no adverse effects. The September 21, 2016 correspondence to the SHPO is included in **Appendix Q**. The SHPO's concurrence with FTA's determinations is pending. Coordination with the SHPO will continue through the remainder of the project.

Appendix Q contains a full summary of the meetings, comments received, and responses to comments. The *Eligibility and Effects Summary Report* included as part of **Appendix Q** contains a concise summary of the NEPA Preferred Alternative APE as well as the eligibility and effects determinations made through the development of the project to date. In regards to the NEPA Preferred Alternative, information in the *Eligibility and Effects Summary Report* supersedes the eligibility and effects information provided in the text of the *Historic and Cultural Resources Technical Memorandum* (**Appendix Q**).

4.7.3 Existing Conditions

Figure 4-24 is a map of the revised APE and NRHP-eligible resources for the UPRR Alternative. Generally, the APE contains parcels within one block of the centerlines of the East and West Option alignments, as well as the areas immediately surrounding the park & ride and the yard and shop sites. Within the limits of the APE for the UPRR Alternative, CTA surveyed 280 individual resources. As a result of the field investigations and comments received from consulting parties on potentially eligible resources, 7 total resources were identified for the UPRR Alternative as eligible for inclusion on the NRHP, including 6 individual buildings and 1 historic district. **Table 4-17** summarizes historic resources within the APE. The *Eligibility and Effects Summary Report* (**Appendix Q**) contains a full description of the eligible resources within the APE as well as a discussion of historic and cultural resources that are locally designated.

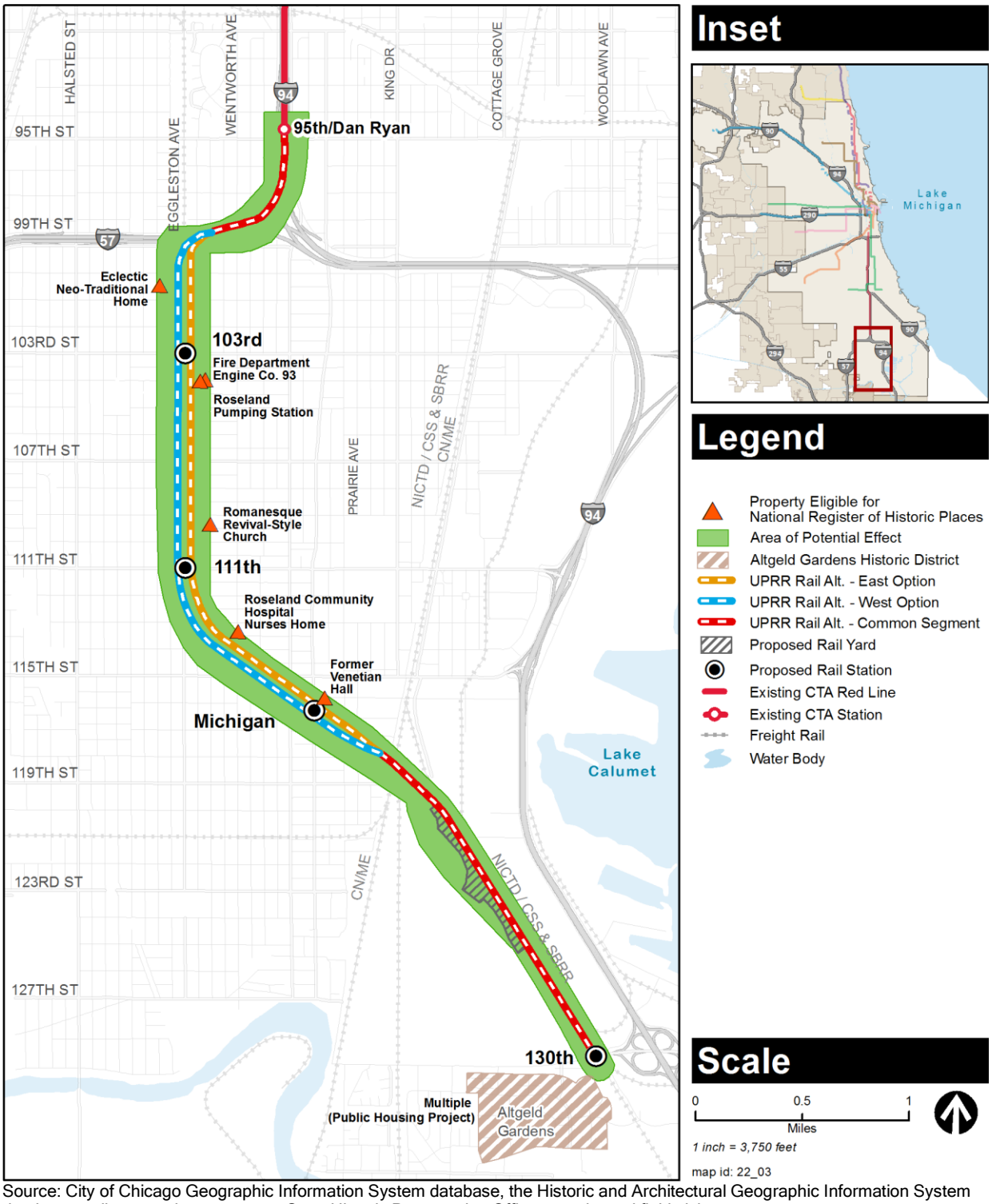

Source: City of Chicago Geographic Information System database, the Historic and Architectural Geographic Information System database, online mapping resources, State Historic Preservation Office records, and field visits
CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-24: NRHP-Eligible Resources in the Area of Potential Effects

Table 4-17: NRHP-Eligible Resources in the Area of Potential Effects

ID	Address	Description	NRHP Eligibility Criteria	Community Area
1	444 W. 100th Place	Eclectic Neo-Traditional Home (built 1930)	Criterion C	Washington Heights
2	324 W. 104th Street	Fire Department Engine Company 93 (built 1917)	Criterion C	Roseland
3	351 W. 104th Street	Roseland Pumping Station (built 1911)	Criterion C	Roseland
4	10920 S. Princeton Avenue	Romanesque Revival-Style Church (built 1916)	Criteria A and C	Roseland
5	11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home (built 1930s)	Criterion A	Roseland
6	133-139 E. Kensington Avenue	Former Venetian Hall (built 1925)	Criterion A	Riverdale
7	Multiple (Public Housing Project)	Altgeld Gardens Historic District (built 1945)	Criterion A	Riverdale

NRHP = National Register of Historic Places

Beyond the NRHP-eligible resources, four properties within the APE are identified as notable "Orange" in the CHRS, three of which have also been identified as NRHP-eligible:

- Fire Department Engine Company 93 at 324 W. 104th Street (NRHP-eligible, ID #3)
- Roseland Pumping Station at 351 W. 104th Street (NRHP-eligible, ID #4)
- Romanesque Revival-style church at 10920 S. Princeton Avenue (NRHP-eligible, ID #5)
- St. Salomea Church at 11800–11808 S. Indiana Avenue

These CHRS "Orange"-rated resources are protected by the City's 2003 Demolition-Delay Ordinance. As none of the CHRS "Orange"-rated resources are proposed for demolition under either the East or West Option, this ordinance is not discussed further.

Eight public parks were also surveyed for potential NRHP eligibility, but none were found to be eligible. The *Historic and Cultural Resources Technical Memorandum* (**Appendix Q**) contains additional discussion on public parks surveyed.

A records search was conducted by cultural resource specialists and no known archaeological sites exist within the APE (see also **Appendix Q**). Although the landscape through which the transit lines would pass is developed, additional archaeological sites may remain undiscovered within protected locations such as parks and gardens. Once the project design has been further refined and before the Final EIS is published, archaeological investigations will occur within areas of ground disturbance for the selected option to determine whether potential resources are present. These investigations will follow the guidelines issued by the State of Illinois.

4.7.4 Environmental Consequences

Section 106 regulations state that if there are historic properties in the APE that may be affected by a federal undertaking, the agency official will assess adverse effects, if any, in accordance with the Criteria of Adverse Effect described in 36 CFR § 800.5. As stated in the regulation, an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR § 800.5(a)(1)). Effects can be direct, indirect, or cumulative (36 CFR § 800.5(a)(1)). The following sections summarize the potential effects on historic districts and properties that are eligible for NRHP listing. Effects are not separated into temporary construction and permanent categories because adverse effects on historic resources would be permanent regardless of whether they occur during or after construction of the project.

4.7.4.1 No Build Alternative

No adverse effects on historic and cultural resources would result from implementation of the No Build Alternative; therefore, no mitigation measures would be required.

4.7.4.2 Union Pacific Railroad Alternative - East Option

The East Option would cause displacements and visual, noise, and other environmental effects within the APE, but none of these effects would alter the characteristics that qualify any of the identified historic resources for inclusion on the NRHP. No mitigation measures would be required. Because none of the NRHP-eligible resources in the APE would be directly affected (they would not be displaced or altered), each resource was evaluated for potential visual effects from the aerial structure, stations, and parking facilities. **Table 4-18** summarizes the effects findings for each historic resource in the APE for both the East and West Options.

Table 4-18: NRHP-Eligible Resources in the Area of Potential Effects - Union Pacific Railroad Alternative East and West Options

ID	Description	Union Pacific Railroad Alternative East Option Effects Finding	Union Pacific Railroad Alternative West Option Effects Finding
1	Eclectic Neo-Traditional Home	No Historic Properties Affected	No Historic Properties Affected
2	Fire Department Engine Company 93	No Historic Properties Affected	No Historic Properties Affected
3	Roseland Pumping Station	No Adverse Effect	No Historic Properties Affected
4	Romanesque Revival-Style Church	No Historic Properties Affected	No Historic Properties Affected
5	Roseland Community Hospital Nurses Home	No Historic Properties Affected	No Historic Properties Affected
6	Former Venetian Hall	No Historic Properties Affected	No Historic Properties Affected
7	Altgeld Gardens Historic District	No Historic Properties Affected	No Historic Properties Affected

NRHP = National Register of Historic Places

Notes:

A "No Adverse Effect" determination is found when the project's effects would not meet the criteria of adverse effect, the undertaking is modified, or conditions are imposed to avoid adverse effects, as described in **Appendix Q**.

A "No Historic Properties Affected" determination is found when the project would have no impact on a particular historic resource. This language is equivalent to the determination of "No Effect" as used in **Appendix Q**, but has been changed to be consistent with the official Section 106 determination documentation coordination with the SHPO.

Figure 4-25 is a photo simulation of the East Option track structure that would be adjacent to the Roseland Pumping Station. The track structure would be approximately 9 feet west of the Roseland Pumping Station at its nearest point. The final horizontal clearance would be determined in the design phase after property and topographic survey. The pumping station would not be displaced or directly affected by the UPRR Alternative; therefore, the East Option is anticipated to have no adverse effect. The resource was recommended eligible under Criterion C for its architecture as an excellent example of a well-preserved community pumping station designed in the Prairie Style that still functions in its original use. The building retains much of its original design, materials, and workmanship, including its projecting two-story flat-roofed entrance pavilion with geometric limestone details and coping. The proposed project would not affect these characteristics and would preserve the property's entrance approach. The changes in setting and feeling brought on by the proposed project would not detract from the architectural aspects of the building that qualify the resource as eligible for NRHP listing. Pile-driving activities would be avoided in the vicinity of the pumping station.

Figure 4-25: Photo of Existing Conditions and Photo Simulation of the Union Pacific Railroad Alternative East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue

The 130th Street station would be approximately 800 feet from Altgeld Gardens Historic District at its closest point and the parking garage at the 130th Street station would be located at a distance away from Altgeld Gardens where the size of the structure would not create a visual impact; therefore, the 130th Street station and parking garage would not affect the Altgeld Gardens Historic District. **Figure 4-26** shows a view of the 130th Street station and parking structure from Altgeld Gardens.

Figure 4-26: Photo of Existing Conditions and Photo Simulation of the 130th Street Station and Parking Garage, Facing Northeast on E. 130th Place

4.7.4.3 Union Pacific Railroad Alternative - West Option

Like the East Option, the West Option would cause displacements and visual, noise, and other environmental effects within the APE, but none of these effects would alter the characteristics that qualify any of the identified historic resources for inclusion on the NRHP. No mitigation measures would be required.

4.8 Hazardous Materials

This section summarizes the potential for encountering hazardous materials during operation and construction of the UPRR Alternative. Hazardous materials may include petroleum products, pesticides, organic compounds, heavy metals, asbestos-containing materials, lead-based paint, or other compounds that could harm human health or the environment (42 CFR § 9601). The nature

and extent of contamination can vary widely. Early detection, evaluation, and determination of appropriate remediation of hazardous materials are essential to avoid or minimize the potential for hazardous material impacts from the project. The *Hazardous Materials Technical Memorandum* (**Appendix R**) contains additional details. **Table 4-19** summarizes the impact findings related to hazardous materials.

Table 4-19: Hazardous Materials - Impacts Summary

Alternative	Permanent Impacts	Construction Impact
No Build	No impacts	No impacts
Union Pacific Railroad - East Option	Benefits	No adverse impacts
Union Pacific Railroad - West Option	Benefits	No adverse impacts

4.8.1 Regulatory Framework/Methods

Although NEPA requires an evaluation of potential impacts related to hazardous materials, it does not define impact analysis thresholds for determining potential adverse impacts. For the purposes of this impact analysis, a hazardous material impact would be considered adverse if it would result in the following:

- Harm to human health or the environment through the routine transport, use, or disposal of hazardous materials
- Harm to human health or the environment through the accidental release of hazardous materials into the environment

Federal and state laws have been established for the protection of human health and the environment. At the federal level, the regulations include the following: the Resource Conservation and Recovery Act (RCRA) (40 CFR § 239–282); the Comprehensive Environmental Response, Compensation, and Liability Act (42 CFR § 9601); the Superfund Amendments and Reauthorization Act (42 CFR § 9601); the Clean Air Act (42 CFR § 7401); the Toxic Substances Control Act (15 USC § 2601); and the federal Occupational Safety and Health Act (29 USC § 651). At the state level, regulations and programs include the Illinois Environmental Protection Act and the Illinois Occupational Safety and Health Program, with oversight by the Office of the State Fire Marshal. Locally, the City of Chicago Police Department, City of Chicago Fire Department, and Department of Public Health regulate and oversee issues related to hazardous material.

A review of federal, state, and local regulatory databases was conducted by Environmental Data Resources, Inc. (EDR) to identify sites that currently or have historically handled, stored, transported, released, or disposed of hazardous or regulated materials, as these types of sites are potential sources of hazardous material contamination. In addition, historical Sanborn® fire insurance maps, topographic and aerial photographs, and other sources were reviewed for the analysis (EDR 2012a, Historical Information Gatherers, Inc. 2012a, 2012b, and 2012c).

Specific sites within ¼ mile of the project alignment, where hazardous materials are known or suspected to exist, were evaluated for the potential for hazardous materials to be present. Each site was assigned a level of concern based on the following criteria:

- **High Concern** - Sites with known/probable soil, groundwater, or soil gas contamination that have not been remediated, or where remediation was incomplete or undocumented. Other considerations include the type and mobility of any contamination, distance to the project, and groundwater impacts.

- **Moderate Concern** - Sites with known/potential soil, groundwater, or soil gas contamination and where remediation is in progress or was completed with restrictions in place, or contaminants do not appear to pose a concern for the project. Sites may also be considered a Moderate Concern based on the type and intensity of former land use (e.g., chemical manufacturers, machine shops, gas stations, laundromats), even though they did not otherwise have an environmental database listing.

- **Low Concern** - Sites where hazardous materials or petroleum products may have been or are stored, but where there is no known contamination associated with the property based on all available information. They may include hazardous material generator sites, sites with permitted air toxic emissions, or sites with spills or leaks that were subsequently remediated and are no longer a concern.

Polychlorinated biphenyls, lead-based paint, and asbestos-containing material are likely to occur in transformers and buildings constructed before 1978–1979. The evaluation of potential impacts associated with the other sources of hazardous materials was limited to determining whether transformers and buildings potentially constructed before 1978–1979 were present.

4.8.2 Existing Conditions

EDR conducted a search of federal, state, and local environmental regulatory databases on August 10, 2012 to identify potential sites of concern within ¼ mile of the project limits (EDR 2012b). Using the impact analysis criteria described above, CTA reviewed the sites identified by EDR and classified them as High, Moderate, or Low Concerns based on their potential to act as a source of contamination to the project. All sites not identified as High or Moderate Concern sites were classified as Low Concern sites. In addition, the list of orphan sites (sites reported as potentially being in the project area, but which could not be mapped due to inadequate or incomplete address information) was reviewed and when possible, classified. CTA used the historic research review and additional information requested from the Illinois Environmental Protection Agency (IEPA) on specific sites to determine the classification for each site.

The review identified 17 High Concern sites within ¼ mile of the East and West Option alignments (see **Table 4-20** and **Figure 4-27**). These sites have the highest potential to affect the RLE Project. The review also identified 18 Moderate Concern sites and 7 Low Concern sites near the alignment. Because it is unlikely that the Moderate and Low Concern sites would affect the RLE Project, they are not discussed here. **Appendix R** contains additional details about all identified sites.

Table 4-20: Identified High Concern Sites

EDR Site ID[1]	Map ID	EDR Database Site Name	Site Address	Approximate Separation Distance[2]	Databases[3]
8	8	Shell Oil Co.	4 E. 95th Street	250 feet (E and W)	LUST (No. 871758 Non-LUST deter.), UST (3 in use)
10	10	Abbott Park Fieldhouse	49 E. 95th Street	200 feet (E and W)	LUST (No. 932467 open; No. 932446 open), UST (removed), SPILLS[5]
51	51	Illinois Bell Telephone	413 W.105th Street	Adjacent (E); Within (W)	LUST (No. 880112 NFR), UST (3 removed)
70	70	William Ransom Transportation/ Bus Garage	352 W. 110th Street	Within (E); 110 feet (W)	LUST (No. 990399 open), UST (removed), SPILLS, RCRA-CESQG, ERNS
81	81a	Pentecostal Temple Church Of God	415 to 419 W. 111th Street	85 feet (E); 75 feet (W)	LUST (No. 912233 open; No. 913417 open), SPILLS, RCRA-SQG
103	103	Cox, Donna	2 W. 115th Street	175 feet (E); NA (W)	LUST (No. 980685 open; No. 201110008 open), UST (2 exempt), SPILLS
104	104	Triangle Transmission	35 W.115th Street	Within (E); 130 feet (W)	LUST (No. 992324 open), UST (2 exempt), SPILLS, RCRA-SQG
105	105	City of Chicago/ Abandoned Service Station	11500 S. Perry Avenue	160 feet (E); Within (W)	LUST (No. 20002342 non-LUST determination), UST (4 exempt)
122	122	Stuart Industrial Coatings, Inc.	11740 S. Front Street	Within (E and W)	LUST (No. 900054 open)
135	135	Lake Calumet Smelting	11901 S. Champlain Avenue	500 feet (E and W)	CERCLIS (referred to removal - NFRAP)
143	143	Bulkoa Inc./ Schneider Tank Lines, Clean Harbors Env. Services/ Bulkoa, Inc.	11861 S. Cottage Grove Avenue	290 feet (E and W)	LUST (No. 971905 NFR), UST (4 removed, 3 exempt), RCRA-CESQG
147	147a	Quala Services, LLC	803 E.120th Street	325 feet (E and W)	RCRA-LQG (violations), SPILLS
151, 162	151/ 162	Keywell, LLC	11900 Cottage Grove Avenue	Within (E and W)	LUST (No. 902351 NFR; No. 942202 non-LUST determination), UST (2 removed), SPILLS, RCRA-CESQG
200	200	MWRD Metropolitan Water Reclamation Di/Calumet Water Reclamation Plant	400 E.130th Street	Within (E and W)	UST (3 in use), RCRA-CESQG
Orphan[4]	O1	US Scrap	123rd Street and Cottage Grove Avenue	1,000 feet (E and W)	UST (3 in use), RCRA-CESQG

EDR Site ID[1]	Map ID	EDR Database Site Name	Site Address	Approximate Separation Distance[2]	Databases[3]
Orphan[4]	O3	Metro Sanitary District #3	125th Street and Doty Avenue	350 feet (E and W)	CERCLIS-NFRAP (archived)
Orphan[4]	O4	Penn Central Corp	810 E.124th Street	Within (E and W)	SSU (transferred to IEPA's Office of Site Evaluation)
		Lake Calumet Quad			CERCLIS-NFRAP (archived)

[1] Environmental Data Resources, Inc. (EDR) Site ID is the site ID number provided in the EDR database report included with the *Hazardous Materials Technical Memorandum*. More than one site has the same EDR Site ID; therefore, each High Concern site was given a unique "Map ID," used in **Figure 4-27**.

[2] Separation distance is measured from the edge of the permanent envelope for an alternative. "Within" means the site would be inside the permanent envelope. E=East Option, W=West Option, NA = High Concern classification is not applicable to that option.

[3] The databases listed are those that contributed information relevant to the site's designation as a High Concern site. See the *Hazardous Materials Technical Memorandum* (**Appendix R** of this Draft EIS) for more information.

[4] Orphan sites are reported as potentially being in the project area but could not be mapped due to inadequate or incomplete address information.

CERCLIS = Comprehensive Environmental Response, Compensation and Liability Information System, CESQG = conditionally exempt small quantity generators, ERNS = Emergency Response Notification System, IEPA = Illinois Environmental Protection Agency, LQG = large quantity generator, LUST = leaking underground storage tank, NFR = No Further Remediation, NFRAP = No Further Remedial Action Planned, NPL = National Priority List, PRP = potentially responsible party, RCRA = Resource Conservation and Recovery Act, SPILLS = Spill Incident List, SQG = small quantity generator, SRP = Site Remediation Program, SSU = State Sites Unit, UST = underground storage tank

The majority of these sites were classified as High Concern due to both their proximity (typically inside or within 500 feet of an alternative's permanent envelope) and being listed in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), or being listed as RCRA Corrective Action Sites, CERCLIS-No Further Remedial Action Planned Sites (CERCLIS-NFRAP), Illinois State Sites Unit Listing (SSU) sites, and/or as open Leaking Underground Storage Tank (LUST) sites or Site Remediation Program (SRP) sites. Open LUST or SRP sites have not been issued a No Further Remediation (NFR) letter from the IEPA, which indicates that a release has been identified but remediation is likely not complete.

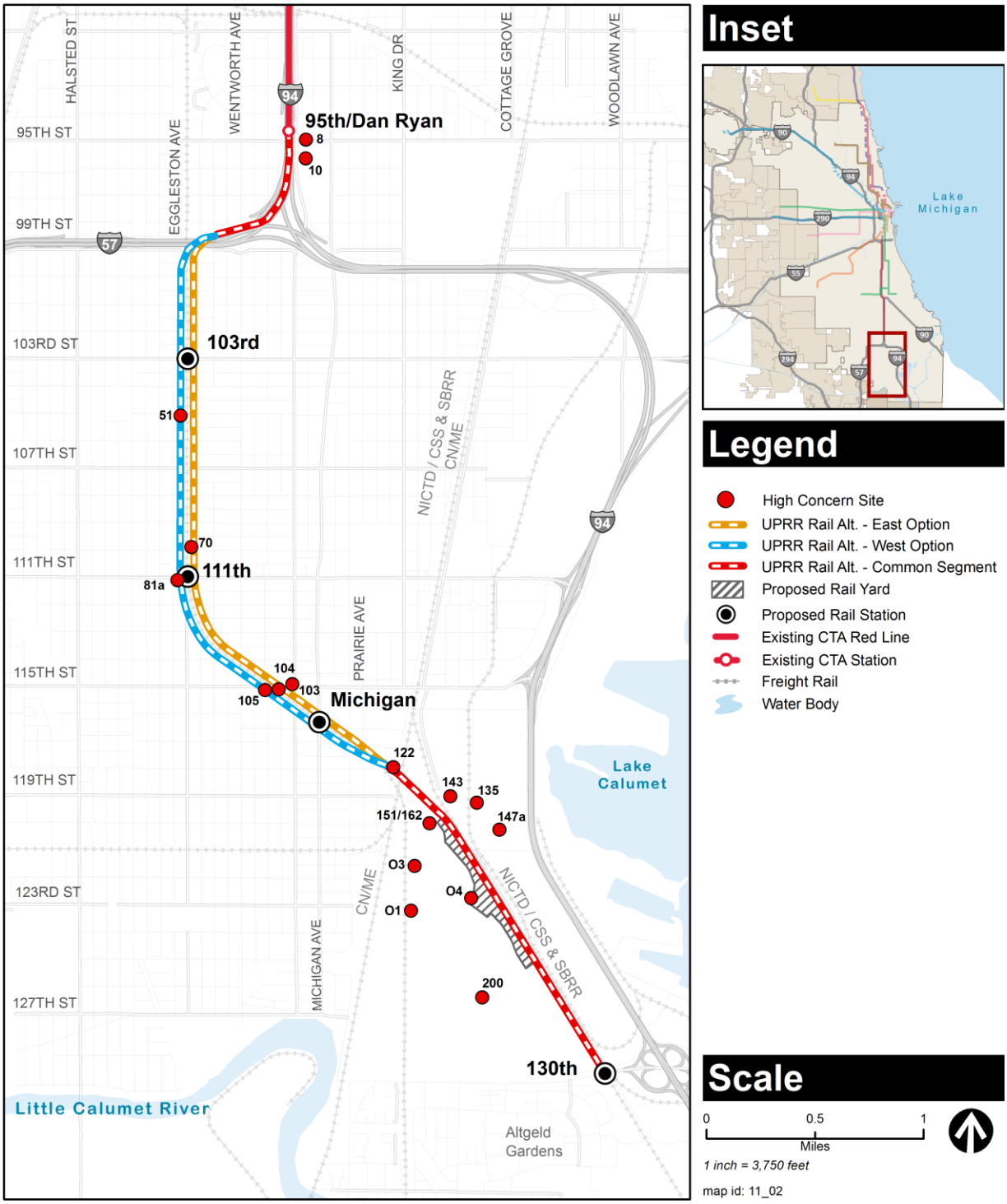

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-27: Identified Sites of Concern

4.8.3 Environmental Consequences

The following sections summarize the potential impacts of each alternative from hazardous materials.

4.8.3.1 No Build Alternative

No adverse construction or permanent impacts related to hazardous materials would occur as part of the No Build Alternative. Potential benefits of remediation associated with the UPRR Alternative would not occur with the No Build Alternative.

4.8.3.2 Union Pacific Railroad Alternative - East Option

Permanent Impacts

CTA identified six High Concern sites (Map IDs 70, 104, 122, 151/162, 200, and O4) within the permanent envelope of the East Option, three of which (Map IDs 151/162, 200, and O4) are within the proposed 120th Street yard and shop site. In addition, CTA identified nine High Concern sites (Map IDs 8, 10, 81a, 103, 135, 143, 147a, O1, and O3) within approximately 1,000 feet of the edge of the permanent envelope for the East Option. Although these nine High Concern sites are not within the permanent envelope, based on their designation and proximity to the permanent envelope they are identified as High Concern.

Implementation of the East or West Option would result in benefits through the cleanup and/or removal of contaminated material (soil, groundwater, and/or asbestos and lead-based paint particles) during construction. Without implementation of a project alternative, this cleanup and removal would occur either at a later date or not at all.

The project's daily operations or maintenance activities that require earthmoving in contaminated areas would have the potential to result in permanent hazardous material impacts from accidental spills or hazardous material releases. Spills are most likely to occur during activities such as equipment and grounds maintenance. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, and pesticides. Examples of maintenance that could require earthmoving include at-grade track repair, underground utility work, and foundation repairs, although these activities are not expected to occur within the first 10–20 years.

The East and West Options also have the potential for additional hazardous material impacts associated with the NICTD/CSS & SBRR. Due to the proximity of the NICTD/CSS & SBRR to the UPRR Alternative alignments, hazardous material spills or releases that occur along these railroads would have the potential to migrate and affect the UPRR Alternative project area. These materials potentially exist along the railroad currently, but the UPRR Alternative would bring transit vehicles closer to them. Spills along the NICTD/CSS & SBRR could occur from the use of chemicals for ground maintenance along the tracks. In addition, because these are freight lines, releases could occur from creosote used to preserve wood railroad ties; polynuclear aromatic compound deposition from diesel exhaust; asbestos dust from brakes; and previous releases of coal ash from engines. Freight lines might also transport hazardous material cargo, which could be released if there were a spill or accident. Releases from adjacent freight lines could affect transit passengers or operations. If adjacent freight lines have a release of hazardous materials, transit operations may need to be stopped to avoid traveling through the release area. First

responders would follow the procedures and protocols for hazardous materials incidents established by the Hazardous Materials Unit of the City of Chicago Fire Department.

Impacts associated with the adjacent freight lines would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 CFR § 171–180) that among other things, specify requirements for the safe transportation of hazardous materials by rail and require rail carriers to conduct a security and safety risk analysis, to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route.

The East Option would not have permanent adverse impacts related to hazardous materials.

Mitigation - Although there would be no permanent adverse impacts related to hazardous materials as part of the East Option, CTA would adhere to all applicable federal, state, and local regulations, as well as existing system-wide hazardous material usage, storage, and disposal plans and procedures, further minimizing the potential for hazardous material impacts.

Construction Impacts

Construction of the East or West Option would include subsurface excavation, which would result in the generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. The source of the contaminated materials could be sites identified in the database, through the historic records review, or from the presence of urban fill. Hazardous materials typically used during construction, such as paints, solvents, fuels, and hydraulic fluids, could also be released accidentally during construction. In addition, there is the potential for encountering contaminated groundwater during construction.

Construction may require the demolition of existing structures that were likely constructed before 1978–1979. These structures may contain asbestos-containing material and lead-based paint that could result in a release of asbestos fibers and lead dust during construction.

The East Option would include construction within the UPRR corridor, which is potentially already affected because of its historic long-term use as a railroad corridor. Maintenance and operation of railroad corridors typically include the use of fuel, oil, paints, herbicides, pesticides, creosote, polynuclear aromatic hydrocarbons, and coal. High and Moderate Concern sites are the greatest potential sources of hazardous material impacts. There would be adverse construction-related impacts associated with the East Option but the impacts would be mitigated by implementing the BMPs and standard practices discussed below.

Mitigation - CTA would follow federal, state, and local laws and regulations regarding hazardous materials before and during construction. The following BMPs, at a minimum, would be implemented before and during construction to avoid and minimize the potential for impacts before and during construction:

- Phase I Environmental Site Assessments (ESAs) would be conducted of any property to be purchased as part of the selected option to identify recognized environmental conditions and assess and limit environmental liability. Phase I ESAs would be completed to evaluate the presence of contamination and to develop appropriate measures to deal with hazardous

materials during construction. Based on the Phase I ESA findings, a Phase II ESA (or focused site assessment) could also be required before purchasing a property.

- Focused site assessments would be required for areas where earthmoving activities would occur and on properties purchased for the project. The assessments would include characterization and evaluation of the potential for encountering hazardous materials and contaminated soils.

- Asbestos, lead-based paint, and hazardous material surveys of buildings or structures would be required before reconstruction or demolition, to identify any asbestos, lead-based paint particles, and hazardous materials, such as polychlorinated biphenyl or mercury-containing equipment. Any asbestos, lead-based paint, and hazardous materials identified would be abated and disposed of in accordance with federal, state, and local regulations. Removal, abatement, and disposal of these materials will be completed by specialists that are trained and certified to conduct such activities.

The following specific and required plans would be developed before construction to further minimize or avoid the potential for hazardous material impacts:

- A Contaminated Material Management Plan that provides the procedures for identifying, characterizing, managing, storing, and disposing of contaminated soil and groundwater encountered during construction activities would be required. The plan would comply with all applicable federal and state cleanup standards and would cover the entire project area, as it is assumed that all material has at least some level of contamination associated with it.

- Spill Control and Prevention Plans to address the use, storage, and disposal of materials such as asphalt, fuel, paint, solvents, and cleaning agents would be required. The Spill Control and Prevention Plans would provide BMPs to limit the potential for accidental releases of potentially hazardous materials.

- Construction Stormwater Pollution Control Plans, which describe methods to prevent or minimize stormwater runoff from encountering contaminated soil or other hazardous materials, would be required.

- Health and Safety Plans for construction activities would be developed by the contractors and approved by CTA before starting any work. The Health and Safety Plans would identify potential contaminants of concern, required personal protective equipment and procedures, and emergency response procedures.

Construction-related impacts would not be adverse after the implementation of the BMPs and standard practices.

Impacts Remaining After Mitigation

After these BMPs and standard practices are implemented, the East Option would not have permanent or construction-related adverse impacts due to hazardous materials. Implementation of the East Option could also result in benefits through the cleanup and/or removal of contaminated material during construction.

4.8.3.3 Union Pacific Railroad Alternative - West Option

Permanent Impacts

Permanent impacts related to the West Option would be similar to those of the East Option with the exception that the West Option would operate adjacent to and west of the UPRR freight railroad. CTA identified six High Concern sites (Map IDs 51, 105, 122, 151/162, 200, and O4) within the permanent envelope of the West Option, three of which (Map IDs 151/162, 200, and O4) are within the proposed 120th Street yard and shop site. In addition, CTA identified nine High Concern sites (Map IDs 8, 10, 81a, 103, 135, 143, 147a, O1, and O3) within approximately 1,000 feet of the edge of the permanent envelope for the West Option. Although these nine High Concern sites are not within the permanent envelope, based on their designation and proximity to the permanent envelope they are identified as High Concern.

Due to the proximity of the UPRR and NICTD/CSS & SBRR to the UPRR Alternative alignments, hazardous material spills or releases that occur along these railroads would have the potential to migrate and affect the UPRR Alternative alignment, as described above for the East Option. These materials potentially exist along the railroad currently, but the UPRR Alternative would bring transit vehicles closer to them.

There would be no permanent adverse impacts associated with the West Option related to hazardous materials.

Construction Impacts

Construction-related impacts associated with the West Option would be the same as those described for the East Option. Construction-related impacts would not be adverse after the implementation of the BMPs and standard practices.

Impacts Remaining After Mitigation

After the BMPs and standard practices discussed in **Section 4.8.3.2** are implemented, the West Option would not have permanent or construction-related adverse impacts due to hazardous materials. Implementation of the West Option could also result in benefits through the cleanup and/or removal of contaminated material during construction.

4.9 Wetlands

This section describes the impacts of the East and West Options on potential wetlands. The *Water Resources Technical Memorandum* (**Appendix S**) includes additional details, along with the wetland delineation report. **Table 4-21** summarizes the impacts on potential wetlands.

Table 4-21: Wetlands - Impacts Summary

Alternative	Permanent Impacts	Construction Impacts
No Build	No impacts	No impacts
Union Pacific Railroad - East Option	Impacts would be mitigated through compensatory mitigation, if required.	Impacts would be mitigated through compensatory mitigation, if required.
Union Pacific Railroad - West Option	Impacts would be mitigated through compensatory mitigation, if required.	Impacts would be mitigated through compensatory mitigation, if required.

4.9.1 Regulatory Framework/Methods

Executive Order 11990 directs federal agencies to minimize the destruction, loss, or degradation of wetlands. It also assures the protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable during the planning, construction, funding, and operation of transportation facilities and projects.

The Illinois Interagency Wetlands Policy Act of 1989 (the Act [20 ILCS § 830 et seq.]) is intended to ensure that there is no overall net loss of Illinois' existing wetland acres or their functional values resulting from State-supported activities. The Act charges State agencies with a further duty to "preserve, enhance, and create wetlands where necessary to increase the quality and quantity of the State's wetland resource base." The Act uses the same definition for wetlands as in the 1987 U.S. Army Corps of Engineers (USACE) *Wetland Delineation Manual* used by federal agencies in implementation of the federal Clean Water Act. All three parameters (hydric [wet] soils, hydrophytic [growing in water] vegetation, and wetland hydrology) are required for a location to be considered a wetland; however, areas that have been restored or created as the result of mitigation or planned construction projects, and that function as wetlands, are also defined as wetlands under the Act even when all three wetland parameters are not yet present.

For this Draft EIS, an impact would be adverse if it would cause the destruction, loss, or degradation of wetlands, including any net loss of their functional values; or cause any discharges of dredged or fill material into wetlands.

CTA reviewed existing data sources to evaluate potential impacts on wetlands. Wetland data was obtained from the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI). The NWI data is very general and is intended to give the user reconnaissance-level information. Several areas identified by NWI as wetlands in the project area were not deemed wetlands after the field review. To help locate wetland sites that may have been missed by the NWI, CTA used the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey website, where available, to locate areas of potentially hydric soils. CTA also reviewed the Illinois Ecological Compliance Assessment Tool (EcoCAT) to identify resources mapped by Illinois Department of Natural Resources (IDNR).

CTA conducted a general field reconnaissance on August 8, 2012 to identify the potential presence and condition of wetlands within the project area. This reconnaissance-level wetland assessment confirmed the presence of potential wetland areas, and the potential extent was estimated from aerial photographs.

CTA contacted USACE in October 2012 for additional information about the wetlands in the vicinity of Lake Calumet. Many areas around Lake Calumet are highly disturbed and wetland delineation is difficult. USACE acknowledged that in many areas the soils are disturbed or imported and may not exhibit typical wetland characteristics. In these situations, USACE often relies on vegetation and hydrology as wetland indicators.

CTA conducted a field reconnaissance of the entire project area and identified potential wetlands in only the areas near the 130th Street station and the 120th Street yard and shop. CTA then completed a wetland delineation of the areas identified as containing potential wetlands and applied the general procedures detailed in the 1987 USACE *Wetland Delineation Manual* and the

2010 *Regional Supplement-Midwest Region*. Data collected included information on soils, hydrology, and vegetation. Surveys were conducted in August 2015, during the growing season, and vegetative species were identified.

During the wetland delineation, these areas were inspected, and data was collected on plant species and hydrology to identify wetland boundaries. In most cases in these areas, the existing gravel and fill precluded investigation of the soil profile; therefore, wetland delineations were based primarily on the presence of wetland vegetation and hydrology. The wetland delineation identified areas that meet the USACE criteria for wetlands.

A native vegetative quality rating was calculated for each wetland using the Floristic Quality Assessment (FQA) method (Swink and Wilhelm 1994). The FQA method calculates an index of the native vegetative quality for an area with higher values assigned to areas that support a greater preponderance of native plant species. Areas that are vegetated predominantly with nonnative or invasive species get a lower FQA value even though they may still meet the definition of a wetland.

The NEPA analysis would support the permit application and review in compliance with wetlands regulations as appropriate. Wetland delineations are generally only valid for 5 years because environmental conditions may change. If more than 5 years have lapsed at the time of permit application submittal, the wetland delineation would be reconfirmed concurrent with final design. In addition, wetland regulations at the federal, state, and local levels may change and some wetlands that may be considered isolated or part of a drainage system may or may not be regulated at the time of final design. Permit requirements would include the provision of compensatory mitigation if regulated wetlands would be affected. CTA will coordinate with the local USACE district. The analysis presented here and in the *Water Resources Technical Memorandum* (**Appendix S**) identifies potential wetland impacts; actual impacts would likely be smaller because additional measures to avoid impacts would be applied in final design. Design elements such as steeper side slopes on areas that need to be filled can often be applied during final design to reduce potential wetland impacts. Because the magnitude of these reductions cannot be predicted at this stage of design, the entire wetland area within the project footprint is assumed to be potentially affected.

Compensatory mitigation is required under the 2008 Clean Water Act Section 404 Final Compensatory Mitigation Rule for wetland impacts and is intended to replace lost aquatic resource functions and area with the goal of "no net loss" of wetlands (U.S. Environmental Protection Agency [USEPA] 2008). Compensatory mitigation should take place on public or private land at or adjacent to the impact site or at another location generally within the same watershed where it is most likely to replace lost functions.

4.9.2 Existing Conditions

Based on the results of the wetland delineation, CTA identified 15 wetland areas totaling 15.34 acres of potentially affected wetlands at the site of the 130th Street station and the 120th Street yard and shop, shown in **Figure 4-28** (see also **Appendix S**, *Water Resources Technical Memorandum*, for more detailed mapping of potential wetland impacts).

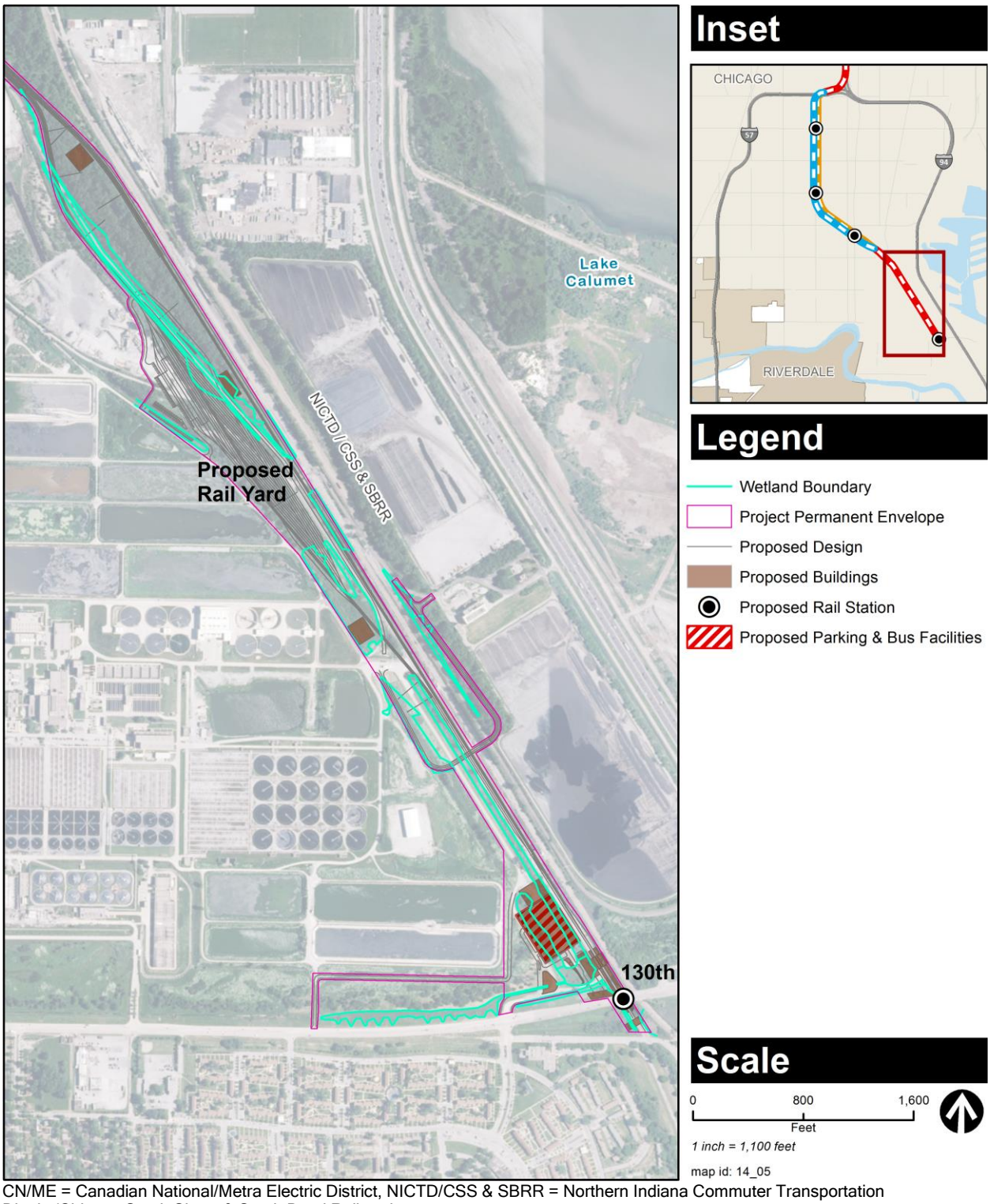

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-28: Wetland Delineation Map

The soils and topography near the site of the proposed 130th Street station and 120th Street yard and shop appear to be highly disturbed and likely include material imported from other locations. Railroad ties and potential slag were identified throughout the area. The compacted soils prevented the investigation of soil profiles or the identification of hydric soil characteristics; therefore, the wetland delineation was based primarily on the presence of wetland vegetation and hydrology in this disturbed area.

The area surveyed has flat topography; there were no obvious drainages and there were depressions with some standing water. The flat topography, combined with the highly compacted soils, likely holds water at the surface for the required two weeks in the spring growing season, leading to the preponderance of wetland vegetation observed. Wetland hydrology indicators observed included standing water or soil saturation in the root zone (in August 2015), sediment deposits, sparsely vegetated concave surfaces, water marks, algal mat or crust, water-stained leaves, and drainage patterns.

All wetland areas identified throughout this area are of low floristic quality and wetland function. Most of the wetlands are dominated by common reed (*Phragmities australis*), often in dense monotypic stands. There are no High Quality Aquatic Resources in the project area or mapped on adjacent properties. Fill and other manmade features define most of the wetland boundaries. On June 2, 2016, FTA and CTA requested a jurisdictional determination from USACE to determine whether the wetlands are jurisdictional under the Clean Water Act or are isolated wetlands of Cook County. Coordination with USACE is ongoing. Wetland boundaries will be reconfirmed at the time of the permit application, concurrent with final design.

4.9.3 Environmental Consequences

The following sections summarize the potential impacts of each alternative on wetlands.

4.9.3.1 No Build Alternative

There would be no permanent or construction impacts on wetlands as a result of the No Build Alternative.

4.9.3.2 Union Pacific Railroad Alternative - East Option

Permanent Impacts

The East Option could affect up to 15.34 acres of wetlands at the 120th Street yard and shop site and the 130th Street station site. The precise quantity of wetlands potentially affected would be reconfirmed based on the actual footprint to be determined in final design.

Mitigation - If there are jurisdictional wetlands and they cannot be avoided, CTA would provide compensatory mitigation. After compensatory mitigation, there would be no adverse permanent impacts on potential wetlands. The preference for compensatory mitigation would be to purchase credits from a mitigation bank or to participate in a USACE-approved in-lieu fee program. Approved mitigation banks would be reviewed at the time of final design to identify ones that include the project area in their service areas and which have available credits. If there are no suitable mitigation banks or in-lieu fee programs available, then compensatory mitigation would be provided through a mitigation project sponsored by CTA. CTA-sponsored compensatory mitigation would take place on public or private land at or near the impact site or at another

location generally within the same watershed where it is most likely to replace lost functions. There are several areas associated with the Little Calumet River that appear to have been disturbed or filled by past industrial activities that could be restored as compensatory mitigation.

Impacts on wetlands would be mitigated through implementation of any of the potential compensatory mitigation measures discussed above.

Construction Impacts

Compensatory mitigation would be needed for construction-related, temporary impacts on wetlands. Construction staging areas would be sited outside of wetlands as much as possible, but if there were any temporary impacts, those areas would be restored as wetlands after construction.

Impacts Remaining After Mitigation

Impacts on wetlands would be mitigated through implementation of any of the potential compensatory mitigation measures discussed above.

4.9.3.3 Union Pacific Railroad Alternative - West Option

Permanent and construction impacts on potential wetlands, and associated mitigation, from the West Option would be the same as with the East Option because the potential wetlands would be within the common segment of the UPRR Alternatives; see the East Option **Section 4.9.3.2**.

Chapter 5
Indirect and Cumulative Impacts

While the other chapters of this Draft EIS provide analysis and findings on direct impacts of the project, NEPA also requires the consideration of the potential indirect and cumulative impacts of federally funded projects.

5.1 Regulatory Framework/Methods

Indirect impacts, also known as secondary impacts, are defined under 40 CFR § 1508.8. As defined, indirect impacts are caused by the project or plan, but are separated from direct impacts by time and/or distance (yet still in the foreseeable future). Indirect impacts include induced growth and related environmental impacts, such as changes to land use patterns, population density or growth rates, and related impacts on air quality, water and other natural systems. Cumulative impacts are defined under 40 CFR § 1508.7 as the aggregate result of the incremental direct and indirect effects of a project or plan, the effects of past and present actions, and impacts of reasonably foreseeable future actions by others on resources of concern.

CTA used the following guidance documents in determining the potential for indirect and cumulative impacts:

- *Consideration of Cumulative Impacts in EPA Review of NEPA Documents* (USEPA 1999)
- *Considering Cumulative Effects Under the National Environmental Policy Act* (Council on Environmental Quality [CEQ] 1997)
- *Guidance on the Consideration of Past Actions in Cumulative Effects Analysis* (CEQ 2005)
- *National Cooperative Highway Research Program (NCHRP) Report 466 - Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects* (Transportation Research Board 2002)

To determine the potential indirect impacts of this project, CTA followed the eight-step method described in the NCHRP Report 466. The project area boundary for the analysis was based on all proposed elements of the project, including construction limits and proposed property acquisitions. For the analysis, CTA reviewed the findings from the environmental resource analyses to properly evaluate the potential for indirect impacts on land use, transportation, and economic development plans and goals, as well as to identify notable or sensitive resources such as community facilities, historic resources, and other vulnerable or unique resources. The potential for and impacts of induced growth that could result from this project were then determined through a qualitative assessment of changes in growth and development expected as a result of the increases in transit accessibility from the project. Based on these factors, a determination was made on the potential and magnitude of impacts that could result from the project and whether those impacts would be consistent with surrounding growth, trends, and goals within the project area.

To identify the potential for cumulative impacts, CTA followed the 11-step method identified in CEQ guidance to meet best practice methods for conducting this type of analysis. Areas within ½ mile of the project corridor (consistent with other analyses conducted for this Draft EIS) were used to evaluate the potential for indirect effects. CTA reviewed applicable current and future regional and local plans.

5.2 Existing Conditions

The project area encompasses a diverse mix of land uses including residential, commercial, and light industrial as described in **Chapters 2, 3, and 4**.

Reasonably foreseeable projects include projects identified in *GO TO 2040*, the TIP, and known private development and redevelopment projects in the project area. The *Cumulative Impacts Technical Memorandum* (**Appendix T**) presents a list of projects in the project area and analyzes the potential cumulative impacts in more detail. CTA reviewed the FY 2014–2019 TIP database to determine whether any new projects would have the potential for cumulative impacts, as those projects were not included in the *Cumulative Impacts Technical Memorandum*. None of the FY 2014–2019 TIP projects would have the potential to have cumulative impacts with the RLE Project.

The specific projects discussed in this section have the potential for cumulative impacts when considered with the RLE Project. The projects that were considered were within the general RLE Project area, anticipated to be completed before the start of RLE Project construction in 2022, or that may be under construction during the RLE Project's proposed construction period of 2022–2026. Projects identified in *GO TO 2040* were also considered. The analysis was based on known projects from information available from CTA, the City of Chicago, CMAP, the Chicago Region Environmental and Transportation Efficiency Program (CREATE), IDOT, the Illinois State Toll Highway Authority, Metra, and NICTD.

Past, present, and reasonably foreseeable future actions within the project area that have the potential for benefits or impacts include the following:

- The CREATE 75th Street Corridor Improvement Project would provide improvements in the UPRR corridor. CREATE would increase freight volumes by its forecasted 2029 build year. Full implementation of CREATE would increase the number of passenger and freight trains using the UPRR tracks by 21 trains per day. CREATE projections include an increase in passenger trains from two to four trains per day by 2029 within the UPRR corridor.

- Metra's Southeast Service (SES) expansion project consists of 33.2 miles of proposed rail line from LaSalle Street station to a terminal near Balmoral Park. The rail line would run along the following four existing railroad rights-of-way: joint UPRR/CSX Transportation freight corridor from Balmoral Park to Dolton junction, UPRR from Dolton junction to Oakdale junction, Chicago Rail Link from Oakdale junction to Gresham interlocking, and Metra Rock Island District from Gresham interlocking to LaSalle Street station. Ten new stations and additional service at three existing stations (existing Rock Island District stations) are proposed. The SES would, if implemented, run along the UPRR tracks adjacent to the East or West Option alignment.

- NICTD is studying the West Lake Corridor Project, an approximately 9-mile alignment that would extend the NICTD South Shore Line from Dyer, Indiana to Hammond, Indiana. The project would connect with the existing NICTD South Shore Line and the ME Line, providing new transit service between Dyer and Millennium station in downtown Chicago. The West Lake Corridor Project alignment would run through the east side of the RLE Project area.

- The Red and Purple Modernization (RPM) Program is a series of proposed improvements to the North Red Line (from just north of Belmont station to the northern terminus of the Red Line at Howard station) and the Purple Line (from just north of Belmont station to Linden station). These improvements would increase passenger capacity and modernize transit stations, track systems, and structures along the 9.6-mile RPM corridor from just north of Belmont station to the northern terminus at Linden station, passing through the Lakeview, Uptown, Edgewater, and Rogers Park community areas of Chicago, the City of Evanston, and the Village of Wilmette.

- The Crown Commercial Real Estate & Development - Roseland Plaza redevelopment would be adjacent to the Michigan Avenue station location. The proposal includes a strip mall within a 91,000-square-foot property with 250 parking spaces. There would be 49,000 square feet of commercial space, which would include a grocery store, pharmacy, clothing store, and a bank. The City's Community Development Commission designated the developer in February 2005. The City approved the sale of its land and land write-down costs in May 2009. The developer modified its proposal and received approval of its Planned Development application from the Chicago Plan Commission in October 2011.

- The Pullman Historic District was declared a National Monument on February 19, 2015. The park is on the east side of the RLE Project area. The designation as a National Monument under the National Park Service is expected to bring economic opportunities to the surrounding communities.

5.3 Environmental Consequences

5.3.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the FY 2014–2019 TIP. TIP projects consist of several road improvement projects including resurfacing and coordination of signal timing, work on Metra's ME district facilities to replace catenary lines, construction of a bicycle/pedestrian multi-use trail south of the project area, and preservation of historic facilities.

Indirect Impacts

The lack of improved transportation options and lack of new infrastructure would do little to reverse the disinvestment in the project area that has occurred over the past several decades.

Cumulative Impacts

The RPM Program, West Lake Corridor Project, and SES line are reasonably foreseeable actions that would result in beneficial air quality impacts because they would increase ridership, which would reduce trips made by vehicles. The cumulative impacts would result in a reduction of air

emissions and would be beneficial. The air quality benefits of the No Build Alternative would be smaller in scale than for the East or West Option.

5.3.2 Union Pacific Railroad Alternative - East Option

Indirect Impacts

Implementation of the East Option would have the potential for indirect benefits to the project area economy. There would be potential for redevelopment from new employment accessibility, attraction of new development near RLE stations, and overall livability improvements. The private sector would likely perceive the East Option as a public-sector commitment to improve the overall project area and regain confidence in the area's economic development market. The retail and commercial space on the ground floor of the Michigan Avenue station's park & ride facility, combined with the proposed Roseland Plaza north of the station site, would help prompt greater social activity in the neighborhood and enhance the station's role as a focal point of community activity and services. The station and retail improvements may contribute to a southward expansion of the current commercial and entertainment district along Michigan Avenue between 111th and 113th Streets.

Cumulative Impacts

The CREATE 75th Street Corridor Improvement Project would provide improvements in the UPRR corridor. CREATE would increase freight volumes substantially by its forecasted 2029 build year. Because the UPRR freight traffic would remain and is projected to increase under the East Option, freight trains would have potential safety and accessibility impacts on pedestrian and vehicular traffic. The addition of more vehicular and pedestrian traffic accessing the proposed stations would increase the potential for safety and accessibility impacts near the proposed stations. Freight traffic could affect travel times for bus service to the station and could increase delays for passengers who choose to use the park & ride facilities. If the frequency of freight trains increases, the amount of time that the gates are down to accommodate the freight train movements would also increase, and vehicular traffic could be delayed while waiting for the trains to pass.

In addition to the expected increase in automobile and pedestrian traffic volumes as a result of the RLE Project when compared to the No Build Alternative, the full implementation of CREATE would increase the number of trains using the UPRR tracks from 27 to 48 per day (train volumes include both freight and passenger trains). The proposed Metra SES Project, if implemented, could also increase the number of passenger trains per day on the line beyond the existing two Amtrak trains per day. The increase in train volumes could correlate to an increase in potential crash frequency at highway-rail grade crossings. This increase in crash potential would be an adverse impact at the existing highway-rail grade crossings along the UPRR tracks at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Wentworth Avenue, 115th Street, and State Street. All of these crossings currently have gates on both roadway approaches and have flashing lights. Crash potential could be further mitigated by installing safety protection technologies for vehicles to prevent drivers from going around the gates. If warranted by an engineering traffic study, CTA may install traffic signals to mitigate pedestrian safety impacts. To further mitigate impacts and improve pedestrian safety, CTA would consider installation of security surveillance cameras, alarm notifications (e.g., flashing blue lights), sidewalk lighting in the immediate vicinity of station entrances, pedestrian crossing treatments, such as refuge medians with appropriate

signage, and police patrols. To mitigate adverse safety impacts at the roadway-railroad grade crossings, CTA would install safety cameras and would consider installing additional passive or active safety devices to enhance the safety devices that are already in place at the existing grade crossings. Additional audible warning devices or non-mountable curbs are examples of other safety measures for at-grade railroad crossings. CTA would install fencing to deter pedestrians from crossing the freight railroad tracks in places other than the designated locations.

The West Lake Corridor Project would run through the east side of the RLE Project area and might accommodate a future connection between the NICTD South Shore Line and the Red Line near the 130th Street station. The combination of the RLE Project and the West Lake Corridor Project would provide additional transit options for people commuting to downtown Chicago.

The RPM Program, West Lake Corridor Project, and SES line are reasonably foreseeable actions that would result in beneficial air quality impacts because they would increase ridership, which would reduce trips made by automobiles. The cumulative impacts with the implementation of the East Option would result in a reduction of air emissions and would be beneficial.

The permanent cumulative impacts of these projects would be beneficial to the surrounding communities because they would improve access to jobs, places of interest, and residences. The potential for an increase in crash frequencies at the at-grade crossings would be mitigated by installing additional grade crossing protection that would prevent vehicles and pedestrians from going around the crossing gates. CTA anticipates the incremental impact from reasonably foreseeable future actions to be more efficient mobility and access to jobs, retail, and places of interest within the project corridor for Chicago residents and visitors. CTA expects that over a period of time retail establishments and places of interest would benefit from the more efficient access to their locations.

5.3.3 Union Pacific Railroad Alternative - West Option

Indirect Impacts

The indirect impacts under the West Option would be the same as those described for the East Option.

Cumulative Impacts

Cumulative impacts with the West Option would be similar to those of the East Option; however, it is anticipated that vehicular and pedestrian impacts would be fewer than with the East Option based on the locations of the park & ride facilities in relation to the proposed station areas.

Chapter 6
Resources with Limited or No Adverse Impacts

This chapter describes the environmental resource categories for which the RLE Project would have limited or no adverse impacts. Based on the nature of these resource areas, impacts would be similar for both the East and West Options and are therefore discussed together.

Section 6.1 Air Quality
Section 6.2 Water Quality
Section 6.3 Floodplains
Section 6.4 Vegetation and Wildlife Habitat
Section 6.5 Threatened and Endangered Species
Section 6.6 Geology and Soils
Section 6.7 Energy

6.1 Air Quality

Under authority of the Clean Air Act (42 USC § 7401) and its amendments, the USEPA has established National Ambient Air Quality Standards (NAAQS) for criteria pollutants to protect the public health and welfare. The IEPA maintains a statewide network of monitoring stations that continuously measure pollutant concentrations in the ambient air. These stations provide data to assess compliance with the NAAQS and the Illinois Ambient Air Quality Standards (IAAQS) and to evaluate the effectiveness of pollution control strategies. The maximum ambient concentrations for these pollutants were measured at representative monitoring stations nearest the project corridor for calendar year 2011. Except for one exceedance of the 8-hour ozone (O_3) at the Lawndale Street station, there were no exceedances in the project area of any of the NAAQS or IAAQS in 2011.

Because the RLE Project is in a "Moderate" O_3 nonattainment area, it is FTA's responsibility, as the federal funding agency, to ensure that the proposed project conforms to the Illinois State Implementation Plan. Conformity is demonstrated by showing that the proposed project is included in a conforming Regional Transportation Plan and a TIP. The RLE Project is included in a conforming Regional Transportation Plan, CMAP's *GO TO 2040*, and a corridor-wide emissions inventory analysis. It is therefore not necessary to demonstrate transportation conformity at the regional level. An air quality assessment of the localized air quality impact of the UPRR Alternative was completed because the project is adding new service that could change local vehicle miles traveled[7] (VMT) and emissions.

Because nearly all of the project-related air pollutant emissions would come from motor vehicles and because the project-related motor vehicles would move throughout the entire project area, the results of the air quality analysis apply equally to the East and West Options, as well as to the 120th Street yard and shop. That is, it makes no difference in the analysis whether the Red Line trains would be on the east side or on the west side of the UPRR right-of-way; the pollutant

[7] Annual VMT, which is an output of CMAP's Regional Travel Demand Model (CMAP 2012c), is the total number of miles driven by all vehicles during 1 year in a defined a geographic area.

emissions would be the same in each case. In addition, the air pollutant emissions associated with the 120th Street yard and shop would not be substantial. The UPRR Alternative, both East and West Options, are therefore discussed together here.

CTA trains run on electricity; therefore, they cause no direct emissions. Their electricity comes from the electric utility grid, which may include local, fossil-fueled power plants. An increase in indirect emissions due to electrical power consumption by the Red Line trains would be expected with the UPRR Alternative. The UPRR Alternative would not result in an exceedance of the carbon monoxide (CO) standards, and because its implementation would reduce VMT, it would therefore slightly improve greenhouse gas (GHG) emissions, particulate matter with an aerodynamic diameter of 2.5 micrometers and less ($PM_{2.5}$) impacts, and mobile source air toxics emissions as compared to the No Build Alternative.

CTA conducted CO dispersion modeling at three "worst-case" intersections, based on LOS and total traffic volumes in 2030 during the peak hour, as required by USEPA guidance (USEPA 1992). The maximum 1-hour and 8-hour CO concentrations were compared to the NAAQS for CO to determine impacts. Modeling determined that the UPRR Alternative alignment would not exceed the federal standards of 35 parts per million (ppm) for the 1-hour concentration or 9 ppm for the 8-hour concentration.

CTA conducted a quantitative assessment of project-related GHG benefits and/or impacts on climate change to reflect the changes in GHG emissions based on differences in VMT, travel speed, fuel consumption, and delay along the project corridor (see **Appendix U** for additional information). The quantitative assessment determined that the East and West Options would have slightly lower estimated GHG emissions as compared to the No Build Alternative.

Emissions from construction equipment would occur during site preparation activities such as grading, installing curbs, or grubbing and removal of vegetation to prepare a site for construction. Impacts during construction would be primarily associated with fugitive dust and emissions from on-road and non-road vehicles. The equipment producing these emissions could include haul trucks, concrete trucks, front-end loaders, excavators, cranes, drill rigs, compressors, flatbed trucks, and generators. Short-term exposure (i.e., 1-hour averaging period) to nitrogen dioxide (NO_2) can worsen the effect of allergens in allergic asthmatics and can contribute to atmospheric discoloration. Long-term exposure (i.e., annual averaging period) can lead to increased respiratory symptoms and medication use in asthmatics, emergency room visits for asthma in children, hospitalization for respiratory and cardiovascular disease, and premature mortality. IEPA has strict guidelines for controlling fugitive dust (by BMPs), diesel particulate emissions (by exhaust emission controls and use of low-sulfur fuels), and GHG emissions (by limiting equipment operations such as excessive idling and by using alternative fuels). In addition, the contractor would follow Chicago's Clean Diesel Construction Ordinance, which would further reduce the potential for construction-related air quality impacts.

Construction activities can also result in traffic disruption, rerouting, and temporary shutdown of traffic. Traffic disruption, such as detours or decreased roadway capacity, can lead to increased traffic congestion, thereby increasing motor vehicle exhaust emissions on nearby roadways, and resulting in elevated localized pollutant concentrations.

Mitigation - The following mitigation measures would be implemented:

- Work would be sequenced to minimize air quality impacts on adjacent roadways and commercial and residential buildings due to traffic disruptions during construction. Alternate routes would be planned for construction-related truck traffic, creating temporary detours for regular roadways where capacities have been diminished, providing traffic control, routing trucks away from residential neighborhoods, and restricting construction activities during hours of high traffic volumes on the existing roadways. Contractors would also consider locations of schools, parks, and daycares when deciding where to route local traffic and construction equipment, and to the extent possible, route traffic away from places where children congregate.

- A Dust Control Plan would be prepared to address in detail how dust would be controlled at the construction site, the staging areas, and the access and egress routes.

- All diesel-powered equipment and vehicles would be required to be retrofitted with emissions control devices and to use ultra-low-sulfur diesel fuel (15 ppm sulfur maximum) to control diesel particulate emissions.

- Contractors would retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.

- Contractors would position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing fume exposure for personnel.

- Contractors would use catalytic converters to reduce CO, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low-sulfur fuels.

- Contractors would use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. High efficiency particulate air filters would filter incoming air.

- Contractors would regularly maintain diesel engines, which is essential to keep exhaust emissions low. Contractors would follow the manufacturer's recommended maintenance schedule and procedures.

- Contractors would reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel-equipment operators to perform routine inspection, and maintaining filtration devices.

- Contractors would repower older vehicles and/or equipment with diesel- or alternative-fueled engines certified to meet newer, more stringent emissions standards. Contractors would purchase new vehicles that are equipped with the most advanced emission control systems available.

- Contractors would use electric starting aids such as block heaters with older vehicles to warm their engines to reduce diesel emissions.

- CTA would require the contractor to develop a plan (including a truck queuing plan) and schedule to allow construction trucks to enter and exit the construction sites and staging areas without excessive disruption and impacts on residences and commercial establishments.

The UPRR Alternative would not have permanent adverse air quality impacts. With the use of appropriate construction-related mitigation measures as described above, no violations of the IAAQS or NAAQS would be anticipated for the UPRR Alternative. With appropriate mitigation measures in place, no adverse air quality impacts due to construction activities would be anticipated with this alternative. The *Air Quality Technical Memorandum* (**Appendix U**) contains additional details.

6.2 Water Quality

The Clean Water Act (33 USC § 1251) establishes the basic structure for regulating discharges of pollutants into waters of the United States and gives the USEPA the authority to implement pollution control programs and actions, such as setting wastewater standards for industries. Section 10 of the Rivers and Harbors Act of 1899 (33 USC § 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. Sole source aquifers are regulated under 40 CFR § 149.

Lake Michigan is the dominant topographic feature in the region and is approximately 4.8 miles from the project area at its closest point near the UPRR Alternative alignment. Lake Calumet is in the eastern portion of the project area, and the Little Calumet River flows west along the southern boundary of the project area. The Little Calumet River is on Illinois 303(d) list (a list of waters where water quality is impaired or threatened); it is listed as impaired for mercury, polychlorinated biphenyls, aldrin, iron, dissolved oxygen, total phosphorus, and silver (IEPA 2012). IEPA has not yet developed a Total Maximum Daily Loads analysis for this segment of the Little Calumet River system. Neither the East Option nor the West Option would cross or come in contact with any local water bodies.

Lake Michigan is the drinking water source for Chicago and its suburbs. Groundwater is not a drinking water source and there are no sole source aquifers within the project area (USEPA 2012). Due to the predominance of impervious surfaces throughout the project area, minimal percolation to the underlying groundwater occurs. **Figure 6-1** shows waterbodies near the project area.

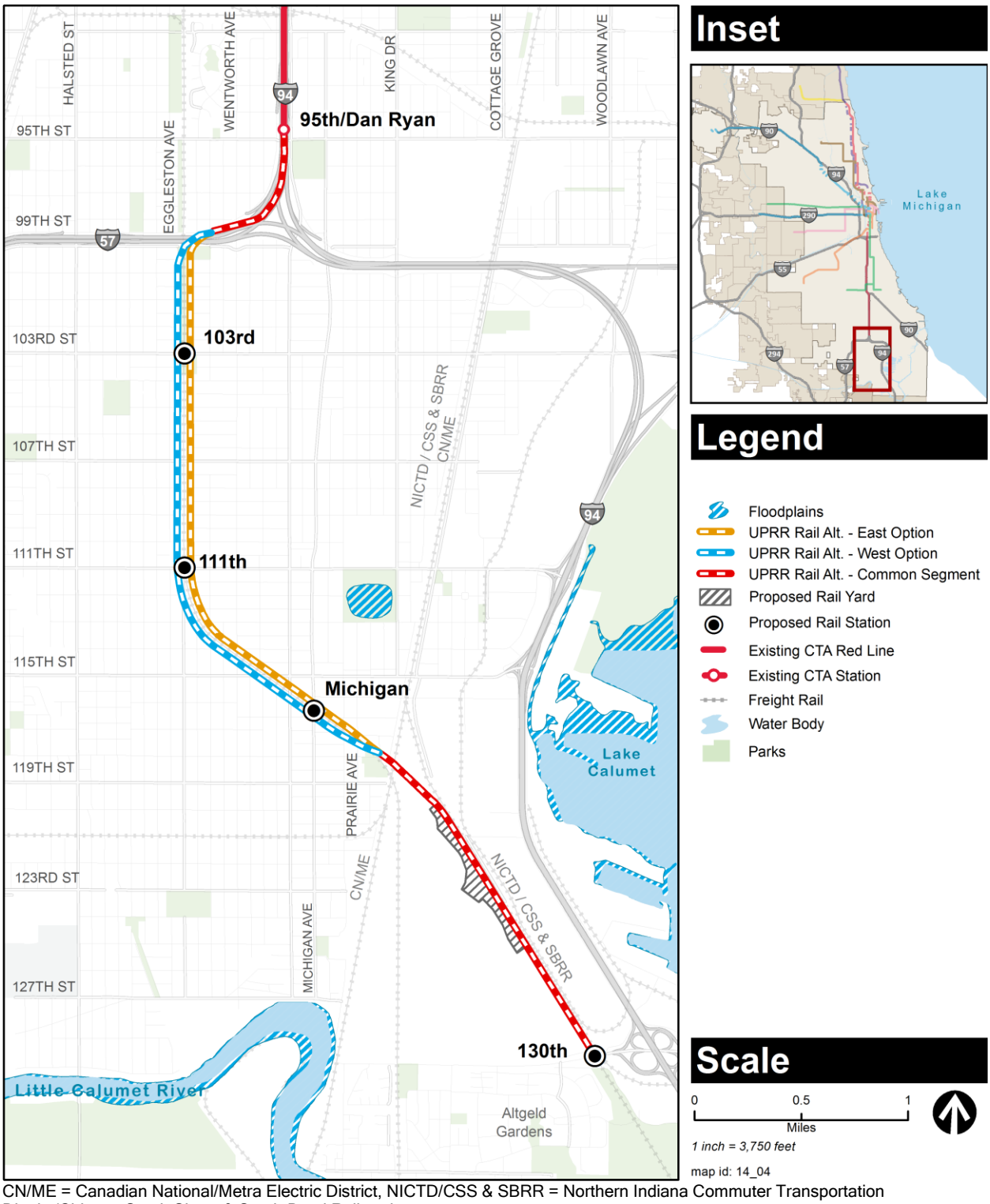

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
Source: Ducks Unlimited 2012, Federal Emergency Management Agency 2008

Figure 6-1: Waterbodies and Floodplains in the Project Area

The No Build Alternative would have no adverse impacts on water resources. The East or West Option would have minimal adverse impacts on water resources. Stormwater drainage may be affected by the proposed structure; however, the alterations would not greatly affect the direction of drainage. Dewatering activities during construction could temporarily affect local groundwater levels. Contaminated groundwater encountered during construction would be disposed of properly in accordance with federal, state, and local regulation. Construction could increase erosion and sedimentation near construction areas. The use of construction BMPs would mitigate these potential impacts. The project would involve reconstruction of impervious surfaces, but would not result in a net change of impervious area, because the project area is heavily urbanized. While the potential exists for minor construction-related impacts, as described above, the East and West Options would have few or no adverse impacts on water quality; therefore, no mitigation measures would be required beyond BMPs currently followed by CTA.

The *Water Resources Technical Memorandum* (**Appendix S**) contains additional details.

6.3 Floodplains

Presidential Executive Order 11988 requires the protection of floodplains. The Executive Order directs federal agencies to avoid conducting, allowing, or supporting actions on a floodplain. The existing floodplains within the project area have been identified using the Federal Emergency Management Agency Flood Insurance Rate Maps. **Figure 6-1** shows the mapped floodplains within the project area. The UPRR Alternative would not cross a floodplain or result in any new structures or construction in a floodplain. Flooding would not affect the project. There would be no impacts on floodplains from the East or West Option.

6.4 Vegetation and Wildlife Habitat

Vegetation and wildlife habitats are regulated on the federal level by the Endangered Species Act (16 USC § 1531), Migratory Bird Treaty Act (16 USC 703–712), Fish and Wildlife Coordination Act (16 USC § 661–667e), and the Bald and Golden Eagle Protection Act (16 USC § 668–668c).

The vegetation and wildlife habitat investigation assessed existing biological resources in the project area and evaluated potential impacts on these resources. CTA reviewed the IDNR EcoCAT report to identify special-status plants and animals and Illinois Natural Areas Inventory (INAI) sites with the potential to occur in the project area (IDNR 2012). The IDNR EcoCAT database identified the Lake Calumet INAI Site near Lake Calumet east of the UPRR Alternative alignment. There are no national wildlife refuges within 0.5 mile of the East or West Option alignments (U.S. Fish and Wildlife Service 2012b).

CTA reviewed aerial photographs and identified all areas within ¼ mile of the UPRR Alternative alignment that appeared to contain approximately ½ acre or more of contiguous habitat cover. (In a heavily urbanized area, ½ acre provides a minimum amount of cover where wildlife not generally found in residential yards might be found.) During the field investigation, CTA visited and evaluated all of these areas. With the exception of the forested habitats (approximately 13 acres) in the vicinity of the 120th Street yard and shop site, it was determined that none of these areas would support wildlife communities that are substantially different from those of the surrounding residential and commercial areas.

The East and West Options have the potential to require the removal of trees. Trees occur in a narrow band immediately adjacent to the proposed track location, in the vicinity of the proposed 120th Street yard and shop, and at properties along the alignment. The narrow bands of trees along the northern portion of the alignment have a lower value to wildlife than blocks of habitat; therefore, removal of these bands of trees would have minimal impacts on wildlife. Along the southern portion of the alignment, the East and West Options have the potential to affect blocks of habitat. The East Option would affect approximately 61 acres of potential habitat and the West Option would affect approximately 67 acres of potential habitat. Tree removal in any part of the project area might affect birds protected under the Migratory Bird Treaty Act (16 USC § 703–712), and depending on what part of the project area the trees are in, tree removal might also be regulated by local ordinances. When applications for local construction permits are made it may be necessary to prepare more detailed tree inventories and update the results of this investigation because some trees may have been removed and others may have grown to a size that would be protected by local tree ordinances.

The East and West Options would have the potential to have adverse impacts on vegetation and wildlife habitat during construction due to tree removal; however, with the implementation of mitigation measures outlined below, potential impacts would not be adverse. Mitigation measures would be required for compliance with the Migratory Bird Treaty Act, for consistency with local tree protection ordinances, and to reduce potential impacts on wildlife habitat. Bird species may use trees that could be removed or disturbed during construction and could be affected. Potential mitigation measures would include the following:

- Tree removal would be timed as much as possible to occur outside the migratory bird nesting season, which occurs generally from April 1–September 15 and as early as March 1 for some species.

- If tree removal must occur during the nesting season, two biological surveys would be conducted: one 15 days before and a second 72 hours before the construction that would remove or disturb suitable nesting habitat. The surveys would be performed by a biologist with experience conducting breeding bird surveys. The biologist would prepare survey reports documenting the presence or absence of any protected bird in the habitat to be removed and any other such habitat within 300 feet of the construction work area. If a protected bird were found, surveys would be continued to locate any nests. If an active nest were located, construction within 300 feet of the nest would be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.

- Avoidance measures would be incorporated into the design of the project during preliminary engineering where feasible; however, if construction of the project were to require removal of a protected tree, a permit would be required in accordance with applicable codes and ordinances of the City of Chicago. Tree removal permits may require replanting of protected trees within the project area or at another location to mitigate for the removal of these trees. Replanting would be done according to the ratios required by tree removal permits and in a size that is appropriate for the species and setting as determined by an arborist. In addition, planted trees would be maintained such that 90 percent are in good condition after 6 months and irrigation would be carried out until the tree is established.

The *Biological Resources Technical Memorandum* (**Appendix V**) contains additional details.

6.5 Threatened and Endangered Species

The Endangered Species Act (16 USC § 1531) and subsequent amendments provide for the conservation of threatened and endangered species and the ecosystems upon which they depend. There are 114 federal- and state-listed species that potentially occur in Cook County (U.S. Fish and Wildlife Service 2012a). CTA also reviewed the IDNR EcoCAT report for information about known occurrences of listed species within the project area. The IDNR EcoCAT database recorded occurrences of seven state-listed species within the sections that encompass the project area, including black-crowned night heron (*Nycticorax nycticorax*), Blanding's turtle (*Emydoidea blandingii*), common moorhen (*Gallinule chloropus*), little blue heron (*Egretta caerulea*), peregrine falcon (*Falco peregrinus*), yellow-crowned night heron (*Nyctanassa violacea*), and yellow-headed blackbird (*Xanthocephalus xanthocephalus*). These recorded occurrences were not within the project area, so CTA compared each species' habitat requirements to the existing habitats within the project area. CTA conducted reconnaissance-level field verification of identified habitat areas to confirm the presence or absence of threatened and endangered species and their habitats within the project area. The field investigation included parks and other public open spaces within ¼ mile of the proposed alignment, stations, and maintenance yard.

CTA identified no federal-listed species in the project area. The only state-listed species with a potential to occur in the project area is the peregrine falcon. There is no suitable habitat for species identified by the EcoCAT database in the project area except for the peregrine falcon. There are no known nesting pairs of peregrine falcons in the project area (Field Museum 2015). In addition, there is no part of the project area that would be expected to provide unique or particularly rich foraging habitat for peregrine falcons. The semi-natural habitats in the vicinity of the 120th Street yard and shop site, and large parks and open spaces might, however, be expected to provide slightly greater foraging opportunities for falcons than elsewhere in the project area.

Neither the East nor West Option would have adverse permanent or construction-related impacts on state- or federal-listed animal and plant species. No mitigation measures for listed species would be required. The *Biological Resources Technical Memorandum* (**Appendix V**) contains additional details.

6.6 Geology and Soils

CTA reviewed existing data on geology, soil, and topography to understand the general geologic setting and identify the locations of geologic hazards that could result in substantial damage to structures or infrastructure or could expose people to substantial risk of injury and to determine potential impacts of the East and West Options. CTA reviewed soil boring and water well logs, geologic maps of Cook County and of Illinois published by the Illinois State Geological Survey, U.S. Geological Survey (USGS) topographic maps, and geologic maps and reports from USDA NRCS. To identify adverse impacts, CTA also considered the project area's proximity to any identified geologic hazards and the potential severity of those hazards. The potential for impacts exists because earthwork activities (such as excavation and grading that occur during construction) can cause soil erosion, affect soil stability, and create topographic disturbances. Potential adverse impacts due to ground settlement, which can occur during both construction and operation, were also considered.

Local topography is generally flat and typically varies less than 50 feet, with a minimum elevation of 590 feet and a maximum elevation of 625 feet above sea level. Bedrock underlying the project area is present at variable depths, ranging from 50 to 100 feet below ground surface. The region has been subjected to tectonic movements; however, the local area does not show evidence of faults or substantial earthquakes (USGS 2002). The project area is underlain by urban land complexes, which are identified as soil that has been disturbed (such as fill material) (USDA NRCS 2012). CTA would perform a geotechnical investigation as part of the preliminary design of the selected option. Some aspects of preliminary plans and design may need revisions based on results of the geotechnical investigation.

Operation or construction of the East or West Option would not have adverse impacts on geologic or soil resources, because all of the features of the options would be located primarily on or within existing transportation use areas such as streets and railroad corridors. No mitigation measures would be required.

6.7 Energy

The Energy Policy Act of 2005 (Public Law 109–58) includes transportation-related provisions that reduce reliance on foreign energy sources (mainly petroleum) and increase use of recovered mineral content in federally funded projects involving procurement of cement or concrete.

CTA evaluated potential energy impacts and benefits associated with construction and operation of the RLE Project. Changes related to the project—in travel patterns and mode choice within the regional transportation network—have the potential to result in changes in net energy demand.

Analysis of long-term energy consumption changes included regional transportation-related energy consumption based on VMT and transit operations. As people choose to use improved transit instead of driving automobiles, VMT can be reduced. Transit operations use energy for vehicle propulsion and operation of stations. The baseline energy consumption was determined from the total regional VMT for the No Build Alternative in 2030, as estimated by CMAP's Regional Travel Demand Model (CMAP 2012c). The VMT was converted to British thermal units (BTU) using 3,650 BTU per vehicle mile traveled, a value derived from an estimated achieved fuel economy of 34.5 miles per gallon for cars and light trucks in 2025 from Corporate Average Fuel Economy standards (National Highway Traffic Safety Administration 2012). Either the East or West Option would result in lower regional VMT than with the No Build Alternative, and would thus result in less vehicular energy consumption than the No Build Alternative.

CTA calculated operational energy consumption based on the total additional annual rail car miles and the average kilowatt-hour per revenue car mile provided by CTA. Kilowatt-hours were then converted to BTU. Station energy was calculated based on similar CTA Red Line elevated stations in 2010.

The projected annual transportation-related energy consumption in the region for the No Build Alternative is approximately 368 trillion BTU, based on output from CMAP's Regional Travel Demand Model (CMAP 2012c). The projected regional travel demand for the East and West Options is marginally smaller than for the No Build Alternative; the East or West Option would result in 11.4 to 19.6 million fewer annual VMT than the No Build Alternative. The difference in projected energy use (regional transportation plus transit operations) between the East or West

Option and the No Build Alternative would not be greater than the margin of error for regional modeling.

The East and West Options would require energy for operations. The net difference in energy use for either option would be less than +/- 0.02 percent, which is smaller than the margin of error for regional modeling. The difference in energy use between the East and West Options and the No Build Alternative (368 trillion BTU for regional vehicular travel in 2030) would be negligible. Operation of the East and West Options would not have an impact on regional energy consumption. While the difference in energy use would be negligible, this analysis shows there would be no adverse energy impact associated with the East or West Option.

CTA evaluated construction energy consumption for the East and West Options to determine the short-term impacts of the project on regional energy use. Capital cost estimates were used to determine the construction energy consumption by applying an energy cost factor from *Energy and Transportation Systems* (California Department of Transportation 1983). Energy was expressed using BTU. Energy use includes both manufacture of components and construction to install the components. Energy would be required for construction of either the East or West Option.

Energy would be used for the production of the guideway and station components (including steel, cement, copper, and glass). Energy would also be used for the operation of construction equipment. Energy use by construction equipment would be localized and temporary. Construction energy use for the East and West Options includes construction of elevated structures and stations. The East Option would use approximately 6,130 billion BTU for construction and the West Option would use approximately 6,170 billion BTU for construction.

The one-time irreversible commitment of energy resources for construction would amount to less than 1.2 percent of the total annual energy consumption for Cook County, which is 530 trillion BTU (CNT Energy 2009). Construction of either option would not have an impact on energy consumption in the Chicago Metropolitan Area, Cook County, or the project area.

Because the RLE Project would not have an impact on regional energy consumption, no mitigation measures are proposed. The *Energy Technical Memorandum* (**Appendix W**) contains additional details.

Chapter 7
Environmental Justice

Environmental justice (EJ) is "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (USEPA 2004). This chapter summarizes the EJ analysis and outreach conducted for this project. The *Environmental Justice Technical Memorandum* (**Appendix X**) provides additional details.

The project area consists entirely of minority communities, some of which are also low-income areas. All of the benefits and impacts of the project would occur within these minority and low-income populations (EJ populations). Few benefits would occur outside of the minority and low-income areas. As such, both the East and West Options would have impacts on EJ populations; however, none of the impacts would be disproportionately high and adverse. FTA and CTA have undertaken outreach and ongoing coordination with affected communities to identify EJ populations, discuss project impacts and benefits, and mitigation measures where relevant.

7.1 Regulatory Framework/Methods

Federal agencies are required to consider the potential for disproportionately high and adverse impacts on EJ populations that could result from all programs, policies, and activities (Executive Order 12898). As described in Executive Order 12898, a disproportionate impact is one that would negatively affect EJ populations to a greater extent than non-EJ populations. In accordance with FTA guidance, including the August 2012 FTA Circular 4703.1 (*Environmental Justice Policy Guidance for Federal Transit Administration Recipients*), the EJ process and analysis for the RLE Project were designed to accomplish the following:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental impacts, including social and economic impacts, on EJ populations.
- Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by EJ populations.

CTA performed the EJ analysis in compliance with Executive Order 12898 (1994), USDOT Order 5610.2(a) (2012), and FTA Circular 4703.1 (2012). **Appendix X** contains additional details regarding federal, state, and local EJ regulations.

CTA performed the analysis of the potential for disproportionate impacts on EJ populations using the following steps:

1. Demographic Analysis and Initial Community Outreach
    - CTA used socioeconomic data from the 2010 Census and the American Community Survey to describe the population in the project area. Income, ethnicity, employment, age,

housing characteristics, disability, and English proficiency were used in conjunction with field observations and stakeholder interviews to help identify the presence of EJ populations.

- CTA collected information about elderly and disabled populations in accordance with the laws of the State of Illinois. CTA identified distinct elderly populations using a 50 percent threshold in accordance with the Illinois Environmental Justice Act. Disability statistics were compiled from 2010 Census data and American Community Survey data at the block group level to include individuals with a sensory, physical, or mental disability or other condition that limits activities of daily living. CTA then compared these statistics to citywide averages. Information on elderly and disabled populations was also overlaid onto the federally protected minority and low-income community areas to provide additional information on elderly populations and people with disabilities within the project area.

- **Section 7.2** summarizes the data analysis, and **Appendix X** contains the limited English proficiency (LEP) analysis. The project area consists of predominantly minority populations, with some concentrations of low-income groups. CTA also identified pockets of Spanish-speaking populations, indicating the need for outreach in both English and Spanish languages.

2. Environmental Analysis to Identify Adverse Impacts and Benefits

- All of the benefits and impacts of the project would accrue to the same EJ populations. The EJ-specific environmental analysis focused on identifying all adverse impacts and mitigation measures of the East and West Options because they would both affect EJ populations.

- Benefits that would offset the potential impacts were also identified and included in the analysis. Identification of additional mitigation measures specifically for EJ purposes would not be necessary for the RLE Project, because none of the impacts would be disproportionately high and adverse. No additional mitigation measures—beyond those identified in **Chapters 3, 4, 5, and 6** of this Draft EIS—would be needed to meet EJ requirements. **Section 7.4** presents the results of the EJ analysis.

3. Engagement with EJ Populations in the Public Outreach and Decision-Making Process

- The stakeholder interview process and CTA's ongoing community relations efforts helped identify effective outreach methods. As described in **Chapter 10**, traditional outreach methods such as public meetings and comment periods were augmented by nontraditional outreach. Nontraditional activities included website postings, presentations to local community groups, e-mail and direct mail newsletters, and one-on-one meetings with elected officials and community group leaders. Per the LEP analysis, CTA provided Spanish translation of meeting handouts and Spanish and sign language interpreters at open house meetings. In addition, CTA maintains a project-specific e-mail address to receive comments and requests to receive updates on the project. **Section 7.3** and **Chapter 10** summarize the outreach process.

4. Incorporation of Input from EJ Populations into the NEPA Process

- After the public meetings held in spring 2014, CTA decided not to pursue the Halsted Alternative in part because of public comments, including comments from EJ populations and community groups, in opposition to that alternative. In addition, the Halsted Alternative failed to fully meet the purpose and need of the project as described in **Section 2.4.3**. After the public meeting, CTA conducted additional engineering analysis to further refine the East and West Options to minimize displacements and impacts on the area parks where possible.

7.2 Existing Conditions

The project area consists entirely of predominantly minority populations (see **Figure 7-1**). Nearly all residential portions of the project area contain over 75 percent African American residents, with many areas approaching 100 percent. The project area contains a higher proportion of minority residents (97.9 percent) than the City of Chicago as a whole (68.3 percent).

The 2010 annual median household income for communities in the project area ranges from approximately $11,000 in Riverdale to $54,000 in the Village of Calumet Park. Project area median income (approximately $41,000) is lower than the City of Chicago as a whole ($46,900) and Cook County ($54,000). Within the project area, the census block groups with the lowest income are concentrated around the Riverdale community area (southeastern portion of the project area) and the Altgeld Gardens public housing project, with some pockets along Michigan Avenue in Roseland and along 119th Street in West Pullman (see **Figure 7-2**). Note: Blocks of white space represent areas with low population density such as schools and industrial areas.

The highest percentages of LEP populations occur in the West Pullman community, east of State Street between 115th and 119th Streets (see **Figure 7-3**). Other areas with LEP residents include Pullman east of the Metra Electric District Line between 111th and 119th Streets, and near Lake Calumet. According to the 2010 U.S. Census, English is the most spoken language at home in the project area, with 92.6 percent of households speaking English only. Spanish is the second most spoken language at home, with over 6 percent of households speaking Spanish. The largest Spanish-speaking populations live in the Village of Calumet Park, where 15.5 percent of households speak Spanish. Pullman and West Pullman also have large percentages of Spanish-speaking households with 10.4 percent and 6.7 percent of homes speaking Spanish, respectively. Specific census tracts in the West Pullman and South Deering community areas and the Village of Calumet Park reported that over 30 percent of households speak Spanish. The full LEP Assessment is included in **Appendix X**.

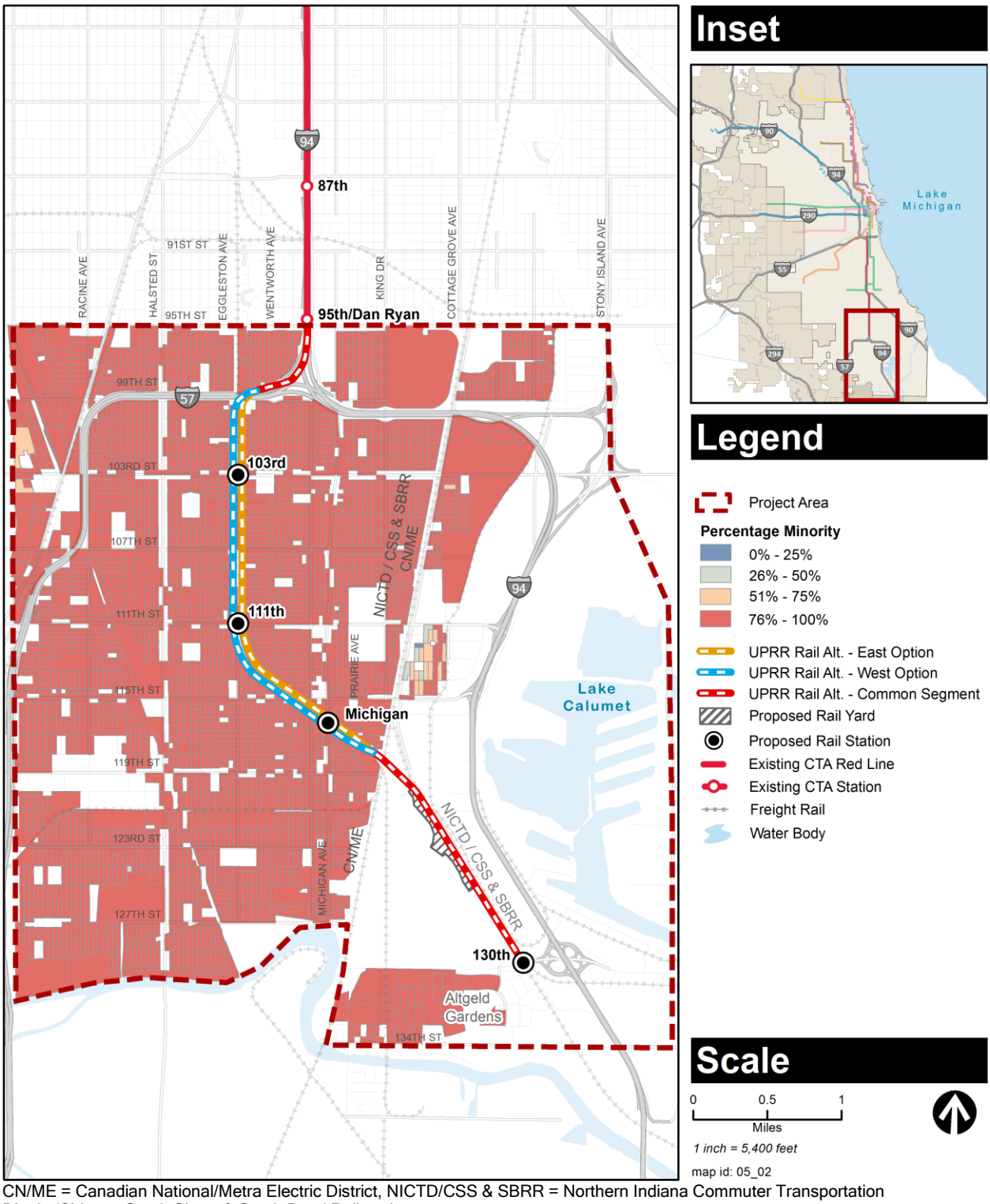

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
Source: U.S. Census Bureau 2010
Note: Blocks of white space represent areas with low population density such as schools and industrial areas.

Figure 7-1: Minority Populations

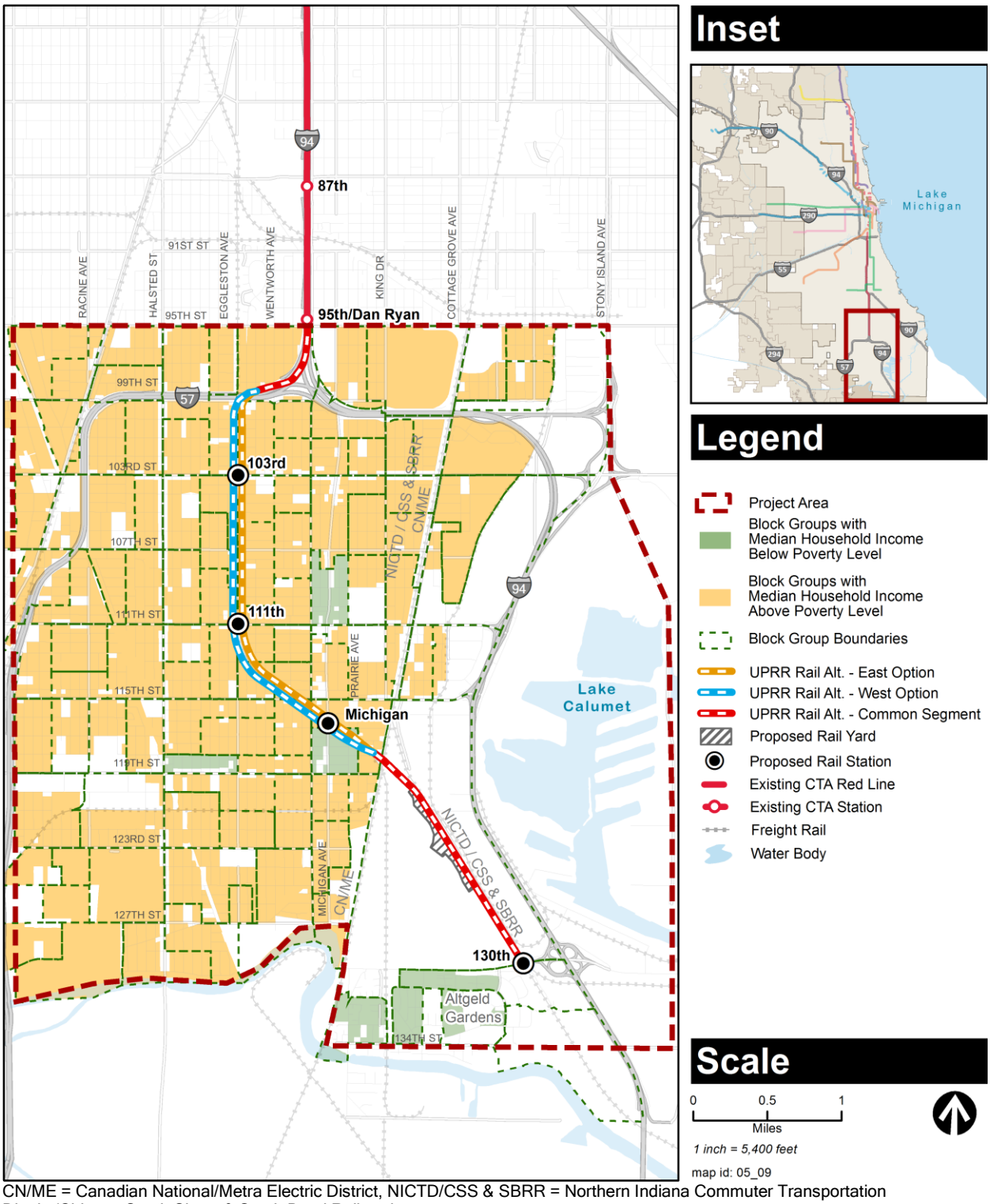

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
Source: U.S. Census Bureau 2010
Note: Blocks of white space represent areas with low population density such as schools and industrial areas.

Figure 7-2: Low-Income Populations

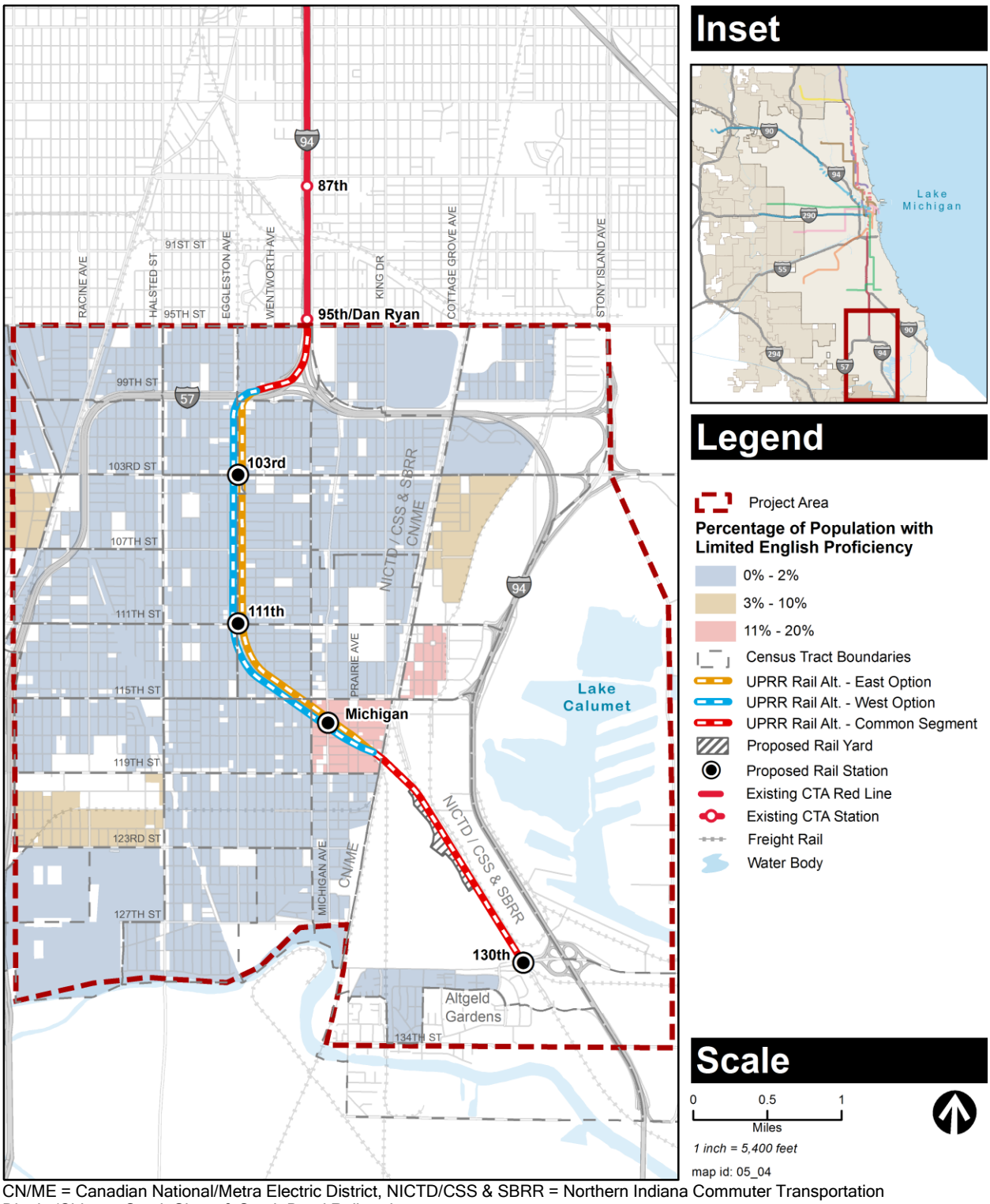

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad
Source: U.S. Census Bureau 2010
Note: Blocks of white space represent areas with low population density such as schools and industrial areas.

Figure 7-3: Percentage of Population that has Limited English Proficiency

The entire project area consists of predominantly minority populations (**Figure 7-1**), with some concentrations of low-income groups (**Figure 7-2**). For these reasons, the entire project area is considered an EJ community. The low-income area in Riverdale (the southeastern portion of the project area) has minimal population between 115th and 130th Streets; the majority of the population in this area resides south of 130th Street and is living below the poverty level.

In addition, approximately 15.3 percent of those living within the project area are elderly, which is higher than the citywide elderly proportion of 10.3 percent (U.S. Census Bureau 2010). Disabled populations within the project area constitute 15.4 percent of the project area population, higher than the 11.0 percent found at the citywide level (U.S. Census Bureau 2012). The *Environmental Justice Technical Memorandum* (**Appendix X**) provides further details about elderly and disabled populations.

7.3 Specialized Outreach

Full and fair access to meaningful involvement by EJ populations in project planning and development is an important aspect of EJ (Executive Order 12898). Using demographic data to determine the presence of EJ populations is only the first step in a robust EJ approach. Ensuring full and fair access means actively seeking the input and participation from those typically under-represented groups throughout all project stages. Residents can provide important information on community concerns, special sites, and unusual traffic, pedestrian, or employment patterns in the corridor. This information can be used in the design and evaluation of alternatives, to avoid negative impacts on valued sites, and to support the development of safe, practical, and attractive transportation options that are responsive to the concerns of EJ communities.

CTA has implemented a robust outreach program with an emphasis on meaningful exchange with EJ populations. **Chapter 10** and **Appendix C** provide additional details on public and agency coordination conducted.

Public and community meetings were conducted in compliance with NEPA guidelines and held at locations selected to reflect equitable geographic coverage and proximity to public transportation, and to minimize overlap with other meetings scheduled in the project area. The locations were within the project area, accessible by public transit, and ADA compliant. CTA performed an LEP assessment in 2009 and determined that public outreach materials should be prepared in both English and Spanish. Spanish translation of meeting handouts and Spanish and sign language interpreters were made available at every public meeting. CTA also offered to make translators for additional languages available upon request at the open house meeting.

In September 2009, two public scoping meetings provided the public with an opportunity to comment on the project purpose and need, alternatives considered, and issues and areas of concern to be considered in the Draft EIS. The meetings were publicized via direct mail and e-mail notices using the stakeholder database, postings on CTA's website, display advertisements in multilingual publications (English and Spanish), a legal notice placed in the Chicago Tribune, CTA customer alerts, flyers distributed to key locations along the project corridor, and notices posted in libraries and village halls.

CTA held an open house meeting at St. John Missionary Baptist Church on August 2, 2011 to update the community regarding the RLE Project. The meeting was publicized using the same

methods as listed above. The meeting location was chosen because of its central location in the project area and proximity to public transportation, and to minimize overlap with other meetings scheduled in the project area. The location was accessible by public transit and compliant with the ADA. Spanish and sign language interpreters were available at the meeting.

In April and May 2014, CTA again reached out to the general public as well as the identified EJ population and local community groups via a public open house meeting and individual community group meetings. Within the project area, community groups who were identified and contacted as part of the EJ and community group outreach included the following:

- 34th Ward Town Hall
- Agape Community Center
- Chicago Neighborhood Initiatives
- Chicago Park District
- DCP
- Far South Side Community Development Corporation
- Friends of the Parks
- Golden Gate Homeowners Association
- Greater Roseland Chamber of Commerce
- People for Community Recovery
- Roseland Business Development Council
- Roseland Manor
- Rosemoor Community Association
- St. Anthony of Padua Parish

CTA contacted each of the groups by telephone and provided them an opportunity for a presentation on the proposed project.

At the request of interested community groups, CTA conducted meetings to share information about the project and allow community members to ask questions and voice concerns. CTA held 13 community group meetings. **Appendix C** contains meeting notes and other supporting information for the outreach efforts.

The purpose of the spring 2014 outreach was to get public feedback on the alternatives, potential impacts, and mitigation and to give the community an opportunity to ask questions about the project. In addition to the 13 community group meetings, CTA held an open house on May 13, 2014.

Input received at the open house and community meetings affected the RLE Project in several ways, the most significant of which was the elimination of the BRT and Halsted Alternatives from further consideration. The community expressed concern about the BRT Alternative's failure to meet the purpose and need.

CTA has considered the EJ communities' comments and concerns in the crafting of mitigation measures to reduce adverse impacts. These mitigation measures are described in greater detail in the environmental consequences analysis.

In addition, CTA has been mindful to promote full and fair participation from all members of the public during the decision-making process for the RLE Project. CTA's public meetings on the RLE Project are held in the evening so that the largest number of community members can attend. CTA's efforts include specialized outreach to people who, as a result of national origin, have LEP. CTA evaluated the need for additional outreach by using 2010 Census data and analyzing whether populations throughout the project corridor were linguistically isolated because of challenges with reading, writing, and/or speaking English. The largest Spanish-speaking populations live in the Village of Calumet Park, where 15.5 percent of households speak Spanish. Pullman and West Pullman also have a large percentage of Spanish-speaking households with 10.4 percent and 6.7 percent of homes speaking Spanish, respectively. Specific census tracts in the West Pullman and South Deering community areas and the Village of Calumet Park reported that over 30 percent of households speak Spanish.

Based on CTA's analysis, Spanish language interpreters were made available at all public meetings. Interpreters for other languages were also made available upon request at all public open houses, community meetings, and the public hearing for the project. Sign language interpreters were also made available at all public meetings.

7.4 Environmental Consequences

FTA Circular 4703.1 indicates that projects in areas consisting entirely of EJ populations do not necessarily eliminate the possibility of disproportionately high and adverse impact findings; however, the following characteristics are true of the project area and East and West Options:

- The entire project area is predominantly minority populations. No community in the project area contains less than 92.9 percent minority populations, and the project area as a whole contains 97.9 percent minority populations.
- All of the impacts and benefits of the East and West Options would accrue to the same minority populations.
- The purpose of this community-initiated project includes connecting disadvantaged communities to Chicago's major employment and activity centers in an effort to spur economic development and improve livability. The project would help remediate the geographic isolation and lack of employment and development opportunities that currently exist in the project area.

A multistep process was used to assess the potential for disproportionately high and adverse impacts on EJ populations as described in **Section 7.1**. Categories that had adverse impacts remaining after mitigation were analyzed further to determine whether any of those impacts would be disproportionately high or adverse. An impact would be disproportionately high or adverse if the effect (1) would be predominantly borne by an EJ population, or (2) would be suffered by the EJ population and would be appreciably more severe or greater in magnitude than the adverse effect suffered by the non-EJ population. Project benefits to EJ communities were also considered.

To provide a complete picture of how the RLE Project would affect EJ populations, this section summarizes the benefits and adverse impacts that would occur in EJ communities and the associated mitigation measures:

- **Beneficial Impacts of the Project** - To estimate the extent of the benefits derived from the East and West Options, the analysis in **Table 7-1** provides a comparison of the benefits with regard to the following criteria:
  - Reduced Transit Times
  - Increased Travel Choices
  - Increased Economic Competitiveness
  - Environmental Criteria
- **Resources with Limited or No Adverse Impacts** - The East and West Options would have limited or no adverse impacts in these environmental resource categories (**Chapter 6**). Because there would be no adverse impacts, there is no potential for disproportionately high and adverse impacts and these categories will not be carried forward for further analysis.
  - Air Quality
  - Water Quality
  - Floodplains
  - Vegetation and Wildlife Habitat
  - Threatened and Endangered Species
  - Geology and Soils
  - Energy
- **Resources with No Adverse Impacts after Mitigation** - The East and West Options would have adverse impacts that would not remain adverse after mitigation in the following categories. Because there would be no adverse impacts after mitigation, there is no potential for disproportionately high and adverse impacts and these categories will not be carried forward for further analysis. Further details about these impacts and the proposed mitigation measures are provided in **Chapter 4**.
  - Land Use and Economic Development
  - Displacement and Relocation of Existing Uses
  - Noise and Vibration
  - Safety and Security
  - Historic and Cultural Resources
  - Hazardous Materials
  - Wetlands

- **Resources with Adverse Impacts after Mitigation** - As shown in **Table 7-2**, adverse impacts would remain after mitigation for both the East and West Options in two categories. These adverse effects would not be fully addressed through mitigation measures, resulting in unavoidable adverse effects. Categories with potential adverse effects after mitigation are considered for their potential for disproportionately high and adverse effects on EJ communities. They are discussed in more detail in **Sections 7.4.2** and **7.4.3**.
    - Neighborhoods and Communities - Permanent Impacts
    - Visual and Aesthetic Conditions - Permanent Impacts

Table 7-1: Summary of Benefits

Benefits and Resource Areas	No Build Alternative	Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
Reduced Transit Times	No	Yes	Yes
Travel Times Between Stations:[1] 130th to 95th 130th to Jackson	 28 minutes 58 minutes	 14 minutes 39 minutes	 14 minutes 39 minutes
Increased Travel Choices	No	Yes	Yes
Increased Economic Competitiveness	No	Yes	Yes
Land Use and Economic Development	No Impacts	Economic development benefits resulting from the enhanced transit service	Economic development benefits resulting from the enhanced transit service
Neighborhoods and Communities	No Impacts	Improved mobility, access to parklands and community facilities, access to jobs, possible economic development, community revitalization, new space for community facilities and retail, and direct service to Altgeld Gardens	Improved mobility, access to parklands and community facilities, access to jobs, possible economic development, community revitalization, new space for community facilities and retail, and direct service to Altgeld Gardens
Hazardous Materials	No Impacts	Cleanup and/or removal of contaminated material during construction	Cleanup and/or removal of contaminated material during construction
Transportation	No Impacts	Public transportation would benefit from expanded rail transit service and rerouted bus service within the project area. Pedestrians would benefit from upgraded intersections immediately adjacent to the stations with ADA-accessible curb ramps and replacement of deteriorated sidewalks.	Public transportation would benefit from expanded rail transit service and rerouted bus service within the project area. Pedestrians would benefit from upgraded intersections immediately adjacent to the stations with ADA-accessible curb ramps and replacement of deteriorated sidewalks.

[1] Source: CTA 2009

Table 7-2: Summary of Potential Impacts after Mitigation

Resource Area	Alternative			Analyze for Potential High and Adverse Impacts on EJ Populations
	No Build	Union Pacific Railroad East Option[1]	Union Pacific Railroad West Option[1]	
Transportation	--	No disproportionate adverse impacts after mitigation	No disproportionate adverse impacts after mitigation	No
Land Use and Economic Development	--	No disproportionate adverse impacts after mitigation	No disproportionate adverse impacts after mitigation	No
Displacement and Relocation of Existing Uses	--	No disproportionate adverse impacts after mitigation	No disproportionate adverse impacts after mitigation	No
Neighborhoods and Communities	--	Permanent: Adverse impact after mitigation Construction: No disproportionate adverse impacts after mitigation	Permanent: Adverse impact after mitigation Construction: No disproportionate adverse impacts after mitigation	Yes
Visual and Aesthetic Conditions	--	Permanent: Adverse impact after mitigation Construction: --	Permanent: Adverse impact after mitigation Construction: --	Yes
Noise and Vibration	--	No disproportionate adverse impacts after mitigation	No disproportionate adverse impacts after mitigation	No
Safety and Security	--	No disproportionate adverse impacts after mitigation	No disproportionate adverse impacts after mitigation	No
Historic and Cultural Resources	--	--	--	No
Hazardous Materials	--	No disproportionate adverse impacts after mitigation	No disproportionate adverse impacts after mitigation	No
Wetlands	--	No disproportionate adverse impacts after mitigation	No disproportionate adverse impacts after mitigation	No
Air Quality	--	--	--	No
Water Quality	--	--	--	No
Floodplains	--	--	--	No
Vegetation and Wildlife Habitat	--	--	--	No
Threatened and Endangered Species	--	--	--	No
Geology and Soils	--	--	--	No
Energy	--	--	--	No
Cumulative	--	--	--	No

-- = No disproportionate adverse effect before mitigation (no mitigation required).
[1] Unless noted separately, impacts are stated for both permanent and construction.

7.4.1 No Build Alternative

The No Build Alternative would not involve any new construction for the RLE Project, and would not have any adverse impacts. No mitigation measures would be required. The No Build Alternative would, however, lack the transportation benefits that the East or West Option would provide, such as reduced travel times, better access to jobs, and economic development. The No Build Alternative would also fail to address the community's desire for growth initiatives that could attract new economic development interests to the area. In addition, potential remediation benefits associated with the UPRR Alternative would not occur with the No Build Alternative.

7.4.2 Union Pacific Railroad Alternative - East Option

The UPRR Alternative East Option would involve an extension of the Red Line from its current endpoint at the 95th Street Terminal southward to 130th Street in the vicinity of Altgeld Gardens via existing highway rights-of-way and railroad corridors. The new rail service would improve commute times to jobs, provide better transit access to geographically isolated communities, and potentially spur economic development in surrounding neighborhoods. The East Option would have permanent adverse impacts on neighborhoods and communities as well as visual and aesthetic conditions. The adverse impacts would occur in the project area, which consists entirely of EJ communities.

Neighborhoods and Community Impacts

The East Option would have permanent adverse impacts on community character and cohesion that could not be mitigated due to the visual encroachment of the elevated structure into the neighborhood north of I-57 in Roseland and at 117th Street and Prairie Avenue in West Pullman. Mitigation measures for impacts on community character, including planting additional landscaping, would not be sufficient to offset this permanent impact. The East Option alignment would pass through the northwestern corner of Wendell Smith Park and the western portion of Block Park, would displace Now Faith Church of God Holiness, and would displace part of the schoolyard at Kwame Nkrumah Academy. The church could be relocated within the neighborhood. The East Option would largely leave the functional and recreational use of the parks intact and impacts would not be adverse after mitigation. See **Section 4.3** for additional details on mitigation measures for permanent neighborhood and community impacts.

By improving travel time, operation of the East Option would improve access to parklands and community facilities within walking distance (½ mile) of the station locations. The East Option would substantially reduce travel times between neighborhoods in the project area, and would enhance their connection with major job and activity centers to the north. The new transit service and the subsequent increase in pedestrian traffic could attract new businesses to the area and support the growth and enhancement of these neighborhood retail and service nodes. The parking garage at the Michigan Avenue station would provide space for retail and community facilities. The station would serve as a transit hub that brings additional passengers and visitors to the area, which could further boost economic development. The result would be an overall increase in community livability. The mobility and development impacts of the East Option would be beneficial.

Visual and Aesthetic Conditions

The elevated structure would cause adverse visual impacts north of I-57 and at 117th Street and Prairie Avenue, as discussed in **Section 4.4**. Mitigation measures would reduce the impacts at these locations, but due to the proximity of the elevated structure to residential areas, the impacts would remain adverse despite mitigation. Mitigation measures to reduce visual impacts would include landscaping, using urban design techniques to reduce massing, and creating pedestrian-friendly surroundings.

Conclusion

Considering the impacts, mitigation measures, and benefits, the East Option's permanent impact on community character and permanent visual impact would not be appreciably more severe or greater in magnitude than similar effects elsewhere in CTA's rail system. The mitigation measures proposed are similar in nature to those for other CTA projects and have been proposed by CTA, with input from local communities, consistently in EJ and non-EJ communities alike. The project offers substantial benefits that would accrue to the resident EJ populations. Although the East Option would still have adverse impacts on EJ communities, these impacts would not be disproportionately high or adverse. As such, no EJ-specific mitigation measures beyond those identified in **Chapter 4** would be required.

7.4.3 Union Pacific Railroad Alternative - West Option

Like the UPRR Alternative East Option, the West Option would involve an extension of the Red Line from its current endpoint at the 95th Street Terminal southward to 130th Street in the vicinity of Altgeld Gardens via existing highway rights-of-way and railroad corridors. The new rail service would improve commute times to jobs, provide better transit access to geographically isolated communities, and potentially spur economic development in surrounding neighborhoods. The West Option would have permanent adverse impacts on neighborhoods and communities as well as visual and aesthetic conditions. The adverse impacts would occur in the project area, which consists entirely of EJ communities.

Neighborhoods and Communities

The West Option would have permanent adverse impacts on community character and cohesion that could not be mitigated due to the visual encroachment of the elevated structure into the neighborhood north of I-57 and between 99th and 103rd Streets in Washington Heights. The 103rd Street station in Roseland and Washington Heights and the Michigan Avenue station park & ride facility in West Pullman would also cause adverse visual impacts because they would change the scale, density, and character of the local community. Mitigation measures for impacts on community character, including planting additional landscaping, would not be sufficient to offset these permanent impacts. The West Option alignment would pass through Fernwood Parkway, and would displace the Grace Temple Church of God Established in Christ. The church could be relocated within the neighborhood; however, as of July 2015 the building is vacant. CTA would keep the area beneath the track structure in Fernwood Parkway open for use, and improve park space elsewhere in the neighborhood. See **Section 4.3** for additional details on mitigation measures for permanent neighborhood and community impacts.

Other impacts, benefits, and mitigation measures would be similar to those for the East Option, as discussed above in **Section 7.4.2**.

Visual and Aesthetic Conditions

The elevated structure would cause adverse visual impacts north of I-57, between 99th Street and 103rd Street, near the 103rd Street station, and near the Michigan Avenue station park & ride facility, as discussed in **Section 4.4**. Mitigation measures to reduce visual impacts would include providing landscaping and replanting vegetation where possible, designing the station and park & ride facility to match the character of the surrounding neighborhood, using urban design techniques to reduce massing, and creating pedestrian-friendly surroundings. Exterior lighting would be shielded and carefully placed when adjacent to sensitive areas such as residential communities. The impacts would remain adverse after mitigation.

Conclusion

Considering the impacts, mitigation measures, and benefits, the West Option's permanent impact on community character and permanent visual impact would not be appreciably more severe or greater in magnitude than similar effects elsewhere in CTA's rail system. The mitigation measures proposed are similar in nature to those for other CTA projects and have been proposed by CTA consistently in EJ and non-EJ communities alike. The project offers substantial benefits that would accrue to the resident EJ populations. Although the West Option would still have adverse impacts on EJ communities, these impacts would not be disproportionately high or adverse. As such, no EJ-specific mitigation measures beyond those identified in **Chapter 4** would be required.

Chapter 8
Section 4(f) Evaluation

Section 4(f) of the USDOT Act of 1966 is a federal law that established requirements for USDOT (including FTA) consideration of publicly owned parks/recreational areas that are accessible to the general public, publicly owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects. This law, commonly known as Section 4(f), is now codified in 49 USC § 303 and 23 USC § 138, and is implemented by FTA through the regulation 23 CFR § 774. Additional guidance on the implementation of Section 4(f) may be found in FHWA's *Section 4(f) Policy Paper* (USDOT, FHWA 2012). FTA has formally adopted this guidance and this analysis was conducted consistent with this guidance.

Publically owned park or recreation land would be used as a result of the options evaluated in the Draft EIS and is further evaluated in this Section 4(f) chapter. Based on the evaluation in this Draft EIS, no historic properties would be affected or used by the project alternatives and further Section 4(f) evaluation of historic properties is not required. Historic properties are described within this chapter to provide sufficient documentation that there is no Section 4(f) use of these properties. This chapter summarizes the findings of the *Parklands and Community Facilities Technical Memorandum* (**Appendix M**), the *Historic and Cultural Resources Technical Memorandum* (**Appendix Q**), and the *Park Replacement Analysis Technical Memorandum* (**Appendix Y**).

As part of the public hearing for this Draft EIS, the public will be offered the opportunity to comment on FTA's preliminary determinations in this Section 4(f) analysis and on the mitigation measures identified, including potential replacement park options. After the public comment period is complete, FTA will make a final Section 4(f) determination based on information in this chapter, the referenced technical memoranda, further coordination with the Chicago Park District, and public comments received. FTA's Section 4(f) determination will either (1) confirm the preliminary findings within this Draft EIS for inclusion in the Final EIS and ROD for the project, or (2) require additional Section 4(f) analysis, which will be prepared as part of the Final EIS.

8.1 Project Description and Supporting Information

CTA, as project sponsor to FTA, proposes to extend the existing Red Line HRT service 5.3 miles south from the existing 95th Street Terminal to 130th Street on Chicago's Far South Side. The project area is 11 miles south of the Loop. The project would address the following needs:

- Transit trips to jobs are longer for Far South Side residents than they are for residents in the Chicago seven-county region as a whole.
- Transit-dependent populations in the project area have limited direct access to rapid transit rail service.

- The project area is geographically isolated from major activity centers and provides residents limited viable transportation options, limiting access between affordable housing (e.g., Altgeld Gardens public housing project) and employment centers outside of the project area.

- Existing transit markets are underserved and transit connectivity is challenging in the project area.

- Disinvestment and limited economic development in the project area have negatively affected Far South Side communities.

- The existing 98th Street Yard does not have capacity to store rail cars for any substantial increase in Red Line capacity accompanying future Red Line expansion.

Additional details on the purpose and need for the project are in **Chapter 1**. The Chicago Transit Board designated the UPRR Alternative, discussed further in **Chapter 2** of the Draft EIS, as the LPA on August 12, 2009.

The UPRR Alternative alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would turn south to follow the UPRR corridor. Two UPRR Alternative options for the segment of the proposed alignment between I-57 and the CN/ME tracks near 119th Street are being analyzed:

- East Option - The CTA elevated structure would be placed immediately adjacent to the east side of the UPRR right-of-way.

- West Option - The CTA elevated structure would be placed immediately adjacent to the west side of the UPRR right-of-way.

The alignment would follow the UPRR corridor to Prairie Avenue, where it would cross over the CN/ME tracks near 119th Street. South of this point, the East and West Options would follow the same alignment southeast along the NICTD/CSS & SBRR right-of-way using a portion of the Norfolk Southern Railway and Conrail right-of-way to the terminus (end) of the RLE at 130th Street.

Chapter 2 provides further details on the AA process leading to the development and selection of the LPA and these alignment options.

8.2 Regulatory Framework

This section describes regulatory framework and requirements under Section 4(f) of the USDOT Act of 1966, as amended by 23 USC § 138 and 49 USC § 303, and its implementing regulations and guidance. It includes information on the definition of "use" under Section 4(f) (**Section 8.2.1**) and the basis of making Section 4(f) determinations (**Section 8.2.2**).

8.2.1 Section 4(f) "Use" Determinations

To determine whether Section 4(f) applies to the proposed project and as defined in 23 CFR § 774.17, the protected Section 4(f) properties must be assessed to determine whether there would

be a "use" of the property as defined in the statute. Per the regulation, use of a protected Section 4(f) property occurs when any of the following conditions are met:

1. **Permanent Incorporation/Direct Use** - A permanent incorporation or direct use of a Section 4(f) property occurs when land is permanently incorporated into a transportation facility. *"Permanent incorporation"* of a Section 4(f) property would include purchasing part or all of the property for use as right-of-way or for transportation facilities, or purchasing a permanent easement for construction or operations. Even small partial acquisitions of Section 4(f) lands are considered permanent incorporation.

2. **Temporary Use** - A temporary use of a Section 4(f) property occurs when there is a short-term use of the property that is considered adverse in terms of the preservation purpose of the Section 4(f) statute. Under 23 CFR § 774.13, a temporary occupancy of a property does not constitute a "use" of a Section 4(f) property when all of the following conditions are satisfied:

   - The duration is temporary (i.e., less than the time needed for construction of the project), and there is no change in ownership of land.
   - The scope of work is minor (i.e., both the nature and magnitude of the changes to a Section 4(f) property are minimal).
   - There are no anticipated permanent adverse physical impacts, nor is there interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis.
   - The land being used is fully restored to a condition that is at least as good as that which existed before the project.
   - There is documented agreement among appropriate federal, state, and local official(s) with jurisdiction over the Section 4(f) property regarding the above conditions.

3. **Constructive Use** - A constructive use of a Section 4(f) property occurs when a transportation project would not incorporate land from the property, but the proximity of the project would result in impacts so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) would be substantially impaired (23 CFR § 774.15).

8.2.2 Section 4(f) Approval Options

FTA may not approve the use of a Section 4(f) property, unless it determines the following, as defined in 23 CFR § 774.17:

- There is no feasible and prudent alternative to the use of that land and the project includes all possible planning to minimize harm of using the property.

  OR

- FTA determines that Section 4(f) use of the property would have a "*de minimis*" impact.

Feasible and prudent standards for evaluating avoidance alternatives to using Section 4(f) property are defined in 23 CFR § 774.17. If it is ultimately determined no feasible and prudent avoidance alternative exists, then the alternative with the least overall harm to Section 4(f) properties must be selected. Seven factors, which are established in 23 CFR § 774.3(c)(1), are used in making a determination of the alternative with least overall harm to Section 4(f) properties.

Alternatively, the requirements of Section 4(f) are satisfied with respect to a Section 4(f) property if it is determined by FTA that a transportation project would have a "*de minimis*" impact on the Section 4(f) property.

A *de minimis* impact is defined in 23 CFR § 774.17 as follows:

- For parks, recreation areas, and wildlife/waterfowl refuges, a *de minimis* impact is one that would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f), and the official with jurisdiction has concurred with this determination after there has been a chance for public review and comment.

- For historic sites, a *de minimis* impact means that FTA has determined, in accordance with 36 CFR § 800, that either no historic property would be affected by the project, or the project would have "no adverse effect" on the property in question. The official with jurisdiction must be notified that FTA intends to make a *de minimis* finding based on their concurrence with the "no adverse effect" determination under 36 CFR § 800. This is usually done in the effect determination letter sent to the official with jurisdiction for their concurrence.

If an alternative is found to use Section 4(f) properties, a *de minimis* finding can be made for direct uses or temporary uses that do not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. The provision allows avoidance, minimization, mitigation, and enhancement measures to be considered in making the *de minimis* determination.

Projects determined to have *de minimis* impacts on Section 4(f) properties may proceed without needing to make a determination that no feasible and prudent avoidance alternatives exist. The officials with jurisdiction must concur in writing with a *de minimis* finding. For parks, recreational areas or wildlife or waterfowl refuge properties, concurrence from the officials having jurisdiction over the properties is required. For historic sites, concurrence from the SHPO on FTA's "No Adverse Effect" determination is required.

8.3 Organization of this Chapter

The sections within this Section 4(f) chapter consider potential impacts in accordance with all applicable regulations and guidance referenced in the previous chapters, and sections are organized to follow the major analysis processes outlined in FHWA's *Section 4(f) Policy Paper*. Each section provides appropriate citations, definitions, and evaluation criteria for each of these steps.

Section 8.4 provides documentation on the identification of all properties potentially afforded protection under Section 4(f). This section includes summary information to identify potential

impacts on historic properties, archaeological resources, public parks, recreational facilities, or wildlife/waterfowl refuges.

Sections 8.5 and **8.6** provide the Section 4(f) evaluations for each alignment option proposed. For each Section 4(f) property that was identified, subsections include the following:

- A full description of the Section 4(f) property, including significance for parks identified
- Assessment and determination of Section 4(f) use for that property
- All possible planning to minimize harm, including proposed mitigation measures
- Agency coordination and consultation conducted, including views of the official with jurisdiction over the Section 4(f) property
- A preliminary Section 4(f) finding for the Section 4(f) property

Section 8.7 provides next steps to confirm the preliminary Section 4(f) findings in this chapter.

8.4 Identification of Section 4(f) Properties

The identification of Section 4(f) properties and analyses of use of Section 4(f) properties is based on the findings of the historic and cultural resources analysis (**Section 4.7**, which addresses historic properties), and the neighborhood and community impacts analysis (**Section 4.3**, which addresses parks). The evaluation of properties was also informed by the 2012 *Federal Highway Administration Section 4(f) Policy Paper* issued by FHWA and formally adopted by FTA. Worst-case scenario impacts were assumed throughout the environmental analysis for full disclosure of all potential impacts and identification of potential Section 4(f) uses. Conclusions will be confirmed as part of the Final EIS based on any additional project design decisions that might be made in development of the project, such as station and structure designs beyond conceptual engineering, and after public input on the Draft EIS.

8.4.1 Historic and Archaeological Resources

CTA has been undertaking the Section 106 consultation process since August 2012, as described in **Section 4.7.2**. CTA met with consulting parties in January 2013 to discuss NRHP-eligible properties. As a result of the field investigations and comments received from consulting parties on potentially eligible resources, 15 total resources were identified as eligible for inclusion on the NRHP, including 13 individual buildings and 2 historic districts. On May 8, 2014, FTA and CTA met with consulting parties to discuss potential project effects on NRHP-eligible historic properties. A Draft Effects Report was mailed to consulting parties on April 18, 2014 and responses to comments were provided to consulting parties on November 23, 2016. As described in **Section 4.7.4**, no adverse effects on historic resources would occur because of the RLE Project (East or West Option); no mitigation measures would be required and therefore consultation with consulting parties is complete. In correspondence to the SHPO dated September 21, 2016, FTA made the determination that the UPRR Alternative (East and West Options) would result in no adverse effects. Coordination with the SHPO related to concurrence with FTA's eligibility and effects determinations is ongoing and will continue through the remainder of the project.

Appendix Q contains a full summary of the meeting, comments received, and responses to the comments for the Section 106 consultation.

For historic properties, all properties within the APE that were found to be listed on the NRHP or eligible for listing were identified for further evaluation of potential Section 4(f) use. **Table 8-1** lists the historic properties identified within the APE and summarizes determinations of Section 4(f) use for each alignment option. **Figure 8-1** shows the locations of these historic properties.

Table 8-1: Historic Properties Evaluated for Section 4(f) Use

Address	Property Description	Community Area	Section 4(f) Use	
			Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
444 W. 100th Place	Eclectic Neo-Traditional Home (built 1930)	Washington Heights	No Use	No Use
324 W. 104th Street	Fire Department Engine Co. 93 (built 1917)	Roseland	No Use	No Use
351 W. 104th Street	Roseland Pumping Station (built 1911)	Roseland	No Use	No Use
10920 S. Princeton Avenue	Romanesque Revival-Style Church (built 1916)	Roseland	No Use	No Use
11321 S. Wentworth Avenue	Roseland Community Hospital Nurses Home (built 1930s)	Roseland	No Use	No Use
133-139 E. Kensington Avenue	Former Venetian Hall (built 1925)	Riverdale	No Use	No Use
Multiple (Public Housing Project)	Altgeld Gardens Historic District (built 1945)	Riverdale	No Use	No Use

There would be no permanent incorporation, temporary use, or a constructive use of any of the historic properties under either option. No historic properties or land would be acquired or used for construction or permanently for either alignment option. As such, neither option would result in the use of any historic properties protected under Section 4(f).

There are no known archaeological sites within the project APE. There would be no permanent incorporation, temporary use, or constructive use of any archaeological resources under either option; therefore, neither option would result in the use of any archaeological resources protected under Section 4(f).

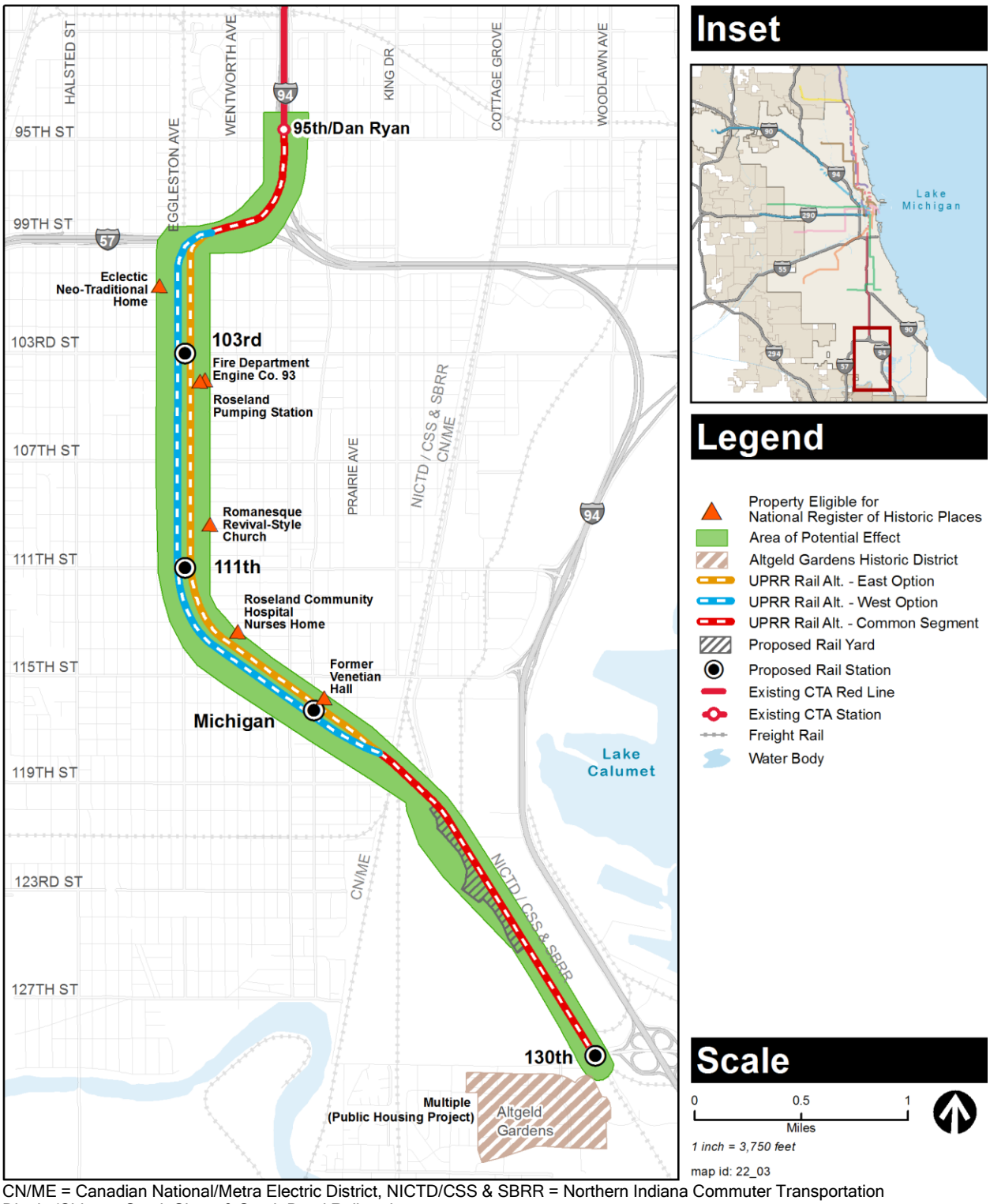

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 8-1: Historic Properties in the Area of Potential Effects

8.4.2 Parks, Recreation, and Wildlife/Waterfowl Refuge Resources

No wildlife or waterfowl refuges were identified within ½ mile of the proposed alignment options. There would be no permanent incorporation, temporary use, or a constructive use of any wildlife/waterfowl resources under either option; therefore, neither option would result in the use of any wildlife/waterfowl refuges protected under Section 4(f).

All public parks and recreational properties within 500 feet of the proposed right-of-way area and within ½ mile of the proposed station locations were analyzed for further evaluation of potential Section 4(f) use. **Table 8-2** lists the parks adjacent to the project and determinations of Section 4(f) use for each alignment option. **Figure 8-2** shows the locations of these parks.

There would be no Section 4(f) use of Robert Abbot Park, Kensington Park, Beaubien Woods Forest Preserve, or George Washington Carver Park permanently or during construction. While these parks would be exposed to increased noise during construction or operations, each of these parks is currently located near an existing highway, freight rail line, or major city streets. As such, these parks are not currently quiet, thus, quiet is not essential to their attributes, features, or activities. In addition, noise barriers would mitigate noise impacts near Robert Abbot Park and Kensington Park. Any increased noise would therefore not substantially impair the attributes, features, or activities that render the parks eligible for Section 4(f) protection. In addition, most parks in the project area would benefit from the transit extension due to improved public accessibility.

Parks subject to further evaluation under Section 4(f) include Wendell Smith Park, Fernwood Parkway, and Block Park. **Sections 8.5** and **8.6** of this chapter provide further details on the determination of Section 4(f) uses of these properties and preliminary findings.

Table 8-2: Park and Recreational Properties Evaluated for Section 4(f) Use

Park or Recreational Property Name	Address	Section 4(f) Use	
		Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
Robert Abbott Park	49 E. 95th Street	No Use	No Use
Wendell Smith Park	9912 S. Princeton Avenue	*De minimis*	No Use
Fernwood Parkway	9501 S. Eggleston Avenue	No Use	*De minimis*
Block Park	346 W. 104th Street	*De minimis*	No Use
Kensington Park	345 E. 118th Street	No Use	No Use
Fernwood Park	10436 S. Wallace Street	No Use	No Use
Beaubien Woods Forest Preserve	1 W. Doty Avenue South	No Use	No Use
George Washington Carver Park	939 E. 132nd Street	No Use	No Use

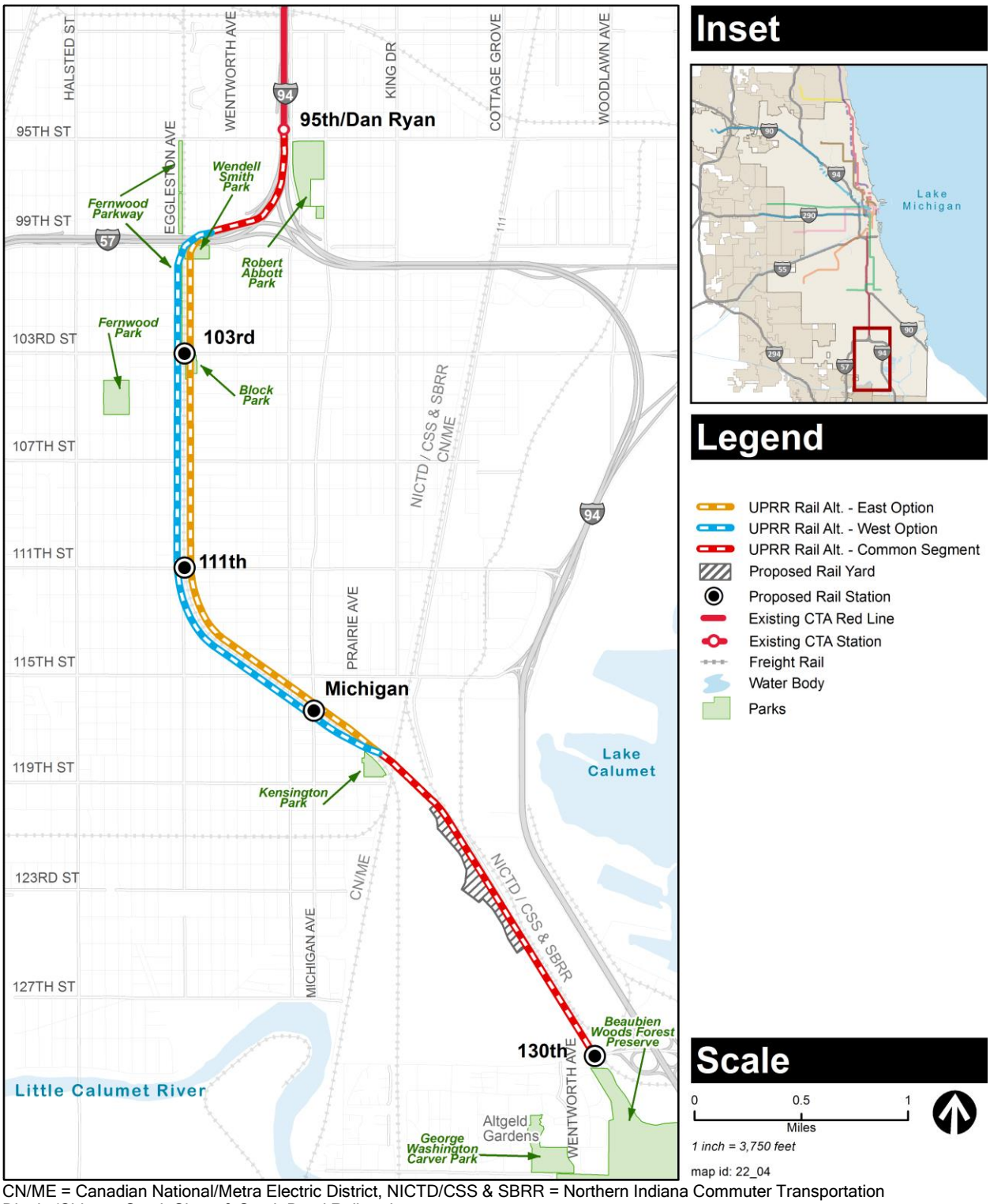

CN/ME = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 8-2: Publicly Owned Park and Recreational Properties Adjacent to the Project

8.5 Union Pacific Railroad Alternative East Option Section 4(f) Evaluation

Two Section 4(f) park properties would be used as result of this alignment option: Wendell Smith Park and Block Park, which are evaluated below.

8.5.1 Wendell Smith Park

Description and Significance of Property

Wendell Smith Park is approximately 4.7 acres (340 feet wide by 610 feet long) and is an actively used recreational facility with basketball courts, baseball fields, a play lot, recreation building, and 0.3 mile of walking trails in Roseland. Regularly scheduled activities at Wendell Smith Park include basketball tournaments, baseball/softball games, and concerts. The park is also actively used by day camps and for activities organized by the Chicago Park District. **Figure 8-3** through **Figure 8-5** are photos and an aerial view of Wendell Smith Park.

Figure 8-3: Photo of Entrance to Wendell Smith Park Facing West from Princeton Avenue

Figure 8-4: Photo of Wendell Smith Park Basketball Courts Facing West

Source: Google Maps 2011

Figure 8-5: Aerial Photograph of Wendell Smith Park

Section 4(f) Use Assessment

The East Option alignment would run through the northwestern corner of the park, as shown in **Figure 8-6**. Elevated track structure supports would be placed permanently in the park space. Of the 4.7 acres of the park, approximately 0.7 acre would be overlapped by the elevated structure and its associated clearances. Piers would be located in the park, and the bottom of the elevated structure would be approximately 15 feet above ground level.

The following attributes and features of the park are within or adjacent to the overlap area:

- **Paved Walking Path/Trees/Bench** - An existing paved walking path is maintained along the entire rectangular perimeter of the park. The westernmost north-south portion of the walking trail and a small portion of the northwestern edge of the walking path would be overlapped by the track structure. A number of small trees line the existing walking path and would be used by the overlap with tracks. In addition, there are two benches along the westernmost north-south walking path within the overlap area.

- **Baseball Field** - There are two baseball fields within Wendell Smith Park. The sand-filled baseball field on the northeast portion of the park is a junior-size baseball diamond. A small portion of the existing outfield/open space would be within the overlap area, but the overlap would not affect the ability to use the baseball field. The second baseball field is a smaller, junior-sized baseball field in the southwest corner of the park. This junior baseball field contains a backstop and bench. Due to the proposed overlap area, the bench and space behind this backstop would be used.

The overlap of the elevated track and placement of elevated track structure supports within the park would limit park use in the overlapped area. This limitation on land owned or operated by the Chicago Park District (because of the elevated structure being placed on its property) is

referred to as a permanent easement. Because a permanent easement is proposed, the land within the easement would be considered a permanent incorporation (direct use) of the park facilities. The park would remain active during construction, with the exception of the overlapped portion of the park, and construction would not result in substantial changes to the park. There would be temporary and permanent uses of the protected attributes, features, and activities of the park due to the overlapped portion of the park needed for permanent right-of-way. There would be no noise impacts related to operation of the proposed project after construction of mitigation measures (noise barrier). Mitigation measures, further discussed below, would be implemented in advance of construction to the extent possible to maintain all park facilities. Remaining land used (area not used for the structure) would be restored to a condition at least as good as that which existed before the project.

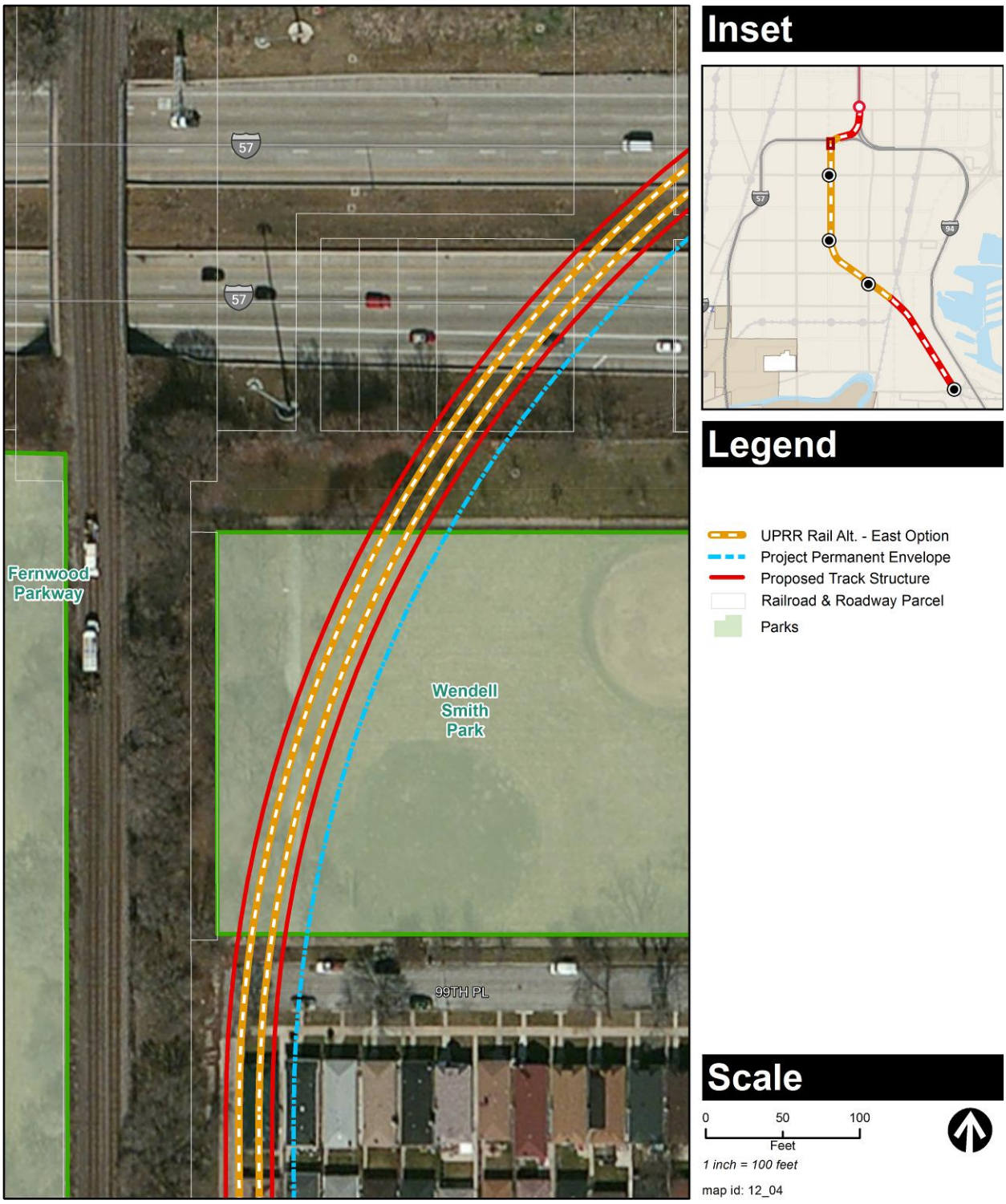

Figure 8-6: Impacts on Wendell Smith Park - Union Pacific Railroad Alternative East Option

All Possible Planning to Minimize Harm

Wendell Smith Park would continue to serve the surrounding community after implementation of the project. The following mitigation and enhancement measures are proposed so that there would be no adverse impacts on the features, attributes, and activities of the park as a result of the project. CTA coordinated with the Chicago Park District as part of the preparation of the Draft EIS to further develop mitigation measures and conceptual plans. **Appendix Y** provides conceptual plans for replacement of amenities within Wendell Smith Park and other replacement park options.

- Replacement of lands (acreage) used with lands of reasonably equivalent usefulness and location and of at least comparable value. The replacement land would be used to construct new park space in or near the Roseland community area to enhance parkland availability for the surrounding community. New park area created through this replacement acreage would be constructed in accordance with Chicago Park District standards and would facilitate Chicago Park District master planning goals and objectives.

- Replacement of the two smaller, junior-sized baseball fields within Wendell Smith Park to provide one larger baseball field. This mitigation measure was developed based on coordination with the Chicago Park District so that the attributes, features, and activities within the park would not be adversely affected as a result of the East Option. This measure would enhance existing baseball facilities and activities within the park. Additional outreach to the public will be conducted to share concepts and obtain public feedback.

- Relocation and replacement of the smaller, junior-sized baseball field on replacement parkland based on coordination with the Chicago Park District and outreach to the public so that the attributes, features, and activities would not be adversely affected by the use of the northwest corner of the park.

- Replacement and relocation of facilities affected by the project including sidewalks, paths, benches, trees, and other facilities within Wendell Smith Park.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the park but not adversely affect the safety of the transit facility.

Preliminary Section 4(f) Finding

Based on consideration of the proposed direct use as well as the proposed mitigation and enhancement measures, no adverse impacts on the attributes, features, or activities would result from the East Option; therefore, a *de minimis* finding is proposed for this Section 4(f) use. The Chicago Park District has concurred with this No Adverse Effect determination with the commitment of proposed mitigation measures in its letter dated August 17, 2015 (see **Appendix C**).

A public involvement process will be held in conjunction with the required NEPA public involvement process after publication of the Draft EIS for review and comment on this

preliminary finding. During development of this Draft EIS, CTA and the Chicago Park District coordinated on several potential locations for new/replacement park space and replacement of amenities within Wendell Smith Park. **Appendix Y** provides conceptual plans for potential replacement parks based on this coordination. These locations and conceptual plans will be shared with the public for input as part of the Draft EIS public hearing.

FTA will consider public comment and the availability of the replacement park in determining whether the preliminary *de minimis* impact determination within this Draft EIS is appropriate. Based on FTA's finding and public input, a preferred location for replacement parkland will be identified as part of the Final EIS. The final location of the replacement park will be confirmed and secured based on ability to acquire property voluntarily, following the completion of the environmental phase of this project.

Agency Coordination and Consultation

Coordination with the agency with jurisdiction over the property, the Chicago Park District, is ongoing and will continue through development of the Final EIS. Early coordination meetings were held on April 18, 2011; July 23, 2013; May 8, 2014; and April 8, 2015 to provide Chicago Park District staff with information on the purpose and need for the project, identification and refinement of alternatives, and potential impacts on parks, and to discuss proposed mitigation measures. The Chicago Park District provided its concurrence on August 17, 2015 that after implementation of the proposed mitigation measures there would be no adverse impact on parks from either alignment option. Additional coordination meetings were held to further develop and refine proposed mitigation measures on October 8, 2015; March 10, 2016; April 6, 2016; May 18, 2016; and June 15, 2016. This coordination will continue as public input is obtained and when finalizing replacement park options and other mitigation measures in the Final EIS. The Chicago Park District has indicated that it regards this project as an opportunity to expand and enhance park activities and overall connectivity in the community once mitigation measures are in place.

8.5.2 Block Park

Description and Significance of Property

Block Park is a passive green space and is divided into two parcels by Harvard Avenue in Roseland. The east parcel is approximately 1.4 acres (130 feet wide by 460 feet long) and includes amenities such as benches, walking paths, and sidewalks. The west parcel is approximately 1.3 acres (90 feet wide by 600 feet long) and is open space with a sidewalk and no other park amenities. In addition, a communications tower and two utility structures are on the west parcel. **Figure 8-7** and **Figure 8-8** are photos of Block Park.

Figure 8-7: Photo of Block Park with the Roseland Pumping Station in the Background (Facing South)

Figure 8-8: Photos of East Parcel (left) and West Parcel (right) of Block Park (Facing South)

Section 4(f) Use Assessment

The East Option alignment would run through the west parcel of Block Park, and the elevated structure and its associated clearances would overlap 0.9 acre of park space, as shown in **Figure 8-9**. Elevated track structure supports would be placed permanently in the west parcel of the park space. An auxiliary station entrance would also be located in the park, along the western edge of the existing parcel. The affected parcel includes an isolated portion of the park's open space and a communications tower, and does not currently serve a recreational use. The key recreational features of the park, walking trails and benches, are on the other side of Harvard Avenue in the east parcel of the park.

Because the alignment would run through the west parcel of Block Park, there would be a permanent incorporation (direct use) of the park facilities. Some temporary closure of the overlapped area (west parcel) would be necessary during construction and be used permanently. The east parcel of the park would remain open during construction and there would be no temporary or permanent impacts on the protected attributes, features or activities of the park. There would be no noise impacts related to operation of the proposed project after construction of mitigation measures (noise barrier). Mitigation measures, further discussed below, would be implemented in advance of construction to the extent possible. Remaining land used (area not used for the structure) would be restored to a condition at least as good as that which existed before the project.

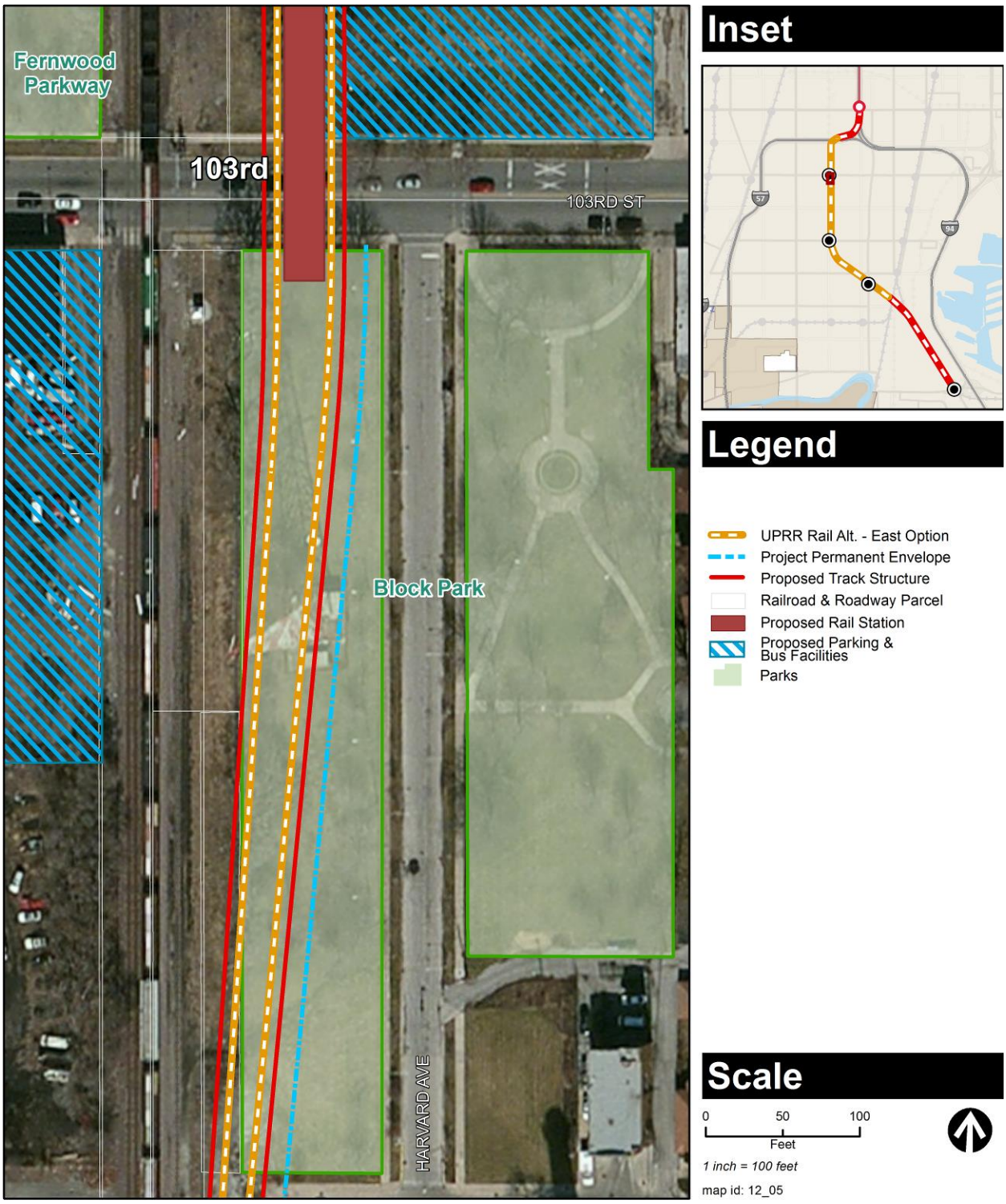

Figure 8-9: Impacts on Block Park - Union Pacific Railroad Alternative East Option

All Possible Planning to Minimize Harm

After implementation of the following proposed mitigation and enhancement measures, there would be no adverse impact on the features, attributes, and activities of the park. **Appendix Y** provides conceptual plans of Block Park and other replacement park options.

- Replacement of lands used (acreage) with lands of reasonably equivalent usefulness and location and of at least comparable value. The replacement land would be used to construct additional new park space in or near the Roseland community area to enhance parkland availability for the surrounding community. New park space created through this replacement acreage would be constructed in accordance with Chicago Park District standards and would facilitate Chicago Park District master planning goals and objectives.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the park but not adversely affect the safety of the transit facility.

While not related to the attributes, features, or activities of the park, additional mitigation measures would include coordination with the City of Chicago and the Federal Communications Commission regarding relocation of the communications tower.

Preliminary Section 4(f) Finding

Based on consideration of the proposed direct use as well as the proposed mitigation and enhancement measures, no adverse impacts on the attributes, features, or activities would result from the East Option; therefore, a *de minimis* finding is proposed for this Section 4(f) use.

The Chicago Park District has concurred with this No Adverse Effect determination with the commitment of proposed mitigation measures in its letter dated August 17, 2015 (see **Appendix C**).

A public involvement process would be held in conjunction with the required NEPA public involvement process after publication of the Draft EIS for review and comment on this preliminary finding. During development of this Draft EIS, CTA and the Chicago Park District coordinated on several potential locations for new/replacement park space. **Appendix Y** provides conceptual plans for potential replacement parks based on this coordination. These locations and conceptual plans will be shared with the public for input as part of the Draft EIS public hearing.

FTA will consider public comment and the availability of the replacement park in determining whether the preliminary *de minimis* impact determination within this Draft EIS is appropriate. Based on FTA's finding and public input, a preferred location for replacement parkland will be identified as part of the Final EIS. The final location of the replacement park will be confirmed and secured based on ability to acquire property voluntarily, following the completion of the environmental phase of this project.

Agency Coordination and Consultation

Coordination with the agency with jurisdiction over the property, the Chicago Park District, is ongoing and will continue through development of the Final EIS. Early coordination meetings were held on April 18, 2011; July 23, 2013; May 8, 2014; and April 8, 2015 to provide Chicago Park District staff with information on the purpose and need for the project, identification and refinement of alternatives, and potential impacts on parks, and to discuss proposed mitigation measures. The Chicago Park District provided its concurrence on August 17, 2015 that after implementation of the proposed mitigation measures there would be no adverse impact on parks from either alignment option. Additional coordination meetings were held to further develop and refine proposed mitigation measures on October 8, 2015; March 10, 2016; April 6, 2016; May 18, 2016; and June 15, 2016. This coordination will continue as public input is obtained and in finalizing replacement park options and other mitigation measures in the Final EIS. The Chicago Park District has indicated that it regards this project as an opportunity to expand and enhance park activities and overall connectivity in the community once mitigation measures are in place.

8.6 Union Pacific Railroad Alternative West Option Section 4(f) Evaluation

During construction of the West Option, there would be temporary and minor construction activities within Wendell Smith Park for a short duration. These temporary construction activities, further described below, would not rise to a level of Temporary Occupancy under Section 4(f) and there would be no permanent use of the park under Section 4(f).

One Section 4(f) park property would be used as result of the West Option—Fernwood Parkway, which is further evaluated in this section.

8.6.1 Wendell Smith Park

Description and Significance of Property

Section 8.5.1 provides a full description and pictures of Wendell Smith Park.

Section 4(f) Use Assessment

The West Option alignment would be located near the existing park, but would not permanently use any parkland. Due to the proximity of the West Option alignment to the park, during construction there would likely be temporary closure of a small portion of the northwest corner of the park (approximately 0.1 acre) while the tracks are constructed and piers are installed. This closure would be temporary (expected to be no more than 3 to 4 months as piers are installed).

There would be no permanent incorporation of Wendell Smith Park proposed under the West Option, because no land from this park would be used for the project. There would be a short-term closure of the northwest corner of the park (approximately 0.1 acre) during construction, but this closure would not rise to the level of temporary occupancy under 23 CFR § 774.13. The total closure time of 3 to 4 months of this small portion of the park would be substantially less than the total time needed for construction and there would be no change in ownership of the land. The work proposed would be minor, and due to the proximity of the park to the elevated track it would have minimal impact on the property during construction and no permanent physical

impact on the park. The temporarily used land would be fully restored to a condition at least as good as that which existed before the project.

Public use of the park would continue throughout construction of the project, and construction would not affect the attributes, features, or activities of the park. There would be no noise impacts related to operation of the proposed project after construction of mitigation measures (noise barrier). If there were any impact on the existing walking trail during these construction activities, the affected portion of the walking trail would be temporarily relocated within the park. No impacts on existing trees are expected to occur as a result of construction activities. Should any trees need to be cut to allow for activities, the trees would be replaced. Appropriate construction BMPs would be followed to shield construction activities, allow use of the property by the general public, and minimize any safety risks.

The Chicago Park District provided its concurrence on August 17, 2015 that after implementation of the proposed mitigation measures there would be no adverse impact on any parks from either alignment option. Based on these factors and the nature of the minor construction-related work proposed, the temporary construction proposed under the West Option would not rise to the level of temporary occupancy of Wendell Smith Park and there would therefore be no use of the park under Section 4(f).

8.6.2 Fernwood Parkway

Description and Significance of Property

Fernwood Parkway is a passive green space in Washington Heights that extends from 95th Street to 103rd Street. The parkway is divided into four parcels, two of which are north of I-57 and two of which are south of I-57. The two parcels south of I-57 are separated by 101st Street. The northern parcel, from 99th Street to 101st Street, is approximately 2.4 acres (78 feet wide by 1,325 feet long). The southern parcel, from 101st Street to 103rd Street, is approximately 2.9 acres (78 feet wide by 1,277 feet long). Both the north and south parcels of Fernwood Parkway serve as open space and do not contain recreational facilities or amenities such as sidewalks or benches. Some trees are planted within the park and a chain-link fence separates the green space from the existing at-grade UPRR tracks. **Figure 8-10** and **Figure 8-11** show Fernwood Parkway facing north and south.

Figure 8-10: Photo of Fernwood Parkway at 100th Street and Eggleston Avenue (Facing North)

Figure 8-11: Photo of Fernwood Parkway at 100th Street and Eggleston Avenue (Facing South)

Section 4(f) Use Assessment

The West Option track structure would run through two of the four parcels that make up Fernwood Parkway between 101st and 103rd Streets. Elevated track structure supports would be placed permanently in the parkway. Approximately 1.9 acres of the parkway would be overlapped by the elevated structure and its associated clearances (see **Figure 8-12**). The parkway functions as open space, and does not contain recreational amenities.

The West Option would result in a permanent incorporation of the park space, which constitutes use under Section 4(f). Temporary closure of the overlapped section of the parkway would be necessary during construction. Elevated track structure supports would be placed permanently in the park space. There would be no noise impacts related to operation of the proposed project after construction of mitigation measures (noise barrier). Mitigation measures, further discussed below, would be implemented in advance of construction to the extent possible. Except for the piers that would be placed in the park, the land used would be restored to a condition at least as good as that which existed before the project.

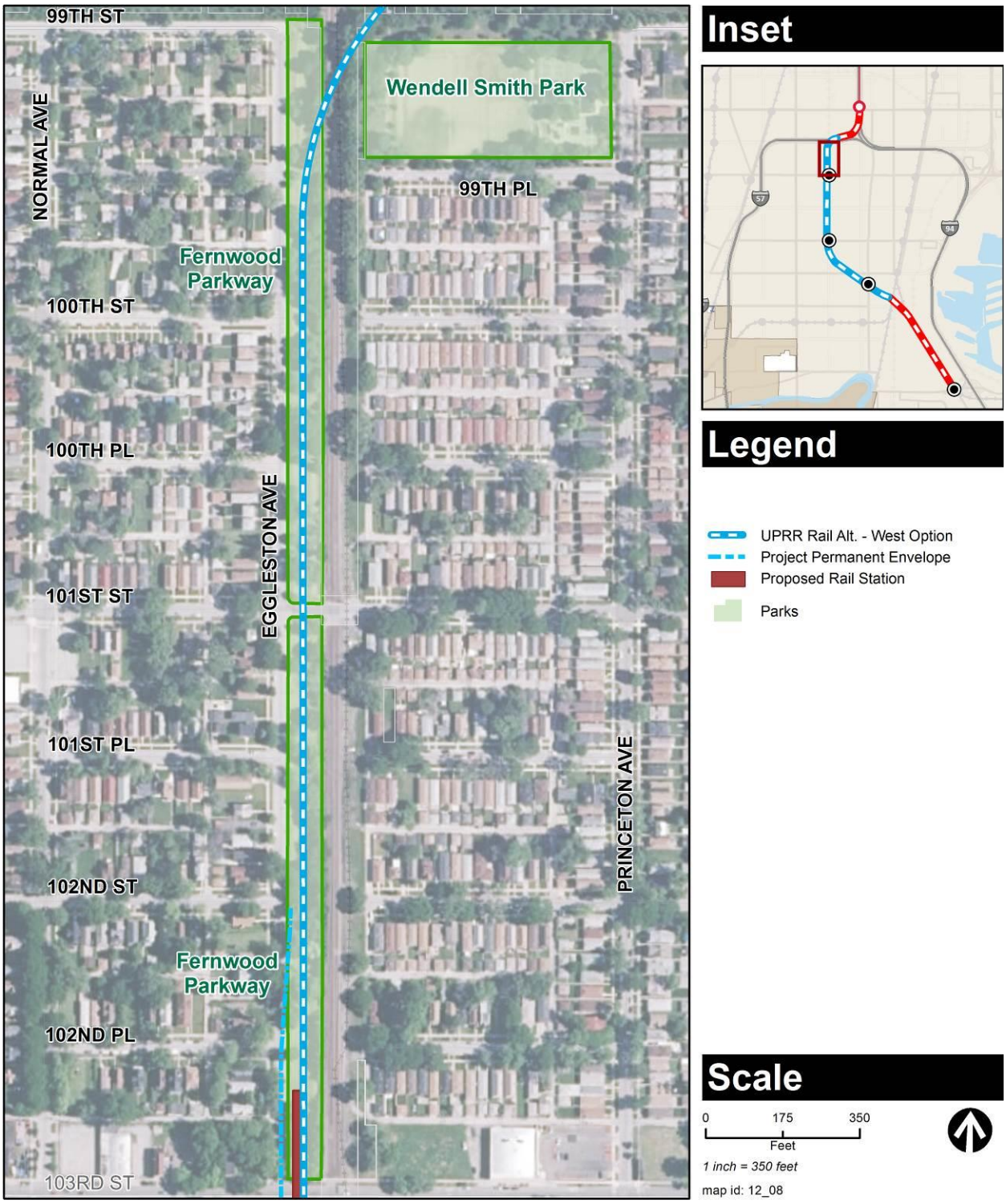

Figure 8-12: Impacts on Fernwood Parkway - Union Pacific Railroad Alternative West Option

All Possible Planning to Minimize Harm

After implementation of the following proposed mitigation and enhancement measures, there would be no adverse impact on the features, attributes, and activities of the park. **Appendix Y** provides conceptual plans of Fernwood Parkway and other replacement park options.

- Replacement of lands (acreage) used with lands of reasonably equivalent usefulness and location and of at least comparable value. The replacement land would be used to construct replacement park space in or near the Washington Heights community area to enhance parkland availability for the surrounding community. New park space created through this replacement acreage would be constructed in accordance with Chicago Park District standards and would facilitate Chicago Park District master planning goals and objectives.

- Potential installation of a new bicycle path beneath the elevated track structure, subject to use for CTA maintenance, which would enhance the existing unused green space and better connect parks and the newly proposed transit infrastructure. Additional coordination with CDOT as part of the Final EIS will finalize the feasibility of this measure.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the green space but not adversely affect the safety of the transit facility.

Preliminary Section 4(f) Finding

Based on consideration of the proposed direct use as well as the proposed mitigation and enhancement measures, no adverse impacts on the attributes, features, or activities would result from the West Option; therefore, a *de minimis* finding is proposed for this Section 4(f) use. There are no physical features requiring replacement, and replacement parkland proposed as mitigation would replace this linear open green space near existing at-grade rail with more enhanced opportunities for active recreation park space within or near the surrounding community. Additional potential for bicycle paths beneath the elevated track structure could enhance connectivity between the proposed transit facility and other nearby community facilities.

The Chicago Park District has concurred with this no adverse effect determination with the commitment of proposed mitigation measures in its letter dated August 17, 2015 (see **Appendix C**).

A public involvement process would be held in conjunction with the required NEPA public involvement process after publication of the Draft EIS for review and comment on this preliminary finding. During development of this Draft EIS, CTA and the Chicago Park District coordinated on several potential locations for new/replacement park space. **Appendix Y** provides conceptual plans for potential replacement parks based on this coordination. These locations and conceptual plans will be shared with the public for input as part of the Draft EIS public hearing.

FTA will consider public comment and the availability of the replacement park in determining whether the preliminary *de minimis* impact determination is appropriate. Based on FTA's finding and public input, a preferred location for replacement parkland will be identified as part of the

Final EIS. The final location of the replacement park will be confirmed and secured based on ability to acquire property voluntarily, following the completion of the environmental phase of this project.

Agency Coordination and Consultation

Coordination with the agency with jurisdiction over the property, the Chicago Park District, is ongoing and will continue through development of the Final EIS. Early coordination meetings were held on April 18, 2011; July 23, 2013; May 8, 2014; and April 8, 2015 to provide Chicago Park District staff with information on the purpose and need for the project, identification and refinement of alternatives, and potential impacts on parks, and to discuss proposed mitigation measures. The Chicago Park District provided its concurrence on August 17, 2015 that after implementation of the proposed mitigation measures there would be no adverse impact on parks from either alignment option. Additional coordination meetings were held to further develop and refine proposed mitigation measures on October 8, 2015; March 10, 2016; April 6, 2016; May 18, 2016; and June 15, 2016. This coordination will continue as public input is obtained and in finalizing replacement park options and other mitigation measures in the Final EIS. The Chicago Park District has indicated that it regards this project as an opportunity to expand and enhance park activities and overall connectivity in the community once mitigation measures are in place.

8.7 Next Steps

This Draft EIS provides information on preliminary findings of *de minimis impact* for the UPRR Alternative East and West Option Section 4(f) uses. These preliminary findings include all possible planning to minimize harm to the extent possible with the conceptual engineering details available to date, in accordance with 23 CFR § 774.7(e)(1).

In addition, public review and comment is required for input into these preliminary *de minimis impact* findings. During development of this Draft EIS, CTA and the Chicago Park District coordinated on several potential locations for new/replacement park space. **Appendix Y** provides conceptual plans of the affected parks and other replacement park options. These locations and conceptual plans will be shared with the public for input as part of the Draft EIS public hearing.

Based on the results from these coordination activities, in the Final EIS and ROD FTA will confirm and finalize the findings by reference to the documentation included in this Draft EIS. Concurrence from the Chicago Park District, as the agency with jurisdiction over Section 4(f) properties evaluated in this chapter, is required to confirm these preliminary findings. Correspondence from the Chicago Park District confirming FTA's determinations will be included in the Final EIS.

The Final EIS will confirm whether the East or West Option is the selected option, and a preferred replacement park site will be identified based on public input. During the Final EIS and based on public feedback on park replacement sites, CTA will conduct outreach to property owners to determine availability of land and ability to acquire replacement property. As part of the Final EIS, additional coordination with the Chicago Park District will occur as well. The Final EIS will lay out the process to be conducted between CTA and the Chicago Park District to further identify replacement park locations should any of the identified replacement park options not be available at the time of property acquisition. The final park replacement site will be acquired in

coordination with the Chicago Park District after completion of the environmental phase of this project (i.e., after FTA issues a ROD for the Final EIS). Additional environmental documentation in the form of a Phase I ESA per Chicago Park District requirements for developing new parks will be conducted before construction of the replacement park. CTA will also coordinate with CDOT as part of the Final EIS regarding potential installation of a new bicycle path beneath the elevated track structure at Fernwood Parkway if the West Option is selected.

Any new or more detailed engineering information available during the preparation of the Final EIS and ROD that could raise new Section 4(f) concerns not already considered herein would be included in that final documentation. If for any reason FTA determines that additional Section 4(f) analysis is required, additional Section 4(f) analysis will be prepared as part of the Final EIS.

Chapter 9
Evaluation of Alternatives

This chapter evaluates the alternatives with two comparisons. First, this chapter reviews and compares the capital expenditures (e.g., construction costs) and operations and maintenance (O&M) costs associated with the East and West Options. The potential funding sources and financing approaches under consideration for the project area are described. Second, this chapter compares the benefits and impacts of the East and West Options.

9.1 Potential Capital and Operating Funding Strategies

The purpose of this analysis is to provide a financial comparison of the East and West Options. Capital and O&M costs included in the analysis reflect the results of planning and engineering completed to date to support the technical analyses in the Draft EIS. These costs and potential revenue sources will be refined to reflect more detailed engineering and operational planning that will be conducted as the project moves through FTA's project development process and to reflect changes in available funding sources and financing approaches.

CTA would prepare a detailed financial plan to support CTA's request for funding through the FTA Section 5309 Capital Investment Grant (CIG) Program. This future detailed financial plan will document CTA's ability to fund construction and operation of the project within FTA requirements for grants awarded under the Section 5309 CIG Program. This initial analysis completed for the Draft EIS and the more detailed future financial plan will assist FTA, CTA, cooperating and participating agencies, and the public in understanding and evaluating CTA's financial capacity to construct and operate the RLE Project and to continue to operate and maintain the existing transit system.

Costs and revenues presented in this chapter are in FY 2015 base year dollars and in year of expenditure (YOE) dollars. YOE dollars reflect the financial impact of funding that would need to be expended in the actual YOE and the relative effects of inflation on costs and revenues. Annual and compounded inflation rates and the preliminary implementation schedules are used to project base year dollars to YOE dollars. For example, in YOE dollars, $3.00 in 2015 is equivalent to $3.18 in 2017, using an annual inflation rate of 3.0 percent.

9.1.1 Capital Cost Estimates

Reflecting engineering and planning completed to support the Draft EIS, the base year capital costs are estimated to be $1,716 million (2015 dollars) for the East Option and $1,746 million (2015 dollars) for the West Option.

For the Draft EIS, the base year capital cost estimates were originally prepared in 2013 dollars and have been escalated to 2015 base year dollars using the annual and compound annual construction cost growth rates summarized in **Table 9-1**. The annual construction cost growth rates reflect the January 2013 R.S. Means Construction Cost Index Forecast for Chicago, IL that was prepared for the RLE Project.

Table 9-1: Annual Inflation Rates

Year	Annual Construction Cost Growth Rate	Compound Annual Construction Cost Growth Rate
2015	-	1.00
2016	3.65%	1.04
2017	3.66%	1.07
2018	3.58%	1.11
2019	3.50%	1.15
2020	3.43%	1.19
2021	3.36%	1.23
2022	3.30%	1.27
2023	3.25%	1.31
2024	3.19%	1.36
2025	3.14%	1.40
2026	3.08%	1.44
2027	3.04%	1.48
2028	2.99%	1.53

Source: Moody's Analytics 2013, Financial Plan for Chicago Transit Authority's Red Line Extension Project

Additionally, for the YOE analysis, CTA escalated capital costs from 2015 base year dollars using the R.S. Means Construction Cost Index combined with preliminary implementation schedules for the East and West Options as summarized in **Table 9-2**. The table summarizes the percent of construction activities expected to be completed by year (cost curve), which was used to estimate the annual capital costs for the East and West Options over the FY 2016 to FY 2028 period. As the selected option moves through FTA's project development process, this implementation schedule will be revised to reflect future federal approvals, detailed engineering, and funding availability.

Table 9-2: Preliminary Implementation Schedule Cost Curve Assumptions

Year	Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
2016	1.2%	1.2%
2017	1.9%	1.9%
2018	1.6%	1.6%
2019	2.8%	2.8%
2020	5.4%	5.6%
2021	7.9%	8.3%
2022	17.7%	17.6%
2023	23.8%	23.7%
2024	32.4%	32.1%
2025	5.1%	5.0%
2026	0.0%	0.0%
2027	0.1%	0.1%
2028	0.1%	0.1%
Total	**100.0%**	**100.0%**

Based on the projected annual construction cost growth rates and preliminary implementation cost curve assumptions above, the total capital costs would be $2,260 million (YOE dollars) for the East Option and $2,300 million (YOE dollars) for the West Option. **Figure 9-1** summarizes the estimated annual costs for the East and West Options. As shown in the figure and reflecting the cost curve assumptions, between FY 2016 and FY 2021 costs reflect engineering, right-of-way acquisition, utility relocation, and construction staging activities. Construction and acquisition of rail cars would occur between FY 2022 and FY 2025. Start-up activities, including testing, would occur in FY 2025, and project close-out and remaining professional services activities, including FTA's Before and After Study requirements, would be completed in FY 2027–2028.

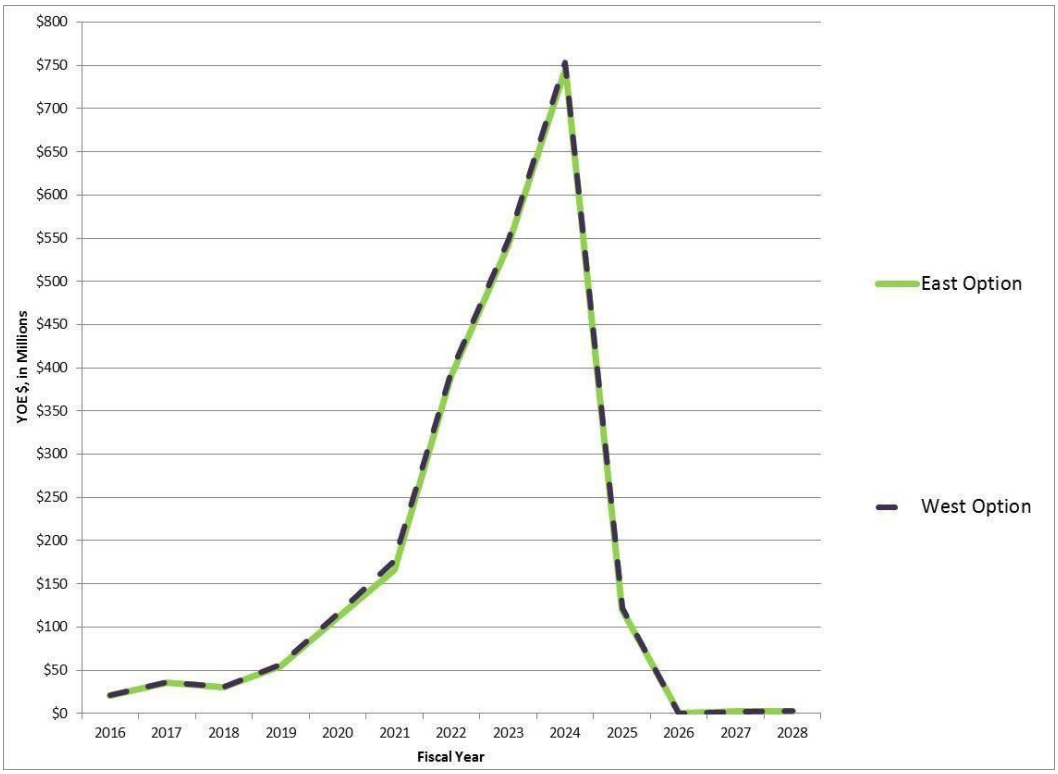

Figure 9-1: Annual Capital Cost Estimates (Year of Expenditure Dollars, in Millions)

9.1.2 Potential Capital Funding Sources and Financing Options

The potential funding sources and financing mechanisms described below reflect an initial list that could support the implementation of either the East or West Option. At this stage of project development, the funding analysis assumes a 49 percent (approximately $1,100 million YOE dollars) contribution from the FTA Section 5309 CIG Program (New Starts), and 51 percent funding from non-New Starts sources.

Potential Capital Funding Sources

Below are summary descriptions of the Section 5309 CIG Program and potential traditional and innovative approaches CTA could consider to fund the non-New Starts share of total project costs. As the selected option continues through the FTA project development process, CTA will determine the specific sources and levels of funding to cover the non-CIG Program share. This is consistent with CTA's traditional project implementation approach of working with the public and key stakeholders to determine the preferred alternative before requesting funds.

- FTA Section 5309 CIG Program (New Starts) - CTA intends to seek CIG funding from FTA for one or more of the alternatives examined in this NEPA document. The CIG Program, more commonly known as the New Starts, Small Starts, and Core Capacity Program, involves a multiyear, multistep process that project sponsors must complete before a project is eligible for funding. The steps in the process and the basic requirements of the program can be found on FTA's website at www.fta.dot.gov.

FTA must evaluate and rate proposed projects seeking funding from the CIG Program on a set of project justification and local financial commitment criteria specified in law. The criteria evaluate the merits of the project and the projects sponsor's ability to build and operate it as well as the existing transit system. FTA assigns ratings from low to high based on information that project sponsors submit on the project cost, benefits, requested amount of CIG Program funds, and overall financial plan. Projects must receive a medium or better overall rating to advance through the steps in the process and be eligible for funding from the program. As projects proceed through the steps in the process, information concerning costs, benefits, and impacts is refined and the ratings are updated to reflect new information.

As stated above, the financial analysis completed for the Draft EIS assumes CTA will pursue CIG Program funds through a New Starts Full Funding Grant Agreement of approximately 49 percent of the total project costs.

- Other Federal Funding Programs - In addition to the proposed New Starts funding, CTA could pursue the use of other federal funding programs to support implementation of the selected option. The total federal funding share for the project (New Starts plus other federal funding programs) cannot exceed 80 percent. The other federal funding programs under consideration include the FHWA programs and the USDOT Competitive Grant Program listed below.
  - FHWA Funding - Funding from these programs would be eligible to be "flexed" (transferred) to FTA to support implementation of transit capital investment projects. These funds are programmed by CMAP and would require adoption in the Long Range Transportation Plan and TIP to be used to fund a portion of the selected option's capital costs. Flexible FHWA funding sources include the following:
    - Congestion Mitigation and Air Quality Program - These funds are available for transportation projects likely to reduce congestion and to contribute to the attainment or maintenance of one or more NAAQS, with a high level of effectiveness in reducing air pollution.
    - Surface Transportation Program - This program provides funding for projects that preserve and improve the conditions and performance on any federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects.
    - Transportation Alternatives Program - This competitive grant program could provide funding for non-motorized elements of the project.
  - USDOT Transportation Investment Generating Economic Recovery (TIGER) Program - The TIGER grant program was established as part of the Recovery Act in 2009 and is a competitive grant program to support implementation of "shovel ready" infrastructure projects, including highways, bridges, public transit, passenger and freight rail, port infrastructure, and intermodal facilities. Grants are made available for transportation projects of national and regional significance that contribute to the long-term economic competitiveness of the nation, improve the condition of existing transportation facilities and systems, increase energy efficiency and reduce GHG emissions, improve the safety of

U.S. transportation facilities, and/or enhance the quality of living and working environments of communities through increased transportation choices and connections.

- Since 2009, USDOT has issued eight separate requests for TIGER applications. CTA was successful in obtaining a $20 million TIGER grant in 2012 for the 95th Street Terminal Improvements. For the RLE Project, a specific element of the overall project with independent utility (i.e., a stand-alone component of the overall project) would need to be identified to meet the TIGER grant eligibility requirements.

- State Funds - Historically the State of Illinois has provided funding assistance for CTA's major capital improvement projects. As the selected option moves through the project development process, CTA will work with State leaders to potentially include the project in future transportation funding packages. CTA could also pursue funding through the Illinois Transportation Enhancement Program (ITEP). ITEP is a competitive grant funding mechanism for Illinois transportation projects to improve pedestrian and bicycle accessibility and could potentially be used for street-level infrastructure improvements in conjunction with the RLE Project.

- Local/Private Funds - As part of the future detailed financial plan, CTA will evaluate opportunities to leverage existing and/or potential local revenue sources to fund specific project elements such as stations. This could include the use of value capture mechanisms such as special assessment districts or TIF districts. In special assessment districts, revenue is generated from a fee on properties in a specified area that is used to pay a portion of the capital improvements made within and specifically benefiting that area. In an assessment district, a connection between benefit received and cost charged is essential, in that assessments charged in these districts must be proportional to and no greater than the benefit to the assessed property. A TIF district reflects a concept where existing facilities and planned capital improvement projects would result in increased property taxes within the defined geographic area. The incremental revenue increase can then be used to support further capital investment within the district. Within the project area there are currently three TIF districts that could potentially provide funding to the project: 107th/Halsted TIF District (includes the site of the 111th Street station), Roseland/Michigan TIF District (includes the site of the Michigan Avenue station), and the Lake Calumet Industrial Corridor TIF District (includes the site of 120th Street yard and shop).

  Additionally, on June 30, 2016, the Illinois General Assembly approved a modified form of TIF to raise local revenues to fund the following four major transit improvements in Chicago and adjacent municipalities: the RLE Project, the RPM Program, Union Station improvements, and the Blue Line Modernization Project. These new districts will be called Transit Facility Improvement Areas (TFIA) and would use incremental property tax revenue to fund improvements. A TFIA as defined in the legislation is an area whose boundaries are no more than ½ mile in any direction from the location of a mass transit facility, provided that the length of any existing or proposed right-of-way included in any transit facility improvement area does not exceed 6 miles. The TIF district for a TFIA will have a 50-year life. Transit capital expenses, including costs related to the construction, reconstruction, rehabilitation, remodeling, or repair of any existing or proposed transit facility, whether publicly or privately

owned or servicing debt issued for transit capital expenditures, are the only eligible expenses for revenue collected with the new TIF districts.

Traditional and Innovative Financing Approaches

Below is an overview of traditional federal and local financing mechanisms, as well as potential innovative public-private partnership financing, that could be used to accelerate implementation of the selected option. A new source(s) of funding would be required to repay these potential financing mechanisms. CTA is working with regional and state partners to evaluate a variety of potential new revenue sources and/or expansion of existing revenue sources that would support transportation improvements throughout the region. The potential sources could include new or increased levels of state, county, and local taxes, as well as potential value capture mechanisms such as assessment districts and TIFs, including the newly created TFIA districts.

- Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan - TIFIA provides federal credit assistance (financing) for eligible projects of regional and national significance. TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar financing instruments. TIFIA can help advance qualified, large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues. Given the flexible repayment terms and favorable interest rates, TIFIA finance has become an increasingly popular financial tool for transportation agencies. A challenge for future financing through TIFIA was the recent 70 percent reduction in annual program funding, from $1.0 billion to $287 million, with the December 2015 passage of the FAST Act. In April 2014, CTA was successful in obtaining CTA's first TIFIA Loan of $79.2 million for the 95th Street Terminal Improvement Project.

- CTA Bonds - CTA's existing debt financing is composed primarily of four different types of long term bonds: Sales and Transfer Tax Receipts Revenue Bonds, Sales Tax Receipts Revenue Bonds, Building Revenue Bonds, and Capital Grant Receipts Revenue Bonds. As the project moves forward in the project development process, CTA will determine the most appropriate bonding mechanism to provide local support for the non-federal share of funding required for the project.

- Private Financing - Private financial participation could take a number of different forms, ranging from Private Activity Bonds, (where tax-exempt interest rates are made available to private issuers), to equity participation in particular project components including transit-oriented developments, parking, or other real estate-related investments.

9.1.3 Operating Cost Estimates

CTA's O&M Cost Model was used to compare the operating costs of the East and West Options to the No Build Alternative. Based on planning completed to date, it is assumed that both options would have the same rail operating plan and associated proposed changes to existing local bus service. As a result, the comparison of operating statistics and O&M costs to the No Build is the same for the East Option and West Option.

The version of CTA's O&M Cost Model used for the Draft EIS was calibrated to the agency's FY 2012 system-wide operating budget ($1,273.7 million) and estimates costs for system-wide rail and

bus costs separately. The model allows CTA staff to evaluate the financial impact of different rail and bus operating plans compared to existing service levels based on changes to the key operating statistics shown in **Table 9-3**. As shown in **Table 9-4**, the unit costs from the O&M Cost Model have been inflated to 2015 dollars based on the Chicago Area Consumer Price Index Forecast provided in the 2013 *Moody's Analytics Financial Plan for Chicago Transit Authority's Red Line Extension Project* economic analysis.

Table 9-3 compares the annual operating statistics for the East and West Options to the No Build Alternative. Compared to the No Build Alternative, the East and West Options would provide substantially higher levels of rail service (hours and miles) while streamlining existing bus service levels as new rail service replaces current bus service.

Table 9-3: Key Operating Statistics - Union Pacific Railroad Alternative East and West Options Compared to the No Build Alternative

	Difference from No Build Alternative
Rail Characteristics	
Annual Train Hours	37,227
Annual Train Car Miles	5,489,502
Peak Trains	8
Peak Train Cars	64
Stations	4
Track Miles	10.6
Existing Bus Characteristics	
Revenue Bus Miles	-276,451
Revenue Bus Hours	-3,991
Peak Buses	6

Note: Rail and bus characteristics reflect service planning assumptions developed as part of the Draft EIS. Service levels may be adjusted in the future to reflect additional planning and actual ridership demand.

Table 9-4 summarizes the estimated impact on annual O&M costs attributable to each of the variables that drive O&M costs, in total for the East and West Options and as compared to the No Build Alternative. The estimated difference in annual operating costs is $17.4 million (2015 dollars) for either the East or West Option as compared to the No Build Alternative. This difference for either of the options represents approximately 1 percent of CTA's total FY 2015 O&M budget ($1,443.7 million).

Table 9-4: Impact on Operations and Maintenance Costs for the Union Pacific Railroad Alternative East or West Option Compared to the No Build Alternative (2015 dollars, in millions)

	CTA O&M Model Unit Costs (2015$)	Difference from No Build Alternative (2015$)
Rail Variables		
Annual Train Hours	173.77	6.5
Annual Car Miles	2.03	2.6
Peak Trains	259,179.20	2.1
Peak Cars	32,216.70	2.1
Stations	647,739.00	2.6
Track Miles	259,259.05	2.7
Existing Bus Variables		
Revenue Bus Miles	3.91	(1.1)
Revenue Bus Hours	82.88	(0.3)
Peak Buses	52,564.05	0.3
Total[1]		**17.4**

O&M = Operations and Maintenance
[1] Total may not match due to rounding
Note: While the capital cost estimate includes costs associated with the construction of park & ride spaces, the O&M cost estimate does not include operating expenses for the park & ride facilities. The O&M cost estimate assumes CTA will contract with an outside company to manage and operate the park & ride facilities. This assumption is consistent with CTA's current contract with CPS Chicago Parking LLC to operate and manage existing park & ride facilities.

9.1.4 Potential Operating Revenue Sources

CTA would use the following system-generated and public funding sources to fully fund the O&M costs of the selected option as well as system-wide rail and bus operations:

- System-Generated Revenues - Fares and passes; reduced fare subsidy; advertising, charters and concessions revenues; investment income revenue; statutory required contributions from the City of Chicago and Cook County; and other revenues includes parking charges, rental revenue, third-party contractor reimbursements, and filming fees, among other income sources.

- Public Funding - The amount of public funding available for CTA operations is determined by the Regional Transportation Authority. Public funding has three sources: sales tax revenue, public transportation funds, and the real estate transfer tax. The three funding sources are authorized under Illinois statutes passed in 1983 and 2008.

9.2 Comparison of Alternatives

This section summarizes information from the other chapters of this Draft EIS and highlights important trade-offs between the East and West Options. Key points of comparison include project benefits, potential to meet purpose and need goals, environmental impacts, and costs.

9.2.1 Evaluation Goals and Criteria

CTA used the following evaluation goals and criteria to compare the benefits and drawbacks of the East and West Options. These goals reflect CTA's desire to provide enhanced transit service and promote economic development in the project area in a fiscally sound manner while

minimizing adverse environmental impacts. For each goal, this evaluation applied the criteria listed below to determine the extent to which the East and West Options would meet that goal.

These goals are based on the purpose and need (**Chapter 2** of the Draft EIS), the AA process, comments received during scoping, public involvement, and the environmental analysis in **Chapters 3–7** of this Draft EIS.

Goal 1 - Reduce Transit Times

Goal 1 is evaluated based on the following criteria:

- Reduce transit times for residents, from within and south of the project area to the 95th Street Terminal and the Loop.
- Provide direct access to the CTA rail system for transit-dependent populations.
    - New stations convenient to transit-dependent communities
    - Direct service to public housing such as Altgeld Gardens

Goal 2 - Increase Travel Choices

Goal 2 is evaluated based on the following criteria:

- Provide better transit access to regional employment centers and local commercial areas.
- Allow for potential connections to other public transportation modes including regional commuter rail.
- Reduce geographic isolation of the project area and improve connections to major activity centers.
- Provide opportunities for drivers commuting on expressways to park and use transit to complete their trips.
    - Number of stations with park & ride facilities
    - Total park & ride spaces

Goal 3 - Increase Economic Competitiveness

Goal 3 is evaluated based on the following criterion:

- Foster economic development in the project area by providing stations that can encourage nearby development.

Goal 4 - Minimize Environmental Impacts

Goal 4 is evaluated based on minimizing environmental impacts:

- Displacement and Relocation Impacts

- Noise Impacts
- Park Impacts
- Community Character Impacts
- Visual and Aesthetic Impacts

Goal 5 - Provide the Best Value

Goal 5 is evaluated based on the following criteria:

- Projected ridership
- Capital costs to construct the project
- Changes in operating and maintenance costs for the system

9.2.2 Evaluation Results

Table 9-5 provides specific measurements for the goals identified in **Section 9.2.1**, and compares the extent to which the East and West Options and the No Build Alternative would meet the goals.

Table 9-5: Comparative Evaluation of Alternatives

Criteria	No Build Alternative	Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
Goal 1 - Reduce Transit Times			
Travel Times Between Stations[1,2] 130th Street to 95th Street Terminal 130th Street to Jackson Station (Loop)	 28 minutes 58 minutes	 14 minutes 39 minutes	 14 minutes 39 minutes
Would the proposed stations serve transit-dependent communities?	No	Yes	Yes
Would there be new direct service to Altgeld Gardens?	No	Yes	Yes
Goal 2 - Increase Travel Choices			
Would there be better access to regional employment centers and local commercial areas?	No	Yes	Yes
Would potential connections to other public transportation modes within the project area be possible?	No	Yes	Yes
Would geographic isolation be reduced?	No	Yes	Yes
How many stations would have park & ride facilities?	0	4 of 4	4 of 4
Total Park & Ride Spaces	0	3,700	3,700
Goal 3 - Increase Economic Competitiveness			
Could nearby development be encouraged?	No	Yes	Yes

Criteria	No Build Alternative	Union Pacific Railroad Alternative East Option	Union Pacific Railroad Alternative West Option
Goal 4 - Minimize Environmental Impacts			
Displacements and Relocations			
Properties	0	260	205
Buildings	0	106	46
Residential Buildings	0	90	26
Mixed-Use Buildings	0	1	2
Commercial and Industrial Buildings	0	13	17
Places of Worship	0	1	1
City-Owned Buildings	0	1	0
Noise Impacts After Mitigation	No change	Not adverse	Not adverse
Receivers with Moderate Impacts (before mitigation/after mitigation)	0	574/0	738/0
Receivers with Severe Impacts (before mitigation/after mitigation)	0	83/0	49/0
Park Impacts (Not Adverse After Mitigation)[3]			
Construction Phase	0 parks	2 parks	2 parks
Permanent	0 parks	2 parks	1 park
Permanent (acres)	0 acres	1.6 acres	1.9 acres
Would there be community impacts after mitigation?	No	Yes	Yes
Would there be visual and aesthetic impacts after mitigation?	No	Yes	Yes
Goal 5 - Provide the Best Value			
Projected Ridership (per weekday)	0	42,000	42,000
Capital Costs[4]	$0	$2.26 Billion	$2.30 Billion
Annual Change in O&M Costs[5]	No Change	+$17.4 Million	+$17.4 Million

N/A = Not Applicable
[1] Source: CTA 2009
[2] Travel time between stations does not include wait time at 130th Street.
[3] Based on the Section 4(f) analysis. Findings contingent on continued coordination process.
[4] Year of expenditure dollars
[5] O&M = Operations and maintenance. Difference from No Build Alternative shown in year 2015 dollars

Based on the criteria above, both the East and West Options would meet the identified goals. The sections below provide further discussion of the evaluation.

Goal 1 - Reduce Transit Times

Under the No Build Alterative, transit times in the project area would remain the same. The East and West Options would reduce transit travel times between the project area and destinations along the existing CTA rail system. The build alternative options would extend the Red Line southward from the 95th Street Terminal, with no transfer at the 95th Street Terminal required. Both the East and West Options would include new stations in transit-dependent communities, which would provide residents with more mobility and better access to jobs and services. The 130th Street station would serve the residents of Altgeld Gardens. The East and West Options would provide enhanced mobility, particularly for project area residents who do not have access to a car, and would allow them easier access to regional employment and activity centers.

Goal 2 - Increase Travel Choices

The No Build Alternative would not provide any transit service improvements, and would therefore not increase travel choices in the project area.

The East and West Options would provide transit service to the project area and would provide better transit access to regional employment centers and local commercial areas. The East and West Options would allow for potential future connections to regional commuter rail, particularly to NICTD at the 130th Street station where the tracks are adjacent. The East and West Options would serve geographically isolated neighborhoods and improve their connections to regional job centers. With the extension of the Red Line, some existing bus routes would be rerouted to feed into the proposed stations. All stations for the East and West Options would include park & ride facilities for motorists wishing to park their cars and complete their trips using transit. These facilities would potentially attract motorists from the nearby expressways, and give project area residents and residents from the south suburbs of Chicago more options for accessing the enhanced transit service.

Goal 3 - Increase Economic Competitiveness

The new stations could serve as catalysts for development and neighborhood revitalization. The Michigan Avenue station park & ride facility would include ground-floor space for community facilities and retail, which would help offset the negative impacts of the required displacements. By providing new, high-quality transit service to communities that have experienced long-term disinvestment, the East and West Options could encourage improvement of local economic conditions for project area residents.

Goal 4 - Minimize Environmental Impacts

The No Build Alternative would not have any environmental impacts, but also would not improve transit service in the project area. It would therefore not fulfill the purpose and need of the RLE Project, and would not satisfy the criteria for the environmental goal. The East and West Options would have greater environmental impacts than the No Build Alternative, but would fulfill the purpose and need of the project. Mitigation measures to address the potentially adverse impacts are proposed in **Chapters 3–7**.

Both the East and West Options would require displacements along their proposed alignments. The East Option would require 106 building displacements, most of which would be residential. The West Option would require 46 building displacements, which would be a mix of residential, commercial, and industrial. Noise-sensitive receivers along the East and West Option alignments would have moderate and severe noise impacts before mitigation. Under the East Option, 574 noise-sensitive receivers would have moderate impacts, and 82 noise-sensitive receivers would have severe impacts. Under the West Option, 738 noise-sensitive receivers would have moderate impacts, and 48 noise-sensitive receivers would have severe impacts. Under both the East and West Options, CTA would construct a noise barrier approximately 4 feet in height along both sides of the elevated track structure from the 95th Street Terminal to the CN/ME tracks near 119th Street, to reduce noise to levels below FTA noise impact criteria. Impacts would not be adverse after mitigation.

Both the East and West Options would affect parks in the project area. The East Option would have permanent and construction impacts on Wendell Smith Park and Block Park. The East

Option would require the elevated structure to be built above the northwest corner of Wendell Smith Park and along the western parcel of Block Park. The West Option would have construction impacts on Wendell Smith Park and Fernwood Parkway and permanent impacts only on Fernwood Parkway. The West Option would require the elevated structure to be built above Fernwood Parkway between 99th and 103rd Streets. The East Option would permanently affect 1.6 acres of parkland, and the West Option would permanently affect 1.9 acres of parkland.

The placement of new elevated structures and park & ride facilities into existing communities would result in community character impacts that would remain adverse after mitigation under the East and West Options. The East Option would have adverse impacts on community character and cohesion despite mitigation because of the visual encroachment of the elevated structure into the neighborhood north of I-57 in Roseland and near 117th Street and Prairie Avenue in West Pullman. The West Option would have adverse impacts on community character and cohesion despite mitigation because of the visual encroachment of the elevated structure into the neighborhood north of I-57 in Roseland and between 99th and 103rd Street in Washington Heights, near the 103rd Street station in Washington Heights, and near the Michigan Avenue station park & ride facility in West Pullman.

Both the East and West Options would have adverse visual impacts despite mitigation. Under the East Option, the elevated track structure would create an adverse visual impact north of I-57 and at the intersection of 117th Street and Prairie Avenue. As part of the West Option, the elevated track structure would create an adverse visual impact north of I-57 and between 99th and 103rd Streets, and at the 103rd Street station.

Goal 5 - Provide the Best Value

The approximate capital costs of the East Option would be $2.22 billion in YOE dollars, and the approximate capital costs of the West Option would be $2.26 billion in YOE dollars. Projected annual O&M costs for the CTA system would increase by approximately $17.4 million for either the East or West Option. CTA developed the East and West Options to meet Goals 1–4 described above and to meet the goals in a cost-efficient manner.

Chapter 10
Public and Agency Coordination

This chapter and the *Agency Coordination and Public Involvement Appendix* (**Appendix C**) document the extensive outreach and coordination that FTA and CTA have undertaken for the RLE Project. CTA began public outreach on the project as part of the AA from 2006 to 2009. Outreach continued during the formal EIS scoping period in 2009, and has continued through the preparation of this Draft EIS starting in 2012.

10.1 Public Participation Plan

To ensure that the public was informed and had opportunities to comment at key milestones throughout the study, CTA developed a detailed Public Participation Plan (PPP) at the onset of the RLE scoping process and updated at the start of the Draft EIS phase. The PPP includes outreach goals, key issues, a detailed stakeholder database, communications protocols, public input tracking protocols, a proposed schedule for interfacing with the public, and recommendations for how meetings should be conducted at various stages of the study. The PPP also includes additional recommendations for individual stakeholder interviews or briefings, interagency coordination, and the formation of working groups. The PPP is included in **Appendix C**.

10.2 Agency Coordination

CTA has coordinated and will continue to coordinate with governmental and other agencies throughout the course of this project. Outreach efforts were conducted in compliance with NEPA and other applicable regulations, including Section 106 of the NHPA, Section 4(f) of the USDOT Act of 1966, joint guidance and regulations from FTA and FHWA, and other agency regulations and guidelines.

10.2.1 Section 106 Coordination

The effort to identify, contact, and consult with various interested groups and agencies to identify historic properties and cultural practices during the environmental planning process has been documented for the Section 106 consultation process (see also **Section 4.7**). The purpose of consultation was to identify historic resources and other concerns relating to the project's potential effects on historically important resources. FTA and CTA sought information from individuals and organizations likely to have knowledge of local potential resources. **Section 4.7** includes the list of consulting parties. Consultation meetings focusing on project introduction, eligibility review, and effects discussions were held on October 24, 2012, January 30, 2013, and May 8, 2014, as described in **Section 4.7**. **Appendix Q** contains copies of correspondence and Section 106 consultation materials. As described in **Section 4.7.4**, no adverse effects on historic resources would occur because of the RLE Project (East or West Option) and no mitigation measures would be required; therefore, consultation with consulting parties is complete. In correspondence to the SHPO dated September 21, 2016, FTA made the determination that the UPRR Alternative (East and West Options) would result in no adverse effects. Coordination with the SHPO related to concurrence with FTA's eligibility and effects determinations is ongoing and will continue through the remainder of the project.

10.2.2 Tribal Coordination

In July 2012, FTA sent invitation letters to 11 Native American tribes to inform them of the Section 106 process and request assistance in identifying areas with potential cultural and/or religious significance. Letters were sent to the following nations: the Ho-Chunk Nation, the Miami Tribe of Oklahoma, the Peoria Tribe of Indians of Oklahoma, the Sac and Fox Nation of Oklahoma, the Pokagon Band of Potawatomi Indians, the Prairie Band of the Potawatomi Nation, the Citizen Potawatomi Nation, the Forest County Potawatomi Nation, the Potawatomi Nation, the Sac and Fox Nation of Mississippi in Iowa, and the Sac and Fox Nation of Missouri. The Miami Tribe of Oklahoma, Peoria Tribe of Indians of Oklahoma, and the Forest County Potawatomi Nation responded confirming their participation in the Section 106 process; no response was received from the other tribes. Coordination with the tribes is ongoing and will continue through the remainder of the project.

10.3 Public Outreach

Community outreach for the RLE Project started with the AA, continued with NEPA scoping in 2009, and will continue through the Draft EIS and Final EIS phases of the project. CTA will continue to involve and consult with the community as the project proceeds through design. **Table 10-1** summarizes public meetings held to date.

Table 10-1: Public Meetings Held to Date

Meeting	Location	Date and Time	Number of Attendees
Alternatives Analysis Phase			
Screen 1	Chicago State University 9501 S. King Drive	April 10, 2007 6:00 to 8:00 PM	66
	Chicago Public Library - West Pullman 830 W. 119th Street	April 11, 2007 6:00 to 8:00 PM	81
Screen 2	Historic Pullman Visitor Center 11141 S. Cottage Grove Avenue	December 3, 2008 6:00 to 8:00 PM	43
	Chicago Public Library - Woodson Regional 9525 S. Halsted Street	December 4, 2008 6:00 to 8:00 PM	41
Screen 3	Olive Harvey College 10001 S. Woodlawn Avenue	June 3, 2009 6:00 to 8:00 PM	44
	Chicago Public Library - Woodson Regional 9525 S. Halsted Street	June 4, 2009 6:00 to 8:00 PM	67
Environmental Impact Statement Scoping Phase			
Scoping	Historic Pullman Visitor Center 11141 S. Cottage Grove Avenue	September 22, 2009 6:00 to 8:00 PM	87
Scoping	Chicago Public Library - Woodson Regional 9525 S. Halsted Street	September 24, 2009 6:00 to 8:00 PM	81
Draft Environmental Impact Statement Phase			
Open House	St. John Missionary Baptist Church 211 E. 115th Street	August 2, 2011 6:00 to 8:30 PM	96
Open House	Palmer Park Gymnasium 201 E. 111th Street	May 13, 2014 5:30 to 7:30 PM	212

10.3.1 Alternatives Analysis Phase

CTA conducted the RLE AA process between 2006 and summer 2009, during which time CTA regularly met with the public. Through presentations and displays, the public learned about the methods of the New Starts federal planning processes and how evaluation criteria were developed and applied to the universe of alternatives for the RLE AA. A formal question and answer process allowed the general public to make comments and ask questions on the study's findings. CTA conducted individual and group briefings for elected and public officials; community, civic, business and religious leaders; and other stakeholders, providing them the opportunity to comment and inquire about the project.

CTA held two public meetings in April 2007 to present the findings of Screen 1 of the AA study; a total of 147 people attended the meetings and 209 comments were received. Two public meetings were held in December 2008 to present the findings of Screen 2 of the AA study; a total of 84 people attended the meetings and 139 comments were received. Two public meetings were held in June 2009 to present the findings of Screen 3 of the AA study; a total of 111 people attended the meetings and 111 comments were received. The AA process concluded with the Chicago Transit Board adoption of an LPA in August 2009.

Detailed information about the public involvement that took place during the AA process is included in **Appendix A**.

10.3.2 Environmental Impact Statement Scoping Phase

The NEPA scoping process began in 2009 to inform the public about the project and gather input on the scope of the environmental studies, draft purpose and need, and alternatives to be evaluated. The *Scoping Report* (**Appendix B**) details all public and agency outreach activities associated with the NEPA scoping process. FTA published the Notice of Intent (NOI) in the Federal Register on September 9, 2009. The NOI initiated the NEPA scoping process and included notification of the dates and locations of the agency and public scoping meetings, the dates of the public comment period, and descriptions of the project purpose and need and alternatives. CTA accepted comments from the date of publication of the NOI in the Federal Register (September 9, 2009) through October 27, 2009. This schedule provided a public comment period of 57 days.

An agency scoping meeting was held on September 24, 2009 with 12 agencies and jurisdictions represented:

- Chicago Department of Community Development
- Chicago Department of Environment
- Chicago Department Streets and Sanitation
- CDOT
- Chicago Park District
- Chicago Police Department
- Detroit Department of Transportation
- Illinois Commerce Commission
- IDOT
- Illinois State Police, Chicago District
- Metra
- MWRD

CTA held two public scoping meetings to provide the public with an opportunity to comment on the project purpose and need, alternatives considered, and issues and areas of concern to be considered in the Draft EIS.

CTA publicized the meetings via direct mail and e-mail notices using the stakeholder database, postings on CTA's website, display advertisements in multilingual publications (English and Spanish), a legal notice placed in the Chicago Tribune, CTA customer alerts, postings at the 95th Street Terminal and on CTA buses and trains, flyers distributed to key locations along the project corridor, and notices posted in libraries and village halls. CTA held four meetings with elected officials from along the project corridor so they could notify their constituents.

The public scoping meetings were hosted in ADA-compliant locations in the project area, accessible by public transit. The public scoping meetings were held approximately four weeks in advance of the end of the public comment period. The scoping meetings began with a 45-minute open house format. During the open house session, project team members were present at project display boards to answer questions related to the technical aspects of the project. The open house session provided attendees with an opportunity to review the project information and clarify their understanding of the project and environmental process before the start of the presentation and subsequent comment period. After the open house period, a presentation was made to provide attendees with information regarding the purpose of scoping, the project purpose and need, project background, the recently completed AA process, and the alternatives being carried forward into the Draft EIS. After the presentation, there was a formal public comment session, which was recorded by a court reporter. Spanish translators and sign language interpreters were available during the meeting.

Agencies, community groups, members of the public, elected officials, and other interested parties submitted 352 letters, e-mails, comment cards, and verbal testimonies during the scoping comment period. The comments largely fell into three topic categories: the project purpose and need (approximately 7 comments); the alternatives to be studied in the Draft EIS, including alignment options, station location options, and potential design features (approximately 326 comments); and environmental impacts and mitigation measures (approximately 37 comments). Many comments related to several topics and may have been counted under more than one category to fully characterize the feedback for each topic.

10.3.3 Draft Environmental Impact Statement Phase

August 2011 Open House Meeting

CTA held an open house meeting on August 2, 2011 to update the community regarding the RLE Project. The meeting was held at St. John Missionary Baptist Church, 211 E. 115th Street in Chicago from 6:00 PM to 8:30 PM. A total of 96 people signed in at the open house.

CTA publicized the meeting via direct mail and e-mail notices using the stakeholder database, postings on CTA's website, display advertisements in multilingual publications (English and Spanish), CTA customer alerts, and a news release to local media outlets. CTA sent letters to participating agencies informing them of the project status and inviting them to the open house.

The open house meeting was hosted in an ADA-compliant location in the project area, accessible by public transit. An open house meeting format was used for the public meeting, during which

project team members were present at project display boards to answer questions related to the technical aspects of the project. The open house provided attendees with an opportunity to review the project information and clarify their understanding of the project and environmental process. Spanish translators and sign language interpreters were available during the meeting. CTA collected written comments at the meeting and by mail, fax, and e-mail after the meeting. **Appendix C** provides additional details about the August 2011 open house.

Summer 2013 Newsletter

CTA sent a newsletter with a general project update to the approximately 3,200 addresses on the stakeholder database on August 27, 2013. **Appendix C** contains a copy of the newsletter.

Spring 2014 Outreach

CTA conducted outreach in April and May of 2014 to update the public on the status of the project; inform them of proposed alternatives, anticipated project benefits, and impacts; and gather feedback. Outreach included meetings with elected officials, interested community groups, and a public open house. The open house was held May 13, 2014 at the Palmer Park Gymnasium, 201 E. 111th Street in Chicago from 5:30 PM to 7:30 PM. The meeting was publicized using the methods described for the August 2011 open house. A total of 212 community members attended the meeting.

CTA received a total of 97 written comments from the community. Community members were asked to provide specific comments or concerns they had about alternatives, potential impacts, and mitigation measures. Overall, the community supports the RLE Project, and noted concerns related to property displacements, community and economic development, noise and vibration, safety and security, traffic, the project timeline, alternatives proposed, and alternative preferences. **Appendix C** provides additional details about the May 2014 open house.

10.4 Public Hearing and Public Comment Period

This Draft EIS serves as the primary document to facilitate review by agencies and the public of the proposed project. Comments on the Draft EIS will be accepted from October 6, 2016 to November 30, 2016. A copy of the Draft EIS is available on the CTA website (www.transitchicago.com/RedEIS), and hard copies of the Draft EIS are available at the following locations during the public review period:

- CTA headquarters, 567 W. Lake Street, 2nd Floor, Chicago, IL 60661
- Pullman Public Library, 11001 S. Indiana Avenue, Chicago, IL 60628
- West Pullman Public Library, 830 W. 119th Street, Chicago, IL 60643
- Altgeld Public Library, 13281 S. Corliss Avenue, Chicago, IL 60827
- Woodson Regional Public Library, 9525 S. Halsted Street, Chicago, IL 60628
- Calumet Park Public Library, 1500 W. 127th Street, Calumet Park, IL 60827
- Harold Washington Library Center, 400 S. State Street, Chicago, IL 60605

A public hearing is scheduled for November 1, 2016 from 5:30 to 7:30 PM at St. John Missionary Baptist Church (211 E. 115th Street, Chicago, IL 60628) to solicit comments from the community about findings presented in this Draft EIS. The public hearing was advertised through display ads in local and regional newspapers, an e-Blast, and through CTA press releases, flyers, and CTA customer alerts placed on CTA rail cars and buses within the project corridor. Additional details concerning the public hearing were also posted on CTA's website. The public hearing location is within the project area, ADA-compliant, and accessible by public transit.

Comments received during the public hearing will be reviewed by FTA and CTA, and will be entered into public record. Written comments will also be accepted at any time during the public comment period via e-mail to: RedExtension@transitchicago.com and U.S. mail to: Chicago Transit Authority, Strategic Planning, 10th Floor, Attn: Red Line Extension Project, 567 W. Lake Street, Chicago, IL 60661. A summary of the public hearing and responses to comments received will be included in the Final EIS.

10.5 Accommodations for Minority, Low-Income, and Disabled People

CTA made substantial efforts to ensure that minority, low-income, and disabled people were included in all outreach efforts. The efforts included sensitivity to multiple distribution channels and language needs, and all meetings were held in ADA-compliant facilities. CTA performed an LEP assessment in 2009, which determined that public outreach materials should be prepared in both English and Spanish. Meetings were advertised in multilingual and local publications. Spanish translators and sign language interpreters were made available at every public meeting.

In addition to direct mail and electronic notifications of meetings, CTA provided advance notice on buses and trains serving the project area to ensure that transit passengers were aware of opportunities to attend the meetings. Meeting notice materials included an offer of translation services in Spanish or other languages with advance request.

As noted, federal requirements for public participation plans include a process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as minority and/or low-income groups. CTA actively worked with organized business and community groups in the project area and transit advocacy organizations to ensure that project information and public meetings were adequately publicized and had substantive participation by minority and low-income groups.

Chapter 11
List of Acronyms and Abbreviations

Acronym or Abbreviation	Definition
AA	Alternatives Analysis
ADA	Americans with Disabilities Act
APE	area of potential effects
API	area of potential impact
BMPs	best management practices
BRT	bus rapid transit
BTU	British thermal unit
CDOT	Chicago Department of Transportation
CEQ	Council on Environmental Quality
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERCLIS-NFRAP	Comprehensive Environmental Response, Compensation and Liability Information System - No Further Remedial Action Planned
CESQG	conditionally exempt small quantity generators
CFR	Code of Federal Regulations
CHRS	Chicago Historic Resources Survey
CIG	Capital Investment Grant
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CN/ME	Canadian National/Metra Electric District
CO	carbon monoxide
Conrail	Consolidated Rail Corporation
CREATE	Chicago Region Environmental and Transportation Efficiency Program
CSS & SBRR	Chicago South Shore & South Bend Railroad
CTA	Chicago Transit Authority
dB	decibels
dBA	A-weighted decibels
DCP	Developing Communities Project, Inc.
EB	eastbound
EcoCAT	Illinois Ecological Compliance Assessment Tool
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
EJ	environmental justice
EJ populations	minority and low-income populations

Acronym or Abbreviation	Definition
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FAST	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	fiscal year
FQA	Floristic Quality Assessment
GHG	greenhouse gas
GO TO 2040	CMAP *GO TO 2040 Comprehensive Regional Plan*
HRT	heavy rail transit
IAAQS	Illinois Ambient Air Quality Standards
IDNR	Illinois Department of Natural Resources
IDOT	Illinois Department of Transportation
IEPA	Illinois Environmental Protection Agency
IHB	Indiana Harbor Belt Railroad
ILCS	Illinois Compiled Statutes
INAI	Illinois Natural Areas Inventory
ITEP	Illinois Transportation Enhancement Program
L_{dn}	day-night average sound level
LEP	limited English proficiency
L_{eq}	equivalent continuous sound level
LOS	level of service
LPA	Locally Preferred Alternative
LUST	leaking underground storage tank
L_v	vibration velocity
LQG	large quantity generator
MAP-21	Moving Ahead for Progress in the 21st Century Act
ME	Metra Electric District
MUTCD	Manual on Uniform Traffic Control Devices
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NAAQS	National Ambient Air Quality Standards
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act of 1969
NFR	No Further Remediation
NFRAP	No Further Remedial Action Planned
NHPA	National Historic Preservation Act
NICTD	Northern Indiana Commuter Transportation District
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Acronym or Abbreviation	Definition
NOI	Notice of Intent
NO_2	nitrogen dioxide
NPL	National Priority List
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OSHA	Occupational Safety and Health Administration
O&M	operations and maintenance
O_3	ozone
Pace	Pace Suburban Bus Service
$PM_{2.5}$	particulate matter with an aerodynamic diameter of 2.5 micrometers and less
ppm	parts per million
PPP	Public Participation Plan
PRP	potentially responsible party
RCRA	Resource Conservation and Recovery Act
RLE	Red Line Extension
ROD	Record of Decision
RPM	Red and Purple Modernization
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SES	Southeast Service
SHPO	State Historic Preservation Office
SPILLS	Spill Incident List
SQG	small quantity generator
SRP	Site Remediation Program
SSU	Illinois State Sites Unit Listing
TFIA	Transit Facility Improvement Area
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIF	tax increment financing
TIGER	Transportation Investment Generating Economic Recovery
TIP	Transportation Improvement Program
TSM	transportation system management
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation

Acronym or Abbreviation	Definition
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	underground storage tank
VdB	decibels referenced to 1 microinch per second
VMT	vehicle miles traveled
WB	westbound
YOE	year of expenditure

Chapter 12
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Chapter 13
List of Preparers

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Chicago Transit Authority

Name	Qualifications	Primary Responsibilities
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Name	Qualifications	Primary Responsibilities
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CDM Smith

Name	Qualifications	Primary Responsibilities
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Name	Qualifications	Primary Responsibilities
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Wight & Company

Name	Qualifications	Primary Responsibilities
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Peter H. Mesha, PE, LEED AP	President, Transportation Group; BS Civil Engineering; PE, LEED AP; 37 years' experience	Quality Control for Energy, Transportation
Nicole Rogers, LEED AP BD+C	Project Designer, Master of Architecture, 10 years' experience	Prepared visualizations, Visual Analyses

Name	Qualifications	Primary Responsibilities
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Jacobs

Name	Qualifications	Primary Responsibilities
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Mark D. Rinnan, AICP	Transportation Planner; BS Civil Engineering; AICP; 35 years' experience	Safety and Security, Parklands and Community Facilities, Neighborhood and Community Impacts Analyses
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Chapter 14
List of Recipients

In order to facilitate review and comment, the following agencies, local officials, and public libraries were notified of the availability of this document. All agencies and organizations on this list will receive web links to download the Draft EIS from the CTA website.

Agencies, organizations, and libraries that received hard copies of the Draft EIS to make available to the public are identified with an asterisk (*).

Participating agencies are federal, state, or local agencies, or federally recognized Indian tribal governmental units that may have an interest in the proposed project and have accepted an invitation to be a participating agency, or in the case of a federal agency, has not declined the invitation. Participating agencies are identified in **bold** text. All federal, state, local, and regional agencies and tribes are potential participating agencies; all others on the list are not eligible to be participating agencies.

The Federal Highway Administration is a cooperating agency.

Federal Agencies

Advisory Council on Historic Preservation
Transportation Security Administration
U.S. Department of Energy
U.S. Department of the Interior, Office of Environmental Policy and Compliance*
U.S. Department of Health and Human Services
U.S. Department of Housing and Urban Development
U.S. Department of Transportation
- **Federal Highway Administration**
- **Federal Railroad Administration**

U.S. Environmental Protection Agency
U.S. Federal Emergency Management Agency
U.S. Fish and Wildlife Service

Tribes

Citizen Potawatomi Nation
Forest County Potawatomi Nation
Ho-Chunk Nation
Miami Tribe of Oklahoma
Peoria Tribe of Indians of Oklahoma
Pokagon Band of Potawatomi Indians
Potawatomi Nation-Hannahville Indian Community
Prairie Band of Potawatomi Nation

Sac and Fox Nation of Mississippi in Iowa
Sac and Fox Nation of Missouri
Sac and Fox Nation of Oklahoma

State Agencies

Illinois Commerce Commission
Illinois Department of Commerce and Economic Opportunity
Illinois Department of Employment Security
Illinois Department of Natural Resources
Illinois Department of Revenue
Illinois Department of Transportation
Illinois Environmental Protection Agency
Illinois Historic Preservation Agency
Illinois Secretary of State
Illinois State Archaeological Survey
Illinois State Museum
Illinois State Police
Illinois State Police District Chicago
Illinois Tollway
Landmarks Illinois

Local and Regional Agencies

Chicago Bureau of Convention and Tourism
Chicago Historical Society
Chicago Housing Authority
Chicago Metropolitan Agency for Planning
Chicago Park District
City of Chicago Department of Aviation
City of Chicago Department of Budget and Management
City of Chicago Department of Business Affairs and Consumer Protection
City of Chicago Department of Community Development
City of Chicago Department of Fleet and Facility Management
City of Chicago Department of Planning and Development Historic Preservation Division
City of Chicago Department of Streets and Sanitation Bureau of Street Operations
City of Chicago Department of Transportation
City of Chicago Office of the Mayor
City of Chicago Police Department
Cook County Board of Commissioners
Cook County Department of Revenue
Cook County Highway Department
Cook County Recorder of Deeds & Registrar of Titles

Cook County Sheriff's Office
Metra
Metropolitan Planning Council
Metropolitan Water Reclamation District of Greater Chicago
Pace
Preservation Chicago
Village of Calumet Park

Community Groups

Agape Community Center
Chicago Neighborhood Initiatives
Developing Communities Project, Inc.
Far South Community Development Corporation
Friends of the Parks
Golden Gate Homeowners Association
Greater Roseland Chamber of Commerce
Neighborhood Housing Services of Chicago
People for Community Recovery
Red Line Extension Coalition
Ridge Historical Society
Roseland Business Development Council
Roseland Manor
Rosemoor Community Association
St. Anthony of Padua Parish

Local Libraries

Altgeld Public Library*
Calumet Park Public Library*
Pullman Public Library*
West Pullman Public Library*
Woodson Regional Public Library*
Harold Washington Library Center*

Glossary

The following terms are used in this Draft Environmental Impact Statement.

95th Street Terminal Improvement Project - The 95th Street Terminal is currently the southern terminus (end) of CTA's Red Line. CTA is in the process of rehabilitating the current 95th Street Terminal, which dates from 1969, with an expanded modern facility. The project will bring substantial improvements to a station that serves thousands of customers each day and is a vital part of the South Side.

Aerial Track Structure - The location of a train track structure above the surface of the ground. Can be constructed of concrete and/or steel.

Affected Environment - The physical, biological, social, and economic setting potentially affected by one or more of the alternatives under consideration.

Alternative - One of a number of specific transportation improvement proposals or options.

Alternatives Analysis - Process of assessing the different transportation improvement proposals or options and documenting alternate concepts based on scenario and functional definitions.

Americans with Disabilities Act (ADA) - Federal regulation establishing legal requirements for accessibility for those with disabilities including wheelchair users.

Area of Potential Impact (API)/Area of Potential Effects (APE) - The geographic area within which the project may cause adverse or beneficial impacts or effects.

At-Grade - The location of a structure or transit guideway at the same level as the ground surface.

Block Group - A census block group is a geographical unit used by the United States Census Bureau. Census block groups fall in size between the census tract and the census block. Census blocks are the smallest geographical units for which the Census Bureau publishes sample data.

Bus Rapid Transit (BRT) - BRT is a bus service that provides faster, more efficient, and more reliable service than an ordinary bus line. Often these changes are achieved by making improvements to existing street and traffic infrastructure. High-capacity, uniquely identified buses are typically used.

Chicago Metropolitan Agency for Planning (CMAP) - The metropolitan planning organization for the Chicago region. CMAP has prepared the *GO TO 2040 Comprehensive Regional Plan*, which provides strategies for the regional transportation network.

Chicago Transit Authority (CTA) - The CTA is an independent governmental agency created by state legislation. It operates the nation's second-largest public transportation system and covers the City of Chicago and 35 surrounding suburbs. CTA is the local lead agency on the Red Line Extension Project.

Community Character - An attribute of a geographic area with identifiable characteristics that make it unique.

Community Cohesion - An attribute of a geographic area, where segmentation or division of the area would reduce its desirability to current and future residents.

Community Resources - Locations that serve as focal points or provide community services. These may include landmarks, parks, or community centers.

Construction Staging - A physical location used for the storage of construction-related equipment and materials such as vehicles and stockpiles.

Cumulative Effect - The incremental environmental impact or effect of the project when added to the impacts of other separate past, present, and reasonably foreseeable future actions.

Deck - The surface of a bridge or elevated rail track section.

> **Closed-deck structure** - Tracks that have a solid deck beneath them. Closed-deck structures allow for more effective noise barriers but require more active snow clearance and drainage maintenance.

Displacement - An impact from a project that results in homes or businesses needing to be relocated.

> **Affected Parcel** - A partial or a full parcel that would need to be acquired because of the project.
>
> **Building Displacement** - A structure that would need to be removed (the land occupied by the structure would also be counted as an affected parcel).
>
> **Easement** - Displacement of a publically owned parcel that would include a roadway. CTA would require a use agreement with the public entity.

Effect (as related to historic/cultural) - Refers to alterations in the character or use of historic properties by the alternatives. Used instead of "impacts" (referred to elsewhere in the Draft EIS) because of the unique requirements and terminology for assessing historic resource impacts.

Elevated Track Structure - The location of a structure above the surface of the ground.

Environmental Impact Statement (EIS) - An EIS is a document that evaluates the economic, social, and environmental effects of a major proposed project. The National Environmental Policy Act (NEPA) requires an EIS to be prepared when federal funds are being sought to fund all or part of a project.

Environmental Justice (EJ) - Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to transportation planning and decision-making processes, per Executive Order 12898.

Federal Transit Administration (FTA) - FTA is a division of the U.S. Department of Transportation that funds transit planning and programs. FTA is the federal lead agency on the RLE Project.

Fixing America's Surface Transportation (FAST) Act - A funding and authorization bill to govern the United States federal surface transportation spending. Congress passed the FAST Act on December 3, 2015, and President Barack Obama signed it into law on December 4, 2015. The $305-billion, 5-year (FY 2016–FY 2020) provides a steady and predictable funding source over the next five years and an increase of approximately $1 billion per year to the transit program. A number of provisions are provided in the law to assist transit service providers in expediting project delivery, enhancing transit agency partnerships, and targeting investments for state of good repair and bus fleet improvements.

Greenhouse Gas (GHG) - A gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

Ground-borne Vibration - A technical term used to describe mostly man-made vibrations of the ground. Examples include vibrations caused by trains, buses on rough roads, and construction activities.

Ground-borne Noise - A technical term used to describe mostly man-made noise of the ground. Examples include noise caused by trains, buses on rough roads, and construction activities. Ground-borne noise often sounds like a rumbling.

Hazardous Material - Substances that could harm human health or the environment, including petroleum products, polynuclear aromatic hydrocarbons, pesticides, organic compounds, heavy metals, asbestos-containing materials, lead-based paint, or other compounds.

Headway - The elapsed time between trains passing a fixed point in the same direction over the same track. Refers to train frequency, for example, a 15-minute headway means a train comes every 15 minutes.

Heavy Rail - A railway powered by electricity or diesel fuel with the capacity for a heavy volume of traffic (number of trains and passenger capacity). It is characterized by high speed and rapid-acceleration passenger rail cars operating singly or in multi-car trains on fixed rails, separate rights-of-way from which some other vehicular and foot traffic are excluded, sophisticated signaling, and high-platform loading.

Historic District - A group of buildings, properties, structures, or sites that have been designated either federally or by the City as historically or architecturally significant. Districts vary greatly in size: some have hundreds of structures while others have just a few.

Impact - An impact is a change in the condition or function of an environmental resource that occurs as a result of the proposed alternative. An impact can be adverse (negative) or beneficial (positive).

Adverse Impact - An adverse impact is a negative consequence of the proposed alternative (opposite of a benefit).

Construction Impact - Construction impacts are related to the construction phase of the proposed alternative.

Cumulative Impact - The environmental impact or effect of the project when added to the impacts of other separate past, present, and reasonably foreseeable future actions.

***De Minimis* Impact** - A term from Latin, meaning "about minimal things." A de minimis impact finding is defined in 23 Code of Federal Regulations § 774.17 for historic resources, parks, recreation areas, and wildlife/waterfowl refuges in determinations of use of such resources for environmental analysis.

Indirect Impact - Also known as a secondary impact, indirect impacts are those caused by the project or plan but that are separated from direct impacts by time and/or distance.

Permanent Impact - Permanent impacts are related to the operation (long-term) of the proposed alternative.

Lead Agency - The agency or agencies responsible for preparing the Environmental Impact Statement (EIS) in compliance with the National Environmental Policy Act (NEPA). FTA and CTA are the lead agencies for the RLE Project.

Level of Service (LOS) - A rating that uses a set of characteristics that indicate the quality and quantity of transportation service. Often LOS is defined by the amount of delay at a traffic signal.

Locally Preferred Alternative - The Union Pacific Railroad (UPRR) Rail Alternative was selected by the Chicago Transit Board as the LPA on August 12, 2009, indicating that it is the alternative that best meets the purpose and need of the project while addressing potential impacts and other potential constraints.

Median Household Income - Median household income is a statistical measurement of a set of household income data. The Median household income for a set of data splits the income distribution into two equal groups, half having income above that amount and half having income below that amount. Median household income is typically presented for a defined geographic area.

Mitigation - Action or measure taken to minimize, reduce, eliminate, or rectify the adverse impacts of a project, practice, action, or activity.

Mixed-use - Refers to a mixture of different types of uses in the same structure or location, for example, a building with commercial units on the ground floor and residential units above.

Mobility - The movement of people or goods, including transportation options, travel patterns, access to jobs, and access for emergency service providers.

Moving Ahead for Progress in the 21st Century Act (MAP-21) - A funding and authorization bill to govern the United States federal surface transportation spending. Congress passed MAP-21 on June 29, 2012, and President Barack Obama signed it on July 6, 2012. The $105-billion, 2-year bill did not substantially alter total funding from the previous authorization, but it did include many major reforms.

National Environmental Policy Act of 1969 (NEPA) - Requires all agencies to examine and disclose the environmental impacts of their actions, incorporate environmental information into project decisions, and use public participation in the planning and implementation of all actions.

National Historic Preservation Act of 1966 (NHPA) - Established a national framework for historic preservation, requiring the federal government to establish a national system for identifying, evaluating, protecting, and rehabilitating historic places.

National Register of Historic Places (NRHP) - The national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture. It is maintained by the Secretary of the Interior under authority of Section 101(2)(1)(a) of the National Historic Preservation Act, as amended.

NEPA Preferred Alternative - An alternative determined by FTA and the project sponsor (in this case, CTA) to best accomplish the purpose and need of a proposed action while fulfilling statutory requirements and responsibilities, with consideration to economic, environmental, technical, and other factors. In August 2014, based on the technical analysis and public input received, CTA announced the NEPA Preferred Alternative for the RLE Project—the UPRR Rail Alternative. The NEPA Preferred Alternative is the RLE Project alternative that is studied in the Draft EIS. CTA intends to move forward with the NEPA Preferred Alternative into the next stage of project development.

New Starts - FTA's primary grant program for funding major transit capital investments, including rapid rail, light rail, bus rapid transit, commuter rail, and ferries.

No Build Alternative - The No Build Alternative refers to an alternative under which no action would be taken (no infrastructure would be built and no new management or operational practices would be instituted). The No Build Alternative includes all projects currently included in the fiscally constrained portion of the CMAP Fiscal Year 2010–2015 Transportation Improvement Program (TIP), including renovation of the 95th Street Terminal.

Noise Barrier - An exterior structure located next to the tracks that is designed to protect surrounding residents and community members from noise impacts related to the proposed project. Noise barriers are an effective method of mitigating roadway, railway, and industrial noise sources.

Noise-Sensitive Receiver - Noise-sensitive receivers are residences and/or other land uses that would be negatively affected by noise from the proposed project, such as tracts of land set aside for serenity and quiet, hospitals, hotels, churches, museums, parks, and cemeteries.

Nonattainment Area - Nonattainment areas are metropolitan areas that do not meet national ambient air quality standards (NAAQS), ranked by the severity of their problem as marginal, moderate, serious, severe, or extreme. In accordance with the Clean Air Act Amendments of 1990, these areas must take specific emission reduction measures.

Option - One of the several possibilities for an alternative. The UPRR Alternative has two options: the East Option and the West Option, each along the same general alignment but slightly different.

Peak/Off-Peak - Peak is the AM or PM time period when the largest volume of riders occurs. Off-Peak is the remainder of the day when travel activity is generally lower.

Photo Simulation - A computer-generated image that shows how an alternative, station, or feature could look after construction.

Platform - An area at a station used to get on or off trains.

Public Participation Plan (PPP) - A Public Participation Plan includes public outreach goals, key issues, a detailed stakeholder database, communications protocols, public input tracking protocols, a proposed schedule for interfacing with the public, and recommendations for how meetings should be conducted at various stages of the study.

Purpose and Need - Identifies the reasons a proposed project is needed and reflects the project objectives discussed with the public during the scoping process.

Railroad Ties - Rectangular supports for railroad tracks. Railroad ties are traditionally made of wood.

Record of Decision (ROD) - A document prepared by FTA that presents the basis for selecting and approving a specific transportation proposal that has been evaluated through the various environmental and engineering studies. Typically, the ROD identifies the alternative selected in the Final EIS, the alternatives considered, measures to minimize harm, monitoring or enforcement programs, and an itemized list of commitments and mitigation measures.

Red Ahead Program - A comprehensive initiative for maintaining, modernizing, and expanding Chicago's most traveled rail line. The program includes major improvement projects on the Red and Purple Lines between Linden terminal in the north and the proposed 130th Street terminal on the south. The improvement projects include the Red and Purple Modernization project, the Red Line Extension Project, and the Red Line South Reconstruction Project. In addition, the Red Ahead Program encompasses several individual projects, including the renovation of several stations along the Red Line including Wilson Station, Clark and Division Stations, and the 95th Street Terminal.

Red Line Extension (RLE) Project - The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to 130th Street, subject to the availability of funding. The proposed 5.3-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus

and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

Right-of-Way - In transit usage, the corridor along a railway that is controlled by a transit or transportation agency/authority.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - A funding and authorization bill that governed the United States federal surface transportation spending. It was signed into law by President George W. Bush on August 10, 2005, and expired on September 30, 2009. The Moving Ahead for Progress in the 21st Century Act (MAP-21) replaced this law on July 6, 2012.

Safety - Safety refers to freedom from harm resulting from unintentional acts or circumstances. With regard to the RLE Project, safety includes all possible incidents within the CTA right-of-way (which includes areas along tracks, in yards, and at stations). Examples include collisions, derailments, fires, property damage, injuries, and fatalities.

Scoping - An early and open process for identifying the extent, variety, and significance of issues related to a proposed action in the EIS. Scoping for RLE was held in the form of public open house meetings in the fall of 2009.

Secondary Station Entrance/Exit - An auxiliary entry/exit in addition to the primary entry and/or exit.

Section 4(f) - Section 4(f) of the Department of Transportation Act of 1966 states that no transportation project should be approved that requires the use of land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless there is no feasible or prudent alternative to the use of such land or the use of such land are found to be *de minimis*.

Section 106 - Section 106 of the National Historic Preservation Act deals with project effects on historic properties. It requires consultation with parties with expertise and interest in historic resources.

Security - Security refers to freedom from harm resulting from intentional acts or circumstances. Intentional danger includes crimes and must be reported if the intentional act meets thresholds for notification as specified in FTA's State Safety Oversight Rule.

Sensitive Receiver Cluster - A group of noise-sensitive receivers determined to be at similar distances from the proposed track locations and where the CTA operating conditions, such as train speed, would be similar.

Shoring - The process of supporting a structure in order to prevent collapse so that construction can proceed.

State Historic Preservation Officer (SHPO) - The official appointed or designated pursuant to Section 101(b)(1) of the National Historic Preservation Act to administer the State historic preservation program. The SHPO consults with state and federal agencies during the Section 106 process review. The SHPO administers the national historic preservation program at the State

level, reviews National Register nominations, and maintains file data on historic properties that have been identified but not yet nominated. Agencies seek the view of the SHPO in the identification of historic properties and the assessment of the effects of a project on historic properties.

Substation - A part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions.

Transit Infrastructure - Basic physical elements of the transit system including track, structures, signals, and power.

Transportation Improvement Program (TIP) - A document prepared by metropolitan planning organizations listing projects to be funded with Federal Highway Administration and FTA funds for the next 1- to 3-year period.

Transportation System Management - A "low cost" project alternative that was previously required for FTA analyses.

Transit-Oriented Development (TOD) - TOD is development that takes advantage of the location of the site adjacent to or near a transit station. TOD includes mixed-use developments, such as residential buildings with ground-floor retail that complement and take advantage of adjacent transit stations, activate streetscapes, enhance livability, and encourage economic development.

Travel Time - The time spent traveling from a place of origin to a place of destination.

Uniform Act - The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, mandates that relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced as a direct result of projects undertaken by a federal agency or with federal financial assistance.

Union Pacific Railroad (UPRR) - The UPRR owns and operates tracks and trains that run through the project corridor along Eggleston Avenue.

Viaduct - A bridge-like structure over a street that allows trains to pass over the street and vehicles to pass under the tracks.

Viewshed - An area that is visible to the human eye from a fixed vantage point.

Visual Impact - A change in the appearance of a place as a result of development. Visual impacts can be positive or negative.

Wetland - Land where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface.

Yard and Shop - An area in a rail system used for maintenance, storing, or holding trains.

Appendix R
Hazardous Materials Technical Memorandum

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Hazardous Materials

Technical Memorandum

August 21, 2013
Updated July 27, 2015

Prepared for:
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Table of Contents

Section 1 Summary 1-1
1.1 Evaluation 1-1
1.2 Findings 1-1
1.3 2014-2015 Red Line Extension Project Update 1-4

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-4
3.3 Area of Potential Impact 3-4
3.4 Methods 3-4

Section 4 Affected Environment 4-1
4.1 Physical Setting 4-1
4.2 Historical Document Review 4-1
4.3 Regulatory Agency Records Review 4-4
4.4 Regulatory File Review 4-5
4.5 Risk Classification 4-14
4.6 Other Sources 4-28

Section 5 Impacts and Mitigations 5-1
5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.3 Union Pacific Railroad Rail Alternative 5-3
5.4 Union Pacific Railroad Rail Alternative - West Option 5-7
5.5 Halsted Rail Alternative 5-8

Section 6 Impacts Remaining After Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-1
6.5 Union Pacific Railroad Rail Alternative - West Option 6-1
6.6 Halsted Rail Alternative 6-2

Section 7 References Cited 7-1

Appendices

Appendix A - Figures of High Concern Sites Within Permanent Envelope
Appendix B - EDR Database Search Report
Appendix C - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 3-1: Maximum Regulatory Database Search Area 3-6
Figure 4-1: Identified Sites of Concern 4-16
Figure A-1: Union Pacific Railroad Rail Alternative, High Concern Site 51 ..... A-2
Figure A-2: Union Pacific Railroad Rail Alternative, High Concern Site 70 ..... A-3
Figure A-3: Union Pacific Railroad Rail Alternative, High Concern Sites 94a, 104, and 105 ..... A-4
Figure A-4: Union Pacific Railroad Rail Alternative, High Concern Site 122 ..... A-5
Figure A-5: Bus Rapid Transit and Union Pacific Railroad Rail Alternatives, High Concern Sites 151/162, 200, and O4 ..... A-6
Figure A-6: Halsted Rail Alternative, High Concern Site 18a A-7
Figure A-7: Halsted Rail Alternative, High Concern Sites 154, 141, NL1, 144, 152a, and 152b A-8

Tables

Table 1-1: Summary of High Concern Sites Within the Permanent Envelope 1-3
Table 3-1: Environmental Databases and Distances Searched 3-7
Table 4-1: Environmental Database Search Results Summary 4-5
Table 4-2: Regulatory Records Request Summary 4-6
Table 4-3: Identified High Concern Sites 4-19
Table 4-4: Summary of High Concern Sites Within the Permanent Envelope 4-22
Table 4-5: Moderate Concern Sites 4-23
Table 4-6: Summary of High and Moderate Concern Sites 4-28

Abbreviations

BRT	Bus Rapid Transit
BTEX	benzene, toluene, ethylbenzene, and xylenes
CERC-NFRAP	Comprehensive Environmental Response, Compensation and Liability Information System -No Further Remediation Planned Sites
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
CTA	Chicago Transit Authority
DDD	dichlorodiphenyldichloroethane
E&E	Ecology & Environment
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
ERNS	Emergency Response Notification System
ENG CONTROLS	Engineered Barrier Site
ESA	Environmental Site Assessment
FOIA	Freedom of Information Act
Gabriel	Gabriel Environmental Services
FTA	Federal Transit Administration
HIG	Historical Information Gatherers, Inc.
HMT	Hazardous Materials Transportation Act
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
IL DRYCLEANERS	Drycleaners License List
LUST	leaking underground storage tank
MWRD	Metropolitan Water Reclamation District
MGP	manufactured gas plant
NEPA	National Environmental Policy Act of 1969
NFR	No Further Remediation
NFRAP	No Further Remediation Planned
NIPC	Northeastern Illinois Planning Commission Active and Inactive Solid Waste Disposal Site Inventory
NPL	National Priority List
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl

PNA	polynuclear aromatic hydrocarbons
RCRA	Resource Conservation and Recovery Act
RCRA CESQ	RCRA Conditionally Exempt Hazardous Waste Generators
RCRA CORRACTS	RCRA Corrective Action
RCRA LQG	RCRA Large Quantity Hazardous Waste Generators
RCRA SQG	RCRA Small Quantity Hazardous Waste Generators
RCRA TSDF	RCRA Treatment, Storage, and Disposal
RLE	Red Line Extension
ROW	right-of-way
SARA	Superfund Amendments and Reauthorization Act
SPILLS	Spill Incident List
SRP	Site Remediation Program
SSU	Illinois State Sites Unit Listing
SVOC	semi-volatile organic compound
SWF/LF	Landfill or solid waste disposal
TACO	Tiered Approach to Corrective Action Objectives
Tetra Tech	Tetra Tech, Inc.
UPRR	Union Pacific Railroad
US BROWNFIEDS	Brownfields
US ENG CONTROLS	Engineering Controls
US INST CONTROL	Institutional Control
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
UST	underground storage tanks
VOC	volatile organic compounds
Weston	Weston Solutions, Inc.
WIRA	West Pullman Industrial Redevelopment Area

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project with respect to hazardous materials, and presents the regulatory framework and evaluation methods used for the analysis.

1.1 Evaluation

The first step of the analysis was to identify potential or existing conditions that could result in hazardous material impacts. A general inspection field visit was performed. Analysis included a review of historical topographic maps, aerials, and fire insurance maps; a regulatory database search; and a review of agency files for a select number of sites. Identified sites were then ranked as No Concern, Low Concern, Moderate Concern, or High Concern, based on their potential to have impacts related to hazardous materials. The potential for encountering other sources of hazardous material impacts, such as urban fill, transformers, substations, and buildings constructed prior to 1978 or 1979 was also assessed.

1.2 Findings

1.2.1 Impacts

While no potential hazardous material impacts would occur as a result of the No Build Alternative, there would be the potential for permanent and construction hazardous material impacts as a result of the Bus Rapid Transit (BRT) Alternative, Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative.

1.2.1.1 Permanent Impacts

Operating BRT service would not result in changes to the existing types of hazardous materials used, stored, or transported; therefore, the BRT Alternative would not result in permanent impacts.

Operation of the UPRR Rail and Halsted Rail Alternatives has the potential to result in permanent hazardous material impacts from accidental spills or from maintenance activities that require earthmoving in contaminated areas. Spills are most likely to occur during activities such as equipment maintenance at the yards and shops and grounds maintenance along the tracks. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, and pesticides. Examples of maintenance activities that could require earthmoving include at-grade track repair, underground utility work, and foundation repairs.

The UPRR Rail Alternative also has the potential for additional hazardous material impacts associated with the adjacent operating UPRR (with the East and West Options) or Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad ([NICTD/CSS & SBRR] with the ROW, East, and West Options). Due to the proximity of the UPRR and NICTD/CSS & SBRR to the UPRR Rail Alternative alignments, hazardous material spills

or releases that occur along these railroads would have the potential to migrate and affect the UPRR Rail Alternative alignments. These materials potentially exist along the railroad currently, but the UPRR Rail Alternative would bring transit vehicles closer to them. Spills along the UPRR and NICTD/CSS & SBRR could occur from the use of chemicals for ground maintenance along the tracks. In addition, because these are freight lines, releases could occur from creosote used to preserve wood railroad ties; polynuclear aromatic (PNA) compound deposition from diesel exhaust; asbestos dust from brakes; and coal ash releases from engines. Freight lines might also transport hazardous material cargo, which could be released if there were a spill or accident.

Although there is the potential for impacts associated with the adjacent freight lines, these impacts would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 Code of Federal Regulations [CFR] Parts 171 to 180) that among other things, specify requirements for the safe transportation of hazardous materials by rail and require rail carriers to conduct a security and safety risk analysis, to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route.

1.2.1.2 Construction Impacts

Construction impacts could occur when activities such as earthmoving and demolition encounter contaminated soil and/or groundwater. Hazardous materials typically involved with construction activities, such as paints, solvents, fuels and hydraulic fluids, could also be accidentally released during construction.

The affected environment evaluation described in Section 4 found that the potential to encounter hazardous materials during construction exists across the entire project area for the BRT, UPRR Rail, and Halsted Rail Alternatives. This potential is due to the urban setting of the project area, where the potential exists for the presence of fill materials previously deposited widespread across the entire project area. Typical urban fill materials contain elevated concentrations of polynuclear aromatic hydrocarbons and metals due to nearby roadways, railways, and industrial and commercial land uses. In addition, urban fill may include contaminated building demolition debris, which was commonly used as fill material in excavations, to increase elevations at sites during development.

Although there would be the potential to encounter hazardous materials during construction throughout the project area, the greatest potential for impacts would be from High Concern sites within the permanent envelope of an alternative. Table 1-1 presents a summary of High Concern sites within the permanent envelopes of alternatives, by segments.

Table 1-1: Summary of High Concern Sites Within the Permanent Envelope

Segment	Number of High Concern Sites Within Envelope	Figure 4 1 ID Numbers	Notes
Bus Rapid Transit Alternative			
Full Length	1	200	
Park & Ride Facilities*	1	200	
Union Pacific Railroad Rail Alternative Right–of-Way Option			
Segment UA	0	---	
Segment UB	4	122,151/162, 200, O4	
120th Street Yard and Shop	3	151/162, 200, O4	Includes one archived CERCLIS -No Further Remediation Planned site**
Union Pacific Railroad Rail Alternative East Option			
Segment UA	2	70, 104	
Segment UB	4	122, 151/162, 200, O4	Includes one archived CERCLIS-No Further Remediation Planned site**
120th Street Yard and Shop	3	151/162, 200, O4	Includes one archived CERCLIS-No Further Remediation Planned site**
Union Pacific Railroad Rail Alternative West Option			
Segment UA	2	51, 105	
Segment UB	4	122, 151/162, 200, O4	Includes one archived CERCLIS-No Further Remediation Planned site**
120th Street Yard and Shop	3	151/162, 200, O4	Includes one archived CERCLIS-No Further Remediation Planned site**
Halsted Rail Alternative			
Segment HA	1	18a	
Segment HB	0	---	
119th Street Yard and Shop	6	141, 144, 152a, 154, NL1, 152b	Includes one active CERCLIS and one CERCLIS-No Further Remediation Planned site **

Notes:
* Includes sites only within the proposed park & ride facilities.
** Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) sites typically come with increased risk of United States Environmental Protection Agency (USEPA) imposing liability and remediation obligations on potentially responsible parties (PRPs). Any owner can be considered a PRP and be required to pay for cleanup. Therefore, additional caution should be taken before acquiring ownership.

Other common sources of hazardous materials that may be present or that could affect the BRT, UPRR Rail, and Halsted Rail Alternatives during construction include transformers and substations within the project area that may contain hazardous materials including polychlorinated biphenyls (PCBs) and buildings and structures built before 1978–1979 that may likely contain lead-based paint or asbestos and releases could occur during their demolition. Hazardous materials typically involved with construction activities, such as paints, solvents, fuels, and hydraulic fluids, could also be accidentally released during construction.

1.2.2 Cumulative Impacts

For the No Build Alternative, no permanent adverse impacts, construction impacts, or cumulative impacts related to hazardous materials would be expected. Under the BRT, UPRR Rail, and Halsted Rail Alternatives, cumulative impacts could occur if there were a release of hazardous materials during ongoing and future projects in the area (described in the *Cumulative Impacts Technical Memorandum)*; however, compliance with local, state, and federal laws and regulations would result in these cumulative impacts being less than adverse.

1.2.3 Mitigation

Permanent mitigation measures for the BRT, UPRR Rail, and Halsted Rail Alternatives would include adherence to applicable federal, state, and local regulations, as well as Chicago Transit Authority's (CTA's) existing system-wide hazardous material usage, storage, and disposal plans and procedures.

Construction mitigation measures for the BRT, UPRR Rail, and Halsted Rail Alternatives would include compliance with federal, state, and local laws and regulations regarding hazardous materials, conducting focused site assessments for areas where earthmoving activities would occur, conducting asbestos, lead-based paint, and hazardous material surveys of buildings or structures that would be demolished. Mitigation measures would also include developing a contaminated material management plan; health and safety plans for construction activities; a spill prevention, control, and countermeasure plan; and a construction stormwater pollution prevention plan prior to construction. In addition, a Phase I Environmental Site Assessment (ESA) of any property to be acquired would be conducted as part of the Final Environmental Impact Statement (Final EIS) and prior to acquisition in order to identify recognized environmental conditions and assess and limit environmental liability. Based on the Phase I ESA findings, a Phase II ESA could also be required during the property acquisition phase and prior to purchasing a property.

1.2.4 Impacts Remaining After Mitigation

No adverse impacts would remain after mitigation for the BRT, UPRR Rail, and Halsted Rail Alternatives.

1.3 2014-2015 Red Line Extension Project Update

Updated July 27, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix C of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix C supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft EIS focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - Right-of-Way (ROW) Option
  - East Option
  - West Option
- Halsted Rail Alternative

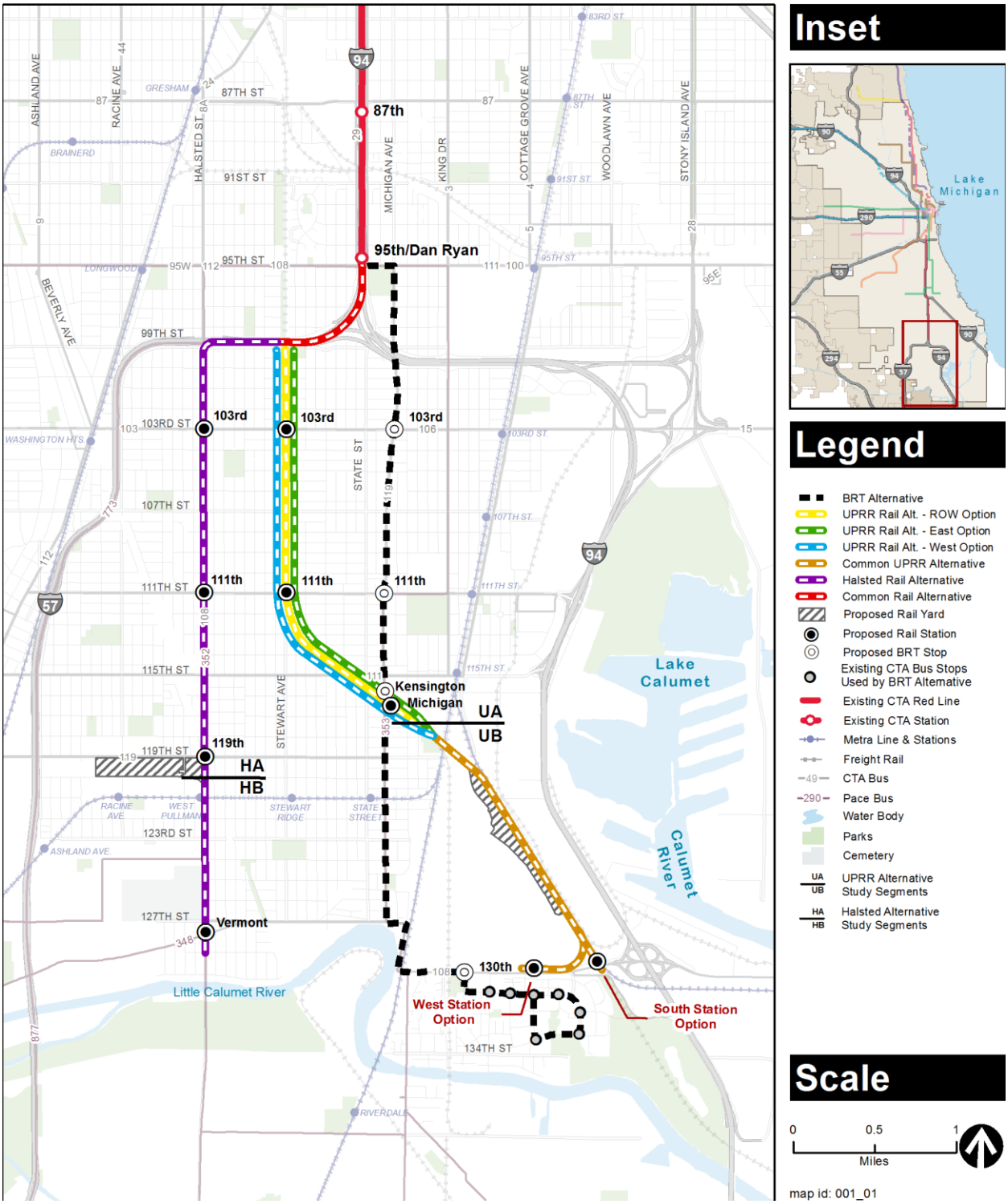

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

This section describes the process used to conduct an analysis of potential permanent, construction, and cumulative hazardous material impacts that could result from the construction and operation of the alternatives analyzed in the EIS for the RLE Project. This analysis also identifies potential options to avoid, minimize, and mitigate adverse impacts.

3.1 Regulatory Framework

The following sections describe the regulatory framework applicable to the jurisdictions in the project area.

3.1.1 Federal

The U.S. Environmental Protection Agency (USEPA) is the lead federal agency responsible for enforcing federal regulations regarding hazardous materials. One exception is the transport of hazardous materials, which is regulated by the U.S. Department of Transportation (USDOT). The primary federal legislation governing hazardous materials includes the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Superfund Amendments and Reauthorization Act (SARA) and the Hazardous Materials Transportation (HMT) Act.

3.1.1.1 Resource Conservation and Recovery Act

The RCRA regulates the generation, transportation, treatment, storage and disposal of hazardous waste through comprehensive life cycle or "cradle to grave" tracking requirements. These requirements include inspection logs of hazardous waste storage locations, records of quantities being generated and stored, and manifests of pick-ups and deliveries to licensed treatment/storage/disposal facilities. The RCRA also identifies standards for treatment, storage, and disposal.

3.1.1.2 Comprehensive Environmental Response, Compensation, and Liability Act

The CERCLA, also known as Superfund, created a tax on the chemical and petroleum industries to provide for response and cleanup of hazardous substances that may endanger public health or the environment. The CERCLA established requirements for abandoned hazardous waste sites and provided for liability of persons responsible for releases of hazardous waste at these sites.

3.1.1.3 Superfund Amendments and Reauthorization Act

The SARA amended CERCLA to increase state involvement and required Superfund actions to consider state environmental laws and regulations. The SARA also established a regulatory program for underground storage tanks (USTs) and the Emergency Planning and Community Right-to-Know Act.

3.1.1.4 Clean Air Act

The Clean Air Act regulates air emissions from stationary and mobile sources. Under Section 112 of the Clean Air Act, National Emissions Standards for Hazardous Air Pollutants were established to protect the public from exposure to airborne contaminants, such as asbestos, that are known to be hazardous to human health.

3.1.1.5 Toxic Substances Control Act

The Toxic Substances Control Act established the mechanisms by which USEPA tracks, screens, and tests industrial chemicals that are produced or imported into the United States and that may pose an environmental or human health hazard. The Toxic Substances Control Act addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and lead-based paint.

3.1.1.6 Federal Occupational Safety and Health Act

The Occupational Safety and Health Administration (OSHA) administers legislation that requires special training for handlers of hazardous materials, notification to employees who work in the vicinity of hazardous materials, acquisition from the manufacturer of material safety data sheets that describe the proper use of hazardous materials, and training of employees to remediate any hazardous material accidental releases. The OSHA legislation regulates lead and asbestos as it relates to employee safety through a set of requirements for notification and corrective action, warning signs and labels, controlled access, use of protective equipment, demolition/renovation procedures, housekeeping controls, training, and in certain cases, air monitoring and medical surveillance to reduce potential exposure.

3.1.1.7 Hazardous Materials Transportation Act

The HMT Act was published in 1975 and improved the regulatory and enforcement authority of the Secretary of Transportation. The purpose of the HMT Act was to provide protection against the risks associated with hazardous material transport in commerce. The Pipeline and Hazardous Materials Safety Administration, a part of the USDOT, is responsible for developing regulations and standards associated with the transport of hazardous materials. These regulations are provided in 49 CFR Parts 171 to 180 and are enforced by the respective mode administrations, such as the Federal Railroad Administration and Federal Highway Administration. Among other things, the regulations specify requirements for the safe transportation of hazardous materials including classification, handling, and packaging requirements. For rail transport, regulations require the carrier to conduct a security and safety risk analysis, develop a security and safety risk plan that includes measure to mitigate risk to population centers, and to select the safest route.

3.1.2 State

3.1.2.1 Illinois Environmental Protection Act

The Illinois Environmental Protection Act (the Act) is Illinois' primary statute for protecting and restoring the environment. The Illinois Pollution Control Board, an independent agency created by the Act, is responsible for adopting Illinois' environmental regulations and deciding contested

environmental cases. In addition, the Act created the Illinois Environmental Protection Agency (IEPA), the primary state agency responsible for the regulation of hazardous materials in Illinois.

The IEPA's Bureau of Land is responsible for the protection and restoration of land and groundwater resources in the State of Illinois. It administers a broad variety of solid and hazardous waste management cleanup programs, including the Leaking Underground Storage Tanks (LUSTs) program, the Site Remediation Program and RCRA Part B Permits and Closure Plans. The IEPA's cleanup programs use IEPA's Tiered Approach to Corrective Action Objectives (TACO) (35 Illinois Administrative Code [IAC] Part 742).

The TACO provides procedures for evaluating the risk to human health posed by environmental conditions and developing remediation objectives that achieve acceptable risk levels in soil and groundwater. The first step of TACO is a Tier 1 evaluation, which compares concentrations of contaminants detected at a site to a standard set of objectives, known as the Tier 1 remediation objectives. The TACO process and Tier 1 objectives incorporate the results of a polynuclear aromatic hydrocarbon study conducted by the City of Chicago. This study determined background concentrations of polynuclear aromatic hydrocarbons within City of Chicago limits.

Effective August 27, 2012, the IEPA amended the Clean Construction or Demolition Debris Fill Operations (35 IAC Part 1100) to among other things, include standards for the maximum allowable concentrations of chemical constituents in uncontaminated soil generated during construction or demolition activities that can be used as fill material at Clean Construction or Demolition Debris facilities and uncontaminated soil fill operations.

3.1.2.2 Office of the State Fire Marshal

The Office of the State Fire Marshal also has responsibility regarding hazardous material regulation. The Office of the State Fire Marshal's Division of Petroleum & Chemical Safety manages the problems caused by the thousands of UST systems containing petroleum or hazardous chemicals. The division regulates petroleum and chemical storage tanks through registration to ensure the protection of public health and safety.

3.1.2.3 Illinois Occupational Safety and Health Program

At the state level, Illinois operates only a public sector occupational safety and health program under a plan approved by the U.S. Department of Labor. This program is administered by the Illinois Department of Labor and provides safety and health protections to state and local government employees within the state. Private sector workers in Illinois are covered by OSHA at the federal level.

3.1.3 Local

The following local jurisdictions and departments regulate and oversee issues related to hazardous materials within the project area:

- City of Chicago Fire Department, Hazardous Materials Unit

- City of Chicago, Department of Public Health, Environmental Permits & Regulation
- City of Chicago, Department of Fleet and Facility Management, Bureau of Environmental Management

3.2 Impact Analysis Thresholds

There are no specific NEPA thresholds for determining potential adverse impacts related to hazardous materials; however, the Federal Transit Administration's (FTA's) process for implementing NEPA (FTA 2012) does require an evaluation of potential impacts related to hazardous materials. The FTA's process for implementing NEPA requires an evaluation of potential impacts related to hazardous materials. Generally, projects that include the purchase of new ROWs, excavation, and/or structure demolition or modification require at least an initial site assessment to determine whether any known or potential hazardous material is present within the potential area of impact.

For the purpose of this impacts analysis, a hazardous material is any media such as soil, groundwater, or building materials that contain detectable concentrations of any state or federally regulated contaminant. An impact would be considered adverse if it would have the potential for the following:

- Harm to human health or the environment through the routine transport, use, or disposal of hazardous materials
- Harm to human health or the environment through the accidental release of hazardous materials into the environment

3.3 Area of Potential Impact

The area of potential impact for determining hazardous material impacts from regulated sites includes sites within an approximately 0.1- and 0.25-mile radius of the RLE Project alternative alignments, with the radius depending on the type of regulated site being evaluated (See Section 3. 4.1.1). The area of potential impact associated with the general historical land use includes parcels adjacent to and with the RLE Project alternatives.

3.4 Methods

The evaluation of potential impacts associated with hazardous materials began with a review of existing sources of data. The potential for construction and/or operation of each alternative to have hazardous material impacts was analyzed. The analysis concluded with an identification of proposed best management practices and mitigation measures to avoid, minimize, and compensate for potential adverse impacts. This analysis uses methods similar to those included in the Phase I ESA process (American Society for Testing and Materials 2005), which is typically used when acquiring properties to evaluate the historical and current use of a site and determine whether the potential exists for hazardous materials use and/or release. However, this *Hazardous Materials Technical Memorandum* does not meet the standards or nor constitute a Phase 1 ESA of

the project area. A Phase I ESA of individual properties being acquired as part of this project would be conducted as part of the Final EIS and prior to acquisition in order to identify recognized environmental conditions and assess and limit environmental liability (See Section 5).

3.4.1 Existing Data Review

Potential impacts from hazardous materials were evaluated by gathering information from a variety of sources to identify potential or existing conditions that could pose environmental concerns.

3.4.1.1 Database Listings

A search of local, state, and federal regulatory databases was conducted by Environmental Data Resources, Inc. (EDR) to identify individual sites of concern. The search by EDR also included a list of orphan sites that was reviewed to identify sites that may be in the area of potential impact. Orphan sites are sites that cannot be mapped by EDR due to inadequate or incomplete address information. Search distances were either 0.1 or 0.25 mile from the RLE Project alternative alignments and included all area in between them. The search distance was based on the nature of the sites included in the database and the separation distance at which impacts become unlikely. Figure 3-1 depicts the maximum search area. Table 3-1 summarizes the databases searched and the corresponding search distance. Table 3-1 also defines abbreviations that are used hereafter in descriptions of sites.

3.4.1.2 Historical Records

Available historical fire insurance and topographic maps and aerial photographs were reviewed to identify previous land uses with a potential for hazardous material concerns. Sanborn fire insurance from 1897, 1911, 1938–39, 1950, 1975–76 and 1989 (EDR 2012a) were available. Topographic maps available included the Calumet Quadrangle from 1892, 1893, 1900, and 1901 (Historical Information Gatherers, Inc. [HIG] 2012b); the Calumet Lake Quadrangle from 1929 and 1953 (HIG 2012c); the Lake Calumet Quadrangle from 1960, 1965, 1973, 1977, 1991, and 1997 (HIG 2012d); and the Blue Island Quadrangle from 1929, 1953, 1963, 1973, 1978, and 1997 (HIG 2012e). Available aerial photographs of the project were available for the years 1938, 1952, 1962, 1973, 1974, 1983, 1984, 1998, 1999, and 2009 (HIGa).

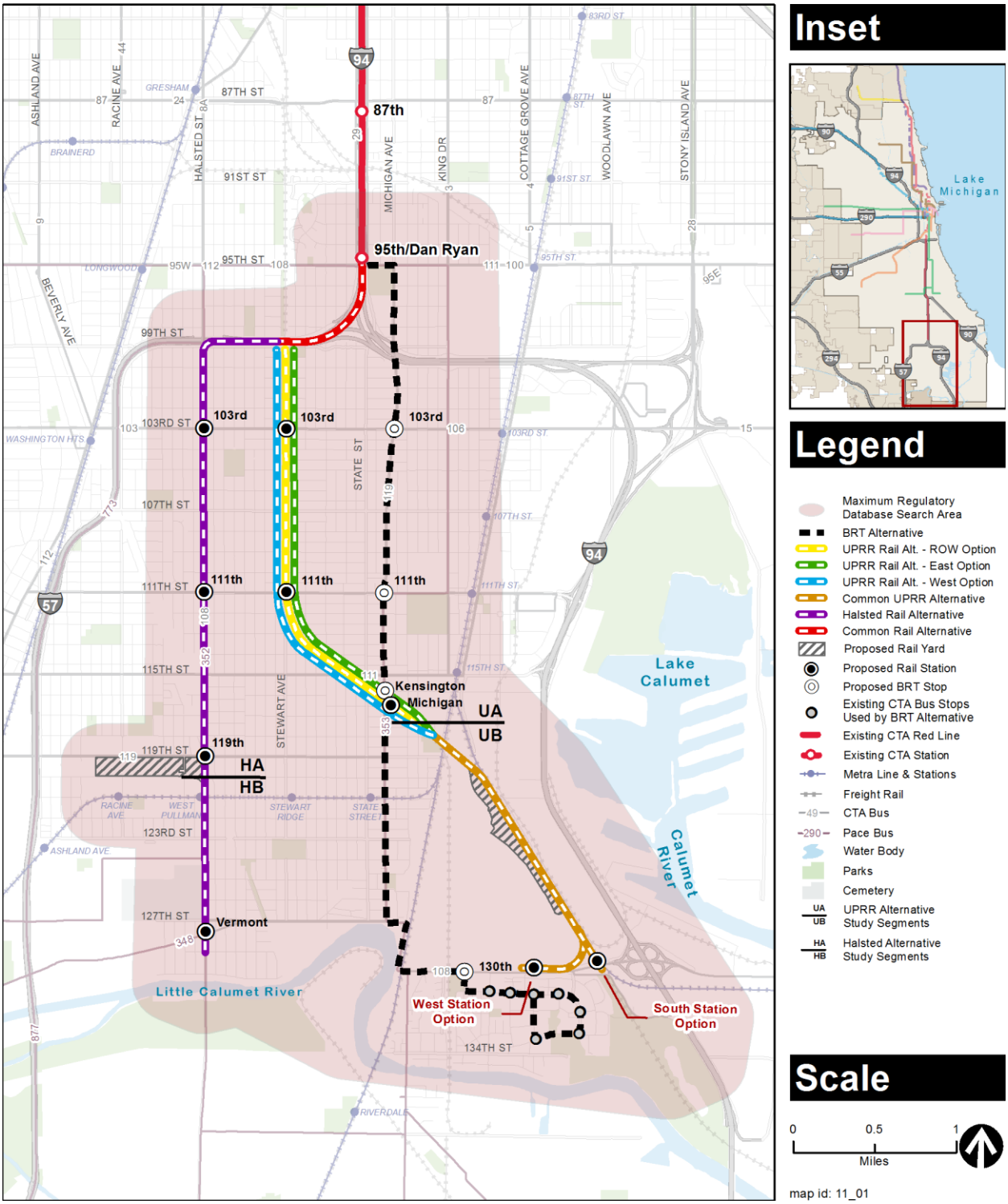

Figure 3-1: Maximum Regulatory Database Search Area

Based on the database listing and historical records evaluation, a review of files from the IEPA and USEPA was conducted for sites located within or adjacent to the RLE project alternative alignments and where hazardous materials were identified as a high level of concern. Files were reviewed for information on enforcement actions, results of previous investigations, and cleanup status.

3.4.2 Impact Analysis

The information gathered from the existing data review was evaluated to identify specific sites where hazardous materials are known or suspected to exist and to determine the potential for the other sources of hazardous materials to be present. The potential permanent and/or construction impacts that each alternative would have were evaluated. Permanent impacts could be associated with maintenance activities during operation if maintenance activities also require earthmoving in potentially contaminated areas or that require the use of hazardous substances or petroleum products. Examples of maintenance activities that could require earthmoving include at-grade track repair, underground utility work and foundation repairs. Construction impacts could occur when activities such as earthmoving encounter contaminated soil and/or groundwater.

Table 3-1: Environmental Databases and Distances Searched

	Database Name	Search Distance from Project Limits (miles)
Federal Databases	National Priority List Sites (NPL)	0.25
	Delisted NPL Sites	0.25
	Comprehensive Environmental Response, Compensation and Liability Information System Sites (CERCLIS)	0.25
	CERCLIS-No Further Remediation Planned Sites (CERC-NFRAP)	0.25
	RCRA Corrective Action Sites (RCRA CORRACTS)	0.25
	RCRA Treatment, Storage, and Disposal Sites (RCRA TSDF)	0.25
	RCRA Large Quantity Hazardous Waste Generators (RCRA LQG)	0.25
	RCRA Small Quantity Hazardous Waste Generators (RCRA SQG)	0.10
	RCRA Conditionally Exempt Hazardous Waste Generators (RCRA CESQ)	0.10
	Engineering Controls Sites (US ENG CONTROLS)	0.10
	Institutional Control Sites (US INST CONTROL)	0.10
	Brownfield Sites (US BROWNFIEDS)	0.25
	Emergency Response Notification System (ERNS)	0.10

Database Name		Search Distance from Project Limits (miles)
State Databases	Illinois State Sites Unit Listing (SSU)	0.25
	Site Remediation Program (SRP)	0.25
	Engineered Barrier Site (ENG CONTROLS)	0.10
	Institutional Control Site (INST CONTROLS)	0.10
	Leaking Underground Storage Tank Sites (LUST)	0.10
	Underground Storage Tank Sites (USTs)	0.10
	Former Manufactured Gas Plant Sites (MGP)	0.25
	Brownfield Sites	0.25
	Landfill or Solid Waste Disposal Sites (SWF/LF)	0.25
	Northeastern Illinois Planning Commission Active and Inactive Solid Waste Disposal Site Inventory (NIPC)	0.25
	Spill Incident List (SPILLS)	0.10
	Drycleaners License List (IL DRYCLEANERS)	0.10

A determination was made regarding the level of concern associated with each of the specific sites identified in the existing data review, using the guidance discussed in Section 3.2 and based on the following criteria:

- **High Concern** - Sites with known/probable soil, groundwater, or soil gas contamination that have not been remediated, or where remediation was incomplete or undocumented and that are within close proximity to the project and the potential for off-site migration is high. High Concern sites typically result in the potential for an adverse impact.

- **Moderate Concern** - Sites with known/potential soil, groundwater, or soil gas contamination and where remediation is in progress, or contaminants do not appear to pose a concern for a project. Sites may also be considered a Moderate Concern based on the proximity to the project and type and intensity of former land use (e.g., chemical manufacturers, machine shops, gas stations), even if they did not otherwise have an environmental database listing. Moderate Concern sites may or may not present the potential for an adverse impact, depending on the proximity to the project and extent of contamination.

- **Low Concern** - Sites where hazardous materials or petroleum products may have been or are stored, but where there is no known contamination associated with the property based on all available information. These sites may include sites with permitted air toxic emissions or sites with spills or leaks that were subsequently remediated and have received case closure. The

sites may also include sites that have known contamination, but are far enough away from the project to make impacts unlikely. Low Concern sites typically do not result in the potential for an adverse impact.

- **No Concern** - Sites that, based on the review of all available information and on the type of site and distance from the project, are not likely to pose a concern for the project. No Concern sites typically do not result in the potential for an adverse impact.

An evaluation was conducted of potential impacts associated with other sources of hazardous materials, including PCBs, buildings, or structures built before 1978 that may contain lead-based paint, and buildings or structures built before 1979 that may contain asbestos. The evaluation was limited to determining whether there was the potential for transformers and buildings constructed prior to 1978 or 1979 to be present. Recommendations for avoiding and minimizing potential hazardous impacts, as well as potential mitigation measures, were also developed.

As part of this analysis, other current and reasonably foreseeable projects and future actions identified as part of the indirect and cumulative impacts analysis were reviewed to determine whether there would be any potential indirect or cumulative impacts associated with hazardous material.

Section 4
Affected Environment

4.1 Physical Setting

Elevations in the project area range from approximately 590 to 615 feet above sea level. Lake Michigan is the dominant topographic feature in the region and is approximately 4.8 miles from the project area at its closest point near the UPRR Rail Alternative alignment. Lake Calumet is in the eastern portion of the project area, and the Little Calumet River flows along the southern boundary of the project area. Shallow soils in the area are predominately classified as urban, generally characterized as highly disturbed as a result of human activities. The soils have been altered through grading, paving, excavation, or infilling. Largely underlying the urban fill in the region is glacial till and thin deposits of silt, clay, and sand of the Equality Formation (Illinois State Geological Survey 1971).

Groundwater generally flows from areas of higher surface elevation to areas of lower surface elevation and toward the nearest surface water body. The dominant flow direction for groundwater underlying the site is assumed to be to the northeast towards Lake Michigan. Groundwater in the project area is part of the deep bedrock Cambrian-Ordovician aquifers. Wells drilled into this aquifer range from 800 to 1,500 feet deep. Shallow, perched groundwater identified in the Chicago area is not utilized as private or municipal drinking water sources as there is a City of Chicago groundwater ordinance prohibiting the installation of new potable water supply wells within the city. Further detail on the groundwater of the project area is presented in the *Water Resources Technical Memorandum.*

4.2 Historical Document Review

Historical aerial photographs, topographic maps, and fire insurance maps covering the potential area of impact were reviewed to determine the general historical land use. The review determined that portions of the project area have been developed since 1892 and that rail lines have been present in or near the corridor since that time. The following sections provide a summary of the review for each source.

4.2.1 Topographic Maps

Historic United States Geologic Survey topographic maps obtained from HIG were reviewed for the Calumet Quadrangle from 1892, 1893, 1900, and 1901 (HIG 2012b); for the Calumet Lake Quadrangle from 1929 and 1953 (HIG 2012c); for the Lake Calumet Quadrangle from 1960, 1965, 1973, 1977, 1991, and 1997 (HIG 2012d); and for the Blue Island Quadrangle from 1929, 1953, 1963, 1973, 1978, and 1997 (HIG 2012e). The maps are not generally at a scale that permits identification of individual sites of concern but they do show general land use over time. The density of streets increased considerably between 1889 and 1929, after which development was primarily limited to isolated areas throughout the project area. The Red Line currently in use is first depicted on the topographic maps starting in 1973 (Lake Calumet Quadrangle).

The UPRR, Canadian National/Metra Electric and South Shore Lines and their predecessors (Chicago and Eastern Illinois Railroad and the Illinois Central Railroad) were first depicted in 1892 (Calumet Quadrangle).

4.2.2 Aerial Photographs

Aerial photographs obtained from HIG (2012a) were reviewed for the years 1938, 1952, 1962, 1973, 1974, 1983, 1984, 1998, 1999, and 2009. Aerial photographs are not generally at a scale that permits identification of potential impacts associated with specific sites, but they provide information on changes in land use and development over time. The 1938 aerial photograph showed that the majority of the project area was already developed with notable exceptions being the area along Halsted Street between 107th and 115th Streets and south of 124th Street. The area along the current South Shore Line was undeveloped south of 115th Street.

Historical land use within the area of potential impact is primarily a mix of residential and commercial use, with pockets of industrial use. Two notable large areas of historical industrial use were noted. The first area is between 119th and 121st Streets west of Halsted Street. The second area is between 115th Street where the UPRR and South Shore Line meet and 130th Street. The greatest increase in development occurred between 1938 and 1952, particularly in the areas identified as undeveloped in the 1938 aerial photograph. Changes in land use in subsequent years did occur, but were generally limited to individual buildings and properties rather than change at a broad scale.

4.2.3 Sanborn Fire Insurance Maps

Historic Sanborn Fire Insurance Maps were requested from EDR for the areas within and adjacent to the UPRR and Halsted Rail Alternative alignments. For the BRT Alternative, only maps within and near the areas of proposed park & ride facilities at the 103rd, 111th, 115th, and 130th Street BRT stop locations were requested. Maps were provided for the years 1897, 1911, 1938-39, 1950, 1975–76 and 1989 (EDR 2012a) for three distinct areas: I-94 from 95th Street to 98th Street, Halsted Street from 98th Street to 130th Street, and UPRR from 98th Street to 130th Street. The UPRR area included coverage of the proposed park & ride facilities at the 115th Street and 130th Street stop locations. For the areas with no Sanborn coverage, aerial maps were used to identify changes in land use and development over time (See Section 4.2.2).

These maps were reviewed to identify past commercial or industrial activities and sources commonly associated with hazardous material use. The review identified uses typical of an urban setting throughout the corridor including coal yards, lumber yards, gas stations, auto repair shops, machine shops, manufacturing plants, USTs, a pump station, and substations. Sites that are considered a potential concern are summarized by alternative in the following sections.

4.2.3.1 BRT Alternative

By 1897, R.A. Viall, a feed mill with two coal sheds, and some residences were present within the area of the proposed park & ride facility for the 115th Street stop. By 1911, additional residences and Armour & Co., which had office, storage, and cooler areas, were also present in this area and R.A. Viall had an auto repair shop that was not present in 1897. By 1939, R.A. Viall was replaced with a

junkyard and although not shown by name, Armour & Co. (or a different company with similar food cooling operations) was still present. By 1950, there were no significant changes from 1939. By 1975, the food cooling operation and junkyard were still present and a filling station had been built to the north of the food cooling operation. By 1989, the area of the proposed 115th Street park & ride facility was similar to 1975 with the exception of the junkyard, which was no longer depicted in the 1989 map.

The Metropolitan Water Reclamation District of Greater Chicago's (MWRD) Calumet Water Reclamation Plant, a wastewater treatment plant within the area of the proposed park & ride facility for the 130th Street stop, first appeared in Sanborn maps in 1950. The MWRD Calumet Water Reclamation Plant was depicted at 126th Street and extending at least two to three blocks south. Settling tanks, ash lagoons, and aerating tanks were shown in both 1950 and 1975. By 1989, the details regarding the type of operations at the MWRD Calumet Water Reclamation Plant were no longer provided but the limits of the operations appeared to extend to 130th Street, which is farther south than shown in previous years.

4.2.3.2 UPRR Rail Alternative

The Roseland Manufacturing Co. was present at 11010 S. Stewart Avenue in 1897. By 1911, the Roseland Pumping Station was constructed at 351 W. 104th Street. By 1938–39, Commonwealth Edison had a substation at 117th Street and Front Street. By 1950, Hoper Equipment Co. and Chicago Hydraulic Oil Co. were present at 116th Street and Front Street. By 1975, there was a paint factory at 11740 S. Calumet Avenue, a metal finishing shop at 11730 S. Front Street, the Aluminum Screen Co. at 116th Street and Front Street, and a transformer yard at 96th Street and Lafayette Avenue.

The proposed 120th Street yard and shop site south of 119th Street and north of 120th Street, the area along the UPRR easements, and the proposed UPRR Rail Alternative alignment have been developed with railroads and railroad yards dating back to 1897 with the Chicago & Eastern Illinois Railroad and the Chicago & Western Indiana. Heavy industry in and around the proposed 120th Street yard and shop area included the Michigan Central RR Transfer Elevators and Transfer House (121st Street and UPRR track), the J.H. Winterbotham & Sons Cooperage (120th Street and UPRR track), and the Pullman Brick Works (north of 119th Street). The MWRD wastewater treatment plant, which is within the area of the proposed South and West Station Options, is discussed in Section 4.2.3.1

4.2.3.3 Halsted Rail Alternative

Developments within the Halsted Rail Alternative alignment included the Southwest Substation at 10229 S. Halsted Street in 1938–39, the Commonwealth Edison 119th Street Substation at the southeast corner of 119th Street and Halsted Street in 1950, and a transformer yard at 96th Street and S. Lafayette Avenue in 1976.

The proposed 119th Street yard and shop, which would be primarily between 119th and 120th Streets west of Halsted Street, is part of what is known as the West Pullman Industrial Redevelopment Area (WIRA). The WIRA generally extends from 117th Street on the north to

122nd Street on the south, Loomis Street on the west and Halsted Street on the east (Chicago 2012). The first three blocks west of Halsted Street between 119th and 121st Streets have been developed with heavy industry dating back to 1897, including the West Pullman Lumber Yard (gas tank), the Burgland and Shead Packing Pail Factory, the Akron Mining & Manufacturing Co., the Smith & Jones Boot & Shoe Co., and the Carter White Lead Works (linseed oil tanks). By 1911, the lumberyard and Carter White Lead Works had expanded and the West Pullman Car Works (gas tank) was present, with additional coal yards west of Peoria Street. By 1938-39, the lumberyard had scaled back and the Neuswanger Coal Co. and West Pullman Iron & Metal Co. now took up a portion of its previous footprint, In addition, the West Pullman Car Works was replaced with an auto wrecking facility, Safety Vulcanizer Co. (foundry), and Louis E. Emerman & Co. and Carter White Lead Co. was now National Lead Co. The area west of Morgan Street was developed by Ingersoll Steel (oil tanks) and International Harvester. The Texas Company bulk oil storage area is at 12100 S. Green Street with 13 underground gasoline tanks and oil storage. By 1950, the area remained similar to 1938-39 with the exception of the auto wrecking area and Safety Vulcanizer Co. no longer labeled as such. By 1975, Neuswanger Coal Co. was a junkyard, Louis E. Emerman & Co. was renamed to Caine Steel Co., and the lumberyard was no longer depicted. By 1989, the area between 119th and 1120th Streets was similar to 1975 but the area between 120th and 121st Streets was depicted as empty.

4.3 Regulatory Agency Records Review

The purpose of the records review was to assess the potential for the presence of hazardous substance contamination within and/or adjacent to the project area as a result of activities conducted on properties within the area of potential impact. The state and federal database listings were searched by EDR, an independent information service, on August 10, 2012 (EDR 2012b). The EDR report in Appendix B provides a listing and description of the databases reviewed, search distances, and a map showing the approximate locations of listed sites and information contained within each database for each listed site.

Table 4-1 summarizes the databases searched and the number of sites found within the search distance for each database. Table 4-1 also defines abbreviations that are used in this document when referring to sites.

Table 4-1: Environmental Database Search Results Summary

Database Name		Number of Sites within Search Distance*		
		BRT	UPRR Rail	Halsted Rail
Federal Databases*	National Priority List Sites (NPL)	0	0	0
	Delisted NPL Sites	0	0	0
	Comprehensive Environmental Response, Compensation, and Liability Information System Sites (CERCLIS)	2	4	4
	CERCLIS-No Further Remediation Planned Sites (CERC-NFRAP)	1	2	2
	RCRA Corrective Action Sites (RCRA CORRACTS)	0	2	1
	RCRA Treatment, Storage and Disposal Sites (RCRA TSDF)	0	1	0
	RCRA Large Quantity Hazardous Waste Generators (RCRA LQG)	0	3	0
	RCRA Small Quantity Hazardous Waste Generators (RCRA SQG)	10	23	31
	RCRA Conditionally Exempt Hazardous Waste Generators (RCRA CESQ)	10	13	7
	Engineering Controls Sites (US ENG CONTROLS)	0	0	0
	Institutional Control Sites (US INST CONTROL)	0	0	0
	Brownfield Sites (US BROWNFIELDS)	0	0	0
	Emergency Response Notification System (ERNS)	6	9	3
State Databases*	Illinois State Sites Unit Listing (SSU)	0	2	1
	Site Remediation Program (SRP)	4	4	19
	Engineered Barrier Site (ENG CONTROLS)	1	2	4
	Institutional Control Site (INST CONTROLS)	2	1	6
	Leaking Underground Storage Tank Sites (LUST)	22	24	29
	Underground Storage Tank Sites (USTs)	41	41	54
	Former Manufactured Gas Plant Sites (MGP)	0	0	0
	Brownfield Sites	0	0	1
	Landfill or solid waste disposal sites (SWF/LF)	0	1	0
	Northeastern Illinois Planning Commission Active and Inactive Solid Waste Disposal Site Inventory (NIPC)	0	0	0
	Spill Incident List (SPILLS)	22	33	21
	Drycleaners License List (IL DRYCLEANERS)	1	1	4

Notes
BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad
* EDR searched additional databases besides those included in this table; however, based on the nature or type of these databases, they were not used in the evaluation of potential impacts and therefore are not listed here. EDR also identified a list of orphan sites (sites reported as potentially being in the project area but which could not be mapped due to inadequate or incomplete address information). These sites were also reviewed and when possible, sites were classified.

4.4 Regulatory File Review

The regulatory file review was limited to those sites that presented the greatest concern. The majority of sites identified in the database review are typical for a highly urban area with a history of commercial and industrial use; therefore, regulatory files were not reviewed for all sites.

Records were requested for certain sites due to their large size, proximity to the RLE Project, and potential environmental concerns associated with listings as a LUST, SRP, and/or CERCLIS site. The purpose of the request was to determine which, if any, records exist regarding known contamination from past activities at the sites and/or to confirm the exact location and property boundaries. In addition, the information was used to determine the level of concern associated with each site. Regulatory files were requested from the City of Chicago, the IEPA, and/or the USEPA depending on the type of site. Table 4-2 summarizes the regulatory file request. Records have been received for all requested sites. Summaries of the records and determination of the level of concern are provided in the following sections.

Table 4-2: Regulatory Records Request Summary

EDR Site ID	Figure 4 1 Site ID	Site Name	Address*	Chicago	IEPA	USEPA
BRT and UPRR Alternatives						
118	118	Clark Oil & Refining/0707 Clark Ser Station	11555 S. Michigan Avenue		x	
202	202a	Pullman Factory	130th Street and Indiana Avenue			x
NL2	NL2	Altgeld Gardens**	300 E. to 1100 East 130th Street; 100 E. to 1200 W. 131st Street; 1100–1200 E. 130th Place; 1000–1200 E. 129th Place		x	x
UPRR Rail Alternative						
45	45a	City of Chicago/Roseland Pumping Station	351 W. 104th Street		x	
51	51	Illinois Bell Telephone	413 W. 105th Street		x	
70	70	William Ransom Transportation/ William Transport/Ransom Transport Bus Garage	352 W. 110th Street		x	
94	94a	Marquette Bank/Vacant Building	135 to 139 W. 114th Street		x	
104	104	Triangle Transmission	35 W. 115th Street		x	
105	105	City of Chicago/Abandoned Service Station	11500 S. Perry Avenue	x	x	
122	122	Stuart Industrial Coatings, Inc.	11740 S. Front Street		x	
151, 162	151, 162	Keywell LLC	11900 Cottage Grove Avenue		x	
Orphan	O1	US Scrap	123rd and Cottage Grove Avenue			x
Orphan	O3	Metro Sanitary District #3	125th Street and Doty Avenue			x
Orphan	O2	Illinois Central RR Tracks	119th Street, East of Central Tracks			x

EDR Site ID	Figure 4 1 Site ID	Site Name	Address*	Chicago	IEPA	USEPA
Orphan	O4	Penn Central Corp	810 E. 124th Street		x	
		Lake Calumet Quad				x
Halsted Rail Alternative						
18	18a	Mobil Oil Corp. SS A8B	9901 S. Halsted Street		x	
NL	NL1	Carl Buddig	11954 Street Peoria Avenue	x	x	
130	130	West Pullman Study Area No. 6	11931 S. Loomis Street	x	x	
141	141	Omnitrax	11955 S. Morgan Street		x	
144	144	West Pullman Iron And Metal Co.	11954 S. Peoria Avenue			x
152	152a	WIRA Study Area 9	820 W. 120th Street	x	x	
152	152b	WIRA Study Area Number 14	815 to 825 W. 120th Street	x	x	
154	154	Ingersoll	1000 W. 120th Street	x		x
156	156a	Exelon Solar Plant/ Chicago Malleable Castings/Vacant Lot	1201 W. 120th Street	x		
159, 153	159, 153	Dutch Boy Paint	12000 and 12042 S. Peoria Avenue, 900 W. 120th Street	x		x

Notes:
IEPA = Illinois Environmental Protection Agency, USEPA = U.S. Environmental Protection Agency, FOIA = Freedom of Information Act
* All addresses are within Chicago.

4.4.1 BRT Alternative

4.4.1.1 Pullman Factory (130th Street and Indiana Avenue)

The Pullman Factory site (also known as the Pullman Sewage Farm) is approximately 90 feet from the proposed park & ride facility location at 130th Street. The site is listed under CERCLIS. The Expanded Site Inspection Final Report ([Final Report] Alternative Remedial Contracting Strategy 1994) summarized the activities completed at the site. According to the Final Report, the 140-acre site was used for land application of untreated industrial and domestic sewage from 1881 to 1907 and was later developed as a residential neighborhood. A preliminary assessment conducted by IEPA in 1987 indicated a medium priority with potential and alleged groundwater, surface water and soil contamination. A 1990 USEPA site inspection determined that site soils had low levels of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, and metals, indicating that portions of the site may have been impacted by the historic activities. Sampling conducted for the Final Report confirmed the presence of low levels of VOCs, SVOCs, pesticides, and metals in site soils. Available documentation for this site indicates that no remedial actions have been completed; however, because the level of contamination identified was low, this site is a Low Concern.

4.4.1.2 Clark Oil & Refining (11555 S. Michigan Avenue)

The former Clark Oil & Refining service station is adjacent to the proposed park & ride facility at 115th Street. The facility had one 7,500-gallon and two 6,000-gallon gasoline USTs removed in

1991. The surrounding soils were heavily impacted, resulting in the removal of 2,880 cubic yards of contaminated soil. Groundwater was not encountered. The 45-Day Report completed in 1992 for LUST Incident #912512 (O'Brien & Associates, Inc. 1992) indicated benzene exceedances along the west sidewalls of the excavation. Additional removal was not feasible due to the close proximity of the sidewalk to Michigan Avenue. The IEPA requested the installation of a passive soil vent system. There is no documentation indicating that the passive system was ever installed; however, IEPA issued a No Further Remediation (NFR) letter for this site on January 9, 1995. Although IEPA issued an NFR letter, this site is a Moderate Concern because residual contamination may still remain.

4.4.1.3 Altgeld Gardens (300 E. to 1100 East 130th Street; 100 E. to 1200 W. 131st Street; 1100-1200 E. 130th Place; 1000-1200 E. 129th Place)

Altgeld Gardens is across the street from the proposed park & ride facility at 130th Street. According to the Agency for Toxic Substances & Disease Registry website, USEPA conducted a site investigation at Altgeld Gardens in 1996 in response to community concerns. The investigation included the collection of ten surficial soil samples, taken across the entire community. Based on the 1996 findings, soil impacted with PCBs was remediated in the area from 940 to 975 E. 132nd Street. The Illinois Department of Public Health concluded that based on the limited information available, there was no public health hazard that exists from exposure to surface soil contamination; however, further assessment was recommended (Agency for Toxic Substances & Disease Registry 2012). This site is a Low Concern.

4.4.2 UPRR Rail Alternative

4.4.2.1 City of Chicago/Roseland Pumping Station (351 W. 104th Street)

The City of Chicago/Roseland Pumping Station is approximately 50 feet from the UPRR Rail Alternative ROW Option permanent envelope, adjacent to the East Option permanent envelope, and approximately 120 feet from the West Option permanent envelope. The facility was historically a hazardous waste generator of flammable waste liquids. A LUST incident was reported in 1994 (#942419) related to overfill and was identified during the removal of a 550-gallon diesel tank. The Site Classification Completion Report (United Environmental Consultants 1995) indicated no benzene, toluene, ethylbenzene, and xylenes (BTEX) or PNA compound exceedances and the IEPA issued an NFR letter dated September 19, 1995; therefore, this site is a Low Concern.

4.4.2.2 Illinois Bell Telephone (413 W. 105th Street)

The Illinois Bell Telephone site is adjacent to the UPRR Rail Alternative ROW Option permanent envelope, approximately 70 feet from the East Option permanent envelope, and within the West Option permanent envelope. The facility had four USTs that were removed in 1988: three fuel oil tanks and a waste oil tank. This site had one LUST incident (#880112) that appears to have been associated with the removal of a 5,000-gallon fuel oil UST on February 8, 1988 along the west side of the building. The remaining three USTs were removed from the north end of the building on March 24, 1988. Subsequent documentation (ATEC Associates, Inc. 1988) indicated the LUST Incident #880112 is also associated with these tanks.

A Corrective Action Completion Report for the LUST incident was submitted in 2004 (STS Consultants, Ltd. [STS] 2004) and the IEPA issued an NFR letter dated March 21, 2005. The site may have remaining contamination associated with the first UST; therefore, this site is a High Concern.

4.4.2.3 William Ransom Transportation (352 W. 110th Street)

The William Ransom Transportation site is adjacent to the UPRR Rail Alternative ROW Option permanent envelope, within the East Option permanent envelope, and approximately 110 feet from the West Option permanent envelope. A 6,000-gallon gasoline UST was removed in 1999 and was given LUST Incident #990399 due to odors in the backfill materials. A 45-Day Report was completed in March 1999, indicating that perched water was encountered and the assumed contamination was left in place (Environmental Management and Resource Consultants, Inc. 1999). No other documentation was available. Because contamination may still remain, this site is a High Concern.

4.4.2.4 Marquette Bank (135-139 W. 114th Street)

The Marquette Bank site is adjacent to the UPRR Rail Alternative ROW Option permanent envelope, within the East Option permanent envelope, and approximately 120 feet from the West Option permanent envelope. A 2,000-gallon gasoline UST was removed in 2001 and was given LUST Incident #20011638 due to piping failure. Seventy-five cubic yards of soil were removed and a Corrective Action Completion Report was completed in November 2001 (Aspen Environmental, Inc. 1991). Groundwater was not encountered and IEPA issued an NFR letter on January 25, 2002 with no restrictions, indicating that the remaining soil and groundwater concentrations were below Tier I residential remedial objectives; therefore, this site is a Low Concern.

4.4.2.5 Triangle Transmission (35 W. 115th Street)

The Triangle Transmission site is adjacent to the UPRR Rail Alternative ROW Option permanent envelope, within the East Option permanent envelope, and approximately 130 feet from the West Option permanent envelope. A 1,000-gallon gasoline UST was removed in 1999 and LUST Incident #992324 was assigned (Illinois Emergency Management Agency 1999). No other documentation was available. Because contamination may still remain, this site is a High Concern.

4.4.2.6 City of Chicago/Abandoned Service Station (11500 S. Perry Avenue)

The City of Chicago/Abandoned Service Station is 60 feet from the ROW Option permanent envelope, 160 feet from the East Option permanent envelope, and within the West Option permanent envelope. A Phase I ESA of the vacant site identified several environmental concerns, including the presence of urban soil/fill, historic presence of a filling station, UST removal and subsequent LUST Incident #20002342 (gasoline), historic presence of up to eight USTs on site, and a UST pump and piping distribution system (The Shaw Group 2011). The gasoline and waste oil USTs were removed on December 11, 2000 by the City of Chicago. No additional remediation was completed. The City of Chicago was exempt from further reporting or corrective actions as they were not the owner and/or operator of the USTs (IEPA 2001).

A Phase II ESA included a geophysical survey, ten soil borings, and three temporary groundwater wells. The soil analytical data indicated the presence of VOCs, mercury, and lead at concentrations exceeding one or more TACO Tier 1 remediation objectives (See Section 3.1.2.1). Groundwater samples identified benzene at a concentration exceeding both the Class I and Class II Groundwater Ingestion Standards in a sample taken along the eastern property boundary (The Shaw Group 2011). No documentation of remediation was available and because contamination may still remain, this site is a High Concern.

4.4.2.7 Clark Oil & Refining (11555 S. Michigan Avenue)

The former Clark Oil & Refining service station site is within the UPRR Rail Alternative ROW and East Option permanent envelope and approximately 240 feet from the West Option permanent envelope. This site is described in Section 4.4.1.2 and is a Moderate Concern.

4.4.2.8 Stuart Industrial Coatings, Inc. (11740 S. Front Street)

The Stuart Industrial Coatings site is within the permanent envelopes of all three UPRR Rail Alternative options. The facility had seven USTs that were removed in 1990: one 3,000-gallon toluene tank and six 1,000-gallon tanks containing xylene, Varnish Makers & Painter naphtha, methyl ethyl ketone, mineral spirits, ethylene acetate, and methyl isobutyl ketone (Best Environmental, Inc. 1991). The site was given LUST Incident #900054. Contaminated soil was removed and stockpiled. Additional information was requested by IEPA in 2001; however, no additional documentation was available. Because contamination may still remain, this site is a High Concern.

4.4.2.9 Keywell LLC (11900 S. Cottage Grove Avenue)

The Keywell LLC site is within the permanent envelopes of all three UPRR Rail Alternative options. Two 2,000-gallon gasoline tanks were removed in 1990, resulting in LUST Incident #902351. Samples indicated the remedial objectives were exceeded for BTEX. Approximately 240 cubic yards of impacted soil and 3,150 gallons of impacted rainwater were subsequently removed (RERC Environmental 1990). Additional soils were removed in 1994 as part of a new dock construction project (NTH Consultants, LTD 1994). The IEPA granted site-specific remedial objectives and the site was granted an NFR letter dated January 24, 1996. Although IEPA has issued an NFR, this site is a High Concern because this site has a long history of industrial use and is currently used as a scrap metal processing facility

4.4.2.10 Pullman Factory (130th and Indiana Avenue)

The Pullman Factory site is approximately 1,200 feet from the 130th Street South Station Option site and approximately 130 feet from the West Station Option site. This site is described in Section 4.4.1.1 and is a Low Concern.

4.4.2.11 Illinois Central Railroad Tracks (119th Street, East of Central Tracks)

The Illinois Central Railroad Tracks site is within the permanent envelopes of all three potential UPRR Rail Alternative Options. The site, which is listed as a CERCLIS-NFRAP site, lies along the tracks at 119th Street. A Site Inspection Report completed in 1987 (Ecology & Environment [E&E]

1987) indicated on-site drum storage from historic aerial photograph review; however, the actual site inspection did not identify drum storage or any additional concerns. Although railroads in general are a potential concern for hazardous material impacts (See Section 4.6), this specific database listing is a Low Concern because no reported release has occurred.

4.4.2.12 US Scrap (123rd and Cottage Grove Avenue)

The US Scrap site is a CERCLIS site approximately 1,000 feet from the permanent envelopes of all three UPRR Rail Alternative Options. It operated as an open dump in the 1960s and 1970s as part of a drum reclamation facility. A 1980 IEPA inspection discovered four hundred 55-gallon drums of waste, liquid wastes stored in eight concrete silos, scattered surficial deposits of wastes, several waste lagoons, and sludge in drainage swales (USEPA 2011). A Site Assessment prepared for the USEPA (STN Environmental JV 2007) determined that site soils were heavily contaminated with PCBs, chlorinated solvents, lead, and cadmium. Surface liquids showed high levels of vinyl chloride, BTEX, PNAs, pesticides, and PCBs.

A removal action completed in 2008 included the installation of sheet piling between the US Scrap and adjacent MWRD site; installation of interceptor trenches to remove liquid wastes; excavation and disposal of PCB-contaminated soils; geophysical survey for buried drums; and overpacking and disposal of drums (USEPA 2011). Although removal action has occurred, this site is a High Concern because extensive contamination still remains.

4.4.2.13 Penn Central Corp. and Lake Calumet Quad (810 E. 124th Street)

The Penn Central Corp. and Lake Calumet Quad sites are within the permanent envelopes of all three UPRR Rail Alternative Options. The Penn Central Corp. site is listed as an SSU site and Lake Calumet Quad is a CERCLIS-NFRAP site. Although these sites are have different names and are listed in separate databases, based on records reviewed, they appear to be the same site and associated with the same activities. The Penn Central Corp. site was identified on a map in a US Scrap report as a hazardous waste illegal dump site due to historic dumping operations (E&E 1990). Reports for both Penn Central Corp. and Lake Calumet Quad stated that over 400,000 gallons of liquid waste were pumped from the basement of on-site grain silos (STS 1982; E&E 1991). A slurry wall was proposed to contain the soils and groundwater impacted with BTEX and chlorinated solvents. There is no documentation that remediation has occurred or that the slurry wall was installed. Because contamination may still remain, this site is a High Concern.

4.4.2.14 Metro Sanitary District #3 (125th Street and Doty Avenue)

The Metro Sanitary District #3 site is approximately 350 feet from the permanent envelopes of all three UPRR Rail Alternative Options. The site is listed as a CERCLIS-NFRAP site and is within the MWRD Calumet Water Reclamation Plant site. A Site Inspection Report was completed in 1986 (E&E 1986), which indicated that the site included a partial, inactive landfill that was used for disposal of sand, gravel, and grit from sewage treatment by MWRD. Surface samples that were collected indicated the presence of PCBs, chloroform, chlorodane, chromium, lead, toluene, and 4,4-dichlorodiphenyldichloroethane (DDD). There were multiple seeps on the western property boundary from the adjacent US Scrap property. As no reported removal or cleanup has occurred, this site is a High Concern.

4.4.2.15 Altgeld Gardens (300 E. to 1100 East 130th Street; 100 E. to 1200 W. 131st Street; 1100-1200 E. 130th Place; 1000-1200 E. 129th Place)

This site is adjacent both the South Station and West Station Option sites for the 130th Street station and is described in Section 4.4.1.3. This site is a Low Concern.

4.4.3 Halsted Rail Alternative

4.4.3.1 Mobil Oil Corp. SS A8B (9901 S. Halsted Street)

This site is within the Halsted Street Rail Alternative permanent envelope. The facility has four active gasoline USTs and records for five additional USTs. The status of the five additional USTs is unknown. The 45-Day Report completed in 1998 for LUST Incident #980630 (Handex of Illinois, Inc. 1998) indicated elevated levels of BTEX in soil and groundwater. The site was classified as a high priority site by the IEPA in 1999. A Corrective Action Plan was rejected by the IEPA in 2009. The LUST incident is still open and contamination may still remain; therefore, this site is a High Concern.

4.4.3.2 Omnitrax (11955 S. Morgan Street)

This site is within the proposed 119th Street yard and shop area and within WIRA Study Area 8. The site is enrolled in the SRP. It is one of 17 study areas within the WIRA, an area of industrial land use dating back to the late 1800s that extends from 117th Street on the north to 122nd Street on the South, Loomis Street on the west and Halsted Street on the east. The WIRA study areas are in various stages of investigation, remediation, and redevelopment by the City of Chicago, private property owners and/or perspective owners and developers. The Comprehensive Site Investigation Report completed in 2007 (Gabriel Environmental Services [Gabriel] 2007) indicated the presence of undissolved (free) product, PNAs, arsenic, lead, hazardous lead, and PCBs. Certain areas were remediated and an engineered barrier was put in place. Additional investigation (Gabriel 2012) indicated the remaining portions of the property still contained elevated levels of PNAs, lead, and PCBs. In addition, the site still had soil with levels of lead that exceeded the hazardous waste disposal thresholds. Because contamination may still remain, this site is a High Concern.

4.4.3.3 West Pullman Iron and Metal Co. (11954 S. Peoria Street)

This site is within the proposed 119th Street yard and shop area and within WIRA Study Area 8. The facility was a scrap yard and was used to dismantle transformers. A 1990 Site Assessment identified PCB-impacted soils at (Weston Solutions, Inc. [Weston] 1990). There is no documentation that remediation has occurred; therefore, contamination may still remain on site and this site is a High Concern.

4.4.3.4 Carl Buddig (11954 S. Peoria Avenue)

This site is within the proposed 119th Street yard and shop area. This site is within the northern portion of WIRA Study Area 8 along the south side of 120th Street. The site is enrolled in the SRP. A Phase II ESA was completed in 2004 for this property, formerly operated by Carl Budding. The Phase II ESA indicated that 2,4-dinitrotoluene, 2,6-dinitrotoluene, and chromium exceed the TACO Soil migration to groundwater exposure route and lead exceeds the ingestion exposure

route and has affected the groundwater at the site (Tetra Tech, Inc. [Tetra Tech] 2004a). Because contamination may still remain, this site is a High Concern.

4.4.3.5 WIRA Study Area No. 6 (11931 S. Loomis Street)

This site is within the proposed 119th Street yard and shop area and is also part of the WIRA (See Section 4.2.3.3). This site is enrolled in the SRP. A review of a Comprehensive Site Investigation Report for this site, which is referred to as the Christ Universal Temple Property (Former International Harvester Property) and WIRA Study Area 6, indicated elevated levels of arsenic. The average detected arsenic values were at levels below background (Tetra Tech 2000a). IEPA issued an NFR letter in 2005 restricting the use of the site to industrial/commercial. Because the NFR letter includes restrictions, this site is a Moderate Concern.

4.4.3.6 WIRA Study Area 9 (820 W. 120th Street)

The WIRA Study Area 9 is within the proposed 119th Street yard and shop area. The site is enrolled in the SRP. The WIRA Study Area 9 was most formerly occupied by West Pullman Car Works and is currently occupied by Abbey Metal Corporation. A Phase II ESA was completed for a portion of WIRA Study Area 9 at 11955 South Peoria Street (Tetra Tech 2004b). The Phase II ESA indicated that VOCs, SVOCs, metals, and PCBs are present in the soil, primarily from 0 to 3 feet below ground surface and that lead and nickel are present in the groundwater. Because contamination may still remain and is primarily within the top 3 feet, this site is a High Concern.

4.4.3.7 WIRA Study Area Number 14 (815 to 825 W. 120th Street)

WIRA Study Area Number 14 is within the proposed 119th Street yard and shop area; it is also part of the WIRA (See Section 4.4.3.1) and is known as The Steel Company site. The site is enrolled in the SRP. The contaminants identified at Study Area Number 14 are VOCs, SVOCs, and metals. The SVOC impacts appear to be localized in the areas of the former railroad tracks and machinery warehouse. In addition, SVOCs were not detected below 3 feet below ground surface. Lead is present at concentrations exceeding TACO Tier 1 remediation objectives throughout the central part of Study Area No. 14. The antimony and selenium concentrations in one soil boring sample exceeded the TACO Tier 1 remediation objective (Tetra Tech 2000b).

Free product is present near the former oil UST. Two groundwater samples contained concentrations exceeding TACO Tier 1 Class I remediation objectives, one with benzene and metals and another with metals (Tetra Tech 2000b). Because contamination may still remain, this site is a High Concern.

4.4.3.8 Ingersoll (1000 West 120th Street)

The Ingersoll site is within the proposed 119th Street yard and shop area and is a CERCLIS site. It is also part of the WIRA (See Section 4.2.3.3) and has been developed as an industrial site since the late 1800s. Multiple Phase I and II ESAs and remedial action have been completed. The current property has had all structures demolished with thousands of gallons of non-hazardous and impacted wastewater removed from the site along with asbestos and PCB debris. However, the site still has free product remaining on-site and soils impacted with PNAs, metals, and PCBs. In addition, it is considered an active CERCLIS site with USEPA enforcement actions (Tetra Tech

2005b; Tetra Tech 2007; Weston 2007). Because contamination may still remain, this site is a High Concern.

4.4.3.9 Exelon Solar Plant/Chicago Malleable Castings/Vacant Lot (1201 W. 120th Street)

This site is south of the proposed 119th Street yard and shop area and is part of the WIRA (See Section 4.2.3.3). This site is enrolled in the SRP and is also a LUST and UST site. It is also referred to as the Chicago Building Structure Site and WIRA Study Areas 10 and 11. The Comprehensive Site Investigation Report for this site identified exceedances of Tier 1 remedial objectives for SVOCs and various metals in soil and for lead in groundwater (Tetra Tech 2001a). The Comprehensive Site Investigation Report recommended averaging soil sample results or conducting a Tier 3 assessment to address these exceedances. Although IEPA has not issued this site an NFR letter, remediation has occurred and it was redeveloped in 2010 as part of the Exelon Corporation's Exelon City Solar site, which now operates as a solar photovoltaic power plant (Exelon Corporation 2012; Mazza 2012). This site has not been issued an NFR letter from IEPA and although remediation has occurred, this site is a Moderate Concern because contamination may still remain.

4.4.3.10 Dutch Boy Paint (1200 and 12042 S. Peoria Avenue, 900 W. 120th Street)

The Dutch Boy Paint site (also identified as the National Lead site) is adjacent to the south of the proposed 119th Street yard and shop area. This site is listed as a CERCLIS site. Documentation indicated the presence of hazardous lead levels across the site. Hazardous lead levels were remediated according to a Consent Decree (Cook County 1999), the site was entered into the SRP. The 2009 Comprehensive Site Investigation Report identified PNAs, arsenic, lead, and PCBs above TACO Tier I remedial objectives for ingestion. Groundwater modeling indicated that lead had the potential to migrate off-site. In addition, the site still had soil with levels of lead that exceeded the hazardous waste disposal thresholds, as well as potential free product (Tetra Tech 2005a; Tetra Tech 2009; Tetra Tech 2010). Because contamination may still remain, this site is a High Concern.

4.5 Risk Classification

Using the impact analysis criteria described in Section 3.4.2 and results of the existing data review described in Sections 4.2, 4.3, and 4.4, the identified sites were classified as No, Low, Moderate or High Concern sites based on their potential to act as a source of contamination to each of the RLE Project alternatives. Figure 4-1 shows the sites identified in the database review and associated concern classification.

With the exception of certain sites associated with the UPRR Rail Alternative, each site was assigned one classification, based on its potential to have caused soil and/or groundwater contamination in the area and its proximity to the project area. For the UPRR Rail Alternative, if applicable, a site was assigned a unique classification for each of the three options (ROW, East, and West). The potential impacts associated with these sites may vary by alternative and are discussed in Section 5.0.

4.5.1 High Concern Sites

The review identified 36 High Concern sites, summarized in Table 4-3. The majority of these sites were classified as High Concerns due to both their proximity (typically inside or within 500 feet of an alternative's permanent envelope) and being listed as CERCLIS, CORRACTS, CERCLIS-NFRAP, SSU, and/or an open LUST or SRP site. Open LUST or SRP sites have not been issued an NFR letter from the IEPA, which indicates that a release has been identified but remediation is likely not complete. Two High Concern sites included in Table 4-3 were classified as high based on the use of the site (Metropolitan Water Reclamation District/Calumet Water Reclamation Plant, a wastewater treatment plant, Figure 4-1 Site ID 200) or information received from a regulatory file request that identified contamination (Carl Buddig, Figure 4-1 Site ID NL1).

As shown in Table 4-3, several High Concern sites lie within the permanent envelope of the alternatives. These sites have the highest potential to affect the RLE Project (see Table 4-4 and Figures A-1 through A-7 in Appendix A).

4.5.2 Moderate Concern Sites

Fifty-six sites were classified as Moderate Concern sites. These sites were typically CERCLIS-NFRAP (archived) and UST sites with no identified releases adjacent to or within a proposed alternative's permanent envelope; LUST and SRP sites that have been issued NFR letters with restrictions (such as engineered barriers and/or instructional controls) and are adjacent to or within a proposed alternative's permanent envelope; open LUST and SRP sites between 300 and 500 feet from an RLE alternative alignment or feature; and CERCLIS, SWL/F and CORRACTS sites within 1,320 feet (0.25 mile) of an RLE alternative alignment or feature. At distances greater than these, the likelihood of contamination traveling from these types of sites and affecting the RLE Project is low. Table 4-5 contains a list of the Moderate Concern sites.

4.5.3 Low and No Concern Sites

Sites not identified as either a High or Moderate Concern were classified as either Low or No Concern. Low Concern sites typically included SQG and CESQG hazardous waste generators, USTs not adjacent to the RLE alternative alignments or features and LUST and SRP sites more than 0.1 mile away. Sites greater than 0.25 mile from any alternative alignment or feature were typically classified as No Concern sites.

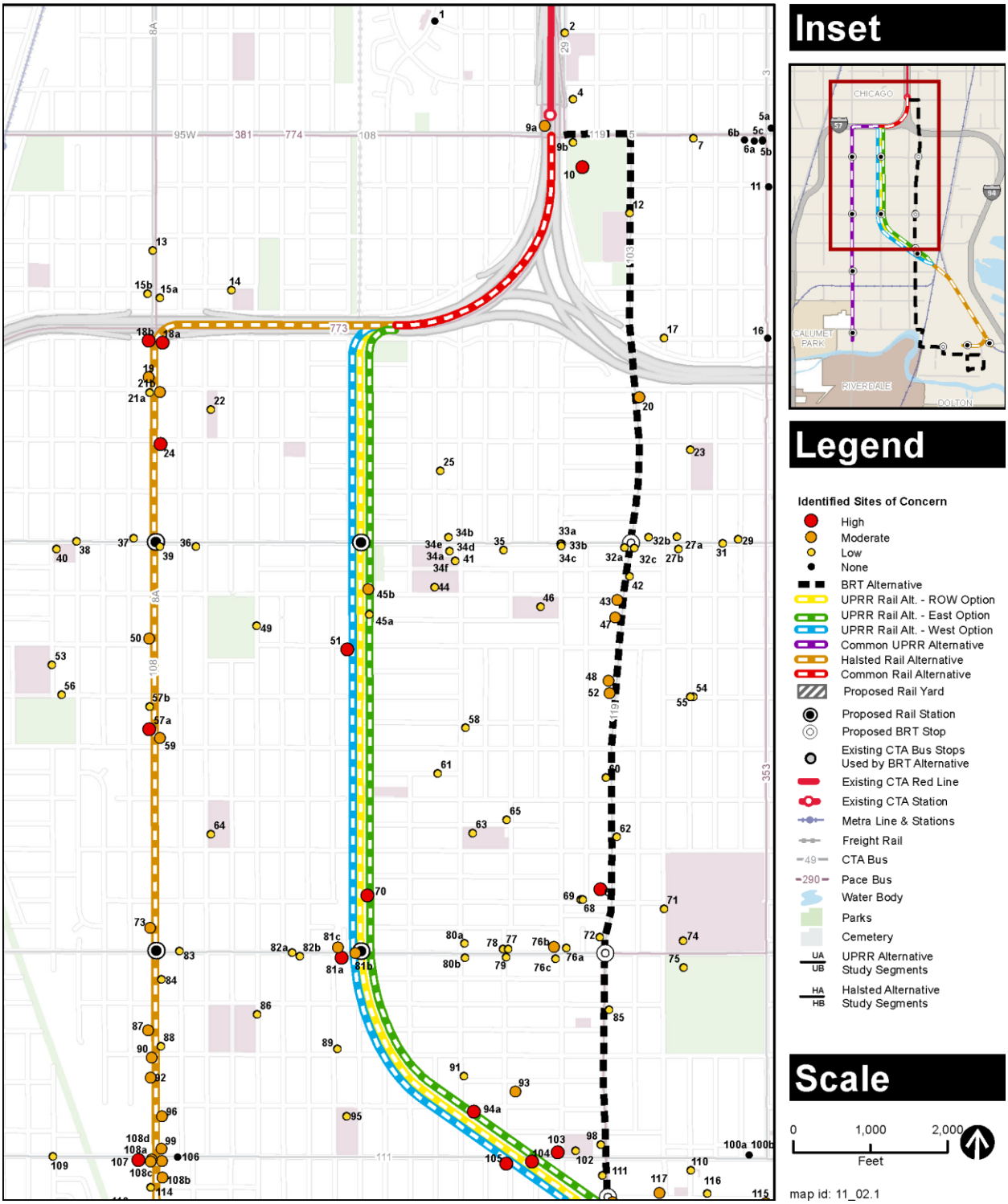

Figure 4-1: Identified Sites of Concern

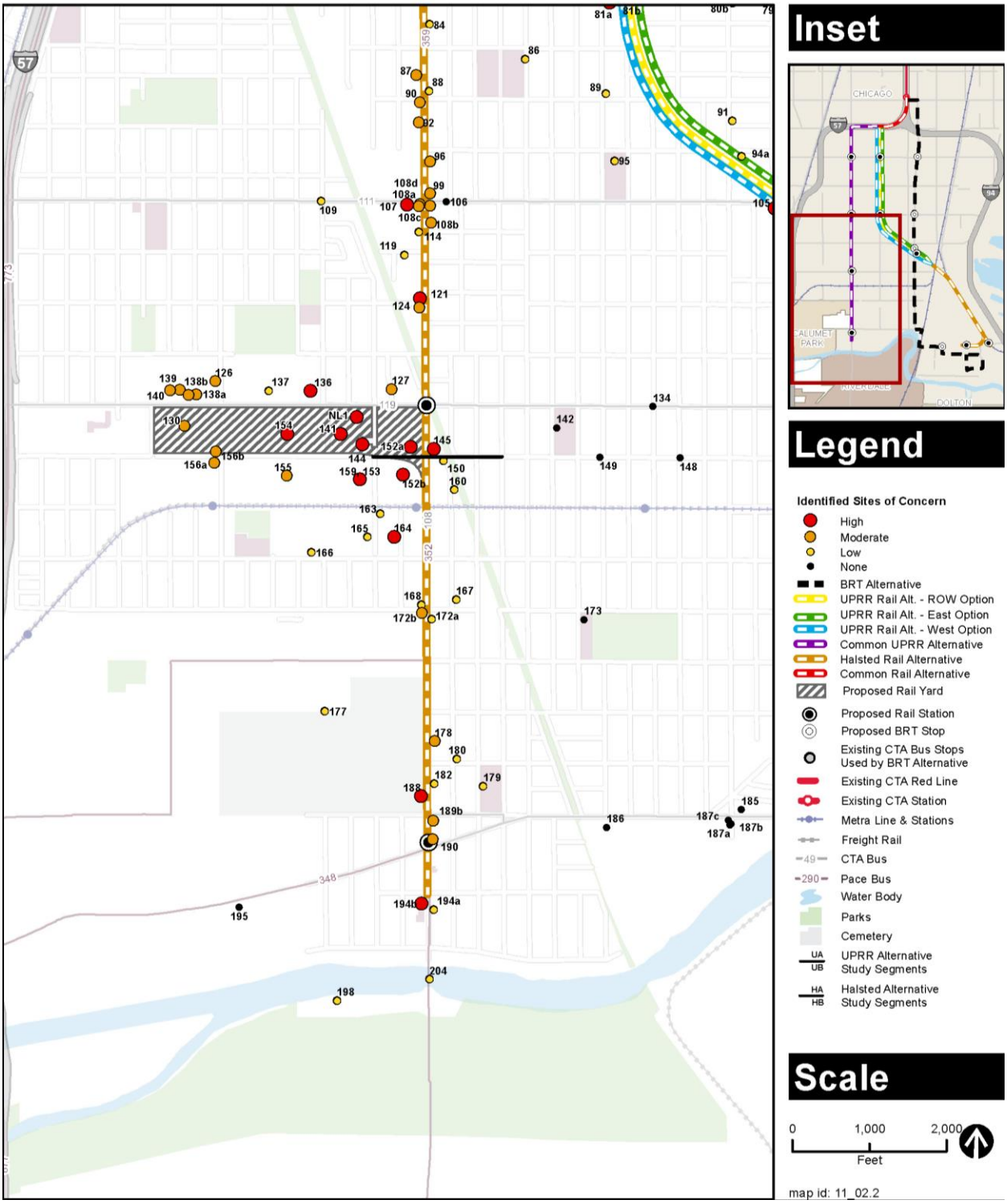

Figure 4-1 (continued): Identified Sites of Concern

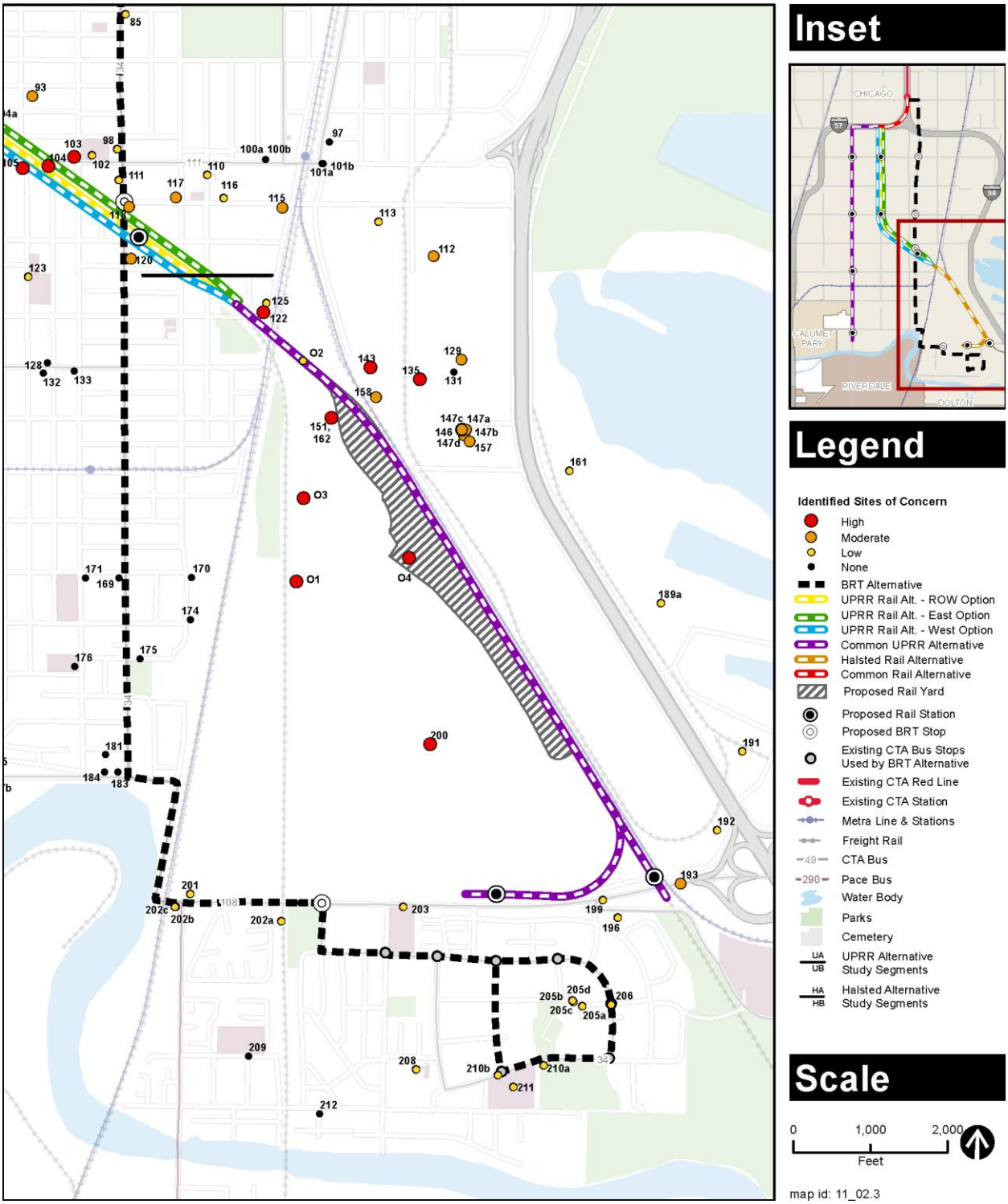

Figure 4-1 (continued): Identified Sites of Concern

Table 4-3: Identified High Concern Sites

EDR Site ID*	Figure 4 1 Site ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
Bus Rapid Transit Alternative					
67	67	109th Place Tear Gas	SG W. 109th Place	Exact location uncertain; likely near or adjacent, not within*	CERCLIS (not on NPL, referred to removal - NFRAP), PRP
200	200	MWRD Metropolitan Water Reclamation Di/ Calumet Water Reclamation Plant	400 E. 130th Street	Within	UST (3 in use), RCRA-CESQG
Union Pacific Railroad Rail Alternative - Segment UA					
8	8	Shell Oil Co.	4 E. 95th Street	250 feet (ROW, E, and W)	LUST (No. 871758 Non-LUST deter.), UST (3 in use)
10	10	Abbott Park Fieldhouse	49 E. 95th Street	200 feet (ROW, E, and W)	LUST (No. 932467 open; No. 932446 open), UST (removed), SPILLS
51	51	Illinois Bell Telephone	413 W.105th Street	Adjacent (ROW, E); Within (W);	LUST (No. 880112 NFR), UST (3 removed)
70	70	William Ransom Transportation/ Bus Garage	352 W. 110th Street	Adjacent (ROW); Within (E); 110 feet (W)	LUST (No. 990399 open), UST (removed), SPILLS, RCRA-CESQG, ERNS
81	81a	Pentecostal Temple Church Of God	415 to 419 W. 111th Street	175 feet (ROW); 85 feet (E); 75 feet (W)	LUST (No. 912233 open; No. 913417 open), SPILLS, RCRA-SQG
104	104	Triangle Transmission	35 W.115th Street	Adjacent (ROW); Within (E); 130 feet (W)	LUST (No. 992324 open), UST (2 exempt), SPILLS, RCRA-SQG
105	105	City of Chicago/ Abandoned Service Station	11500 S. Perry Avenue	60 feet (ROW); 160 feet (E); Within (W)	LUST (No. 20002342 non-LUST determination), UST (4 exempt)
Union Pacific Railroad Rail Alternative - Segment UB					
103	103	Cox, Donna	2 W. 115th Street	300 feet (ROW); 175 feet (E); n/a (W)	LUST (No. 980685 open; No. 201110008 open), UST (2 exempt), SPILLS
122	122	Stuart Industrial Coatings, Inc.	11740 S. Front Street	Within (ROW, E, and W)	LUST (No. 900054 open)
135	135	Lake Calumet Smelting	11901 S. Champlain Avenue	500 feet (ROW, E, and W)	CERCLIS (referred to removal - NFRAP)

EDR Site ID*	Figure 4 1 Site ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
143	143	Bulkoa Inc./Schneider Tank Lines, Clean Harbors Env. Services/Bulkoa , Inc.	11861 S. Cottage Grove Avenue	290 feet (ROW, E, and W)	LUST (No. 971905 NFR), UST (4 removed, 3 exempt), RCRA-CESQG
147	147a	Quala Services, LLC	803 E.120th Street	325 feet (ROW, E, and W)	RCRA-LQG (violations), SPILLS
200	200	MWRD Metropolitan Water Reclamation Di/ Calumet Water Reclamation Plant	400 E.130th Street	Within (ROW, E, and W)	UST (3 in use), RCRA-CESQG
151, 162	151, 162	Keywell, LLC	11900 Cottage Grove Avenue	Within (ROW, E, and W)	LUST (No. 902351 NFR; No. 942202 non-LUST determination), UST (2 removed), SPILLS, RCRA-CESQG
Orphan	O1	US Scrap	123rd Street and Cottage Grove Avenue	1,000 feet (ROW, E, and W)	UST (3 in use), RCRA-CESQG
Orphan	O3	Metro Sanitary District #3	125th Street and Doty Avenue	350 feet (ROW, E, and W)	CERCLIS-NFRAP (archived)
Orphan	O4	Penn Central Corp	810 E.124th Street	Within (ROW, E, and W)	SSU (transferred to IEPA's Office of Site Evaluation)
		Lake Calumet Quad			CERCLIS-NFRAP (archived)
Halsted Rail Alternative - Segment HA					
8	8	Shell Oil Co.	4 E. 95th Street	300 feet	LUST (No. 871758 non-LUST determination), UST (3 in use)
10	10	Abbott Park Fieldhouse	49 E. 95th Street	200 feet	LUST (No. 932467 open; No. 932446 open), UST (removed), SPILLS
18	18a	Mobil Oil Corp. SS A8B	9901 S. Halsted Street	Within	LUST (No. 980630 open), UST (5 exempt, 4 in use), RCRA-SQG

EDR Site ID*	Figure 4 1 Site ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
18	18b	Bhagats Amoco	9900 S. Halsted Street	150 feet	LUST (No. 941074 and No. 971752 non-LUST determination), UST (6 removed, 1 exempt, 3 in use), SRP (open), RCRA-SQG
24	24	Fernwood Towing & Tune-Ups/ Hester, Franny	10101 to 10103 S. Ashland Avenue	Adjacent	LUST (No. 991953 open), UST (3 exempt)
57	57a	Betty Brite Cleaners	10630 S. Halsted Street	Adjacent	SRP (open), DRYCLEANERS, RCRA-SQG
107	107	Chicago Housing Authority	833 W.115th Street	150 feet	LUST (No. 921830 NFR), UST (removed), SPILLS, SRP (open), RCRA-SQG
121	121	Mickey's Auto Service Center	11656 S. Halsted Avenue	Adjacent	LUST (No. 970068 open), SRP (open, not active)
136	136	WIRA East Ingersoll Property	920 W.119th Street	60 feet	SRP (open, not active)
141	141	Omnitrax	11955 S. Morgan Street	Within	SRP (open)
144	144	West Pullman Iron and Metal Co.	11954 S. Peoria Avenue	Within	CERCLIS-NFRAP, SRP (open, not active)
145	145	Sandhu Petroleum, Inc./Conoco Phillips 66	11957 and 11959 S. Halsted Street	Adjacent	LUST (No. 20041132 open; No. 20041362 open), UST (5 in use, 2 removed), SPILLS
152	152a	WIRA Study Area 9	820 W. 120th Street	Within	SRP (open, not active)
154	154	Ingersoll	1000 W. 120th Street	Within	CERCLIS (not on the NPL, removal only site, no site assessment work needed, enforcement action)
NL	NL1	Carl Buddig	11954 Street Peoria Avenue	Within	None
Halsted Rail Alternative - Segment HB					
152	152b	WIRA Study Area Number 14	815 to 825 W. 120th Street	Within	SRP (open, not active)
159, 153	159, 153	Dutch Boy Paint	12000 and 12042 S. Peoria Avenue, 900 West 120th Street	Adjacent	CERCLIS (Not on NPL, Referred to Removal - NFRAP), PRP, SSU (Transferred to another program), SRP (open), SPILLS, UST (9 removed)

EDR Site ID*	Figure 4 1 Site ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
164	164	South Green Plating Shop	12130 S. Green Street	300 feet	CERCLIS (not on the NPL, removal only site, no site assessment work needed, enforcement action), PRP
188	188	Cedar Park Cemetery	12540 S. Halsted Street	Adjacent	LUST (No. 952568 open), UST (4 removed), RCRA-SQG
194	194b	Christ Church Baptist	12844 S. Halsted Street	Adjacent	LUST (No. 20000796 open), UST (1 exempt), SPILLS

Notes:
* Environmental Data Resources, Inc. (EDR) ID is the site ID number provided in the EDR database report (Appendix B). More than one site has the same EDR ID; therefore, each High Concern site was given a unique "Figure ID," used in Figures 4-2 through 4-8.
** Addresses are in Chicago unless otherwise noted.
*** Separation distance is measured from the edge of the permanent envelope for an alternative. 'Within' means the site would be inside the permanent envelope. E=East Option, W=West Option, ROW=ROW Option, n/a = High Concern classification is not applicable to that option.
**** The Databases listed are those that contributed information relevant to the site's designation as a High Concern site. See Tables 3-1 and 4-1 for distances evaluated, summaries, and definitions of abbreviations.

Table 4-4: Summary of High Concern Sites Within the Permanent Envelope

Segment	Total Number of High Sites Within Envelope	Site ID	Appendix A Figure Number
Bus Rapid Transit Alternative			
Full Length	1	200	A-5
Park & Ride Facilities*	1	200	A-5
Union Pacific Railroad Rail Alternative ROW Option			
Segment UA	0	---	---
Segment UB	4	122 151/162, 200, O4	A-4 A-5
120th Street Yard and Shop	3	151/162, 200, O4	A-5
Union Pacific Railroad Rail Alternative East Option			
Segment UA	2	70, 104	A-2 A-3
Segment UB	4	122 151/162, 200, O4	A-4 A-5
120th Street Yard and Shop	3	151/162, 200, O4	A-5
Union Pacific Railroad Rail Alternative West Option			
Segment UA	2	51 105	A-1 A-3
Segment UB	4	122 151/162, 200, O4	A-4 A-5
120th Street Yard and Shop	3	151/162, 200, O4	A-5

Segment	Total Number of High Sites Within Envelope	Site ID	Appendix A Figure Number
Halsted Rail Alternative			
Segment HA	1	18a	A-6
Segment HB	0	---	---
119th Street Yard and Shop	6	141, 144, 152a, 154, NL1, 152b	A-7

Notes:
* Includes sites only within the proposed park & ride facilities.

Table 4-5: Moderate Concern Sites

EDR Map ID*	Figure 4 1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
Bus Rapid Transit Alternative					
8	8	Shell Oil Co.	4 E. 95th Street	Adjacent	LUST (No. 871758 non-LUST Determination), UST (3 in use)
10	10	Abbott Park Fieldhouse	49 E. 95th Street	Adjacent	LUST (No. 932467 open; Incident No. 932446 open), UST (removed), SPILLS
20	20	Sweis Ray Town and Country Mini Mart	10007 S. Michigan Avenue	Adjacent	LUST (No. 942453 open), UST (3 in use, 2 removed), RCRA-SQG
43	43	Roseland Place/Vacant Property	10400-10420 S. Michigan Avenue	Adjacent	SRP (NFR), INST CONTROL, UST (4 exempt)
47	47	Neighborhood Housing Services Redevelopment Corp./Vacant Property	10426 S. Michigan Avenue	Adjacent	LUST (No. 20100068 NFR), UST (2 exempt), SPILLS
48	48	Dairy Fresh Foods, Inc.	10450 S. Michigan Avenue	Adjacent	SRP (NFR), INST CONTROL, ENG CONTROLS, SPILLS
52	52	Michigan Avenue Collision/C&O Auto Rebuilders/Auto Repair Shop	10554 S. Michigan Avenue	Adjacent	LUST (No. 20071260 NFR), UST (2 exempt), RCRA-SQG, SPILLS
76	76b	BP Products North America	2 W. 111th Street	400 feet	LUST (No. 20080184 open), UST (3 in use), SPILLS
117	117	Kensington Serv Station	162 E. Kensington Avenue	350 feet	LUST (No. 960207 open), UST (3 removed), SPILLS
118	118	Clark Oil & Refining/0707 Clark Ser Station	11555 S. Michigan Avenue	Within	LUST (No. 912512 NFR), UST (3 removed)
120	120	Michigan Citgo	11600 S. Michigan Avenue	Adjacent	UST (4 in use)

EDR Map ID*	Figure 4 1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
Union Pacific Railroad Rail Alternative - Segment UA					
9	9a	Amoco 15459	36 W. 95th Street and Lafayette Avenue	150 feet (ROW, E, and W)	RCRA-SQG, LUST (No. 971123 NFR), UST (3 removed), SPILLS
45	45b	Chicago Fire Department Engine #93	330 W. 104th Street	Adjacent (ROW); Within (E); 100 feet (W);	UST (1 exempt)
81	81b	Chicago Dept. of Env. (Spill)	11100 S. Stewart Avenue	Exact location unknown; likely adjacent or within	RCRA-LQG
81	81c	No Name	420 W. 111th Street	60 feet (ROW, E, and W)	SPILLS
93	93	Pullman Co./Illinois Bell Telephone	65 W. 113th Place	500 feet (ROW); 375 feet (E); 550 feet (W)	LUST (No. 903598 NFR), UST (1 removed, 1 exempt, 1 in use), SPILLS
103	103	Cox, Donna	2 W. 115th Street	n/a (ROW, E); 350 feet (W)	LUST (No. 980685 open; No. 201110008 open), UST (2 exempt), SPILLS
112	112	Sherwin Williams Co	11541 S. Champlain Avenue	1,300 feet (ROW, E, and W)	CERCLIS (not on the NPL), CORRACTS, RCRA-TSDF, RCRA-LQG
115	115	U.S. Scrap	391 E. Kensington Avenue	1,000 feet (ROW, E, and W)	SSU (transferred to USEPA), SWF/LF (unpermitted, closed with no final cover)
118	118	Clark Oil & Refining/0707 Clark Ser Station	11555 S. Michigan Avenue	Adjacent (W, ROW); Within (E)	LUST (No. 912512 NFR), UST (3 removed)
Union Pacific Railroad Rail Alternative - Segment UB					
117	117	Kensington Serv Station	162 E. Kensington Avenue	450 feet (ROW, E); n/a (W)	LUST (No. 960207 open), UST (3 removed), SPILLS
120	120	Michigan Citgo	11600 S. Michigan Avenue	n/a (ROW, E); 60 feet (W)	UST (4 in use)
129	129	Inland Metal Refining Company Incorporation	651 E. 119th Street	875 feet (ROW, E, and W)	CERCLIS-NFRAP (archived), CORRACTS, SSU (backlog), UST (removed)

EDR Map ID*	Figure 4 1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
146	146	Bulkmatic Transport Co	12000 S. Doty Avenue	325 feet (ROW, E, and W)	RCRA-SQG
147	147b	Nortru, Inc. Transportation Group	801 E. 120th Street	325 feet (ROW, E, and W)	RCRA-SQG
147	147c	Allwaste Container Services	803 E. 120th Street	325 feet (ROW, E, and W)	UST (3 removed), SPILLS
147	147d	PSC Container Services, LLC	803 E. 120th Street	325 feet (ROW, E, and W)	LUST (No. 930641 open)
157	157	Praxair Distribution, Inc./Liquid Carbonic Corp	12054 Southwest Doty Avenue	325 feet (ROW, E, and W)	UST (removed), SPILLS, RCRA-CESQG
158	158	Tri City Tank Wash	11901 S. Cottage Grove Avenue	100 feet (ROW, E, and W)	UST (out of service)
193	193	Calumet Nu-Earth Dist. Center	North 130th Street and Doty Avenue	Exact location uncertain; could be adjacent*	CERCLIS-NFRAP (archived)
Halsted Rail Alternative - Segment HA					
9	9a	Amoco 15459	36 W. 95th Street and Lafayette Avenue	150 feet	LUST (No. 971123 NFR), UST, SPILLS, RCRA-SQG
19	19	#013611	9948 S. Halsted Street	Adjacent	UST (4 out of service)
21	21b	Joy Auto Service	10001 S. Halsted Street	Adjacent	UST (5 exempt), RCRA-SQG
50	50	Our #52-9652-105	Northwest Corner of Halsted Street & 105th Street	Adjacent	UST (4 exempt)
59	59	Shell Oil Co.	10655 S. Halsted Street	Adjacent	LUST (No. 880583 NFR), UST (4 removed, 3 in use)
73	73	Muffler & Brake Man, Inc.	11038 and 11048 S. Halsted Street	Within	UST (2 removed)
87	87	Longs Garden Center, Inc.	11226 S. Halsted Street	Adjacent	LUST (No. 980313 NFR), UST (1 removed), RCRA-SQG

EDR Map ID*	Figure 4 1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
90	90	Devotion Unisex Beauty Salon	11300 S. Halsted Street	Adjacent	UST (1 exempt)
92	92	Whitmal Oil Ser Inc.	11328 S. Halsted Street	Adjacent	UST (2 removed)
96	96	McDonald's Corp.	11421 S. Halsted Street	Adjacent	UST (1 exempt)
99	99	Quality Muffler, First Cook Comm. Bank	11453 S. Halsted Street	Adjacent	LUST (No. 920332 NFR), SPILLS, UST (5 removed), RCRA-SQG
108	108a	Equilon Enterprises LLC	11501 S. Halsted Street	Adjacent	LUST (No. 990250 NFR), UST (3 removed, 3 in use)
108	108b	0415 Clark Ser Station	11525 S. Halsted Street	Adjacent	UST (3 removed)
108	108c	Former CHA Warehouse	901 W. 115th Street	Adjacent	UST (1 exempt)
108	108d	Amoco Oil Co. #5954	11500 S. Halsted Street	Adjacent	LUST (No. 923184 NFR), UST (3 in use)
124	124	Abandoned Service Station	11700 S. Halsted Street	Adjacent	UST (2 exempt)
126	126	WIRA Study Area Number 4	11801 S. Racine Avenue	60 feet	SRP (NFR), INST CONTROL
127	127	Sheldon Heights Church of Christ/Vacant Land	11819 to 11849 S. Green Street	60 feet	SRP (NFR), INST CONTROL, UST (removed)
130	130	West Pullman Study Area No. 6	11931 S. Loomis Street	Within	SRP (NFR)
138	138a	W.E. Davis Company*****	1220 to 1314 W. 119th Street	60 feet	SRP (NFR), INST CONTROL, ENG CONTROLS
138	138b	City of Chicago - Department of Environment/ Construction Site (Future RJKCCC) *****	1220 W. 119th Street	60 feet	LUST (No. 20100193 open; No. 20110956 open), SPILLS, UST (6 exempt)
139	139	Former Amforge Facility*****	1250 W. 119th Street	60 feet	BROWNFIELDS
140	140	Amforge*****	1324 W. 119th Street	60 feet	UST (4 exempt)

EDR Map ID*	Figure 4 1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
Halsted Rail Alternative - Segment HB					
155	155	International Harvester Co., W P/ Former West Pullman Works	1015 W. 120th Street	60 feet	CERCLIS (Not on NPL, Referred to removal-NFRAP), CORRACTS, LUST (No. 20091219 NFR; No. 20091282 NFR), SPILLS, LUST, SRP (NFR), INST CONTROL, ENG CONTROLS, HWAR, UST (3 exempt)
156	156a	Exelon Solar Plant/Chicago Malleable Castings/Vacant Lot	1201 W. 120th Street	60 feet	LUST (No. 20091066 open), SRP (open, not active), SPILLS, UST (2 exempt), RCRA-CESQG
156	156b	Vacant Site	1210 W. 120th Street	Within	UST (2 exempt)
172	172b	Cal Gas, Inc.	12304 S. Halsted Street, Calumet Park	Adjacent	UST (2 in use)
178	178	Red's Checkpoint/Franklin George	12535 S. Halsted Street	Adjacent	LUST (No. 911261 NFR), UST (4 removed), SPILLS
189	189b	Amoco SS #18717 Facility #24277	12701 S. Halsted Street	Adjacent	UST (3 removed)
190	190	#008489	12731 S. Halsted Street	Adjacent	UST (3 exempt)

Notes:
* Environmental Data Resources, Inc. (EDR) ID is the site ID number provided in the EDR database report (Appendix B). More than one site has the same EDR ID; therefore, each High Concern site was given a unique "Figure ID," used in Figures 5-2 through 5-9.
** Addresses are in Chicago unless otherwise noted.
*** Separation distance is measured from the edge of the permanent envelope for an alternative. 'Within' means the site is inside the permanent envelope. E=East Option, W=West Option, ROW=ROW Option, n/a = Moderate Concern classification is not applicable to that option.
**** The Databases listed are those that contributed information relevant to the site's designation as a High Concern site. See Tables 3-1 and 4-1 for distances evaluated, summaries, and definitions of abbreviations.
***** These sites are all part of the former Amforge site, which has received and NFR and been redeveloped.

4.5.4 Summary

Table 4-6 presents a summary of the number of High and Moderate Concern sites associated with each alternative.

Table 4-6: Summary of High and Moderate Concern Sites

Segment	High Concern	Moderate Concern
Bus Rapid Transit Alternative		
Full Length	2	11
Park & Ride Facilities*	1	4
Union Pacific Railroad Rail Alternative ROW Option		
Segment UA	7	8
Segment UB	10	9
Union Pacific Railroad Rail Alternative East Option		
Segment UA	7	8
Segment UB	10	9
Union Pacific Railroad Rail Alternative West Option		
Segment UA	7	9
Segment UB	9	9
Halsted Rail Alternative		
Segment HA	15	23
Segment HB	5	7

*Includes Moderate and High Concern sites only within or near the proposed park & ride facilities.

4.6 Other Sources

Other common sources of hazardous materials that may be present or that could affect the project were considered. Review of the Certified Sanborn maps confirmed that substations have been present since at least 1938. Prior to 1979, when their production was banned, PCBs were commonly used as fluid in electrical equipment. Transformers and substations within the project area may contain PCBs. The historical review also confirmed that the majority of buildings and structures within the project area were built before 1978–1979. Therefore, the majority of these buildings and structures are likely to contain lead-based paint or asbestos.

The long-term operation and maintenance of the existing UPRR and the NICTD/CSS & SBRR corridors adjacent to and within the project area are also potential sources of hazardous material impacts (UPRR Rail Alternative). Maintenance activities typically require the use of fuel, oil, paints, solvents, and cleaning agents for equipment, and grounds maintenance that may have contaminated the soil and/or groundwater from the use of materials such as herbicides, and pesticides. Operation of both lines includes carrying freight traffic, which may include hazardous materials transport. In addition, other potential sources of hazardous material impacts from railroad operations could include creosote used to preserve wood railroad ties, polynuclear aromatic carbon deposition from diesel exhaust, asbestos dust from brakes, coal ash releases from engines, and hazardous material cargo. Although a search of the National Response Center Database, which provides reported oil and chemicals spill data for railroad incidents, did not identify any spills reported by UPRR, NICTD, CSS, or SBRR along the project area, the potential for impacts still exists. (National Response Center 2012)

Given the urban setting of the project area, the potential exists for the presence of typical urban fill throughout the entire project area. Typical urban fill materials contain elevated concentrations of polynuclear aromatic hydrocarbons and metals due to nearby roadways, railways, and industrial and commercial lands uses and activities. Industrial and commercial land uses and activities include coal yards, gas stations, auto repair shops, machine shops, manufacturing plants, dry cleaners, USTs, substations, and transformers. This type of contamination is not necessarily associated with a release from a specific site or source. In addition, urban fill may include contaminated building demolition debris, which was commonly used as fill material in excavations, to increase elevations at sites during development.

Section 5
Impacts and Mitigations

The evaluation of the affected environment found the potential to encounter hazardous materials across the entire project area during both construction and operation. This section analyzes and compares the hazardous material impacts of the RLE Project alternatives in one of three categories: permanent impacts, construction impacts, and cumulative impacts.

5.1 No Build Alternative

Under the No Build Alternative, there would be no construction other than that associated with already funded and committed projects in the corridor. For the No Build Alternative, no permanent adverse impacts, construction impacts, or cumulative impacts related to hazardous materials would be expected.

5.2 Bus Rapid Transit Alternative

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

Operating BRT service and park & ride facilities would not result in changes to the existing types of hazardous materials used, stored or transported. Therefore, no permanent adverse impacts related to hazardous materials would be associated with the BRT Alternative.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.2.1 Impacts

Subsurface excavation associated with the BRT Alternative would occur during construction of all four of the proposed park & ride facilities; however, excavated quantities would likely be greater at Kensington Avenue and 130th Street than at 103rd Street and 111th Street. This difference is because the Kensington Avenue and 130th Street facilities both would have garages, which would require more excavation to install their foundations and other support structures. Therefore, construction for this alternative would result in generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. The source of hazardous material impacts could be from sites identified in the database review or from the presence of urban fill. In addition there is the potential that groundwater encountered during construction may contain contaminated materials. As summarized in Table 4-4 and shown on Figure 4-6, one High Concern site (ID Number 200) was identified within or near a proposed park & ride facility site where the majority of subsurface excavation and potential adverse impacts would be likely to occur. This High Concern site is near the proposed 130th Street facility site and is an operating wastewater treatment plant. Sludge, a byproduct of the wastewater treatment process, typically contains heavy metals and other contaminants and may be present throughout the site, including within the footprint of the proposed park & ride facility at 130th Street.

In all areas besides the park & ride facilities, work would be limited to the surface and the potential for impacts to hazardous materials would be low.

Construction of park & ride facilities at 103rd Street and Kensington Avenue would include demolition of existing structures that were likely constructed before 1978–1979. These structures may contain asbestos-containing material and lead-based paint that could result in a release of asbestos fibers and lead dust during construction. Hazardous materials typically involved with construction activities, such as paints, solvents, fuels, and hydraulic fluids, could also be released accidentally during construction.

Implementation of the BRT Alternative could also result in beneficial impacts through the cleanup and/or removal of contaminated material (soil, groundwater, and/or asbestos and lead-based paint particles) during construction. Without this alternative, this cleanup and removal would occur either at a later date or not at all.

Indirect impacts could occur from the accidental release of hazardous materials during the transport of soil or other contaminated media to a disposal facility away from the project area.

5.2.2.2 Mitigation

Mitigation measures for the BRT Alternative would be used to avoid and minimize impacts prior to and during construction and would, at a minimum, include the following:

- Compliance with federal, state, and local laws and regulations regarding hazardous materials would be required.
- Focused site assessments would be required for areas where earth-moving activities would occur. The assessments would include characterization and evaluation of the potential for encountering hazardous materials and contaminated soils.
- Asbestos, lead-based paint, and hazardous material surveys of buildings or structures would be required prior to renovation or demolition, to identify any asbestos and lead-based paint particles and hazardous materials, such as PCB- or mercury-containing equipment. Any hazardous materials identified would be abated and disposed of in accordance with local, state and federal regulations.
- A Contaminated Material Management Plan that provides the procedures for identifying, characterizing, managing, storing, and disposing contaminated soil and groundwater encountered during construction activities would be required. This plan would cover the entire project area, as it is assumed that all material has at least some level of contamination associated with it. Contaminated material generated during construction would be disposed of at a nearby facility permitted to accept such material, such as the Veolia ES Zion Landfill, in Zion, Illinois (non-hazardous special waste) and the Menomonee Falls Treatment Storage and Disposal Facility in Menomonee Falls, Wisconsin (hazardous waste).
- Health and Safety Plans for construction activities would be developed by the contractors and read and signed by all workers prior to starting any work. The Health and Safety Plans would identify potential contaminants of concern, required personal protection equipment and procedures, and emergency response procedures.

- Spill Prevention, Control, and Countermeasure Plans to address the use, storage, and disposal of materials such as asphalt, fuel, paint, solvents, and cleaning agents would be required. The Spill Control and Prevention Plans would provide best management practices to limit the potential for accidental releases of potentially hazardous materials.

- Construction Stormwater Pollution Prevention Plans, which describe methods to prevent or minimize stormwater runoff from encountering contaminated soil or other hazardous materials, would be required.

In addition to the above, a Phase I ESA of any property to be purchased would be conducted as part of the Final EIS in order to identify recognized environmental conditions and assess and limit environmental liability. Based on the Phase I ESA findings, a Phase II ESA could also be required during the property acquisition phase and prior to purchasing a property.

5.2.3 Cumulative Impacts and Mitigations - Bus Rapid Transit Alternative

Under the BRT Alternative, cumulative impacts could occur if there were a release of hazardous materials during ongoing and future projects in the area (described in the *Cumulative Impacts Technical Memorandum)*; however, compliance with local, state, and federal laws and regulations would result in these cumulative impacts being less than adverse.

5.3 Union Pacific Railroad Rail Alternative

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1.1 Segment UA

5.3.1.1.1 Impacts

Operation of UPRR Rail Alternative ROW Option, a heavy rail transit line, would have the potential to result in the release of hazardous materials and/or petroleum products into the environment from accidental spills or from maintenance activities that require earthmoving in contaminated areas. Spills are most likely to occur during activities such as equipment maintenance at the yards and shops and grounds maintenance along the tracks. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, and pesticides. Examples of maintenance activities that could require earthmoving include at-grade track repair, underground utility work, and foundation repairs.

5.3.1.1.2 Mitigation

During operation of the ROW Option, mitigation measures would include adherence to applicable federal, state, and local regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures.

5.3.1.2 Segment UB

Permanent impacts and mitigation measures would be similar to those described for Segment UA in Section 5.3.1.1. However, there would be the potential for additional impacts associated with the NICTD/CSS & SBRR, which is an active railroad and is adjacent to Segment UB. Due to the

proximity of NICTD/CSS & SBRR to Segment UB, hazardous material spills or releases that occur along the NICTD/CSS & SBRR during its operation and maintenance would have the potential to migrate affect the UPRR Rail Alternative alignment within this segment. Section 4.6 describes typical sources of hazardous material spills and releases that may be associated with NICTD/CSS & SBRR. Although there is the potential for impacts associated with the adjacent freight line, these impacts would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 CFR Parts 171 to 180), Among other things, these regulations specify requirements for the safe transportation of hazardous materials by rail, and they require rail carriers to conduct a security and safety risk analysis to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.2.1 Segment UA

5.3.2.1.1 Impacts

Construction of Segment UA of the UPRR Rail Alternative ROW Option would involve approximately 130,100 cubic yards of soil or aggregate excavation. Therefore, there would be the potential to encounter hazardous materials, whether from the sites identified in the database review or from the presence of urban fill. In addition, unlike the East and West Options, the ROW Option would include construction within the UPRR corridor, which is potentially impacted because of the use of fuel, oil, paints, herbicides, and pesticides, creosote, polynuclear aromatic hydrocarbons and coal ash associated with the long-term operation as a railroad (See Section 4.6). In addition, groundwater encountered during construction may contain hazardous materials.

As shown in Table 4-4, no High Concern sites are within the permanent envelope of Segment UA of the UPRR Rail Alternative ROW Option.

This alternative would include the demolition of existing structures that were likely constructed before 1978 - 1979. Potential issues associated with these structures would be as described for the BRT Alternative in Section 5.2.2.1.

Construction of Segment UA could also result in beneficial impacts through the cleanup and/or removal of contaminated material, as described for the BRT Alternative in Section 5.2.2.1.

Indirect impacts could occur from accidental releases as described for the BRT Alternative in Section 5.2.2.1.

5.3.2.1.2 Mitigation

Proposed mitigation measures would be similar to those described for the BRT Alternative in Section 5.2.2.2.

5.3.2.2 Segment UB

5.3.2.2.1 Impacts

Construction of Segment UB of the UPRR Rail Alternative ROW Option would involve approximately 140,100 cubic yards of soil or aggregate excavation. Therefore, impacts would be similar to those described for Segment UA in Section 5.3.2.1. One exception is that Segment UB is not directly within a freight railroad corridor, but it is adjacent to the NICTD/CSS & SBRR and railroad spurs serving the Keywell property (ID Number 151/162), which carries freight trains and could still have potential hazardous material impacts. While there would be the potential for hazardous material impacts associated with construction adjacent to a railroad, they would likely be fewer than for construction directly within the footprint of a railroad.

Based on the historic aerials and Sanborn fire insurance maps, heavy industry has been present in and along this segment since at least 1897. As shown in Table 4-4 and Figures 4-5 and 4-6, three High Concern sites (ID Numbers 122, 200, and 151/162) are within the permanent envelope of Segment UB of the UPRR Rail Alternative ROW Option. One High Concern site is within both the areas for the South Station and West Station Options (ID Number 200, See Section 5.2.2.1). Four additional High Concern sites (ID Numbers O1, O2, O3, and O4) are potentially within the permanent envelope but not enough information is available at the time of this report to determine their exact location.

Of note within this segment is that there are two CERCLIS Archived sites potentially within the permanent envelope (O3 and O3). The CERCLIS sites typically come with increased risk of the USEPA imposing liability and remediation obligations on potentially responsible parties (PRPs). Any owner can be considered a PRP and be required to pay for cleanup. These sites have Archived status, which means that USEPA has completed its assessment of the site and has determined that no future action will be taken to list it on the National Priorities List and has removed it from its inventory of Superfund sites. However, this does not mean that a site is considered clean, and additional caution should be taken before acquiring ownership.

5.3.2.2.2 Mitigation

Permanent impacts and mitigation measures would be similar to those described for Segment UA in Section 5.3.2.1.

5.3.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

Cumulative impacts under the UPRR Rail Alternative ROW Option would be similar to those under the BRT Alternative, described in Section 5.2.3.

5.3.4 120th Street Yard and Shop

5.3.4.1 Permanent Impacts and Mitigations

Permanent impacts and mitigation measures for the 120th Street yard and shop would be similar in type to those described for the UPRR Rail Alternative ROW Option, Segment UA (Section 5.3.1.1); however, the quantities of materials used (including fuel, oil, paints, solvents, cleaning

agents, herbicides, and pesticides) and therefore, the potential for spills to occur, would likely be greater at the yard and shop than along the rail line itself.

5.3.4.2 Construction Impacts and Mitigations

Construction of the 120th Street yard and shop would involve approximately 138,100 cubic yards of soil or aggregate excavation. Impacts and mitigation measures would be similar to those described for Segment UB in Section 5.3.2.2, with the exception of one less High Risk site (ID Number 122, a LUST site) within or potentially within the permanent envelope of the yard.

5.3.5 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.3.5.1 Segment UA

5.3.5.1.1 Impacts

Permanent impacts under the UPRR Rail Alternative East Option would be similar to those for the UPRR Rail Alternative ROW Option, described in Section 5.3.1.1. However, there would be the potential for additional impacts associated with the operation of the adjacent active UPRR, which would remain in operation under the East Option. Given the proximity of the UPRR track to the alignment for the East Option, there would be the potential for impacts due to releases of hazardous materials being transported and from hazardous materials used in the routine operation and maintenance of the UPRR. Hazardous materials potentially exist along the railroad currently, but the UPRR Rail Alternative would bring transit vehicles closer to them. Although there is the potential for impacts associated with the adjacent freight line, these impacts would be reduced by the freight lines' adherence to federal hazardous material transport regulations (See Section 5.3.1.2).

5.3.5.1.2 Mitigation

Mitigation measures would be similar to those for the UPRR Rail Alternative Rail ROW Option, described in Section 5.3.1.1. It is presumed that in addition to the CTA, the UPRR would follow its own system-wide hazardous material usage, storage, and disposal plans and procedures. The UPRR would also adhere to federal hazardous material transport regulations (49 CFR Parts 171 to 180) that among other things, specify requirements for the safe transportation of hazardous materials by rail and require the rail carrier to conduct a security and safety risk analysis, develop a security and safety risk plan that includes measure to mitigate risk to population centers, and to select the safest route.

5.3.5.2 Segment UB

Permanent impacts and mitigation measures would be similar to those for Segment UA of the UPRR Rail Alternative East Option, described in Section 5.3.5.1; however, instead of potential impacts from the adjacent operating UPRR, Segment UB would have potential impacts from the adjacent operating NICTD/CSS & SBRR.

5.3.6 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.3.6.1 Segment UA

Construction of Segment UA of the UPRR Rail Alternative East Option would involve approximately 122,900 cubic yards of soil or aggregate excavation. Construction impacts and mitigation would be similar to those for Segment UA of the UPRR Rail Alternative ROW Option, described in Section 5.3.2.1. However, as shown in Table 4-4 and Figures 4-3 and 4-4, the East Option would include three High Concern Sites (ID Numbers 70, 94a and 104) within its permanent envelope compared to none in the ROW Option. These three sites are all LUST sites.

5.3.6.2 Segment UB

Construction impacts and mitigation would be similar to those for Segment UB of the UPRR Rail Alternative ROW Option, described in Section 5.3.2.2.

5.3.7 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

Cumulative impacts would be similar to those under the BRT Alternative, described in Section 5.2.3.

5.3.8 120th Street Yard and Shop

5.3.8.1 Permanent Impacts and Mitigations

Permanent impacts and mitigation measures would be similar to those described for the UPRR Rail ROW Alternative in Section 5.3.4.1.

5.3.8.2 Construction Impacts and Mitigations

Permanent impacts and mitigation measures would be similar to those described for the UPRR ROW Alternative in Section 5.3.4.2.

5.4 Union Pacific Railroad Rail Alternative - West Option

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.4.1.1 Segment UA

Permanent impacts and mitigation measures would be similar to those described for the UPRR Rail Alternative East Option in Section 5.3.5.1.

5.4.1.2 Segment UB

Permanent impacts and mitigation measures would be similar to those described for the UPRR Rail Alternative East Option in Section 5.3.5.2.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.4.2.1 Segment UA

Construction of Segment UA of the UPRR Rail Alternative West Option would involve approximately 129,400 cubic yards of soil or aggregate excavation. Construction impacts and mitigation would be similar to those for Segment UA of the UPRR Rail Alternative ROW Option, described in Section 5.3.2.1. However, as shown in Table 4-4 and Figures 4-2 and 4-4, the West Option would include two High Concern Sites (ID Numbers 51 and 105) within its permanent envelope, compared to none in the ROW Option and three in the East Option. These three sites are all LUST sites.

5.4.2.2 Segment UB

Construction impacts and mitigation would be similar to those for Segment UB of the UPRR Rail Alternative ROW Option, described in Section 5.3.2.2.

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

Cumulative impacts would be similar to those for the BRT Alternative, described in Section 5.2.3.

5.4.4 120th Street Yard and Shop

5.4.4.1 Permanent Impacts and Mitigations

Permanent impacts and mitigation measures would be similar to those described for the UPRR ROW Alternative in Section 5.3.4.1.

5.4.4.2 Construction Impacts and Mitigations

Construction impacts and mitigation measures would be similar to those described for the UPRR ROW Alternative in Section 5.3.4.2.

5.5 Halsted Rail Alternative

5.5.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

5.5.1.1.1 Impacts

Operation of Halsted Rail Alternative, a heavy rail transit line, would have the potential to result in the release of hazardous materials and/or petroleum products into the environment from accidental spills. Spills are most likely to occur during activities such as equipment and grounds maintenance. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, and pesticides.

5.5.1.1.2 Mitigation

During operation of the Halsted Rail Alternative, adherence to applicable federal, state, and local regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures, would minimize the potential for impacts.

5.5.2 Construction Impacts and Mitigations - Halsted Rail Alternative

5.5.2.1 Segment HA

5.5.2.1.1 Impacts

Construction of Segment HA of the Halsted Rail Alternative would involve approximately 83,400 cubic yards of soil or aggregate excavation. Therefore, there would be the potential to encounter hazardous materials, whether from the sites identified in the database review or from the presence of urban fill. In addition, groundwater encountered during construction may contain hazardous materials.

As shown in Table 4-4 and Figure 4-7, there is one High Concern site (ID Number 18a) within the permanent envelope of Segment HA of the Halsted Rail Alternative: an open LUST site.

Construction of Segment HA would include the demolition of existing structures that were likely constructed before 1978 - 1979. Potential issues associated with these structures would be as described for the BRT Alternative in Section 5.2.2.1.

Construction of Segment HA could also result in beneficial impacts through the cleanup and/or removal of contaminated material, as described for the BRT Alternative in Section 5.2.2.1.

Indirect impacts could occur from accidental releases as described for the BRT Alternative in Section 5.2.2.1.

5.5.2.1.2 Mitigation

Proposed mitigation measures would be similar to those described for the BRT Alternative in Section 5.2.2.2.

5.5.2.2 Segment HB

5.5.2.2.1 Impacts

Construction of Segment HB of the Halsted Rail Alternative would involve approximately 57,900 cubic yards of soil or aggregate excavation and demolition of existing structures that were likely constructed before 1978-1979. Therefore, impacts would be similar those described for to Segment HA in Section 5.5.2.1.

As shown in Table 4-4, no High Concern sites are within the permanent envelope of Segment HB of the Halsted Rail Alternative. Potential beneficial impacts and indirect impacts would also be similar to those described for Segment HA in Section 5.5.2.1.

5.5.2.2.2 Mitigation

Permanent impacts and mitigation measures would be similar to those described for the BRT Alternative in Section 5.2.2.2.

5.5.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative

Cumulative impacts under the Halsted Rail Alternative would be similar to those described for the BRT Alternative in Section 5.2.3.

5.5.4 119th Street Yard and Shop

5.5.4.1 Permanent Impacts and Mitigations

Permanent impacts and mitigation measures would be similar to those described for the 120th Street yard and shop in Section 5.3.4.1.

5.5.4.2 Construction Impacts and Mitigations

5.5.4.2.1 Impacts

Construction of the 119th Street yard and shop would involve approximately 129,100 cubic yards of soil or aggregate excavation. Therefore, there would be the potential to encounter hazardous materials, and impacts would be similar to those described for Segment HA in Section 5.5.2.1.

Based on the historic aerials and Sanborn fire insurance maps, industry has been present within the proposed yard permanent envelope since at least 1897. As shown in Table 4-4 and Figure 4-8, six High Concern sites (ID Numbers 141, 144, 152a, 154, NL1, and 152b) are within the permanent envelope of the 119th Street yard and shop.

Of note within this segment are the one CERCLIS site (Ingersoll, ID Number 154) and one CERCLIS-NFRAP site (West Pullman Iron and Metal Co., ID Number 144) within the permanent envelope. As discussed in Section 5.3.2.2, CERCLIS sites typically come with increased risk of the USEPA imposing liability and remediation obligations on PRPs. Any owner can be considered a PRP and be required to pay for cleanup. The Ingersoll site is of special concern given that there are free product and known USEPA enforcement actions at the site (See Section 4.4.3). The NFRAP status at the West Pullman Iron and Metal Co. site means that means that USEPA has completed its assessment of the site and determined that no future action will be taken to list it on the National Priorities List. However, this does not mean that a site is considered clean, and additional caution should be taken before acquiring ownership. In addition to the sites within the permanent envelope of the 119th Street yard and shop, there is also an active CERCLIS site, Dutch Boy (ID Number 159 and 153) adjacent to the south (See Figure 4-1) of the 119th Street yard and shop, which based on available information, has the potential for off-site migration of contamination.

Construction of the 119th Street yard and shop would include the demolition of existing structures that were constructed before 1978 and 1979. Potential issues associated with these structures would be as described for the BRT Alternative in Section 5.2.2.1.

Potential beneficial impacts and indirect impacts would be similar to those described for Segment HA in Section 5.5.2.1.

5.5.4.2.2 Mitigation

Proposed mitigation measures would be similar to those described for the BRT Alternative in Section 5.2.2.2.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

No permanent impacts, construction impacts, or cumulative impacts related to hazardous materials would be expected to be associated with the No Build Alternative. Therefore, there would also be no impacts remaining after mitigation.

6.2 Bus Rapid Transit Alternative

No hazardous material impacts would remain after mitigation.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

No hazardous material impacts would remain after mitigation.

6.3.1 Segment UA

No hazardous material impacts would remain after mitigation.

6.3.2 Segment UB

No hazardous material impacts would remain after mitigation.

6.3.3 120th Street Yard and Shop

No hazardous material impacts would remain after mitigation.

6.4 Union Pacific Railroad Rail Alternative - East Option

No hazardous material impacts would remain after mitigation.

6.4.1 Segment UA

No hazardous material impacts would remain after mitigation.

6.4.2 Segment UB

No hazardous material impacts would remain after mitigation.

6.4.3 120th Street Yard and Shop

No hazardous material impacts would remain after mitigation.

6.5 Union Pacific Railroad Rail Alternative - West Option

No hazardous material impacts would remain after mitigation.

6.5.1 Segment UA

No hazardous material impacts would remain after mitigation.

6.5.2 Segment UB

No hazardous material impacts would remain after mitigation.

6.5.3 120th Street Yard and Shop

No hazardous material impacts would remain after mitigation.

6.6 Halsted Rail Alternative

No hazardous material impacts would remain after mitigation.

6.6.1 Segment HA

No hazardous material impacts would remain after mitigation.

6.6.2 Segment HB

No hazardous material impacts would remain after mitigation.

6.6.3 119th Street Yard and Shop

No hazardous material impacts would remain after mitigation.

Section 7
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Appendix A
Figures of High Concern Sites Within Permanent Envelope

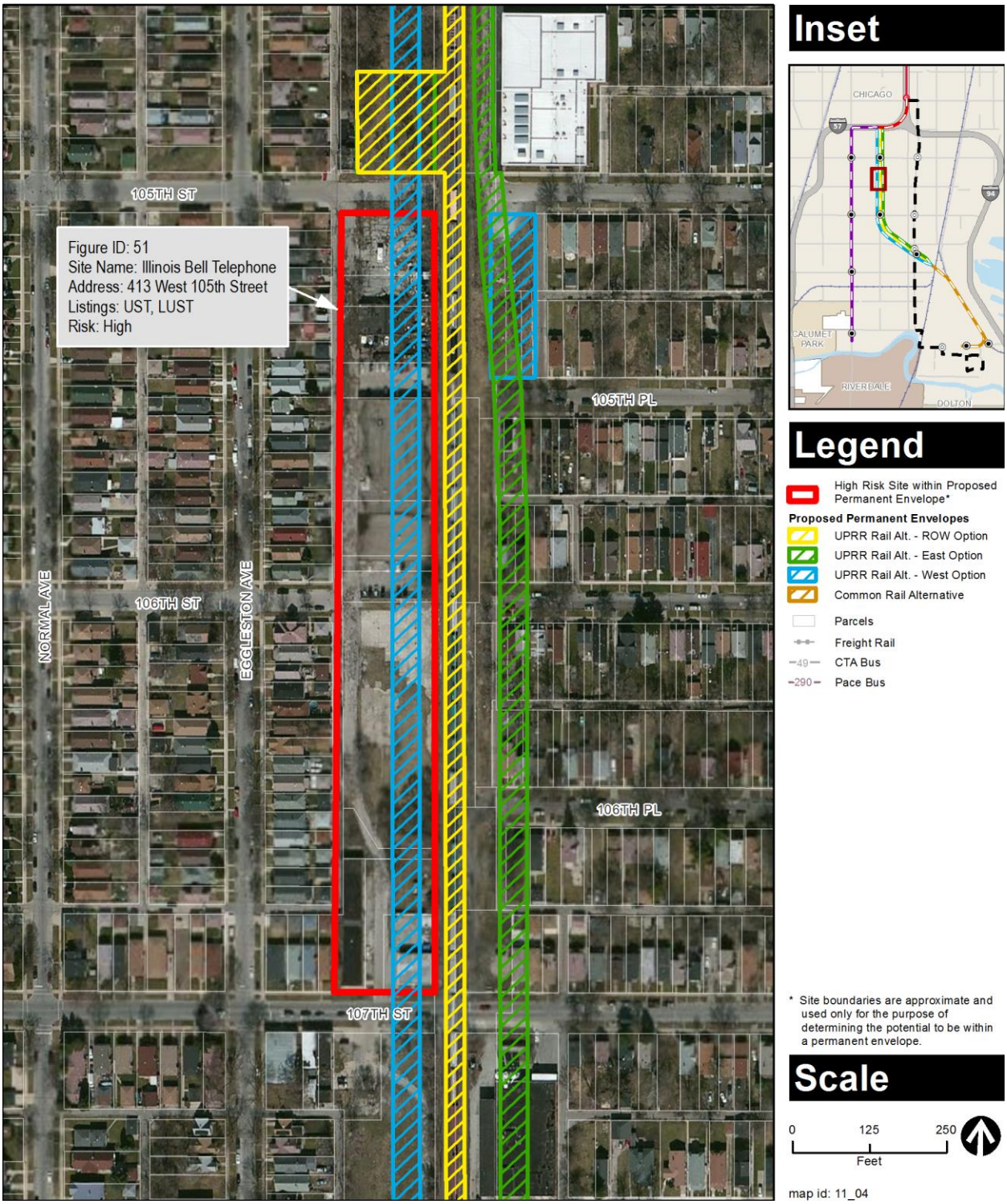

Figure A-1: Union Pacific Railroad Rail Alternative, High Concern Site 51

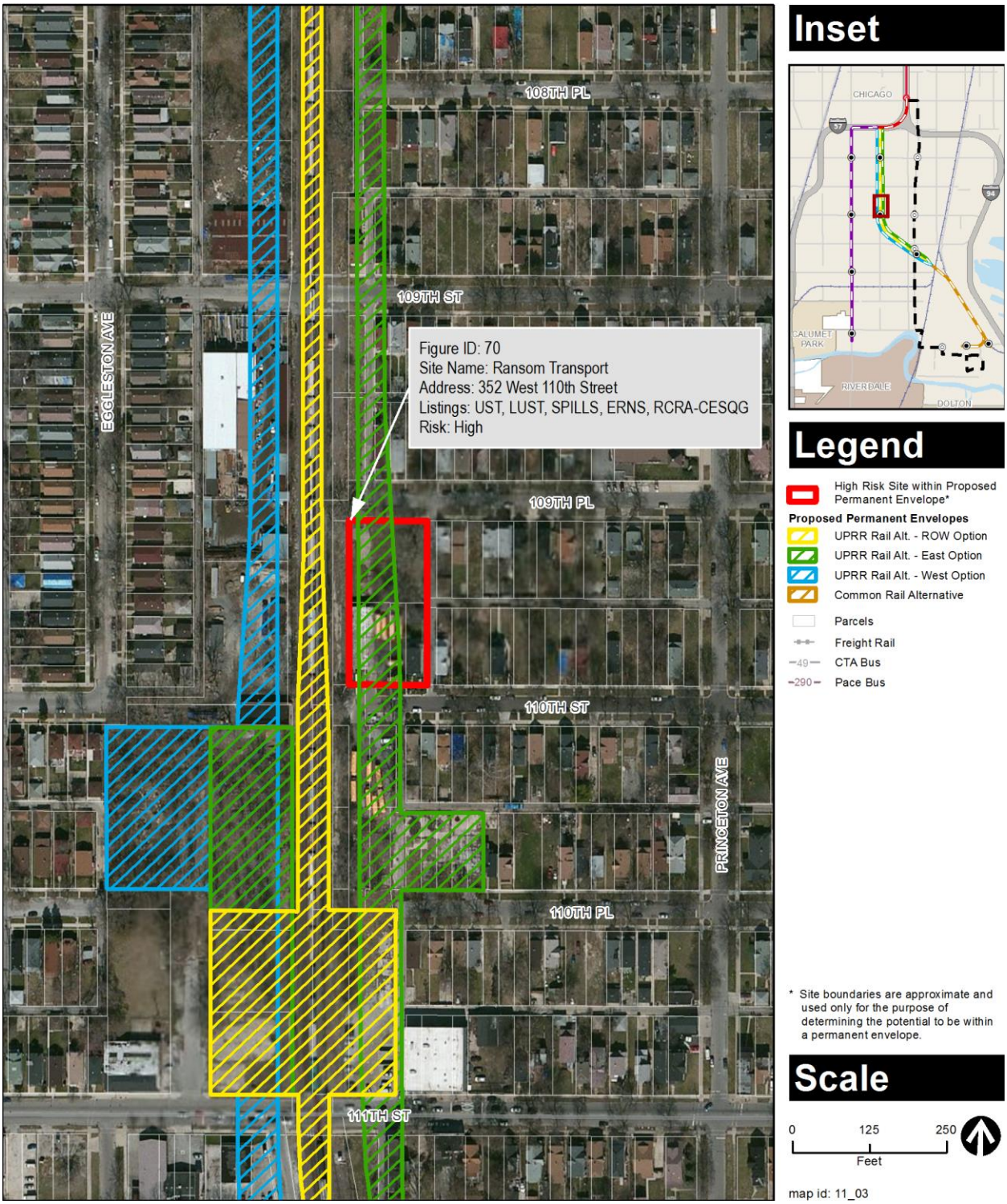

Figure A-2: Union Pacific Railroad Rail Alternative, High Concern Site 70

Figure A-3: Union Pacific Railroad Rail Alternative, High Concern Sites 94a, 104, and 105

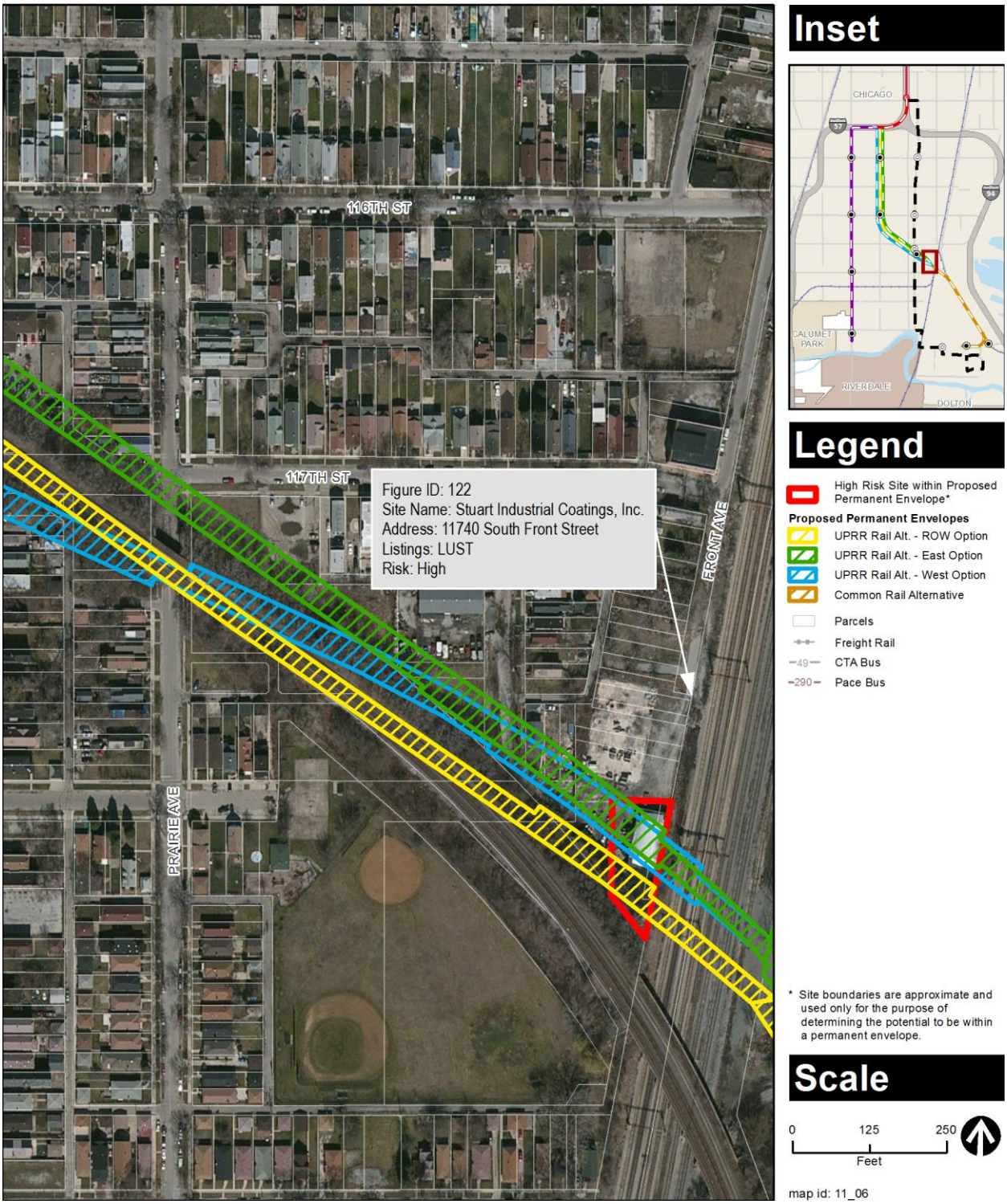

Figure A-4: Union Pacific Railroad Rail Alternative, High Concern Site 122

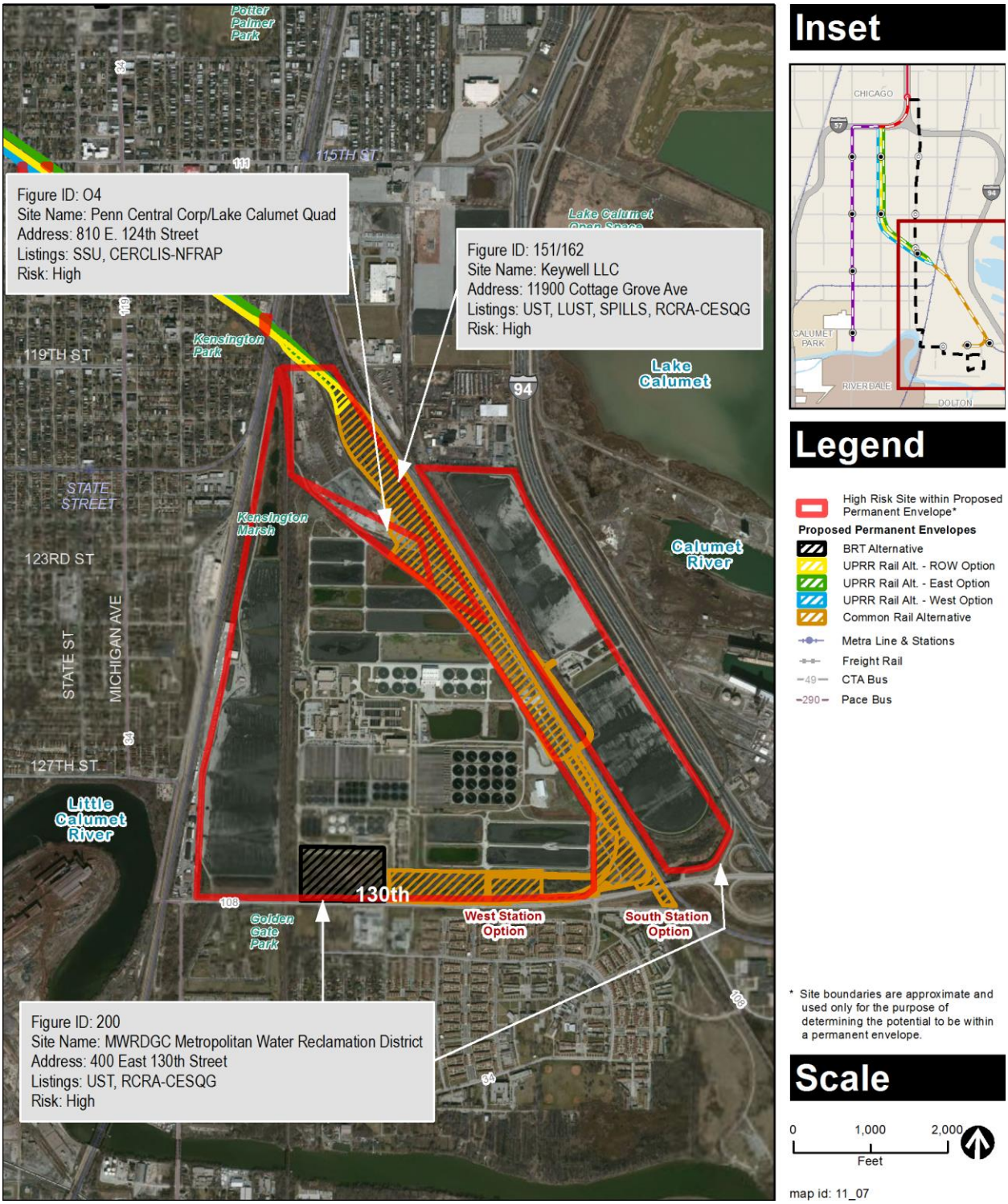

Figure A-5: Bus Rapid Transit and Union Pacific Railroad Rail Alternatives, High Concern Sites 151/162, 200, and O4

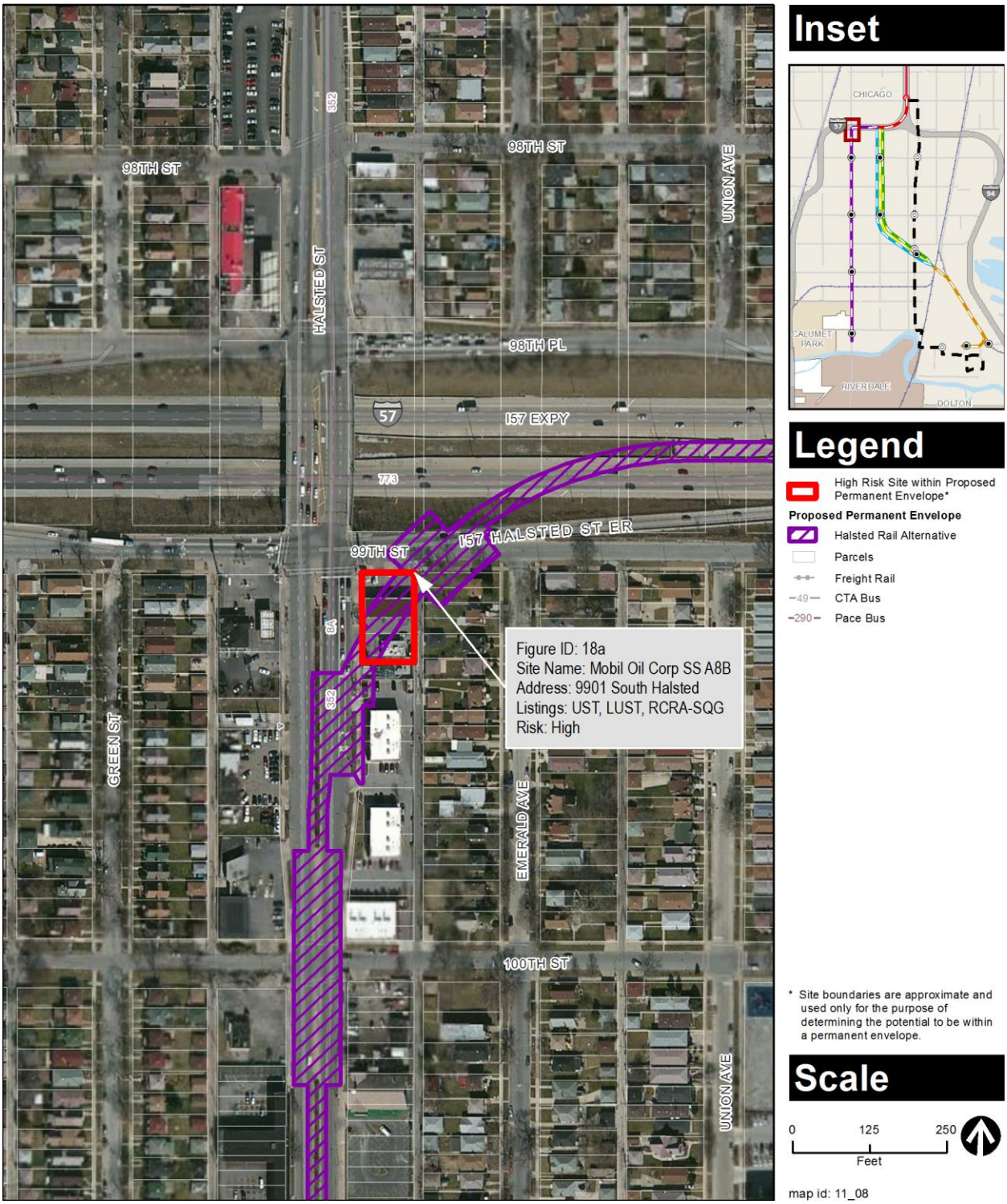

Figure A-6: Halsted Rail Alternative, High Concern Site 18a

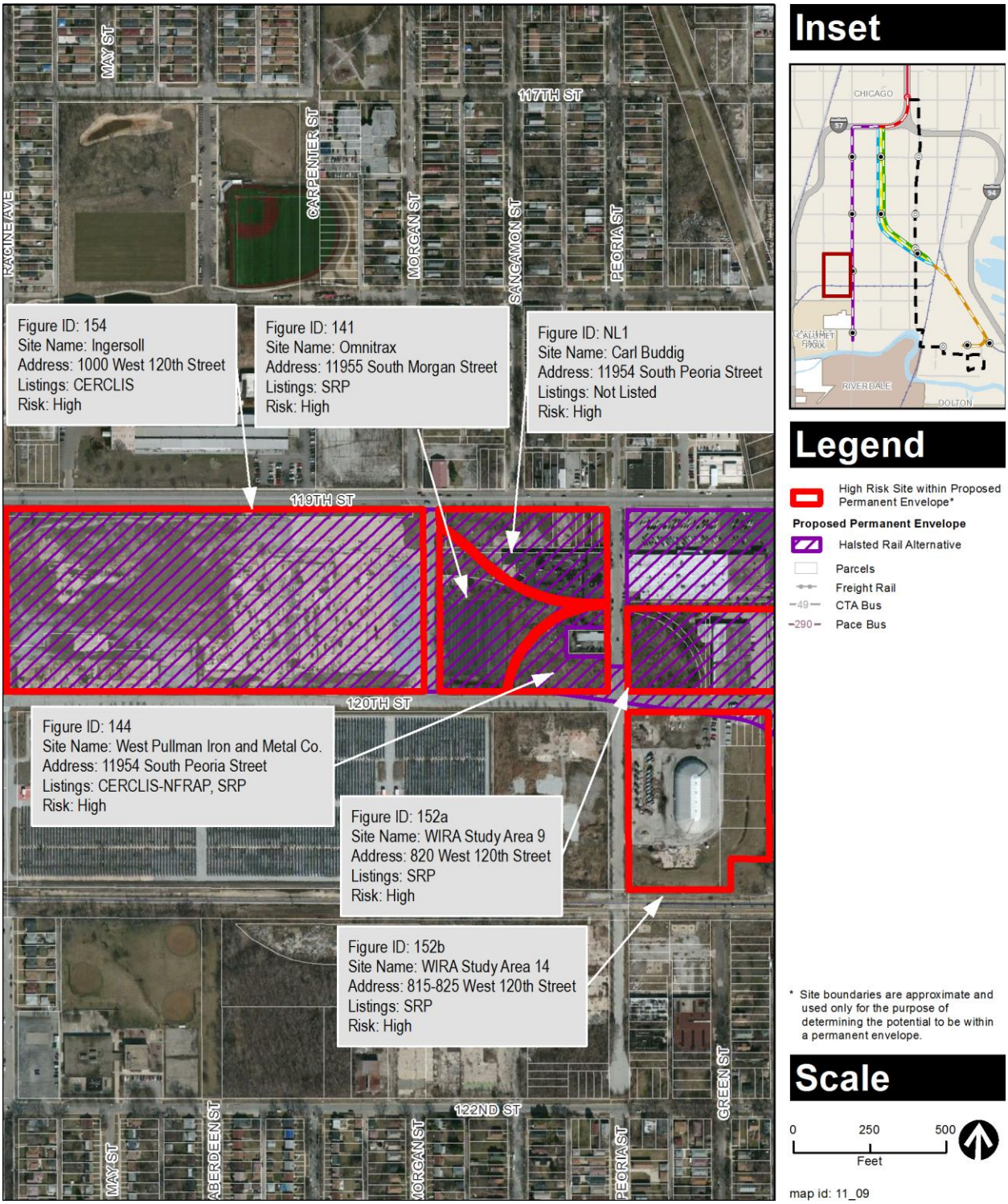

Figure A-7: Halsted Rail Alternative, High Concern Sites 154, 141, NL1, 144, 152a, and 152b

Appendix B
EDR Database Search Report

90786 CTC RLE Hazardous Materials
Cook, IL

Inquiry Number: 3385614.1s
August 10, 2012

EDR DataMap™ Environmental Atlas™

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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FOCUS MAP SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	8
CERC-NFRAP	5
CORRACTS	4
RCRA-TSDF	1
RCRA-LQG	3
RCRA-SQG	71
RCRA-CESQG	29
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	17
US BROWNFIELDS	1
STATE AND LOCAL RECORDS	
IL SSU	3
IL SWF/LF	1
IL NIPC	0
IL LUST	73
IL UST	141
WI MANIFEST	1
NY MANIFEST	1
IL SPILLS	79
IL ENG CONTROLS	6
IL INST CONTROL	9
IL SRP	26
IL DRYCLEANERS	5
IL BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

COOK, IL
CHICAGO, IL 60628

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL RECORDS

Proposed NPL..... Proposed National Priority List Sites
Delisted NPL..... National Priority List Deletions
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

STATE AND LOCAL RECORDS

IL NIPC..... Solid Waste Landfill Inventory
IL BROWNFIELDS..... Municipal Brownfields Redevelopment Grant Program Project Descriptions

EDR PROPRIETARY RECORDS

Manufactured Gas Plants..... EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

The Map ID column refers to the Map ID-Focus Map(s) of the listed site.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 12/27/2011 has revealed that there are 8

EXECUTIVE SUMMARY

CERCLIS sites within the searched area.

Site	Address	Map ID
109TH PLACE TEAR GAS	SG WEST 109TH PLACE	67-7
SHERWIN WILLIAMS CO	***11541 S CHAMPLAIN AVE***	***112-7,8***
LAKE CALUMET SMELTING	11901 S. CHAMPLAIN AVE.	135-11,12
INGERSOLL	1000 WEST 120TH STREET	154-10
INTERNATIONAL HARVESTER CO W P	***1015 W 120TH ST***	***155-10***
DUTCH BOY	WEST PULLMAN 12042 SOUT	159-10
SOUTH GREEN PLATING SHOP	12130 SOUTH GREEN ST	164-10
PULLMAN FACTORY	130TH ST & INDIANA	202-15

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 12/28/2011 has revealed that there are 5 CERC-NFRAP sites within the searched area.

Site	Address	Map ID
SHERWIN WILLIAMS CO	***10909 S COTTAGE GROVE A***	***66-7***
INLAND METAL REFINING COMPANY	***651 EAST 119TH STREET***	***129-11,12***
WEST PULLMAN IRON AND METAL CO	11954 S PEORIA AVE	144-10
CALUMET NU-EARTH DIST CENTER	NORTH 130TH ST & DOTY A	193-12,16
CIZCAR ET AL/VACANT LOT	1137-1141 VERMONT AVE	195-14

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 08/19/2011 has revealed that there are 4 CORRACTS sites within the searched area.

Site	Address	Map ID
SHERWIN WILLIAMS CO	***10909 S COTTAGE GROVE A***	***66-7***
SHERWIN WILLIAMS CO	***11541 S CHAMPLAIN AVE***	***112-7,8***
INLAND METAL REFINING COMPANY	***651 EAST 119TH STREET***	***129-11,12***
INTERNATIONAL HARVESTER CO W P	***1015 W 120TH ST***	***155-10***

EXECUTIVE SUMMARY

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 03/15/2012 has revealed that there is 1 RCRA-TSDF site within the searched area.

Site	Address	Map ID
SHERWIN WILLIAMS CO	***11541 S CHAMPLAIN AVE***	***112-7,8***

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/15/2012 has revealed that there are 3 RCRA-LQG sites within the searched area.

Site	Address	Map ID
CHICAGO DEPT OF ENV (SPILL)	11100 S STEWART AVE (SP	81-6
SHERWIN WILLIAMS CO	***11541 S CHAMPLAIN AVE***	***112-7,8***
QUALA SERVICES LLC	803 E 120TH ST	147-12

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/15/2012 has revealed that there are 71 RCRA-SQG sites within the searched area.

Site	Address	Map ID
GILLESPIE SCH	9301 S STATE	2-2
CITY OF CHICAGO (ABANDONMENT)	9431 S VERNON	3-2
AMOCO 5921	400 E 95TH ST AND KING	5-2
AMOCO 15459	36 W 95TH AND LAFAYETTE	9-2
EVERS	9811 S LOWE	14-1,3
MOBIL OIL CORP SS A8B	9901 S HALSTED	18-3
BHAGATS AMOCO	9900 S HALSTED	18-3
SWEIS RAY TOWN AND COUNTRY MIN	10007 S MICHIGAN AVE	20-4
JOY AUTO REPAIR	10001 S HALSTED	21-3
BELL BROS 29 MIN CLEANERS INC	10000 S HALSTED ST	21-3
FERNWOOD	10041 S UNION	22-3
BENNETT	10115 S PRAIRIE AVE	23-4
WALGREENS NO 1069	319 E 103RD ST	31-4
WALGREENS STORE #5123	10300 S MICHIGAN	32-4

EXECUTIVE SUMMARY

Site	Address	Map ID
F & R QUALITY CLEANERS	201 W. 103RD ST.	34-4
HARDY CORP	***711 W 103RD ST***	***36-3***
DELITE CLEANERS	816 W 103RD ST	37-3
MCDONNELL CLEANERS	932 W 103RD ST	38-3
AMOCO 8614	10301 S HALSTED ST	39-3
GARVEY	10309 S MORGAN	40-3
AMERICAN IDEAL	10351 S MICHIGAN AVE	42-4
MICHIGAN AVENUE COLLISION	10554 S MICHIGAN	52-4
WALGREEN N0 2300	10620 S HALSTED ST	57-3
BETTY BRITE CLEANERS	10630 S HALSTED	57-3
GTE SERVICE CTR INC	10635 S WENTWORTH	58-4
RAYS CLEANERS	10738 S MICHIGAN AVE	60-4
VAN VLISSINGEN PETER SCHOOL	***137 W 108TH PL***	***63-4,7***
DUNNE	10845 S UNION	64-3,6
WALGREENS 2210	11040 S MICHIGAN AVE	72-7
SOUTH SIDE PREP ACADEMY	250 E 111TH ST	74-7
STAR CLEANERS	149 W 111TH ST	80-7
PENTECOSTAL TEMPLE CHURCH OF G	415 THRU 419 W 111TH ST	81-6
SEW CLEAN	519 W 111TH ST	82-6
JOHNS CLEANERS	11129 S HALSTED	84-6
LONGS GARDEN CENTER INC	***11226 S HALSTED***	***87-6***
KLEEN TOWNE CLEANERS	***11249 S HALSTED***	***88-6***
BRENAN SCHOOL	11411 EGGLESTON	95-6
GOODYEAR AUTO SERVICE CTR	11442 S MICHIGAN AVE	98-7
QUALITY MUFFLER	11453 S HALSTED	99-6
ILLINOIS CENTRAL RAILROAD	115TH & COTTAGE GROVE	101-7
TRIANGLE TRANSMISSION	***35 W 115TH ST***	***104-7***
CHICAGO HOSUING AUTHORITY	833 W 115TH ST	107-6
GONNELLA BAKING CO	318 E KENSINGTON	116-7
ROSELAND AUTO BODY	821 W 116TH ST	119-6
STUART INDUSTRIAL COATINGS INC	11740 S FRONT ST	125-7
SCHNEIDER TANK LINES	11861 SOUTH COTTAGE GRO	143-11
CLEAN HARBORS ENV SERVICES	11861 COTTAGE GROVE-BLD	143-11
BULKMATIC TRANSPORT CO	12000 S DOTY AVE	146-12
NORTRU INC TRANSPORTATION GROU	801 E 120TH ST	147-12
COMED-MANHOLE	120TH ST & PRINCETON	148-11
HARBOR TOOL MFG INC	12140 S PEORIA AVE	165-10
MODERN STEEL	1010 W 122RD ST	166-10
BIG MELS CLEANERS	12256 S HALSTED	168-10
METRA	12301 S INDIANA AVE	170-11
GOMPERS SCH	12302 S STATE	171-11
AAMCO	12307 S HALSTED	172-10
METCALFE SCHOOL	12339 S NORMAL	173-10
NANSEN SCHOOL	12607 S UNION	179-10
COM ED	48 E 127TH ST	183-11
NACME STEEL PROCESSING LLC	429 W 127TH ST	186-10
CEDAR PARK CEMETERY	***12540 S HALSTED ST***	***188-10***
METAL MANAGEMENT MIDWEST INC	12701 S DOTY AVE-B	189-12
YOUNGS AUTO SUPPLY INC	12853 S HALSTED	194-10,14
CHICAGO, CITY OF	1100 E 130TH PL	196-16
MOBILE STORAGE GROUP	1465 E 130TH ST	197-16
LAND & LAKES TRANSFER STATION	1258-1300 E 130TH ST	199-16
SMITH TIRE SERVICE	13004 S INDIANA	202-15
CARVER MILITARY ACADEMY	13100 S DOTY AVE	207-16
DUBOIS	330 E 133RD ST	209-15
CARVER PRIMARY	901 E 133RD PL	210-16

EXECUTIVE SUMMARY

Site	Address	Map ID
CARVER MIDDLE	801 E 133RD PL	211-16

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/15/2012 has revealed that there are 29 RCRA-CESQG sites within the searched area.

Site	Address	Map ID
TURNER DREW LANGUAGE ACADEMY	9300 S PRINCETON AVE	1-2
HARLAN COMMUNITY ACADEMY HS	9652 S MICHIGAN AVE	12-2
SHEDD BRANCH SCHOOL	200 E 99TH ST	17-4
ABA NORGETOWN	437 E 103RD ST	26-4
HUGHES LANGSTON SCHOOL	226 W 104TH ST	44-4
KOHN SCHOOL	10414 S STATE ST	46-4
MOUNT VERNON ELEMENTARY	10540 S MORGAN ST	53-3
COM ED	10847 S MICHIGAN AVE	62-4,7
ROSELAND AUTO SALES INC	271 E 110TH ST	69-7
RANSOM TRANSPORT	352 W 110TH ST	70-6,7
PALMER PARK	201 E 111TH ST	75-7
FENGER SCH	11220 S WALLACE	86-6
CURTIS ELEMENTARY	32 E 115TH ST	102-7
BETTY BRITE CLEANERS	11518 S MICHIGAN AVE	111-7
PEP BOYS #891	11550 SO HALSTED	114-6
SONGHAI LEARNING INSTITUTE	11725 S PERRY AVE	123-7
AMERICAN CLYBOURN FINISHING CO	11730 S FRONT ST	125-7
US GEAR CORP/HEAT TREAT CORP	1020-1120 W 119TH ST	137-10
WEST PULLMAN SCHOOL	11941 S PARNELL AVE	142-10
KEYWELL LLC	11900 COTTAGE GROVE AVE	151-11
EXELON SOLAR PLANT	1201 W 120TH ST	156-10
PRAXAIR DISTRIBUTION INC	12054 SOUTHWEST DOTY AV	157-12
OWENS JESSE COMMUNITY ACADEMY	12450 S STATE ST	176-11
WALGREENS #0186	12635 S HALSTED	182-10
AIRGAS SPECIALTY GASES	12722 S WENTWORTH AVE	187-11
MWRDGC METROPOLITAN WATER RECL	***400 E 130TH ST***	***200-15***
CARVER PARK	939 E 132ND ST	205-16
ALTGELD GARDENS	977 E 132ND STREET	205-16
WHEATLEY PHYLLIS CENTER	902 E 133RD PL	210-16

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 04/02/2012 has revealed that there are 17 ERNS sites within the searched area.

EXECUTIVE SUMMARY

Site	Address	Map ID
Not reported	GLISBEE SCHOOL, 9301 S.	2-2
Not reported	10135 SOUTH YALE ST	25-4
Not reported	240 EAST 106TH ST	54-4
Not reported	240 EAST 106 TH STREET	54-4
Not reported	CALUMET YARD 204 EAST 1	55-4
Not reported	1040 WEST 106TH ST	56-3
Not reported	352 WEST 110 ST	70-6,7
Not reported	11255 S EGGLESTON ST	89-6
Not reported	803 EAST 120TH ST.	147-12
Not reported	803 EAST 120TH ST.	147-12
Not reported	12000 SOUTH EMERALD	150-10
Not reported	12101 S. DOTY	161-12
Not reported	12101 SOUTH DOTY AVE DO	161-12
Not reported	25 EAST 126TH STREET	181-11
Not reported	633 EAST 130TH ST.	203-15,16
Not reported	941 E 132ND STREET	205-16
Not reported	13201 SOUTH ELLIS	206-16

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/27/2011 has revealed that there is 1 US BROWNFIELDS site within the searched area.

Site	Address	Map ID
FORMER AMFORGE FACILITY	1250 W. 119TH STREET	139-10

STATE AND LOCAL RECORDS

IL SSU: The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

A review of the IL SSU list, as provided by EDR, and dated 07/10/2012 has revealed that there are 3 IL SSU sites within the searched area.

Site	Address	Map ID
U.S. SCRAP	391 EAST KENSINGTON	115-7
INLAND METAL REFINING COMPANY	***651 EAST 119TH STREET***	***129-11,12***
DUTCH BOY PAINT	12042 SOUTH PEORIA	159-10

EXECUTIVE SUMMARY

IL SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Illinois Environmental Protection Agency's Available Disposal for Solid Waste in Illinois--Solid Waste Landfills Subject to State Surcharge list.

A review of the IL SWF/LF list, as provided by EDR, and dated 12/31/2010 has revealed that there is 1 IL SWF/LF site within the searched area.

Site	Address	Map ID
US SCRAP	391 E KENSINGTON	115-7

IL LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Illinois Environmental Protection Agency's LUST Incident Report.

A review of the IL LUST list, as provided by EDR, and dated 03/22/2012 has revealed that there are 73 IL LUST sites within the searched area.

Site	Address	Map ID
QUALITY CAR WASH NFA/NFR Letter: 04/08/1997	9417 SOUTH STATE ST.	4-2
BP	***400 EAST 95TH STREET***	***5-2***
SHELL OIL CO. NFA/NFR Letter: 05/27/2004	9500 SOUTH MARTIN LUTHE	5-2
S.W.C. 95TH & MLK LLC	347 EAST 95TH STREET	6-2
MEDLEY'S MOVING & STORAGE NFA/NFR Letter: 06/23/2011	251 EAST 95TH ST.	7-2
MEDLEY'S MOVING & STORAGE NFA/NFR Letter: 11/15/2000	251 EAST 95TH ST.-B	7-2
SHELL OIL CO.	4 EAST 95TH ST.	8-2
AMOCO SERVICE STATION #15459. NFA/NFR Letter: 05/07/2003	36 WEST 95TH ST.	9-2
ABBOTT	49 EAST 95TH ST.	10-2
ABBOTT	45 EAST 95TH ST.	10-2
EQUILON ENTERPRISES LLC NFA/NFR Letter: 09/14/2005	9811 HALSTED	15-1,3
SECRETARY OF STATE - DRIVER FA NFA/NFR Letter: 11/17/1995	9901 DR MARTIN LUTHER K	16-4
BP	***9900 SOUTH HALSTED STRE***	***18-3***
MOBIL OIL CO.	05A8B MOBILE ST./9901 S	18-3
AMOCO OIL CO. #15525	99TH & HALSTED	18-3
TOWN & COUNTRY GAS MART NFA/NFR Letter: 01/27/2009	10007 SOUTH MICHIGAN AV	20-4
HESTER, FRANNY	10101-03 SOUTH HALSTED	24-3
KADALIMATTON, SIBI	446 EAST 103RD ST.	26-4
VACANT JIFFY LUBE STORE 208	***350 EAST 103RD STREET***	***29-4***
AGUILAR, ABEL	415 EAST 103RD ST.	30-4
AMOCO OIL CO. #15991	10301 SOUTH STATE ST.	33-4
ONE HOUR MARTENIZING NFA/NFR Letter: 02/27/1991 NFA/NFR Letter: 02/27/1991	201 WEST 103RD ST.	34-4

EXECUTIVE SUMMARY

Site	Address	Map ID
VACANT LOT	***201-217 EAST 23RD STREE***	***34-4***
NFA/NFR Letter: 11/17/2004		
HARDY CORP	***711 W 103RD ST***	***36-3***
MUSTAFA, KHADIM	10301 SOUTH HALSTED	39-3
NFA/NFR Letter: 11/21/2008		
NFA/NFR Letter: 07/30/2008		
CHICAGO, CITY OF	351 WEST 104TH ST.	45-3
NFA/NFR Letter: 09/19/1995		
NEIGHBORHOOD HOUSING SERVICES	10426 SOUTH MICHIGAN AV	47-4
NFA/NFR Letter: 06/09/2010		
ILLINOIS BELL TELEPHONE	413 WEST 105TH STREET	51-3
NFA/NFR Letter: 03/21/2005		
C & O AUTO REBUILDERS	10554 SOUTH MICHIGAN AV	52-4
NFA/NFR Letter: 03/31/2008		
SHELL OIL CO.	10655 SOUTH HALSTED	59-3
NFA/NFR Letter: 09/07/1999		
WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.	70-6,7
SOUTHSIDE COLLEGE PREPATORY AC	***250 EAST 111TH ST.***	***74-7***
NFA/NFR Letter: 06/29/2000		
YMCA	4 EAST 111TH ST.	76-7
NFA/NFR Letter: 02/24/2009		
ROSELAND MARATHON	***2 WEST 111TH STREET***	***76-7***
ROSELAND MEDICAL CENTER	100-136 WEST 111TH STRE	78-7
NFA/NFR Letter: 01/25/2008		
PENTICOSTAL TEMPLE	419 WEST 111TH ST.	81-6
34 WARD OFFICE/CITY OF CHICAGO	***507 WEST 111TH STREET***	***82-6***
NFA/NFR Letter: 08/24/2004		
LONGS GARDEN CENTER INC	***11226 S HALSTED***	***87-6***
NFA/NFR Letter: 02/19/1999		
PULLMAN CO	***65 WEST 113TH PLACE***	***93-7***
NFA/NFR Letter: 05/04/2004		
MARQUETTE BANK	135-39 WEST 114TH ST.	94-7
TADROS, MUSA	11442 SOUTH MICHIGAN AV	98-7
NFA/NFR Letter: 01/27/1998		
FIRST COOK COMM. BANK	11453 SOUTH HALSTED ST.	99-6
NFA/NFR Letter: 08/18/1992		
FRIESON, PHYLLIS	342 EAST 115TH STREET	100-7
NFA/NFR Letter: 05/29/2007		
ABANDONED GAS STATION	***2 WEST 115TH STREET***	***103-7***
TRIANGLE TRANSMISSION	***35 W 115TH ST***	***104-7***
CHICAGO, CITY OF	11500 SOUTH PERRY	105-7
COMMUNITY HIGH SCHOOL DIST. #2	731 WEST 115TH ST.	106-6
NFA/NFR Letter: 10/18/1995		
CHICAGO HOUSING AUTHORITY	***833 WEST 115TH STREET***	***107-6***
NFA/NFR Letter: 11/01/2010		
AMOCO OIL	***11500 SOUTH HALSTED STR***	***108-6***
NFA/NFR Letter: 09/05/2003		
MOBIL CARWASH	***11501 SOUTH HALSTED STR***	***108-6***
NFA/NFR Letter: 11/15/2002		

EXECUTIVE SUMMARY

Site	Address	Map ID
E.J. BROWNLEE TRANSPORTATION NFA/NFR Letter: 04/01/1999	1001 WEST 115TH ST.	109-6
KENSINGTON SERV STATION	162 E KENSINGTON	117-7
CLARK OIL & REFINING NFA/NFR Letter: 01/09/1995	11555 SOUTH MICHIGAN AV	118-7
MICKEY'S AUTO SERVICE CENTER	***11656 SOUTH HALSTED AVE***	***121-6***
STUARTS CHEMICAL & PAINT	11740 FRONT ST.	122-7
HUFF & HUFF INC.	651 EAST 179TH ST.	131-12
GREATER CANAAN BAPTIST CHURCH NFA/NFR Letter: 12/12/2007	38 WEST 119TH STREET	132-11
CHICAGO, CITY OF	11900 SOUTH STATE ST.	133-11
BIG SAM'S PROPERTIES	333 WEST 119TH STREET	134-10,11
CHICAGO, CITY OF - DEPARTMENT	1220 WEST 119TH STREET	138-10
BULKOA INC NFA/NFR Letter: 04/08/2003	11861 S COTTAGE GROVE A	143-11
SANDHU PETROLEUM, INC.	11957 SOUTH HALSTED STR	145-10
PSC CONTAINER SERVICES, LLC	803 EAST 120TH ST.	147-12
KEYWELL CO. NFA/NFR Letter: 01/24/1996	***11900 SOUTH COTTAGE GRO***	***151-11***
INTERNATIONAL HARVESTER NFA/NFR Letter: 10/14/2010 NFA/NFR Letter: 10/14/2010	***1015 WEST 120TH STREET***	***155-10***
CHICAGO MALLEABLE CASTINGS	***1201 WEST 120TH STREET***	***156-10***
HANCOCK HOUSE LLC	***12045 SOUTH EMERALD AVE***	***160-10***
BANK OF COMMERCE AND IND NFA/NFR Letter: 07/12/1991	12300 S MICHIGAN AVE	169-11
RED'S CHECKPOINT NFA/NFR Letter: 07/11/2002	12535 SOUTH HALSTED ST.	178-10
PROGRESSIVE BAPTIST CHURCH	26 EAST 127TH ST.	184-11
CEDAR PARK CEMETERY	***12540 S HALSTED ST***	***188-10***
CHRIST CHURCH	12844 SOUTH HALSTED ST.	194-14
CHICAGO HOUSING AUTHORITY NFA/NFR Letter: 09/10/2007	***940 EAST 132ND STREET***	***205-16***

IL UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Illinois State Fire Marshal's STC Facility List.

A review of the IL UST list, as provided by EDR, and dated 05/01/2012 has revealed that there are 141 IL UST sites within the searched area.

Site	Address	Map ID
CITGO SUPER WASH & WAX	9417 S. STATE STREET	4-2
BP	***400 EAST 95TH STREET***	***5-2***
SHELL STATION 1545-28	9500 S MARTIN LUTHER KI	5-2
VACANT LAND	333 E. 95TH STREET	6-2
MEDLEY MOVING & STORAGE, INC.	251 E 95TH ST	7-2
MOBIL GAS & FOOD MART	4 E. 95TH STREET	8-2
SS#15459 FAC#10443	36 W. 95TH ST.	9-2

EXECUTIVE SUMMARY

Site	Address	Map ID
ATLANTIC RICHFIELD CO	1 E 95TH ST	9-2
ABBOTT PARK FIELDHOUSE	49 E 95TH ST	10-2
CHICAGO STATE UNIVERSITY	9501 S DR KINGS DR	11-2
ANCHOR PRUDENTIAL HMO	9718 SOUTH HALSTED	13-1
SHELL	9802 S. HALSTED	15-1,3
CLARK GAS	9811 S. HALSTED	15-1,3
DRIVER SER FACILITY	9901 S MARTIN LUTHER KI	16-4
MOBIL #10769	9901 SOUTH HALSTEAD STR	18-3
BP	***9900 SOUTH HALSTED STRE***	***18-3***
#013611	9948 S HALSTED	19-3
O.S. CORPORATION D/B/A CITGO	10007 S. MICHIGAN AVENU	20-4
JOY AUTO SERVICE	10001 SOUTH HALSTED STR	21-3
FERNWOOD TOWING & TUNE-UPS	10101-10103 S ASHLAND	24-3
R & R MARATHON	446 E. 103RD STREET	26-4
METROPOLITAN FAMILY SERVICES	235E 103RD ST	27-4
#014816	214 E 103RD ST	27-4
VACANT JIFFY LUBE STORE 208	***350 EAST 103RD STREET***	***29-4***
VACANT BUILDING	415 E 103RD AVE THIRD P	30-4
G&J AUTOMOTIVE	122 E 103RD ST	32-4
E-Z GO #077	10301 S MICHIGAN AVE	32-4
SHELL STATION 1545-68	1 W 103RD ST STATE	33-4
MARATHON GAS STATION & MINI-MA	10301 S STATE ST	33-4
AMOCO SS #15991 FACILITY#11758	103RD & STATE 18599	34-4
CITGO	210 W. 103RD STREET	34-4
VACANT LOT	***201-217 EAST 23RD STREE***	***34-4***
MCCORMICK PLACE VACANT LOT	201-217 E. CERMAK RD.	34-4
CONSTRUCTION SITE	201-231 W. 87TH STREET	34-4
HARDY CORP	711 W 103RD ST	36-3
MARATHON GAS AND FOOD	10301 S. HALSTED STREET	39-3
AMERICAN IDEAL CLEANING CO., I	10351 S. MICHIGAN AVE.	42-4
VACANT PROPERTY	10400-10420 S. MICHIGAN	43-4
CHICAGO FIRE DEPARTMENT ENGINE	330 WEST 104TH STREET	45-3
ROSELAND PUMPING STATION	351 W 104TH ST	45-3
VACANT PROPERTY	10426 S. MICHIGAN AVENU	47-4
FERNWOOD PLAYGROUND PARK	10436 S WALLACE	49-3
OUR #52-9652-105	NWC HALSTED & 105TH ST	50-3
IL BELL TELEPHONE CO	413 W 105TH	51-3
AUTO REPAIR SHOP	10554 S. MICHIGAN AVENU	52-4
GT&T SERVICE CENTER INC	10635 S WENTWORTH AVE	58-4
CITGO GAS & MINI MART	10655 S HALSTED ST	59-3
VACANT RESIDENTIAL BUILDING	226-248 W 107TH PLACE	61-4
VAN VLISSINGEN PETER SCHOOL	***137 W 108TH PL***	***63-4,7***
VACANT APARTMENT BUILDING	10834 S PERRY AVE	65-4,7
ROSELAND AUTO SALES CO	27 E 110TH ST	68-7
RANSOM TRANSPORT BUS GARAGE	352 W 110TH ST	70-6,7
PULLMAN BRANCH LIBRARY	11011 S INDIANA	71-7
MUFFLER & BRAKE MAN, INC.	11038 SOUTH HALSTED	73-6
MUFFLER & BRAKE MAN CAR CARE C	11048 S HALSTED ST	73-6
SOUTHSIDE COLLEGE PREPATORY AC	***250 EAST 111TH ST.***	***74-7***
ROSELAND MARATHON	***2 WEST 111TH STREET***	***76-7***
PHILLIPS 66	11100 S. STATE STREET	76-7
ABANDONED SERVICE STATION	68 W 111TH ST	77-7
ANGELICA HEALTHCARE SERVGROUP	100 - 140 W. 111TH STRE	78-7
ROSELAND COMMUNITY HOSPITAL	45 WEST 111TH STREET	79-7
34 WARD OFFICE/CITY OF CHICAGO	***507 WEST 111TH STREET***	***82-6***
GJK PETROLEUM, INC.	734 W. 111TH STREET	83-6

EXECUTIVE SUMMARY

Site	Address	Map ID
KANG WON H	11201-227 S MICHIGAN AV	85-7
LONG-GARDEN-CENTER INC	11226 S HALSTED	87-6
DEVOTION UNISEX BEAUTY SALON	11300 S HALSTED ST	90-6
VACANT BULDING	11321 S WENTWORTH AVENU	91-7
WHITMAL OIL SER INC	11328 S HALSTED	92-6
PULLMAN CO	***65 WEST 113TH PLACE***	***93-7***
VACANT BUILDING	133-37 W 114TH ST THRID	94-7
MCDONALD'S CORP.	11421 S. HALSTED STREET	96-6
TORINO GARAGE	11439 S COTTAGE GROVE	97-7
GOODYEAR TIRE & RUBBER	11442 S MICHIGAN AVE	98-7
FORMER QUALITY MUFFLER SHOP	11453 S HALSTED ST	99-6
USED APPLLIANCE STORE	342-44 E. 115TH STREET	100-7
ILLINOIS CENTRAL RAILROAD	11500 S COTTAGE GROVE	101-7
SHERWIN WILLIAMS CHICAGO FACIL	549 E. 115TH ST.	101-7
CURTIS SCHOOL	32 E 115TH ST	102-7
ABANDONED GAS STATION	***2 WEST 115TH STREET***	***103-7***
TRIANGLE TRANSMISSION	***35 W 115TH ST***	***104-7***
ABANDONED SERVICE STATION	11500 S PERRY	105-7
CHA WAREHOUSE	833 W 115TH ST	107-6
AMOCO OIL	***11500 SOUTH HALSTED STR***	***108-6***
FORMER CHA WAREHOUSE	901 W. 115TH STREET	108-6
MOBIL CARWASH	***11501 SOUTH HALSTED STR***	***108-6***
0415 CLARK SER STATION	11525 S HALSTED ST	108-6
E J BROWNLEE TRANSPORTATION IN	1001 W 115TH ST	109-6
CATHOLIC CONVENT	11515 S. PRAIRIE AVENUE	110-7
KENSINGTON SERVICE STATION	162 E KENSINGTON	117-7
0707 CLARK SER STATION	11555 S MICHIGAN AVE	118-7
MICHIGAN CITGO	11600 S MICHIGAN AVE	120-7
ABANDONED SERVICE STATION	11700 S HALSTED	124-6
STUART INDUSTRIAL COATINGS INC	11740 S FRONT ST	125-7
VACANT LAND	11819 - 11849 SOUTH GRE	127-6,10
GREATOR CANAAN MBC/VACANT LOT	11856 S. LAFAYETTE	128-7,11
INLAND METALS REFINING CO INC	651 E 119TH ST	129-11,12
ABANDONED SERVICE STATION	11900 S STATE STREET	133-11
BIG SAM'S GROCERS	333 W. 119TH STREET	134-10,11
CONSTRUCTION SITE (FUTURE RJKC	1220 W. 119TH STREET	138-10
AMFORGE	1324 W. 119TH STREET	140-9,10
BULKOA INC	11861 S COTTAGE GROVE A	143-11
CONOCO PHILLIPS 66	11959 S. HALSTED	145-10
ALLWASTE CONTAINER SERVICES	803 E 120TH ST	147-12
PRAYER WARRIORS BAPTIST CHURCH	438 W. 120TH STREET	149-10
S G KEYWELL CO	11900 S COTTAGE GROVE A	151-11
DUTCH BOY	12000 SOUTH PEORIA ST.	153-10
FORMER WEST PULLMAN WORKS	1015 W 120TH ST	155-10
VACANT SITE	1210 W 120TH ST	156-10
VACANT LOT	1201 W. 120TH STREET	156-10
LIQUID CARBONIC CORP	12054 S W DOTY AVE	157-12
TRI CITY TANK WASH	11901 S COTTAGE GROVE	158-11,12
HANCOCK HOUSE, LLC	12045 S. EMERALD	160-10
CENTRAL STATES PIPE & SUPPLY I	12101 S PEORIA	163-10
POWER & LIGHT EVANGELIST CHURC	12257 S EMERALD ST	167-10
BANK OF COMMERCE & INDUSTRY	12300 S MICHIGAN AVE	169-11
METRA KYD YARD	12301 S INDIANA AVE	170-11
CAL GAS INC.	12304 S. HALSTED ST.	172-10
KYD 124TH ST SHOP	12357 S INDIANA AVE	174-11
METROPOLITAN WATER RECLAMATION	129 EAST 124TH PLACE	175-11

EXECUTIVE SUMMARY

Site	Address	Map ID
MWRD-125TH PUMPING STATION	129 E. 124TH PLACE	175-11
FRANKLIN GEORGE	12535 S HALSTED	178-10
BROWN ACADEMY	12607 S. UNION STREET	179-10
PROGRESSIVE BAPTIST CHURCH	26 E 127TH ST	184-11
COMMUNITY GAS	150 W. 127TH STREET	185-11
BLUE ISLAND CITGO	3196 WEST 127TH STREET	187-11
AIR PRODUCTS & CHEMICALS INC	12721 WENTWORTH AVE	187-11
CEDAR PARK CEMETERY ASSN INC	12540 S HALSTED ST	188-10
AMOOC SS #18717 FACILITY #2427	12701 SOUTH HALSTED	189-12
#008489	12731 S HALSTED	190-10
CONTINENTAL GRAIN CO	127TH & DOTY AVE	191-12
CHRIST CHURCH BAPTIST	12844 S HALSTED ST	194-14
TRIPLEX MARINE SERV	13100 S MORGAN ST	198-14
CALUMET WATER RECLAMATION PLAN	400 E. 130TH STREET	200-15
COOK COUNTY LUMBER CO	200 E 130TH ST	201-15
INTERNATIONAL TRANSP SER INC	130TH & INDIANA AVE	202-15
130TH CITGO	13002 S INDIANA	202-15
RIVERDALE VILLAGE OF	130TH & HALSTED ST	204-14
MAINTENANCE BUILDING	940 E. 132ND STREET	205-16
CARVER PARK NATATORIUM	939 E 132ND ST	205-16
SCHOOL / CHURCH	13300 S. LANGLEY	208-16
SKIPPER'S MARINA	13421 S VERNON	212-15

WI MANIFEST: Hazardous waste manifest information.

A review of the WI MANIFEST list, as provided by EDR, has revealed that there is 1 WI MANIFEST site within the searched area.

Site	Address	Map ID
MWRDGC METROPOLITAN WATER RECL	***400 E 130TH ST***	***200-15***

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, has revealed that there is 1 NY MANIFEST site within the searched area.

Site	Address	Map ID
KLEEN TOWNE CLEANERS	***11249 S HALSTED***	***88-6***

IL SPILLS: A listing of incidents reported to the Office of Emergency Response.

A review of the IL SPILLS list, as provided by EDR, and dated 07/18/2012 has revealed that there are 79 IL SPILLS sites within the searched area.

Site	Address	Map ID
Not reported	9417 S STATE ST	4-2
Not reported	400 E 95TH ST	5-2

EXECUTIVE SUMMARY

Site	Address	Map ID
Not reported	9500 S MARTIN LUTHER KI	5-2
Not reported	9501 S KING DR	5-2
Not reported	347 E 95TH ST	6-2
Not reported	251 E 95TH ST	7-2
Not reported	251 E 95TH ST	7-2
Not reported	251 E 95TH ST	7-2
Not reported	36 W 95TH ST	9-2
Not reported	49 E 95TH ST	10-2
Not reported	446 E 103RD ST	26-4
Not reported	350 E 103RD ST	29-4
Not reported	415 E 103RD ST	30-4
Not reported	10301 S STATE ST	33-4
Not reported	201 W 103RD ST	34-4
Not reported	201 W 103RD ST	34-4
Not reported	201-217 E 23RD ST	34-4
Not reported	105 W 103RD ST	35-4
Not reported	10301 S HALSTED	39-3
Not reported	351 W 104TH ST	45-3
Not reported	10426 S MICHIGAN AVE	47-4
Not reported	10450 S MICHIGAN AVE	48-4
Not reported	10554 S MICHIGAN AVE	52-4
Not reported	240 E 106TH ST	54-4
Not reported	352 W 110TH ST	70-6,7
Not reported	250 E 111TH ST	74-7
Not reported	4 E 111TH ST	76-7
Not reported	2 W 111TH	76-7
Not reported	2 W 111TH ST	76-7
Not reported	100-136 W 111TH ST	78-7
Not reported	420 W 111TH ST	81-6
Not reported	420 W. 111TH ST.	81-6
Not reported	419 W 111TH ST	81-6
Not reported	419 W 111TH ST	81-6
Not reported	507 W 111TH ST	82-6
Not reported	65 W 113TH PL	93-7
Not reported	135-39 W 114TH ST	94-7
Not reported	11442 S MICHIGAN AVE	98-7
Not reported	11453 S HALSTED ST	99-6
Not reported	342 E 115TH ST	100-7
Not reported	344 E 115TH ST	100-7
Not reported	2 W 115TH ST	103-7
Not reported	2 W 115TH ST	103-7
Not reported	35 W 115TH ST	104-7
Not reported	833 W 115TH ST	107-6
Not reported	1001 W 115TH ST	109-6
Not reported	11515 PRAIRIE	110-7
Not reported	162 E KENSINGTON AVE	117-7
Not reported	38 W 119TH ST	132-11
Not reported	11900 S STATE ST	133-11
Not reported	333 W 119TH ST	134-10,11
Not reported	1220 W 119TH ST	138-10
Not reported	1220 WEST 119TH ST.	138-10
Not reported	11957 S HALSTED ST	145-10
Not reported	803 E 120TH ST	147-12
Not reported	803 E 120TH ST	147-12
ALLWASTE CONTAINER SERVICES	803 E 120TH ST	147-12
Not reported	803 E 120TH ST	147-12

EXECUTIVE SUMMARY

Site	Address	Map ID
Not reported	803 E 120TH ST	147-12
KEYWELL CO.	***11900 SOUTH COTTAGE GRO***	***151-11***
Not reported	900 W 120TH ST	153-10
Not reported	1015 WEST 120TH ST	155-10
Not reported	1015 W 120TH ST	155-10
Not reported	1015 W 120TH ST	155-10
Not reported	1015 W 120TH ST	155-10
Not reported	1201 W 120TH ST	156-10
Not reported	12054 S DOTY AVE	157-12
Not reported	12045 S EMERALD AVE	160-10
Not reported	12101 S DOTY AVE	161-12
Not reported	11900 S COTTAGE GROVE A	162-11,12
Not reported	12300 S MICHIGAN AVE	169-11
Not reported	125TH ST & MORGAN	177-10
Not reported	12535 S HALSTED ST	178-10
Not reported	726 W 126TH ST	180-10
Not reported	26 E 127TH ST	184-11
Not reported	12701 S DOTY AVE	189-12
Not reported	12701 S DOTY AVE	189-12
Not reported	12900 S DOTY	192-12
Not reported	12844 S HALSTED ST	194-14

IL ENG CONTROLS: Sites with Engineering Controls.

A review of the IL ENG CONTROLS list, as provided by EDR, and dated 07/20/2012 has revealed that there are 6 IL ENG CONTROLS sites within the searched area.

Site	Address	Map ID
NEW LANGSTON HUGHES ELEMENTARY	***10320 SOUTH WENTWORTH A***	***41-4***
DAIRY FRESH FOODS, INC.	***10450 SOUTH MICHIGAN AV***	***48-4***
LAKEFRONT SUPPORTING HOUSING	***11023-11045 S WENTWORTH***	***80-7***
W.E. DAVIS COMPANY	***1220 -1314 WEST 119TH S***	***138-10***
INTERNATIONAL HARVESTER	***1015 WEST 120TH STREET***	***155-10***
HANCOCK HOUSE LLC	***12045 SOUTH EMERALD AVE***	***160-10***

IL INST CONTROL: Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

A review of the IL INST CONTROL list, as provided by EDR, and dated 07/20/2012 has revealed that there are 9 IL INST CONTROL sites within the searched area.

Site	Address	Map ID
CHICAGO DEPARTMENT OF ENVIRONM	***501 EAST 103RD STREET***	***28-4***
ROSELAND PLACE	***10400-10420 SOUTH MICHI***	***43-4***
DAIRY FRESH FOODS, INC.	***10450 SOUTH MICHIGAN AV***	***48-4***
LAKEFRONT SUPPORTING HOUSING	***11023-11045 S WENTWORTH***	***80-7***
WIRA STUDY AREA NUMBER 4	***11801 SOUTH RACINE AVEN***	***126-6,10***
SHELDON HEIGHTS CHURCH OF CHRI	***11819-11849 SOUTH GREEN***	***127-6,10***
W.E. DAVIS COMPANY	***1220 -1314 WEST 119TH S***	***138-10***

EXECUTIVE SUMMARY

Site	Address	Map ID
INTERNATIONAL HARVESTER	***1015 WEST 120TH STREET***	***155-10***
HANCOCK HOUSE LLC	***12045 SOUTH EMERALD AVE***	***160-10***

IL SRP: Illinois Environmental Protection Agency, Site Remediation Program Database

A review of the IL SRP list, as provided by EDR, and dated 07/20/2012 has revealed that there are 26 IL SRP sites within the searched area.

Site	Address	Map ID
CHICAGO STATE UNIVERSITY	9500 SOUTH KING DRIVE	5-2
BP	***9900 SOUTH HALSTED STRE***	***18-3***
CHICAGO DEPARTMENT OF ENVIRONM	***501 EAST 103RD STREET***	***28-4***
NEW LANGSTON HUGHES ELEMENTARY	***10320 SOUTH WENTWORTH A***	***41-4***
ROSELAND PLACE	***10400-10420 SOUTH MICHI***	***43-4***
DAIRY FRESH FOODS, INC.	***10450 SOUTH MICHIGAN AV***	***48-4***
BETTY BRITE CLEANERS	***10630 SOUTH HALSTED STR***	***57-3***
LAKEFRONT SUPPORTING HOUSING	***11023-11045 S WENTWORTH***	***80-7***
KLEEN TOWNE CLEANERS	11249 SOUTH HALSTED ST	88-6
CHICAGO HOUSING AUTHORITY	***833 WEST 115TH STREET***	***107-6***
SHERWIN-WILLIAMS COMPANY BOILE	603 EAST KENSINGTON AVE	113-7
MICKEY'S AUTO SERVICE CENTER	***11656 SOUTH HALSTED AVE***	***121-6***
WIRA STUDY AREA NUMBER 4	***11801 SOUTH RACINE AVEN***	***126-6,10***
SHELDON HEIGHTS CHURCH OF CHRI	***11819-11849 SOUTH GREEN***	***127-6,10***
WEST PULLMAN STUDY AREA NO. 6	11931 SOUTH LOOMIS STRE	130-9
WIRA EAST INGERSOLL PROPERTY	920 WEST 119TH STREET	136-10
W.E. DAVIS COMPANY	***1220 -1314 WEST 119TH S***	***138-10***
OMNITRAX	11955 SOUTH MORGAN STRE	141-10
WEST PULLMAN IRON & METAL	11954 SOUTH PEORIA STRE	144-10
WIRA STUDY AREA 9	820 WEST 120TH STREET	152-10
WIRA STUDY AREA NUMBER 14	815-825 WEST 120TH STRE	152-10
DUTCH BOY PAINTS	12000 SOUTH PEORIA STRE	153-10
INTERNATIONAL HARVESTER	***1015 WEST 120TH STREET***	***155-10***
CHICAGO MALLEABLE CASTINGS	***1201 WEST 120TH STREET***	***156-10***
HANCOCK HOUSE LLC	***12045 SOUTH EMERALD AVE***	***160-10***
CHICAGO HOUSING AUTHORITY	***940 EAST 132ND STREET***	***205-16***

IL DRYCLEANERS: Any business interested in operating a drycleaning facility in Illinois needs to apply for a license through the Illinois Drycleaner Environmental Response trust Fund.

A review of the IL DRYCLEANERS list, as provided by EDR, and dated 05/28/2012 has revealed that there are 5 IL DRYCLEANERS sites within the searched area.

Site	Address	Map ID
AMERICAN IDEAL CLEANING COMPAN	10351 SOUTH MICHIGAN AV	42-4
BETTY BRITE CLEANERS	***10630 SOUTH HALSTED STR***	***57-3***
STAR CLEANERS	149 WEST 111TH STREET	80-7
JOHNS CLEANERS	11129 SOUTH HALSTED STR	84-6
BIG MEL'S LAUNDROMAT	12256 SOUTH HALSTED	168-10

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

Section 1

Overview and Key Map

Overview Map

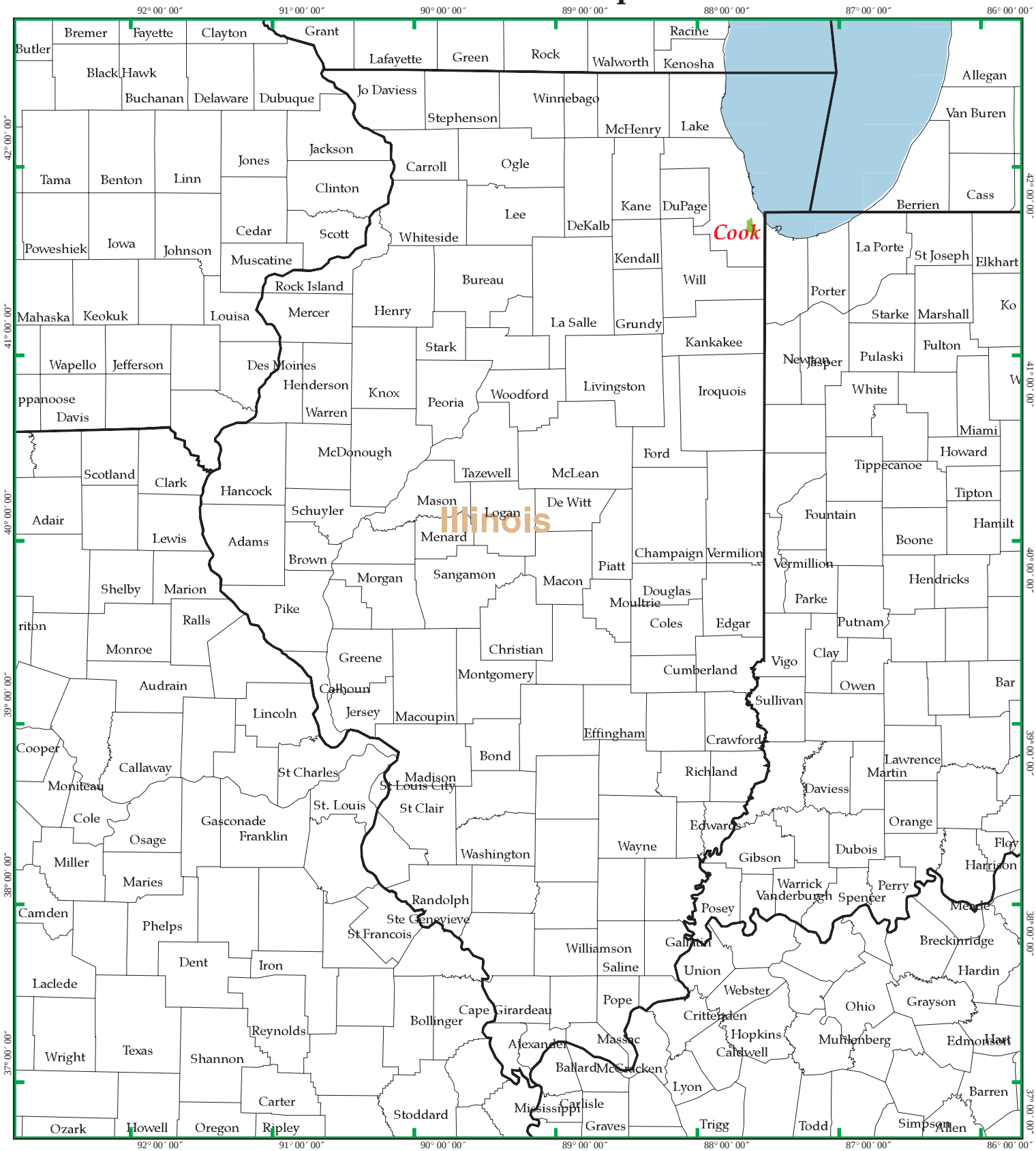

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N

Key Map

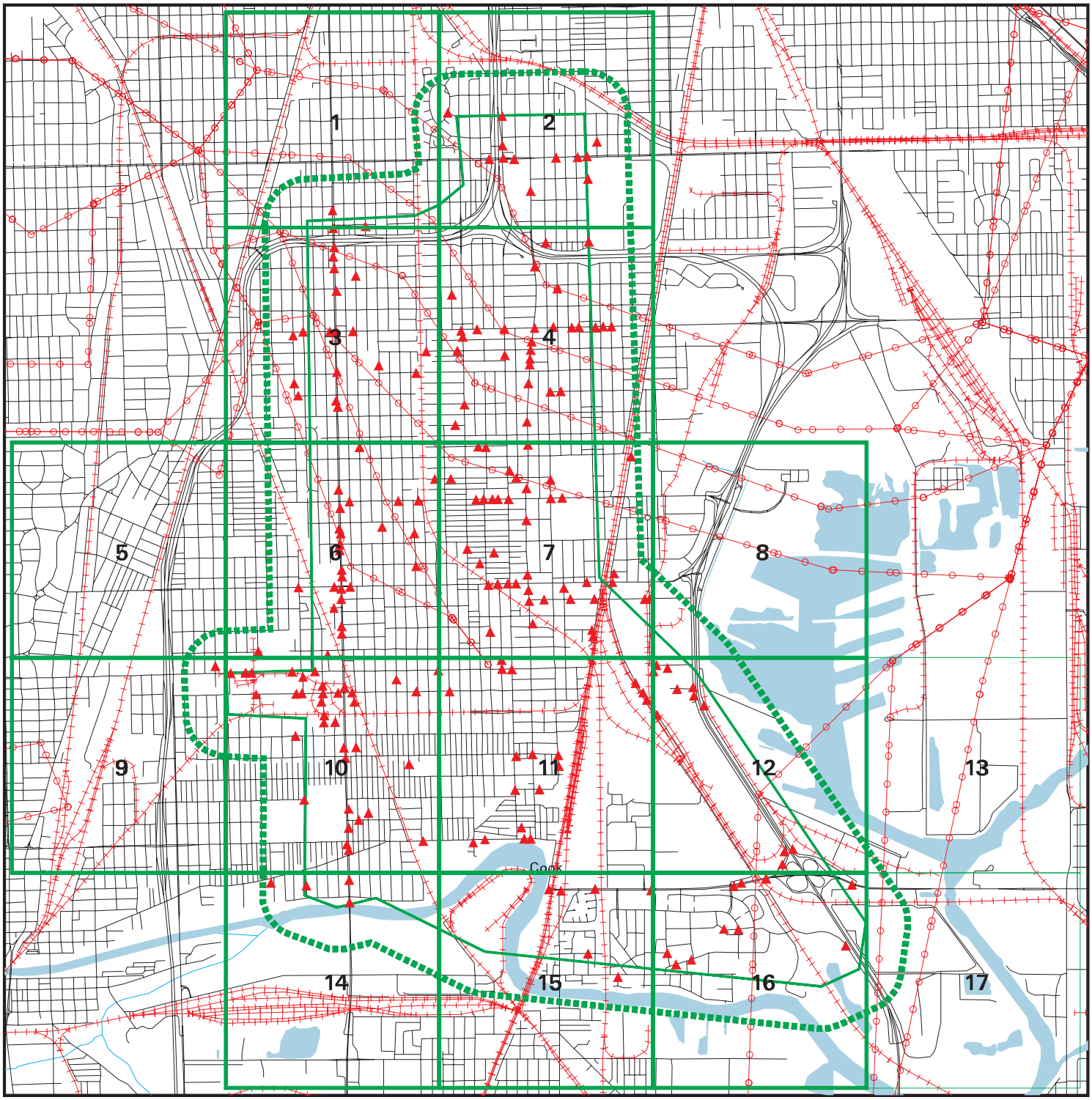

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Legend

Roads
Major Roads
Contour Lines
Waterways
Railroads
Study Boundary
Powerlines
Pipelines
Fault Lines
Water
Listed Sites

N

0 1/2 1

Scale in Miles

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Section 2

Focus Maps and Findings

Focus Map 1

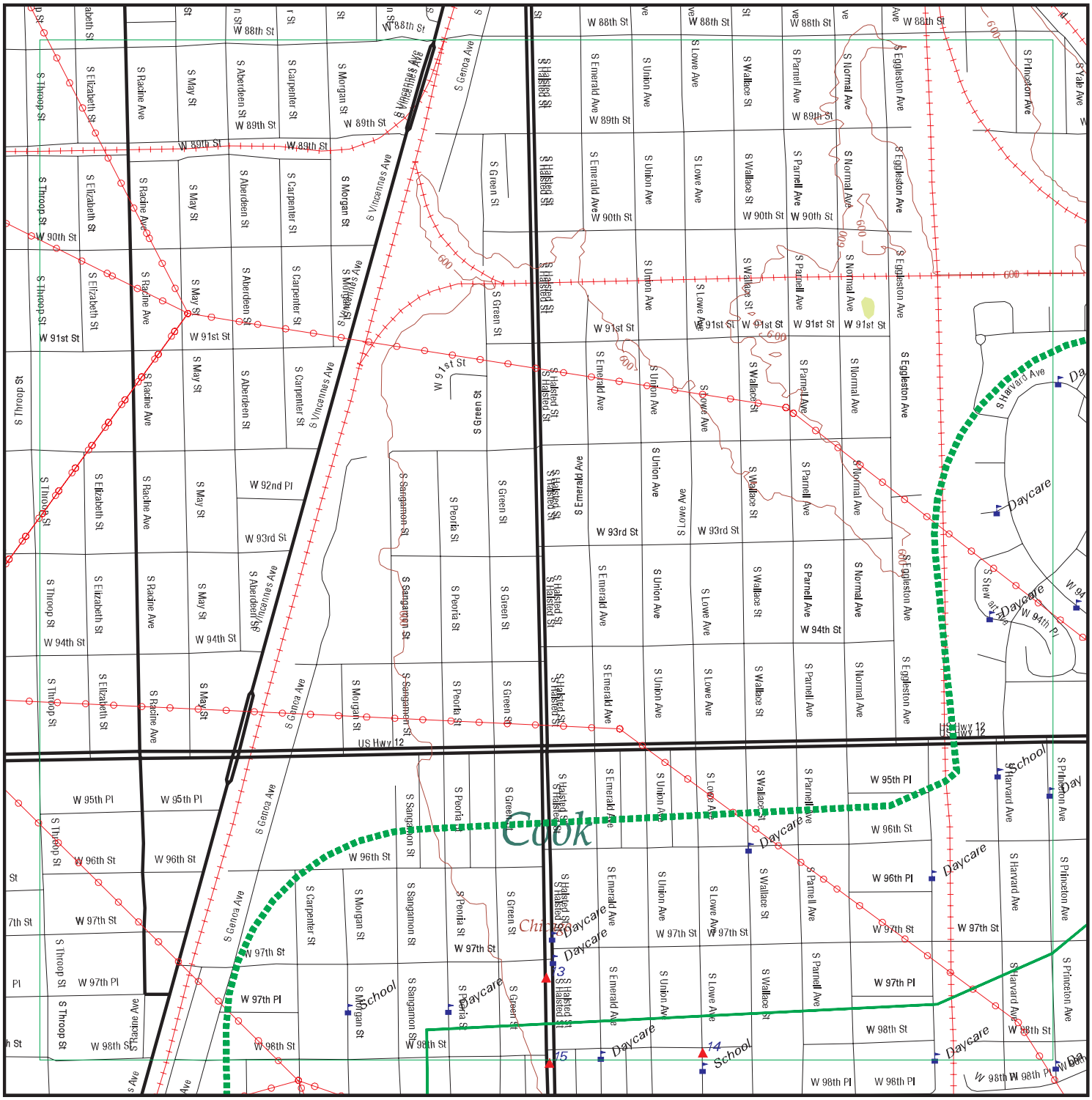

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 1 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	1
RCRA-CESQG	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	1
UST	3
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
13	**ANCHOR PRUDENTIAL HMO** **9718 SOUTH HALSTED** **CHICAGO, IL 60620**	**UST**	**U003668571** **N/A**

UST:

Facility ID:	2038684
Facility Status:	EXEMPT
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Name:	Standard Bank Trust #6743
Owner Id:	U0028511
Owner Address:	7800 West 95th Street
Owner City,St,Zip:	Hickory Hills, IL 60457
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	5/5/1998
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

14	**EVERS** **9811 S LOWE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001127034** **ILR000033118**

RCRA-SQG:

Date form received by agency:	01/10/1997
Facility name:	EVERS
Facility address:	9811 S LOWE CHICAGO, IL 60628
EPA ID:	ILR000033118
Contact:	EMMERINE CLARKSTON
Contact address:	9811 S LOWE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-2565
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District

Map ID	Site	Database(s)	EPA ID Number

EVERS (Continued) **1001127034**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

---

15 **SHELL** **UST** **U001142621**
9802 S. HALSTED **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2019884
Facility Status: ACTIVE
Facility Type: SELF-SERVICE STATION
Owner Name: Khalid Siddiqui
Owner Id: U0029824
Owner Address: 1823 West Hood Avenue, Suite C
Owner City,St,Zip: Chicago, IL 60660

Tank Number: 1
Tank Capacity: 10000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 5/7/1986
Tank Status: Currently in use
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: K003789
Green Tag Issue Date: 6/18/2009
Green Tag Expire Date: 12/31/2011
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 10000

Map ID	Site	Database(s)	EPA ID Number
	SHELL (Continued)		**U001142621**

Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

15	**CLARK GAS** **9811 S. HALSTED** **CHICAGO, IL 60628**	**UST**	**U001143133** **N/A**

UST:

Facility ID:	2007026
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Petro Universal, Inc.
Owner Id:	U0034143
Owner Address:	9811 S. Halsted
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
	CLARK GAS (Continued)		**U001143133**

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	8000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**

Map ID	Site	Database(s)	EPA ID Number

CLARK GAS (Continued) **U001143133**

Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

---

15 **EQUILON ENTERPRISES LLC** **LUST** **S104189763**
9811 HALSTED **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	990295
IL EPA Id:	0316495059
Product:	Unleaded Gas
IEMA Date:	02/10/1999
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	John Robbins
PRP Address:	603 West Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/19/1999
45 Report Received:	02/26/1999
NFA/NFR Letter:	**09/14/2005**
NFR Date Recorded:	12/02/2005

Count: 13 records

FOCUS MAP 1 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1006426238	76TH AND PARNELL	76TH AND PARNELL	60620	CERC-NFRAP
CHICAGO	S107926342	CHICAGO PROCESS ENGINEERING	7801 S CLAIRMONT	60620	SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	U003975090	NEW KENNEDY KING COLLEGE CAMPUS	6401 LOWE ST	60620	UST
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	1001487618	FERNWOOD TOWING AND TUNE UPS	10101 10103 S HALSTED	60628	RCRA-SQG
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS

Focus Map 2

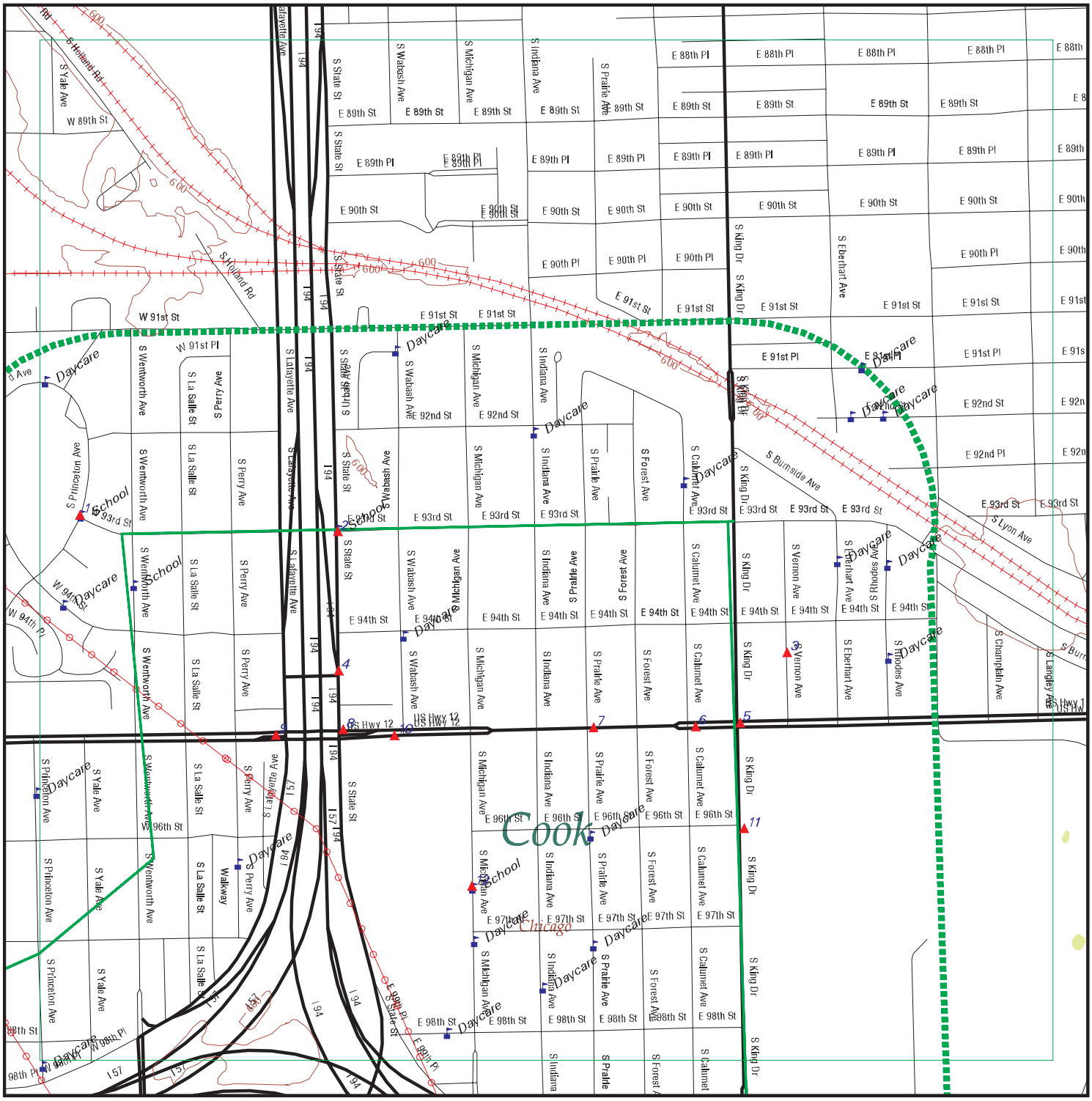

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Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 2 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	4
RCRA-CESQG	2
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	10
UST	10
SPILLS	10
ENG CONTROLS	0
INST CONTROL	0
SRP	1
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
1	**TURNER DREW LANGUAGE ACADEMY** **9300 S PRINCETON AVE** **CHICAGO, IL 60620**	**RCRA-CESQG**	**1004696975** **ILR000061192**

RCRA-CESQG:

Date form received by agency:	02/08/1999
Facility name:	TURNER DREW LANGUAGE ACADEMY
Facility address:	9300 S PRINCETON AVE CHICAGO, IL 60620
EPA ID:	ILR000061192
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	9300 S PRINCETON AVE CHICAGO, IL 60620
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number

TURNER DREW LANGUAGE ACADEMY (Continued) **1004696975**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

---

2 **ERNS** **96507590**

GLISBEE SCHOOL, 9301 S. STATE **N/A**
CHICAGO, IL

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

---

2 **GILLESPIE SCH** **RCRA-SQG** **1001116633**
9301 S STATE **ILR000026583**
CHICAGO, IL 60619

RCRA-SQG:
Date form received by agency: 08/30/1996
Facility name: GILLESPIE SCH
Facility address: 9301 S STATE
CHICAGO, IL 60619
EPA ID: ILR000026583
Mailing address: 1819 W PERSHING RD 6W N
CHICAGO, IL 60609
Contact: SPENCER ADAMS
Contact address: 1819 W PERSHING RD 6W N
CHICAGO, IL 60609
Contact country: US
Contact telephone: (312) 535-5065
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHS
Owner/operator address: 1819 W PERSHING RD 6W N
CHICAGO, IL 60609

Map ID	Site	Database(s)	EPA ID Number

GILLESPIE SCH (Continued) **1001116633**

Owner/operator country: Not reported
Owner/operator telephone: (312) 535-7039
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

---

3 **CITY OF CHICAGO (ABANDONMENT)** **RCRA-SQG** **1005443427**
9431 S VERNON **ILR000113639**
CHICAGO, IL 60619

RCRA-SQG:
Date form received by agency: 06/17/2002
Facility name: CITY OF CHICAGO (ABANDONMENT)
Facility address: 9431 S VERNON
CHICAGO, IL 60619
EPA ID: ILR000113639
Mailing address: 30 N LASALLE 25TH FLOOR
CHICAGO, IL 60602
Contact: TERRY SHEAHAN
Contact address: 30 N LASALLE 25TH FLOOR
CHICAGO, IL 60602
Contact country: US
Contact telephone: (312) 744-7674
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Map ID	Site	Database(s)	EPA ID Number

CITY OF CHICAGO (ABANDONMENT) (Continued) **1005443427**

Owner/operator name:	CITY OF CHICAGO (ABANDONMENT)
Owner/operator address:	9431 S VERNON CHICAGO, IL 60619
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 744-7674
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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4 **CITGO SUPER WASH & WAX** **UST** **U002222575**
9417 S. STATE STREET **N/A**
CHICAGO, IL 60617

UST:

Facility ID:	2034153
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	F & F 786, Inc.
Owner Id:	U0034735
Owner Address:	9417 S. State
Owner City,St,Zip:	Chicago, IL 60619
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Tank Status:	**Exempt from registration**

Map ID	Site	Database(s)	EPA ID Number
	CITGO SUPER WASH & WAX (Continued)		**U002222575**

Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	CITGO SUPER WASH & WAX (Continued)		**U002222575**

Tank Number:	5
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	1/8/1998
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	10/9/1997
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	1/8/1998
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	10/9/1997
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

4	**QUALITY CAR WASH** **9417 SOUTH STATE ST.** **CHICAGO, IL 60619**	**LUST**	**S104522540** **N/A**

LUST:

Incident Num:	951097
IL EPA Id:	0316445040
Product:	Gasoline
IEMA Date:	05/23/1995
Project Manager:	Piggush
Project Manager Phone:	(217) 782-3101
Email:	Michael.Piggush@illinois.gov
PRP Name:	Quality Car Wash
PRP Contact:	John Hill
PRP Address:	7936 South Vincennes
PRP City,St,Zip:	Chicago, IL 60620
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	11/22/1996
45 Report Received:	11/22/1996
NFA/NFR Letter:	**04/08/1997**
NFR Date Recorded:	04/14/1998

Map ID	Site	Database(s)	EPA ID Number
4	**9417 S STATE ST** **CHICAGO, IL**	**SPILLS**	**S111893798** **N/A**

SPILLS:

Incident ID:	19951097
Incident Date:	Not reported
Date Received:	05/23/1995
Facility Address:	9417 S STATE ST
Facility City:	CHICAGO
PRP Name:	QUALITY CAR WASH
AC:	Not reported

5	**AMOCO 5921** **400 E 95TH ST AND KING DR** **CHICAGO, IL 60619**	**RCRA-SQG**	**1000862425** **ILD984923268**

RCRA-SQG:

Date form received by agency:	08/20/1993
Facility name:	AMOCO 5921
Facility address:	400 E 95TH ST AND KING DR CHICAGO, IL 60619
EPA ID:	ILD984923268
Mailing address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact:	LINDA CURRAN
Contact address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact country:	US
Contact telephone:	(708) 990-1043
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AMOCO OIL CO
Owner/operator address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Owner/operator country:	Not reported
Owner/operator telephone:	(708) 990-1043
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

AMOCO 5921 (Continued) **1000862425**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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5 **BP** **LUST** **U004128180**
400 EAST 95TH STREET **UST** **N/A**
CHICAGO, IL 60619

LUST:

Incident Num:	20051059
IL EPA Id:	0316475002
Product:	Gasoline
IEMA Date:	07/29/2005
Project Manager:	Kaiser
Project Manager Phone:	(217) 524-4650
Email:	Karl.Kaiser@illinois.gov
PRP Name:	PAV2, LLC
PRP Contact:	William Shaver
PRP Address:	24501 Ecourse Road
PRP City,St,Zip:	Taylor, MI 48180
PRP Phone:	5742726955
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	08/10/2005
45 Report Received:	09/12/2005
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2022992
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	JAN Petro, Inc.
Owner Id:	U0035846
Owner Address:	3314 W. Albion Ave.
Owner City,St,Zip:	Lincolnwood, IL 60712
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number

BP (Continued) **U004128180**

Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**M003795**
Green Tag Issue Date:	**7/28/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**M003795**
Green Tag Issue Date:	**7/28/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**M003795**
Green Tag Issue Date:	**7/28/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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5 **SPILLS** **S108046226**
400 E 95TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20051059
Incident Date:	Not reported
Date Received:	07/29/2005
Facility Address:	400 E 95TH ST
Facility City:	CHICAGO
PRP Name:	BP PRODUCTS NORTH AMERICA INC
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
5	**CHICAGO STATE UNIVERSITY** **9500 SOUTH KING DRIVE** **CHICAGO, IL 60628**	**SRP**	**S104491687** **N/A**

SRP:

IL EPA Id:	0316500005
US EPA Id:	ILD068469824
Longitude:	-87.61032
Latitude:	41.72012
Contact Name:	Ronald Leahy
Contact Address:	9501South King Drive
Contact Address2:	Office of Physical Plant
Contact City,St,Zip:	Chicago, IL 606281598
Contact Phone:	(312) 995-2140
Date Enrolled:	04/26/1994
Point Of Contact:	Brian A. Delaney
Consultant Company:	August Mack Environmental, Inc.
Consultant Address:	784 Busse Highway
Consultant Address2:	Not reported
Consultant City,St,Zip:	Park Ridge, IL 60068-
Consultant Phone:	(630) 325-7121
Proj Mgr Assigned:	Gross
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	Not reported
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Chicago State University
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

5	**9500 S MARTIN LUTHER KING DR** **CHICAGO, IL**	**SPILLS**	**S111908478** **N/A**

SPILLS:

Incident ID:	20002169
Incident Date:	Not reported
Date Received:	11/10/2000
Facility Address:	9500 S MARTIN LUTHER KING DR
Facility City:	CHICAGO
PRP Name:	EQUILON ENTERPRISES
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
5	**SHELL STATION 1545-28** **9500 S MARTIN LUTHER KING DR** **CHICAGO, IL 60628**	**UST**	**U000792152** **N/A**

UST:

Facility ID:	2007040
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	Equilon Enterprises, LLC
Owner Id:	U0027449
Owner Address:	603 Diehl Road, Suite 103
Owner City,St,Zip:	Naperville, IL 60563

Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number

SHELL STATION 1545-28 (Continued) **U000792152**

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	8/9/1996
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	5
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	10/31/1970
OSFM First Notify Date:	11/24/1994
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	1000
Tank Substance:	Water
Last Used Date:	12/31/1973
OSFM First Notify Date:	9/27/2001
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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5 **SPILLS** **S108891681**

9501 S KING DR **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20071437
Incident Date:	10/26/2007
Date Received:	10/26/2007
Facility Address:	9501 S KING DR
Facility City:	CHICAGO
PRP Name:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	(Continued)		**S108891681**
	AC: Not reported		
5	**SHELL OIL CO.** **9500 SOUTH MARTIN LUTHER KING DR.** **CHICAGO, IL 60628**	**LUST**	**S104792923** **N/A**

LUST:

Incident Num:	20002169
IL EPA Id:	0316505016
Product:	Gasoline
IEMA Date:	11/10/2000
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Equilon Enterprises
PRP Contact:	John Robbins
PRP Address:	603 Diehl, Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	High
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	11/20/2000
45 Report Received:	11/13/2001
NFA/NFR Letter:	**05/27/2004**
NFR Date Recorded:	08/16/2004

Incident Num:	942284
IL EPA Id:	0316505016
Product:	Other Petro
IEMA Date:	10/10/1994
Project Manager:	Nickell
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Equilon Enterprises LLC
PRP Contact:	Lisa Schoedel
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	01/04/1995
Non LUST Determination Letter:	Not reported
20 Report Received:	01/12/1995
45 Report Received:	01/11/1995
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
6	**S.W.C. 95TH & MLK LLC** **347 EAST 95TH STREET** **CHICAGO, IL 60619**	**LUST**	**S108480371** **N/A**

LUST:

Incident Num:	20070110
IL EPA Id:	0316445057
Product:	Fuel Oil
IEMA Date:	02/02/2007
Project Manager:	Schwartzkopf
Project Manager Phone:	(217) 557-8763
Email:	Lizz.Schwartzkopf@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	10/11/2007
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

6	**347 E 95TH ST** **CHICAGO, IL**	**SPILLS**	**S111921064** **N/A**

SPILLS:

Incident ID:	20070110
Incident Date:	Not reported
Date Received:	02/02/2007
Facility Address:	347 E 95TH ST
Facility City:	CHICAGO
PRP Name:	SWC 95TH AND MLK LLC
AC:	Not reported

6	**VACANT LAND** **333 E. 95TH STREET** **CHICAGO, IL 60619**	**UST**	**U003668302** **N/A**

UST:

Facility ID:	2037435
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Rose Construction
Owner Id:	U0032769
Owner Address:	9440 Enterprise Drive
Owner City,St,Zip:	Mokena, IL 60448
Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Heating Oil
Last Used Date:	1/1/2005
OSFM First Notify Date:	9/29/1998
Tank Status:	**Removed**

Map ID	Site	Database(s)	EPA ID Number

VACANT LAND (Continued) **U003668302**

Red Tag Issue Date:	Not reported
Install Date:	2/1/1989
Green Tag Decal:	**F002189**
Green Tag Issue Date:	**12/2/2004**
Green Tag Expire Date:	**12/31/2007**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Used Oil
Last Used Date:	1/1/2005
OSFM First Notify Date:	9/29/1998
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	2/1/1989
Green Tag Decal:	**F002189**
Green Tag Issue Date:	**12/2/2004**
Green Tag Expire Date:	**12/31/2007**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	550
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	3/22/2007
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**F002189**
Green Tag Issue Date:	**12/2/2004**
Green Tag Expire Date:	**12/31/2007**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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7 **MEDLEY MOVING & STORAGE, INC.** **UST** **U001142805**
251 E 95TH ST **N/A**
CHICAGO, IL 60619

UST:

Facility ID:	2006670
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Medley Moving & Storage Inc
Owner Id:	U0010054
Owner Address:	251 E 95Th St
Owner City,St,Zip:	Chicago, IL 60619

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	6/8/2000

Map ID	Site	Database(s)	EPA ID Number

MEDLEY MOVING & STORAGE, INC. (Continued) **U001142805**

OSFM First Notify Date:	3/24/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**05093**
Green Tag Issue Date:	**8/18/1998**
Green Tag Expire Date:	**12/31/2001**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**05093**
Green Tag Issue Date:	**8/18/1998**
Green Tag Expire Date:	**12/31/2001**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**05093**
Green Tag Issue Date:	**8/18/1998**
Green Tag Expire Date:	**12/31/2001**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

7 **SPILLS** **S111907087**
251 E 95TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20000774
Incident Date:	Not reported
Date Received:	04/27/2000
Facility Address:	251 E 95TH ST
Facility City:	CHICAGO
PRP Name:	MEADLWY MOVING & STORAGE
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
7	**MEDLEY'S MOVING & STORAGE** **251 EAST 95TH ST.** **CHICAGO, IL 60619**	**LUST**	**S104564421** **N/A**

LUST:

Incident Num:	20001183
IL EPA Id:	0318993017
Product:	Fuel Oil
IEMA Date:	06/21/2000
Project Manager:	Ransdell
Project Manager Phone:	(217) 557-6938
Email:	James.Ransdell@illinois.gov
PRP Name:	Medleys Moving & Storage
PRP Contact:	Howard Medley
PRP Address:	251 East 95th St.
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	7738214000
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	11/02/2000
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	930643
IL EPA Id:	0318993017
Product:	Deisel
IEMA Date:	03/18/1993
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	Meadley's Moving & Storage
PRP Contact:	Howard Meadley
PRP Address:	251 East 95th St.
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**06/23/2011**
NFR Date Recorded:	Not reported

7	**251 E 95TH ST** **CHICAGO, IL**	**SPILLS**	**S111907493** **N/A**

SPILLS:

Incident ID:	20001183
Incident Date:	Not reported
Date Received:	06/21/2000
Facility Address:	251 E 95TH ST
Facility City:	CHICAGO
PRP Name:	MEDLEYS MOVING & STORAGE
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
7	**MEDLEY'S MOVING & STORAGE** **251 EAST 95TH ST.-B** **CHICAGO, IL 60619**	**LUST**	**S104524044** **N/A**

LUST:

Incident Num:	20000774
IL EPA Id:	0318993017
Product:	Deisel
IEMA Date:	04/27/2000
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	Medley's Moving & Storage
PRP Contact:	Howard Medley
PRP Address:	251 East 95th St.-B
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	7738214000
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/25/2000
45 Report Received:	07/24/2000
NFA/NFR Letter:	**11/15/2000**
NFR Date Recorded:	02/01/2001

7	**251 E 95TH ST** **CHICAGO, IL**	**SPILLS**	**S111887108** **N/A**

SPILLS:

Incident ID:	19930643
Incident Date:	Not reported
Date Received:	03/18/1993
Facility Address:	251 E 95TH ST
Facility City:	CHICAGO
PRP Name:	HOWARD MEDLEY
AC:	Not reported

8	**SHELL OIL CO.** **4 EAST 95TH ST.** **CHICAGO, IL 60619**	**LUST**	**S104528096** **N/A**

LUST:

Incident Num:	871758
IL EPA Id:	0316445022
Product:	Gasoline
IEMA Date:	10/29/1987
Project Manager:	Rife
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Equilon Enterprises LLC
PRP Contact:	Lisa Schoedel
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	Not reported
Section 57.5(g) Letter:	731

Map ID	Site	Database(s)	EPA ID Number

SHELL OIL CO. (Continued) **S104528096**

Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: 1996-01-22
20 Report Received: 12/11/1987
45 Report Received: 10/15/1990
NFA/NFR Letter: Not reported
NFR Date Recorded: Not reported

---

8 **MOBIL GAS & FOOD MART** **UST** **U000174484**
4 E. 95TH STREET **N/A**
CHICAGO, IL 60620

UST:
Facility ID: 2007056
Facility Status: ACTIVE
Facility Type: SELF-SERVICE STATION
Owner Name: Rock Build Enterprises, Inc.
Owner Id: U0033996
Owner Address: 14123 South 85th Avenue
Owner City,St,Zip: Orland Park, IL 60462

Tank Number: 1
Tank Capacity: 12000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 4/25/1986
Tank Status: Currently in use
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: N001762
Green Tag Issue Date: 2/15/2012
Green Tag Expire Date: 12/31/2014
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 8000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 4/25/1986
Tank Status: Currently in use
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: N001762
Green Tag Issue Date: 2/15/2012
Green Tag Expire Date: 12/31/2014
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 3
Tank Capacity: 6000
Tank Substance: Diesel Fuel
Last Used Date: Not reported
OSFM First Notify Date: 4/25/1986
Tank Status: Currently in use

Map ID	Site	Database(s)	EPA ID Number
	MOBIL GAS & FOOD MART (Continued)		**U000174484**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**N001762**
Green Tag Issue Date:	**2/15/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

9	**AMOCO SERVICE STATION #15459.** **36 WEST 95TH ST.** **CHICAGO, IL 60628**	**LUST**	**S105059046** **N/A**

LUST:

Incident Num:	971123
IL EPA Id:	0316490013
Product:	Unleaded Gas
IEMA Date:	06/24/1997
Project Manager:	Piggush
Project Manager Phone:	(217) 782-3101
Email:	Michael.Piggush@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	06/27/1997
45 Report Received:	08/01/1997
NFA/NFR Letter:	**05/07/2003**
NFR Date Recorded:	07/17/2003

9	**36 W 95TH ST** **CHICAGO, IL**	**SPILLS**	**S111898819** **N/A**

SPILLS:

Incident ID:	19971123
Incident Date:	Not reported
Date Received:	06/24/1997
Facility Address:	36 W 95TH ST
Facility City:	CHICAGO
PRP Name:	AMOCO OIL COMPANY
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
9	**SS#15459 FAC#10443** **36 W. 95TH ST.** **CHICAGO, IL 60628**	**UST**	**U000864621** **N/A**

UST:

Facility ID:	2023039
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	BP Amoco
Owner Id:	U0023834
Owner Address:	28100 Torch Parkway Suite 300
Owner City,St,Zip:	Warrenville, IL 60555

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
9	**AMOCO 15459** **36 W 95TH AND LAFAYETTE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000862583** **ILD984924860**

RCRA-SQG:

Date form received by agency:	09/02/1993
Facility name:	AMOCO 15459
Facility address:	36 W 95TH AND LAFAYETTE CHICAGO, IL 60628
EPA ID:	ILD984924860
Mailing address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact:	LINDA CURRAN
Contact address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact country:	US
Contact telephone:	(708) 990-2277
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AMOCO OIL CO
Owner/operator address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Owner/operator country:	Not reported
Owner/operator telephone:	(708) 990-2277
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS

Map ID	Site	Database(s)	EPA ID Number

AMOCO 15459 (Continued) **1000862583**

CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

---

9 **ATLANTIC RICHFIELD CO** **UST** **U003559028**
1 E 95TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2011489
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Atlantic Richfield Co
Owner Id:	U0000926
Owner Address:	515 S Flower St
Owner City,St,Zip:	Los Angeles, CA 90071
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	1/1/1979
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

10 **SPILLS** **S111888927**
49 E 95TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19932467
Incident Date:	Not reported
Date Received:	09/15/1993
Facility Address:	49 E 95TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO PARK DISTRICT
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
10	**ABBOTT PARK FIELDHOUSE** **49 E 95TH ST** **CHICAGO, IL 60619**	**UST**	**U000864953** **N/A**

UST:

Facility ID:	2030829
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Chicago Park District
Owner Id:	U0002888
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	8800
Tank Substance:	Heating Oil
Last Used Date:	1/1/1974
OSFM First Notify Date:	7/1/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

10	**ABBOTT** **49 EAST 95TH ST.** **CHICAGO, IL 60619**	**LUST**	**S104523631** **N/A**

LUST:

Incident Num:	932446
IL EPA Id:	0316445035
Product:	Fuel Oil
IEMA Date:	09/13/1993
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Park Dist.
PRP Contact:	Masood Razvi
PRP Address:	425 East McFetridge Dr.
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	09/22/1993
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
10	**ABBOTT** **45 EAST 95TH ST.** **CHICAGO, IL 60619**	**LUST**	**S104523621** **N/A**

LUST:

Incident Num:	932467
IL EPA Id:	0316445035
Product:	Uset Oil
IEMA Date:	09/15/1993
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Park Dist.
PRP Contact:	Robin Minor
PRP Address:	425 East McFetridge Dr.
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

11	**CHICAGO STATE UNIVERSITY** **9501 S DR KINGS DR** **CHICAGO, IL 60628**	**UST**	**U001142270** **N/A**

UST:

Facility ID:	2017832
Facility Status:	CLOSED
Facility Type:	**STATE**
Owner Name:	Chicago State University
Owner Id:	U0002899
Owner Address:	9501 S Kings Dr
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	30000
Tank Substance:	Diesel Fuel
Last Used Date:	11/17/1997
OSFM First Notify Date:	4/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	20000
Tank Substance:	Water
Last Used Date:	11/17/1997
OSFM First Notify Date:	2/25/1999

Map ID	Site	Database(s)	EPA ID Number
	CHICAGO STATE UNIVERSITY (Continued)		**U001142270**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	11/7/1997
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

12	**HARLAN COMMUNITY ACADEMY HS** **9652 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696723** **ILR000056994**

RCRA-CESQG:

Date form received by agency:	10/30/1998
Facility name:	HARLAN COMMUNITY ACADEMY HS
Facility address:	9652 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000056994
Mailing address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6W CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	HARLAN COMMUNITY ACADEMY HS (Continued)		**1004696723**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

Count: 11 records

FOCUS MAP 2 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	U004179087	FORMER FILLING STATION	7296 S CHICAGO	60619	UST
CHICAGO	S110122357	DIE TECH	7230 S CHICAGO	60619	ENG CONTROLS, INST CONTROL, S
CHICAGO	U004128268	SOUTH CHICAGO ONE, INC.	7283 S CHICAGO AVE	60619	LUST, UST
CHICAGO	S107926342	CHICAGO PROCESS ENGINEERING	7801 S CLAIRMONT	60620	SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU

Focus Map 3

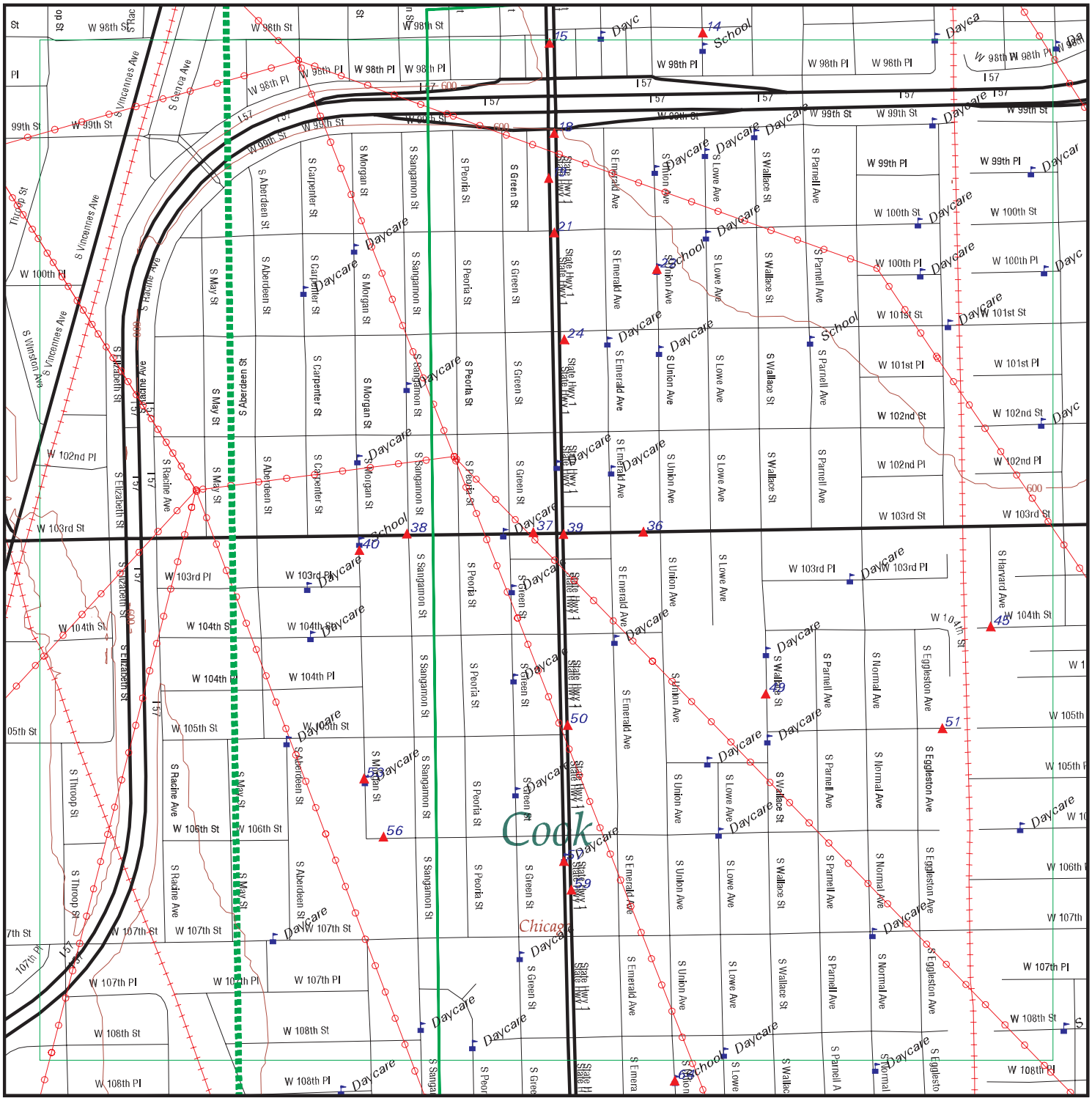

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 3 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	14
RCRA-CESQG	1
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	10
UST	15
SPILLS	2
ENG CONTROLS	0
INST CONTROL	0
SRP	2
DRYCLEANERS	1
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
14	**EVERS** **9811 S LOWE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001127034** **ILR000033118**

RCRA-SQG:

Date form received by agency:	01/10/1997
Facility name:	EVERS
Facility address:	9811 S LOWE CHICAGO, IL 60628
EPA ID:	ILR000033118
Contact:	EMMERINE CLARKSTON
Contact address:	9811 S LOWE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-2565
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
15	**SHELL** **9802 S. HALSTED** **CHICAGO, IL 60628**	**UST**	**U001142621** **N/A**

UST:

Facility ID:	2019884
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Khalid Siddiqui
Owner Id:	U0029824
Owner Address:	1823 West Hood Avenue, Suite C
Owner City,St,Zip:	Chicago, IL 60660

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
15	**CLARK GAS** **9811 S. HALSTED** **CHICAGO, IL 60628**	**UST**	**U001143133** **N/A**

UST:

Facility ID:	2007026
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Petro Universal, Inc.
Owner Id:	U0034143
Owner Address:	9811 S. Halsted
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number

CLARK GAS (Continued) **U001143133**

Tank Number:	5
Tank Capacity:	8000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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15 **EQUILON ENTERPRISES LLC** **LUST** **S104189763**
9811 HALSTED **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	990295
IL EPA Id:	0316495059
Product:	Unleaded Gas
IEMA Date:	02/10/1999
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715

Map ID	Site	Database(s)	EPA ID Number
	EQUILON ENTERPRISES LLC (Continued)		**S104189763**

Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	John Robbins
PRP Address:	603 West Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/19/1999
45 Report Received:	02/26/1999
NFA/NFR Letter:	**09/14/2005**
NFR Date Recorded:	12/02/2005

18	**MOBIL OIL CORP SS A8B** **9901 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000612200** **ILD984824235**

RCRA-SQG:

Date form received by agency:	03/01/2000
Facility name:	MOBIL OIL CORP SS A8B
Site name:	MOBIL OIL CORP, #A8B
Facility address:	9901 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD984824235
Mailing address:	3225 GALLOWS RD, STE-5D FAIRFAX, VA 22037
Contact:	RATRY VINAYA
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(703) 846-5735
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MOBIL OIL CORP
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

Map ID	Site	Database(s)	EPA ID Number

MOBIL OIL CORP SS A8B (Continued) **1000612200**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	05/10/1991
Facility name:	MOBIL OIL CORP SS A8B
Classification:	Small Quantity Generator

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

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18 **MOBIL #10769** **UST** **U000172643**
9901 SOUTH HALSTEAD STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2008992
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	JMJ Mobil
Owner Id:	U0033024
Owner Address:	9901 S. Halsted
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**

Map ID	Site	Database(s)	EPA ID Number
	MOBIL #10769 (Continued)		**U000172643**

Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	1000

Map ID	Site	Database(s)	EPA ID Number
	MOBIL #10769 (Continued)		**U000172643**

Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1988
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1986
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1988
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1986
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	8
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1988
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1986
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**

Map ID	Site	Database(s)	EPA ID Number

MOBIL #10769 (Continued) **U000172643**

Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	9
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1988
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1986
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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18 **BHAGATS AMOCO** **RCRA-SQG** **1000862667**
9900 S HALSTED **ILD984925701**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	09/24/2007
Facility name:	BHAGATS AMOCO
Facility address:	9900 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD984925701
Contact:	CHACKO CHANDY
Contact address:	9900 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 233-6661
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHACKO CHANDY
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	03/01/2003
Owner/Op end date:	Not reported

Owner/operator name:	IRFAN BHAGAT
Owner/operator address:	9900 S HALSTED

Map ID	Site	Database(s)	EPA ID Number

BHAGATS AMOCO (Continued) **1000862667**

CHICAGO, IL 60628
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/13/1993
Facility name: BHAGATS AMOCO
Site name: AMOCO 15525
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

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18 **BP** **LUST** **U004128062**
9900 SOUTH HALSTED STREET **UST** **N/A**
CHICAGO, IL 60628 **SRP**

LUST:
Incident Num: 971752
IL EPA Id: 0316535007
Product: Gasoline
IEMA Date: 09/18/1997
Project Manager: Carlock
Project Manager Phone: (217) 782-6762

Map ID	Site	Database(s)	EPA ID Number

BP (Continued) **U004128062**

Email:	Not reported
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	6309901048
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2000-09-13
20 Report Received:	09/29/1997
45 Report Received:	11/03/1997
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2010818
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	9900 Halsted Corp.
Owner Id:	U0036058
Owner Address:	9739 W. Irvine Park
Owner City,St,Zip:	Schiller Park, IL 60167

Tank Number:	1
Tank Capacity:	500
Tank Substance:	Used Oil
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	10
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	6/21/1994
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	11/1/1988
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2

Map ID	Site	Database(s)	EPA ID Number
	BP (Continued)		**U004128062**

Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**

Map ID	Site	Database(s)	EPA ID Number
	BP (Continued)		**U004128062**

Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	550
Tank Substance:	Heating Oil
Last Used Date:	1/1/1988
OSFM First Notify Date:	6/21/1994
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/21/1994
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/1988
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	8
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/21/1994
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/1988
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	9
Tank Capacity:	12000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number
	BP (Continued)		**U004128062**

Last Used Date:	Not reported
OSFM First Notify Date:	6/21/1994
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/1988
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

SRP:

IL EPA Id:	0316535007
US EPA Id:	ILD984925701
Longitude:	-87.64345
Latitude:	41.71383
Contact Name:	William Shaver
Contact Address:	24501 Ecorse Road
Contact Address2:	Not reported
Contact City,St,Zip:	Taylor, MI 48180-
Contact Phone:	(574) 272-6955
Date Enrolled:	06/22/2005
Point Of Contact:	Jason Brink
Consultant Company:	Timmermans Environmental Services, Inc.
Consultant Address:	4455 Chicago Drive SW
Consultant Address2:	Not reported
Consultant City,St,Zip:	Grandville, MI 49418-1544
Consultant Phone:	(616) 531-0503
Proj Mgr Assigned:	Baldwin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	0.5
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	PAV2, LLC
Remediation Applicant Title:	Executive V.P.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

Map ID	Site	Database(s)	EPA ID Number
18	**MOBIL OIL CO.** **05A8B MOBILE ST./9901 SOUTH HALSTED** **CHICAGO, IL 60628**	**LUST**	**S103688309** **N/A**

LUST:

Incident Num:	980630
IL EPA Id:	0316535005
Product:	Gasoline
IEMA Date:	03/24/1998
Project Manager:	Weller
Project Manager Phone:	(217) 524-4647
Email:	Melinda.Weller@illinois.gov
PRP Name:	Mobil Oil Corp.
PRP Contact:	Mike Holland
PRP Address:	Joliet Refinery, I-55 & Arsenal Rd.
PRP City,St,Zip:	Channahon, IL 60410
PRP Phone:	8154237664
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	04/02/1998
45 Report Received:	05/08/1998
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

18	**AMOCO OIL CO. #15525** **99TH & HALSTED** **CHICAGO, IL 60628**	**LUST**	**S103687480** **N/A**

LUST:

Incident Num:	941074
IL EPA Id:	0316535007
Product:	Gasoline
IEMA Date:	05/13/1994
Project Manager:	Weller
Project Manager Phone:	(217) 524-4647
Email:	Melinda.Weller@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1994-06-08
20 Report Received:	06/03/1994
45 Report Received:	06/29/1994
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
19	**#013611** **9948 S HALSTED** **CHICAGO, IL 60628**	**UST**	**U000865680** **N/A**

UST:

Facility ID:	2016833
Facility Status:	INACTIVE
Facility Type:	**NONE**
Owner Name:	Phillips Petroleum Company
Owner Id:	U0011864
Owner Address:	13 D2 Phillips Building
Owner City,St,Zip:	Bartlesville, OK 74004

Tank Number:	1
Tank Capacity:	560
Tank Substance:	Used Oil
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

Tank Number:	3
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

Map ID	Site	Database(s)	EPA ID Number

#013611 (Continued) **U000865680**

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

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21 **JOY AUTO REPAIR** **RCRA-SQG** **1004697492**
10001 S HALSTED **ILR000077966**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	06/01/2000
Facility name:	JOY AUTO REPAIR
Facility address:	10001 S HALSTED CHICAGO, IL 60628
EPA ID:	ILR000077966
Contact:	WILL TURNER
Contact address:	10001 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 298-8601
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	JOY AUTO REPAIR
Owner/operator address:	10001 S HALSTED CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 298-8601
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No

Map ID	Site	Database(s)	EPA ID Number

JOY AUTO REPAIR (Continued) **1004697492**

On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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21 **JOY AUTO SERVICE** **UST** **U003298274**
10001 SOUTH HALSTED STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2036186
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Turner Denise
Owner Id:	U0015296
Owner Address:	6847 S Calumet Ave
Owner City,St,Zip:	Chicago, IL 60647
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	JOY AUTO SERVICE (Continued)		**U003298274**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	500
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
21	**BELL BROS 29 MIN CLEANERS INC** **10000 S HALSTED ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001960552** **ILR000075119**

RCRA-SQG:

Date form received by agency:	02/25/2000
Facility name:	BELL BROS 29 MIN CLEANERS INC
Facility address:	10000 S HALSTED ST CHICAGO, IL 60628
EPA ID:	ILR000075119
Contact:	ALONZO BELL
Contact address:	10000 S HALSTED ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 774-5757
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	BELL BROS 29 MIN CLEANERS INC
Owner/operator address:	10000 S HALSTED CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 774-5757
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET,

Map ID	Site	Database(s)	EPA ID Number

BELL BROS 29 MIN CLEANERS INC (Continued) **1001960552**

WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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22 **FERNWOOD** **RCRA-SQG** **1001127030**
10041 S UNION **ILR000033076**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	01/10/1997
Facility name:	FERNWOOD
Facility address:	10041 S UNION CHICAGO, IL 60628
EPA ID:	ILR000033076
Contact:	ERVIN BOND
Contact address:	10041 S UNION CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-2700
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Map ID	Site	Database(s)	EPA ID Number
	FERNWOOD (Continued)		**1001127030**

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
24	**HESTER, FRANNY** **10101-03 SOUTH HALSTED AVE.** **CHICAGO, IL 60628**	**LUST**	**S104529973** **N/A**

LUST:

Incident Num:	991953
IL EPA Id:	0316495119
Product:	Gasoline, Uset Oil
IEMA Date:	08/18/1999
Project Manager:	Rothering
Project Manager Phone:	(217) 785-1858
Email:	Scott.Rothering@illinois.gov
PRP Name:	Franny Hester
PRP Contact:	Anna Davis
PRP Address:	2237 East 79th St.
PRP City,St,Zip:	Chicago, IL 60649
PRP Phone:	7733566300
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	09/02/1999
45 Report Received:	01/31/2000
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
24	**FERNWOOD TOWING & TUNE-UPS** **10101-10103 S ASHLAND** **CHICAGO, IL 60628**	**UST**	**U003668840** **N/A**

UST:

Facility ID:	2039129
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Fannie Hester
Owner Id:	U0028902
Owner Address:	2237 E 79th St C/O Anna Davis Maguire & Assoc Real Estate
Owner City,St,Zip:	Chicago, IL 60644
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/31/1999
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

FERNWOOD TOWING & TUNE-UPS (Continued) **U003668840**

Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/31/1999
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/31/1999
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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36 **HARDY CORP** **UST** **U000791535**
711 W 103RD ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2001050
Facility Status:	CLOSED
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Name:	Hardy Corp
Owner Id:	U0006455
Owner Address:	711 W 103Rd St
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	5/1/1994
OSFM First Notify Date:	1/24/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	HARDY CORP (Continued)		**U000791535**

Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

36	**HARDY CORP** **711 W 103RD ST** **CHICAGO, IL 60628**	**RCRA-SQG** **LUST**	**1000979049** **IL0000958884**

RCRA-SQG:

Date form received by agency:	11/30/1994
Facility name:	HARDY CORP
Facility address:	711 W 103RD ST CHICAGO, IL 60628
EPA ID:	IL0000958884
Contact:	WILLIAM HARDY
Contact address:	711 W 103RD ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 779-6600
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	HARDY CORP
Owner/operator address:	711 W 103RD ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 779-6600
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Map ID	Site	Database(s)	EPA ID Number

HARDY CORP (Continued) **1000979049**

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

LUST:

Incident Num:	942827
IL EPA Id:	0316495065
Product:	Gasoline
IEMA Date:	12/15/1994
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Hardy Corp.
PRP Contact:	William Hardy
PRP Address:	711 West 103rd St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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37 **DELITE CLEANERS** **RCRA-SQG** **1000612336**
816 W 103RD ST **ILD984825638**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	11/02/1998
Facility name:	DELITE CLEANERS
Facility address:	816 W 103RD ST CHICAGO, IL 60643
EPA ID:	ILD984825638
Contact:	WILLIAM HOPKINS
Contact address:	816 W 103RD ST CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(773) 233-2486
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Map ID	Site	Database(s)	EPA ID Number

DELITE CLEANERS (Continued) **1000612336**

Owner/Operator Summary:

Owner/operator name:	HOPKINS WILLIAM
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

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38 **MCDONNELL CLEANERS** **RCRA-SQG** **1000339273**
932 W 103RD ST **ILD097171318**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	02/11/1988
Facility name:	MCDONNELL CLEANERS
Facility address:	932 W 103RD ST
	CHICAGO, IL 60643
EPA ID:	ILD097171318
Contact:	JOHN MCDONNELL
Contact address:	932 W 103RD ST
	CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(312) 238-2776

Map ID	Site	Database(s)	EPA ID Number

MCDONNELL CLEANERS (Continued) **1000339273**

Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: MCDONNELL JOHN
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR

Map ID	Site	Database(s)	EPA ID Number

MCDONNELL CLEANERS (Continued) **1000339273**

F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

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39 **AMOCO 8614** **RCRA-SQG** **1000862415**
10301 S HALSTED ST **ILD984923169**
CHICAGO, IL 60628

RCRA-SQG:
Date form received by agency: 08/20/1993
Facility name: AMOCO 8614
Facility address: 10301 S HALSTED
CHICAGO, IL 60627
EPA ID: ILD984923169
Mailing address: 2021 SPRING RD 400
OAK BROOK, IL 60521
Contact: LINDA CURRAN
Contact address: 2021 SPRING RD 400
OAK BROOK, IL 60521
Contact country: US
Contact telephone: (708) 990-1043
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: AMOCO OIL CO
Owner/operator address: 2021 SPRING RD 400
OAK BROOK, IL 60521
Owner/operator country: Not reported
Owner/operator telephone: (708) 990-1043
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No

Map ID	Site	Database(s)	EPA ID Number

AMOCO 8614 (Continued) **1000862415**

Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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39 **MARATHON GAS AND FOOD** **UST** **U001141865**
10301 S. HALSTED STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2022921
Facility Status:	CLOSED
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	OK Gas and Food, Inc.
Owner Id:	U0031512
Owner Address:	10301 S. Halsted
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/16/2008
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1983
Green Tag Decal:	**G001584**
Green Tag Issue Date:	**4/11/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No
Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/16/2008
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1983

Map ID	Site	Database(s)	EPA ID Number

MARATHON GAS AND FOOD (Continued) **U001141865**

Green Tag Decal:	**G001584**
Green Tag Issue Date:	**4/11/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	1/16/2008
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1983
Green Tag Decal:	**G001584**
Green Tag Issue Date:	**4/11/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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39 **MUSTAFA, KHADIM** **LUST** **S105958677**
10301 SOUTH HALSTED **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20031090
IL EPA Id:	0316495046
Product:	Gasoline
IEMA Date:	07/23/2003
Project Manager:	Hale
Project Manager Phone:	(217) 782-1803
Email:	Sam.Hale@illinois.gov
PRP Name:	BP Products North America, Inc.
PRP Contact:	Harold Primack
PRP Address:	28100 Torch Parkway, 2S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	6308367139
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	08/12/2003
45 Report Received:	09/08/2003
NFA/NFR Letter:	**11/21/2008**
NFR Date Recorded:	01/14/2010

Incident Num:	20080221
IL EPA Id:	0316495046
Product:	Gasoline
IEMA Date:	02/15/2008
Project Manager:	Hale
Project Manager Phone:	(217) 782-1803
Email:	Sam.Hale@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported

Map ID	Site	Database(s)	EPA ID Number

MUSTAFA, KHADIM (Continued) **S105958677**

PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/31/2008
45 Report Received:	04/25/2008
NFA/NFR Letter:	**07/30/2008**
NFR Date Recorded:	04/20/2009

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39 **SPILLS** **S109092833**
10301 S HALSTED **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20080221
Incident Date:	Not reported
Date Received:	02/15/2008
Facility Address:	10301 S HALSTED
Facility City:	CHICAGO
PRP Name:	MUSTAFA, KHADIM
AC:	Not reported

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40 **GARVEY** **RCRA-SQG** **1001127074**
10309 S MORGAN **ILR000033746**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	01/22/1997
Facility name:	GARVEY
Facility address:	10309 S MORGAN CHICAGO, IL 60643
EPA ID:	ILR000033746
Contact:	PATRICIA TAYLOR
Contact address:	10309 S MORGAN CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(773) 535-2763
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District

Map ID	Site	Database(s)	EPA ID Number

GARVEY (Continued) **1001127074**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

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45 **CHICAGO FIRE DEPARTMENT ENGINE #93** **UST** **U004128232**
330 WEST 104TH STREET **N/A**
CHICAGO, IL 60622

UST:
Facility ID: 2030538
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: City of Chicago, Department of Environment
Owner Id: U0020004
Owner Address: 30 North LaSalle Street, #300
Owner City,St,Zip: Chicago, IL 60612

Tank Number: 1
Tank Capacity: 0
Tank Substance: Heating Oil
Last Used Date: 9/1/1968
OSFM First Notify Date: 6/30/1992
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: 1/1/1901
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
45	**ROSELAND PUMPING STATION** **351 W 104TH ST** **CHICAGO, IL 60628**	**UST**	**U001142169** **N/A**

UST:

Facility ID:	2020701
Facility Status:	EXEMPT
Facility Type:	**CITY / TOWN**
Owner Name:	City of Chicago
Owner Id:	U0020652
Owner Address:	121 North LaSalle Street Commissioners Office
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Diesel Fuel
Last Used Date:	6/1/1981
OSFM First Notify Date:	4/28/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

45	**CHICAGO, CITY OF** **351 WEST 104TH ST.** **CHICAGO, IL 60628**	**LUST**	**S105225778** **N/A**

LUST:

Incident Num:	942419
IL EPA Id:	0316495048
Product:	Deisel
IEMA Date:	10/27/1994
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	City of Chicago
PRP Contact:	Richard Wojcieszak
PRP Address:	1000 East Ohio St.
PRP City,St,Zip:	Chicago, IL 60611
PRP Phone:	Not reported
Site Classification:	NFA
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	11/07/1994
45 Report Received:	03/08/1995
NFA/NFR Letter:	**09/19/1995**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
45	**351 W 104TH ST** **CHICAGO, IL**	**SPILLS**	**S111892193** **N/A**

SPILLS:

Incident ID:	19942419
Incident Date:	Not reported
Date Received:	10/27/1994
Facility Address:	351 W 104TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO, CITY OF-DEPT OF WATER
AC:	Not reported

49	**FERNWOOD PLAYGROUND PARK** **10436 S WALLACE** **CHICAGO, IL 60605**	**UST**	**U001473580** **N/A**

UST:

Facility ID:	2032287
Facility Status:	INACTIVE/HEATING OIL
Facility Type:	**CITY / TOWN**
Owner Name:	Chicago Park District
Owner Id:	U0002888
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	1500
Tank Substance:	Heating Oil
Last Used Date:	1/1/1974
OSFM First Notify Date:	7/7/1993
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1960
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

50	**OUR #52-9652-105** **NWC HALSTED & 105TH ST** **CHICAGO, IL 60628**	**UST**	**U000865963** **N/A**

UST:

Facility ID:	2020630
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Union Oil Co Of California
Owner Id:	U0015371
Owner Address:	1650 E Gulf Rd
Owner City,St,Zip:	Schaumburg, IL 60196
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	6/1/1972

Map ID	Site	Database(s)	EPA ID Number

OUR #52-9652-105 (Continued) **U000865963**

OSFM First Notify Date:	4/30/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	6/1/1972
OSFM First Notify Date:	4/30/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	9500
Tank Substance:	Gasoline
Last Used Date:	6/1/1972
OSFM First Notify Date:	4/30/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	9500
Tank Substance:	Gasoline
Last Used Date:	6/1/1972
OSFM First Notify Date:	4/30/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	OUR #52-9652-105 (Continued)		**U000865963**

Fee Due: Not reported

51	**IL BELL TELEPHONE CO** **413 W 105TH** **CHICAGO, IL 60628**	**UST**	**U001142608** **N/A**

UST:

Facility ID:	2007809
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Ameritech d/b/a AT&T
Owner Id:	U0007227
Owner Address:	308 South Akard, Room 1701
Owner City,St,Zip:	Dallas, TX 75202

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/8/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/8/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1988
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	IL BELL TELEPHONE CO (Continued)		**U001142608**

Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

51	**ILLINOIS BELL TELEPHONE** **413 WEST 105TH STREET** **CHICAGO, IL 60628**	**LUST**	**S104528083** **N/A**

LUST:

Incident Num:	880112
IL EPA Id:	0316495016
Product:	Not reported
IEMA Date:	02/02/1988
Project Manager:	Tucka
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Illinois Bell Telephone
PRP Contact:	Thomas Scheer
PRP Address:	900 North Villa
PRP City,St,Zip:	Villa Park, IL 60181
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**03/21/2005**
NFR Date Recorded:	Not reported

53	**MOUNT VERNON ELEMENTARY** **10540 S MORGAN ST** **CHICAGO, IL 60643**	**RCRA-CESQG**	**1004696867** **ILR000059352**

RCRA-CESQG:

Date form received by agency:	12/09/1998
Facility name:	MOUNT VERNON ELEMENTARY
Facility address:	10540 S MORGAN ST CHICAGO, IL 60643
EPA ID:	ILR000059352
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or

Map ID	Site	Database(s)	EPA ID Number
	MOUNT VERNON ELEMENTARY (Continued)		**1004696867**

other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
56	**1040 WEST 106TH ST** **CHICAGO, IL**	**ERNS**	**2003703238** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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57 **WALGREEN N0 2300**
10620 S HALSTED ST
CHICAGO, IL 60628

RCRA-SQG **1001213813**
ILR000046268

RCRA-SQG:

Date form received by agency:	12/11/1997
Facility name:	WALGREEN N0 2300
Facility address:	10620 S HALSTED ST CHICAGO, IL 60628
EPA ID:	ILR000046268
Mailing address:	4020 STIRRUP CREEK DR DURHAM, NC 27703
Contact:	RUSS ROELLER
Contact address:	4020 STIRRUP CREEK DR DURHAM, NC 27703
Contact country:	US
Contact telephone:	(919) 484-3631
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WALGREEN STORES
Owner/operator address:	200 WILMONT RD DEERFIELD, IL 60015
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 914-2500
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number
	WALGREEN N0 2300 (Continued)		**1001213813**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D011
Waste name: SILVER

Violation Status: No violations found

57	**BETTY BRITE CLEANERS** **10630 SOUTH HALSTED STREET** **CHICAGO, IL 60628**	**SRP** **DRYCLEANERS**	**S106346412** **N/A**

SRP:

IL EPA Id:	0316495007
US EPA Id:	ILD103342267
Longitude:	-87.64306
Latitude:	41.70038
Contact Name:	Betty Ehman
Contact Address:	10630 South Halsted Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60628-
Contact Phone:	(708) 494-6040
Date Enrolled:	03/01/2004
Point Of Contact:	Michael C. Butler, P.E.
Consultant Company:	Northern Environmental Technologies, Inc.
Consultant Address:	647 Academy Drive
Consultant Address2:	Not reported
Consultant City,St,Zip:	Northbrook, IL 60062-
Consultant Phone:	(847) 562-8577
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	0.450
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Betty Brite Cleaners
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BETTY BRITE CLEANERS (Continued)		**S106346412**

DRYCLEANERS:

Facility Id:	5534-4100-01
DC No:	DC-00489
Facility Contact:	EUNICE KIM
License Expires:	12/31/2012

57	**BETTY BRITE CLEANERS** **10630 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000423104** **ILD103342267**

RCRA-SQG:

Date form received by agency:	03/19/1987
Facility name:	BETTY BRITE CLEANERS
Facility address:	10630 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD103342267
Contact:	MICHAEL WILLIAMS
Contact address:	10630 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 881-9822
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	BETTY BRITE INC
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

Map ID	Site	Database(s)	EPA ID Number

BETTY BRITE CLEANERS (Continued) **1000423104**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:

Regulation violated:	Not reported
Area of violation:	Not reported
Date violation determined:	Not reported
Date achieved compliance:	Not reported
Violation lead agency:	Not reported
Enforcement action:	Not reported
Enforcement action date:	Not reported
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	Not reported
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Evaluation Action Summary:

Evaluation date:	09/29/1997
Evaluation:	COMPLIANCE ASSISTANCE VISIT
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	EPA

---

59 **CITGO GAS & MINI MART** **UST** **U001143119**
10655 S HALSTED ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2007001
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Gagan Petroleum, Inc.
Owner Id:	U0029367

Map ID	Site	Database(s)	EPA ID Number
	CITGO GAS & MINI MART (Continued)		**U001143119**

Owner Address:	10655 S. Halsted St.
Owner City,St,Zip:	Chicago, IL 99999
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/24/2000
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/24/2000
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/24/2000
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	8/9/1996
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**

Map ID	Site	Database(s)	EPA ID Number
	CITGO GAS & MINI MART (Continued)		**U001143119**

Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/5/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	2/1/2000
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/5/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	2/1/2000
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/5/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	2/1/2000
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
59	**SHELL OIL CO.** **10655 SOUTH HALSTED** **CHICAGO, IL 60628**	**LUST**	**S104528066** **N/A**

LUST:

Incident Num:	880583
IL EPA Id:	0316495044
Product:	Gasoline
IEMA Date:	05/06/1988
Project Manager:	Wallace
Project Manager Phone:	(217) 524-1283
Email:	Donna.Wallace@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	Lisa Schoedel
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	06/26/1988
45 Report Received:	10/24/1990
NFA/NFR Letter:	**09/07/1999**
NFR Date Recorded:	Not reported

64	**DUNNE** **10845 S UNION** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001123586** **ILR000032904**

RCRA-SQG:

Date form received by agency:	01/08/1997
Facility name:	DUNNE
Facility address:	10845 S UNION CHICAGO, IL 60628
EPA ID:	ILR000032904
Contact:	DEAN THOMPSON
Contact address:	10845 S UNION CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-5517
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	DUNNE (Continued)		**1001123586**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Count: 12 records

FOCUS MAP 3 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1010563423	COM ED	103RD & VINCIENNES	60643	RCRA-SQG
CHICAGO	1004692486	107TH ST SUB SHOP	1215 W 107TH	60628	RCRA-CESQG
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	1001487618	FERNWOOD TOWING AND TUNE UPS	10101 10103 S HALSTED	60628	RCRA-SQG
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS

Focus Map 4

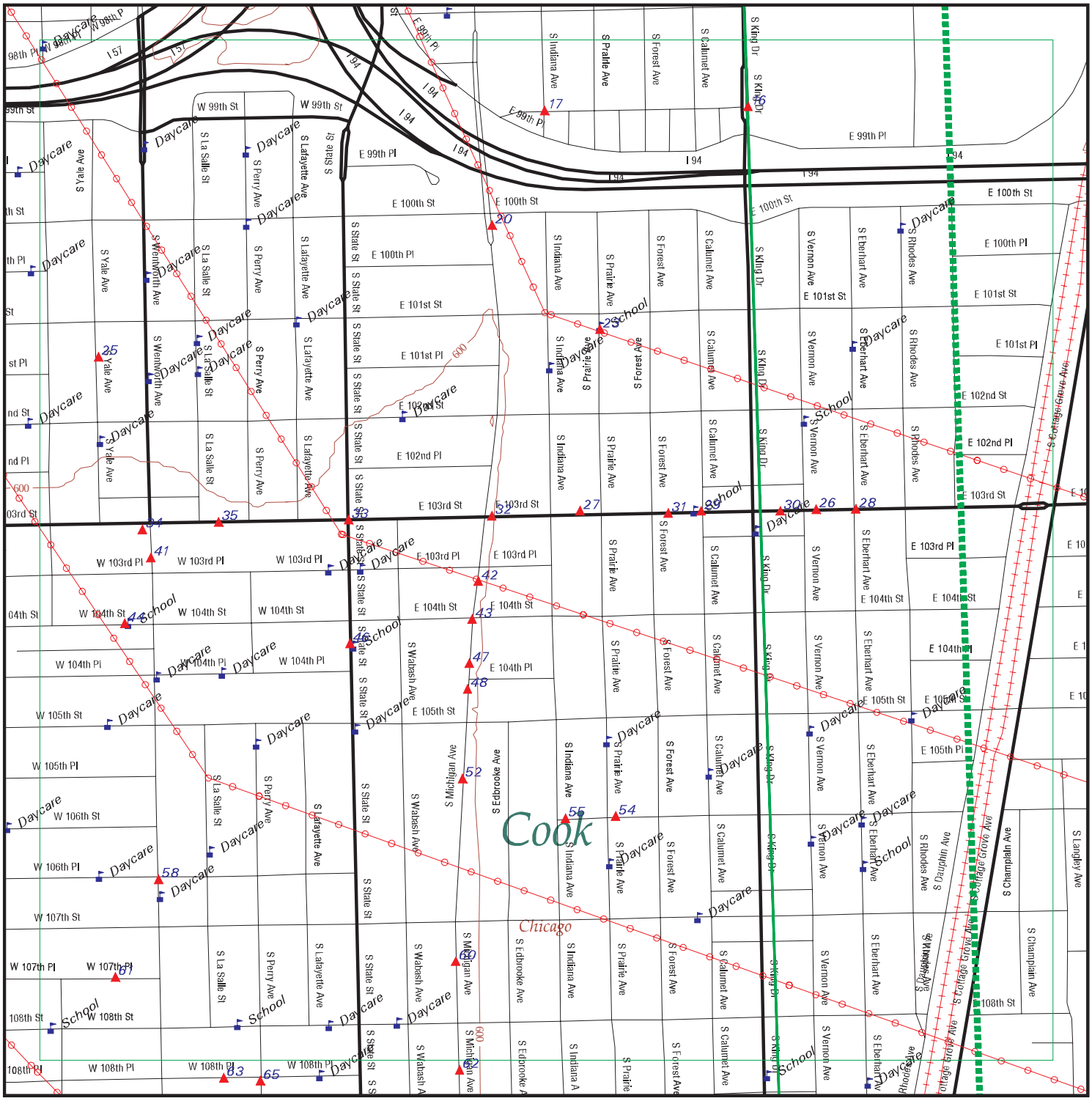

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 4 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	10
RCRA-CESQG	5
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	4
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	10
UST	24
SPILLS	12
ENG CONTROLS	2
INST CONTROL	3
SRP	4
DRYCLEANERS	1
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
16	**DRIVER SER FACILITY** **9901 S MARTIN LUTHER KING DR** **CHICAGO, IL 60628**	**UST**	**U000792087** **N/A**

UST:

Facility ID:	2024664
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Secretary Of State
Owner Id:	U0013734
Owner Address:	Rm 189 Howlett Bldg
Owner City,St,Zip:	Springfield, IL 62756
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	3/6/1989
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

16	**SECRETARY OF STATE - DRIVER FACILITY** **9901 DR MARTIN LUTHER KING** **CHICAGO, IL 60628**	**LUST**	**1008127443** **N/A**

LUST:

Incident Num:	932320
IL EPA Id:	0316495055
Product:	Non Petro
IEMA Date:	08/30/1993
Project Manager:	Nickell
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Illinois Secretary of State
PRP Contact:	Robert Orr
PRP Address:	Room 037, Howlett Bldg.
PRP City,St,Zip:	Springfield, IL 62756
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	09/17/1993
45 Report Received:	10/25/1993
NFA/NFR Letter:	**11/17/1995**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
17	**SHEDD BRANCH SCHOOL** **200 E 99TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1001123323** **ILR000028951**

RCRA-CESQG:

Date form received by agency:	12/24/2009
Facility name:	SHEDD BRANCH SCHOOL
Facility address:	200 E 99TH ST CHICAGO, IL 60628
EPA ID:	ILR000028951
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	200 E 99TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number
	SHEDD BRANCH SCHOOL (Continued)		**1001123323**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/15/1998
Facility name: SHEDD BRANCH SCHOOL
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: X002
Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

20	**SWEIS RAY TOWN AND COUNTRY MINI MART** **10007 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000907509** **IL0000802181**

RCRA-SQG:
Date form received by agency: 09/20/1994
Facility name: SWEIS RAY TOWN AND COUNTRY MINI MART
Facility address: 10007 S MICHIGAN AVE
CHICAGO, IL 60628
EPA ID: IL0000802181
Mailing address: 9023 W PINE
ORLAND PARK, IL 60462
Contact: RAY SWEIS
Contact address: 10007 S MICHIGAN AVE
CHICAGO, IL 60628
Contact country: US
Contact telephone: (708) 460-8950
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

Map ID	Site	Database(s)	EPA ID Number

SWEIS RAY TOWN AND COUNTRY MINI MART (Continued) **1000907509**

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NASSER MUHAMMAD
Owner/operator address:	10007 S MICHIGAN AVE CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 785-5110
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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20 **TOWN & COUNTRY GAS MART** **LUST** **S104522883**
10007 SOUTH MICHIGAN AVE. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	942453
IL EPA Id:	0316495064
Product:	Uset Oil
IEMA Date:	11/01/1994
Project Manager:	Zuehlke
Project Manager Phone:	(217) 557-6937
Email:	Wayne.Zuehlke@illinois.gov
PRP Name:	Omar Muthane
PRP Contact:	Not reported
PRP Address:	5901 North Cicero Avenue

Map ID	Site	Database(s)	EPA ID Number

TOWN & COUNTRY GAS MART (Continued) **S104522883**

PRP City,St,Zip:	Chicago, IL 60646
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/01/1995
45 Report Received:	05/26/1995
NFA/NFR Letter:	**01/27/2009**
NFR Date Recorded:	03/23/2009

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20 **O.S. CORPORATION D/B/A CITGO** **UST** **U000865940**
10007 S. MICHIGAN AVENUE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2026784
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Omar Muthanna
Owner Id:	U0032438
Owner Address:	Not reported
Owner City,St,Zip:	Not reported

Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	2/14/1991
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1974
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	2/14/1991
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1974
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000

Map ID	Site	Database(s)	EPA ID Number

O.S. CORPORATION D/B/A CITGO (Continued) **U000865940**

Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	2/14/1991
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1974
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	1/1/1987
OSFM First Notify Date:	8/20/1996
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1987
OSFM First Notify Date:	8/20/1996
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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23 **BENNETT** **RCRA-SQG** **1001087388**
10115 S PRAIRIE AVE **ILR000021204**
CHICAGO, IL 60609

RCRA-SQG:

Date form received by agency:	12/23/1996
Facility name:	BENNETT
Facility address:	10115 S PRAIRIE AVE CHICAGO, IL 60609
EPA ID:	ILR000021204
Contact:	BARBARA ELLIS
Contact address:	10115 S PRAIRIE AVE CHICAGO, IL 60609

Map ID	Site	Database(s)	EPA ID Number

BENNETT (Continued) **1001087388**

Contact country: US
Contact telephone: (773) 535-5460
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-7039
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
25	**10135 SOUTH YALE ST** **CHICAGO, IL**	**ERNS**	**2006796125** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

26	**R & R MARATHON** **446 E. 103RD STREET** **CHICAGO, IL 60628**	**UST**	**U003971876** **N/A**

UST:

Facility ID:	2034334
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	R & R Gasoline, Inc.
Owner Id:	U0033325
Owner Address:	446 E. 103rd Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	9/15/1995
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	6/15/1972
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	9/15/1995
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	6/15/1972
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	9/15/1995

Map ID	Site	Database(s)	EPA ID Number
	R & R MARATHON (Continued)		**U003971876**

Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/6/1970
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1962
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1956
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	1/1/1962
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1956
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	1/1/1963
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1962
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
26	**KADALIMATTON, SIBI** **446 EAST 103RD ST.** **CHICAGO, IL 60628**	**LUST**	**S105815855** **N/A**

LUST:

Incident Num:	20030225
IL EPA Id:	0316495079
Product:	Unleaded Gas
IEMA Date:	02/20/2003
Project Manager:	Wallace
Project Manager Phone:	(217) 524-1283
Email:	Donna.Wallace@illinois.gov
PRP Name:	Sibi Kadalimatton
PRP Contact:	Not reported
PRP Address:	5745 Beba
PRP City,St,Zip:	Morton Grove, IL 60053
PRP Phone:	7738791522
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/14/2004
45 Report Received:	05/14/2004
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

26	**446 E 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111913067** **N/A**

SPILLS:

Incident ID:	20030225
Incident Date:	Not reported
Date Received:	02/20/2003
Facility Address:	446 E 103RD ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

26	**ABA NORGETOWN** **437 E 103RD ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1000612392** **ILD984826206**

RCRA-CESQG:

Date form received by agency:	01/13/1997
Facility name:	ABA NORGETOWN CLEANERS
Facility address:	437 E 103RD ST CHICAGO, IL 60628
EPA ID:	ILD984826206
Contact:	GARY ADOLPH
Contact address:	437 E 103RD ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 568-6674
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Conditionally Exempt Small Quantity Generator

Map ID	Site	Database(s)	EPA ID Number

ABA NORGETOWN (Continued) **1000612392**

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	ABA NORGETOWN
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Owner/operator name:	ABA NORGETOWN
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	05/13/1991
Facility name:	ABA NORGETOWN CLEANERS

Map ID	Site	Database(s)	EPA ID Number

ABA NORGETOWN (Continued) **1000612392**

Classification: Small Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 01/13/1997
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

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27 **METROPOLITAN FAMILY SERVICES** **UST** **U003668693**
235E 103RD ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID: 2038836
Facility Status: EXEMPT
Facility Type: **NONE**
Owner Name: Metropolitan Family Services
Owner Id: U0027558
Owner Address: 14 E Jackson Blvd Suite 1400
Owner City,St,Zip: Chicago, IL 60604

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Heating Oil
Last Used Date: 1/1/1960
OSFM First Notify Date: Not reported
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**

Map ID	Site	Database(s)	EPA ID Number
	METROPOLITAN FAMILY SERVICES (Continued)		**U003668693**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
27	**#014816** **214 E 103RD ST** **CHICAGO, IL 60628**	**UST**	**U000865670** **N/A**

UST:

Facility ID:	2016843
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Phillips Petroleum Company
Owner Id:	U0011864
Owner Address:	13 D2 Phillips Building
Owner City,St,Zip:	Bartlesville, OK 74004

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	10/1/1979
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	10/1/1979
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

Tank Number:	3
Tank Capacity:	560
Tank Substance:	Used Oil
Last Used Date:	10/1/1979
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

#014816 (Continued) **U000865670**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

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28 **CHICAGO DEPARTMENT OF ENVIRONMENT** **INST CONTROL** **S109143364**
501 EAST 103RD STREET **SRP** **N/A**
CHICAGO, IL 60628

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316495132
NFR Letter:	09/29/2009
Date NFR Recorded:	Not reported
Type Of Site:	Industrial/Commercial
Comprehensive / Focused:	Focused
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Tawfik Tawil
RA Company:	Millenium Investment & Development, Inc.
RA Address:	9224 South Oketo Avenue
RA Secondary Address:	Not reported
RA City,St,Zip:	Bridgeview, IL 60455-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	0.497

SRP:

IL EPA Id:	0316495132
US EPA Id:	Not reported
Longitude:	-87.61091
Latitude:	41.70711
Contact Name:	Tawfik Tawil
Contact Address:	9224 South Oketo Avenue
Contact Address2:	Not reported
Contact City,St,Zip:	Bridgeview, IL 60455-
Contact Phone:	(630) 688-0277
Date Enrolled:	06/30/2008
Point Of Contact:	Dana S. Rose
Consultant Company:	Adept Environmental Solutions, Inc.
Consultant Address:	1100 South Waiola Avenue
Consultant Address2:	Not reported
Consultant City,St,Zip:	LaGrange, IL 60525-
Consultant Phone:	(708) 352-9322
Proj Mgr Assigned:	Smith
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	0.497
No Further Remediation Letter Dt:	09/29/2009
Remediation Applicant Co:	Millenium Investment & Development, Inc.
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Mr. Tawfik Tawil
Remediation Applicant Company:	Millenium Investment & Development, Inc.
Remediation Applicant Address:	9224 South Oketo Avenue

Map ID	Site	Database(s)	EPA ID Number

CHICAGO DEPARTMENT OF ENVIRONMENT (Continued) **S109143364**

Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Bridgeview, IL 60455-
Illinois EPA:	0316495132
Site Name:	Chicago Department of Environment
NFR Letter:	2009-09-29
NFR Letter Date Recorded:	Not reported
Site Type:	Industrial/Commercial
Comprehensive/Focused:	Focused
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	0.497

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29 **VACANT JIFFY LUBE STORE 208** **LUST** **U002112807**
350 EAST 103RD STREET **UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	950708
IL EPA Id:	0316505017
Product:	Other Petro
IEMA Date:	04/10/1995
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	Pennzoil
PRP Contact:	Dan McQuillen
PRP Address:	P.O. Box 2967
PRP City,St,Zip:	Houston, TX 77252-2967
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	10/23/1995
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2033802
Facility Status:	CLOSED
Facility Type:	**PETROLEUM DISTRIBUTOR**
Owner Name:	Jiffy Lube International
Owner Id:	U0007899
Owner Address:	700 Milam - 10th Floor P.O. Box 2967
Owner City,St,Zip:	Houston, TX 77002
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	12/1/1994
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901

Map ID	Site	Database(s)	EPA ID Number
	VACANT JIFFY LUBE STORE 208 (Continued)		**U002112807**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	12/1/1994
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/17/1995
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/17/1995
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
29	**350 E 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111893409** **N/A**

SPILLS:

Incident ID:	19950708
Incident Date:	Not reported
Date Received:	04/10/1995
Facility Address:	350 E 103RD ST
Facility City:	CHICAGO
PRP Name:	PENNZOIL
AC:	Not reported

30	**AGUILAR, ABEL** **415 EAST 103RD ST.** **CHICAGO, IL 60628**	**LUST**	**S105958607** **N/A**

LUST:

Incident Num:	20030826
IL EPA Id:	0316495152
Product:	Other Petro
IEMA Date:	06/04/2003
Project Manager:	Hale
Project Manager Phone:	(217) 782-1803
Email:	Sam.Hale@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	10/27/2003
Non LUST Determination Letter:	Not reported
20 Report Received:	07/22/2003
45 Report Received:	07/22/2003
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

30	**415 E 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111914026** **N/A**

SPILLS:

Incident ID:	20030826
Incident Date:	Not reported
Date Received:	06/04/2003
Facility Address:	415 E 103RD ST
Facility City:	CHICAGO
PRP Name:	AGUILAR, ABEL
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
30	**VACANT BUILDING** **415 E 103RD AVE THIRD PARTY REMOVAL** **CHICAGO, IL 60628**	**UST**	**U003907981** **N/A**

UST:

Facility ID:	2041666
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Sheldon Liquors
Owner Id:	U0031274
Owner Address:	421 E 103rd
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	7/22/2003
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
31	**WALGREENS NO 1069** **319 E 103RD ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000612045** **ILD984822635**

RCRA-SQG:

Date form received by agency:	11/04/1997
Facility name:	WALGREENS NO 1069
Facility address:	319 E 103RD ST CHICAGO, IL 60628
EPA ID:	ILD984822635
Contact:	HENRY REDD
Contact address:	319 E 103RD ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 468-0600
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WALGREENS
Owner/operator address:	319 E 103RD ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 468-0600
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

WALGREENS NO 1069 (Continued) **1000612045**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D011
Waste name: SILVER

Violation Status: No violations found

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32 **G&J AUTOMOTIVE** **UST** **U001142482**
122 E 103RD ST **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2026747
Facility Status: CLOSED
Facility Type: **NONE**
Owner Name: G&J Automotive
Owner Id: U0005572
Owner Address: 122 E 103Rd St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 8000
Tank Substance: Gasoline
Last Used Date: 9/1/1988
OSFM First Notify Date: 1/22/1991
Tank Status: **Removed**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**

Map ID	Site	Database(s)	EPA ID Number
	G&J AUTOMOTIVE (Continued)		**U001142482**

Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: No

Map ID	Site	Database(s)	EPA ID Number
32	**WALGREENS STORE #5123** **10300 S MICHIGAN** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001960520** **ILR000074518**

RCRA-SQG:

Date form received by agency:	02/02/2000
Facility name:	WALGREENS STORE #5123
Facility address:	10300 S MICHIGAN MICHIGAN & 103RD CHICAGO, IL 60628
EPA ID:	ILR000074518
Contact:	RUSS ROELLER
Contact address:	4020 STIRRUP CREEK DR #211 DURHAM, NC 27703
Contact country:	US
Contact telephone:	(919) 484-3631
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WALGREEN STORES
Owner/operator address:	200 WILMOT RD DEERFIELD, IL 60013
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 914-2500
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No

Map ID	Site	Database(s)	EPA ID Number
	WALGREENS STORE #5123 (Continued)		**1001960520**

Used oil transporter: No

Hazardous Waste Summary:
Waste code: D011
Waste name: SILVER

Violation Status: No violations found

32	**E-Z GO #077** **10301 S MICHIGAN AVE** **CHICAGO, IL 60628**	**UST**	**U001142061** **N/A**

UST:

Facility ID:	2017204
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Bulk Petroleum Corporation
Owner Id:	U0002119
Owner Address:	9653 North Granville Road
Owner City,St,Zip:	Mequon, WI 53097
Tank Number:	1
Tank Capacity:	99
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	99
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	99
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986

Map ID	Site	Database(s)	EPA ID Number

E-Z GO #077 (Continued) **U001142061**

Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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33 **SHELL STATION 1545-68** **UST** **U001473624**
1 W 103RD ST STATE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2007051
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Shell Oil Products
Owner Id:	U0013849
Owner Address:	P.O. Box 2099 Two Shell Plaza
Owner City,St,Zip:	Houston, TX 77252

Tank Number:	1
Tank Capacity:	9520
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	9520
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	9520
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number
	SHELL STATION 1545-68 (Continued)		**U001473624**

Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

33	**10301 S STATE ST** **CHICAGO, IL**	**SPILLS**	**S111898514** **N/A**

SPILLS:

Incident ID:	19970818
Incident Date:	Not reported
Date Received:	05/09/1997
Facility Address:	10301 S STATE ST
Facility City:	CHICAGO
PRP Name:	AMOCO OIL CO
AC:	Not reported

33	**MARATHON GAS STATION & MINI-MART** **10301 S STATE ST** **CHICAGO, IL 60628**	**UST**	**U003914149** **N/A**

UST:

Facility ID:	2041743
Facility Status:	NOT INSTALLED
Facility Type:	**NONE**
Owner Name:	Ali Mohsen
Owner Id:	U0031358
Owner Address:	10301 S State St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not Installed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	12000

Map ID	Site	Database(s)	EPA ID Number

MARATHON GAS STATION & MINI-MART (Continued) **U003914149**

Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not Installed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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33 **AMOCO OIL CO. #15991** **LUST** **S104521516**
10301 SOUTH STATE ST. **N/A**
CHICAGO, IL 60610

LUST:

Incident Num:	970818
IL EPA Id:	0316085301
Product:	Other Petro
IEMA Date:	05/09/1997
Project Manager:	Piggush
Project Manager Phone:	(217) 782-3101
Email:	Michael.Piggush@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2002-11-01
20 Report Received:	Not reported
45 Report Received:	07/28/1997
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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34 **AMOCO SS #15991 FACILITY#11758** **UST** **U001141959**
103RD & STATE 18599 **N/A**
CHICAGO, IL 60636

UST:

Facility ID:	2020358
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	BP Products North America, Inc.
Owner Id:	U0000552
Owner Address:	P. O. Box 6038 Environmental Compliance Department
Owner City,St,Zip:	Artesia, CA 90702
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	7/1/1986

Map ID	Site	Database(s)	EPA ID Number

AMOCO SS #15991 FACILITY#11758 (Continued) **U001141959**

OSFM First Notify Date:	4/25/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	7/1/1986
OSFM First Notify Date:	4/25/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	7/1/1986
OSFM First Notify Date:	4/25/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	7/1/1986
OSFM First Notify Date:	4/25/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

AMOCO SS #15991 FACILITY#11758 (Continued) **U001141959**

Fee Due: Not reported

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34 **CITGO** **UST** **U003805663**
210 W. 103RD STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2040667
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	WG 8, Inc.
Owner Id:	U0034928
Owner Address:	210 W. 103rd Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	15000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/12/2002
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/2001
Green Tag Decal:	**N001777**
Green Tag Issue Date:	**3/21/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/12/2002
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/2001
Green Tag Decal:	**N001777**
Green Tag Issue Date:	**3/21/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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34 **SPILLS** **S111878830**
201 W 103RD ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19903655
Incident Date:	Not reported
Date Received:	12/10/1990
Facility Address:	201 W 103RD ST
Facility City:	CHICAGO

Map ID	Site	Database(s)	EPA ID Number
	(Continued)		**S111878830**

PRP Name: F & DARDEN DRY CLEANERS
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
34	**201 W 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111878463** **N/A**

SPILLS:

Incident ID:	19903286
Incident Date:	Not reported
Date Received:	11/07/1990
Facility Address:	201 W 103RD ST
Facility City:	CHICAGO
PRP Name:	OXY USA INC.
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
34	**ONE HOUR MARTENIZING** **201 WEST 103RD ST.** **CHICAGO, IL 60628**	**LUST**	**S103292372** **N/A**

LUST:

Incident Num:	903286
IL EPA Id:	0316495013
Product:	Gasoline
IEMA Date:	11/07/1990
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	F & R Darden Corp.
PRP Contact:	Renee Darden
PRP Address:	201 West 103rd St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**02/27/1991**
NFR Date Recorded:	Not reported

Incident Num:	903655
IL EPA Id:	0316495013
Product:	Gasoline
IEMA Date:	12/11/1990
Project Manager:	Nifong
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Fred Darden
PRP Contact:	Not reported
PRP Address:	201 West 103rd St.
PRP City,St,Zip:	Chicago, IL 60606
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731

Map ID	Site	Database(s)	EPA ID Number
	ONE HOUR MARTENIZING (Continued)		**S103292372**

Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 02/29/1992
45 Report Received: 02/29/1992
NFA/NFR Letter: 02/27/1991
NFR Date Recorded: Not reported

34	**201-217 E 23RD ST** **CHICAGO, IL**	**SPILLS**	**S108045754** **N/A**

SPILLS:
Incident ID: 20040644
Incident Date: 05/04/2004
Date Received: 05/06/2004
Facility Address: 201-217 E 23RD ST
Facility City: CHICAGO
PRP Name: MPEA
AC: Not reported

34	**VACANT LOT** **201-217 EAST 23RD STREET** **CHICAGO, IL 60616**	**LUST** **UST**	**U003975109** **N/A**

LUST:
Incident Num: 20040644
IL EPA Id: 0316345050
Product: Uset Oil
IEMA Date: 05/06/2004
Project Manager: Rothering
Project Manager Phone: (217) 785-1858
Email: Scott.Rothering@illinois.gov
PRP Name: Not reported
PRP Contact: Not reported
PRP Address: Not reported
PRP City,St,Zip: Not reported
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: P.A.
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 06/14/2004
45 Report Received: 10/01/2004
NFA/NFR Letter: 11/17/2004
NFR Date Recorded: 02/25/2005

UST:
Facility ID: 2042284
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: Metropolitan Pier & Expostion Authority
Owner Id: U0031837
Owner Address: 301 E. Cermak Rd.
Owner City,St,Zip: Chicago, IL 60616

Tank Number: 1

Map ID	Site	Database(s)	EPA ID Number
	VACANT LOT (Continued)		**U003975109**

Tank Capacity:	300
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
34	**F & R QUALITY CLEANERS** **201 W. 103RD ST.** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000117870** **ILD982065310**

RCRA-SQG:

Date form received by agency:	05/12/1987
Facility name:	ONE HOUR MARTINIZING
Facility address:	201 W 103RD ST CHICAGO, IL 60628
EPA ID:	ILD982065310
Contact:	RENEE DARDEN
Contact address:	201 W 103RD ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 821-6738
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	F AND R DARDEN CORP
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

F & R QUALITY CLEANERS (Continued) **1000117870**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

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34 **MCCORMICK PLACE VACANT LOT** **UST** **U003971916**
201-217 E. CERMAK RD. **N/A**
CHICAGO, IL 60616

UST:

Facility ID:	2042068
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Metropolitan Pier & Expostion Authority
Owner Id:	U0031837
Owner Address:	301 E. Cermak Rd.
Owner City,St,Zip:	Chicago, IL 60616
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	4/13/2004
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	MCCORMICK PLACE VACANT LOT (Continued)		**U003971916**

Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

34	**CONSTRUCTION SITE** **201-231 W. 87TH STREET** **CHICAGO, IL 60620**	**UST**	**U004060420** **N/A**

UST:

Facility ID:	2043357
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Berkshire - West 87th Street, LLC
Owner Id:	U0033605
Owner Address:	41 Taylor Street
Owner City,St,Zip:	Springfield, MA 011031205

Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Lubricating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

CONSTRUCTION SITE (Continued) **U004060420**

Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	6500
Tank Substance:	Heating Oil

Map ID	Site	Database(s)	EPA ID Number

CONSTRUCTION SITE (Continued) **U004060420**

Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	8
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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35 **SPILLS** **S108045282**

105 W 103RD ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20040313
Incident Date:	Not reported
Date Received:	03/10/2004
Facility Address:	105 W 103RD ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

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41 **NEW LANGSTON HUGHES ELEMENTARY SCHOOL** **ENG CONTROLS** **S108891246**
10320 SOUTH WENTWORTH AVENUE **SRP** **N/A**
CHICAGO, IL 60628

ENGINEERING CONTROLS:

Illinois Epa Id:	0316505045
NFR Letter:	08/03/2009
Date NFR Recorded:	09/10/2009
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	LeeAnn Tomas-Foster
RA Company:	Public Building Commission of Chicago
RA Address:	50 West Washington Street
RA Secondary Address:	Room 200

Map ID	Site	Database(s)	EPA ID Number
	NEW LANGSTON HUGHES ELEMENTARY SCHOOL (Continued)		**S108891246**

RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Not reported
Engineered Barriers:	Clean soil barrier
Worker Caution:	True
Acres:	3

SRP:

IL EPA Id:	0316505045
US EPA Id:	Not reported
Longitude:	-87.62958
Latitude:	41.70653
Contact Name:	LeeAnn Tomas-Foster
Contact Address:	50 West Washington Street
Contact Address2:	Room 200
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 930-5270
Date Enrolled:	09/06/2007
Point Of Contact:	Ala E. Sassila, P.E.
Consultant Company:	GSG Consultants, Inc.
Consultant Address:	855 West Adams Street
Consultant Address2:	Suite 200
Consultant City,St,Zip:	Chicago, IL 60607-
Consultant Phone:	(312) 733-6262
Proj Mgr Assigned:	Baldwin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	09/10/2009
Active:	False
Total Acres:	3
No Further Remediation Letter Dt:	08/03/2009
Remediation Applicant Co:	Public Building Commission of Chicago
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Ms. LeeAnn Tomas-Foster
Remediation Applicant Company:	Public Building Commission of Chicago
Remediation Applicant Address:	50 West Washington Street
Remediation Applicant Address 2:	Room 200
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316505045
Site Name:	New Langston Hughes Elementary School
NFR Letter:	2009-08-03
NFR Letter Date Recorded:	2009-09-10
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Not reported
Barrier:	Clean soil barrier
Worker Caution:	True
Acres:	3

Map ID	Site	Database(s)	EPA ID Number
42	**AMERICAN IDEAL** **10351 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1010563717** **ILR000151258**

RCRA-SQG:

Date form received by agency:	01/08/2008
Facility name:	AMERICAN IDEAL
Facility address:	10351 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000151258
Contact:	KERRY KOHN
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(773) 785-0687
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AMERICAN IDEAL
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/08/2008
Owner/Op end date:	Not reported

Owner/operator name:	AMERICAN IDEAL
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/08/2008
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

Map ID	Site	Database(s)	EPA ID Number

AMERICAN IDEAL (Continued) **1010563717**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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42 **AMERICAN IDEAL CLEANING CO., INC.** **UST** **U001141846**
10351 S. MICHIGAN AVE. **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2022018
Facility Status: CLOSED
Facility Type: COMMERCIAL / RETAIL
Owner Name: American Ideal Cleaning Co., Inc.
Owner Id: U0000499
Owner Address: 10341 S. Michigan Ave.
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 3000
Tank Substance: Cleaning Solvent
Last Used Date: 1/1/1983
OSFM First Notify Date: 5/6/1986
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: 1/1/1959
Green Tag Decal: G001592
Green Tag Issue Date: 4/21/2005
Green Tag Expire Date: 12/31/2008
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Tank Number: 2
Tank Capacity: 3000
Tank Substance: Cleaning Solvent
Last Used Date: 1/1/1983
OSFM First Notify Date: 5/6/1986
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: 1/1/1959
Green Tag Decal: G001592
Green Tag Issue Date: 4/21/2005
Green Tag Expire Date: 12/31/2008
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	AMERICAN IDEAL CLEANING CO., INC. (Continued)		**U001141846**

Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Cleaning Solvent
Last Used Date:	Not reported
OSFM First Notify Date:	5/6/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1976
Green Tag Decal:	**G001592**
Green Tag Issue Date:	**4/21/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Cleaning Solvent
Last Used Date:	Not reported
OSFM First Notify Date:	5/6/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1976
Green Tag Decal:	**G001592**
Green Tag Issue Date:	**4/21/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	5
Tank Capacity:	6000
Tank Substance:	Cleaning Solvent
Last Used Date:	8/16/2007
OSFM First Notify Date:	5/6/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	10/1/1983
Green Tag Decal:	**G001592**
Green Tag Issue Date:	**4/21/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
42	**AMERICAN IDEAL CLEANING COMPANY INC** **10351 SOUTH MICHIGAN AVENUE** **CHICAGO, IL 60628**	**DRYCLEANERS**	**S106540576** **N/A**

DRYCLEANERS:

Facility Id:	1016-9687-01
DC No:	DC-00747
Facility Contact:	KERRY KOHN
License Expires:	12/31/2012

43	**ROSELAND PLACE** **10400-10420 SOUTH MICHIGAN AVENUE** **CHICAGO, IL 60628**	**INST CONTROL** **SRP**	**S106967073** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316495164
NFR Letter:	09/30/2009
Date NFR Recorded:	10/06/2009
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Deborah Dixon
RA Company:	NHS Redevelopment Corporation
RA Address:	1279 North Milwaukee Avenue
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60622-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	1.95

SRP:

IL EPA Id:	0316495164
US EPA Id:	ILR000141622
Longitude:	-87.62109
Latitude:	41.70483
Contact Name:	Deborah Dixon
Contact Address:	1279 North Milwaukee Avenue
Contact Address2:	Suite 500
Contact City,St,Zip:	Chicago, IL 60622-
Contact Phone:	(773) 568-1020
Date Enrolled:	06/10/2005
Point Of Contact:	Paul S. Bernstein
Consultant Company:	MACTEC
Consultant Address:	5440 North Cumberland Avenue
Consultant Address2:	Suite 250
Consultant City,St,Zip:	Chicago, IL 60656-
Consultant Phone:	(773) 693-6030
Proj Mgr Assigned:	Rossi
Sec. 4 Letter Date:	Not reported
NFR Recorded:	10/06/2009
Active:	True
Total Acres:	1.95
No Further Remediation Letter Dt:	09/30/2009
Remediation Applicant Co:	Roseland Place, Inc. NFP
Remediation Applicant Title:	Vice President
Remediation Applicant Name:	Ms. Deborah Dixon
Remediation Applicant Company:	NHS Redevelopment Corporation
Remediation Applicant Address:	1279 North Milwaukee Avenue

Map ID	Site	Database(s)	EPA ID Number

ROSELAND PLACE (Continued) **S106967073**

Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60622-
Illinois EPA:	0316495164
Site Name:	Roseland Place
NFR Letter:	2009-09-30
NFR Letter Date Recorded:	2009-10-06
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	1.95

IL EPA Id:	0316495164
US EPA Id:	ILR000141622
Longitude:	-87.62109
Latitude:	41.70483
Contact Name:	Deborah Dixon
Contact Address:	1279 North Milwaukee Avenue
Contact Address2:	Suite 500
Contact City,St,Zip:	Chicago, IL 60622-
Contact Phone:	(773) 568-1020
Date Enrolled:	06/10/2005
Point Of Contact:	Paul S. Bernstein
Consultant Company:	MACTEC
Consultant Address:	5440 North Cumberland Avenue
Consultant Address2:	Suite 250
Consultant City,St,Zip:	Chicago, IL 60656-
Consultant Phone:	(773) 693-6030
Proj Mgr Assigned:	Rossi
Sec. 4 Letter Date:	Not reported
NFR Recorded:	04/24/2007
Active:	True
Total Acres:	1.95
No Further Remediation Letter Dt:	03/26/2007
Remediation Applicant Co:	Roseland Place, Inc. NFP
Remediation Applicant Title:	Vice President
Remediation Applicant Name:	Ms. Deborah Dixon
Remediation Applicant Company:	NHS Redevelopment Corporation
Remediation Applicant Address:	1279 North Milwaukee Avenue
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60622-
Illinois EPA:	0316495164
Site Name:	Roseland Place
NFR Letter:	2009-09-30
NFR Letter Date Recorded:	2009-10-06
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	1.95

Map ID	Site	Database(s)	EPA ID Number
43	**VACANT PROPERTY** **10400-10420 S. MICHIGAN AVENUE** **CHICAGO, IL 60628**	**UST**	**U004051774** **N/A**

UST:

Facility ID:	2043289
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Neighborhood Housing Services of Chicago
Owner Id:	U0033496
Owner Address:	11101 S. Michigan
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	275
Tank Substance:	Waste Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	VACANT PROPERTY (Continued)		**U004051774**

Tank Number:	4
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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44 **HUGHES LANGSTON SCHOOL**
226 W 104TH ST
CHICAGO, IL 60628

RCRA-CESQG **1000986465**
ILD984868745

RCRA-CESQG:

Date form received by agency:	10/22/2009
Facility name:	HUGHES LANGSTON SCHOOL
Facility address:	226 W 104TH ST CHICAGO, IL 60628
EPA ID:	ILD984868745
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number
	HUGHES LANGSTON SCHOOL (Continued)		**1000986465**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/04/1998
Facility name: HUGHES LANGSTON SCHOOL
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D000
Waste name: Not Defined

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: X002
Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
46	**KOHN SCHOOL** **10414 S STATE ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696761** **ILR000057521**

RCRA-CESQG:

Date form received by agency:	11/04/1998
Facility name:	KOHN SCHOOL
Facility address:	10414 S STATE ST CHICAGO, IL 60628
EPA ID:	ILR000057521
Mailing address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

Map ID	Site	Database(s)	EPA ID Number

KOHN SCHOOL (Continued) **1004696761**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

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47 **SPILLS** **S110278064**
10426 S MICHIGAN AVE **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 20100068
Incident Date: 01/20/2010
Date Received: Not reported
Facility Address: 10426 S MICHIGAN AVE
Facility City: CHICAGO
PRP Name: Neighborhood Housing Services of Chicago
AC: Not reported

Incident ID: 20100068
Incident Date: Not reported
Date Received: 01/20/2010
Facility Address: 10426 S MICHIGAN AVE
Facility City: CHICAGO
PRP Name: NEIGHBORHOOD HOUSING SERVICES REDEVELOPMENT CORP O
AC: Not reported

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47 **VACANT PROPERTY** **UST** **U004151256**
10426 S. MICHIGAN AVENUE **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2044656
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: Roseland Place Limited Partnership
Owner Id: U0035710
Owner Address: 1279 N. Milwaukee Ave., 5th Floor
Owner City,St,Zip: Chicago, IL 60622

Tank Number: 1
Tank Capacity: 3250
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: Not reported

Map ID	Site	Database(s)	EPA ID Number

VACANT PROPERTY (Continued) **U004151256**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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47 **NEIGHBORHOOD HOUSING SERVICES REDEVELOPMENT CORP** **LUST** **S110122189**
10426 SOUTH MICHIGAN AVENUE **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20100068
IL EPA Id:	0316495183
Product:	Fuel Oil
IEMA Date:	01/20/2010
Project Manager:	South
Project Manager Phone:	(217) 558-0347
Email:	Shirlene.South@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/08/2010
45 Report Received:	03/10/2010
NFA/NFR Letter:	**06/09/2010**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
48	**DAIRY FRESH FOODS, INC.** **10450 SOUTH MICHIGAN AVENUE** **CHICAGO, IL 60628**	**ENG CONTROLS** **INST CONTROL** **SRP**	**S106878785** **N/A**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316515155
NFR Letter:	08/08/2006
Date NFR Recorded:	08/15/2006
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Robert Helle
RA Company:	Roseland SLF Associates, L.P.
RA Address:	701 Lee Street
RA Secondary Address:	Suite 450
RA City,St,Zip:	Des Plaines, IL 60016-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Brick barrier
Worker Caution:	True
Acres:	1.669

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316515155
NFR Letter:	08/08/2006
Date NFR Recorded:	08/15/2006
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Robert Helle
RA Company:	Roseland SLF Associates, L.P.
RA Address:	701 Lee Street
RA Secondary Address:	Suite 450
RA City,St,Zip:	Des Plaines, IL 60016-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Brick barrier
Worker Caution:	True
Acres:	1.669

SRP:

IL EPA Id:	0316515155
US EPA Id:	Not reported
Longitude:	-87.62117
Latitude:	41.70400
Contact Name:	Robert Helle
Contact Address:	701 Lee Street
Contact Address2:	Suite 450
Contact City,St,Zip:	Des Plaines, IL 60016-
Contact Phone:	(847) 768-5105
Date Enrolled:	04/28/2005
Point Of Contact:	Lawrence A. DuBose, P.E.
Consultant Company:	Testing Service Corporation
Consultant Address:	360 South Main Place
Consultant Address2:	Not reported
Consultant City,St,Zip:	Carol Stream, IL 60188-
Consultant Phone:	(630) 462-2600
Proj Mgr Assigned:	Murphy
Sec. 4 Letter Date:	Not reported
NFR Recorded:	08/15/2006

Map ID	Site	Database(s)	EPA ID Number

DAIRY FRESH FOODS, INC. (Continued) **S106878785**

Active:	False
Total Acres:	1.669
No Further Remediation Letter Dt:	08/08/2006
Remediation Applicant Co:	Roseland SLF Associates, L.P.
Remediation Applicant Title:	Vice President
Remediation Applicant Name:	Mr. Robert Helle
Remediation Applicant Company:	Roseland SLF Associates, L.P.
Remediation Applicant Address:	701 Lee Street
Remediation Applicant Address 2:	Suite 450
Remediation Applicant City,St,Zip:	Des Plaines, IL 60016-
Illinois EPA:	0316515155
Site Name:	Dairy Fresh Foods, Inc.
NFR Letter:	2006-08-08
NFR Letter Date Recorded:	2006-08-15
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Asphalt barrier/Concrete barrier/Brick barrier
Worker Caution:	True
Acres:	1.669

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48 **SPILLS** **S108045279**

10450 S MICHIGAN AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20040788
Incident Date:	06/02/2004
Date Received:	06/02/2004
Facility Address:	10450 S MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	DAIRY FRESH FOODS
AC:	Not reported

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52 **C & O AUTO REBUILDERS** **LUST** **S108891404**
10554 SOUTH MICHIGAN AVENUE **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20071260
IL EPA Id:	0316495096
Product:	Gasoline
IEMA Date:	09/14/2007
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	C & O AUTO REBUILDERS (Continued)		**S108891404**

20 Report Received:	10/09/2007
45 Report Received:	10/30/2007
NFA/NFR Letter:	**03/31/2008**
NFR Date Recorded:	04/08/2008

Map ID	Site	Database(s)	EPA ID Number
52	**10554 S MICHIGAN AVE** **CHICAGO, IL**	**SPILLS**	**S108891605** **N/A**

SPILLS:

Incident ID:	20071260
Incident Date:	Not reported
Date Received:	09/14/2007
Facility Address:	10554 S MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	C&O AUTO REBUILDERS
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
52	**AUTO REPAIR SHOP** **10554 S. MICHIGAN AVENUE** **CHICAGO, IL 60628**	**UST**	**U004110665** **N/A**

UST:

Facility ID:	2043798
Facility Status:	EXEMPT
Facility Type:	**COMMERCIAL / RETAIL**
Owner Name:	C & O Audo Rebuilders
Owner Id:	U0034337
Owner Address:	10554 S. Michigan Avenue
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/9/2007
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/9/2007
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	AUTO REPAIR SHOP (Continued)		**U004110665**

Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

52	**MICHIGAN AVENUE COLLISION** **10554 S MICHIGAN** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001201777** **ILR000039289**

RCRA-SQG:

Date form received by agency:	12/24/2009
Facility name:	MICHIGAN AVENUE COLLISION
Facility address:	10554 S MICHIGAN CHICAGO, IL 60628
EPA ID:	ILR000039289
Contact:	ROBT SIGEL
Contact address:	10554 S MICHIGAN CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-5586
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MICHIGAN AVE COLLISION
Owner/operator address:	10554 S MICHIGAN CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-5586
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Map ID	Site	Database(s)	EPA ID Number

MICHIGAN AVENUE COLLISION (Continued) **1001201777**

Historical Generators:
Date form received by agency: 06/13/1997
Facility name: MICHIGAN AVENUE COLLISION
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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54 **ERNS** **2001569315**
240 EAST 106TH ST **N/A**
CHICAGO, IL 0

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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54 **ERNS** **2002600539**
240 EAST 106 TH STREET **N/A**
CHICAGO, IL 0

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

Map ID	Site	Database(s)	EPA ID Number
54	**240 E 106TH ST** **CHICAGO, IL**	**SPILLS**	**S111901490** **N/A**

SPILLS:

Incident ID:	19981235
Incident Date:	05/25/1998
Date Received:	05/25/1998
Facility Address:	240 E 106TH ST
Facility City:	CHICAGO
PRP Name:	NORFOLK RAILROAD
AC:	Not reported

55	**CALUMET YARD 204 EAST 106TH STREET** **CHICAGO, IL**	**ERNS**	**93328488** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

58	**GT&T SERVICE CENTER INC** **10635 S WENTWORTH AVE** **CHICAGO, IL 60628**	**UST**	**U000865955** **N/A**

UST:

Facility ID:	2031587
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Trotter Lorenzo
Owner Id:	U0020981
Owner Address:	11352 S Parnell
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1901
OSFM First Notify Date:	12/1/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1901
OSFM First Notify Date:	12/1/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

GT&T SERVICE CENTER INC (Continued) **U000865955**

Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1901
OSFM First Notify Date:	12/1/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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58 **GTE SERVICE CTR INC** **RCRA-SQG** **1000453244**
10635 S WENTWORTH **ILD984792952**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	09/10/1990
Facility name:	GTE SERVICE CTR INC
Facility address:	10635 S WENTWORTH CHICAGO, IL 60628
EPA ID:	ILD984792952
Contact:	LORENZO TROTTER
Contact address:	10635 S WENTWORTH CHICAGO, IL 60628
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TROTTER LORENZO PRES
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

GTE SERVICE CTR INC (Continued) **1000453244**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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60 **RAYS CLEANERS** **RCRA-SQG** **1000374355**
10738 S MICHIGAN AVE **ILD054589148**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	04/06/1987
Facility name:	RAYS CLEANERS
Facility address:	10738 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILD054589148
Contact:	RAYMOND BRADLEY
Contact address:	10738 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 928-2143
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: NAME NOT REPORTED

Map ID	Site	Database(s)	EPA ID Number

RAYS CLEANERS (Continued) **1000374355**

Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BRADLEY RAYMOND
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
61	**VACANT RESIDENTIAL BUILDING** **226-248 W 107TH PLACE** **CHICAGO, IL 60628**	**UST**	**U003715093** **N/A**

UST:

Facility ID:	2039223
Facility Status:	CLOSED
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Name:	Daniel McGovern
Owner Id:	U0028986
Owner Address:	10424 S Campbell
Owner City,St,Zip:	Chicago, IL 60655
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	4/1/1975
OSFM First Notify Date:	9/8/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No
Tank Number:	2
Tank Capacity:	3500
Tank Substance:	Heating Oil
Last Used Date:	4/1/1975
OSFM First Notify Date:	9/8/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

62	**COM ED** **10847 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004698372** **ILR000106195**

RCRA-CESQG:

Date form received by agency:	05/21/2001
Facility name:	COM ED
Facility address:	10847 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000106195
Mailing address:	19156 S 85TH PL MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	10847 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US

Map ID	Site	Database(s)	EPA ID Number

COM ED (Continued) **1004698372**

Contact telephone: (815) 469-7007
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: COM ED
Owner/operator address: 555 JOLIET RD
BOLINGBROOK, IL 60440
Owner/operator country: Not reported
Owner/operator telephone: (630) 455-3448
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
63	**VAN VLISSINGEN PETER SCHOOL** **137 W 108TH PL** **CHICAGO, IL 60628**	**RCRA-SQG** **UST**	**1001127079** **ILR000033795**

RCRA-SQG:

Date form received by agency:	01/22/1997
Facility name:	VAN VLISSINGEN PETER SCHOOL
Facility address:	137 W 108TH PL CHICAGO, IL 60628
EPA ID:	ILR000033795
Contact:	MILICENT RUSSELL
Contact address:	137 W 108TH PL CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-5300
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
	VAN VLISSINGEN PETER SCHOOL (Continued)		**1001127079**

UST:

Facility ID:	2039443
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0029206
Owner Address:	125 S. Clark, 16th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
65	**VACANT APARTMENT BUILDING** **10834 S PERRY AVE** **CHICAGO, IL 60628**	**UST**	**U003715200** **N/A**

UST:

Facility ID:	2039442
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0029206
Owner Address:	125 S. Clark, 16th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	1600
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Count: 9 records

FOCUS MAP 4 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1004692486	107TH ST SUB SHOP	1215 W 107TH	60628	RCRA-CESQG
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU

Focus Map 5

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

Roads
Major Roads
Contour Lines
National Wetlands Inventory
Waterways
Railroads
Study Boundary
100-Yr Flood Zones
Powerlines
Pipelines
Fault Lines
Water
Listed Sites
Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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Count: 7 records

FOCUS MAP 5 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CALUMET PARK	U001964624	RACEWAY PK	SWC 130TH & ASHLAND	60643	UST
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS

Focus Map 6

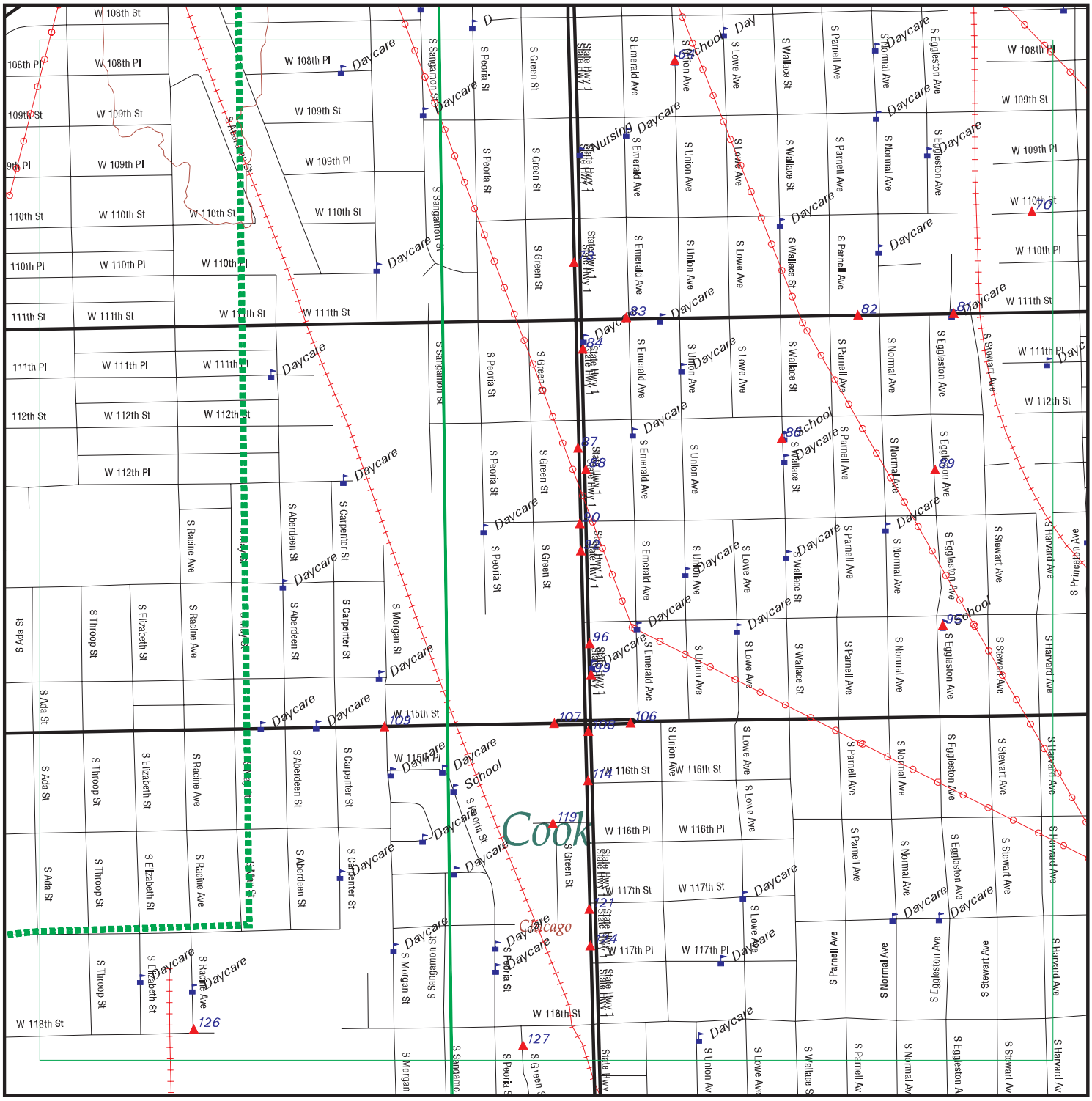

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 6 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	1
RCRA-SQG	10
RCRA-CESQG	3
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	2
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
IL SSU	0
IL SWF/LF	0
IL LUST	11
IL UST	18
NY MANIFEST	1
IL SPILLS	9
IL ENG CONTROLS	0
IL INST CONTROL	2
IL SRP	5
IL DRYCLEANERS	1
IL BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
64	**DUNNE** **10845 S UNION** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001123586** **ILR000032904**

RCRA-SQG:

Date form received by agency:	01/08/1997
Facility name:	DUNNE
Facility address:	10845 S UNION CHICAGO, IL 60628
EPA ID:	ILR000032904
Contact:	DEAN THOMPSON
Contact address:	10845 S UNION CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-5517
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
70	**WILLIAM RANSOM TRANSPORTATION** **352 WEST 110TH ST.** **CHICAGO, IL 60628**	**IL LUST**	**S104529463** **N/A**

LUST:

Incident Num:	990399
IL EPA Id:	0316495116
Product:	Gasoline
IEMA Date:	02/19/1999
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	William Ransom Transportation
PRP Contact:	William Ransom, Sr.
PRP Address:	352 West 110th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7737858480
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/23/1999
45 Report Received:	05/21/1999
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

70	**RANSOM TRANSPORT** **352 W 110TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696953** **ILR000060863**

RCRA-CESQG:

Date form received by agency:	01/28/1999
Facility name:	RANSOM TRANSPORT
Facility address:	352 W 110TH ST CHICAGO, IL 60628
EPA ID:	ILR000060863
Contact:	WILLIAM RANSOM
Contact address:	352 W 110TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-8480
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Map ID	Site	Database(s)	EPA ID Number

RANSOM TRANSPORT (Continued) **1004696953**

Owner/Operator Summary:

Owner/operator name:	RANSOM TRANSORT
Owner/operator address:	352 W 110TH ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-8480
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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70 **IL SPILLS** **S111903849**

352 W 110TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19990399
Incident Date:	Not reported
Date Received:	02/19/1999
Facility Address:	352 W 110TH ST
Facility City:	CHICAGO
PRP Name:	WILLIAM RANSOM TRANSPORTATION
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
70	**352 WEST 110 ST** **CHICAGO, IL**	**ERNS**	**93301726** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

---

70 **RANSOM TRANSPORT BUS GARAGE** — **IL UST** — **U001142423**, **N/A**
352 W 110TH ST
CHICAGO, IL 60628

UST:

Facility ID:	2000983
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Eloyse Carney School Bus Ser
Owner Id:	U0004730
Owner Address:	352 W 110Th St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	6/1/1998
OSFM First Notify Date:	1/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

73 **MUFFLER & BRAKE MAN, INC.** — **IL UST** — **U001142484**, **N/A**
11038 SOUTH HALSTED
CHICAGO, IL 60628

UST:

Facility ID:	2007242
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	Muffler & Brake Man Inc
Owner Id:	U0028764
Owner Address:	11038 South Halsted
Owner City,St,Zip:	Chicago, IL 60625
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	12/21/1998
OSFM First Notify Date:	9/19/1987
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	MUFFLER & BRAKE MAN, INC. (Continued)		**U001142484**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
73	**MUFFLER & BRAKE MAN CAR CARE CTR** **11048 S HALSTED ST** **CHICAGO, IL 60628**	**IL UST**	**U001473604** **N/A**

UST:

Facility ID:	2032349
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	L B I Inc
Owner Id:	U0021841
Owner Address:	1905 Bernice Rd Ste 4
Owner City,St,Zip:	Lansing, IL 60438
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	4/1/1993
OSFM First Notify Date:	7/23/1993
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
81	**420 W 111TH ST** **CHICAGO, IL**	**IL SPILLS**	**S109699953** **N/A**

SPILLS:

Incident ID:	20090500
Incident Date:	Not reported
Date Received:	05/13/2009
Facility Address:	420 W 111TH ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
81	**420 W. 111TH ST. CHICAGO, IL**	**IL SPILLS**	**S111924877 N/A**

SPILLS:

Incident ID:	20090500
Incident Date:	05/13/2009
Date Received:	Not reported
Facility Address:	420 W. 111TH ST.
Facility City:	CHICAGO
PRP Name:	unknown
AC:	SR

81	**PENTECOSTAL TEMPLE CHURCH OF GOD 415 THRU 419 W 111TH ST CHICAGO, IL 60643**	**RCRA-SQG**	**1000703753 ILD984831958**

RCRA-SQG:

Date form received by agency:	07/25/1991
Facility name:	PENTECOSTAL TEMPLE CHURCH OF GOD
Facility address:	415 THRU 419 W 111TH ST CHICAGO, IL 60643
EPA ID:	ILD984831958
Mailing address:	10819 S MORGAN ST CHICAGO, IL 60643
Contact:	RICHARD EDWARDS
Contact address:	10819 S MORGAN ST CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(312) 785-0117
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	REV RICHARD EDWARDS
Owner/operator address:	10819 S MORGAN CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 785-0117
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

PENTECOSTAL TEMPLE CHURCH OF GOD (Continued) **1000703753**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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81 **PENTICOSTAL TEMPLE** **IL LUST** **S104525751**
419 WEST 111TH ST. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	912233
IL EPA Id:	0316205006
Product:	Uset Oil
IEMA Date:	08/09/1991
Project Manager:	Chappel
Project Manager Phone:	(217) 785-3913
Email:	Harry.A.Chappel@illinois.gov
PRP Name:	Penticostal Temple Church of God & Christ
PRP Contact:	Rev. Edward
PRP Address:	10819 South Morgan St.
PRP City,St,Zip:	Chicago, IL 60643
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	913417
IL EPA Id:	0316205006
Product:	Gasoline
IEMA Date:	11/22/1991
Project Manager:	Chappel
Project Manager Phone:	(217) 785-3913
Email:	Harry.A.Chappel@illinois.gov
PRP Name:	Penticostal Temple
PRP Contact:	Pastor Edwards
PRP Address:	419 West 111th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	PENTICOSTAL TEMPLE (Continued)		**S104525751**

Site Classification: Not reported
Section 57.5(g) Letter: 731
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: Not reported
45 Report Received: Not reported
NFA/NFR Letter: Not reported
NFR Date Recorded: Not reported

81	**419 W 111TH ST** **CHICAGO, IL**	**IL SPILLS**	**S111882409** **N/A**

SPILLS:
Incident ID: 19913417
Incident Date: Not reported
Date Received: 11/22/1991
Facility Address: 419 W 111TH ST
Facility City: CHICAGO
PRP Name: PENTICOSTAL TEMPLE C.G.O.L.D.
AC: Not reported

81	**419 W 111TH ST** **CHICAGO, IL**	**IL SPILLS**	**S111881226** **N/A**

SPILLS:
Incident ID: 19912233
Incident Date: Not reported
Date Received: 08/09/1991
Facility Address: 419 W 111TH ST
Facility City: CHICAGO
PRP Name: PENTICOSTAL TEMPLE CHURCH
AC: Not reported

81	**CHICAGO DEPT OF ENV (SPILL)** **11100 S STEWART AVE (SPILL)** **CHICAGO, IL 60628**	**RCRA-LQG**	**1012178681** **ILR000157560**

RCRA-LQG:
Date form received by agency: 03/09/2010
Facility name: CHICAGO DEPT OF ENV (SPILL)
Site name: CHICAGO DEPT OF ENVIRONMENT
Facility address: 11100 S STEWART AVE (SPILL)
CHICAGO, IL 60628
EPA ID: ILR000157560
Mailing address: 30 N LASALLE
CHICAGO, IL 60628
Contact: TERRY SHEAHAN
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (312) 742-4806
Contact email: Not reported
EPA Region: 05

Map ID	Site	Database(s)	EPA ID Number

CHICAGO DEPT OF ENV (SPILL) (Continued) **1012178681**

Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency: 03/01/2010
Facility name: CHICAGO DEPT OF ENV (SPILL)
Classification: Large Quantity Generator

Date form received by agency: 05/13/2009
Facility name: CHICAGO DEPT OF ENV (SPILL)
Site name: CHICAGO DEPT OF ENVIRONMENT
Classification: Conditionally Exempt Small Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 12000.4

Waste code: D035

Map ID	Site	Database(s)	EPA ID Number

CHICAGO DEPT OF ENV (SPILL) (Continued) **1012178681**

Waste name: METHYL ETHYL KETONE
Amount (Lbs): 19650.5

Violation Status: No violations found

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82 **34 WARD OFFICE/CITY OF CHICAGO** **IL LUST** **U004128304**
507 WEST 111TH STREET **IL UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20040732
IL EPA Id:	0316616397
Product:	Other Petro
IEMA Date:	05/21/2004
Project Manager:	South
Project Manager Phone:	(217) 558-0347
Email:	Shirlene.South@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	06/28/2004
45 Report Received:	07/23/2004
NFA/NFR Letter:	**08/24/2004**
NFR Date Recorded:	05/27/2005

UST:

Facility ID:	2042211
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	34 Ward Office/City of Chicago
Owner Id:	U0032031
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/15/2004
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
82	**507 W 111TH ST** **CHICAGO, IL**	**IL SPILLS**	**S108046418** **N/A**

SPILLS:

Incident ID:	20040732
Incident Date:	Not reported
Date Received:	05/21/2004
Facility Address:	507 W 111TH ST
Facility City:	CHICAGO
PRP Name:	CHESTER WILSON
AC:	Not reported

82	**SEW CLEAN** **519 W 111TH ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000107577** **ILD013428487**

RCRA-SQG:

Date form received by agency:	01/27/1989
Facility name:	SEW CLEAN
Facility address:	519 W 111TH ST CHICAGO, IL 60628
EPA ID:	ILD013428487
Contact:	JEROME SMITH
Contact address:	519 W 111TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 264-2965
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SMITH JEROME
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

SEW CLEAN (Continued) **1000107577**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

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83 **GJK PETROLEUM, INC.** **IL UST** **U003152286**
734 W. 111TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2016840
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	GJK Petroleum, Inc.
Owner Id:	U0033661
Owner Address:	734 W. 111th Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/1996
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**

Map ID	Site	Database(s)	EPA ID Number
	GJK PETROLEUM, INC. (Continued)		**U003152286**

Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/1996
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/1996
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	8/1/1979
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	8/1/1979

Map ID	Site	Database(s)	EPA ID Number

GJK PETROLEUM, INC. (Continued) **U003152286**

OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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84 **JOHNS CLEANERS** **IL DRYCLEANERS** **S111826478**
11129 SOUTH HALSTED STREET **N/A**
CHICAGO, IL 60628

DRYCLEANERS:

Facility Id:	7000-0013-01
DC No:	DC-01254
Facility Contact:	BOK NAM LEE
License Expires:	12/31/2012

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84 **JOHNS CLEANERS** **RCRA-SQG** **1004697801**
11129 S HALSTED **ILR000100230**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	09/18/2000
Facility name:	JOHNS CLEANERS
Facility address:	11129 S HALSTED CHICAGO, IL 60628
EPA ID:	ILR000100230
Contact:	MYUNG OCK CHON
Contact address:	11129 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 264-8556
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHON MYUNG OCK
Owner/operator address:	11129 S HALSTED CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 264-8556
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

JOHNS CLEANERS (Continued) **1004697801**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

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86 **FENGER SCH** **RCRA-CESQG** **1004695757**
11220 S WALLACE **ILR000026559**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	08/30/1996
Facility name:	FENGER SCH
Facility address:	11220 S WALLACE CHICAGO, IL 60628
EPA ID:	ILR000026559
Mailing address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact:	LINDA LAYNE
Contact address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact country:	US
Contact telephone:	(312) 535-5430
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less

Map ID	Site	Database(s)	EPA ID Number

FENGER SCH (Continued) **1004695757**

of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHS
Owner/operator address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

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87 **LONG-GARDEN-CENTER INC** **IL UST** **U000865477**
11226 S HALSTED **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2006606
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Long Garden Center Inc
Owner Id:	U0009339
Owner Address:	11226 S Halsted
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000

Map ID	Site	Database(s)	EPA ID Number
	LONG-GARDEN-CENTER INC (Continued)		**U000865477**

Tank Substance:	Gasoline
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1970
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

87	**LONGS GARDEN CENTER INC** **11226 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG** **IL LUST**	**1001213751** **ILR000045344**

RCRA-SQG:

Date form received by agency:	11/24/1997
Facility name:	LONGS GARDEN CENTER INC
Facility address:	11226 S HALSTED CHICAGO, IL 60628
EPA ID:	ILR000045344
Contact:	GEORGE LONG
Contact address:	11226 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-3129
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	LONGS GARDEN CENTER INC
Owner/operator address:	11226 S HALSTED CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-3129
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

LONGS GARDEN CENTER INC (Continued) **1001213751**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

LUST:

Incident Num:	980313
IL EPA Id:	0316495100
Product:	Gasoline
IEMA Date:	02/12/1998
Project Manager:	Haskins
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Long's Garden Center, Inc.
PRP Contact:	George Long
PRP Address:	11226 South Halsted
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7737853129
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/25/1998
45 Report Received:	06/09/1998
NFA/NFR Letter:	**02/19/1999**
NFR Date Recorded:	03/24/1999

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88 **KLEEN TOWNE CLEANERS** **RCRA-SQG** **1000206885**
11249 S HALSTED **NY MANIFEST** **ILD064381650**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	11/18/1986
Facility name:	KLEEN TOWNE CLEANERS
Facility address:	11249 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD064381650
Contact:	KARNEY BOYAJIAN
Contact address:	11249 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 785-2127
Contact email:	Not reported

Map ID	Site	Database(s)	EPA ID Number

KLEEN TOWNE CLEANERS (Continued) **1000206885**

EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BOYAJIAN KARNEY
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

Map ID	Site	Database(s)	EPA ID Number

KLEEN TOWNE CLEANERS (Continued) **1000206885**

SPENT SOLVENT MIXTURES.

Violation Status: No violations found

NY MANIFEST:

EPA ID:	ILD064381650
Country:	USA
Mailing Name:	KLEENTOWNE CLEANERS
Mailing Contact:	SARKIS BOYAJIAN
Mailing Address:	11249 S HALSTED ST
Mailing Address 2:	Not reported
Mailing City:	CHICAGO
Mailing State:	IL
Mailing Zip:	60628
Mailing Zip4:	4795
Mailing Country:	USA
Mailing Phone:	773-785-2127

NY MANIFEST:

No Manifest Records Available

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88 **KLEEN TOWNE CLEANERS** **IL SRP** **S108255951**
11249 SOUTH HALSTED ST **N/A**
CHICAGO, IL 60628

SRP:

IL EPA Id:	0316495008
US EPA Id:	ILD064381650
Longitude:	-87.64190
Latitude:	41.68901
Contact Name:	Karney Boyajian
Contact Address:	11249 South Halsted Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60628-
Contact Phone:	(773) 785-2127
Date Enrolled:	07/02/2001
Point Of Contact:	Christopher J. Lee
Consultant Company:	Northern Environmental Technologies, Inc.
Consultant Address:	647 Academy Drive
Consultant Address2:	Not reported
Consultant City,St,Zip:	Northbrook, IL 60062-
Consultant Phone:	(847) 562-8577
Proj Mgr Assigned:	Murphy
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	0.359
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Kleene Towne Cleaners
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	KLEEN TOWNE CLEANERS (Continued)		**S108255951**

NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

Map ID	Site	Database(s)	EPA ID Number
89	**11255 S EGGLESTON ST** **CHICAGO, IL**	**ERNS**	**92265508** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

Map ID	Site	Database(s)	EPA ID Number
90	**DEVOTION UNISEX BEAUTY SALON** **11300 S HALSTED ST** **CHICAGO, IL 60628**	**IL UST**	**U001629884** **N/A**

UST:

Facility ID:	2032718
Facility Status:	EXEMPT
Facility Type:	**COMMERCIAL / RETAIL**
Owner Name:	Juanita Wilson
Owner Id:	U0022323
Owner Address:	11300 S Halsted St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	1/1/1969
OSFM First Notify Date:	11/12/1993
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
92	**WHITMAL OIL SER INC** **11328 S HALSTED** **CHICAGO, IL 60628**	**IL UST**	**U001143309** **N/A**

UST:

Facility ID:	2000228
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Whitmal Oil Ser Inc
Owner Id:	U0016354
Owner Address:	11328 S Halsted
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Not reported
Last Used Date:	1/15/1998
OSFM First Notify Date:	9/17/1998
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	10/1/1987
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Used Oil
Last Used Date:	1/15/1998
OSFM First Notify Date:	11/21/1987
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	10/1/1987
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

95	**BRENAN SCHOOL** **11411 EGGLESTON** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001116740** **ILR000027656**

RCRA-SQG:

Date form received by agency:	09/17/1996
Facility name:	BRENAN SCHOOL
Facility address:	11411 EGGLESTON CHICAGO, IL 60628
EPA ID:	ILR000027656
Contact:	FRANK BLAIR
Contact address:	11411 EGGLESTON CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 535-5340
Contact email:	Not reported

Map ID	Site	Database(s)	EPA ID Number

BRENAN SCHOOL (Continued) **1001116740**

EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS 6WN
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (312) 535-7039
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

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96 **MCDONALD'S CORP.** **IL UST** **U004107018**
11421 S. HALSTED STREET **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2043655
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: McDonald's USA, LLC
Owner Id: U0030322
Owner Address: 4320 Winfield Rd., Suite 400
Owner City,St,Zip: Warrenville, IL 60555

Tank Number: 1
Tank Capacity: 1150

Map ID	Site	Database(s)	EPA ID Number
	MCDONALD'S CORP. (Continued)		**U004107018**

Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
99	**11453 S HALSTED ST** **CHICAGO, IL**	**IL SPILLS**	**S111883100** **N/A**

SPILLS:

Incident ID:	19920332
Incident Date:	Not reported
Date Received:	02/05/1992
Facility Address:	11453 S HALSTED ST
Facility City:	CHICAGO
PRP Name:	FIRST COOK COMMUNITY BANK
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
99	**QUALITY MUFFLER** **11453 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000614937** **ILD984852525**

RCRA-SQG:

Date form received by agency:	02/26/1992
Facility name:	QUALITY MUFFLER
Facility address:	11453 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD984852525
Mailing address:	2720 W DEVON CHICAGO, IL 60659
Contact:	ADAM EPSTEIN
Contact address:	2720 W DEVON CHICAGO, IL 60659
Contact country:	US
Contact telephone:	(312) 761-2700
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	FIRST COOK COMMUNITY BANK
Owner/operator address:	2720 W DEVON CHICAGO, IL 60659

Map ID	Site	Database(s)	EPA ID Number

QUALITY MUFFLER (Continued) **1000614937**

Owner/operator country: Not reported
Owner/operator telephone: (312) 761-2700
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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99 **FORMER QUALITY MUFFLER SHOP** **IL UST** **U001141777**
11453 S HALSTED ST **N/A**
CHICAGO, IL 60643

UST:
Facility ID: 2029904
Facility Status: CLOSED
Facility Type: NONE
Owner Name: 1St Cook Comm Bk Fsb
Owner Id: U0019371
Owner Address: 2720 W Devon Ave
Owner City,St,Zip: Chicago, IL 60659

Tank Number: 1
Tank Capacity: 10000
Tank Substance: Gasoline
Last Used Date: 1/1/1989
OSFM First Notify Date: 5/4/1992
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported

Map ID	Site	Database(s)	EPA ID Number
	FORMER QUALITY MUFFLER SHOP (Continued)		**U001141777**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	1000

Map ID	Site	Database(s)	EPA ID Number

FORMER QUALITY MUFFLER SHOP (Continued) **U001141777**

Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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99 **FIRST COOK COMM. BANK** **IL LUST** **S104525208**
11453 SOUTH HALSTED ST. **N/A**
CHICAGO, IL 60643

LUST:

Incident Num:	920332
IL EPA Id:	0316755040
Product:	Gasoline
IEMA Date:	02/05/1992
Project Manager:	Nickell
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	First Cook Comm. Bank
PRP Contact:	Adam Epstein
PRP Address:	2720 West Devon Ave.
PRP City,St,Zip:	Chicago, IL 60659
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/12/1992
45 Report Received:	05/22/1992
NFA/NFR Letter:	**08/18/1992**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
106	**COMMUNITY HIGH SCHOOL DIST. #218** **731 WEST 115TH ST.** **ALSIP, IL 60803**	**IL LUST**	**S105427986** **N/A**

LUST:

Incident Num:	922574
IL EPA Id:	0310035119
Product:	Fuel Oil
IEMA Date:	09/14/1992
Project Manager:	Steinheimer
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Community High School Dist. #218
PRP Contact:	John Hickey
PRP Address:	10701 Kilpatrick Ave.
PRP City,St,Zip:	Oak Lawn, IL 60453
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	10/08/1992
45 Report Received:	12/16/1992
NFA/NFR Letter:	**10/18/1995**
NFR Date Recorded:	Not reported

107	**CHA WAREHOUSE** **833 W 115TH ST** **CHICAGO, IL 60643**	**IL UST**	**U001142187** **N/A**

UST:

Facility ID:	2026770
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Chicago Housing Authority
Owner Id:	U0002876
Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	2/6/1991
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
107	**833 W 115TH ST** **CHICAGO, IL**	**IL SPILLS**	**S111884588** **N/A**

SPILLS:

Incident ID:	19921830
Incident Date:	Not reported
Date Received:	07/07/1992
Facility Address:	833 W 115TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO HOUSING AUTHORITY
AC:	Not reported

107	**CHICAGO HOSUING AUTHORITY** **833 W 115TH ST** **CHICAGO, IL 60643**	**RCRA-SQG**	**1000613607** **ILD984839035**

RCRA-SQG:

Date form received by agency:	10/07/1991
Facility name:	CHICAGO HOSUING AUTHORITY
Facility address:	833 W 115TH ST CHICAGO, IL 60643
EPA ID:	ILD984839035
Mailing address:	22 W MADISON ST RM 221 CHICAGO, IL 60602
Contact:	EVON PARKS
Contact address:	22 W MADISON ST RM 221 CHICAGO, IL 60602
Contact country:	US
Contact telephone:	(312) 791-8500
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO HOUSING AUTHORITY
Owner/operator address:	22 W MADISON STE 400 CHICAGO, IL 60602
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 791-8444
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

CHICAGO HOSUING AUTHORITY (Continued) **1000613607**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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107 **CHICAGO HOUSING AUTHORITY** **IL LUST** **S104524777**
833 WEST 115TH STREET **IL SRP** **N/A**
CHICAGO, IL 60643

LUST:

Incident Num:	921830
IL EPA Id:	0316755035
Product:	Uset Oil
IEMA Date:	07/07/1992
Project Manager:	Myers
Project Manager Phone:	(217) 785-7491
Email:	Dave.Myers@illinois.gov
PRP Name:	Chicago Housing Authority
PRP Contact:	Scott Ammarell
PRP Address:	60 East VanBuren, 12th Floor
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	11/03/1994
45 Report Received:	11/22/1994
NFA/NFR Letter:	**11/01/2010**
NFR Date Recorded:	Not reported

SRP:

IL EPA Id:	0316755035
US EPA Id:	ILD984839035
Longitude:	-87.64337
Latitude:	41.68442
Contact Name:	Thomas Morabito
Contact Address:	141 West Jackson Boulevard
Contact Address2:	Suite 3540
Contact City,St,Zip:	Chicago, IL 60604-
Contact Phone:	(312) 327-2700
Date Enrolled:	06/25/2004
Point Of Contact:	Richard C. Thomas

Map ID	Site	Database(s)	EPA ID Number

CHICAGO HOUSING AUTHORITY (Continued) **S104524777**

Consultant Company:	Challenge Contractors, Inc.
Consultant Address:	2612 Flossmoor Road
Consultant Address2:	P.O. Box 333
Consultant City,St,Zip:	Flossmoor, IL 60422-
Consultant Phone:	(708) 206-0007
Proj Mgr Assigned:	Irwin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	4.299
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Preferred-Halsted LLC
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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108 **AMOCO OIL** **IL LUST** **U004110544**
11500 SOUTH HALSTED STREET **IL UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	923184
IL EPA Id:	0316545010
Product:	Gasoline
IEMA Date:	11/12/1992
Project Manager:	Friedel
Project Manager Phone:	(217) 785-5736
Email:	Melinda.Friedel@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	12/01/1992
45 Report Received:	02/16/1993
NFA/NFR Letter:	**09/05/2003**
NFR Date Recorded:	09/25/2003

UST:

Map ID	Site	Database(s)	EPA ID Number
	AMOCO OIL (Continued)		**U004110544**

Facility ID:	2023001
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Sania Oil Company
Owner Id:	U0034353
Owner Address:	1002 Sean Circle
Owner City,St,Zip:	Darien, IL 60561

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1979
Green Tag Decal:	**L003536**
Green Tag Issue Date:	**1/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1979
Green Tag Decal:	**L003536**
Green Tag Issue Date:	**1/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1979
Green Tag Decal:	**L003536**
Green Tag Issue Date:	**1/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
108	**FORMER CHA WAREHOUSE** **901 W. 115TH STREET** **CHICAGO, IL 60628**	**IL UST**	**U003971972** **N/A**

UST:

Facility ID:	2042212
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Preferred Development
Owner Id:	U0027885
Owner Address:	141 W. Jackson
Owner City,St,Zip:	Chicago, IL 60601
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

108	**MOBIL CARWASH** **11501 SOUTH HALSTED STREET** **CHICAGO, IL 60628**	**IL LUST** **IL UST**	**U000174475** **N/A**

LUST:

Incident Num:	990250
IL EPA Id:	0316495058
Product:	Gasoline
IEMA Date:	02/05/1999
Project Manager:	Malcom
Project Manager Phone:	(217) 524-9140
Email:	James.Malcom@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	John Robbins
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/10/1999
45 Report Received:	02/26/1999
NFA/NFR Letter:	**11/15/2002**
NFR Date Recorded:	01/21/2003

UST:

Facility ID:	2007045
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Rockbuild Enterprises, Inc.

Map ID	Site	Database(s)	EPA ID Number

MOBIL CARWASH (Continued) **U000174475**

Owner Id: U0034774
Owner Address: 14123 S. 85th Avenue
Owner City,St,Zip: Orland Park, IL 60462

Tank Number: 1
Tank Capacity: 9520
Tank Substance: Gasoline
Last Used Date: 6/1/2001
OSFM First Notify Date: 4/25/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: 1/1/1973
Green Tag Decal: M003429
Green Tag Issue Date: 4/20/2011
Green Tag Expire Date: 12/31/2013
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 9520
Tank Substance: Gasoline
Last Used Date: 6/1/2001
OSFM First Notify Date: 4/25/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: 1/1/1973
Green Tag Decal: M003429
Green Tag Issue Date: 4/20/2011
Green Tag Expire Date: 12/31/2013
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 3
Tank Capacity: 7734
Tank Substance: Gasoline
Last Used Date: 6/1/2001
OSFM First Notify Date: 4/25/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: 1/1/1973
Green Tag Decal: M003429
Green Tag Issue Date: 4/20/2011
Green Tag Expire Date: 12/31/2013
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 4
Tank Capacity: 4000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 3/5/2002

Map ID	Site	Database(s)	EPA ID Number

MOBIL CARWASH (Continued) **U000174475**

Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	9/5/2001
Green Tag Decal:	**M003429**
Green Tag Issue Date:	**4/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/2002
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	9/5/2001
Green Tag Decal:	**M003429**
Green Tag Issue Date:	**4/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/2002
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	9/5/2001
Green Tag Decal:	**M003429**
Green Tag Issue Date:	**4/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

---

108 **0415 CLARK SER STATION** **IL UST** **U001142318**
11525 S HALSTED ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2009966
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Clark Retail Enterprises, Inc.
Owner Id:	U0003073
Owner Address:	3003 Butterfield Road, Suite 300
Owner City,St,Zip:	Oak Brook, IL 60523

Tank Number:	1
Tank Capacity:	5000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number

0415 CLARK SER STATION (Continued) **U001142318**

Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	100

Tank Number:	2
Tank Capacity:	5000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	100

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	100

---

109 **E.J. BROWNLEE TRANSPORTATION** **IL LUST** **S104528868**
1001 WEST 115TH ST. **N/A**
CHICAGO, IL 60643

LUST:

Incident Num:	981649
IL EPA Id:	0316755006
Product:	Deisel
IEMA Date:	07/08/1998
Project Manager:	Carlock
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	E.J. Brownlee Transportation
PRP Contact:	Edison Brownlee

Map ID	Site	Database(s)	EPA ID Number

E.J. BROWNLEE TRANSPORTATION (Continued) **S104528868**

PRP Address:	1001 West 115th St.
PRP City,St,Zip:	Chicago, IL 60643
PRP Phone:	7736601999
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	07/28/1998
45 Report Received:	12/18/1998
NFA/NFR Letter:	**04/01/1999**
NFR Date Recorded:	09/16/1999

---

109 **IL SPILLS** **S111901904**
1001 W 115TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19981649
Incident Date:	Not reported
Date Received:	07/08/1998
Facility Address:	1001 W 115TH ST
Facility City:	CHICAGO
PRP Name:	EJ BROWNLEE TRANSPORTATION
AC:	Not reported

---

109 **E J BROWNLEE TRANSPORTATION INC** **IL UST** **U001629852**
1001 W 115TH ST **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2032613
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Brownlee Edison
Owner Id:	U0022158
Owner Address:	1001 W 115Th St
Owner City,St,Zip:	Chicago, IL 60643
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	10/18/1993
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
114	**PEP BOYS #891** **11550 SO HALSTED** **CHICAGO, IL 60648**	**RCRA-CESQG**	**1004696278** **ILR000043224**

RCRA-CESQG:

Date form received by agency:	10/07/1997
Facility name:	PEP BOYS #891
Facility address:	11550 SO HALSTED CHICAGO, IL 60648
EPA ID:	ILR000043224
Mailing address:	3111 W ALLEGHENY AVE PHILADELPHIA, PA 19132
Contact:	JOHN KERELO
Contact address:	3111 W ALLEGHENY AVE PHILADELPHIA, PA 19132
Contact country:	US
Contact telephone:	(215) 227-9277
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	THE PEP BOYS
Owner/operator address:	3111 W ALLEGHENY AVE PHILADELPHIA, PA 19132
Owner/operator country:	Not reported
Owner/operator telephone:	(215) 227-9277
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number

PEP BOYS #891 (Continued) **1004696278**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

---

119 **ROSELAND AUTO BODY** **RCRA-SQG** **1000203955**
821 W 116TH ST **ILD982209991**
CHICAGO, IL 60643

RCRA-SQG:
Date form received by agency: 08/12/1987
Facility name: ROSELAND AUTO BODY
Facility address: 821 W 116TH ST
CHICAGO, IL 60643
EPA ID: ILD982209991
Contact: AL DERE
Contact address: 821 W 116TH ST
CHICAGO, IL 60643
Contact country: US
Contact telephone: (312) 468-1515
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: DERE AL
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998

Map ID	Site	Database(s)	EPA ID Number

ROSELAND AUTO BODY (Continued) **1000203955**

Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

Map ID	Site	Database(s)	EPA ID Number

ROSELAND AUTO BODY (Continued) **1000203955**

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

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121 **MICKEY'S AUTO SERVICE CENTER** **IL LUST** **S104521684**
11656 SOUTH HALSTED AVENUE **IL SRP** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	970068
IL EPA Id:	0316495087
Product:	Gasoline, Other Petro
IEMA Date:	01/13/1997
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Public Petroleum Co.
PRP Contact:	James Packtor
PRP Address:	2500 West 36th St.
PRP City,St,Zip:	Chicago, IL 60632
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

SRP:

IL EPA Id:	0316495087
US EPA Id:	Not reported
Longitude:	-87.64239
Latitude:	41.68166
Contact Name:	James Packtor
Contact Address:	2500 West 36th Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60632
Contact Phone:	(773) 376-2500
Date Enrolled:	02/04/1997
Point Of Contact:	Alisa S. Leyden
Consultant Company:	Leyden Environmental, Inc.
Consultant Address:	2711 South Wabash Avenue
Consultant Address2:	Not reported
Consultant City,St,Zip:	Chicago, IL 60616
Consultant Phone:	(312) 808-1476
Proj Mgr Assigned:	NA
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	Not reported
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Public Petroleum
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	MICKEY'S AUTO SERVICE CENTER (Continued)		**S104521684**

Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

124	**ABANDONED SERVICE STATION** **11700 S HALSTED** **CHICAGO, IL 60628**	**IL UST**	**U003762981** **N/A**

UST:

Facility ID:	2040245
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
126	**WIRA STUDY AREA NUMBER 4** **11801 SOUTH RACINE AVENUE** **CHICAGO, IL 60643**	**IL INST CONTROL** **IL SRP**	**S106121987** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755128
NFR Letter:	03/23/2011
Date NFR Recorded:	04/25/2011
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Zachary Clayton
RA Company:	City of Chicago, Department of Environment
RA Address:	30 North LaSalle Street
RA Secondary Address:	2nd Floor
RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	13.64

SRP:

IL EPA Id:	0316755128
US EPA Id:	Not reported
Longitude:	-87.65152
Latitude:	41.67927
Contact Name:	Kimberly Worthington
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-9139
Date Enrolled:	09/08/2003
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	1 South Wacker Drive
Consultant Address2:	37th Floor
Consultant City,St,Zip:	Chicago, IL 60606-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	04/25/2011
Active:	False
Total Acres:	2
No Further Remediation Letter Dt:	03/23/2011
Remediation Applicant Co:	City of Chicago Department of Environment
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Mr. Zachary Clayton
Remediation Applicant Company:	City of Chicago, Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	2nd Floor
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755128
Site Name:	WIRA Study Area 4
NFR Letter:	2011-03-23
NFR Letter Date Recorded:	2011-04-25
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	WIRA STUDY AREA NUMBER 4 (Continued)		**S106121987**

Worker Caution: False
Acres: 13.64

127	**SHELDON HEIGHTS CHURCH OF CHRIST** **11819-11849 SOUTH GREEN STREET** **CHICAGO, IL 60643**	**IL INST CONTROL** **IL SRP**	**S105521066** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755117
NFR Letter:	10/19/2004
Date NFR Recorded:	11/23/2004
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Willie Carter
RA Company:	Sheldon Heights Church of Christ
RA Address:	11325 South Halsted Street
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60628-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	2.600

SRP:

IL EPA Id:	0316755117
US EPA Id:	ILR000117911
Longitude:	-87.64303
Latitude:	41.67911
Contact Name:	Willie Carter
Contact Address:	11325 South Halsted Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60628-
Contact Phone:	(773) 568-2929
Date Enrolled:	06/13/2002
Point Of Contact:	Adam M. Moghamis, P.E.
Consultant Company:	Applied GeoScience, Inc.
Consultant Address:	2385 Hammond Drive
Consultant Address2:	Suite 6
Consultant City,St,Zip:	Schaumburg, IL 60173-
Consultant Phone:	(847) 303-0300
Proj Mgr Assigned:	Catlin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	11/23/2004
Active:	False
Total Acres:	2.600
No Further Remediation Letter Dt:	10/19/2004
Remediation Applicant Co:	Sheldon Heights Church of Christ
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Mr. Willie Carter
Remediation Applicant Company:	Sheldon Heights Church of Christ
Remediation Applicant Address:	11325 South Halsted Street
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60628-
Illinois EPA:	0316755117
Site Name:	Sheldon Heights Church of Christ

Map ID	Site	Database(s)	EPA ID Number
	SHELDON HEIGHTS CHURCH OF CHRIST (Continued)		**S105521066**

NFR Letter:	2004-10-19
NFR Letter Date Recorded:	2004-11-23
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	2.600

127	**VACANT LAND** **11819 - 11849 SOUTH GREEN ST** **CHICAGO, IL 60643**	**IL UST**	**U003865079** **N/A**

UST:

Facility ID:	2041273
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Sheldon Heights Church of Christ
Owner Id:	U0030886
Owner Address:	11325 S Halsted St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Gasoline
Last Used Date:	1/1/1987
OSFM First Notify Date:	9/3/2002
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1960
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Count: 9 records

FOCUS MAP 6 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		IL LUST, IL SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		IL SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		IL LUST, IL SPILLS
CHICAGO	S108891646		11900 LOOMIS		IL LUST, IL SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	IL SSU
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS

Focus Map 7

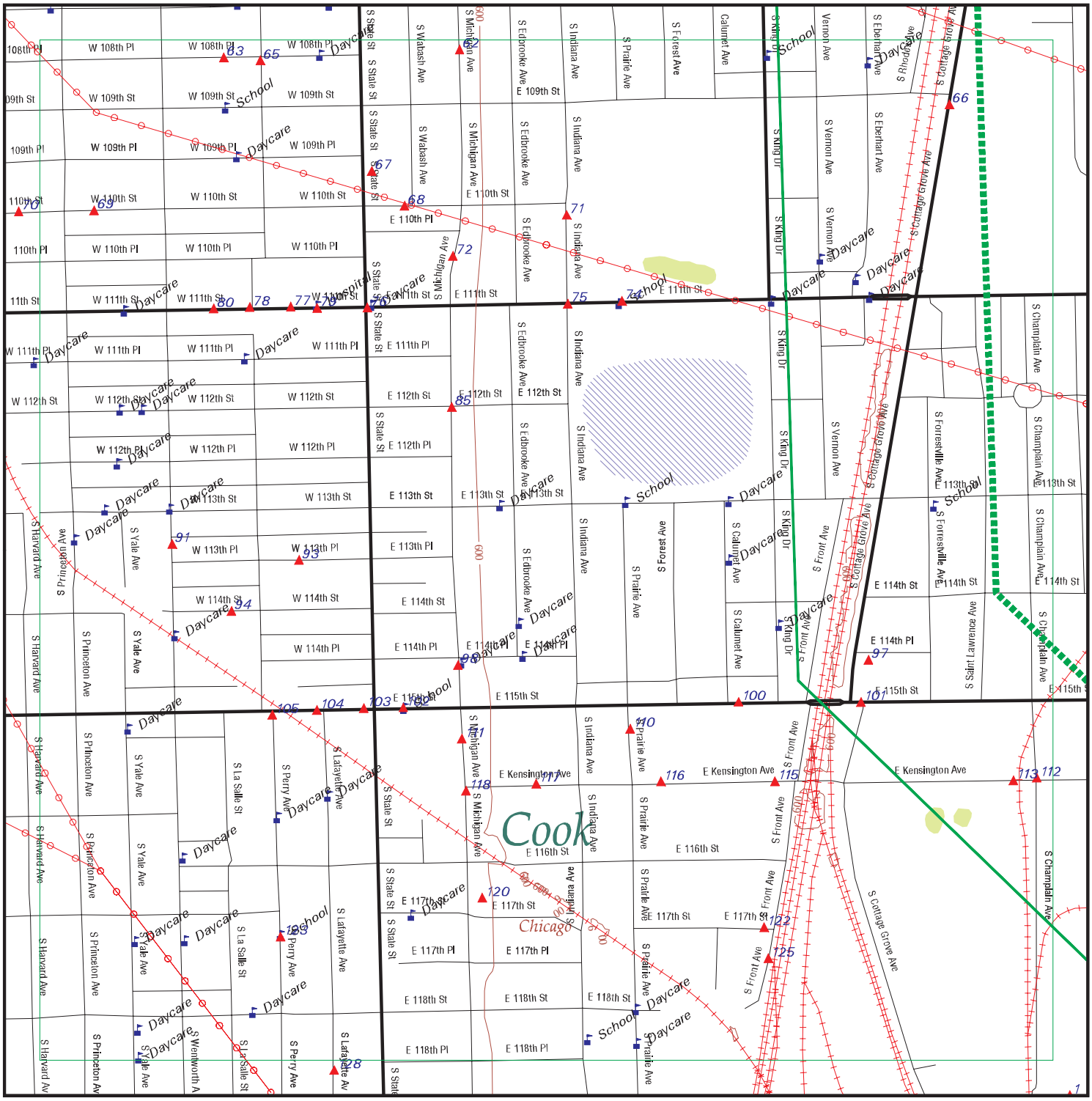

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 7 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	2
CERC-NFRAP	1
CORRACTS	2
RCRA-TSDF	1
RCRA-LQG	1
RCRA-SQG	9
RCRA-CESQG	8
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	1
SWF/LF	1
LUST	15
UST	30
SPILLS	16
ENG CONTROLS	1
INST CONTROL	1
SRP	2
DRYCLEANERS	1
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
62	**COM ED** **10847 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004698372** **ILR000106195**

RCRA-CESQG:

Date form received by agency:	05/21/2001
Facility name:	COM ED
Facility address:	10847 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000106195
Mailing address:	19156 S 85TH PL MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	10847 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(815) 469-7007
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	COM ED
Owner/operator address:	555 JOLIET RD BOLINGBROOK, IL 60440
Owner/operator country:	Not reported
Owner/operator telephone:	(630) 455-3448
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number
	COM ED (Continued)		**1004698372**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

63	**VAN VLISSINGEN PETER SCHOOL** **137 W 108TH PL** **CHICAGO, IL 60628**	**RCRA-SQG** **UST**	**1001127079** **ILR000033795**

RCRA-SQG:
Date form received by agency: 01/22/1997
Facility name: VAN VLISSINGEN PETER SCHOOL
Facility address: 137 W 108TH PL
CHICAGO, IL 60628
EPA ID: ILR000033795
Contact: MILICENT RUSSELL
Contact address: 137 W 108TH PL
CHICAGO, IL 60628
Contact country: US
Contact telephone: (773) 535-5300
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-7039
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No

Map ID	Site	Database(s)	EPA ID Number

VAN VLISSINGEN PETER SCHOOL (Continued) **1001127079**

Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

UST:

Facility ID:	2039443
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0029206
Owner Address:	125 S. Clark, 16th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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65 **VACANT APARTMENT BUILDING** **UST** **U003715200**
10834 S PERRY AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2039442
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0029206
Owner Address:	125 S. Clark, 16th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	1600
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**

Map ID	Site	Database(s)	EPA ID Number
	VACANT APARTMENT BUILDING (Continued)		**U003715200**

Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

66	**SHERWIN WILLIAMS CO** **10909 S COTTAGE GROVE AVE** **CHICAGO, IL 60628**	**CERC-NFRAP** **CORRACTS**	**1000371387** **ILD000672451**

CERC-NFRAP:
Site ID: 0507297
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Deferred to RCRA

Program Priority:
Description: RCRA Deferral Audit

Description: RCRA Deferral - Lead Confirmed

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 01/28/1992
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 07/15/1993
Priority Level: Deferred to RCRA (Subtitle C)

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 12/11/1995
Priority Level: Not reported

CORRACTS:

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/02/1992
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371387**

Area Name: ENTIRE FACILITY
Actual Date: 03/02/1992
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/16/1992
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 05/01/2009
Action: CA070NO - RFA Determination Of Need For An RFI, RFI is Not Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

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67 **109TH PLACE TEAR GAS** **CERCLIS** **1000851385**
SG WEST 109TH PLACE **IL0000027714**
CHICAGO, IL 60628

CERCLIS:
Site ID: 0507320
EPA ID: IL0000027714
Facility County: COOK
Short Name: 109TH PLACE TEAR GAS
Congressional District: 02
IFMS ID: 05ZW
SMSA Number: 1600
USGC Hydro Unit: 07120003
Federal Facility: Not a Federal Facility
DMNSN Number: Not reported
Site Orphan Flag: N
RCRA ID: Not reported
USGS Quadrangle: Not reported
Site Init By Prog: Not reported
NFRAP Flag: Not reported
Parent ID: Not reported
RST Code: Not reported
EPA Region: 05
Classification: Not reported
Site Settings Code: Not reported
NPL Status: Not on the NPL
DMNSN Unit Code: Not reported
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: Referred to Removal - NFRAP
Non NPL Status Date: 20020422
Site Fips Code: 17031

Map ID	Site	Database(s)	EPA ID Number

109TH PLACE TEAR GAS (Continued) **1000851385**

CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):
Contact ID: 5270175.00000
Contact Name: STAVROS EMMANOUIL
Contact Tel: (312) 886-1768
Contact Title: On-Scene Coordinator (OSC)
Contact Email: Not reported

Alias Comments: Not reported
Site Description: A MILITARY TEAR GAS GRENEDA WAS ACTIVATED BY A CHILD. TEAR GAS (ORTHO CHLORO BENZALMALENANITRILE) CONTAMINATED THE FIRST FLOOR OF THE HOUSE. EPA WAS CALLED ON SCENE BY THE CHICAGO DEPARTMENT OF ENVIRONMENT AND THE CHICAGO FIRE DEPARTMENT.

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/15/1993
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 11/29/1993
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL
Date Started: 09/30/1993
Date Completed: 01/12/1994
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Emergency
Action Anomaly: Not reported

Map ID	Site	Database(s)	EPA ID Number

109TH PLACE TEAR GAS (Continued) **1000851385**

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started:	10/15/1993
Date Completed:	03/27/1996
Priority Level:	No PRPs Identified
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	04/17/2002
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Click this hyperlink while viewing on your computer to access
2 additional US CERCLIS Financial: record(s) in the EDR Site Report.

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68 **ROSELAND AUTO SALES CO** **UST** **U000865746**
27 E 110TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2014109
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Roseland Auto Sales Co
Owner Id:	U0013121
Owner Address:	10954 S Michigan Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	300
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

ROSELAND AUTO SALES CO (Continued) **U000865746**

Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	250
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	500
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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69 **ROSELAND AUTO SALES INC** **RCRA-CESQG** **1004696195**
271 E 110TH ST **ILR000040303**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	07/02/1997
Facility name:	ROSELAND AUTO SALES INC
Facility address:	271 E 110TH ST CHICAGO, IL 60628
EPA ID:	ILR000040303
Mailing address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Contact:	RAY ZEALEX
Contact address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-6070
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar

Map ID	Site	Database(s)	EPA ID Number

ROSELAND AUTO SALES INC (Continued) **1004696195**

month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	ROSELAND AUTO SALES INC
Owner/operator address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-6070
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
70	**WILLIAM RANSOM TRANSPORTATION** **352 WEST 110TH ST.** **CHICAGO, IL 60628**	**LUST**	**S104529463** **N/A**

LUST:

Incident Num:	990399
IL EPA Id:	0316495116
Product:	Gasoline
IEMA Date:	02/19/1999
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	William Ransom Transportation
PRP Contact:	William Ransom, Sr.
PRP Address:	352 West 110th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7737858480
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/23/1999
45 Report Received:	05/21/1999
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

70	**RANSOM TRANSPORT** **352 W 110TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696953** **ILR000060863**

RCRA-CESQG:

Date form received by agency:	01/28/1999
Facility name:	RANSOM TRANSPORT
Facility address:	352 W 110TH ST CHICAGO, IL 60628
EPA ID:	ILR000060863
Contact:	WILLIAM RANSOM
Contact address:	352 W 110TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-8480
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Map ID	Site	Database(s)	EPA ID Number

RANSOM TRANSPORT (Continued) **1004696953**

Owner/Operator Summary:

Owner/operator name:	RANSOM TRANSORT
Owner/operator address:	352 W 110TH ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-8480
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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70 **SPILLS** **S111903849**
352 W 110TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19990399
Incident Date:	Not reported
Date Received:	02/19/1999
Facility Address:	352 W 110TH ST
Facility City:	CHICAGO
PRP Name:	WILLIAM RANSOM TRANSPORTATION
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
70	**352 WEST 110 ST** **CHICAGO, IL**	**ERNS**	**93301726** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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70 **RANSOM TRANSPORT BUS GARAGE** **UST** **U001142423**
352 W 110TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2000983
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Eloyse Carney School Bus Ser
Owner Id:	U0004730
Owner Address:	352 W 110Th St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	6/1/1998
OSFM First Notify Date:	1/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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71 **PULLMAN BRANCH LIBRARY** **UST** **U001386539**
11011 S INDIANA **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2032004
Facility Status:	CLOSED
Facility Type:	**SCHOOL/COLLEGE**
Owner Name:	Chicago City Of
Owner Id:	U0021498
Owner Address:	400 S State St Chicago Public Library
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/13/1993
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902

Map ID	Site	Database(s)	EPA ID Number
	PULLMAN BRANCH LIBRARY (Continued)		**U001386539**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/13/1993
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
72	**WALGREENS 2210** **11040 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001201905** **ILR000041418**

RCRA-SQG:

Date form received by agency:	08/08/1997
Facility name:	WALGREENS 2210
Facility address:	11040 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000041418
Mailing address:	200 WILMONT RD DEERFIELD, IL 60015
Contact:	FRED OWENS
Contact address:	200 WILMONT RD DEERFIELD, IL 60015
Contact country:	US
Contact telephone:	(773) 928-6447
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WALGREENS
Owner/operator address:	200 WILMONT RD DEERFIELD, IL 60015
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 940-2500
Legal status:	Private
Owner/Operator Type:	Owner

Map ID	Site	Database(s)	EPA ID Number

WALGREENS 2210 (Continued) **1001201905**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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74 **SOUTHSIDE COLLEGE PREPATORY ACADEMY** **LUST** **U003668849**
250 EAST 111TH ST. **UST** **N/A**
CHICAGO, IL 60628

LUST:
Incident Num: 992547
IL EPA Id: 0316505015
Product: Other Petro
IEMA Date: 11/13/1999
Project Manager: Ransdell
Project Manager Phone: (217) 557-6938
Email: James.Ransdell@illinois.gov
PRP Name: Chicago Public Schools
PRP Contact: Lynn Crivello
PRP Address: 125 South Clark, 17th Fl.
PRP City,St,Zip: Chicago, IL 60603
PRP Phone: 7735533113
Site Classification: Not reported
Section 57.5(g) Letter: 732
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: Not reported
45 Report Received: 04/27/2000
NFA/NFR Letter: 06/29/2000
NFR Date Recorded: 10/16/2000

Map ID	Site	Database(s)	EPA ID Number
	SOUTHSIDE COLLEGE PREPATORY ACADEMY (Continued)		**U003668849**

UST:

Facility ID:	2039156
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Chicago Board of Education (CPS)
Owner Id:	U0026761
Owner Address:	125 S. Clark St. Suite 700
Owner City,St,Zip:	Chicago, IL 60603

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	9/17/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	9/17/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	550
Tank Substance:	Mineral Spirits
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
74	**250 E 111TH ST** **CHICAGO, IL**	**SPILLS**	**S111905996** **N/A**

SPILLS:

Incident ID:	19992547
Incident Date:	Not reported
Date Received:	11/13/1999
Facility Address:	250 E 111TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO PUBLIC SCHOOLS
AC:	Not reported

74	**SOUTH SIDE PREP ACADEMY** **250 E 111TH ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001227871** **ILR000041434**

RCRA-SQG:

Date form received by agency:	12/24/2009
Facility name:	SOUTH SIDE PREP ACADEMY
Facility address:	250 E 111TH ST CHICAGO, IL 60628
EPA ID:	ILR000041434
Mailing address:	BOX 1 FLOSSMOOR, IL 60422
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST NO 10 MOKENAO, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

SOUTH SIDE PREP ACADEMY (Continued) **1001227871**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/18/1998
Facility name: SOUTH SIDE PREP ACADEMY
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN

Map ID	Site	Database(s)	EPA ID Number

SOUTH SIDE PREP ACADEMY (Continued) **1001227871**

THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: X002
Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

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75 **PALMER PARK** **RCRA-CESQG** **1010563614**
201 E 111TH ST **ILR000150235**
CHICAGO, IL 60602

RCRA-CESQG:
Date form received by agency: 10/31/2007
Facility name: PALMER PARK
Facility address: 201 E 111TH ST
CHICAGO, IL 60602
EPA ID: ILR000150235
Mailing address: 541 N FAIRBANKS
CHICAGO, IL 60611
Contact: LEEANN THOMAS
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (312) 742-4287
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: 541 N FAIRBANKS
CHICAGO, IL 60611
Owner/operator country: US
Owner/operator telephone: Not reported

Map ID	Site	Database(s)	EPA ID Number

PALMER PARK (Continued) **1010563614**

Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 10/31/2007
Owner/Op end date: Not reported

Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: 541 N FAIRBANKS
CHICAGO, IL 60611
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: 10/31/2007
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

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76 **SPILLS** **S111880597**
4 E 111TH ST **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 19911600
Incident Date: Not reported
Date Received: 06/12/1991
Facility Address: 4 E 111TH ST
Facility City: CHICAGO
PRP Name: YMCA
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
76	**YMCA** **4 EAST 111TH ST.** **CHICAGO, IL 60628**	**LUST**	**S104525942** **N/A**

LUST:

Incident Num:	911600
IL EPA Id:	0316495043
Product:	Jet Fuel
IEMA Date:	06/12/1991
Project Manager:	Fernandes
Project Manager Phone:	(217) 558-4071
Email:	Suzanne.Fernandes@illinois.gov
PRP Name:	YMCA
PRP Contact:	Mike Dalgard
PRP Address:	755 West North Ave.
PRP City,St,Zip:	Chicago, IL 60610
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**02/24/2009**
NFR Date Recorded:	Not reported

76	**2 W 111TH** **CHICAGO, IL**	**SPILLS**	**S108045720** **N/A**

SPILLS:

Incident ID:	20041632
Incident Date:	11/21/2004
Date Received:	11/22/2004
Facility Address:	2 W 111TH
Facility City:	CHICAGO
PRP Name:	BP
AC:	Not reported

76	**2 W 111TH ST** **CHICAGO, IL**	**SPILLS**	**S111923145** **N/A**

SPILLS:

Incident ID:	20080184
Incident Date:	Not reported
Date Received:	02/07/2008
Facility Address:	2 W 111TH ST
Facility City:	CHICAGO
PRP Name:	BP PRODUCTS NORTH AMERICA
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
76	**ROSELAND MARATHON** **2 WEST 111TH STREET** **CHICAGO, IL 60628**	**LUST** **UST**	**U001141893** **N/A**

LUST:

Incident Num:	20080184
IL EPA Id:	0316495042
Product:	Unleaded Gas
IEMA Date:	02/07/2008
Project Manager:	Kaiser
Project Manager Phone:	(217) 524-4650
Email:	Karl.Kaiser@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/29/2008
45 Report Received:	03/26/2008
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2023171
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Mohammed Zahir
Owner Id:	U0030411
Owner Address:	2 W. 111th Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**L003715**
Green Tag Issue Date:	**3/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984

Map ID	Site	Database(s)	EPA ID Number

ROSELAND MARATHON (Continued) **U001141893**

Green Tag Decal:	**L003715**
Green Tag Issue Date:	**3/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**L003715**
Green Tag Issue Date:	**3/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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76 **PHILLIPS 66** **UST** **U003971788**
11100 S. STATE STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2017200
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	A. B. State Petroleum
Owner Id:	U0032765
Owner Address:	Not reported
Owner City,St,Zip:	Not reported

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003476**
Green Tag Issue Date:	**11/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Currently in use**

Map ID	Site	Database(s)	EPA ID Number

PHILLIPS 66 (Continued) **U003971788**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003476**
Green Tag Issue Date:	**11/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003476**
Green Tag Issue Date:	**11/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003476**
Green Tag Issue Date:	**11/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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77 **ABANDONED SERVICE STATION** **UST** **U003769825**
68 W 111TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2040529
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	City Of Chicago
Owner Id:	U0024652
Owner Address:	30 North LaSalle Street, 25th Floor
Owner City,St,Zip:	Chicago, IL 60602

Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973

Map ID	Site	Database(s)	EPA ID Number

ABANDONED SERVICE STATION (Continued) **U003769825**

OSFM First Notify Date:	Not reported
Tank Status:	**Does Not Exist**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Does Not Exist**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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78 **SPILLS** **S108479871**

100-136 W 111TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20070049
Incident Date:	Not reported
Date Received:	01/18/2007
Facility Address:	100-136 W 111TH ST
Facility City:	CHICAGO
PRP Name:	ROSELAND MEDICAL CENTER
AC:	Not reported

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78 **ANGELICA HEALTHCARE SERVGROUP** **UST** **U001141972**
100 - 140 W. 111TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2008212
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Angelica Corp.
Owner Id:	U0000654
Owner Address:	10176 Corporate Square Dr
Owner City,St,Zip:	Saint Louis, MO 63132

Tank Number:	1
Tank Capacity:	99
Tank Substance:	Diesel Fuel

Map ID	Site	Database(s)	EPA ID Number
	ANGELICA HEALTHCARE SERVGROUP (Continued)		**U001141972**

Last Used Date:	8/1/1985
OSFM First Notify Date:	4/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	99
Tank Substance:	Diesel Fuel
Last Used Date:	8/1/1985
OSFM First Notify Date:	4/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	99
Tank Substance:	Gasoline
Last Used Date:	7/1/1985
OSFM First Notify Date:	4/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	4
Tank Capacity:	3000
Tank Substance:	Solvent
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	ANGELICA HEALTHCARE SERVGROUP (Continued)		**U001141972**

Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	3000
Tank Substance:	Solvent
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	3000
Tank Substance:	Solvent
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	3000
Tank Substance:	Solvent
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	8
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

ANGELICA HEALTHCARE SERVGROUP (Continued) **U001141972**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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78 **ROSELAND MEDICAL CENTER** **LUST** **S108282965**
100-136 WEST 111TH STREET **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20070049
IL EPA Id:	0316495173
Product:	Other Petro
IEMA Date:	01/18/2007
Project Manager:	Jones
Project Manager Phone:	(217) 524-1253
Email:	Steve.Jones@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/06/2007
45 Report Received:	03/02/2007
NFA/NFR Letter:	**01/25/2008**
NFR Date Recorded:	02/19/2008

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79 **ROSELAND COMMUNITY HOSPITAL** **UST** **U003668403**
45 WEST 111TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2038282
Facility Status:	ACTIVE
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Roseland Community Hospital
Owner Id:	U0028039
Owner Address:	45 West 111th Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1998
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	ROSELAND COMMUNITY HOSPITAL (Continued)		**U003668403**

Install Date:	Not reported
Green Tag Decal:	**L007710**
Green Tag Issue Date:	**4/8/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

80	**LAKEFRONT SUPPORTING HOUSING** **11023-11045 S WENTWORTH** **CHICAGO, IL 60628**	**ENG CONTROLS** **INST CONTROL** **SRP**	**1000204428** **ILD981960537**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316495014
NFR Letter:	10/21/2005
Date NFR Recorded:	01/19/2006
Type Of Site:	Residential
Comprehensive / Focused:	Focused
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Robert Banta
RA Company:	Lakefront Supportive Housing
RA Address:	247 South State Street
RA Secondary Address:	Suite 810
RA City,St,Zip:	Chicago, IL 60604-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Clean soil barrier/Concrete barrier/Building foundation
Worker Caution:	False
Acres:	1.575

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316495014
NFR Letter:	10/21/2005
Date NFR Recorded:	01/19/2006
Type Of Site:	Residential
Comprehensive / Focused:	Focused
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Robert Banta
RA Company:	Lakefront Supportive Housing
RA Address:	247 South State Street
RA Secondary Address:	Suite 810
RA City,St,Zip:	Chicago, IL 60604-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Clean soil barrier/Concrete barrier/Building foundation
Worker Caution:	False
Acres:	1.575

SRP:

IL EPA Id:	0316495014
US EPA Id:	ILD981960537
Longitude:	-87.62756
Latitude:	41.69306
Contact Name:	Robert Banta
Contact Address:	247 South State Street
Contact Address2:	Suite 810
Contact City,St,Zip:	Chicago, IL 60640-
Contact Phone:	(312) 447-4500
Date Enrolled:	05/22/2003

Map ID	Site	Database(s)	EPA ID Number

LAKEFRONT SUPPORTING HOUSING (Continued) **1000204428**

Point Of Contact:	Carl L. Dawes
Consultant Company:	Mostardi Platt Environmental
Consultant Address:	1520 Kensington Road
Consultant Address2:	Suite 204
Consultant City,St,Zip:	Oak Brook, IL 60523-2139
Consultant Phone:	(630) 993-2100
Proj Mgr Assigned:	Dunn
Sec. 4 Letter Date:	Not reported
NFR Recorded:	01/19/2006
Active:	False
Total Acres:	1.575
No Further Remediation Letter Dt:	10/21/2005
Remediation Applicant Co:	Lakefront Supportive Housing
Remediation Applicant Title:	Vice President
Remediation Applicant Name:	Mr. Robert Banta
Remediation Applicant Company:	Lakefront Supportive Housing
Remediation Applicant Address:	247 South State Street
Remediation Applicant Address 2:	Suite 810
Remediation Applicant City,St,Zip:	Chicago, IL 60604-
Illinois EPA:	0316495014
Site Name:	Angelica Health Services
NFR Letter:	2005-10-21
NFR Letter Date Recorded:	2006-01-19
Site Type:	Residential
Comprehensive/Focused:	Focused
Institutional Controls:	Groundwater use restriction
Barrier:	Clean soil barrier/Concrete barrier/Building foundation
Worker Caution:	False
Acres:	1.575

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80 **STAR CLEANERS** **RCRA-SQG** **1010317282**
149 W 111TH ST **ILR000144154**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	10/27/2006
Facility name:	STAR CLEANERS
Facility address:	149 W 111TH ST CHICAGO, IL 60628
EPA ID:	ILR000144154
Contact:	KI KIM
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(217) 555-1212
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STAR CLEANERS

Map ID	Site	Database(s)	EPA ID Number

STAR CLEANERS (Continued) **1010317282**

Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 10/27/2006
Owner/Op end date: Not reported

Owner/operator name: STAR CLEANERS
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 10/27/2006
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D039
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

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80 **STAR CLEANERS** **DRYCLEANERS** **S111009271**
149 WEST 111TH STREET **N/A**
CHICAGO, IL 60628

DRYCLEANERS:
Facility Id: 2881-5610-04
DC No: DC-00937
Facility Contact: KI CHANG KIM
License Expires: 12/31/2012

Map ID	Site	Database(s)	EPA ID Number
85	**KANG WON H** **11201-227 S MICHIGAN AVE** **CHICAGO, IL 60628**	**UST**	**U003909406** **N/A**

UST:

Facility ID:	2036925
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Kang Won H
Owner Id:	U0027063
Owner Address:	11201-227 S Michigan Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	Not reported
Tank Capacity:	Not reported
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not reported**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

91	**VACANT BULDING** **11321 S WENTWORTH AVENUE** **CHICAGO, IL 60603**	**UST**	**U003193590** **N/A**

UST:

Facility ID:	2035824
Facility Status:	EXEMPT
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Chicago Assoc For Retarded Citizens
Owner Id:	U0026078
Owner Address:	8South Michigan Avenue
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	5/30/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Heating Oil

Map ID	Site	Database(s)	EPA ID Number

VACANT BULDING (Continued) **U003193590**

Last Used Date:	12/1/1973
OSFM First Notify Date:	5/30/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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93 **PULLMAN CO** **LUST** **U001142600**
65 WEST 113TH PLACE **UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	903598
IL EPA Id:	0316495033
Product:	Deisel
IEMA Date:	12/04/1990
Project Manager:	Davis
Project Manager Phone:	(217) 785-7492
Email:	Valerie.A.Davis@illinois.gov
PRP Name:	Illinois Bell Telephone
PRP Contact:	Thomas Scheer
PRP Address:	900 North Villa
PRP City,St,Zip:	Villa Park, IL 60181
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**05/04/2004**
NFR Date Recorded:	11/05/2004

UST:

Facility ID:	2007786
Facility Status:	ACTIVE
Facility Type:	**UTILITY**
Owner Name:	AT&T Corp. d/b/a Illinois Bell
Owner Id:	U0034340
Owner Address:	308 S. Akard, Room 1700
Owner City,St,Zip:	Dallas, TX 75202
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	12/11/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M006121**
Green Tag Issue Date:	**5/5/2011**

Map ID	Site	Database(s)	EPA ID Number
	PULLMAN CO (Continued)		**U001142600**

Green Tag Expire Date: **12/31/2013**
Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 5760
Tank Substance: Fuel Oil
Last Used Date: 1/1/1970
OSFM First Notify Date: 12/11/1986
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **M006121**
Green Tag Issue Date: **5/5/2011**
Green Tag Expire Date: **12/31/2013**
Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

Tank Number: 3
Tank Capacity: 2500
Tank Substance: Diesel Fuel
Last Used Date: Not reported
OSFM First Notify Date: 2/21/1991
Tank Status: **Currently in use**
Red Tag Issue Date: Not reported
Install Date: 11/28/1990
Green Tag Decal: **M006121**
Green Tag Issue Date: **5/5/2011**
Green Tag Expire Date: **12/31/2013**
Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: $0.00

93		**SPILLS**	**S111878773**
	65 W 113TH PL **CHICAGO, IL**		**N/A**

SPILLS:
Incident ID: 19903598
Incident Date: Not reported
Date Received: 12/04/1990
Facility Address: 65 W 113TH PL
Facility City: CHICAGO
PRP Name: ILLINOIS BELL
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
94	**135-39 W 114TH ST** **CHICAGO, IL**	**SPILLS**	**S111910374** **N/A**

SPILLS:

Incident ID:	20011638
Incident Date:	Not reported
Date Received:	10/03/2001
Facility Address:	135-39 W 114TH ST
Facility City:	CHICAGO
PRP Name:	MARQUETTE BANK
AC:	Not reported

94	**MARQUETTE BANK** **135-39 WEST 114TH ST.** **CHICAGO, IL 60628**	**LUST**	**S105155384** **N/A**

LUST:

Incident Num:	20011638
IL EPA Id:	0316495139
Product:	Gasoline
IEMA Date:	10/03/2001
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Marquette Bank
PRP Contact:	James McDonough
PRP Address:	8020 South Harlem Ave.
PRP City,St,Zip:	Bridgeview, IL 60455
PRP Phone:	7739184541
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	10/17/2001
45 Report Received:	11/16/2001
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

94	**VACANT BUILDING** **133-37 W 114TH ST THRID PARTY REMOVAL** **CHICAGO, IL 60628**	**UST**	**U003853337** **N/A**

UST:

Facility ID:	2040973
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Marquette Bank
Owner Id:	U0030607
Owner Address:	8020 S Harlem Ave
Owner City,St,Zip:	Bridgeview, IL 60455
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/18/2001
Tank Status:	**Exempt from registration**

Map ID	Site	Database(s)	EPA ID Number

VACANT BUILDING (Continued) **U003853337**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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97 **TORINO GARAGE** **UST** **U001143217**
11439 S COTTAGE GROVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2001712
Facility Status:	ACTIVE
Facility Type:	**COMMERCIAL / RETAIL**
Owner Name:	Torino Baking Co
Owner Id:	U0015099
Owner Address:	318 E Kensington Co
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	2/20/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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98 **SPILLS** **S111896002**
11442 S MICHIGAN AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19960704
Incident Date:	Not reported
Date Received:	04/30/1996
Facility Address:	11442 S MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	MUSA TADROS
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
98	**GOODYEAR TIRE & RUBBER** **11442 S MICHIGAN AVE** **CHICAGO, IL 60628**	**UST**	**U000865244** **N/A**

UST:

Facility ID:	2012823
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	American Bank & Trust #120064-09
Owner Id:	U0024861
Owner Address:	733 Spruce Rd
Owner City,St,Zip:	Frankfort, IL 60423
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Used Oil
Last Used Date:	1/1/1993
OSFM First Notify Date:	4/15/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1969
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

98	**TADROS, MUSA** **11442 SOUTH MICHIGAN AVE.** **CHICAGO, IL 60628**	**LUST**	**S104522099** **N/A**

LUST:

Incident Num:	960704
IL EPA Id:	0316500008
Product:	Uset Oil
IEMA Date:	04/30/1996
Project Manager:	Blumhorst
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Musa Tadros
PRP Contact:	Not reported
PRP Address:	655 North La Grange Rd.
PRP City,St,Zip:	Frankfort, IL 60423
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/16/1996
45 Report Received:	04/02/1997
NFA/NFR Letter:	**01/27/1998**
NFR Date Recorded:	10/21/1998

Map ID	Site	Database(s)	EPA ID Number
98	**GOODYEAR AUTO SERVICE CTR** **11442 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000194572** **ILD149985640**

RCRA-SQG:

Date form received by agency:	11/03/1986
Facility name:	GOODYEAR AUTO SERVICE CTR
Facility address:	11442 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILD149985640
Mailing address:	1501 NICHOLAS BLVD ELK GROVE VILLAGE, IL 60007
Contact:	H BROWN
Contact address:	1501 NICHOLAS BLVD ELK GROVE VILLAGE, IL 60007
Contact country:	US
Contact telephone:	(312) 640-5000
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	GOODYEAR TIRE AND RUBBER CO
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

Map ID	Site	Database(s)	EPA ID Number

GOODYEAR AUTO SERVICE CTR (Continued) **1000194572**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: X001
Waste name: WASTE OILS

Violation Status: No violations found

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100 **SPILLS** **S111920067**
342 E 115TH ST **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 20061096
Incident Date: Not reported
Date Received: 08/29/2006
Facility Address: 342 E 115TH ST
Facility City: CHICAGO
PRP Name: FRIESON, PHYLLIS
AC: Not reported

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100 **USED APPLLIANCE STORE** **UST** **U004022836**
342-44 E. 115TH STREET **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2043038
Facility Status: EXEMPT
Facility Type: **NONE**
Owner Name: Frieson, Willie
Owner Id: U0033097
Owner Address: 342-344 E. 115th Street
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: 1/23/2006
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**

Map ID	Site	Database(s)	EPA ID Number

USED APPLLIANCE STORE (Continued) **U004022836**

Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

100 **FRIESON, PHYLLIS** **LUST** **S108187373**
342 EAST 115TH STREET **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20061096
IL EPA Id:	0316495171
Product:	Fuel Oil, Other Petro
IEMA Date:	08/29/2006
Project Manager:	Covert
Project Manager Phone:	(217) 785-3943
Email:	Chris.Covert@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	01/29/2007
45 Report Received:	01/29/2007
NFA/NFR Letter:	**05/29/2007**
NFR Date Recorded:	08/08/1988

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100 **SPILLS** **S108046141**
344 E 115TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20051628
Incident Date:	Not reported
Date Received:	12/06/2005
Facility Address:	344 E 115TH ST
Facility City:	CHICAGO
PRP Name:	FRIESON, WILLIE
AC:	Not reported

---

101 **ILLINOIS CENTRAL RAILROAD** **UST** **U003152193**
11500 S COTTAGE GROVE **N/A**
CHICAGO, IL 60430

UST:

Facility ID:	2035501
Facility Status:	EXEMPT
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Name:	Lend Lease Realestate Investors
Owner Id:	U0007233
Owner Address:	455 N Cityfront Plaza Dr Suite 3200

Map ID	Site	Database(s)	EPA ID Number
	ILLINOIS CENTRAL RAILROAD (Continued)		**U003152193**

Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	5000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	500
Tank Substance:	Gasoline
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	275
Tank Substance:	Gasoline
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	4
Tank Capacity:	275
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

ILLINOIS CENTRAL RAILROAD (Continued) **U003152193**

Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	275
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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101 **ILLINOIS CENTRAL RAILROAD** **RCRA-SQG** **1001123410**
115TH & COTTAGE GROVE **ILR000030551**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	11/14/1996
Facility name:	ILLINOIS CENTRAL RAILROAD
Facility address:	115TH & COTTAGE GROVE CHICAGO, IL 60628
EPA ID:	ILR000030551
Mailing address:	455 N CITY FRONT PLAZA DR CHICAGO, IL 60611
Contact:	MARIO SILLER
Contact address:	455 N CITY FRONT PLAZA DR CHICAGO, IL 60611
Contact country:	US
Contact telephone:	(708) 957-6566
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	ILLINOIS CENTRAL RAILROAD
Owner/operator address:	455 N CITY FRONT PLAZA DR CHICAGO, IL 60611
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 755-7840
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

ILLINOIS CENTRAL RAILROAD (Continued) **1001123410**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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101 **SHERWIN WILLIAMS CHICAGO FACILITY** **UST** **U004123100**
549 E. 115TH ST. **N/A**
CHICAGO, IL 60609

UST:
Facility ID: 2044116
Facility Status: EXEMPT
Facility Type: **COMMERCIAL / RETAIL**
Owner Name: Sherwin Williams Company
Owner Id: U0013875
Owner Address: 101 Prospect Avenue
Owner City,St,Zip: Cleveland, OH 44115

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: Not reported
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date **Not reported**

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CHICAGO FACILITY (Continued)		**U004123100**

Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

102	**CURTIS SCHOOL** **32 E 115TH ST** **CHICAGO, IL 60628**	**UST**	**1002889106** **N/A**

UST:

Facility ID:	2040500
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0028313
Owner Address:	125 S. Clark, 17th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

102	**CURTIS ELEMENTARY** **32 E 115TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696709** **ILR000056796**

RCRA-CESQG:

Date form received by agency:	10/27/1998
Facility name:	CURTIS ELEMENTARY
Facility address:	32 E 115TH ST CHICAGO, IL 60628
EPA ID:	ILR000056796
Mailing address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous

Map ID	Site	Database(s)	EPA ID Number

CURTIS ELEMENTARY (Continued) **1004696709**

waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING ROAD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
103	**ABANDONED GAS STATION** **2 WEST 115TH STREET** **CHICAGO, IL 60628**	**LUST** **UST**	**U003668168** **N/A**

LUST:

Incident Num:	980685
IL EPA Id:	0316495103
Product:	Gasoline
IEMA Date:	03/30/1998
Project Manager:	Harlow
Project Manager Phone:	(217) 524-7650
Email:	Robert.Harlow@illinois.gov
PRP Name:	Donna Cox
PRP Contact:	Not reported
PRP Address:	345 South Sacramento
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	7737223797
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	20111008
IL EPA Id:	0316495103
Product:	Gasoline
IEMA Date:	09/22/2011
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2037063
Facility Status:	EXEMPT
Facility Type:	**GOLF COURSE**
Owner Name:	Cox Donna
Owner Id:	U0027202
Owner Address:	345 S Sacramento
Owner City,St,Zip:	Chicago, IL 60612

Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number

ABANDONED GAS STATION (Continued) **U003668168**

Last Used Date:	12/31/1973
OSFM First Notify Date:	3/23/1998
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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103 **SPILLS** **S111900940**
2 W 115TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19980685
Incident Date:	Not reported
Date Received:	03/30/1998
Facility Address:	2 W 115TH ST
Facility City:	CHICAGO
PRP Name:	COX, DONNA
AC:	Not reported

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103 **SPILLS** **S111927173**
2 W 115TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20111008
Incident Date:	Not reported
Date Received:	Not reported
Facility Address:	2 W 115TH ST
Facility City:	CHICAGO
PRP Name:	Donna Cox
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
104	**35 W 115TH ST** **CHICAGO, IL**	**SPILLS**	**S111905773** **N/A**

SPILLS:

Incident ID:	19992324
Incident Date:	Not reported
Date Received:	10/13/1999
Facility Address:	35 W 115TH ST
Facility City:	CHICAGO
PRP Name:	TRIANGLE TRANSMISSIONS
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
104	**TRIANGLE TRANSMISSION** **35 W 115TH ST** **CHICAGO, IL 60628**	**RCRA-SQG** **LUST** **UST**	**1001493094** **ILR000067009**

RCRA-SQG:

Date form received by agency:	08/27/1999
Facility name:	TRIANGLE TRANSMISSION
Facility address:	35 W 115TH ST CHICAGO, IL 60628
EPA ID:	ILR000067009
Contact:	THERON AYTCH
Contact address:	35 W 115TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 458-0054
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TRIANGLE TRANSMISSION
Owner/operator address:	35 W 115TH ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 458-0054
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

Map ID	Site	Database(s)	EPA ID Number

TRIANGLE TRANSMISSION (Continued) **1001493094**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

LUST:
Incident Num: 992324
IL EPA Id: 0316495120
Product: Gasoline
IEMA Date: 10/13/1999
Project Manager: NOT ASSIGNED
Project Manager Phone: Not reported
Email: Not reported
PRP Name: Triangle Transmissions
PRP Contact: Pheron Aytch
PRP Address: 35 West 115th St.
PRP City,St,Zip: Chicago, IL 60628
PRP Phone: 7734680054
Site Classification: Not reported
Section 57.5(g) Letter: 732
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 10/21/1999
45 Report Received: Not reported
NFA/NFR Letter: Not reported
NFR Date Recorded: Not reported

UST:
Facility ID: 2039271
Facility Status: EXEMPT
Facility Type: GOLF COURSE
Owner Name: Triangle Transmission
Owner Id: U0029023
Owner Address: 35 W 115th St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Gasoline
Last Used Date: 12/31/1973
OSFM First Notify Date: 10/21/1999
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: Not reported

Map ID	Site	Database(s)	EPA ID Number

TRIANGLE TRANSMISSION (Continued) **1001493094**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/21/1999
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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105 **ABANDONED SERVICE STATION** **UST** **U003762980**
11500 S PERRY **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2040244
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	5000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**

Map ID	Site	Database(s)	EPA ID Number

ABANDONED SERVICE STATION (Continued) **U003762980**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	5000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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105 **CHICAGO, CITY OF** **LUST** **S104872169**
11500 SOUTH PERRY **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20002342
IL EPA Id:	0316495135
Product:	Gasoline, Uset Oil
IEMA Date:	12/12/2000
Project Manager:	Tucka
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	City of Chicago
PRP Contact:	Dave Graham
PRP Address:	30 North LaSalel St., 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127443639

Map ID	Site	Database(s)	EPA ID Number

CHICAGO, CITY OF (Continued) **S104872169**

Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2001-04-20
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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110 **CATHOLIC CONVENT** **UST** **U004014199**
11515 S. PRAIRIE AVENUE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2042879
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Methodist Youth Services, Inc.
Owner Id:	U0032855
Owner Address:	954 W. Washington Blvd., #4E
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1960
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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110 **SPILLS** **S108045361**
11515 PRAIRIE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20050964
Incident Date:	Not reported
Date Received:	07/12/2005
Facility Address:	11515 PRAIRIE
Facility City:	CHICAGO
PRP Name:	METHODIST YOUTH SERVICES
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
111	**BETTY BRITE CLEANERS** **11518 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004693025** **ILD981954753**

RCRA-CESQG:

Date form received by agency:	03/29/2000
Facility name:	BETTY BRITE CLEANERS
Facility address:	11518 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILD981954753
Contact:	MIKE HUSSAIN
Contact address:	11518 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 821-9379
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	HUSSAIN HABIB
Owner/operator address:	11518 S MICHIGAN AVE CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 821-9379
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

Map ID	Site	Database(s)	EPA ID Number

BETTY BRITE CLEANERS (Continued) **1004693025**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	D039
Waste name:	TETRACHLOROETHYLENE
Waste code:	D040
Waste name:	TRICHLOROETHYLENE
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

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112 **SHERWIN WILLIAMS CO**
11541 S CHAMPLAIN AVE
CHICAGO, IL 60628

CERCLIS **1000371369**
CORRACTS **60628SHRWN11**
RCRA-TSDF
RCRA-LQG

CERCLIS:

Site ID:	0500202
EPA ID:	ILD005456439
Facility County:	COOK
Short Name:	SHERWIN WILLIAMS COMPANY,
Congressional District:	01
IFMS ID:	Not reported
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Y
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

RST Code: Not reported
EPA Region: 05
Classification: Not reported
Site Settings Code: Not reported
NPL Status: Not on the NPL
DMNSN Unit Code: Not reported
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: ESI Start Needed
Non NPL Status Date: 19991123
Site Fips Code: 17031
CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Alias Name(s):
Alias ID: 101
Alias Name: SHERWIN WILLIAMS CO THE
Alias Address: 11541 S CHAMPLAIN AVE
CHICAGO, IL 60628
Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/01/1980
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 09/01/1984
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 06/11/1986
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

CORRACTS:

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 01/22/2007
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/04/1998
Action: CA110 - RFI Workplan Received
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/05/1998
Action: CA110 - RFI Workplan Received
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/1998
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/26/1998
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/31/1994
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/06/1991
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/06/1989
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/06/1990
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/16/1993
Action: CA016
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/20/2001
Action: CA005EE
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/22/1998
Action: CA077

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/25/2004
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/25/2004
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/28/1997
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/28/1997
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 32551
Paint and Coating Manufacturing

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/28/1992
Action: CA086
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 10/28/1998
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/2000
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 11/06/1997
Action: CA100DC - RFI Imposition, Focused data collection required for stabilization evaluation
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 12/06/1999
Action: CA200 - RFI Approved
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/2002
Schedule end date: Not reported

RCRA-TSDF:
Date form received by agency: 03/01/2010
Facility name: SHERWIN WILLIAMS CO
Facility address: 11541 S CHAMPLAIN AVE
CHICAGO, IL 60628
EPA ID: ILD005456439
Mailing address: 101 PROSPECT AVE NW-4M
CLEVELAND, OH 441151075
Contact: PAUL BARDING
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (216) 515-4629

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	SHERWIN WILLIAMS CO
Owner/operator address:	101 PROSPECT AVE NW CLEVELAND, OH 44115
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1900
Owner/Op end date:	Not reported

Owner/operator name:	THE SHERWIN WILLIAMS CO
Owner/operator address:	101 PROSPECT AVE NW CITY NOT REPORTED, OH 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(216) 566-2000
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	THE SHERWIN WILLIAMS CO
Owner/operator address:	101 PROSPECT AVE NW CLEVELAND, OH 44115
Owner/operator country:	Not reported
Owner/operator telephone:	(216) 566-2000
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	SHERWIN WILLIAMS CO
Owner/operator address:	101 PROSPECT AVE NW CLEVELAND, OH 44115
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Owner/Operator Type: Owner
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency:03/01/2008
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:12/31/2007
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:08/14/2007
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:03/01/2006
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:03/01/2004
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:03/01/2002
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:03/01/2000
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:03/01/1998
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency:03/01/1996
Facility name: SHERWIN WILLIAMS CO

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 10/19/1993
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1992
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1991
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 03/01/1990
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 11/22/1980
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 08/18/1980
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D004
Waste name: ARSENIC

Waste code: D007
Waste name: CHROMIUM

Waste code: D009
Waste name: MERCURY

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: LABP
Waste name: LAB PACK

Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F017
Waste name: Not Defined

Waste code: F018
Waste name: Not Defined

Waste code: K078
Waste name: K078

Waste code: K079
Waste name: K079

Waste code: K081
Waste name: K081

Waste code: K082
Waste name: K082

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: P003

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: ACROLEIN

Waste code: P005
Waste name: ALLYL ALCOHOL

Waste code: P008
Waste name: 4-AMINOPYRIDINE

Waste code: P011
Waste name: ARSENIC OXIDE AS2O3

Waste code: P014
Waste name: BENZENETHIOL

Waste code: P019
Waste name: Not Defined

Waste code: P022
Waste name: CARBON DISULFIDE

Waste code: P028
Waste name: BENZENE, (CHLOROMETHYL)-

Waste code: P029
Waste name: COPPER CYANIDE

Waste code: P030
Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Waste code: P052
Waste name: Not Defined

Waste code: P053
Waste name: Not Defined

Waste code: P054
Waste name: AZIRIDINE

Waste code: P087
Waste name: OSMIUM OXIDE OSO4, (T-4)-

Waste code: P090
Waste name: Not Defined

Waste code: P095
Waste name: CARBONIC DICHLORIDE

Waste code: P100
Waste name: Not Defined

Waste code: P101
Waste name: ETHYL CYANIDE

Waste code: P105
Waste name: SODIUM AZIDE

Waste code: U001

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: ACETALDEHYDE (I)

Waste code: U002
Waste name: ACETONE (I)

Waste code: U003
Waste name: ACETONITRILE (I,T)

Waste code: U004
Waste name: ACETOPHENONE

Waste code: U006
Waste name: ACETYL CHLORIDE (C,R,T)

Waste code: U007
Waste name: ACRYLAMIDE

Waste code: U008
Waste name: ACRYLIC ACID (I)

Waste code: U009
Waste name: ACRYLONITRILE

Waste code: U012
Waste name: ANILINE (I,T)

Waste code: U013
Waste name: Not Defined

Waste code: U017
Waste name: BENZAL CHLORIDE

Waste code: U019
Waste name: BENZENE (I,T)

Waste code: U020
Waste name: BENZENESULFONIC ACID CHLORIDE (C,R)

Waste code: U021
Waste name: BENZIDINE

Waste code: U023
Waste name: BENZENE, (TRICHLOROMETHYL)-

Waste code: U028
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER

Waste code: U031
Waste name: 1-BUTANOL (I)

Waste code: U032
Waste name: CALCIUM CHROMATE

Waste code: U033
Waste name: CARBONIC DIFLUORIDE

Waste code: U037

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: BENZENE, CHLORO-

Waste code: U039
Waste name: P-CHLORO-M-CRESOL

Waste code: U048
Waste name: O-CHLOROPHENOL

Waste code: U052
Waste name: CRESOL (CRESYLIC ACID)

Waste code: U053
Waste name: 2-BUTENAL

Waste code: U054
Waste name: Not Defined

Waste code: U055
Waste name: BENZENE, (1-METHYLETHYL)- (I)

Waste code: U056
Waste name: BENZENE, HEXAHYDRO- (I)

Waste code: U057
Waste name: CYCLOHEXANONE (I)

Waste code: U067
Waste name: ETHANE, 1,2-DIBROMO-

Waste code: U069
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER

Waste code: U070
Waste name: BENZENE, 1,2-DICHLORO-

Waste code: U071
Waste name: BENZENE, 1,3-DICHLORO-

Waste code: U072
Waste name: BENZENE, 1,4-DICHLORO-

Waste code: U073
Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO-

Waste code: U074
Waste name: 2-BUTENE, 1,4-DICHLORO- (I,T)

Waste code: U076
Waste name: ETHANE, 1,1-DICHLORO-

Waste code: U077
Waste name: ETHANE, 1,2-DICHLORO-

Waste code: U078
Waste name: 1,1-DICHLOROETHYLENE

Waste code: U080

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: METHANE, DICHLORO-

Waste code: U081
Waste name: 2,4-DICHLOROPHENOL

Waste code: U082
Waste name: 2,6-DICHLOROPHENOL

Waste code: U088
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER

Waste code: U092
Waste name: DIMETHYLAMINE (I)

Waste code: U102
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER

Waste code: U103
Waste name: DIMETHYL SULFATE

Waste code: U104
Waste name: Not Defined

Waste code: U105
Waste name: BENZENE, 1-METHYL-2,4-DINITRO-

Waste code: U106
Waste name: BENZENE, 2-METHYL-1,3-DINITRO-

Waste code: U107
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER

Waste code: U108
Waste name: 1,4-DIETHYLENEOXIDE

Waste code: U110
Waste name: DIPROPYLAMINE (I)

Waste code: U112
Waste name: ACETIC ACID ETHYL ESTER (I)

Waste code: U113
Waste name: ETHYL ACRYLATE (I)

Waste code: U115
Waste name: ETHYLENE OXIDE (I,T)

Waste code: U117
Waste name: ETHANE, 1,1'-OXYBIS-(I)

Waste code: U118
Waste name: ETHYL METHACRYLATE

Waste code: U119
Waste name: ETHYL METHANESULFONATE

Waste code: U122

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: FORMALDEHYDE

Waste code: U123
Waste name: FORMIC ACID (C,T)

Waste code: U124
Waste name: FURAN (I)

Waste code: U125
Waste name: 2-FURANCARBOXALDEHYDE (I)

Waste code: U126
Waste name: GLYCIDYLALDEHYDE

Waste code: U127
Waste name: BENZENE, HEXACHLORO-

Waste code: U128
Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO-

Waste code: U130
Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO-

Waste code: U131
Waste name: ETHANE, HEXACHLORO-

Waste code: U133
Waste name: HYDRAZINE (R,T)

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)

Waste code: U135
Waste name: HYDROGEN SULFIDE

Waste code: U140
Waste name: ISOBUTYL ALCOHOL (I,T)

Waste code: U145
Waste name: LEAD PHOSPHATE

Waste code: U147
Waste name: 2,5-FURANDIONE

Waste code: U149
Waste name: MALONONITRILE

Waste code: U150
Waste name: MELPHALAN

Waste code: U151
Waste name: MERCURY

Waste code: U152
Waste name: METHACRYLONITRILE (I, T)

Waste code: U154

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Waste name: METHANOL (I)

Waste code: U155
Waste name: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)-

Waste code: U159
Waste name: 2-BUTANONE (I,T)

Waste code: U160
Waste name: 2-BUTANONE, PEROXIDE (R,T)

Waste code: U161
Waste name: METHYL ISOBUTYL KETONE (I)

Waste code: U162
Waste name: METHYL METHACRYLATE (I,T)

Waste code: U165
Waste name: NAPHTHALENE

Waste code: U167
Waste name: 1-NAPHTHALENAMINE

Waste code: U168
Waste name: 2-NAPHTHALENAMINE

Waste code: U169
Waste name: BENZENE, NITRO-

Waste code: U170
Waste name: P-NITROPHENOL

Waste code: U171
Waste name: 2-NITROPROPANE (I,T)

Waste code: U183
Waste name: BENZENE, PENTACHLORO-

Waste code: U184
Waste name: ETHANE, PENTACHLORO-

Waste code: U185
Waste name: BENZENE, PENTACHLORONITRO-

Waste code: U186
Waste name: 1-METHYLBUTADIENE (I)

Waste code: U187
Waste name: ACETAMIDE, N-(4-ETHOXYPHENYL)-

Waste code: U188
Waste name: PHENOL

Waste code: U190
Waste name: 1,3-ISOBENZOFURANDIONE

Waste code: U194

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: 1-PROPANAMINE (I,T)

Waste code: U196
Waste name: PYRIDINE

Waste code: U201
Waste name: 1,3-BENZENEDIOL

Waste code: U202
Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS

Waste code: U207
Waste name: BENZENE, 1,2,4,5-TETRACHLORO-

Waste code: U208
Waste name: ETHANE, 1,1,1,2-TETRACHLORO-

Waste code: U209
Waste name: ETHANE, 1,1,2,2-TETRACHLORO-

Waste code: U210
Waste name: ETHENE, TETRACHLORO-

Waste code: U211
Waste name: CARBON TETRACHLORIDE

Waste code: U212
Waste name: Not Defined

Waste code: U213
Waste name: FURAN, TETRAHYDRO-(I)

Waste code: U218
Waste name: ETHANETHIOAMIDE

Waste code: U220
Waste name: BENZENE, METHYL-

Waste code: U221
Waste name: BENZENEDIAMINE, AR-METHYL-

Waste code: U223
Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Waste code: U225
Waste name: BROMOFORM

Waste code: U226
Waste name: ETHANE, 1,1,1-TRICHLORO-

Waste code: U227
Waste name: ETHANE, 1,1,2-TRICHLORO-

Waste code: U228
Waste name: ETHENE, TRICHLORO-

Waste code: U229

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Waste name: Not Defined

Waste code: U230
Waste name: Not Defined

Waste code: U231
Waste name: Not Defined

Waste code: U232
Waste name: Not Defined

Waste code: U234
Waste name: BENZENE, 1,3,5-TRINITRO-

Waste code: U238
Waste name: CARBAMIC ACID, ETHYL ESTER

Waste code: U239
Waste name: BENZENE, DIMETHYL- (I,T)

Biennial Reports:

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 256148.7

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 289819.8

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 289819.8

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 216

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 256148.7

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 256148.7

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 256148.7

Waste code: LABP
Waste name: LAB PACK
Amount (Lbs): 7599.3

Corrective Action Summary:

Event date: 07/06/1989
Event: RFA Completed, Assessment was an RFA.

Event date: 07/06/1990
Event: RFA Determination Of Need For An RFI, RFI is Necessary;

Event date: 06/06/1991
Event: CA077

Event date: 09/27/1991
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 09/28/1992
Event: CA086

Event date: 07/16/1993
Event: CA016

Event date: 03/31/1994
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 08/28/1997
Event: Current Human Exposures under Control, More information is needed to make a determination.

Event date: 08/28/1997
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 11/06/1997
Event: RFI Imposition, Focused data collection required for stabilization evaluation.

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Event date: 03/04/1998
Event: RFI Workplan Received

Event date: 03/05/1998
Event: RFI Workplan Received

Event date: 03/26/1998
Event: CA077

Event date: 07/22/1998
Event: CA077

Event date: 10/28/1998
Event: RFI Workplan Approved

Event date: 12/06/1999
Event: RFI Approved

Event date: 07/20/2001
Event: CA005EE

Event date: 08/25/2004
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 08/25/2004
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 01/22/2007
Event: Date For Remedy Selection (CM Imposed)

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 04/09/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 04/09/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.197
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 08/18/1995
Date achieved compliance: 11/06/1997
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/13/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 09/22/1994
Date achieved compliance: 02/14/1995
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 10/24/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 08/05/1987
Date achieved compliance: 02/05/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/06/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.111
Area of violation: Generators - General
Date violation determined: 10/10/1986
Date achieved compliance: 02/26/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(d)(4)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 03/31/1986
Date achieved compliance: 08/07/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/03/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 03/27/1986
Date achieved compliance: 07/18/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/01/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 03/27/1986
Date achieved compliance: 07/18/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/01/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116
Area of violation: TSD - General Facility Standards
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 07/24/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/10/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 05/05/1986
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/18/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 05/05/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/10/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 07/24/1985
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/18/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/07/1985
Date achieved compliance: 06/04/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/05/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/07/1985
Date achieved compliance: 06/04/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/07/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/14/1984
Date achieved compliance: 12/20/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/19/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/15/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/19/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/09/1984
Date achieved compliance: 09/13/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/16/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/19/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 05/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/15/1984
Date achieved compliance: 01/24/1985
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 03/28/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/15/1984
Date achieved compliance: 01/24/1985
Violation lead agency: EPA
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 07/30/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: SR - 725.191

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 10/14/2008

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/24/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation lead agency: State

Evaluation date: 01/23/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/03/2002
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/18/1995
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 03/27/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 03/27/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 01/18/1995
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/14/1995
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/1994

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/14/1995
Evaluation lead agency: State

Evaluation date: 04/20/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 04/20/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Tank System Standards
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Permits - Application
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: LDR - General
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Generators - General
Date achieved compliance: 11/06/1997

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - General
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 01/08/1988
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/05/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/05/1988
Evaluation lead agency: State

Evaluation date: 10/10/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/26/1987
Evaluation lead agency: State

Evaluation date: 03/31/1986
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 08/07/1986
Evaluation lead agency: State

Evaluation date: 03/27/1986
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 07/18/1986
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 01/17/1986

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 04/25/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/24/1985
Evaluation lead agency: State

Evaluation date: 04/25/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/05/1986
Evaluation lead agency: State

Evaluation date: 01/07/1985
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 06/04/1985
Evaluation lead agency: State

Evaluation date: 12/14/1984
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/20/1984
Evaluation lead agency: State

Evaluation date: 10/23/1984
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/19/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 09/19/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/17/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 12/21/1984

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Evaluation lead agency: State

Evaluation date: 08/17/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/09/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/13/1984
Evaluation lead agency: State

Evaluation date: 07/16/1984
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 07/16/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 05/17/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 02/15/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 01/24/1985
Evaluation lead agency: EPA

Evaluation date: 11/03/1983
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 04/06/1984
Evaluation lead agency: State

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113 **SHERWIN-WILLIAMS COMPANY BOILERHOUSE COMPLEX** **SRP** **S111678029**
603 EAST KENSINGTON AVENUE **N/A**
CHICAGO, IL 60628

SRP:
IL EPA Id: 0316500003
US EPA Id: ILD005456439
Longitude: -87.60814
Latitude: 41.68350
Contact Name: Gordon Kuntz
Contact Address: 101 Prospect Avenue, NW
Contact Address2: Not reported
Contact City,St,Zip: Cleveland, OH 44115-
Contact Phone: (216) 566-2889
Date Enrolled: 02/21/2012

Map ID	Site	Database(s)	EPA ID Number

SHERWIN-WILLIAMS COMPANY BOILERHOUSE COMPLEX (Continued) **S111678029**

Point Of Contact:	Jennifer Troast
Consultant Company:	Weston Solutions
Consultant Address:	750 East Bunker Court
Consultant Address2:	Suite 500
Consultant City,St,Zip:	Vernon Hills, IL 60061-
Consultant Phone:	(847) 918-4068
Proj Mgr Assigned:	Hall
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	2.870
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	The Sherwin-Williams Company
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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115 **US SCRAP** **SWF/LF** **1008113237**
391 E KENSINGTON **N/A**
CHICAGO, IL 60628

IL WMRC_LF:

Region:	WMRC
General:	Not reported
IEPA ID Number:	316000022
Municipal Waste:	Not reported
Provisional IEPA ID:	Not reported
Septic:	Not reported
NIPC Map Number:	135
Animal:	Not reported
Owner Name:	U S SCRAP
Pathological:	Not reported
Operator:	U S SCRAP
Industrial:	Not reported
PO Box:	Not reported
Foundry Sand:	Not reported
Incinerator Ash:	Not reported
Slag:	Not reported
Hazardous:	Not reported
Hazardous Liquid:	Not reported
Radiation:	Not reported
Demolition:	X
Lat/Long:	414000/873600
Landscaping:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	US SCRAP (Continued)		**1008113237**

Oil Field:	Not reported
Primemer ID:	3
Special:	Not reported
Township:	37N
Other:	Not reported
Range:	14E
Unknown:	Not reported
Section:	27
Quarter Section1:	NW
Quarter Section2:	Not reported
Quarter Section3:	Not reported
Quarter Section4:	Not reported
IEPA:	X
ISGS:	Not reported
PollutionControlBoard:	Not reported
IDM&M:	Not reported
DPH:	Not reported
Operational Status:	CLOSED NO FINAL COVER
Local Agency:	Not reported
Permit Status:	UNPERMITTED UNAUTHORIZED
Agency:	NIPC
IEPA Permit Date:	10174
Source Other:	Not reported
Close Date:	73074
Reaction:	Not reported
RCRA Facility:	Not reported
Date Discover:	Not reported
GW Monitoring:	YES
Date Cleaned:	Not reported
FD Site:	Not reported
Offsite Waste:	Not reported
Landfill Size:	Not reported
Random Dump:	Not reported
Size Fill:	Not reported
Open Dump:	Not reported
Leachate Collected:	Not reported
Abandonment:	Not reported
Other:	Not reported
Recompacted Clay:	Not reported
In-situ Clay:	Not reported
Secured Containers:	Not reported
Combination:	Not reported
Landfill:	X
None:	Not reported
Incineration:	Not reported
Other:	Not reported
Survace Impoundment:	Not reported
Land Application:	Not reported

Map ID	Site	Database(s)	EPA ID Number
115	**U.S. SCRAP** **391 EAST KENSINGTON** **CHICAGO, IL 60628**	**SSU**	**S101467254** **N/A**

SSU:

Facility ID:	0316000022
Facility Type:	Manufacturer - Industrial
Lat/Long:	41.6839332 / -87.613449
Directions:	Take I-55 North.
Region:	Des Plaines
Current Program:	USEPA
Project Manager:	Nickell
Community Relations:	McGinnis
SSU Status:	Transferred
US EPA Id:	ILD980679484
FOS:	NA
Year Completed:	Not reported
Year Entered:	Not reported
Site Size:	9

116	**GONNELLA BAKING CO** **318 E KENSINGTON** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001218857** **ILR000049858**

RCRA-SQG:

Date form received by agency:	04/07/1998
Facility name:	GONNELLA BAKING CO
Facility address:	318 E KENSINGTON CHICAGO, IL 60628
EPA ID:	ILR000049858
Contact:	HOUSTON BICKHEM
Contact address:	318 E KENSINGTON CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 821-1783
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	GONNELA BAKING
Owner/operator address:	318 E KENSINGTON CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 821-1783
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

Map ID	Site	Database(s)	EPA ID Number

GONNELLA BAKING CO (Continued) **1001218857**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Violation Status:	No violations found

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117 **SPILLS** **S111895505**

162 E KENSINGTON AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19960207
Incident Date:	Not reported
Date Received:	02/07/1996
Facility Address:	162 E KENSINGTON AVE
Facility City:	CHICAGO
PRP Name:	KENSINGTON SERVICE STATION
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
117	**KENSINGTON SERV STATION** **162 E KENSINGTON** **CHICAGO, IL 60628**	**LUST**	**1001086793** **ILR000015131**

LUST:

Incident Num:	960207
IL EPA Id:	0316505018
Product:	Gasoline
IEMA Date:	02/07/1996
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Kensington Service Station
PRP Contact:	Hector Vasquez
PRP Address:	162 East Kensington Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

117	**KENSINGTON SERVICE STATION** **162 E KENSINGTON** **CHICAGO, IL 60473**	**UST**	**U003042181** **N/A**

UST:

Facility ID:	2034581
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	Kensington Service Station
Owner Id:	U0024426
Owner Address:	162 E Kensington
Owner City,St,Zip:	Chicago, IL 60473
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995

Map ID	Site	Database(s)	EPA ID Number

KENSINGTON SERVICE STATION (Continued) **U003042181**

Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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118 **0707 CLARK SER STATION** **UST** **U000172648**
11555 S MICHIGAN AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2010017
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Clark Retail Enterprises, Inc.
Owner Id:	U0003073
Owner Address:	3003 Butterfield Road, Suite 300
Owner City,St,Zip:	Oak Brook, IL 60523

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number

0707 CLARK SER STATION (Continued) **U000172648**

Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	7500
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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118 **CLARK OIL & REFINING** **LUST** **S104525658**
11555 SOUTH MICHIGAN AVE. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	912512
IL EPA Id:	0316535008
Product:	Gasoline
IEMA Date:	09/05/1991
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Clark Oil & Refining
PRP Contact:	Johnna VanKeuran
PRP Address:	8182 Maryland Ave.
PRP City,St,Zip:	Clayton, MO 63105-3721
PRP Phone:	3147520533
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	05/28/1992
NFA/NFR Letter:	**01/09/1995**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
120	**MICHIGAN CITGO** **11600 S MICHIGAN AVE** **CHICAGO, IL 60628**	**UST**	**U001142786** **N/A**

UST:

Facility ID:	2017681
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Michigan Citgo, Inc.
Owner Id:	U0031233
Owner Address:	11600 S Michigan Ave
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	11/10/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003457**
Green Tag Issue Date:	**8/24/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	15000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	11/10/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003457**
Green Tag Issue Date:	**8/24/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	11/10/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003457**
Green Tag Issue Date:	**8/24/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number

MICHIGAN CITGO (Continued) **U001142786**

Tank Number:	4
Tank Capacity:	6000
Tank Substance:	Kerosene
Last Used Date:	Not reported
OSFM First Notify Date:	11/10/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003457**
Green Tag Issue Date:	**8/24/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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122 **STUARTS CHEMICAL & PAINT** **LUST** **S104002394**
11740 FRONT ST. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	900054
IL EPA Id:	0316005286
Product:	Non Petro
IEMA Date:	01/05/1990
Project Manager:	Heaton
Project Manager Phone:	(217) 524-3312
Email:	Mike.Heaton@illinois.gov
PRP Name:	Stuarts Ind.
PRP Contact:	Marla Kowlaski
PRP Address:	11740 Front St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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123 **SONGHAI LEARNING INSTITUTE** **RCRA-CESQG** **1004696903**
11725 S PERRY AVE **ILR000059832**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	12/15/1998
Facility name:	SONGHAI LEARNING INSTITUTE
Facility address:	11725 S PERRY AVE CHICAGO, IL 60628
EPA ID:	ILR000059832
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10

Map ID	Site	Database(s)	EPA ID Number

SONGHAI LEARNING INSTITUTE (Continued) **1004696903**

	MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD

Map ID	Site	Database(s)	EPA ID Number
	SONGHAI LEARNING INSTITUTE (Continued)		**1004696903**

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

125	**AMERICAN CLYBOURN FINISHING CO** **11730 S FRONT ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1000359773** **ILT180010019**

RCRA-CESQG:

Date form received by agency:	04/14/1995
Facility name:	AMERICAN CLYBOURN FINISHING CO
Facility address:	11730 S FRONT ST CHICAGO, IL 60628
EPA ID:	ILT180010019
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	FRANK J COLLINS
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

AMERICAN CLYBOURN FINISHING CO (Continued) **1000359773**

Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/19/1980
Facility name: AMERICAN CLYBOURN FINISHING CO
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/28/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/23/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
125	**STUART INDUSTRIAL COATINGS INC** **11740 S FRONT ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000614197** **ILD984845073**

RCRA-SQG:

Date form received by agency:	11/19/1991
Facility name:	STUART INDUSTRIAL COATINGS INC
Facility address:	11740 S FRONT ST CHICAGO, IL 60628
EPA ID:	ILD984845073
Contact:	CHARLES KOWALSKI
Contact address:	11740 S FRONT ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 928-0202
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	KOWALSKI CHARLES J
Owner/operator address:	11740 S FRONT ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 928-0202
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE

Map ID	Site	Database(s)	EPA ID Number

STUART INDUSTRIAL COATINGS INC (Continued) **1000614197**

FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 02/24/1999
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/23/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

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125 **STUART INDUSTRIAL COATINGS INC** **UST** **U001143189**
11740 S FRONT ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID: 2008210
Facility Status: CLOSED
Facility Type: **INDUSTRIAL / MANUFACTURING**
Owner Name: Stuart Industrial Coatings Inc
Owner Id: U0014654
Owner Address: 11740 S Front St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 3000
Tank Substance: Not reported
Last Used Date: 11/1/1989

Map ID	Site	Database(s)	EPA ID Number
	STUART INDUSTRIAL COATINGS INC (Continued)		**U001143189**

OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	STUART INDUSTRIAL COATINGS INC (Continued)		**U001143189**

Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
128	**GREATOR CANAAN MBC/VACANT LOT** **11856 S. LAFAYETTE** **CHICAGO, IL 60607**	**UST**	**U004068153** **N/A**

UST:

Facility ID:	2043476
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Greater Canaan MBC
Owner Id:	U0033817
Owner Address:	35 W. 119th Street
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Count: 9 records

FOCUS MAP 7 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU

Focus Map 8

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 8 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	1
CERC-NFRAP	0
CORRACTS	1
RCRA-TSDF	1
RCRA-LQG	1
RCRA-SQG	0
RCRA-CESQG	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	0
UST	0
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
112	**SHERWIN WILLIAMS CO** **11541 S CHAMPLAIN AVE** **CHICAGO, IL 60628**	**CERCLIS** **CORRACTS** **RCRA-TSDF** **RCRA-LQG**	**1000371369** **60628SHRWN11**

CERCLIS:

Site ID:	0500202
EPA ID:	ILD005456439
Facility County:	COOK
Short Name:	SHERWIN WILLIAMS COMPANY,
Congressional District:	01
IFMS ID:	Not reported
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Y
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	ESI Start Needed
Non NPL Status Date:	19991123
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Alias Name(s):

Alias ID:	101
Alias Name:	SHERWIN WILLIAMS CO THE
Alias Address:	11541 S CHAMPLAIN AVE CHICAGO, IL 60628
Alias Comments:	Not reported

Site Description: Not reported

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	08/01/1980
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	09/01/1984
Priority Level:	Low priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	06/11/1986
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

CORRACTS:

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	01/22/2007
Action:	CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s):	32551 Paint and Coating Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	03/04/1998
Action:	CA110 - RFI Workplan Received
NAICS Code(s):	32551 Paint and Coating Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	03/05/1998
Action:	CA110 - RFI Workplan Received
NAICS Code(s):	32551 Paint and Coating Manufacturing
Original schedule date:	05/01/1998
Schedule end date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/26/1998
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/31/1994
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/06/1991
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/06/1989
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/06/1990
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/16/1993
Action: CA016
NAICS Code(s): 32551

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/20/2001
Action: CA005EE
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/22/1998
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/25/2004
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/25/2004
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/28/1997
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/28/1997
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/28/1992
Action: CA086
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 10/28/1998
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/2000
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 11/06/1997
Action: CA100DC - RFI Imposition, Focused data collection required for stabilization evaluation
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 12/06/1999

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Action: CA200 - RFI Approved
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/2002
Schedule end date: Not reported

RCRA-TSDF:
Date form received by agency: 03/01/2010
Facility name: SHERWIN WILLIAMS CO
Facility address: 11541 S CHAMPLAIN AVE
CHICAGO, IL 60628
EPA ID: ILD005456439
Mailing address: 101 PROSPECT AVE NW-4M
CLEVELAND, OH 441151075
Contact: PAUL BARDING
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (216) 515-4629
Contact email: Not reported
EPA Region: 05
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: THE SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CITY NOT REPORTED, OH 99998
Owner/operator country: Not reported
Owner/operator telephone: (216) 566-2000
Legal status: Private

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: THE SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: Not reported
Owner/operator telephone: (216) 566-2000
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/01/2008
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 12/31/2007
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 08/14/2007
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2006
Facility name: SHERWIN WILLIAMS CO

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Classification: Large Quantity Generator

Date form received by agency: 03/01/2004
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2002
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2000
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1998
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 10/19/1993
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1992
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1991
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 03/01/1990
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 11/22/1980
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 08/18/1980
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D004
Waste name: ARSENIC

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: D007
Waste name: CHROMIUM

Waste code: D009
Waste name: MERCURY

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: LABP
Waste name: LAB PACK

Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F017
Waste name: Not Defined

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: F018
Waste name: Not Defined

Waste code: K078
Waste name: K078

Waste code: K079
Waste name: K079

Waste code: K081
Waste name: K081

Waste code: K082
Waste name: K082

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: P003
Waste name: ACROLEIN

Waste code: P005
Waste name: ALLYL ALCOHOL

Waste code: P008
Waste name: 4-AMINOPYRIDINE

Waste code: P011
Waste name: ARSENIC OXIDE AS2O3

Waste code: P014
Waste name: BENZENETHIOL

Waste code: P019
Waste name: Not Defined

Waste code: P022
Waste name: CARBON DISULFIDE

Waste code: P028
Waste name: BENZENE, (CHLOROMETHYL)-

Waste code: P029
Waste name: COPPER CYANIDE

Waste code: P030
Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Waste code: P052
Waste name: Not Defined

Waste code: P053
Waste name: Not Defined

Waste code: P054
Waste name: AZIRIDINE

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: P087
Waste name: OSMIUM OXIDE OSO4, (T-4)-

Waste code: P090
Waste name: Not Defined

Waste code: P095
Waste name: CARBONIC DICHLORIDE

Waste code: P100
Waste name: Not Defined

Waste code: P101
Waste name: ETHYL CYANIDE

Waste code: P105
Waste name: SODIUM AZIDE

Waste code: U001
Waste name: ACETALDEHYDE (I)

Waste code: U002
Waste name: ACETONE (I)

Waste code: U003
Waste name: ACETONITRILE (I,T)

Waste code: U004
Waste name: ACETOPHENONE

Waste code: U006
Waste name: ACETYL CHLORIDE (C,R,T)

Waste code: U007
Waste name: ACRYLAMIDE

Waste code: U008
Waste name: ACRYLIC ACID (I)

Waste code: U009
Waste name: ACRYLONITRILE

Waste code: U012
Waste name: ANILINE (I,T)

Waste code: U013
Waste name: Not Defined

Waste code: U017
Waste name: BENZAL CHLORIDE

Waste code: U019
Waste name: BENZENE (I,T)

Waste code: U020
Waste name: BENZENESULFONIC ACID CHLORIDE (C,R)

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U021
Waste name: BENZIDINE

Waste code: U023
Waste name: BENZENE, (TRICHLOROMETHYL)-

Waste code: U028
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER

Waste code: U031
Waste name: 1-BUTANOL (I)

Waste code: U032
Waste name: CALCIUM CHROMATE

Waste code: U033
Waste name: CARBONIC DIFLUORIDE

Waste code: U037
Waste name: BENZENE, CHLORO-

Waste code: U039
Waste name: P-CHLORO-M-CRESOL

Waste code: U048
Waste name: O-CHLOROPHENOL

Waste code: U052
Waste name: CRESOL (CRESYLIC ACID)

Waste code: U053
Waste name: 2-BUTENAL

Waste code: U054
Waste name: Not Defined

Waste code: U055
Waste name: BENZENE, (1-METHYLETHYL)- (I)

Waste code: U056
Waste name: BENZENE, HEXAHYDRO- (I)

Waste code: U057
Waste name: CYCLOHEXANONE (I)

Waste code: U067
Waste name: ETHANE, 1,2-DIBROMO-

Waste code: U069
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER

Waste code: U070
Waste name: BENZENE, 1,2-DICHLORO-

Waste code: U071
Waste name: BENZENE, 1,3-DICHLORO-

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U072
Waste name: BENZENE, 1,4-DICHLORO-

Waste code: U073
Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO-

Waste code: U074
Waste name: 2-BUTENE, 1,4-DICHLORO- (I,T)

Waste code: U076
Waste name: ETHANE, 1,1-DICHLORO-

Waste code: U077
Waste name: ETHANE, 1,2-DICHLORO-

Waste code: U078
Waste name: 1,1-DICHLOROETHYLENE

Waste code: U080
Waste name: METHANE, DICHLORO-

Waste code: U081
Waste name: 2,4-DICHLOROPHENOL

Waste code: U082
Waste name: 2,6-DICHLOROPHENOL

Waste code: U088
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER

Waste code: U092
Waste name: DIMETHYLAMINE (I)

Waste code: U102
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER

Waste code: U103
Waste name: DIMETHYL SULFATE

Waste code: U104
Waste name: Not Defined

Waste code: U105
Waste name: BENZENE, 1-METHYL-2,4-DINITRO-

Waste code: U106
Waste name: BENZENE, 2-METHYL-1,3-DINITRO-

Waste code: U107
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER

Waste code: U108
Waste name: 1,4-DIETHYLENEOXIDE

Waste code: U110
Waste name: DIPROPYLAMINE (I)

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U112
Waste name: ACETIC ACID ETHYL ESTER (I)

Waste code: U113
Waste name: ETHYL ACRYLATE (I)

Waste code: U115
Waste name: ETHYLENE OXIDE (I,T)

Waste code: U117
Waste name: ETHANE, 1,1'-OXYBIS-(I)

Waste code: U118
Waste name: ETHYL METHACRYLATE

Waste code: U119
Waste name: ETHYL METHANESULFONATE

Waste code: U122
Waste name: FORMALDEHYDE

Waste code: U123
Waste name: FORMIC ACID (C,T)

Waste code: U124
Waste name: FURAN (I)

Waste code: U125
Waste name: 2-FURANCARBOXALDEHYDE (I)

Waste code: U126
Waste name: GLYCIDYLALDEHYDE

Waste code: U127
Waste name: BENZENE, HEXACHLORO-

Waste code: U128
Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO-

Waste code: U130
Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO-

Waste code: U131
Waste name: ETHANE, HEXACHLORO-

Waste code: U133
Waste name: HYDRAZINE (R,T)

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)

Waste code: U135
Waste name: HYDROGEN SULFIDE

Waste code: U140
Waste name: ISOBUTYL ALCOHOL (I,T)

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U145
Waste name: LEAD PHOSPHATE

Waste code: U147
Waste name: 2,5-FURANDIONE

Waste code: U149
Waste name: MALONONITRILE

Waste code: U150
Waste name: MELPHALAN

Waste code: U151
Waste name: MERCURY

Waste code: U152
Waste name: METHACRYLONITRILE (I, T)

Waste code: U154
Waste name: METHANOL (I)

Waste code: U155
Waste name: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)-

Waste code: U159
Waste name: 2-BUTANONE (I,T)

Waste code: U160
Waste name: 2-BUTANONE, PEROXIDE (R,T)

Waste code: U161
Waste name: METHYL ISOBUTYL KETONE (I)

Waste code: U162
Waste name: METHYL METHACRYLATE (I,T)

Waste code: U165
Waste name: NAPHTHALENE

Waste code: U167
Waste name: 1-NAPHTHALENAMINE

Waste code: U168
Waste name: 2-NAPHTHALENAMINE

Waste code: U169
Waste name: BENZENE, NITRO-

Waste code: U170
Waste name: P-NITROPHENOL

Waste code: U171
Waste name: 2-NITROPROPANE (I,T)

Waste code: U183
Waste name: BENZENE, PENTACHLORO-

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U184
Waste name: ETHANE, PENTACHLORO-

Waste code: U185
Waste name: BENZENE, PENTACHLORONITRO-

Waste code: U186
Waste name: 1-METHYLBUTADIENE (I)

Waste code: U187
Waste name: ACETAMIDE, N-(4-ETHOXYPHENYL)-

Waste code: U188
Waste name: PHENOL

Waste code: U190
Waste name: 1,3-ISOBENZOFURANDIONE

Waste code: U194
Waste name: 1-PROPANAMINE (I,T)

Waste code: U196
Waste name: PYRIDINE

Waste code: U201
Waste name: 1,3-BENZENEDIOL

Waste code: U202
Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS

Waste code: U207
Waste name: BENZENE, 1,2,4,5-TETRACHLORO-

Waste code: U208
Waste name: ETHANE, 1,1,1,2-TETRACHLORO-

Waste code: U209
Waste name: ETHANE, 1,1,2,2-TETRACHLORO-

Waste code: U210
Waste name: ETHENE, TETRACHLORO-

Waste code: U211
Waste name: CARBON TETRACHLORIDE

Waste code: U212
Waste name: Not Defined

Waste code: U213
Waste name: FURAN, TETRAHYDRO-(I)

Waste code: U218
Waste name: ETHANETHIOAMIDE

Waste code: U220
Waste name: BENZENE, METHYL-

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Waste code: U221
Waste name: BENZENEDIAMINE, AR-METHYL-

Waste code: U223
Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Waste code: U225
Waste name: BROMOFORM

Waste code: U226
Waste name: ETHANE, 1,1,1-TRICHLORO-

Waste code: U227
Waste name: ETHANE, 1,1,2-TRICHLORO-

Waste code: U228
Waste name: ETHENE, TRICHLORO-

Waste code: U229
Waste name: Not Defined

Waste code: U230
Waste name: Not Defined

Waste code: U231
Waste name: Not Defined

Waste code: U232
Waste name: Not Defined

Waste code: U234
Waste name: BENZENE, 1,3,5-TRINITRO-

Waste code: U238
Waste name: CARBAMIC ACID, ETHYL ESTER

Waste code: U239
Waste name: BENZENE, DIMETHYL- (I,T)

Biennial Reports:

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 256148.7

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 289819.8

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 289819.8

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 216

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 256148.7

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 256148.7

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 256148.7

Waste code: LABP
Waste name: LAB PACK
Amount (Lbs): 7599.3

Corrective Action Summary:

Event date: 07/06/1989
Event: RFA Completed, Assessment was an RFA.

Event date: 07/06/1990
Event: RFA Determination Of Need For An RFI, RFI is Necessary;

Event date: 06/06/1991
Event: CA077

Event date: 09/27/1991
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 09/28/1992
Event: CA086

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Event date: 07/16/1993
Event: CA016

Event date: 03/31/1994
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 08/28/1997
Event: Current Human Exposures under Control, More information is needed to make a determination.

Event date: 08/28/1997
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 11/06/1997
Event: RFI Imposition, Focused data collection required for stabilization evaluation.

Event date: 03/04/1998
Event: RFI Workplan Received

Event date: 03/05/1998
Event: RFI Workplan Received

Event date: 03/26/1998
Event: CA077

Event date: 07/22/1998
Event: CA077

Event date: 10/28/1998
Event: RFI Workplan Approved

Event date: 12/06/1999
Event: RFI Approved

Event date: 07/20/2001
Event: CA005EE

Event date: 08/25/2004
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 08/25/2004
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 01/22/2007
Event: Date For Remedy Selection (CM Imposed)

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 04/09/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 04/09/2008

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.197
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 08/18/1995
Date achieved compliance: 11/06/1997
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/13/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 09/22/1994
Date achieved compliance: 02/14/1995
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 10/24/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 08/05/1987
Date achieved compliance: 02/05/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/06/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.111
Area of violation: Generators - General
Date violation determined: 10/10/1986
Date achieved compliance: 02/26/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(d)(4)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 03/31/1986
Date achieved compliance: 08/07/1986

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/03/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 03/27/1986
Date achieved compliance: 07/18/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/01/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 03/27/1986
Date achieved compliance: 07/18/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/01/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116
Area of violation: TSD - General Facility Standards
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 07/24/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/10/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 05/05/1986
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/18/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 05/05/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enforcement action date: 05/10/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 07/24/1985
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/18/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/07/1985
Date achieved compliance: 06/04/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/05/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/07/1985
Date achieved compliance: 06/04/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/07/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/14/1984
Date achieved compliance: 12/20/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1984

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/19/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/15/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/19/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/20/1984
Enf. disposition status: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/09/1984
Date achieved compliance: 09/13/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/16/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/19/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 05/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/15/1984
Date achieved compliance: 01/24/1985
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 03/28/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/15/1984
Date achieved compliance: 01/24/1985
Violation lead agency: EPA
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 07/30/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: SR - 725.191
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 10/14/2008
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: NON-FINANCIAL RECORD REVIEW

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/24/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/03/2002
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/18/1995
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 03/27/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 03/27/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation date: 01/18/1995
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/14/1995
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/14/1995
Evaluation lead agency: State

Evaluation date: 04/20/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 04/20/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Tank System Standards
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Permits - Application
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: LDR - General

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Generators - General
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - General
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 01/08/1988
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/05/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/05/1988
Evaluation lead agency: State

Evaluation date: 10/10/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/26/1987
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation date: 03/31/1986
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 08/07/1986
Evaluation lead agency: State

Evaluation date: 03/27/1986
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 07/18/1986
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 04/25/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/24/1985
Evaluation lead agency: State

Evaluation date: 04/25/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/05/1986
Evaluation lead agency: State

Evaluation date: 01/07/1985
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 06/04/1985
Evaluation lead agency: State

Evaluation date: 12/14/1984
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/20/1984
Evaluation lead agency: State

Evaluation date: 10/23/1984
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/19/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 09/19/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/17/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/17/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/09/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/13/1984
Evaluation lead agency: State

Evaluation date: 07/16/1984
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 07/16/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 05/17/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 02/15/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 01/24/1985
Evaluation lead agency: EPA

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation date:	11/03/1983
Evaluation:	GROUNDWATER MONITORING EVALUATION
Area of violation:	TSD IS-Ground-Water Monitoring
Date achieved compliance:	04/06/1984
Evaluation lead agency:	State

Count: 23 records

FOCUS MAP 8 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	S108111043	CHICAGO REGIONAL PORT DISTRICT	111TH & CALUMET EXPY	60617	SWF/LF
CHICAGO	1010784332	COMED	113TH & TORRENCE	60617	RCRA-LQG
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S108112646	PAXTON LANDFILL CORP #2	116TH & OGELSBY	60617	SWF/LF
CHICAGO	1014389970	COMED	119TH & PAULINA	60617	RCRA-SQG
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S108111042	CHICAGO MSD #4	124TH & OGELSBY	60617	SWF/LF
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	S108939041	USX REALTY DEVELOPMENT PBR	3426 89TH ST E	60617	SWF/LF
CHICAGO	S107926345	VAN VLISSINGEN PROPERTY	96TH & VAN VLISSINGEN RD	60617	SSU
CHICAGO	U003853346	FORMER PULLMAN FACTORY	11302 CORLISS AVE	60628	UST
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	S108111350	ENVIROTHERM	11700 STONY IS	60617	SWF/LF
CHICAGO	1008150443	PAXTON LANDFILL CORP	TORRENCE AVE	60617	SWF/LF

Focus Map 9

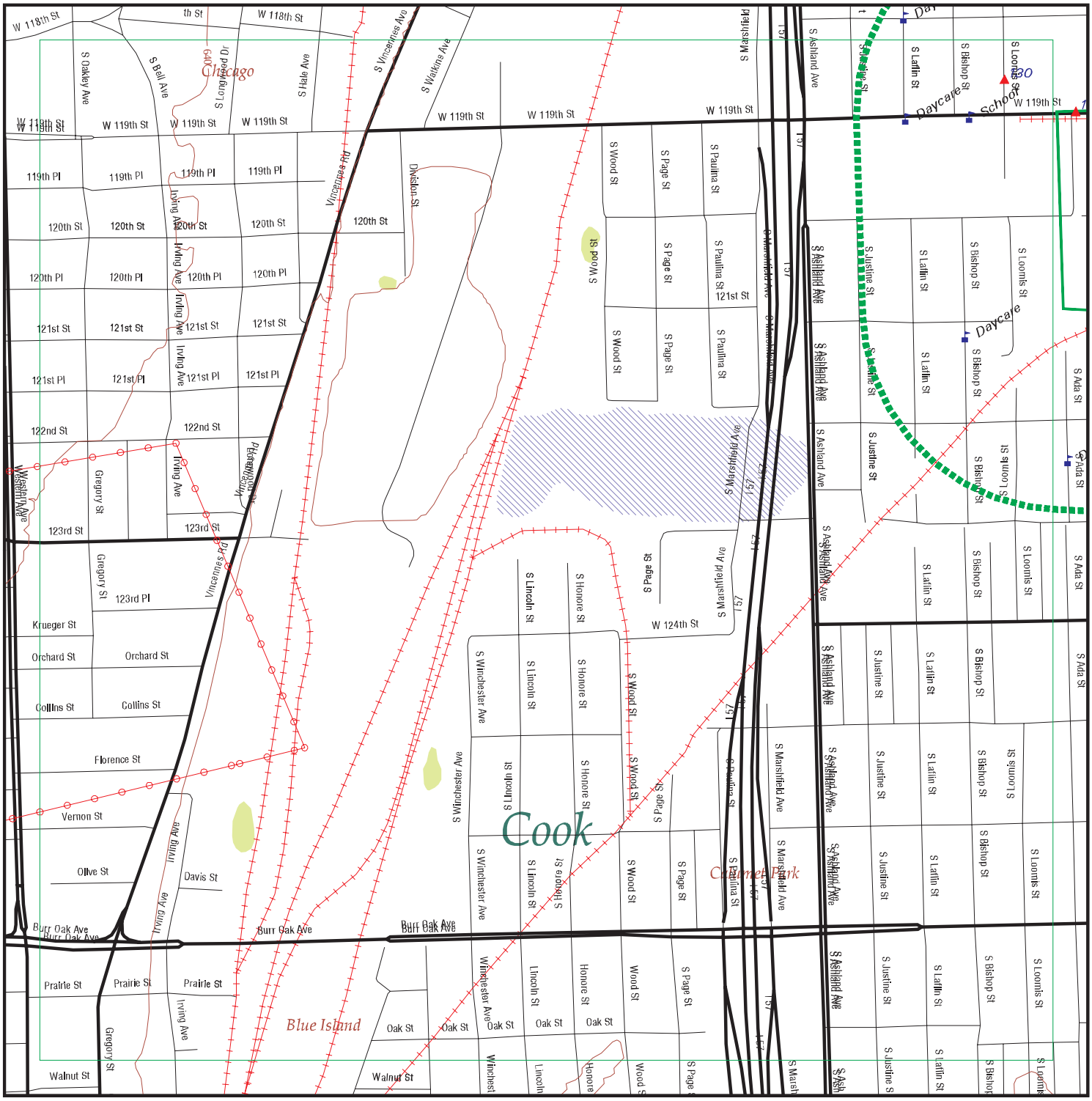

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90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 9 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	0
RCRA-CESQG	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	0
UST	1
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
SRP	1
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
130	**WEST PULLMAN STUDY AREA NO. 6** **11931 SOUTH LOOMIS STREET** **CHICAGO, IL 60643**	**SRP**	**S104491753** **N/A**

SRP:

IL EPA Id:	0316755104
US EPA Id:	Not reported
Longitude:	-87.65269
Latitude:	41.67681
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	09/23/1999
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Frierdich
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	9.570
No Further Remediation Letter Dt:	06/21/2002
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Deputy Comm.
Remediation Applicant Name:	Mr. David Reynolds
Remediation Applicant Company:	City of Chicago Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	25th Floor
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755104
Site Name:	West Pullman Study Area No. 6
NFR Letter:	2005-09-20
NFR Letter Date Recorded:	2005-09-30
Site Type:	Industrial/Commercial
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	False
Acres:	9.570

IL EPA Id:	0316755104
US EPA Id:	Not reported
Longitude:	-87.65269
Latitude:	41.67681
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	09/23/1999
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive

Map ID	Site	Database(s)	EPA ID Number

WEST PULLMAN STUDY AREA NO. 6 (Continued) **S104491753**

Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Frierdich
Sec. 4 Letter Date:	Not reported
NFR Recorded:	09/30/2005
Active:	False
Total Acres:	9.570
No Further Remediation Letter Dt:	09/20/2005
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Deputy Comm.
Remediation Applicant Name:	Mr. David Reynolds
Remediation Applicant Company:	City of Chicago Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	25th Floor
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755104
Site Name:	West Pullman Study Area No. 6
NFR Letter:	2005-09-20
NFR Letter Date Recorded:	2005-09-30
Site Type:	Industrial/Commercial
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	False
Acres:	9.570

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140 **AMFORGE** **UST** **U004110692**
1324 W. 119TH STREET **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2043836
Facility Status:	EXEMPT
Facility Type:	**VACANT**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Fuel Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2

Map ID	Site	Database(s)	EPA ID Number
	AMFORGE (Continued)		**U004110692**

Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Count: 27 records

FOCUS MAP 9 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLUE ISLAND	1014476085	2001 W 119TH - TOD SITE 11	2001 W 119TH SAINT FREDERICKS CORP	60406	US BROWNFIELDS
BLUE ISLAND	1014476095	2021 120TH ST - TOD SITE 1E	2021 120TH SAINT GREATER OPEN &	60406	US BROWNFIELDS
BLUE ISLAND	1014476096	2025 120TH ST - TOD SITE 1D	2025 120TH SAINT GREATER OPEN &	60406	US BROWNFIELDS
BLUE ISLAND	1014476091	2011 120TH ST - TOD SITE 1G	2011 120TH SAINT MAYTAG	60406	US BROWNFIELDS
BLUE ISLAND	1014476098	2029 120TH PL - TOD SITE 1C	2029 120TH PL GREATER OPEN DEV &	60406	US BROWNFIELDS
BLUE ISLAND	1004694615	BLUE ISLAND CITY OF WATER DEPT	122ND AND HIGHLAND	60406	RCRA-CESQG
BLUE ISLAND	1014476038	12301 VINCENNES AVE - TOD SITE 3A	12301ST VINCENNES AVE W & W AUTO	60406	US BROWNFIELDS
BLUE ISLAND	S108113026	SEXTON	123RD ST & CALIFORNIA	60406	SWF/LF
BLUE ISLAND	1003108961	CLARK/BLUE ISLAND	CLARK REFINERY, 13100 S KEDZIE	60406	CERCLIS
BLUE ISLAND	1003073091	DIVISION STREET BRIDGE MERCURY SPILL	2000 W DIVISION ST	60406	CERC-NFRAP
BLUE ISLAND	S105015149	CLARK BLUE ISLAND REFINERY	1300 S KEDZIE	60406	SSU
BLUE ISLAND	1014390104	NE MIXED-USE COMMERCIAL PARK	12200 S MARSHFIELD AVE	60406	RCRA-CESQG
BLUE ISLAND	1014476046	12451 VINCENNES AVE - TOD SITE 3F	12451 VINCENNES AVE SOUTH PARK	60406	US BROWNFIELDS
BLUE ISLAND	1014476045	12431 VINCENNES AVE - TOD SITE 3E	12431 VINCENNES AVENUE PARK	60406	US BROWNFIELDS
CALUMET PARK	U004183412	TRUE NORTH LOCATION 1967	1620 W 127TH ST	60643	UST
CALUMET PARK	1004696111	EARL SCHEIB PAINT & BODY	1731 W 127TH	60643	RCRA-CESQG
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CALUMET PARK	U001964624	RACEWAY PK	SWC 130TH & ASHLAND	60643	UST
CALUMET PARK	S106779089	CHICAGO COPPER & CHEMICAL	12300 S WINCHESTER AVE	60643	SRP
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S110335776	BEVERLY PROFESSIONAL BUILDERS	10054 S WESTERN AVE	60643	ENG CONTROLS, INST CONTROL, S
CHICAGO	1004696188	HUMANA HEALTH CARE SVCS	983 S WESTERN AVE	60643	RCRA-CESQG

Focus Map 10

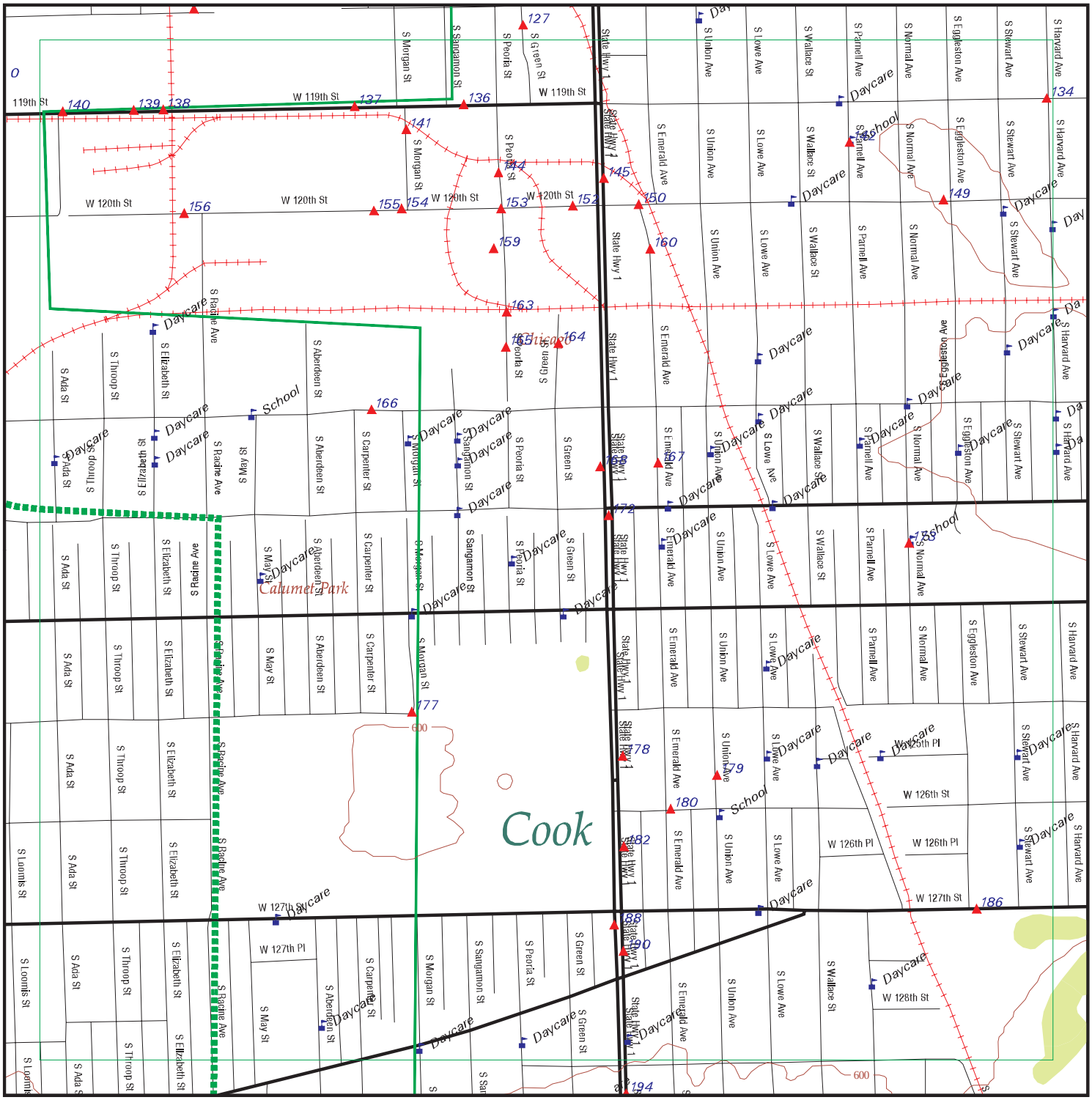

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 10 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	4
CERC-NFRAP	1
CORRACTS	1
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	9
RCRA-CESQG	4
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	1
STATE AND LOCAL RECORDS	
SSU	1
SWF/LF	0
LUST	8
UST	18
SPILLS	14
ENG CONTROLS	3
INST CONTROL	5
SRP	12
DRYCLEANERS	1
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
126	**WIRA STUDY AREA NUMBER 4** **11801 SOUTH RACINE AVENUE** **CHICAGO, IL 60643**	**INST CONTROL** **SRP**	**S106121987** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755128
NFR Letter:	03/23/2011
Date NFR Recorded:	04/25/2011
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Zachary Clayton
RA Company:	City of Chicago, Department of Environment
RA Address:	30 North LaSalle Street
RA Secondary Address:	2nd Floor
RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	13.64

SRP:

IL EPA Id:	0316755128
US EPA Id:	Not reported
Longitude:	-87.65152
Latitude:	41.67927
Contact Name:	Kimberly Worthington
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-9139
Date Enrolled:	09/08/2003
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	1 South Wacker Drive
Consultant Address2:	37th Floor
Consultant City,St,Zip:	Chicago, IL 60606-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	04/25/2011
Active:	False
Total Acres:	2
No Further Remediation Letter Dt:	03/23/2011
Remediation Applicant Co:	City of Chicago Department of Environment
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Mr. Zachary Clayton
Remediation Applicant Company:	City of Chicago, Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	2nd Floor
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755128
Site Name:	WIRA Study Area 4
NFR Letter:	2011-03-23
NFR Letter Date Recorded:	2011-04-25
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	WIRA STUDY AREA NUMBER 4 (Continued)		**S106121987**

Worker Caution: False
Acres: 13.64

127	**SHELDON HEIGHTS CHURCH OF CHRIST** **11819-11849 SOUTH GREEN STREET** **CHICAGO, IL 60643**	**INST CONTROL** **SRP**	**S105521066** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755117
NFR Letter:	10/19/2004
Date NFR Recorded:	11/23/2004
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Willie Carter
RA Company:	Sheldon Heights Church of Christ
RA Address:	11325 South Halsted Street
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60628-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	2.600

SRP:

IL EPA Id:	0316755117
US EPA Id:	ILR000117911
Longitude:	-87.64303
Latitude:	41.67911
Contact Name:	Willie Carter
Contact Address:	11325 South Halsted Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60628-
Contact Phone:	(773) 568-2929
Date Enrolled:	06/13/2002
Point Of Contact:	Adam M. Moghamis, P.E.
Consultant Company:	Applied GeoScience, Inc.
Consultant Address:	2385 Hammond Drive
Consultant Address2:	Suite 6
Consultant City,St,Zip:	Schaumburg, IL 60173-
Consultant Phone:	(847) 303-0300
Proj Mgr Assigned:	Catlin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	11/23/2004
Active:	False
Total Acres:	2.600
No Further Remediation Letter Dt:	10/19/2004
Remediation Applicant Co:	Sheldon Heights Church of Christ
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Mr. Willie Carter
Remediation Applicant Company:	Sheldon Heights Church of Christ
Remediation Applicant Address:	11325 South Halsted Street
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60628-
Illinois EPA:	0316755117
Site Name:	Sheldon Heights Church of Christ

Map ID	Site	Database(s)	EPA ID Number

SHELDON HEIGHTS CHURCH OF CHRIST (Continued) **S105521066**

NFR Letter:	2004-10-19
NFR Letter Date Recorded:	2004-11-23
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	2.600

---

127 **VACANT LAND** **UST** **U003865079**
11819 - 11849 SOUTH GREEN ST **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2041273
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Sheldon Heights Church of Christ
Owner Id:	U0030886
Owner Address:	11325 S Halsted St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Gasoline
Last Used Date:	1/1/1987
OSFM First Notify Date:	9/3/2002
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1960
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

---

134 **BIG SAM'S GROCERS** **UST** **U004110603**
333 W. 119TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2043706
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Big Sam's Properties
Owner Id:	U0034216
Owner Address:	333 W. 119th Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Fuel Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BIG SAM'S GROCERS (Continued)		**U004110603**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	2500
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
134	**333 W 119TH ST** **CHICAGO, IL**	**SPILLS**	**S111921908** **N/A**

SPILLS:

Incident ID:	20070843
Incident Date:	Not reported
Date Received:	06/20/2007
Facility Address:	333 W 119TH ST
Facility City:	CHICAGO
PRP Name:	BIG SAMS PROPERTIES LLC
AC:	Not reported

134	**BIG SAM'S PROPERTIES** **333 WEST 119TH STREET** **CHICAGO, IL 60628**	**LUST**	**S108649986** **N/A**

LUST:

Incident Num:	20070843
IL EPA Id:	0316505043
Product:	Gasoline, Uset Oil
IEMA Date:	06/20/2007
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

136	**WIRA EAST INGERSOLL PROPERTY** **920 WEST 119TH STREET** **CHICAGO, IL 60643**	**SRP**	**S106121984** **N/A**

SRP:

IL EPA Id:	0316755125
US EPA Id:	Not reported
Longitude:	-87.64740
Latitude:	41.67873
Contact Name:	Kimberly Worthington
Contact Address:	30 North LaSalle Street
Contact Address2:	Room 2500
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-4034
Date Enrolled:	06/02/2003
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700

Map ID	Site	Database(s)	EPA ID Number

WIRA EAST INGERSOLL PROPERTY (Continued) **S106121984**

Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	3
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago, Department of Environment
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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137 **US GEAR CORP/HEAT TREAT CORP** **RCRA-CESQG** **1000394164**
1020-1120 W 119TH ST **ILD093160018**
CHICAGO, IL 60643

RCRA-CESQG:

Date form received by agency:	07/21/2009
Facility name:	US GEAR CORP/HEAT TREAT CORP
Facility address:	1020-1120 W 119TH ST CHICAGO, IL 60643
EPA ID:	ILD093160018
Mailing address:	1020 W 119TH ST CHICAGO, IL 60643
Contact:	PETE HAMBY
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(773) 821-5450
Telephone ext.:	531
Contact email:	PETE@USGEAR.COM
EPA Region:	05
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

Map ID	Site	Database(s)	EPA ID Number

US GEAR CORP/HEAT TREAT CORP (Continued) **1000394164**

hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO TITLE LAND TRUST CO
Owner/operator address:	171 N CLARK ST CHICAGO, IL 60601
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/29/1998
Owner/Op end date:	Not reported

Owner/operator name:	AXLE TECH INTERNATIONAL LLC
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	11/19/2008
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	11/01/2007
Facility name:	US GEAR CORP/HEAT TREAT CORP
Site name:	HEAT TREAT CORP OF AMERICA
Classification:	Not a generator, verified

Date form received by agency:	02/19/1987
Facility name:	US GEAR CORP/HEAT TREAT CORP
Site name:	HEAT TREAT CORP OF AMERICA
Classification:	Large Quantity Generator

Map ID	Site	Database(s)	EPA ID Number

US GEAR CORP/HEAT TREAT CORP (Continued) **1000394164**

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 09/20/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

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138 **SPILLS** **S110278075**

1220 W 119TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID: 20100193
Incident Date: 03/02/2010
Date Received: Not reported
Facility Address: 1220 W 119TH ST
Facility City: CHICAGO
PRP Name: City of Chicago - Department of Environment
AC: Not reported

Incident ID: 20100193
Incident Date: Not reported
Date Received: 03/02/2010
Facility Address: 1220 W 119TH ST
Facility City: CHICAGO
PRP Name: CHICAGO DEPT OF ENVIRONMENT
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
138	**CHICAGO, CITY OF - DEPARTMENT OF ENVIRONMENT** **1220 WEST 119TH STREET** **CHICAGO, IL 60643**	**LUST**	**S110150344** **N/A**

LUST:

Incident Num:	20100193
IL EPA Id:	0316755014
Product:	Fuel Oil
IEMA Date:	03/02/2010
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/09/2010
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	20110956
IL EPA Id:	0316755014
Product:	Gasoline
IEMA Date:	09/06/2011
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	09/12/2011
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

138	**CONSTRUCTION SITE (FUTURE RJKCCC)** **1220 W. 119TH STREET** **CHICAGO, IL 60643**	**UST**	**U004151264** **N/A**

UST:

Facility ID:	2044654
Facility Status:	EXEMPT
Facility Type:	**CONSTRUCTION**
Owner Name:	The Salvation Army
Owner Id:	U0013378
Owner Address:	PO Box 43095
Owner City,St,Zip:	Chicago, IL 60643

Map ID	Site	Database(s)	EPA ID Number
	CONSTRUCTION SITE (FUTURE RJKCCC) (Continued)		**U004151264**

Tank Number:	1
Tank Capacity:	50000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	50000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	160
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

CONSTRUCTION SITE (FUTURE RJKCCC) (Continued) **U004151264**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	12/3/2010
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/5/2011
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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138 **SPILLS** **S111927136**
N/A

1220 WEST 119TH ST.
CHICAGO, IL

SPILLS:

Incident ID:	20110956
Incident Date:	Not reported
Date Received:	Not reported
Facility Address:	1220 WEST 119TH ST.
Facility City:	CHICAGO
PRP Name:	City of Chicago Department of Environment
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
138	**W.E. DAVIS COMPANY** **1220 -1314 WEST 119TH STREET** **CHICAGO, IL 60643**	**ENG CONTROLS** **INST CONTROL** **SRP**	**S104491750** **N/A**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316755014
NFR Letter:	02/10/2012
Date NFR Recorded:	02/17/2012
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago
RA Address:	30 North LaSalle Street
RA Secondary Address:	Suite 200
RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Clean soil barrier
Worker Caution:	True
Acres:	18.76

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755014
NFR Letter:	02/10/2012
Date NFR Recorded:	02/17/2012
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago
RA Address:	30 North LaSalle Street
RA Secondary Address:	Suite 200
RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Clean soil barrier
Worker Caution:	True
Acres:	18.76

SRP:

IL EPA Id:	0316755014
US EPA Id:	ILD005523162
Longitude:	-87.65380
Latitude:	41.67808
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	06/09/1999
Point Of Contact:	Carol Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Frierdich
Sec. 4 Letter Date:	Not reported
NFR Recorded:	02/17/2012

Map ID	Site	Database(s)	EPA ID Number

W.E. DAVIS COMPANY (Continued) **S104491750**

Active:	False
Total Acres:	18.76
No Further Remediation Letter Dt:	02/10/2012
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Ms. Kimberly Worthington
Remediation Applicant Company:	City of Chicago
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	Suite 200
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755014
Site Name:	W.E. Davis Company
NFR Letter:	2012-02-10
NFR Letter Date Recorded:	2012-02-17
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Asphalt barrier/Concrete barrier/Clean soil barrier
Worker Caution:	True
Acres:	18.76

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139 **FORMER AMFORGE FACILITY** **US BROWNFIELDS** **1009912690**
1250 W. 119TH STREET **N/A**
CHICAGO, IL 60643

US BROWNFIELDS:

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	18-APR-01
Completed date:	05-APR-06
Acres cleaned up:	Not reported
Cleanup funding:	2220000
Cleanup funding source:	Local Funding
Assessment funding:	Not reported
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported
Cleanup funding entity:	City of Chicago
Grant type:	N/A
Accomplishment type:	Not reported
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4
Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	18-APR-01
Completed date:	05-APR-06
Acres cleaned up:	Not reported
Cleanup funding:	500000
Cleanup funding source:	US EPA - Brownfields RLF Loan
Assessment funding:	Not reported
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Not reported
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4
Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	410000
Assessment funding source:	Local Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	City of Chicago
Cleanup funding entity:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Grant type:	N/A
Accomplishment type:	Phase II Environmental Assessment
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	10000
Assessment funding source:	Local Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	City of Chicago
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase I Environmental Assessment
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4
Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	1800000

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Assessment funding source:	Local Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	City of Chicago
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Supplemental Assessment
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4
Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Property Description:	Currently vacant. Previously owned or operated by Arvinmeritor, Nailite Int'l and Graham Partners, Inc. for the manufacturing of brakes for rail cars. (PPF-Former AmForge Facility, 1/17/07)

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140 **AMFORGE** **UST** **U004110692**
1324 W. 119TH STREET **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2043836
Facility Status:	EXEMPT
Facility Type:	**VACANT**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602

Tank Number:	1
Tank Capacity:	500
Tank Substance:	Fuel Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

AMFORGE (Continued) **U004110692**

Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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141 **OMNITRAX** **SRP** **S106121983**
11955 SOUTH MORGAN STREET **N/A**
CHICAGO, IL 60643

SRP:

IL EPA Id:	0316755122
US EPA Id:	Not reported
Longitude:	-87.64597
Latitude:	41.67651
Contact Name:	Michael Ogborn
Contact Address:	252 Clayton Street
Contact Address2:	4th Floor
Contact City,St,Zip:	Denver, CO 80206-
Contact Phone:	(303) 393-0033
Date Enrolled:	04/03/2003
Point Of Contact:	Daniel M. Caplice, P.E.
Consultant Company:	K-Plus Environmental Services
Consultant Address:	600 West Van Buren Street
Consultant Address2:	Suite 1000
Consultant City,St,Zip:	Chicago, IL 60607-
Consultant Phone:	(312) 207-1600
Proj Mgr Assigned:	Hall
Sec. 4 Letter Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

OMNITRAX (Continued) **S106121983**

NFR Recorded:	Not reported
Active:	True
Total Acres:	2.600
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Chicago Rail Link, LLC
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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142 **WEST PULLMAN SCHOOL** **RCRA-CESQG** **1004696956**
11941 S PARNELL AVE **ILR000060954**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	02/05/1999
Facility name:	WEST PULLMAN SCHOOL
Facility address:	11941 S PARNELL AVE CHICAGO, IL 60628
EPA ID:	ILR000060954
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	11941 S PARNELL AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Map ID	Site	Database(s)	EPA ID Number
	WEST PULLMAN SCHOOL (Continued)		**1004696956**

Owner/Operator Summary:

Owner/operator name:	CHGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

144	**WEST PULLMAN IRON AND METAL CO** **11954 S PEORIA AVE** **CHICAGO, IL 60643**	**CERC-NFRAP**	**1002885169** **ILD005428651**

CERC-NFRAP:

Site ID:	0500196
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	06/01/1980
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT

Map ID	Site	Database(s)	EPA ID Number

WEST PULLMAN IRON AND METAL CO (Continued) **1002885169**

Date Started:	Not reported
Date Completed:	03/01/1984
Priority Level:	Low priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	12/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	10/31/1995
Priority Level:	Not reported

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144 **WEST PULLMAN IRON & METAL** **SRP** **1003071152**
11954 SOUTH PEORIA STREET **N/A**
CHICAGO, IL 60643

SRP:

IL EPA Id:	0316750008
US EPA Id:	ILD005428651
Longitude:	-87.64539
Latitude:	41.67703
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	06/06/2001
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 946-6411
Proj Mgr Assigned:	Salch
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	1.8
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago, Department of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	WEST PULLMAN IRON & METAL (Continued)		**1003071152**

Comprehensive/Focused: Not reported
Institutional Controls: Not reported
Barrier: Not reported
Worker Caution: Not reported
Acres: Not reported

145	**11957 S HALSTED ST** **CHICAGO, IL**	**SPILLS**	**S108045376** **N/A**

SPILLS:

Incident ID: 20041132
Incident Date: Not reported
Date Received: 08/12/2004
Facility Address: 11957 S HALSTED ST
Facility City: CHICAGO
PRP Name: SANDHU PETROLEUM
AC: Not reported

Incident ID: 20041362
Incident Date: Not reported
Date Received: 09/30/2004
Facility Address: 11957 S HALSTEAD ST
Facility City: CHICAGO
PRP Name: SAND HU PETROLEUM INC.
AC: Not reported

145	**SANDHU PETROLEUM, INC.** **11957 SOUTH HALSTED STREET** **CHICAGO, IL 60628**	**LUST**	**S106655963** **N/A**

LUST:

Incident Num: 20041132
IL EPA Id: 0316495159
Product: Gasoline
IEMA Date: 08/12/2004
Project Manager: South
Project Manager Phone: (217) 558-0347
Email: Shirlene.South@illinois.gov
PRP Name: Not reported
PRP Contact: Not reported
PRP Address: Not reported
PRP City,St,Zip: Not reported
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: P.A.
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 09/03/2004
45 Report Received: 09/28/2004
NFA/NFR Letter: Not reported
NFR Date Recorded: Not reported

Incident Num: 20041362
IL EPA Id: 0316495159

Map ID	Site	Database(s)	EPA ID Number

SANDHU PETROLEUM, INC. (Continued) **S106655963**

Product:	Other Petro
IEMA Date:	09/30/2004
Project Manager:	South
Project Manager Phone:	(217) 558-0347
Email:	Shirlene.South@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	10/21/2004
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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145 **CONOCO PHILLIPS 66** **UST** **U000865211**
11959 S. HALSTED **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2014700
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Sandhu Petroleum Corporation Number 2
Owner Id:	U0024145
Owner Address:	301 North Hough Street
Owner City,St,Zip:	Barrington, IL 60010

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/6/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1982
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/6/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1982
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**

Map ID	Site	Database(s)	EPA ID Number
	CONOCO PHILLIPS 66 (Continued)		**U000865211**

Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/6/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1982
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Kerosene
Last Used Date:	9/4/2004
OSFM First Notify Date:	3/6/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1984
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	1000
Tank Substance:	Kerosene
Last Used Date:	9/4/2004
OSFM First Notify Date:	3/6/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1984
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	1500
Tank Substance:	Diesel Fuel

Map ID	Site	Database(s)	EPA ID Number

CONOCO PHILLIPS 66 (Continued) **U000865211**

Last Used Date:	Not reported
OSFM First Notify Date:	7/18/2005
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	1500
Tank Substance:	Kerosene
Last Used Date:	Not reported
OSFM First Notify Date:	7/18/2005
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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149 **PRAYER WARRIORS BAPTIST CHURCH** **UST** **U004051810**
438 W. 120TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2043168
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Prayer Warriors Baptist Church
Owner Id:	U0033283
Owner Address:	438 W. 120th Street
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	3/17/2006
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
150	**12000 SOUTH EMERALD** **CHICAGO, IL**	**ERNS**	**2003704549** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

152	**WIRA STUDY AREA 9** **820 WEST 120TH STREET** **CHICAGO, IL 60643**	**SRP**	**S106121986** **N/A**

SRP:

IL EPA Id:	0316755127
US EPA Id:	Not reported
Longitude:	-87.64379
Latitude:	41.67622
Contact Name:	Kimberly Worthington
Contact Address:	30 North LaSalle Street
Contact Address2:	Room 2500
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-4034
Date Enrolled:	06/02/2003
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	3
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago Department of Environment
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

Map ID	Site	Database(s)	EPA ID Number
152	**WIRA STUDY AREA NUMBER 14** **815-825 WEST 120TH STREET** **CHICAGO, IL 60643**	**SRP**	**S106499834** **N/A**

SRP:

IL EPA Id:	0316725130
US EPA Id:	Not reported
Longitude:	-87.64342
Latitude:	41.67551
Contact Name:	David Graham
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-3639
Date Enrolled:	06/04/2004
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	5
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago Department of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

153	**900 W 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111893990** **N/A**

SPILLS:

Incident ID:	19951289
Incident Date:	Not reported
Date Received:	06/16/1995
Facility Address:	900 W 120TH ST
Facility City:	CHICAGO
PRP Name:	MELROSE TRANSPORT SYSTEM
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
153	**DUTCH BOY** **12000 SOUTH PEORIA ST.** **CHICAGO, IL 60643**	**UST**	**U003668676** **N/A**

UST:

Facility ID:	2038815
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	N L Industries Inc
Owner Id:	U0028689
Owner Address:	16825 N Chase Dr Suite 1200
Owner City,St,Zip:	Houston, TX 77060

Tank Number:	1
Tank Capacity:	30000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	30000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	30000
Tank Substance:	Mineral Spirits
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
	DUTCH BOY (Continued)		**U003668676**

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	5
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	6
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	7
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY (Continued) **U003668676**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	8
Tank Capacity:	10000
Tank Substance:	Mineral Spirits
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	9
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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153 **DUTCH BOY PAINTS** **SRP** **S104491477**
12000 SOUTH PEORIA STREET **N/A**
CHICAGO, IL 60643

SRP:

IL EPA Id:	0316005116
US EPA Id:	ILD083084954
Longitude:	-87.64498
Latitude:	41.67517
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60643-
Contact Phone:	(312) 742-0123
Date Enrolled:	06/09/1999
Point Of Contact:	Frances B. Hodge
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY PAINTS (Continued) **S104491477**

Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Gross
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	5
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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154 **INGERSOLL** **CERCLIS** **1009218883**
1000 WEST 120TH STREET **ILN000510053**
CHICAGO, IL 60643

CERCLIS:

Site ID:	0510053
EPA ID:	ILN000510053
Facility County:	COOK
Short Name:	INGERSOLL
Congressional District:	02
IFMS ID:	B5CW
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	R
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Removal Only Site (No Site Assessment Work Needed)
Non NPL Status Date:	20050815
Site Fips Code:	17031

Map ID	Site	Database(s)	EPA ID Number

INGERSOLL (Continued) **1009218883**

CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):
Contact ID: 5270178.00000
Contact Name: CHARLES M. GEBIEN
Contact Tel: (312) 353-7645
Contact Title: On-Scene Coordinator (OSC)
Contact Email: Not reported

Contact ID: 5271197.00000
Contact Name: THOMAS COOK
Contact Tel: (312) 886-7182
Contact Title: On-Scene Coordinator (OSC)
Contact Email: Not reported

Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: REMOVAL
Date Started: 01/18/2006
Date Completed: 06/13/2009
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Approved
Urgency Indicator: Time Critical
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 10/07/2011
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Click this hyperlink while viewing on your computer to access
293 additional US CERCLIS Financial: record(s) in the EDR Site Report.

Map ID	Site	Database(s)	EPA ID Number
155	**INTERNATIONAL HARVESTER** **1015 WEST 120TH STREET** **CHICAGO, IL 60643**	**LUST** **ENG CONTROLS** **INST CONTROL** **SRP**	**S108490996** **N/A**

LUST:

Incident Num:	20091219
IL EPA Id:	0316005005
Product:	Uset Oil
IEMA Date:	11/05/2009
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	12/04/2009
45 Report Received:	Not reported
NFA/NFR Letter:	**10/14/2010**
NFR Date Recorded:	Not reported

Incident Num:	20091282
IL EPA Id:	0316005005
Product:	Other Petro
IEMA Date:	11/18/2009
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**10/14/2010**
NFR Date Recorded:	Not reported

ENGINEERING CONTROLS:

Illinois Epa Id:	0316005005
NFR Letter:	10/14/2010
Date NFR Recorded:	11/22/2010
Type Of Site:	Industrial/Commercial
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Edith Ardiente
RA Company:	Navistar, Inc.
RA Address:	4201 Winfield Road
RA Secondary Address:	Not reported

Map ID	Site	Database(s)	EPA ID Number

INTERNATIONAL HARVESTER (Continued) **S108490996**

RA City,St,Zip:	Warrenville, IL 60555-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier
Worker Caution:	True
Acres:	20.75

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316005005
NFR Letter:	10/14/2010
Date NFR Recorded:	11/22/2010
Type Of Site:	Industrial/Commercial
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Edith Ardiente
RA Company:	Navistar, Inc.
RA Address:	4201 Winfield Road
RA Secondary Address:	Not reported
RA City,St,Zip:	Warrenville, IL 60555-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier
Worker Caution:	True
Acres:	20.75

SRP:

IL EPA Id:	0316005005
US EPA Id:	ILD005213285
Longitude:	-87.64700
Latitude:	41.67562
Contact Name:	Edith Ardiente
Contact Address:	303 East Wacker Drive
Contact Address2:	Suite 360
Contact City,St,Zip:	Chicago, IL 60601-
Contact Phone:	(312) 836-3920
Date Enrolled:	04/01/1996
Point Of Contact:	Gregory Vanderlaan
Consultant Company:	ARCADIS, Inc.
Consultant Address:	10 South Riverside Plaza
Consultant Address2:	Suite 1900
Consultant City,St,Zip:	Chicago, IL 60606-
Consultant Phone:	Not reported
Proj Mgr Assigned:	Gross
Sec. 4 Letter Date:	Not reported
NFR Recorded:	11/22/2010
Active:	False
Total Acres:	20.75
No Further Remediation Letter Dt:	10/14/2010
Remediation Applicant Co:	Navistar, Inc.
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Ms. Edith Ardiente
Remediation Applicant Company:	Navistar, Inc.
Remediation Applicant Address:	4201 Winfield Road
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Warrenville, IL 60555-
Illinois EPA:	0316005005
Site Name:	International Harvester
NFR Letter:	2010-10-14

Map ID	Site	Database(s)	EPA ID Number
	INTERNATIONAL HARVESTER (Continued)		**S108490996**

NFR Letter Date Recorded: 2010-11-22
Site Type: Industrial/Commercial
Comprehensive/Focused: Comprehensive
Institutional Controls: Groundwater use restriction
Barrier: Asphalt barrier/Concrete barrier
Worker Caution: True
Acres: 20.75

Map ID	Site	Database(s)	EPA ID Number
155	**1015 WEST 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111925600** **N/A**

SPILLS:
Incident ID: 20091282
Incident Date: 11/18/2009
Date Received: Not reported
Facility Address: 1015 WEST 120TH ST
Facility City: CHICAGO
PRP Name: City of Chicago
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
155	**1015 W 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111925520** **N/A**

SPILLS:
Incident ID: 20091219
Incident Date: 11/05/2009
Date Received: Not reported
Facility Address: 1015 W 120TH ST
Facility City: CHICAGO
PRP Name: City of Chicago - Department of Environment
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
155	**FORMER WEST PULLMAN WORKS** **1015 W 120TH ST** **CHICAGO, IL 60643**	**UST**	**U003762830** **N/A**

UST:
Facility ID: 2039998
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: City of Chicago Department of Environment
Owner Id: U0028125
Owner Address: 30 North LaSalle Street, 25th floor
Owner City,St,Zip: Chicago, IL 60602

Tank Number: 1
Tank Capacity: 5000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: Not reported
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER WEST PULLMAN WORKS (Continued) **U003762830**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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155 **INTERNATIONAL HARVESTER CO W P** **CERCLIS** **1000216851**
1015 W 120TH ST **CORRACTS** **ILD005213285**
CHICAGO, IL 60643

CERCLIS:

Site ID:	0500184
EPA ID:	ILD005213285
Facility County:	COOK
Short Name:	INTERNATIONAL HARVESTER
Congressional District:	02
IFMS ID:	05YE
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported

Map ID	Site	Database(s)	EPA ID Number

INTERNATIONAL HARVESTER CO W P (Continued) **1000216851**

Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Referred to Removal - NFRAP
Non NPL Status Date:	20010118
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	5270200.00000
Contact Name:	PAUL STEADMAN
Contact Tel:	Not reported
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported

CERCLIS Site Alias Name(s):

Alias ID:	201
Alias Name:	CALUMET HARVESTER
Alias Address:	Not reported
	IL
Alias ID:	301
Alias Name:	INTERNATIONAL HARVESTER, INC.
Alias Address:	401 N. MICHIGAN AVE.
	CHICAGO, IL 60611
Alias ID:	302
Alias Name:	WEST PULLMAN WORKS
Alias Address:	Not reported
	Not reported
Alias Comments:	Not reported

Site Description: ABANDONED 21 ACRE SITE WITH HIGH LEVELS OF PAH'S (E.G. PYRENE, PHEHANTHRNE, FLUORENE). HEAVY METALS AND ASBESTOS CONTAM INATION.ABANDONED 21 ACRE SITE WITH HIGH LEVELS OF PAH'S (E.G. PYRENE, PHEHANTHRNE, FLUORENE). HEAVY METALS AND ASBESTOS CONTAMINATION.

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	06/17/1987
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Map ID	Site	Database(s)	EPA ID Number

INTERNATIONAL HARVESTER CO W P (Continued) **1000216851**

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 08/10/1987
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 10/22/1990
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: 10/01/1995
Date Completed: 01/26/1996
Priority Level: Search Complete, Viable PRPs
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

CORRACTS:

EPA ID: ILD005213285
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/11/1993
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): 33272 33299 333111
Turned Product and Screw, Nut, and Bolt Manufacturing
All Other Fabricated Metal Product Manufacturing
Farm Machinery and Equipment Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005213285
EPA Region: 05
Area Name: ENTIRE FACILITY

Map ID	Site	Database(s)	EPA ID Number

INTERNATIONAL HARVESTER CO W P (Continued) **1000216851**

Actual Date: 12/28/1992
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 33272 33299 333111
Turned Product and Screw, Nut, and Bolt Manufacturing
All Other Fabricated Metal Product Manufacturing
Farm Machinery and Equipment Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

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155 **SPILLS** **S110122202**
1015 W 120TH ST **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 20091282
Incident Date: Not reported
Date Received: 11/18/2009
Facility Address: 1015 W 120TH ST
Facility City: CHICAGO
PRP Name: CHICAGO, CITY OF
AC: Not reported

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155 **SPILLS** **S111906193**
1015 W 120TH ST **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 19992745
Incident Date: Not reported
Date Received: 12/13/1999
Facility Address: 1015 W 120TH ST
Facility City: CHICAGO
PRP Name: WEST PULLMAN ASSOCIATES
AC: Not reported

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156 **VACANT SITE** **UST** **U003909424**
1210 W 120TH ST **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2040504
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: City of Chicago/Dept Of Environment
Owner Id: U0002865
Owner Address: 30 North LaSalle Street, 25th Floor
Owner City,St,Zip: Chicago, IL 60602

Tank Number: Not reported
Tank Capacity: Not reported
Tank Substance: Not reported
Last Used Date: Not reported
OSFM First Notify Date: Not reported
Tank Status: Not reported

Map ID	Site	Database(s)	EPA ID Number
	VACANT SITE (Continued)		**U003909424**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

156	**EXELON SOLAR PLANT** **1201 W 120TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1012178820** **ILR000158964**

RCRA-CESQG:

Date form received by agency:	08/13/2009
Facility name:	EXELON SOLAR PLANT
Facility address:	1201 W 120TH ST CHICAGO, IL 60628
EPA ID:	ILR000158964
Mailing address:	10 S DEARBORN ST 48TH FL CHICAGO, IL 60680
Contact:	JOHN R SEMINOFF
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(510) 344-6917
Contact email:	JOHN.SEMINOFF@SUNPOWERCORP.COM
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1997
Owner/Op end date:	Not reported
Owner/operator name:	EXELON CORP
Owner/operator address:	Not reported

Map ID	Site	Database(s)	EPA ID Number

EXELON SOLAR PLANT (Continued) **1012178820**

	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1997
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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156 **VACANT LOT** **UST** **U004142073**
1201 W. 120TH STREET **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2044576
Facility Status:	EXEMPT
Facility Type:	**VACANT**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Capacity:	600
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

VACANT LOT (Continued) **U004142073**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	25000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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156 **SPILLS** **S109953892**
1201 W 120TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20091066
Incident Date:	09/28/2009
Date Received:	Not reported
Facility Address:	1201 W 120TH ST
Facility City:	CHICAGO
PRP Name:	City of Chicago - Department of Environment
AC:	Not reported

Incident ID:	20091066
Incident Date:	09/15/2009
Date Received:	09/28/2009
Facility Address:	1201 W 120TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO DEPT OF ENVIRONMENTAL
AC:	Not reported

Incident ID:	20091219
Incident Date:	Not reported
Date Received:	11/05/2009
Facility Address:	1201 W 120TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO DEPT OF ENVIRONMENT
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
156	**CHICAGO MALLEABLE CASTINGS** **1201 WEST 120TH STREET** **CHICAGO, IL 60643**	**LUST** **SRP**	**S104491749** **N/A**

LUST:

Incident Num:	20091066
IL EPA Id:	0316725027
Product:	Other Petro
IEMA Date:	09/28/2009
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	01/11/2010
45 Report Received:	01/11/2010
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

SRP:

IL EPA Id:	0316725027
US EPA Id:	ILR000158964
Longitude:	-87.65435
Latitude:	41.67515
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	06/09/1999
Point Of Contact:	Frances B. Hodge
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 946-6440
Proj Mgr Assigned:	Gross
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	9.570
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	CHICAGO MALLEABLE CASTINGS (Continued)		**S104491749**

NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

159	**DUTCH BOY** **WEST PULLMAN 12042 SOUTH PEORIA STREET** **CHICAGO, IL 60643**	**CERCLIS**	**1000401248** **ILD980265797**

CERCLIS:

Site ID:	0500529
EPA ID:	ILD980265797
Facility County:	COOK
Short Name:	DUTCH BOY
Congressional District:	02
IFMS ID:	05VG
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Referred to Removal - NFRAP
Non NPL Status Date:	20000505
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	5271200.00000
Contact Name:	KENNETH THEISEN
Contact Tel:	(312) 886-1959
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported
Contact ID:	5271035.00000
Contact Name:	JANET POPE
Contact Tel:	(312) 353-0628
Contact Title:	Community Involvement Coordinator

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY (Continued) **1000401248**

Contact Email: Not reported

Contact ID: 5000191.00000
Contact Name: DION NOVAK
Contact Tel: (312) 886-4737
Contact Title: Remedial Project Manager (RPM)
Contact Email: novak.dion@epa.gov

CERCLIS Site Alias Name(s):
Alias ID: 101
Alias Name: CARTER WHITE LEAD NL IND
Alias Address: WEST PULLMAN 12042 S PEORIA ST
CHICAGO, IL 60643
Alias ID: 102
Alias Name: DUTCH BOY
Alias Address: Not reported
Not reported
Alias ID: 103
Alias Name: CARTER WHITE LEAD NATIONAL INDUSTRIES
Alias Address: WEST PULLMAN 12042 SOUTH PEORIA STREET
CHICAGO, IL 60643
Alias Comments: Not reported
Site Description: Associated with International Harvester site

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 06/01/1981
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 03/01/1984
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 12/01/1984
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY (Continued) **1000401248**

Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 03/31/1986
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 03/26/1996
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: 10/01/1995
Date Completed: 08/08/1996
Priority Level: Search Complete, Viable PRPs
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 002
Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: 04/09/1997
Date Completed: 04/23/1997
Priority Level: Search Complete, No Viable PRPs
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 05/08/2002

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY (Continued) **1000401248**

Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 002
Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 08/08/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 05/06/1999
Date Completed: 09/17/2007
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Time Critical
Action Anomaly: Not reported

Action Code: 001
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: Not reported
Date Completed: 09/03/2009
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

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159 **DUTCH BOY PAINT** **SSU** **S101467563**
12042 SOUTH PEORIA **N/A**
CHICAGO, IL 60643

SSU:
Facility ID: 0316005116
Facility Type: Manufacturer - Paint
Lat/Long: 41.6750984 / -87.644447
Directions: Take I-55 North.
Region: Des Plaines
Current Program: SRP
Project Manager: Frierdich
Community Relations: Britton
SSU Status: Transferred

Map ID	Site	Database(s)	EPA ID Number
	DUTCH BOY PAINT (Continued)		**S101467563**

US EPA Id: ILP083084954
FOS: NA
Year Completed: N/A
Year Entered: Not reported
Site Size: 5.25

160	**HANCOCK HOUSE LLC** **12045 SOUTH EMERALD AVENUE** **CHICAGO, IL 60628**	**LUST** **ENG CONTROLS** **INST CONTROL** **SRP**	**S109685129** **N/A**

LUST:

Incident Num:	20100844
IL EPA Id:	0316495178
Product:	Gasoline
IEMA Date:	08/04/2010
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	08/10/2010
45 Report Received:	10/17/2011
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

ENGINEERING CONTROLS:

Illinois Epa Id:	0316495178
NFR Letter:	11/29/2011
Date NFR Recorded:	01/26/2012
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Brigite Grossman
RA Company:	Hancock House LLC
RA Address:	345 North Canal Street
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60606-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Building foundation
Worker Caution:	True
Acres:	1

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316495178
NFR Letter:	11/29/2011
Date NFR Recorded:	01/26/2012
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.

Map ID	Site	Database(s)	EPA ID Number

HANCOCK HOUSE LLC (Continued) **S109685129**

Remediation Applicant Name:	Brigite Grossman
RA Company:	Hancock House LLC
RA Address:	345 North Canal Street
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60606-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Building foundation
Worker Caution:	True
Acres:	1

SRP:

IL EPA Id:	0316495178
US EPA Id:	Not reported
Longitude:	-87.64096
Latitude:	41.67434
Contact Name:	Brigite Grossman
Contact Address:	345 North Canal Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60606-
Contact Phone:	(312) 560-4560
Date Enrolled:	05/19/2009
Point Of Contact:	Michael D. Monteith
Consultant Company:	LFR, Inc.
Consultant Address:	630 Tollgate Road
Consultant Address2:	Suite D
Consultant City,St,Zip:	Elgin, IL 60123-
Consultant Phone:	(847) 649-2037
Proj Mgr Assigned:	Mehra
Sec. 4 Letter Date:	Not reported
NFR Recorded:	01/26/2012
Active:	False
Total Acres:	1
No Further Remediation Letter Dt:	11/29/2011
Remediation Applicant Co:	Hancock House LLC
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Ms. Brigite Grossman
Remediation Applicant Company:	Hancock House LLC
Remediation Applicant Address:	345 North Canal Street
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60606-
Illinois EPA:	0316495178
Site Name:	Hancock House LLC
NFR Letter:	2011-11-29
NFR Letter Date Recorded:	2012-01-26
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Asphalt barrier/Concrete barrier/Building foundation
Worker Caution:	True
Acres:	1

Map ID	Site	Database(s)	EPA ID Number
160	**HANCOCK HOUSE, LLC** **12045 S. EMERALD** **CHICAGO, IL 60628**	**UST**	**U004158192** **N/A**

UST:

Facility ID:	2044775
Facility Status:	EXEMPT
Facility Type:	**COMMERCIAL / RETAIL**
Owner Name:	Hancock House, LLC
Owner Id:	U0035891
Owner Address:	345 N. Canal Street #301
Owner City,St,Zip:	Chicago, IL 60606

Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	550
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	400
Tank Substance:	Diesel Fuel
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number

HANCOCK HOUSE, LLC (Continued) **U004158192**

Tank Number:	4
Tank Capacity:	400
Tank Substance:	Diesel Fuel
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	400
Tank Substance:	Diesel Fuel
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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160 **SPILLS** **S110613538**
12045 S EMERALD AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20100844
Incident Date:	08/04/2010
Date Received:	Not reported
Facility Address:	12045 S EMERALD AVE
Facility City:	CHICAGO
PRP Name:	Hancock House LLC
AC:	Not reported

Incident ID:	20100844
Incident Date:	Not reported
Date Received:	08/04/2010
Facility Address:	12045 S EMERALD AVE
Facility City:	CHICAGO
PRP Name:	HANCOCK HOUSE LLC
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
163	**CENTRAL STATES PIPE & SUPPLY INC** **12101 S PEORIA** **CHICAGO, IL 60643**	**UST**	**U000791028** **N/A**

UST:

Facility ID:	2029216
Facility Status:	INACTIVE/HEATING OIL
Facility Type:	**NONE**
Owner Name:	Central States Pipe & Supply Inc
Owner Id:	U0018573
Owner Address:	12101 S Peoria
Owner City,St,Zip:	Chicago, IL 60643

Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1901
OSFM First Notify Date:	1/28/1992
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1901
OSFM First Notify Date:	1/28/1992
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

164	**SOUTH GREEN PLATING SHOP** **12130 SOUTH GREEN ST** **CHICAGO, IL 60620**	**CERCLIS**	**1007985322** **ILN000509237**

CERCLIS:

Site ID:	0509237
EPA ID:	ILN000509237
Facility County:	COOK
Short Name:	SOUTH GREEN PLATING SHOP
Congressional District:	01
IFMS ID:	B5AA
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	Not reported

Map ID	Site	Database(s)	EPA ID Number

SOUTH GREEN PLATING SHOP (Continued) **1007985322**

RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	R
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Removal Only Site (No Site Assessment Work Needed)
Non NPL Status Date:	20041006
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	5270375.00000
Contact Name:	MICHAEL HARRIS
Contact Tel:	(312) 886-0760
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported

Alias Comments:	Not reported
Site Description:	Former plating shop with elevated levels of cyanide, chromium, cadmium and lead contamination.

CERCLIS Assessment History:

Action Code:	001
Action:	NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started:	10/02/2004
Date Completed:	10/04/2004
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMOVAL
Date Started:	05/16/2005
Date Completed:	07/28/2005
Priority Level:	Cleaned up
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Time Critical
Action Anomaly:	Not reported

Map ID	Site	Database(s)	EPA ID Number

SOUTH GREEN PLATING SHOP (Continued) **1007985322**

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	08/16/2005
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	08/16/2005
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	12/29/2005
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	05/09/2006
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004

Map ID	Site	Database(s)	EPA ID Number

SOUTH GREEN PLATING SHOP (Continued) **1007985322**

Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	11/02/2006
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	03/20/2008
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	006
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	02/05/2009
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Click this hyperlink while viewing on your computer to access
69 additional US CERCLIS Financial: record(s) in the EDR Site Report.

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165 **HARBOR TOOL MFG INC** **RCRA-SQG** **1004698325**
12140 S PEORIA AVE **ILR000105692**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	05/14/2001
Facility name:	HARBOR TOOL MFG INC
Facility address:	12140 S PEORIA AVE CHICAGO, IL 60643
EPA ID:	ILR000105692
Contact:	ARNOLD LORENZINI
Contact address:	12140 S PEORIA AVE CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(773) 468-3120

Map ID	Site	Database(s)	EPA ID Number

HARBOR TOOL MFG INC (Continued) **1004698325**

Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: STRATTA JOHN
Owner/operator address: 12140 S PEORIA AVE
CHICAGO, IL 60643
Owner/operator country: Not reported
Owner/operator telephone: (773) 468-3120
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D005
Waste name: BARIUM

Violation Status: No violations found

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166 **MODERN STEEL** **RCRA-SQG** **1001816935**
1010 W 122RD ST **ILR000068262**
CHICAGO, IL 60643

RCRA-SQG:
Date form received by agency: 10/20/1999
Facility name: MODERN STEEL
Facility address: 1010 W 122RD ST
CHICAGO, IL 60643
EPA ID: ILR000068262
Mailing address: 30 N LASALLE ST 15TH FLR
CHICAGO, IL 60602
Contact: RENANTE MARANTE
Contact address: 30 N LASALLE ST 15TH FLR

Map ID	Site	Database(s)	EPA ID Number

MODERN STEEL (Continued) **1001816935**

	CHICAGO, IL 60602
Contact country:	US
Contact telephone:	(312) 742-0123
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CITY OF CHGO DEPT OF ENV
Owner/operator address:	30 N LASALLE ST 25TH FLR CHICAGO, IL 60602
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 742-0123
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
167	**POWER & LIGHT EVANGELIST CHURCH** **12257 S EMERALD ST** **CHICAGO, IL 60628**	**UST**	**U003668010** **N/A**

UST:

Facility ID:	2036855
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Power & Light Evangelist Church
Owner Id:	U0027012
Owner Address:	Pob 288421
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1973
OSFM First Notify Date:	1/1/1902
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

168	**BIG MEL'S LAUNDROMAT** **12256 SOUTH HALSTED** **CHICAGO, IL 60628**	**DRYCLEANERS**	**S106540629** **N/A**

DRYCLEANERS:

Facility Id:	2373-6879-01
DC No:	DC-00846
Facility Contact:	MELVIN STANTON
License Expires:	12/31/2012

168	**BIG MELS CLEANERS** **12256 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000123948** **ILD984781849**

RCRA-SQG:

Date form received by agency:	03/08/1990
Facility name:	BIG MELS CLEANERS
Facility address:	12256 S HALSTED CHICAGO, IL 60643
EPA ID:	ILD984781849
Contact:	MELVIN STANTON
Contact address:	12256 S HALSTED CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(312) 568-2026
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of

Map ID	Site	Database(s)	EPA ID Number
	BIG MELS CLEANERS (Continued)		**1000123948**

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STANTON MELVIN
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined

Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Map ID	Site	Database(s)	EPA ID Number
	BIG MELS CLEANERS (Continued)		**1000123948**

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
172	**CAL GAS INC.** **12304 S. HALSTED ST.** **CALUMET PARK, IL 60827**	**UST**	**U003668717** **N/A**

UST:

Facility ID:	2038892
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Cal Gas Station, Inc.
Owner Id:	U0028693
Owner Address:	12304 S. Halsted St.
Owner City,St,Zip:	Calumet Park, IL 60827
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	8/23/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/19/2000
Green Tag Decal:	**L001224**
Green Tag Issue Date:	**2/3/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**2/3/2010**
Self Service Permit Expire Date:	**12/31/2012**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	8/23/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/19/2000
Green Tag Decal:	**L001224**
Green Tag Issue Date:	**2/3/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**2/3/2010**
Self Service Permit Expire Date:	**12/31/2012**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
172	**AAMCO** **12307 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1010317178** **ILR000142984**

RCRA-SQG:

Date form received by agency:	08/17/2006
Facility name:	AAMCO
Facility address:	12307 S HALSTED CHICAGO, IL 60628
EPA ID:	ILR000142984
Contact:	DAN PISKE

Map ID	Site	Database(s)	EPA ID Number

AAMCO (Continued) **1010317178**

Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (773) 568-4747
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: AAMCO
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 08/17/2006
Owner/Op end date: Not reported

Owner/operator name: AAMCO
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 08/17/2006
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE

Map ID	Site	Database(s)	EPA ID Number

AAMCO (Continued) **1010317178**

FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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173 **METCALFE SCHOOL** **RCRA-SQG** **1001116711**
12339 S NORMAL **ILR000027367**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	09/12/1996
Facility name:	METCALFE SCHOOL
Facility address:	12339 S NORMAL CHICAGO, IL 60628
EPA ID:	ILR000027367
Mailing address:	1819 W PERSHING RD CHICAGO, IL 60609
Contact:	ALBERT FOSTER JR
Contact address:	1819 W PERSHING RD CHICAGO, IL 60609
Contact country:	US
Contact telephone:	(312) 535-5590
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No

Map ID	Site	Database(s)	EPA ID Number
	METCALFE SCHOOL (Continued)		**1001116711**

Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

177	**125TH ST & MORGAN** **CHICAGO, IL**	**SPILLS**	**S109327375** **N/A**

SPILLS:
Incident ID: 20081522
Incident Date: Not reported
Date Received: 10/10/2008
Facility Address: 125TH ST & MORGAN
Facility City: CHICAGO
PRP Name: COMED
AC: Not reported

178	**12535 S HALSTED ST** **CHICAGO, IL**	**SPILLS**	**S111880261** **N/A**

SPILLS:
Incident ID: 19911261
Incident Date: Not reported
Date Received: 05/11/1991
Facility Address: 12535 S HALSTED ST
Facility City: CHICAGO
PRP Name: GEORGE FRANKLIN II
AC: Not reported

178	**RED'S CHECKPOINT** **12535 SOUTH HALSTED ST.** **CHICAGO, IL 60632**	**LUST**	**S104526016** **N/A**

LUST:
Incident Num: 911261
IL EPA Id: 0316585075
Product: Unleaded Gas
IEMA Date: 05/10/1991
Project Manager: Malcom
Project Manager Phone: (217) 524-9140
Email: James.Malcom@illinois.gov
PRP Name: George Franklin II
PRP Contact: Not reported
PRP Address: 12535 South Halsted St.
PRP City,St,Zip: Chicago, IL 60632
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: 731
Date Section 57.5(g) Letter: Not reported

Map ID	Site	Database(s)	EPA ID Number
	RED'S CHECKPOINT (Continued)		**S104526016**

Non LUST Determination Letter: Not reported
20 Report Received: 10/17/1994
45 Report Received: 07/28/1998
NFA/NFR Letter: 07/11/2002
NFR Date Recorded: 07/25/2002

178	**FRANKLIN GEORGE** **12535 S HALSTED** **CHICAGO, IL 60628**	**UST**	**U001142473** **N/A**

UST:

Facility ID:	2001206
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	Franklin George
Owner Id:	U0005425
Owner Address:	12535 S Halsted
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/7/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/7/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/7/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FRANKLIN GEORGE (Continued) **U001142473**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	3/7/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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179 **BROWN ACADEMY** **UST** **U003914184**
12607 S. UNION STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2041804
Facility Status:	EXEMPT
Facility Type:	**OTHER**
Owner Name:	Chicago Board of Education (CPS)
Owner Id:	U0026761
Owner Address:	125 S. Clark St. Suite 700
Owner City,St,Zip:	Chicago, IL 60603

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/21/2003
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
179	**NANSEN SCHOOL** **12607 S UNION** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001116716** **ILR000027417**

RCRA-SQG:

Date form received by agency:	09/12/1996
Facility name:	NANSEN SCHOOL
Facility address:	12607 S UNION CHICAGO, IL 60628
EPA ID:	ILR000027417
Mailing address:	1819 W PERSHING RD CHICAGO, IL 60609
Contact:	KAREN WILSON
Contact address:	1819 W PERSHING RD CHICAGO, IL 60609
Contact country:	US
Contact telephone:	(312) 535-5385
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Map ID	Site	Database(s)	EPA ID Number
	NANSEN SCHOOL (Continued)		**1001116716**

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
180	**726 W 126TH ST** **CHICAGO, IL**	**SPILLS**	**S111891422** **N/A**

SPILLS:

Incident ID:	19941648
Incident Date:	Not reported
Date Received:	07/25/1994
Facility Address:	726 W 126TH ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
182	**WALGREENS #0186** **12635 S HALSTED** **CHICAGO, IL 60643**	**RCRA-CESQG**	**1004696258** **ILR000042465**

RCRA-CESQG:

Date form received by agency:	09/05/1997
Facility name:	WALGREENS #0186
Facility address:	12635 S HALSTED CHICAGO, IL 60643
EPA ID:	ILR000042465
Contact:	MARCELLUS GORDON
Contact address:	12635 S HALSTED CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(773) 468-6200
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	WALGREENS
Owner/operator address:	12635 S HALSTED CHICAGO, IL 60643
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 468-6200
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

WALGREENS #0186 (Continued) **1004696258**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: X003
Waste name: OTHER STATE REGULATED WASTES [i.e., DIESEL FUEL, GASOLINE AND HOME HEATING OIL]

Violation Status: No violations found

---

186 **NACME STEEL PROCESSING LLC** **RCRA-SQG** **1001218837**
429 W 127TH ST **ILR000049544**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	03/01/2010
Facility name:	NACME STEEL PROCESSING LLC
Facility address:	429 W 127TH ST CHICAGO, IL 60007
EPA ID:	ILR000049544
Contact:	JOHN DUBROCK
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(773) 468-2800
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NACME STEEL PROCESSING LLC
Owner/operator address:	4506 W CLINE AVE EAST CHICAGO, IN 46312
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

NACME STEEL PROCESSING LLC (Continued) **1001218837**

Owner/Operator Type: Owner
Owner/Op start date: 03/27/2003
Owner/Op end date: Not reported

Owner/operator name: NACME STEEL PROCESSING LLC
Owner/operator address: 429 W 127TH ST
CHICAGO, IL 60628
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/27/2003
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: Yes
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 04/01/2006
Facility name: NACME STEEL PROCESSING LLC
Classification: Not a generator, verified

Date form received by agency: 06/12/1998
Facility name: NACME STEEL PROCESSING LLC
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: K062
Waste name: SPENT PICKLE LIQUOR GENERATED BY STEEL FINISHING OPERATIONS OF FACILITIES WITHIN THE IRON AND STEEL INDUSTRY (SIC CODES 331 AND 332).

Biennial Reports:

Map ID	Site	Database(s)	EPA ID Number

NACME STEEL PROCESSING LLC (Continued) **1001218837**

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs):	30871
Waste code:	K062
Waste name:	SPENT PICKLE LIQUOR GENERATED BY STEEL FINISHING OPERATIONS OF FACILITIES WITHIN THE IRON AND STEEL INDUSTRY (SIC CODES 331 AND 332).
Amount (Lbs):	30871

Violation Status: No violations found

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188 **CEDAR PARK CEMETERY ASSN INC** **UST** **U001142098**
12540 S HALSTED ST **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2006553
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Cedar Park Cemetery Assn Inc
Owner Id:	U0002617
Owner Address:	12540 S Halsted St
Owner City,St,Zip:	Chicago, IL 60643
Tank Number:	1
Tank Capacity:	1150
Tank Substance:	Gasoline
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

CEDAR PARK CEMETERY ASSN INC (Continued) **U001142098**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1050
Tank Substance:	Heating Oil
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

188 **CEDAR PARK CEMETERY** **RCRA-SQG** **1001077035**
12540 S HALSTED ST **LUST** **ILR000013557**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	12/24/2009
Facility name:	CEDAR PARK CEMETERY
Facility address:	12540 S HALSTED ST CHICAGO, IL 60643
EPA ID:	ILR000013557
Contact:	ROBERT ROTHSCHILD
Contact address:	12540 S HALSTED ST CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(312) 785-8840
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of

Map ID	Site	Database(s)	EPA ID Number

CEDAR PARK CEMETERY (Continued) **1001077035**

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CEDAR PARK CEMETARY
Owner/operator address:	12540 S HALSTED CHICAGO, IL 60643
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 785-8840
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	11/28/1995
Facility name:	CEDAR PARK CEMETERY
Classification:	Small Quantity Generator

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Map ID	Site	Database(s)	EPA ID Number

CEDAR PARK CEMETERY (Continued) **1001077035**

Violation Status: No violations found

LUST:

Incident Num:	952568
IL EPA Id:	0316755067
Product:	Gasoline
IEMA Date:	12/22/1995
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Cedar Park Cemetery
PRP Contact:	Alma Fox
PRP Address:	12540 South Halsted
PRP City,St,Zip:	Chicago, IL 60643
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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190 **#008489** **UST** **U000172589**
12731 S HALSTED **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2016822
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Phillips Petroleum Company
Owner Id:	U0011864
Owner Address:	13 D2 Phillips Building
Owner City,St,Zip:	Bartlesville, OK 74004
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986

Map ID	Site	Database(s)	EPA ID Number

#008489 (Continued) **U000172589**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	560
Tank Substance:	Used Oil
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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194 **YOUNGS AUTO SUPPLY INC** **RCRA-SQG** **1000315322**
12853 S HALSTED **ILD025355173**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	10/02/1986
Facility name:	YOUNGS AUTO SUPPLY INC
Facility address:	12853 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD025355173
Contact:	VINCE PALERMO
Contact address:	12853 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 568-0001
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PALERMO JOSEPH
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

YOUNGS AUTO SUPPLY INC (Continued) **1000315322**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

Count: 17 records

FOCUS MAP 10 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	U004183412	TRUE NORTH LOCATION 1967	1620 W 127TH ST	60643	UST
CALUMET PARK	1004696111	EARL SCHEIB PAINT & BODY	1731 W 127TH	60643	RCRA-CESQG
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	1003870058	LAKE CALUMET QUAD	810 E 124TH ST	60628	CERC-NFRAP
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	S105743962	GASGO SERVICE STATION	150 W 127TH ST	60628	LUST
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS
RIVERDALE	S106121908	TWIN OUTDOOR THEATER	13701 S UNION AVE	60827	SRP

Focus Map 11

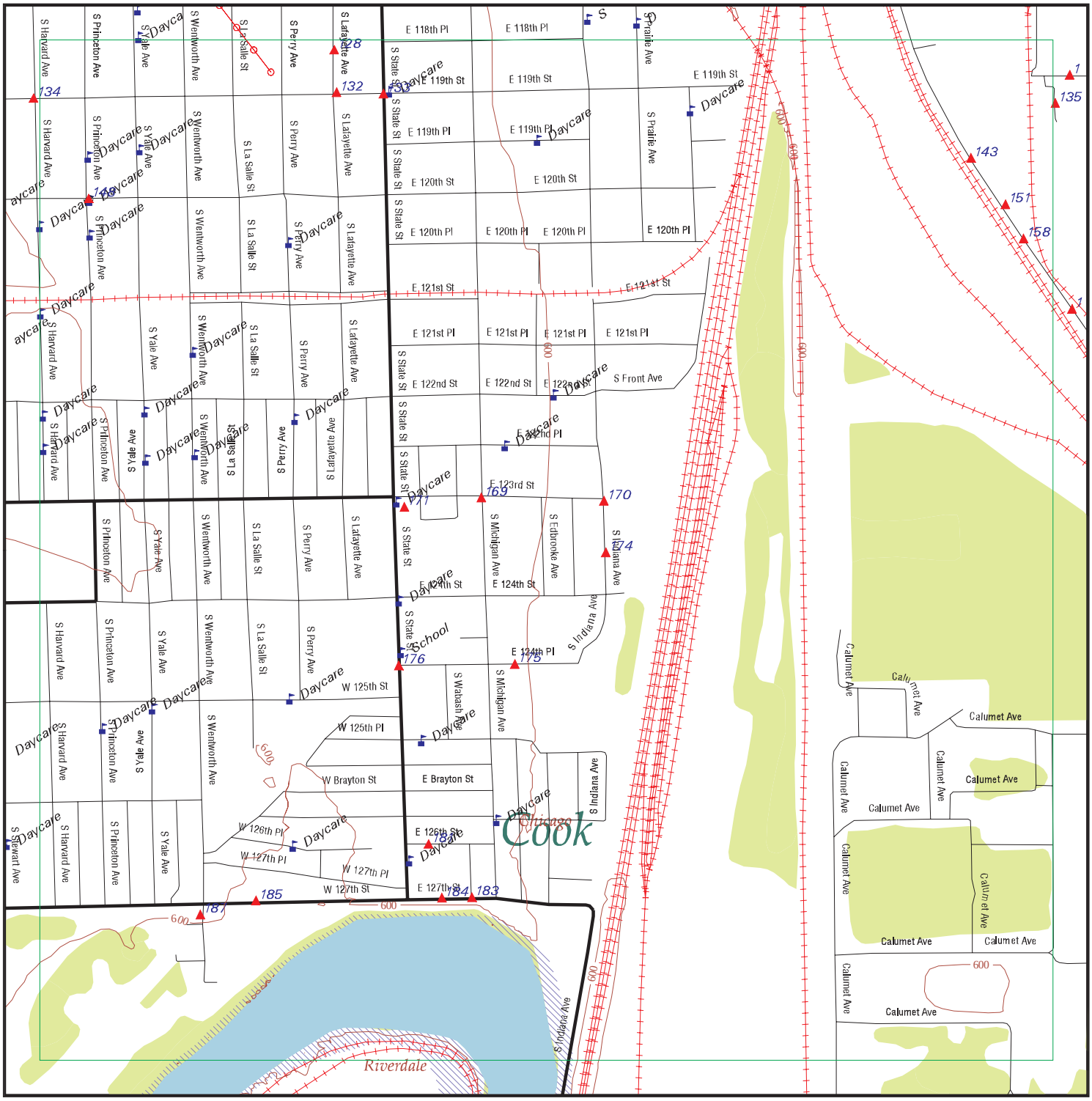

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 11 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	1
CERC-NFRAP	1
CORRACTS	1
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	6
RCRA-CESQG	3
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	1
SWF/LF	0
LUST	7
UST	16
SPILLS	7
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
128	**GREATOR CANAAN MBC/VACANT LOT** **11856 S. LAFAYETTE** **CHICAGO, IL 60607**	**UST**	**U004068153** **N/A**

UST:

Facility ID:	2043476
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Greater Canaan MBC
Owner Id:	U0033817
Owner Address:	35 W. 119th Street
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

129	**INLAND METAL REFINING COMPANY INCORPORATION** **651 EAST 119TH STREET** **CHICAGO, IL 60628**	**CERC-NFRAP** **CORRACTS** **SSU**	**1000151808** **ILD980503213**

CERC-NFRAP:

Site ID:	0500577
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Alias Name(s):

Alias Name:	INLAND METAL REFINING CO INC
Alias Address:	651 E 119TH ST CHICAGO, IL 60628

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	09/01/1980
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	05/16/1985
Priority Level:	Higher priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	09/23/1986
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information

Map ID	Site	Database(s)	EPA ID Number

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 09/23/1986
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 10/31/1991
Priority Level: Not reported

CORRACTS:

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/01/1987
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/01/1987
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

SSU:
Facility ID: 0316500001
Facility Type: Refinery
Lat/Long: 41.6781311 / -87.605331
Directions: Take I-55 North.
Region: Des Plaines
Current Program: SSU
Project Manager: Kershaw
Community Relations: Frost
SSU Status: Backlog
US EPA Id: ILD980503213
FOS: NA
Year Completed: Not reported
Year Entered: Not reported
Site Size: 5

Map ID	Site	Database(s)	EPA ID Number
129	**INLAND METALS REFINING CO INC** **651 E 119TH ST** **CHICAGO, IL 60628**	**UST**	**U000865355** **N/A**

UST:

Facility ID:	2013533
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Inland Metals Refining Co Inc
Owner Id:	U0007543
Owner Address:	651 E 119Th St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/8/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

132	**38 W 119TH ST** **CHICAGO, IL**	**SPILLS**	**S111920638** **N/A**

SPILLS:

Incident ID:	20061440
Incident Date:	Not reported
Date Received:	11/15/2006
Facility Address:	38 W 119TH ST
Facility City:	CHICAGO
PRP Name:	GREATER CANAAN BAPTIST CHURCH
AC:	Not reported

132	**GREATER CANAAN BAPTIST CHURCH** **38 WEST 119TH STREET** **CHICAGO, IL 60628**	**LUST**	**S108255716** **N/A**

LUST:

Incident Num:	20061440
IL EPA Id:	0316495172
Product:	Other Petro
IEMA Date:	11/15/2006
Project Manager:	Rahman
Project Manager Phone:	(217) 782-9848
Email:	Mohammed.Rahman@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported

Map ID	Site	Database(s)	EPA ID Number

GREATER CANAAN BAPTIST CHURCH (Continued) **S108255716**

Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/26/2007
45 Report Received:	02/26/2007
NFA/NFR Letter:	**12/12/2007**
NFR Date Recorded:	07/18/2008

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133 **SPILLS** **S111902545**
N/A

11900 S STATE ST
CHICAGO, IL

SPILLS:

Incident ID:	19982290
Incident Date:	Not reported
Date Received:	09/15/1998
Facility Address:	11900 S STATE ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

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133 **CHICAGO, CITY OF** **LUST** **S105225839**
11900 SOUTH STATE ST. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	982290
IL EPA Id:	0316495107
Product:	Gasoline
IEMA Date:	09/15/1998
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	City of Chicago, Dept. of Environment
PRP Contact:	Renante Marante
PRP Address:	30 North La Salle St., 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127420123
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1998-10-08
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
133	**ABANDONED SERVICE STATION** **11900 S STATE STREET** **CHICAGO, IL 60628**	**UST**	**U003668364** **N/A**

UST:

Facility ID:	2038145
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Unknown
Owner Id:	U0018799
Owner Address:	Unknown
Owner City,St,Zip:	Unknown, IL 0

Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number

ABANDONED SERVICE STATION (Continued) **U003668364**

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	5
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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134 **BIG SAM'S GROCERS** **UST** **U004110603**
333 W. 119TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2043706
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Big Sam's Properties
Owner Id:	U0034216
Owner Address:	333 W. 119th Street
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Fuel Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BIG SAM'S GROCERS (Continued)		**U004110603**

Tank Number:	2
Tank Capacity:	2500
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

134		**SPILLS**	**S111921908**
	333 W 119TH ST **CHICAGO, IL**		**N/A**

SPILLS:

Incident ID:	20070843
Incident Date:	Not reported
Date Received:	06/20/2007
Facility Address:	333 W 119TH ST
Facility City:	CHICAGO
PRP Name:	BIG SAMS PROPERTIES LLC

Map ID	Site	Database(s)	EPA ID Number
	(Continued)		**S111921908**

AC: Not reported

134	**BIG SAM'S PROPERTIES** **333 WEST 119TH STREET** **CHICAGO, IL 60628**	**LUST**	**S108649986** **N/A**

LUST:

Incident Num:	20070843
IL EPA Id:	0316505043
Product:	Gasoline, Uset Oil
IEMA Date:	06/20/2007
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

135	**LAKE CALUMET SMELTING** **11901 S. CHAMPLAIN AVE.** **CHICAGO, IL 60628**	**CERCLIS**	**1007646528** **ILN000509228**

CERCLIS:

Site ID:	0509228
EPA ID:	ILN000509228
Facility County:	COOK
Short Name:	LAKE CALUMET SMELTING
Congressional District:	01
IFMS ID:	B5FM
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	5.70000
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	S
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	ACRE
RBRAC Code:	Not reported

Map ID	Site	Database(s)	EPA ID Number

LAKE CALUMET SMELTING (Continued) **1007646528**

RResp Fed Agency Code: Not reported
Non NPL Status: Assessment Complete - Decision Needed
Non NPL Status Date: 20110715
Site Fips Code: 17031
CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

Alias Comments: Not reported
Site Description: Former secondary smelter of non-ferrous metals such as lead and tin. Smelting these metals created bulk units of babbitt and solder. Not currently known if any metal fabrication was done or if cleaning solvents were used on-site. Preliminary XRF data indicates heavy metal contamination on the soil surface throughout the site as well as on flooring of former sturctures. Residential neighborhoods within 1/4 miles of the property.

CERCLIS Assessment History:

Action Code: 001
Action: PRE-CERCLIS SCREENING
Date Started: Not reported
Date Completed: 09/29/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/18/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: 09/30/2005
Date Completed: 03/20/2008
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: 04/15/2008

Map ID	Site	Database(s)	EPA ID Number

LAKE CALUMET SMELTING (Continued) **1007646528**

Date Completed:	07/15/2011
Priority Level:	Assessment Complete - Decision Needed
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

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143 **SCHNEIDER TANK LINES** **RCRA-SQG** **1000312551**
11861 SOUTH COTTAGE GROVE AVENUE **ILD981789035**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	10/02/1986
Facility name:	SCHNEIDER TANK LINES
Facility address:	11861 S COTTAGE GROVE AVE CHICAGO, IL 60628
EPA ID:	ILD981789035
Contact:	ARTHUR FAVERTY
Contact address:	11861 S COTTAGE GROVE AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 928-8040
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	BULKOA
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

Map ID	Site	Database(s)	EPA ID Number

SCHNEIDER TANK LINES (Continued) **1000312551**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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143 **BULKOA INC** **UST** **U003152281**
11861 S COTTAGE GROVE AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2023462
Facility Status:	CLOSED
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Name:	Bulkoa Inc
Owner Id:	U0025760
Owner Address:	11861 S Cottage Grove Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BULKOA INC (Continued)		**U003152281**

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/2002
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

BULKOA INC (Continued) **U003152281**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/2002
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/1902
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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143 **BULKOA INC** **LUST** **1000271640**
11861 S COTTAGE GROVE AVE **ILD000667154**
CHICAGO, IL 60628

LUST:

Incident Num:	971905
IL EPA Id:	0316515005
Product:	Gasoline, Deisel
IEMA Date:	10/07/1997
Project Manager:	Wallace
Project Manager Phone:	(217) 524-1283
Email:	Donna.Wallace@illinois.gov
PRP Name:	Bulkoa
PRP Contact:	Patrick Gaughan
PRP Address:	11861 South Cottage Grove
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7732642200
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BULKOA INC (Continued)		**1000271640**

Non LUST Determination Letter: Not reported
20 Report Received: 10/20/1997
45 Report Received: 01/20/1998
NFA/NFR Letter: 04/08/2003
NFR Date Recorded: 07/28/2003

Map ID	Site	Database(s)	EPA ID Number
143	**CLEAN HARBORS ENV SERVICES** **11861 COTTAGE GROVE-BLDG 13** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001487584** **ILR000065797**

RCRA-SQG:
Date form received by agency: 12/17/2007
Facility name: CLEAN HARBORS ENV SERVICES
Facility address: 11861 COTTAGE GROVE-BLDG 13
CHICAGO, IL 60628
EPA ID: ILR000065797
Contact: RON PFEIFER
Contact address: 11861 COTTAGE GROVE-BLDG 13
CHICAGO, IL 60628
Contact country: US
Contact telephone: (773) 468-1186
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: MARLEY COOLING
Owner/operator address: 11861 COTTAGE GROVE/10
CHICAGO, IL 60620
Owner/operator country: Not reported
Owner/operator telephone: (773) 995-0611
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Map ID	Site	Database(s)	EPA ID Number

CLEAN HARBORS ENV SERVICES (Continued) **1001487584**

Historical Generators:
Date form received by agency: 07/19/1999
Facility name: CLEAN HARBORS ENV SERVICES
Site name: MARLEY COOLING
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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148 **COMED-MANHOLE** **RCRA-SQG** **1010317138**
120TH ST & PRINCETON **ILR000142562**
CHICAGO, IL 60628

RCRA-SQG:
Date form received by agency: 03/01/2008
Facility name: COMED-MANHOLE
Facility address: 120TH ST & PRINCETON
CHICAGO, IL 60628
EPA ID: ILR000142562
Mailing address: THREE LINCOLN CTR 3RD FL
OAKBROOK TERRACE, IL 60181
Contact: NEENA HEMMADY
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (630) 576-6724
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: COMED
Owner/operator address: THREE LINCOLN CTR 3RD FL
OAKBROOK TERRACE, IL 60181
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1976
Owner/Op end date: Not reported

Owner/operator name: COM ED
Owner/operator address: THREE LINCOLN CTR 3RD FL

Map ID	Site	Database(s)	EPA ID Number

COMED-MANHOLE (Continued) **1010317138**

OAKBROOK TERRACE, IL 60181
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1976
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/01/2007
Facility name: COMED-MANHOLE
Site name: COMED
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 07/20/2006
Facility name: COMED-MANHOLE
Site name: COM ED
Classification: Large Quantity Generator

Violation Status: No violations found

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151 **KEYWELL LLC** **RCRA-CESQG** **1004693217**
11900 COTTAGE GROVE AVE **ILD984804831**
CHICAGO, IL 60628

RCRA-CESQG:
Date form received by agency: 01/29/1996
Facility name: KEYWELL LLC
Facility address: 11900 COTTAGE GROVE AVE
CHICAGO, IL 60628
EPA ID: ILD984804831
Contact: RONALD GOSTEK
Contact address: 11900 COTTAGE GROVE AVE
CHICAGO, IL 60628
Contact country: US
Contact telephone: (312) 660-2060
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time;

Map ID	Site	Database(s)	EPA ID Number
	KEYWELL LLC (Continued)		**1004693217**

or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/01/1992
Facility name:	KEYWELL LLC
Site name:	KEYWELL CORP
Classification:	Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
151	**KEYWELL CO.** **11900 SOUTH COTTAGE GROVE AVE.** **CHICAGO, IL 60628**	**LUST** **SPILLS**	**S108045374** **N/A**

LUST:

Incident Num:	902351
IL EPA Id:	0316495035
Product:	Unleaded Gas
IEMA Date:	08/16/1990
Project Manager:	Rife
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Keywell Co.
PRP Contact:	Ron Gostek
PRP Address:	11900 South Cottage Grove Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/29/1992
45 Report Received:	02/29/1992
NFA/NFR Letter:	**01/24/1996**
NFR Date Recorded:	Not reported

Incident Num:	942202
IL EPA Id:	0316495035
Product:	Deisel
IEMA Date:	09/26/1994
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Keywell Corp.
PRP Contact:	Ron Gostek
PRP Address:	11900 South Cottage Grove Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1994-11-01
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

SPILLS:

Incident ID:	20040961
Incident Date:	07/09/2004
Date Received:	07/09/2004
Facility Address:	11900 COTTAGE GROVE
Facility City:	CHICAGO
PRP Name:	BIG O MOVERS AND STORAGE INC
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
151	**S G KEYWELL CO** **11900 S COTTAGE GROVE AVE** **CHICAGO, IL 60628**	**UST**	**U001143038** **N/A**

UST:

Facility ID:	2012567
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	S G Keywell Co
Owner Id:	U0013327
Owner Address:	11900 S Cottage Grove Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	8/1/1990
OSFM First Notify Date:	4/23/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	8/1/1990
OSFM First Notify Date:	4/23/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

158	**TRI CITY TANK WASH** **11901 S COTTAGE GROVE** **CHICAGO, IL 60628**	**UST**	**U001143228** **N/A**

UST:

Facility ID:	2014827
Facility Status:	INACTIVE
Facility Type:	**NONE**
Owner Name:	Tri City Tank Wash
Owner Id:	U0015198
Owner Address:	11901 S Cottage Grove
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	99
Tank Substance:	Not reported

Map ID	Site	Database(s)	EPA ID Number

TRI CITY TANK WASH (Continued) **U001143228**

Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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162 **SPILLS** **S111877539**
N/A

11900 S COTTAGE GROVE AVE
CHICAGO, IL

SPILLS:

Incident ID:	19902351
Incident Date:	Not reported
Date Received:	08/17/1990
Facility Address:	11900 S COTTAGE GROVE AVE
Facility City:	CHICAGO
PRP Name:	SAMUEL G. KEYWELL CO.
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
169	**12300 S MICHIGAN AVE** **CHICAGO, IL**	**SPILLS**	**S111879154** **N/A**

SPILLS:

Incident ID:	19910147
Incident Date:	Not reported
Date Received:	01/16/1991
Facility Address:	12300 S MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	BANK OF COMMERCE & INDUSTRY
AC:	Not reported

169	**BANK OF COMMERCE & INDUSTRY** **12300 S MICHIGAN AVE** **CHICAGO, IL 60631**	**UST**	**U001142019** **N/A**

UST:

Facility ID:	2026423
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Bank Of Commerce & Industry
Owner Id:	U0001126
Owner Address:	6100 N Nw Hwy
Owner City,St,Zip:	Chicago, IL 60631
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/1/1980
OSFM First Notify Date:	10/29/1990
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	1/1/1980
OSFM First Notify Date:	10/29/1990
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	3000

Map ID	Site	Database(s)	EPA ID Number

BANK OF COMMERCE & INDUSTRY (Continued) **U001142019**

Tank Substance:	Gasoline
Last Used Date:	1/1/1980
OSFM First Notify Date:	10/29/1990
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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169 **BANK OF COMMERCE AND IND** **LUST** **1000462986**
12300 S MICHIGAN AVE **ILD984812545**
CHICAGO, IL 60628

LUST:

Incident Num:	910147
IL EPA Id:	0316495037
Product:	Gasoline
IEMA Date:	01/16/1991
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Bank of Commerce & Industry
PRP Contact:	Donald Houder
PRP Address:	6100 North Northwest Hwy.
PRP City,St,Zip:	Chicago, IL 60631
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/29/1992
45 Report Received:	02/29/1992
NFA/NFR Letter:	**07/12/1991**
NFR Date Recorded:	Not reported

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170 **METRA KYD YARD** **UST** **U001629890**
12301 S INDIANA AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2032641
Facility Status:	ACTIVE
Facility Type:	**COUNTY**
Owner Name:	Metra Ne Il Regional Rr Corp
Owner Id:	U0010172
Owner Address:	547 W Jackson Blvd
Owner City,St,Zip:	Chicago, IL 60661
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

METRA KYD YARD (Continued) **U001629890**

OSFM First Notify Date:	10/18/1993
Tank Status:	**Currently in use**
Red Tag Issue Date:	12/3/2009
Install Date:	9/25/1992
Green Tag Decal:	**M006112**
Green Tag Issue Date:	**6/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	10/18/1993
Tank Status:	**Currently in use**
Red Tag Issue Date:	12/3/2009
Install Date:	9/25/1992
Green Tag Decal:	**M006112**
Green Tag Issue Date:	**6/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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170 **METRA** **RCRA-SQG** **1001024735**
12301 S INDIANA AVE **ILR000007096**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	03/01/2008
Facility name:	METRA
Facility address:	12301 S INDIANA AVE CHICAGO, IL 60628
EPA ID:	ILR000007096
Mailing address:	547 W JACKSON CHICAGO, IL 60661
Contact:	RONALD COUPET
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(312) 322-6907
Contact email:	Not reported
EPA Region:	05
Land type:	Other land type
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	METRA
Owner/operator address:	547 W JACKSON 4 EAST

Map ID	Site	Database(s)	EPA ID Number

METRA (Continued) **1001024735**

CHICAGO, IL 60661
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: 06/01/1974
Owner/Op end date: Not reported

Owner/operator name: METRA
Owner/operator address: 547 W JACKSON 4 EAST
CHICAGO, IL 60661
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: 06/01/1974
Owner/Op end date: Not reported

Owner/operator name: REGIONAL COMMUTER RR CORP
Owner/operator address: 547 W JACKSON BLVD
CHICAGO, IL 60661
Owner/operator country: US
Owner/operator telephone: (312) 322-6900
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1974
Owner/Op end date: Not reported

Owner/operator name: REGIONAL COMMUTER RR CORP
Owner/operator address: 547 W JACKSON BLVD
CHICAGO, IL 60661
Owner/operator country: US
Owner/operator telephone: (312) 322-6900
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1974
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Map ID	Site	Database(s)	EPA ID Number

METRA (Continued) **1001024735**

Date form received by agency: 05/02/2007
Facility name: METRA
Site name: METRA KYD
Classification: Large Quantity Generator

Date form received by agency: 03/01/2007
Facility name: METRA
Classification: Small Quantity Generator

Date form received by agency: 02/23/2007
Facility name: METRA
Site name: METRA KYD
Classification: Large Quantity Generator

Date form received by agency: 07/21/1995
Facility name: METRA
Site name: METRA RR KENSINGTON YARD
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D005
Waste name: BARIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D018
Waste name: BENZENE

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/09/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
171	**GOMPERS SCH** **12302 S STATE** **CHICAGO, IL 60609**	**RCRA-SQG**	**1001116634** **ILR000026591**

RCRA-SQG:

Date form received by agency:	08/30/1996
Facility name:	GOMPERS SCH
Facility address:	12302 S STATE CHICAGO, IL 60609
EPA ID:	ILR000026591
Mailing address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact:	DIANE GRISSET
Contact address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact country:	US
Contact telephone:	(312) 535-5475
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHS
Owner/operator address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Map ID	Site	Database(s)	EPA ID Number
	GOMPERS SCH (Continued)		**1001116634**

Violation Status: No violations found

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174 **KYD 124TH ST SHOP**
12357 S INDIANA AVE
CHICAGO, IL 60628

UST **U000791903**
N/A

UST:

Facility ID:	2026259
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Metra
Owner Id:	U0011093
Owner Address:	547 West Jackson Boulevard
Owner City,St,Zip:	Chicago, IL 60661
Tank Number:	1
Tank Capacity:	250
Tank Substance:	Lube Oil
Last Used Date:	6/1/1975
OSFM First Notify Date:	7/27/1990
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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175 **METROPOLITAN WATER RECLAMATION DIST.**
129 EAST 124TH PLACE
CHICAGO, IL 60628

UST **U003668649**
N/A

UST:

Facility ID:	2038782
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Metropolitan-Water Reclamation Dist.
Owner Id:	U0028605
Owner Address:	100 East Erie
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	13000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
	METROPOLITAN WATER RECLAMATION DIST. (Continued)		**U003668649**

Tank Number:	2
Tank Capacity:	13000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	13000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	13000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
175	**MWRD-125TH PUMPING STATION** **129 E. 124TH PLACE** **CHICAGO, IL 60628**	**UST**	**U003668651** **N/A**

UST:

Facility ID:	2038784
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Metropolitan Water Reclamation Dist.
Owner Id:	U0028606
Owner Address:	100 East Erie

Map ID	Site	Database(s)	EPA ID Number

MWRD-125TH PUMPING STATION (Continued) **U003668651**

Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	320
Tank Substance:	Kerosene
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

---

176 **OWENS JESSE COMMUNITY ACADEMY** **RCRA-CESQG** **1004696856**
12450 S STATE ST **ILR000059196**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	12/14/1998
Facility name:	OWENS JESSE COMMUNITY ACADEMY
Facility address:	12450 S STATE ST CHICAGO, IL 60628
EPA ID:	ILR000059196
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported

Map ID	Site	Database(s)	EPA ID Number

OWENS JESSE COMMUNITY ACADEMY (Continued) **1004696856**

Owner/operator telephone: (773) 535-7038
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

---

181 **ERNS** **2000541927**
25 EAST 126TH STREET **N/A**
CHICAGO, IL 60628

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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183 **COM ED** **RCRA-SQG** **1009217017**
48 E 127TH ST **ILR000140020**
CHICAGO, IL 60628

RCRA-SQG:
Date form received by agency: 02/08/2006
Facility name: COM ED
Facility address: 48 E 127TH ST
CHICAGO, IL 60628
EPA ID: ILR000140020
Mailing address: 3 LINCOLN CTR 3RD FLR
OAK BROOK, IL 60181

Map ID	Site	Database(s)	EPA ID Number

COM ED (Continued) **1009217017**

Contact:	NEENA HEMMADY
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(630) 576-6724
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	COM ED
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	02/08/2006
Owner/Op end date:	Not reported

Owner/operator name:	COM ED
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	02/08/2006
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Map ID	Site	Database(s)	EPA ID Number

COM ED (Continued) **1009217017**

Violation Status: No violations found

---

184 **SPILLS** **S111908134**
N/A

26 E 127TH ST
CHICAGO, IL

SPILLS:

Incident ID:	20001824
Incident Date:	Not reported
Date Received:	09/25/2000
Facility Address:	26 E 127TH ST
Facility City:	CHICAGO
PRP Name:	PROGRESSIVE BAPTIST CHURCH
AC:	Not reported

---

184 **PROGRESSIVE BAPTIST CHURCH** **UST** **U003762917**
26 E 127TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2040115
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	John Digby Jr
Owner Id:	U0029777
Owner Address:	10622 S Eberhart Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	1/1/1970
OSFM First Notify Date:	10/19/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

184 **PROGRESSIVE BAPTIST CHURCH** **LUST** **S104792803**
26 EAST 127TH ST. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20001824
IL EPA Id:	0316495133
Product:	Other Petro
IEMA Date:	09/26/2000
Project Manager:	Tucka
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Progressive Baptist Church

Map ID	Site	Database(s)	EPA ID Number

PROGRESSIVE BAPTIST CHURCH (Continued) **S104792803**

PRP Contact:	Rev. J.D. Digby Jr.
PRP Address:	735 East 134th St.
PRP City,St,Zip:	Chicago, IL 60627
PRP Phone:	7739288889
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	04/09/2001
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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185 **COMMUNITY GAS** **UST** **U000173441**
150 W. 127TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2025044
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	M & R Sahloul
Owner Id:	U0033772
Owner Address:	150 S. 127th Street
Owner City,St,Zip:	Chicago, IL 60618

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	3/10/1989
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Kerosene
Last Used Date:	Not reported
OSFM First Notify Date:	3/10/1989
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number

COMMUNITY GAS (Continued) **U000173441**

Tank Number:	3
Tank Capacity:	7500
Tank Substance:	Gasoline
Last Used Date:	7/1/2003
OSFM First Notify Date:	3/10/1989
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/10/1989
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	7500
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/10/1989
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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187 **BLUE ISLAND CITGO** **UST** **U003152164**
3196 WEST 127TH STREET **N/A**
BLUE ISLAND, IL 60407

UST:

Facility ID:	2035464
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Madji Darwish
Owner Id:	U0025277
Owner Address:	3196 West 127Th Street

Map ID	Site	Database(s)	EPA ID Number

BLUE ISLAND CITGO (Continued) **U003152164**

Owner City,St,Zip: Blue Island, IL 60407

Tank Number: 1
Tank Capacity: 15000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 8/6/1998
Tank Status: Currently in use
Red Tag Issue Date: Not reported
Install Date: 4/8/1997
Green Tag Decal: L001285
Green Tag Issue Date: 5/18/2010
Green Tag Expire Date: 12/31/2012
Self Service Permit Inspection Date 5/18/2010
Self Service Permit Expire Date: 12/31/2012
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 10000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 8/6/1998
Tank Status: Currently in use
Red Tag Issue Date: Not reported
Install Date: 4/8/1997
Green Tag Decal: L001285
Green Tag Issue Date: 5/18/2010
Green Tag Expire Date: 12/31/2012
Self Service Permit Inspection Date 5/18/2010
Self Service Permit Expire Date: 12/31/2012
Fee Due: $0.00

---

187 **AIR PRODUCTS & CHEMICALS INC** **UST** **U001141824**
12721 WENTWORTH AVE **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2020533
Facility Status: CLOSED
Facility Type: INDUSTRIAL / MANUFACTURING
Owner Name: Air Products And Chemical Inc
Owner Id: U0026451
Owner Address: Po Box 538
Owner City,St,Zip: Allentown, PA 18105

Tank Number: 1
Tank Capacity: 10000
Tank Substance: Diesel Fuel
Last Used Date: 9/22/1997
OSFM First Notify Date: 5/19/1987
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date Not reported

Map ID	Site	Database(s)	EPA ID Number
	AIR PRODUCTS & CHEMICALS INC (Continued)		**U001141824**

Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

187	**AIRGAS SPECIALTY GASES** **12722 S WENTWORTH AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1000128672** **ILD097167860**

RCRA-CESQG:

Date form received by agency:	03/12/2009
Facility name:	AIRGAS SPECIALTY GASES
Facility address:	12722 S WENTWORTH AVE CHICAGO, IL 60628
EPA ID:	ILD097167860
Contact:	CURT STEWART
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(773) 785-3000
Telephone ext.:	15
Contact email:	CURTIS.STEWART@AIRGAS.COM
EPA Region:	05
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	AIRGAS INC
Owner/operator address:	6340 SUGARLOAF PKWY STE 300 DULUTH, GA 30097
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	03/01/2002
Owner/Op end date:	Not reported
Owner/operator name:	CURT STEWART
Owner/operator address:	6340 SUGARLOAF PKWY STE 300 DULUTH, GA 30097
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	03/01/2002

Map ID	Site	Database(s)	EPA ID Number

AIRGAS SPECIALTY GASES (Continued) **1000128672**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency: 01/31/1997
Facility name: AIRGAS SPECIALTY GASES
Site name: AIR PRODUCTS AND CHEMICALS INC
Classification: Not a generator, verified

Date form received by agency: 04/01/1985
Facility name: AIRGAS SPECIALTY GASES
Site name: AIR PRODUCTS AND CHEMICALS INC
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 11/19/1996
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported

Map ID	Site	Database(s)	EPA ID Number
	AIRGAS SPECIALTY GASES (Continued)		**1000128672**

Date achieved compliance: Not reported
Evaluation lead agency: State

Count: 14 records

FOCUS MAP 11 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	1003870058	LAKE CALUMET QUAD	810 E 124TH ST	60628	CERC-NFRAP
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	S105743962	GASGO SERVICE STATION	150 W 127TH ST	60628	LUST
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
RIVERDALE	S105427839	PM AG PROD. INC.	3550 S INDIANA AVE	60827	LUST

Focus Map 12

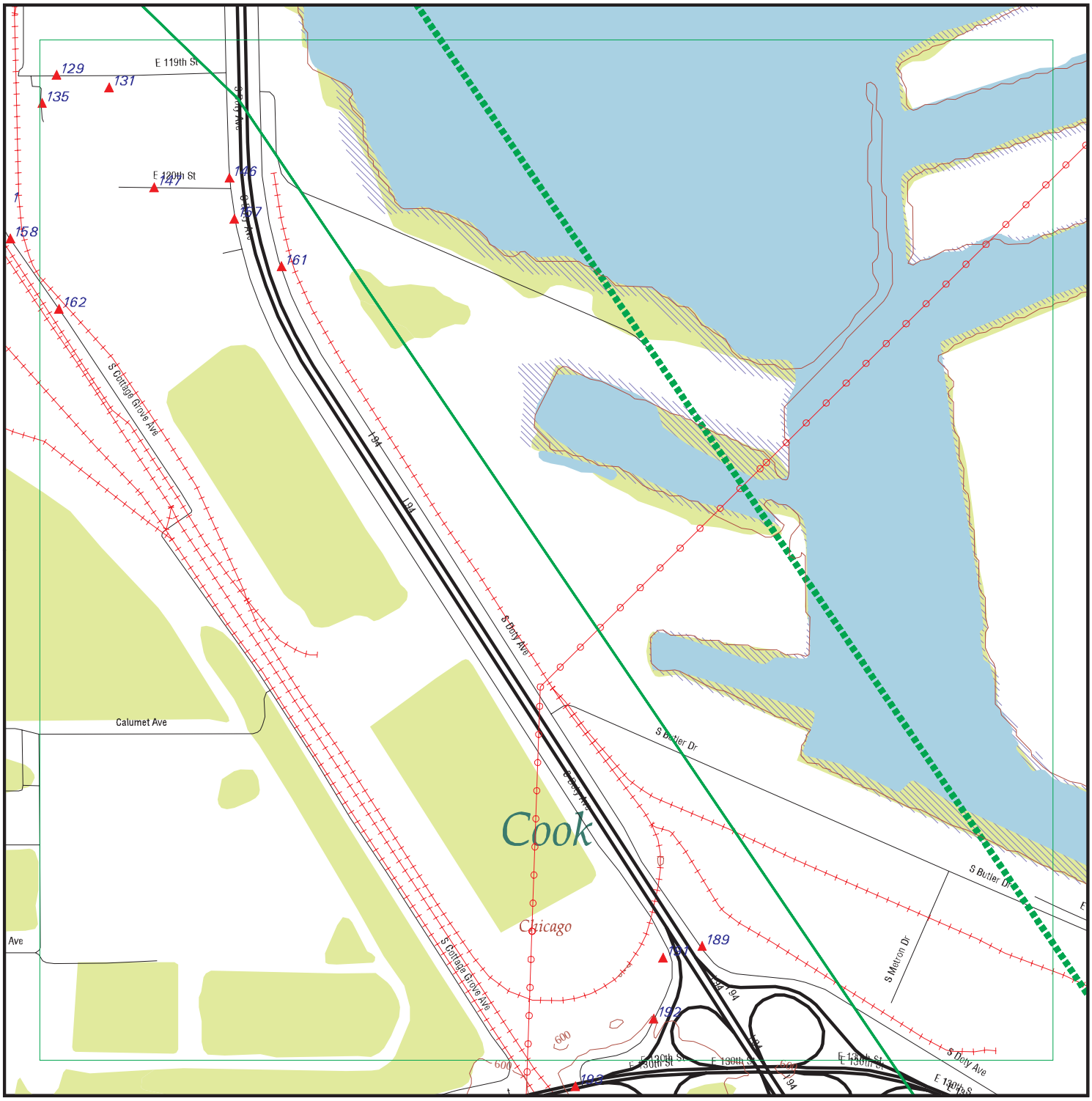

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 12 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	1
CERC-NFRAP	2
CORRACTS	1
RCRA-TSDF	0
RCRA-LQG	1
RCRA-SQG	3
RCRA-CESQG	1
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	4
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	1
SWF/LF	0
LUST	2
UST	6
SPILLS	11
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
129	**INLAND METAL REFINING COMPANY INCORPORATION** **651 EAST 119TH STREET** **CHICAGO, IL 60628**	**CERC-NFRAP** **CORRACTS** **SSU**	**1000151808** **ILD980503213**

CERC-NFRAP:

Site ID:	0500577
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Alias Name(s):

Alias Name:	INLAND METAL REFINING CO INC
Alias Address:	651 E 119TH ST CHICAGO, IL 60628

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	09/01/1980
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	05/16/1985
Priority Level:	Higher priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	09/23/1986
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	09/23/1986
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	10/31/1991
Priority Level:	Not reported

CORRACTS:

EPA ID:	ILD980503213
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	06/01/1987
Action:	CA050 - RFA Completed
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported
EPA ID:	ILD980503213
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	06/01/1987
Action:	CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary

Map ID	Site	Database(s)	EPA ID Number

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

SSU:
Facility ID: 0316500001
Facility Type: Refinery
Lat/Long: 41.6781311 / -87.605331
Directions: Take I-55 North.
Region: Des Plaines
Current Program: SSU
Project Manager: Kershaw
Community Relations: Frost
SSU Status: Backlog
US EPA Id: ILD980503213
FOS: NA
Year Completed: Not reported
Year Entered: Not reported
Site Size: 5

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129 **INLAND METALS REFINING CO INC** **UST** **U000865355**
651 E 119TH ST **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2013533
Facility Status: CLOSED
Facility Type: NONE
Owner Name: Inland Metals Refining Co Inc
Owner Id: U0007543
Owner Address: 651 E 119Th St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 5/8/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
131	**HUFF & HUFF INC.** **651 EAST 179TH ST.** **CHICAGO, IL 60607**	**LUST**	**S103292398** **N/A**

LUST:

Incident Num:	891954
IL EPA Id:	0316280047
Product:	Deisel
IEMA Date:	10/04/1989
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Huff & Huff Inc.
PRP Contact:	Linda Huff
PRP Address:	512 West Burlington, Suite 100
PRP City,St,Zip:	La Grange, IL 60525
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

135	**LAKE CALUMET SMELTING** **11901 S. CHAMPLAIN AVE.** **CHICAGO, IL 60628**	**CERCLIS**	**1007646528** **ILN000509228**

CERCLIS:

Site ID:	0509228
EPA ID:	ILN000509228
Facility County:	COOK
Short Name:	LAKE CALUMET SMELTING
Congressional District:	01
IFMS ID:	B5FM
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	5.70000
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	S
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	ACRE
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Assessment Complete - Decision Needed
Non NPL Status Date:	20110715
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported

Map ID	Site	Database(s)	EPA ID Number

LAKE CALUMET SMELTING (Continued) **1007646528**

Alias EPA ID: Not reported
Site FUDS Flag: Not reported

Alias Comments: Not reported
Site Description: Former secondary smelter of non-ferrous metals such as lead and tin. Smelting these metals created bulk units of babbitt and solder. Not currently known if any metal fabrication was done or if cleaning solvents were used on-site. Preliminary XRF data indicates heavy metal contamination on the soil surface throughout the site as well as on flooring of former sturctures. Residential neighborhoods within 1/4 miles of the property.

CERCLIS Assessment History:

Action Code: 001
Action: PRE-CERCLIS SCREENING
Date Started: Not reported
Date Completed: 09/29/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/18/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: 09/30/2005
Date Completed: 03/20/2008
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: 04/15/2008
Date Completed: 07/15/2011
Priority Level: Assessment Complete - Decision Needed
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported

Map ID	Site	Database(s)	EPA ID Number
	LAKE CALUMET SMELTING (Continued)		**1007646528**

Action Anomaly: Not reported

Map ID	Site	Database(s)	EPA ID Number
146	**BULKMATIC TRANSPORT CO** **12000 S DOTY AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000271480** **ILD053220711**

RCRA-SQG:

Date form received by agency:	07/28/1980
Facility name:	BULKMATIC TRANSPORT CO
Facility address:	12000 S DOTY AVE CHICAGO, IL 60628
EPA ID:	ILD053220711
Contact:	CHUCK APPELQUIST
Contact address:	12000 S DOTY AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 568-1300
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	JB INC
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

BULKMATIC TRANSPORT CO (Continued) **1000271480**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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147 **ERNS** **2011991453**
803 EAST 120TH ST. **N/A**
CHICAGO, IL 60628

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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147 **ERNS** **2011992401**
803 EAST 120TH ST. **N/A**
CHICAGO, IL 60628

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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147 **SPILLS** **S111927203**
803 E 120TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20111056
Incident Date:	Not reported
Date Received:	Not reported
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	Quala Services, LLC
AC:	VN

Map ID	Site	Database(s)	EPA ID Number
147	**803 E 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111887106** **N/A**

SPILLS:

Incident ID:	19930641
Incident Date:	Not reported
Date Received:	03/17/1993
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	ALL WASTE CONTAINER SERVICES
AC:	Not reported

147	**ALLWASTE CONTAINER SERVICES** **803 E 120TH ST** **CHICAGO, IL**	**SPILLS**	**1008124151** **N/A**

SPILLS:

Incident ID:	20111225
Incident Date:	11/12/2011
Date Received:	03/05/2012
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	Quala Services, LLC
AC:	SR

147	**803 E 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111882010** **N/A**

SPILLS:

Incident ID:	19913018
Incident Date:	10/22/1991
Date Received:	10/22/1991
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	SCHNEIDER NATIONAL BULK CAR.
AC:	Not reported

147	**803 E 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111927204** **N/A**

SPILLS:

Incident ID:	20111057
Incident Date:	Not reported
Date Received:	Not reported
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	Quala Services, LLC
AC:	VN

Map ID	Site	Database(s)	EPA ID Number
147	**PSC CONTAINER SERVICES, LLC** **803 EAST 120TH ST.** **CHICAGO, IL 60628**	**LUST**	**S104524045** **N/A**

LUST:

Incident Num:	930641
IL EPA Id:	0316535003
Product:	Deisel
IEMA Date:	03/17/1993
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	PSC Container Services, LLC
PRP Contact:	Garry Risse
PRP Address:	2 South Concourse Pkwy., Suite 750
PRP City,St,Zip:	Atlanta, GA 30324
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	04/08/1993
45 Report Received:	05/03/1993
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

147	**QUALA SERVICES LLC** **803 E 120TH ST** **CHICAGO, IL 60628**	**RCRA-LQG**	**1000462652** **ILD984808022**

RCRA-LQG:

Date form received by agency:	02/17/2011
Facility name:	QUALA SERVICES LLC
Facility address:	803 E 120TH ST CHICAGO, IL 60628
EPA ID:	ILD984808022
Contact:	BEVERLY M BURTON
Contact address:	101 S FRANKLIN ST STE 101 TAMPA, FL 33602
Contact country:	US
Contact telephone:	(813) 466-8424
Contact email:	BBURTON@QUALAWASH.COM
EPA Region:	05
Land type:	Private
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Map ID	Site	Database(s)	EPA ID Number

QUALA SERVICES LLC (Continued) **1000462652**

Owner/operator name: QUALA SERVICES LLC
Owner/operator address: 101 S FRANKLIN ST STE 101
TAMPA, FL 33602
Owner/operator country: US
Owner/operator telephone: (813) 466-8424
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 12/20/1990
Owner/Op end date: Not reported

Owner/operator name: QUALA SERVICES LLC
Owner/operator address: 101 S FRANKLIN ST STE 101
TAMPA, FL 33602
Owner/operator country: US
Owner/operator telephone: (813) 466-8424
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 12/20/1990
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/01/2010
Facility name: QUALA SERVICES LLC
Site name: PSC CONTAINER SVCS LLC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2008
Facility name: QUALA SERVICES LLC
Site name: PSC CONTAINER SERVICES LLC
Classification: Large Quantity Generator

Date form received by agency: 01/30/2008
Facility name: QUALA SERVICES LLC
Site name: PSC CONTAINER SERVICES LLC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2006
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SVC

Map ID	Site	Database(s)	EPA ID Number

QUALA SERVICES LLC (Continued) **1000462652**

Classification: Large Quantity Generator

Date form received by agency: 03/01/2004
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SVC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2002
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 03/01/2000
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 04/13/1998
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1998
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 03/01/1992
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D004
Waste name: ARSENIC

Waste code: D005
Waste name: BARIUM

Map ID	Site	Database(s)	EPA ID Number
	QUALA SERVICES LLC (Continued)		**1000462652**

Waste code: D006
Waste name: CADMIUM

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D010
Waste name: SELENIUM

Waste code: D011
Waste name: SILVER

Waste code: D012
Waste name: ENDRIN

Waste code: D018
Waste name: BENZENE

Waste code: D019
Waste name: CARBON TETRACHLORIDE

Waste code: D020
Waste name: CHLORDANE

Waste code: D021
Waste name: CHLOROBENZENE

Waste code: D022
Waste name: CHLOROFORM

Waste code: D023
Waste name: O-CRESOL

Waste code: D024
Waste name: M-CRESOL

Waste code: D025
Waste name: P-CRESOL

Waste code: D026
Waste name: CRESOL

Waste code: D027
Waste name: 1,4-DICHLOROBENZENE

Waste code: D028
Waste name: 1,2-DICHLOROETHANE

Biennial Reports:

Last Biennial Reporting Year: 2011

Map ID	Site	Database(s)	EPA ID Number
	QUALA SERVICES LLC (Continued)		**1000462652**

Annual Waste Handled:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs):	94163.2
Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs):	440
Waste code:	U001
Waste name:	ACETALDEHYDE (I)
Amount (Lbs):	93723.2
Waste code:	U019
Waste name:	BENZENE (I,T)
Amount (Lbs):	93723.2
Waste code:	U122
Waste name:	FORMALDEHYDE
Amount (Lbs):	93723.2
Waste code:	U188
Waste name:	PHENOL
Amount (Lbs):	93723.2
Waste code:	U389
Waste name:	CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3,3-TRICHLORO-2-PROPENYL) ESTER (OR) TRIALLATE
Amount (Lbs):	1320

Facility Has Received Notices of Violations:

Regulation violated:	Not reported
Area of violation:	Permits - General Information
Date violation determined:	09/29/2009
Date achieved compliance:	07/09/2010
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/17/2010
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	EPA
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	QUALA SERVICES LLC (Continued)		**1000462652**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 09/29/2009
Date achieved compliance: 07/09/2010
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/17/2010
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 09/29/2009
Date achieved compliance: 07/09/2010
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/17/2010
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 09/29/2009
Date achieved compliance: 07/09/2010
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/17/2010
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/29/2009
Date achieved compliance: 07/09/2010
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/17/2010
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

QUALA SERVICES LLC (Continued) **1000462652**

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 01/04/1991
Date achieved compliance: 02/08/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/08/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - General Information
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 05/19/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/19/1994
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number

QUALA SERVICES LLC (Continued) **1000462652**

Evaluation date:	01/04/1991
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - Pre-transport
Date achieved compliance:	02/08/1991
Evaluation lead agency:	State

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147 **ALLWASTE CONTAINER SERVICES** **UST** **U001142641**
803 E 120TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2013510
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Phillips Services Corp
Owner Id:	U0007681
Owner Address:	803 E 120th St
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	12000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	12000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	6/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

ALLWASTE CONTAINER SERVICES (Continued) **U001142641**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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147 **NORTRU INC TRANSPORTATION GROUP** **RCRA-SQG** **1004694142**
801 E 120TH ST **ILD984890822**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	10/22/2009
Facility name:	NORTRU INC TRANSPORTATION GROUP
Facility address:	801 E 120TH ST CHICAGO, IL 60628
EPA ID:	ILD984890822
Contact:	JEFFREY O DAVIS
Contact address:	801 E 120TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(313) 824-5303
Contact email:	JDAVIS@PSCNOW.COM
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NORTRU
Owner/operator address:	801 E 120TH ST CHICAGO, IL 60628
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	03/13/2002
Owner/Op end date:	Not reported
Owner/operator name:	PSC ENVIRONMENTAL SVCS INC
Owner/operator address:	5151 SAN FELIPE DR STE 1600 HOUSTON, TX 77056
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	03/13/2002
Owner/Op end date:	Not reported
Owner/operator name:	WATKINS MOTOR LINES
Owner/operator address:	1144 W GRIFFIN RD PO BOX 95002 LAKELAND, FL 32804
Owner/operator country:	Not reported
Owner/operator telephone:	(813) 687-4545

Map ID	Site	Database(s)	EPA ID Number

NORTRU INC TRANSPORTATION GROUP (Continued) **1004694142**

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: Yes

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Pesticides
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Thermostats
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Historical Generators:
Date form received by agency: 10/11/2007
Facility name: NORTRU INC TRANSPORTATION GROUP
Classification: Small Quantity Generator

Date form received by agency: 06/29/1992
Facility name: NORTRU INC TRANSPORTATION GROUP
Site name: HIGHWAY TRANSPORT
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

Map ID	Site	Database(s)	EPA ID Number

NORTRU INC TRANSPORTATION GROUP (Continued) **1004694142**

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

Waste code: D018
Waste name: BENZENE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

---

157 **PRAXAIR DISTRIBUTION INC** **RCRA-CESQG** **1004476903**
12054 SOUTHWEST DOTY AVENUE **ILD082545732**
CHICAGO, IL 60628

RCRA-CESQG:
Date form received by agency: 03/01/2000
Facility name: PRAXAIR DISTRIBUTION INC
Facility address: 12054 SW DOTY AVE
CHICAGO, IL 60628
EPA ID: ILD082545732
Mailing address: 12000 ROOSEVELT RD
HILLSIDE, IL 60162
Contact: DEBBIE BOE
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (773) 568-8840
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No

Map ID	Site	Database(s)	EPA ID Number
	PRAXAIR DISTRIBUTION INC (Continued)		**1004476903**

Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/12/1998
Facility name: PRAXAIR DISTRIBUTION INC
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 03/01/1996
Facility name: PRAXAIR DISTRIBUTION INC
Site name: LIQUID CARBONIC INDUSTRIES
Classification: Large Quantity Generator

Violation Status: No violations found

---

157 **SPILLS** **S111901168**
12054 S DOTY AVE **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 19980913
Incident Date: 04/22/1998
Date Received: 04/22/1998
Facility Address: 12054 S DOTY AVE
Facility City: CHICAGO
PRP Name: PRAXAIR INC
AC: Not reported

---

157 **LIQUID CARBONIC CORP** **UST** **U001142744**
12054 S W DOTY AVE **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2018568
Facility Status: CLOSED
Facility Type: NONE
Owner Name: Liquid Carbonic Corp
Owner Id: U0009226
Owner Address: 810 Jorie Blvd
Owner City,St,Zip: Oak Brook, IL 60521

Tank Number: 1
Tank Capacity: 2500
Tank Substance: Diesel Fuel
Last Used Date: 9/14/1995
OSFM First Notify Date: 4/1/1986
Tank Status: Removed
Red Tag Issue Date: Not reported

Map ID	Site	Database(s)	EPA ID Number

LIQUID CARBONIC CORP (Continued) **U001142744**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

158 **TRI CITY TANK WASH** **UST** **U001143228**
11901 S COTTAGE GROVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2014827
Facility Status:	INACTIVE
Facility Type:	**NONE**
Owner Name:	Tri City Tank Wash
Owner Id:	U0015198
Owner Address:	11901 S Cottage Grove
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986

Map ID	Site	Database(s)	EPA ID Number
	TRI CITY TANK WASH (Continued)		**U001143228**

Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

161 — **SPILLS** — **S111896851** / **N/A**

12101 S DOTY AVE
CHICAGO, IL

SPILLS:

Incident ID:	19961553
Incident Date:	08/27/1996
Date Received:	08/27/1996
Facility Address:	12101 S DOTY AVE
Facility City:	CHICAGO
PRP Name:	MEDUSA PORTLAND CEMENT
AC:	Not reported

---

161 — **ERNS** — **96505325** / **N/A**

12101 S. DOTY
CHICAGO, IL 60633

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

---

161 — **ERNS** — **99628634** / **N/A**

12101 SOUTH DOTY AVE DOCK ON CALUMET RIVER SLIP 3
CHICAGO, IL

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

---

162 — **SPILLS** — **S111877539** / **N/A**

11900 S COTTAGE GROVE AVE
CHICAGO, IL

SPILLS:

Incident ID:	19902351
Incident Date:	Not reported
Date Received:	08/17/1990
Facility Address:	11900 S COTTAGE GROVE AVE
Facility City:	CHICAGO
PRP Name:	SAMUEL G. KEYWELL CO.

Map ID	Site	Database(s)	EPA ID Number
	(Continued)		**S111877539**

AC: Not reported

189	**AMOOC SS #18717 FACILITY #24277** **12701 SOUTH HALSTED** **CHICAGO, IL 60600**	**UST**	**U001141866** **N/A**

UST:

Facility ID:	2023194
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	BP Products North America, Inc.
Owner Id:	U0000552
Owner Address:	P. O. Box 6038 Environmental Compliance Department
Owner City,St,Zip:	Artesia, CA 90702

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	AMOOC SS #18717 FACILITY #24277 (Continued)		**U001141866**

Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

189	**12701 S DOTY AVE** **CHICAGO, IL**	**SPILLS**	**S111884590** **N/A**

SPILLS:

Incident ID:	19921832
Incident Date:	Not reported
Date Received:	07/07/1992
Facility Address:	12701 S DOTY AVE
Facility City:	CHICAGO
PRP Name:	RESERVE IRON & METAL
AC:	Not reported

189	**12701 S DOTY AVE** **CHICAGO, IL**	**SPILLS**	**S111905694** **N/A**

SPILLS:

Incident ID:	19992245
Incident Date:	09/30/1999
Date Received:	10/01/1999
Facility Address:	12701 S DOTY AVE
Facility City:	CHICAGO
PRP Name:	TRANS SCHENK
AC:	Not reported

189	**METAL MANAGEMENT MIDWEST INC** **12701 S DOTY AVE-B** **CHICAGO, IL 60633**	**RCRA-SQG**	**1014472131** **ILR000166009**

RCRA-SQG:

Date form received by agency:	03/28/2011
Facility name:	METAL MANAGEMENT MIDWEST INC
Facility address:	12701 S DOTY AVE-B CHICAGO, IL 60633
EPA ID:	ILR000166009
Contact:	DANIEL KOLLMON
Contact address:	12701 S DOTY AVE-B CHICAGO, IL 60633
Contact country:	US
Contact telephone:	(773) 383-9420
Contact email:	DANIEL.KOLLMON@SIMSMM.COM
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Map ID	Site	Database(s)	EPA ID Number

METAL MANAGEMENT MIDWEST INC (Continued) **1014472131**

Owner/Operator Summary:

Owner/operator name:	METAL MGT MIDWEST INC
Owner/operator address:	999 MCCLINTOCK BURR RIDGE, IL 60527
Owner/operator country:	US
Owner/operator telephone:	(630) 288-9400
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	05/23/2011
Owner/Op end date:	Not reported

Owner/operator name:	METAL MGT MIDWEST INC
Owner/operator address:	999 MCCLINTOCK BURR RIDGE, IL 60527
Owner/operator country:	US
Owner/operator telephone:	(630) 288-9400
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	05/23/2011
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
191	**CONTINENTAL GRAIN CO** **127TH & DOTY AVE** **CHICAGO, IL 60633**	**UST**	**U000791610** **N/A**

UST:

Facility ID:	2008867
Facility Status:	CLOSED
Facility Type:	**PORT DISTRICT**
Owner Name:	Il International Port Dist
Owner Id:	U0007390
Owner Address:	3600 E 95Th
Owner City,St,Zip:	Chicago, IL 60617

Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	9/1/1995
OSFM First Notify Date:	4/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	4/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

192	**12900 S DOTY** **CHICAGO, IL**	**SPILLS**	**S108045432** **N/A**

SPILLS:

Incident ID:	20041479
Incident Date:	Not reported
Date Received:	10/25/2004
Facility Address:	12900 S DOTY
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
193	**CALUMET NU-EARTH DIST CENTER** **NORTH 130TH ST & DOTY AVE** **CHICAGO, IL 60628**	**CERC-NFRAP**	**1003870307** **ILD980903686**

CERC-NFRAP:

Site ID:	0500927
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	Low priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	09/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	12/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	10/31/1991
Priority Level:	Not reported

Count: 27 records

FOCUS MAP 12 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	S108111043	CHICAGO REGIONAL PORT DISTRICT	111TH & CALUMET EXPY	60617	SWF/LF
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S108112646	PAXTON LANDFILL CORP #2	116TH & OGELSBY	60617	SWF/LF
CHICAGO	1014389970	COMED	119TH & PAULINA	60617	RCRA-SQG
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S108111042	CHICAGO MSD #4	124TH & OGELSBY	60617	SWF/LF
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	1004695029	ARMY COE LOCK DAM 01	134TH AND CALUMET RIVER	60633	RCRA-CESQG
CHICAGO	S108939041	USX REALTY DEVELOPMENT PBR	3426 89TH ST E	60617	SWF/LF
CHICAGO	U003838643	95TH STREET PROPERTY	95TH ST & COLFAZ AVE	60617	UST
CHICAGO	1001228053	CDOT/BRIDGES	95TH ST BRIDGE/CALUMET RIVER	60617	RCRA-LQG
CHICAGO	S107926345	VAN VLISSINGEN PROPERTY	96TH & VAN VLISSINGEN RD	60617	SSU
CHICAGO	U004158163	T. J. OBRIEN LOCK & DAM	13400 S CALUMET RIV	60633	UST
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	S108111350	ENVIROTHERM	11700 STONY IS	60617	SWF/LF
CHICAGO	1008150443	PAXTON LANDFILL CORP	TORRENCE AVE	60617	SWF/LF
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST	60827	LUST

Focus Map 13

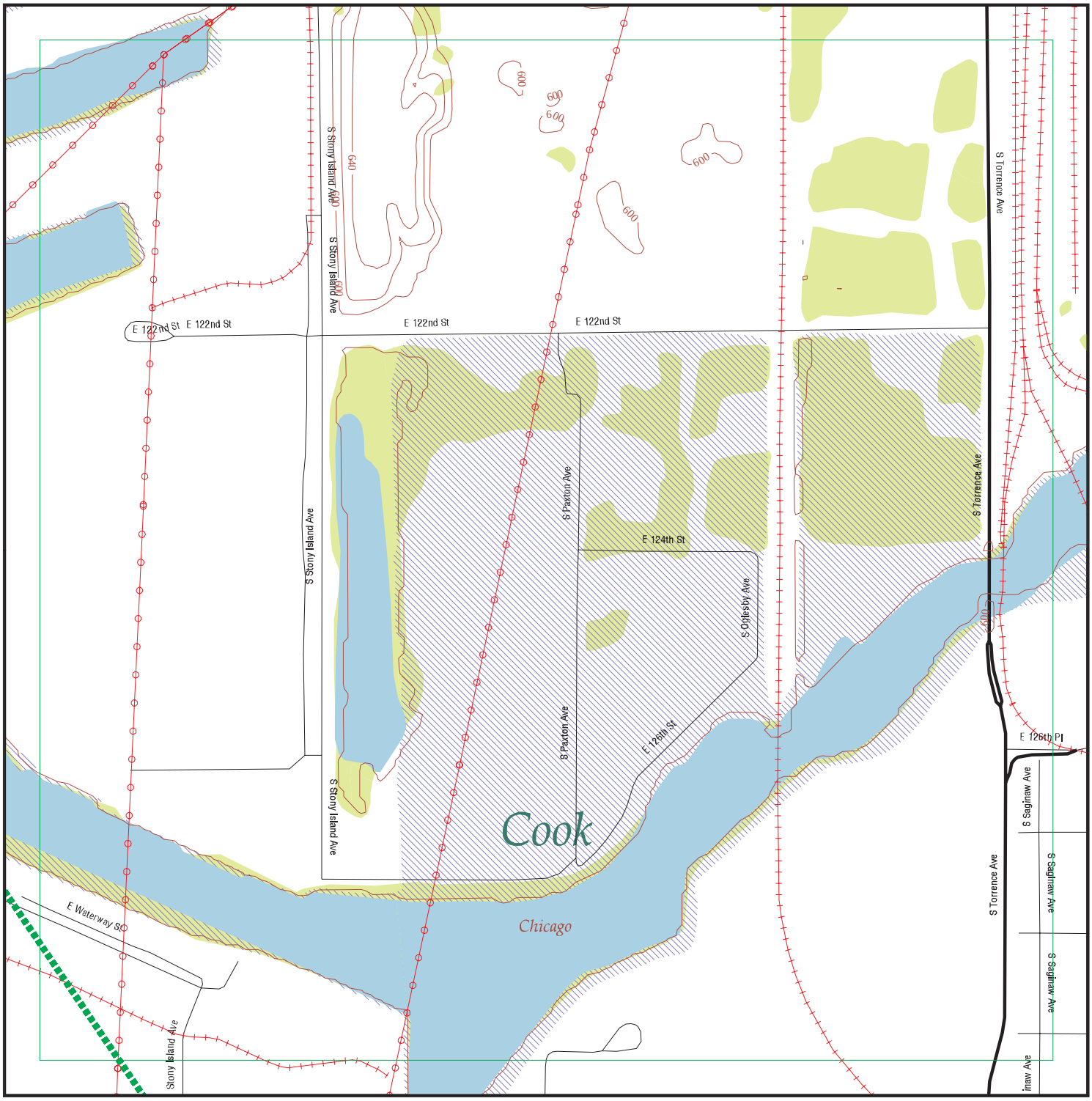

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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Count: 20 records

FOCUS MAP 13 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1014390033	COMED	100TH & TORRENCE	60633	RCRA-SQG
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S108111043	CHICAGO REGIONAL PORT DISTRICT	111TH & CALUMET EXPY	60617	SWF/LF
CHICAGO	1010784332	COMED	113TH & TORRENCE	60617	RCRA-LQG
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S108112646	PAXTON LANDFILL CORP #2	116TH & OGELSBY	60617	SWF/LF
CHICAGO	S109756592	CLEAN HARBORS	118TH & STONY ISLAND RD	60633	MANIFEST
CHICAGO	S109756593	CLEAN HARBORS OF CHICAGO INC	118TH & STONY ISLAND RD	60633	MANIFEST
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	S108111042	CHICAGO MSD #4	124TH & OGELSBY	60617	SWF/LF
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S108939041	USX REALTY DEVELOPMENT PBR	3426 89TH ST E	60617	SWF/LF
CHICAGO	S107926345	VAN VLISSINGEN PROPERTY	96TH & VAN VLISSINGEN RD	60617	SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
CHICAGO	S108111350	ENVIROTHERM	11700 STONY IS	60617	SWF/LF
CHICAGO	1008150443	PAXTON LANDFILL CORP	TORRENCE AVE	60617	SWF/LF

Focus Map 14

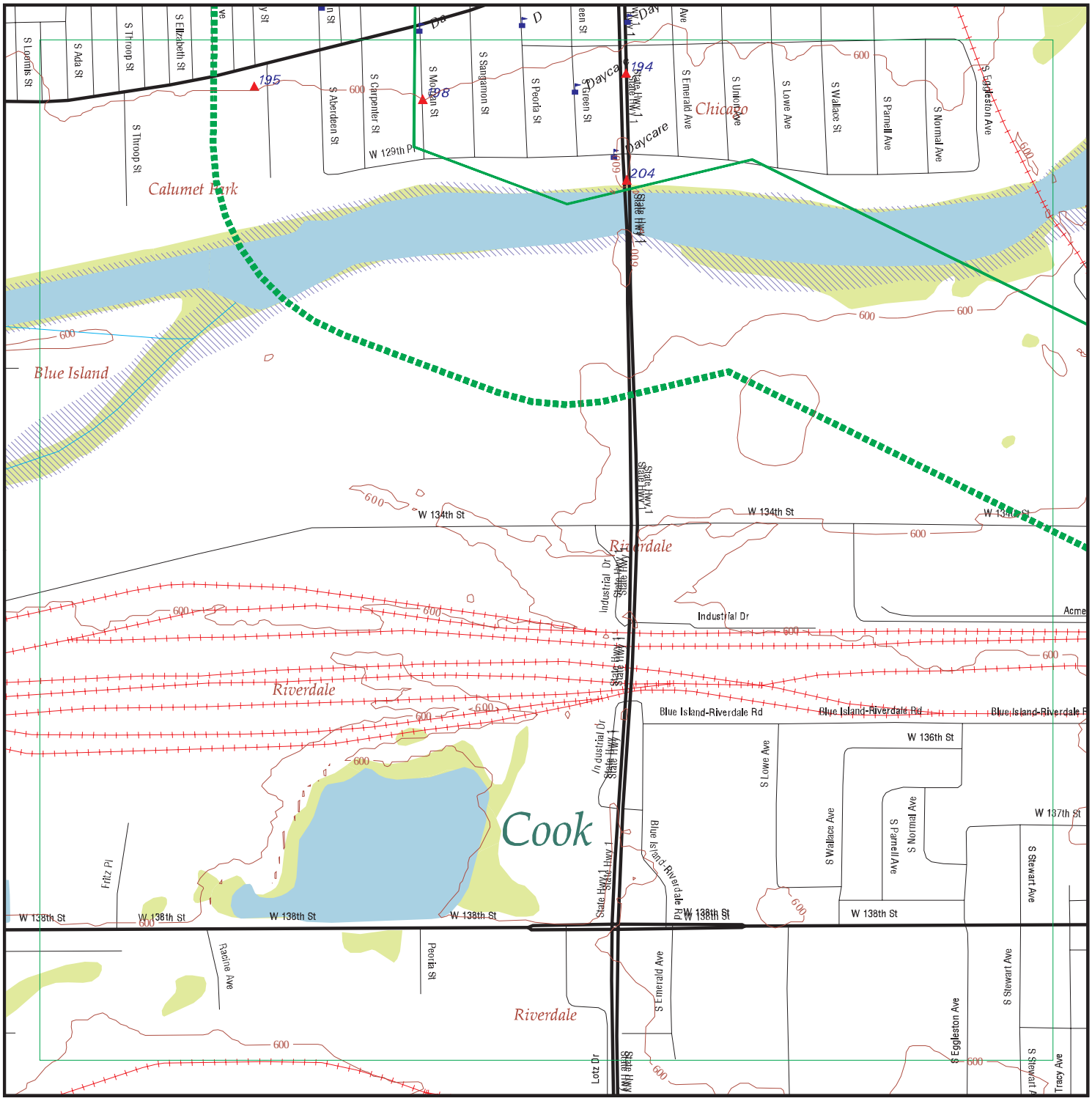

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

N

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

0 1/8 1/4

Scale in Miles

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FOCUS MAP 14 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	1
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	1
RCRA-CESQG	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	1
UST	3
SPILLS	1
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
194	**YOUNGS AUTO SUPPLY INC** **12853 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000315322** **ILD025355173**

RCRA-SQG:

Date form received by agency:	10/02/1986
Facility name:	YOUNGS AUTO SUPPLY INC
Facility address:	12853 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD025355173
Contact:	VINCE PALERMO
Contact address:	12853 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 568-0001
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PALERMO JOSEPH
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

Map ID	Site	Database(s)	EPA ID Number

YOUNGS AUTO SUPPLY INC (Continued) **1000315322**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

---

194 **CHRIST CHURCH BAPTIST** **UST** **U003762893**
12844 S HALSTED ST **N/A**
CHICAGO, IL 60643

UST:
Facility ID: 2040075
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: Christ Church Baptist
Owner Id: U0029746
Owner Address: 12844 S Halsted St
Owner City,St,Zip: Chicago, IL 60643

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: Not reported
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
194	**CHRIST CHURCH** **12844 SOUTH HALSTED ST.** **CHICAGO, IL 60628**	**LUST**	**S104530683** **N/A**

LUST:

Incident Num:	20000796
IL EPA Id:	0316495130
Product:	Other Petro
IEMA Date:	05/01/2000
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Christ Church
PRP Contact:	Rev. Lee Toussaint
PRP Address:	12844 South Halsted St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7088498711
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

194	**12844 S HALSTED ST** **CHICAGO, IL**	**SPILLS**	**S111907108** **N/A**

SPILLS:

Incident ID:	20000796
Incident Date:	Not reported
Date Received:	05/01/2000
Facility Address:	12844 S HALSTED ST
Facility City:	CHICAGO
PRP Name:	CHRIST CHURCH
AC:	Not reported

195	**CIZCAR ET AL/VACANT LOT** **1137-1141 VERMONT AVE** **CALUMET PARK, IL 60409**	**CERC-NFRAP**	**1002886325** **ILD980500144**

CERC-NFRAP:

Site ID:	0500575
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	08/01/1980
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	Not reported
Date Completed:	03/25/1982

Map ID	Site	Database(s)	EPA ID Number

CIZCAR ET AL/VACANT LOT (Continued) **1002886325**

Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	03/25/1982
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	02/01/1984
Priority Level:	Low priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	03/31/1986
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	08/23/1993
Priority Level:	Not reported

---

198 **TRIPLEX MARINE SERV** **UST** **U000181285**
13100 S MORGAN ST **N/A**
RIVERDALE, IL 60627

UST:

Facility ID:	2028752
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Triplex Marine Serv
Owner Id:	U0018321
Owner Address:	13100 S Morgan St
Owner City,St,Zip:	Riverdale, IL 60627
Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	11/19/1991
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
204	**RIVERDALE VILLAGE OF** **130TH & HALSTED ST** **RIVERDALE, IL 60627**	**UST**	**U001134487** **N/A**

UST:

Facility ID:	2001711
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Riverdale Village Of
Owner Id:	U0012804
Owner Address:	325 W 142nd St
Owner City,St,Zip:	Riverdale, IL 60827
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	1/16/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Count: 20 records

FOCUS MAP 14 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLUE ISLAND	S108113026	SEXTON	123RD ST & CALIFORNIA	60406	SWF/LF
BLUE ISLAND	1014476128	2833 W. 139TH ST - TOD 12E	2833 W 139TH SAINT VACANT LOT	60406	US BROWNFIELDS
BLUE ISLAND	1014476133	2853 W. 139TH ST - TOD SITE 12C	2853 W 139TH SAINT CITY OWNED VACANT	60406	US BROWNFIELDS
BLUE ISLAND	1014476132	2849 W. 139TH ST - TOD SITE 12B	2849 W 139TH SAINT VACANT CHURCH PROP	60406	US BROWNFIELDS
BLUE ISLAND	1014476129	2837 W. 139TH ST - TOD SITE 12F	2837 W 139TH SAINT VACANT LOT	60406	US BROWNFIELDS
BLUE ISLAND	1014476130	2841 W. 139TH ST - TOD SITE 12G	2841 W 139TH SAINT CITY OWNED VACANT	60406	US BROWNFIELDS
BLUE ISLAND	1004693546	KILSBY ROBERTS	2850 W 139TH ST	60406	RCRA-CESQG
BLUE ISLAND	1003108961	CLARK/BLUE ISLAND	CLARK REFINERY, 13100 S KEDZIE	60406	CERCLIS
BLUE ISLAND	S105015149	CLARK BLUE ISLAND REFINERY	1300 S KEDZIE	60406	SSU
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS
RIVERDALE	S103292952	RIVERDALE PLATING	6860 W 134TH ST	60827	LUST
RIVERDALE	S106121908	TWIN OUTDOOR THEATER	13701 S UNION AVE	60827	SRP

Focus Map 15

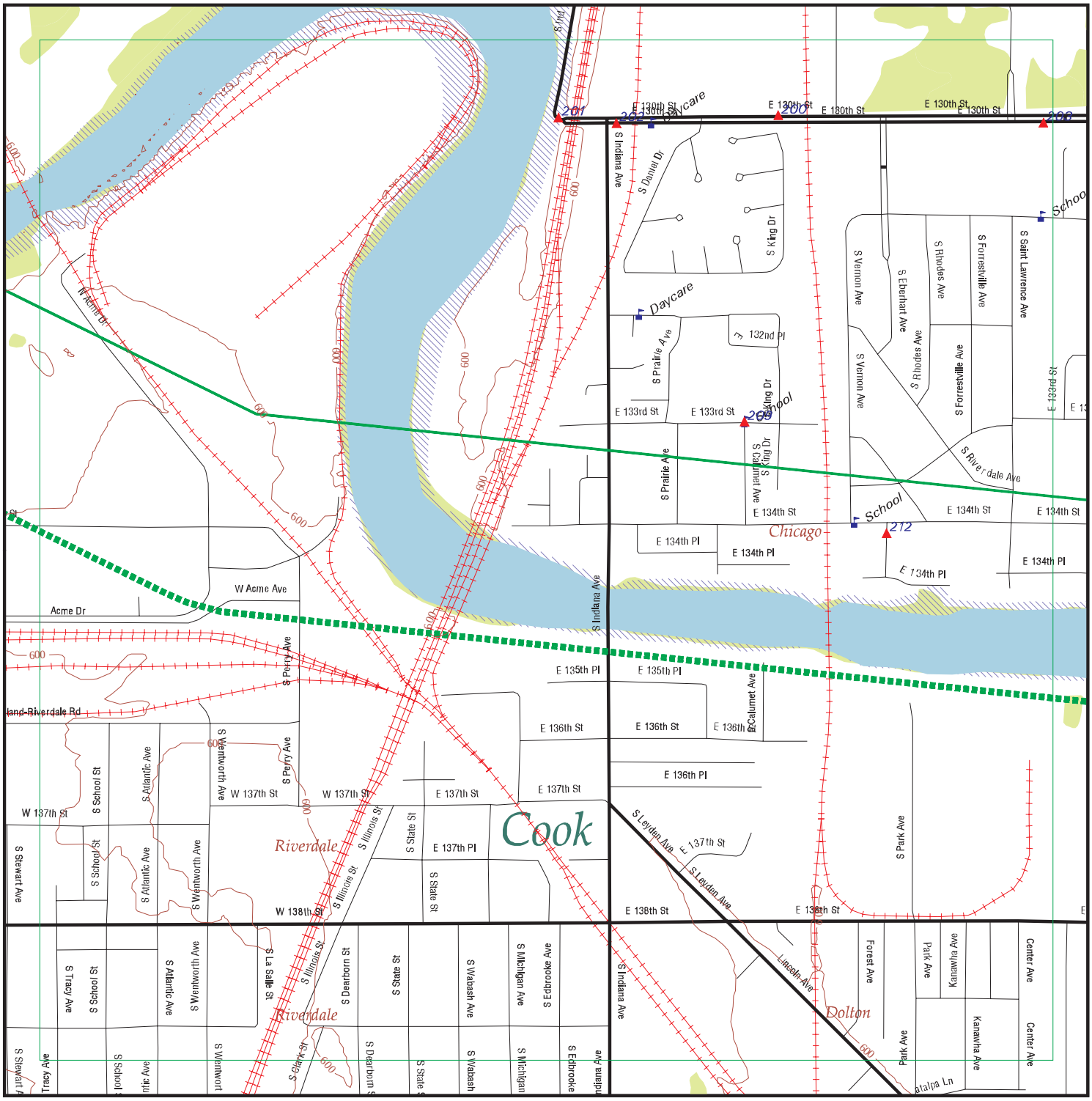

EDR Environmental Data Resources Inc

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

N

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

0 1/8 1/4

Scale in Miles

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FOCUS MAP 15 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	1
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	2
RCRA-CESQG	1
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
IL SSU	0
IL SWF/LF	0
IL LUST	0
IL UST	5
WI MANIFEST	1
IL SPILLS	0
IL ENG CONTROLS	0
IL INST CONTROL	0
IL SRP	0
IL DRYCLEANERS	0
IL BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
200	**MWRDGC METROPOLITAN WATER RECLAMATION DI** **400 E 130TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG** **WI MANIFEST**	**1000131012** **ILD000870832**

RCRA-CESQG:

Date form received by agency:	03/01/1998
Facility name:	MWRDGC METROPOLITAN WATER RECLAMATION DI
Site name:	MWRDGC
Facility address:	400 E 130TH ST CHICAGO, IL 60628
EPA ID:	ILD000870832
Mailing address:	2918 E 95TH ST CHICAGO, IL 60617
Contact:	WILLIAM PAPKE
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(312) 821-2349
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/01/1996
Facility name:	MWRDGC METROPOLITAN WATER RECLAMATION DI
Site name:	MWRDGC

Map ID	Site	Database(s)	EPA ID Number

MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued) **1000131012**

Classification: Large Quantity Generator

Date form received by agency: 02/15/1996
Facility name: MWRDGC METROPOLITAN WATER RECLAMATION DI
Classification: Conditionally Exempt Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: SR - 722.141(a)
Area of violation: Generators - General
Date violation determined: 09/07/1999
Date achieved compliance: 12/07/1999
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/05/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.141(a)
Area of violation: Generators - General
Date violation determined: 09/07/1999
Date achieved compliance: 12/07/1999
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 09/13/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 09/07/1999
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/07/1999
Evaluation lead agency: State

Evaluation date: 01/29/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

WI MANIFEST:
Year: 10
EPA ID: ILD000870832
FID: Not reported
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported

Map ID	Site	Database(s)	EPA ID Number
	MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued)		**1000131012**

Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 09
EPA ID: ILD000870832
FID: Not reported
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported

Map ID	Site	Database(s)	EPA ID Number
	MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued)		**1000131012**

Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 08
EPA ID: ILD000870832
FID: Not reported
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported

Map ID	Site	Database(s)	EPA ID Number
	MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued)		**1000131012**

Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 07
EPA ID: ILD000870832
FID: 0
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: 0
Contact Telephone: 0
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported

Map ID	Site	Database(s)	EPA ID Number

MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued) **1000131012**

Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 06
EPA ID: ILD000870832
FID: 0
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 05
EPA ID: ILD000870832
FID: 0
ACT Code: 203
ACT Status: A

Map ID	Site	Database(s)	EPA ID Number

MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued) **1000131012**

ACT Code 1:	203
ACT Name:	HW Generator - Very Small
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	0
Contact Telephone:	0
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

---

200 **CALUMET WATER RECLAMATION PLANT** **IL UST** **U001142814**
400 E. 130TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2018929
Facility Status:	ACTIVE
Facility Type:	**CITY / TOWN**
Owner Name:	Metropolitan Water Reclamation District
Owner Id:	U0010188
Owner Address:	100 East Erie Street
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	15000
Tank Substance:	Diesel Fuel

Map ID	Site	Database(s)	EPA ID Number
	CALUMET WATER RECLAMATION PLANT (Continued)		**U001142814**

Last Used Date:	Not reported
OSFM First Notify Date:	1/7/1987
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1979
Green Tag Decal:	**L003680**
Green Tag Issue Date:	**3/11/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	1/7/1987
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1976
Green Tag Decal:	**L003680**
Green Tag Issue Date:	**3/11/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	1/7/1987
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1982
Green Tag Decal:	**L003680**
Green Tag Issue Date:	**3/11/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
201	**COOK COUNTY LUMBER CO** **200 E 130TH ST** **CHICAGO, IL 60627**	**IL UST**	**U001142356** **N/A**

UST:

Facility ID:	2003404
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Cook County Lumber Co
Owner Id:	U0003394
Owner Address:	200 E 130Th St
Owner City,St,Zip:	Chicago, IL 60627

Tank Number:	1

Map ID	Site	Database(s)	EPA ID Number
	COOK COUNTY LUMBER CO (Continued)		**U001142356**

Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
202	**INTERNATIONAL TRANSP SER INC** **130TH & INDIANA AVE** **RIVERDALE, IL 60627**	**IL UST**	**U000160789** **N/A**

UST:

Facility ID:	2001838
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	International Transp Ser Inc
Owner Id:	U0007571
Owner Address:	3300 Ne Expressway Ste 1-M
Owner City,St,Zip:	Atlanta, GA 30341
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	2/13/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
202	**PULLMAN FACTORY** **130TH ST & INDIANA** **CHICAGO, IL 60643**	**CERCLIS**	**1000289828** **ILD981959208**

CERCLIS:

Site ID:	0501149
EPA ID:	ILD981959208
Facility County:	COOK
Short Name:	PULLMAN FACTORY
Congressional District:	02
IFMS ID:	B5JE
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility

Map ID	Site	Database(s)	EPA ID Number

PULLMAN FACTORY (Continued) **1000289828**

DMNSN Number: Not reported
Site Orphan Flag: N
RCRA ID: Not reported
USGS Quadrangle: Not reported
Site Init By Prog: Not reported
NFRAP Flag: Not reported
Parent ID: Not reported
RST Code: Not reported
EPA Region: 05
Classification: Not reported
Site Settings Code: Not reported
NPL Status: Not on the NPL
DMNSN Unit Code: Not reported
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: HRS Start Needed
Non NPL Status Date: 20000120
Site Fips Code: 17031
CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 06/17/1987
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 08/14/1987
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 10/19/1990
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE

Map ID	Site	Database(s)	EPA ID Number

PULLMAN FACTORY (Continued) **1000289828**

Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	EXPANDED SITE INSPECTION
Date Started:	12/21/1993
Date Completed:	01/13/1995
Priority Level:	Recommended for HRS Scoring
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

---

202 **130TH CITGO** **IL UST** **U003971940**
13002 S INDIANA **N/A**
CHICAGO, IL 60627

UST:

Facility ID:	2042131
Facility Status:	NOT INSTALLED
Facility Type:	**NONE**
Owner Name:	Sibi Kabalimato
Owner Id:	U0031927
Owner Address:	1519 W 81st St
Owner City,St,Zip:	Chicago, IL 60620

Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not Installed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not Installed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	130TH CITGO (Continued)		**U003971940**

Self Service Permit Inspection Date **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

202	**SMITH TIRE SERVICE** **13004 S INDIANA** **CHICAGO, IL 60627**	**RCRA-SQG**	**1001024401** **ILR000003749**

RCRA-SQG:

Date form received by agency:	12/24/2009
Facility name:	SMITH TIRE SERVICE
Facility address:	13004 S INDIANA CHICAGO, IL 60627
EPA ID:	ILR000003749
Contact:	WILLIE SMITH
Contact address:	520 W 127TH PL CHICAGO, IL 60627
Contact country:	US
Contact telephone:	(312) 468-4134
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SMITH WILLIE
Owner/operator address:	520 W 127TH PL CHICAGO, IL 60627
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 568-9847
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Map ID	Site	Database(s)	EPA ID Number

SMITH TIRE SERVICE (Continued) **1001024401**

Historical Generators:
Date form received by agency: 04/28/1995
Facility name: SMITH TIRE SERVICE
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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203 **ERNS** **98467878**
633 EAST 130TH ST. **N/A**
DOLTON, IL 60419

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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209 **DUBOIS** **RCRA-SQG** **1001123582**
330 E 133RD ST **ILR000032862**
CHICAGO, IL 60627

RCRA-SQG:
Date form received by agency: 01/08/1997
Facility name: DUBOIS
Facility address: 330 E 133RD ST
CHICAGO, IL 60627
EPA ID: ILR000032862
Contact: JOYCE JOHNSON
Contact address: 330 E 133RD ST
CHICAGO, IL 60627
Contact country: US
Contact telephone: (773) 535-5582
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

Map ID	Site	Database(s)	EPA ID Number
	DUBOIS (Continued)		**1001123582**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
212	**SKIPPER'S MARINA** **13421 S VERNON** **CHICAGO, IL 60827**	**IL UST**	**U000865873** **N/A**

UST:

Facility ID:	2007724
Facility Status:	ACTIVE
Facility Type:	**MARINA**
Owner Name:	Earl Strombeck
Owner Id:	U0014025
Owner Address:	13421 S Vernon
Owner City,St,Zip:	Chicago, IL 608271806
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1997
OSFM First Notify Date:	4/26/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	SKIPPER'S MARINA (Continued)		**U000865873**

Install Date:	Not reported
Green Tag Decal:	**K003801**
Green Tag Issue Date:	**9/1/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/26/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	6/30/1975
Green Tag Decal:	**K003801**
Green Tag Issue Date:	**9/1/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Count: 11 records

FOCUS MAP 15 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		IL LUST, IL SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		IL SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		IL LUST, IL SPILLS
CHICAGO	S108891646		11900 LOOMIS		IL LUST, IL SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	IL SSU
DOLTON	1012209907	DOLTON HAZMAT	DOLTON AVE EXIT ON THE BISHOP FORD	60419	CERCLIS
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST	60827	IL LUST
RIVERDALE	S103292952	RIVERDALE PLATING	6860 W 134TH ST	60827	IL LUST
RIVERDALE	S105427839	PM AG PROD. INC.	3550 S INDIANA AVE	60827	IL LUST

Focus Map 16

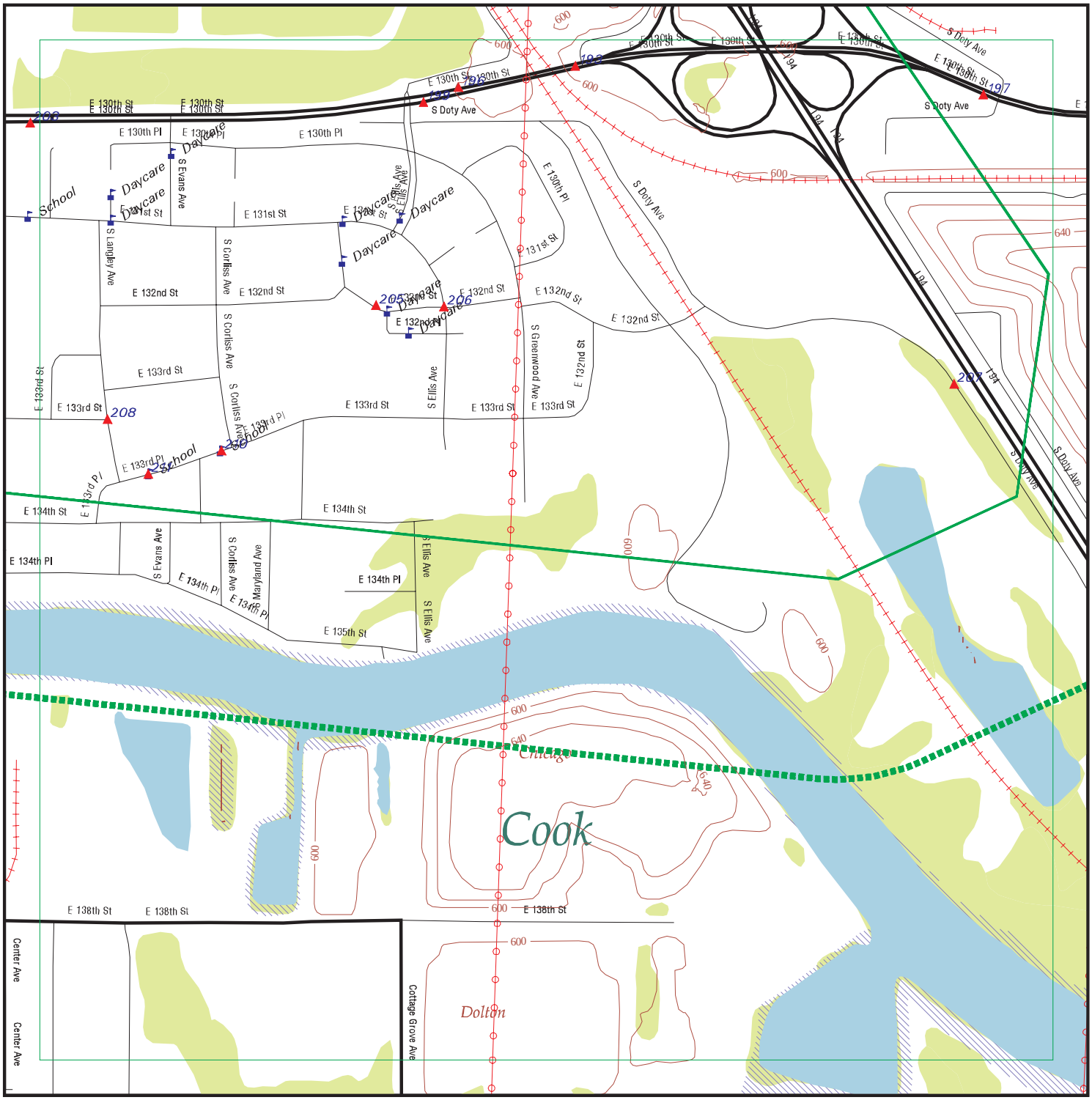

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 16 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	1
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	6
RCRA-CESQG	3
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	3
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	1
UST	3
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
SRP	1
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
193	**CALUMET NU-EARTH DIST CENTER** **NORTH 130TH ST & DOTY AVE** **CHICAGO, IL 60628**	**CERC-NFRAP**	**1003870307** **ILD980903686**

CERC-NFRAP:

Site ID:	0500927
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	Low priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	09/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	12/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	10/31/1991
Priority Level:	Not reported

196	**CHICAGO, CITY OF** **1100 E 130TH PL** **CHICAGO, IL 60628**	**RCRA-SQG**	**1006930428** **ILR000122952**

RCRA-SQG:

Date form received by agency:	07/31/2003
Facility name:	CHICAGO, CITY OF
Facility address:	1100 E 130TH PL CHICAGO, IL 60628
EPA ID:	ILR000122952
Mailing address:	30 N LASALLE 25TH FL CHICAGO, IL 60602
Contact:	TERRY SHEAHAN
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(312) 742-4806
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

Map ID	Site	Database(s)	EPA ID Number
	CHICAGO, CITY OF (Continued)		**1006930428**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	07/31/2003
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	07/31/2003
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
197	**MOBILE STORAGE GROUP** **1465 E 130TH ST** **CHICAGO, IL 60633**	**RCRA-SQG**	**1000907064** **IL0000366484**

RCRA-SQG:

Date form received by agency:	06/14/1994
Facility name:	THREE QS AUTO INC
Facility address:	1465 E 130TH ST CHICAGO, IL 60633
EPA ID:	IL0000366484
Contact:	WARREN QUARCINI
Contact address:	1465 E 130TH ST CHICAGO, IL 60633
Contact country:	US
Contact telephone:	(312) 646-1600
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	THREE QS AUTO INC
Owner/operator address:	1465 E 130TH ST CHICAGO, IL 60633
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 646-1600
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

Map ID	Site	Database(s)	EPA ID Number

MOBILE STORAGE GROUP (Continued) **1000907064**

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

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199 **LAND & LAKES TRANSFER STATION** **RCRA-SQG** **1004697781**
1258-1300 E 130TH ST **ILR000081000**
CHICAGO, IL 60827

RCRA-SQG:

Date form received by agency:	09/01/2000
Facility name:	LAND & LAKES TRANSFER STATION
Facility address:	1258-1300 E 130TH ST CHICAGO, IL 60827
EPA ID:	ILR000081000
Mailing address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Contact:	WM KARPAS
Contact address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Contact country:	US
Contact telephone:	(847) 825-5000
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MARINA DEVELOPMENTS INC
Owner/operator address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 825-5000
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No

Map ID	Site	Database(s)	EPA ID Number

LAND & LAKES TRANSFER STATION (Continued) **1004697781**

Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	D010
Waste name:	SELENIUM
Waste code:	D018
Waste name:	BENZENE
Violation Status:	No violations found

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203 **ERNS** **98467878**

633 EAST 130TH ST. **N/A**
DOLTON, IL 60419

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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205 **CHICAGO HOUSING AUTHORITY** **LUST** **S108649962**
940 EAST 132ND STREET **SRP** **N/A**
CHICAGO, IL 60627

LUST:

Incident Num:	20070682
IL EPA Id:	0316545003
Product:	Gasoline
IEMA Date:	05/21/2007
Project Manager:	Jones
Project Manager Phone:	(217) 524-1253
Email:	Steve.Jones@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	07/12/2007
45 Report Received:	08/08/2007
NFA/NFR Letter:	**09/10/2007**
NFR Date Recorded:	10/29/2007

SRP:

IL EPA Id:	0316545003

Map ID	Site	Database(s)	EPA ID Number

CHICAGO HOUSING AUTHORITY (Continued) **S108649962**

US EPA Id:	ILD981098395
Longitude:	-87.59881
Latitude:	41.65668
Contact Name:	John Gerut
Contact Address:	60 East Van Buren Street
Contact Address2:	13th Floor
Contact City,St,Zip:	Chicago, IL 60605-
Contact Phone:	(312) 913-7586
Date Enrolled:	11/23/2011
Point Of Contact:	Ala E. Sassila, P.E.
Consultant Company:	GSG Consultants, Inc.
Consultant Address:	855 West Adams Street
Consultant Address2:	Suite 200
Consultant City,St,Zip:	Chicago, IL 60607-
Consultant Phone:	(312) 733-6262
Proj Mgr Assigned:	Smith
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	2.589
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Chicago Housing Authority
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

---

205 **MAINTENANCE BUILDING** **UST** **U004107042**
940 E. 132ND STREET **N/A**
CHICAGO, IL 60661

UST:

Facility ID:	2043650
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Housing Authority
Owner Id:	U0002876
Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

MAINTENANCE BUILDING (Continued) **U004107042**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

205 **CARVER PARK NATATORIUM** **UST** **U001142250**
939 E 132ND ST **N/A**
CHICAGO, IL 60627

UST:

Facility ID:	2030903
Facility Status:	CLOSED
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Name:	Chicago Park District
Owner Id:	U0002888
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	10/1/1974
OSFM First Notify Date:	7/1/1992
Tank Status:	**Abandoned in place**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1956
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

205 **CARVER PARK** **RCRA-CESQG** **1010563392**
939 E 132ND ST **ILR000148049**
CHICAGO, IL 60627

RCRA-CESQG:

Date form received by agency:	07/20/2007
Facility name:	CARVER PARK
Facility address:	939 E 132ND ST
	CHICAGO, IL 60627
EPA ID:	ILR000148049
Mailing address:	425 E MCFETRIDGE
	CHICAGO, IL 60605
Contact:	LEEANN THOMAS
Contact address:	Not reported
	Not reported
Contact country:	Not reported
Contact telephone:	(312) 742-4287
Contact email:	Not reported

Map ID	Site	Database(s)	EPA ID Number

CARVER PARK (Continued) **1010563392**

EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 07/20/2007
Owner/Op end date: Not reported

Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: 07/20/2007
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Map ID	Site	Database(s)	EPA ID Number
	CARVER PARK (Continued)		**1010563392**

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

205	**941 E 132ND STREET** **CHICAGO, IL**	**ERNS**	**2004710762** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

205	**ALTGELD GARDENS** **977 E 132ND STREET** **CHICAGO, IL 60627**	**RCRA-CESQG**	**1004697962** **ILR000101980**

RCRA-CESQG:
Date form received by agency: 12/01/2000
Facility name: ALTGELD GARDENS
Facility address: 977 E 132ND STREET
CHICAGO, IL 60627
EPA ID: ILR000101980
Mailing address: 19156 S 85TH PLACE
MOIENA, IL 60448
Contact: THOOMAS CONNELLY
Contact address: 19156 S 85TH PLACE
MOIENA, IL 60448
Contact country: US
Contact telephone: (815) 469-7007
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICAGO HOUSING AUTHORITY
Owner/operator address: 626 W JACKSON BLVD
CHICAGO, IL 60606
Owner/operator country: Not reported
Owner/operator telephone: (312) 567-7775

Map ID	Site	Database(s)	EPA ID Number

ALTGELD GARDENS (Continued) **1004697962**

Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

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206 **ERNS** **99618837**
13201 SOUTH ELLIS **N/A**
CHICAGO, IL

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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207 **CARVER MILITARY ACADEMY** **RCRA-SQG** **1001116670**
13100 S DOTY AVE **ILR000026955**
CHICAGO, IL 60827

RCRA-SQG:
Date form received by agency: 07/05/2000
Facility name: CARVER MILITARY ACADEMY
Facility address: 13100 S DOTY AVE
CHICAGO, IL 608271516
EPA ID: ILR000026955
Contact: KAREN RAYMOND
Contact address: 13100 S DOTY AVE
CHICAGO, IL 608271516
Contact country: US
Contact telephone: (773) 535-5250
Contact email: Not reported

Map ID	Site	Database(s)	EPA ID Number

CARVER MILITARY ACADEMY (Continued) **1001116670**

EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 13100 S DOTY AVE
CHICAGO, IL 60827
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-5250
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003

Map ID	Site	Database(s)	EPA ID Number

CARVER MILITARY ACADEMY (Continued) **1001116670**

Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D004
Waste name: ARSENIC

Waste code: D007
Waste name: CHROMIUM

Waste code: D009
Waste name: MERCURY

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: P119
Waste name: AMMONIUM VANADATE

Waste code: U052
Waste name: CRESOL (CRESYLIC ACID)

Waste code: U112
Waste name: ACETIC ACID ETHYL ESTER (I)

Waste code: U122
Waste name: FORMALDEHYDE

Waste code: U123
Waste name: FORMIC ACID (C,T)

Waste code: U154
Waste name: METHANOL (I)

Waste code: U196
Waste name: PYRIDINE

Waste code: U220

Map ID	Site	Database(s)	EPA ID Number

CARVER MILITARY ACADEMY (Continued) **1001116670**

Waste name: BENZENE, METHYL-

Waste code: U228
Waste name: ETHENE, TRICHLORO-

Violation Status: No violations found

---

208 **SCHOOL / CHURCH** **UST** **U004138018**
13300 S. LANGLEY **N/A**
CHICAGO, IL 60627

UST:

Facility ID:	2044351
Facility Status:	EXEMPT
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Our Lady of the Garden
Owner Id:	U0035305
Owner Address:	13300 S. Langley
Owner City,St,Zip:	Chicago, IL 60827
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

210 **WHEATLEY PHYLLIS CENTER** **RCRA-CESQG** **1004696979**
902 E 133RD PL **ILR000061234**
CHICAGO, IL 60627

RCRA-CESQG:

Date form received by agency:	02/08/1999
Facility name:	WHEATLEY PHYLLIS CENTER
Facility address:	902 E 133RD PL CHICAGO, IL 60627
EPA ID:	ILR000061234
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time;

Map ID	Site	Database(s)	EPA ID Number
	WHEATLEY PHYLLIS CENTER (Continued)		**1004696979**

or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHGO PUBLIC SCHOOLS 6WW
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
210	**CARVER PRIMARY** **901 E 133RD PL** **CHICAGO, IL 60627**	**RCRA-SQG**	**1001123533** **ILR000032375**

RCRA-SQG:

Date form received by agency:	12/30/1996
Facility name:	CARVER PRIMARY
Facility address:	901 E 133RD PL CHICAGO, IL 60627
EPA ID:	ILR000032375
Contact:	LINDA RANDOLPH
Contact address:	901 E 133RD PL CHICAGO, IL 60627
Contact country:	US
Contact telephone:	(773) 535-5674
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
211	**CARVER MIDDLE** **801 E 133RD PL** **CHICAGO, IL 60627**	**RCRA-SQG**	**1001123534** **ILR000032383**

RCRA-SQG:

Date form received by agency:	12/30/1996
Facility name:	CARVER MIDDLE
Facility address:	801 E 133RD PL CHICAGO, IL 60627
EPA ID:	ILR000032383
Contact:	CARRIE CLARK
Contact address:	801 E 133RD PL CHICAGO, IL 60627
Contact country:	US
Contact telephone:	(773) 535-5656
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Count: 21 records

FOCUS MAP 16 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	1004695029	ARMY COE LOCK DAM 01	134TH AND CALUMET RIVER	60633	RCRA-CESQG
CHICAGO	U003853346	FORMER PULLMAN FACTORY	11302 CORLISS AVE	60628	UST
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
DOLTON	U001629479	MARINE SERV	140TH COTTAGE GRV	60419	UST
DOLTON	1003870419	DOLTON MUNI LDFL	140TH ST & COTTAGE GROVE	60419	CERC-NFRAP
DOLTON	1006930445	THORNRIDGE HIGH SCHOOL	15000 COTTAGE GROVE	60419	RCRA-SQG
DOLTON	1012209907	DOLTON HAZMAT	DOLTON AVE EXIT ON THE BISHOP FORD	60419	CERCLIS
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST	60827	LUST
RIVERDALE	S103292952	RIVERDALE PLATING	6860 W 134TH ST	60827	LUST

Focus Map 17

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

Roads	Waterways	Powerlines	Water	Listed Sites
Major Roads	Railroads	Pipelines		Sensitive Receptors
Contour Lines	Study Boundary	Fault Lines		
National Wetlands Inventory	100-Yr Flood Zones			

N

0 1/8 1/4

Scale in Miles

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Count: 28 records

FOCUS MAP 17 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1012172074	BLOCK A - 15 PROPERTIES IN TIF DISTRICT	(STATE LINE ROAD FROM 153RD ST. TO 152ND. ST.)	60409	US BROWNFIELDS
CALUMET CITY	1012172075	BLOCK B - 75 PROPERTIES IN TIF DISTRICT	(STATE LINE ROAD FROM 154TH ST. TO 153RD. ST.)	60409	US BROWNFIELDS
CALUMET CITY	1014390033	COMED	100TH & TORRENCE	60633	RCRA-SQG
CALUMET CITY	1010317482	COM ED	129TH & CARONDOLET	60409	RCRA-SQG
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CALUMET CITY	U001133551	SHELL STATION 1182-02	147TH & TORRENCE AVE	60409	UST
CALUMET CITY	1001076920	SHELL OIL CO	147TH AND TORRENCE	60409	RCRA-SQG
CALUMET CITY	U004115056	GREEN LAKE POOL & BUILDINGS	159TH ST & TORRENCE AVE	60409	UST
CALUMET CITY	S108966686	FOREST PRESERVE DISTRICT OF COOK COUNTY	NE COR OF 159TH & TORRENCE ST	60409	LUST
CALUMET CITY	S109366537	FOREST PRESERVE DISTRICT OF COOK COUNTY	NE CORNER 159TH ST & TORRENCE AVE	60409	SRP
CALUMET CITY	1014349679	696 STATE LINE ROAD/A	696 STATE LINE RD	60409	US BROWNFIELDS
CALUMET CITY	1012172139	WENDY'S RESTAURANT	550-552 STATE LINE ROAD	60409	US BROWNFIELDS
CALUMET CITY	1012178502	BENCO CHEMICALS	700 STATE ST-C	60409	RCRA-CESQG
CALUMET CITY	S108414130	620/634 STATE LINE RD.	634 STATE LINE AVE	60409	BROWNFIELDS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S109756592	CLEAN HARBORS	118TH & STONY ISLAND RD	60633	MANIFEST
CHICAGO	S109756593	CLEAN HARBORS OF CHICAGO INC	118TH & STONY ISLAND RD	60633	MANIFEST
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1004695029	ARMY COE LOCK DAM 01	134TH AND CALUMET RIVER	60633	RCRA-CESQG
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
DOLTON	1012209907	DOLTON HAZMAT	DOLTON AVE EXIT ON THE BISHOP FORD	60419	CERCLIS
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST	60827	LUST
RIVERDALE	S103292952	RIVERDALE PLATING	6860 W 134TH ST	60827	LUST

Section 3

County Level Orphan Sites

Count: 4347 records

COOK COUNTY, IL - ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	91242062	79 ST & CENTRAL 47ST OF CICERO	79 ST & CENTRAL 47ST OF CICERO		ERNS
CHICAGO	S108968213		RD & OLDFIELD RD		SPILLS
CHICAGO	S111877705		NORTH & LASALLE		SPILLS
CHICAGO	S111882937		NORTH & ASHLAND		SPILLS
CHICAGO	90189323	126 ST & FRONTAGE BY METRO SANITARY DIST	126 ST & FRONTAGE BY METRO SANITARY DIST		ERNS
CHICAGO	90189321	I94 & 130TH SW QUADRANT	I94 & 130TH SW QUADRANT		ERNS
CHICAGO	S111925634		I - RAMP 55ATPULASKI RD		SPILLS
CHICAGO	S111908406		I - 90ATWILSON AVE		SPILLS
CHICAGO	S111913846		I - 190ATMANNHEIM RD		SPILLS
CHICAGO	2011964313	MP 00518 CALUMET YARD DEARBORN DIVISION	MP 00518		ERNS
CHICAGO	2009898893	MP: 09514	MP: 09514		ERNS
CHICAGO	2008898893	MP: 09514	MP: 09514		ERNS
CHICAGO	92282850	1465 E. 100 AND 30TH ST.	1465 E. 100 AND 30TH ST.		ERNS
CHICAGO	S111914075		10000TH W OHARE & OHARE AIRPORT 60666		SPILLS
CHICAGO	S109953775		100TH & DORCHESTER		SPILLS
CHICAGO	8714920	100TH & EWING (ONE BLOCK EAST)	100TH & EWING (ONE BLOCK EAST)		ERNS
CHICAGO	2012103741		S 100TH ST		ERNS
CHICAGO	S111925275		100TH		SPILLS
CHICAGO	S111922136		100TH ST		SPILLS
CHICAGO	S111903512		3259 E 100TH SAINT KCBX TERMINALS COM		SPILLS
CHICAGO	S111891992		W 100TH & S PLYMOUTH CT		SPILLS
CHICAGO	S109327349		101ST & HARLEM AVE		SPILLS
CHICAGO	S111880789		6205 W 101ST ST		SPILLS
CHICAGO	98445288	E 103 STREET MILE POST 510.5	E 103 STREET MILE POST 510.5		ERNS
CHICAGO	S108045277		103RD ST		SPILLS
CHICAGO	S111875405		103RD & YELLOW FREIGHT		SPILLS
CHICAGO	S111875748		103RD & CALUMET		SPILLS
CHICAGO	S111898938		103RD & SPRINGFIELD		SPILLS
CHICAGO	S111877819		103RD ST & STONY ISLAND AVE		SPILLS
CHICAGO	S111903230		325 E 103RD ROW		SPILLS
CHICAGO	S111879357		103RD & DOTY STS		SPILLS
CHICAGO	S111894735		103RD ST & CALUMET CANAL		SPILLS
CHICAGO	S111890747		1100 103RD ST		SPILLS
CHICAGO	S111892600		7711 W 103RD ST		SPILLS
CHICAGO	S111880466		4001 E 103RD AVE		SPILLS
CHICAGO	2002592420	103RD AND KEDZIE	103RD AND KEDZIE	0	ERNS
CHICAGO	2009900518	104TH STREET	104TH STREET		ERNS
CHICAGO	2008900518	104TH STREET	104TH STREET		ERNS
CHICAGO	S111893119		104TH & TORRANCE AVE		SPILLS
CHICAGO	2000531564	104TH STREET	104TH STREET	0	ERNS
CHICAGO	S111907794		4898 E 105TH ST		SPILLS
CHICAGO	S111922937		2016 E 106ST ST		SPILLS
CHICAGO	98455926	106TH STREET	106TH STREET		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111891910		2040 E 106TH SAINT LANDERS YD		SPILLS
CHICAGO	S111925410		2040 E 106TH SAINT CALUMET RAIL YD		SPILLS
CHICAGO	S111882082		2040 E 106TH		SPILLS
CHICAGO	S111889611		2040 106TH ST		SPILLS
CHICAGO	S111912043		2040 E 106TH		SPILLS
CHICAGO	S111919236		2040 E 106TH CALUMET YARD		SPILLS
CHICAGO	S111882964		106TH AVE & INDIANAPOLIS BLVD		SPILLS
CHICAGO	S111878270		3033 106TH ST		SPILLS
CHICAGO	S111879978		2040 E 106TH		SPILLS
CHICAGO	S111915160		1040 W 106TH		SPILLS
CHICAGO	S111875510		2040 E 106TH SAINT RAIL YARDS		SPILLS
CHICAGO	S111881087		106TH ST & AVE O		SPILLS
CHICAGO	S111902576		106TH ST		SPILLS
CHICAGO	S111889998		106TH & AVE B		SPILLS
CHICAGO	90186751	107TH AND TORRENCE AVE. LISTALL COMPANY	107TH AND TORRENCE AVE. LISTALL COMPANY		ERNS
CHICAGO	S111904594		801 107TH ST		SPILLS
CHICAGO	S111894183		1215 W 107TH		SPILLS
CHICAGO	S111878613		107TH & TORRENCE		SPILLS
CHICAGO	S108045299		108TH ST & STONEY IS		SPILLS
CHICAGO	94374534	108TH AND BUFFALO AVE	108TH AND BUFFALO AVE		ERNS
CHICAGO	2004735469	109TH ST AND MICHIGAN AVE	109TH ST AND MICHIGAN AVE		ERNS
CHICAGO	S111899635		109TH ST		SPILLS
CHICAGO	S111898484		109TH 109TH ST & COTTAGE AVE		SPILLS
CHICAGO	2005608751	2040 EAST 10TH ST	2040 EAST 10TH ST		ERNS
CHICAGO	2007321070	11.90	11.90		ERNS
CHICAGO	S111875977		1100TH & KEDZIE		SPILLS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S111886669		352 W 110TH		SPILLS
CHICAGO	S111896440		110TH ST		SPILLS
CHICAGO	8865144	111ST AND LANE	111ST AND LANE		ERNS
CHICAGO	2010946025	111 TH STREET	111TH ST		ERNS
CHICAGO	2012101140		111TH ST		ERNS
CHICAGO	S111908715		6040 W 111TH ST		SPILLS
CHICAGO	S111879301		111TH & MONTERY		SPILLS
CHICAGO	S111880670		111TH & LANGLEY		SPILLS
CHICAGO	S111914359		111TH W		SPILLS
CHICAGO	2000551947	112TH STREET	112TH STREET	0	ERNS
CHICAGO	8850281	114TH ST AND TORRENCE AVE	114TH ST AND TORRENCE AVE		ERNS
CHICAGO	S111915596		752 E 114TH W		SPILLS
CHICAGO	2009922898	115TH AND DOTY RD	115TH AND DOTY RD		ERNS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	2006808077	115TH ST.	115TH ST.		ERNS
CHICAGO	S111877798		115TH & KENSINGTON		SPILLS
CHICAGO	S111876815		3200 W 115TH KEDZIE		SPILLS
CHICAGO	S111901591		115TH ST		SPILLS
CHICAGO	S111925540		115TH ST		SPILLS
CHICAGO	S111925539		115TH ST & I 94 DOTY		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111875316		116TH & BURLING		SPILLS
CHICAGO	S111898477		116TH ST & S BARLEY AVE		SPILLS
CHICAGO	S111913243		118TH SAINT COTTAGE GRV		SPILLS
CHICAGO	S111913680		1200 W 11TH ST		SPILLS
CHICAGO	S111883453		735 E 11TH ST		SPILLS
CHICAGO	S111911683		3118 W 11TH ST		SPILLS
CHICAGO	S111882526		2626 W 11TH ST		SPILLS
CHICAGO	96490464	900 WEST 120ST / 2ND SEWER DRAIN AT CORNER OF MORGAN ST	900 WEST 120ST / 2ND SEWER DRAIN AT CORNER OF MORGAN ST		ERNS
CHICAGO	99645303	120TH AND MORGAN	120TH AND MORGAN		ERNS
CHICAGO	2008886792	120TH ST AND MORGAN	120TH ST AND MORGAN		ERNS
CHICAGO	S111924227		120TH ST & MORGAN		SPILLS
CHICAGO	S111880149		120TH ST & RACINE AVE		SPILLS
CHICAGO	S111897595		120TH S TORRENCE AVE		SPILLS
CHICAGO	S111909286		1855 E 121ST ST		SPILLS
CHICAGO	94389275	122ND AND TORRENCE	122ND AND TORRENCE		ERNS
CHICAGO	99646447	122ND AND INDIANA	122ND AND INDIANA		ERNS
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	S110363616		122ND & PRINCETON		SPILLS
CHICAGO	S111895143		1855 W 122ND ST		SPILLS
CHICAGO	S111909484		122ND ST & STONY ISLAND AVE		SPILLS
CHICAGO	S111878392		122ND & TORRENCE AVE		SPILLS
CHICAGO	S111926232		122ND ST & PRINCETON		SPILLS
CHICAGO	S111898012		122ND ST & STONY ISLAND RD		SPILLS
CHICAGO	S111912859		122ND ST & TORRENCE ST		SPILLS
CHICAGO	S111902613		1701 E 122TH ST		SPILLS
CHICAGO	94395307	123RD AND STONEY ISLAND	123RD AND STONEY ISLAND		ERNS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	2011996953		E 126TH ST		ERNS
CHICAGO	S111918596		126TH & DOTY AVE		SPILLS
CHICAGO	S111894230		127TH & CARONDOLET STS		SPILLS
CHICAGO	S111912696		150 W 127TH		SPILLS
CHICAGO	S111898770		128TH & ESCANEBA		SPILLS
CHICAGO	2012102522		MP 1290		ERNS
CHICAGO	S111876826		12958TH S CARONDOLET & D AUTO		SPILLS
CHICAGO	89109245	MP 13 ASHLAND AVE. YARD	MP 13 ASHLAND AVE. YARD		ERNS
CHICAGO	1005636372	ILLINOIS MINING CORP INC	130TH W OF TORRENCE AVE		SPILLS
CHICAGO	2009897414	130TH ST	130TH ST		ERNS
CHICAGO	2008897414	130TH ST	130TH ST		ERNS
CHICAGO	2006810974	130TH ST.	130TH ST.		ERNS
CHICAGO	S108669473		130TH ST & I 94 EB		SPILLS
CHICAGO	S111885360		130TH ST & CALUMET EXPY		SPILLS
CHICAGO	2011995829		130TH ST		ERNS
CHICAGO	S111891972		E 130TH ST		SPILLS
CHICAGO	S111877064		4300 W 130TH ST		SPILLS
CHICAGO	S111927317		130TH ST AND TORRENCE AVE		SPILLS
CHICAGO	S111908455		130TH ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111914525		1100 E 130TH PL		SPILLS
CHICAGO	S111901336		130TH & STONY IS		SPILLS
CHICAGO	S111894790		130TH ST & TORRENCE ST		SPILLS
CHICAGO	S111878584		130TH ST SW		SPILLS
CHICAGO	S110685145		130TH ST & COTTAGE GROVE AVE		SPILLS
CHICAGO	2011993812		1310		ERNS
CHICAGO	S111892985		131ST ST & TRUMBLE ST		SPILLS
CHICAGO	S111921716		940 E 132ND ST		SPILLS
CHICAGO	S111899942		133RD & AVE K		SPILLS
CHICAGO	S111920503		133RD ST & AVE K		SPILLS
CHICAGO	2009905686	134TH ST AND CALUMAT RIVER	134TH ST AND CALUMAT RIVER		ERNS
CHICAGO	2008905686	134TH ST AND CALUMAT RIVER	134TH ST AND CALUMAT RIVER		ERNS
CHICAGO	2011966840	134TH ST. NEAR AVENUE O	134TH SAINT NEAR AVE		ERNS
CHICAGO	S111878642		134TH & STATE LINE		SPILLS
CHICAGO	S111888946		1350TH & 60 N LAKE SHORE DR		SPILLS
CHICAGO	S111924465		135TH AND NEW AVE		SPILLS
CHICAGO	92250546	137TH ST AND HOXIE ST	137TH ST AND HOXIE ST		ERNS
CHICAGO	S111882838		137TH ST & HOXIE		SPILLS
CHICAGO	S111882727		612 E 138TH ST		SPILLS
CHICAGO	S111896483		138TH ST & CALUMET EXPY		SPILLS
CHICAGO	S111900160		138TH & I 94		SPILLS
CHICAGO	S111906591		612 E 138TH ST		SPILLS
CHICAGO	S111892394		138TH ST & CALUMET EXPY		SPILLS
CHICAGO	S111898774		138TH ST & I 94		SPILLS
CHICAGO	S111881930		826 E 138TH ST		SPILLS
CHICAGO	S111915551		138TH & I 94		SPILLS
CHICAGO	S111881111		440 E 138TH ST		SPILLS
CHICAGO	S111907124		440 E 138TH ST		SPILLS
CHICAGO	S111898712		440 E 138TH ST		SPILLS
CHICAGO	S111912667		440 E 138TH ST		SPILLS
CHICAGO	S111912668		440 E 138TH ST		SPILLS
CHICAGO	2012102531		13TH AND SAINT SUBWAY STHY		ERNS
CHICAGO	S111910596		13TH & MORGAN STS		SPILLS
CHICAGO	S111886354		1400TH & W 111TH ST		SPILLS
CHICAGO	S111882902		1400TH W DIVISION & NOBLE		SPILLS
CHICAGO	S111906779		1425 OR 1431 W TAYLOR ST		SPILLS
CHICAGO	8858752	14TH AND WESTERN GLOBAL I RR YARD	14TH AND WESTERN GLOBAL I RR YARD		ERNS
CHICAGO	90159722	14TH AND HALSTED	14TH AND HALSTED		ERNS
CHICAGO	1001024395	GTB AUTO	2407 E 14TH ST		RCRA-SQG
CHICAGO	99651692	14TH STREET YARD AT CANAL (SOUTHERN END OF NORTH YARD BETWEE	14TH STREET YARD AT CANAL (SOUTHERN END OF NORTH YARD BETWEE		ERNS
CHICAGO	S111887196		14TH & INDIANA		SPILLS
CHICAGO	S111875747		14TH & CANAL BURLINGTON NORTHERN YARD		SPILLS
CHICAGO	S111892249		14TH PL & SANGAMON		SPILLS
CHICAGO	S111908909		14TH & HALSTED STS		SPILLS
CHICAGO	S111908862		14TH & CANAL STS		SPILLS
CHICAGO	S111906274		159TH & SIBLEY BLVD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111887661		15TH & CANAL ST		SPILLS
CHICAGO	S111887610		15TH ST & CANAL ST		SPILLS
CHICAGO	S111906022		15TH ST & CANAL		SPILLS
CHICAGO	S111902392		15TH ST & LAKE MICHIGAN FLD		SPILLS
CHICAGO	S111906546		15TH ST & LAKEFRONT MEIGS FLD		SPILLS
CHICAGO	S111919525		1150 W 15TH		SPILLS
CHICAGO	S111888789		15TH ST & LAKEFRONT		SPILLS
CHICAGO	S111884000		15TH ST & LAKE MICHIGAN FLD		SPILLS
CHICAGO	S111882819		15TH & LAKEFRONT FLD		SPILLS
CHICAGO	S111878273		163RD SAINT TOLL PLZ		SPILLS
CHICAGO	S111879761		167TH & CICERO		SPILLS
CHICAGO	2009904959	W. 16TH ST AND S. UNION AVE	W. 16TH ST AND S. UNION AVE		ERNS
CHICAGO	2008904959	W. 16TH ST AND S. UNION AVE	W. 16TH ST AND S. UNION AVE		ERNS
CHICAGO	S109327396		16TH ST & JEFFERSON BRG		SPILLS
CHICAGO	S111880523		2558 W 16TH		SPILLS
CHICAGO	S111892287		1956 S 17TH ST		SPILLS
CHICAGO	S111876974		17TH & WATWORTH		SPILLS
CHICAGO	S111894343		1820TH W 14TH ST & IN ALY		SPILLS
CHICAGO	2007305206	18TH ST YARD	18TH ST YARD		ERNS
CHICAGO	92292345	18TH ST BRIDGE	18TH ST BRIDGE		ERNS
CHICAGO	2009921297	18TH ST. & ROOSEVELT ST.	18TH ST. & ROOSEVELT ST.		ERNS
CHICAGO	2010959606	18TH STREET	18TH ST		ERNS
CHICAGO	S111886026		18TH ST & CHICAGO RIV		SPILLS
CHICAGO	S111887491		18TH & CLARK STS		SPILLS
CHICAGO	S111884255		18TH & CLARK		SPILLS
CHICAGO	S111892387		18TH PL & WOOD ST		SPILLS
CHICAGO	S108045676		18TH ST & THE CHICAGO RIV		SPILLS
CHICAGO	S108047105		1ST & 4 MI N OF PULASKI MM 288 HWY		SPILLS
CHICAGO	S111887583		NB 1ST AVE & GOLFVIEW		SPILLS
CHICAGO	S111910709		1ST & 2ND W OF CENTRAL AVE EXIT		SPILLS
CHICAGO	S111925271		1ST & S 5 MILE N OF 103RD ST 300 FEET DR		SPILLS
CHICAGO	S111907669		1ST & 4 MILE W OF COUNTY LINE RD		SPILLS
CHICAGO	S111891726		1ST & N 2 MILE		SPILLS
CHICAGO	S111912632		1ST & 4 MILE FROM CALIFORNIA AVE MIL		SPILLS
CHICAGO	S111919834		N 200TH STATE LAKE & STATE ST		SPILLS
CHICAGO	S111890337		2040TH E 106TH ST & RR YARD		SPILLS
CHICAGO	S111903428		1345 21ST ST		SPILLS
CHICAGO	S111909292		21ST ST & CANAL PORT AVE		SPILLS
CHICAGO	S111880437		1349 W 21ST		SPILLS
CHICAGO	S108045853		22ND & MORGAN ST		SPILLS
CHICAGO	93327475	22ND AND ARCHER ST	22ND AND ARCHER ST		ERNS
CHICAGO	89128107	22ND AND FEDERAL	22ND AND FEDERAL		ERNS
CHICAGO	S111888150		22ND & CLARK ST		SPILLS
CHICAGO	S111887811		22ND ST & WESTERN AVE		SPILLS
CHICAGO	S111890014		350 E 22ND ST		SPILLS
CHICAGO	S111890359		22TH & CALUMET		SPILLS
CHICAGO	S111895799		2332ND & W CHICAGO AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2003650960	23RD AND MICHIGAN STREET	23RD AND MICHIGAN STREET		ERNS
CHICAGO	S111883427		2550 W 23RD		SPILLS
CHICAGO	94368624	24TH AND UNION STREET NORTH OF I-95	24TH AND UNION STREET NORTH OF I-95		ERNS
CHICAGO	S111890697		24TH & UNION		SPILLS
CHICAGO	S111903927		1345 W 24TH ST		SPILLS
CHICAGO	S111879755		252ND E OHIO ST & FAIRBANKS		SPILLS
CHICAGO	S111927266		2543RD WEST COLUMBUS & LANDERS RAILYARD		SPILLS
CHICAGO	S111890225		2543RD COLUMBUS DR & IN THE LANDERS YARD		SPILLS
CHICAGO	2005617641	426 WEST 25TH STREET	426 W 25TH ST		ERNS
CHICAGO	S111909431		426 N 25TH PL		SPILLS
CHICAGO	S111922268		436 S 25TH PL		SPILLS
CHICAGO	S111925762		426 W 25TH PLACE CANAL ST		SPILLS
CHICAGO	S111894802		25TH PL & SACRAMENTO AVE		SPILLS
CHICAGO	S111896743		2429 W 25TH AVE		SPILLS
CHICAGO	S111925001		436 W 25TH PLACE CANAL ST		SPILLS
CHICAGO	S111890711		2600TH & EDISON ST		SPILLS
CHICAGO	96474197	26TH AND FEDERAL ST	26TH AND FEDERAL ST		ERNS
CHICAGO	2003644943	26TH STREET AND FEDERAL STREET	26TH STREET AND FEDERAL STREET		ERNS
CHICAGO	2008873723	26TH STREET ON THE RED LINE	26TH STREET ON THE RED LINE		ERNS
CHICAGO	S111907471		436 W 26TH PL		SPILLS
CHICAGO	S111889908		26TH ST & FEDERAL		SPILLS
CHICAGO	S111910796		26TH & WENTWORTH		SPILLS
CHICAGO	S111926601		5601 W 26TH ST		SPILLS
CHICAGO	S111920961		26TH & CANAL ST		SPILLS
CHICAGO	S111924220		26TH		SPILLS
CHICAGO	S111892718		26TH ST & FEDERAL		SPILLS
CHICAGO	S111919539		26TH & CANAL ST		SPILLS
CHICAGO	S111895388		26TH & FEDERAL		SPILLS
CHICAGO	S111913858		26TH & FEDERAL		SPILLS
CHICAGO	S110685274		5601 W 26TH ST		SPILLS
CHICAGO	98428956	27TH AND FEDERAL STREETS	27TH AND FEDERAL STREETS		ERNS
CHICAGO	98464382	27TH AND FEDERAL ST	27TH AND FEDERAL ST		ERNS
CHICAGO	S111903103		27TH & FEDERAL ST		SPILLS
CHICAGO	S111900849		27TH & FEDERAL		SPILLS
CHICAGO	S108047067		I 290 WBINBETWEENHARLEM & 1ST AVE		SPILLS
CHICAGO	S111891919		I 290 EB AT		SPILLS
CHICAGO	S111877875		I 290 WB		SPILLS
CHICAGO	S111906792		I 290 WB		SPILLS
CHICAGO	S111908034		I 290 NEAREXIT 24 W		SPILLS
CHICAGO	S108047071		I 294 SB		SPILLS
CHICAGO	S110613499		I 294 & I 88 NBMP		SPILLS
CHICAGO	S110363820		I 294 & I 90 SB		SPILLS
CHICAGO	S111926310		I 294		SPILLS
CHICAGO	S111901815		I 294 SBMP 22		SPILLS
CHICAGO	S111911769		HWY 294 SBMILEPOST 17		SPILLS
CHICAGO	S111884259		I 294 & I 80		SPILLS
CHICAGO	S111926180		I 294		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111920540		I 294 SBMP 31		SPILLS
CHICAGO	S111914599		I 294 & CERMAC RD		SPILLS
CHICAGO	S111896748		I 294 & NEAR THE 1ST TOLL PLAZA NORTHB		SPILLS
CHICAGO	S111919394		I 294 NBNEARCICERO AVE		SPILLS
CHICAGO	S111914117		I 294 NB		SPILLS
CHICAGO	S111893237		I 294 SBATJOLIET RD		SPILLS
CHICAGO	S111925566		I 294 SBMP 20		SPILLS
CHICAGO	S111925567		I 294 SOUTHBOUNDMP 20		SPILLS
CHICAGO	S111901305		I 294 NEARARLINGTON HEIGHTS		SPILLS
CHICAGO	S111910862		29TH & KEDZIE		SPILLS
CHICAGO	92270141	2ND POLE NORTH OF 74TH ST IN AN ALLEY WEST OF	2ND POLE NORTH OF 74TH ST IN AN ALLEY WEST OF		ERNS
CHICAGO	S111920359		2ND BLOCKS E OF 63RD ST & I 94		SPILLS
CHICAGO	S111883783		MM 301		SPILLS
CHICAGO	2006802234	31ST AND ASHLAND AVE.	31ST AND ASHLAND AVE.		ERNS
CHICAGO	S111908683		31ST		SPILLS
CHICAGO	S111891505		1100 E 31ST ST		SPILLS
CHICAGO	S111877001		4421 W 31ST		SPILLS
CHICAGO	S111897125		31ST ST & WOOD		SPILLS
CHICAGO	S111918870		215 W 31ST		SPILLS
CHICAGO	S111894090		31ST & KENTON AVE		SPILLS
CHICAGO	89121211	32ND ST AND CENTRAL PARK AVE	32ND ST AND CENTRAL PARK AVE		ERNS
CHICAGO	S111902053		444 W 330TH ST		SPILLS
CHICAGO	S111894273		3348TH W WARREN BLVD & HOMAN AVE		SPILLS
CHICAGO	S111889654		33RD & LAWNDALE		SPILLS
CHICAGO	S111894094		4500 W 33RD ST		SPILLS
CHICAGO	S111897564		N 3401ST AVE & ROSCOE		SPILLS
CHICAGO	S111881418		34TH & PULASKI		SPILLS
CHICAGO	S111911117		I 355 NBMP 265		SPILLS
CHICAGO	S111904092		3555TH W BELMONT & AMPO		SPILLS
CHICAGO	99638174	WEST 35TH STREET BRIDGE	WEST 35TH STREET BRIDGE		ERNS
CHICAGO	2008882825	35TH ST. BRIDGE	35TH ST. BRIDGE		ERNS
CHICAGO	S111911913		1954 W 35TH SAINT IN ALY		SPILLS
CHICAGO	S111897664		35TH & ASHLAND		SPILLS
CHICAGO	S111919560		1810 35TH ST		SPILLS
CHICAGO	S111894121		35TH & STATE ST		SPILLS
CHICAGO	S111890028		5400 S 35TH ST		SPILLS
CHICAGO	S111897980		35TH & KEDZIE		SPILLS
CHICAGO	S111896843		W 3642ND ST & LAWNDALE AVE		SPILLS
CHICAGO	2007318725	36TH AND PULASKI	36TH AND PULASKI		ERNS
CHICAGO	S111922036		36TH & PULASKI		SPILLS
CHICAGO	S111880537		3021 W 36TH		SPILLS
CHICAGO	S111879503		3000 W 36TH		SPILLS
CHICAGO	91220394	3021 WEST 36TH STREET (WEST OF HWY 41)	3021 WEST 36TH STREET (WEST OF HWY 41)		ERNS
CHICAGO	2002591202	103 36TH SOUTH AVE O.	103 36TH SOUTH AVE O.	0	ERNS
CHICAGO	S111915590		3782ND & 2ND W 79TH ST		SPILLS
CHICAGO	S111876347		37TH & LITHUANICA		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111897052		3025 W 37TH ST		SPILLS
CHICAGO	S111883506		1365 W 37TH		SPILLS
CHICAGO	2002608251	37TH STREET	37TH STREET	0	ERNS
CHICAGO	S111908583		3611 W 38TH SAINT RAIL YARD		SPILLS
CHICAGO	S111925402		3611 W 38TH SAINT CORWITH YARD		SPILLS
CHICAGO	S111919287		3611 W 38TH SAINT CORWITH YARD		SPILLS
CHICAGO	S111919275		3557 38TH ST		SPILLS
CHICAGO	S111919234		3811 W 38TH SAINT CORWITH YARD		SPILLS
CHICAGO	S111880783		3960TH W IRVING PARK & PULASKI		SPILLS
CHICAGO	S109953825		39TH & CICERO		SPILLS
CHICAGO	S111925323		39TH		SPILLS
CHICAGO	S111878496		39TH & KEDZIE		SPILLS
CHICAGO	S111900446		2600 39TH ST		SPILLS
CHICAGO	S111877189		39TH & MORTEN		SPILLS
CHICAGO	2002617674	40TH AND ALBANY AVE	40TH AND ALBANY AVE	0	ERNS
CHICAGO	S111893100		40TH ST & ASHLAND AVE		SPILLS
CHICAGO	S111878687		4040 W 40TH		SPILLS
CHICAGO	2000550320	40TH AND ASHLAND	40TH AND ASHLAND	0	ERNS
CHICAGO	90166402	41ST AND PULASKI	41ST AND PULASKI		ERNS
CHICAGO	S111913718		41ST & PULASKI		SPILLS
CHICAGO	S111905301		41ST & SPRINGFIELD		SPILLS
CHICAGO	2008907906	4950 WEST 41TH STREET	4950 WEST 41TH STREET		ERNS
CHICAGO	S111902644		1445 W 42ND		SPILLS
CHICAGO	S111897127		1445 W 42ND		SPILLS
CHICAGO	S111880182		1445 W 42ND		SPILLS
CHICAGO	S111906165		42ND & ASHLAND STS		SPILLS
CHICAGO	S111909024		I 435 & PRAVEN RD		SPILLS
CHICAGO	S111887549		43RD ST & LAKE SHORE DR		SPILLS
CHICAGO	S111919153		43RD & CANAL ST		SPILLS
CHICAGO	S111893707		4454TH & N ELSTON AVE		SPILLS
CHICAGO	S108046312		44TH		SPILLS
CHICAGO	93308263	44TH STREET BETWEEN INDIANA AND MICHIGAN AVE	44TH STREET BETWEEN INDIANA AND MICHIGAN AVE		ERNS
CHICAGO	S111887079		44TH SAINT BETWEEN INDIAN & MICHIGAN AVE		SPILLS
CHICAGO	S111884406		44TH & BLACKSTONE		SPILLS
CHICAGO	2004733997	45TH AND STATE ST.	45TH AND STATE ST.		ERNS
CHICAGO	89106127	45TH ST OFF OF HALSTON	45TH ST OFF OF HALSTON		ERNS
CHICAGO	S111888261		45TH & ASHLAND		SPILLS
CHICAGO	S111907955		45TH ST & RACINE		SPILLS
CHICAGO	S111905790		4700TH & WELL STS		SPILLS
CHICAGO	99651668	361 WEST 47TH	361 WEST 47TH		ERNS
CHICAGO	99650024	47TH ST TERMINAL	47TH ST TERMINAL		ERNS
CHICAGO	S108669575		47TH ST		SPILLS
CHICAGO	S108480057		47TH ST		SPILLS
CHICAGO	S111927304		361 47TH ST		SPILLS
CHICAGO	S111922938		2300 W 47TH		SPILLS
CHICAGO	S111922791		47TH ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111914233		47TH SAINT YARD		SPILLS
CHICAGO	S111895986		47TH ST & DAN RYAN EXPY		SPILLS
CHICAGO	S111894714		12000 W 4800 N		SPILLS
CHICAGO	S108047758		W 48TH & S CANAL ST		SPILLS
CHICAGO	S111885475		3428 N 48TH PL		SPILLS
CHICAGO	S111909951		1100 48TH ST		SPILLS
CHICAGO	S111878705		48TH PL & OAKLEY		SPILLS
CHICAGO	S111883259		1100 W 48TH		SPILLS
CHICAGO	2004732527	49TH AND VINCENNES	49TH AND VINCENNES		ERNS
CHICAGO	98436895	49TH AND MICHIGAN	49TH AND MICHIGAN		ERNS
CHICAGO	2007315427	49TH AND CERMAK ST	49TH AND CERMAK ST		ERNS
CHICAGO	S111907447		49TH & PRAIRIE STS		SPILLS
CHICAGO	S111891317		49TH SAINT IN THE DAN RYAN EXPY		SPILLS
CHICAGO	S111895516		49TH ST & WABASH AVE		SPILLS
CHICAGO	S111888798		47 W 49TH ST		SPILLS
CHICAGO	S111901380		49TH & MICHIGAN		SPILLS
CHICAGO	2000669045	OF 49TH AND PRAIRIE STREET	OF 49TH AND PRAIRIE STREET		ERNS
CHICAGO	S111907791		2200 W 4TH ST		SPILLS
CHICAGO	S111927766		5000TH 41ST ST & CHICAGO SANITARY SHIP CANAL		SPILLS
CHICAGO	S111919606		500TH W MADISON MADISON & CANAL ST		SPILLS
CHICAGO	S111896668		5035TH W 55TH ST & CHICAGO MID WAY		SPILLS
CHICAGO	2007312186	50TH ST YARD	50TH ST YARD		ERNS
CHICAGO	S111926084		CD 513		SPILLS
CHICAGO	90165019	51ST AND MOBILE RD. CLOROX BLDG	51ST AND MOBILE RD. CLOROX BLDG		ERNS
CHICAGO	2000541439	506 WEST 51ST	506 WEST 51ST	0	ERNS
CHICAGO	2000548268	51ST STREET	51ST STREET	0	ERNS
CHICAGO	98465428	51ST ST YARD	51ST ST YARD		ERNS
CHICAGO	2007303728	51ST AND CHICAGO	51ST AND CHICAGO		ERNS
CHICAGO	S111897822		51ST SAINT YARD		SPILLS
CHICAGO	S111906455		51ST & NORMAL		SPILLS
CHICAGO	S111889239		51ST & CORNELL		SPILLS
CHICAGO	S111882002		5620 W 51ST		SPILLS
CHICAGO	S111903862		51ST & CALUMET AVE		SPILLS
CHICAGO	S111906790		506 W 51ST		SPILLS
CHICAGO	S111903188		51ST & NORMAL		SPILLS
CHICAGO	S111910277		506 ST 51ST ST		SPILLS
CHICAGO	S111879756		51ST & HALSTED		SPILLS
CHICAGO	S111883239		2301 W 51ST		SPILLS
CHICAGO	99651475	506 WEST 51TH ST.	506 WEST 51TH ST.		ERNS
CHICAGO	S111890796		5252ND PALMER AVE & WEBBER HS		SPILLS
CHICAGO	S111900682		5345TH W 55TH ST & MIDWAY AP		SPILLS
CHICAGO	2011994278		5385		ERNS
CHICAGO	S110122311		I 55 & PULASKI ROAD RAMP		SPILLS
CHICAGO	S109327589		I 55 & I 294 SBMP		SPILLS
CHICAGO	S111887551		I 55 NB		SPILLS
CHICAGO	S111912371		I 55 NB		SPILLS
CHICAGO	S111884297		I 55 RIGHTHAND LANE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111902492		I 55 SBMM 28894		SPILLS
CHICAGO	S111922930		I 55 NB & LEMONT RD AND OLDFIELD RD		SPILLS
CHICAGO	S111900509		I 55 & PULASKI RD		SPILLS
CHICAGO	S111897651		I 55 RAMP WBASHLAND AVE		SPILLS
CHICAGO	S111896039		I 55 & HARLEM AVE		SPILLS
CHICAGO	S111894932		I 55 MPEEATASHLAND ST		SPILLS
CHICAGO	S111898860		I 55 & WOOD		SPILLS
CHICAGO	S111895979		I 55 NB & CICERO AVE		SPILLS
CHICAGO	S111899470		55ST YARD		SPILLS
CHICAGO	2007318421	55TH STREET STATION	55TH STREET STATION		ERNS
CHICAGO	S111887481		28800 W 55TH ST		SPILLS
CHICAGO	S111883143		55TH NENA & ARCHER		SPILLS
CHICAGO	S111882156		55TH & CICERO		SPILLS
CHICAGO	S111883850		5035 W 55TH SAINT MIDWAY AIRPORT		SPILLS
CHICAGO	S111903929		55TH & LAGRANGE RD		SPILLS
CHICAGO	S111883276		4950 W 55TH		SPILLS
CHICAGO	S111901394		55TH & COUNTRY LINE RD EXIT		SPILLS
CHICAGO	S111880505		5657TH N BROADWAY & HOLLYWOOD		SPILLS
CHICAGO	2010951078	57TH AND KENTON	57TH		ERNS
CHICAGO	2010957052	57TH STREET	57TH ST		ERNS
CHICAGO	91238388	58TH AND PRAIRIE	58TH AND PRAIRIE		ERNS
CHICAGO	89111593	59TH AND HORNE	59TH AND HORNE		ERNS
CHICAGO	2009925992	59TH AND PRARIE	59TH AND PRARIE		ERNS
CHICAGO	2010940083	59TH AND MASSASOTT	59TH		ERNS
CHICAGO	S111218553		59TH ST & HALSTED		SPILLS
CHICAGO	S111885320		59TH & WENTWORTH		SPILLS
CHICAGO	S111909924		2101 W 59TH		SPILLS
CHICAGO	S111882253		59TH & BISHOP		SPILLS
CHICAGO	S111926929		59TH ST		SPILLS
CHICAGO	S111905285		2801 W 59TH		SPILLS
CHICAGO	S111881755		3301 W 59TH		SPILLS
CHICAGO	S111915272		2101 59TH ST		SPILLS
CHICAGO	S111908487		59TH SAINT BETWEEN DAMON & WESTERN		SPILLS
CHICAGO	S111908378		2101 W 59TH		SPILLS
CHICAGO	S111900002		4452 W 5TH ST		SPILLS
CHICAGO	S111884620		60TH & DORCHESTER		SPILLS
CHICAGO	S111349402		61ST ST		SPILLS
CHICAGO	S111921253		61ST & ELLIS ST		SPILLS
CHICAGO	S111890702		61ST & CICERO		SPILLS
CHICAGO	S111909762		6000 W 623RD ST		SPILLS
CHICAGO	91233172	62ND & LASALLE (EAST SIDE OF TRACKS)	62ND & LASALLE (EAST SIDE OF TRACKS)		ERNS
CHICAGO	S108046564		63RD SAINT INTERMODLE FACILITY		SPILLS
CHICAGO	2004721985	63RD AND ASHLAND	63RD AND ASHLAND		ERNS
CHICAGO	2006814764	63RD STREET	63RD STREET		ERNS
CHICAGO	2008883760	63RD STREET RAIL YARD	63RD STREET RAIL YARD		ERNS
CHICAGO	S111349563		63RD & PULASKI		SPILLS
CHICAGO	S109327514		63RD SAINT ENGLEWOOD YARD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S110824974		2800 W 63RD		SPILLS
CHICAGO	2006814727	63RD ST INTERMODAL RAMP	63RD ST INTERMODAL RAMP		ERNS
CHICAGO	2006818594	63RD AND STATE STREET	63RD AND STATE STREET		ERNS
CHICAGO	2010954740	63RD STREET	63RD ST		ERNS
CHICAGO	S111887350		63RD & UNION		SPILLS
CHICAGO	S111886430		5400 W 63RD SAINT MIDWAY AVIATION SUP		SPILLS
CHICAGO	S111881447		63RD & HOMAN		SPILLS
CHICAGO	S111925459		5000 W 63RD SAINT MIDWAY AP		SPILLS
CHICAGO	S111875746		6400 W 63RD		SPILLS
CHICAGO	S111900462		3515 W 63RD SAINT CHICAGO PD 8TH		SPILLS
CHICAGO	S111877019		63RD SAINT LOREL		SPILLS
CHICAGO	S111901688		63RD ST		SPILLS
CHICAGO	S111895740		63RD & LARAMIE		SPILLS
CHICAGO	S111915495		63RD & OAKLEY		SPILLS
CHICAGO	S111927894		7030 W 63RD		SPILLS
CHICAGO	S111890750		63RD & (ST		SPILLS
CHICAGO	S111880671		63RD & KOSTNER		SPILLS
CHICAGO	S111894905		63RD & INDIANA STS		SPILLS
CHICAGO	S108046554		6300 N 6420		SPILLS
CHICAGO	S111878677		64TH & DAN RYAN EXPY		SPILLS
CHICAGO	S111882808		64TH & COTTAGE GRV		SPILLS
CHICAGO	S111888399		66TH & WENTWORTH		SPILLS
CHICAGO	S108891628		67TH AVE & WESTERN AVE		SPILLS
CHICAGO	S111888074		67TH & STONY ISLAND AVE		SPILLS
CHICAGO	S111901190		432 E 67TH ST		SPILLS
CHICAGO	S111919162		67TH ST & MICHIGAN AVE		SPILLS
CHICAGO	877558	AT 69TH AND HARLEM	AT 69TH AND HARLEM		ERNS
CHICAGO	S111909195		69TH SAINT DAN RYAN EXPRESS WAY		SPILLS
CHICAGO	91238491	71ST AND PALLESKY	71ST AND PALLESKY		ERNS
CHICAGO	2011963845	AT THE INSECTION OF 71ST AND BENNETT NONE	71ST		ERNS
CHICAGO	S111888166		71ST & STATE ST		SPILLS
CHICAGO	S111878525		499 W 71ST		SPILLS
CHICAGO	S111877483		71ST ST & LAKE SHORE DR		SPILLS
CHICAGO	2000531550	71ST STREET AND KEDZIE AVE	71ST STREET AND KEDZIE AVE	0	ERNS
CHICAGO	872272	72ND & SAYER	72ND & SAYER		ERNS
CHICAGO	S110824843		73RD ST		SPILLS
CHICAGO	S111895872		73RD & KEDZIE AVE		SPILLS
CHICAGO	S111885537		74TH & WOODS ST		SPILLS
CHICAGO	S111878127		74TH & HARDING		SPILLS
CHICAGO	S111923518		7501ST S LAWNDALE & 33RD HAYFORD		SPILLS
CHICAGO	2009896730	75TH STREET AT	75TH STREET AT		ERNS
CHICAGO	2009905642	75TH ST. & SW HWY	75TH ST. & SW HWY		ERNS
CHICAGO	2008896730	75TH STREET AT	75TH STREET AT		ERNS
CHICAGO	2008905642	75TH ST. & SW HWY	75TH ST. & SW HWY		ERNS
CHICAGO	S111894639		75TH & BELL ST		SPILLS
CHICAGO	S108046690		76TH & CICERO PARKING LOT OF FORD CIT MALL		SPILLS
CHICAGO	S111925251		1400 W 76TH		SPILLS

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CHICAGO	2007324296	78TH AND PHILLIPS STREET	78TH AND PHILLIPS STREET		ERNS
CHICAGO	S111907714		78TH & WOODLAWN STS		SPILLS
CHICAGO	1004696268	PUBLIC STORAGE	2640 W 79TH		RCRA-CESQG
CHICAGO	S111887212		79TH & PERRY		SPILLS
CHICAGO	S111895139		79TH & KEDZIE AVE		SPILLS
CHICAGO	S111923553		79TH ST & WESTERN AVE		SPILLS
CHICAGO	S111876849		79TH & MERRILL		SPILLS
CHICAGO	S111921806		79TH & CICERO		SPILLS
CHICAGO	S111899140		79TH & KEDZIE		SPILLS
CHICAGO	S111899413		79TH & KILPATRICK		SPILLS
CHICAGO	873714	7TH FLOOR	7TH FLOOR		ERNS
CHICAGO	2008876881	INTERSTATE 80 EASTBOUND	INTERSTATE 80 EASTBOUND		ERNS
CHICAGO	S111907569		I 80 TOLLBOOTH 45		SPILLS
CHICAGO	S111885209		81ST & INDIANA		SPILLS
CHICAGO	S108046748		822ND N ROCKWELL & N KEATING		SPILLS
CHICAGO	S111886154		8250TH & S COTTAGE GROVE AVE		SPILLS
CHICAGO	S111888213		83RD & PULASKI		SPILLS
CHICAGO	S111876908		1111 E 83RD		SPILLS
CHICAGO	S111898513		2501 E 83RD		SPILLS
CHICAGO	S111883741		83RD & STATE ST		SPILLS
CHICAGO	S111883654		86TH SAINT GATE		SPILLS
CHICAGO	S108046297		440 2 87TH ST		SPILLS
CHICAGO	S111887646		87TH & COTTAGE RD		SPILLS
CHICAGO	S111896937		1730 87TH ST		SPILLS
CHICAGO	S111902165		1400 87TH ST		SPILLS
CHICAGO	S111878094		87TH ST & KING AVE		SPILLS
CHICAGO	S111876074		87TH & MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111898018		87TH & MARTIN LUTHER DR		SPILLS
CHICAGO	S109953838		I 88 E & HIGHLAND AVE		SPILLS
CHICAGO	S111915633		89TH & RACINE		SPILLS
CHICAGO	S109700073		I 90 MP 48		SPILLS
CHICAGO	S111885631		I 90 ONSHOULDERSBDANRYAN & I 94 AT 79TH ST		SPILLS
CHICAGO	S111927573		I 90 WB		SPILLS
CHICAGO	S111876495		I 90 & N I 94 NB		SPILLS
CHICAGO	S111896119		I 90 & I 290 MM		SPILLS
CHICAGO	S111901056		I 90 & I 94 EB		SPILLS
CHICAGO	S111899135		I 90 94 AT 410 AVENUE		SPILLS
CHICAGO	S111895712		I 90 WB		SPILLS
CHICAGO	S111894927		I 90 NEATARMITAGE AVE		SPILLS
CHICAGO	S111883615		125 I 90 WB		SPILLS
CHICAGO	S111883537		I 90 EBMPOTOLL ROAD		SPILLS
CHICAGO	S108480169		I 90 WB		SPILLS
CHICAGO	2000540207	ROUTE 90	ROUTE 90	0	ERNS
CHICAGO	S111880871		9059TH S WESTERN & 91ST		SPILLS
CHICAGO	2008880922	90TH STREET	90TH STREET		ERNS
CHICAGO	S111911279		90TH & ANTHONY ST		SPILLS
CHICAGO	S111891107		925ND & KIMBARK		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	93309560	92ND ST BRIDGE	92ND ST BRIDGE		ERNS
CHICAGO	S111877738		3125 E 92ND		SPILLS
CHICAGO	2000516161	93RD AND SANGAMON STREETS	93RD AND SANGAMON STREETS	0	ERNS
CHICAGO	S109953773		I 94 NB		SPILLS
CHICAGO	S110122315		I 94 EBEXIT 73		SPILLS
CHICAGO	S111349598		I 94		SPILLS
CHICAGO	S109366492		I 94 EBEXIT 68		SPILLS
CHICAGO	2011966167	INTERSTATE 94 EASTBOUND BEFORE THE FULLERTON EXIT	I 94 EASTBOUNDBEFORETHEFULLERTON		ERNS
CHICAGO	S111885871		I 94 NBATPOLK ST		SPILLS
CHICAGO	S111898276		I 94 & 59TH SAINT ENTRANCE RAMP		SPILLS
CHICAGO	S111927566		I 94 & 55TH SAINT EXIT		SPILLS
CHICAGO	S111904380		I 94 EB & MONTROSE		SPILLS
CHICAGO	S111910037		I 94 & 130TH ST NB		SPILLS
CHICAGO	S111912362		I 94 WBEXIT 59B		SPILLS
CHICAGO	S111883105		I 94 & OGDEN ST		SPILLS
CHICAGO	S111910894		I 94 & I 90 AT IRVING PARK RD		SPILLS
CHICAGO	S111925806		I 94 EASTBOUND		SPILLS
CHICAGO	S111893668		I 94 NB		SPILLS
CHICAGO	S111914933		I 94 MM 64 S		SPILLS
CHICAGO	S111903237		I 94 WB		SPILLS
CHICAGO	S111896729		I 94 NB		SPILLS
CHICAGO	S111920177		I 94 S & EXIT 33A		SPILLS
CHICAGO	S111920168		I 94 EXIT 33A S		SPILLS
CHICAGO	S111920145		I 94 SB		SPILLS
CHICAGO	98424429	94TH AND DAN RYAN EXP	94TH AND DAN RYAN EXP		ERNS
CHICAGO	98444633	95TH STREET AT THE BOAT DOCKS	95TH STREET AT THE BOAT DOCKS		ERNS
CHICAGO	2008885493	95TH AND ASHLAND	95TH AND ASHLAND		ERNS
CHICAGO	S109327559		95TH ST & CHICAGO SKWY		SPILLS
CHICAGO	2010936475	95TH AND VINCENNES	95TH		ERNS
CHICAGO	S111885252		1421 2 95TH ST		SPILLS
CHICAGO	2012105009		95TH AND VINCENNES ST		ERNS
CHICAGO	S111881440		2647 E 95TH		SPILLS
CHICAGO	S111876565		4001 E 95TH SAINT CALUMET HBR		SPILLS
CHICAGO	S111910538		95TH ST & COLFAX		SPILLS
CHICAGO	S111888906		49 E 95TH SAINT ABBOTT PARK		SPILLS
CHICAGO	S111904651		1123 E 95TH AVE		SPILLS
CHICAGO	S111920554		95TH & WENTWORTH		SPILLS
CHICAGO	2010951454	MILE POST 9.69	969		ERNS
CHICAGO	2011992364		96TH BLOCK OF COMMERCIAL AVE		ERNS
CHICAGO	2007301682	97TH STREET	97TH STREET		ERNS
CHICAGO	97408920	97TH STREET YARD NORFOLK SOUTHERN RR	97TH STREET YARD NORFOLK SOUTHERN RR		ERNS
CHICAGO	S111920983		97TH SAINT ROCK IS		SPILLS
CHICAGO	876733	99TH ST AND CENTRAL PARK	99TH ST AND CENTRAL PARK		ERNS
CHICAGO	875165	99TH ST. AND AVE. J	99TH ST. AND AVE. J		ERNS
CHICAGO	S111890848		99TH & HALSTEAD		SPILLS
CHICAGO	2000537597	99TH STREET AND WESTERN AVE	99TH STREET AND WESTERN AVE	0	ERNS

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CHICAGO	S111912210		5414 S ABERDEEN		SPILLS
CHICAGO	S111900403		406 N ABERDEEN		SPILLS
CHICAGO	S111915133		114 N ABERDEEN		SPILLS
CHICAGO	2011963768	616 SOUTH ACCESS RD	616 S ACCESS RD		ERNS
CHICAGO	S111912541		611 N ACCESS RD		SPILLS
CHICAGO	S111902943		609 S ACCESS RD		SPILLS
CHICAGO	876135	ACROSS FROM 3440 NORTH LAKESHORE DR, IN BELMONT HARBOR	ACROSS FROM 3440 NORTH LAKESHORE DR, IN BELMONT HARBOR		ERNS
CHICAGO	2010960900	12245 SOUTH ADA	12245 S ADA		ERNS
CHICAGO	S111888659		11250 S ADA		SPILLS
CHICAGO	S111899285		172 N ADA		SPILLS
CHICAGO	S111877769		ADAMS & SANGAMON		SPILLS
CHICAGO	S111895246		1130 W ADAMS		SPILLS
CHICAGO	S111904649		1029 W ADAMS		SPILLS
CHICAGO	S111902090		927 W ADAMS		SPILLS
CHICAGO	S111883547		1114 W ADAMS		SPILLS
CHICAGO	S111913912		1127 W ADAMS		SPILLS
CHICAGO	S111887356		6001 W ADDISON		SPILLS
CHICAGO	S111926696		5200 W ADDISON		SPILLS
CHICAGO	S111912256		3323 W ADDISON AVE		SPILLS
CHICAGO	S111904712		5935 W ADDISON RD		SPILLS
CHICAGO	S111907993		1801 W ADDISON RD		SPILLS
CHICAGO	S111925267		2436 ADDISON ST		SPILLS
CHICAGO	S111903324		4601 W ADDISON		SPILLS
CHICAGO	S111875851		6000 ADDISON		SPILLS
CHICAGO	S111922758		3159 W ADDISON		SPILLS
CHICAGO	S111905549		5935 W ADDISON		SPILLS
CHICAGO	S111896798		6519 W ADDISON AVE		SPILLS
CHICAGO	S111877287		7560 W ADDISON		SPILLS
CHICAGO	S111876140		3555 W ADDISON		SPILLS
CHICAGO	S111888785		2800 W ADDISON		SPILLS
CHICAGO	S111896716		4550 W ADDISON AVE		SPILLS
CHICAGO	S111876013		7560 W ADDISON		SPILLS
CHICAGO	S111876008		4633 ADDISON AVE		SPILLS
CHICAGO	S111883985		4440 W ADDISON		SPILLS
CHICAGO	S111878561		7200 W ADDISON		SPILLS
CHICAGO	S111902548		2500 W ADDISON		SPILLS
CHICAGO	S111876607		3700 W ADDISON		SPILLS
CHICAGO	89124407	ADJACENT TO 9300 S. SANGAMON	ADJACENT TO 9300 S. SANGAMON		ERNS
CHICAGO	S111927545		2319 W AGUSTA BLVD		SPILLS
CHICAGO	S111905860		4560 W AGUSTA BLVD		SPILLS
CHICAGO	S111887521		3206 W AINSLIE		SPILLS
CHICAGO	94382241	AIRCRAFT PARKING LOT NORTH END OF OHARE INT AIRPORT	AIRCRAFT PARKING LOT NORTH END OF OHARE INT AIRPORT		ERNS
CHICAGO	S111877908		US AIRFORCEBASE		SPILLS
CHICAGO	2007319807	ALBANY GRADE CROSSING ON THE BROWN LINE	ALBANY GRADE CROSSING ON THE BROWN LINE		ERNS
CHICAGO	S111885146		ALBANY ST & CHICAGO AVE		SPILLS

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CHICAGO	S111878211		3610 S ALBANY		SPILLS
CHICAGO	S111918682		2417 N ALBANY		SPILLS
CHICAGO	S111902233		3700 S ALBANY		SPILLS
CHICAGO	S111905680		744 W ALDINE		SPILLS
CHICAGO	92296598	ALLEY ADJACENT TO 1669 FARWELL AVE	ALLEY ADJACENT TO 1669 FARWELL AVE		ERNS
CHICAGO	98419775	ALLEY AT 4920 NORTH KENMORE AVENUE	ALLEY AT 4920 NORTH KENMORE AVENUE		ERNS
CHICAGO	97417233	ALLEY NEAR HOLMAN AND 23RD STREET	ALLEY NEAR HOLMAN AND 23RD STREET		ERNS
CHICAGO	90155144	ALLEY BEHIND 3737 N. ASHLAND	ALLEY BEHIND 3737 N. ASHLAND		ERNS
CHICAGO	89118759	IN ALLEY BEHIND, 111 WEST WINONA	IN ALLEY BEHIND, 111 WEST WINONA		ERNS
CHICAGO	99626121	ALLEY BEHIND RUETERS BAKERY/7175 WEST GRAND AVE	ALLEY BEHIND RUETERS BAKERY/7175 WEST GRAND AVE		ERNS
CHICAGO	S111879642		1300 W ALTGELD AVE		SPILLS
CHICAGO	S111913999		5940 W ALTGELD		SPILLS
CHICAGO	S111887832		ALWASTE COMPANY SOUTH COTTAGE GRV		SPILLS
CHICAGO	S111881951		2844 N ALY MILWAUKEE AVE		SPILLS
CHICAGO	S111896501		AMB & OHARE AIRPORT		SPILLS
CHICAGO	92264268	AMERICAN AIRLINES FREIGHT TERMINAL	AMERICAN AIRLINES FREIGHT TERMINAL		ERNS
CHICAGO	S109700034		AMERICAN AIRLINES HANGER 1		SPILLS
CHICAGO	S109700033		AMERICAN AIRLINES HANGER 1		SPILLS
CHICAGO	S111909909		AMERICAN AIRLINES HANGER OHARE		SPILLS
CHICAGO	S111909487		AMERICAN AIRLINES GATE G19		SPILLS
CHICAGO	S111924903		AMERICAN AIRLINES HANGAR 1		SPILLS
CHICAGO	8718690	AMOCO STATION WEST PETERSON ST	AMOCO STATION WEST PETERSON ST		ERNS
CHICAGO	S108045529		1463 AND 1465 W HUBBARD		SPILLS
CHICAGO	93329071	71 ST AND PULASKI ST ADJACENT TO DOMINICKS	71 ST AND PULASKI ST ADJACENT TO DOMINICKS		ERNS
CHICAGO	89127613	130 ST AND TORENCE AVE	130 ST AND TORENCE AVE		ERNS
CHICAGO	873985	130 AND TORRANCE AVENUE JUST SOUTH OF SOUTH SHORE RAIL ROAD	130 AND TORRANCE AVENUE JUST SOUTH OF SOUTH SHORE RAIL ROAD		ERNS
CHICAGO	89119785	A AND B ARE 5 BLOCKS APART.	A AND B ARE 5 BLOCKS APART.		ERNS
CHICAGO	99638599	I-94 AND 130TH STREET	I-94 AND 130TH STREET		ERNS
CHICAGO	98466955	39 TH AND RACIN NEAR RAILROAD	39 TH AND RACIN NEAR RAILROAD		ERNS
CHICAGO	2000670407	AND COLUMBUS ST.	AND COLUMBUS ST.		ERNS
CHICAGO	S111927439		4500 W ANNE LORI PL		SPILLS
CHICAGO	S111912212		3418 W ANSLIE ST		SPILLS
CHICAGO	S111882269		7740 S ANTHONY		SPILLS
CHICAGO	2002598671	ANTHONY STREET	ANTHONY STREET	0	ERNS
CHICAGO	93324425	APEX DOCK ON THE ILLINOIS RIVER	APEX DOCK ON THE ILLINOIS RIVER		ERNS
CHICAGO	S111887926		APEX DOCK		SPILLS
CHICAGO	S108046848		ARCHER & KOSTER AVE		SPILLS
CHICAGO	2004712427	ARCHER AVENUE & KOSTER AVENUE	ARCHER AVENUE & KOSTER AVENUE		ERNS
CHICAGO	S111887303		4400 S ARCHER		SPILLS
CHICAGO	S111885938		4710 S ARCHER		SPILLS
CHICAGO	S111900032		4546 S ARCHER		SPILLS
CHICAGO	S111909973		ARCHER & LOCKWOOD		SPILLS
CHICAGO	S111907499		5434 S ARCHER		SPILLS
CHICAGO	S111925457		ARCHER & CANAL		SPILLS
CHICAGO	S111925458		ARCHER		SPILLS

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CHICAGO	S111882732		4555 S ARCHER		SPILLS
CHICAGO	S111908313		6150 S ARCHER		SPILLS
CHICAGO	S111910533		3956 S ARCHER		SPILLS
CHICAGO	S111924484		ARCHER AND CLARK STS		SPILLS
CHICAGO	S111877409		ARCHER & CENTRAL		SPILLS
CHICAGO	S111893743		3402 S ARCHER		SPILLS
CHICAGO	S111899851		5552 ARCHER		SPILLS
CHICAGO	S111877291		6824 W ARCHER		SPILLS
CHICAGO	S111880751		5889 ARCHER AVE		SPILLS
CHICAGO	S111905725		ARCHER & CICERO AVE		SPILLS
CHICAGO	S111924727		6751 W ARCHER		SPILLS
CHICAGO	S111900992		3583 S ARCHER		SPILLS
CHICAGO	2002608327	AREA 2 GARAGE	AREA 2 GARAGE	0	ERNS
CHICAGO	96501842	2900 WEST ARGYLE FRANCISCO ST AT RIVER PARK	2900 WEST ARGYLE FRANCISCO ST AT RIVER PARK		ERNS
CHICAGO	S111900910		4014 W ARGYLE		SPILLS
CHICAGO	S111894232		1333 ARGYLE ST		SPILLS
CHICAGO	S111911967		4701 W ARMATAGE AVE		SPILLS
CHICAGO	S108047902		ARMITAGE		SPILLS
CHICAGO	S111899643		3839 W ARMITAGE		SPILLS
CHICAGO	S111891969		3920 W ARMITAGE		SPILLS
CHICAGO	S111890623		1955 W ARMITAGE		SPILLS
CHICAGO	S111904745		1135 W ARMITAGE		SPILLS
CHICAGO	S111892222		1135 W ARMITAGE RD		SPILLS
CHICAGO	S111893394		2518 ARMITAGE AVE		SPILLS
CHICAGO	S111892624		2052 W ARMITAGE		SPILLS
CHICAGO	S111883582		6803 ARMITAGE		SPILLS
CHICAGO	S111910152		4740 W ARMITAGE		SPILLS
CHICAGO	S111884834		4447 W ARMITAGE		SPILLS
CHICAGO	S111895626		2317 W ARMITAGE		SPILLS
CHICAGO	S111890355		3400 W ARMITAGE		SPILLS
CHICAGO	S111912634		1768 W ARMITAGE		SPILLS
CHICAGO	S111894278		3247 W ARMNITAGE		SPILLS
CHICAGO	S111912324		2745 ARMSTRONG CT		SPILLS
CHICAGO	S111901434		5419 W ARMSTRONG		SPILLS
CHICAGO	S111880653		5353 N ARMSTRONG AVE		SPILLS
CHICAGO	S108045921		2525 S ARTEGIAN		SPILLS
CHICAGO	S111881808		4825 ARTHINGTON		SPILLS
CHICAGO	S111907628		2954 W ARTHUR ST		SPILLS
CHICAGO	S111891841		4324 S ARTISEN ST		SPILLS
CHICAGO	91232602	3901 ASHLAND AVE	3901 ASHLAND AVE		ERNS
CHICAGO	96517432	ASHLAND AVE MILEPOST UNKNOWN	ASHLAND AVE MILEPOST UNKNOWN		ERNS
CHICAGO	2004733058	ASHLAND AVENUE	ASHLAND AVENUE		ERNS
CHICAGO	90151129	ASHLAND AVE YARD	ASHLAND AVE YARD		ERNS
CHICAGO	2009914875	4024 ASHLAND AVENUE	4024 ASHLAND AVENUE		ERNS
CHICAGO	2008914875	4024 ASHLAND AVENUE	4024 ASHLAND AVENUE		ERNS
CHICAGO	2005620314	4024 ASHLAND AVE	4024 ASHLAND AVE		ERNS

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CHICAGO	2005604687	ASHLAND AVE	ASHLAND AVE		ERNS
CHICAGO	2005601210	4024 ASHLAND AVENUE	4024 ASHLAND AVENUE		ERNS
CHICAGO	2005615233	4107 ASHLAND AVE.	4107 ASHLAND AVE.		ERNS
CHICAGO	2006807909	4024 ASHLAND AVE	4024 ASHLAND AVE		ERNS
CHICAGO	2006797514	4024 ASHLAND AVE	4024 ASHLAND AVE		ERNS
CHICAGO	S111888048		6630 S ASHLAND		SPILLS
CHICAGO	S111887349		4810 S ASHLAND		SPILLS
CHICAGO	S111887205		6501 N ASHLAND		SPILLS
CHICAGO	S111887600		5257 S ASHLAND		SPILLS
CHICAGO	S111885804		4008 S ASHLAND		SPILLS
CHICAGO	S111896674		7531 ASHLAND AVE		SPILLS
CHICAGO	S111877168		7531 S ASHLAND		SPILLS
CHICAGO	S111905995		ASHLAND AVE		SPILLS
CHICAGO	S111900270		2522 N ASHLAND		SPILLS
CHICAGO	S111900269		2522 N ASHLAND		SPILLS
CHICAGO	S111878491		3434 N ASHLAND		SPILLS
CHICAGO	S111927483		4024 ASHLAND AVE		SPILLS
CHICAGO	S111912485		9131 S ASHLAND		SPILLS
CHICAGO	S111913577		4016 S ASHLAND		SPILLS
CHICAGO	S111882740		649 N ASHLAND		SPILLS
CHICAGO	S111878983		100 S ASHLAND		SPILLS
CHICAGO	S111902676		4024 ASHLAND AVE		SPILLS
CHICAGO	S111897809		3656 N ASHLAND		SPILLS
CHICAGO	S111875322		4024 S ASHLAND		SPILLS
CHICAGO	S111925244		4024 ASHLAND AVE		SPILLS
CHICAGO	S111911966		133 S ASHLAND		SPILLS
CHICAGO	S111902630		3931 N ASHLAND		SPILLS
CHICAGO	S111888954		7225 S ASHLAND		SPILLS
CHICAGO	S111888621		11859 ASHLAND		SPILLS
CHICAGO	S111878225		3715 ASHLAND AVE		SPILLS
CHICAGO	S111876462		2545 N ASHLAND		SPILLS
CHICAGO	S111881752		3901 ASHLAND		SPILLS
CHICAGO	S111898942		625 N ASHLAND		SPILLS
CHICAGO	S111892788		1000 N ASHLAND		SPILLS
CHICAGO	S111920063		401 N ASHLAND		SPILLS
CHICAGO	S111895462		3332 N ASHLAND		SPILLS
CHICAGO	S111891530		7520 S ASHLAND		SPILLS
CHICAGO	S111882029		5343 S ASHLAND		SPILLS
CHICAGO	S111922702		ASHLAND AVE		SPILLS
CHICAGO	S111920039		4224 ASHLAND AVE		SPILLS
CHICAGO	S111889871		2352 S ASHLAND		SPILLS
CHICAGO	S111924249		4024 ASHLAND AVE		SPILLS
CHICAGO	S111905030		415 N ASHLAND		SPILLS
CHICAGO	S111905871		2200 S ASHLAND		SPILLS
CHICAGO	S111899471		6837 S ASHLAND		SPILLS
CHICAGO	S111889175		7101 S ASHLAND		SPILLS
CHICAGO	S111879432		8345 S ASHLAND		SPILLS

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CHICAGO	S111919969		4024 ASHLAND AVE		SPILLS
CHICAGO	S111919211		4024 ASHLAND AVE		SPILLS
CHICAGO	S111915218		7059 S ASHLAND		SPILLS
CHICAGO	S111882512		3700 S ASHLAND		SPILLS
CHICAGO	S111881216		ASHLAND & LAWRENCE		SPILLS
CHICAGO	S111909172		8701 S ASHLAND		SPILLS
CHICAGO	S111889497		4123 N ASHLAND		SPILLS
CHICAGO	S111875588		3737 N ASHLAND		SPILLS
CHICAGO	S111920317		2800 N ASHLAND		SPILLS
CHICAGO	S111891756		OF ASHLAND AVE		SPILLS
CHICAGO	S111880143		2459 N ASHLAND		SPILLS
CHICAGO	S111879985		9420 S ASHLAND		SPILLS
CHICAGO	S111919890		4024 ASHLAND AVE		SPILLS
CHICAGO	S111919871		2730 N ASHLAND		SPILLS
CHICAGO	S111895708		6630 S ASHLAND		SPILLS
CHICAGO	S111888774		ASHLAND YARD		SPILLS
CHICAGO	S111905457		325 N ASHLAND		SPILLS
CHICAGO	S111880683		7059 ASHLAND ST		SPILLS
CHICAGO	S111903522		5900 S ASHLAND		SPILLS
CHICAGO	S111903492		649 N ASHLAND		SPILLS
CHICAGO	S111901940		2020 N ASHLAND		SPILLS
CHICAGO	S111901581		3535 S ASHLAND		SPILLS
CHICAGO	S111903829		5257 S ASHLAND		SPILLS
CHICAGO	S111890400		3130 S ASHLAND		SPILLS
CHICAGO	S111875987		2020 N ASHLAND		SPILLS
CHICAGO	S111879066		ASHLAND & 22ND ST		SPILLS
CHICAGO	S111924188		4024 ASHLAND AVE		SPILLS
CHICAGO	S111915565		8640 S ASHLAND		SPILLS
CHICAGO	S111915294		7101 S ASHLAND		SPILLS
CHICAGO	S111914633		348 ASHLAND AVE		SPILLS
CHICAGO	S111910200		2100 S ASHLAND		SPILLS
CHICAGO	S111884403		5026 N ASHLAND		SPILLS
CHICAGO	S111749785		1430 S ASHLAND		SPILLS
CHICAGO	S109366444		ASIG MOUNT PROSPECT RD NW		SPILLS
CHICAGO	S111924323		RD ASIG MOUNT PROSPECT ENTRANCE H NW		SPILLS
CHICAGO	92253228	ASPHALT RECOVERY SYSTEMS 4835 SOUTH MORG/	ASPHALT RECOVERY SYSTEMS 4835 SOUTH MORGAN		ERNS
CHICAGO	94393029	M-5 AT ACCESS RD AT OHARE AIRPORT BETWEEN TERMINAL 3 AND INT	M-5 AT ACCESS RD AT OHARE AIRPORT BETWEEN TERMINAL 3 AND INT		ERNS
CHICAGO	2009900532	I-57 AT 99TH & HALSTEAD EXIT	I-57 AT 99TH & HALSTEAD EXIT		ERNS
CHICAGO	2008900532	I-57 AT 99TH & HALSTEAD EXIT	I-57 AT 99TH & HALSTEAD EXIT		ERNS
CHICAGO	S111894433		2363 W AUGDEN AVE		SPILLS
CHICAGO	S111888908		4501 W AUGUST BLVD		SPILLS
CHICAGO	S111885906		2405 W AUGUSTA		SPILLS
CHICAGO	S111894681		1700 W AUGUSTA		SPILLS
CHICAGO	S111906482		1260 W AUGUSTA		SPILLS
CHICAGO	S111918585		1949 W AUGUSTA		SPILLS
CHICAGO	S111897818		4801 S AUSTIN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111875905		1900 N AUSTIN		SPILLS
CHICAGO	S111898927		3020 N AUSTIN		SPILLS
CHICAGO	89108912	NORTH AVE AND LASALLE ST	NORTH AVE AND LASALLE ST		ERNS
CHICAGO	S109167113		1425 SW AVE		SPILLS
CHICAGO	S111889368		6131 NORTHWEST AVE		SPILLS
CHICAGO	S111889367		6060 NORTHWEST AVE		SPILLS
CHICAGO	S111909940		1425 SOUTHWEST AVE		SPILLS
CHICAGO	S111905664		10558 AVE NORTH		SPILLS
CHICAGO	S111875954		11610 AVE O		SPILLS
CHICAGO	S111912313		11835 S AVE 0		SPILLS
CHICAGO	S111901173		AVE 0 & 116TH ST		SPILLS
CHICAGO	S111909089		5600 NORTH AVE		SPILLS
CHICAGO	S111899915		12949 AVE O		SPILLS
CHICAGO	S111927231		6740 W AVE		SPILLS
CHICAGO	S111907771		732 SOUTHWEST AVE		SPILLS
CHICAGO	S111898055		11610 AVE O		SPILLS
CHICAGO	S111927791		1425 SW AVE		SPILLS
CHICAGO	S111908413		13600 S AVE N		SPILLS
CHICAGO	S111896019		11610 AVE O		SPILLS
CHICAGO	S111912702		AVE N		SPILLS
CHICAGO	S111897832		NORTH AVE		SPILLS
CHICAGO	91217612	AVE. O & 111TH STREET	AVE. O & 111TH STREET		ERNS
CHICAGO	2005616197	6547 N AVENDALE	6547 N AVENDALE		ERNS
CHICAGO	90169860	11610 AVENUE ZERO	11610 AVENUE ZERO		ERNS
CHICAGO	S111888413		4024 N AVERS		SPILLS
CHICAGO	S111907712		388 N AVERS ST		SPILLS
CHICAGO	S111906041		3360 N AVONDALE		SPILLS
CHICAGO	S111907972		3388 AVONDALE ST		SPILLS
CHICAGO	S111906266		6501 N AVONDALE BLVD		SPILLS
CHICAGO	S111892650		6479 N AVONDALE		SPILLS
CHICAGO	94366797	MM B514	MM B514		ERNS
CHICAGO	99650012	IN BACK OF CAR DEALER	IN BACK OF CAR DEALER		ERNS
CHICAGO	S111912436		8500 S BAKER		SPILLS
CHICAGO	S111905021		13359 S BALTIMORE ST		SPILLS
CHICAGO	S111898806		8491 S BALTIMORE		SPILLS
CHICAGO	92297014	BARR YARD FACILITY	BARR YARD FACILITY		ERNS
CHICAGO	94368478	BARR YARD	BARR YARD		ERNS
CHICAGO	94407403	BARR RAIL YARD TRACK F2	BARR RAIL YARD TRACK F2		ERNS
CHICAGO	S110278199		BARR YARD		SPILLS
CHICAGO	2007308409	BARR RAILYARD	BARR RAILYARD		ERNS
CHICAGO	S111890670		BARR YARD		SPILLS
CHICAGO	S111893146		BARR YARD		SPILLS
CHICAGO	S111896779		BARR YARD IN		SPILLS
CHICAGO	S111892664		BARR YARD		SPILLS
CHICAGO	S111891412		S BARR YARD 13600		SPILLS
CHICAGO	S111907524		BARR RAILYARD		SPILLS
CHICAGO	S111910961		4921 W BARRISON ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2012107030		BEDFORD PARK		ERNS
CHICAGO	93317876	BEHIND QUARRY ON 28TH AND HALLSTON	BEHIND QUARRY ON 28TH AND HALLSTON		ERNS
CHICAGO	93312357	BEHIND BUS STATION AT FOSTER STREET	BEHIND BUS STATION AT FOSTER STREET		ERNS
CHICAGO	8867774	BEHIND FORD MOTOR CO	BEHIND FORD MOTOR CO		ERNS
CHICAGO	S111909791		6650 W BELDEN AVE		SPILLS
CHICAGO	S111909066		6650 W BELDEN AVE		SPILLS
CHICAGO	S111905676		7003 S BELL		SPILLS
CHICAGO	S111891060		4244 N BELL		SPILLS
CHICAGO	S111923381		7100 S BELL		SPILLS
CHICAGO	S111907306		6301 S BELL		SPILLS
CHICAGO	S111877683		342 N BELL		SPILLS
CHICAGO	S111907143		4117 N BELL ST		SPILLS
CHICAGO	2001552751	SH BELL OLD DRY DOCK SLIP	SH BELL OLD DRY DOCK SLIP	0	ERNS
CHICAGO	S111926441		7320 W BELLMONT		SPILLS
CHICAGO	S111882675		7055 W BELLMONT AVE		SPILLS
CHICAGO	S111884055		4200 W BELLMONT AVE		SPILLS
CHICAGO	S111905727		6809 BELLMONT AVE		SPILLS
CHICAGO	2001562904	BELLMONT ROAD	BELLMONT ROAD	0	ERNS
CHICAGO	93349990	BELMONT AND KEDZEE STS	BELMONT AND KEDZEE STS		ERNS
CHICAGO	2004724076	3200 NORTH BELMONT	3200 NORTH BELMONT		ERNS
CHICAGO	2003702829	BELMONT HARBOR	BELMONT HARBOR		ERNS
CHICAGO	S111887682		5001 W BELMONT		SPILLS
CHICAGO	S111886379		4549 BELMONT		SPILLS
CHICAGO	S111885935		3968 W BELMONT		SPILLS
CHICAGO	S111887621		4500 W BELMONT		SPILLS
CHICAGO	S111904780		3500 W BELMONT		SPILLS
CHICAGO	S111899228		1415 W BELMONT		SPILLS
CHICAGO	S111895053		4820 W BELMONT		SPILLS
CHICAGO	S111875235		5400 W BELMONT		SPILLS
CHICAGO	S111898905		5142 W BELMONT		SPILLS
CHICAGO	S111893069		2227 W BELMONT		SPILLS
CHICAGO	S111921792		2858 W BELMONT		SPILLS
CHICAGO	S111894478		4401 W BELMONT		SPILLS
CHICAGO	S111881972		3927 W BELMONT		SPILLS
CHICAGO	S111906293		4700 W BELMONT		SPILLS
CHICAGO	S111888499		6419 BELMONT		SPILLS
CHICAGO	S111899454		5811 W BELMONT		SPILLS
CHICAGO	S111890737		6546 W BELMONT		SPILLS
CHICAGO	S111882827		1525 W BELMONT		SPILLS
CHICAGO	S111898676		3409 W BELMONT		SPILLS
CHICAGO	S111897570		3045 W BELMONT ST		SPILLS
CHICAGO	S111878548		6757 W BELMONT		SPILLS
CHICAGO	S111884819		2001 W BELMONT		SPILLS
CHICAGO	S111899039		5410 W BELMONT		SPILLS
CHICAGO	S111911378		5900 W BELMONT		SPILLS
CHICAGO	S111883236		3416 W BELMONT		SPILLS
CHICAGO	2000533030	BELMONT HARBOR	BELMONT HARBOR	0	ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S109953676		1608 W BELMONTE AVE		SPILLS
CHICAGO	S111925406		1608 W BELMONTE AVE		SPILLS
CHICAGO	96486114	BELT RAILWAY YARD MP: UNKNOWN	BELT RAILWAY YARD MP: UNKNOWN		ERNS
CHICAGO	S111899119		1457 W BELTMONT AVE		SPILLS
CHICAGO	S111920275		2415 W BEMONT AVE		SPILLS
CHICAGO	S111905126		5600 N BENARD		SPILLS
CHICAGO	S111911325		BENSENVILLE RAILROAD YARD		SPILLS
CHICAGO	99621260	BENSONVILLE YARD BETWEEN MANHEIM AND YORK ROAD	BENSONVILLE YARD BETWEEN MANHEIM AND YORK ROAD		ERNS
CHICAGO	S111911109		5555 N BERNARD AVE		SPILLS
CHICAGO	S111909587		1641 W BERRY		SPILLS
CHICAGO	2002625685	3237 W BERTAEU	3237 W BERTAEU	0	ERNS
CHICAGO	S111875681		4514 BERTEAU		SPILLS
CHICAGO	S111900173		4404 W BERTEAU		SPILLS
CHICAGO	2000542071	BERWIN STATION	BERWIN STATION	0	ERNS
CHICAGO	2010952538	BERWYN STATION RED LINE	BERWYN STA		ERNS
CHICAGO	S111882698		1824 N BESLY		SPILLS
CHICAGO	S111888654		10000 BESSIE COLEMAN RD		SPILLS
CHICAGO	S111904847		1000 BESSIE COLEMAN DR		SPILLS
CHICAGO	S111892588		560 BESSIECOLEMAN DR		SPILLS
CHICAGO	91233983	BETWEEN 4.5 TO 5.0	BETWEEN 4.5 TO 5.0		ERNS
CHICAGO	94360249	BETWEEN MAJOR ST AND PARKSIDE AT THE SOUTH EAST CORNER OF 62	BETWEEN MAJOR ST AND PARKSIDE AT THE SOUTH EAST CORNER OF 62		ERNS
CHICAGO	2000534642	BETWEEN LEMONT AND	BETWEEN LEMONT AND	0	ERNS
CHICAGO	99626004	BETWEEN LOWE AND WALLACE TO 81ST STREET	BETWEEN LOWE AND WALLACE TO 81ST STREET		ERNS
CHICAGO	98433927	BETWEEN ADAMS AND JACKSON STREET AT UNION STATION OUTFALL	BETWEEN ADAMS AND JACKSON STREET AT UNION STATION OUTFALL		ERNS
CHICAGO	S111893339		BETWEEN 8514 S KENNETH & N MICHIGAN AVE		SPILLS
CHICAGO	S111906832		BETWEEN GRAYSLAKE & CHICAGO		SPILLS
CHICAGO	S111910210		BETWEEN 111TH & 112TH ON SOUTH AVE N		SPILLS
CHICAGO	S108046717		800 E BISHOP FORD EXPY		SPILLS
CHICAGO	S110278077		12500 S BISHOP FRD		SPILLS
CHICAGO	S111876709		823 W BLACK HAWK		SPILLS
CHICAGO	S111898039		1419 W BLACKHAWK		SPILLS
CHICAGO	S111875500		823 W BLACKHAWK		SPILLS
CHICAGO	98455783	80000 SOUTH BLACKSTONE	80000 SOUTH BLACKSTONE		ERNS
CHICAGO	93345927	4400 BLOCK OF ADDISON ST NEXT TO SPRAGUE IRON WORKS	4400 BLOCK OF ADDISON ST NEXT TO SPRAGUE IRON WORKS		ERNS
CHICAGO	2004727492	2700 BLOCK OF WEST GRAND	2700 BLOCK OF WEST GRAND		ERNS
CHICAGO	98429208	5700 BLOCK OF NORTH MOBILE AVE IN THE MIDDLE OF THE ALLEY	5700 BLOCK OF NORTH MOBILE AVE IN THE MIDDLE OF THE ALLEY		ERNS
CHICAGO	2009922293	1300 BLOCK OF WESTERN AVE.	1300 BLOCK OF WESTERN AVE.		ERNS
CHICAGO	S109327504		600 BLOCK OF KINZIE		SPILLS
CHICAGO	S111884785		3800 BLOCK OF W TAYLOR ST		SPILLS
CHICAGO	S111877926		5000 BLOCK OF CENTRAL AVE		SPILLS
CHICAGO	S111911159		3221 BLOCK OF S WALLACE		SPILLS
CHICAGO	S111881362		2700 BLOCK OF W GRAND AVE		SPILLS

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CHICAGO	S111919579		4300 BLOCK OF W FOSTER		SPILLS
CHICAGO	S111895449		4500 BLOCK OF W BERTEAU AVE		SPILLS
CHICAGO	S111919397		1200 BLOCK W OF NORTH AVENUE OF BRG S		SPILLS
CHICAGO	2002598894	2300 BLOCK OF NORTH AVE	2300 BLOCK OF NORTH AVE	0	ERNS
CHICAGO	S111903661		5000 BLOOMINGDALE AVE		SPILLS
CHICAGO	S111907691		4940 BLOOMINGDALE AVE		SPILLS
CHICAGO	S111890714		2530 W BLOOMINGDALE		SPILLS
CHICAGO	2003653270	BLUE LINE / O'HARE BRANCH	BLUE LINE / O'HARE BRANCH		ERNS
CHICAGO	2009908230	BLUE LINE CENTRAL STATION	BLUE LINE CENTRAL STATION		ERNS
CHICAGO	2008908230	BLUE LINE CENTRAL STATION	BLUE LINE CENTRAL STATION		ERNS
CHICAGO	2010938905	BLUE LINE	BLUE LINE		ERNS
CHICAGO	S111913352		2584 S BLUE IS		SPILLS
CHICAGO	S111924578		160 S BLUE ISLAND AVE		SPILLS
CHICAGO	S111892462		2584 S BLUE IS		SPILLS
CHICAGO	S111878148		2655 S BLUE ISLAND AVE		SPILLS
CHICAGO	S111907798		2524 S BLUE IS		SPILLS
CHICAGO	S111889753		1801 SOUTHWEST BLVD		SPILLS
CHICAGO	S111896192		1535 N BOSWORTH		SPILLS
CHICAGO	S111914709		1650 N BOSWORTH ST		SPILLS
CHICAGO	S111891070		41 BRAINARD AVENUE TO 130TH AND S AVE		SPILLS
CHICAGO	S108047339		N BRANCH RD & DIVISION ST		SPILLS
CHICAGO	94395395	NORTH BRANCH	NORTH BRANCH		ERNS
CHICAGO	877940	NORTH BRANCH OF THE CHICAGO RIVER	NORTH BRANCH OF THE CHICAGO RIVER		ERNS
CHICAGO	8714268	NORTH BRANCH	NORTH BRANCH		ERNS
CHICAGO	89118757	SO. BRANCH OF CHGO RIVER BETW LAKE & RAN	SO. BRANCH OF CHGO RIVER BETW LAKE & RAN	-	ERNS
CHICAGO	S111891018		S BRANCH CHICAGO RIV		SPILLS
CHICAGO	S111877919		932 N BRANCH ST		SPILLS
CHICAGO	S111900952		1200 N BRANCH ST		SPILLS
CHICAGO	90188490	922 NORTH BRANCH STREET	922 NORTH BRANCH STREET		ERNS
CHICAGO	99633000	SOUTH BREAK WALL / 63RD STREET BEACH	SOUTH BREAK WALL / 63RD STREET BEACH		ERNS
CHICAGO	91227080	6601 N BRIDGE BLVD	6601 N BRIDGE BLVD		ERNS
CHICAGO	S111881181		6601 N BRIDGE BLVD		SPILLS
CHICAGO	2006801026	BRIGHTON PARK	BRIGHTON PARK		ERNS
CHICAGO	S111349440		5821 N BROADWAY		SPILLS
CHICAGO	S111886763		4900 N BROADWAY		SPILLS
CHICAGO	S111887507		4849 N BROADWAY		SPILLS
CHICAGO	S111887501		5625 N BROADWAY		SPILLS
CHICAGO	S111887779		5156 N BROADWAY		SPILLS
CHICAGO	S111897919		4117 N BROADWAY		SPILLS
CHICAGO	S111884883		3440 N BROADWAY		SPILLS
CHICAGO	S111910986		5657 N BROADWAY		SPILLS
CHICAGO	S111876296		5427 N BROADWAY		SPILLS
CHICAGO	S111899247		2836 N BROADWAY		SPILLS
CHICAGO	S111912165		6231 BROADWAY		SPILLS
CHICAGO	S111877353		5427 N BROADWAY IN ALY		SPILLS
CHICAGO	S111911692		3012 N BROADWAY		SPILLS
CHICAGO	S111905888		3829 N BROADWAY		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111906834		5027 N BROADWAY		SPILLS
CHICAGO	S111926518		5343 BROADWAY AVE		SPILLS
CHICAGO	S111882856		4916 N BROADWAY		SPILLS
CHICAGO	S111882855		4925 N BROADWAY		SPILLS
CHICAGO	S111882854		4925 N BROADWAY		SPILLS
CHICAGO	S111899411		2840 N BROADWAY		SPILLS
CHICAGO	S111889471		5719 N BROADWAY		SPILLS
CHICAGO	S111927855		3531 N BROADWAY		SPILLS
CHICAGO	S111877180		5427 N BROADWAY		SPILLS
CHICAGO	S111895976		4843 BROADWAY		SPILLS
CHICAGO	2010960866	BROWN LINE AT KEDZIE STATION	BROWN LINE AT KEDZIE STA		ERNS
CHICAGO	S111887767		1939 W BRYN MAWR ST		SPILLS
CHICAGO	S111883885		1404 W BRYN MAWR ST		SPILLS
CHICAGO	S111905127		3434 W BRYN MAWR		SPILLS
CHICAGO	S111889215		3426 W BRYN MAWR		SPILLS
CHICAGO	S111915544		6123 W BRYN MAWR		SPILLS
CHICAGO	93337686	3131 W BRYNMAWR	3131 W BRYNMAWR		ERNS
CHICAGO	S111891567		3131 N BRYNMAWR AVE		SPILLS
CHICAGO	S111907390		8702 S BUFFALO ST		SPILLS
CHICAGO	S111911437		9002 S BUFFALO		SPILLS
CHICAGO	S108047785		BUILDING SERVICE CTR		SPILLS
CHICAGO	S108046885		BUILDING UNITED AIRLINES		SPILLS
CHICAGO	S111887390		BUILDING OHARE AIRPORT		SPILLS
CHICAGO	2011994509		BUILDING SOUTH CARGO RD		ERNS
CHICAGO	S111924536		BUILDING OHARE INTERNATIONAL A		SPILLS
CHICAGO	S111906378		BURHAM HBR		SPILLS
CHICAGO	S111891899		11600 S BURLEY		SPILLS
CHICAGO	S111902409		11600 BURLEY AVE		SPILLS
CHICAGO	S111900767		11600 BURLEY AVE		SPILLS
CHICAGO	S111894536		110600 BURLEY AVE		SPILLS
CHICAGO	S111889147		11600 S BURLEY		SPILLS
CHICAGO	S111878621		11600 S BURLEY		SPILLS
CHICAGO	S111880564		11600 S BURLEY		SPILLS
CHICAGO	S111898997		11800 S BURLEY		SPILLS
CHICAGO	90180914	11600 BURLY AVE	11600 BURLY AVE		ERNS
CHICAGO	90186778	11600 BURLY AVE	11600 BURLY AVE		ERNS
CHICAGO	93331311	BURNHAM PARK HARBOR	BURNHAM PARK HARBOR		ERNS
CHICAGO	94370999	BURNHAM PARK HARBOR MARINA	BURNHAM PARK HARBOR MARINA		ERNS
CHICAGO	2004727889	BURNHAM HARBOR	BURNHAM HARBOR		ERNS
CHICAGO	2009913512	BURNHAM HARBOR	BURNHAM HARBOR		ERNS
CHICAGO	2008913512	BURNHAM HARBOR	BURNHAM HARBOR		ERNS
CHICAGO	2011986593		BURNHAM HBR		ERNS
CHICAGO	S111877590		BURNHAM HBR		SPILLS
CHICAGO	2001566538	BURNHAM HARBOR	BURNHAM HARBOR	0	ERNS
CHICAGO	2000547571	BURNHAM HARBOR YACHT CLUB	BURNHAM HARBOR YACHT CLUB	0	ERNS
CHICAGO	90184467	BURNS DITCH R&C MARINA	BURNS DITCH R&C MARINA		ERNS
CHICAGO	S111882677		70 W BURTON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S108046892		CAL SAG RIV		SPILLS
CHICAGO	91236336	CAL SAG CHANNEL (6 MI E. OF INDIANA AVE)	CAL SAG CHANNEL (6 MI E. OF INDIANA AVE)		ERNS
CHICAGO	91205743	CALAMUT RAIL YARD	CALAMUT RAIL YARD		ERNS
CHICAGO	S111892119		6200 N CALDWELL		SPILLS
CHICAGO	S111891835		2501 N CALIFORNI AVE		SPILLS
CHICAGO	S111886757		958 N CALIFORNIA		SPILLS
CHICAGO	S111887519		1741 N CALIFORNIA		SPILLS
CHICAGO	S111903102		4637 S CALIFORNIA		SPILLS
CHICAGO	S111881901		925 N CALIFORNIA		SPILLS
CHICAGO	S111896620		4658 S CALIFORNIA		SPILLS
CHICAGO	S111884704		CALIFORNIA & ARMITAGE		SPILLS
CHICAGO	S111902177		3711 S CALIFORNIA		SPILLS
CHICAGO	S111893838		CALIFORNIA & WASHINGTON		SPILLS
CHICAGO	S111877444		3301 S CALIFORNIA		SPILLS
CHICAGO	S111884627		1647 N CALIFORNIA		SPILLS
CHICAGO	S111894587		3151 S CALIFORNIA		SPILLS
CHICAGO	S111879294		6655 S CALIFORNIA		SPILLS
CHICAGO	S111879281		1655 N CALIFORNIA		SPILLS
CHICAGO	S111876477		501 S CALIFORNIA		SPILLS
CHICAGO	S111898539		320 N CALIFORNIA		SPILLS
CHICAGO	S111883048		2000 CALIFORNIA		SPILLS
CHICAGO	S111901748		2339 N CALIFORNIA		SPILLS
CHICAGO	S111900508		4925 S CALIFORNIA		SPILLS
CHICAGO	S111902394		502 S CALIFORNIA		SPILLS
CHICAGO	S111902385		6736 N CALIFORNIA		SPILLS
CHICAGO	S111895024		1500 CALIFORNIA		SPILLS
CHICAGO	S111920561		3500 N CALIFORNIA		SPILLS
CHICAGO	S111918977		916 S CALIFORNIA		SPILLS
CHICAGO	S111892384		837 N CALIFORNIA		SPILLS
CHICAGO	S111880141		2026 S CALIFORNIA		SPILLS
CHICAGO	S111915135		3114 N CALIFORNIA		SPILLS
CHICAGO	S111899764		2531 N CALIFORNIA ST		SPILLS
CHICAGO	S111889124		4201 N CALIFORNIA		SPILLS
CHICAGO	S111894023		3401 S CALIFORNIA		SPILLS
CHICAGO	S111891724		3541 S CALIFORNIA		SPILLS
CHICAGO	S111912804		340 S CALIFORNIA ST		SPILLS
CHICAGO	S111912805		340 S CALIFORNIA ST		SPILLS
CHICAGO	S111913887		2710 N CALIFORNIA		SPILLS
CHICAGO	99649653	CALSAG HARBOR BETWEEN MM 305 AND 306.5	CALSAG HARBOR BETWEEN MM 305 AND 306.5		ERNS
CHICAGO	92271530	CALUMEP RIVER	CALUMEP RIVER		ERNS
CHICAGO	S108046893		CALUMET RIV		SPILLS
CHICAGO	2009919708	CALUMET YARD	CALUMET YARD		ERNS
CHICAGO	2010933382	CALUMET RIVER 9402 SOUTH EWING AVE.	9402 CALUMET RIV S		ERNS
CHICAGO	2007321724	CALUMET RAILYARD	CALUMET RAILYARD		ERNS
CHICAGO	2010949502	CALUMET RIVER	CALUMET RIV		ERNS
CHICAGO	2006789187	CALUMET RIVER	CALUMET RIVER		ERNS
CHICAGO	S111886949		CALUMET YARD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111885994		CALUMET RIV		SPILLS
CHICAGO	S111884983		6217 S CALUMET		SPILLS
CHICAGO	S111887496		CALUMET YARD & 106TH ST		SPILLS
CHICAGO	S111875416		4151 S CALUMET		SPILLS
CHICAGO	S111883222		3920 S CALUMET		SPILLS
CHICAGO	S111927484		3259 CALUMET RIV E		SPILLS
CHICAGO	S111922328		CALUMET YARD		SPILLS
CHICAGO	S111908596		CALUMET RIV		SPILLS
CHICAGO	S111900155		CALUMET EXPRESSWAY AT COTTAGE AVE		SPILLS
CHICAGO	S111891884		CALUMET YARDS		SPILLS
CHICAGO	S111908122		5817 S CALUMET		SPILLS
CHICAGO	S111927844		2926 CALUMET RIV E		SPILLS
CHICAGO	S111915066		2822 S CALUMET		SPILLS
CHICAGO	S111894015		3130 N CAMBELL		SPILLS
CHICAGO	S110613600		CAMPBELL RD & IOWA DR		SPILLS
CHICAGO	S111887622		212 S CAMPBELL		SPILLS
CHICAGO	S111892900		10200 S CAMPBELL		SPILLS
CHICAGO	S111912463		2930 N CAMPBELL		SPILLS
CHICAGO	S111901814		3245 N CAMPBELL		SPILLS
CHICAGO	S111892671		2700 N CAMPBELL		SPILLS
CHICAGO	S111892082		300 N CAMPBELL AVE		SPILLS
CHICAGO	S111919759		5703 S CAMPBELL		SPILLS
CHICAGO	S108047914		436 W CANAL ST		SPILLS
CHICAGO	S108047895		CANAL ST		SPILLS
CHICAGO	S108046896		CANAL ST		SPILLS
CHICAGO	91228231	CANAL STREET RAMP CHICAGO	CANAL STREET RAMP CHICAGO		ERNS
CHICAGO	2002597953	CANAL STREET YARD	CANAL STREET YARD	0	ERNS
CHICAGO	2011966290	CANAL STREET	CANAL ST		ERNS
CHICAGO	S111887901		840 N CANAL		SPILLS
CHICAGO	2012104231		CANAL STREET AND 25TH ST		ERNS
CHICAGO	S111876502		155 N CANAL		SPILLS
CHICAGO	S111922227		2148 S CANAL		SPILLS
CHICAGO	S111910488		CANAL		SPILLS
CHICAGO	S111881718		1514 S CANAL		SPILLS
CHICAGO	S111925763		426 W CANAL ST		SPILLS
CHICAGO	S111905014		2148 S CANAL PRT		SPILLS
CHICAGO	S111925132		436 W CANAL ST		SPILLS
CHICAGO	S111926582		1800 S CANAL RD		SPILLS
CHICAGO	S111920433		CANAL ST		SPILLS
CHICAGO	S111883676		CANAL & MADISON ST		SPILLS
CHICAGO	S111896706		1802 CANAL ST		SPILLS
CHICAGO	S111927595		210 S CANAL		SPILLS
CHICAGO	S110685241		1800 S CANAL		SPILLS
CHICAGO	S111907076		2601 CANNON DR		SPILLS
CHICAGO	99647114	RR CAR NO.GATX22983 2040 E. 106TH ST MP B510/RR YARD	RR CAR NO.GATX22983 2040 E. 106TH ST MP B510/RR YARD		ERNS
CHICAGO	S111879803		12800 S CARBONDOLET AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111894135		300 W CARFIELD BLVD		SPILLS
CHICAGO	92263363	CARGO FACILITY O'HARE AIRPORT	CARGO FACILITY O'HARE AIRPORT		ERNS
CHICAGO	S110613734		CARGO FUEL FACILITY OHARE AP		SPILLS
CHICAGO	S111349447		SW CARGO FACILITY OHARE AIRPORT		SPILLS
CHICAGO	U003984894	DELTA AIR LINES/O'HARE INTERNATIONAL AIRPORT	SW CARGO AREA		UST
CHICAGO	S111891065		511 CARGO RD		SPILLS
CHICAGO	S111896980		CARGO RD		SPILLS
CHICAGO	S111883856		CARGO FACILITY OHARE INTERNATI		SPILLS
CHICAGO	S111907727		610 CARGO NORTH BLDG		SPILLS
CHICAGO	S111877817		SW CARGO RD		SPILLS
CHICAGO	S111926512		CARGO FUEL FACILITY OHARE AIRP		SPILLS
CHICAGO	S111892245		844 N CARIBE		SPILLS
CHICAGO	S111878166		1512 W CARMEN		SPILLS
CHICAGO	S108045639		1747 W CARMENT		SPILLS
CHICAGO	2008862757	1250 CAROLINA AVE.	1250 CAROLINA AVE.		ERNS
CHICAGO	S109092838		1250 CAROLINA AVE		SPILLS
CHICAGO	S111885461		12260 S CARONDOLET		SPILLS
CHICAGO	S111896210		12260 S CARONDOLET		SPILLS
CHICAGO	S111900589		12260 S CARONDOLET		SPILLS
CHICAGO	S111896514		12260 S CARONDOLET		SPILLS
CHICAGO	S111896476		12260 S CARONDOLET		SPILLS
CHICAGO	S111896143		12260 S CARONDOLET		SPILLS
CHICAGO	S111877600		12260 S CARONDOLET		SPILLS
CHICAGO	S111895250		212 N CARPENTER		SPILLS
CHICAGO	S111898164		742 N CARPENTER AVE		SPILLS
CHICAGO	S111890965		2155 S CARPENTER		SPILLS
CHICAGO	S111882601		1044 CARPENTER		SPILLS
CHICAGO	S111888932		3120 W CARROL ST		SPILLS
CHICAGO	S111900365		1901 W CARROL ST		SPILLS
CHICAGO	S111885009		3114 W CARROLL ST		SPILLS
CHICAGO	S111884953		2900 W CARROLL		SPILLS
CHICAGO	S111887538		2040 W CARROLL		SPILLS
CHICAGO	S111903738		1220 W CARROLL ST		SPILLS
CHICAGO	S111900539		3039 W CARROLL ST		SPILLS
CHICAGO	S111893099		1658 CARROLL AVE		SPILLS
CHICAGO	S111899170		1220 W CARROLL		SPILLS
CHICAGO	S111895404		3021 W CARROLL ST		SPILLS
CHICAGO	S111905468		2925 W CARROLL		SPILLS
CHICAGO	S111899418		3005 W CARROLL ST		SPILLS
CHICAGO	S111894938		1700 W CARROLL		SPILLS
CHICAGO	S111892946		2100 W CARROLL		SPILLS
CHICAGO	S111896007		1805 W CARROLL ST		SPILLS
CHICAGO	S111897853		1700 W CARROLL ST		SPILLS
CHICAGO	S111913102		2550 W CATALPA		SPILLS
CHICAGO	S111881209		1122 W CATALPA		SPILLS
CHICAGO	S111904525		2601 W CATALPA		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2009918160	MP: CD515	MP: CD515		ERNS
CHICAGO	2007311320	MM CD515	MM CD515		ERNS
CHICAGO	2011989792		CD517		ERNS
CHICAGO	94389597	CENTRAL AND DIVERSY	CENTRAL AND DIVERSY		ERNS
CHICAGO	S109327563		CENTRAL & ROOSEVELT NEW ROCKNEY SCHOOL		SPILLS
CHICAGO	S111888433		5248 S CENTRAL		SPILLS
CHICAGO	S111891640		CENTRAL & DIVERSEY ST		SPILLS
CHICAGO	S111875281		4780 S CENTRAL UNINCORPORATED AREA		SPILLS
CHICAGO	S111905611		1250 N CENTRAL PARK		SPILLS
CHICAGO	S111890916		627 N CENTRAL PARK ST		SPILLS
CHICAGO	S111879289		4075 N CENTRAL		SPILLS
CHICAGO	S111878394		6425 S CENTRAL		SPILLS
CHICAGO	S111906605		CENTRAL INTERMODAL FACILITY CO		SPILLS
CHICAGO	S111889756		5923 S CENTRAL		SPILLS
CHICAGO	S111880908		3935 N CENTRAL PARK		SPILLS
CHICAGO	S111902836		5708 S CENTRAL ST		SPILLS
CHICAGO	S111877253		1802 CENTRAL RD		SPILLS
CHICAGO	S111891373		6900 S CENTRAL		SPILLS
CHICAGO	S111908416		645 CENTRAL AVE		SPILLS
CHICAGO	S111901319		6013 CENTRAL AVE		SPILLS
CHICAGO	S111901316		6013 CENTRAL AVE		SPILLS
CHICAGO	S111898988		1546 N CENTRAL		SPILLS
CHICAGO	S111882059		1440 W CERMAC RD		SPILLS
CHICAGO	92293268	1111 WEST CERMACK ST	1111 WEST CERMACK ST		ERNS
CHICAGO	93334397	1111 WEST CERMACK	1111 WEST CERMACK		ERNS
CHICAGO	S111905319		1111 W CERMACK RD		SPILLS
CHICAGO	S111912357		3855 W CERMACK		SPILLS
CHICAGO	S111900882		1111 W CERMACK RD		SPILLS
CHICAGO	S111894614		1111 W CERMACK		SPILLS
CHICAGO	S111905580		1130 W CERMACK		SPILLS
CHICAGO	S111883365		CERMACK & ASHLAND		SPILLS
CHICAGO	S111910399		ON CERMACK AVE BETWEEN WABASH & MICHIGAN AVE		SPILLS
CHICAGO	S111907663		3148 W CERMACK RD		SPILLS
CHICAGO	S111893382		1111 W CERMACK		SPILLS
CHICAGO	91207322	4204 WEST CERMACK ST.	4204 WEST CERMACK ST.		ERNS
CHICAGO	89118761	CERMAK & MONROE STREET	CERMAK & MONROE STREET		ERNS
CHICAGO	S111885759		977 W CERMAK		SPILLS
CHICAGO	S111886131		1111 W CERMAK		SPILLS
CHICAGO	S111885967		1111 CERMAK		SPILLS
CHICAGO	S111884657		4401 W CERMAK		SPILLS
CHICAGO	S111881358		3925 W CERMAK		SPILLS
CHICAGO	S111893702		4454 W CERMAK		SPILLS
CHICAGO	S111880157		1234 W CERMAK		SPILLS
CHICAGO	S111927783		1111 W CERMAK		SPILLS
CHICAGO	S111901595		CERMAK & CLARK STS		SPILLS
CHICAGO	2012101308		4936 S CHAMPLAIN		ERNS
CHICAGO	S111910701		11541 S CHAMPLAIN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111876350		11541 S CHAMPLIN		SPILLS
CHICAGO	S111885588		3300 E CHELTENHEM AVE		SPILLS
CHICAGO	S111878878		3300 E CHELTMAHN PL		SPILLS
CHICAGO	8867772	CHEMICAL SYSTEMS	CHEMICAL SYSTEMS		ERNS
CHICAGO	S111897551		1301 N CHERRY ST		SPILLS
CHICAGO	S111900491		361 W CHESTNUT		SPILLS
CHICAGO	S108046904		CHICAGO SHIP 318		SPILLS
CHICAGO	S108047916		CHICAGO MIDWAY AIRPORT AT CENT & W 55TH AVE		SPILLS
CHICAGO	2003647496	CHICAGO O'HARE	CHICAGO O'HARE		ERNS
CHICAGO	2004727490	ON CHICAGO & GRAND AVE	ON CHICAGO & GRAND AVE		ERNS
CHICAGO	2009921306	CHICAGO RIVER	CHICAGO RIVER		ERNS
CHICAGO	2009906499	CHICAGO YARD	CHICAGO YARD		ERNS
CHICAGO	2009910273	SOUTH CHICAGO SUB DISTRICT	SOUTH CHICAGO SUB DISTRICT		ERNS
CHICAGO	2009894848	CHICAGO UNION TERMINAL	CHICAGO UNION TERMINAL		ERNS
CHICAGO	2008910273	SOUTH CHICAGO SUB DISTRICT	SOUTH CHICAGO SUB DISTRICT		ERNS
CHICAGO	2008894848	CHICAGO UNION TERMINAL	CHICAGO UNION TERMINAL		ERNS
CHICAGO	S109700006		7256 S CHICAGO ST		SPILLS
CHICAGO	2008906499	CHICAGO YARD	CHICAGO YARD		ERNS
CHICAGO	S109327564		CHICAGO SANITARY SHIP CANAL		SPILLS
CHICAGO	S109366454		CHICAGO SANITARY SHIP CANAL		SPILLS
CHICAGO	S109366453		CHICAGO OHARE AP		SPILLS
CHICAGO	2006806423	CHICAGO O' HARE AIRPORT	CHICAGO O' HARE AIRPORT		ERNS
CHICAGO	2011964102	CHICAGO STATION BLUE LINE	CHICAGO STA		ERNS
CHICAGO	S111887922		CHICAGO RIV		SPILLS
CHICAGO	S111886376		7934 S CHICAGO AVE		SPILLS
CHICAGO	S111885775		8164 S CHICAGO AVE		SPILLS
CHICAGO	S111886967		CHICAGO CANAL		SPILLS
CHICAGO	2012103416		CHICAGO OHARE		ERNS
CHICAGO	S111905375		4224 W CHICAGO		SPILLS
CHICAGO	S111888712		6711 S CHICAGO		SPILLS
CHICAGO	S111875764		CHICAGO AVE & HUDSON		SPILLS
CHICAGO	S111883209		7130 S CHICAGO AVE		SPILLS
CHICAGO	S111903398		CHICAGO OHARE AIRPORT		SPILLS
CHICAGO	S111878498		2500 W CHICAGO		SPILLS
CHICAGO	S111911795		CHICAGO RIVER OF 18TH ST N		SPILLS
CHICAGO	S111891924		9100 S CHICAGO AVE		SPILLS
CHICAGO	S111877968		9347 S CHICAGO AVE		SPILLS
CHICAGO	S111903012		4346 W CHICAGO		SPILLS
CHICAGO	S111889258		CHICAGO OHARA AIRPORT		SPILLS
CHICAGO	S111909564		CHICAGO RIV		SPILLS
CHICAGO	S111924402		CHICAGO OHARE AIRPORT		SPILLS
CHICAGO	S111904600		8410 S CHICAGO AVE		SPILLS
CHICAGO	S111890504		8900 S CHICAGO SKWY		SPILLS
CHICAGO	S111910432		9343 S CHICAGO AVE		SPILLS
CHICAGO	S111919644		CHICAGO AVE & CALIFORNIA AVE		SPILLS
CHICAGO	S111890490		4950 CHICAGO BEACH DR		SPILLS
CHICAGO	S111889188		8640 S CHICAGO		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111925131		407 W CHICAGO		SPILLS
CHICAGO	S111884145		CHICAGO FD CRASH OHARA FLD		SPILLS
CHICAGO	S111896774		7757 S CHICAGO AVE		SPILLS
CHICAGO	S111925112		7256 S CHICAGO ST		SPILLS
CHICAGO	S111891440		755 CHICAGO OHARA INT		SPILLS
CHICAGO	S111892070		405 W CHICAGO		SPILLS
CHICAGO	S111908897		7301 S CHICAGO AVE		SPILLS
CHICAGO	S111890789		8108 S CHICAGO AVE		SPILLS
CHICAGO	S111877227		CHICAGO HBR & INDIANA		SPILLS
CHICAGO	S111909220		7287 S CHICAGO ST		SPILLS
CHICAGO	S111903121		7000 S CHICAGO AVE		SPILLS
CHICAGO	S111907542		6859 S CHICAGO AVE		SPILLS
CHICAGO	S111920681		3319 W CHICAGO		SPILLS
CHICAGO	S111912730		7605 S CHICAGO AVE		SPILLS
CHICAGO	S111912731		7605 S CHICAGO AVE		SPILLS
CHICAGO	S111882801		777 E CHICAGO AVE		SPILLS
CHICAGO	S111906185		9070 S CHICAGO		SPILLS
CHICAGO	S111900619		6838 S CHICAGO AVE		SPILLS
CHICAGO	S111876578		CHICAGO YARDS		SPILLS
CHICAGO	S111926745		CHICAGO RIV		SPILLS
CHICAGO	2010948714	BY CHICAGO'S UNION STATION	BY CHICAGOS UNION STA		ERNS
CHICAGO	S111887730		4800 S CHICAOG BEECHER DR		SPILLS
CHICAGO	S111906049		2300 CHILDRENS PLZ		SPILLS
CHICAGO	S111901266		3915 N CHRISTIANA		SPILLS
CHICAGO	S111878588		865 N CHRISTIANA		SPILLS
CHICAGO	S111907949		2133 W CHURCHILL		SPILLS
CHICAGO	94383435	22 S CICERO EMPTY BUILDING	22 S CICERO EMPTY BUILDING		ERNS
CHICAGO	98450755	CICERO AVE.	CICERO AVE.		ERNS
CHICAGO	S111218770		4900 N CICERO		SPILLS
CHICAGO	S111887311		6000 N CICERO ST		SPILLS
CHICAGO	S111888134		6219 S CICERO		SPILLS
CHICAGO	S111885930		6301 CICERO AVE		SPILLS
CHICAGO	S111885263		7601 S CICERO		SPILLS
CHICAGO	S111899316		8515 S CICERO		SPILLS
CHICAGO	S111890662		3801 S CICERO AVE		SPILLS
CHICAGO	S111910757		2500 N CICERO		SPILLS
CHICAGO	S111905333		119 S CICERO		SPILLS
CHICAGO	S111900252		3255 N CICERO		SPILLS
CHICAGO	S111900253		3255 N CICERO		SPILLS
CHICAGO	S111892874		1001 N CICERO		SPILLS
CHICAGO	S111913621		1914 N CICERO		SPILLS
CHICAGO	S111881393		8330 S CICERO		SPILLS
CHICAGO	S111906088		3544 N CICERO		SPILLS
CHICAGO	S111878792		7905 S CICERO		SPILLS
CHICAGO	S111904331		3350 N CICERO		SPILLS
CHICAGO	S111903315		7401 S CICERO		SPILLS
CHICAGO	S111884204		CICERO & PETERSON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111878754		2515 N CICERO		SPILLS
CHICAGO	S111918726		632 N CICERO		SPILLS
CHICAGO	S111906353		5200 S CICERO		SPILLS
CHICAGO	S111911848		1949 N CICERO ST		SPILLS
CHICAGO	S111919040		4247 S CICERO		SPILLS
CHICAGO	S111920459		749 S CICERO		SPILLS
CHICAGO	S111904206		4600 S CICERO		SPILLS
CHICAGO	S111892698		2950 N CICERO		SPILLS
CHICAGO	S111908115		7201 S CICERO		SPILLS
CHICAGO	S111881139		5140 S CICERO		SPILLS
CHICAGO	S111896027		7401 S CICERO		SPILLS
CHICAGO	S111898025		CICERO GATE		SPILLS
CHICAGO	S111878051		2758 N CICERO		SPILLS
CHICAGO	S111927771		4401 N CICERO		SPILLS
CHICAGO	S111902286		CICERO AVE		SPILLS
CHICAGO	S111902238		3300 N CICERO		SPILLS
CHICAGO	S111920677		4325 N CICERO		SPILLS
CHICAGO	S111894323		CICERO AVE & I 55		SPILLS
CHICAGO	S111927938		CICERO YARD		SPILLS
CHICAGO	S111898725		5945 NORTHWEST CIR		SPILLS
CHICAGO	96516420	CITCO TERMINAL ADDRESS UNKNOWN	CITCO TERMINAL ADDRESS UNKNOWN		ERNS
CHICAGO	S111909065		1840 N CLAIBORNE		SPILLS
CHICAGO	S111907075		5739 S CLAIRMONT AVE		SPILLS
CHICAGO	S111884865		4501 N CLAKE		SPILLS
CHICAGO	S111907000		5739 S CLAREMONT		SPILLS
CHICAGO	S108046415		50512 N CLARK		SPILLS
CHICAGO	94407483	CLARK OIL BLUE ISLAND//CAL SAG	CLARK OIL BLUE ISLAND//CAL SAG		ERNS
CHICAGO	96515012	CLARK BLUE ISLAND	CLARK BLUE ISLAND		ERNS
CHICAGO	S111886134		4001 CLARK ST		SPILLS
CHICAGO	S111885900		6304 N CLARK		SPILLS
CHICAGO	S111909598		6000 N CLARK		SPILLS
CHICAGO	S111881356		2684 W CLARK ST		SPILLS
CHICAGO	S111890593		3650 N CLARK		SPILLS
CHICAGO	S111875602		CLARK & ELM		SPILLS
CHICAGO	S111907234		6800 CLARK ST		SPILLS
CHICAGO	S111884150		CLARK & IRVING		SPILLS
CHICAGO	S111893033		6525 N CLARK		SPILLS
CHICAGO	S111900408		3836 N CLARK		SPILLS
CHICAGO	S111879353		3721 N CLARK		SPILLS
CHICAGO	S111923610		CLARK & CERMAK		SPILLS
CHICAGO	S111901095		7201 N CLARKE ST		SPILLS
CHICAGO	90170305	CLARKE OIL 131ST AND KEEZIE AVE	CLARKE OIL 131ST AND KEEZIE AVE		ERNS
CHICAGO	S111899378		2626 N CLAYBORN		SPILLS
CHICAGO	S111908648		2660 N CLAYBOURN		SPILLS
CHICAGO	S111899224		1970 N CLAYBOURN AVE		SPILLS
CHICAGO	S111911677		2472 N CLAYBOURN		SPILLS
CHICAGO	90174033	CLEARING EAST YARD	CLEARING EAST YARD		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111895183		500 W CLEVELAND ST		SPILLS
CHICAGO	S111900640		3133 N CLIBOURN		SPILLS
CHICAGO	2006796407	CLINTON STREET AND LAKE STREET	CLINTON STREET AND LAKE STREET		ERNS
CHICAGO	S111885090		CLINTON & HARRISON		SPILLS
CHICAGO	S111887185		740 S CLINTON		SPILLS
CHICAGO	2011983620		CLINTON AND CANAL ST		ERNS
CHICAGO	S111912608		324 N CLINTON		SPILLS
CHICAGO	S111903638		700 S CLINTON		SPILLS
CHICAGO	S111896031		1830 S CLINTON		SPILLS
CHICAGO	S111892369		4050 N CLOVER		SPILLS
CHICAGO	S111907230		2746 N CLYBORN		SPILLS
CHICAGO	S111879071		2901 N CLYBORN		SPILLS
CHICAGO	98449420	CLYBOURN AND MAGNOLIA STREETS	CLYBOURN AND MAGNOLIA STREETS		ERNS
CHICAGO	S111886704		CLYBOURN & FULLERTON		SPILLS
CHICAGO	S111881457		2660 N CLYBOURN		SPILLS
CHICAGO	S111912364		2261 CLYBOURN		SPILLS
CHICAGO	S111902201		CLYBOURN & MAGNOLIA		SPILLS
CHICAGO	S111901813		2020 N CLYBOURN		SPILLS
CHICAGO	S111896173		1275 CLYBOURN AVE		SPILLS
CHICAGO	S111919003		2791 N CLYBOURN		SPILLS
CHICAGO	S111880983		2245 N CLYBOURN ST		SPILLS
CHICAGO	S111915094		2283 N CLYBOURN		SPILLS
CHICAGO	S111891729		2145 N CLYBOURN		SPILLS
CHICAGO	S111890371		2600 N CLYBOURN		SPILLS
CHICAGO	2000669016	TH CLYBOURN	TH CLYBOURN		ERNS
CHICAGO	98461976	1501 N CLYBOURNE	1501 N CLYBOURNE		ERNS
CHICAGO	S111893640		2740 N CLYBOURNE AVE		SPILLS
CHICAGO	S111892041		1531 W CLYBOURNE AVE		SPILLS
CHICAGO	S111879206		3068 N CLYBURN		SPILLS
CHICAGO	94355689	1400 COASTMASTER DR	1400 COASTMASTER DR		ERNS
CHICAGO	S111908978		9500 S COLFAX		SPILLS
CHICAGO	S111909306		8721 S COLLEGE GRV		SPILLS
CHICAGO	S111906068		5201 S COLLEGE GRV		SPILLS
CHICAGO	94361432	2543 WEST COLULMBUS	2543 WEST COLULMBUS		ERNS
CHICAGO	S111894505		2543 W COLUMBIA DR		SPILLS
CHICAGO	90184210	COLUMBIA AVE. CLEARING YARD	COLUMBIA AVE. CLEARING YARD		ERNS
CHICAGO	2011968968	LANDERS YARD 543 WEST COLUMBUS AVE	543 W COLUMBUS AVE		ERNS
CHICAGO	2011983239		347 N COLUMBUS		ERNS
CHICAGO	S111899652		2543 W COLUMBUS DR		SPILLS
CHICAGO	S111890295		2543 COLUMBUS DR		SPILLS
CHICAGO	S111890237		2543 COLUMBUS DR		SPILLS
CHICAGO	S111923004		2543 W COLUMBUS		SPILLS
CHICAGO	S111897235		2543 W COLUMBUS DR		SPILLS
CHICAGO	S111909362		3363 COLUMBUS AVE		SPILLS
CHICAGO	S111890526		2043 COLUMBUS AVE		SPILLS
CHICAGO	S111898777		3491 W COLUMBUS DR		SPILLS
CHICAGO	S111895402		2543 W COLUMBUS DR		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111880044		3485 W COLUMBUS		SPILLS
CHICAGO	S111901353		2543 W COLUMBUS DR		SPILLS
CHICAGO	S111899737		2543 W COLUMBUS DR		SPILLS
CHICAGO	S111890334		2543 COLUMBUS DR		SPILLS
CHICAGO	S111908248		8557 S COMMERCIAL		SPILLS
CHICAGO	S111915092		9127 S COMMERCIAL		SPILLS
CHICAGO	S111898832		9100 S COMMERCIAL		SPILLS
CHICAGO	8714257	COMMONWEALTH EDISON?	COMMONWEALTH EDISON?		ERNS
CHICAGO	S110122235		2100 COMMONWEALTH		SPILLS
CHICAGO	S111889670		CONCORD F GATE OHARA AP		SPILLS
CHICAGO	S111888165		CONGRESS & DEARBORN		SPILLS
CHICAGO	S111888158		561 W CONGRESS		SPILLS
CHICAGO	S111894801		316 W CONGRESS PKWY		SPILLS
CHICAGO	94370891	CONRAIL RAIL YARD 63RD STATE ST	CONRAIL RAIL YARD 63RD STATE ST		ERNS
CHICAGO	S111884256		CONRAIL YARD 47TH ST		SPILLS
CHICAGO	94363657	103 CONSTANCE AVE	103 CONSTANCE AVE		ERNS
CHICAGO	S111887609		6907 CONSTANCE AVE		SPILLS
CHICAGO	94358493	COOK COUNTY BUILDING 118 NORTH CLARK ST	COOK COUNTY BUILDING 118 NORTH CLARK ST		ERNS
CHICAGO	S108047341		N COR OF 18TH & BLUE IS		SPILLS
CHICAGO	S111349599		COR OF 53RD		SPILLS
CHICAGO	S111902425		COR DEVON & KEDZIE		SPILLS
CHICAGO	S111879966		SE COR 35TH & INDIANA		SPILLS
CHICAGO	S111902170		11130 S CORLISS		SPILLS
CHICAGO	S111876981		11100 S CORLISS		SPILLS
CHICAGO	S111904124		4805 W CORNELIA		SPILLS
CHICAGO	S111883722		7828 S CORNELL		SPILLS
CHICAGO	S111904973		1711 W CORNELLIA		SPILLS
CHICAGO	2003637212	5701 SOUTH CORNELLL DRIVE	5701 SOUTH CORNELLL DRIVE		ERNS
CHICAGO	S108047370		NW CORNER W AUGUSTA BLVD & KOLMAR AVE		SPILLS
CHICAGO	90158422	SW CORNER LAKE MICHIGAN FROM E. CHICAGO TO CENTER OF LAKE MI	SW CORNER LAKE MICHIGAN FROM E. CHICAGO TO CENTER OF LAKE MI		ERNS
CHICAGO	2000526527	CORNER OF 7021	CORNER OF 7021	0	ERNS
CHICAGO	U003769793	VACANT LOT	SW CORNER OF CENTRAL & FILLMORE		UST
CHICAGO	S111885866		NW CORNER OF CHICAGO AVE & KILPATRICK		SPILLS
CHICAGO	S111893831		W CORNER OF HANGER AREA & OHARA		SPILLS
CHICAGO	S111910967		CORNER OF MONTROSE & RAVENSWOOD		SPILLS
CHICAGO	S111924076		CORNER OF ROOSEVELT AND CENTRA RDS		SPILLS
CHICAGO	S111906413		SE CORNER OF 60TH ST & DORCHESTER AVE		SPILLS
CHICAGO	S111907029		CORNER OF EVERGREEN & HICKORY		SPILLS
CHICAGO	S111907911		NW CORNER OF ASHLAND & WASHBURNE AVE		SPILLS
CHICAGO	S111907910		SW CORNER OF ASHLAND & WASHBURNE AVE		SPILLS
CHICAGO	S111907909		SE CORNER OF PAULINA ST & ROOSEVELT RD		SPILLS
CHICAGO	S111907908		NE CORNER OF PAULINA ST & WASHBURNE AVE		SPILLS
CHICAGO	S111908554		CORNER OF OHIO & DAMEN		SPILLS
CHICAGO	S111898135		SW CORNER OF MADISON & WELLS ST		SPILLS
CHICAGO	S111894436		NW CORNER OF HANGAR AREA		SPILLS
CHICAGO	S111927929		SE CORNER OF IRVING PARK RD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111893288		CORNER OF WESTERN AVE & ADDISON AVE		SPILLS
CHICAGO	2002590248	CORNER OF ROSEVELT AND BLUE ISLAND	CORNER OF ROSEVELT AND BLUE ISLAND	0	ERNS
CHICAGO	2000531554	CORNER OF PINE GROVE AND	CORNER OF PINE GROVE AND	0	ERNS
CHICAGO	S111885575		12260 S CORONDOLET		SPILLS
CHICAGO	S111884011		12260 S CORONDOLET AVE		SPILLS
CHICAGO	S111881984		11260 S CORONDOLETT AVE		SPILLS
CHICAGO	S111909441		2413 W CORTEZ		SPILLS
CHICAGO	S111893341		4520 W CORTEZ		SPILLS
CHICAGO	S111878992		1509 W CORTLAND		SPILLS
CHICAGO	S111884334		4500 W CORTLAND		SPILLS
CHICAGO	S111918764		2940 W CORTLAND		SPILLS
CHICAGO	S111897230		5834 W CORTLAND		SPILLS
CHICAGO	S111883723		4501 W CORTLAND		SPILLS
CHICAGO	S111925633		1509 W CORTLAND		SPILLS
CHICAGO	S111902572		1509 W CORTLAND		SPILLS
CHICAGO	8860817	CORWITH SWITCHING YARD;TRAIN MASTER 312-890-5082	CORWITH SWITCHING YARD;TRAIN MASTER 312-890-5082		ERNS
CHICAGO	S110122299		CORWITH YARD		SPILLS
CHICAGO	2006798826	CORWITH YARD	CORWITH YARD		ERNS
CHICAGO	S111877460		1140 N COSTNER ST		SPILLS
CHICAGO	S108046497		5818 S COTTAGE DR WASHINGTON PARK		SPILLS
CHICAGO	S111885698		8722 S COTTAGE GRV		SPILLS
CHICAGO	S111885007		4414 S COTTAGE GRV		SPILLS
CHICAGO	S111886270		8701 S COTTAGE AVE		SPILLS
CHICAGO	S111886592		5818 S COTTAGE GRV		SPILLS
CHICAGO	S111924950		8127 S COTTAGE GRV		SPILLS
CHICAGO	S111907485		8540 S COTTAGE GRV		SPILLS
CHICAGO	S111893504		10909 COTTAGE GROVE AVE		SPILLS
CHICAGO	S111891976		11900 S COTTAGE GRV		SPILLS
CHICAGO	S111876295		6700 S COTTAGE GRV		SPILLS
CHICAGO	S111899600		11861 S COTTAGE GRV		SPILLS
CHICAGO	S111882111		5601 S COTTAGE GRV		SPILLS
CHICAGO	S111902454		9811 S COTTAGE GRV		SPILLS
CHICAGO	S111895457		7560 S COTTAGE GRV		SPILLS
CHICAGO	S111906570		8540 S COTTAGE GRV		SPILLS
CHICAGO	S111906569		8600 S COTTAGE GRV		SPILLS
CHICAGO	S111897700		6352 S COTTAGE GRV		SPILLS
CHICAGO	S111908954		4257 S COTTAGE GROVE RD		SPILLS
CHICAGO	S111878296		4601 S COTTAGE GRV		SPILLS
CHICAGO	S111908141		4533 S COTTAGE GRV		SPILLS
CHICAGO	S111896307		8651 S COTTAGE GRV		SPILLS
CHICAGO	S111907546		8600 S COTTAGE GRV		SPILLS
CHICAGO	S111911514		9452 S COTTAGE GRV		SPILLS
CHICAGO	S111893660		2049 W COULTER		SPILLS
CHICAGO	S111895142		230 COURT ST		SPILLS
CHICAGO	S110824890		COURTLAND & CLYBOURNE		SPILLS
CHICAGO	S111885368		4701 W COURTLAND AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111899675		3737 W COURTLAND ST		SPILLS
CHICAGO	S111878871		1825 W COURTLAND		SPILLS
CHICAGO	S111881183		2940 COURTLAND ST		SPILLS
CHICAGO	2012102059		CRAIGIN JCT		ERNS
CHICAGO	94391080	CRAWFORD SUBSTATION	CRAWFORD SUBSTATION		ERNS
CHICAGO	89107064	CRAWFORD GENERATING STA. 3501 PULASKI RD.	CRAWFORD GENERATING STA. 3501 PULASKI RD.		ERNS
CHICAGO	S111912302		3501 CRAWFORD GENERATING STA S		SPILLS
CHICAGO	S111927685		6346 NORTH CRK		SPILLS
CHICAGO	S111885640		946 N CROSBY		SPILLS
CHICAGO	S111910509		946 N CROSBY		SPILLS
CHICAGO	S111914620		5318 W CRYSTAL		SPILLS
CHICAGO	S111896702		2619 W CULLERTON		SPILLS
CHICAGO	S111915350		2456 W CULLOM		SPILLS
CHICAGO	S111896154		4938 W CULLUM		SPILLS
CHICAGO	S111905250		4452 W CUNNISON		SPILLS
CHICAGO	S111218489		0 D29		SPILLS
CHICAGO	S111925127		6500 W DAKIN		SPILLS
CHICAGO	S111902249		6535 W DAKIN		SPILLS
CHICAGO	98444510	DALTON YACHT MARINA/ MARINE SERVICES COTTAGE GROVE AVE	DALTON YACHT MARINA/ MARINE SERVICES COTTAGE GROVE AVE		ERNS
CHICAGO	S111887197		2608 S DAMEN		SPILLS
CHICAGO	S111888995		3201 N DAMEN		SPILLS
CHICAGO	S111905657		3306 N DAMEN		SPILLS
CHICAGO	S111908000		5941 S DAMEN		SPILLS
CHICAGO	S111890616		3000 S DAMEN		SPILLS
CHICAGO	S111905625		2309 N DAMEN		SPILLS
CHICAGO	S111905311		2501 N DAMEN		SPILLS
CHICAGO	S111902640		6159 S DAMEN		SPILLS
CHICAGO	S111904589		3000 S DAMEN		SPILLS
CHICAGO	S111894214		6502 S DAMEN		SPILLS
CHICAGO	S111893772		3000 S DAMEN		SPILLS
CHICAGO	S111892179		7050 S DAMEN		SPILLS
CHICAGO	S111927093		3501 DAMEN AVE		SPILLS
CHICAGO	S111920502		DAMEN & W WEBSTER 2300		SPILLS
CHICAGO	S111908121		2801 N DAMEN		SPILLS
CHICAGO	S111882868		4917 N DAMEN		SPILLS
CHICAGO	S111901352		2501 N DAMEN		SPILLS
CHICAGO	S111877243		2064 N DAMEN		SPILLS
CHICAGO	S111892578		7050 S DAMEN		SPILLS
CHICAGO	S111910144		7242 N DAMEN		SPILLS
CHICAGO	S111875923		500 S DAMIEN		SPILLS
CHICAGO	S108046065		3100 S DAMON		SPILLS
CHICAGO	2002600737	2600 SOUTH DAMON	2600 SOUTH DAMON	0	ERNS
CHICAGO	S111349576		3220 N DAMON AVE		SPILLS
CHICAGO	S108891547		2921 N DAMON		SPILLS
CHICAGO	S111877593		2608 S DAMON		SPILLS
CHICAGO	S111914248		2500 S DAMON AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111909125		2639 S DAMON AVE		SPILLS
CHICAGO	S111907832		3000 S DAMON IMX YARD		SPILLS
CHICAGO	S111915714		2608 S DAMON AVE		SPILLS
CHICAGO	S111890741		3000 S DAMON AVE		SPILLS
CHICAGO	S111910237		1238 N DAMON AVE		SPILLS
CHICAGO	S111889397		3354 N DAMON AVE		SPILLS
CHICAGO	S111882355		2501 N DAMON		SPILLS
CHICAGO	S111913930		3354 N DAMON AVE		SPILLS
CHICAGO	S109953799		DAN RYAN EXPY & 67TH ST		SPILLS
CHICAGO	S111925297		DAN RYAN NB AT 67TH ST		SPILLS
CHICAGO	S111880140		4700 S DAN RYAN EXPY		SPILLS
CHICAGO	S111914835		SB DAN RYAN AT 35TH ST		SPILLS
CHICAGO	S111905781		4700 S DAN RYAN EXPY		SPILLS
CHICAGO	S111910075		DAN RYAN EXPY & 47TH ST		SPILLS
CHICAGO	S111882372		1535 N DATON ST		SPILLS
CHICAGO	S111922152		1440 N DAYTON		SPILLS
CHICAGO	S111885269		2001 S DEARBORN		SPILLS
CHICAGO	S111904353		509 N DEARBORN		SPILLS
CHICAGO	S111907648		2624 S DEARBORN		SPILLS
CHICAGO	S111882430		3255 DEARBORN AVE		SPILLS
CHICAGO	S111880697		DEARBORN & ERIE		SPILLS
CHICAGO	S111900106		650 N DEARBORN		SPILLS
CHICAGO	S111909872		641 N DEARBORNE		SPILLS
CHICAGO	S111911135		111 N DEERBORN		SPILLS
CHICAGO	S111884487		253 E DELAWARE ST		SPILLS
CHICAGO	S111878780		DELLA AIR LINES OHARA		SPILLS
CHICAGO	S111903945		3481 N DELMONT HARBOR DR		SPILLS
CHICAGO	S111895352		DELTA AIT LINES CARGO FACILITY		SPILLS
CHICAGO	S111914140		4815 W DEMING ST		SPILLS
CHICAGO	8711762	EAST DEPARTURE YARD	EAST DEPARTURE YARD		ERNS
CHICAGO	S111913549		210 S DES PLAINS ST		SPILLS
CHICAGO	S111878606		300 N DES PLAINS AVE		SPILLS
CHICAGO	S110824891		100000 DESSIE COLEMAN DR		SPILLS
CHICAGO	S111926746		10000 DESSIE COLEMAN DR		SPILLS
CHICAGO	S111897962		3113 W DEVOE AVE		SPILLS
CHICAGO	S110363804		DEVON & KIMBALL		SPILLS
CHICAGO	S111885011		3034 W DEVON		SPILLS
CHICAGO	S111910731		2828 W DEVON ST		SPILLS
CHICAGO	S111895157		1700 W DEVON ST		SPILLS
CHICAGO	S111926288		DEVON & N CAMPBELL AVE		SPILLS
CHICAGO	S111908640		7237 W DEVON ST		SPILLS
CHICAGO	S111892477		2225 W DEVON		SPILLS
CHICAGO	S111879144		3535 W DEVON		SPILLS
CHICAGO	S111899792		2225 W DEVON		SPILLS
CHICAGO	S111885423		5841 W DICKENS		SPILLS
CHICAGO	S111878809		5851 W DICKENS		SPILLS
CHICAGO	S111905069		5801 W DICKENS		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111902609		6201 W DICKENS		SPILLS
CHICAGO	89111614	E. DIKE LOADING/UNLOADING PAD	E. DIKE LOADING/UNLOADING PAD		ERNS
CHICAGO	99626468	DIRECTLY ACROSS STREET FM 2154 WEST WARREI	DIRECTLY ACROSS STREET FM 2154 WEST WARREN		ERNS
CHICAGO	S111892065		3820 W DIVERSERY		SPILLS
CHICAGO	S111885937		2401 W DIVERSEY		SPILLS
CHICAGO	S111885933		5610 W DIVERSEY		SPILLS
CHICAGO	S111897940		4720 W DIVERSEY		SPILLS
CHICAGO	S111877987		4601 W DIVERSEY		SPILLS
CHICAGO	S111895189		2916 W DIVERSEY ST		SPILLS
CHICAGO	S111907432		4626 W DIVERSEY ST		SPILLS
CHICAGO	S111912325		6347 W DIVERSEY		SPILLS
CHICAGO	S111884680		4200 W DIVERSEY		SPILLS
CHICAGO	S111896513		920 W DIVERSEY		SPILLS
CHICAGO	S111905253		1725 W DIVERSEY		SPILLS
CHICAGO	S111882083		4919 W DIVERSEY		SPILLS
CHICAGO	S111898525		3820 W DIVERSEY		SPILLS
CHICAGO	S111891511		5412 W DIVERSEY		SPILLS
CHICAGO	S111902920		5059 W DIVERSEY		SPILLS
CHICAGO	S111889214		1901 W DIVERSEY		SPILLS
CHICAGO	S111909109		5433 W DIVERSEY		SPILLS
CHICAGO	S111889495		1826 W DIVERSEY		SPILLS
CHICAGO	S111881926		1301 W DIVERSEY		SPILLS
CHICAGO	S111878692		4000 W DIVERSEY		SPILLS
CHICAGO	S111896337		6002 W DIVERSEY		SPILLS
CHICAGO	S111892094		4700 W DIVERSEY		SPILLS
CHICAGO	S111875469		3201 W DIVERSEY		SPILLS
CHICAGO	S111876584		6625 W DIVERSEY		SPILLS
CHICAGO	S111883504		6902 W DIVERSEY AVE		SPILLS
CHICAGO	S108480122		DIVERSEY PKWY LINCOLN AVE & N SEMINARY		SPILLS
CHICAGO	2000668929	T DIVERSEY ST	T DIVERSEY ST		ERNS
CHICAGO	S111880720		5049 W DIVERSTY		SPILLS
CHICAGO	2010962009	DIVERSY BRIDGE	DIVERSY BRG		ERNS
CHICAGO	S111879666		5002 W DIVERSY AVE		SPILLS
CHICAGO	S111883797		5955 W DIVERSY		SPILLS
CHICAGO	S111884177		6435 W DIVERSY AVE		SPILLS
CHICAGO	S111880565		5601 DIVERSY		SPILLS
CHICAGO	S111915409		4356 W DIVERSY		SPILLS
CHICAGO	S111878045		DIVERSY HARBOR DIVERSY PKWY		SPILLS
CHICAGO	S111349396		1071 W DIVISION		SPILLS
CHICAGO	2010947297	DIVISION AND HALSTED BRIDGE	DIVISION AND HALSTED BRG		ERNS
CHICAGO	S111886034		3954 DIVISION		SPILLS
CHICAGO	S111885978		2805 W DIVISION		SPILLS
CHICAGO	S111910732		834 W DIVISION		SPILLS
CHICAGO	S111903064		3353 W DIVISION		SPILLS
CHICAGO	S111891599		4500 W DIVISION		SPILLS
CHICAGO	S111884340		4857 W DIVISION		SPILLS
CHICAGO	S111911046		5035 W DIVISION		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111892445		4431 W DIVISION		SPILLS
CHICAGO	S111878200		3401 W DIVISION		SPILLS
CHICAGO	S111891854		901 DIVISION ST		SPILLS
CHICAGO	S111898449		4824 W DIVISION		SPILLS
CHICAGO	S111882907		1334 W DIVISION		SPILLS
CHICAGO	S111882834		2751 W DIVISION AVE		SPILLS
CHICAGO	S111900098		5035 W DIVISION		SPILLS
CHICAGO	S111912726		3855 W DIVISION		SPILLS
CHICAGO	2001563085	DIVISION STREET	DIVISION STREET	0	ERNS
CHICAGO	S111885202		9930 S DOBSON		SPILLS
CHICAGO	S111882593		8133 S DOBSON		SPILLS
CHICAGO	S111891332		8133 S DOBSON		SPILLS
CHICAGO	98446488	J DOCK BURNHAM NEAR SOLDIERS FIE	J DOCK BURNHAM NEAR SOLDIERS FIE		ERNS
CHICAGO	89117859	DOCK #10 JACKSON PARK INNER HARBOR	DOCK #10 JACKSON PARK INNER HARBOR		ERNS
CHICAGO	8867935	DOCK-E	DOCK-E		ERNS
CHICAGO	S111905005		12101 S DODY AVE		SPILLS
CHICAGO	S111903494		DOLLAR RENT A CAR INC OHARE AP		SPILLS
CHICAGO	96507592	8633 DORCHSTER	8633 DORCHSTER		ERNS
CHICAGO	S109700137		W DOTY AVE BETWEEN 126TH & 127TH ST		SPILLS
CHICAGO	S111878421		S DOTY AVE		SPILLS
CHICAGO	S111902403		DOTY ST		SPILLS
CHICAGO	S111903583		10300 S DOTY		SPILLS
CHICAGO	S111925091		DOTY AVE BETWEEN 126TH W & 127TH ST		SPILLS
CHICAGO	2011992370		1400 DOWNS DR		ERNS
CHICAGO	96509929	DUMPING FORM HOLES IN BUILDING	DUMPING FORM HOLES IN BUILDING		ERNS
CHICAGO	8710194	DUMPSTER NEXT TO NOTIFIERS HOUSE IN AN ALLEY	DUMPSTER NEXT TO NOTIFIERS HOUSE IN AN ALLEY		ERNS
CHICAGO	92295829	DUPAGE RIVER	DUPAGE RIVER		ERNS
CHICAGO	S111919105		DUPO YARD		SPILLS
CHICAGO	2009911946	DUSABLE HARBOR MARINA	DUSABLE HARBOR MARINA		ERNS
CHICAGO	2008911946	DUSABLE HARBOR MARINA	DUSABLE HARBOR MARINA		ERNS
CHICAGO	2007319183	2921 NORTH EAMON	2921 NORTH EAMON		ERNS
CHICAGO	91237140	11600 SOUTH EARLY AVENUE	11600 SOUTH EARLY AVENUE		ERNS
CHICAGO	2011991495		40 MI EAST OF CHICAGO ON LAKE		ERNS
CHICAGO	S111888583		1 N EAST LAKE TER		SPILLS
CHICAGO	S111912744		7431 S EAST END		SPILLS
CHICAGO	90165774	39.5 NM EAST OF NORTH BROOK ON 080 RADIO	39.5 NM EAST OF NORTH BROOK ON 080 RADIO		ERNS
CHICAGO	S111888509		2806 W EASTWOOD		SPILLS
CHICAGO	S111900752		EB		SPILLS
CHICAGO	2000668614	EET AND KEDZIE AV	EET AND KEDZIE AV		ERNS
CHICAGO	S111904584		9050 S EGGLESTON		SPILLS
CHICAGO	S111887445		3950 EIGHTH NARRANGANSETT		SPILLS
CHICAGO	S111893035		1251 W EISENHOWER EXPY		SPILLS
CHICAGO	S111889597		600 N ELAINE		SPILLS
CHICAGO	S111884962		4433 N ELFTON AVE		SPILLS
CHICAGO	S111925150		9423 S ELIZABETH		SPILLS
CHICAGO	S111879840		6737 ELIZABETH		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111887934		2929 S ELLIS		SPILLS
CHICAGO	S111887836		2929 S ELLIS		SPILLS
CHICAGO	S111900113		5200 S ELLIS		SPILLS
CHICAGO	S111875511		5640 S ELLIS		SPILLS
CHICAGO	S111907997		2228 N ELLSTON AVE		SPILLS
CHICAGO	S111905287		2604 N ELLSTON		SPILLS
CHICAGO	S111895681		6747 N ELMHURST		SPILLS
CHICAGO	S111926974		2750 N ELSON AVE		SPILLS
CHICAGO	S110825030		2752 N ELSTON		SPILLS
CHICAGO	S111888055		5555 ELSTON AVE		SPILLS
CHICAGO	S111886780		4185 N ELSTON		SPILLS
CHICAGO	S111885824		2480 ELSTON AVE		SPILLS
CHICAGO	S111909949		2062 ELSTON AVE		SPILLS
CHICAGO	S111884911		1401 N ELSTON		SPILLS
CHICAGO	S111913619		1330 N ELSTON		SPILLS
CHICAGO	S111884365		5332 N ELSTON		SPILLS
CHICAGO	S111906121		495 N ELSTON		SPILLS
CHICAGO	S111900915		4721 N ELSTON		SPILLS
CHICAGO	S111893533		1357 N ELSTON		SPILLS
CHICAGO	S111882697		2665 ELSTON AVE		SPILLS
CHICAGO	S111906394		4939 N ELSTON		SPILLS
CHICAGO	S111924587		1901 N ELSTON		SPILLS
CHICAGO	S111895124		3148 N ELSTON		SPILLS
CHICAGO	S111882128		1004 N ELSTON		SPILLS
CHICAGO	S111883806		2407 N ELSTON		SPILLS
CHICAGO	S111898954		5733 N ELSTON		SPILLS
CHICAGO	S111901419		4721 N ELSTON		SPILLS
CHICAGO	S111892447		2315 N ELSTON		SPILLS
CHICAGO	S111907723		2212 N ELSTON		SPILLS
CHICAGO	S111878875		1765 N ELSTON		SPILLS
CHICAGO	S111877868		4505 N ELSTON		SPILLS
CHICAGO	S111892192		3918 ELSTON AVE		SPILLS
CHICAGO	S111877836		4060 N ELSTON		SPILLS
CHICAGO	S111920921		2900 N ELSTON		SPILLS
CHICAGO	S111918867		2600 N ELSTON		SPILLS
CHICAGO	S111894133		5979 ELSTON AVE		SPILLS
CHICAGO	S111893342		5200 N ELSTON		SPILLS
CHICAGO	S111881028		5705 ELSTON AVE		SPILLS
CHICAGO	S111880989		5555 N ELSTON		SPILLS
CHICAGO	S111888753		3401 N ELSTON		SPILLS
CHICAGO	S111892609		1661 N ELSTON		SPILLS
CHICAGO	S111901618		3101 N ELSTON		SPILLS
CHICAGO	S111892934		2604 ELSTON AVE		SPILLS
CHICAGO	S111919792		3246 N ELSTON		SPILLS
CHICAGO	S111900296		3428 N ELSTON		SPILLS
CHICAGO	S111900297		3428 N ELSTON		SPILLS
CHICAGO	S111900597		4258 N ELSTON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111911452		5312 N ELSTON		SPILLS
CHICAGO	S111909071		4201 S EMERAL		SPILLS
CHICAGO	S111908689		4100 S EMERALD		SPILLS
CHICAGO	S111920336		1400 S EMERALD		SPILLS
CHICAGO	S111915064		11020 S EMERALD		SPILLS
CHICAGO	8862413	EMPIRE HARD CHROME INC	EMPIRE HARD CHROME INC		ERNS
CHICAGO	S108046592		6800 SOUTHEAST END AVE		SPILLS
CHICAGO	S108047759		W END OF TRAK		SPILLS
CHICAGO	91225392	NORTH END OF MONROE ST HARBOR	NORTH END OF MONROE ST HARBOR		ERNS
CHICAGO	2003708369	SOUTH END	SOUTH END		ERNS
CHICAGO	89106785	END OF MONROE ST MONROE ST HARBOR	END OF MONROE ST MONROE ST HARBOR		ERNS
CHICAGO	8864519	SOUTH END OF BELMONT HARBOR LAKE MICHIGAN	SOUTH END OF BELMONT HARBOR LAKE MICHIGAN		ERNS
CHICAGO	S111884927		4300 WEST END AVE		SPILLS
CHICAGO	90187130	SOUTH END OF NAVY PIER	SOUTH END OF NAVY PIER		ERNS
CHICAGO	S111877997		1901 N ENGINE		SPILLS
CHICAGO	S111927213		6050 S ENGLESIDE AVE		SPILLS
CHICAGO	S111924137		ENGLEWOOD YARD 63RD ST		SPILLS
CHICAGO	S111898816		500 ENGLEWOOD ST		SPILLS
CHICAGO	2011990843		ENTRANCE TO CALUMET RIV		ERNS
CHICAGO	S110685277		EOLA YARD		SPILLS
CHICAGO	S111889640		700 W ERIE		SPILLS
CHICAGO	S111926580		2140 W ERIE		SPILLS
CHICAGO	S111907609		1250 W ERIE		SPILLS
CHICAGO	S111890459		4600 W ERIE		SPILLS
CHICAGO	S110685237		2140 W ERIE		SPILLS
CHICAGO	S111891267		1945 W EVERGREEN ST		SPILLS
CHICAGO	S111903211		1841 W EVERGREEN ST		SPILLS
CHICAGO	S111884345		9330 EWING AVE		SPILLS
CHICAGO	S111903003		9331 S EWING		SPILLS
CHICAGO	S111883342		9651 S EWING		SPILLS
CHICAGO	S111888940		7670 S EXCHANGE ST		SPILLS
CHICAGO	S111900830		7101 S EXCHANGE		SPILLS
CHICAGO	S111881280		7149 S EXCHANGE		SPILLS
CHICAGO	96506222	EXIT 63 NORTHBOUND I-90	EXIT 63 NORTHBOUND I-90		ERNS
CHICAGO	99651995	I-290W EXIT 13B	I-290W EXIT 13B		ERNS
CHICAGO	S109092825		NB EXIT		SPILLS
CHICAGO	S111899812		NB EXIT		SPILLS
CHICAGO	S111910965		513 EXPRESS CENTER DR		SPILLS
CHICAGO	S111898541		EXPRESSWAY NEAR FOSTER AVE & I 94		SPILLS
CHICAGO	S111913213		194 EXT 59C WB		SPILLS
CHICAGO	8869549	FACILITY	FACILITY		ERNS
CHICAGO	S111883933		710 FAIRBANKS		SPILLS
CHICAGO	S111897212		1414 S FAIRFIELD		SPILLS
CHICAGO	S111881134		2914 N FAIRFIELD		SPILLS
CHICAGO	S111912566		3001 W FAIRMONT AVE		SPILLS
CHICAGO	S111899016		2120 W FARAGUT		SPILLS
CHICAGO	S111876452		2103 W FARRAGUT		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111904011		2051 W FARRGUT		SPILLS
CHICAGO	2006819483	FAYER AVENUE AND	FAYER AVENUE AND		ERNS
CHICAGO	S111899841		3450 S FEDERAL		SPILLS
CHICAGO	S111881792		2025 W FERDINAND		SPILLS
CHICAGO	S111888757		4221 W FERDINAND		SPILLS
CHICAGO	S111897285		3611 W FILLMORE		SPILLS
CHICAGO	S111898752		3700 W FILLMORE		SPILLS
CHICAGO	S111898515		3842 W FILMORE		SPILLS
CHICAGO	S111910890		2542 W FILMORE AVE		SPILLS
CHICAGO	S111920130		2848 W FILMORE		SPILLS
CHICAGO	S111912303		1111 FISK GENERATING STA W		SPILLS
CHICAGO	S111892904		2613 W FLETCHER		SPILLS
CHICAGO	S111897531		2617 W FLETCHER		SPILLS
CHICAGO	S111913681		2540 W FLOURNOY		SPILLS
CHICAGO	S111884217		5201 W FLOURNOY		SPILLS
CHICAGO	S111884188		5000 W FLOURNOY		SPILLS
CHICAGO	S111882568		8229 FOREST PRESERRVE DR		SPILLS
CHICAGO	2000530733	4541 SOUTH FORESTVILLE	4541 SOUTH FORESTVILLE	0	ERNS
CHICAGO	8869682	FOREWAY EXPRESS TERMINAL 6200 SOUTHEAST AVENUE (312)352-0850	FOREWAY EXPRESS TERMINAL 6200 SOUTHEAST AVENUE (312)352-0850		ERNS
CHICAGO	S111875253		11740 FORONT ST		SPILLS
CHICAGO	S111895616		6300 W FORSTER AVE		SPILLS
CHICAGO	2012104791		50 FORT OF DEARBORN AVE E		ERNS
CHICAGO	94366999	FOSTER AVE ON THE RIVER	FOSTER AVE ON THE RIVER		ERNS
CHICAGO	S111886953		2464 W FOSTER		SPILLS
CHICAGO	S111885675		1745 W FOSTER		SPILLS
CHICAGO	S111891020		1800 W FOSTER		SPILLS
CHICAGO	S111878398		4635 W FOSTER		SPILLS
CHICAGO	S111908579		2322 W FOSTER		SPILLS
CHICAGO	S111875629		1800 W FOSTER		SPILLS
CHICAGO	S111924308		1923 W FOSTER ST		SPILLS
CHICAGO	S111880930		3112 FOSTER AVE		SPILLS
CHICAGO	2012107374		FRANCISCO STATION N MANOR AVE		ERNS
CHICAGO	S111902688		4750 N FRANCISCO AVE		SPILLS
CHICAGO	S111910692		4300 N FRANCISCO ST		SPILLS
CHICAGO	S111899005		6519 N FRANCISCO		SPILLS
CHICAGO	S111926675		1 S FRANKLIN		SPILLS
CHICAGO	S111913473		1504 N FREMONT		SPILLS
CHICAGO	S108669591		6000 E FT IN AIR 15		SPILLS
CHICAGO	S111894314		1340 W FULERTON		SPILLS
CHICAGO	S111893463		2111 W FULERTON		SPILLS
CHICAGO	98430046	FULLERTON 1000 WEST DEPAL UNIVERSITY MAINT. DRIVEWAY	FULLERTON 1000 WEST DEPAL UNIVERSITY MAINT. DRIVEWAY		ERNS
CHICAGO	S111887414		FULLERTON & ASHLAND		SPILLS
CHICAGO	S111886933		5021 W FULLERTON		SPILLS
CHICAGO	S111887511		1350 W FULLERTON		SPILLS
CHICAGO	S111898277		1320 W FULLERTON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111891048		1880 W FULLERTON ST		SPILLS
CHICAGO	S111908315		3417 W FULLERTON		SPILLS
CHICAGO	S111877461		1880 W FULLERTON		SPILLS
CHICAGO	S111909707		1900 W FULLERTON ST		SPILLS
CHICAGO	S111884329		5055 W FULLERTON		SPILLS
CHICAGO	S111900842		6001 W FULLERTON		SPILLS
CHICAGO	S111902670		3918 W FULLERTON		SPILLS
CHICAGO	S111889967		4401 W FULLERTON		SPILLS
CHICAGO	S111910536		4444 FULLERTON		SPILLS
CHICAGO	S111903021		1917 W FULLERTON		SPILLS
CHICAGO	S111927267		3959 W FULLERTON		SPILLS
CHICAGO	S111905159		1655 FULLERTON AVE		SPILLS
CHICAGO	S111927101		4140 W FULLERTON		SPILLS
CHICAGO	S111889537		4444 W FULLERTON		SPILLS
CHICAGO	S111904540		4900 W FULLERTON		SPILLS
CHICAGO	S111915676		5000 W FULLERTON		SPILLS
CHICAGO	S111894733		1718 W FULLERTON		SPILLS
CHICAGO	S111890773		2357 W FULLERTON		SPILLS
CHICAGO	S111877204		1650 W FULLERTON		SPILLS
CHICAGO	S111880749		2357 W FULLERTON		SPILLS
CHICAGO	S111880664		1106 W FULLERTON		SPILLS
CHICAGO	S111889432		1880 W FULLERTON		SPILLS
CHICAGO	S111912266		1400 W FULLTERTON AVE		SPILLS
CHICAGO	S111886711		FULTON & UNION STS		SPILLS
CHICAGO	S111877990		3006 W FULTON		SPILLS
CHICAGO	S111881407		1642 W FULTON		SPILLS
CHICAGO	S111891010		2950 W FULTON		SPILLS
CHICAGO	S111912411		3216 FULTON		SPILLS
CHICAGO	S111892267		832 W FULTON MARKET ST		SPILLS
CHICAGO	S111911765		832 W FULTON MARKET ST		SPILLS
CHICAGO	S111922251		1227 W FULTON		SPILLS
CHICAGO	S111908748		1000 W FULTON		SPILLS
CHICAGO	S111896900		1642 W FULTON		SPILLS
CHICAGO	S111878334		5055 W FULTON		SPILLS
CHICAGO	S111893696		2501 W FULTON		SPILLS
CHICAGO	S111883285		832 W FULTON MARKET ST		SPILLS
CHICAGO	S111914896		1813 W FULTON		SPILLS
CHICAGO	S111904577		1745 FULTON ST		SPILLS
CHICAGO	S111897131		1325 W FULTON AVE		SPILLS
CHICAGO	S111907796		1325 W FULTON		SPILLS
CHICAGO	S111892086		832 W FULTON MARKET ST		SPILLS
CHICAGO	S111889459		2128 W FULTON IN ALY		SPILLS
CHICAGO	S111880758		2051 W FULTON AVE		SPILLS
CHICAGO	S111900638		2401 W FULTON		SPILLS
CHICAGO	S111900976		2201 W FULTON		SPILLS
CHICAGO	96474553	2000 GAL ABANDONED STORAGE TANK / DURING TANK REMOVAL	2000 GAL ABANDONED STORAGE TANK / DURING TANK REMOVAL		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	98438241	000 GAL / CONTRACTOR LEFT VALVOPEN	000 GAL / CONTRACTOR LEFT VALVOPEN		ERNS
CHICAGO	S111349414		2630 N GARDEN AVE		SPILLS
CHICAGO	S110613603		9555 W GARFIELD		SPILLS
CHICAGO	S111926398		9555 W GARFIELD		SPILLS
CHICAGO	S111900592		GATE OF K 19TH & RAMP OHARE AIRPORT		SPILLS
CHICAGO	94360367	GENERAL MILLS SLIP	GENERAL MILLS SLIP		ERNS
CHICAGO	94399152	GENERAL MARINE MOUTH OF CALCAG RIVER MILE 333	GENERAL MARINE MOUTH OF CALCAG RIVER MILE 333		ERNS
CHICAGO	S111895101		9351 GENOA AVE		SPILLS
CHICAGO	S111882567		9536 S GENOA		SPILLS
CHICAGO	S111919131		5744 GEORGE ST		SPILLS
CHICAGO	S111892933		1303 W GEORGE		SPILLS
CHICAGO	S111892932		1224 N GEORGE		SPILLS
CHICAGO	S111907303		2711 W GLADYS ST		SPILLS
CHICAGO	S111898194		2720 W GLADYS		SPILLS
CHICAGO	2005610546	GLEN YARD	GLEN YARD		ERNS
CHICAGO	S111889981		6632 N GLENWOOD		SPILLS
CHICAGO	S111875234		5800 GLENWOOD		SPILLS
CHICAGO	2008870345	GLOBAL ONE RAIL YARD	GLOBAL ONE RAIL YARD		ERNS
CHICAGO	S111925831		W GLOBAL 2		SPILLS
CHICAGO	S111913094		GLOBAL FREE YARD ROCKWELL SUBD		SPILLS
CHICAGO	S111919138		GLOBAL 1		SPILLS
CHICAGO	S111914935		GLOBAL ONE		SPILLS
CHICAGO	S111904975		GLOBAL 1		SPILLS
CHICAGO	S111904568		GOBLE ONE		SPILLS
CHICAGO	S111877289		2401 GRACE ST		SPILLS
CHICAGO	2003709193	GRADE CROSSING	GRADE CROSSING		ERNS
CHICAGO	2008875091	GRADE CROSSING	GRADE CROSSING		ERNS
CHICAGO	2008881150	GRAND AVENUE	GRAND AVENUE		ERNS
CHICAGO	S111877458		2027 W GRAND		SPILLS
CHICAGO	S111899558		6655 W GRAND AVE		SPILLS
CHICAGO	S111896464		6935 W GRAND AVE		SPILLS
CHICAGO	S111888951		6918 W GRAND AVE		SPILLS
CHICAGO	S111896878		6935 W GRAND AVE		SPILLS
CHICAGO	S111922968		6505 W GRAND AVE		SPILLS
CHICAGO	S111904634		7020 W GRAND AVE		SPILLS
CHICAGO	S111900790		6655 W GRAND AVE		SPILLS
CHICAGO	S111879242		6704 W GRAND AVE		SPILLS
CHICAGO	S111879241		6722 W GRAND AVE		SPILLS
CHICAGO	S111879240		6750 W GRAND AVE		SPILLS
CHICAGO	S111905502		3834 W GRAND		SPILLS
CHICAGO	S111883260		5555 W GRAND		SPILLS
CHICAGO	S111881218		3175 N GRAND AVE		SPILLS
CHICAGO	S111900727		3965 W GRAND		SPILLS
CHICAGO	S111897656		3909 W GRAND		SPILLS
CHICAGO	S111893345		GRAND AVE & ORLEANS ST		SPILLS
CHICAGO	S111891073		1339 W GRAND		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111925618		7001 W GRAND AVE		SPILLS
CHICAGO	S111910267		6914 W GRAND		SPILLS
CHICAGO	S111878605		6801 W GRAND AVE		SPILLS
CHICAGO	S111903795		3955 W GRAND		SPILLS
CHICAGO	S111894051		2816 GRAND AVE		SPILLS
CHICAGO	S111889874		1807 W GRANDVILLE		SPILLS
CHICAGO	S111907420		5035 W GRANT AVE		SPILLS
CHICAGO	S111911509		5145 W GRANT		SPILLS
CHICAGO	2010960437	GRANVILLE AND RIDGE	GRANVILLE		ERNS
CHICAGO	S111900739		2447 W GRANVILLE		SPILLS
CHICAGO	S111904032		2700 S GREEN ST		SPILLS
CHICAGO	S111907232		106 S GREENBAY AVE		SPILLS
CHICAGO	S111877938		1320 W GREENLEAF		SPILLS
CHICAGO	S111885304		2512 N GREENVIEW		SPILLS
CHICAGO	S111902387		4542 N GREENVIEW		SPILLS
CHICAGO	S111905211		3928 N GREENVIEW ST		SPILLS
CHICAGO	S111895425		9000 S GREENWOOD ST		SPILLS
CHICAGO	99626883	ST. GREGORY HIGH SCHOOL 1637 WEST BRYN MAWR ROAD	ST. GREGORY HIGH SCHOOL 1637 WEST BRYN MAWR ROAD		ERNS
CHICAGO	S111924972		4400 W GRENSHAW		SPILLS
CHICAGO	S111897142		7041 S GRN ST IN THE ALLEY		SPILLS
CHICAGO	S111915291		8915 S GRN BAY		SPILLS
CHICAGO	2010936059	4820 WEST GUNNINSON	4820 W GUNNINSON		ERNS
CHICAGO	S111911295		5918 W GUNNISON		SPILLS
CHICAGO	S111906606		6601 W GUNNISON		SPILLS
CHICAGO	S111920129		5930 W GUNNISON		SPILLS
CHICAGO	S111911414		2525 W GUNNISON AVE		SPILLS
CHICAGO	S111883939		2000 W HADDON		SPILLS
CHICAGO	94378941	830 HAINES RIGHT OFF HOOKER	830 HAINES RIGHT OFF HOOKER		ERNS
CHICAGO	S111891184		830 HAINES		SPILLS
CHICAGO	S111898079		10449 S HALE		SPILLS
CHICAGO	2010929894	4500 S. HALFTED STREET	4500 S HALFTED ST		ERNS
CHICAGO	S111883818		928 HALG OHARE ARFS		SPILLS
CHICAGO	2003648226	1130 SOUTH HALSTAD	1130 SOUTH HALSTAD		ERNS
CHICAGO	S111906302		3737 S HALSTAD ST		SPILLS
CHICAGO	94371388	HALSTEAD STREET	HALSTEAD STREET		ERNS
CHICAGO	97413488	901 N HALSTEAD GREY HOUND MAINTENANCE CENTER	901 N HALSTEAD GREY HOUND MAINTENANCE CENTER		ERNS
CHICAGO	2008887158	4118 S HALSTEAD	4118 S HALSTEAD		ERNS
CHICAGO	2008880664	HALSTEAD @ HUBBARD	HALSTEAD @ HUBBARD		ERNS
CHICAGO	2010948540	2615 N HALSTEAD	2615 N HALSTEAD		ERNS
CHICAGO	S111885666		3600 N HALSTEAD		SPILLS
CHICAGO	S111885939		11500 S HALSTEAD		SPILLS
CHICAGO	S111887110		2300 S HALSTEAD		SPILLS
CHICAGO	S111910763		4512 S HALSTEAD		SPILLS
CHICAGO	S111903056		9420 S HALSTEAD		SPILLS
CHICAGO	S111912365		7100 HALSTEAD AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111912978		1234 N HALSTEAD		SPILLS
CHICAGO	S111912979		1234 N HALSTEAD		SPILLS
CHICAGO	S111926011		2600 N HALSTEAD		SPILLS
CHICAGO	S111905948		111 S HALSTEAD ST		SPILLS
CHICAGO	S111893111		3024 S HALSTEAD AVE		SPILLS
CHICAGO	S111911697		2145 N HALSTEAD		SPILLS
CHICAGO	S111900784		7808 S HALSTEAD		SPILLS
CHICAGO	S111921061		112 S HALSTEAD		SPILLS
CHICAGO	S111903489		4187 S HALSTEAD		SPILLS
CHICAGO	S111914110		5901 S HALSTEAD		SPILLS
CHICAGO	S108047026		HALSTED ST		SPILLS
CHICAGO	S110613501		2615 N HALSTED		SPILLS
CHICAGO	2005630618	HALSTED STREET	HALSTED STREET		ERNS
CHICAGO	2007319874	HALSTED STREET	HALSTED STREET		ERNS
CHICAGO	S111925906		HALSTED		SPILLS
CHICAGO	S111913799		4200 S HALSTED		SPILLS
CHICAGO	S111910568		1218 S HALSTED		SPILLS
CHICAGO	S111882312		HALSTED AVE W		SPILLS
CHICAGO	S111903745		9811 HALSTED		SPILLS
CHICAGO	S111896992		950 S HALSTED		SPILLS
CHICAGO	S111895268		12540 S HALSTED		SPILLS
CHICAGO	S111912243		13600 S HALSTED		SPILLS
CHICAGO	S111903700		11501 HALSTED ST		SPILLS
CHICAGO	S111900568		11226 S HALSTED		SPILLS
CHICAGO	S111897767		11656 S HALSTED		SPILLS
CHICAGO	S111879314		8259 S HALSTED		SPILLS
CHICAGO	S111927370		365 N HALSTED		SPILLS
CHICAGO	S111927342		40 S HALSTED		SPILLS
CHICAGO	S111913452		170 N HALSTED		SPILLS
CHICAGO	S111905255		13600 S HALSTED ST		SPILLS
CHICAGO	S111898547		2600 N HALSTED		SPILLS
CHICAGO	S111889283		9458 S HALSTED		SPILLS
CHICAGO	S111922150		5833 S HALSTED		SPILLS
CHICAGO	S111892429		2733 N HALSTED		SPILLS
CHICAGO	S111921198		HALSTED & HUBBARD		SPILLS
CHICAGO	S111893787		2723 S HALSTED		SPILLS
CHICAGO	S111891503		711 HALSTED		SPILLS
CHICAGO	S111927240		2300 S HALSTED		SPILLS
CHICAGO	S111927238		2300 S HALSTED		SPILLS
CHICAGO	S111921739		4834 S HALSTED		SPILLS
CHICAGO	S111918745		HALSTED ST		SPILLS
CHICAGO	S111881265		6659 S HALSTED		SPILLS
CHICAGO	S111925751		8605 S HALSTED		SPILLS
CHICAGO	S111894501		1560 N HALSTED AVE		SPILLS
CHICAGO	S111890866		901 N HALSTED		SPILLS
CHICAGO	S111924820		1560 N HALSTED		SPILLS
CHICAGO	S111919033		4512 S HALSTED		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111920289		HALSTED ST		SPILLS
CHICAGO	S111908149		2857 S HALSTED		SPILLS
CHICAGO	S111899448		9900 S HALSTED		SPILLS
CHICAGO	S111881003		8801 S HALSTED		SPILLS
CHICAGO	S111905402		10101 S HALSTED AVE		SPILLS
CHICAGO	S111889107		3000 N HALSTED		SPILLS
CHICAGO	S111880767		7100 S HALSTED AVE		SPILLS
CHICAGO	S111919434		HALSTED & KINZIE YARD		SPILLS
CHICAGO	S111927720		3740 N HALSTED		SPILLS
CHICAGO	S111914463		10301 S HALSTED		SPILLS
CHICAGO	S111907558		2145 N HALSTED		SPILLS
CHICAGO	S111911558		2834 N HALSTED		SPILLS
CHICAGO	S111910193		10630 S HALSTED		SPILLS
CHICAGO	S111904830		3539 N HALSTED		SPILLS
CHICAGO	S108480128		HALSTED ST		SPILLS
CHICAGO	S108046821		9500 S HALSTRAD		SPILLS
CHICAGO	S111898193		2630 HAMDEN CT		SPILLS
CHICAGO	S111880970		5956 S HAMILTON		SPILLS
CHICAGO	S111894412		3823 N HAMILTON		SPILLS
CHICAGO	S111920189		7850 S HAMILTON		SPILLS
CHICAGO	S111910159		3215 S HAMIMTON ST		SPILLS
CHICAGO	S111888291		1800 N HAMLIN ST		SPILLS
CHICAGO	S111925519		HANGER 755		SPILLS
CHICAGO	S111889509		HANGER 755		SPILLS
CHICAGO	S111890043		HANGER 2		SPILLS
CHICAGO	2001570505	HANGER 2 BLDG 725	HANGER 2 BLDG 725	0	ERNS
CHICAGO	94364406	HARBOR NEAR NAVY PIER CHESTNUT & LAKESHOR DR	HARBOR NEAR NAVY PIER CHESTNUT & LAKESHORE DR		ERNS
CHICAGO	2000669619	HARBOR	HARBOR		ERNS
CHICAGO	S111913179		3132 N HARDING		SPILLS
CHICAGO	S111920811		1956 N HARDING		SPILLS
CHICAGO	S108047373		O HARE AIRPORT & UNITED HANGAR BLVG 710		SPILLS
CHICAGO	2007309784	HARLEM STREET	HARLEM STREET		ERNS
CHICAGO	U001965186	SHELL SER STATION	7550 N HARLEM MILWAUKEE		UST
CHICAGO	S111887273		3611 N HARLEM		SPILLS
CHICAGO	S111876556		6800 N HARLEM ST		SPILLS
CHICAGO	S111911102		2919 N HARLEM AVE		SPILLS
CHICAGO	S111900902		2001 N HARLEM		SPILLS
CHICAGO	S111900521		2001 N HARLEM AVE		SPILLS
CHICAGO	S111892489		1801 N HARLEM AVE		SPILLS
CHICAGO	S111901780		3200 N HARLEM		SPILLS
CHICAGO	S111895514		5837 S HARLEM		SPILLS
CHICAGO	S111876180		3330 N HARLEM		SPILLS
CHICAGO	S111879221		6256 N HARLEM		SPILLS
CHICAGO	S111882566		5709 S HARLEM		SPILLS
CHICAGO	S111899505		1957 N HARLEM AVE		SPILLS
CHICAGO	S111898470		2801 N HARLEM AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111879191		6800 N HARLEM		SPILLS
CHICAGO	S111879433		1823 N HARLEM AVE		SPILLS
CHICAGO	S111914235		1733 N HARLEM		SPILLS
CHICAGO	S111892364		HARLEM AVE & I 55		SPILLS
CHICAGO	S111892359		7550 N HARLEM		SPILLS
CHICAGO	S111893361		4051 N HARLEM		SPILLS
CHICAGO	S111906761		1733 N HARLEM AVE		SPILLS
CHICAGO	S111910974		3434 N HARLEN		SPILLS
CHICAGO	S111888469		5129 S HARPER		SPILLS
CHICAGO	S111912572		530 S HARPER AVE		SPILLS
CHICAGO	S111883170		9315 S HARPER		SPILLS
CHICAGO	S111880043		5129 S HARPER		SPILLS
CHICAGO	U003104599	MEDICAL CENTER COMM	224359 W HARRISON		UST
CHICAGO	S111887979		3305 W HARRISON		SPILLS
CHICAGO	S111888248		707 W HARRISON		SPILLS
CHICAGO	S111876439		3801 W HARRISON		SPILLS
CHICAGO	S111900827		3707 W HARRISON		SPILLS
CHICAGO	S111894454		4519 W HARRISON		SPILLS
CHICAGO	S111894895		HARRISON & RACINE AVES		SPILLS
CHICAGO	S111876051		3801 W HARRISON		SPILLS
CHICAGO	90182371	HAYFORD INTERLOCKING PLANT 75TH AND HARDIE	HAYFORD INTERLOCKING PLANT 75TH AND HARDIE		ERNS
CHICAGO	S111895209		4544 HAZEL ST		SPILLS
CHICAGO	93352173	4837 NORTH HERMINAGES	4837 NORTH HERMINAGES		ERNS
CHICAGO	S111894215		4625 HERMITAGE AVE		SPILLS
CHICAGO	S111878314		4200 S HERMITAGE		SPILLS
CHICAGO	S111890832		1942 N HERMITAGE		SPILLS
CHICAGO	S111880926		4863 N HERMITAGE IN THE ALLEY BEHIND		SPILLS
CHICAGO	S111900056		435 N HERMITAGE ST		SPILLS
CHICAGO	S111885663		HERTZ SERVICE RETURN OHARE AIR		SPILLS
CHICAGO	2002600940	HICK BRIDGE	HICK BRIDGE	0	ERNS
CHICAGO	S111886098		7159 W HIGGINS		SPILLS
CHICAGO	S111875374		6716 W HIGGINS		SPILLS
CHICAGO	S111910018		820 W HIGGINS AVE		SPILLS
CHICAGO	S111912382		6417 W HIGGINS		SPILLS
CHICAGO	S111903948		6436 W HIGGINS		SPILLS
CHICAGO	S111899229		6842 W HIGGINS		SPILLS
CHICAGO	S111923035		7133 W HIGGINS		SPILLS
CHICAGO	S111889494		5765 W HIGGINS		SPILLS
CHICAGO	S111906848		7201 W HIGGINS		SPILLS
CHICAGO	S111882786		6020 HIGGINS AVE		SPILLS
CHICAGO	S111898638		2201 W HIGHLAND		SPILLS
CHICAGO	S111915225		1743 HIGHLAND AVE		SPILLS
CHICAGO	S111884462		2883 S HILLOCK ST		SPILLS
CHICAGO	S111912226		6257 W HOLBROOK		SPILLS
CHICAGO	S111900181		HOLMAN & 23RD ST		SPILLS
CHICAGO	S111908084		1830 S HOLMAN AVE		SPILLS
CHICAGO	S109327479		4118 S HOLSTEAD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111924234		4118 S HOLSTEAD		SPILLS
CHICAGO	S111883868		2857 S HOLSTED		SPILLS
CHICAGO	S111876775		HOLY CROSS HOSPITAL & 2701ST W 68TH ST		SPILLS
CHICAGO	S111909312		913 HOMAN AVE		SPILLS
CHICAGO	S111906649		234 N HOMAN		SPILLS
CHICAGO	S111913259		2650 S HOMAN		SPILLS
CHICAGO	S111919204		2612 S HOMAN		SPILLS
CHICAGO	S111914452		HOMAN AVE		SPILLS
CHICAGO	S111900938		11600 S HOMAN		SPILLS
CHICAGO	S111749680		43 N HOMAN		SPILLS
CHICAGO	S111912237		2419 W HOMER		SPILLS
CHICAGO	S111911881		4819 HOMER		SPILLS
CHICAGO	S111884173		5142 W HOMER		SPILLS
CHICAGO	900104022	HONEY CRUST BAKERY (312)376-0350 3822 SOUTH MORGAN ST	HONEY CRUST BAKERY (312)376-0350 3822 SOUTH MORGAN ST		ERNS
CHICAGO	2009896503	3550 W. HONEYSIDE AVE.	3550 W. HONEYSIDE AVE.		ERNS
CHICAGO	2008896503	3550 W. HONEYSIDE AVE.	3550 W. HONEYSIDE AVE.		ERNS
CHICAGO	S111884726		1000 N HOOKER		SPILLS
CHICAGO	S111879820		12300 S HOUSTON		SPILLS
CHICAGO	2011963459	HOWARD YARD	HOWARD YARD		ERNS
CHICAGO	2010943926	HOWARD STREET TERMINAL	HOWARD ST		ERNS
CHICAGO	S111904581		1771 W HOWARD		SPILLS
CHICAGO	S111893617		1529 W HOWARD ST		SPILLS
CHICAGO	S111888463		1155 N HOWE		SPILLS
CHICAGO	S111879482		13518 S HOXIE		SPILLS
CHICAGO	S111887768		7115 S HOYNE		SPILLS
CHICAGO	S111913745		4856 HOYNE		SPILLS
CHICAGO	S111883382		226 S HOYNE		SPILLS
CHICAGO	S111888936		11071 S HOYNE ST		SPILLS
CHICAGO	S111894405		4848 S HOYNE		SPILLS
CHICAGO	S111913844		7342 S HOYNE		SPILLS
CHICAGO	S111913778		1446 W HUBBARD		SPILLS
CHICAGO	S111903702		1146 W HUBBARD		SPILLS
CHICAGO	S111909710		2246 W HUBBARD		SPILLS
CHICAGO	S111911028		1725 HUBBARD ST		SPILLS
CHICAGO	S111881245		2121 W HUBBARD		SPILLS
CHICAGO	S111902854		333 W HUBBARD		SPILLS
CHICAGO	S111903486		1373 W HUBBARD		SPILLS
CHICAGO	S111890683		1519 N HUDSON		SPILLS
CHICAGO	S111896938		1800 N HUMBULDT BLVD		SPILLS
CHICAGO	S111891944		11600 HURLEY AVE		SPILLS
CHICAGO	S111906032		942 W HURON		SPILLS
CHICAGO	S111880971		409 W HURON		SPILLS
CHICAGO	S111920822		469 W HURON		SPILLS
CHICAGO	S111915329		333 E HURON		SPILLS
CHICAGO	S111899580		410 E HURRON ST		SPILLS
CHICAGO	S108047098		HWY		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111887325		5450 NORTHWEST HWY		SPILLS
CHICAGO	S111888275		5707 NORTHWEST HWY		SPILLS
CHICAGO	S111926439		6060 NORTHWEST HWY		SPILLS
CHICAGO	S111900204		5292 NORTHWEST HWY		SPILLS
CHICAGO	S111908625		6643 NORTHWEST HWY		SPILLS
CHICAGO	S111889939		6060 NORTHWEST HWY		SPILLS
CHICAGO	S111879323		5349 NORTHWEST HWY		SPILLS
CHICAGO	S111884598		5688 NORTHWEST HWY		SPILLS
CHICAGO	S111883789		5677 NORTHWEST HWY		SPILLS
CHICAGO	S111883788		5601 NORTHWEST HWY		SPILLS
CHICAGO	S111902878		5932 NORTHWEST HWY		SPILLS
CHICAGO	S111898406		5978 NORTHWEST HWY		SPILLS
CHICAGO	S111906239		5540 NORTHWEST HWY		SPILLS
CHICAGO	S111882437		5328 NORTHWEST HWY		SPILLS
CHICAGO	S111889070		5210 NORTHWEST HWY		SPILLS
CHICAGO	S111880779		6405 NORTHWEST HWY		SPILLS
CHICAGO	S111898878		5990 NORTHWEST HWY		SPILLS
CHICAGO	S111893992		5810 NORTHWEST HWY		SPILLS
CHICAGO	S111897518		5400 NORTHWEST HWY		SPILLS
CHICAGO	S111890344		5860 NORTHWEST HWY		SPILLS
CHICAGO	94389410	I-190	I-190		ERNS
CHICAGO	2000534767	ROUTE I-290	ROUTE I-290	0	ERNS
CHICAGO	S111891411		ON IL RIV		SPILLS
CHICAGO	S111892173		ILCALSAG 333MM		SPILLS
CHICAGO	8862767	ILL SCRAP PROCESSING	ILL SCRAP PROCESSING		ERNS
CHICAGO	2002624541	ILLINOIS WATER WAY MILE 319.4	ILLINOIS WATER WAY MILE 319.4	0	ERNS
CHICAGO	98430979	ILLINOIS RIVER MM300	ILLINOIS RIVER MM300		ERNS
CHICAGO	2000534026	ILLINOIS AND COLUMBUS ST.	ILLINOIS AND COLUMBUS ST.	0	ERNS
CHICAGO	99633038	ILLINOIS MARINE FLEET MILE 300 M/V ROSS PICKETT	ILLINOIS MARINE FLEET MILE 300 M/V ROSS PICKETT		ERNS
CHICAGO	2007310111	ILLINOIS AVE AND MCCLURG AVENUE	ILLINOIS AVE AND MCCLURG AVENUE		ERNS
CHICAGO	2008871775	ILLINOIS RIVER	ILLINOIS RIVER		ERNS
CHICAGO	S111907456		201 E ILLINOIS		SPILLS
CHICAGO	S111926005		ILLINOIS RIV		SPILLS
CHICAGO	S111907572		ILLINOIS & COLUMBUS STS		SPILLS
CHICAGO	S111925018		ILLINOIS RIV		SPILLS
CHICAGO	92289906	IMX FACILITY 26TH AND 31ST AVE	IMX FACILITY 26TH AND 31ST AVE		ERNS
CHICAGO	S111888437		IMX RAILYARD ON WESTERN AVE		SPILLS
CHICAGO	S111879297		9915 S IN ALY		SPILLS
CHICAGO	S111902081		W IN FLIGHT 5		SPILLS
CHICAGO	S111910684		6600 S INBOUND SKYWAY NEAR THE ST		SPILLS
CHICAGO	S111914280		INDIAN ROAD WOODS FRST		SPILLS
CHICAGO	S111885760		2241 S INDIANA		SPILLS
CHICAGO	S111883212		3730 S INDIANA		SPILLS
CHICAGO	S111905655		INDIANA ROAD PARK		SPILLS
CHICAGO	S111910042		1730 S INDIANA		SPILLS
CHICAGO	S111884346		1730 S INDIANA		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111905096		13701 S INDIANA		SPILLS
CHICAGO	S111881915		5000 S INDIANA		SPILLS
CHICAGO	S111904954		13759 S INDIANA AVE		SPILLS
CHICAGO	S111915566		13333 S INDIANA		SPILLS
CHICAGO	S111888759		10300 INDIANAPOLIS BLVD		SPILLS
CHICAGO	90173269	INDIANAPOLIS BLVD BRIDGE INDIANA HARBOR CANAL EAST OF CHICAG	INDIANAPOLIS BLVD BRIDGE INDIANA HARBOR CANAL EAST OF CHICAG		ERNS
CHICAGO	S111895476		711 INDUSTRIAL DR		SPILLS
CHICAGO	S111893530		MP INT OF 94		SPILLS
CHICAGO	S111924479		INT 94		SPILLS
CHICAGO	S111899051		INT OGDON & OAKLEY ST		SPILLS
CHICAGO	2008859473	INTERMODAL YARD	INTERMODAL YARD		ERNS
CHICAGO	2008859472	INTERMODAL YARD	INTERMODAL YARD		ERNS
CHICAGO	S108047234		INTERSECTION OF 30TH ST & KEDZIE ST		SPILLS
CHICAGO	S108047858		INTERSECTION OF DUNLAP & HARVARD		SPILLS
CHICAGO	93341562	INTERSECTION OF DAMEN AVE AND CHURCHILL	INTERSECTION OF DAMEN AVE AND CHURCHILL		ERNS
CHICAGO	2010936858	INTERSECTION OF MANNHEIM ROAD	INTERSECTION OF MANNHEIM RD		ERNS
CHICAGO	S111894498		INTERSECTION OF DAMEN & ARCHER		SPILLS
CHICAGO	S111925598		INTERSECTION OF WOOD ST AND WA ST		SPILLS
CHICAGO	S111913948		INTERSECTION OF 47TH ST & LEANINGTON ST		SPILLS
CHICAGO	S111886694		INTERSECTIONOF 83RD & STATE ST		SPILLS
CHICAGO	S111888696		INTERSECTIONOF 37TH & STATE STS		SPILLS
CHICAGO	S111912516		2954 W IRIVING PARK RD		SPILLS
CHICAGO	S111911904		7501 W IRIVING PARK RD		SPILLS
CHICAGO	S111890148		3604 S IRON		SPILLS
CHICAGO	S111881629		3700 S IRON		SPILLS
CHICAGO	S111886858		2337 IRVINE PARK RD		SPILLS
CHICAGO	S111885562		4001 W IRVING		SPILLS
CHICAGO	S111886380		953 IRVING PARK		SPILLS
CHICAGO	S111880190		2033 W IRVING PARK		SPILLS
CHICAGO	S111881428		3020 W IRVING PARK		SPILLS
CHICAGO	S111907476		6100 IRVING RD		SPILLS
CHICAGO	S111898600		3541 W IRVING PARK		SPILLS
CHICAGO	S111901186		777 IRVING PARK RD		SPILLS
CHICAGO	S111877073		IRVING PARK & KENEDY EXPY		SPILLS
CHICAGO	S111878401		7800 W IRVING PARK RD		SPILLS
CHICAGO	S111923083		IRVING PARK RD & CARGO RD		SPILLS
CHICAGO	S111907683		953 IRVING PARK RD		SPILLS
CHICAGO	S111927131		13609 W IRVING PARK RD		SPILLS
CHICAGO	S111893012		11501 W IRVING PARK RD		SPILLS
CHICAGO	S111892347		4323 W IRVING		SPILLS
CHICAGO	S111875552		8000 IRVING PARK RD		SPILLS
CHICAGO	S111882935		4001 W IRVING PARK		SPILLS
CHICAGO	S111911648		841 W IRVING PAEK RD		SPILLS
CHICAGO	S111880750		841 W IRVING PARK		SPILLS
CHICAGO	S111915050		11560 W IRVING PARK RD		SPILLS
CHICAGO	S111924998		2834 IRVING PARK RD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111913990		11560 W IRVING PARK RD		SPILLS
CHICAGO	S111882362		4816 W IRVING PARK		SPILLS
CHICAGO	S110613713		2508 W JACKSON ST		SPILLS
CHICAGO	2010932920	BUSINESS DISTRICT 358 W. JACKSON ST.	358 W JACKSON ST		ERNS
CHICAGO	S111887249		209 W JACKSON		SPILLS
CHICAGO	S111885980		5201 W JACKSON		SPILLS
CHICAGO	S111887884		5201 W JACKSON		SPILLS
CHICAGO	2012101868		77 W JACKSON ST		ERNS
CHICAGO	S111912575		JACKSON PARK GOLF DRIVING RANG DR		SPILLS
CHICAGO	S111913625		4546 W JACKSON		SPILLS
CHICAGO	S111884884		1645 W JACKSON		SPILLS
CHICAGO	S111925491		3236 W JACKSON		SPILLS
CHICAGO	S111925492		3236 W JACKSON		SPILLS
CHICAGO	S111911695		JACKSON PARK HAYES AVE		SPILLS
CHICAGO	S111881270		2100 W JACKSON		SPILLS
CHICAGO	S111907782		1001 W JACKSON		SPILLS
CHICAGO	S111926494		2508 W JACKSON ST		SPILLS
CHICAGO	S111915553		330 W JACKSON		SPILLS
CHICAGO	S111908348		1010 E JACKSON BLVD		SPILLS
CHICAGO	S111883501		1655 W JACKSON		SPILLS
CHICAGO	S111877812		827 S JEFFERSON		SPILLS
CHICAGO	S111884638		1401 S JEFFERSON		SPILLS
CHICAGO	S111889615		1400 S JEFFERSON		SPILLS
CHICAGO	S111914939		7601 S JEFFERSON		SPILLS
CHICAGO	S111883593		1400 S JEFFERSON		SPILLS
CHICAGO	S111912836		180 N JEFFERSON		SPILLS
CHICAGO	S111912837		180 N JEFFERSON		SPILLS
CHICAGO	S111899009		1400 S JEFFERSON		SPILLS
CHICAGO	S111910682		6701 S JEFFERY		SPILLS
CHICAGO	S111888739		6701 S JEFFERY		SPILLS
CHICAGO	S108891660		6701 S JEFFREY		SPILLS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S111910683		6701 S JEFFREY BLVD		SPILLS
CHICAGO	S111883975		9336 S JEFFREY		SPILLS
CHICAGO	99609148	JFK EXPRESSWAY (RT 90) WEST JUST BEFORE THE 45B EXIT	JFK EXPRESSWAY (RT 90) WEST JUST BEFORE THE 45B EXIT		ERNS
CHICAGO	S109327404		1912 S JOURDAN COURT PEORIA ST		SPILLS
CHICAGO	S111885499		JULIEN & WOOD ST		SPILLS
CHICAGO	94378888	JUST SOUTH OF WASHINGTON ST BRIDGE	JUST SOUTH OF WASHINGTON ST BRIDGE		ERNS
CHICAGO	2007324003	JUST N.E. OF SOLDIER FIELD	JUST N.E. OF SOLDIER FIELD		ERNS
CHICAGO	S111902745		6755 S JUSTINE		SPILLS
CHICAGO	S111890318		309 N JUSTINE		SPILLS
CHICAGO	2000518027	135 SOUTH KADZIE	135 SOUTH KADZIE	0	ERNS
CHICAGO	S111919671		5310 S KARLOV		SPILLS
CHICAGO	S111907501		3115 N KEATING ST		SPILLS
CHICAGO	S111898382		5801 KEATING ST		SPILLS
CHICAGO	S111902616		1438 N KEATING		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S108669593		6033 N KEDALE AVE		SPILLS
CHICAGO	93350395	2759 SOUTH KEDSE AVE	2759 SOUTH KEDSE AVE		ERNS
CHICAGO	S111876900		10759 S KEDSIE		SPILLS
CHICAGO	S111886081		3920 N KEDVALE		SPILLS
CHICAGO	S111884525		1921 N KEDVALE		SPILLS
CHICAGO	94407837	3000 SOUTH KEDZIE SCRAP YARD	3000 SOUTH KEDZIE SCRAP YARD		ERNS
CHICAGO	S111885628		7300 S KEDZIE		SPILLS
CHICAGO	S111886517		3350 N KEDZIE		SPILLS
CHICAGO	S111888296		8700 S KEDZIE		SPILLS
CHICAGO	S111888442		3001 S KEDZIE		SPILLS
CHICAGO	S111888408		2122 N KEDZIE		SPILLS
CHICAGO	S111885391		7300 S KEDZIE		SPILLS
CHICAGO	S111888368		4000 S KEDZIE		SPILLS
CHICAGO	S111877816		3316 N KEDZIE		SPILLS
CHICAGO	S111910595		N KEDZIE AVE		SPILLS
CHICAGO	S111880294		10758 S KEDZIE		SPILLS
CHICAGO	S111900017		5604 N KEDZIE		SPILLS
CHICAGO	S111875974		5808 S KEDZIE		SPILLS
CHICAGO	S111876949		1031 S KEDZIE		SPILLS
CHICAGO	S111910046		4831 S KEDZIE		SPILLS
CHICAGO	S111922462		1701 N KEDZIE		SPILLS
CHICAGO	S111895557		2847 S KEDZIE		SPILLS
CHICAGO	S111877425		5050 KEDZIE AVE		SPILLS
CHICAGO	S111912412		7100 S KEDZIE		SPILLS
CHICAGO	S111899270		3720 N KEDZIE		SPILLS
CHICAGO	S111923987		3301 KEDZIE AVE		SPILLS
CHICAGO	S111908732		101 N KEDZIE		SPILLS
CHICAGO	S111905596		4235 N KEDZIE		SPILLS
CHICAGO	S111890918		1020 N KEDZIE		SPILLS
CHICAGO	S111909533		2800 S KEDZIE		SPILLS
CHICAGO	S111922101		4447 N KEDZIE		SPILLS
CHICAGO	S111876848		1201 S KEDZIE		SPILLS
CHICAGO	S111893723		727 N KEDZIE		SPILLS
CHICAGO	S111876366		4054 N KEDZIE		SPILLS
CHICAGO	S111927168		11040 S KEDZIE		SPILLS
CHICAGO	S111922672		4801 S KEDZIE		SPILLS
CHICAGO	S111919188		2614 S KEDZIE		SPILLS
CHICAGO	S111905518		2021 N KEDZIE		SPILLS
CHICAGO	S111905493		5359 N KEDZIE		SPILLS
CHICAGO	S111899858		1116 N KEDZIE		SPILLS
CHICAGO	S111878143		8200 S KEDZIE		SPILLS
CHICAGO	S111919080		7100 KEDZIE		SPILLS
CHICAGO	S111882493		5050 S KEDZIE		SPILLS
CHICAGO	S111901715		11900 S KEDZIE AVE		SPILLS
CHICAGO	S111894964		5035 N KEDZIE		SPILLS
CHICAGO	S111881916		3247 S KEDZIE		SPILLS
CHICAGO	S111920353		2551 S KEDZIE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111920903		2657 S KEDZIE		SPILLS
CHICAGO	S111878644		6659 N KEDZIE		SPILLS
CHICAGO	S111899132		7625 S KEDZIE		SPILLS
CHICAGO	S111897576		3200 S KEDZIE		SPILLS
CHICAGO	S111896348		10320 S KEDZIE		SPILLS
CHICAGO	S111892109		4910 N KEDZIE		SPILLS
CHICAGO	S111880940		358 S KEDZIE		SPILLS
CHICAGO	S111880825		3947 S KEDZIE		SPILLS
CHICAGO	S111876720		3247 S KEDZIE		SPILLS
CHICAGO	S111880682		7100 S KEDZIE ST		SPILLS
CHICAGO	S111904136		5441 N KEDZIE		SPILLS
CHICAGO	S111914097		5040 N KEDZIE		SPILLS
CHICAGO	S111912849		642 N KEDZIE		SPILLS
CHICAGO	S111912850		642 N KEDZIE		SPILLS
CHICAGO	S111910172		228 S KEDZIE		SPILLS
CHICAGO	S111897377		4646 S KEDZIE		SPILLS
CHICAGO	S111897336		11900 S KEDZIE AVE		SPILLS
CHICAGO	S111912810		3747 N KEDZIE		SPILLS
CHICAGO	S111912811		3747 N KEDZIE		SPILLS
CHICAGO	S111883969		3100 N KEDZIE		SPILLS
CHICAGO	S111902571		412 N KEDZIE		SPILLS
CHICAGO	S111876629		3247 S KEDZIE		SPILLS
CHICAGO	S111920182		4837 S KEDZIE		SPILLS
CHICAGO	S111920124		5440 S KEDZIE		SPILLS
CHICAGO	S111911511		4140 N KEDZIE		SPILLS
CHICAGO	94367889	6900 S KEELER ST	6900 S KEELER ST		ERNS
CHICAGO	90164999	69 KEELER STREET	69 KEELER STREET		ERNS
CHICAGO	S111910602		930 N KENMORE		SPILLS
CHICAGO	S111900364		4920 N KENMORE		SPILLS
CHICAGO	S111878670		4208 KENMORE AVE		SPILLS
CHICAGO	S109700090		NW KENNEDY EXPY & NORTH AVE		SPILLS
CHICAGO	S111903042		SB KENNEDY EXPY		SPILLS
CHICAGO	S111925176		NW KENNEDY EXPRESSWAY AT NORTH AVE		SPILLS
CHICAGO	S111749663		300 S KENNEDY EXPY		SPILLS
CHICAGO	S111925061		2324 S KENNETH		SPILLS
CHICAGO	S111907521		KENOSHA SUBDIVISION		SPILLS
CHICAGO	2006805030	400 N. KENTON AVE	400 N. KENTON AVE		ERNS
CHICAGO	S111890713		1636 N KENTON		SPILLS
CHICAGO	S108046186		3701 W KENZIE		SPILLS
CHICAGO	S111902173		3701 W KENZIE		SPILLS
CHICAGO	S108045321		11039 S KEZIE AVE		SPILLS
CHICAGO	S111891776		4411 S KILBARE		SPILLS
CHICAGO	8850526	1645 S KILBORN ST	1645 S KILBORN ST		ERNS
CHICAGO	2011993247		1821 S KILBORN		ERNS
CHICAGO	S111875834		356 N KILBORN		SPILLS
CHICAGO	2010956033	1821 SOUTH KILBOURN	1821 S KILBOURN		ERNS
CHICAGO	2010956034	1821 SOUTH KILBOURN	1821 S KILBOURN		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111888019		N KILBOURN & W BYRON		SPILLS
CHICAGO	S111892847		2816 S KILBOURN		SPILLS
CHICAGO	S111877630		1330 S KILBOURN		SPILLS
CHICAGO	S111919186		1730 N KILBOURN		SPILLS
CHICAGO	S111898486		750 N KILBOURN		SPILLS
CHICAGO	S111880599		6249 S KILBOURN		SPILLS
CHICAGO	S111898682		5152 S KILBOURN		SPILLS
CHICAGO	S111912840		1821 KILBOURN AVE		SPILLS
CHICAGO	S111886847		2816 S KILBOURNE		SPILLS
CHICAGO	S111884664		902 KILBOURNE ST		SPILLS
CHICAGO	S111876879		1440 S KILBOURNE AVE		SPILLS
CHICAGO	S111876447		3200 S KILBOURNE ST		SPILLS
CHICAGO	S111878673		4940 S KILBOURNE AVE		SPILLS
CHICAGO	S111879169		1810 N KILBOURNE		SPILLS
CHICAGO	S111911634		1810 N KILBOURNE		SPILLS
CHICAGO	S111890018		715 N KILBOURNE		SPILLS
CHICAGO	S111883554		22 N KILDAIR AVE		SPILLS
CHICAGO	S111894670		2100 N KILDARE		SPILLS
CHICAGO	S111893166		1630 N KILDARE		SPILLS
CHICAGO	S111904816		4400 S KILDARE		SPILLS
CHICAGO	S111901228		4220 S KILDARE BLVD		SPILLS
CHICAGO	S111924072		4220 S KILDARE		SPILLS
CHICAGO	S111877664		2649 N KILDARE ST		SPILLS
CHICAGO	S111877382		2649 N KILDARE		SPILLS
CHICAGO	S111894182		2100 N KILDARE ST		SPILLS
CHICAGO	S111879962		4400 S KILDARE BLVD		SPILLS
CHICAGO	S111901304		4220 S KILDARE BLVD		SPILLS
CHICAGO	S111901420		4220 S KILDEAR BLVD		SPILLS
CHICAGO	S111920649		4201 N KILPATRIC AVE		SPILLS
CHICAGO	2010930105	KILPATRICK ST	KILPATRICK ST		ERNS
CHICAGO	S111886128		4117 N KILPATRICK		SPILLS
CHICAGO	S111893210		400 N KILPATRICK		SPILLS
CHICAGO	S111883938		1657 KILPATRICK		SPILLS
CHICAGO	S111884767		4201 N KILPATRICK ST		SPILLS
CHICAGO	S111907795		800 N KILPATRICK		SPILLS
CHICAGO	S111881598		3250 N KILPATRICK		SPILLS
CHICAGO	S111910258		1657 N KILPATRICK		SPILLS
CHICAGO	S111885936		3200 N KIMBALL		SPILLS
CHICAGO	S111883796		5200 N KIMBALL		SPILLS
CHICAGO	S111881168		5155 KIMBALL AVE		SPILLS
CHICAGO	S111908447		5155 KIMBALL		SPILLS
CHICAGO	S111915311		7330 S KIMBART		SPILLS
CHICAGO	S111877515		3330 N KIMBELL		SPILLS
CHICAGO	S111878502		5060 KIMBERLY		SPILLS
CHICAGO	S111879373		5060 N KIMBERLY ST		SPILLS
CHICAGO	S111876640		5155 KIMNBALL		SPILLS
CHICAGO	S111922716		KINDER MORGAN STOLT TERMINAL		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111920445		KINDER MORGAN DOCK		SPILLS
CHICAGO	2009904890	600 WEST KINDIE	600 WEST KINDIE		ERNS
CHICAGO	2008904890	600 WEST KINDIE	600 WEST KINDIE		ERNS
CHICAGO	S109953771		OF KING DR		SPILLS
CHICAGO	S111899680		7850 KING DR		SPILLS
CHICAGO	S111925269		OF KING DR		SPILLS
CHICAGO	S111912936		KING DR & 26TH ST		SPILLS
CHICAGO	871114	KINGSBURY TRANSMISSION SUBSTATION//370 WEST GRANT AVE	KINGSBURY TRANSMISSION SUBSTATION//370 WEST GRANT AVE		ERNS
CHICAGO	2000521705	KINGSBURY AND OHIO STREETS	KINGSBURY AND OHIO STREETS	0	ERNS
CHICAGO	98437399	KINGSBURY STREET AND NORTH AVE.	KINGSBURY STREET AND NORTH AVE.		ERNS
CHICAGO	S111906666		KINGSBURY & OHIO		SPILLS
CHICAGO	S111922142		1800 N KINGSBURY		SPILLS
CHICAGO	S111904272		1436 N KINGSBURY		SPILLS
CHICAGO	S111886172		9 W KINSEY ST		SPILLS
CHICAGO	S111902807		4201 W KINSEY		SPILLS
CHICAGO	S111904668		1750 W KINSIE		SPILLS
CHICAGO	2011996803		KINZIE ST & FULTON ST		ERNS
CHICAGO	S111881368		4656 W KINZIE		SPILLS
CHICAGO	S111879257		4656 W KINZIE		SPILLS
CHICAGO	S111876836		KINZIE & DES PLAINES		SPILLS
CHICAGO	S111926098		600 W KINZIE		SPILLS
CHICAGO	S111893287		1456 KINZIE ST		SPILLS
CHICAGO	S111890345		1650 W KINZIE		SPILLS
CHICAGO	S111915295		600 W KINZIE AVE		SPILLS
CHICAGO	S111884192		4125 N KISTNER		SPILLS
CHICAGO	S111909432		4222 S KNOX		SPILLS
CHICAGO	S111893839		4243 S KNOX		SPILLS
CHICAGO	S111905612		6051 S KNOX		SPILLS
CHICAGO	S111890944		3315 N KNOX		SPILLS
CHICAGO	S111904627		4333 S KNOX		SPILLS
CHICAGO	S111881185		4358 S KNOX		SPILLS
CHICAGO	S111908891		4242 S KNOX		SPILLS
CHICAGO	S111908890		4243 S KNOX		SPILLS
CHICAGO	S111903050		3136 S KOLIN ST		SPILLS
CHICAGO	S108045958		2660 N KOLMAR		SPILLS
CHICAGO	S111901525		3123 N KOLMAR		SPILLS
CHICAGO	S111875259		1745 KOLMAR AVE		SPILLS
CHICAGO	S111890799		5033 N KOLMAR		SPILLS
CHICAGO	94376715	KOPPERS DOCK	KOPPERS DOCK		ERNS
CHICAGO	2010936208	KOPPER'S - ILLINOIS RIVER MILE 317	KOPPERS ILLINOIS RIV		ERNS
CHICAGO	S111891058		KOPPERS DOCK IN		SPILLS
CHICAGO	S111349455		5225 S KOSTNER		SPILLS
CHICAGO	S111887978		7101 S KOSTNER		SPILLS
CHICAGO	2011983894		5225 S KOSTNER		ERNS
CHICAGO	S111910740		7200 KOSTNER		SPILLS
CHICAGO	S111907481		932 KOSTNER RD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111875327		1500 W KOSTNER		SPILLS
CHICAGO	S111912124		3702 N KOSTNER		SPILLS
CHICAGO	S111905264		1270 S KOSTNER ST		SPILLS
CHICAGO	S111927291		1800 N KOSTNER		SPILLS
CHICAGO	S111903863		3600 S KOSTNER		SPILLS
CHICAGO	S111898148		1100 S KOSTNER		SPILLS
CHICAGO	S111921546		3600 S KOSTNER		SPILLS
CHICAGO	S111899477		KOSTNER & EISENHOWER EXPY		SPILLS
CHICAGO	S111915644		7101 S KOSTNER		SPILLS
CHICAGO	S111905740		1300 N KOSTNER ST		SPILLS
CHICAGO	S111876837		1334 N KROSTNER		SPILLS
CHICAGO	2000530517	5142 SOUTH LACROSSE STREET	5142 SOUTH LACROSSE STREET	0	ERNS
CHICAGO	S108046596		6900 S LAFAYETTE RIGHT OFF DAN RYAN EXPY		SPILLS
CHICAGO	S111895035		6152 S LAFAYETTE		SPILLS
CHICAGO	S111878698		8456 LAFAYETTE		SPILLS
CHICAGO	S111878530		1600 S LAFLIN		SPILLS
CHICAGO	S111904684		2400 S LAFLIN		SPILLS
CHICAGO	S111920382		2150 S LAFLIN		SPILLS
CHICAGO	S111914345		9155 S LAFLIN AVE		SPILLS
CHICAGO	S111909187		2441 S LAFLIN		SPILLS
CHICAGO	S111893132		901 S LAGRANGE		SPILLS
CHICAGO	S108047276		LAKE MICHIGAN		SPILLS
CHICAGO	93331465	LAKE MICHIGAN AT BURNHAM HARBOR	LAKE MICHIGAN AT BURNHAM HARBOR		ERNS
CHICAGO	93331555	LAKE MICHIGAN 1 MI E OF THE 4 MI CRIB	LAKE MICHIGAN 1 MI E OF THE 4 MI CRIB		ERNS
CHICAGO	89114226	LAKE MICHIGAN, BY BANK ST	LAKE MICHIGAN, BY BANK ST		ERNS
CHICAGO	89100836	LAKE MICHIGAN ADJACENT ILLINOIS RIVER LOCKS	LAKE MICHIGAN ADJACENT ILLINOIS RIVER LOCKS		ERNS
CHICAGO	2000534034	2900 LAKE SHORE DRIVE	2900 LAKE SHORE DRIVE	0	ERNS
CHICAGO	2009926425	LAKE MICHIGAN	LAKE MICHIGAN		ERNS
CHICAGO	2005615981	4400 NORTH LAKE SHORE DR.	4400 NORTH LAKE SHORE DR.		ERNS
CHICAGO	2008878901	LAKE MICHIGAN	LAKE MICHIGAN		ERNS
CHICAGO	2008867313	LAKE STREET	LAKE STREET		ERNS
CHICAGO	2007328830	LAKE CALUMET	LAKE CALUMET		ERNS
CHICAGO	S111890682		LAKE MICHIGAN		SPILLS
CHICAGO	S111890681		1604 W LAKE		SPILLS
CHICAGO	S111884771		S LAKE LAKE SHORE DR		SPILLS
CHICAGO	S111889627		4611 W LAKE		SPILLS
CHICAGO	S111924364		5050 W LAKE		SPILLS
CHICAGO	S111925665		LAKE MICHIGAN FRONT		SPILLS
CHICAGO	S111889106		2650 LAKE VIEW		SPILLS
CHICAGO	S111915464		5130 S LAKE PARK		SPILLS
CHICAGO	S111891730		LAKE MICHIGAN MONTROSE HBRS		SPILLS
CHICAGO	90172929	LAKE MICHIGAN	LAKE MICHIGAN		ERNS
CHICAGO	2000521849	WEST LAKE STREET	WEST LAKE STREET	0	ERNS
CHICAGO	96506171	285 LAKEPORT	285 LAKEPORT		ERNS
CHICAGO	S111886622		860 LAKESHORE DR		SPILLS
CHICAGO	S111888228		1000 LAKESHORE DR		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111886999		3180 N LAKESHORE DR		SPILLS
CHICAGO	S111894145		2400 LAKEVIEW		SPILLS
CHICAGO	S111887122		3127 N LAKEWOOD		SPILLS
CHICAGO	S111885810		2940 N LAKEWOOD		SPILLS
CHICAGO	S111903424		2325 N LAKEWOOD		SPILLS
CHICAGO	2010950649	4911 SOUTH LAMON ST	4911 S LAMON ST		ERNS
CHICAGO	S110613565		4911 S LAMOND ST		SPILLS
CHICAGO	98459275	LAMONT ROAD 2 MILES SOUTH OF I-55	LAMONT ROAD 2 MILES SOUTH OF I-55		ERNS
CHICAGO	S111894990		4711 N LAMONT AVE		SPILLS
CHICAGO	S111906983		275 LAND WEIR RD		SPILLS
CHICAGO	S111926468		LANDER RAILROAD YARD		SPILLS
CHICAGO	S109953757		LANDERS RAIL YARD		SPILLS
CHICAGO	94363189	LANDERS YARD	LANDERS YARD		ERNS
CHICAGO	S110613678		LANDERS		SPILLS
CHICAGO	2006788888	LANDERS RAIL YARD	LANDERS RAIL YARD		ERNS
CHICAGO	S111894234		LANDERS YARD		SPILLS
CHICAGO	S111925254		LANDERS RAILYARD		SPILLS
CHICAGO	S111893784		LANDERS YARD NORFOLK SOUTHERN		SPILLS
CHICAGO	S111897716		LANDERS YARDS		SPILLS
CHICAGO	S111876541		1101 S LANGLEY		SPILLS
CHICAGO	S111914213		1101 S LANGLEY ST		SPILLS
CHICAGO	S111885627		4410 S LAPORTE ST		SPILLS
CHICAGO	S111891875		4501 N LAPORTE		SPILLS
CHICAGO	S111912538		720 N LARABEE ST		SPILLS
CHICAGO	S111901863		324 S LARAMIE		SPILLS
CHICAGO	S111877402		1010 S LARAMIE		SPILLS
CHICAGO	S111904587		1825 N LARAMIE ST		SPILLS
CHICAGO	S111922800		LARAMIE & ROOSEVELT		SPILLS
CHICAGO	S111900803		4001 N LARAMIE		SPILLS
CHICAGO	S111884468		2013 LARAMIE ST		SPILLS
CHICAGO	S111889801		3900 S LARAMIE AVE		SPILLS
CHICAGO	S111904477		1825 N LARAMIE ST		SPILLS
CHICAGO	99608302	2929 LARGE WESTERN AVE	2929 LARGE WESTERN AVE		ERNS
CHICAGO	S111904479		4753 N LARIMAN		SPILLS
CHICAGO	S111902945		900 N LARRABBE		SPILLS
CHICAGO	S111905705		1409 N LARRABEE		SPILLS
CHICAGO	S111895411		844 N LARRABEE		SPILLS
CHICAGO	99607893	LASALLE AND WACKER	LASALLE AND WACKER		ERNS
CHICAGO	S111885520		135 S LASALLE		SPILLS
CHICAGO	S111898568		135 S LASALLE		SPILLS
CHICAGO	S111892870		327 S LASALLE ST		SPILLS
CHICAGO	S111891966		5923 S LASALLE		SPILLS
CHICAGO	S111884308		121 N LASALLE ST		SPILLS
CHICAGO	S111906404		1660 N LASALLE		SPILLS
CHICAGO	S111908258		427 S LASALLE ST		SPILLS
CHICAGO	S111897786		203 N LASALLE		SPILLS
CHICAGO	S111909407		530 N LASALLE ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111906329		345 N LASALLE ST		SPILLS
CHICAGO	S111883712		LASALLE & HARRISON		SPILLS
CHICAGO	S111893068		327 S LASALLE ST		SPILLS
CHICAGO	S111891812		920 N LASALLE		SPILLS
CHICAGO	S111890116		633 S LASALLE ST		SPILLS
CHICAGO	S111889725		721 N LASALLE ST		SPILLS
CHICAGO	S111903164		707 S LASALLE ST		SPILLS
CHICAGO	S111927724		3100 S LASALLE		SPILLS
CHICAGO	S111920245		2150 S LASLIN		SPILLS
CHICAGO	S111897376		350 N LASLIN		SPILLS
CHICAGO	2004731395	6300 SOUTH LATORBE AVE	6300 SOUTH LATORBE AVE		ERNS
CHICAGO	S111891220		2250 N LATROBE		SPILLS
CHICAGO	S111876621		1946 N LATROBE		SPILLS
CHICAGO	S111903749		2250 N LATROSE		SPILLS
CHICAGO	2009907082	LAURENS AND KENNEDY STREET	LAURENS AND KENNEDY STREET		ERNS
CHICAGO	2008907082	LAURENS AND KENNEDY STREET	LAURENS AND KENNEDY STREET		ERNS
CHICAGO	91215262	LAWERANCE & FRANCISCO STREET	LAWERANCE & FRANCISCO STREET		ERNS
CHICAGO	S111882211		4625 W LAWERENCE		SPILLS
CHICAGO	S111900134		W LAWN PARK & 4233RD W 65TH ST		SPILLS
CHICAGO	2010927643	7601 S. LAWNDALE ST.	7601 S LAWNDALE ST		ERNS
CHICAGO	S111888417		7601 S LAWNDALE		SPILLS
CHICAGO	S111892879		5007 S LAWNDALE		SPILLS
CHICAGO	S111881828		7601 S LAWNDALE		SPILLS
CHICAGO	S111898231		3401 S LAWNDALE		SPILLS
CHICAGO	S111895069		7601 S LAWNDALE		SPILLS
CHICAGO	S111925796		7601 S LAWNDALE		SPILLS
CHICAGO	S111878706		LAWNDALE GARAGE ON CERMAC RD		SPILLS
CHICAGO	S111911834		3314 S LAWNDALE ST		SPILLS
CHICAGO	S111882950		3445 S LAWNDALE		SPILLS
CHICAGO	S111895014		2626 S LAWNDALE		SPILLS
CHICAGO	S111881633		7700 S LAWNDALE		SPILLS
CHICAGO	S111891120		7601 S LAWNDALE		SPILLS
CHICAGO	S111879139		7601 S LAWNDALE		SPILLS
CHICAGO	S111915708		3307 S LAWNDALE		SPILLS
CHICAGO	S111892632		5007 S LAWNDALE		SPILLS
CHICAGO	S111904484		2700 S LAWNDALE		SPILLS
CHICAGO	2008873502	3200 WEST LAWRENCE & KEDCCI	3200 WEST LAWRENCE & KEDCCI		ERNS
CHICAGO	S111885501		1063 LAWRENCE AVE		SPILLS
CHICAGO	S111886338		2800 W LAWRENCE		SPILLS
CHICAGO	S111891024		1124 W LAWRENCE		SPILLS
CHICAGO	S111884351		3111 W LAWRENCE		SPILLS
CHICAGO	S111904688		4825 LAWRENCE		SPILLS
CHICAGO	S111910860		LAWRENCE & AUSTIN		SPILLS
CHICAGO	S111923119		2800 W LAWRENCE		SPILLS
CHICAGO	S111904632		3139 W LAWRENCE		SPILLS
CHICAGO	S111920945		2754 W LAWRENCE		SPILLS
CHICAGO	S111909157		2960 W LAWRENCE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111895981		2306 W LAWRENCE		SPILLS
CHICAGO	8713139	LAYSTORM MFG CO.	LAYSTORM MFG CO.		ERNS
CHICAGO	S111885584		2828 S LCK		SPILLS
CHICAGO	S111885632		3417 S LEAVITT		SPILLS
CHICAGO	S111885509		2550 S LEAVITT		SPILLS
CHICAGO	S111904756		337 S LEAVITT		SPILLS
CHICAGO	S111888901		2555 S LEAVITT		SPILLS
CHICAGO	S111883374		457 N LEAVITT		SPILLS
CHICAGO	S111884825		212 S LEAVITT		SPILLS
CHICAGO	S111910205		2641 S LEAVITT AVE		SPILLS
CHICAGO	S111914370		600 N LEAVITTE ST		SPILLS
CHICAGO	S111896636		1934 N LECLAIR AVE		SPILLS
CHICAGO	90157722	18340 S. LECLAIRE "BACKYARD"	18340 S. LECLAIRE "BACKYARD"		ERNS
CHICAGO	2005624364	LECLAIRE AVE	LECLAIRE AVE		ERNS
CHICAGO	S111895533		3235 NORTH LECLAIRE		SPILLS
CHICAGO	S111878648		3949 N LECLARE		SPILLS
CHICAGO	S111927268		5318 W LELAND		SPILLS
CHICAGO	S111889180		1501 W LELAND ST		SPILLS
CHICAGO	S111908108		3708 LELAND		SPILLS
CHICAGO	2000670910	LEMONT AND CHICAGO	LEMONT AND CHICAGO		ERNS
CHICAGO	S111888754		4935 W LEMOYNE		SPILLS
CHICAGO	S111895485		5834 LEONARD AVE		SPILLS
CHICAGO	8713060	LESTER (LAST NAME UNK)	LESTER (LAST NAME UNK)		ERNS
CHICAGO	S111901189		10 N LEVITT		SPILLS
CHICAGO	S111920373		2730 S LEVITT		SPILLS
CHICAGO	S111909052		2650 LEXINGTON ST		SPILLS
CHICAGO	S111913266		4500 W LEXINGTON		SPILLS
CHICAGO	S111880165		4700 W LEXINGTON		SPILLS
CHICAGO	S111884835		5301 W LEXINGTON		SPILLS
CHICAGO	S111881008		717 W LIBERTY		SPILLS
CHICAGO	S111888144		2000 LINCOLN AVE		SPILLS
CHICAGO	S111899632		6211 N LINCOLN		SPILLS
CHICAGO	S111902147		4257 N LINCOLN		SPILLS
CHICAGO	S111898934		LINCOLN OASIS & I 80		SPILLS
CHICAGO	S111905546		3740 N LINCOLN		SPILLS
CHICAGO	S111914223		5785 LINCOLN AVE		SPILLS
CHICAGO	S111907642		3144 N LINCOLN		SPILLS
CHICAGO	S111893610		5943 N LINCOLN		SPILLS
CHICAGO	S111897073		5601 N LINCOLN ST		SPILLS
CHICAGO	S111893236		6101 LINCOLN AVE		SPILLS
CHICAGO	S111897679		NW LINE BETWEEN HARVARD IL		SPILLS
CHICAGO	S111876459		1500 LINN WHITE DR		SPILLS
CHICAGO	S111907433		2300 LISTER AVE		SPILLS
CHICAGO	S111884196		2227 N LISTER		SPILLS
CHICAGO	S111881385		LITTLE CALUMET RIV		SPILLS
CHICAGO	S111883817		LOADING DOCK OHARA AIRPORT		SPILLS
CHICAGO	98457733	LOCOMOTIVE (CR6400) FUEL TANK/ DERAILMENT OF 2 LOCOMOTIVES O	LOCOMOTIVE (CR6400) FUEL TANK/ DERAILMENT OF 2 LOCOMOTIVES O		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111922884		1600 S LOMBARD		SPILLS
CHICAGO	S111898597		2000 N LONG		SPILLS
CHICAGO	S111884549		1434 N LONG ST		SPILLS
CHICAGO	S111896323		6429 S LONG		SPILLS
CHICAGO	S111907085		1833 N LONG ST		SPILLS
CHICAGO	91233431	7601 S LONGDALE	7601 S LONGDALE		ERNS
CHICAGO	S110613526		LOOMIS SLIP		SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S111890919		1911 S LOOMIS		SPILLS
CHICAGO	S111927324		LOOMIS SLIP NEAR 5TH POWER STA		SPILLS
CHICAGO	S111892919		2500 S LOOMIS		SPILLS
CHICAGO	S111915597		6869 S LOOMIS		SPILLS
CHICAGO	S111885427		4163 S LOWE		SPILLS
CHICAGO	S111882122		5925 S LOWE		SPILLS
CHICAGO	S111925728		5959 S LOWE		SPILLS
CHICAGO	S111880153		7430 LOWE ST		SPILLS
CHICAGO	S111908065		3501 S LOWE ST		SPILLS
CHICAGO	S111919464		3843 S LOWELL		SPILLS
CHICAGO	S111880728		LUFTHANSA CARGO TERMINAL & OHARE		SPILLS
CHICAGO	S111885015		LUMBER ST		SPILLS
CHICAGO	S111887825		2255 S LUMBER		SPILLS
CHICAGO	S111888436		1600 LUMBER ST		SPILLS
CHICAGO	S111899983		1600 S LUMBER		SPILLS
CHICAGO	S111901497		1400 S LUMBER		SPILLS
CHICAGO	S111895780		1600 S LUMBER		SPILLS
CHICAGO	S111888860		1600 S LUMBER		SPILLS
CHICAGO	S111881103		1500 S LUMBER		SPILLS
CHICAGO	S111878067		2147 S LUMBER		SPILLS
CHICAGO	S111892948		1600 LUMBER ST		SPILLS
CHICAGO	S111926465		1600 S LUMBER		SPILLS
CHICAGO	S111909168		4545 W LYNDALE		SPILLS
CHICAGO	S111898016		4545 W LYNDALE		SPILLS
CHICAGO	S111911869		LYNX CARGO RAMP		SPILLS
CHICAGO	S111906155		8836 S MACKINAW		SPILLS
CHICAGO	S108046393		500 W MADISON MM 6 GENEVA SUB		SPILLS
CHICAGO	2010963447	504 W MADISON	504 W MADISON		ERNS
CHICAGO	S111888053		1800 W MADISON		SPILLS
CHICAGO	S111887272		5727 W MADISON		SPILLS
CHICAGO	S111886438		29 E MADISON		SPILLS
CHICAGO	S111909475		2316 W MADISON AVE		SPILLS
CHICAGO	S111909290		2316 W MADISON AVE		SPILLS
CHICAGO	S111909289		2316 W MADISON AVE		SPILLS
CHICAGO	S111902145		1200 W MADISON AVE		SPILLS
CHICAGO	S111912956		5727 W MADISON		SPILLS
CHICAGO	S111912957		5727 W MADISON		SPILLS
CHICAGO	S111922361		500 W MADISON		SPILLS
CHICAGO	S111896484		1500 W MADISON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111918760		901 MADISON		SPILLS
CHICAGO	S111891539		4700 W MADISON		SPILLS
CHICAGO	S111927167		4111 W MADISON		SPILLS
CHICAGO	S111908496		4940 W MADISON AVE		SPILLS
CHICAGO	S111891430		1633 W MADISON		SPILLS
CHICAGO	S111904969		2324 W MADISON		SPILLS
CHICAGO	S111890783		5118 W MADISON AVE		SPILLS
CHICAGO	S111893604		1633 W MADISON		SPILLS
CHICAGO	S111914735		3801 W MADISON AVE		SPILLS
CHICAGO	S111890392		2320 W MADISON		SPILLS
CHICAGO	S111927432		MAIN LINE CD 5097 & RAIL		SPILLS
CHICAGO	S111892931		14 N MAIN		SPILLS
CHICAGO	S111926463		2 MAIN TRAK		SPILLS
CHICAGO	91203326	MAIN RAIL YARD	MAIN RAIL YARD		ERNS
CHICAGO	S111885453		4900 S MAJOR		SPILLS
CHICAGO	S111883026		4900 S MAJOR		SPILLS
CHICAGO	S111913627		6126 S MANARD		SPILLS
CHICAGO	S111904609		4400 N MANGO		SPILLS
CHICAGO	S111920461		E MANHEIM PROVISO YARD		SPILLS
CHICAGO	S110363845		MANNHEIM RD & IRVING PARK RD		SPILLS
CHICAGO	S111926036		MANNHEIM RD AND IRVING PARK RD		SPILLS
CHICAGO	S111887888		13915 MAPLE ST		SPILLS
CHICAGO	S111891974		3250 MAPLE AVE		SPILLS
CHICAGO	S111907793		7356 S MAPLE		SPILLS
CHICAGO	S111903460		3901 W MAPLE AVE		SPILLS
CHICAGO	S111901990		3715 S MAPLEWOOD ST		SPILLS
CHICAGO	S111894472		1541 N MAPLEWOOD		SPILLS
CHICAGO	S111901610		3715 S MAPLEWOOD		SPILLS
CHICAGO	S111893945		5527 N MAPLEWOOD		SPILLS
CHICAGO	S111898086		1800 N MARCEY		SPILLS
CHICAGO	S111920778		4215 S MARFHIELD AVE		SPILLS
CHICAGO	98449599	37FT PC MARGARET MARY BURNHAM HABR SLIP Q-49	37FT PC MARGARET MARY BURNHAM HABR SLIP Q-49		ERNS
CHICAGO	94364363	MARINE OIL TERMINAL CICERO AVE	MARINE OIL TERMINAL CICERO AVE		ERNS
CHICAGO	S111893190		8400 S MARLAND AVE		SPILLS
CHICAGO	S111888440		403 E MARQUETTE		SPILLS
CHICAGO	S111899130		2010 W MARQUETTE		SPILLS
CHICAGO	S111898346		2010 W MARQUETTE		SPILLS
CHICAGO	S111914996		1600 W MARQUETTE AVE		SPILLS
CHICAGO	S111881909		MARSHALL BLVD		SPILLS
CHICAGO	2010928212	111 MARSHFIELD	111 MARSHFIELD		ERNS
CHICAGO	S111895513		2700 N MARSHFIELD		SPILLS
CHICAGO	S111906532		3342 N MARSHFIELD ST		SPILLS
CHICAGO	S108045920		2524 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	876689	9500 MARTIN LUTHER KING DR SHELL GAS STATION	9500 MARTIN LUTHER KING DR SHELL GAS STATION		ERNS
CHICAGO	S110363727		4415 S MARTIN LUTHER KING DR		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111886424		2400 S MARTIN LUTHER KING JR DR		SPILLS
CHICAGO	S111885931		5514 S MARTIN LUTHER KING		SPILLS
CHICAGO	S111888099		3357 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111905100		2211 S MARTIN LUTHER KING JR BLVD		SPILLS
CHICAGO	S111905953		6341 S MARTIN LUTHER KING JR DR		SPILLS
CHICAGO	S111895483		3731 MARTIN SERVICE STA W		SPILLS
CHICAGO	S111899823		2211 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111888781		9901 MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111880660		2501 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111903812		2211 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111903811		2211 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111892058		9500 S MARTIN LUTHER KING		SPILLS
CHICAGO	2000544679	MARTIN LUTHER KING DRIVE	MARTIN LUTHER KING DRIVE	0	ERNS
CHICAGO	S111889565		8018 MARYLAND		SPILLS
CHICAGO	S111883527		4350 N MASON ST		SPILLS
CHICAGO	S111886220		5437 S MASSASOIT		SPILLS
CHICAGO	96484236	MATERIAL WAS IN CONCRETE CONTAINMENT / ABSORBENT MATERIAL AP	MATERIAL WAS IN CONCRETE CONTAINMENT / ABSORBENT MATERIAL AP		ERNS
CHICAGO	S111901191		6901 S MAY		SPILLS
CHICAGO	S111893109		14 N MAY		SPILLS
CHICAGO	S111907831		8150 S MAY		SPILLS
CHICAGO	S111888380		405 MCCLUD CT		SPILLS
CHICAGO	S111880965		3906 W MCLEAN		SPILLS
CHICAGO	S111923993		2245 N MCVICKER		SPILLS
CHICAGO	S111906637		5214 S MCVICKERS		SPILLS
CHICAGO	S111895290		1727 MEDILL LN		SPILLS
CHICAGO	S111876278		1147 MEDILL		SPILLS
CHICAGO	S111914927		2635 W MEDILL		SPILLS
CHICAGO	S111897668		1727 W MEIDILL		SPILLS
CHICAGO	93323553	3234,3236,3240,5606 WEST MELROSE	3234,3236,3240,5606 WEST MELROSE		ERNS
CHICAGO	8749	MERCHANT MART AT WELLS AND NEW ORLEANS, 15TH FLOOR, WEST WIN	MERCHANT MART AT WELLS AND NEW ORLEANS, 15TH FLOOR, WEST WIN		ERNS
CHICAGO	93352422	4700 SOUTH MERIMAC RAIL YARD	4700 SOUTH MERIMAC RAIL YARD		ERNS
CHICAGO	S111889719		4700 S MERIMAC AVE		SPILLS
CHICAGO	2004715154	METRA 45	METRA 45		ERNS
CHICAGO	2004721184	METRO NORTH LINE ON MILWAUKEE DISTRICT	METRO NORTH LINE ON MILWAUKEE DISTRICT		ERNS
CHICAGO	2002594346	2230 MICHGAN AVE	2230 MICHGAN AVE	0	ERNS
CHICAGO	94400021	MICHIGAN AND EAST WACKER	MICHIGAN AND EAST WACKER		ERNS
CHICAGO	S110613624		1508 MICHIGAN AVE		SPILLS
CHICAGO	S111887271		3103 S MICHIGAN		SPILLS
CHICAGO	S111891930		1533 S MICHIGAN		SPILLS
CHICAGO	S111896187		7101 S MICHIGAN		SPILLS
CHICAGO	S111892227		10007 S MICHIGAN		SPILLS
CHICAGO	S111920371		2337 S MICHIGAN		SPILLS
CHICAGO	S111880659		3900 S MICHIGAN		SPILLS
CHICAGO	S111920742		1400 S MICHIGAN		SPILLS
CHICAGO	S111881504		11555 S MICHIGAN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	99631717	MICKE'S DRIVE INN 7829 SOUTHWESTERN AVE	MICKE'S DRIVE INN 7829 SOUTHWESTERN AVE		ERNS
CHICAGO	S108047305		MIDWAY AIRPORT B TERMINAL GATE		SPILLS
CHICAGO	S111349468		MIDWAY AIRPORT		SPILLS
CHICAGO	S111887306		MIDWAY AIRPORT		SPILLS
CHICAGO	S111885496		MIDWAY AIRPORT		SPILLS
CHICAGO	S111911940		MIDWAY AIRPORT SIGNATURE W		SPILLS
CHICAGO	S111911939		MIDWAY AIRPORT GATE B3		SPILLS
CHICAGO	S111889593		MIDWAY AP CONCOURSE C		SPILLS
CHICAGO	S111922749		MIDWAY AIRPORT TERMINAL GATE A		SPILLS
CHICAGO	S111902413		MIDWAY AIRPORT		SPILLS
CHICAGO	S111892344		MIDWAY AIRPORT		SPILLS
CHICAGO	S111927889		MIDWAY AIRPORT GATE B12		SPILLS
CHICAGO	S111927765		MIDWAY AIRPORT 8B9		SPILLS
CHICAGO	S111927661		MIDWAY AIRPORT		SPILLS
CHICAGO	S111912794		MIDWAY AP		SPILLS
CHICAGO	S111885148		MIDWAYAIRPORT 58TH & CICERO		SPILLS
CHICAGO	92254689	MILE MARKER 318	MILE MARKER 318		ERNS
CHICAGO	93333205	MILE 318.8 CHICAGO SANITARY CANAL	MILE 318.8 CHICAGO SANITARY CANAL		ERNS
CHICAGO	96516421	MILE 317.4 RIGHT BANK	MILE 317.4 RIGHT BANK		ERNS
CHICAGO	2002618930	MILE MARKER 317.1	MILE MARKER 317.1	0	ERNS
CHICAGO	93302748	MILE MARKER 277.5	MILE MARKER 277.5		ERNS
CHICAGO	2000523929	MILE 329 LITTLE CALUMAT RIVER	MILE 329 LITTLE CALUMAT RIVER	0	ERNS
CHICAGO	2002590669	MILE POST C11	MILE POST C11	0	ERNS
CHICAGO	99640528	MILE 297.5 ON ILLINOIS RIVER	MILE 297.5 ON ILLINOIS RIVER		ERNS
CHICAGO	99650005	MILE MARKER 306 ON CHICAGO SHIP CANAL	MILE MARKER 306 ON CHICAGO SHIP CANAL		ERNS
CHICAGO	2006791836	MILE 330	MILE 330		ERNS
CHICAGO	2009904976	MILE POST C10.5	MILE POST C10.5		ERNS
CHICAGO	2009908640	MILE MARKER 299.90	MILE MARKER 299.90		ERNS
CHICAGO	2008904976	MILE POST C10.5	MILE POST C10.5		ERNS
CHICAGO	2008876999	MILE CD 518	MILE CD 518		ERNS
CHICAGO	2007315926	MILE POST: CD 517	MILE POST: CD 517		ERNS
CHICAGO	2008908640	MILE MARKER 299.90	MILE MARKER 299.90		ERNS
CHICAGO	2008874437	MILE POST 09514	MILE POST 09514		ERNS
CHICAGO	2008893703	MILE POST 1.0	MILE POST 1.0		ERNS
CHICAGO	S111888448		1 MILE E OF 4 MILE CRIB LAKE		SPILLS
CHICAGO	2001566873	MILE POST 00518	MILE POST 00518	0	ERNS
CHICAGO	2000540433	MILE 317.5 OF THE	MILE 317.5 OF THE	0	ERNS
CHICAGO	2000547095	MILE POST 510	MILE POST 510	0	ERNS
CHICAGO	96477228	MILEPOST B510	MILEPOST B510		ERNS
CHICAGO	2009915231	MILEPOST 8.4	MILEPOST 8.4		ERNS
CHICAGO	2009925953	MILEPOST 12.7	MILEPOST 12.7		ERNS
CHICAGO	2008915231	MILEPOST 8.4	MILEPOST 8.4		ERNS
CHICAGO	2010931620	MILEPOST C10.8 LANDERS YARD INTERMODAL	MILEPOST C108		ERNS
CHICAGO	2010928741	MILEPOST B510	MILEPOST B510		ERNS
CHICAGO	2007321733	MILEPOST 3.7	MILEPOST 3.7		ERNS
CHICAGO	2010942057	MILEPOST CD517	MILEPOST CD517		ERNS
CHICAGO	2010937997	MILEPOST JJJ36	MILEPOST JJJ36		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2010938289	MILEPOST: CD513	MILEPOST CD513		ERNS
CHICAGO	2012106766		MILEPOST CD513		ERNS
CHICAGO	2012103708		MILEPOST UW2		ERNS
CHICAGO	2012101576		MILEPOST CD5097		ERNS
CHICAGO	2012101577		MILEPOST CD7097		ERNS
CHICAGO	98433484	MILEPOST:10.8	MILEPOST:10.8		ERNS
CHICAGO	98441240	MILEPOST:18.0 CANAL STREET YARD	MILEPOST:18.0 CANAL STREET YARD		ERNS
CHICAGO	97410621	MILEPOST:B510.5	MILEPOST:B510.5		ERNS
CHICAGO	97407442	MILEPOST:C-10.8	MILEPOST:C-10.8		ERNS
CHICAGO	S111926883		MILEPOSTS TO D 29		SPILLS
CHICAGO	S109167339		MILES E OF JOLIET		SPILLS
CHICAGO	S111902788		2 MILES S OF		SPILLS
CHICAGO	S111904758		5225 S MILLARD		SPILLS
CHICAGO	S111905770		5600 S MILLARD		SPILLS
CHICAGO	S111349448		MILWAUKEE BETWEEN CANAL		SPILLS
CHICAGO	S111349496		5475 N MILWAUKEE		SPILLS
CHICAGO	S111889683		5514 MILWAUKEE AVE		SPILLS
CHICAGO	S111882729		1820 N MILWAUKEE		SPILLS
CHICAGO	S111925434		1801 N MILWAUKEE		SPILLS
CHICAGO	S111905270		1874 N MILWAUKEE		SPILLS
CHICAGO	S111894177		3845 N MILWAUKEE		SPILLS
CHICAGO	S111902941		4625 N MILWAUKEE		SPILLS
CHICAGO	S111919991		1424 N MILWAUKEE		SPILLS
CHICAGO	S111896814		2037 N MILWAUKEE		SPILLS
CHICAGO	S108045622		1701 N MILWAUKIE		SPILLS
CHICAGO	2007313834	MM09514	MM09514		ERNS
CHICAGO	8714111	MOBIL SERVICE STATION 6700 S. JEFFREY ST	MOBIL SERVICE STATION 6700 S. JEFFREY ST		ERNS
CHICAGO	S111900885		9901 S MOBILE ST		SPILLS
CHICAGO	S111898543		1606 N MOBILE		SPILLS
CHICAGO	S111902610		5625 S MOBILE		SPILLS
CHICAGO	2010962542	2457 WEST MOFFIT	2457 W MOFFIT		ERNS
CHICAGO	S111899935		8650 S MOGAN		SPILLS
CHICAGO	S111887980		4920 S MONITOR		SPILLS
CHICAGO	S111895493		1152 N MONITOR ST		SPILLS
CHICAGO	91227365	MONROE STREET HARBOR	MONROE STREET HARBOR		ERNS
CHICAGO	97406258	MONROE STREET OUTER HARBOR	MONROE STREET OUTER HARBOR		ERNS
CHICAGO	2011993183		MONROE ST		ERNS
CHICAGO	S111903036		400 E MONROE		SPILLS
CHICAGO	S111891600		5222 W MONROE		SPILLS
CHICAGO	S111909035		1065 W MONROE		SPILLS
CHICAGO	S111896884		2608 W MONROE AVE		SPILLS
CHICAGO	S111893740		711 W MONROE		SPILLS
CHICAGO	S111881214		MONROE HARBOR LAKE		SPILLS
CHICAGO	S111914622		2347 W MONROE		SPILLS
CHICAGO	S111892151		1040 W MONROE		SPILLS
CHICAGO	S111901930		2419 W MONROE		SPILLS
CHICAGO	S111911366		400 E MONROE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111919202		1512 W MONTANA		SPILLS
CHICAGO	S111891428		5045 W MONTANA		SPILLS
CHICAGO	S111902911		1830 W MONTEREY		SPILLS
CHICAGO	S111900669		1830 W MONTERY AVENUE CHICAGO PD 22ND STA		SPILLS
CHICAGO	S111900633		1830 W MONTERY		SPILLS
CHICAGO	S111918752		3041 N MONTICELLO		SPILLS
CHICAGO	S111890417		5030 N MONTICELLO		SPILLS
CHICAGO	S111914849		3601 W MONTORESE		SPILLS
CHICAGO	2005615909	MONTROS HARBOR	MONTROS HARBOR		ERNS
CHICAGO	91236314	MONTROSE HARBOR	MONTROSE HARBOR		ERNS
CHICAGO	94391125	MONTROSE HARBOR LAKE MICHIGAN	MONTROSE HARBOR LAKE MICHIGAN		ERNS
CHICAGO	94391456	MONTROSE AVE MONTROSE HARBOR	MONTROSE AVE MONTROSE HARBOR		ERNS
CHICAGO	2003647189	MONTROSE HARBOR	MONTROSE HARBOR		ERNS
CHICAGO	8710205	2800 W. MONTROSE GAS STATION FOR SALE	2800 W. MONTROSE GAS STATION FOR SALE		ERNS
CHICAGO	90169605	MONTROSE AT THE MOUTH OF THE HARBOR	MONTROSE AT THE MOUTH OF THE HARBOR		ERNS
CHICAGO	99642573	MONTROSE DRIVE	MONTROSE DRIVE		ERNS
CHICAGO	S110824860		MONTROSE WB		SPILLS
CHICAGO	S111910756		3601 W MONTROSE		SPILLS
CHICAGO	S111899977		2537 W MONTROSE		SPILLS
CHICAGO	S111926718		MONTROSE ALONT THE KENNEDY EDE JCT		SPILLS
CHICAGO	S111927396		4269 W MONTROSE		SPILLS
CHICAGO	S111908703		4455 W MONTROSE		SPILLS
CHICAGO	S111898219		5520 W MONTROSE		SPILLS
CHICAGO	S111889598		7330 W MONTROSE		SPILLS
CHICAGO	S111910904		810 W MONTROSE		SPILLS
CHICAGO	S111903636		3359 W MONTROSE		SPILLS
CHICAGO	S111889887		2742 W MONTROSE		SPILLS
CHICAGO	S111919870		2450 W MONTROSE		SPILLS
CHICAGO	S111880799		6350 MONTROSE		SPILLS
CHICAGO	S111904951		2424 MONTROSE AVE		SPILLS
CHICAGO	S111879923		2000 W MONTROSE		SPILLS
CHICAGO	S111883556		6001 W MONTROSE		SPILLS
CHICAGO	S111903805		3448 W MONTROSE		SPILLS
CHICAGO	S111897845		2955 W MONTROSE		SPILLS
CHICAGO	2008888071	MONTROSS STATION	MONTROSS STATION		ERNS
CHICAGO	S111885745		1548 S MORGAN		SPILLS
CHICAGO	S111886103		MORGAN & JACKSON		SPILLS
CHICAGO	S111886089		4000 S MORGAN		SPILLS
CHICAGO	S111887146		7900 S MORGAN		SPILLS
CHICAGO	S111887805		3800 S MORGAN		SPILLS
CHICAGO	S111886969		1601 S MORGAN		SPILLS
CHICAGO	S111892869		4309 S MORGAN		SPILLS
CHICAGO	S111890271		4837 S MORGAN		SPILLS
CHICAGO	S111909900		1451 MORGAN AVE		SPILLS
CHICAGO	S111892427		3800 S MORGAN		SPILLS
CHICAGO	S111878898		8051 S MORGAN		SPILLS
CHICAGO	S111898084		318 S MORGAN		SPILLS

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CHICAGO	S111900688		1140 S MORGAN		SPILLS
CHICAGO	S111890751		3800 S MORGAN		SPILLS
CHICAGO	S111890739		3800 S MORGAN RD		SPILLS
CHICAGO	S111904125		4848 S MORGAN		SPILLS
CHICAGO	S111915382		8900 S MORGAN		SPILLS
CHICAGO	S111900133		MOUNT GREENWOOD PARK & 3721ST W 111TH ST		SPILLS
CHICAGO	S111908511		5115 N MOUNT CLAIR		SPILLS
CHICAGO	S111908889		MOUNT PROSPECT RD		SPILLS
CHICAGO	S111912846		MOUNT PROSPECT & TOUGHY OHARE AIRPORT		SPILLS
CHICAGO	93302749	MOUTH OF CHICAGO RIVER AT LOCK	MOUTH OF CHICAGO RIVER AT LOCK		ERNS
CHICAGO	89113350	MOUTH OF BURNHAM HARBOR AT APPROX 2300 S LAKESHORE	MOUTH OF BURNHAM HARBOR AT APPROX 2300 S LAKESHORE		ERNS
CHICAGO	S111899847		4043 N MOZART		SPILLS
CHICAGO	97410255	MPB510	MPB510		ERNS
CHICAGO	2007325433	MULTI UNIT BUILDING	MULTI UNIT BUILDING		ERNS
CHICAGO	S111924180		10459 S MUSKEGAN AVE		SPILLS
CHICAGO	S109167338		4868 4870 N CLARK ST		SPILLS
CHICAGO	S108669664		N		SPILLS
CHICAGO	S111912510		6015 23 N FAIRFIELD		SPILLS
CHICAGO	2002594261	N/A	N/A	0	ERNS
CHICAGO	2010956232	NAGLE ST	NAGLE ST		ERNS
CHICAGO	S111889590		5201 N NAGLE		SPILLS
CHICAGO	S111879468		5759 N NAGLE		SPILLS
CHICAGO	2000543395	NAGLE AVE.	NAGLE AVE.	0	ERNS
CHICAGO	S111927245		7400 S NARAAGAUSETT		SPILLS
CHICAGO	2011992898		7400 S NARAGAUSATTE		ERNS
CHICAGO	2009894288	NARRAGANSEET AVE	NARRAGANSEET AVE		ERNS
CHICAGO	2008894288	NARRAGANSEET AVE	NARRAGANSEET AVE		ERNS
CHICAGO	S111894469		3600 NARRAGANSETT		SPILLS
CHICAGO	S111890464		3134 N NARRAGANSETT		SPILLS
CHICAGO	S111901949		1701 N NARRAGANSETT		SPILLS
CHICAGO	S111902100		5330 S NASHVILLE		SPILLS
CHICAGO	S111902121		2323 N NATCHEZ AVE		SPILLS
CHICAGO	S111891852		2248 N NATCHEZ AVE		SPILLS
CHICAGO	S111911839		2101 N NATCHEZ		SPILLS
CHICAGO	S111890051		2248 N NATCHEZ AVE		SPILLS
CHICAGO	2010931300	1943 NORTH NATOMA AVE.	1943 N NATOMA AVE		ERNS
CHICAGO	93320083	NAVY PIER	NAVY PIER		ERNS
CHICAGO	94375184	NAVY PIER SOUTHSIDE OF PIER	NAVY PIER SOUTHSIDE OF PIER		ERNS
CHICAGO	90186681	NAVY PIER SOUTH SIDE	NAVY PIER SOUTH SIDE		ERNS
CHICAGO	90157711	NAVY PIER	NAVY PIER		ERNS
CHICAGO	8864001	NAVY PIER	NAVY PIER		ERNS
CHICAGO	2000529972	NAVY PIER IN CHICAGO	NAVY PIER IN CHICAGO	0	ERNS
CHICAGO	2007327046	NAVY PIER	NAVY PIER		ERNS
CHICAGO	S111885022		NAVY PIER		SPILLS
CHICAGO	S111880711		NAVY PIER		SPILLS
CHICAGO	S108480186		NAVY PIER		SPILLS

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CHICAGO	S111896931		NB		SPILLS
CHICAGO	2003702300	NEAR 48TH ST	NEAR 48TH ST		ERNS
CHICAGO	2000549597	NEAR CANAL AND LAKE STREET	NEAR CANAL AND LAKE STREET	0	ERNS
CHICAGO	2000547713	NEAR EXIT 115 STREET	NEAR EXIT 115 STREET	0	ERNS
CHICAGO	99648314	NEAR AIRPORT WEST OF HIGGINS RD ON THUEY RD	NEAR AIRPORT WEST OF HIGGINS RD ON THUEY RD		ERNS
CHICAGO	S111895256		NEAR 25TH & CALIFORNIA		SPILLS
CHICAGO	S111920473		NEAR SAINT EXIT STHY		SPILLS
CHICAGO	S111901926		RD NEAR 103 E		SPILLS
CHICAGO	S111927623		NEAR WEST 79TH ST XING		SPILLS
CHICAGO	2001569847	NEAR ADDISON STATION	NEAR ADDISON STATION	0	ERNS
CHICAGO	2000528773	NEAR WESTERN STREET ON THE BLUE LINE	NEAR WESTERN STREET ON THE BLUE LINE	0	ERNS
CHICAGO	2011964700	NEAREST CROSS STREETS KILBOURN AND KINZIE STREETS	NEAREST CROSS STREETS KILBOURN STS		ERNS
CHICAGO	S108046927		643 NEARPULASKI RD		SPILLS
CHICAGO	S111898366		2952 W NELSON		SPILLS
CHICAGO	S111899829		5838 N NEVA		SPILLS
CHICAGO	94388379	NEW EDITION TO THE UNIVERSITY HOSPITAL	NEW EDITION TO THE UNIVERSITY HOSPITAL		ERNS
CHICAGO	98445339	NEW HOSPITAL SE CORNER OF HURON ST AND ST. CLAIR ST	NEW HOSPITAL SE CORNER OF HURON ST AND ST. CLAIR ST		ERNS
CHICAGO	S111349489		NEW FEDEX CARGO BLDG		SPILLS
CHICAGO	S111892433		2360 N NEWCASTLE		SPILLS
CHICAGO	S111887007		1255 N NOBLE		SPILLS
CHICAGO	S111903487		417 N NOBLE		SPILLS
CHICAGO	2010944765	NONE	NONE		ERNS
CHICAGO	2010947372	NONE	NONE		ERNS
CHICAGO	2011990715		NONE		ERNS
CHICAGO	2011981876		NONE		ERNS
CHICAGO	96497189	NORFOLK SOUTHERN YARD 103RD ST AND DOTY AVE	NORFOLK SOUTHERN YARD 103RD ST AND DOTY AVE		ERNS
CHICAGO	94353725	NORFOLK SOUTHERN DIESEL SHOP AT CHICAGO TRAIN YARD	NORFOLK SOUTHERN DIESEL SHOP AT CHICAGO TRAIN YARD		ERNS
CHICAGO	90159432	NORFOLK SOUTHER RAIL YARD	NORFOLK SOUTHER RAIL YARD		ERNS
CHICAGO	2010928863	NORFOLK SOUTHERN MILE POST 521.1	5211 NORFOLK SOUTHERN		ERNS
CHICAGO	90161024	NORFOLK SOUTHERN RAIL YRD	NORFOLK SOUTHERN RAIL YRD		ERNS
CHICAGO	2004714035	12931 SOUTH NORMA	12931 SOUTH NORMA		ERNS
CHICAGO	S111909056		7851 NORMAL ST		SPILLS
CHICAGO	S111909405		3839 NORMAL AVE		SPILLS
CHICAGO	S111876178		5100 S NORMAL		SPILLS
CHICAGO	S111926532		5834 S NORMAL		SPILLS
CHICAGO	S111907937		2351 N NORMANDY		SPILLS
CHICAGO	S111900721		11236 NORRENCE AVE		SPILLS
CHICAGO	S111887394		301 E NORTH WATER		SPILLS
CHICAGO	S111881459		1137 N NORTH BR		SPILLS
CHICAGO	S111912229		6600 W NORTH AVE		SPILLS
CHICAGO	S111895554		6810 W NORTH AVE		SPILLS
CHICAGO	S111912083		4500 W NORTH AVE N ALY		SPILLS

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CHICAGO	S111904804		6938 W NORTH AVE		SPILLS
CHICAGO	S111908171		7020 W NORTH AVE		SPILLS
CHICAGO	S111902714		926 N NORTHBRANCH AVE		SPILLS
CHICAGO	S111878812		922 N NORTHBRANCH		SPILLS
CHICAGO	S111877046		1092 N NORTHBRANCH		SPILLS
CHICAGO	S111897490		1150 N NORTHBRANCH		SPILLS
CHICAGO	S111886564		1371 N NORTHBRANCH		SPILLS
CHICAGO	S111884020		1150 N NORTHBRANCH		SPILLS
CHICAGO	S111907246		6300 W NORTHWEST HWY		SPILLS
CHICAGO	S109327519		6750 NORTHWESTERN AVE		SPILLS
CHICAGO	S109327393		1656 NORTHWESTERN AVE		SPILLS
CHICAGO	S111218390	SHELL OIL PRODUCTS US	45 NORTHWESTERN		LUST
CHICAGO	S111923504		1800 NORTHWESTERN AVE		SPILLS
CHICAGO	S111898119		333 NORTHWESTERN AVE		SPILLS
CHICAGO	S111920556		1600 NORTHWESTERN		SPILLS
CHICAGO	S111899062		49 NORTHWESTERN AVE		SPILLS
CHICAGO	S111894106		6600 NORTHWESTERN AVE		SPILLS
CHICAGO	S111913975		1651 NORTHWESTERN AVE		SPILLS
CHICAGO	S111900331		6652 NORTHWESTERN AVE		SPILLS
CHICAGO	S111918193		45 NOTRHWESTERN		SPILLS
CHICAGO	97408922	NSRR LANDERS YARD 2543 WEST COLOMBUS DRIV	NSRR LANDERS YARD 2543 WEST COLOMBUS DRIVE		ERNS
CHICAGO	2004715516	O'HARA AIRPORT	O'HARA AIRPORT		ERNS
CHICAGO	93311285	O'HARE AIRPORT SOUTH POL	O'HARE AIRPORT SOUTH POL		ERNS
CHICAGO	91238794	O'HARE INTL AIRPORT POB 66144	O'HARE INTL AIRPORT POB 66144		ERNS
CHICAGO	92266249	O'HARE AFB REFUELING APRON	O'HARE AFB REFUELING APRON		ERNS
CHICAGO	91236320	O'HARE AIRPORT->HIGGINS RD + MANNHEIM #4	O'HARE AIRPORT->HIGGINS RD + MANNHEIM #4		ERNS
CHICAGO	2002625470	O'HARE INTERNATIONAL AIRPORT	O'HARE INTERNATIONAL AIRPORT	0	ERNS
CHICAGO	8870782	O'HARE AIRPORT	O'HARE AIRPORT		ERNS
CHICAGO	89101914	O'HARE INTERNATIONAL AIRPORT (312)686-5211, TWA OPERATIONS,	O'HARE INTERNATIONAL AIRPORT (312)686-5211, TWA OPERATIONS,		ERNS
CHICAGO	89106683	O'HARE FIELD	O'HARE FIELD		ERNS
CHICAGO	2009897823	O'HARE TERMAINAL	O'HARE TERMAINAL		ERNS
CHICAGO	2008897823	O'HARE TERMAINAL	O'HARE TERMAINAL		ERNS
CHICAGO	2007316978	O'HARE AIRPORT	O'HARE AIRPORT		ERNS
CHICAGO	90181005	O'HARE INTERNATIONAL AIRPORT CARGO AREA	O'HARE INTERNATIONAL AIRPORT CARGO AREA		ERNS
CHICAGO	8714913	418 W. OAK	418 W. OAK		ERNS
CHICAGO	S111908663		6800 OAK PARK AVE		SPILLS
CHICAGO	S111908972		2211 N OAK PARK AVE		SPILLS
CHICAGO	S111899549		2221 W OAKDALE		SPILLS
CHICAGO	S111875539		1250 W OAKDALE		SPILLS
CHICAGO	S111891087		517 OAKDALE		SPILLS
CHICAGO	S111880915		350 W OAKDALE		SPILLS
CHICAGO	S111884902		4040 S OAKENWALD		SPILLS
CHICAGO	S111894659		518 N OAKLEY ST		SPILLS
CHICAGO	S111890310		4140 S OAKLEY		SPILLS
CHICAGO	S111900380		1337 S OAKLEY		SPILLS
CHICAGO	S111900381		1337 S OAKLEY		SPILLS

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CHICAGO	S111915479		610 S OAKLEY		SPILLS
CHICAGO	S111881098		339 N OAKLEY		SPILLS
CHICAGO	S111910140		2825 N OAKLEY		SPILLS
CHICAGO	S111895977		4343 S OAKLEY BLVD		SPILLS
CHICAGO	S111912663		3900 S OAKWOOD		SPILLS
CHICAGO	91237841	SOUTH OF 115 ST WEST OF GREEN ST	SOUTH OF 115 ST WEST OF GREEN ST		ERNS
CHICAGO	94373036	WEST OF FRANSISCO NORTH OF LUNT IN AN UNNAMED ALLEY	WEST OF FRANSISCO NORTH OF LUNT IN AN UNNAMED ALLEY		ERNS
CHICAGO	93326794	W. OF CLYBOURNE ON WEBSTER AVE	W. OF CLYBOURNE ON WEBSTER AVE		ERNS
CHICAGO	93303038	N OF 54TH ST & EAST OF HERMITHGE RD	N OF 54TH ST & EAST OF HERMITHGE RD		ERNS
CHICAGO	94381906	SOUTH OF THE ARGYLE ST BRIDGE ON THE WEST BANK	SOUTH OF THE ARGYLE ST BRIDGE ON THE WEST BANK		ERNS
CHICAGO	S109550473		S OF 130TH ST		SPILLS
CHICAGO	2008883200	NORTH OF 45TH AVE.	NORTH OF 45TH AVE.		ERNS
CHICAGO	S109327619		N OF 45TH ST & E OF STATE ST		SPILLS
CHICAGO	2007321007	SOUTH OF 31ST STREET	SOUTH OF 31ST STREET		ERNS
CHICAGO	S111886747		N OF 54TH ST E		SPILLS
CHICAGO	S111886996		N OF ALLEY BETWEEN BARRY & FLETCHER STS		SPILLS
CHICAGO	S111889709		N OF 47TH SAINT ON DAN RYAN EXPY		SPILLS
CHICAGO	S111922322		S OF 31ST & E OF KARLOV		SPILLS
CHICAGO	S111896469		W OF SACRAMENTO AVE & N OF BELLMONT AVE		SPILLS
CHICAGO	S111890906		W OF FRANCISCO ST N		SPILLS
CHICAGO	S111884595		E OF ASHLAND AVE		SPILLS
CHICAGO	S111911664		N OF 18TH ON BANK OF CHICAGO RIV W		SPILLS
CHICAGO	S111883295		E OF COTTAGE GROVE AVE		SPILLS
CHICAGO	S111924749		S OF 130TH ST		SPILLS
CHICAGO	S111879544		E OF ALY & LASLIN		SPILLS
CHICAGO	S111911416		S OF 116TH SAINT PROBABLY 5		SPILLS
CHICAGO	90181857	EAST OF CHICAGO LAKE MICHIGAN	EAST OF CHICAGO LAKE MICHIGAN		ERNS
CHICAGO	92289021	OFF OF JARVIS AVE	OFF OF JARVIS AVE		ERNS
CHICAGO	92288359	I-55 OFFRAMP TO SOUTH 35TH ST	I-55 OFFRAMP TO SOUTH 35TH ST		ERNS
CHICAGO	1012172065	3701 W. OGDAN	3701 W. OGDAN		US BROWNFIELDS
CHICAGO	99626470	OGDEN SLIP	OGDEN SLIP		ERNS
CHICAGO	99623878	OGDEN SLIP OFF THE CHICAGO RIVER	OGDEN SLIP OFF THE CHICAGO RIVER		ERNS
CHICAGO	S111922533		3450 W OGDEN		SPILLS
CHICAGO	S111906986		4150 OGDEN AVE		SPILLS
CHICAGO	S111877927		2600 W OGDEN		SPILLS
CHICAGO	S111883865		2424 W OGDEN		SPILLS
CHICAGO	S111882138		2256 OGDEN AVE		SPILLS
CHICAGO	S111913280		3315 W OGDEN		SPILLS
CHICAGO	S111884215		2241 OGDEN AVE		SPILLS
CHICAGO	S111902061		355 OGDEN AVE		SPILLS
CHICAGO	S111906624		3801 OGDEN AVE		SPILLS
CHICAGO	S111927160		167 N OGDEN		SPILLS
CHICAGO	S111905835		3124 W OGDEN		SPILLS
CHICAGO	S111899124		4040 OGDEN AVE		SPILLS
CHICAGO	S111889137		333 OGDEN AVE		SPILLS

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CHICAGO	S111915595		3423 W OGDEN		SPILLS
CHICAGO	S111897839		221 N OGDEN		SPILLS
CHICAGO	91231203	OGDEN SLIP LAKESHORE DRIVE	OGDEN SLIP LAKESHORE DRIVE		ERNS
CHICAGO	2000519176	OGDEN JUNCTION	OGDEN JUNCTION	0	ERNS
CHICAGO	S111906955		3139 W OGDON AVE		SPILLS
CHICAGO	S111880103		7900 S OGELSBY ST		SPILLS
CHICAGO	S111876096		333 N OGEON AVE		SPILLS
CHICAGO	S111927336		OGILVIE TRANSPORTATION CENTER ST & FULTON ST		SPILLS
CHICAGO	S111908219		7900 S OGLESBY		SPILLS
CHICAGO	96516129	OHARA FIELD 10000 WEST OHARA FIELD	OHARA FIELD 10000 WEST OHARA FIELD		ERNS
CHICAGO	S109699842		10000 W OHARA		SPILLS
CHICAGO	2010933730	O'HARA AIRPORT TAXIWAKI, SOUTH OF AIRFIELD	OHARA AIRPORT TAXIWAKI SOUTH O		ERNS
CHICAGO	S111905665		611 OHARA CARGO RD		SPILLS
CHICAGO	S111904070		OHARA AIRPORT TRUCK FILL AREA		SPILLS
CHICAGO	S111875356		OHARA FLD		SPILLS
CHICAGO	S111884344		OHARA FLD		SPILLS
CHICAGO	S111877932		OHARA INTERNATIONAL AP		SPILLS
CHICAGO	S111877911		OHARA INTERNATIONAL CARGO AREA		SPILLS
CHICAGO	S111903650		OHARA INTERNATIONAL AP		SPILLS
CHICAGO	S111889601		10000 OHARA FLD		SPILLS
CHICAGO	S111884552		OHARA AP CARGO AREA GATE		SPILLS
CHICAGO	S111883008		OHARA FLD		SPILLS
CHICAGO	S111876395		OHARA FLD		SPILLS
CHICAGO	S111909004		OHARA AIRPORT		SPILLS
CHICAGO	S111893608		OHARA INTERNATIONAL AP & ARS		SPILLS
CHICAGO	S111925005		10000 W OHARA		SPILLS
CHICAGO	S108045240		10000 OHARE RD		SPILLS
CHICAGO	S108047382		OHARE AP NE RAMP		SPILLS
CHICAGO	2004730063	OHARE AIRPORT	OHARE AIRPORT		ERNS
CHICAGO	S110122279		755 OHARE AIRPORT NORTHWEST AIRLIN		SPILLS
CHICAGO	S110278059		10000 W OHARE DR		SPILLS
CHICAGO	S109550572		OHARE AP AMERICAN AIRLINES FUE CTR		SPILLS
CHICAGO	S109550534		OHARE AP BLDG		SPILLS
CHICAGO	S109550614		OHARE AP		SPILLS
CHICAGO	U001135163	O'HARE NURSARY	10000 W OHARE ST		UST
CHICAGO	S111218688		OHARE FLD		SPILLS
CHICAGO	S111888021		OHARE INT AIRPORT AF		SPILLS
CHICAGO	S111887282		OHARE AIRPORT		SPILLS
CHICAGO	S111885338		OHARE FLD		SPILLS
CHICAGO	S111885043		OHARE FIELD MANHEIM RD		SPILLS
CHICAGO	S111887913		OHARE AIRPORT		SPILLS
CHICAGO	S111886218		OHARE INTERNATIONAL AIRPORT HA		SPILLS
CHICAGO	S111888085		OHARE AIRPORT		SPILLS
CHICAGO	2012102621		OHARE AIRPORT		ERNS
CHICAGO	2011983614		OHARE AIRPORT		ERNS
CHICAGO	S111888666		OHARE AIRPORT		SPILLS
CHICAGO	S111912570		10000 W OHARE OUTSIDE GATE F 10		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111913759		OHARE AIRPORT GATE L5		SPILLS
CHICAGO	S111909948		OHARE INTERNATIONAL AIRPORT TE		SPILLS
CHICAGO	S111909889		OHARE INTERNATIONAL AIRPORT BLDG		SPILLS
CHICAGO	S111909884		723 OHARE INTERNATIONAL AIRPORT BLDG		SPILLS
CHICAGO	S111909829		1000 W OHARE AIRPORT		SPILLS
CHICAGO	S111913641		10000 W OHARE ST		SPILLS
CHICAGO	S111903044		OHARE AP & TRUCK FILL AREA		SPILLS
CHICAGO	S111898610		10000 W OHARE		SPILLS
CHICAGO	S111896964		OHARE AIRPORT		SPILLS
CHICAGO	S111895195		OHARE AIRPORT HERTZ RENT A CAR		SPILLS
CHICAGO	S111927473		OHARE AIRPORT CARGO BLDG		SPILLS
CHICAGO	S111910016		OHARE INTERNATIONAL AIRPORT TE		SPILLS
CHICAGO	S111913003		10000 W OHARE AVE		SPILLS
CHICAGO	S111883901		OHARE FLD & CARGO FACILITY		SPILLS
CHICAGO	S111904723		OHARE INTERNATIONAL AP		SPILLS
CHICAGO	S111908006		10000 W OHARE ST		SPILLS
CHICAGO	S111903996		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111891959		OHARE AIRPORT		SPILLS
CHICAGO	S111927456		502 W OHARE		SPILLS
CHICAGO	S111924904		OHARE AIRPORT AMERICAN AIRLINE		SPILLS
CHICAGO	S111912416		10000 W OHARE		SPILLS
CHICAGO	S111924620		OHARE AIRPORT		SPILLS
CHICAGO	S111906062		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111904822		726 OHARE AIRPORT BLDG		SPILLS
CHICAGO	S111891929		OHARE AIRPORT		SPILLS
CHICAGO	S111878442		OHARE AIRPORT		SPILLS
CHICAGO	S111927354		OHARE CARGO AREA RD		SPILLS
CHICAGO	S111909822		OHARE AIRPORT HANGER		SPILLS
CHICAGO	S111924580		OHARE AIRPORT FUEL CTR		SPILLS
CHICAGO	S111896466		OHARE AIRPORT		SPILLS
CHICAGO	S111912191		10000 W OHARE		SPILLS
CHICAGO	S111875892		OHARE AIRPORT		SPILLS
CHICAGO	S111927263		OHARE AIRPORT		SPILLS
CHICAGO	S111910933		OHARE INTERNATIONAL AIRPORT TE		SPILLS
CHICAGO	S111903916		OHARE INTERNATIONAL AP		SPILLS
CHICAGO	S111903881		OHARE AIRPORT TRUCK FILL AREA		SPILLS
CHICAGO	S111913065		10000 W OHARE		SPILLS
CHICAGO	S111913054		OHARE AIRPORT		SPILLS
CHICAGO	S111921804		OHARE AIRPORT BLDG		SPILLS
CHICAGO	S111921784		OHARE FLD		SPILLS
CHICAGO	S111898143		10000 W OHARE		SPILLS
CHICAGO	S111897702		OHARE AIRPORT BY TERMINAL 5		SPILLS
CHICAGO	S111892175		OHARE AIRPORT AMERICAN AIRLINE		SPILLS
CHICAGO	S111927156		606 OHARE FUELING SOUTHWEST CARGO BLDG		SPILLS
CHICAGO	S111910607		OHARE INTERNATIONAL AIRPORT GA		SPILLS
CHICAGO	S111898476		OHARE AIRPORT LAKE		SPILLS
CHICAGO	S111903593		OHARE AIRPORT		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111897424		OHARE AIRPORT OIL STA		SPILLS
CHICAGO	S111884075		OHARE AIR FORCE BASE		SPILLS
CHICAGO	S111902315		OHARE INTERNATIONAL AP		SPILLS
CHICAGO	S111894428		OHARE AIRPORT BLDG		SPILLS
CHICAGO	S111920800		OHARE AP FUEL FARM LOADING RAC		SPILLS
CHICAGO	S111907138		OHARE AIRPORT		SPILLS
CHICAGO	S111905441		OHARE AIRPORT		SPILLS
CHICAGO	S111901377		OHARE AP		SPILLS
CHICAGO	S111880592		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111883597		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111877178		OHARE AIRPORT		SPILLS
CHICAGO	S111876015		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111914131		OHARE INTERNATIONAL AIRPORT BLDG		SPILLS
CHICAGO	S111908014		OHARE INTERNATIONAL AIRPORT TE		SPILLS
CHICAGO	S111900292		OHARE AIRPORT		SPILLS
CHICAGO	S111897360		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111895652		OHARE OASIS		SPILLS
CHICAGO	S111912817		OHARE AIRPORT BLDG		SPILLS
CHICAGO	S111911483		OHARE INTERNATIONAL AIRPORT TE & GATE B 17		SPILLS
CHICAGO	S111910127		OHARE AIRPORT EAST OF AMC		SPILLS
CHICAGO	S111908362		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111897495		OHARE AIRPORT		SPILLS
CHICAGO	S111927028		OHARE TERMINAL 5		SPILLS
CHICAGO	S111889203		OHAREAIRPORTHANGAR 5A		SPILLS
CHICAGO	S111898281		43 E OHIO		SPILLS
CHICAGO	S111902091		N OHIO ST		SPILLS
CHICAGO	S111902033		1000 E OHIO		SPILLS
CHICAGO	S111908136		OHIO & GRAND STS		SPILLS
CHICAGO	S111906256		1000 E OHIO		SPILLS
CHICAGO	S111883579		450 E OHIO		SPILLS
CHICAGO	94354816	N. OKETO ST	N. OKETO ST		ERNS
CHICAGO	S111890513		5205 N OKETO		SPILLS
CHICAGO	92269315	OLD STREET WALL INSIDE HARBOR	OLD STREET WALL INSIDE HARBOR		ERNS
CHICAGO	S110613668		OLD HWY 10 ON THE RAMP		SPILLS
CHICAGO	S111926457		OLD 10 - ON THE RAMP		SPILLS
CHICAGO	S111887563		6551 N OLMSTED		SPILLS
CHICAGO	S111890471		6645 N OLPHANT AVE		SPILLS
CHICAGO	S111905547		30 W ONTARIO		SPILLS
CHICAGO	S111883249		30 W ONTARIO		SPILLS
CHICAGO	S111878589		76 W ONTARIO		SPILLS
CHICAGO	S111898153		ORD ALSF OHARE INTERNATIONAL A		SPILLS
CHICAGO	S111884809		ORD ASR 4		SPILLS
CHICAGO	S111909500		863 N ORLEANS		SPILLS
CHICAGO	S111906819		1546 N ORLEANS		SPILLS
CHICAGO	S108046501		5900 S OUTBOUND DAN RYAN EXPY		SPILLS
CHICAGO	S111896029		OUTBOUND RAMP		SPILLS
CHICAGO	S108480188		FT OVER LAKE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111914369		UN PACIFIC RAIL YARD ON CANAL		SPILLS
CHICAGO	S111892291		3348 S PALASKI		SPILLS
CHICAGO	S111910482		4343 S PALASKI RD		SPILLS
CHICAGO	S111914392		4650 N PALASKI RD		SPILLS
CHICAGO	S111901287		3900 W PALMER		SPILLS
CHICAGO	S111881904		3563 PALMER ST		SPILLS
CHICAGO	S111905693		4600 W PALMSTER ST		SPILLS
CHICAGO	2009927055	PARK MANOR	PARK MANOR		ERNS
CHICAGO	2011991335		4111 W PARKER		ERNS
CHICAGO	S111927200		4111 W PARKER		SPILLS
CHICAGO	S111918997		4547 W PARKER		SPILLS
CHICAGO	S111877796		1434 N PARKSIDE		SPILLS
CHICAGO	S111875666		3315 S PARNELL		SPILLS
CHICAGO	91202957	MI PAST 326 N BRANCH CHGO RIVER W KINZIE	MI PAST 326 N BRANCH CHGO RIVER W KINZIE		ERNS
CHICAGO	S111911236		4552 W PATTERSON ST		SPILLS
CHICAGO	S111926461		3000 PATTERSON RD		SPILLS
CHICAGO	8857613	1443 PAULINA	1443 PAULINA		ERNS
CHICAGO	S111883908		421 PAULINA ST		SPILLS
CHICAGO	S111902515		2500 S PAULINA		SPILLS
CHICAGO	S111913115		5214 N PAULINA		SPILLS
CHICAGO	S111923400		2500 S PAULINA		SPILLS
CHICAGO	S111897771		1811 S PAULINA		SPILLS
CHICAGO	S111922987		8727 S PAULINA		SPILLS
CHICAGO	S111879136		1924 PAULINA ST		SPILLS
CHICAGO	S111882431		2651 N PAULINA		SPILLS
CHICAGO	S111901393		4311 N PAULINA		SPILLS
CHICAGO	S111919322		2712 N PAULINA		SPILLS
CHICAGO	S111883670		9606 S PAXTON		SPILLS
CHICAGO	S111885703		25 E PEARSON		SPILLS
CHICAGO	S111888962		41 E PEARSON		SPILLS
CHICAGO	S111883632		2558 W PEDERSON		SPILLS
CHICAGO	S111908651		11500 S PERRY		SPILLS
CHICAGO	94366239	3800 PERSHING RD	3800 PERSHING RD		ERNS
CHICAGO	S111887440		1050 PERSHING RD		SPILLS
CHICAGO	S111886288		2101 W PERSHING		SPILLS
CHICAGO	S111922162		2655 W PERSHING		SPILLS
CHICAGO	S111892487		1000 W PERSHING		SPILLS
CHICAGO	S111893458		1819 PERSHING RD		SPILLS
CHICAGO	S111890488		3800 PERSHING RD		SPILLS
CHICAGO	S111915529		1700 W PERSHING		SPILLS
CHICAGO	S111908076		1700 W PERSHING		SPILLS
CHICAGO	S111907094		1400 W PERSHING		SPILLS
CHICAGO	S111896240		454 E PERSHING		SPILLS
CHICAGO	S111890802		2500 PERTERSON AVE		SPILLS
CHICAGO	S111899334		3553 W PETERSEN AVE		SPILLS
CHICAGO	S111900069		4123 W PETERSEN AVE		SPILLS
CHICAGO	S111924937		2838 W PETERSON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111912549		3400 W PETERSON		SPILLS
CHICAGO	S111892889		2542 N PETERSON AVE		SPILLS
CHICAGO	S111900222		2554 W PETERSON ST		SPILLS
CHICAGO	S111900223		2554 W PETERSON ST		SPILLS
CHICAGO	S111900537		3401 PETERSON AVE		SPILLS
CHICAGO	S111883870		3800 W PETERSON		SPILLS
CHICAGO	S111908745		2501 W PETERSON		SPILLS
CHICAGO	S111892787		2812 W PETERSON		SPILLS
CHICAGO	S111921200		2424 W PETERSON		SPILLS
CHICAGO	S111893754		2935 W PETERSON		SPILLS
CHICAGO	S111878761		4025 W PETERSON		SPILLS
CHICAGO	S111883758		3200 PETERSON		SPILLS
CHICAGO	S111898094		3016 W PETERSON		SPILLS
CHICAGO	S111891657		4343 W PETERSON		SPILLS
CHICAGO	S111892892		2108 N PETTERSON AVE		SPILLS
CHICAGO	S111892891		2107 N PETTERSON		SPILLS
CHICAGO	S111892890		2544 N PETTERSON AVE		SPILLS
CHICAGO	S111892888		2540 N PETTERSON AVE		SPILLS
CHICAGO	S111892887		2538 N PETTERSON AVE		SPILLS
CHICAGO	S111892886		2536 N PETTERSON AVE		SPILLS
CHICAGO	S111892885		2534 N PETTERSON AVE		SPILLS
CHICAGO	S111884261		3401 PETTERSON AVE		SPILLS
CHICAGO	S111909797		5625 W PHILMOORE		SPILLS
CHICAGO	S111890810		PIGGY BACK RAMP		SPILLS
CHICAGO	2000668618	F PINE GROVE AND ADISON	F PINE GROVE AND ADISON		ERNS
CHICAGO	S111911996		5500 W PINE		SPILLS
CHICAGO	S111891349		2756 PINE GRV		SPILLS
CHICAGO	S111905197		3805 N PLAINFIELD		SPILLS
CHICAGO	877438	PLYMOUTH CT & EISENHOWER PARKWAY PLYMOUT CT PSS	PLYMOUTH CT & EISENHOWER PARKWAY PLYMOUTH CT PSS		ERNS
CHICAGO	8867459	PMC SPECIALITY	PMC SPECIALITY		ERNS
CHICAGO	875664	PMC CORPORATION OR SHERWIN WILLIAMS 115TH ST AND CHAMPLAIN A	PMC CORPORATION OR SHERWIN WILLIAMS 115TH ST AND CHAMPLAIN A		ERNS
CHICAGO	S111887302		S POL OHARE AIRPORT		SPILLS
CHICAGO	2000552216	700 NORTH POLASKI	700 NORTH POLASKI	0	ERNS
CHICAGO	2010956157	POLK STATION	POLK STA		ERNS
CHICAGO	S111885212		3450 W POLK		SPILLS
CHICAGO	2012104402		1634 W POLK		ERNS
CHICAGO	S111905690		2661 POLK ST		SPILLS
CHICAGO	S111896528		5048 POLK ST		SPILLS
CHICAGO	S111896201		5048 POLK ST		SPILLS
CHICAGO	S111927496		1634 W POLK		SPILLS
CHICAGO	S108047409		POPLAR & ARCHER AVE		SPILLS
CHICAGO	S111894440		3522 W POTOMAC ST		SPILLS
CHICAGO	S111892090		4055 W POTOMAC		SPILLS
CHICAGO	S111885365		3525 W POTOMIC AVE		SPILLS
CHICAGO	S111349389		5226 POTTAWATOMIE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111885056		4120 S PR		SPILLS
CHICAGO	S111885188		5734 S PR		SPILLS
CHICAGO	S111913448		5910 S PR		SPILLS
CHICAGO	S111880835		1915 S PR		SPILLS
CHICAGO	S111902589		1918 S PR		SPILLS
CHICAGO	S111883214		3748 S PRAIRIE ST		SPILLS
CHICAGO	S111908224		6028 PRAIRIE AVE		SPILLS
CHICAGO	S111882375		58 PRAIRIE ST		SPILLS
CHICAGO	S111911813		1712 W PRATT ST		SPILLS
CHICAGO	S111878257		1622 W PRATT		SPILLS
CHICAGO	S111926559		1340 W PRATT		SPILLS
CHICAGO	S111890346		3101 PRATT AVE		SPILLS
CHICAGO	2001559682	PREMIERE WHAREHOUSES	PREMIERE WHAREHOUSES	0	ERNS
CHICAGO	S111898233		39 PRINCETON		SPILLS
CHICAGO	91227438	PRIVATE DRIVEWAY 3175 N. GRAND	PRIVATE DRIVEWAY 3175 N. GRAND		ERNS
CHICAGO	8875211	PRIVATE CITIZEN	PRIVATE CITIZEN		ERNS
CHICAGO	91223529	PROPERTY TAX NO. PIN 26- 07-157-008. ON 100 ST	PROPERTY TAX NO. PIN 26- 07-157-008. ON 100 ST		ERNS
CHICAGO	S108047414		PROVISO		SPILLS
CHICAGO	2004724880	PROVISO YARD	PROVISO YARD		ERNS
CHICAGO	2000550784	PROVISO RAIL YARD	PROVISO RAIL YARD	0	ERNS
CHICAGO	2000525104	PROVISO	PROVISO	0	ERNS
CHICAGO	98456856	PROVISO YARD	PROVISO YARD		ERNS
CHICAGO	S111909017		PROVISO YARD		SPILLS
CHICAGO	S111902105		PROVISO YARD		SPILLS
CHICAGO	S111906881		PROVISO YARD		SPILLS
CHICAGO	S111918825		PROVISO YARD		SPILLS
CHICAGO	S111900702		PROVISO YARD & W MADISON ST		SPILLS
CHICAGO	S111910341		PROVISO YARD		SPILLS
CHICAGO	S111902614		PROVISO YARD		SPILLS
CHICAGO	98451458	5838 NORTH PUASKI RD	5838 NORTH PUASKI RD		ERNS
CHICAGO	S111879661		4646 S PUILASKI RD		SPILLS
CHICAGO	S108047918		OF PULASKI ST		SPILLS
CHICAGO	97407460	PULASKI AVE NORTH OF STEVENSON EXPRESSWA\	PULASKI AVE NORTH OF STEVENSON EXPRESSWAY		ERNS
CHICAGO	89118756	PULASKI RD & SANITARY SHIP CANAL	PULASKI RD & SANITARY SHIP CANAL		ERNS
CHICAGO	2008886505	PULASKI AND FERDINAN STRS	PULASKI AND FERDINAN STRS		ERNS
CHICAGO	2010941633	3501 S. PULASKI	3501 S PULASKI		ERNS
CHICAGO	2010950374	PULASKI AND CONGRESS	PULASKI		ERNS
CHICAGO	S111218699		6500 S PULASKI		SPILLS
CHICAGO	S111885735		3500 S PULASKI		SPILLS
CHICAGO	S111885715		3500 S PULASKI		SPILLS
CHICAGO	S111885574		3925 N PULASKI		SPILLS
CHICAGO	S111887313		4560 N PULASKI AVE		SPILLS
CHICAGO	S111886512		3925 N PULASKI		SPILLS
CHICAGO	S111886468		5255 N PULASKI		SPILLS
CHICAGO	S111886058		2801 W PULASKI		SPILLS
CHICAGO	S111888307		5151 N PULASKI		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111885291		3348 S PULASKI		SPILLS
CHICAGO	S111885369		4500 S PULASKI AVE		SPILLS
CHICAGO	S111905353		826 PULASKI ST		SPILLS
CHICAGO	S111896579		6029 N PULASKI AVE		SPILLS
CHICAGO	S111879725		3400 S PULASKI		SPILLS
CHICAGO	S111879688		3400 S PULASKI		SPILLS
CHICAGO	S111877979		4433 S PULASKI		SPILLS
CHICAGO	S111925325		2345 S PULASKI		SPILLS
CHICAGO	S111892862		3800 S PULASKI		SPILLS
CHICAGO	S111877100		2444 N PULASKI		SPILLS
CHICAGO	S111878981		7401 S PULASKI		SPILLS
CHICAGO	S111882660		4154 N PULASKI AVE		SPILLS
CHICAGO	S111904779		3250 S PULASKI		SPILLS
CHICAGO	S111902481		5500 S PULASKI		SPILLS
CHICAGO	S111925451		5901 S PULASKI		SPILLS
CHICAGO	S111923232		400 N PULASKI		SPILLS
CHICAGO	S111908734		700 N PULASKI		SPILLS
CHICAGO	S111903029		4625 N PULASKI		SPILLS
CHICAGO	S111888590		8251 S PULASKI		SPILLS
CHICAGO	S111878413		6100 N PULASKI		SPILLS
CHICAGO	S111914261		39 N PULASKI		SPILLS
CHICAGO	S111902424		4250 N PULASKI		SPILLS
CHICAGO	S111900135		2200 N PULASKI		SPILLS
CHICAGO	S111891193		7400 S PULASKI		SPILLS
CHICAGO	S111875637		3501 S PULASKI		SPILLS
CHICAGO	S111878380		3501 PULASKI AVE		SPILLS
CHICAGO	S111878350		3741 S PULASKI AVE		SPILLS
CHICAGO	S111922781		400 N PULASKI		SPILLS
CHICAGO	S111878741		5838 N PULASKI		SPILLS
CHICAGO	S111927154		3501 S PULASKI		SPILLS
CHICAGO	S111919290		PULASKI & OGDEN AVE		SPILLS
CHICAGO	S111876797		1230 N PULASKI		SPILLS
CHICAGO	S111920485		6242 S PULASKI		SPILLS
CHICAGO	S111914914		1900 S PULASKI AVE		SPILLS
CHICAGO	S111903582		1747 N PULASKI		SPILLS
CHICAGO	S111908477		5456 S PULASKI		SPILLS
CHICAGO	S111902328		5838 N PULASKI		SPILLS
CHICAGO	S111894132		5860 N PULASKI		SPILLS
CHICAGO	S111889787		4448 N PULASKI AVE		SPILLS
CHICAGO	S111921283		400 N PULASKI		SPILLS
CHICAGO	S111880080		5114 S PULASKI		SPILLS
CHICAGO	S111889738		4118 N PULASKI		SPILLS
CHICAGO	S111905447		3501 S PULASKI		SPILLS
CHICAGO	S111901366		1923 N PULASKI		SPILLS
CHICAGO	S111908861		4859 S PULASKI		SPILLS
CHICAGO	S111908849		5801 N PULASKI AVE		SPILLS
CHICAGO	S111908067		6214 N PULASKI		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111900066		2200 N PULASKI		SPILLS
CHICAGO	S111901971		5609 S PULASKI		SPILLS
CHICAGO	S111897410		6225 S PULASKI ST		SPILLS
CHICAGO	S111876049		10301 S PULASKI		SPILLS
CHICAGO	S111875481		3249 S PULASKI		SPILLS
CHICAGO	S111914486		308 N PULASKI AVE		SPILLS
CHICAGO	S111892051		3050 N PULASKI AVE		SPILLS
CHICAGO	S111890045		4461 N PULASKI AVE		SPILLS
CHICAGO	S111879084		4302 S PULASKI		SPILLS
CHICAGO	S111879082		4900 S PULASKI		SPILLS
CHICAGO	S111924202		3348 S PULASKI		SPILLS
CHICAGO	S111914957		1500 S PULASKI		SPILLS
CHICAGO	S111896220		4340 S PULASKI AVE		SPILLS
CHICAGO	S111876975		6200 S PULASKI		SPILLS
CHICAGO	S111875777		4639 N PULASKI		SPILLS
CHICAGO	S111919340		400 N PULASKI		SPILLS
CHICAGO	S111913902		743 N PULASKI		SPILLS
CHICAGO	S111883482		6311 N PULASKI		SPILLS
CHICAGO	S110685232		40234 N PULASKI		SPILLS
CHICAGO	S111881030		4140 W PULLERTON		SPILLS
CHICAGO	S111877014		3042 S QUINN		SPILLS
CHICAGO	U004082459	2001-03 RACE, INC.	2001 RACE ST		UST
CHICAGO	S111894840		4545 W RACE ST		SPILLS
CHICAGO	S111895324		4545 W RACE ST		SPILLS
CHICAGO	S108046140		3435 S RACINE		SPILLS
CHICAGO	S111887438		2015 S RACINE		SPILLS
CHICAGO	S111887117		4650 S RACINE		SPILLS
CHICAGO	S111885256		3134 N RACINE ST		SPILLS
CHICAGO	2011982152		3500 RACINE		ERNS
CHICAGO	S111896657		4545 S RACINE		SPILLS
CHICAGO	S111880267		4545 S RACINE		SPILLS
CHICAGO	S111910058		4545 S RACINE BUILDING 4549		SPILLS
CHICAGO	S111912454		10507 S RACINE		SPILLS
CHICAGO	S111909590		3340 S RACINE		SPILLS
CHICAGO	S111897168		4750 N RACINE ST		SPILLS
CHICAGO	S111893730		218 N RACINE		SPILLS
CHICAGO	S111881994		4551 S RACINE		SPILLS
CHICAGO	S111882928		RACINE AVE & MILWAUKEE AVE		SPILLS
CHICAGO	S111881164		4551 S RACINE		SPILLS
CHICAGO	S111907813		11830 S RACINE ST		SPILLS
CHICAGO	S111879972		3425 N RACINE		SPILLS
CHICAGO	S111906799		7944 RACINE AVE		SPILLS
CHICAGO	S111904462		222 S RACINE		SPILLS
CHICAGO	S111903516		100 S RACINE		SPILLS
CHICAGO	S111895363		8257 S RACINE		SPILLS
CHICAGO	S111884002		4740 N RACINE		SPILLS
CHICAGO	S111906201		2141 S RACINE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111882349		11731 S RACINE		SPILLS
CHICAGO	S111914385		1312 S RACINE		SPILLS
CHICAGO	2000672067	TH RACINE AVE	TH RACINE AVE		ERNS
CHICAGO	94394439	RAIL YARD TRACK 15	RAIL YARD TRACK 15		ERNS
CHICAGO	2009922369	RAIL YARD	RAIL YARD		ERNS
CHICAGO	2009907064	RAIL YARD	RAIL YARD		ERNS
CHICAGO	2008888947	RAIL YARD	RAIL YARD		ERNS
CHICAGO	2008907064	RAIL YARD	RAIL YARD		ERNS
CHICAGO	S110363854		RAIL LINE CD 513		SPILLS
CHICAGO	89112004	RAIL MILE POST 510	RAIL MILE POST 510		ERNS
CHICAGO	98438453	RAILYARD CHICAGO 2040 EAST 106TH ST CHICAGO	RAILYARD CHICAGO 2040 EAST 106TH ST CHICAGO		ERNS
CHICAGO	2011971442	RAILYARD DIESEL SHOP 400 N. PULASKI	N RAILYARD DIESEL SHOP 400		ERNS
CHICAGO	S111894241		N RAMP NEAR 5320		SPILLS
CHICAGO	S111901184		RAMP SB & CICERO AVE		SPILLS
CHICAGO	S111901805		RAMP BETWEEN DAN RYAN & STEVENSON EXPY		SPILLS
CHICAGO	S111895329		WEST RAMP		SPILLS
CHICAGO	89119300	I-55, RAMP TO MARTIN LUTHER KING DR	I-55, RAMP TO MARTIN LUTHER KING DR		ERNS
CHICAGO	98447408	RANDOLF AND COLUMBUS ST	RANDOLF AND COLUMBUS ST		ERNS
CHICAGO	2009925379	RANDOLPH & LAKE SHORE DR.	RANDOLPH & LAKE SHORE DR.		ERNS
CHICAGO	S111886973		RANDOLPH ST & LAKE SHORE DR		SPILLS
CHICAGO	S111902077		RANDOLPH & COLUMBUS STS		SPILLS
CHICAGO	S111876361		600 RANDOLPH		SPILLS
CHICAGO	S111901719		300 E RANDOLPH		SPILLS
CHICAGO	S111877288		225 W RANDOLPH		SPILLS
CHICAGO	S111896352		RANDOLPH & HALSTEAD		SPILLS
CHICAGO	S111925666		RANDOLPH & LAKE FRONT		SPILLS
CHICAGO	S111909242		RANDOLPH & WASHINGTON STS		SPILLS
CHICAGO	S111903484		1240 W RANDOLPH		SPILLS
CHICAGO	S111909084		4343 N RAVENSWOOD		SPILLS
CHICAGO	S111882543		6445 N RAVENSWOOD		SPILLS
CHICAGO	S111913944		4325 N RAVENSWOOD		SPILLS
CHICAGO	S111901227		4510 N RAVENSWOODS		SPILLS
CHICAGO	S111886929		5115 N RAVENWOOD		SPILLS
CHICAGO	2012100545		W RD UNKNOWN SHEEN INCIDENT 1111		ERNS
CHICAGO	S111889376		6323 N RDG		SPILLS
CHICAGO	S111880227		6401 N RDG		SPILLS
CHICAGO	91235192	4551 S. RECINE ST.	4551 S. RECINE ST.		ERNS
CHICAGO	2005618378	RED LINE	RED LINE		ERNS
CHICAGO	90184306	REPUBLIC ENG. STEEL INC. 11610 S. AVE. O	REPUBLIC ENG. STEEL INC. 11610 S. AVE. O		ERNS
CHICAGO	S111905965		6518 N RICHMOND		SPILLS
CHICAGO	S111888680		6601 RIDGE BLVD		SPILLS
CHICAGO	S111920240		7330 RIDGELAND		SPILLS
CHICAGO	S111884632		5100 N RIDGEWAY		SPILLS
CHICAGO	S111912367		RIGHT BANK OF THE ILLINOIS RIV		SPILLS
CHICAGO	S108046207		3858 W RIGHTWOOD		SPILLS
CHICAGO	2005631002	3858 WEST RIGHTWOOD	3858 WEST RIGHTWOOD		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111912146		1640 W RIGHTWOOD		SPILLS
CHICAGO	S111901896		1310 RITCHIE CT		SPILLS
CHICAGO	S109092962		RIV CALUMET		SPILLS
CHICAGO	S111911050		N RIV BRANCH OF THE CHICAGO OF CALIF S		SPILLS
CHICAGO	S111904280		RIV MP 11		SPILLS
CHICAGO	S111905205		RIV ILLINOIS MP 278		SPILLS
CHICAGO	S111900973		RIV ILLINOIS NEAR HAVANAH MARINE		SPILLS
CHICAGO	96487268	RIVER CANAL IN FRONT OF MERCHANDISE MART ORLEANS AND WELL	RIVER CANAL IN FRONT OF MERCHANDISE MART ORLEANS AND WELL		ERNS
CHICAGO	2009899019	RIVER CITY MARINA	RIVER CITY MARINA		ERNS
CHICAGO	2008899019	RIVER CITY MARINA	RIVER CITY MARINA		ERNS
CHICAGO	2007320879	RIVER MILE 318	RIVER MILE 318		ERNS
CHICAGO	S111889961		RIVER		SPILLS
CHICAGO	S111896319		5540 NE RIVER RD		SPILLS
CHICAGO	2010934829	ROCK ISLAND RAIL YARD, MILEPOST: CD510, SUBDIVISION: DEARBOR	ROCK IS		ERNS
CHICAGO	S111890595		6834 ROCKET AUTO MALL W		SPILLS
CHICAGO	2000518948	ROCKWELL SUBDIVISION	ROCKWELL SUBDIVISION	0	ERNS
CHICAGO	S111888318		3001 N ROCKWELL		SPILLS
CHICAGO	S111887052		6203 N ROCKWELL AVE		SPILLS
CHICAGO	S111907374		4100 ROCKWELL NORTH BRANCH OF CHICA RIV		SPILLS
CHICAGO	S111882296		40101 N ROCKWELL		SPILLS
CHICAGO	S111891917		2800 S ROCKWELL		SPILLS
CHICAGO	S111905125		1825 N ROCKWELL		SPILLS
CHICAGO	S111898196		7400 S ROCKWELL		SPILLS
CHICAGO	S111903855		3022 N ROCKWELL		SPILLS
CHICAGO	S111902913		30143 N ROCKWELL		SPILLS
CHICAGO	S111888851		5747 N ROCKWELL		SPILLS
CHICAGO	S111911607		3145 N ROCKWELL		SPILLS
CHICAGO	S111894403		4130 N ROCKWELL		SPILLS
CHICAGO	S111901970		1825 N ROCKWELL		SPILLS
CHICAGO	S111901609		3715 S ROCKWELL		SPILLS
CHICAGO	S111884021		3500 N ROCKWELL		SPILLS
CHICAGO	S111879087		3029 N ROCKWELL		SPILLS
CHICAGO	S111879077		3029 N ROCKWELL		SPILLS
CHICAGO	S111886629		7240 N ROGERS		SPILLS
CHICAGO	1000177452	FORMER PARCO PRODUCTS INC FACILITY	4710 ROOSEVELT RD		CERC-NFRAP, CORRACTS
CHICAGO	S111885979		534 W ROOSEVELT		SPILLS
CHICAGO	S111887049		3803 W ROOSEVELT		SPILLS
CHICAGO	S111887522		2950 W ROOSEVELT		SPILLS
CHICAGO	S111879635		5700 W ROOSEVELT		SPILLS
CHICAGO	S111909573		5300 W ROOSEVELT ST		SPILLS
CHICAGO	S111876814		3159 ROOSEVELT RD		SPILLS
CHICAGO	S111882014		ROOSEVELT RD & WESTERN		SPILLS
CHICAGO	S111922797		1303 ROOSEVELT RD		SPILLS
CHICAGO	S111898776		7500 W ROOSEVELT RD		SPILLS
CHICAGO	S111880385		ROOSEVELT & OGDEN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111902783		3731 W ROOSEVELT		SPILLS
CHICAGO	S111884942		636 W ROOT		SPILLS
CHICAGO	S111895928		636 W ROOT		SPILLS
CHICAGO	S111881753		636 ROOT ST		SPILLS
CHICAGO	S111877638		636 W ROOT		SPILLS
CHICAGO	S111908965		428 ROOT ST		SPILLS
CHICAGO	2005601156	ROSCO ST	ROSCO ST		ERNS
CHICAGO	S108047761		W ROSCOE ST		SPILLS
CHICAGO	S111894729		2239 W ROSCOE		SPILLS
CHICAGO	S111906289		2740 W ROSEMONT		SPILLS
CHICAGO	98452740	ROUND HOUSE	ROUND HOUSE		ERNS
CHICAGO	93303252	IL ROUTE 137 NEAR GREAT LAKES NAVAL	IL ROUTE 137 NEAR GREAT LAKES NAVAL		ERNS
CHICAGO	S111891837		6030 N RUST ST		SPILLS
CHICAGO	S111922723		RYAN & 30TH ST		SPILLS
CHICAGO	S111886862		7257 59 S JEFFERY		SPILLS
CHICAGO	S111879467		1200 600 S TORRENCE AVE		SPILLS
CHICAGO	S111896321		2419 E S SHORE DR		SPILLS
CHICAGO	S111922442		6320 SACRAMENTO		SPILLS
CHICAGO	S111908731		630 N SACRAMENTO		SPILLS
CHICAGO	S111912898		2811 N SACRAMENTO		SPILLS
CHICAGO	S111912899		2811 N SACRAMENTO		SPILLS
CHICAGO	S111925039		SACRAMENTO & GRAND MP 23		SPILLS
CHICAGO	S111890798		22451 N SACRAMENTO		SPILLS
CHICAGO	S111925630		550 N SACRAMENTO AVE		SPILLS
CHICAGO	S111925629		550 N SACRAMENTO AVE		SPILLS
CHICAGO	S111900104		318 S SACRAMENTO ST		SPILLS
CHICAGO	S111901566		810 N SACRAMENTO		SPILLS
CHICAGO	876449	6101 SOUTH SACREMENTO	6101 SOUTH SACREMENTO		ERNS
CHICAGO	S111893206		3100 S SACREMENTO		SPILLS
CHICAGO	S111893118		404 N SACREMENTO		SPILLS
CHICAGO	S111892115		1400 N SACREMENTO		SPILLS
CHICAGO	S111925030		500 N SACREMENTO BLVD		SPILLS
CHICAGO	S111912857		2628 S SACREMENTO ST		SPILLS
CHICAGO	98427468	SADDLE TANK OF TANKER TRUCK/TRUCK SLID ON ICE IN PARKING LOT	SADDLE TANK OF TANKER TRUCK/TRUCK SLID ON ICE IN PARKING LOT		ERNS
CHICAGO	8857165	SAFETY-KLEEN	SAFETY-KLEEN		ERNS
CHICAGO	2009901502	SAG CANAL	SAG CANAL		ERNS
CHICAGO	2008901502	SAG CANAL	SAG CANAL		ERNS
CHICAGO	2007332346	SAG CHANNEL, MILE MARKER 329	SAG CHANNEL, MILE MARKER 329		ERNS
CHICAGO	S111910549		SAG CANAL		SPILLS
CHICAGO	S108669662		SAINT WB EXIT		SPILLS
CHICAGO	S111885657		SAINT EXIT		SPILLS
CHICAGO	S111887912		3729 S SAINT LOUIS		SPILLS
CHICAGO	S111906725		3200 S SAINT LOUIS		SPILLS
CHICAGO	S111898317		2333 W SAINT PAUL ST		SPILLS
CHICAGO	S111924159		SAINT CHARLES AIR LINE BRIDGE ST		SPILLS
CHICAGO	S111894264		SAINT LAWRENCE & 95TH ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111891909		4938 N SAINT LOUIS		SPILLS
CHICAGO	S111906950		SAINT EXIT		SPILLS
CHICAGO	S111878333		1908 S SAINT LOUIS		SPILLS
CHICAGO	S111902895		SAINT EXIT		SPILLS
CHICAGO	S111888769		5500 N SAINT LOUIS		SPILLS
CHICAGO	S111879542		1908 S SAINT LOUIS		SPILLS
CHICAGO	S111915460		4319 S SAINT LAWRENCE		SPILLS
CHICAGO	93339633	LA SALLE	LA SALLE		ERNS
CHICAGO	S111913344		901 N SANGAMON		SPILLS
CHICAGO	S111909761		325 S SANGAMON AVE		SPILLS
CHICAGO	S111909078		3750 S SANGAMON		SPILLS
CHICAGO	S111905510		6300 S SANGAMON		SPILLS
CHICAGO	S111882978		335 S SANGAMON		SPILLS
CHICAGO	S111895743		901 N SANGAMON		SPILLS
CHICAGO	S111927935		123 N SANGAMON		SPILLS
CHICAGO	S111927865		3608 S SANGAMON		SPILLS
CHICAGO	2001557824	3750 SOUTH SANGANON	3750 SOUTH SANGANON	0	ERNS
CHICAGO	91233492	SANITARIA AND SHIP CANAL	SANITARIA AND SHIP CANAL		ERNS
CHICAGO	92294756	SANITARY SHIP CANAL	SANITARY SHIP CANAL		ERNS
CHICAGO	S111881835		SANITARY & SHIP CANAL		SPILLS
CHICAGO	91236307	SANITARY& SHIP CANAL @ I-55 DAMEN BRIDGE	SANITARY& SHIP CANAL @ I-55 DAMEN BRIDGE		ERNS
CHICAGO	S111902410		5248 S SAWYER ST		SPILLS
CHICAGO	S111880077		2357 S SAWYER		SPILLS
CHICAGO	S111885611		2227 SAYER ST N		SPILLS
CHICAGO	S111879595		6300 S SAYRE		SPILLS
CHICAGO	S111910985		SB		SPILLS
CHICAGO	S111884439		88 W SCHILLER		SPILLS
CHICAGO	S111896971		427 W SCOTT		SPILLS
CHICAGO	S111890290		345 W SCOTT		SPILLS
CHICAGO	S111925210		640 W SCOTT		SPILLS
CHICAGO	8863319	ON SE CORNER OF 45TH AND ASHLAND 4501 S. ASHLAND	ON SE CORNER OF 45TH AND ASHLAND 4501 S. ASHLAND		ERNS
CHICAGO	8869431	SEARS TOWER,29TH FLOOR,ELECTRICAL EQUIPMENT ROOM INTERSECTIO	SEARS TOWER,29TH FLOOR,ELECTRICAL EQUIPMENT ROOM INTERSECTIO		ERNS
CHICAGO	S111923042		SECURITY POST		SPILLS
CHICAGO	S111907297		1441 N SEDGEWICH		SPILLS
CHICAGO	S109953715		1805 SEDGWICK AVE		SPILLS
CHICAGO	S111925200		1805 SEDGWICK AVE		SPILLS
CHICAGO	S111902638		7409 SEELEY		SPILLS
CHICAGO	2000519383	6644 SELEY	6644 SELEY	0	ERNS
CHICAGO	S111349429		3216 N SEMINARY		SPILLS
CHICAGO	2011983101		3216 N SEMINARY		ERNS
CHICAGO	S111895720		2500 S SENOUR		SPILLS
CHICAGO	98429516	1111 WEST SERMACK ROAD	1111 WEST SERMACK ROAD		ERNS
CHICAGO	S111909626		SERVICE CTR		SPILLS
CHICAGO	S111891628		4600 W SHAKESPEARE		SPILLS
CHICAGO	96479823	SHEEN SIZE:1MI X UNKNOWN/RAINBOW	SHEEN SIZE:1MI X UNKNOWN/RAINBOW		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	98423866	SHEEN SIZE: UNKNOWN / THIRD PARTY REPORTS OIL SLICK	SHEEN SIZE: UNKNOWN / THIRD PARTY REPORTS OIL SLICK		ERNS
CHICAGO	98458737	SHEEN SIZE: 300-400 YDS X 75 YDS / RAINBOW COLORED / SHEEN H	SHEEN SIZE: 300-400 YDS X 75 YDS / RAINBOW COLORED / SHEEN H		ERNS
CHICAGO	98452229	SHEEN SIZE:100 FT X 20 FT / COLOR: RAINBOW	SHEEN SIZE:100 FT X 20 FT / COLOR: RAINBOW		ERNS
CHICAGO	98448303	SHEEN SIZE: 100 YDS X UNKNOWN WIDTH RAINBOW COLORED	SHEEN SIZE: 100 YDS X UNKNOWN WIDTH RAINBOW COLORED		ERNS
CHICAGO	98469237	SHEEN SIZE: 8-20 FT X 1/2 MILE / COLOR: LIGHT RAINBOW / DIES	SHEEN SIZE: 8-20 FT X 1/2 MILE / COLOR: LIGHT RAINBOW / DIES		ERNS
CHICAGO	98436673	SHEEN SIZE: 30 X 15 FEET COLOR: YELLOW	SHEEN SIZE: 30 X 15 FEET COLOR: YELLOW		ERNS
CHICAGO	98448707	SHEEN SIZE: FOOTBALL FIELD / IN MARINA GOING TO RIVER / RAIN	SHEEN SIZE: FOOTBALL FIELD / IN MARINA GOING TO RIVER / RAIN		ERNS
CHICAGO	S111883878		1555 N SHEFFIELD		SPILLS
CHICAGO	S111890621		1714 N SHEFFIELD		SPILLS
CHICAGO	S111895791		1723 W SHEFFIELD		SPILLS
CHICAGO	S111877862		3532 N SHEFFIELD		SPILLS
CHICAGO	S111880861		1630 N SHEFFIELD		SPILLS
CHICAGO	S111904160		2345 SHEFFIELD AVE		SPILLS
CHICAGO	S111886130		5816 SHERIDAN RD		SPILLS
CHICAGO	S111885096		1034 SHERIDAN RD		SPILLS
CHICAGO	S111899665		5556 N SHERIDAN		SPILLS
CHICAGO	S111892457		7740 N SHERIDAN		SPILLS
CHICAGO	S111896801		1152 SHERIDAN RD		SPILLS
CHICAGO	S111906295		6601 N SHERIDAN		SPILLS
CHICAGO	S111906471		5556 W SHERIDAN		SPILLS
CHICAGO	S111894796		2930 N SHERIDAN		SPILLS
CHICAGO	S111900312		7740 N SHERIDAN		SPILLS
CHICAGO	S111882763		6590 N SHERIDAN		SPILLS
CHICAGO	S111879757		7550 N SHERIDAN		SPILLS
CHICAGO	S111886233		3241 S SHIELDS		SPILLS
CHICAGO	S111896666		3250 S SHIELDS		SPILLS
CHICAGO	S111882236		3229 S SHIELDS		SPILLS
CHICAGO	S111892450		3208 S SHIELDS		SPILLS
CHICAGO	S111900729		3226 S SHIELDS		SPILLS
CHICAGO	S111887324		7337 S SHORE DR		SPILLS
CHICAGO	S111886440		7022 S SHORE DR		SPILLS
CHICAGO	S111898057		7901 S SHORE DR		SPILLS
CHICAGO	S111880690		7050 S SHORE DR		SPILLS
CHICAGO	S111911359		5491 S SHORE DR		SPILLS
CHICAGO	S111890331		7715 S SHORE DR		SPILLS
CHICAGO	2000670414	E SHORE DRIVE	E SHORE DRIVE		ERNS
CHICAGO	S111877457		7034 S SHR		SPILLS
CHICAGO	94391406	SOUTH SIDE OF LOWER WACKER DRIVE INTERSECT CLARK ABOVE	SOUTH SIDE OF LOWER WACKER DRIVE INTERSECT CLARK ABOVE		ERNS
CHICAGO	8875208	EAST SIDE PARKING LOT	EAST SIDE PARKING LOT		ERNS
CHICAGO	8856310	EAST SIDE BELMONT HARBOUR	EAST SIDE BELMONT HARBOUR		ERNS
CHICAGO	98437355	WEST SIDE BURNHAM HARBOR FIRST DOCK NORTH OF THE HARBOR MAST	WEST SIDE BURNHAM HARBOR FIRST DOCK NORTH OF THE HARBOR MAST		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111892533		E SIDE OF STONY IS		SPILLS
CHICAGO	S111893508		4559 SIMONDS DR		SPILLS
CHICAGO	2008875743	SLIP 22	SLIP 22		ERNS
CHICAGO	S111906844		1328 W SMT		SPILLS
CHICAGO	2012105223		11800 S SONEY ISLAND AVE		ERNS
CHICAGO	98445525	SOURCE:OVERSIZED GLASS JAR CONTAINING 3 GLASS CYLANDERS INSI	SOURCE:OVERSIZED GLASS JAR CONTAINING 3 GLASS CYLANDERS INSI		ERNS
CHICAGO	2009925390	116 54 SOUTH THROOP	116 54 SOUTH THROOP		ERNS
CHICAGO	2008860563	900 OF SOUTH ASHLEN AVE	900 OF SOUTH ASHLEN AVE		ERNS
CHICAGO	2012100548		8756361 12600 SOUTH TORRENCE A		ERNS
CHICAGO	S111925858		12500 SOUTH		SPILLS
CHICAGO	873474	SOUTHBOUND FROM LOCKS BTWN CHICAGO RIVER LAKE MICHIGAN	SOUTHBOUND FROM LOCKS BTWN CHICAGO RIVER & LAKE MICHIGAN		ERNS
CHICAGO	S111885928		3601 N SOUTHPORT		SPILLS
CHICAGO	S111885495		3137 N SOUTHPORT		SPILLS
CHICAGO	S111878119		2748 N SOUTHPORT		SPILLS
CHICAGO	2007330921	1425 SOUTHWESTERN AVE	1425 SOUTHWESTERN AVE		ERNS
CHICAGO	S109366337		1425 SOUTHWESTERN AVE		SPILLS
CHICAGO	2011988534		10222 SOUTHWESTERN AVE		ERNS
CHICAGO	2011992609		1425 SOUTHWESTERN AVE		ERNS
CHICAGO	S111895146		10402 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111903718		4711 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111891623		7858 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111911199		4515 SOUTHWESTERN BLVD		SPILLS
CHICAGO	S111906652		4724 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111896446		2502 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111924448		1425 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111902967		3815 SOUTHWESTERN		SPILLS
CHICAGO	S111921939		10700 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111901745		7400 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111891517		4318 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111906912		6603 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111906911		6606 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111899529		5370 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111897698		10133 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111911868		10257 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111896355		2512 SOUTHWESTERN		SPILLS
CHICAGO	S111920220		1425 SOUTHWESTERN		SPILLS
CHICAGO	S111895389		1425 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111927875		1425 SOUTHWESTERN AVE		SPILLS
CHICAGO	S108046095		3201 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111909669		5515 S SOYER AVE		SPILLS
CHICAGO	94391108	3500 N SPALDING	3500 N SPALDING		ERNS
CHICAGO	S111912014		5148 N SPALDING		SPILLS
CHICAGO	S111913690		535 N SPAULDING		SPILLS
CHICAGO	S111901710		3018 S SPAULDING ST		SPILLS
CHICAGO	S111895582		1750 N SPRINGFIELD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111919064		1938 N SPRINGFIELD		SPILLS
CHICAGO	S111890732		1747 N SPRINGFIELD		SPILLS
CHICAGO	91200423	22 ND ST AND ASHLAND ST	22 ND ST AND ASHLAND ST		ERNS
CHICAGO	S111910036		ST		SPILLS
CHICAGO	S111912360		2101 W ST 59TH ST		SPILLS
CHICAGO	S111894256		ST		SPILLS
CHICAGO	S111893142		ST		SPILLS
CHICAGO	S111927201		N ST ALOYSIUS PARISH 1510		SPILLS
CHICAGO	S111889364		STAGING AREA B MOUNT PROSPECTS FLD		SPILLS
CHICAGO	S111909606		4101 S STATE		SPILLS
CHICAGO	S111901197		553 S STATE		SPILLS
CHICAGO	S111898356		8701 S STATE		SPILLS
CHICAGO	S111897367		STATION		SPILLS
CHICAGO	S111919017		8301 S STEWART		SPILLS
CHICAGO	S111900362		6201 S STEWART		SPILLS
CHICAGO	99627482	STOLT HAVEN DOCK CALSAG MI 327.9	STOLT HAVEN DOCK CALSAG MI 327.9		ERNS
CHICAGO	92252272	12500 S STONEY ISLAND CHICAGO STEEL AND PICKEL	12500 S STONEY ISLAND CHICAGO STEEL AND PICKEL		ERNS
CHICAGO	S110278076		12200 S STONEY IS		SPILLS
CHICAGO	S110824930		5800 S STONEY IS		SPILLS
CHICAGO	2011966883	12200 S STONEY ISLAND	12200 S STONEY IS		ERNS
CHICAGO	S110363765		7550 S STONEY ISLAND AVE		SPILLS
CHICAGO	2010938620	7550 SOUTH STONEY ISLAND AVE	7550 S STONEY ISLAND AVE		ERNS
CHICAGO	2007307178	10101 SOUTH STONEY ISLAND	10101 SOUTH STONEY ISLAND		ERNS
CHICAGO	S111926972		11800 S STONEY ISLAND AVE		SPILLS
CHICAGO	S111879366		11700 S STONEY IS		SPILLS
CHICAGO	S111926165		11800 S STONEY ISLAND AVE		SPILLS
CHICAGO	S111925660		11800 S STONEY IS		SPILLS
CHICAGO	S111925661		11800 S STONEY IS		SPILLS
CHICAGO	S111926127		11900 S STONEY ISLAND AVE		SPILLS
CHICAGO	S111926102		122200 S STONEY ISLAND AVE		SPILLS
CHICAGO	2010928199	ETHANOL UNLOADING RACK 12200 SOUTH STONEY ISLAND AVE	12200 S STONEYISLAND AVE		ERNS
CHICAGO	92254413	11700 S. STONY ISL. AVE	11700 S. STONY ISL. AVE		ERNS
CHICAGO	S111886765		8300 S STONY IS		SPILLS
CHICAGO	S111886413		11700 STONY ISLAND AVE		SPILLS
CHICAGO	S111885934		8600 S STONY IS		SPILLS
CHICAGO	S111885885		11700 S STONY AVE		SPILLS
CHICAGO	S111903117		11800 S STONY IS		SPILLS
CHICAGO	S111896675		11800 S STONY IS		SPILLS
CHICAGO	S111884943		18800 S STONY ISLAND AVE		SPILLS
CHICAGO	S111905984		11800 S STONY IS		SPILLS
CHICAGO	S111893201		8555 S STONY IS		SPILLS
CHICAGO	S111877481		11800 S STONY IS		SPILLS
CHICAGO	S111910021		12200 S STONY IS		SPILLS
CHICAGO	S111912300		11800 S STONY IS		SPILLS
CHICAGO	S111883141		11700 S STONY AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111881396		8950 S STONY IS		SPILLS
CHICAGO	S111890618		1220 S STONY ISLAND AVE		SPILLS
CHICAGO	S111883079		11700 S STONY IS		SPILLS
CHICAGO	S111907328		12901 S STONY IS		SPILLS
CHICAGO	S111889262		6650 STONY IS		SPILLS
CHICAGO	S111903654		8702 S STONY IS		SPILLS
CHICAGO	S111892481		12500 S STONY IS		SPILLS
CHICAGO	S111926788		5800 S STONY IS		SPILLS
CHICAGO	S111882589		12200 S STONY IS		SPILLS
CHICAGO	S111908227		11700 STONY ISLAND AVE		SPILLS
CHICAGO	S111899162		11800 S STONY IS		SPILLS
CHICAGO	S111878711		8720 S STONY ISLAND PKWY		SPILLS
CHICAGO	S111882565		6963 S STONY IS		SPILLS
CHICAGO	S111905216		11800 S STONY IS		SPILLS
CHICAGO	S111893050		10101 S STONY IS		SPILLS
CHICAGO	S111892351		7250 STONY ISLAND AVE		SPILLS
CHICAGO	S111878089		11700 S STONY IS		SPILLS
CHICAGO	S111876742		11700 S STONY IS		SPILLS
CHICAGO	S111894129		12200 S STONY IS		SPILLS
CHICAGO	S111914826		5748 S STONY IS		SPILLS
CHICAGO	S111886574		11800 S STONY IS		SPILLS
CHICAGO	S111902823		11800 S STONY IS		SPILLS
CHICAGO	S111907597		8702 S STONY IS		SPILLS
CHICAGO	S111882370		11700 S STONY AVE		SPILLS
CHICAGO	S111903788		7300 S STONY IS		SPILLS
CHICAGO	S111893955		11800 S STONY IS		SPILLS
CHICAGO	S111883965		7169 S STONY IS		SPILLS
CHICAGO	S111897509		8702 S STONY IS		SPILLS
CHICAGO	98463427	STORAGE TANK ABOVE GROUND / CAUSE UNKNOW	STORAGE TANK ABOVE GROUND / CAUSE UNKNOWN		ERNS
CHICAGO	8713142	DA STUART OIL CO	DA STUART OIL CO		ERNS
CHICAGO	S111902795		8400 S STUART		SPILLS
CHICAGO	2011971898	MILE POST 3.82 SUBDIVISION HARVAD	382 SUBDIVISION HARVAD		ERNS
CHICAGO	2012107483		¯SUBDIVISION SOUTH CHICAGO		ERNS
CHICAGO	S104792906	HUYNH, NAM	1328 W SUMMIT		LUST
CHICAGO	S111904771		4820 W SUNNYSIDE		SPILLS
CHICAGO	S111904417		5420 W SUNNYSIDE		SPILLS
CHICAGO	S111904834		2212 W SUNNYSIDE		SPILLS
CHICAGO	S111888133		259 E SUPERIOR		SPILLS
CHICAGO	S111875761		SUPERIOR & ORLEANS ST NW COR		SPILLS
CHICAGO	S111882731		417 W SUPERIOR		SPILLS
CHICAGO	S111911979		2001 W SUPERIOR RD		SPILLS
CHICAGO	S111888968		1455 W SUPERIOR		SPILLS
CHICAGO	S111911678		1829 N SUPERIOR ST		SPILLS
CHICAGO	S111880128		SUPERIOR ST & FAIRBANKS CT		SPILLS
CHICAGO	S111905783		360 W SUPERIOR		SPILLS
CHICAGO	2006799199	314 WEST SUPPERIOR	314 WEST SUPPERIOR		ERNS
CHICAGO	S108047374		610 SWEST CARGO		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111877245		TAB CHEMICAL COMPANY & 4801ST S AUSTIN		SPILLS
CHICAGO	S111927868		TAFT AVENUE AND IRVING PARK RD		SPILLS
CHICAGO	90181001	928 TAG/ARF FAC.	928 TAG/ARF FAC.		ERNS
CHICAGO	90183057	928 TAG/ARF FAC.	928 TAG/ARF FAC.		ERNS
CHICAGO	S111921390		7263 S TALCOTT AVE		SPILLS
CHICAGO	S111894371		7432 W TALCOTT		SPILLS
CHICAGO	97412379	2412 N TALLMAN	2412 N TALLMAN		ERNS
CHICAGO	S111915208		5838 S TALMAN ST		SPILLS
CHICAGO	S111895751		4814 N TALMAN ST		SPILLS
CHICAGO	S111898829		3637 TALMAN		SPILLS
CHICAGO	96516458	TANK TRUCK/VALVE ON TANK ACCIDENTALLY OPENED	TANK TRUCK/VALVE ON TANK ACCIDENTALLY OPENED		ERNS
CHICAGO	879839	RR TANK CAR NO.NATX 29908, RR MILE 510 CHICAGO DIST FORT WAY	RR TANK CAR NO.NATX 29908, RR MILE 510 CHICAGO DIST FORT WAY		ERNS
CHICAGO	98457221	TANK FARM 4	TANK FARM 4		ERNS
CHICAGO	94372706	TAYLOR AND HOYNE ST	TAYLOR AND HOYNE ST		ERNS
CHICAGO	S111887268		2537 W TAYLOR		SPILLS
CHICAGO	S111894677		2900 W TAYLOR AVE		SPILLS
CHICAGO	S111913489		TAYLOR ST		SPILLS
CHICAGO	S111913435		3050 W TAYLOR		SPILLS
CHICAGO	S111895465		TAYLOR & DES PLAINES		SPILLS
CHICAGO	S111908553		1717 W TAYLOR		SPILLS
CHICAGO	S111890880		TAYLOR & HOYNE STS		SPILLS
CHICAGO	S111888741		4243 W TAYLOR		SPILLS
CHICAGO	S111899048		840 W TAYLOR		SPILLS
CHICAGO	S109366450		C TERMINAL OHARE FLD		SPILLS
CHICAGO	S111218725		TERMINAL 5		SPILLS
CHICAGO	S111924466		C TERMINAL AT OHARE FLD		SPILLS
CHICAGO	S111921971		TERMINAL 5		SPILLS
CHICAGO	S111911572		W TERMINAL 2		SPILLS
CHICAGO	S109366336		13700 S TERRY		SPILLS
CHICAGO	S111924314		13700 S TERRY		SPILLS
CHICAGO	872210	IN THE FACTORY THERE	IN THE FACTORY THERE		ERNS
CHICAGO	2008883715	THE MOUTH OF THE CHICAGO RIVER	THE MOUTH OF THE CHICAGO RIVER		ERNS
CHICAGO	S111900324		THE ELSDON YARD ON 51ST ST		SPILLS
CHICAGO	S111924611		520 THEDEARBORNSUBDIVISIONNEARUNIO AVE		SPILLS
CHICAGO	S111886227		4950 W THOMAS		SPILLS
CHICAGO	S111876389		4950 W THOMAS		SPILLS
CHICAGO	S111897519		4520 W THOMAS		SPILLS
CHICAGO	2000531893	THOMAS STREET	THOMAS STREET	0	ERNS
CHICAGO	S111890649		10400 THROOP ST		SPILLS
CHICAGO	S111895555		10403 S THROOP		SPILLS
CHICAGO	S111895225		2141 THROOP ST		SPILLS
CHICAGO	S111883395		1612 N THROOP		SPILLS
CHICAGO	98427144	GO TO CARANDOLET AVE GO W. ON 126 ST. TO TERMINAL 2926 EAST	GO TO CARANDOLET AVE GO W. ON 126 ST. TO TERMINAL 2926 EAST		ERNS
CHICAGO	S111894196		ON TO		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111878972		13511 S TORENCE		SPILLS
CHICAGO	S111878436		11236 S TORENCE AVE		SPILLS
CHICAGO	S111895491		11236 S TORENCE AVE		SPILLS
CHICAGO	99637648	11236 TORRANCE AVE	11236 TORRANCE AVE		ERNS
CHICAGO	S111905597		11236 TORRANCE AVE		SPILLS
CHICAGO	S111902659		11236 TORRANCE AVE		SPILLS
CHICAGO	S111894493		11236 S TORRANCE AVE		SPILLS
CHICAGO	93332215	TORRENCE AVE BRIDGE MILE MARKER 328.1	TORRENCE AVE BRIDGE MILE MARKER 328.1		ERNS
CHICAGO	S111885099		11700 TORRENCE		SPILLS
CHICAGO	S111887213		10302 TORRENCE		SPILLS
CHICAGO	2011985606		13227 S TORRENCE		ERNS
CHICAGO	S111905391		11236 TORRENCE AVE		SPILLS
CHICAGO	S111909315		11236 S TORRENCE		SPILLS
CHICAGO	S111897261		11236 TORRENCE AVE		SPILLS
CHICAGO	S111891610		122201 TORRENCE		SPILLS
CHICAGO	S111903957		11236 TORRENCE AVE		SPILLS
CHICAGO	S111902710		11236 TORRENCE AVE		SPILLS
CHICAGO	S111901179		11236 TORRENCE AVE		SPILLS
CHICAGO	S111901455		11236 TORRENCE AVE		SPILLS
CHICAGO	S111909764		11236 S TORRENCE		SPILLS
CHICAGO	S111913519		13327 S TORRENCE YARD		SPILLS
CHICAGO	S111901781		11236 TORRENCE AVE		SPILLS
CHICAGO	S111902104		11236 TORRENCE AVE		SPILLS
CHICAGO	S111900766		11236 TORRENCE AVE		SPILLS
CHICAGO	S111898746		11236 TORRENCE AVE		SPILLS
CHICAGO	S111889481		13000 S TORRENCE		SPILLS
CHICAGO	S111896050		11236 S TORRENCE		SPILLS
CHICAGO	S111902798		11236 TORRENCE AVE		SPILLS
CHICAGO	S111905729		11236 TORRENCE AVE		SPILLS
CHICAGO	S111895349		11236 TORRENCE AVE		SPILLS
CHICAGO	S111906758		10050 S TORRENCE		SPILLS
CHICAGO	S111911510		TORRENCE AVENUE ABOUT 111TH ST		SPILLS
CHICAGO	S111899515		2620 W TOUCHY AVE		SPILLS
CHICAGO	S111877417		11601 W TOUGHY AVE		SPILLS
CHICAGO	S111890367		6401 W TOUGHY AVE		SPILLS
CHICAGO	S111883888		TOUHEY & WESTERN		SPILLS
CHICAGO	S111887307		11601 W TOUHY AVE		SPILLS
CHICAGO	S111888456		11601 TOUHY OHARE AIRPORT		SPILLS
CHICAGO	S111898642		3514 W TOUHY		SPILLS
CHICAGO	S111911183		TOUHY AVE & MOUNT PROSPECT RD HANGER		SPILLS
CHICAGO	S111883440		11601 W TOUHY OHARE INT AIRPORT		SPILLS
CHICAGO	S111893683		11601 W TOUHY AVE		SPILLS
CHICAGO	S111881647		7706 W TOUHY		SPILLS
CHICAGO	S111882443		11601 W TOUHY		SPILLS
CHICAGO	S111889117		6000 W TOUHY		SPILLS
CHICAGO	S111914080		TOUHY & PROSPECT ST		SPILLS
CHICAGO	S111900922		11601 W TOUHY AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S108480172		OF TOUHY AVE		SPILLS
CHICAGO	2000519233	TRACK 5	TRACK 5	0	ERNS
CHICAGO	2000544477	TRACKS	TRACKS	0	ERNS
CHICAGO	2001555601	TRAIN DERAILMENT	TRAIN DERAILMENT	0	ERNS
CHICAGO	S111891925		4343 S TRIPP		SPILLS
CHICAGO	S111875554		3030 N TRIPP		SPILLS
CHICAGO	S111896507		2851 S TROY		SPILLS
CHICAGO	S111905070		2100 S TROY		SPILLS
CHICAGO	S111905907		3836 N TROY		SPILLS
CHICAGO	S111919974		2849 S TROY		SPILLS
CHICAGO	S111883683		2727 S TROY		SPILLS
CHICAGO	S111892140		2431 S TROY		SPILLS
CHICAGO	S111914562		2141 S TROY		SPILLS
CHICAGO	S108047160		N TRUCK IS		SPILLS
CHICAGO	S111903578		401 N TRUMBULL		SPILLS
CHICAGO	S111886937		4100 S UN		SPILLS
CHICAGO	S111903107		4300 S UN		SPILLS
CHICAGO	S111899240		360 N UN		SPILLS
CHICAGO	S111925742		3700 S UN		SPILLS
CHICAGO	S111925743		3700 S UN		SPILLS
CHICAGO	S111892924		5000 S UN		SPILLS
CHICAGO	S111908824		2205 S UN		SPILLS
CHICAGO	94364292	UNDER NEATH THE BRIDGE AT MADISON AVE IN THE CHICAGO RIVER	UNDER NEATH THE BRIDGE AT MADISON AVE IN THE CHICAGO RIVER		ERNS
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS
CHICAGO	S109550607		UNION AVE		SPILLS
CHICAGO	S111899041		360 N UNION ST		SPILLS
CHICAGO	S111889204		UNITED AIRLINES & KITCHEN OHARE AIRPORT		SPILLS
CHICAGO	91201187	UNITED AIRLINES OHARE TERMINAL NO. 1	UNITED AIRLINES OHARE TERMINAL NO. 1		ERNS
CHICAGO	S111925507		7122 UNIVERSITY		SPILLS
CHICAGO	S108047843		UNKNOWN		SPILLS
CHICAGO	S108047836		UNKNOWN		SPILLS
CHICAGO	S108047834		UNKNOWN		SPILLS
CHICAGO	S108047832		UNKNOWN		SPILLS
CHICAGO	S108047830		UNKNOWN		SPILLS
CHICAGO	S108047828		UNKNOWN		SPILLS
CHICAGO	S108047825		UNKNOWN		SPILLS
CHICAGO	S108047813		UNKNOWN		SPILLS
CHICAGO	S108047808		UNKNOWN		SPILLS
CHICAGO	S108047803		UNKNOWN		SPILLS
CHICAGO	S108047795		UNKNOWN		SPILLS
CHICAGO	S108047794		UNKNOWN		SPILLS
CHICAGO	S108047793		UNKNOWN		SPILLS
CHICAGO	S108047600		UNKNOWN		SPILLS
CHICAGO	S109700127		UNKNOWN		SPILLS
CHICAGO	S109167215		UNKNOWN		SPILLS
CHICAGO	S108047820		UNKNOWN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111887120		UNKNOWN		SPILLS
CHICAGO	S111911935		UNKNOWN		SPILLS
CHICAGO	S111882598		UNKNOWN		SPILLS
CHICAGO	S111905044		UNKNOWN		SPILLS
CHICAGO	S111883280		UNKNOWN		SPILLS
CHICAGO	S111912652		UNKNOWN		SPILLS
CHICAGO	S111879931		URBAN AREA		SPILLS
CHICAGO	91226485	USAFR AND AIR GUARD BASE O'HARE AIRPORT BLDG NO.4	USAFR AND AIR GUARD BASE O'HARE AIRPORT BLDG NO.4		ERNS
CHICAGO	8857978	VACANT AREA BET.POLK & TAYLOR E OF CANAL	VACANT AREA BET.POLK & TAYLOR E OF CANAL		ERNS
CHICAGO	S111908778		VAN BUREN & WABASH		SPILLS
CHICAGO	S111896178		9700 S VAN VLISSIGEN		SPILLS
CHICAGO	S111880063		1014 W VAN BUREN		SPILLS
CHICAGO	S111879524		2630 W VANBURAN		SPILLS
CHICAGO	S111888140		VANBUREN & ASHLAND		SPILLS
CHICAGO	S111876564		1030 W VANBUREN		SPILLS
CHICAGO	S111911975		71 W VANBUREN ST		SPILLS
CHICAGO	S111911681		9431 S VERNON		SPILLS
CHICAGO	S109699841		10000 VESSIE COLEMAN DR		SPILLS
CHICAGO	S111925006		10 000 VESSIE COLEMAN DR		SPILLS
CHICAGO	2000532134	VICINITY OF 49TH	VICINITY OF 49TH	0	ERNS
CHICAGO	S111900909		9858 S VINCENNES ST		SPILLS
CHICAGO	S111906387		1201 S VINCENNES		SPILLS
CHICAGO	S111881359		7801 S VINCENNES		SPILLS
CHICAGO	S111905191		11816 S VINCENNES		SPILLS
CHICAGO	S111888766		11163 S VINCENNES		SPILLS
CHICAGO	S111880752		7114 VINCENNES AVE		SPILLS
CHICAGO	S111915029		8654 S VINCENNES		SPILLS
CHICAGO	S111893309		7936 S VINCENNES		SPILLS
CHICAGO	S111897959		10658 S VINCENNES		SPILLS
CHICAGO	S111897844		10658 S VINCENNES		SPILLS
CHICAGO	S111876993		VINCENTVILLE YARDS		SPILLS
CHICAGO	S111899176		9906 S VINNCENNES AVE		SPILLS
CHICAGO	S111890990		4764 N VIRGINIA		SPILLS
CHICAGO	S111892224		5 W		SPILLS
CHICAGO	S111880018		1914 16 W IRVING PARK RD		SPILLS
CHICAGO	S111889328		2155 WABANSIA		SPILLS
CHICAGO	S111911181		2255 W WABANSIA		SPILLS
CHICAGO	S111894579		1843 W WABANSIA ST		SPILLS
CHICAGO	S111877892		2213 W WABANSIA		SPILLS
CHICAGO	S111893375		1401 W WABANSIA		SPILLS
CHICAGO	S111887893		1220 WABASH		SPILLS
CHICAGO	S111884984		6215 S WABASH		SPILLS
CHICAGO	S111887493		137 N WABASH		SPILLS
CHICAGO	S111896665		218 S WABASH		SPILLS
CHICAGO	S111913362		9402 S WABASH		SPILLS
CHICAGO	S111906459		5100 S WABASH		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111927389		WABASH AVE AND CHICAGO RIV		SPILLS
CHICAGO	S111927380		4654 S WABASH		SPILLS
CHICAGO	S111913446		8823 S WABASH		SPILLS
CHICAGO	S111901423		1515 WABASH		SPILLS
CHICAGO	S111897239		2705 S WABASH		SPILLS
CHICAGO	S111902448		4256 S WABASH		SPILLS
CHICAGO	S111883759		1608 S WABASH		SPILLS
CHICAGO	S111898104		1415 S WABASH ST		SPILLS
CHICAGO	S111876072		1758 S WABASH		SPILLS
CHICAGO	S111914807		600 S WABASH		SPILLS
CHICAGO	S111893632		219 S WABASH		SPILLS
CHICAGO	S111878563		2111 S WABASH		SPILLS
CHICAGO	2000521948	WABASH YARD	WABASH YARD	0	ERNS
CHICAGO	S111885179		20 N WACKER		SPILLS
CHICAGO	S111890261		311 S WACKER		SPILLS
CHICAGO	S111900757		2204 S WALBASH AVE		SPILLS
CHICAGO	S111885136		411 N WALCOTT		SPILLS
CHICAGO	S111910247		1600 S WALCOTT ST		SPILLS
CHICAGO	S111908808		9952 WALDON PKWY		SPILLS
CHICAGO	92293814	WEST WALL OF TURNING BASIN	WEST WALL OF TURNING BASIN		ERNS
CHICAGO	91236316	WEST WALL OF BURNHAM HARBOR	WEST WALL OF BURNHAM HARBOR		ERNS
CHICAGO	S111882205		8201 S WALLACE		SPILLS
CHICAGO	S111891305		4500 S WALLACE		SPILLS
CHICAGO	S111901230		8201 S WALLACE AVE		SPILLS
CHICAGO	S111892599		2330 S WALLACE		SPILLS
CHICAGO	98434467	8201 SOUTH WALLAS AVE	8201 SOUTH WALLAS AVE		ERNS
CHICAGO	S111897291		2234 W WALNUT		SPILLS
CHICAGO	S111894595		2000 W WALNUT		SPILLS
CHICAGO	S111905779		2332 W WALNUT		SPILLS
CHICAGO	2004733570	140 WALTON ST	140 WALTON ST		ERNS
CHICAGO	S111887409		163 E WALTON		SPILLS
CHICAGO	S111883863		315 W WALTON		SPILLS
CHICAGO	S111881957		1322 W WALTON		SPILLS
CHICAGO	S111877252		3144 W WALTON		SPILLS
CHICAGO	S111913617		4820 W WARNER		SPILLS
CHICAGO	2001554430	WARREN ST	WARREN ST	0	ERNS
CHICAGO	S110613587		1712 W WARREN		SPILLS
CHICAGO	2010951565	1712 WEST WARREN ST.	1712 W WARREN ST		ERNS
CHICAGO	S111895840		1621 W WASHBURN ST		SPILLS
CHICAGO	S111910800		221 N WASHENAW AVE		SPILLS
CHICAGO	94378898	WASHINGTON ST BRIDGE	WASHINGTON ST BRIDGE		ERNS
CHICAGO	S111886202		4353 W WASHINGTON		SPILLS
CHICAGO	S111885312		651 W WASHINGTON		SPILLS
CHICAGO	S111896609		915 W WASHINGTON		SPILLS
CHICAGO	S111890212		55 E WASHINGTON		SPILLS
CHICAGO	S111889890		2627 WASHINGTON BLVD		SPILLS
CHICAGO	S111896149		1145 W WASHINGTON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111883294		1045 W WASHINGTON		SPILLS
CHICAGO	S111920406		740 W WASHINGTON		SPILLS
CHICAGO	S111914841		909 WASHINGTON ST		SPILLS
CHICAGO	S111927892		1605 N WASHINGTON AVE		SPILLS
CHICAGO	S111927788		1245 W WASHINGTON		SPILLS
CHICAGO	S111883491		1304 W WASHINGTON		SPILLS
CHICAGO	S111877107		735 S WASHTENAW		SPILLS
CHICAGO	S111926670		1260 S WASHTENAW		SPILLS
CHICAGO	S111896441		5802 N WASHTENAW		SPILLS
CHICAGO	S111893809		3250 N WASHTENAW		SPILLS
CHICAGO	S111900082		801 S WASHTENAW		SPILLS
CHICAGO	S111900933		3724 S WASHTENAW		SPILLS
CHICAGO	S111894331		3250 N WASHTENAW		SPILLS
CHICAGO	92264733	40W SOUTH WATER MARKET	40W SOUTH WATER MARKET		ERNS
CHICAGO	98434885	WATER AND SOME KIND OF CHEMICALS	WATER AND SOME KIND OF CHEMICALS		ERNS
CHICAGO	S111887555		23 S WATER MARKET		SPILLS
CHICAGO	S111905413		445 E WATER ST		SPILLS
CHICAGO	90180221	3210 WATLING PLANT 3	3210 WATLING PLANT 3		ERNS
CHICAGO	S111911093		2255 W WAVANSIA		SPILLS
CHICAGO	S111879675		2510 N WAYNE		SPILLS
CHICAGO	S109092813		WB		SPILLS
CHICAGO	S111896503		1334 W WEBSTER		SPILLS
CHICAGO	S111890715		1471 W WEBSTER		SPILLS
CHICAGO	S111886989		911 WEED ST		SPILLS
CHICAGO	S111900937		1001 W WEED		SPILLS
CHICAGO	94355692	WELL ST BRIDGE	WELL ST BRIDGE		ERNS
CHICAGO	2006819150	WELLER AND LAKE STREETS	WELLER AND LAKE STREETS		ERNS
CHICAGO	2008866609	WELLINGTON AVE.	WELLINGTON AVE.		ERNS
CHICAGO	S111879189		1701 W WELLINGTON		SPILLS
CHICAGO	2000671191	H WELLS ST	H WELLS ST		ERNS
CHICAGO	S108669706		WENTWORTH AVE & CERMACK		SPILLS
CHICAGO	S111888398		6550 S WENTWORTH		SPILLS
CHICAGO	S111881887		4600 S WENTWORTH		SPILLS
CHICAGO	S111891981		1800 S WENTWORTH		SPILLS
CHICAGO	S111882078		1934 S WENTWORTH		SPILLS
CHICAGO	S111906575		7626 S WENTWORTH ST		SPILLS
CHICAGO	S111902013		6601 S WENTWORTH		SPILLS
CHICAGO	S111878620		6543 S WENTWORTH		SPILLS
CHICAGO	S108045271		10258 S WEST AVE		SPILLS
CHICAGO	2005616447	600 WEST	600 WEST		ERNS
CHICAGO	S111879781		211 S WEST HILL ST		SPILLS
CHICAGO	S108045996		290 WESTBOUND		SPILLS
CHICAGO	94391467	I-290 WESTBOUND/EAST OF ASHLAND AVE	I-290 WESTBOUND/EAST OF ASHLAND AVE		ERNS
CHICAGO	S111898397		4005 W WESTEND		SPILLS
CHICAGO	S111879285		11030 S WESTER AVE		SPILLS
CHICAGO	S108046688		7600 WESTERN ST		SPILLS
CHICAGO	93331395	WESTERN AVE BETWEEN 26TH AND 31ST STS AT THE RAIL	WESTERN AVE BETWEEN 26TH AND 31ST STS AT THE RAIL		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2002593093	1400 SOUTH WESTERN BLVD	1400 SOUTH WESTERN BLVD	0	ERNS
CHICAGO	974084921	WESTERN AVE. RAILYARD 2741 WEST GRAND	WESTERN AVE. RAILYARD 2741 WEST GRAND		ERNS
CHICAGO	974084920	WESTERN AVE. RAILYARD 2741 WEST GRAND	WESTERN AVE. RAILYARD 2741 WEST GRAND		ERNS
CHICAGO	2009909153	WESTERN AVENUE	WESTERN AVENUE		ERNS
CHICAGO	2008909153	WESTERN AVENUE	WESTERN AVENUE		ERNS
CHICAGO	2008877190	WESTERN STATION	WESTERN STATION		ERNS
CHICAGO	S110824846		5102 S WESTERN		SPILLS
CHICAGO	2006784912	7600 WESTERN ST.	7600 WESTERN ST.		ERNS
CHICAGO	S111887275		1414 S WESTERN		SPILLS
CHICAGO	S111886759		6150 N WESTERN		SPILLS
CHICAGO	S111913491		WESTERN & ROCKWELL		SPILLS
CHICAGO	S111909338		1425 S WESTERN ST		SPILLS
CHICAGO	S111922484		2072 N WESTERN		SPILLS
CHICAGO	S111890955		6455 S WESTERN		SPILLS
CHICAGO	S111905914		2801 N WESTERN		SPILLS
CHICAGO	S111884545		7740 WESTERN AVE		SPILLS
CHICAGO	S111918691		WESTERN AVE & SW HWY LANDERS INTERMODAL YARD		SPILLS
CHICAGO	S111899511		8659 WESTERN		SPILLS
CHICAGO	S111914197		6515 WESTERN AVE		SPILLS
CHICAGO	S111918955		14625 S WESTERN		SPILLS
CHICAGO	S111918631		2133 N WESTERN		SPILLS
CHICAGO	S111880985		7900 S WESTERN		SPILLS
CHICAGO	S111894411		3200 S WESTERN		SPILLS
CHICAGO	S111898374		3223 S WESTERN		SPILLS
CHICAGO	S111915386		225 N WESTERN AREA		SPILLS
CHICAGO	S111906762		WESTERN & IRVING PARK STS		SPILLS
CHICAGO	S111903771		WESTERN AVE		SPILLS
CHICAGO	S111906184		WESTERN AVE		SPILLS
CHICAGO	S111900618		4346 N WESTERN		SPILLS
CHICAGO	90157530	11044 SOUTH WESTERN AVE IN AN ALLEY TO THE WEST OF ABOVE ADD	11044 SOUTH WESTERN AVE IN AN ALLEY TO THE WEST OF ABOVE ADD		ERNS
CHICAGO	2002593045	1400 SOUTH WESTERN BLVD	1400 SOUTH WESTERN BLVD	0	ERNS
CHICAGO	2011991097		7748 WESTGLENLAKE AVE		ERNS
CHICAGO	2011993259		WESTMONT		ERNS
CHICAGO	99610647	1425 SOUTH WESTON GLOBAL YARD	1425 SOUTH WESTON GLOBAL YARD		ERNS
CHICAGO	S111903934		1425 S WESTON		SPILLS
CHICAGO	S111893554		3943 N WHIPPLE		SPILLS
CHICAGO	S111912437		1745 N WHIPPLE		SPILLS
CHICAGO	S111895905		319 N WHIPPLE		SPILLS
CHICAGO	S111884226		319 N WHIPPLE		SPILLS
CHICAGO	S111890404		4801 S WHIPPLE		SPILLS
CHICAGO	S108480121		BP WHITTING FACILITY		SPILLS
CHICAGO	2010938096	5500 N. WILCOCK	5500 N WILCOCK		ERNS
CHICAGO	2009916797	3937 WILCOTT ROAD	3937 WILCOTT ROAD		ERNS
CHICAGO	S110363742		5500 N WILCOX		SPILLS
CHICAGO	S111910988		4219 W WILCOX		SPILLS
CHICAGO	S111909507		1754 N WILMOT		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2004743433	WILSON ST AND MAIN	WILSON ST AND MAIN		ERNS
CHICAGO	2005632034	105 W WILSON STREET	105 W WILSON ST		ERNS
CHICAGO	S111908769		2751 W WILSON CHICAGO RIV		SPILLS
CHICAGO	S111900202		4808 WILSON AVE		SPILLS
CHICAGO	S111926870		4850 W WILSON		SPILLS
CHICAGO	S111899857		931 W WILSON		SPILLS
CHICAGO	S111893367		OF WILSON AVE		SPILLS
CHICAGO	S111901526		1915 N WINCHESTER		SPILLS
CHICAGO	S111882930		4836 WINCHESTER AVE		SPILLS
CHICAGO	S111897095		1610 N WINCHESTER		SPILLS
CHICAGO	S111891114		1742 N WINCHESTER		SPILLS
CHICAGO	S111894446		8804 S WINCHESTER		SPILLS
CHICAGO	S111880578		4550 N WINCHESTER		SPILLS
CHICAGO	S111919386		7372 N WINCHESTER		SPILLS
CHICAGO	S111894899		1276 WINFIELD MOODY MED CTR N		SPILLS
CHICAGO	S111899923		1801 W WINNEMAC		SPILLS
CHICAGO	S111915710		4826 W WINNEMAC ST		SPILLS
CHICAGO	S108046362		4822 W WINNEMACK		SPILLS
CHICAGO	S111885364		940 W WINONA		SPILLS
CHICAGO	S111881205		1436 W WINONA		SPILLS
CHICAGO	S111887251		4949 S WINTHROP		SPILLS
CHICAGO	S111897777		5934 N WINTHROP		SPILLS
CHICAGO	S111877851		5900 N WINTHROP		SPILLS
CHICAGO	S111877012		5900 WINTHROP		SPILLS
CHICAGO	90179382	WISCONSON STEEL WORK SITE 106TH ST. AND TORRENCE AVE.	WISCONSON STEEL WORK SITE 106TH ST. AND TORRENCE AVE.		ERNS
CHICAGO	874879	WITCO CHEMICAL CO., 6200 WEST 51ST ST	WITCO CHEMICAL CO., 6200 WEST 51ST ST		ERNS
CHICAGO	S111902182		800 S WLS		SPILLS
CHICAGO	S111924451		800 SOUTH WLS		SPILLS
CHICAGO	S111921021		4027 S WLS		SPILLS
CHICAGO	S111878623		5454 N WOLCOT		SPILLS
CHICAGO	S111885606		2434 S WOLCOTT		SPILLS
CHICAGO	S111890696		4331 N WOLCOTT		SPILLS
CHICAGO	S111913579		919 N WOLCOTT		SPILLS
CHICAGO	S111904020		5435 N WOLCOTT		SPILLS
CHICAGO	S111906995		350 N WOLCOTT ST		SPILLS
CHICAGO	S111903004		3210 S WOLCOTT		SPILLS
CHICAGO	S111877048		2764 N WOLCOTT		SPILLS
CHICAGO	S111881061		5555 N WOLCOTT		SPILLS
CHICAGO	S111897894		1378 N WOLCOTT ST		SPILLS
CHICAGO	S111911375		915 N WOLCOTT		SPILLS
CHICAGO	S111918649		WOLF CRK & PROVISO RD		SPILLS
CHICAGO	S111903989		2305 W WOLFRAM		SPILLS
CHICAGO	S111906327		2706 N WOLPOTT		SPILLS
CHICAGO	S110122336		WOOD ST & WASHINGTON ST		SPILLS
CHICAGO	S111912323		6316 S WOOD		SPILLS
CHICAGO	S111893096		1824 S WOOD RD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111922733		WOOD ST & ASHLAND AVE		SPILLS
CHICAGO	S111908075		2501 E WOOD		SPILLS
CHICAGO	S111885909		7700 S WOODLAWN		SPILLS
CHICAGO	S111906005		7345 S WOODLAWN		SPILLS
CHICAGO	S111908913		7905 S WOODLAWN		SPILLS
CHICAGO	S109366389		3211 S WOODS ST		SPILLS
CHICAGO	S111878366		833 S WOODS ST		SPILLS
CHICAGO	S110613575		WRIGHTWOOD & COSTNER		SPILLS
CHICAGO	S111888057		4132 W WRIGHTWOOD		SPILLS
CHICAGO	S111926374		WRIGHTWOOD		SPILLS
CHICAGO	S111910994		1 S YARD1400WESTERN AVE		SPILLS
CHICAGO	S111927845		1 YARD1425WESTERN AVE		SPILLS
CHICAGO	S111926647		3 N YORK		SPILLS
CHICAGO	S111904229		1819 YORK RD		SPILLS
CHICAGO	S111890130		6825 N YORK RD		SPILLS
CHICAGO	S110685334		3 N YORK		SPILLS
CHICAGO	S109366324		10510 W ZEMKE RD		SPILLS
CHICAGO	S111924380		10510 W ZEMKE RD		SPILLS
COOK COUNTY	2011981404	MP 1.33 ABERDEEN ST	MP 1.33 ABERDEEN ST		ERNS
COOK COUNTY	2011973076	2040 EAST 106TH ST	2040 EAST 106TH ST		ERNS
COOK COUNTY	2010946140	11TH AND CANAL	11TH AND CANAL		ERNS
COOK COUNTY	2011972549	5601 W 26TH ST	5601 W 26TH ST		ERNS
COOK COUNTY	2011972669	MP 29.8 200 YARDS WEST OF BURNHAM AVE	MP 29.8 200 YARDS WEST OF BURNHAM AVE		ERNS
COOK COUNTY	2011980248	MP 6.1	MP 6.1		ERNS
COOK COUNTY	S111927636		8500 W. 68TH ST.		SPILLS
COOK COUNTY	2011980370	8500 W. 68TH STREET	8500 W. 68TH STREET		ERNS
COOK COUNTY	2011974764	7300 WEST 71ST ST	7300 WEST 71ST ST		ERNS
COOK COUNTY	2011972239	7351 SOUTH 78TH AVE	7351 SOUTH 78TH AVE		ERNS
COOK COUNTY	2010960150	95TH AND VINCENNES	95TH AND VINCENNES		ERNS
COOK COUNTY	2010943534	ON A BEARING OF 020 DEG (NNE)	ON A BEARING OF 020 DEG (NNE)		ERNS
COOK COUNTY	2011973021	4551 WEST ADAMS BLVD	4551 WEST ADAMS BLVD		ERNS
COOK COUNTY	2008915423	2436 ADDISON STREET	2436 ADDISON STREET		ERNS
COOK COUNTY	2011977407	87 AND LAGRANGE ST.	87 AND LAGRANGE ST.		ERNS
COOK COUNTY	2011972225	C AND M SUBDIVISION MP B 0.0 TO B 2.9	C AND M SUBDIVISION MP B 0.0 TO B 2.9		ERNS
COOK COUNTY	2011979907	ASHLAND AVE YARD NONE	ASHLAND AVE YARD NONE		ERNS
COOK COUNTY	2011972006	BARR YARD MILE POST DD2 SUBDIVISION CHICAGO	BARR YARD MILE POST DD2 SUBDIVISION CHICAGO		ERNS
COOK COUNTY	2011978847	BEHIND DOCKSIDE STEEL 11828 SOUTH STONY ISLAND AVE.	BEHIND DOCKSIDE STEEL 11828 SOUTH STONY ISLAND AVE.		ERNS
COOK COUNTY	2011973396	BELMONT AND SHEFFIELD ROAD	BELMONT AND SHEFFIELD ROAD		ERNS
COOK COUNTY	2011977640	BENSENVILLE RAILYARD. 11306 FRANKLIN AVE.	BENSENVILLE RAILYARD. 11306 FRANKLIN AVE.		ERNS
COOK COUNTY	2011974200	BENSONVILLE INTERMODEL / ENTRANCE 4 10800 FRANKLIN AVE	BENSONVILLE INTERMODEL / ENTRANCE 4 10800 FRANKLIN AVE		ERNS
COOK COUNTY	2011981499	BENSONVILLE YARD	BENSONVILLE YARD		ERNS
COOK COUNTY	2009899057	BETWEEN MILE POST CD 520	BETWEEN MILE POST CD 520		ERNS
COOK COUNTY	2008899057	BETWEEN MILE POST CD 520	BETWEEN MILE POST CD 520		ERNS
COOK COUNTY	2011974035	BETWEEN RIVER ROAD AND PEARSON ST. MILEPOST: 16.7	BETWEEN RIVER ROAD AND PEARSON ST. MILEPOST: 16.7		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COOK COUNTY	S111927088		BURNHAM AVE. & BRAINERD AVE		SPILLS
COOK COUNTY	2011972659	BURNHAM AVE, MP 29.8	BURNHAM AVE, MP 29.8		ERNS
COOK COUNTY	2011980118	BURNHAM HARBOR //UNKNOWN SHEEN INCIDENT SLIP P54	BURNHAM HARBOR //UNKNOWN SHEEN INCIDENT SLIP P54		ERNS
COOK COUNTY	2011981381	CARONDELET AVE	CARONDELET AVE		ERNS
COOK COUNTY	2011977694	MP; CD515, RAILYARD	MP; CD515, RAILYARD		ERNS
COOK COUNTY	2011975560	CHATHAM, IL CHATHAM STREET	CHATHAM, IL CHATHAM STREET		ERNS
COOK COUNTY	2009899072	CHICAGO UNION STATION	CHICAGO UNION STATION		ERNS
COOK COUNTY	2009906666	CHICAGO RIVER	CHICAGO RIVER		ERNS
COOK COUNTY	2008899072	CHICAGO UNION STATION	CHICAGO UNION STATION		ERNS
COOK COUNTY	2008906666	CHICAGO RIVER	CHICAGO RIVER		ERNS
COOK COUNTY	2010954447	CHICAGO	CHICAGO		ERNS
COOK COUNTY	S111927095		5700 S CICERO AVE (MIDWAY AIRPORT)		SPILLS
COOK COUNTY	2011977864	CLOSE TO A BUSINESS 13800 S. HALSTEAD	CLOSE TO A BUSINESS 13800 S. HALSTEAD		ERNS
COOK COUNTY	2011981839		DEERBORN SUBDIVISION		ERNS
COOK COUNTY	2011979504	FOOD PROCESSING PLANT 945 WEST 38TH ST.	FOOD PROCESSING PLANT 945 WEST 38TH ST.		ERNS
COOK COUNTY	2011977876	FOOD PROCESSOR 2816 S KILBORN AVE	FOOD PROCESSOR 2816 S KILBORN AVE		ERNS
COOK COUNTY	2011976365	GRADE CROSSING THORNTON RD.	GRADE CROSSING THORNTON RD.		ERNS
COOK COUNTY	2011978150	4805 SOUTH HARLEM AVE	4805 SOUTH HARLEM AVE		ERNS
COOK COUNTY	2011980065	AT ICE HOUSE SPUR TRACK NONE	AT ICE HOUSE SPUR TRACK NONE		ERNS
COOK COUNTY	2011980749	INTERSECTION OF 175TH ST AND COMMUNITY ST	INTERSECTION OF 175TH ST AND COMMUNITY ST		ERNS
COOK COUNTY	2011977731	LAKE MICHIGAN WILLAMETTE PUMPING STATION NORTHSHORE CHANNEL	LAKE MICHIGAN WILLAMETTE PUMPING STATION NORTHSHORE CHANNEL		ERNS
COOK COUNTY	2011975662	301 WEST LAKE ST	301 WEST LAKE ST		ERNS
COOK COUNTY	2011979313	LANDERS RAIL YARD (MILEPOST: 09514 / DEARBORN DIVISION) 7540	LANDERS RAIL YARD (MILEPOST: 09514 / DEARBORN DIVISION) 7540		ERNS
COOK COUNTY	2011974989	MAIN STREET	MAIN STREET		ERNS
COOK COUNTY	2011979082	200 N MANNHEIM	200 N MANNHEIM		ERNS
COOK COUNTY	2009919045	MILE 12.2	MILE 12.2		ERNS
COOK COUNTY	2009898297	MILE POST 16.86	MILE POST 16.86		ERNS
COOK COUNTY	2008898297	MILE POST 16.86	MILE POST 16.86		ERNS
COOK COUNTY	2010933409	MILE POST DC27 NONE	MILE POST DC27 NONE		ERNS
COOK COUNTY	2011980032	MILE POST DC9.9	MILE POST DC9.9		ERNS
COOK COUNTY	2011972397	MILEPOST 6.5 NONE	MILEPOST 6.5 NONE		ERNS
COOK COUNTY	2011976175	MOUNT PROSPECT ROAD AND U.S. 14	MOUNT PROSPECT ROAD AND U.S. 14		ERNS
COOK COUNTY	2010937358	NONE	NONE		ERNS
COOK COUNTY	2010944507	O'BRIEN LOCKS SG 226.0	O'BRIEN LOCKS SG 226.0		ERNS
COOK COUNTY	2011979226	O'HARE AIRPORT	O'HARE AIRPORT		ERNS
COOK COUNTY	2011974979	NORTH OF 67TH STREET ON MAIN 2 6630 SOUTH KENTON	NORTH OF 67TH STREET ON MAIN 2 6630 SOUTH KENTON		ERNS
COOK COUNTY	2008883971	OFF OF LAKE STREET	OFF OF LAKE STREET		ERNS
COOK COUNTY	2011979830	OGDEN SLIP, WEST END, CHICAGO, ILLINOIS 455 E ILLINOIS ST SU	OGDEN SLIP, WEST END, CHICAGO, ILLINOIS 455 E ILLINOIS ST SU		ERNS
COOK COUNTY	S111927768		13700 PERRY AVE.		SPILLS
COOK COUNTY	2011974832	17401 SO POLASKI	17401 SO POLASKI		ERNS
COOK COUNTY	2011980534	PORT OF CHICAGO 2150 STONEY ISLAND AVE. CHICAGO	PORT OF CHICAGO 2150 STONEY ISLAND AVE. CHICAGO		ERNS

Count: 4347 records

COOK COUNTY, IL - ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COOK COUNTY	2011981629	5226 POTTAWATOMIE	5226 POTTAWATOMIE		ERNS
COOK COUNTY	2011980221	PROVISO RAIL YARD 5050 WEST LAKE ST	PROVISO RAIL YARD 5050 WEST LAKE ST		ERNS
COOK COUNTY	2011982154		3500 RACINE		ERNS
COOK COUNTY	2011974559	1111 SMITH ST	1111 SMITH ST		ERNS
COOK COUNTY	2008886889	STATE ST.	STATE ST.		ERNS
COOK COUNTY	2008870404	STATE ROUTE 53 N	STATE ROUTE 53 N		ERNS
COOK COUNTY	2011973999	STORM DRAIN 120 EMERALD DRIVE	STORM DRAIN 120 EMERALD DRIVE		ERNS
COOK COUNTY	2011973706	SUB: CHICAGO ON BNSF MILE 9.6	SUB: CHICAGO ON BNSF MILE 9.6		ERNS
COOK COUNTY	2006799783	TEST	TEST		ERNS
COOK COUNTY	2011976311	THE SOUTH EAST CORNER OF CHICAGO AVE AND DAVIS STREET NONE	THE SOUTH EAST CORNER OF CHICAGO AVE AND DAVIS STREET NONE		ERNS
COOK COUNTY	2011976259	TORRENCE AVE 130TH ST	TORRENCE AVE 130TH ST		ERNS
COOK COUNTY	2006784297	B3 TRACK	B3 TRACK		ERNS
COOK COUNTY	2011978519	UNION STATION	UNION STATION		ERNS
COOK COUNTY	2011976419	556 WATERS EDGE	556 WATERS EDGE		ERNS
COOK COUNTY	S111927287		1425 S. WESTERN AVE		SPILLS
COOK COUNTY	S111927239		7327 S. WOODLAWN AVE.		SPILLS

Section 4

EPA Waste Code Addendum

SECTION 4 - EPA WASTE CODES

There are no epa codes to report for this search area.

Section 5

Databases Searched and Update Dates

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/30/2012	Source: EPA
Date Data Arrived at EDR: 04/05/2012	Telephone: N/A
Date Made Active in Reports: 05/15/2012	Last EDR Contact: 07/05/2012
Number of Days to Update: 40	Next Scheduled EDR Contact: 10/22/2012
	Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/30/2012	Source: EPA
Date Data Arrived at EDR: 04/05/2012	Telephone: N/A
Date Made Active in Reports: 05/15/2012	Last EDR Contact: 07/05/2012
Number of Days to Update: 40	Next Scheduled EDR Contact: 10/22/2012
	Data Release Frequency: Quarterly

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/27/2011	Source: EPA
Date Data Arrived at EDR: 02/27/2012	Telephone: 703-412-9810
Date Made Active in Reports: 03/12/2012	Last EDR Contact: 07/05/2012
Number of Days to Update: 14	Next Scheduled EDR Contact: 09/10/2012
	Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/28/2011	Source: EPA
Date Data Arrived at EDR: 02/27/2012	Telephone: 703-412-9810
Date Made Active in Reports: 03/12/2012	Last EDR Contact: 07/05/2012
Number of Days to Update: 14	Next Scheduled EDR Contact: 09/10/2012
	Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 08/19/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 132

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Quarterly

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/30/2011
Date Data Arrived at EDR: 12/30/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/11/2012
Next Scheduled EDR Contact: 09/24/2012
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/30/2011
Date Data Arrived at EDR: 12/30/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/11/2012
Next Scheduled EDR Contact: 09/24/2012
Data Release Frequency: Varies

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 04/02/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 72

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Annually

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/27/2011
Date Data Arrived at EDR: 06/27/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 78

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/25/2012
Next Scheduled EDR Contact: 10/08/2012
Data Release Frequency: Semi-Annually

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: 09/10/2012
Data Release Frequency: Biennially

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE AND LOCAL RECORDS

SSU: State Sites Unit Listing
The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

Date of Government Version: 07/10/2012
Date Data Arrived at EDR: 07/12/2012
Date Made Active in Reports: 08/02/2012
Number of Days to Update: 21

Source: Illinois Environmental Protection Agency
Telephone: 217-524-4826
Last EDR Contact: 07/12/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Semi-Annually

LF WMRC: Waste Management & Research Center Landfill Database
The Waste Management & Research Center Landfill Database includes records from the Department of Public Health, Department of Mines & Minerals, Illinois Environmental Protection Agency, State Geological Survey, Northeastern Illinois Planning Commission and Pollution Control Board.

Date of Government Version: 12/31/2001
Date Data Arrived at EDR: 10/06/2006
Date Made Active in Reports: 11/06/2006
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 217-333-8940
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: No Update Planned

SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 12/21/2011
Date Made Active in Reports: 12/23/2011
Number of Days to Update: 2

Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Last EDR Contact: 08/03/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Annually

IL NIPC: Solid Waste Landfill Inventory
Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/1988
Date Data Arrived at EDR: 08/01/1994
Date Made Active in Reports: 08/12/1994
Number of Days to Update: 11

Source: Northeastern Illinois Planning Commission
Telephone: 312-454-0400
Last EDR Contact: 05/23/2006
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LUST: Leaking Underground Storage Tank Sites
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/22/2012
Date Data Arrived at EDR: 05/01/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 14

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6762
Last EDR Contact: 07/31/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Semi-Annually

UST: Underground Storage Tank Facility List
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/01/2012
Date Data Arrived at EDR: 05/01/2012
Date Made Active in Reports: 06/01/2012
Number of Days to Update: 31

Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Last EDR Contact: 07/31/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Quarterly

SPILLS: State spills
A listing of incidents reported to the Office of Emergency Response.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 07/23/2012
Date Made Active in Reports: 07/30/2012
Number of Days to Update: 7

Source: Illinois EPA
Telephone: 217-558-1677
Last EDR Contact: 07/12/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Varies

ENG CONTROLS: Sites with Engineering Controls
Sites using of engineered barriers (e.g., asphalt or concrete paving).

Date of Government Version: 07/20/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 07/30/2012
Number of Days to Update: 6

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 07/24/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Quarterly

Inst Control: Institutional Controls
Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

Date of Government Version: 07/20/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 07/30/2012
Number of Days to Update: 6

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 07/24/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Quarterly

SRP: Site Remediation Program Database
The database identifies the status of all voluntary remediation projects administered through the pre-notice site cleanup program (1989 to 1995) and the site remediation program (1996 to the present).

Date of Government Version: 07/20/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 07/30/2012
Number of Days to Update: 6

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 07/24/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Semi-Annually

DRYCLEANERS: Illinois Licensed Drycleaners
Any retail drycleaning facility in Illinois must apply for a license through the Illinois Drycleaner Environmental Response Trust Fund. Drycleaner Environmental Response Trust Fund of Illinois.

Date of Government Version: 05/28/2012
Date Data Arrived at EDR: 05/31/2012
Date Made Active in Reports: 06/18/2012
Number of Days to Update: 18

Source: Drycleaner Environmental Response Trust Fund of Illinois
Telephone: 800-765-4041
Last EDR Contact: 05/31/2012
Next Scheduled EDR Contact: 09/10/2012
Data Release Frequency: Varies

BROWNFIELDS: Municipal Brownfields Redevelopment Grant Program Project Descriptions
The Illinois Municipal Brownfields Redevelopment Grant Program (MBRGP) offers grants worth a maximum of $240,000 each to municipalities to assist in site investigation activities, development of cleanup objectives, and performance of cleanup activities. Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment.

Date of Government Version: 06/28/2012
Date Data Arrived at EDR: 06/29/2012
Date Made Active in Reports: 07/27/2012
Number of Days to Update: 28

Source: Illinois Environmental Protection Agency
Telephone: 217-785-3486
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

BROWNFIELDS: Redevelopment Assessment Database

The Office of Site Evaluations Redevelopment Assessment database identifies the status of all properties within the State in which the Illinois EPA's Office of Site Evaluation has conducted a municipal Brownfield Redevelopment Assessment.

Date of Government Version: 05/01/2012
Date Data Arrived at EDR: 05/01/2012
Date Made Active in Reports: 05/16/2012
Number of Days to Update: 15

Source: Illinois Environmental Protection Agency
Telephone: 217-524-1658
Last EDR Contact: 07/31/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/21/2012
Date Data Arrived at EDR: 05/22/2012
Date Made Active in Reports: 05/31/2012
Number of Days to Update: 9

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/22/2012
Next Scheduled EDR Contact: 09/03/2012
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 07/20/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 22

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/01/2012
Date Data Arrived at EDR: 05/09/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 36

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/09/2012
Next Scheduled EDR Contact: 11/19/2012
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 04/27/2012
Date Made Active in Reports: 06/05/2012
Number of Days to Update: 39

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/31/2012
Number of Days to Update: 39

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/27/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/15/2011
Number of Days to Update: 27

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 07/16/2012
Next Scheduled EDR Contact: 10/01/2012
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Homes & Centers Listing
Source: Department of Children & Family Services
Telephone: 312-814-4150

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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12000 SOUTH EMERALD
CHICAGO, IL

Inquiry Number:
November 2, 2012

EDR Site Report™

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
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TABLE OF CONTENTS

The EDR-Site Report™ is a comprehensive presentation of government filings on a facility identified in a search of federal, state and local environmental databases. The report is divided into three sections:

Section 1: Facility Summary . . . . . Page 3

Summary of facility filings including a review of the following areas: waste management, waste disposal, multi-media issues, and Superfund liability.

Section 2: Facility Detail Reports . . . . . Page 4

All available detailed information from databases where sites are identified.

Section 3: Databases and Update Information. . . . . Page 7

Name, source, update dates, contact phone number and description of each of the databases for this report.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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SECTION 1: FACILITY SUMMARY

FACILITY AREA	FACILITY 1 12000 SOUTH EMERALD CHICAGO, IL EDR ID #2003704549
WASTE MANAGEMENT Facility generates hazardous waste (RCRA)	NO
Facility treats, stores, or disposes of hazardous waste on-site (RCRA/TSDF)	NO
Facility has received Notices of Violations (RCRA/VIOL)	NO
Facility has been subject to RCRA administrative actions (RAATS)	NO
Facility has been subject to corrective actions (CORRACTS)	NO
Facility handles PCBs (PADS)	NO
Facility uses radioactive materials (MLTS)	NO
Facility manages registered aboveground storage tanks (AST)	NO
Facility manages registered underground storage tanks (UST)	NO
Facility has reported leaking underground storage tank incidents (LUST)	NO
Facility has reported emergency releases to the soil (ERNS)	**YES - p4**
Facility has reported hazardous material incidents to DOT (HMIRS)	NO
WASTE DISPOSAL Facility is a Superfund Site (NPL)	NO
Facility has a known or suspect abandoned, inactive or uncontrolled hazardous waste site (CERCLIS)	NO
Facility has a reported Superfund Lien on it (LIENS)	NO
Facility is listed as a state hazardous waste site (SHWS)	NO
Facility has disposed of solid waste on-site (SWF/LF)	NO
MULTIMEDIA Facility uses toxic chemicals and has notified EPA under SARA Title III, Section 313 (TRIS)	NO
Facility produces pesticides and has notified EPA under Section 7 of FIFRA (SSTS)	NO
Facility manufactures or imports toxic chemicals on the TSCA list (TSCA)	NO
Facility has inspections under FIFRA, TSCA or EPCRA (FTTS)	NO
Facility is listed in EPA's index system (FINDS)	NO
Facility is listed in a county/local unique database (LOCAL)	NO
POTENTIAL SUPERFUND LIABILITY Facility has a list of potentially responsible parties PRP	NO
TOTAL (YES)	1

SECTION 2: FACILITY DETAIL REPORTS

WASTE MANAGEMENT

Facility has reported emergency releases to the soil

DATABASE: Emergency Response Notification System (ERNS)

12000 SOUTH EMERALD
CHICAGO, IL
EDR ID #2003704549

ERNS:

Site ID:	2003704549
Incident cause:	OPERATOR ERROR
Incident desc:	THE CALLER REPORTED RELEASE OF HYDRAULIC OIL FROM TRACTOR WHEN DRIVER HIT FIRE HYDRANT AND PUNCTURED OIL PAN.
Incident type:	MOBILE
Incident date:	20031105
Incident TG:	OCCURRED
Inc location:	Not reported
Incident address:	12000 SOUTH EMERALD CHICAGO, IL
Distance from city:	Not reported
Lat/Long:	0/0
Lat/Long quad:	/
Incident date:	11/05/2003
Township/section/range:	//
WMD flag:	Not reported
Rad flag:	Not reported
Bio flag:	Not reported
Amt material flag:	Not reported
Military:	Not reported
LNG flag:	Not reported
Fire involved:	No
Fire extinguished:	Unknown
Any evacuees:	No
Number of evacs:	Not reported
Who evacuated:	Not reported
Radius of evacuation:	Not reported
Any injuries:	No
Number injured:	Not reported
Number hospitalized:	Not reported
Any fatalities:	No
Any damage:	No
Damage amount:	Not reported
Air corridor desc:	Not reported
Air corridor closed:	Not reported
Water description:	Not reported
Water closed:	No
Water closed time:	Not reported
Road closed:	No
Road closed desc:	Not reported
Road closed time:	Not reported
Closure direction:	Not reported
Major artery:	No
Track closed:	No
Track closed time:	Not reported
Tr. close direction:	Not reported
Track description:	Not reported
Media interest:	NONE
Medium affected:	WATER
Additional medium:	STORM DRAIN
Body of water:	STORM DRAIN
Tributary:	UNKNOWN
Near river:	Not reported
Release secured:	Yes
Est. duration of rel.:	Not reported
Release rate:	Not reported
Rel. rate units:	Not reported
Rel. per units:	Not reported
Remedial action:	CONTRACTOR HAS BEEN HIRED, LAND CLEAN UP COMPLETED, MATERIAL IN WATER IS NON RECOVERABLE
Agency on scene:	Not reported
Other agency:	Not reported
State agency notified:	Not reported
Fed. agency notified:	Not reported
Structure name:	Not reported
Structure type:	Not reported
Struct. operator:	Not reported
Weather:	CLEAR

Air temp:	0
Wind speed:	0
Wind speed unit:	Not reported
Wind direction:	Not reported
Water contaminated:	No
Sheen size:	Not reported
Sheen size units:	Not reported
Sheen color:	Not reported
Sheen direction:	Not reported
Sheen odor:	Not reported
Sheen length:	Not reported
Sheen len. units:	Not reported
Sheen width:	Not reported
Sheen wid. units:	Not reported
Wave condit:	Not reported
Current speed:	0
Current speed units:	Not reported
Current direction:	Not reported
Water temp:	Not reported
Allision:	Not reported
Employees injured:	Not reported
Employee fatalities:	Not reported
Passengers injured:	Not reported
Passenger fatalities:	Not reported
Occupant fatalities:	Not reported
Community impact:	No
Offshore:	No
Addition info:	THE CALLER HAD NO ADDITIONAL INFORMATION.

Aircraft type:	Not reported
Aircraft model:	Not reported
Aircraft ID:	Not reported
Aircraft fuel cap:	Not reported
Capacity units:	Not reported
Fuel onboard:	Not reported
Fuel units:	Not reported
Spot number:	Not reported
AC hanger:	Not reported
AC runway:	Not reported
Mile marker:	Not reported
Building ID:	Not reported
Type fixed obj:	Not reported
Power gen facility:	Unknown
Generation capacity:	Not reported
Fuel type:	Not reported
NPDES:	Not reported
NPDES compliance:	Unknown
Pipe type:	Not reported
DOT regulated:	Unknown
Pipe above:	ABOVE
Exposed underwtr:	No
Pipe covered:	Unknown
Railroad hotline:	Not reported
Grade crossing:	No
Location subdivision:	Not reported
Railroad milepost:	Not reported
Vehicle type:	Not reported
Crossing device:	Not reported
Device operational:	Yes
DOT crossing #:	Not reported
Brakes failed:	No
Tank description:	Not reported
Above ground tank:	ABOVE
Tank regulated:	Unknown
Tank ID:	Not reported
Tank regulated by:	Not reported
Tank capacity:	Not reported
Capacity units:	Not reported
Actual amount:	Not reported
Amount units:	Not reported
Transportable container:	Unknown
Platform rig name:	Not reported
Platform letter:	Not reported
Local area ID:	Not reported
Local block ID:	0
OCSG number:	0
State lease #:	Not reported
Pier dock #:	Not reported
Berth slip #:	Not reported
Initial continuous rel #:	Not reported
Cont. rel permit:	Not reported
Allision:	No
Structure type:	Not reported
Structure:	Not reported
Structure operator:	U

Air bag deployed:	Not reported
Date time normal srvc:	Not reported
Service disruption time:	Not reported
Transit bus flag:	Not reported
Begin date:	Not reported
End date:	Not reported
Change date:	Not reported

Call received date:	20031105
Complete date:	20031105
Call Taker:	AMB7531
Call Type:	INC
Responsible Party:	UNKNOWN
RP telephone:	6516862591
RP tel type:	PRIMARY
RP telephone:	0
RP tel type:	Not reported
Responsible company:	TRANSPORT AMERICA
RC organization type:	PRIVATE ENTERPRISE
PR address:	1715 YANKEE DOODLE ROAD EAGAN, MN
Initial caller:	Not reported
Initial caller tel:	Not reported
Initially reported comp.:	Not reported
On behalf:	Not reported
Source:	TELEPHONE

Spilled material name:	HYDRAULIC OIL
Material CHRIS code:	OHY
Mat. CAS number:	000000-00-0
Material UN #:	Not reported
Amount of spilled mat.:	11
Mat. amount unit:	GALLON(S)
Mat. reached water:	YES
Amount in water:	5
Amount in water units:	GALLON(S)

Involved vehicle #:	TA6397
Trailer #:	Not reported
Vehicle Year:	Not reported
Vehicle make:	Not reported
Vehicle model:	Not reported
Vehicle type:	TRACTOR TRAILER TRUCK
Veh. fuel cap:	Not reported
Cargo capacity:	Not reported
Cargo cap units:	Not reported
Cargo amount:	Not reported
Cargo amount units:	Not reported
HAZMAT:	No
Carrier licensed:	Unknown
Hazmat non-compliance	Unknown

SECTION 3: DATABASES AND UPDATE DATES

To maintain currency of the following federal, state and local databases, EDR contacts the appropriate government agency on a monthly or quarterly basis as required.

Elapsed ASTM days: Provides confirmation that this report meets or exceeds the 90-day updating requirement of the ASTM standard.

DATABASES FOUND IN THIS REPORT

ERNS: Emergency Response Notification System
Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 04/02/2012
Database Release Frequency: Annually

Date of Last EDR Contact: 10/02/2012
Date of Next Scheduled Update: 01/14/2013

Appendix C
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
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Phase I Environmental Site Assessment

Site:

Altgeld Gardens – Blocks 11, 12, & 13
Northeast Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

Prepared For:

Chicago Housing Authority
60 East Van Buren, 13th Floor
Chicago, IL 60605

Report Issue Date: March 3, 2017

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CARNOW CONIBEAR

Phase I Environmental Site Assessment

Site:

Altgeld Gardens – Blocks 11, 12, & 13
Northeast Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

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Nohemi Melero
Senior Project Manager

Prepared by: Nohemi Melero
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David S. Bremer, CHMM, REM
Director, Environmental Engineering

Carnow Conibear Project # E160040026-01

Table of Contents

1.0 Executive Summary 1

2.0 Introduction 3
2.1 Purpose 3
2.2 Detailed Scope of Service 3
2.3 Significant Assumptions 3
2.4 Limitations & Exceptions 3
2.5 Special Terms & Conditions 3
2.6 User Reliance 4

3.0 Site Description 5
3.1 Site Location 5
3.2 Site & Vicinity General Characteristics 6
3.3 Current Use & Ownership 6
3.4 Site Infrastructure 6
3.5 Current Uses of Adjacent Properties 7

4.0 User Provided Information 8
4.1 Title Records 8
4.2 Environmental Liens or Activity & Use Limitations 8
4.3 Specialized Information 8
4.4 Commonly Known or Reasonably Ascertainable Information 8
4.5 Valuation Reduction for Environmental Issues 8
4.6 Owner, Property Manager, and/or Occupant Information 8
4.7 Reasons for Performing this Phase I ESA 9
4.8 Previous Environmental Reports 9

5.0 Records Review 19
5.1 Standard Environmental Record Sources 19
5.2 Additional Environmental Record Sources 25
5.3 Physical Setting Sources 25
5.4 Historical Use Information 27

6.0 Site Reconnaissance 30
6.1 Methodology & Limiting Conditions 30
6.2 General Site Setting 30
6.3 Exterior Observations 30
6.4 Interior Observations 31
6.5 Hazardous Substances and/or Chemical Storage 32
6.6 Above Ground & Underground Storage Tanks & Pipelines 32
6.7 Suspected Polychlorinated Biphenyls (PCB)-Containing Equipment 32

7.0 Interviews 34
7.1 Interview with Site Owner/Manager 34
7.2 Interviews with Occupants 34
7.3 Interview with Phase I ESA User 34

CARNOW CONIBEAR

8.0 Non-ASTM Scope Considerations 35

8.0 Findings & Opinions 35
8.1 General Findings 35
8.2 Recognized Environmental Conditions 35
8.3 Controlled Recognized Environmental Conditions 36
8.4 Historical Recognized Environmental Conditions 36
8.5 De Minimis Conditions 36
8.6 Business Risks 37
8.7 Data Gaps 37

9.0 Conclusions 38

10.0 Deviations 39

11.0 References 40

12.0 Signature & Qualifications of the Environmental Professional 41

APPENDICES

Appendix A Site Location Map

Appendix B Detailed Site Map

Appendix C Site Photographs

Appendix D Interview Documentation

Appendix E Previous Environmental Reports
E-1 – *Extracted Pages from Reports Provided by Client*
E-2 – *95% Upper Confidence Limit Calculations*

Appendix F Regulatory Records Documentation
F-1 – *FOIA Correspondence & Database Search Results*
F-2 – *Environmental Database Report*

Appendix G Historical Research Documentation
G-1 – *Aerial Photo Decade Package*
G-2 – *Sanborn Map Report*

Appendix H Qualifications of the Environmental Professionals

1.0 Executive Summary

This report presents the results of the Carnow, Conibear & Assoc., Ltd. (Carnow Conibear) Phase I Environmental Site Assessment (ESA) investigation of Blocks 11, 12, and 13 of the Altgeld Gardens public housing project located at the northeast corner of South Greenwood Avenue and East 133rd Street in Chicago, Illinois (subject site). The subject site buildings are currently unoccupied. The Phase I ESA consisted of a visual site inspection, a historical records review, a review of public record documents, and a review of government agency records. The Phase I ESA was conducted in accordance with the American Society for Testing and Materials Standard E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process).

A visual inspection was conducted at the subject site on February 17, 2017. The subject site consists of 26 vacant two-story brick buildings, an electrical building, parking lots, sidewalks, and landscape areas. Based upon historical sources, the subject site had been agricultural land in 1938. By 1945, the subject site was developed with 26 residential buildings, sidewalks, and landscape areas. The electrical building was added to the subject site by 2007. The property has remained relatively unchanged until the time of this assessment.

The subject site was listed in the environmental databases consulted for this ESA. Federal, state, and local agencies accessed during the assessment revealed records of environmental concern in connection with the subject site. This assessment has revealed no evidence of Recognized Environmental Conditions (RECs) in connection with the subject site, except for the following:

- The presence of five incinerators on the subject site. The incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a Recognized Environmental Condition to the subject site.

The following were found to be *de minimis* conditions, defined as conditions that are not RECs and generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies:

- In 1996 and 2000, soil samples were collected from the subject site and analyzed for pesticides. One soil sample from Block 12 contained concentrations of pesticides that exceeded the SROs promulgated in 35 IAC 742, also known as *Tiered Approach to Corrective Action Objectives* (TACO). The Illinois Department of Public Health reviewed the sampling data and prepared the February 16, 2001 Health Consultation letter. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil. Therefore, the concentrations of pesticides detected in the 1996 and 2000 sampling events in Blocks 11, 12, and 13 can be considered a de minimis condition to the subject site, as defined in Section 3.2.22 of ASTM E1527-13. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly. In 2009, additional soil samples were collected from the subject site. Twenty-four of 122 soil samples contained

PNAs and/or arsenic that exceeded the SROs promulgated in 35 IAC 742. Carnow Conibear performed a 95% Upper Confidence Limit (UCL) evaluation of the data pursuant to 35 IAC 742.225(d) and (e). The objective of this evaluation was to determine whether the resulting 95% UCL concentration of each analyte, as derived from the data/results (sample population), is less than the corresponding applicable Tier 1 residential ingestion SRO. The results of this analysis indicate that each 95% UCL concentration is below the corresponding applicable Tier 1 residential ingestion SRO (or median background concentration) for each respective analyte. Therefore, the concentrations of PNAs and arsenic detected in the July 2009 GSG sampling event can be considered a de minimis condition to the subject site, because the concentrations do not generally present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies, as defined in Section 3.2.22 of ASTM E1527-13. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly. USEPA recommended that CHA reduce residents' contact with PAH contaminated soils, including establishing groundcover, placing wood chips, and planting grass.

With respect to the ASTM standard, there were limitations associated with this Phase I ESA. Limitations included:

- Due to flooding, the basement and crawl space areas of the subject site were inaccessible at the time of site inspection.

The Executive Summary is intended to provide a brief summary of the findings of the recent site investigation. The entire report must be read in order to fully understand the findings and potential environmental concerns associated with the subject site; therefore, the Executive Summary should not be substituted in lieu of reading the entire report.

2.0 Introduction

2.1 Purpose

The Chicago Housing Authority (CHA) retained Carnow, Conibear & Assoc., Ltd. (Carnow Conibear) to perform a Phase I Environmental Site Assessment (ESA) of the property associated with Blocks 11, 12, and 13 of the Altgeld Gardens housing project located at the northeast corner of South Greenwood Avenue and 133rd Street in Chicago, Illinois (subject site). The purpose of the Phase I ESA was to obtain and evaluate information related to any Recognized Environmental Conditions (RECs) that might be present on the subject site.

2.2 Detailed Scope of Service

The Phase I ESA was performed for the subject site in accordance with the current American Society of Testing Materials (ASTM) Standard E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process). The following activities were conducted:

- A visual investigation of the subject site;
- Visual inspection of at least 10% of the building units;
- Interview with the site representative;
- Interview with the Phase I ESA User;
- Review of topographic, soils, and floodplain data;
- Review of United States Geological Survey (USGS) maps;
- Review of historic Sanborn Fire Insurance Maps;
- Review of historic city directory listings;
- Review of accessible government/public records;
- Review of local, state and federal databases; and
- A limited inspection of the adjacent properties from vantage points accessible to the public.

2.3 Significant Assumptions

With respect to the ASTM standard, there were no significant assumptions associated with this Phase I ESA.

2.4 Limitations & Exceptions

With respect to the ASTM standard, there were limitations associated with this Phase I ESA. Carnow Conibear was unable to inspect the basement areas of the buildings due to flooding.

2.5 Special Terms & Conditions

With respect to the ASTM standard, there were no special terms or conditions involved in this Phase I ESA.

2.6 User Reliance

No environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. This Phase I ESA, in accordance to ASTM Standard E 1527-13, is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs for the subject site, given reasonable limits in time and cost. Based solely upon the work performed in connection with this Phase I ESA Report, which has taken into account commonly known and reasonably ascertainable information, and subject to all conditions and exceptions set forth in this report, the following entity can rely on this report when assessing environmental conditions pertaining to the subject site:

Chicago Housing Authority
60 East Van Buren, 13th Floor
Chicago, IL 60605

No other party may rely on this Phase I ESA without the prior express written consent of Carnow Conibear.

3.0 Site Description

3.1 Site Location

The subject site is located on the northeast corner of South Greenwood Avenue and E. 133rd Street in Chicago, Illinois. The subject site is bounded by E. 130th Place, beyond which is TCA Health Clinic and its associated parking lot to the north, E. 130th Place, an urban garden, E. 133rd Street to the east, E. 133rd Street to the south, and S. Greenwood Avenue to the west. According to the United States Geological Survey (USGS) Topographic Map Lake Calumet, Illinois dated 1997, the subject site is located in Section 35, Township 37 North, Range 14 East of the Third Principal Meridian in Cook County, Illinois. The Property Index Number (PIN) associated with the subject site is 25-35-100-019-0000. **Appendix A** presents the location of the subject site. The following table lists addresses associated with the subject site buildings:

Address	Block	Number of Units	Building Type
1101-1111 E. 130th Pl	11	6	A-11-12
1113-1135 E. 130th Pl	11	12	CL-11-2
1137-1147 E. 130th Pl	11	6	A-11-1
1149-1171 E. 130th Pl	11	12	CR-11-1
13031-13053 S. Greenwood Ave	11	12	CR-11-2
13055-13077 S. Greenwood Ave	11	12	CL-11-3
1100-1106 E. 131st St	11	4	D-11
1108-1130 E. 131st St	11	12	CR-11-3
1132-1142 E. 131st St	11	6	B-11
1144-1166 E. 131st St	11	12	CL-11-1
13201-13223 S. Greenwood Ave	12	12	CR-12-2
13241-13263 S. Greenwood Ave	12	12	CL-12-1
1101-1107 E. 132nd St	12	4	D-12-1
1109-1131 E. 132nd St	12	12	CL-12-3
1133-1143 E. 132nd St	12	6	B-12
1145-1167 E. 132nd St	12	12	CR-12-3
1100-1106 E. 133rd St	12	4	D-12-2
1108-1130 E. 133rd St	12	12	CR-12-1
1132-1142 E. 133rd St	12	6	A-12
1144-1166 E. 133rd St	12	12	CL-12-2
13101-13107 S. Greenwood Ave	13	4	D-13-1
1101-1123 E. 131st St	13	12	CR-13-1
1125-1147 E. 131st St	13	12	CL-13-2
1100-1122 E. 132nd St	13	12	CL-13-1
1124-1134 E. 132nd St	13	6	B-13
1136-1158 E. 132nd St	13	12	CR-13-2

3.2 Site & Vicinity General Characteristics

The subject site is located in a residential zone in Chicago, Illinois. It is a portion of the Altgeld Gardens housing development owned and operated by the CHA. The subject site consists of three blocks of the development. The remainder of the Altgeld Gardens development includes an additional fourteen blocks of residences, a maintenance building, a Chicago Park District field house and park, school buildings, and day care centers. Two more blocks of former CHA residential housing developments are located south of E. 133rd St. and were known as the Phillip Murray Homes.

The topography of the subject site and adjacent properties is relatively level, with no significant natural relief features. **Appendix B** depicts a detailed site plan and adjacent properties.

3.3 Current Use & Ownership

The subject site totals approximately 17.3 acres in area and currently consists of 26 vacant two-story multi-unit residential buildings, an electrical building, parking lots, sidewalks, and landscape areas. The property is owned by the CHA. Photographs of the subject site and adjacent properties are provided in **Appendix C**.

3.4 Site Infrastructure

The subject site consists of 26 two-story brick buildings with a crawl space under the ground floor of the majority of the buildings. Three buildings, one in each block, had a basement. An electrical building containing transformers and switchgears was present on Block 11.

The following companies supply or formerly supplied utilities to the subject site:

Utilities	
Natural Gas	Constellation Energy
Electricity	Integrys Energy
Storm & Sanitary Sewers	City of Chicago
Potable Water	City of Chicago

3.5 Current Uses of Adjacent Properties

Adjacent properties with contiguous property lines were visually inspected from vantage points available to the general public. The subject site is bordered by the following properties:

Adjacent Properties	
North	East 130th Place, beyond which is TCA Health Clinic and its associated parking lot.
East	East 130th Place, CHA land currently used for urban gardening, and East 133rd Street beyond which is CHA land and Beaubien Forest Preserve.
South	East 133rd Street, beyond which is undeveloped land and the Little Calumet River.
West	South Greenwood Avenue, beyond which are Blocks 9 and 10 of the CHA Altgeld Garden Housing Complex. On some maps, South Greenwood Avenue is depicted as Leanna Tucker Avenue.

4.0 User Provided Information

ASTM Standard E 1527-13 requires the user of a Phase I ESA to provide the environmental professional with any information that could be deemed useful in identifying RECs. The User of this Phase I ESA is the CHA. A User Questionnaire was completed by Ms. Lynn Crivello, Environmental Engineer of the CHA, and was returned to Carnow Conibear on March 2, 2017. The User Questionnaire and associated correspondence can be reviewed in **Appendix D**.

4.1 Title Records

A real title search including any deeds, easements, leases, restrictions, and covenants for a period of fifty years was not provided to Carnow Conibear. However, a title search is not required by ASTM if other historical sources of information provide the necessary information. Carnow Conibear believes that the data collected during the Phase I ESA provided sufficient information about the site which eliminates the need for a fifty year title search. The site buildings were constructed between 1942 and 1944. CHA has been the owner of the property since 1956.

4.2 Environmental Liens or Activity & Use Limitations

This investigation, including information obtained from the User Questionnaires completed by the CHA, has revealed no record of environmental liens or activity use limitations specific to the subject site.

4.3 Specialized Information

Ms. Crivello indicated that the residential units are vacant and there are currently no occupants or business present in the site.

4.4 Commonly Known or Reasonably Ascertainable Information

Ms. Crivello indicated that she has no commonly known or reasonably ascertainable information concerning the subject site.

4.5 Valuation Reduction for Environmental Issues

Ms. Crivello indicated that there are currently no real estate actions related to this site.

4.6 Owner, Property Manager, and/or Occupant Information

The CHA has indicated that the subject site is owned by the CHA and is currently vacant. The subject site property is managed by East Lake Management Group, Inc.

4.7 Reasons for Performing this Phase I ESA

The reason for performing the Phase I ESA as a NEPA review for demolition.

4.8 Previous Environmental Reports

CHA provided Carnow Conibear with electronic versions of approximately 44 reports, letters, and miscellaneous documents (including duplicates) concerning the Altgeld Gardens and Murray Homes housing developments. Many of the documents dealt with areas outside of the boundary of this Phase I. Brief summaries of the reports (including some text copied verbatim from the documents) that directly related to the subject site (Blocks 11, 12, and 13) are provided below. Selected pages have been extracted from the reports and included in **Appendix E-1**.

File Name:	1996 August Aerial Photo Analysis		
Document Title:	AERIAL PHOTOGRAPHIC ANALYSIS ALTGELD GARDENS	**Date:**	August 1996
Document Type:	Report	**Pages:**	21
Prepared By:	Lockheed Environmental Systems & Technologies Co.	**Prepared For:**	US EPA

Notes:
This report presents findings of an analysis of historical aerial photography spanning the period 1938 to 1976. The analysis was performed for the study area known as the Pullman Sewage Farm and the community of Altgeld Gardens in Chicago, Illinois. This analysis was requested by Region 5 to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built.

Findings from the analysis indicate that the results of filling activity were observed in 1959 and 1967 in the Pullman site, which is west of Altgeld Gardens across S. Lawrence Ave. The material used for filling could not be identified; it appeared to be light-toned, but it could not be determined what the nature of the material was or if any wastes were incorporated into this material. No evidence of the effluent ditch, referred to in the collateral information, was identified in the period of analysis.

Pages Extracted: Selected text and Aerial Photos

File Name:	1996 November Aerial Photo Analysis		
Document Title:	AERIAL PHOTOGRAPHIC ANALYSIS ALTGELD GARDENS	**Date:**	November 1996
Document Type:	Report	**Pages:**	16
Prepared By:	Lockheed Environmental Systems & Technologies Co.	**Prepared For:**	US EPA

Notes:
This report is an addendum to TS-PIC 9605510. It presents the results of an aerial photographic analysis of the Altgeld Gardens extended study area located in Chicago, Illinois. The primary data used for this report are two selected dates of black-and-white photographs: November 14, 1938 and September 3, 1959. This analysis was requested to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built in

the Altgeld Gardens extended study area. Findings from the analysis indicate evidence of a possible drainageway in the Altgeld Gardens Housing Development Area in 1938. This possible drainage way cuts through Blocks 3, 4, 7, 9, 10, and 12.

Pages Extracted: Selected text and Aerial Photos

File Name:	1997-8-6_USEPA Site Assessment		
Document Title:	SITE ASSESSMENT REPORT FOR THE ALTGELD GARDENS COMMUNITY	**Date:**	August 6, 1997
Document Type:	Report	**Pages:**	71
Prepared By:	US EPA	**Prepared For:**	---

Notes:
US EPA assessed the possible presence of soil contamination at the Altgeld Gardens Community (AGC). CHA was advised of proposed assessment work and participated in sampling. Nine standing water samples were collected from flooded areas. Fourteen surface soil samples and ten subsurface soil samples were collected.

The water samples, surface soil samples, and sub-surface samples were analyzed for acid base neutrals (ABN), pesticides/polychlorinated biphenyls (PCBs), volatile organic analytes (VOAs), metals, mercury, and cyanide. All samples were analyzed at the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois. Analytical results indicate that slightly elevated levels of PAH compounds may be present in the surface soils within the AGC area.

Analyses of surface soils, sub-surface soils and standing water within the AGC indicate that although elevated levels of PAHs were identified in surface soils within Block 11, the levels do not exceed the recommended removal action level (RAL) for total PAHs established in the "Emergency Removal Guidelines." Information from this report is being reviewed by U.S. EPA for a health based risk assessment. There are no conditions present in the areas assessed at the AGC that may present an imminent and substantial threat to public health and welfare and the environment. There were no conditions observed at the AGC during the site assessment which warrant a removal action.

Pages Extracted: Report text, Tables, and Sample Location Figure

File Name:	USEPA 5-98 Fact Sheet		
Document Title:	US EPA FACT SHEET, Altgeld Murray Gardens	**Date:**	May 1998
Document Type:	Fact Sheet	**Pages:**	4
Prepared By:	US EPA	**Prepared For:**	---

Notes:
This fact sheet describes the usage and sampling history of the site. It states that PAH and pesticide contamination was identified in 1996 and 1997 sampling events, and states the following:

Using USEPA risk assessment methodology, the lifetime excess cancer risk for exposure to the highest concentration of PAHs ranged from 2 x 10 (2 out of 10,000 exposed individuals) to 3 x 10 (3 out of 1,000 exposed individuals). In interpreting these estimates, one should keep in mind these are risks that are likely to be very similar to those experienced in any other urban site. In addition, the sampling results, as well as aerial photos of the area, reveal no physical evidence that Altgeld Gardens was built on a landfill or evidence of industrial contamination in the surface soil.

At this time US EPA has determined that additional sampling in the Altgeld Gardens is not necessary because Altgeld Garden levels were similar to those identified in studies of other urban areas. However, US EPA is conducting a PAH and lead background study to verify PAH and lead background levels for the City of Chicago. Information gathered in this study will be used to help determine future cleanup action levels for urban sites in general.

Pages Extracted: Entire Fact Sheet

File Name:	1998-8-27_USEPA_Ltr on PAHs Present at Altgeld		
Document Title:	Re: Altgeld Gardens Housing Complex	**Date:**	August 27, 1998
Document Type:	Letter	**Pages:**	2
Prepared By:	US EPA	**Prepared For:**	CHA

Notes:
USEPA collected samples in 1996 at the request of the community and found PAH contamination. USEPA found no evidence of a specific source and suspects that atmospheric deposition from point, area, and mobile sources were likely responsible. A comparison of PAH levels detected at Altgeld Gardens to those found in other urban areas indicated that the Altgeld values were within the expected range. USEPA strongly recommends that CHA reduce residents' contact with PAH contaminated soils, including establishing groundcover, placing wood chips, and planting grass. These activities will greatly reduce risk to children and adults by eliminating direct contact with contaminated soils. These measures may also result in the reduction of the PAH compounds through a natural process known as phyto-remediation.

Pages Extracted: Entire Letter

File Name:	2000-9-11_USEPA Ltr to Alt._Response to FOIA Request		
Document Title:	Re: Altgeld Gardens Community	**Date:**	September 11, 2000
Document Type:	Letter	**Pages:**	3
Prepared By:	US EPA	**Prepared For:**	Hopkins & Sutter

Notes:
Information concerning the potential analytical problems involving the United States Environmental Protection Agency's (U.S. EPA) Central Regional Laboratory, and U.S. EPA's proposal to conduct core sampling for Polychlorinated Biphenyls (PCBs) in the yards on the north side of the Dorothy Gautreax Child Parent Center, 975 E. 132nd Street, Chicago, Illinois (Gautreax Center), and surface soil and surface water sampling in the area throughout the

community housing, as in the enclosed figure.

During the spring of 1996 the Chicago Housing Authority (CHA) conducted a cleanup of soil contaminated with PCBs, a chemical regulated under the Toxic Substances Control Act, from the yards on the north side of the Gautreax Center. The source of the PCB contamination was a storage lot located across the street from the Gautreax Center where the CHA had disposed PCBs from electrical transformers. During the cleanup, approximately one foot of soil was excavated across the entire north side of the Gautreax Center, cleanup confirmation samples were collected, and the area was backfilled with clean soil trucked in from off site. U.S. EPA, Region 5, conducted oversight of the CHA's cleanup and assisted the CHA by providing laboratory analysis of the CHA's samples. Based on the sample analysis, Region 5 determined that the PCB cleanup level of less than 10 parts per million (ppm) had been met, and the area could be backfilled to grade with clean soil.

During 1996 and 1997, U.S. EPA also conducted surface soil and water sampling in certain areas of the housing complex in response to residents' concerns with potential contamination. The surface soil samples and surface water samples were analyzed for a full range of contaminants. Low levels of polycyclic aromatic hydrocarbons (PAHs), mainly Benzo(a)pyrene and low levels of DDD, DDT and DDE, were found in the soil samples. Although results were below action levels, U.S. EPA recommended to the CHA that a grass cover be placed in areas where bare soil was present. This grass cover prevents direct contact with soil.

Since these actions, allegations of misconduct in the analysis of samples have been made. Because of these allegations, U.S. EPA has determined that data generated from samples analyzed by these individuals will not be relied on for its decisions. Even though U.S. EPA has reviewed the 1996 raw analytical data and cannot conclude that there was any failure to follow analytical procedures which caused the analytical results to be lower than target levels indicating a need for cleanup, U.S. EPA believes the most prudent course of action is to resample this area, U.S. EPA must emphasize that the north yards are covered by approximately one foot of clean soil and do not present a significant risk to children attending the Gautreax Center or to the nearby community. It should also be noted that no similar problems have been found with the cleanup at the Altgeld Gardens storage lot, which was completed last summer.

With regard to the Superfund sampling, all locations will need to be resampled by U.S. EPA. However, samples will only be analyzed for pesticides and volatile organic compounds. U.S. EPA intends to conduct this sampling by the middle of September.

Pages Extracted: Entire letter and Figure

File Name:	2000-11-15_E-E Rpt		
Document Title:	Letter Report for Altgeld Gardens	**Date:**	November 15, 2000
Document Type:	Report	**Pages:**	47
Prepared By:	Ecology & Environment, Inc.	**Prepared For:**	US EPA
Notes: The purpose of the site assessment was to resample surface soil locations on the Altgeld			

Gardens Community (AGC) that were originally sampled by U.S. EPA in 1996 and 1997 and analyzed for poly aromatic hydrocarbons (PAHs) and pesticides. Analytical results from that sampling effort are suspect because recent investigations have determined that certain analytical data, including pesticide analyses, generated by CRL at the time of the U.S. EPA Altgeld Gardens soil sampling event may be erroneous.

Various pesticides were detected in every soil sample. In general it appears, from a comparison of the data, that the U.S. EPA sample results were higher than those of the START samples, although not in all cases.

This report is discussed in greater detail later in this section of the Phase I ESA report.

Pages Extracted: Report text, Tables, and Sample Location Figure

File Name:	2001-2-16_Dept of Health and Human Serv_Altgeld Health Consultation		
Document Title:	Health Consultation, October 2000 Soil Sampling, Altgeld Gardens	**Date:**	February 16, 2001
Document Type:	Report	**Pages:**	12
Prepared By:	US Dept. of Health and Human Services/Illinois Department of Public Health	**Prepared For:**	US EPA

Notes:
US EPA requested IDPH to evaluate public health hazards from soil at Atlgeld Gardens.
From the summary: US EPA conducted site investigation at Altgeld Gardens in 1996. In 1998, IDPH evaluated the data and concluded that no apparent public health hazard existed from exposure to the surface soil contamination detected. IDPH recommended additional surface soil samples near the sample with the greatest pesticide levels. In 1999, US EPA collected 12 soil samples along 134th street on the southern edge of Altgeld Gardens. IDPH concluded that no apparent public health hazard existed from exposure to the pesticide residuals detected in the surface soils.

In 2000, 10 surface soil samples were collected from the top 2 to 3 inches of soil and analyzed for pesticides. DDT, DDE, and heptachlor epoxide were detected, but IDPH concludes that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil.

This report is discussed in greater detail later in this section of the Phase I ESA report

Pages Extracted: Introduction, Conclusions, Results table, and Figure

File Name:	2009-7-1_GSG_Blocks 11,12,13_Soil Sampling Summary Report		
Document Title:	Summary Report, Altgeld Gardens Renovation, Blocks 11, 12, and 13	**Date:**	July 1, 2009
Document Type:	Report	**Pages:**	209
Prepared By:	GSG Consultants, Inc.	**Prepared For:**	CHA

Notes: Report summarizes the findings of field sampling activities within landscaped areas of Blocks 11, 12, and 13. GSG performed 122 soil borings to maximum depth of 2 feet. Samples analyzed for Polynuclear Aromatics Hydrocarbons (PAH), and total lead and arsenic. A total of 24 of the 122 sample locations reported values that exceed PNAs and arsenic Tier 1 Soil Remediation Objectives (SROs) for residential properties or Metropolitan Area background concentrations. None of the collected soil samples exhibit lead values above Tier 1 SROs for residential properties. **This report is discussed in greater detail later in this section of the Phase I ESA report** **Pages Extracted: Figures showing exceedances.**

File Name:	2009-7-29_GSG_Blocks 11,12,13_130th St. and Ellis Ave_PH 5_Hazardous Material…		
Document Title:	HAZARDOUS MATERIALS BUILDING SURVEY ALTGELD GARDENS (PHASE V), BLOCKS 11, 12 & 13	**Date:**	July 29, 2009
Document Type:	Report	**Pages:**	456
Prepared By:	GSG Consultants, Inc.	**Prepared For:**	Holabird & Root LLC
Notes: Hazardous materials building survey of the units associated with the Altgeld Gardens Blocks 11, 12 & 13. The survey included twenty-six (26) residential buildings with a total of 244 individual units to identify the location and quantity of asbestos containing material (ACM), lead-based paint (LBP), mold, poly-chlorinated biphenyls (PCB), and Universal Waste. GSG identified ACM, LBP, and suspect mold in the buildings. GSG did not observe any fluorescent light fixtures, PCB ballasts, or chemical waste on site during the survey. **Pages Extracted: Executive Summary.**			

File Name:	2014-1-10_ACM Abatement Block 12 Project Specs		
Document Title:	Altgeld – Block 12 - Renovation and Redevelopment	**Date:**	January 10, 2014
Document Type:	Portion of Asbestos Abatement Specifications	**Pages:**	22
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Asbestos Abatement specs for Block 12. **Pages Extracted: None**			

File Name:	2014-1-10_CHA_ACM_Lead Block 12 Drawings		
Document Title:	Asbestos and Lead Based Paint Abatement Drawings Block 12	**Date:**	January 10, 2014
Document Type:	Drawings	**Pages:**	11

Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Asbestos and Lead Based Paint Abatement Drawings for Block 12. **Pages Extracted: None**			

File Name:	CHA_Block 12_Civil Storm Retention Drawings		
Document Title:	Altgeld/Murray Renovation & Redevelopment Block 12	**Date:**	January 10, 2014
Document Type:	Drawings	**Pages:**	20
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Altgeld/Murray Renovation & Redevelopment Drawings for Block 12, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

File Name:	CHA_Drawing_Block 11 13 Drainage Notes C-403		
Document Title:	Altgeld/Murray Renovation & Redevelopment Blocks 11 & 13, Site Drainage and Utility Notes	**Date:**	February 13, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Note sheet for Redevelopment Drawings for Blocks 11 & 13, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

File Name:	CHA_Drawing_Block 11 C-401		
Document Title:	Altgeld/Murray Renovation & Redevelopment Blocks 11 & 13, Site Drainage and Utility Plan Block 11	**Date:**	February 13, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Redevelopment Drawings for Block 11, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

File Name:	CHA_Drawing_Block 12 1132 East 133rd St-C-401		
Document Title:	Altgeld/Murray Renovation & Redevelopment Block 12, Site Drainage and Utility Plan Block 12	**Date:**	February 28, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	Prepared For:	CHA

Notes: Redevelopment Drawings for Block 12, mainly sewers, drainage, and landscaping. Pages Extracted: None

File Name:	CHA_Drawing_Block 12 1132 East 133rd St-C-402		
Document Title:	Altgeld/Murray Renovation & Redevelopment Block 12, Site Drainage and Utility Notes	**Date:**	February 28, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Note sheet for Redevelopment Drawings for Block 12, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

File Name:	CHA_Drawing_Block 13 C-402		
Document Title:	Altgeld/Murray Renovation & Redevelopment Blocks 11 & 13, Site Drainage and Utility Plan Block 13	**Date:**	February 13, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Redevelopment Drawings for Block 13, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

The following potential contamination issues were identified in the review of the documents provided by CHA:

November 15, 2000, Letter Report for Altgeld Gardens, and February 16, 2001, Health Consultation

The November 15, 2000, Letter Report prepared by Ecology and Environment, Inc. (E&E) for the US EPA presents the results of pesticide sampling and resampling conducted throughout the Altgeld Gardens and Murray Homes developments. In 1996, three of the samples were collected from the subject site: S15 (Block 11), S16 (Block 12), and S20 (Block 13). In 2000, these areas were resampled and given the following sample names: AGS10 (Block 11), AGS8 (Block 12), and AGS9 (Block 13). All of the soil samples were grab samples collected from two to three inches below the grass surface.

Pesticides were detected in each of the samples. Carnow Conibear evaluated the soil analysis data in relation to the SROs promulgated in 35 IAC 742, also known as *Tiered Approach to Corrective Action Objectives* (TACO). The soil samples from Block 12 (S16/AGS8) contained concentrations of two pesticides that were slightly above the SRO for Residential Ingestion. The DDE concentration detected was 2.399 mg/kg, which is slightly above the SRO of 2.0 mg/kg, and the Heptachlor epoxide concentration detected was 0.0974 mg/kg, which is slightly above the SRO of 0.07 mg/kg.

There is no obvious, discrete source for the pesticide concentrations detected in the samples. Based on the dispersed nature of the identified compounds, there is no clear point source or "hot spot" of contamination.

The Illinois Department of Public Health reviewed the sampling data and prepared the February 16, 2001 Health Consultation letter. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil.

Therefore, the concentrations of pesticides detected in the 1996 and 2000 sampling events in Blocks 11, 12, and 13 can be considered a de minimis condition to the subject site as defined in Section 3.2.22 of ASTM E1527-13. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

July 1, 2009, Summary Report

The July 1, 2009, *Summary Report, Altgeld Gardens Renovation, Blocks 11, 12, and 13*, prepared by GSG Consultants, Inc. (GSG) for the CHA, was labeled "DRAFT Work In Progress". The report documents soil sampling performed by GSG within Blocks 11, 12, and 13. One hundred and twenty-two (122) soil borings were installed throughout the blocks. Soil samples were collected for analysis from depth intervals of approximately 6 inches to 1 foot and from 1 foot to 2 feet below existing landscaped surfaces. Soil samples were analyzed for Polynuclear Aromatic Hydrocarbons (PNAs), total lead and total arsenic. GSG reported that 24 of the 122 sample locations reported values that exceeded the Tier 1 Soil Remediation Objectives (SROs) promulgated in 35 IAC 742 TACO for PNAs and/or arsenic. No SRO exceedances for lead were reported. GSG recommended that soil exceeding Tier 1 SROs should not be used as backfill during site renovation activities and that it be disposed of at a licensed Subtitle D landfill if it is removed from the site. GSG estimated the volume of soil exceeding Tier 1 SROs to be 2,497 cubic yards.

Carnow Conibear evaluated the soil analysis data in relation to the SROs promulgated in 35 IAC 742 TACO. Arsenic and five PNAs were identified in exceedance of the applicable Tier 1 SROs for the residential ingestion exposure route. Based on the dispersed nature of the identified exceedances, there is no clear point source or "hot spot" of contamination.

Carnow Conibear performed a 95% Upper Confidence Limit (UCL) evaluation of the data pursuant to 35 IAC 742.225(d) and (e). The objective of this evaluation was to determine whether the resulting 95% UCL concentration of each analyte, as derived from the data/results (sample population), is less than the corresponding applicable Tier 1 residential ingestion SRO, as adjusted for background concentrations in the City of Chicago for PNAs and counties within Metropolitan Statistical Areas (MSAs) for arsenic. Carnow Conibear utilized the Statistical Software *ProUCL 4.1 for Environmental Applications* to calculate the 95% UCL for the five PNA compounds and arsenic. These data sets incorporated appropriate methods to address "No-Detects." The resulting concentrations are presented in the following table:

Analyte	95% UCL (mg/kg) All Data	Applicable Tier 1 SRO (mg/kg)	Exceedance?
Arsenic	10.51	13.0	No
Benzo(a)anthracene	0.961	1.1*	No
Benzo(a)pyrene	0.544	1.3*	No
Benzo(b)fluoranthene	0.698	0.9	No
Dibenzo(a,h)anthracene	0.114	0.2*	No
Indeno(1,2,3-c,d)pyrene	0.199	0.9	No

* Indicates median background concentration applied as Tier 1 SRO.

The results of this analysis indicate that each 95% UCL concentration is below the corresponding applicable Tier 1 residential ingestion SRO (or median background concentration) for each respective analyte. Therefore, the concentrations of PNAs and arsenic detected in the July 2009 GSG sampling event can be considered a de minimis condition to the subject site, because the concentrations do not generally present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies, as defined in Section 3.2.22 of ASTM E1527-13. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

The 95% Upper Confidence Level ProUCL analysis is presented in **Appendix E-2**.

5.0 Records Review

5.1 Standard Environmental Record Sources

This section presents the results of the state and federal government agency Freedom of Information Act (FOIA) responses and the government agency database search that was performed by Environmental Data Resources, Inc. (EDR) in accordance with the ASTM standard.

5.1.1 Federal & State Regulatory Agencies

Carnow Conibear submitted FOIA requests and reviewed public online databases of state and federal agencies in an effort to obtain information regarding the subject site and adjacent properties. Documentation of the FOIA correspondence and database search results can be found in **Appendix F-1**. The following agencies were contacted:

- United States Environmental Protection Agency (USEPA)

  Carnow Conibear searched the USEPA's EnviroFacts online database. Altgeld Gardens, which includes the subject site, was listed on the database under Agency Compliance and Enforcement Systems (ACES) as an operator of apartment buildings. The subject site was not flagged for Significant Non-compliance (SNC) or High Priority Violations (HPV).

- Illinois Environmental Protection Agency (IEPA)
  Springfield, Illinois

  Carnow Conibear submitted a FOIA request to the IEPA on September 29, 2016 regarding any information of environmental concern for the subject site. A response was received from the IEPA on October 5, 2016 indicating that they had no records on file for the subject site addresses.

  Carnow Conibear searched online IEPA databases for Leaking Underground Storage Tanks (LUST) incidents, Site Remediation Program (SRP) properties, and publicly available environmental documents on March 2, 2017. The subject site was not identified in the IEPA databases.

- Illinois Emergency Management Agency (IEMA)
  Springfield, Illinois

  Carnow Conibear's search of the IEMA's online Hazardous Materials Incident Reports database did not reveal any record of incidents on the subject site. IEMA has record of the abandonment of an 85 gallon drum of unknown material in the road right of way near 1100 E. 130th Place on July 30, 2003. The drum was removed from the road. The listing did not indicate a release to the ground.

- Illinois Office of the State Fire Marshal (OSFM)
  Springfield, Illinois

Carnow Conibear searched the OSFM's State of Illinois UST online database for addresses on E. 130th Place, Greenwood Avenue, E. 131st Street, E. 132nd Street, and E. 133rd Street in Chicago, Illinois. The subject site and immediately adjacent properties were not listed in the OSFM database.

5.1.2 Regulatory Database Inquiry

Carnow Conibear retained EDR to conduct a search of available environmental databases for the subject site and surrounding properties. The databases were searched according to ASTM standards, with supplemental environmental information also provided. The descriptions, sources, telephone numbers, and government version dates for each of the databases are provided in **Appendix F-2**. Carnow Conibear used the subject site to specify the site location as the "target property." The following table lists the databases searched by EDR and the corresponding ASTM search distances.

Database	ASTM Search Distance	Number of Properties Found
National Priority List (NPL) The federal National Priority List is a federal list of abandoned or uncontrolled hazardous waste sites identified for priority remedial action under the Superfund program.	1.0 Mile	0
Delisted National Priority List (D-NPL) The National Oil and Hazardous Substances Pollution Control Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.	0.5 Mile	0
Comprehensive Environmental Response & Liability Information System (CERCLIS) The federally maintained Comprehensive Environmental Response, Compensation and Liability Information System is a compilation of past and current sites that the EPA has investigated pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). It also includes abandoned or uncontrolled waste sites identified under the federal Superfund Program.	0.5 Mile	0
CERCLIS No Further Remedial Action Planned (NFRAP) Sites which have been investigated and subsequently delisted from the federal CERCLIS are designated as No Further Remedial Action Planned (NFRAP) sites.	0.5 Mile	1
Resource Conservation Recovery Act (RCRA) Information RCRA Information is EPA's comprehensive information system, including information on selective information on sites which treat, store or dispose (TSD) hazardous wastes. CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. Conditionally exempt small quantity generators (CESQGs) generate less than 100 kilograms (kg) of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kg of hazardous waste, or over 1 kg of acutely hazardous waste per	Subject Site or Adjacent Property * 0.5 Mile if TSD	0

Database	ASTM Search Distance	Number of Properties Found
month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDs treat, store or dispose of waste.		
Federal/State Engineering/Institutional Controls Registries These federal and state registries list sites with engineering or institutional controls associated with them. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are often required as a part of institutional controls.	Subject Site	0
Emergency Response Notification System (ERNS) Emergency Response Notification System, maintained by the federal government, records and stores information on reported releases of oil and hazardous substances.	Subject Site	0
State Hazardous Waste Sites (SHWS) State hazardous waste sites records are the state's equivalent to the federal CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for clean-up using state funds are identifiable along with sites where cleanup will be paid by potentially responsible parties.	0.5 Mile	0
Solid Waste Facilities / Landfill Sites (SWF/LF) Solid Waste Facilities / Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. These may be active or inactive facilities, or open dumps that failed to meet RCRA subtitle D Section 4004 criteria for solid waste landfills or disposal sites.	0.5 Mile	0
Underground Storage Tank (UST) A database of registered USTs that are regulated under Subtitle I of RCRA and must be registered with the state department responsible for administering the UST program. In Illinois the UST registry is maintained by the Office of the State Fire Marshall.	Subject Site or Adjacent Property	0
Leaking Underground Storage Tank (LUST) The Leaking Underground Storage Tank records contain an inventory of LUST incidents reported to the state.	0.5 Mile	1
Site Remediation Program (SRP) The Illinois Site Remediation Program (SRP) database includes properties that are enrolled in the state's voluntary clean-up program.	0.5 Mile	1
Brownfields Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment. The Illinois Municipal Brownfields Redevelopment Grant Program offers	0.5 Mile	0

Database	ASTM Search Distance	Number of Properties Found
grants to assist in site investigation activities, development cleanup objectives, and performance of cleanup activities.		

Note: The report also includes additional databases that are not required to be searched by ASTM standards. These additional database results are reviewed for potential environmental impact on the subject site.

The subject site addresses were not identified in the databases accessed by EDR.

Due to the densely-urbanized area in which the subject site is located, EDR identified numerous listings in the surrounding area. Carnow Conibear evaluated these listings to determine if any may potentially represent a REC, Historical REC, Controlled REC, business risk, or *deminimis* condition for the subject site. Considerations for potential vapor intrusion concerns were also made including Areas of Concern (AOCs), Critical Distances, and applicable adjustments discussed in ASTM Standard E2600-10 (Standard Guide for Vapor Encroachment Screening on Property involved in Real Estate Transactions), though a complete Vapor Encroachment Screening was not conducted within the scope of this assessment. The following table summarizes sites that could possibly affect the environmental conditions at the subject site. The complete EDR report is presented in **Appendix F-2**.

Distance from Site	Owner/Address	Listed Database	Comments
North Adjacent <1/8mile 85 ft. Higher Relative Elevation 600 ft.	Chicago, City of 1100 East 130th Place Chicago, IL 60827	RCRA-SQG	EPA ID: ILR000122952 Small quantity generator, no violations found. Hazardous Waste Summary: D001-Ignitable
West < 1/8 mile 633 ft. Higher Relative Elevation 587 ft.	Altgeld Gardens 977 East 132nd Street Chicago, IL 60827	RCRA-CESQG FINDS ECHO	EPA ID: ILR000101980 Conditionally exempt small quantity generator, no violations found. Registry ID: 110006409779 Envid: 1004697962
West < 1/8 mile 649ft. Higher Relative Elevation 588 ft.	13124 South Ellis Avenue Chicago, IL 60827	EDR Historical Cleaners	Name: Noonies Laundromat Inc Type: Cleaners Year: 2002
West <1/8 mile 824 ft. Same Relative Elevation 589 ft.	Chicago Housing Authority 940 East 132nd Street Chicago, IL 60827 Chicago Housing Authority	LUST SRP RCRA	ILEPA ID: 0316545003 Incident Number: 20070682 IEMA Date: 5/21/2007 NFA/NFR Letter: 9/10/2007 ILEPA ID: 0316545003 EPA ID: ILD981098395 Date Enrolled: 11/23/2011 NFA/NFR Letter: Not Reported EPA ID: ILD981098395

Distance from Site	Owner/Address	Listed Database	Comments
		NonGen/NLR FTTS INSP/ HIST FTTS INSP FINDS ECHO	Non-Generator, Handler, no violations found. Inspection Number: 19930908IL014 1 Inspection Date: 9/8/1993 Investigation Type: Section 6 PCB State Conducted Registry ID: 110009373622 Envid: 1000166304
West <1/8 mile 1020 ft. Same Relative Elevation 587 ft.	Carver Park Natatorium 939 E 132nd Street Chicago, IL 60827 Carver Park	UST RCRA-CESQG	Facility ID: 2043650 Facility Status: Closed 1 – 5,000 gal. Heating oil – Abandoned in place EPA ID: ILR000148049 Conditionally exempt small quantity generator, no violations found. Hazardous Waste Summary: D008-Lead
East Northeast <1/8mile 641 ft. Higher Relative Elevation	Calumet NU Earth (130th/Doty) Chicago, IL Calumet NU-Earth Dist Center	IL NIPC SEMS-ARCHIVE	IL NIPC inventories solid waste disposal sites. Site ID: 0500927 NPL Status: Not on the NPL Non NPL Status: Site does not qualify for the NPL based on existing information.
Southeast >1/4mile 3220 ft. Higher Relative Elevation 615 ft.	Land & Lakes Transfer Station 1258-1300 E 130th (138th) Street Chicago, IL	RCRA-SQG FINDS	EPA ID: ILR000081000 Small quantity generator, no violations found. Hazardous Waste Summary: D001-Not defined, D010 – Selenium, D018 - Benzene

NOTE: Carnow Conibear has interpreted the EDR Report to eliminate duplicate addresses and misspellings reported to the governmental agencies.

Review of the EDR environmental database listings is summarized below:

- City of Chicago, located at 1100 E. 130th Place, is listed as a RCRA small quantity generator with no violations. Based on the lack of reported violation, this listing should not pose a significant threat to the subject site at this time.

- Altgeld Gardens, located at 977 E. 132nd Street, is listed as a RCRA conditionally exempt small quantity generator with no violations. Based on the lack of reported violation, this listing should not pose a significant threat to the subject site at this time.

- Noonies Cleaners Inc, located at 13124 S. Ellis Avenue, is listed as a historical cleaners approximately 649 feet west of the subject site. No additional environmental records or

citations were found for this site. Based on the lack of reported violation, this site should not pose a significant threat to the subject site at this time.

- Chicago Housing Authority (maintenance building), located at 940 E. 132nd Street, is listed as having one LUST/SPILLS incident (20070682) and one 1,000 gallon gasoline UST. Online review of the OSFM website indicates that the UST was removed on May 21, 2007. A NFA/NFR Letter was issued for LUST incident 20070682 on September 10, 2007.

  The maintenance building property was enrolled into the Site Remediation Program (SRP) on November 23, 2011 and issued LPC# 31654003. An NFA/NFR letter has not been issued for the site. Reports provided by CHA indicate that a Comprehensive Site Investigation/ Remediation Objectives Report/Remedial Action Plan (CSI/ROR/RAP), dated November 18, 2011, was submitted to the IEPA for approval. Contaminants identified at the site include PNAs, mercury, lead, arsenic, and manganese. After additional soil sampling requested by the IEPA in a CSI/ROR/RAP Comments letter dated January 19, 2012 was submitted, the IEPA approved the Response to CSI/ROR/RAP Comments letter. The January 19, 2012, sampling report demonstrated that the contaminants at the site were not a threat to Class I Groundwater.

  Based on the current SRP status, the nature of the contaminants, and the distance from the subject site (over 700 feet) this site does not represent a REC to the subject site.

  The Chicago Housing Authority site is listed as a RCRA Non-Generator with no violations.

  The site was listed in the FIFRA/TSCA Tracking System (FTTS) for inspections of PCBs. Reports provided by CHA indicate that PCB contamination has been remediated to acceptable levels on the property and is no longer a concern.

- Carver Park Natatorium, located at 939 E. 132nd Street, is listed as a RCRA conditionally exempt small quantity generator with no violations. The site is listed as having one 5,000-gallon heating oil UST. The UST is listed as having been abandoned in place. These listings do not represent RECs to the subject site.

- Calumet NU Earth, located at 130th Street and Doty Avenue, is listed as an IL NIPC site. Review of the NIPC Historical Inventory of Solid Waste Disposal Sites in Northeast Illinois indicates that the site is located in Section 26, Township 37N, Range 14E. Online review of the IEPA Bureau of Land databases indicates that the site has IEPA number 0316490016. Based on the lack of reported violation, this listing should not pose a significant threat to the subject site at this time.

- Land & Lakes Transfer Station is listed as a RCRA small quantity generator with no violations. Online review of the USEPA Envirofacts database found that the site is located on across the Little Calumet River on 138th Street and not adjacent to the subject site. Based on the distance to the subject site, this listing should not pose a significant threat to the subject site at this time.

5.1.3 EDR Orphan Sites

There were six orphan sites (listed sites that could not be mapped due to poor or inadequate address information) identified during the database search. Upon further investigation, no evidence was found to suggest that these sites would pose an environmental threat to the subject site. The complete orphan site list is included in **Appendix F-2**.

5.2 Additional Environmental Record Sources

5.2.1 Local Government Agencies

Carnow Conibear submitted FOIA requests to local agencies in an effort to obtain information regarding the subject site. Copies of the state and local requests and responses can be found in **Appendix F-1**. The following agencies were contacted:

- City of Chicago Fire Department (CFD), Chicago, IL

  Carnow Conibear received a response from the CFD on October 4, 2016 indicating that they have no records concerning for the subject site.

- Chicago Department of Public Health (CDPH), Chicago, IL

  Online review of CDPH Environmental Records Lookup Table found records concerning the subject site consisting of asbestos abatement work, permits for surface cleaning/grinding and the installation of combustion emission unit, and a complaint and inspection concerning a diesel fuel spill from a leaking generator. CDPH records indicate that the spill was remediated and no notice of violation was issued.

- Chicago Department of Fleet and Facilities Management (2FM), Chicago, IL

  Carnow Conibear did not receive a response from 2FM.

- Cook County Recorder of Deeds (CCRD), Cook County, IL

  Carnow Conibear searched the Cook County Recorder of Deeds website for Chain of Title documents on file for the subject site PIN. No environmental liens or deed restrictions of environmental significance were encountered.

5.3 Physical Setting Sources

5.3.1 Surface Water Characteristics

The topography of the subject site and adjacent properties is relatively level, with no significant natural relief features. According to the USGS 7.5-minute topographic quadrangle for Lake Calumet, Illinois (dated 1997) accessed by EDR, the elevation in the vicinity of the subject site is approximately 589 feet above mean sea level.

The Federal Emergency Management Agency (FEMA) lists the subject site in an area determined to be outside the 0.2% annual chance floodplain. [National Flood Insurance

Program, Map numbers 17031C0661J, 17031C0662J, 17031C0663J, and 17031C0664J, August 19, 2008]

According to the map provided by EDR, there are no wetlands on the subject site. No standing bodies of water or wetland vegetation was observed during the recent site inspection.

5.3.2 Subsurface Geological Characteristics

Surficial geology at the site is mapped in the Wadsworth Formation of the Wedron Group. This unit is a succession of calcareous gray, fine-textured till consisting mainly of clay, silt, and fine sand. Although most of the till beds in this formation appear relatively homogeneous and massive, some contain silt laminae and sand lenses. Dominant pebble rock types are dolomite and shale (Hansel & Johnson, 1996, and Stiff, 2000).

Carnow Conibear reviewed Plate 1 of the ISGS Circular, *Potential for Contamination of Shallow Aquifers in Illinoi*s, indicating that the regional geologic materials underlying the subject site are designated as “B1” and “E”. The “B1” classification denotes the presence of sand and gravel at the surface in layers less than 20 feet thick, which are underlain by till or impermeable bedrock. Although the sand and gravel may be used for local well points, these deposits generally do not yield large quantities of water. The potential for contamination of surface water and groundwater in B1 areas is high. A hydraulic conductivity of about 1×10^{-3} cm/sec (high) makes these materials an excellent medium for transport of contaminants. Because water may flow along contacts between materials with different textures (e.g. through sand and gravel over dense bedrock) and discharge on slopes, there is also a potential for ground-to-surface water contamination in B1 areas. The “E” classification denotes deposits of uniform, relatively impermeable silty or clayey till or other fine-grained materials that are more than 50 feet thick, with no identified sand and gravel layers. The potential for contamination in E areas is low because of low hydraulic conductivity in the till, 1×10^{-9} to 1×10^{-7} cm/sec, and good attenuation capacities of the materials. (Berg, et al. 1984)

Per Plate 2 of the Berg Circular, the subject site is located in area designated as “C1” and “D2”. C1 areas are described as sand and gravel at the surface, less than 20 feet thick; underlain by till or impermeable bedrock. D2 areas are described as uniform, relatively impermeable silty or clayey till or other fine-grained materials extending from the surface to more than 20 feet deep; no interbedded sand and gravel.

5.3.3 Groundwater Characteristics

The EDR database identified several historic wells in the general vicinity of the subject site. No wells were identified on the subject site, and information regarding other wells in the area did not provide enough information regarding the direction of groundwater flow. Information from the well searches performed by EDR can be viewed in **Appendix F-2**.

Carnow Conibear searched the IEPA Bureau of Land (BOL) online database for groundwater ordinances in the City of Chicago. An ordinance was enacted in May of 1997 restricting the installation and use of potable water wells within the City limits. This ordinance is accepted by the IEPA as an environmental institutional control pursuant to Title 35 Illinois Administrative Code Part 742 (35 IAC 742).

Two (2) primary aquifers are present in the Chicago metropolitan region. These aquifers are the shallow dolomite aquifer (which includes the bedrock strata directly underlying the unconsolidated glacial sediments) and the deep Cambrian-Ordovician Aquifer (which predominately consists of sandstone) and is isolated from the shallow dolomite aquifer by up to 250 feet of shale. Discontinuous glacial aquifers are also present in the Chicago region in the form of lacustrine sands (Dolton Member of the Equality Formation) and outwash sand and gravel of the Henry and Wedron Formations (Willman, 1971).

5.4 Historical Use Information

5.4.1 Historical Aerial Photographs

Historical aerial photographs for the subject site and surrounding areas were reviewed for the years 1938, 1952, 1962, 1964, 1974, 1988, 1993, 1998, 2005, 2007, 2009, 2010, 2011, and 2012. Carnow Conibear reviewed the photographs in an effort to determine former site usage and identify potential environmental concerns. The Aerial Photo Decade Package provided by EDR can be viewed in **Appendix G-1**.

Review of the historical aerial indicated that the subject site was agricultural land in 1938. By 1952, residential Blocks 1 through 13 and other assorted buildings pertaining to Altgeld Gardens had been developed. Vacant land is depicted to the north, beyond which is E. 130th Street; vacant land and Beaubien Forest Preserve to the east, beyond which are railroad tracks; vacant land to the south, beyond which is the Little Calumet River; and residential Blocks 9 and 10 of Altgeld Gardens to the west. The 1962 photograph depicts the development of residential Block 15 of Altgeld Gardens immediately southwest of the subject site. Two roads have been added north of the subject site and the church building has been developed west of Block 11. There are no significant changes until 1975 when a road is depicted east of Blocks 11 and 13 of the subject site and E. 132nd Street has been extended further east. The 1998 photograph depicts the development of the clinic building and associated parking lot on the north adjacent property. By 2007, the electrical building had been developed on the east central portion of Block 11 of the subject site. There were no other significant changes to the subsequent aerial photographs.

5.4.2 Sanborn Fire Insurance Maps

Carnow Conibear retained EDR to provide Sanborn Fire insurance Maps for the subject site and surrounding area. The EDR Sanborn Library includes more than 1.2 million Sanborn maps from the Library of Congress, University Publications of America, and a private collection. Sanborn Map coverage was available for review for the years 1975, 1987, 1989, 1992, 2002, and 2004. The Sanborn Report supplied by EDR can be viewed in **Appendix G-2**.

Sanborn Map Date	Subject Site Usage	Adjacent Property Usage
1975	The subject site consists of 26 two-story residential building and parking lots.	• North adjacent property – E. 130th Place, beyond which is vacant land. • East adjacent properties – Vacant land and Beaubien Forest Preserve, beyond which are railroad tracks. • South adjacent property – E. 133rd Street , beyond which is a playground.

Sanborn Map Date	Subject Site Usage	Adjacent Property Usage
		• West adjacent properties – S. Greenwood Avenue, beyond which are several residential buildings associated with Altgeld Gardens Apartments and the United Church.
1987	The 1987 Sanborn map reveals no significant changes to the subject site as compared to the 1975 map.	• North adjacent property – No significant changes. • East adjacent properties – No significant changes. • South adjacent property – No significant changes. • West adjacent properties – No significant changes.
1989	The 1989 Sanborn map reveals no significant changes to the subject site as compared to the 1987 map.	• North adjacent property – No significant changes. • East adjacent properties – No significant changes. • South adjacent properties – No significant changes. • West adjacent properties – No significant changes.
1992	The subject site is not depicted on the 1992 map.	• North adjacent property – No significant changes. • East adjacent properties – No significant changes. • South adjacent properties – No significant changes. • West adjacent properties – No significant changes.
2002	The 2002 Sanborn map reveals no significant changes to the subject site as compared to the 1989 map.	• North adjacent property – A public building has been developed beyond E. 130th Place. • East adjacent properties – No significant changes. • South adjacent properties – No significant changes. • West adjacent properties – No significant changes.
2004	The 2004 Sanborn map reveals no significant changes to the subject site as compared to the 2002 map.	• North adjacent property – No significant changes. • East adjacent properties – No significant changes. • South adjacent property – No significant changes • West adjacent properties – No significant changes.

Review of the Sanborn maps indicates that the subject site has been utilized for residential purposes since at least 1975.

6.0 Site Reconnaissance

6.1 Methodology & Limiting Conditions

A visual inspection of the subject site was conducted on February 17, 2017 by Ms. Nohemi Melero of Carnow Conibear. Mr. Gregory Burton, Ms. Alexis Morsby, and Ms. Teri Payton, A Janitor and C Janitors respectively at East Lake Management Group, Inc., provided access to the subject site buildings during the inspection. Conditions during the visit were favorable with dry sunny weather. Photographs taken at the subject site can be viewed in **Appendix C**.

6.2 General Site Setting

The subject site is located in a residential area of Chicago, Illinois. **Appendix B** depicts the Site Plan and adjacent properties.

6.3 Exterior Observations

The subject site consists of 26 two-story brick buildings, an electrical building, parking lots, sidewalks, and landscape areas. Each residential building had a mechanical room at one end with boilers, a water tank, and a water heater.

Five of the residential buildings on the subject site had former incinerators attached to the end of the building. According to Mr. Joseph Rogers, Maintenance Supervisor with Eastlake Management Group, the incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's, when garbage burning was banned. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a REC to the subject site.

Exterior Site Observations	
Lot Size	~ 17.3 acres
Shape of Parcel(s)	Irregular
Buildings on Site	Twenty six residential buildings, one electrical building.
Exterior Improvements	No
Pools of Liquid	Yes, basements and crawl spaces were flooded. Standing water from what appears to be a broken pipeline was observed in the landscape area in the southern portion of Block 11.
Drums, Hazardous Material or Petroleum/Unidentified Substance Containers	No
Stained Soil or Pavement	Block 11 – Stained transformer concrete pad
Stressed Vegetation	No
Wells	No
Solid Waste or Fill Material	No
Pits, Ponds, Lagoons, Surface Water, Waste Water	No
Septic Systems	No

Exterior Site Observations	
Railroad Tracks	No
Pipeline(s)	No
Incinerators	5 Incinerators: Block 11 – 1113-1135 E. 130th Pl. Block 11 – 1108-1130 E. 130th St. Block 12 – 1109-1131 E. 132nd St. Block 13 – 1101-1123 E. 131st St. Block 13 – 1136-1158 E. 132nd St.

6.4 Interior Observations

The subject site buildings consist of a twenty six two-story multi-residential brick buildings which are currently vacant. Carnow Conibear inspected one residential unit from each of the subject site multi-unit buildings, with the exception of building 1108-1130 E. 133rd St., which had a missing wall between two regular units. The ground floors consist of living rooms and kitchen areas. The second floors consist of bedrooms, restrooms, and closets. Peeling paint was observed in the majority of the units inspected. There are crawl spaces under the ground level flooring in all of the residential buildings, except the three buildings which have basements. Heating was provided by steam radiators heated by natural gas boilers located in the building with basements. The electrical building housed transformers and switchgears.

Site Observations	
Number of Floors in Buildings	Residential Building – 2 floors Electrical building – 1 floor
Units Inspected	**Block 11:** 13053 S. Greenwood Avenue 13055 S. Greenwood Avenue 1103 E. 130th Place 1135 E. 130th Place 1137 E. 130th Place 1161 E. 130th Place 1100 E. 131st Street 1130 E. 131st Street 1132 E. 131st Street 1146 E. 131st Street **Block 12:** 13223 S. Greenwood Avenue 13241 S. Greenwood Avenue 1101 E. 132nd Street 1109 E. 132nd Street 1141 E. 132nd Street 1165 E. 132nd Street 1106 E. 133rd Street 1108-1110 E. 133rd Street 1132 E. 133rd Street 1144 E. 133rd Street **Block 13:** 13107 S. Greenwood Avenue 1123 E. 131st Street 1125 E. 131st Street 1122 E. 132nd Street 1124 E. 132nd Street

Site Observations	
	1136 E. 132nd Street
Basement	3 Basements: Block 11 – 1132-1142 E. 131st St. Block 12 – 1133-1143 E. 132nd St. Block 13 – 1124-1134 E. 132nd St.
Pools of Liquid	None
Drums, Hazardous Material or Petroleum/Unidentified Substance Containers	None
Building Heating Type	Natural gas, Boiler/Radiators
Building Cooling Type	None
Pits, Waste Water	None
Sumps	Yes, 2 sumps in each building with a basement.

6.5 Hazardous Substances and/or Chemical Storage

On May 19, 1980, the U.S. Environmental Protection Agency (EPA) published, in the Federal Register, the first phase of the Resource Conservation and Recovery Act (RCRA), 1980 RCRA Laws. RCRA defines a hazardous waste as a solid waste that may cause or significantly contribute to serious illness or death, or that poses a substantial threat to human health or the environment when improperly managed.

The storage of hazardous substances or chemicals was not observed on the subject site at the time of the site inspection.

6.6 Above Ground & Underground Storage Tanks & Pipelines

6.6.1 On-Site

No evidence of the presence of UST, ASTs, or pipelines was observed on the subject site.

6.6.2 Adjacent Properties

No evidence of the presence of UST, ASTs, or pipelines was observed on the immediately adjacent portions of the bordering properties from publicly accessible vantage points.

6.7 Suspected Polychlorinated Biphenyls (PCB)-Containing Equipment

The Toxic Substance Control Act (TSCA) of 1976 mandates the regulation of toxic substances known as polychlorinated biphenyls (PCBs), a chemical component of many dielectric fluids, heat transfer fluids, hydraulic fluids, and lubricating oils. Equipment that may potentially contain PCBs includes electrical equipment such as transformers or capacitors, or hydraulically operated equipment, such as elevators, compaction equipment, or manufacturing equipment. Regulations promulgated under TSCA require that transformers containing PCBs be marked as such. A PCB Ban Rule was enacted in 1979 to eliminate the use of PCBs altogether. The owner of the transformer or other PCB-containing equipment is responsible for equipment maintenance and remediation in the event of a leak or release.

Three pad-mounted transformers were observed on the subject site during the site visit. The transformer components had been removed. According to Mr. Joseph Rogers with Eastlake Management, the CHA had replaced PCB-containing transformers in Altgeld Gardens between 2001 and 2003. Mr. Rogers indicated that ComEd removed the internal components from each of the transformers.

7.0 Interviews

7.1 Interview with Site Owner/Manager

Mr. Joseph Rogers, Maintenance Supervisor with Eastlake Management Group, was interviewed on March 3, 2017 during a telephone interview. Mr. Rogers indicated that he did not know of any USTs, ASTs, environmental liens associated with the subject site. Mr. Rogers indicated that improvements were made to the subject site units as the units became vacated by residents. There is no hydraulic equipment on the subject site. There are no thermostats in the residential units. Heat was regulated from the basement. According to Mr. Rogers, there is one transformer in each Block. The PCB-containing transformers were removed between 2001 and 2003.

Mr. Rogers stated that the incinerators located on the subject site were used to burn garbage and that their use was terminated in the 1970's when garbage burning was banned. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a REC to the subject site.

7.2 Interviews with Occupants

The subject site buildings are currently vacant.

7.3 Interview with Phase I ESA User

A User Questionnaire was completed by Ms. Lynn Crivello, Environmental Engineer of the CHA. Information obtained from the User Questionnaire is summarized in **Section 4.0**. The User Questionnaire can be reviewed in **Appendix D**.

8.0 Findings & Opinions

Based on the findings of this Phase I Environmental Site Assessment, within the scope of this investigation and pursuant to the requirements of ASTM Standard Practice E 1527-13, the following findings are presented below:

8.1 General Findings

- The subject site is located in a residential area of Chicago, Illinois.

- According to historical sources accessed during this assessment, the subject site was agricultural land in 1938. By 1945, the subject site was developed with 26 residential buildings, sidewalks, and landscape areas. The electrical building was added to Block 11 of the subject site by 2007. The subject site has remained relatively unchanged to this time.

- Five of the buildings within the subject site have attached incinerators. The incinerators were used to burn garbage from the 1940's until the 1970's, when garbage burning was banned.

- In 1996 and 2000, soil samples were collected from the subject site and analyzed for pesticides. One soil sample from Block 12 contained concentrations of pesticides that exceeded the SROs promulgated in 35 IAC 742 TACO. The Illinois Department of Public Health reviewed the sampling data and prepared the February 16, 2001 Health Consultation letter. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil.

- In 2009, additional soil samples were collected from the subject site. Twenty-four of 122 soil samples contained PNAs and/or arsenic that exceeded the SROs promulgated in 35 IAC 742 TACO.

- During the visual inspection of the subject site, the basement and crawl space areas were inaccessible due to flooding. Carnow Conibear was unable to inspect the mechanical equipment located in the basement areas.

8.2 Recognized Environmental Conditions

The ASTM standard defines a REC as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. This assessment has revealed no evidence of RECs in connection with the subject site, except for the following:

- Five incinerators were observed on the subject site. The incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's. The burning of garbage in the incinerators over that period could contribute contamination from ash,

spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a REC to the subject site.

8.3 Controlled Recognized Environmental Conditions

The ASTM standard defines a Controlled REC as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. This investigation did not find any Controlled RECs in connection with the subject site.

8.4 Historical Recognized Environmental Conditions

The ASTM standard defines a Historical REC as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. This investigation found no Historical RECs in connection with the subject site.

8.5 De Minimis Conditions

The following were found to be *de minimis* conditions, defined as conditions that are not RECs and generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies, as defined in Section 3.2.22 of ASTM E1527-13:

- In 1996 and 2000, soil samples were collected from the subject site and analyzed for pesticides. One soil sample from Block 12 contained concentrations of pesticides that exceeded the SROs promulgated in 35 IAC 742 TACO. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil. Therefore, the concentrations of pesticides detected in the 1996 and 2000 sampling events in Blocks 11, 12, and 13 can be considered a de minimis condition to the subject site. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

- In 2009, additional soil samples were collected from the subject site. Twenty-four of 122 soil samples contained PNAs and/or arsenic that exceeded the SROs promulgated in 35 IAC 742. Carnow Conibear performed a 95% Upper Confidence Limit (UCL) evaluation of the data pursuant to 35 IAC 742.225(d) and (e). The results of this analysis indicate that each 95% UCL concentration is below the corresponding applicable Tier 1 residential ingestion SRO (or median background concentration) for each respective analyte. Therefore, the concentrations of PNAs and arsenic detected in the July 2009 GSG sampling event can be considered a de minimis condition to the subject site. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

8.6 Business Risks

A business environmental risk refers to a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated as a part of ASTM 1527. This investigation found no business risks in connection with the subject site.

8.7 Data Gaps

When conducting a Phase I ESA investigation, an environmental professionals' ability to identify RECs is sometimes limited due to data gaps. Data gaps are not inherently significant, but can be substantive to a report if other information and/or professional experience raise reasonable concerns regarding the data gap.

One common type of data gap is data failure – the inability to find sources to adequately identify the historical uses of the subject site. ASTM 1527-13 requires that historical uses of a property be identified in five year intervals back to 1940 or the property's first development, whichever is earlier, as long as the information is reasonably ascertainable. If specific use of the property appears unchanged over a period of longer than five years, then research of the use of the property during intervening years is not required.

This investigation has identified sources of information from 1938, 1952, 1962, 1964, 1974, 1975, 1987, 1988, 1992, 1993, 1998, 2002, 2004, 2005, 2007, 2009, 2010, and 2011. Historical information suggests that the subject site had been agricultural land in 1938. By 1945, the subject site was developed with 26 residential buildings, sidewalks, and landscape areas. The electrical building was added to the subject site by 2007. The subject site has remained relatively unaltered since this time.

Carnow Conibear believes based on professional experience, adequate historical information on the subject site was obtained, and the data failure does not represent a significant data gap to the study.

9.0 Conclusions

Carnow Conibear has performed a Phase I Environmental Site Assessment, in conformance with the scope and limitations of the current ASTM Practice E 1527, of the property associated with Blocks 11, 12, and 13 of the Altgeld Gardens housing project located at the northeast corner of South Greenwood Avenue and 133rd Street in Chicago, Illinois (subject site). Any exceptions to, or deletions from, the practice are described in **Section 2.4** of this report. This assessment has revealed no evidence of RECs in connection with the subject site, except for the following:

- Five incinerators were observed on the subject site. The incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a REC to the subject site.

Carnow Conibear has applied prevailing industry standards and reasonable judgment and effort within the scope of work outlined in Carnow Conibear's proposal, while conducting the Phase I ESA. The standards, judgment, and effort used by Carnow Conibear personnel to investigate, assess, and determine the presence of potential environmental hazards and liabilities associated with the site are consistent with the requirements outlined in the current ASTM Standards No. E1527. Carnow Conibear makes no warranty, express or implied, that the findings and interpretations in this report are a complete representation of the environmental hazards and liabilities, associated with the site. There may be unrecorded information or documentation from previous owners or tenants that is unattainable and may be proprietary, legally protected, or unavailable through government regulatory services.

10.0 Deviations

Carnow Conibear has performed a Phase I Environmental Site Assessment, in conformance with the scope and limitations of the current ASTM Practice E 1527, of the property associated with Blocks 11, 12, and 13 of the Altgeld Gardens housing project located at the northeast corner of South Greenwood Avenue and 133rd Street in Chicago, Illinois (the subject site). Any exceptions to, or deletions from, the practice are described in **Section 2.4** of this report. No other significant deviations are noted with this report.

11.0 References

Referenced Documents

1. ASTM Standard E 1527-13, 2013. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM International, West Conshohocken, PA.

2. *Resource Conservation and Recovery Act.* April 14, 2006. Environmental Protection Agency. < http://www.epa.gov/region5/defs/html/rcra.htm>

3. *Toxic Substance Control Act.* April 14, 2006. Environmental Protection Agency. http://www.epa.gov./region5/defs/html/tsca.htm

4. Office of the State Fire Marshal UST Inquiry page. http://webapps.sfm.illinois.gov.ustsearch

5. U.S. Environmental Protection Agency EnviroMapper for EnviroFacts page. http://www.epa.gov/enviro/emef/

6. *Underground Storage Tank System, Illinois Facility List.* Office of the Illinois State Fire Marshall. Springfield, Illinois. March 2, 2017. <http://webapps.sfm.illinois.gov/ustsearch/>.

7. *CDPH Environmental Records Lookup Table*. Chicago Department of Public Health. Chicago, Illinois. March 2, 2017. < https://data.cityofchicago.org/Environment-Sustainable-Development/CDPH-Environmental-Records-Lookup-Table >

8. Willman, H.B. 1971. Summary of the Geology of the Chicago Area, Illinois State Geological Survey, Champaign, IL.

9. *Lake Calumet, Illinois* [map]. 1:24,000. 15 Minute Series. 1997. U.S. Geological Survey. Washington D.C.

10. Berg, Richard C., Kempton, John C., and Cartwright, Keros. 1984 Potential for Contamination of Shallow Aquifers in Illinois, Illinois State Geological Survey, Champaign, IL.

11. Federal Emergency Management Agency Map Center page. http://www.msc.fema.gov/

12. Illinois Emergency Management Agency Hazardous Materials Incident Reports page. http://www.state.il.us/iema/FOIA.asp

Additional documents provided by the client were reviewed and discussed in Section 4.8.

12.0 Signature & Qualifications of the Environmental Professional

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312,

and,

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Nohemi Melero

Nohemi Melero
Senior Project Manager

APPENDICES

Appendix A Site Location Map

Appendix B Detailed Site Map

Appendix C Site Photographs

Appendix D Interview Documentation

Appendix E Previous Environmental Reports
- E-1 – *Extracted Pages from Reports Provided by Client*
- E-2 – *95% Upper Confidence Limit Calculations*

Appendix F Regulatory Records Documentation
- F-1 – *FOIA Correspondence & Database Search Results*
- F-2 – *Environmental Database Report*

Appendix G Historical Research Documentation
- G-1 – *Aerial Photo Decade Package*
- G-2 – *Sanborn Map Report*

Appendix H Qualifications of the Environmental Professionals

Appendix A

Site Location Map

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CONIBEAR

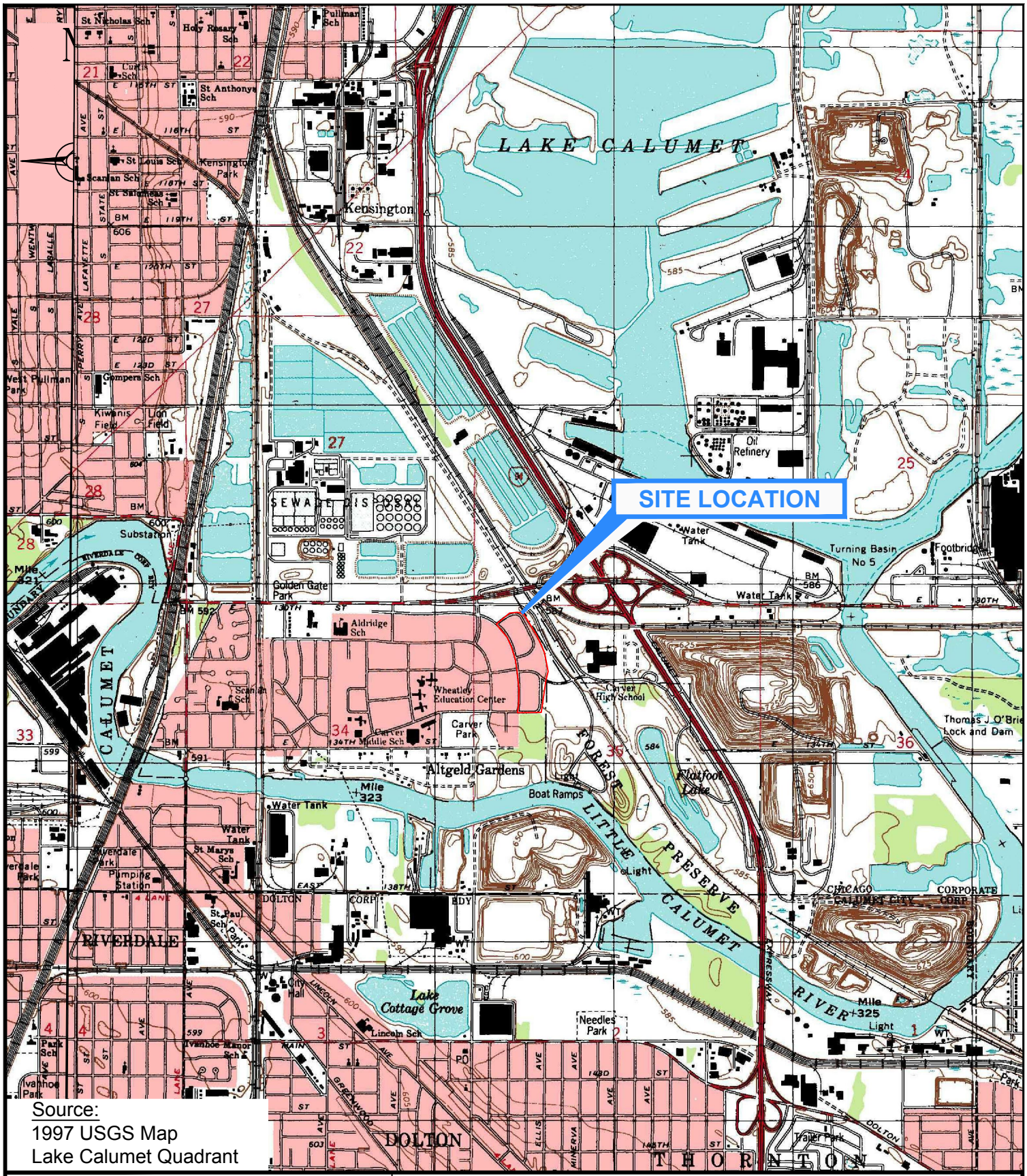

Source:
1997 USGS Map
Lake Calumet Quadrant

Date:	February 2017
Scale:	1"=1,500'
Drawn by:	NM
Checked by:	DSB

Appendix A: Site Location Map
Altgeld Gardens - Blocks 11, 12, & 13
NE Corner of S. Greenwood Ave. & E. 133rd St.
Chicago, Illinois 60827

Your Environmental Resource
T:\Chicago Housing Authority (CHA) \Environmental Consulting - Task Order 24\Altgeld\Altgeld__Blocks7,8,11,12,13,15__PhaseIESAa\Drawings\ChicagoReferenceMap.dwg

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com
CARNOW CONIBEAR

Appendix B

Detailed Site Map

CARNOW
CONIBEAR

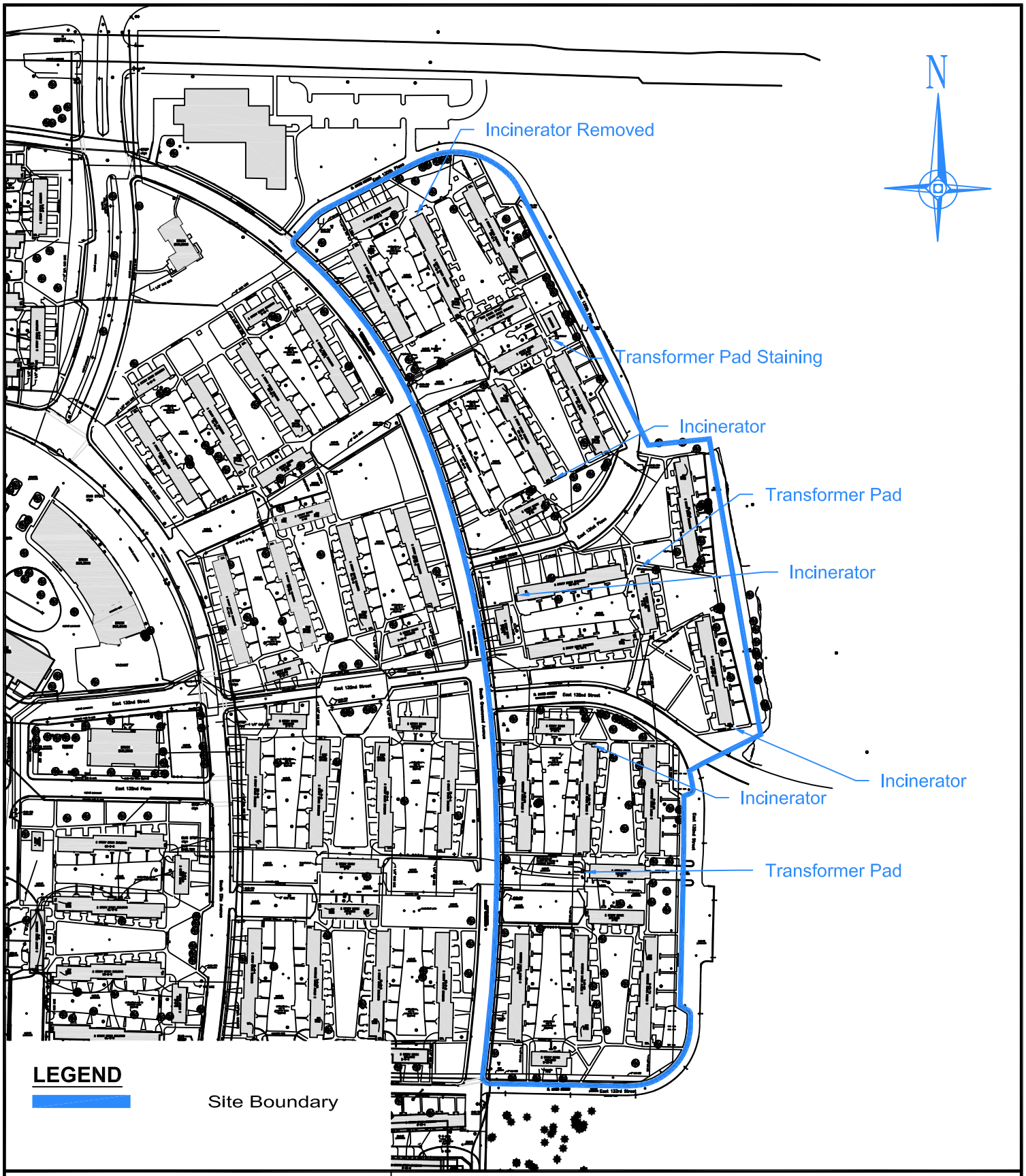

Date:	February 2017
Scale:	1"= 250'
Drawn by:	NM
Checked by:	DSB

Appendix B: Detailed Site Plan
Altgeld Gardens - Blocks 11, 12 & 13
NE Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

Your Environmental Resource

T:\Chicago Housing Authority (CHA) \Environmental Consulting - Task Order 24\Altgeld\2016 Phase I ESA-Block 11,12,13\Drawings\Exhlblts.dwg

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Appendix C

Site Photographs

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1: View of a typical 12 unit residential building in Block 11 of the subject site.

2: View of a typical mechanical room located at the end of a residential building.

3: View of a typical incinerator located at the end of select residential buildings.

4: View of the area of the former incinerator located at 1113 - 1135 W. 130th Place.

Photo Date:	February 17, 2017
Created by:	NM
Checked by:	DSB
Page:	1 of 3

Appendix C: Site Photographs
Altgeld Gardens - Blocks 11, 12 & 13
NE Corner of Greenwood Avenue & 133rd Street
Chicago, Illinois 60827

Your Environmental Resource
T:\Chicago Housing Authority (CHA) \Environmental Consulting - Task Order 24\Altgeld\2016 Phase I ESA-Block 11,12,13\Photos\PhotoAppx.dwg

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Environmental Consulting Services
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t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

CARNOW CONIBEAR

5: View of a typical flooded basement stairway observed throughout the subject site.

6: View of the stained transformer observed near the electrical building in Block 11 of the subject site.

7: View of the electrical building located in Block 11 of the subject site.

8: View of the electrical panels observed in the electrical building in Block 11.

Photo Date:	February 17, 2017	**Appendix C: Site Photographs**
Created by:	NM	Altgeld Gardens - Blocks 11, 12 & 13
Checked by:	DSB	NE Corner of Greenwood Avenue & 133rd Street
Page:	2 of 3	Chicago, Illinois 60827

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t: 312.782.4486 f: 312.782.5145
www.ccaltd.com
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9: View of the interior of a typical residential unit on the subject site.

10: View of the typical equipment observed in the mechanical rooms on the subject site.

11: View of a flooded crawl space through the floor of one of the residential units.

12: View of flooding from water main break in the southern portion of Block 11 of the subject site.

Photo Date:	February 17, 2017	**Appendix C: Site Photographs**
Created by:	NM	Altgeld Gardens - Blocks 11, 12 & 13
Checked by:	DSB	NE Corner of Greenwood Avenue & 133rd Street
Page:	3 of 3	Chicago, Illinois 60827

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Appendix D

Interview Documentation

CARNOW CONIBEAR

lcrivello

Phase I Client Questionnaire_AltgeldBlocks111
03/02/17 02:30 PM

xerox

Phase I Environmental Site Assessment Client Questionnaire

ASTM Standard E1527-13 requires the user of the Environmental Site Assessment (ESA) to complete the following questionnaire. The questions should be answered to the best of your actual knowledge. Please explain all answers thoroughly, utilizing extra paper as needed. Failure to provide the following information will be listed as a data gap within the report.

Property Name: Altgeld Gardens - Blocks 11, 12, & 13

Property Address: Northeast Corner of Greenwood Avenue & E. 133rd Street, Chicago, IL 60627

(1) What is the reason for conducting this Phase I ESA? (ASTM 1527-13, 6.8)
If no answer is provided, CCA will assume the purpose of the Phase I ESA is to qualify for an LLP to CERCLA liability and will state this in the report.

NEPA Review for Demolition

(2) Do you know of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property? (ASTM 1527-13, 10.9)

☐ **Yes** ☑ **No**

If yes, please explain below:

(3) Do you know of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property? (ASTM 1527-13, 10.9)

☐ **Yes** ☑ **No**

If yes, please explain below:

(4) Do you know of any notices from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? (ASTM 1527-13, 10.9)

☐ **Yes** ☑ **No**

If yes, please explain below:

(5) Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).

Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law?

☐ **Yes** ☑ **No**

If yes, please explain below:

(6) Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).
Are you aware of any AULs[1], such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

☐Yes ☑No

If yes, please explain below:

(7) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).
As the *user* of this *ESA* do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

☐Yes ☐No

If yes, please explain below:

NA The residential units are vacant. There are currently no occupants or businesses present on the site.

(8) Relationship of the purchase price to the fair market value of the *property* if it were not contaminated (40 CFR 312.29).
Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

☐Yes ☐No

If no, please explain below:

NA There are currently no real estate actions related to this site

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

☐Yes ☐No

If yes, please explain below:

NA See Above

(9) Commonly known or *reasonably ascertainable* information about the *property* (40 CFR 312.30).
Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,

(a.)Do you know the past uses of the *property*?

☐Yes ☑No

If yes, please explain below:

(b.)Do you know of specific chemicals that are present or once were present at the *property*?

☐Yes ☑No

If yes, please explain below:

(c.)Do you know of spills or other chemical releases that have taken place at the *property*?

☐Yes ☑No

If yes, please explain below:

(d.)Do you know of any environmental cleanups that have taken place at the *property*?

☐Yes ☑No

If yes, please explain below:

(e.)Do you know of any environmental assessments that have taken place at the *property*? If so, please attach copies of the assessment or cleanup reports.

☐Yes ☑No

(10) The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the *user* of this *ESA*, based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?

☐Yes ☑No

If yes, please explain below:

I have completed the preceding questions in good faith and to the extent of my actual knowledge.

User Name: Lynn A Crivello

Please Print

User Signature: Lynn A Crivello 3/2/2017

Please Sign Date

---

[1] *As defined in 3.2.2 of ASTM Standard E 1527-13, an AUL stands for activity and use limitations – legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and/or surface water on the property, or (2)to prevent activities that could interfere with the effectiveness of a response action in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls, are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil, ground water, and/or surface water on the property.*

Appendix E-1

Previous Environmental Reports

Extracted Pages from Reports Provided by Client

CARNOW CONIBEAR

US EPA RECORDS CENTER REGION 5
411887

TS-PIC-9605510R
August 1996

AERIAL PHOTOGRAPHIC ANALYSIS
ALTGELD GARDENS

Chicago, Illinois

by

G. I. Martucci
Environmental Services Division
Lockheed Environmental Systems & Technologies Co.
Las Vegas, Nevada 89119

Contract No. 68-C5-0065

Work Assignment Manager

J. L. Bozik
Monitoring Sciences Branch
Characterization Research Division
Las Vegas, Nevada 89193-3478

CHARACTERIZATION RESEARCH DIVISION
NATIONAL EXPOSURE RESEARCH LABORATORY
OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY
LAS VEGAS, NEVADA 89193-3478

ABSTRACT

This report presents findings of an analysis of historical aerial photography spanning the period 1938 to 1976. The analysis was performed for the study area known as the Pullman Sewage Farm and the community of Altgeld Gardens in Chicago, Illinois. It consists of approximately 400 acres bordered on the north by 130th Street, on the east by the Calumet Expressway, on the south by the Little Calumet River, and on the west by Indiana Avenue. The collateral information supplied by Region 5 reports that the Pullman Sewage Farm facility had been used as a site for the deposition of liquid wastes from 1881 to 1907. This analysis was requested by Region 5 to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built.

Findings from the analysis indicate that the results of filling activity were observed in 1959 in the northeast quadrant of the Pullman site and later filling was observed in progress in 1967 during the construction of Housing Development 4. The material used for filling could not be identified; it appeared to be light-toned, but it could not be determined what the nature of the material was or if any wastes were incorporated into this material. No evidence of the effluent ditch, referred to in the collateral information, was identified in the period of analysis.

The U.S. Environmental Protection Agency's Characterization Research Division's Monitoring Sciences Branch in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 5 in Chicago, Illinois, and the Office of Emergency and Remedial Response in Washington, D.C.

CONTENTS

Page

Abstract iii

Introduction 1

Methodology 2

Photo Analysis 4

FIGURES

Number

1 Study area location map, Illinois vi

2 Local study area location map, Lake Calumet, Illinois vii

3 Altgeld Gardens, November 14, 1938 5

4 Altgeld Gardens, March 29, 1952 7

5 Altgeld Gardens, September 3, 1959 9

6 Altgeld Gardens, August 28, 1967 11

7 Altgeld Gardens, April 23, 1973 13

TABLE

1 Documentation of Aerial Photography 3

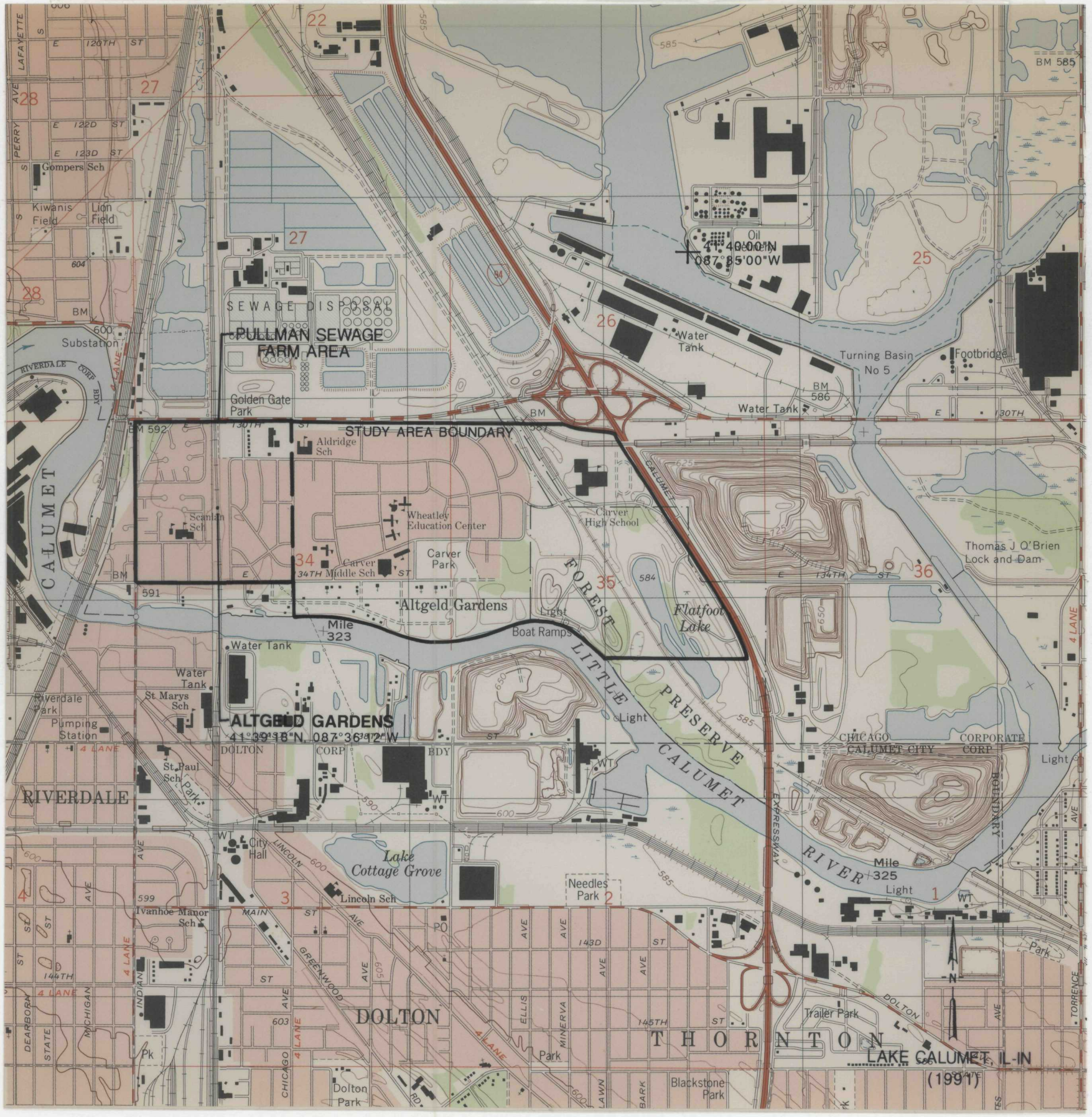

Figure 2. Local study area location map, Lake Calumet, Illinois. Scale 1:24,000.

INTRODUCTION

This report presents findings of an analysis of historical aerial photography spanning the period 1938 to 1976. The analysis was performed for the study area known as the Pullman Sewage Farm and the community of Altgeld Gardens in Chicago, Illinois. The study area consists of approximately 400 acres bordered on the north by 130th Street, on the east by the Calumet Expressway, on the south by the Little Calumet River, and on the west by Indiana Avenue. This analysis was requested by Region 5 to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built.

The collateral information supplied by Region 5 reports that the Pullman facility had been used as a site for the deposition of liquid wastes from 1881 to 1907. The following is a summary of the Pullman site background information supplied by EPA Region 5: The Pullman Sewage Farm was actively used as a disposal area for municipal waste for a span of sixteen years, from 1881 to 1907. The sludge consisted of municipal sewage and industrial waste associated with a railcar factory. It was transported through subterranean pipes from the town of Pullman in the north to a hydrant located on the farm, from which it was allowed to flow over the soil. Buried in the soil were three- to four-inch farm tiles which provided underdrainage for the filtration process. The untreated effluent flowed to ditches which then carried it to the Little Calumet River. In addition to being used to filter the sewage, the soil was also used by the Pullman Land Association to grow cash crops. Accounts published in 1893 documented eye-witness reports of the discharging of "crude sewage" into the Lake even prior to 1887. "The sewage was being run in a large open ditch...from near the farm to the lake [Calumet]". Reportedly this procedure was done to protect the cash crops being grown on the Pullman Sewage Farm.

The U.S. Environmental Protection Agency's Characterization Research Division's Monitoring Sciences Branch in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 5 in Chicago, Illinois, and the Office of Emergency and Remedial Response in Washington, D.C.

METHODOLOGY

Stereoscopic pairs of historical aerial photographs were used to perform the analysis. Stereo viewing enhances the interpretation because it allows the analyst to observe the vertical as well as horizontal spatial relationships of natural and cultural features. Stereoscopy is also an aid in distinguishing between various shapes, tones, textures, and colors that can be found within the study area.

Evidence of waste disposal is a prime consideration when conducting a hazardous waste site analysis. Leachate or seepage resulting from burial and dumping of hazardous materials might threaten existing surface or ground-water resources. Pools of unexplained liquid are routinely noted because they can indicate seepage from buried wastes and may enter drainage channels that allow contaminants to move off the site. An excellent indicator of how well hazardous materials are being handled at a site is the presence or absence of spills, spill stains, and vegetation damage. Trees and other forms of vegetation that exhibit a marked color difference from surrounding members of the same species are labeled "stressed," "damaged," or "dead" based upon the degree of noticeable variation. Vegetation is so labeled only after consideration of the season in which the photography was acquired.

Drainage analysis identifies the direction a spill or surface runoff would follow. Direction of drainage is determined from analysis of the photographs and from U.S. Geological Survey topographic maps. Whenever they are available, 7.5-minute quadrangle maps (scale 1:24,000) are used to show site location and to provide geographic and topographic information. Site boundaries or areas used in this analysis were determined from observations made from aerial photographs in conjunction with collateral data supplied by Region 5 and do not necessarily denote legal property lines or ownership.

Results of the analysis are shown on annotated overlays attached to the photos. The following table provides documentation of the photographs used in this report:

TABLE 1. DOCUMENTATION OF AERIAL PHOTOGRAPHY

Site name, location, geographic coordinates	Figures	Date of acquisition	Original scale	Film type*	Photo source†	Photo I.D.	Frame Number
Altgeld Gardens, Chicago, Illinois	3	11-14-38	1:19,525	B&W	NARA	BWO	31
	4	03-29-52	1:23,590	B&W	USGS	SA	60
	5	09-03-59	1:23,700	B&W	USGS	VZW	80
	6	08-28-67	1:24,447	B&W	USGS	VBTY	138
41°39′18"N 087°36′12"W	7	04-23-73	1:29,960	B&W	USGS	VDCP	80

*Film type identification:
B&W: Black-and-white

†Photo source identification:

NARA: National Archives and Records Services, Washington, DC

USGS: U.S. Department of Interior, U.S. Geological Survey, Washington, DC

PHOTO ANALYSIS

NOVEMBER 14, 1938 (FIGURE 3)

Collateral information indicates that sewage disposal had ceased at the Pullman Sewage Farm in 1907. At this time, in the northwest quadrant of the Pullman Sewage Farm area, the ground appears to be undergoing railway demolition and road construction. At a bend of the Little Calumet River (which lies northwest of the study area) an outfall and dark plume are noted, but the source of the discharge is unknown. At the center of the Pullman Sewage Farm area there is a square lot with a building (Building 1); this lot is a location of a school in 1996. In the northeast quadrant of the Pullman Sewage Farm area the land is cleared and appears to be either turf or under cultivation. In the southeast quadrant of the study area there is a small lot with buildings which appears to be a farmstead (Annotation A). In the southwest quadrant of the Pullman Sewage Farm area a housing development (Housing Development 1) is extant and is comprised of three sections, each section contains approximately twenty structures. No evidence of waste disposal activity is noted.

Figure 3. Altgeld Gardens, November 14, 1938. Approximate scale 1:19,525.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- — — — STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

SITE FEATURES

- DIKE
- STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WV WETLAND VEGETATION

MARCH 29, 1952 (FIGURE 4)

The northwest quadrant of the Pullman Sewage Farm area continues to be disturbed by construction activity. An exposed pipe is visible in this area. Much of the study area appears to be either turf or undergoing cultivation. Outside the northeast perimeter of the Pullman Sewage Farm area, there are drainage depressions leading toward the Pullman Sewage Farm area from the Altgeld Gardens housing development. The buildings denoted by Annotation A appear unchanged. No evidence of waste disposal is noted.

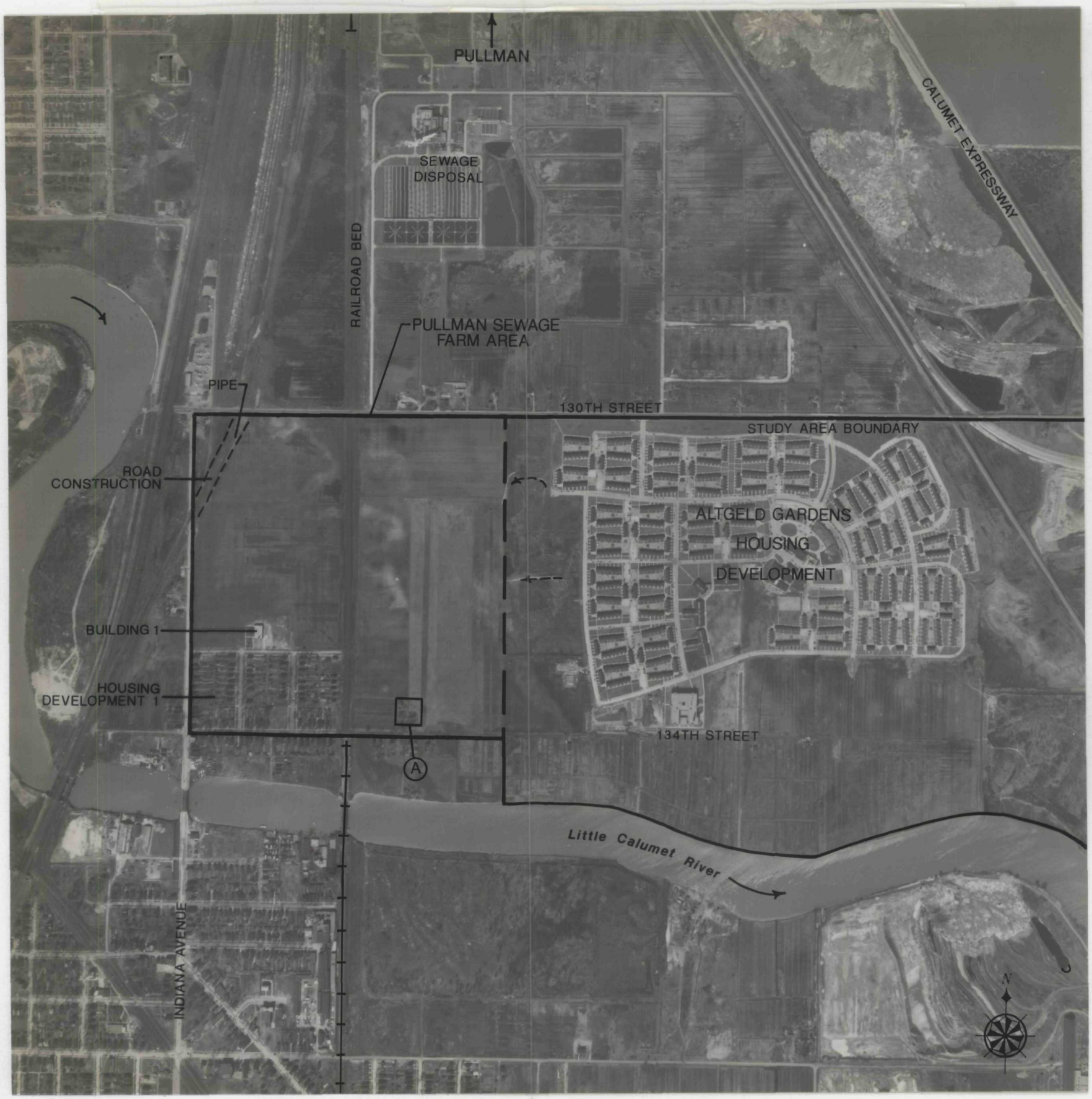

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

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- ST STAIN
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- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WV WETLAND VEGETATION

Figure 4. Altgeld Gardens, March 29, 1952. Approximate scale 1:10,740.

SEPTEMBER 3, 1959 (FIGURE 5)

Golden Gate Park is under construction across 130th Street from the northwest perimeter of the study area. In the northeast corner of the Pullman Sewage Farm area is a rectangular lot with a complex of buildings; the remaining surface of the lot appears to be smooth fill. A school has been built adjacent to this lot. Lawrence Avenue has been constructed along the eastern perimeter of the Pullman Sewage Farm area. The buildings denoted in previous years by Annotation A are no longer visible. No evidence of waste disposal is noted.

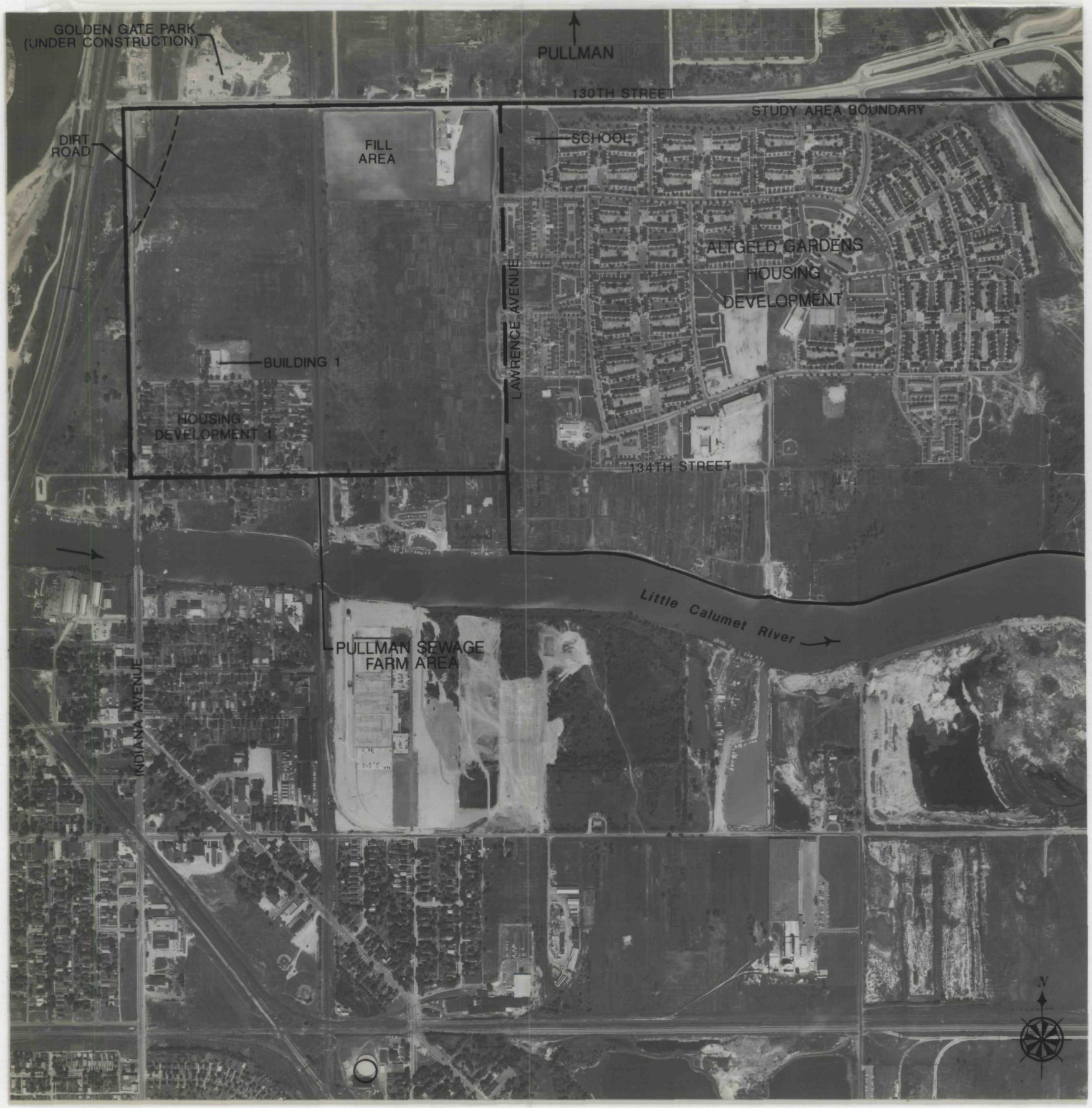

Figure 5. Altgeld Gardens, September 3, 1959. Approximate scale 1:9,320.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- — — — STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

SITE FEATURES

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- SL STANDING LIQUID
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- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
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- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
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- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WV WETLAND VEGETATION

AUGUST 28, 1967 (FIGURE 6)

In the northwest quadrant of the study area there is a pipe trench extending from the road. Annotation B denotes the location of buildings inside the study area which seem to be a part of a nearby train depot. Buildings and a circular storage tank have been built on the location of the fill area previously noted in the northeast quadrant of the Pullman Sewage Farm area. In the southeast quadrant of the Pullman Sewage Farm area a housing development (Housing Development 2) has been built over the location of Annotation A (Figure 3); it is probably an expansion of the Altgeld Gardens housing development. A third housing development (Housing Development 3) is in the initial stages of construction, surrounding Building 1.

Figure 6. Altgeld Gardens, August 28, 1967. Approximate scale 1:8,470.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- — — — STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

SITE FEATURES

- DIKE
- STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WV WETLAND VEGETATION

APRIL 23, 1973 (FIGURE 7)

Housing Development 3 appears completed and a fourth housing development (Housing Development 4) has also been built in the northwest quadrant of the study area.

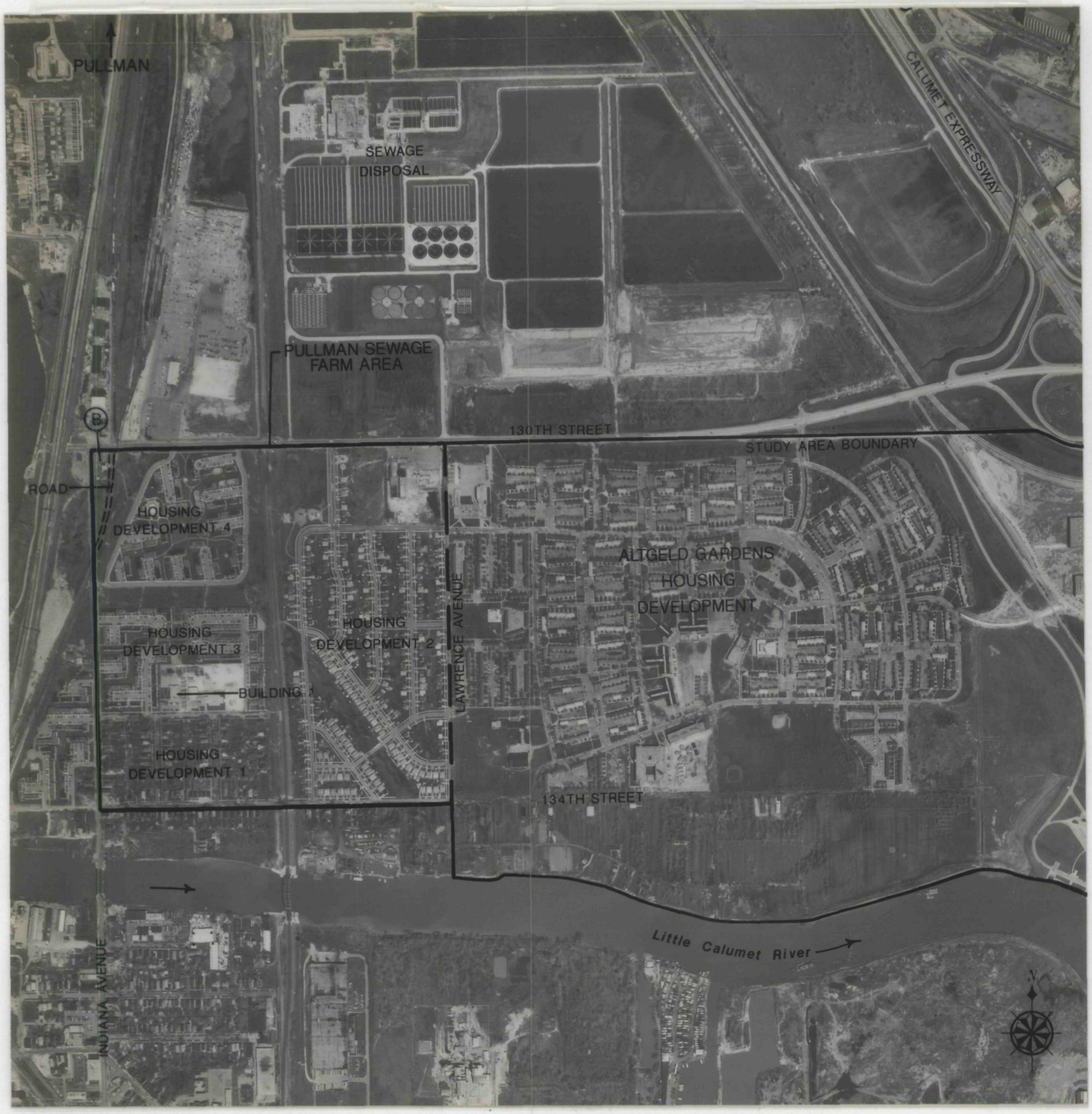

Figure 7. Altgeld Gardens, April 23, 1973. Approximate scale 1:9,630.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

SITE FEATURES

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US EPA RECORDS CENTER REGION 5
411888

TS-PIC-9705512S
November 1996

AERIAL PHOTOGRAPHIC ANALYSIS
ALTGELD GARDENS

Chicago, Illinois
Addendum

by

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Environmental Services Division
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Contract No. 68-C5-0065

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LAS VEGAS, NEVADA 89193-3478

ABSTRACT

This report is an addendum to TS-PIC 9605510. It presents the results of an aerial photographic analysis of the Altgeld Gardens extended study area located in Chicago, Illinois. The Altgeld Gardens extended study area occupies approximately 570 acres and is comprised of two main areas, the Pullman Sewage Farm and the Altgeld Gardens Housing Development, which are separated by Lawrence Avenue. The primary data used for this report are two selected dates of black-and-white photographs: November 14, 1938 and September 3, 1959. This analysis was requested to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built in the Altgeld Gardens extended study area.

Findings from the analysis indicate evidence of a possible drainageway in the Altgeld Gardens Housing Development Area in 1938. The poor resolution of the photograph precludes a detailed description of the function of the possible drainageway. The landfilling operations that took place in 1959 at the Pullman Sewage Farm Area and at the Altgeld Gardens Housing Development Area appeared to be related to building construction. The material used for filling appeared to be light- to medium-toned. It could not be determined what the nature of the material was or if any wastes were incorporated into this material.

The U.S. Environmental Protection Agency's Characterization Research Division's Monitoring Sciences Branch in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 5 in Chicago, Illinois, and the Office of Emergency and Remedial Response in Washington, D.C.

CONTENTS

	Page
Abstract	iii
Introduction	1
Methodology	3
Analysis Summary	5
Photo Analysis	6

FIGURES

Number		
1	Study area location map, Illinois	vi
2	Local study area location map, Lake Calumet, Illinois	vii
3	Altgeld Gardens, November 14, 1938	7
4	Altgeld Gardens, September 3, 1959	9

TABLE

1	Documentation of Aerial Photography	4

INTRODUCTION

This report presents the results of an aerial photographic analysis of the Altgeld Gardens extended study area located in Chicago, Illinois (Figures 1 and 2). The primary data used for this report are two selected dates of black-and-white photographs: November 14, 1938 and September 3, 1959.

The Altgeld Gardens extended study area occupies approximately 570 acres and is comprised of two main areas, the Pullman Sewage Farm and the Altgeld Gardens Housing Development, separated by Lawrence Avenue. The Pullman Sewage Farm Area consists of approximately 140 acres bordered on the north by 130th Street, on the east by Lawrence Avenue, on the south by 134th Street, and on the west by Indiana Avenue. Collateral information supplied by Region 5 indicates that it operated for sixteen years (1881-1907) as a disposal site of sewage sludge originating from the town of Pullman to the north and reportedly included a ditch which carried effluent to Lake Calumet (for a summary of the collateral information supplied by Region 5, please refer to previous report TS-PIC-9605510). The Altgeld Gardens Housing Development Area consists of approximately 430 acres bordered on the north by 130th Street, on the east by Lawrence Avenue, on the south by the Little Calumet River and on the east by the Calumet Expressway (note: the actual Altgeld Gardens housing development does not extend to the Calumet Expressway). This analysis was requested to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built in the Altgeld Gardens extended study area.

The U.S. Environmental Protection Agency's Characterization Research Division's Monitoring Sciences Branch in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 5 in Chicago, Illinois, and the Office of Emergency and Remedial Response in Washington, D.C.

METHODOLOGY

Stereoscopic pairs of historical aerial photographs were used to perform the analysis. Stereo viewing enhances the interpretation because it allows the analyst to observe the vertical as well as horizontal spatial relationships of natural and cultural features. Stereoscopy is also an aid in distinguishing between various shapes, tones, textures, and colors that can be found within the study area.

Evidence of waste disposal is a prime consideration when conducting a hazardous waste site analysis. Leachate or seepage resulting from burial and dumping of hazardous materials might threaten existing surface or ground-water resources. Pools of unexplained liquid are routinely noted because they can indicate seepage from buried wastes and may enter drainage channels that allow contaminants to move off the site. An excellent indicator of how well hazardous materials are being handled at a site is the presence or absence of spills, spill stains, and vegetation damage. Trees and other forms of vegetation that exhibit a marked color difference from surrounding members of the same species are labeled "stressed," "damaged," or "dead" based upon the degree of noticeable variation. Vegetation is so labeled only after consideration of the season in which the photography was acquired.

Drainage analysis identifies the direction a spill or surface runoff would follow. Direction of drainage is determined from analysis of the photographs and from U.S. Geological Survey topographic maps. Whenever they are available, 7.5-minute quadrangle maps (scale 1:24,000) are used to show site location and to provide geographic and topographic information. Site boundaries or areas used in this analysis were determined from observations made from aerial photographs in conjunction with collateral data supplied by Region 5 and do not necessarily denote legal property lines or ownership.

Results of the analysis are shown on annotated overlays attached to the photos. The following table provides documentation of the photographs used in this report:

TABLE 1. DOCUMENTATION OF AERIAL PHOTOGRAPHY

Site name, location, geographic coordinates	Figures	Date of acquisition	Original scale	Film type*	Photo source†	Photo I.D.	Frame Number
Altgeld Gardens, Chicago, Illinois	3	11-14-38	1:19,525	B&W	NARA	BWO	31
	4	09-03-59	1:23,700	B&W	USGS	VZW	80
41°39'20"N 087°36'04"W							

*Film type identification:
B&W: Black-and-white

†Photo source identification:

NARA: National Archives and Records Services, Washington, D.C.

USGS: U.S. Department of Interior, U.S. Geological Survey, Washington, D.C.

ANALYSIS SUMMARY

The primary data used for this report are two selected dates of black-and-white photographs: November 14, 1938 and September 3, 1959. This analysis was requested to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built in the Altgeld Gardens extended study area.

Findings from the analysis of 1938 photographs indicated evidence of a possible drainageway in the Altgeld Gardens Housing Development Area, but the poor resolution of the photograph precluded a detailed description of the function of these features. The landfilling operations that took place in 1959 at the Pullman Sewage Farm Area and at the Altgeld Gardens Housing Development Area appeared to be related to building construction. The material used for filling appeared to be light- to medium-toned but it could not be determined what the nature of the material was or if any wastes were incorporated into this material.

PHOTO ANALYSIS

NOVEMBER 14, 1938 (FIGURE 3)

The first date of analysis shows the Pullman Sewage Farm Area after it was known to have last been in operation (circa 1907) and the Altgeld Gardens Housing Development Area prior to the building of the actual Altgeld Gardens housing development (circa 1952). At the Pullman Sewage Farm Area in the northwest quadrant the ground appears to be undergoing rail-line demolition and road construction. Building 1 is a square lot; this lot is the current location of a school. In the northeast quadrant the land is cleared and appears to be either turf or under cultivation. In the southeast quadrant is a small lot with buildings (Annotation A). In the southwest quadrant a housing development (Housing Development 1) is already extant and is comprised of three sections, where each section contains approximately twenty structures. At the Altgeld Gardens Housing Development Area extended, linear segments of a possible drainageway are discernible in the northwest and southeast quadrants, but the poor resolution of the 1938 photograph precluded a detailed description of the function of these features. The land is mostly cleared and continues to appear either turf or under cultivation, but with no discernible buildings. There are intermittent patches of larger vegetation and the general surface runoff flows south.

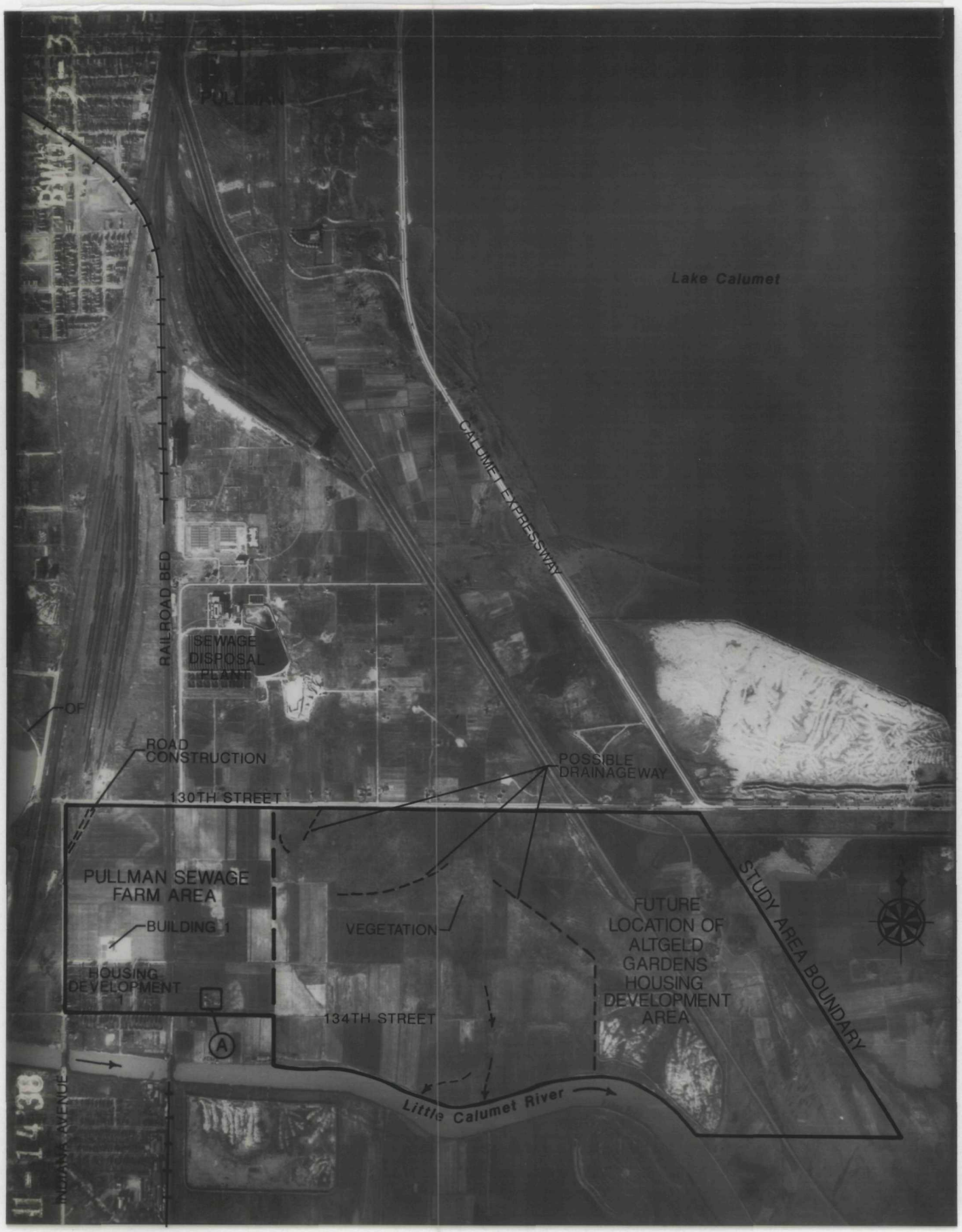

Figure 3. Altgeld Gardens, November 14, 1938. Approximate scale 1:19,525.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- — — — STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

SITE FEATURES

- DIKE
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- VS VEGETATION STRESS
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- WV WETLAND VEGETATION

SEPTEMBER 3, 1959 (FIGURE 4)

Locations of features and/or structures previously reported on the 1938 photograph are annotated on this photograph to serve as reference points. The second date of analysis shows the extended study area 21 years later. At the Pullman Sewage Farm Area the northeast corner is a rectangular lot with a complex of buildings already extant. The remaining surface of the lot appears to be smoothed construction fill. Adjacent to this lot, but within the Altgeld Gardens Housing Development Area, a school is noted as already extant. Lawrence Avenue has been constructed along the eastern perimeter of the sector. At the Altgeld Gardens Housing Development Area the actual Altgeld Gardens housing development is extant. There are smoothed fill areas just north of 134th Street which indicate construction in progress.

Figure 4. Altgeld Gardens, September 3, 1959. Approximate scale 1:11,732.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- — — — STUDY AREA

DRAINAGE

- ←- - - - DRAINAGE
- ← FLOW DIRECTION
- - -←→- - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- = = = = = VEHICLE ACCESS
- +-+-+-+ RAILWAY

SITE FEATURES

- DIKE
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- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WV WETLAND VEGETATION

US EPA RECORDS CENTER REGION 5
411882

SITE ASSESSMENT REPORT
FOR THE
ALTGELD GARDENS COMMUNITY
I-94 and 130th Street
CHICAGO, COOK COUNTY, ILLINOIS

August 6, 1997

Prepared by:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: Charles Gebien Date: 8/6/97
Charles Gebien, On-Scene Coordinator

Reviewed by: Donald J. Bruce Date: 8/6/97
Donald Bruce, Chief ER Section 2

Table of Contents

Section		Page
1	Introduction	1-1
2	Background	2-1
	2.1 Site Description	2-1
	2.2 Site History	2-2
3	Site Assessment	3-1
4	Analytical Results	4-1
5	Discussion of Potential Threats	5-1
6	Removal Activities	6-1

Appendix		Page
A	Aerial Photographic Analysis	A-1
B	U.S. EPA CRL Analytical Reports	B-1
C	Photo Documentation	C-1

List of Figures

Figure		Page
2-1	Site Location Map	2-3
2-2	Site Features Map	2-4

List of Tables

Table		Page
3-1	Standing Water Sample Description	3-1
3-2	Surface Soil Sample Description	3-2
3-3	Sub-Surface Soil Sample Description	3-3
3-4	Block 11 Follow -up Surface Soil Sample Description	3-4
4-1	Summarized PAH Data for Standing Water Samples	4-1
4-2	Summarized PAH Data for Surface Soil Samples	4-2
4-3	Summarized PAH Data for Sub-Surface Soil Samples	4-3
4-4	Summarized PAH Data for Block 11 Follow Up Surface Soil Samples & X103\SS20	4-4

1. Introduction

The United States Environmental Protection Agency (U.S. EPA) Southeast Chicago Site Assessment Team (SAT) requested the Superfund Division Emergency Response Branch (ERB) and the Superfund Division Technical Support Section (TSS) to assess the possible presence of soil contamination at the Altgeld Gardens Community (AGC) located in Chicago, Cook County, Illinois.

On-Scene Coordinator Charles Gebien and Keith Lesniak of U.S. EPA ERB were tasked to perform the site assessment and to determine if conditions are present at the AGC which present an imminent and substantial threat to public health and welfare and the environment. The Chicago Housing Authority (CHA) was advised of proposed assessment work and participated in sampling activities.

2. Background

2.1 Site Description

The Altgeld Gardens community (AGC) is a low-income housing development that is managed by the Chicago Housing Authority (CHA). The AGC is located near Interstate 94 and 130th Street, Chicago, Cook County, Illinois (Figure 2-1). The AGC is bounded on the north by 130th Street, on the south by the Little Calumet River, on the east by the Beaubien Woods, and on the west by St. Lawrence Avenue (Figure 2-2). Approximately 10,000 residents live in the AGC.

2.2 Site History

The AGC was constructed in approximately 1941, atop an agricultural area. Residents of the AGC have indicated that canals from the Pullman Sewage Farm carried sewage wastes from industrial areas north of the AGC, through the AGC, and southward to the little Calumet River, until the 1950s. Many residents complain that health problems including skin rashes and asthma are prevalent in the AGC. Two soil samples collected from the AGC as part of a 1990 U.S. EPA Site Screening Inspection (SSI) and 1994 Expanded Site Inspection (ESI) for the Pullman Sewage Farm identified elevated levels of PAHs, pesticides, and heavy metals in surface soil (Refer to Table 4-4). The Illinois Department of Public Health (IDPH) has recommended that additional soil testing is justified at the AGC, particularly in areas where children play. The contaminants of concern are pthalates, PCBs, PAHs, heavy metals, pesticides, and VOCs.

On July 18, 1996, OSC Gebien, U.S. EPA ERB, completed a Sampling QA/QC Work Plan (SWP) for sampling activities planned at the AGC. The sample locations that are included in the SWP were chosen by interviews with AGC leaders and are based on complaints of contamination in each of the locations. In August 1996, the U.S. EPA Characterization Research Division completed an aerial photographic analysis of the Pullman Sewage Farm and the AGC area. In November 1996, an addendum was added to further interpret historical drainage ways which appear in 1938 aerial photos of the AGC (Refer to Appendix A for the Aerial Photographic Analysis of Altgeld Gardens). The 1938 aerial photo shows the AGC property in cultivation prior to construction of housing units and depicts possible drainage ways.

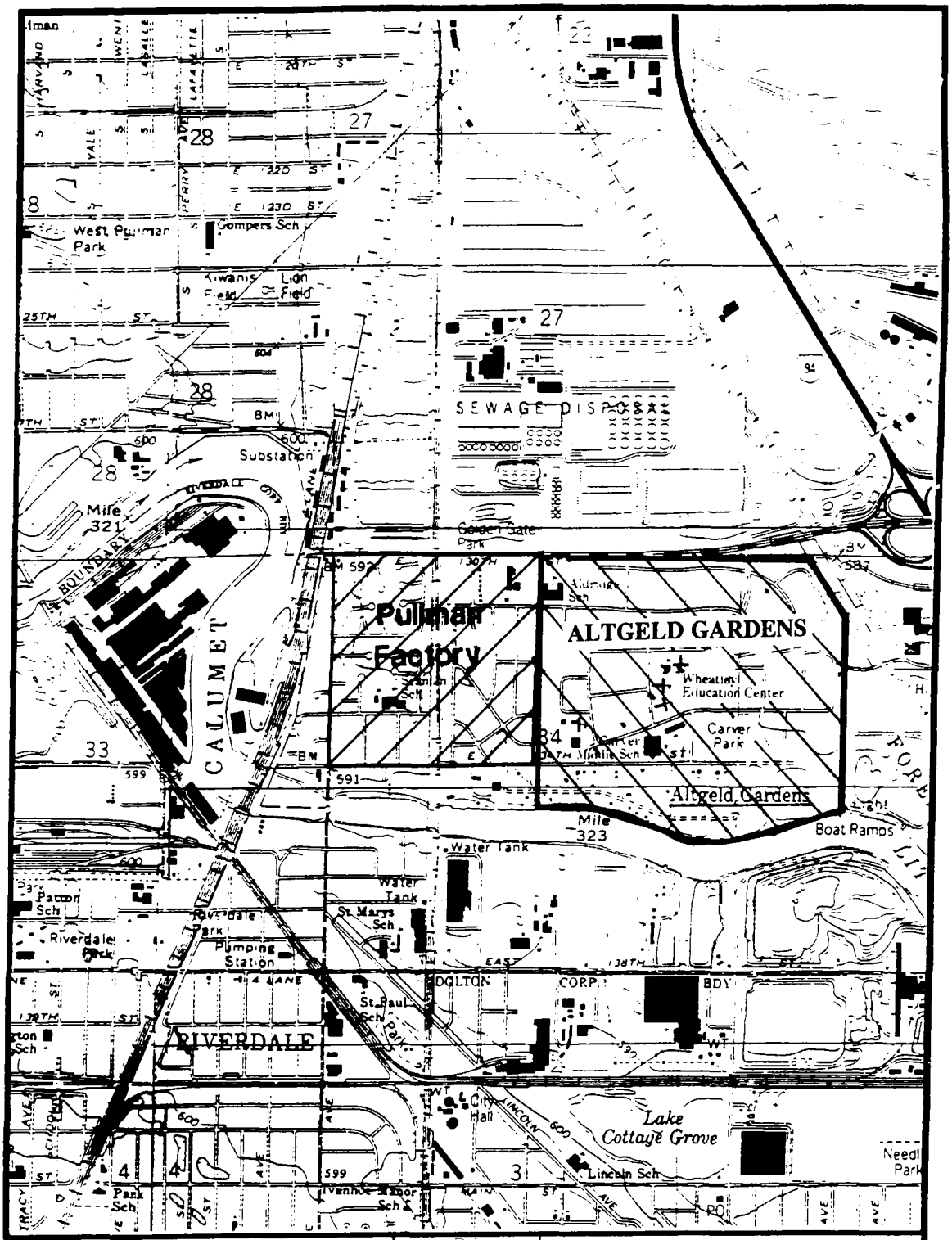

Source: USGS 7.5' Topographic Maps Lake Calumet (1991) and Blue Island (1973) Quadrangles		Figure 2-1 Site Location Map
Scale: 0 1/2 mile		**ALTGELD GARDENS** Chicago, Illinois

FRE00109
7 12 94

Altgeld Gardens Sampling Locations

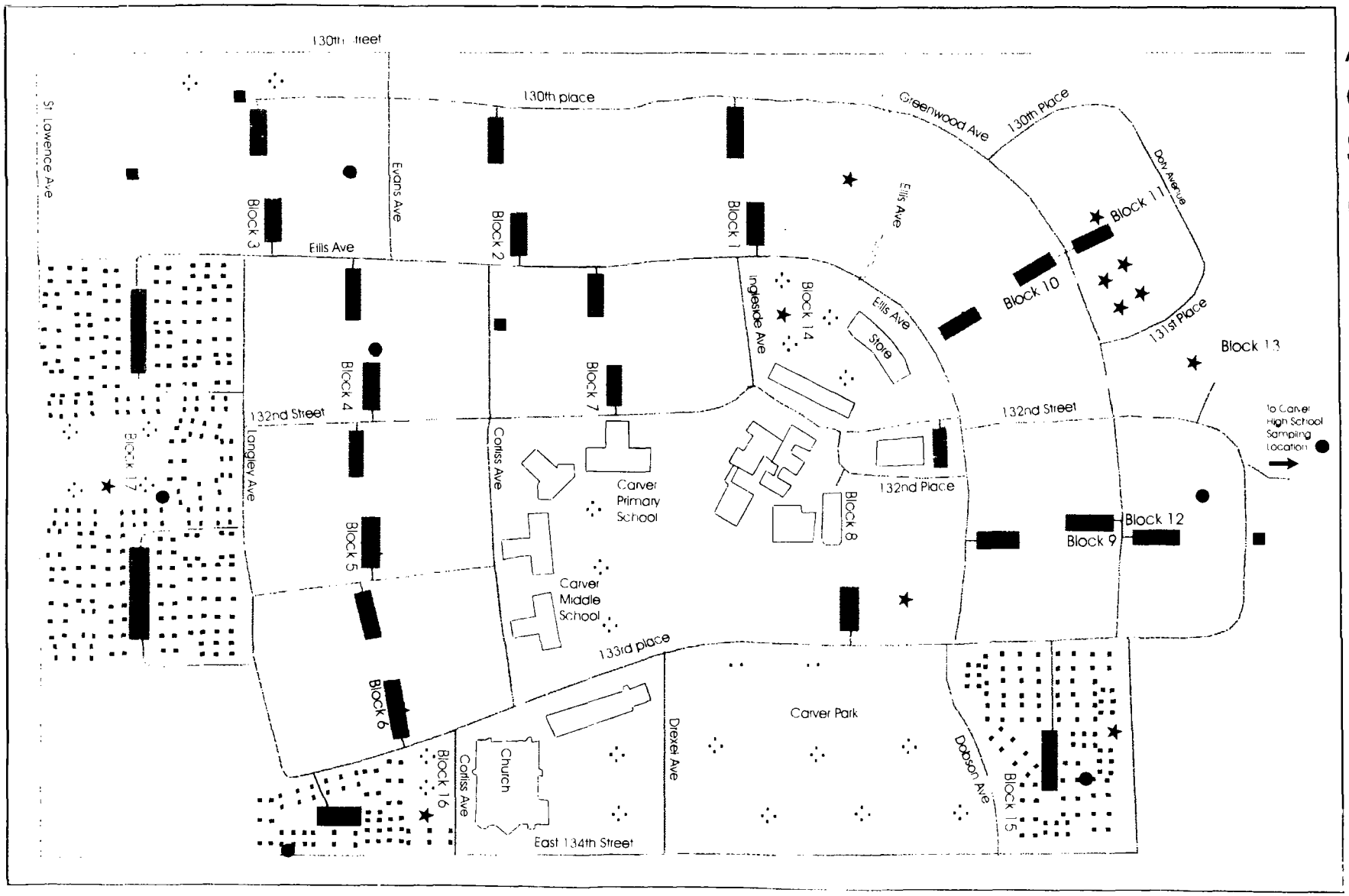

Legend

- Residential Buildings
- Overhead Lighting
- Public Buildings
- Pavement
- Surface Sampling Locations
- Subsurface Sampling Locations
- Standing Water Sampling Locations

3. Site Assessment

On July 18, 1996 OSC Charles Gebien and Keith Lesniak visited the AGC area, after a major storm event to observe and photo document possible flooding conditions. On July 22, 1996, OSC Gebien and Lesniak met at AGC with Mr. Fred Chang, P.E., Environmental Unit, CHA, to collect water samples from areas of chronic standing water within the AGC. Standing water samples were collected from seven locations (Figure 2-2) were collected from the following locations; Block 15 (SO1), Block 12 (SO5), Block 16 (SO6), Block 17 (SO7), Block 3 (SO2), Block 4 (SO3), Carver High School (SO9). Refer to Table 3-1 for further sample location and description information and to Appendix C for photographs taken during the flooding observation and water sampling activities. Sampling was conducted in level D protection. The samples were delivered to the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois. The water samples were analyzed for ABN, pesticides/polychlorinated biphenyls (PCBs), volatile organic analytes (VOAs), metals, mercury, and cyanide.

On August 21, 1996 OSC Charles Gebien and Keith Lesniak returned to the AGC area, and met with Mr. Fred Chang, P.E., Environmental Unit, CHA, to collect soil samples from areas within the AGC which are suspected areas of contamination. Soil samples were collected from the surface of the ground at ten locations (Figure 2-2). Samples were collected from the following locations; Block 16 (S17), Block 17 (S18), Block 3 (S13), Block 4 (S14), Carver Primary School Courtyard on Corliss St (S21). Block 15 (S12), Block 12 (S16), Carver High School (S20), Block 11 (S15) and WIC Clinic (S19). Refer to Table 3-2 for additional sample description and location information and to Appendix C for photographs taken during the soil sampling activities. Sampling was conducted in level D protection. The samples were delivered to the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois. The soil samples were analyzed for ABN, pesticides/PCBs, VOAs, metals, mercury, and cyanide.

On November 11, 1996, OSC Charles Gebien and Keith Lesniak returned to the AGC area, and met with Steve Peterson, Alan Gebien, and Tom Sedlacek. Mr. Fred Chang, CHA, was not present due to other obligations. The purpose of the visit was to investigate subsurface soils in historical drainage areas within the AGC, which were identified through aerial photographic analysis as potential routes of contamination from the former Pullman Sewage Farm. Four former drainage ways were chosen for Geoprobe sampling, and one Geoprobe boring was performed in each drainage way. Subsurface soil samples were collected from the four Geoprobe boring locations as shown in Figure 2-

2. Samples were collected as follows; Geoprobe I 2'-4' (S01), 4'-6'(S02), Geoprobe II 2'-4' (S03), 4'-6' (S04), 6'-8' (S11), Geoprobe III 2'-4' (S05), 4'-6' (S06), Geoprobe IV 2'-4' (S07), 4'-6' (S08) and 6'-8' (S09). Refer to Table 3-3 for further sample description and location information. Photographs were not taken during the Geoprobe soil sampling activities. Sampling was conducted in level D protection. The samples were delivered to the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois. The soil samples were analyzed for ABN, pesticides/PCBs, VOAs, metals, mercury, and cyanide.

On March 25,1997, OSC Charles Gebien and Keith Lesniak returned to the AGC area, and met with Mr. Fred Chang, CHA. The purpose of the visit was to collect additional surface soil samples in Block 11, because elevated levels of PAHs were identified from our earlier surface soil sample in that block. Four samples were collected from a courtyard lawn area as follows: front of Unit 13055 (S01), front of Unit 1128 (S02), front of Unit 1114 (S03), and front of Unit 13073 (S04). Refer to Table 3-4 for further sample description and location information.

Table 3-1 Standing Water (Collected 7/22/96) Sample Description		
Sample No.	**Appearance**	**Location**
S01	Clear Water	Sample from lawn area near unit 1078 in Block 15. Photos 1-5
S02	Clear water	Sample from grassy area near unit 13034 in Block 3. Photos 18-20.
S03	Cloudy water	Sample from hose that was pumping flood water from basement of unit 13144 in Block 4. Photos 15-17.
S05	Clear water with mosquito larvae	Sample from lawn area in front of unit 1153 in Block 12, Photos 6-8.
S06	Clear water with mosquito larvae	Sample collected from lawn sidewalk area in front of units 706 and 708 in Block 16. Photos 9-11.
S07	Clear water with mosquito larvae	Sample from base of playground slide in back of unit 13221 in Block 17. Photos 12-14.
S09	Clear water with mosquito larvae	Sample from grassy ditch west of Carver High School in Beaubien Woods. Photos 21-24.

Table 3-2 Surface Soils (Collected 8/21/96) Sample Description (0-3 inches depth)		
Sample No.	**Appearance**	**Location**
S12	Soil	Sample collected from grassy area in courtyard near unit 1076 in Block 15. Photos 7-8.
S13	Soil	Sample collected from grassy area in front of unit 13042 in Block 3. Photo 4.
S14	Soil	Sample from grassy area in courtyard near unit 13124 in Block 4. Photo 5.
S15	Soil	Sample from grassy area near unit 1130 in Block 11. Photo 11.
S16	Soil	Sample collected from grassy area near unit 1149 in Block 12. Photo 9.
S17	Soil	Sample from grassy area near units 706 and 708 in Block 16. Photos 1 and 2.
S18	Soil	Sample from grassy area, near lamp post, adjacent to slide, in playground area in Block 17. Photo 3.
S19	Soil	Sample from grassy area in front of WIC Clinic. Photo 12.
S20	Soil	Sample from grassy ditch west of Carver High School in Beaubien Woods between R.R. tracks and entrance road. Photo 10.
S21	Soil	Sample from grassy area in Carver Primary School courtyard approx. 50 ft. North of play area equipment for school.

Table 3-3 Sub-Surface Soils (Collected 11/12/96) Sample Description			
Sample No.	**Depth (feet)**	**Appearance**	**Location**
Geoprobe I S01	2' to 4'	Light brown clay soil	Sample from grassy area east of Corliss St. in Block 7.
Geoprobe I S02	4' to 6'	Light brown clay soil	Sample from grassy area east of Corliss St. in Block 7.
Geoprobe II S03	2' to 4'	Mottled clay with yellow specks	Sample from field east of 133rd St. immediately east of Block 12.
Geoprobe II S04	4' to 6'	Mottled clay with sand	Sample from field east of 133rd St. immediately east of Block 12.
Geoprobe II S11	6' to 8'	Wet brown clay	Sample from field east of 133rd St. immediately east of Block 12.
Geoprobe III S05	2' to 4'	Brown clay soil with pieces of brick	Sample from grassy playground area 30 ft. southwest of rocket ship west of Block 3.
Geoprobe III S06	4' to 6'	Brown clay soil with pieces of brick	Sample from grassy playground area 30 ft. southwest of rocket ship west of Block 3.
Geoprobe IV S07	2' to 4'	Brown clay soil	Sample from grassy area midway between light post and large willow tree in Block 3.
Geoprobe IV S08	4' to 6'	Brown clay soil	Sample from grassy area midway between light post and large willow tree in Block 3.
Geoprobe IV S09	6' to 8'	Brown clay soil	.Sample from grassy area midway between light post and large willow tree in Block 3.

Table 3-4 Block 11 Follow up Surface Soils (Collected 3/25/97) Sample Description (0-3 inches depth)		
Sample No.	**Appearance**	**Location**
S01	Soil	Sample collected from grassy area in courtyard near unit 13055 in Block 11.
S02	Soil	Sample collected from grassy area in courtyard near unit 1128 in Block 11.
S03	Soil	Sample from grassy area in courtyard near unit 1114 in Block 11.
S04	Soil	Sample from grassy area in courtyard near unit 13073 in Block 11.

4. Analytical Results

The water samples, surface soil samples, and sub-surface samples were analyzed for ABN, pesticides/polychlorinated biphenyls (PCBs), volatile organic analytes (VOAs), metals, mercury, and cyanide. All samples were analyzed at the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois.

Analytical results indicate that slightly elevated levels of PAH compounds may be present in the surface soils within the AGC area. PAH data is summarized for standing water, surface soils, and sub-surface soils in tables 4-1, 4-2, and 4-3. Refer to Appendix B for CRL analytical reports and corresponding QA/QC reviews.

Table 4-1
Summarized PAH Data for Standing Water Samples
All concentrations in ppb

Compound	Sample Designation							
	S01	S02	S03	S05	S06	S07	S09	R01
di-n-Butylphthalate	5 U	1 J	5 U	5 U	3 J	5 U	5 U	5 U
Carbazole	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-ethylhexyl)phthalate	2 J	2 J	4 J	2 J	1 J	2 J	5 U	4 J
Chrysene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(b)flouranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(k)flouranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Key:
J = Estimated value.
U = Not detected.
B = Contaminant found in laboratory method blank.

Source: U.S. EPA Central Regional Laboratory, Chicago, Illinois.

Table 4-2
Summarized PAH Data for Surface Soil Samples
All concentrations in ppb

Compound	Sample Designation										
	S12	D12	S13	S14	S15	S16	S17	S18	S19	S20	S21
di-n-Butylphthalate	3800	2000	1800	12000	6300	4400	2300	3100	6800	4900	3000
Carbazole	990 U	1000 U	1000 U	1000 U	370 J	1100 U	1100 U	930 U	940 U	990 U	970 U
Fluoranthene	250 J	280 J	450 J	630 J	4800	600 J	580 J	930 U	850 J	990 U	530 J
Anthracene	990 U	1000 U	1000 U	1000 U	630 J	1100 U	1100 U	930 U	200 J	990 U	970 U
Pyrene	210 J	250 J	370 J	530 J	4000	520 J	450 J	930 U	870 J	990 U	460 J
Bis(2-ethylhexyl)phthalate	6900 BJ	6600 BJ	12000 BJ	2100 BJ	1600 BJ	7900 BJ	6500 BJ	4900 BJ	9800 BJ	4900 BJ	7600 BJ
Chrysene	990 U	1000 U	300 J	410 J	2700	370 J	380 J	930 U	380 J	990 U	350 J
Benzo(a)anthracene	990 U	1000 U	1000 U	360 J	2500	400 J	380 J	930 U	480 J	990 U	330 J
Benzo(b)flouranthene	270 J	330 J	380 J	540 J	3400	530 J	540 J	930 U	370 J	990 U	460 J
Benzo(k)flouranthene	990 U	1000 U	1000 U	230 J	1000 J	230 J	230 J	930 U	160 J	990 U	180 J
Benzo(a)pyrene	190 J	220 J	300 J	380 J	2500	410 J	400 J	930 U	370 J	990 U	370 J
Indeno(1,2,3-cd)pyrene	180 J	230 J	290 J	380 J	2000	390 J	390 J	930 U	270 J	990 U	340 J

Key:
J = Estimated value.
U = Not detected.
B = Contaminant found in laboratory method blank.

Source: U.S. EPA Central Regional Laboratory, Chicago, Illinois.

Table 4-3
Summarized PAH Data for Sub-Surface Soil Samples
All concentrations in ppb

Compound	Sample Designation									
	S01	S02	S03	S04	S05	S06	S07	S08	S09	S11
di-n-Butylphthalate	7600 B	10000 B	8800 B	5600 B	8200 B	7600 B	7300 B	15000 BD	14000 BD	8100 B
Carbazole	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	100O U	1200 U	1200 U	1100 U
Fluoranthene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Anthracene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Pyrene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Bis(2-ethylhexyl)phthalate	1700 B	2200 B	1600 B	1100 B	140 JB	760 JB	710 JB	1300 B	830 JB	1500 B
Chrysene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Benzo(a)anthracene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Benzo(b)flouranthene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Benzo(k)flouranthene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Benzo(a)pyrene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Indeno(1,2,3-cd)pyrene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U

Key:
J = Estimated value.
U = Not detected.
B = Contaminant found in laboratory method blank.

Source: U.S. EPA Central Regional Laboratory, Chicago, Illinois.

Table 4-4
Summary PAH Data for Block 11 Follow Up Surface Soil Samples and X103/SS20 Historical PAH Data
All concentrations in ppb

Compound	Sample Designation					
	S01	S02	S03	S04	X103 (May 1990)	SS20 (Nov. 1994)
di-n-Butylphthalate					----------	1300 J
Carbazole					----------	2400 J
Fluoranthene	2100 J	2300 J	1800 J	1400 J	1800.00	23,000
Anthracene	2500 U	2400 U	2400 U	2200 U	----------	3500 J
Pyrene	1600 J	2300 J	1700 J	1400 J	1600.00	22,000
Bis(2-ethylhexyl)phthalate					480.00 J	----------
Chrysene	1010 J	1300 J	1100 J	740 J	720.00 J	12,000
Benzo(a)anthracene	1100 J	1300 J	1100 J	920 J	1000.00	9700
Benzo(b)flouranthene	1500 J	1600 J	1600 J	1040 J	830.00 J	7900
Benzo(k)flouranthene	550 J	520 J	390 J	380 J	510.00 J	11,000
Benzo(a)pyrene	990 J	1200 J	980 J	740 J	670.00 J	9000
Indeno(1,2,3-cd)pyrene	970 J	1080 J	870 J	620 J	440.00 J	4600

Key:
J = Estimated value.
U = Not detected.
B = Contaminant found in laboratory method blank.

Source: U.S. EPA Central Regional Laboratory, Chicago, Illinois.

5. Discussion of Potential Threats

Analyses of surface soils, sub-surface soils and standing water within the AGC indicate that although elevated levels of PAHs were identified in surface soils within block 11, the levels do not exceed the recommended removal action level (RAL) for total PAHs (500-1000 PPM total PAHs) established in the "Emergency Removal Guidelines". Information from this report is being reviewed by U.S. EPA for a health based risk assessment.

There are no conditions present in the areas assessed at the AGC that may present an imminent and substantial threat to public health and welfare and the environment, based on considerations set forth in paragraph (b) (2) of Section 300.415 (b) (2) of the National Oil and Hazardous Substances Contingency Plan (NCP).

6. Removal Activities

There were no conditions observed at the AGC during the site assessment which warrant a removal action.

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FACT SHEET

Altgeld Murray Gardens

Chicago, Illinois

May 1998

Introduction

The United States Environmental Protection Agency (US EPA) in conjunction with the Chicago Housing Authority (CHA), has prepared this fact sheet to inform residents of US EPA's past sampling activities in the area, and to provide information regarding the results of these activities.

Background Information

Altgeld Gardens (AG) is located near Interstate 94 and 130th Street in Chicago, Illinois. AG is bounded on the north by 130th Street, on the south by the Little Calumet River, on the east by the Beaubien Woods, and on the west by St. Lawrence Avenue. AG houses 5,780 residents and is owned by the (CHA), but managed by a private company. The AG community was constructed during the years 1944-1952, atop an agricultural area. Residents of the area are concerned that canals from the Pullman Sewage Farm, located to the east of the complex, may have carried sewage wastes from industrial areas north of AG and southward to the little Calumet River
until the 1950s. There was also a belief by some community residents that AG was built on a landfill.

Investigation History

- ☐ In 1990, at the community's request, US EPA conducted background soil sampling in AG as part of a Site Screening Inspection (SSI) of the Pullman Sewage Site. Background samples are taken in most areas where US EPA is conducting inspections in order to determine the extent of contamination.

- ☐ In 1994, subsequent soil samples were taken as a follow-up to the 1990 samples. US EPA identified elevated levels of polycyclic aromatic hydrocarbons (PAHs), pesticides, and heavy metals in some of the background samples from the Expanded Site Inspection (ESI) conducted for the Pullman Sewage Farm in 1994. PAHs are common by-products of combustion. Sources include cars, trucks, smokestacks,

and even bar-b-ques.

- In 1996, US EPA observed and photo documented AG after a major storm event to identify possible flooding conditions. Water samples were then collected from seven locations in the area.

- In August 1996, US EPA also worked with CHA's environmental unit to collect soil samples at ten locations. The areas were selected after interviewing community leaders.

- In November 1996, US EPA investigated the subsurface soils in drainage areas on the site. Evidence from the aerial photos and soil samples do not indicate that there was transport of waste materials from the Pullman Sewage Farm to the Altgeld property.

- Finally, in March 1997, additional soil samples were collected in Block 11 (130th Place & Doty Avenue) because elevated levels of PAHs were identified from earlier surface soil sampling results. Four samples were collected from a courtyard lawn area in front of Units 1128 and 1114, and in front of several other street addresses.

Results

During EPA investigations in 1996 and 1997, water, surface soils, and sub-surface samples were collected from various location with Altgeld Murray Gardens. These samples were analyzed by the US EPA Central Regional Laboratory in Chicago for polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semi-volatiles, and metals. Of the chemicals detected in these samples, PAHs and DDT pesticides were identified as chemicals that requires an evaluation for their potential health effects. DDT and DDE, were generally detected in very low levels in these samples. The highest detected level of DDT, at 31 parts per million (ppm) in Block 16. This level of DDT is not considered to be either an immediate or long-term health concern.

PAHs were detected at Altgeld Gardens in about 40 percent of the surface soil samples. The detected PAHs were generally at very low levels (<0.5 ppm for the most toxic PAH, benzo(a)pyrene (BaP)). The highest detected concentration of BaP was 2.5 ppm, which occurred in Block 11 (130th Place & Doty Avenue). The four additional samples collected in that area in March, 1997 did not detect BaP or any other PAH. These levels of PAHs are not considered to be an immediate health concern and are similar to levels found in studies of other urban areas. To confirm that these levels are representative of Chicago background levels, an additional investigation is planned to specifically evaluate the background levels of PAHs in various residential areas of Chicago and to compare those levels to those found at Altgeld Gardens.

To evaluate the potential for long term, chronic effects of exposure, a screening risk assessment was performed, using the maximum detected surface soil sampling data for the site. The risk assessment considered soil ingestion and dermal absorption as the most important pathways for exposure. Using very conservative methods for evaluated,

dermal exposure to PAHs accounts for about 70 percent of the risk in our analysis. The objective of this assessment is to predict future risks of continuous lifetime exposure, rather than evaluate whether people may be affected by current exposure at the site. Using USEPA risk assessment methodology, the lifetime excess cancer risk for exposure to the highest concentration of PAHs ranged from 2 x 10 (2 out of 10,000 exposed individuals) to 3 x 10 (3 out of 1,000 exposed individuals). In interpreting these estimates, one should keep in mind these are risks that are likely to be very similar to those experienced in any other urban site. In addition, the sampling results, as well as aerial photos of the area, reveal no physical evidence that Altgeld Gardens was built on a landfill or evidence of industrial contamination in the surface soil.

Future Actions

At this time US EPA has determined that additional sampling in the Altgeld Gardens is not necessary because Altgeld Garden levels were similar to those identified in studies of other urban areas. However, US EPA is conducting a PAH and lead background study to verify PAH and lead background levels for the City of Chicago. Information gathered in this study will be used to help determine future cleanup action levels for urban sites in general.

☎ For more information, please feel free to contact

Leo Rosales
Community Involvement Coordinator
U.S. Environmental Protection Agency
77 West Jackson Blvd. P-19J
Chicago, IL 60604
(312) 353-6198
1-800-621-8431

Pablo Valentin
Remedial Project Manager
(312) 353-5592

GLOSSARY

Volatile Organic Compounds (VOCs) and **Semi-Volatile Organic Compounds (semi-VOC's)** - An organic (carbon-containing) compound that evaporates readily at room temperature. Examples of VOC's include dry cleaning fluid, lighter fluid, paint thinners and components of gasoline.

Pesticides - Substances or mixture thereof intended for preventing, destroying, repelling, or mitigating crop. EPA sets these levels well below the point where the compounds might be harmful to consumers.

DDT - the first chlorinated hydrocarbon insecticide (chemical name: Dichloro-Diphenyl-Trichloromethane). It has a half-life of 15 years and can collect in fatty tissues of certain animals. EPA banned registration and interstate sale of DDT for virtually all but emergency uses in the United States in 1972 because of its persistence in the environment and accumulation in the food chain.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

received
9/2/98

c: J. GIBSON
J. WAWATU
original - SUBJECT FILE - EPA PAH

August 27, 1998

REPLY TO THE ATTENTION OF: S. Jain

Mr. Sanjiv Jain
Chicago Housing Authority - Modernization Division
833 W 115th Street
Chicago, Illinois 60643

Re: Altgeld Gardens Housing Complex

Dear Mr. Jain:

This letter is written to you with a recommendation that the Chicago Housing Authority (CHA) take appropriate actions to reduce the potential exposure at the Altgeld Gardens Housing Complex to polynuclear aromatic hydrocarbons (PAHs) detected in surface soils.

As you know, U.S. EPA has been involved in various soil sampling activities at the Altgeld Gardens Property. The most recent sampling took place in 1996, after a request was made by the community to look into possible soil contamination. The results of the sampling effort were presented to community representatives, specifically Hazel and Cheryl Johnson, People for Community Recovery (PCR), and Keith Harley, Chicago Legal Clinic, on July 20, 1998, at the U.S. EPA's office. We also tried to invite a representative from the Altgeld Gardens Local Advisory Board, but attempts to contact Mrs. Wheeler yielded a phone message indicating that the line had been disconnected. In addition, Lisa Schneider and Jaote Wawatu from the CHA were also present at this meeting.

U.S. EPA could find no evidence of release of PAHs from specific sources, and suspects that atmospheric deposition from point, area, and mobile sources are most likely responsible for the contamination. A comparison of PAH levels detected at Altgeld Gardens to those found in other urban areas indicated that the Altgeld values were within the expected range. However, the highest value of 2.5 ppm has the potential to cause adverse health effects through dermal contact under certain exposure assumptions. While this level would not support a Superfund removal action, we believe it is prudent to take some common sense steps to reduce or eliminate the exposure pathway.

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Therefore, U.S. EPA strongly recommen CHA, as property owner, take appropriate measures to reduce the residents' contact with PAH contaminated soils. Appropriate measures to reduce exposure could include establishing groundcover, such as placing wood chips over surface soils in play lots and/or planting grass in court yard areas where the elevated PAH levels were found. These activities will greatly reduce risk to children and adults by eliminating direct contact with contaminated soils. These measures may also result in the reduction of the PAH compounds through a natural process known as phyto-remediation. In addition, Northwestern Unliversity may shortly provide us with other options to reduce the exposure pathway.

U.S. EPA would also like to invite CHA to partner in a project that would address this issue at Altgeld Gardens by establishing and maintaining groundcover with community support. The project would consist largely of education and outreach activities to Altgeld Gardens residents, and other stakeholders, in order to address the PAH issue.

Should you have any questions or concerns, please feel free to contact Mardi Klevs, Greater Chicago Team Manager, at (312) 353-5490.

Sincerely yours,

William E. Muno, Director
Superfund Division

cc: Hazel Johnson, People for Community Recovery
Keith Harley, Chicago Legal Clinic
Altgeld Gardens Local Advisory Board

Clarke-Moreno
I.1
9/11/00

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

US EPA RECORDS CENTER REGION 5
411876

SEP 11 2000

REPLY TO THE ATTENTION OF:
D-8J

Martin J. Bishop
Hopkins & Sutter
Three First National Plaza
Chicago, Illinois 60602-4205

Re: Altgeld Gardens Community

Dear Mr. Bishop:

As promised in the July 28, 2000, letters responding to your Freedom of Information Act request, we are writing to provide you with information concerning the potential analytical problems involving the United States Environmental Protection Agency's (U.S. EPA) Central Regional Laboratory, and U.S. EPA's proposal to conduct core sampling for Polychlorinated Biphenyls (PCBs) in the yards on the north side of the Dorothy Gautreax Child Parent Center, 975 E. 132nd Street, Chicago, Illinois (Gautreax Center), and surface soil and surface water sampling in the area throughout the community housing, as in the enclosed figure.

During the spring of 1996 the Chicago Housing Authority (CHA) conducted a cleanup of soil contaminated with PCBs, a chemical regulated under the Toxic Substances Control Act, from the yards on the north side of the Gautreax Center. The source of the PCB contamination was a storage lot located across the street from the Gautreax Center where the CHA had disposed PCBs from electrical transformers. During the cleanup, approximately one foot of soil was excavated across the entire north side of the Gautreax Center, cleanup confirmation samples were collected, and the area was backfilled with clean soil trucked in from off site. U.S. EPA, Region 5, conducted oversight of the CHA's cleanup and assisted the CHA by providing laboratory analysis of the CHA's samples. Based on the sample analysis, Region 5 determined that the PCB cleanup level of less than 10 parts per million (ppm) had been met, and the area could be backfilled to grade with clean soil.

During 1996 and 1997, U.S. EPA also conducted surface soil and water sampling in certain areas of the housing complex in response to residents' concerns with potential contamination. The surface soil samples and surface water samples were analyzed for a full range of contaminants. Low levels of polycyclic aromatic hydrocarbons (PAHs), mainly Benzo(a)pyrene and low levels of DDD, DDT and DDE, were found in the soil samples. Although results were below action levels, U.S. EPA recommended to the CHA that a grass cover be placed in areas where bare soil was present. This grass cover prevents direct contact with soil.

Since these actions, allegations of misconduct in the analysis of samples have been made regarding two employees of U.S. EPA's Central Regional Laboratory and two contract employees who analyzed samples for Region 5's Superfund Program. The Office of the Inspector General is conducting an investigation of the alleged misconduct which relates to failures to follow standard laboratory operating procedures. Because of these allegations, U.S. EPA has determined that data generated from samples analyzed by these individuals will not be relied on for its decisions. U.S. EPA has determined that two sampling events at the Gautreax Center resulted in final cleanup decisions based solely on analytical results which were provided by one of the analytical chemists in question. On April 23 and May 8, 1996, soil samples were collected for PCB analysis from the excavation on the north side of the Gautreax Center. These results are identified by data set numbers 960073 and 960084. Because the 1996 analyses were performed by one of the analytical chemists in question, U.S. EPA now considers these particular analytical results to be unreliable Even though U.S. EPA has reviewed the 1996 raw analytical data and cannot conclude that there was any failure to follow analytical procedures which caused the analytical results to be lower than target levels indicating a need for cleanup, U.S. EPA believes the most prudent course of action is to resample this area. U.S. EPA must emphasize that the north yards are covered by approximately one foot of clean soil and do not present a significant risk to children attending the Gautreax Center or to the nearby community. It should also be noted that no similar problems have been found with the cleanup at the Altgeld Gardens storage lot, which was completed last summer.

With regard to the Superfund sampling, data from the sampling events in soil and water were reviewed and only certain chemical analysis was performed by these individuals. This was the case for pesticides in water and soils and for organic contaminants in soils, identified by data set numbers 960131, 960152 and 970025. Therefore, all locations will need to be resampled by U.S. EPA. However, samples will only be analyzed for pesticides and volatile organic compounds.

U.S. EPA intends to conduct this sampling by the middle of September.

If you have questions, please contact Scott Cooper, for the PCB sampling at (312) 886-1332 and Rosita Clarke-Moreno at (312) 886-7251, for the Superfund soil and water sampling.

Sincerely,

Robert Springer, Director
Waste, Pesticides and Toxics Division

William E. Muno
Superfund Division Director

Enclosure

Altgeld Gardens Sampling Locations

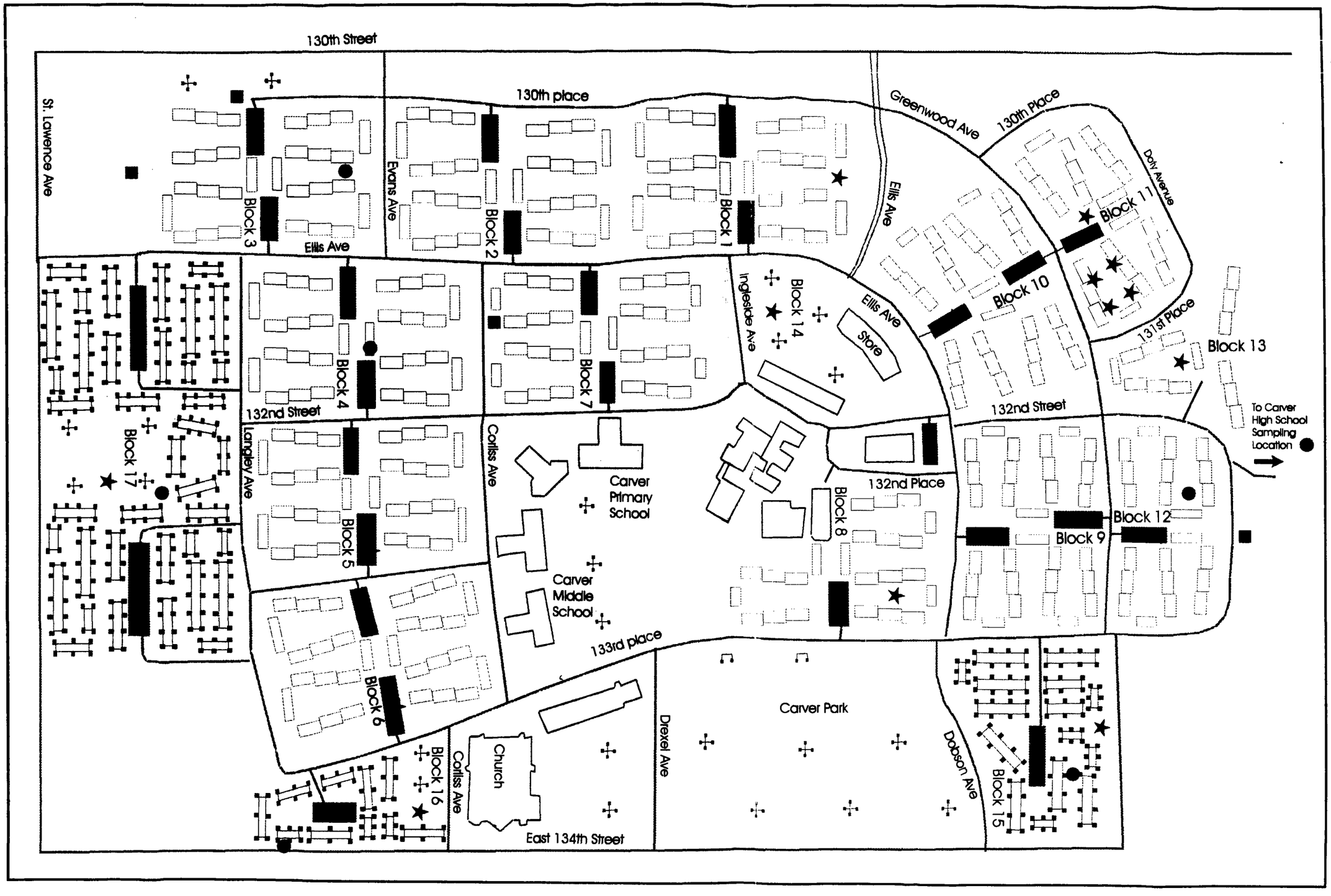

U.S EPA Sampling 1996/1997

Legend

- Residential Buildings
- Overhead Lighting
- Public Buildings
- Pavement
- ★ Surface Sampling Locations
- ■ Subsurface Sampling Locations
- ● Standing Water Sampling Locations

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11/15/00

LETTER REPORT
FOR
ALTGELD GARDENS
CHICAGO, COOK COUNTY, ILLINOIS
TDD: S05-0008-010
PAN: 0G1001SIXX

November 15, 2000

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: _____ Date: 11/15/00
Larry Lueck, START Project Manager

Reviewed by: _____ Date: 11/15/00
Patrick Zwilling, START Assistant Program Manager

Approved By: _____ Date: 11/15/00
Daniel Sewall, START Program Manager

International Specialists in the Environment

33 North Dearborn Street, Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

ecology and environment, inc.
International Specialists in the Environment

33 North Dearborn Street
Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

November 15, 2000

Ms. Gail Nabasny
START Project Officer
Emergency Support Section
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Altgeld Gardens
Chicago, Cook County, Illinois
TDD: S05-0008-010
PAN: 0G1001SIXX

Dear Ms. Nabasny:

The United States Environmental Protection Agency (U.S. EPA) tasked the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E), under Technical Direction Document (TDD) S05-0008-010, to assist U.S. EPA Remedial Project Manager (RPM) Rosita Clarke-Moreno with a site assessment at the above referenced site. The purpose of the site assessment was to resample surface soil locations on the Altgeld Gardens Community (AGC) that were originally sampled by U.S. EPA in 1996 and 1997 and analyzed for polyaromatic hydrocarbons (PAHs) and pesticides. Analytical results from that sampling effort are suspect because the analyses were performed by the Central Regional Laboratory (CRL). Recent investigations have determined that certain analytical data, including pesticide analyses, generated by CRL at the time of the U.S. EPA Altgeld Gardens soil sampling event may be erroneous.

The AGC site is a housing development managed by the Chicago Housing Authority (CHA) located south of 130th Street just west of Interstate 94 in Chicago, Cook County, Illinois (Attachment A, Figure 1). The AGC is bounded on the north by 130th Street, on the south by the Little Calumet River, on the east by the Beaubien Woods forest preserve, and on the west by St. Lawrence Avenue. Approximately 10,000 residents live in the AGC.

The AGC was constructed in 1941 on former farm land and several backfilled ditches that may have contained industrial effluent and debris. Many residents of the AGC have complained that health problems, including skin rashes and asthma, are prevalent in the community. Two soil samples collected from the AGC property in 1990 during a U.S. EPA investigation identified elevated levels of PAHs, pesticides, and heavy metals in surface soil. The Illinois Department of Public Health recommended additional soil sampling on AGC property, particularly in areas where children play.

In 1996, at the request of community leaders, U.S. EPA conducted a site investigation of the AGC property, including sampling of soil and standing water, to determine whether hazardous materials were present due to reported landfilling in the area. Results of this sampling and analysis indicated PAHs, and

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PAHs, and the pesticides DDT, DDD, and DDE as contaminants of concern. The U.S. EPA analytical pesticide data is given in Attachment B, Table 1. At one sample location, S17, in housing Block 16 (Attachment A, Figure 2), the concentrations of pesticides were found to be above Agency for Toxic Substances and Disease Registry (ATSDR) screening criteria. Maximum concentrations found were: DDT at 31,399 micrograms per kilogram (μg/kg), DDD at 5,841 μg/kg, and DDE at 31,595 μg/kg.

In April of 1999, START performed a more detailed round of surface soil sampling in the vicinity of Block 16, collecting 10 located samples plus one duplicate and one off-site background sample. Analytical results, detailed in a Letter Report dated May 28, 1999, revealed the presence of pesticides in every sample, including the background sample. In on-site soils, 4,4'-DDD ranged from 30 to 570 μg/kg; 4,4'-DDE ranged from 660 to 17,000 μg/kg; and 4,4'-DDT ranged from 340 to 7,900 μg/kg. Aldrin was detected in one sample at 32 μg/kg, and dieldrin was detected in one sample at 15 μg/kg.

Under the present TDD, RPM Clarke requested that START return to the AGC site, resample the 1996-1997 U.S. EPA surface soil locations, and have the samples analyzed for pesticides at a commercial laboratory. On October 4, 2000, START members Larry Lueck and Erin White mobilized to the site and collected 10 surface soil samples, as well as a duplicate of one sample, using site file information to determine the 1996-1997 locations as well as possible (Attachment A, Figure 2). Each sample was a grab sample collected from the surface to a depth of 2 to 3 inches with a stainless steel trowel. Where turf was present, attention was given to freeing soil from the grass roots to ensure that the surface was truly represented. The soil was then homogenized in a stainless steel bowl and packed into an 8-ounce wide-mouth glass sample bottle and stored on ice in a cooler. Trowels and bowls were decontaminated with Alconox solution and rinsed with commercial distilled water between samples. Dates, times, and locations of sample collection are given in Attachment B, Table 2. Attachment C presents photographs of each sample location.

START labeled each sample bottle with a unique sample number, and the date and time of collection, and shipped the samples with a completed chain of custody form to the Ecology and Environment, Inc., Analytical Services Center in Lancaster, New York, for analysis of pesticides and polychlorinated biphenyls (PCBs) under analytical TDD S05-0008-804.

A summary of the START analyses is given in Attachment B, Table 3, which also lists the U.S. EPA Region III risk-based concentrations (RBCs) for comparison. Various pesticides were detected in every soil sample in concentrations from near the respective detection limits to 25,000 μg/kg DDE and 16,300 μg/kg DDT in sample AGS1. Note that the same substances were detected at even higher levels in the U.S. EPA soil sample from the same location (Attachment B, Table 1). Of the analyses listed in Attachment B, Table 3, seven are above the respective RBCs. Although the RBCs are guidelines rather than absolute action levels, they should be considered in determining which sample locations deserve further action. The 16,300 μg/kg DDT in sample AGS1 is noteworthy as being more than ten times the RBC. In general it appears, from a comparison of the data, that the U.S. EPA sample results were higher than those of the START samples, although not in all cases. Original laboratory reports and the validation memorandum are presented in Attachment D.

This Letter Report completes the deliverable requirements of the TDD. If you should have any questions or require additional information, please contact our office.

Sincerely,

Larry Lueck
START Project Manager

for Daniel Sewall
START Program Manager

Attachments: A - Figures
B - Data Tables
C - Photodocumentation
D - Validated Analytical Results

cc: Rosita Clarke-Moreno, U.S. EPA Remedial Project Manager
TDD file

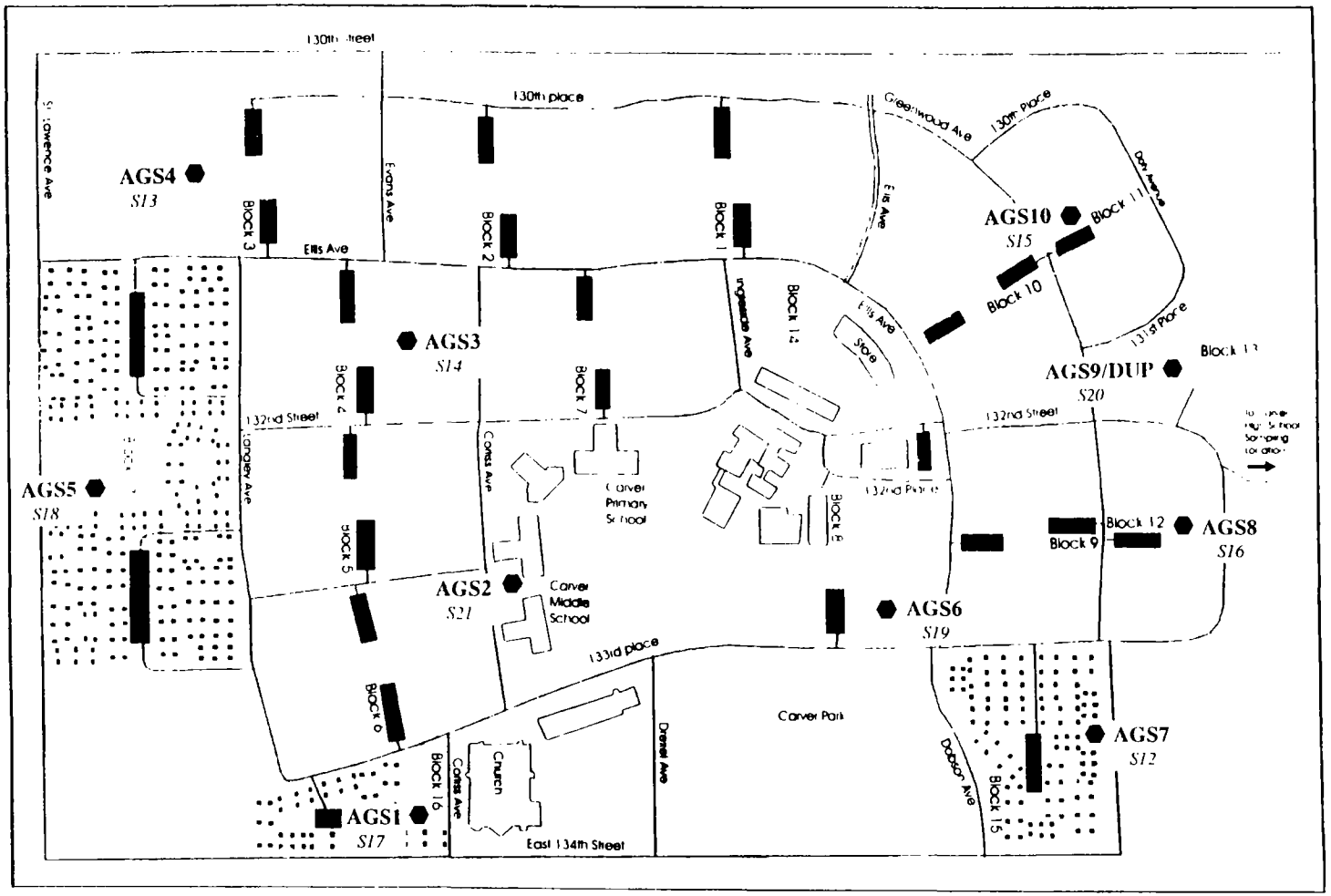

Legend

AGS3 *S14*	Soil sample location with sample number; corresponding U.S. Environmental Protection Agency sample number in italics
	Road or street
	Residential building
	Public building

ecology and environment, inc.
Superfund Technical Assessment and Response Team
33 North Dearborn, Suite 900, Chicago, Illinois 60602

TITLE	Site Features and Sample Location Map	FIGURE	2
SITE	Altgeld Gardens	SCALE	Not to Scale
CITY	Chicago STATE Illinois	TDD	S05-0008-010
SOURCE	United States Environmental Protection Agency, modified by Ecology and Envrionment, Inc.	DATE	1998; 2000

Table 1

1996-1997 U.S. EPA ANALYTICAL DATA
ALTGELD GARDENS
CHICAGO, COOK COUNTY, ILLINOIS

Parameter (µg/kg)	Sample Number[a]									
	S12 *AGS7*	**S13** *AGS4*	**S14** *AGS3*	**S15** *AGS10*	**S16** *AGS8*	**S17** *AGS1*	**S18** *AGS5*	**S19** *AGS6*	**S20** *AGS9 DUP*	**S21** *AGS2*
DDD	271	122	260	56	448	5,841	14	20	< 5	< 5
DDE	2,271	1,082	1,828	352	2,399	31,595	89	101	20	117
DDT	1,195	472	746	384	987	31,399	82	75	44	83

Key:

[a] U.S. EPA sample numbers in bold, corresponding START 10/4/00 sample numbers in italics (see Tables 2 and 3).
µg/kg = Micrograms per kilogram
< = Less than.

Source:

U.S. EPA Central Regional Laboratory, Chicago, Illinois, as reported in: Rosita Clarke-Moreno to Kathryn Evans, ATSDR, October 22, 1998

Table 2

SOIL SAMPLING INFORMATION
ALTGELD GARDENS
CHICAGO, COOK COUNTY, ILLINOIS
October 4, 2000

START Sample Number	Time of Collection	Location	Corresponding U.S. EPA 1997 Sample Number
AGS1	0845	Off southwest corner of unit 708, Block 16.	S17
AGS2	0900	Between the two buildings of Carver Primary School.	S21
AGS3	0915	Middle of common area west of Corliss Avenue, Block 4.	S14
AGS4	0925	Middle of common area, Block 3.	S13
AGS5	0935	Common area, Block 17.	S18
AGS6	0950	Common area, Block 8.	S19
AGS7	1005	Front yard of units 1074 and 1076, near east edge of Block 15.	S12
AGS8	1025	Front yard of units 1141 and 1143, Block 12.	S16
AGS9	1040	Under tree at front corner of unit 1134 lot, Block 13.	S20
AGS10	1050	Common area opposite unit 1121, Block 11.	S15
AGS11	1040	Duplicate of AGS9.	S20

Table 3

ANALYTICAL DATA
ALTGELD GARDENS
CHICAGO, COOK COUNTY, ILLINOIS

Parameter (μg/kg)	Sample Number[a]										
	AGS1 *S17*	**AGS2** *S21*	**AGS3** *S14*	**AGS4** *S13*	**AGS5** *S18*	**AGS6** *S19*	**AGS7** *S12*	**AGS8** *S16*	**AGS9/DUP** *S20*	**AGS10** *S15*	**RBCs**
4,4'-DDD	ND	15.1	42.4	49.8	ND	6.49	ND	31.1	ND	23.5	11,000
4,4'-DDE	25,000	27.2	629	630	57.4	113	2,330	449	103/112	387	35,000
4,4'-DDT	16,300	30.6	200	377	55.1	55.9	958	656	74.2/80.0	188	1,200
Aldrin	ND	ND	ND	ND	5.89	34.8	ND	ND	ND/12.7	ND	7.7
alpha-Chlordane[b]	ND	33.4	ND	ND	ND	5.00	ND	27.8	ND	ND	920[b]
Dieldrin	ND	15.7	ND	ND	11.0	15.3	ND	ND	ND	ND	2.2
Endrin	ND	19.8	ND	38.0	ND	ND	ND	ND	ND	ND	5,400
Endrin ketone	ND	ND	ND	ND	ND	ND	ND	16.9	ND	ND	none
gamma-Chlordane[b]	ND	25.2	ND	ND	2.70	3.01	ND	10.7	1.71/1.94	ND	920[b]
Heptachlor epoxide	ND	67.3	ND	ND	5.09	21.3	ND	97.4	3.01/10.0	ND	25
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	137	ND	ND	310,000
PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	various

Key:
[a] START sample numbers in bold, corresponding U.S. EPA 1996-1997 sample numbers in italics (see Table 1).
[b] Chlordane is listed as a single compound in the table of risk-based concentrations.
μg/kg = Micrograms per kilogram.
RBC = EPA Region III risk-based concentration for ingestion of residential soil (10/5/00).
ND = Not detected.

Source: Ecology and Environment, Inc. Analytical Services Center, Lancaster, New York; analytical TDD S05-0008-804.

HEALTH CONSULTATION

October 2000 Soil Sampling

ALTGELD GARDENS

CHICAGO, COOK COUNTY, ILLINOIS

EPA FACILITY ID: ILD981098395

FEBRUARY 16, 2001

Prepared by:

Illinois Department of Public Health
Under a Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry

BACKGROUND AND STATEMENT OF ISSUES

The U.S. Environmental Protection Agency (USEPA) requested that the Illinois Department of Public Health (IDPH) evaluate the public health hazards posed by exposure to contaminants detected in the soil at Altgeld Gardens in Chicago, Cook County, Illinois. IDPH has written two previous health consultations for soil sampling in Altgeld Gardens; however, due to data quality issues at the Central Regional Laboratory, USEPA contracted with Ecology and Environment (E & E) to collect surface soil samples from areas previously sampled [1].

Altgeld Gardens is a Chicago Housing Authority community of about 10,000 people on the southeast side of Chicago, Illinois (Attachment 1). Altgeld Gardens covers about 190 acres and is bordered on the north by 130th Street, on the south by 134th Street and the Little Calumet River, on the west by St. Lawrence Avenue, and on the east by the Beaulien Woods Forest Preserve. This land is north and west of a wetland area and was reportedly agricultural land before Altgeld Gardens was developed in 1941 [2].

In response to community concerns, USEPA conducted a site investigation at Altgeld Gardens in 1996. IDPH evaluated that data in a November 1998 health consultation and concluded, based on the limited information available, that no apparent public health hazard existed from exposure to the surface soil contamination detected. IDPH recommended that USEPA collect more surface soil samples near the sample with the greatest pesticide levels to confirm the elevated levels found and to more fully characterize the potential exposure in the area.

In April 1999, USEPA collected twelve soil samples near apartments along 134th Street on the southern edge of Altgeld Gardens. These recent samples were collected near the location of the greatest pesticide levels detected in the 1996 site investigation. IDPH concluded that no apparent public health hazard existed from exposure to the pesticide residuals detected in surface soil at Altgeld Gardens.

Most recently, E & E collected ten surface soil samples on October 4, 2000. The samples were collected from the top 2 to 3 inches of soil (Attachment 2) and were analyzed for pesticides by a private, certified laboratory.

DISCUSSION AND CHILD HEALTH STATEMENT

IDPH compared the results of each soil sample with the appropriate screening comparison value used to select contaminants for further evaluation for carcinogenic and non-carcinogenic health effects. Chemicals found at levels greater than comparison values or those for which no comparison value exists were selected for further evaluation. A discussion of each comparison value used is found in Attachment 3. Children are a sensitive sub-population, so special consideration is given to potential exposures to children in the toxicological evaluation.

DDT, DDE, and heptachlor epoxide were found at levels greater than comparison values in three of the ten samples (Table 1); however, DDT and DDE were found at higher levels in previous sampling.

Exceeding a comparison value does not necessarily mean that exposure to the chemical will cause adverse health effects. The potential for exposed persons to experience adverse health effects depends on:

- how much of each chemical to which a person is exposed,
- how long a person is exposed, and
- the health condition of the exposed person.

Residents can be exposed to the chemicals in the soil (Attachment 4). Routes of exposure include ingestion, dermal contact, and inhalation; however, exposure to contaminated soil is limited by the grass cover at the most contaminated sample locations [2].

If a child growing up in the community or an adult living in the community were exposed to chemicals at the highest levels detected in the soil, for nine months of each year, the estimated exposure would pose no apparent increased cancer risk. The estimated low level of exposure would also not be expected to cause any non-cancer health effects [3].

CONCLUSION

IDPH concludes that, based on the information reviewed, no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil at Altgeld Gardens.

PREPARER OF REPORT

Ken Runkle
Environmental Toxicologist
Illinois Department of Public Health

Certification

This Altgeld Gardens Health Consultation was prepared by the Illinois Department of Public Health under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures existing at the time the health consultation was initiated.

Roberta Erlwein

Technical Project Officer SPS, SSAB, DHAC

Richard Gieling

Section Chief, SPS, SSAB, DHAC, ATSDR

Table 1. Chemicals Exceeding Comparison Values in October 4, 2000 Soil Samples.

Sample Number	DDE (in ppm)	DDT (in ppm)	Heptachlor epoxide (in ppm)
AGS1	25.0	16.3	NE
AGS7	2.33	NE	NE
AGS8	NE	NE	0.10
Comparison Value (in ppm)*	2 CREG	2 CREG	0.08 CREG

*Exceeding a comparison value does not necessarily mean that exposure to the chemical will cause adverse health effects.
ppm = parts per million
NE = comparison value not exceeded in this sample
CREG = cancer risk evaluation guide

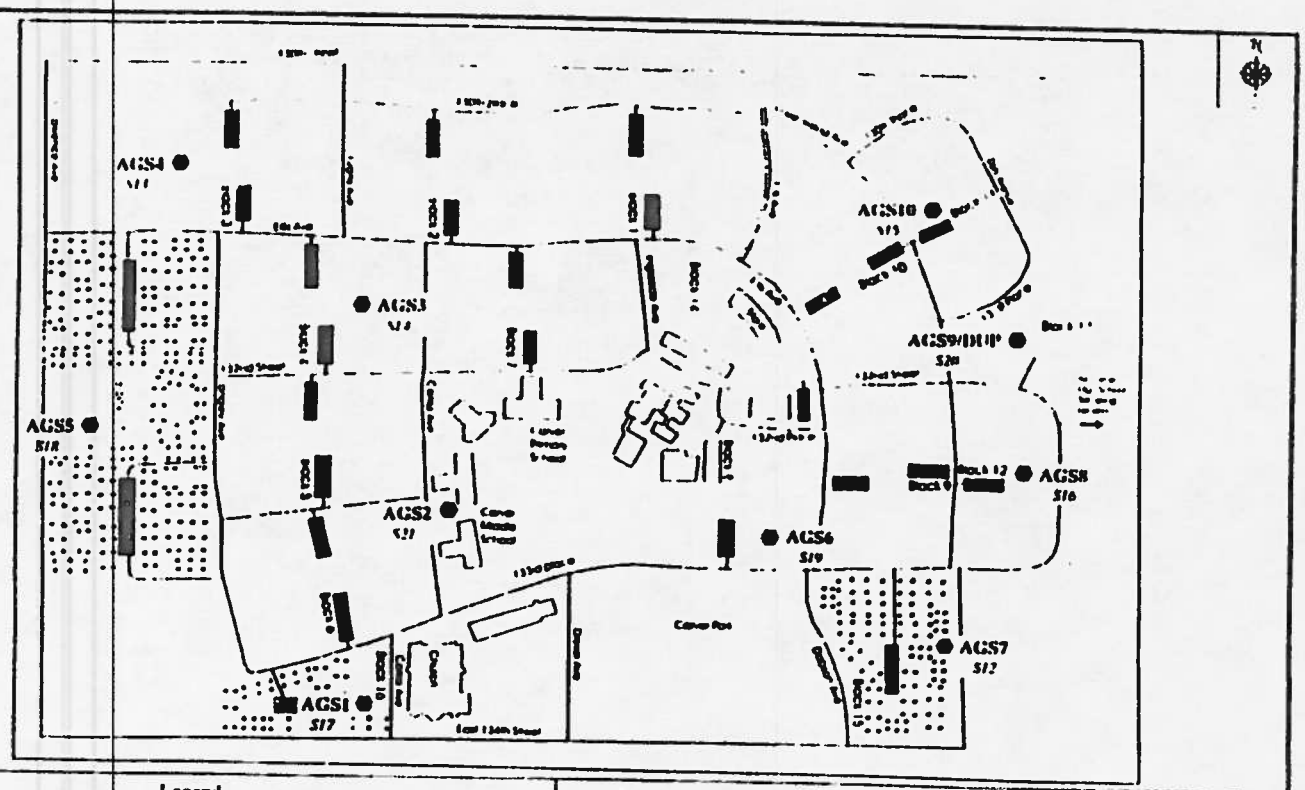

Legend

- ● AGS3 *S14* — Soil sample location with sample number; corresponding U.S. Environmental Protection Agency sample number in italics
- Road or street
- Residential building
- Public building

ecology and environment, inc.
Superfund Technical Assessment and Response Team
33 North Dearborn Suite 900, Chicago, Illinois 60602

TITLE: Site Features and Sample Location Map	FIGURE: 2
SITE: Altgeld Gardens	SCALE: Not to Scale
CITY: Chicago STATE: Illinois	JOB: SD5-0008 010
SOURCE: United States Environmental Protection Agency, modified by Ecology and Environment, Inc	DATE: 1998; 2000

ATTACHMENT 2

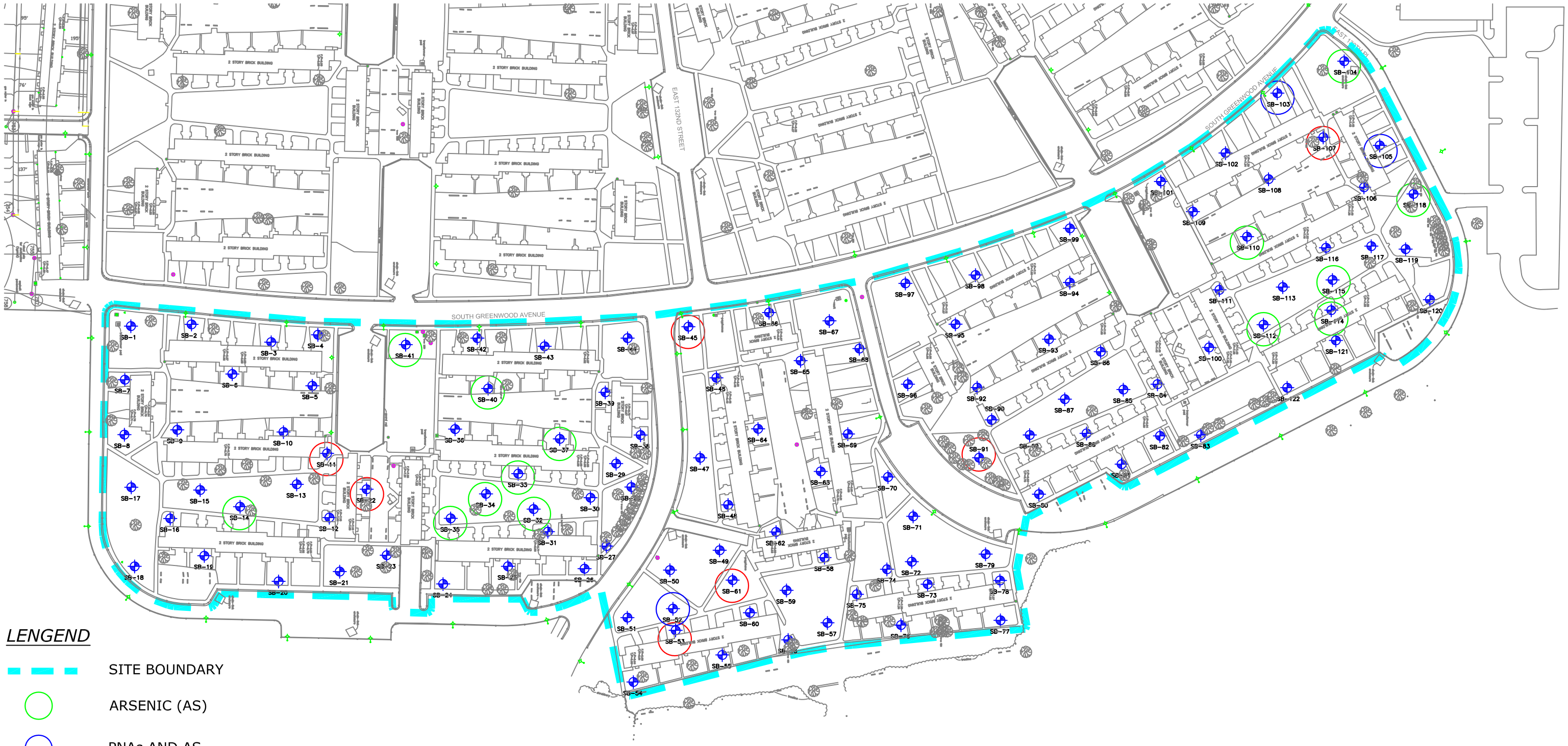

LENGEND

- SITE BOUNDARY
- ARSENIC (AS)
- PNAs AND AS
- POLYNUCLEAR AROMATIC HYDROCARBONS (PNAs)

GSG CONSULTANTS, INC.
855 W. ADAMS, SUITE 200
CHICAGO, IL. 60607
PHONE: (312) 733-6262
FAX : (312) 733-5612

SCALE: NTS	DRAWN BY: JD
	CHECKED BY: SL
	DATE: 6/16/09

EXHIBIT 1 - SOIL EXCEEDING TIER 1 RO'S - BLOCKS 11, 12, & 13
RESULTS FOR NEAR SURFACE SOILS (6" TO 1')
CHA ALTGELD GARDENS
CHICAGO, IL

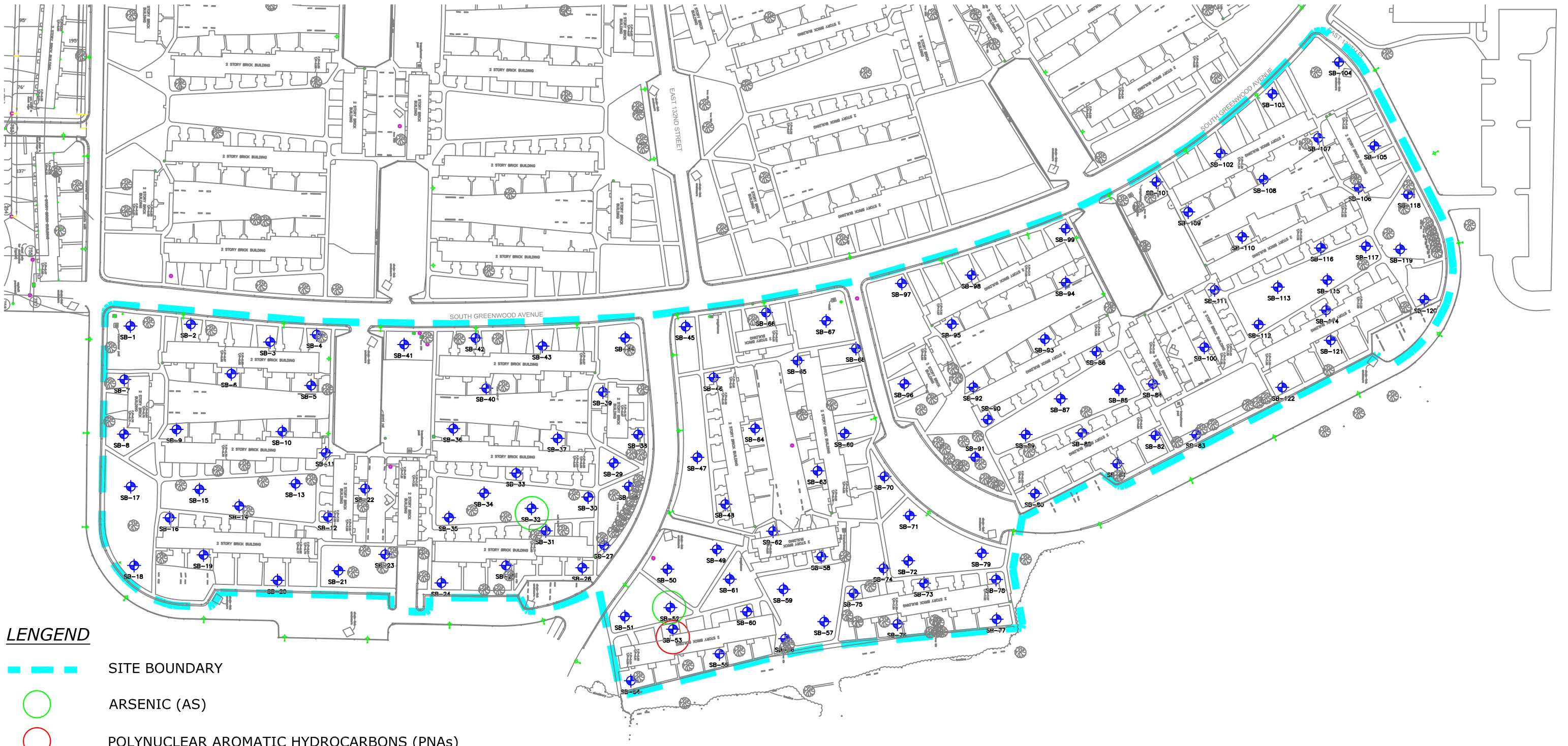

LENGEND

SITE BOUNDARY

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CHICAGO, IL. 60607
PHONE: (312) 733-6262
FAX : (312) 733-5612

SCALE:	DRAWN BY:
NTS	JD
	CHECKED BY: SL
	DATE: 6/16/09

EXHIBIT 2 - SOIL EXCEEDING TIER 1 RO'S - BLOCKS 11, 12, & 13
RESULTS FOR NEAR SURFACE SOILS (1' TO 2')
CHA ALTGELD GARDENS
CHICAGO, IL

HAZARDOUS MATERIALS BUILDING SURVEY

ALTGELD GARDENS (PHASE V)
BLOCKS 11, 12 & 13
130 TH STREET & ELLIS AVENUE
CHICAGO, ILLINOIS

Prepared for:

Holabird & Root LLC
Architecture Engineering Interiors
140 South Dearborn Street
Chicago, Illinois 60603

July 29, 2009

GSG Project No. A09-260.06

Prepared by:

GSG CONSULTANTS, INC.

855 West Adams, Suite 200
Chicago, Illinois 60607
tel: 312.733.6262 • fax: 312.733.5612

EXECUTIVE SUMMARY

GSG Consultants, Inc. (GSG) was retained by Holabird & Root LLC, to conduct a hazardous materials building survey of the units associated with the Altgeld Gardens Blocks 11, 12 & 13. The site is located at 130th Street & Ellis Avenue in Chicago, Illinois. The survey included twenty-six (26) residential buildings with a total of 244 individual units that are to be renovated as part of this project. The purpose and scope of the survey was to identify the location and quantity of asbestos containing material (ACM), lead-based paint (LBP), mold, poly-chlorinated biphenyls (PCB), and Universal Waste that may be present in these units.

GSG performed the field survey in accordance with the Illinois EPA requirements and guidelines and standard industry practices. The surveys were conducted from June 29, 2009 to July 23, 2009. The work was performed by experienced project managers and technicians who are licensed by the Illinois Department of Public Health (IDPH) and have been involved in numerous renovation projects.

Asbestos-Containing Materials (ACM)

The asbestos survey identified the presence of friable and non-friable asbestos containing materials in the building. Materials that tested positive for asbestos content include: “9x9” floor tiles & mastic, “12x12” floor tiles & mastic, pipe insulation, and associated joint compound fittings, exterior door caulk, & window caulk, roof field & flashing, and transite pipe.

Lead-Based Paint Surfaces/Components/Materials

Lead-based paint was identified on exterior wooden window and door frames. The location, component, substrate, and condition of all lead-bearing surfaces tested are listed in Sections 3, 4, 5, 6 and 7 Tables 3.2, 4.2, 5.2, 6.2, and 7.2.

All painted surfaces / components including walls and ceilings inside the units tested **Negative** for lead-based paint throughout Blocks 11, 12 and 13.

Microbial Contaminated Material (Mold)

Suspect mold growth was identified in some of the units that were inspected during this survey. Water damage was also observed in most units in Blocks 11, 12 and 13.

Polychlorinated Biphenyls (PCBs) & Universal Waste

GSG Inspectors did not observe any fluorescent light fixtures or PCB ballasts during the survey.

Chemical Waste

GSG Inspectors did not observe any chemical waste on site during the survey.

END OF EXECUTIVE SUMMARY

Appendix E-2

Previous Environmental Reports

95% Upper Confidence Limit Calculations

CARNOW CONIBEAR

General UCL Statistics for Full Data Sets

User Selected Options

From File	T:\Chicago Housing Authority (CHA)\Environmental Consulting - Task Order 24\Altgeld\Altgeld_Blocks7,8,11,12
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Altgeld Arsenic

General Statistics

Number of Valid Observations	151	Number of Distinct Observations	48

Raw Statistics		**Log-transformed Statistics**	
Minimum	4.8	Minimum of Log Data	1.569
Maximum	24	Maximum of Log Data	3.178
Mean	10.08	Mean of log Data	2.268
Geometric Mean	9.656	SD of log Data	0.29
Median	9.4		
SD	3.178		
Std. Error of Mean	0.259		
Coefficient of Variation	0.315		
Skewness	1.491		

Relevant UCL Statistics

Normal Distribution Test		**Lognormal Distribution Test**	
Lilliefors Test Statistic	0.206	Lilliefors Test Statistic	0.147
Lilliefors Critical Value	0.0721	Lilliefors Critical Value	0.0721
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	10.51	95% H-UCL	10.49
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	11.12
95% Adjusted-CLT UCL (Chen-1995)	10.54	97.5% Chebyshev (MVUE) UCL	11.58
95% Modified-t UCL (Johnson-1978)	10.52	99% Chebyshev (MVUE) UCL	12.47

Gamma Distribution Test		**Data Distribution**
k star (bias corrected)	11.48	Data do not follow a Discernable Distribution (0.05)
Theta Star	0.878	
MLE of Mean	10.08	
MLE of Standard Deviation	2.976	
nu star	3467	
Approximate Chi Square Value (.05)	3332	**Nonparametric Statistics**
Adjusted Level of Significance	0.0484	95% CLT UCL 10.51
Adjusted Chi Square Value	3330	95% Jackknife UCL 10.51
		95% Standard Bootstrap UCL 10.51
Anderson-Darling Test Statistic	2.444	95% Bootstrap-t UCL 10.56
Anderson-Darling 5% Critical Value	0.751	95% Hall's Bootstrap UCL 10.58
Kolmogorov-Smirnov Test Statistic	0.168	95% Percentile Bootstrap UCL 10.51
Kolmogorov-Smirnov 5% Critical Value	0.0762	95% BCA Bootstrap UCL 10.52

Data not Gamma Distributed at 5% Significance Level

95% Chebyshev(Mean, Sd) UCL 11.21

97.5% Chebyshev(Mean, Sd) UCL 11.7

99% Chebyshev(Mean, Sd) UCL 12.66

Assuming Gamma Distribution

95% Approximate Gamma UCL (Use when n >= 40) 10.49

95% Adjusted Gamma UCL (Use when n < 40) 10.5

Potential UCL to Use

Use 95% Student's-t UCL 10.51

or 95% Modified-t UCL 10.52

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.

General UCL Statistics for Data Sets with Non-Detects

User Selected Options

From File	T:\Chicago Housing Authority (CHA)\Environmental Consulting - Task Order 24\Altgeld\Altgeld_Blocks7,8,11,12,1
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Benz(a)anthracene

General Statistics

Number of Valid Data	132	Number of Detected Data	69
Number of Distinct Detected Data	55	Number of Non-Detect Data	63
		Percent Non-Detects	47.73%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.028	Minimum Detected	-3.576
Maximum Detected	8.9	Maximum Detected	2.186
Mean of Detected	0.82	Mean of Detected	-1.577
SD of Detected	1.812	SD of Detected	1.489
Minimum Non-Detect	0.027	Minimum Non-Detect	-3.612
Maximum Non-Detect	0.04	Maximum Non-Detect	-3.219

Note: Data have multiple DLs - Use of KM Method is recommended	Number treated as Non-Detect	68
For all methods (except KM, DL/2, and ROS Methods),	Number treated as Detected	64
Observations < Largest ND are treated as NDs	Single DL Non-Detect Percentage	51.52%

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Lilliefors Test Statistic	0.356	Lilliefors Test Statistic	0.161
5% Lilliefors Critical Value	0.107	5% Lilliefors Critical Value	0.107
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.436	Mean	-2.841
SD	1.366	SD	1.708
95% DL/2 (t) UCL	0.633	95% H-Stat (DL/2) UCL	0.388
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-3.429
		SD in Log Scale	2.377
		Mean in Original Scale	0.432
		SD in Original Scale	1.367
		95% t UCL	0.629
		95% Percentile Bootstrap UCL	0.652
		95% BCA Bootstrap UCL	0.698
		95% H-UCL	1.185

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	0.455	Data do not follow a Discernable Distribution (0.05)

Theta Star	1.8
nu star	62.85

A-D Test Statistic	6.577
5% A-D Critical Value	0.825
K-S Test Statistic	0.825
5% K-S Critical Value	0.114

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

Gamma ROS Statistics using Extrapolated Data

Minimum	0.000001
Maximum	8.9
Mean	0.429
Median	0.033
SD	1.368
k star	0.123
Theta star	3.487
Nu star	32.45
AppChi2	20.43
95% Gamma Approximate UCL (Use when n >= 40)	0.681
95% Adjusted Gamma UCL (Use when n < 40)	0.684

Note: DL/2 is not a recommended method.

Nonparametric Statistics

Kaplan-Meier (KM) Method

Mean	0.442
SD	1.359
SE of Mean	0.119
95% KM (t) UCL	0.639
95% KM (z) UCL	0.638
95% KM (jackknife) UCL	0.637
95% KM (bootstrap t) UCL	0.733
95% KM (BCA) UCL	0.641
95% KM (Percentile Bootstrap) UCL	0.657
95% KM (Chebyshev) UCL	0.961
97.5% KM (Chebyshev) UCL	1.186
99% KM (Chebyshev) UCL	1.628

Potential UCLs to Use

95% KM (Chebyshev) UCL	0.961

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

General UCL Statistics for Data Sets with Non-Detects

User Selected Options

From File	T:\Chicago Housing Authority (CHA)\Environmental Consulting - Task Order 24\Altgeld\Altgeld_Blocks7,8,11,12,1
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Benzo(a)pyrene

General Statistics

Number of Valid Data	132	Number of Detected Data	62
Number of Distinct Detected Data	48	Number of Non-Detect Data	70
		Percent Non-Detects	53.03%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.03	Minimum Detected	-3.507
Maximum Detected	8.5	Maximum Detected	2.14
Mean of Detected	0.717	Mean of Detected	-1.725
SD of Detected	1.698	SD of Detected	1.492
Minimum Non-Detect	0.027	Minimum Non-Detect	-3.612
Maximum Non-Detect	0.04	Maximum Non-Detect	-3.219

Note: Data have multiple DLs - Use of KM Method is recommended	Number treated as Non-Detect	78
For all methods (except KM, DL/2, and ROS Methods),	Number treated as Detected	54
Observations < Largest ND are treated as NDs	Single DL Non-Detect Percentage	59.09%

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Lilliefors Test Statistic	0.36	Lilliefors Test Statistic	0.132
5% Lilliefors Critical Value	0.113	5% Lilliefors Critical Value	0.113
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.345	Mean	-3.048
SD	1.211	SD	1.613
95% DL/2 (t) UCL	0.519	95% H-Stat (DL/2) UCL	0.259
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-3.888
		SD in Log Scale	2.483
		Mean in Original Scale	0.34
		SD in Original Scale	1.212
		95% t UCL	0.515
		95% Percentile Bootstrap UCL	0.521
		95% BCA Bootstrap UCL	0.596
		95% H-UCL	1.032

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	0.45	Data do not follow a Discernable Distribution (0.05)

Theta Star	1.592
nu star	55.83

A-D Test Statistic	5.571
5% A-D Critical Value	0.825
K-S Test Statistic	0.825
5% K-S Critical Value	0.12

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

Gamma ROS Statistics using Extrapolated Data	
Minimum	0.000001
Maximum	8.5
Mean	0.337
Median	0.000001
SD	1.213
k star	0.116
Theta star	2.907
Nu star	30.58
AppChi2	18.95
95% Gamma Approximate UCL (Use when n >= 40)	0.543
95% Adjusted Gamma UCL (Use when n < 40)	0.546

Note: DL/2 is not a recommended method.

Nonparametric Statistics

Kaplan-Meier (KM) Method	
Mean	0.353
SD	1.204
SE of Mean	0.106
95% KM (t) UCL	0.528
95% KM (z) UCL	0.526
95% KM (jackknife) UCL	0.527
95% KM (bootstrap t) UCL	0.639
95% KM (BCA) UCL	0.544
95% KM (Percentile Bootstrap) UCL	0.54
95% KM (Chebyshev) UCL	0.813
97.5% KM (Chebyshev) UCL	1.013
99% KM (Chebyshev) UCL	1.404

Potential UCLs to Use

95% KM (BCA) UCL	0.544

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

General UCL Statistics for Data Sets with Non-Detects

User Selected Options

From File	T:\Chicago Housing Authority (CHA)\Environmental Consulting - Task Order 24\Altgeld\Altgeld_Blocks7,8,11,12,1
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Benzo(b)fluoranthene

General Statistics

Number of Valid Data	132	Number of Detected Data	68
Number of Distinct Detected Data	49	Number of Non-Detect Data	64
		Percent Non-Detects	48.48%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.031	Minimum Detected	-3.474
Maximum Detected	6.4	Maximum Detected	1.856
Mean of Detected	0.588	Mean of Detected	-1.843
SD of Detected	1.34	SD of Detected	1.407
Minimum Non-Detect	0.027	Minimum Non-Detect	-3.612
Maximum Non-Detect	0.04	Maximum Non-Detect	-3.219

Note: Data have multiple DLs - Use of KM Method is recommended	Number treated as Non-Detect	72
For all methods (except KM, DL/2, and ROS Methods),	Number treated as Detected	60
Observations < Largest ND are treated as NDs	Single DL Non-Detect Percentage	54.55%

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Lilliefors Test Statistic	0.379	Lilliefors Test Statistic	0.14
5% Lilliefors Critical Value	0.107	5% Lilliefors Critical Value	0.107
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.31	Mean	-3
SD	1.001	SD	1.564
95% DL/2 (t) UCL	0.454	95% H-Stat (DL/2) UCL	0.247
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-3.627
		SD in Log Scale	2.253
		Mean in Original Scale	0.306
		SD in Original Scale	1.002
		95% t UCL	0.45
		95% Percentile Bootstrap UCL	0.461
		95% BCA Bootstrap UCL	0.489
		95% H-UCL	0.68

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	0.475	Data do not follow a Discernable Distribution (0.05)

Theta Star	1.239
nu star	64.54

A-D Test Statistic	7.173
5% A-D Critical Value	0.82
K-S Test Statistic	0.82
5% K-S Critical Value	0.115

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

Gamma ROS Statistics using Extrapolated Data

Minimum	0.000001
Maximum	6.4
Mean	0.303
Median	0.0325
SD	1.003
k star	0.125
Theta star	2.426
Nu star	32.95
AppChi2	20.83
95% Gamma Approximate UCL (Use when n >= 40)	0.479
95% Adjusted Gamma UCL (Use when n < 40)	0.482

Note: DL/2 is not a recommended method.

Nonparametric Statistics

Kaplan-Meier (KM) Method

Mean	0.318
SD	0.995
SE of Mean	0.0872
95% KM (t) UCL	0.462
95% KM (z) UCL	0.461
95% KM (jackknife) UCL	0.461
95% KM (bootstrap t) UCL	0.547
95% KM (BCA) UCL	0.478
95% KM (Percentile Bootstrap) UCL	0.483
95% KM (Chebyshev) UCL	0.698
97.5% KM (Chebyshev) UCL	0.863
99% KM (Chebyshev) UCL	1.186

Potential UCLs to Use

95% KM (Chebyshev) UCL	0.698

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

General UCL Statistics for Data Sets with Non-Detects

User Selected Options

From File	T:\Chicago Housing Authority (CHA)\Environmental Consulting - Task Order 24\Altgeld\Altgeld_Blocks7,8,11,12,1
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Dibenz(a,h)anthracene

General Statistics

Number of Valid Data	132	Number of Detected Data	26
Number of Distinct Detected Data	25	Number of Non-Detect Data	106
		Percent Non-Detects	80.30%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.028	Minimum Detected	-3.576
Maximum Detected	1.8	Maximum Detected	0.588
Mean of Detected	0.261	Mean of Detected	-2.068
SD of Detected	0.389	SD of Detected	1.161
Minimum Non-Detect	0.027	Minimum Non-Detect	-3.612
Maximum Non-Detect	0.043	Maximum Non-Detect	-3.147

Note: Data have multiple DLs - Use of KM Method is recommended	Number treated as Non-Detect	111
For all methods (except KM, DL/2, and ROS Methods),	Number treated as Detected	21
Observations < Largest ND are treated as NDs	Single DL Non-Detect Percentage	84.09%

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Shapiro Wilk Test Statistic	0.624	Shapiro Wilk Test Statistic	0.914
5% Shapiro Wilk Critical Value	0.92	5% Shapiro Wilk Critical Value	0.92
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0634	Mean	-3.783
SD	0.196	SD	0.996
95% DL/2 (t) UCL	0.0917	95% H-Stat (DL/2) UCL	0.0452
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-5.789
		SD in Log Scale	2.503
		Mean in Original Scale	0.0544
		SD in Original Scale	0.199
		95% t UCL	0.0831
		95% Percentile Bootstrap UCL	0.0829
		95% BCA Bootstrap UCL	0.0955
		95% H-UCL	0.164

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	0.749	Data do not follow a Discernable Distribution (0.05)

Theta Star	0.348
nu star	38.94

A-D Test Statistic	1.449
5% A-D Critical Value	0.781
K-S Test Statistic	0.781
5% K-S Critical Value	0.178

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

Gamma ROS Statistics using Extrapolated Data	
Minimum	0.000001
Maximum	1.8
Mean	0.0514
Median	0.000001
SD	0.199
k star	0.0986
Theta star	0.521
Nu star	26.02
AppChi2	15.4
95% Gamma Approximate UCL (Use when n >= 40)	0.0868
95% Adjusted Gamma UCL (Use when n < 40)	0.0873

Note: DL/2 is not a recommended method.

Nonparametric Statistics

Kaplan-Meier (KM) Method	
Mean	0.0739
SD	0.193
SE of Mean	0.0171
95% KM (t) UCL	0.102
95% KM (z) UCL	0.102
95% KM (jackknife) UCL	0.0975
95% KM (bootstrap t) UCL	0.125
95% KM (BCA) UCL	0.114
95% KM (Percentile Bootstrap) UCL	0.107
95% KM (Chebyshev) UCL	0.149
97.5% KM (Chebyshev) UCL	0.181
99% KM (Chebyshev) UCL	0.244

Potential UCLs to Use

95% KM (BCA) UCL	0.114

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

General UCL Statistics for Data Sets with Non-Detects

User Selected Options

From File	T:\Chicago Housing Authority (CHA)\Environmental Consulting - Task Order 24\Altgeld\Altgeld_Blocks7,8,11,12,1
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Indeno(1,2,3-cd)pyrene

General Statistics

Number of Valid Data	132	Number of Detected Data	46
Number of Distinct Detected Data	38	Number of Non-Detect Data	86
		Percent Non-Detects	65.15%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.032	Minimum Detected	-3.442
Maximum Detected	3.3	Maximum Detected	1.194
Mean of Detected	0.339	Mean of Detected	-1.999
SD of Detected	0.608	SD of Detected	1.236
Minimum Non-Detect	0.027	Minimum Non-Detect	-3.612
Maximum Non-Detect	0.04	Maximum Non-Detect	-3.219

Note: Data have multiple DLs - Use of KM Method is recommended	Number treated as Non-Detect	90
For all methods (except KM, DL/2, and ROS Methods),	Number treated as Detected	42
Observations < Largest ND are treated as NDs	Single DL Non-Detect Percentage	68.18%

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Shapiro Wilk Test Statistic	0.556	Shapiro Wilk Test Statistic	0.883
5% Shapiro Wilk Critical Value	0.945	5% Shapiro Wilk Critical Value	0.945
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.128	Mean	-3.447
SD	0.389	SD	1.288
95% DL/2 (t) UCL	0.184	95% H-Stat (DL/2) UCL	0.0964
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-4.514
		SD in Log Scale	2.284
		Mean in Original Scale	0.122
		SD in Original Scale	0.39
		95% t UCL	0.178
		95% Percentile Bootstrap UCL	0.179
		95% BCA Bootstrap UCL	0.205
		95% H-UCL	0.306

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	0.636	Data do not follow a Discernable Distribution (0.05)

Theta Star	0.532
nu star	58.51

A-D Test Statistic	3.669
5% A-D Critical Value	0.798
K-S Test Statistic	0.798
5% K-S Critical Value	0.136

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

Gamma ROS Statistics using Extrapolated Data

Minimum	0.000001
Maximum	3.3
Mean	0.118
Median	0.000001
SD	0.392
k star	0.109
Theta star	1.081
Nu star	28.82
AppChi2	17.57
95% Gamma Approximate UCL (Use when n >= 40)	0.194
95% Adjusted Gamma UCL (Use when n < 40)	0.195

Note: DL/2 is not a recommended method.

Nonparametric Statistics

Kaplan-Meier (KM) Method

Mean	0.139
SD	0.384
SE of Mean	0.0338
95% KM (t) UCL	0.195
95% KM (z) UCL	0.194
95% KM (jackknife) UCL	0.194
95% KM (bootstrap t) UCL	0.235
95% KM (BCA) UCL	0.199
95% KM (Percentile Bootstrap) UCL	0.203
95% KM (Chebyshev) UCL	0.286
97.5% KM (Chebyshev) UCL	0.35
99% KM (Chebyshev) UCL	0.475

Potential UCLs to Use

95% KM (BCA) UCL	0.199

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

Appendix F-1

Regulatory Records Documentation

FOIA Correspondence & Database Search Results

CARNOW CONIBEAR

Envirofacts

Search Results

<< Return

Envirofacts Links

- EF Overview
- Search
- Model
- Data Update
- Multisystem Search User Guide
- Contact Us

Report an Error

Search Parameters:

API Link for Report Data: (*Copy and paste the link below to view the data from this report*)

http://iaspub.epa.gov/enviro/efservice/multisystem/minLatitude/41.653953/ma

Info
AIR
TOXICS
WASTE
RADIATION
WATER

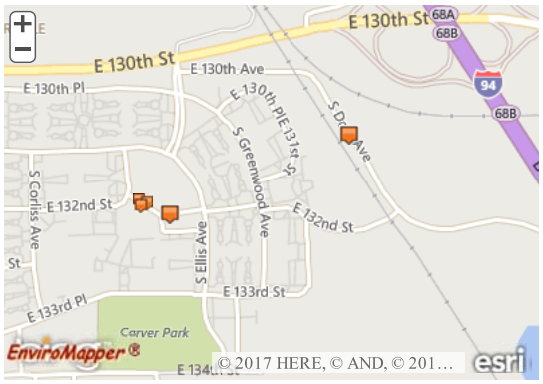

LIST OF EPA-REGULATED FACILITIES IN ENVIROFACTS

FACILITY INFORMATION	AFS	ACRES	BR	SEMS	GHG	PCS/ICIS	RAD Info

Copy CSV Excel PDF Print

Showing 1 to 5 of 5 entries Display 10 facilities in the table Search:

First Previous 1 Next Last

FACILITY INFORMATION	AFS	ACRES	BR	SEMS	GHG	PCS/ICIS	RAD Info	RCRA Info	TRI	TSCA
ALTGELD GARDENS 977 E 132ND STREET CHICAGO, IL 60827 Latitude: 41.655694 Longitude: -87.597869 Summary Report Facility Report Compliance Report								View Report		
CARVER MILITARY ACADEMY 13100 S DOTY AVE CHICAGO, IL 608271516 Latitude: 41.657561 Longitude: -87.592121 Summary Report Facility Report Compliance Report								View Report		

FACILITY INFORMATION	AFS	ACRES	BR	SEMS	GHG	PCS/ICIS	RAD Info	RCRA Info	TRI	TSCA
CHA-ALTGELD GARDENS VARIOUS CHICAGO, IL 60627 Latitude: 41.65593 Longitude: -87.59864 Summary Report Facility Report Compliance Report	View Report									
CHICAGO HOUSING AUTHORITY 940 E 132ND ST CHICAGO, IL 60827-1462 Latitude: 41.655946 Longitude: -87.59879 Summary Report Facility Report Compliance Report								View Report		
CHICAGO PARK DIST CARVER PK 939 E 132ND ST CHICAGO, IL 60827 Latitude: 41.655966 Longitude: -87.598835 Summary Report Facility Report Compliance Report								View Report		

Showing 1 to 5 of 5 entries Display 10 facilities in the table Search:

First Previous 1 Next Last

Total Number of Facilities Retrieved: 5

Detailed Facility Report

Facility Summary

CHA-ALTGELD GARDENS

VARIOUS, CHICAGO, IL 60627

FRS (Facility Registry Service) ID: 110018484246
EPA Region: 05
Latitude: 41.65593
Longitude: -87.59864
Locational Data Source: ACES
Industry: Real Estate
Indian Country: N

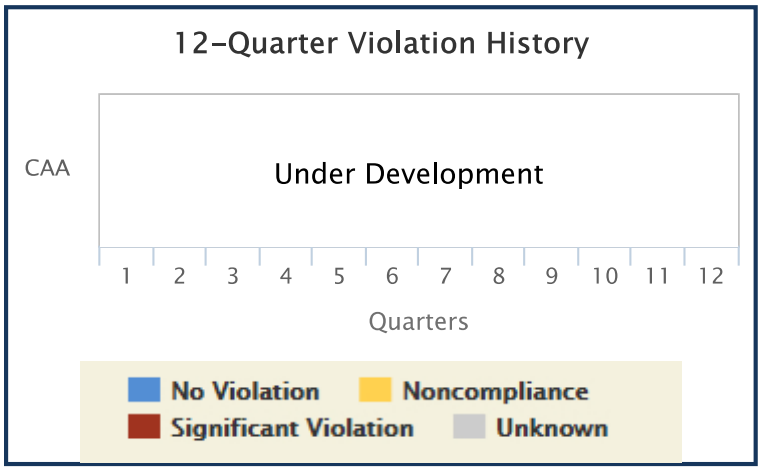

Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs in NC (Non-Compliance) (of 12)	Qtrs in Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
CAA	-	-		0	0	-	-	-	-	-

Regulatory Information

Clean Air Act (CAA): Permanently Closed Minor (IL000031600DIA)
Clean Water Act (CWA): No Information
Resource Conservation and Recovery Act (RCRA): No Information
Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information
Greenhouse Gas Emissions (eGGRT): No Information
Toxic Releases (TRI): No Information

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110018484246					N	41.65593	-87.59864
AIR	CAA	IL000031600DIA	Minor Emissions	Permanently Closed			N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address
FRS		110018484246	CHA-ALTGELD GARDENS	VARIOUS, CHICAGO, IL 60627
AIR	CAA	IL000031600DIA	CHA-ALTGELD GARDENS	VARIOUS, CHICAGO, IL 60627

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Desc
AIR	IL000031600DIA	6513	Apartment Building Operators

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
AIR	IL000031600DIA	531110	Lessors of Residential Buildings and Dwellings

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
No data records returned			

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Inspection Type	Lead Agency	Date	Finding
No data records returned						

Entries in italics are not considered inspections in official counts.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Non-compliance)/HPV (High Priority Violation)	Description	Current As Of	Qtrs in NC (Non-Compliance) (of 12)
CAA	IL000031600DIA	No		02/26/2017	0

Three Year Compliance Status by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12
CAA (Source ID: IL000031600DIA)		04/01-06/30/14	07/01-09/30/14	10/01-12/31/14	01/01-03/31/15	04/01-06/30/15	07/01-09/30/15	10/01-12/31/15	01/01-03/31/16	04/01-06/30/16	07/01-09/30/16	10/01-12/31/16	01/01-03/31/17
	Facility-Level Status	**No Viol**	**No Viol**	**No Viol**	**No Viol**								
	HPV History												

Statute	Program/Pollutant/Violation Type				QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12
	Violation Type	**Agency**	**Programs**	**Pollutants**												
Historic Violations																

Informal Enforcement Actions (5 Years)

Statute	Source ID	Type of Action	Lead Agency	Date
No data records returned				

Formal Enforcement Actions (5 Years)

Statute	Source ID	Type of Action	Lead Agency	Date	Penalty	Penalty Description
No data records returned						

ICIS (Integrated Compliance Information System) Case History (5 years)

Primary Law/Section	Case No.	Case Type	Lead Agency	Case Name	Issued/Filed Date	Settlement Date	Federal Penalty	State/Local Penalty	SEP (Supplemental Environmental Project) Cost	Comp Action Cost
No data records returned										

Environmental Conditions

Water Quality

Permit ID	Combined Sewer System?	Number of CSO (Combined Sewer Overflow) Outfalls	12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Waterbody Name (ICIS (Integrated Compliance Information System))	Impaired Waters	Impaired Class	Causes of Impairment(s) by Group(s)	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
No data records returned									

Waterbody Designated Uses

Reach Code	Waterbody Name	Exceptional Use	Recreational Use	Aquatic Life Use	Shellfish Use	Beach Closure Within Last Year	Beach Closure Within Last Two Years
No data records returned							

Air Quality

Non-Attainment Area?	Pollutant(s)
Yes	Ozone
No	Lead
Yes	Particulate Matter
No	Sulfur Dioxide

Pollutants

Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Releases
No data records returned								

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

Demographic Profile

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

Radius of Area:	3	Land Area:	92%	Households in Area:	35,876
Center latitude:	41.65593	Water Area:	8%	Housing Units in Area:	42,064
Center Longitude:	-87.59864	Population Density:	4,012/sq.mi.	Households on Public Assistance:	1,668
Total Persons:	104,684	Percent Minority:	94%	Persons Below Poverty Level:	52,075

Race Breakdown	Persons (%)	Age Breakdown	Persons (%)
White:	9,987 (9.54%)	Child 5 years and younger:	7,467 (7.13%)
African-American:	89,337 (85.34%)	Minors 17 years and younger:	30,821 (29.44%)
Hispanic-Origin:	7,633 (7.29%)	Adults 18 years and older:	73,864 (70.56%)
Asian/Pacific Islander:	225 (.21%)	Seniors 65 years and older:	10,711 (10.23%)
American Indian:	288 (.28%)		
Other/Multiracial:	4,847 (4.63%)		

Education Level (Persons 25 & older)	Persons (%)	Income Breakdown	Households (%)
Less than 9th Grade:	2,864 (4.36%)	Less than $15,000:	7,362 (19.58%)
9th through 12th Grade:	8,404 (12.78%)	$15,000 - $25,000:	4,675 (12.43%)
High School Diploma:	20,150 (30.65%)	$25,000 - $50,000:	9,713 (25.83%)
Some College/2-yr:	25,129 (38.23%)	$50,000 - $75,000:	7,954 (21.16%)
B.S./B.A. or More:	9,187 (13.98%)	Greater than $75,000:	7,893 (20.99%)

Related Topics: Envirofacts

FRS

FRS Facility Detail Report

CHA-ALTGELD GARDENS

EPA Registry Id:
110018484246
VARIOUS
CHICAGO, IL 60627

Facilty Registry Service Links:

- Facility Registry Service (FRS) Overview
- FRS Facility Query
- FRS Organization Query
- EZ Query
- FRS Physical Data Model
- FRS Geospatial Model

Legend

- Selected Facility
- EPA Facility of Interest
- State/Tribe Facility of Interest

The facility locations displayed come from the FRS Spatial Coordinates tables. They are the best representative locations for the displayed facilities based on the accuracy of the collection method and quality assurance checks performed against each location. The North American Datum of 1983 is used to display all coordinates.

Environmental Interests

Information System	System Facility Name	Information System Id/Report Link	Environmental Interest Type	Data Source	Last Updated Date
ICIS-AIR (AIR)	CHA-ALTGELD GARDENS	IL000031600DIA	AIR MINOR	ICIS	10/19/2014
AIR FACILITY SYSTEM	CHA-ALTGELD GARDENS	1703101791	AIR MINOR (PERMANENTLY CLOSED)	AIRS/AFS	05/16/2014
AGENCY COMPLIANCE AND ENFORCEMENT SYSTEMS	CHA-ALTGELD GARDENS	170000048856	STATE MASTER	ACES	

Additional EPA Reports: MyEnvironment Enforcement and Compliance Site Demographics Facility Coordinates Viewer Environmental Justice Map Viewer Watershed Re

Standard Industrial Classification Codes (SIC)

Data Source	SIC Code	Description	Primary
AIRS/AFS	6513	OPERATORS OF APARTMENT BUILDINGS	

Facility Codes and Flags

EPA Region:	05
Duns Number:	
Congressional District Number:	02
Legislative District Number:	
HUC Code/Watershed:	07120003 / CHICAGO
US Mexico Border Indicator:	
Federal Facility:	
Tribal Land:	

Alternative Names

Alternative Name	Source of Data
CHICAGO HOUSING AUTHORITY	AIRS/AFS

Organizations

No Organizations returned.

National Industry Classification System C

Data Source	NAICS Code	Description
AIRS/AFS	531110	LESSORS OF RESIDENTIAL BUILDIN

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name
FACILITY MAILING ADDRESS	22 W MADISON ST	CHICAGO

Contacts

No Contacts returned.

Query executed on: MAR-02-2017

Last updated on September 24, 2015

EPA United States Environmental Protection Agency

Envirofacts

Search Results

CHA-ALTGELD GARDENS
VARIOUS
CHICAGO, IL 60627

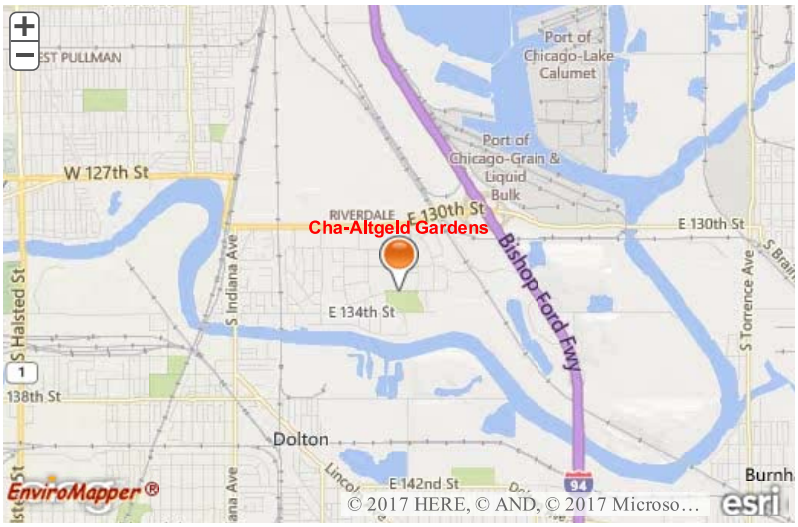

*You can navigate within the map with your mouse.

EPA Facility Information

This query was executed on MAR-02-2017

Multisystem Links

- EF Overview
- Search
- Model
- Contact Us

Report an Error

AFS Information

Operating Status:	X	HPV Flag:	
Operating Status Description:	PERMANENTLY CLOSED	State Registration Number:	031600DIA
State County Compliance Source:	1703101791	Government Facility Code Description:	PRIVATELY OWNED/OPERATED
Region Code:	05	Class Code:	B
Primary SIC Code:	6513	Class Code Description:	POTENTIAL UNCONTROLLED EM
Primary SIC Description:	APARTMENT BUILDING OPERAT	Compliance Status:	0
NAICS Code:	531110	Compliance Status Description:	UNKNOWN COMPLIANCE STATUS
NAICS Code Description:	Lessors of Residential Buildings and Dwellings	Date Plant Information Last Updated:	05/16/2014

Air Program Information

Air Program Code	Air Program Description	Air Program Status	Air Program Status Description	Air Program Subpart	Air Program Subpart Description	Class Code	Class Code Description	Compliance Status	Compliance Status Description
0	SIP	X	PERMANENTLY CLOSED			B	POTENTIAL UNCONTROLLED EM	0	UNKNOWN COMPLIANCE STATUS

Pollutant Data

Air Program Code	Pollutant Code / CAS Number	Pollutant / CAS Description	Attain Indicator	Attain Indicator Description	Pollutant Compliance Status	ES Pollutant Compliance Description	Pollutant Class Code	Pollutant Class Description

3/2/2017 Multisystem Search Results | Envirofacts | US EPA

0	FACIL	FACILITY-WIDE PERMIT REQUIREMENTS			0	UNKNOWN COMPLIANCE STATUS		
0	PT	TOTAL PARTICULATE MATTER	N	NON-ATTAINMENT FOR PRIMAR	0	UNKNOWN COMPLIANCE STATUS	B	POTENTIAL UNCONTROLLED EM

Compliance Monitoring System Plan

CMS Start Date	FY2008 CMS Indicator	FY2008 CMS Indicator Description	FY2009 CMS Indicator	FY2009 CMS Indicator Description

Plant Actions

Action Number	Key Action Numbers	Air Program Codes	National Action Type	National Action Description	Action Type	Action Description	Date Achieved	Penalty Amount	Results Code	Results Code Description	Pollutant Code	Regional Data Element	Regional Data Element 16
00001		0			ZZ	DAY SOURCE ENTERED INTO AFS SYSTEM	15-NOV-91						

Additional Information can be obtained from Air Facility System AFS Search.

Renisa Kokoneshi

From: epa.foia@illinois.gov
Sent: Thursday, September 29, 2016 11:18 AM
To: Renisa Kokoneshi
Subject: Illinois EPA FOIA Request Received - Renisa Kokoneshi

Illinois Environmental Protection Agency

FOIA Request Received

Thursday, September 29, 2016

Ms. Renisa Kokoneshi
Carnow, Conibear & Assoc., Ltd
600 West Van Buren Street, Suite 500
Chicago, IL 60607

Requester Type: Other

Dear Renisa Kokoneshi,

We have received your request for information under the Illinois Freedom of Information Act. Listed below is a summary of what we received in your online request.

Please do not reply to this email. If you have questions about your request please call (217) 558-5101.

Request Summary

Received	9/29/2016 11:18:12 AM
Reference Id(s)	
Date Range	05/13/2014 - 09/29/2016
Request Narrative	CHA Altgeld Gardens Block 11, 12, & 13 - Chicago, IL Block 11: 1101-1171 E. 130th Pl. 13031- 13077 S. Greenwood Ave. 1100-1166 E. 131st St. Block 12: 13201-

13263 S. Greenwood Ave. 1101-1131 E. 132nd St. 1133-1167 E. 133rd St. Block 13: 1100-1166 E. 131st St. 13101-13107 S. Greenwood Ave. 1100-1158 E. 132nd St. Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the addresses listed above for the period of May 13, 2014 up to date.

© 2015 Illinois EPA

Renisa Kokoneshi

From: Jordan, Richard <Richard.Jordan@Illinois.gov>
Sent: Wednesday, October 05, 2016 12:39 PM
To: Renisa Kokoneshi
Subject: Illinois EPA FOIA Response.doc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
BRUCE RAUNER, GOVERNOR ALEC MESSINA, ACTING DIRECTOR

October 5, 2016

Carnow, Conibear & Assoc., Ltd
Attn: Ms. Renisa Kokoneshi
600 West Van Buren Street, Suite 500
Chicago, IL 60607 -

Re: Freedom of Information Act Request - 97053

Dear Ms. Kokoneshi:

This letter is in response to your Freedom of Information Act (FOIA) (5 ILCS 140/1 et seq.) request dated September 29, 2016 and received by the Illinois Environmental Protection Agency (Illinois EPA) on September 29, 2016.

Following a search, the Illinois EPA has determined there to be no information responsive to your request.

Requested Information			
1.	Property	1101 -1171 E 130th St	Chicago
2.	Property	1101 – 1158 132nd St	Chicago
3.	Property	13031 – 13263 S Greenwood St	Chicago
4.	Property	1100-1166 131st St	Chicago
5.	Property	1133 -1167 133rd St	Chicago

Thank you for your patience in this matter.

Sincerely,

Anwar Johnson

Illinois EPA
FOIA Officer
217.558.5101
http://www.epa.illinois.gov/foia/index

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

Leaking UST

Leaking UST Incident Tracking Database Search

The Leaking Underground Storage Tank Incident Tracking ("LIT") database identifies the status of all Illinois Leaking UST incidents reported to the Illinois Emergency Management Agency ("IEMA") and to the Illinois Environmental Protection Agency.

Download Leaking UST CSV File

Show 10 entries

Search

LPC	IEMA	Site Name	Street	City	Zip Code	County
Search	Search	Search	Search	Chicag	60827	Cook
0316545022	991647	Triangle Service	13701 South Indiana	Chicago	60827	Cook

Showing 1 to 1 of 1 entries (filtered from 28,150 total entries)

Previous 1 Next

Site Search Results

Return to Search Page (/land/srp/index.asp)

IEPA ID	Site Name	Street	City	Zip
0316545003 (/land/srp/srp_sites.asp?IEPAID=0316545003)	Chicago Housing Authority	940 East 132nd Street	Chicago	60827

Illinois Emergency Management Agency

Return to the main IEMA website

Hazardous Materials Incident Report

***NOTE:** The following fields have been deleted or redacted from some of the reports contained in this database: Callback Phone, Number Injured, Number killed, On Scene Contact Phone, Responsible Party Contact Person, Responsible Party Callback Phone.

Incident Number:	H 2003 1130
Incident Report Date:	7/30/2003 12:00:00 AM
Street Address of Incident Location:	1100 E. 130TH PLACE
Incident Location City:	CHICAGO
Incident Location County:	COOK
Entered By:	
Data Input Status:	CLOSED
Leaking Underground Storage Tank (LUST)?:	
Caller:	HERITAGE ENVIRONMENTAL SERVICES
Caller Represents:	HERITAGE ENVIRONMENTAL SERVICES
Hazmat Incident Type: HAZMAT:	OTHER:ABANDONMENT

Incident Location

Date/Time Occurred:	
Street:	1100 E. 130TH PLACE
City:	CHICAGO
State:	ILLINOIS
County:	COOK
Milepost:	
Section:	
Township:	
Range:	
Area Involved:	ROAD RIGHT OF WAY
Latitude:	
Longutude:	
Media or medium into which the release occurred:	

Weather Information

Temp:	
Wind:	

Materials Involved

Name:	UNK
Type:	UNKNOWN
CHRIS CODE:	
CAS#:	UNK
UN/NA #:	UNK
Is this a 302(a) Extremely Hazardous Substance?:	UNKNOWN
Is this a RCRA Hazardous Waste?:	
Is this a RCRA regulated facility?:	
Container Type:	DRUM
Container Size:	85 GAL.
Amount Released:	NONE
Rate of Release/min:	
Duration of Release:	
Cause of Release:	
Estimated Spill Extent:	

Spill Extent Units:	
Date/Time Incident Occurred:	
Check if Unknown (Occurrence):	
Date/Time Discovered:	07/30/03 @ 16:00
Check if Unknown (Discovered):	
WhereTaken:	
On Scene Contact:	NONE
Proper safety precautions to take as a result of the release, including evacuation:	NONE
Number of People Evacuated:	NONE
Assistance needed from State Agencies:	NONE
Containment/cleanup actions and plans:	HERITAGE HIRED FOR REMOVAL
Responsible Party	
Name:	UNK
Facility Manager:	
Facility Manager Phone #:	
Street:	
Emergency Units Contacted	
Contacted ESDA?:	
ESDA on Scene?:	
Specific ESDA Agency Contacted:	
Contacted Fire Department?:	
Fire Department on Scene?:	
Name of Fire Department Contacted:	
Contacted Police Department?:	
Police Department on Scene?:	
Name of Police Department Contacted:	
Sheriff Police Department?:	
Sheriff Department on Scene?:	
Name of Sheriff Department Contacted:	
Was an Agency Other than ESDA, Fire Police or Sheriff Contacted?:	
Was this Other Agency On Scene?:	
Name of Other Agency Contacted:	
Agency or Persons Notified	
Narrative	
0915 FAXED IEPA/REG.4/NRTP/CFD	

Division of Petroleum & Chemical Safety

Search Results - 2 matches found

Export to Excel

Facility Nbr	Facility Name	Address	City	Facility Type	Owner Name	Status	Owner Status	Pending NOV
2016245	Former Georgia Pacific Packaging Plant	440 E. 138th Street	Chicago	Industrial / Manufacturing	Georgia Pacific, LLC	Closed	Current Owner	N
2007724	Skipper's Marina	13421 S Vernon	Chicago	Marina	Earl Strombeck	Inactive	Current Owner	N

Search Results - 2 matches found

Export to Excel

Division of Petroleum & Chemical Safety

Search Results - 7 matches found

Export to Excel

Facility Nbr	Facility Name	Address	City	Facility Type	Owner Name	Status	Owner Status	Pending NOV
2018929	Calumet Water Reclamation Plant	400 E. 130th Street	Chicago	City / Town	Metropolitan Water Reclamation District	Active	Current Owner	N
2040889	Construction Site	2150 E 130th Street Thrid Party Removal	Chicago	Construction	Lafarge Corporation	Exempt	Current Owner	N
2040521	Construction Site	2550 E 130th St Third Party Removal	Chicago	None	Lafarge Corporation	Exempt	Current Owner	N
2003404	Cook County Lumber Co	200 E 130Th St	Chicago	None	Cook County Lumber Co	Closed	Current Owner	N
2025115	Il Bell Telephone Co	3032 E 130Th St	Chicago	None	Ameritech d/b/a AT&T	Closed	Current Owner	N
2021543	Marsulex Inc	2250 E 130Th St	Chicago	None	Marsulex Inc	Closed	Current Owner	N
2041653	Vacant Site	1721 E 130th St Thrid Party Removal	Chicago	None	Dearborn Trust 2	Exempt	Current Owner	N

Search Results - 7 matches found

Export to Excel

Division of Petroleum & Chemical Safety

Search Results - 2 matches found

Export to Excel

Facility Nbr	Facility Name	Address	City	Facility Type	Owner Name	Status	Owner Status	Pending NOV
2030903	Carver Park Natatorium	939 E 132Nd St	Chicago	Other Special Service District	Chicago Park District	Closed	Current Owner	N
2043650	Maintenance Building	940 E. 132nd Street	Chicago	None	Chicago Housing Authority	Exempt	Current Owner	N

Search Results - 2 matches found

Export to Excel

Division of Petroleum & Chemical Safety

Facility Details

Facility Number:	2030903
Facility Name:	Carver Park Natatorium
Address:	939 E 132Nd St Chicago, IL 60627
County:	Cook
Status:	Closed
Facility Type:	Other Special Service District
Motor Fuel Type:	
Owner Type:	
Green Tag Decal:	
Green Tag Issue Date:	
Green Tag Expiration Date:	
Motor Fuel Dispensing Permit Inspection Date:	
Motor Fuel Dispensing Permit Expiration Date:	

Owner Details

Owner Name:	Chicago Park District
Owner Address:	541 North Fairbanks Court Chicago, IL 60611
Owner Status:	Current Owner
Purchase Date:	1/1/1956
Type of Financial Responsibility:	Self-Insurance
Financial Responsibility Reporting Due Date:	

Owner Summary

Click for Facility/Tank Ownership history

Owner Number	Owner Name	Owner Status	Purchase Date
U0002888	Chicago Park District	Current Owner	1/1/1956

Permits (Unexpired)

Click for permit history

No Active Permits Found

Deficiencies (Current)

No Deficiencies Found

IEMA Numbers Associated with the Facility

No IEMA Numbers Found

LUST Fund Eligibility and Deductibility Determinations

No Applications Found

Tank Information

Tank Number 1

Capacity:	5000		Petroleum Use:	Heating Oil
Product:	Heating Oil		CERCLA Substance:	
Status:	Abandoned in place		CAS Code:	
OSFM First Notify Date:	7/1/1992		Removed Date:	
Current Age:	61		Abandoned Material:	Inert Materials

Install Date:	1/1/1956		Abandoned Date:	5/6/1996
Last Used Date:	10/1/1974		Red Tag Issue Date:	
Product Date:			Fee Due:	

Equipment Type	Equipment	Last Passing Date	Test Expire Date

Division of Petroleum & Chemical Safety

Facility Details

Facility Number:	2043650
Facility Name:	Maintenance Building
Address:	940 E. 132nd Street Chicago, IL 60661
County:	Cook
Status:	Exempt
Facility Type:	None
Motor Fuel Type:	
Owner Type:	
Green Tag Decal:	
Green Tag Issue Date:	
Green Tag Expiration Date:	
Motor Fuel Dispensing Permit Inspection Date:	
Motor Fuel Dispensing Permit Expiration Date:	

Owner Details

Owner Name:	Chicago Housing Authority
Owner Address:	60 East Van Buren, 13th Floor Chicago, IL 60605
Owner Status:	Current Owner
Purchase Date:	
Type of Financial Responsibility:	
Financial Responsibility Reporting Due Date:	

Owner Summary

Click for Facility/Tank Ownership history

Owner Number	Owner Name	Owner Status	Purchase Date
U0002876	Chicago Housing Authority	Current Owner	

Permits (Unexpired)

Click for permit history

No Active Permits Found

Deficiencies (Current)

No Deficiencies Found

IEMA Numbers Associated with the Facility

IEMA Number
07-0682

LUST Fund Eligibility and Deductibility Determinations

No Applications Found

Tank Information

Tank Number 1

Capacity:	1000		Petroleum Use:	
Product:	Gasoline		CERCLA Substance:	
Status:	Exempt from registration		CAS Code:	

OSFM First Notify Date:			Removed Date:	5/21/2007
Current Age:			Abandoned Material:	
Install Date:			Abandoned Date:	
Last Used Date:	12/31/1973		Red Tag Issue Date:	
Product Date:			Fee Due:	

Equipment Type	Equipment	Last Passing Date	Test Expire Date

Division of Petroleum & Chemical Safety

Search Results - 9 matches found

Export to Excel

Facility Nbr	Facility Name	Address	City	Facility Type	Owner Name	Status	Owner Status	Pending NOV
2038843	Apartment Building	5225 South Greenwood Avenue	Chicago	None	Blake Betty	Exempt	Current Owner	N
2045609	Construction Site	8847 S. Greenwood Ave.	Chicago	Commercial / Retail	SCR Medical Transportation	Exempt	Current Owner	N
2006820	D C Catenary Headquarters	90Th St & Greenwood Ave	Chicago	State	Metra NE II Regional RR Corp.	Closed	Current Owner	N
2024186	Dial Corp	8825 S Greenwood Ave	Chicago	None	Dial Corp	Closed	Current Owner	N
2046299	New Life Covenant Church	7621 Greenwood Avenue	Chicago	Vacant	New Life Covenant Church	Exempt	Current Owner	N
2042612	Renaissance Adult Day Services	7920 S. Greenwood	Chicago	None	Renaissance Adult Day Services	Exempt	Current Owner	N
2034432	Schmid School	9755 S Greenwood Ave	Chicago	City / Town	Public Building Commission of Chicago	Closed	Current Owner	N
2030731	Stuart Hooper Company	8757 S Greenwood	Chicago	None	8757 Building (In Land Trust)	Closed	Current Owner	N
2046262	Vacant Lot	7612 Greenwood Avenue	Chicago	Vacant	New Life Covenant Church	Exempt	Current Owner	N

Search Results - 9 matches found

Export to Excel

OFFICE # 312-745-4232 **CFDFOIA@CITYOFCHICAGO.ORG** **FAX # 312-745-4189**

FOIA REQUEST FORM

REQUESTER'S INFORMATION:

Name Renisa Kokoneshi, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail rkokoneshi@ccaltd.com Phone Number 312-762-2926

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION _____

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY **1101-1111 East 130th Place, Chicago, IL**

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 11 - Additional addresses associated with the site: 1113-1135 E. 130th Pl., 1137-1147 E. 130th Pl., 1149-1171 E. 130th Pl., 13031-13053 S. Greenwood Ave., 13055-13077 S. Greenwood Ave., 1100-1106 E. 131st St., 1108-1130 E. 131st St., 1132-1142 E. 131st St., and 1144-1166 E. 131st St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above from May 21, 2014 up to date.

SHADED AREA FOR OFFICE USE ONLY

DATE OF RECEIPT _____ DATE OF RESPONSE _____

DIVISION OR BUREAU ASSIGNED _____

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED _____ FEE $ _____

☐ REQUEST DENIED REASON FOR DENIAL _____

OFFICE # 312-745-4232 **CFDFOIA@CITYOFCHICAGO.ORG** **FAX # 312-745-4189**

FOIA REQUEST FORM

REQUESTER'S INFORMATION:

Name Renisa Kokoneshi, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail rkokoneshi@ccaltd.com Phone Number 312-762-2926

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION _____

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY **13201-13223 South Greenwood Avenue, Chicago, IL**

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 12 - Additional addresses associated with the site: 13241-13263 S. Greenwood Ave., 1101-1107 E. 132nd St., 1109-1131 E. 132nd St., 1133-1143 E. 133rd St., 1145-1167 E. 133rd St., 1132-1142 E. 133rd St., and 1144-1166 E. 133rd St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above from May 21, 2014 up to date.

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DATE OF RECEIPT _____ DATE OF RESPONSE _____

DIVISION OR BUREAU ASSIGNED _____

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED _____ FEE $ _____

☐ REQUEST DENIED REASON FOR DENIAL _____

OFFICE # 312-745-4232 **CFDFOIA@CITYOFCHICAGO.ORG** **FAX # 312-745-4189**

FOIA REQUEST FORM

REQUESTER'S INFORMATION:

Name Renisa Kokoneshi, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail rkokoneshi@ccaltd.com Phone Number 312-762-2926

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION _____

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY **1101-1123 East 131st Street, Chicago, IL**

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 13 - Additional addresses associated with the site: 13101-13107 S. Greenwood Ave., 1125-1147 E. 131st St., 1100-1122 E. 132nd St., 1124-1134 E. 132nd St., and 1136-1158 E. 132nd St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above from May 21, 2014 up to date.

SHADED AREA FOR OFFICE USE ONLY

DATE OF RECEIPT _____ DATE OF RESPONSE _____

DIVISION OR BUREAU ASSIGNED _____

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED _____ FEE $ _____

☐ REQUEST DENIED REASON FOR DENIAL _____

CHICAGO FIRE DEPARTMENT

CITY OF CHICAGO

October 4, 2016

VIA EMAIL

Renisa Kokoneshi
Carnow, Conibear & Associates, Ltd.
600 West Van Buren St., Suite 500
Chicago, IL 60607
rkokoneshi@ccaltd.com

FOIA RESPONSE: 16-8562

Dear Ms. Kokoneshi:

Thank you for writing to the Chicago Fire Department with your request for information pursuant to the Illinois Freedom of Information Act, 5 ILCS 140/1 et seq.

On September 27, 2016 we received your request for the following:

> *Records of underground storage (UST's), above ground storage tanks (AST's), incident reports, hazardous materials incident reports and other records of environmental concern, for 1101-23 E. 131st St., CHA Altgeld Gardens Block 13, 13101 S. Greenwood Ave., 1125-47 E. 131st St., 1100-22 E. 132nd St., 1124-34 E. 132nd St., and 1136-58 E. 132nd St., 13201-23 S. Greenwood Ave., CHA Altgeld Gardens, Block 12 13241-63 S. Greenwood Ave., 1101-7 E. 132nd St., 1109-31 E. 132nd St.., 1133-43 E. 133rd St., 1132-42 E. 133rd St., and 1144-66 E. 133rd St., 1101-11 E. 130th Place, CHA-Altgeld Gardens, Block 11, 1113-35 E. 130th Pl., 1137-47 E. 130th Pl., 1149-71 E. 130th Pl., 13031-53 S. Greenwood Ave., 13055-77 S. Greenwood Ave., 1100-6 E. 131st St., 1108-30 E. 131st St., 1132-42 E. 131st St. and 1144-66 E. 131st St.*

Please be advised there are no records responsive to your requests.

Sincerely,
Cynthia Linzy
CFDFOIA@cityofchicago.org

16-8562-4

Linzy, Cynthia

From:	Renisa Kokoneshi <rkokoneshi@ccaltd.com>
Sent:	Monday, September 26, 2016 4:46 PM
To:	CFDFOIA
Subject:	FOIA Requests- CHA Altgeld Gardens Block 11, 12, and 13
Attachments:	CFD_FOIA Form_Block11_20160926.pdf; CFD_FOIA Form_Block12_20160926.pdf; CFD_FOIA Form_Block13_20160926.pdf

Dear FOIA Officer,

Attached are FOIA Request forms for the CHA Altgeld Gardens Block 11, 12, and 13 located in Chicago, Illinois. Please feel free to contact me if you have questions or concerns.

Thank you,

Renisa Kokoneshi
Environmental Specialist I
Carnow, Conibear & Assoc., Ltd.
600 West Van Buren Street, Suite 500
Chicago, IL 60607
Direct:(312) 762-2926
Mobile:(312) 446-0761
Fax:(312) 782-5145

No Records

CHICAGO FIRE DEPARTMENT

OFFICE # 312-745-4232 CFDFOIA@CITYOFCHICAGO.ORG FAX # 312-745-4189

FOIA REQUEST FORM

16-8562

REQUESTER'S INFORMATION:

Name Renisa Kokoneshi, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail rkokoneshi@ccaltd.com Phone Number 312-762-2926

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY 1101-1123 East 131st Street, Chicago, IL

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 13 - Additional addresses associated with the site: 13101-13107 S. Greenwood Ave., 1125-1147 E. 131st St., 1100-1122 E. 132nd St., 1124-1134 E. 132nd St., and 1136-1158 E. 132nd St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above from May 21, 2014 up to date.

SHADED AREA FOR OFFICE USE ONLY

DATE OF RECEIPT DATE OF RESPONSE

DIVISION OR BUREAU ASSIGNED

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED FEE $

☐ REQUEST DENIED REASON FOR DENIAL

No records

OFFICE # 312-745-4232 CFDFOIA@CITYOFCHICAGO.ORG FAX # 312-745-4189

FOIA REQUEST FORM

16-8563

REQUESTER'S INFORMATION:

Name Renisa Kokoneshi, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail rkokoneshi@ccaltd.com Phone Number 312-762-2926

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY **13201-13223 South Greenwood Avenue, Chicago, IL**

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 12 - Additional addresses associated with the site: 13241-13263 S. Greenwood Ave., 1101-1107 E. 132nd St., 1109-1131 E. 132nd St., 1133-1143 E. 133rd St., 1145-1167 E. 133rd St., 1132-1142 E. 133rd St., and 1144-1166 E. 133rd St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above from May 21, 2014 up to date.

SHADED AREA FOR OFFICE USE ONLY

DATE OF RECEIPT DATE OF RESPONSE

DIVISION OR BUREAU ASSIGNED FPB

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED FEE $

☐ REQUEST DENIED REASON FOR DENIAL

No Records

CHICAGO FIRE DEPARTMENT

OFFICE # 312-745-4232 CFDFOIA@CITYOFCHICAGO.ORG FAX # 312-745-4189

FOIA REQUEST FORM

16-8564

REQUESTER'S INFORMATION:

Name Renisa Kokoneshi, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail rkokoneshi@ccaltd.com Phone Number 312-762-2926

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY **1101-1111 East 130th Place, Chicago, IL**

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 11 - Additional addresses associated with the site: 1113-1135 E. 130th Pl., 1137-1147 E. 130th Pl., 1149-1171 E. 130th Pl., 13031-13053 S. Greenwood Ave., 13055-13077 S. Greenwood Ave., 1100-1106 E. 131st St., 1108-1130 E. 131st St., 1132-1142 E. 131st St., and 1144-1166 E. 131st St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above from May 21, 2014 up to date.

SHADED AREA FOR OFFICE USE ONLY

DATE OF RECEIPT DATE OF RESPONSE

DIVISION OR BUREAU ASSIGNED FPB

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED FEE $

☐ REQUEST DENIED REASON FOR DENIAL

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
1112 E 130TH ST CHICAGO, IL (41.659687, -87.596381)	1112	E	130TH	ST	Y			Y			

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
1133 E 132ND ST CHICAGO, IL (41.655503, -87.593408)	1133	E	132ND	ST					Y		
1128 E 132ND ST CHICAGO, IL (41.655519, -87.593409)	1128	E	132ND	ST				Y			
1130 E 132ND ST CHICAGO, IL (41.655511, -87.593409)	1130	E	132ND	ST	Y			Y			

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
13022 S GREENWOOD AVE CHICAGO, IL (41.658418, -87.59715)	13022	S	GREENWOOD	AVE				Y			
13030 S GREENWOOD AVE CHICAGO, IL (41.658376, -87.597014)	13030	S	GREENWOOD	AVE				Y			
13068 S GREENWOOD AVE CHICAGO, IL (41.658121, -87.596413)	13068	S	GREENWOOD	AVE				Y	Y		
13072 S GREENWOOD AVE CHICAGO, IL (41.658076, -87.596325)	13072	S	GREENWOOD	AVE				Y			
13200 S GREENWOOD AVE CHICAGO, IL (41.655775, -87.594955)	13200	S	GREENWOOD	AVE				Y			
13240 S GREENWOOD AVE CHICAGO, IL (41.654908, -87.594855)	13240	S	GREENWOOD	AVE				Y			

CDPH Environmental Complaints

Based on CDPH Environmental Complaints

COMPLAINT ID	COMPLAINT TYPE	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTOR	COMPLAINT DATE	COMPLAINT DETAIL	INSPECTION LOG	DATA SOURCE	Modified Date
DOECOMP 35046	Toxics Hazardous Materials Work Order	1112 E 130TH ST CHICAGO, IL (41.659687, -87.596381)	1112		E	130TH	ST	14	04/20/2011	PUBLIC WAY 8 55 GAL DRUMS WITH UNKNOWN SUBSTANCE. S&S CLEANING UP LOT. OBSERVED DRUMS ON PUBLC WAY. JT OF SET WIL BE REMOVING THE DRUMS.	MORE INFORMATION MAY BE AVAILABLE IN THE CDPH ENVIRONMENTAL INSPECTIONS DATASET	HISTORIC DEPT. OF ENVIRONMENT	01/01/2012

CDPH Environmental Complaints

Based on CDPH Environmental Complaints

COMPLAINT ID	COMPLAINT TYPE	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTOR	COMPLAINT DATE	COMPLAINT DETAIL	INSPECTION LOG	DATA SOURCE	Modified Date
DOECOMP 2286	Toxics Hazardous Materials Work Order	1130 E 132ND ST CHICAGO, IL (41.655511, -87.593409)	1130		E	132ND	ST	77	10/13/2005	ALTGELD GARDENS DIESEL FUEL SPILL. DIESEL FUEL SPILL FROM LEAKING GENERATOR. SPILL REMEDIATED AND NO NOV ISSUED BUT PENDING RECEIPT OF PRPER DISPOSAL PROOF (CONTAMINATED SAND).	MORE INFORMATION MAY BE AVAILABLE IN THE CDPH ENVIRONMENTAL INSPECTIONS DATASET	HISTORIC DEPT. OF ENVIRONMENT	01/01/2012

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
DOEINS 9383	01/01/2012	ALTGELD GARDENS	1130 E 132ND ST CHICAGO, ILLINOIS (41.655511, -87.593409)	1130		E	132ND	ST	HAZMATS		77	10/13/2005	UPON ARRIVAL 512 WAS ON SITE. THERE WAS A GENERATOR WHICH HAD DEVELOPED A LEAK, SPILLING UNKNOWN AMOUNTS OF DIESEL FUEL ONTO THE GROUND. PROPERTY MANAGEMENT HAD IMMEDIATELY APPLIED SAND THEN NOTIFIED CFD. O'HARE TOWING REMOVES EMPTY GENERATOR AND CLEAN UP WAS COMPLETED.	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 9342	01/01/2012	NESHAP SITE	1128 E 132ND ST CHICAGO, ILLINOIS (41.655519, -87.593409)	1128	1138	E	132ND	ST	DEMOLITION/ASBESTOS	RENOVATION/NESHAPS	112	01/07/2005	NO ACTIVITY.	HISTORIC DEPT. OF ENVIRONMENT

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
DOEINS 8426	01/01/2012	PUBLIC WAY	1112 E 130TH ST CHICAGO, ILLINOIS (41.659687, -87.596381)	1112		E	130TH	ST	HAZMATS		14	04/20/2011	RECEIVED CALL VIA THE NEXTEL TO RESPOND TO THIS SITE TO CHECK ON THE SUBSTANCE IN THE DRUMS FOUND BY S AND S WHILE CLEANING THE AREA. I ARRIVED ON SITE AND MET WITH ALFREDA CLARK FROM S AND S WHO WAS IN CHARGE OF THE CLEANUP. I USED MY MULTI RAE AND DID NOT GET ANY READINGS . I PHED THE SUBSTANCE AND IT WAS NEUTRAL. I CALLED FOR JT OF SET TO RESPOND FOR A FURTHER CHECK IF THE SUBSTANCE WAS HAZARDOUS. WHEN HE ARRIVED HE ALSO CHECK	HISTORIC DEPT. OF ENVIRONMENT

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
													THE SUBSTANCE AND FOUND IT TO BE NON HAZARDOUS. THE MARKINGS ON THE DRUM WAS SOY LECITHIN WHICH IS A FOOD PRODUCT. I TOOK PHOTOS OF THE DRUMS AND INFORMED ALFREDA THAT THEY COULD BE TAKEN BY S & S FOR DISPOSAL. SHE STATED THAT THEY WOULD COME BACK AFTER THEY HAD LUNCH AND REMOVE THE DRUMS.	
DOEINS 8428	01/01/2012		1112 E 130TH ST CHICAGO, ILLINOIS (41.659687, -87.596381)	1112		E	130TH	ST	HAZMATS		14	04/22/2011	RETURNED TO SITE FOR THE REMOVAL OF THE DRUMS. JT ARRIVED AND THE DRUMS WERE UP RIGHTED AND CHECKED AGAIN AND	HISTORIC DEPT. OF ENVIRONMENT

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
													SECURED. SEVEN DRUMS WERE REMOVED AND THE REMAINING WERE ON THE ROAD. I STAYED ON SITE SO AS NO ONE WOULD HIT THESE DRUMS. JT CAME BACK FOR THE SECOND LOAD WHICH CONSISTED OF SIX MORE DRUMS. ONE OF THESE WAS OF PRODUCT THAT HAD SPILLED OUT OF THE OPEN DRUMS. THE MARKINGS ON THE DRUMS HAD A NAME OF KEBBLER FOOD AT 730 E. SOMETHING. I FOUND OUT THAT THE PLANT WAS NEAR 108TH AND LANGLEY. I WILL HAVE THE MARKINGS	

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
DOEINS 8427	01/01/2012		1112 E 130TH ST CHICAGO, ILLINOIS (41.659687, -87.596381)	1112		E	130TH	ST	HAZMATS		14	04/21/2011	RETURNED TO SITE TO CHECK IF THE DRUMS WERE REMOVED. I FOUND THE DRUMS STILL THERE. I CALLED TO ALFREDA TO SEE WHEN THE DRUMS WOULD BE GONE. I LEFT A VOICE MAIL ON HER PHONE. SHE CALLED BACK TO SAY SHE WAS MOVED TO ANOTHER SITE AND HER SUPERVISOR WOULD CALL ME AS I TOLD HER SHE TOLD ME THAT WOULD BE REMOVED. A COLE STARDARD CALLED AND WANTED TO KNOW MY SUPERVISOR'S NAME AS HE DID NOT KNOW ME. HE WANTED MY	HISTORIC DEPT. OF ENVIRONMENT

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
													TITLE ALSO. I EXPLAINED THAT MY SUPERVISOR WAS OTIS OMENAZO AND HE STATED THE NAMES OF EVERYONE ELSE IN THE DEPARTMENT AND THAT NOT KNOWING WHO I WAS HE WOULD NEED A LETTER FORM T. SHEAHAN WITH CONTENTS OF THE AND THE ANALYSIS OF THE CONTENTS. I THEN CALLED TO T. SHEAHAN AND TOLD HIM WHAT HAD HAPPENED. HE TOLD ME TO CALL JT TO PICK UP THE DRUMS THE NEXT DAY. THIS WAS DONE.	

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
DOEINS 19500	01/01/2012		13022 S GREENWOOD AVE CHICAGO, ILLINOIS (41.658418, -87.59715)	13022		S	GREENWOOD	AVE	SOLID WASTE INSPECTIONS	C & D RECYCLING PROGRAM	17	02/16/2011	NOT COMPLETED	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 19511	01/01/2012		13030 S GREENWOOD AVE CHICAGO, ILLINOIS (41.658376, -87.597014)	13030		S	GREENWOOD	AVE	SOLID WASTE INSPECTIONS	C & D RECYCLING PROGRAM	17	02/09/2011	NOT COMPLETED	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 20263	01/01/2012		13240 S GREENWOOD AVE CHICAGO, ILLINOIS (41.654908, -87.594855)	13240	13262	S	GREENWOOD	AVE	DEMOLITION/ASBESTOS	RENOVATION/NESHAPS	85	11/04/2009	ASBESTOS ABATEMENT PROJECT COMPLETE IN THIS QUAD.	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 20262	01/01/2012		13240 S GREENWOOD AVE CHICAGO, ILLINOIS (41.654908, -87.594855)	13240		S	GREENWOOD	AVE	SOLID WASTE INSPECTIONS	C & D RECYCLING PROGRAM	17	02/08/2011	NOT YET COMPLETED	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 19653	01/01/2012		13072 S GREENWOOD AVE CHICAGO, ILLINOIS (41.658076, -87.596325)	13072	13094	S	GREENWOOD	AVE	DEMOLITION/ASBESTOS	RENOVATION/NESHAPS	85	11/04/2009	ASBESTOS ABATEMENT PROJECT COMPLETE IN THIS QUAD.	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 19501	01/01/2012		13022 S GREENWOOD AVE CHICAGO,	13022	13028	S	GREENWOOD	AVE	DEMOLITION/ASBESTOS	RENOVATION/NESHAPS	85	11/04/2009	ASBESTOS ABATEMENT PROJECT COMPLETE IN	HISTORIC DEPT. OF ENVIRONMENT

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
			CHICAGO, ILLINOIS (41.658418, -87.59715)										COMPLETE IN THIS QUAD.	NT
DOEINS 19652	01/01/2012		13072 S GREENWOOD AVE CHICAGO, ILLINOIS (41.658076, -87.596325)	13072		S	GREENWOOD	AVE	SOLID WASTE INSPECTIONS	C & D RECYCLING PROGRAM	17	02/09/2011	NOT YET COMPLETED	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 20131	01/01/2012		13200 S GREENWOOD AVE CHICAGO, ILLINOIS (41.655775, -87.594955)	13200	13222	S	GREENWOOD	AVE	DEMOLITION/ASBESTOS	RENOVATION/NESHAPS	85	11/04/2009	ASBESTOS ABATEMENT PROJECT COMPLETE IN THIS QUAD.	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 19512	01/01/2012		13030 S GREENWOOD AVE CHICAGO, ILLINOIS (41.658376, -87.597014)	13030	13052	S	GREENWOOD	AVE	DEMOLITION/ASBESTOS	RENOVATION/NESHAPS	85	11/04/2009	ASBESTOS ABATEMENT PROJECT COMPLETE IN THIS QUAD.	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 20127	01/01/2012		13200 S GREENWOOD AVE CHICAGO, ILLINOIS (41.655775, -87.594955)	13200		S	GREENWOOD	AVE	SOLID WASTE INSPECTIONS	C & D RECYCLING PROGRAM	17	02/09/2011	NOT YET COPMPLETED	HISTORIC DEPT. OF ENVIRONMENT
DOEINS 19619	01/01/2012		13068 S GREENWOOD AVE CHICAGO, ILLINOIS (41.658121, -87.596413)	13068		S	GREENWOOD	AVE	SOLID WASTE INSPECTIONS	C & D RECYCLING PROGRAM	17	02/16/2011	NOT COMPLETED	HISTORIC DEPT. OF ENVIRONMENT

CDPH Environmental Inspections

Based on CDPH Environmental Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
			87.596413)											

CDPH Environmental Permits

Based on CDPH Environmental Permits

APPLICATION ID	APPLICATION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	APPLICATION TYPE	APPLICATION SUBTYPE	STATUS	APPLICANT	ISSUE OR ENTRY DATE	EXPIRATION DATE	COMMENT	DATA SOURCE
DOEAIR 17209	CHICAGO HOUSING AUTHORITY	1133 E 132ND ST CHICAGO, IL (41.655503, -87.593408)	1133		E	132ND	ST	AIR POLLUTION CONTROL PERMIT	EQUIPMENT INSTALLATION	CLOSED		08/11/2005	02/07/2006	QTY: 1.0 ARHITECTURAL SURFACE CLEANING:GRINDING/ CHEMICAL WASH/DUST SUPPRESSION METHOD: WETTING/TARPS/PERMIT EXPIRES: 12/01/2006	HISTORIC DEPT. OF ENVIRONMENT
DOEAIR 18567	CHICAGO HOUSING AUTHORITY	1133 E 132ND ST CHICAGO, IL (41.655503, -87.593408)	1133		E	132ND	ST	AIR POLLUTION CONTROL PERMIT	EQUIPMENT INSTALLATION	CLOSED		05/03/2006	10/30/2006	QTY: 4.0 COMBUSTION EMISSION UNIT/ CARRIER/ 58MCA-060-08/ MAX OUTPUT: 56,000 BTU,QTY: 1.0 UNFIRED PRESSURE VESSEL/ TANK/ BELL & GOSSETT/ PT-42V/ MAX ALLOWED SHELL PRESSURE: 150 PSI,QTY: 1.0 UNFIRED PRESSURE VESSEL/ TANK/ AMTROL/ ST-	HISTORIC DEPT. OF ENVIRONMENT

CDPH Environmental Permits

Based on CDPH Environmental Permits

APPLICATION ID	APPLICATION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	APPLICATION TYPE	APPLICATION SUBTYPE	STATUS	APPLICANT	ISSUE OR ENTRY DATE	EXPIRATION DATE	COMMENT	DATA SOURCE
														25V/ MAX ALLOWED SHELL PRESSURE: 150 PSI,QTY: 2.0 COMBUSTION EMISSION UNIT/ CARRIER/ 58MCA-040-08/ MAX OUTPUT: 37,000 BTU	

CDPH Environmental Permits

Based on CDPH Environmental Permits

APPLICATION ID	APPLICATION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	APPLICATION TYPE	APPLICATION SUBTYPE	STATUS	APPLICANT	ISSUE OR ENTRY DATE	EXPIRATION DATE	COMMENT	DATA SOURCE
DOEAIR 27703	CHICAGO HOUSING AUTHORITY	13068 S GREENWOOD AVE CHICAGO, IL (41.658121, -87.596413)	13068		S	GREENWOOD	AVE	AIR POLLUTION CONTROL PERMIT	EQUIPMENT INSTALLATION	CLOSED		08/26/2010	02/22/2011	QTY: 1.0 COMBUSTION EMISSION UNIT: RTU/ MAKE AND MODEL: CARRIER/48TM007/ MAX OUTPUT: 120 MBTU/HR,QTY: 2.0 COMBUSTION EMISSION UNIT: HOT WTR HTR/ MAKE AND MODEL: A. O. SMITH/BTH-400/ MAX OUTPUT: 376 MBTU/HR,QTY: 2.0 COMBUSTION EMISSION UNIT: GAS UNIT HTR/ MAKE AND MODEL: STERLING/QVSF-350/ MAX OUTPUT: 280 MBTU/HR	HISTORIC DEPT. OF ENVIRONMENT

Nohemi Melero

From: Renisa Kokoneshi
Sent: Thursday, March 02, 2017 6:28 PM
To: Nohemi Melero
Subject: Fw: FOIA Requests- CHA Altgeld Gardens Block 11, 12, and 13
Attachments: 2016-09-26_2FM FOIA Request_Block 11.pdf; 2016-09-26_2FM FOIA Request_Block 12.pdf; 2016-09-26_2FM FOIA Request_Block 13.pdf

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From: Renisa Kokoneshi
Sent: Monday, September 26, 2016 4:44 PM
To: 2FMFOIA@cityofchicago.org
Subject: FOIA Requests- CHA Altgeld Gardens Block 11, 12, and 13

Dear FOIA Officer,

Attached are FOIA Request forms for the CHA Altgeld Gardens Block 11, 12, and 13 located in Chicago, Illinois. Please feel free to contact me if you have questions or concerns.

Thank you,

Renisa Kokoneshi
Environmental Specialist I
Carnow, Conibear & Assoc., Ltd.
600 West Van Buren Street, Suite 500
Chicago, IL 60607
Direct:(312) 762-2926
Mobile:(312) 446-0761
Fax:(312) 782-5145

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

CARNOW CONIBEAR

September 26, 2016

Freedom of Information Office
Fleet and Facility Management
30 N. LaSalle Street, Suite 300
Chicago, IL 60602

Freedom of Information Officer:

We are sending this Freedom of Information request regarding the existence of any record of hazardous materials storage, incident reports, and other records of environmental concern, from June 2, 2014 up to date, for the following properties in Chicago, Illinois:

CHA- Altgeld Gardens Block 11 – 1101-1111 East 130th Place

Additional addresses associated with the site:
1113-1135 E. 130th Pl., 1137-1147 E. 130th Pl., 1149-1171 E. 130th Pl., 13031-13053 S. Greenwood Ave., 13055-13077 S. Greenwood Ave., 1100-1106 E. 131st St., 1108-1130 E. 131st St., 1132-1142 E. 131st St., and 1144-1166 E. 131st St.

Please forward any available public documents to Renisa Kokoneshi, Carnow Conibear, 600 W. Van Buren St., Suite 500, Chicago, IL 60607. Records can also be faxed to 312-782-5145. Thank you for your assistance.

Sincerely,
CARNOW, CONIBEAR & ASSOCIATES, LTD.

Renisa Kokoneshi

Renisa Kokoneshi, EIT
Environmental Specialist I

Tel: 312-762-2926
Email: rkokoneshi@ccaltd.com

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CARNOW CONIBEAR

September 26, 2016

Freedom of Information Office
Fleet and Facility Management
30 N. LaSalle Street, Suite 300
Chicago, IL 60602

Freedom of Information Officer:

We are sending this Freedom of Information request regarding the existence of any record of hazardous materials storage, incident reports, and other records of environmental concern, from June 2, 2014 up to date, for the following properties in Chicago, Illinois:

CHA- Altgeld Gardens Block 12 – 13201-13223 South Greenwood Avenue

Additional addresses associated with the site:
13241-13263 S. Greenwood Ave., 1101-1107 E. 132nd St., 1109-1131 E. 132nd St., 1133-1143 E. 133rd St., 1145-1167 E. 133rd St., 1132-1142 E. 133rd St., and 1144-1166 E. 133rd St.

Please forward any available public documents to Renisa Kokoneshi, Carnow Conibear, 600 W. Van Buren St., Suite 500, Chicago, IL 60607. Records can also be faxed to 312-782-5145. Thank you for your assistance.

Sincerely,
CARNOW, CONIBEAR & ASSOCIATES, LTD.

Renisa Kokoneshi

Renisa Kokoneshi, EIT
Environmental Specialist I

Tel: 312-762-2926
Email: rkokoneshi@ccaltd.com

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CARNOW CONIBEAR

September 26, 2016

Freedom of Information Office
Fleet and Facility Management
30 N. LaSalle Street, Suite 300
Chicago, IL 60602

Freedom of Information Officer:

We are sending this Freedom of Information request regarding the existence of any record of hazardous materials storage, incident reports, and other records of environmental concern, from June 2, 2014 up to date, for the following properties in Chicago, Illinois:

CHA- Altgeld Gardens Block 13 – 1101-1123 East 131st Street

Additional addresses associated with the site:
13101-13107 S. Greenwood Ave., 1125-1147 E. 131st St., 1100-1122 E. 132nd St., 1124-1134 E. 132nd St., and 1136-1158 E. 132nd St.

Please forward any available public documents to Renisa Kokoneshi, Carnow Conibear, 600 W. Van Buren St., Suite 500, Chicago, IL 60607. Records can also be faxed to 312-782-5145. Thank you for your assistance.

Sincerely,
CARNOW, CONIBEAR & ASSOCIATES, LTD.

Renisa Kokoneshi

Renisa Kokoneshi, EIT
Environmental Specialist I

Tel: 312-762-2926
Email: rkokoneshi@ccaltd.com

Welcome to 20/20 Perfe

162.217.184.82/i2/default.aspx

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Cook County Recorder of Deeds

Karen A. Yarbrough

Property Identification Number (PIN): 25 - 35 - 100 - 019 - 0000 Search Reset Advanced

Property Identification Number (PIN) Search: 25-35-100-019-0000 **(Total:** 1.44 **seconds,** 59 **rows)** Index Posted Through: 02-07-2017

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Recorded Date	PIN	Type Desc.	Doc. #	1st Grantor	1st Grantee	1st Prior Doc#
10/6/2015	25-35-100-019-0000	CONTINUING FINANCING STMT	1527915000	U S BK	TCA HEALTH INC	96U02490
11/20/2009	25-35-100-019-0000	MEMORANDUM	0932429125	CHICAGO HOUSING AUTHORITY	COMCAST S CHGO INC	
11/9/2009	25-35-100-019-0000	LIEN	0931312090	CHICAGO DEPT WATER MGMT	13159 S LANGLEY	
10/26/2009	25-35-100-019-0000	LIS PENDENS	0929941005	CHICAGO	CHICAGO HOUSING AUTH	
5/5/2009	25-35-100-019-0000	LIEN	0912533108	CHICAGO DEPT WATER MGMT	13250-84 S ELLIS AVE	
4/17/2009	25-35-100-019-0000	LIEN	0910733104	CHICAGO DEPT WATER MGMT	1614-16 W 51ST ST	
3/31/2009	25-35-100-019-0000	LIEN	0909012138	CHICAGO DEPT WATER MGMT	13291 S LANGLEY AVE	
3/6/2009	25-35-100-019-0000	LIEN	0906542055	CHICAGO DEPT WATER MGMT	13349-83 S LANGLEY AVE	
1/14/2009	25-35-100-019-0000	LIEN	0901433245	CHICAGO DEPT WATER MGMT	800 E 131ST ST	
1/14/2009	25-35-100-019-0000	LIEN	0901435243	CHICAGO DEPT WATER MGMT	800 E 131ST	
10/10/2008	25-35-100-019-0000	LIEN	0828433231	CHICAGO DEPT WATER MGMT	2865 W LYNDALE ST	
9/3/2008	25-35-100-019-0000	LIEN	0824726121	CHICAGO DEPT WATER MGMT	927 E 131ST ST	
3/19/2008	25-35-100-019-0000	LIEN	0807905103	CHICAGO DEPT WATER MGMT	930 E 131ST	
2/22/2008	25-35-100-019-0000	RELEASE	0805331170	CHICAGO DEPT WATER MGMT	959 E 130TH ST CHICAGO IL	95554126
1/18/2008	25-35-100-019-0000	DECLARATION	0801860065	CHICAGO HOUSING AUTHORITY	PUBLIC	
10/22/2007	25-35-100-019-0000	AFFIDAVIT	0729509067	ILLINOIS ENVIRON PROTECTION AGCY	CHICAGO HOUSING AUTHORITY	
1/13/2004	25-35-100-019-0000	LIEN	0401327034	KELLY CONSTRUCTION & ROOFING CO INC	MARKETPRO INC	
6/20/2001	25-35-100-019-0000	CORRECTION	0010541694	CLINICIN ALTGELD INC	CHICAGO HOUSING AUTHORITY	96152854
10/28/1998	25-35-100-019-0000	RELEASE	98966466	ANNING JOHNSON CO INC	HARBOUR CONTR INC	98910662
10/9/1998	25-35-100-019-0000	MECHANICS LIEN	98910662	ANNING JOHNSON CO INC	HARBOUR CONTRACTORS INC	98966466

1 2 3 Next

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Document No.	Executed	Recorded	Document Type	Case No.	Amount
1527915000		10/06/2015	CONTINUING FINANCING STMT		

PIN(s) - 1

PIN	Prop. Type	Condo Unit Num.	S-T-R	Sub Div-Condo	Lot	Block	Part of Lot	Building
25-35-100-019-0000	S		35-37-14	ALTGELDG		4	P	

Grantor(s) - 1

Grantor(s)	Trust #
U S BK	

Grantee(s) - 1

Grantee(s)	Trust #
TCA HEALTH INC	

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Cook County Recorder of Deeds

Karen A. Yarbrough

Property Identification Number (PIN): 25 - 35 - 100 - 019 - 0000 Search Reset Advanced

Property Identification Number (PIN) Search: 25-35-100-019-0000 **(Total:** 1.44 **seconds,** 59 **rows)** Index Posted Through: 02-07-2017

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Recorded Date▼	PIN	Type Desc.	Doc. #	1st Grantor	1st Grantee	1st Prior Doc#
1/23/1998	25-35-100-019-0000	RELEASE	98063163	SHERRY K CORP	CLER INC	97896384
12/30/1997	25-35-100-019-0000	ORDER	97979643	CHICAGO CITY	CHA	
12/1/1997	25-35-100-019-0000	LIEN	97896384	SHERRY K CORP	CLER INC	98063163
3/22/1996	25-35-100-019-0000	PARTIAL RELEASE	96220861	ILLINOIS BELL TELEPHONE CO	UNKNOWN	23195214
3/14/1996	25-35-100-019-0000	PARTIAL RELEASE	96195805	COMMONWEALT H EDISON CO	UNKNOWN	13338084
2/28/1996	25-35-100-019-0000	CORRECTION	96152854	CLINIC ALTGELD INC	CLINIC ALTGELD INC	03012534
2/28/1996	25-35-100-019-0000	MORTGAGE	96152855	CLINIC ALTGELD INC	LASALLE NATL BK TR	
11/13/1995	25-35-100-019-0000	RELEASE	95783687	21ST CENTURY COATING CORP	CMA CONSTRUCTION	95731185
10/26/1995	25-35-100-019-0000	RELEASE	95731185	21ST CENTURY COATINGS CORP	CLINIC ALTGELDT INC	95783687
8/22/1995	25-35-100-019-0000	LIEN	95554126	CHICAGO DEPT WATER	UNKNOWN	0805331170
11/9/1994	25-35-100-019-0000	LIS PENDENS	94955055	CHICAGO CITY	CLINIC ALTGELD INC	
10/21/1994	25-35-100-019-0000	LIS PENDENS	94903769	CHICAGO CITY	CLINIC ALTGELD INC	
2/8/1994	25-35-100-019-0000	RELEASE	94128254	CHICAGO HOUSING AUTH	CLINIC ALTGELD INC	03012535
12/10/1993	25-35-100-019-0000	MORTGAGE	03012535	CLINIC IN ALTGELD INC	CHICAGO HOUSING AUTH	94128254
12/10/1993	25-35-100-019-0000	PARTIAL RELEASE	03012533	U S A	U S A HOUSING & URBAN DE	17832780
12/10/1993	25-35-100-019-0000	QUIT CLAIM DEED	03012534	CHICAGO HOUSING AUTH	CLINIC AT ALTGELD INC	96152854
3/10/1993	25-35-100-019-0000	LIS PENDENS	93177926	CHICAGO CITY	CHICAGO HOUSING AUTH	
3/10/1993	25-35-100-019-0000	LIS PENDENS	93177924	CHICAGO CITY	CARUSO F WILLIS	
3/10/1993	25-35-100-019-0000	LIS PENDENS	93177921	CHICAGO CITY	CHICAGO HOUSING AUTH	
3/10/1993	25-35-100-019-0000	LIS PENDENS	93177918	CHICAGO CITY	CHICAGO HOUSING AUTH	

Previous 1 2 3 Next

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1527915000		10/06/2015	CONTINUING FINANCING STMT		

PIN(s) - 1

PIN	Prop. Type	Condo Unit Num.	S-T-R	Sub Div-Condo	Lot	Block	Part of Lot	Building
25-35-100-019-0000	S		35-37-14	ALTGELDG		4	P	

Grantor(s) - 1

Grantor(s)	Trust #
U S BK	

Grantee(s) - 1

Grantee(s)	Trust #
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Cook County Recorder of Deeds

Karen A. Yarbrough

Property Identification Number (PIN): 25 - 35 - 100 - 019 - 0000 Search Reset Advanced

Property Identification Number (PIN) Search: 25-35-100-019-0000 **(Total:** 1.44 **seconds,** 59 **rows)** Index Posted Through: 02-07-2017

Select All | Invert Selection | Purchase Results Summary | Add to Cart | View: 20/Page 50/Page 100/Page

Recorded Date▼	PIN	Type Desc.	Doc. #	1st Grantor	1st Grantee	1st Prior Doc#
3/10/1993	25-35-100-019-0000	LIS PENDENS	93177917	CHICAGO CITY	CHICAGO HOUSING AUTH	
3/10/1993	25-35-100-019-0000	LIS PENDENS	93177916	CHICAGO CITY	CHICAGO HOUSING AUTH	
3/10/1993	25-35-100-019-0000	LIS PENDENS	93177914	CHICAGO CITY	CHICAGO HOUSING AUTH	
3/10/1993	25-35-100-019-0000	LIS PENDENS	93177913	CHICAGO CITY	CHICAGO HOUSING AUTH	
11/20/1992	25-35-100-019-0000	LIS PENDENS	92872129	CHICAGO CITY	CHICAGO HOUSING AUTH	
11/20/1992	25-35-100-019-0000	LIS PENDENS	92872123	CHICAGO CITY	CHICAGO HOUSING AUTH	
11/20/1992	25-35-100-019-0000	LIS PENDENS	92872120	CHICAGO CITY	CHICAGO HOUSING AUTH	
11/20/1992	25-35-100-019-0000	LIS PENDENS	92872119	CHICAGO CITY	CHICAGO HOUSING AUTH	
11/20/1992	25-35-100-019-0000	LIS PENDENS	92872117	CHICAGO CITY	CHICAGO HOUSING AUTH	
10/5/1992	25-35-100-019-0000	LIS PENDENS	92737346	CHICAGO CITY	CHICAGO HOUSING AUTH ETA	
10/5/1992	25-35-100-019-0000	LIS PENDENS	92737344	CHICAGO CITY	CHICAGO HOUSING AUTH	
10/5/1992	25-35-100-019-0000	LIS PENDENS	92737343	CHICAGO CITY	CHICAGO HOUSING AUTH	
9/4/1992	25-35-100-019-0000	LIS PENDENS	92659040	CHICAGO CITY	CHICAGO HOUSING AUTH	
7/17/1992	25-35-100-019-0000	WARRANTY DEED	92528212	CHICAGO HOUSING AUTH	COOK COUNTY	
6/30/1992	25-35-100-019-0000	LIS PENDENS	92473629	CHICAGO CITY	CHICAGO HOUSING AUTH	
6/19/1992	25-35-100-019-0000	LIS PENDENS	92445328	CHICAGO CITY	CHICAGO HOUSING AUTH	
6/20/1990	25-35-100-019-0000	QUIT CLAIM DEED	90292878	CHICAGO CITY	CHICAGO PUBLIC BLDG COMM	95893312
5/3/1989	25-35-100-019-0000	RELEASE	89198416	CHATHAM SPLY CO	CHICAGO HOUSING AUTH	87367986
7/6/1987	25-35-100-019-0000	LIEN	87367986	CHATHAM SPLY CO	CHICAGO HOUSING AUTH	89198416

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1527915000		10/06/2015	CONTINUING FINANCING STMT		

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PIN	Prop. Type	Condo Unit Num.	S-T-R	Sub Div-Condo	Lot	Block	Part of Lot	Building
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Grantor(s) - 1

Grantor(s)	Trust #
U S BK	

Grantee(s) - 1

Grantee(s)	Trust #
TCA HEALTH INC	

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Attachment A – Corridor Level Phase I Environmental Site Assessment (continued)

Appendix F-2

Regulatory Records Documentation

Environmental Database Report

CARNOW CONIBEAR

Altgeld Gardens Blocks 11, 12, & 13
Northeast Corner of Greenwood Ave and 133rd St
Chicago, IL 60827

Inquiry Number: 4740280.2s
September 29, 2016

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	24
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-9
Physical Setting Source Map Findings	A-10
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NORTHEAST CORNER OF GREENWOOD AVE AND 133RD ST
CHICAGO, IL 60827

COORDINATES

Latitude (North):	41.6563420 - 41˚ 39' 22.83''
Longitude (West):	87.5942180 - 87˚ 35' 39.18''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	450522.9
UTM Y (Meters):	4611579.0
Elevation:	586 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5681452 LAKE CALUMET, IL
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150822
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
NORTHEAST CORNER OF GREENWOOD AVE AND 133RD ST
CHICAGO, IL 60827

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	LAND & LAKES TRANSFE	1258-1300 E 130TH ST	RCRA-SQG, FINDS, ECHO	Higher	457, 0.087, NNW
2	CALUMET NU EARTH (13		IL NIPC	Higher	482, 0.091, NNE
3	CHICAGO, CITY OF	1100 E 130TH PL	RCRA-SQG	Higher	492, 0.093, NNW
4		13124 S ELLIS AVE	EDR Hist Cleaner	Higher	585, 0.111, West
A5	CALUMET NU-EARTH DIS	NORTH 130TH ST & DOT	SEMS-ARCHIVE	Higher	641, 0.121, North
A6	CHGO METRO SANITARY		IL NIPC	Higher	670, 0.127, North
A7	CHGO METYRO SANITARY		IL NIPC	Higher	670, 0.127, North
A8	CHGO METRO SANITARY		IL NIPC	Higher	670, 0.127, North
B9	ALTGELD GARDENS	977 E 132ND STREET	RCRA-CESQG, FINDS, ECHO	Higher	900, 0.170, WSW
B10	CHICAGO HOUSING AUTH	940 EAST 132ND STREE	LUST, SRP	Higher	1014, 0.192, West
B11	CHICAGO HOUSING AUTH	940 E 132ND ST	RCRA NonGen / NLR, FTTS, HIST FTTS, FINDS, ECHO	Higher	1014, 0.192, West
B12	CARVER PARK	939 E 132ND ST	RCRA-CESQG	Higher	1020, 0.193, West
B13	CARVER PARK NATATORI	939 E 132ND ST	UST	Higher	1020, 0.193, West
14	PALUMBO EXCAVATING		IL NIPC	Higher	2537, 0.480, ENE
15	BARKER CHEMICAL CO	700 E 138TH STREET	SEMS-ARCHIVE, CORRACTS, RCRA NonGen / NLR, FINDS,...	Higher	4316, 0.817, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SSU ..... State Sites Unit Listing

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

EXECUTIVE SUMMARY

CCDD ..... Clean Construction or Demolition Debris
LF SPECIAL WASTE ..... Special Waste Site List

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land
LUST TRUST ..... Underground Storage Tank Fund Payment Priority List

State and tribal registered storage tank lists

FEMA UST ..... Underground Storage Tank Listing
AST ..... Above Ground Storage Tanks
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

ENG CONTROLS ..... Sites with Engineering Controls
INST CONTROL ..... Institutional Controls

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ..... Municipal Brownfields Redevelopment Grant Program Project Descriptions

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
CDL ..... Meth Drug Lab Site Listing
US CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
SPILLS ..... State spills
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
AIRS	Air Inventory Listing
BOL	Bureau of Land Inventory Database
CHICAGO ENV	Environmental Records Dataset
COAL ASH	Coal Ash Site Listing
DRYCLEANERS	Illinois Licensed Drycleaners
Financial Assurance	Financial Assurance Information Listing
HWAR	Hazard Waste Annual Report
IMPDMENT	Surface Impoundment Inventory
NPDES	A Listing of Active Permits
PIMW	Potentially Infectious Medical Waste
TIER 2	Tier 2 Information Listing
UIC	Underground Injection Wells
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historic Gas Stations

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS..... Recovered Government Archive State Hazardous Waste Facilities List
RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALUMET NU-EARTH DIS	NORTH 130TH ST & DOT	N 0 - 1/8 (0.121 mi.)	A5	11

EXECUTIVE SUMMARY

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 06/27/2016 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BARKER CHEMICAL CO	***700 E 138TH STREET***	***SW 1/2 - 1 (0.817 mi.)***	***15***	***20***

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAND & LAKES TRANSFE	***1258-1300 E 130TH ST***	***NNW 0 - 1/8 (0.087 mi.)***	***1***	***8***
CHICAGO, CITY OF	1100 E 130TH PL	NNW 0 - 1/8 (0.093 mi.)	3	9

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALTGELD GARDENS	***977 E 132ND STREET***	***WSW 1/8 - 1/4 (0.170 mi.)***	***B9***	***12***
CARVER PARK	939 E 132ND ST	W 1/8 - 1/4 (0.193 mi.)	B12	17

State and tribal landfill and/or solid waste disposal site lists

IL NIPC: NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites that previously had never been identified largely because, prior to 1971, there was no obligation to register such sites. The data come from the Northeastern Illinois Planning Commission's Solid Waste Landfill Inventory.

A review of the IL NIPC list, as provided by EDR, and dated 08/01/1988 has revealed that there are 5

IL NIPC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALUMET NU EARTH (13		NNE 0 - 1/8 (0.091 mi.)	2	9
CHGO METRO SANITARY		N 1/8 - 1/4 (0.127 mi.)	A6	12
CHGO METYRO SANITARY		N 1/8 - 1/4 (0.127 mi.)	A7	12
CHGO METRO SANITARY		N 1/8 - 1/4 (0.127 mi.)	A8	12
PALUMBO EXCAVATING		ENE 1/4 - 1/2 (0.480 mi.)	14	19

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Illinois Environmental Protection Agency's LUST Incident Report.

A review of the LUST list, as provided by EDR, and dated 04/06/2016 has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHICAGO HOUSING AUTH	***940 EAST 132ND STREE***	***W 1/8 - 1/4 (0.192 mi.)***	***B10***	***14***
NFA/NFR Letter: 09/10/2007				
Incident Num: 20070682				
IL EPA Id: 0316545003				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Illinois State Fire Marshal's STC Facility List.

A review of the UST list, as provided by EDR, and dated 04/26/2016 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CARVER PARK NATATORI	939 E 132ND ST	W 1/8 - 1/4 (0.193 mi.)	B13	19
Tank Status: Abandoned in place				
Status: CLOSED				
Facility Id: 2030903				

State and tribal voluntary cleanup sites

SRP: Illinois Environmental Protection Agency, Site Remediation Program Database

A review of the SRP list, as provided by EDR, and dated 06/30/2016 has revealed that there is 1 SRP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHICAGO HOUSING AUTH	***940 EAST 132ND STREE***	***W 1/8 - 1/4 (0.192 mi.)***	***B10***	***14***

IL EPA Id: 0316545003

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/21/2016 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHICAGO HOUSING AUTH	***940 E 132ND ST***	***W 1/8 - 1/4 (0.192 mi.)***	***B11***	***15***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist Cleaner site within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	13124 S ELLIS AVE	W 0 - 1/8 (0.111 mi.)	4	11

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 6 records.

Site Name	Database(s)
US SCRAP	SEMS, PRP, CONSENT
DOLTON HAZMAT	SEMS
CHICAGO REGIONAL PORT DIST	SEMS-ARCHIVE
METRO SANITARY DISTRICT #3	SEMS-ARCHIVE
DOLTON MUNI LDFL	SEMS-ARCHIVE
RIVERDALE, VILLAGE OF	LUST

OVERVIEW MAP - 4740280.2S

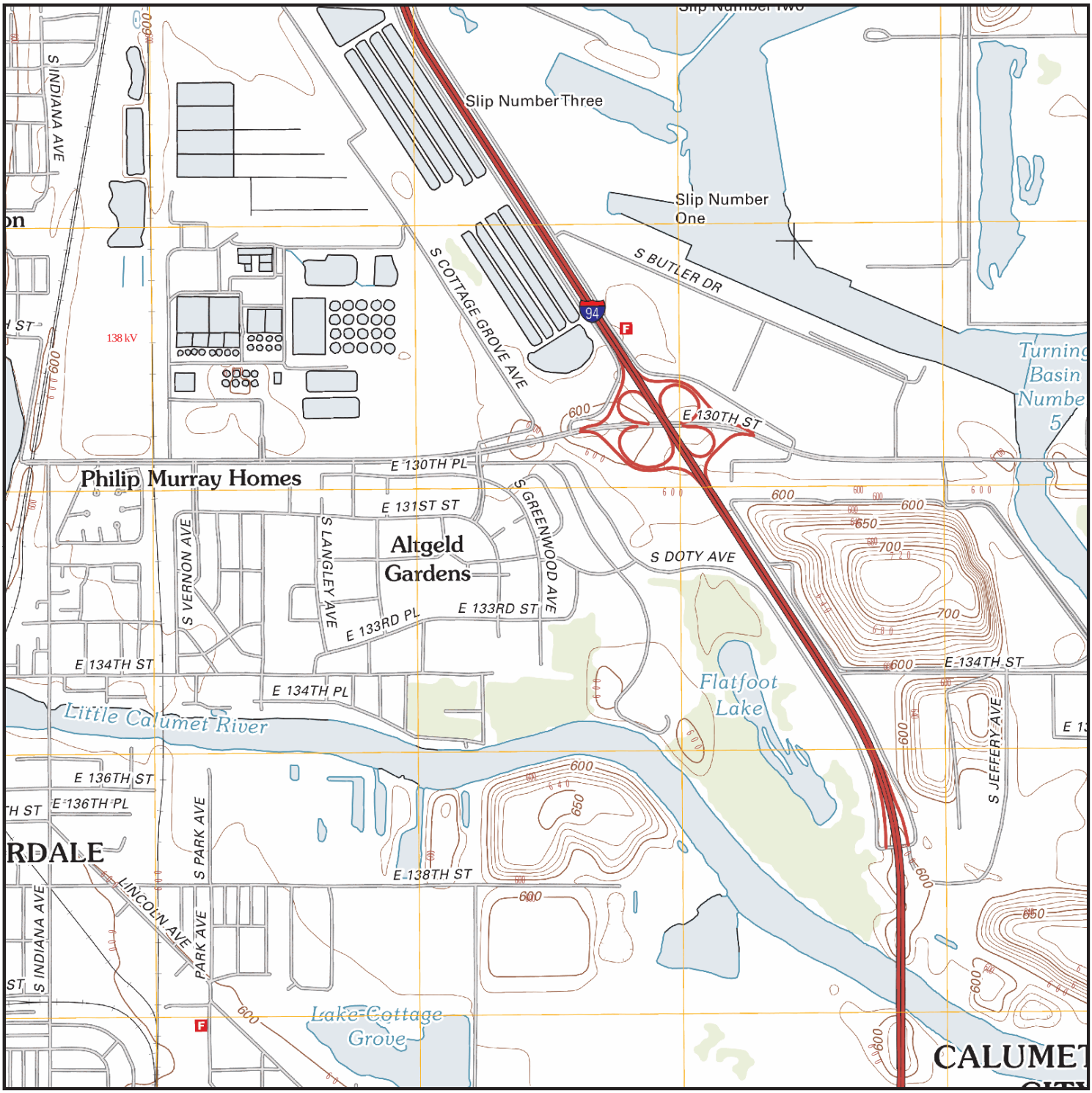

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Altgeld Gardens Blocks 11, 12, & 13	CLIENT:	Carnow, Conibear & Assoc., LTD
ADDRESS:	Northeast Corner of Greenwood Ave and 133rd St Chicago IL 60827	CONTACT:	Renisa Kokoneshi
		INQUIRY #:	4740280.2s
LAT/LONG:	41.656342 / 87.594218	DATE:	September 29, 2016 11:36 am

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DETAIL MAP - 4740280.2S

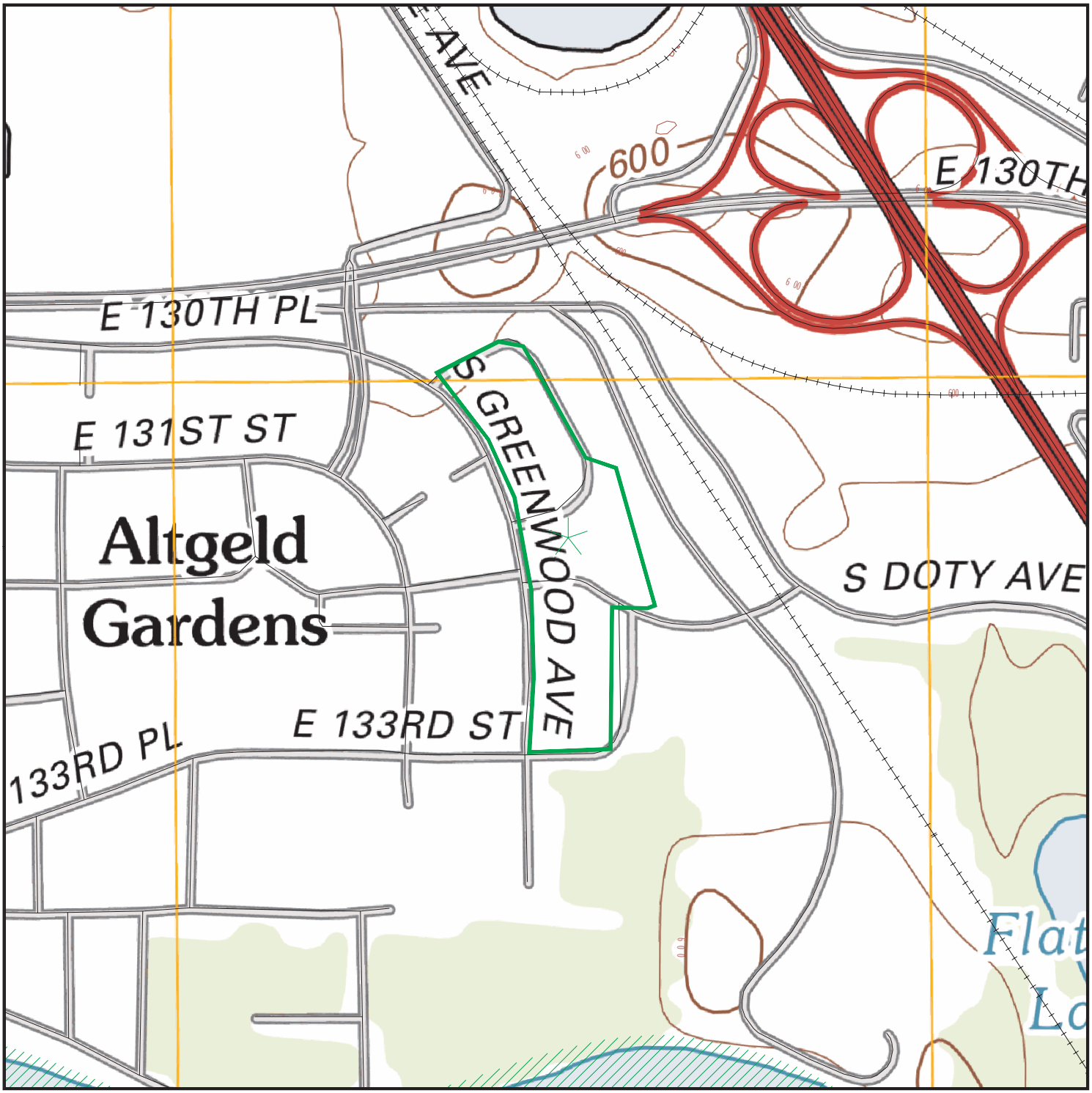

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Altgeld Gardens Blocks 11, 12, & 13 ADDRESS: Northeast Corner of Greenwood Ave and 133rd St Chicago IL 60827 LAT/LONG: 41.656342 / 87.594218	CLIENT: Carnow, Conibear & Assoc., LTD CONTACT: Renisa Kokoneshi INQUIRY #: 4740280.2s DATE: September 29, 2016 11:38 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		1	0	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		2	0	NR	NR	NR	2
RCRA-CESQG	0.250		0	2	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SSU	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
CCDD	0.500		0	0	0	NR	NR	0
LF SPECIAL WASTE	0.500		0	0	0	NR	NR	0
IL NIPC	0.500		1	3	1	NR	NR	5
State and tribal leaking storage tank lists								
LUST	0.500		0	1	0	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	1	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
SRP	0.500		0	1	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
BOL	0.001		0	NR	NR	NR	NR	0
CHICAGO ENV	0.001		0	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HWAR	0.001		0	NR	NR	NR	NR	0
IMPDMENT	0.500		0	0	0	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PIMW	0.250		0	0	NR	NR	NR	0
TIER 2	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		1	NR	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	5	9	1	1	0	16

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 NNW < 1/8 0.087 mi. 457 ft.	**LAND & LAKES TRANSFER STATION 1258-1300 E 130TH ST CHICAGO, IL 60827**	**RCRA-SQG FINDS ECHO**	**1004697781 ILR000081000**

Relative:
Higher

Actual:
615 ft.

RCRA-SQG:

Date form received by agency:	09/01/2000
Facility name:	LAND & LAKES TRANSFER STATION
Facility address:	1258-1300 E 130TH ST CHICAGO, IL 60827
EPA ID:	ILR000081000
Mailing address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Contact:	WM KARPAS
Contact address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Contact country:	US
Contact telephone:	(847) 825-5000
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MARINA DEVELOPMENTS INC
Owner/operator address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 825-5000
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D000
. Waste name: Not Defined

LAND & LAKES TRANSFER STATION (Continued) **1004697781**

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

FINDS:

Registry ID: 110003059831

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
Envid: 1004697781
Registry ID: 110003059831
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110003059831

---

2 NNE < 1/8 0.091 mi. 482 ft. **CALUMET NU EARTH (130TH/DOTY)** **IL NIPC** **S100790125**
N/A
CHICAGO, IL

Relative: Higher

Actual: 589 ft.

---

3 NNW < 1/8 0.093 mi. 492 ft. **CHICAGO, CITY OF** **RCRA-SQG** **1006930428**
1100 E 130TH PL **ILR000122952**
CHICAGO, IL 60628

Relative: Higher

Actual: 600 ft.

RCRA-SQG:
Date form received by agency: 07/31/2003
Facility name: CHICAGO, CITY OF
Facility address: 1100 E 130TH PL
CHICAGO, IL 60628
EPA ID: ILR000122952
Mailing address: 30 N LASALLE 25TH FL
CHICAGO, IL 60602
Contact: TERRY SHEAHAN
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: (312) 742-4806
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator

CHICAGO, CITY OF (Continued) **1006930428**

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	07/31/2003
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	07/31/2003
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

4
West
< 1/8
0.111 mi.
585 ft.

13124 S ELLIS AVE
RIVERDALE, IL 60827

EDR Hist Cleaner **1014987878**
N/A

Relative:
Higher

Actual:
588 ft.

EDR Historical Cleaners:

Name:	NOONIES LAUNDROMAT INC
Year:	2002
Address:	13124 S ELLIS AVE

A5
North
< 1/8
0.121 mi.
641 ft.

CALUMET NU-EARTH DIST CENTER
NORTH 130TH ST & DOTY AVE
CHICAGO, IL 60628

SEMS-ARCHIVE **1003870307**
ILD980903686

Site 1 of 4 in cluster A

Relative:
Higher

Actual:
616 ft.

SEMS-ARCHIVE:

Site ID:	500927
EPA ID:	ILD980903686
Federal Facility:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID:	0500927
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	/ /
Date Completed:	12/01/84
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	12/01/84
Priority Level:	Low priority for further assessment
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	/ /
Date Completed:	12/20/85
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	SITE INSPECTION
Date Started:	/ /
Date Completed:	09/20/85
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	/ /
Date Completed:	10/31/91
Priority Level:	Not reported

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
A6 **North** **1/8-1/4** **0.127 mi.** **670 ft.** **Relative:** **Higher** **Actual:** **617 ft.**	**CHGO METRO SANITARY DIST #4** **CHICAGO, IL** **Site 2 of 4 in cluster A**	**IL NIPC**	**S100790026** **N/A**
A7 **North** **1/8-1/4** **0.127 mi.** **670 ft.** **Relative:** **Higher** **Actual:** **617 ft.**	**CHGO METYRO SANITARY DIST #2** **CHICAGO, IL** **Site 3 of 4 in cluster A**	**IL NIPC**	**S100789996** **N/A**
A8 **North** **1/8-1/4** **0.127 mi.** **670 ft.** **Relative:** **Higher** **Actual:** **617 ft.**	**CHGO METRO SANITARY DIST #3** **CHICAGO, IL** **Site 4 of 4 in cluster A**	**IL NIPC**	**S100790008** **N/A**
B9 **WSW** **1/8-1/4** **0.170 mi.** **900 ft.** **Relative:** **Higher** **Actual:** **587 ft.**	**ALTGELD GARDENS** **977 E 132ND STREET** **CHICAGO, IL 60827** **Site 1 of 5 in cluster B**	**RCRA-CESQG** **FINDS** **ECHO**	**1004697962** **ILR000101980**

RCRA-CESQG:

Date form received by agency:	12/01/2000
Facility name:	ALTGELD GARDENS
Facility address:	977 E 132ND STREET CHICAGO, IL 60627
EPA ID:	ILR000101980
Mailing address:	19156 S 85TH PLACE MOIENA, IL 60448
Contact:	THOOMAS CONNELLY
Contact address:	19156 S 85TH PLACE MOIENA, IL 60448
Contact country:	US
Contact telephone:	(815) 469-7007
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

ALTGELD GARDENS (Continued) **1004697962**

hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO HOUSING AUTHORITY
Owner/operator address:	626 W JACKSON BLVD CHICAGO, IL 60606
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 567-7775
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Violation Status: No violations found

FINDS:

Registry ID: 110006409779

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALTGELD GARDENS (Continued) **1004697962**

ECHO:

Envid:	1004697962
Registry ID:	110006409779
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110006409779

B10 West 1/8-1/4 0.192 mi. 1014 ft. **CHICAGO HOUSING AUTHORITY** **LUST** **S108649962**
940 EAST 132ND STREET **SRP** **N/A**
CHICAGO, IL 60827

Site 2 of 5 in cluster B

Relative: Higher

Actual: 587 ft.

LUST:

Incident Num:	20070682
IL EPA Id:	0316545003
Product:	Gasoline
IEMA Date:	05/21/2007
Project Manager:	Jones
Project Manager Phone:	(217) 524-1253
Email:	Steve.Jones@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	07/12/2007
45 Report Received:	08/08/2007
NFA/NFR Letter:	**09/10/2007**
NFR Date Recorded:	10/29/2007

SRP:

IL EPA Id:	0316545003
US EPA Id:	ILD981098395
Longitude:	-87.598806
Latitude:	41.656681
Contact Name:	John Gerut
Contact Address:	60 East Van Buren Street
Contact City,St,Zip:	Chicago, IL 60605
Date Enrolled:	11/23/2011
Point Of Contact:	Ala E. Sassila, P.E.
Consultant Company:	GSG Consultants, Inc.
Consultant Address:	855 West Adams Street
Consultant City,St,Zip:	Chicago, IL 60607
Proj Mgr Assigned:	Tammy Smith
Sec. 4 Letter Date:	Not reported
Active:	Yes
Remediation Applicant Co:	Chicago Housing Authority
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported

CHICAGO HOUSING AUTHORITY (Continued) **S108649962**

NFR Letter Date Recorded:	Not reported
Comprehensive/Focused:	Not reported
Worker Caution:	Not reported
Acres:	Not reported
Land Use:	Not reported
Ground Water Use Restriction:	Not reported
Highway Authority Agreement:	Not reported
Ordinance:	Not reported
Industrial - Commercial:	Not reported
Slab on Grade:	Not reported
BCT:	Not reported
Building Slab:	Not reported
Asphalt Used:	Not reported
Concrete Used:	Not reported
Clean Soil 3ft:	Not reported
Clean Soil 10ft:	Not reported
Alternate Barrier:	Not reported

Click here for IL SRP:

B11 **CHICAGO HOUSING AUTHORITY** **RCRA NonGen / NLR** **1000166304**
West **940 E 132ND ST** **FTTS** **ILD981098395**
1/8-1/4 **CHICAGO, IL 60627** **HIST FTTS**
0.192 mi. **FINDS**
1014 ft. **Site 3 of 5 in cluster B** **ECHO**

Relative:
Higher

Actual:
587 ft.

RCRA NonGen / NLR:

Date form received by agency:	09/17/1985
Facility name:	CHICAGO HOUSING AUTHORITY
Facility address:	940 E 132ND ST CHICAGO, IL 60627
EPA ID:	ILD981098395
Mailing address:	22 W MADISON ST 14 FL CHICAGO, IL 60602
Contact:	JAMES WESLEY
Contact address:	22 W MADISON ST 14 FL CHICAGO, IL 60602
Contact country:	US
Contact telephone:	(312) 791-8449
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED

CHICAGO HOUSING AUTHORITY (Continued) **1000166304**

Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: X002
. Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

FTTS INSP:
Inspection Number: 19930908IL014 1
Region: 05
Inspection Date: 09/08/93
Inspector: OSOWSKI
Violation occurred: Yes
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: For Cause, Government
Legislation Code: TSCA
Facility Function: User

HIST FTTS INSP:
Inspection Number: 19930908IL014 1
Region: 05
Inspection Date: Not reported
Inspector: OSOWSKI
Violation occurred: Yes
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: For Cause, Government
Legislation Code: TSCA
Facility Function: User

FINDS:

CHICAGO HOUSING AUTHORITY (Continued) **1000166304**

Registry ID: 110009373622

Environmental Interest/Information System

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

ECHO:

Envid:	1000166304
Registry ID:	110009373622
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110009373622

B12 **CARVER PARK** **RCRA-CESQG** **1010563392**
West **939 E 132ND ST** **ILR000148049**
1/8-1/4 **CHICAGO, IL 60627**
0.193 mi.
1020 ft. **Site 4 of 5 in cluster B**

Relative:
Higher

Actual:
587 ft.

RCRA-CESQG:

Date form received by agency:	07/20/2007
Facility name:	CARVER PARK
Facility address:	939 E 132ND ST CHICAGO, IL 60627
EPA ID:	ILR000148049
Mailing address:	425 E MCFETRIDGE CHICAGO, IL 60605
Contact:	LEEANN THOMAS
Contact address:	Not reported Not reported

CARVER PARK (Continued) **1010563392**

Contact country: US
Contact telephone: (312) 742-4287
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 07/20/2007
Owner/Op end date: Not reported

Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: 07/20/2007
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No

CARVER PARK (Continued) **1010563392**

Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

B13
West
1/8-1/4
0.193 mi.
1020 ft.

CARVER PARK NATATORIUM **UST** **U001142250**
939 E 132ND ST **N/A**
CHICAGO, IL 60627

Site 5 of 5 in cluster B

Relative:
Higher

Actual:
587 ft.

UST:

Facility ID:	2030903
Facility Status:	CLOSED
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Id:	U0002888
Owner Name:	Chicago Park District
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Status:	**Abandoned in place**
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	10/1/1974
OSFM First Notify Date:	7/1/1992
Red Tag Issue Date:	Not reported
Install Date:	1/1/1956
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported

14
ENE
1/4-1/2
0.480 mi.
2537 ft.

PALUMBO EXCAVATING **IL NIPC** **S100789998**
N/A
CHICAGO, IL

Relative:
Higher

Actual:
592 ft.

15	**BARKER CHEMICAL CO**	**SEMS-ARCHIVE**	**1000269195**
SW	**700 E 138TH STREET**	**CORRACTS**	**ILD005097670**
1/2-1	**CHICAGO, IL 60601**	**RCRA NonGen / NLR**	
0.817 mi.		**FINDS**	
4316 ft.		**ECHO**	

Relative:
Higher

Actual:
590 ft.

SEMS-ARCHIVE:

Site ID:	500154
EPA ID:	ILD005097670
Federal Facility:	N
NPL:	Not on the NPL
Non NPL Status:	Deferred to RCRA

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID:	0500154
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	Deferred to RCRA

Program Priority:

Description:	RCRA Deferral Audit
Description:	RCRA Deferral - Lead Confirmed

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	/ /
Date Completed:	04/01/79
Priority Level:	Not reported
Action:	SITE INSPECTION
Date Started:	/ /
Date Completed:	12/01/84
Priority Level:	Deferred to RCRA (Subtitle C)
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	01/01/84
Priority Level:	Low priority for further assessment
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	/ /
Date Completed:	09/29/85
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	/ /
Date Completed:	10/30/95
Priority Level:	Not reported

CORRACTS:

EPA ID:	ILD005097670
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	19911113
Action:	CA050 - RFA Completed

BARKER CHEMICAL CO (Continued) **1000269195**

NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005097670
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19920221
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005097670
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19910927
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

RCRA NonGen / NLR:
Date form received by agency: 10/23/1981
Facility name: BARKER CHEMICAL CO
Facility address: 700 E 138TH STREET
CHICAGO, IL 60627
EPA ID: ILD005097670
Mailing address: PO BOX 546
SOUTH HOLLAND, IL 60473
Contact: WAYNE BARKER
Contact address: PO BOX 546
SOUTH HOLLAND, IL 60473
Contact country: US
Contact telephone: (312) 842-8000
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED

BARKER CHEMICAL CO (Continued) **1000269195**

Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/26/1981
Site name: BARKER CHEMICAL CO
Classification: Not a generator, verified

Corrective Action Summary:
Event date: 09/27/1991
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 11/13/1991
Event: RFA Completed

Event date: 02/21/1992
Event: Stabilization Measures Evaluation,This facility is amenable to stabilization activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations.

Violation Status: No violations found

FINDS:

Registry ID: 110009366550

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource

BARKER CHEMICAL CO (Continued) **1000269195**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid:	1000269195
Registry ID:	110009366550
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110009366550

Count: 6 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	SEMS-ARCHIVE
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	SEMS, PRP, CONSENT
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	SEMS-ARCHIVE
DOLTON	1003870419	DOLTON MUNI LDFL	140TH ST & COTTAGE GROVE	60419	SEMS-ARCHIVE
DOLTON	1012209907	DOLTON HAZMAT	DOLTON AVE EXIT ON THE BISHOP		SEMS
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST.	60827	LUST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 07/07/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 10/17/2016
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/06/2016	Telephone: 703-603-8704
Date Made Active in Reports: 05/20/2016	Last EDR Contact: 07/06/2016
Number of Days to Update: 135	Next Scheduled EDR Contact: 10/17/2016
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 07/22/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 10/31/2016
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SSU: State Sites Unit Listing

The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 07/29/2015
Date Made Active in Reports: 09/01/2015
Number of Days to Update: 34

Source: Illinois Environmental Protection Agency
Telephone: 217-524-4826
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

CCDD: Clean Construction or Demolition Debris

Construction and demolition (C and D) debris is nonhazardous, uncontaminated material resulting from construction, remodeling, repair, or demolition of utilities, structures, and roads.

Date of Government Version: 04/11/2016
Date Data Arrived at EDR: 04/12/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 59

Source: Illinois EPA
Telephone: 217-524-3300
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

LF WMRC: Waste Management & Research Center Landfill Database

The Waste Management & Research Center Landfill Database includes records from the Department of Public Health, Department of Mines & Minerals, Illinois Environmental Protection Agency, State Geological Survey, Northeastern Illinois Planning Commission and Pollution Control Board.

Date of Government Version: 12/31/2001
Date Data Arrived at EDR: 10/06/2006
Date Made Active in Reports: 11/06/2006
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 217-333-8940
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: No Update Planned

SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/29/2015
Date Made Active in Reports: 09/15/2015
Number of Days to Update: 48

Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Annually

LF SPECIAL WASTE: Special Waste Site List

These landfills, as of January 1, 1990, accept non-hazardous special waste pursuant to the Illinois EPA Non-Hazardous Special Waste Definition. List A includes landfills that may receive any non-hazardous waste, Non-Regional Pollution Control Facilities are so noted. List B includes landfills designed to receive specific non-hazardous wastes. List B landfills are designated as a Regional Pollution Control Facility by RPCF, or Non-Regional Pollution Control Facility by Non-RPCF.

Date of Government Version: 01/01/1990
Date Data Arrived at EDR: 06/17/2009
Date Made Active in Reports: 07/15/2009
Number of Days to Update: 28

Source: Illinois EPA
Telephone: 217-782-9288
Last EDR Contact: 06/10/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IL NIPC: Solid Waste Landfill Inventory

Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/1988
Date Data Arrived at EDR: 08/01/1994
Date Made Active in Reports: 08/12/1994
Number of Days to Update: 11

Source: Northeastern Illinois Planning Commission
Telephone: 312-454-0400
Last EDR Contact: 05/23/2006
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/06/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 44

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6762
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

LUST TRUST: Underground Storage Tank Fund Payment Prioirty List
In case sufficient funds are not available in the Underground Storage Tank Fund, requests for payment are entered on the Payment Priority List by "queue date" order. As required by the Environmental Protection Act, the queue date is the date that a complete request for partial or final payment was received by the Agency. The queue date is "officially" confirmed at the end of the payment review process when a Final Decision Letter is sent to the site owner.

Date of Government Version: 04/22/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 44

Source: Illinois EPA
Telephone: 217-782-6762
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

UST: Underground Storage Tank Facility List
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 44

Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

AST: Above Ground Storage Tanks
Listing of all aboveground tanks inspected by Office of State Fire Marshal.

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 07/01/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 32

Source: State Fire Marshal
Telephone: 217-785-1011
Last EDR Contact: 08/19/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 120

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENG CONTROLS: Sites with Engineering Controls
Sites using of engineered barriers (e.g., asphalt or concrete paving).

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/06/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 27

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 07/06/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

Inst Control: Institutional Controls
Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/06/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 27

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 07/06/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

SRP: Site Remediation Program Database
The database identifies the status of all voluntary remediation projects administered through the pre-notice site cleanup program (1989 to 1995) and the site remediation program (1996 to the present).

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/06/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 27

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 07/06/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Municipal Brownfields Redevelopment Grant Program Project Descriptions
The Illinois Municipal Brownfields Redevelopment Grant Program (MBRGP) offers grants worth a maximum of $240,000 each to municipalities to assist in site investigation activities, development of cleanup objectives, and performance of cleanup activities. Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment.

Date of Government Version: 02/11/2010
Date Data Arrived at EDR: 07/31/2014
Date Made Active in Reports: 09/08/2014
Number of Days to Update: 39

Source: Illinois Environmental Protection Agency
Telephone: 217-785-3486
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

BROWNFIELDS: Redevelopment Assessment Database
The Office of Site Evaluations Redevelopment Assessment database identifies the status of all properties within the State in which the Illinois EPA's Office of Site Evaluation has conducted a municipal Brownfield Redevelopment Assessment.

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 44

Source: Illinois Environmental Protection Agency
Telephone: 217-524-1658
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/22/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/21/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/05/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 08/31/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: No Update Planned

CDL: Meth Drug Lab Site Listing
A listing of clandestine/meth drug lab locations.

Date of Government Version: 04/13/2016
Date Data Arrived at EDR: 04/19/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 52

Source: Department of Public Health
Telephone: 217-782-5750
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 06/28/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 87

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/27/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

IEMA SPILLS: Illinois Emergency Management Agency Spills
A listing of hazardous materials incidents reported to the Illinois Emergency Management Agency.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 37

Source: Illinois Emergency Management Agency
Telephone: 217-524-0770
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

SPILLS: State spills
A listing of incidents reported to the Office of Emergency Response.

Date of Government Version: 05/06/2016
Date Data Arrived at EDR: 05/10/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 31

Source: Illinois EPA
Telephone: 217-782-3637
Last EDR Contact: 07/11/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/15/2013
Number of Days to Update: 71

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 09/28/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/15/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/08/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 107

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/23/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 28

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/05/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2016
Date Data Arrived at EDR: 08/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 53

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016
Date Data Arrived at EDR: 07/26/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 59

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/07/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 148

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/08/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/05/2016
Date Data Arrived at EDR: 09/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/01/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (312) 353-2000
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Varies

AIRS: Air Inventory Listing
A listing of air permits and emissions information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 05/06/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 35

Source: Illinois EPA
Telephone: 217-557-0314
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

BOL: Bureau of Land Inventory Database
Bureau of Land inventory for facility information. Data results are cross-linked with all on-line database system applications from IEPA - Bureau of Land as well as USEPA FRS database.

Date of Government Version: 06/17/2016
Date Data Arrived at EDR: 06/21/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 42

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

CHICAGO ENV: Environmental Records Dataset
This dataset serves as a lookup table to determine if environmental records exist in a Chicago Department of Public Health (CDPH) environmental dataset for a given address. COMPLAINTS: A "Y" indicates that one or more records exist in the CDPH Environmental Complaints dataset. NESHAPS and DEMOLITON NOTICES: A "Y" indicates that one or more records exist in the CDPH Asbestos and Demolition Notification dataset. ENFORCEMENT: A "Y" indicates that one or more records exist in the CDPH Environmental Enforcement dataset. INSPECTIONS: A "Y" indicates that one or more records exist in the CDPH Environmental Inspections dataset. PERMITS: A "Y" indicates that one or more records exist in the CDPH Environmental Permits dataset. TANKS: A "Y" indicates that one or more records exist in the CDPH Storage Tanks dataset.

Date of Government Version: 06/15/2016
Date Data Arrived at EDR: 06/22/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 41

Source: Chicago Department of Public Health
Telephone: 312-745-3136
Last EDR Contact: 09/21/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Varies

COAL ASH: Coal Ash Site Listing
A listing of coal ash site lcoations.

Date of Government Version: 10/01/2011
Date Data Arrived at EDR: 03/09/2012
Date Made Active in Reports: 04/10/2012
Number of Days to Update: 32

Source: Illinois EPA
Telephone: 217-782-1654
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Annually

DRYCLEANERS: Illinois Licensed Drycleaners

Any retail drycleaning facility in Illinois must apply for a license through the Illinois Drycleaner Environmental Response Trust Fund. Drycleaner Environmental Response Trust Fund of Illinois.

Date of Government Version: 05/23/2016
Date Data Arrived at EDR: 05/25/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 69

Source: Drycleaner Environmental Response Trust Fund of Illinois
Telephone: 800-765-4041
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

Financial Assurance: Financial Assurance Information Listing

Information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/15/2015
Date Data Arrived at EDR: 12/18/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 62

Source: Illinois Environmental Protection Agency
Telephone: 217-782-9887
Last EDR Contact: 08/19/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

HWAR: Hazard Waste Annual Report

Each year, Illinois hazardous-waste generators tell the Illinois EPA the amounts and kinds of hazardous waste they produced during the previous year. Generators indicate by code the types of wastes produced and the steps they took to manage these wastes. If some or all of these wastes were sent to commercial treatment, storage, and disposal facilities (TSDFs), that information and the identity of each receiving facility also are submitted.
Illinois TSDFs likewise report the types and quantities of wastes received from in-state and out-of-state generators; they also report the procedures they used to manage these wastes.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/22/2016
Date Made Active in Reports: 06/10/2016
Number of Days to Update: 49

Source: Illinois EPA
Telephone: 217-524-3300
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

IMPDMENT: Surface Impoundment Inventory

Statewide inventory of industrial, municipal, mining, oil & gas , and large agricultural impoundment. This study was conducted by the Illinois EPA to assess potentail for contamination of shallow aquifers. This was a one-time study. Although many of the impoundments may no longer be present, the sites may be contaminated.

Date of Government Version: 12/31/1980
Date Data Arrived at EDR: 03/08/2002
Date Made Active in Reports: 06/03/2002
Number of Days to Update: 87

Source: Illinois Waste Management & Research Center
Telephone: 217-333-8940
Last EDR Contact: 02/20/2002
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: A Listing of Active Permits

A listing of facilities currently active in the state. The types of permits are public, private, federal and state.

Date of Government Version: 04/16/2014
Date Data Arrived at EDR: 04/18/2014
Date Made Active in Reports: 05/20/2014
Number of Days to Update: 32

Source: Illinois EPA
Telephone: 217-782-0610
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

PIMW: Potentially Infectious Medical Waste

Potentially Infectious Medical Waste (PIMW) is waste generated in connection with the diagnosis, treatment (i.e., provision of medical services), or immunization of human beings or animals; research pertaining to the provision of medical services; or the provision or testing of biologicals.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/24/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 39

Source: Illinois EPA
Telephone: 217-524-3289
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing
A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 05/24/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 70

Source: Illinois Emergency Management Agency
Telephone: 217-785-9860
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Annually

UIC: Underground Injection Wells
Injection wells are used for disposal of fluids by "injection" into the subsurface. The construction of injection wells range from very technical designs with twenty-four hour monitoring to simply a hole dug in the ground to control runoff. As a result of this diversity, the UIC Program divides injection wells into five different classes.

Date of Government Version: 06/01/2016
Date Data Arrived at EDR: 06/20/2016
Date Made Active in Reports: 08/02/2016
Number of Days to Update: 43

Source: Illinois EPA
Telephone: 217-782-9878
Last EDR Contact: 08/19/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/24/2016
Date Data Arrived at EDR: 05/25/2016
Date Made Active in Reports: 07/13/2016
Number of Days to Update: 49

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 09/20/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Illinois Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Illinois Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/11/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/03/2016
Date Made Active in Reports: 09/09/2016
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/18/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 09/20/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Homes & Centers Listing
Source: Department of Children & Family Services
Telephone: 312-814-4150

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Illinois State Geological Survey
Telephone: 217-333-4747

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ALTGELD GARDENS BLOCKS 11, 12, & 13
NORTHEAST CORNER OF GREENWOOD AVE AND 133RD ST
CHICAGO, IL 60827

TARGET PROPERTY COORDINATES

Latitude (North):	41.656342 - 41˚ 39' 22.83''
Longitude (West):	87.594218 - 87˚ 35' 39.18''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	450522.9
UTM Y (Meters):	4611579.0
Elevation:	586 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5681452 LAKE CALUMET, IL
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES

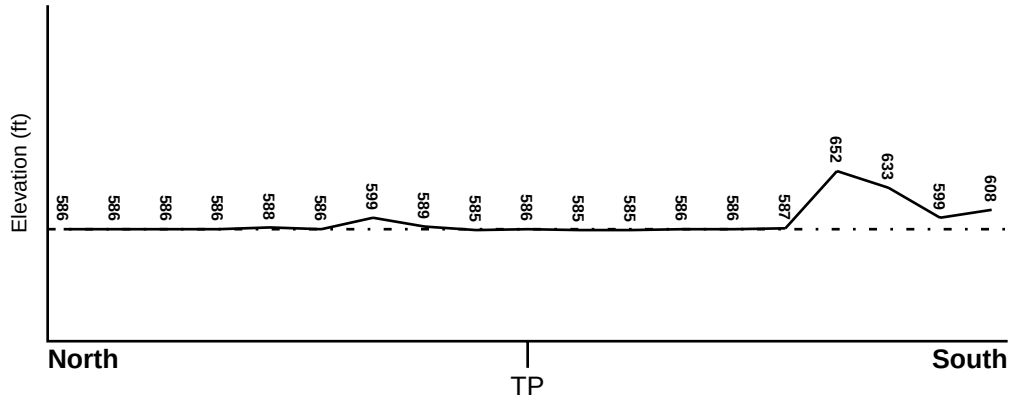

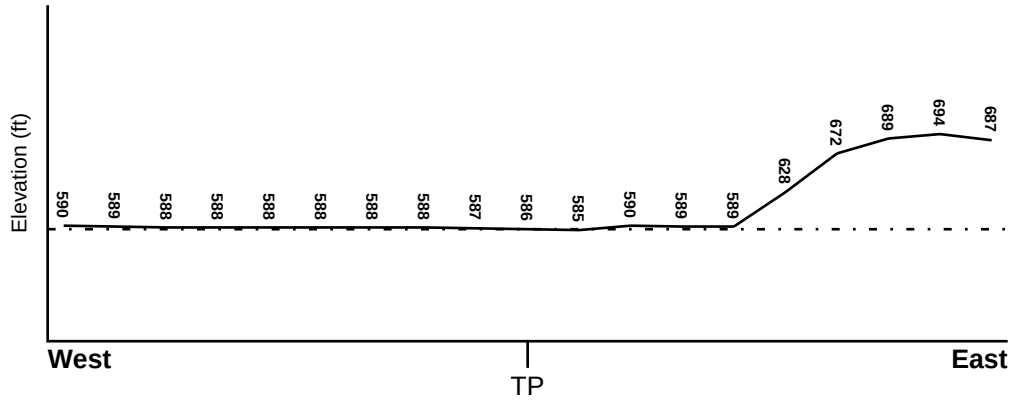

Target Property Elevation: 586 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
17031C0661J	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
17031C0662J	FEMA FIRM Flood data
17031C0664J	FEMA FIRM Flood data
17031C0663J	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
LAKE CALUMET	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1/2 - 1 Mile SSW
Site Name:	Land & Lakes #2
Site EPA ID Number:	ILD981531882
Surficial Aquifer Flow Dir.:	N TOWARD THE LITTLE CALUMET RIVER.
Measured Depth to Water:	not available.
Hydraulic Connection:	While a hydraulic connection between the near-surface lacustrine and glacial drift deposits aquifer and the underlying Silurian Dolomite bedrock aquifer is unlikely, a downward vertical ground water flow is present.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW

* ©1996 Site--specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
D42	1/2 - 1 Mile SSW	N

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Silurian
Series:	Middle Silurian (Niagoaran)
Code:	S2 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	URBANLAND
Soil Surface Texture:	variable
Hydrologic Group:	Not reported
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 0 inches
Depth to Bedrock Max:	> 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	60 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silt loam
fine sandy loam
loam
fine sand

Surficial Soil Types: silt loam
fine sandy loam
loam
fine sand

Shallow Soil Types: sandy loam

Deeper Soil Types: silt loam
sand
loamy sand
loam

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000298836	1/4 - 1/2 Mile ENE
11	USGS40000298813	1/4 - 1/2 Mile SSE
12	USGS40000298852	1/4 - 1/2 Mile NNE
16	USGS40000298848	1/2 - 1 Mile ENE
19	USGS40000298840	1/2 - 1 Mile WNW
20	USGS40000298858	1/2 - 1 Mile North
24	USGS40000298820	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B2	ILSG20000193721	1/4 - 1/2 Mile North
B3	ILSG20000193720	1/4 - 1/2 Mile North
B4	ILSG20000193723	1/4 - 1/2 Mile North
B5	ILSG20000193722	1/4 - 1/2 Mile North
A6	ILSG20000193543	1/4 - 1/2 Mile ENE
C7	ILSG20000193724	1/4 - 1/2 Mile NE
C8	ILSG20000193725	1/4 - 1/2 Mile NE
C9	ILSG20000193726	1/4 - 1/2 Mile NE
10	ILSG20000193544	1/4 - 1/2 Mile ENE
13	ILSG20000192405	1/4 - 1/2 Mile South
14	ILSG20000192404	1/4 - 1/2 Mile SSW
15	ILSG20000194198	1/2 - 1 Mile North
17	ILSG20000193953	1/2 - 1 Mile NW
18	ILSG20000192064	1/2 - 1 Mile SSE
21	ILSG20000191739	1/2 - 1 Mile SSW
22	ILSG20000191633	1/2 - 1 Mile South
23	ILSG20000193714	1/2 - 1 Mile WNW
D25	ILSG20000191476	1/2 - 1 Mile South
D26	ILSG20000191465	1/2 - 1 Mile South
D27	ILSG20000191466	1/2 - 1 Mile South
D28	ILSG20000191467	1/2 - 1 Mile South
D29	ILSG20000191464	1/2 - 1 Mile South
D30	ILSG20000191461	1/2 - 1 Mile South
D31	ILSG20000191462	1/2 - 1 Mile South
D32	ILSG20000191463	1/2 - 1 Mile South
D33	ILSG20000191468	1/2 - 1 Mile South
D34	ILSG20000191473	1/2 - 1 Mile South
D35	ILSG20000191474	1/2 - 1 Mile South
D36	ILSG20000191475	1/2 - 1 Mile South
D37	ILSG20000191472	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D38	ILSG20000191469	1/2 - 1 Mile South
D39	ILSG20000191470	1/2 - 1 Mile South
D40	ILSG20000191471	1/2 - 1 Mile South
41	ILSG20000192408	1/2 - 1 Mile ESE
43	ILSG20000194682	1/2 - 1 Mile NNW
44	ILSG20000193716	1/2 - 1 Mile WNW
45	ILSG20000191477	1/2 - 1 Mile SSE
46	ILSG20000192671	1/2 - 1 Mile ESE
47	ILSG20000193552	1/2 - 1 Mile East

PHYSICAL SETTING SOURCE MAP - 4740280.2s

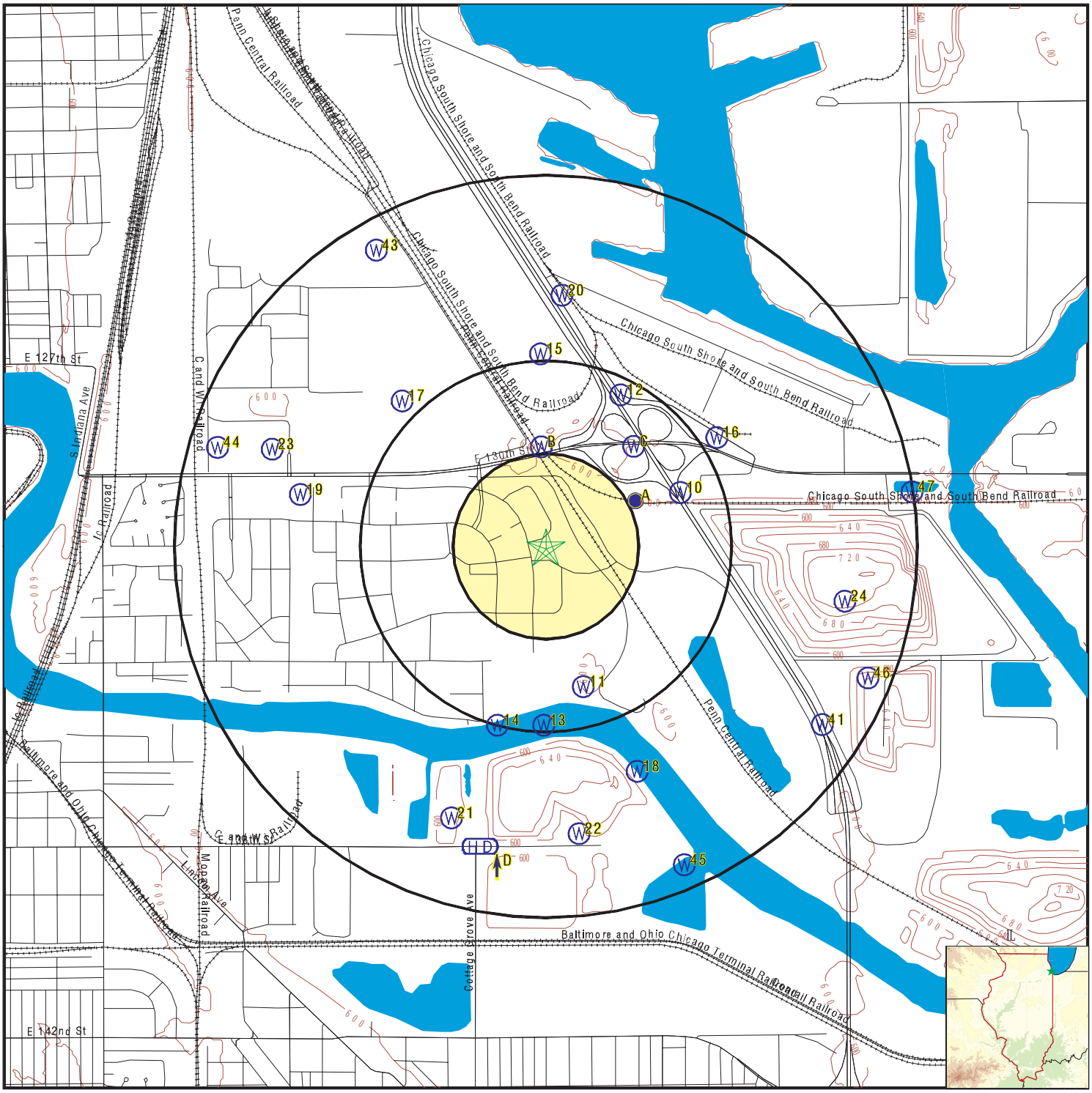

0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data

SITE NAME:	Altgeld Gardens Blocks 11, 12, & 13	CLIENT:	Carnow, Conibear & Assoc., LTD
ADDRESS:	Northeast Corner of Greenwood Ave and 133rd St Chicago IL 60827	CONTACT:	Renisa Kokoneshi
		INQUIRY #:	4740280.2s
LAT/LONG:	41.656342 / 87.594218	DATE:	September 29, 2016 11:38 am

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Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **ENE** **1/4 - 1/2 Mile** **Higher**		**FED USGS**	**USGS40000298836**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413928087342801		
Monloc name:	isws well at carver high school		
Monloc type:	Well		
Monloc desc:	s78 wrir 95-4253		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6578125
Longitude:	-87.58949	Sourcemap scale:	Not Reported
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	590
Vert measure units:	feet	Vertacc measure val:	3
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Silurian-Devonian aquifers		
Formation type:	Niagaran Series		
Aquifer type:	Confined single aquifer		
Construction date:	Not Reported	Welldepth:	58
Welldepth units:	ft	Wellholedepth:	58
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1997-07-09	31.20		1993-06-15	30.53	
1992-06-23	30.92		1991-05-06	30.7	

B2 **North** **1/4 - 1/2 Mile** **Higher**		**IL WELLS**	**ILSG20000193721**

Pt api number:	120313329900	Pt status:	ENG
Pt longitude:	-87.59445		
Pt latitude:	41.660228		
Api number:	120313329900		
Longitude :	-87.59445		
Latitude :	41.660228		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	130th St. over K&E Railroad
Farm num:	B-2	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	592
Elevref:	Ground level	Total depth:	51
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

Map ID Direction Distance Elevation	Database	EDR ID Number
B3 **North** **1/4 - 1/2 Mile** **Higher**	**IL WELLS**	**ILSG20000193720**

Pt api number:	120313329800	Pt status:	ENG
Pt longitude:	-87.59445		
Pt latitude:	41.660228		
Api number:	120313329800		
Longitude :	-87.59445		
Latitude :	41.660228		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	130th St. over K&E Railroad
Farm num:	B-1	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	616
Elevref:	Ground level	Total depth:	49
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B4 **North** **1/4 - 1/2 Mile** **Higher**	**IL WELLS**	**ILSG20000193723**

Pt api number:	120313330100	Pt status:	ENG
Pt longitude:	-87.59445		
Pt latitude:	41.660228		
Api number:	120313330100		
Longitude :	-87.59445		
Latitude :	41.660228		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	130th St. over K&E Railroad
Farm num:	B-4	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	614
Elevref:	Ground level	Total depth:	47
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B5 **North** **1/4 - 1/2 Mile** **Higher**	**IL WELLS**	**ILSG20000193722**

Pt api number:	120313330000	Pt status:	ENG
Pt longitude:	-87.59445		
Pt latitude:	41.660228		
Api number:	120313330000		
Longitude :	-87.59445		
Latitude :	41.660228		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	130th St. over K&E Railroad
Farm num:	B-3	Company name:	IL Div. of Highways

Status:	Engineering Test	Elevation:	586
Elevref:	Ground level	Total depth:	57
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

A6
ENE **IL WELLS** **ILSG20000193543**
1/4 - 1/2 Mile
Higher

Pt api number:	120313200300	Pt status:	STRAT
Pt longitude:	-87.589621		
Pt latitude:	41.658437		
Api number:	120313200300		
Longitude :	-87.589621		
Latitude :	41.658437		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Carver High School
Farm num:	LC-1	Company name:	D & G Drilling Co., Inc.
Status:	Stratigraphic Test	Elevation:	590
Elevref:	Ground level	Total depth:	59
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

C7
NE **IL WELLS** **ILSG20000193724**
1/4 - 1/2 Mile
Higher

Pt api number:	120313330200	Pt status:	ENG
Pt longitude:	-87.589644		
Pt latitude:	41.660249		
Api number:	120313330200		
Longitude :	-87.589644		
Latitude :	41.660249		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Calumet Expressway
Farm num:	B-1	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	588
Elevref:	Ground level	Total depth:	54
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

C8
NE **IL WELLS** **ILSG20000193725**
1/4 - 1/2 Mile
Higher

Pt api number:	120313330300	Pt status:	ENG
Pt longitude:	-87.589644		
Pt latitude:	41.660249		
Api number:	120313330300		
Longitude :	-87.589644		
Latitude :	41.660249		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Calumet Expressway
Farm num:	B-2	Company name:	IL Div. of Highways

Status:	Engineering Test	Elevation:	587
Elevref:	Ground level	Total depth:	53
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

C9
NE **IL WELLS** **ILSG20000193726**
1/4 - 1/2 Mile
Higher

Pt api number:	120313330400	Pt status:	ENG
Pt longitude:	-87.589644		
Pt latitude:	41.660249		
Api number:	120313330400		
Longitude :	-87.589644		
Latitude :	41.660249		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Calumet Expressway
Farm num:	B-3	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	587
Elevref:	Ground level	Total depth:	52
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

10
ENE **IL WELLS** **ILSG20000193544**
1/4 - 1/2 Mile
Higher

Pt api number:	120310089600	Pt status:	ENG
Pt longitude:	-87.587217		
Pt latitude:	41.658446		
Api number:	120310089600		
Longitude :	-87.587217		
Latitude :	41.658446		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Dh-6	Company name:	Chicago Sanitary Dist.
Status:	Engineering Test	Elevation:	584
Elevref:	Ground level	Total depth:	995
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

11
SSE **FED USGS** **USGS40000298813**
1/4 - 1/2 Mile
Higher

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413903087353201		
Monloc name:	beubein woods soil boring		
Monloc type:	Well: Test hole not completed as a well		
Monloc desc:	see wrir 96-4126, fill is dredge spoil		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6508681
Longitude:	-87.5922677	Sourcemap scale:	Not Reported

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	605
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19941104	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	9
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1994-11-04		

Note: The site was dry (no water level recorded).

12
NNE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000298852**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413944087352501		
Monloc name:	isws well 2		
Monloc type:	Well		
Monloc desc:	s82 wrir 95-4253		
Huc code:	04040001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.662257
Longitude:	-87.5903235	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	587.63
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Other aquifers		
Formation type:	Fill		
Aquifer type:	Unconfined single aquifer		
Construction date:	19910401	Welldepth:	15
Welldepth units:	ft	Wellholedepth:	20
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1992-06-23	4.13	

Map ID Direction Distance Elevation	Database	EDR ID Number
13 **South** **1/4 - 1/2 Mile** **Lower**	**IL WELLS**	**ILSG20000192405**

Pt api number:	120313211200	Pt status:	MONIT
Pt longitude:	-87.594324		
Pt latitude:	41.649362		
Api number:	120313211200		
Longitude :	-87.594324		
Latitude :	41.649362		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes
Farm num:	RA-11S	Company name:	Raimonde & Sons
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	15
Wformation:	unconsolidated	Wfmfrom:	9
Wfmto:	15	Pumpgpm:	0

---

14 **SSW** **1/4 - 1/2 Mile** **Lower**	**IL WELLS**	**ILSG20000192404**

Pt api number:	120313572700	Pt status:	MONIT
Pt longitude:	-87.596737		
Pt latitude:	41.649361		
Api number:	120313572700		
Longitude :	-87.596737		
Latitude :	41.649361		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land and Lakes Company - 1 & 2
Farm num:	R17D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	63
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

---

15 **North** **1/2 - 1 Mile** **Higher**	**IL WELLS**	**ILSG20000194198**

Pt api number:	120312531200	Pt status:	ENG
Pt longitude:	-87.594492		
Pt latitude:	41.663857		
Api number:	120312531200		
Longitude :	-87.594492		
Latitude :	41.663857		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metro San Dist
Farm num:	B-7	Company name:	Walter Louis K

Status:	Engineering Test	Elevation:	589
Elevref:	Ground level	Total depth:	17
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

16
ENE **FED USGS** **USGS40000298848**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413938087350701		
Monloc name:	isws well 1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	04040001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6605903
Longitude:	-87.5853233	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	585.90
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	11
Welldepth units:	ft	Wellholedepth:	11
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1992-06-22	1.37	

17
NW **IL WELLS** **ILSG20000193953**
1/2 - 1 Mile
Higher

Pt api number:	120312531300	Pt status:	ENG
Pt longitude:	-87.601691		
Pt latitude:	41.662018		
Api number:	120312531300		
Longitude :	-87.601691		
Latitude :	41.662018		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metro San Dist
Farm num:	B-6	Company name:	Testing Service Corp.

Status:	Engineering Test	Elevation:	585
Elevref:	Topographic Map	Total depth:	15
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

18
SSE **IL WELLS** **ILSG20000192064**
1/2 - 1 Mile
Lower

Pt api number:	120313572800	Pt status:	MONIT
Pt longitude:	-87.589466		
Pt latitude:	41.647559		
Api number:	120313572800		
Longitude :	-87.589466		
Latitude :	41.647559		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land and Lakes Company - 1 & 2
Farm num:	R18D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	53
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

19
WNW **FED USGS** **USGS40000298840**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413930087362501		
Monloc name:	bh30 aldridge school		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6583679
Longitude:	-87.6069906	Sourcemap scale:	Not Reported
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	587
Vert measure units:	feet	Vertacc measure val:	3
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Clay (Holocene and/or Pleistocene)		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	20
Welldepth units:	ft	Wellholedepth:	20
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1993-06-16	8.86	

20
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000298858**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413958087353601		
Monloc name:	isws well 3		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	04040001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6661458
Longitude:	-87.5933792	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	584.49
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Other aquifers		
Formation type:	Fill		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	13
Welldepth units:	ft	Wellholedepth:	13
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1992-06-22	3.56	

21
SSW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191739**

Pt api number:	120312641500	Pt status:	WATER
Pt longitude:	-87.599126		
Pt latitude:	41.645743		
Api number:	120312641500		
Longitude :	-87.599126		
Latitude :	41.645743		
Section:	34	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Brooks, Brenda
Farm num:	Not Reported	Company name:	Not Reported

Status:	Water Well	Elevation:	607
Elevref:	Ground level	Total depth:	210
Wformation:	rock	Wfmfrom:	40
Wfmto:	210	Pumpgpm:	10

22
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191633**

Pt api number:	120312590200	Pt status:	WATER
Pt longitude:	-87.592486		
Pt latitude:	41.645126		
Api number:	120312590200		
Longitude :	-87.592486		
Latitude :	41.645126		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co.
Farm num:	Not Reported	Company name:	Wehling Well Works Inc.
Status:	Water Well	Elevation:	594
Elevref:	Ground level	Total depth:	450
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

23
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000193714**

Pt api number:	120310087700	Pt status:	ENG
Pt longitude:	-87.608454		
Pt latitude:	41.660136		
Api number:	120310087700		
Longitude :	-87.608454		
Latitude :	41.660136		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Bow3	Company name:	Chicago Sanitary Dist.
Status:	Engineering Test	Elevation:	586
Elevref:	Topographic Map	Total depth:	997
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

24
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000298820**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-4139150873443		
Monloc name:	well 1 clark refinery		
Monloc type:	Well		
Monloc desc:	see s43 wri 95-4253		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6542015
Longitude:	-87.5786563	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	597.55
Vert measure units:	feet	Vertacc measure val:	0.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Sand and Gravel (Holocene and/or Pleistocene)		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	24
Welldepth units:	ft	Wellholedepth:	24
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1992-06-23	20.94		1992-05-26	21	

D25
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191476**

Pt api number:	120313479800	Pt status:	WATER
Pt longitude:	-87.596704		
Pt latitude:	41.64391		
Api number:	120313479800		
Longitude :	-87.596704		
Latitude :	41.64391		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Pr. Landfill
Farm num:	R01S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well	Elevation:	593
Elevref:	Not Reported	Total depth:	24
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D26
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191465**

Pt api number:	120313538800	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538800		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	G36d	Company name:	Not Reported

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	74
Wformation:	shaley dolomite	Wfmfrom:	63
Wfmto:	73	Pumpgpm:	0

D27
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191466**

Pt api number:	120313571700	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313571700		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G35D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	75
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D28
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191467**

Pt api number:	120313571800	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313571800		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G35S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	25
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D29
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191464**

Pt api number:	120313538700	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538700		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	EW-5	Company name:	Not Reported

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	44
Wformation:	gvl, brick fl,sty cl	Wfmfrom:	18
Wfmto:	37	Pumpgpm:	0

D30
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191461**

Pt api number:	120313538400	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538400		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	EW-1	Company name:	Not Reported
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	19
Wformation:	silty clay	Wfmfrom:	11
Wfmto:	16	Pumpgpm:	0

D31
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191462**

Pt api number:	120313538500	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538500		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	EW-2	Company name:	Not Reported
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	32
Wformation:	sand, sty clay, cl-s	Wfmfrom:	10
Wfmto:	29	Pumpgpm:	0

D32
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191463**

Pt api number:	120313538600	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538600		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	EW-3	Company name:	Not Reported

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	41
Wformation:	silty clay	Wfmfrom:	18
Wfmto:	38	Pumpgpm:	0

D33
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191468**

Pt api number:	120313571900	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313571900		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G36S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	29
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D34
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191473**

Pt api number:	120313572400	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572400		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	R14S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	31
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D35
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191474**

Pt api number:	120313572500	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572500		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	R32D	Company name:	RD-n-P Drilling, Inc.

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	69
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D36
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191475**

Pt api number:	120313572600	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572600		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	R32S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	26
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D37
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191472**

Pt api number:	120313572300	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572300		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	R14D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	67
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D38
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191469**

Pt api number:	120313572000	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572000		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G41D	Company name:	RD-n-P Drilling, Inc.

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	74
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D39
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191470**

Pt api number:	120313572100	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572100		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G42D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	70
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D40
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191471**

Pt api number:	120313572200	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572200		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G47D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	75
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

41
ESE
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000192408**

Pt api number:	120310088400	Pt status:	ENG
Pt longitude:	-87.579832		
Pt latitude:	41.649385		
Api number:	120310088400		
Longitude :	-87.579832		
Latitude :	41.649385		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Dh10	Company name:	Chicago Sanitary Dist.

Status:	Engineering Test	Elevation:	590
Elevref:	Topographic Map	Total depth:	1029
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D42
SSW
1/2 - 1 Mile
Higher

AQUIFLOW **27154**

Site ID:	1000274369
Groundwater Flow:	N
Deep Water Depth:	Not Reported
Average Water Depth:	7
Shallow Water Depth:	Not Reported
Current Deep Depth:	6.88
Current Average Depth:	Not Reported
Current Shallow Depth:	5.06
Date:	07/31/1997

43
NNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000194682**

Pt api number:	120310088200	Pt status:	ENG
Pt longitude:	-87.603035		
Pt latitude:	41.667906		
Api number:	120310088200		
Longitude :	-87.603035		
Latitude :	41.667906		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Ow-2	Company name:	Chicago Sanitary Dist.
Status:	Engineering Test	Elevation:	599
Elevref:	Topographic Map	Total depth:	1696
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

44
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000193716**

Pt api number:	120312950200	Pt status:	WATER
Pt longitude:	-87.611297		
Pt latitude:	41.660205		
Api number:	120312950200		
Longitude :	-87.611297		
Latitude :	41.660205		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metropolitan Sanitary Dist
Farm num:	11	Company name:	Knierim, Phil
Status:	Water Well	Elevation:	591
Elevref:	Ground level	Total depth:	343
Wformation:	rock	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

Map ID Direction Distance Elevation	Database	EDR ID Number
45 **SSE** **1/2 - 1 Mile** **Lower**	**IL WELLS**	**ILSG20000191477**

Pt api number:	120313034800	Pt status:	OBS
Pt longitude:	-87.58701		
Pt latitude:	41.643912		
Api number:	120313034800		
Longitude :	-87.58701		
Latitude :	41.643912		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metr Sanitary Dist Chicag
Farm num:	C35	Company name:	Continental Drilling Company
Status:	Observation Well	Elevation:	586
Elevref:	Ground level	Total depth:	428
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

---

46 **ESE** **1/2 - 1 Mile** **Higher**	**IL WELLS**	**ILSG20000192671**

Pt api number:	120312626300	Pt status:	ENG
Pt longitude:	-87.577454		
Pt latitude:	41.651205		
Api number:	120312626300		
Longitude :	-87.577454		
Latitude :	41.651205		
Section:	36	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Waste Mng Of Ill
Farm num:	B-9	Company name:	Soil Testing Services, Inc.
Status:	Engineering Test	Elevation:	0
Elevref:	Not Reported	Total depth:	32
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

---

47 **East** **1/2 - 1 Mile** **Higher**	**IL WELLS**	**ILSG20000193552**

Pt api number:	120310088300	Pt status:	ENG
Pt longitude:	-87.575157		
Pt latitude:	41.658475		
Api number:	120310088300		
Longitude :	-87.575157		
Latitude :	41.658475		
Section:	36	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Dh11	Company name:	Chicago Sanitary Dist.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Status:	Engineering Test	Elevation:	585
Elevref:	Ground level	Total depth:	1020
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: IL Radon

Radon Test Results

Zipcode	Result
60827	0.5
60827	0.9
60827	0.9
60827	0.2
60827	0.4
60827	2
60827	0.1

Federal EPA Radon Zone for COOK County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for COOK COUNTY, IL

Number of sites tested: 82

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.273 pCi/L	96%	4%	0%
Living Area - 2nd Floor	0.900 pCi/L	100%	0%	0%
Basement	1.740 pCi/L	93%	7%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Illinois State Geological Survey
Telephone: 217-333-4747

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Records
Source: Illinois Geological Survey
Telephone: 217-333-4747

Illinois Private Well Database and PICS (Public, Industrial, Commercial Survey)
Source: Illinois State Water Survey
Telephone: 217-333-9043

Water Well Location Information
Source: Illinois Environmental Protection Agency
Telephone: 217-782-0810

OTHER STATE DATABASE INFORMATION

RADON

State Database: IL Radon
Source: Department of Nuclear Safety
Telephone: 217-785-9958
County Radon Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Appendix G-1

Historical Research Documentation

Aerial Photo Decade Package

CARNOW CONIBEAR

Altgeld Gardens/Phillip Murray Homes
E. 131st Street & S. Ingleside Avenue
Chicago, IL 60827

Inquiry Number: 3931997.5
May 06, 2014

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

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with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography May 06, 2014

Target Property:

E. 131st Street & S. Ingleside Avenue

Chicago, IL 60827

Year	***Scale***	***Details***	***Source***
1938	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: November 14, 1938	EDR
1938	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: November 14, 1938	EDR
1952	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: March 29, 1952	EDR
1952	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: March 29, 1952	EDR
1962	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 20, 1962	EDR
1962	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 20, 1962	EDR
1964	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 01, 1964	EDR
1974	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: October 10, 1974	EDR
1974	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: October 10, 1974	EDR
1974	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: October 10, 1974	EDR
1988	Aerial Photograph. Scale: 1"=750'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 12, 1988	EDR
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1998	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/DOQQ - acquisition dates: April 12, 1998	EDR
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2005	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2005	EDR
2007	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2007	EDR
2007	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2007	EDR

Year	*Scale*	*Details*	*Source*
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2009	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2009	EDR
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2010	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2010	EDR
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2011	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2011	EDR
2012	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2012	EDR
2012	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2012	EDR

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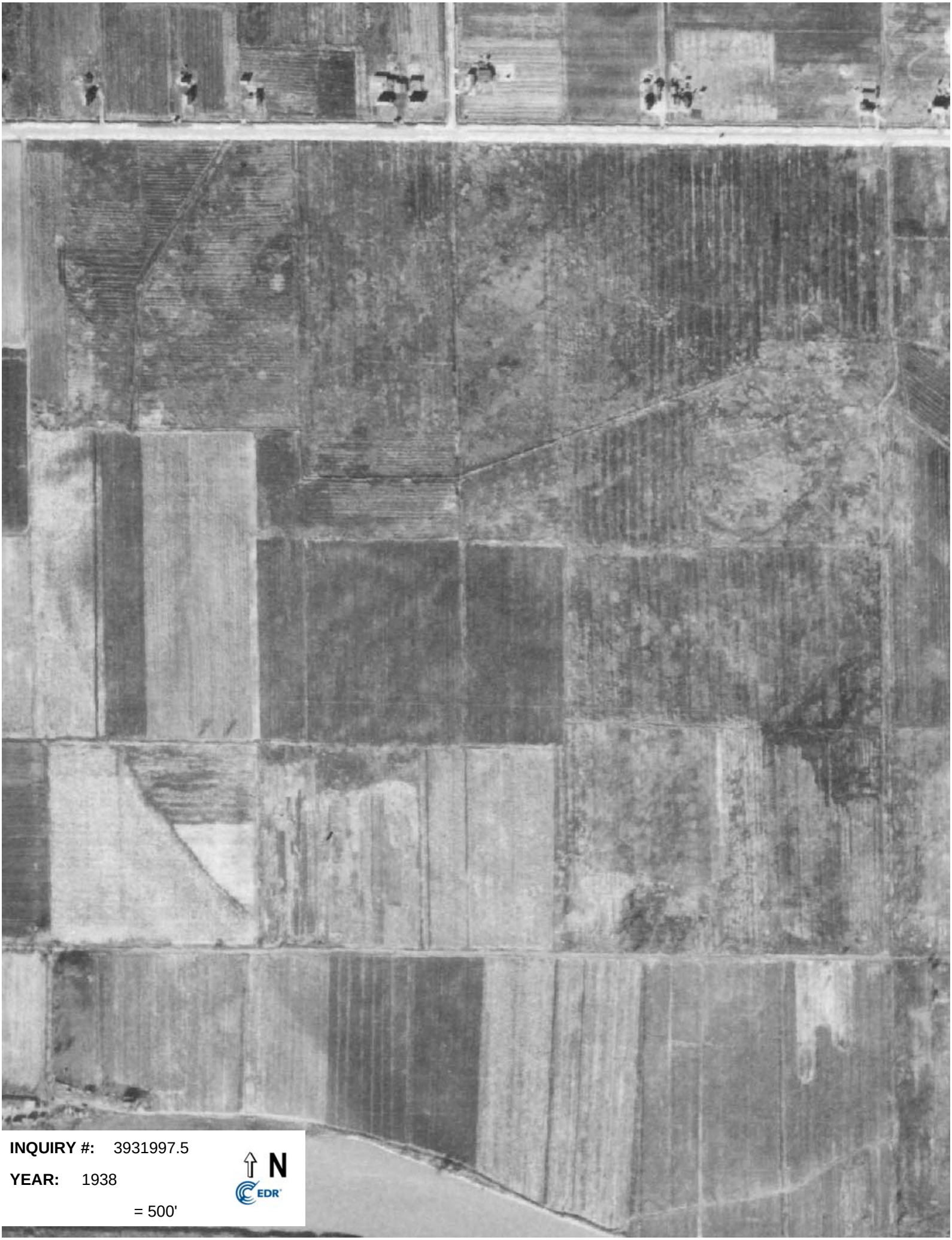
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YEAR: 1952

= 500'

N

INQUIRY #: 3931997.5

YEAR: 1962

= 500'

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YEAR: 1962
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YEAR: 1964
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EDR

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YEAR: 1974

= 500'

N

INQUIRY #: 3931997.5

YEAR: 1974

= 500'

N

INQUIRY #: 3931997.5

YEAR: 1974

= 500'

N

INQUIRY #: 3931997.5

YEAR: 1988

= 750'

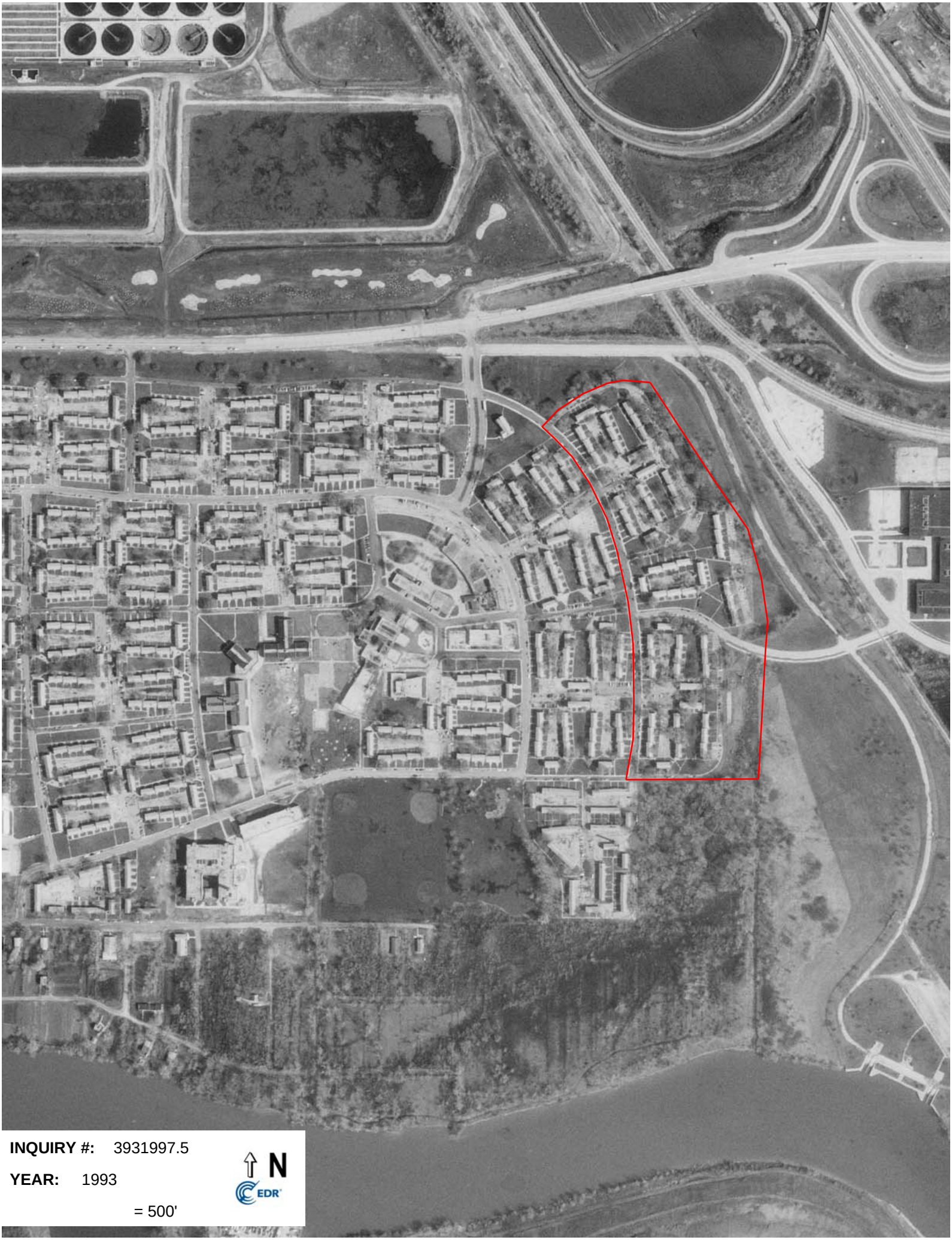

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YEAR: 1993

= 500'

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YEAR: 1993
= 500'
N
EDR

INQUIRY #: 3931997.5

YEAR: 1998

= 500'

N

INQUIRY #: 3931997.5
YEAR: 1998
= 500'
N
EDR

INQUIRY #: 3931997.5
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 3931997.5
YEAR: 2005
= 500'
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EDR

INQUIRY #: 3931997.5
YEAR: 2007
= 500'
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EDR

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EDR

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YEAR: 2009

= 500'

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YEAR: 2010
= 500'
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EDR

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YEAR: 2011

= 500'

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INQUIRY #: 3931997.5
YEAR: 2011
= 500'
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EDR

INQUIRY #: 3931997.5

YEAR: 2012

= 500'

INQUIRY #: 3931997.5
YEAR: 2012
= 500'
N
EDR

Appendix G-2

Historical Research Documentation

Sanborn Map Report

CARNOW CONIBEAR

1975 Certified Sanborn Map

CHICAGO, ILL. VOL 42

4342

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Certification # 2A5D-4352-97C8

Site Name:	Altgeld Gardens/Phillip Murray Homes
Address:	E. 131st Street & S. Ingleside Avenue
City, ST, ZIP:	Chicago IL 60827
Client:	Carnow, Conibear & Assoc., LTD
EDR Inquiry:	3931997.3
Order Date:	5/13/2014 1:09:59 PM
Certification #	2A5D-4352-97C8
Copyright:	1975

(6121049)

1987 Certified Sanborn Map

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Copyright:	1987

Image Provided By EDR Certified Sanborns

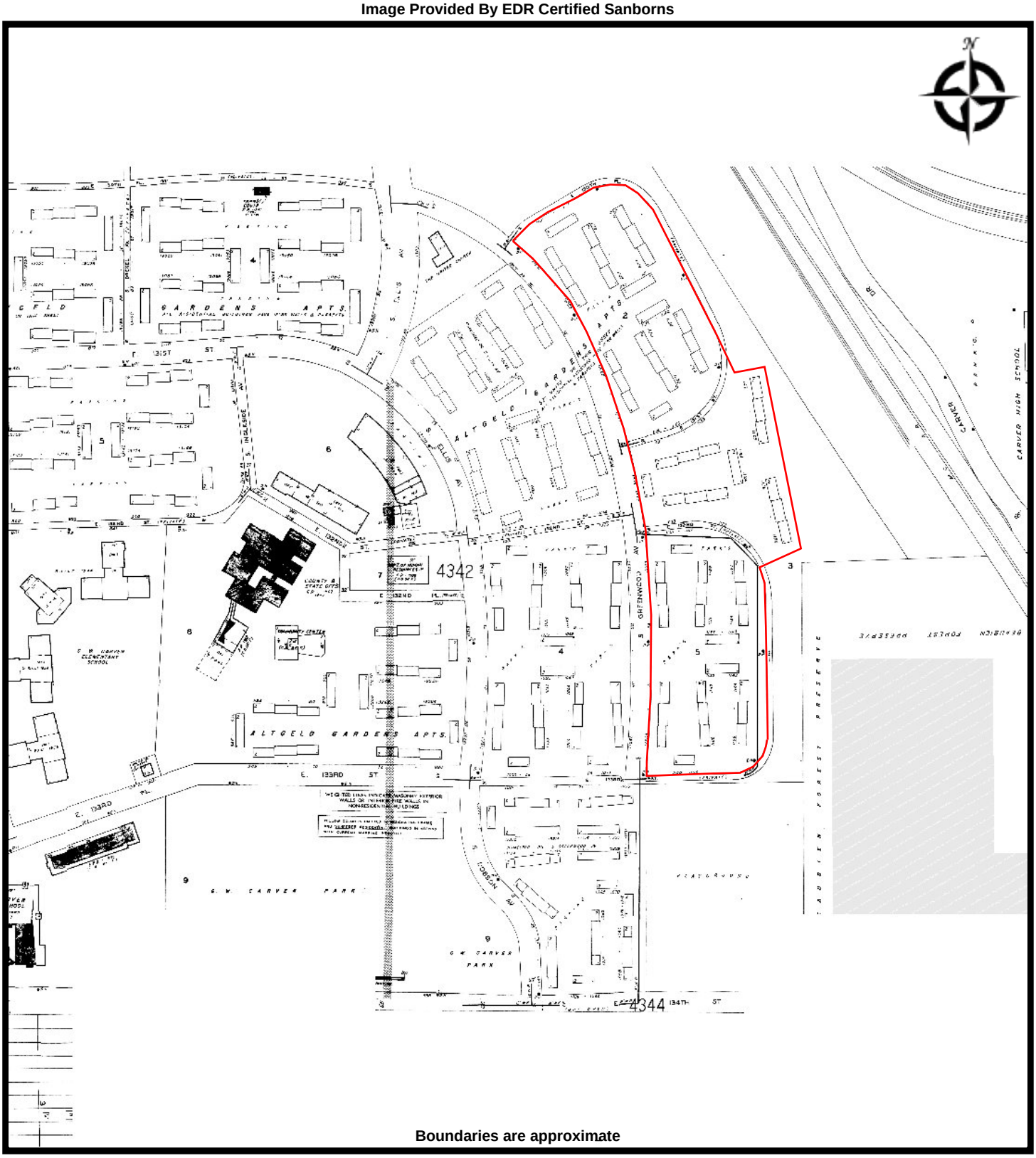

Boundaries are approximate

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www.ccaltd.com

CARNOW CONIBEAR

SANBORN - 1989
ALTGELD GARDENS - BLOCKS 11, 12, & 13
S. Greenwood Avenue & E. 133rd Street
Chicago IL 60827

PREPARED FOR: Chicago Housing Authority
PROJ. MGR: David S. Bremer **DATE:** June 2014
DRAWN BY: Nohemi Melero **PROJ. #:** E153390006-01

Image Provided By EDR Certified Sanborns

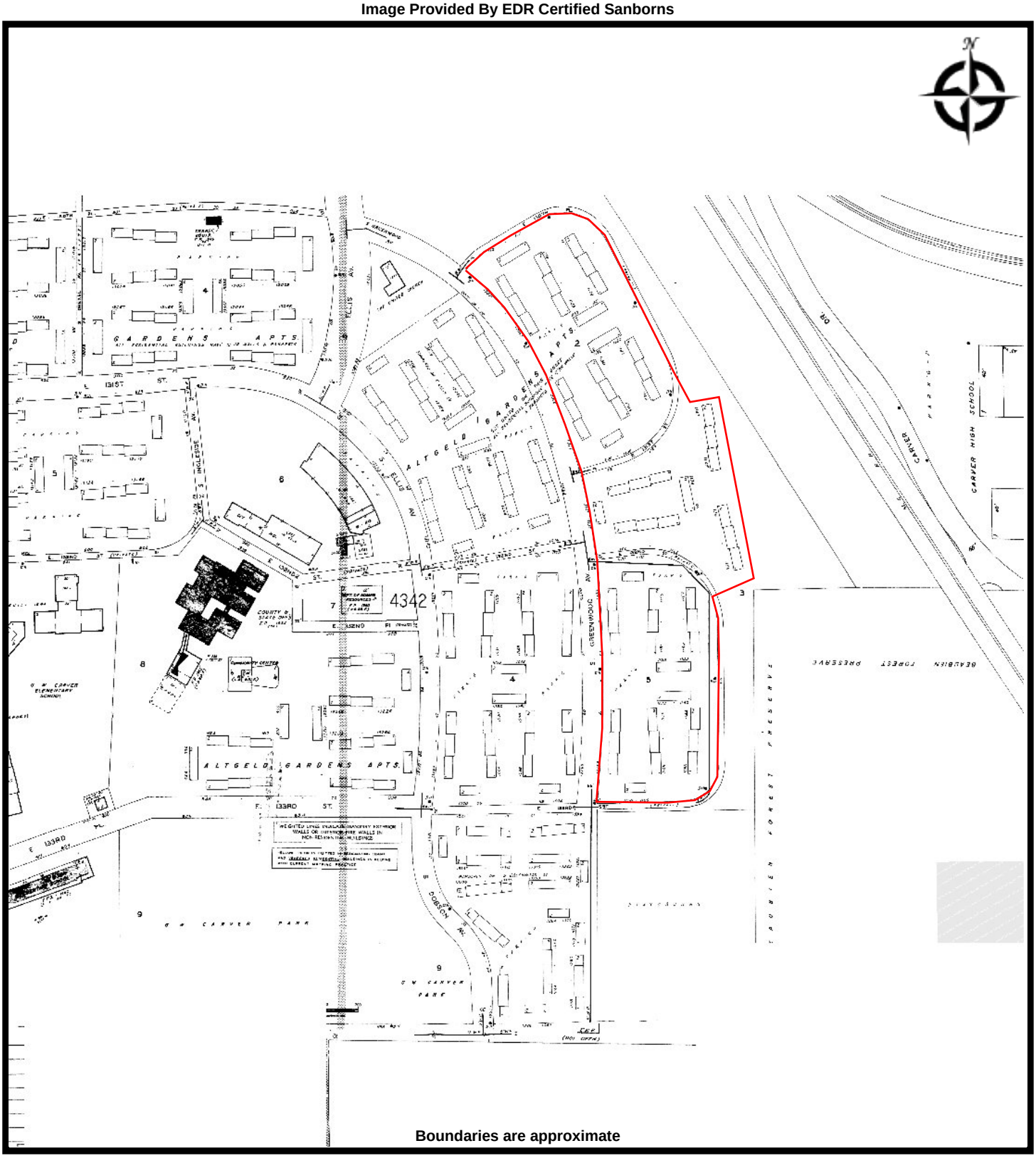

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CARNOW CONIBEAR

SANBORN - 1992
ALTGELD GARDENS - BLOCKS 11, 12, & 13
S. Greenwood Avenue & E. 133rd Street
Chicago IL 60827

PREPARED FOR: Chicago Housing Authority
PROJ. MGR: David S. Bremer **DATE:** June 2014
DRAWN BY: Nohemi Melero **PROJ. #:** E153390006-01

Image Provided By EDR Certified Sanborns

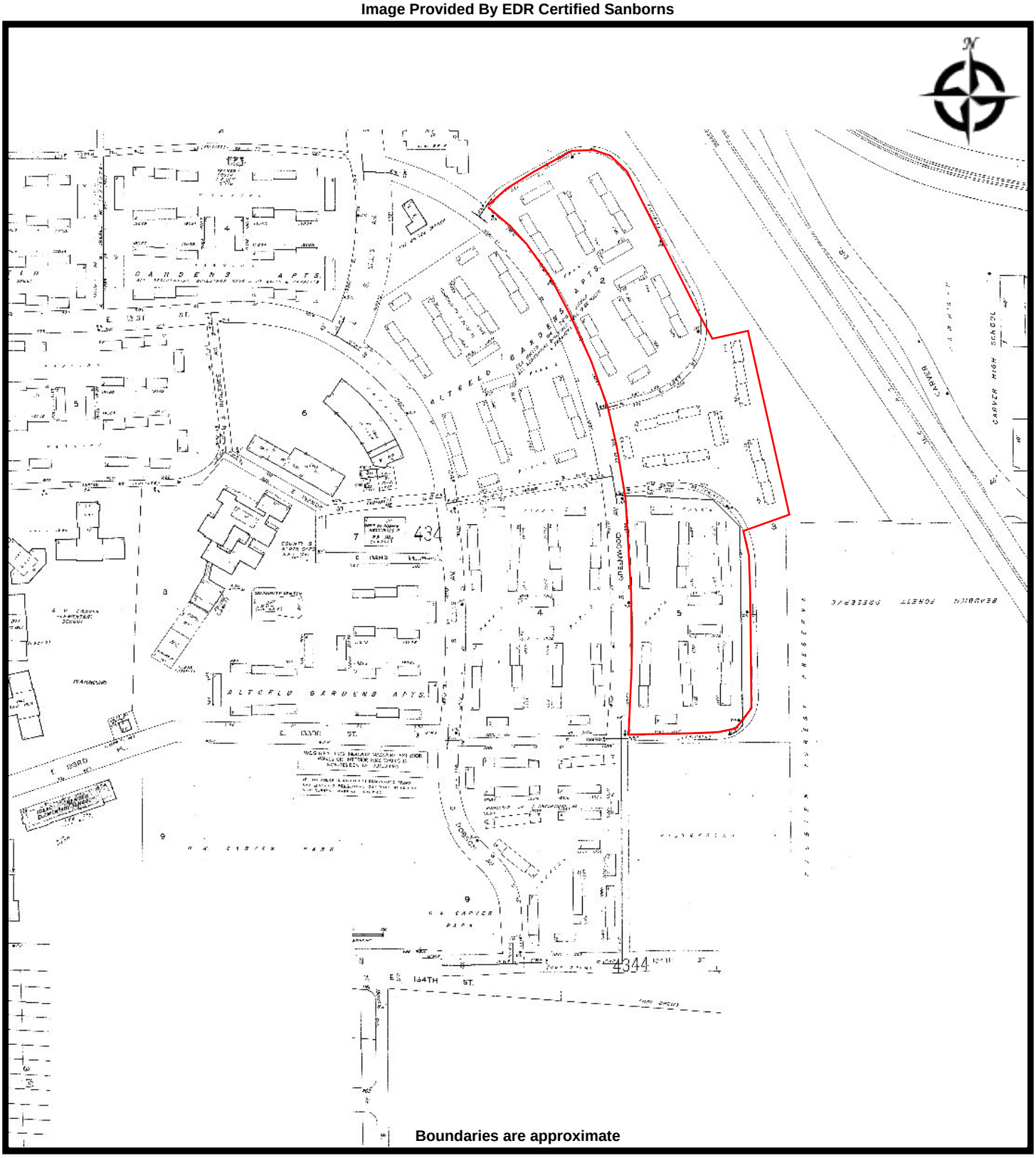

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CARNOW CONIBEAR

SANBORN - 2002
ALTGELD GARDENS - BLOCKS 11, 12, & 13
S. Greenwood Avenue & E. 133rd Street
Chicago IL 60827

PREPARED FOR: Chicago Housing Authority
PROJ. MGR: David S. Bremer **DATE:** June 2014
DRAWN BY: Nohemi Melero **PROJ. #:** E153390006-01

Image Provided By EDR Certified Sanborns

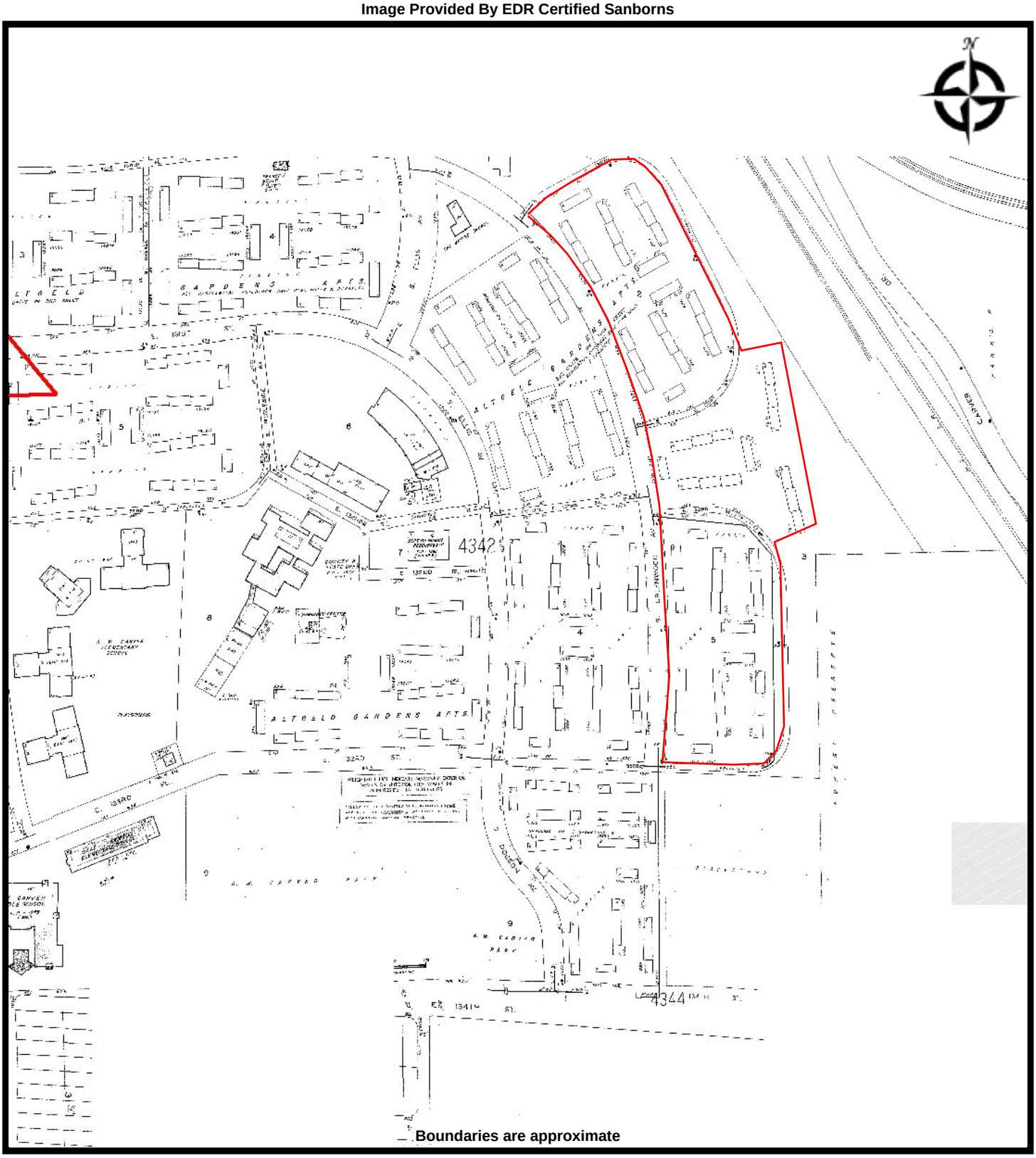

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CARNOW CONIBEAR

SANBORN - 2004
ALTGELD GARDENS - BLOCKS 11, 12, & 13
S. Greenwood Avenue & E. 133rd Street
Chicago IL 60827

PREPARED FOR: Chicago Housing Authority
PROJ. MGR: David S. Bremer **DATE:** June 2014
DRAWN BY: Nohemi Melero **PROJ. #:** E153390006-01

Appendix H

Qualifications of the Environmental Professionals

CARNOW CONIBEAR

Nohemi Melero
Environmental Specialist

Nohemi Melero performs performs and oversees environmental engineering, site remediation, and environmental site investigation projects. She performs Phase I Environmental Site Assessments, hazardous materials surveys, and oversees UST removals and groundwater investigations.

EXPERIENCEN

11 years experience in environmental consulting services.

EDUCATION

BS, Environmental Science
Roosevelt University, Chicago, Illinois

PROFESSIONAL LICENSES/REGISTRATION

Hazardous Waste Operations and Emergency Response 29 CFR 1910.120 - Trained
Confined Space Training - OSHA 29 CFR 1910.146 - Trained

PROJECT EXPERIENCE

Various Private Clients
Perform numerous Phase I Environmental Site Assessments to assist clients in purchasing decisions of various properties. Perform site inspections, review background information, title searches, reviews of Freedom of Information Act (FOIA) requests, zoning, Sanborn, aerial, wetland, flood zone, regulatory databases, and USGS maps regarding site history, geology, hydrology, and potential contaminant migration pathways. Evaluate potential sources of environmental concerns and provide recommendations.

General Services Administration (GSA)
Perform expanded-scope Phase I Environmental Site Assessments for federal buildings investigations. In addition to standard ASTM Phase I ESA requirements, the assessments followed the NEPA protocol and incorporated air, water, land, sound, and other environmental impacts and included a recommendation if necessary.

Chicago Housing Authority/City of Chicago Department of Environment
Remediation Oversight
Performed oversight activities for former Henry Horner Homes housing project. Oversaw site remediation activities including the removal of impacted soil and the construction of engineered barriers.

Public Building Commission of Chicago
Performed Phase I and II Environmental Site Assessments for the PBCC in the development of sites for libraries. Assessed sites contaminated by previous use, USTs and ASTs.

South West Area Middle School
Performed oversight of site remediation including the removal of impacted soil and installation of engineered barriers.

Layser and Freiwald
Conducted residential well sampling and assisted in soil sampling for a large ongoing lawsuit regarding groundwater and soil contamination to a residential area. Sampled 20 residential sites for groundwater and 5 agricultural areas for soil contamination. Screened groundwater samples for temperature and turbidity.

AIG
Reviewed numerous Phase I and II ESAs and various documents and summarized the recognized environmental conditions, concerns, and conclusions.

City of Gary/Department of Environmental Affairs
Assisted in the preparation of a Quality Assurance Project Plan for the former International Bridge Corporation site as part of the City of Gary's Brownfield Redevelopment program.

Forest Preserve District of DuPage County
Oak Meadows Golf Course
Performed oversight of UST removal activities including the removal of impacted soils. Took confirmatory soil samples to verify extent of contamination. Completed an UST Summary Report for the site.

Homeowners and Rental Properties, Illinois
Conducted radon testing in numerous residences and rental properties related to proactive air quality testing.

Chicago 2016
Conducted a hazardous materials investigation of various Michael Reese Hospital buildings. Investigated turn-of-the century buildings for the presence of hazardous materials such as PCBs, mercury, drums, etc.

Chicago Department of Health
Conducted respirator fit testing on several CDH employees. Oversaw proper fit using Bitrex solution.

David S. Bremer, CHMM, REM

Director, Environmental Engineering Services

David Bremer directs a staff of professional engineers, professional geologists, environmental scientist/specialists, computer aided drafting technicians, and industrial hygienists in the performance of environmental site investigations, environmental design and engineering, Site Remediation Program (SRP) investigations and reporting, Leaking Underground Storage Tank (LUST) removals, closures and reimbursements, geotechnical evaluations, geophysical investigations, construction and demolition management, as well as asbestos, lead and various other environmental investigations and clean-ups. He prepares and evaluates proposals for department and inter-company departments. He performs quality control/quality assurance and also serves as Project Executive on projects. He serves as principal contact with clients, architects, designers, construction managers, and regulatory agencies. He assists in negotiations regarding clean-up costs with sellers, buyers, developers, and governmental agencies.

EXPERIENCE

20 years performing environmental consulting services, including: conducting over 200 Phase I and II ESAs; investigating and reporting numerous LUST and SRP sites; preparing remediation design packages of residential, commercial and public buildings and facilities; managing large remediation projects; managing remediation, demolition and construction management activities for new developments; and managing other types of environmental and industrial hygiene projects.

EDUCATION

BS, Industrial Engineering Technology
Southern Illinois University, Carbondale, Illinois
AS, Highway Engineering Technology
Morrison Institute of Technology, Morrison, Illinois

PROFESSIONAL CERTIFICATIONS

Certified Hazardous Materials Manager
Recognized Environmental Manager
Asbestos Inspector/Management Planner – IDPH
Lead Inspector – IDPH
40-Hour OSHA HAZWOPER
8-Hour OSHA HAZWOPER Supervisor

PROJECT EXPERIENCE

City of Chicago Department of Environment
Environmental Engineering Services – Various Residential, Commercial, and Industrial Sites
Managed projects and performed quality control/quality assurance for Phase I and II Environmental Site Assessments, UST removals and closure reporting, Site Remediation Program investigations and reporting, and environmental remediation for numerous city projects. Prepared remediation cost estimates for abatement, UST removals, and soil and groundwater remediation, asbestos abatement, demolition for future development of the contaminated sites. Managed the assessments and remediation of sites contaminated by previous use including PNAs, Inorganics, PCBs, solvents, USTs and ASTs. Enrolled sites in the IEPA's Site Remediation Program. Prime contact for interface with regulatory agency and City. Principal liaison between the DOE, other City agencies, and developers. Assisted the City in obtaining *No Further Remediation* letters for numerous sites.

Public Building Commission of Chicago
Environmental Engineering Services – Various Residential and Commercial Sites
Project Executive for Phase I, II Environmental Site Assessments, Site Remediation Program reporting, remediation design, and remediation oversight activities. Recent PBCC projects include development of sites for the District 7 Police Station, Engine Companies 18, 70, and 121, Humboldt Library, Taylor Lauridsen Park, and Southwest Area Middle School. Worked with Architects of Record and PBCC to prepare design plans to remediate sites as part of redevelopment. Prepared remediation design bid packages for Site Prep activities as well as development phases of the projects. Principal contact between PBCC/PMO Owners Representative/Construction Manager, and Contractor for all remediation design and construction issues. Conducted review of design project submittals and assisted with Contractor pay application review. Enrolled various sites in IEPA's Site Remediation Program. Managed both on-site oversight staff and office report preparation staff. Performed quality control and quality assurance for all SRP and/or LUST reports. Assisted the PBCC in obtaining *No Further Remediation* letters for numerous sites. Managed overall budget for consultant and subcontractor activities.

City of Chicago Department of Aviation
Environmental Engineering and Asbestos Abatement Services – Midway Airport Terminal Development Program
Managed and performed Phase I and II ESAs, Phase III Remedial Design, demolition/construction oversight, and review of contractor's submittals. Compiled assessment and investigation data from numerous sites prepared by Carnow Conibear as well as data from reports prepared by others to prepare design plans and technical specifications for the proposed development. The remediation design plans included removal of ASTs, USTs, asbestos, lead paint, PCBs, universal wastes, and the removal and disposal of hazardous materials. Environmental design and construction management for eleven design packages performed as part of the MATDP. Several of the packages had overlapping work performed under separate bid packages by separate contractors. Served as principal contact and field manager as representative of the DOA on all environmental issues for over four years during the redevelopment phases of the project. Managed several engineers and specialist that documented the construction, abatement, UST removal, and remediation activities. Managed the budget and performed quality control and quality assurance during project phases.

City of Chicago Department of Aviation
Hazardous Waste Remediation Project
O'Hare International Airport Acquisition Area – O'Hare Modernization Program
Served as Project Executive/Senior Project Manager for the $6.2 million remediation of three parcels of acquired land. Project included the *in-situ* stabilization and removal of 82,000 tons of hazardous waste, 33,000 tons of special waste, 50,500 gallons of impacted groundwater, and replacement of 34,000 tons of backfill. All remediation work was required to be completed in 75 days before a scheduled ground breaking ceremony by the Mayor of Chicago for the OMP. All requested mercury hazardous waste removal, hazardous waste lead treatment and removal as well as petroleum special waste removal work requested to be removed by the City was completed by the deadline. Project also included the removal of a UST and numerous scrap tires encountered during the progression of work and changing backfill material due to other OMP design plan changes. Managed the overall budget and a staff of two field personnel and two office engineers throughout the duration of the project. Managed the preparation of a Remedial Action Completion Report and UST Corrective Action Completion Report.

City Colleges of Chicago
Geotechnical and Environmental Investigations
Student Services/Parking Facility Development
Managed the environmental and geotechnical investigations for a new six-story building/parking facility. The project included performing over 30 soil borings and installation of monitoring wells. Many of the borings were advanced into bedrock to 109 feet and included rock coring and vane shear testing. The soil and groundwater physical and analytical laboratory data were evaluated for environmental impact and geotechnical characteristic. Managed the preparation of four overlapping remediation design packages for the development of the site with associated roadways and landscaping. Currently managing the design submittal review activities and remediation oversight activities.

Chicago Department of Aviation
Phase I, II, and III Environmental Site Assessments, Asbestos Surveys, AST Removal
Managed the performance of Phase I, II, and III ESAs at former Meigs Field Airport as part of closure plan. Project included laboratory data from 80 soil borings and incorporation of data from former investigations. Reports included Tier 3 PNA background study. Removed several ASTs. Performed asbestos surveys on several buildings. Served as primary contact of the DOA in discussions with the DOE and Chicago Park District.

Chicago Department of Aviation
Underground Storage Tank Facility Decommission and Removal
Managed the $1.2 million aircraft fueling facility decommissioning at Midway Airport. Removed USTs from 3 facilities, excavated 5,700 cubic yards of soil, and replaced 10,000 tons of fill. Installed acoustic sound wall, security fence, asphalt pavement, piping system, and sewer. Prepared all paperwork to secure an NFR letter from the IEPA for all sites.

City of Chicago Department of Aviation/O'Hare Partners
Quality Control/Quality Assurance – International Airport World Gateway Program
Performed QA/QC of Phase I and Phase II ESAs and remedial design estimates for the Design/Build contractor's submittals. Responsibilities also included managing environmental investigation of proposed new locations for existing facilities that were scheduled to be displaced by the Terminal 6 project. Assessments included reviewing soil and groundwater investigation data from over 100 soil borings and monitoring wells. Prepared detailed report of review for the DOA and O'Hare Partners.

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www.ccaltd.com

Phase I Environmental Site Assessment

Site:

Altgeld Gardens – Blocks 11, 12, & 13
Northeast Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

Prepared For:

Chicago Housing Authority
60 East Van Buren, 13th Floor
Chicago, IL 60605

Final Report Issue Date: July 22, 2014

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Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
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CARNOW CONIBEAR

Phase I Environmental Site Assessment

Site:

Altgeld Gardens – Blocks 11, 12, & 13
Northeast Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

Field Work by: _____
Nohemi Melero
Field Supervisor

Field Work by: _____
Paul Waite, P. E.
Senior Project Manager

Prepared by: _____
Nohemi Melero
Field Supervisor

Reviewed by: _____
Paul Waite, P. E.
Senior Project Manager

Carnow Conibear Project # E153390006-01

Table of Contents

1.0 Executive Summary 1

2.0 Introduction 3
2.1 Purpose 3
2.2 Detailed Scope of Service 3
2.3 Significant Assumptions 3
2.4 Limitations & Exceptions 3
2.5 Special Terms & Conditions 3
2.6 User Reliance 4

3.0 Site Description 5
3.1 Site Location 5
3.2 Site & Vicinity General Characteristics 6
3.3 Current Use & Ownership 6
3.4 Site Infrastructure 6
3.5 Current Uses of Adjacent Properties 7

4.0 User Provided Information 8
4.1 Title Records 8
4.2 Environmental Liens or Activity & Use Limitations 8
4.3 Specialized Information 8
4.4 Commonly Known or Reasonably Ascertainable Information 8
4.5 Valuation Reduction for Environmental Issues 8
4.6 Owner, Property Manager, and/or Occupant Information 8
4.7 Reasons for Performing this Phase I ESA 9
4.8 Previous Environmental Reports 9

5.0 Records Review 19
5.1 Standard Environmental Record Sources 19
5.2 Additional Environmental Record Sources 26
5.3 Physical Setting Sources 26
5.4 Historical Use Information 28

6.0 Site Reconnaissance 31
6.1 Methodology & Limiting Conditions 31
6.2 General Site Setting 31
6.3 Exterior Observations 31
6.4 Interior Observations 32
6.5 Hazardous Substances and/or Chemical Storage 33
6.6 Above Ground & Underground Storage Tanks & Pipelines 33
6.7 Suspected Polychlorinated Biphenyls (PCB)-Containing Equipment 33

7.0 Interviews 35
7.1 Interview with Site Owner/Manager 35
7.2 Interviews with Occupants 35
7.3 Interview with Phase I ESA User 35

CARNOW CONIBEAR

8.0 Non-ASTM Scope Considerations 36

8.0 Findings & Opinions 36
8.1 General Findings 36
8.2 Recognized Environmental Conditions 36
8.3 Controlled Recognized Environmental Conditions 37
8.4 Historical Recognized Environmental Conditions 37
8.5 De Minimis Conditions 37
8.6 Business Risks 38
8.7 Data Gaps 38

9.0 Conclusions 39

10.0 Deviations 41

11.0 References 42

12.0 Signature & Qualifications of the Environmental Professional 43

APPENDICES

Appendix A Site Location Map

Appendix B Detailed Site Map

Appendix C Site Photographs

Appendix D Interview Documentation

Appendix E Previous Environmental Reports
E-1 – *Extracted Pages from Reports Provided by Client*
F-2 – *95% Upper Confidence Limit Calculations*

Appendix F Regulatory Records Documentation
F-1 – *FOIA Correspondence & Database Search Results*
F-2 – *Environmental Database Report*

Appendix G Historical Research Documentation
G-1 – *Aerial Photo Decade Package*
G-2 – *Sanborn Map Report*

Appendix H Qualifications of the Environmental Professionals

CARNOW CONIBEAR

1.0 Executive Summary

This report presents the results of the Carnow, Conibear & Assoc., Ltd. (Carnow Conibear) Phase I Environmental Site Assessment (ESA) investigation of Blocks 11, 12, and 13 of the Altgeld Gardens public housing project located at the northeast corner of South Greenwood Avenue and East 133rd Street in Chicago, Illinois (subject site). The subject site buildings are currently unoccupied. The Phase I ESA consisted of a visual site inspection, a historical records review, a review of public record documents, and a review of government agency records. The Phase I ESA was conducted in accordance with the American Society for Testing and Materials Standard E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process).

A visual inspection was conducted at the subject site on May 28, 2014. The subject site consists of 26 vacant two-story brick buildings, an electrical building, parking lots, sidewalks, and landscape areas. Based upon historical sources, the subject site had been agricultural land in 1938. By 1945, the subject site was developed with 26 residential buildings, sidewalks, and landscape areas. The electrical building was added to the subject site by 2007. The property has remained relatively unchanged until the time of this assessment.

The subject site was listed in the environmental databases consulted for this ESA. Federal, state, and local agencies accessed during the assessment revealed records of environmental concern in connection with the subject site. This assessment has revealed no evidence of Recognized Environmental Conditions (RECs) in connection with the subject site, except for the following:

- The presence of four incinerators on the subject site. The incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a Recognized Environmental Condition to the subject site.

The following were found to be *de minimis* conditions, defined as conditions that are not RECs and generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies:

- In 1996 and 2000, soil samples were collected from the subject site and analyzed for pesticides. One soil sample from Block 12 contained concentrations of pesticides that exceeded the SROs promulgated in 35 IAC 742, also known as *Tiered Approach to Corrective Action Objectives* (TACO). The Illinois Department of Public Health reviewed the sampling data and prepared the February 16, 2001 Health Consultation letter. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil. Therefore, the concentrations of pesticides detected in the 1996 and 2000 sampling events in Blocks 11, 12, and 13 can be considered a de minimis condition to the subject site, as defined in Section 3.2.22 of ASTM E1527-13. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly. In 2009, additional soil samples were collected from the subject site. Twenty-four of 122 soil samples contained

PNAs and/or arsenic that exceeded the SROs promulgated in 35 IAC 742. Carnow Conibear performed a 95% Upper Confidence Limit (UCL) evaluation of the data pursuant to 35 IAC 742.225(d) and (e). The objective of this evaluation was to determine whether the resulting 95% UCL concentration of each analyte, as derived from the data/results (sample population), is less than the corresponding applicable Tier 1 residential ingestion SRO. The results of this analysis indicate that each 95% UCL concentration is below the corresponding applicable Tier 1 residential ingestion SRO (or median background concentration) for each respective analyte. Therefore, the concentrations of PNAs and arsenic detected in the July 2009 GSG sampling event can be considered a de minimis condition to the subject site, because the concentrations do not generally present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies, as defined in Section 3.2.22 of ASTM E1527-13. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly. USEPA recommended that CHA reduce residents' contact with PAH contaminated soils, including establishing groundcover, placing wood chips, and planting grass.

With respect to the ASTM standard, there were limitations associated with this Phase I ESA. Limitations included:

- Due to flooding, the basement and crawl space areas of the subject site were inaccessible at the time of site inspection.

The Executive Summary is intended to provide a brief summary of the findings of the recent site investigation. The entire report must be read in order to fully understand the findings and potential environmental concerns associated with the subject site; therefore, the Executive Summary should not be substituted in lieu of reading the entire report.

2.0 Introduction

2.1 Purpose

The Chicago Housing Authority (CHA) retained Carnow, Conibear & Assoc., Ltd. (Carnow Conibear) to perform a Phase I Environmental Site Assessment (ESA) of the property associated with Blocks 11, 12, and 13 of the Altgeld Gardens housing project located at the northeast corner of South Greenwood Avenue and 133rd Street in Chicago, Illinois (subject site). The purpose of the Phase I ESA was to obtain and evaluate information related to any Recognized Environmental Conditions (RECs) that might be present on the subject site.

2.2 Detailed Scope of Service

The Phase I ESA was performed for the subject site in accordance with the current American Society of Testing Materials (ASTM) Standard E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process). The following activities were conducted:

- A visual investigation of the subject site;
- Visual inspection of at least 10% of the building units;
- Interview with the site representative;
- Interview with the Phase I ESA User;
- Review of topographic, soils, and floodplain data;
- Review of United States Geological Survey (USGS) maps;
- Review of historic Sanborn Fire Insurance Maps;
- Review of historic city directory listings;
- Review of accessible government/public records;
- Review of local, state and federal databases; and
- A limited inspection of the adjacent properties from vantage points accessible to the public.

2.3 Significant Assumptions

With respect to the ASTM standard, there were no significant assumptions associated with this Phase I ESA.

2.4 Limitations & Exceptions

With respect to the ASTM standard, there were limitations associated with this Phase I ESA. Carnow Conibear was unable to inspect the basement areas of the buildings due to flooding.

2.5 Special Terms & Conditions

With respect to the ASTM standard, there were no special terms or conditions involved in this Phase I ESA.

2.6 User Reliance

No environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. This Phase I ESA, in accordance to ASTM Standard E 1527-13, is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs for the subject site, given reasonable limits in time and cost. Based solely upon the work performed in connection with this Phase I ESA Report, which has taken into account commonly known and reasonably ascertainable information, and subject to all conditions and exceptions set forth in this report, the following entity can rely on this report when assessing environmental conditions pertaining to the subject site:

Chicago Housing Authority
60 East Van Buren, 13th Floor
Chicago, IL 60605

No other party may rely on this Phase I ESA without the prior express written consent of Carnow Conibear.

3.0 Site Description

3.1 Site Location

The subject site is located on the northeast corner of South Greenwood Avenue and E. 133rd Street in Chicago, Illinois. The subject site is bounded by E. 130th Place, beyond which is TCA Health Clinic and its associated parking lot to the north, E. 130th Place, an urban garden, E. 133rd Street to the east, E. 133rd Street to the south, and S. Greenwood Avenue to the west. According to the United States Geological Survey (USGS) Topographic Map Lake Calumet, Illinois dated 1997, the subject site is located in Section 35, Township 37 North, Range 14 East of the Third Principal Meridian in Cook County, Illinois. The Property Index Number (PIN) associated with the subject site is 25-35-100-019-0000. **Appendix A** presents the location of the subject site. The following table lists addresses associated with the subject site buildings:

Address	Block	Number of Units	Building Type
1101-1111 E. 130th Pl	11	6	A-11-12
1113-1135 E. 130th Pl	11	12	CL-11-2
1137-1147 E. 130th Pl	11	6	A-11-1
1149-1171 E. 130th Pl	11	12	CR-11-1
13031-13053 S. Greenwood Ave	11	12	CR-11-2
13055-13077 S. Greenwood Ave	11	12	CL-11-3
1100-1106 E. 131st St	11	4	D-11
1108-1130 E. 131st St	11	12	CR-11-3
1132-1142 E. 131st St	11	6	B-11
1144-1166 E. 131st St	11	12	CL-11-1
13201-13223 S. Greenwood Ave	12	12	CR-12-2
13241-13263 S. Greenwood Ave	12	12	CL-12-1
1101-1107 E. 132nd St	12	4	D-12-1
1109-1131 E. 132nd St	12	12	CL-12-3
1133-1143 E. 132nd St	12	6	B-12
1145-1167 E. 132nd St	12	12	CR-12-3
1100-1106 E. 133rd St	12	4	D-12-2
1108-1130 E. 133rd St	12	12	CR-12-1
1132-1142 E. 133rd St	12	6	A-12
1144-1166 E. 133rd St	12	12	CL-12-2
13101-13107 S. Greenwood Ave	13	4	D-13-1
1101-1123 E. 131st St	13	12	CR-13-1
1125-1147 E. 131st St	13	12	CL-13-2
1100-1122 E. 132nd St	13	12	CL-13-1
1124-1134 E. 132nd St	13	6	B-13
1136-1158 E. 132nd St	13	12	CR-13-2

3.2 Site & Vicinity General Characteristics

The subject site is located in a residential zone in Chicago, Illinois. It is a portion of the Altgeld Gardens housing development owned and operated by the CHA. The subject site consists of three blocks of the development. The remainder of the Altgeld Gardens development includes an additional fourteen blocks of residences, a maintenance building, a Chicago Park District field house and park, school buildings, and day care centers. Two more blocks of CHA residential housing developments are located south of E. 133rd St. and are known as the Phillip Murray Homes.

The topography of the subject site and adjacent properties is relatively level, with no significant natural relief features. **Appendix B** depicts a detailed site plan and adjacent properties.

3.3 Current Use & Ownership

The subject site totals approximately 17.3 acres in area and currently consists of 26 vacant two-story multi-unit residential buildings, an electrical building, parking lots, sidewalks, and landscape areas. The property is owned by the CHA. Photographs of the subject site and adjacent properties are provided in **Appendix C**.

3.4 Site Infrastructure

The subject site consists of 26 two-story brick buildings with a crawl space under the ground floor of the majority of the buildings. Three buildings, one in each block, had a basement. An electrical building containing transformers and switchgears was present on Block 11.

The following companies supply or formerly supplied utilities to the subject site:

Natural Gas	Constellation Energy
Electricity	Integrys Energy
Storm & Sanitary Sewers	City of Chicago
Potable Water	City of Chicago

3.5 Current Uses of Adjacent Properties

Adjacent properties with contiguous property lines were visually inspected from vantage points available to the general public. The subject site is bordered by the following properties:

North	East 130th Place, beyond which is TCA Health Clinic and its associated parking lot.
East	East 130th Place, CHA land currently used for urban gardening, and East 133rd Street beyond which is CHA land and Beaubien Forest Preserve.
South	East 133rd Street, beyond which is undeveloped land and the Little Calumet River.
West	South Greenwood Avenue, beyond which are Blocks 9 and 10 of the CHA Altgeld Garden Housing Complex. On some maps, South Greenwood Avenue is depicted as Leanna Tucker Avenue.

4.0 User Provided Information

ASTM Standard E 1527-13 requires the user of a Phase I ESA to provide the environmental professional with any information that could be deemed useful in identifying RECs. The User of this Phase I ESA is the CHA. A User Questionnaire was completed by Mr. Michael R. Merchant, CEO of the CHA, and was returned to Carnow Conibear on June 16, 2014. The User Questionnaire and associated correspondence can be reviewed in **Appendix D**.

4.1 Title Records

A real title search including any deeds, easements, leases, restrictions, and covenants for a period of fifty years was not provided to Carnow Conibear. However, a title search is not required by ASTM if other historical sources of information provide the necessary information. Carnow Conibear believes that the data collected during the Phase I ESA provided sufficient information about the site which eliminates the need for a fifty year title search. The site buildings were constructed between 1942 and 1944. CHA has been the owner of the property since 1956.

4.2 Environmental Liens or Activity & Use Limitations

This investigation, including information obtained from the User Questionnaires completed by the CHA, has revealed no record of environmental liens or activity use limitations specific to the subject site.

4.3 Specialized Information

Mr. Merchant indicated that he has no specialized knowledge concerning the subject site.

4.4 Commonly Known or Reasonably Ascertainable Information

Mr. Merchant indicated that he is aware that the property was used as farmland before it was developed as residential property. Mr. Merchant also indicated that he was aware of the PCB spill and subsequent cleanup conducted at Altgeld Gardens.

4.5 Valuation Reduction for Environmental Issues

Mr. Merchant indicated that an evaluation of the purchase price of the subject site has not been made.

4.6 Owner, Property Manager, and/or Occupant Information

The CHA has indicated that the subject site is owned by the CHA and is currently vacant. The subject site property is managed by East Lake Management Group, Inc.

4.7 Reasons for Performing this Phase I ESA

The reason for performing the Phase I ESA is to fulfill a HUD loan requirement.

4.8 Previous Environmental Reports

CHA provided Carnow Conibear with electronic versions of approximately 44 reports, letters, and miscellaneous documents (including duplicates) concerning the Altgeld Gardens and Murray Homes housing developments. Many of the documents dealt with areas outside of the boundary of this Phase I. Brief summaries of the reports (including some text copied verbatim from the documents) that directly related to the subject site (Blocks 11, 12, and 13) are provided below. Selected pages have been extracted from the reports and included in **Appendix E-1**.

File Name:	1996 August Aerial Photo Analysis		
Document Title:	AERIAL PHOTOGRAPHIC ANALYSIS ALTGELD GARDENS	**Date:**	August 1996
Document Type:	Report	**Pages:**	21
Prepared By:	Lockheed Environmental Systems & Technologies Co.	**Prepared For:**	US EPA

Notes:
This report presents findings of an analysis of historical aerial photography spanning the period 1938 to 1976. The analysis was performed for the study area known as the Pullman Sewage Farm and the community of Altgeld Gardens in Chicago, Illinois. This analysis was requested by Region 5 to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built.

Findings from the analysis indicate that the results of filling activity were observed in 1959 and 1967 in the Pullman site, which is west of Altgeld Gardens across S. Lawrence Ave. The material used for filling could not be identified; it appeared to be light-toned, but it could not be determined what the nature of the material was or if any wastes were incorporated into this material. No evidence of the effluent ditch, referred to in the collateral information, was identified in the period of analysis.

Pages Extracted: Selected text and Aerial Photos

File Name:	1996 November Aerial Photo Analysis		
Document Title:	AERIAL PHOTOGRAPHIC ANALYSIS ALTGELD GARDENS	**Date:**	November 1996
Document Type:	Report	**Pages:**	16
Prepared By:	Lockheed Environmental Systems & Technologies Co.	**Prepared For:**	US EPA

Notes:
This report is an addendum to TS-PIC 9605510. It presents the results of an aerial photographic analysis of the Altgeld Gardens extended study area located in Chicago, Illinois. The primary data used for this report are two selected dates of black-and-white photographs: November 14, 1938 and September 3, 1959. This analysis was requested to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built in

the Altgeld Gardens extended study area. Findings from the analysis indicate evidence of a possible drainageway in the Altgeld Gardens Housing Development Area in 1938. This possible drainage way cuts through Blocks 3, 4, 7, 9, 10, and 12.

Pages Extracted: Selected text and Aerial Photos

File Name:	1997-8-6_USEPA Site Assessment		
Document Title:	SITE ASSESSMENT REPORT FOR THE ALTGELD GARDENS COMMUNITY	**Date:**	August 6, 1997
Document Type:	Report	**Pages:**	71
Prepared By:	US EPA	**Prepared For:**	---

Notes:
US EPA assessed the possible presence of soil contamination at the Altgeld Gardens Community (AGC). CHA was advised of proposed assessment work and participated in sampling. Nine standing water samples were collected from flooded areas. Fourteen surface soil samples and ten subsurface soil samples were collected.

The water samples, surface soil samples, and sub-surface samples were analyzed for acid base neutrals (ABN), pesticides/polychlorinated biphenyls (PCBs), volatile organic analytes (VOAs), metals, mercury, and cyanide. All samples were analyzed at the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois. Analytical results indicate that slightly elevated levels of PAH compounds may be present in the surface soils within the AGC area.

Analyses of surface soils, sub-surface soils and standing water within the AGC indicate that although elevated levels of PAHs were identified in surface soils within Block 11, the levels do not exceed the recommended removal action level (RAL) for total PAHs established in the "Emergency Removal Guidelines." Information from this report is being reviewed by U.S. EPA for a health based risk assessment. There are no conditions present in the areas assessed at the AGC that may present an imminent and substantial threat to public health and welfare and the environment. There were no conditions observed at the AGC during the site assessment which warrant a removal action.

Pages Extracted: Report text, Tables, and Sample Location Figure

File Name:	USEPA 5-98 Fact Sheet		
Document Title:	US EPA FACT SHEET, Altgeld Murray Gardens	**Date:**	May 1998
Document Type:	Fact Sheet	**Pages:**	4
Prepared By:	US EPA	**Prepared For:**	---

Notes:
This fact sheet describes the usage and sampling history of the site. It states that PAH and pesticide contamination was identified in 1996 and 1997 sampling events, and states the following:

Using USEPA risk assessment methodology, the lifetime excess cancer risk for exposure to the highest concentration of PAHs ranged from 2 x 10 (2 out of 10,000 exposed individuals) to 3 x 10 (3 out of 1,000 exposed individuals). In interpreting these estimates, one should keep in mind these are risks that are likely to be very similar to those experienced in any other urban site. In addition, the sampling results, as well as aerial photos of the area, reveal no physical evidence that Altgeld Gardens was built on a landfill or evidence of industrial contamination in the surface soil.

At this time US EPA has determined that additional sampling in the Altgeld Gardens is not necessary because Altgeld Garden levels were similar to those identified in studies of other urban areas. However, US EPA is conducting a PAH and lead background study to verify PAH and lead background levels for the City of Chicago. Information gathered in this study will be used to help determine future cleanup action levels for urban sites in general.

Pages Extracted: Entire Fact Sheet

File Name:	1998-8-27_USEPA_Ltr on PAHs Present at Altgeld		
Document Title:	Re: Altgeld Gardens Housing Complex	**Date:**	August 27, 1998
Document Type:	Letter	**Pages:**	2
Prepared By:	US EPA	**Prepared For:**	CHA

Notes:
USEPA collected samples in 1996 at the request of the community and found PAH contamination. USEPA found no evidence of a specific source and suspects that atmospheric deposition from point, area, and mobile sources were likely responsible. A comparison of PAH levels detected at Altgeld Gardens to those found in other urban areas indicated that the Altgeld values were within the expected range. USEPA strongly recommends that CHA reduce residents' contact with PAH contaminated soils, including establishing groundcover, placing wood chips, and planting grass. These activities will greatly reduce risk to children and adults by eliminating direct contact with contaminated soils. These measures may also result in the reduction of the PAH compounds through a natural process known as phyto-remediation.

Pages Extracted: Entire Letter

File Name:	2000-9-11_USEPA Ltr to Alt._Response to FOIA Request		
Document Title:	Re: Altgeld Gardens Community	**Date:**	September 11, 2000
Document Type:	Letter	**Pages:**	3
Prepared By:	US EPA	**Prepared For:**	Hopkins & Sutter

Notes:
Information concerning the potential analytical problems involving the United States Environmental Protection Agency's (U.S. EPA) Central Regional Laboratory, and U.S. EPA's proposal to conduct core sampling for Polychlorinated Biphenyls (PCBs) in the yards on the north side of the Dorothy Gautreax Child Parent Center, 975 E. 132nd Street, Chicago, Illinois (Gautreax Center), and surface soil and surface water sampling in the area throughout the

community housing, as in the enclosed figure.

During the spring of 1996 the Chicago Housing Authority (CHA) conducted a cleanup of soil contaminated with PCBs, a chemical regulated under the Toxic Substances Control Act, from the yards on the north side of the Gautreax Center. The source of the PCB contamination was a storage lot located across the street from the Gautreax Center where the CHA had disposed PCBs from electrical transformers. During the cleanup, approximately one foot of soil was excavated across the entire north side of the Gautreax Center, cleanup confirmation samples were collected, and the area was backfilled with clean soil trucked in from off site. U.S. EPA, Region 5, conducted oversight of the CHA's cleanup and assisted the CHA by providing laboratory analysis of the CHA's samples. Based on the sample analysis, Region 5 determined that the PCB cleanup level of less than 10 parts per million (ppm) had been met, and the area could be backfilled to grade with clean soil.

During 1996 and 1997, U.S. EPA also conducted surface soil and water sampling in certain areas of the housing complex in response to residents' concerns with potential contamination. The surface soil samples and surface water samples were analyzed for a full range of contaminants. Low levels of polycyclic aromatic hydrocarbons (PAHs), mainly Benzo(a)pyrene and low levels of DDD, DDT and DDE, were found in the soil samples. Although results were below action levels, U.S. EPA recommended to the CHA that a grass cover be placed in areas where bare soil was present. This grass cover prevents direct contact with soil.

Since these actions, allegations of misconduct in the analysis of samples have been made. Because of these allegations, U.S. EPA has determined that data generated from samples analyzed by these individuals will not be relied on for its decisions. Even though U.S. EPA has reviewed the 1996 raw analytical data and cannot conclude that there was any failure to follow analytical procedures which caused the analytical results to be lower than target levels indicating a need for cleanup, U.S. EPA believes the most prudent course of action is to resample this area, U.S. EPA must emphasize that the north yards are covered by approximately one foot of clean soil and do not present a significant risk to children attending the Gautreax Center or to the nearby community. It should also be noted that no similar problems have been found with the cleanup at the Altgeld Gardens storage lot, which was completed last summer.

With regard to the Superfund sampling, all locations will need to be resampled by U.S. EPA. However, samples will only be analyzed for pesticides and volatile organic compounds. U.S. EPA intends to conduct this sampling by the middle of September.

Pages Extracted: Entire letter and Figure

File Name:	2000-11-15_E-E Rpt		
Document Title:	Letter Report for Altgeld Gardens	**Date:**	November 15, 2000
Document Type:	Report	**Pages:**	47
Prepared By:	Ecology & Environment, Inc.	**Prepared For:**	US EPA
Notes: The purpose of the site assessment was to resample surface soil locations on the Altgeld			

Gardens Community (AGC) that were originally sampled by U.S. EPA in 1996 and 1997 and analyzed for poly aromatic hydrocarbons (PAHs) and pesticides. Analytical results from that sampling effort are suspect because recent investigations have determined that certain analytical data, including pesticide analyses, generated by CRL at the time of the U.S. EPA Altgeld Gardens soil sampling event may be erroneous.

Various pesticides were detected in every soil sample. In general it appears, from a comparison of the data, that the U.S. EPA sample results were higher than those of the START samples, although not in all cases.

This report is discussed in greater detail later in this section of the Phase I ESA report.

Pages Extracted: Report text, Tables, and Sample Location Figure

File Name:	2001-2-16_Dept of Health and Human Serv_Altgeld Health Consultation		
Document Title:	Health Consultation, October 2000 Soil Sampling, Altgeld Gardens	**Date:**	February 16, 2001
Document Type:	Report	**Pages:**	12
Prepared By:	US Dept. of Health and Human Services/Illinois Department of Public Health	**Prepared For:**	US EPA

Notes:
US EPA requested IDPH to evaluate public health hazards from soil at Atlgeld Gardens.
From the summary: US EPA conducted site investigation at Altgeld Gardens in 1996. In 1998, IDPH evaluated the data and concluded that no apparent public health hazard existed from exposure to the surface soil contamination detected. IDPH recommended additional surface soil samples near the sample with the greatest pesticide levels. In 1999, US EPA collected 12 soil samples along 134th street on the southern edge of Altgeld Gardens. IDPH concluded that no apparent public health hazard existed from exposure to the pesticide residuals detected in the surface soils.

In 2000, 10 surface soil samples were collected from the top 2 to 3 inches of soil and analyzed for pesticides. DDT, DDE, and heptachlor epoxide were detected, but IDPH concludes that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil.

This report is discussed in greater detail later in this section of the Phase I ESA report

Pages Extracted: Introduction, Conclusions, Results table, and Figure

File Name:	2009-7-1_GSG_Blocks 11,12,13_Soil Sampling Summary Report		
Document Title:	Summary Report, Altgeld Gardens Renovation, Blocks 11, 12, and 13	**Date:**	July 1, 2009
Document Type:	Report	**Pages:**	209
Prepared By:	GSG Consultants, Inc.	**Prepared For:**	CHA

Notes: Report summarizes the findings of field sampling activities within landscaped areas of Blocks 11, 12, and 13. GSG performed 122 soil borings to maximum depth of 2 feet. Samples analyzed for Polynuclear Aromatics Hydrocarbons (PAH), and total lead and arsenic. A total of 24 of the 122 sample locations reported values that exceed PNAs and arsenic Tier 1 Soil Remediation Objectives (SROs) for residential properties or Metropolitan Area background concentrations. None of the collected soil samples exhibit lead values above Tier 1 SROs for residential properties. **This report is discussed in greater detail later in this section of the Phase I ESA report** **Pages Extracted: Figures showing exceedances.**

File Name:	2009-7-29_GSG_Blocks 11,12,13_130th St. and Ellis Ave_PH 5_Hazardous Material…		
Document Title:	HAZARDOUS MATERIALS BUILDING SURVEY ALTGELD GARDENS (PHASE V), BLOCKS 11, 12 & 13	**Date:**	July 29, 2009
Document Type:	Report	**Pages:**	456
Prepared By:	GSG Consultants, Inc.	**Prepared For:**	Holabird & Root LLC
Notes: Hazardous materials building survey of the units associated with the Altgeld Gardens Blocks 11, 12 & 13. The survey included twenty-six (26) residential buildings with a total of 244 individual units to identify the location and quantity of asbestos containing material (ACM), lead-based paint (LBP), mold, poly-chlorinated biphenyls (PCB), and Universal Waste. GSG identified ACM, LBP, and suspect mold in the buildings. GSG did not observe any fluorescent light fixtures, PCB ballasts, or chemical waste on site during the survey. **Pages Extracted: Executive Summary.**			

File Name:	2014-1-10_ACM Abatement Block 12 Project Specs		
Document Title:	Altgeld – Block 12 - Renovation and Redevelopment	**Date:**	January 10, 2014
Document Type:	Portion of Asbestos Abatement Specifications	**Pages:**	22
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Asbestos Abatement specs for Block 12. **Pages Extracted: None**			

File Name:	2014-1-10_CHA_ACM_Lead Block 12 Drawings		
Document Title:	Asbestos and Lead Based Paint Abatement Drawings Block 12	**Date:**	January 10, 2014
Document Type:	Drawings	**Pages:**	11

Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Asbestos and Lead Based Paint Abatement Drawings for Block 12. **Pages Extracted: None**			

File Name:	CHA_Block 12_Civil Storm Retention Drawings		
Document Title:	Altgeld/Murray Renovation & Redevelopment Block 12	**Date:**	January 10, 2014
Document Type:	Drawings	**Pages:**	20
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Altgeld/Murray Renovation & Redevelopment Drawings for Block 12, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

File Name:	CHA_Drawing_Block 11 13 Drainage Notes C-403		
Document Title:	Altgeld/Murray Renovation & Redevelopment Blocks 11 & 13, Site Drainage and Utility Notes	**Date:**	February 13, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Note sheet for Redevelopment Drawings for Blocks 11 & 13, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

File Name:	CHA_Drawing_Block 11 C-401		
Document Title:	Altgeld/Murray Renovation & Redevelopment Blocks 11 & 13, Site Drainage and Utility Plan Block 11	**Date:**	February 13, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Redevelopment Drawings for Block 11, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

File Name:	CHA_Drawing_Block 12 1132 East 133rd St-C-401		
Document Title:	Altgeld/Murray Renovation & Redevelopment Block 12, Site Drainage and Utility Plan Block 12	**Date:**	February 28, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	Prepared For:	CHA

Notes: Redevelopment Drawings for Block 12, mainly sewers, drainage, and landscaping. Pages Extracted: None

File Name:	CHA_Drawing_Block 12 1132 East 133rd St-C-402		
Document Title:	Altgeld/Murray Renovation & Redevelopment Block 12, Site Drainage and Utility Notes	**Date:**	February 28, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Note sheet for Redevelopment Drawings for Block 12, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

File Name:	CHA_Drawing_Block 13 C-402		
Document Title:	Altgeld/Murray Renovation & Redevelopment Blocks 11 & 13, Site Drainage and Utility Plan Block 13	**Date:**	February 13, 2014
Document Type:	Drawings	**Pages:**	1
Prepared By:	Holabird & Root, LLC.	**Prepared For:**	CHA
Notes: Redevelopment Drawings for Block 13, mainly sewers, drainage, and landscaping. **Pages Extracted: None**			

The following potential contamination issues were identified in the review of the documents provided by CHA:

November 15, 2000, Letter Report for Altgeld Gardens, and February 16, 2001, Health Consultation

The November 15, 2000, Letter Report prepared by Ecology and Environment, Inc. (E&E) for the US EPA presents the results of pesticide sampling and resampling conducted throughout the Altgeld Gardens and Murray Homes developments. In 1996, three of the samples were collected from the subject site: S15 (Block 11), S16 (Block 12), and S20 (Block 13). In 2000, these areas were resampled and given the following sample names: AGS10 (Block 11), AGS8 (Block 12), and AGS9 (Block 13). All of the soil samples were grab samples collected from two to three inches below the grass surface.

Pesticides were detected in each of the samples. Carnow Conibear evaluated the soil analysis data in relation to the SROs promulgated in 35 IAC 742, also known as *Tiered Approach to Corrective Action Objectives* (TACO). The soil samples from Block 12 (S16/AGS8) contained concentrations of two pesticides that were slightly above the SRO for Residential Ingestion. The DDE concentration detected was 2.399 mg/kg, which is slightly above the SRO of 2.0 mg/kg, and the Heptachlor epoxide concentration detected was 0.0974 mg/kg, which is slightly above the SRO of 0.07 mg/kg.

There is no obvious, discrete source for the pesticide concentrations detected in the samples. Based on the dispersed nature of the identified compounds, there is no clear point source or "hot spot" of contamination.

The Illinois Department of Public Health reviewed the sampling data and prepared the February 16, 2001 Health Consultation letter. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil.

Therefore, the concentrations of pesticides detected in the 1996 and 2000 sampling events in Blocks 11, 12, and 13 can be considered a de minimis condition to the subject site as defined in Section 3.2.22 of ASTM E1527-13. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

July 1, 2009, Summary Report

The July 1, 2009, *Summary Report, Altgeld Gardens Renovation, Blocks 11, 12, and 13*, prepared by GSG Consultants, Inc. (GSG) for the CHA, was labeled "DRAFT Work In Progress". The report documents soil sampling performed by GSG within Blocks 11, 12, and 13. One hundred and twenty-two (122) soil borings were installed throughout the blocks. Soil samples were collected for analysis from depth intervals of approximately 6 inches to 1 foot and from 1 foot to 2 feet below existing landscaped surfaces. Soil samples were analyzed for Polynuclear Aromatic Hydrocarbons (PNAs), total lead and total arsenic. GSG reported that 24 of the 122 sample locations reported values that exceeded the Tier 1 Soil Remediation Objectives (SROs) promulgated in 35 IAC 742 TACO for PNAs and/or arsenic. No SRO exceedances for lead were reported. GSG recommended that soil exceeding Tier 1 SROs should not be used as backfill during site renovation activities and that it be disposed of at a licensed Subtitle D landfill if it is removed from the site. GSG estimated the volume of soil exceeding Tier 1 SROs to be 2,497 cubic yards.

Carnow Conibear evaluated the soil analysis data in relation to the SROs promulgated in 35 IAC 742 TACO. Arsenic and five PNAs were identified in exceedance of the applicable Tier 1 SROs for the residential ingestion exposure route. Based on the dispersed nature of the identified exceedances, there is no clear point source or "hot spot" of contamination.

Carnow Conibear performed a 95% Upper Confidence Limit (UCL) evaluation of the data pursuant to 35 IAC 742.225(d) and (e). The objective of this evaluation was to determine whether the resulting 95% UCL concentration of each analyte, as derived from the data/results (sample population), is less than the corresponding applicable Tier 1 residential ingestion SRO, as adjusted for background concentrations in the City of Chicago for PNAs and counties within Metropolitan Statistical Areas (MSAs) for arsenic. Carnow Conibear utilized the Statistical Software *ProUCL 4.1 for Environmental Applications* to calculate the 95% UCL for the five PNA compounds and arsenic. These data sets incorporated appropriate methods to address "No-Detects." The resulting concentrations are presented in the following table:

Arsenic	10.51	13.0	No
Benzo(a)anthracene	0.961	1.1*	No
Benzo(a)pyrene	0.544	1.3*	No
Benzo(b)fluoranthene	0.698	0.9	No
Dibenzo(a,h)anthracene	0.114	0.2*	No
Indeno(1,2,3-c,d)pyrene	0.199	0.9	No

* Indicates median background concentration applied as Tier 1 SRO.

The results of this analysis indicate that each 95% UCL concentration is below the corresponding applicable Tier 1 residential ingestion SRO (or median background concentration) for each respective analyte. Therefore, the concentrations of PNAs and arsenic detected in the July 2009 GSG sampling event can be considered a de minimis condition to the subject site, because the concentrations do not generally present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies, as defined in Section 3.2.22 of ASTM E1527-13. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

The 95% Upper Confidence Level ProUCL analysis is presented in **Appendix E-2**.

5.0 Records Review

5.1 Standard Environmental Record Sources

This section presents the results of the state and federal government agency Freedom of Information Act (FOIA) responses and the government agency database search that was performed by Environmental Data Resources, Inc. (EDR) in accordance with the ASTM standard.

5.1.1 Federal & State Regulatory Agencies

Carnow Conibear submitted FOIA requests and reviewed public online databases of state and federal agencies in an effort to obtain information regarding the subject site and adjacent properties. Documentation of the FOIA correspondence and database search results can be found in **Appendix F-1**. The following agencies were contacted:

- United States Environmental Protection Agency (USEPA)

  Carnow Conibear searched the USEPA's EnviroFacts online database. Altgeld Gardens, which includes the subject site, was listed on the database under Agency Compliance and Enforcement Systems (ACES) as an operator of apartment buildings. The subject site was not flagged for Significant Non-compliance (SNC) or High Priority Violations (HPV).

- Illinois Environmental Protection Agency (IEPA)
  Springfield, Illinois

  Carnow Conibear submitted a FOIA request to the IEPA on May 13, 2014 regarding any information of environmental concern for the subject site. A response was received from the IEPA on June 4, 2014 indicating that they had no records on file for the subject site addresses.

- Illinois Emergency Management Agency (IEMA)
  Springfield, Illinois

  Carnow Conibear's search of the IEMA's online Hazardous Materials Incident Reports database did not reveal any record of incidents on the subject site or immediately adjacent properties.

- Illinois Office of the State Fire Marshal (OSFM)
  Springfield, Illinois

  Carnow Conibear searched the OSFM's State of Illinois UST online database for addresses on E. 130th Place, Greenwood Avenue, E. 131st Street, E. 132nd Street, and E. 133rd Street in Chicago, Illinois. The subject site and immediately adjacent properties were not listed in the OSFM database.

5.1.2 Regulatory Database Inquiry

Carnow Conibear retained EDR to conduct a search of available environmental databases for the subject site and surrounding properties. The databases were searched according to ASTM standards, with supplemental environmental information also provided. The descriptions, sources, telephone numbers, and government version dates for each of the databases are provided in **Appendix F-2**. Carnow Conibear used the subject site to specify the site location as the "target property." The following table lists the databases searched by EDR and the corresponding ASTM search distances.

National Priority List (NPL) The federal National Priority List is a federal list of abandoned or uncontrolled hazardous waste sites identified for priority remedial action under the Superfund program.	1.0 Mile
Delisted National Priority List (D-NPL) The National Oil and Hazardous Substances Pollution Control Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.	0.5 Mile
Comprehensive Environmental Response & Liability Information System (CERCLIS) The federally maintained Comprehensive Environmental Response, Compensation and Liability Information System is a compilation of past and current sites that the EPA has investigated pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). It also includes abandoned or uncontrolled waste sites identified under the federal Superfund Program.	0.5 Mile
CERCLIS No Further Remedial Action Planned (NFRAP) Sites which have been investigated and subsequently delisted from the federal CERCLIS are designated as No Further Remedial Action Planned (NFRAP) sites.	0.5 Mile
Resource Conservation Recovery Act (RCRA) Information RCRA Information is EPA's comprehensive information system, including information on selective information on sites which treat, store or dispose (TSD) hazardous wastes. CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. Conditionally exempt small quantity generators (CESQGs) generate less than 100 kilograms (kg) of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kg of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDs treat, store or dispose of waste.	Subject Site or Adjacent Property * 0.5 Mile if TSD

Federal/State Engineering/Institutional Controls Registries These federal and state registries list sites with engineering or institutional controls associated with them. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are often required as a part of institutional controls.	Subject Site
Emergency Response Notification System (ERNS) Emergency Response Notification System, maintained by the federal government, records and stores information on reported releases of oil and hazardous substances.	Subject Site
Category List (CAT) Illinois EPA information listing notice of response action, NPL, pre/proposed NPL, completed remedial action, SRP, federal facilities, and cleanup started and or cleanup completed sites.	1.0 Mile
State Hazardous Waste Sites (SHWS) State hazardous waste sites records are the state's equivalent to the federal CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for clean-up using state funds are identifiable along with sites where cleanup will be paid by potentially responsible parties.	0.5 Mile
Solid Waste Facilities / Landfill Sites (SWF/LF) Solid Waste Facilities / Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. These may be active or inactive facilities, or open dumps that failed to meet RCRA subtitle D Section 4004 criteria for solid waste landfills or disposal sites.	0.5 Mile
Underground Storage Tank (UST) A database of registered USTs that are regulated under Subtitle I of RCRA and must be registered with the state department responsible for administering the UST program. In Illinois the UST registry is maintained by the Office of the State Fire Marshall.	Subject Site or Adjacent Property
Leaking Underground Storage Tank (LUST) The Leaking Underground Storage Tank records contain an inventory of LUST incidents reported to the state.	0.5 Mile
Site Remediation Program (SRP) The Illinois Site Remediation Program (SRP) database includes properties that are enrolled in the state's voluntary clean-up program.	0.5 Mile
Brownfields Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment. The Illinois Municipal Brownfields Redevelopment Grant Program offers grants to assist in site investigation activities, development cleanup objectives, and performance of cleanup activities.	0.5 Mile

Note: The report also includes additional databases that are not required to be searched by ASTM standards. These additional database results are reviewed for potential environmental impact on the subject site.

The subject site addresses were not identified in the databases accessed by EDR. However, the Altgeld Gardens complex was identified under FINDS, IL AIRS, IL SPILLS, and IL BOL. Further review found that the IL SPILLS and IL BOL listings are associated with the property at 940 E. 132nd Street. Federal listings identified in the EDR report within the ASTM minimum search distances from the subject site include: One CERCLIS listing, one CERCLIS NFRAP listing, two CORRACTS listings, four RCRA-SQG listings, and two RCRA-CESQG listings. State and local listings identified in the EDR report within the ASTM minimum search distances from the site include: five IL NIPC listings, four UST listings, and one RCRA-NonGen listing. EDR Proprietary Records listings identified in the EDR report within the ASTM minimum search distances from the subject site include: five EDR Historical Cleaners listings.

Due to the densely urbanized area in which the subject site is located, EDR identified many listings within the ASTM search distances. Carnow Conibear evaluated the listings to determine which sites might pose a potential environmental threat based on the presence of intervening properties and thoroughfares which would impede impacts to the subject site. The following table summarizes sites that could possibly affect the environmental conditions at the subject site. The complete EDR report is presented in **Appendix F-2**.

Subject Site Elevation 589 ft.	CHA-Altgeld Gardens Various Chicago, Illinois 60827	FINDS IL AIRS	Registry ID: 110018484146 Facility ID: 3256 ID Number: 031600DIA SIC Code: 6513 Site ID: 170000048856 Inv Number: 0316545003
North Adjacent <1/8mile 85 ft. Higher Relative Elevation 601 ft.	Chicago, City of 1100 East 130th Place Chicago, IL 60827	RCRA-SQG	EPA ID: ILR000122952 Small quantity generator, no violations found. Hazardous Waste Summary: D001-Ignitable
West < 1/8 mile 633 ft. Same Relative Elevation 589 ft.	Altgeld Gardens 977 East 132nd Street Chicago, IL 60827	BOL RCRA-CESQG	Site ID: 170000356549 Inv Number: 0316545023 EPA ID: ILR000101980 Conditionally exempt small quantity generator, no violations found.
West < 1/8 mile 649ft. Same Relative Elevation 589 ft.	Norfleet Cleaners 13114 South Ellis Avenue Chicago, IL 60827	EDR Historical Cleaners	Type: Cleaners Year: 1981
West <1/8 mile 824 ft. Same Relative Elevation	940 East 132nd Street Chicago, IL 60827	HMIRS	Report #: 2004090848 Commodity Name: Gasoline Result: Vapor, Spillage Amount: 5 gallons Remarks: Cleaned by Chicago Fire Department

589 ft.	Altgeld Gardens (Murray Homes)	ICIS	Enforcement Action ID: 05-1985-0099 FRS ID: 110009373622 Enforcement Action Type: TSCA 16 Action for Penalty
	Chicago Housing Authority/ CHA-Altgeld Gardens Various	LUST/ SPILLS	ILEPA ID: 0316545003 Incident Number: 20070682 IEMA Date: 5/21/2007 NFA/NFR Letter: 9/10/2007
		SRP/ BOL	ILEPA ID: 0316545003 EPA ID: ILD981098395 Site ID: 170000048856 Date Enrolled: 11/23/2011 NFA/NFR Letter: Not Reported
	Altgeld Gardens (Murray Homes)	FTTS INSP	Inspection Number: 1988082560509 2 Inspection Date: 8/25/1988 Investigation Type: Section 6 PCB Federal Conducted
	Chicago Housing Authority/ Altgeld Murray	FTTS/ HIST FTTS	Case Number: Not Reported Docket Number: TSCA-V-C-042-89 Complaint Issue Date: 5/4/1989 Violations: PCB, Dispose
	Chicago Housing Authority	RCRA NonGen	EPA ID: ILD981098395 Non-Generator, Handler, no violations found.
		FTTS INSP/ HIST FTTS INSP	Inspection Number: 19930908IL014 1 Inspection Date: 9/8/1993 Investigation Type: Section 6 PCB State Conducted
	Maintenance Building	UST	Facility ID: 2043650 Facility Status: Exempt 1 – 1,000 gal. Gasoline – Exempt from registration
West <1/8 mile 1220 ft. Same Relative Elevation 589 ft.	Carver Park Natatorium 939 E 132nd Street Chicago, IL 60827	UST	Facility ID: 2043650 Facility Status: Closed 1 – 5,000 gal. Heating oil – Abandoned in place
	Carver Park	RCRA-CESQG	EPA ID: ILR000148049 Conditionally exempt small quantity generator, no violations found. Hazardous Waste Summary: D008-Lead

East Northeast <1/8mile 698 ft. Higher Relative Elevation	Calumet NU Earth (130th/Doty) Chicago, IL Calumet NU-Earth Dist Center	IL NIPC CERC-NFRAP	IL NIPC inventories solid waste disposal sites. Site ID: 0500927 NPL Status: Not on the NPL Non NPL Status: Site does not qualify for the NPL based on existing information.
Southeast >1/4mile 3220 ft. Higher Relative Elevation 615 ft.	Land & Lakes Transfer Station 1258-1300 E 130th (138th) Street Chicago, IL	RCRA-SQG FINDS	EPA ID: ILR000081000 Small quantity generator, no violations found. Hazardous Waste Summary: D001-Not defined, D010 – Selenium, D018 - Benzene

NOTE: Carnow Conibear has interpreted the EDR Report to eliminate duplicate addresses and misspellings reported to the governmental agencies.

Review of the EDR environmental database listings is summarized below:

- Altgeld Gardens, including the subject site, was identified previously in the USEPA EnviroFacts database and is listed under FINDS and IL AIRS. FINDS is a comprehensive database that lists facilities regulated under a variety of EPA programs. AIRS provides information regarding air permitting and emissions. Based on the lack of reported violation, this listing should not pose a significant threat to the subject site at this time.

- City of Chicago, located at 1100 E. 130th Place, is listed as a RCRA small quantity generator with no violations. Based on the lack of reported violation, this listing should not pose a significant threat to the subject site at this time.

- Altgeld Gardens, located at 977 E. 132nd Street, is listed as a RCRA conditionally exempt small quantity generator with no violations. Based on the lack of reported violation, this listing should not pose a significant threat to the subject site at this time.

- Norfleet Cleaners, located at 13114 S. Ellis Avenue, is listed as a historical cleaners approximately 649 feet west of the subject site. No additional environmental records or citations were found for this site. Based on the lack of reported violation, this site should not pose a significant threat to the subject site at this time.

- Chicago Housing Authority/Altgeld Gardens (Murray Homes), located at 940 E. 132nd Street, is listed as under HMIRS for a gasoline spill which occurred in 2004 during delivery of the fuel to the site. Approximately five gallons of gasoline was spilled and cleaned up by the Chicago Fire Department.

  The site was listed in the Integrated Compliance Information System (ICIS) and appears to have received several penalties under Toxic Substance Control Act (TSCA) 16 Enforcement Action. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list.

The Chicago Housing Authority site (maintenance building) is listed as a RCRA Non-Generator with no violations. The site is listed as having one LUST/SPILLS incident (20070682) and one 1,000 gallon gasoline UST. Online review of the OSFM website indicates that the UST was removed on May 21, 2007. A NFA/NFR Letter was issued for LUST incident 20070682 on September 10, 2007.

The site was listed in the FIFRA/TSCA Tracking System (FTTS) for inspections and violations for the disposal of PCBs. Reports provided by CHA indicate that PCB contamination has been remediated to acceptable levels on the property and are no longer a concern.

The maintenance building property was enrolled into the Site Remediation Program (SRP) on November 23, 2011 and issued LPC# 31654003. An NFA/NFR letter has not been issued for the site. Reports provided by CHA indicate that a Comprehensive Site Investigation/ Remediation Objectives Report/Remedial Action Plan (CSI/ROR/RAP), dated November 18, 2011, was submitted to the IEPA for approval. Contaminants identified at the site include PNAs, mercury, lead, arsenic, and manganese. After additional soil sampling requested by the IEPA in a CSI/ROR/RAP Comments letter dated January 19, 2012 was submitted, the IEPA approved the Response to CSI/ROR/RAP Comments letter. The January 19, 2012, sampling report demonstrated that the contaminants at the site were not a threat to Class I Groundwater.

Based on the current SRP status, the nature of the contaminants, and the distance from the subject site (over 700 feet) this site does not represent a REC to the subject site.

Carver Park Natatorium, located at 939 E. 132nd Street, is listed as a RCRA conditionally exempt small quantity generator with no violations. The site is listed as having one 5,000-gallon heating oil UST. The UST is listed as having been abandoned in place. These listings do not represent RECs to the subject site.

- Calumet NU Earth, located at 130th Street and Doty Avenue, is listed as an IL NIPC site. Review of the NIPC Historical Inventory of Solid Waste Disposal Sites in Northeast Illinois indicates that the site is located in Section 26, Township 37N, Range 14E. Online review of the IEPA Bureau of Land databases indicates that the site has IEPA number 0316490016. Based on the lack of reported violation, this listing should not pose a significant threat to the subject site at this time.

- Land & Lakes Transfer Station is listed as a RCRA small quantity generator with no violations. Online review of the USEPA Envirofacts database found that the site is located on across the Little Calumet River on 138th Street and not adjacent to the subject site. Based on the distance to the subject site, this listing should not pose a significant threat to the subject site at this time.

5.1.3 EDR Orphan Sites

There were twenty orphan sites (listed sites that could not be mapped due to poor or inadequate address information) identified during the database search. Upon further investigation, no evidence was found to suggest that these sites would pose an environmental threat to the subject site. The complete orphan site list is included in **Appendix F-2**.

5.2 Additional Environmental Record Sources

5.2.1 Local Government Agencies

Carnow Conibear submitted FOIA requests to local agencies in an effort to obtain information regarding the subject site. Copies of the state and local requests and responses can be found in **Appendix F-1**. The following agencies were contacted:

- City of Chicago Fire Department (CFD), Chicago, IL

  Carnow Conibear received a response from the CFD on May 21, 2014 indicating that they have no records concerning for the subject site.

- Chicago Department of Public Health (CDPH), Chicago, IL

  Online review of CDPH Environmental Records Lookup Table found records concerning the subject site consisting of asbestos abatement work, permits for surface cleaning/grinding and the installation of combustion emission unit, and a complaint and inspection concerning a diesel fuel spill from a leaking generator. CDPH records indicate that the spill was remediated and no notice of violation was issued.

- Chicago Department of Fleet and Facilities Management (2FM), Chicago, IL

  Carnow Conibear received a response from 2FM on June 2, 2014 indicating that they have records concerning the Altgeld Gardens Housing Project. The records consisted of 1) a CDPH report regarding residential soil sample results taken from Block 17 of Altgeld Gardens; 2) PCB wipe sampling results for samples collected from the Gautreax Child/Parent Center, Garden Fast Food, and Altgeld Branch Library; and 3) Phase I and II ESA's for the Chicago Youth Gautreax Center. The reports indicated that the results soil and wipe samples collected were below their respective remediation objectives, with the exception of two polycyclic aromatic hydrocarbons (PAHs) found in a soil sample collected in a courtyard in Block 17. Carnow Conibear compared the PAH results to current IEPA Tiered Approach to Corrective Action (TACO) Tier 1 Soil Remediation Objectives (SROs) and found that only benzo(a)pyrene exceeded the SROs. The CDPH report indicated that the result may be indicative of a single isolated incident at the site and determined that there were no apparent health concerns related to normal exposure to soil at this property. The CDPH recommended the maintenance of a vegetative cover on the soil to reduce exposure. Based on the analytical results and distance to the subject site, these properties do not pose a significant threat to the subject site at this time.

5.3 Physical Setting Sources

5.3.1 Surface Water Characteristics

The topography of the subject site and adjacent properties is relatively level, with no significant natural relief features. According to the USGS 7.5-minute topographic quadrangle for Lake Calumet, Illinois (dated 1997) accessed by EDR, the elevation in the vicinity of the subject site is approximately 589 feet above mean sea level.

The Federal Emergency Management Agency (FEMA) lists the subject site in an area determined to be outside the 0.2% annual chance floodplain. [National Flood Insurance Program, Map numbers 17031C0661J, 17031C0662J, 17031C0663J, and 17031C0664J, August 19, 2008]

According to the map provided by EDR, there are no wetlands on the subject site. No standing bodies of water or wetland vegetation was observed during the recent site inspection.

5.3.2 Subsurface Geological Characteristics

Surficial geology at the site is mapped in the Wadsworth Formation of the Wedron Group. This unit is a succession of calcareous gray, fine-textured till consisting mainly of clay, silt, and fine sand. Although most of the till beds in this formation appear relatively homogeneous and massive, some contain silt laminae and sand lenses. Dominant pebble rock types are dolomite and shale (Hansel & Johnson, 1996, and Stiff, 2000).

Carnow Conibear reviewed Plate 1 of the ISGS Circular, *Potential for Contamination of Shallow Aquifers in Illinoi*s, indicating that the regional geologic materials underlying the subject site are designated as “B1” and “E”. The “B1” classification denotes the presence of sand and gravel at the surface in layers less than 20 feet thick, which are underlain by till or impermeable bedrock. Although the sand and gravel may be used for local well points, these deposits generally do not yield large quantities of water. The potential for contamination of surface water and groundwater in B1 areas is high. A hydraulic conductivity of about 1×10^{-3} cm/sec (high) makes these materials an excellent medium for transport of contaminants. Because water may flow along contacts between materials with different textures (e.g. through sand and gravel over dense bedrock) and discharge on slopes, there is also a potential for ground-to-surface water contamination in B1 areas. The “E” classification denotes deposits of uniform, relatively impermeable silty or clayey till or other fine-grained materials that are more than 50 feet thick, with no identified sand and gravel layers. The potential for contamination in E areas is low because of low hydraulic conductivity in the till, 1×10^{-9} to 1×10^{-7} cm/sec, and good attenuation capacities of the materials. (Berg, et al. 1984)

Per Plate 2 of the Berg Circular, the subject site is located in area designated as “C1” and “D2”. C1 areas are described as sand and gravel at the surface, less than 20 feet thick; underlain by till or impermeable bedrock. D2 areas are described as uniform, relatively impermeable silty or clayey till or other fine-grained materials extending from the surface to more than 20 feet deep; no interbedded sand and gravel.

5.3.3 Groundwater Characteristics

The EDR database identified several historic wells in the general vicinity of the subject site. No wells were identified on the subject site, and information regarding other wells in the area did not provide enough information regarding the direction of groundwater flow. Information from the well searches performed by EDR can be viewed in **Appendix F-2**.

Carnow Conibear searched the IEPA Bureau of Land (BOL) online database for groundwater ordinances in the City of Chicago. An ordinance was enacted in May of 1997 restricting the installation and use of potable water wells within the City limits. This ordinance is accepted by the IEPA as an environmental institutional control pursuant to Title 35 Illinois Administrative Code Part 742 (35 IAC 742).

Two (2) primary aquifers are present in the Chicago metropolitan region. These aquifers are the shallow dolomite aquifer (which includes the bedrock strata directly underlying the unconsolidated glacial sediments) and the deep Cambrian-Ordovician Aquifer (which predominately consists of sandstone) and is isolated from the shallow dolomite aquifer by up to 250 feet of shale. Discontinuous glacial aquifers are also present in the Chicago region in the form of lacustrine sands (Dolton Member of the Equality Formation) and outwash sand and gravel of the Henry and Wedron Formations (Willman, 1971).

5.4 Historical Use Information

5.4.1 Historical Aerial Photographs

Historical aerial photographs for the subject site and surrounding areas were reviewed for the years 1938, 1952, 1962, 1964, 1974, 1988, 1993, 1998, 2005, 2007, 2009, 2010, 2011, and 2012. Carnow Conibear reviewed the photographs in an effort to determine former site usage and identify potential environmental concerns. The Aerial Photo Decade Package provided by EDR can be viewed in **Appendix G-1**.

Review of the historical aerial indicated that the subject site was agricultural land in 1938. By 1952, residential Blocks 1 through 13 and other assorted buildings pertaining to Altgeld Gardens had been developed. Vacant land is depicted to the north, beyond which is E. 130th Street; vacant land and Beaubien Forest Preserve to the east, beyond which are railroad tracks; vacant land to the south, beyond which is the Little Calumet River; and residential Blocks 9 and 10 of Altgeld Gardens to the west. The 1962 photograph depicts the development of residential Block 15 of Altgeld Gardens immediately southwest of the subject site. Two roads have been added north of the subject site and the church building has been developed west of Block 11. There are no significant changes until 1975 when a road is depicted east of Blocks 11 and 13 of the subject site and E. 132nd Street has been extended further east. The 1998 photograph depicts the development of the clinic building and associated parking lot on the north adjacent property. By 2007, the electrical building had been developed on the east central portion of Block 11 of the subject site. There were no other significant changes to the subsequent aerial photographs.

5.4.2 Sanborn Fire Insurance Maps

Carnow Conibear retained EDR to provide Sanborn Fire insurance Maps for the subject site and surrounding area. The EDR Sanborn Library includes more than 1.2 million Sanborn maps from the Library of Congress, University Publications of America, and a private collection. Sanborn Map coverage was available for review for the years 1975, 1987, 1989, 1992, 2002, and 2004. The Sanborn Report supplied by EDR can be viewed in **Appendix G-2**.

1975	The subject site consists of 26 two-story residential building and parking lots.	• North adjacent property – E. 130th Place, beyond which is vacant land. • East adjacent properties – Vacant land and Beaubien Forest Preserve, beyond which are railroad tracks. • South adjacent property – E. 133rd Street ,

		beyond which is a playground. • West adjacent properties – S. Greenwood Avenue, beyond which are several residential buildings associated with Altgeld Gardens Apartments and the United Church.
1987	The 1987 Sanborn map reveals no significant changes to the subject site as compared to the 1975 map.	• North adjacent property – No significant changes. • East adjacent properties – No significant changes. • South adjacent property – No significant changes. • West adjacent properties – No significant changes.
1989	The 1989 Sanborn map reveals no significant changes to the subject site as compared to the 1987 map.	• North adjacent property – No significant changes. • East adjacent properties – No significant changes. • South adjacent properties – No significant changes. • West adjacent properties – No significant changes.
1992	The subject site is not depicted on the 1992 map.	• North adjacent property – No significant changes. • East adjacent properties – No significant changes. • South adjacent properties – No significant changes. • West adjacent properties – No significant changes.
2002	The 2002 Sanborn map reveals no significant changes to the subject site as compared to the 1989 map.	• North adjacent property – A public building has been developed beyond E. 130th Place. • East adjacent properties – No significant changes. • South adjacent properties – No significant changes. • West adjacent properties – No significant changes.
2004	The 2004 Sanborn map reveals no significant changes to the subject site as compared to the 2002 map.	• North adjacent property – No significant changes. • East adjacent properties – No significant changes. • South adjacent property – No significant changes • West adjacent properties – No significant changes.

Review of the Sanborn maps indicates that the subject site has been utilized for residential purposes since at least 1975.

6.0 Site Reconnaissance

6.1 Methodology & Limiting Conditions

A visual inspection of the subject site was conducted on May 28, 2014 by Ms. Nohemi Melero and Mr. Paul Waite P. E. of Carnow Conibear and Mr. John Fenn of JHF Consulting, Inc. Mr. Lloyd Sims, Assistant Head General at East Lake Management Group, Inc., provided access to the subject site buildings during the inspection. Conditions during the visit were favorable with dry sunny weather. Photographs taken at the subject site can be viewed in **Appendix C**.

6.2 General Site Setting

The subject site is located in a residential area of Chicago, Illinois. **Appendix B** depicts the Site Plan and adjacent properties.

6.3 Exterior Observations

The subject site consists of 26 two-story brick buildings, an electrical building, parking lots, sidewalks, and landscape areas. Each residential building had a mechanical room at one end with boilers, a water tank, and a water heater.

Four of the residential buildings on the subject site had former incinerators attached to the end of the building. According to Mr. Lloyd Sims, Assistant Head General with Eastlake Management Group, the incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's, when garbage burning was banned. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a REC to the subject site.

Exterior Site Observations	
Lot Size	~ 17.3 acres
Shape of Parcel(s)	Irregular
Buildings on Site	Twenty six residential buildings, one electrical building.
Exterior Improvements	No
Pools of Liquid	Yes, basements and crawl spaces were flooded. A water line break in unit 1110 E. 131st St. flooded the landscape area in front of the unit.
Drums, Hazardous Material or Petroleum/Unidentified Substance Containers	No
Stained Soil or Pavement	Block 11 – Stained transformer concrete pad
Stressed Vegetation	No
Wells	No
Solid Waste or Fill Material	No
Pits, Ponds, Lagoons, Surface Water, Waste Water	No
Septic Systems	No
Railroad Tracks	No

Pipeline(s)	No
Incinerators	4 Incinerators: Block 11 – 1113-1135 E. 130th Pl. - Removed Block 11 – 1108-1130 E. 130th St. Block 12 – 1109-1131 E. 132nd St. Block 13 – 1101-1123 E. 131st St.

6.4 Interior Observations

The subject site buildings consist of a twenty six two-story multi-residential brick buildings which are currently vacant. Carnow Conibear inspected one residential unit from each of the subject site multi-unit buildings, with the exception of building 1133-1143 E. 132nd St., which had a prototype unit consisting of three regular units. The ground floors consist of living rooms and kitchen areas. The second floors consist of bedrooms, restrooms, and closets. Peeling paint was observed in the majority of the units inspected. There are crawl spaces under the ground level flooring in all of the residential buildings, except the three buildings which have basements. Heating was provided by steam radiators heated by natural gas boilers located in the building with basements. The electrical building housed transformers and switchgears.

Number of Floors in Buildings	Residential Building – 2 floors Electrical building – 1 floor
Units Inspected	**Block 11:** 13033 S. Greenwood Avenue 13077 S. Greenwood Avenue 1105 E. 130th Place 1135 E. 130th Place 1137 E. 130th Place 1171 E. 130th Place 1106 E. 131st Street 1130 E. 131st Street 1132 E. 131st Street 1166 E. 131st Street **Block 12:** 13201 S. Greenwood Avenue 13263 S. Greenwood Avenue 1101 E. 132nd Street 1129 E. 132nd Street 1133-37 E. 132nd Street 1165 E. 132nd Street 1106 E. 133rd Street 1108 E. 133rd Street 1136 E. 133rd Street 1166 E. 133rd Street **Block 13:** 13103 S. Greenwood Avenue 1123 E. 131st Street 1131 E. 131st Street 1122 E. 132nd Street 1128 E. 132nd Street 1136 E. 132nd Street
Basement	3 Basements:

Site Observations	
	Block 11 – 1132-1142 E. 131st St. Block 12 – 1133-1143 E. 132nd St. Block 13 – 1124-1134 E. 132nd St.
Pools of Liquid	None
Drums, Hazardous Material or Petroleum/Unidentified Substance Containers	None
Building Heating Type	Natural gas, Boiler/Radiators
Building Cooling Type	None
Pits, Waste Water	None
Sumps	Yes, 2 sumps in each building with a basement.

6.5 Hazardous Substances and/or Chemical Storage

On May 19, 1980, the U.S. Environmental Protection Agency (EPA) published, in the Federal Register, the first phase of the Resource Conservation and Recovery Act (RCRA), 1980 RCRA Laws. RCRA defines a hazardous waste as a solid waste that may cause or significantly contribute to serious illness or death, or that poses a substantial threat to human health or the environment when improperly managed.

The storage of hazardous substances or chemicals was not observed on the subject site at the time of the site inspection.

6.6 Above Ground & Underground Storage Tanks & Pipelines

6.6.1 On-Site

No evidence of the presence of UST, ASTs, or pipelines was observed on the subject site.

6.6.2 Adjacent Properties

No evidence of the presence of UST, ASTs, or pipelines was observed on the immediately adjacent portions of the bordering properties from publicly accessible vantage points.

6.7 Suspected Polychlorinated Biphenyls (PCB)-Containing Equipment

The Toxic Substance Control Act (TSCA) of 1976 mandates the regulation of toxic substances known as polychlorinated biphenyls (PCBs), a chemical component of many dielectric fluids, heat transfer fluids, hydraulic fluids, and lubricating oils. Equipment that may potentially contain PCBs includes electrical equipment such as transformers or capacitors, or hydraulically operated equipment, such as elevators, compaction equipment, or manufacturing equipment. Regulations promulgated under TSCA require that transformers containing PCBs be marked as such. A PCB Ban Rule was enacted in 1979 to eliminate the use of PCBs altogether. The owner of the transformer or other PCB-containing equipment is responsible for equipment maintenance and remediation in the event of a leak or release.

Three pad-mounted transformers were observed on the subject site during the site visit. The transformer in Block 11 had visible signs of staining on the concrete pad. The transformers in Blocks 12 and 13 appeared to be in good condition with no visible signs of leakage. According

to Mr. Lloyd Sims with Eastlake Management, the CHA had replaced PCB-containing transformers in Altgeld Gardens between 2001 and 2003. If the transformer in Block 11 is removed, best management practices should be followed to make sure that the stained concrete pad is not contaminated before it is removed.

7.0 Interviews

7.1 Interview with Site Owner/Manager

Mr. Lloyd Sims, Assistant Head General with Eastlake Management Group, was interviewed on May 28, 2014 during the site inspection. Mr. Sims indicated that he did not know of any USTs, ASTs, environmental liens associated with the subject site. Mr. Sims indicated that improvements were made to the subject site units as the units became vacated by residents. There is no hydraulic equipment on the subject site. There are no thermostats in the residential units. Heat was regulated from the basement. According to Mr. Sims, there is one transformer in each Block. The PCB-containing transformers were removed between 2001 and 2003.

Mr. Sims stated that the incinerators located on the subject site were used to burn garbage and that their use was terminated in the 1970's when garbage burning was banned. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a REC to the subject site.

7.2 Interviews with Occupants

The subject site buildings are currently vacant.

7.3 Interview with Phase I ESA User

A User Questionnaire was completed by Mr. Michael R. Merchant, CEO of the CHA. Information obtained from the User Questionnaire is summarized in **Section 4.0**. The User Questionnaire can be reviewed in **Appendix D**.

8.0 Findings & Opinions

Based on the findings of this Phase I Environmental Site Assessment, within the scope of this investigation and pursuant to the requirements of ASTM Standard Practice E 1527-13, the following findings are presented below:

8.1 General Findings

- The subject site is located in a residential area of Chicago, Illinois.

- According to historical sources accessed during this assessment, the subject site was agricultural land in 1938. By 1945, the subject site was developed with 26 residential buildings, sidewalks, and landscape areas. The electrical building was added to Block 11 of the subject site by 2007. The subject site has remained relatively unchanged to this time.

- Four of the buildings within the subject site have attached incinerators. The incinerators were used to burn garbage from the 1940's until the 1970's, when garbage burning was banned.

- In 1996 and 2000, soil samples were collected from the subject site and analyzed for pesticides. One soil sample from Block 12 contained concentrations of pesticides that exceeded the SROs promulgated in 35 IAC 742 TACO. The Illinois Department of Public Health reviewed the sampling data and prepared the February 16, 2001 Health Consultation letter. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil.

- In 2009, additional soil samples were collected from the subject site. Twenty-four of 122 soil samples contained PNAs and/or arsenic that exceeded the SROs promulgated in 35 IAC 742 TACO.

- During the visual inspection of the subject site, the basement and crawl space areas were inaccessible due to flooding. Carnow Conibear was unable to inspect the mechanical equipment located in the basement areas.

8.2 Recognized Environmental Conditions

The ASTM standard defines a REC as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. This assessment has revealed no evidence of RECs in connection with the subject site, except for the following:

- Four incinerators were observed on the subject site. The incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's. The burning of garbage in the incinerators over that period could contribute contamination from ash,

spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a REC to the subject site.

8.3 Controlled Recognized Environmental Conditions

The ASTM standard defines a Controlled REC as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. This investigation did not find any Controlled RECs in connection with the subject site.

8.4 Historical Recognized Environmental Conditions

The ASTM standard defines a Historical REC as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. This investigation found no Historical RECs in connection with the subject site.

8.5 De Minimis Conditions

The following were found to be *de minimis* conditions, defined as conditions that are not RECs and generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies, as defined in Section 3.2.22 of ASTM E1527-13:

- In 1996 and 2000, soil samples were collected from the subject site and analyzed for pesticides. One soil sample from Block 12 contained concentrations of pesticides that exceeded the SROs promulgated in 35 IAC 742 TACO. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil. Therefore, the concentrations of pesticides detected in the 1996 and 2000 sampling events in Blocks 11, 12, and 13 can be considered a de minimis condition to the subject site. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

- In 2009, additional soil samples were collected from the subject site. Twenty-four of 122 soil samples contained PNAs and/or arsenic that exceeded the SROs promulgated in 35 IAC 742. Carnow Conibear performed a 95% Upper Confidence Limit (UCL) evaluation of the data pursuant to 35 IAC 742.225(d) and (e). The results of this analysis indicate that each 95% UCL concentration is below the corresponding applicable Tier 1 residential ingestion SRO (or median background concentration) for each respective analyte. Therefore, the concentrations of PNAs and arsenic detected in the July 2009 GSG sampling event can be considered a de minimis condition to the subject site. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

8.6 Business Risks

A business environmental risk refers to a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated as a part of ASTM 1527. This investigation found no business risks in connection with the subject site.

8.7 Data Gaps

When conducting a Phase I ESA investigation, an environmental professionals' ability to identify RECs is sometimes limited due to data gaps. Data gaps are not inherently significant, but can be substantive to a report if other information and/or professional experience raise reasonable concerns regarding the data gap.

One common type of data gap is data failure – the inability to find sources to adequately identify the historical uses of the subject site. ASTM 1527-13 requires that historical uses of a property be identified in five year intervals back to 1940 or the property's first development, whichever is earlier, as long as the information is reasonably ascertainable. If specific use of the property appears unchanged over a period of longer than five years, then research of the use of the property during intervening years is not required.

This investigation has identified sources of information from 1938, 1952, 1962, 1964, 1974, 1975, 1987, 1988, 1992, 1993, 1998, 2002, 2004, 2005, 2007, 2009, 2010, and 2011. Historical information suggests that the subject site had been agricultural land in 1938. By 1945, the subject site was developed with 26 residential buildings, sidewalks, and landscape areas. The electrical building was added to the subject site by 2007. The subject site has remained relatively unaltered since this time.

Carnow Conibear believes based on professional experience, adequate historical information on the subject site was obtained, and the data failure does not represent a significant data gap to the study.

9.0 Conclusions

Carnow Conibear has performed a Phase I Environmental Site Assessment, in conformance with the scope and limitations of the current ASTM Practice E 1527, of the property associated with Blocks 11, 12, and 13 of the Altgeld Gardens housing project located at the northeast corner of South Greenwood Avenue and 133rd Street in Chicago, Illinois (subject site). Any exceptions to, or deletions from, the practice are described in **Section 2.4** of this report. This assessment has revealed no evidence of RECs in connection with the subject site, except for the following:

- Four incinerators were observed on the subject site. The incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a REC to the subject site.

The following were found to be *de minimis* conditions, defined as conditions that are not RECs and generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies:

- In 1996 and 2000, soil samples were collected from the subject site and analyzed for pesticides. One soil sample from Block 12 contained concentrations of pesticides that exceeded the SROs promulgated in 35 IAC 742 TACO. The IDPH concluded that no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil. Therefore, the concentrations of pesticides detected in the 1996 and 2000 sampling events in Blocks 11, 12, and 13 can be considered a de minimis condition to the subject site. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly.

- In 2009, additional soil samples were collected from the subject site. Twenty-four of 122 soil samples contained PNAs and/or arsenic that exceeded the SROs promulgated in 35 IAC 742. Carnow Conibear performed a 95% Upper Confidence Limit (UCL) evaluation of the data pursuant to 35 IAC 742.225(d) and (e). The results of this analysis indicate that each 95% UCL concentration is below the corresponding applicable Tier 1 residential ingestion SRO (or median background concentration) for each respective analyte. Therefore, the concentrations of PNAs and arsenic detected in the July 2009 GSG sampling event can be considered a de minimis condition to the subject site. If soil is excavated from the areas where concentrations exceeded SROs, the soil should be handled and/or disposed of properly. USEPA recommended that CHA reduce residents' contact with PAH contaminated soils, including establishing groundcover, placing wood chips, and planting grass.

With respect to the ASTM standard, there were limitations associated with this Phase I ESA. Limitations included:

- Due to flooding, the basement and crawl space areas of the subject site were inaccessible at the time of site inspection.

Carnow Conibear has applied prevailing industry standards and reasonable judgment and effort within the scope of work outlined in Carnow Conibear's proposal, while conducting the Phase I ESA. The standards, judgment, and effort used by Carnow Conibear personnel to investigate, assess, and determine the presence of potential environmental hazards and liabilities associated with the site are consistent with the requirements outlined in the current ASTM Standards No. E1527. Carnow Conibear makes no warranty, express or implied, that the findings and interpretations in this report are a complete representation of the environmental hazards and liabilities, associated with the site. There may be unrecorded information or documentation from previous owners or tenants that is unattainable and may be proprietary, legally protected, or unavailable through government regulatory services.

10.0 Deviations

Carnow Conibear has performed a Phase I Environmental Site Assessment, in conformance with the scope and limitations of the current ASTM Practice E 1527, of the property associated with Blocks 11, 12, and 13 of the Altgeld Gardens housing project located at the northeast corner of South Greenwood Avenue and 133rd Street in Chicago, Illinois (the subject site). Any exceptions to, or deletions from, the practice are described in **Section 2.4** of this report. No other significant deviations are noted with this report.

11.0 References

Referenced Documents

1. ASTM Standard E 1527-13, 2013. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM International, West Conshohocken, PA.

2. *Resource Conservation and Recovery Act.* April 14, 2006. Environmental Protection Agency. < http://www.epa.gov/region5/defs/html/rcra.htm>

3. *Toxic Substance Control Act.* April 14, 2006. Environmental Protection Agency. http://www.epa.gov./region5/defs/html/tsca.htm

4. Office of the State Fire Marshal UST Inquiry page. http://webapps.sfm.illinois.gov.ustsearch

5. U.S. Environmental Protection Agency EnviroMapper for EnviroFacts page. http://www.epa.gov/enviro/emef/

6. *Underground Storage Tank System, Illinois Facility List.* Office of the Illinois State Fire Marshall. Springfield, Illinois. April 21, 2014. <http://webapps.sfm.illinois.gov/ustsearch/>.

7. *CDPH Environmental Records Lookup Table*. Chicago Department of Public Health. Chicago, Illinois. June 12, 2014. < https://data.cityofchicago.org/Environment-Sustainable-Development/CDPH-Environmental-Records-Lookup-Table >

8. Willman, H.B. 1971. Summary of the Geology of the Chicago Area, Illinois State Geological Survey, Champaign, IL.

9. *Lake Calumet, Illinois* [map]. 1:24,000. 15 Minute Series. 1997. U.S. Geological Survey. Washington D.C.

10. Berg, Richard C., Kempton, John C., and Cartwright, Keros. 1984 Potential for Contamination of Shallow Aquifers in Illinois, Illinois State Geological Survey, Champaign, IL.

11. Federal Emergency Management Agency Map Center page. http://www.msc.fema.gov/

12. Illinois Emergency Management Agency Hazardous Materials Incident Reports page. http://www.state.il.us/iema/FOIA.asp

Additional documents provided by the client were reviewed and discussed in Section 4.8.

12.0 Signature & Qualifications of the Environmental Professional

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312,

and,

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Paul Waite, P. E.
Senior Project Manager

APPENDICES

Appendix A Site Location Map

Appendix B Detailed Site Map

Appendix C Site Photographs

Appendix D Interview Documentation

Appendix E Previous Environmental Reports

Appendix F Regulatory Records Documentation
- F-1 – *FOIA Correspondence & Database Search Results*
- F-2 – *Environmental Database Report*

Appendix G Historical Research Documentation
- G-1 – *Aerial Photo Decade Package*
- G-2 – *Sanborn Map Report*

Appendix H Qualifications of the Environmental Professionals

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Appendix A

Site Location Map

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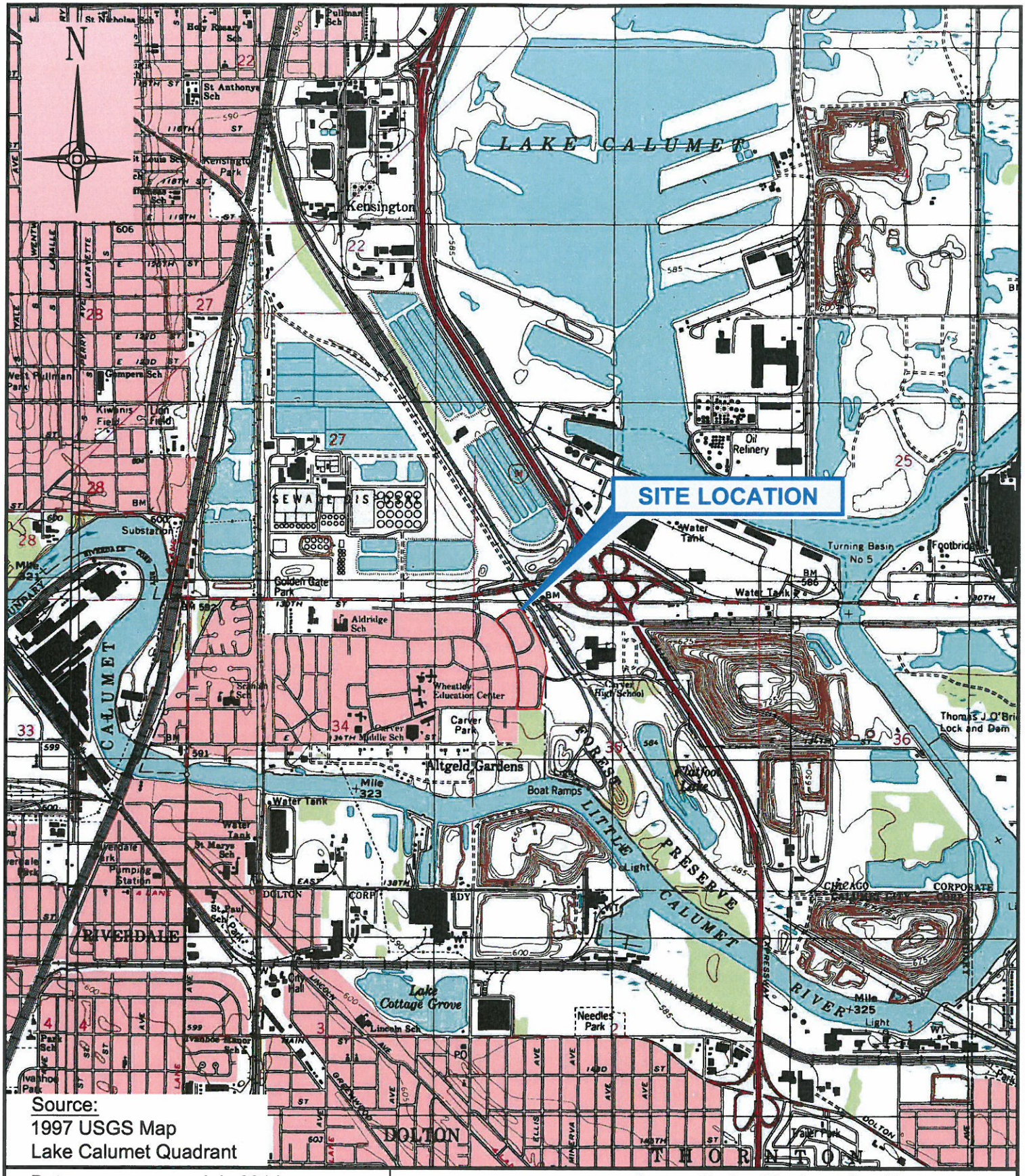

Source:
1997 USGS Map
Lake Calumet Quadrant

Date:	July 2014
Scale:	1"=1,500'
Drawn by:	NM
Checked by:	PW

Appendix A: Site Location Map
Altgeld Gardens - Blocks 11, 12, & 13
NE Corner of S. Greenwood Ave. & E. 133rd St.
Chicago, Illinois 60827

Your Environmental Resource
T:\Chicago Housing Authority (CHA) \Environmental Consulting - Task Order 24\Altgeld\Altgeld__Blocks7,8,11,12,13,15__PhaseIESAa\Drawings\ChicagoReferenceMap.dwg

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com
CARNOW CONIBEAR

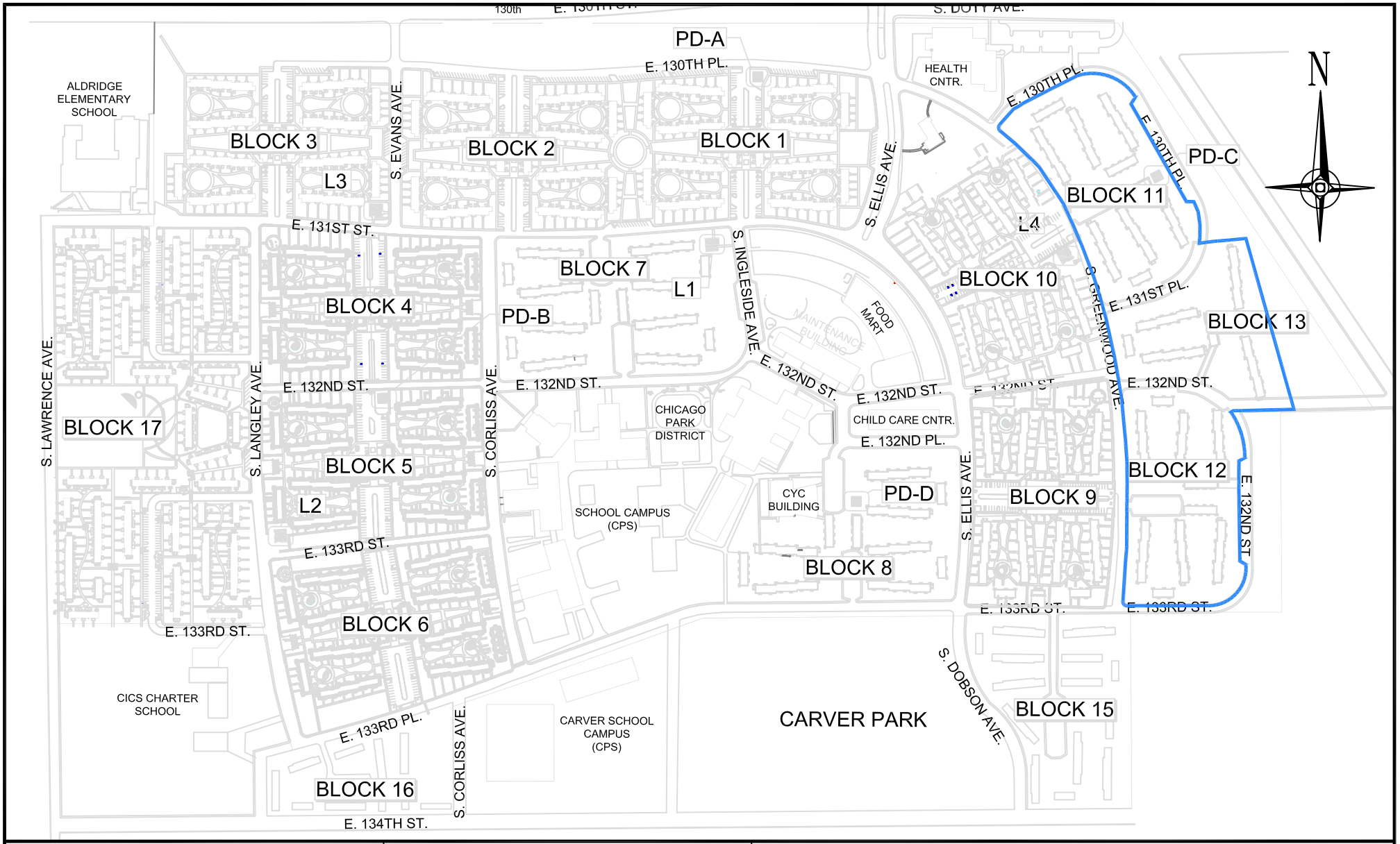

Date:	July 2014
Scale:	1"=400'
Drawn by:	KF
Checked by:	PW

LEGEND

Subject Site Boundary

Appendix A: Site Plan

Altgeld Gardens - Blocks 11, 12 & 13

NE Corner of Greenwood Avenue &133rd Street

Chicago, Illinois 6082

Your Environmental Resource

T:\Chicago Housing Authority (CHA) \Environmental Consulting - Task Order 24\Altgeld\Altgeld_Blocks7,8,11,12,13,15_PhaseIESAa\Drawings\Exhibits.dwg

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Appendix B

Detailed Site Map

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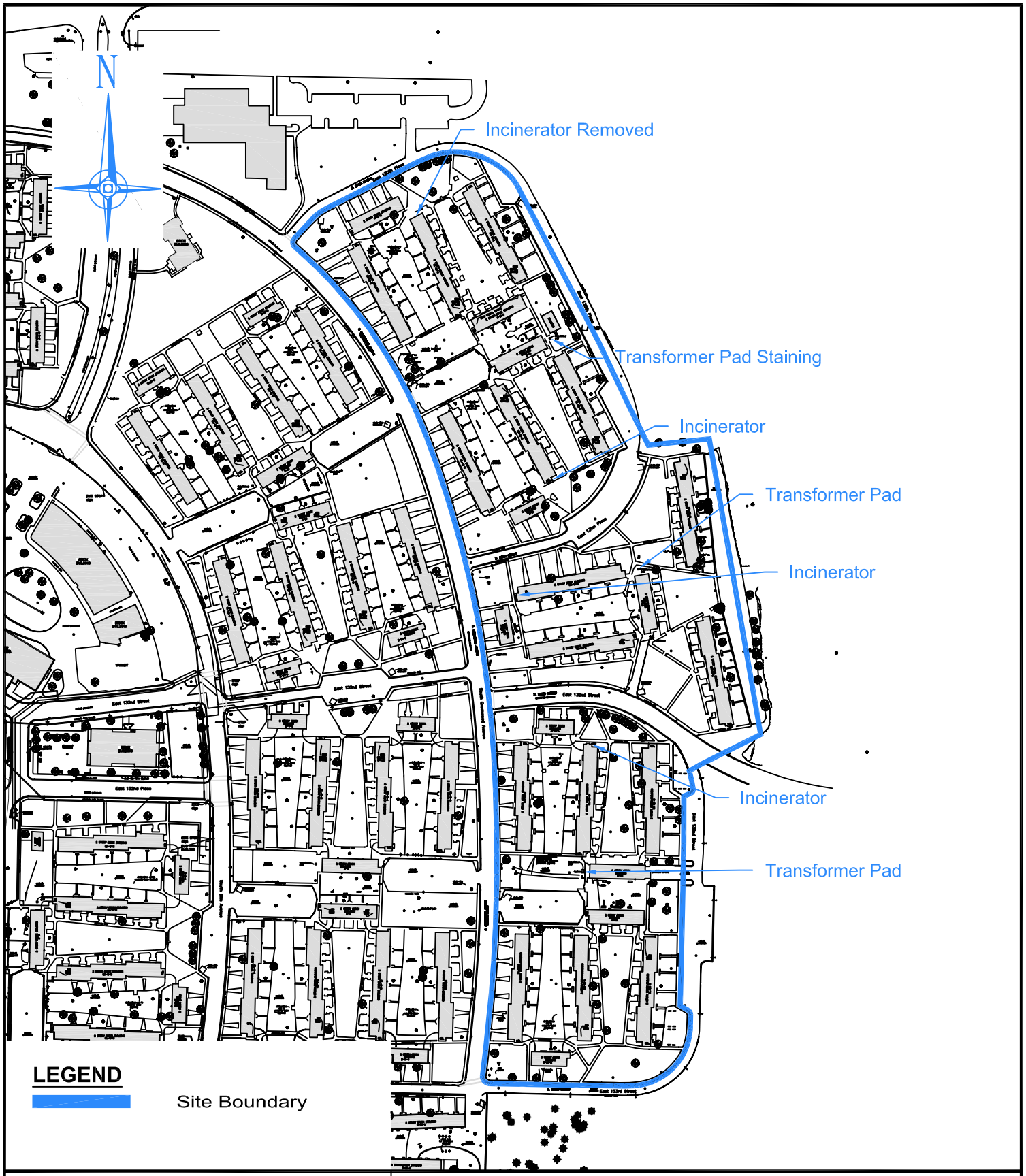

Date:	July 2014
Scale:	1"= 250'
Drawn by:	NM
Checked by:	PW

Appendix B: Detailed Site Plan
Altgeld Gardens - Blocks 11, 12 & 13
NE Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

Your Environmental Resource

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Appendix C

Site Photographs

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1: View of a typical 12 unit residential building in Block 11 of the subject site.

2: View of a typical mechanical room located at the end of a residential building.

3: View of a typical incinerator located at the end of select residential buildings.

4: View of the area of the former incinerator located at 1113 - 1135 W. 130th Place.

Photo Date:	May 28, 2014	**Appendix C: Site Photographs**
Created by:	NM	Altgeld Gardens - Blocks 11, 12 & 13
Checked by:	PW	NE Corner of Greenwood Avenue & 133rd Street
Page:	1 of 3	Chicago, Illinois 60827

Your Environmental Resource

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5: View of a typical flooded basement stairway observed throughout the subject site.

6: View of the stained transformer observed near the electrical building in Block 11 of the subject site.

7: View of the electrical building located in Block 11 of the subject site.

8: View of the electrical panels observed in the electrical building in Block 11.

Photo Date:	May 28, 2014	**Appendix C: Site Photographs**
Created by:	NM	Altgeld Gardens - Blocks 11, 12 & 13
Checked by:	PW	NE Corner of Greenwood Avenue & 133rd Street
Page:	2 of 3	Chicago, Illinois 60827

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9: View of the interior of a typical residential unit on the subject site.

10: View of the typical equipment observed in the mechanical rooms on the subject site.

11: View of a flooded crawl space.

12: View of flooding from water main break in unit 1110 W. 131st Street in Block 11 of the subject site.

Photo Date:	May 28, 2014	**Appendix C: Site Photographs**
Created by:	NM	Altgeld Gardens - Blocks 11, 12 & 13
Checked by:	PW	NE Corner of Greenwood Avenue & 133rd Street
Page:	3 of 3	Chicago, Illinois 60827

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Appendix D

Interview Documentation

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Phase I Environmental Site Assessment User Questionnaire

ASTM Standard E1527-13 requires the user of the Environmental Site Assessment to complete the following questionnaire. The questions should be answered to the best of your actual knowledge. Please explain all answers thoroughly, utilizing extra paper as needed.

Property Name & Address: Altgeld Gardens – Blocks 7, 8, 11, 12, &13
E. 131st St. and S. Ingleside Ave., Chicago, IL

(1) What is the reason for conducting this Phase I ESA? (ASTM 1527-13, 6.8)
If no answer is provided, CCA will assume the purpose of the Phase I ESA is to qualify for an LLP to CERCLA liability and will state this in the report.

(2) Do you know of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property? (ASTM 1527-13, 10.9)

No

(3) Do you know of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property? (ASTM 1527-13, 10.9)

No

(4) Do you know of any notices from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? (ASTM 1527-13, 10.9)

No

(5) Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).
Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law?

No

(6) Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).
Are you aware of any AULs[1], such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

No

(7) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).
As the *user* of this *ESA* do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

No

(8) Relationship of the purchase price to the fair market value of the *property* if it were not contaminated (40 CFR 312.29).
Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

An evaluation of the purchase price has not been made

(9) Commonly known or *reasonably ascertainable* information about the *property* (40 CFR 312.30).
Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,

(a.)Do you know the past uses of the *property*?

Farming followed by residential

(b.)Do you know of specific chemicals that are present or once were present at the *property*?

No

(c.)Do you know of spills or other chemical releases that have taken place at the *property*?

PCB spill in 1996

(d.)Do you know of any environmental cleanups that have taken place at the *property*?

PCB clean up, USEPA completion letter dated 9/11/2000

(e.)Do you know of any environmental assessments that have taken place at the *property*? If so, please attach copies of the assessment or cleanup reports.

Several USEPA assessments from 8/6/97 to 11/15/2000, reports have been sent on cd

(10) The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).
As the *user* of this *ESA*, based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?

No

I have completed the preceding questions in good faith and to the extent of my actual knowledge.

User Name: Michael R. Merchant
Please Print

User Signature: Michael R Merchant 7/18/19
Please Sign Date

---

[1] *As defined in 3.2.2 of ASTM Standard E 1527-13, an AUL stands for activity and use limitations – legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and/or surface water on the property, or (2)to prevent activities that could interfere with the effectiveness of a response action in order to ensure maintenance of a condition of no significant risk to public heath or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls, are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil, soil vapor, groundwater, and/or surface water on the property.*

Appendix E

Previous Environmental Reports

CARNOW CONIBEAR

US EPA RECORDS CENTER REGION 5
411887

TS-PIC-9605510R
August 1996

AERIAL PHOTOGRAPHIC ANALYSIS
ALTGELD GARDENS

Chicago, Illinois

by

G. I. Martucci
Environmental Services Division
Lockheed Environmental Systems & Technologies Co.
Las Vegas, Nevada 89119

Contract No. 68-C5-0065

Work Assignment Manager

J. L. Bozik
Monitoring Sciences Branch
Characterization Research Division
Las Vegas, Nevada 89193-3478

CHARACTERIZATION RESEARCH DIVISION
NATIONAL EXPOSURE RESEARCH LABORATORY
OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY
LAS VEGAS, NEVADA 89193-3478

ABSTRACT

This report presents findings of an analysis of historical aerial photography spanning the period 1938 to 1976. The analysis was performed for the study area known as the Pullman Sewage Farm and the community of Altgeld Gardens in Chicago, Illinois. It consists of approximately 400 acres bordered on the north by 130th Street, on the east by the Calumet Expressway, on the south by the Little Calumet River, and on the west by Indiana Avenue. The collateral information supplied by Region 5 reports that the Pullman Sewage Farm facility had been used as a site for the deposition of liquid wastes from 1881 to 1907. This analysis was requested by Region 5 to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built.

Findings from the analysis indicate that the results of filling activity were observed in 1959 in the northeast quadrant of the Pullman site and later filling was observed in progress in 1967 during the construction of Housing Development 4. The material used for filling could not be identified; it appeared to be light-toned, but it could not be determined what the nature of the material was or if any wastes were incorporated into this material. No evidence of the effluent ditch, referred to in the collateral information, was identified in the period of analysis.

The U.S. Environmental Protection Agency's Characterization Research Division's Monitoring Sciences Branch in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 5 in Chicago, Illinois, and the Office of Emergency and Remedial Response in Washington, D.C.

CONTENTS

Page

Abstract iii

Introduction 1

Methodology 2

Photo Analysis 4

FIGURES

Number

1 Study area location map, Illinois vi

2 Local study area location map, Lake Calumet, Illinois vii

3 Altgeld Gardens, November 14, 1938 5

4 Altgeld Gardens, March 29, 1952 7

5 Altgeld Gardens, September 3, 1959 9

6 Altgeld Gardens, August 28, 1967 11

7 Altgeld Gardens, April 23, 1973 13

TABLE

1 Documentation of Aerial Photography 3

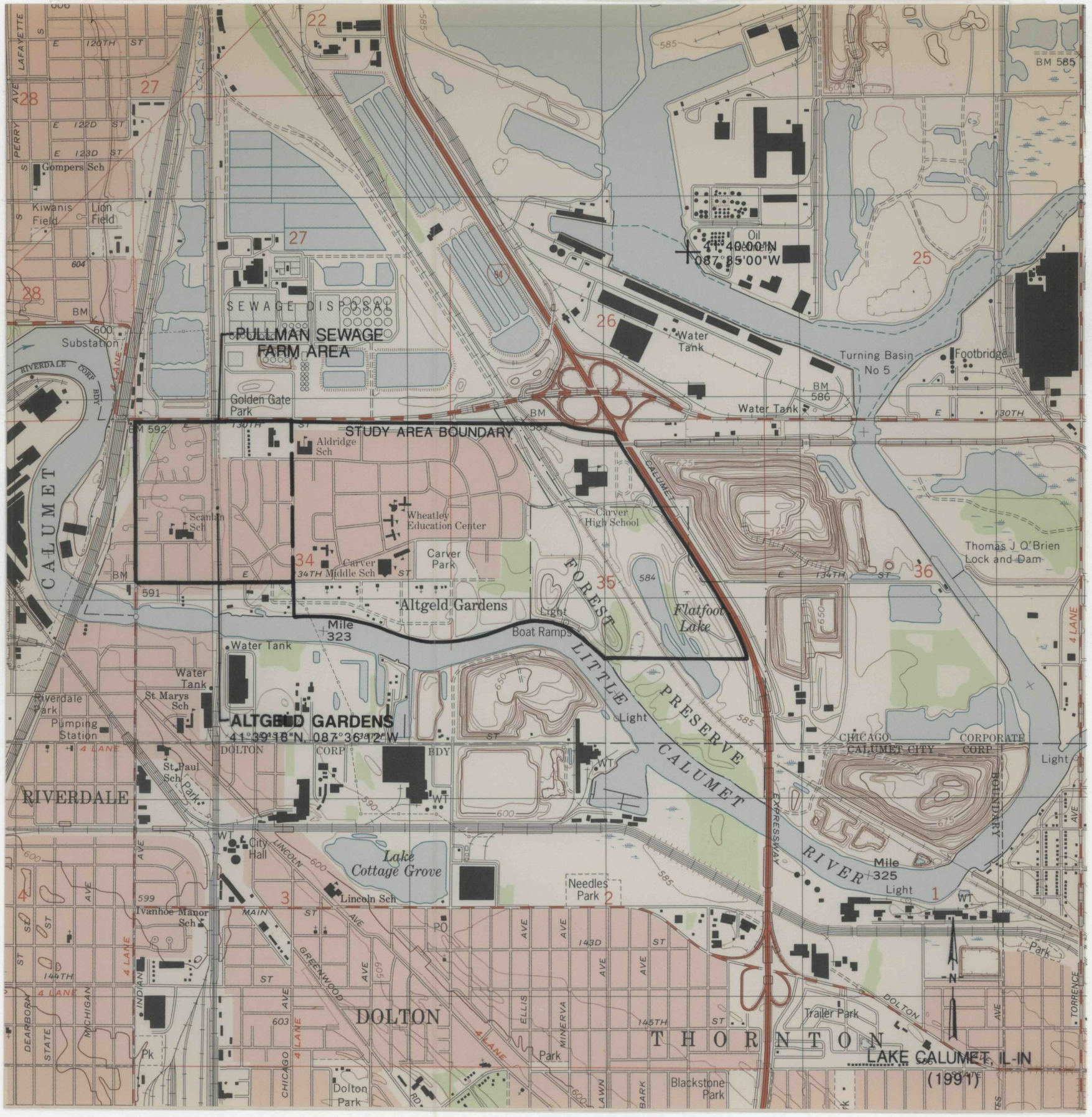

Figure 2. Local study area location map, Lake Calumet, Illinois. Scale 1:24,000.

INTRODUCTION

This report presents findings of an analysis of historical aerial photography spanning the period 1938 to 1976. The analysis was performed for the study area known as the Pullman Sewage Farm and the community of Altgeld Gardens in Chicago, Illinois. The study area consists of approximately 400 acres bordered on the north by 130th Street, on the east by the Calumet Expressway, on the south by the Little Calumet River, and on the west by Indiana Avenue. This analysis was requested by Region 5 to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built.

The collateral information supplied by Region 5 reports that the Pullman facility had been used as a site for the deposition of liquid wastes from 1881 to 1907. The following is a summary of the Pullman site background information supplied by EPA Region 5: The Pullman Sewage Farm was actively used as a disposal area for municipal waste for a span of sixteen years, from 1881 to 1907. The sludge consisted of municipal sewage and industrial waste associated with a railcar factory. It was transported through subterranean pipes from the town of Pullman in the north to a hydrant located on the farm, from which it was allowed to flow over the soil. Buried in the soil were three- to four-inch farm tiles which provided underdrainage for the filtration process. The untreated effluent flowed to ditches which then carried it to the Little Calumet River. In addition to being used to filter the sewage, the soil was also used by the Pullman Land Association to grow cash crops. Accounts published in 1893 documented eye-witness reports of the discharging of "crude sewage" into the Lake even prior to 1887. "The sewage was being run in a large open ditch...from near the farm to the lake [Calumet]". Reportedly this procedure was done to protect the cash crops being grown on the Pullman Sewage Farm.

The U.S. Environmental Protection Agency's Characterization Research Division's Monitoring Sciences Branch in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 5 in Chicago, Illinois, and the Office of Emergency and Remedial Response in Washington, D.C.

METHODOLOGY

Stereoscopic pairs of historical aerial photographs were used to perform the analysis. Stereo viewing enhances the interpretation because it allows the analyst to observe the vertical as well as horizontal spatial relationships of natural and cultural features. Stereoscopy is also an aid in distinguishing between various shapes, tones, textures, and colors that can be found within the study area.

Evidence of waste disposal is a prime consideration when conducting a hazardous waste site analysis. Leachate or seepage resulting from burial and dumping of hazardous materials might threaten existing surface or ground-water resources. Pools of unexplained liquid are routinely noted because they can indicate seepage from buried wastes and may enter drainage channels that allow contaminants to move off the site. An excellent indicator of how well hazardous materials are being handled at a site is the presence or absence of spills, spill stains, and vegetation damage. Trees and other forms of vegetation that exhibit a marked color difference from surrounding members of the same species are labeled "stressed," "damaged," or "dead" based upon the degree of noticeable variation. Vegetation is so labeled only after consideration of the season in which the photography was acquired.

Drainage analysis identifies the direction a spill or surface runoff would follow. Direction of drainage is determined from analysis of the photographs and from U.S. Geological Survey topographic maps. Whenever they are available, 7.5-minute quadrangle maps (scale 1:24,000) are used to show site location and to provide geographic and topographic information. Site boundaries or areas used in this analysis were determined from observations made from aerial photographs in conjunction with collateral data supplied by Region 5 and do not necessarily denote legal property lines or ownership.

Results of the analysis are shown on annotated overlays attached to the photos. The following table provides documentation of the photographs used in this report:

TABLE 1. DOCUMENTATION OF AERIAL PHOTOGRAPHY

Site name, location, geographic coordinates	Figures	Date of acquisition	Original scale	Film type*	Photo source†	Photo I.D.	Frame Number
Altgeld Gardens, Chicago, Illinois	3	11-14-38	1:19,525	B&W	NARA	BWO	31
	4	03-29-52	1:23,590	B&W	USGS	SA	60
	5	09-03-59	1:23,700	B&W	USGS	VZW	80
	6	08-28-67	1:24,447	B&W	USGS	VBTY	138
41°39′18"N 087°36′12"W	7	04-23-73	1:29,960	B&W	USGS	VDCP	80

*Film type identification:
B&W: Black-and-white

†Photo source identification:

NARA: National Archives and Records Services, Washington, DC

USGS: U.S. Department of Interior, U.S. Geological Survey, Washington, DC

PHOTO ANALYSIS

NOVEMBER 14, 1938 (FIGURE 3)

Collateral information indicates that sewage disposal had ceased at the Pullman Sewage Farm in 1907. At this time, in the northwest quadrant of the Pullman Sewage Farm area, the ground appears to be undergoing railway demolition and road construction. At a bend of the Little Calumet River (which lies northwest of the study area) an outfall and dark plume are noted, but the source of the discharge is unknown. At the center of the Pullman Sewage Farm area there is a square lot with a building (Building 1); this lot is a location of a school in 1996. In the northeast quadrant of the Pullman Sewage Farm area the land is cleared and appears to be either turf or under cultivation. In the southeast quadrant of the study area there is a small lot with buildings which appears to be a farmstead (Annotation A). In the southwest quadrant of the Pullman Sewage Farm area a housing development (Housing Development 1) is extant and is comprised of three sections, each section contains approximately twenty structures. No evidence of waste disposal activity is noted.

Figure 3. Altgeld Gardens, November 14, 1938. Approximate scale 1:19,525.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- — — — STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

SITE FEATURES

- DIKE
- STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WV WETLAND VEGETATION

MARCH 29, 1952 (FIGURE 4)

The northwest quadrant of the Pullman Sewage Farm area continues to be disturbed by construction activity. An exposed pipe is visible in this area. Much of the study area appears to be either turf or undergoing cultivation. Outside the northeast perimeter of the Pullman Sewage Farm area, there are drainage depressions leading toward the Pullman Sewage Farm area from the Altgeld Gardens housing development. The buildings denoted by Annotation A appear unchanged. No evidence of waste disposal is noted.

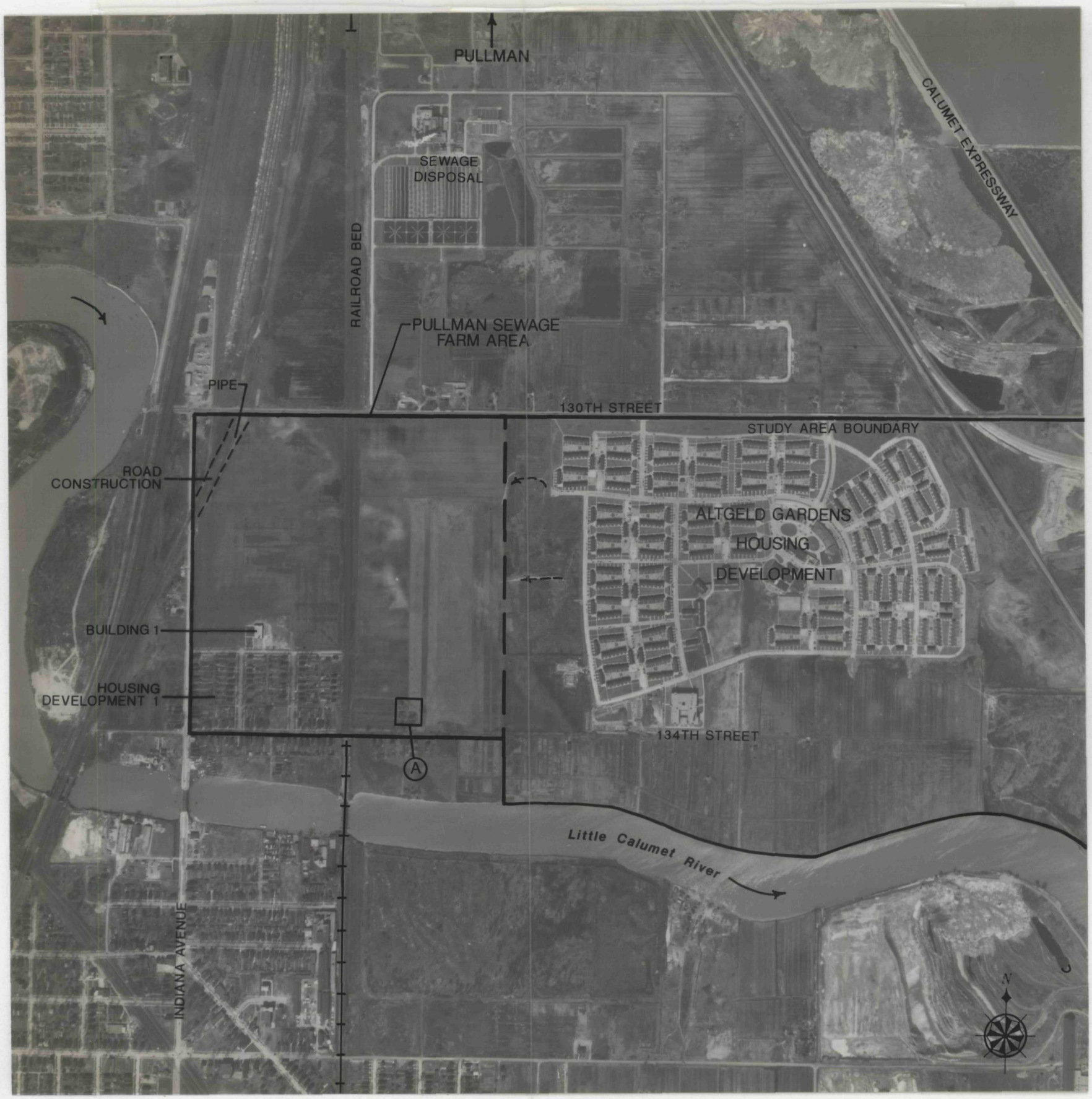

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- FENCE
- STUDY AREA

DRAINAGE

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SITE FEATURES

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Figure 4. Altgeld Gardens, March 29, 1952. Approximate scale 1:10,740.

SEPTEMBER 3, 1959 (FIGURE 5)

Golden Gate Park is under construction across 130th Street from the northwest perimeter of the study area. In the northeast corner of the Pullman Sewage Farm area is a rectangular lot with a complex of buildings; the remaining surface of the lot appears to be smooth fill. A school has been built adjacent to this lot. Lawrence Avenue has been constructed along the eastern perimeter of the Pullman Sewage Farm area. The buildings denoted in previous years by Annotation A are no longer visible. No evidence of waste disposal is noted.

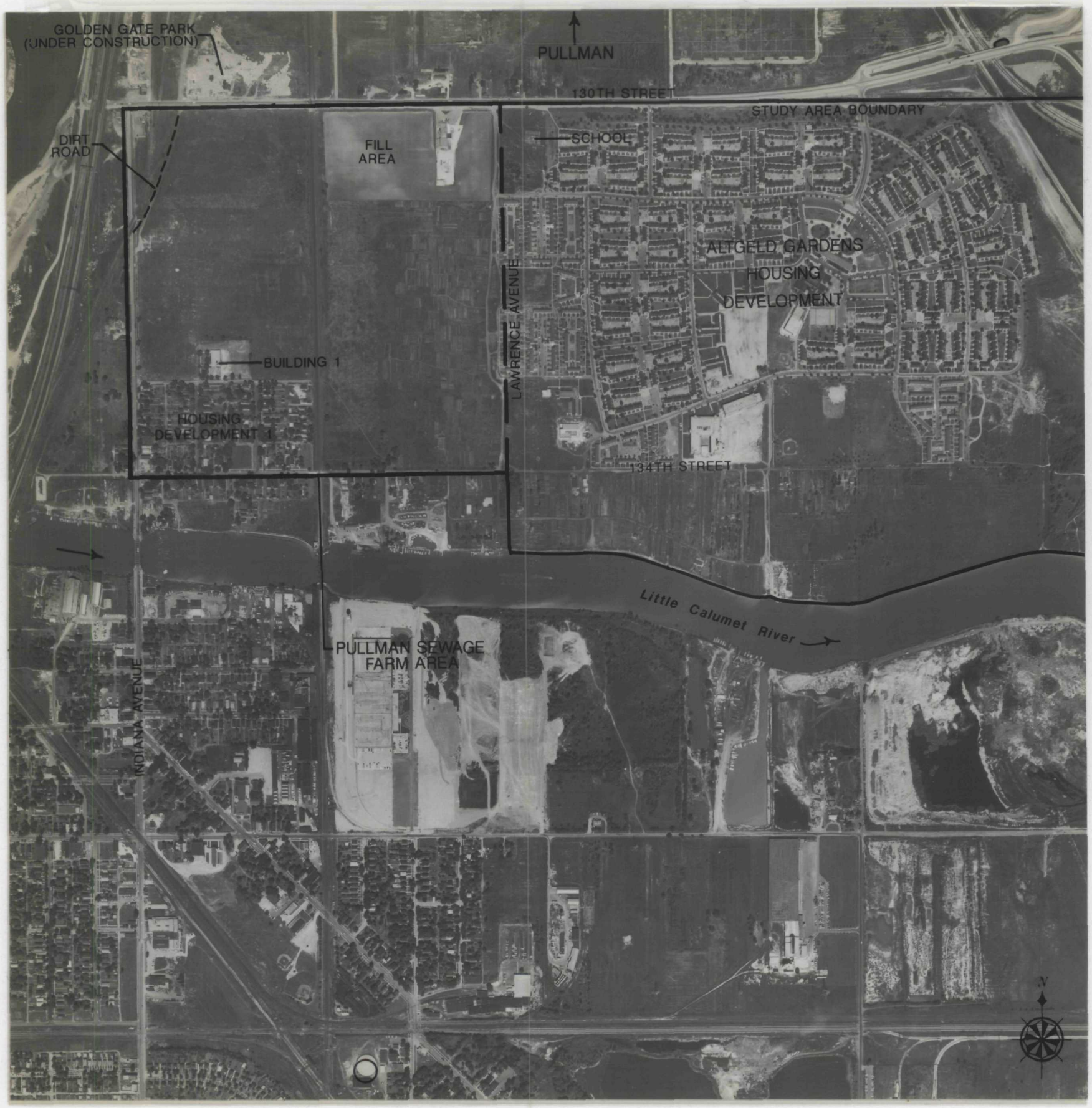

Figure 5. Altgeld Gardens, September 3, 1959. Approximate scale 1:9,320.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
- x x x x x x FENCE
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DRAINAGE

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TRANSPORTATION/UTILITY

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SITE FEATURES

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AUGUST 28, 1967 (FIGURE 6)

In the northwest quadrant of the study area there is a pipe trench extending from the road. Annotation B denotes the location of buildings inside the study area which seem to be a part of a nearby train depot. Buildings and a circular storage tank have been built on the location of the fill area previously noted in the northeast quadrant of the Pullman Sewage Farm area. In the southeast quadrant of the Pullman Sewage Farm area a housing development (Housing Development 2) has been built over the location of Annotation A (Figure 3); it is probably an expansion of the Altgeld Gardens housing development. A third housing development (Housing Development 3) is in the initial stages of construction, surrounding Building 1.

Figure 6. Altgeld Gardens, August 28, 1967. Approximate scale 1:8,470.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
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APRIL 23, 1973 (FIGURE 7)

Housing Development 3 appears completed and a fourth housing development (Housing Development 4) has also been built in the northwest quadrant of the study area.

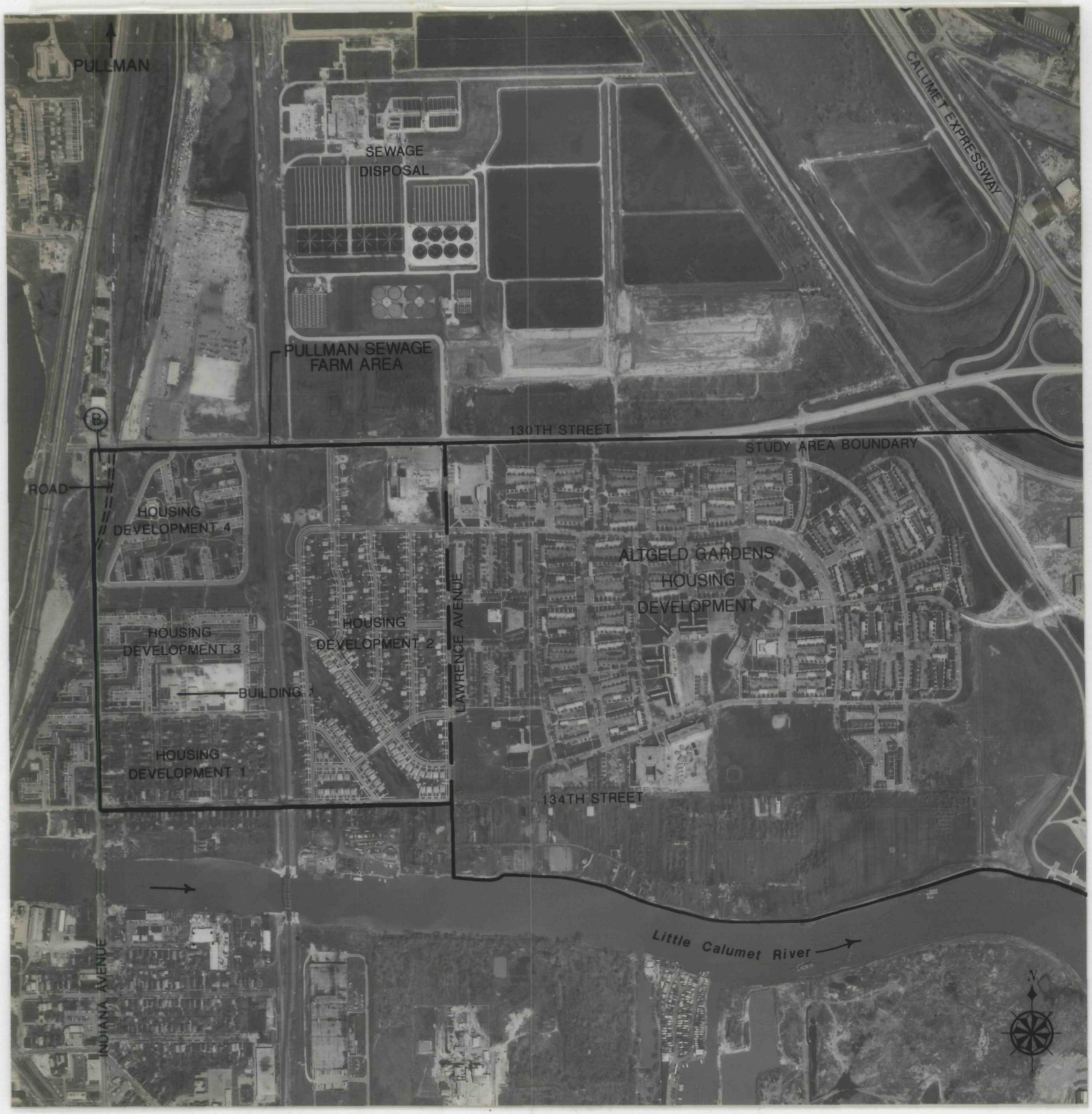

Figure 7. Altgeld Gardens, April 23, 1973. Approximate scale 1:9,630.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

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- STUDY AREA

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TRANSPORTATION/UTILITY

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- WD WASTE DISPOSAL AREA
- WV WETLAND VEGETATION

US EPA RECORDS CENTER REGION 5
411888

TS-PIC-9705512S
November 1996

AERIAL PHOTOGRAPHIC ANALYSIS
ALTGELD GARDENS

Chicago, Illinois
Addendum

by

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Environmental Services Division
Lockheed Environmental Systems & Technologies Co.
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Contract No. 68-C5-0065

Work Assignment Manager

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CHARACTERIZATION RESEARCH DIVISION
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OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY
LAS VEGAS, NEVADA 89193-3478

ABSTRACT

This report is an addendum to TS-PIC 9605510. It presents the results of an aerial photographic analysis of the Altgeld Gardens extended study area located in Chicago, Illinois. The Altgeld Gardens extended study area occupies approximately 570 acres and is comprised of two main areas, the Pullman Sewage Farm and the Altgeld Gardens Housing Development, which are separated by Lawrence Avenue. The primary data used for this report are two selected dates of black-and-white photographs: November 14, 1938 and September 3, 1959. This analysis was requested to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built in the Altgeld Gardens extended study area.

Findings from the analysis indicate evidence of a possible drainageway in the Altgeld Gardens Housing Development Area in 1938. The poor resolution of the photograph precludes a detailed description of the function of the possible drainageway. The landfilling operations that took place in 1959 at the Pullman Sewage Farm Area and at the Altgeld Gardens Housing Development Area appeared to be related to building construction. The material used for filling appeared to be light- to medium-toned. It could not be determined what the nature of the material was or if any wastes were incorporated into this material.

The U.S. Environmental Protection Agency's Characterization Research Division's Monitoring Sciences Branch in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 5 in Chicago, Illinois, and the Office of Emergency and Remedial Response in Washington, D.C.

CONTENTS

	Page
Abstract	iii
Introduction	1
Methodology	3
Analysis Summary	5
Photo Analysis	6

FIGURES

Number		
1	Study area location map, Illinois	vi
2	Local study area location map, Lake Calumet, Illinois	vii
3	Altgeld Gardens, November 14, 1938	7
4	Altgeld Gardens, September 3, 1959	9

TABLE

1	Documentation of Aerial Photography	4

INTRODUCTION

This report presents the results of an aerial photographic analysis of the Altgeld Gardens extended study area located in Chicago, Illinois (Figures 1 and 2). The primary data used for this report are two selected dates of black-and-white photographs: November 14, 1938 and September 3, 1959.

The Altgeld Gardens extended study area occupies approximately 570 acres and is comprised of two main areas, the Pullman Sewage Farm and the Altgeld Gardens Housing Development, separated by Lawrence Avenue. The Pullman Sewage Farm Area consists of approximately 140 acres bordered on the north by 130th Street, on the east by Lawrence Avenue, on the south by 134th Street, and on the west by Indiana Avenue. Collateral information supplied by Region 5 indicates that it operated for sixteen years (1881-1907) as a disposal site of sewage sludge originating from the town of Pullman to the north and reportedly included a ditch which carried effluent to Lake Calumet (for a summary of the collateral information supplied by Region 5, please refer to previous report TS-PIC-9605510). The Altgeld Gardens Housing Development Area consists of approximately 430 acres bordered on the north by 130th Street, on the east by Lawrence Avenue, on the south by the Little Calumet River and on the east by the Calumet Expressway (note: the actual Altgeld Gardens housing development does not extend to the Calumet Expressway). This analysis was requested to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built in the Altgeld Gardens extended study area.

The U.S. Environmental Protection Agency's Characterization Research Division's Monitoring Sciences Branch in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 5 in Chicago, Illinois, and the Office of Emergency and Remedial Response in Washington, D.C.

METHODOLOGY

Stereoscopic pairs of historical aerial photographs were used to perform the analysis. Stereo viewing enhances the interpretation because it allows the analyst to observe the vertical as well as horizontal spatial relationships of natural and cultural features. Stereoscopy is also an aid in distinguishing between various shapes, tones, textures, and colors that can be found within the study area.

Evidence of waste disposal is a prime consideration when conducting a hazardous waste site analysis. Leachate or seepage resulting from burial and dumping of hazardous materials might threaten existing surface or ground-water resources. Pools of unexplained liquid are routinely noted because they can indicate seepage from buried wastes and may enter drainage channels that allow contaminants to move off the site. An excellent indicator of how well hazardous materials are being handled at a site is the presence or absence of spills, spill stains, and vegetation damage. Trees and other forms of vegetation that exhibit a marked color difference from surrounding members of the same species are labeled "stressed," "damaged," or "dead" based upon the degree of noticeable variation. Vegetation is so labeled only after consideration of the season in which the photography was acquired.

Drainage analysis identifies the direction a spill or surface runoff would follow. Direction of drainage is determined from analysis of the photographs and from U.S. Geological Survey topographic maps. Whenever they are available, 7.5-minute quadrangle maps (scale 1:24,000) are used to show site location and to provide geographic and topographic information. Site boundaries or areas used in this analysis were determined from observations made from aerial photographs in conjunction with collateral data supplied by Region 5 and do not necessarily denote legal property lines or ownership.

Results of the analysis are shown on annotated overlays attached to the photos. The following table provides documentation of the photographs used in this report:

TABLE 1. DOCUMENTATION OF AERIAL PHOTOGRAPHY

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	4	09-03-59	1:23,700	B&W	USGS	VZW	80
41°39'20"N 087°36'04"W							

*Film type identification:
B&W: Black-and-white

†Photo source identification:

NARA: National Archives and Records Services, Washington, D.C.

USGS: U.S. Department of Interior, U.S. Geological Survey, Washington, D.C.

ANALYSIS SUMMARY

The primary data used for this report are two selected dates of black-and-white photographs: November 14, 1938 and September 3, 1959. This analysis was requested to document the possible disposal of sewage sludge and landfilling operations that may have taken place before housing was built in the Altgeld Gardens extended study area.

Findings from the analysis of 1938 photographs indicated evidence of a possible drainageway in the Altgeld Gardens Housing Development Area, but the poor resolution of the photograph precluded a detailed description of the function of these features. The landfilling operations that took place in 1959 at the Pullman Sewage Farm Area and at the Altgeld Gardens Housing Development Area appeared to be related to building construction. The material used for filling appeared to be light- to medium-toned but it could not be determined what the nature of the material was or if any wastes were incorporated into this material.

PHOTO ANALYSIS

NOVEMBER 14, 1938 (FIGURE 3)

The first date of analysis shows the Pullman Sewage Farm Area after it was known to have last been in operation (circa 1907) and the Altgeld Gardens Housing Development Area prior to the building of the actual Altgeld Gardens housing development (circa 1952). At the Pullman Sewage Farm Area in the northwest quadrant the ground appears to be undergoing rail-line demolition and road construction. Building 1 is a square lot; this lot is the current location of a school. In the northeast quadrant the land is cleared and appears to be either turf or under cultivation. In the southeast quadrant is a small lot with buildings (Annotation A). In the southwest quadrant a housing development (Housing Development 1) is already extant and is comprised of three sections, where each section contains approximately twenty structures. At the Altgeld Gardens Housing Development Area extended, linear segments of a possible drainageway are discernible in the northwest and southeast quadrants, but the poor resolution of the 1938 photograph precluded a detailed description of the function of these features. The land is mostly cleared and continues to appear either turf or under cultivation, but with no discernible buildings. There are intermittent patches of larger vegetation and the general surface runoff flows south.

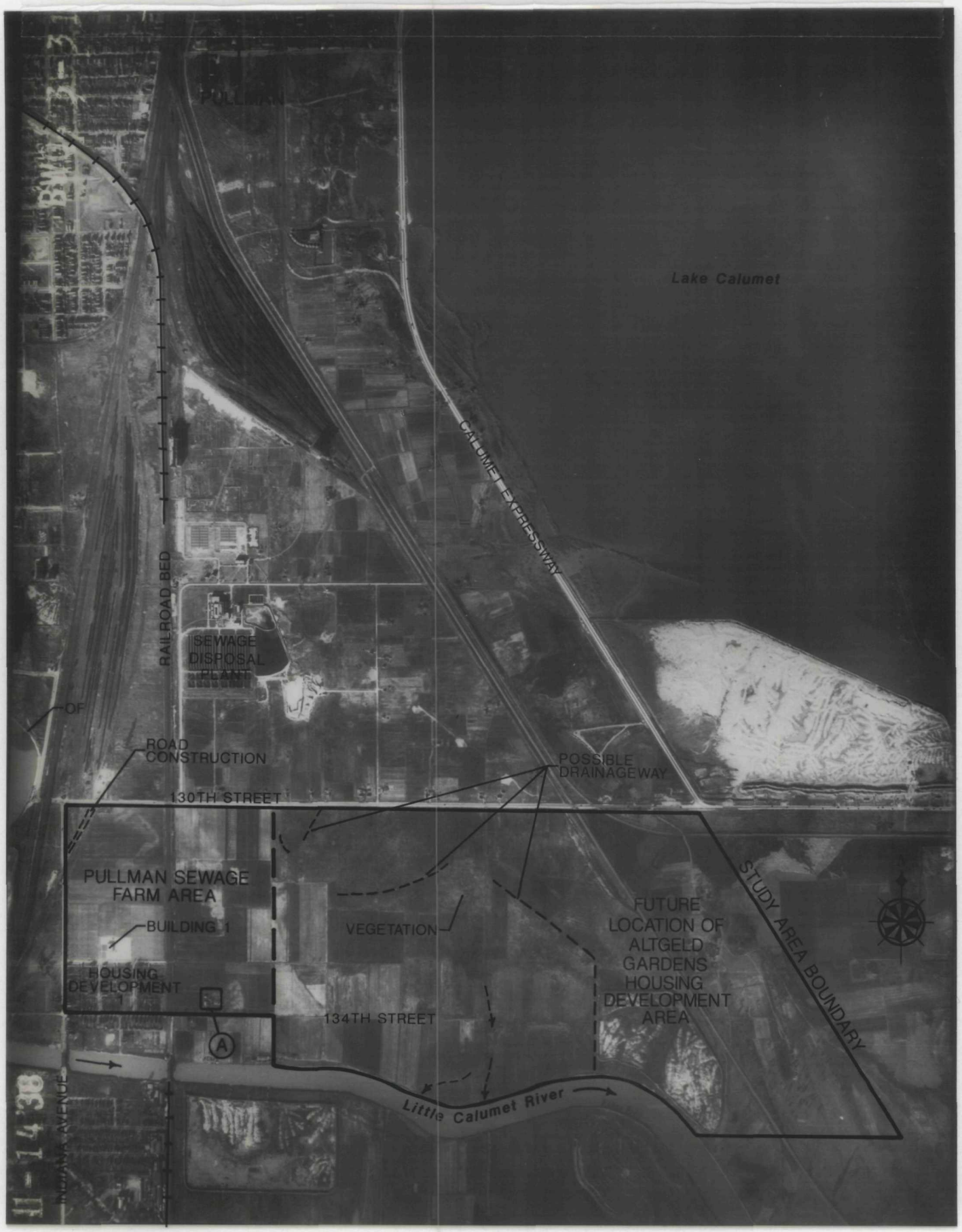

Figure 3. Altgeld Gardens, November 14, 1938. Approximate scale 1:19,525.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x—x—x— FENCED SITE BOUNDARY
- ——— UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- — — — STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

SITE FEATURES

- DIKE
- STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
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- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WV WETLAND VEGETATION

SEPTEMBER 3, 1959 (FIGURE 4)

Locations of features and/or structures previously reported on the 1938 photograph are annotated on this photograph to serve as reference points. The second date of analysis shows the extended study area 21 years later. At the Pullman Sewage Farm Area the northeast corner is a rectangular lot with a complex of buildings already extant. The remaining surface of the lot appears to be smoothed construction fill. Adjacent to this lot, but within the Altgeld Gardens Housing Development Area, a school is noted as already extant. Lawrence Avenue has been constructed along the eastern perimeter of the sector. At the Altgeld Gardens Housing Development Area the actual Altgeld Gardens housing development is extant. There are smoothed fill areas just north of 134th Street which indicate construction in progress.

Figure 4. Altgeld Gardens, September 3, 1959. Approximate scale 1:11,732.

INTERPRETATION CODE

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- ——— UNFENCED SITE BOUNDARY
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DRAINAGE

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TRANSPORTATION/UTILITY

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411882

SITE ASSESSMENT REPORT
FOR THE
ALTGELD GARDENS COMMUNITY
I-94 and 130th Street
CHICAGO, COOK COUNTY, ILLINOIS

August 6, 1997

Prepared by:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: Charles Gebien Date: 8/6/97
Charles Gebien, On-Scene Coordinator

Reviewed by: Donald J. Bruce Date: 8/6/97
Donald Bruce, Chief ER Section 2

Table of Contents

Section		Page
1	Introduction	1-1
2	Background	2-1
	2.1 Site Description	2-1
	2.2 Site History	2-2
3	Site Assessment	3-1
4	Analytical Results	4-1
5	Discussion of Potential Threats	5-1
6	Removal Activities	6-1

Appendix		Page
A	Aerial Photographic Analysis	A-1
B	U.S. EPA CRL Analytical Reports	B-1
C	Photo Documentation	C-1

List of Figures

Figure		Page
2-1	Site Location Map	2-3
2-2	Site Features Map	2-4

List of Tables

Table		Page
3-1	Standing Water Sample Description	3-1
3-2	Surface Soil Sample Description	3-2
3-3	Sub-Surface Soil Sample Description	3-3
3-4	Block 11 Follow -up Surface Soil Sample Description	3-4
4-1	Summarized PAH Data for Standing Water Samples	4-1
4-2	Summarized PAH Data for Surface Soil Samples	4-2
4-3	Summarized PAH Data for Sub-Surface Soil Samples	4-3
4-4	Summarized PAH Data for Block 11 Follow Up Surface Soil Samples & X103\SS20	4-4

1. Introduction

The United States Environmental Protection Agency (U.S. EPA) Southeast Chicago Site Assessment Team (SAT) requested the Superfund Division Emergency Response Branch (ERB) and the Superfund Division Technical Support Section (TSS) to assess the possible presence of soil contamination at the Altgeld Gardens Community (AGC) located in Chicago, Cook County, Illinois.

On-Scene Coordinator Charles Gebien and Keith Lesniak of U.S. EPA ERB were tasked to perform the site assessment and to determine if conditions are present at the AGC which present an imminent and substantial threat to public health and welfare and the environment. The Chicago Housing Authority (CHA) was advised of proposed assessment work and participated in sampling activities.

2. Background

2.1 Site Description

The Altgeld Gardens community (AGC) is a low-income housing development that is managed by the Chicago Housing Authority (CHA). The AGC is located near Interstate 94 and 130th Street, Chicago, Cook County, Illinois (Figure 2-1). The AGC is bounded on the north by 130th Street, on the south by the Little Calumet River, on the east by the Beaubien Woods, and on the west by St. Lawrence Avenue (Figure 2-2). Approximately 10,000 residents live in the AGC.

2.2 Site History

The AGC was constructed in approximately 1941, atop an agricultural area. Residents of the AGC have indicated that canals from the Pullman Sewage Farm carried sewage wastes from industrial areas north of the AGC, through the AGC, and southward to the little Calumet River, until the 1950s. Many residents complain that health problems including skin rashes and asthma are prevalent in the AGC. Two soil samples collected from the AGC as part of a 1990 U.S. EPA Site Screening Inspection (SSI) and 1994 Expanded Site Inspection (ESI) for the Pullman Sewage Farm identified elevated levels of PAHs, pesticides, and heavy metals in surface soil (Refer to Table 4-4). The Illinois Department of Public Health (IDPH) has recommended that additional soil testing is justified at the AGC, particularly in areas where children play. The contaminants of concern are pthalates, PCBs, PAHs, heavy metals, pesticides, and VOCs.

On July 18, 1996, OSC Gebien, U.S. EPA ERB, completed a Sampling QA/QC Work Plan (SWP) for sampling activities planned at the AGC. The sample locations that are included in the SWP were chosen by interviews with AGC leaders and are based on complaints of contamination in each of the locations. In August 1996, the U.S. EPA Characterization Research Division completed an aerial photographic analysis of the Pullman Sewage Farm and the AGC area. In November 1996, an addendum was added to further interpret historical drainage ways which appear in 1938 aerial photos of the AGC (Refer to Appendix A for the Aerial Photographic Analysis of Altgeld Gardens). The 1938 aerial photo shows the AGC property in cultivation prior to construction of housing units and depicts possible drainage ways.

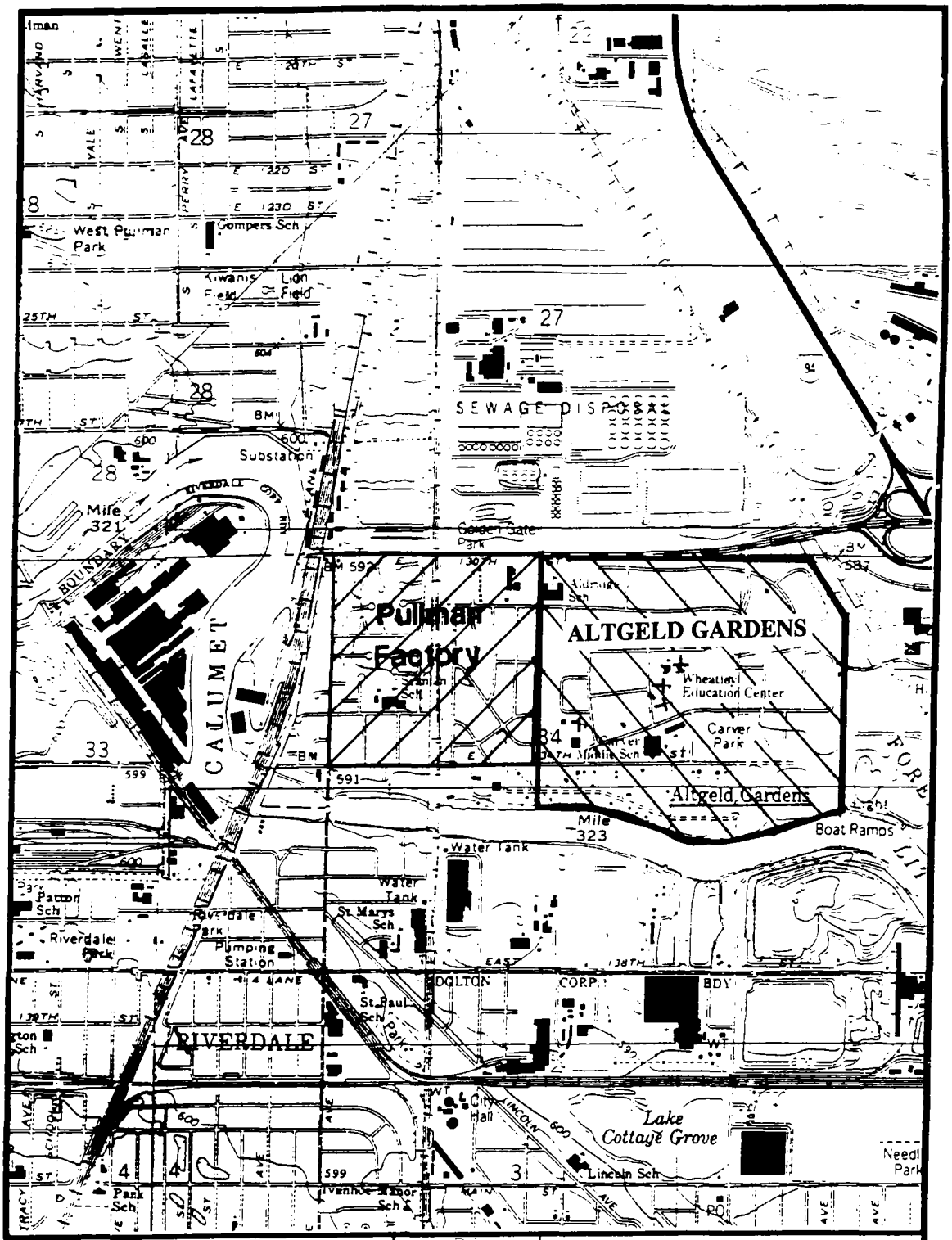

Source: USGS 7.5' Topographic Maps Lake Calumet (1991) and Blue Island (1973) Quadrangles		Figure 2-1 Site Location Map
Scale: 0 1/2 mile		**ALTGELD GARDENS** Chicago, Illinois

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Altgeld Gardens Sampling Locations

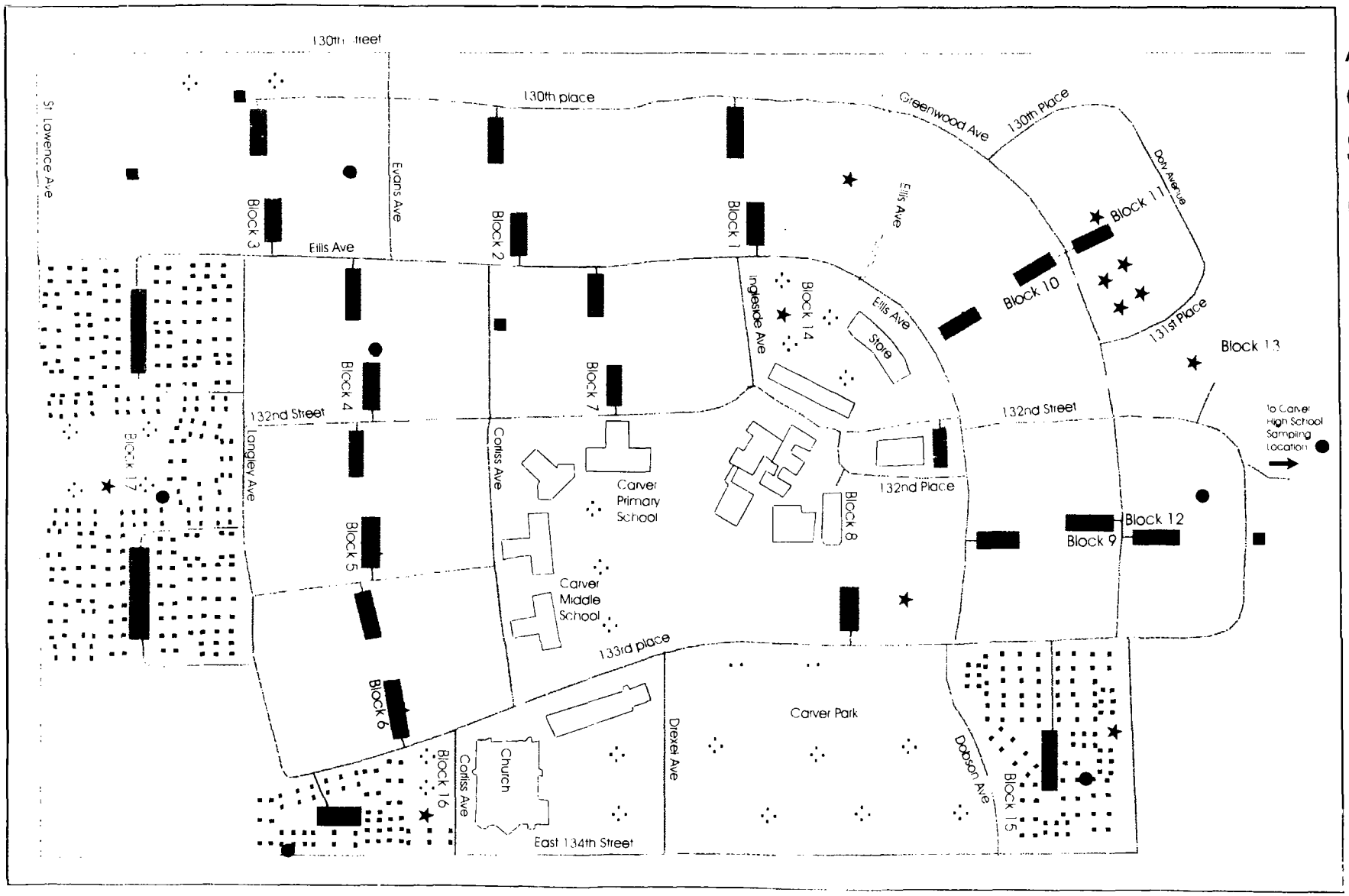

Legend

- Residential Buildings
- Overhead Lighting
- Public Buildings
- Pavement
- Surface Sampling Locations
- Subsurface Sampling Locations
- Standing Water Sampling Locations

3. Site Assessment

On July 18, 1996 OSC Charles Gebien and Keith Lesniak visited the AGC area, after a major storm event to observe and photo document possible flooding conditions. On July 22, 1996, OSC Gebien and Lesniak met at AGC with Mr. Fred Chang, P.E., Environmental Unit, CHA, to collect water samples from areas of chronic standing water within the AGC. Standing water samples were collected from seven locations (Figure 2-2) were collected from the following locations; Block 15 (SO1), Block 12 (SO5), Block 16 (SO6), Block 17 (SO7), Block 3 (SO2), Block 4 (SO3), Carver High School (SO9). Refer to Table 3-1 for further sample location and description information and to Appendix C for photographs taken during the flooding observation and water sampling activities. Sampling was conducted in level D protection. The samples were delivered to the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois. The water samples were analyzed for ABN, pesticides/polychlorinated biphenyls (PCBs), volatile organic analytes (VOAs), metals, mercury, and cyanide.

On August 21, 1996 OSC Charles Gebien and Keith Lesniak returned to the AGC area, and met with Mr. Fred Chang, P.E., Environmental Unit, CHA, to collect soil samples from areas within the AGC which are suspected areas of contamination. Soil samples were collected from the surface of the ground at ten locations (Figure 2-2). Samples were collected from the following locations; Block 16 (S17), Block 17 (S18), Block 3 (S13), Block 4 (S14), Carver Primary School Courtyard on Corliss St (S21). Block 15 (S12), Block 12 (S16), Carver High School (S20), Block 11 (S15) and WIC Clinic (S19). Refer to Table 3-2 for additional sample description and location information and to Appendix C for photographs taken during the soil sampling activities. Sampling was conducted in level D protection. The samples were delivered to the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois. The soil samples were analyzed for ABN, pesticides/PCBs, VOAs, metals, mercury, and cyanide.

On November 11, 1996, OSC Charles Gebien and Keith Lesniak returned to the AGC area, and met with Steve Peterson, Alan Gebien, and Tom Sedlacek. Mr. Fred Chang, CHA, was not present due to other obligations. The purpose of the visit was to investigate subsurface soils in historical drainage areas within the AGC, which were identified through aerial photographic analysis as potential routes of contamination from the former Pullman Sewage Farm. Four former drainage ways were chosen for Geoprobe sampling, and one Geoprobe boring was performed in each drainage way. Subsurface soil samples were collected from the four Geoprobe boring locations as shown in Figure 2-

2. Samples were collected as follows; Geoprobe I 2'-4' (S01), 4'-6'(S02), Geoprobe II 2'-4' (S03), 4'-6' (S04), 6'-8' (S11), Geoprobe III 2'-4' (S05), 4'-6' (S06), Geoprobe IV 2'-4' (S07), 4'-6' (S08) and 6'-8' (S09). Refer to Table 3-3 for further sample description and location information. Photographs were not taken during the Geoprobe soil sampling activities. Sampling was conducted in level D protection. The samples were delivered to the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois. The soil samples were analyzed for ABN, pesticides/PCBs, VOAs, metals, mercury, and cyanide.

On March 25,1997, OSC Charles Gebien and Keith Lesniak returned to the AGC area, and met with Mr. Fred Chang, CHA. The purpose of the visit was to collect additional surface soil samples in Block 11, because elevated levels of PAHs were identified from our earlier surface soil sample in that block. Four samples were collected from a courtyard lawn area as follows: front of Unit 13055 (S01), front of Unit 1128 (S02), front of Unit 1114 (S03), and front of Unit 13073 (S04). Refer to Table 3-4 for further sample description and location information.

Table 3-1 Standing Water (Collected 7/22/96) Sample Description		
Sample No.	**Appearance**	**Location**
S01	Clear Water	Sample from lawn area near unit 1078 in Block 15. Photos 1-5
S02	Clear water	Sample from grassy area near unit 13034 in Block 3. Photos 18-20.
S03	Cloudy water	Sample from hose that was pumping flood water from basement of unit 13144 in Block 4. Photos 15-17.
S05	Clear water with mosquito larvae	Sample from lawn area in front of unit 1153 in Block 12, Photos 6-8.
S06	Clear water with mosquito larvae	Sample collected from lawn sidewalk area in front of units 706 and 708 in Block 16. Photos 9-11.
S07	Clear water with mosquito larvae	Sample from base of playground slide in back of unit 13221 in Block 17. Photos 12-14.
S09	Clear water with mosquito larvae	Sample from grassy ditch west of Carver High School in Beaubien Woods. Photos 21-24.

Table 3-2 Surface Soils (Collected 8/21/96) Sample Description (0-3 inches depth)		
Sample No.	**Appearance**	**Location**
S12	Soil	Sample collected from grassy area in courtyard near unit 1076 in Block 15. Photos 7-8.
S13	Soil	Sample collected from grassy area in front of unit 13042 in Block 3. Photo 4.
S14	Soil	Sample from grassy area in courtyard near unit 13124 in Block 4. Photo 5.
S15	Soil	Sample from grassy area near unit 1130 in Block 11. Photo 11.
S16	Soil	Sample collected from grassy area near unit 1149 in Block 12. Photo 9.
S17	Soil	Sample from grassy area near units 706 and 708 in Block 16. Photos 1 and 2.
S18	Soil	Sample from grassy area, near lamp post, adjacent to slide, in playground area in Block 17. Photo 3.
S19	Soil	Sample from grassy area in front of WIC Clinic. Photo 12.
S20	Soil	Sample from grassy ditch west of Carver High School in Beaubien Woods between R.R. tracks and entrance road. Photo 10.
S21	Soil	Sample from grassy area in Carver Primary School courtyard approx. 50 ft. North of play area equipment for school.

Table 3-3 Sub-Surface Soils (Collected 11/12/96) Sample Description			
Sample No.	**Depth (feet)**	**Appearance**	**Location**
Geoprobe I S01	2' to 4'	Light brown clay soil	Sample from grassy area east of Corliss St. in Block 7.
Geoprobe I S02	4' to 6'	Light brown clay soil	Sample from grassy area east of Corliss St. in Block 7.
Geoprobe II S03	2' to 4'	Mottled clay with yellow specks	Sample from field east of 133rd St. immediately east of Block 12.
Geoprobe II S04	4' to 6'	Mottled clay with sand	Sample from field east of 133rd St. immediately east of Block 12.
Geoprobe II S11	6' to 8'	Wet brown clay	Sample from field east of 133rd St. immediately east of Block 12.
Geoprobe III S05	2' to 4'	Brown clay soil with pieces of brick	Sample from grassy playground area 30 ft. southwest of rocket ship west of Block 3.
Geoprobe III S06	4' to 6'	Brown clay soil with pieces of brick	Sample from grassy playground area 30 ft. southwest of rocket ship west of Block 3.
Geoprobe IV S07	2' to 4'	Brown clay soil	Sample from grassy area midway between light post and large willow tree in Block 3.
Geoprobe IV S08	4' to 6'	Brown clay soil	Sample from grassy area midway between light post and large willow tree in Block 3.
Geoprobe IV S09	6' to 8'	Brown clay soil	.Sample from grassy area midway between light post and large willow tree in Block 3.

Table 3-4 Block 11 Follow up Surface Soils (Collected 3/25/97) Sample Description (0-3 inches depth)		
Sample No.	**Appearance**	**Location**
S01	Soil	Sample collected from grassy area in courtyard near unit 13055 in Block 11.
S02	Soil	Sample collected from grassy area in courtyard near unit 1128 in Block 11.
S03	Soil	Sample from grassy area in courtyard near unit 1114 in Block 11.
S04	Soil	Sample from grassy area in courtyard near unit 13073 in Block 11.

4. Analytical Results

The water samples, surface soil samples, and sub-surface samples were analyzed for ABN, pesticides/polychlorinated biphenyls (PCBs), volatile organic analytes (VOAs), metals, mercury, and cyanide. All samples were analyzed at the U.S. EPA Central Regional Laboratory (CRL), Chicago, Illinois.

Analytical results indicate that slightly elevated levels of PAH compounds may be present in the surface soils within the AGC area. PAH data is summarized for standing water, surface soils, and sub-surface soils in tables 4-1, 4-2, and 4-3. Refer to Appendix B for CRL analytical reports and corresponding QA/QC reviews.

Table 4-1
Summarized PAH Data for Standing Water Samples
All concentrations in ppb

Compound	Sample Designation							
	S01	S02	S03	S05	S06	S07	S09	R01
di-n-Butylphthalate	5 U	1 J	5 U	5 U	3 J	5 U	5 U	5 U
Carbazole	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Anthracene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-ethylhexyl)phthalate	2 J	2 J	4 J	2 J	1 J	2 J	5 U	4 J
Chrysene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(b)flouranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(k)flouranthene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Key:
J = Estimated value.
U = Not detected.
B = Contaminant found in laboratory method blank.

Source: U.S. EPA Central Regional Laboratory, Chicago, Illinois.

Table 4-2
Summarized PAH Data for Surface Soil Samples
All concentrations in ppb

Compound	Sample Designation										
	S12	D12	S13	S14	S15	S16	S17	S18	S19	S20	S21
di-n-Butylphthalate	3800	2000	1800	12000	6300	4400	2300	3100	6800	4900	3000
Carbazole	990 U	1000 U	1000 U	1000 U	370 J	1100 U	1100 U	930 U	940 U	990 U	970 U
Fluoranthene	250 J	280 J	450 J	630 J	4800	600 J	580 J	930 U	850 J	990 U	530 J
Anthracene	990 U	1000 U	1000 U	1000 U	630 J	1100 U	1100 U	930 U	200 J	990 U	970 U
Pyrene	210 J	250 J	370 J	530 J	4000	520 J	450 J	930 U	870 J	990 U	460 J
Bis(2-ethylhexyl)phthalate	6900 BJ	6600 BJ	12000 BJ	2100 BJ	1600 BJ	7900 BJ	6500 BJ	4900 BJ	9800 BJ	4900 BJ	7600 BJ
Chrysene	990 U	1000 U	300 J	410 J	2700	370 J	380 J	930 U	380 J	990 U	350 J
Benzo(a)anthracene	990 U	1000 U	1000 U	360 J	2500	400 J	380 J	930 U	480 J	990 U	330 J
Benzo(b)flouranthene	270 J	330 J	380 J	540 J	3400	530 J	540 J	930 U	370 J	990 U	460 J
Benzo(k)flouranthene	990 U	1000 U	1000 U	230 J	1000 J	230 J	230 J	930 U	160 J	990 U	180 J
Benzo(a)pyrene	190 J	220 J	300 J	380 J	2500	410 J	400 J	930 U	370 J	990 U	370 J
Indeno(1,2,3-cd)pyrene	180 J	230 J	290 J	380 J	2000	390 J	390 J	930 U	270 J	990 U	340 J

Key:
J = Estimated value.
U = Not detected.
B = Contaminant found in laboratory method blank.

Source: U.S. EPA Central Regional Laboratory, Chicago, Illinois.

Table 4-3
Summarized PAH Data for Sub-Surface Soil Samples
All concentrations in ppb

Compound	Sample Designation									
	S01	S02	S03	S04	S05	S06	S07	S08	S09	S11
di-n-Butylphthalate	7600 B	10000 B	8800 B	5600 B	8200 B	7600 B	7300 B	15000 BD	14000 BD	8100 B
Carbazole	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	100O U	1200 U	1200 U	1100 U
Fluoranthene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Anthracene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Pyrene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Bis(2-ethylhexyl)phthalate	1700 B	2200 B	1600 B	1100 B	140 JB	760 JB	710 JB	1300 B	830 JB	1500 B
Chrysene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Benzo(a)anthracene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Benzo(b)flouranthene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Benzo(k)flouranthene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Benzo(a)pyrene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U
Indeno(1,2,3-cd)pyrene	1100 U	1300 U	1500 U	1100 U	970 U	1100 U	1000 U	1200 U	1200 U	1100 U

Key:
J = Estimated value.
U = Not detected.
B = Contaminant found in laboratory method blank.

Source: U.S. EPA Central Regional Laboratory, Chicago, Illinois.

Table 4-4
Summary PAH Data for Block 11 Follow Up Surface Soil Samples and X103/SS20 Historical PAH Data
All concentrations in ppb

Compound	Sample Designation					
	S01	S02	S03	S04	X103 (May 1990)	SS20 (Nov. 1994)
di-n-Butylphthalate					----------	1300 J
Carbazole					----------	2400 J
Fluoranthene	2100 J	2300 J	1800 J	1400 J	1800.00	23,000
Anthracene	2500 U	2400 U	2400 U	2200 U	----------	3500 J
Pyrene	1600 J	2300 J	1700 J	1400 J	1600.00	22,000
Bis(2-ethylhexyl)phthalate					480.00 J	----------
Chrysene	1010 J	1300 J	1100 J	740 J	720.00 J	12,000
Benzo(a)anthracene	1100 J	1300 J	1100 J	920 J	1000.00	9700
Benzo(b)flouranthene	1500 J	1600 J	1600 J	1040 J	830.00 J	7900
Benzo(k)flouranthene	550 J	520 J	390 J	380 J	510.00 J	11,000
Benzo(a)pyrene	990 J	1200 J	980 J	740 J	670.00 J	9000
Indeno(1,2,3-cd)pyrene	970 J	1080 J	870 J	620 J	440.00 J	4600

Key:
J = Estimated value.
U = Not detected.
B = Contaminant found in laboratory method blank.

Source: U.S. EPA Central Regional Laboratory, Chicago, Illinois.

5. Discussion of Potential Threats

Analyses of surface soils, sub-surface soils and standing water within the AGC indicate that although elevated levels of PAHs were identified in surface soils within block 11, the levels do not exceed the recommended removal action level (RAL) for total PAHs (500-1000 PPM total PAHs) established in the "Emergency Removal Guidelines". Information from this report is being reviewed by U.S. EPA for a health based risk assessment.

There are no conditions present in the areas assessed at the AGC that may present an imminent and substantial threat to public health and welfare and the environment, based on considerations set forth in paragraph (b) (2) of Section 300.415 (b) (2) of the National Oil and Hazardous Substances Contingency Plan (NCP).

6. Removal Activities

There were no conditions observed at the AGC during the site assessment which warrant a removal action.

US EPA RECORDS CENTER REGION 5
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FACT SHEET

Altgeld Murray Gardens

Chicago, Illinois

May 1998

Introduction

The United States Environmental Protection Agency (US EPA) in conjunction with the Chicago Housing Authority (CHA), has prepared this fact sheet to inform residents of US EPA's past sampling activities in the area, and to provide information regarding the results of these activities.

Background Information

Altgeld Gardens (AG) is located near Interstate 94 and 130th Street in Chicago, Illinois. AG is bounded on the north by 130th Street, on the south by the Little Calumet River, on the east by the Beaubien Woods, and on the west by St. Lawrence Avenue. AG houses 5,780 residents and is owned by the (CHA), but managed by a private company. The AG community was constructed during the years 1944-1952, atop an agricultural area. Residents of the area are concerned that canals from the Pullman Sewage Farm, located to the east of the complex, may have carried sewage wastes from industrial areas north of AG and southward to the little Calumet River
until the 1950s. There was also a belief by some community residents that AG was built on a landfill.

Investigation History

- ☐ In 1990, at the community's request, US EPA conducted background soil sampling in AG as part of a Site Screening Inspection (SSI) of the Pullman Sewage Site. Background samples are taken in most areas where US EPA is conducting inspections in order to determine the extent of contamination.

- ☐ In 1994, subsequent soil samples were taken as a follow-up to the 1990 samples. US EPA identified elevated levels of polycyclic aromatic hydrocarbons (PAHs), pesticides, and heavy metals in some of the background samples from the Expanded Site Inspection (ESI) conducted for the Pullman Sewage Farm in 1994. PAHs are common by-products of combustion. Sources include cars, trucks, smokestacks,

and even bar-b-ques.

- In 1996, US EPA observed and photo documented AG after a major storm event to identify possible flooding conditions. Water samples were then collected from seven locations in the area.

- In August 1996, US EPA also worked with CHA's environmental unit to collect soil samples at ten locations. The areas were selected after interviewing community leaders.

- In November 1996, US EPA investigated the subsurface soils in drainage areas on the site. Evidence from the aerial photos and soil samples do not indicate that there was transport of waste materials from the Pullman Sewage Farm to the Altgeld property.

- Finally, in March 1997, additional soil samples were collected in Block 11 (130th Place & Doty Avenue) because elevated levels of PAHs were identified from earlier surface soil sampling results. Four samples were collected from a courtyard lawn area in front of Units 1128 and 1114, and in front of several other street addresses.

Results

During EPA investigations in 1996 and 1997, water, surface soils, and sub-surface samples were collected from various location with Altgeld Murray Gardens. These samples were analyzed by the US EPA Central Regional Laboratory in Chicago for polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semi-volatiles, and metals. Of the chemicals detected in these samples, PAHs and DDT pesticides were identified as chemicals that requires an evaluation for their potential health effects. DDT and DDE, were generally detected in very low levels in these samples. The highest detected level of DDT, at 31 parts per million (ppm) in Block 16. This level of DDT is not considered to be either an immediate or long-term health concern.

PAHs were detected at Altgeld Gardens in about 40 percent of the surface soil samples. The detected PAHs were generally at very low levels (<0.5 ppm for the most toxic PAH, benzo(a)pyrene (BaP)). The highest detected concentration of BaP was 2.5 ppm, which occurred in Block 11 (130th Place & Doty Avenue). The four additional samples collected in that area in March, 1997 did not detect BaP or any other PAH. These levels of PAHs are not considered to be an immediate health concern and are similar to levels found in studies of other urban areas. To confirm that these levels are representative of Chicago background levels, an additional investigation is planned to specifically evaluate the background levels of PAHs in various residential areas of Chicago and to compare those levels to those found at Altgeld Gardens.

To evaluate the potential for long term, chronic effects of exposure, a screening risk assessment was performed, using the maximum detected surface soil sampling data for the site. The risk assessment considered soil ingestion and dermal absorption as the most important pathways for exposure. Using very conservative methods for evaluated,

dermal exposure to PAHs accounts for about 70 percent of the risk in our analysis. The objective of this assessment is to predict future risks of continuous lifetime exposure, rather than evaluate whether people may be affected by current exposure at the site. Using USEPA risk assessment methodology, the lifetime excess cancer risk for exposure to the highest concentration of PAHs ranged from 2 x 10 (2 out of 10,000 exposed individuals) to 3 x 10 (3 out of 1,000 exposed individuals). In interpreting these estimates, one should keep in mind these are risks that are likely to be very similar to those experienced in any other urban site. In addition, the sampling results, as well as aerial photos of the area, reveal no physical evidence that Altgeld Gardens was built on a landfill or evidence of industrial contamination in the surface soil.

Future Actions

At this time US EPA has determined that additional sampling in the Altgeld Gardens is not necessary because Altgeld Garden levels were similar to those identified in studies of other urban areas. However, US EPA is conducting a PAH and lead background study to verify PAH and lead background levels for the City of Chicago. Information gathered in this study will be used to help determine future cleanup action levels for urban sites in general.

☎ For more information, please feel free to contact

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GLOSSARY

Volatile Organic Compounds (VOCs) and **Semi-Volatile Organic Compounds (semi-VOC's)** - An organic (carbon-containing) compound that evaporates readily at room temperature. Examples of VOC's include dry cleaning fluid, lighter fluid, paint thinners and components of gasoline.

Pesticides - Substances or mixture thereof intended for preventing, destroying, repelling, or mitigating crop. EPA sets these levels well below the point where the compounds might be harmful to consumers.

DDT - the first chlorinated hydrocarbon insecticide (chemical name: Dichloro-Diphenyl-Trichloromethane). It has a half-life of 15 years and can collect in fatty tissues of certain animals. EPA banned registration and interstate sale of DDT for virtually all but emergency uses in the United States in 1972 because of its persistence in the environment and accumulation in the food chain.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

received
9/2/98

c: J. GIBSON
J. WAWATU
original - SUBJECT FILE - EPA PAH

August 27, 1998

REPLY TO THE ATTENTION OF: S. Jain

Mr. Sanjiv Jain
Chicago Housing Authority - Modernization Division
833 W 115th Street
Chicago, Illinois 60643

Re: Altgeld Gardens Housing Complex

Dear Mr. Jain:

This letter is written to you with a recommendation that the Chicago Housing Authority (CHA) take appropriate actions to reduce the potential exposure at the Altgeld Gardens Housing Complex to polynuclear aromatic hydrocarbons (PAHs) detected in surface soils.

As you know, U.S. EPA has been involved in various soil sampling activities at the Altgeld Gardens Property. The most recent sampling took place in 1996, after a request was made by the community to look into possible soil contamination. The results of the sampling effort were presented to community representatives, specifically Hazel and Cheryl Johnson, People for Community Recovery (PCR), and Keith Harley, Chicago Legal Clinic, on July 20, 1998, at the U.S. EPA's office. We also tried to invite a representative from the Altgeld Gardens Local Advisory Board, but attempts to contact Mrs. Wheeler yielded a phone message indicating that the line had been disconnected. In addition, Lisa Schneider and Jaote Wawatu from the CHA were also present at this meeting.

U.S. EPA could find no evidence of release of PAHs from specific sources, and suspects that atmospheric deposition from point, area, and mobile sources are most likely responsible for the contamination. A comparison of PAH levels detected at Altgeld Gardens to those found in other urban areas indicated that the Altgeld values were within the expected range. However, the highest value of 2.5 ppm has the potential to cause adverse health effects through dermal contact under certain exposure assumptions. While this level would not support a Superfund removal action, we believe it is prudent to take some common sense steps to reduce or eliminate the exposure pathway.

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Therefore, U.S. EPA strongly recommen CHA, as property owner, take appropriate measures to reduce the residents' contact with PAH contaminated soils. Appropriate measures to reduce exposure could include establishing groundcover, such as placing wood chips over surface soils in play lots and/or planting grass in court yard areas where the elevated PAH levels were found. These activities will greatly reduce risk to children and adults by eliminating direct contact with contaminated soils. These measures may also result in the reduction of the PAH compounds through a natural process known as phyto-remediation. In addition, Northwestern Unliversity may shortly provide us with other options to reduce the exposure pathway.

U.S. EPA would also like to invite CHA to partner in a project that would address this issue at Altgeld Gardens by establishing and maintaining groundcover with community support. The project would consist largely of education and outreach activities to Altgeld Gardens residents, and other stakeholders, in order to address the PAH issue.

Should you have any questions or concerns, please feel free to contact Mardi Klevs, Greater Chicago Team Manager, at (312) 353-5490.

Sincerely yours,

William E. Muno, Director
Superfund Division

cc: Hazel Johnson, People for Community Recovery
Keith Harley, Chicago Legal Clinic
Altgeld Gardens Local Advisory Board

Clarke-Moreno
I.1
9/11/00

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

US EPA RECORDS CENTER REGION 5
411876

SEP 11 2000

REPLY TO THE ATTENTION OF:
D-8J

Martin J. Bishop
Hopkins & Sutter
Three First National Plaza
Chicago, Illinois 60602-4205

Re: Altgeld Gardens Community

Dear Mr. Bishop:

As promised in the July 28, 2000, letters responding to your Freedom of Information Act request, we are writing to provide you with information concerning the potential analytical problems involving the United States Environmental Protection Agency's (U.S. EPA) Central Regional Laboratory, and U.S. EPA's proposal to conduct core sampling for Polychlorinated Biphenyls (PCBs) in the yards on the north side of the Dorothy Gautreax Child Parent Center, 975 E. 132nd Street, Chicago, Illinois (Gautreax Center), and surface soil and surface water sampling in the area throughout the community housing, as in the enclosed figure.

During the spring of 1996 the Chicago Housing Authority (CHA) conducted a cleanup of soil contaminated with PCBs, a chemical regulated under the Toxic Substances Control Act, from the yards on the north side of the Gautreax Center. The source of the PCB contamination was a storage lot located across the street from the Gautreax Center where the CHA had disposed PCBs from electrical transformers. During the cleanup, approximately one foot of soil was excavated across the entire north side of the Gautreax Center, cleanup confirmation samples were collected, and the area was backfilled with clean soil trucked in from off site. U.S. EPA, Region 5, conducted oversight of the CHA's cleanup and assisted the CHA by providing laboratory analysis of the CHA's samples. Based on the sample analysis, Region 5 determined that the PCB cleanup level of less than 10 parts per million (ppm) had been met, and the area could be backfilled to grade with clean soil.

During 1996 and 1997, U.S. EPA also conducted surface soil and water sampling in certain areas of the housing complex in response to residents' concerns with potential contamination. The surface soil samples and surface water samples were analyzed for a full range of contaminants. Low levels of polycyclic aromatic hydrocarbons (PAHs), mainly Benzo(a)pyrene and low levels of DDD, DDT and DDE, were found in the soil samples. Although results were below action levels, U.S. EPA recommended to the CHA that a grass cover be placed in areas where bare soil was present. This grass cover prevents direct contact with soil.

Since these actions, allegations of misconduct in the analysis of samples have been made regarding two employees of U.S. EPA's Central Regional Laboratory and two contract employees who analyzed samples for Region 5's Superfund Program. The Office of the Inspector General is conducting an investigation of the alleged misconduct which relates to failures to follow standard laboratory operating procedures. Because of these allegations, U.S. EPA has determined that data generated from samples analyzed by these individuals will not be relied on for its decisions. U.S. EPA has determined that two sampling events at the Gautreax Center resulted in final cleanup decisions based solely on analytical results which were provided by one of the analytical chemists in question. On April 23 and May 8, 1996, soil samples were collected for PCB analysis from the excavation on the north side of the Gautreax Center. These results are identified by data set numbers 960073 and 960084. Because the 1996 analyses were performed by one of the analytical chemists in question, U.S. EPA now considers these particular analytical results to be unreliable Even though U.S. EPA has reviewed the 1996 raw analytical data and cannot conclude that there was any failure to follow analytical procedures which caused the analytical results to be lower than target levels indicating a need for cleanup, U.S. EPA believes the most prudent course of action is to resample this area. U.S. EPA must emphasize that the north yards are covered by approximately one foot of clean soil and do not present a significant risk to children attending the Gautreax Center or to the nearby community. It should also be noted that no similar problems have been found with the cleanup at the Altgeld Gardens storage lot, which was completed last summer.

With regard to the Superfund sampling, data from the sampling events in soil and water were reviewed and only certain chemical analysis was performed by these individuals. This was the case for pesticides in water and soils and for organic contaminants in soils, identified by data set numbers 960131, 960152 and 970025. Therefore, all locations will need to be resampled by U.S. EPA. However, samples will only be analyzed for pesticides and volatile organic compounds.

U.S. EPA intends to conduct this sampling by the middle of September.

If you have questions, please contact Scott Cooper, for the PCB sampling at (312) 886-1332 and Rosita Clarke-Moreno at (312) 886-7251, for the Superfund soil and water sampling.

Sincerely,

Robert Springer, Director
Waste, Pesticides and Toxics Division

William E. Muno
Superfund Division Director

Enclosure

Altgeld Gardens Sampling Locations

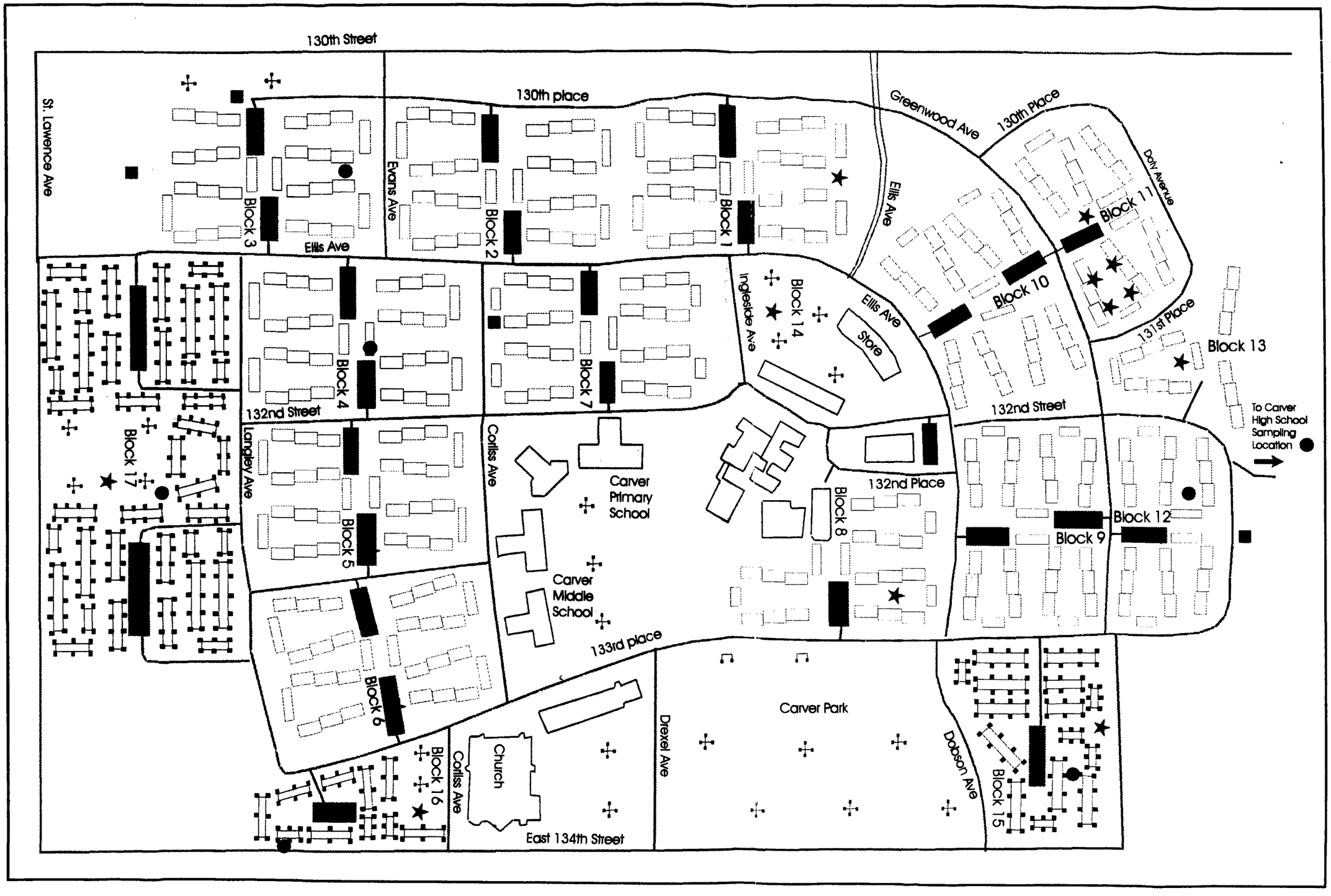

U.S EPA Sampling 1996/1997

Legend

- Residential Buildings
- Overhead Lighting
- Public Buildings
- Pavement
- ★ Surface Sampling Locations
- ■ Subsurface Sampling Locations
- ● Standing Water Sampling Locations

US EPA RECORDS CENTER REGION 5
411877

IL
11/15/00

LETTER REPORT
FOR
ALTGELD GARDENS
CHICAGO, COOK COUNTY, ILLINOIS
TDD: S05-0008-010
PAN: 0G1001SIXX

November 15, 2000

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: _____ Date: 11/15/00
Larry Lueck, START Project Manager

Reviewed by: _____ Date: 11/15/00
Patrick Zwilling, START Assistant Program Manager

Approved By: _____ Date: 11/15/00
Daniel Sewall, START Program Manager

International Specialists in the Environment

33 North Dearborn Street, Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

ecology and environment, inc.
International Specialists in the Environment

33 North Dearborn Street
Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

November 15, 2000

Ms. Gail Nabasny
START Project Officer
Emergency Support Section
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Altgeld Gardens
Chicago, Cook County, Illinois
TDD: S05-0008-010
PAN: 0G1001SIXX

Dear Ms. Nabasny:

The United States Environmental Protection Agency (U.S. EPA) tasked the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E), under Technical Direction Document (TDD) S05-0008-010, to assist U.S. EPA Remedial Project Manager (RPM) Rosita Clarke-Moreno with a site assessment at the above referenced site. The purpose of the site assessment was to resample surface soil locations on the Altgeld Gardens Community (AGC) that were originally sampled by U.S. EPA in 1996 and 1997 and analyzed for polyaromatic hydrocarbons (PAHs) and pesticides. Analytical results from that sampling effort are suspect because the analyses were performed by the Central Regional Laboratory (CRL). Recent investigations have determined that certain analytical data, including pesticide analyses, generated by CRL at the time of the U.S. EPA Altgeld Gardens soil sampling event may be erroneous.

The AGC site is a housing development managed by the Chicago Housing Authority (CHA) located south of 130th Street just west of Interstate 94 in Chicago, Cook County, Illinois (Attachment A, Figure 1). The AGC is bounded on the north by 130th Street, on the south by the Little Calumet River, on the east by the Beaubien Woods forest preserve, and on the west by St. Lawrence Avenue. Approximately 10,000 residents live in the AGC.

The AGC was constructed in 1941 on former farm land and several backfilled ditches that may have contained industrial effluent and debris. Many residents of the AGC have complained that health problems, including skin rashes and asthma, are prevalent in the community. Two soil samples collected from the AGC property in 1990 during a U.S. EPA investigation identified elevated levels of PAHs, pesticides, and heavy metals in surface soil. The Illinois Department of Public Health recommended additional soil sampling on AGC property, particularly in areas where children play.

In 1996, at the request of community leaders, U.S. EPA conducted a site investigation of the AGC property, including sampling of soil and standing water, to determine whether hazardous materials were present due to reported landfilling in the area. Results of this sampling and analysis indicated PAHs, and

recycled paper

PAHs, and the pesticides DDT, DDD, and DDE as contaminants of concern. The U.S. EPA analytical pesticide data is given in Attachment B, Table 1. At one sample location, S17, in housing Block 16 (Attachment A, Figure 2), the concentrations of pesticides were found to be above Agency for Toxic Substances and Disease Registry (ATSDR) screening criteria. Maximum concentrations found were: DDT at 31,399 micrograms per kilogram (μg/kg), DDD at 5,841 μg/kg, and DDE at 31,595 μg/kg.

In April of 1999, START performed a more detailed round of surface soil sampling in the vicinity of Block 16, collecting 10 located samples plus one duplicate and one off-site background sample. Analytical results, detailed in a Letter Report dated May 28, 1999, revealed the presence of pesticides in every sample, including the background sample. In on-site soils, 4,4'-DDD ranged from 30 to 570 μg/kg; 4,4'-DDE ranged from 660 to 17,000 μg/kg; and 4,4'-DDT ranged from 340 to 7,900 μg/kg. Aldrin was detected in one sample at 32 μg/kg, and dieldrin was detected in one sample at 15 μg/kg.

Under the present TDD, RPM Clarke requested that START return to the AGC site, resample the 1996-1997 U.S. EPA surface soil locations, and have the samples analyzed for pesticides at a commercial laboratory. On October 4, 2000, START members Larry Lueck and Erin White mobilized to the site and collected 10 surface soil samples, as well as a duplicate of one sample, using site file information to determine the 1996-1997 locations as well as possible (Attachment A, Figure 2). Each sample was a grab sample collected from the surface to a depth of 2 to 3 inches with a stainless steel trowel. Where turf was present, attention was given to freeing soil from the grass roots to ensure that the surface was truly represented. The soil was then homogenized in a stainless steel bowl and packed into an 8-ounce wide-mouth glass sample bottle and stored on ice in a cooler. Trowels and bowls were decontaminated with Alconox solution and rinsed with commercial distilled water between samples. Dates, times, and locations of sample collection are given in Attachment B, Table 2. Attachment C presents photographs of each sample location.

START labeled each sample bottle with a unique sample number, and the date and time of collection, and shipped the samples with a completed chain of custody form to the Ecology and Environment, Inc., Analytical Services Center in Lancaster, New York, for analysis of pesticides and polychlorinated biphenyls (PCBs) under analytical TDD S05-0008-804.

A summary of the START analyses is given in Attachment B, Table 3, which also lists the U.S. EPA Region III risk-based concentrations (RBCs) for comparison. Various pesticides were detected in every soil sample in concentrations from near the respective detection limits to 25,000 μg/kg DDE and 16,300 μg/kg DDT in sample AGS1. Note that the same substances were detected at even higher levels in the U.S. EPA soil sample from the same location (Attachment B, Table 1). Of the analyses listed in Attachment B, Table 3, seven are above the respective RBCs. Although the RBCs are guidelines rather than absolute action levels, they should be considered in determining which sample locations deserve further action. The 16,300 μg/kg DDT in sample AGS1 is noteworthy as being more than ten times the RBC. In general it appears, from a comparison of the data, that the U.S. EPA sample results were higher than those of the START samples, although not in all cases. Original laboratory reports and the validation memorandum are presented in Attachment D.

This Letter Report completes the deliverable requirements of the TDD. If you should have any questions or require additional information, please contact our office.

Sincerely,

Larry Lueck
START Project Manager

for Daniel Sewall
START Program Manager

Attachments: A - Figures
B - Data Tables
C - Photodocumentation
D - Validated Analytical Results

cc: Rosita Clarke-Moreno, U.S. EPA Remedial Project Manager
TDD file

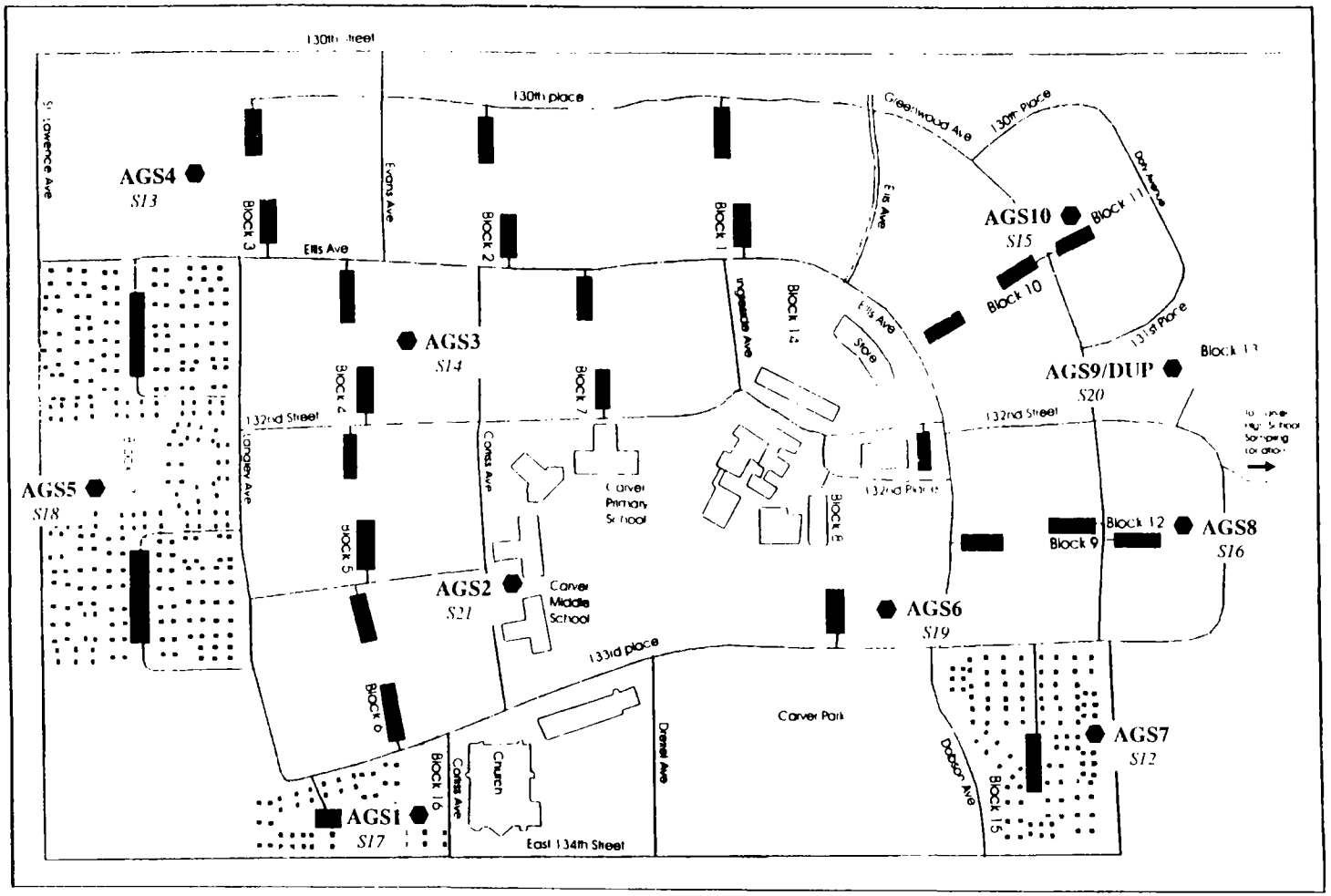

Legend

AGS3 *S14*	Soil sample location with sample number; corresponding U.S. Environmental Protection Agency sample number in italics
	Road or street
	Residential building
	Public building

ecology and environment, inc.
Superfund Technical Assessment and Response Team
33 North Dearborn, Suite 900, Chicago, Illinois 60602

TITLE	Site Features and Sample Location Map	FIGURE	2
SITE	Altgeld Gardens	SCALE	Not to Scale
CITY	Chicago STATE Illinois	TDD	S05-0008-010
SOURCE	United States Environmental Protection Agency, modified by Ecology and Envrionment, Inc.	DATE	1998; 2000

Table 1

1996-1997 U.S. EPA ANALYTICAL DATA
ALTGELD GARDENS
CHICAGO, COOK COUNTY, ILLINOIS

Parameter (µg/kg)	Sample Number[a]									
	S12 *AGS7*	**S13** *AGS4*	**S14** *AGS3*	**S15** *AGS10*	**S16** *AGS8*	**S17** *AGS1*	**S18** *AGS5*	**S19** *AGS6*	**S20** *AGS9 DUP*	**S21** *AGS2*
DDD	271	122	260	56	448	5,841	14	20	< 5	< 5
DDE	2,271	1,082	1,828	352	2,399	31,595	89	101	20	117
DDT	1,195	472	746	384	987	31,399	82	75	44	83

Key:

[a] U.S. EPA sample numbers in bold, corresponding START 10/4/00 sample numbers in italics (see Tables 2 and 3).
µg/kg = Micrograms per kilogram
< = Less than.

Source:

U.S. EPA Central Regional Laboratory, Chicago, Illinois, as reported in: Rosita Clarke-Moreno to Kathryn Evans, ATSDR, October 22, 1998

Table 2

SOIL SAMPLING INFORMATION
ALTGELD GARDENS
CHICAGO, COOK COUNTY, ILLINOIS
October 4, 2000

START Sample Number	Time of Collection	Location	Corresponding U.S. EPA 1997 Sample Number
AGS1	0845	Off southwest corner of unit 708, Block 16.	S17
AGS2	0900	Between the two buildings of Carver Primary School.	S21
AGS3	0915	Middle of common area west of Corliss Avenue, Block 4.	S14
AGS4	0925	Middle of common area, Block 3.	S13
AGS5	0935	Common area, Block 17.	S18
AGS6	0950	Common area, Block 8.	S19
AGS7	1005	Front yard of units 1074 and 1076, near east edge of Block 15.	S12
AGS8	1025	Front yard of units 1141 and 1143, Block 12.	S16
AGS9	1040	Under tree at front corner of unit 1134 lot, Block 13.	S20
AGS10	1050	Common area opposite unit 1121, Block 11.	S15
AGS11	1040	Duplicate of AGS9.	S20

Table 3

ANALYTICAL DATA
ALTGELD GARDENS
CHICAGO, COOK COUNTY, ILLINOIS

Parameter (μg/kg)	Sample Number[a]										
	AGS1 *S17*	**AGS2** *S21*	**AGS3** *S14*	**AGS4** *S13*	**AGS5** *S18*	**AGS6** *S19*	**AGS7** *S12*	**AGS8** *S16*	**AGS9/DUP** *S20*	**AGS10** *S15*	**RBCs**
4,4'-DDD	ND	15.1	42.4	49.8	ND	6.49	ND	31.1	ND	23.5	11,000
4,4'-DDE	25,000	27.2	629	630	57.4	113	2,330	449	103/112	387	35,000
4,4'-DDT	16,300	30.6	200	377	55.1	55.9	958	656	74.2/80.0	188	1,200
Aldrin	ND	ND	ND	ND	5.89	34.8	ND	ND	ND/12.7	ND	7.7
alpha-Chlordane[b]	ND	33.4	ND	ND	ND	5.00	ND	27.8	ND	ND	920[b]
Dieldrin	ND	15.7	ND	ND	11.0	15.3	ND	ND	ND	ND	2.2
Endrin	ND	19.8	ND	38.0	ND	ND	ND	ND	ND	ND	5,400
Endrin ketone	ND	ND	ND	ND	ND	ND	ND	16.9	ND	ND	none
gamma-Chlordane[b]	ND	25.2	ND	ND	2.70	3.01	ND	10.7	1.71/1.94	ND	920[b]
Heptachlor epoxide	ND	67.3	ND	ND	5.09	21.3	ND	97.4	3.01/10.0	ND	25
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	137	ND	ND	310,000
PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	various

Key:
[a] START sample numbers in bold, corresponding U.S. EPA 1996-1997 sample numbers in italics (see Table 1).
[b] Chlordane is listed as a single compound in the table of risk-based concentrations.
μg/kg = Micrograms per kilogram.
RBC = EPA Region III risk-based concentration for ingestion of residential soil (10/5/00).
ND = Not detected.

Source: Ecology and Environment, Inc. Analytical Services Center, Lancaster, New York; analytical TDD S05-0008-804.

HEALTH CONSULTATION

October 2000 Soil Sampling

ALTGELD GARDENS

CHICAGO, COOK COUNTY, ILLINOIS

EPA FACILITY ID: ILD981098395

FEBRUARY 16, 2001

Prepared by:

Illinois Department of Public Health
Under a Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry

BACKGROUND AND STATEMENT OF ISSUES

The U.S. Environmental Protection Agency (USEPA) requested that the Illinois Department of Public Health (IDPH) evaluate the public health hazards posed by exposure to contaminants detected in the soil at Altgeld Gardens in Chicago, Cook County, Illinois. IDPH has written two previous health consultations for soil sampling in Altgeld Gardens; however, due to data quality issues at the Central Regional Laboratory, USEPA contracted with Ecology and Environment (E & E) to collect surface soil samples from areas previously sampled [1].

Altgeld Gardens is a Chicago Housing Authority community of about 10,000 people on the southeast side of Chicago, Illinois (Attachment 1). Altgeld Gardens covers about 190 acres and is bordered on the north by 130th Street, on the south by 134th Street and the Little Calumet River, on the west by St. Lawrence Avenue, and on the east by the Beaulien Woods Forest Preserve. This land is north and west of a wetland area and was reportedly agricultural land before Altgeld Gardens was developed in 1941 [2].

In response to community concerns, USEPA conducted a site investigation at Altgeld Gardens in 1996. IDPH evaluated that data in a November 1998 health consultation and concluded, based on the limited information available, that no apparent public health hazard existed from exposure to the surface soil contamination detected. IDPH recommended that USEPA collect more surface soil samples near the sample with the greatest pesticide levels to confirm the elevated levels found and to more fully characterize the potential exposure in the area.

In April 1999, USEPA collected twelve soil samples near apartments along 134th Street on the southern edge of Altgeld Gardens. These recent samples were collected near the location of the greatest pesticide levels detected in the 1996 site investigation. IDPH concluded that no apparent public health hazard existed from exposure to the pesticide residuals detected in surface soil at Altgeld Gardens.

Most recently, E & E collected ten surface soil samples on October 4, 2000. The samples were collected from the top 2 to 3 inches of soil (Attachment 2) and were analyzed for pesticides by a private, certified laboratory.

DISCUSSION AND CHILD HEALTH STATEMENT

IDPH compared the results of each soil sample with the appropriate screening comparison value used to select contaminants for further evaluation for carcinogenic and non-carcinogenic health effects. Chemicals found at levels greater than comparison values or those for which no comparison value exists were selected for further evaluation. A discussion of each comparison value used is found in Attachment 3. Children are a sensitive sub-population, so special consideration is given to potential exposures to children in the toxicological evaluation.

DDT, DDE, and heptachlor epoxide were found at levels greater than comparison values in three of the ten samples (Table 1); however, DDT and DDE were found at higher levels in previous sampling.

Exceeding a comparison value does not necessarily mean that exposure to the chemical will cause adverse health effects. The potential for exposed persons to experience adverse health effects depends on:

- how much of each chemical to which a person is exposed,
- how long a person is exposed, and
- the health condition of the exposed person.

Residents can be exposed to the chemicals in the soil (Attachment 4). Routes of exposure include ingestion, dermal contact, and inhalation; however, exposure to contaminated soil is limited by the grass cover at the most contaminated sample locations [2].

If a child growing up in the community or an adult living in the community were exposed to chemicals at the highest levels detected in the soil, for nine months of each year, the estimated exposure would pose no apparent increased cancer risk. The estimated low level of exposure would also not be expected to cause any non-cancer health effects [3].

CONCLUSION

IDPH concludes that, based on the information reviewed, no apparent public health hazard exists from exposure to the pesticide residuals detected in surface soil at Altgeld Gardens.

PREPARER OF REPORT

Ken Runkle
Environmental Toxicologist
Illinois Department of Public Health

Certification

This Altgeld Gardens Health Consultation was prepared by the Illinois Department of Public Health under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures existing at the time the health consultation was initiated.

Roberta Erlwein

Technical Project Officer SPS, SSAB, DHAC

Richard Gieling

Section Chief, SPS, SSAB, DHAC, ATSDR

Table 1. Chemicals Exceeding Comparison Values in October 4, 2000 Soil Samples.

Sample Number	DDE (in ppm)	DDT (in ppm)	Heptachlor epoxide (in ppm)
AGS1	25.0	16.3	NE
AGS7	2.33	NE	NE
AGS8	NE	NE	0.10
Comparison Value (in ppm)*	2 CREG	2 CREG	0.08 CREG

*Exceeding a comparison value does not necessarily mean that exposure to the chemical will cause adverse health effects.
ppm = parts per million
NE = comparison value not exceeded in this sample
CREG = cancer risk evaluation guide

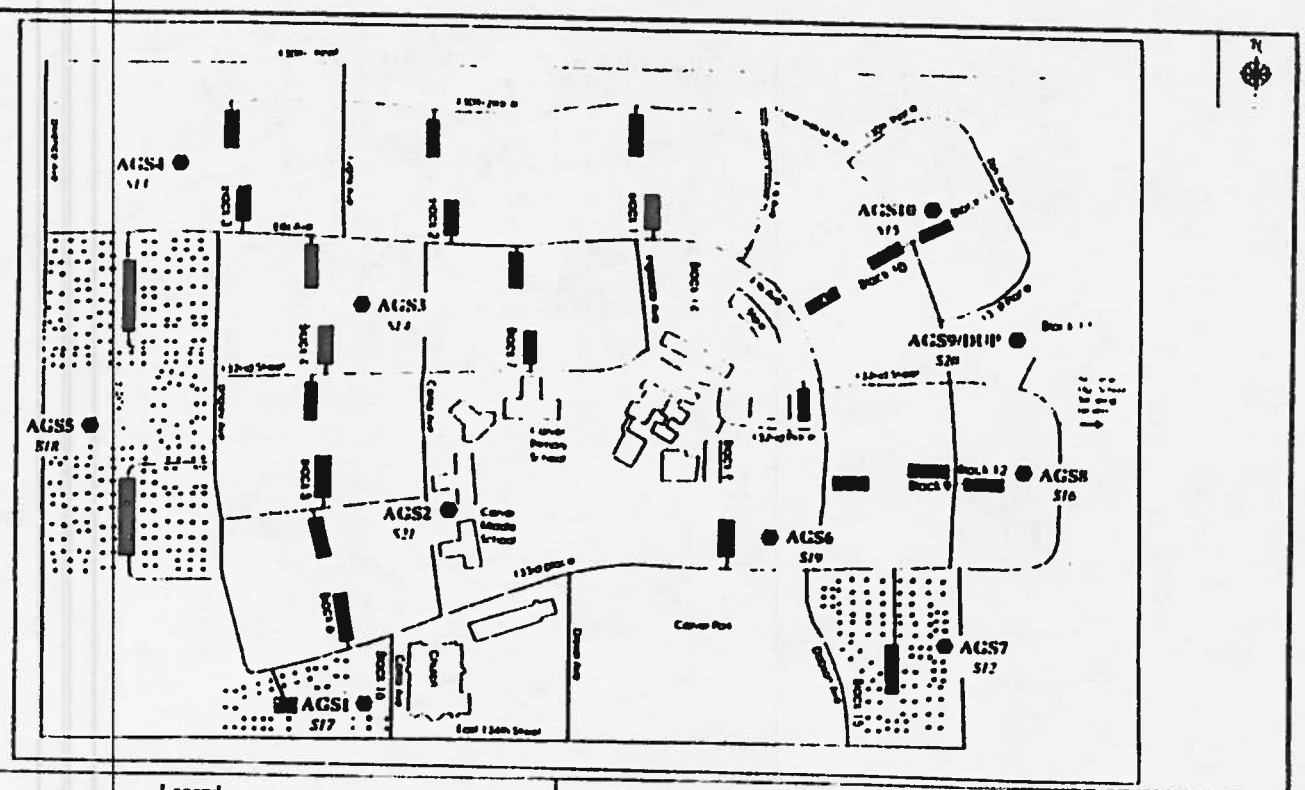

Legend

- ● AGS3 *S14* — Soil sample location with sample number; corresponding U.S. Environmental Protection Agency sample number in italics
- Road or street
- Residential building
- Public building

ecology and environment, inc.
Superfund Technical Assessment and Response Team
33 North Dearborn Suite 900, Chicago, Illinois 60602

TITLE: Site Features and Sample Location Map	FIGURE: 2
SITE: Altgeld Gardens	SCALE: Not to Scale
CITY: Chicago STATE: Illinois	JOB: SD5-0008 010
SOURCE: United States Environmental Protection Agency, modified by Ecology and Environment, Inc	DATE: 1998; 2000

ATTACHMENT 2

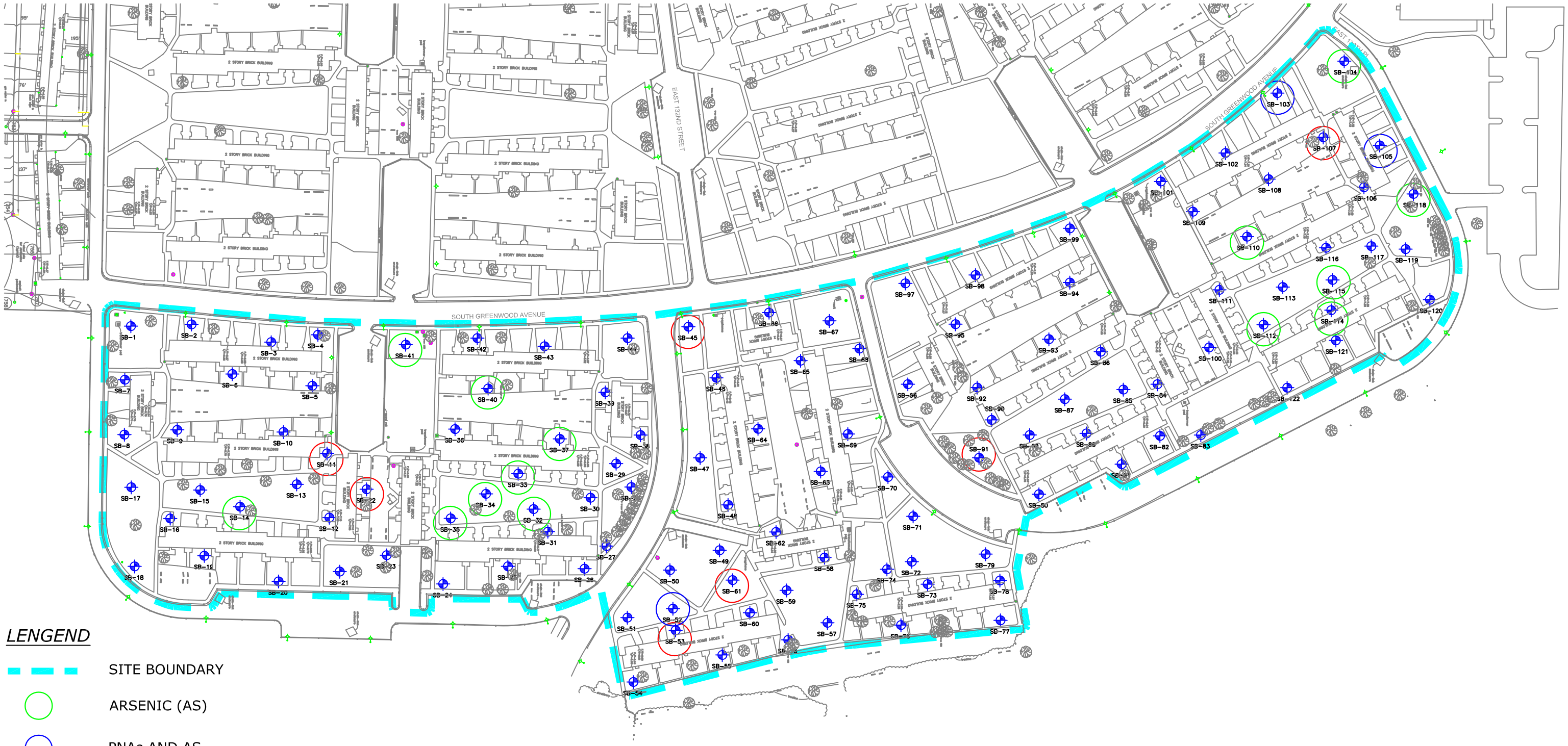

LENGEND

- SITE BOUNDARY
- ARSENIC (AS)
- PNAs AND AS
- POLYNUCLEAR AROMATIC HYDROCARBONS (PNAs)

GSG CONSULTANTS, INC.
855 W. ADAMS, SUITE 200
CHICAGO, IL. 60607
PHONE: (312) 733-6262
FAX : (312) 733-5612

SCALE: NTS	DRAWN BY: JD
	CHECKED BY: SL
	DATE: 6/16/09

EXHIBIT 1 - SOIL EXCEEDING TIER 1 RO'S - BLOCKS 11, 12, & 13
RESULTS FOR NEAR SURFACE SOILS (6" TO 1')
CHA ALTGELD GARDENS
CHICAGO, IL

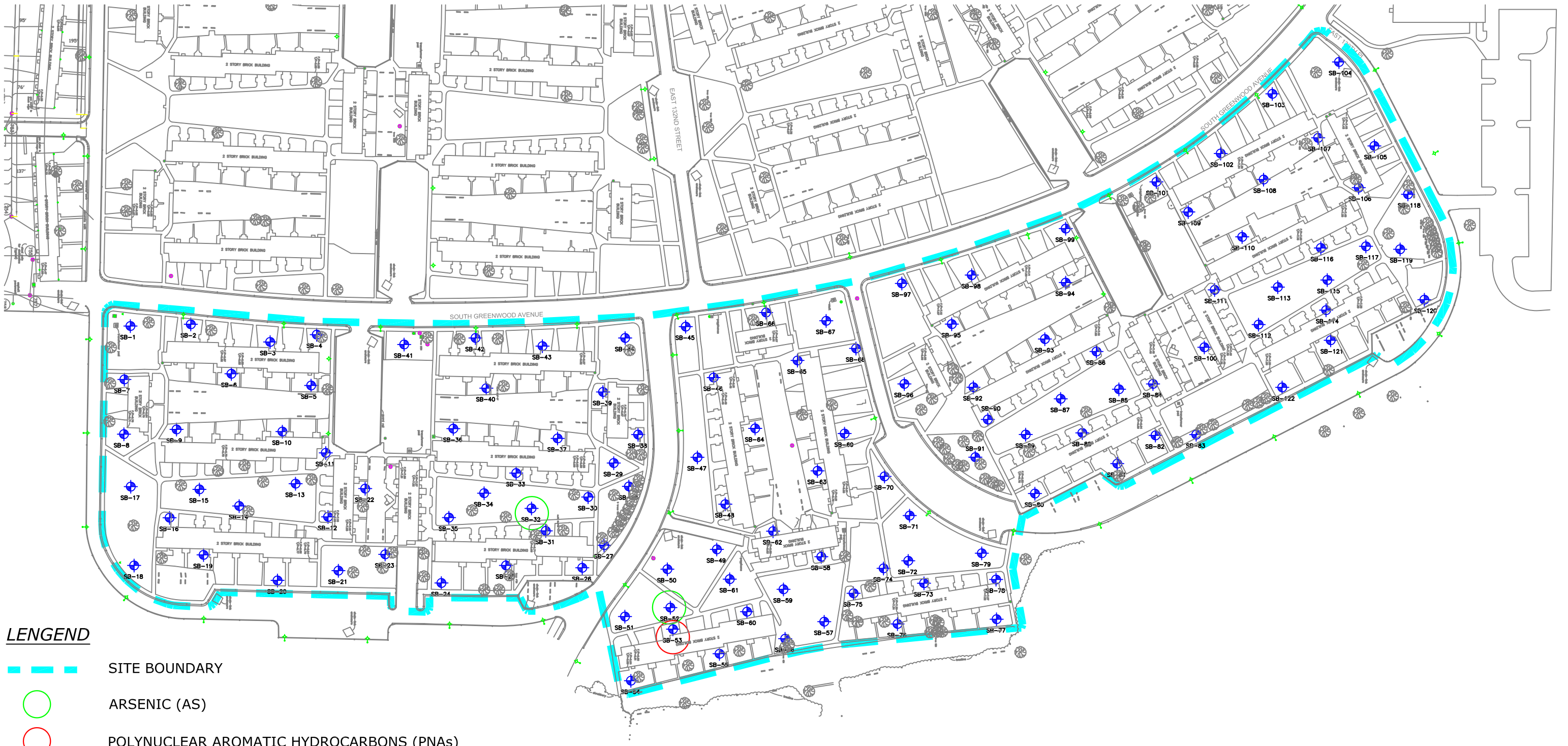

LENGEND

SITE BOUNDARY

ARSENIC (AS)

POLYNUCLEAR AROMATIC HYDROCARBONS (PNAs)

GSG CONSULTANTS, INC.
855 W. ADAMS, SUITE 200
CHICAGO, IL. 60607
PHONE: (312) 733-6262
FAX : (312) 733-5612

SCALE:	DRAWN BY:
NTS	JD
	CHECKED BY: SL
	DATE: 6/16/09

EXHIBIT 2 - SOIL EXCEEDING TIER 1 RO'S - BLOCKS 11, 12, & 13
RESULTS FOR NEAR SURFACE SOILS (1' TO 2')
CHA ALTGELD GARDENS
CHICAGO, IL

HAZARDOUS MATERIALS BUILDING SURVEY

ALTGELD GARDENS (PHASE V)
BLOCKS 11, 12 & 13
130 TH STREET & ELLIS AVENUE
CHICAGO, ILLINOIS

Prepared for:

Holabird & Root LLC
Architecture Engineering Interiors
140 South Dearborn Street
Chicago, Illinois 60603

July 29, 2009

GSG Project No. A09-260.06

Prepared by:

GSG CONSULTANTS, INC.

855 West Adams, Suite 200
Chicago, Illinois 60607
tel: 312.733.6262 • fax: 312.733.5612

EXECUTIVE SUMMARY

GSG Consultants, Inc. (GSG) was retained by Holabird & Root LLC, to conduct a hazardous materials building survey of the units associated with the Altgeld Gardens Blocks 11, 12 & 13. The site is located at 130th Street & Ellis Avenue in Chicago, Illinois. The survey included twenty-six (26) residential buildings with a total of 244 individual units that are to be renovated as part of this project. The purpose and scope of the survey was to identify the location and quantity of asbestos containing material (ACM), lead-based paint (LBP), mold, poly-chlorinated biphenyls (PCB), and Universal Waste that may be present in these units.

GSG performed the field survey in accordance with the Illinois EPA requirements and guidelines and standard industry practices. The surveys were conducted from June 29, 2009 to July 23, 2009. The work was performed by experienced project managers and technicians who are licensed by the Illinois Department of Public Health (IDPH) and have been involved in numerous renovation projects.

Asbestos-Containing Materials (ACM)

The asbestos survey identified the presence of friable and non-friable asbestos containing materials in the building. Materials that tested positive for asbestos content include: “9x9” floor tiles & mastic, “12x12” floor tiles & mastic, pipe insulation, and associated joint compound fittings, exterior door caulk, & window caulk, roof field & flashing, and transite pipe.

Lead-Based Paint Surfaces/Components/Materials

Lead-based paint was identified on exterior wooden window and door frames. The location, component, substrate, and condition of all lead-bearing surfaces tested are listed in Sections 3, 4, 5, 6 and 7 Tables 3.2, 4.2, 5.2, 6.2, and 7.2.

All painted surfaces / components including walls and ceilings inside the units tested **Negative** for lead-based paint throughout Blocks 11, 12 and 13.

Microbial Contaminated Material (Mold)

Suspect mold growth was identified in some of the units that were inspected during this survey. Water damage was also observed in most units in Blocks 11, 12 and 13.

Polychlorinated Biphenyls (PCBs) & Universal Waste

GSG Inspectors did not observe any fluorescent light fixtures or PCB ballasts during the survey.

Chemical Waste

GSG Inspectors did not observe any chemical waste on site during the survey.

END OF EXECUTIVE SUMMARY

Appendix F-1

Regulatory Records Documentation

FOIA Correspondence & Database Search Results

CARNOW CONIBEAR

Envirofacts

Search Results

<< Return

Envirofacts Links

- EF Overview
- Search
- Model
- Data Update
- Multisystem Search User Guide
- Contact Us

Report an Error

API Link for Report Data:

http://iaspub.epa.gov/enviro/efservice/multisystem/minLatitude/41

Copy and paste the link above to view the data from this report

Info | AIR | TOXICS | WASTE | RADIATION | WATER

Click on a tab to see a summary view of data for a media type.

**Zoom or pan map to change location.*

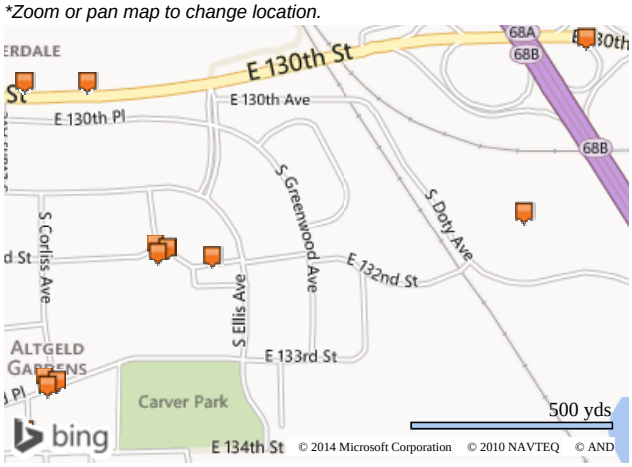

LIST OF EPA-REGULATED FACILITIES IN ENVIROFACTS

To search Envirofacts via an interactive map, please view your results in EnviroMapper for Envirofacts Use the buttons located beneath the facility name and address information to obtain detailed reports on a specific facility. The data within the table below can be downloaded in a comma-separated value file for use in Excel by clicking here:

Download Table as CSV File *OR* Copy CSV URL to Clipboard

FACILITY INFORMATION	AFS	ACRES	BR	CERCLIS	GHG	PCS/ICIS	RADInfo	RCRAInfo	TRI	TSCA
ALTGELD GARDENS 977 E 132ND STREET CHICAGO, IL 60827 Latitude: 41.655694 Longitude: -87.597869 Summary Report Facility Report Compliance Report								View Report		
CARVER MIDDLE SCHOOL 801 E. 133RD PLACE CHICAGO, IL 60827-1495 Latitude: 41.6519 Longitude: -87.6017 Summary Report Facility Report Compliance Report	View Report							View Report		
CARVER MILITARY ACADEMY 13100 S DOTY AVE CHICAGO, IL 608271516 Latitude: 41.656584 Longitude: -87.589559 Summary Report Facility Report Compliance Report								View Report		
CARVER PRIMARY SCHOOL 901 E 133RD PL CHICAGO, IL 60827-1493 Latitude: 41.6532 Longitude: -87.60196 Summary Report Facility Report Compliance Report								View Report		
CARVER SCHOOL 909 E 132ND ST CHICAGO, IL 60827 Latitude: 41.655961 Longitude: -87.599423 Summary Report Facility Report Compliance Report	View Report									
CHA-ALTGELD GARDENS VARIOUS CHICAGO, IL 60827	View Report									

Latitude: 41.65593 Longitude: -87.59864										
CHICAGO HOUSING AUTHORITY 940 E 132ND ST CHICAGO, IL 60827-1462 Latitude: 41.655837 Longitude: -87.598672 Summary Report Facility Report Compliance Report								View Report		
CHICAGO PARK DIST CARVER PK 939 E 132ND ST CHICAGO, IL 60827 Latitude: 41.655966 Longitude: -87.598835								View Report		
CHICAGO, CITY OF 1100 E 130TH PL CHICAGO, IL 60628 Latitude: 41.659151 Longitude: -87.602332 Summary Report Facility Report Compliance Report								View Report		
LAND & LAKES TRANSFER STATION 1258-1300 E 130TH ST CHICAGO, IL 60827 Latitude: 41.65916 Longitude: -87.601488								View Report		
MOBILE STORAGE GROUP 1465 E 130TH ST CHICAGO, IL 60633 Latitude: 41.660149 Longitude: -87.587704 Summary Report Facility Report Compliance Report						View Report		View Report		
WHEATLEY PHYLLIS CENTER 902 E 133RD PL CHICAGO, IL 60827 Latitude: 41.65321 Longitude: -87.601924								View Report		

Go To Top Of The Page

Total Number of Facilities Displayed: 12

You have been redirected from the former ECHO site to the modernized ECHO, now at echo.epa.gov. Please update your bookmarks, and see our ECHO Modernization Information page to learn about the new ECHO.

Detailed Facility Report

Facility Summary

CHA-ALTGELD GARDENS
VARIOUS, CHICAGO, IL 60827

Facility Information (FRS)

FRS ID: 110018484246
EPA Region: 05
Latitude: 41.65593
Longitude: -87.59864
Industry:
Indian Country: N

Regulatory Interests

Clean Air Act: Permanently Closed Minor (1703101791)
Clean Water Act: No Information
Resource Conservation and Recovery Act: No Information
Safe Drinking Water Act: No Information

Also Reports

Air Emissions Inventory (EIS): No Information
Greenhouse Gas Emissions (eGGRT): No Information
Toxic Releases (TRI): No Information

Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Current Compliance Status	Qtrs in NC (of 12)	Qtrs in Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
CAA	--	--	**Unknown**	0	0	--	--	--	--	--

Facility/System Characteristics

Facility/System Characteristics

Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
--	110018484246	--	–	--	–	N	41.65593	-87.59864
CAA	1703101791	Other Minor	Permanently Closed	SIP	–	N	--	–

Facility Contact Information

System	Identifier	Facility Name	Facility Address	Contact Name	Contact Telephone
FRS	110018484246	CHA-ALTGELD GARDENS	VARIOUS, CHICAGO, IL 60827	x	x
AFS	1703101791	CHA-ALTGELD GARDENS	VARIOUS, CHICAGO, IL 60627	x	x

Facility SIC Codes

System	Identifier	SIC Code	SIC Desc
AFS	1703101791	6513	--

Facility NAICS Codes

System	Identifier	NAICS Code	NAICS Desc
AFS	1703101791	531110	Lessors of Residential Buildings and Dwellings

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Inspection Type	Lead Agency	Date	Finding
No data records returned						

Entries in italics are not considered inspections in official counts.

Compliance Summary Data

Statute	Source ID	Current SNC/HPV	Description	Current As Of	Qtrs in NC (of 12)
CAA	1703101791	No	–	02/15/2014	0

Three Year Compliance Status by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10
CAA (Source ID: 1703101791)		04/01-06/30 2011	07/01-09/30 2011	10/01-12/31 2011	01/01-03/31 2012	04/01-06/30 2012	07/01-09/30 2012	10/01-12/31 2012	01/01-03/31 2013	04/01-06/30 2013	07/01-09/30 2013
	Facility-Level Status	Unk	Unk	Unk	Unk	Unk	Unk	Unk	Unk	Unk	Unk
	HPV History	–	–	--	--	–	–	–	–	--	--
	Program/Pollutant in Current Violation										
CAA	SIP	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN

Informal Enforcement Actions (5 Years)

Statute	Source ID	Type of Action	Lead Agency	Date
No data records returned				

Formal Enforcement Actions (5 Years)

Statute	Source ID	Type of Action	Lead Agency	Date	Penalty	Penalty Description
No data records returned						

ICIS Case History (5 years)

Primary Law/Section	Case No.	Case Type	Lead Agency	Case Name	Issued/Filed Date	Settlement Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
No data records returned										

Environmental Conditions

Water Quality

Permit ID	Watershed (HUC 8)	Watershed Name (HUC 8)	Watershed (HUC 12)	Watershed Name (HUC 12)	Receiving Waters	Impaired Waters	Combined Sewer System?
110018484246	07120003	CHICAGO	071200030407	Grand Calumet River-Little Calumet River	--	No	--

Air Quality

Non-Attainment Area?	Pollutant(s)
Yes	Ozone
No	Lead
Yes	Particulate Matter

Pollutants

TRI History of Reported Chemicals Released in Pounds per Year at Site

Year	Total Air Emissions	Surface Water Discharges	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Releases
No data records returned						

TRI Total Releases and Transfers by Chemical and Year

Chemical Name
No data records returned

Demographic Profile

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

Radius of Area:	3	Land Area:	92%	Households in Area:	35,870
Center latitude:	41.65593	Water Area:	8%	Housing Units in Area:	42,058
Center Longitude:	-87.59864	Population Density:	4,016/sq.mi.	Households on Public Assistance:	1,667
Total Persons:	104,661	Percent Minority:	90%	Persons Below Poverty Level:	52,066

Race Breakdown	Persons (%)	Age Breakdown	Persons (%)
White:	9,990 (9.55%)	Child 5 years and younger:	7,464 (7.13%)
African-American:	89,313 (85.34%)	Minors 17 years and younger:	30,811 (29.44%)
Hispanic-Origin:	7,632 (7.29%)	Adults 18 years and older:	73,850 (70.56%)
Asian/Pacific Islander:	226 (.22%)	Seniors 65 years and older:	10,711 (10.23%)
American Indian:	287 (.27%)		
Other/Multiracial:	4,846 (4.63%)		

Education Level (Persons 25 & older)	Persons (%)	Income Breakdown	Households (%)
Less than 9th Grade:	2,864 (4.36%)	Less than $15,000:	9,184 (13.97%)
9th through 12th Grade:	8,402 (12.78%)	$15,000 - $25,000:	4,675 (12.44%)
High School Diploma:	20,147 (30.66%)	$25,000 - $50,000:	9,711 (25.83%)
Some College/2-yr:	25,121 (38.23%)	$50,000 - $75,000:	7,955 (21.16%)
B.S./B.A. or More:	9,184 (13.97%)	Greater than $75,000:	7,889 (20.99%)

Envirofacts

FRS Facility Detail Report

FRS

CHA-ALTGELD GARDENS

VARIOUS
CHICAGO, IL 60827
EPA Registry Id: 110018484246

Facilty Registry Service Links

- Search
  - FRS Facility Query
  - FRS EZ Search
  - Organization Search
- FRS Physical Data Model
- FRS Geospatial Model
- Contact Us
- Facility Registry Service (FRS) Home

Report an Error

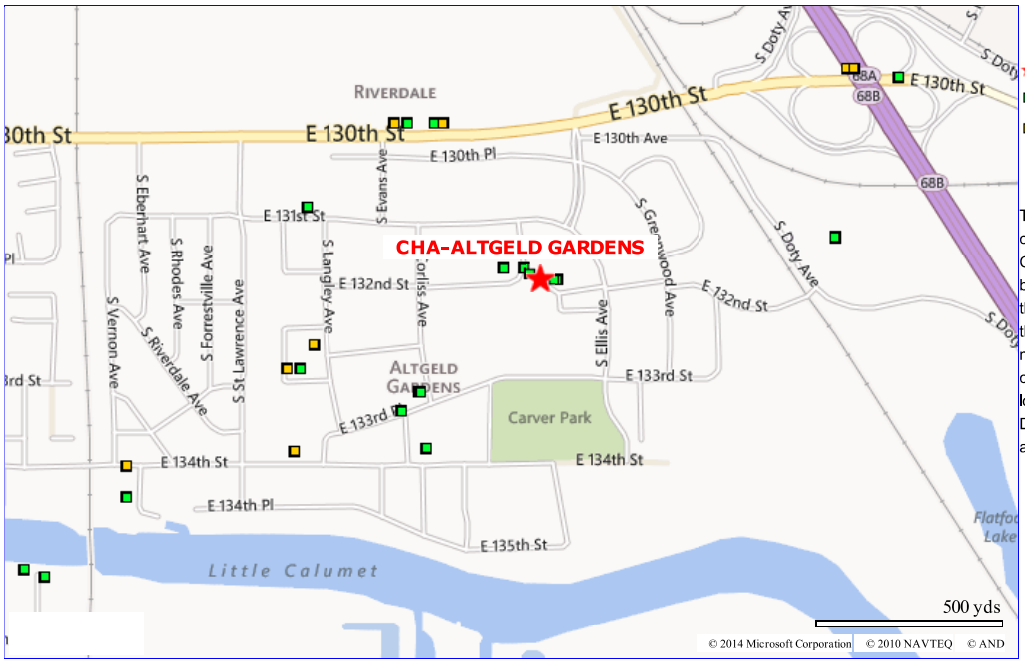

Legend

- ★ Selected Facility
- ■ EPA Facility of Interest
- ■ State/Tribe Facility of Interest

The facility locations displayed come from the FRS Spatial Coordinates tables. They are the best representative locations for the displayed facilities based on the accuracy of the collection method and quality assurance checks performed against each location. The North American Datum of 1983 is used to display all coordinates.

Environmental Interests

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests:
AGENCY COMPLIANCE AND ENFORCEMENT SYSTEMS	170000048856	STATE MASTER	ACES		-0316545003 SOLID WASTE PROGRAM -0316545003 REFUSE DISPOSAL -031600DIA AIR PROGRAM
AIR FACILITY SYSTEM	1703101791	AIR MINOR (PERMANENTLY CLOSED)	AIRS/AFS	03/11/2014	

Additional EPA Reports: MyEnvironment Enforcement and Compliance Site Demographics Facility Coordinates Viewer Environmental Justice Map Viewer Watershed Report

Standard Industrial Classification Codes (SIC)

Data Source	SIC Code	Description	Primary
AIRS/AFS	6513	OPERATORS OF APARTMENT BUILDINGS	
AIRS/AFS	PRIV		

National Industry Classification System Codes (NAICS)

Data Source	NAICS Code	Description	Prima
AIRS/AFS	531110	LESSORS OF RESIDENTIAL BUILDINGS AND DWELLINGS.	
AIRS/AFS	ATELY		

Facility Codes and Flags

EPA Region:	05
Duns Number:	
Congressional District Number:	02
Legislative District Number:	
HUC Code/Watershed:	07120003 / CHICAGO
US Mexico Border Indicator:	
Federal Facility:	NO
Tribal Land:	NO

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information Syste
FACILITY MAILING ADDRESS	22 W MADISON ST	CHICAGO	IL	60606	AIRS/AFS

Contacts

No Contacts returned.

Alternative Names

Alternative Name	Source of Data

CHA-ALTGELD GARDENS	ACES
CHICAGO HOUSING AUTHORITY	AIRS/AFS

Organizations

No Organizations returned.

Query executed on: MAY-02-2014

EPA United States Environmental Protection Agency

Envirofacts

Search Results

CHA-ALTGELD GARDENS
VARIOUS
CHICAGO, IL 60827

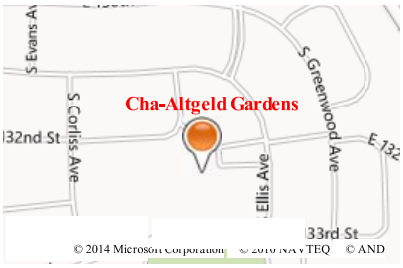

You can navigate within the map with your mouse.

EPA Facility Information

This query was executed on MAY-02-2014

Multisystem Links

- EF Overview
- Search
- Model
- Contact Us

Report an Error

AFS Information

Operating Status:	X	HPV Flag:	
Operating Status Description:	PERMANENTLY CLOSED	State Registration Number:	031600DIA
State County Compliance Source:	1703101791	Government Facility Code Description:	PRIVATELY OWNED/OPERATED
Region Code:	05	Class Code:	B
Primary SIC Code:	6513	Class Code Description:	POTENTIAL UNCONTROLLED EM
Primary SIC Description:	APARTMENT BUILDING OPERAT	Compliance Status:	0
NAICS Code:	531110	Compliance Status Description:	UNKNOWN COMPLIANCE STATUS
NAICS Code Description:	Lessors of Residential Buildings and Dwellings	Date Plant Information Last Updated:	03/11/2014

Air Program Information

Air Program Code	Air Program Description	Air Program Status	Air Program Status Description	Air Program Subpart	Air Program Subpart Description	Class Code	Class Code Description	Compliance Status	Compliance Status Description
0	SIP	X	PERMANENTLY CLOSED			B	POTENTIAL UNCONTROLLED EM	0	UNKNOWN COMPLIANCE STATUS

Pollutant Data

Air Program Code	Pollutant Code / CAS Number	Pollutant / CAS Description	Attain Indicator	Attain Indicator Description	Pollutant Compliance Status	ES Pollutant Compliance Description	Pollutant Class Code	Pollutant Class Description
0	FACIL	FACILITY-WIDE PERMIT REQUIREMENTS			0	UNKNOWN COMPLIANCE STATUS		
0	PT	TOTAL PARTICULATE MATTER	N	NON-ATTAINMENT FOR PRIMAR	0	UNKNOWN COMPLIANCE STATUS	B	POTENTIAL UNCONTROLLED EM

Compliance Monitoring System Plan

CMS Start Date	FY2008 CMS Indicator	FY2008 CMS Indicator Description	FY2009 CMS Indicator	FY2009 CMS Indicator Description

Plant Actions

Action Number	Key Action Numbers	Air Program Codes	National Action Type	National Action Description	Action Type	Action Description	Date Achieved	Penalty Amount	Results Code	Results Code Description	Pollutant Code	Regional Data Element	Regional Data Element 16
00001		0			ZZ	DAY SOURCE ENTERED INTO AFS SYSTEM	15-NOV-91						

Additional Information can be obtained from Air Facility System AFS Search.

Last updated on 5/2/2014

Nohemi Melero - Illinois EPA FOIA Response

From: "Kates, Kelly" <Kelly.Kates@Illinois.gov>
To: "nmelero@ccaltd.com" <nmelero@ccaltd.com>
Date: 6/4/2014 3:25 PM
Subject: Illinois EPA FOIA Response
Attachments: 1700-0052-9756 Asbestos.pdf; microfiche.zip; W0316000123-002.zip

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829
PAT QUINN, GOVERNOR LISA BONNETT, DIRECTOR

June 3, 2014
Carnow Conibear & Assoc Ltd
Attn: Ms. Nohemi Melero
600 West Van Buren Street
Suite 500
Chicago, IL 60607
Re: Freedom of Information Act Request - 83654
Dear Ms. Melero:
This letter is in response to your Freedom of Information Act (FOIA) (5 ILCS 140/1 et seq.) request dated May 13, 2014 and received by the Illinois Environmental Protection Agency (Illinois EPA) on May 13, 2014.

The information responsive to your request is attached.

Requested Information

1. Chicago Park District – 939 East 132nd Street, Chicago
2. Chicago Housing Authority – 940 East 132nd Street, Chicago

Following a search, the Illinois EPA has determined there to be no information responsive to your request.

Requested Information

1. Chicago – 133373-13383 South Langley Avenue
2. Chicago – 701-755 East 133rd Pl
3. Chicago – 708-750 East 134th Street
4. Chicago – 1036-1098 East 134th Street
5. Chicago – 13314-13353 South Greenwood Avenue
6. Chicago – 13301-13355 South Dobson Avenue
7. Chicago – 1101-1147 East 131st Street
8. Chicago – 13101-13107 South Greenwood Avenue
9. Chicago – 1100-1158 East 132nd Street
10. Chicago – 13201-13263 South Greenwood Avenue
11. Chicago – 1101-1131 East 132nd Street
12. Chicago – 1133-1166 East 133rd Street
13. Chicago – 1101-1171 East 130th Pl
14. Chicago – 13031-13077 South Greenwood Avenue

15. Chicago – 1100-1166 East 131st Street
16. Chicago – 801-923 East 131st Street
17. Chicago – 800-922 East 132nd Street
18. Chicago – 13101-13175 South Corliss Avenue
19. Chicago – 13100-13174 South Ingleside Avenue
20. Chicago - 900-994 East 133rd Street
21. Chicago – 967-989 East 132nd Pl
22. Chicago – 13218-13292 South Ellis Avenue
23. Chicago - 901 East 132nd Street

Thank you for your patience in this matter.

Sincerely,

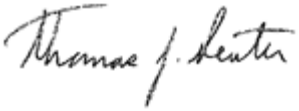

Thomas J. Reuter
FOIA Officer (Acting)
Illinois EPA
217.558.5101
www.epa.state.il.us/foia

Division of Petroleum & Chemical Safety

Search Results - 7 matches found Export to Excel

Facility Nbr	Facility Name	Address	City	Facility Type	Owner Name	Status	Pending NOV
2018929	Calumet Water Reclamation Plant	400 E. 130th Street	Chicago	City / Town	Metropolitan Water Reclamation District	Active	N
2040521	Construction Site	2550 E 130th St Third Party Removal	Chicago	None	Lafarge Corporation	Exempt	N
2040889	Construction Site	2150 E 130th Street Thrid Party Removal	Chicago	Construction	Lafarge Corporation	Exempt	N
2003404	Cook County Lumber Co	200 E 130Th St	Chicago	None	Cook County Lumber Co	Closed	N
2025115	Il Bell Telephone Co	3032 E 130Th St	Chicago	None	Ameritech d/b/a AT&T	Closed	N
2021543	Marsulex Inc	2250 E 130Th St	Chicago	None	Marsulex Inc	Closed	N
2041653	Vacant Site	1721 E 130th St Thrid Party Removal	Chicago	None	Dearborn Trust 2	Exempt	N

Search Results - 7 matches found

Export to Excel

Division of Petroleum & Chemical Safety

Search Results - 2 matches found Export to Excel

Facility Nbr	Facility Name	Address	City	Facility Type	Owner Name	Status	Pending NOV
2030903	Carver Park Natatorium	939 E 132Nd St	Chicago	Other Special Service District	Chicago Park District	Closed	N
2043650	Maintenance Building	940 E. 132nd Street	Chicago	None	Chicago Housing Authority	Exempt	N

Search Results - 2 matches found

Export to Excel

Division of Petroleum & Chemical Safety

Search Results - 6 matches found Export to Excel

Facility Nbr	Facility Name	Address	City	Facility Type	Owner Name	Status	Pending NOV
2038843	Apartment Building	5225 South Greenwood Avenue	Chicago	None	Blake Betty	Exempt	N
2006820	D C Catenary Headquarters	90Th St & Greenwood Ave	Chicago	State	Metra NE Il Regional RR Corp.	Closed	N
2024186	Dial Corp	8825 S Greenwood Ave	Chicago	None	Dial Corp	Closed	N
2042612	Renaissance Adult Day Services	7920 S. Greenwood	Chicago	None	Renaissance Adult Day Services	Exempt	N
2034432	Schmid School	9755 S Greenwood Ave	Chicago	City / Town	Public Building Commission of Chicago	Closed	N
2030731	Stuart Hooper Company	8757 S Greenwood	Chicago	None	8757 Building (In Land Trust)	Closed	N

Search Results - 6 matches found

Export to Excel

CHICAGO FIRE DEPARTMENT

CITY OF CHICAGO

May 21, 2014

VIA EMAIL

Nohemi Melero
Carnow, Conibear & Associates
600 West Van Buren
Chicago, Il 60607
nmelero@ccaltd.com

FOIA RESPONSES:14-3490-3497, 3499-3500

Dear Ms. Melero:

Thank you for writing to the Chicago Fire Department with your requestsfor information pursuant to the Illinois Freedom of Information Act, 5 ILCS 140/1 et seq.

On May 16, 2014, the attached requests were received. Please be advised there are no records responsive to the inquiries described in your requests.

Sincerely,

Sherri Logan Hicks

Freedom of Information Officer
Chicago Fire Department
CFDFOIA@cityofchicago.org

Enc.

CHICAGO FIRE DEPARTMENT

OFFICE # 312-745-4232 CFDFOIA@CITYOFCHICAGO.ORG FAX # 312-745-4189

FOIA REQUEST FORM

No Records

14-3494

REQUESTER'S INFORMATION:

Name Nohemi Melero, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail nmelero@ccaitd.com Phone Number 312-762-2927

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY **1101-1111 East 130th Place, Chicago, IL**

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 11 - Additional addresses associated with the site: 1113-1135 E. 130th Pl., 1137-1147 E. 130th Pl., 1149-1171 E. 130th Pl., 13031-13053 S. Greenwood Ave., 13055-13077 S. Greenwood Ave., 1100-1106 E. 131st St., 1108-1130 E. 131st St., 1132-1142 E. 131st St., and 1144-1166 E. 131st St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above.

SHADED AREA FOR OFFICE USE ONLY

DATE OF RECEIPT DATE OF RESPONSE

DIVISION OR BUREAU ASSIGNED FPB

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED FEE $

☐ REQUEST DENIED REASON FOR DENIAL

OFFICE # 312-745-4232 CFDFOIA@CITYOFCHICAGO.ORG FAX # 312-745-4189

FOIA REQUEST FORM

14-3493

REQUESTER'S INFORMATION:

Name Nohemi Melero, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail nmelero@ccaltd.com Phone Number 312-762-2927

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY **13201-13223 South Greenwood Avenue, Chicago, IL**

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 12 - Additional addresses associated with the site: 13241-13263 S. Greenwood Ave., 1101-1107 E. 132nd St., 1109-1131 E. 132nd St., 1133-1143 E. 133rd St., 1145-1167 E. 133rd St., 1132-1142 E. 133rd St., and 1144-1166 E. 133rd St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above.

SHADED AREA FOR OFFICE USE ONLY

DATE OF RECEIPT DATE OF RESPONSE

DIVISION OR BUREAU ASSIGNED FPB

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED FEE $

☐ REQUEST DENIED REASON FOR DENIAL

CHICAGO FIRE DEPARTMENT

OFFICE # 312-745-4232 CFDFOIA@CITYOFCHICAGO.ORG FAX # 312-745-4189

FOIA REQUEST FORM

14-3492

No Records

REQUESTER'S INFORMATION:

Name Nohemi Melero, Carnow, Conibear & Assoc., Ltd.

Address 600 West Van Buren Street, Suite 500

City Chicago State IL Zip Code 60607

E-Mail nmelero@ccaltd.com Phone Number 312-762-2927

DATE OF INCIDENT, INSPECTION, TEST OR VIOLATION

LOCATION OF INCIDENT OR ADDRESS OF PROPERTY **1101-1123 East 131st Street, Chicago, IL**

RECORDS BEING SOUGHT (Please be specific)

CHA - Altgeld Gardens - Block 13 - Additional addresses associated with the site: 13101-13107 S. Greenwood Ave., 1125-1147 E. 131st St., 1100-1122 E. 132nd St., 1124-1134 E. 132nd St., and 1136-1158 E. 132nd St.

Records of underground storage tanks (USTs), above ground storage tanks (ASTs), incident reports, hazardous materials incident reports and other records of environmental concern, for the address listed above.

SHADED AREA FOR OFFICE USE ONLY

DATE OF RECEIPT DATE OF RESPONSE

DIVISION OR BUREAU ASSIGNED FPB

RECORDS FOUND ☐ YES ☐ NO NUMBER OF PAGES OR ITEMS COPIED FEE $

☐ REQUEST DENIED REASON FOR DENIAL

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
901 E 130TH PL CHICAGO, IL (41.6586953850005, -87.59961143799967)	901	E	130TH	PL					Y		
901 E 130TH ST CHICAGO, IL (41.65911737200048, -87.60327522499966)	901	E	130TH	ST					Y		
931 E 130TH ST CHICAGO, IL (41.65911864900045, -87.60312963099966)	931	E	130TH	ST				Y			
933 E 130TH ST CHICAGO, IL (41.65911873500045, -87.60311992499965)	933	E	130TH	ST					Y		
954 E 130TH ST CHICAGO, IL (41.659173627000484, -87.60301400299966)	954	E	130TH	ST	Y			Y			
1016 E 130TH ST CHICAGO, IL (41.659176266000486, -87.60271310799965)	1016	E	130TH	ST				Y			
1112 E 130TH ST CHICAGO, IL	1112	E	130TH	ST	Y			Y			

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
(41.65918051700049, -87.60224726599967)											

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
700 E 131ST ST CHICAGO, IL (41.65724387300048, -87.60328729599968)	700	E	131ST	ST					Y		
701 E 131ST ST CHICAGO, IL (41.65718998000045, -87.60329085699965)	701	E	131ST	ST				Y			
732 E 131ST ST CHICAGO, IL (41.65721288600048, -87.60244720699967)	732	E	131ST	ST					Y		
733 E 131ST ST CHICAGO, IL (41.65715899200046, -87.60245076899969)	733	E	131ST	ST				Y	Y		
742 E 131ST ST CHICAGO, IL (41.65721282400045, -87.60207690299967)	742	E	131ST	ST					Y		
800 E 131ST ST CHICAGO, IL (41.65722932800048, -87.60111732199965)	800	E	131ST	ST					Y		
900 E 131ST ST CHICAGO, IL	900	E	131ST	ST					Y		

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
(41.657321055000466, -87.59925984399968)											
927 E 131ST ST CHICAGO, IL (41.65727189500046, -87.59894951499967)	927	E	131ST	ST					Y		
932 E 131ST ST CHICAGO, IL (41.657326948000446, -87.59887974399965)	932	E	131ST	ST					Y		

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
1128 E 132ND ST CHICAGO, IL (41.65585846400046, -87.59445385099968)	1128	E	132ND	ST				Y			
1130 E 132ND ST CHICAGO, IL (41.65586066900045, -87.59442691999965)	1130	E	132ND	ST	Y			Y			
1133 E 132ND ST CHICAGO, IL (41.65580923600049, -87.59439212399968)	1133	E	132ND	ST					Y		

CDPH Environmental Records Lookup Table | City of Chicago | Data Portal - Windows Internet Explorer

https://data.cityofchicago.org/Environment-Sustainable-Development/CDPH-Environmental-Records-Lookup-Table/a9u4-3dwb

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Based on CDPH Environmental Records Lookup Table

This dataset serves as a lookup table to determine if environmental records exist in a Chicago Department of Public Health (CDPH) environmental dataset

Find in this Dataset

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MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTIC

No rows to display

Filter

STREET NUMBER FROM is between

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CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
13022 S GREENWOOD AVE CHICAGO, IL (41.658387132000485, -87.59699281799965)	13022	S	GREENWOOD	AVE				Y			
13030 S GREENWOOD AVE CHICAGO, IL (41.65832932800049, -87.59683130799965)	13030	S	GREENWOOD	AVE				Y			
13068 S GREENWOOD AVE CHICAGO, IL (41.657826008000484, -87.59601991799968)	13068	S	GREENWOOD	AVE				Y	Y		
13072 S GREENWOOD AVE CHICAGO, IL (41.657771407000496, -87.59595682399964)	13072	S	GREENWOOD	AVE				Y			
13200 S GREENWOOD AVE CHICAGO, IL (41.65569934600046, -87.59497397299964)	13200	S	GREENWOOD	AVE				Y			
13240 S GREENWOOD AVE	13240	S	GREENWOOD	AVE				Y			

CDPH Environmental Records Lookup Table

Based on CDPH Environmental Records Lookup Table

MAP LOCATION	STREET NUMBER FROM	DIRECTION	STREET NAME	STREET TYPE	COMPLAINTS	NESHAPS & DEMOLITION NOTICES	ENFORCEMENT	INSPECTIONS	PERMITS	TANKS	HOLDS & LUST NFR
GREENWOOD AVE CHICAGO, IL (41.65494394600046, -87.59490330699964)			OOD								

CDPH Environmental Records Lookup Table
Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
DOEINS9342	1/1/2012	NESHAP SITE	1128 E 132ND ST CHICAGO, ILLINOIS (41.65585846400046, -87.59445385099968)	1128	1138	E	132ND	ST	DEMOLITION/ASBESTOS	RENOVATION/ NESHAPS	112	1/7/2005	NO ACTIVITY.	HISTORIC DEPT. OF ENVIRON MENT

CDPH Environmental Records Lookup Table
Complaints

COMPLAINT ID	COMPLAINT TYPE	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTOR	COMPLAINT DATE	COMPLAINT DETAIL	INSPECTION LOG	DATA SOURCE	Modified Date
DOECOMP2286	Toxics Hazardous Materials Work Order	1130 E 132ND ST CHICAGO, IL (41.65586066900045, -87.59442691999965)	1130		E	132ND	ST	77	10/13/2005	ALTGELD GARDENS DIESEL FUEL SPILL. DIESEL FUEL SPILL FROM LEAKING GENERATOR. SPILL REMEDIATED AND NO NOV ISSUED BUT PENDING RECEIPT OF PRPER DISPOSAL PROOF (CONTAMINATED SAND).	MORE INFORMATION MAY BE AVAILABLE IN THE CDPH ENVIRONMENTAL INSPECTIONS DATASET	HISTORIC DEPT. OF ENVIRONMENT	1/1/2012

CDPH Environmental Records Lookup Table
Inspections

INSPECTION ID	MODIFIED DATE	INSPECTION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	INSPECTION CATEGORY	INSPECTION SUB CATEGORY	INSPECTOR	INSPECTION DATE	NARRATIVE	DATA SOURCE
DOEINS9383	1/1/2012	ALTGELD GARDENS	1130 E 132ND ST CHICAGO, ILLINOIS (41.65586066900045, -87.59442691999965)	1130		E	132ND	ST	HAZMATS		77	10/13/2005	UPON ARRIVAL 512 WAS ON SITE. THERE WAS A GENERATOR WHICH HAD DEVELOPED A LEAK, SPILLING UNKNOWN AMOUNTS OF DIESEL FUEL ONTO THE GROUND. PROPERTY MANAGEMENT HAD IMMEDIATELY APPLIED SAND THEN NOTIFIED CFD. O'HARE TOWING REMOVES EMPTY GENERATOR AND CLEAN UP WAS COMPLETED.	HISTORIC DEPT. OF ENVIRONMENT

CDPH Environmental Records Lookup Table
Permits

APPLICATION ID	APPLICATION NAME	MAPPED LOCATION	STREET NUMBER FROM	STREET NUMBER TO	DIRECTION	STREET NAME	STREET TYPE	APPLICATION TYPE	APPLICATION SUBTYPE	STATUS	APPLICANT	ISSUE OR ENTRY DATE	EXPIRATION DATE	COMMENT	DATA SOURCE
DOEAIR17209	CHICAGO HOUSING AUTHORITY	1133 E 132ND ST CHICAGO, IL (41.65580923600049, -87.59439212399968)	1133		E	132ND	ST	AIR POLLUTION CONTROL PERMIT	EQUIPMENT INSTALLATION	CLOSED		8/11/2005	2/7/2006	QTY: 1.0 ARHITECTURAL SURFACE CLEANING:GRINDING/ CHEMICAL WASH/DUST SUPPRESSION METHOD: WETTING/TARPS/PERMIT EXPIRES: 12/01/2006	HISTORIC DEPT. OF ENVIRONMENT
DOEAIR18567	CHICAGO HOUSING AUTHORITY	1133 E 132ND ST CHICAGO, IL (41.65580923600049, -87.59439212399968)	1133		E	132ND	ST	AIR POLLUTION CONTROL PERMIT	EQUIPMENT INSTALLATION	CLOSED		5/3/2006	10/30/2006	QTY: 4.0 COMBUSTION EMISSION UNIT/ CARRIER/ 58MCA-060-08/ MAX OUTPUT: 56,000 BTU,QTY: 1.0 UNFIRED PRESSURE VESSEL/ TANK/ BELL & GOSSETT/ PT-42V/ MAX ALLOWED SHELL PRESSURE: 150 PSI,QTY: 1.0 UNFIRED PRESSURE VESSEL/ TANK/ AMTROL/ ST-25V/ MAX ALLOWED SHELL PRESSURE: 150 PSI,QTY: 2.0 COMBUSTION EMISSION UNIT/ CARRIER/ 58MCA-040-08/ MAX OUTPUT: 37,000 BTU	HISTORIC DEPT. OF ENVIRONMENT

DEPARTMENT OF FLEET AND FACILITY MANAGEMENT

CITY OF CHICAGO

June 2, 2014

Nohemi Melero
Field Supervisor
Carnow Conibear & Associates, LTD.
600 West Van Buren Street
Chicago, IL 60607

Dear Ms. Melero,

This letter is in response to your Freedom of Information Act ("FOIA") request received by the Department of Fleet and Facility Management on May 19, 2014 where you seek and state the following:

We are sending this Freedom of Information request regarding the existence of any record of hazardous materials incident reports and other records of environmental concern, for the following property in Chicago, Illinois:

- ***Altgeld Gardens Housing Project***

Your request has been reviewed and has been granted please see the attached documents for the above mentioned property in our files maintained by the Department of Fleet and Facility Management (2FM).

Sincerely,

Yasmine S. Miranda
FOIA Officer
Department of Fleet and Facility Management
(312) 744-0447

BLACK & VEATCH Waste Science, Inc.

101 North Wacker Drive, Suite 1100, Chicago, Illinois 60606, (312) 346-3775, Fax: (312) 346-4781

USEPA/ARCS V
ESI Group II 33-5JZZ

BVWS Project 71280.113
BVWS File C.4
August 25, 1994

Mr. Mike Moomey
Illinois Department of Public Health
Toxicology Section
525 West Jefferson Street
Springfield, Illinois 62761

Subject: Residential Soil Sampling Results

Dear Mr. Moomey:

Enclosed please find the residential soil sampling results for the Eden Green Cooperative, Concordia Park Apartments, Altgeld Gardens public housing development, 12 residences, and two schools sampled by Black & Veatch Waste Science, Inc. as part of an expanded site inspection.

To assist you with the analytical results, this package includes a sample reporting form preceding each set of raw data. For the residences, the form lists the name and address of the resident where each sample was taken. For the other properties, the form lists the name and address of a contact person, as well as a brief description of the sample location. The U.S. Environmental Protection Agency sample number listed on the form corresponds to the number on the upper right hand corner of the raw data sheet. Also listed is the name of the site associated with the sampling effort. The package also includes a sample location map and definitions for the organic and inorganic chemical data qualifiers.

If you have any questions, please do not hesitate to contact us.

Sincerely,

BLACK & VEATCH WASTE SCIENCE, INC.

Steven R. Mrkvicka

Enclosures

cc: A. Altur, USEPA w/o Enclosures
W. Gregson, BVWS w/o Enclosures

77 W Jackson
Chicago 60604
Mail Code HSE-5J

let-idph/pullman

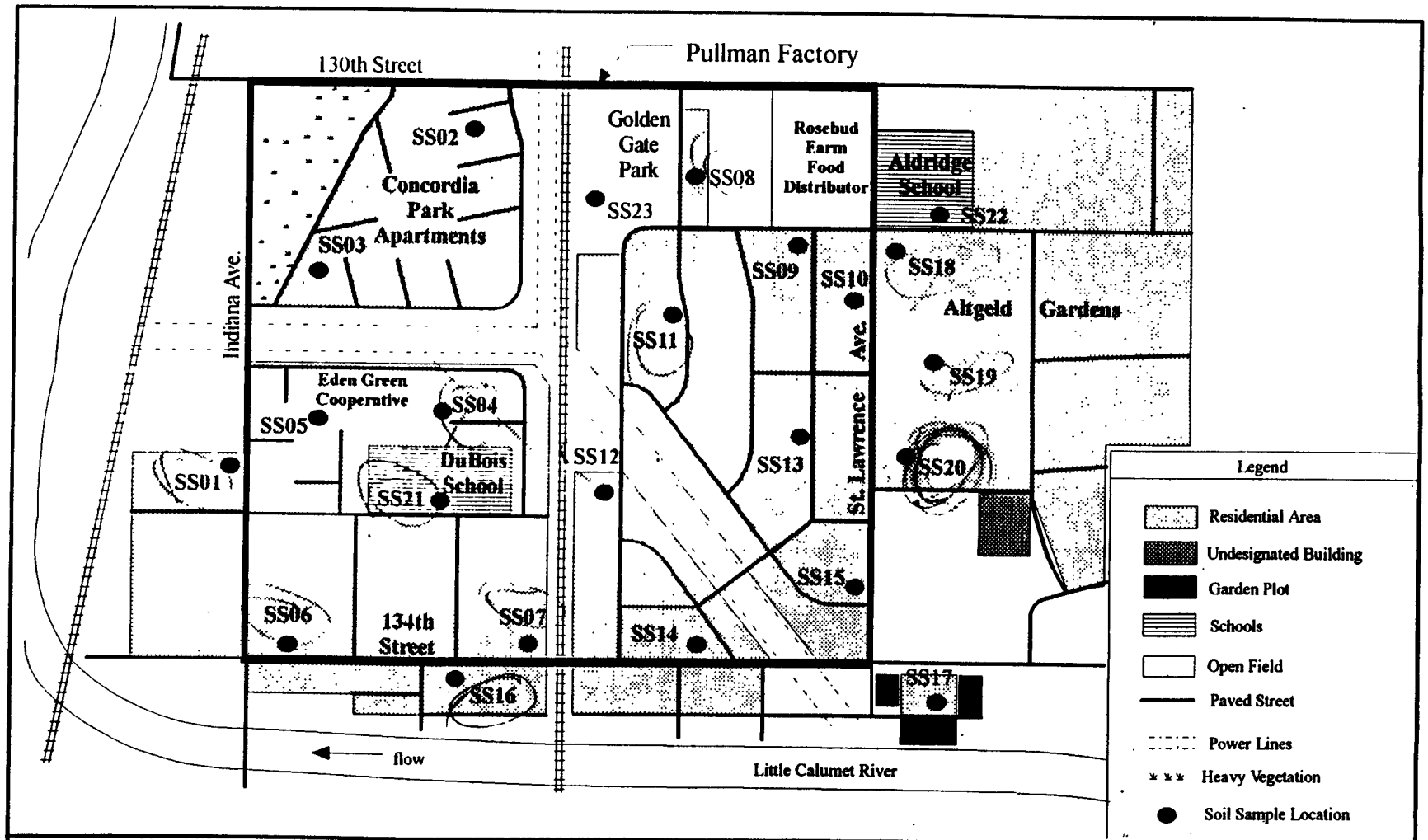

Source: Modified from USGS, 1991

Scale: Not to scale

N

Figure 3-1
Sample Location Map
Pullman Factory
Chicago, Illinois

FRE00110
7.13.94

Illinois Department of Public Health Form
Residential Soil Sample

Name of resident:	Altgeld Gardens Public Housing (owned by Chicago Housing Authority)
Street Address:	Chicago Housing Authority Construction Management Branch
City, State, Zip Code:	833 W. 115th Street Chicago, IL 60643 (Note: This address is not where the sample was collected)
Number of occupants:	
Organic sample number:	EQG92
Inorganic sample number:	MEQD88
Attachments:	Data Sheets
	Sample Location Map*
Comments:	Soil sample is SS18 on the attached sample location map, collected from a lawn at southeast corner of St. Lawrence Ave. and 131st Street, near an Altgeld Gardens apartment building. Samples SS19 and SS20 also were collected from Altgeld Gardens public housing property. *

Confidential:
For internal use only. Do not use site name or any site information in citizen notification letters.

* The attached sample location map is also confidential.

Site Name: Pullman Factory

Site ILD Number: ILD 981959 208

attlet9/esi-2 gen#3

** Send notification letter to the attention of Ms. Michael Rowder at the address listed above.

Also, send a copy of the notification letter to: Ms. Cheryl Johnson
People for Community Recovery
Environmental Organization
13116 S. Ellis

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG92

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG92V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EQG92V

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: not dec. 18 Date Analyzed: 01/31/94

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	12	U	
74-83-9	Bromomethane	12	U J	wk
75-01-4	Vinyl Chloride	12	U	
75-00-3	Chloroethane	12	U	
75-09-2	Methylene Chloride	~~12~~	BJ u	KM
67-64-1	Acetone	18	B u	3-3-94
75-15-0	Carbon Disulfide	12	U	
75-35-4	1,1-Dichloroethene	12	U	
75-34-3	1,1-Dichloroethane	12	U	
540-59-0	1,2-Dichloroethene (total)	12	U	
67-66-3	Chloroform	12	U	
107-06-2	1,2-Dichloroethane	12	U	
78-93-3	2-Butanone	~~12~~ 5	BJ u	KM 3-3-94
71-55-6	1,1,1-Trichloroethane	12	U	
56-23-5	Carbon Tetrachloride	12	U	
75-27-4	Bromodichloromethane	12	U	
78-87-5	1,2-Dichloropropane	12	U	
10061-01-5	cis-1,3-Dichloropropene	12	U	
79-01-6	Trichloroethene	12	U	
124-48-1	Dibromochloromethane	12	U	
79-00-5	1,1,2-Trichloroethane	12	U	
71-43-2	Benzene	12	U	
10061-02-6	trans-1,3-Dichloropropene	12	U	
75-25-2	Bromoform	12	U	
108-10-1	4-Methyl-2-Pentanone	12	U	
591-78-6	2-Hexanone	12	U	
127-18-4	Tetrachloroethene	12	U	
79-34-5	1,1,2,2-Tetrachloroethane	12	U	
108-88-3	Toluene	1	J	
108-90-7	Chlorobenzene	12	U	
100-41-4	Ethylbenzene	12	U	
100-42-5	Styrene	12	U	
1330-20-7	Xylene (total)	12	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQG92

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG92V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EQG92V

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: not dec. 18 Date Analyzed: 01/31/94

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-69-4	TRICHLOROFLUOROMETHANE	3.20	7	JN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG92

Lab Name: ENCOTEC Contract: 68-D2-0012
Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG92B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQG92B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 18 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/22/94

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)Ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-Di-n-Propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)Methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-Methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U J
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	980	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	980	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	980	U
83-32-9	Acenaphthene	400	U

SM 6/17/94

unlk

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG92

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG92B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQG92B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 18 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/22/94

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	980	U	
100-02-7	4-Nitrophenol	980	U	
132-64-9	Dibenzofuran	400	U	
121-14-2	2,4-Dinitrotoluene	400	U	
84-66-2	Diethylphthalate	400	U	
7005-72-3	4-Chlorophenyl-phenylether	400	U	
86-73-7	Fluorene	400	U	
100-01-6	4-Nitroaniline	980	U	
534-52-1	4,6-Dinitro-2-Methylphenol	980	U	
86-30-6	N-Nitrosodiphenylamine (1)	400	U	
101-55-3	4-Bromophenyl-phenylether	400	U	
118-74-1	Hexachlorobenzene	400	U	
87-86-5	Pentachlorophenol	980	U J	unk
85-01-8	Phenanthrene	73	J	
120-12-7	Anthracene	400	U	
86-74-8	Carbazole	400	U	
84-74-2	Di-n-Butylphthalate	25	J	
206-44-0	Fluoranthene	150	J	
129-00-0	Pyrene	160	J	
85-68-7	Butylbenzylphthalate	400	U	
91-94-1	3,3'-Dichlorobenzidine	400	U J	unk
56-55-3	Benzo(A) anthracene	80	J	
218-01-9	Chrysene	92	J	
117-81-7	bis(2-Ethylhexyl)Phthalate	400 ~~220~~	BJ U	KM 5-4-94
117-84-0	Di-n-Octylphthalate	400	U	
205-99-2	Benzo(b)Fluoranthene	82	J	
207-08-9	Benzo(k)Fluoranthene	76	J	
50-32-8	Benzo(a)Pyrene	80	J	
193-39-5	Indeno(1,2,3-cd)Pyrene	50	J	
53-70-3	Dibenz(a,h)Anthracene	400	U	
191-24-2	Benzo(g,h,i)Perylene	49	J	

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 3/90

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQG92

Lab Name: ENCOTEC Contract: 68-D2-0012
Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG92B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQG92B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 18 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/22/94

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.17	250	JB u
2.	UNKNOWN	7.47	170	J
3.	UNKNOWN ALKANE	18.43	110	J
4.	UNKNOWN ALKANE	19.10	110	J
5.	UNKNOWN ALKANE	19.77	130	J
6.	UNKNOWN ALKANE	19.85	330	J
7.	UNKNOWN ALKANE	22.18	120	J
8.	UNKNOWN ALKANE	23.28	120	J
9.	UNKNOWN ALKANE	24.30	130	J
10.	UNKNOWN ALKANE	25.28	140	J
11.	UNKNOWN ORGANIC ACID	27.13	6900	JB u
12.	UNKNOWN ALKANE	27.93	160	J
13.	UNKNOWN ALKANE	29.53	140	J
14.	UNKNOWN	30.62	210	J
15.	UNKNOWN ALKANE	31.03	310	J
16.	UNKNOWN	31.23	150	J
17.	UNKNOWN	31.30	180	J
18.	UNKNOWN ALKANE	32.80	250	J
19.	UNKNOWN	33.37	150	J
20.	UNKNOWN	35.63	1200	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG92

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: 28664

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 18 decanted: (Y/N) N Date Received: 01/26/94

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/01/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/16/94

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	~~150~~	~~PE~~
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	11	PX
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	~~210~~	~~E~~
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.0	U
7421-93-4	Endrin aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	82	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG92DL

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: 28664DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 18 decanted: (Y/N) N Date Received: 01/26/94

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/01/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/16/94

Injection Volume: 1.00 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	41	U
319-85-7	beta-BHC	41	U
319-86-8	delta-BHC	41	U
58-89-9	gamma-BHC (Lindane)	41	U
76-44-8	Heptachlor	41	U
309-00-2	Aldrin	41	U
1024-57-3	Heptachlor epoxide	41	U
959-98-8	Endosulfan I	41	U
60-57-1	Dieldrin	80	U
72-55-9	4,4'-DDE	580	D
72-20-8	Endrin	80	U
33213-65-9	Endosulfan II	80	U
72-54-8	4,4'-DDD	80	U
1031-07-8	Endosulfan sulfate	80	U
50-29-3	4,4'-DDT	370	D
72-43-5	Methoxychlor	410	U
53494-70-5	Endrin ketone	80	U
7421-93-4	Endrin aldehyde	80	U
5103-71-9	alpha-Chlordane	41	U
5103-74-2	gamma-Chlordane	41	U
8001-35-2	Toxaphene	4100	U
12674-11-2	Aroclor-1016	800	U
11104-28-2	Aroclor-1221	1600	U
11141-16-5	Aroclor-1232	800	U
53469-21-9	Aroclor-1242	800	U
12672-29-6	Aroclor-1248	800	U
11097-69-1	Aroclor-1254	800	U
11096-82-5	Aroclor-1260	800	U

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD88

Lab Name: SOUTHWEST_LAB_OF_OK_____ Contract: 68-D2-0040

Lab Code: SWOK__ Case No.: 21530_ SAS No.: _____ SDG No.: MEQD39

Matrix (soil/water): SOIL_ Lab Sample ID: 1737107___

Level (low/med): LOW__ Date Received: 01/27/94

% Solids: _84.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	16500			P	
7440-36-0	Antimony	11.9	B	N	P	J*
7440-38-2	Arsenic	11.3			P	
7440-39-3	Barium	99.6			P	
7440-41-7	Beryllium	0.81	B		P	
7440-43-9	Cadmium	0.71	U		P	
7440-70-2	Calcium	42100			P	
7440-47-3	Chromium	36.7			P	
7440-48-4	Cobalt	12.8			P	
7440-50-8	Copper	27.9		*	P	J↑
7439-89-6	Iron	26900			P	
7439-92-1	Lead	74.2			P	
7439-95-4	Magnesium	22200			P	
7439-96-5	Manganese	520			P	
7439-97-6	Mercury	0.12	U	N*	CV	J↓
7440-02-0	Nickel	33.2			P	
7440-09-7	Potassium	4320			P	
7782-49-2	Selenium	0.95	U		P	
7440-22-4	Silver	0.48	U		P	
7440-23-5	Sodium	180	U		P	
7440-28-0	Thallium	1.4	U		P	
7440-62-2	Vanadium	33.3			P	
7440-66-6	Zinc	159		E	P	J UNC
	Cyanide	0.60	U		CA	

Color Before: BLACK____ Clarity Before: _____ Texture: FINE__

Color After: COLORLESS Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN

ILM02.1

Illinois Department of Public Health Form
Residential Soil Sample

Name of resident:	Altgeld Gardens Public Housing (owned by Chicago Housing Authori
Street Address:	Chicago Housing Authority Construction Management Branch
City, State, Zip Code:	833 W. 115th Street Chicago, IL 60643 (Note: this address is not where the sample was collected
Number of occupants:	
Organic sample number:	EQG93
Inorganic sample number:	MEQD89
Attachments:	Data Sheets
	Sample Location Map*
Comments:	Soil sample is SS19 on the attached sample location map, collected from Altgeld Gardens property, east of the intersection of 132nd Street and St. Lawrence Ave. Samples SS18 and SS20 also were collected from Altgeld Gardens propert *

Confidential:
For internal use only. Do not use site name or any site information in citizen notification letters.

* The attached sample location map is also confidential.

Site Name: Pullman Factory

Site ILD Number: ILD 981 959 208

attlet9/esi-2 gen#3

** Send notification letter to the attention of Ms. Michael Rowder at the address listed above.

Also, send a copy of the notification letter to:

Ms. Cheryl Johnson
People for Community Recovery Environmental Organization
13116 S. Ellis
[illegible] IL 60627

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG93

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG93VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EQG93VR

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: not dec. 19 Date Analyzed: 02/01/94

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
74-87-3	Chloromethane	12	U	
74-83-9	Bromomethane	12	U	
75-01-4	Vinyl Chloride	12	U	
75-00-3	Chloroethane	12	U	
75-09-2	Methylene Chloride	~~12~~ 8	BJ U	KM 3-3-94
67-64-1	Acetone	15	B U	
75-15-0	Carbon Disulfide	12	U	
75-35-4	1,1-Dichloroethene	12	U	
75-34-3	1,1-Dichloroethane	12	U	
540-59-0	1,2-Dichloroethene (total)	12	U	
67-66-3	Chloroform	12	U	
107-06-2	1,2-Dichloroethane	12	U	
78-93-3	2-Butanone	~~12~~ 5	BJ U	KM 3-3-94
71-55-6	1,1,1-Trichloroethane	12	U	
56-23-5	Carbon Tetrachloride	12	U	
75-27-4	Bromodichloromethane	12	U	
78-87-5	1,2-Dichloropropane	12	U	
10061-01-5	cis-1,3-Dichloropropene	12	U	
79-01-6	Trichloroethene	12	U	
124-48-1	Dibromochloromethane	12	U	
79-00-5	1,1,2-Trichloroethane	12	U	
71-43-2	Benzene	12	U	
10061-02-6	trans-1,3-Dichloropropene	12	U	
75-25-2	Bromoform	12	U	
108-10-1	4-Methyl-2-Pentanone	12	U	
591-78-6	2-Hexanone	12	U	
127-18-4	Tetrachloroethene	12	U	
79-34-5	1,1,2,2-Tetrachloroethane	12	U	
108-88-3	Toluene	2	J	
108-90-7	Chlorobenzene	12	U	
100-41-4	Ethylbenzene	12	U	
100-42-5	Styrene	12	U	
1330-20-7	Xylene (total)	12	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQG93

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG93VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EQG93VR

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: not dec. 19 Date Analyzed: 02/01/94

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG93

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG93B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQG93B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 19 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/22/94

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)Ether	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
95-50-1	1,2-Dichlorobenzene	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-Di-n-Propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)Methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-Methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	990	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	990	U
131-11-3	Dimethylphthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	990	U
83-32-9	Acenaphthene	410	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG93

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG93B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQG93B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 19 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/22/94

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	990	U
100-02-7	4-Nitrophenol	990	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
86-73-7	Fluorene	410	U
100-01-6	4-Nitroaniline	990	U
534-52-1	4,6-Dinitro-2-Methylphenol	990	U
86-30-6	N-Nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	990	U
85-01-8	Phenanthrene	33	J
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-Butylphthalate	31	J
206-44-0	Fluoranthene	72	J
129-00-0	Pyrene	79	J
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(A) anthracene	49	J
218-01-9	Chrysene	52	J
117-81-7	bis(2-Ethylhexyl)Phthalate	410 ~~110~~	BJU
117-84-0	Di-n-Octylphthalate	410	U
205-99-2	Benzo(b)Fluoranthene	81	J
207-08-9	Benzo(k)Fluoranthene	410	U
50-32-8	Benzo(a)Pyrene	45	J
193-39-5	Indeno(1,2,3-cd)Pyrene	26	J
53-70-3	Dibenz(a,h)Anthracene	410	U
191-24-2	Benzo(g,h,i)Perylene	23	J

KY 3-4-94

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQG93

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG93B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQG93B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 19 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/22/94

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 16

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.65	120	JB u
2.	UNKNOWN	6.78	140	J
3.	UNKNOWN	7.08	260	J
4.	UNKNOWN	7.40	160	JB u
5.	UNKNOWN ORGANIC ACID	27.05	6600	JB u
6.	UNKNOWN	27.32	120	J
7.	UNKNOWN	29.58	310	J
8.	UNKNOWN	30.55	150	J
9.	UNKNOWN ALKANE	30.98	180	J
10.	UNKNOWN	31.25	680	J
11.	UNKNOWN	32.28	290	J
12.	UNKNOWN ALKANE	32.75	130	J
13.	UNKNOWN	33.28	340	J
14.	UNKNOWN	35.60	3000	J
15.	UNKNOWN	35.98	1600	J
16.	UNKNOWN	36.80	460	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG93

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: 28665

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 19 decanted: (Y/N) N Date Received: 01/26/94

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/01/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/15/94

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U J ↓
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U ↓
72-55-9	4,4'-DDE	3.1	J ↓
72-20-8	Endrin	4.1	U J ↓
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U ↓
50-29-3	4,4'-DDT	1.7	JP ↓
72-43-5	Methoxychlor	21	U J ↓
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	83	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

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1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 12

MEQD89

Lab Name: SOUTHWEST_LAB_OF_OK_____ Contract: 68-D2-0040

Lab Code: SWOK__ Case No.: 21530_ SAS No.: _____ SDG No.: MEQD39

Matrix (soil/water): SOIL_ Lab Sample ID: 1737108___

Level (low/med): LOW__ Date Received: 01/27/94

% Solids: _87.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	19300			P	
7440-36-0	Antimony	8.4	B	N	P	J
7440-38-2	Arsenic	7.3			P	
7440-39-3	Barium	60.7			P	
7440-41-7	Beryllium	0.84	B		P	
7440-43-9	Cadmium	0.68	U		P	
7440-70-2	Calcium	32600			P	
7440-47-3	Chromium	25.6			P	
7440-48-4	Cobalt	8.9	B		P	
7440-50-8	Copper	16.0		*	P	J
7439-89-6	Iron	24200			P	
7439-92-1	Lead	13.2			P	
7439-95-4	Magnesium	20000			P	
7439-96-5	Manganese	256			P	
7439-97-6	Mercury	0.11	U	N*	CV	J
7440-02-0	Nickel	26.5			P	
7440-09-7	Potassium	3020			P	
7782-49-2	Selenium	0.91	U		P	
7440-22-4	Silver	0.46	U		P	
7440-23-5	Sodium	172	U		P	
7440-28-0	Thallium	1.4	U		P	
7440-62-2	Vanadium	31.2			P	
7440-66-6	Zinc	52.8		E	P	J UNC
	Cyanide	0.57	U		CA	

Color Before: BLACK____ Clarity Before: _____ Texture: FINE__

Color After: COLORLESS Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN

ILM02.1

Illinois Department of Public Health Form
Residential Soil Sample

Name of resident:	Altgeld Gardens Public Housing (owned by Chicago Housing Authority)
Street Address:	Chicago Housing Authority Construction Management Branch
City, State, Zip Code:	833 W. 115th Street Chicago, IL 60643 (Note: This address is not where the sample was collected)
Number of occupants:	
Organic sample number:	EQG94
Inorganic sample number:	MEQD38
Attachments:	Data Sheets
	Sample Location Map*
Comments:	Soil sample is SS20 on the sample location map, collected from a courtyard surrounded by apartment buildings. Samples SS18 and SS19 also were collected from Altgeld Gardens public housing property. **

Confidential:
For internal use only. Do not use site name or any site information in citizen notification letters.

* The attached sample location map is also confidential.

Site Name: Pullman Factory

Site ILD Number: ILD 981 959 208

attlet9/esi-2 gen#3

** Send notification to the attention of Ms. Michael Rowder at the address listed above.

Also, send a copy of the notification letter to:
Ms. Cheryl Johnson
People for Community Recovery Environmental Organizatic
13116 S. Ellis
Chicago, IL 60627

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG94RE

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG94VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EQG94VR

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: not dec. 21 Date Analyzed: 02/01/94

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	~~8~~ 13	BJ u
67-64-1	Acetone	20	B u
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U J
78-93-3	2-Butanone	~~8~~ 13	BJ u
71-55-6	1,1,1-Trichloroethane	13	U J
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U J
591-78-6	2-Hexanone	13	U J
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U J
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (total)	13	U

KH 3-3-94

KH 3-3-94

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQG94RE

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQG94VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EQG94VR

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: not dec. 21 Date Analyzed: 02/01/94

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG94

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQ94B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQ94B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 21 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/25/94

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4200	U
111-44-4	bis(2-Chloroethyl)Ether	4200	U
95-57-8	2-Chlorophenol	4200	U
541-73-1	1,3-Dichlorobenzene	4200	U
106-46-7	1,4-Dichlorobenzene	4200	U
95-50-1	1,2-Dichlorobenzene	4200	U
95-48-7	2-Methylphenol	4200	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4200	U
106-44-5	4-Methylphenol	4200	U
621-64-7	N-Nitroso-Di-n-Propylamine	4200	U
67-72-1	Hexachloroethane	4200	U
98-95-3	Nitrobenzene	4200	U
78-59-1	Isophorone	4200	U
88-75-5	2-Nitrophenol	4200	U
105-67-9	2,4-Dimethylphenol	4200	U
111-91-1	bis(2-Chloroethoxy)Methane	4200	U
120-83-2	2,4-Dichlorophenol	4200	U
120-82-1	1,2,4-Trichlorobenzene	4200	U
91-20-3	Naphthalene	860	J
106-47-8	4-Chloroaniline	4200	U
87-68-3	Hexachlorobutadiene	4200	U
59-50-7	4-Chloro-3-Methylphenol	4200	U
91-57-6	2-Methylnaphthalene	4200	U
77-47-4	Hexachlorocyclopentadiene	4200	U
88-06-2	2,4,6-Trichlorophenol	4200	U
95-95-4	2,4,5-Trichlorophenol	10000	U
91-58-7	2-Chloronaphthalene	4200	U
88-74-4	2-Nitroaniline	10000	U
131-11-3	Dimethylphthalate	4200	U
208-96-8	Acenaphthylene	4200	U
606-20-2	2,6-Dinitrotoluene	4200	U
99-09-2	3-Nitroaniline	10000	U
83-32-9	Acenaphthene	2000	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BaP

EPA SAMPLE NO.

EQG94

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQ94B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQ94B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 21 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/25/94

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	10000	U J
100-02-7	4-Nitrophenol	10000	U
132-64-9	Dibenzofuran	960	J
121-14-2	2,4-Dinitrotoluene	4200	U
84-66-2	Diethylphthalate	4200	U
7005-72-3	4-Chlorophenyl-phenylether	4200	U
86-73-7	Fluorene	2100	J
100-01-6	4-Nitroaniline	10000	U
534-52-1	4,6-Dinitro-2-Methylphenol	10000	U
86-30-6	N-Nitrosodiphenylamine (1)	4200	U
101-55-3	4-Bromophenyl-phenylether	4200	U
118-74-1	Hexachlorobenzene	4200	U
87-86-5	Pentachlorophenol	10000	U
85-01-8	Phenanthrene	21000	
120-12-7	Anthracene	3500	J
86-74-8	Carbazole	2400	J
84-74-2	Di-n-Butylphthalate	1300	J
206-44-0	Fluoranthene	23000	
129-00-0	Pyrene	22000	
85-68-7	Butylbenzylphthalate	4200	U
91-94-1	3,3'-Dichlorobenzidine	4200	U
56-55-3	Benzo(A) anthracene	9700	
218-01-9	Chrysene	12000	
117-81-7	bis(2-Ethylhexyl)Phthalate	4220 ~~720~~	BJ
117-84-0	Di-n-Octylphthalate	4200	U
205-99-2	Benzo(b)Fluoranthene	7900	
207-08-9	Benzo(k)Fluoranthene	11000	
50-32-8	Benzo(a)Pyrene	9000	
193-39-5	Indeno(1,2,3-cd)Pyrene	4600	
53-70-3	Dibenz(a,h)Anthracene	2300	J
191-24-2	Benzo(g,h,i)Perylene	2900	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 3/90

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EQG94

Lab Name: ENCOTEC Contract: 68-D2-0012
Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: EQ94B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EQ94B

Level: (low/med) LOW Date Received: 01/26/94

% Moisture: 21 decanted: (Y/N) N Date Extracted: 02/01/94

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/25/94

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 14

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN POLYNUCLEAR AROMATIC	22.25	820	J
2. 203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	22.48	2400	NJ
3.	UNKNOWN POLYNUCLEAR AROMATIC	23.02	1100	J
4. 243-42-5	BENZO[B]NAPHTHALENE[2,3-D]FU	25.00	650	NJ
5.	UNKNOWN POLYNUCLEAR AROMATIC	25.57	2200	J
6.	UNKNOWN POLYNUCLEAR AROMATIC	25.73	1800	J
7.	UNKNOWN ORGANIC ACID	26.83	11000	JB u
9. 115-86-6	TRIPHENYL PHOSPHORIC ACID	27.07	3100	JN
8.	BENZO[B]NAPHTHO-THIOPHENE IS	27.18	4500	J
10.	UNKNOWN POLYNUCLEAR AROMATIC	27.28	3000	J
11.	UNKNOWN POLYNUCLEAR AROMATIC	28.12	5700	J
12.	UNKNOWN POLYNUCLEAR AROMATIC	29.25	2200	J
13.	UNKNOWN POLYNUCLEAR AROMATIC	30.68	2500	J
14.	UNKNOWN POLYNUCLEAR AROMATIC	31.07	8800	J

KH 3-4

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EQG94

Lab Name: ENCOTEC Contract: 68-D2-0012

Lab Code: ENCOT Case No.: 21530 SAS No.: SDG No.: EJZ28

Matrix: (soil/water) SOIL Lab Sample ID: 28666

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 21 decanted: (Y/N) N Date Received: 01/26/94

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/01/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/16/94

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U J
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	23	P
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	36	J
72-43-5	Methoxychlor	22	U J
53494-70-5	Endrin ketone	7.5	P
7421-93-4	Endrin aldehyde	4.6	PX
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	85	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEQD38

Lab Name: SOUTHWEST_LAB_OF_OK_____ Contract: 68-D2-0040

Lab Code: SWOK__ Case No.: 21530_ SAS No.: _____ SDG No.: MEQD39

Matrix (soil/water): SOIL_ Lab Sample ID: 1737101___

Level (low/med): LOW__ Date Received: 01/27/94

% Solids: _79.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	11000			P	
7440-36-0	Antimony	9.2	B	N	P	J ↓
7440-38-2	Arsenic	7.7			P	
7440-39-3	Barium	31.1	B		P	
7440-41-7	Beryllium	0.52	B		P	
7440-43-9	Cadmium	0.75	U		P	
7440-70-2	Calcium	22400			P	
7440-47-3	Chromium	10.7			P	
7440-48-4	Cobalt	7.7	B		P	
7440-50-8	Copper	20.1		*	P	J ↑
7439-89-6	Iron	13100			P	
7439-92-1	Lead	19.8			P	
7439-95-4	Magnesium	11400			P	
7439-96-5	Manganese	239			P	
7439-97-6	Mercury	0.13	U	N*	CV	J ↓
7440-02-0	Nickel	17.0			P	
7440-09-7	Potassium	1230	B		P	
7782-49-2	Selenium	1.0	U		P	
7440-22-4	Silver	0.50	U		P	
7440-23-5	Sodium	190	U		P	
7440-28-0	Thallium	1.5	U		P	
7440-62-2	Vanadium	13.9			P	
7440-66-6	Zinc	49.5		E	P	J UNC
	Cyanide	0.63	U		CA	

Color Before: BLACK_ ___ Clarity Before: _____ Texture: FINE__

Color After: COLORLESS Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN

ILM02.1

Illinois Department of
Public Health

John R. Lumpkin, M.D., M.P.H. Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001

February 23, 1995

Altgeld Gardens Public Housing
Attn: Ms. Michael Rowder
Chicago Housing Authority
Construction Management Branch
833 W. 115th Street
Chicago, IL 60643

RE: Residential Soil Sample Results Interpretation

Dear Ms. Rowder:

The Department has received and reviewed the laboratory data provided by Black & Veatch Waste Science Inc. for the soil sample taken at Altgeld Gardens Public Housing. It is our role in this matter to comment on the potential health effects posed by exposure to this soil.

The results of the soil analyses for both organic and inorganic parameters indicate no occurrence of any compounds at levels exceeding current health standards or guidelines, except for two semi-volatile organic compounds named benzo(a)pyrene and chrysene. Benzo(a)pyrene and chrysene belong to a group of chemicals called polycyclic aromatic hydrocarbons (PAHs). PAHs are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. PAHs enter the environment largely as releases to air from volcanoes, forest fires, residential wood burning, and automobile and truck exhausts. PAHs can be found virtually in all soils everywhere.

The laboratory results indicated that benzo(a)pyrene and chrysene were found in the soil sample collected from a courtyard at a level of 9,000 and 12,000 parts per billion (ppb) respectively. These levels are above the upper limits of the national urban background soil concentrations of 220 ppb for benzo(a)pyrene and 640 ppb for chrysene (see attached table). The table indicates the concentrations of PAHs commonly found in rural, agricultural, and urban soils.

The above mentioned results may be indicative of a single isolated incident at the sample site (ex. past use for wood burning, emptying charcoal ashes, etc.), since these compounds were only found at these levels in the soil sample taken from the courtyard. Although, the Environmental Protection Agency (EPA) has determined that benzo(a)pyrene and chrysene are probable human carcinogens, we see no apparent health concerns related to normal exposure to soil at this property.

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The primary routes of PAH exposure from the soil are ingestion of dust, inhalation of dust, and dermal (skin) absorption. You may want to minimize possible exposure to PAHs by providing and maintaining a vegetative cover (ex. grass, flowers, etc.) on the soil.

If you have any questions or concerns, please contact me at the Division of Environmental Health, Toxicology Section, 525 West Jefferson Street, Springfield, IL 62671 or call 217/782-5830.

Sincerely,

Monica J. Rebbe
Toxicology Section

#812289001
Enclosure

cc: Ms. Cheryl Johnson
People for Community Recovery
Environmental Organization
13116 S. Ellis
Chicago, IL 60627

Illinois Department of
Public Health

John R. Lumpkin, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001

MEMORANDUM

TO: Alan Altur

FROM: Monica Rebbe

DATE: October 12, 1994

RE: Residential Soil Samples
Pullman Factory

For your review, please find enclosed the letters for the individuals or properties where the soil samples were taken. There were eight locations which indicated no occurrence of any compounds at levels exceeding current health standards or guidelines. Based on these results, we saw no apparent health concerns related to normal exposure to the soil at those locations.

There were nine locations with results indicating levels of benzo(a)pyrene higher than national norms. These levels were not of the magnitude to cause concern for health, but we suggested to maintain a vegetative cover on the soil to reduce exposure.

The Altgeld Gardens Public Housing sample results indicated no occurrence of compounds exceeding current health standards and guidelines, except for the sample taken in the courtyard. The results indicated high levels of polycyclic aromatic hydrocarbons (PAHs). The two of most concern are benzo(a)pyrene and chrysene. After completing a risk characterization for a child exposed to the levels reported, no apparent increased risk of cancer was found. The high levels of PAHs in this one sample may also be indicative of a single isolated incident, such as wood burning or emptied charcoal ashes at the soil sample site.

Please note the Altgeld letter states that a carbon copy will be sent to Ms. Cheryl Johnson. Since we sent the letters to you to forward, please don't forget to send the carbon copy.

If you have any questions, please contact Mike Moomey or me at (217) 782-5830.

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Illinois Department of
Public
Health

John R. Lumpkin, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001

October 12, 1994

Altgeld Gardens Public Housing
Attn: Ms. Michael Rowder
Chicago Housing Authority
Construction Management Branch
833 W. 115th Street
Chicago, IL 60643

RE: Residential Soil Sample Results Interpretation

Dear Ms. Rowder:

The Department has received and reviewed the laboratory data provided by Black & Veatch Waste Science Inc. for the soil sample taken at Altgeld Gardens Public Housing. It is our role in this matter to comment on the potential health effects posed by exposure to this soil.

The results of the soil analyses for both organic and inorganic parameters indicate no occurrence of any compounds at levels exceeding current health standards or guidelines, except for two semi-volatile organic compounds named benzo(a)pyrene and chrysene. Benzo(a)pyrene and chrysene belong to a group of chemicals called polycyclic aromatic hydrocarbons (PAHs). PAHs are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. PAHs enter the environment largely as releases to air from volcanoes, forest fires, residential wood burning, and automobile and truck exhausts. PAHs can be found virtually in all soils everywhere.

The laboratory results indicated that benzo(a)pyrene and chrysene were found in the soil sample collected from a courtyard at a level of 9,000 and 12,000 parts per billion (ppb) respectively. These levels are above the upper limits of the national urban background soil concentrations of 220 ppb for benzo(a)pyrene and 640 ppb for chrysene (see attached table). The table indicates the concentrations of PAHs commonly found in rural, agricultural, and urban soils.

The above mentioned results may be indicative of a single isolated incident at the sample site (ex. past use for wood burning, emptying charcoal ashes, etc.), since these compounds were only found at these levels in the soil sample taken from the courtyard. Although, the Environmental Protection Agency (EPA) has determined that benzo(a)pyrene and chrysene are probable human carcinogens, we see no apparent health concerns related to normal exposure to soil at this property.

Printed on Recycled Paper

The primary routes of PAH exposure from the soil are ingestion of dust, inhalation of dust, and dermal (skin) absorption. You may want to minimize possible exposure to PAHs by providing and maintaining a vegetative cover (ex. grass, flowers, etc.) on the soil.

If you have any questions or concerns, please contact me at the Division of Environmental Health, Toxicology Section, 525 West Jefferson Street, Springfield, IL 62671 or call 217/782-5830.

Sincerely,

Monica J. Rebbe

Monica J. Rebbe
Toxicology Section

#910079401
Enclosure

cc: Ms. Cheryl Johnson
People for Community Recovery
Environmental Organization
13116 S. Ellis
Chicago, IL 60627

TABLE 5-2. Background Soil Concentrations of Polycyclic Aromatic Hydrocarbons (PAHs)

	Concentration (μg/kg)		
Compound	Rural soil	Agricultural soil	Urban soil
Acenaphthene	1.7	6	
Acenaphthylene		5	
Anthracene		11–13	
Benzo(a)anthracene	5–20	56–110	169–59,000
Benzo(a)pyrene	2–1,300	4.6–900	165–220
Benzo(b)fluoranthene	20–30	58–220	15,000–62,000
Benzo(e)pyrene		53–130	60–14,000
Benzo(g,h,i)perylene	10–70	66	900–47,000
Benzo(k)fluoranthene	10–110	58–250	300–26,000
Chrysene	38.3	78–120	251–640
Fluoranthene	0.3–40	120–210	200–166,000
Fluorene		9.7	
Indeno(1,2,3-c,d)pyrene	10–15	63–100	8,000–61,000
Phenanthrene	30.0	48–140	
Pyrene	1–19.7	99–150	145–147,000

[a]Derived from
IARC (1973)
White and Vanderslice (1980)
Windsor and Hites (1979)
Edwards (1983)
Butler et al. (1984)
Vogt et al. (1987)
Jones et al. (1987)

The Chicago Housing Authority

Board of Commissioners

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Louis Brown
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Daniel Solis

Graham C. Grady
Chief Operating Officer

April 4, 1995

Ms. Monica J. Rebbe
Illinois Department of Public Health
Division of Environmental Health
Toxicology Section
525 West Jefferson Street
Springfield, Illinois 62671

SUBJECT: RESIDENTIAL SOIL SAMPLE RESULTS
CHICAGO HOUSING AUTHORITY
ALTGELD GARDENS DEVELOPMENT, IL2-07

Dear Ms. Rebbe:

We wish to thank you for your letter of February 23, 1995 to Ms. Michael Rowder of the Chicago Housing Authority (CHA), copy attached. This letter interprets the laboratory results of a soil sample taken at Altgeld Gardens by Black & Veatch Waste Science, Inc.

The above mentioned letter explains that the laboratory results of the sample show that the organic and inorganic parameters indicate no occurrence of any compounds at levels exceeding current health standards or guidelines, with the exception for two semi-volatile organic compounds. These two compounds: Benzo(a)pyrene and chrysene belong to a group of chemicals called polycyclic aromatic hydrocarbons (PAHs). Furthermore, as stated these PAHs are formed by the incomplete burning of coal, oil, gas, or other organic substances such as tobacco and charbroiled meat; and may be found everywhere.

As stated in your letter the results may be indicative of a single isolated incident at the sample site since these PAHs were only found at the high levels in the soil sample taken from the courtyard.

626 West Jackson Boulevard • Chicago, Illinois 60661-5601 • (312) 791-8500

Therefore, the Authority is confirming its understanding that no action is required of the CHA, based on the Illinois Department of Public Health's interpretation of the results. Your recommendation regarding vegetative cover will be forwarded to the development management staff for their review and implementation pending availability of funds for this purpose.

Again, we thank you for the testing performed and the interpretation of the results for the benefit of CHA residents at Altgeld Gardens.

If you have any questions or require additional information, please contact Michael Rowder, Manager Environmental Unit at (312) 567-7775 Extension 1074 or Nestor P. Ardiente, Senior Environmental Officer, Environmental Unit at Extension 1076.

Sincerely,

Andrew Rodriguez
Director of Construction Management

cc: Dr. Daniel W. Blue, Jr.

Illinois Department of
Public Health

John R. Lumpkin, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001

February 23, 1995

Altgeld Gardens Public Housing
Attn: Ms. Michael Rowder
Chicago Housing Authority
Construction Management Branch
833 W. 115th Street
Chicago, IL 60643

RE: Residential Soil Sample Results Interpretation

Dear Ms. Rowder:

The Department has received and reviewed the laboratory data provided by Black & Veatch Waste Science Inc. for the soil sample taken at Altgeld Gardens Public Housing. It is our role in this matter to comment on the potential health effects posed by exposure to this soil.

The results of the soil analyses for both organic and inorganic parameters indicate no occurrence of any compounds at levels exceeding current health standards or guidelines, except for two semi-volatile organic compounds named benzo(a)pyrene and chrysene. Benzo(a)pyrene and chrysene belong to a group of chemicals called polycyclic aromatic hydrocarbons (PAHs). PAHs are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. PAHs enter the environment largely as releases to air from volcanoes, forest fires, residential wood burning, and automobile and truck exhausts. PAHs can be found virtually in all soils everywhere.

The laboratory results indicated that benzo(a)pyrene and chrysene were found in the soil sample collected from a courtyard at a level of 9,000 and 12,000 parts per billion (ppb) respectively. These levels are above the upper limits of the national urban background soil concentrations of 220 ppb for benzo(a)pyrene and 640 ppb for chrysene (see attached table). The table indicates the concentrations of PAHs commonly found in rural, agricultural, and urban soils.

The above mentioned results may be indicative of a single isolated incident at the sample site (ex. past use for wood burning, emptying charcoal ashes, etc.), since these compounds were only found at these levels in the soil sample taken from the courtyard. Although, the Environmental Protection Agency (EPA) has determined that benzo(a)pyrene and chrysene are probable human carcinogens, we see no apparent health concerns related to normal exposure to soil at this property.

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The primary routes of PAH exposure from the soil are ingestion of dust, inhalation of dust, and dermal (skin) absorption. You may want to minimize possible exposure to PAHs by providing and maintaining a vegetative cover (ex. grass, flowers, etc.) on the soil.

If you have any questions or concerns, please contact me at the Division of Environmental Health, Toxicology Section, 525 West Jefferson Street, Springfield, IL 62671 or call 217/782-5830.

Sincerely,

Monica J. Rebbe
Toxicology Section

#812289001
Enclosure

cc: Ms. Cheryl Johnson
People for Community Recovery
Environmental Organization
13116 S. Ellis
Chicago, IL 60627

TABLE 5-2. Background Soil Concentrations of Polycyclic Aromatic Hydrocarbons (PAHs)

	Concentration (μg/kg)		
Compound	Rural soil	Agricultural soil	Urban soil
Acenaphthene	1.7	6	
Acenaphthylene		5	
Anthracene		11–13	
Benzo(a)anthracene	5–20	56–110	169–59,000
Benzo(a)pyrene	2–1,300	4.6–900	165–220
Benzo(b)fluoranthene	20–30	58–220	15,000–62,000
Benzo(e)pyrene		53–130	60–14,000
Benzo(g,h,i)perylene	10–70	66	900–47,000
Benzo(k)fluoranthene	10–110	58–250	300–26,000
Chrysene	38.3	78–120	251–640
Fluoranthene	0.3–40	120–210	200–166,000
Fluorene		9.7	
Indeno(1,2,3-c,d)pyrene	10–15	63–100	8,000–61,000
Phenanthrene	30.0	48–140	
Pyrene	1–19.7	99–150	145–147,000

[a]Derived from
IARC (1973)
White and Vanderslice (1980)
Windsor and Hites (1979)
Edwards (1983)
Butler et al. (1984)
Vogt et al. (1987)
Jones et al. (1987)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

MAR 07 1995

S-14J

Hazel Johnson, Director
People for Community Recovery
13116 South Ellis Avenue
Chicago, Illinois 60627

Dear Mrs. Johnson:

I want to share with you information on a recent U.S. Environmental Protection Agency (EPA) investigation at the former Pullman Factory site. The Pullman Expanded Site Investigation (ESI) is complete and attached is a copy of the finished report. In conjunction with the investigation, the Illinois Department of Public Health (IDPH) analyzed a number of soil samples from the nearby community. In fact, three of those samples were taken from Altgeld Gardens.

The ESI was conducted to determine whether this site qualifies for the National Priorities List (NPL) of hazardous waste sites under EPA's Superfund program. The results of the soil analyses for both organic and inorganic parameters indicate only two compounds occurring at levels exceeding current health standards or guidelines. These two semi-volatile organic compounds are benzo(a) pyrene and chrysene which belong to a group of chemicals called polycyclic aromatic hydrocarbons (PAHs). PAHs are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. PAHs enter the environment largely as releases to air from residential wood burning, and automobile and truck exhausts. PAHs are found virtually in all soils everywhere.

The laboratory results indicate these compounds were found in the soil sample collected from the Altgeld Gardens courtyard sampling location, at the level of 9,000 and 12,000 parts per billion (ppb) respectively. These levels are above the upper limits of the national urban background soil concentrations of 220 ppb for benzo(a)pyrene and 640 ppb for chrysene.

These results may indicate a single isolated incident at the sample site (e.g., past use for wood burning or emptying charcoal ashes) since these compounds were only found at these levels in the soil sample taken from the courtyard. Based on these findings there are no health concerns related to normal exposure to soil at Altgeld

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Gardens. However, your familiarity with the location can provide me with valuable insights about the potential causes and I would like to meet with you to discuss your thoughts about the source. I know you are as interested as I in pursuing whatever avenues might be useful in protecting the public health in Southeast Chicago and I look forward to such a meeting.

Please call either Shirley Dorsey of my staff at 886-1770 or Ethel Crisp at 353-3808 to arrange a convenient meeting date and time for us to talk further.

Sincerely,

Corinne S. Wellish

Corinne S. Wellish, Acting Director
Environmental Sciences Division

Enclosure

833 W. 115th Street, Chicago, Il. 60532 · Phone (312) 567-7775
· Fax (773) 468-8258

[redacted]

Fax

To: Kimberly Worthington From: James Gibson

Phone: Date: 1-21-2000

Fax: 312-744-5852 Pages: 12

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

● **Comments:**

Waste Pesticides & Toxics Division

Pesticides & Toxics Branch
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Mailcode: DT-8J

Chicago, Illinois 60604

FACSIMILE REQUEST

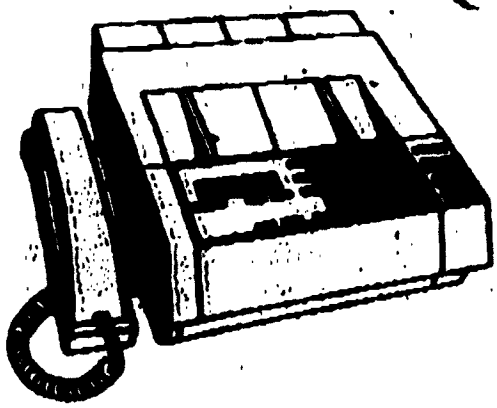

To: Jim Gibson
Office/Phone: CHA Environmental Unit / (312) 567-7775
Facsimile Number: (773) 468-8258
Verification Number:

From: Scott Cooper
Office/Phone: PTB / (312) 886-1332
Date: **Number of Pages:** 12 including this cover page.
Additional Comments:
First and last wipe samples inside Gantrex.

SENT FROM FACSIMILE NUMBER:
312/353-4788

Sampling Activity I
(wipe samples)

On March 19,1996, the United States Environmental Protection Agency (U.S. EPA) received the results from seven wipe samples collected by U.S. EPA and the Illinois Environmental Protection Agency (IEPA) on March 8th. Analysis was performed by IEPA's lab in Springfield. All sample results were below the reporting value of 1 microgram(ug)/wipe. Standard wipe samples are taken over a 100 cm^2 area. The results are as follows:

Sample #	Result	Location
D602786	0.22 ug/100 cm^2 (est. value)	floor just inside doors to Gautreax Child/Parent Center
D602787	0.45 ug/100 cm^2 (est. value)	sidewalk outside doors to Gautreax Center
D602788	< 1 ug/100 cm^2	floor inside lobby of Garden Fast Food
D602789	0.46 ug/100 cm^2 (est. value)	asphalt outside door to Garden Fast Food
D602790	< 1 ug/100 cm^2	kitchen floor in front of fire door at Garden Fast Food
D602791	< 1 ug/100 cm^2	floor inside library doors
D602792	< 1 ug/100 cm^2	sidewalk outside library doors

These results have been reported to the Gautreax Center, Garden Fast Food, Altgeld Branch Library, CHA, Local Advisory Counsel (LAC), and People for Community Recovery (PCR). The results are below the U.S. EPA's residential cleanup standard and the Illinois Public Health Department's standard for cleanup of PCBs in schools on surfaces contaminated by releases from PCB light ballast, both of which have a cleanup standard of 10 ug/100 cm^2.

Sample results are attached.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 0602786
SAMPLING POINT DESC. : N501/COOK/CHICAGO/ALTGELD GARDENS

SUBMITTING SOURCE # : SITE # : IL-96-N9-01-0
DATE COLLECTED : 960305 TIME COLLECTED : 1002 SAMPLING PROGRAM :

COLLECTED BY : ED DELIVERED BY : CDA
COMMENTS : PCB'S
FUNDING CODE : CSZ7 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 4 REPORTING INDICATOR : N

DATE RECEIVED : 960312 TIME RECEIVED : 1605 RECEIVED BY : A R
LAB OBSERVATIONS : 1-6-OZ.WIPE SEAL OK TRIP BL SAM# :
SUPERVISORS INITIALS : CMC CMC NOTE : X = LESS THAN VALUE

P39516 TOTAL PCBS PER WIPE UG/WIPE : 1X
: *
: LOW LEVEL PCB DETECTED BELOW CALIBRATION
: RANGE - TENTATIVE QUANTITATION
: PCB UG/WIPE / 0.22

W-135 ✓

Post-it™ brand fax transmittal memo 7671 | # of pages ▸
To Scott Cooper | From E. Ocowski
Co. | Co.
Dept. | Phone #
Fax # | Fax #

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 0602787
SAMPLING POINT DESC. : NS02/COOK/CHICAGO,ALTGELD GARDENS

SUBMITTING SOURCE # : SITE # : IL-96-NS-02-0
DATE COLLECTED : 960308 TIME COLLECTED : 1008 SAMPLING PROGRAM :

COLLECTED BY : ED DELIVERED BY : CDA
COMMENTS : PCB'S
FUNDING CODE : C627 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 4 REPORTING INDICATOR : N

DATE RECEIVED : 960312 TIME RECEIVED : 1403 RECEIVED BY : A R
LAB OBSERVATIONS : 1-8-OZ.WIPE SEAL OK TRIP BL GAMA :
SUPERVISORS INITIALS : CMC cmc NOTE : K = LESS THAN VALUE

PJ9516 TOTAL PCBS PER WIPE UG/WIPE : 1K
: .
: LOW LEVEL PCB DETECTED BELOW CALIBRATION
: RANGE - TENTATIVE QUANTITATION
: PCB UG/WIPE : 0.45

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : D602788
SAMPLING POINT DESC. : N503/COOK/CHICAGO,ALTGELD GARDENS

SUBMITTING SOURCE # : SITE # : IL-96-N5-03-0
DATE COLLECTED : 960308 TIME COLLECTED : 1110 SAMPLING PROGRAM :

COLLECTED BY : CD DELIVERED BY : CDA
COMMENTS : PCB'S
FUNDING CODE : C827 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 4 REPORTING INDICATOR : N

DATE RECEIVED : 960312 TIME RECEIVED : 1605 RECEIVED BY : A R
LAB OBSERVATIONS : 1-6-OZ.WIPE,SEAL OK TRIP BL SAM# :
SUPERVISORS INITIALS : CMC NOTE : K = LESS THAN VALUE
cmc

P39516 TOTAL PCBS PER WIPE UG/WIPE : 1K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 0602789
SAMPLING POINT DESC. : N504/COOK/CHICAGO,ALTGELD GARDENS

SUBMITTING SOURCE # : SITE # : IL-PA-N5-04-0
DATE COLLECTED : 960308 TIME COLLECTED : 1113 SAMPLING PROGRAM :

COLLECTED BY : ED DELIVERED BY : CDA
COMMENTS : PCB'S
FUNDING CODE : C827 AGENCY ROUTING : -- UNIT CODE :
SAR TYPE CODE : SAMPLE PURPOSE CODE : 4 REPORTING INDICATOR : N

DATE RECEIVED : 960312 TIME RECEIVED : 1605 RECEIVED BY : A R
LAB OBSERVATIONS : 1-6-OZ.WIPE,SEAL OK TRIP BL SAMP :
SUPERVISORS INITIALS : CMC CMC NOTE : K = LESS THAN VALUE

P39516 TOTAL PCBS PER WIPE UG/WIPE : 1K
/
: LOW LEVEL PCB DETECTED BELOW CALIBRATION
: RANGE - TENTATIVE QUANTITATION
: PCB UG/WIPE : 0.46

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : D602790
SAMPLING POINT DESC. : N505/COOK/CHICAGO/ALTGELD GARDENS

SUBMITTING SOURCE # : SITE # : IL-96-N5-05-
DATE COLLECTED : 960308 TIME COLLECTED : 1116 SAMPLING PROGRAM :

COLLECTED BY : ED DELIVERED BY : COA
COMMENTS : PCB'S
FUNDING CODE : C327 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 6 REPORTING INDICATOR : N

DATE RECEIVED : 960312 TIME RECEIVED : 1605 RECEIVED BY : A R
LAB OBSERVATIONS : 1-6-02.WIPE/SEAL OK TRIP BL SAMP :
SUPERVISORS INITIALS : CMC NOTE : K = LESS THAN VALUE

cmc

P39516 TOTAL PCBS PER WIPE UG/WIPE : 1K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 0602791
SAMPLING POINT DESC. : NS06/COOK/CHICAGO,ALTGELD GARDENS

SUBMITTING SOURCE # : SITE # : IL-96-NS-06-0
DATE COLLECTED : 960308 TIME COLLECTED : 1144 SAMPLING PROGRAM :

COLLECTED BY : ED DELIVERED BY : CDA
COMMENTS : PCB'S
FUNDING CODE : CS27 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 4 REPORTING INDICATOR : N

DATE RECEIVED : 960312 TIME RECEIVED : 1605 RECEIVED BY : A R
LAB OBSERVATIONS : 1-6-OZ.WIPE,SEAL OK TRIP BL SAM# :
SUPERVISORS INITIALS : CMC NOTE : K = LESS THAN VALUE

P39516 TOTAL PCBS PER WIPE UG/WIPE : 1K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : 0602702
SAMPLING POINT DESC. : N507/COOK/CHICAGO,ALTGELD GARDENS

SUBMITTING SOURCE # : SITE # : IL-96-N9-07-
DATE COLLECTED : 960308 TIME COLLECTED : 1145 SAMPLING PROGRAM :

COLLECTED BY : ED DELIVERED BY : CDA
COMMENTS : PCB'S
FUNDING CODE : C327 AGENCY ROUTING : -- UNIT CODE :
SAM TYPE CODE : SAMPLE PURPOSE CODE : 4 REPORTING INDICATOR : N

DATE RECEIVED : 960312 TIME RECEIVED : 1605 RECEIVED BY : A A
LAB OBSERVATIONS : 1-6-OZ.WIPE,SEAL OK TRIP BL SAM# :
SUPERVISORS INITIALS : CMC cmc NOTE : K = LESS THAN VALUE

P39516 TOTAL PCBS PER WIPE UG/WIPE : 1K

SIMALABS International

Date: *Monday, August 16, 1999*

Client Environmental Protection Agency
Project 99TS18 / Altgeld Gardens VIII
Work Order ME9908059
Date Received 08/06/99

Work Order/Sample Delivery Group Summary

Lab Sample ID	Client Sample ID	Client Description	Collection Date
ME9908059-01A	S01	Wipe-entry hall floor Gautrea	07/02/99
ME9908059-02A	R02	Wipe Control	07/02/99

Case Narrative
PCB Analyses

TOXICS PROGRAMS SECTION
Waste, Pesticides & Toxics Division
U.S. EPA REGION 5

Client: Environmental Protection Agency-Region 5

Project: 99TS18/ Altgeld Gardens VIII

Laboratory #: ME9908059

These samples were wipe samples. They were extracted by sonication and analyzed by Method SW 846-8082 for PCBs by GC/ECD analysis.

This samples were received on 8/6/99. They were extracted on 8/17/99 and analyzed the following day.

The action level for these samples was 1 ug/wipe. Sample extraction parameters were established to obtain a sample concentration of 0.1 to 2 ug/wipe. The two LCS's associated with these samples were spiked with AR1016/1260, at a level of 1 ug/wipe. The concentration of AR1260 was quantitated and reported The recovery was 89% for each LCS Because the samples were wipes, a MS/MSD could not be done.

The samples, MB and LCS's were all spiked with two surrogates. All recoveries for all samples were within QC limits

All standards associated with these samples met Method 8082 criteria The laboratory runs initial calibration standards for all PCBs from AR1016 thru AR1260. The raw data from AR1016/1260 and AR1242 initial linearity standards are included in this data package

Although there were peaks detected in the elution range of some PCBs, no Arochlor pattern was detected, so no PCB results were quantitated for either sample

The samples had sulfur, florisil and acid clean-ups

Nancy L. Tavitas — 9/16/99
Nancy L. Tavitas
Organics Manager
Date

p. 3

Revised Case Narrative
D. Pangel 9-23-99

SIMALABS International **Date:** *Tuesday, August 31, 1999*

Client: Environmental Protection Agency
Project 99TS18 / Altgeld Gardens VIII
Work Order: ME9908059
Date Received. 08/06/99

Department: GCSEMI

Holding Times Summary

Lab Sample ID	Client Sample ID	Test Code	Collection Date	Prep Date	Elapsed Days	Days Allowed		Analysis Date	Elapsed Days	Days Allowed
ME9908059-01A	S01	8081PCB_WIPE	7/2/99	8/17/99	46		#	08/18/99	1	40
ME9908059-02A	R02	8081PCB_WIPE	7/2/99	8/17/99	46		#	08/18/99	1	40

*Missed Holding Time (s)
#Prep Batch Referenced Incorrectly

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Conducted on:

CHICAGO YOUTH GAUTREAUX CENTER
975 East 132 Street
Chicago, Illinois

CARNOW, CONIBEAR & ASSOC., LTD.
Occupational and Environmental Health Consultants
333 West Wacker Drive, Suite 1400, Chicago, IL 60606, 312/782-4486

Chicago Youth Gautreaux Center
975/945 E. 132nd Street
Phase I/II Environmental Site Assessments

Phase I Environmental Site Assessment - March 26, 1999

Missing or Limited Information:

1. Aerial Photographs not included as part of Phase I ESA
2. No receipt of FOIA responses, addendum to be submitted if warranted
3. No legal description of the property provided
4. Mention of construction site to the north - no description of activities, unlabeled warehouse per Sanborn map
5. One Sanborn map from 1975 was available, 50 yr. historical review required per ASTM
6. Limited description and information on uses of surrounding properties
7. Site map provided does not include surrounding area description, structures, etc.
8. Groundwater flow not described in water resources
9. No linking of photos taken and description of site
10. UST at 939 E. 132nd St, greater than 200 ft., therefore no impact ??
11. ACM present at site - boiler insulation, floor tiles, etc.
12. LBP potential presence based on age of structure
13. Transformers and PCB identifies light ballasts. Transformers not found during site visit, however a transformer picture is included in the appendix.
14. Database search indicates - USTs at 939 and 940 E. 132nd St. (DOE), and listed sites from independent search include UST at 939 E. 132nd St., and CHA Altgeld Gardens at 940 E. 132nd St. with an EPA ID: ILD981098395 and civil judicial and administrative enforcement case. Sites determined to be of minimal environmental concern based on close proximity. 34 orphan sites were determined to be of no environmental concern due to location. No copy of the database was provided

Conclusions.

1. USTs in close proximity
2. LBP due to age of building
3. ACM due to age of building
4. PCBs in fluorescent light ballasts

Does not address the potential impacts of surrounding properties due in part to limited historical/current information contained in the Phase I ESA.

Chicago Youth Gautreaux Center
975/945 E. 132nd Street
Phase I/II Environmental Site Assessments

Phase II Environmental Site Assessment

Objectives: Impact of USTs
LBP Survey
Asbestos Survey

Missing or Limited Information:

1. Site location description is limited to streets adjacent to the site. No description of the property to the north
2. Conclusions cited from the Phase I ESA are not consistent, missing PCB light ballasts
3. No BTEX comparison to regulations included in Table 1 results. Limited PNA constituents included in Table 1.
4. B-3 sample collected at 9-10 ft. bgs at PID = 24.6, however sample at 0-3 ft. bgs at PID = 46.44
5. No asbestos sampling around water heater which was an area of concern in the Phase I ESA.

Soil Investigation
5 samples taken from northern and northwestern portion of property. Tier 1 SROs not exceeded for the constituents analyzed. Note inconsistency at B-3.

Asbestos Survey
Non-friable ACM encountered in approximately 5500 sq. ft. between the gym and the office. Materials in good condition and should not pose an environmental concern to occupants.

LBP
None of the locations tested indicated the presence of LBP.

Conclusions
Soils samples indicated that the site has not been adversely impacted by neighboring USTs.
Estimated 5500 sq. ft. of non-friable ACM which should not pose an environmental concern.
No LBP was identified during sampling.
CCA does not recommend performing additional investigation or abatement work at the site.

DOE Concerns
Limited historical information of surrounding properties (not compliant with ASTM).
Limited information included about the property to the north.
Database results not included as part of the Phase I ESA.
No PCB sampling included at the site.
Presence of ACM for future demolition/remodeling activities.

Phase I Environmental Site Assessment

Conducted on

Chicago Youth Gautreaux Center
975 East 132nd Street
Chicago, Illinois 60627

Prepared for

City of Chicago Department of Environment
30 North Lasalle, Suite 2500
Chicago, Illinois 60602

Prepared by

Carnow, Conibear & Assoc., Ltd.
333 West Wacker Drive, Suite 1400
Chicago, Illinois 60602
CCA Project No. 12951-E016

Report Issue Date: **March 26, 1999**

Ted Cagney
Geologist

Ala E. Sassila, Ph.D., P.E.
Director, Engineering Services

Table Of Contents

1.0 EXECUTIVE SUMMARY 1
2.0 INTRODUCTION 2
2.1 Objective 2
2.2 Limitations or Exceptions 2
3.0 SITE OVERVIEW 3
3.1 Location 3
3.2 Current Use 3
4.0 SITE BACKGROUND/OPERATING HISTORY 4
4.1 Current Ownership 4
4.2 Prior Ownership 4
4.3 Utility Services 4
4.4 Aerial Photographs 4
4.5 Sanborn Fire Insurance Maps 4
5.0 ENVIRONMENTAL SETTING 5
5.1 Surface Water Characteristics 5
5.2 Subsurface Geological Characteristics 5
5.3 Groundwater Characteristics 6
6.0 SITE INSPECTION 7
6.1 Site Observations and Inquiries 7
6.2 Area Reconnaissance 7
6.3 Hazardous Substances and Chemical Storage 7
6.4 Waste Disposal 8
6.5 AST/UST Systems and Pipelines 8
6.6 Asbestos Containing Materials 8
6.7 Lead Based Paint 8
6.8 Transformers and PCB Equipment 9
6.9 Site Plan Drawing 9
7.0 ENVIRONMENTAL/REGULATORY AGENCY INQUIRIES 10
7.1 Federal and State Regulatory Agencies 10
7.2 Local Government Agencies 10
7.3 Regulatory Database Inquiry 10
7.4 Orphan Sites 12
8.0 CONCLUSIONS AND RECOMMENDATIONS 13

EXHIBITS
Exhibit I Location Map
Exhibit II Site Plan
Exhibit III Zoning Map
Exhibit IV Sanborn Maps

APPENDICES
Appendix A Photo Log
Appendix B Freedom of Information Act Requests and Responses
Appendix C Database Descriptions

1.0 Executive Summary

This report presents the results of the Carnow, Conibear & Assoc., Ltd. (CCA) investigation associated with a Phase I Environmental Site Assessment (ESA) for the Chicago Youth Gautreaux Center, the property. The property is located at 975 East 132nd Street, Chicago, IL 60608. The Phase I ESA consisted of a visual site inspection, a site historical review, a review of public record documents, an interview with the building engineer, and a review of government agency records.

The property encompasses a total area of approximately 9800 square feet consisting of a one-story building. The building was constructed in 1978. The City of Chicago Department of Human Services utilizes the building as a child development center. The property has been the Gautreaux Center since 1978, and prior to that it was vacant land.

The Phase I ESA discovered several areas of environmental concern. These areas include the following; 1) potential presence of soil contamination associated with the former presence of two (2) USTs on the adjacent property; 2) the potential presence of friable and non-friable asbestos containing materials in the building; 3) the potential presence of lead-based paints (LBPs) in the building; and 4) The potential presence of PCBs in the fluorescent light fixtures located throughout the entire building and the pole-mounted transformers located on the north side of the property.

CCA recommends the following: 1) conduct a surface and subsurface soil investigation to determine if site has been adversely impacted by the presence of the tanks; 2) conduct a comprehensive asbestos bulk survey to determine the extent and condition of ACMs present on the property; 3) conduct a lead-based paint survey for the building; and 4) monitor the condition of the fluorescent ballasts for any signs of leaking. If noticed, then the ballasts should be replaced and disposed of in accordance with all state and federal regulations when any renovation or demolition occurs.

2.0 Introduction

The City of Chicago Department of Environment (CDOE) retained Carnow, Conibear & Assoc., Ltd (CCA) to perform a Phase I ESA for the Chicago Youth Gautreaux Center. The property is located at 975 East 132nd Street. The Phase I ESA was performed in accordance with the current American Society of Testing Materials (ASTM) Standards Practices of Environmental Assessment, E 1527-97. The following activities were conducted:

- An interview with the building engineer
- Review of topographic, floodplain, wetlands, and Sanborn Fire Insurance maps
- Review of government/public access records
- Review of local, state and Federal databases
- Visual investigation of adjacent properties

2.1 OBJECTIVE

The objective of the Phase I ESA was to obtain and evaluate information related to recognized environmental conditions of the property.

2.2 LIMITATIONS AND EXCEPTIONS

With respect to ASTM standard, there were limitations associated with this Phase I ESA. Aerial photographs were not available for the property, and responses to the FOIA requests have not been received from some of the government agencies. CCA will issue an addendum to this report upon receiving all the FOIA requests, if warranted.

3.0 Site Overview

3.1 Location

The subject property is located at 975 East 132nd Street, Chicago, Illinois, Section 34, Range 14 East, Township 37 North (Exhibit I). The property is zoned R3, General Residential. All of the surrounding properties are also zoned R3, with the exception of the properties located to the west, which are zoned B4-1, Restricted Service (Exhibit III). The property is bordered by: South Ellis Avenue and residential property on the east; West 132nd Street , a church, and a neighborhood clinic on the south; a public alley and a branch of the Chicago Public Library to the west; and a construction site to the north.

3.2 Current Use

The property is currently used as a Head Start child development center.

4.0 Site Background/ Operating History

4.1 Current Ownership

According to information found on the property, the owner is the City of Chicago Department of Human Services.

4.2 Prior Ownership

A real title search including any deeds, easements, leases, restrictions, and covenants for a period of fifty years was not provided to CCA. However, a title search is not required by ASTM if other historical sources of information provide the necessary information. CCA feels that the data collected during the Phase I ESA provided sufficient information about the subject property which eliminated the need for a fifty year title search. The site was vacant until the current building was constructed in 1978.

4.3 Utility Services

The following utility service companies are currently in use or available to the property:

- Natural Gas - People's Gas;
- Potable Water- City of Chicago;
- Storm & Sanitary Sewer - City of Chicago; and
- Electricity - Commonwealth Edison.

4.4 Aerial Photographs

Aerial photographs were not available for the site.

4.5 Sanborn Fire Insurance Maps

CCA performed a search for reasonably ascertainable Sanborn Fire Insurance Maps for the subject property. One (1) Map was discovered for the year 1975. The map shows the property as being vacant.

Historic uses of adjacent properties were also reviewed as part of the assessment. The Map shows all of the surrounding properties to resemble those that were seen on the day of the site visit, except the property to the north. The Map shows a warehouse located on that site.

5.0 Environmental Setting

5.1 Surface Water Characteristics

The topography of the property region is relatively flat. Elevations in the vicinity of the site are 590 feet above mean sea level, according to the United States Geological Survey 7.5- minute topographic quadrangle for the Lake Calumet, Illinois-Indiana, (dated 1963, photorevised 1973 and 1977). The ground surface at the site appears flat. Surface and storm water flow toward the storm water sewers along the edge of the streets.

The Federal Emergency Management Agency (FEMA) has designated the property as Zone C, which means that it is an area of minimal flooding (Community Panel 170074-0120B, June 1981). Additionally, there are no wetlands on the property, but there are three (3) within 1/2 mile of the property, Lake Calumet located one mile north, and the Little Calumet River located less than one mile to the south. The wetlands are: PEMF (Palustrine Emergent Semi-permanently Flooded); PSS1C (Palustrine Scrub-Shrub Broad-Leafed Deciduous Seasonally Flooded) on the west; and P(FO1/EM)Ad (Palustrine Forested Broad-Leafed Deciduous above Emergent Temporarily flooded partially drained/ditched) on the south (National Wetlands Inventory Map, Lake Calumet, IL-IN, June, 1983).

5.2 Subsurface Geological Characteristics

The property is located in the Dolton Member of the Equality Formation, which is composed of sand, silt, and clay deposits that accumulated in glacial lakes. The surficial geology of the area is characterized as unconsolidated glacial deposits consisting of quiet-water lake sediments, dominantly well bedded silt with interbedded clay and sand overlying clay till, all of which is overlain by various fill materials. A very stiff gray silty clay (hardpan) clayey sand and gravel underlies the Wadsworth. These till units represent earlier stages of glacier advancement and retreat, and most likely belong to the Wadsworth Member or the Yorkville Till Member of the Wedron Formation. The soils in this area are classified as "C1," sand and gravel less than 20 feet thick over relatively impermeable till or bedrock, or "D2," uniform, impermeable sandy till, at least 20' thick.

Bedrock, which directly underlies the till, is the Racine Formation of the Silurian Nigerian Series. The bedrock is typically composed of gray to white, medium grained, pure to slightly argillaceous, fossilferous dolomite. Typically, the upper portion of the dolomite bedrock is fractured, and has increased porosity and permeability.

5.3 Groundwater Characteristics

Groundwater in the vicinity of the site ranges in depth from approximately 20 feet to 60 feet below ground surface. No groundwater investigation data for the subject site or immediately adjacent properties was available. Therefore, CCA was unable to determine groundwater flow direction for the subject site.

Two (2) primary aquifers are present in the Chicago region, the shallow dolomite aquifer which includes the bedrock strata directly underlying the unconsolidated glacial sediments, and the (deep) Cambrian-Ordovician Aquifer, which mostly consists of sandstone and is isolated from the shallow dolomite aquifer by up to 250 feet of shale. Glacial aquifers are also present in the Chicago region in the form of lacustrine sands (Dolton Member) and outwash sand and gravel (Henry and Wedron Formation).

6.0 Site Inspection

6.1 Site Observations and Inquiries

The site reconnaissance was performed on March 22, 1999 by Ted Cagney of CCA. The building engineer, Mr. James Edwards accompanied CCA during the reconnaissance. The site reconnaissance consisted of a walk around the property grounds, a visual inspection of the interior of the building, and a visual investigation of the adjacent properties accessible to the general public. Photographs taken during the site visit are presented in Appendix A. Exhibit II presents the site map.

The site consists of a brick and concrete block main building, a chain-link fence enclosed playground, and a parking area. The playground is located to the south of the building, and the parking lot to the east. The building is of brick and concrete block construction, and has no basement. The building is divided into several areas by their use - offices, a classroom, a kitchen and dining area, storage closets, a utility closet, and a laundry room. Fluorescent lighting is used throughout the facility. The floors in the classroom, the dining area, and the offices are carpeted, with the rest of the halls having tiled floors. The ceilings have 1' x 1' acoustical ceiling tiles. The paint on the walls was in good condition.

The boiler room is located off the dining area, and contains a hot water heater and piping with insulation which may have asbestos.

6.2 Area Reconnaissance

Adjacent properties with contiguous property lines, were visually inspected from vantage points available to the general public. The property is bordered by the following properties:

- North: a construction site;
- East: South Ellis Avenue and residential property;
- South: East 132nd Place, a health clinic, a church, and residential property; and
- West: a public alley, and a branch of the Chicago Public Library.

6.3 Hazardous Substances and/or Chemical Storage

On May 19, 1980, the EPA published in the Federal Register the first phase of the Resource Conservation and Recovery Act (RCRA), 1980 RCRA Laws. RCRA defines a hazardous waste as a solid waste that may cause or significantly contribute to serious

illness or death, or that poses a substantial threat to human health or the environment when improperly managed. The
only chemicals that are located on the property are commercial cleaning products that are used to clean the facility. These chemicals are kept in rooms that remain locked at all times. The only keys for these rooms are with the building engineer, and in the main office.

6.4 Waste Disposal

Waste currently generated at the site consists of municipal wastes, which includes rubbish, and cardboard. Disposal is by National Waste Removal.

6.5 AST/UST Systems and Pipelines

6.5.1 On-site

According to Mr. Edwards, there are no Underground Storage Tanks (USTs) located on the property.

No aboveground storage tanks (ASTs) were noted at the time of our site reconnaissance.

6.5.2 Adjacent Properties

No obvious ASTs were observed on the immediately adjacent properties to the site. However, not all portions of the adjacent properties were visible to the public.

There is one (1) UST site located within 1/8 mile of the property, at 939 East 132nd Street. Given the fact that the site is closed and that the UST site is greater than 200 feet from the subject property, it is not an environmental concern to the property.

6.6 Asbestos Containing Materials (ACMs)

Based on the age of the building, there is a potential that ACMs are present in the building. Several suspected ACMs were identified during the site inspection. These include ceiling tile, pipe insulation, and hot water tank insulation.

6.7 Lead-Based Paint

In 1973, the Consumer Product Safety Commission (CPSC) established a maximum lead content in paint of 0.5% by weight of dry film of paint newly applied. In 1978, CPSC lowered the allowable lead level in paint to 0.06%. Based the age of the

building, there is the possibility that LBPs are present. On the day of the site visit, the paint on the walls was in good condition and not peeling.

6.8 Transformers and PCB Equipment

The Toxic Substance Control Act (TSCA) of 1976 mandates the regulation of electrical transformers containing a toxic substance known as polychlorinated biphenyl (PCB). Prior to 1976, PCB transformers were manufactured and placed into service by various electric utility companies without government regulation. Regulations promulgated under TSCA require that transformers containing PCBs be marked as such. Subsequently, a PCB Ban Rule was enacted in 1979 to eliminate the use of PCBs in transformers. No transformers were observed on the day of the site visit.

Fluorescent lights were observed throughout the facility. They appeared to be in good condition.

6.9 Site Plan Drawing

CCA was provided a site plan. Exhibit II, Site Plan, shows a detailed layout of the property.

7.0 Environmental/Regulatory Agency Inquiries

This section presents the results of the government agency Freedom of Information Act (FOIA) responses and the government agency database search that was performed by EDR in accordance with the ASTM standard.

7.1 Federal and State Regulatory Agencies

FOIA requests were sent to the USEPA, the OSFM, and the IEPA for any violations, permits, reports of land, air or water pollution, and/or UST and AST information on file for the property. As of the date of issue of this report, no responses to the FOIA requests have been received. After they are received, they will be reviewed, and CCA will issue an addendum, if warranted.

7.2 Local Governmental Agencies FOIA

A Freedom of Information Act (FOIA) request was sent to the City of Chicago Department of Environment (CDOE). The CDOE had no information for the site, but had the following information for the adjacent properties:

939 E. 132nd Street:

- 8/21/95: Permit to remove one (1) 5,000 gallon UST, former contents unknown
- 9/12/95: Permit to abandon in place one (1) 5,000 gallon gasoline UST.

940 E. 132nd Street

- 12/2/60: Install one (1) 1,000 gallon gasoline UST

Copies of the requests and responses can be found in Appendix B.

7.3 Regulatory Database Inquiry

CCA retained Environmental Data Resources (EDR) of Southport, Connecticut to conduct a search of available environmental databases for the property and surrounding properties. The databases were searched according to ASTM standards. The descriptions, sources, telephone numbers, government version dates, and definitions for each of the databases are provided in Appendix C. Databases marked with an asterisk were not required to be searched by ASTM standards and were searched only for the target property. The center of the site was used as the target property.

* National Priority List (NPL)
* Comprehensive Environmental Response and Liability Information System (CERCLIS)
* Comprehensive Environmental Response and Liability Information System (CERC-NFRAP)
* Resource Conservation Recovery Act Information System (RCRIS)-Large Quantity Generator (LQG)
* RCRIS- Small Quantity Generator (SQG)
* Facility Index System (FINDS)
* Emergency Response Notification System (ERNS)
* Illinois LUST Incident Report (LUST)
* Illinois OSFM UST Database (UST)
* Toxic Chemical Release Inventory System (TRIS)
* Solid Waste Facilities/Landfill Sites (SWF/LS)
* Hazardous Waste Sites (SHWS)
* State Priority or Superfund List (SPL)
* Superfund (CERCLA) Consent Decrees (CONSENT) State Landfill*
* Corrective Action Report (CORRACTS)*
* Hazardous Materials Information Reporting System (HMIRS)*
* Material Licensing Tracking System (MLTS)*
* Federal Superfund Liens (NPL LEINS)*
* PCB Activity Database System (PADS)*
* RCRA Administrative Action Tracking System (RAATS)*
* Records of Decision (ROD)*
* Toxic Substances Control Act (TSCA)*, and
* Coal Gas.*

There are two (2) properties located within a quarter-mile radius of the site. One of the properties is listed in multiple databases. Sites listed in databases include: one (1) UST site; one (1) RCRIS-SQG site and one (1) FINDS site. Table 1 (below) includes the sites listed within a half-mile radius of the property. All sites are in the City of Chicago, IL, unless specified otherwise.

TABLE 1
Listed Sites for Surrounding Properties Within 1/2 Mile of Site

Distance from Property	Owner/Address	Listed Database	Comments
< 1/8 Mile WNW	Chicago Park District 939 E. 132nd Street Chicago, IL	UST	Facility ID: 2-030903 Total Tanks: 0 Status: Closed
< 1/8 Mile WNW	CHA Altgeld Gardens 940 E. 132nd Street	RCRIS-SQG FINDS	EPA ID: ILD981098395 No violations reported Civil judicial and administrative enforcement case against facility (under DOCKET)
1/4 -1 /2 Mile NE	Calumet Nu Earth 130th/DOTY	Planning Commission	
1/4 -1 /2 Mile NE	Chicago Metro Sanitary District #3	Planning Commission	
1/4 -1 /2 Mile NE	Chicago Metro Sanitary District #2	Planning Commission	
1/4 -1 /2 Mile NE	Chicago Metro Sanitary District #4	Planning Commission	

There is minimal environmental concerns associated with the Park District LUST and the CHA Altgeld Gardens sites due to their close proximity to the property.

7.4 Orphan Sites

There were thirty four (34) orphan sites, or listed sites that could not be mapped due to poor or inadequate address information, identified during the database search. CCA was able to eliminate these sites as being outside of a 1/8 mile radius from the subject property and therefore not an environmental concern to the property.

8.0 Summary and Conclusions

CCA performed a Phase I Environmental Site Assessment, in conformance with the scope and limitations ASTM Practice E 1527-97, of 975 East 132nd Street, the property. Any exceptions to, or deletions from, the practice are described in Section 2.2 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

- **Underground Storage Tanks (USTs).** The property located at 939 East 132nd Street formerly contained two (2) gasoline USTs. The tanks were removed in 1995 and 1996. There is no information regarding the regulatory status of the USTs. CCA recommends performing subsurface soil investigation to determine if the site has been adversely impacted by the adjacent property.

- **Lead-Based Paints (LBPs).** Due to the age of the building, there is the potential for LBPs to be present in the building. CCA recommends that a LBP survey be conducted to determine if they are present in the building.

- **Suspected Asbestos Containing Materials.** Based on the age of the building, there is the potential for ACMs to be present in the building. Suspected ACMs include pipe insulation, hot water heater, and ceiling tiles. CCA recommends performing a comprehensive bulk asbestos survey to determine the extent and condition of ACMs present on the property.

- **Fluorescent Light Ballasts**. Due to the age of the building, and the presence of fluorescent light fixtures throughout the facility, PCBs are suspected to be present. No labels were observed on these fixtures. CCA did not notice any signs of leaking or staining of the fixtures. CCA recommends monitoring the condition of the fluorescent ballasts for any signs of leaking. If noticed, then the ballasts should be replaced and disposed of in accordance with all state and federal regulations when any renovation or demolition occurs.

CCA has applied prevailing industry standards and reasonable judgment and effort within the scope of work outlined in CCA's proposal, while conducting the Phase I ESA. The standards, judgment, and effort used by CCA personnel to investigate, assess, and determine the presence of potential environmental hazards and liabilities associated with the property are consistent with the requirements outlined the current ASTM Standards N°. E1527.97. CCA makes no warranty, express or implied, that the findings and interpretations in this report are a complete representation of the environmental hazards and liabilities, associated with the property. There may be unrecorded information or

documentation from previous owners or tenants that is unattainable and may be proprietary, legally protected, or unavailable through government regulatory services.

EXHIBITS

Exhibit I	**Location Map**
Exhibit II	**Site Plan**
Exhibit III	**Zoning Map**
Exhibit IV	**Sanborn Fire Insurance Map**

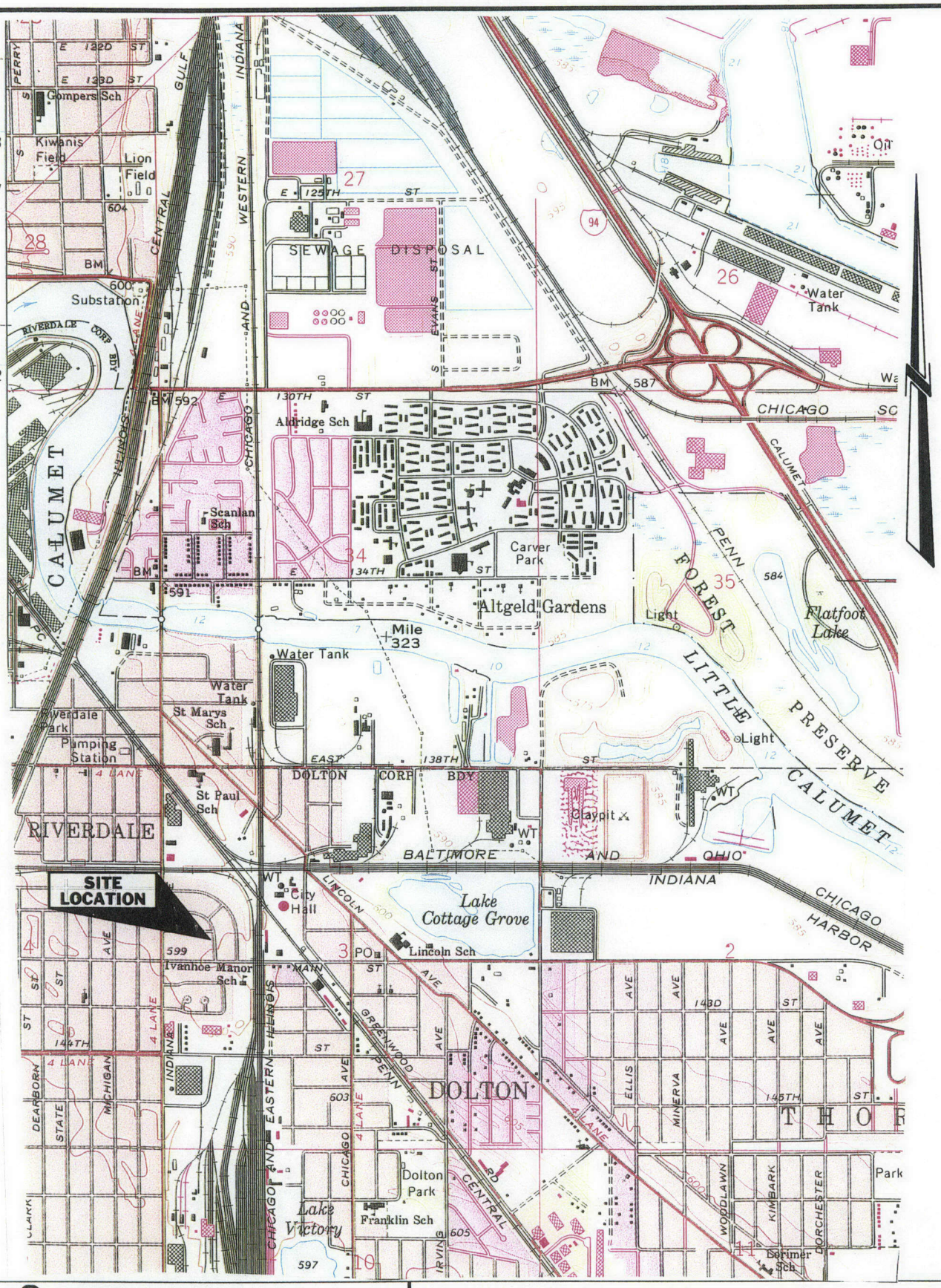

CARNOW, CONIBEAR & ASSOC., LTD.

ENVIRONMENTAL ENGINEERING DEPT.
333 West Wacker Dr. Suite 1400
Chicago, IL 60606
PHONE (312)782-4486
FAX # (312)782-5145

EXHIBIT I: SITE LOCATION
CHICAGO YOUTH GAUTREAUX CNETER
975 EAST 132nd STREET
CHICAGO, ILLINOIS

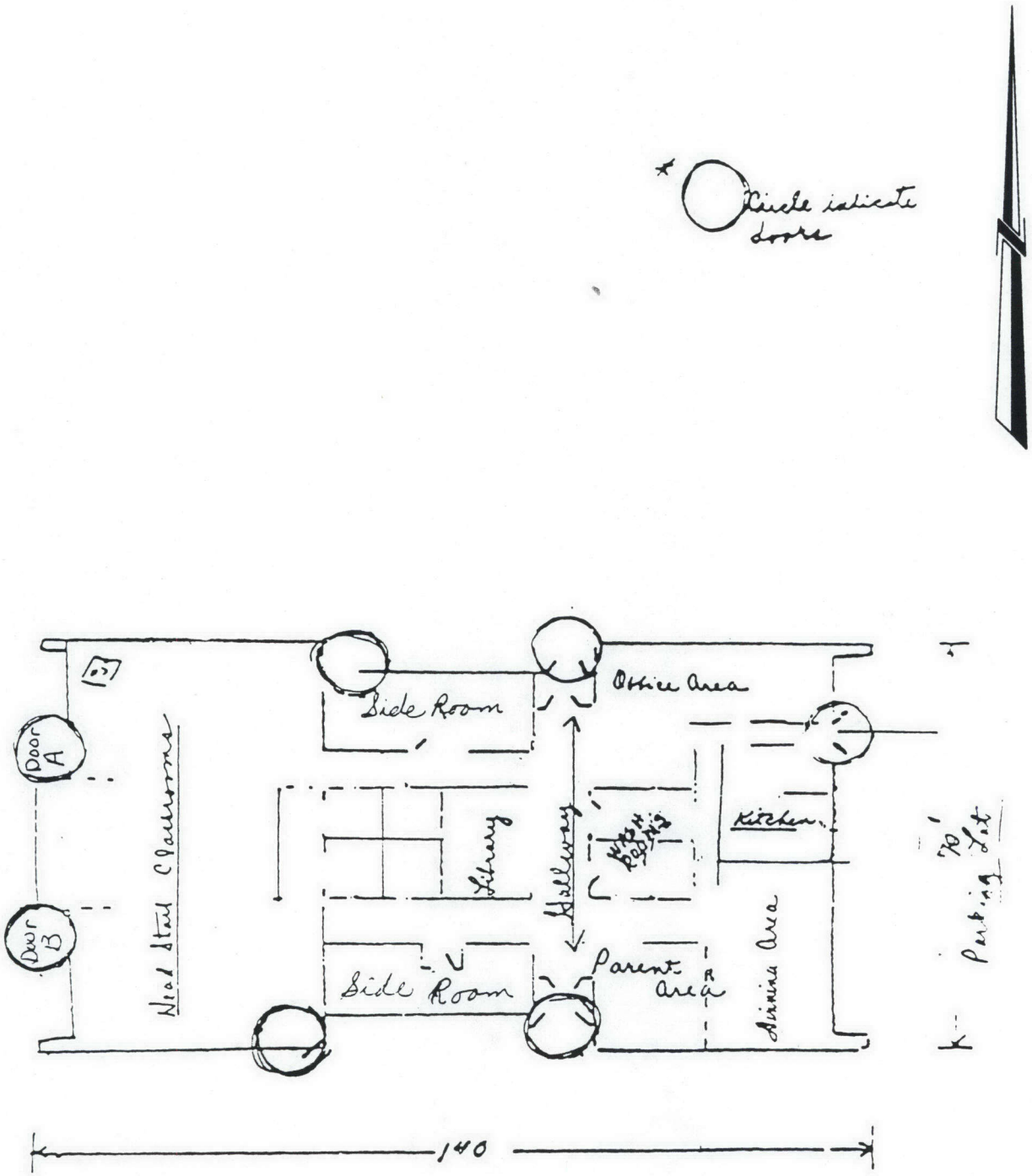

CARNOW, CONIBEAR & ASSOC., LTD.
ENVIRONMENTAL ENGINEERING DEPT.
333 West Wacker Dr. Suite 1400
Chicago, IL 60606
PHONE (312)782-4486
FAX # (312)782-5145

EXHIBIT II: SITE PLAN
CHICAGO YOUTH GAUTREAUX CNETER
975 EAST 132nd STREET
CHICAGO, ILLINOIS

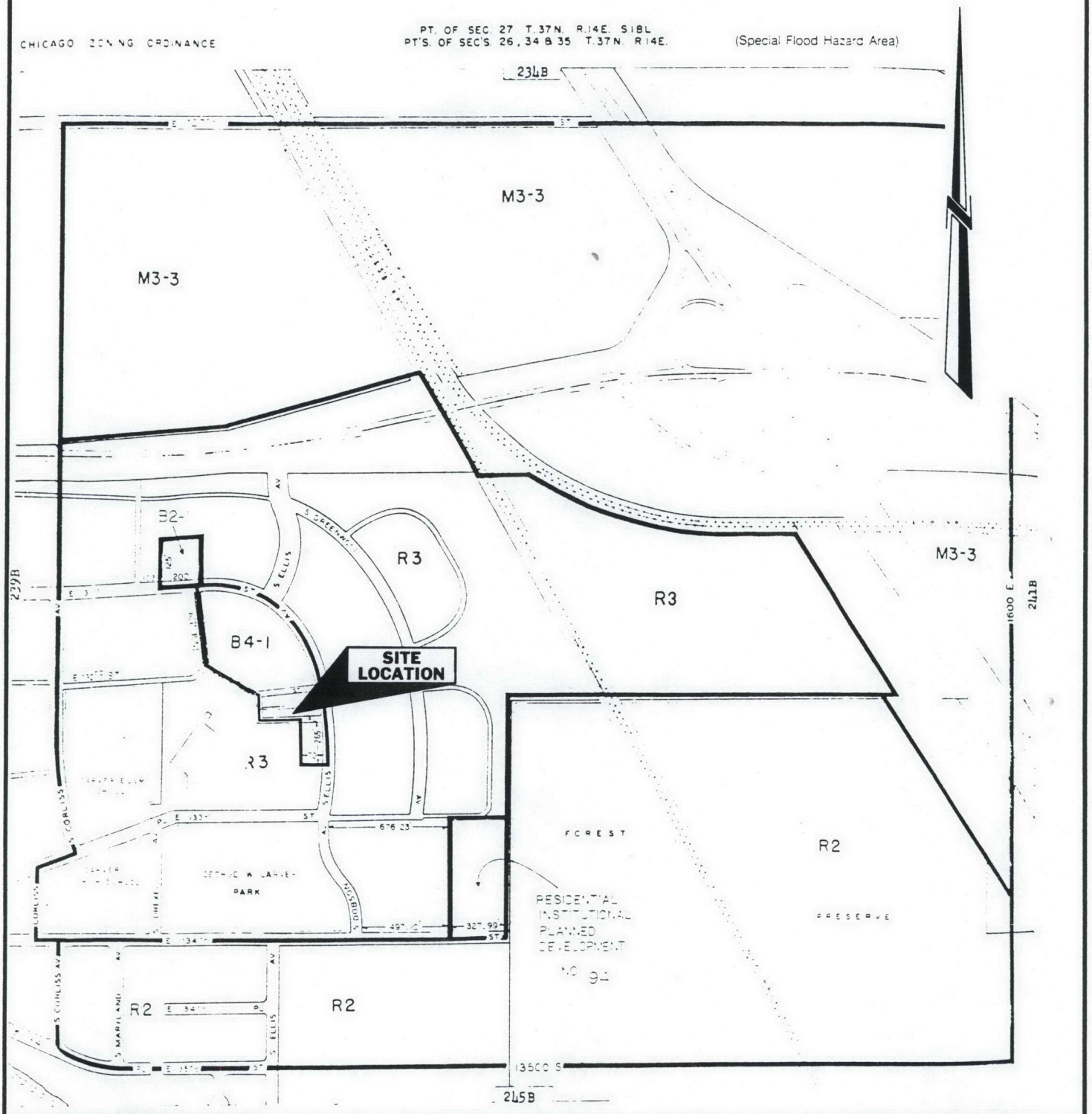

CARNOW, CONIBEAR & ASSOC., LTD.
ENVIRONMENTAL ENGINEERING DEPT.
333 West Wacker Dr. Suite 1400
Chicago, IL 60606
PHONE (312)782-4486
FAX # (312)782-5145

EXHIBIT III: ZONING MAP
CHICAGO YOUTH GAUTREAUX CNETER
975 EAST 132nd STREET
CHICAGO, ILLINOIS

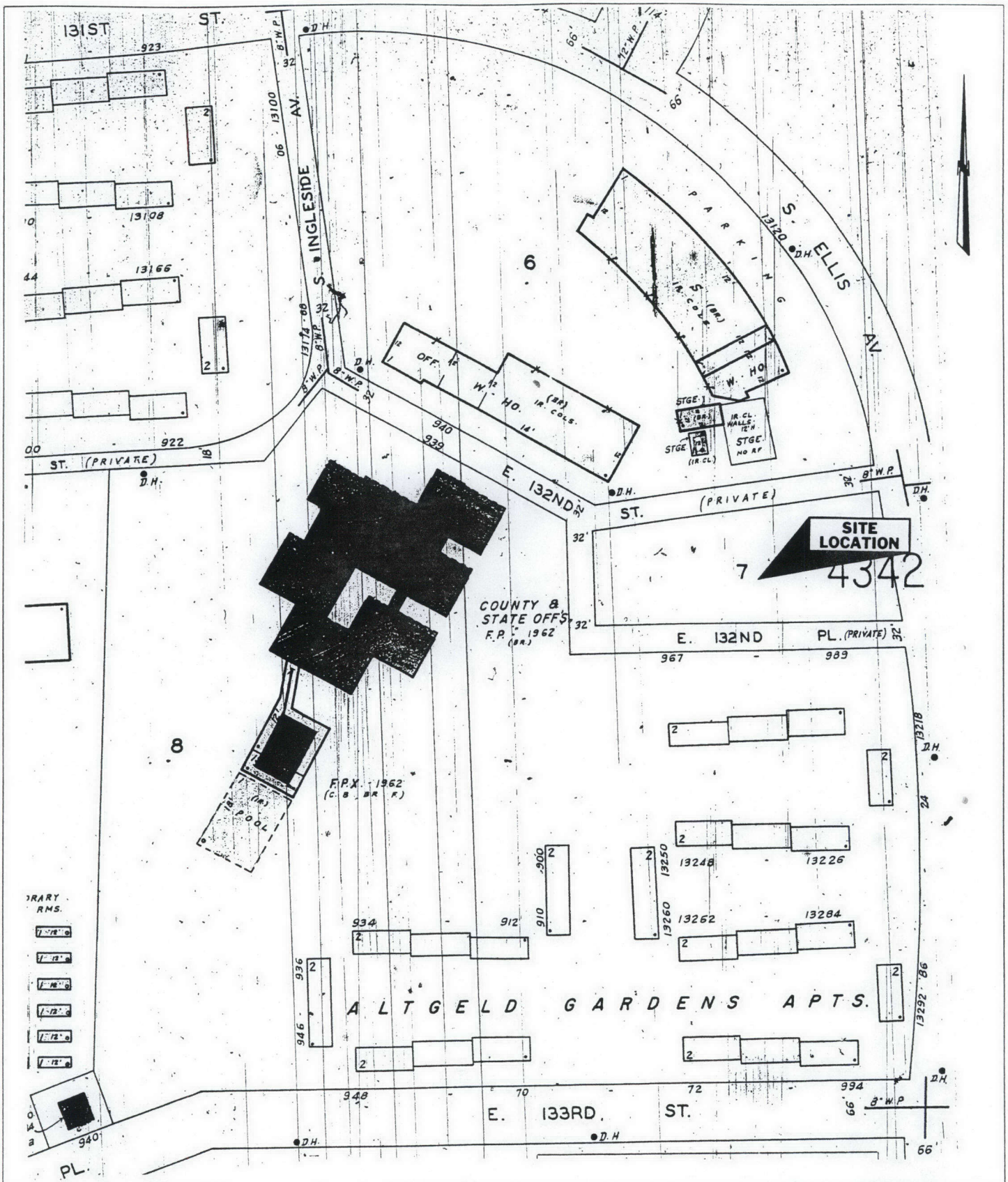

CARNOW, CONIBEAR & ASSOC., LTD.

ENVIRONMENTAL ENGINEERING DEPT.
333 West Wacker Dr. Suite 1400
Chicago, IL 60606
PHONE (312)782-4486
FAX # (312)782-5145

EXHIBIT IV- SANBORN FIRE INSURANCE MAP (1975)
CHICAGO YOUTH GAUTREAUX CENTER
975 EAST 132ND STREET
CHICAGO, ILLINOIS

DRAWN BY: EZM

CHECKED BY: AES

DATE: 03/24/99

APPENDICES

Appendix A Photographs
Appendix B FOIA Requests and Responses
Appendix C Database Definitions

draft

APPENDICES

Appendix A Photographs
Appendix B FOIA Requests and Responses
Appendix C Database Definitions

Appendix A

Photographs

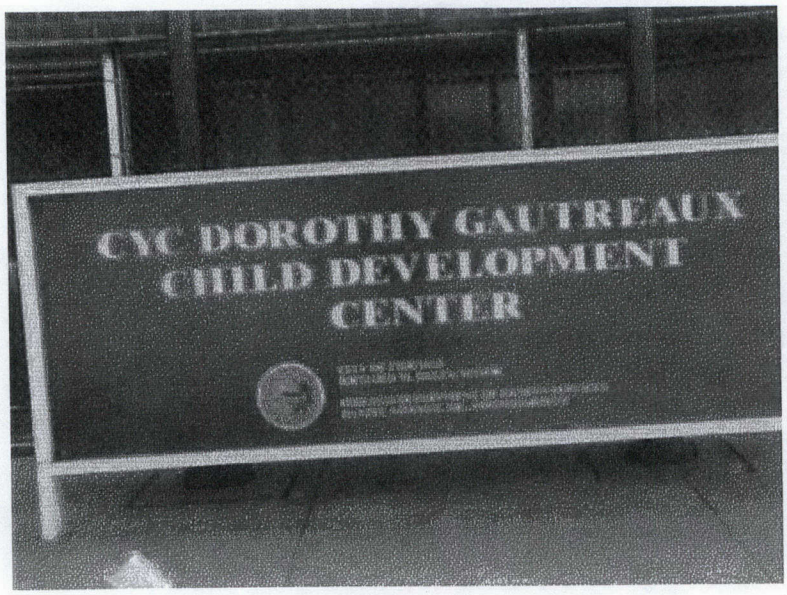
CYC DOROTHY GAUTREAUX
CHILD DEVELOPMENT
CENTER

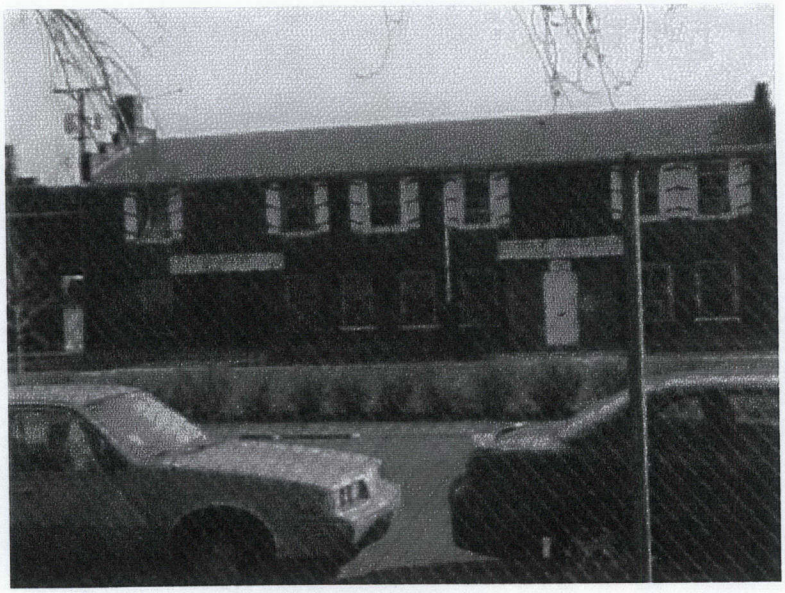

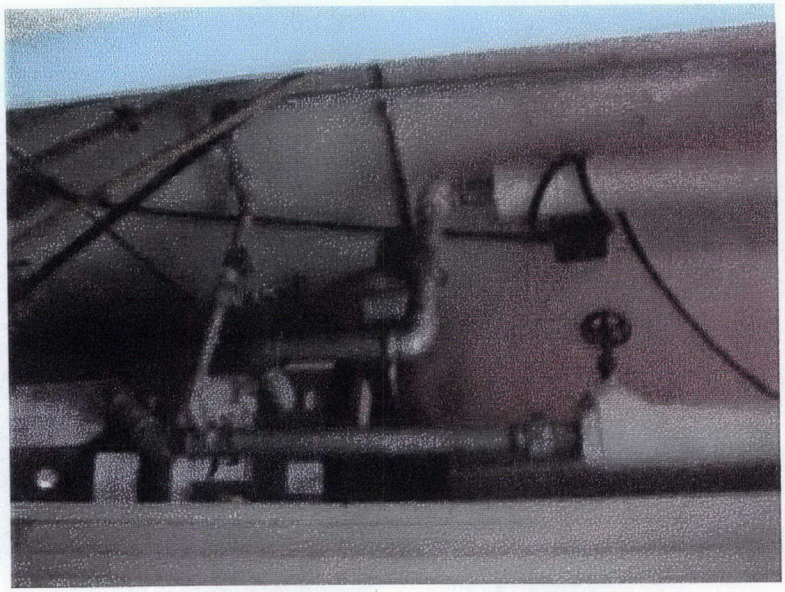

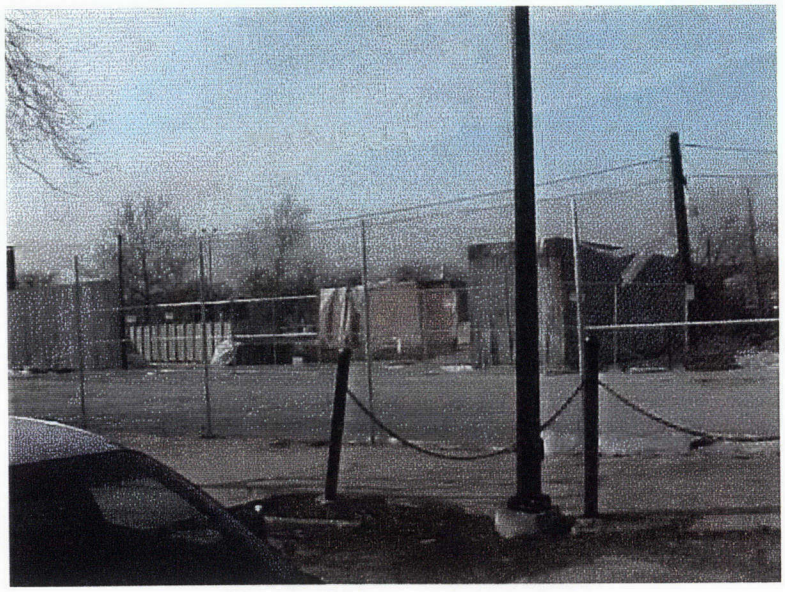

Appendix B

FOIA Requests and Responses

CARNOW, CONIBEAR & ASSOC., LTD.
Occupational and Environmental Health Consultants
333 West Wacker Drive, Suite 1400, Chicago, IL 60606, 312/782-4486

March 23, 1999

Ms. Wendy Schumacher
Freedom of Information Officer
Region V USEPA
77 West Jackson Blvd.
Chicago, IL 60604

Dear Ms. Schumacher:

We are sending this Freedom of Information request regarding the existence of any water or land pollution records, underground storage tanks information, or any permits for the following properties:

Abraham Lincoln Near South Center
4210 S. Berkeley
Chicago IL 60653

Boys & Girls Club- Fletcher Center
3140 W. Ogden
Chicago IL 60623

Trinity United - Brooks Center
6921 S. Stony Island
Chicago IL 60649

Chicago Youth Gautreaux Center
975 E 132nd St.
Chicago IL 60627

YMCA Garfield Center
7 N. Homan
Chicago IL 60624

If you find any documents on file, we would appreciate it if you would forward this information to us as soon as possible. If you have any questions, please call me at (312) 782-4486.

Sincerely,

CARNOW, CONIBEAR & ASSOC., LTD.

Erin Menig

Erin Menig
Geologist

242 Lawrence Street, Marietta, GA 30060, 770/424-9194

CARNOW, CONIBEAR & ASSOC., LTD.
Occupational and Environmental Health Consultants
333 West Wacker Drive, Suite 1400, Chicago, IL 60606, 312/782-4486

March 23, 1999

Ms. Cathy Bormida, FOIA Officer
Office of the Illinois State Fire Marshal
1035 Stevenson Drive
Springfield, IL 62703-4259

Dear Ms. Bormida:

We are sending this Freedom of Information request regarding the existence of any record of underground storage tanks (USTs) for the following properties:

Abraham Lincoln Near South Center
4210 S. Berkeley
Chicago IL 60653

Boys & Girls Club- Fletcher Center
3140 W. Ogden
Chicago IL 60623

Trinity United - Brooks Center
6921 S. Stony Island
Chicago IL 60649

Chicago Youth Gautreaux Center
975 E 132nd St.
Chicago IL 60627

YMCA Garfield Center
7 N. Homan
Chicago IL 60624

We would appreciate receiving information about any USTs or UST incidents, past or present, concerning the above properties.

If you find any documents on file, we would appreciate it if you would forward this information to us as soon as possible. If you have any questions, please call me at (312) 782-4486. Thank you for your cooperation in this matter.

Sincerely,

CARNOW, CONIBEAR & ASSOCIATES, LTD.

Erin Menig

Erin Menig
Geologist

$25 check enclosed

CARNOW, CONIBEAR & ASSOC., LTD.
Occupational and Environmental Health Consultants
333 West Wacker Drive, Suite 1400, Chicago, IL 60606, 312/782-4486

March 23, 1999

Ms. Diana L. Gobleman
Coordinator, Freedom of Information Unit
Illinois Environmental Protection Agency
2200 Churchill Road.
Springfield, IL 62706

Dear Ms. Gobleman:

We are sending this Freedom of Information request regarding the following properties:

Abraham Lincoln Near South Center
4210 S. Berkeley
Chicago IL 60653

Boys & Girls Club- Fletcher Center
3140 W. Ogden
Chicago IL 60623

Trinity United - Brooks Center
6921 S. Stony Island
Chicago IL 60649

Chicago Youth Gautreaux Center
975 E 132nd St.
Chicago IL 60627

YMCA Garfield Center
7 N. Homan
Chicago IL 60624

If you find any documents on file, regarding the air, water or land pollution of this property, any LUST incidents, underground storage tanks, or permits or notifications on file, we would appreciate it if you would forward this information to us as soon as possible. If you have any questions, please call me at (312) 782-4486.

Sincerely,

CARNOW, CONIBEAR & ASSOC, LTD.

Erin Menig

Erin Menig
Geologist

(UST) FREEDOM OF INFORMATION REQUEST AS OF March 19, 1999

FACILITY: CARVER PARK
939 E 132ND ST
CHICAGO, IL 60627 WARD-09
CONTACT: JITEN SHAH

STATE ID: 2030903 IEMA #:

PHONE: (312) 928-6555

OWNER: CHICAGO PARK DISTRICT
425 E MCFETRIDGE
CHICAGO, IL 60605
CONTACT: CHUCK WEBER

PHONE: (312) 294-7824

CURRENT SITE TANK INFORMATION AS OF 5/06/96

TANKS ON SITE:
TYPE OF TANKS:
TYPE(S) OF MATERIAL INVOLVED:
--

SIZE OF TANKS:
AGE OF TANKS:

CURRENT STATUS: Continue to monitor
GENERAL COMMENTS: 5/6/96: THE HEATING OIL WAS CUT OPEN, CLEANED AND FILLED TO THE TOP WITH INERT FOAM.

UST PERMITS LISTED BELOW (OLD) BLDG DEPT PERMITS IF ANY LISTED ON NEXT PAGE

UST PERMIT-100444 TYPE-REMOVAL TOT.TKS: 1 5K

RECEIVED	PRE-INSPECTION	ISSUED	EFFECTIVE	EXPIRATION	COMPLETION
7/16/93	8/12/93-(21)	8/18/93	8/15/93	2/15/94	

CONTRACTOR: CHICAGO PARK DISTRICT (366-00-5822)
COMMENTS: PERMIT EXPIRED ISSUED ANOTHER PERMIT # 101885

UST PERMIT-101885 TYPE-REMOVAL TOT.TKS: 1 5,000

RECEIVED	PRE-INSPECTION	ISSUED	EFFECTIVE	EXPIRATION	COMPLETION
8/21/95	-( )	8/23/95	8/28/95	2/28/96	

CONTRACTOR: ENVIROCON AND ASSOCIATES (IL-1724)
COMMENTS:

UST PERMIT-102276 TYPE-ABANDON TOT.TKS: 1 5,000 GALLON FUEL OIL

RECEIVED	PRE-INSPECTION	ISSUED	EFFECTIVE	EXPIRATION	COMPLETION
9/12/95	5/06/96-(43)	4/10/96	4/18/96	10/18/96	5/06/96

CONTRACTOR: ENVIROCON AND ASSOCIATES (IL-1724)
COMMENTS: TANK WAS CLEANED AND FILLED WITH ENVIRON. RFOAM.

THE FOLLOWING LIST ARE OLD BUILDING DEPARTMENT PERMITS
ISSUED FOR UNDERGROUND STORAGE TANK WORK PRIOR TO 1/1/93
AT ---> 940 E 132ND ST
CHICAGO HOUSING AUTHORITY

DATE ISSUED: 12/02/60 BLDG PERMIT NUMBER: 291065
TYPE OF WORK: INSTALL 1-1K GAS
WORK BY: HARTIGAN OIL

CARNOW, CONIBEAR & ASSOC., LTD.
Occupational and Environmental Health Consultants
333 West Wacker Drive, Suite 1400, Chicago, IL 60606, 312/782-4486

March 23, 1999

Ms. Cassandra Curry
City of Chicago, Department of Environment
30 North LaSalle, 25th Floor
Chicago, IL 60602

Dear Ms. Curry:

We are sending this Freedom of Information request regarding the existence of any record of air, water or land pollution complaints regarding the following properties:

Abraham Lincoln Near South Center
4210 S. Berkeley
Chicago IL 60653

Boys & Girls Club- Fletcher Center
3140 W. Ogden
Chicago IL 60623

Trinity United - Brooks Center
6921 S. Stony Island
Chicago IL 60649

Chicago Youth Gautreaux Center
975 E 132nd St.
Chicago IL 60627

YMCA Garfield Center
7 N. Homan
Chicago IL 60624

We would appreciate receiving information about citizen complaints, violations, citations, emergency response to spills, underground storage tanks, aboveground storage tanks, or other such information concerning the above referenced properties. Our fax number is (312) 782-5145.

If you find any documents on file, we would appreciate it if you would forward this information to us as soon as possible. If you have any questions, please call me at (312) 782-4486 ex308.

Sincerely,
CARNOW, CONIBEAR & ASSOC, LTD.

Erin Menig

Erin Menig
Geologist

Appendix C

Database Definitions

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/10/98
Date Made Active at EDR: 01/29/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 12/29/98
Elapsed ASTM days: 31
Date of Last EDR Contact: 03/03/99

ERNS: Emergency Response Notification System
Source: EPA/NTIS
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/98
Date Made Active at EDR: 01/18/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 01/13/99
Elapsed ASTM days: 5
Date of Last EDR Contact: 01/04/99

NPL: National Priority List
Source: EPA
Telephone: 703-603-8852
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC).

Date of Government Version: 01/19/99
Date Made Active at EDR: 02/19/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 02/08/99
Elapsed ASTM days: 11
Date of Last EDR Contact: 02/08/99

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 10/01/98
Date Made Active at EDR: 01/29/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 12/28/98
Elapsed ASTM days: 32
Date of Last EDR Contact: 01/25/99

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/01/98
Date Made Active at EDR: 01/29/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 12/28/98
Elapsed ASTM days: 32
Date of Last EDR Contact: 12/22/98

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDERAL NON-ASTM RECORDS:

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/95
Database Release Frequency: Biennially
Date of Last EDR Contact: 12/21/98
Date of Next Scheduled EDR Contact: 03/22/99

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: Varies
Database Release Frequency: Varies
Date of Last EDR Contact: Varies
Date of Next Scheduled EDR Contact: N/A

FINDS: Facility Index System
Source: EPA/NTIS
Telephone: 703-908-2493
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 09/30/97
Database Release Frequency: Quarterly
Date of Last EDR Contact: 12/23/98
Date of Next Scheduled EDR Contact: 03/29/99

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4526
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/97
Database Release Frequency: Annually
Date of Last EDR Contact: 03/02/99
Date of Next Scheduled EDR Contact: 04/26/99

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 12/08/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/02/99
Date of Next Scheduled EDR Contact: 05/31/99

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 02/22/98
Date of Next Scheduled EDR Contact: 05/24/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-260-3936
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/22/97
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 03/05/99
Date of Next Scheduled EDR Contact: 05/17/99

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 12/15/98
Date of Next Scheduled EDR Contact: 03/15/99

ROD: Records Of Decision
Source: NTIS
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/31/95
Database Release Frequency: Annually
Date of Last EDR Contact: 02/16/99
Date of Next Scheduled EDR Contact: 04/19/99

TRIS: Toxic Chemical Release Inventory System
Source: EPA/NTIS
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/95
Database Release Frequency: Annually
Date of Last EDR Contact: 12/28/98
Date of Next Scheduled EDR Contact: 03/29/99

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-1444
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/94
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 01/25/99
Date of Next Scheduled EDR Contact: 04/26/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF ILLINOIS ASTM RECORDS:

LUST: Leaking Underground Storage Tank Sites
Source: Illinois Environmental Protection Agency
Telephone: 217-782-6760
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 11/18/98
Date Made Active at EDR: 02/12/99
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 01/11/99
Elapsed ASTM days: 32
Date of Last EDR Contact: 03/02/99

SHWS: Category List
Source: Illinois Environmental Protection Agency
Telephone: 217-524-4863
State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 12/07/98
Date Made Active at EDR: 01/26/99
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 12/23/98
Elapsed ASTM days: 34
Date of Last EDR Contact: 03/02/99

LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge
Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/01/98
Date Made Active at EDR: 01/26/99
Database Release Frequency: Annually

Date of Data Arrival at EDR: 12/23/98
Elapsed ASTM days: 34
Date of Last EDR Contact: 02/15/99

UST: STC (State, Town, County) Facility List
Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/03/98
Date Made Active at EDR: 08/21/98
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 07/23/98
Elapsed ASTM days: 29
Date of Last EDR Contact: 02/02/99

STATE OF ILLINOIS NON-ASTM RECORDS:

NIPC: Solid Waste Landfill Inventory
Source: Northeastern Illinois Planning Commission
Telephone: 312-454-0400
Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/88
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/11/97
Date of Next Scheduled EDR Contact: N/A

CAT: Category List
Source: Illinois EPA
Telephone: N/A

Date of Government Version: 06/01/97
Database Release Frequency: N/A

Date of Last EDR Contact: 03/02/99
Date of Next Scheduled EDR Contact: 05/31/99

Historical and Other Database(s)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

DELISTED NPL: NPL Deletions
Source: EPA
Telephone: 703-603-8769
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/19/99
Date Made Active at EDR: 02/19/99
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 02/08/99
Elapsed ASTM days: 11
Date of Last EDR Contact: 02/08/99

NFRAP: No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 11/10/98
Date Made Active at EDR: 01/29/99
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/29/98
Elapsed ASTM days: 31
Date of Last EDR Contact: 03/03/99

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SWDIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones: Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1996 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in March 1997 from the U.S. Fish and Wildlife Service.

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Water Dams: National Inventory of Dams
Source: Federal Emergency Management Agency
Telephone: 202-646-2801
National computer database of more than 74,000 dams maintained by the Federal Emergency Management Agency.

County Well Data in Illinois: Cook and DuPage Counties
Source: Illinois State Geological Survey
Telephone: 217-244-2387

Illinois Private Well Database and PICS (Public, Industrial, Commercial Survey)
Source: Illinois State Water Survey
Telephone: 217-333-9043

Illinois State Geological Survey Water Wells
Source: Illinois State Geological Survey
Telephone: 217-333-5102
Point data set that shows locations, well type, and well ID for wells in Illinois. Data comes from driller's logs.

AQUIFLOW™ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Conducted on:

Chicago Youth Gatreaux Center
945 East 132nd Street
Chicago, Illinois

CARNOW, CONIBEAR & ASSOC., LTD.

Occupational and Environmental Health Consultants

333 West Wacker Drive, Suite 1400, Chicago, IL 60606, 312/782-4486

Phase II Environmental Site Assessment

Conducted on

Chicago Youth Gatreaux Center
945 East 132nd Street
Chicago, Illinois

Prepared for

City of Chicago
Department of General Services
30 North LaSalle Street
Suite 3700
Chicago, Illinois 60602

Prepared by

Carnow, Conibear & Assoc., Ltd.
Chicago, Illinois

CCA Project No. 12951-E016

Report Issue Date: June 15, 1999

Mike Duet
Senior Environmental Specialist

Ala Sassila, Ph.D., P.E.
Director, Engineering Services

Table Of Contents

1.0 EXECUTIVE SUMMARY 1

2.0 INTRODUCTION 2

3.0 BACKGROUND 3

4.0 SCOPE OF WORK 4

5.0 INVESTIGATION METHODOLOGIES 5

5.1 Subsurface Soil Investigation 5
5.2 Bulk Asbestos Survey 5
5.3 Lead-Based Paint Survey 6

6.0 SITE GEOLOGY AND HYDROGEOLOGY 7

6.1 General Area Geology 7
6.2 Site Geology 7
6.3 Groundwater Resources 8

7.0 SAMPLE PROCEDURES AND ANALYTICAL RESULTS 9

7.1 Soil Investigation Sampling 9
7.2 Soil Sample Analytical Results 9
7.3 Discussion of Soil Sample Analytical Results 10
7.4 Bulk Asbestos Survey Analyses 10
7.5 Discussion of Bulk Asbestos Survey Results 10
7.6 Lead-Based Paint Survey Analyses 11

6.0 CONCLUSIONS AND RECOMMENDATIONS 12

Table Of Contents (continued)

TABLES

Table I	Soil Analytical Results
Table II	Bulk Asbestos Survey Analytical Results
Table III	Lead-Based Paint Analytical Results

EXHIBITS

Exhibit I	Site Location
Exhibit II	Site Plan
Exhibit III	Zoning Map
Exhibit IV	Cross Section
Exhibit V	ACM Location Map

APPENDICES

Appendix A	Boring Logs
Appendix B	Laboratory Analytical Report - Soil Sampling
Appendix C	Laboratory Analytical Results - Bulk Asbestos Survey
Appendix D	Lead-Based Paint Data Sheets

1.0 Executive Summary

This report presents the results of a Phase II Environmental Site Assessment (ESA) investigation at the Chicago Youth Gatreaux Center property. The site is located at 945 East 132nd Street, Chicago, Illinois. The property is currently utilized as a day care center. The property consists of a building, play lot, and parking area.

The objectives of the Phase II ESA investigation consisted of performing a subsurface investigation, to determine whether the site had been adversely impacted by adjacent leaking underground storage tank (UST) sites, and performing asbestos and lead-based paint surveys.

The subsurface investigation consisted of performing a total of five (5) soil borings in locations adjacent to the properties with the former USTs. One soil sample from each boring was submitted to an independent laboratory for analyses. The samples were analyzed for the presence of benzene, toluene, ethyl benzene, and xylene (BTEX), polynuclear aromatic hydrocarbon compounds (PNAs), and total lead. The laboratory analyses indicated that eight PNAs and total lead were detected in the soil boring samples. The Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) methodology [Illinois Administrative Code Title 35 Section 742 (35 IAC 742)] was used to evaluate the analytes detected in the soil at the site. The evaluation indicated that none of the constituents was present at a concentration exceeding IEPA Tier 1 Soil Remediation Objectives for residential land use. The residential land use scenario is the most conservative SRO developed by IEPA and most protective of human health and environment. Therefore, CCA recommends that no further investigative or remedial action be conducted at the site.

The asbestos survey included collecting a total of forty-two (42) samples from suspect materials. The survey identified the presence of non-friable asbestos-containing materials (ACMs) in floor tiles and mastic present in the office and gym and in ceiling tile present in the hallway areas. The ACMs are on good condition and should not pose an environmental concern to the occupants of the building.

The lead-based paint survey utilized an X-ray fluorescence spectrum analyzer to test all painted surfaces in the building. The survey did not identify any positive component in the building. Therefore, LBP should not be of concern for this building.

Based on the results of the Phase II ESA, CCA does not recommends performing additional investigation or abatement at the site.

2.0 Introduction

Carnow, Conibear & Assoc., Ltd. (CCA) was retained by the City of Chicago Department of General Services to perform Phase II Environmental Site Assessment (ESA) activities at the Chicago Youth Gatreaux Center (Gatreaux), located at 945 East 132nd Street, Chicago, Illinois. CCA initiated this project under contract number T69613201-10. The objectives of the Phase II ESA were following:

- Determine whether a potential release from former underground storage tanks (USTs) located on adjacent properties had impacted the subsurface soils at the site;
- Determine the nature of suspected asbestos-containing materials (ACMs); and
- Determine whether lead-based paint (LBP) is present in any of the building components.

The Phase II ESA field activities were conducted on May 25 and 27, 1999.

The site is located in Section 35 of Township 37 North, Range 14 East in Cook County, Illinois (Exhibit I). The property consists of a paved parking area on the east side of the property, the Youth Center building in the central area of the site, a play lot on the west side of the property, and a lawn area on the north side of the site.

3.0 Background

The Gatreaux property is surrounded by 132nd Place to the south, 132nd Street to the west, a private street (currently utilized as a pedestrian walkway) on the north, and Ellis Avenue on the east. A map of the site is presented as Exhibit II.

The property is zoned as B4-1 (restricted service district). The properties directly north and south of the site are similarly zoned. Other areas in the vicinity are zoned R3 (general residence district). Exhibit III illustrates the zoning of the area.

CCA performed a Phase I ESA in March 1999. The Phase I ESA indicated the following potential environmental concerns:

- The potential presence of subsurface contamination due to former USTs on properties north and west of the site;
- The potential presence of friable and non-friable ACMs; and
- The potential presence of LBP at the site.

4.0 Scope of Work

The objective of the Phase II ESA was to determine whether soil contamination, ACMs, and/or LBP building components are present at the site. CCA's scope of work consisted of the following tasks:

- Advance soil borings on the property;
- Perform quantitative laboratory analyses of selected soil samples collected from the borings;
- Perform a bulk asbestos survey of suspected ACMs;
- Perform quantitative laboratory analyses of the bulk asbestos survey samples;
- Perform a LBP survey utilizing an X-ray fluorescence spectrum analyzer;
- Review and interpret the site investigation analytical results; and
- Prepare a report to document the site investigations and provide recommendations regarding the site regulatory conditions.

5.0 Investigation Methodologies

5.1 Subsurface Soil Investigation

CCA personnel supervised the advancement of five (5) soil borings during the Phase II ESA. The locations of the soil borings were chosen to provide samples from areas of the site which appear to be closest to the off-site locations of two (2) former USTs. The locations chosen were along the northern boundary, at the northwest corner, and along the western boundary of the site. The soil borings were completed to a depth of fifteen (15) feet below ground surface (bgs) on the property. Exhibit II illustrates the location of the soil borings.

C.S. Drilling, Inc. was retained by CCA to conduct the soil boring activities. The field drilling activities were conducted on May 27, 1999. Five (5) soil borings (B-1 through B-5) were advanced on the property using Geoprobe® drilling equipment. Samples were collected by advancing a two and one-half (2.5) inch outer diameter sampling tube with a disposable acetate sleeve inside. Continuous samples were collected from the one (1) foot bgs to a depth of fifteen (15) feet. The sampling tubes were decontaminated prior to each use with an Alconox®/water solution, and were then rinsed with distilled water. The sleeves were disposed after the collection of each sample.

CCA's field representative supervised the drilling operation, collected the soil samples, inspected soil samples for visible signs of contamination, performed field screening of the soil samples, and classified each soil sample in terms of texture and color in accordance with the Unified Soil Classification System (ASTM D-2487-85 and D-2488-84). Each soil sample was field screened utilizing a photoionization detector to qualitatively measure volatile organic compound (VOC) vapors. Soil samples submitted for quantitative analyses were selected based upon field screening measurements and the subsurface lithology encountered. One soil sample was submitted for quantitative analysis from each boring.

Based on the borings conducted on the site, the site soil profile consists of clay and silty clay unit with trace sand and gravel. One boring (B-2) had a discontinuous coarse to medium sand lens present at a depth of approximately eight (8) feet bgs. This thin sand lens [less than one (1) foot thick] was not encountered in any of the other borings. The clay unit was present to the terminus of each boring (15 feet bgs).

Details of the soil profile and sample information are presented on boring logs contained in Appendix A. The locations of the borings are presented on Exhibit II.

5.2 Bulk Asbestos Survey

The bulk asbestos survey was conducted on May 25, 1999 by Marcos Iwankiw, an Illinois Department of Public Health (IDPH) Licensed Asbestos Inspector (ID #100-3175). The survey included the following tasks:

- Perform a visual inspection and physical assessment of the accessible areas to determine the location and quantity of suspected ACMs within the building;

- Collect and analyze bulk samples from suspected ACMs; and

- Submit the samples to the CCA in-house laboratory for analyses.

CCA collected a total of forty-two (42) samples from suspected ACM locations. All samples were collected in accordance with CCA *Bulk Sampling Standard Operating Procedures*. These procedures were developed in-house and are based upon methodologies promulgated in U.S. Environmental Protection Agency (EPA) guidelines. All sampling equipment was double-rinsed with potable water before and after each sampling event.

5.3 Lead-Based Paint Survey

The LBP survey was conducted on May 25, 1999 by Marcos Iwankiw, who is an IDPH Licensed Lead Inspector (ID #100-3175). The survey was performed utilizing an X-ray fluorescence (XRF) spectrum analyzer to determine lead content of suspected LBP building components present in the interior and exterior areas of the building. Each suspected building component was tested at a minimum of three (3) points during the XRF analyses.

6.0 Site Geology and Hydrogeology

6.1 General Area Geology

The site is located within an area of Carmi Member till deposits of the Equality Formation. The Carmi Member was formed by sediments from still water areas of glacial Lake Chicago. The deposit is typified by well-bedded silt with thin beds of clay. Discontinuous, localized lenses of sand and sandy gravel are present in beach areas of the formation (Willman 1971). The till deposits in the vicinity of the site are at least fifty (50) feet thick with no apparent interbedded sand or gravel (Berg, Kempton, and Cartwright 1984).

The bedrock, which directly underlies the till, is of the Racine Formation of the Silurian Niagaran Series. The bedrock is typically composed of gray to white, medium grained, pure to slightly argillaceous, fossiliferous dolomite. Depth to bedrock in the area ranges from approximately 80 to 110 feet. Typically, the upper portion of the dolomite bedrock is fractured, and has increased porosity and permeability.

According to the Illinois Geological Survey Division, Circular 532, Potential for Contamination of Shallow Aquifers in Illinois, the property is located in an area mapped as "E" on Circular 532, *Potential for Contamination of Shallow Aquifers in Illinois*. The "E" classification indicates that relatively impermeable till deposits, at least fifty (50) feet thick, without interbedded sand and gravel deposits (Berg, Kempton, and Cartwright 1984).

6.2 Site Geology

CCA performed a total of five (5) soil borings on the property. The following is a description of the general soil profile encountered during the subsurface investigations:

- A clay unit with trace fine to coarse sand and trace fine gravel. The clay unit is very stiff and typically dry and moderately plastic. The clay unit extended to the bottom of each boring advanced at the site [a depth of fifteen (15) feet bgs].

  A coarse to medium sand lens was encountered within the clay unit at boring B-2. The sand lens was not encountered in any of the other four (4) borings advanced at the site, thus it should be considered discontinuous.

The subsurface lithology encountered at the site is consistent with description of the area geology presented in the Illinois State Geological Survey (ISGS) publications mentioned in Section 6.1. Exhibit IV presents a cross-section illustrating the subsurface materials encountered during completion of the soil borings.

6.3 Groundwater Resources

Potable water in the vicinity of the site is supplied by the City of Chicago Water Department. The department obtains water from intakes located in Lake Michigan. The intakes are located approximately one (1) mile offshore. Additionally, the City of Chicago has enacted a groundwater usage restriction ordinance. The ordinance prohibits the use of wells as a potable water supply source within the corporate boundaries of the city. Therefore, no additional wells can be installed in the vicinity of the site.

A search of ISGS and Illinois State Water Survey databases indicated that one (1) well is located within 2,500 feet of the site. This well is approximately two thousand (2,000) feet southwest of the site and is completed within the upper bedrock unit underlying the area.

Groundwater was not encountered during the advancement of the soil borings [to a maximum explored depth of fifteen (15) feet]. Since groundwater was not encountered within ten feet of the surface, Class I groundwater is assumed to underlie the site. The Class I groundwater ingestion exposure route was used to compare the constituents concentrations encountered on the property with the IEPA remediation objectives.

7.0 Sample Procedures and Analytical Results

7.1 Soil Investigation Sampling

The type of sample containers and preservation procedures used during the sampling is dependent upon the analysis parameters. CCA utilized tared, forty (40) milliliter vials with preservative for the soil aliquots which were to be analyzed for the presence of benzene, toluene, ethylbenzene, and total xylenes (BTEX). The sample was analyzed utilizing U.S. Environmental Protection Agency (EPA) Methods 5035/8021. CCA used one, four (4) ounce borosilicate glass jar for the aliquot analyzed for the presence of polynuclear aromatic hydrocarbon compounds (PNAs) and total lead. The presence of PNAs was analyzed utilizing EPA Method 8310. The presence of total lead was analyzed by a Series 7000 method, respectively. All jars were precleaned to the EPA standards with a Teflon® lined cap used for each container.

Each soil sample was labeled by a unique identification number after it was collected during the sampling activities. Each sample was labeled at the time of sampling with the following information using indelible ink:

- Project/site name;
- Date and time of collection;
- Soil boring number; and
- Name of sample collector

After each soil sample jar was labeled, the jar was placed into an insulated portable cooler with ice. The samples were transported to American Environmental Analytical (AEA) in Chicago, Illinois. A chain-of-custody form was prepared, signed, and dated by the CCA representative and the laboratory representative who received the samples.

7.2 Soil Sample Analytical Results

CCA submitted a total of five (5) representative soil samples to AEA for analysis. The samples were analyzed for BTEX, PNAs, and total lead. The analytical results indicated the presence of several PNA constituents and total lead.

Table I presents a summary of the soil analytical results. A complete copy of the analytical data and chain of custody form are provided in Appendix B.

7.3 Discussion of Soil Sample Analytical Results

CCA evaluated the concentrations of the constituents encountered at the property in relation to the SROs promulgated in 35 IAC 742 (TACO). The Tier 1 evaluation compares the concentration of contaminants detected at the property to residential SROs developed by the IEPA for various exposure routes. Tier 1 SROs are based on prudently conservative assumptions and take into account only limited site-specific information such as contaminant concentrations, class of groundwater, receptor classification, and some appropriate soil parameters. Tier 1 allows for differentiating between residential and industrial/commercial properties. Based on the use of the subject property as a youth center, the Tier 1 residential exposure scenario was used to compare the constituent concentrations in the subsurface soils with the IEPA SROs. Residential SROs are the most conservative SROs developed by IEPA and are the most protective of human health and environment.

The results of the Phase II ESA indicated that none of the detected constituents is present at a concentration exceeding an IEPA Tier 1 SRO. Thus, the subsurface soil has not been impacted by leaking UST (LUST) incidents at the adjacent properties. Based on the analytical results, it is CCA's opinion that there are no environmental concerns present on site and associated with the LUST incidents at the adjacent off-site locations.

7.4 Bulk Asbestos Survey Analyses

The samples collected during the bulk asbestos survey were placed in pre-cleaned containers after collection. Each container was assigned an identification number. CCA also prepared a chain-of-custody form prior to submittal of the samples to CCA's in-house laboratory.

CCA's laboratory is accredited for bulk asbestos fiber analyses by the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Industrial Hygiene Association (AIHA). CCA utilized dispersion staining and polarized light microscopy (PLM) techniques to analyze the samples, which is consistent with National Institute of Occupational Safety and Health (NIOSH) Method 7403. PLM is the EPA's recognized method for determining bulk asbestos content.

7.5 Discussion of Bulk Asbestos Survey Results

The results of the bulk asbestos survey indicated that non-friable ACMs were present in the office and gym areas of the building. Table II presents a summary of the PLM results. Exhibit V illustrates the identified ACM areas. ACMs identified by PLM are also identified by type of asbestos fiber, percentage of composition, and estimated quantity of ACMs.

The analytical results indicated that approximately 1,500 square feet (ft^2) of ACMs were present in the floor tile, floor tile mastic, and transite ceiling tiles of the office. The ACM was identified as containing chrysotile, with composition ranging from one (1) to seventy (70) percent.

The analytical results also identified the floor tile and floor tile mastic in the gym as a chrysotile-containing ACM. A total of approximately 4,000 ft^2 of ACMs were identified in the gym with compositions ranging from five (5) to thirty (30) percent.

Additionally, samples collected of caulking from the interior windows exhibited the presence of chrysotile. Estimated composition of the caulk was five (5) to ten (10) percent.

All ACMs are in good condition and should not pose an environmental concern to the building occupants. CCA does not recommend performing an additional investigation for ACMs unless suspect materials, which were previously inaccessible, are discovered during future renovation work at the site.

7.6 Lead-Based Paint Survey Analyses

Building components with suspected LBP content were tested by the XRF spectrum analyzer at three (3) sample locations during the survey. No LBP materials were identified during the field survey. Table III identifies the building components tested and summarizes the results of the XRF analyses. The table also indicates the color of the suspected LBP and the substrate underlying the suspected LBP.

8.0 Conclusions and Recommendations

CCA performed a Phase II ESA for the Gatreaux Center property, located at 945 East 132nd Street, Chicago, Illinois. The scope of work for the Phase II ESA activities consisted of performing a subsurface soil investigation and performing asbestos and lead-based paint surveys.

The Phase II subsurface investigation included advancing five (5) soil borings on the property and collecting soil samples from the borings to determine whether the site has been adversely impacted by two (2) leaking USTs at adjacent properties.

The IEPA TACO methodology (35 IAC 742) was used to evaluate the analytes detected in the soil at the site. None of the analytes was present at a concentration exceeding applicable IEPA Tier 1 objectives. This indicates that the site has not been adversely impacted by the LUST incidents at the adjacent properties. Therefore, the site should not subject to regulatory/remediation requirements associated with releases from former LUST sites.

The bulk asbestos survey completed at the site identified the presence of non-friable ACMs in the floor tiles and mastic in the office and gym areas. The estimated total area of these ACMs is approximately 5,500 ft^2. CCA also identified interior window caulk in the office as ACM. CCA does not recommend performing any additional investigations nor performing any abatement work at the site unless future renovation work is planned for the areas in which ACMs are present or previously inaccessible suspect material is discovered at the site.

The lead-based paint survey at the site did not identify any building components with LBP.

Based on the results of the Phase II ESA, no environmental concerns were identified during the site investigation. CCA does not recommend performing any additional investigation or abatement work at the site.

CCA makes no warranty, express or implied, that the findings and interpretations in this report are a complete representation of the environmental hazards and liabilities, associated with the site. CCA's findings are based upon the scope of work requested by the client and should not be interpreted as a complete presentation of the site conditions. There may be unrecorded information or documentation from previous owners or tenants that is unattainable and may be proprietary, legally protected, or unavailable through government regulatory services.

EXHIBITS

Exhibit I	**Site Location**
Exhibit II	**Site Plan**
Exhibit III	**Zoning Map**
Exhibit IV	**Cross Section**
Exhibit V	**ACM Location Map**

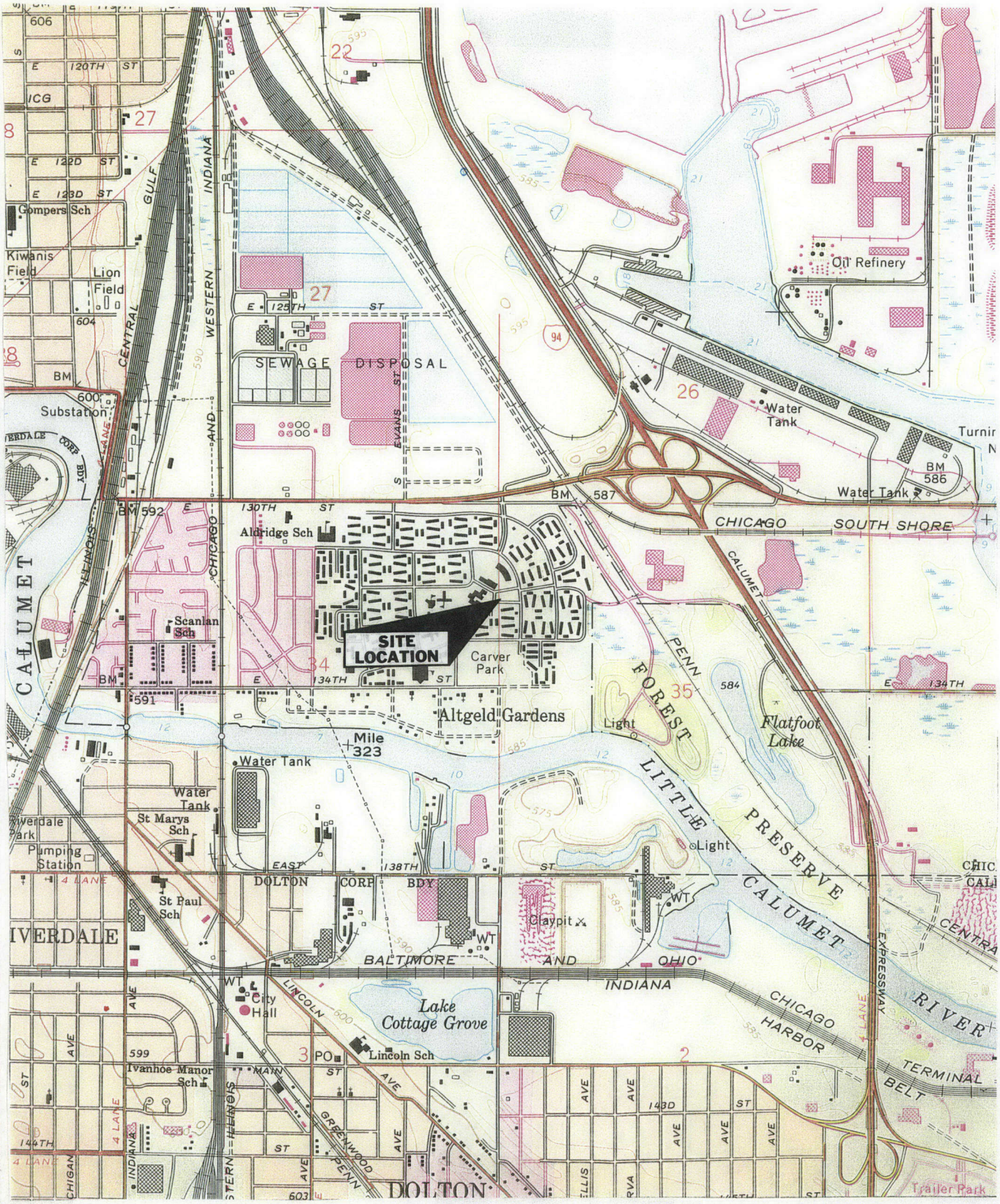

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ENVIRONMENTAL ENGINEERING DEPT.
333 West Wacker Dr. Suite 1400
Chicago, IL 60606
PHONE (312)782-4486
FAX # (312)782-5145

EXHIBIT I – SITE LOCATION
CHICAGO YOUTH GATREAUX CENTER
945 EAST 132nd STREET
CHICAGO, ILLINOIS

DRAWN BY: MD	DATE: 03/19/99
CHECKED BY: AS	SCALE: 1" = 2000'

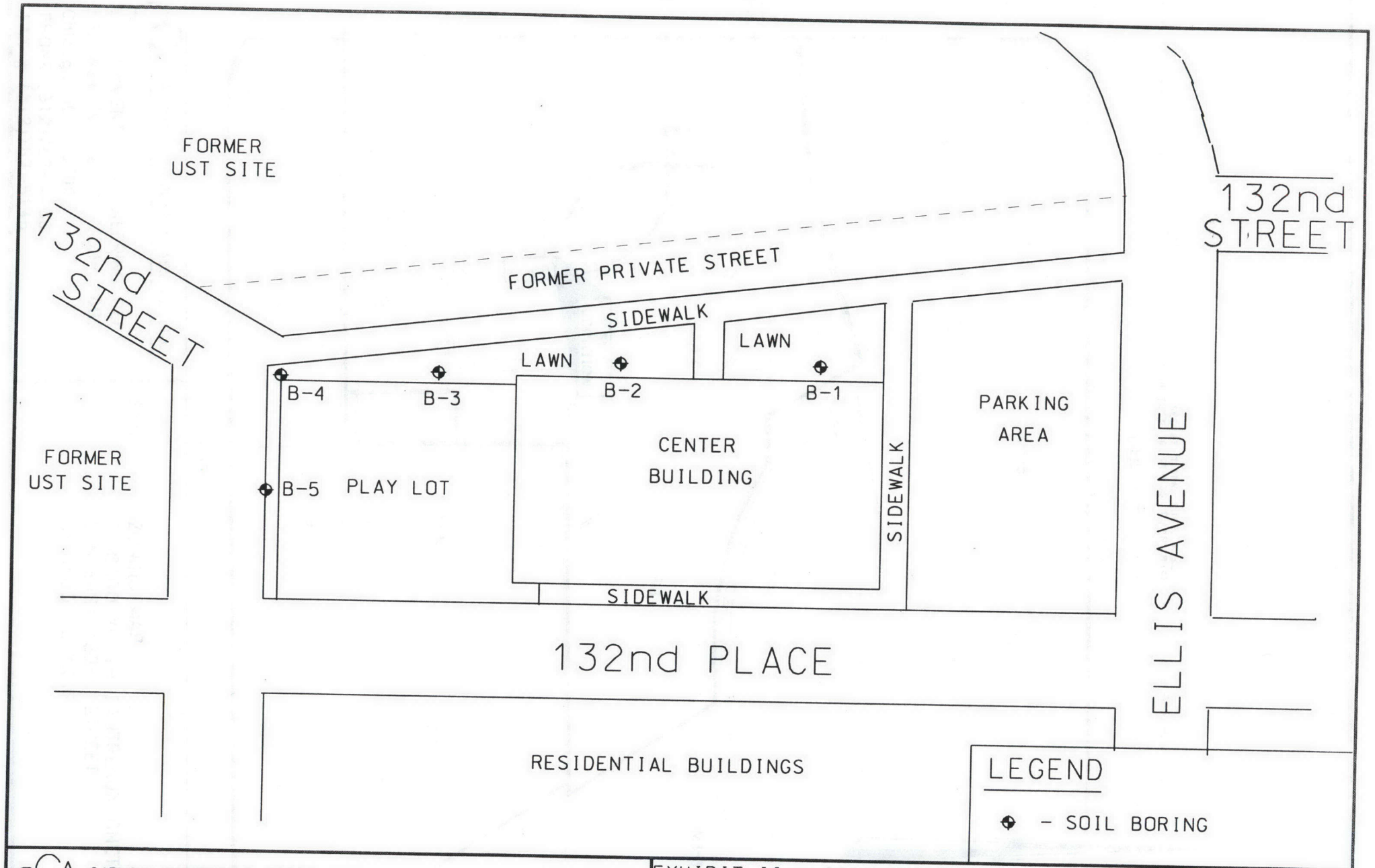

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EXHIBIT II - SITE PLAN: CHICAGO YOUTH GATREAUX CENTER
945 EAST 132nd STREET, CHICAGO, ILLINOIS

DRAWN BY : MRD	DATE : 5/10/99
CHECKED BY : AES	SCALE : 1" = 50'

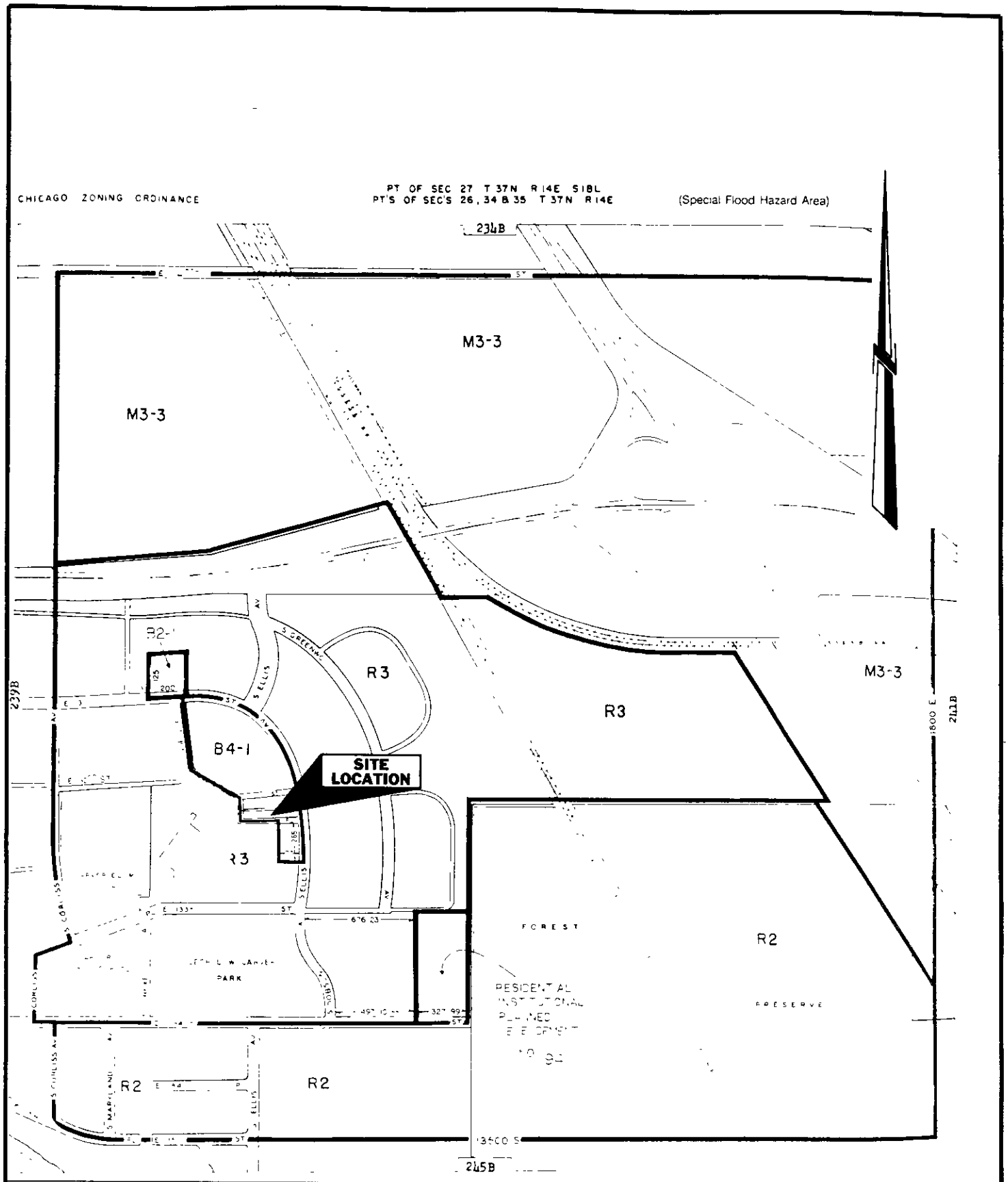

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Chicago, IL 60606
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EXHIBIT III: ZONING MAP
CHICAGO YOUTH GAUTREAUX CNETER
975 EAST 132nd STREET
CHICAGO, ILLINOIS

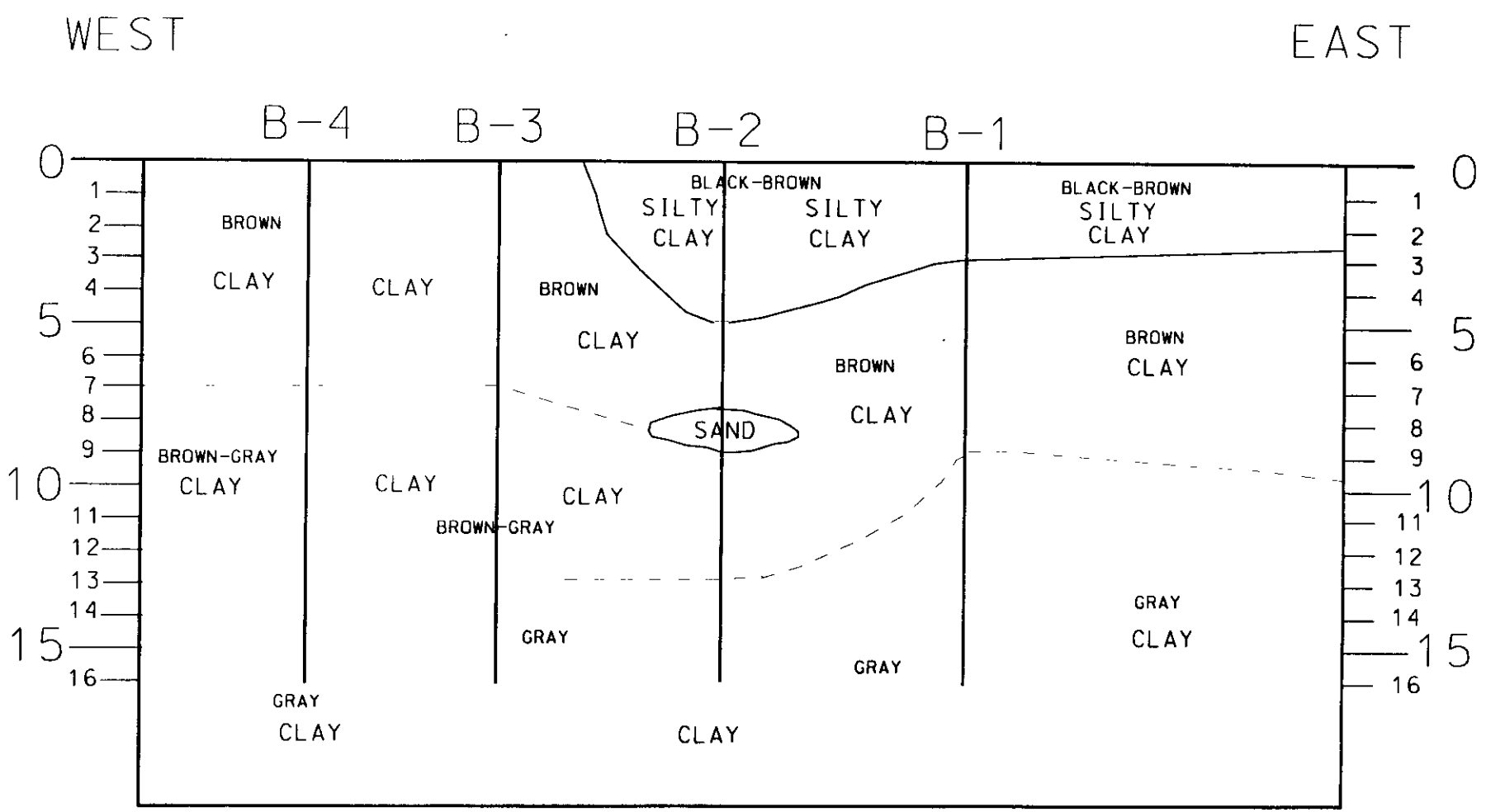

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EXHIBIT IV - CROSS SECTION: CHIC. YOUTH GATREAUX CENT.
945 EAST 132nd STREET, CHICAGO, ILLINOIS

DRAWN BY: MRD	DATE : 5/10/99
CHECKED BY : AES	SCALE : 1" = 50'

CENTER BUILDING

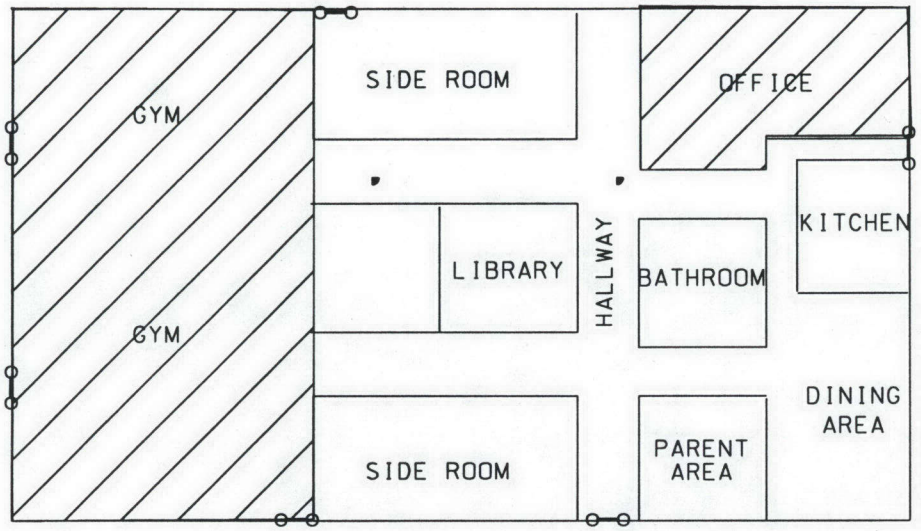

LEGEND

- DOOR

IDENTIFIED ACM LOCATION

CARNOW, CONIBEAR & ASSOC., LTD.
ENVIRONMENTAL ENGINEERING DEPT.
333 West Wacker Dr. Suite 1400
Chicago, IL 60606
PHONE (312)782-4486
FAX • (312)782-5145

EXHIBIT V- ACM LOCATION MAP: CHI. YTH. GATREAUX CTR.
945 EAST 132nd STREET, CHICAGO, ILLINOIS

DRAWN BY : MRD	DATE : 5/10/99
CHECKED BY : AES	SCALE : 1" = 30'

TABLE

Table I	**Soil Analytical Results**
Table II	**Bulk Asbestos Survey Analytical Results**
Table III	**Lead-Based Paint Analytical Results**

TABLE I
SOIL ANALYTICAL RESULTS

CHICAGO YOUTH GATREAUX CENTER
945 East 132nd Street
Chicago, Illinois

CCA Project Number: 12951-E016

Identification	Sample Date	Depth (feet)	PNAs								Lead
			Benzo(*a*)anthracene mg/kg	Benzo(*b*)fluoranthene mg/kg	Benzo(*k*)fluoranthene mg/kg	Benzo(*a*)pyrene mg/kg	Chrysene mg/kg	Dibenzo(*a,h*)anthracene mg/kg	Fluoranthene mg/kg	Indeno(*1,2,3-c,d*)pyrene mg/kg	mg/kg
IEPA Soil Remediation Objectives											
Residential											
Ingestion			0.9	0.9	9	0.09	88	0.09	3,100	0.9	400
Inhalation			NC	NC	NC	NC	NC	NC	NC	NC	NC
Industrial/Commercial											
Ingestion			8	8	78	0.8	780	0.8	82,000	8	400
Inhalation			NC	NC	NC	NC	NC	NC	NC	NC	NC
Construction Worker											
Ingestion			170	170	1,700	17	17,000	17	82,000	170	400
Inhalation			NC	NC	NC	NC	NC	NC	NC	NC	NC
Soil Component of the Groundwater Ingestion Exposure Route											
Class I			2	5	8	8	160	2	4,300	14	NE
Class II			8	25	82	82	800	7.6	21,000	69	NE
B-1	5/27/99	1 - 3	0.031	0.032	0.016	0.029	0.040	0.008	0.061	0.017	22.1
B-2	5/27/99	7 - 9	<0.00307	<0.00425	<0.00401	<0.00472	<0.00354	<0.00708	<0.0326	<0.0101	4.29
B-3	5/27/99	9 - 11	<0.0032	<0.00443	<0.00418	<0.00492	<0.00369	<0.00738	<0.0339	<0.0106	5.43
B-4	5/27/99	7 - 9	<0.00312	<0.00432	<0.00408	<0.0048	<0.0036	<0.0072	<0.0331	<0.0103	6.92
B-5	5/27/99	3 - 5	<0.00315	<0.00436	<0.00411	<0.00484	<0.00363	<0.00726	<0.0334	<0.0104	13.9

NOTES:
1. mg/kg = Milligrams per kilogram.
2. NC = No toxicity criteria for this exposure route.
3. NE = No established IEPA Soil Remediation Objective for this analyte.
4. Samples were analyzed for the presence of benzene, toluene, ethylbenzene, and total xylenes. All were non-detect.
5. Samples were analyzed utilizing U.S. Environmental Protection Agency (EPA) Methods 8021B (BTEX), 8310 (PNAs), and SW-846 methodology (lead).

TABLE II
BULK ASBESTOS SURVEY ANALYTICAL RESULTS

CHICAGO YOUTH GATREAUX CENTER
945 East 132nd Street
Chicago, Illinois

CCA Project Number: 12951-E016

Identification	Result	Friable (Y/N)	Estimated Percent	Asbestos Type	Quantity
Office					
Floor tile, 9"x9", gray	Positive	N	1 - 5	Chrysotile	
Floor tile, 9"x9", gray	Positive	N	1 - 5	Chrysotile	1500 ft^2
Floor tile, 9"x9", gray	Positive	N	1 - 5	Chrysotile	
Floor tile mastic, for 9"x9" gray tiles, black	Positive	N	25 - 30	Chrysotile	
Floor tile mastic, for 9"x9" gray tiles, black	Positive	N	25 - 30	Chrysotile	1500 ft^2
Floor tile mastic, for 9"x9" gray tiles, black	Positive	N	25 - 30	Chrysotile	
Transite ceiling tile, 2"x4", gray/white	Positive	N	65 - 70	Chrysotile	
Transite ceiling tile, 2"x4", gray/white	Positive	N	65 - 70	Chrysotile	1500 ft^2
Transite ceiling tile, 2"x4", gray/white	Positive	N	65 - 70	Chrysotile	
Vinyl baseboard, black	Negative	N	NA	NA	NA
Vinyl baseboard, black	Negative	N	NA	NA	NA
Vinyl baseboard, black	Negative	N	NA	NA	NA
Mastic for black vinyl baseboard, brown	Negative	N	NA	NA	NA
Mastic for black vinyl baseboard, brown	Negative	N	NA	NA	NA
Mastic for black vinyl baseboard, brown	Negative	N	NA	NA	NA
Interior window caulk, gray/tan	Positive	N	5 - 10	Chrysotile	NA
Interior window caulk, gray/tan	Positive	N	5 - 10	Chrysotile	NA
Interior window caulk, gray/tan	Positive	N	5 - 10	Chrysotile	NA
Hallway					
Ceiling tile, 2"x4", white	Negative	Y	NA	NA	NA
Classroom					
Ceiling tile, 2"x4", white	Negative	Y	NA	NA	NA
Classroom Bathroom					
Ceiling tile, 2"x4", white	Negative	Y	NA	NA	NA

NOTE: 1. Positive = Asbestos-containing material detected in the sample.
2. Negative = Asbestos-containing material not detected in the sample.

TABLE II
BULK ASBESTOS SURVEY ANALYTICAL RESULTS

CHICAGO YOUTH GATREAUX CENTER
945 East 132nd Street
Chicago, Illinois

CCA Project Number: 12951-E016

Identification	Result	Friable (Y/N)	Estimated Percent	Asbestos Type	Quantity
Washroom Closet					
Fiberglass pipe insulation elbows, tan	Negative	Y	NA	NA	NA
Fiberglass pipe insulation elbows, tan	Negative	Y	NA	NA	NA
Fiberglass pipe insulation elbows, tan	Negative	Y	NA	NA	NA
Hallways and Classrooms					
Floor tile, 12"x12", light beige with gray	Negative	N	NA	NA	NA
Floor tile, 12"x12", light beige with gray	Negative	N	NA	NA	NA
Floor tile, 12"x12", light beige with gray	Negative	N	NA	NA	NA
Floor tile mastic, for 12"x12" lt. beige with gray tiles, gold	Negative	N	NA	NA	NA
Floor tile mastic, for 12"x12" lt. beige with gray tiles, gold	Negative	N	NA	NA	NA
Floor tile mastic, for 12"x12" lt. beige with gray tiles, gold	Negative	N	NA	NA	NA
Vinyl baseboard, gray	Negative	N	NA	NA	NA
Vinyl baseboard, gray	Negative	N	NA	NA	NA
Vinyl baseboard, gray	Negative	N	NA	NA	NA
Mastic for gray vinyl baseboard, white	Negative	N	NA	NA	NA
Mastic for gray vinyl baseboard, white	Negative	N	NA	NA	NA
Mastic for gray vinyl baseboard, white	Negative	N	NA	NA	NA
Gym					
Floor tile, 9"x9", gray with white streaks	Positive	N	5 - 10	Chrysotile	
Floor tile, 9"x9", gray with white streaks	Positive	N	5 - 10	Chrysotile	4000 ft^2
Floor tile, 9"x9", gray with white streaks	Positive	N	5 - 10	Chrysotile	
Floor tile mastic, for 9"x9" gray with white streaks tiles, black	Positive	N	25 - 30	Chrysotile	
Floor tile mastic, for 9"x9" gray with white streaks tiles, black	Positive	N	25 - 30	Chrysotile	4000 ft^2
Floor tile mastic, for 9"x9" gray with white streaks tiles, black	Positive	N	25 - 30	Chrysotile	

NOTE: 1. Positive = Asbestos-containing material detected in the sample.
2. Negative = Asbestos-containing material not detected in the sample.

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TABLE III
LEAD-BASED PAINT ANALYTICAL RESULTS

CHICAGO YOUTH GATREAUX CENTER
945 East 132nd Street
Chicago, Illinois

CCA Project Number: 12951-E016

Location and Component	Substrate	Paint Color	Result
Office			
North Wall	Cinder Block	Yellow	Negative
East Wall	Cinder Block	Yellow	Negative
South Wall	Cinder Block	Yellow	Negative
Westh Wall	Cinder Block	Yellow	Negative
Baseboard	Vinyl	Black	Negative
Window Panel	Wood	Yellow	Negative
Door Frame	Metal	Yellow	Negative
Door	Metal	Yellow	Negative
Assistant Director's Office			
North Wall	Cinder Block	White	Negative
East Wall	Cinder Block	White	Negative
South Wall	Cinder Block	White	Negative
West Wall	Cinder Block	White	Negative
Baseboard	Vinyl	Black	Negative
Window Panel	Wood	White	Negative
Door Frame	Metal	Beige	Negative
Door	Wood	Stain	Negative
North to South Hallway			
West Lower Wall	Cinder Block	Dark Blue	Negative
East Lower Wall	Cinder Block	Dark Blue	Negative
West Upper Wall	Cinder Block	Light Blue	Negative
East Upper Wall	Cinder Block	Light Blue	Negative
Baseboard	Vinyl	Light Gray	Negative
Door Frame	Metal	Light Blue	Negative
Door	Metal	Light Blue	Negative
Door Frame	Metal	Black	Negative
Door	Metal	Red	Negative
East to West Hallway			
North Lower Wall	Cinder Block	Dark Blue	Negative
South Lower Wall	Cinder Block	Dark Blue	Negative
North Upper Wall	Cinder Block	Light Blue	Negative
South Upper Wall	Cinder Block	Light Blue	Negative
Baseboard	Vinyl	Gray	Negative

NOTE: Negative = Lead-based paint not detected in the sample.

TABLE III
LEAD-BASED PAINT ANALYTICAL RESULTS

CHICAGO YOUTH GATREAUX CENTER
945 East 132nd Street
Chicago, Illinois

CCA Project Number: 12951-E016

Location and Component	Substrate	Paint Color	Result
Maintenance Office			
North Wall	Cinder Block	Green	Negative
East Wall	Cinder Block	Green	Negative
South Wall	Cinder Block	Green	Negative
West Wall	Cinder Block	Green	Negative
Ceiling	Concrete	Beige	Negative
Baseboard	Vinyl	Black	Negative
Door Frame	Metal	Dark Blue	Negative
Door	Wood	Stain	Negative
East to West Hallway North End			
North Lower Wall	Cinder Block	Dark Blue	Negative
South Lower Wall	Cinder Block	Dark Blue	Negative
North Upper wall	Cinder Block	Light Blue	Negative
South Upper Wall	Cinder Block	Light Blue	Negative
Baseboard	Vinyl	Gray	Negative
Railing	Metal	Gray	Negative
Room #1 and #2			
North Wall	Cinder Block	Beige	Negative
East Wall	Cinder Block	Beige	Negative
South Wall	Cinder Block	Beige	Negative
West Wall	Cinder Block	Beige	Negative
Radiator Cover	Metal	Beige	Negative
Door Frame	Metal	Beige	Negative
Door	Wood	Stain	Negative
Baseboard	Vinyl	Light Blue	Negative
Room #1 and #2 Bathroom			
North Wall	Cinder Block	Beige	Negative
East Wall	Cinder Block	Beige	Negative
South Wall	Cinder Block	Beige	Negative
West Wall	Cinder Block	Beige	Negative
Baseboard	Vinyl	Light Blue	Negative
Door Frame	Metal	Beige	Negative
Door	Wood	Stain	Negative

NOTE: Negative = Lead-based paint not detected in the sample.

TABLE III
LEAD-BASED PAINT ANALYTICAL RESULTS

CHICAGO YOUTH GATREAUX CENTER
945 East 132nd Street
Chicago, Illinois

CCA Project Number: 12951-E016

Location and Component	Substrate	Paint Color	Result
Mens' Bathroom			
North Wall	Cinder Block	Beige	Negative
East Wall	Cinder Block	Beige	Negative
South Wall	Cinder Block	Beige	Negative
West Wall	Cinder Block	Beige	Negative
Baseboard	Vinyl	Gray	Negative
Partition Wall	Metal	Dark Blue	Negative
Door Frame	Metal	Dark Blue	Negative
Door	Wood	Stain	Negative
Womens' Bathroom			
North Wall	Cinder Block	Beige	Negative
East Wall	Cinder Block	Beige	Negative
South Wall	Cinder Block	Beige	Negative
West Wall	Cinder Block	Maroon	Negative
Partition Wall	Metal	Purple	Negative
Baseboard	Vinyl	Brown	Negative
Door Frame	Metal	Maroon	Negative
Door	Wood	Stain	Negative
Gym/Stage			
North Lower Wall	Cinder Block	Blue	Negative
East Lower Wall	Cinder Block	Blue	Negative
South Lower Wall	Cinder Block	Blue	Negative
West Lower Wall	Cinder Block	Blue	Negative
North Upper Wall	Cinder Block	Beige	Negative
East Upper Wall	Cinder Block	Beige	Negative
South Upper Wall	Cinder Block	Beige	Negative
West Upper Wall	Cinder Block	Beige	Negative
Baseboard	Concrete	Black	Negative
Railing	Metal	Black	Negative
Storage Door	Wood	Blue	Negative
Door Frame	Metal	Gray	Negative
Door	Wood	Gray	Negative

NOTE: Negative = Lead-based paint not detected in the sample.

TABLE III
LEAD-BASED PAINT ANALYTICAL RESULTS

CHICAGO YOUTH GATREAUX CENTER
945 East 132nd Street
Chicago, Illinois

CCA Project Number: 12951-E016

Location and Component	Substrate	Paint Color	Result
Kitchen			
North Wall	Cinder Block	Maroon	Negative
East Wall	Cinder Block	Maroon	Negative
South Wall	Cinder Block	Maroon	Negative
West Wall	Cinder Block	Maroon	Negative
Baseboard	Vinyl	Gray	Negative
Door Frame	Metal	Gray	Negative
Door	Wood	Stain	Negative
Railing	Metal	Gray	Negative
Exterior			
Window Guard	Metal	Red	Negative
Window Guard	Metal	White	Negative
Railing	Metal	Gray	Negative

NOTE: Negative = Lead-based paint not detected in the sample.

APPENDICES

Appendix A **Boring Logs**
Appendix B **Laboratory Analytical Report - Soil Sampling**
Appendix C **Laboratory Analytical Report - Bulk Asbestos Survey**
Appendix D **Lead-Based Paint Data Sheets**

APPENDIX A

Boring Logs

SOIL BORING LOG

Site Name: GAUTREAUX YOUTH CENTER Address: 945 E. 132ND STREET CHICAGO, IL	CCA Job Number: 12951-E016 Boring Number: B-1	Page 01 of 01 Date: 5/27/99

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
			1					
1	GP		2	BLACK SILTY CLAY, DRY	–	–	9.17	SAMPLE COLLECTED
			3					
2	GP		4	BROWN CLAY, DRY, LOW TO MODERATE PLASTICITY	–	3.5	4.01	
			5					
3	GP		6		–	>4.5	1.17	
			7					
4	GP		8	BROWN CLAY, MOIST	–	1.5	4.24	
			9	GRAY CLAY, MOIST, HIGH PLASTICITY				
5	GP		10		–	1.5	1.11	
			11					
6	GP		12		–	1.5	1.86	
			13					
7	GP		14		–	1.0	4.18	
			15	END OF BORING @ 15 FEET				
			16					
			17					
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY

▽ Depth After Drilling DRY

Geologist: MD

Driller: C.S. DRILLING

Legend:
GP: Geoprobe
HS: Hollow Stem Auger

CCA CARNOW, CONIBEAR & ASSOC., LTD.
ENGINEERING SERVICES DEPT.
333 West Wacker Dr. Suite 1400
Chicago, IL 60606
PHONE (312)782-4486
FAX # (312)782-5145

SOIL BORING LOG

Site Name: GAUTREAUX YOUTH CENTER Address: 945 E. 132ND STREET CHICAGO, IL	CCA Job Number: 12951-E016 Boring Number: B-2	Page 01 of 01 Date: 5/27/99

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	GP		1–3	BLACK-BROWN SILTY CLAY, DRY, TRACE COARSE GRAVEL, LOW PLASTICITY.	–	2.25	2.60	
2	GP		3–5		–	2.75	1.53	
3	GP		5–7	BROWN CLAY WITH SOME SAND, LOW PLASTICITY.	–	2.25	1.63	
4	GP		7–9	MOIST, BROWN COARSE-MEDIUM SAND.	–	2.25	4.43	SAMPLE COLLECTED
5	GP		9–11	GRAY-BROWN CLAY, TRACE COARSE-MEDIUM GRAVEL, MODERATE PLASTICITY, MOIST.	–	1.75	2.65	
6	GP		11–13		–	1.75	2.68	
7	GP		13–15	GRAY CLAY, MOIST. MODERATE PLASTICITY.	–	0.75	1.41	
			15–25	END OF BORING @ 15 FEET				

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY

▽ Depth After Drilling DRY

Geologist: MD

Driller: C.S. DRILLING

Legend:
GP: Geoprobe
HS: Hollow Stem Auger

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Chicago, IL 60606
PHONE (312)782-4486
FAX # (312)782-5145

SOIL BORING LOG

Site Name: GAUTREAUX YOUTH CENTER Address: 945 E. 132ND STREET CHICAGO, IL	CCA Job Number: 12951-E016 Boring Number: B-3	Page 01 of 01 Date: 5/27/99

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
			1					
1	GP		2	DARK BROWN CLAY, DRY, MODERATE PLASTICITY	–	2.0	46.44	
			3					
2	GP		4	SAME WITH MODERATE TO HIGH PLASTICITY.	–	2.5	12.02	
			5					
3	GP		6	DARK BROWN-GRAY CLAY,TRACE MEDIUM SAND,COARSE-MEDIUM GRAVEL, MODERATE PLASTICITY	–	2.0	12.10	
			7					
4	GP		8	BROWN-GRAY CLAY, DRY, TRACE COARSE-MEDIUM GRAVEL, HIGH PLASTICITY	–	2.75	9.03	
			9					
5	GP		10	GRAY-BROWN CLAY, MOIST. TRACE COARSE-MEDIUM GRAVEL, HIGH PLASTICITY	–	1.5	24.60	SAMPLE COLLECTED
			11					
6	GP		12		–	1.25	5.30	
			13					
7	GP		14	GRAY CLAY, MOIST, HIGH PLASTICITY	–	1.0	8.62	
			15	END OF BORING @ 15 FEET				
			16					
			17					
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY

▽ Depth After Drilling DRY

Geologist: MD

Driller: C.S. DRILLING

Legend:
GP: Geoprobe
HS: Hollow Stem Auger

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SOIL BORING LOG

Site Name: GAUTREAUX YOUTH CENTER Address: 945 E. 132ND STREET CHICAGO, IL	CCA Job Number: 12951-E016 Boring Number: B-4	Page 01 of 01 Date: 5/27/99

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
			1					
1	GP		2	DARK BROWN CLAY, DRY, TRACE FINE SAND, LOW PLASTICITY	–	4.0	2.42	
			3					
2	GP		4	SAME WITH SOME FINE SAND, HIGH PLASTICITY	–	0.5	2.60	
			5					
3	GP		6	SAME WITH LITTLE FINE SAND	–	0.5	3.30	
			7					
4	GP		8	BROWN-GRAY CLAY, DRY HIGH PLASTICITY.	–	1.75	3.20	SAMPLE COLLECTED
			9					
5	GP		10	SAME WITH TRACE FINE MEDIUM GRAVEL, MOIST	–	2.25	3.22	
			11					
6	GP		12		–	1.25	2.96	
			13					
7	GP		14	GRAY CLAY, TRACE MEDIUM GRAVEL AND FINE-MEDIUM SAND, DRY, HIGH PLASTICITY	–	1.0	1.89	
			15	END OF BORING @ 15 FEET				
			16					
			17					
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY

▽ Depth After Drilling DRY

Geologist: MD

Driller: C.S. DRILLING

Legend:
GP: Geoprobe
HS: Hollow Stem Auger

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SOIL BORING LOG

Site Name: GAUTREAUX YOUTH CENTER Address: 945 E. 132ND STREET CHICAGO, IL	CCA Job Number: 12951-E016	Page 01 of 01	
	Boring Number: B-5	Date: 5/27/99	

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
			1					
1	GP		2	COARSE GRAVEL BLACK CLAY, DRY, LOW PLASTICITY	–	–	22.35	
			3					
2	GP		4	BROWN-GREEN CLAY, DRY, TRACE MEDIUM GRAVEL, MODERATE PLASTICITY	–	3.5	29.42	SAMPLE COLLECTED
			5					
3	GP		6	BROWN-GRAY CLAY, DRY, TRACE COARSE-MEDIUM GRAVEL, LOW PLASTICITY	–	2.75	4.15	
			7					
4	GP		8	SAME WITH TRACE COARSE SAND AND GRAVEL, LOW-MODERATE PLASTICITY	–	3.0	6.51	
			9					
5	GP		10		–	2.25	16.94	
			11					
6	GP		12	GRAY CLAY, DRY, TRACE COARSE GRAVEL, HIGH PLASTICITY	–	1.5	4.60	
			13					
7	GP		14	BROWN-GRAY CLAY GRAY CLAY, DRY, SOME COARSE-MEDIUM SAND, HIGH PLASTICITY	–	–	13.72	
			15	END OF BORING @ 15 FEET				
			16					
			17					
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY

▽ Depth After Drilling DRY

Geologist: MD

Driller: C.S. DRILLING

Legend:
GP: Geoprobe
HS: Hollow Stem Auger

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APPENDIX B

Laboratory Analytical Report - Soil Sampling

AEA
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DBA: AMERICAN-ATHENA LABORATORIES

LABORATORY DATA REPORT

CLIENT **Carnow, Conibear & Associates**
333 West Wacker Dr., Suite1400
Chicago, Illinois, 60606-1218

PROJECT NAME	:	**Gatreaux Youth Center**
NUMBER#	:	12951-E016
TASK ORDER	:	
ATTN	:	**Mike Duet**
RECEIVED	:	05/28/99
REPORTED	:	06/08/99
FILE ID#	:	**99006126 THRU 99006130**

PROJECT SUMMARY:

Analyses were performed in accordance with the methods found in the USEPA publication: Test Methods for Evaluating Solid Waste, Physical/Chemical methods, SW- 846, 3rd Edition, December 1996. Specific method references are listed on the analytical report.

Results have been expressed on a "wet" weight (as recived) basis except where otherwise specified .

All analyses were performed within established holding times, and all Quality Control criteria as outlined in the methods have been met.

LABORATORY DIRECTOR

AEA LABO

Post-it® Fax Note 7671	Date	# of pages ▶ 6
To Mike Duet	From	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

Job # 52512

CAN-ATHENA LABORATORIES
TORY TESTING OF SOIL
ND HAZARDOUS WASTE
r, Suite 201, Chicago, IL 60631-3524
Fax: 773-693-8783 888-AEA-TEST
Web: http://www.aeatest.com

CHAIN OF CUSTODY

Client: GARNOW, CONIBEAR & ASSOC., LTD.	Project Name: GATREAUX YOUTH CENTER
Address: 333 W. WACKER DRIVE SUITE 1400 CHICAGO, IL	Sampler Name: MIKE DUET
	Project #: 12951-E016
Report to: MIKE DUET	Time Period: (5 Day) 4 Day 3 Day 2 Day 1 Day <24Hr.
Phone #: 312/782-4486 Fax #: 312/782-5145	Date Needed: 06/05/99

	Field ID; Location	Matrix	Date Time	Type Cont.	# Cont.	Parameters Requested	AEA ID #
1	B-1	S	05/27/99 1140	A,D	2	BTEX(8021), PNAs(8310), TOTAL LEAD	99006126
2	B-2	S	5/27/99 1213	A,D	2	BTEX(8021), PNAs(8310), TOTAL LEAD	99006127
3	B-3	S	5/27/99 1243	A,D	2	BTEX(8021), PNAs(8310), TOTAL LEAD	99006128
4	B-4	S	5/27/99 1307	A,D	2	BTEX(8021), PNAs(8310), TOTAL LEAD	99006129
5	B-5	S	5/27/99 1343	A,D	2	BTEX(8021), PNAs(8310), TOTAL LEAD	99006130
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

PLEASE FILL COMPLETELY

Sample Preserved: (Y-N)	Condition of Sample(s): (Good - Violated)	GLOSSARY: MATRIX=Soil(S), Air(A), Water(W), Drinking Water(DW), Wipe(P), Other(O). A=Accept, R=Reject. CONTAINER=40ml Vial(A), 60ml Vial(B), 2oz(C), 4oz(D), 8oz(E), 1Liter(F), Glass(G), Plastic(P), Air Tube(T), Wipe(W) PRESERVATIVE=HCl, HNO3, H2SO4, NaOH, MeCl, Other(O). I=Ice. N/A=Not Applicable
Preservative Type:	Temp. of Container °C: 4°C	

Relinquished by: Mike Duet	Date/Time: 05/28/99 1900	Accepted by: [signature]
Relinquished by:	Date/Time: 9:30 AM	Accepted by:
Comments:		

WHITE - OFFICE COPY YELLOW - LAB COPY PINK - CUSTOMER COPY

AEA LABORATORIES, INC.

DBA: AMERICAN-ATHENA LABORATORIES

Carnow, Conibear & Assoc., Ltd.
333 West Wacker Dr., Suite1400
Chicago, Illinois, 60606-1218
Fax:312-782-5145
Attn: Mike Duet

First Lab Number: 006126
Project Name: Gatreaux Youth Center
Project No.: 12951-E016
Sample Matrix: Soil

Sampled: 05/27/99
Received: 05/28/99
Analyzed: 05/28-06/07/99
Reported: 06/08/99

ANALYTICAL REPORT

Lab Number	AE06126		
Field ID	B-1		
Compound	Result mg/kg dry weight	MDL mg.kg dry weight	Regulatory Limits
% Moisture	15.0	-	-
Lead	22.1	0.0235	-
BTEX by 8021B	-	-	-
Benzene	< Stated MDL	0.021	0.03
Toluene	< Stated MDL	0.021	12
Ethyl Benzene	< Stated MDL	0.021	13
Meta & Para Xylene	< Stated MDL	0.021	200
Ortho Xylene	< Stated MDL	0.021	190
Polynuclear Aromatics by 8310	-	-	
Naphthalene	< Stated MDL	0.0292	84
Acenaphthene	< Stated MDL	0.0491	570
Anthracene	< Stated MDL	0.0381	12000
Fluoranthene	0.061	0.0323	3100
Fluorene	< Stated MDL	0.0642	560
Pyrene	< Stated MDL	0.0627	2300
Acenaphthylene	< Stated MDL	0.0732	
Benzo (ghi) perylene	< Stated MDL	0.0315	
Phenanthrene	< Stated MDL	0.035	
Benzo (a) anthracene	0.031	0.00304	0.9
Benzo (a) pyrene	0.029	0.00468	0.09
Benzo (b) fluoranthene	0.032	0.00421	0.9
Benzo (k) fluoranthene	0.016	0.00398	9
Chrysene	0.040	0.00351	88
Dibenzo (a,h) anthracene	0.008	0.00702	0.09
Indeno (1,2,3-cd) pyrene	0.017	0.0101	0.9
SONICATION PREP-PNA	06/03/99	-	-

Analytes reported on dry weight basis except for Moisture.

AEA Laboratories, Inc.

Arminta P. Priddy
Laboratory Director

8609 W. Bryn Mawr, Suite 201, Chicago, IL 60631-3524 • Tel.: 773-693-8030 • Fax: 773-693-8783 • 888-AEA-TEST • http://www.aeatest.com

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Fax:312-782-5145
Attn: Mike Duet

First Lab Number: 006126
Project Name: Gatreaux Youth Center
Project No.: 12951-E016
Sample Matrix: Soil

Sampled: 05/27/99
Received: 05/28/99
Analyzed: 05/28-06/07/99
Reported: 06/08/99

ANALYTICAL REPORT

Lab Number	AE06127		
Field ID	B-2		
Compound	Result mg/kg dry weight	MDL mg.kg dry weight	Regulatory Limits
% Moisture	15.4	-	-
Lead	4.29	0.0236	-
BTEX by 8021B	-	-	-
Benzene	< Stated MDL	0.006	0.03
Toluene	< Stated MDL	0.006	12
Ethyl Benzene	< Stated MDL	0.006	13
Meta & Para Xylene	< Stated MDL	0.006	200
Ortho Xylene	< Stated MDL	0.006	190
Polynuclear Aromatics by 8310	-	-	
Naphthalene	< Stated MDL	0.0295	84
Acenaphthene	< Stated MDL	0.0496	570
Anthracene	< Stated MDL	0.0385	12000
Fluoranthene	< Stated MDL	0.0326	3100
Fluorene	< Stated MDL	0.0648	560
Pyrene	< Stated MDL	0.0632	2300
Acenaphthylene	< Stated MDL	0.0739	
Benzo (ghi) perylene	< Stated MDL	0.0317	
Phenanthrene	< Stated MDL	0.0353	
Benzo (a) anthracene	< Stated MDL	0.00307	0.9
Benzo (a) pyrene	< Stated MDL	0.00472	0.09
Benzo (b) fluoranthene	< Stated MDL	0.00425	0.9
Benzo (k) fluoranthene	< Stated MDL	0.00401	9
Chrysene	< Stated MDL	0.00354	88
Dibenzo (a,h) anthracene	< Stated MDL	0.00708	0.09
Indeno (1,2,3-cd) pyrene	< Stated MDL	0.0101	0.9
SONICATION PREP-PNA	06/03/99	-	-

Analytes reported on dry weight basis except for Moisture.

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Fax:312-782-5145
Attn: Mike Duet

First Lab Number: 006126
Project Name: Gatreaux Youth Center
Project No.: 12951-E016
Sample Matrix: Soil

Sampled: 05/27/99
Received: 05/28/99
Analyzed: 05/28-06/07/99
Reported: 06/08/99

ANALYTICAL REPORT

Lab Number	AE06128		
Field ID	B-3		
Compound	Result mg/kg dry weight	MDL mg.kg dry weight	Regulatory Limits
% Moisture	19.0	-	-
Lead	5.43	0.0247	-
BTEX by 8021B	-	-	-
Benzene	< Stated MDL	0.0115	0.03
Toluene	< Stated MDL	0.0115	12
Ethyl Benzene	< Stated MDL	0.0115	13
Meta & Para Xylene	< Stated MDL	0.0115	200
Ortho Xylene	< Stated MDL	0.0115	190
Polynuclear Aromatics by 8310	-	-	
Naphthalene	< Stated MDL	0.0308	84
Acenaphthene	< Stated MDL	0.0517	570
Anthracene	< Stated MDL	0.0401	12000
Fluoranthene	< Stated MDL	0.0339	3100
Fluorene	< Stated MDL	0.0675	560
Pyrene	< Stated MDL	0.0659	2300
Acenaphthylene	< Stated MDL	0.077	
Benzo (ghi) perylene	< Stated MDL	0.0331	
Phenanthrene	< Stated MDL	0.0368	
Benzo (a) anthracene	< Stated MDL	0.0032	0.9
Benzo (a) pyrene	< Stated MDL	0.00492	0.09
Benzo (b) fluoranthene	< Stated MDL	0.00443	0.9
Benzo (k) fluoranthene	< Stated MDL	0.00418	9
Chrysene	< Stated MDL	0.00369	88
Dibenzo (a,h) anthracene	< Stated MDL	0.00738	0.09
Indeno (1,2,3-cd) pyrene	< Stated MDL	0.0106	0.9
SONICATION PREP-PNA	06/03/99	-	-

Analytes reported on dry weight basis except for Moisture.

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Fax:312-782-5145
Attn: Mike Duet

First Lab Number: 006126
Project Name: Gatreaux Youth Center
Project No.: 12951-E016
Sample Matrix: Soil

Sampled: 05/27/99
Received: 05/28/99
Analyzed: 05/28-06/07/99
Reported: 06/08/99

ANALYTICAL REPORT

Lab Number	AE06129		
Field ID	B-4		
Compound	Result mg/kg dry weight	MDL mg.kg dry weight	Regulatory Limits
% Moisture	16.2	-	-
Lead	6.92	0.0239	-
BTEX by 8021B	-	-	-
Benzene	< Stated MDL	0.006	0.03
Toluene	< Stated MDL	0.006	12
Ethyl Benzene	< Stated MDL	0.006	13
Meta & Para Xylene	< Stated MDL	0.006	200
Ortho Xylene	< Stated MDL	0.006	190
Polynuclear Aromatics by 8310	-	-	
Naphthalene	< Stated MDL	0.030	84
Acenaphthene	< Stated MDL	0.0504	570
Anthracene	< Stated MDL	0.0391	12000
Fluoranthene	< Stated MDL	0.0331	3100
Fluorene	< Stated MDL	0.0659	560
Pyrene	< Stated MDL	0.0643	2300
Acenaphthylene	< Stated MDL	0.0751	
Benzo (ghi) perylene	< Stated MDL	0.0323	
Phenanthrene	< Stated MDL	0.0359	
Benzo (a) anthracene	< Stated MDL	0.00312	0.9
Benzo (a) pyrene	< Stated MDL	0.0048	0.09
Benzo (b) fluoranthene	< Stated MDL	0.00432	0.9
Benzo (k) fluoranthene	< Stated MDL	0.00408	9
Chrysene	< Stated MDL	0.0036	88
Dibenzo (a,h) anthracene	< Stated MDL	0.0072	0.09
Indeno (1,2,3-cd) pyrene	< Stated MDL	0.0103	0.9
SONICATION PREP-PNA	06/03/99	-	-

Analytes reported on dry weight basis except for Moisture.

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Chicago, Illinois, 60606-1218
Fax:312-782-5145
Attn: Mike Duet

First Lab Number: 006126
Project Name: Gatreaux Youth Center
Project No.: 12951-E016
Sample Matrix: Soil

Sampled: 05/27/99
Received: 05/28/99
Analyzed: 05/28-06/07/99
Reported: 06/08/99

ANALYTICAL REPORT

Lab Number	AE06130		
Field ID	B-5		
Compound	Result mg/kg dry weight	MDL mg.kg dry weight	Regulatory Limits
% Moisture	17.1	-	-
Lead	13.9	0.0241	-
BTEX by 8021B	-	-	-
Benzene	< Stated MDL	0.005	0.03
Toluene	< Stated MDL	0.005	12
Ethyl Benzene	< Stated MDL	0.005	13
Meta & Para Xylene	< Stated MDL	0.005	200
Ortho Xylene	< Stated MDL	0.005	190
Polynuclear Aromatics by 8310	-	-	
Naphthalene	< Stated MDL	0.0303	84
Acenaphthene	< Stated MDL	0.0508	570
Anthracene	< Stated MDL	0.0394	12000
Fluoranthene	< Stated MDL	0.0334	3100
Fluorene	< Stated MDL	0.0664	560
Pyrene	< Stated MDL	0.0649	2300
Acenaphthylene	< Stated MDL	0.0757	
Benzo (ghi) perylene	< Stated MDL	0.0325	
Phenanthrene	< Stated MDL	0.0362	
Benzo (a) anthracene	< Stated MDL	0.00315	0.9
Benzo (a) pyrene	< Stated MDL	0.00484	0.09
Benzo (b) fluoranthene	< Stated MDL	0.00436	0.9
Benzo (k) fluoranthene	< Stated MDL	0.00411	9
Chrysene	< Stated MDL	0.00363	88
Dibenzo (a,h) anthracene	< Stated MDL	0.00726	0.09
Indeno (1,2,3-cd) pyrene	< Stated MDL	0.0104	0.9
SONICATION PREP-PNA	06/03/99	-	-

Analytes reported on dry weight basis except for Moisture.

AEA Laboratories, Inc.

Arminta P. Priddy
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APPENDIX C

Laboratory Analytical Results - Bulk Asbestos Survey

CARNOW, CONIBEAR & ASSOCIATES, LTD.

333 W. Wacker Drive, Suite 1400, Chicago, IL 60606
1-800-860-4486

LABORATORY ANALYSIS FORM

Project No.: 12951-E016
Job Site: CHICAGO Youth Center
Client: City of Chicago
Employee: M. Franklin | Emp. No.: 018
Date: 05/25/99 | Roto. No
Check one: ☐ Lab Table Only ☐ Final Report

Time In:
Time Out:
Total Time:
Billable:
Non Billable:
Job Description:

Field # / Sample Number	PLM % Asb.	Type & location where sample was taken
05259901		9x9 gray floor tile office
02		↓ ↓
03		↓ ↓
04		Mastic under 9x9 gray FT office
05		↓ ↓
06		↓ ↓
07		2x4 transite ceiling tile office
08		↓ ↓
09		↓ ↓
10		Vinyl baseboard black in office
11		↓ ↓
12		↓ ↓
13		Mastic on vinyl baseboard black in office

TURN AROUND TIME
(For Verbal Results)
Check one: ☒ 24 hr ☐ 48 hr ☐ 72 hr

COMMENTS

Results to Dr Sasita

CHAIN OF CUSTODY RECORD

Collected by: (Signature)	Date 5/25/99	Time	Relinquished by: (Signature)	Date	Time
Received by: (Signature)	Date	Time	Relinquished by: (Signature)	Date	Time
Dispatched by: (Signature, if mailed)	Date	Time	Received for Laboratory by:	Date	Time

Method of Shipment

Definitions: BLK - Bulk Sample, PLM - Polarized Light Microscopy

Client Approval X _____

Form# CCA - L1

CARNOW, CONIBEAR & ASSOCIATES, LTD.

333 W. Wacker Drive, Suite 1400, Chicago, IL 60606
1-800-860-4486

LABORATORY ANALYSIS FORM

Project No.: 12951-E016
Job Site: Chicago Youth Center
Client: City of Chicago
Employee: M Franklin | Emp. No.: 018
Date: 05/25/99 | Roto. No
Check one: ☐ Lab Table Only ☐ Final Report

Time In:
Time Out:
Total Time:
Billable:
Non Billable:
Job Description:

Field # Sample Number	PLM % Asb.	Type & location where sample was taken
05252 ~~14~~		Mastic on Vinyl Baseboard black in office
~~15~~		↓ ↓
~~16~~		Interior window caulk office
~~17~~		↓ ↓
~~18~~		↓ ↓
~~19~~		2x4 ceiling tile white Hallway
~~20~~		↓ Classroom
~~21~~		↓ Bathroom inside Classroom
~~22~~		Elbows on Fiberglass pipe insulation - Closet near to washroom
~~23~~		↓ ↓
~~24~~		↓ ↓
~~25~~		12x12 ft Light Beige w/ spray Hallways / Classroom
~~26~~		↓ ↓

TURN AROUND TIME
(For Verbal Results)
Check one: ☒ 24 hr ☐ 48 hr ☐ 72 hr

COMMENTS

Results to Ala Sassia

CHAIN OF CUSTODY RECORD

Collected by: (Signature)	Date 5/25/99	Time	Relinquished by: (Signature)	Date	Time
Received by: (Signature)	Date	Time	Relinquished by: (Signature)	Date	Time
Dispatched by: (Signature, if mailed)	Date	Time	Received for Laboratory by:	Date	Time

Method of Shipment

Definitions: BLK - Bulk Sample, PLM - Polarized Light Microscopy

Client Approval X _____

Form# CCA - L1

CARNOW, CONIBEAR & ASSOCIATES, LTD.

333 W. Wacker Drive, Suite 1400, Chicago, IL 60606
1-800-359-1979

LABORATORY ANALYSIS FORM

Project No.: 129 S1-E016
Job Site: CHICAGO YOUTH CENTER
Client: City of Chicago
Employee: M Franklin | Emp. No 013
Date: 05/25/99 | Roto. No
Check one: ☐ Lab Table Only ☐ Final Report

Time In:
Time Out:
Total Time:
Billable:
Non Billable:
Job Description:

Field # Sample Number	PLM % Asb.	Type & location where sample was taken
05259 27		12x12 FT light beige w/ gray hallways / classroom
28		MASTIC under 12x12 FT beige w/ gray hallways / classroom
29		↓ ↓
30		
31		VINYL baseboard gray in hallways and classroom
32		↓ ↓
33		
34		MASTIC under VINYL BASEBOARD gray in hallways and classroom
35		↓ ↓ ↓
36		
37		9x9 FT gray w/ white streaks GUM
38		↓ ↓
39		

TURN AROUND TIME
(For Verbal Results)
Check one: ☒ 24 hr
☐ 48 hr
☐ 72 hr

COMMENTS

Results to A/A Cassata

CHAIN OF CUSTODY RECORD

Collected by: *(Signature)*	Date 5-25-99	Time	Relinquished by: *(Signature)*	Date	Time
Received by: *(Signature)*	Date	Time	Relinquished by: *(Signature)*	Date	Time
Dispatched by: *(Signature, if mailed)*	Date	Time	Received for Laboratory by:	Date	Time

Method of Shipment

Definitions: BLK - Bullk Sample, PLM - Polarized Light Microscopy

Client Approval X _____

Form# CCA - L1

CARNOW, CONIBEAR & ASSOCIATES, LTD.

333 W. Wacker Drive, Suite 1400, Chicago, IL 60606
1-800-359-1979

LABORATORY ANALYSIS FORM

Project No.: 12951 - E016
Job Site: CHICAGO YOUTH CENTER
Client: City of Chicago
Employee: M. Ivanow | Emp. No.: OB
Date: 05/25/99 | Roto. No
Check one: ☐ Lab Table Only ☐ Final Report

Time In:
Time Out:
Total Time:
Billable:
Non Billable:
Job Description:

Field # Sample Number	PLM % Asb.	Type & location where sample was taken
00258340		MASTIC under 9x9 FT gray w/white streaks in room
~~41~~		↓ ↓
~~42~~		

TURN AROUND TIME
(For Verbal Results)
Check one: ☑ 24 hr
☐ 48 hr
☐ 72 hr

COMMENTS

Results to Pla Sassita

CHAIN OF CUSTODY RECORD

Collected by: *(Signature)* M. Ivanow	Date 05/25/99	Time	Relinquished by: *(Signature)*	Date	Time
Received by: *(Signature)*	Date	Time	Relinquished by: *(Signature)*	Date	Time
Dispatched by: *(Signature, if mailed)*	Date	Time	Received for Laboratory by:	Date	Time

Method of Shipment

Definitions: BLK - Bullk Sample, PLM - Polarized Light Microscopy

Client Approval X _____

Form# CCA - L1

BULK SAMPLE ANALYSIS
PAGE 1
CITY OF CHICAGO
CHICAGO YOUTH CENTER
12951-E016- 1

Laboratory and Sample Number Date Analyzed	Note	Asbestos Detected	Type Asbestos Detected	Estimated Percent	Friable	Color	Homogeneous Number of Layers	Other Fibers Present	Estimated Percent	% Binders & Fillers
99-BA-02981 MI -05/25/99-001 DLS-05/26/99	9X9 GREY FLOOR TILE, OFFICE	Y	Chrysotile	1-5%	N	GREY	Y 1			95-99%
99-BA-02982 MI -05/25/99-002 DLS-05/26/99	9X9 GREY FLOOR TILE, OFFICE	Y	Chrysotile	1-5%	N	GREY	Y 1			95-99%
99-BA-02983 MI -05/25/99-003 DLS-05/26/99	9X9 GREY FLOOR TILE, OFFICE	Y	Chrysotile	1-5%	N	GREY	Y 1			95-99%
99-BA-02984 MI -05/25/99-004 DLS-05/26/99	MASTIC ASSOCIATED WITH 9X9 GREY FLOOR TILE, OFFICE	Y	Chrysotile	25-30%	N	BLACK	Y 1	Cellulose	15-20%	50-55%
99-BA-02985 MI -05/25/99-005 DLS-05/26/99	MASTIC ASSOCIATED WITH 9X9 GREY FLOOR TILE, OFFICE	Y	Chrysotile	25-30%	N	BLACK	Y 1	Cellulose	15-20%	50-55%
99-BA-02986 MI -05/25/99-006 DLS-05/26/99	MASTIC ASSOCIATED WITH 9X9 GREY FLOOR TILE, OFFICE	Y	Chrysotile	25-30%	N	BLACK	Y 1	Cellulose	15-20%	50-55%
99-BA-02987 MI -05/25/99-007 DLS-05/26/99	2X4 TRANSITE CEILING TILE, OFFICE	Y	Chrysotile	65-70%	N	WHITE/GREY	N 2			30-35%
99-BA-02988 MI -05/25/99-008 DLS-05/26/99	2X4 TRANSITE CEILING TILE, OFFICE	Y	Chrysotile	65-70%	N	GREY/WHITE	N 2			30-35%

BULK SAMPLE ANALYSIS
PAGE 2
CITY OF CHICAGO
CHICAGO YOUTH CENTER
12951-E016- 1

Laboratory and Sample Number Date Analyzed	Note	Asbestos Detected	Type Asbestos Detected	Estimated Percent	Friable	Color	Homogeneous Number of Layers	Other Fibers Present	Estimated Percent	% Binders & Fillers
99-BA-02989 MI -05/25/99-009 DLS-05/26/99	2X4 TRANSITE CEILING TILE, OFFICE	Y	Chrysotile	65-70%	N	GREY/WHITE	N 2			30-35%
99-BA-02990 MI -05/25/99-010 DLS-05/26/99	BLACK VINYL BASEBOARD, OFFICE	N	NA		N	BLACK	Y 1			99-100%
99-BA-02991 MI -05/25/99-011 DLS-05/26/99	BLACK VINYL BASEBOARD, OFFICE	N	NA		N	BLACK	Y 1			99-100%
99-BA-02992 MI -05/25/99-012 DLS-05/26/99	BLACK VINYL BASEBOARD, OFFICE	N	NA		N	BLACK	Y 1			99-100%
99-BA-02993 MI -05/25/99-013 DLS-05/26/99	MASTIC ASSOICATED WITH BLACK VINYL BASEBOARD, OFFICE	N	NA		N	BROWN	Y 1			99-100%
99-BA-02994 MI -05/25/99-014 DLS-05/26/99	MASTIC ASSOICATED WITH BLACK VINYL BASEBOARD, OFFICE	N	NA		N	BROWN	Y 1			99-100%
99-BA-02995 MI -05/25/99-015 DLS-05/26/99	MASTIC ASSOICATED WITH BLACK VINYL BASEBOARD, OFFICE	N	NA		N	BROWN	Y 1			99-100%
99-BA-02996 MI -05/25/99-016 DLS-05/26/99	INTERIOR WINDOW CAULK, OFFICE	Y	Chrysotile	5-10%	N	GREY/TAN	N 2			90-95%

BULK SAMPLE ANALYSIS
PAGE 3
CITY OF CHICAGO
CHICAGO YOUTH CENTER
12951-E016- 1

Laboratory and Sample Number Date Analyzed	Note	Asbestos Detected	Type Asbestos Detected	Estimated Percent	Friable	Color	Homogeneous Number of Layers	Other Fibers Present	Estimated Percent	% Binders & Fillers
99-BA-02997 MI -05/25/99-017 DLS-05/26/99		Y	Chrysotile	5-10%	N	GREY/TAN	N 2			90-95%
	INTERIOR WINDOW CAULK, OFFICE									
99-BA-02998 II -05/25/99-018 DLS-05/26/99		Y	Chrysotile	5-10%	N	GREY/TAN	N 1			90-95%
	INTERIOR WINDOW CAULK, OFFICE									
99-BA-02999 MI -05/25/99-019 DLS-05/26/99		N	NA		Y	WHITE/TAN	N 2	Cellulose Fibrous Glass	30-35% 30-35%	30-35%
	2X4 WHITE CEILING TILE, HALLWAY									
9-BA-03000 MI -05/25/99-020 DLS-05/26/99		N	NA		Y	WHITE/TAN	N 2	Cellulose Fibrous Glass	30-35% 30-35%	30-35%
	2X4 WHITE CEILING TILE, CLASSROOM									
99-BA-03001 I -05/25/99-021 DLS-05/26/99		N	NA		Y	WHITE/TAN	N 2	Cellulose Fibrous Glass	30-35% 30-35%	30-35%
	2X4 WHITE CEILING TILE, BATHROOM INSIDE CLASSROOM									
99-BA-03002 MI -05/25/99-022 DLS-05/26/99		N	NA		Y	TAN	Y 1	Fibrous Glass	60-65%	35-40%
	ELBOWS ON FIBERGLASS PIPE INSULATION, CLOSET NEXT TO WASHROOM									
9-BA-03003 I -05/25/99-023 DLS-05/26/99		N	NA		Y	TAN	Y 1	Fibrous Glass	60-65%	35-40%
	ELBOWS ON FIBERGLASS PIPE INSULATION, CLOSET NEXT TO WASHROOM									
99-BA-03004 I -05/25/99-024 DLS-05/26/99		N	NA		Y	TAN	Y 1	Fibrous Glass	60-65%	35-40%
	ELBOWS ON FIBERGLASS PIPE INSULATION, CLOSET NEXT TO WASHROOM									

BULK SAMPLE ANALYSIS
PAGE 4
CITY OF CHICAGO
CHICAGO YOUTH CENTER
12951-E016- 1

Laboratory and Sample Number Date Analyzed	Note	Asbestos Detected	Type Asbestos Detected	Estimated Percent	Friable	Color	Homogeneous Number of Layers	Other Fibers Present	Estimated Percent	% Binders & Fillers
99-BA-03005 MI -05/25/99-025 DLS-05/26/99		N	NA		N	GREY	Y 1			99-100%
12X12 LIGHT BEIGE WITH GREY FLOOR TILE, HALLWAYS AND CLASSROOMS										
99-BA-03006 MI -05/25/99-026 DLS-05/26/99		N	NA		N	GREY	Y 1			99-100%
12X12 LIGHT BEIGE WITH GREY FLOOR TILE, HALLWAYS AND CLASSROOMS										
99-BA-03007 MI -05/25/99-027 DLS-05/26/99		N	NA		N	GREY	Y 1			99-100%
12X12 LIGHT BEIGE WITH GREY FLOOR TILE, HALLWAYS AND CLASSROOMS										
99-BA-03008 MI -05/25/99-028 DLS-05/26/99		N	NA		N	GOLD	Y 1	Cellulose	10-15%	85-90%
MASTIC ASSOICATED WITH 12X12 LIGHT BEIGE WITH GREY FLOOR TILE, HALLWAYS AND CLASSROOMS										
99-BA-03009 MI -05/25/99-029 DLS-05/26/99		N	NA		N	GOLD	Y 1	Cellulose	10-15%	85-90%
MASTIC ASSOICATED WITH 12X12 LIGHT BEIGE WITH GREY FLOOR TILE, HALLWAYS AND CLASSROOMS										
99-BA-03010 MI -05/25/99-030 DLS-05/26/99		N	NA		N	GOLD	Y 1	Cellulose	10-15%	85-90%
MASTIC ASSOICATED WITH 12X12 LIGHT BEIGE WITH GREY FLOOR TILE, HALLWAYS AND CLASSROOMS										
99-BA-03011 MI -05/25/99-031 DLS-05/26/99		N	NA		N	GREY	Y 1			99-100%
GREY VINYL BASEBOARD, HALLWAYS AND CLASSROOMS										
99-BA-03012 MI -05/25/99-032 DLS-05/26/99		N	NA		N	GREY	Y 1			99-100%
GREY VINYL BASEBOARD, HALLWAYS AND CLASSROOMS										

BULK SAMPLE ANALYSIS
PAGE 5
CITY OF CHICAGO
CHICAGO YOUTH CENTER
12951-E016- 1

Laboratory and Sample Number Date Analyzed	Note	Asbestos Detected	Type Asbestos Detected	Estimated Percent	Friable	Color	Homogeneous Number of Layers	Other Fibers Present	Estimated Percent	% Binders & Fillers
99-BA-03013 MI -05/25/99-033 DLS-05/26/99		N	NA		N	GREY	Y 1			99-100%
	GREY VINYL BASEBOARD, HALLWAYS AND CLASSROOMS									
99-BA-03014 MI -05/25/99-034 DLS-05/26/99		N	NA		N	WHITE	Y 1			99-100%
	MASTIC ASSOICATED WITH GREY VINYL BASEBOARD, HALLWAYS AND CLASSROOMS									
99-BA-03015 MI -05/25/99-035 DLS-05/26/99		N	NA		N	WHITE	Y 1			99-100%
	MASTIC ASSOICATED WITH GREY VINYL BASEBOARD, HALLWAYS AND CLASSROOMS									
99-BA-03016 MI -05/25/99-036 DLS-05/26/99		N	NA		N	WHITE	Y 1			99-100%
	MASTIC ASSOICATED WITH GREY VINYL BASEBOARD, HALLWAYS AND CLASSROOMS									
99-BA-03017 MI -05/25/99-037 DLS-05/26/99		Y	Chrysotile	5-10%	N	GREY	Y 1			90-95%
	9X9 GREY FLOOR TILE WITH WHITE STREAKS, GYM									
99-BA-03018 MI -05/25/99-038 DLS-05/26/99		Y	Chrysotile	5-10%	N	GREY	Y 1			90-95%
	9X9 GREY FLOOR TILE WITH WHITE STREAKS, GYM									
99-BA-03019 MI -05/25/99-039 DLS-05/26/99		Y	Chrysotile	5-10%	N	GREY	Y 1			90-95%
	9X9 GREY FLOOR TILE WITH WHITE STREAKS, GYM									
99-BA-03020 MI -05/25/99-040 DLS-05/26/99		Y	Chrysotile	25-30%	N	BLACK	Y 1	Cellulose	15-20%	50-55%
	MASTIC ASSOICATED WITH 9X9 GREY FLOOR TILE WITH WHITE STREAKS, GYM									

BULK SAMPLE ANALYSIS
PAGE 6
CITY OF CHICAGO
CHICAGO YOUTH CENTER
12951-E016- 1

Laboratory and Sample Number Date Analyzed	Note	Asbestos Detected	Type Asbestos Detected	Estimated Percent	Friable	Color	Homogeneous Number of Layers	Other Fibers Present	Estimated Percent	% Binders & Fillers
99-BA-03021 MI -05/25/99-041 DLS-05/26/99		Y	Chrysotile	25-30%	N	BLACK	Y 1	Cellulose	15-20%	50-55%
	MASTIC ASSOICATED WITH 9X9 GREY FLOOR TILE WITH WHITE STREAKS, GYM									
99-BA-03022 MI -05/25/99-042 DLS-05/26/99		Y	Chrysotile	25-30%	N	BLACK	Y 1	Cellulose	15-20%	50-55%
	MASTIC ASSOICATED WITH 9X9 GREY FLOOR TILE WITH WHITE STREAKS, GYM									

CARNOW, CONIBEAR & ASSOC., LTD.

N Borger
DENISE BORGER
ANALYST

APPENDIX D

Lead-Based Paint Data Sheets

CALIBRATION CHECK TEST RESULTS

Address / Unit # CHICAGO Youth Center unit #10 0525990856

Date 05.25.99

XRF Serial # 1519

XRF Instrument: 1519

Inspector M Kwarkiw

Calibration Check Tolerance Used:

CALIBRATION CHECK (Bare Wood)

1st Reading	2nd Reading	3rd Reading	Average	Difference Between Average & 0.0mg/cm2
-0.0	.00	.00		

CALIBRATION CHECK

1st Reading	2nd Reading	3rd Reading	Average	Difference Between Average & 1.0mg/cm2
0.9	0.9	0.8		

CALIBRATION CHECK

1st Reading	2nd Reading	3rd Reading	Average	Difference Between Average & 1.0mg/cm2
1.0	0.8	0.9		

CALIBRATION CHECK

1st Reading	2nd Reading	3rd Reading	Average	Difference Between Average & 1.0mg/cm2

CARNOW, CONIBEAR & ASSOC., LTD.

Lead - Based Paint Data Sheet

Address/Unit Number _____ Inspection Date _____ XRF File # _____

Room Equivalent OFFICE Inspector _____ License # _____

XRF Serial # _____ XRF Instrument: RMD LPA 1 Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
under Black	Yellow Wall	Yellow	Intact / Fair / Poor	0	7	North	00	Positive		
					8		01	Negative		
					9		01	Inconclusive		
			Intact / Fair / Poor	0	10	East	00	Positive		
					11		00	Negative		
					12		00	Inconclusive		
			Intact / Fair / Poor	0	13	South	01	Positive		
					14		01	Negative		
					15		01	Inconclusive		
			Intact / Fair / Poor	0	16	West	01	Positive		
					17		01	Negative		
					18		00	Inconclusive		
Vinyl	Baseboard	Black	Intact / Fair / Poor	0	19	North	01	Positive		
					20		00	Negative		
					21		01	Inconclusive		
Wood	Window Pannel	Yellow	Intact / Fair / Poor	0	22	North	00	Positive		
					23		00	Negative		
					24		00	Inconclusive		
Metal	Door Frame		Intact / Fair / Poor	5%	25	South	01	Positive		
					26		01	Negative		
					27		00	Inconclusive		
	Door		Intact / Fair / Poor	5%	28	South	01	Positive		
					29		00	Negative		
					30		00	Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		

Lead - Based Paint Data Sheet

Address/Unit Number _____

Room Equivalent Assistance Managers office

XRF Serial # _____ XRF Instrument: RMD LPA 1

Inspection Date _____ XRF File # _____

Inspector _____ License # _____

Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
under Block	Wall	white	Intact / Fair / Poor		31	North	01	Positive		
					32		01	Negative		
					33		01	Inconclusive		
			Intact / Fair / Poor		34	East	01	Positive		
					35		01	Negative		
					36		00	Inconclusive		
			Intact / Fair / Poor		37	South	01	Positive		
					38		00	Negative		
					39		01	Inconclusive		
			Intact / Fair / Poor		40	West	01	Positive		
					41		01	Negative		
					42		01	Inconclusive		
vinyl	baseboard	Black	Intact / Fair / Poor		43	West	01	Positive		
					44		03	Negative		
					45		00	Inconclusive		
wood	window Panel	white	Intact / Fair / Poor		46	East	00	Positive		
					47		00	Negative		
					48		00	Inconclusive		
Metal	door frame	Beige	Intact / Fair / Poor		49	West	01	Positive		
					50		00	Negative		
					51		01	Inconclusive		
wood	door	stain	Intact / Fair / Poor		52	West	00	Positive		
					53		00	Negative		
					54		00	Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		

Lead - Based Paint Data Sheet

Address/Unit Number _____ Inspection Date _____ XRF File # _____

Room Equivalent N-S HALLWAY Inspector _____ License # _____

XRF Serial # _____ XRF Instrument: RMD LPA 1 Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
cinder Block	lower wall	dark blue	Intact / Fair / Poor	0	55	West	00	Positive		
					56		00	Negative		
					57		00	Inconclusive		
↓	↓	↓	Intact / Fair / Poor	0	58	EAST	04	Positive		
					59		01	Negative		
					60		00	Inconclusive		
	upper wall	light blue	Intact / Fair / Poor	0	61	WEST	01	Positive		
					62		01	Negative		
					63		00	Inconclusive		
↓	↓	↓	Intact / Fair / Poor	0	64	EAST	00	Positive		
					65		00	Negative		
					66		00	Inconclusive		
VINYL	baseboard	light blue	Intact / Fair / Poor	0	67	WEST	00	Positive		
					68		00	Negative		
					69		01	Inconclusive		
metal	door frame	light blue	Intact / Fair / Poor	0	70	SOUTH	01	Positive		
					71		00	Negative		
					72		01	Inconclusive		
↓	door	↓	Intact / Fair / Poor	0	73	SOUTH	02	Positive		
					74		01	Negative		
					75		02	Inconclusive		
↓	door frame	Black	Intact / Fair / Poor	0	76	NORTH	00	Positive		
					77		02	Negative		
					78		01	Inconclusive		
↓	door	Metal	Intact / Fair / Poor	0	79	NORTH	01	Positive		
					80		00	Negative		
					81		01	Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		

Lead - Based Paint Data Sheet

Address/Unit Number _____ Inspection Date _____ XRF File # _____

Room Equivalent E - W Hallway south end Inspector _____ License # _____

XRF Serial # _____ XRF Instrument: RMD LPA 1 Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
wood Block	lower wall	DARK BLUE	Intact		82	North	00	Positive		
			Fair		83		00	Negative		
			Poor		84		00	Inconclusive		
	↓	↓	Intact		85	South	01	Positive		
			Fair		86		01	Negative		
			Poor		87		00	Inconclusive		
	upper wall	light Blue	Intact		88	North	00	Positive		
			Fair		89		-03	Negative		
			Poor		90		00	Inconclusive		
↓	↓	↓	Intact		91	South	00	Positive		
			Fair		92		01	Negative		
			Poor		93		01	Inconclusive		
vinyl	baseboard	GREY	Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		

Lead - Based Paint Data Sheet

Page ___ of ___

Address/Unit Number _____

Room Equivalent Maintenance office.

XRF Serial # _____ XRF Instrument: RMD LPA 1

Inspection Date _____ XRF File # _____

Inspector _____ License # _____

Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
cinder block	wall	green	Intact / Fair / Poor		94	North	00	Positive		
					95		00	Negative		
					96		00	Inconclusive		
↓	↓	↓	Intact / Fair / Poor		97	East	00	Positive		
					98		01	Negative		
					99		00	Inconclusive		
			Intact / Fair / Poor		100	South	01	Positive		
					101		00	Negative		
					102		00	Inconclusive		
			Intact / Fair / Poor		103	West	01	Positive		
					104		01	Negative		
					105		01	Inconclusive		
Concrete	ceiling	Beige	Intact / Fair / Poor	Scaff	106	center	00	Positive		
					107		00	Negative		
					108		00	Inconclusive		
vinyl	baseboard	black	Intact / Fair / Poor		109	West	-00	Positive		
					110		-00	Negative		
					111		01	Inconclusive		
metal	door frame	dark blue	Intact / Fair / Poor		112	South	01	Positive		
					113		01	Negative		
					114		00	Inconclusive		
wood	door	stain	Intact / Fair / Poor		115	South	-00	Positive		
					116		-00	Negative		
					117		00	Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		

Lead - Based Paint Data Sheet

Page ____ of ____

Address/Unit Number _____

Room Equivalent E-W HALLWAY North end

XRF Serial # _____ XRF Instrument: RMD LPA 1

Inspection Date _____ XRF File # _____

Inspector _____ License # _____

Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
cinder Block	lower wall	dark Blue	Intact / Fair / Poor		118	North	00	Positive / Negative / Inconclusive		
					119		00			
					120		00			
↓	↓	↓	Intact / Fair / Poor		121	South	00	Positive / Negative / Inconclusive		
					122		00			
					123		00			
	upper wall	Light Blue	Intact / Fair / Poor		124	North	00	Positive / Negative / Inconclusive		
					125		01			
					126		01			
↓	↓	↓	Intact / Fair / Poor		127	South	01	Positive / Negative / Inconclusive		
					128		00			
					129		01			
vinyl	Baseboard	Black	Intact / Fair / Poor		130	South	03	Positive / Negative / Inconclusive		
					131		00			
					132		00			
metal	Railing	↓	Intact / Fair / Poor		133	center	00	Positive / Negative / Inconclusive		
					134		-02			
					135		-03			
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		

Lead - Based Paint Data Sheet

Address/Unit Number _____

Room Equivalent Bathroom Inside Rooms #1 and 2

XRF Serial # _____ XRF Instrument: RMD LPA 1

Inspection Date _____ XRF File # _____

Inspector _____ License # _____

Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
Cinder Block	Wall	Beige	Intact / Fair / Poor		160	North	00	Positive / Negative / Inconclusive		
					161		00			
					162		00			
↓	↓	↓	Intact / Fair / Poor		163	East	00	Positive / Negative / Inconclusive		
					164		00			
					165		00			
			Intact / Fair / Poor		166	South	01	Positive / Negative / Inconclusive		
					167		01			
					168		00			
			Intact / Fair / Poor		169	West	00	Positive / Negative / Inconclusive		
					170		00			
					171		00			
Vinyl	Backboard	Light Brown	Intact / Fair / Poor		172	South	00	Positive / Negative / Inconclusive		
					173		01			
					174		01			
Metal	Door Frame	Beige	Intact / Fair / Poor		175	North	01	Positive / Negative / Inconclusive		
					176		01			
					177		01			
Wood	Door	Stain	Intact / Fair / Poor		178	North	00	Positive / Negative / Inconclusive		
					179		00			
					180		00			
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		

Lead - Based Paint Data Sheet

Address/Unit Number _____ Inspection Date _____ XRF File # _____

Room Equivalent Mens Bathroom Inspector _____ License # _____

XRF Serial # _____ XRF Instrument: RMD LPA 1 Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
cinder block	wall	Beige	Intact / Fair / Poor		181	North	00	Positive		
					182		00	Negative		
					183		03	Inconclusive		
↓	↓	↓	Intact / Fair / Poor		184	East	00	Positive		
					185		02	Negative		
					186		02	Inconclusive		
			Intact / Fair / Poor		187	South	00	Positive		
					188		00	Negative		
					189		00	Inconclusive		
			Intact / Fair / Poor		190	West	00	Positive		
					191		01	Negative		
					192		01	Inconclusive		
vinyl	baseboard	Green	Intact / Fair / Poor		193	East	00	Positive		
					194		00	Negative		
					195		01	Inconclusive		
Metal	partition wall	Dark Blue	Intact / Fair / Poor		196	North	00	Positive		
					197		01	Negative		
					198		01	Inconclusive		
↓	door frame	dark Blue	Intact / Fair / Poor		199	West	01	Positive		
					200		00	Negative		
					201		00	Inconclusive		
wood	door	stain	Intact / Fair / Poor		202	West	00	Positive		
					203		00	Negative		
					204		00	Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		
			Intact / Fair / Poor					Positive / Negative / Inconclusive		

Lead - Based Paint Data Sheet

Address/Unit Number: Women's Bathroom

Room Equivalent: Women's Bathroom

XRF Serial #: _____

XRF Instrument: RMD LPA 1

Inspection Date: _____

Inspector: _____

Inspectors Signature: _____

XRF File #: _____

License #: _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
Cinder Block	Wall	Beige	Intact		205	North	01	Positive		
			Fair		206		01	Negative		
			Poor		207		00	Inconclusive		
			Intact		208	East	01	Positive		
			Fair		209		01	Negative		
			Poor		210		01	Inconclusive		
			Intact		211	South	00	Positive		
			Fair		212		01	Negative		
			Poor		213		00	Inconclusive		
		Maroon	Intact		214	West	00	Positive		
			Fair		215		02	Negative		
			Poor		216		00	Inconclusive		
Metal	Partition Wall	Purple	Intact		217	North	02	Positive		
			Fair		218		02	Negative		
			Poor		219		01	Inconclusive		
Vinyl	Baseboard	Brown	Intact		220	West	00	Positive		
			Fair		221		00	Negative		
			Poor		222		00	Inconclusive		
Metal	door frame	Maroon	Intact		223	North	00	Positive		
			Fair		224		01	Negative		
			Poor		225		00	Inconclusive		
Wood	door	Stain	Intact		226	North	-00	Positive		
			Fair		227		-00	Negative		
			Poor		228		00	Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		

Lead - Based Paint Data Sheet

Address/Unit Number _____

Room Equivalent GYM / STAGE

XRF Serial # _____ XRF Instrument: RMD LPA 1

Inspection Date _____ XRF File # _____

Inspector _____ License # _____

Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
under Block	Lower Wall	Blue	Intact / Fair / Poor		229	North	00	Positive		
					230		00	Negative		
					231		00	Inconclusive		
			Intact / Fair / Poor		232	East	00	Positive		
					233		00	Negative		
					234		00	Inconclusive		
			Intact / Fair / Poor		235	South	01	Positive		
					236		00	Negative		
					237		01	Inconclusive		
			Intact / Fair / Poor		238	West	00	Positive		
					239		01	Negative		
					240		01	Inconclusive		
	upper Wall	Beige	Intact / Fair / Poor		241	North	01	Positive		
					242		01	Negative		
					243		01	Inconclusive		
			Intact / Fair / Poor		244	East	00	Positive		
					245		00	Negative		
					246		00	Inconclusive		
			Intact / Fair / Poor		247	South	04	Positive		
					248		01	Negative		
					249		00	Inconclusive		
			Intact / Fair / Poor		250	West	00	Positive		
					251		03	Negative		
					252		01	Inconclusive		
concrete	Baseboard	Black	Intact / Fair / Poor		253	North	01	Positive		
					254		01	Negative		
					255		00	Inconclusive		
Metal	Railing	Black	Intact / Fair / Poor		256	North	01	Positive		
					257		01	Negative		
					258		02	Inconclusive		

CARNOW, CONIBEAR & ASSOC., LTD.

Carnow, Conibear Assoc. Ltd.

Lead - Based Paint Data Sheet

Address/Unit Number _____

Room Equivalent GLYM | STAIRS

XRF Serial # _____ XRF Instrument: RMD LPA 1

Inspection Date _____ XRF File # _____

Inspector _____ License # _____

Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
wood	storage door	Blue	Intact Fair Poor		259 260 261	West	00 00 00	Positive Negative Inconclusive		
metal	door frame	Gray	Intact Fair Poor		262 263 264	West	01 00 01	Positive Negative Inconclusive		
wood	door	↓	Intact Fair Poor		265 266 267	West	00 00 00	Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		

Lead - Based Paint Data Sheet

Address/Unit Number _____ Inspection Date _____ XRF File # _____

Room Equivalent Kitchen Inspector _____ License # _____

XRF Serial # _____ XRF Instrument: RMD LPA 1 Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
cinder block	wall	Maroon	Intact Fair Poor		268 269 270	North	00 00 00	Positive Negative Inconclusive		
↓	↓	↓	Intact Fair Poor		271 272 273	East	00 01 00	Positive Negative Inconclusive		
↓	↓	↓	Intact Fair Poor		274 275 276	South	00 00 01	Positive Negative Inconclusive		
↓	↓	↓	Intact Fair Poor		277 278 279	West	00 00 00	Positive Negative Inconclusive		
vinyl	baseboard	Gray	Intact Fair Poor		280 281 282	North	01 01 00	Positive Negative Inconclusive		
Metal	door frame	↓	Intact Fair Poor		283 284 285	North	03 01 04	Positive Negative Inconclusive		
Wood	door	stain	Intact Fair Poor		286 287 288	North	00 00 00	Positive Negative Inconclusive		
metal	railing	Gray	Intact Fair Poor		289 290 291	South	01 02 00	Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		
			Intact Fair Poor					Positive Negative Inconclusive		

CARNOW, CONIBEAR & ASSOC., LTD.

Lead - Based Paint Data Sheet

Page ____ of ____

Address/Unit Number [illegible]

Room Equivalent Exterior

Inspection Date _____

Inspector _____

XRF File # _____

License # _____

XRF Serial # _____

XRF Instrument: RMD LPA 1

Inspectors Signature _____

Substrate	Component	Color	Condition	Estimated Damage	Sample #	Test Location	XRF Reading	Classification	Laboratory Results	Final Classification
metal	window frame	Red	Intact		292	North	01	Positive		
			Fair		293		01	Negative		
			Poor		294		00	Inconclusive		
↓	↓	white	Intact		295	North	01	Positive		
			Fair		296		02	Negative		
			Poor		297		03	Inconclusive		
↓	Railing	Spray	Intact		298	North	00	Positive		
			Fair		299		01	Negative		
			Poor		300		00	Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		
			Intact					Positive		
			Fair					Negative		
			Poor					Inconclusive		

Appendix F-2

Regulatory Records Documentation

Environmental Database Report

CARNOW CONIBEAR

Altgeld Gardens/Phillip Murray Homes
E. 131st Street & S. Ingleside Avenue
Chicago, IL 60827

Inquiry Number: 3931997.2s
May 06, 2014

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	393
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-9
Physical Setting Source Map Findings	A-10
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

E. 131ST STREET & S. INGLESIDE AVENUE
CHICAGO, IL 60827

COORDINATES

Latitude (North):	41.6571000 - 41˚ 39' 25.56''
Longitude (West):	87.5996000 - 87˚ 35' 58.56''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	450075.4
UTM Y (Meters):	4611666.0
Elevation:	589 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	41087-F5 LAKE CALUMET, IL IN
Most Recent Revision:	1997

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
CHA-ALTGELD GARDENS VARIOUS CHICAGO, IL	FINDS IL AIRS	N/A
ALTGELD GARDENS(130/INDIANA CHICAGO, IL	IL NIPC	N/A
940 E 132ND ST 940 E 132ND ST CHICAGO, IL	HMIRS	N/A
ALTGELD GARDENS 977 E 132ND ST CHICAGO, IL 60627	IL BOL	N/A

EXECUTIVE SUMMARY

ALTGELD GARDENS (MURRAY HOMES) 940 E 132ND ST CHICAGO IL 60601 CHICAGO, IL 60601	ICIS	N/A
CHICAGO HOUSING AUTHORITY 940 EAST 132ND STREET CHICAGO, IL 60827	IL LUST NFA/NFR Letter: 09/10/2007 IL SRP	N/A
CHA-ALTGELD GARDENS VARIOUS CHICAGO, IL 60627	IL SPILLS IL BOL	N/A
ALTGELD GARDENS (MURRAY HOMES) 940 EAST 132ND STREET CHIAGO, IL 60627	FTTS	N/A
CHICAGO HOUSING AUTHORITY/ALTGELD 940 E 132ND ST CHICAGO, IL 60627	FTTS	N/A
ALTGELD GARDENS 977 E 132ND STREET CHICAGO, IL 60627	RCRA-CESQG FINDS	ILR000101980
CHICAGO HOUSING AUTHORITY/ALTGELD 940 E 132ND ST CHICAGO, IL 60627	HIST FTTS	N/A
CHICAGO HOUSING AUTHORITY 940 E 132ND ST CHICAGO, IL 60627	RCRA NonGen / NLR FTTS HIST FTTS FINDS	ILD981098395
MAINTENANCE BUILDING 940 E. 132ND STREET CHICAGO, IL 60661	IL UST	N/A
ALTGELD GARDENS (MURRAY HOMES) 940 EAST 132ND STREET CHIAGO, IL 60627	HIST FTTS	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls
LUCIS ..... Land Use Control Information System

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

IL SSU ..... State Sites Unit Listing

State and tribal landfill and/or solid waste disposal site lists

IL SWF/LF ..... Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge
IL LF SPECIAL WASTE ..... Special Waste Site List
IL CCDD ..... Clean Construction or Demolition Debris

State and tribal leaking storage tank lists

IL LUST TRUST ..... Underground Storage Tank Fund Payment Priority List
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST ..... Underground Storage Tanks on Indian Land
FEMA UST ..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

IL ENG CONTROLS ..... Sites with Engineering Controls

EXECUTIVE SUMMARY

IL INST CONTROL ..... Institutional Controls

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

IL BROWNFIELDS ..... Municipal Brownfields Redevelopment Grant Program Project Descriptions

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs
IL CDL ..... Meth Drug Lab Site Listing
US HIST CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

IL SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS ..... Incident and Accident Data
DOD ..... Department of Defense Sites
FUDS ..... Formerly Used Defense Sites
CONSENT ..... Superfund (CERCLA) Consent Decrees
ROD ..... Records Of Decision
UMTRA ..... Uranium Mill Tailings Sites
US MINES ..... Mines Master Index File
TRIS ..... Toxic Chemical Release Inventory System
TSCA ..... Toxic Substances Control Act
SSTS ..... Section 7 Tracking Systems
MLTS ..... Material Licensing Tracking System
RADINFO ..... Radiation Information Database
RMP ..... Risk Management Plans
IL UIC ..... Underground Injection Wells
IL NPDES ..... A Listing of Active Permits
IL HWAR ..... Hazard Waste Annual Report

EXECUTIVE SUMMARY

IL DRYCLEANERS..... Illinois Licensed Drycleaners
IL IMPDMENT..... Surface Impoundment Inventory
INDIAN RESERV..... Indian Reservations
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
IL COAL ASH..... Coal Ash Site Listing
IL PIMW..... Potentially Infectious Medical Waste
LEAD SMELTERS..... Lead Smelter Sites
PRP..... Potentially Responsible Parties
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
PCB TRANSFORMER..... PCB Transformer Registration Database
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
COAL ASH DOE..... Steam-Electric Plant Operation Data
EPA WATCH LIST..... EPA WATCH LIST

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat..... EDR Exclusive Historic Gas Stations

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

IL RGA LF..... Recovered Government Archive Solid Waste Facilities List
IL RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank
IL RGA HWS..... Recovered Government Archive State Hazardous Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either

proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PULLMAN FACTORY	130TH ST & INDIANA	W 1/4 - 1/2 (0.498 mi.)	37	34

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALUMET NU-EARTH DIST CENTER	NORTH 130TH ST & DOTY A	NE 0 - 1/8 (0.086 mi.)	F28	29

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/11/2014 has revealed that there are 2 CORRACTS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BARKER CHEMICAL CO	***700 E 138TH STREET***	***SSW 1/2 - 1 (0.504 mi.)***	***38***	***35***
SAFETY KLEEN ENVIROSYSTEMS INC	***633 E 138TH ST***	***SSW 1/2 - 1 (0.509 mi.)***	***39***	***38***

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/11/2014 has revealed that there are 4

RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAND & LAKES TRANSFER STATION	***1258-1300 E 130TH ST***	***NE 0 - 1/8 (0.076 mi.)***	***27***	***28***
CHICAGO, CITY OF	1100 E 130TH PL	NE 0 - 1/8 (0.091 mi.)	29	30

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARVER MIDDLE	801 E 133RD PL	0 - 1/8 (0.000 mi.)	20	23
CARVER PRIMARY SCHOOL	***901 E 133RD PL***	***0 - 1/8 (0.000 mi.)***	***C21***	***24***

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/11/2014 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WHEATLEY PHYLLIS CENTER	***902 E 133RD PL***	***0 - 1/8 (0.000 mi.)***	***C16***	***19***
CARVER PARK	939 E 132ND ST	0 - 1/8 (0.000 mi.)	B18	21

State and tribal landfill and/or solid waste disposal site lists

IL NIPC: NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites that previously had never been identified largely because, prior to 1971, there was no obligation to register such sites. The data come from the Northeastern Illinois Planning Commission's Solid Waste Landfill Inventory.

A review of the IL NIPC list, as provided by EDR, and dated 08/01/1988 has revealed that there are 5 IL NIPC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALUMET NU EARTH (130TH/DOTY)		ENE 0 - 1/8 (0.044 mi.)	26	28
CHGO METRO SANITARY DIST #3		NE 0 - 1/8 (0.091 mi.)	F30	31
CHGO METYRO SANITARY DIST #2		NE 0 - 1/8 (0.091 mi.)	F31	31
CHGO METRO SANITARY DIST #4		NE 0 - 1/8 (0.091 mi.)	F32	32
PALUMBO EXCAVATING		E 1/4 - 1/2 (0.414 mi.)	36	33

State and tribal registered storage tank lists

IL UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Illinois State Fire Marshal's STC Facility List.

A review of the IL UST list, as provided by EDR, and dated 01/27/2014 has revealed that there are 4

IL UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SKIPPER'S MARINA	13421 S VERNON	SW 1/8 - 1/4 (0.216 mi.)	35	33

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARVER PARK NATATORIUM	939 E 132ND ST	0 - 1/8 (0.000 mi.)	B15	19
SCHOOL / CHURCH	13300 S. LANGLEY	0 - 1/8 (0.000 mi.)	17	21
FORMER MARINA	557 E. 134TH PLACE	SW 1/8 - 1/4 (0.156 mi.)	33	32

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/11/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ALDRIDGE SCH	***630 E 131ST ST***	***0 - 1/8 (0.000 mi.)***	***E25***	***26***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 5 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	13124 S ELLIS AVE	0 - 1/8 (0.000 mi.)	D19	23
NORFLEET CLNRS	13114 S ELLIS AVE	0 - 1/8 (0.000 mi.)	D22	25
ALTGELD MURRAY COMMUNITY COUNC	651 E 131ST ST	0 - 1/8 (0.000 mi.)	E24	26
NOONIE S LAUNDROMAT	507 E 130TH ST	WNW 1/8 - 1/4 (0.181 mi.)	34	32

Lower Elevation	Address	Direction / Distance	Map ID	Page
C AND C CLNRS	753 W 132ND ST	0 - 1/8 (0.000 mi.)	23	26

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name	Database(s)
US SCRAP	CERCLIS, CONSENT
CHICAGO REGIONAL PORT DIST	CERC-NFRAP
METRO SANITARY DISTRICT #3	CERC-NFRAP
DOLTON MUNI LDFL	CERC-NFRAP
THORNRIDGE HIGH SCHOOL	RCRA-SQG
CITY OF CHICAGO	RCRA NonGen / NLR, FINDS
FEWER BOILER INC	RCRA NonGen / NLR, FINDS
BORK TRANSPORT	RCRA NonGen / NLR
LEXINGTON HOMES	FINDS
EDEN GARDENS APTS 325-335 E 132ND	FINDS
CHA-WASHINGTON PARK HOMES	FINDS, IL AIRS
CHA-LAWNDALE GARDENS	FINDS, IL AIRS
CITY HOMES INC	FINDS
CHA-LATHROP HOMES DEVELOPMENT	FINDS, IL AIRS
CHA-FRANCES CABRINI HOMES	FINDS
CHA-WASHINGTON PARK HOMES	FINDS, IL AIRS
CHA-GRACE ABBOTT HOMES	FINDS, IL AIRS
CHA-STATEWAY GARDENS	FINDS
CHA-WASHINGTON PARK HOMES PHASE HR	FINDS, IL AIRS
CHA GOV FRANK AND LOWDEN HOMES	FINDS, IL AIRS

OVERVIEW MAP - 3931997.2s

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Altgeld Gardens/Phillip Murray Homes	CLIENT:	Carnow, Conibear & Assoc., LTD
ADDRESS:	E. 131st Street & S. Ingleside Avenue Chicago IL 60827	CONTACT:	Nohemi Melero
		INQUIRY #:	3931997.2s
LAT/LONG:	41.6571 / 87.5996	DATE:	May 06, 2014 5:42 pm

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DETAIL MAP - 3931997.2s

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/8 1/4 1/2 Miles

- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Altgeld Gardens/Phillip Murray Homes ADDRESS: E. 131st Street & S. Ingleside Avenue Chicago IL 60827 LAT/LONG: 41.6571 / 87.5996	CLIENT: Carnow, Conibear & Assoc., LTD CONTACT: Nohemi Melero INQUIRY #: 3931997.2s DATE: May 06, 2014 5:46 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	1	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		1	0	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	2	NR	2
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		4	0	NR	NR	NR	4
RCRA-CESQG	0.250	1	2	0	NR	NR	NR	3
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
IL SSU	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
IL SWF/LF	0.500		0	0	0	NR	NR	0
IL LF SPECIAL WASTE	0.500		0	0	0	NR	NR	0
IL NIPC	0.500	1	4	0	1	NR	NR	6
IL CCDD	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
IL LUST	0.500	1	0	0	0	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
IL LUST TRUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
IL UST	0.250	1	2	2	NR	NR	NR	5
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
IL ENG CONTROLS	0.500		0	0	0	NR	NR	0
IL INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
IL SRP	0.500	1	0	0	0	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
IL BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
IL CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP	1	NR	NR	NR	NR	NR	1
IL SPILLS	TP	1	NR	NR	NR	NR	NR	1
IL SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	1	0	NR	NR	NR	2
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP	3	NR	NR	NR	NR	NR	3
HIST FTTS	TP	3	NR	NR	NR	NR	NR	3
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP	1	NR	NR	NR	NR	NR	1
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	3	NR	NR	NR	NR	NR	3
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
IL UIC	TP		NR	NR	NR	NR	NR	0
IL NPDES	TP		NR	NR	NR	NR	NR	0
IL HWAR	TP		NR	NR	NR	NR	NR	0
RI MANIFEST	0.250		0	0	NR	NR	NR	0
PA MANIFEST	0.250		0	0	NR	NR	NR	0
WI MANIFEST	0.250		0	0	NR	NR	NR	0
NY MANIFEST	0.250		0	0	NR	NR	NR	0
NJ MANIFEST	0.250		0	0	NR	NR	NR	0
IL DRYCLEANERS	0.250		0	0	NR	NR	NR	0
IL IMPDMENT	0.500		0	0	0	NR	NR	0
IL AIRS	TP	1	NR	NR	NR	NR	NR	1
IL TIER 2	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
IL COAL ASH	0.500		0	0	0	NR	NR	0
IL Financial Assurance	TP		NR	NR	NR	NR	NR	0
IL BOL	TP	2	NR	NR	NR	NR	NR	2
IL PIMW	0.250		0	0	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		4	1	NR	NR	NR	5

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
IL RGA LF		TP	NR	NR	NR	NR	NR	0
IL RGA LUST		TP	NR	NR	NR	NR	NR	0
IL RGA HWS		TP	NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **CHA-ALTGELD GARDENS** | **FINDS** | **1008151597**
VARIOUS | **IL AIRS** | **N/A**
CHICAGO, IL

Site 1 of 14 in cluster A

Actual: 589 ft.

FINDS:

Registry ID: 110018484246

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

IL AIRS:

Facility ID:	3256
ID Number:	031600DIA
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Tele:	Not reported
Contact Extention:	Not reported
Contact EMail:	Not reported
Contact Fax:	Not reported
Cease Operation Date:	1/1/1901
SIC Code:	6513
Address Type Code:	LOC

A2 Target Property | **ALTGELD GARDENS(130/INDIANA** | **IL NIPC** | **S100790128**
N/A
CHICAGO, IL

Site 2 of 14 in cluster A

Actual: 589 ft.

A3
Target Property
940 E 132ND ST
CHICAGO, IL

HMIRS **2004090848**
N/A

Site 3 of 14 in cluster A

Actual: 589 ft.

Click this hyperlink while viewing on your computer to access additional HMIRS detail in the EDR Site Report.

A4
Target Property
ALTGELD GARDENS
977 E 132ND ST
CHICAGO, IL 60627

IL BOL **S113272635**
N/A

Site 4 of 14 in cluster A

Actual: 589 ft.

BOL:

Site Id:	170000356549
Inv Num:	0316545023
Interest Name:	Altgeld Gardens
Interest Type:	BOL
Media Code:	LAND

A5
Target Property
ALTGELD GARDENS (MURRAY HOMES)
940 E 132ND ST CHICAGO IL 60601
CHICAGO, IL 60601

ICIS **1011622748**
N/A

Site 5 of 14 in cluster A

Actual: 589 ft.

ICIS:

Enforcement Action ID:	05-1985-0099
FRS ID:	110009373622
Program ID:	NCDB I05#1988082560509 2
Action Name:	CHICAGO HOUSING AUTH.
Facility Name:	ALTGELD GARDENS (MURRAY HOMES)
Facility Address:	940 E 132ND ST CHICAGO IL 60601 CHICAGO, Illinois 60601
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Cook
EPA Region #:	5

Enforcement Action ID:	05-1985-0099
FRS ID:	110009373622
Program ID:	ACES 170000529701
Action Name:	CHICAGO HOUSING AUTH.
Facility Name:	CHICAGO HOUSING AUTHORITY
Facility Address:	940 E 132ND ST CHICAGO IL 60601 CHICAGO, Illinois 60601
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Cook
EPA Region #:	5

Enforcement Action ID:	05-1985-0099
FRS ID:	110009373622
Program ID:	FRS 110009373622
Action Name:	CHICAGO HOUSING AUTH.
Facility Name:	CHICAGO HOUSING AUTHORITY
Facility Address:	940 E 132ND ST CHICAGO IL 60601 CHICAGO, Illinois 60601
Enforcement Action Type:	TSCA 16 Action For Penalty

ALTGELD GARDENS (MURRAY HOMES) (Continued) **1011622748**

Facility County:	Cook
EPA Region #:	5
Enforcement Action ID:	05-1985-0099
FRS ID:	110009373622
Program ID:	RCRAINFO ILD981098395
Action Name:	CHICAGO HOUSING AUTH.
Facility Name:	CHICAGO HOUSING AUTHORITY
Facility Address:	940 E 132ND ST CHICAGO IL 60601 CHICAGO, Illinois 60601
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Cook
EPA Region #:	5
Enforcement Action ID:	05-1985-0099
FRS ID:	110009373622
Program ID:	NCDB I05#19930908IL014 1
Action Name:	CHICAGO HOUSING AUTH.
Facility Name:	CHICAGO HOUSING AUTHORITY
Facility Address:	940 E 132ND ST CHICAGO IL 60601 CHICAGO, Illinois 60601
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Cook
EPA Region #:	5
Enforcement Action ID:	05-1985-0099
FRS ID:	110009373622
Program ID:	NCDB D05#TSCA-V-C-042-89
Action Name:	CHICAGO HOUSING AUTH.
Facility Name:	CHICAGO HOUSING AUTHORITY/ALTGELD MURRAY
Facility Address:	940 E 132ND ST CHICAGO IL 60601 CHICAGO, Illinois 60601
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Cook
EPA Region #:	5

Program ID:	ACES 170000529701
Facility Name:	CHICAGO HOUSING AUTHORITY
Address:	940 E 132ND ST
Tribal Indicator:	N
Fed Facility:	Not reported
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	41.655946
Longitude:	-87.59879
Program ID:	FRS 110009373622
Facility Name:	CHICAGO HOUSING AUTHORITY
Address:	940 E 132ND ST
Tribal Indicator:	N
Fed Facility:	Not reported
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	41.655946
Longitude:	-87.59879

ALTGELD GARDENS (MURRAY HOMES) (Continued) **1011622748**

Program ID:	NCDB D05#TSCA-V-C-042-89
Facility Name:	CHICAGO HOUSING AUTHORITY
Address:	940 E 132ND ST
Tribal Indicator:	N
Fed Facility:	Not reported
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	41.655946
Longitude:	-87.59879

Program ID:	NCDB I05#1988082560509 2
Facility Name:	CHICAGO HOUSING AUTHORITY
Address:	940 E 132ND ST
Tribal Indicator:	N
Fed Facility:	Not reported
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	41.655946
Longitude:	-87.59879

Program ID:	NCDB I05#19930908IL014 1
Facility Name:	CHICAGO HOUSING AUTHORITY
Address:	940 E 132ND ST
Tribal Indicator:	N
Fed Facility:	Not reported
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	41.655946
Longitude:	-87.59879

Program ID:	RCRAINFO ILD981098395
Facility Name:	CHICAGO HOUSING AUTHORITY
Address:	940 E 132ND ST
Tribal Indicator:	N
Fed Facility:	Not reported
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	41.655946
Longitude:	-87.59879

A6 Target Property **CHICAGO HOUSING AUTHORITY**
940 EAST 132ND STREET
CHICAGO, IL 60827

IL LUST **S108649962**
IL SRP **N/A**

Site 6 of 14 in cluster A

Actual: 589 ft.

LUST:

Incident Num:	20070682
IL EPA Id:	0316545003
Product:	Gasoline
IEMA Date:	05/21/2007
Project Manager:	Jones
Project Manager Phone:	(217) 524-1253
Email:	Steve.Jones@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported

CHICAGO HOUSING AUTHORITY (Continued) **S108649962**

PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	07/12/2007
45 Report Received:	08/08/2007
NFA/NFR Letter:	**09/10/2007**
NFR Date Recorded:	10/29/2007

SRP:

IL EPA Id:	0316545003
US EPA Id:	ILD981098395
Longitude:	-87.59881
Latitude:	41.65668
Contact Name:	John Gerut
Contact Address:	60 East Van Buren Street
Contact Address2:	13th Floor
Contact City,St,Zip:	Chicago, IL 60605-
Contact Phone:	(312) 913-7586
Date Enrolled:	11/23/2011
Point Of Contact:	Ala E. Sassila, P.E.
Consultant Company:	GSG Consultants, Inc.
Consultant Address:	855 West Adams Street
Consultant Address2:	Suite 200
Consultant City,St,Zip:	Chicago, IL 60607-
Consultant Phone:	(312) 733-6262
Proj Mgr Assigned:	Smith
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	2.589
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Chicago Housing Authority
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

A7 Target Property | **CHA-ALTGELD GARDENS** | **IL SPILLS** | **S111921716**
VARIOUS | **IL BOL** | **N/A**
CHICAGO, IL 60627

Site 7 of 14 in cluster A

Actual: 589 ft.

SPILLS:

Incident ID:	20070682
Incident Date:	Not reported
Date Received:	05/21/2007
Facility Address:	940 E 132ND ST
Facility City:	CHICAGO
PRP Name:	CHICAGO HOUSING AUTHORITY
AC:	Not reported
Source Table:	dbo_OCIN_INCIDENTCUR

BOL:

Site Id:	170000048856
Inv Num:	0316545003
Interest Name:	Chicago Housing Authority
Interest Type:	BOL
Media Code:	LAND

A8 Target Property | **ALTGELD GARDENS (MURRAY HOMES)** | **FTTS** | **1010000559**
940 EAST 132ND STREET | **N/A**
CHIAGO, IL 60627

Site 8 of 14 in cluster A

Actual: 589 ft.

FTTS INSP:

Inspection Number:	1988082560509 2
Region:	05
Inspection Date:	08/25/88
Inspector:	LAMB
Violation occurred:	Yes
Investigation Type:	Section 6 PCB Federal Conducted
Investigation Reason:	Neutral Scheme, Follow-Up
Legislation Code:	TSCA
Facility Function:	Manufacturer

A9 Target Property | **CHICAGO HOUSING AUTHORITY/ALTGELD MURRAY** | **FTTS** | **1010002325**
940 E 132ND ST | **N/A**
CHICAGO, IL 60627

Site 9 of 14 in cluster A

Actual: 589 ft.

FTTS:

Case Number:	Not reported
Docket Number:	TSCA-V-C-042-89
Complaint Issue Date:	05/04/89
Abatement Amount:	0.0000
Proposed Penalty:	6250.0000
Final Assessment:	0.0000
Final Order Date:	01/04/90
Close Date:	/ /
Violations(s):	PCB, Dispose

A10	**ALTGELD GARDENS**	**RCRA-CESQG**	**1004697962**
Target	**977 E 132ND STREET**	**FINDS**	**ILR000101980**
Property	**CHICAGO, IL 60627**		

Site 10 of 14 in cluster A

Actual: 589 ft.

RCRA-CESQG:

Date form received by agency:	12/01/2000
Facility name:	ALTGELD GARDENS
Facility address:	977 E 132ND STREET CHICAGO, IL 60627
EPA ID:	ILR000101980
Mailing address:	19156 S 85TH PLACE MOIENA, IL 60448
Contact:	THOOMAS CONNELLY
Contact address:	19156 S 85TH PLACE MOIENA, IL 60448
Contact country:	US
Contact telephone:	(815) 469-7007
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO HOUSING AUTHORITY
Owner/operator address:	626 W JACKSON BLVD CHICAGO, IL 60606
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 567-7775
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No

ALTGELD GARDENS (Continued) **1004697962**

Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

FINDS:

Registry ID: 110006409779

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

A11 Target Property **CHICAGO HOUSING AUTHORITY/ALTGELD MURRAY** **HIST FTTS** **1008177279**
940 E 132ND ST **N/A**
CHICAGO, IL 60627

Site 11 of 14 in cluster A

Actual: 589 ft.

HIST FTTS:
Case Number: Not reported
Docket Number: TSCA-V-C-042-89
Complaint Issue Date: 05/04/1989
Abatement Amount: 0.0000
Proposed Penalty: 6250.0000
Final Assessment: 0.0000
Final Order Date: 01/04/1990
Close Date: / /
Violations(s): PCB, Dispose

A12 Target Property | **CHICAGO HOUSING AUTHORITY**
940 E 132ND ST
CHICAGO, IL 60627

RCRA NonGen / NLR
FTTS
HIST FTTS
FINDS

1000166304
ILD981098395

Site 12 of 14 in cluster A

Actual: 589 ft.

RCRA NonGen / NLR:

Date form received by agency:	09/17/1985
Facility name:	CHICAGO HOUSING AUTHORITY
Facility address:	940 E 132ND ST CHICAGO, IL 60627
EPA ID:	ILD981098395
Mailing address:	22 W MADISON ST 14 FL CHICAGO, IL 60602
Contact:	JAMES WESLEY
Contact address:	22 W MADISON ST 14 FL CHICAGO, IL 60602
Contact country:	US
Contact telephone:	(312) 791-8449
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

CHICAGO HOUSING AUTHORITY (Continued) **1000166304**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: X002
Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

FTTS INSP:
Inspection Number: 19930908IL014 1
Region: 05
Inspection Date: 09/08/93
Inspector: OSOWSKI
Violation occurred: Yes
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: For Cause, Government
Legislation Code: TSCA
Facility Function: User

HIST FTTS INSP:
Inspection Number: 19930908IL014 1
Region: 05
Inspection Date: Not reported
Inspector: OSOWSKI
Violation occurred: Yes
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: For Cause, Government
Legislation Code: TSCA
Facility Function: User

FINDS:

Registry ID: 110009373622

Environmental Interest/Information System

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ICIS (Integrated Compliance Information System) is the Integrated

CHICAGO HOUSING AUTHORITY (Continued) **1000166304**

Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

A13 Target Property | **MAINTENANCE BUILDING** | **IL UST** | **U004107042**
940 E. 132ND STREET | **N/A**
CHICAGO, IL 60661

Site 13 of 14 in cluster A

Actual: 589 ft.

UST:

Facility ID:	2043650
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0002876
Owner Name:	Chicago Housing Authority
Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

A14 Target Property | **ALTGELD GARDENS (MURRAY HOMES)** | **HIST FTTS** | **1008174492**
940 EAST 132ND STREET | **N/A**
CHIAGO, IL 60627

Site 14 of 14 in cluster A

Actual: 589 ft.

HIST FTTS INSP:

Inspection Number:	1988082560509 2
Region:	05
Inspection Date:	Not reported
Inspector:	LAMB

ALTGELD GARDENS (MURRAY HOMES) (Continued) **1008174492**

Violation occurred: Yes
Investigation Type: Section 6 PCB Federal Conducted
Investigation Reason: Neutral Scheme, Follow-Up
Legislation Code: TSCA
Facility Function: Manufacturer

B15 **CARVER PARK NATATORIUM** **IL UST** **U001142250**
939 E 132ND ST **N/A**
< 1/8 **CHICAGO, IL 60627**
1 ft.

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
587 ft.

UST:

Facility ID:	2030903
Facility Status:	CLOSED
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Id:	U0002888
Owner Name:	Chicago Park District
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Status:	**Abandoned in place**
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	10/1/1974
OSFM First Notify Date:	7/1/1992
Red Tag Issue Date:	Not reported
Install Date:	1/1/1956
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

C16 **WHEATLEY PHYLLIS CENTER** **RCRA-CESQG** **1004696979**
902 E 133RD PL **FINDS** **ILR000061234**
< 1/8 **CHICAGO, IL 60627**
1 ft.

Site 1 of 2 in cluster C

Relative:
Lower

Actual:
586 ft.

RCRA-CESQG:

Date form received by agency:	02/08/1999
Facility name:	WHEATLEY PHYLLIS CENTER
Facility address:	902 E 133RD PL CHICAGO, IL 60627
EPA ID:	ILR000061234
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202

WHEATLEY PHYLLIS CENTER (Continued) **1004696979**

Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHGO PUBLIC SCHOOLS 6WW
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-7038
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

WHEATLEY PHYLLIS CENTER (Continued) **1004696979**

Violation Status: No violations found

FINDS:

Registry ID: 110009386404

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

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17 **SCHOOL / CHURCH** **IL UST** **U004138018**
13300 S. LANGLEY **N/A**
< 1/8 **CHICAGO, IL 60627**
1 ft.

Relative: Lower
Actual: 587 ft.

UST:

Facility ID:	2044351
Facility Status:	EXEMPT
Facility Type:	**PRIVATE INSTITUTION**
Owner Id:	U0035305
Owner Name:	Our Lady of the Garden
Owner Address:	13300 S. Langley
Owner City,St,Zip:	Chicago, IL 60827
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

B18 **CARVER PARK** **RCRA-CESQG** **1010563392**
939 E 132ND ST **ILR000148049**
< 1/8 **CHICAGO, IL 60627**
1 ft.

Site 2 of 2 in cluster B

Relative: Lower
Actual: 587 ft.

RCRA-CESQG:

Date form received by agency:	07/20/2007
Facility name:	CARVER PARK
Facility address:	939 E 132ND ST CHICAGO, IL 60627
EPA ID:	ILR000148049
Mailing address:	425 E MCFETRIDGE

CARVER PARK (Continued) **1010563392**

	CHICAGO, IL 60605
Contact:	LEEANN THOMAS
Contact address:	Not reported
	Not reported
Contact country:	Not reported
Contact telephone:	(312) 742-4287
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PARK DISTRICT
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	07/20/2007
Owner/Op end date:	Not reported

Owner/operator name:	CHICAGO PARK DISTRICT
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	07/20/2007
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

CARVER PARK (Continued) **1010563392**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

D19 **EDR US Hist Cleaners** **1014987878**
N/A

13124 S ELLIS AVE
RIVERDALE, IL 60827

< 1/8
1 ft.

Site 1 of 2 in cluster D

Relative:
Higher

Actual:
589 ft.

EDR Historical Cleaners:
Name: NOONIES LAUNDROMAT INC
Year: 2002
Address: 13124 S ELLIS AVE

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20 **CARVER MIDDLE** **RCRA-SQG** **1001123534**
801 E 133RD PL **ILR000032383**
CHICAGO, IL 60627

< 1/8
1 ft.

Relative:
Lower

Actual:
586 ft.

RCRA-SQG:
Date form received by agency: 12/30/1996
Facility name: CARVER MIDDLE
Facility address: 801 E 133RD PL
CHICAGO, IL 60627
EPA ID: ILR000032383
Contact: CARRIE CLARK
Contact address: 801 E 133RD PL
CHICAGO, IL 60627
Contact country: US
Contact telephone: (773) 535-5656
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-7039
Legal status: District
Owner/Operator Type: Owner

CARVER MIDDLE (Continued) **1001123534**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

C21 **CARVER PRIMARY SCHOOL** **RCRA-SQG** **1001123533**
901 E 133RD PL **FINDS** **ILR000032375**
< 1/8 **CHICAGO, IL**
1 ft.

Site 2 of 2 in cluster C

Relative:
Lower

Actual:
586 ft.

RCRA-SQG:
Date form received by agency: 12/30/1996
Facility name: CARVER PRIMARY
Facility address: 901 E 133RD PL
CHICAGO, IL 60627
EPA ID: ILR000032375
Contact: LINDA RANDOLPH
Contact address: 901 E 133RD PL
CHICAGO, IL 60627
Contact country: US
Contact telephone: (773) 535-5674
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported

CARVER PRIMARY SCHOOL (Continued) **1001123533**

Owner/operator telephone: (773) 535-7039
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

FINDS:

Registry ID: 110009384567

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

D22 **NORFLEET CLNRS** **EDR US Hist Cleaners** **1009187119**
13114 S ELLIS AVE **N/A**
< 1/8 **CHICAGO, IL**
1 ft.

Site 2 of 2 in cluster D

Relative: Higher
Actual: 589 ft.

EDR Historical Cleaners:
Name: NORFLEET CLNRS
Year: 1981
Type: CLEANERS

23 **C AND C CLNRS** **EDR US Hist Cleaners** **1009185563**
753 W 132ND ST **N/A**
< 1/8 **CHICAGO, IL**
1 ft.

Relative: Lower
Actual: 588 ft.

EDR Historical Cleaners:

Name:	C AND C CLNRS
Year:	1981
Type:	CLEANERS

E24 **ALTGELD MURRAY COMMUNITY COUNCIL LAUNDRY MAT** **EDR US Hist Cleaners** **1009187702**
651 E 131ST ST **N/A**
< 1/8 **CHICAGO, IL**
1 ft.

Site 1 of 2 in cluster E

Relative: Higher
Actual: 589 ft.

EDR Historical Cleaners:

Name:	ALTGELD MURRAY COMMUNITY COUNCIL LAUNDRY MAT
Year:	1981
Type:	LAUNDRIES

E25 **ALDRIDGE SCH** **RCRA NonGen / NLR** **1001116660**
630 E 131ST ST **FINDS** **ILR000026856**
< 1/8 **CHICAGO, IL 60627**
1 ft.

Site 2 of 2 in cluster E

Relative: Lower
Actual: 588 ft.

RCRA NonGen / NLR:

Date form received by agency:	09/22/1997
Facility name:	ALDRIDGE SCH
Facility address:	630 E 131ST ST CHICAGO, IL 60627
EPA ID:	ILR000026856
Mailing address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Land type:	District
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

ALDRIDGE SCH (Continued) **1001116660**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	08/30/1996
Facility name:	ALDRIDGE SCH
Classification:	Small Quantity Generator

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

Evaluation Action Summary:

Evaluation date:	03/25/1997
Evaluation:	COMPLIANCE ASSISTANCE VISIT
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	State

FINDS:

Registry ID: 110009384264

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

26 ENE < 1/8 0.044 mi. 230 ft. | **CALUMET NU EARTH (130TH/DOTY)** | **IL NIPC** | **S100790125** | **N/A**

CHICAGO, IL

Relative: Higher

Actual: 589 ft.

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27 NE < 1/8 0.076 mi. 403 ft. | **LAND & LAKES TRANSFER STATION** | **RCRA-SQG FINDS** | **1004697781** | **ILR000081000**

1258-1300 E 130TH ST
CHICAGO, IL

Relative: Higher

Actual: 615 ft.

RCRA-SQG:

Date form received by agency:	09/01/2000
Facility name:	LAND & LAKES TRANSFER STATION
Facility address:	1258-1300 E 130TH ST CHICAGO, IL 60827
EPA ID:	ILR000081000
Mailing address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Contact:	WM KARPAS
Contact address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Contact country:	US
Contact telephone:	(847) 825-5000
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MARINA DEVELOPMENTS INC
Owner/operator address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 825-5000
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

LAND & LAKES TRANSFER STATION (Continued) **1004697781**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D010
Waste name: SELENIUM

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

FINDS:

Registry ID: 110003059831

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

F28
NE
< 1/8
0.086 mi.
453 ft.

Relative:
Higher

Actual:
616 ft.

CALUMET NU-EARTH DIST CENTER **CERC-NFRAP** **1003870307**
NORTH 130TH ST & DOTY AVE **ILD980903686**
CHICAGO, IL 60628

Site 1 of 4 in cluster F

CERC-NFRAP:
Site ID: 0500927
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: / /
Date Completed: 12/01/84
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 12/01/84
Priority Level: Low priority for further assessment

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: / /
Date Completed: 12/20/85

CALUMET NU-EARTH DIST CENTER (Continued) **1003870307**

Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: SITE INSPECTION
Date Started: / /
Date Completed: 09/20/85
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 10/31/91
Priority Level: Not reported

29
NE
< 1/8
0.091 mi.
479 ft.

CHICAGO, CITY OF **RCRA-SQG** **1006930428**
1100 E 130TH PL **ILR000122952**
CHICAGO, IL 60628

Relative:
Higher

Actual:
601 ft.

RCRA-SQG:
Date form received by agency: 07/31/2003
Facility name: CHICAGO, CITY OF
Facility address: 1100 E 130TH PL
CHICAGO, IL 60628
EPA ID: ILR000122952
Mailing address: 30 N LASALLE 25TH FL
CHICAGO, IL 60602
Contact: TERRY SHEAHAN
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (312) 742-4806
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CITY OF CHICAGO
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 07/31/2003
Owner/Op end date: Not reported

Owner/operator name: CITY OF CHICAGO
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Municipal

CHICAGO, CITY OF (Continued) **1006930428**

Owner/Operator Type: Operator
Owner/Op start date: 07/31/2003
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

F30 **CHGO METRO SANITARY DIST #3** **IL NIPC** **S100790008**
NE **N/A**
< 1/8 **CHICAGO, IL**
0.091 mi.
482 ft. **Site 2 of 4 in cluster F**

Relative:
Higher

Actual:
617 ft.

F31 **CHGO METYRO SANITARY DIST #2** **IL NIPC** **S100789996**
NE **N/A**
< 1/8 **CHICAGO, IL**
0.091 mi.
482 ft. **Site 3 of 4 in cluster F**

Relative:
Higher

Actual:
617 ft.

F32 NE < 1/8 0.091 mi. 482 ft. | **CHGO METRO SANITARY DIST #4** | **IL NIPC** | **S100790026** **N/A**

CHICAGO, IL

Site 4 of 4 in cluster F

Relative: Higher

Actual: 617 ft.

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33 SW 1/8-1/4 0.156 mi. 824 ft. | **FORMER MARINA** | **IL UST** | **U004051821** **N/A**

557 E. 134TH PLACE
CHICAGO, IL 60627

Relative: Lower

Actual: 586 ft.

UST:

Facility ID:	2043165
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0033280
Owner Name:	Ron Gaines
Owner Address:	10639 S. Drew Avenue
Owner City,St,Zip:	Chicago, IL 60643
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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34 WNW 1/8-1/4 0.181 mi. 955 ft. | **NOONIE S LAUNDROMAT** | **EDR US Hist Cleaners** | **1009186499** **N/A**

507 E 130TH ST
CHICAGO, IL

Relative: Higher

Actual: 589 ft.

EDR Historical Cleaners:

Name:	NOONIE S LAUNDROMAT
Year:	2003
Type:	LAUNDRIES SELF SERVICE

35
SW
1/8-1/4
0.216 mi.
1140 ft.

SKIPPER'S MARINA
13421 S VERNON
CHICAGO, IL 60827

IL UST **U000865873**
N/A

Relative:
Higher

Actual:
591 ft.

UST:

Facility ID:	2007724
Facility Status:	INACTIVE
Facility Type:	**MARINA**
Owner Id:	U0014025
Owner Name:	Earl Strombeck
Owner Address:	13421 S Vernon
Owner City,St,Zip:	Chicago, IL 608271806

Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1997
OSFM First Notify Date:	4/26/1986
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003801**
Green Tag Issue Date:	**9/1/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Status:	**Out of service**
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	5/2/2013
OSFM First Notify Date:	4/26/1986
Red Tag Issue Date:	Not reported
Install Date:	6/30/1975
Green Tag Decal:	**K003801**
Green Tag Issue Date:	**9/1/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

36
East
1/4-1/2
0.414 mi.
2187 ft.

PALUMBO EXCAVATING

CHICAGO, IL

IL NIPC **S100789998**
N/A

Relative:
Higher

Actual:
592 ft.

37 West 1/4-1/2 0.498 mi. 2631 ft. | **PULLMAN FACTORY 130TH ST & INDIANA CHICAGO, IL 60643** | **CERCLIS** | **1000289828 ILD981959208**

Relative: Higher

Actual: 590 ft.

CERCLIS:

Site ID:	0501149
EPA ID:	ILD981959208
Facility County:	COOK
Short Name:	PULLMAN FACTORY
Congressional District:	02
IFMS ID:	B5JE
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	0.00000
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	HRS Start Needed
Non NPL Status Date:	01/20/00
Site Fips Code:	17031
CC Concurrence Date:	/ /
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported
Alias Comments:	Not reported

Site Description: Not reported

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	/ /
Date Completed:	06/17/87
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	08/14/87

PULLMAN FACTORY (Continued) **1000289828**

Priority Level:	Low priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	SITE INSPECTION
Date Started:	/ /
Date Completed:	10/19/90
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	EXPANDED SITE INSPECTION
Date Started:	12/21/93
Date Completed:	01/13/95
Priority Level:	Recommended for HRS Scoring
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

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38 SSW 1/2-1 0.504 mi. 2661 ft.

BARKER CHEMICAL CO
700 E 138TH STREET
CHICAGO, IL 60627

CERC-NFRAP **1000269195**
CORRACTS **ILD005097670**
RCRA NonGen / NLR
FINDS

Relative: Higher

Actual: 590 ft.

CERC-NFRAP:

Site ID:	0500154
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	Deferred to RCRA

Program Priority:

Description:	RCRA Deferral Audit
Description:	RCRA Deferral - Lead Confirmed

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	/ /
Date Completed:	04/01/79
Priority Level:	Not reported
Action:	SITE INSPECTION
Date Started:	/ /

BARKER CHEMICAL CO (Continued) **1000269195**

Date Completed: 12/01/84
Priority Level: Deferred to RCRA (Subtitle C)

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 01/01/84
Priority Level: Low priority for further assessment

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: / /
Date Completed: 09/29/85
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 10/30/95
Priority Level: Not reported

CORRACTS:

EPA ID: ILD005097670
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19911113
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005097670
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19920221
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005097670
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19910927
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

RCRA NonGen / NLR:
Date form received by agency:10/23/1981
Facility name: BARKER CHEMICAL CO
Facility address: 700 E 138TH STREET
CHICAGO, IL 60627

BARKER CHEMICAL CO (Continued) **1000269195**

EPA ID:	ILD005097670
Mailing address:	PO BOX 546 SOUTH HOLLAND, IL 60473
Contact:	WAYNE BARKER
Contact address:	PO BOX 546 SOUTH HOLLAND, IL 60473
Contact country:	US
Contact telephone:	(312) 842-8000
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/26/1981
Facility name:	BARKER CHEMICAL CO
Classification:	Not a generator, verified

BARKER CHEMICAL CO (Continued) **1000269195**

Corrective Action Summary:

Event date:	09/27/1991
Event:	CA Prioritization, Facility or area was assigned a high corrective action priority.
Event date:	11/13/1991
Event:	RFA Completed
Event date:	02/21/1992
Event:	Stabilization Measures Evaluation,This facility is amenable to stabilization activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations.
Violation Status:	No violations found

FINDS:

Registry ID: 110009366550

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

39
SSW
1/2-1
0.509 mi.
2685 ft.

Relative:
Higher

Actual:
590 ft.

SAFETY KLEEN ENVIROSYSTEMS INC
633 E 138TH ST
DOLTON, IL

RCRA-TSDF **1000222289**
CERC-NFRAP **ILD980613913**
CORRACTS
RCRA-LQG
PADS
RAATS
NJ MANIFEST
NY MANIFEST
WI MANIFEST
PA MANIFEST
RI MANIFEST
IL TIER 2
US FIN ASSUR
IL Financial Assurance
2020 COR ACTION

RCRA-TSDF:

Date form received by agency:	02/26/2014
Facility name:	SAFETY KLEEN SYSTEMS INC
Facility address:	633 E 138TH ST DOLTON, IL 60419
EPA ID:	ILD980613913
Contact:	JAMES R LAUBSTED
Contact address:	633 E 138TH ST DOLTON, IL 60419
Contact country:	US

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Contact telephone:	(708) 225-8155
Contact email:	LAUBSTEDJ@CLEANHARBORS.COM
EPA Region:	05
Land type:	Private
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	SAFETY KLEEN SYSTEMS INC
Owner/operator address:	2600 N CENTRAL EXPY STE 400 RICHARDSON, TX 75080
Owner/operator country:	US
Owner/operator telephone:	(972) 265-2000
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/21/1987
Owner/Op end date:	Not reported

Owner/operator name:	SAFETY KLEEN SYSTEMS INC
Owner/operator address:	633 E 138TH ST DOLTON, IL 60419
Owner/operator country:	US
Owner/operator telephone:	708/225-8155
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/21/1987
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Yes
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	Yes
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Used oil transfer facility: Yes
Used oil transporter: Yes

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Thermostats
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Historical Generators:
Date form received by agency: 02/10/2014
Facility name: SAFETY KLEEN SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2012
Facility name: SAFETY KLEEN SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2010
Facility name: SAFETY KLEEN SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 08/18/2009
Facility name: SAFETY KLEEN SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2008
Facility name: SAFETY KLEEN SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2006
Facility name: SAFETY KLEEN SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2004
Facility name: SAFETY KLEEN SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 09/23/2002
Facility name: SAFETY KLEEN SYSTEMS INC
Site name: SAFETY KLEEN ENVIROSYSTEMS INC
Classification: Not a generator, verified

Date form received by agency: 03/01/2002
Facility name: SAFETY KLEEN SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2000
Facility name: SAFETY KLEEN SYSTEMS INC

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Site name: SAFETY-KLEEN ENVIRONSYSTEMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1998
Facility name: SAFETY KLEEN SYSTEMS INC
Site name: SAFETY-KLEEN ENVIRONSYSTEMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Facility name: SAFETY KLEEN SYSTEMS INC
Site name: SAFETY KLEEN ENVIROSYSTEMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Facility name: SAFETY KLEEN SYSTEMS INC
Site name: SAFETY KLEEN ENVIROSYSTEMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1992
Facility name: SAFETY KLEEN SYSTEMS INC
Site name: SAFETY KLEEN ENVIROSYSTEMS CO
Classification: Large Quantity Generator

Date form received by agency: 02/28/1990
Facility name: SAFETY KLEEN SYSTEMS INC
Site name: SAFETY KLEEN ENVIROSYSTEMS CO
Classification: Large Quantity Generator

Date form received by agency: 09/23/1981
Facility name: SAFETY KLEEN SYSTEMS INC
Site name: SAFETY KLEEN ENVIROSYSTEMS INC
Classification: Not a generator, verified

Date form received by agency: 09/23/1981
Facility name: SAFETY KLEEN SYSTEMS INC
Site name: SAFETY KLEEN ENVIROSYSTEMS INC
Classification: Not a generator, verified

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D004
Waste name: ARSENIC

Waste code: D005
Waste name: BARIUM

Waste code: D006
Waste name: CADMIUM

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D010
Waste name: SELENIUM

Waste code: D011
Waste name: SILVER

Waste code: D012
Waste name: ENDRIN

Waste code: D013
Waste name: LINDANE

Waste code: D014
Waste name: METHOXYCHLOR

Waste code: D015
Waste name: TOXAPHENE

Waste code: D016
Waste name: 2,4-D

Waste code: D017
Waste name: 2,4,5-TP (SILVEX)

Waste code: D018
Waste name: BENZENE

Waste code: D019
Waste name: CARBON TETRACHLORIDE

Waste code: D020
Waste name: CHLORDANE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: D021
Waste name: CHLOROBENZENE

Waste code: D022
Waste name: CHLOROFORM

Waste code: D023
Waste name: O-CRESOL

Waste code: D024
Waste name: M-CRESOL

Waste code: D025
Waste name: P-CRESOL

Waste code: D026
Waste name: CRESOL

Waste code: D027
Waste name: 1,4-DICHLOROBENZENE

Waste code: D028
Waste name: 1,2-DICHLOROETHANE

Waste code: D029
Waste name: 1,1-DICHLOROETHYLENE

Waste code: D030
Waste name: 2,4-DINITROTOLUENE

Waste code: D031
Waste name: HEPTACHLOR (AND ITS EPOXIDE).

Waste code: D032
Waste name: HEXACHLOROBENZENE

Waste code: D033
Waste name: HEXACHLOROBUTADIENE

Waste code: D034
Waste name: HEXACHLOROETHANE

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: D036
Waste name: NITROBENZENE

Waste code: D037
Waste name: PENTRACHLOROPHENOL

Waste code: D038
Waste name: PYRIDINE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: D040
Waste name: TRICHLOROETHYLENE

Waste code: D041
Waste name: 2,4,5-TRICHLOROPHENOL

Waste code: D042
Waste name: 2,4,6-TRICHLOROPHENOL

Waste code: D043
Waste name: VINYL CHLORIDE

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Waste code: F007
Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Waste code: F008
Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code: F009
Waste name: SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code: F010
Waste name: QUENCHING BATH RESIDUES FROM OIL BATHS FROM METAL HEAT TREATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code: F011
Waste name: SPENT CYANIDE SOLUTIONS FROM SALT BATH POT CLEANING FROM METAL HEAT TREATING OPERATIONS.

Waste code: F012
Waste name: QUENCHING WASTE WATER TREATMENT SLUDGES FROM METAL HEAT TREATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code: F019
Waste name: WASTEWATER TREATMENT SLUDGES FROM THE CHEMICAL CONVERSION COATING OF ALUMINUM EXCEPT FROM ZIRCONIUM PHOSPHATING IN ALUMINUM CAN WASHING WHEN SUCH PHOSPHATING IS AN EXCLUSIVE CONVERSION COATING PROCESS.

Waste code: F020
Waste name: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE PRODUCTION OR MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF TRI- OR TETRACHLOROPHENOL, OR OF INTERMEDIATES USED TO PRODUCE THEIR PESTICIDE DERIVATIVES. (THIS LISTING DOES NOT INCLUDE WASTES FROM THE PRODUCTION OF HEXACHLOROPHENE FROM HIGHLY PURIFIED 2,4,5-TRICHLOROPHENOL).

Waste code: F021
Waste name: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE PRODUCTION OR MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF PENTACHLOROPHENOL, OR OF INTERMEDIATES USED TO PRODUCE ITS DERIVATIVES.

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: F022
Waste name: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF TETRA-, PENTA-, OR HEXACHLOROBENZENES UNDER ALKALINE CONDITIONS.

Waste code: F023
Waste name: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE PRODUCTION OF MATERIALS ON EQUIPMENT PREVIOUSLY USED FOR THE PRODUCTION OR MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF TRI- AND TETRACHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE WASTES FROM EQUIPMENT USED ONLY FOR THE PRODUCTION OR USE OF HEXACHLOROPHENE FROM HIGHLY PURIFIED 2,4,5-TRICHLOROPHENOL).

Waste code: F024
Waste name: PROCESS WASTES, INCLUDING BUT NOT LIMITED TO, DISTILLATION RESIDUES, HEAVY ENDS, TARS, AND REACTOR CLEAN-OUT WASTES, FROM THE PRODUCTION OF CERTAIN CHLORINATED ALIPHATIC HYDROCARBONS BY FREE RADICAL CATALYZED PROCESSES. THESE CHLORINATED ALIPHATIC HYDROCARBONS ARE THOSE HAVING CARBON CHAIN LENGTHS RANGING FROM ONE TO AND INCLUDING FIVE, WITH VARYING AMOUNTS AND POSITIONS OF CHLORINE SUBSTITUTION. (THIS LISTING DOES NOT INCLUDE WASTEWATERS, WASTEWATER TREATMENT SLUDGES, SPENT CATALYSTS, AND WASTES LISTED IN SECTION 261.31 OR SECTION 261.32).

Waste code: F025
Waste name: CONDENSED LIGHT ENDS, SPENT FILTERS AND FILTER AIDS, AND SPENT DESICCANT WASTES FROM THE PRODUCTION OF CERTAIN CHLORINATED ALIPHATIC HYDROCARBONS, BY FREE RADICAL CATALYZED PROCESSES. THESE CHLORINATED ALIPHATIC HYDROCARBONS ARE THOSE HAVING CARBON CHAIN LENGTHS RANGING FROM ONE TO AND INCLUDING FIVE, WITH VARYING AMOUNTS AND POSITIONS OF CHLORINE SUBSTITUTION.

Waste code: F026
Waste name: WASTES (EXCEPT WASTEWATER AND SPENT CARBON FROM HYDROGEN CHLORIDE PURIFICATION) FROM THE PRODUCTION OF MATERIALS ON EQUIPMENT PREVIOUSLY USED FOR THE MANUFACTURING USE (AS A REACTANT, CHEMICAL INTERMEDIATE, OR COMPONENT IN A FORMULATING PROCESS) OF TETRA-, PENTA-, OR HEXACHLOROBENZENE UNDER ALKALINE CONDITIONS.

Waste code: F027
Waste name: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT).

Waste code: F028
Waste name: RESIDUES RESULTING FROM THE INCINERATION OR THERMAL TREATMENT OF SOIL CONTAMINATED WITH EPA HAZARDOUS WASTE NOS. F020, F021, F022, F023, F026, AND F027.

Waste code: F032
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESSES GENERATED AT PLANTS THAT CURRENTLY USE OR HAVE PREVIOUSLY USED CHLOROPHENOLIC FORMULATIONS (EXCEPT POTENTIALLY CROSS-CONTAMINATED WASTES THAT HAVE HAD THE F032

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

WASTE CODE DELETED IN ACCORDANCE WITH SECTION 261.35 OF THIS CHAPTER AND WHERE THE GENERATOR DOES NOT RESUME OR INITIATE USE OF CHLOROPHENOLIC FORMULATIONS). THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL. (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE LISTING FOR PLANTS THAT HAVE PREVIOUSLY USED CHLOROPHENOLIC FORMULATIONS IS ADMINISTRATIVELY STAYED WHENEVER THESE WASTES ARE COVERED BY THE F034 OR F035 LISTINGS. THESE STAYS WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.)

Waste code: F034
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESS GENERATED AT PLANTS THAT USE CREOSOTE FORMULATIONS. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL. (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE STAY WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.)

Waste code: F035
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESS GENERATED AT PLANTS THAT USE INORGANIC PRESERVATIVES CONTAINING ARSENIC OR CHROMIUM. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE STAY WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.).

Waste code: F037
Waste name: PETROLEUM REFINERY PRIMARY OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE GENERATED FROM THE GRAVITATIONAL SEPARATION OF OIL/WATER/SOLIDS DURING THE STORAGE OR TREATMENT OF PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH SLUDGES INCLUDE, BUT ARE NOT LIMITED TO, THOSE GENERATED IN: OIL/WATER/SOLIDS SEPARATORS; TANKS AND IMPOUNDMENTS; DITCHES AND OTHER CONVEYANCES; SUMPS; AND STORMWATER UNITS RECEIVING DRY WEATHER FLOW. SLUDGE GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.

Waste code: F038
Waste name: PETROLEUM REFINERY SECONDARY (EMULSIFIED) OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE AND/OR FLOAT GENERATED FROM THE PHYSICAL AND/OR CHEMICAL SEPARATION OF OIL/WATER/SOLIDS IN PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH WASTES INCLUDE, BUT ARE NOT LIMITED TO, ALL SLUDGES AND FLOATS GENERATED IN: INDUCED AIR FLOTATION (IAF) UNITS, TANKS AND IMPOUNDMENTS, AND ALL

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

SLUDGES GENERATED IN DAF UNITS. SLUDGES GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES AND FLOATS GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES AND FLOATS GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND F037, K048, AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.

Waste code: F039
Waste name: LEACHATE (LIQUIDS THAT HAVE PERCOLATED THROUGH LAND DISPOSED WASTES) RESULTING FROM THE DISPOSAL OF MORE THAN ONE RESTRICTED WASTE CLASSIFIED AS HAZARDOUS UNDER SUBPART D OF THIS PART. (LEACHATE RESULTING FROM THE DISPOSAL OF ONE OR MORE OF THE FOLLOWING EPA HAZARDOUS WASTES AND NO OTHER HAZARDOUS WASTES RETAINS ITS EPA HAZARDOUS WASTES NUMBER(S): F020, F021, F022, F026, F027, AND/OR F028).

Waste code: K001
Waste name: BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATERS FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL.

Waste code: K002
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHROME YELLOW AND ORANGE PIGMENTS.

Waste code: K003
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF MOLYBDATE ORANGE PIGMENTS

Waste code: K004
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF ZINC YELLOW PIGMENTS

Waste code: K005
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHROME GREEN PIGMENTS

Waste code: K006
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHROME OXIDE GREEN PIGMENTS (ANHYDROUS AND HYDRATED).

Waste code: K007
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF IRON BLUE PIGMENTS

Waste code: K008
Waste name: OVEN RESIDUE FROM THE PRODUCTION OF CHROME OXIDE GREEN PIGMENTS

Waste code: K009
Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF ACETALDEHYDE FROM ETHYLENE

Waste code: K010
Waste name: DISTILLATION SIDE CUTS FROM THE PRODUCTION OF ACETAIDEHYDE FROM ETHYLENE

Waste code: K011

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste name: BOTTOM STREAM FROM THE WASTEWATER STRIPPER IN THE PRODUCTION OF ACRYLONITRILE

Waste code: K013
Waste name: BOTTOM STREAM FROM THE ACETONITRILE COLUMN IN THE PRODUCTION OF ACRYLONITRILE

Waste code: K014
Waste name: BOTTOMS FROM THE ACETONITRILE PURIFICATION COLUMN IN THE PRODUCTION OF ACRYLONITRILE

Waste code: K015
Waste name: STILL BOTTOMS FROM THE DISTILLATION OF BENZYL CHLORIDE

Waste code: K016
Waste name: HEAVY ENDS OR DISTILLATION RESIDUES FROM THE PRODUCTION OF CARBON TETRACHLORIDE

Waste code: K017
Waste name: HEAVY ENDS (STILL BOTTOMS) FROM THE PURIFICATION COLUMN IN THE PRODUCTION OF EPICHLOROHYDRIN.

Waste code: K018
Waste name: HEAVY ENDS FROM THE FRACTIONATION COLUMN IN ETHYL CHLORIDE PRODUCTION

Waste code: K019
Waste name: HEAVY ENDS FROM THE DISTILLATION OF ETHYLENE DICHLORIDE IN ETHYLENE DICHLORIDE PRODUCTION.

Waste code: K020
Waste name: HEAVY ENDS FROM THE DISTILLATION OF VINYL CHLORIDE IN VINYL CHLORIDE MONOMER PRODUCTION.

Waste code: K021
Waste name: AQUEOUS SPENT ANTIMONY CATALYST WASTE FROM FLUOROMETHANES PRODUCTION

Waste code: K022
Waste name: DISTILLATION BOTTOM TARS FROM THE PRODUCTION OF PHENOL/ACETONE FROM CUMENE

Waste code: K023
Waste name: DISTILLATION LIGHT ENDS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM NAPHTHALENE

Waste code: K024
Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM NAPHTHALENE

Waste code: K025
Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF NITROBENZENE BY THE NITRATION OF BENZENE

Waste code: K026
Waste name: STRIPPING STILL TAILS FROM THE PRODUCTION OF METHY ETHYL PYRIDINES

Waste code: K027
Waste name: CENTRIFUGE AND DISTILLATION RESIDUES FROM TOLUENE DIISOCYANATE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

PRODUCTION

Waste code: K028
Waste name: SPENT CATALYST FROM THE HYDROCHLORINATOR REACTOR IN THE PRODUCTION OF 1,1,1-TRICHLOROETHANE.

Waste code: K029
Waste name: WASTE FROM THE PRODUCT STEAM STRIPPER IN THE PRODUCTION OF 1,1,1-TRICHLOROETHANE

Waste code: K030
Waste name: COLUMN BOTTOMS OR HEAVY ENDS FROM THE COMBINED PRODUCTION OF TRICHLOROETHYLENE AND PERCHLOROETHYLENE.

Waste code: K031
Waste name: BY-PRODUCT SALTS GENERATED IN THE PRODUCTION OF MSMA AND CACODYLIC ACID

Waste code: K032
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHLORDANE

Waste code: K033
Waste name: WASTEWATER AND SCRUB WATER FROM THE CHLORINATION OF CYCLOPENTADIENE IN THE PRODUCTION OF CHLORDANE.

Waste code: K034
Waste name: FILTER SOLIDS FROM THE FILTRATION OF HEXACHLOROCYCLOPENTADIENE IN THE PRODUCTION OF CHLORDANE.

Waste code: K035
Waste name: WASTEWATER TREATMENT SLUDGES GENERATED IN THE PRODUCTION OF CREOSOTE

Waste code: K036
Waste name: STILL BOTTOMS FROM TOLUENE RECLAMATION DISTILLATION IN THE PRODUCTION OF DISULFOTON

Waste code: K037
Waste name: WASTEWATER TREATMENT SLUDGES FROM THE PRODUCTION OF DISULFOTON

Waste code: K038
Waste name: WASTEWATER FROM THE WASHING AND STRIPPING OF PHORATE PRODUCTION

Waste code: K039
Waste name: FILTER CAKE FROM THE FILTRATION OF DIETHYLPHOSPHORODITHIOIC ACID IN THE PRODUCTION OF PHORATE.

Waste code: K040
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF PHORATE

Waste code: K041
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF TOXAPHENE

Waste code: K042
Waste name: HEAVY ENDS OR DISTILLATION RESIDUES FROM THE DISTILLATION OF TETRACHLOROBENZENE IN THE PRODUCTION OF 2,4,5-T.

Waste code: K043

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste name: 2,6-DICHLOROPHENOL WASTE FROM THE PRODUCTION OF 2,4-D

Waste code: K044
Waste name: WASTEWATER TREATMENT SLUDGES FROM THE MANUFACTURING AND PROCESSING OF EXPLOSIVES

Waste code: K045
Waste name: SPENT CARBON FROM THE TREATMENT OF WASTEWATER CONTAINING EXPLOSIVES

Waste code: K046
Waste name: WASTEWATER TREATMENT SLUDGES FROM THE MANUFACTURING, FORMULATION AND LOADING OF LEAD-BASED INITIATING COMPOUNDS.

Waste code: K047
Waste name: PINK/RED WATER FROM TNT OPERATIONS

Waste code: K048
Waste name: DISSOLVED AIR FLOTATION (DAF) FLOAT FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K049
Waste name: SLOP OIL EMULSION SOLIDS FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K050
Waste name: HEAT EXCHANGER BUNDLE CLEANING SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K051
Waste name: API SEPARATOR SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K052
Waste name: TANK BOTTOMS (LEADED) FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K060
Waste name: AMMONIA STILL LIME SLUDGE FROM COKING OPERATIONS

Waste code: K061
Waste name: EMISSION CONTROL DUST/SLUDGE FROM THE PRIMARY PRODUCTION OF STEEL IN ELECTRIC FURNACES.

Waste code: K062
Waste name: SPENT PICKLE LIQUOR GENERATED BY STEEL FINISHING OPERATIONS OF FACILITIES WITHIN THE IRON AND STEEL INDUSTRY (SIC CODES 331 AND 332).

Waste code: K064
Waste name: ACID PLANT BLOWDOWN SLURRY/SLUDGE RESULTING FROM THE THICKENING OF BLOWDOWN SLURRY FROM PRIMARY COPPER PRODUCTION.

Waste code: K065
Waste name: SURFACE IMPOUNDMENT SOLIDS CONTAINED IN AND DREDGED FROM SURFACE IMPOUNDMENTS AT PRIMARY LEAD SMELTING FACILITIES.

Waste code: K066
Waste name: SLUDGE FROM TREATMENT OF PROCESS WASTEWATER AND OR ACID PLANT BLOWDOWN FROM PRIMARY ZINC PRODUCTION.

Waste code: K069

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste name: EMISSION CONTROL DUST/SLUDGE FROM SECONDARY LEAD SMELTING. (NOTE: THIS LISTING IS STAYED ADMINISTRATIVELY FOR SLUDGE GENERATED FROM SECONDARY ACID SCRUBBER SYSTEMS. THE STAY WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN. IF EPA TAKES FURTHER ACTION EFFECTING THIS STAY, EPA WILL PUBLISH A NOTICE OF THE ACTION IN THE FEDERAL REGISTER.

Waste code: K071
Waste name: BRINE PURIFICATION MUDS FROM THE MERCURY CELL PROCESS IN CHLORINE PRODUCTION, WHERE SEPARATELY PREPURIFIED BRINE IS NOT USED.

Waste code: K073
Waste name: CHLORINATED HYDROCARBON WASTE FROM THE PURIFICATION STEP OF THE DIAPHRAGM CELL PROCESS USING GRAPHITE ANODES IN CHLORINE PRODUCTION.

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: K084
Waste name: WASTEWATER TREATMENT SLUDGES GENERATED DURING THE PRODUCTION OF VETERINARY PHARMACEUTICALS FROM ARSENIC OR ORGANO-ARSENIC COMPOUNDS.

Waste code: K085
Waste name: DISTILLATION OR FRACTIONATION COLUMN BOTTOMS FROM THE PRODUCTION OF CHLOROBENZENES

Waste code: K086
Waste name: SOLVENT WASHES AND SLUDGES, CAUSTIC WASHES AND SLUDGES, OR WATER WASHES AND SLUDGES FROM CLEANING TUBS AND EQUIPMENT USED IN THE FORMULATION OF INK FROM PIGMENTS, DRIERS, SOAPS, AND STABILIZERS CONTAINING CHROMIUM AND LEAD.

Waste code: K087
Waste name: DECANTER TANK TAR SLUDGE FROM COKING OPERATIONS

Waste code: K088
Waste name: SPENT POTLINERS FROM PRIMARY ALUMINUM REDUCTION

Waste code: K090
Waste name: EMISSION CONTROL DUST OR SLUDGE FROM FERROCHROMIUMSILICON PRODUCTION

Waste code: K091
Waste name: EMISSION CONTROL DUST OR SLUDGE FROM FERROCHROMIUM PRODUCTION

Waste code: K093
Waste name: DISTILLATION LIGHT ENDS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM ORTHO-XYLENE

Waste code: K094
Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM ORTHO-XYLENE

Waste code: K095
Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF 1,1,1-TRICHLOROETHANE

Waste code: K096
Waste name: HEAVY ENDS FROM THE HEAVY ENDS COLUMN FROM THE PRODUCTION OF

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

1,1,1-TRICHLOROETHANE.

Waste code: K097
Waste name: VACUUM STRIPPER DISCHARGE FROM THE CHLORDANE CHLORINATOR IN THE PRODUCTION OF CHLORDANE.

Waste code: K098
Waste name: UNTREATED PROCESS WASTEWATER FROM THE PRODUCTION OF TOXAPHENE

Waste code: K099
Waste name: UNTREATED WASTEWATER FROM THE PRODUCTION OF 2,4-D

Waste code: K100
Waste name: WASTE LEACHING SOLUTION FROM ACID LEACHING OF EMISSION CONTROL DUST/SLUDGE FROM SECONDARY LEAD SMELTING.

Waste code: K101
Waste name: DISTILLATION TAR RESIDUES FROM THE DISTILLATION OF ANILINE-BASED COMPOUNDS IN THE PRODUCTION OF VETERINARY PHARMACEUTICALS FROM ARSENIC OR ORGANO-ARSENIC COMPOUNDS.

Waste code: K102
Waste name: RESIDUE FROM THE USE OF ACTIVATED CARBON FOR DECOLORIZATION IN THE PRODUCTION OF VETERINARY PHARMACEUTICALS FROM ARSENIC OR ORGANO-ARSENIC COMPOUNDS.

Waste code: K103
Waste name: PROCESS RESIDUES FROM ANILINE EXTRACTION FROM THE PRODUCTION OF ANILINE

Waste code: K104
Waste name: COMBINED WASTEWATER STREAMS GENERATED FROM NITROBENZENE/ANILINE PRODUCTION

Waste code: K105
Waste name: SEPARATED AQUEOUS STREAM FROM THE REACTOR PRODUCT WASHING STEP IN THE PRODUCTION OF CHLOROBENZENES.

Waste code: K106
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE MERCURY CELL PROCESS IN CHLORINE PRODUCTION

Waste code: K107
Waste name: COLUMN BOTTOMS FROM PRODUCT SEPARATION FROM THE PRODUCTION OF 1,1-DIMETHYLHYDRAZINE (UDMH) FROM CARBOXYLIC ACID HYDRAZINES.

Waste code: K108
Waste name: CONDENSED COLUMN OVERHEADS FROM PRODUCT SEPARATION AND CONDENSED REACTOR VENT GASES FROM THE PRODUCTION OF 1,1-DIMETHYLHYDRAZINE (UDMH) FROM CARBOXYLIC ACID HYDRAZIDES.

Waste code: K109
Waste name: SPENT FILTER CARTRIDGES FROM PRODUCT PURIFICATION FROM THE PRODUCTION OF 1,1-DIMETHYLHYDRAZINE (UDMH) FROM CARBOXYLIC ACID HYDRAZIDES.

Waste code: K110
Waste name: CONDENSED COLUMN OVERHEADS FROM INTERMEDIATE SEPARATION FROM THE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

PRODUCTION OF 1,1-DIMETHYLHYDRAZINE (UDMH) FROM CARBOXYLIC ACID HYDRAZIDES.

Waste code: K111
Waste name: PRODUCT WASHWATERS FROM THE PRODUCTION OF DINITROTOLUENE VIA NITRATION OF TOLUENE

Waste code: K112
Waste name: REACTION BY-PRODUCT WATER FROM THE DRYING COLUMN IN THE PRODUCTION OF TOLUENEDIAMINE VIA HYDROGENATION OF DINITROTOLUENE.

Waste code: K113
Waste name: CONDENSED LIQUID LIGHT ENDS FROM THE PURIFICATION OF TOLUENEDIAMINE IN THE PRODUCTION OF TOLUENEDIAMINE VIA HYDROGENATION OF DINITROTOLUENE.

Waste code: K114
Waste name: VICINALS FROM THE PURIFICATION OF TOLUENEDIAMINE IN THE PRODUCTION OF TOLUENEDIAMINE VIA HYDROGENATION OF DINITROTOLUENE.

Waste code: K115
Waste name: HEAVY ENDS FROM THE PURIFICATION OF TOLUENEDIAMINE IN THE PRODUCTION OF TOLUENEDIAMINE VIA HYDROGENATION OF DINITROTOLUENE.

Waste code: K116
Waste name: ORGANIC CONDENSATE FROM THE SOLVENT RECOVERY COLUMN IN THE PRODUCTION OF TOLUENE DIISOCYANATE VIA PHOSGENATION OF TOLUENEDIAMINE.

Waste code: K117
Waste name: WASTEWATER FROM THE REACTOR VENT GAS SCRUBBER IN THE PRODUCTION OF ETHYLENE DIBROMIDE VIA BROMINATION OF ETHENE.

Waste code: K118
Waste name: SPENT ADSORBENT SOLIDS FROM PURIFICATION OF ETHYLENE DIBROMIDE IN THE PRODUCTION OF ETHYLENE DIBROMIDE VIA BROMINATION OF ETHENE.

Waste code: K123
Waste name: PROCESS WASTEWATER (INCLUDING SUPERNATES, FILTRATES, AND WASHWATERS) FROM THE PRODUCTION OF ETHYLENEBISDITHIOCARBAMIC ACID AND ITS SALT.

Waste code: K124
Waste name: REACTOR VENT SCRUBBER WATER FROM THE PRODUCTION OF ETHYLENEBISDITHIOCARBAMIC ACID AND ITS SALTS.

Waste code: K125
Waste name: FILTRATION, EVAPORATION, AND CENTRIFUGATION SOLIDS FROM THE PRODUCTION OF ETHYLENEBISDITHIOCARBAMIC ACID AND ITS SALTS.

Waste code: K126
Waste name: BAGHOUSE DUST AND FLOOR SWEEPINGS IN MILLING AND PACKAGING OPERATIONS FROM THE PRODUCTION OR FORMULATION OF ETHYLENEBISDITHIOCARBAMIC ACID AND ITS SALTS.

Waste code: K131
Waste name: WASTEWATER FROM THE REACTOR AND SPENT SULFURIC ACID FROM THE ACID DRYER FROM THE PRODUCTION OF METHYL BROMIDE.

Waste code: K132

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste name: SPENT ABSORBENT AND WASTEWATER SEPARATOR SOLIDS FROM THE PRODUCTION OF METHYL BROMIDE.

Waste code: K136
Waste name: STILL BOTTOMS FROM THE PURIFICATION OF ETHYLENE DIBROMIDE IN THE PRODUCTION OF ETHYLENE DIBROMIDE VIA BROMINATION OF ETHENE.

Waste code: K140
Waste name: DESCRIPTION

Waste code: K141
Waste name: Not Defined

Waste code: K142
Waste name: Not Defined

Waste code: K143
Waste name: Not Defined

Waste code: K144
Waste name: Not Defined

Waste code: K145
Waste name: Not Defined

Waste code: K147
Waste name: Not Defined

Waste code: K148
Waste name: Not Defined

Waste code: K149
Waste name: Not Defined

Waste code: K150
Waste name: Not Defined

Waste code: K151
Waste name: Not Defined

Waste code: K156
Waste name: ORGANIC WASTE (INCLUDING HEAVY ENDS, STILL BOTTOMS, LIGHT ENDS, SPENT SOLVENTS, FILTRATES, AND DECAN

Waste code: K157
Waste name: WASTEWATERS (INCLUDING SCRUBBER WATERS, CONDENSER WATERS, WASHWATERS, AND SEPARATION WATERS) FROM TH

Waste code: K158
Waste name: BAG HOUSE DUSTS AND FILTER/SEPARATION SOLIDS FROM THE PRODUCTION OF CARBAMATES AND CARBAMOYL OXIMES.

Waste code: K159
Waste name: ORGANICS FROM THE TREATMENT OF THIOCARBAMATE WASTES.

Waste code: K160
Waste name: SOLIDS (INCLUDING FILTER WASTES, SEPARATION SOLIDS, AND SPENT

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

CATALYSTS) FROM THE PRODUCTION OF THIOCARBAMATES AND SOLIDS FROM THE TREATMENT OF THIOCARBAMATE WASTES.

Waste code: K161
Waste name: PURIFICATION SOLIDS (INCLUDING FILTRATION, EVAPORATION, AND CENTRIFUGATION SOLIDS), BAG HOUSE DUST A

Waste code: K169
Waste name: Crude oil storage tank sediment from petroleum refining operations.

Waste code: K170
Waste name: Clarified slurry oil storage tank sediment and/or in-line filter/separation solids from petroleum refining operations.

Waste code: K171
Waste name: Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media)

Waste code: K172
Waste name: Spent hydro refining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media).

Waste code: K174
Waste name: WASTEWATER TREATMENT SLUDGES FROM THE PRODUCTION OF ETHLYENE DICHLORIDE OR VINYL CHLORIDE

Waste code: K175
Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF VINYL CHLORIDE MONOMER..

Waste code: K176
Waste name: BAGHOUSE FILTERS FROM THE PRODUCTION OF ANTIMONY OXIDE, INCLUDING FILTERS FROM THE PRODUCTION OF INTERMEDIATES (E.G.,ANTIMONY METAL OR CRUDE ANTIMONY OXIDE)

Waste code: K177
Waste name: SLAG FROM THE PRODUCTION OF ANTIMONY OXIDE THAT IS SPECULATIVELY ACCUMULATED OR DISPOSED,INCLUDING SLAG FROM THE PRODUCTION OF INTERMEDIATES (E.G.,ANTIMONY METAL OR CRUDE ANTIMONY OXIDE)

Waste code: K178
Waste name: RESIDUES FROM MANUFACTURING AND MANUFACTURING-SITE STORAGE OF FERRIC CHLORIDE FROM ACIDS FORMED DURING THE PRODUCTION OF TITANIUM DIOXIDE USING THE CHLORIDE-ILMENITE PROCESS.

Waste code: K181
Waste name: Nonwastewaters from the production of dyes and/or pigments.

Waste code: LABP
Waste name: LAB PACK

Waste code: P001
Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: P002
Waste name: ACETAMIDE, N-(AMINOTHIOXOMETHYL)-

Waste code: P003
Waste name: ACROLEIN

Waste code: P004
Waste name: ALDRIN

Waste code: P005
Waste name: ALLYL ALCOHOL

Waste code: P006
Waste name: ALUMINUM PHOSPHIDE (R,T)

Waste code: P007
Waste name: 5-(AMINOMETHYL)-3-ISOXAZOLOL

Waste code: P008
Waste name: 4-AMINOPYRIDINE

Waste code: P009
Waste name: AMMONIUM PICRATE (R)

Waste code: P010
Waste name: ARSENIC ACID H3ASO4

Waste code: P011
Waste name: ARSENIC OXIDE AS2O3

Waste code: P012
Waste name: ARSENIC OXIDE AS2O3

Waste code: P013
Waste name: BARIUM CYANIDE

Waste code: P014
Waste name: BENZENETHIOL

Waste code: P015
Waste name: BERYLLIUM

Waste code: P016
Waste name: DICHLOROMETHYL ETHER

Waste code: P017
Waste name: BROMOACETONE

Waste code: P018
Waste name: BRUCINE

Waste code: P020
Waste name: DINOSEB

Waste code: P021
Waste name: CALCIUM CYANIDE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: P022
Waste name: CARBON DISULFIDE

Waste code: P023
Waste name: ACETALDEHYDE, CHLORO-

Waste code: P024
Waste name: BENZENAMINE, 4-CHLORO-

Waste code: P026
Waste name: 1-(O-CHLOROPHENYL)THIOUREA

Waste code: P027
Waste name: 3-CHLOROPROPIONITRILE

Waste code: P028
Waste name: BENZENE, (CHLOROMETHYL)-

Waste code: P029
Waste name: COPPER CYANIDE

Waste code: P030
Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Waste code: P031
Waste name: CYANOGEN

Waste code: P033
Waste name: CYANOGEN CHLORIDE

Waste code: P034
Waste name: 2-CYCLOHEXYL-4,6-DINITROPHENOL

Waste code: P036
Waste name: ARSONOUS DICHLORIDE, PHENYL-

Waste code: P037
Waste name: DIELDRIN

Waste code: P038
Waste name: ARSINE, DIETHYL-

Waste code: P039
Waste name: DISULFOTON

Waste code: P040
Waste name: O,O-DIETHY: O-PYRAZINYL PHOSPHOROTHIOATE

Waste code: P041
Waste name: DIETHYL-P-NITROPHENYL PHOSPHATE

Waste code: P042
Waste name: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)-

Waste code: P043
Waste name: DIISOPROPYTFLUOROPHOSPHATE (DFP)

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: P044
Waste name: DIMETHOATE

Waste code: P045
Waste name: 2-BUTANONE, 3,3-DIMETHYL-1-(METHYLTHIO)-, O-[METHYLAMINO)CARBONYL] OXIME

Waste code: P046
Waste name: BENZENEETHANAMINE, ALPHA,ALPHA-DIMETHYL-

Waste code: P047
Waste name: 4,6-DINITRO-O-CRESOL, & SALTS

Waste code: P048
Waste name: 2,4-DINITROPHENOL

Waste code: P049
Waste name: DITHIOBIURET

Waste code: P050
Waste name: ENDOSULFAN

Waste code: P051
Waste name: 2,7:3,6-DIMETHANONAPHTH [2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA,2BETA,2ABETA,3ALPHA,6ALPHA,6ABETA,7BETA, 7AALPHA)-, & METABOLITES

Waste code: P054
Waste name: AZIRIDINE

Waste code: P056
Waste name: FLUORINE

Waste code: P057
Waste name: ACETAMIDE, 2-FLUORO-

Waste code: P058
Waste name: ACETIC ACID, FLUORO-, SODIUM SALT

Waste code: P059
Waste name: HEPTACHLOR

Waste code: P060
Waste name: 1,4,5,8-DIMETHANONAPHTHALENE, 1,2,3,4,10,10-HEXA-CHLORO-1,4,4A,5,8,8A-HEXAHYDRO-, (1ALPHA,4ALPHA,4ABETA,5BETA,8BETA,8ABETA)-

Waste code: P062
Waste name: HEXAETHYL TETRAPHOSPHATE

Waste code: P063
Waste name: HYDROCYANIC ACID

Waste code: P064
Waste name: METHANE, ISOCYANATO-

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: P065
Waste name: FULMINIC ACID, MERCURY(2+) SALT (R,T)

Waste code: P066
Waste name: ETHANIMIDOTHIOIC ACID, N-[[(METHYLAMINO)CARBONYL]OXY]-, METHYL ESTER

Waste code: P067
Waste name: AZIRIDINE, 2-METHYL-

Waste code: P068
Waste name: HYDRAZINE, METHYL-

Waste code: P069
Waste name: 2-METHYLLACTONITRILE

Waste code: P070
Waste name: ALDICARB

Waste code: P071
Waste name: METHYL PARATHION

Waste code: P072
Waste name: ALPHA-NAPHTHYLTHIOUREA

Waste code: P073
Waste name: NICKEL CARBONYL

Waste code: P074
Waste name: NICKEL CYANIDE

Waste code: P075
Waste name: NICOTINE, & SALTS

Waste code: P076
Waste name: NITRIC OXIDE

Waste code: P077
Waste name: BENZENAMINE, 4-NITRO-

Waste code: P078
Waste name: NITROGEN DIOXIDE

Waste code: P081
Waste name: NITROGLYCERINE (R)

Waste code: P082
Waste name: METHANAMINE, N-METHYL-N-NITROSO-

Waste code: P084
Waste name: N-NITROSOMETHYLVINYLAMINE

Waste code: P085
Waste name: DIPHOSPHORAMIDE, OCTAMETHYL-

Waste code: P087
Waste name: OSMIUM OXIDE OSO4, (T-4)-

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: P088
Waste name: ENDOTHALL

Waste code: P089
Waste name: PARATHION

Waste code: P092
Waste name: MERCURY, (ACETATO-O)PHENYL-

Waste code: P093
Waste name: PHENYLTHIOUREA

Waste code: P094
Waste name: PHORATE

Waste code: P095
Waste name: CARBONIC DICHLORIDE

Waste code: P096
Waste name: HYDROGEN PHOSPHIDE

Waste code: P097
Waste name: FAMPHUR

Waste code: P098
Waste name: POTASSIUM CYANIDE

Waste code: P099
Waste name: ARGENTATE(1-), BIS(CYANO-C)-, POTASSIUM

Waste code: P101
Waste name: ETHYL CYANIDE

Waste code: P102
Waste name: PROPARGYL ALCOHOL

Waste code: P103
Waste name: SELENOUREA

Waste code: P104
Waste name: SILVER CYANIDE

Waste code: P105
Waste name: SODIUM AZIDE

Waste code: P106
Waste name: SODIUM CYANIDE

Waste code: P107
Waste name: Not Defined

Waste code: P108
Waste name: STRYCHNIDIN-10-ONE, & SALTS

Waste code: P109
Waste name: TETRAETHYLDITHIOPYROPHOSPHATE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: P110
Waste name: PLUMBANE, TETRAETHYL-

Waste code: P111
Waste name: DIPHOSPHORIC ACID, TETRAETHYL ESTER

Waste code: P112
Waste name: METHANE, TETRANITRO- (R)

Waste code: P113
Waste name: THALLIC OXIDE

Waste code: P114
Waste name: SELENIOUS ACID, DITHALLIUM(1+) SALT

Waste code: P115
Waste name: SULFURIC ACID, DITHALLIUM(1+) SALT

Waste code: P116
Waste name: HYDRAZINECARBOTHIOAMIDE

Waste code: P118
Waste name: METHANETHIOL, TRICHLORO-

Waste code: P119
Waste name: AMMONIUM VANADATE

Waste code: P120
Waste name: VANADIUM OXIDE V2O5

Waste code: P121
Waste name: ZINC CYANIDE

Waste code: P122
Waste name: ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 10% (R,T)

Waste code: P123
Waste name: TOXAPHENE

Waste code: P127
Waste name: 7-BENZOFURANOL, 2,3-DIHYDRO-2,2-DIMETHYL-, METHYLCARBAMATE (OR) CARBOFURAN

Waste code: P128
Waste name: PHENOL, 4-(DIMETHYLAMINO)-3,5-DIMETHYL-, METHYLCARBAMATE (ESTER)

Waste code: P185
Waste name: 1,3-DITHIOLANE-2-CARBOXALDEHYDE, 2,4-DIMETHYL-, O-[(METHYLAMINO)-CARBONYL]OXIME (OR) TIRPATE

Waste code: P188
Waste name: BENZOIC ACID, 2-HYDROXY-, COMPD. WITH (3AS-CIS)-1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYLPYRROLO[2,3-

Waste code: P189
Waste name: CARBAMIC ACID, [(DIBUTYLAMINO)-THIO]METHYL-, 2,3-DIHYDRO-2,2-DIMETHYL

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

-7-BENZOFURANYL ESTER (OR) CAR

Waste code: P190
Waste name: CARBAMIC ACID, METHYL-, 3-METHYLPHENYL ESTER (OR) METOLCARB

Waste code: P191
Waste name: CARBAMIC ACID, DIMETHYL-, 1-[(DIMETHYL-AMINO)CARBONYL]- 5-METHYL-1H-PYRAZOL-3-YL ESTER (OR) DIMETIL

Waste code: P192
Waste name: ISOLAN (OR) CARBAMIC ACID, DIMETHYL-, 3-METHY-L-(1-METHYLETHYL)-1H-PYRAZOL-5-YL ESTER

Waste code: P194
Waste name: ETHANIMIDOTHIOC ACID, 2-(DIMETHYLAMINO)-N-[[(METHYLAMINO) CARBONYL]OXY]-2-OXO-, METHYL ESTER (OR) OX

Waste code: P196
Waste name: MANGANESE DIMETHYLDITHIOCARBAMATE (OR) MANGANESE, BIS(DIMETHYLCARBAMODITHIOATO-S,S')-,

Waste code: P197
Waste name: FORMPARANATE (OR) METHANIMIDAMIDE, N,N-DIMETHYL-N'-[2-METHYL-4-[[(METHYLAMINO)CARBONYL]OXY]PHENYL]

Waste code: P198
Waste name: METHANIMIDAMIDE, N,N-DIMETHYL-N'-[3-[[(METHYLAMINO)-CARBONYL]OXY]PHENYL]-, MONOHYDROCHLORIDE (OR) FO

Waste code: P199
Waste name: METHIOCARB (OR) MEXACARBATE (OR) PHENOL, (3,5-DIMETHYL-4-(METHYLTHIO)-, METHYLCARBAMATE

Waste code: P201
Waste name: PHENOL, 3-METHYL-5-(1-METHYLETHYL)-, METHYL CARBAMATE (OR) PROMECARB

Waste code: P202
Waste name: M-CUMENYL METHYLCARBAMATE (OR) 3-ISOPROPYLPHENYL N-METHYLCARBAMATE (OR) PHENOL, 3-(1-METHYLETHYL)-,

Waste code: P203
Waste name: ALDICARB SULFONE (OR) PROPANAL, 2-METHYL-2-(METHYL-SULFONYL)-, O-[(METHYLAMINO)CARBONYL] OXIME

Waste code: P204
Waste name: PHYSOSTIGMINE (OR) PYRROLO[2,3-B]INDOL-5-OL, 1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYL-METHYLCARBAMAT

Waste code: P205
Waste name: ZINC, BIS(DIMETHYLCARBAMODITHIOATO-S,S')-, (OR) ZIRAM

Waste code: U001
Waste name: ACETALDEHYDE (I)

Waste code: U002
Waste name: ACETONE (I)

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U003
Waste name: ACETONITRILE (I,T)

Waste code: U004
Waste name: ACETOPHENONE

Waste code: U005
Waste name: ACETAMIDE, N-9H-FLUOREN-2-YL-

Waste code: U006
Waste name: ACETYL CHLORIDE (C,R,T)

Waste code: U007
Waste name: ACRYLAMIDE

Waste code: U008
Waste name: ACRYLIC ACID (I)

Waste code: U009
Waste name: ACRYLONITRILE

Waste code: U010
Waste name: AZIRINO[2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[(AMINOCARBONYL)OXY]METHYL]- 1,1A,2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA,8AALPHA,8BALPHA)]-

Waste code: U011
Waste name: AMITROLE

Waste code: U012
Waste name: ANILINE (I,T)

Waste code: U014
Waste name: AURAMINE

Waste code: U015
Waste name: AZASERINE

Waste code: U016
Waste name: BENZ[C]ACRIDINE

Waste code: U017
Waste name: BENZAL CHLORIDE

Waste code: U018
Waste name: BENZ[A]ANTHRACENE

Waste code: U019
Waste name: BENZENE (I,T)

Waste code: U020
Waste name: BENZENESULFONIC ACID CHLORIDE (C,R)

Waste code: U021
Waste name: BENZIDINE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U022
Waste name: BENZO[A]PYRENE

Waste code: U023
Waste name: BENZENE, (TRICHLOROMETHYL)-

Waste code: U024
Waste name: DICHLOROMETHOXY ETHANE

Waste code: U025
Waste name: DICHLOROETHYL ETHER

Waste code: U026
Waste name: CHLORNAPHAZIN

Waste code: U027
Waste name: DICHLOROISOPROPYL ETHER

Waste code: U028
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER

Waste code: U029
Waste name: METHANE, BROMO-

Waste code: U030
Waste name: BENZENE, 1-BROMO-4-PHENOXY-

Waste code: U031
Waste name: 1-BUTANOL (I)

Waste code: U032
Waste name: CALCIUM CHROMATE

Waste code: U033
Waste name: CARBONIC DIFLUORIDE

Waste code: U034
Waste name: ACETALDEHYDE, TRICHLORO-

Waste code: U035
Waste name: BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]-

Waste code: U036
Waste name: CHLORDANE, ALPHA & GAMMA ISOMERS

Waste code: U037
Waste name: BENZENE, CHLORO-

Waste code: U038
Waste name: BENZENEACETIC ACID, 4-CHLORO-ALPHA-(4-CHLOROPHENYL)-ALPHA-HYDROXY-, ETHYL ESTER

Waste code: U039
Waste name: P-CHLORO-M-CRESOL

Waste code: U041
Waste name: EPICHLOROHYDRIN

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U042
Waste name: 2-CHLOROETHYL VINYL ETHER

Waste code: U043
Waste name: ETHENE, CHLORO-

Waste code: U044
Waste name: CHLOROFORM

Waste code: U045
Waste name: METHANE, CHLORO- (I, T)

Waste code: U046
Waste name: CHLOROMETHYL METHYL ETHER

Waste code: U047
Waste name: BETA-CHLORONAPHTHALENE

Waste code: U048
Waste name: O-CHLOROPHENOL

Waste code: U049
Waste name: BENZENAMINE, 4-CHLORO-2-METHYL-, HYDROCHLORIDE

Waste code: U050
Waste name: CHRYSENE

Waste code: U051
Waste name: CREOSOTE

Waste code: U052
Waste name: CRESOL (CRESYLIC ACID)

Waste code: U053
Waste name: 2-BUTENAL

Waste code: U055
Waste name: BENZENE, (1-METHYLETHYL)- (I)

Waste code: U056
Waste name: BENZENE, HEXAHYDRO- (I)

Waste code: U057
Waste name: CYCLOHEXANONE (I)

Waste code: U058
Waste name: CYCLOPHOSPHAMIDE

Waste code: U059
Waste name: DAUNOMYCIN

Waste code: U060
Waste name: BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO-

Waste code: U061
Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO-

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U062
Waste name: CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3-DICHLORO-2-PROPENYL) ESTER

Waste code: U063
Waste name: DIBENZ[A,H]ANTHRACENE

Waste code: U064
Waste name: BENZO[RST]PENTAPHENE

Waste code: U066
Waste name: 1,2-DIBROMO-3-CHLOROPROPANE

Waste code: U067
Waste name: ETHANE, 1,2-DIBROMO-

Waste code: U068
Waste name: METHANE, DIBROMO-

Waste code: U069
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER

Waste code: U070
Waste name: BENZENE, 1,2-DICHLORO-

Waste code: U071
Waste name: BENZENE, 1,3-DICHLORO-

Waste code: U072
Waste name: BENZENE, 1,4-DICHLORO-

Waste code: U073
Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO-

Waste code: U074
Waste name: 2-BUTENE, 1,4-DICHLORO- (I,T)

Waste code: U075
Waste name: DICHLORODIFLUOROMETHANE

Waste code: U076
Waste name: ETHANE, 1,1-DICHLORO-

Waste code: U077
Waste name: ETHANE, 1,2-DICHLORO-

Waste code: U078
Waste name: 1,1-DICHLOROETHYLENE

Waste code: U079
Waste name: 1,2-DICHLOROETHYLENE

Waste code: U080
Waste name: METHANE, DICHLORO-

Waste code: U081
Waste name: 2,4-DICHLOROPHENOL

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U082
Waste name: 2,6-DICHLOROPHENOL

Waste code: U083
Waste name: PROPANE, 1,2-DICHLORO-

Waste code: U084
Waste name: 1,3-DICHLOROPROPENE

Waste code: U085
Waste name: 2,2'-BIOXIRANE

Waste code: U086
Waste name: N,N'-DIETHYLHYDRAZINE

Waste code: U087
Waste name: O,O-DIETHYL S-METHYL DITHIOPHOSPHATE

Waste code: U088
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER

Waste code: U089
Waste name: DIETHYLSTILBESTEROL

Waste code: U090
Waste name: 1,3-BENZODIOXOLE, 5-PROPYL-

Waste code: U091
Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHOXY-

Waste code: U092
Waste name: DIMETHYLAMINE (I)

Waste code: U093
Waste name: BENZENAMINE, N,N-DIMETHYL-4-(PHENYLAZO)-

Waste code: U094
Waste name: BENZ[A]ANTHRACENE, 7,12-DIMETHYL-

Waste code: U095
Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHYL-

Waste code: U096
Waste name: ALPHA,ALPHA-DIMETHYLBENZYLHYDROPEROXIDE (R)

Waste code: U097
Waste name: CARBAMIC CHLORIDE, DIMETHYL-

Waste code: U098
Waste name: 1,1-DIMETHYLHYDRAZINE

Waste code: U099
Waste name: 1,2-DIMETHYLHYDRAZINE

Waste code: U101
Waste name: 2,4-DIMETHYLPHENOL

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U102
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER

Waste code: U103
Waste name: DIMETHYL SULFATE

Waste code: U105
Waste name: BENZENE, 1-METHYL-2,4-DINITRO-

Waste code: U106
Waste name: BENZENE, 2-METHYL-1,3-DINITRO-

Waste code: U107
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER

Waste code: U108
Waste name: 1,4-DIETHYLENEOXIDE

Waste code: U109
Waste name: 1,2-DIPHENYLHYDRAZINE

Waste code: U110
Waste name: DIPROPYLAMINE (I)

Waste code: U111
Waste name: DI-N-PROPYLNITROSAMINE

Waste code: U112
Waste name: ACETIC ACID ETHYL ESTER (I)

Waste code: U113
Waste name: ETHYL ACRYLATE (I)

Waste code: U114
Waste name: CARBAMODITHIOIC ACID, 1,2-ETHANEDIYLBIS-, SALTS & ESTERS

Waste code: U115
Waste name: ETHYLENE OXIDE (I,T)

Waste code: U116
Waste name: ETHYLENETHIOUREA

Waste code: U117
Waste name: ETHANE, 1,1'-OXYBIS-(I)

Waste code: U118
Waste name: ETHYL METHACRYLATE

Waste code: U119
Waste name: ETHYL METHANESULFONATE

Waste code: U120
Waste name: FLUORANTHENE

Waste code: U121
Waste name: METHANE, TRICHLOROFLUORO-

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U122
Waste name: FORMALDEHYDE

Waste code: U123
Waste name: FORMIC ACID (C,T)

Waste code: U124
Waste name: FURAN (I)

Waste code: U125
Waste name: 2-FURANCARBOXALDEHYDE (I)

Waste code: U126
Waste name: GLYCIDYLALDEHYDE

Waste code: U127
Waste name: BENZENE, HEXACHLORO-

Waste code: U128
Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO-

Waste code: U129
Waste name: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA,2ALPHA,3BETA,4ALPHA,5ALPHA,6BETA)-

Waste code: U130
Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO-

Waste code: U131
Waste name: ETHANE, HEXACHLORO-

Waste code: U132
Waste name: HEXACHLOROPHENE

Waste code: U133
Waste name: HYDRAZINE (R,T)

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)

Waste code: U135
Waste name: HYDROGEN SULFIDE

Waste code: U136
Waste name: ARSINIC ACID, DIMETHYL-

Waste code: U137
Waste name: INDENO[1,2,3-CD]PYRENE

Waste code: U138
Waste name: METHANE, IODO-

Waste code: U140
Waste name: ISOBUTYL ALCOHOL (I,T)

Waste code: U141
Waste name: 1,3-BENZODIOXOLE, 5-(1-PROPENYL)-

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U142
Waste name: KEPONE

Waste code: U143
Waste name: 2-BUTENOIC ACID, 2-METHYL-, 7-[[2,3-DIHYDROXY-2-(1-METHOXYETHYL)-3-METHYL-1-OXOBUTOXY]METHYL]-2,3,5,7A-TETRAHYDRO-1H-PYRROLIZIN-1-YL ESTER, [1S-[1ALPHA(Z),7(2S*,3R*),7AALPHA]]-

Waste code: U144
Waste name: ACETIC ACID, LEAD(2+) SALT

Waste code: U145
Waste name: LEAD PHOSPHATE

Waste code: U146
Waste name: LEAD, BIS(ACETATO-O)TETRAHYDROXYTRI-

Waste code: U147
Waste name: 2,5-FURANDIONE

Waste code: U148
Waste name: MALEIC HYDRAZIDE

Waste code: U149
Waste name: MALONONITRILE

Waste code: U150
Waste name: MELPHALAN

Waste code: U151
Waste name: MERCURY

Waste code: U152
Waste name: METHACRYLONITRILE (I, T)

Waste code: U153
Waste name: METHANETHIOL (I, T)

Waste code: U154
Waste name: METHANOL (I)

Waste code: U155
Waste name: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)-

Waste code: U156
Waste name: CARBONOCHLORIDIC ACID, METHYL ESTER (I,T)

Waste code: U157
Waste name: BENZ[J]ACEANTHRYLENE, 1,2-DIHYDRO-3-METHYL-

Waste code: U158
Waste name: BENZENAMINE, 4,4'-METHYLENEBIS[2-CHLORO-

Waste code: U159
Waste name: 2-BUTANONE (I,T)

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U160
Waste name: 2-BUTANONE, PEROXIDE (R,T)

Waste code: U161
Waste name: METHYL ISOBUTYL KETONE (I)

Waste code: U162
Waste name: METHYL METHACRYLATE (I,T)

Waste code: U163
Waste name: GUANIDINE, N-METHYL-N'-NITRO-N-NITROSO-

Waste code: U164
Waste name: METHYLTHIOURACIL

Waste code: U165
Waste name: NAPHTHALENE

Waste code: U166
Waste name: 1,4-NAPHTHALENEDIONE

Waste code: U167
Waste name: 1-NAPHTHALENAMINE

Waste code: U168
Waste name: 2-NAPHTHALENAMINE

Waste code: U169
Waste name: BENZENE, NITRO-

Waste code: U170
Waste name: P-NITROPHENOL

Waste code: U171
Waste name: 2-NITROPROPANE (I,T)

Waste code: U172
Waste name: 1-BUTANAMINE, N-BUTYL-N-NITROSO-

Waste code: U173
Waste name: ETHANOL, 2,2'-(NITROSOIMINO)BIS-

Waste code: U174
Waste name: ETHANAMINE, N-ETHYL-N-NITROSO-

Waste code: U176
Waste name: N-NITROSO-N-ETHYLUREA

Waste code: U177
Waste name: N-NITROSO-N-METHYLUREA

Waste code: U178
Waste name: CARBAMIC ACID, METHYLNITROSO-, ETHYL ESTER

Waste code: U179
Waste name: N-NITROSOPIPERIDINE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U180
Waste name: N-NITROSOPYRROLIDINE

Waste code: U181
Waste name: BENZENAMINE, 2-METHYL-5-NITRO-

Waste code: U182
Waste name: PARALDEHYDE

Waste code: U183
Waste name: BENZENE, PENTACHLORO-

Waste code: U184
Waste name: ETHANE, PENTACHLORO-

Waste code: U185
Waste name: BENZENE, PENTACHLORONITRO-

Waste code: U186
Waste name: 1-METHYLBUTADIENE (I)

Waste code: U187
Waste name: ACETAMIDE, N-(4-ETHOXYPHENYL)-

Waste code: U188
Waste name: PHENOL

Waste code: U189
Waste name: PHOSPHORUS SULFIDE (R)

Waste code: U190
Waste name: 1,3-ISOBENZOFURANDIONE

Waste code: U191
Waste name: 2-PICOLINE

Waste code: U192
Waste name: BENZAMIDE, 3,5-DICHLORO-N-(1,1-DIMETHYL-2-PROPYNYL)-

Waste code: U193
Waste name: 1,2-OXATHIOLANE, 2,2-DIOXIDE

Waste code: U194
Waste name: 1-PROPANAMINE (I,T)

Waste code: U196
Waste name: PYRIDINE

Waste code: U197
Waste name: P-BENZOQUINONE

Waste code: U200
Waste name: RESERPINE

Waste code: U201
Waste name: 1,3-BENZENEDIOL

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U202
Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS

Waste code: U203
Waste name: 1,3-BENZODIOXOLE, 5-(2-PROPENYL)-

Waste code: U204
Waste name: SELENIOUS ACID

Waste code: U205
Waste name: SELENIUM SULFIDE

Waste code: U206
Waste name: GLUCOPYRANOSE, 2-DEOXY-2-(3-METHYL-3-NITROSOUREIDO)-, D-

Waste code: U207
Waste name: BENZENE, 1,2,4,5-TETRACHLORO-

Waste code: U208
Waste name: ETHANE, 1,1,1,2-TETRACHLORO-

Waste code: U209
Waste name: ETHANE, 1,1,2,2-TETRACHLORO-

Waste code: U210
Waste name: ETHENE, TETRACHLORO-

Waste code: U211
Waste name: CARBON TETRACHLORIDE

Waste code: U213
Waste name: FURAN, TETRAHYDRO-(I)

Waste code: U214
Waste name: ACETIC ACID, THALLIUM(1+) SALT

Waste code: U215
Waste name: CARBONIC ACID, DITHALLIUM(1+) SALT

Waste code: U216
Waste name: THALLIUM(I) CHLORIDE

Waste code: U217
Waste name: NITRIC ACID, THALLIUM(1+) SALT

Waste code: U218
Waste name: ETHANETHIOAMIDE

Waste code: U219
Waste name: THIOUREA

Waste code: U220
Waste name: BENZENE, METHYL-

Waste code: U221
Waste name: BENZENEDIAMINE, AR-METHYL-

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U222
Waste name: BENZENAMINE, 2-METHYL-, HYDROCHLORIDE

Waste code: U223
Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Waste code: U225
Waste name: BROMOFORM

Waste code: U226
Waste name: ETHANE, 1,1,1-TRICHLORO-

Waste code: U227
Waste name: ETHANE, 1,1,2-TRICHLORO-

Waste code: U228
Waste name: ETHENE, TRICHLORO-

Waste code: U234
Waste name: BENZENE, 1,3,5-TRINITRO-

Waste code: U235
Waste name: 1-PROPANOL, 2,3-DIBROMO-, PHOSPHATE (3:1)

Waste code: U236
Waste name: 2,7-NAPHTHALENEDISULFONIC ACID, 3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)BIS[5-AMINO-4-HYDROXY]-, TETRASODIUM SALT

Waste code: U237
Waste name: 2,4-(1H,3H)-PYRIMIDINEDIONE, 5-[BIS(2-CHLOROETHYL)AMINO]-

Waste code: U238
Waste name: CARBAMIC ACID, ETHYL ESTER

Waste code: U239
Waste name: BENZENE, DIMETHYL- (I,T)

Waste code: U240
Waste name: ACETIC ACID, (2,4-DICHLOROPHENOXY)-, SALTS & ESTERS

Waste code: U243
Waste name: HEXACHLOROPROPENE

Waste code: U244
Waste name: THIOPEROXYDICARBONIC DIAMIDE [(H2N)C(S)]2S2, TETRAMETHYL-

Waste code: U246
Waste name: CYANOGEN BROMIDE (CN)BR

Waste code: U247
Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4- METHOXY-

Waste code: U248
Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYL-BUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS OF 0.3% OR LESS

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U249
Waste name: ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS OF 10% OR LESS

Waste code: U271
Waste name: BENOMYL (OR) CARBAMIC ACID, [1-[(BUTYLAMINO)CARBONYL]-1H-BENZIMIDAZOL-2-YL]-, METHYL ESTER

Waste code: U277
Waste name: SULFALLATE (OR) CARBAMODITHIOIC ACID, DIETHYL-, 2-CHLORO-2-PROPENYL ESTER

Waste code: U278
Waste name: BENDIOCARB (OR) 1,3-BENZODIOXOL-4-OL, 2,2-DIMETHYL-, METHYL CARBAMATE

Waste code: U279
Waste name: CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE

Waste code: U280
Waste name: BARBAN (OR) CARBAMIC ACID, (3-CHLOROPHENYL)-, 4-CHLORO-2-BUTYNYL ESTER

Waste code: U328
Waste name: BENZENAMINE, 2-METHYL-

Waste code: U353
Waste name: BENZENAMINE, 4-METHYL-

Waste code: U359
Waste name: ETHANOL, 2-ETHOXY-

Waste code: U364
Waste name: BENDIOCARB PHENOL (OR) 1,3-BENZODIOXOL-4-OL, 2,2-DIMETHYL-

Waste code: U365
Waste name: H-AZEPINE-1-CARBOTHIOIC ACID, HEXAHYDRO-, S-ETHYL ESTER (OR) MOLINATE

Waste code: U366
Waste name: DAZOMET (OR) 2H-1,3,5-THIADIAZINE- 2-THIONE, TETRAHYDRO-3,5-DIMETHYL-

Waste code: U367
Waste name: 7-BENZOFURANOL, 2,3-DIHYDRO-2,2-DIMETHYL- (OR) CARBOFURAN PHENOL

Waste code: U372
Waste name: CARBAMIC ACID, 1H-BENZIMIDAZOL-2-YL, METHYL ESTER (OR) CARBENDAZIM

Waste code: U373
Waste name: CARBAMIC ACID, PHENYL-, 1-METHYLETHYL ESTER (OR) PROPHAM

Waste code: U375
Waste name: CARBAMIC ACID, BUTYL-, 3-IODO-2-PROPYNYL ESTER (OR) 3-IODO-2-PROPYNYL N-BUTYLCARBAMATE

Waste code: U376
Waste name: CARBAMODITHIOIC ACID, DIMETHYL-, TETRAANHYDROSULFIDE WITH ORTHOTHIOSETENIOUS ACID (OR) SELENIUM, TETRAKIS (DIMETHYLDITHIOCARBAMATE)

Waste code: U377

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste name: CARBAMODITHIOIC ACID, METHYL-, MONOPOTASSIUM SALT (OR) POTASSIUM N-METHYLDITHIOCARBAMATE

Waste code: U378
Waste name: CARBAMODITHIOIC ACID, (HYDROXYMETHYL) METHYL-, MONOPOTASSIUM SALT (OR) POTASSIUM N-HYDROXYMETHYL- N-METHYLDI-THIOCARBAMATE

Waste code: U379
Waste name: SODIUM DIBUTYLDITHIOCARBAMATE (OR) CARBAMODITHIOIC ACID, DIBUTYL, SODIUM SALT

Waste code: U381
Waste name: CARBAMODITHIOIC ACID, DIETHYL-, SODIUM SALT (OR) SODIUM DIETHYLDITHIOCARBAMATE

Waste code: U382
Waste name: CARBAMODITHIOIC ACID, DIMETHYL-, SODIUM SALT (OR) SODIUM DIMETHYLDITHIOCARBAMATE

Waste code: U383
Waste name: CARBAMODITHIOIC ACID, DIMETHYL, POTASSIUM SALT (OR) POTASSIUM DIMETHYLDITHIOCARBAMATE

Waste code: U384
Waste name: CARBAMODITHIOIC ACID, METHYL-, MONOSODIUM SALT (OR) METAM SODIUM

Waste code: U385
Waste name: CARBAMOTHIOIC ACID, DIPROPYL-, S-PROPYL ESTER

Waste code: U386
Waste name: CARBAMOTHIOIC ACID, CYCLOHEXYLETHYL-, S-ETHYL ESTER (OR) CYCLOATE

Waste code: U387
Waste name: CARBAMOTHIOIC ACID, DIPROPYL-, S-(PHENYLMETHYL) ESTER (OR) PROSULFOCARB

Waste code: U389
Waste name: CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3,3-TRICHLORO-2-PROPENYL) ESTER (OR) TRIALLATE

Waste code: U390
Waste name: CARBAMOTHIOIC ACID, DIPROPYL-, S-ETHYL ESTER (OR) EPTC

Waste code: U391
Waste name: CARBAMOTHIOIC ACID, BUTYLETHYL-, S-PROPYL ESTER (OR) PEBULATE

Waste code: U392
Waste name: BUTYLATE (OR) CARBAMOTHIOIC ACID, BIS(2-METHYLPROPYL)-, S-ETHYL ESTER

Waste code: U393
Waste name: COPPER, BIS(DIMETHYLCARBAMODITHIOATO-S,S')- (OR) COPPER DIMETHYLDITHIOCARBAMATE

Waste code: U394
Waste name: A2213 (OR) ETHANIMIDOTHIOIC ACID, 2-(DIMETHYLAMINO)-N-HYDROXY-2-OXO-, METHYL ESTER

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U395
Waste name: DIETHYLENE GLYCOL, DICARBAMATE (OR) ETHANOL, 2,2'-OXYBIS-, DICARBAMATE

Waste code: U396
Waste name: FERBAM (OR) IRON, TRIS(DIMETHYLCARBAMODITHIOATO-S,S')-,

Waste code: U400
Waste name: BIS(PENTAMETHYLENE)THIURAM TETRASULFIDE (OR) PIPERIDINE, 1,1'-(TETRATHIODICARBONOTHIOYL)-BIS-

Waste code: U401
Waste name: BIS(DIMETHYLTHIOCARBAMOYL) SULFIDE (OR) TETRAMETHYLTHIURAM MONOSULFIDE

Waste code: U402
Waste name: TETRABUTYLTHIURAM DISULFIDE (OR) THIOPEROXYDICARBONIC DIAMIDE, TETRABUTYL

Waste code: U403
Waste name: DISULFIRAM (OR) THIOPEROXYDICARBONIC DIAMIDE, TETRAETHYL

Waste code: U404
Waste name: ETHANAMINE, N,N-DIETHYL- (OR) TRIETHYLAMINE

Waste code: U407
Waste name: ETHYL ZIRAM

Waste code: U408
Waste name: DESCRIPTION

Waste code: U409
Waste name: CARBAMIC ACID, [1,2-PHENYLENEBIS (IMINOCARBONOTHIOYL)]BIS-, DIMETHYL ESTER (OR) THIOPHANATE-METHYL

Waste code: U410
Waste name: ETHANIMIDOTHIOIC ACID, N,N'-[THIOBIS[(METHYLIMINO)CARBONYLOXY]]BIS-, DIMETHYL ESTER (OR) THIODICARB

Waste code: U411
Waste name: PHENOL, 2-(1-METHYLETHOXY)-, METHYLCARBAMATE (OR) PROPOXUR

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 40444056.9

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Amount (Lbs): 1901168.6

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 124044.2

Waste code: D005
Waste name: BARIUM
Amount (Lbs): 459503.6

Waste code: D006
Waste name: CADMIUM
Amount (Lbs): 684104.3

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 2861519.3

Waste code: D008
Waste name: LEAD
Amount (Lbs): 978353.3

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 79074.7

Waste code: D010
Waste name: SELENIUM
Amount (Lbs): 62818.1

Waste code: D011
Waste name: SILVER
Amount (Lbs): 69616.4

Waste code: D012
Waste name: ENDRIN
Amount (Lbs): 904

Waste code: D015
Waste name: TOXAPHENE
Amount (Lbs): 32

Waste code: D016
Waste name: 2,4-D
Amount (Lbs): 11520.4

Waste code: D018
Waste name: BENZENE
Amount (Lbs): 636654.2

Waste code: D019
Waste name: CARBON TETRACHLORIDE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Amount (Lbs): 792

Waste code: D020
Waste name: CHLORDANE
Amount (Lbs): 18704.6

Waste code: D021
Waste name: CHLOROBENZENE
Amount (Lbs): 24296.8

Waste code: D022
Waste name: CHLOROFORM
Amount (Lbs): 64098.2

Waste code: D025
Waste name: P-CRESOL
Amount (Lbs): 1760.1

Waste code: D026
Waste name: CRESOL
Amount (Lbs): 144

Waste code: D027
Waste name: 1,4-DICHLOROBENZENE
Amount (Lbs): 29690

Waste code: D028
Waste name: 1,2-DICHLOROETHANE
Amount (Lbs): 20688.7

Waste code: D029
Waste name: 1,1-DICHLOROETHYLENE
Amount (Lbs): 51645.8

Waste code: D030
Waste name: 2,4-DINITROTOLUENE
Amount (Lbs): 16

Waste code: D031
Waste name: HEPTACHLOR (AND ITS EPOXIDE).
Amount (Lbs): 16

Waste code: D032
Waste name: HEXACHLOROBENZENE
Amount (Lbs): 16

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 183106.6

Waste code: D038
Waste name: PYRIDINE
Amount (Lbs): 12328.4

Waste code: D039
Waste name: TETRACHLOROETHYLENE
Amount (Lbs): 647283.2

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: D040
Waste name: TRICHLOROETHYLENE
Amount (Lbs): 654900.5

Waste code: D043
Waste name: VINYL CHLORIDE
Amount (Lbs): 4776.2

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 38725104.8

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 38825605.3

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 38912572.6

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 896

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 38849428.5

Waste code: F006
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
Amount (Lbs): 52153.8

Waste code: F007
Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS
Amount (Lbs): 3800.1

Waste code: F008
Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
Amount (Lbs): 5784.2

Waste code: F009
Waste name: SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
Amount (Lbs): 7680.3

Waste code: F019
Waste name: WASTEWATER TREATMENT SLUDGES FROM THE CHEMICAL CONVERSION COATING OF ALUMINUM EXCEPT FROM ZIRCONIUM PHOSPHATING IN ALUMINUM CAN WASHING WHEN SUCH PHOSPHATING IS AN EXCLUSIVE CONVERSION COATING PROCESS.
Amount (Lbs): 14056.5

Waste code: F032
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESSES GENERATED AT PLANTS THAT CURRENTLY USE OR HAVE PREVIOUSLY USED CHLOROPHENOLIC FORMULATIONS (EXCEPT POTENTIALLY CROSS-CONTAMINATED WASTES THAT HAVE HAD THE F032 WASTE CODE DELETED IN ACCORDANCE WITH SECTION 261.35 OF THIS CHAPTER AND WHERE THE GENERATOR DOES NOT RESUME OR INITIATE USE OF CHLOROPHENOLIC FORMULATIONS). THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL. (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE LISTING FOR PLANTS THAT HAVE PREVIOUSLY USED CHLOROPHENOLIC FORMULATIONS IS ADMINISTRATIVELY STAYED WHENEVER THESE WASTES ARE COVERED BY THE F034 OR F035 LISTINGS. THESE STAYS WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.)
Amount (Lbs): 6280.2

Waste code: F035
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESS GENERATED AT PLANTS THAT USE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

INORGANIC PRESERVATIVES CONTAINING ARSENIC OR CHROMIUM. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE STAY WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.).
Amount (Lbs): 2000.1

Waste code: K061
Waste name: EMISSION CONTROL DUST/SLUDGE FROM THE PRIMARY PRODUCTION OF STEEL IN ELECTRIC FURNACES.
Amount (Lbs): 19360.7

Waste code: K088
Waste name: SPENT POTLINERS FROM PRIMARY ALUMINUM REDUCTION
Amount (Lbs): 96

Waste code: K149
Waste name: Not Defined
Amount (Lbs): 90163.1

Waste code: P001
Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
Amount (Lbs): 19584.7

Waste code: P051
Waste name: 2,7:3,6-DIMETHANONAPHTH [2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA,2BETA,2ABETA,3ALPHA,6ALPHA,6ABETA,7BETA, 7AALPHA)-, & METABOLITES
Amount (Lbs): 1568.1

Waste code: P075
Waste name: NICOTINE, & SALTS
Amount (Lbs): 192

Waste code: P120
Waste name: VANADIUM OXIDE V2O5
Amount (Lbs): 8

Waste code: P123
Waste name: TOXAPHENE
Amount (Lbs): 1568.1

Waste code: U001
Waste name: ACETALDEHYDE (I)
Amount (Lbs): 20080.7

Waste code: U002
Waste name: ACETONE (I)
Amount (Lbs): 82162.8

Waste code: U003
Waste name: ACETONITRILE (I,T)
Amount (Lbs): 21808.7

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste code: U007
Waste name: ACRYLAMIDE
Amount (Lbs): 7480.3

Waste code: U008
Waste name: ACRYLIC ACID (I)
Amount (Lbs): 6472.2

Waste code: U009
Waste name: ACRYLONITRILE
Amount (Lbs): 20080.7

Waste code: U012
Waste name: ANILINE (I,T)
Amount (Lbs): 1984.1

Waste code: U019
Waste name: BENZENE (I,T)
Amount (Lbs): 20080.7

Waste code: U028
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER
Amount (Lbs): 920

Waste code: U036
Waste name: CHLORDANE, ALPHA & GAMMA ISOMERS
Amount (Lbs): 1568.1

Waste code: U044
Waste name: CHLOROFORM
Amount (Lbs): 2240.1

Waste code: U051
Waste name: CREOSOTE
Amount (Lbs): 480

Waste code: U061
Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO-
Amount (Lbs): 24

Waste code: U070
Waste name: BENZENE, 1,2-DICHLORO-
Amount (Lbs): 42865.5

Waste code: U078
Waste name: 1,1-DICHLOROETHYLENE
Amount (Lbs): 7480.3

Waste code: U080
Waste name: METHANE, DICHLORO-
Amount (Lbs): 63558.2

Waste code: U113
Waste name: ETHYL ACRYLATE (I)
Amount (Lbs): 7480.3

Waste code: U116

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste name: ETHYLENETHIOUREA
Amount (Lbs): 1984.1

Waste code: U117
Waste name: ETHANE, 1,1'-OXYBIS-(I)
Amount (Lbs): 152

Waste code: U121
Waste name: METHANE, TRICHLOROFLUORO-
Amount (Lbs): 408

Waste code: U122
Waste name: FORMALDEHYDE
Amount (Lbs): 12728.4

Waste code: U123
Waste name: FORMIC ACID (C,T)
Amount (Lbs): 880

Waste code: U131
Waste name: ETHANE, HEXACHLORO-
Amount (Lbs): 240

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)
Amount (Lbs): 1376

Waste code: U144
Waste name: ACETIC ACID, LEAD(2+) SALT
Amount (Lbs): 240

Waste code: U150
Waste name: MELPHALAN
Amount (Lbs): 288

Waste code: U151
Waste name: MERCURY
Amount (Lbs): 192

Waste code: U154
Waste name: METHANOL (I)
Amount (Lbs): 60114

Waste code: U159
Waste name: 2-BUTANONE (I,T)
Amount (Lbs): 344

Waste code: U162
Waste name: METHYL METHACRYLATE (I,T)
Amount (Lbs): 264

Waste code: U188
Waste name: PHENOL
Amount (Lbs): 120

Waste code: U190
Waste name: 1,3-ISOBENZOFURANDIONE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Amount (Lbs): 7328.2

Waste code: U196
Waste name: PYRIDINE
Amount (Lbs): 1248

Waste code: U201
Waste name: 1,3-BENZENEDIOL
Amount (Lbs): 960

Waste code: U202
Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS
Amount (Lbs): 16

Waste code: U210
Waste name: ETHENE, TETRACHLORO-
Amount (Lbs): 54397.8

Waste code: U211
Waste name: CARBON TETRACHLORIDE
Amount (Lbs): 8

Waste code: U213
Waste name: FURAN, TETRAHYDRO-(I)
Amount (Lbs): 1256

Waste code: U219
Waste name: THIOUREA
Amount (Lbs): 1984.1

Waste code: U226
Waste name: ETHANE, 1,1,1-TRICHLORO-
Amount (Lbs): 6100.2

Waste code: U228
Waste name: ETHENE, TRICHLORO-
Amount (Lbs): 11320.4

Waste code: U239
Waste name: BENZENE, DIMETHYL- (I,T)
Amount (Lbs): 2000.1

Waste code: U240
Waste name: ACETIC ACID, (2,4-DICHLOROPHENOXY)-, SALTS & ESTERS
Amount (Lbs): 11384.4

Waste code: U244
Waste name: THIOPEROXYDICARBONIC DIAMIDE [(H2N)C(S)]2S2, TETRAMETHYL-
Amount (Lbs): 1984.1

Waste code: U247
Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4- METHOXY-
Amount (Lbs): 11384.4

Waste code: U248
Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYL-BUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS OF 0.3% OR LESS

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Amount (Lbs): 17176.6

Waste code: U279
Waste name: CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE
Amount (Lbs): 9728.3

Waste code: U328
Waste name: BENZENAMINE, 2-METHYL-
Amount (Lbs): 1984.1

Waste code: U353
Waste name: BENZENAMINE, 4-METHYL-
Amount (Lbs): 288

Waste code: U411
Waste name: PHENOL, 2-(1-METHYLETHOXY)-, METHYLCARBAMATE (OR) PROPOXUR
Amount (Lbs): 10088.3

Corrective Action Summary:

Event date: 09/26/1991
Event: RFA Completed

Event date: 09/26/1991
Event: RFA Determination Of Need For An RFI, RFI is Necessary;

Event date: 09/29/1993
Event: RFI Imposition

Event date: 09/30/1993
Event: CA Prioritization, Facility or area was assigned a medium corrective action priority.

Event date: 08/30/1994
Event: Stabilization Measures Evaluation,This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.

Event date: 08/30/1994
Event: RFI Workplan Approved

Event date: 08/17/1995
Event: RFI Supplemental Information Deemed Satisfactory

Event date: 02/21/1996
Event: RFI Supplemental Information Deemed Satisfactory

Event date: Not reported
Event: RFI Workplan Received

Facility Has Received Notices of Violations:

Regulation violated: FR - 725.273a

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Area of violation: TSD - Container Use and Management
Date violation determined: 07/01/2003
Date achieved compliance: 07/01/2003
Violation lead agency: EPA
Enforcement action: VERBAL INFORMAL
Enforcement action date: 07/01/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.1084(c)(2)(iii)
Area of violation: TSD - Air Emission Standards - Equipment Leaks
Date violation determined: 07/01/2003
Date achieved compliance: 07/01/2003
Violation lead agency: EPA
Enforcement action: VERBAL INFORMAL
Enforcement action date: 07/01/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Conditions
Date violation determined: 09/19/2002
Date achieved compliance: 10/31/2002
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/31/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.I(B)(1)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 02/06/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.VI(45)
Area of violation: Permits - Application

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 02/06/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.176
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.VI(22)(b)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.120(a)
Area of violation: Generators - Manifest
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.I(B)(1)
Area of violation: Permits - Application
Date violation determined: 04/26/2000

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.I(B)(1)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.VI(45)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.VI(22)(b)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 02/06/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.I(J)(1)(d)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.I(J)(1)(d)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 723.120(a)
Area of violation: Transporters - Manifest and Recordkeeping
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 723.120(a)
Area of violation: Transporters - Manifest and Recordkeeping
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 02/06/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.I(J)(1)(d)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 02/06/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.120(a)
Area of violation: Generators - Manifest
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Enforcement action date: 02/06/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.132(b)
Area of violation: Generators - Pre-transport
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.176
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 07/27/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.176
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 02/06/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.VI(22)(b)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 02/06/2001

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: PC - Cond.VI(45)
Area of violation: Permits - Application
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.120(a)
Area of violation: Generators - Manifest
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.132(b)
Area of violation: Generators - Pre-transport
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.132(b)
Area of violation: Generators - Pre-transport
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 02/06/2001
Enf. disposition status: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 723.120(a)
Area of violation: Transporters - Manifest and Recordkeeping
Date violation determined: 04/26/2000
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Conditions
Date violation determined: 09/09/1999
Date achieved compliance: 06/23/2001
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/24/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Conditions
Date violation determined: 06/28/1999
Date achieved compliance: 06/23/2001
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 07/14/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: 250000

Regulation violated: Not reported
Area of violation: TSD - Air Emission Standards - Equipment Leaks
Date violation determined: 06/28/1999
Date achieved compliance: 06/23/2001
Violation lead agency: EPA
Enforcement action: VERBAL INFORMAL
Enforcement action date: 06/29/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 12/23/1998
Date achieved compliance: 06/30/1999
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 07/14/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: 250000

Regulation violated: FR - 40 cfr 265.1087(d)(2)
Area of violation: TSD - Air Emission Standards - Equipment Leaks
Date violation determined: 12/14/1998
Date achieved compliance: 06/23/2001
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/13/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 270.10
Area of violation: TSD - Miscellaneous Unit Standards
Date violation determined: 05/15/1998
Date achieved compliance: 06/13/2001
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 07/14/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: 250000

Regulation violated: FR - 40 CFR 270.10
Area of violation: TSD - Miscellaneous Unit Standards
Date violation determined: 05/15/1998
Date achieved compliance: 06/13/2001
Violation lead agency: EPA
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/23/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Proposed penalty amount: Not reported
Final penalty amount: 250000
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 270.10
Area of violation: TSD - Miscellaneous Unit Standards
Date violation determined: 05/15/1998
Date achieved compliance: 06/13/2001
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/24/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 270.30 (e)(1)
Area of violation: Permits - Conditions
Date violation determined: 05/15/1998
Date achieved compliance: 06/13/2001
Violation lead agency: EPA
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/23/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 250000
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 270.30 (e)(1)
Area of violation: Permits - Conditions
Date violation determined: 05/15/1998
Date achieved compliance: 06/13/2001
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/24/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 04/22/1998
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/02/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - Sec.I, Cond. K
Area of violation: Permits - Application
Date violation determined: 04/22/1998
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/06/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - Sec.VI,Cond.14
Area of violation: Permits - Application
Date violation determined: 04/22/1998
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/06/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - Sec.VI,Cond.5
Area of violation: Permits - Application
Date violation determined: 04/22/1998
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/02/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - Sec.VI,Cond.14
Area of violation: Permits - Application
Date violation determined: 04/22/1998
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/02/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Paid penalty amount: Not reported

Regulation violated: SR - Sec.VI,Cond.5
Area of violation: Permits - Application
Date violation determined: 04/22/1998
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/06/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - Sec.I, Cond. K
Area of violation: Permits - Application
Date violation determined: 04/22/1998
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/02/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 04/22/1998
Date achieved compliance: 01/13/2011
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/06/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 262.20(a)
Area of violation: Generators - Manifest
Date violation determined: 05/12/1997
Date achieved compliance: 07/30/1997
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/24/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Regulation violated: FR - 40 CFR 262.11
Area of violation: Generators - General
Date violation determined: 05/12/1997
Date achieved compliance: 07/30/1997
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/24/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 262.20(a)
Area of violation: Generators - Manifest
Date violation determined: 05/12/1997
Date achieved compliance: 07/30/1997
Violation lead agency: EPA
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/23/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 250000
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 262.20(a)
Area of violation: Generators - Manifest
Date violation determined: 05/12/1997
Date achieved compliance: 07/30/1997
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 07/14/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 1515700
Final penalty amount: Not reported
Paid penalty amount: 250000

Regulation violated: FR - 40 CFR 262.11
Area of violation: Generators - General
Date violation determined: 05/12/1997
Date achieved compliance: 07/30/1997
Violation lead agency: EPA
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/23/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 250000
Paid penalty amount: Not reported

Regulation violated: SR - 724.251

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Area of violation: TSD - Financial Requirements
Date violation determined: 11/08/1995
Date achieved compliance: 08/23/1996
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/04/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.292(a)
Area of violation: TSD - Tank System Standards
Date violation determined: 11/21/1994
Date achieved compliance: 03/28/1995
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 12/09/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.121(a)
Area of violation: TSD - General
Date violation determined: 11/21/1994
Date achieved compliance: 03/28/1995
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 12/09/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.293(e)
Area of violation: TSD - Tank System Standards
Date violation determined: 11/21/1994
Date achieved compliance: 07/20/1995
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 12/09/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date violation determined: 06/07/1994
Date achieved compliance: 10/07/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/10/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.251
Area of violation: TSD - Financial Requirements
Date violation determined: 07/26/1993
Date achieved compliance: 01/07/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/03/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 07/26/1993
Date achieved compliance: 01/07/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/03/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.247(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 09/30/1992
Date achieved compliance: 12/21/1992
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 12/04/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.247(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 09/30/1992

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date achieved compliance: 12/21/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.247(f)(3)
Area of violation: TSD - Financial Requirements
Date violation determined: 09/30/1992
Date achieved compliance: 12/21/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.247(f)(3)
Area of violation: TSD - Financial Requirements
Date violation determined: 09/30/1992
Date achieved compliance: 12/21/1992
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 12/04/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.171(a)(4)
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 11/27/1991
Date achieved compliance: 09/25/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 723.121
Area of violation: Transporters - Manifest and Recordkeeping
Date violation determined: 11/27/1991
Date achieved compliance: 09/25/1992

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.171(c)
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 11/26/1991
Date achieved compliance: 09/25/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/06/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.120(a)
Area of violation: Generators - Manifest
Date violation determined: 11/26/1991
Date achieved compliance: 09/25/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/06/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.171(a)
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 11/26/1991
Date achieved compliance: 09/25/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/06/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 09/26/1991
Date achieved compliance: 06/23/2001
Violation lead agency: EPA

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 05/07/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 108800
Final penalty amount: 72075
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 09/26/1991
Date achieved compliance: 06/23/2001
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/26/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 108800
Final penalty amount: 72075
Paid penalty amount: 72075

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 03/05/1991
Date achieved compliance: 07/10/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/22/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(c)
Area of violation: TSD - Financial Requirements
Date violation determined: 03/05/1991
Date achieved compliance: 07/10/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/22/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243(c)(4)
Area of violation: TSD - Financial Requirements
Date violation determined: 03/05/1991
Date achieved compliance: 07/10/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Enforcement action date: 04/22/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/22/1990
Date achieved compliance: 06/04/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/22/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.247(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/20/1990
Date achieved compliance: 06/04/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/22/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243(c)(4)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/20/1990
Date achieved compliance: 06/04/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/22/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 02/02/1988
Date achieved compliance: 05/03/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/05/1988

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 10/16/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/08/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 07/03/2013
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/16/2013
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/28/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/03/2012
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/26/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/04/2011
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/13/2011

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/06/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/06/2009
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/13/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/06/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/25/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/01/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 07/27/2006
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/31/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation lead agency: EPA

Evaluation date: 10/31/2005
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/30/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/30/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 07/09/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/12/2003
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/03/2003
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/01/2003
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 07/01/2003
Evaluation lead agency: EPA

Evaluation date: 07/01/2003
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: TSD - Air Emission Standards - Equipment Leaks
Date achieved compliance: 07/01/2003
Evaluation lead agency: EPA

Evaluation date: 06/24/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/08/2003

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/19/2002
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Permits - Conditions
Date achieved compliance: 10/31/2002
Evaluation lead agency: EPA

Evaluation date: 11/28/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/26/2001
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/23/2001
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 11/21/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Application
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/21/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/21/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/21/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Transporters - Manifest and Recordkeeping
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/21/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 01/13/2011

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation lead agency: State

Evaluation date: 11/21/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 07/10/2000
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/30/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Transporters - Manifest and Recordkeeping
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 06/30/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - Pre-transport
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 06/30/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - Manifest
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 06/30/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD - General
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 06/30/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 06/30/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Permits - Application
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 04/26/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Application
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 04/26/2000

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 04/26/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Transporters - Manifest and Recordkeeping
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 04/26/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 04/26/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 04/26/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/15/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Application
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/15/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 09/09/1999
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Permits - Conditions
Date achieved compliance: 06/23/2001
Evaluation lead agency: EPA

Evaluation date: 08/06/1999
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/28/1999
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Permits - Conditions
Date achieved compliance: 06/23/2001

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation lead agency: EPA

Evaluation date: 06/28/1999
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Air Emission Standards - Equipment Leaks
Date achieved compliance: 06/23/2001
Evaluation lead agency: EPA

Evaluation date: 12/23/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - General
Date achieved compliance: 06/30/1999
Evaluation lead agency: EPA

Evaluation date: 12/23/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - Air Emission Standards - Equipment Leaks
Date achieved compliance: 06/23/2001
Evaluation lead agency: EPA

Evaluation date: 12/23/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Permits - Conditions
Date achieved compliance: 06/23/2001
Evaluation lead agency: EPA

Evaluation date: 12/18/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Permits - Application
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 12/18/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD - General
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 12/14/1998
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: TSD - Air Emission Standards - Equipment Leaks
Date achieved compliance: 06/23/2001
Evaluation lead agency: EPA

Evaluation date: 11/20/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Application
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/20/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/02/1998

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Permits - Application
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 11/02/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - General
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 06/15/1998
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/15/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Permits - Conditions
Date achieved compliance: 06/13/2001
Evaluation lead agency: EPA

Evaluation date: 05/15/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Permits - Conditions
Date achieved compliance: 06/23/2001
Evaluation lead agency: EPA

Evaluation date: 05/15/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - General
Date achieved compliance: 07/30/1997
Evaluation lead agency: EPA

Evaluation date: 05/15/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD - Air Emission Standards - Equipment Leaks
Date achieved compliance: 06/23/2001
Evaluation lead agency: EPA

Evaluation date: 05/15/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD - Miscellaneous Unit Standards
Date achieved compliance: 06/13/2001
Evaluation lead agency: EPA

Evaluation date: 05/15/1998
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - Manifest
Date achieved compliance: 07/30/1997
Evaluation lead agency: EPA

Evaluation date: 04/22/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Permits - Application
Date achieved compliance: 01/13/2011

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation lead agency: State

Evaluation date: 04/22/1998
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - General
Date achieved compliance: 01/13/2011
Evaluation lead agency: State

Evaluation date: 04/06/1998
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/1998
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/21/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/12/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 07/30/1997
Evaluation lead agency: EPA

Evaluation date: 05/12/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/30/1997
Evaluation lead agency: EPA

Evaluation date: 05/12/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Conditions
Date achieved compliance: 06/13/2001
Evaluation lead agency: EPA

Evaluation date: 05/12/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Miscellaneous Unit Standards
Date achieved compliance: 06/13/2001
Evaluation lead agency: EPA

Evaluation date: 04/28/1997
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/19/1996

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/22/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/13/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/08/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 08/23/1996
Evaluation lead agency: State

Evaluation date: 08/25/1995
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/30/1995
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/31/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Tank System Standards
Date achieved compliance: 07/20/1995
Evaluation lead agency: State

Evaluation date: 11/21/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Tank System Standards
Date achieved compliance: 07/20/1995
Evaluation lead agency: State

Evaluation date: 11/21/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Tank System Standards
Date achieved compliance: 03/28/1995
Evaluation lead agency: State

Evaluation date: 11/21/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 03/28/1995

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation lead agency: State

Evaluation date: 06/07/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 10/07/1994
Evaluation lead agency: State

Evaluation date: 05/25/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/11/1994
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/17/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/29/1993
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 07/26/1993
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 01/07/1994
Evaluation lead agency: State

Evaluation date: 05/24/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/24/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/30/1992
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 12/21/1992
Evaluation lead agency: State

Evaluation date: 05/22/1992

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/27/1991
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/25/1992
Evaluation lead agency: State

Evaluation date: 11/27/1991
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Transporters - Manifest and Recordkeeping
Date achieved compliance: 09/25/1992
Evaluation lead agency: State

Evaluation date: 11/26/1991
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Manifest
Date achieved compliance: 09/25/1992
Evaluation lead agency: State

Evaluation date: 11/26/1991
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/25/1992
Evaluation lead agency: State

Evaluation date: 11/25/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/11/1991
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/26/1991
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - General
Date achieved compliance: 06/23/2001
Evaluation lead agency: EPA

Evaluation date: 05/31/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/22/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation lead agency: State

Evaluation date: 03/05/1991
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 07/10/1991
Evaluation lead agency: State

Evaluation date: 11/28/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/31/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/20/1990
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 06/04/1990
Evaluation lead agency: State

Evaluation date: 11/30/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/23/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/30/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/30/1988
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 11/30/1988
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/12/1988

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/28/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/02/1988
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - General
Date achieved compliance: 05/03/1988
Evaluation lead agency: State

Evaluation date: 12/02/1987
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/02/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

CERC-NFRAP:
Site ID: 0500680
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Deferred to RCRA

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: / /
Date Completed: 01/15/86
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 08/29/86
Priority Level: Low priority for further assessment

Action: SITE INSPECTION
Date Started: / /
Date Completed: 06/30/89
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 06/30/89
Priority Level: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

CORRACTS:

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19950817
Action: CA170 - RFI Supplemental Information Deemed Satisfactory
NAICS Code(s): 562211 325998 48423 333318
Hazardous Waste Treatment and Disposal
All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19960221
Action: CA170 - RFI Supplemental Information Deemed Satisfactory
NAICS Code(s): 562211 325998 48423 333318
Hazardous Waste Treatment and Disposal
All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19910926
Action: CA050 - RFA Completed
NAICS Code(s): 562211 325998 48423 333318
Hazardous Waste Treatment and Disposal
All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19910926
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 562211 325998 48423 333318
Hazardous Waste Treatment and Disposal
All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19930929
Action: CA100 - RFI Imposition
NAICS Code(s): 562211 325998 48423 333318

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Hazardous Waste Treatment and Disposal
All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19940830
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations
NAICS Code(s): 562211 325998 48423 333318
Hazardous Waste Treatment and Disposal
All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19940830
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 562211 325998 48423 333318
Hazardous Waste Treatment and Disposal
All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 19930930
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): 562211 325998 48423 333318
Hazardous Waste Treatment and Disposal
All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980613913
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: Not reported
Action: CA110 - RFI Workplan Received
NAICS Code(s): 562211 325998 48423 333318
Hazardous Waste Treatment and Disposal

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

All Other Miscellaneous Chemical Product and Preparation Manufacturing
Specialized Freight (except Used Goods) Trucking, Long-Distance
Original schedule date: 19940303
Schedule end date: Not reported

PADS:
EPAID: ILD980613913
Facility name: SAFETY-KLEEN CORP.
Facility Address: 633 E 138TH ST
DOLTON, IL 60419
Facility country: US
Generator: Yes
Storer: No
Transporter: No
Disposer: No
Research facility: No
Smelter: No
Facility owner name: SAFETY-KLEEN CORP.
Contact title: Not reported
Contact name: BARD, JEFF
Contact tel: (708)468-2243
Contact extension: Not reported
Mailing address: PO BOX 100
DOLTON, IL 60419
Mailing country: US
Cert. title: Not reported
Cert. name: Not reported
Cert. date: 07/13/1994
Date received: 08/18/1994

NJ MANIFEST:
Manifest Code: 003367879FLE
EPA ID: ILD980613913
Date Shipped: 06/22/2010
TSDF EPA ID: NJ0000381962
Transporter EPA ID: OKD981588791
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 06/22/2010
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 06/24/2010
Tranporter 1 Decal: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	Yes
Reason Load Was Rejected:	Partial Rejection
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	7907
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	50
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	30
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	40
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	280
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	465
Unit:	P

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	1927
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	110
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	55
Unit:	G
Hand Code:	H010

Manifest Code:	002509944SKS
EPA ID:	ILD980613913
Date Shipped:	04/02/2010
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	NJD071629976
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	04/02/2010
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	04/05/2010
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	50
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	325
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	3195
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	495
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	55
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	8599
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	385
Unit:	G
Hand Code:	H010

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Manifest Code:	000603958SKS
EPA ID:	ILD980613913
Date Shipped:	05/13/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	05/13/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	05/16/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	62
Unit:	G
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	3245

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Unit:	P
Hand Code:	H141

Manifest Code:	002219834SKS
EPA ID:	ILD980613913
Date Shipped:	02/19/2010
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	OKD981588791
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	02/19/2010
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	02/22/2010
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	40
Unit:	G

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Hand Code:	H010
Waste Code:	D001
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	10281
Unit:	P
Hand Code:	H010
Waste Code:	D001
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	1329
Unit:	G
Hand Code:	H010

Manifest Code:	002332971SKS
EPA ID:	ILD980613913
Date Shipped:	02/19/2010
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	OKD981588791
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	02/19/2010
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	02/22/2010
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	4413
Unit:	P
Hand Code:	H010

Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	55
Unit:	G
Hand Code:	H010

Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	30
Unit:	G
Hand Code:	H010

Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	740
Unit:	P
Hand Code:	H010

Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	210
Unit:	G
Hand Code:	H010

Manifest Code:	000603531SKS
EPA ID:	ILD980613913
Date Shipped:	02/05/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	02/05/2008
Date Trans2 Transported Waste:	02/13/2008
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	02/13/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	3445
Unit:	P
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	595
Unit:	P
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	171
Unit:	G
Hand Code:	H141
Manifest Code:	003310050FLE
EPA ID:	ILD980613913
Date Shipped:	05/11/2010
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	OKD981588791
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	05/11/2010
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	05/12/2010
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	Yes
Reason Load Was Rejected:	Partial Rejection
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	820
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	13233
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	1465
Unit:	G

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Hand Code:	H010
Waste Code:	D011
Manifest Year:	2010 New Jersey Manifest Data
Quantity:	286
Unit:	G
Hand Code:	H010

Manifest Code:	002925393SKS
EPA ID:	ILD980613913
Date Shipped:	11/29/2011
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	NJD071629976
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	SAFETY KLEEN CORP
Transporter-1 EPA Facility Name:	SJ TRANSPORTATION COMPANY
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	KARLAN SERVICE INC
QTY Units:	Pounds
Transporter SEQ ID:	1.00
Transporter-1 Date:	11/29/2011
Waste SEQ ID:	7.00
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	12/1/2011
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	200.00
Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	280.00
Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	1,065.00
Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	4.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	30.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	140.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	1,580.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	5,743.00
Unit:	gallons
Hand Code:	H010

Manifest Code:	002925393SKS
EPA ID:	ILD980613913
Date Shipped:	11/29/2011
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	NJD071629976
Transporter 2 EPA ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	SAFETY KLEEN CORP
Transporter-1 EPA Facility Name:	SJ TRANSPORTATION COMPANY
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	KARLAN SERVICE INC
QTY Units:	Pounds
Transporter SEQ ID:	1.00
Transporter-1 Date:	11/29/2011
Waste SEQ ID:	8.00
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	12/1/2011
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	Not reported
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	200.00
Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	280.00
Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	1,065.00

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	4.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	30.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	140.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	1,580.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	5,743.00
Unit:	gallons
Hand Code:	H010

Manifest Code:	002925393SKS
EPA ID:	ILD980613913
Date Shipped:	11/29/2011
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	NJD071629976
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	SAFETY KLEEN CORP
Transporter-1 EPA Facility Name:	SJ TRANSPORTATION COMPANY
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	KARLAN SERVICE INC
QTY Units:	Pounds
Transporter SEQ ID:	1.00
Transporter-1 Date:	11/29/2011
Waste SEQ ID:	4.00
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	12/1/2011
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	Not reported
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	200.00
Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	280.00
Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	1,065.00
Unit:	Pounds
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	4.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	30.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Manifest Year:	2011 New Jersey Manifest Data
Quantity:	140.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	1,580.00
Unit:	gallons
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2011 New Jersey Manifest Data
Quantity:	5,743.00
Unit:	gallons
Hand Code:	H010

Manifest Code:	001205824SKS
EPA ID:	ILD980613913
Date Shipped:	06/10/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	06/10/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	06/13/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	159
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	1592
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	13
Unit:	G
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	55
Unit:	G
Hand Code:	H010

Manifest Code:	000083840SKS
EPA ID:	ILD980613913
Date Shipped:	01/22/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	01/22/2008
Date Trans2 Transported Waste:	02/06/2008
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	02/06/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	440
Unit:	P
Hand Code:	H141
Waste Code:	D001
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	3879
Unit:	P
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	126
Unit:	G
Hand Code:	H141

Manifest Code:	001205982SKS
EPA ID:	ILD980613913
Date Shipped:	05/28/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	05/28/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	06/13/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	1775
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	108
Unit:	G
Hand Code:	H010
Manifest Code:	000603865SKS
EPA ID:	ILD980613913
Date Shipped:	04/25/2008
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	FLD006921340

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	04/25/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	05/10/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D001
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	21000
Unit:	G
Hand Code:	H020

Manifest Code:	000603866SKS
EPA ID:	ILD980613913
Date Shipped:	04/25/2008
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	FLD006921340
Transporter 2 EPA ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	04/25/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	07/02/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D001
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	25547
Unit:	G
Hand Code:	H020

Manifest Code:	000603667SKS
EPA ID:	ILD980613913
Date Shipped:	03/25/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/25/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/28/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	2840
Unit:	P
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	1050
Unit:	P
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	55
Unit:	G

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Hand Code:	H141

Manifest Code:	000603517SKS
EPA ID:	ILD980613913
Date Shipped:	01/29/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	01/29/2008
Date Trans2 Transported Waste:	02/06/2008
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	02/06/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	470
Unit:	P
Hand Code:	H141

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	323
Unit:	G
Hand Code:	H141

Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	1348
Unit:	P
Hand Code:	H141

Manifest Code:	000603737SKS
EPA ID:	ILD980613913
Date Shipped:	04/08/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	04/08/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	04/11/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	4255
Unit:	P
Hand Code:	H141

Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	50
Unit:	G
Hand Code:	H141

Manifest Code:	000685465SKS
EPA ID:	ILD980613913
Date Shipped:	04/29/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	04/29/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	05/02/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	185
Unit:	G
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	66
Unit:	G
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	2005
Unit:	P
Hand Code:	H141
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	165
Unit:	P
Hand Code:	H141

Manifest Code:	001205979SKS
EPA ID:	ILD980613913
Date Shipped:	05/20/2008
TSDF EPA ID:	NJ0000381962
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	05/20/2008
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	05/23/2008
Tranporter 1 Decal:	Not reported
Tranporter 2 Decal:	Not reported
Generator EPA Facility Name:	Not reported
Transporter-1 EPA Facility Name:	Not reported
Transporter-2 EPA Facility Name:	Not reported
Transporter-3 EPA Facility Name:	Not reported
Transporter-4 EPA Facility Name:	Not reported
Transporter-5 EPA Facility Name:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Reference Manifest Number:	Not reported
Was Load Rejected (Y/N):	No
Reason Load Was Rejected:	Not reported
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	240
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	5118
Unit:	P
Hand Code:	H010
Waste Code:	D011
Manifest Year:	2008 New Jersey Manifest Data
Quantity:	292
Unit:	G
Hand Code:	H010

NY MANIFEST:

EPA ID:	ILD980613913
Country:	USA
Mailing Name:	SAFETY-KLEEN SYSTEMS INC
Mailing Contact:	JOHNESSE MOBLEY
Mailing Address:	633 E 138TH ST
Mailing Address 2:	Not reported
Mailing City:	DOLTON
Mailing State:	IL
Mailing Zip:	60419

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Zip4:	1058
Mailing Country:	USA
Mailing Phone:	708-849-4850

Document ID:	ILA1695813
Manifest Status:	Not reported
Trans1 State ID:	TXR000050930
Trans2 State ID:	NJD071629976
Generator Ship Date:	11/16/2005
Trans1 Recv Date:	11/16/2005
Trans2 Recv Date:	11/30/2005
TSD Site Recv Date:	12/08/2005
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NY9143425511
Trans1 EPA ID:	UPW151288
Trans2 EPA ID:	03217
TSDF ID:	ILD980613913
Waste Code:	D008 - LEAD 5.0 MG/L TCLP
Quantity:	00050
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	01.00
Year:	Not reported

Document ID:	NYA3228524
Manifest Status:	Completed copy
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	861020
Trans1 Recv Date:	861020
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861020
Part A Recv Date:	861023
Part B Recv Date:	861024
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05808
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228535
Manifest Status:	Completed copy
Trans1 State ID:	WI001
Trans2 State ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Generator Ship Date:	861021
Trans1 Recv Date:	861021
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861022
Part A Recv Date:	861023
Part B Recv Date:	861024
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05649
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228311
Manifest Status:	Completed copy
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	861027
Trans1 Recv Date:	861027
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861028
Part A Recv Date:	861030
Part B Recv Date:	861110
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05786
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228344
Manifest Status:	Completed copy
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	860903
Trans1 Recv Date:	860903
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	860903
Part A Recv Date:	860908
Part B Recv Date:	860912
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	06000
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA1475064
Manifest Status:	Completed copy
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	860820
Trans1 Recv Date:	860820
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	860821
Part A Recv Date:	860825
Part B Recv Date:	860827
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05449
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228557
Manifest Status:	Completed copy
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	861022
Trans1 Recv Date:	861022
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861023
Part A Recv Date:	861029
Part B Recv Date:	861030
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05856
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Document ID:	NYA3228355
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	861007
Trans1 Recv Date:	861007
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861008
Part A Recv Date:	861118
Part B Recv Date:	861015
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05466
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA1475055
Manifest Status:	Completed copy
Trans1 State ID:	WI001GS
Trans2 State ID:	Not reported
Generator Ship Date:	860816
Trans1 Recv Date:	860816
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	860818
Part A Recv Date:	860825
Part B Recv Date:	860825
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05500
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA1475073
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	860822
Trans1 Recv Date:	860822
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	860825
Part A Recv Date:	860926

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Part B Recv Date:	860903
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05611
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228513
Manifest Status:	Completed copy
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	861013
Trans1 Recv Date:	861013
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861014
Part A Recv Date:	861017
Part B Recv Date:	861020
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05417
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228322
Manifest Status:	Completed copy
Trans1 State ID:	W1001
Trans2 State ID:	Not reported
Generator Ship Date:	861029
Trans1 Recv Date:	861029
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861030
Part A Recv Date:	861103
Part B Recv Date:	861110
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05371
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228333
Manifest Status:	Completed copy
Trans1 State ID:	W1001
Trans2 State ID:	Not reported
Generator Ship Date:	861026
Trans1 Recv Date:	861026
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861029
Part A Recv Date:	861030
Part B Recv Date:	861110
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	04759
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228546
Manifest Status:	Completed copy
Trans1 State ID:	WI001
Trans2 State ID:	Not reported
Generator Ship Date:	861021
Trans1 Recv Date:	861021
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861023
Part A Recv Date:	861023
Part B Recv Date:	861030
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05690
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

Document ID:	NYA3228568
Manifest Status:	Completed copy
Trans1 State ID:	WI001

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Trans2 State ID:	Not reported
Generator Ship Date:	861023
Trans1 Recv Date:	861023
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	861023
Part A Recv Date:	861027
Part B Recv Date:	861030
Generator EPA ID:	ILD980613913
Trans1 EPA ID:	WID980904742
Trans2 EPA ID:	Not reported
TSDF ID:	NYD080469935
Waste Code:	F001 - UNKNOWN
Quantity:	05417
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	TT - Cargo tank, tank trucks
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	86

WI MANIFEST:

Year:	12
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I
ACT Code 1:	Not reported
ACT Name:	Not reported
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported

Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	12
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	209
ACT Status:	A
ACT Code 1:	209
ACT Name:	HW Handler (Out-of-State) - TSD/Generator
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	11
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	209
ACT Status:	A
ACT Code 1:	209
ACT Name:	HW Handler (Out-of-State) - TSD/Generator
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	11
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I
ACT Code 1:	Not reported
ACT Name:	Not reported
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	10
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I
ACT Code 1:	Not reported
ACT Name:	Not reported
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	10
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	209
ACT Status:	A
ACT Code 1:	209
ACT Name:	HW Handler (Out-of-State) - TSD/Generator
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 09
EPA ID: ILD980613913
FID: 999054210
ACT Code: 209
ACT Status: A
ACT Code 1: 209
ACT Name: HW Handler (Out-of-State) - TSD/Generator
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste LBS:	Not reported

Year:	09
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I
ACT Code 1:	Not reported
ACT Name:	Not reported
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported

Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	08
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I
ACT Code 1:	Not reported
ACT Name:	Not reported
Contact First Name:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	08
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	209
ACT Status:	A
ACT Code 1:	209
ACT Name:	HW Handler (Out-of-State) - TSD/Generator
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	07
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I
ACT Code 1:	0
ACT Name:	Not reported
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	0
Contact Telephone:	0
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 07
EPA ID: ILD980613913
FID: 999054210
ACT Code: 209
ACT Status: A
ACT Code 1: 209
ACT Name: HW Handler (Out-of-State) - TSD/Generator
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: 0
Contact Telephone: 0
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	06
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I
ACT Code 1:	Not reported
ACT Name:	Not reported
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported

Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	05
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

ACT Code 1:	0
ACT Name:	Not reported
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	0
Contact Telephone:	0
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

Year:	04
EPA ID:	ILD980613913
FID:	999054210
ACT Code:	291
ACT Status:	I
ACT Code 1:	Not reported
ACT Name:	Not reported
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	Not reported
Contact Telephone:	Not reported
Contact Extention:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

PA MANIFEST:

Year:	2007
Manifest Number:	000071757SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	08/21/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D008
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	350
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Date TSP Sig: Not reported

Year: 2007
Manifest Number: 000071757SKS
Manifest Type: Not reported
Generator EPA Id: ILD980613913
Generator Date: 08/21/2007
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: 708-849-4850
TSD Epa Id: PAD987367216
TSD Date: Not reported
TSD Facility Name: AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address: 2591 MITCHELL AVENUE
TSD Facility City: ALLENTOWN
TSD Facility State: PA
Facility Telephone: Not reported
Page Number: 1
Line Number: 4
Waste Number: NONE
Container Number: 2
Container Type: Fiber or plastic boxes, cartons, cases
Waste Quantity: 50
Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Year: 2007
Manifest Number: 000213089SKS
Manifest Type: Not reported
Generator EPA Id: ILD980613913
Generator Date: 02/14/2007
Mailing Address: Not reported
Mailing City,St,Zip: Not reported
Contact Name: Not reported
Contact Phone: 708-849-4850
TSD Epa Id: PAD987367216
TSD Date: Not reported
TSD Facility Name: AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address: 2591 MITCHELL AVENUE
TSD Facility City: ALLENTOWN
TSD Facility State: PA
Facility Telephone: Not reported
Page Number: 1
Line Number: 1
Waste Number: D002
Container Number: 1
Container Type: Metal drums, barrels, kegs
Waste Quantity: 30
Unit: Gallons (liquids only)
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Year: 2007

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Manifest Number:	000213264SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	03/27/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	2
Waste Number:	NONE
Container Number:	1
Container Type:	Fiber or plastic boxes, cartons, cases
Waste Quantity:	4
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000071757SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	08/21/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D002
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	350
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000071757SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Generator Date:	08/21/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	2
Waste Number:	D011
Container Number:	1
Container Type:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	30
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000071757SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	08/21/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	2
Waste Number:	D002
Container Number:	1
Container Type:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	30
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000213089SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	02/14/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D007
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	30
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000213089SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	02/14/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D009
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	30
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000213264SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	03/27/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D009
Container Number:	1
Container Type:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	10
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000071757SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	08/21/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	2
Waste Number:	D007
Container Number:	1
Container Type:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	30
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000213089SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	02/14/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D011
Container Number:	1
Container Type:	Metal drums, barrels, kegs
Waste Quantity:	30
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000013936SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	05/15/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	D009
Container Number:	1
Container Type:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	25
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000071757SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	08/21/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Page Number:	1
Line Number:	2
Waste Number:	D009
Container Number:	1
Container Type:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	30
Unit:	Gallons (liquids only)
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2007
Manifest Number:	000071757SKS
Manifest Type:	Not reported
Generator EPA Id:	ILD980613913
Generator Date:	08/21/2007
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	Not reported
TSD Facility Name:	AERC COM INC ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVENUE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	3
Waste Number:	NONE
Container Number:	1
Container Type:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	5
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2005
Manifest Number:	PAH070691
Manifest Type:	T
Generator EPA Id:	ILD980613913
Generator Date:	03/07/2005
Mailing Address:	633 E 138TH ST
Mailing City,St,Zip:	DOLTON, IL 60419
Contact Name:	Not reported
Contact Phone:	708-849-4850
TSD Epa Id:	PAD987367216
TSD Date:	03/28/2005
TSD Facility Name:	A E R C COM ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address:	2591 MITCHELL AVE
TSD Facility City:	ALLENTOWN
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	2
Waste Number:	NONE

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Container Number: 2
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 10
Unit: Gallons (liquids only)
Handling Code: Not reported
TSP EPA Id: TXR000050930
Date TSP Sig: 03/09/2005

Year: 2005
Manifest Number: PAH070691
Manifest Type: T
Generator EPA Id: ILD980613913
Generator Date: 03/07/2005
Mailing Address: 633 E 138TH ST
Mailing City,St,Zip: DOLTON, IL 60419
Contact Name: Not reported
Contact Phone: 708-849-4850
TSD Epa Id: PAD987367216
TSD Date: 03/28/2005
TSD Facility Name: A E R C COM ADVANCED ENVIRONMENTAL RECYCLING
TSD Facility Address: 2591 MITCHELL AVE
TSD Facility City: ALLENTOWN
TSD Facility State: PA
Facility Telephone: Not reported
Page Number: 1
Line Number: 1
Waste Number: D009
Container Number: 1
Container Type: Fiberboard or plastic drums, barrels, kegs
Waste Quantity: 5
Unit: Gallons (liquids only)
Handling Code: Not reported
TSP EPA Id: TXR000050930
Date TSP Sig: 03/09/2005

RI MANIFEST:
GEN Cert Date: 5/6/2011
Transporter Receipt Date: 5/6/2011
Number Of Containers: 1
Container Type: DM
Waste Code1: D007
Waste Code2: D029
Waste Code3: D039
Comment: Not reported
Fee Exempt Code: Not reported
TSDF Name: SAFETY KLEEN
TSDF ID: RID084802842
TSDF Date: 5/6/2011
Transporter 2 Name: Not reported
Transporter 2 ID: Not reported
Manifest Docket Number: 002642624SKS
Waste Description: TOXIC LIQUIDS ORGANIC NOS
Quantity: 248
WT/Vol Units: P
Item Number: 3
Transporter Name: SJ TRANSPORTATION CO INC
Transporter EPA ID: NJD071629976

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

GEN Cert Date:	5/6/2011
Transporter Recpt Date:	5/6/2011
Transporter 2 Recpt Date:	Not reported
TSDF Recpt Date:	5/6/2011
EPA ID:	ILD980613913
Transporter 2 ID:	Not reported

TIER 2:

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBANT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM HYDROXIDE
CAS Number:	1310583
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310732
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	WINDSHIELD WASHER FLUID BLEND
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	WINDSHIELD WASHER FLUID BLEND
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	XYLENE
CAS Number:	1330-20-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742-94-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYLENE GLYCOL
CAS Number:	107211
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	FOAM BLAST (PETROLEUM HYDROCARBONS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Hexane
CAS Number:	110-54-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Isopropyl Alcohol
CAS Number:	67-63-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Isopropyl Alcohol
CAS Number:	67-63-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER (MIXED SOLVENTS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78-93-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Mineral Spirits (petroleum distillates)
CAS Number:	64742-47-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Monoethanolamine
CAS Number:	141-43-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-Methyl-Pyrrolidinone
CAS Number:	872-50-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NAPTHALENE
CAS Number:	91203
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Nitrogen Cryogenic Liquid
CAS Number:	7727-37-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133-50-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SILICA, FUSED, AGGREGATE
CAS Number:	60676-86-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM SILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102-71-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102716
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 DIESEL FUEL
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Acetone
CAS Number:	67-64-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACTREL (PETROLEUM HYDROCARBONS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742-94-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	CALCIUM CHLORIDE
CAS Number:	10043524
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Dipropylene Glycol Monomethyl Ether
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Ethyl Acetate
CAS Number:	141-78-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL ACETATE
CAS Number:	141786
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	GASOLINE (AUTOMOTIVE)
CAS Number:	8006619
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78-93-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Methyl Isobutyl Ketone
CAS Number:	10-81-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (CUP)
CAS Number:	64741-41-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Oil Absorbant (Christobalite)
CAS Number:	14464-46-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBENT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64-19-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64197
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64197
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109999
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108-88-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133506
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109-99-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109999
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Xylene
CAS Number:	1330-20-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	2-METHOXYMETHYLETHOXY (PROPANOL)
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Acetone
CAS Number:	67-64-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67-64-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACTREL (PETROLEUM HYDROCARBONS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER (MIXED SOLVENTS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHANOL
CAS Number:	67561
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Methyl Ethyl Ketone
CAS Number:	78-93-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Methyl Isobutyl Ketone
CAS Number:	10-81-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	108-10-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDONE
CAS Number:	87-50-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL AND GREASE ABSORBENT
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Oleic Acid
CAS Number:	112-80-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112-80-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sodium Chloride
CAS Number:	7647-14-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM METASILICATE
CAS Number:	6834-92-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664-93-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Tetrahydrofuran
CAS Number:	109-99-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Toluene
CAS Number:	108-88-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Triethanolamine
CAS Number:	102-71-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Universal Plus 3%/6% Foam
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	UNIVERSAL PLUS 3%/6% FOAM
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Vermiculite
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	2-Methoxymethylethoxy (Propanol)
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67-64-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Aromatic 150
CAS Number:	64742-94-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Calcium Chloride
CAS Number:	10043-52-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	CALCIUM CHLORIDE
CAS Number:	10043524
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL METHYL ETHER
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Dipropylene Glycol Monomethyl Ether
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYLENE GLYCOL
CAS Number:	107211
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67-63-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LOW-VAPOR-PRESSURE LACQUER THINNER
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHANOL
CAS Number:	67561
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Methyl Ethyl Ketone
CAS Number:	78-93-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78933
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS
CAS Number:	64741-41-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBENT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBENT (MONTMORILLONATE CLAY)
CAS Number:	1302789
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112-80-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Secondary Ethoxylated Alcohols
CAS Number:	84133-50-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310732
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Toluene
CAS Number:	108-88-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102716
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Monoethanolamine
CAS Number:	141-43-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	141435
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	75047-04-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	n-Butyl Acetate
CAS Number:	123-86-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-BUTYL ACETATE
CAS Number:	123864
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDONE
CAS Number:	87-50-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Aromatic 150
CAS Number:	64742-94-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL METHYL ETHER
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL BENZENE
CAS Number:	100414
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Foam Blast (Petroleum Hydrocarbons)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Gasoline (Automotive)
CAS Number:	8006-61-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER (MIXED SOLVENTS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Isobutyl Acetate
CAS Number:	110-19-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS 150 (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-Methyl-Pyrrolidinone
CAS Number:	872-50-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Napthalene
CAS Number:	91-20-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NITROGEN, REFRIGERATED LIQUID (CRYOGENIC LIQUID)
CAS Number:	7727-37-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Soda Ash
CAS Number:	64-19-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM CHLORIDE
CAS Number:	7647-14-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sodium Metasilicate
CAS Number:	6834-92-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRACHLOROETHYLENE
CAS Number:	127184
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108-88-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	XYLENE
CAS Number:	1330207
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Not reported
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	(2-METHOXYMETHYLETHOXY) PROPANOL
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETOPHENONE
CAS Number:	98862
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIESEL FUEL #2
CAS Number:	68476-34-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOBUTYL ACETATE
CAS Number:	110190
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Magnesium Chloride
CAS Number:	7786-30-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOL AMINE
CAS Number:	75-04-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Oil Absorbant (Montmorillonate Clay)
CAS Number:	1302-78-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBANT (MONTMORILLONATE CLAY)
CAS Number:	1302789
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Oleic Acid
CAS Number:	112-80-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Potassium Chloride
CAS Number:	7447-40-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Potassium Hydroxide
CAS Number:	1310-58-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133506
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM CHLORIDE
CAS Number:	7647145
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310-73-2
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sodium Hydroxide
CAS Number:	1310-73-2
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM METASILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sulfuric Acid
CAS Number:	7664-93-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Tetrachloroethylene
CAS Number:	127-18-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	UNIVERSAL PLUS 3%/6% FOAM
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	VERMICULITE
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 Diesel Fuel
CAS Number:	68476-34-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 DIESEL FUEL
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Actrel (Petroleum Hydrocarbons)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Ethyl Benzene
CAS Number:	100-41-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	FOAM BLAST (PETROLEUM HYDROCARBONS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Immersion Cleaner (mixed solvents)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER (MIXED SOLVENTS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOBUTYL ACETATE
CAS Number:	110190
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Lacquer Thinner (mixed solvents)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MAGNESIUM CHLORIDE
CAS Number:	7786303
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78933
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-BUTYL ACETATE
CAS Number:	123-86-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NITROGEN CRYOGENIC LIQUID
CAS Number:	7727379
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2012
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742-94-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Isobutyl Acetate
CAS Number:	110-19-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Isopropyl Alcohol
CAS Number:	67-63-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Magnesium Chloride
CAS Number:	7786-30-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOL AMINE
CAS Number:	75-04-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	75047-04-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-BUTYL ACETATE
CAS Number:	123864
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Napthalene
CAS Number:	91-20-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NITROGEN, REFRIGERATED LIQUID (CRYOGENIC LIQUID)
CAS Number:	7727-37-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Oleic Acid
CAS Number:	112-80-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133506
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Soda Ash
CAS Number:	64-19-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sodium Chloride
CAS Number:	7647-14-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sodium Metasilicate
CAS Number:	6834-92-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM METASILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108-88-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Not reported
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETOPHENONE
CAS Number:	98862
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACTREL (PETROLEUM HYDROCARBONS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742-94-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIESEL FUEL #2
CAS Number:	68476-34-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Dipropylene Glycol Monomethyl Ether
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Ethyl Acetate
CAS Number:	141-78-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYLENE GLYCOL
CAS Number:	107211
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Foam Blast (Petroleum Hydrocarbons)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Methyl Ethyl Ketone
CAS Number:	78-93-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Methyl Isobutyl Ketone
CAS Number:	10-81-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (CUP)
CAS Number:	64741-41-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Mineral Spirits (petroleum distillates)
CAS Number:	64742-47-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Monoethanolamine
CAS Number:	141-43-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-Methyl-Pyrrolidinone
CAS Number:	872-50-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Oil Absorbant (Montmorillonate Clay)
CAS Number:	1302-78-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Oleic Acid
CAS Number:	112-80-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Potassium Hydroxide
CAS Number:	1310-58-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SILICA, FUSED, AGGREGATE
CAS Number:	60676-86-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRACHLOROETHYLENE
CAS Number:	127184
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Toluene
CAS Number:	108-88-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Triethanolamine
CAS Number:	102-71-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 Diesel Fuel
CAS Number:	68476-34-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	(2-METHOXYMETHYLETHOXY) PROPANOL
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	2-METHOXYMETHYLETHOXY (PROPANOL)
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACTREL (PETROLEUM HYDROCARBONS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	FOAM BLAST (PETROLEUM HYDROCARBONS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOBUTYL ACETATE
CAS Number:	110190
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOBUTYL ACETATE
CAS Number:	110190
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	108-10-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Nitrogen Cryogenic Liquid
CAS Number:	7727-37-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL AND GREASE ABSORBENT
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112-80-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Potassium Chloride
CAS Number:	7447-40-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM CHLORIDE
CAS Number:	7647145
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310-73-2
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sodium Hydroxide
CAS Number:	1310-73-2
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Tetrahydrofuran
CAS Number:	109-99-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102716
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Universal Plus 3%/6% Foam
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Vermiculite
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	VERMICULITE
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Xylene
CAS Number:	1330-20-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 DIESEL FUEL
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67-64-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Acetone
CAS Number:	67-64-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Actrel (Petroleum Hydrocarbons)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Aromatic 150
CAS Number:	64742-94-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Calcium Chloride
CAS Number:	10043-52-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	CALCIUM CHLORIDE
CAS Number:	10043524
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYLENE GLYCOL
CAS Number:	107211
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Hexane
CAS Number:	110-54-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67-63-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Isopropyl Alcohol
CAS Number:	67-63-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MAGNESIUM CHLORIDE
CAS Number:	7786303
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78933
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78933
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Monoethanolamine
CAS Number:	141-43-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NITROGEN CRYOGENIC LIQUID
CAS Number:	7727379
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112-80-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64197
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM SILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664-93-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109999
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Toluene
CAS Number:	108-88-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	CALCIUM CHLORIDE
CAS Number:	10043524
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL METHYL ETHER
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL METHYL ETHER
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Dipropylene Glycol Monomethyl Ether
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHANOL
CAS Number:	67561
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBANT (MONTMORILLONATE CLAY)
CAS Number:	1302789
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBENT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	UNIVERSAL PLUS 3%/6% FOAM
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	WINDSHIELD WASHER FLUID BLEND
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	WINDSHIELD WASHER FLUID BLEND
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	XYLENE
CAS Number:	1330-20-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	2-Methoxymethylethoxy (Propanol)
CAS Number:	34590-94-8
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	FOAM BLAST (PETROLEUM HYDROCARBONS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Immersion Cleaner (mixed solvents)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Lacquer Thinner (mixed solvents)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LOW-VAPOR-PRESSURE LACQUER THINNER
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHANOL
CAS Number:	67561
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78-93-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78-93-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS
CAS Number:	64741-41-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-BUTYL ACETATE
CAS Number:	123-86-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	n-Butyl Acetate
CAS Number:	123-86-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDONE
CAS Number:	87-50-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDONE
CAS Number:	87-50-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NAPTHALENE
CAS Number:	91203
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBANT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBENT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Secondary Ethoxylated Alcohols
CAS Number:	84133-50-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310732
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310732
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109-99-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109999
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102-71-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102716
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL ACETATE
CAS Number:	141786
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Ethyl Benzene
CAS Number:	100-41-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL BENZENE
CAS Number:	100414
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Gasoline (Automotive)
CAS Number:	8006-61-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	GASOLINE (AUTOMOTIVE)
CAS Number:	8006619
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	141435
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Oil Absorbant (Christobalite)
CAS Number:	14464-46-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM HYDROXIDE
CAS Number:	1310583
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64-19-7
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64197
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM CHLORIDE
CAS Number:	7647-14-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Sulfuric Acid
CAS Number:	7664-93-9
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Tetrachloroethylene
CAS Number:	127-18-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108-88-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 DIESEL FUEL
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Acetone
CAS Number:	67-64-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67-64-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Aromatic 150
CAS Number:	64742-94-5
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER (MIXED SOLVENTS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER (MIXED SOLVENTS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER (MIXED SOLVENTS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER (MIXED SOLVENTS)
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Methyl Ethyl Ketone
CAS Number:	78-93-3
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	Methyl Isobutyl Ketone
CAS Number:	10-81-1
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS 150 (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-Methyl-Pyrrolidinone
CAS Number:	872-50-4
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBENT (MONTMORILLONATE CLAY)
CAS Number:	1302789
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133-50-6
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133506
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM METASILICATE
CAS Number:	6834-92-0
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	UNIVERSAL PLUS 3%/6% FOAM
CAS Number:	N/A
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2011
Corporate Name:	Dolton Recycle Center
Latitude:	Not reported
Longitude:	Not reported
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	XYLENE
CAS Number:	1330207
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	Not reported

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MAGNESIUM CHLORIDE
CAS Number:	7786303
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYLENE GLYCOL
CAS Number:	107211
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NAPTHALENE
CAS Number:	91203
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	141435
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78933
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM HYDROXIDE
CAS Number:	1310583
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL BENZENE
CAS Number:	100414
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHANOL
CAS Number:	67561
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBENT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64197
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 DIESEL FUEL
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000-9,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000,000-9,999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-BUTYL ACETATE
CAS Number:	123864
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NITROGEN CRYOGENIC LIQUID
CAS Number:	7727379
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000-9,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM METASILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	VERMICULITE
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	2-METHOXYMETHYLETHOXY (PROPANOL)
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL ACETATE
CAS Number:	141786
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER (MIXED SOLVENTS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOBUTYL ACETATE
CAS Number:	110190
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310732
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000-9,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000-9,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109999
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	XYLENE
CAS Number:	1330207
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACTREL (PETROLEUM HYDROCARBONS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	GASOLINE (AUTOMOTIVE)
CAS Number:	8006619
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000-9,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER (MIXED SOLVENTS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133506
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM CHLORIDE
CAS Number:	7647145
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBANT (MONTMORILLONATE CLAY)
CAS Number:	1302789
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM SILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRACHLOROETHYLENE
CAS Number:	127184
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102716
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	FOAM BLAST (PETROLEUM HYDROCARBONS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000-9,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	UNIVERSAL PLUS 3%/6% FOAM
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	CALCIUM CHLORIDE
CAS Number:	10043524
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000-99,9999

Year:	2010
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	WINDSHIELD WASHER FLUID BLEND
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000-999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM HYDROXIDE
CAS Number:	1310583
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM METASILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	UNIVERSAL PLUS 3%/6% FOAM
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	141435
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM SILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRACHLOROETHYLENE
CAS Number:	127184
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	2-METHOXYMETHYLETHOXY (PROPANOL)
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	CALCIUM CHLORIDE
CAS Number:	10043524
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109999
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-BUTYL ACETATE
CAS Number:	123864
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102716
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	FOAM BLAST (PETROLEUM HYDROCARBONS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000,000 - 9,999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYLENE GLYCOL
CAS Number:	107211
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBANT (MONTMORILLONATE CLAY)
CAS Number:	1302789
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	WINDSHIELD WASHER FLUID BLEND
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER (MIXED SOLVENTS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133506
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	VERMICULITE
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MAGNESIUM CHLORIDE
CAS Number:	7786303
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	XYLENE
CAS Number:	1330207
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 DIESEL FUEL
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL BENZENE
CAS Number:	100414
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHANOL
CAS Number:	67561
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78933
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NITROGEN CRYOGENIC LIQUID
CAS Number:	7727379
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM CHLORIDE
CAS Number:	7647145
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NAPTHALENE
CAS Number:	91203
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64197
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACTREL (PETROLEUM HYDROCARBONS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	GASOLINE (AUTOMOTIVE)
CAS Number:	8006619
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBENT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL ACETATE
CAS Number:	141786
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOBUTYL ACETATE
CAS Number:	110190
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER (MIXED SOLVENTS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2009
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310732
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYLENE GLYCOL
CAS Number:	107211
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	XYLENE
CAS Number:	1330207
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODA ASH
CAS Number:	64197
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78933
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	141435
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM HYDROXIDE
CAS Number:	1310732
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	WINDSHIELD WASHER FLUID BLEND
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL ACETATE
CAS Number:	141786
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-BUTYL ACETATE
CAS Number:	123864
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SULFURIC ACID
CAS Number:	7664939
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	PROPYLENE GLYCOL
CAS Number:	57556
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	VERMICULITE
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM CHLORIDE
CAS Number:	7647145
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHANOL
CAS Number:	67561
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TOLUENE
CAS Number:	108883
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOBUTYL ACETATE
CAS Number:	110190
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETONE
CAS Number:	67641
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ISOBUTYL KETONE
CAS Number:	10811
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM CHLORIDE
CAS Number:	7447407
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRACHLOROETHYLENE
CAS Number:	127184
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	LACQUER THINNER (MIXED SOLVENTS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MINERAL SPIRITS (PETROLEUM DISTILLATES)
CAS Number:	64742478
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000,000 - 9,999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	IMMERSION CLEANER (MIXED SOLVENTS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MONOETHANOLAMINE
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NAPTHALENE
CAS Number:	91203
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBANT (CHRISTOBALITE)
CAS Number:	14464461
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	POTASSIUM HYDROXIDE
CAS Number:	1310583
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OIL ABSORBANT (MONTMORILLONATE CLAY)
CAS Number:	1302789
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SECONDARY ETHOXYLATED ALCOHOLS
CAS Number:	84133506
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TETRAHYDROFURAN
CAS Number:	109999
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	#2 DIESEL FUEL
CAS Number:	68476346
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACTREL (PETROLEUM HYDROCARBONS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	GASOLINE (AUTOMOTIVE)
CAS Number:	8006619
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	OLEIC ACID
CAS Number:	112801
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	DIPROPYLENE GLYCOL MONOMETHYL ETHER
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	MAGNESIUM CHLORIDE
CAS Number:	7786303
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	N-METHYL-PYRROLIDINONE
CAS Number:	872504
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	NITROGEN CRYOGENIC LIQUID
CAS Number:	7727379
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM METASILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	TRIETHANOLAMINE
CAS Number:	102716
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ETHYL BENZENE
CAS Number:	100414
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	FOAM BLAST (PETROLEUM HYDROCARBONS)
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	1,000 - 9,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ACETOPHENONE
CAS Number:	98862
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	CALCIUM CHLORIDE
CAS Number:	10043524
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	METHYL ETHYL KETONE
CAS Number:	78933
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	SODIUM SILICATE
CAS Number:	6834920
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	UNIVERSAL PLUS 3%/6% FOAM
CAS Number:	Not reported
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	2-METHOXYMETHYLETHOXY (PROPANOL)
CAS Number:	34590948
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	AROMATIC 150
CAS Number:	64742945
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	10,000 - 99,999

Year:	2008
Corporate Name:	Dolton Recycle Center
Latitude:	41.644463000000002
Longitude:	-87.606306000000004
Facility Fax:	Not reported
Fire Dept:	Not reported
LEPC:	Not reported
Owner:	Not reported
Owner Phone:	Not reported
Owner Street:	Not reported
Owner City/State/ZipCode:	Not reported
Mailing Name:	Not reported
Mailing Street:	Not reported
Mailing City/State/ZipCode:	Not reported
Chemical Name:	ISOPROPYL ALCOHOL
CAS Number:	67630
Chemical EHS:	Not reported
Chemical Contents:	Not reported
Chemical Health Hazards:	Not reported
Chemical Max Daily Amount(pounds):	Not reported
Chemical Avg Daily Amount(pounds):	Not reported
Max Daily Range:	100,000 - 999,999

US FIN ASSUR:

EPA ID:	ILD980613913
Provider:	GREENWICH INSURANCE COMPANY
EPA region:	5
County:	COOK
Mechanism type:	INSURANCE
Mechanism ID:	PEC002102002
Cost estimate:	8000000
Face value:	8000000
Effective date:	9/1/2009

EPA ID:	ILD980613913
Provider:	INDIAN HARBOR INSURANCE COMPANY
EPA region:	5
County:	COOK
Mechanism type:	INSURANCE
Mechanism ID:	PEC000659411
Cost estimate:	3498366
Face value:	3941882
Effective date:	3/19/2013

EPA ID:	ILD980613913

SAFETY KLEEN ENVIROSYSTEMS INC (Continued) **1000222289**

Provider:	INDIAN HARBOUR INSURANCE COMPANY
EPA region:	5
County:	COOK
Mechanism type:	INSURANCE
Mechanism ID:	PEC000659407
Cost estimate:	3245746
Face value:	3293963
Effective date:	1/25/2009

IL Financial Assurance:

Region:	1
Facility Type:	Both Hazardous & Solid Waste Units
Operation Status:	Operating
EPA Number:	0310690006
US EPA Number:	ILD980613913
Financial Assurance Req?:	Y

2020 COR ACTION:

EPA ID:	ILD980613913
Region:	5
Action:	Not reported

Count: 20 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1011847795	LEXINGTON HOMES	2433 -41		FINDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS, CONSENT
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	1011854223	EDEN GARDENS APTS 325-335 E 132ND	301 E 132ND PL 13201-07 E MART		FINDS
CHICAGO	1004479985	CHA-WASHINGTON PARK HOMES	41ST AND COTTAGE		FINDS, IL AIRS
CHICAGO	1004473206	CHA-LAWNDALE GARDENS	2325 S CALIFORNIA		FINDS, IL AIRS
CHICAGO	1005415947	CITY OF CHICAGO	11700 S COTTAGE GROVE/SITE B		RCRA NonGen / NLR, FINDS
CHICAGO	1001960495	FEWER BOILER INC	3333 S COTTAGE GROVE		RCRA NonGen / NLR, FINDS
CHICAGO	1008150967	CITY HOMES INC	HERMITAGE & WILSON RD		FINDS
CHICAGO	1005494932	CHA-LATHROP HOMES DEVELOPMENT	NUMEROUS		FINDS, IL AIRS
CHICAGO	1004479652	CHA-FRANCES CABRINI HOMES	OAK AND HUDSON STREETS		FINDS
CHICAGO	1004477995	CHA-WASHINGTON PARK HOMES	PHASE HR-2		FINDS, IL AIRS
CHICAGO	1004479611	CHA-GRACE ABBOTT HOMES	PILSEN AREA		FINDS, IL AIRS
CHICAGO	1004477164	CHA-STATEWAY GARDENS	STATE STREET AND FEDERAL		FINDS
CHICAGO	1008151599	CHA-WASHINGTON PARK HOMES PHASE HR	VARIOUS		FINDS, IL AIRS
CHICAGO	1005487196	CHA GOV FRANK AND LOWDEN HOMES	VARIOUS		FINDS, IL AIRS
DOLTON	1003870419	DOLTON MUNI LDFL	140TH ST & COTTAGE GROVE	60419	CERC-NFRAP
DOLTON	1004697463	BORK TRANSPORT	198TH ST & GREENWOOD RD	60419	RCRA NonGen / NLR
DOLTON	1006930445	THORNRIDGE HIGH SCHOOL	15000 COTTAGE GROVE	60419	RCRA-SQG

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 04/08/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: N/A
Date Made Active in Reports: 01/28/2014	Last EDR Contact: 04/08/2014
Number of Days to Update: 78	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 02/28/2014
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/09/2014
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/31/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/08/2013	Telephone: 703-603-8704
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 04/11/2014
Number of Days to Update: 151	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 02/28/2014
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/09/2014
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/17/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/17/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/26/2014
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 55

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SSU: State Sites Unit Listing

The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

Date of Government Version: 02/03/2014
Date Data Arrived at EDR: 02/07/2014
Date Made Active in Reports: 03/10/2014
Number of Days to Update: 31

Source: Illinois Environmental Protection Agency
Telephone: 217-524-4826
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

LF WMRC: Waste Management & Research Center Landfill Database

The Waste Management & Research Center Landfill Database includes records from the Department of Public Health, Department of Mines & Minerals, Illinois Environmental Protection Agency, State Geological Survey, Northeastern Illinois Planning Commission and Pollution Control Board.

Date of Government Version: 12/31/2001
Date Data Arrived at EDR: 10/06/2006
Date Made Active in Reports: 11/06/2006
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 217-333-8940
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: No Update Planned

SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/30/2014
Date Made Active in Reports: 03/07/2014
Number of Days to Update: 36

Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Last EDR Contact: 05/02/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Annually

LF SPECIAL WASTE: Special Waste Site List

These landfills, as of January 1, 1990, accept non-hazardous special waste pursuant to the Illinois EPA Non-Hazardous Special Waste Definition. List A includes landfills that may receive any non-hazardous waste, Non-Regional Pollution Control Facilities are so noted. List B includes landfills designed to receive specific non-hazardous wastes. List B landfills are designated as a Regional Pollution Control Facility by RPCF, or Non-Regional Pollution Control Facility by Non-RPCF.

Date of Government Version: 01/01/1990
Date Data Arrived at EDR: 06/17/2009
Date Made Active in Reports: 07/15/2009
Number of Days to Update: 28

Source: Illinois EPA
Telephone: 217-782-9288
Last EDR Contact: 06/10/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IL NIPC: Solid Waste Landfill Inventory

Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/1988
Date Data Arrived at EDR: 08/01/1994
Date Made Active in Reports: 08/12/1994
Number of Days to Update: 11

Source: Northeastern Illinois Planning Commission
Telephone: 312-454-0400
Last EDR Contact: 05/23/2006
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CCDD: Clean Construction or Demolition Debris

Construction and demolition (C and D) debris is nonhazardous, uncontaminated material resulting from construction, remodeling, repair, or demolition of utilities, structures, and roads.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 02/10/2014
Number of Days to Update: 13

Source: Illinois EPA
Telephone: 217-524-3300
Last EDR Contact: 04/29/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Storage Tank Sites
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 12/04/2013
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/06/2014
Number of Days to Update: 37

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6762
Last EDR Contact: 04/29/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Semi-Annually

LUST TRUST: Underground Storage Tank Fund Payment Prioirty List
In case sufficient funds are not available in the Underground Storage Tank Fund, requests for payment are entered on the Payment Priority List by "queue date" order. As required by the Environmental Protection Act, the queue date is the date that a complete request for partial or final payment was received by the Agency. The queue date is "officially" confirmed at the end of the payment review process when a Final Decision Letter is sent to the site owner.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/06/2014
Number of Days to Update: 37

Source: Illinois EPA
Telephone: 217-782-6762
Last EDR Contact: 04/30/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/22/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/02/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 62

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Underground Storage Tank Facility List
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/07/2014
Number of Days to Update: 38

Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Last EDR Contact: 04/30/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/22/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 01/29/2014
Date Data Arrived at EDR: 01/29/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 42

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 62

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 129

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/02/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/15/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Sites with Engineering Controls
Sites using of engineered barriers (e.g., asphalt or concrete paving).

Date of Government Version: 01/17/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/20/2014
Number of Days to Update: 30

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Quarterly

Inst Control: Institutional Controls
Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

Date of Government Version: 01/17/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/20/2014
Number of Days to Update: 30

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

SRP: Site Remediation Program Database
The database identifies the status of all voluntary remediation projects administered through the pre-notice site cleanup program (1989 to 1995) and the site remediation program (1996 to the present).

Date of Government Version: 01/17/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/20/2014
Number of Days to Update: 30

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/17/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Municipal Brownfields Redevelopment Grant Program Project Descriptions
The Illinois Municipal Brownfields Redevelopment Grant Program (MBRGP) offers grants worth a maximum of $240,000 each to municipalities to assist in site investigation activities, development of cleanup objectives, and performance of cleanup activities. Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/06/2014
Number of Days to Update: 37

Source: Illinois Environmental Protection Agency
Telephone: 217-785-3486
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

BROWNFIELDS: Redevelopment Assessment Database
The Office of Site Evaluations Redevelopment Assessment database identifies the status of all properties within the State in which the Illinois EPA's Office of Site Evaluation has conducted a municipal Brownfield Redevelopment Assessment.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/06/2014
Number of Days to Update: 37

Source: Illinois Environmental Protection Agency
Telephone: 217-524-1658
Last EDR Contact: 04/30/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/20/2014
Date Data Arrived at EDR: 03/20/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/20/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/02/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/04/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 65

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Quarterly

CDL: Meth Drug Lab Site Listing
A listing of clandestine/meth drug lab locations.

Date of Government Version: 01/15/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 03/06/2014
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 217-782-5750
Last EDR Contact: 04/14/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 52

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

SPILLS: State spills

A listing of incidents reported to the Office of Emergency Response.

Date of Government Version: 06/28/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 08/29/2013
Number of Days to Update: 57

Source: Illinois EPA
Telephone: 217-782-3637
Last EDR Contact: 04/09/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/15/2013
Number of Days to Update: 71

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/06/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 55

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/24/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 31

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/05/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/26/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/28/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/29/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/09/2014
Date Data Arrived at EDR: 01/10/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/09/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 13

Source: EPA
Telephone: (312) 353-2000
Last EDR Contact: 03/14/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/28/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Biennially

UIC: Underground Injection Wells

Injection wells are used for disposal of fluids by "injection" into the subsurface. The construction of injection wells range from very technical designs with twenty-four hour monitoring to simply a hole dug in the ground to control runoff. As a result of this diversity, the UIC Program divides injection wells into five different classes.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 04/04/2014
Number of Days to Update: 36

Source: Illinois EPA
Telephone: 217-782-9878
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

NPDES: A Listing of Active Permits

A listing of facilities currently active in the state. The types of permits are public, private, federal and state.

Date of Government Version: 01/21/2014
Date Data Arrived at EDR: 01/22/2014
Date Made Active in Reports: 03/06/2014
Number of Days to Update: 43

Source: Illinois EPA
Telephone: 217-782-0610
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Varies

HWAR: Hazard Waste Annual Report

Each year, Illinois hazardous-waste generators tell the Illinois EPA the amounts and kinds of hazardous waste they produced during the previous year. Generators indicate by code the types of wastes produced and the steps they took to manage these wastes. If some or all of these wastes were sent to commercial treatment, storage, and disposal facilities (TSDFs), that information and the identity of each receiving facility also are submitted.
Illinois TSDFs likewise report the types and quantities of wastes received from in-state and out-of-state generators; they also report the procedures they used to manage these wastes.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 04/24/2012
Date Made Active in Reports: 05/16/2012
Number of Days to Update: 22

Source: Illinois EPA
Telephone: 217-524-3300
Last EDR Contact: 04/10/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Annually

DRYCLEANERS: Illinois Licensed Drycleaners

Any retail drycleaning facility in Illinois must apply for a license through the Illinois Drycleaner Environmental Response Trust Fund. Drycleaner Environmental Response Trust Fund of Illinois.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/26/2014
Date Made Active in Reports: 03/10/2014
Number of Days to Update: 12

Source: Drycleaner Environmental Response Trust Fund of Illinois
Telephone: 800-765-4041
Last EDR Contact: 02/26/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

IMPDMENT: Surface Impoundment Inventory

Statewide inventory of industrial, municipal, mining, oil & gas , and large agricultural impoundment. This study was conducted by the Illinois EPA to assess potentail for contamination of shallow aquifers. This was a one-time study. Although many of the impoundments may no longer be present, the sites may be contaminated.

Date of Government Version: 12/31/1980
Date Data Arrived at EDR: 03/08/2002
Date Made Active in Reports: 06/03/2002
Number of Days to Update: 87

Source: Illinois Waste Management & Research Center
Telephone: 217-333-8940
Last EDR Contact: 02/20/2002
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

AIRS: AIRS
A listing of air permits and emissions information.

Date of Government Version: 09/06/2013
Date Data Arrived at EDR: 09/06/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 42

Source: Illinois EPA
Telephone: 217-557-0314
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing
A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/18/2014
Date Made Active in Reports: 03/10/2014
Number of Days to Update: 20

Source: Illinois Emergency Management Agency
Telephone: 217-785-9860
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

COAL ASH: Coal Ash Site Listing
A listing of coal ash site lcoations.

Date of Government Version: 10/01/2011
Date Data Arrived at EDR: 03/09/2012
Date Made Active in Reports: 04/10/2012
Number of Days to Update: 32

Source: Illinois EPA
Telephone: 217-782-1654
Last EDR Contact: 03/07/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Annually

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

BOL: Bureau of Land Inventory Database
Bureau of Land inventory for facility information. Data results are cross-linked with all on-line database system applications from IEPA - Bureau of Land as well as USEPA FRS database.

Date of Government Version: 03/04/2014
Date Data Arrived at EDR: 03/06/2014
Date Made Active in Reports: 04/03/2014
Number of Days to Update: 28

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Varies

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: N/A

PIMW: Potentially Infectious Medical Waste
Potentially Infectious Medical Waste (PIMW) is waste generated in connection with the diagnosis, treatment (i.e., provision of medical services), or immunization of human beings or animals; research pertaining to the provision of medical services; or the provision or testing of biologicals.

Date of Government Version: 03/12/2014
Date Data Arrived at EDR: 03/28/2014
Date Made Active in Reports: 04/03/2014
Number of Days to Update: 6

Source: Illinois EPA
Telephone: 217-524-3289
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Annually

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Financial Assurance: Financial Assurance Information Listing
Information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 06/07/2013
Date Made Active in Reports: 07/26/2013
Number of Days to Update: 49

Source: Illinois Environmental Protection Agency
Telephone: 217-782-9887
Last EDR Contact: 03/12/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/02/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Illinois Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Illinois Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/28/2014
Date Data Arrived at EDR: 03/12/2014
Date Made Active in Reports: 04/29/2014
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 03/12/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Homes & Centers Listing
Source: Department of Children & Family Services
Telephone: 312-814-4150

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ALTGELD GARDENS/PHILLIP MURRAY HOMES
E. 131ST STREET & S. INGLESIDE AVENUE
CHICAGO, IL 60827

TARGET PROPERTY COORDINATES

Latitude (North):	41.6571 - 41˚ 39' 25.56''
Longitude (West):	87.5996 - 87˚ 35' 58.56''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	450075.4
UTM Y (Meters):	4611666.0
Elevation:	589 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	41087-F5 LAKE CALUMET, IL IN
Most Recent Revision:	1997

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES

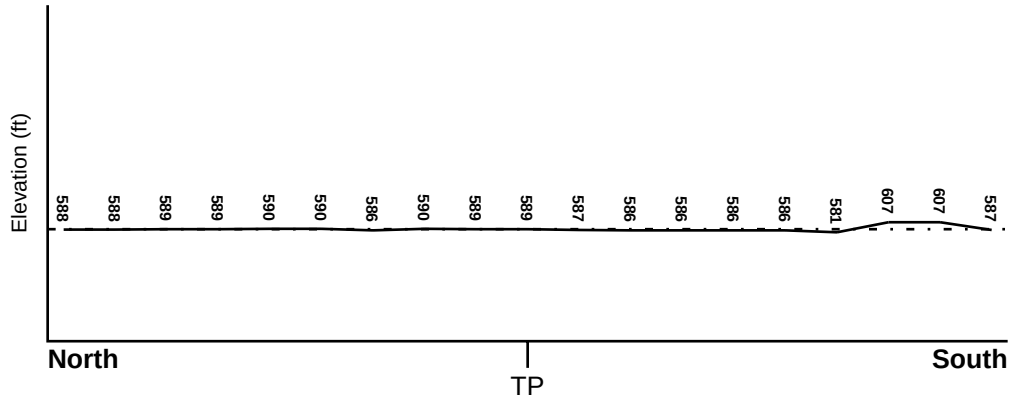

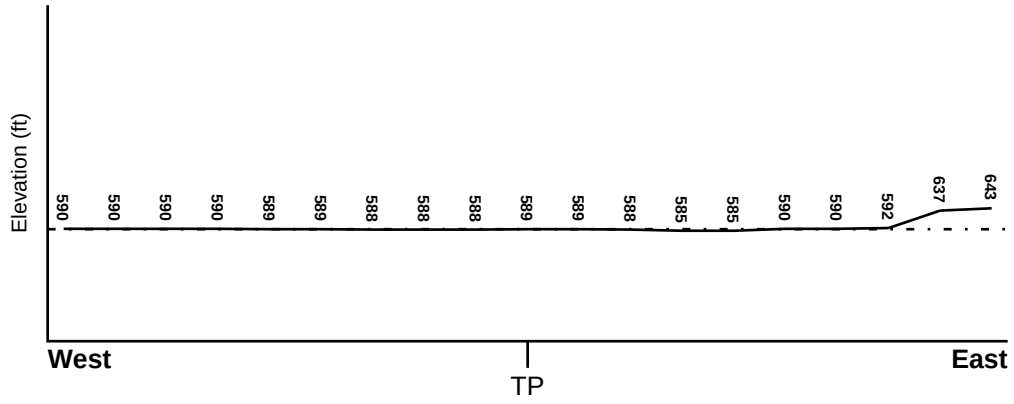

Target Property Elevation: 589 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
COOK, IL	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	17031C - FEMA DFIRM Flood data
Additional Panels in search area:	Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
LAKE CALUMET	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1/2 - 1 Mile South
Site Name:	Land & Lakes #2
Site EPA ID Number:	ILD981531882
Surficial Aquifer Flow Dir.:	N TOWARD THE LITTLE CALUMET RIVER.
Measured Depth to Water:	not available.
Hydraulic Connection:	While a hydraulic connection between the near-surface lacustrine and glacial drift deposits aquifer and the underlying Silurian Dolomite bedrock aquifer is unlikely, a downward vertical ground water flow is present.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW

* ©1996 Site--specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
D46	1/2 - 1 Mile South	N
49	1/2 - 1 Mile WNW	W

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Silurian
Series:	Middle Silurian (Niagoaran)
Code:	S2 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	URBANLAND
Soil Surface Texture:	variable
Hydrologic Group:	Not reported
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 0 inches
Depth to Bedrock Max:	> 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	60 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silt loam
fine sandy loam
loam
fine sand

Surficial Soil Types: silt loam
fine sandy loam
loam
fine sand

Shallow Soil Types: sandy loam

Deeper Soil Types: silt loam
sand
loamy sand
loam

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
6	USGS40000298840	1/4 - 1/2 Mile WNW
B9	USGS40000298836	1/2 - 1 Mile East
15	USGS40000298813	1/2 - 1 Mile SE
16	USGS40000298852	1/2 - 1 Mile NE
20	USGS40000298858	1/2 - 1 Mile NNE
22	USGS40000298848	1/2 - 1 Mile ENE
24	USGS40000298847	1/2 - 1 Mile WNW
25	USGS40000298823	1/2 - 1 Mile WSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	ILSG20000193721	1/4 - 1/2 Mile NE
A2	ILSG20000193720	1/4 - 1/2 Mile NE
A3	ILSG20000193723	1/4 - 1/2 Mile NE
A4	ILSG20000193722	1/4 - 1/2 Mile NE
5	ILSG20000193953	1/4 - 1/2 Mile NNW
7	ILSG20000193714	1/2 - 1 Mile WNW
B8	ILSG20000193543	1/2 - 1 Mile East
10	ILSG20000194198	1/2 - 1 Mile NNE
11	ILSG20000192404	1/2 - 1 Mile SSE
C12	ILSG20000193724	1/2 - 1 Mile ENE
C13	ILSG20000193725	1/2 - 1 Mile ENE
C14	ILSG20000193726	1/2 - 1 Mile ENE
17	ILSG20000192405	1/2 - 1 Mile SSE
18	ILSG20000193716	1/2 - 1 Mile WNW
19	ILSG20000193544	1/2 - 1 Mile East
21	ILSG20000194682	1/2 - 1 Mile NNW
23	ILSG20000191739	1/2 - 1 Mile South
26	ILSG20000192064	1/2 - 1 Mile SE
27	ILSG20000192409	1/2 - 1 Mile SW
28	ILSG20000191633	1/2 - 1 Mile SSE
29	ILSG20000193949	1/2 - 1 Mile WNW
D30	ILSG20000191476	1/2 - 1 Mile South
D31	ILSG20000191465	1/2 - 1 Mile South
D32	ILSG20000191466	1/2 - 1 Mile South
D33	ILSG20000191467	1/2 - 1 Mile South
D34	ILSG20000191464	1/2 - 1 Mile South
D35	ILSG20000191461	1/2 - 1 Mile South
D36	ILSG20000191462	1/2 - 1 Mile South
D37	ILSG20000191463	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D38	ILSG20000191468	1/2 - 1 Mile South
D39	ILSG20000191473	1/2 - 1 Mile South
D40	ILSG20000191474	1/2 - 1 Mile South
D41	ILSG20000191475	1/2 - 1 Mile South
D42	ILSG20000191472	1/2 - 1 Mile South
D43	ILSG20000191469	1/2 - 1 Mile South
D44	ILSG20000191470	1/2 - 1 Mile South
D45	ILSG20000191471	1/2 - 1 Mile South
47	ILSG20000194626	1/2 - 1 Mile NW
48	ILSG20000192661	1/2 - 1 Mile WSW
50	ILSG20000193538	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 3931997.2s

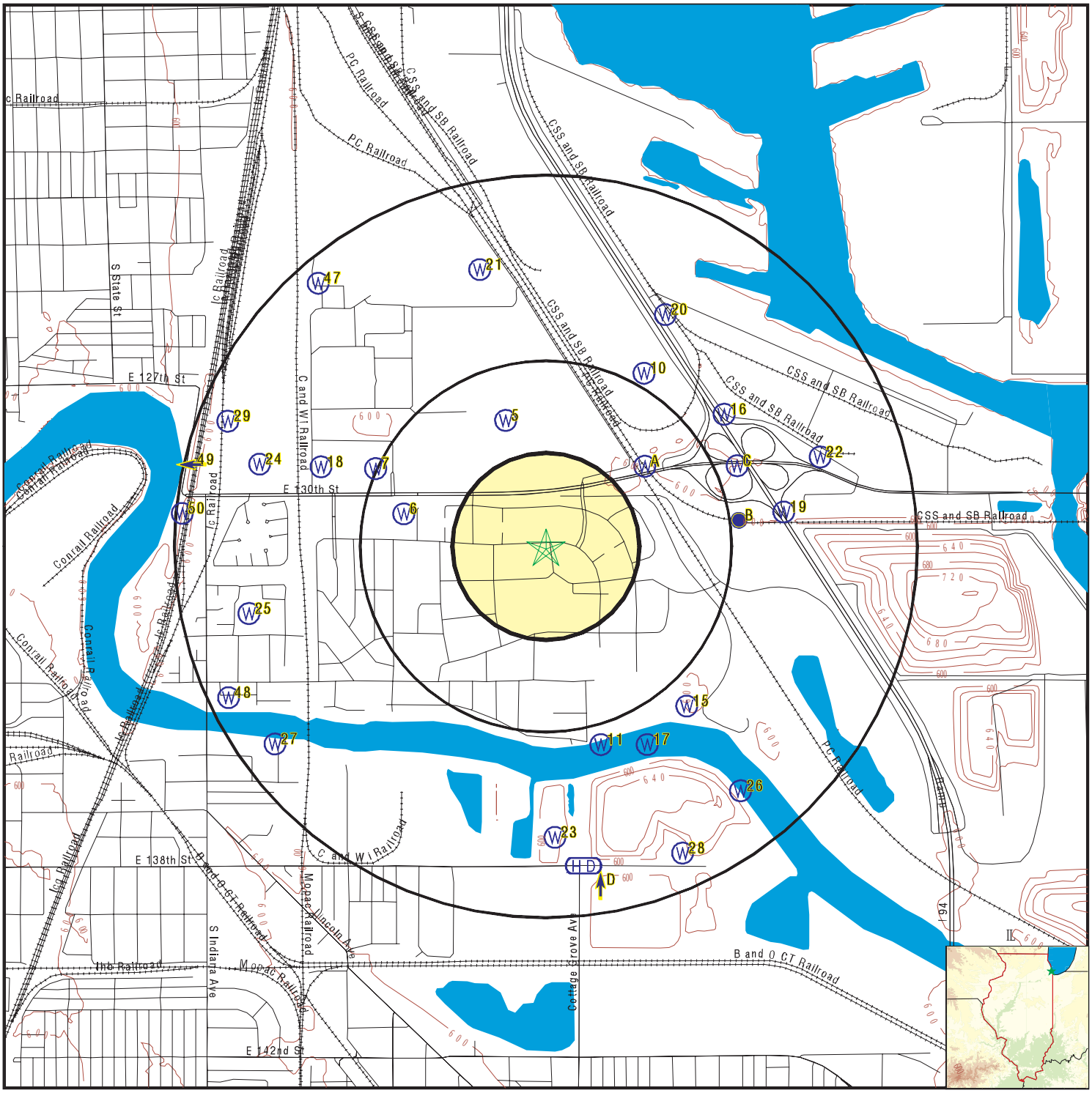

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location
HD Closest Hydrogeological Data

N

SITE NAME: Altgeld Gardens/Phillip Murray Homes	CLIENT: Carnow, Conibear & Assoc., LTD
ADDRESS: E. 131st Street & S. Ingleside Avenue Chicago IL 60827	CONTACT: Nohemi Melero
LAT/LONG: 41.6571 / 87.5996	INQUIRY #: 3931997.2s DATE: May 06, 2014 5:46 pm

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Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **NE** **1/4 - 1/2 Mile** **Higher**	**IL WELLS**	**ILSG20000193721**

Pt api number:	120313329900	Pt status:	ENG
Pt longitude:	-87.59445		
Pt latitude:	41.660228		
Api number:	120313329900		
Longitude :	-87.59445		
Latitude :	41.660228		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	130th St. over K&E Railroad
Farm num:	B-2	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	592
Elevref:	Ground level	Total depth:	51
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

A2 **NE** **1/4 - 1/2 Mile** **Higher**	**IL WELLS**	**ILSG20000193720**

Pt api number:	120313329800	Pt status:	ENG
Pt longitude:	-87.59445		
Pt latitude:	41.660228		
Api number:	120313329800		
Longitude :	-87.59445		
Latitude :	41.660228		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	130th St. over K&E Railroad
Farm num:	B-1	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	616
Elevref:	Ground level	Total depth:	49
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

A3 **NE** **1/4 - 1/2 Mile** **Higher**	**IL WELLS**	**ILSG20000193723**

Pt api number:	120313330100	Pt status:	ENG
Pt longitude:	-87.59445		
Pt latitude:	41.660228		
Api number:	120313330100		
Longitude :	-87.59445		
Latitude :	41.660228		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	130th St. over K&E Railroad
Farm num:	B-4	Company name:	IL Div. of Highways

Status:	Engineering Test	Elevation:	614
Elevref:	Ground level	Total depth:	47
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

A4
NE
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG20000193722**

Pt api number:	120313330000	Pt status:	ENG
Pt longitude:	-87.59445		
Pt latitude:	41.660228		
Api number:	120313330000		
Longitude :	-87.59445		
Latitude :	41.660228		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	130th St. over K&E Railroad
Farm num:	B-3	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	586
Elevref:	Ground level	Total depth:	57
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

5
NNW
1/4 - 1/2 Mile
Lower

IL WELLS **ILSG20000193953**

Pt api number:	120312531300	Pt status:	ENG
Pt longitude:	-87.601691		
Pt latitude:	41.662018		
Api number:	120312531300		
Longitude :	-87.601691		
Latitude :	41.662018		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metro San Dist
Farm num:	B-6	Company name:	Testing Service Corp.
Status:	Engineering Test	Elevation:	585
Elevref:	Topographic Map	Total depth:	15
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

6
WNW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000298840**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413930087362501		
Monloc name:	bh30 aldridge school		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6583679
Longitude:	-87.6069906	Sourcemap scale:	Not Reported

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	587
Vert measure units:	feet	Vertacc measure val:	3
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Clay (Holocene and/or Pleistocene)		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	20
Welldepth units:	ft	Wellholedepth:	20
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1993-06-16	8.86	

7
WNW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000193714**

Pt api number:	120310087700	Pt status:	ENG
Pt longitude:	-87.608454		
Pt latitude:	41.660136		
Api number:	120310087700		
Longitude :	-87.608454		
Latitude :	41.660136		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Bow3	Company name:	Chicago Sanitary Dist.
Status:	Engineering Test	Elevation:	586
Elevref:	Topographic Map	Total depth:	997
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B8
East
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000193543**

Pt api number:	120313200300	Pt status:	STRAT
Pt longitude:	-87.589621		
Pt latitude:	41.658437		
Api number:	120313200300		
Longitude :	-87.589621		
Latitude :	41.658437		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Carver High School
Farm num:	LC-1	Company name:	D & G Drilling Co., Inc.

Status:	Stratigraphic Test	Elevation:	590
Elevref:	Ground level	Total depth:	59
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B9
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000298836**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413928087342801		
Monloc name:	isws well at carver high school		
Monloc type:	Well		
Monloc desc:	s78 wrir 95-4253		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6578125
Longitude:	-87.58949	Sourcemap scale:	Not Reported
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	590
Vert measure units:	feet	Vertacc measure val:	3
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Silurian-Devonian aquifers		
Formation type:	Niagaran Series		
Aquifer type:	Confined single aquifer		
Construction date:	Not Reported	Welldepth:	58
Welldepth units:	ft	Wellholedepth:	58
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1997-07-09	31.20		1993-06-15	30.53	
1992-06-23	30.92		1991-05-06	30.7	

10
NNE
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000194198**

Pt api number:	120312531200	Pt status:	ENG
Pt longitude:	-87.594492		
Pt latitude:	41.663857		
Api number:	120312531200		
Longitude :	-87.594492		
Latitude :	41.663857		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metro San Dist
Farm num:	B-7	Company name:	Walter Louis K

Status:	Engineering Test	Elevation:	589
Elevref:	Ground level	Total depth:	17
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

11
SSE **IL WELLS** **ILSG20000192404**
1/2 - 1 Mile
Lower

Pt api number:	120313572700	Pt status:	MONIT
Pt longitude:	-87.596737		
Pt latitude:	41.649361		
Api number:	120313572700		
Longitude :	-87.596737		
Latitude :	41.649361		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land and Lakes Company - 1 & 2
Farm num:	R17D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	63
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

C12
ENE **IL WELLS** **ILSG20000193724**
1/2 - 1 Mile
Higher

Pt api number:	120313330200	Pt status:	ENG
Pt longitude:	-87.589644		
Pt latitude:	41.660249		
Api number:	120313330200		
Longitude :	-87.589644		
Latitude :	41.660249		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Calumet Expressway
Farm num:	B-1	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	588
Elevref:	Ground level	Total depth:	54
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

C13
ENE **IL WELLS** **ILSG20000193725**
1/2 - 1 Mile
Higher

Pt api number:	120313330300	Pt status:	ENG
Pt longitude:	-87.589644		
Pt latitude:	41.660249		
Api number:	120313330300		
Longitude :	-87.589644		
Latitude :	41.660249		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Calumet Expressway
Farm num:	B-2	Company name:	IL Div. of Highways

Status:	Engineering Test	Elevation:	587
Elevref:	Ground level	Total depth:	53
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

C14
ENE **IL WELLS** **ILSG20000193726**
1/2 - 1 Mile
Higher

Pt api number:	120313330400	Pt status:	ENG
Pt longitude:	-87.589644		
Pt latitude:	41.660249		
Api number:	120313330400		
Longitude :	-87.589644		
Latitude :	41.660249		
Section:	26	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Calumet Expressway
Farm num:	B-3	Company name:	IL Div. of Highways
Status:	Engineering Test	Elevation:	587
Elevref:	Ground level	Total depth:	52
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

15
SE **FED USGS** **USGS40000298813**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413903087353201		
Monloc name:	beubein woods soil boring		
Monloc type:	Well: Test hole not completed as a well		
Monloc desc:	see wrir 96-4126, fill is dredge spoil		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6508681
Longitude:	-87.5922677	Sourcemap scale:	Not Reported
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	605
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19941104	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	9
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1994-11-04		

Note: The site was dry (no water level recorded).

16
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40000298852**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413944087352501		
Monloc name:	isws well 2		
Monloc type:	Well		
Monloc desc:	s82 wrir 95-4253		
Huc code:	04040001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.662257
Longitude:	-87.5903235	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	587.63
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Other aquifers		
Formation type:	Fill		
Aquifer type:	Unconfined single aquifer		
Construction date:	19910401	Welldepth:	15
Welldepth units:	ft	Wellholedepth:	20
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1992-06-23	4.13	

17
SSE
1/2 - 1 Mile
Lower

IL WELLS **ILSG20000192405**

Pt api number:	120313211200	Pt status:	MONIT
Pt longitude:	-87.594324		
Pt latitude:	41.649362		
Api number:	120313211200		
Longitude :	-87.594324		
Latitude :	41.649362		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes
Farm num:	RA-11S	Company name:	Raimonde & Sons

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	15
Wformation:	unconsolidated	Wfmfrom:	9
Wfmto:	15	Pumpgpm:	0

18
WNW **IL WELLS** **ILSG20000193716**
1/2 - 1 Mile
Higher

Pt api number:	120312950200	Pt status:	WATER
Pt longitude:	-87.611297		
Pt latitude:	41.660205		
Api number:	120312950200		
Longitude :	-87.611297		
Latitude :	41.660205		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metropolitan Sanitary Dist
Farm num:	11	Company name:	Knierim, Phil
Status:	Water Well	Elevation:	591
Elevref:	Ground level	Total depth:	343
Wformation:	rock	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

19
East **IL WELLS** **ILSG20000193544**
1/2 - 1 Mile
Higher

Pt api number:	120310089600	Pt status:	ENG
Pt longitude:	-87.587217		
Pt latitude:	41.658446		
Api number:	120310089600		
Longitude :	-87.587217		
Latitude :	41.658446		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Dh-6	Company name:	Chicago Sanitary Dist.
Status:	Engineering Test	Elevation:	584
Elevref:	Ground level	Total depth:	995
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

20
NNE **FED USGS** **USGS40000298858**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413958087353601		
Monloc name:	isws well 3		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	04040001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6661458
Longitude:	-87.5933792	Sourcemap scale:	Not Reported

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	584.49
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Other aquifers		
Formation type:	Fill		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	13
Welldepth units:	ft	Wellholedepth:	13
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1992-06-22	3.56	

21
NNW
1/2 - 1 Mile
Lower

IL WELLS **ILSG20000194682**

Pt api number:	120310088200	Pt status:	ENG
Pt longitude:	-87.603035		
Pt latitude:	41.667906		
Api number:	120310088200		
Longitude :	-87.603035		
Latitude :	41.667906		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Ow-2	Company name:	Chicago Sanitary Dist.
Status:	Engineering Test	Elevation:	599
Elevref:	Topographic Map	Total depth:	1696
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

22
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000298848**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413938087350701		
Monloc name:	isws well 1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	04040001	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6605903
Longitude:	-87.5853233	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	585.90
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	11
Welldepth units:	ft	Wellholedepth:	11
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1992-06-22	1.37	

23
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191739**

Pt api number:	120312641500	Pt status:	WATER
Pt longitude:	-87.599126		
Pt latitude:	41.645743		
Api number:	120312641500		
Longitude :	-87.599126		
Latitude :	41.645743		
Section:	34	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Brooks, Brenda
Farm num:	Not Reported	Company name:	Not Reported
Status:	Water Well	Elevation:	607
Elevref:	Ground level	Total depth:	210
Wformation:	rock	Wfmfrom:	40
Wfmto:	210	Pumpgpm:	10

24
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000298847**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413937087365201		
Monloc name:	37N14E-27.6g1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.6603123
Longitude:	-87.6144909	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	589.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Cambrian-Ordovician aquifer system		
Formation type:	Ironton-Galesville		
Aquifer type:	Not Reported		
Construction date:	1914	Welldepth:	1648
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

25
WSW **FED USGS** **USGS40000298823**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-413916087365401		
Monloc name:	bh29 dubois school		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.654479
Longitude:	-87.6150464	Sourcemap scale:	Not Reported
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	590
Vert measure units:	feet	Vertacc measure val:	3
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Sand and gravel aquifers (glaciated regions)		
Formation type:	Clay (Holocene and/or Pleistocene)		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	15
Welldepth units:	ft	Wellholedepth:	15
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1993-06-16	3.34	

26
SE **IL WELLS** **ILSG20000192064**
1/2 - 1 Mile
Lower

Pt api number:	120313572800	Pt status:	MONIT
Pt longitude:	-87.589466		
Pt latitude:	41.647559		
Api number:	120313572800		
Longitude :	-87.589466		
Latitude :	41.647559		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land and Lakes Company - 1 & 2
Farm num:	R18D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	53
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

27
SW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000192409**

Pt api number:	120312951000	Pt status:	WATER
Pt longitude:	-87.613692		
Pt latitude:	41.649387		
Api number:	120312951000		
Longitude :	-87.613692		
Latitude :	41.649387		
Section:	34	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metropolitan Sanitary Dist
Farm num:	10	Company name:	Knierim, Phil
Status:	Water Well	Elevation:	587
Elevref:	Ground level	Total depth:	348
Wformation:	rock	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

28
SSE
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191633**

Pt api number:	120312590200	Pt status:	WATER
Pt longitude:	-87.592486		
Pt latitude:	41.645126		
Api number:	120312590200		
Longitude :	-87.592486		
Latitude :	41.645126		
Section:	35	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co.
Farm num:	Not Reported	Company name:	Wehling Well Works Inc.
Status:	Water Well	Elevation:	594
Elevref:	Ground level	Total depth:	450
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

Map ID Direction Distance Elevation	Database	EDR ID Number
29 **WNW** **1/2 - 1 Mile** **Lower**	**IL WELLS**	**ILSG20000193949**

Pt api number:	120313033400	Pt status:	OBS
Pt longitude:	-87.616145		
Pt latitude:	41.661987		
Api number:	120313033400		
Longitude :	-87.616145		
Latitude :	41.661987		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metr Sanitary Dist Chicag
Farm num:	C80	Company name:	Continental Drilling Company
Status:	Observation Well	Elevation:	589
Elevref:	Ground level	Total depth:	387
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D30 **South** **1/2 - 1 Mile** **Higher**	**IL WELLS**	**ILSG20000191476**

Pt api number:	120313479800	Pt status:	WATER
Pt longitude:	-87.596704		
Pt latitude:	41.64391		
Api number:	120313479800		
Longitude :	-87.596704		
Latitude :	41.64391		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Pr. Landfill
Farm num:	R01S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well	Elevation:	593
Elevref:	Not Reported	Total depth:	24
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D31 **South** **1/2 - 1 Mile** **Higher**	**IL WELLS**	**ILSG20000191465**

Pt api number:	120313538800	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538800		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	G36d	Company name:	Not Reported

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	74
Wformation:	shaley dolomite	Wfmfrom:	63
Wfmto:	73	Pumpgpm:	0

D32
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191466**

Pt api number:	120313571700	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313571700		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G35D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	75
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D33
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191467**

Pt api number:	120313571800	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313571800		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G35S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	25
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D34
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191464**

Pt api number:	120313538700	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538700		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	EW-5	Company name:	Not Reported

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	44
Wformation:	gvl, brick fl,sty cl	Wfmfrom:	18
Wfmto:	37	Pumpgpm:	0

D35
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191461**

Pt api number:	120313538400	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538400		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	EW-1	Company name:	Not Reported
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	19
Wformation:	silty clay	Wfmfrom:	11
Wfmto:	16	Pumpgpm:	0

D36
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191462**

Pt api number:	120313538500	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538500		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	EW-2	Company name:	Not Reported
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	32
Wformation:	sand, sty clay, cl-s	Wfmfrom:	10
Wfmto:	29	Pumpgpm:	0

D37
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191463**

Pt api number:	120313538600	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313538600		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	River Bend Prairie Landfill
Farm num:	EW-3	Company name:	Not Reported

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	41
Wformation:	silty clay	Wfmfrom:	18
Wfmto:	38	Pumpgpm:	0

D38
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191468**

Pt api number:	120313571900	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313571900		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G36S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	29
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D39
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191473**

Pt api number:	120313572400	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572400		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	R14S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	31
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D40
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191474**

Pt api number:	120313572500	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572500		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	R32D	Company name:	RD-n-P Drilling, Inc.

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	69
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D41
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191475**

Pt api number:	120313572600	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572600		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	R32S	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	26
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D42
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191472**

Pt api number:	120313572300	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572300		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	R14D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	67
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D43
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191469**

Pt api number:	120313572000	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572000		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G41D	Company name:	RD-n-P Drilling, Inc.

Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	74
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D44
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191470**

Pt api number:	120313572100	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572100		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G42D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	70
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D45
South
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000191471**

Pt api number:	120313572200	Pt status:	MONIT
Pt longitude:	-87.596702		
Pt latitude:	41.643909		
Api number:	120313572200		
Longitude :	-87.596702		
Latitude :	41.643909		
Section:	2	Twp:	36
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lakes Co/River Bend Prairie
Farm num:	G47D	Company name:	RD-n-P Drilling, Inc.
Status:	Water Well Monitoring Well	Elevation:	0
Elevref:	Not Reported	Total depth:	75
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D46
South
1/2 - 1 Mile
Higher

AQUIFLOW **27154**

Site ID:	1000274369
Groundwater Flow:	N
Deep Water Depth:	Not Reported
Average Water Depth:	7
Shallow Water Depth:	Not Reported
Current Deep Depth:	6.88
Current Average Depth:	Not Reported
Current Shallow Depth:	5.06
Date:	07/31/1997

Map ID Direction Distance Elevation		Database	EDR ID Number
47 **NW** **1/2 - 1 Mile** **Higher**		**IL WELLS**	**ILSG20000194626**

Pt api number:	120310089100	Pt status:	ENG
Pt longitude:	-87.611441		
Pt latitude:	41.66737		
Api number:	120310089100		
Longitude :	-87.611441		
Latitude :	41.66737		
Section:	27	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Deep Tunnel Test
Farm num:	Dh1	Company name:	Chicago Sanitary Dist.
Status:	Engineering Test	Elevation:	591
Elevref:	Ground level	Total depth:	1696
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

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48 **WSW** **1/2 - 1 Mile** **Higher**		**IL WELLS**	**ILSG20000192661**

Pt api number:	120310237300	Pt status:	ENG
Pt longitude:	-87.616109		
Pt latitude:	41.651195		
Api number:	120310237300		
Longitude :	-87.616109		
Latitude :	41.651195		
Section:	34	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Chgo Pub Wks Dept
Farm num:	Not Reported	Company name:	Chicago Pub. Works Dept.
Status:	Engineering Test	Elevation:	584
Elevref:	Topographic Map	Total depth:	42
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

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49 **WNW** **1/2 - 1 Mile** **Higher**	Site ID:	S100053498	**AQUIFLOW**	**27284**
	Groundwater Flow:	W		
	Deep Water Depth:	4.84		
	Average Water Depth:	Not Reported		
	Shallow Water Depth:	0.52		
	Current Deep Depth:	4.84		
	Current Average Depth:	Not Reported		
	Current Shallow Depth:	0.52		
	Date:	08/28/1992		

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50 **West** **1/2 - 1 Mile** **Higher**		**IL WELLS**	**ILSG20000193538**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Pt api number:	120313033700	Pt status:	OBS
Pt longitude:	-87.618513		
Pt latitude:	41.65839		
Api number:	120313033700		
Longitude :	-87.618513		
Latitude :	41.65839		
Section:	33	Twp:	37
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Metr Sanitary Dist Chicag
Farm num:	C5	Company name:	Continental Drilling Company
Status:	Observation Well	Elevation:	590
Elevref:	Ground level	Total depth:	460
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: IL Radon

Radon Test Results

Zipcode	Result
60827	0.5
60827	0.9
60827	0.9
60827	0.2
60827	0.4
60827	2
60827	0.1

Federal EPA Radon Zone for COOK County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for COOK COUNTY, IL

Number of sites tested: 82

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.273 pCi/L	96%	4%	0%
Living Area - 2nd Floor	0.900 pCi/L	100%	0%	0%
Basement	1.740 pCi/L	93%	7%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Records
Source: Illinois Geological Survey
Telephone: 217-333-4747

Illinois Private Well Database and PICS (Public, Industrial, Commercial Survey)
Source: Illinois State Water Survey
Telephone: 217-333-9043

Water Well Location Information
Source: Illinois Environmental Protection Agency
Telephone: 217-782-0810

OTHER STATE DATABASE INFORMATION

RADON

State Database: IL Radon
Source: Department of Nuclear Safety
Telephone: 217-785-9958
County Radon Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Appendix G-1

Historical Research Documentation

Aerial Photo Decade Package

CARNOW CONIBEAR

Altgeld Gardens/Phillip Murray Homes
E. 131st Street & S. Ingleside Avenue
Chicago, IL 60827

Inquiry Number: 3931997.5
May 06, 2014

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography May 06, 2014

Target Property:

E. 131st Street & S. Ingleside Avenue

Chicago, IL 60827

Year	***Scale***	***Details***	***Source***
1938	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: November 14, 1938	EDR
1938	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: November 14, 1938	EDR
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1952	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: March 29, 1952	EDR
1962	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 20, 1962	EDR
1962	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 20, 1962	EDR
1964	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 01, 1964	EDR
1974	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: October 10, 1974	EDR
1974	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: October 10, 1974	EDR
1974	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: October 10, 1974	EDR
1988	Aerial Photograph. Scale: 1"=750'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 12, 1988	EDR
1993	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 17, 1993	EDR
1993	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Date: April 17, 1993	EDR
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2007	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2007	EDR

Year	*Scale*	*Details*	*Source*
2009	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2009	EDR
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2010	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2010	EDR
2010	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2010	EDR
2011	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2011	EDR
2011	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2011	EDR
2012	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2012	EDR
2012	Aerial Photograph. Scale: 1"=500'	Panel #: 41087-F5, Lake Calumet, IL;/Flight Year: 2012	EDR

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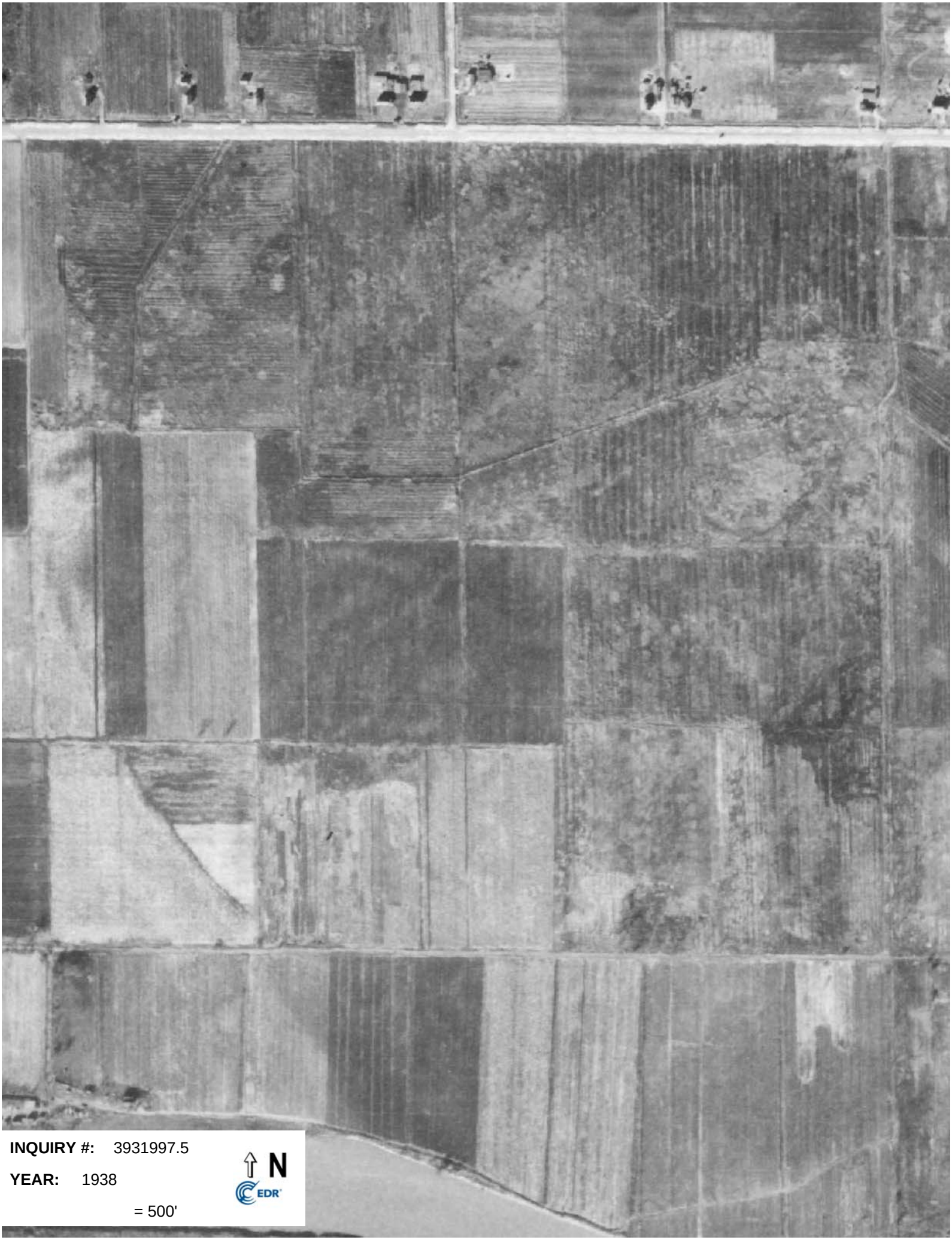
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YEAR: 1952

= 500'

INQUIRY #: 3931997.5

YEAR: 1952

= 500'

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INQUIRY #: 3931997.5

YEAR: 1962

= 500'

INQUIRY #: 3931997.5
YEAR: 1962
= 500'
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EDR

INQUIRY #: 3931997.5
YEAR: 1964
= 500'
N
EDR

INQUIRY #: 3931997.5

YEAR: 1974

= 500'

N

INQUIRY #: 3931997.5

YEAR: 1974

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YEAR: 1974

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YEAR: 1988

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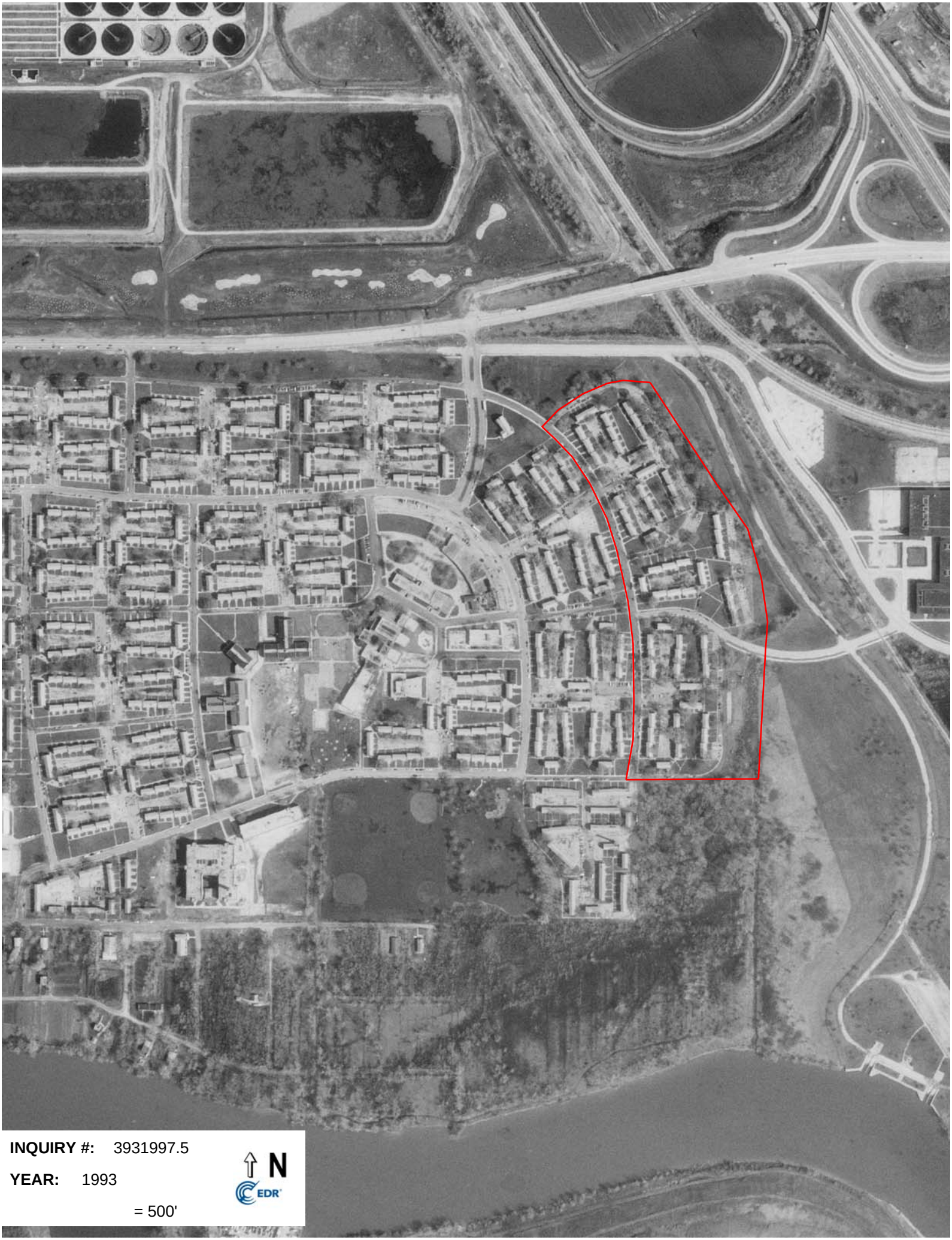

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YEAR: 1993

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YEAR: 1993
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YEAR: 1998

= 500'

N

INQUIRY #: 3931997.5
YEAR: 1998
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EDR

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YEAR: 2007
= 500'
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EDR

INQUIRY #: 3931997.5

YEAR: 2009

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INQUIRY #: 3931997.5
YEAR: 2009
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INQUIRY #: 3931997.5
YEAR: 2010
= 500'
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EDR

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YEAR: 2010
= 500'
N
EDR

INQUIRY #: 3931997.5

YEAR: 2011

= 500'

N

INQUIRY #: 3931997.5
YEAR: 2011
= 500'
N
EDR

INQUIRY #: 3931997.5

YEAR: 2012

= 500'

INQUIRY #: 3931997.5
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= 500'
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EDR

Appendix G-2

Historical Research Documentation

Sanborn Map Report

CARNOW CONIBEAR

1975 Certified Sanborn Map

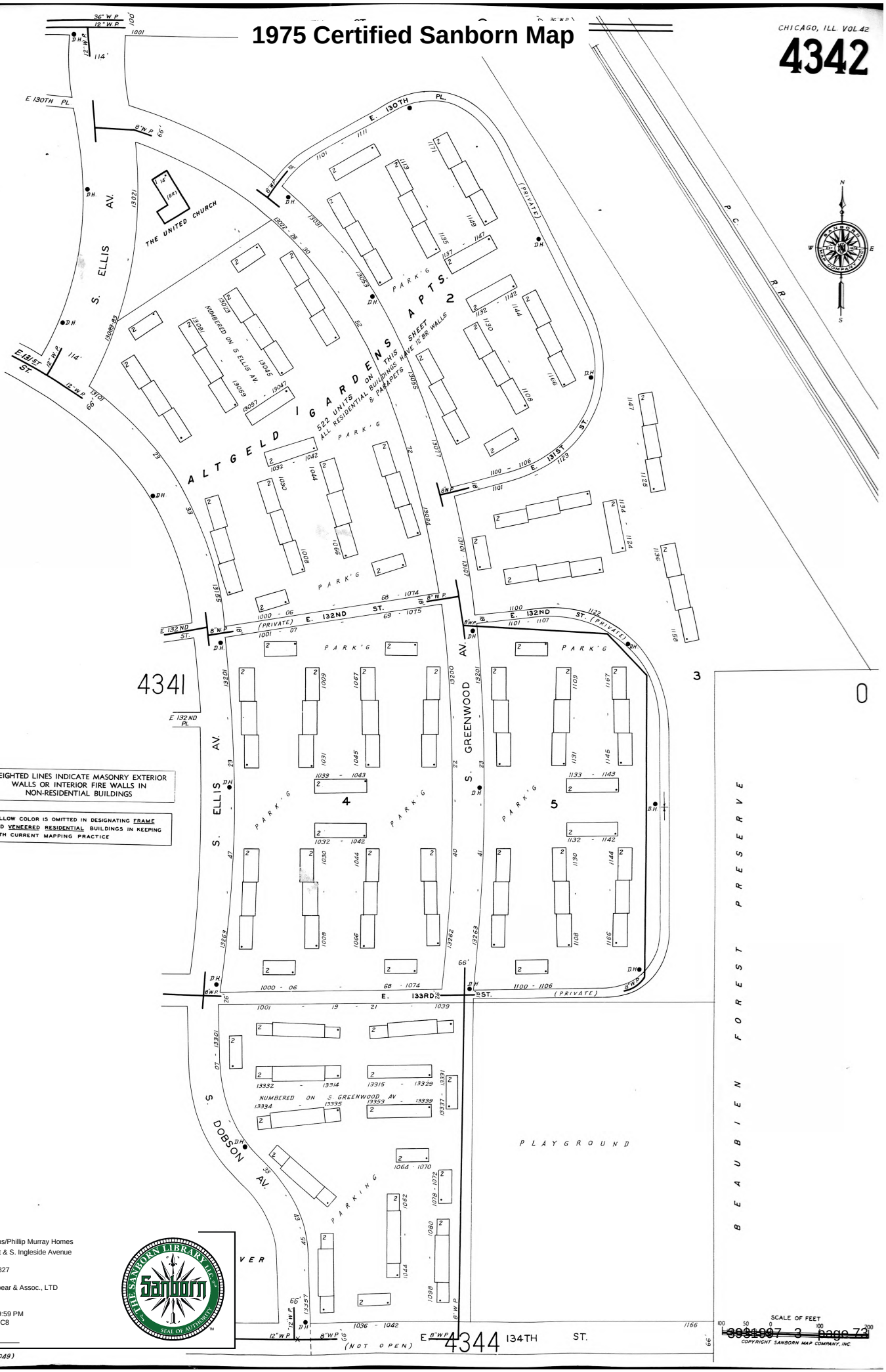

WEIGHTED LINES INDICATE MASONRY EXTERIOR WALLS OR INTERIOR FIRE WALLS IN NON-RESIDENTIAL BUILDINGS

YELLOW COLOR IS OMITTED IN DESIGNATING FRAME AND VENEERED RESIDENTIAL BUILDINGS IN KEEPING WITH CURRENT MAPPING PRACTICE

Site Name:	Altgeld Gardens/Phillip Murray Homes
Address:	E. 131st Street & S. Ingleside Avenue
City, ST, ZIP:	Chicago IL 60827
Client:	Carnow, Conibear & Assoc., LTD
EDR Inquiry:	3931997.3
Order Date:	5/13/2014 1:09:59 PM
Certification #	2A5D-4352-97C8
Copyright:	1975

(6121049)

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Certification # 2A5D-4352-97C8

1987 Certified Sanborn Map

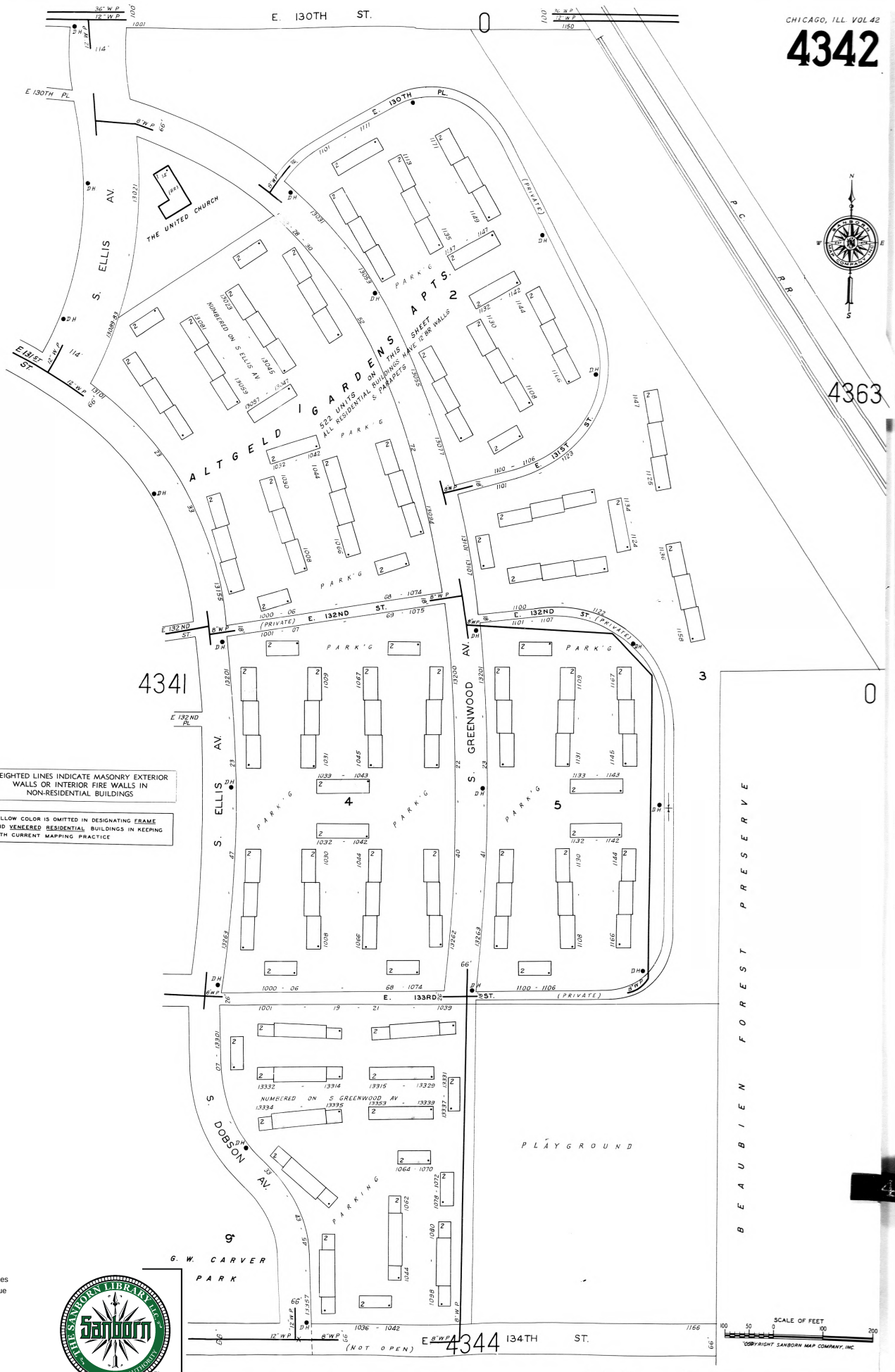

WEIGHTED LINES INDICATE MASONRY EXTERIOR WALLS OR INTERIOR FIRE WALLS IN NON-RESIDENTIAL BUILDINGS

YELLOW COLOR IS OMITTED IN DESIGNATING FRAME AND VENEERED RESIDENTIAL BUILDINGS IN KEEPING WITH CURRENT MAPPING PRACTICE

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Certification # 2A5D-4352-97C8

Site Name:	Altgeld Gardens/Phillip Murray Homes
Address:	E. 131st Street & S. Ingleside Avenue
City, ST, ZIP:	Chicago IL 60827
Client:	Carnow, Conibear & Assoc., LTD
EDR Inquiry:	3931997.3
Order Date:	5/13/2014 1:09:59 PM
Certification #	2A5D-4352-97C8
Copyright:	1987

Image Provided By EDR Certified Sanborns

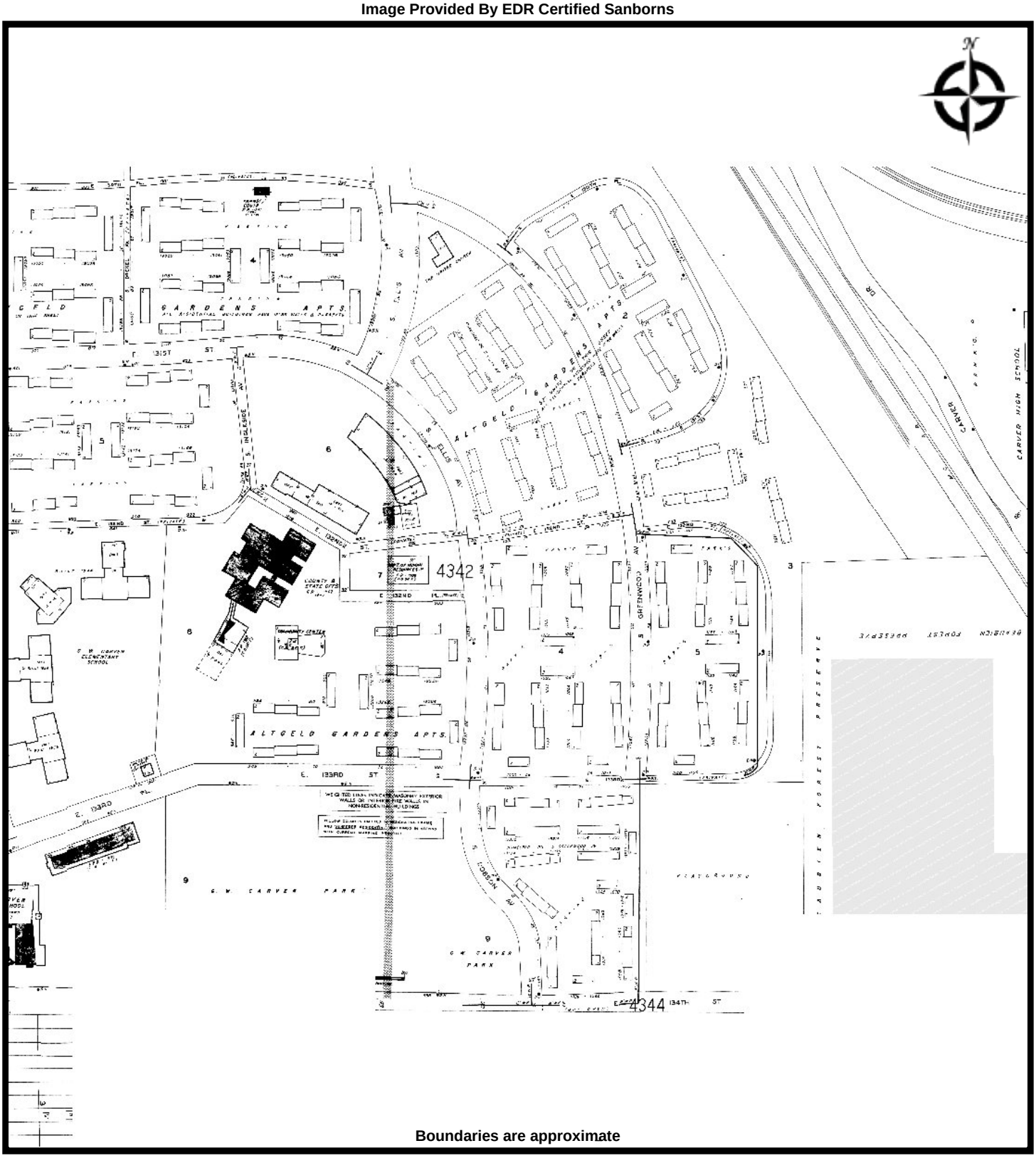

Boundaries are approximate

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

CARNOW CONIBEAR

SANBORN - 1989
ALTGELD GARDENS - BLOCKS 11, 12, & 13
S. Greenwood Avenue & E. 133rd Street
Chicago IL 60827

PREPARED FOR: Chicago Housing Authority
PROJ. MGR: David S. Bremer **DATE:** June 2014
DRAWN BY: Nohemi Melero **PROJ. #:** E153390006-01

Image Provided By EDR Certified Sanborns

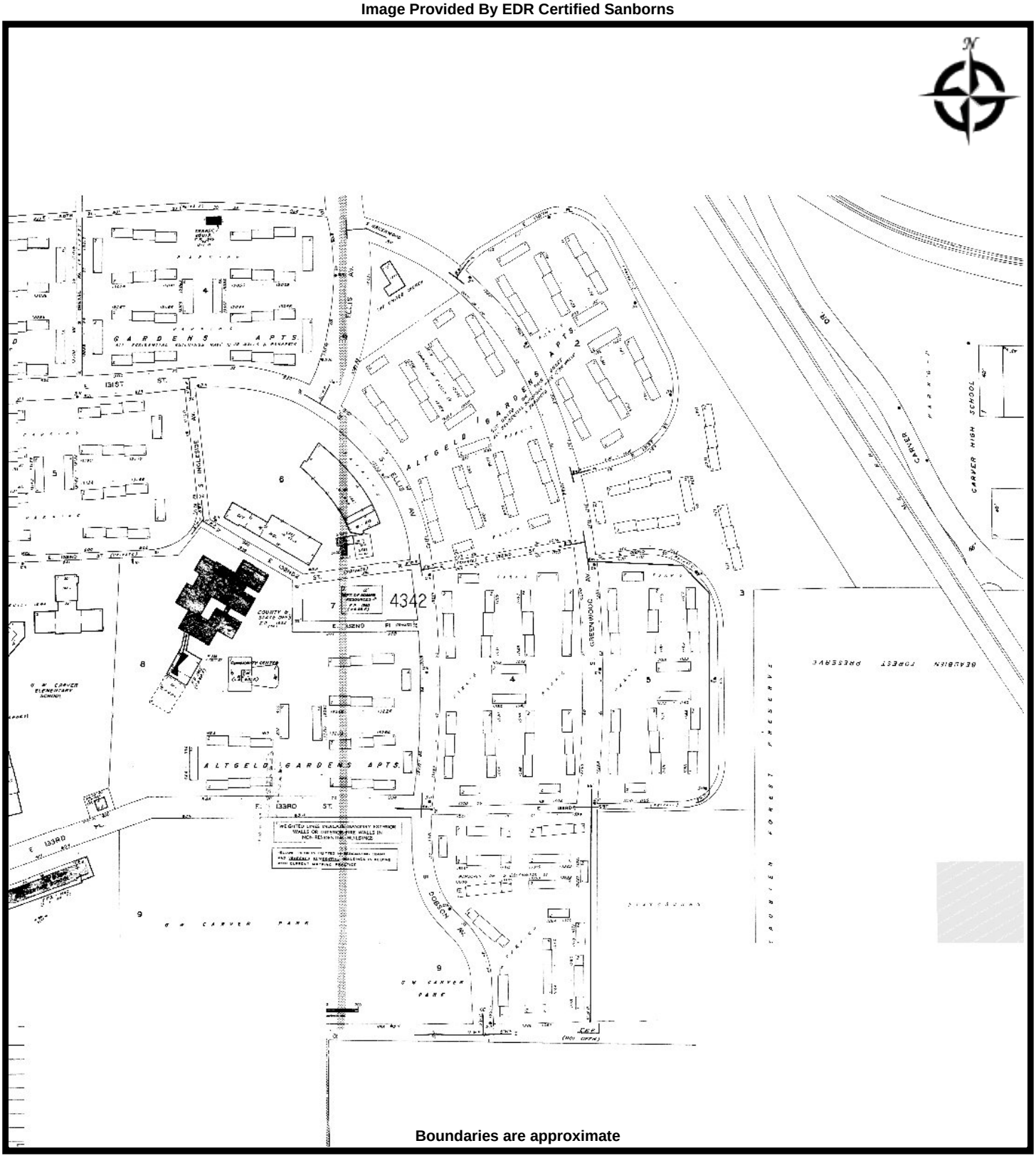

Boundaries are approximate

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t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

CARNOW CONIBEAR

SANBORN - 1992
ALTGELD GARDENS - BLOCKS 11, 12, & 13
S. Greenwood Avenue & E. 133rd Street
Chicago IL 60827

PREPARED FOR: Chicago Housing Authority
PROJ. MGR: David S. Bremer **DATE:** June 2014
DRAWN BY: Nohemi Melero **PROJ. #:** E153390006-01

Image Provided By EDR Certified Sanborns

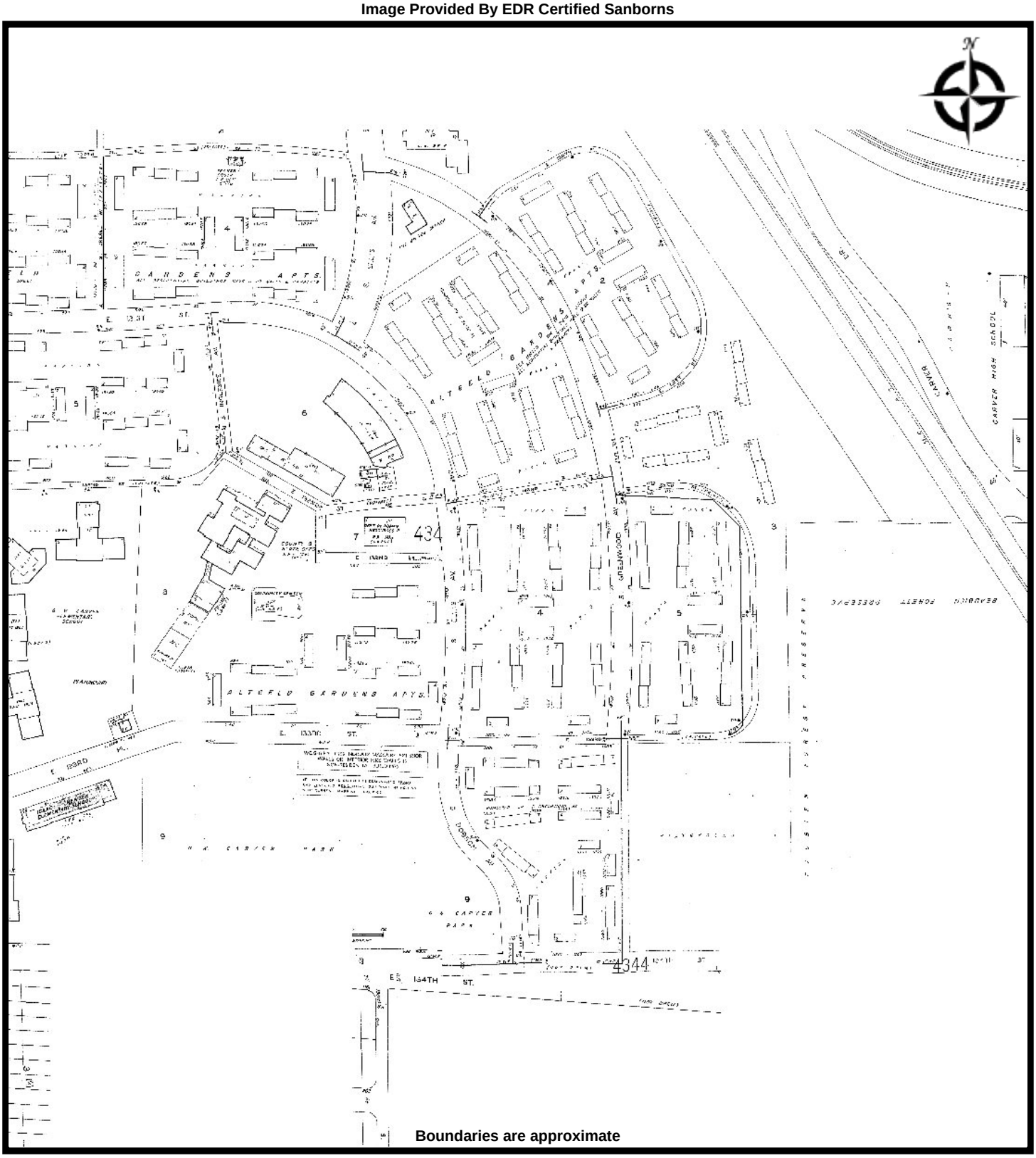

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www.ccaltd.com

SANBORN - 2002
ALTGELD GARDENS - BLOCKS 11, 12, & 13
S. Greenwood Avenue & E. 133rd Street
Chicago IL 60827

PREPARED FOR: Chicago Housing Authority
PROJ. MGR: David S. Bremer **DATE:** June 2014
DRAWN BY: Nohemi Melero **PROJ. #:** E153390006-01

Image Provided By EDR Certified Sanborns

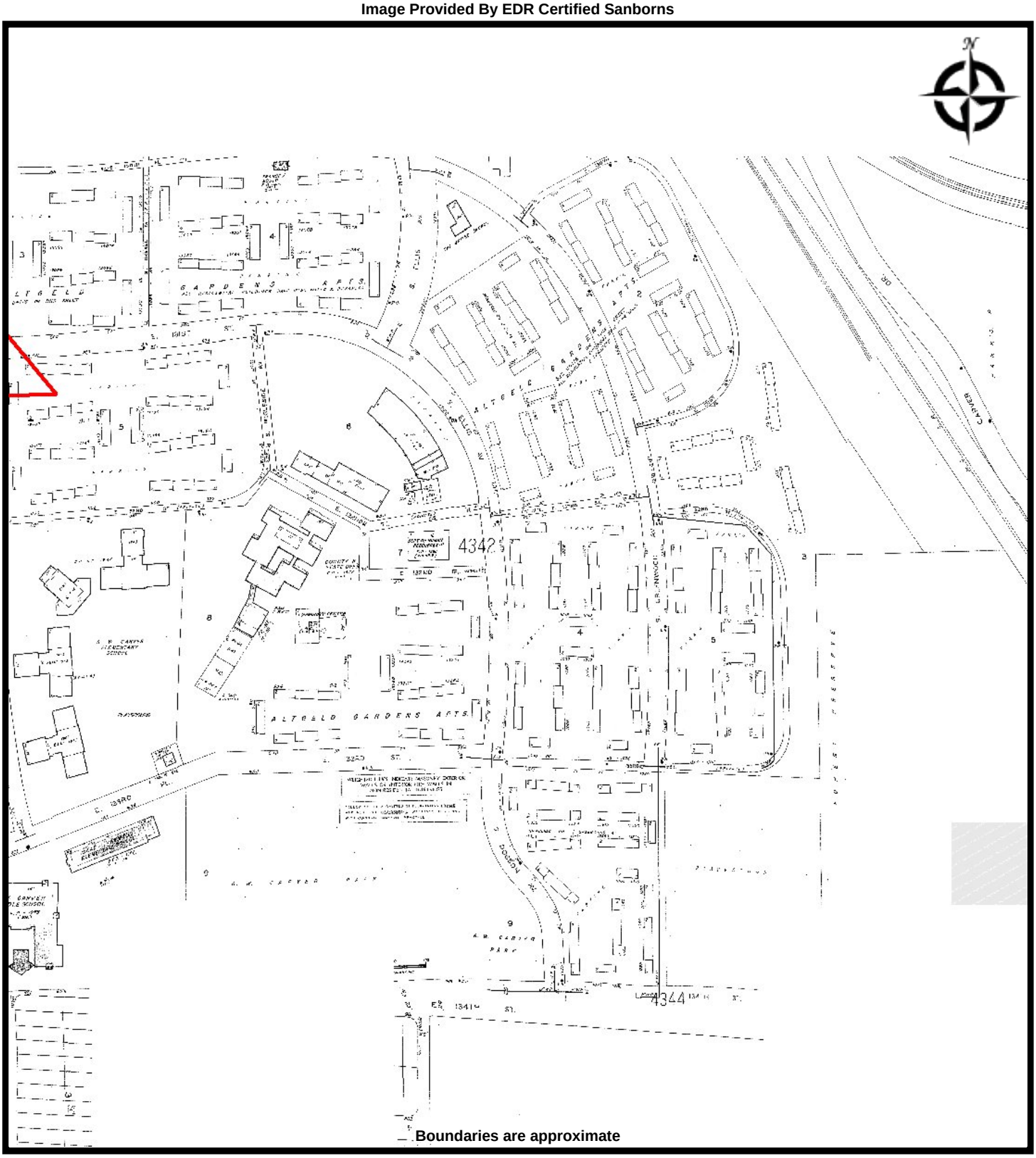

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

CARNOW CONIBEAR

SANBORN - 2004
ALTGELD GARDENS - BLOCKS 11, 12, & 13
S. Greenwood Avenue & E. 133rd Street
Chicago IL 60827

PREPARED FOR: Chicago Housing Authority
PROJ. MGR: David S. Bremer **DATE:** June 2014
DRAWN BY: Nohemi Melero **PROJ. #:** E153390006-01

Appendix H

Qualifications of the Environmental Professionals

CARNOW CONIBEAR

Paul D. Waite, P.E.
Senior Project Manager

Mr. Waite provides direct client services and technical guidance to clients and Carnow Conibear staff in the performance of environmental site investigations, site remediation projects, and site remediation design.

EXPERIENCE

Mr. Waite has 20 years of environmental project management experience, as both an environmental consultant and a government regulator. He has conducted over 300 Phase I and Phase II Environmental Site Assessments on residential, commercial, and industrial properties throughout the United States. He has contributed to active remediation systems for soil and groundwater contamination. His clients have included major oil companies, insurance providers, lending institutions, and governmental agencies.

EDUCATION

BS, Civil Engineering
Southern Illinois University, Carbondale, IL

PROFESSIONAL CERTIFICATIONS

Licensed Professional Engineer – Illinois, Florida
40-Hour OSHA HAZWOPER
8-Hour OSHA Site Supervisor Training

PROJECT EXPERIENCE

Broward County Florida Government
As a Project Manager for the Broward County Florida Environmental Assessment and Remediation Section, Mr. Waite enforced State and County regulations concerning soil and groundwater contamination from Leaking Underground Storage Tanks, petroleum spills, chlorinated solvents, arsenic, pesticides, PCBs, and other contaminants. Reviewed Remedial Action Plans, Site Assessment Reports, Dewatering Plans, and No Further Action Proposals. Inspected and oversaw operations of active remediation systems. Managed sites with Brownfield Site Rehabilitation Agreements and reviewed Due Diligence Assessments.

Brownfield Site Remediation and Redevelopment
Mr. Waite was the regulatory project manager for a 4.25-acre parcel that was redeveloped for future use as a public library and commercial complex in Pompano Beach, Florida. Contamination issues included Leaking Underground Storage Tanks and arsenic. Following remediation, regulatory closure was granted for the site with institutional controls. The local municipality entered into a Brownfield Site Redevelopment Agreement and was able to recoup approximately $600,000 in remediation tax credits.

Golf Course Assessment and Redevelopment
Mr. Waite was the regulatory project manager for a 120-acre golf course in Davie, Florida. Petroleum, arsenic, and pesticide contamination was detected at the site. The property was purchased and redeveloped by the Florida Department of Transportation to incorporate stormwater management areas. Regulatory closure was granted for the site with engineering and institutional controls. The local municipality purchased the property and operates it as a public golf course.

Former Arsenal Assessment and Inspection
Prepared environmental summary reports of U.S. Army environmental activities at a former arsenal property near Joliet, Illinois. Reviewed and summarized documents from the 1940's through the 1990's. Performed environmental site assessment activities and asbestos inspections at the facility. Contamination issues included organic chemicals associated with the manufacture of explosives, Leaking Underground Storage Tanks, chlorinated solvents, and unexploded ordnance (UXO).

County Courthouse Asbestos Inspection
Performed an asbestos inspection of a County courthouse building in Central Illinois. Prepared asbestos abatement specifications and participated in pre-bid and pre-construction process.

Small Business Administration Site Assessments
Performed Phase I and Phase II Environmental Site Assessments in Colorado, Florida, and Georgia in accordance with the Small Business Administration protocols in response to potential loan foreclosures.

Underground Storage Tank Monitoring and Upgrades
Managed the quarterly groundwater sampling and regulatory reporting at over 45 Leaking Underground Storage Tank sites for a major oil distributer client in Northern California. Over time, expanded the oversight program to over 200 sites. Also performed and managed the soil and groundwater sampling required during the 1998 Underground Storage Tank upgrade activities.

CARNOW CONIBEAR

Nohemi Melero
Environmental Specialist

Nohemi Melero performs performs and oversees environmental engineering, site remediation, and environmental site investigation projects. She performs Phase I Environmental Site Assessments, hazardous materials surveys, and oversees UST removals and groundwater investigations.

EXPERIENCEN

years experience in environmental consulting services.

EDUCATION

BS, Environmental Science
Roosevelt University, Chicago, Illinois

PROFESSIONAL LICENSES/REGISTRATION

Hazardous Waste Operations and Emergency Response 29 CFR 1910.120 - Trained
Confined Space Training - OSHA 29 CFR 1910.146 - Trained

PROJECT EXPERIENCE

Various Private Clients
Perform numerous Phase I Environmental Site Assessments to assist clients in purchasing decisions of various properties. Perform site inspections, review background information, title searches, reviews of Freedom of Information Act (FOIA) requests, zoning, Sanborn, aerial, wetland, flood zone, regulatory databases, and USGS maps regarding site history, geology, hydrology, and potential contaminant migration pathways. Evaluate potential sources of environmental concerns and provide recommendations.

General Services Administration (GSA)
Perform expanded-scope Phase I Environmental Site Assessments for federal buildings investigations. In addition to standard ASTM Phase I ESA requirements, the assessments followed the NEPA protocol and incorporated air, water, land, sound, and other environmental impacts and included a recommendation if necessary.

Chicago Housing Authority/City of Chicago Department of Environment
Remediation Oversight
Performed oversight activities for former Henry Horner Homes housing project. Oversaw site remediation activities including the removal of impacted soil and the construction of engineered barriers.

Public Building Commission of Chicago
Performed Phase I and II Environmental Site Assessments for the PBCC in the development of sites for libraries. Assessed sites contaminated by previous use, USTs and ASTs.

South West Area Middle School
Performed oversight of site remediation including the removal of impacted soil and installation of engineered barriers.

Layser and Freiwald
Conducted residential well sampling and assisted in soil sampling for a large ongoing lawsuit regarding groundwater and soil contamination to a residential area. Sampled 20 residential sites for groundwater and 5 agricultural areas for soil contamination. Screened groundwater samples for temperature and turbidity.

AIG
Reviewed numerous Phase I and II ESAs and various documents and summarized the recognized environmental conditions, concerns, and conclusions.

City of Gary/Department of Environmental Affairs
Assisted in the preparation of a Quality Assurance Project Plan for the former International Bridge Corporation site as part of the City of Gary's Brownfield Redevelopment program.

Forest Preserve District of DuPage County
Oak Meadows Golf Course
Performed oversight of UST removal activities including the removal of impacted soils. Took confirmatory soil samples to verify extent of contamination. Completed an UST Summary Report for the site.

Homeowners and Rental Properties, Illinois
Conducted radon testing in numerous residences and rental properties related to proactive air quality testing.

Chicago 2016
Conducted a hazardous materials investigation of various Michael Reese Hospital buildings. Investigated turn-of-the century buildings for the presence of hazardous materials such as PCBs, mercury, drums, etc.

Chicago Department of Health
Conducted respirator fit testing on several CDH employees. Oversaw proper fit using Bitrex solution.

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Phase II Environmental Site Assessment

Site:

Altgeld Gardens – Blocks 11, 12, & 13
Northeast Corner of Greenwood Avenue & 133rd Street
Chicago, Illinois 60827

Prepared For:

Chicago Housing Authority
60 East Van Buren, 13th Floor
Chicago, IL 60605

Report Issue Date: March 24, 2017

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Phase II Environmental Site Assessment

Site:

Altgeld Gardens – Blocks 11, 12, & 13
Northeast Corner of Greenwood Avenue & 133rd Street
Chicago, Illinois 60827

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Carnow Conibear Project # E160040026-21

Table of Contents

1.0 Executive Summary 1

2.0 Introduction 2
2.1 Site Background 2
2.2 Scope of Work 2

3.0 Site Characterization 3
3.1 Physical Setting 3

4.0 Site investigation 5
4.1 Subsurface Investigation 5
4.2 Sampling Procedures & Analytical Methods 6
4.3 Analytical Results 7

5.0 Conclusions & Recommendations 8

Exhibits

Exhibit I Site Location Map
Exhibit II Soil Boring Locations
Exhibit III Soil Boring Locations – North
Exhibit IV Soil Boring Locations – South

Tables

Table I Soil Analytical Results – PNAs
Table II Soil Analytical Results – RCRA Metals
Table III Soil Analytical Results – pH-Specific RCRA Metals
Table IV Soil Analytical Results – SPLP Inorganics

Appendices

Appendix A Soil Boring Logs
Appendix B Laboratory Analytical Report

1.0 Executive Summary

Carnow, Conibear & Assoc., Ltd. (Carnow Conibear) conducted this Phase II Environmental Site Assessment (ESA) for the Chicago Housing Authority (CHA) to investigate environmental concerns at Blocks 11, 12, and 13 of the Altgeld Gardens public housing project located at the northeast corner of South Greenwood Avenue and East 133rd Street in Chicago, Illinois (subject site). The objective of the investigation was to determine potential subsurface impacts to the subject site from Recognized Environmental Condition (REC) identified in a Phase I ESA completed in March 2017 which included potential impacts from former onsite incinerators.

The scope of work for this Phase II ESA included the advancement of soil borings, collection of samples, and quantitative analysis of the samples. Soil boring locations and analytical parameters were selected to investigate the identified REC.

On February 27, 2017, Carnow Conibear supervised the advancement of 15 soil borings to a depth of 8 feet below ground surface (bgs). Results of the Phase II investigation indicated a general soil profile of fill material underlain by brown and gray silty clay to the termination depth of the borings (8 feet bgs).

A total of five samples were analyzed for polynuclear aromatic hydrocarbons (PNAs), Resource Conservation & Recovery Act (RCRA) metals, synthetic precipitation leaching procedure (SPLP) metals, and/or pH. Analytical results were compared to the Illinois Environmental Protection Agency (IEPA) Tier 1 Soil Remediation Objectives (SROs) promulgated in 35 Illinois Administrative Code (IAC) 742, also known as *Tiered Approach to Corrective Action Objectives* (TACO), for the residential, construction worker, and Class I and Class II groundwater exposure scenarios.

Based upon the results of the investigation, no further investigation is warranted at the subject site in regard to the identified REC.

The Executive Summary is intended to provide a brief summary of the findings of the subject site investigation. The entire report must be read in order to fully understand the findings and potential environmental concerns associated with the site; therefore, the Executive Summary should not be substituted in lieu of reading the entire report.

2.0 Introduction

The Chicago Housing Authority (CHA) retained Carnow, Conibear & Assoc., Ltd. (Carnow Conibear) to perform a Phase II Environmental Site Assessment (ESA) of the property associated with Blocks 11, 12, and 13 of the Altgeld Gardens housing project located at the northeast corner of South Greenwood Avenue and East 133rd Street in Chicago, Illinois (subject site). The purpose of this Phase II ESA was to investigate the potential impacts from the recognized Environmental Condition (REC) identified in a previous Phase I ESA.

2.1 Site Background

Carnow Conibear performed a Phase I ESA for the subject site in March 2017. Historical sources indicated that the subject site had been agricultural land in 1938. By 1945, the subject site was developed with 26 residential buildings, sidewalks, and landscape areas. The property has remained relatively unchanged until the time of the Phase I ESA.

The assessment revealed the following REC in connection with the subject site:

- The presence of five incinerators on the subject site. The incinerators were used to burn garbage from the 1940's until their use was terminated in the 1970's. The burning of garbage in the incinerators over that period could contribute contamination from ash, spills, or leaching to the immediate vicinity, and therefore the incinerators are considered a Recognized Environmental Condition to the subject site.

2.2 Scope of Work

The objective of this Phase II ESA was to investigate potential impacts from the incinerators by advancing soil borings near the incinerators on the subject site. Soil samples will be collected and analyzed for the constituents that would typically be generated as the result of incinerator use.

The scope of work for this project consisted of the following tasks:

- Advance 15 soil borings near the incinerators;
- Perform field screening of soil for VOCs using a photoionization detector (PID);
- Collect soil samples from each borehole for laboratory analysis;
- Submit samples to an independent laboratory for quantitative analysis;
- Review and interpret the analytical results of the samples as compared to the Tier 1 Remediation Objectives (ROs); and
- Prepare a report to document the investigation.

3.0 Site Characterization

3.1 Physical Setting

According to the United States Geological Survey (USGS) Topographic Map Lake Calumet, Illinois, dated 1997, the subject site is located in Section 35, Township 37 North, Range 14 East of the Third Principal Meridian in Cook County, Illinois. The subject site is a portion of the Altgeld Gardens housing development owned by the CHA. The subject site totals approximately 17.3 acres in area and consists of three blocks of the development including 26 vacant two-story multi-unit residential buildings which are currently under construction/renovation. **Exhibit I** depicts the site's location on the USGS Topographic Map.

3.1.1 Site Topography

The topography of the subject site and adjacent properties is relatively level, with no significant natural relief features. According to the USGS 7.5-minute topographic quadrangle for Lake Calumet, Illinois (dated 1997) accessed by EDR, the elevation in the vicinity of the subject site is approximately 589 feet above mean sea level.

3.1.2 Site Geology & Hydrogeology

Surficial geology at the site is mapped in the Wadsworth Formation of the Wedron Group. This unit is a succession of calcareous gray, fine-textured till consisting mainly of clay, silt, and fine sand. Although most of the till beds in this formation appear relatively homogeneous and massive, some contain silt laminae and sand lenses. Dominant pebble rock types are dolomite and shale (Hansel & Johnson, 1996, and Stiff, 2000).

According to the Illinois Geological Survey Division, Circular 532, *Potential for Contamination of Shallow Aquifers in Illinois* - the "Berg Circular" (Berg, Kempton, and Cartwright, 1984):

- Plate 1, the site is located in a map area classified as "B1" and "E". The "B1" classification denotes the presence of sand and gravel at the surface in layers less than 20 feet thick, which are underlain by till or impermeable bedrock. Although the sand and gravel may be used for local well points, these deposits generally do not yield large quantities of water. The potential for contamination of surface water and groundwater in B1 areas is high. A hydraulic conductivity of about 1×10^{-3} cm/sec (high) makes these materials an excellent medium for transport of contaminants. Because water may flow along contacts between materials with different textures (e.g. through sand and gravel over dense bedrock) and discharge on slopes, there is also a potential for ground-to-surface water contamination in B1 areas. The "E" classification denotes deposits of uniform, relatively impermeable silty or clayey till or other fine-grained materials that are more than 50 feet thick, with no identified sand and gravel layers. The potential for contamination in E areas is low because of low hydraulic conductivity in the till, 1×10^{-9} to 1×10^{-7} cm/sec, and good attenuation capacities of the materials.

- Plate 2, the site is located in a map area classified as "C1" and "D2". C1 denotes that sand and gravel less than 20 feet thick are observed at the surface and underlain by till or impermeable bedrock. D2 denotes uniform, relatively impermeable silty or clayey till

or other fine-grained materials extending from the surface to more than 20 feet deep with no interbedded sand and gravel.

Two primary aquifers are present in the Chicago metropolitan region. These aquifers are the shallow dolomite aquifer (which includes the bedrock strata directly underlying the unconsolidated glacial sediments) and the deep Cambrian-Ordovician Aquifer (which predominately consists of sandstone) and is isolated from the shallow dolomite aquifer by up to 250 feet of shale. Discontinuous glacial aquifers are also present in the Chicago region in the form of lacustrine sands (Dolton Member of the Equality Formation) and outwash sand and gravel (Henry and Wedron Formations) (Willman, 1971).

There are no potable water supply wells located on the subject site and the City of Chicago has a groundwater ordinance with the IEPA prohibiting the installation and use of potable water wells. (**Appendix C**).

3.1.3 Surface Water, Wetlands, & Flooding

There are no wetlands on the subject site. No standing bodies of water or wetland vegetation was observed during the recent site inspection.

The Federal Emergency Management Agency (FEMA) lists the subject site in an area determined to be outside the 0.2% annual chance floodplain. [National Flood Insurance Program, Map numbers 17031C0661J, 17031C0662J, 17031C0663J, and 17031C0664J, August 19, 2008]

4.0 Site investigation

4.1 Subsurface Investigation

Carnow Conibear retained Enviro-Dynamics of Hebron, Indiana to advance soil borings on February 27, 2017. Weather during the investigation consisted of mostly sunny skies and temperatures around 45 degrees Fahrenheit. Soil boring locations are depicted on **Exhibit II**; boring logs are presented in **Appendix A**.

4.1.1 Soil Investigation

The soil borings, numbered BLK 11-101 through BLK 11-106; BLK 12-101 through BLK 12-103; and BLK 13-101 through BLK 13-106 were advanced utilizing a truck-mounted Geoprobe® system direct-push drilling equipment. The Geoprobe® system utilizes disposable acetate liners within stainless steel sampling tubes, which were decontaminated prior to each use with an Alconox® and water solution, and then rinsed with distilled water. Disposable liners within the sampling tube were discarded after a single use. Soil samples were collected by hydraulically advancing the sampling tube (with acetate liner) into the subsurface. Soil samples were continuously collected to the terminus of the boring or until an obstruction was encountered. Void space was backfilled to grade with bentonite chips. No native groundwater was encountered during the subsurface drilling. Carnow Conibear's field representative supervised the drilling operation and collected, inspected, and logged all samples.

Soils were inspected for visible signs of contamination and were classified in terms of texture, color, and consistency in accordance with the Unified Soil Classification System (USCS). Headspace portions of each soil sample were field screened with a photo ionization detector (PID), which provides a qualitative measurement of volatile organic compounds (VOCs) in the soil. PID screening consisted of collecting an undisturbed representative portion of soil from each two foot sample interval and placing in sealable plastic sandwich bag. Once the bag was sealed, the soils within the bag were disturbed and allowed to warm for a period of approximately three to five minutes as headspace developed. The tip of the PID probe was inserted into the bag and the reading recorded. The PID was calibrated prior to its initial usage.

The general soil profile encountered at the subject site featured approximately three inches to 4.5 feet of fill material underlain by brown and gray silty clay to the termination depth of the borings (8 feet bgs). Native soil encountered at the subject site generally matches the soil types in the published geological information.

For each boring, two samples were collected, one from the surface and from subsurface. Based upon the REC, the surface samples nearest the source were selected and submitted for analysis. Other surface and subsurface samples were placed on “hold” at the laboratory pending the results of the initial sample analysis. Surface samples collected from the six borings near the incinerators were analyzed for Polynuclear Aromatic Compounds (PNAs), Resource Conservation and Recovery Act (RCRA) metals, and pH. The following table summarizes soil sample locations, depths, and analysis from the soil investigation.

Table A: Soil Sample Locations & Analysis

Boring	REC	Sample Depth	Analysis
BLK 11-101	Incinerator at 1113-1135 E. 130th Place	1-3'	PNAs, RCRA metals, pH
BLK 11-104	Incinerator at 13055-13007 S. Greenwood Ave	1-3'	PNAs, RCRA metals, pH
BLK 12-101	Incinerator at 1109-1131 E. 132nd Street	1-3'	PNAs, RCRA metals, pH
BLK 13-101	Incinerator at 1101-1123 E. 131st Street	1-3'	PNAs, RCRA metals, pH, SPLP Chromium, SPLP Selenium
BLK 13-104	Incinerator at 1136-1158 E. 132nd Street	1-3'	PNAs, RCRA metals, pH

PNAs = Polynuclear Aromatic Compounds RCRA = Resource Conservation and Recovery Act

4.2 Sampling Procedures & Analytical Methods

The following US Environmental Protection Agency (EPA) methods were used to analyze the samples:

- Polynuclear Aromatic Hydrocarbons (PNAs): EPA Method 8270C;
- Resource Conservation and Recovery Act (RCRA) Metals: EPA Methods 6020/7471A;
- pH: EPA Method 9045C; and
- SPLP: EPA Methods 1312/6020.

The samples were transferred to a nine-ounce glass jar with a Teflon® lid and stored in a cooler with ice. A portion of each 2 foot sample depth interval was placed into a resealable plastic bag for headspace screening with the PID as described in Section 4.1.1. All containers were precleaned to EPA standards and sealed with Teflon® lined plastic screw-on lids.

Each sample was labeled by a unique identification number as it was collected during the investigation activities. The sample identification numbers consisted of the block number, boring number, and sample depth (e.g., BLK 11-101 (1-3) indicates a sample collected at block 11 boring location BLK 11-101 from 1 to 3 feet bgs). Each container was labeled at the time of the sampling with the following information using indelible ink:

- Project/site name;
- Date of collection;
- Sample location and depth;
- Sample times;
- Name of sample collector.

All soil samples were maintained in the cooler with ice for transport to the laboratory. A chain of custody form was prepared for the samples. The chain of custody form was signed and dated

by Carnow Conibear's sampler and representative delivering the samples, as well as the laboratory representative who received the samples.

4.3 Analytical Results

Carnow Conibear compared the laboratory analytical results with the IEPA Tier 1 Soil Remediation Objectives (SROs) promulgated in 35 Illinois Administrative Code (IAC) 742, also known as *Tiered Approach to Corrective Action Objectives* (TACO). TACO presents three risk-based tiers for remediation objectives based on applicable exposure scenarios. The TACO approach can be used to develop cleanup objectives for soil, soil gas and/or groundwater. Pursuant to 35 IAC 742, Tier 1 SROs were modified by background concentrations of PNAs established for the City of Chicago and inorganic constituents in Metropolitan Statistical Areas (MSAs). Based on the use of the site as residential property, residential and construction worker SROs were used for comparison. Class I and Class II groundwater scenarios were considered, as native groundwater at the Site has not been fully characterized.

4.3.1 Soil Analytical Results

Results of the analyses are presented in **Tables I-IV**. The complete analytical laboratory report is presented in **Appendix B**. Sample results from the investigation are summarized as follows:

- No PNAs were detected above the applicable Tier 1 SROs.
- Chromium was identified in exceedance of the applicable pH-Specific Tier 1 SROs for the soil component of Class I and II groundwater ingestion exposure routes in boring BLK 13-101(1-3) between 1 and 3 feet bgs.
- Selenium was identified in exceedance of the applicable pH-Specific Tier 1 SROs for the soil component of Class I and II groundwater ingestion exposure routes in borings BLK 11-104(1-3), BLK 13-101(1-3), and BLK 13-104(1-3) between 1 and 3 feet bgs.

4.3.2 Soil Component of Groundwater Ingestion Exposure Route Evaluation

To further evaluate the soil component of groundwater ingestion exposure route, SPLP analysis was performed on sample BLK 13-101(1-3), which exceeded both chromium and selenium pH-Specific Tier 1 SROs.

Results of the SPLP analyses were below all applicable Tier 1 SROs for both Class I and Class II groundwater scenarios for chromium and selenium, indicating that these constituents are not a concern for the soil component of groundwater ingestion exposure route.

5.0 Conclusions & Recommendations

Carnow, Conibear conducted this Phase II ESA to investigate environmental concerns at Blocks 11, 12, and 13 of the Altgeld Gardens public housing project located at the northeast corner of Greenwood Avenue & 133rd Street in Chicago, Illinois (subject site). The objective of the investigation was to determine potential impacts to the subject site from the REC identified in a Phase I ESA. The REC included former onsite incinerator use at five locations

The results of the Phase II ESA investigation indicated a general soil profile of crushed concrete or topsoil underlain by brown and gray silty clay with lenses of organics to the termination depth of the borings (8 feet bgs).

Boring locations were selected to address the REC identified in the Phase I ESA. A total of five soil samples from 15 soil borings were selected for analysis. One surface soil sample was analyzed from the boring closest to the incinerators. Analytical results were compared to the IEPA Tier 1 SROs promulgated in 35 IAC 742, also known as TACO, for the residential, construction worker, and Class I and II groundwater scenarios.

Results of the investigation did not identify PNAs in exceedance of applicable Tier 1 SROs. Chromium and/or selenium were identified in three boring locations above applicable Tier 1 SROs for Class II and II pH-specific soil component of groundwater ingestion exposure route. However resulting SPLP concentrations for chromium and selenium were below corresponding Tier 1 GROs for Class I and Class II groundwater, indicating that these constituents are not a concern for the soil component of the groundwater ingestion exposure route.

Based upon the results of the investigation, no further investigation is warranted at the subject site in regard to the identified REC.

Carnow Conibear makes no warranty, express or implied, that the findings and interpretations in this report are a complete representation of the environmental hazards and liabilities associated with the site. Carnow Conibear's findings are based upon the scope of work requested by the client and should not be interpreted as a complete presentation of the site conditions. There may be unrecorded information or documentation from previous owners or tenants that is unattainable and may be proprietary, legally protected, or unavailable through government regulatory services.

Exhibits

Exhibit I	Site Location Map
Exhibit II	Soil Boring Locations
Exhibit III	Soil Boring Locations – North
Exhibit IV	Soil Boring Locations – South

Tables

Table I	Soil Analytical Results – PNAs
Table II	Soil Analytical Results – RCRA Metals
Table III	Soil Analytical Results – pH-Specific RCRA Metals
Table IV	Soil Analytical Results – SPLP Inorganics

Appendices

Appendix A	Soil Boring Logs
Appendix B	Laboratory Analytical Report

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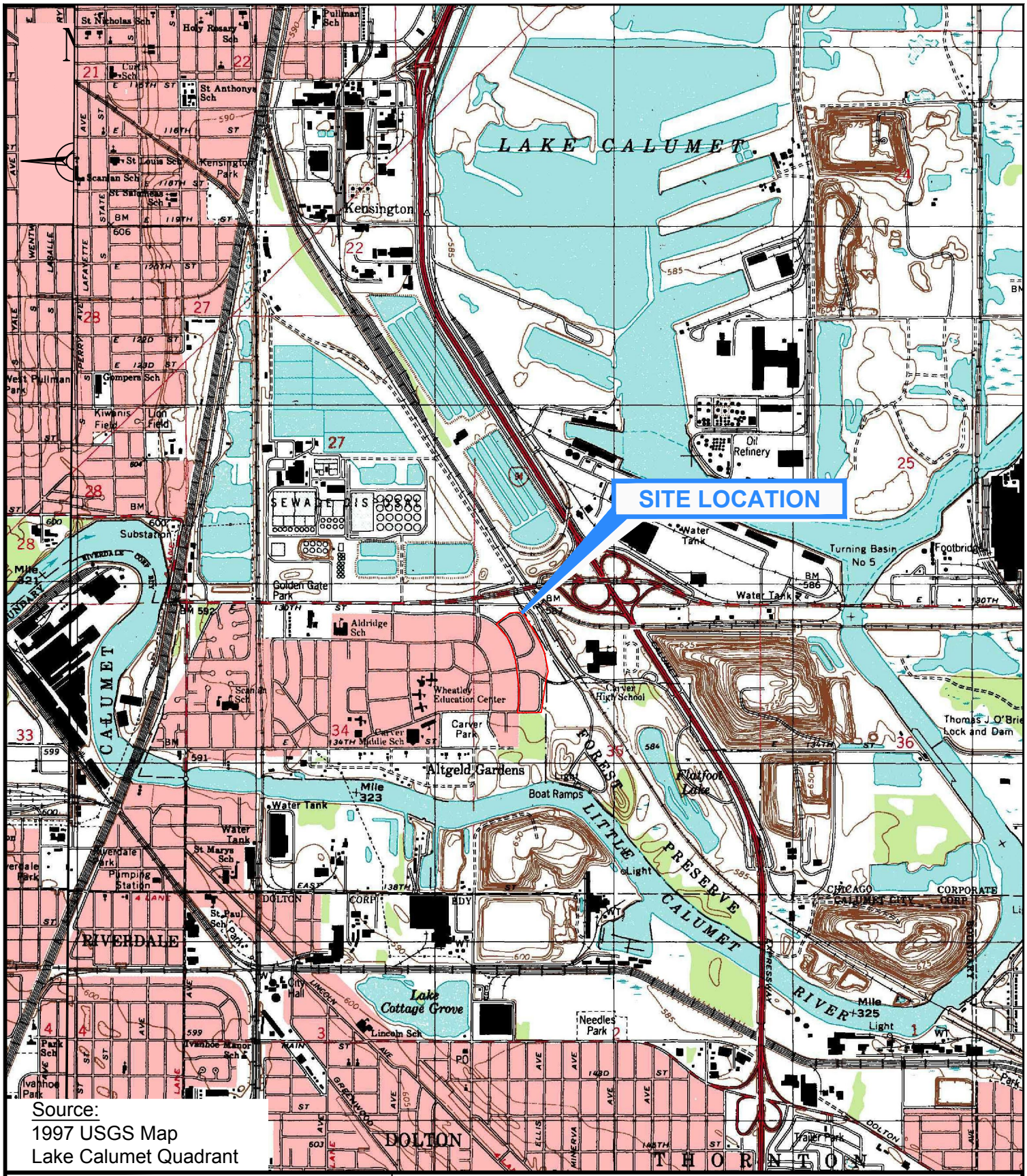

Source:
1997 USGS Map
Lake Calumet Quadrant

Date:	March 2017
Scale:	1"=1,500'
Drawn by:	NM
Checked by:	DSB

Exhibit I: Site Location Map
Altgeld Gardens - Blocks 11, 12, & 13
NE Corner of S. Greenwood Ave. & E. 133rd St.
Chicago, Illinois 60827

Your Environmental Resource
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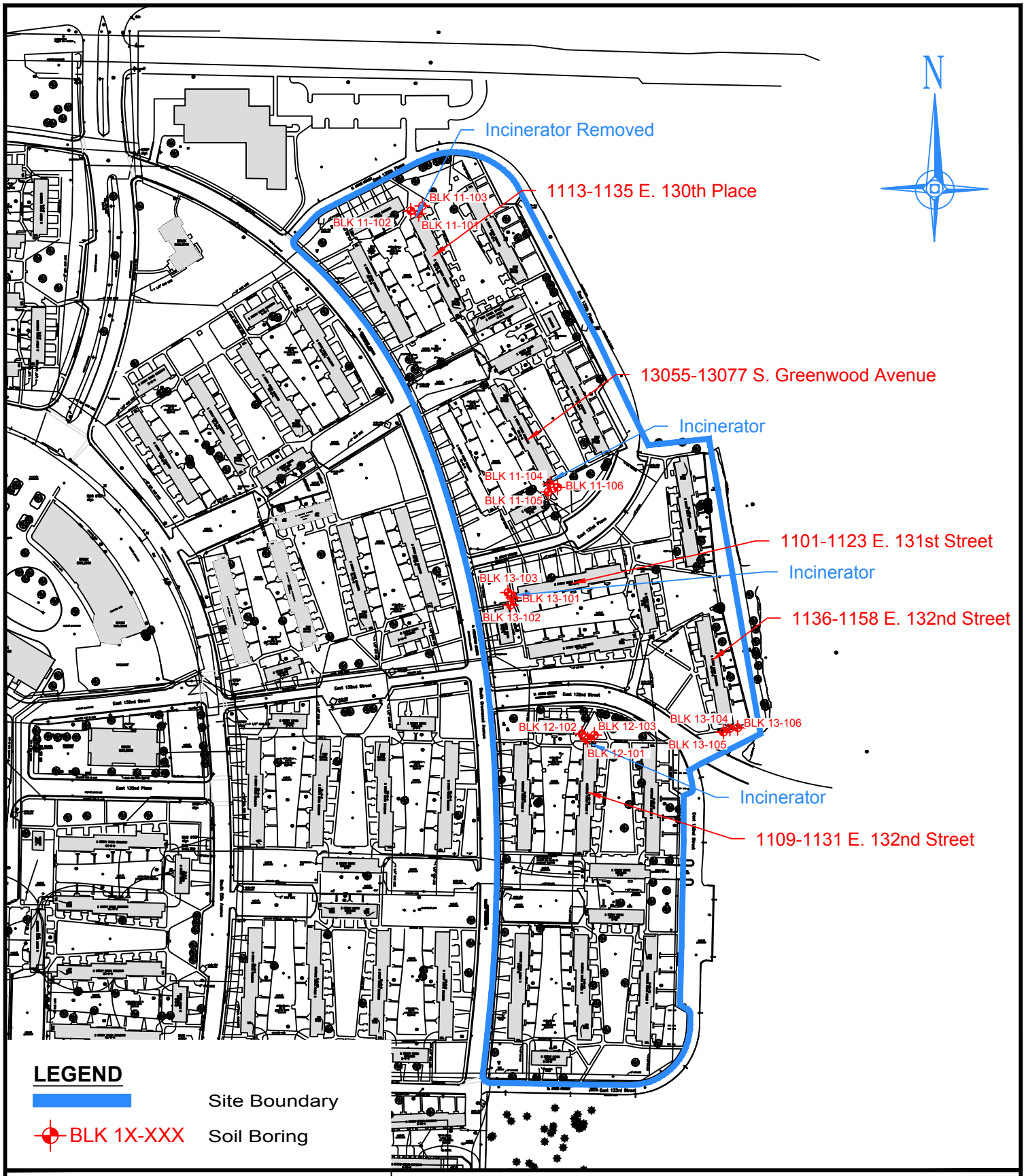

Date:	March 2017
Scale:	1"= 250'
Drawn by:	NM
Checked by:	DSB

Exhibit II: Boring Location Map
Altgeld Gardens - Blocks 11, 12 & 13
NE Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

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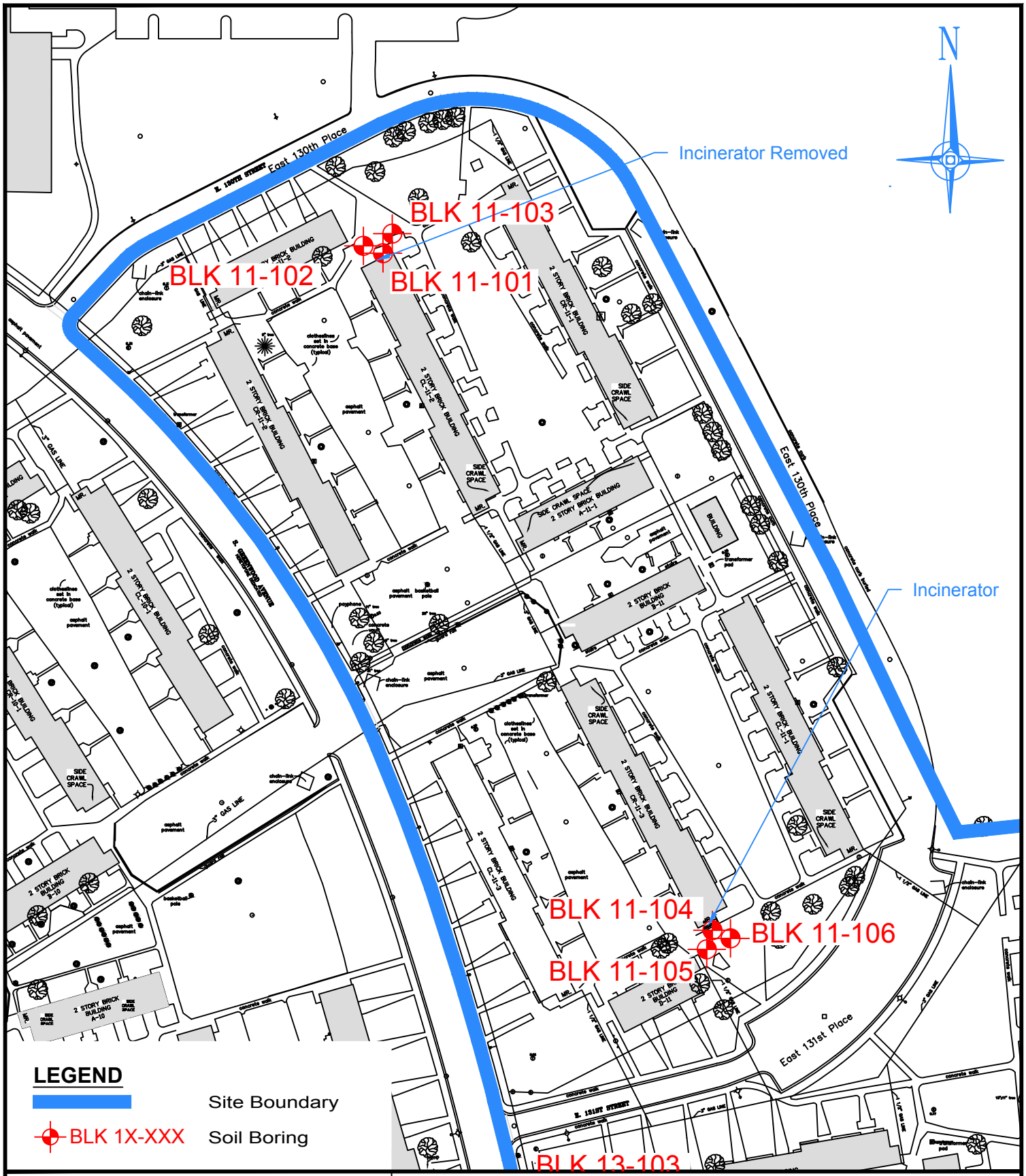

Date:	March 2017
Scale:	1"= 100'
Drawn by:	NM
Checked by:	DSB

Exhibit III: Boring Location Map - North
Altgeld Gardens - Blocks 11, 12 & 13
NE Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

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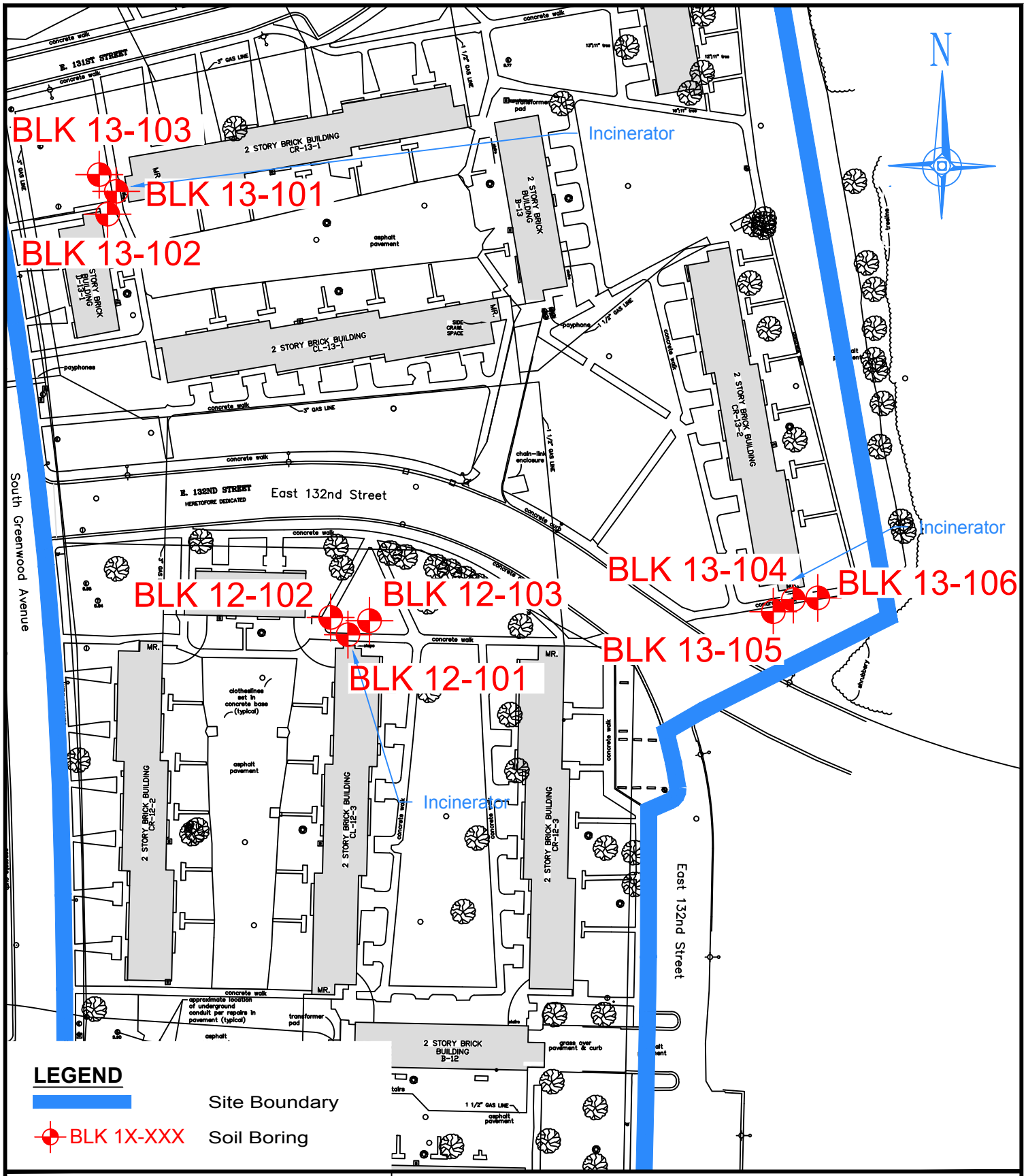

Date:	March 2017
Scale:	1"= 80'
Drawn by:	NM
Checked by:	DSB

Exhibit IV: Boring Location Map - South
Altgeld Gardens - Blocks 11, 12 & 13
NE Corner of Greenwood Avenue &133rd Street
Chicago, Illinois 60827

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Table I

Soil Analytical Results - PNAs

	Analyte	IEPA SROs							Bkgd.	Sample	BLK 11-101(1-3)	BLK 11-104(1-3)	BLK 12-101(1-3)	BLK 13-101(1-3)	BLK 13-104(1-3)
		Residential		Construction Worker		G.W. Ing.		ADL	Conc.	Date	02/27/17	02/27/17	02/27/17	02/27/17	02/27/17
		Ingestion	Inhalation	Ingestion	Inhalation	Class I	Class II		Level	Depth (ft)	1-3	1-3	1-3	1-3	1-3
PNAs	Acenaphthene	4,700	NC	120,000	NC	570	2,900	*	0.09		< 0.040	< 0.040	< 0.039	< 0.039	< 0.039
	Acenaphthylene	2,300	NC	61,000	NC	85	420	*	0.03		< 0.040	< 0.040	< 0.039	< 0.039	< 0.039
	Anthracene	23,000	NC	610,000	NC	12,000	59,000	*	0.25		< 0.040	< 0.040	0.1	< 0.039	< 0.039
	Benz(a)anthracene	0.9	NC	170	NC	2.0	8.0	*	1.1		< 0.040	0.042	0.26	< 0.039	< 0.039
	Benzo(a)pyrene	0.09	NC	17	NC	8.0	82	*	1.3		< 0.040	< 0.040	0.25	< 0.039	< 0.039
	Benzo(b)fluoranthene	0.9	NC	170	NC	5.0	25	*	1.5		< 0.040	< 0.040	0.2	< 0.039	< 0.039
	Benzo(g,h,i)perylene	2,300	NC	61,000	NC	27,000	130,000	SS	0.68		< 0.040	< 0.040	0.17	< 0.039	< 0.039
	Benzo(k)fluoranthene	9.0	NC	1,700	NC	49	250	*	0.99		< 0.040	< 0.040	0.2	< 0.039	< 0.039
	Chrysene	88	NC	17,000	NC	160	800	*	1.2		< 0.040	0.043	0.28	< 0.039	< 0.039
	Dibenzo(a,h)anthracene	0.09	NC	17	NC	2.0	7.6	*	0.2		< 0.040	< 0.040	0.08	< 0.039	< 0.039
	Fluoranthene	3,100	NC	82,000	NC	4,300	21,000	*	2.7		0.044	0.075	0.58	< 0.039	< 0.039
	Fluorene	3,100	NC	82,000	NC	560	2,800	*	0.1		< 0.040	< 0.040	< 0.039	< 0.039	< 0.039
	Indeno(1,2,3-c,d)pyrene	0.9	NC	170	NC	14	69	*	0.86		< 0.040	< 0.040	0.14	< 0.039	< 0.039
	Naphthalene	1,600	170	4,100	1.8	12	18	*	0.04		< 0.040	< 0.040	< 0.039	< 0.039	< 0.039
	Phenanthrene	2,300	NC	61,000	NC	200	1,000	*	1.3		< 0.040	0.051	0.46	< 0.039	< 0.039
	Pyrene	2,300	NC	61,000	NC	4,200	21,000	*	1.9		< 0.040	0.07	0.55	< 0.039	< 0.039

NOTES:

1. All results expressed in milligrams per kilogram (mg/kg).
2. NA = Not analyzed for this constituent.
3. NC = No toxicity criteria for this exposure route.
4. NE = No established IEPA SRO for this analyte.
5. Samples were analyzed utilizing EPA Method SW-8270C(3550B).
6. G.W. Ing. = Soil Component of the Groundwater Ingestion Exposure Route.
7. **Bold values** = Concentration exceeds soil ing. and/or inh. exposure route for residential Tier 1 SROs ***and*** Chicago background concentration level, if applicable.
8. O Concentration exceeds soil ing. and/or inh. exposure route for construction worker Tier 1 SROs.
9. Concentration exceeds soil component of the groundwater ing. exposure route for Class I and/or Class II Tier 1 SROs.
10. * = The ADL is less than or equal to the specified remediation objective.
11. SS = Site-specific based upon wet weight of soil.

Table II

Soil Analytical Results - RCRA Metals

	Analyte	IEPA SROs					Bkgd.	Sample	BLK 11-101(1-3)	BLK 11-104(1-3)	BLK 12-101(1-3)	BLK 13-101(1-3)	BLK 13-104(1-3)
		Residential		Construction Worker		ADL	Conc.	Date	02/27/17	02/27/17	02/27/17	02/27/17	02/27/17
		Ingestion	Inhalation	Ingestion	Inhalation		Level	Depth (ft)	1-3	1-3	1-3	1-3	1-3
	pH								8.7	8.7	8.4	8.8	8.6
RCRA Metals	**Arsenic**	13	750	61	25,000	*	*13*		7.2	8.8	9.1	7.7	13
	Barium	5,500	690,000	14,000	870,000	*	*110*		66	54	34	44	72
	Cadmium	78	1,800	200	59,000	*	*0.6*		<0.53	<0.54	<0.53	<0.51	<0.53
	Chromium	230	270	4,100	690	*	*16.2*		16	16	11	27	16
	Lead	400	NC	700	NC	*	*36*		16	22	19	22	21
	Mercury	23	10	61	0.10	*	*0.06*		<0.023	0.024	0.027	<0.020	0.083
	Selenium	390	NC	1,000	NC	*	*0.48*		1.6	2.1	1.6	1.8	2.4
	Silver	390	NC	1,000	NC	*	*0.55*		<1.1	<1.1	<1.1	<1.0	<1.1

NOTES:

1. All results expressed in milligrams per kilogram (mg/kg).
2. NA = Not analyzed for this constituent.
3. NC = No toxicity criteria for this exposure route.
4. NE = No established IEPA SRO for this analyte.
5. Samples were analyzed utilizing EPA Methods SW6010/3050B/7471A and 9045C.
6. **Bold values** = Concentration exceeds soil ingestion and/or inhalation exposure route for residential Tier 1 SROs.
7. **O** Concentration exceeds soil ingestion and/or inhalation exposure route for construction worker Tier 1 SROs.
8. * = The ADL is less than or equal to the specified remediation objective.

Table III

Soil Analytical Results - pH-Specific RCRA Metals

Analyte		IEPA SROs				*Bkgd.*	Sample	BLK 11-101(1-3)	BLK 11-104(1-3)	BLK 12-101(1-3)	BLK 13-101(1-3)	BLK 13-104(1-3)
		G.W. Ing. - pH-Specific SROs				*Conc.*	Date	02/27/17	02/27/17	02/27/17	02/27/17	02/27/17
		Class I		Class II		*Level*	Depth (ft)	1-3	1-3	1-3	1-3	1-3
pH		8.25-8.74	8.75-9.0	8.25-8.74	8.75-9.0	-		8.7	8.7	8.4	8.8	8.6
RCRA Metals	**Arsenic**	32	33	130	130	*13*		7.2	8.8	9.1	7.7	13
	Barium	NE	NE	NE	NE	*110*		66	54	34	44	72
	Cadmium	NE	NE	NE	NE	*0.6*		<0.53	<0.54	<0.53	<0.51	<0.53
	Chromium**	24	21	NE	NE	*16.2*		16	16	11	27	16
	Lead	107	282	1,420	3,760	*36*		16	22	19	22	21
	Mercury	NE	NE	NE	NE	*0.06*		<0.023	0.024	0.027	<0.020	0.083
	Selenium	1.8	1.3	1.8	1.3	*0.48*		1.6	2.1	1.6	1.8	2.4
	Silver	NE	NE	NE	NE	*0.55*		<1.1	<1.1	<1.1	<1.0	<1.1

NOTES:

1. All results expressed in milligrams per kilogram (mg/kg).
2. NA = Not analyzed for this constituent.
3. NE = No established IEPA SRO for this analyte.
4. Samples were analyzed utilizing EPA Methods SW6020/3050B/7471/9012A and 9045C.
5. G.W. Ing. = Soil Component of the Groundwater Ingestion Exposure Route.
6. Bkgd. Conc. Level = IEPA-established background concentration within Metropolitan Statistical Areas (MSAs).
7. Concentration exceeds soil component of the groundwater ing. exposure route for applicable Class I and/or Class II Tier 1 SRO.
8. **Chromium pH-specific SROs from migration to Class I groundwater for Chromium^{VI}.
9. For samples with pH above 9.0 or below 4.5, concentrations were compared to Tier 1 SROs in nearest range.

Table IV

Soil Analytical Results - SPLP Inorganics

Analyte		IEPA SROs G.W. Ing. Class I	IEPA SROs G.W. Ing. Class II	Toxicity Characteristic	Sample Date Depth (ft)	BLK 11-101(1-3) 02/27/17 1-3	BLK 11-104(1-3) 02/27/17 1-3	BLK 12-101(1-3) 02/27/17 1-3	BLK 13-101(1-3) 02/27/17 1-3	BLK 13-104(1-3) 02/27/17 1-3
pH						8.7	8.7	8.4	8.8	8.6
SPLP	Chromium	0.1	1.0	NE		NA	NA	NA	<0.0080	NA
SPLP	Selenium	0.05	0.05	NE		NA	NA	NA	<0.0040	NA

NOTES:

1. All results expressed in milligrams per liter (mg/L).
2. NA = Not analyzed for this constituent.
3. NE = No established IEPA SRO for this analyte.
4. Samples were analyzed utilizing EPA Methods 6020/1311/1312/7470A and 9045C.
5. G.W. Ing. = Soil Component of the Groundwater Ingestion Exposure Route.
6. Concentration exceeds the Tier 1 SRO for Class I and/or Class II G.W. Ing.
7. SPLP = Synthetic Precipitation Leaching Procedure inorganic analyte concentration.

=

Appendix A

Soil Boring Logs

CARNOW CONIBEAR

SOIL BORING LOG

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 11-101

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete underlain by brown sand with gravel					
	1			Silty Clay: Dark brown and gray mottled, Firm to Stiff, Trace sand, gravel, and shale. (CL) Decreased sand content with depth.	-		2.3		
	2								Sample BLK 11-101 (1-3) 9:40 AM
	3				1.75		1.5		
2	4								
	5				3.0		0.9		
	6								
	7				1.75		1.5		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
t: 312.782.4486 f: 312.782.5145
www.ccaltd.com

SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 11-102

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete					
	1			Silty Clay: Brown and gray mottled and trace organics, Stiff, Trace sand, gravel, and shale. (CL) Increase gray with depth.	-		2.0		
	2								
	3				2.75		3.2		
2	4								
	5				2.5		2.2		
	6								
	7				2.0		2.3		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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Environmental Consulting Services
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www.ccaltd.com

SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 11-103

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete					
				Silty Clay: Brown and gray/orange mottled, Organics from 3 to 4 feet bgs, Stiff, Trace sand, gravel, and shale. (CL)					
	1				1.0		2.2		
	2								
	3				2.0		2.1		
	4								
2									
	5				3.25		2.0		
	6								
	7				2.25		1.7		
	8								

GROUNDWATER DEPTH (FEET):

DURING DRILLING - Dry

AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics

GEOLOGIST: NM, KZ

WEATHER: ~45°F, Sunny

SOIL BORING LOG

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SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 11-104

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete underlain by a layer of sand with organics (black in color)					
	1			Silty Clay: Gray and orange mottled, Firm, Trace sand, gravel, and shale. (CL)	-		1.5		
	2								Sample BLK 11-104 (1-3) 10:17 AM
	3				1.5		2.5		
2	4								
	5				2.25		1.2		
	6								
	7				1.75		0.6		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 11-105

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete underlain by a layer of light brown sand.					
	1			Silty Clay: Brown and grey mottled, Lenses of organics Firm, Trace sand, gravel, and shale. (CL)	2.75		1.3		
	2								
	3				1.0		1.5		
	4								
2									
	5				2.25		2.0		
	6								
	7				1.5		1.1		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 11-106

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete underlain by a layer of brown sand.					
	1			Silty Clay: Brown and gray mottled, Firm, Trace sand, gravel, and shale. (CL)	2.5		2.0		
	2								
	3				1.75		1.1		
	4								
2									
	5				1.75		1.8		
	6								
	7				2.0		1.7		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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Environmental Consulting Services
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www.ccaltd.com

SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 12-101

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete underlain by a thin layer of cinders, underlain by brown clay. Crushed brick and stone observed at approximately 3 feet.					
	1				2.75		0.0		
	2								Sample BLK 12-101 (1-3) 12:56 PM
	3				1.75		0.0		
				Silty Clay: Brown and gray mottled, Firm, Trace sand, gravel, and shale. (CL)					
2	4								
	5				3.0		0.0		
	6								
	7				2.25		0.0		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 12-102

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Topsoil					
	1			Silty Clay: Brown and gray mottled, Lenses of organics, Stiff, Trace sand, gravel, and shale. (CL) Rock encountered around 3 feet.	3.0		0.1		
	2								
	3				3.0		0.1		
2	4								
	5				3.0		0.0		
	6								
	7				2.5		0.0		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 12-103

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Topsoil					
	1			Silty Clay: Brown and gray mottled, Lenses of organics, Stiff, Trace sand, gravel, and shale. (CL)	2.5		0.0		
	2				2.5		0.0		
	3								
	4								
2	5				3.0		0.0		
	6								
	7				3.5		0.0		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 13-101

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete					
	1			Silty Clay: Brown with gravel. Trace organics, Soft, Trace sand, gravel, and shale. (CL) Decreased gravel content with depth.	0.75		0.0		
	2								Sample BLK 13-101 (1-3) 12:00 PM
	3				0.75		0.0		
2	4								
	5				1.5		0.0		
	6								
	7				1.75		0.0		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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www.ccaltd.com

SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 13-102

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0–1			Fill: Crushed concrete underlain by finely crushed gravel and brown sand.	0.75		0.2		
	1–4			Silty Clay: Brown and gray mottled, Stiff, Trace sand, gravel, and shale. (CL)	1.5		0.0		
2	4–6				3.75		0.0		
	6–8				2.75		0.0		

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

Carnow, Conibear & Assoc., Ltd.
Environmental Consulting Services
600 W. Van Buren St., Suite 500, Chicago, IL 60607
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SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 13-103

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Topsoil					
	1			Silty Clay: Brown and gray mottled, Lenses of Organics, Stiff, Trace sand, gravel, and shale. (CL) Increased gray with depth.	2.5		0.0		
	2								
	3				2.5		0.0		
	4								
2									
	5				1.5		0.0		
	6								
	7				1.5		0.0		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

Carnow, Conibear & Assoc., Ltd.
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SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 13-104

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete					
	1			Silty Clay: Brown with gravel. Lenses of organics, Stiff, Trace sand, gravel, and shale. (CL) Increased gray with depth.	2.75		0.0		
	2								Sample BLK 13-104 (1-3) 11:27 AM
	3				2.5		0.4		
2	4								
	5				3.5		0.0		
	6								
	7				2.0		0.0		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

Carnow, Conibear & Assoc., Ltd.
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SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 13-105

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Topsoil with trace glass					
	1			Silty Clay: Brown and gray/orange mottled, Stiff, Trace sand, gravel, and shale. (CL) Increased gray with depth.	2.0		0.5		
	2								
	3				2.0		0.0		
	4								
2									
	5				2.75		0.0		
	6								
	7				1.0		0.0		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

SOIL BORING LOG

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Environmental Consulting Services
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SITE NAME: Altgeld Gardens Blocks 11, 12, & 13

SITE LOCATION: NE corner Greenwood Ave & 133rd St
Chicago, IL

PROJECT NUMBER: E160040026-21

BORING NUMBER: BLK 13-106

DRILLING DATE: 02/27/17

ELEVATION: ~589 FEET

SAMPLE INTERVAL	DEPTH (FEET)	SAMPLE RECOVERY	LITHOLOGY	DESCRIPTION	PENETROMETER	MOISTURE	PID/FID (ppm)	SAMPLE ANALYZED	REMARKS
1	0			Fill: Crushed concrete underlain by brown clay with organics and crushed brick.					
	1			Silty Clay: Brown and gray mottled, Firm, Trace sand, gravel, and shale. (CL) Increased gray with depth.	0.75		0.0		
	2								
	3				1.75		0.0		
2	4								
	5				1.5		0.0		
	6								
	7				1.5		0.0		
	8								

GROUNDWATER DEPTH (FEET):
DURING DRILLING - Dry
AFTER DRILLING - Dry

DRILLING COMPANY: Enviro-Dynamics
GEOLOGIST: NM, KZ
WEATHER: ~45°F, Sunny

Appendix B

Laboratory Analytical Report

CARNOW CONIBEAR

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

March 10, 2017

Carnow, Conibear, & Associates
600 W. Van Buren Street
Chicago, IL 60607

Telephone: (312) 782-4486
Fax: (312) 782-5145

Analytical Report for STAT Work Order: 17020791 Revision 2

RE: E160040026-21, Altgeld Garden Blocks 11, 12, & 13, S. Greenwood Ave

Dear Nohemi Melero:

STAT Analysis received 30 samples for the referenced project on 2/27/2017 2:06:00 PM. The analytical results are presented in the following report.

This report is revised to reflect additional analysis requested after the last report revision.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAC standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Martin Kucan

Martin Kucan
Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This analytical report shall become property of the Customer upon payment in full. Otherwise, STAT will be under no obligation to support, defend or discuss the analytical report.

STAT Analysis Corporation

Date: March 10, 2017

Client: Carnow, Conibear, & Associates
Project: E160040026-21, Altgeld Garden Blocks 11, 12, & 13,
Work Order: 17020791 Revision 2

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
17020791-001A	BLK 11-101 (1-3)		2/27/2017 9:40:00 AM	2/27/2017
17020791-002A	BLK 11-101 (6-8)		2/27/2017 9:50:00 AM	2/27/2017
17020791-003A	BLK 11-102 (1-3)		2/27/2017 9:27:00 AM	2/27/2017
17020791-004A	BLK 11-102 (4-6)		2/27/2017 9:31:00 AM	2/27/2017
17020791-005A	BLK 11-103 (1-3)		2/27/2017 9:55:00 AM	2/27/2017
17020791-006A	BLK 11-103 (5-7)		2/27/2017 9:55:00 AM	2/27/2017
17020791-007A	BLK 11-104 (1-3)		2/27/2017 10:17:00 AM	2/27/2017
17020791-008A	BLK 11-104 (3-5)		2/27/2017 10:20:00 AM	2/27/2017
17020791-009A	BLK 11-105 (1-3)		2/27/2017 10:00:00 AM	2/27/2017
17020791-010A	BLK 11-105 (4-6)		2/27/2017 10:05:00 AM	2/27/2017
17020791-011A	BLK 11-106 (1-3)		2/27/2017 10:10:00 AM	2/27/2017
17020791-012A	BLK 11-106 (4-6)		2/27/2017 10:14:00 AM	2/27/2017
17020791-013A	BLK 13-101 (1-3)		2/27/2017 12:00:00 PM	2/27/2017
17020791-014A	BLK 13-101 (4-6)		2/27/2017 12:03:00 PM	2/27/2017
17020791-015A	BLK 13-102 (1-3)		2/27/2017 11:40:00 AM	2/27/2017
17020791-016A	BLK 13-102 (4-6)		2/27/2017 11:45:00 AM	2/27/2017
17020791-017A	BLK 13-103 (1-3)		2/27/2017 12:06:00 PM	2/27/2017
17020791-018A	BLK 13-103 (5-7)		2/27/2017 12:10:00 PM	2/27/2017
17020791-019A	BLK 13-104 (1-3)		2/27/2017 11:27:00 AM	2/27/2017
17020791-020A	BLK 13-104 (4-6)		2/27/2017 11:30:00 AM	2/27/2017
17020791-021A	BLK 13-105 (1-3)		2/27/2017 11:10:00 AM	2/27/2017
17020791-022A	BLK 13-105 (4-6)		2/27/2017 11:00:00 AM	2/27/2017
17020791-023A	BLK 13-106 (1-3)		2/27/2017 11:35:00 AM	2/27/2017
17020791-024A	BLK 13-106 (5-7)		2/27/2017 11:37:00 AM	2/27/2017
17020791-025A	BLK 12-101 (1-3)		2/27/2017 12:56:00 PM	2/27/2017
17020791-026A	BLK 12-101 (4-6)		2/27/2017 12:58:00 PM	2/27/2017
17020791-027A	BLK 12-102 (1-3)		2/27/2017 12:30:00 PM	2/27/2017
17020791-028A	BLK 12-102 (4-6)		2/27/2017 12:35:00 PM	2/27/2017
17020791-029A	BLK 12-103 (1-3)		2/27/2017 12:45:00 PM	2/27/2017
17020791-030A	BLK 12-103 (4-6)		2/27/2017 12:50:00 PM	2/27/2017

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Date Reported: March 10, 2017
Date Printed: March 10, 2017

ANALYTICAL RESULTS

Client: Carnow, Conibear, & Associates
Work Order: 17020791 Revision 2
Project: E160040026-21, Altgeld Garden Blocks 11, 12, &
Lab ID: 17020791-001

Client Sample ID: BLK 11-101 (1-3)
Collection Date: 2/27/2017 9:40:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **3/1/2017**		Analyst: **ERP**
Acenaphthene	ND	0.040		mg/Kg-dry	1	3/1/2017
Acenaphthylene	ND	0.040		mg/Kg-dry	1	3/1/2017
Anthracene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benz(a)anthracene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benzo(a)pyrene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benzo(b)fluoranthene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benzo(g,h,i)perylene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benzo(k)fluoranthene	ND	0.040		mg/Kg-dry	1	3/1/2017
Chrysene	ND	0.040		mg/Kg-dry	1	3/1/2017
Dibenz(a,h)anthracene	ND	0.040		mg/Kg-dry	1	3/1/2017
Fluoranthene	0.044	0.040		mg/Kg-dry	1	3/1/2017
Fluorene	ND	0.040		mg/Kg-dry	1	3/1/2017
Indeno(1,2,3-cd)pyrene	ND	0.040		mg/Kg-dry	1	3/1/2017
Naphthalene	ND	0.040		mg/Kg-dry	1	3/1/2017
Phenanthrene	ND	0.040		mg/Kg-dry	1	3/1/2017
Pyrene	ND	0.040		mg/Kg-dry	1	3/1/2017
Metals by ICP/MS	**SW6020 (SW3050B)**			Prep Date: **3/3/2017**		Analyst: **JG**
Arsenic	7.2	1.1		mg/Kg-dry	10	3/5/2017
Barium	66	1.1		mg/Kg-dry	10	3/5/2017
Cadmium	ND	0.53		mg/Kg-dry	10	3/5/2017
Chromium	16	1.1		mg/Kg-dry	10	3/5/2017
Lead	16	0.53		mg/Kg-dry	10	3/5/2017
Selenium	1.6	1.1		mg/Kg-dry	10	3/5/2017
Silver	ND	1.1		mg/Kg-dry	10	3/5/2017
Mercury	**SW7471A**			Prep Date: **3/1/2017**		Analyst: **LB**
Mercury	ND	0.023		mg/Kg-dry	1	3/1/2017
pH (25 °C)	**SW9045C**			Prep Date: **2/28/2017**		Analyst: **RW**
pH	8.74			pH Units	1	2/28/2017
Percent Moisture	**D2974**			Prep Date: **3/2/2017**		Analyst: **RW**
Percent Moisture	16.7	0.2	*	wt%	1	3/3/2017

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: March 10, 2017
Date Printed: March 10, 2017

ANALYTICAL RESULTS

Client: Carnow, Conibear, & Associates
Work Order: 17020791 Revision 2
Project: E160040026-21, Altgeld Garden Blocks 11, 12, &
Lab ID: 17020791-007

Client Sample ID: BLK 11-104 (1-3)
Collection Date: 2/27/2017 10:17:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **3/1/2017**		Analyst: **ERP**
Acenaphthene	ND	0.040		mg/Kg-dry	1	3/1/2017
Acenaphthylene	ND	0.040		mg/Kg-dry	1	3/1/2017
Anthracene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benz(a)anthracene	0.042	0.040		mg/Kg-dry	1	3/1/2017
Benzo(a)pyrene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benzo(b)fluoranthene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benzo(g,h,i)perylene	ND	0.040		mg/Kg-dry	1	3/1/2017
Benzo(k)fluoranthene	ND	0.040		mg/Kg-dry	1	3/1/2017
Chrysene	0.043	0.040		mg/Kg-dry	1	3/1/2017
Dibenz(a,h)anthracene	ND	0.040		mg/Kg-dry	1	3/1/2017
Fluoranthene	0.075	0.040		mg/Kg-dry	1	3/1/2017
Fluorene	ND	0.040		mg/Kg-dry	1	3/1/2017
Indeno(1,2,3-cd)pyrene	ND	0.040		mg/Kg-dry	1	3/1/2017
Naphthalene	ND	0.040		mg/Kg-dry	1	3/1/2017
Phenanthrene	0.051	0.040		mg/Kg-dry	1	3/1/2017
Pyrene	0.070	0.040		mg/Kg-dry	1	3/1/2017
Metals by ICP/MS	**SW6020 (SW3050B)**			Prep Date: **3/3/2017**		Analyst: **JG**
Arsenic	8.8	1.1		mg/Kg-dry	10	3/5/2017
Barium	54	1.1		mg/Kg-dry	10	3/5/2017
Cadmium	ND	0.54		mg/Kg-dry	10	3/5/2017
Chromium	16	1.1		mg/Kg-dry	10	3/5/2017
Lead	22	0.54		mg/Kg-dry	10	3/5/2017
Selenium	2.1	1.1		mg/Kg-dry	10	3/5/2017
Silver	ND	1.1		mg/Kg-dry	10	3/5/2017
Mercury	**SW7471A**			Prep Date: **3/1/2017**		Analyst: **LB**
Mercury	0.024	0.022		mg/Kg-dry	1	3/1/2017
pH (25 °C)	**SW9045C**			Prep Date: **2/28/2017**		Analyst: **RW**
pH	8.74			pH Units	1	2/28/2017
Percent Moisture	**D2974**			Prep Date: **3/2/2017**		Analyst: **RW**
Percent Moisture	17.8	0.2	*	wt%	1	3/3/2017

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: March 10, 2017
Date Printed: March 10, 2017

ANALYTICAL RESULTS

Client: Carnow, Conibear, & Associates
Work Order: 17020791 Revision 2
Project: E160040026-21, Altgeld Garden Blocks 11, 12, &
Lab ID: 17020791-013

Client Sample ID: BLK 13-101 (1-3)
Collection Date: 2/27/2017 12:00:00 PM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **3/1/2017**		Analyst: **ERP**
Acenaphthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Acenaphthylene	ND	0.039		mg/Kg-dry	1	3/1/2017
Anthracene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Chrysene	ND	0.039		mg/Kg-dry	1	3/1/2017
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	3/1/2017
Fluoranthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Fluorene	ND	0.039		mg/Kg-dry	1	3/1/2017
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	3/1/2017
Naphthalene	ND	0.039		mg/Kg-dry	1	3/1/2017
Phenanthrene	ND	0.039		mg/Kg-dry	1	3/1/2017
Pyrene	ND	0.039		mg/Kg-dry	1	3/1/2017
Metals by ICP/MS	**SW6020 (SW3050B)**			Prep Date: **3/3/2017**		Analyst: **JG**
Arsenic	7.7	1.0		mg/Kg-dry	10	3/5/2017
Barium	44	1.0		mg/Kg-dry	10	3/5/2017
Cadmium	ND	0.51		mg/Kg-dry	10	3/5/2017
Chromium	27	1.0		mg/Kg-dry	10	3/5/2017
Lead	22	0.51		mg/Kg-dry	10	3/5/2017
Selenium	1.8	1.0		mg/Kg-dry	10	3/5/2017
Silver	ND	1.0		mg/Kg-dry	10	3/5/2017
SPLP Metals by ICP/MS	**SW1312/6020 (SW3005A)**			Prep Date: **3/8/2017**		Analyst: **JG**
Chromium	ND	0.0080		mg/L	2	3/8/2017
Selenium	ND	0.0040		mg/L	2	3/8/2017
Mercury	**SW7471A**			Prep Date: **3/1/2017**		Analyst: **LB**
Mercury	ND	0.020		mg/Kg-dry	1	3/1/2017
pH (25 °C)	**SW9045C**			Prep Date: **2/28/2017**		Analyst: **RW**
pH	8.84			pH Units	1	2/28/2017
Percent Moisture	**D2974**			Prep Date: **3/2/2017**		Analyst: **RW**
Percent Moisture	15.3	0.2	*	wt%	1	3/3/2017

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter

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R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: March 10, 2017
Date Printed: March 10, 2017

ANALYTICAL RESULTS

Client: Carnow, Conibear, & Associates
Work Order: 17020791 Revision 2
Project: E160040026-21, Altgeld Garden Blocks 11, 12, &
Lab ID: 17020791-019

Client Sample ID: BLK 13-104 (1-3)
Collection Date: 2/27/2017 11:27:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **3/1/2017**		Analyst: **ERP**
Acenaphthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Acenaphthylene	ND	0.039		mg/Kg-dry	1	3/1/2017
Anthracene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	3/1/2017
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Chrysene	ND	0.039		mg/Kg-dry	1	3/1/2017
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	3/1/2017
Fluoranthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Fluorene	ND	0.039		mg/Kg-dry	1	3/1/2017
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	3/1/2017
Naphthalene	ND	0.039		mg/Kg-dry	1	3/1/2017
Phenanthrene	ND	0.039		mg/Kg-dry	1	3/1/2017
Pyrene	ND	0.039		mg/Kg-dry	1	3/1/2017
Metals by ICP/MS	**SW6020 (SW3050B)**			Prep Date: **3/3/2017**		Analyst: **JG**
Arsenic	13	1.1		mg/Kg-dry	10	3/5/2017
Barium	72	1.1		mg/Kg-dry	10	3/5/2017
Cadmium	ND	0.53		mg/Kg-dry	10	3/5/2017
Chromium	16	1.1		mg/Kg-dry	10	3/5/2017
Lead	21	0.53		mg/Kg-dry	10	3/5/2017
Selenium	2.4	1.1		mg/Kg-dry	10	3/5/2017
Silver	ND	1.1		mg/Kg-dry	10	3/5/2017
Mercury	**SW7471A**			Prep Date: **3/1/2017**		Analyst: **LB**
Mercury	0.083	0.019		mg/Kg-dry	1	3/1/2017
pH (25 °C)	**SW9045C**			Prep Date: **2/28/2017**		Analyst: **RW**
pH	8.65			pH Units	1	2/28/2017
Percent Moisture	**D2974**			Prep Date: **3/2/2017**		Analyst: **RW**
Percent Moisture	14.7	0.2	*	wt%	1	3/3/2017

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: March 10, 2017
Date Printed: March 10, 2017

ANALYTICAL RESULTS

Client: Carnow, Conibear, & Associates
Work Order: 17020791 Revision 2
Project: E160040026-21, Altgeld Garden Blocks 11, 12, &
Lab ID: 17020791-025

Client Sample ID: BLK 12-101 (1-3)
Collection Date: 2/27/2017 12:56:00 PM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **3/1/2017**		Analyst: **ERP**
Acenaphthene	ND	0.039		mg/Kg-dry	1	3/1/2017
Acenaphthylene	ND	0.039		mg/Kg-dry	1	3/1/2017
Anthracene	0.10	0.039		mg/Kg-dry	1	3/1/2017
Benz(a)anthracene	0.26	0.039		mg/Kg-dry	1	3/1/2017
Benzo(a)pyrene	0.25	0.039		mg/Kg-dry	1	3/1/2017
Benzo(b)fluoranthene	0.20	0.039		mg/Kg-dry	1	3/1/2017
Benzo(g,h,i)perylene	0.17	0.039		mg/Kg-dry	1	3/1/2017
Benzo(k)fluoranthene	0.20	0.039		mg/Kg-dry	1	3/1/2017
Chrysene	0.28	0.039		mg/Kg-dry	1	3/1/2017
Dibenz(a,h)anthracene	0.080	0.039		mg/Kg-dry	1	3/1/2017
Fluoranthene	0.58	0.039		mg/Kg-dry	1	3/1/2017
Fluorene	ND	0.039		mg/Kg-dry	1	3/1/2017
Indeno(1,2,3-cd)pyrene	0.14	0.039		mg/Kg-dry	1	3/1/2017
Naphthalene	ND	0.039		mg/Kg-dry	1	3/1/2017
Phenanthrene	0.46	0.039		mg/Kg-dry	1	3/1/2017
Pyrene	0.55	0.039		mg/Kg-dry	1	3/1/2017
Metals by ICP/MS	**SW6020 (SW3050B)**			Prep Date: **3/3/2017**		Analyst: **JG**
Arsenic	9.1	1.1		mg/Kg-dry	10	3/5/2017
Barium	34	1.1		mg/Kg-dry	10	3/5/2017
Cadmium	ND	0.53		mg/Kg-dry	10	3/5/2017
Chromium	11	1.1		mg/Kg-dry	10	3/5/2017
Lead	19	0.53		mg/Kg-dry	10	3/5/2017
Selenium	1.6	1.1		mg/Kg-dry	10	3/5/2017
Silver	ND	1.1		mg/Kg-dry	10	3/5/2017
Mercury	**SW7471A**			Prep Date: **3/1/2017**		Analyst: **LB**
Mercury	0.027	0.019		mg/Kg-dry	1	3/1/2017
pH (25 °C)	**SW9045C**			Prep Date: **2/28/2017**		Analyst: **RW**
pH	8.43			pH Units	1	2/28/2017
Percent Moisture	**D2974**			Prep Date: **3/2/2017**		Analyst: **RW**
Percent Moisture	14.6	0.2	*	wt%	1	3/3/2017

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
2242 W. Harrison Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
e-mail address: STATinfo@STATAnalysis.com *AIHA, NVLAP and NELAP accredited*

CHAIN OF CUSTODY RECORD

№: 864338 Page : 1 of 2

Company: Cornow, Conibear + Assoc., Ltd.
Project Number: E160040026-21 Client Tracking No.:
Project Name: Altgeld Gardens Blocks 11, 12, + 13
Project Location: S. Greenwood Ave + E. 133rd St, Chicago
Sampler(s): Karen Zelzer, Mona Rogers, Nehemi Melero
Report To: Nehemi Melero Phone: 312-762-2927
Fax:
QC Level: 1 ____ 2 ____ 3 ____ 4 ____ e-mail: nmelero@ccaltd.com

P.O. No.:
Quote No.:

Turn Around: Standard
Results Needed: / / am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	PNAs	RCRA	pH	Metals	Remarks	Lab No.:
BLK 11-101 (1-3)	2/27/17	9:40	Soil		X		1	X	X	X			001
(6-8)		9:50											002
BLK 11-102 (1-3)		9:27										HOLD	~~003~~ 003 J.W
(4-6)		9:31											004
BLK 11-103 (1-3)		9:55											005
(5-7)		9:55											006
BLK 11-104 (1-3)		10:17						X	X	X			007
(3-5)		10:20										HOLD	008
BLK 11-105 (1-3)		10:00											009
(4-6)		10:05											010
BLK 11-106 (1-3)		10:10											011
(4-6)		10:14											012
BLK 13-101 (1-3)		12:00						X	X	X			013
(4-6)		12:03										HOLD	~~014~~ J.W 014
BLK 13-102 (1-3)		11:40											015
(4-6)		11:45											016
BLK 13-103 (1-3)		12:06											017
(5-7)		12:10											018
BLK 13-104 (1-3)		11:27						X	X	X			019
(4-6)		11:30										HOLD	020

Relinquished by: (Signature) Nehemi Melero	Date/Time: 2/27/17 2:06	
Received by: (Signature) [signature]	Date/Time: 2/27/17 4:00	
Relinquished by: (Signature)	Date/Time:	
Received by: (Signature)	Date/Time:	
Relinquished by: (Signature)	Date/Time:	
Received by: (Signature)	Date/Time:	

Comments:

Preservation Code: A = None B = HNO_3 C = NaOH D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

Laboratory Work Order No.: 17020791

Received on Ice: Yes [X] No [ ]

Temperature: On Ice °C

STAT Analysis Corporation
2242 W. Harrison Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
e-mail address: STATinfo@STATAnalysis.com AIHA, NVLAP and NELAP accredited

CHAIN OF CUSTODY RECORD

№: 865019 Page : 2 of 2

Company: Cannon, Conibear + Assoc, Ltd
Project Number: E160040026-21 Client Tracking No.:
Project Name: Altgeld Gardens Blocks 11, 12 + 13
Project Location: S. Greenwood Ave + E 133rd St, Chicago
Sampler(s): Karen Zelzer, Mona Rogers, Nohemi Melero
Report To: Nohemi Melero Phone: 312-762-2927
Fax:
e-mail: nmelero@ccaltd.com
QC Level: 1 ____ 2 ____ 3 ____ 4 ____

P.O. No.:
Quote No.:

Turn Around: Standard
Results Needed: / / am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	PNAs	RCRA Metals	pH	Remarks	Lab No.:
BLK 13-105 (1-3)	2/27/17	11:10	Soil		X		1				HOLD	021
↓ (4-6)	↓	11:10	↓		↓		↓				↓	022
BLK 13-106 (1-3)		11:35										023
↓ (5-7)		11:37										024
BLK 12-101 (1-3)		12:56						X	X	X		025
↓ (4-6)		12:56										026
BLK 12-102 (1-3)		12:30									HOLD	027
↓ (4-6)		12:35									↓	028
BLK 12-103 (1-3)		12:45										029
↓ (4-6)	↓	12:50	↓		↓		↓					030

Relinquished by: (Signature) Nohemi Melero	Date/Time: 2/27/17 2:06	Comments:
Received by: (Signature) [signature]	Date/Time: 2/27/17 4:00	
Relinquished by: (Signature)	Date/Time:	
Received by: (Signature)	Date/Time:	
Relinquished by: (Signature)	Date/Time:	
Received by: (Signature)	Date/Time:	

Preservation Code: A = None B = HNO_3 C = NaOH D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

Laboratory Work Order No.: 17020791

Received on Ice: Yes [X] No [ ]

Temperature: On Ice °C

STAT Analysis Corporation

Sample Receipt Checklist

Client Name CCA

Date and Time Received: 2/27/2017 2:06:00 PM

Work Order Number 17020791

Received by: JNW

Checklist completed by: Signature 2/27/17 Date

Reviewed by: JOK Initials 2/28/17 Date

Matrix: Carrier name Client Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels/containers?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container or Temp Blank temperature in compliance?	Yes ☑	No ☐	Temperature On Ice °C
Water - VOA vials have zero headspace?	No VOA vials submitted ☒	Yes ☒	No ☒
Water - Samples pH checked?	Yes ☒	No ☒	Checked by:
Water - Samples properly preserved?	Yes ☒	No ☒	pH Adjusted?

Any No response must be detailed in the comments section below.

Comments: SPLP Cr added to sample BLK B-101 (1-3) per Noheni Melero verbal 3/10/17 8:54.

Client / Person contacted: Date contacted: Contacted by:

Response:

Frank Capoccia

From: Nohemi Melero [nmelero@ccaltd.com]
Sent: Tuesday, March 07, 2017 5:34 PM
To: Frank Capoccia
Subject: RE: E160040026-21, Altgeld Garden Blocks 11, 12, & 13, S. Greenwood Ave STAT 17020791

Hi Frank,
Can you please run the following on a 2-day TAT:

Blk 13-101(1-3) - SPLP Selenium

Thank you,

Nohemi Melero
Senior Project Manager
Carnow, Conibear & Assoc., Ltd.
600 West Van Buren Street, Suite 500
Chicago, IL 60607
Direct:(312) 762-2927
Mobile:(312) 656-2383
Fax:(312) 782-5145

-

-

-

Civil Enforcement Case Report

Civil Enforcement Case

Basic Information

Case Number: 05-1988-0077
Case Name: U.S. SCRAP
Case Category: Judicial
Case Status (as of 03/20/1992): Concluded
Case Lead: EPA
Court Docket Number: 89 C 5730
DOJ Docket Number: 90-11-3-465

Relief Sought: Cost Recovery
Enforcement Outcome: Final Order With Specified Cost Recovery
Headquarters Division: CER
Branch: MMB
Result of Voluntary Disclosure? No
Multi-media Case? No
Enforcement Type: Civil Judicial Action
Violations: --

Penalties – Case Level

Total Federal Penalty Assessed or Agreed To: $0
Total State/Local Penalty Assessed: $0
Total SEP Cost: $0
Total Compliance Action Cost: $0
Total Cost Recovery: $310,000

Case Summary

NAT'L PRIORITIES LIST WHEN THE NEW HAZARD RANKING SYSTEM IS ISSUED, THIS ACTION ALSO SEEKS A DECLARATORY JUDGMENT ON LIA BILITY FOR ANY FUTURE COST EXPENDED AT THE SITE. EMERGENCY REMOVAL COMPLETED IN JULY 1986. EXPANDED SITE INVESTIGATION COMPLETED FALL 1987. PRP SEARCH STILL BEING CONDUCTED. THE PURPOSE IS THE FILING OF A CIVIL ACTION TO RECOVER GOVERNMENT RESPONSE COSTS UNDER SECT 107 OF CERCLA, 42 USC SECT 9601 ET SEQ., AS AMENDED BY THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986, PUB. L. NO. 99-499, 100 STAT. 1613 (1986) (SARA). NATURE OF THE CASE: THIS PROPOSED COST RECOVERY CASE CONCERNS THE U.S. SCRAP SITE LOCATED ON THE SOUTH SITE OF CHGO., IL. THE SITE OPERA TED AS AN INDUSTRIAL CHEMICAL WASTE RECEIVER BETWEEN 1965 AND 1975. DURING THIS PERIOD, THE OPERATOR TOOK LIQUID AND DRY WASTES FROM OVER 200 AREA GENERATORS AND DISPOSED OF THEM IN LAGOONS, OLD GRAIN SILOS, PITS, AS WELL AS ONTO THE GROUND OF THE SITE. OPERATIONS AT THE SITE CEASED IN 1975, WHEN THE SITE OPERATOR ENCOUNTERED FINANCIAL DIFFICULTIES. FROM 1973 TO 1975 HE DISPOSED OF WASTES AT BOTH THE U.S. SCRAP SITE AND A RELATED SITE, NINTH AVE. DUMP IN GARY, IN. EXCEPT FOR SCORING THE SITE UNDER THE HAZARD RANKING SYS- TEM IN 1982, THE U.S. SCRAP SITE FIRST CAME TO THE ATTENTION OF THE USEPA ON AUGUST 16, 1985, WHEN THE IEPA REQUESTED AS- SISTANCE IN EXTINGUISHING A LANDFILL FIRE ON THE SITE. THE USEPA INITIATED AN EMERGENCY RESPONSE ACTION, WHICH INVOLVED EXTINGUISHING THE FIRE AND EXCAVATING AND REMOVING HEAVILY CONTAMINATED SOIL AND DRUMMED WASTES FROM A RAILROAD EMBANK- MENT ON THE SITE. EMERGENCY RESPONSE ACTIVITIES WERE CONCLU DED ON JULY 25, 1986. BECAUSE THE EMERGENCY RESPONSE ACTION ADDRESSED ONLY A FRACTION OF THE WASTES BURIED ON THE SITE, A SPECIAL STUDY/ EXPANDED SITE INSPECTION WAS INITIATED ON THE SITE IN NOVEM- BER 1986, FOR THE PURPOSE OF DETERMINING THE NATURE AND EX- TENT OF CONTAMINATION. THE FINAL REPORT FOR THIS STUDY IS` EXPECTED IN THE SUMMER OF 1989. CAUSE OF ACTION: USEPA SEEKS THE RECOVERY OF APPROXIMATELY $1.512 MILLION EXPENDED AT THE SITE PURSUANT TO SECT 107 OF CERCLA, 42 USC SECT 9607 (WITH AN OFFSET OF $625,000 COLLECTED FROM ALLIS CHALMERS, ONE OF THE GENERATORS, AS A RESULT OF A BANKRUPTCY SETTLEMENT). THE RECOMMENDED DEFENDANTS INCLUDE ONLY TWENTY EIGHT GENERATORS OF HAZARDOUS SUBSTANCES TAKEN TO THE SITE. THESE TWENTY-EIGHT HAVE BEEN CARVED OUT BECAUSE RESOURCE LI- MITATIONS PROHIBIT SUING ALL 201 POTENTIAL DEFENDANTS. THESE TWENTY-EIGHT HAVE SIGNIFICANT EVIDENCE LINKING THEM TO THE SITE AND ARE NOT COMMITTED TO COMPLYING WITH THE UNILATERAL ADMINISTRATIVE ORDER ISSUED IN CONNECTION WITH THE RELATED NINTH AVE. DUMP SITE. THE STATUTE OF LIMITATIONS FOR THE EMERGENCY RESPONSE ACTION (APPROXIMATELY $1 MILLION) IS JULY 25, 1989. PROPOSED REMEDY: THE REMEDY SOUGHT IN THIS ACTION IS THE REIMBURSEMENT OF ALL RESPONSE COSTS EXPENDED BY THE USEPA IN CONNECTION WITH THE EMERGENCY RESPONSE ACTION AND SPECIAL STUDY/EXPANDED SITE INSPECTION. BECAUSE THE SITE MAY BE RESCORED FOR THE

Laws and Sections

Law	Sections	Programs
CERCLA	107A	Cost Recovery

Citations

Title	Part	Section
No data records returned		

Facilities

FRS Number	Facility Name	Address	City Name	State	Zip	SIC Codes	NAIC Codes
110010737658	US SCRAP	123RD & COTTAGE GROVE AVE	CHICAGO	IL	60628	--	--

Defendants

Defendants and Settlements	In Complaint	In Settlement
BRIGHTLY GALVANIZED PRODUCTS, INC.	Y	Y

Case Milestones

Event	Actual Date
Referred To Dept Of Justice	03/29/1989

Defendants and Settlements	In Complaint	In Settlement
COLLIS COMPANY	Y	Y
CONTAINER CORPORATION OF AMERICA	Y	Y
DEMERT & DOUGHERTY, INC.	Y	Y
DEPARTMENT OF ARMY	Y	Y
LTV STEEL COMPANY	Y	Y
NATIONAL PRECISION CIRCUITS & ELECTRONIC	Y	Y
PIERCE & STEVENS CHEMICAL COMPANY	Y	Y
PRECISION TWIST DRILL COMPANY	Y	Y
STANDARD T. CHEMICAL COMPANY, INC.	Y	Y
THE GLIDDEN COMPANY	Y	Y
U.S. SCRAP	N	N
USX CORPORATION	Y	Y
VENICULUM, INC.	Y	Y
WYMAN GORDON COMPANY	Y	Y

Related Case Documents

Document	Facility Name	Publish Date	EPA Program
No data records returned			

Event	Actual Date
Complaint Filed With Court	07/25/1989
Concluded	03/20/1992
Final Order Lodged	03/20/1992
Final Order Entered	03/20/1992
Enforcement Action Data Entered	08/28/1997

Pollutants

Pollutant Name	Chemical Abstract Number
NONE	--

Related Activities

Description	Actual Date
No data records returned	

Final Order 1

Final Order Type: Consent Decree or Court Order Resolving a Civil Judicial Action
Final Order Name: STANDARD T. CHEMICAL CO, ET AL
Linked Facilities (FRS ID): 110010737658
Final Order Lodged Date: 03/20/1992
Final Order Entered Date: 03/20/1992
Enforcement Action Closed Date: --
Actual Termination Date: 09/25/1997

Penalties/SEPs/Cost Recovery Amounts

Federal Penalty Assessed or Agreed To: $0
State/Local Penalty Assessed: $0
SEP Value: --
Compliance Action Cost: $0
Federal Cost Recovery Awarded: $310,000

Complying Actions

Complying Action ID	Category	Description
No data records returned		

Supplemental Environmental Projects

SEP ID	Category	SEP Value	Description
No data records returned			

Estimated Pollutant Reductions

Resulting From	Pollutant	Estimated Annual Amount	Units	Media Affected
No data records returned				

Appendix G - Qualifications

BRITTEN V. ROBINSON-ADAMS

STAFF PROFESSIONAL/ENVIRONMENTAL SCIENTIST I

Mr. Robinson-Adams has multiple years of experience in the geologic, mining, environment fields, primarily in the oil and gas industry. His areas of knowledge include the following: sedimentology, mineralogy, environmental assessment, well logging, geophysics, geologic mapping, rock and sediment sampling analysis.

Education
B.S., Geology, Eastern Illinois University, 2009

Certificates
OSHA 40 Hour HAZWOPER Industry Training
CPR

Key Projects

Ecology and Environment, Inc. – IDOT PTB 185-025 Hazardous Waste Surveys (Preliminary Site Investigations), Statewide (October 2019 – Present), Environmental Scientist. Mr. Robinson-Adams is providing soil sampling services for the Hazardous Waste Surveys including Preliminary Site Investigations (PSIs) conducted along Illinois roads for the Illinois Department of Transportation (IDOT). The PSIs include soil and groundwater sampling and evaluation and cost planning for soil excavation and disposal.The purpose of this work is to evaluate and determine the condition for disposal of subsurface soils expected to be excavated during IDOT upgrade work. *Mr. Dean Tiebout, Program Manager, Ecology and Environment, Inc., 33 W. Monroe St., Suite 1410, Chicago, IL 60603. (312) 578-9243. DTiebout@ene.com*

CTA Phase #1 Report, Chicago, IL (February 2018 – March 2018) Mr. Robinson-Adams collected data from EDR, OFSM, IEPA, USEPA, Chicago Zoning, and etc. This data gather was entered into the report. With the collection of data, I determined if the subject property and adjacent properties had potential to harm the environment with waste, chemicals, air pollution, or petroleum products.

NEPA SARFS & RPR, CHICAGO, IL. (JUNE 2018 – JULY 2018) Mr. Robinson-Adams completed reports for City of Chicago. These reports consist of Chicago zoning maps, CHRS database maps, HARGIS historical maps, FEMA waterway maps, and FOIA 2FM data.

Property Screens CHA, Chicago, IL. (February 2018 – July 2018) Mr. Robinson-Adams completed reports for CHA. These reports include OSFM, 2FM, IEPA, USAEPA, and historical aerials research data. The data gather is use for identifying RECs near subject properties.

Landrum and Brown, O'Hare Airport Facility Development, Chicago, IL. (January 2018 – January 2018), Environmental Scientist. Mr. Robinson-Adams conducted a Phase I Environmental Site Assessment report and an Environment Assessment (EA) Checklist for a planned property development for a property in Chicago managed by O'Hare Airport. The objective of the assessments was to identify recognized environmental conditions (REC's) associated with the site and satisfy the environmental assessment requirements of the City of Chicago. The EA was conducted for compliance with the National Environmental Policy Act (NEPA).

Oakwood Redevelopment Phase I, Chicago, IL (April 2019) Mr. Robinson-Adams conducted a Phase I Environmental Site Assessment report and an Environment Assessment (EA) checklist for a planned property development for a property in Chicago managed by HUD. The objective of the assessments was to identify recognized environmental conditions (REC's) associated with the site and satisfy the environmental assessment requirements of the City of Chicago and Urban Development. The EA was conducted for compliance with the National Environmental Policy Act (NEPA).

Jackson Park (PSC) Intern Soil Removal, Chicago, IL. (April 2019) Mr. Robinson-Adams managed soil removal for Intern's street liner/pipe redevelopment.

New Lenox (PSC) Hydro-Vac Soil Removal, New Lenox, IL. (March 2019) Mr. Robinson-Adams managed soil removal for Comed electric pole replacement project.

Chicago (People Gas) Soil Sampling, Chicgao, IL. (February 2019) Mr. Robinson-Adams collected soil samples for PH and TCL testing. The samples will be delivered to Stat Analysis and analyzed.

Maywood (PSC) Soil Sampling, Maywood, IL. (January 2019) Mr. Robinson-Adams collected soil from roll-off trailer. The sample will be delivered to Stat Analysis and analyzed for hazards.

Dixon (PSC) Soil Sampling, Dixon, IL. (January 2019) Mr. Robinson-Adams collected soil from roll-off trailer. The sample will be delivered to Stat Analysis and analyzed for hazards.

Rockfalls Storage Audit, Rockfalls, IL. (January 2019) Mr. Robinson-Adams completed a site review and audit on Comed storage property located in Rockfalls, IL. Photos, written report, and job brief meeting with foreman was recorded.

Zion Substation Soil Removal Management, Zion, IL. (January 2019) Mr. Robinson-Adams worked on behalf of Comed to oversee soil and debris removal from Comed Zion substation location. The soil and debris were taken to landfill with proper manifest complete by EDI. Mr. Robinson-Adams was approved for security clearance for access to the substation as part of the project.

Comed Rockfalls Project, Rockfalls, IL. (November 2018 – December 2018) Mr. Robinson-Adams worked on behalf of Comed to oversee soil and debris removal in Rockfalls, IL. The soil and debris were taken to landfill with proper manifest complete by EDI. Comed workers remove older wooden electric poles and replace them with steel structures.

Rockfalls Storage Audit, Rockfalls, IL. (November 2018) Mr. Robinson-Adams completed a site review and audit on Comed storage property located in Rockfalls, IL. Photos, written report, and job brief meeting with foreman was recorded.

Calumet Storage Audit, Chicago, IL. (November 2018) Mr. Robinson-Adams completed a site review and audit on Comed storage property located in Chicago, IL. Photos, written report, and brief meeting with foreman was recorded.

Higgins Substation Soil Removal Management, Chicago, IL. (August 2018 – December 2018) Mr. Robinson-Adams worked on behalf of the Comed to oversee soil and debris removal in Chicago, IL. The soil and debris were taken to landfill with proper manifest complete by EDI.

Weber Road, Romeville, IL. (July 2018 – July 2018) Mr. Robinson-Adams conducted soil sampling with a hand auger for Comed project. The soil samples were delivered to Stats Laboratory for further scientific data

VA Perimeter Security Fence Project, North Chicago, IL. (July 2018 – July 2018) Mr. Robinson-Adams conducted soil sampling with a hand auger for US Navy new fence line. The soil samples were delivered to Stats Laboratory for further scientific data.

Riteway Huggins Soil Removal Management Chicago, IL. (July 2018 – July 2018) Mr. Robinson-Adams worked on behalf of the Comed to oversee soil and debris removal in Chicago, IL. The soil and debris were taken to landfill with proper manifest complete by EDI. Mr. Robinson-Adams was approved for security clearance for access to the substation as part of the project.

Taylor Substation Soil Removal Management Chicago, IL. (July 2018 – July 2018) Mr. Robinson-Adams worked on behalf of the Comed to oversee soil and debris removal in Chicago, IL. The soil and debris were taken to landfill with proper manifest complete by EDI. Mr. Robinson-Adams was approved for security clearance for access to the substation as part of the project.

Ridgeland Substation Soil Removal Management Stickey, IL. (July 2018 – July 2018) Mr. Robinson-Adams worked on behalf of the Comed to oversee soil and debris removal in Stickey, IL. The soil and debris were taken to landfill with proper manifest complete by EDI. Mr. Robinson-Adams was approved for security clearance for access to the substation as part of the project.

Calumet Substation Fence Project, Chicago, IL. (**April 2018 – April 2018)** Mr. Robinson-Adams conducted soil sampling with a hand auger near substation's fence line. The soil samples were delivered to Stat Laboratory

for further scientific data. Mr. Robinson-Adams also preformed PID test and gather GPS coordinates on site.

Comed Southside Geoprobe Street Boring, Chicago, IL. (March 2018 – March 2018)
Mr. Robinson-Adams help locate boring sites in the field. These boring sites must stay clear from utilities, gas lines, water lines and etc. Boring soil samples were characterized, tested with PID, and further tested at Stat Laboratory. Also, water tables depths were determined onsite.

Franklin Park Substation Fence Project, Franklin Park, IL. (April 2018 – April 2018) Mr. Robinson-Adams conducted soil sampling with a hand auger near substation's fence line. The soil samples were delivered to Stat Laboratory for further scientific data. Mr. Robinson-Adams also preformed PID test and gather GPS coordinates on site.

Itasca Substation Fence Project, Chicago, IL. (March 2018 – March 2018) Mr. Robinson-Adams conducted soil sampling with a hand auger near substation's fence line. The soil samples were delivered to Stat Laboratory for further scientific data. Mr. Robinson-Adams also preformed PID test and gather GPS coordinates. Mr. Robinson-Adams also preformed PID test and gather GPS coordinates on site.

Calumet Substation Fence Project, Chicago, IL. (March 2018 – March 2018) Mr. Robinson-Adams conducted soil sampling with a hand auger near substation's fence line. The soil samples were delivered to Stat Laboratory for further scientific data. Mr. Robinson-Adams also preformed PID test and gather GPS coordinates. Mr. Robinson-Adams also preformed PID test and gather GPS coordinates on site.hic

Davis Creek Substation Fence Project, Chicago, IL. (February 2018 – February 2018) Mr. Robinson-Adams conducted soil sampling with a hand auger near substation's fence line. The soil samples were delivered to Stat Laboratory for further scientific data. Mr. Robinson-Adams also preformed PID test and gather GPS coordinates. Mr. Robinson-Adams also preformed PID test and gather GPS coordinates on site.

Itasca Substation, Comed Road and Manhole Development, Itasca, IL. (January 2018 – January 2018), Environmental Scientist. Mr. Robinson-Adams worked on behalf of the Comed to oversee soil and debris removal in Itasca, IL. The soil and debris were taken to landfill with proper manifest complete by EDI. Mr. Robinson-Adams was approved for security clearance for access to the substation as part of the project.

God's House for Nations Property, Grace Little, (January 2018 – January 2018), Chicago, IL., Environmental Scientist. Mr. Robinson-Adams conducted a Phase I Environmental Site Assessment report and an Environment Assessment (EA) checklist for a planned property development for a property in Chicago managed by God's House for Nations Property. The objective of the assessments was to identify recognized environmental conditions (REC's) associated with the site and satisfy the environmental assessment requirements of the City of Chicago and Urban Development. The EA was conducted for compliance with the National Environmental Policy Act (NEPA).

Jones Lang LaSalle, BMO Harris Bank N.A., Phase II ESA, Hinsdale, IL., (January 2018 – January 2018), Environmental Scientist. Mr. Robinson-Adams conducted a Phase II ESA report for the Jones Lang LaSalle. The purpose was to examine soil and groundwater of the subject property. Duties included creating soil boring logs, analyzing soil sample data, performing risk modeling, performing groundwater pollution modeling, and completing ESA reports for the BMO Harris Bank owner.

Oil and Gas Well Drilling, Alaska, Texas, and California, (2011-2017), Logging Geologist. Mr. Robinson-Adams worked as a Logging Geologist on over 60 wells, encompassing six basins across 3 states, for the drilling of oil, gas, and scientific well drilling. He provided detailed reports for multinational oil and gas corporations. He collected, and cataloged samples from well drilling. Mr. Robinson-Adams analyzed rock samples using various tests including microscopy, fluorometry, oil cut, oil and mineral fluorescence, gas chromatography, and interpret geophysics tools.

Ore Mining, Alaska, (2011-2011), Mining Geologist, Mr. Robinson-Adams worked as a Mining Geologist for Metallogeny and contracted to Kinross Gold Mine. The job description was to analyzed rock chip sample for gold and collect sample for Essay Lab.

JASON JANSSEN, CHMM

QA/QC MANAGER

Mr. Janssen has over 15 years of professional experience with extensive knowledge of environmental consulting, remediation, and construction. Mr. Janssen's experience includes project management, environmental site assessments, inspections, permitting, sampling, environmental compliance, site remediation, NEPA environmental assessments, and regulatory compliance. Work has included developing and leading a comprehensive update and expansion of health and safety policy and programs, as well as expanding employment of GIS geo-databases and systems utilizing the Esri ArcGIS software suite to provide accurate, timely, and thorough analysis of environmental issues. Key work has also included the development and implementation of Ambient Air Monitoring Programs designed to protect the public's health and safety during remediation efforts at former Manufactured Gas Plant sites, as well as being project team leader directly supervising staff and overseeing the program implementation.

Education
BS, Environmental Science & Natural Resources, Purdue University, West Lafayette, Indiana

Licenses
Certified Hazardous Materials Manger (CHMM), 2014

Certifications
40-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Training

Annual 8-hour OSHA HAZWOPER Refresher Training

Affiliations/Membership
Alliance of Hazardous Materials Professionals

Society of American Military Engineers

Key Projects

City of Chicago Department of Aviation (CDA), O'Hare International Airport Modernization Program (OMP), Chicago, Illinois. Mr. Janssen completed a Phase I ESA for the CDA for the new Runway 10R-28L, which was built as part of the OMP. Mr. Janssen was responsible for the execution and the composition of the report to identify Recognized Environmental Conditions (RECs) that would impact proposed Federal Aviation Administration (FAA) facilities and lease limits. As part of this work, Mr. Janssen created a geodatabase of the nearly 600 fuel spills reported at O'Hare airport between 2003 and 2009, and utilized the resulting information to analyze for the potential of fuel spills to impact the proposed FAA facilities. This work was conducted as part of preparatory efforts for future work and the completion of lease agreements between the City of Chicago and the FAA. As part of this work, Mr. Janssen reviewed previous investigations, reports, sampling results, and other information provided by the client that amounted to over 5,800 individual documents.

The Community Builders, Historic Art Deco Coca-Cola Bottling Plant, Fort Wayne, Indiana. Mr. Janssen conducted and prepared several reports (Phase I, Phase II, and NEPA Environmental Assessment) for a residential redevelopment of an active manufacturing facility and vacant properties in Fort Wayne, IN. The redevelopment featured housing and a community center, centered around a repurposed former Coca-Cola Bottling Plant recognized as a unique historical structure. The EA followed the Department of Housing and Urban Development's grant program and NEPA's review requirements, which included creating an environmental review record, identifying environmental hazards, and consulting with state and national agencies. The Phase I ESA was conducted in accordance with ASTM Standards. Activities included a detailed visual inspection of the subject property and adjacent properties, a review of available data on site history and conditions, and a review of available local, state, and federal records. The Phase II ESA was conducted to investigate recognized environmental conditions identified during the Phase I ESA, and included subsurface soil and groundwater sample collection.

Walmart, Brownfield Redevelopment, Chicago, Illinois. Mr. Janssen completed a Phase I ESA, and composed a Soil Management Plan (SMP), for a walmart retail development that was part of a 167-acre hazardous waste brownfield site enrolled in the Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP). Mr. Janssen was responsible for the execution and the composition of the Phase I ESA to identify Recognized Environmental Conditions (RECs) that impact the planned retail facility. As part of the assessment, Mr. Janssen reviewed the extensive investigative history of the larger brownfield site, as well as evaluated completed and ongoing remedial efforts. The SMP prepared by Mr. Janssen presented the means and methods to be utilized for proper management, removal, and disposal of the property's characteristically hazardous soils in accordance with United States Environmental Protection Agency (USEPA) regulations and Illinois EPA requirements during site development and any post development activities which would disturb site soils.

City of Chicago Department of Fleet and Facilities Management (2FM), PA Railroad Area Project, Chicago, Illinois. Mr. Janssen provided client contact, project management, scope of work and budget development for the project which included conducting Phase I and Phase II Environmental Site Assessments (ESAs) at multiple parcels in accordance with ASTM standards. Work was conducted to support a City of Chicago imitative to expand opportunities for community gardens and agriculture within underutilized urban areas with a goal of providing greater local food security and improved access to healthy food in underserved neighborhoods.

The Community Builders, 40-Site Portfolio, Cincinnati, Ohio. Due to successful performance on past projects, Mr. Janssen was tasked with providing expanded services for The Community Builders to the Ohio region and providing environmental support for residential acquisition and redevelopment of a 40-site portfolio in the Cincinnati region. As part of this work, Mr. Janssen developed the scope of work and budget for the project, reviewed numerous Phase I ESAs, prepared or reviewed several Phase II ESAs, and become experienced with Ohio Voluntary Action Program (VAP) regulations and requirements.

City of Chicago Department of Aviation, Midway International Airport, Chicago, Illinois. Mr. Janssen provided client contact, scope of work and budget preparation, field efforts, and reporting activities associated with the completion of Phase I and Phase II Environmental Site Assessments (ESAs) for a property transfer of two underground storage tanks at Midway International Airport. The Phase I and Phase II ESAs were conducted in accordance with ASTM Standard E1527-05 and IEPA Site Remediation Program requirements respectively. Activities included a detailed visual inspection of the subject property and adjacent properties, a review of available data on site history and conditions, and a review of available local, state, and federal records. The Phase II ESA was conducted to investigate reported existing contamination and potential surface spills identified during the Phase I ESA, and included a collection of subsurface soil and groundwater samples. Mr. Janssen developed the scope of work and budget for the project, performed field activities, and prepared reports.

J.L. Woode Ltd, Hawthorne House Apartments, Chicago, Illinois. In 2017 through early 2018, Mr. Janssen was tasked with resuming efforts to obtain a No Further Remediation (NFR) Letter and achieve regulatory closure for a legacy Leaking Underground Storage Tank (LUST) incident at the Hawthorne House residential high-rise apartment building. Mr. Janssen provided project management, client contact, and state reporting activities associated with the resolution this legacy LUST incident. The Hawthorne House LUST incident dated to 1999 when several underground storage tanks (USTs) were abandoned in-place at the property due to their proximity to the high-rise building. In preparing the tanks for abandonment, a release of heating oil and gasoline was discovered and reported to the State of Illinois. Between 1999 and 2010, several rounds of remedial actions were conducted at the property (this included three rounds of in-situ chemical injections and two rounds of physical source removal) under the Illinois Environmental Protection Agency (IEPA's) LUST program. These earlier efforts were unsuccessful in achieving regulatory closure through the IEPA's LUST program. In 2017, J.L. Woode Ltd. resumed efforts to obtain a NFR Letter. Through limited additional investigation, working closely with the IEPA, and transferring the LUST incident to the IEPA's Site Remediation Program (SRP), Mr. Janssen was able to obtain a NFR Letter for J.L. Woode Ltd. Closure was obtained in part through the development and subsequent approval by the IEPA's CORE committee of a Tier 3 Evaluation. The Tier 3 evaluation successfully demonstrated that the heating oil and gasoline contamination which remains at the property was unlikely to create an unacceptable risk to human health or the environment as they undergo natural attenuation.

Kimco, 87th Street Shopping Center, Chicago, Illinois. Mr. Janssen is providing client contact, project management, remediation, and state reporting activities associated with the completion of a comprehensive investigation and remediation of the five-parcel 87th Street Center. The 87th Street Center is an active 17-acre commercial property that is undergoing redevelopment, and that was historically the site of an automotive manufacturing facility. To address legacy impacts to soil and groundwater from the historic manufacturing operations, and obtain regulatory recognition of the remedial efforts, each parcel of the center was enrolled into the Illinois EPA Site Remediation Program in order to obtain No Further Remediation (NFR) Letters. Work to date has included a compressive evaluation of soil and groundwater contamination at the center, development of tailored remediation plans for each parcel, and reporting to the Illinois EPA.

Ridge Development, Downers Grove Supportive Living Facility, Downers Grove, Illinois. Mr. Janssen provided client contact, project management, remediation, and state reporting activities associated with the

completion of a comprehensive investigation and remediation of the recently constructed six-acre Downers Grove Supportive Living Facility. During the due diligence period for Ridge Development, impacts from degreasing solvents and petroleum products were identified in shallow soil and groundwater at the property from the operation of a former construction company's maintenance and storage yard at the site. Prior to development, a comprehensive investigation was conducted, and a tailored remedial design was developed and incorporated into the development plans. To obtain regulatory recognition of the remedial efforts and meet Housing and Urban Development (HUD) financing Requirements, the property was enrolled into the Illinois EPA Site Remediation Program and a comprehensive No Further Remediation (NFR) Letter was obtained.

City of Chicago Department of Fleet and Facilities Management (2FM), Eden Place Nature Center, Chicago, Illinois. Mr. Janssen provided client contact, project management, and state reporting activities associated with the completion of comprehensive investigations, and remediation, of Eden Place. Eden Place is an urban nature preserve and environmental education center located at 4339 South Stewart Avenue in the City of Chicago. Prior to Eden Place's founding, City records indicate that the property was utilized as illegal dump site for hazardous materials and that in or after 1997, a three-year clean-up effort was undertaken to remove the illegally dumped materials. Mr. Janssen was tasked by 2FM to investigate the City owned properties that comprise the northern portion of Eden Place for remnant impacts, enroll the property into the Illinois EPA Site Remediation Program (SRP) to address identified impacts, and obtain a No Further Remediation (NFR) Letter from the Illinois EPA. Work conducted by Mr. Janssen included completion of a Phase I and Phase II Environmental Site Assessment (ESA), enrollment of the property into the SRP, development of a remediation plan, oversight of a City Contractor implementing the remediation plan, and reporting to the IEPA. Efforts resulted in a comprehensive NFR Letter being issued.

U.S. Environmental Protection Agency (USEPA) Remedial Action Contract, South Minneapolis Residential Soil Contamination (SMRSC) Site, Minneapolis, MN. Mr. Janssen was an Inspector for the $20 Million Superfund project at the SMRSC Site, which is approximately a 1,130-acre arsenic impacted site located southeast of downtown Minneapolis primarily composed of residential properties. Mr. Janssen provided technical oversight and inspection of the remedial and restoration actions by CH2M HILL contractors. Mr. Janssen's duties included supervising field staff, supervising and inspecting contractors', and subcontractors' work, progress, and health and safety. Other responsibilities included meeting with individual residential property owners prior to, during, and after the remedial action and restoration work activities, confirmation sampling, and documenting remedial and restoration actions at each property.

U.S. Environmental Protection Agency (USEPA) Remedial Action Contract, Zionsville Superfund Site Remediation, Zionsville, Indiana. Mr. Janssen provided project oversight for the USEPA of a Potentially Responsible Party (PRP) lead remediation effort installing and operating a Soil Vapor Extraction and Permeable Reactive Barrier Gate System at the USEPA Superfund site. The Soil Vapor Extraction and Permeable Reactive Barrier Gate System was designed to protect the city of Indianapolis' municipal water supply from volatile organic contaminant migration. Mr. Janssen's responsibilities included inspection and oversight of contractors, oversight of system construction, verification of system parameters and operation, and project progress reporting to the USEPA.

U.S. Environmental Protection Agency (USEPA), Outboard Marine Corp. Superfund Site Remediation, Waukegan, Illinois. Mr. Janssen provided technical oversight for the installation of a groundwater extraction, treatment, and reinjection system for a USEPA Superfund site in Waukegan, IL for the purpose of remediating contaminated groundwater and controlling contaminant migration to Lake Michigan. Mr. Janssen's responsibilities included supervision of contractors, oversight of system construction, verification of system parameters and operation, and project progress reporting.

Ameren Services, Former Decatur Manufactured Gas Plant Remediation, Decatur, Illinois. Mr. Janssen was the Project Team Leader for an Ambient Air Monitoring Program, developed and designed by Mr. Janssen, to protect the public's health and safety during remediation efforts to remove MGP related contamination at an active electric substation located within, and servicing, downtown Decatur, Illinois. The Ambient Air Monitoring Program included continuous monitoring of the local air quality, twenty-four hours a day, seven days a week, utilizing high volume air samplers and real-time instrumentation for various chemicals of concern. Mr. Janssen's duties include: developing the scope of work and budget for the project, managing field staff and

laboratory contractors; directing, coordinating, and conducting sampling efforts, and acting as a liaison between the remediation contractor, Ameren, and office staff.

Ameren Services, Former Shelbyville Manufactured Gas Plant (MGP), Shelbyville, Illinois. Mr. Janssen was the Project Team Leader for an Ambient Air Monitoring Program developed and designed by Mr. Janssen to protect the public's health and safety during a comprehensive remediation effort to remove MGP related contamination at an active manufacturing facility that was partially built over the former MGP and is adjacent to residential properties, one of them being a child daycare. The Ambient Air Monitoring Program included continuous monitoring of the local air quality, twenty-four hours a day, seven days a week, utilizing high volume air samplers and real-time instrumentation for various chemicals of concern. Mr. Janssen's duties included: managing field staff and laboratory contractors; directing, coordinating, and conducting sampling efforts, and acting as a liaison between the remediation contractor, the manufacturing facility's representative, Ameren, and office staff.

U.S. Environmental Protection Agency (USEPA), Multiple Manufactured Gas Plants (MGPs) Remediation, Chicago, Illinois. Mr. Janssen was Project Leader for a multi-year, $62 Million Superfund project at three former manufactured gas plants (MGPs) in Chicago, IL. Mr. Janssen provided oversight to the Potentially Responsible Party's (PRP) directed remediation efforts for the USEPA. Mr. Janssen's responsibilities included oversight and inspection of site activities for compliance, soil and water sampling, meeting with contractors, the PRP, and EPA, preparing site progress reports, and tracking site-specific EPA budgets.

Peoples Gas Light and Coke Company, Chicago River Investigation, Chicago, Illinois. Mr. Janssen was part of a team responsible for an investigation of possible contamination under the Chicago River at locations adjacent to former manufactured gas plants (MGP). Mr. Janssen's duties involved the continuous monitoring of water quality impacts during Geoprobe direct push, and hollow stem auger drilling investigations of river bottom sediment and subsurface soils.

Peoples Gas Light and Coke Company, 96th Street Station, Site Remediation, Chicago, Illinois. Mr. Janssen was responsible for the ambient air-monitoring program at 96th Street Station, a former manufactured gas plant (MGP) remediation project. Responsibilities included set up, operation, and solving operational problems for an automated real-time air monitoring system, as well as conducting 24-hour air monitoring and calibrating all field air monitoring equipment. Additional field duties for this project included conducting worker health and safety air monitoring, ambient air data reporting, and soil sampling. Mr. Janssen was also responsible for the composition of the Ambient Air Monitoring Report, as well as assisting in the writing of the Site Investigation and Remedial Action Completion Report.

City Colleges of Chicago, Chemical Safety and Hygiene Plan, Chicago, Illinois. Mr. Janssen assisted in preparing a Chemical Safety and Hygiene Plan (CHP) that meets the requirements of the "Laboratory Standard" of the Occupational Health and Safety Act (OSHA), 29 CFR 1910, Subpart Z for the City Colleges of Chicago. As part of this work, Mr. Janssen, along with other staff, conducted an extensive inventory of hazardous chemicals at the seven college campuses and ten satellite locations within the City of Chicago. Work resulted in development of a harmonized disposal program across all 17 locations for regulated materials and a CHP for the entire City College system, which addressed the products utilized by the curriculums/services at each college.

Sears Holdings Corporation, Environmental Support and Environmental Permitting, Hoffman Estates, Illinois. Mr. Janssen was involved with permitting support for the retailer nationwide. Efforts included applying for and renewal of numerous and diverse permits for individual retail locations nationwide, including permits for: hazardous material storage, transportation, and disposal, wastewater discharges and air emissions. Efforts also included development and renewal of Hazardous Materials Business Plans (HMBP's) required annually by the state of California at each retail location.

Chicago Department of Environment (CDOE), Critical Facility Assessments, Multiple Sites, Chicago, Illinois. Mr. Janssen conducted critical facility assessments and inspections at 27 locations throughout the City of Chicago for facilities that contain extremely hazardous substances, as defined by the Emergency Planning and Community Right-To-Know Act (EPCRA). This work was funded by the Department of Homeland Security. Facilities included local hospitals, manufacturing facilities, businesses, and critical infrastructure centers. Mr. Janssen's work included conducting site assessments of chemical storage practices, emergency and spill

response equipment, data collection and evaluation to identify worst-case scenarios, and the preparation of emergency response guides for each facility. Mr. Janssen's work also included utilizing the ArcGIS and CAMEO program suites to model, analyze, and map potential atmospheric dispersions of hazardous chemicals during hypothetical incidents at each facility.

U. S. Environmental Protection Agency (USEPA) Region 5, Hazardous Waste School Audits and Collections Genesse County, MI. Mr. Janssen assisted the USEPA Region 5 to manage hazardous material reduction efforts at Genesee County, MI schools in an effort to reduce the volume of hazardous materials stored onsite and in use at county schools. Mr. Janssen performed site audits at the schools in conjunction with USEPA officials to identify hazardous materials for disposal and assist school and USEPA officials with implementation of best management practices. Mr. Janssen was also responsible for the oversight of the subcontractor performing the subsequent collection of hazardous materials identified for disposal.

Chicago Department of Water Management, Central Park Pumping Station, Chicago, Illinois. Mr. Janssen provided client contact, document review, project management, and review and approval all accounting functions for the development of design specifications, limited construction administration and oversight, for the renovation of the Central Park Pump Station (CPPS) at 1015 South Central Park Avenue. Mr. Janssen developed design specifications and provided construction administration and oversight for removal of Asbestos Containing Materials (ACM), Lead Based Paint (LBP), mercury-containing devices, and PCB-containing devices as part of restorations to CPPS. Starting in 2006 and through 2009, initial surveys and plans for the restoration of CPPS were prepared, including preparation of 100% design documents for bid. In 2009, due to funding issues, the restoration project was put on indefinite hold. Starting in 2012, the project was re-funded with a reduced scope, based on future plans to electrify the facility. Work from 2012-2014 has included returning to the facility to evaluate the presence and condition of materials identified in 2006, preparing updated design specifications for the final design documents, and reviewing contractor submittals.

City of Chicago Department of Aviation (CDA), O'Hare International Airport Modernization Program (OMP), Chicago, Illinois. Mr. Janssen provided client contact and project management for Asbestos Containing Materials (ACM) and Lead Based Paint (LBP) surveys and abatement oversight services as part of renovations to the public bathrooms at O'Hare airport. Work included ACM and LBP surveys of areas affected by renovations, development of abatement specifications for inclusion in bid documents, reporting and oversight of contractor abatement activities. Mr. Janssen was the client's point of contact, directed and coordinated field activities, reviewed prepared reports, and reviewed and approved all accounting functions including client invoices.

Department of the Navy, Base-wide Steam Lines Survey and Sampling, Great Lakes Naval Station, Great Lakes, Illinois. Mr. Janssen lead and managed two environmental field survey and sampling teams to meet an aggressive, client required deadline of 35-days from contract award to draft report for an environmental survey of the steam line system at the Great Lakes Naval Station targeted for demolition. Work included assessment, documentation, and sampling of over 30,000 linear feet of above and belowground steam piping, focusing on asbestos, lead paint, and other hazardous materials. The survey was conducted to identify materials for abatement prior to demolition and provide a cost estimate for planning purposes. Prior to the commencement of fieldwork, Mr. Janssen composed the Health and Safety Plan, inclusive of a Confined Space Entry and Permit Program, and provided confined space safety training certification to staff. Upon completion of fieldwork, Mr. Janssen assisted with report composition, utilized the ArcGIS software suite, and analyzed and mapped asbestos and lead survey results.

SYDNEY MILLER
ENVIRONMENTAL SCIENTIST I

Ms. Miller has multiple years of experience in the environmental field, specifically with environmental consulting. Her areas of knowledge include the following: various environmental assessments, including experience with Phase I and Phase II Environmental Site Assessments (ESAs) and Preliminary Site Assessments; historical usage review; and building inspections. Ms. Miller applies quality assurance measures in research, planning and reporting.

Education
B.S., Integrative Biology & Anthropology, University of Illinois at Urbana Champaign, 2015

Certificates/Accreditations
OSHA 40 Hour HAZWOPER Training
DOT Hazmat Basic General Awareness Training
EPA Accredited Asbestos Building Inspector

Key Projects

ENVIRONMENTAL PROJECTS

Parsons Transportation Group, Inc., Chicago, Illinois (October 2019-present), Environmental Scientist. Ms. Miller conducted an environmental site investigation including several locations for proposed signal bridges or bridge replacement work along elevated railroad tracks and at the street level for CREATE Project WA1. In addition, Ms. Miller prepared a Special Waste Assessment (SWA) report following the site investigation in accordance with the Federal Highway Administration (FHWA) and the Federal Railroad Administration (FRA) *CREATE Railroad Property Special Waste Procedures*. Duties included accurately reporting observations from the site investigation, summarizing environmental database findings on or near the property, and reviewing prior provided records. The purpose was to identify environmental conditions or potential contamination associated with property and/or surrounding sites; and to subsequently provide a recommendation for additional environmental work, including a Preliminary Site Assessment (PSA).

City of Chicago Department of Fleet and Facility Management (2FM), National Environmental Policy Act (NEPA) Property Screens, (January 2019-present), Environmental Scientist. Ms. Miller provides support for the completion of property screens required to successfully comply with NEPA guidelines for properties which the Department of Buildings has sent demolition requests. EDI's responsibilities included creating environmental review records, identifying environmental hazards, and corresponding with the state and city preservation agency. *Mr. Patrick Dunn, Planner, CDM Smith, 125 S. Wacker Drive, Suite 600, Chicago, IL 60606, (312)-780-7726*

Commonwealth Edison, Environmental Support, (2018-present), Environmental Scientist. Since 2018, Ms. Miller has been actively performing environmental oversight and soil manifesting support for various projects with ComEd. Duties include supervising the removal of spoils from various excavations and providing manifest support for proper disposal. In addition, Ms. Miller provides report writing support following field work.

SET Environmental, Inc., Peoples Gas and Lighting (PGL) Gas Main Installation and Retirement, Chicago, Illinois (2018-present), Environmental Scientist. Ms. Miller currently reviews environmental databases for recognized environmental conditions on or adjacent to the project sites to identify potential impacted properties. Subsequently, Ms. Miller prepares summaries of the database and field survey findings in a Preliminary Environmental Site Assessment (PESA) report. In addition, Ms. Miller assists in coordinating field activities and completing the Source Site Certification by Owner or Operator LPC-662 Form documentation for PGL. *Ms. Vicky Cradduck, Project Manager, SET Environmental Inc. (847)533-5150.*

City of Chicago Department of Fleet and Facility Management (2FM) Data Review Project, Chicago, Illinois (March 2019), Environmental Scientist. Ms. Miller provided support for a large data review project for the City of Chicago, including reviewing physical copies of prior environmental reports, cataloguing the reports digitally, and updating the City of Chicago data portals with the additional reports. Duties included a detailed reviewing process, accurately cataloguing the reports, and attention to detail. The purpose of the project was to update the City of Chicago records with the hardcopies of previously prepared environmental reports.

Chicago Housing Authority (CHA), Chicago, Illinois (2018-present), Environmental Scientist. Ms. Miller provides support for report writing and field work associated with multiple, ongoing subsurface investigations

and remedial actions on behalf of the CHA. Specifically, Ms. Miller provides draft reports, analyzes data and supports field work by assisting in collecting samples associated with property redevelopment and modernization at several of the City of Chicago former and current public housing facilities. Duties include extensive review of documentation regarding cleanup efforts and review of the historical usage of the subject property and surrounding sites. *Ms. Lynn Crivello, Environmental Development Manager, Chicago Housing Authority, 60 East Van Buren, Chicago, IL 60605, (312) 913-5868*

Confidential Investment Group Client – Yorkville Self Storage, Inc., Phase I Environmental Site Assessment (ESA), (June 2018), Environmental Scientist. Ms. Miller conducted and prepared a Phase I ESA report for a confidential investment group client for a site located in Yorkville. Duties included review of the historical usage by utilizing historical topographic maps, historical city telephone directories and historical aerial photographs, review of available documentation from the Illinois Environmental Protection Agency (IEPA) and/or Office of the Illinois State Fire Marshal (OSFM), and a site inspection of the property and surrounding sites. The purpose was to identify environmental conditions and/or potential contamination associated with historical uses of the property and/or surrounding sites; and to subsequently provide a recommendation for additional environmental work, if necessary.

Confidential Client, Phase I Environmental Site Assessment (ESA), (November 2017), Environmental Scientist. Ms. Miller conducted and prepared a Phase I ESA report for a confidential client for a site located on the Superfund Enterprise Management System (SEMS) environmental database. This site was located within the Pilsen Area Soil Site Operable Unit 1 (OU1) for lead soil contamination associated with the prolonged industrial history in the area. The United States Environmental Protection Agency (USEPA) has been overseeing cleanup efforts of surface soil in the area for several years. Duties included extensive review of USEPA documentation regarding cleanup efforts, review of the historical usage and a site inspection of the subject property and surrounding sites. The purpose was to identify environmental conditions and/or potential contamination hazards for the subject property and surrounding sites; and to subsequently provide a recommendation for additional environmental work, if necessary.

Confidential Client, Phase I Environmental Site Assessment (ESA), (September 2017), Environmental Scientist. Ms. Miller conducted and prepared a Phase I ESA report for a confidential client for a site that previously managed halogenated solvents associated with a former dry cleaner on the property. This site was identified on the Resource Conservation and Recovery Act (RCRA) environmental database and the IEPA Site Remediation Program (SRP) environmental database as having undergone site cleanup and remediation. Duties included review of available documentation from the IEPA regarding soil and/or groundwater remediation efforts conducted on the site, review of the historical usage, and a site inspection of the property and surrounding sites. In addition, the inspection of the property included observations of site engineered barriers to ensure the site was following the conditions of the No Further Remediation (NFR) letter issued by the IEPA to maintain contamination in place. The purpose was to identify environmental conditions and/or residual potential contamination hazards on the property and/or surrounding sites.

AKILAH TOWNSEND

ENVIRONMENTAL SCIENTIST II

Ms. Townsend is a graduate of University of Illinois. Recent key work has included Phase I and Phase II report writing, NEPA environmental reviews and NEPA property screens. Ms. Akilah Townsend is familiar with USEPA, IEPA, and OSHA regulations. Her areas of knowledge also include native species and conservation, and she has received training in surveying plant abundances, sampling animal populations and water quality analysis.

Education
B.S., Natural Resources and Environmental Science, Environmental Policy, University of Illinois at Urbana-Champaign, 2015

Licenses
Illinois Herbicide License

Certificates
Training in the use of the Corps Wetland Delineation Manual
HAZWOPER Certification

Volunteer Work
Science Fair Judge at Young Women s Leadership Charter School of Chicago, 2017

Key Projects

Orland Park Wetland Delineation Report, Orland Park, IL (September 2019). Ms. Townsend conducted a wetland delineation report for a proposed transmission line located within Orland Park, Illinois. By analyzing soil characteristics, evidence of hydrology and evidence of wetland vegetation, Ms. Townsend identified, and GPS mapped several wetland boundaries and completed the report for a USACE permit submittal.

Crestwood Drainage West, Crestwood, IL (August 2019). Ms. Townsend conducted a wetland delineation report for a drainage ditch construction project located within Crestwood, Illinois. By analyzing soil characteristics, evidence of hydrology and evidence of wetland vegetation, Ms. Townsend identified, and GPS mapped several wetland boundaries and created a wetland delineation report for a USACE permit submittal.

ComEd, 3807 South Michigan Avenue, Phase I and Phase II ESA (July 2018-present) Ms. Townsend conducted a Phase I investigation for a vacant site considered for purchase by ComEd. Environmental documents were reviewed to identify RECs that could impact construction and schedule. During the Phase II ESA, Ms. Townsend conducted soil and groundwater sampling to further investigate any RECs. A GPS monitor was utilized to record sampling locations. Ms. Townsend completed a report for the client that included site maps, data tables, a photo log, boring logs, and analytical data from the laboratory.

ComEd, QTS Data Center Laydown Yard, Phase I and Phase II ESA (July 2018-August 2018) Ms. Townsend conducted a Phase I investigation for a vacant site considered for purchase by ComEd. Environmental documents were reviewed to identify RECs that could impact construction and schedule. During the Phase II ESA, Ms. Townsend conducted soil and groundwater sampling to further investigate any RECs. A GPS monitor was utilized to record sampling locations. Ms. Townsend completed a report for the client that included site maps, data tables, a photo log, boring logs, and analytical data from the laboratory

Illinois Tollway Authority, I-294 Corridor, NEPA Assessment and ESIS, Environmental Scientist. Ms. Townsend conducted NEPA assessments required to identify natural resources including biological resources, wetlands, hydrological resources, and agricultural resources for the planning of tollway maintenance in accordance with the Illinois State Toll Highway Authority Environmental Studies Manual.

Illinois Tollway Authority, M-2, M-4 and M-8, NEPA Desktop Screens, Environmental Scientist. Ms. Townsend conducted desktop NEPA screens required to identify natural resources including biological resources, wetlands, hydrological resources, and agricultural resources for the planning of tollway facilities in accordance with the Illinois State Toll Highway Authority Environmental Studies Manual.

Department of Fleet and Facility Management (2FM), National Environmental Policy Act (NEPA) Reviews, (October 2016-present), Environmental Scientist. Ms. Townsend completes property screens required to successfully comply with NEPA guidelines for properties which the Department of Buildings has sent demolition requests. EDI's responsibilities included creating environmental review records, identifying environmental hazards, and corresponding with the state and city preservation agency.

Ecology and Environment, Inc. - IDOT Beach Park Phase II Environmental Site Assessment, (2016),

Environmental Scientist. Ms. Townsend participated in a Phase II ESA on a segment of Illinois Route 131 in Beach Park, Illinois to assess potential RECs previously found in through Phase I ESAs. The Phase II activities consisted of performing thirty six soil borings at the site to identify any contamination within ten site parcels along Illinois Route 131. Field screenings were performed on soil retrieved from borings and soil samples were collected and analyzed for various constituents relevant to the RECs identified at the site. *Dean Tiebout, Ecology and Environment, 33 West Monroe Street, Chicago, Illinois, 60603.*

ComEd, Meade Construction, 39th and Cottage Utilities Replacement, (November 2016 – January 2017) Ms. Townsend's role in this project was overseeing the removal of soil and transportation of soil to the landfill. Ms. Townsend's duties included signing and distributing waste manifests to truck drivers, and filling out daily reports which noted what was done during the day and how much soil was excavated.

Chicago Housing Authority (CHA), 4022 N. Elston Avenue, and Phase II ESA (January 2017-present) Ms. Townsend conducted a Phase II investigation for a former library being considered for purchase by the CHA. Environmental documents were reviewed to identify RECs that could impact construction and schedule. During the Phase II ESA, Ms. Townsend conducted soil and groundwater sampling to further investigate any RECs. A GPS monitor was utilized to record sampling locations. Ms. Townsend completed a report for the client that included site maps, data tables, a photo log, boring logs, and analytical data from the laboratory. Furthermore, Ms. Townsend completed groundwater modeling to estimate contamination impacts in the surrounding area. *Lynn Crivello, Chicago Housing Authority, 60 East Van Buren Street, Chicago, Illinois, 60605.*

Chicago Housing Authority (CHA), 6800 N. Western Avenue, and Phase II ESA (January 2017-present) Ms. Townsend conducted a Phase II investigation for a former library being considered for purchase by the CHA. Environmental documents were reviewed to identify RECs that could impact construction and schedule. During the Phase II ESA, Ms. Townsend conducted soil and groundwater sampling to further investigate any RECs. A GPS monitor was utilized to record sampling locations. Ms. Townsend completed a report for the client that included site maps, data tables, a photo log, boring logs, and analytical data from the laboratory. Furthermore, Ms. Townsend completed groundwater modeling to estimate contamination impacts in the surrounding area.

Chicago Housing Authority SOS Children's Village Phase I Environmental Site Assessment Report, (2017), Environmental Scientist. Ms. Townsend analyzed environmental information and constructed a Phase I Report for a parcel of vacant land located in Chicago, Illinois. The subject property is planned to become a multi-use facility, so historical environmental research was conducted through database searches, Freedom of Information Act (FOIA) requests, map analyses and site investigations. *Lynn Crivello, Chicago Housing Authority, 60 East Van Buren Street, Chicago, Illinois, 60605.*

NATURAL RESOURCES PROJECTS

Friends of the Forest Preserve, Beaubien Forest Preserve, Chicago, IL (2016) Conservation Leader led a team of 32 in the coordination and execution of restoration practices in the Beaubien Forest Preserve, within the 279 acres of Beaubien forest preserve's mix of woodland, prairie, savannah and wetland habitats, the invasive species removed ranged from buckthorn, Hawthorne trees, spotted knapweed, sweet clover, and garlic mustard, native species were seeded, watered and planted, then fenced off from deer; woody species which were cut were applied with herbicide, *Zach Taylor, Friends of the Forest Preserve, Chicago, Illinois 60605, 312-356-9990.*

Blacks in Green, Community Organization, Chicago, IL (2015-2016), Intern met with community members and leaders to establish alliances to collaborate and expand BIG's outreach and goals of building local living economies as greenhouse gas reduction strategies, developed reports on success and challenges of program work, Stewarded garden and orchard in maintenance while working in teams ranging from three to fifteen people *Naomi Davis, Blacks in Green, 6019 S. St Lawrence, Chicago, IL 60603, 773-678-9541.*

University of Illinois, Integrated Biology Lab, Champaign, IL (2015). Analyzed, measured and identified macro invertebrate samples and fish samples to establish links between physical habitat, food webs, and fish populations in Midwestern streams, Calculated the age of various fish by otoliths *Mr. Corey Deboom, University of Illinois, Illinois Natural History Survey,1816 S. Oak St. Champaign, IL 60603, 217-333-6880.*

Appendix R

Hazardous Materials Technical Memorandum

- Draft EIS Appendix R, Hazardous Materials Technical Memorandum, July 2015
  - Appendix A, Figures of High Concern Sites Within Permanent Envelope
  - Appendix B, EDR Database Search Report
  - Appendix C, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Hazardous Materials

Technical Memorandum

August 21, 2013
Updated July 27, 2015

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
CWE Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

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Table of Contents

Section 1 Summary 1-1
1.1 Evaluation 1-1
1.2 Findings 1-1
1.3 2014-2015 Red Line Extension Project Update 1-4

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-4
3.3 Area of Potential Impact 3-4
3.4 Methods 3-4

Section 4 Affected Environment 4-1
4.1 Physical Setting 4-1
4.2 Historical Document Review 4-1
4.3 Regulatory Agency Records Review 4-4
4.4 Regulatory File Review 4-5
4.5 Risk Classification 4-14
4.6 Other Sources 4-28

Section 5 Impacts and Mitigations 5-1
5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.3 Union Pacific Railroad Rail Alternative 5-3
5.4 Union Pacific Railroad Rail Alternative - West Option 5-7
5.5 Halsted Rail Alternative 5-8

Section 6 Impacts Remaining After Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-1
6.5 Union Pacific Railroad Rail Alternative - West Option 6-1
6.6 Halsted Rail Alternative 6-2

Section 7 References Cited 7-1

Appendices

Appendix A - Figures of High Concern Sites Within Permanent Envelope
Appendix B - EDR Database Search Report
Appendix C - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 3-1: Maximum Regulatory Database Search Area 3-6
Figure 4-1: Identified Sites of Concern 4-16
Figure A-1: Union Pacific Railroad Rail Alternative, High Concern Site 51 ..... A-2
Figure A-2: Union Pacific Railroad Rail Alternative, High Concern Site 70 ..... A-3
Figure A-3: Union Pacific Railroad Rail Alternative, High Concern Sites 94a, 104, and 105 ..... A-4
Figure A-4: Union Pacific Railroad Rail Alternative, High Concern Site 122 ..... A-5
Figure A-5: Bus Rapid Transit and Union Pacific Railroad Rail Alternatives, High Concern Sites 151/162, 200, and O4 ..... A-6
Figure A-6: Halsted Rail Alternative, High Concern Site 18a A-7
Figure A-7: Halsted Rail Alternative, High Concern Sites 154, 141, NL1, 144, 152a, and 152b A-8

Tables

Table 1-1: Summary of High Concern Sites Within the Permanent Envelope 1-3
Table 3-1: Environmental Databases and Distances Searched 3-7
Table 4-1: Environmental Database Search Results Summary 4-5
Table 4-2: Regulatory Records Request Summary 4-6
Table 4-3: Identified High Concern Sites 4-19
Table 4-4: Summary of High Concern Sites Within the Permanent Envelope 4-22
Table 4-5: Moderate Concern Sites 4-23
Table 4-6: Summary of High and Moderate Concern Sites 4-28

Abbreviations

BRT	Bus Rapid Transit
BTEX	benzene, toluene, ethylbenzene, and xylenes
CERC-NFRAP	Comprehensive Environmental Response, Compensation and Liability Information System -No Further Remediation Planned Sites
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
CTA	Chicago Transit Authority
DDD	dichlorodiphenyldichloroethane
E&E	Ecology & Environment
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
ERNS	Emergency Response Notification System
ENG CONTROLS	Engineered Barrier Site
ESA	Environmental Site Assessment
FOIA	Freedom of Information Act
Gabriel	Gabriel Environmental Services
FTA	Federal Transit Administration
HIG	Historical Information Gatherers, Inc.
HMT	Hazardous Materials Transportation Act
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
IL DRYCLEANERS	Drycleaners License List
LUST	leaking underground storage tank
MWRD	Metropolitan Water Reclamation District
MGP	manufactured gas plant
NEPA	National Environmental Policy Act of 1969
NFR	No Further Remediation
NFRAP	No Further Remediation Planned
NIPC	Northeastern Illinois Planning Commission Active and Inactive Solid Waste Disposal Site Inventory
NPL	National Priority List
NICTD/CSS & SBRR	Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl

PNA	polynuclear aromatic hydrocarbons
RCRA	Resource Conservation and Recovery Act
RCRA CESQ	RCRA Conditionally Exempt Hazardous Waste Generators
RCRA CORRACTS	RCRA Corrective Action
RCRA LQG	RCRA Large Quantity Hazardous Waste Generators
RCRA SQG	RCRA Small Quantity Hazardous Waste Generators
RCRA TSDF	RCRA Treatment, Storage, and Disposal
RLE	Red Line Extension
ROW	right-of-way
SARA	Superfund Amendments and Reauthorization Act
SPILLS	Spill Incident List
SRP	Site Remediation Program
SSU	Illinois State Sites Unit Listing
SVOC	semi-volatile organic compound
SWF/LF	Landfill or solid waste disposal
TACO	Tiered Approach to Corrective Action Objectives
Tetra Tech	Tetra Tech, Inc.
UPRR	Union Pacific Railroad
US BROWNFIEDS	Brownfields
US ENG CONTROLS	Engineering Controls
US INST CONTROL	Institutional Control
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
UST	underground storage tanks
VOC	volatile organic compounds
Weston	Weston Solutions, Inc.
WIRA	West Pullman Industrial Redevelopment Area

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project with respect to hazardous materials, and presents the regulatory framework and evaluation methods used for the analysis.

1.1 Evaluation

The first step of the analysis was to identify potential or existing conditions that could result in hazardous material impacts. A general inspection field visit was performed. Analysis included a review of historical topographic maps, aerials, and fire insurance maps; a regulatory database search; and a review of agency files for a select number of sites. Identified sites were then ranked as No Concern, Low Concern, Moderate Concern, or High Concern, based on their potential to have impacts related to hazardous materials. The potential for encountering other sources of hazardous material impacts, such as urban fill, transformers, substations, and buildings constructed prior to 1978 or 1979 was also assessed.

1.2 Findings

1.2.1 Impacts

While no potential hazardous material impacts would occur as a result of the No Build Alternative, there would be the potential for permanent and construction hazardous material impacts as a result of the Bus Rapid Transit (BRT) Alternative, Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative.

1.2.1.1 Permanent Impacts

Operating BRT service would not result in changes to the existing types of hazardous materials used, stored, or transported; therefore, the BRT Alternative would not result in permanent impacts.

Operation of the UPRR Rail and Halsted Rail Alternatives has the potential to result in permanent hazardous material impacts from accidental spills or from maintenance activities that require earthmoving in contaminated areas. Spills are most likely to occur during activities such as equipment maintenance at the yards and shops and grounds maintenance along the tracks. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, and pesticides. Examples of maintenance activities that could require earthmoving include at-grade track repair, underground utility work, and foundation repairs.

The UPRR Rail Alternative also has the potential for additional hazardous material impacts associated with the adjacent operating UPRR (with the East and West Options) or Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad ([NICTD/CSS & SBRR] with the ROW, East, and West Options). Due to the proximity of the UPRR and NICTD/CSS & SBRR to the UPRR Rail Alternative alignments, hazardous material spills

or releases that occur along these railroads would have the potential to migrate and affect the UPRR Rail Alternative alignments. These materials potentially exist along the railroad currently, but the UPRR Rail Alternative would bring transit vehicles closer to them. Spills along the UPRR and NICTD/CSS & SBRR could occur from the use of chemicals for ground maintenance along the tracks. In addition, because these are freight lines, releases could occur from creosote used to preserve wood railroad ties; polynuclear aromatic (PNA) compound deposition from diesel exhaust; asbestos dust from brakes; and coal ash releases from engines. Freight lines might also transport hazardous material cargo, which could be released if there were a spill or accident.

Although there is the potential for impacts associated with the adjacent freight lines, these impacts would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 Code of Federal Regulations [CFR] Parts 171 to 180) that among other things, specify requirements for the safe transportation of hazardous materials by rail and require rail carriers to conduct a security and safety risk analysis, to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route.

1.2.1.2 Construction Impacts

Construction impacts could occur when activities such as earthmoving and demolition encounter contaminated soil and/or groundwater. Hazardous materials typically involved with construction activities, such as paints, solvents, fuels and hydraulic fluids, could also be accidentally released during construction.

The affected environment evaluation described in Section 4 found that the potential to encounter hazardous materials during construction exists across the entire project area for the BRT, UPRR Rail, and Halsted Rail Alternatives. This potential is due to the urban setting of the project area, where the potential exists for the presence of fill materials previously deposited widespread across the entire project area. Typical urban fill materials contain elevated concentrations of polynuclear aromatic hydrocarbons and metals due to nearby roadways, railways, and industrial and commercial land uses. In addition, urban fill may include contaminated building demolition debris, which was commonly used as fill material in excavations, to increase elevations at sites during development.

Although there would be the potential to encounter hazardous materials during construction throughout the project area, the greatest potential for impacts would be from High Concern sites within the permanent envelope of an alternative. Table 1-1 presents a summary of High Concern sites within the permanent envelopes of alternatives, by segments.

Table 1-1: Summary of High Concern Sites Within the Permanent Envelope

Segment	Number of High Concern Sites Within Envelope	Figure 4-1 ID Numbers	Notes
Bus Rapid Transit Alternative			
Full Length	1	200	
Park & Ride Facilities*	1	200	
Union Pacific Railroad Rail Alternative Right–of-Way Option			
Segment UA	0	---	
Segment UB	4	122,151/162, 200, O4	
120th Street Yard and Shop	3	151/162, 200, O4	Includes one archived CERCLIS -No Further Remediation Planned site**
Union Pacific Railroad Rail Alternative East Option			
Segment UA	2	70, 104	
Segment UB	4	122, 151/162, 200, O4	Includes one archived CERCLIS-No Further Remediation Planned site**
120th Street Yard and Shop	3	151/162, 200, O4	Includes one archived CERCLIS-No Further Remediation Planned site**
Union Pacific Railroad Rail Alternative West Option			
Segment UA	2	51, 105	
Segment UB	4	122, 151/162, 200, O4	Includes one archived CERCLIS-No Further Remediation Planned site**
120th Street Yard and Shop	3	151/162, 200, O4	Includes one archived CERCLIS-No Further Remediation Planned site**
Halsted Rail Alternative			
Segment HA	1	18a	
Segment HB	0	---	
119th Street Yard and Shop	6	141, 144, 152a, 154, NL1, 152b	Includes one active CERCLIS and one CERCLIS-No Further Remediation Planned site **

Notes:
* Includes sites only within the proposed park & ride facilities.
** Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) sites typically come with increased risk of United States Environmental Protection Agency (USEPA) imposing liability and remediation obligations on potentially responsible parties (PRPs). Any owner can be considered a PRP and be required to pay for cleanup. Therefore, additional caution should be taken before acquiring ownership.

Other common sources of hazardous materials that may be present or that could affect the BRT, UPRR Rail, and Halsted Rail Alternatives during construction include transformers and substations within the project area that may contain hazardous materials including polychlorinated biphenyls (PCBs) and buildings and structures built before 1978–1979 that may likely contain lead-based paint or asbestos and releases could occur during their demolition. Hazardous materials typically involved with construction activities, such as paints, solvents, fuels, and hydraulic fluids, could also be accidentally released during construction.

1.2.2 Cumulative Impacts

For the No Build Alternative, no permanent adverse impacts, construction impacts, or cumulative impacts related to hazardous materials would be expected. Under the BRT, UPRR Rail, and Halsted Rail Alternatives, cumulative impacts could occur if there were a release of hazardous materials during ongoing and future projects in the area (described in the *Cumulative Impacts Technical Memorandum)*; however, compliance with local, state, and federal laws and regulations would result in these cumulative impacts being less than adverse.

1.2.3 Mitigation

Permanent mitigation measures for the BRT, UPRR Rail, and Halsted Rail Alternatives would include adherence to applicable federal, state, and local regulations, as well as Chicago Transit Authority's (CTA's) existing system-wide hazardous material usage, storage, and disposal plans and procedures.

Construction mitigation measures for the BRT, UPRR Rail, and Halsted Rail Alternatives would include compliance with federal, state, and local laws and regulations regarding hazardous materials, conducting focused site assessments for areas where earthmoving activities would occur, conducting asbestos, lead-based paint, and hazardous material surveys of buildings or structures that would be demolished. Mitigation measures would also include developing a contaminated material management plan; health and safety plans for construction activities; a spill prevention, control, and countermeasure plan; and a construction stormwater pollution prevention plan prior to construction. In addition, a Phase I Environmental Site Assessment (ESA) of any property to be acquired would be conducted as part of the Final Environmental Impact Statement (Final EIS) and prior to acquisition in order to identify recognized environmental conditions and assess and limit environmental liability. Based on the Phase I ESA findings, a Phase II ESA could also be required during the property acquisition phase and prior to purchasing a property.

1.2.4 Impacts Remaining After Mitigation

No adverse impacts would remain after mitigation for the BRT, UPRR Rail, and Halsted Rail Alternatives.

1.3 2014-2015 Red Line Extension Project Update

Updated July 27, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix C of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix C supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft EIS focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - Right-of-Way (ROW) Option
  - East Option
  - West Option
- Halsted Rail Alternative

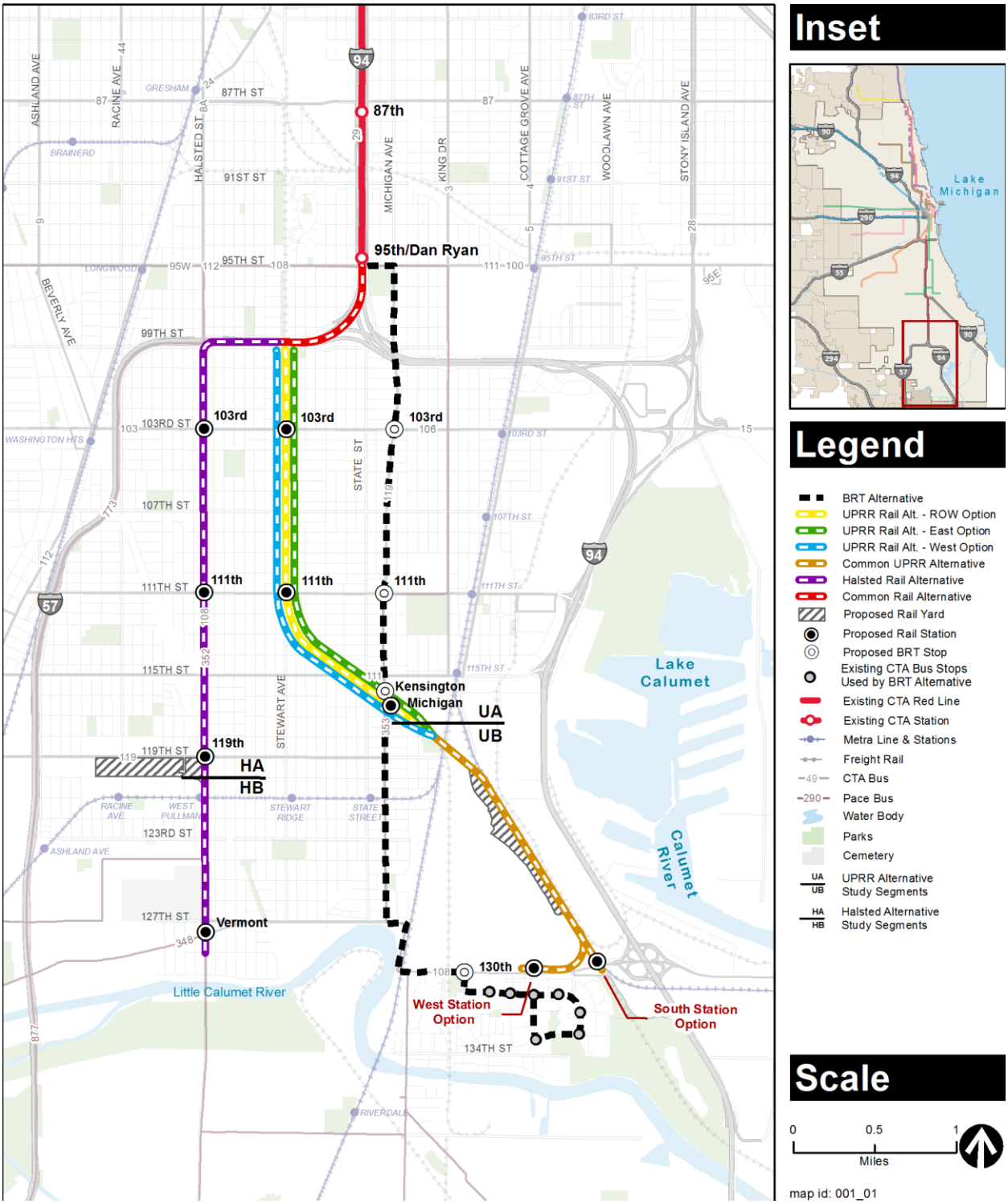

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

This section describes the process used to conduct an analysis of potential permanent, construction, and cumulative hazardous material impacts that could result from the construction and operation of the alternatives analyzed in the EIS for the RLE Project. This analysis also identifies potential options to avoid, minimize, and mitigate adverse impacts.

3.1 Regulatory Framework

The following sections describe the regulatory framework applicable to the jurisdictions in the project area.

3.1.1 Federal

The U.S. Environmental Protection Agency (USEPA) is the lead federal agency responsible for enforcing federal regulations regarding hazardous materials. One exception is the transport of hazardous materials, which is regulated by the U.S. Department of Transportation (USDOT). The primary federal legislation governing hazardous materials includes the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Superfund Amendments and Reauthorization Act (SARA) and the Hazardous Materials Transportation (HMT) Act.

3.1.1.1 Resource Conservation and Recovery Act

The RCRA regulates the generation, transportation, treatment, storage and disposal of hazardous waste through comprehensive life cycle or "cradle to grave" tracking requirements. These requirements include inspection logs of hazardous waste storage locations, records of quantities being generated and stored, and manifests of pick-ups and deliveries to licensed treatment/storage/disposal facilities. The RCRA also identifies standards for treatment, storage, and disposal.

3.1.1.2 Comprehensive Environmental Response, Compensation, and Liability Act

The CERCLA, also known as Superfund, created a tax on the chemical and petroleum industries to provide for response and cleanup of hazardous substances that may endanger public health or the environment. The CERCLA established requirements for abandoned hazardous waste sites and provided for liability of persons responsible for releases of hazardous waste at these sites.

3.1.1.3 Superfund Amendments and Reauthorization Act

The SARA amended CERCLA to increase state involvement and required Superfund actions to consider state environmental laws and regulations. The SARA also established a regulatory program for underground storage tanks (USTs) and the Emergency Planning and Community Right-to-Know Act.

3.1.1.4 Clean Air Act

The Clean Air Act regulates air emissions from stationary and mobile sources. Under Section 112 of the Clean Air Act, National Emissions Standards for Hazardous Air Pollutants were established to protect the public from exposure to airborne contaminants, such as asbestos, that are known to be hazardous to human health.

3.1.1.5 Toxic Substances Control Act

The Toxic Substances Control Act established the mechanisms by which USEPA tracks, screens, and tests industrial chemicals that are produced or imported into the United States and that may pose an environmental or human health hazard. The Toxic Substances Control Act addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and lead-based paint.

3.1.1.6 Federal Occupational Safety and Health Act

The Occupational Safety and Health Administration (OSHA) administers legislation that requires special training for handlers of hazardous materials, notification to employees who work in the vicinity of hazardous materials, acquisition from the manufacturer of material safety data sheets that describe the proper use of hazardous materials, and training of employees to remediate any hazardous material accidental releases. The OSHA legislation regulates lead and asbestos as it relates to employee safety through a set of requirements for notification and corrective action, warning signs and labels, controlled access, use of protective equipment, demolition/renovation procedures, housekeeping controls, training, and in certain cases, air monitoring and medical surveillance to reduce potential exposure.

3.1.1.7 Hazardous Materials Transportation Act

The HMT Act was published in 1975 and improved the regulatory and enforcement authority of the Secretary of Transportation. The purpose of the HMT Act was to provide protection against the risks associated with hazardous material transport in commerce. The Pipeline and Hazardous Materials Safety Administration, a part of the USDOT, is responsible for developing regulations and standards associated with the transport of hazardous materials. These regulations are provided in 49 CFR Parts 171 to 180 and are enforced by the respective mode administrations, such as the Federal Railroad Administration and Federal Highway Administration. Among other things, the regulations specify requirements for the safe transportation of hazardous materials including classification, handling, and packaging requirements. For rail transport, regulations require the carrier to conduct a security and safety risk analysis, develop a security and safety risk plan that includes measure to mitigate risk to population centers, and to select the safest route.

3.1.2 State

3.1.2.1 Illinois Environmental Protection Act

The Illinois Environmental Protection Act (the Act) is Illinois' primary statute for protecting and restoring the environment. The Illinois Pollution Control Board, an independent agency created by the Act, is responsible for adopting Illinois' environmental regulations and deciding contested

environmental cases. In addition, the Act created the Illinois Environmental Protection Agency (IEPA), the primary state agency responsible for the regulation of hazardous materials in Illinois.

The IEPA's Bureau of Land is responsible for the protection and restoration of land and groundwater resources in the State of Illinois. It administers a broad variety of solid and hazardous waste management cleanup programs, including the Leaking Underground Storage Tanks (LUSTs) program, the Site Remediation Program and RCRA Part B Permits and Closure Plans. The IEPA's cleanup programs use IEPA's Tiered Approach to Corrective Action Objectives (TACO) (35 Illinois Administrative Code [IAC] Part 742).

The TACO provides procedures for evaluating the risk to human health posed by environmental conditions and developing remediation objectives that achieve acceptable risk levels in soil and groundwater. The first step of TACO is a Tier 1 evaluation, which compares concentrations of contaminants detected at a site to a standard set of objectives, known as the Tier 1 remediation objectives. The TACO process and Tier 1 objectives incorporate the results of a polynuclear aromatic hydrocarbon study conducted by the City of Chicago. This study determined background concentrations of polynuclear aromatic hydrocarbons within City of Chicago limits.

Effective August 27, 2012, the IEPA amended the Clean Construction or Demolition Debris Fill Operations (35 IAC Part 1100) to among other things, include standards for the maximum allowable concentrations of chemical constituents in uncontaminated soil generated during construction or demolition activities that can be used as fill material at Clean Construction or Demolition Debris facilities and uncontaminated soil fill operations.

3.1.2.2 Office of the State Fire Marshal

The Office of the State Fire Marshal also has responsibility regarding hazardous material regulation. The Office of the State Fire Marshal's Division of Petroleum & Chemical Safety manages the problems caused by the thousands of UST systems containing petroleum or hazardous chemicals. The division regulates petroleum and chemical storage tanks through registration to ensure the protection of public health and safety.

3.1.2.3 Illinois Occupational Safety and Health Program

At the state level, Illinois operates only a public sector occupational safety and health program under a plan approved by the U.S. Department of Labor. This program is administered by the Illinois Department of Labor and provides safety and health protections to state and local government employees within the state. Private sector workers in Illinois are covered by OSHA at the federal level.

3.1.3 Local

The following local jurisdictions and departments regulate and oversee issues related to hazardous materials within the project area:

- City of Chicago Fire Department, Hazardous Materials Unit

- City of Chicago, Department of Public Health, Environmental Permits & Regulation
- City of Chicago, Department of Fleet and Facility Management, Bureau of Environmental Management

3.2 Impact Analysis Thresholds

There are no specific NEPA thresholds for determining potential adverse impacts related to hazardous materials; however, the Federal Transit Administration's (FTA's) process for implementing NEPA (FTA 2012) does require an evaluation of potential impacts related to hazardous materials. The FTA's process for implementing NEPA requires an evaluation of potential impacts related to hazardous materials. Generally, projects that include the purchase of new ROWs, excavation, and/or structure demolition or modification require at least an initial site assessment to determine whether any known or potential hazardous material is present within the potential area of impact.

For the purpose of this impacts analysis, a hazardous material is any media such as soil, groundwater, or building materials that contain detectable concentrations of any state or federally regulated contaminant. An impact would be considered adverse if it would have the potential for the following:

- Harm to human health or the environment through the routine transport, use, or disposal of hazardous materials
- Harm to human health or the environment through the accidental release of hazardous materials into the environment

3.3 Area of Potential Impact

The area of potential impact for determining hazardous material impacts from regulated sites includes sites within an approximately 0.1- and 0.25-mile radius of the RLE Project alternative alignments, with the radius depending on the type of regulated site being evaluated (See Section 3. 4.1.1). The area of potential impact associated with the general historical land use includes parcels adjacent to and with the RLE Project alternatives.

3.4 Methods

The evaluation of potential impacts associated with hazardous materials began with a review of existing sources of data. The potential for construction and/or operation of each alternative to have hazardous material impacts was analyzed. The analysis concluded with an identification of proposed best management practices and mitigation measures to avoid, minimize, and compensate for potential adverse impacts. This analysis uses methods similar to those included in the Phase I ESA process (American Society for Testing and Materials 2005), which is typically used when acquiring properties to evaluate the historical and current use of a site and determine whether the potential exists for hazardous materials use and/or release. However, this *Hazardous Materials Technical Memorandum* does not meet the standards or nor constitute a Phase 1 ESA of

the project area. A Phase I ESA of individual properties being acquired as part of this project would be conducted as part of the Final EIS and prior to acquisition in order to identify recognized environmental conditions and assess and limit environmental liability (See Section 5).

3.4.1 Existing Data Review

Potential impacts from hazardous materials were evaluated by gathering information from a variety of sources to identify potential or existing conditions that could pose environmental concerns.

3.4.1.1 Database Listings

A search of local, state, and federal regulatory databases was conducted by Environmental Data Resources, Inc. (EDR) to identify individual sites of concern. The search by EDR also included a list of orphan sites that was reviewed to identify sites that may be in the area of potential impact. Orphan sites are sites that cannot be mapped by EDR due to inadequate or incomplete address information. Search distances were either 0.1 or 0.25 mile from the RLE Project alternative alignments and included all area in between them. The search distance was based on the nature of the sites included in the database and the separation distance at which impacts become unlikely. Figure 3-1 depicts the maximum search area. Table 3-1 summarizes the databases searched and the corresponding search distance. Table 3-1 also defines abbreviations that are used hereafter in descriptions of sites.

3.4.1.2 Historical Records

Available historical fire insurance and topographic maps and aerial photographs were reviewed to identify previous land uses with a potential for hazardous material concerns. Sanborn fire insurance from 1897, 1911, 1938–39, 1950, 1975–76 and 1989 (EDR 2012a) were available. Topographic maps available included the Calumet Quadrangle from 1892, 1893, 1900, and 1901 (Historical Information Gatherers, Inc. [HIG] 2012b); the Calumet Lake Quadrangle from 1929 and 1953 (HIG 2012c); the Lake Calumet Quadrangle from 1960, 1965, 1973, 1977, 1991, and 1997 (HIG 2012d); and the Blue Island Quadrangle from 1929, 1953, 1963, 1973, 1978, and 1997 (HIG 2012e). Available aerial photographs of the project were available for the years 1938, 1952, 1962, 1973, 1974, 1983, 1984, 1998, 1999, and 2009 (HIGa).

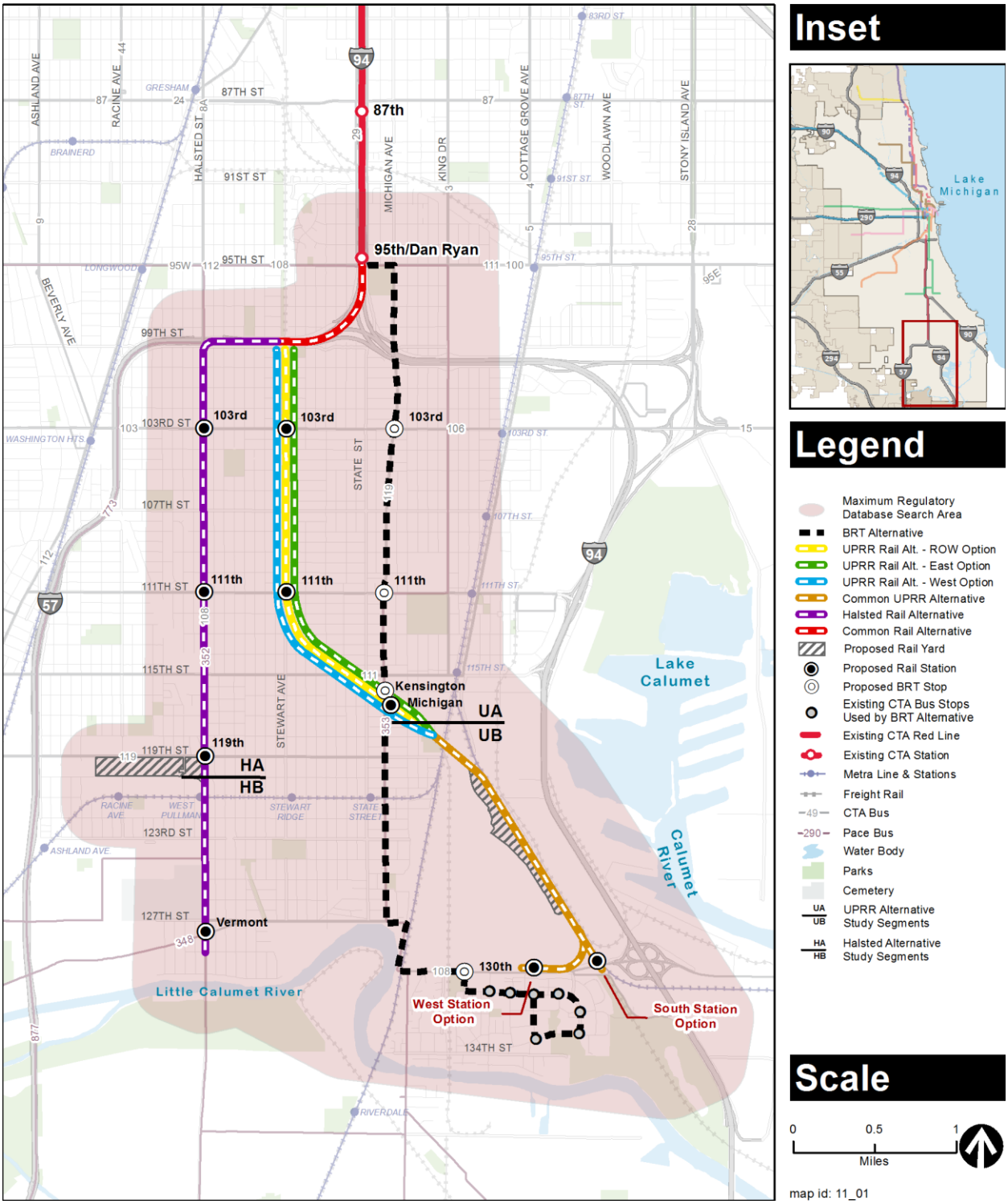

Figure 3-1: Maximum Regulatory Database Search Area

Based on the database listing and historical records evaluation, a review of files from the IEPA and USEPA was conducted for sites located within or adjacent to the RLE project alternative alignments and where hazardous materials were identified as a high level of concern. Files were reviewed for information on enforcement actions, results of previous investigations, and cleanup status.

3.4.2 Impact Analysis

The information gathered from the existing data review was evaluated to identify specific sites where hazardous materials are known or suspected to exist and to determine the potential for the other sources of hazardous materials to be present. The potential permanent and/or construction impacts that each alternative would have were evaluated. Permanent impacts could be associated with maintenance activities during operation if maintenance activities also require earthmoving in potentially contaminated areas or that require the use of hazardous substances or petroleum products. Examples of maintenance activities that could require earthmoving include at-grade track repair, underground utility work and foundation repairs. Construction impacts could occur when activities such as earthmoving encounter contaminated soil and/or groundwater.

Table 3-1: Environmental Databases and Distances Searched

	Database Name	Search Distance from Project Limits (miles)
Federal Databases	National Priority List Sites (NPL)	0.25
	Delisted NPL Sites	0.25
	Comprehensive Environmental Response, Compensation and Liability Information System Sites (CERCLIS)	0.25
	CERCLIS-No Further Remediation Planned Sites (CERC-NFRAP)	0.25
	RCRA Corrective Action Sites (RCRA CORRACTS)	0.25
	RCRA Treatment, Storage, and Disposal Sites (RCRA TSDF)	0.25
	RCRA Large Quantity Hazardous Waste Generators (RCRA LQG)	0.25
	RCRA Small Quantity Hazardous Waste Generators (RCRA SQG)	0.10
	RCRA Conditionally Exempt Hazardous Waste Generators (RCRA CESQ)	0.10
	Engineering Controls Sites (US ENG CONTROLS)	0.10
	Institutional Control Sites (US INST CONTROL)	0.10
	Brownfield Sites (US BROWNFIEDS)	0.25
	Emergency Response Notification System (ERNS)	0.10

	Database Name	Search Distance from Project Limits (miles)
State Databases	Illinois State Sites Unit Listing (SSU)	0.25
	Site Remediation Program (SRP)	0.25
	Engineered Barrier Site (ENG CONTROLS)	0.10
	Institutional Control Site (INST CONTROLS)	0.10
	Leaking Underground Storage Tank Sites (LUST)	0.10
	Underground Storage Tank Sites (USTs)	0.10
	Former Manufactured Gas Plant Sites (MGP)	0.25
	Brownfield Sites	0.25
	Landfill or Solid Waste Disposal Sites (SWF/LF)	0.25
	Northeastern Illinois Planning Commission Active and Inactive Solid Waste Disposal Site Inventory (NIPC)	0.25
	Spill Incident List (SPILLS)	0.10
	Drycleaners License List (IL DRYCLEANERS)	0.10

A determination was made regarding the level of concern associated with each of the specific sites identified in the existing data review, using the guidance discussed in Section 3.2 and based on the following criteria:

- **High Concern** - Sites with known/probable soil, groundwater, or soil gas contamination that have not been remediated, or where remediation was incomplete or undocumented and that are within close proximity to the project and the potential for off-site migration is high. High Concern sites typically result in the potential for an adverse impact.

- **Moderate Concern** - Sites with known/potential soil, groundwater, or soil gas contamination and where remediation is in progress, or contaminants do not appear to pose a concern for a project. Sites may also be considered a Moderate Concern based on the proximity to the project and type and intensity of former land use (e.g., chemical manufacturers, machine shops, gas stations), even if they did not otherwise have an environmental database listing. Moderate Concern sites may or may not present the potential for an adverse impact, depending on the proximity to the project and extent of contamination.

- **Low Concern** - Sites where hazardous materials or petroleum products may have been or are stored, but where there is no known contamination associated with the property based on all available information. These sites may include sites with permitted air toxic emissions or sites with spills or leaks that were subsequently remediated and have received case closure. The

sites may also include sites that have known contamination, but are far enough away from the project to make impacts unlikely. Low Concern sites typically do not result in the potential for an adverse impact.

- **No Concern** - Sites that, based on the review of all available information and on the type of site and distance from the project, are not likely to pose a concern for the project. No Concern sites typically do not result in the potential for an adverse impact.

An evaluation was conducted of potential impacts associated with other sources of hazardous materials, including PCBs, buildings, or structures built before 1978 that may contain lead-based paint, and buildings or structures built before 1979 that may contain asbestos. The evaluation was limited to determining whether there was the potential for transformers and buildings constructed prior to 1978 or 1979 to be present. Recommendations for avoiding and minimizing potential hazardous impacts, as well as potential mitigation measures, were also developed.

As part of this analysis, other current and reasonably foreseeable projects and future actions identified as part of the indirect and cumulative impacts analysis were reviewed to determine whether there would be any potential indirect or cumulative impacts associated with hazardous material.

Section 4
Affected Environment

4.1 Physical Setting

Elevations in the project area range from approximately 590 to 615 feet above sea level. Lake Michigan is the dominant topographic feature in the region and is approximately 4.8 miles from the project area at its closest point near the UPRR Rail Alternative alignment. Lake Calumet is in the eastern portion of the project area, and the Little Calumet River flows along the southern boundary of the project area. Shallow soils in the area are predominately classified as urban, generally characterized as highly disturbed as a result of human activities. The soils have been altered through grading, paving, excavation, or infilling. Largely underlying the urban fill in the region is glacial till and thin deposits of silt, clay, and sand of the Equality Formation (Illinois State Geological Survey 1971).

Groundwater generally flows from areas of higher surface elevation to areas of lower surface elevation and toward the nearest surface water body. The dominant flow direction for groundwater underlying the site is assumed to be to the northeast towards Lake Michigan. Groundwater in the project area is part of the deep bedrock Cambrian-Ordovician aquifers. Wells drilled into this aquifer range from 800 to 1,500 feet deep. Shallow, perched groundwater identified in the Chicago area is not utilized as private or municipal drinking water sources as there is a City of Chicago groundwater ordinance prohibiting the installation of new potable water supply wells within the city. Further detail on the groundwater of the project area is presented in the *Water Resources Technical Memorandum*.

4.2 Historical Document Review

Historical aerial photographs, topographic maps, and fire insurance maps covering the potential area of impact were reviewed to determine the general historical land use. The review determined that portions of the project area have been developed since 1892 and that rail lines have been present in or near the corridor since that time. The following sections provide a summary of the review for each source.

4.2.1 Topographic Maps

Historic United States Geologic Survey topographic maps obtained from HIG were reviewed for the Calumet Quadrangle from 1892, 1893, 1900, and 1901 (HIG 2012b); for the Calumet Lake Quadrangle from 1929 and 1953 (HIG 2012c); for the Lake Calumet Quadrangle from 1960, 1965, 1973, 1977, 1991, and 1997 (HIG 2012d); and for the Blue Island Quadrangle from 1929, 1953, 1963, 1973, 1978, and 1997 (HIG 2012e). The maps are not generally at a scale that permits identification of individual sites of concern but they do show general land use over time. The density of streets increased considerably between 1889 and 1929, after which development was primarily limited to isolated areas throughout the project area. The Red Line currently in use is first depicted on the topographic maps starting in 1973 (Lake Calumet Quadrangle).

The UPRR, Canadian National/Metra Electric and South Shore Lines and their predecessors (Chicago and Eastern Illinois Railroad and the Illinois Central Railroad) were first depicted in 1892 (Calumet Quadrangle).

4.2.2 Aerial Photographs

Aerial photographs obtained from HIG (2012a) were reviewed for the years 1938, 1952, 1962, 1973, 1974, 1983, 1984, 1998, 1999, and 2009. Aerial photographs are not generally at a scale that permits identification of potential impacts associated with specific sites, but they provide information on changes in land use and development over time. The 1938 aerial photograph showed that the majority of the project area was already developed with notable exceptions being the area along Halsted Street between 107th and 115th Streets and south of 124th Street. The area along the current South Shore Line was undeveloped south of 115th Street.

Historical land use within the area of potential impact is primarily a mix of residential and commercial use, with pockets of industrial use. Two notable large areas of historical industrial use were noted. The first area is between 119th and 121st Streets west of Halsted Street. The second area is between 115th Street where the UPRR and South Shore Line meet and 130th Street. The greatest increase in development occurred between 1938 and 1952, particularly in the areas identified as undeveloped in the 1938 aerial photograph. Changes in land use in subsequent years did occur, but were generally limited to individual buildings and properties rather than change at a broad scale.

4.2.3 Sanborn Fire Insurance Maps

Historic Sanborn Fire Insurance Maps were requested from EDR for the areas within and adjacent to the UPRR and Halsted Rail Alternative alignments. For the BRT Alternative, only maps within and near the areas of proposed park & ride facilities at the 103rd, 111th, 115th, and 130th Street BRT stop locations were requested. Maps were provided for the years 1897, 1911, 1938-39, 1950, 1975–76 and 1989 (EDR 2012a) for three distinct areas: I-94 from 95th Street to 98th Street, Halsted Street from 98th Street to 130th Street, and UPRR from 98th Street to 130th Street. The UPRR area included coverage of the proposed park & ride facilities at the 115th Street and 130th Street stop locations. For the areas with no Sanborn coverage, aerial maps were used to identify changes in land use and development over time (See Section 4.2.2).

These maps were reviewed to identify past commercial or industrial activities and sources commonly associated with hazardous material use. The review identified uses typical of an urban setting throughout the corridor including coal yards, lumber yards, gas stations, auto repair shops, machine shops, manufacturing plants, USTs, a pump station, and substations. Sites that are considered a potential concern are summarized by alternative in the following sections.

4.2.3.1 BRT Alternative

By 1897, R.A. Viall, a feed mill with two coal sheds, and some residences were present within the area of the proposed park & ride facility for the 115th Street stop. By 1911, additional residences and Armour & Co., which had office, storage, and cooler areas, were also present in this area and R.A.

Viall had an auto repair shop that was not present in 1897. By 1939, R.A. Viall was replaced with a junkyard and although not shown by name, Armour & Co. (or a different company with similar food cooling operations) was still present. By 1950, there were no significant changes from 1939. By 1975, the food cooling operation and junkyard were still present and a filling station had been built to the north of the food cooling operation. By 1989, the area of the proposed 115th Street park & ride facility was similar to 1975 with the exception of the junkyard, which was no longer depicted in the 1989 map.

The Metropolitan Water Reclamation District of Greater Chicago's (MWRD) Calumet Water Reclamation Plant, a wastewater treatment plant within the area of the proposed park & ride facility for the 130th Street stop, first appeared in Sanborn maps in 1950. The MWRD Calumet Water Reclamation Plant was depicted at 126th Street and extending at least two to three blocks south. Settling tanks, ash lagoons, and aerating tanks were shown in both 1950 and 1975. By 1989, the details regarding the type of operations at the MWRD Calumet Water Reclamation Plant were no longer provided but the limits of the operations appeared to extend to 130th Street, which is farther south than shown in previous years.

4.2.3.2 UPRR Rail Alternative

The Roseland Manufacturing Co. was present at 11010 S. Stewart Avenue in 1897. By 1911, the Roseland Pumping Station was constructed at 351 W. 104th Street. By 1938–39, Commonwealth Edison had a substation at 117th Street and Front Street. By 1950, Hoper Equipment Co. and Chicago Hydraulic Oil Co. were present at 116th Street and Front Street. By 1975, there was a paint factory at 11740 S. Calumet Avenue, a metal finishing shop at 11730 S. Front Street, the Aluminum Screen Co. at 116th Street and Front Street, and a transformer yard at 96th Street and Lafayette Avenue.

The proposed 120th Street yard and shop site south of 119th Street and north of 120th Street, the area along the UPRR easements, and the proposed UPRR Rail Alternative alignment have been developed with railroads and railroad yards dating back to 1897 with the Chicago & Eastern Illinois Railroad and the Chicago & Western Indiana. Heavy industry in and around the proposed 120th Street yard and shop area included the Michigan Central RR Transfer Elevators and Transfer House (121st Street and UPRR track), the J.H. Winterbotham & Sons Cooperage (120th Street and UPRR track), and the Pullman Brick Works (north of 119th Street). The MWRD wastewater treatment plant, which is within the area of the proposed South and West Station Options, is discussed in Section 4.2.3.1

4.2.3.3 Halsted Rail Alternative

Developments within the Halsted Rail Alternative alignment included the Southwest Substation at 10229 S. Halsted Street in 1938–39, the Commonwealth Edison 119th Street Substation at the southeast corner of 119th Street and Halsted Street in 1950, and a transformer yard at 96th Street and S. Lafayette Avenue in 1976.

The proposed 119th Street yard and shop, which would be primarily between 119th and 120th Streets west of Halsted Street, is part of what is known as the West Pullman Industrial

Redevelopment Area (WIRA). The WIRA generally extends from 117th Street on the north to 122nd Street on the south, Loomis Street on the west and Halsted Street on the east (Chicago 2012). The first three blocks west of Halsted Street between 119th and 121st Streets have been developed with heavy industry dating back to 1897, including the West Pullman Lumber Yard (gas tank), the Burgland and Shead Packing Pail Factory, the Akron Mining & Manufacturing Co., the Smith & Jones Boot & Shoe Co., and the Carter White Lead Works (linseed oil tanks). By 1911, the lumberyard and Carter White Lead Works had expanded and the West Pullman Car Works (gas tank) was present, with additional coal yards west of Peoria Street. By 1938-39, the lumberyard had scaled back and the Neuswanger Coal Co. and West Pullman Iron & Metal Co. now took up a portion of its previous footprint, In addition, the West Pullman Car Works was replaced with an auto wrecking facility, Safety Vulcanizer Co. (foundry), and Louis E. Emerman & Co. and Carter White Lead Co. was now National Lead Co. The area west of Morgan Street was developed by Ingersoll Steel (oil tanks) and International Harvester. The Texas Company bulk oil storage area is at 12100 S. Green Street with 13 underground gasoline tanks and oil storage. By 1950, the area remained similar to 1938-39 with the exception of the auto wrecking area and Safety Vulcanizer Co. no longer labeled as such. By 1975, Neuswanger Coal Co. was a junkyard, Louis E. Emerman & Co. was renamed to Caine Steel Co., and the lumberyard was no longer depicted. By 1989, the area between 119th and 1120th Streets was similar to 1975 but the area between 120th and 121st Streets was depicted as empty.

4.3 Regulatory Agency Records Review

The purpose of the records review was to assess the potential for the presence of hazardous substance contamination within and/or adjacent to the project area as a result of activities conducted on properties within the area of potential impact. The state and federal database listings were searched by EDR, an independent information service, on August 10, 2012 (EDR 2012b). The EDR report in Appendix B provides a listing and description of the databases reviewed, search distances, and a map showing the approximate locations of listed sites and information contained within each database for each listed site.

Table 4-1 summarizes the databases searched and the number of sites found within the search distance for each database. Table 4-1 also defines abbreviations that are used in this document when referring to sites.

Table 4-1: Environmental Database Search Results Summary

Database Name		Number of Sites within Search Distance*		
		BRT	UPRR Rail	Halsted Rail
Federal Databases*	National Priority List Sites (NPL)	0	0	0
	Delisted NPL Sites	0	0	0
	Comprehensive Environmental Response, Compensation, and Liability Information System Sites (CERCLIS)	2	4	4
	CERCLIS-No Further Remediation Planned Sites (CERC-NFRAP)	1	2	2
	RCRA Corrective Action Sites (RCRA CORRACTS)	0	2	1
	RCRA Treatment, Storage and Disposal Sites (RCRA TSDF)	0	1	0
	RCRA Large Quantity Hazardous Waste Generators (RCRA LQG)	0	3	0
	RCRA Small Quantity Hazardous Waste Generators (RCRA SQG)	10	23	31
	RCRA Conditionally Exempt Hazardous Waste Generators (RCRA CESQ)	10	13	7
	Engineering Controls Sites (US ENG CONTROLS)	0	0	0
	Institutional Control Sites (US INST CONTROL)	0	0	0
	Brownfield Sites (US BROWNFIELDS)	0	0	0
	Emergency Response Notification System (ERNS)	6	9	3
State Databases*	Illinois State Sites Unit Listing (SSU)	0	2	1
	Site Remediation Program (SRP)	4	4	19
	Engineered Barrier Site (ENG CONTROLS)	1	2	4
	Institutional Control Site (INST CONTROLS)	2	1	6
	Leaking Underground Storage Tank Sites (LUST)	22	24	29
	Underground Storage Tank Sites (USTs)	41	41	54
	Former Manufactured Gas Plant Sites (MGP)	0	0	0
	Brownfield Sites	0	0	1
	Landfill or solid waste disposal sites (SWF/LF)	0	1	0
	Northeastern Illinois Planning Commission Active and Inactive Solid Waste Disposal Site Inventory (NIPC)	0	0	0
	Spill Incident List (SPILLS)	22	33	21
	Drycleaners License List (IL DRYCLEANERS)	1	1	4

Notes
BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad
* EDR searched additional databases besides those included in this table; however, based on the nature or type of these databases, they were not used in the evaluation of potential impacts and therefore are not listed here. EDR also identified a list of orphan sites (sites reported as potentially being in the project area but which could not be mapped due to inadequate or incomplete address information). These sites were also reviewed and when possible, sites were classified.

4.4 Regulatory File Review

The regulatory file review was limited to those sites that presented the greatest concern. The majority of sites identified in the database review are typical for a highly urban area with a history of commercial and industrial use; therefore, regulatory files were not reviewed for all sites.

Records were requested for certain sites due to their large size, proximity to the RLE Project, and potential environmental concerns associated with listings as a LUST, SRP, and/or CERCLIS site. The purpose of the request was to determine which, if any, records exist regarding known contamination from past activities at the sites and/or to confirm the exact location and property boundaries. In addition, the information was used to determine the level of concern associated with each site. Regulatory files were requested from the City of Chicago, the IEPA, and/or the USEPA depending on the type of site. Table 4-2 summarizes the regulatory file request. Records have been received for all requested sites. Summaries of the records and determination of the level of concern are provided in the following sections.

Table 4-2: Regulatory Records Request Summary

EDR Site ID	Figure 4-1 Site ID	Site Name	Address*	Chicago	IEPA	USEPA
BRT and UPRR Alternatives						
118	118	Clark Oil & Refining/0707 Clark Ser Station	11555 S. Michigan Avenue		x	
202	202a	Pullman Factory	130th Street and Indiana Avenue			x
NL2	NL2	Altgeld Gardens**	300 E. to 1100 East 130th Street; 100 E. to 1200 W. 131st Street; 1100–1200 E. 130th Place; 1000–1200 E. 129th Place		x	x
UPRR Rail Alternative						
45	45a	City of Chicago/Roseland Pumping Station	351 W. 104th Street		x	
51	51	Illinois Bell Telephone	413 W. 105th Street		x	
70	70	William Ransom Transportation/ William Transport/Ransom Transport Bus Garage	352 W. 110th Street		x	
94	94a	Marquette Bank/Vacant Building	135 to 139 W. 114th Street		x	
104	104	Triangle Transmission	35 W. 115th Street		x	
105	105	City of Chicago/Abandoned Service Station	11500 S. Perry Avenue	x	x	
122	122	Stuart Industrial Coatings, Inc.	11740 S. Front Street		x	
151, 162	151, 162	Keywell LLC	11900 Cottage Grove Avenue		x	
Orphan	O1	US Scrap	123rd and Cottage Grove Avenue			x
Orphan	O3	Metro Sanitary District #3	125th Street and Doty Avenue			x
Orphan	O2	Illinois Central RR Tracks	119th Street, East of Central Tracks			x

EDR Site ID	Figure 4-1 Site ID	Site Name	Address*	Chicago	IEPA	USEPA
Orphan	O4	Penn Central Corp	810 E. 124th Street		x	
		Lake Calumet Quad				x
Halsted Rail Alternative						
18	18a	Mobil Oil Corp. SS A8B	9901 S. Halsted Street		x	
NL	NL1	Carl Buddig	11954 Street Peoria Avenue	x	x	
130	130	West Pullman Study Area No. 6	11931 S. Loomis Street	x	x	
141	141	Omnitrax	11955 S. Morgan Street		x	
144	144	West Pullman Iron And Metal Co.	11954 S. Peoria Avenue			x
152	152a	WIRA Study Area 9	820 W. 120th Street	x	x	
152	152b	WIRA Study Area Number 14	815 to 825 W. 120th Street	x	x	
154	154	Ingersoll	1000 W. 120th Street	x		x
156	156a	Exelon Solar Plant/ Chicago Malleable Castings/Vacant Lot	1201 W. 120th Street	x		
159, 153	159, 153	Dutch Boy Paint	12000 and 12042 S. Peoria Avenue, 900 W. 120th Street	x		x

Notes:
IEPA = Illinois Environmental Protection Agency, USEPA = U.S. Environmental Protection Agency, FOIA = Freedom of Information Act
* All addresses are within Chicago.

4.4.1 BRT Alternative

4.4.1.1 Pullman Factory (130th Street and Indiana Avenue)

The Pullman Factory site (also known as the Pullman Sewage Farm) is approximately 90 feet from the proposed park & ride facility location at 130th Street. The site is listed under CERCLIS. The Expanded Site Inspection Final Report ([Final Report] Alternative Remedial Contracting Strategy 1994) summarized the activities completed at the site. According to the Final Report, the 140-acre site was used for land application of untreated industrial and domestic sewage from 1881 to 1907 and was later developed as a residential neighborhood. A preliminary assessment conducted by IEPA in 1987 indicated a medium priority with potential and alleged groundwater, surface water and soil contamination. A 1990 USEPA site inspection determined that site soils had low levels of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, and metals, indicating that portions of the site may have been impacted by the historic activities. Sampling conducted for the Final Report confirmed the presence of low levels of VOCs, SVOCs, pesticides, and metals in site soils. Available documentation for this site indicates that no remedial actions have been completed; however, because the level of contamination identified was low, this site is a Low Concern.

4.4.1.2 Clark Oil & Refining (11555 S. Michigan Avenue)

The former Clark Oil & Refining service station is adjacent to the proposed park & ride facility at 115th Street. The facility had one 7,500-gallon and two 6,000-gallon gasoline USTs removed in

1991. The surrounding soils were heavily impacted, resulting in the removal of 2,880 cubic yards of contaminated soil. Groundwater was not encountered. The 45-Day Report completed in 1992 for LUST Incident #912512 (O'Brien & Associates, Inc. 1992) indicated benzene exceedances along the west sidewalls of the excavation. Additional removal was not feasible due to the close proximity of the sidewalk to Michigan Avenue. The IEPA requested the installation of a passive soil vent system. There is no documentation indicating that the passive system was ever installed; however, IEPA issued a No Further Remediation (NFR) letter for this site on January 9, 1995. Although IEPA issued an NFR letter, this site is a Moderate Concern because residual contamination may still remain.

4.4.1.3 Altgeld Gardens (300 E. to 1100 East 130th Street; 100 E. to 1200 W. 131st Street; 1100-1200 E. 130th Place; 1000-1200 E. 129th Place)

Altgeld Gardens is across the street from the proposed park & ride facility at 130th Street. According to the Agency for Toxic Substances & Disease Registry website, USEPA conducted a site investigation at Altgeld Gardens in 1996 in response to community concerns. The investigation included the collection of ten surficial soil samples, taken across the entire community. Based on the 1996 findings, soil impacted with PCBs was remediated in the area from 940 to 975 E. 132nd Street. The Illinois Department of Public Health concluded that based on the limited information available, there was no public health hazard that exists from exposure to surface soil contamination; however, further assessment was recommended (Agency for Toxic Substances & Disease Registry 2012). This site is a Low Concern.

4.4.2 UPRR Rail Alternative

4.4.2.1 City of Chicago/Roseland Pumping Station (351 W. 104th Street)

The City of Chicago/Roseland Pumping Station is approximately 50 feet from the UPRR Rail Alternative ROW Option permanent envelope, adjacent to the East Option permanent envelope, and approximately 120 feet from the West Option permanent envelope. The facility was historically a hazardous waste generator of flammable waste liquids. A LUST incident was reported in 1994 (#942419) related to overfill and was identified during the removal of a 550-gallon diesel tank. The Site Classification Completion Report (United Environmental Consultants 1995) indicated no benzene, toluene, ethylbenzene, and xylenes (BTEX) or PNA compound exceedances and the IEPA issued an NFR letter dated September 19, 1995; therefore, this site is a Low Concern.

4.4.2.2 Illinois Bell Telephone (413 W. 105th Street)

The Illinois Bell Telephone site is adjacent to the UPRR Rail Alternative ROW Option permanent envelope, approximately 70 feet from the East Option permanent envelope, and within the West Option permanent envelope. The facility had four USTs that were removed in 1988: three fuel oil tanks and a waste oil tank. This site had one LUST incident (#880112) that appears to have been associated with the removal of a 5,000-gallon fuel oil UST on February 8, 1988 along the west side of the building. The remaining three USTs were removed from the north end of the building on March 24, 1988. Subsequent documentation (ATEC Associates, Inc. 1988) indicated the LUST Incident #880112 is also associated with these tanks.

A Corrective Action Completion Report for the LUST incident was submitted in 2004 (STS Consultants, Ltd. [STS] 2004) and the IEPA issued an NFR letter dated March 21, 2005. The site may have remaining contamination associated with the first UST; therefore, this site is a High Concern.

4.4.2.3 William Ransom Transportation (352 W. 110th Street)

The William Ransom Transportation site is adjacent to the UPRR Rail Alternative ROW Option permanent envelope, within the East Option permanent envelope, and approximately 110 feet from the West Option permanent envelope. A 6,000-gallon gasoline UST was removed in 1999 and was given LUST Incident #990399 due to odors in the backfill materials. A 45-Day Report was completed in March 1999, indicating that perched water was encountered and the assumed contamination was left in place (Environmental Management and Resource Consultants, Inc. 1999). No other documentation was available. Because contamination may still remain, this site is a High Concern.

4.4.2.4 Marquette Bank (135-139 W. 114th Street)

The Marquette Bank site is adjacent to the UPRR Rail Alternative ROW Option permanent envelope, within the East Option permanent envelope, and approximately 120 feet from the West Option permanent envelope. A 2,000-gallon gasoline UST was removed in 2001 and was given LUST Incident #20011638 due to piping failure. Seventy-five cubic yards of soil were removed and a Corrective Action Completion Report was completed in November 2001 (Aspen Environmental, Inc. 1991). Groundwater was not encountered and IEPA issued an NFR letter on January 25, 2002 with no restrictions, indicating that the remaining soil and groundwater concentrations were below Tier I residential remedial objectives; therefore, this site is a Low Concern.

4.4.2.5 Triangle Transmission (35 W. 115th Street)

The Triangle Transmission site is adjacent to the UPRR Rail Alternative ROW Option permanent envelope, within the East Option permanent envelope, and approximately 130 feet from the West Option permanent envelope. A 1,000-gallon gasoline UST was removed in 1999 and LUST Incident #992324 was assigned (Illinois Emergency Management Agency 1999). No other documentation was available. Because contamination may still remain, this site is a High Concern.

4.4.2.6 City of Chicago/Abandoned Service Station (11500 S. Perry Avenue)

The City of Chicago/Abandoned Service Station is 60 feet from the ROW Option permanent envelope, 160 feet from the East Option permanent envelope, and within the West Option permanent envelope. A Phase I ESA of the vacant site identified several environmental concerns, including the presence of urban soil/fill, historic presence of a filling station, UST removal and subsequent LUST Incident #20002342 (gasoline), historic presence of up to eight USTs on site, and a UST pump and piping distribution system (The Shaw Group 2011). The gasoline and waste oil USTs were removed on December 11, 2000 by the City of Chicago. No additional remediation was completed. The City of Chicago was exempt from further reporting or corrective actions as they were not the owner and/or operator of the USTs (IEPA 2001).

A Phase II ESA included a geophysical survey, ten soil borings, and three temporary groundwater wells. The soil analytical data indicated the presence of VOCs, mercury, and lead at concentrations exceeding one or more TACO Tier 1 remediation objectives (See Section 3.1.2.1). Groundwater samples identified benzene at a concentration exceeding both the Class I and Class II Groundwater Ingestion Standards in a sample taken along the eastern property boundary (The Shaw Group 2011). No documentation of remediation was available and because contamination may still remain, this site is a High Concern.

4.4.2.7 Clark Oil & Refining (11555 S. Michigan Avenue)

The former Clark Oil & Refining service station site is within the UPRR Rail Alternative ROW and East Option permanent envelope and approximately 240 feet from the West Option permanent envelope. This site is described in Section 4.4.1.2 and is a Moderate Concern.

4.4.2.8 Stuart Industrial Coatings, Inc. (11740 S. Front Street)

The Stuart Industrial Coatings site is within the permanent envelopes of all three UPRR Rail Alternative options. The facility had seven USTs that were removed in 1990: one 3,000-gallon toluene tank and six 1,000-gallon tanks containing xylene, Varnish Makers & Painter naphtha, methyl ethyl ketone, mineral spirits, ethylene acetate, and methyl isobutyl ketone (Best Environmental, Inc. 1991). The site was given LUST Incident #900054. Contaminated soil was removed and stockpiled. Additional information was requested by IEPA in 2001; however, no additional documentation was available. Because contamination may still remain, this site is a High Concern.

4.4.2.9 Keywell LLC (11900 S. Cottage Grove Avenue)

The Keywell LLC site is within the permanent envelopes of all three UPRR Rail Alternative options. Two 2,000-gallon gasoline tanks were removed in 1990, resulting in LUST Incident #902351. Samples indicated the remedial objectives were exceeded for BTEX. Approximately 240 cubic yards of impacted soil and 3,150 gallons of impacted rainwater were subsequently removed (RERC Environmental 1990). Additional soils were removed in 1994 as part of a new dock construction project (NTH Consultants, LTD 1994). The IEPA granted site-specific remedial objectives and the site was granted an NFR letter dated January 24, 1996. Although IEPA has issued an NFR, this site is a High Concern because this site has a long history of industrial use and is currently used as a scrap metal processing facility

4.4.2.10 Pullman Factory (130th and Indiana Avenue)

The Pullman Factory site is approximately 1,200 feet from the 130th Street South Station Option site and approximately 130 feet from the West Station Option site. This site is described in Section 4.4.1.1 and is a Low Concern.

4.4.2.11 Illinois Central Railroad Tracks (119th Street, East of Central Tracks)

The Illinois Central Railroad Tracks site is within the permanent envelopes of all three potential UPRR Rail Alternative Options. The site, which is listed as a CERCLIS-NFRAP site, lies along the tracks at 119th Street. A Site Inspection Report completed in 1987 (Ecology & Environment [E&E]

1987) indicated on-site drum storage from historic aerial photograph review; however, the actual site inspection did not identify drum storage or any additional concerns. Although railroads in general are a potential concern for hazardous material impacts (See Section 4.6), this specific database listing is a Low Concern because no reported release has occurred.

4.4.2.12 US Scrap (123rd and Cottage Grove Avenue)

The US Scrap site is a CERCLIS site approximately 1,000 feet from the permanent envelopes of all three UPRR Rail Alternative Options. It operated as an open dump in the 1960s and 1970s as part of a drum reclamation facility. A 1980 IEPA inspection discovered four hundred 55-gallon drums of waste, liquid wastes stored in eight concrete silos, scattered surficial deposits of wastes, several waste lagoons, and sludge in drainage swales (USEPA 2011). A Site Assessment prepared for the USEPA (STN Environmental JV 2007) determined that site soils were heavily contaminated with PCBs, chlorinated solvents, lead, and cadmium. Surface liquids showed high levels of vinyl chloride, BTEX, PNAs, pesticides, and PCBs.

A removal action completed in 2008 included the installation of sheet piling between the US Scrap and adjacent MWRD site; installation of interceptor trenches to remove liquid wastes; excavation and disposal of PCB-contaminated soils; geophysical survey for buried drums; and overpacking and disposal of drums (USEPA 2011). Although removal action has occurred, this site is a High Concern because extensive contamination still remains.

4.4.2.13 Penn Central Corp. and Lake Calumet Quad (810 E. 124th Street)

The Penn Central Corp. and Lake Calumet Quad sites are within the permanent envelopes of all three UPRR Rail Alternative Options. The Penn Central Corp. site is listed as an SSU site and Lake Calumet Quad is a CERCLIS-NFRAP site. Although these sites are have different names and are listed in separate databases, based on records reviewed, they appear to be the same site and associated with the same activities. The Penn Central Corp. site was identified on a map in a US Scrap report as a hazardous waste illegal dump site due to historic dumping operations (E&E 1990). Reports for both Penn Central Corp. and Lake Calumet Quad stated that over 400,000 gallons of liquid waste were pumped from the basement of on-site grain silos (STS 1982; E&E 1991). A slurry wall was proposed to contain the soils and groundwater impacted with BTEX and chlorinated solvents. There is no documentation that remediation has occurred or that the slurry wall was installed. Because contamination may still remain, this site is a High Concern.

4.4.2.14 Metro Sanitary District #3 (125th Street and Doty Avenue)

The Metro Sanitary District #3 site is approximately 350 feet from the permanent envelopes of all three UPRR Rail Alternative Options. The site is listed as a CERCLIS-NFRAP site and is within the MWRD Calumet Water Reclamation Plant site. A Site Inspection Report was completed in 1986 (E&E 1986), which indicated that the site included a partial, inactive landfill that was used for disposal of sand, gravel, and grit from sewage treatment by MWRD. Surface samples that were collected indicated the presence of PCBs, chloroform, chlorodane, chromium, lead, toluene, and 4,4-dichlorodiphenyldichloroethane (DDD). There were multiple seeps on the western property boundary from the adjacent US Scrap property. As no reported removal or cleanup has occurred, this site is a High Concern.

4.4.2.15 Altgeld Gardens (300 E. to 1100 East 130th Street; 100 E. to 1200 W. 131st Street; 1100-1200 E. 130th Place; 1000-1200 E. 129th Place)

This site is adjacent both the South Station and West Station Option sites for the 130th Street station and is described in Section 4.4.1.3. This site is a Low Concern.

4.4.3 Halsted Rail Alternative

4.4.3.1 Mobil Oil Corp. SS A8B (9901 S. Halsted Street)

This site is within the Halsted Street Rail Alternative permanent envelope. The facility has four active gasoline USTs and records for five additional USTs. The status of the five additional USTs is unknown. The 45-Day Report completed in 1998 for LUST Incident #980630 (Handex of Illinois, Inc. 1998) indicated elevated levels of BTEX in soil and groundwater. The site was classified as a high priority site by the IEPA in 1999. A Corrective Action Plan was rejected by the IEPA in 2009. The LUST incident is still open and contamination may still remain; therefore, this site is a High Concern.

4.4.3.2 Omnitrax (11955 S. Morgan Street)

This site is within the proposed 119th Street yard and shop area and within WIRA Study Area 8. The site is enrolled in the SRP. It is one of 17 study areas within the WIRA, an area of industrial land use dating back to the late 1800s that extends from 117th Street on the north to 122nd Street on the South, Loomis Street on the west and Halsted Street on the east. The WIRA study areas are in various stages of investigation, remediation, and redevelopment by the City of Chicago, private property owners and/or perspective owners and developers. The Comprehensive Site Investigation Report completed in 2007 (Gabriel Environmental Services [Gabriel] 2007) indicated the presence of undissolved (free) product, PNAs, arsenic, lead, hazardous lead, and PCBs. Certain areas were remediated and an engineered barrier was put in place. Additional investigation (Gabriel 2012) indicated the remaining portions of the property still contained elevated levels of PNAs, lead, and PCBs. In addition, the site still had soil with levels of lead that exceeded the hazardous waste disposal thresholds. Because contamination may still remain, this site is a High Concern.

4.4.3.3 West Pullman Iron and Metal Co. (11954 S. Peoria Street)

This site is within the proposed 119th Street yard and shop area and within WIRA Study Area 8. The facility was a scrap yard and was used to dismantle transformers. A 1990 Site Assessment identified PCB-impacted soils at (Weston Solutions, Inc. [Weston] 1990). There is no documentation that remediation has occurred; therefore, contamination may still remain on site and this site is a High Concern.

4.4.3.4 Carl Buddig (11954 S. Peoria Avenue)

This site is within the proposed 119th Street yard and shop area. This site is within the northern portion of WIRA Study Area 8 along the south side of 120th Street. The site is enrolled in the SRP. A Phase II ESA was completed in 2004 for this property, formerly operated by Carl Budding. The Phase II ESA indicated that 2,4-dinitrotoluene, 2,6-dinitrotoluene, and chromium exceed the TACO Soil migration to groundwater exposure route and lead exceeds the ingestion exposure

route and has affected the groundwater at the site (Tetra Tech, Inc. [Tetra Tech] 2004a). Because contamination may still remain, this site is a High Concern.

4.4.3.5 WIRA Study Area No. 6 (11931 S. Loomis Street)

This site is within the proposed 119th Street yard and shop area and is also part of the WIRA (See Section 4.2.3.3). This site is enrolled in the SRP. A review of a Comprehensive Site Investigation Report for this site, which is referred to as the Christ Universal Temple Property (Former International Harvester Property) and WIRA Study Area 6, indicated elevated levels of arsenic. The average detected arsenic values were at levels below background (Tetra Tech 2000a). IEPA issued an NFR letter in 2005 restricting the use of the site to industrial/commercial. Because the NFR letter includes restrictions, this site is a Moderate Concern.

4.4.3.6 WIRA Study Area 9 (820 W. 120th Street)

The WIRA Study Area 9 is within the proposed 119th Street yard and shop area. The site is enrolled in the SRP. The WIRA Study Area 9 was most formerly occupied by West Pullman Car Works and is currently occupied by Abbey Metal Corporation. A Phase II ESA was completed for a portion of WIRA Study Area 9 at 11955 South Peoria Street (Tetra Tech 2004b). The Phase II ESA indicated that VOCs, SVOCs, metals, and PCBs are present in the soil, primarily from 0 to 3 feet below ground surface and that lead and nickel are present in the groundwater. Because contamination may still remain and is primarily within the top 3 feet, this site is a High Concern.

4.4.3.7 WIRA Study Area Number 14 (815 to 825 W. 120th Street)

WIRA Study Area Number 14 is within the proposed 119th Street yard and shop area; it is also part of the WIRA (See Section 4.4.3.1) and is known as The Steel Company site. The site is enrolled in the SRP. The contaminants identified at Study Area Number 14 are VOCs, SVOCs, and metals. The SVOC impacts appear to be localized in the areas of the former railroad tracks and machinery warehouse. In addition, SVOCs were not detected below 3 feet below ground surface. Lead is present at concentrations exceeding TACO Tier 1 remediation objectives throughout the central part of Study Area No. 14. The antimony and selenium concentrations in one soil boring sample exceeded the TACO Tier 1 remediation objective (Tetra Tech 2000b).

Free product is present near the former oil UST. Two groundwater samples contained concentrations exceeding TACO Tier 1 Class I remediation objectives, one with benzene and metals and another with metals (Tetra Tech 2000b). Because contamination may still remain, this site is a High Concern.

4.4.3.8 Ingersoll (1000 West 120th Street)

The Ingersoll site is within the proposed 119th Street yard and shop area and is a CERCLIS site. It is also part of the WIRA (See Section 4.2.3.3) and has been developed as an industrial site since the late 1800s. Multiple Phase I and II ESAs and remedial action have been completed. The current property has had all structures demolished with thousands of gallons of non-hazardous and impacted wastewater removed from the site along with asbestos and PCB debris. However, the site still has free product remaining on-site and soils impacted with PNAs, metals, and PCBs.

In addition, it is considered an active CERCLIS site with USEPA enforcement actions (Tetra Tech 2005b; Tetra Tech 2007; Weston 2007). Because contamination may still remain, this site is a High Concern.

4.4.3.9 Exelon Solar Plant/Chicago Malleable Castings/Vacant Lot (1201 W. 120th Street)

This site is south of the proposed 119th Street yard and shop area and is part of the WIRA (See Section 4.2.3.3). This site is enrolled in the SRP and is also a LUST and UST site. It is also referred to as the Chicago Building Structure Site and WIRA Study Areas 10 and 11. The Comprehensive Site Investigation Report for this site identified exceedances of Tier 1 remedial objectives for SVOCs and various metals in soil and for lead in groundwater (Tetra Tech 2001a). The Comprehensive Site Investigation Report recommended averaging soil sample results or conducting a Tier 3 assessment to address these exceedances. Although IEPA has not issued this site an NFR letter, remediation has occurred and it was redeveloped in 2010 as part of the Exelon Corporation's Exelon City Solar site, which now operates as a solar photovoltaic power plant (Exelon Corporation 2012; Mazza 2012). This site has not been issued an NFR letter from IEPA and although remediation has occurred, this site is a Moderate Concern because contamination may still remain.

4.4.3.10 Dutch Boy Paint (1200 and 12042 S. Peoria Avenue, 900 W. 120th Street)

The Dutch Boy Paint site (also identified as the National Lead site) is adjacent to the south of the proposed 119th Street yard and shop area. This site is listed as a CERCLIS site. Documentation indicated the presence of hazardous lead levels across the site. Hazardous lead levels were remediated according to a Consent Decree (Cook County 1999), the site was entered into the SRP. The 2009 Comprehensive Site Investigation Report identified PNAs, arsenic, lead, and PCBs above TACO Tier I remedial objectives for ingestion. Groundwater modeling indicated that lead had the potential to migrate off-site. In addition, the site still had soil with levels of lead that exceeded the hazardous waste disposal thresholds, as well as potential free product (Tetra Tech 2005a; Tetra Tech 2009; Tetra Tech 2010). Because contamination may still remain, this site is a High Concern.

4.5 Risk Classification

Using the impact analysis criteria described in Section 3.4.2 and results of the existing data review described in Sections 4.2, 4.3, and 4.4, the identified sites were classified as No, Low, Moderate or High Concern sites based on their potential to act as a source of contamination to each of the RLE Project alternatives. Figure 4-1 shows the sites identified in the database review and associated concern classification.

With the exception of certain sites associated with the UPRR Rail Alternative, each site was assigned one classification, based on its potential to have caused soil and/or groundwater contamination in the area and its proximity to the project area. For the UPRR Rail Alternative, if applicable, a site was assigned a unique classification for each of the three options (ROW, East, and West). The potential impacts associated with these sites may vary by alternative and are discussed in Section 5.0.

4.5.1 High Concern Sites

The review identified 36 High Concern sites, summarized in Table 4-3. The majority of these sites were classified as High Concerns due to both their proximity (typically inside or within 500 feet of an alternative's permanent envelope) and being listed as CERCLIS, CORRACTS, CERCLIS-NFRAP, SSU, and/or an open LUST or SRP site. Open LUST or SRP sites have not been issued an NFR letter from the IEPA, which indicates that a release has been identified but remediation is likely not complete. Two High Concern sites included in Table 4-3 were classified as high based on the use of the site (Metropolitan Water Reclamation District/Calumet Water Reclamation Plant, a wastewater treatment plant, Figure 4-1 Site ID 200) or information received from a regulatory file request that identified contamination (Carl Buddig, Figure 4-1 Site ID NL1).

As shown in Table 4-3, several High Concern sites lie within the permanent envelope of the alternatives. These sites have the highest potential to affect the RLE Project (see Table 4-4 and Figures A-1 through A-7 in Appendix A).

4.5.2 Moderate Concern Sites

Fifty-six sites were classified as Moderate Concern sites. These sites were typically CERCLIS-NFRAP (archived) and UST sites with no identified releases adjacent to or within a proposed alternative's permanent envelope; LUST and SRP sites that have been issued NFR letters with restrictions (such as engineered barriers and/or instructional controls) and are adjacent to or within a proposed alternative's permanent envelope; open LUST and SRP sites between 300 and 500 feet from an RLE alternative alignment or feature; and CERCLIS, SWL/F and CORRACTS sites within 1,320 feet (0.25 mile) of an RLE alternative alignment or feature. At distances greater than these, the likelihood of contamination traveling from these types of sites and affecting the RLE Project is low. Table 4-5 contains a list of the Moderate Concern sites.

4.5.3 Low and No Concern Sites

Sites not identified as either a High or Moderate Concern were classified as either Low or No Concern. Low Concern sites typically included SQG and CESQG hazardous waste generators, USTs not adjacent to the RLE alternative alignments or features and LUST and SRP sites more than 0.1 mile away. Sites greater than 0.25 mile from any alternative alignment or feature were typically classified as No Concern sites.

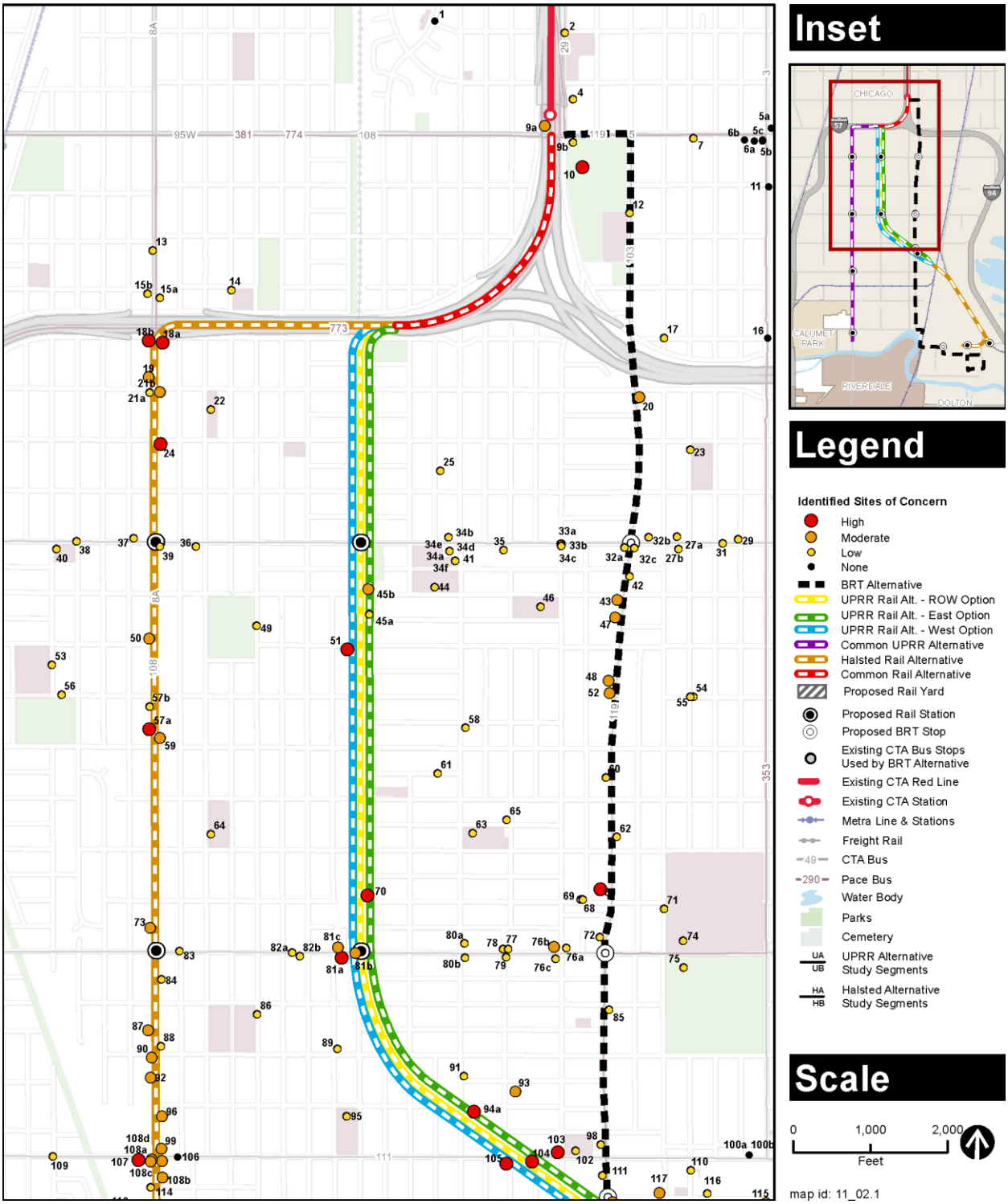

Figure 4-1: Identified Sites of Concern

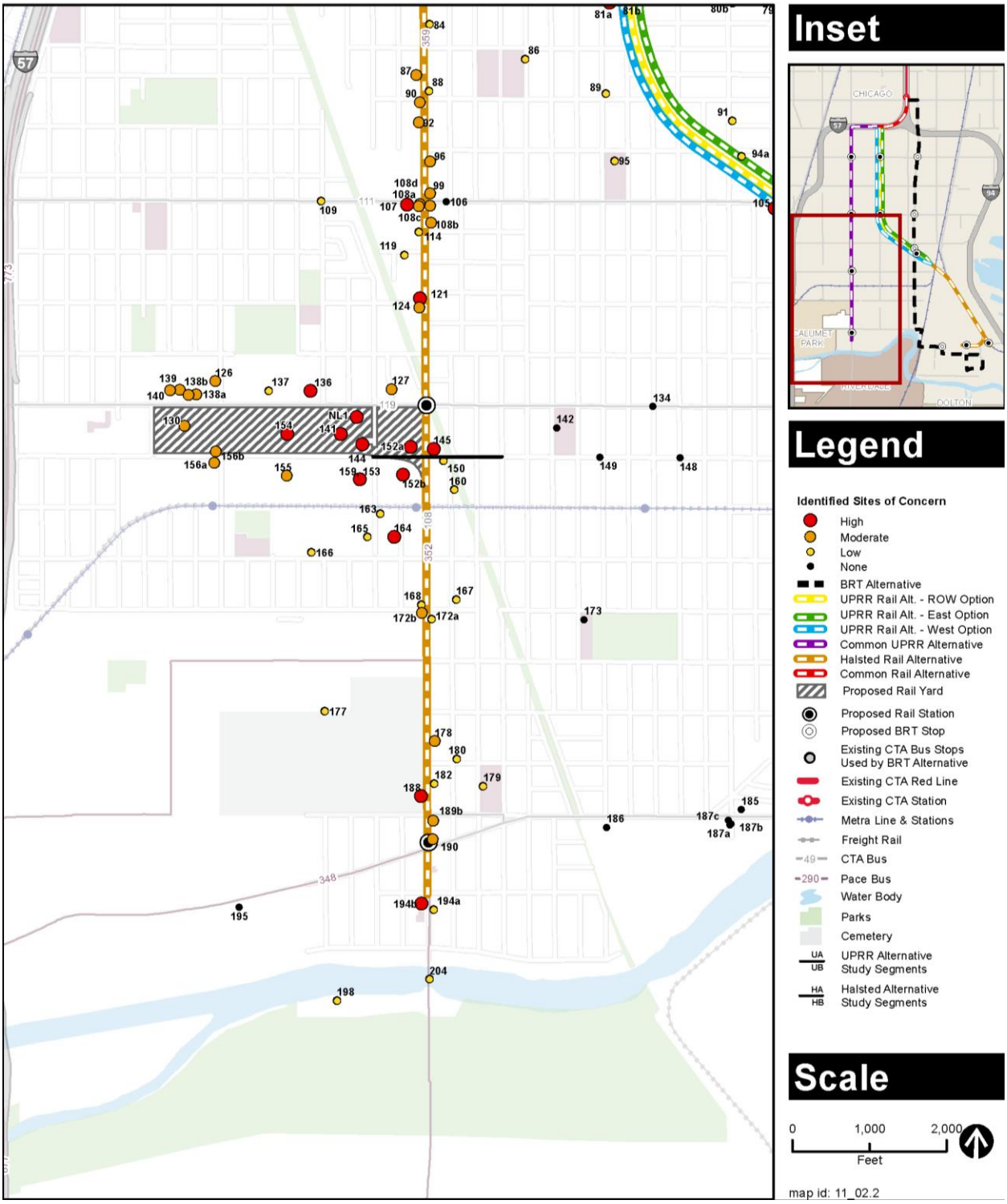

Figure 4-1 (continued): Identified Sites of Concern

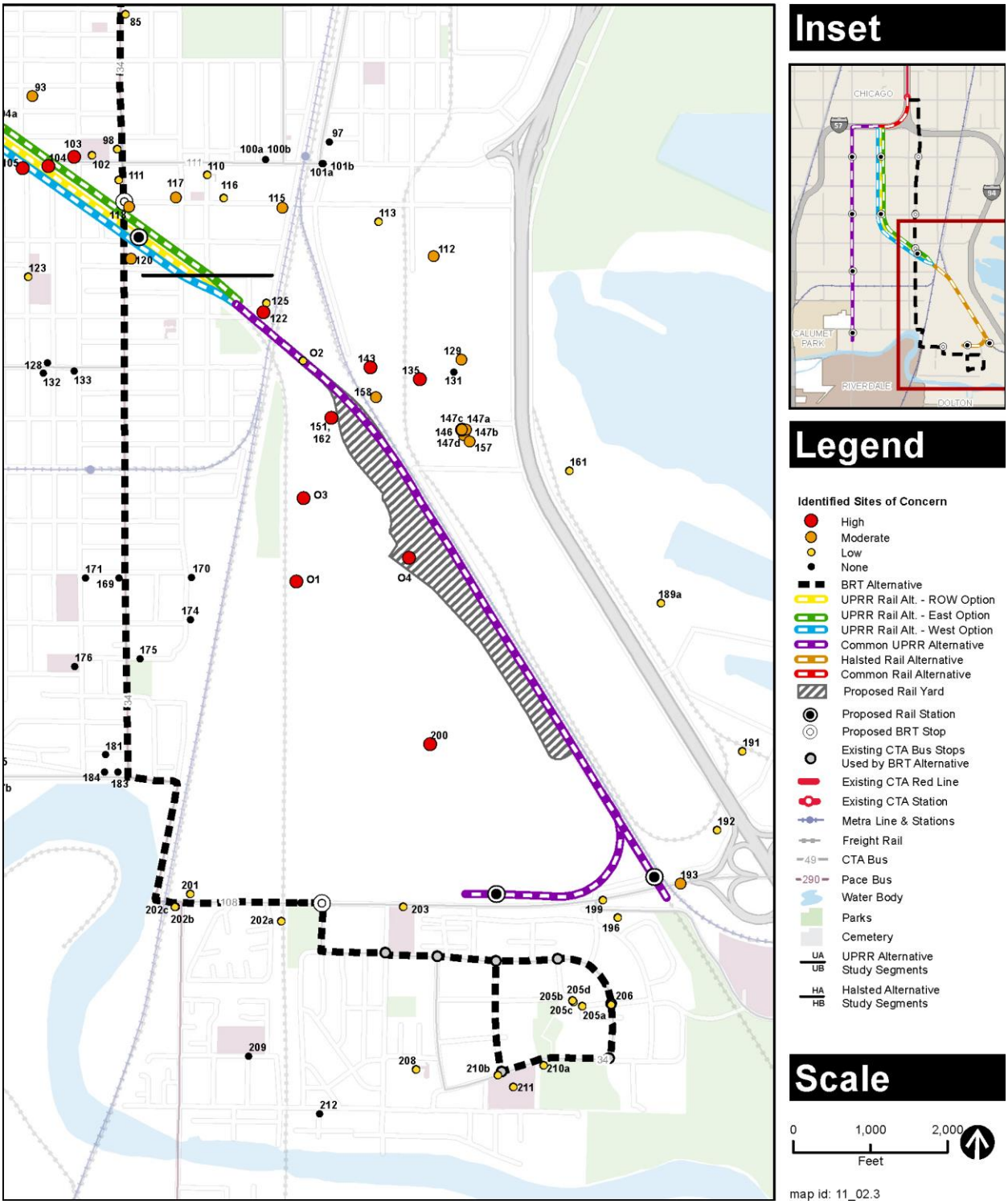

Figure 4-1 (continued): Identified Sites of Concern

Table 4-3: Identified High Concern Sites

EDR Site ID*	Figure 4-1 Site ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
Bus Rapid Transit Alternative					
67	67	109th Place Tear Gas	SG W. 109th Place	Exact location uncertain; likely near or adjacent, not within*	CERCLIS (not on NPL, referred to removal - NFRAP), PRP
200	200	MWRD Metropolitan Water Reclamation Di/ Calumet Water Reclamation Plant	400 E. 130th Street	Within	UST (3 in use), RCRA-CESQG
Union Pacific Railroad Rail Alternative - Segment UA					
8	8	Shell Oil Co.	4 E. 95th Street	250 feet (ROW, E, and W)	LUST (No. 871758 Non-LUST deter.), UST (3 in use)
10	10	Abbott Park Fieldhouse	49 E. 95th Street	200 feet (ROW, E, and W)	LUST (No. 932467 open; No. 932446 open), UST (removed), SPILLS
51	51	Illinois Bell Telephone	413 W.105th Street	Adjacent (ROW, E); Within (W);	LUST (No. 880112 NFR), UST (3 removed)
70	70	William Ransom Transportation/ Bus Garage	352 W. 110th Street	Adjacent (ROW); Within (E); 110 feet (W)	LUST (No. 990399 open), UST (removed), SPILLS, RCRA-CESQG, ERNS
81	81a	Pentecostal Temple Church Of God	415 to 419 W. 111th Street	175 feet (ROW); 85 feet (E); 75 feet (W)	LUST (No. 912233 open; No. 913417 open), SPILLS, RCRA-SQG
104	104	Triangle Transmission	35 W.115th Street	Adjacent (ROW); Within (E); 130 feet (W)	LUST (No. 992324 open), UST (2 exempt), SPILLS, RCRA-SQG
105	105	City of Chicago/ Abandoned Service Station	11500 S. Perry Avenue	60 feet (ROW); 160 feet (E); Within (W)	LUST (No. 20002342 non-LUST determination), UST (4 exempt)
Union Pacific Railroad Rail Alternative - Segment UB					
103	103	Cox, Donna	2 W. 115th Street	300 feet (ROW); 175 feet (E); n/a (W)	LUST (No. 980685 open; No. 201110008 open), UST (2 exempt), SPILLS
122	122	Stuart Industrial Coatings, Inc.	11740 S. Front Street	Within (ROW, E, and W)	LUST (No. 900054 open)
135	135	Lake Calumet Smelting	11901 S. Champlain Avenue	500 feet (ROW, E, and W)	CERCLIS (referred to removal - NFRAP)

EDR Site ID*	Figure 4-1 Site ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
143	143	Bulkoa Inc./Schneider Tank Lines, Clean Harbors Env. Services/Bulkoa , Inc.	11861 S. Cottage Grove Avenue	290 feet (ROW, E, and W)	LUST (No. 971905 NFR), UST (4 removed, 3 exempt), RCRA-CESQG
147	147a	Quala Services, LLC	803 E.120th Street	325 feet (ROW, E, and W)	RCRA-LQG (violations), SPILLS
200	200	MWRD Metropolitan Water Reclamation Di/ Calumet Water Reclamation Plant	400 E.130th Street	Within (ROW, E, and W)	UST (3 in use), RCRA-CESQG
151, 162	151, 162	Keywell, LLC	11900 Cottage Grove Avenue	Within (ROW, E, and W)	LUST (No. 902351 NFR; No. 942202 non-LUST determination), UST (2 removed), SPILLS, RCRA-CESQG
Orphan	O1	US Scrap	123rd Street and Cottage Grove Avenue	1,000 feet (ROW, E, and W)	UST (3 in use), RCRA-CESQG
Orphan	O3	Metro Sanitary District #3	125th Street and Doty Avenue	350 feet (ROW, E, and W)	CERCLIS-NFRAP (archived)
Orphan	O4	Penn Central Corp	810 E.124th Street	Within (ROW, E, and W)	SSU (transferred to IEPA's Office of Site Evaluation)
		Lake Calumet Quad			CERCLIS-NFRAP (archived)
Halsted Rail Alternative - Segment HA					
8	8	Shell Oil Co.	4 E. 95th Street	300 feet	LUST (No. 871758 non-LUST determination), UST (3 in use)
10	10	Abbott Park Fieldhouse	49 E. 95th Street	200 feet	LUST (No. 932467 open; No. 932446 open), UST (removed), SPILLS
18	18a	Mobil Oil Corp. SS A8B	9901 S. Halsted Street	Within	LUST (No. 980630 open), UST (5 exempt, 4 in use), RCRA-SQG

EDR Site ID*	Figure 4-1 Site ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
18	18b	Bhagats Amoco	9900 S. Halsted Street	150 feet	LUST (No. 941074 and No. 971752 non-LUST determination), UST (6 removed, 1 exempt, 3 in use), SRP (open), RCRA-SQG
24	24	Fernwood Towing & Tune-Ups/ Hester, Franny	10101 to 10103 S. Ashland Avenue	Adjacent	LUST (No. 991953 open), UST (3 exempt)
57	57a	Betty Brite Cleaners	10630 S. Halsted Street	Adjacent	SRP (open), DRYCLEANERS, RCRA-SQG
107	107	Chicago Housing Authority	833 W.115th Street	150 feet	LUST (No. 921830 NFR), UST (removed), SPILLS, SRP (open), RCRA-SQG
121	121	Mickey's Auto Service Center	11656 S. Halsted Avenue	Adjacent	LUST (No. 970068 open), SRP (open, not active)
136	136	WIRA East Ingersoll Property	920 W.119th Street	60 feet	SRP (open, not active)
141	141	Omnitrax	11955 S. Morgan Street	Within	SRP (open)
144	144	West Pullman Iron and Metal Co.	11954 S. Peoria Avenue	Within	CERCLIS-NFRAP, SRP (open, not active)
145	145	Sandhu Petroleum, Inc./Conoco Phillips 66	11957 and 11959 S. Halsted Street	Adjacent	LUST (No. 20041132 open; No. 20041362 open), UST (5 in use, 2 removed), SPILLS
152	152a	WIRA Study Area 9	820 W. 120th Street	Within	SRP (open, not active)
154	154	Ingersoll	1000 W. 120th Street	Within	CERCLIS (not on the NPL, removal only site, no site assessment work needed, enforcement action)
NL	NL1	Carl Buddig	11954 Street Peoria Avenue	Within	None
Halsted Rail Alternative - Segment HB					
152	152b	WIRA Study Area Number 14	815 to 825 W. 120th Street	Within	SRP (open, not active)
159, 153	159, 153	Dutch Boy Paint	12000 and 12042 S. Peoria Avenue, 900 West 120th Street	Adjacent	CERCLIS (Not on NPL, Referred to Removal - NFRAP), PRP, SSU (Transferred to another program), SRP (open), SPILLS, UST (9 removed)

EDR Site ID*	Figure 4-1 Site ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
164	164	South Green Plating Shop	12130 S. Green Street	300 feet	CERCLIS (not on the NPL, removal only site, no site assessment work needed, enforcement action), PRP
188	188	Cedar Park Cemetery	12540 S. Halsted Street	Adjacent	LUST (No. 952568 open), UST (4 removed), RCRA-SQG
194	194b	Christ Church Baptist	12844 S. Halsted Street	Adjacent	LUST (No. 20000796 open), UST (1 exempt), SPILLS

Notes:
* Environmental Data Resources, Inc. (EDR) ID is the site ID number provided in the EDR database report (Appendix B). More than one site has the same EDR ID; therefore, each High Concern site was given a unique "Figure ID," used in Figures 4-2 through 4-8.
** Addresses are in Chicago unless otherwise noted.
*** Separation distance is measured from the edge of the permanent envelope for an alternative. 'Within' means the site would be inside the permanent envelope. E=East Option, W=West Option, ROW=ROW Option, n/a = High Concern classification is not applicable to that option.
**** The Databases listed are those that contributed information relevant to the site's designation as a High Concern site. See Tables 3-1 and 4-1 for distances evaluated, summaries, and definitions of abbreviations.

Table 4-4: Summary of High Concern Sites Within the Permanent Envelope

Segment	Total Number of High Sites Within Envelope	Site ID	Appendix A Figure Number
Bus Rapid Transit Alternative			
Full Length	1	200	A-5
Park & Ride Facilities*	1	200	A-5
Union Pacific Railroad Rail Alternative ROW Option			
Segment UA	0	---	---
Segment UB	4	122 151/162, 200, O4	A-4 A-5
120th Street Yard and Shop	3	151/162, 200, O4	A-5
Union Pacific Railroad Rail Alternative East Option			
Segment UA	2	70, 104	A-2 A-3
Segment UB	4	122 151/162, 200, O4	A-4 A-5
120th Street Yard and Shop	3	151/162, 200, O4	A-5
Union Pacific Railroad Rail Alternative West Option			
Segment UA	2	51 105	A-1 A-3
Segment UB	4	122 151/162, 200, O4	A-4 A-5
120th Street Yard and Shop	3	151/162, 200, O4	A-5

Segment	Total Number of High Sites Within Envelope	Site ID	Appendix A Figure Number
Halsted Rail Alternative			
Segment HA	1	18a	A-6
Segment HB	0	---	---
119th Street Yard and Shop	6	141, 144, 152a, 154, NL1, 152b	A-7

Notes:
* Includes sites only within the proposed park & ride facilities.

Table 4-5: Moderate Concern Sites

EDR Map ID*	Figure 4-1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
Bus Rapid Transit Alternative					
8	8	Shell Oil Co.	4 E. 95th Street	Adjacent	LUST (No. 871758 non-LUST Determination), UST (3 in use)
10	10	Abbott Park Fieldhouse	49 E. 95th Street	Adjacent	LUST (No. 932467 open; Incident No. 932446 open), UST (removed), SPILLS
20	20	Sweis Ray Town and Country Mini Mart	10007 S. Michigan Avenue	Adjacent	LUST (No. 942453 open), UST (3 in use, 2 removed), RCRA-SQG
43	43	Roseland Place/Vacant Property	10400-10420 S. Michigan Avenue	Adjacent	SRP (NFR), INST CONTROL, UST (4 exempt)
47	47	Neighborhood Housing Services Redevelopment Corp./Vacant Property	10426 S. Michigan Avenue	Adjacent	LUST (No. 20100068 NFR), UST (2 exempt), SPILLS
48	48	Dairy Fresh Foods, Inc.	10450 S. Michigan Avenue	Adjacent	SRP (NFR), INST CONTROL, ENG CONTROLS, SPILLS
52	52	Michigan Avenue Collision/C&O Auto Rebuilders/Auto Repair Shop	10554 S. Michigan Avenue	Adjacent	LUST (No. 20071260 NFR), UST (2 exempt), RCRA-SQG, SPILLS
76	76b	BP Products North America	2 W. 111th Street	400 feet	LUST (No. 20080184 open), UST (3 in use), SPILLS
117	117	Kensington Serv Station	162 E. Kensington Avenue	350 feet	LUST (No. 960207 open), UST (3 removed), SPILLS
118	118	Clark Oil & Refining/0707 Clark Ser Station	11555 S. Michigan Avenue	Within	LUST (No. 912512 NFR), UST (3 removed)

EDR Map ID*	Figure 4-1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
120	120	Michigan Citgo	11600 S. Michigan Avenue	Adjacent	UST (4 in use)
Union Pacific Railroad Rail Alternative - Segment UA					
9	9a	Amoco 15459	36 W. 95th Street and Lafayette Avenue	150 feet (ROW, E, and W)	RCRA-SQG, LUST (No. 971123 NFR), UST (3 removed), SPILLS
45	45b	Chicago Fire Department Engine #93	330 W. 104th Street	Adjacent (ROW); Within (E); 100 feet (W);	UST (1 exempt)
81	81b	Chicago Dept. of Env. (Spill)	11100 S. Stewart Avenue	Exact location unknown; likely adjacent or within	RCRA-LQG
81	81c	No Name	420 W. 111th Street	60 feet (ROW, E, and W)	SPILLS
93	93	Pullman Co./Illinois Bell Telephone	65 W. 113th Place	500 feet (ROW); 375 feet (E); 550 feet (W)	LUST (No. 903598 NFR), UST (1 removed, 1 exempt, 1 in use), SPILLS
103	103	Cox, Donna	2 W. 115th Street	n/a (ROW, E); 350 feet (W)	LUST (No. 980685 open; No. 201110008 open), UST (2 exempt), SPILLS
112	112	Sherwin Williams Co	11541 S. Champlain Avenue	1,300 feet (ROW, E, and W)	CERCLIS (not on the NPL), CORRACTS, RCRA-TSDF, RCRA-LQG
115	115	U.S. Scrap	391 E. Kensington Avenue	1,000 feet (ROW, E, and W)	SSU (transferred to USEPA), SWF/LF (unpermitted, closed with no final cover)
118	118	Clark Oil & Refining/0707 Clark Ser Station	11555 S. Michigan Avenue	Adjacent (W, ROW); Within (E)	LUST (No. 912512 NFR), UST (3 removed)
Union Pacific Railroad Rail Alternative - Segment UB					
117	117	Kensington Serv Station	162 E. Kensington Avenue	450 feet (ROW, E); n/a (W)	LUST (No. 960207 open), UST (3 removed), SPILLS
120	120	Michigan Citgo	11600 S. Michigan Avenue	n/a (ROW, E); 60 feet (W)	UST (4 in use)

EDR Map ID*	Figure 4-1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
129	129	Inland Metal Refining Company Incorporation	651 E. 119th Street	875 feet (ROW, E, and W)	CERCLIS-NFRAP (archived), CORRACTS, SSU (backlog), UST (removed)
146	146	Bulkmatic Transport Co	12000 S. Doty Avenue	325 feet (ROW, E, and W)	RCRA-SQG
147	147b	Nortru, Inc. Transportation Group	801 E. 120th Street	325 feet (ROW, E, and W)	RCRA-SQG
147	147c	Allwaste Container Services	803 E. 120th Street	325 feet (ROW, E, and W)	UST (3 removed), SPILLS
147	147d	PSC Container Services, LLC	803 E. 120th Street	325 feet (ROW, E, and W)	LUST (No. 930641 open)
157	157	Praxair Distribution, Inc./Liquid Carbonic Corp	12054 Southwest Doty Avenue	325 feet (ROW, E, and W)	UST (removed), SPILLS, RCRA-CESQG
158	158	Tri City Tank Wash	11901 S. Cottage Grove Avenue	100 feet (ROW, E, and W)	UST (out of service)
193	193	Calumet Nu-Earth Dist. Center	North 130th Street and Doty Avenue	Exact location uncertain; could be adjacent*	CERCLIS-NFRAP (archived)
Halsted Rail Alternative - Segment HA					
9	9a	Amoco 15459	36 W. 95th Street and Lafayette Avenue	150 feet	LUST (No. 971123 NFR), UST, SPILLS, RCRA-SQG
19	19	#013611	9948 S. Halsted Street	Adjacent	UST (4 out of service)
21	21b	Joy Auto Service	10001 S. Halsted Street	Adjacent	UST (5 exempt), RCRA-SQG
50	50	Our #52-9652-105	Northwest Corner of Halsted Street & 105th Street	Adjacent	UST (4 exempt)
59	59	Shell Oil Co.	10655 S. Halsted Street	Adjacent	LUST (No. 880583 NFR), UST (4 removed, 3 in use)

EDR Map ID*	Figure 4-1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
73	73	Muffler & Brake Man, Inc.	11038 and 11048 S. Halsted Street	Within	UST (2 removed)
87	87	Longs Garden Center, Inc.	11226 S. Halsted Street	Adjacent	LUST (No. 980313 NFR), UST (1 removed), RCRA-SQG
90	90	Devotion Unisex Beauty Salon	11300 S. Halsted Street	Adjacent	UST (1 exempt)
92	92	Whitmal Oil Ser Inc.	11328 S. Halsted Street	Adjacent	UST (2 removed)
96	96	McDonald's Corp.	11421 S. Halsted Street	Adjacent	UST (1 exempt)
99	99	Quality Muffler, First Cook Comm. Bank	11453 S. Halsted Street	Adjacent	LUST (No. 920332 NFR), SPILLS, UST (5 removed), RCRA-SQG
108	108a	Equilon Enterprises LLC	11501 S. Halsted Street	Adjacent	LUST (No. 990250 NFR), UST (3 removed, 3 in use)
108	108b	0415 Clark Ser Station	11525 S. Halsted Street	Adjacent	UST (3 removed)
108	108c	Former CHA Warehouse	901 W. 115th Street	Adjacent	UST (1 exempt)
108	108d	Amoco Oil Co. #5954	11500 S. Halsted Street	Adjacent	LUST (No. 923184 NFR), UST (3 in use)
124	124	Abandoned Service Station	11700 S. Halsted Street	Adjacent	UST (2 exempt)
126	126	WIRA Study Area Number 4	11801 S. Racine Avenue	60 feet	SRP (NFR), INST CONTROL
127	127	Sheldon Heights Church of Christ/Vacant Land	11819 to 11849 S. Green Street	60 feet	SRP (NFR), INST CONTROL, UST (removed)
130	130	West Pullman Study Area No. 6	11931 S. Loomis Street	Within	SRP (NFR)
138	138a	W.E. Davis Company*****	1220 to 1314 W. 119th Street	60 feet	SRP (NFR), INST CONTROL, ENG CONTROLS
138	138b	City of Chicago - Department of Environment/ Construction Site (Future RJKCCC) *****	1220 W. 119th Street	60 feet	LUST (No. 20100193 open; No. 20110956 open), SPILLS, UST (6 exempt)

EDR Map ID*	Figure 4-1 ID	EDR Database Site Name	Address**	Approx. Separation Distance***	Databases****
139	139	Former Amforge Facility*****	1250 W. 119th Street	60 feet	BROWNFIELDS
140	140	Amforge*****	1324 W. 119th Street	60 feet	UST (4 exempt)
Halsted Rail Alternative - Segment HB					
155	155	International Harvester Co., W P/ Former West Pullman Works	1015 W. 120th Street	60 feet	CERCLIS (Not on NPL, Referred to removal-NFRAP), CORRACTS, LUST (No. 20091219 NFR; No. 20091282 NFR), SPILLS, LUST, SRP (NFR), INST CONTROL, ENG CONTROLS, HWAR, UST (3 exempt)
156	156a	Exelon Solar Plant/Chicago Malleable Castings/Vacant Lot	1201 W. 120th Street	60 feet	LUST (No. 20091066 open), SRP (open, not active), SPILLS, UST (2 exempt), RCRA-CESQG
156	156b	Vacant Site	1210 W. 120th Street	Within	UST (2 exempt)
172	172b	Cal Gas, Inc.	12304 S. Halsted Street, Calumet Park	Adjacent	UST (2 in use)
178	178	Red's Checkpoint/Franklin George	12535 S. Halsted Street	Adjacent	LUST (No. 911261 NFR), UST (4 removed), SPILLS
189	189b	Amoco SS #18717 Facility #24277	12701 S. Halsted Street	Adjacent	UST (3 removed)
190	190	#008489	12731 S. Halsted Street	Adjacent	UST (3 exempt)

Notes:
* Environmental Data Resources, Inc. (EDR) ID is the site ID number provided in the EDR database report (Appendix B). More than one site has the same EDR ID; therefore, each High Concern site was given a unique "Figure ID," used in Figures 5-2 through 5-9.
** Addresses are in Chicago unless otherwise noted.
*** Separation distance is measured from the edge of the permanent envelope for an alternative. 'Within' means the site is inside the permanent envelope. E=East Option, W=West Option, ROW=ROW Option, n/a = Moderate Concern classification is not applicable to that option.
**** The Databases listed are those that contributed information relevant to the site's designation as a High Concern site. See Tables 3-1 and 4-1 for distances evaluated, summaries, and definitions of abbreviations.
***** These sites are all part of the former Amforge site, which has received and NFR and been redeveloped.

4.5.4 Summary

Table 4-6 presents a summary of the number of High and Moderate Concern sites associated with each alternative.

Table 4-6: Summary of High and Moderate Concern Sites

Segment	High Concern	Moderate Concern
Bus Rapid Transit Alternative		
Full Length	2	11
Park & Ride Facilities*	1	4
Union Pacific Railroad Rail Alternative ROW Option		
Segment UA	7	8
Segment UB	10	9
Union Pacific Railroad Rail Alternative East Option		
Segment UA	7	8
Segment UB	10	9
Union Pacific Railroad Rail Alternative West Option		
Segment UA	7	9
Segment UB	9	9
Halsted Rail Alternative		
Segment HA	15	23
Segment HB	5	7

*Includes Moderate and High Concern sites only within or near the proposed park & ride facilities.

4.6 Other Sources

Other common sources of hazardous materials that may be present or that could affect the project were considered. Review of the Certified Sanborn maps confirmed that substations have been present since at least 1938. Prior to 1979, when their production was banned, PCBs were commonly used as fluid in electrical equipment. Transformers and substations within the project area may contain PCBs. The historical review also confirmed that the majority of buildings and structures within the project area were built before 1978–1979. Therefore, the majority of these buildings and structures are likely to contain lead-based paint or asbestos.

The long-term operation and maintenance of the existing UPRR and the NICTD/CSS & SBRR corridors adjacent to and within the project area are also potential sources of hazardous material impacts (UPRR Rail Alternative). Maintenance activities typically require the use of fuel, oil, paints, solvents, and cleaning agents for equipment, and grounds maintenance that may have contaminated the soil and/or groundwater from the use of materials such as herbicides, and pesticides. Operation of both lines includes carrying freight traffic, which may include hazardous materials transport. In addition, other potential sources of hazardous material impacts from railroad operations could include creosote used to preserve wood railroad ties, polynuclear aromatic carbon deposition from diesel exhaust, asbestos dust from brakes, coal ash releases from engines, and hazardous material cargo. Although a search of the National Response Center Database, which provides reported oil and chemicals spill data for railroad incidents, did not identify any spills reported by UPRR, NICTD, CSS, or SBRR along the project area, the potential for impacts still exists. (National Response Center 2012)

Given the urban setting of the project area, the potential exists for the presence of typical urban fill throughout the entire project area. Typical urban fill materials contain elevated concentrations of polynuclear aromatic hydrocarbons and metals due to nearby roadways, railways, and industrial and commercial lands uses and activities. Industrial and commercial land uses and activities include coal yards, gas stations, auto repair shops, machine shops, manufacturing plants, dry cleaners, USTs, substations, and transformers. This type of contamination is not necessarily associated with a release from a specific site or source. In addition, urban fill may include contaminated building demolition debris, which was commonly used as fill material in excavations, to increase elevations at sites during development.

Section 5
Impacts and Mitigations

The evaluation of the affected environment found the potential to encounter hazardous materials across the entire project area during both construction and operation. This section analyzes and compares the hazardous material impacts of the RLE Project alternatives in one of three categories: permanent impacts, construction impacts, and cumulative impacts.

5.1 No Build Alternative

Under the No Build Alternative, there would be no construction other than that associated with already funded and committed projects in the corridor. For the No Build Alternative, no permanent adverse impacts, construction impacts, or cumulative impacts related to hazardous materials would be expected.

5.2 Bus Rapid Transit Alternative

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

Operating BRT service and park & ride facilities would not result in changes to the existing types of hazardous materials used, stored or transported. Therefore, no permanent adverse impacts related to hazardous materials would be associated with the BRT Alternative.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.2.1 Impacts

Subsurface excavation associated with the BRT Alternative would occur during construction of all four of the proposed park & ride facilities; however, excavated quantities would likely be greater at Kensington Avenue and 130th Street than at 103rd Street and 111th Street. This difference is because the Kensington Avenue and 130th Street facilities both would have garages, which would require more excavation to install their foundations and other support structures. Therefore, construction for this alternative would result in generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. The source of hazardous material impacts could be from sites identified in the database review or from the presence of urban fill. In addition there is the potential that groundwater encountered during construction may contain contaminated materials. As summarized in Table 4-4 and shown on Figure 4-6, one High Concern site (ID Number 200) was identified within or near a proposed park & ride facility site where the majority of subsurface excavation and potential adverse impacts would be likely to occur. This High Concern site is near the proposed 130th Street facility site and is an operating wastewater treatment plant. Sludge, a byproduct of the wastewater treatment process, typically contains heavy metals and other contaminants and may be present throughout the site, including within the footprint of the proposed park & ride facility at 130th Street.

In all areas besides the park & ride facilities, work would be limited to the surface and the potential for impacts to hazardous materials would be low.

Construction of park & ride facilities at 103rd Street and Kensington Avenue would include demolition of existing structures that were likely constructed before 1978–1979. These structures may contain asbestos-containing material and lead-based paint that could result in a release of asbestos fibers and lead dust during construction. Hazardous materials typically involved with construction activities, such as paints, solvents, fuels, and hydraulic fluids, could also be released accidentally during construction.

Implementation of the BRT Alternative could also result in beneficial impacts through the cleanup and/or removal of contaminated material (soil, groundwater, and/or asbestos and lead-based paint particles) during construction. Without this alternative, this cleanup and removal would occur either at a later date or not at all.

Indirect impacts could occur from the accidental release of hazardous materials during the transport of soil or other contaminated media to a disposal facility away from the project area.

5.2.2.2 Mitigation

Mitigation measures for the BRT Alternative would be used to avoid and minimize impacts prior to and during construction and would, at a minimum, include the following:

- Compliance with federal, state, and local laws and regulations regarding hazardous materials would be required.
- Focused site assessments would be required for areas where earth-moving activities would occur. The assessments would include characterization and evaluation of the potential for encountering hazardous materials and contaminated soils.
- Asbestos, lead-based paint, and hazardous material surveys of buildings or structures would be required prior to renovation or demolition, to identify any asbestos and lead-based paint particles and hazardous materials, such as PCB- or mercury-containing equipment. Any hazardous materials identified would be abated and disposed of in accordance with local, state and federal regulations.
- A Contaminated Material Management Plan that provides the procedures for identifying, characterizing, managing, storing, and disposing contaminated soil and groundwater encountered during construction activities would be required. This plan would cover the entire project area, as it is assumed that all material has at least some level of contamination associated with it. Contaminated material generated during construction would be disposed of at a nearby facility permitted to accept such material, such as the Veolia ES Zion Landfill, in Zion, Illinois (non-hazardous special waste) and the Menomonee Falls Treatment Storage and Disposal Facility in Menomonee Falls, Wisconsin (hazardous waste).
- Health and Safety Plans for construction activities would be developed by the contractors and read and signed by all workers prior to starting any work. The Health and Safety Plans would identify potential contaminants of concern, required personal protection equipment and procedures, and emergency response procedures.

- Spill Prevention, Control, and Countermeasure Plans to address the use, storage, and disposal of materials such as asphalt, fuel, paint, solvents, and cleaning agents would be required. The Spill Control and Prevention Plans would provide best management practices to limit the potential for accidental releases of potentially hazardous materials.

- Construction Stormwater Pollution Prevention Plans, which describe methods to prevent or minimize stormwater runoff from encountering contaminated soil or other hazardous materials, would be required.

In addition to the above, a Phase I ESA of any property to be purchased would be conducted as part of the Final EIS in order to identify recognized environmental conditions and assess and limit environmental liability. Based on the Phase I ESA findings, a Phase II ESA could also be required during the property acquisition phase and prior to purchasing a property.

5.2.3 Cumulative Impacts and Mitigations - Bus Rapid Transit Alternative

Under the BRT Alternative, cumulative impacts could occur if there were a release of hazardous materials during ongoing and future projects in the area (described in the *Cumulative Impacts Technical Memorandum)*; however, compliance with local, state, and federal laws and regulations would result in these cumulative impacts being less than adverse.

5.3 Union Pacific Railroad Rail Alternative

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1.1 Segment UA

5.3.1.1.1 Impacts

Operation of UPRR Rail Alternative ROW Option, a heavy rail transit line, would have the potential to result in the release of hazardous materials and/or petroleum products into the environment from accidental spills or from maintenance activities that require earthmoving in contaminated areas. Spills are most likely to occur during activities such as equipment maintenance at the yards and shops and grounds maintenance along the tracks. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, and pesticides. Examples of maintenance activities that could require earthmoving include at-grade track repair, underground utility work, and foundation repairs.

5.3.1.1.2 Mitigation

During operation of the ROW Option, mitigation measures would include adherence to applicable federal, state, and local regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures.

5.3.1.2 Segment UB

Permanent impacts and mitigation measures would be similar to those described for Segment UA in Section 5.3.1.1. However, there would be the potential for additional impacts associated with the NICTD/CSS & SBRR, which is an active railroad and is adjacent to Segment UB. Due to the

proximity of NICTD/CSS & SBRR to Segment UB, hazardous material spills or releases that occur along the NICTD/CSS & SBRR during its operation and maintenance would have the potential to migrate affect the UPRR Rail Alternative alignment within this segment. Section 4.6 describes typical sources of hazardous material spills and releases that may be associated with NICTD/CSS & SBRR. Although there is the potential for impacts associated with the adjacent freight line, these impacts would be reduced by the freight lines' adherence to federal hazardous material transport regulations (49 CFR Parts 171 to 180), Among other things, these regulations specify requirements for the safe transportation of hazardous materials by rail, and they require rail carriers to conduct a security and safety risk analysis to develop a security and safety risk plan that includes measures to mitigate risk to population centers, and to select the safest route.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.2.1 Segment UA

5.3.2.1.1 Impacts

Construction of Segment UA of the UPRR Rail Alternative ROW Option would involve approximately 130,100 cubic yards of soil or aggregate excavation. Therefore, there would be the potential to encounter hazardous materials, whether from the sites identified in the database review or from the presence of urban fill. In addition, unlike the East and West Options, the ROW Option would include construction within the UPRR corridor, which is potentially impacted because of the use of fuel, oil, paints, herbicides, and pesticides, creosote, polynuclear aromatic hydrocarbons and coal ash associated with the long-term operation as a railroad (See Section 4.6). In addition, groundwater encountered during construction may contain hazardous materials.

As shown in Table 4-4, no High Concern sites are within the permanent envelope of Segment UA of the UPRR Rail Alternative ROW Option.

This alternative would include the demolition of existing structures that were likely constructed before 1978 - 1979. Potential issues associated with these structures would be as described for the BRT Alternative in Section 5.2.2.1.

Construction of Segment UA could also result in beneficial impacts through the cleanup and/or removal of contaminated material, as described for the BRT Alternative in Section 5.2.2.1.

Indirect impacts could occur from accidental releases as described for the BRT Alternative in Section 5.2.2.1.

5.3.2.1.2 Mitigation

Proposed mitigation measures would be similar to those described for the BRT Alternative in Section 5.2.2.2.

5.3.2.2 Segment UB

5.3.2.2.1 Impacts

Construction of Segment UB of the UPRR Rail Alternative ROW Option would involve approximately 140,100 cubic yards of soil or aggregate excavation. Therefore, impacts would be similar to those described for Segment UA in Section 5.3.2.1. One exception is that Segment UB is not directly within a freight railroad corridor, but it is adjacent to the NICTD/CSS & SBRR and railroad spurs serving the Keywell property (ID Number 151/162), which carries freight trains and could still have potential hazardous material impacts. While there would be the potential for hazardous material impacts associated with construction adjacent to a railroad, they would likely be fewer than for construction directly within the footprint of a railroad.

Based on the historic aerials and Sanborn fire insurance maps, heavy industry has been present in and along this segment since at least 1897. As shown in Table 4-4 and Figures 4-5 and 4-6, three High Concern sites (ID Numbers 122, 200, and 151/162) are within the permanent envelope of Segment UB of the UPRR Rail Alternative ROW Option. One High Concern site is within both the areas for the South Station and West Station Options (ID Number 200, See Section 5.2.2.1). Four additional High Concern sites (ID Numbers O1, O2, O3, and O4) are potentially within the permanent envelope but not enough information is available at the time of this report to determine their exact location.

Of note within this segment is that there are two CERCLIS Archived sites potentially within the permanent envelope (O3 and O3). The CERCLIS sites typically come with increased risk of the USEPA imposing liability and remediation obligations on potentially responsible parties (PRPs). Any owner can be considered a PRP and be required to pay for cleanup. These sites have Archived status, which means that USEPA has completed its assessment of the site and has determined that no future action will be taken to list it on the National Priorities List and has removed it from its inventory of Superfund sites. However, this does not mean that a site is considered clean, and additional caution should be taken before acquiring ownership.

5.3.2.2.2 Mitigation

Permanent impacts and mitigation measures would be similar to those described for Segment UA in Section 5.3.2.1.

5.3.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

Cumulative impacts under the UPRR Rail Alternative ROW Option would be similar to those under the BRT Alternative, described in Section 5.2.3.

5.3.4 120th Street Yard and Shop

5.3.4.1 Permanent Impacts and Mitigations

Permanent impacts and mitigation measures for the 120th Street yard and shop would be similar in type to those described for the UPRR Rail Alternative ROW Option, Segment UA (Section 5.3.1.1); however, the quantities of materials used (including fuel, oil, paints, solvents, cleaning

agents, herbicides, and pesticides) and therefore, the potential for spills to occur, would likely be greater at the yard and shop than along the rail line itself.

5.3.4.2 Construction Impacts and Mitigations

Construction of the 120th Street yard and shop would involve approximately 138,100 cubic yards of soil or aggregate excavation. Impacts and mitigation measures would be similar to those described for Segment UB in Section 5.3.2.2, with the exception of one less High Risk site (ID Number 122, a LUST site) within or potentially within the permanent envelope of the yard.

5.3.5 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.3.5.1 Segment UA

5.3.5.1.1 Impacts

Permanent impacts under the UPRR Rail Alternative East Option would be similar to those for the UPRR Rail Alternative ROW Option, described in Section 5.3.1.1. However, there would be the potential for additional impacts associated with the operation of the adjacent active UPRR, which would remain in operation under the East Option. Given the proximity of the UPRR track to the alignment for the East Option, there would be the potential for impacts due to releases of hazardous materials being transported and from hazardous materials used in the routine operation and maintenance of the UPRR. Hazardous materials potentially exist along the railroad currently, but the UPRR Rail Alternative would bring transit vehicles closer to them. Although there is the potential for impacts associated with the adjacent freight line, these impacts would be reduced by the freight lines' adherence to federal hazardous material transport regulations (See Section 5.3.1.2).

5.3.5.1.2 Mitigation

Mitigation measures would be similar to those for the UPRR Rail Alternative Rail ROW Option, described in Section 5.3.1.1. It is presumed that in addition to the CTA, the UPRR would follow its own system-wide hazardous material usage, storage, and disposal plans and procedures. The UPRR would also adhere to federal hazardous material transport regulations (49 CFR Parts 171 to 180) that among other things, specify requirements for the safe transportation of hazardous materials by rail and require the rail carrier to conduct a security and safety risk analysis, develop a security and safety risk plan that includes measure to mitigate risk to population centers, and to select the safest route.

5.3.5.2 Segment UB

Permanent impacts and mitigation measures would be similar to those for Segment UA of the UPRR Rail Alternative East Option, described in Section 5.3.5.1; however, instead of potential impacts from the adjacent operating UPRR, Segment UB would have potential impacts from the adjacent operating NICTD/CSS & SBRR.

5.3.6 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.3.6.1 Segment UA

Construction of Segment UA of the UPRR Rail Alternative East Option would involve approximately 122,900 cubic yards of soil or aggregate excavation. Construction impacts and mitigation would be similar to those for Segment UA of the UPRR Rail Alternative ROW Option, described in Section 5.3.2.1. However, as shown in Table 4-4 and Figures 4-3 and 4-4, the East Option would include three High Concern Sites (ID Numbers 70, 94a and 104) within its permanent envelope compared to none in the ROW Option. These three sites are all LUST sites.

5.3.6.2 Segment UB

Construction impacts and mitigation would be similar to those for Segment UB of the UPRR Rail Alternative ROW Option, described in Section 5.3.2.2.

5.3.7 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

Cumulative impacts would be similar to those under the BRT Alternative, described in Section 5.2.3.

5.3.8 120th Street Yard and Shop

5.3.8.1 Permanent Impacts and Mitigations

Permanent impacts and mitigation measures would be similar to those described for the UPRR Rail ROW Alternative in Section 5.3.4.1.

5.3.8.2 Construction Impacts and Mitigations

Permanent impacts and mitigation measures would be similar to those described for the UPRR ROW Alternative in Section 5.3.4.2.

5.4 Union Pacific Railroad Rail Alternative - West Option

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.4.1.1 Segment UA

Permanent impacts and mitigation measures would be similar to those described for the UPRR Rail Alternative East Option in Section 5.3.5.1.

5.4.1.2 Segment UB

Permanent impacts and mitigation measures would be similar to those described for the UPRR Rail Alternative East Option in Section 5.3.5.2.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.4.2.1 Segment UA

Construction of Segment UA of the UPRR Rail Alternative West Option would involve approximately 129,400 cubic yards of soil or aggregate excavation. Construction impacts and mitigation would be similar to those for Segment UA of the UPRR Rail Alternative ROW Option, described in Section 5.3.2.1. However, as shown in Table 4-4 and Figures 4-2 and 4-4, the West Option would include two High Concern Sites (ID Numbers 51 and 105) within its permanent envelope, compared to none in the ROW Option and three in the East Option. These three sites are all LUST sites.

5.4.2.2 Segment UB

Construction impacts and mitigation would be similar to those for Segment UB of the UPRR Rail Alternative ROW Option, described in Section 5.3.2.2.

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

Cumulative impacts would be similar to those for the BRT Alternative, described in Section 5.2.3.

5.4.4 120th Street Yard and Shop

5.4.4.1 Permanent Impacts and Mitigations

Permanent impacts and mitigation measures would be similar to those described for the UPRR ROW Alternative in Section 5.3.4.1.

5.4.4.2 Construction Impacts and Mitigations

Construction impacts and mitigation measures would be similar to those described for the UPRR ROW Alternative in Section 5.3.4.2.

5.5 Halsted Rail Alternative

5.5.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

5.5.1.1.1 Impacts

Operation of Halsted Rail Alternative, a heavy rail transit line, would have the potential to result in the release of hazardous materials and/or petroleum products into the environment from accidental spills. Spills are most likely to occur during activities such as equipment and grounds maintenance. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, and pesticides.

5.5.1.1.2 Mitigation

During operation of the Halsted Rail Alternative, adherence to applicable federal, state, and local regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures, would minimize the potential for impacts.

5.5.2 Construction Impacts and Mitigations - Halsted Rail Alternative

5.5.2.1 Segment HA

5.5.2.1.1 Impacts

Construction of Segment HA of the Halsted Rail Alternative would involve approximately 83,400 cubic yards of soil or aggregate excavation. Therefore, there would be the potential to encounter hazardous materials, whether from the sites identified in the database review or from the presence of urban fill. In addition, groundwater encountered during construction may contain hazardous materials.

As shown in Table 4-4 and Figure 4-7, there is one High Concern site (ID Number 18a) within the permanent envelope of Segment HA of the Halsted Rail Alternative: an open LUST site.

Construction of Segment HA would include the demolition of existing structures that were likely constructed before 1978 - 1979. Potential issues associated with these structures would be as described for the BRT Alternative in Section 5.2.2.1.

Construction of Segment HA could also result in beneficial impacts through the cleanup and/or removal of contaminated material, as described for the BRT Alternative in Section 5.2.2.1.

Indirect impacts could occur from accidental releases as described for the BRT Alternative in Section 5.2.2.1.

5.5.2.1.2 Mitigation

Proposed mitigation measures would be similar to those described for the BRT Alternative in Section 5.2.2.2.

5.5.2.2 Segment HB

5.5.2.2.1 Impacts

Construction of Segment HB of the Halsted Rail Alternative would involve approximately 57,900 cubic yards of soil or aggregate excavation and demolition of existing structures that were likely constructed before 1978-1979. Therefore, impacts would be similar those described for to Segment HA in Section 5.5.2.1.

As shown in Table 4-4, no High Concern sites are within the permanent envelope of Segment HB of the Halsted Rail Alternative. Potential beneficial impacts and indirect impacts would also be similar to those described for Segment HA in Section 5.5.2.1.

5.5.2.2.2 Mitigation

Permanent impacts and mitigation measures would be similar to those described for the BRT Alternative in Section 5.2.2.2.

5.5.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative

Cumulative impacts under the Halsted Rail Alternative would be similar to those described for the BRT Alternative in Section 5.2.3.

5.5.4 119th Street Yard and Shop

5.5.4.1 Permanent Impacts and Mitigations

Permanent impacts and mitigation measures would be similar to those described for the 120th Street yard and shop in Section 5.3.4.1.

5.5.4.2 Construction Impacts and Mitigations

5.5.4.2.1 Impacts

Construction of the 119th Street yard and shop would involve approximately 129,100 cubic yards of soil or aggregate excavation. Therefore, there would be the potential to encounter hazardous materials, and impacts would be similar to those described for Segment HA in Section 5.5.2.1.

Based on the historic aerials and Sanborn fire insurance maps, industry has been present within the proposed yard permanent envelope since at least 1897. As shown in Table 4-4 and Figure 4-8, six High Concern sites (ID Numbers 141, 144, 152a, 154, NL1, and 152b) are within the permanent envelope of the 119th Street yard and shop.

Of note within this segment are the one CERCLIS site (Ingersoll, ID Number 154) and one CERCLIS-NFRAP site (West Pullman Iron and Metal Co., ID Number 144) within the permanent envelope. As discussed in Section 5.3.2.2, CERCLIS sites typically come with increased risk of the USEPA imposing liability and remediation obligations on PRPs. Any owner can be considered a PRP and be required to pay for cleanup. The Ingersoll site is of special concern given that there are free product and known USEPA enforcement actions at the site (See Section 4.4.3). The NFRAP status at the West Pullman Iron and Metal Co. site means that means that USEPA has completed its assessment of the site and determined that no future action will be taken to list it on the National Priorities List. However, this does not mean that a site is considered clean, and additional caution should be taken before acquiring ownership. In addition to the sites within the permanent envelope of the 119th Street yard and shop, there is also an active CERCLIS site, Dutch Boy (ID Number 159 and 153) adjacent to the south (See Figure 4-1) of the 119th Street yard and shop, which based on available information, has the potential for off-site migration of contamination.

Construction of the 119th Street yard and shop would include the demolition of existing structures that were constructed before 1978 and 1979. Potential issues associated with these structures would be as described for the BRT Alternative in Section 5.2.2.1.

Potential beneficial impacts and indirect impacts would be similar to those described for Segment HA in Section 5.5.2.1.

5.5.4.2.2 Mitigation

Proposed mitigation measures would be similar to those described for the BRT Alternative in Section 5.2.2.2.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

No permanent impacts, construction impacts, or cumulative impacts related to hazardous materials would be expected to be associated with the No Build Alternative. Therefore, there would also be no impacts remaining after mitigation.

6.2 Bus Rapid Transit Alternative

No hazardous material impacts would remain after mitigation.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

No hazardous material impacts would remain after mitigation.

6.3.1 Segment UA

No hazardous material impacts would remain after mitigation.

6.3.2 Segment UB

No hazardous material impacts would remain after mitigation.

6.3.3 120th Street Yard and Shop

No hazardous material impacts would remain after mitigation.

6.4 Union Pacific Railroad Rail Alternative - East Option

No hazardous material impacts would remain after mitigation.

6.4.1 Segment UA

No hazardous material impacts would remain after mitigation.

6.4.2 Segment UB

No hazardous material impacts would remain after mitigation.

6.4.3 120th Street Yard and Shop

No hazardous material impacts would remain after mitigation.

6.5 Union Pacific Railroad Rail Alternative - West Option

No hazardous material impacts would remain after mitigation.

6.5.1 Segment UA

No hazardous material impacts would remain after mitigation.

6.5.2 Segment UB

No hazardous material impacts would remain after mitigation.

6.5.3 120th Street Yard and Shop

No hazardous material impacts would remain after mitigation.

6.6 Halsted Rail Alternative

No hazardous material impacts would remain after mitigation.

6.6.1 Segment HA

No hazardous material impacts would remain after mitigation.

6.6.2 Segment HB

No hazardous material impacts would remain after mitigation.

6.6.3 119th Street Yard and Shop

No hazardous material impacts would remain after mitigation.

Section 7
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Appendix A
Figures of High Concern Sites Within Permanent Envelope

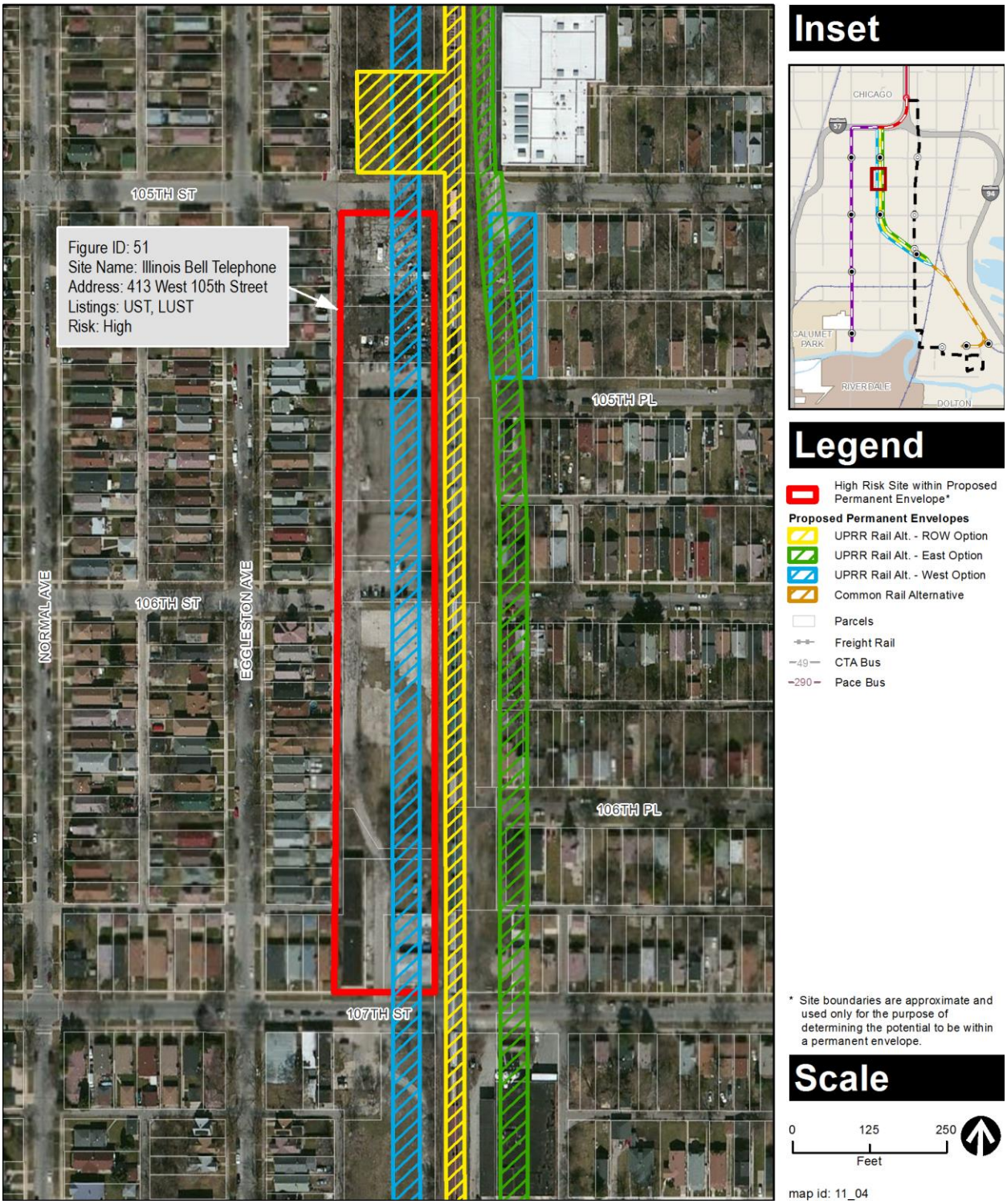

Figure A-1: Union Pacific Railroad Rail Alternative, High Concern Site 51

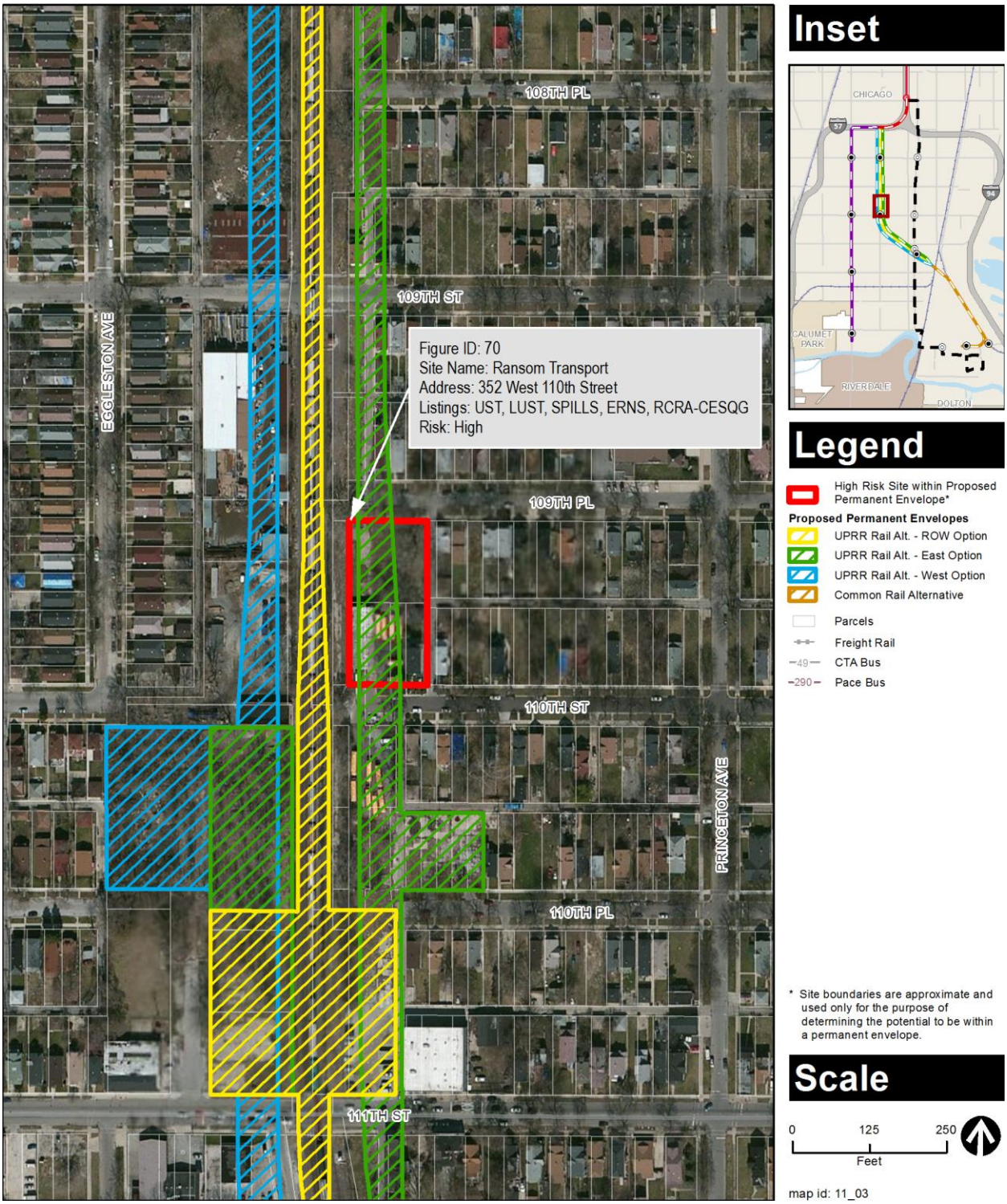

Figure A-2: Union Pacific Railroad Rail Alternative, High Concern Site 70

Figure A-3: Union Pacific Railroad Rail Alternative, High Concern Sites 94a, 104, and 105

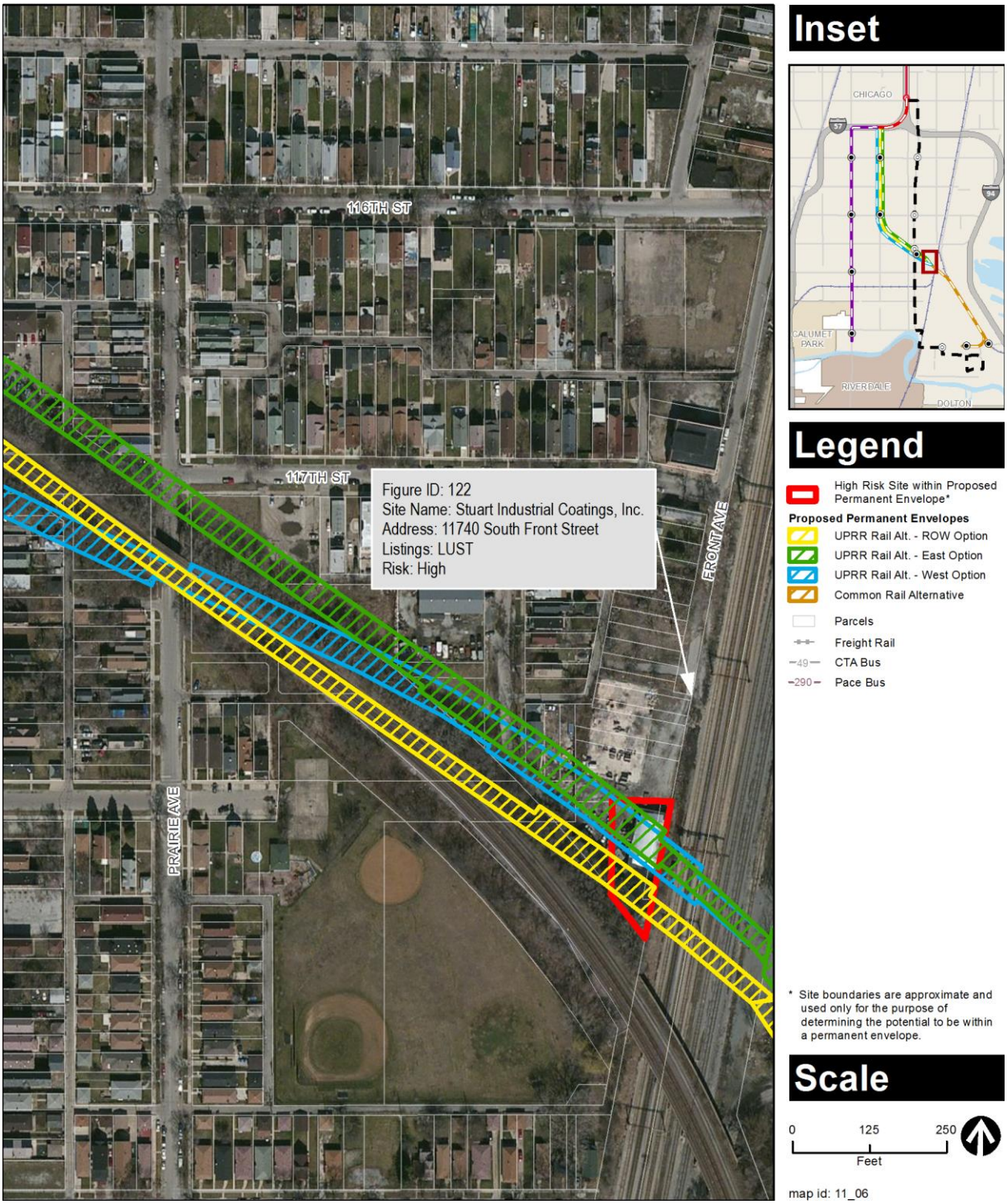

Figure A-4: Union Pacific Railroad Rail Alternative, High Concern Site 122

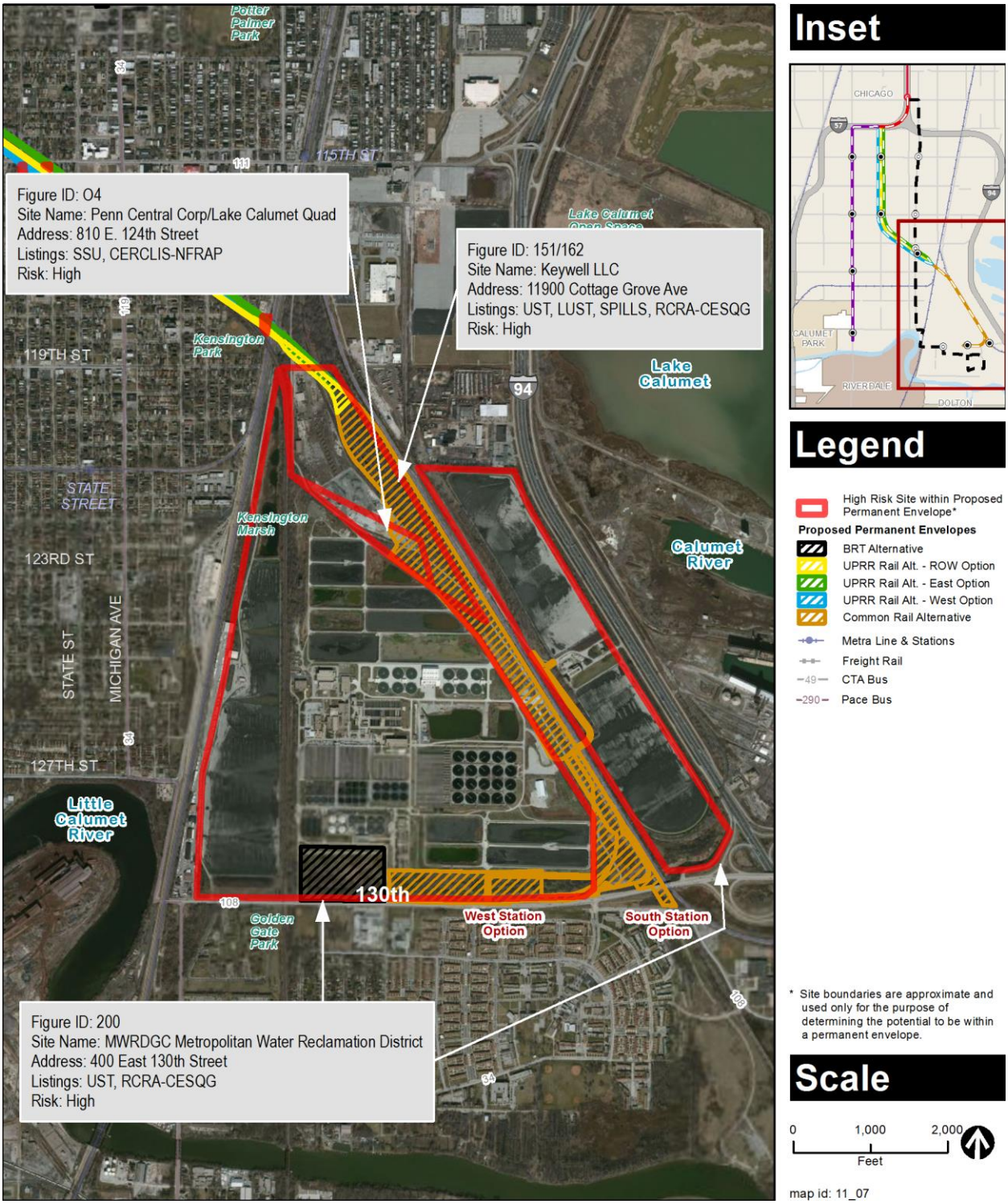

Figure A-5: Bus Rapid Transit and Union Pacific Railroad Rail Alternatives, High Concern Sites 151/162, 200, and O4

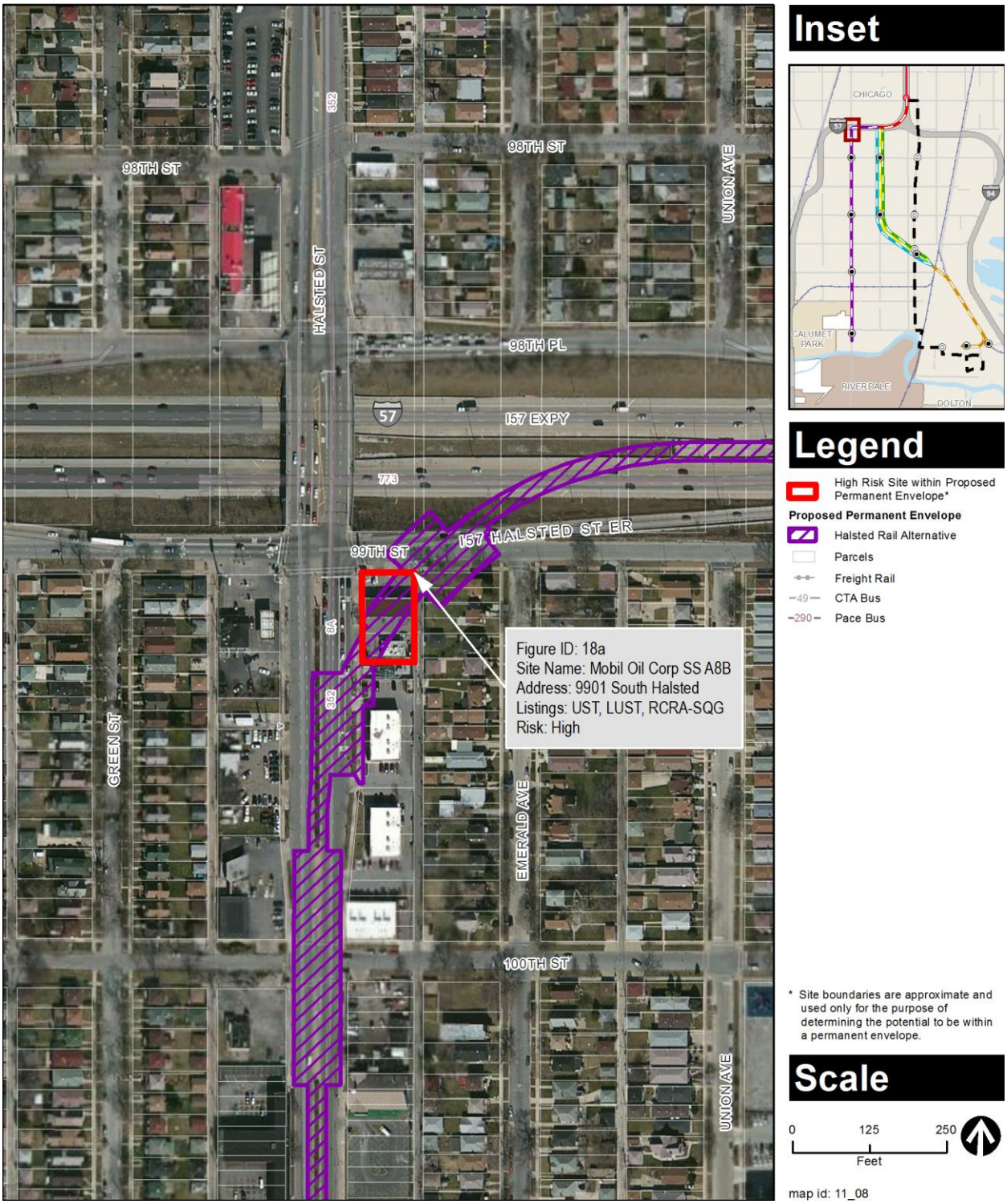

Figure A-6: Halsted Rail Alternative, High Concern Site 18a

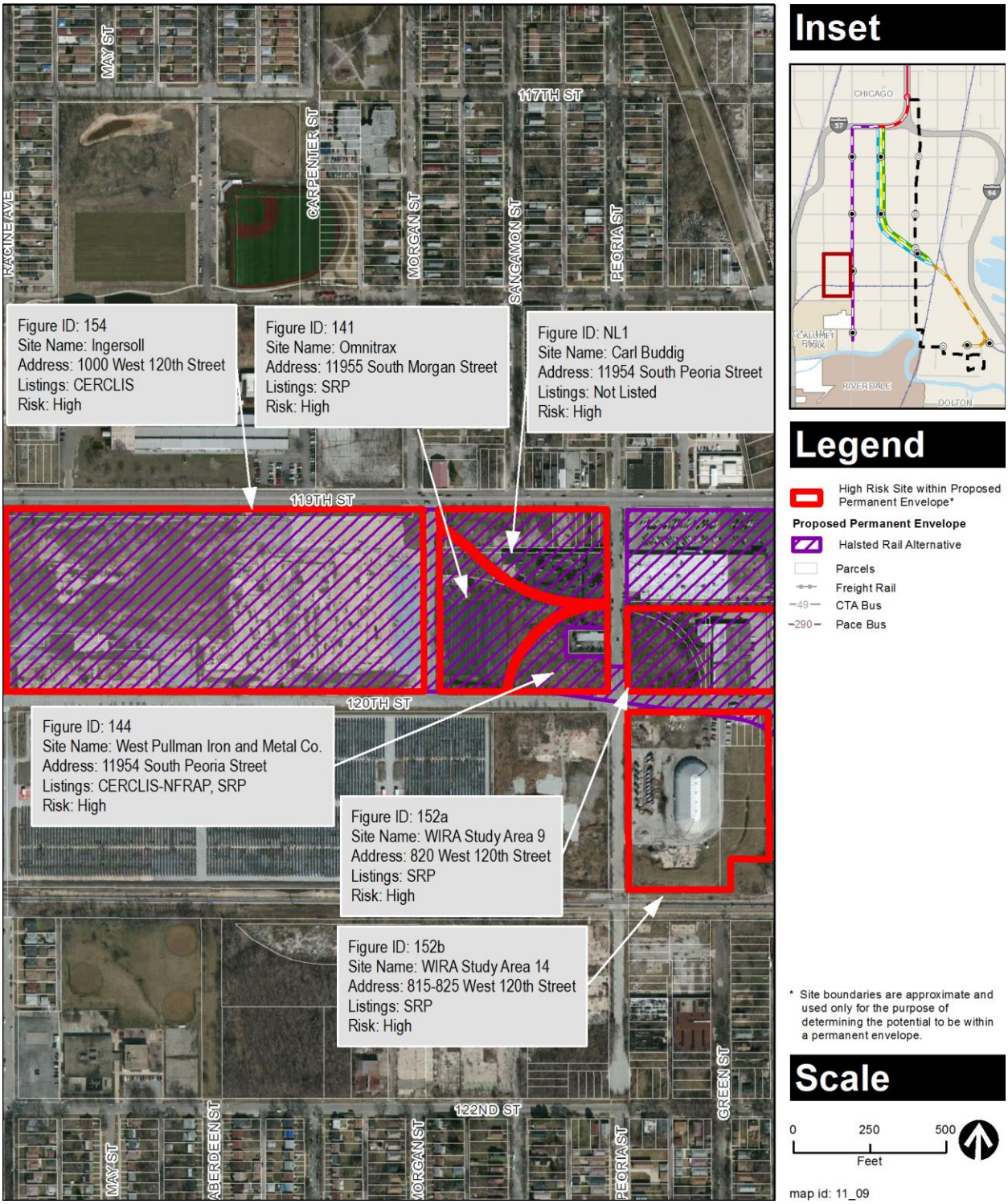

Figure A-7: Halsted Rail Alternative, High Concern Sites 154, 141, NL1, 144, 152a, and 152b

Appendix B
EDR Database Search Report

90786 CTC RLE Hazardous Materials
Cook, IL

Inquiry Number: 3385614.1s
August 10, 2012

EDR DataMap™ Environmental Atlas™

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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FOCUS MAP SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	8
CERC-NFRAP	5
CORRACTS	4
RCRA-TSDF	1
RCRA-LQG	3
RCRA-SQG	71
RCRA-CESQG	29
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	17
US BROWNFIELDS	1
STATE AND LOCAL RECORDS	
IL SSU	3
IL SWF/LF	1
IL NIPC	0
IL LUST	73
IL UST	141
WI MANIFEST	1
NY MANIFEST	1
IL SPILLS	79
IL ENG CONTROLS	6
IL INST CONTROL	9
IL SRP	26
IL DRYCLEANERS	5
IL BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

COOK, IL
CHICAGO, IL 60628

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL RECORDS

Proposed NPL..... Proposed National Priority List Sites
Delisted NPL..... National Priority List Deletions
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

STATE AND LOCAL RECORDS

IL NIPC..... Solid Waste Landfill Inventory
IL BROWNFIELDS..... Municipal Brownfields Redevelopment Grant Program Project Descriptions

EDR PROPRIETARY RECORDS

Manufactured Gas Plants..... EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

The Map ID column refers to the Map ID-Focus Map(s) of the listed site.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 12/27/2011 has revealed that there are 8

EXECUTIVE SUMMARY

CERCLIS sites within the searched area.

Site	Address	Map ID
109TH PLACE TEAR GAS	SG WEST 109TH PLACE	67-7
SHERWIN WILLIAMS CO	***11541 S CHAMPLAIN AVE***	***112-7,8***
LAKE CALUMET SMELTING	11901 S. CHAMPLAIN AVE.	135-11,12
INGERSOLL	1000 WEST 120TH STREET	154-10
INTERNATIONAL HARVESTER CO W P	***1015 W 120TH ST***	***155-10***
DUTCH BOY	WEST PULLMAN 12042 SOUT	159-10
SOUTH GREEN PLATING SHOP	12130 SOUTH GREEN ST	164-10
PULLMAN FACTORY	130TH ST & INDIANA	202-15

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 12/28/2011 has revealed that there are 5 CERC-NFRAP sites within the searched area.

Site	Address	Map ID
SHERWIN WILLIAMS CO	***10909 S COTTAGE GROVE A***	***66-7***
INLAND METAL REFINING COMPANY	***651 EAST 119TH STREET***	***129-11,12***
WEST PULLMAN IRON AND METAL CO	11954 S PEORIA AVE	144-10
CALUMET NU-EARTH DIST CENTER	NORTH 130TH ST & DOTY A	193-12,16
CIZCAR ET AL/VACANT LOT	1137-1141 VERMONT AVE	195-14

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 08/19/2011 has revealed that there are 4 CORRACTS sites within the searched area.

Site	Address	Map ID
SHERWIN WILLIAMS CO	***10909 S COTTAGE GROVE A***	***66-7***
SHERWIN WILLIAMS CO	***11541 S CHAMPLAIN AVE***	***112-7,8***
INLAND METAL REFINING COMPANY	***651 EAST 119TH STREET***	***129-11,12***
INTERNATIONAL HARVESTER CO W P	***1015 W 120TH ST***	***155-10***

EXECUTIVE SUMMARY

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 03/15/2012 has revealed that there is 1 RCRA-TSDF site within the searched area.

Site	Address	Map ID
SHERWIN WILLIAMS CO	***11541 S CHAMPLAIN AVE***	***112-7,8***

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/15/2012 has revealed that there are 3 RCRA-LQG sites within the searched area.

Site	Address	Map ID
CHICAGO DEPT OF ENV (SPILL)	11100 S STEWART AVE (SP	81-6
SHERWIN WILLIAMS CO	***11541 S CHAMPLAIN AVE***	***112-7,8***
QUALA SERVICES LLC	803 E 120TH ST	147-12

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/15/2012 has revealed that there are 71 RCRA-SQG sites within the searched area.

Site	Address	Map ID
GILLESPIE SCH	9301 S STATE	2-2
CITY OF CHICAGO (ABANDONMENT)	9431 S VERNON	3-2
AMOCO 5921	400 E 95TH ST AND KING	5-2
AMOCO 15459	36 W 95TH AND LAFAYETTE	9-2
EVERS	9811 S LOWE	14-1,3
MOBIL OIL CORP SS A8B	9901 S HALSTED	18-3
BHAGATS AMOCO	9900 S HALSTED	18-3
SWEIS RAY TOWN AND COUNTRY MIN	10007 S MICHIGAN AVE	20-4
JOY AUTO REPAIR	10001 S HALSTED	21-3
BELL BROS 29 MIN CLEANERS INC	10000 S HALSTED ST	21-3
FERNWOOD	10041 S UNION	22-3
BENNETT	10115 S PRAIRIE AVE	23-4
WALGREENS NO 1069	319 E 103RD ST	31-4
WALGREENS STORE #5123	10300 S MICHIGAN	32-4

EXECUTIVE SUMMARY

Site	Address	Map ID
F & R QUALITY CLEANERS	201 W. 103RD ST.	34-4
HARDY CORP	***711 W 103RD ST***	***36-3***
DELITE CLEANERS	816 W 103RD ST	37-3
MCDONNELL CLEANERS	932 W 103RD ST	38-3
AMOCO 8614	10301 S HALSTED ST	39-3
GARVEY	10309 S MORGAN	40-3
AMERICAN IDEAL	10351 S MICHIGAN AVE	42-4
MICHIGAN AVENUE COLLISION	10554 S MICHIGAN	52-4
WALGREEN N0 2300	10620 S HALSTED ST	57-3
BETTY BRITE CLEANERS	10630 S HALSTED	57-3
GTE SERVICE CTR INC	10635 S WENTWORTH	58-4
RAYS CLEANERS	10738 S MICHIGAN AVE	60-4
VAN VLISSINGEN PETER SCHOOL	***137 W 108TH PL***	***63-4,7***
DUNNE	10845 S UNION	64-3,6
WALGREENS 2210	11040 S MICHIGAN AVE	72-7
SOUTH SIDE PREP ACADEMY	250 E 111TH ST	74-7
STAR CLEANERS	149 W 111TH ST	80-7
PENTECOSTAL TEMPLE CHURCH OF G	415 THRU 419 W 111TH ST	81-6
SEW CLEAN	519 W 111TH ST	82-6
JOHNS CLEANERS	11129 S HALSTED	84-6
LONGS GARDEN CENTER INC	***11226 S HALSTED***	***87-6***
KLEEN TOWNE CLEANERS	***11249 S HALSTED***	***88-6***
BRENAN SCHOOL	11411 EGGLESTON	95-6
GOODYEAR AUTO SERVICE CTR	11442 S MICHIGAN AVE	98-7
QUALITY MUFFLER	11453 S HALSTED	99-6
ILLINOIS CENTRAL RAILROAD	115TH & COTTAGE GROVE	101-7
TRIANGLE TRANSMISSION	***35 W 115TH ST***	***104-7***
CHICAGO HOSUING AUTHORITY	833 W 115TH ST	107-6
GONNELLA BAKING CO	318 E KENSINGTON	116-7
ROSELAND AUTO BODY	821 W 116TH ST	119-6
STUART INDUSTRIAL COATINGS INC	11740 S FRONT ST	125-7
SCHNEIDER TANK LINES	11861 SOUTH COTTAGE GRO	143-11
CLEAN HARBORS ENV SERVICES	11861 COTTAGE GROVE-BLD	143-11
BULKMATIC TRANSPORT CO	12000 S DOTY AVE	146-12
NORTRU INC TRANSPORTATION GROU	801 E 120TH ST	147-12
COMED-MANHOLE	120TH ST & PRINCETON	148-11
HARBOR TOOL MFG INC	12140 S PEORIA AVE	165-10
MODERN STEEL	1010 W 122RD ST	166-10
BIG MELS CLEANERS	12256 S HALSTED	168-10
METRA	12301 S INDIANA AVE	170-11
GOMPERS SCH	12302 S STATE	171-11
AAMCO	12307 S HALSTED	172-10
METCALFE SCHOOL	12339 S NORMAL	173-10
NANSEN SCHOOL	12607 S UNION	179-10
COM ED	48 E 127TH ST	183-11
NACME STEEL PROCESSING LLC	429 W 127TH ST	186-10
CEDAR PARK CEMETERY	***12540 S HALSTED ST***	***188-10***
METAL MANAGEMENT MIDWEST INC	12701 S DOTY AVE-B	189-12
YOUNGS AUTO SUPPLY INC	12853 S HALSTED	194-10,14
CHICAGO, CITY OF	1100 E 130TH PL	196-16
MOBILE STORAGE GROUP	1465 E 130TH ST	197-16
LAND & LAKES TRANSFER STATION	1258-1300 E 130TH ST	199-16
SMITH TIRE SERVICE	13004 S INDIANA	202-15
CARVER MILITARY ACADEMY	13100 S DOTY AVE	207-16
DUBOIS	330 E 133RD ST	209-15
CARVER PRIMARY	901 E 133RD PL	210-16

EXECUTIVE SUMMARY

Site	Address	Map ID
CARVER MIDDLE	801 E 133RD PL	211-16

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/15/2012 has revealed that there are 29 RCRA-CESQG sites within the searched area.

Site	Address	Map ID
TURNER DREW LANGUAGE ACADEMY	9300 S PRINCETON AVE	1-2
HARLAN COMMUNITY ACADEMY HS	9652 S MICHIGAN AVE	12-2
SHEDD BRANCH SCHOOL	200 E 99TH ST	17-4
ABA NORGETOWN	437 E 103RD ST	26-4
HUGHES LANGSTON SCHOOL	226 W 104TH ST	44-4
KOHN SCHOOL	10414 S STATE ST	46-4
MOUNT VERNON ELEMENTARY	10540 S MORGAN ST	53-3
COM ED	10847 S MICHIGAN AVE	62-4,7
ROSELAND AUTO SALES INC	271 E 110TH ST	69-7
RANSOM TRANSPORT	352 W 110TH ST	70-6,7
PALMER PARK	201 E 111TH ST	75-7
FENGER SCH	11220 S WALLACE	86-6
CURTIS ELEMENTARY	32 E 115TH ST	102-7
BETTY BRITE CLEANERS	11518 S MICHIGAN AVE	111-7
PEP BOYS #891	11550 SO HALSTED	114-6
SONGHAI LEARNING INSTITUTE	11725 S PERRY AVE	123-7
AMERICAN CLYBOURN FINISHING CO	11730 S FRONT ST	125-7
US GEAR CORP/HEAT TREAT CORP	1020-1120 W 119TH ST	137-10
WEST PULLMAN SCHOOL	11941 S PARNELL AVE	142-10
KEYWELL LLC	11900 COTTAGE GROVE AVE	151-11
EXELON SOLAR PLANT	1201 W 120TH ST	156-10
PRAXAIR DISTRIBUTION INC	12054 SOUTHWEST DOTY AV	157-12
OWENS JESSE COMMUNITY ACADEMY	12450 S STATE ST	176-11
WALGREENS #0186	12635 S HALSTED	182-10
AIRGAS SPECIALTY GASES	12722 S WENTWORTH AVE	187-11
MWRDGC METROPOLITAN WATER RECL	***400 E 130TH ST***	***200-15***
CARVER PARK	939 E 132ND ST	205-16
ALTGELD GARDENS	977 E 132ND STREET	205-16
WHEATLEY PHYLLIS CENTER	902 E 133RD PL	210-16

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 04/02/2012 has revealed that there are 17 ERNS sites within the searched area.

EXECUTIVE SUMMARY

Site	Address	Map ID
Not reported	GLISBEE SCHOOL, 9301 S.	2-2
Not reported	10135 SOUTH YALE ST	25-4
Not reported	240 EAST 106TH ST	54-4
Not reported	240 EAST 106 TH STREET	54-4
Not reported	CALUMET YARD 204 EAST 1	55-4
Not reported	1040 WEST 106TH ST	56-3
Not reported	352 WEST 110 ST	70-6,7
Not reported	11255 S EGGLESTON ST	89-6
Not reported	803 EAST 120TH ST.	147-12
Not reported	803 EAST 120TH ST.	147-12
Not reported	12000 SOUTH EMERALD	150-10
Not reported	12101 S. DOTY	161-12
Not reported	12101 SOUTH DOTY AVE DO	161-12
Not reported	25 EAST 126TH STREET	181-11
Not reported	633 EAST 130TH ST.	203-15,16
Not reported	941 E 132ND STREET	205-16
Not reported	13201 SOUTH ELLIS	206-16

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/27/2011 has revealed that there is 1 US BROWNFIELDS site within the searched area.

Site	Address	Map ID
FORMER AMFORGE FACILITY	1250 W. 119TH STREET	139-10

STATE AND LOCAL RECORDS

IL SSU: The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

A review of the IL SSU list, as provided by EDR, and dated 07/10/2012 has revealed that there are 3 IL SSU sites within the searched area.

Site	Address	Map ID
U.S. SCRAP	391 EAST KENSINGTON	115-7
INLAND METAL REFINING COMPANY	***651 EAST 119TH STREET***	***129-11,12***
DUTCH BOY PAINT	12042 SOUTH PEORIA	159-10

EXECUTIVE SUMMARY

IL SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Illinois Environmental Protection Agency's Available Disposal for Solid Waste in Illinois--Solid Waste Landfills Subject to State Surcharge list.

A review of the IL SWF/LF list, as provided by EDR, and dated 12/31/2010 has revealed that there is 1 IL SWF/LF site within the searched area.

Site	Address	Map ID
US SCRAP	391 E KENSINGTON	115-7

IL LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Illinois Environmental Protection Agency's LUST Incident Report.

A review of the IL LUST list, as provided by EDR, and dated 03/22/2012 has revealed that there are 73 IL LUST sites within the searched area.

Site	Address	Map ID
QUALITY CAR WASH NFA/NFR Letter: 04/08/1997	9417 SOUTH STATE ST.	4-2
BP	***400 EAST 95TH STREET***	***5-2***
SHELL OIL CO. NFA/NFR Letter: 05/27/2004	9500 SOUTH MARTIN LUTHE	5-2
S.W.C. 95TH & MLK LLC	347 EAST 95TH STREET	6-2
MEDLEY'S MOVING & STORAGE NFA/NFR Letter: 06/23/2011	251 EAST 95TH ST.	7-2
MEDLEY'S MOVING & STORAGE NFA/NFR Letter: 11/15/2000	251 EAST 95TH ST.-B	7-2
SHELL OIL CO.	4 EAST 95TH ST.	8-2
AMOCO SERVICE STATION #15459. NFA/NFR Letter: 05/07/2003	36 WEST 95TH ST.	9-2
ABBOTT	49 EAST 95TH ST.	10-2
ABBOTT	45 EAST 95TH ST.	10-2
EQUILON ENTERPRISES LLC NFA/NFR Letter: 09/14/2005	9811 HALSTED	15-1,3
SECRETARY OF STATE - DRIVER FA NFA/NFR Letter: 11/17/1995	9901 DR MARTIN LUTHER K	16-4
BP	***9900 SOUTH HALSTED STRE***	***18-3***
MOBIL OIL CO.	05A8B MOBILE ST./9901 S	18-3
AMOCO OIL CO. #15525	99TH & HALSTED	18-3
TOWN & COUNTRY GAS MART NFA/NFR Letter: 01/27/2009	10007 SOUTH MICHIGAN AV	20-4
HESTER, FRANNY	10101-03 SOUTH HALSTED	24-3
KADALIMATTON, SIBI	446 EAST 103RD ST.	26-4
VACANT JIFFY LUBE STORE 208	***350 EAST 103RD STREET***	***29-4***
AGUILAR, ABEL	415 EAST 103RD ST.	30-4
AMOCO OIL CO. #15991	10301 SOUTH STATE ST.	33-4
ONE HOUR MARTENIZING NFA/NFR Letter: 02/27/1991 NFA/NFR Letter: 02/27/1991	201 WEST 103RD ST.	34-4

EXECUTIVE SUMMARY

Site	Address	Map ID
VACANT LOT	***201-217 EAST 23RD STREE***	***34-4***
NFA/NFR Letter: 11/17/2004		
HARDY CORP	***711 W 103RD ST***	***36-3***
MUSTAFA, KHADIM	10301 SOUTH HALSTED	39-3
NFA/NFR Letter: 11/21/2008		
NFA/NFR Letter: 07/30/2008		
CHICAGO, CITY OF	351 WEST 104TH ST.	45-3
NFA/NFR Letter: 09/19/1995		
NEIGHBORHOOD HOUSING SERVICES	10426 SOUTH MICHIGAN AV	47-4
NFA/NFR Letter: 06/09/2010		
ILLINOIS BELL TELEPHONE	413 WEST 105TH STREET	51-3
NFA/NFR Letter: 03/21/2005		
C & O AUTO REBUILDERS	10554 SOUTH MICHIGAN AV	52-4
NFA/NFR Letter: 03/31/2008		
SHELL OIL CO.	10655 SOUTH HALSTED	59-3
NFA/NFR Letter: 09/07/1999		
WILLIAM RANSOM TRANSPORTATION	352 WEST 110TH ST.	70-6,7
SOUTHSIDE COLLEGE PREPATORY AC	***250 EAST 111TH ST.***	***74-7***
NFA/NFR Letter: 06/29/2000		
YMCA	4 EAST 111TH ST.	76-7
NFA/NFR Letter: 02/24/2009		
ROSELAND MARATHON	***2 WEST 111TH STREET***	***76-7***
ROSELAND MEDICAL CENTER	100-136 WEST 111TH STRE	78-7
NFA/NFR Letter: 01/25/2008		
PENTICOSTAL TEMPLE	419 WEST 111TH ST.	81-6
34 WARD OFFICE/CITY OF CHICAGO	***507 WEST 111TH STREET***	***82-6***
NFA/NFR Letter: 08/24/2004		
LONGS GARDEN CENTER INC	***11226 S HALSTED***	***87-6***
NFA/NFR Letter: 02/19/1999		
PULLMAN CO	***65 WEST 113TH PLACE***	***93-7***
NFA/NFR Letter: 05/04/2004		
MARQUETTE BANK	135-39 WEST 114TH ST.	94-7
TADROS, MUSA	11442 SOUTH MICHIGAN AV	98-7
NFA/NFR Letter: 01/27/1998		
FIRST COOK COMM. BANK	11453 SOUTH HALSTED ST.	99-6
NFA/NFR Letter: 08/18/1992		
FRIESON, PHYLLIS	342 EAST 115TH STREET	100-7
NFA/NFR Letter: 05/29/2007		
ABANDONED GAS STATION	***2 WEST 115TH STREET***	***103-7***
TRIANGLE TRANSMISSION	***35 W 115TH ST***	***104-7***
CHICAGO, CITY OF	11500 SOUTH PERRY	105-7
COMMUNITY HIGH SCHOOL DIST. #2	731 WEST 115TH ST.	106-6
NFA/NFR Letter: 10/18/1995		
CHICAGO HOUSING AUTHORITY	***833 WEST 115TH STREET***	***107-6***
NFA/NFR Letter: 11/01/2010		
AMOCO OIL	***11500 SOUTH HALSTED STR***	***108-6***
NFA/NFR Letter: 09/05/2003		
MOBIL CARWASH	***11501 SOUTH HALSTED STR***	***108-6***
NFA/NFR Letter: 11/15/2002		

EXECUTIVE SUMMARY

Site	Address	Map ID
E.J. BROWNLEE TRANSPORTATION NFA/NFR Letter: 04/01/1999	1001 WEST 115TH ST.	109-6
KENSINGTON SERV STATION	162 E KENSINGTON	117-7
CLARK OIL & REFINING NFA/NFR Letter: 01/09/1995	11555 SOUTH MICHIGAN AV	118-7
MICKEY'S AUTO SERVICE CENTER	***11656 SOUTH HALSTED AVE***	***121-6***
STUARTS CHEMICAL & PAINT	11740 FRONT ST.	122-7
HUFF & HUFF INC.	651 EAST 179TH ST.	131-12
GREATER CANAAN BAPTIST CHURCH NFA/NFR Letter: 12/12/2007	38 WEST 119TH STREET	132-11
CHICAGO, CITY OF	11900 SOUTH STATE ST.	133-11
BIG SAM'S PROPERTIES	333 WEST 119TH STREET	134-10,11
CHICAGO, CITY OF - DEPARTMENT	1220 WEST 119TH STREET	138-10
BULKOA INC NFA/NFR Letter: 04/08/2003	11861 S COTTAGE GROVE A	143-11
SANDHU PETROLEUM, INC.	11957 SOUTH HALSTED STR	145-10
PSC CONTAINER SERVICES, LLC	803 EAST 120TH ST.	147-12
KEYWELL CO. NFA/NFR Letter: 01/24/1996	***11900 SOUTH COTTAGE GRO***	***151-11***
INTERNATIONAL HARVESTER NFA/NFR Letter: 10/14/2010 NFA/NFR Letter: 10/14/2010	***1015 WEST 120TH STREET***	***155-10***
CHICAGO MALLEABLE CASTINGS	***1201 WEST 120TH STREET***	***156-10***
HANCOCK HOUSE LLC	***12045 SOUTH EMERALD AVE***	***160-10***
BANK OF COMMERCE AND IND NFA/NFR Letter: 07/12/1991	12300 S MICHIGAN AVE	169-11
RED'S CHECKPOINT NFA/NFR Letter: 07/11/2002	12535 SOUTH HALSTED ST.	178-10
PROGRESSIVE BAPTIST CHURCH	26 EAST 127TH ST.	184-11
CEDAR PARK CEMETERY	***12540 S HALSTED ST***	***188-10***
CHRIST CHURCH	12844 SOUTH HALSTED ST.	194-14
CHICAGO HOUSING AUTHORITY NFA/NFR Letter: 09/10/2007	***940 EAST 132ND STREET***	***205-16***

IL UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Illinois State Fire Marshal's STC Facility List.

A review of the IL UST list, as provided by EDR, and dated 05/01/2012 has revealed that there are 141 IL UST sites within the searched area.

Site	Address	Map ID
CITGO SUPER WASH & WAX	9417 S. STATE STREET	4-2
BP	***400 EAST 95TH STREET***	***5-2***
SHELL STATION 1545-28	9500 S MARTIN LUTHER KI	5-2
VACANT LAND	333 E. 95TH STREET	6-2
MEDLEY MOVING & STORAGE, INC.	251 E 95TH ST	7-2
MOBIL GAS & FOOD MART	4 E. 95TH STREET	8-2
SS#15459 FAC#10443	36 W. 95TH ST.	9-2

EXECUTIVE SUMMARY

Site	Address	Map ID
ATLANTIC RICHFIELD CO	1 E 95TH ST	9-2
ABBOTT PARK FIELDHOUSE	49 E 95TH ST	10-2
CHICAGO STATE UNIVERSITY	9501 S DR KINGS DR	11-2
ANCHOR PRUDENTIAL HMO	9718 SOUTH HALSTED	13-1
SHELL	9802 S. HALSTED	15-1,3
CLARK GAS	9811 S. HALSTED	15-1,3
DRIVER SER FACILITY	9901 S MARTIN LUTHER KI	16-4
MOBIL #10769	9901 SOUTH HALSTEAD STR	18-3
BP	***9900 SOUTH HALSTED STRE***	***18-3***
#013611	9948 S HALSTED	19-3
O.S. CORPORATION D/B/A CITGO	10007 S. MICHIGAN AVENU	20-4
JOY AUTO SERVICE	10001 SOUTH HALSTED STR	21-3
FERNWOOD TOWING & TUNE-UPS	10101-10103 S ASHLAND	24-3
R & R MARATHON	446 E. 103RD STREET	26-4
METROPOLITAN FAMILY SERVICES	235E 103RD ST	27-4
#014816	214 E 103RD ST	27-4
VACANT JIFFY LUBE STORE 208	***350 EAST 103RD STREET***	***29-4***
VACANT BUILDING	415 E 103RD AVE THIRD P	30-4
G&J AUTOMOTIVE	122 E 103RD ST	32-4
E-Z GO #077	10301 S MICHIGAN AVE	32-4
SHELL STATION 1545-68	1 W 103RD ST STATE	33-4
MARATHON GAS STATION & MINI-MA	10301 S STATE ST	33-4
AMOCO SS #15991 FACILITY#11758	103RD & STATE 18599	34-4
CITGO	210 W. 103RD STREET	34-4
VACANT LOT	***201-217 EAST 23RD STREE***	***34-4***
MCCORMICK PLACE VACANT LOT	201-217 E. CERMAK RD.	34-4
CONSTRUCTION SITE	201-231 W. 87TH STREET	34-4
HARDY CORP	711 W 103RD ST	36-3
MARATHON GAS AND FOOD	10301 S. HALSTED STREET	39-3
AMERICAN IDEAL CLEANING CO., I	10351 S. MICHIGAN AVE.	42-4
VACANT PROPERTY	10400-10420 S. MICHIGAN	43-4
CHICAGO FIRE DEPARTMENT ENGINE	330 WEST 104TH STREET	45-3
ROSELAND PUMPING STATION	351 W 104TH ST	45-3
VACANT PROPERTY	10426 S. MICHIGAN AVENU	47-4
FERNWOOD PLAYGROUND PARK	10436 S WALLACE	49-3
OUR #52-9652-105	NWC HALSTED & 105TH ST	50-3
IL BELL TELEPHONE CO	413 W 105TH	51-3
AUTO REPAIR SHOP	10554 S. MICHIGAN AVENU	52-4
GT&T SERVICE CENTER INC	10635 S WENTWORTH AVE	58-4
CITGO GAS & MINI MART	10655 S HALSTED ST	59-3
VACANT RESIDENTIAL BUILDING	226-248 W 107TH PLACE	61-4
VAN VLISSINGEN PETER SCHOOL	***137 W 108TH PL***	***63-4,7***
VACANT APARTMENT BUILDING	10834 S PERRY AVE	65-4,7
ROSELAND AUTO SALES CO	27 E 110TH ST	68-7
RANSOM TRANSPORT BUS GARAGE	352 W 110TH ST	70-6,7
PULLMAN BRANCH LIBRARY	11011 S INDIANA	71-7
MUFFLER & BRAKE MAN, INC.	11038 SOUTH HALSTED	73-6
MUFFLER & BRAKE MAN CAR CARE C	11048 S HALSTED ST	73-6
SOUTHSIDE COLLEGE PREPATORY AC	***250 EAST 111TH ST.***	***74-7***
ROSELAND MARATHON	***2 WEST 111TH STREET***	***76-7***
PHILLIPS 66	11100 S. STATE STREET	76-7
ABANDONED SERVICE STATION	68 W 111TH ST	77-7
ANGELICA HEALTHCARE SERVGROUP	100 - 140 W. 111TH STRE	78-7
ROSELAND COMMUNITY HOSPITAL	45 WEST 111TH STREET	79-7
34 WARD OFFICE/CITY OF CHICAGO	***507 WEST 111TH STREET***	***82-6***
GJK PETROLEUM, INC.	734 W. 111TH STREET	83-6

EXECUTIVE SUMMARY

Site	Address	Map ID
KANG WON H	11201-227 S MICHIGAN AV	85-7
LONG-GARDEN-CENTER INC	11226 S HALSTED	87-6
DEVOTION UNISEX BEAUTY SALON	11300 S HALSTED ST	90-6
VACANT BULDING	11321 S WENTWORTH AVENU	91-7
WHITMAL OIL SER INC	11328 S HALSTED	92-6
PULLMAN CO	***65 WEST 113TH PLACE***	***93-7***
VACANT BUILDING	133-37 W 114TH ST THRID	94-7
MCDONALD'S CORP.	11421 S. HALSTED STREET	96-6
TORINO GARAGE	11439 S COTTAGE GROVE	97-7
GOODYEAR TIRE & RUBBER	11442 S MICHIGAN AVE	98-7
FORMER QUALITY MUFFLER SHOP	11453 S HALSTED ST	99-6
USED APPLLIANCE STORE	342-44 E. 115TH STREET	100-7
ILLINOIS CENTRAL RAILROAD	11500 S COTTAGE GROVE	101-7
SHERWIN WILLIAMS CHICAGO FACIL	549 E. 115TH ST.	101-7
CURTIS SCHOOL	32 E 115TH ST	102-7
ABANDONED GAS STATION	***2 WEST 115TH STREET***	***103-7***
TRIANGLE TRANSMISSION	***35 W 115TH ST***	***104-7***
ABANDONED SERVICE STATION	11500 S PERRY	105-7
CHA WAREHOUSE	833 W 115TH ST	107-6
AMOCO OIL	***11500 SOUTH HALSTED STR***	***108-6***
FORMER CHA WAREHOUSE	901 W. 115TH STREET	108-6
MOBIL CARWASH	***11501 SOUTH HALSTED STR***	***108-6***
0415 CLARK SER STATION	11525 S HALSTED ST	108-6
E J BROWNLEE TRANSPORTATION IN	1001 W 115TH ST	109-6
CATHOLIC CONVENT	11515 S. PRAIRIE AVENUE	110-7
KENSINGTON SERVICE STATION	162 E KENSINGTON	117-7
0707 CLARK SER STATION	11555 S MICHIGAN AVE	118-7
MICHIGAN CITGO	11600 S MICHIGAN AVE	120-7
ABANDONED SERVICE STATION	11700 S HALSTED	124-6
STUART INDUSTRIAL COATINGS INC	11740 S FRONT ST	125-7
VACANT LAND	11819 - 11849 SOUTH GRE	127-6,10
GREATOR CANAAN MBC/VACANT LOT	11856 S. LAFAYETTE	128-7,11
INLAND METALS REFINING CO INC	651 E 119TH ST	129-11,12
ABANDONED SERVICE STATION	11900 S STATE STREET	133-11
BIG SAM'S GROCERS	333 W. 119TH STREET	134-10,11
CONSTRUCTION SITE (FUTURE RJKC	1220 W. 119TH STREET	138-10
AMFORGE	1324 W. 119TH STREET	140-9,10
BULKOA INC	11861 S COTTAGE GROVE A	143-11
CONOCO PHILLIPS 66	11959 S. HALSTED	145-10
ALLWASTE CONTAINER SERVICES	803 E 120TH ST	147-12
PRAYER WARRIORS BAPTIST CHURCH	438 W. 120TH STREET	149-10
S G KEYWELL CO	11900 S COTTAGE GROVE A	151-11
DUTCH BOY	12000 SOUTH PEORIA ST.	153-10
FORMER WEST PULLMAN WORKS	1015 W 120TH ST	155-10
VACANT SITE	1210 W 120TH ST	156-10
VACANT LOT	1201 W. 120TH STREET	156-10
LIQUID CARBONIC CORP	12054 S W DOTY AVE	157-12
TRI CITY TANK WASH	11901 S COTTAGE GROVE	158-11,12
HANCOCK HOUSE, LLC	12045 S. EMERALD	160-10
CENTRAL STATES PIPE & SUPPLY I	12101 S PEORIA	163-10
POWER & LIGHT EVANGELIST CHURC	12257 S EMERALD ST	167-10
BANK OF COMMERCE & INDUSTRY	12300 S MICHIGAN AVE	169-11
METRA KYD YARD	12301 S INDIANA AVE	170-11
CAL GAS INC.	12304 S. HALSTED ST.	172-10
KYD 124TH ST SHOP	12357 S INDIANA AVE	174-11
METROPOLITAN WATER RECLAMATION	129 EAST 124TH PLACE	175-11

EXECUTIVE SUMMARY

Site	Address	Map ID
MWRD-125TH PUMPING STATION	129 E. 124TH PLACE	175-11
FRANKLIN GEORGE	12535 S HALSTED	178-10
BROWN ACADEMY	12607 S. UNION STREET	179-10
PROGRESSIVE BAPTIST CHURCH	26 E 127TH ST	184-11
COMMUNITY GAS	150 W. 127TH STREET	185-11
BLUE ISLAND CITGO	3196 WEST 127TH STREET	187-11
AIR PRODUCTS & CHEMICALS INC	12721 WENTWORTH AVE	187-11
CEDAR PARK CEMETERY ASSN INC	12540 S HALSTED ST	188-10
AMOOC SS #18717 FACILITY #2427	12701 SOUTH HALSTED	189-12
#008489	12731 S HALSTED	190-10
CONTINENTAL GRAIN CO	127TH & DOTY AVE	191-12
CHRIST CHURCH BAPTIST	12844 S HALSTED ST	194-14
TRIPLEX MARINE SERV	13100 S MORGAN ST	198-14
CALUMET WATER RECLAMATION PLAN	400 E. 130TH STREET	200-15
COOK COUNTY LUMBER CO	200 E 130TH ST	201-15
INTERNATIONAL TRANSP SER INC	130TH & INDIANA AVE	202-15
130TH CITGO	13002 S INDIANA	202-15
RIVERDALE VILLAGE OF	130TH & HALSTED ST	204-14
MAINTENANCE BUILDING	940 E. 132ND STREET	205-16
CARVER PARK NATATORIUM	939 E 132ND ST	205-16
SCHOOL / CHURCH	13300 S. LANGLEY	208-16
SKIPPER'S MARINA	13421 S VERNON	212-15

WI MANIFEST: Hazardous waste manifest information.

A review of the WI MANIFEST list, as provided by EDR, has revealed that there is 1 WI MANIFEST site within the searched area.

Site	Address	Map ID
MWRDGC METROPOLITAN WATER RECL	***400 E 130TH ST***	***200-15***

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, has revealed that there is 1 NY MANIFEST site within the searched area.

Site	Address	Map ID
KLEEN TOWNE CLEANERS	***11249 S HALSTED***	***88-6***

IL SPILLS: A listing of incidents reported to the Office of Emergency Response.

A review of the IL SPILLS list, as provided by EDR, and dated 07/18/2012 has revealed that there are 79 IL SPILLS sites within the searched area.

Site	Address	Map ID
Not reported	9417 S STATE ST	4-2
Not reported	400 E 95TH ST	5-2

EXECUTIVE SUMMARY

Site	Address	Map ID
Not reported	9500 S MARTIN LUTHER KI	5-2
Not reported	9501 S KING DR	5-2
Not reported	347 E 95TH ST	6-2
Not reported	251 E 95TH ST	7-2
Not reported	251 E 95TH ST	7-2
Not reported	251 E 95TH ST	7-2
Not reported	36 W 95TH ST	9-2
Not reported	49 E 95TH ST	10-2
Not reported	446 E 103RD ST	26-4
Not reported	350 E 103RD ST	29-4
Not reported	415 E 103RD ST	30-4
Not reported	10301 S STATE ST	33-4
Not reported	201 W 103RD ST	34-4
Not reported	201 W 103RD ST	34-4
Not reported	201-217 E 23RD ST	34-4
Not reported	105 W 103RD ST	35-4
Not reported	10301 S HALSTED	39-3
Not reported	351 W 104TH ST	45-3
Not reported	10426 S MICHIGAN AVE	47-4
Not reported	10450 S MICHIGAN AVE	48-4
Not reported	10554 S MICHIGAN AVE	52-4
Not reported	240 E 106TH ST	54-4
Not reported	352 W 110TH ST	70-6,7
Not reported	250 E 111TH ST	74-7
Not reported	4 E 111TH ST	76-7
Not reported	2 W 111TH	76-7
Not reported	2 W 111TH ST	76-7
Not reported	100-136 W 111TH ST	78-7
Not reported	420 W 111TH ST	81-6
Not reported	420 W. 111TH ST.	81-6
Not reported	419 W 111TH ST	81-6
Not reported	419 W 111TH ST	81-6
Not reported	507 W 111TH ST	82-6
Not reported	65 W 113TH PL	93-7
Not reported	135-39 W 114TH ST	94-7
Not reported	11442 S MICHIGAN AVE	98-7
Not reported	11453 S HALSTED ST	99-6
Not reported	342 E 115TH ST	100-7
Not reported	344 E 115TH ST	100-7
Not reported	2 W 115TH ST	103-7
Not reported	2 W 115TH ST	103-7
Not reported	35 W 115TH ST	104-7
Not reported	833 W 115TH ST	107-6
Not reported	1001 W 115TH ST	109-6
Not reported	11515 PRAIRIE	110-7
Not reported	162 E KENSINGTON AVE	117-7
Not reported	38 W 119TH ST	132-11
Not reported	11900 S STATE ST	133-11
Not reported	333 W 119TH ST	134-10,11
Not reported	1220 W 119TH ST	138-10
Not reported	1220 WEST 119TH ST.	138-10
Not reported	11957 S HALSTED ST	145-10
Not reported	803 E 120TH ST	147-12
Not reported	803 E 120TH ST	147-12
ALLWASTE CONTAINER SERVICES	803 E 120TH ST	147-12
Not reported	803 E 120TH ST	147-12

EXECUTIVE SUMMARY

Site	Address	Map ID
Not reported	803 E 120TH ST	147-12
KEYWELL CO.	***11900 SOUTH COTTAGE GRO***	***151-11***
Not reported	900 W 120TH ST	153-10
Not reported	1015 WEST 120TH ST	155-10
Not reported	1015 W 120TH ST	155-10
Not reported	1015 W 120TH ST	155-10
Not reported	1015 W 120TH ST	155-10
Not reported	1201 W 120TH ST	156-10
Not reported	12054 S DOTY AVE	157-12
Not reported	12045 S EMERALD AVE	160-10
Not reported	12101 S DOTY AVE	161-12
Not reported	11900 S COTTAGE GROVE A	162-11,12
Not reported	12300 S MICHIGAN AVE	169-11
Not reported	125TH ST & MORGAN	177-10
Not reported	12535 S HALSTED ST	178-10
Not reported	726 W 126TH ST	180-10
Not reported	26 E 127TH ST	184-11
Not reported	12701 S DOTY AVE	189-12
Not reported	12701 S DOTY AVE	189-12
Not reported	12900 S DOTY	192-12
Not reported	12844 S HALSTED ST	194-14

IL ENG CONTROLS: Sites with Engineering Controls.

A review of the IL ENG CONTROLS list, as provided by EDR, and dated 07/20/2012 has revealed that there are 6 IL ENG CONTROLS sites within the searched area.

Site	Address	Map ID
NEW LANGSTON HUGHES ELEMENTARY	***10320 SOUTH WENTWORTH A***	***41-4***
DAIRY FRESH FOODS, INC.	***10450 SOUTH MICHIGAN AV***	***48-4***
LAKEFRONT SUPPORTING HOUSING	***11023-11045 S WENTWORTH***	***80-7***
W.E. DAVIS COMPANY	***1220 -1314 WEST 119TH S***	***138-10***
INTERNATIONAL HARVESTER	***1015 WEST 120TH STREET***	***155-10***
HANCOCK HOUSE LLC	***12045 SOUTH EMERALD AVE***	***160-10***

IL INST CONTROL: Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

A review of the IL INST CONTROL list, as provided by EDR, and dated 07/20/2012 has revealed that there are 9 IL INST CONTROL sites within the searched area.

Site	Address	Map ID
CHICAGO DEPARTMENT OF ENVIRONM	***501 EAST 103RD STREET***	***28-4***
ROSELAND PLACE	***10400-10420 SOUTH MICHI***	***43-4***
DAIRY FRESH FOODS, INC.	***10450 SOUTH MICHIGAN AV***	***48-4***
LAKEFRONT SUPPORTING HOUSING	***11023-11045 S WENTWORTH***	***80-7***
WIRA STUDY AREA NUMBER 4	***11801 SOUTH RACINE AVEN***	***126-6,10***
SHELDON HEIGHTS CHURCH OF CHRI	***11819-11849 SOUTH GREEN***	***127-6,10***
W.E. DAVIS COMPANY	***1220 -1314 WEST 119TH S***	***138-10***

EXECUTIVE SUMMARY

Site	Address	Map ID
INTERNATIONAL HARVESTER	***1015 WEST 120TH STREET***	***155-10***
HANCOCK HOUSE LLC	***12045 SOUTH EMERALD AVE***	***160-10***

IL SRP: Illinois Environmental Protection Agency, Site Remediation Program Database

A review of the IL SRP list, as provided by EDR, and dated 07/20/2012 has revealed that there are 26 IL SRP sites within the searched area.

Site	Address	Map ID
CHICAGO STATE UNIVERSITY	9500 SOUTH KING DRIVE	5-2
BP	***9900 SOUTH HALSTED STRE***	***18-3***
CHICAGO DEPARTMENT OF ENVIRONM	***501 EAST 103RD STREET***	***28-4***
NEW LANGSTON HUGHES ELEMENTARY	***10320 SOUTH WENTWORTH A***	***41-4***
ROSELAND PLACE	***10400-10420 SOUTH MICHI***	***43-4***
DAIRY FRESH FOODS, INC.	***10450 SOUTH MICHIGAN AV***	***48-4***
BETTY BRITE CLEANERS	***10630 SOUTH HALSTED STR***	***57-3***
LAKEFRONT SUPPORTING HOUSING	***11023-11045 S WENTWORTH***	***80-7***
KLEEN TOWNE CLEANERS	11249 SOUTH HALSTED ST	88-6
CHICAGO HOUSING AUTHORITY	***833 WEST 115TH STREET***	***107-6***
SHERWIN-WILLIAMS COMPANY BOILE	603 EAST KENSINGTON AVE	113-7
MICKEY'S AUTO SERVICE CENTER	***11656 SOUTH HALSTED AVE***	***121-6***
WIRA STUDY AREA NUMBER 4	***11801 SOUTH RACINE AVEN***	***126-6,10***
SHELDON HEIGHTS CHURCH OF CHRI	***11819-11849 SOUTH GREEN***	***127-6,10***
WEST PULLMAN STUDY AREA NO. 6	11931 SOUTH LOOMIS STRE	130-9
WIRA EAST INGERSOLL PROPERTY	920 WEST 119TH STREET	136-10
W.E. DAVIS COMPANY	***1220 -1314 WEST 119TH S***	***138-10***
OMNITRAX	11955 SOUTH MORGAN STRE	141-10
WEST PULLMAN IRON & METAL	11954 SOUTH PEORIA STRE	144-10
WIRA STUDY AREA 9	820 WEST 120TH STREET	152-10
WIRA STUDY AREA NUMBER 14	815-825 WEST 120TH STRE	152-10
DUTCH BOY PAINTS	12000 SOUTH PEORIA STRE	153-10
INTERNATIONAL HARVESTER	***1015 WEST 120TH STREET***	***155-10***
CHICAGO MALLEABLE CASTINGS	***1201 WEST 120TH STREET***	***156-10***
HANCOCK HOUSE LLC	***12045 SOUTH EMERALD AVE***	***160-10***
CHICAGO HOUSING AUTHORITY	***940 EAST 132ND STREET***	***205-16***

IL DRYCLEANERS: Any business interested in operating a drycleaning facility in Illinois needs to apply for a license through the Illinois Drycleaner Environmental Response trust Fund.

A review of the IL DRYCLEANERS list, as provided by EDR, and dated 05/28/2012 has revealed that there are 5 IL DRYCLEANERS sites within the searched area.

Site	Address	Map ID
AMERICAN IDEAL CLEANING COMPAN	10351 SOUTH MICHIGAN AV	42-4
BETTY BRITE CLEANERS	***10630 SOUTH HALSTED STR***	***57-3***
STAR CLEANERS	149 WEST 111TH STREET	80-7
JOHNS CLEANERS	11129 SOUTH HALSTED STR	84-6
BIG MEL'S LAUNDROMAT	12256 SOUTH HALSTED	168-10

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

Section 1

Overview and Key Map

Overview Map

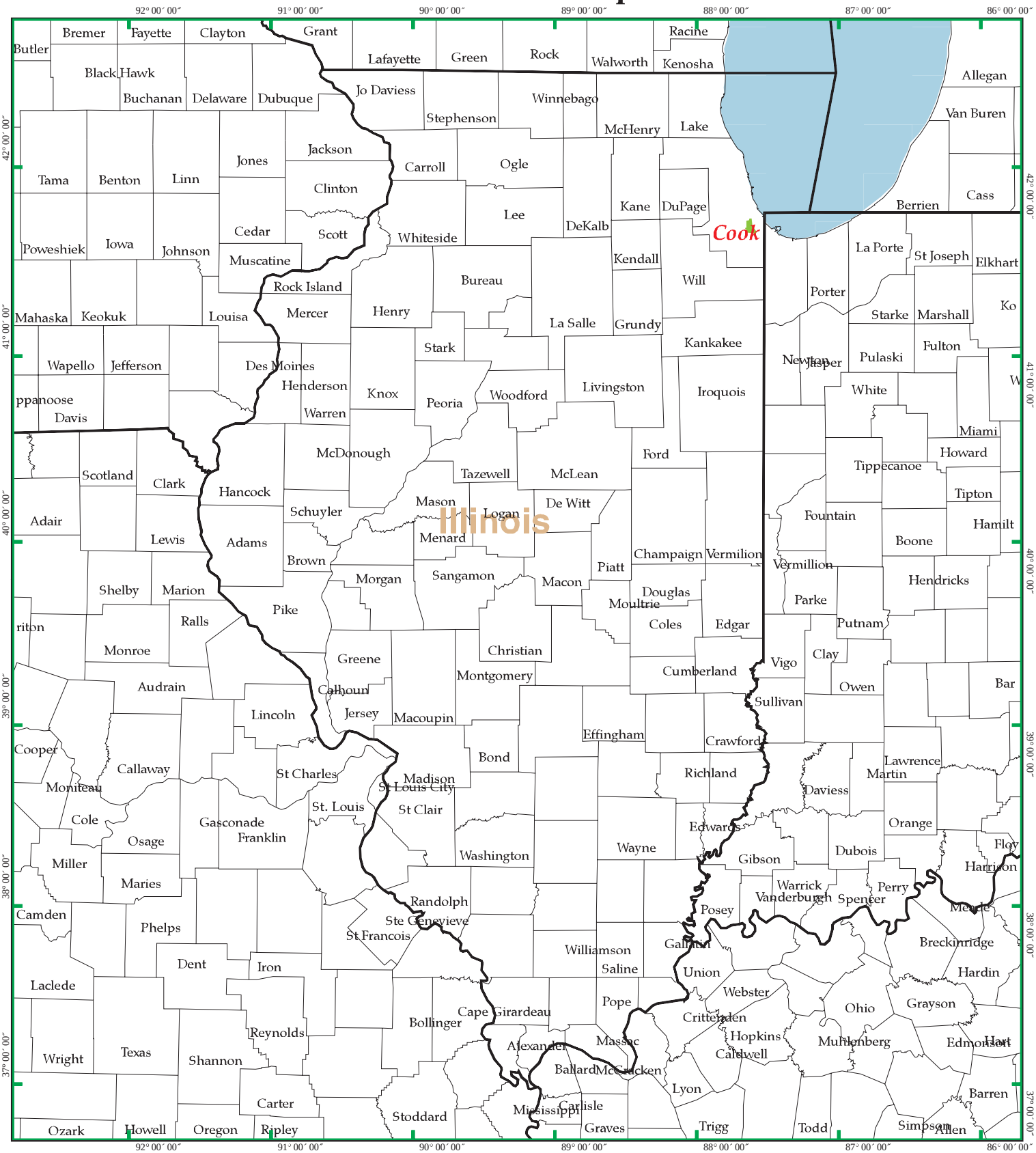

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EDR Environmental Data Resources Inc

N

Key Map

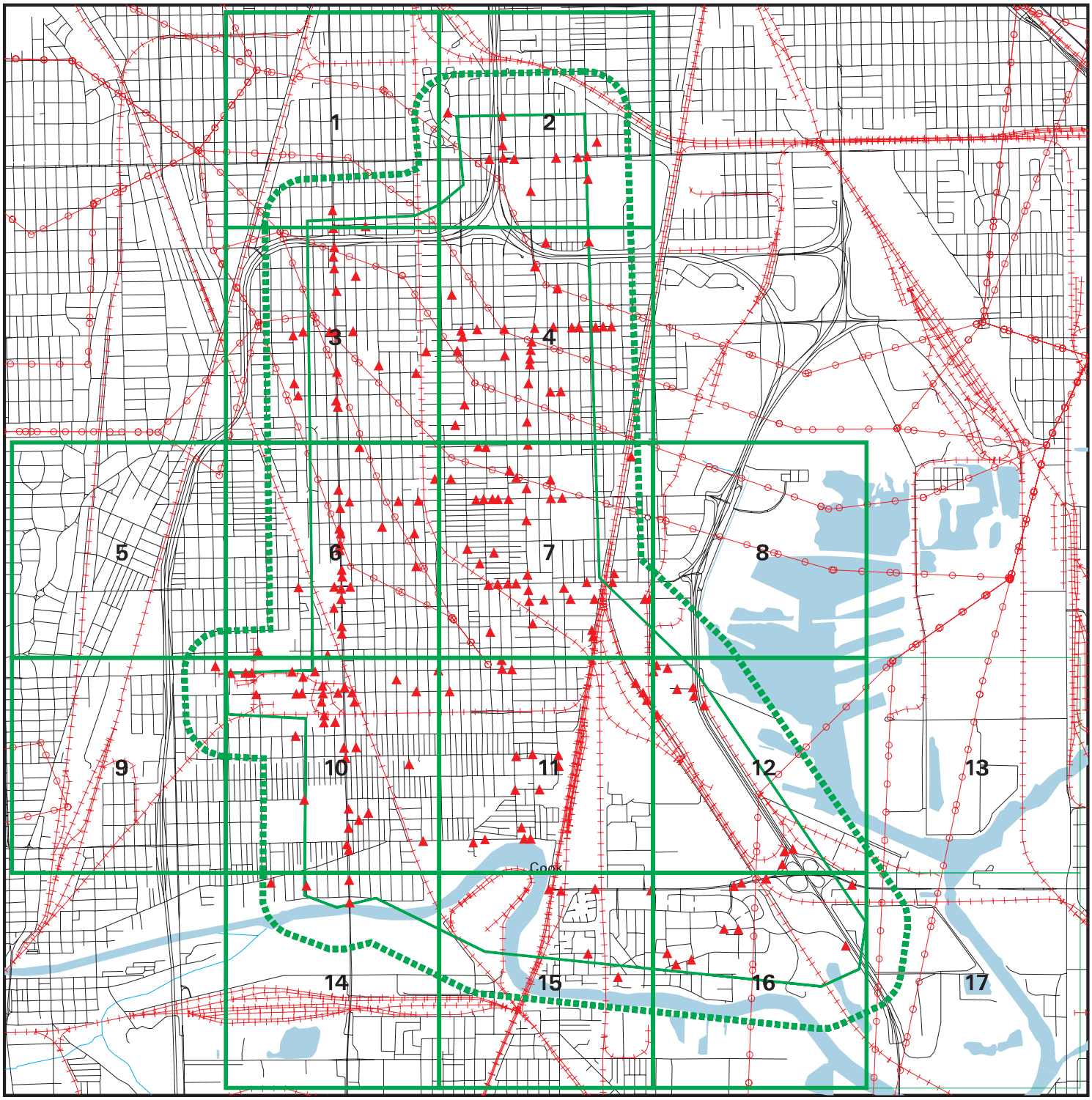

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Legend

Roads
Major Roads
Contour Lines
Waterways
Railroads
Study Boundary
Powerlines
Pipelines
Fault Lines
Water
Listed Sites

N

0 1/2 1

Scale in Miles

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Section 2

Focus Maps and Findings

Focus Map 1

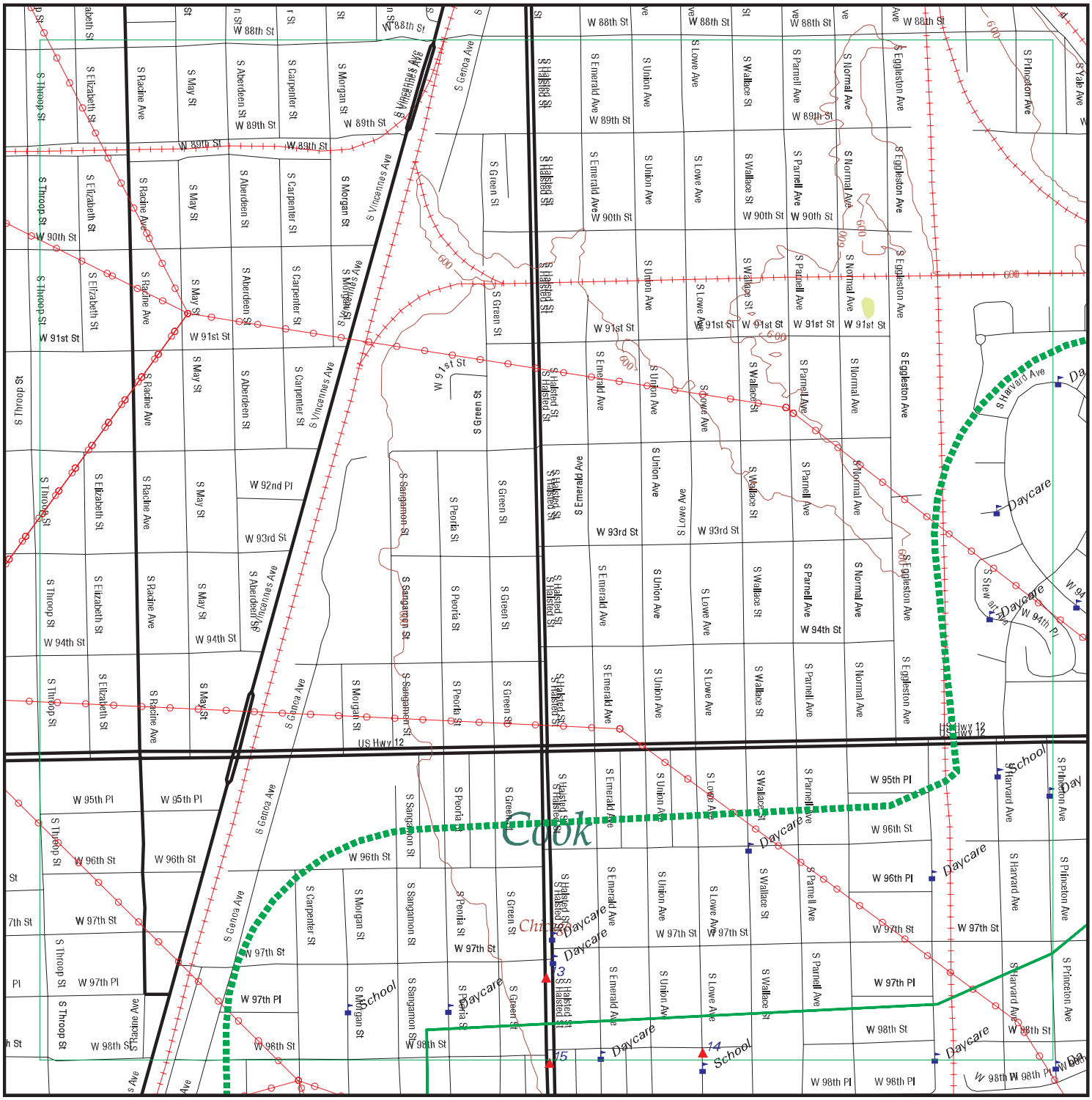

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Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 1 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	1
RCRA-CESQG	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	1
UST	3
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
13	**ANCHOR PRUDENTIAL HMO** **9718 SOUTH HALSTED** **CHICAGO, IL 60620**	**UST**	**U003668571** **N/A**

UST:

Facility ID:	2038684
Facility Status:	EXEMPT
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Name:	Standard Bank Trust #6743
Owner Id:	U0028511
Owner Address:	7800 West 95th Street
Owner City,St,Zip:	Hickory Hills, IL 60457
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	5/5/1998
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

14	**EVERS** **9811 S LOWE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001127034** **ILR000033118**

RCRA-SQG:

Date form received by agency:	01/10/1997
Facility name:	EVERS
Facility address:	9811 S LOWE CHICAGO, IL 60628
EPA ID:	ILR000033118
Contact:	EMMERINE CLARKSTON
Contact address:	9811 S LOWE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-2565
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District

Map ID	Site	Database(s)	EPA ID Number

EVERS (Continued) **1001127034**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

---

15 **SHELL** **UST** **U001142621**
9802 S. HALSTED **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2019884
Facility Status: ACTIVE
Facility Type: SELF-SERVICE STATION
Owner Name: Khalid Siddiqui
Owner Id: U0029824
Owner Address: 1823 West Hood Avenue, Suite C
Owner City,St,Zip: Chicago, IL 60660

Tank Number: 1
Tank Capacity: 10000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 5/7/1986
Tank Status: Currently in use
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: K003789
Green Tag Issue Date: 6/18/2009
Green Tag Expire Date: 12/31/2011
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 10000

Map ID	Site	Database(s)	EPA ID Number

SHELL (Continued) **U001142621**

Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

---

15 **CLARK GAS** **UST** **U001143133**
9811 S. HALSTED **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2007026
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Petro Universal, Inc.
Owner Id:	U0034143
Owner Address:	9811 S. Halsted
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
	CLARK GAS (Continued)		**U001143133**

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	8000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**

Map ID	Site	Database(s)	EPA ID Number
	CLARK GAS (Continued)		**U001143133**

Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

15	**EQUILON ENTERPRISES LLC** **9811 HALSTED** **CHICAGO, IL 60628**	**LUST**	**S104189763** **N/A**

LUST:

Incident Num:	990295
IL EPA Id:	0316495059
Product:	Unleaded Gas
IEMA Date:	02/10/1999
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	John Robbins
PRP Address:	603 West Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/19/1999
45 Report Received:	02/26/1999
NFA/NFR Letter:	**09/14/2005**
NFR Date Recorded:	12/02/2005

Count: 13 records

FOCUS MAP 1 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1006426238	76TH AND PARNELL	76TH AND PARNELL	60620	CERC-NFRAP
CHICAGO	S107926342	CHICAGO PROCESS ENGINEERING	7801 S CLAIRMONT	60620	SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	U003975090	NEW KENNEDY KING COLLEGE CAMPUS	6401 LOWE ST	60620	UST
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	1001487618	FERNWOOD TOWING AND TUNE UPS	10101 10103 S HALSTED	60628	RCRA-SQG
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS

Focus Map 2

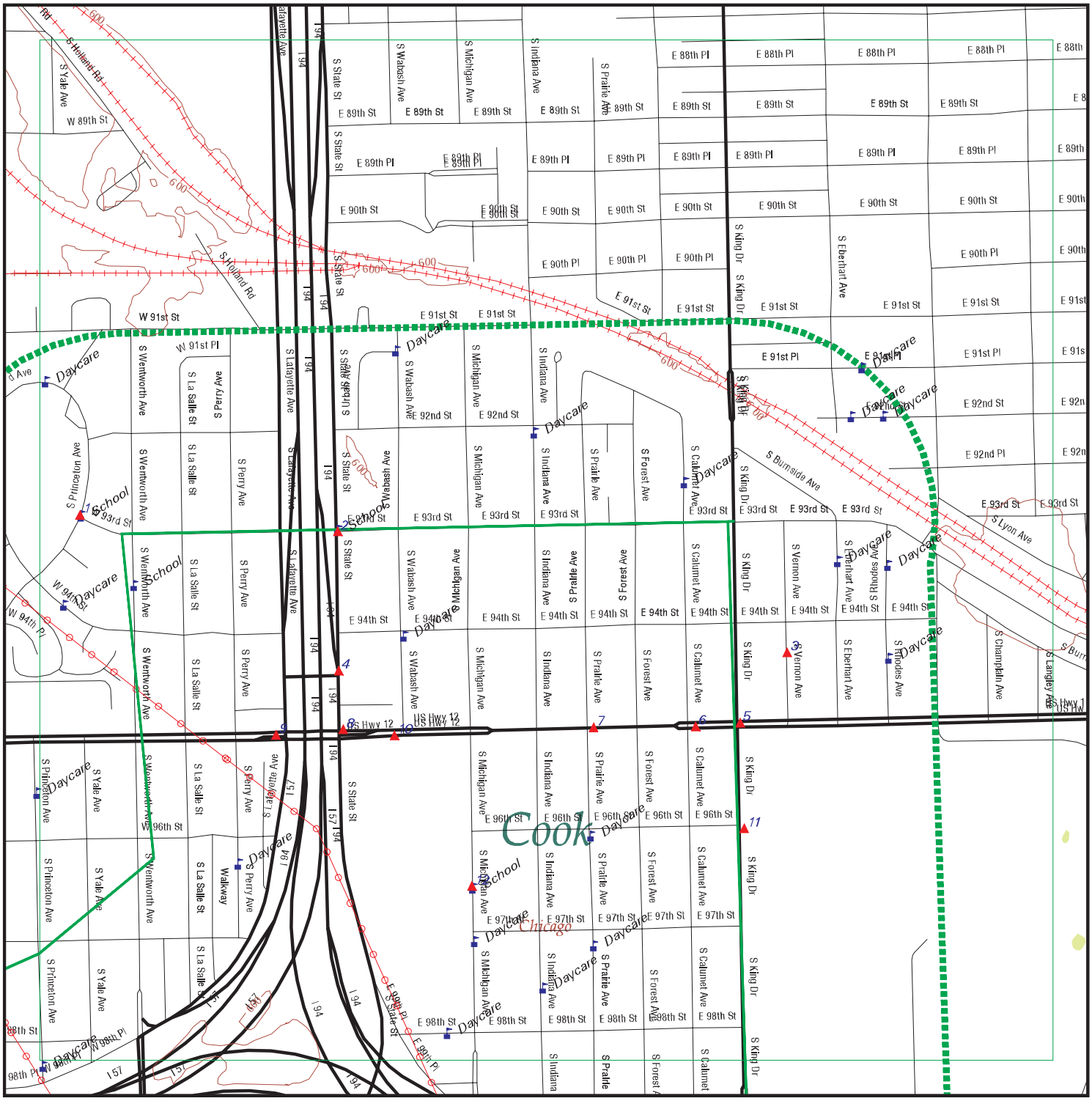

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Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 2 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	4
RCRA-CESQG	2
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	10
UST	10
SPILLS	10
ENG CONTROLS	0
INST CONTROL	0
SRP	1
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
1	**TURNER DREW LANGUAGE ACADEMY** **9300 S PRINCETON AVE** **CHICAGO, IL 60620**	**RCRA-CESQG**	**1004696975** **ILR000061192**

RCRA-CESQG:

Date form received by agency:	02/08/1999
Facility name:	TURNER DREW LANGUAGE ACADEMY
Facility address:	9300 S PRINCETON AVE CHICAGO, IL 60620
EPA ID:	ILR000061192
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	9300 S PRINCETON AVE CHICAGO, IL 60620
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number

TURNER DREW LANGUAGE ACADEMY (Continued) **1004696975**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

---

2 **ERNS** **96507590**

GLISBEE SCHOOL, 9301 S. STATE **N/A**
CHICAGO, IL

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

---

2 **GILLESPIE SCH** **RCRA-SQG** **1001116633**
9301 S STATE **ILR000026583**
CHICAGO, IL 60619

RCRA-SQG:
Date form received by agency: 08/30/1996
Facility name: GILLESPIE SCH
Facility address: 9301 S STATE
CHICAGO, IL 60619
EPA ID: ILR000026583
Mailing address: 1819 W PERSHING RD 6W N
CHICAGO, IL 60609
Contact: SPENCER ADAMS
Contact address: 1819 W PERSHING RD 6W N
CHICAGO, IL 60609
Contact country: US
Contact telephone: (312) 535-5065
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHS
Owner/operator address: 1819 W PERSHING RD 6W N
CHICAGO, IL 60609

Map ID	Site	Database(s)	EPA ID Number

GILLESPIE SCH (Continued) **1001116633**

Owner/operator country: Not reported
Owner/operator telephone: (312) 535-7039
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

---

3 **CITY OF CHICAGO (ABANDONMENT)** **RCRA-SQG** **1005443427**
9431 S VERNON **ILR000113639**
CHICAGO, IL 60619

RCRA-SQG:
Date form received by agency: 06/17/2002
Facility name: CITY OF CHICAGO (ABANDONMENT)
Facility address: 9431 S VERNON
CHICAGO, IL 60619
EPA ID: ILR000113639
Mailing address: 30 N LASALLE 25TH FLOOR
CHICAGO, IL 60602
Contact: TERRY SHEAHAN
Contact address: 30 N LASALLE 25TH FLOOR
CHICAGO, IL 60602
Contact country: US
Contact telephone: (312) 744-7674
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Map ID	Site	Database(s)	EPA ID Number

CITY OF CHICAGO (ABANDONMENT) (Continued) **1005443427**

Owner/operator name:	CITY OF CHICAGO (ABANDONMENT)
Owner/operator address:	9431 S VERNON CHICAGO, IL 60619
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 744-7674
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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4 **CITGO SUPER WASH & WAX** **UST** **U002222575**
9417 S. STATE STREET **N/A**
CHICAGO, IL 60617

UST:

Facility ID:	2034153
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	F & F 786, Inc.
Owner Id:	U0034735
Owner Address:	9417 S. State
Owner City,St,Zip:	Chicago, IL 60619
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Tank Status:	**Exempt from registration**

Map ID	Site	Database(s)	EPA ID Number
	CITGO SUPER WASH & WAX (Continued)		**U002222575**

Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	8/1/1965
OSFM First Notify Date:	6/1/1995
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number

CITGO SUPER WASH & WAX (Continued) **U002222575**

Tank Number:	5
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	1/8/1998
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	10/9/1997
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	1/8/1998
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	10/9/1997
Green Tag Decal:	**L003790**
Green Tag Issue Date:	**5/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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4 **QUALITY CAR WASH** **LUST** **S104522540**
9417 SOUTH STATE ST. **N/A**
CHICAGO, IL 60619

LUST:

Incident Num:	951097
IL EPA Id:	0316445040
Product:	Gasoline
IEMA Date:	05/23/1995
Project Manager:	Piggush
Project Manager Phone:	(217) 782-3101
Email:	Michael.Piggush@illinois.gov
PRP Name:	Quality Car Wash
PRP Contact:	John Hill
PRP Address:	7936 South Vincennes
PRP City,St,Zip:	Chicago, IL 60620
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	11/22/1996
45 Report Received:	11/22/1996
NFA/NFR Letter:	**04/08/1997**
NFR Date Recorded:	04/14/1998

Map ID	Site	Database(s)	EPA ID Number
4	**9417 S STATE ST** **CHICAGO, IL**	**SPILLS**	**S111893798** **N/A**

SPILLS:

Incident ID:	19951097
Incident Date:	Not reported
Date Received:	05/23/1995
Facility Address:	9417 S STATE ST
Facility City:	CHICAGO
PRP Name:	QUALITY CAR WASH
AC:	Not reported

5	**AMOCO 5921** **400 E 95TH ST AND KING DR** **CHICAGO, IL 60619**	**RCRA-SQG**	**1000862425** **ILD984923268**

RCRA-SQG:

Date form received by agency:	08/20/1993
Facility name:	AMOCO 5921
Facility address:	400 E 95TH ST AND KING DR CHICAGO, IL 60619
EPA ID:	ILD984923268
Mailing address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact:	LINDA CURRAN
Contact address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact country:	US
Contact telephone:	(708) 990-1043
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AMOCO OIL CO
Owner/operator address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Owner/operator country:	Not reported
Owner/operator telephone:	(708) 990-1043
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

AMOCO 5921 (Continued) **1000862425**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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5 **BP** **LUST** **U004128180**
400 EAST 95TH STREET **UST** **N/A**
CHICAGO, IL 60619

LUST:
Incident Num: 20051059
IL EPA Id: 0316475002
Product: Gasoline
IEMA Date: 07/29/2005
Project Manager: Kaiser
Project Manager Phone: (217) 524-4650
Email: Karl.Kaiser@illinois.gov
PRP Name: PAV2, LLC
PRP Contact: William Shaver
PRP Address: 24501 Ecourse Road
PRP City,St,Zip: Taylor, MI 48180
PRP Phone: 5742726955
Site Classification: Not reported
Section 57.5(g) Letter: P.A.
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 08/10/2005
45 Report Received: 09/12/2005
NFA/NFR Letter: Not reported
NFR Date Recorded: Not reported

UST:
Facility ID: 2022992
Facility Status: ACTIVE
Facility Type: SELF-SERVICE STATION
Owner Name: JAN Petro, Inc.
Owner Id: U0035846
Owner Address: 3314 W. Albion Ave.
Owner City,St,Zip: Lincolnwood, IL 60712

Tank Number: 1
Tank Capacity: 6000
Tank Substance: Gasoline

Map ID	Site	Database(s)	EPA ID Number

BP (Continued) **U004128180**

Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**M003795**
Green Tag Issue Date:	**7/28/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**M003795**
Green Tag Issue Date:	**7/28/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**M003795**
Green Tag Issue Date:	**7/28/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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5 **SPILLS** **S108046226**
400 E 95TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20051059
Incident Date:	Not reported
Date Received:	07/29/2005
Facility Address:	400 E 95TH ST
Facility City:	CHICAGO
PRP Name:	BP PRODUCTS NORTH AMERICA INC
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
5	**CHICAGO STATE UNIVERSITY** **9500 SOUTH KING DRIVE** **CHICAGO, IL 60628**	**SRP**	**S104491687** **N/A**

SRP:

IL EPA Id:	0316500005
US EPA Id:	ILD068469824
Longitude:	-87.61032
Latitude:	41.72012
Contact Name:	Ronald Leahy
Contact Address:	9501South King Drive
Contact Address2:	Office of Physical Plant
Contact City,St,Zip:	Chicago, IL 606281598
Contact Phone:	(312) 995-2140
Date Enrolled:	04/26/1994
Point Of Contact:	Brian A. Delaney
Consultant Company:	August Mack Environmental, Inc.
Consultant Address:	784 Busse Highway
Consultant Address2:	Not reported
Consultant City,St,Zip:	Park Ridge, IL 60068-
Consultant Phone:	(630) 325-7121
Proj Mgr Assigned:	Gross
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	Not reported
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Chicago State University
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

5	**9500 S MARTIN LUTHER KING DR** **CHICAGO, IL**	**SPILLS**	**S111908478** **N/A**

SPILLS:

Incident ID:	20002169
Incident Date:	Not reported
Date Received:	11/10/2000
Facility Address:	9500 S MARTIN LUTHER KING DR
Facility City:	CHICAGO
PRP Name:	EQUILON ENTERPRISES
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
5	**SHELL STATION 1545-28** **9500 S MARTIN LUTHER KING DR** **CHICAGO, IL 60628**	**UST**	**U000792152** **N/A**

UST:

Facility ID:	2007040
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	Equilon Enterprises, LLC
Owner Id:	U0027449
Owner Address:	603 Diehl Road, Suite 103
Owner City,St,Zip:	Naperville, IL 60563

Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number

SHELL STATION 1545-28 (Continued) **U000792152**

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	8/9/1996
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	5
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	10/31/1970
OSFM First Notify Date:	11/24/1994
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	1000
Tank Substance:	Water
Last Used Date:	12/31/1973
OSFM First Notify Date:	9/27/2001
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**A000953**
Green Tag Issue Date:	**8/20/1999**
Green Tag Expire Date:	**12/31/2002**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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5 **SPILLS** **S108891681**

9501 S KING DR **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20071437
Incident Date:	10/26/2007
Date Received:	10/26/2007
Facility Address:	9501 S KING DR
Facility City:	CHICAGO
PRP Name:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	(Continued)		**S108891681**

AC: Not reported

5	**SHELL OIL CO.** **9500 SOUTH MARTIN LUTHER KING DR.** **CHICAGO, IL 60628**	**LUST**	**S104792923** **N/A**

LUST:

Incident Num:	20002169
IL EPA Id:	0316505016
Product:	Gasoline
IEMA Date:	11/10/2000
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Equilon Enterprises
PRP Contact:	John Robbins
PRP Address:	603 Diehl, Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	High
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	11/20/2000
45 Report Received:	11/13/2001
NFA/NFR Letter:	**05/27/2004**
NFR Date Recorded:	08/16/2004

Incident Num:	942284
IL EPA Id:	0316505016
Product:	Other Petro
IEMA Date:	10/10/1994
Project Manager:	Nickell
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Equilon Enterprises LLC
PRP Contact:	Lisa Schoedel
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	01/04/1995
Non LUST Determination Letter:	Not reported
20 Report Received:	01/12/1995
45 Report Received:	01/11/1995
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
6	**S.W.C. 95TH & MLK LLC** **347 EAST 95TH STREET** **CHICAGO, IL 60619**	**LUST**	**S108480371** **N/A**

LUST:

Incident Num:	20070110
IL EPA Id:	0316445057
Product:	Fuel Oil
IEMA Date:	02/02/2007
Project Manager:	Schwartzkopf
Project Manager Phone:	(217) 557-8763
Email:	Lizz.Schwartzkopf@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	10/11/2007
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

6	**347 E 95TH ST** **CHICAGO, IL**	**SPILLS**	**S111921064** **N/A**

SPILLS:

Incident ID:	20070110
Incident Date:	Not reported
Date Received:	02/02/2007
Facility Address:	347 E 95TH ST
Facility City:	CHICAGO
PRP Name:	SWC 95TH AND MLK LLC
AC:	Not reported

6	**VACANT LAND** **333 E. 95TH STREET** **CHICAGO, IL 60619**	**UST**	**U003668302** **N/A**

UST:

Facility ID:	2037435
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Rose Construction
Owner Id:	U0032769
Owner Address:	9440 Enterprise Drive
Owner City,St,Zip:	Mokena, IL 60448
Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Heating Oil
Last Used Date:	1/1/2005
OSFM First Notify Date:	9/29/1998
Tank Status:	**Removed**

Map ID	Site	Database(s)	EPA ID Number

VACANT LAND (Continued) **U003668302**

Red Tag Issue Date:	Not reported
Install Date:	2/1/1989
Green Tag Decal:	**F002189**
Green Tag Issue Date:	**12/2/2004**
Green Tag Expire Date:	**12/31/2007**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Used Oil
Last Used Date:	1/1/2005
OSFM First Notify Date:	9/29/1998
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	2/1/1989
Green Tag Decal:	**F002189**
Green Tag Issue Date:	**12/2/2004**
Green Tag Expire Date:	**12/31/2007**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	550
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	3/22/2007
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**F002189**
Green Tag Issue Date:	**12/2/2004**
Green Tag Expire Date:	**12/31/2007**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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7 **MEDLEY MOVING & STORAGE, INC.** **UST** **U001142805**
251 E 95TH ST **N/A**
CHICAGO, IL 60619

UST:

Facility ID:	2006670
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Medley Moving & Storage Inc
Owner Id:	U0010054
Owner Address:	251 E 95Th St
Owner City,St,Zip:	Chicago, IL 60619

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	6/8/2000

Map ID	Site	Database(s)	EPA ID Number

MEDLEY MOVING & STORAGE, INC. (Continued) **U001142805**

OSFM First Notify Date:	3/24/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**05093**
Green Tag Issue Date:	**8/18/1998**
Green Tag Expire Date:	**12/31/2001**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**05093**
Green Tag Issue Date:	**8/18/1998**
Green Tag Expire Date:	**12/31/2001**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**05093**
Green Tag Issue Date:	**8/18/1998**
Green Tag Expire Date:	**12/31/2001**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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7 **SPILLS** **S111907087**
251 E 95TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20000774
Incident Date:	Not reported
Date Received:	04/27/2000
Facility Address:	251 E 95TH ST
Facility City:	CHICAGO
PRP Name:	MEADLWY MOVING & STORAGE
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
7	**MEDLEY'S MOVING & STORAGE** **251 EAST 95TH ST.** **CHICAGO, IL 60619**	**LUST**	**S104564421** **N/A**

LUST:

Incident Num:	20001183
IL EPA Id:	0318993017
Product:	Fuel Oil
IEMA Date:	06/21/2000
Project Manager:	Ransdell
Project Manager Phone:	(217) 557-6938
Email:	James.Ransdell@illinois.gov
PRP Name:	Medleys Moving & Storage
PRP Contact:	Howard Medley
PRP Address:	251 East 95th St.
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	7738214000
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	11/02/2000
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	930643
IL EPA Id:	0318993017
Product:	Deisel
IEMA Date:	03/18/1993
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	Meadley's Moving & Storage
PRP Contact:	Howard Meadley
PRP Address:	251 East 95th St.
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**06/23/2011**
NFR Date Recorded:	Not reported

7	**251 E 95TH ST** **CHICAGO, IL**	**SPILLS**	**S111907493** **N/A**

SPILLS:

Incident ID:	20001183
Incident Date:	Not reported
Date Received:	06/21/2000
Facility Address:	251 E 95TH ST
Facility City:	CHICAGO
PRP Name:	MEDLEYS MOVING & STORAGE
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
7	**MEDLEY'S MOVING & STORAGE** **251 EAST 95TH ST.-B** **CHICAGO, IL 60619**	**LUST**	**S104524044** **N/A**

LUST:

Incident Num:	20000774
IL EPA Id:	0318993017
Product:	Deisel
IEMA Date:	04/27/2000
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	Medley's Moving & Storage
PRP Contact:	Howard Medley
PRP Address:	251 East 95th St.-B
PRP City,St,Zip:	Chicago, IL 60619
PRP Phone:	7738214000
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/25/2000
45 Report Received:	07/24/2000
NFA/NFR Letter:	**11/15/2000**
NFR Date Recorded:	02/01/2001

7	**251 E 95TH ST** **CHICAGO, IL**	**SPILLS**	**S111887108** **N/A**

SPILLS:

Incident ID:	19930643
Incident Date:	Not reported
Date Received:	03/18/1993
Facility Address:	251 E 95TH ST
Facility City:	CHICAGO
PRP Name:	HOWARD MEDLEY
AC:	Not reported

8	**SHELL OIL CO.** **4 EAST 95TH ST.** **CHICAGO, IL 60619**	**LUST**	**S104528096** **N/A**

LUST:

Incident Num:	871758
IL EPA Id:	0316445022
Product:	Gasoline
IEMA Date:	10/29/1987
Project Manager:	Rife
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Equilon Enterprises LLC
PRP Contact:	Lisa Schoedel
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	Not reported
Section 57.5(g) Letter:	731

Map ID	Site	Database(s)	EPA ID Number

SHELL OIL CO. (Continued) **S104528096**

Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1996-01-22
20 Report Received:	12/11/1987
45 Report Received:	10/15/1990
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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8 **MOBIL GAS & FOOD MART** **UST** **U000174484**
4 E. 95TH STREET **N/A**
CHICAGO, IL 60620

UST:

Facility ID:	2007056
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Rock Build Enterprises, Inc.
Owner Id:	U0033996
Owner Address:	14123 South 85th Avenue
Owner City,St,Zip:	Orland Park, IL 60462

Tank Number:	1
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**N001762**
Green Tag Issue Date:	**2/15/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**N001762**
Green Tag Issue Date:	**2/15/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**

Map ID	Site	Database(s)	EPA ID Number
	MOBIL GAS & FOOD MART (Continued)		**U000174484**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**N001762**
Green Tag Issue Date:	**2/15/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

9	**AMOCO SERVICE STATION #15459.** **36 WEST 95TH ST.** **CHICAGO, IL 60628**	**LUST**	**S105059046** **N/A**

LUST:

Incident Num:	971123
IL EPA Id:	0316490013
Product:	Unleaded Gas
IEMA Date:	06/24/1997
Project Manager:	Piggush
Project Manager Phone:	(217) 782-3101
Email:	Michael.Piggush@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	06/27/1997
45 Report Received:	08/01/1997
NFA/NFR Letter:	**05/07/2003**
NFR Date Recorded:	07/17/2003

9	**36 W 95TH ST** **CHICAGO, IL**	**SPILLS**	**S111898819** **N/A**

SPILLS:

Incident ID:	19971123
Incident Date:	Not reported
Date Received:	06/24/1997
Facility Address:	36 W 95TH ST
Facility City:	CHICAGO
PRP Name:	AMOCO OIL COMPANY
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
9	**SS#15459 FAC#10443** **36 W. 95TH ST.** **CHICAGO, IL 60628**	**UST**	**U000864621** **N/A**

UST:

Facility ID:	2023039
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	BP Amoco
Owner Id:	U0023834
Owner Address:	28100 Torch Parkway Suite 300
Owner City,St,Zip:	Warrenville, IL 60555

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
9	**AMOCO 15459** **36 W 95TH AND LAFAYETTE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000862583** **ILD984924860**

RCRA-SQG:

Date form received by agency:	09/02/1993
Facility name:	AMOCO 15459
Facility address:	36 W 95TH AND LAFAYETTE CHICAGO, IL 60628
EPA ID:	ILD984924860
Mailing address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact:	LINDA CURRAN
Contact address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact country:	US
Contact telephone:	(708) 990-2277
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AMOCO OIL CO
Owner/operator address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Owner/operator country:	Not reported
Owner/operator telephone:	(708) 990-2277
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS

Map ID	Site	Database(s)	EPA ID Number

AMOCO 15459 (Continued) **1000862583**

CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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9 **ATLANTIC RICHFIELD CO** **UST** **U003559028**
1 E 95TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2011489
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Atlantic Richfield Co
Owner Id:	U0000926
Owner Address:	515 S Flower St
Owner City,St,Zip:	Los Angeles, CA 90071
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	1/1/1979
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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10 **SPILLS** **S111888927**
49 E 95TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19932467
Incident Date:	Not reported
Date Received:	09/15/1993
Facility Address:	49 E 95TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO PARK DISTRICT
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
10	**ABBOTT PARK FIELDHOUSE** **49 E 95TH ST** **CHICAGO, IL 60619**	**UST**	**U000864953** **N/A**

UST:

Facility ID:	2030829
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Chicago Park District
Owner Id:	U0002888
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	8800
Tank Substance:	Heating Oil
Last Used Date:	1/1/1974
OSFM First Notify Date:	7/1/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

10	**ABBOTT** **49 EAST 95TH ST.** **CHICAGO, IL 60619**	**LUST**	**S104523631** **N/A**

LUST:

Incident Num:	932446
IL EPA Id:	0316445035
Product:	Fuel Oil
IEMA Date:	09/13/1993
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Park Dist.
PRP Contact:	Masood Razvi
PRP Address:	425 East McFetridge Dr.
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	09/22/1993
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
10	**ABBOTT** **45 EAST 95TH ST.** **CHICAGO, IL 60619**	**LUST**	**S104523621** **N/A**

LUST:

Incident Num:	932467
IL EPA Id:	0316445035
Product:	Uset Oil
IEMA Date:	09/15/1993
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Park Dist.
PRP Contact:	Robin Minor
PRP Address:	425 East McFetridge Dr.
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

11	**CHICAGO STATE UNIVERSITY** **9501 S DR KINGS DR** **CHICAGO, IL 60628**	**UST**	**U001142270** **N/A**

UST:

Facility ID:	2017832
Facility Status:	CLOSED
Facility Type:	**STATE**
Owner Name:	Chicago State University
Owner Id:	U0002899
Owner Address:	9501 S Kings Dr
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	30000
Tank Substance:	Diesel Fuel
Last Used Date:	11/17/1997
OSFM First Notify Date:	4/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	20000
Tank Substance:	Water
Last Used Date:	11/17/1997
OSFM First Notify Date:	2/25/1999

Map ID	Site	Database(s)	EPA ID Number

CHICAGO STATE UNIVERSITY (Continued) **U001142270**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	11/7/1997
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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12 **HARLAN COMMUNITY ACADEMY HS** **RCRA-CESQG** **1004696723**
9652 S MICHIGAN AVE **ILR000056994**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	10/30/1998
Facility name:	HARLAN COMMUNITY ACADEMY HS
Facility address:	9652 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000056994
Mailing address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6W CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	HARLAN COMMUNITY ACADEMY HS (Continued)		**1004696723**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

Count: 11 records

FOCUS MAP 2 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	U004179087	FORMER FILLING STATION	7296 S CHICAGO	60619	UST
CHICAGO	S110122357	DIE TECH	7230 S CHICAGO	60619	ENG CONTROLS, INST CONTROL, S
CHICAGO	U004128268	SOUTH CHICAGO ONE, INC.	7283 S CHICAGO AVE	60619	LUST, UST
CHICAGO	S107926342	CHICAGO PROCESS ENGINEERING	7801 S CLAIRMONT	60620	SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU

Focus Map 3

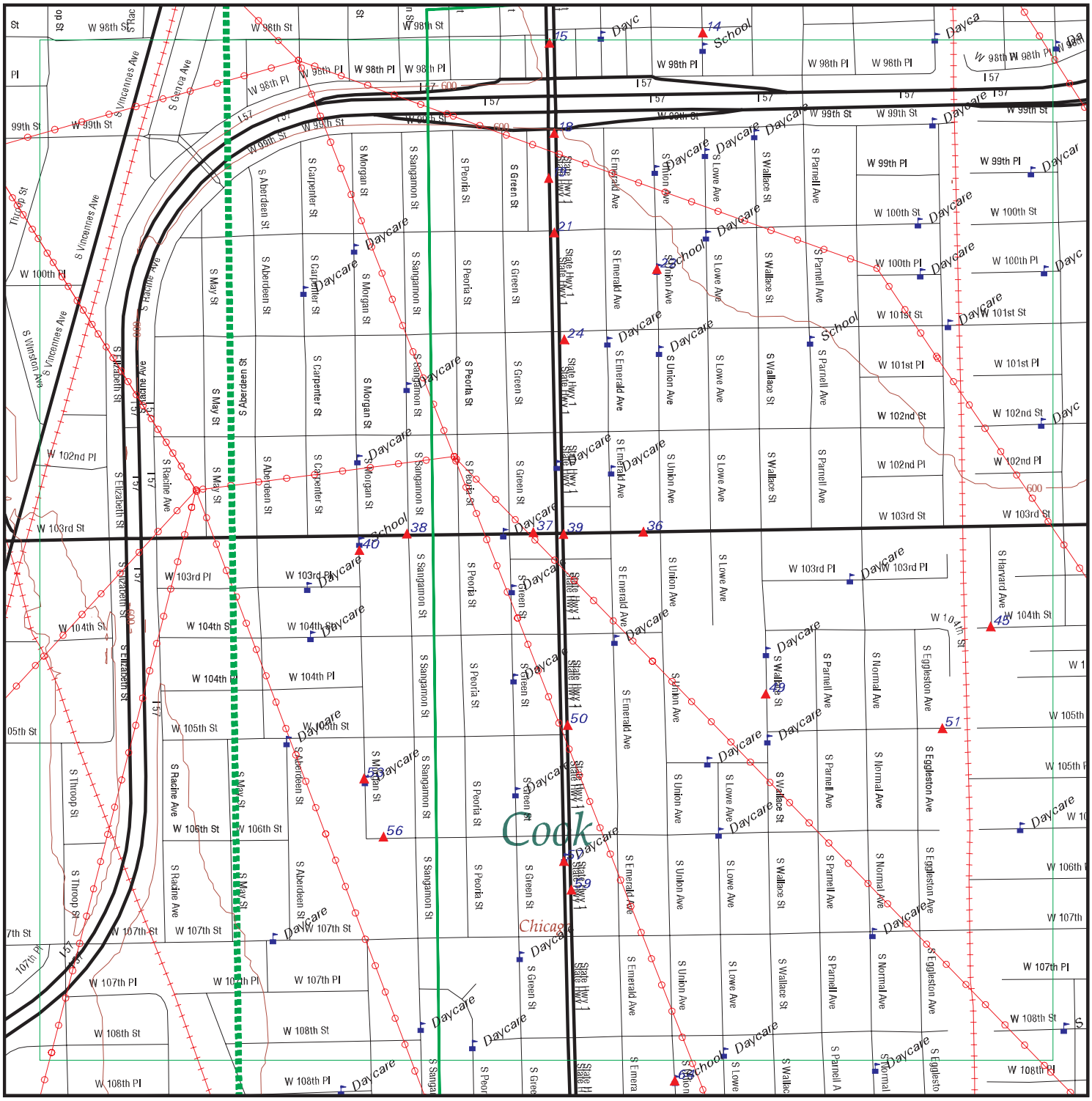

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 3 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	14
RCRA-CESQG	1
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	10
UST	15
SPILLS	2
ENG CONTROLS	0
INST CONTROL	0
SRP	2
DRYCLEANERS	1
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
14	**EVERS** **9811 S LOWE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001127034** **ILR000033118**

RCRA-SQG:

Date form received by agency:	01/10/1997
Facility name:	EVERS
Facility address:	9811 S LOWE CHICAGO, IL 60628
EPA ID:	ILR000033118
Contact:	EMMERINE CLARKSTON
Contact address:	9811 S LOWE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-2565
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
15	**SHELL** **9802 S. HALSTED** **CHICAGO, IL 60628**	**UST**	**U001142621** **N/A**

UST:

Facility ID:	2019884
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Khalid Siddiqui
Owner Id:	U0029824
Owner Address:	1823 West Hood Avenue, Suite C
Owner City,St,Zip:	Chicago, IL 60660

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/7/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003789**
Green Tag Issue Date:	**6/18/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
15	**CLARK GAS** **9811 S. HALSTED** **CHICAGO, IL 60628**	**UST**	**U001143133** **N/A**

UST:

Facility ID:	2007026
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Petro Universal, Inc.
Owner Id:	U0034143
Owner Address:	9811 S. Halsted
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number

CLARK GAS (Continued) **U001143133**

Tank Number:	5
Tank Capacity:	8000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/17/2000
Green Tag Decal:	**N001766**
Green Tag Issue Date:	**2/28/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

---

15 **EQUILON ENTERPRISES LLC** **LUST** **S104189763**
9811 HALSTED **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	990295
IL EPA Id:	0316495059
Product:	Unleaded Gas
IEMA Date:	02/10/1999
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715

Map ID	Site	Database(s)	EPA ID Number

EQUILON ENTERPRISES LLC (Continued) **S104189763**

Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	John Robbins
PRP Address:	603 West Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/19/1999
45 Report Received:	02/26/1999
NFA/NFR Letter:	**09/14/2005**
NFR Date Recorded:	12/02/2005

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18 **MOBIL OIL CORP SS A8B** **RCRA-SQG** **1000612200**
9901 S HALSTED **ILD984824235**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	03/01/2000
Facility name:	MOBIL OIL CORP SS A8B
Site name:	MOBIL OIL CORP, #A8B
Facility address:	9901 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD984824235
Mailing address:	3225 GALLOWS RD, STE-5D FAIRFAX, VA 22037
Contact:	RATRY VINAYA
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(703) 846-5735
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MOBIL OIL CORP
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

Map ID	Site	Database(s)	EPA ID Number

MOBIL OIL CORP SS A8B (Continued) **1000612200**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	05/10/1991
Facility name:	MOBIL OIL CORP SS A8B
Classification:	Small Quantity Generator

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

---

18 **MOBIL #10769** **UST** **U000172643**
9901 SOUTH HALSTEAD STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2008992
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	JMJ Mobil
Owner Id:	U0033024
Owner Address:	9901 S. Halsted
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**

Map ID	Site	Database(s)	EPA ID Number

MOBIL #10769 (Continued) **U000172643**

Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	1000

Map ID	Site	Database(s)	EPA ID Number
	MOBIL #10769 (Continued)		**U000172643**

Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	5/5/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1988
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1986
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1988
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1986
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	8
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1988
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1986
Green Tag Decal:	**L003829**
Green Tag Issue Date:	**12/1/2010**
Green Tag Expire Date:	**12/31/2012**

Map ID	Site	Database(s)	EPA ID Number
	MOBIL #10769 (Continued)		**U000172643**

Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: $0.00

Tank Number: 9
Tank Capacity: 10000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 12/19/1988
Tank Status: **Currently in use**
Red Tag Issue Date: Not reported
Install Date: 1/1/1986
Green Tag Decal: **L003829**
Green Tag Issue Date: **12/1/2010**
Green Tag Expire Date: **12/31/2012**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: $0.00

18	**BHAGATS AMOCO** **9900 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000862667** **ILD984925701**

RCRA-SQG:
Date form received by agency: 09/24/2007
Facility name: BHAGATS AMOCO
Facility address: 9900 S HALSTED
CHICAGO, IL 60628
EPA ID: ILD984925701
Contact: CHACKO CHANDY
Contact address: 9900 S HALSTED
CHICAGO, IL 60628
Contact country: US
Contact telephone: (773) 233-6661
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHACKO CHANDY
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/01/2003
Owner/Op end date: Not reported

Owner/operator name: IRFAN BHAGAT
Owner/operator address: 9900 S HALSTED

Map ID	Site	Database(s)	EPA ID Number

BHAGATS AMOCO (Continued) **1000862667**

CHICAGO, IL 60628
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/13/1993
Facility name: BHAGATS AMOCO
Site name: AMOCO 15525
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

---

18 **BP** **LUST** **U004128062**
9900 SOUTH HALSTED STREET **UST** **N/A**
CHICAGO, IL 60628 **SRP**

LUST:
Incident Num: 971752
IL EPA Id: 0316535007
Product: Gasoline
IEMA Date: 09/18/1997
Project Manager: Carlock
Project Manager Phone: (217) 782-6762

Map ID	Site	Database(s)	EPA ID Number

BP (Continued) **U004128062**

Email:	Not reported
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	6309901048
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2000-09-13
20 Report Received:	09/29/1997
45 Report Received:	11/03/1997
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2010818
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	9900 Halsted Corp.
Owner Id:	U0036058
Owner Address:	9739 W. Irvine Park
Owner City,St,Zip:	Schiller Park, IL 60167
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Used Oil
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	10
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	6/21/1994
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	11/1/1988
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2

Map ID	Site	Database(s)	EPA ID Number
	BP (Continued)		**U004128062**

Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	1/1/1988
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**

Map ID	Site	Database(s)	EPA ID Number
	BP (Continued)		**U004128062**

Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	550
Tank Substance:	Heating Oil
Last Used Date:	1/1/1988
OSFM First Notify Date:	6/21/1994
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/21/1994
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/1988
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	8
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/21/1994
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/1988
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	9
Tank Capacity:	12000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number

BP (Continued) **U004128062**

Last Used Date:	Not reported
OSFM First Notify Date:	6/21/1994
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/1988
Green Tag Decal:	**M003472**
Green Tag Issue Date:	**10/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

SRP:

IL EPA Id:	0316535007
US EPA Id:	ILD984925701
Longitude:	-87.64345
Latitude:	41.71383
Contact Name:	William Shaver
Contact Address:	24501 Ecorse Road
Contact Address2:	Not reported
Contact City,St,Zip:	Taylor, MI 48180-
Contact Phone:	(574) 272-6955
Date Enrolled:	06/22/2005
Point Of Contact:	Jason Brink
Consultant Company:	Timmermans Environmental Services, Inc.
Consultant Address:	4455 Chicago Drive SW
Consultant Address2:	Not reported
Consultant City,St,Zip:	Grandville, MI 49418-1544
Consultant Phone:	(616) 531-0503
Proj Mgr Assigned:	Baldwin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	0.5
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	PAV2, LLC
Remediation Applicant Title:	Executive V.P.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

Map ID	Site	Database(s)	EPA ID Number
18	**MOBIL OIL CO.** **05A8B MOBILE ST./9901 SOUTH HALSTED** **CHICAGO, IL 60628**	**LUST**	**S103688309** **N/A**

LUST:

Incident Num:	980630
IL EPA Id:	0316535005
Product:	Gasoline
IEMA Date:	03/24/1998
Project Manager:	Weller
Project Manager Phone:	(217) 524-4647
Email:	Melinda.Weller@illinois.gov
PRP Name:	Mobil Oil Corp.
PRP Contact:	Mike Holland
PRP Address:	Joliet Refinery, I-55 & Arsenal Rd.
PRP City,St,Zip:	Channahon, IL 60410
PRP Phone:	8154237664
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	04/02/1998
45 Report Received:	05/08/1998
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

18	**AMOCO OIL CO. #15525** **99TH & HALSTED** **CHICAGO, IL 60628**	**LUST**	**S103687480** **N/A**

LUST:

Incident Num:	941074
IL EPA Id:	0316535007
Product:	Gasoline
IEMA Date:	05/13/1994
Project Manager:	Weller
Project Manager Phone:	(217) 524-4647
Email:	Melinda.Weller@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1994-06-08
20 Report Received:	06/03/1994
45 Report Received:	06/29/1994
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
19	**#013611** **9948 S HALSTED** **CHICAGO, IL 60628**	**UST**	**U000865680** **N/A**

UST:

Facility ID:	2016833
Facility Status:	INACTIVE
Facility Type:	**NONE**
Owner Name:	Phillips Petroleum Company
Owner Id:	U0011864
Owner Address:	13 D2 Phillips Building
Owner City,St,Zip:	Bartlesville, OK 74004

Tank Number:	1
Tank Capacity:	560
Tank Substance:	Used Oil
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

Tank Number:	3
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

Map ID	Site	Database(s)	EPA ID Number

#013611 (Continued) **U000865680**

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

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21 **JOY AUTO REPAIR** **RCRA-SQG** **1004697492**
10001 S HALSTED **ILR000077966**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	06/01/2000
Facility name:	JOY AUTO REPAIR
Facility address:	10001 S HALSTED CHICAGO, IL 60628
EPA ID:	ILR000077966
Contact:	WILL TURNER
Contact address:	10001 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 298-8601
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	JOY AUTO REPAIR
Owner/operator address:	10001 S HALSTED CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 298-8601
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No

Map ID	Site	Database(s)	EPA ID Number

JOY AUTO REPAIR (Continued) **1004697492**

On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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21 **JOY AUTO SERVICE** **UST** **U003298274**
10001 SOUTH HALSTED STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2036186
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Turner Denise
Owner Id:	U0015296
Owner Address:	6847 S Calumet Ave
Owner City,St,Zip:	Chicago, IL 60647
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	JOY AUTO SERVICE (Continued)		**U003298274**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	500
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/13/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
21	**BELL BROS 29 MIN CLEANERS INC** **10000 S HALSTED ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001960552** **ILR000075119**

RCRA-SQG:

Date form received by agency:	02/25/2000
Facility name:	BELL BROS 29 MIN CLEANERS INC
Facility address:	10000 S HALSTED ST CHICAGO, IL 60628
EPA ID:	ILR000075119
Contact:	ALONZO BELL
Contact address:	10000 S HALSTED ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 774-5757
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	BELL BROS 29 MIN CLEANERS INC
Owner/operator address:	10000 S HALSTED CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 774-5757
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET,

Map ID	Site	Database(s)	EPA ID Number

BELL BROS 29 MIN CLEANERS INC (Continued) **1001960552**

WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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22 **FERNWOOD** **RCRA-SQG** **1001127030**
10041 S UNION **ILR000033076**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	01/10/1997
Facility name:	FERNWOOD
Facility address:	10041 S UNION CHICAGO, IL 60628
EPA ID:	ILR000033076
Contact:	ERVIN BOND
Contact address:	10041 S UNION CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-2700
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Map ID	Site	Database(s)	EPA ID Number
	FERNWOOD (Continued)		**1001127030**

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

24	**HESTER, FRANNY** **10101-03 SOUTH HALSTED AVE.** **CHICAGO, IL 60628**	**LUST**	**S104529973** **N/A**

LUST:

Incident Num:	991953
IL EPA Id:	0316495119
Product:	Gasoline, Uset Oil
IEMA Date:	08/18/1999
Project Manager:	Rothering
Project Manager Phone:	(217) 785-1858
Email:	Scott.Rothering@illinois.gov
PRP Name:	Franny Hester
PRP Contact:	Anna Davis
PRP Address:	2237 East 79th St.
PRP City,St,Zip:	Chicago, IL 60649
PRP Phone:	7733566300
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	09/02/1999
45 Report Received:	01/31/2000
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

24	**FERNWOOD TOWING & TUNE-UPS** **10101-10103 S ASHLAND** **CHICAGO, IL 60628**	**UST**	**U003668840** **N/A**

UST:

Facility ID:	2039129
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Fannie Hester
Owner Id:	U0028902
Owner Address:	2237 E 79th St C/O Anna Davis Maguire & Assoc Real Estate
Owner City,St,Zip:	Chicago, IL 60644
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/31/1999
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

FERNWOOD TOWING & TUNE-UPS (Continued) **U003668840**

Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/31/1999
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/31/1999
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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36 **HARDY CORP** **UST** **U000791535**
711 W 103RD ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2001050
Facility Status:	CLOSED
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Name:	Hardy Corp
Owner Id:	U0006455
Owner Address:	711 W 103Rd St
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	5/1/1994
OSFM First Notify Date:	1/24/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

HARDY CORP (Continued) **U000791535**

Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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36 **HARDY CORP** **RCRA-SQG** **1000979049**
711 W 103RD ST **LUST** **IL0000958884**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	11/30/1994
Facility name:	HARDY CORP
Facility address:	711 W 103RD ST CHICAGO, IL 60628
EPA ID:	IL0000958884
Contact:	WILLIAM HARDY
Contact address:	711 W 103RD ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 779-6600
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	HARDY CORP
Owner/operator address:	711 W 103RD ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 779-6600
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Map ID	Site	Database(s)	EPA ID Number

HARDY CORP (Continued) **1000979049**

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

LUST:

Incident Num:	942827
IL EPA Id:	0316495065
Product:	Gasoline
IEMA Date:	12/15/1994
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Hardy Corp.
PRP Contact:	William Hardy
PRP Address:	711 West 103rd St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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37 **DELITE CLEANERS** **RCRA-SQG** **1000612336**
816 W 103RD ST **ILD984825638**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	11/02/1998
Facility name:	DELITE CLEANERS
Facility address:	816 W 103RD ST CHICAGO, IL 60643
EPA ID:	ILD984825638
Contact:	WILLIAM HOPKINS
Contact address:	816 W 103RD ST CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(773) 233-2486
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Map ID	Site	Database(s)	EPA ID Number

DELITE CLEANERS (Continued) **1000612336**

Owner/Operator Summary:

Owner/operator name:	HOPKINS WILLIAM
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

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38 **MCDONNELL CLEANERS** **RCRA-SQG** **1000339273**
932 W 103RD ST **ILD097171318**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	02/11/1988
Facility name:	MCDONNELL CLEANERS
Facility address:	932 W 103RD ST
	CHICAGO, IL 60643
EPA ID:	ILD097171318
Contact:	JOHN MCDONNELL
Contact address:	932 W 103RD ST
	CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(312) 238-2776

Map ID	Site	Database(s)	EPA ID Number

MCDONNELL CLEANERS (Continued) **1000339273**

Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: MCDONNELL JOHN
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR

Map ID	Site	Database(s)	EPA ID Number

MCDONNELL CLEANERS (Continued) **1000339273**

F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

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39 **AMOCO 8614** **RCRA-SQG** **1000862415**
10301 S HALSTED ST **ILD984923169**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	08/20/1993
Facility name:	AMOCO 8614
Facility address:	10301 S HALSTED CHICAGO, IL 60627
EPA ID:	ILD984923169
Mailing address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact:	LINDA CURRAN
Contact address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Contact country:	US
Contact telephone:	(708) 990-1043
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AMOCO OIL CO
Owner/operator address:	2021 SPRING RD 400 OAK BROOK, IL 60521
Owner/operator country:	Not reported
Owner/operator telephone:	(708) 990-1043
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No

Map ID	Site	Database(s)	EPA ID Number

AMOCO 8614 (Continued) **1000862415**

Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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39 **MARATHON GAS AND FOOD** **UST** **U001141865**
10301 S. HALSTED STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2022921
Facility Status:	CLOSED
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	OK Gas and Food, Inc.
Owner Id:	U0031512
Owner Address:	10301 S. Halsted
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/16/2008
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1983
Green Tag Decal:	**G001584**
Green Tag Issue Date:	**4/11/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No
Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/16/2008
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1983

Map ID	Site	Database(s)	EPA ID Number

MARATHON GAS AND FOOD (Continued) **U001141865**

Green Tag Decal:	**G001584**
Green Tag Issue Date:	**4/11/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	1/16/2008
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1983
Green Tag Decal:	**G001584**
Green Tag Issue Date:	**4/11/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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39 **MUSTAFA, KHADIM** **LUST** **S105958677**
10301 SOUTH HALSTED **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20031090
IL EPA Id:	0316495046
Product:	Gasoline
IEMA Date:	07/23/2003
Project Manager:	Hale
Project Manager Phone:	(217) 782-1803
Email:	Sam.Hale@illinois.gov
PRP Name:	BP Products North America, Inc.
PRP Contact:	Harold Primack
PRP Address:	28100 Torch Parkway, 2S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	6308367139
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	08/12/2003
45 Report Received:	09/08/2003
NFA/NFR Letter:	**11/21/2008**
NFR Date Recorded:	01/14/2010

Incident Num:	20080221
IL EPA Id:	0316495046
Product:	Gasoline
IEMA Date:	02/15/2008
Project Manager:	Hale
Project Manager Phone:	(217) 782-1803
Email:	Sam.Hale@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported

Map ID	Site	Database(s)	EPA ID Number

MUSTAFA, KHADIM (Continued) **S105958677**

PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/31/2008
45 Report Received:	04/25/2008
NFA/NFR Letter:	**07/30/2008**
NFR Date Recorded:	04/20/2009

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39 **SPILLS** **S109092833**
N/A

10301 S HALSTED
CHICAGO, IL

SPILLS:

Incident ID:	20080221
Incident Date:	Not reported
Date Received:	02/15/2008
Facility Address:	10301 S HALSTED
Facility City:	CHICAGO
PRP Name:	MUSTAFA, KHADIM
AC:	Not reported

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40 **GARVEY** **RCRA-SQG** **1001127074**
10309 S MORGAN **ILR000033746**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	01/22/1997
Facility name:	GARVEY
Facility address:	10309 S MORGAN CHICAGO, IL 60643
EPA ID:	ILR000033746
Contact:	PATRICIA TAYLOR
Contact address:	10309 S MORGAN CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(773) 535-2763
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District

Map ID	Site	Database(s)	EPA ID Number

GARVEY (Continued) **1001127074**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

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45 **CHICAGO FIRE DEPARTMENT ENGINE #93** **UST** **U004128232**
330 WEST 104TH STREET **N/A**
CHICAGO, IL 60622

UST:
Facility ID: 2030538
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: City of Chicago, Department of Environment
Owner Id: U0020004
Owner Address: 30 North LaSalle Street, #300
Owner City,St,Zip: Chicago, IL 60612

Tank Number: 1
Tank Capacity: 0
Tank Substance: Heating Oil
Last Used Date: 9/1/1968
OSFM First Notify Date: 6/30/1992
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: 1/1/1901
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
45	**ROSELAND PUMPING STATION** **351 W 104TH ST** **CHICAGO, IL 60628**	**UST**	**U001142169** **N/A**

UST:

Facility ID:	2020701
Facility Status:	EXEMPT
Facility Type:	**CITY / TOWN**
Owner Name:	City of Chicago
Owner Id:	U0020652
Owner Address:	121 North LaSalle Street Commissioners Office
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Diesel Fuel
Last Used Date:	6/1/1981
OSFM First Notify Date:	4/28/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
45	**CHICAGO, CITY OF** **351 WEST 104TH ST.** **CHICAGO, IL 60628**	**LUST**	**S105225778** **N/A**

LUST:

Incident Num:	942419
IL EPA Id:	0316495048
Product:	Deisel
IEMA Date:	10/27/1994
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	City of Chicago
PRP Contact:	Richard Wojcieszak
PRP Address:	1000 East Ohio St.
PRP City,St,Zip:	Chicago, IL 60611
PRP Phone:	Not reported
Site Classification:	NFA
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	11/07/1994
45 Report Received:	03/08/1995
NFA/NFR Letter:	**09/19/1995**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
45	**351 W 104TH ST** **CHICAGO, IL**	**SPILLS**	**S111892193** **N/A**

SPILLS:

Incident ID:	19942419
Incident Date:	Not reported
Date Received:	10/27/1994
Facility Address:	351 W 104TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO, CITY OF-DEPT OF WATER
AC:	Not reported

49	**FERNWOOD PLAYGROUND PARK** **10436 S WALLACE** **CHICAGO, IL 60605**	**UST**	**U001473580** **N/A**

UST:

Facility ID:	2032287
Facility Status:	INACTIVE/HEATING OIL
Facility Type:	**CITY / TOWN**
Owner Name:	Chicago Park District
Owner Id:	U0002888
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	1500
Tank Substance:	Heating Oil
Last Used Date:	1/1/1974
OSFM First Notify Date:	7/7/1993
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1960
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

50	**OUR #52-9652-105** **NWC HALSTED & 105TH ST** **CHICAGO, IL 60628**	**UST**	**U000865963** **N/A**

UST:

Facility ID:	2020630
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Union Oil Co Of California
Owner Id:	U0015371
Owner Address:	1650 E Gulf Rd
Owner City,St,Zip:	Schaumburg, IL 60196
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	6/1/1972

Map ID	Site	Database(s)	EPA ID Number

OUR #52-9652-105 (Continued) **U000865963**

OSFM First Notify Date:	4/30/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	6/1/1972
OSFM First Notify Date:	4/30/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	9500
Tank Substance:	Gasoline
Last Used Date:	6/1/1972
OSFM First Notify Date:	4/30/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	9500
Tank Substance:	Gasoline
Last Used Date:	6/1/1972
OSFM First Notify Date:	4/30/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	OUR #52-9652-105 (Continued)		**U000865963**

Fee Due: Not reported

51	**IL BELL TELEPHONE CO** **413 W 105TH** **CHICAGO, IL 60628**	**UST**	**U001142608** **N/A**

UST:

Facility ID:	2007809
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Ameritech d/b/a AT&T
Owner Id:	U0007227
Owner Address:	308 South Akard, Room 1701
Owner City,St,Zip:	Dallas, TX 75202
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/8/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/8/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1988
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	IL BELL TELEPHONE CO (Continued)		**U001142608**

Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
51	**ILLINOIS BELL TELEPHONE** **413 WEST 105TH STREET** **CHICAGO, IL 60628**	**LUST**	**S104528083** **N/A**

LUST:

Incident Num:	880112
IL EPA Id:	0316495016
Product:	Not reported
IEMA Date:	02/02/1988
Project Manager:	Tucka
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Illinois Bell Telephone
PRP Contact:	Thomas Scheer
PRP Address:	900 North Villa
PRP City,St,Zip:	Villa Park, IL 60181
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**03/21/2005**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
53	**MOUNT VERNON ELEMENTARY** **10540 S MORGAN ST** **CHICAGO, IL 60643**	**RCRA-CESQG**	**1004696867** **ILR000059352**

RCRA-CESQG:

Date form received by agency:	12/09/1998
Facility name:	MOUNT VERNON ELEMENTARY
Facility address:	10540 S MORGAN ST CHICAGO, IL 60643
EPA ID:	ILR000059352
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or

Map ID	Site	Database(s)	EPA ID Number
	MOUNT VERNON ELEMENTARY (Continued)		**1004696867**

other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
56	**1040 WEST 106TH ST** **CHICAGO, IL**	**ERNS**	**2003703238** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

57	**WALGREEN N0 2300** **10620 S HALSTED ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001213813** **ILR000046268**

RCRA-SQG:

Date form received by agency:	12/11/1997
Facility name:	WALGREEN N0 2300
Facility address:	10620 S HALSTED ST CHICAGO, IL 60628
EPA ID:	ILR000046268
Mailing address:	4020 STIRRUP CREEK DR DURHAM, NC 27703
Contact:	RUSS ROELLER
Contact address:	4020 STIRRUP CREEK DR DURHAM, NC 27703
Contact country:	US
Contact telephone:	(919) 484-3631
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WALGREEN STORES
Owner/operator address:	200 WILMONT RD DEERFIELD, IL 60015
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 914-2500
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number
	WALGREEN N0 2300 (Continued)		**1001213813**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D011
Waste name: SILVER

Violation Status: No violations found

57	**BETTY BRITE CLEANERS** **10630 SOUTH HALSTED STREET** **CHICAGO, IL 60628**	**SRP** **DRYCLEANERS**	**S106346412** **N/A**

SRP:

IL EPA Id:	0316495007
US EPA Id:	ILD103342267
Longitude:	-87.64306
Latitude:	41.70038
Contact Name:	Betty Ehman
Contact Address:	10630 South Halsted Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60628-
Contact Phone:	(708) 494-6040
Date Enrolled:	03/01/2004
Point Of Contact:	Michael C. Butler, P.E.
Consultant Company:	Northern Environmental Technologies, Inc.
Consultant Address:	647 Academy Drive
Consultant Address2:	Not reported
Consultant City,St,Zip:	Northbrook, IL 60062-
Consultant Phone:	(847) 562-8577
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	0.450
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Betty Brite Cleaners
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BETTY BRITE CLEANERS (Continued)		**S106346412**

DRYCLEANERS:

Facility Id:	5534-4100-01
DC No:	DC-00489
Facility Contact:	EUNICE KIM
License Expires:	12/31/2012

57	**BETTY BRITE CLEANERS** **10630 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000423104** **ILD103342267**

RCRA-SQG:

Date form received by agency:	03/19/1987
Facility name:	BETTY BRITE CLEANERS
Facility address:	10630 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD103342267
Contact:	MICHAEL WILLIAMS
Contact address:	10630 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 881-9822
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	BETTY BRITE INC
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

Map ID	Site	Database(s)	EPA ID Number

BETTY BRITE CLEANERS (Continued) **1000423104**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:

Regulation violated:	Not reported
Area of violation:	Not reported
Date violation determined:	Not reported
Date achieved compliance:	Not reported
Violation lead agency:	Not reported
Enforcement action:	Not reported
Enforcement action date:	Not reported
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	Not reported
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Evaluation Action Summary:

Evaluation date:	09/29/1997
Evaluation:	COMPLIANCE ASSISTANCE VISIT
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	EPA

---

59 **CITGO GAS & MINI MART** **UST** **U001143119**
10655 S HALSTED ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2007001
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Gagan Petroleum, Inc.
Owner Id:	U0029367

Map ID	Site	Database(s)	EPA ID Number
	CITGO GAS & MINI MART (Continued)		**U001143119**

Owner Address:	10655 S. Halsted St.
Owner City,St,Zip:	Chicago, IL 99999
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/24/2000
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/24/2000
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	1/24/2000
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	8/9/1996
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**

Map ID	Site	Database(s)	EPA ID Number
	CITGO GAS & MINI MART (Continued)		**U001143119**

Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/5/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	2/1/2000
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/5/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	2/1/2000
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/5/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	2/1/2000
Green Tag Decal:	**L003786**
Green Tag Issue Date:	**5/18/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
59	**SHELL OIL CO.** **10655 SOUTH HALSTED** **CHICAGO, IL 60628**	**LUST**	**S104528066** **N/A**

LUST:

Incident Num:	880583
IL EPA Id:	0316495044
Product:	Gasoline
IEMA Date:	05/06/1988
Project Manager:	Wallace
Project Manager Phone:	(217) 524-1283
Email:	Donna.Wallace@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	Lisa Schoedel
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	06/26/1988
45 Report Received:	10/24/1990
NFA/NFR Letter:	**09/07/1999**
NFR Date Recorded:	Not reported

64	**DUNNE** **10845 S UNION** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001123586** **ILR000032904**

RCRA-SQG:

Date form received by agency:	01/08/1997
Facility name:	DUNNE
Facility address:	10845 S UNION CHICAGO, IL 60628
EPA ID:	ILR000032904
Contact:	DEAN THOMPSON
Contact address:	10845 S UNION CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-5517
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	DUNNE (Continued)		**1001123586**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

Count: 12 records

FOCUS MAP 3 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1010563423	COM ED	103RD & VINCIENNES	60643	RCRA-SQG
CHICAGO	1004692486	107TH ST SUB SHOP	1215 W 107TH	60628	RCRA-CESQG
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	1001487618	FERNWOOD TOWING AND TUNE UPS	10101 10103 S HALSTED	60628	RCRA-SQG
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS

Focus Map 4

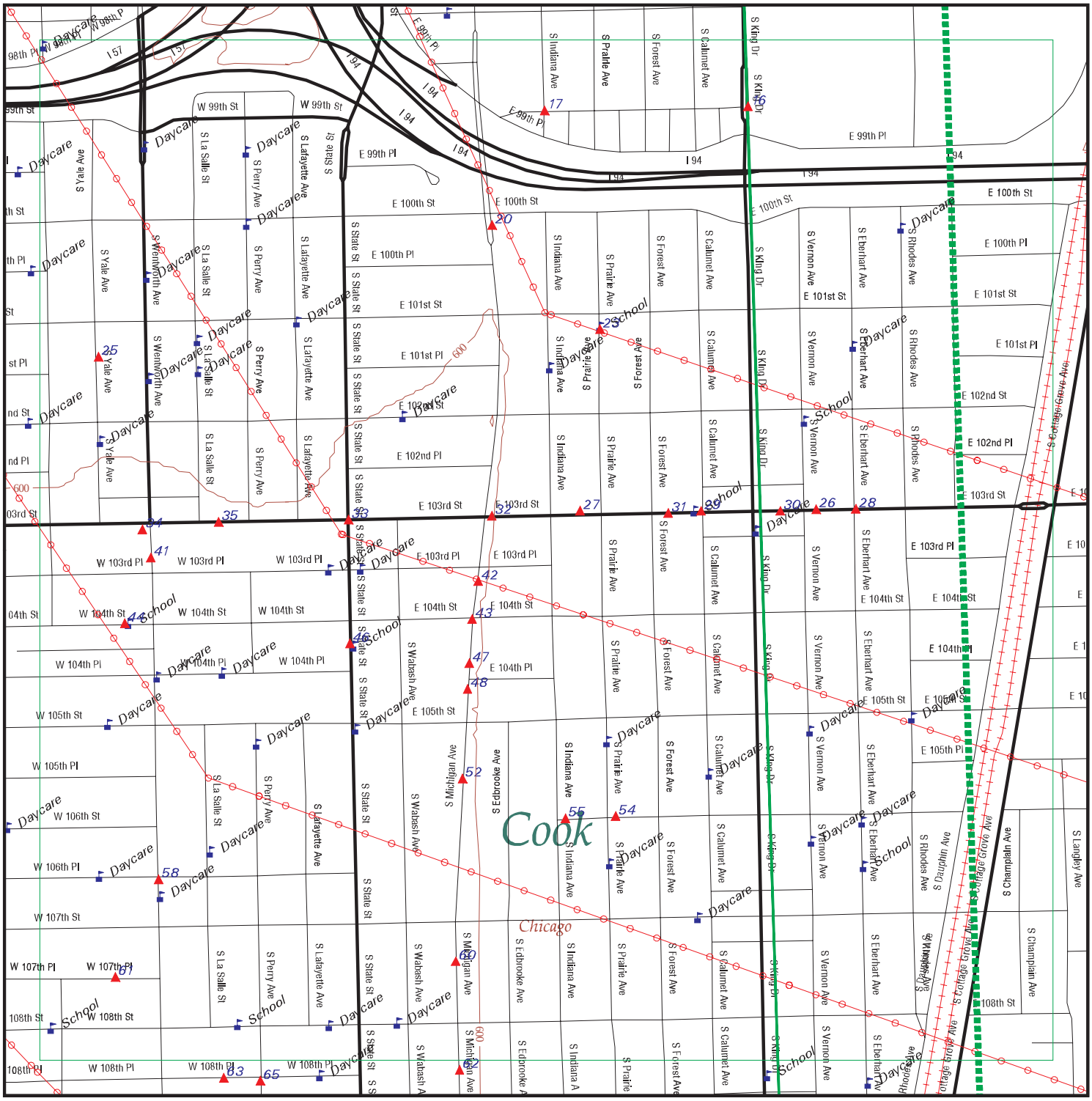

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 4 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	10
RCRA-CESQG	5
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	4
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	10
UST	24
SPILLS	12
ENG CONTROLS	2
INST CONTROL	3
SRP	4
DRYCLEANERS	1
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
16	**DRIVER SER FACILITY** **9901 S MARTIN LUTHER KING DR** **CHICAGO, IL 60628**	**UST**	**U000792087** **N/A**

UST:

Facility ID:	2024664
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Secretary Of State
Owner Id:	U0013734
Owner Address:	Rm 189 Howlett Bldg
Owner City,St,Zip:	Springfield, IL 62756
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	3/6/1989
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
16	**SECRETARY OF STATE - DRIVER FACILITY** **9901 DR MARTIN LUTHER KING** **CHICAGO, IL 60628**	**LUST**	**1008127443** **N/A**

LUST:

Incident Num:	932320
IL EPA Id:	0316495055
Product:	Non Petro
IEMA Date:	08/30/1993
Project Manager:	Nickell
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Illinois Secretary of State
PRP Contact:	Robert Orr
PRP Address:	Room 037, Howlett Bldg.
PRP City,St,Zip:	Springfield, IL 62756
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	09/17/1993
45 Report Received:	10/25/1993
NFA/NFR Letter:	**11/17/1995**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
17	**SHEDD BRANCH SCHOOL** **200 E 99TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1001123323** **ILR000028951**

RCRA-CESQG:

Date form received by agency:	12/24/2009
Facility name:	SHEDD BRANCH SCHOOL
Facility address:	200 E 99TH ST CHICAGO, IL 60628
EPA ID:	ILR000028951
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	200 E 99TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number
	SHEDD BRANCH SCHOOL (Continued)		**1001123323**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/15/1998
Facility name: SHEDD BRANCH SCHOOL
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: X002
Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
20	**SWEIS RAY TOWN AND COUNTRY MINI MART** **10007 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000907509** **IL0000802181**

RCRA-SQG:
Date form received by agency: 09/20/1994
Facility name: SWEIS RAY TOWN AND COUNTRY MINI MART
Facility address: 10007 S MICHIGAN AVE
CHICAGO, IL 60628
EPA ID: IL0000802181
Mailing address: 9023 W PINE
ORLAND PARK, IL 60462
Contact: RAY SWEIS
Contact address: 10007 S MICHIGAN AVE
CHICAGO, IL 60628
Contact country: US
Contact telephone: (708) 460-8950
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

Map ID	Site	Database(s)	EPA ID Number

SWEIS RAY TOWN AND COUNTRY MINI MART (Continued) **1000907509**

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NASSER MUHAMMAD
Owner/operator address:	10007 S MICHIGAN AVE CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 785-5110
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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20 **TOWN & COUNTRY GAS MART** **LUST** **S104522883**
10007 SOUTH MICHIGAN AVE. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	942453
IL EPA Id:	0316495064
Product:	Uset Oil
IEMA Date:	11/01/1994
Project Manager:	Zuehlke
Project Manager Phone:	(217) 557-6937
Email:	Wayne.Zuehlke@illinois.gov
PRP Name:	Omar Muthane
PRP Contact:	Not reported
PRP Address:	5901 North Cicero Avenue

Map ID	Site	Database(s)	EPA ID Number

TOWN & COUNTRY GAS MART (Continued) **S104522883**

PRP City,St,Zip:	Chicago, IL 60646
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/01/1995
45 Report Received:	05/26/1995
NFA/NFR Letter:	**01/27/2009**
NFR Date Recorded:	03/23/2009

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20 **O.S. CORPORATION D/B/A CITGO** **UST** **U000865940**
10007 S. MICHIGAN AVENUE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2026784
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Omar Muthanna
Owner Id:	U0032438
Owner Address:	Not reported
Owner City,St,Zip:	Not reported

Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	2/14/1991
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1974
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	2/14/1991
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1974
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000

Map ID	Site	Database(s)	EPA ID Number

O.S. CORPORATION D/B/A CITGO (Continued) **U000865940**

Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	2/14/1991
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1974
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	1/1/1987
OSFM First Notify Date:	8/20/1996
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1987
OSFM First Notify Date:	8/20/1996
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**K003713**
Green Tag Issue Date:	**4/21/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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23 **BENNETT** **RCRA-SQG** **1001087388**
10115 S PRAIRIE AVE **ILR000021204**
CHICAGO, IL 60609

RCRA-SQG:

Date form received by agency:	12/23/1996
Facility name:	BENNETT
Facility address:	10115 S PRAIRIE AVE CHICAGO, IL 60609
EPA ID:	ILR000021204
Contact:	BARBARA ELLIS
Contact address:	10115 S PRAIRIE AVE CHICAGO, IL 60609

Map ID	Site	Database(s)	EPA ID Number

BENNETT (Continued) **1001087388**

Contact country: US
Contact telephone: (773) 535-5460
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-7039
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
25	**10135 SOUTH YALE ST** **CHICAGO, IL**	**ERNS**	**2006796125** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

26	**R & R MARATHON** **446 E. 103RD STREET** **CHICAGO, IL 60628**	**UST**	**U003971876** **N/A**

UST:

Facility ID:	2034334
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	R & R Gasoline, Inc.
Owner Id:	U0033325
Owner Address:	446 E. 103rd Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	9/15/1995
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	6/15/1972
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	9/15/1995
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	6/15/1972
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	9/15/1995

Map ID	Site	Database(s)	EPA ID Number

R & R MARATHON (Continued) **U003971876**

Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/6/1970
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1962
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1956
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	1/1/1962
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1956
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	1/1/1963
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1962
Green Tag Decal:	**J003813**
Green Tag Issue Date:	**2/6/2008**
Green Tag Expire Date:	**12/31/2010**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
26	**KADALIMATTON, SIBI** **446 EAST 103RD ST.** **CHICAGO, IL 60628**	**LUST**	**S105815855** **N/A**

LUST:

Incident Num:	20030225
IL EPA Id:	0316495079
Product:	Unleaded Gas
IEMA Date:	02/20/2003
Project Manager:	Wallace
Project Manager Phone:	(217) 524-1283
Email:	Donna.Wallace@illinois.gov
PRP Name:	Sibi Kadalimatton
PRP Contact:	Not reported
PRP Address:	5745 Beba
PRP City,St,Zip:	Morton Grove, IL 60053
PRP Phone:	7738791522
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/14/2004
45 Report Received:	05/14/2004
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

26	**446 E 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111913067** **N/A**

SPILLS:

Incident ID:	20030225
Incident Date:	Not reported
Date Received:	02/20/2003
Facility Address:	446 E 103RD ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

26	**ABA NORGETOWN** **437 E 103RD ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1000612392** **ILD984826206**

RCRA-CESQG:

Date form received by agency:	01/13/1997
Facility name:	ABA NORGETOWN CLEANERS
Facility address:	437 E 103RD ST CHICAGO, IL 60628
EPA ID:	ILD984826206
Contact:	GARY ADOLPH
Contact address:	437 E 103RD ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 568-6674
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Conditionally Exempt Small Quantity Generator

Map ID	Site	Database(s)	EPA ID Number

ABA NORGETOWN (Continued) **1000612392**

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	ABA NORGETOWN
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Owner/operator name:	ABA NORGETOWN
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	05/13/1991
Facility name:	ABA NORGETOWN CLEANERS

Map ID	Site	Database(s)	EPA ID Number

ABA NORGETOWN (Continued) **1000612392**

Classification: Small Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 01/13/1997
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

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27 **METROPOLITAN FAMILY SERVICES** **UST** **U003668693**
235E 103RD ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID: 2038836
Facility Status: EXEMPT
Facility Type: **NONE**
Owner Name: Metropolitan Family Services
Owner Id: U0027558
Owner Address: 14 E Jackson Blvd Suite 1400
Owner City,St,Zip: Chicago, IL 60604

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Heating Oil
Last Used Date: 1/1/1960
OSFM First Notify Date: Not reported
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**

Map ID	Site	Database(s)	EPA ID Number
	METROPOLITAN FAMILY SERVICES (Continued)		**U003668693**

Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

27	**#014816** **214 E 103RD ST** **CHICAGO, IL 60628**	**UST**	**U000865670** **N/A**

UST:

Facility ID: 2016843
Facility Status: EXEMPT
Facility Type: **NONE**
Owner Name: Phillips Petroleum Company
Owner Id: U0011864
Owner Address: 13 D2 Phillips Building
Owner City,St,Zip: Bartlesville, OK 74004

Tank Number: 1
Tank Capacity: 6000
Tank Substance: Gasoline
Last Used Date: 10/1/1979
OSFM First Notify Date: 4/16/1986
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: $100.00

Tank Number: 2
Tank Capacity: 6000
Tank Substance: Gasoline
Last Used Date: 10/1/1979
OSFM First Notify Date: 4/16/1986
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: $100.00

Tank Number: 3
Tank Capacity: 560
Tank Substance: Used Oil
Last Used Date: 10/1/1979
OSFM First Notify Date: 4/16/1986
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported

Map ID	Site	Database(s)	EPA ID Number

#014816 (Continued) **U000865670**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$100.00

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28 **CHICAGO DEPARTMENT OF ENVIRONMENT** **INST CONTROL** **S109143364**
501 EAST 103RD STREET **SRP** **N/A**
CHICAGO, IL 60628

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316495132
NFR Letter:	09/29/2009
Date NFR Recorded:	Not reported
Type Of Site:	Industrial/Commercial
Comprehensive / Focused:	Focused
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Tawfik Tawil
RA Company:	Millenium Investment & Development, Inc.
RA Address:	9224 South Oketo Avenue
RA Secondary Address:	Not reported
RA City,St,Zip:	Bridgeview, IL 60455-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	0.497

SRP:

IL EPA Id:	0316495132
US EPA Id:	Not reported
Longitude:	-87.61091
Latitude:	41.70711
Contact Name:	Tawfik Tawil
Contact Address:	9224 South Oketo Avenue
Contact Address2:	Not reported
Contact City,St,Zip:	Bridgeview, IL 60455-
Contact Phone:	(630) 688-0277
Date Enrolled:	06/30/2008
Point Of Contact:	Dana S. Rose
Consultant Company:	Adept Environmental Solutions, Inc.
Consultant Address:	1100 South Waiola Avenue
Consultant Address2:	Not reported
Consultant City,St,Zip:	LaGrange, IL 60525-
Consultant Phone:	(708) 352-9322
Proj Mgr Assigned:	Smith
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	0.497
No Further Remediation Letter Dt:	09/29/2009
Remediation Applicant Co:	Millenium Investment & Development, Inc.
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Mr. Tawfik Tawil
Remediation Applicant Company:	Millenium Investment & Development, Inc.
Remediation Applicant Address:	9224 South Oketo Avenue

Map ID	Site	Database(s)	EPA ID Number

CHICAGO DEPARTMENT OF ENVIRONMENT (Continued) **S109143364**

Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Bridgeview, IL 60455-
Illinois EPA:	0316495132
Site Name:	Chicago Department of Environment
NFR Letter:	2009-09-29
NFR Letter Date Recorded:	Not reported
Site Type:	Industrial/Commercial
Comprehensive/Focused:	Focused
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	0.497

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29 **VACANT JIFFY LUBE STORE 208** **LUST** **U002112807**
350 EAST 103RD STREET **UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	950708
IL EPA Id:	0316505017
Product:	Other Petro
IEMA Date:	04/10/1995
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	Pennzoil
PRP Contact:	Dan McQuillen
PRP Address:	P.O. Box 2967
PRP City,St,Zip:	Houston, TX 77252-2967
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	10/23/1995
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2033802
Facility Status:	CLOSED
Facility Type:	**PETROLEUM DISTRIBUTOR**
Owner Name:	Jiffy Lube International
Owner Id:	U0007899
Owner Address:	700 Milam - 10th Floor P.O. Box 2967
Owner City,St,Zip:	Houston, TX 77002
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	12/1/1994
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901

Map ID	Site	Database(s)	EPA ID Number
	VACANT JIFFY LUBE STORE 208 (Continued)		**U002112807**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	12/1/1994
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/17/1995
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/17/1995
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
29	**350 E 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111893409** **N/A**

SPILLS:

Incident ID:	19950708
Incident Date:	Not reported
Date Received:	04/10/1995
Facility Address:	350 E 103RD ST
Facility City:	CHICAGO
PRP Name:	PENNZOIL
AC:	Not reported

30	**AGUILAR, ABEL** **415 EAST 103RD ST.** **CHICAGO, IL 60628**	**LUST**	**S105958607** **N/A**

LUST:

Incident Num:	20030826
IL EPA Id:	0316495152
Product:	Other Petro
IEMA Date:	06/04/2003
Project Manager:	Hale
Project Manager Phone:	(217) 782-1803
Email:	Sam.Hale@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	10/27/2003
Non LUST Determination Letter:	Not reported
20 Report Received:	07/22/2003
45 Report Received:	07/22/2003
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

30	**415 E 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111914026** **N/A**

SPILLS:

Incident ID:	20030826
Incident Date:	Not reported
Date Received:	06/04/2003
Facility Address:	415 E 103RD ST
Facility City:	CHICAGO
PRP Name:	AGUILAR, ABEL
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
30	**VACANT BUILDING** **415 E 103RD AVE THIRD PARTY REMOVAL** **CHICAGO, IL 60628**	**UST**	**U003907981** **N/A**

UST:

Facility ID:	2041666
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Sheldon Liquors
Owner Id:	U0031274
Owner Address:	421 E 103rd
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	7/22/2003
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

31	**WALGREENS NO 1069** **319 E 103RD ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000612045** **ILD984822635**

RCRA-SQG:

Date form received by agency:	11/04/1997
Facility name:	WALGREENS NO 1069
Facility address:	319 E 103RD ST CHICAGO, IL 60628
EPA ID:	ILD984822635
Contact:	HENRY REDD
Contact address:	319 E 103RD ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 468-0600
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WALGREENS
Owner/operator address:	319 E 103RD ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 468-0600
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

WALGREENS NO 1069 (Continued) **1000612045**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D011
Waste name: SILVER

Violation Status: No violations found

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32 **G&J AUTOMOTIVE** **UST** **U001142482**
122 E 103RD ST **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2026747
Facility Status: CLOSED
Facility Type: **NONE**
Owner Name: G&J Automotive
Owner Id: U0005572
Owner Address: 122 E 103Rd St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 8000
Tank Substance: Gasoline
Last Used Date: 9/1/1988
OSFM First Notify Date: 1/22/1991
Tank Status: **Removed**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**

Map ID	Site	Database(s)	EPA ID Number
	G&J AUTOMOTIVE (Continued)		**U001142482**

Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: No

32	**WALGREENS STORE #5123** **10300 S MICHIGAN** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001960520** **ILR000074518**

RCRA-SQG:

Date form received by agency:	02/02/2000
Facility name:	WALGREENS STORE #5123
Facility address:	10300 S MICHIGAN MICHIGAN & 103RD CHICAGO, IL 60628
EPA ID:	ILR000074518
Contact:	RUSS ROELLER
Contact address:	4020 STIRRUP CREEK DR #211 DURHAM, NC 27703
Contact country:	US
Contact telephone:	(919) 484-3631
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WALGREEN STORES
Owner/operator address:	200 WILMOT RD DEERFIELD, IL 60013
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 914-2500
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No

Map ID	Site	Database(s)	EPA ID Number
	WALGREENS STORE #5123 (Continued)		**1001960520**

Used oil transporter: No

Hazardous Waste Summary:
Waste code: D011
Waste name: SILVER

Violation Status: No violations found

32	**E-Z GO #077** **10301 S MICHIGAN AVE** **CHICAGO, IL 60628**	**UST**	**U001142061** **N/A**

UST:

Facility ID:	2017204
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Bulk Petroleum Corporation
Owner Id:	U0002119
Owner Address:	9653 North Granville Road
Owner City,St,Zip:	Mequon, WI 53097
Tank Number:	1
Tank Capacity:	99
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	99
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	99
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986

Map ID	Site	Database(s)	EPA ID Number

E-Z GO #077 (Continued) **U001142061**

Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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33 **SHELL STATION 1545-68** **UST** **U001473624**
1 W 103RD ST STATE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2007051
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Shell Oil Products
Owner Id:	U0013849
Owner Address:	P.O. Box 2099 Two Shell Plaza
Owner City,St,Zip:	Houston, TX 77252

Tank Number:	1
Tank Capacity:	9520
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	9520
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	9520
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number
	SHELL STATION 1545-68 (Continued)		**U001473624**

Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

33		**SPILLS**	**S111898514**
	10301 S STATE ST **CHICAGO, IL**		**N/A**

SPILLS:

Incident ID:	19970818
Incident Date:	Not reported
Date Received:	05/09/1997
Facility Address:	10301 S STATE ST
Facility City:	CHICAGO
PRP Name:	AMOCO OIL CO
AC:	Not reported

33	**MARATHON GAS STATION & MINI-MART** **10301 S STATE ST** **CHICAGO, IL 60628**	**UST**	**U003914149** **N/A**

UST:

Facility ID:	2041743
Facility Status:	NOT INSTALLED
Facility Type:	**NONE**
Owner Name:	Ali Mohsen
Owner Id:	U0031358
Owner Address:	10301 S State St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not Installed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	12000

Map ID	Site	Database(s)	EPA ID Number

MARATHON GAS STATION & MINI-MART (Continued) **U003914149**

Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not Installed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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33 **AMOCO OIL CO. #15991** **LUST** **S104521516**
10301 SOUTH STATE ST. **N/A**
CHICAGO, IL 60610

LUST:

Incident Num:	970818
IL EPA Id:	0316085301
Product:	Other Petro
IEMA Date:	05/09/1997
Project Manager:	Piggush
Project Manager Phone:	(217) 782-3101
Email:	Michael.Piggush@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2002-11-01
20 Report Received:	Not reported
45 Report Received:	07/28/1997
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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34 **AMOCO SS #15991 FACILITY#11758** **UST** **U001141959**
103RD & STATE 18599 **N/A**
CHICAGO, IL 60636

UST:

Facility ID:	2020358
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	BP Products North America, Inc.
Owner Id:	U0000552
Owner Address:	P. O. Box 6038 Environmental Compliance Department
Owner City,St,Zip:	Artesia, CA 90702
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	7/1/1986

Map ID	Site	Database(s)	EPA ID Number

AMOCO SS #15991 FACILITY#11758 (Continued) **U001141959**

OSFM First Notify Date:	4/25/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	7/1/1986
OSFM First Notify Date:	4/25/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	7/1/1986
OSFM First Notify Date:	4/25/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	7/1/1986
OSFM First Notify Date:	4/25/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	AMOCO SS #15991 FACILITY#11758 (Continued)		**U001141959**

Fee Due: Not reported

34	**CITGO** **210 W. 103RD STREET** **CHICAGO, IL 60628**	**UST**	**U003805663** **N/A**

UST:

Facility ID:	2040667
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	WG 8, Inc.
Owner Id:	U0034928
Owner Address:	210 W. 103rd Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	15000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/12/2002
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/2001
Green Tag Decal:	**N001777**
Green Tag Issue Date:	**3/21/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/12/2002
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	11/1/2001
Green Tag Decal:	**N001777**
Green Tag Issue Date:	**3/21/2012**
Green Tag Expire Date:	**12/31/2014**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

34	**201 W 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111878830** **N/A**

SPILLS:

Incident ID:	19903655
Incident Date:	Not reported
Date Received:	12/10/1990
Facility Address:	201 W 103RD ST
Facility City:	CHICAGO

Map ID	Site	Database(s)	EPA ID Number
	(Continued)		**S111878830**

PRP Name: F & DARDEN DRY CLEANERS
AC: Not reported

34	**201 W 103RD ST** **CHICAGO, IL**	**SPILLS**	**S111878463** **N/A**

SPILLS:
Incident ID: 19903286
Incident Date: Not reported
Date Received: 11/07/1990
Facility Address: 201 W 103RD ST
Facility City: CHICAGO
PRP Name: OXY USA INC.
AC: Not reported

34	**ONE HOUR MARTENIZING** **201 WEST 103RD ST.** **CHICAGO, IL 60628**	**LUST**	**S103292372** **N/A**

LUST:
Incident Num: 903286
IL EPA Id: 0316495013
Product: Gasoline
IEMA Date: 11/07/1990
Project Manager: NOT ASSIGNED
Project Manager Phone: Not reported
Email: Not reported
PRP Name: F & R Darden Corp.
PRP Contact: Renee Darden
PRP Address: 201 West 103rd St.
PRP City,St,Zip: Chicago, IL 60628
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: 731
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: Not reported
45 Report Received: Not reported
NFA/NFR Letter: 02/27/1991
NFR Date Recorded: Not reported

Incident Num: 903655
IL EPA Id: 0316495013
Product: Gasoline
IEMA Date: 12/11/1990
Project Manager: Nifong
Project Manager Phone: Not reported
Email: Not reported
PRP Name: Fred Darden
PRP Contact: Not reported
PRP Address: 201 West 103rd St.
PRP City,St,Zip: Chicago, IL 60606
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: 731

Map ID	Site	Database(s)	EPA ID Number
	ONE HOUR MARTENIZING (Continued)		**S103292372**

Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 02/29/1992
45 Report Received: 02/29/1992
NFA/NFR Letter: 02/27/1991
NFR Date Recorded: Not reported

Map ID	Site	Database(s)	EPA ID Number
34	**201-217 E 23RD ST** **CHICAGO, IL**	**SPILLS**	**S108045754** **N/A**

SPILLS:
Incident ID: 20040644
Incident Date: 05/04/2004
Date Received: 05/06/2004
Facility Address: 201-217 E 23RD ST
Facility City: CHICAGO
PRP Name: MPEA
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
34	**VACANT LOT** **201-217 EAST 23RD STREET** **CHICAGO, IL 60616**	**LUST** **UST**	**U003975109** **N/A**

LUST:
Incident Num: 20040644
IL EPA Id: 0316345050
Product: Uset Oil
IEMA Date: 05/06/2004
Project Manager: Rothering
Project Manager Phone: (217) 785-1858
Email: Scott.Rothering@illinois.gov
PRP Name: Not reported
PRP Contact: Not reported
PRP Address: Not reported
PRP City,St,Zip: Not reported
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: P.A.
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 06/14/2004
45 Report Received: 10/01/2004
NFA/NFR Letter: 11/17/2004
NFR Date Recorded: 02/25/2005

UST:
Facility ID: 2042284
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: Metropolitan Pier & Expostion Authority
Owner Id: U0031837
Owner Address: 301 E. Cermak Rd.
Owner City,St,Zip: Chicago, IL 60616

Tank Number: 1

Map ID	Site	Database(s)	EPA ID Number
	VACANT LOT (Continued)		**U003975109**

Tank Capacity:	300
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

34	**F & R QUALITY CLEANERS** **201 W. 103RD ST.** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000117870** **ILD982065310**

RCRA-SQG:

Date form received by agency:	05/12/1987
Facility name:	ONE HOUR MARTINIZING
Facility address:	201 W 103RD ST CHICAGO, IL 60628
EPA ID:	ILD982065310
Contact:	RENEE DARDEN
Contact address:	201 W 103RD ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 821-6738
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	F AND R DARDEN CORP
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

F & R QUALITY CLEANERS (Continued) **1000117870**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

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34 **MCCORMICK PLACE VACANT LOT** **UST** **U003971916**
201-217 E. CERMAK RD. **N/A**
CHICAGO, IL 60616

UST:

Facility ID:	2042068
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Metropolitan Pier & Expostion Authority
Owner Id:	U0031837
Owner Address:	301 E. Cermak Rd.
Owner City,St,Zip:	Chicago, IL 60616
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	4/13/2004
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	MCCORMICK PLACE VACANT LOT (Continued)		**U003971916**

Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

34	**CONSTRUCTION SITE** **201-231 W. 87TH STREET** **CHICAGO, IL 60620**	**UST**	**U004060420** **N/A**

UST:

Facility ID:	2043357
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Berkshire - West 87th Street, LLC
Owner Id:	U0033605
Owner Address:	41 Taylor Street
Owner City,St,Zip:	Springfield, MA 011031205

Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Lubricating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

CONSTRUCTION SITE (Continued) **U004060420**

Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	6500
Tank Substance:	Heating Oil

Map ID	Site	Database(s)	EPA ID Number

CONSTRUCTION SITE (Continued) **U004060420**

Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	8
Tank Capacity:	6500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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35 **SPILLS** **S108045282**

105 W 103RD ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20040313
Incident Date:	Not reported
Date Received:	03/10/2004
Facility Address:	105 W 103RD ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

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41 **NEW LANGSTON HUGHES ELEMENTARY SCHOOL** **ENG CONTROLS** **S108891246**
10320 SOUTH WENTWORTH AVENUE **SRP** **N/A**
CHICAGO, IL 60628

ENGINEERING CONTROLS:

Illinois Epa Id:	0316505045
NFR Letter:	08/03/2009
Date NFR Recorded:	09/10/2009
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	LeeAnn Tomas-Foster
RA Company:	Public Building Commission of Chicago
RA Address:	50 West Washington Street
RA Secondary Address:	Room 200

Map ID	Site	Database(s)	EPA ID Number

NEW LANGSTON HUGHES ELEMENTARY SCHOOL (Continued) **S108891246**

RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Not reported
Engineered Barriers:	Clean soil barrier
Worker Caution:	True
Acres:	3

SRP:

IL EPA Id:	0316505045
US EPA Id:	Not reported
Longitude:	-87.62958
Latitude:	41.70653
Contact Name:	LeeAnn Tomas-Foster
Contact Address:	50 West Washington Street
Contact Address2:	Room 200
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 930-5270
Date Enrolled:	09/06/2007
Point Of Contact:	Ala E. Sassila, P.E.
Consultant Company:	GSG Consultants, Inc.
Consultant Address:	855 West Adams Street
Consultant Address2:	Suite 200
Consultant City,St,Zip:	Chicago, IL 60607-
Consultant Phone:	(312) 733-6262
Proj Mgr Assigned:	Baldwin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	09/10/2009
Active:	False
Total Acres:	3
No Further Remediation Letter Dt:	08/03/2009
Remediation Applicant Co:	Public Building Commission of Chicago
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Ms. LeeAnn Tomas-Foster
Remediation Applicant Company:	Public Building Commission of Chicago
Remediation Applicant Address:	50 West Washington Street
Remediation Applicant Address 2:	Room 200
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316505045
Site Name:	New Langston Hughes Elementary School
NFR Letter:	2009-08-03
NFR Letter Date Recorded:	2009-09-10
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Not reported
Barrier:	Clean soil barrier
Worker Caution:	True
Acres:	3

Map ID	Site	Database(s)	EPA ID Number
42	**AMERICAN IDEAL** **10351 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1010563717** **ILR000151258**

RCRA-SQG:

Date form received by agency:	01/08/2008
Facility name:	AMERICAN IDEAL
Facility address:	10351 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000151258
Contact:	KERRY KOHN
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(773) 785-0687
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AMERICAN IDEAL
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/08/2008
Owner/Op end date:	Not reported

Owner/operator name:	AMERICAN IDEAL
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/08/2008
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

Map ID	Site	Database(s)	EPA ID Number

AMERICAN IDEAL (Continued) **1010563717**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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42 **AMERICAN IDEAL CLEANING CO., INC.** **UST** **U001141846**
10351 S. MICHIGAN AVE. **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2022018
Facility Status: CLOSED
Facility Type: COMMERCIAL / RETAIL
Owner Name: American Ideal Cleaning Co., Inc.
Owner Id: U0000499
Owner Address: 10341 S. Michigan Ave.
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 3000
Tank Substance: Cleaning Solvent
Last Used Date: 1/1/1983
OSFM First Notify Date: 5/6/1986
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: 1/1/1959
Green Tag Decal: G001592
Green Tag Issue Date: 4/21/2005
Green Tag Expire Date: 12/31/2008
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Tank Number: 2
Tank Capacity: 3000
Tank Substance: Cleaning Solvent
Last Used Date: 1/1/1983
OSFM First Notify Date: 5/6/1986
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: 1/1/1959
Green Tag Decal: G001592
Green Tag Issue Date: 4/21/2005
Green Tag Expire Date: 12/31/2008
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	AMERICAN IDEAL CLEANING CO., INC. (Continued)		**U001141846**

Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Cleaning Solvent
Last Used Date:	Not reported
OSFM First Notify Date:	5/6/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1976
Green Tag Decal:	**G001592**
Green Tag Issue Date:	**4/21/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Cleaning Solvent
Last Used Date:	Not reported
OSFM First Notify Date:	5/6/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1976
Green Tag Decal:	**G001592**
Green Tag Issue Date:	**4/21/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	5
Tank Capacity:	6000
Tank Substance:	Cleaning Solvent
Last Used Date:	8/16/2007
OSFM First Notify Date:	5/6/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	10/1/1983
Green Tag Decal:	**G001592**
Green Tag Issue Date:	**4/21/2005**
Green Tag Expire Date:	**12/31/2008**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
42	**AMERICAN IDEAL CLEANING COMPANY INC** **10351 SOUTH MICHIGAN AVENUE** **CHICAGO, IL 60628**	**DRYCLEANERS**	**S106540576** **N/A**

DRYCLEANERS:

Facility Id:	1016-9687-01
DC No:	DC-00747
Facility Contact:	KERRY KOHN
License Expires:	12/31/2012

43	**ROSELAND PLACE** **10400-10420 SOUTH MICHIGAN AVENUE** **CHICAGO, IL 60628**	**INST CONTROL** **SRP**	**S106967073** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316495164
NFR Letter:	09/30/2009
Date NFR Recorded:	10/06/2009
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Deborah Dixon
RA Company:	NHS Redevelopment Corporation
RA Address:	1279 North Milwaukee Avenue
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60622-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	1.95

SRP:

IL EPA Id:	0316495164
US EPA Id:	ILR000141622
Longitude:	-87.62109
Latitude:	41.70483
Contact Name:	Deborah Dixon
Contact Address:	1279 North Milwaukee Avenue
Contact Address2:	Suite 500
Contact City,St,Zip:	Chicago, IL 60622-
Contact Phone:	(773) 568-1020
Date Enrolled:	06/10/2005
Point Of Contact:	Paul S. Bernstein
Consultant Company:	MACTEC
Consultant Address:	5440 North Cumberland Avenue
Consultant Address2:	Suite 250
Consultant City,St,Zip:	Chicago, IL 60656-
Consultant Phone:	(773) 693-6030
Proj Mgr Assigned:	Rossi
Sec. 4 Letter Date:	Not reported
NFR Recorded:	10/06/2009
Active:	True
Total Acres:	1.95
No Further Remediation Letter Dt:	09/30/2009
Remediation Applicant Co:	Roseland Place, Inc. NFP
Remediation Applicant Title:	Vice President
Remediation Applicant Name:	Ms. Deborah Dixon
Remediation Applicant Company:	NHS Redevelopment Corporation
Remediation Applicant Address:	1279 North Milwaukee Avenue

Map ID	Site	Database(s)	EPA ID Number

ROSELAND PLACE (Continued) **S106967073**

Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60622-
Illinois EPA:	0316495164
Site Name:	Roseland Place
NFR Letter:	2009-09-30
NFR Letter Date Recorded:	2009-10-06
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	1.95

IL EPA Id:	0316495164
US EPA Id:	ILR000141622
Longitude:	-87.62109
Latitude:	41.70483
Contact Name:	Deborah Dixon
Contact Address:	1279 North Milwaukee Avenue
Contact Address2:	Suite 500
Contact City,St,Zip:	Chicago, IL 60622-
Contact Phone:	(773) 568-1020
Date Enrolled:	06/10/2005
Point Of Contact:	Paul S. Bernstein
Consultant Company:	MACTEC
Consultant Address:	5440 North Cumberland Avenue
Consultant Address2:	Suite 250
Consultant City,St,Zip:	Chicago, IL 60656-
Consultant Phone:	(773) 693-6030
Proj Mgr Assigned:	Rossi
Sec. 4 Letter Date:	Not reported
NFR Recorded:	04/24/2007
Active:	True
Total Acres:	1.95
No Further Remediation Letter Dt:	03/26/2007
Remediation Applicant Co:	Roseland Place, Inc. NFP
Remediation Applicant Title:	Vice President
Remediation Applicant Name:	Ms. Deborah Dixon
Remediation Applicant Company:	NHS Redevelopment Corporation
Remediation Applicant Address:	1279 North Milwaukee Avenue
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60622-
Illinois EPA:	0316495164
Site Name:	Roseland Place
NFR Letter:	2009-09-30
NFR Letter Date Recorded:	2009-10-06
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	1.95

Map ID	Site	Database(s)	EPA ID Number
43	**VACANT PROPERTY** **10400-10420 S. MICHIGAN AVENUE** **CHICAGO, IL 60628**	**UST**	**U004051774** **N/A**

UST:

Facility ID:	2043289
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Neighborhood Housing Services of Chicago
Owner Id:	U0033496
Owner Address:	11101 S. Michigan
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	275
Tank Substance:	Waste Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	VACANT PROPERTY (Continued)		**U004051774**

Tank Number:	4
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

44	**HUGHES LANGSTON SCHOOL** **226 W 104TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1000986465** **ILD984868745**

RCRA-CESQG:

Date form received by agency:	10/22/2009
Facility name:	HUGHES LANGSTON SCHOOL
Facility address:	226 W 104TH ST CHICAGO, IL 60628
EPA ID:	ILD984868745
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

HUGHES LANGSTON SCHOOL (Continued) **1000986465**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/04/1998
Facility name: HUGHES LANGSTON SCHOOL
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D000
Waste name: Not Defined

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: X002
Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
46	**KOHN SCHOOL** **10414 S STATE ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696761** **ILR000057521**

RCRA-CESQG:

Date form received by agency:	11/04/1998
Facility name:	KOHN SCHOOL
Facility address:	10414 S STATE ST CHICAGO, IL 60628
EPA ID:	ILR000057521
Mailing address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

Map ID	Site	Database(s)	EPA ID Number

KOHN SCHOOL (Continued) **1004696761**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

---

47 **SPILLS** **S110278064**

10426 S MICHIGAN AVE **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 20100068
Incident Date: 01/20/2010
Date Received: Not reported
Facility Address: 10426 S MICHIGAN AVE
Facility City: CHICAGO
PRP Name: Neighborhood Housing Services of Chicago
AC: Not reported

Incident ID: 20100068
Incident Date: Not reported
Date Received: 01/20/2010
Facility Address: 10426 S MICHIGAN AVE
Facility City: CHICAGO
PRP Name: NEIGHBORHOOD HOUSING SERVICES REDEVELOPMENT CORP O
AC: Not reported

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47 **VACANT PROPERTY** **UST** **U004151256**
10426 S. MICHIGAN AVENUE **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2044656
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: Roseland Place Limited Partnership
Owner Id: U0035710
Owner Address: 1279 N. Milwaukee Ave., 5th Floor
Owner City,St,Zip: Chicago, IL 60622

Tank Number: 1
Tank Capacity: 3250
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: Not reported

Map ID	Site	Database(s)	EPA ID Number

VACANT PROPERTY (Continued) **U004151256**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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47 **NEIGHBORHOOD HOUSING SERVICES REDEVELOPMENT CORP** **LUST** **S110122189**
10426 SOUTH MICHIGAN AVENUE **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20100068
IL EPA Id:	0316495183
Product:	Fuel Oil
IEMA Date:	01/20/2010
Project Manager:	South
Project Manager Phone:	(217) 558-0347
Email:	Shirlene.South@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/08/2010
45 Report Received:	03/10/2010
NFA/NFR Letter:	**06/09/2010**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
48	**DAIRY FRESH FOODS, INC.** **10450 SOUTH MICHIGAN AVENUE** **CHICAGO, IL 60628**	**ENG CONTROLS** **INST CONTROL** **SRP**	**S106878785** **N/A**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316515155
NFR Letter:	08/08/2006
Date NFR Recorded:	08/15/2006
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Robert Helle
RA Company:	Roseland SLF Associates, L.P.
RA Address:	701 Lee Street
RA Secondary Address:	Suite 450
RA City,St,Zip:	Des Plaines, IL 60016-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Brick barrier
Worker Caution:	True
Acres:	1.669

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316515155
NFR Letter:	08/08/2006
Date NFR Recorded:	08/15/2006
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Robert Helle
RA Company:	Roseland SLF Associates, L.P.
RA Address:	701 Lee Street
RA Secondary Address:	Suite 450
RA City,St,Zip:	Des Plaines, IL 60016-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Brick barrier
Worker Caution:	True
Acres:	1.669

SRP:

IL EPA Id:	0316515155
US EPA Id:	Not reported
Longitude:	-87.62117
Latitude:	41.70400
Contact Name:	Robert Helle
Contact Address:	701 Lee Street
Contact Address2:	Suite 450
Contact City,St,Zip:	Des Plaines, IL 60016-
Contact Phone:	(847) 768-5105
Date Enrolled:	04/28/2005
Point Of Contact:	Lawrence A. DuBose, P.E.
Consultant Company:	Testing Service Corporation
Consultant Address:	360 South Main Place
Consultant Address2:	Not reported
Consultant City,St,Zip:	Carol Stream, IL 60188-
Consultant Phone:	(630) 462-2600
Proj Mgr Assigned:	Murphy
Sec. 4 Letter Date:	Not reported
NFR Recorded:	08/15/2006

Map ID	Site	Database(s)	EPA ID Number

DAIRY FRESH FOODS, INC. (Continued) **S106878785**

Active:	False
Total Acres:	1.669
No Further Remediation Letter Dt:	08/08/2006
Remediation Applicant Co:	Roseland SLF Associates, L.P.
Remediation Applicant Title:	Vice President
Remediation Applicant Name:	Mr. Robert Helle
Remediation Applicant Company:	Roseland SLF Associates, L.P.
Remediation Applicant Address:	701 Lee Street
Remediation Applicant Address 2:	Suite 450
Remediation Applicant City,St,Zip:	Des Plaines, IL 60016-
Illinois EPA:	0316515155
Site Name:	Dairy Fresh Foods, Inc.
NFR Letter:	2006-08-08
NFR Letter Date Recorded:	2006-08-15
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Asphalt barrier/Concrete barrier/Brick barrier
Worker Caution:	True
Acres:	1.669

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48 **SPILLS** **S108045279**

10450 S MICHIGAN AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20040788
Incident Date:	06/02/2004
Date Received:	06/02/2004
Facility Address:	10450 S MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	DAIRY FRESH FOODS
AC:	Not reported

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52 **C & O AUTO REBUILDERS** **LUST** **S108891404**
10554 SOUTH MICHIGAN AVENUE **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20071260
IL EPA Id:	0316495096
Product:	Gasoline
IEMA Date:	09/14/2007
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	C & O AUTO REBUILDERS (Continued)		**S108891404**

20 Report Received:	10/09/2007
45 Report Received:	10/30/2007
NFA/NFR Letter:	**03/31/2008**
NFR Date Recorded:	04/08/2008

Map ID	Site	Database(s)	EPA ID Number
52	**10554 S MICHIGAN AVE** **CHICAGO, IL**	**SPILLS**	**S108891605** **N/A**

SPILLS:

Incident ID:	20071260
Incident Date:	Not reported
Date Received:	09/14/2007
Facility Address:	10554 S MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	C&O AUTO REBUILDERS
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
52	**AUTO REPAIR SHOP** **10554 S. MICHIGAN AVENUE** **CHICAGO, IL 60628**	**UST**	**U004110665** **N/A**

UST:

Facility ID:	2043798
Facility Status:	EXEMPT
Facility Type:	**COMMERCIAL / RETAIL**
Owner Name:	C & O Audo Rebuilders
Owner Id:	U0034337
Owner Address:	10554 S. Michigan Avenue
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/9/2007
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/9/2007
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	AUTO REPAIR SHOP (Continued)		**U004110665**

Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
52	**MICHIGAN AVENUE COLLISION** **10554 S MICHIGAN** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001201777** **ILR000039289**

RCRA-SQG:

Date form received by agency:	12/24/2009
Facility name:	MICHIGAN AVENUE COLLISION
Facility address:	10554 S MICHIGAN CHICAGO, IL 60628
EPA ID:	ILR000039289
Contact:	ROBT SIGEL
Contact address:	10554 S MICHIGAN CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-5586
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MICHIGAN AVE COLLISION
Owner/operator address:	10554 S MICHIGAN CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-5586
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Map ID	Site	Database(s)	EPA ID Number

MICHIGAN AVENUE COLLISION (Continued) **1001201777**

Historical Generators:
Date form received by agency: 06/13/1997
Facility name: MICHIGAN AVENUE COLLISION
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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54 **ERNS** **2001569315**
240 EAST 106TH ST **N/A**
CHICAGO, IL 0

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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54 **ERNS** **2002600539**
240 EAST 106 TH STREET **N/A**
CHICAGO, IL 0

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

Map ID	Site	Database(s)	EPA ID Number
54	**240 E 106TH ST** **CHICAGO, IL**	**SPILLS**	**S111901490** **N/A**

SPILLS:

Incident ID:	19981235
Incident Date:	05/25/1998
Date Received:	05/25/1998
Facility Address:	240 E 106TH ST
Facility City:	CHICAGO
PRP Name:	NORFOLK RAILROAD
AC:	Not reported

55	**CALUMET YARD 204 EAST 106TH STREET** **CHICAGO, IL**	**ERNS**	**93328488** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

58	**GT&T SERVICE CENTER INC** **10635 S WENTWORTH AVE** **CHICAGO, IL 60628**	**UST**	**U000865955** **N/A**

UST:

Facility ID:	2031587
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Trotter Lorenzo
Owner Id:	U0020981
Owner Address:	11352 S Parnell
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1901
OSFM First Notify Date:	12/1/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1901
OSFM First Notify Date:	12/1/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

GT&T SERVICE CENTER INC (Continued) **U000865955**

Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1901
OSFM First Notify Date:	12/1/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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58 **GTE SERVICE CTR INC** **RCRA-SQG** **1000453244**
10635 S WENTWORTH **ILD984792952**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	09/10/1990
Facility name:	GTE SERVICE CTR INC
Facility address:	10635 S WENTWORTH CHICAGO, IL 60628
EPA ID:	ILD984792952
Contact:	LORENZO TROTTER
Contact address:	10635 S WENTWORTH CHICAGO, IL 60628
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TROTTER LORENZO PRES
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

GTE SERVICE CTR INC (Continued) **1000453244**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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60 **RAYS CLEANERS** **RCRA-SQG** **1000374355**
10738 S MICHIGAN AVE **ILD054589148**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	04/06/1987
Facility name:	RAYS CLEANERS
Facility address:	10738 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILD054589148
Contact:	RAYMOND BRADLEY
Contact address:	10738 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 928-2143
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: NAME NOT REPORTED

Map ID	Site	Database(s)	EPA ID Number

RAYS CLEANERS (Continued) **1000374355**

Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BRADLEY RAYMOND
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
61	**VACANT RESIDENTIAL BUILDING** **226-248 W 107TH PLACE** **CHICAGO, IL 60628**	**UST**	**U003715093** **N/A**

UST:

Facility ID:	2039223
Facility Status:	CLOSED
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Name:	Daniel McGovern
Owner Id:	U0028986
Owner Address:	10424 S Campbell
Owner City,St,Zip:	Chicago, IL 60655
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	4/1/1975
OSFM First Notify Date:	9/8/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No
Tank Number:	2
Tank Capacity:	3500
Tank Substance:	Heating Oil
Last Used Date:	4/1/1975
OSFM First Notify Date:	9/8/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

62	**COM ED** **10847 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004698372** **ILR000106195**

RCRA-CESQG:

Date form received by agency:	05/21/2001
Facility name:	COM ED
Facility address:	10847 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000106195
Mailing address:	19156 S 85TH PL MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	10847 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US

Map ID	Site	Database(s)	EPA ID Number

COM ED (Continued) **1004698372**

Contact telephone: (815) 469-7007
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: COM ED
Owner/operator address: 555 JOLIET RD
BOLINGBROOK, IL 60440
Owner/operator country: Not reported
Owner/operator telephone: (630) 455-3448
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
63	**VAN VLISSINGEN PETER SCHOOL** **137 W 108TH PL** **CHICAGO, IL 60628**	**RCRA-SQG** **UST**	**1001127079** **ILR000033795**

RCRA-SQG:

Date form received by agency:	01/22/1997
Facility name:	VAN VLISSINGEN PETER SCHOOL
Facility address:	137 W 108TH PL CHICAGO, IL 60628
EPA ID:	ILR000033795
Contact:	MILICENT RUSSELL
Contact address:	137 W 108TH PL CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-5300
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
	VAN VLISSINGEN PETER SCHOOL (Continued)		**1001127079**

UST:

Facility ID:	2039443
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0029206
Owner Address:	125 S. Clark, 16th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
65	**VACANT APARTMENT BUILDING** **10834 S PERRY AVE** **CHICAGO, IL 60628**	**UST**	**U003715200** **N/A**

UST:

Facility ID:	2039442
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0029206
Owner Address:	125 S. Clark, 16th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	1600
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Count: 9 records

FOCUS MAP 4 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1004692486	107TH ST SUB SHOP	1215 W 107TH	60628	RCRA-CESQG
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU

Focus Map 5

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

Roads
Major Roads
Contour Lines
National Wetlands Inventory
Waterways
Railroads
Study Boundary
100-Yr Flood Zones
Powerlines
Pipelines
Fault Lines
Water
Listed Sites
Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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Count: 7 records

FOCUS MAP 5 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CALUMET PARK	U001964624	RACEWAY PK	SWC 130TH & ASHLAND	60643	UST
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS

Focus Map 6

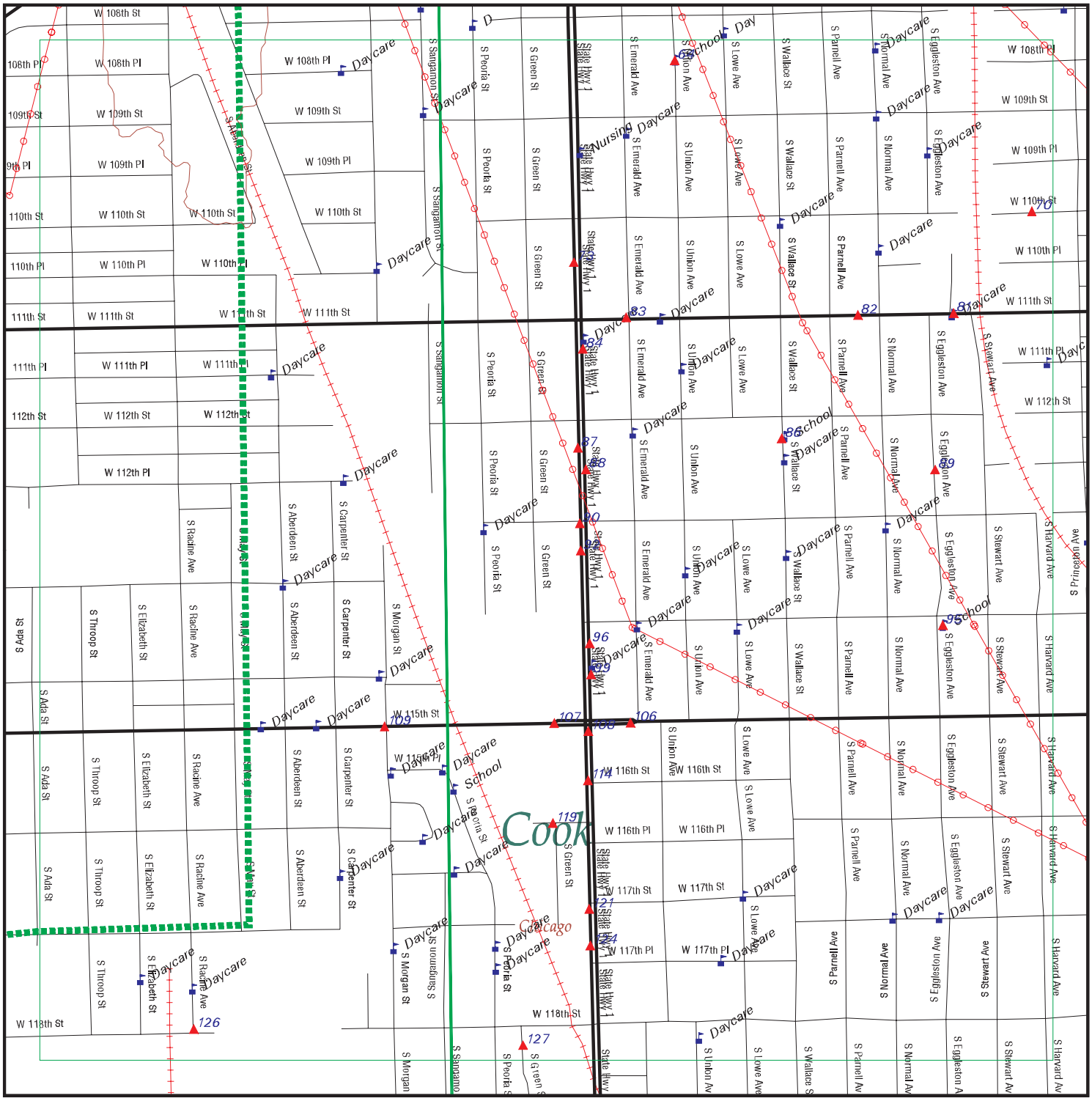

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 6 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	1
RCRA-SQG	10
RCRA-CESQG	3
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	2
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
IL SSU	0
IL SWF/LF	0
IL LUST	11
IL UST	18
NY MANIFEST	1
IL SPILLS	9
IL ENG CONTROLS	0
IL INST CONTROL	2
IL SRP	5
IL DRYCLEANERS	1
IL BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
64	**DUNNE** **10845 S UNION** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001123586** **ILR000032904**

RCRA-SQG:

Date form received by agency:	01/08/1997
Facility name:	DUNNE
Facility address:	10845 S UNION CHICAGO, IL 60628
EPA ID:	ILR000032904
Contact:	DEAN THOMPSON
Contact address:	10845 S UNION CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 535-5517
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
70	**WILLIAM RANSOM TRANSPORTATION** **352 WEST 110TH ST.** **CHICAGO, IL 60628**	**IL LUST**	**S104529463** **N/A**

LUST:

Incident Num:	990399
IL EPA Id:	0316495116
Product:	Gasoline
IEMA Date:	02/19/1999
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	William Ransom Transportation
PRP Contact:	William Ransom, Sr.
PRP Address:	352 West 110th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7737858480
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/23/1999
45 Report Received:	05/21/1999
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

70	**RANSOM TRANSPORT** **352 W 110TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696953** **ILR000060863**

RCRA-CESQG:

Date form received by agency:	01/28/1999
Facility name:	RANSOM TRANSPORT
Facility address:	352 W 110TH ST CHICAGO, IL 60628
EPA ID:	ILR000060863
Contact:	WILLIAM RANSOM
Contact address:	352 W 110TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-8480
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Map ID	Site	Database(s)	EPA ID Number

RANSOM TRANSPORT (Continued) **1004696953**

Owner/Operator Summary:

Owner/operator name:	RANSOM TRANSORT
Owner/operator address:	352 W 110TH ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-8480
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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70 **IL SPILLS** **S111903849**
352 W 110TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19990399
Incident Date:	Not reported
Date Received:	02/19/1999
Facility Address:	352 W 110TH ST
Facility City:	CHICAGO
PRP Name:	WILLIAM RANSOM TRANSPORTATION
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
70	**352 WEST 110 ST** **CHICAGO, IL**	**ERNS**	**93301726** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

---

70 **RANSOM TRANSPORT BUS GARAGE** — **IL UST** — **U001142423**
352 W 110TH ST — **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2000983
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Eloyse Carney School Bus Ser
Owner Id:	U0004730
Owner Address:	352 W 110Th St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	6/1/1998
OSFM First Notify Date:	1/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

73 **MUFFLER & BRAKE MAN, INC.** — **IL UST** — **U001142484**
11038 SOUTH HALSTED — **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2007242
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	Muffler & Brake Man Inc
Owner Id:	U0028764
Owner Address:	11038 South Halsted
Owner City,St,Zip:	Chicago, IL 60625
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	12/21/1998
OSFM First Notify Date:	9/19/1987
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	MUFFLER & BRAKE MAN, INC. (Continued)		**U001142484**

Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

73	**MUFFLER & BRAKE MAN CAR CARE CTR** **11048 S HALSTED ST** **CHICAGO, IL 60628**	**IL UST**	**U001473604** **N/A**

UST:
Facility ID: 2032349
Facility Status: CLOSED
Facility Type: **OTHER**
Owner Name: L B I Inc
Owner Id: U0021841
Owner Address: 1905 Bernice Rd Ste 4
Owner City,St,Zip: Lansing, IL 60438

Tank Number: 1
Tank Capacity: 550
Tank Substance: Used Oil
Last Used Date: 4/1/1993
OSFM First Notify Date: 7/23/1993
Tank Status: **Removed**
Red Tag Issue Date: Not reported
Install Date: 1/1/1985
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: No

81	**420 W 111TH ST** **CHICAGO, IL**	**IL SPILLS**	**S109699953** **N/A**

SPILLS:
Incident ID: 20090500
Incident Date: Not reported
Date Received: 05/13/2009
Facility Address: 420 W 111TH ST
Facility City: CHICAGO
PRP Name: UNKNOWN
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
81	**420 W. 111TH ST. CHICAGO, IL**	**IL SPILLS**	**S111924877 N/A**

SPILLS:

Incident ID:	20090500
Incident Date:	05/13/2009
Date Received:	Not reported
Facility Address:	420 W. 111TH ST.
Facility City:	CHICAGO
PRP Name:	unknown
AC:	SR

81	**PENTECOSTAL TEMPLE CHURCH OF GOD 415 THRU 419 W 111TH ST CHICAGO, IL 60643**	**RCRA-SQG**	**1000703753 ILD984831958**

RCRA-SQG:

Date form received by agency:	07/25/1991
Facility name:	PENTECOSTAL TEMPLE CHURCH OF GOD
Facility address:	415 THRU 419 W 111TH ST CHICAGO, IL 60643
EPA ID:	ILD984831958
Mailing address:	10819 S MORGAN ST CHICAGO, IL 60643
Contact:	RICHARD EDWARDS
Contact address:	10819 S MORGAN ST CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(312) 785-0117
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	REV RICHARD EDWARDS
Owner/operator address:	10819 S MORGAN CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 785-0117
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

PENTECOSTAL TEMPLE CHURCH OF GOD (Continued) **1000703753**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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81 **PENTICOSTAL TEMPLE** **IL LUST** **S104525751**
419 WEST 111TH ST. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	912233
IL EPA Id:	0316205006
Product:	Uset Oil
IEMA Date:	08/09/1991
Project Manager:	Chappel
Project Manager Phone:	(217) 785-3913
Email:	Harry.A.Chappel@illinois.gov
PRP Name:	Penticostal Temple Church of God & Christ
PRP Contact:	Rev. Edward
PRP Address:	10819 South Morgan St.
PRP City,St,Zip:	Chicago, IL 60643
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	913417
IL EPA Id:	0316205006
Product:	Gasoline
IEMA Date:	11/22/1991
Project Manager:	Chappel
Project Manager Phone:	(217) 785-3913
Email:	Harry.A.Chappel@illinois.gov
PRP Name:	Penticostal Temple
PRP Contact:	Pastor Edwards
PRP Address:	419 West 111th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	PENTICOSTAL TEMPLE (Continued)		**S104525751**

Site Classification: Not reported
Section 57.5(g) Letter: 731
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: Not reported
45 Report Received: Not reported
NFA/NFR Letter: Not reported
NFR Date Recorded: Not reported

Map ID	Site	Database(s)	EPA ID Number
81	**419 W 111TH ST** **CHICAGO, IL**	**IL SPILLS**	**S111882409** **N/A**

SPILLS:
Incident ID: 19913417
Incident Date: Not reported
Date Received: 11/22/1991
Facility Address: 419 W 111TH ST
Facility City: CHICAGO
PRP Name: PENTICOSTAL TEMPLE C.G.O.L.D.
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
81	**419 W 111TH ST** **CHICAGO, IL**	**IL SPILLS**	**S111881226** **N/A**

SPILLS:
Incident ID: 19912233
Incident Date: Not reported
Date Received: 08/09/1991
Facility Address: 419 W 111TH ST
Facility City: CHICAGO
PRP Name: PENTICOSTAL TEMPLE CHURCH
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
81	**CHICAGO DEPT OF ENV (SPILL)** **11100 S STEWART AVE (SPILL)** **CHICAGO, IL 60628**	**RCRA-LQG**	**1012178681** **ILR000157560**

RCRA-LQG:
Date form received by agency: 03/09/2010
Facility name: CHICAGO DEPT OF ENV (SPILL)
Site name: CHICAGO DEPT OF ENVIRONMENT
Facility address: 11100 S STEWART AVE (SPILL)
CHICAGO, IL 60628
EPA ID: ILR000157560
Mailing address: 30 N LASALLE
CHICAGO, IL 60628
Contact: TERRY SHEAHAN
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (312) 742-4806
Contact email: Not reported
EPA Region: 05

Map ID	Site	Database(s)	EPA ID Number

CHICAGO DEPT OF ENV (SPILL) (Continued) **1012178681**

Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency: 03/01/2010
Facility name: CHICAGO DEPT OF ENV (SPILL)
Classification: Large Quantity Generator

Date form received by agency: 05/13/2009
Facility name: CHICAGO DEPT OF ENV (SPILL)
Site name: CHICAGO DEPT OF ENVIRONMENT
Classification: Conditionally Exempt Small Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 12000.4

Waste code: D035

Map ID	Site	Database(s)	EPA ID Number

CHICAGO DEPT OF ENV (SPILL) (Continued) **1012178681**

Waste name: METHYL ETHYL KETONE
Amount (Lbs): 19650.5

Violation Status: No violations found

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82 **34 WARD OFFICE/CITY OF CHICAGO** **IL LUST** **U004128304**
507 WEST 111TH STREET **IL UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20040732
IL EPA Id:	0316616397
Product:	Other Petro
IEMA Date:	05/21/2004
Project Manager:	South
Project Manager Phone:	(217) 558-0347
Email:	Shirlene.South@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	06/28/2004
45 Report Received:	07/23/2004
NFA/NFR Letter:	**08/24/2004**
NFR Date Recorded:	05/27/2005

UST:

Facility ID:	2042211
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	34 Ward Office/City of Chicago
Owner Id:	U0032031
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	6/15/2004
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
82	**507 W 111TH ST** **CHICAGO, IL**	**IL SPILLS**	**S108046418** **N/A**

SPILLS:

Incident ID:	20040732
Incident Date:	Not reported
Date Received:	05/21/2004
Facility Address:	507 W 111TH ST
Facility City:	CHICAGO
PRP Name:	CHESTER WILSON
AC:	Not reported

82	**SEW CLEAN** **519 W 111TH ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000107577** **ILD013428487**

RCRA-SQG:

Date form received by agency:	01/27/1989
Facility name:	SEW CLEAN
Facility address:	519 W 111TH ST CHICAGO, IL 60628
EPA ID:	ILD013428487
Contact:	JEROME SMITH
Contact address:	519 W 111TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 264-2965
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SMITH JEROME
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

SEW CLEAN (Continued) **1000107577**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

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83 **GJK PETROLEUM, INC.** **IL UST** **U003152286**
734 W. 111TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2016840
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	GJK Petroleum, Inc.
Owner Id:	U0033661
Owner Address:	734 W. 111th Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/1996
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**

Map ID	Site	Database(s)	EPA ID Number

GJK PETROLEUM, INC. (Continued) **U003152286**

Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/1996
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/1996
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	8/1/1979
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	8/1/1979

Map ID	Site	Database(s)	EPA ID Number

GJK PETROLEUM, INC. (Continued) **U003152286**

OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003566**
Green Tag Issue Date:	**8/5/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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84 **JOHNS CLEANERS** **IL DRYCLEANERS** **S111826478**
11129 SOUTH HALSTED STREET **N/A**
CHICAGO, IL 60628

DRYCLEANERS:

Facility Id:	7000-0013-01
DC No:	DC-01254
Facility Contact:	BOK NAM LEE
License Expires:	12/31/2012

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84 **JOHNS CLEANERS** **RCRA-SQG** **1004697801**
11129 S HALSTED **ILR000100230**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	09/18/2000
Facility name:	JOHNS CLEANERS
Facility address:	11129 S HALSTED CHICAGO, IL 60628
EPA ID:	ILR000100230
Contact:	MYUNG OCK CHON
Contact address:	11129 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 264-8556
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHON MYUNG OCK
Owner/operator address:	11129 S HALSTED CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 264-8556
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	JOHNS CLEANERS (Continued)		**1004697801**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
86	**FENGER SCH** **11220 S WALLACE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004695757** **ILR000026559**

RCRA-CESQG:

Date form received by agency:	08/30/1996
Facility name:	FENGER SCH
Facility address:	11220 S WALLACE CHICAGO, IL 60628
EPA ID:	ILR000026559
Mailing address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact:	LINDA LAYNE
Contact address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact country:	US
Contact telephone:	(312) 535-5430
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less

Map ID	Site	Database(s)	EPA ID Number

FENGER SCH (Continued) **1004695757**

of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHS
Owner/operator address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Violation Status: No violations found

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87 **LONG-GARDEN-CENTER INC** **IL UST** **U000865477**
11226 S HALSTED **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2006606
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Long Garden Center Inc
Owner Id:	U0009339
Owner Address:	11226 S Halsted
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000

Map ID	Site	Database(s)	EPA ID Number

LONG-GARDEN-CENTER INC (Continued) **U000865477**

Tank Substance:	Gasoline
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1970
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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87 **LONGS GARDEN CENTER INC** **RCRA-SQG** **1001213751**
11226 S HALSTED **IL LUST** **ILR000045344**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	11/24/1997
Facility name:	LONGS GARDEN CENTER INC
Facility address:	11226 S HALSTED CHICAGO, IL 60628
EPA ID:	ILR000045344
Contact:	GEORGE LONG
Contact address:	11226 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-3129
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	LONGS GARDEN CENTER INC
Owner/operator address:	11226 S HALSTED CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-3129
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

LONGS GARDEN CENTER INC (Continued) **1001213751**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

LUST:

Incident Num:	980313
IL EPA Id:	0316495100
Product:	Gasoline
IEMA Date:	02/12/1998
Project Manager:	Haskins
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Long's Garden Center, Inc.
PRP Contact:	George Long
PRP Address:	11226 South Halsted
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7737853129
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/25/1998
45 Report Received:	06/09/1998
NFA/NFR Letter:	**02/19/1999**
NFR Date Recorded:	03/24/1999

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88 **KLEEN TOWNE CLEANERS** **RCRA-SQG** **1000206885**
11249 S HALSTED **NY MANIFEST** **ILD064381650**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	11/18/1986
Facility name:	KLEEN TOWNE CLEANERS
Facility address:	11249 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD064381650
Contact:	KARNEY BOYAJIAN
Contact address:	11249 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 785-2127
Contact email:	Not reported

Map ID	Site	Database(s)	EPA ID Number

KLEEN TOWNE CLEANERS (Continued) **1000206885**

EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BOYAJIAN KARNEY
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

Map ID	Site	Database(s)	EPA ID Number

KLEEN TOWNE CLEANERS (Continued) **1000206885**

SPENT SOLVENT MIXTURES.

Violation Status: No violations found

NY MANIFEST:

EPA ID:	ILD064381650
Country:	USA
Mailing Name:	KLEENTOWNE CLEANERS
Mailing Contact:	SARKIS BOYAJIAN
Mailing Address:	11249 S HALSTED ST
Mailing Address 2:	Not reported
Mailing City:	CHICAGO
Mailing State:	IL
Mailing Zip:	60628
Mailing Zip4:	4795
Mailing Country:	USA
Mailing Phone:	773-785-2127

NY MANIFEST:

No Manifest Records Available

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88 **KLEEN TOWNE CLEANERS** **IL SRP** **S108255951**
11249 SOUTH HALSTED ST **N/A**
CHICAGO, IL 60628

SRP:

IL EPA Id:	0316495008
US EPA Id:	ILD064381650
Longitude:	-87.64190
Latitude:	41.68901
Contact Name:	Karney Boyajian
Contact Address:	11249 South Halsted Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60628-
Contact Phone:	(773) 785-2127
Date Enrolled:	07/02/2001
Point Of Contact:	Christopher J. Lee
Consultant Company:	Northern Environmental Technologies, Inc.
Consultant Address:	647 Academy Drive
Consultant Address2:	Not reported
Consultant City,St,Zip:	Northbrook, IL 60062-
Consultant Phone:	(847) 562-8577
Proj Mgr Assigned:	Murphy
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	0.359
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Kleene Towne Cleaners
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	KLEEN TOWNE CLEANERS (Continued)		**S108255951**

NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

89	**11255 S EGGLESTON ST** **CHICAGO, IL**	**ERNS**	**92265508** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

90	**DEVOTION UNISEX BEAUTY SALON** **11300 S HALSTED ST** **CHICAGO, IL 60628**	**IL UST**	**U001629884** **N/A**

UST:

Facility ID:	2032718
Facility Status:	EXEMPT
Facility Type:	**COMMERCIAL / RETAIL**
Owner Name:	Juanita Wilson
Owner Id:	U0022323
Owner Address:	11300 S Halsted St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	1/1/1969
OSFM First Notify Date:	11/12/1993
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
92	**WHITMAL OIL SER INC** **11328 S HALSTED** **CHICAGO, IL 60628**	**IL UST**	**U001143309** **N/A**

UST:

Facility ID:	2000228
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Whitmal Oil Ser Inc
Owner Id:	U0016354
Owner Address:	11328 S Halsted
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Not reported
Last Used Date:	1/15/1998
OSFM First Notify Date:	9/17/1998
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	10/1/1987
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Used Oil
Last Used Date:	1/15/1998
OSFM First Notify Date:	11/21/1987
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	10/1/1987
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

95	**BRENAN SCHOOL** **11411 EGGLESTON** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001116740** **ILR000027656**

RCRA-SQG:

Date form received by agency:	09/17/1996
Facility name:	BRENAN SCHOOL
Facility address:	11411 EGGLESTON CHICAGO, IL 60628
EPA ID:	ILR000027656
Contact:	FRANK BLAIR
Contact address:	11411 EGGLESTON CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 535-5340
Contact email:	Not reported

Map ID	Site	Database(s)	EPA ID Number

BRENAN SCHOOL (Continued) **1001116740**

EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS 6WN
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (312) 535-7039
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

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96 **MCDONALD'S CORP.** **IL UST** **U004107018**
11421 S. HALSTED STREET **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2043655
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: McDonald's USA, LLC
Owner Id: U0030322
Owner Address: 4320 Winfield Rd., Suite 400
Owner City,St,Zip: Warrenville, IL 60555

Tank Number: 1
Tank Capacity: 1150

Map ID	Site	Database(s)	EPA ID Number
	MCDONALD'S CORP. (Continued)		**U004107018**

Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

99	**11453 S HALSTED ST** **CHICAGO, IL**	**IL SPILLS**	**S111883100** **N/A**

SPILLS:

Incident ID:	19920332
Incident Date:	Not reported
Date Received:	02/05/1992
Facility Address:	11453 S HALSTED ST
Facility City:	CHICAGO
PRP Name:	FIRST COOK COMMUNITY BANK
AC:	Not reported

99	**QUALITY MUFFLER** **11453 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000614937** **ILD984852525**

RCRA-SQG:

Date form received by agency:	02/26/1992
Facility name:	QUALITY MUFFLER
Facility address:	11453 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD984852525
Mailing address:	2720 W DEVON CHICAGO, IL 60659
Contact:	ADAM EPSTEIN
Contact address:	2720 W DEVON CHICAGO, IL 60659
Contact country:	US
Contact telephone:	(312) 761-2700
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	FIRST COOK COMMUNITY BANK
Owner/operator address:	2720 W DEVON CHICAGO, IL 60659

Map ID	Site	Database(s)	EPA ID Number

QUALITY MUFFLER (Continued) **1000614937**

Owner/operator country: Not reported
Owner/operator telephone: (312) 761-2700
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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99 **FORMER QUALITY MUFFLER SHOP** **IL UST** **U001141777**
11453 S HALSTED ST **N/A**
CHICAGO, IL 60643

UST:
Facility ID: 2029904
Facility Status: CLOSED
Facility Type: **NONE**
Owner Name: 1St Cook Comm Bk Fsb
Owner Id: U0019371
Owner Address: 2720 W Devon Ave
Owner City,St,Zip: Chicago, IL 60659

Tank Number: 1
Tank Capacity: 10000
Tank Substance: Gasoline
Last Used Date: 1/1/1989
OSFM First Notify Date: 5/4/1992
Tank Status: **Removed**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**

Map ID	Site	Database(s)	EPA ID Number
	FORMER QUALITY MUFFLER SHOP (Continued)		**U001141777**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	1000

Map ID	Site	Database(s)	EPA ID Number

FORMER QUALITY MUFFLER SHOP (Continued) **U001141777**

Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	1/1/1989
OSFM First Notify Date:	5/4/1992
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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99 **FIRST COOK COMM. BANK** **IL LUST** **S104525208**
11453 SOUTH HALSTED ST. **N/A**
CHICAGO, IL 60643

LUST:

Incident Num:	920332
IL EPA Id:	0316755040
Product:	Gasoline
IEMA Date:	02/05/1992
Project Manager:	Nickell
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	First Cook Comm. Bank
PRP Contact:	Adam Epstein
PRP Address:	2720 West Devon Ave.
PRP City,St,Zip:	Chicago, IL 60659
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/12/1992
45 Report Received:	05/22/1992
NFA/NFR Letter:	**08/18/1992**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
106	**COMMUNITY HIGH SCHOOL DIST. #218** **731 WEST 115TH ST.** **ALSIP, IL 60803**	**IL LUST**	**S105427986** **N/A**

LUST:

Incident Num:	922574
IL EPA Id:	0310035119
Product:	Fuel Oil
IEMA Date:	09/14/1992
Project Manager:	Steinheimer
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Community High School Dist. #218
PRP Contact:	John Hickey
PRP Address:	10701 Kilpatrick Ave.
PRP City,St,Zip:	Oak Lawn, IL 60453
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	10/08/1992
45 Report Received:	12/16/1992
NFA/NFR Letter:	**10/18/1995**
NFR Date Recorded:	Not reported

107	**CHA WAREHOUSE** **833 W 115TH ST** **CHICAGO, IL 60643**	**IL UST**	**U001142187** **N/A**

UST:

Facility ID:	2026770
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Chicago Housing Authority
Owner Id:	U0002876
Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Capacity:	550
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	2/6/1991
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
107	**833 W 115TH ST** **CHICAGO, IL**	**IL SPILLS**	**S111884588** **N/A**

SPILLS:

Incident ID:	19921830
Incident Date:	Not reported
Date Received:	07/07/1992
Facility Address:	833 W 115TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO HOUSING AUTHORITY
AC:	Not reported

107	**CHICAGO HOSUING AUTHORITY** **833 W 115TH ST** **CHICAGO, IL 60643**	**RCRA-SQG**	**1000613607** **ILD984839035**

RCRA-SQG:

Date form received by agency:	10/07/1991
Facility name:	CHICAGO HOSUING AUTHORITY
Facility address:	833 W 115TH ST CHICAGO, IL 60643
EPA ID:	ILD984839035
Mailing address:	22 W MADISON ST RM 221 CHICAGO, IL 60602
Contact:	EVON PARKS
Contact address:	22 W MADISON ST RM 221 CHICAGO, IL 60602
Contact country:	US
Contact telephone:	(312) 791-8500
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO HOUSING AUTHORITY
Owner/operator address:	22 W MADISON STE 400 CHICAGO, IL 60602
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 791-8444
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

CHICAGO HOSUING AUTHORITY (Continued) **1000613607**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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107 **CHICAGO HOUSING AUTHORITY** **IL LUST** **S104524777**
833 WEST 115TH STREET **IL SRP** **N/A**
CHICAGO, IL 60643

LUST:

Incident Num:	921830
IL EPA Id:	0316755035
Product:	Uset Oil
IEMA Date:	07/07/1992
Project Manager:	Myers
Project Manager Phone:	(217) 785-7491
Email:	Dave.Myers@illinois.gov
PRP Name:	Chicago Housing Authority
PRP Contact:	Scott Ammarell
PRP Address:	60 East VanBuren, 12th Floor
PRP City,St,Zip:	Chicago, IL 60605
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	11/03/1994
45 Report Received:	11/22/1994
NFA/NFR Letter:	**11/01/2010**
NFR Date Recorded:	Not reported

SRP:

IL EPA Id:	0316755035
US EPA Id:	ILD984839035
Longitude:	-87.64337
Latitude:	41.68442
Contact Name:	Thomas Morabito
Contact Address:	141 West Jackson Boulevard
Contact Address2:	Suite 3540
Contact City,St,Zip:	Chicago, IL 60604-
Contact Phone:	(312) 327-2700
Date Enrolled:	06/25/2004
Point Of Contact:	Richard C. Thomas

Map ID	Site	Database(s)	EPA ID Number

CHICAGO HOUSING AUTHORITY (Continued) **S104524777**

Consultant Company:	Challenge Contractors, Inc.
Consultant Address:	2612 Flossmoor Road
Consultant Address2:	P.O. Box 333
Consultant City,St,Zip:	Flossmoor, IL 60422-
Consultant Phone:	(708) 206-0007
Proj Mgr Assigned:	Irwin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	4.299
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Preferred-Halsted LLC
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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108 **AMOCO OIL** **IL LUST** **U004110544**
11500 SOUTH HALSTED STREET **IL UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	923184
IL EPA Id:	0316545010
Product:	Gasoline
IEMA Date:	11/12/1992
Project Manager:	Friedel
Project Manager Phone:	(217) 785-5736
Email:	Melinda.Friedel@illinois.gov
PRP Name:	Amoco Oil Co.
PRP Contact:	Lyle Bruce
PRP Address:	28100 Torch Pkwy., 6-S
PRP City,St,Zip:	Warrenville, IL 60555
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	12/01/1992
45 Report Received:	02/16/1993
NFA/NFR Letter:	**09/05/2003**
NFR Date Recorded:	09/25/2003

UST:

Map ID	Site	Database(s)	EPA ID Number
	AMOCO OIL (Continued)		**U004110544**

Facility ID:	2023001
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Sania Oil Company
Owner Id:	U0034353
Owner Address:	1002 Sean Circle
Owner City,St,Zip:	Darien, IL 60561

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1979
Green Tag Decal:	**L003536**
Green Tag Issue Date:	**1/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1979
Green Tag Decal:	**L003536**
Green Tag Issue Date:	**1/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1979
Green Tag Decal:	**L003536**
Green Tag Issue Date:	**1/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
108	**FORMER CHA WAREHOUSE** **901 W. 115TH STREET** **CHICAGO, IL 60628**	**IL UST**	**U003971972** **N/A**

UST:

Facility ID:	2042212
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Preferred Development
Owner Id:	U0027885
Owner Address:	141 W. Jackson
Owner City,St,Zip:	Chicago, IL 60601
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
108	**MOBIL CARWASH** **11501 SOUTH HALSTED STREET** **CHICAGO, IL 60628**	**IL LUST** **IL UST**	**U000174475** **N/A**

LUST:

Incident Num:	990250
IL EPA Id:	0316495058
Product:	Gasoline
IEMA Date:	02/05/1999
Project Manager:	Malcom
Project Manager Phone:	(217) 524-9140
Email:	James.Malcom@illinois.gov
PRP Name:	Equilon Enterprises LLC
PRP Contact:	John Robbins
PRP Address:	603 Diehl Rd., Suite 103
PRP City,St,Zip:	Naperville, IL 60563
PRP Phone:	6302764206
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/10/1999
45 Report Received:	02/26/1999
NFA/NFR Letter:	**11/15/2002**
NFR Date Recorded:	01/21/2003

UST:

Facility ID:	2007045
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Rockbuild Enterprises, Inc.

Map ID	Site	Database(s)	EPA ID Number
	MOBIL CARWASH (Continued)		**U000174475**

Owner Id: U0034774
Owner Address: 14123 S. 85th Avenue
Owner City,St,Zip: Orland Park, IL 60462

Tank Number: 1
Tank Capacity: 9520
Tank Substance: Gasoline
Last Used Date: 6/1/2001
OSFM First Notify Date: 4/25/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: 1/1/1973
Green Tag Decal: M003429
Green Tag Issue Date: 4/20/2011
Green Tag Expire Date: 12/31/2013
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 9520
Tank Substance: Gasoline
Last Used Date: 6/1/2001
OSFM First Notify Date: 4/25/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: 1/1/1973
Green Tag Decal: M003429
Green Tag Issue Date: 4/20/2011
Green Tag Expire Date: 12/31/2013
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 3
Tank Capacity: 7734
Tank Substance: Gasoline
Last Used Date: 6/1/2001
OSFM First Notify Date: 4/25/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: 1/1/1973
Green Tag Decal: M003429
Green Tag Issue Date: 4/20/2011
Green Tag Expire Date: 12/31/2013
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: $0.00

Tank Number: 4
Tank Capacity: 4000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 3/5/2002

Map ID	Site	Database(s)	EPA ID Number

MOBIL CARWASH (Continued) **U000174475**

Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	9/5/2001
Green Tag Decal:	**M003429**
Green Tag Issue Date:	**4/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/2002
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	9/5/2001
Green Tag Decal:	**M003429**
Green Tag Issue Date:	**4/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/5/2002
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	9/5/2001
Green Tag Decal:	**M003429**
Green Tag Issue Date:	**4/20/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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108 **0415 CLARK SER STATION** **IL UST** **U001142318**
11525 S HALSTED ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2009966
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Clark Retail Enterprises, Inc.
Owner Id:	U0003073
Owner Address:	3003 Butterfield Road, Suite 300
Owner City,St,Zip:	Oak Brook, IL 60523

Tank Number:	1
Tank Capacity:	5000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number

0415 CLARK SER STATION (Continued) **U001142318**

Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	100

Tank Number:	2
Tank Capacity:	5000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	100

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	100

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109 **E.J. BROWNLEE TRANSPORTATION** **IL LUST** **S104528868**
1001 WEST 115TH ST. **N/A**
CHICAGO, IL 60643

LUST:

Incident Num:	981649
IL EPA Id:	0316755006
Product:	Deisel
IEMA Date:	07/08/1998
Project Manager:	Carlock
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	E.J. Brownlee Transportation
PRP Contact:	Edison Brownlee

Map ID	Site	Database(s)	EPA ID Number

E.J. BROWNLEE TRANSPORTATION (Continued) **S104528868**

PRP Address:	1001 West 115th St.
PRP City,St,Zip:	Chicago, IL 60643
PRP Phone:	7736601999
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	07/28/1998
45 Report Received:	12/18/1998
NFA/NFR Letter:	**04/01/1999**
NFR Date Recorded:	09/16/1999

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109 **IL SPILLS** **S111901904**
1001 W 115TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19981649
Incident Date:	Not reported
Date Received:	07/08/1998
Facility Address:	1001 W 115TH ST
Facility City:	CHICAGO
PRP Name:	EJ BROWNLEE TRANSPORTATION
AC:	Not reported

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109 **E J BROWNLEE TRANSPORTATION INC** **IL UST** **U001629852**
1001 W 115TH ST **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2032613
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Brownlee Edison
Owner Id:	U0022158
Owner Address:	1001 W 115Th St
Owner City,St,Zip:	Chicago, IL 60643
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	10/18/1993
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
114	**PEP BOYS #891** **11550 SO HALSTED** **CHICAGO, IL 60648**	**RCRA-CESQG**	**1004696278** **ILR000043224**

RCRA-CESQG:

Date form received by agency:	10/07/1997
Facility name:	PEP BOYS #891
Facility address:	11550 SO HALSTED CHICAGO, IL 60648
EPA ID:	ILR000043224
Mailing address:	3111 W ALLEGHENY AVE PHILADELPHIA, PA 19132
Contact:	JOHN KERELO
Contact address:	3111 W ALLEGHENY AVE PHILADELPHIA, PA 19132
Contact country:	US
Contact telephone:	(215) 227-9277
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	THE PEP BOYS
Owner/operator address:	3111 W ALLEGHENY AVE PHILADELPHIA, PA 19132
Owner/operator country:	Not reported
Owner/operator telephone:	(215) 227-9277
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number

PEP BOYS #891 (Continued) **1004696278**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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119 **ROSELAND AUTO BODY** **RCRA-SQG** **1000203955**
821 W 116TH ST **ILD982209991**
CHICAGO, IL 60643

RCRA-SQG:
Date form received by agency: 08/12/1987
Facility name: ROSELAND AUTO BODY
Facility address: 821 W 116TH ST
CHICAGO, IL 60643
EPA ID: ILD982209991
Contact: AL DERE
Contact address: 821 W 116TH ST
CHICAGO, IL 60643
Contact country: US
Contact telephone: (312) 468-1515
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: DERE AL
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998

Map ID	Site	Database(s)	EPA ID Number

ROSELAND AUTO BODY (Continued) **1000203955**

Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

Map ID	Site	Database(s)	EPA ID Number

ROSELAND AUTO BODY (Continued) **1000203955**

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

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121 **MICKEY'S AUTO SERVICE CENTER** **IL LUST** **S104521684**
11656 SOUTH HALSTED AVENUE **IL SRP** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	970068
IL EPA Id:	0316495087
Product:	Gasoline, Other Petro
IEMA Date:	01/13/1997
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Public Petroleum Co.
PRP Contact:	James Packtor
PRP Address:	2500 West 36th St.
PRP City,St,Zip:	Chicago, IL 60632
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

SRP:

IL EPA Id:	0316495087
US EPA Id:	Not reported
Longitude:	-87.64239
Latitude:	41.68166
Contact Name:	James Packtor
Contact Address:	2500 West 36th Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60632
Contact Phone:	(773) 376-2500
Date Enrolled:	02/04/1997
Point Of Contact:	Alisa S. Leyden
Consultant Company:	Leyden Environmental, Inc.
Consultant Address:	2711 South Wabash Avenue
Consultant Address2:	Not reported
Consultant City,St,Zip:	Chicago, IL 60616
Consultant Phone:	(312) 808-1476
Proj Mgr Assigned:	NA
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	Not reported
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Public Petroleum
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported

Map ID	Site	Database(s)	EPA ID Number

MICKEY'S AUTO SERVICE CENTER (Continued) **S104521684**

Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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124 **ABANDONED SERVICE STATION** **IL UST** **U003762981**
11700 S HALSTED **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2040245
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602

Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
126	**WIRA STUDY AREA NUMBER 4** **11801 SOUTH RACINE AVENUE** **CHICAGO, IL 60643**	**IL INST CONTROL** **IL SRP**	**S106121987** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755128
NFR Letter:	03/23/2011
Date NFR Recorded:	04/25/2011
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Zachary Clayton
RA Company:	City of Chicago, Department of Environment
RA Address:	30 North LaSalle Street
RA Secondary Address:	2nd Floor
RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	13.64

SRP:

IL EPA Id:	0316755128
US EPA Id:	Not reported
Longitude:	-87.65152
Latitude:	41.67927
Contact Name:	Kimberly Worthington
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-9139
Date Enrolled:	09/08/2003
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	1 South Wacker Drive
Consultant Address2:	37th Floor
Consultant City,St,Zip:	Chicago, IL 60606-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	04/25/2011
Active:	False
Total Acres:	2
No Further Remediation Letter Dt:	03/23/2011
Remediation Applicant Co:	City of Chicago Department of Environment
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Mr. Zachary Clayton
Remediation Applicant Company:	City of Chicago, Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	2nd Floor
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755128
Site Name:	WIRA Study Area 4
NFR Letter:	2011-03-23
NFR Letter Date Recorded:	2011-04-25
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	WIRA STUDY AREA NUMBER 4 (Continued)		**S106121987**

Worker Caution: False
Acres: 13.64

127	**SHELDON HEIGHTS CHURCH OF CHRIST** **11819-11849 SOUTH GREEN STREET** **CHICAGO, IL 60643**	**IL INST CONTROL** **IL SRP**	**S105521066** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755117
NFR Letter:	10/19/2004
Date NFR Recorded:	11/23/2004
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Willie Carter
RA Company:	Sheldon Heights Church of Christ
RA Address:	11325 South Halsted Street
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60628-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	2.600

SRP:

IL EPA Id:	0316755117
US EPA Id:	ILR000117911
Longitude:	-87.64303
Latitude:	41.67911
Contact Name:	Willie Carter
Contact Address:	11325 South Halsted Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60628-
Contact Phone:	(773) 568-2929
Date Enrolled:	06/13/2002
Point Of Contact:	Adam M. Moghamis, P.E.
Consultant Company:	Applied GeoScience, Inc.
Consultant Address:	2385 Hammond Drive
Consultant Address2:	Suite 6
Consultant City,St,Zip:	Schaumburg, IL 60173-
Consultant Phone:	(847) 303-0300
Proj Mgr Assigned:	Catlin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	11/23/2004
Active:	False
Total Acres:	2.600
No Further Remediation Letter Dt:	10/19/2004
Remediation Applicant Co:	Sheldon Heights Church of Christ
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Mr. Willie Carter
Remediation Applicant Company:	Sheldon Heights Church of Christ
Remediation Applicant Address:	11325 South Halsted Street
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60628-
Illinois EPA:	0316755117
Site Name:	Sheldon Heights Church of Christ

Map ID	Site	Database(s)	EPA ID Number
	SHELDON HEIGHTS CHURCH OF CHRIST (Continued)		**S105521066**

NFR Letter:	2004-10-19
NFR Letter Date Recorded:	2004-11-23
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	2.600

127	**VACANT LAND** **11819 - 11849 SOUTH GREEN ST** **CHICAGO, IL 60643**	**IL UST**	**U003865079** **N/A**

UST:

Facility ID:	2041273
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Sheldon Heights Church of Christ
Owner Id:	U0030886
Owner Address:	11325 S Halsted St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Gasoline
Last Used Date:	1/1/1987
OSFM First Notify Date:	9/3/2002
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1960
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Count: 9 records

FOCUS MAP 6 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		IL LUST, IL SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		IL SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		IL LUST, IL SPILLS
CHICAGO	S108891646		11900 LOOMIS		IL LUST, IL SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	IL SSU
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS

Focus Map 7

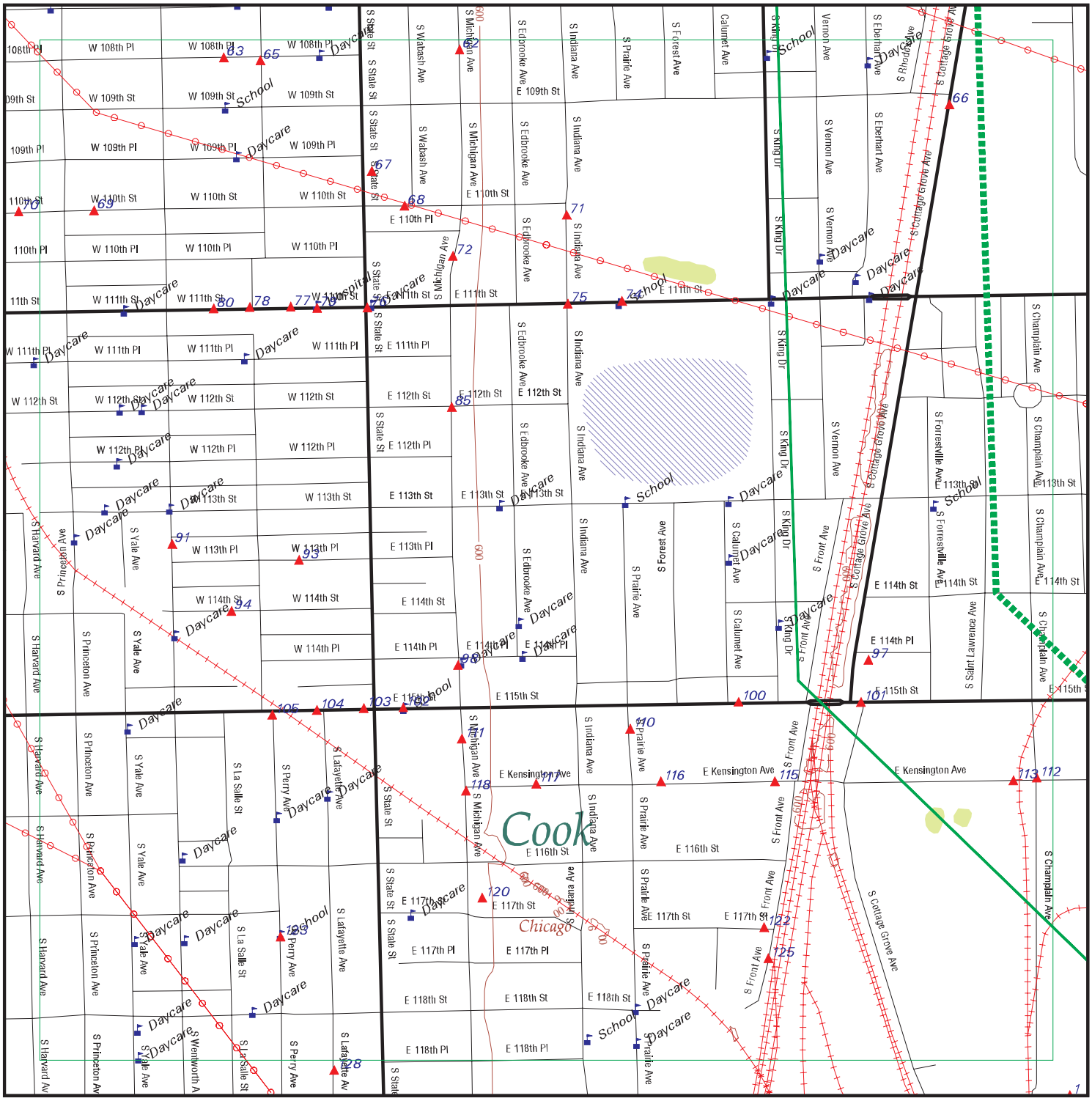

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 7 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	2
CERC-NFRAP	1
CORRACTS	2
RCRA-TSDF	1
RCRA-LQG	1
RCRA-SQG	9
RCRA-CESQG	8
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	1
SWF/LF	1
LUST	15
UST	30
SPILLS	16
ENG CONTROLS	1
INST CONTROL	1
SRP	2
DRYCLEANERS	1
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
62	**COM ED** **10847 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004698372** **ILR000106195**

RCRA-CESQG:

Date form received by agency:	05/21/2001
Facility name:	COM ED
Facility address:	10847 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000106195
Mailing address:	19156 S 85TH PL MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	10847 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(815) 469-7007
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	COM ED
Owner/operator address:	555 JOLIET RD BOLINGBROOK, IL 60440
Owner/operator country:	Not reported
Owner/operator telephone:	(630) 455-3448
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/0001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

Map ID	Site	Database(s)	EPA ID Number

COM ED (Continued) **1004698372**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

---

63 **VAN VLISSINGEN PETER SCHOOL** **RCRA-SQG** **1001127079**
137 W 108TH PL **UST** **ILR000033795**
CHICAGO, IL 60628

RCRA-SQG:
Date form received by agency: 01/22/1997
Facility name: VAN VLISSINGEN PETER SCHOOL
Facility address: 137 W 108TH PL
CHICAGO, IL 60628
EPA ID: ILR000033795
Contact: MILICENT RUSSELL
Contact address: 137 W 108TH PL
CHICAGO, IL 60628
Contact country: US
Contact telephone: (773) 535-5300
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-7039
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No

Map ID	Site	Database(s)	EPA ID Number

VAN VLISSINGEN PETER SCHOOL (Continued) **1001127079**

Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

UST:

Facility ID:	2039443
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0029206
Owner Address:	125 S. Clark, 16th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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65 **VACANT APARTMENT BUILDING** **UST** **U003715200**
10834 S PERRY AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2039442
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0029206
Owner Address:	125 S. Clark, 16th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	1600
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**

Map ID	Site	Database(s)	EPA ID Number
	VACANT APARTMENT BUILDING (Continued)		**U003715200**

Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

66	**SHERWIN WILLIAMS CO** **10909 S COTTAGE GROVE AVE** **CHICAGO, IL 60628**	**CERC-NFRAP** **CORRACTS**	**1000371387** **ILD000672451**

CERC-NFRAP:
Site ID: 0507297
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Deferred to RCRA

Program Priority:
Description: RCRA Deferral Audit

Description: RCRA Deferral - Lead Confirmed

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 01/28/1992
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 07/15/1993
Priority Level: Deferred to RCRA (Subtitle C)

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 12/11/1995
Priority Level: Not reported

CORRACTS:

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/02/1992
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371387**

Area Name: ENTIRE FACILITY
Actual Date: 03/02/1992
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/16/1992
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD000672451
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 05/01/2009
Action: CA070NO - RFA Determination Of Need For An RFI, RFI is Not Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

---

67 **109TH PLACE TEAR GAS** **CERCLIS** **1000851385**
SG WEST 109TH PLACE **IL0000027714**
CHICAGO, IL 60628

CERCLIS:
Site ID: 0507320
EPA ID: IL0000027714
Facility County: COOK
Short Name: 109TH PLACE TEAR GAS
Congressional District: 02
IFMS ID: 05ZW
SMSA Number: 1600
USGC Hydro Unit: 07120003
Federal Facility: Not a Federal Facility
DMNSN Number: Not reported
Site Orphan Flag: N
RCRA ID: Not reported
USGS Quadrangle: Not reported
Site Init By Prog: Not reported
NFRAP Flag: Not reported
Parent ID: Not reported
RST Code: Not reported
EPA Region: 05
Classification: Not reported
Site Settings Code: Not reported
NPL Status: Not on the NPL
DMNSN Unit Code: Not reported
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: Referred to Removal - NFRAP
Non NPL Status Date: 20020422
Site Fips Code: 17031

Map ID	Site	Database(s)	EPA ID Number

109TH PLACE TEAR GAS (Continued) **1000851385**

CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):
Contact ID: 5270175.00000
Contact Name: STAVROS EMMANOUIL
Contact Tel: (312) 886-1768
Contact Title: On-Scene Coordinator (OSC)
Contact Email: Not reported

Alias Comments: Not reported
Site Description: A MILITARY TEAR GAS GRENEDA WAS ACTIVATED BY A CHILD. TEAR GAS (ORTHO CHLORO BENZALMALENANITRILE) CONTAMINATED THE FIRST FLOOR OF THE HOUSE. EPA WAS CALLED ON SCENE BY THE CHICAGO DEPARTMENT OF ENVIRONMENT AND THE CHICAGO FIRE DEPARTMENT.

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/15/1993
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: Notice Letters Issued
Date Started: Not reported
Date Completed: 11/29/1993
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL
Date Started: 09/30/1993
Date Completed: 01/12/1994
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Emergency
Action Anomaly: Not reported

Map ID	Site	Database(s)	EPA ID Number

109TH PLACE TEAR GAS (Continued) **1000851385**

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started:	10/15/1993
Date Completed:	03/27/1996
Priority Level:	No PRPs Identified
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	04/17/2002
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Click this hyperlink while viewing on your computer to access
2 additional US CERCLIS Financial: record(s) in the EDR Site Report.

---

68 **ROSELAND AUTO SALES CO** **UST** **U000865746**
27 E 110TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2014109
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Roseland Auto Sales Co
Owner Id:	U0013121
Owner Address:	10954 S Michigan Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	300
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

ROSELAND AUTO SALES CO (Continued) **U000865746**

Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	250
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	500
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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69 **ROSELAND AUTO SALES INC** **RCRA-CESQG** **1004696195**
271 E 110TH ST **ILR000040303**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	07/02/1997
Facility name:	ROSELAND AUTO SALES INC
Facility address:	271 E 110TH ST CHICAGO, IL 60628
EPA ID:	ILR000040303
Mailing address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Contact:	RAY ZEALEX
Contact address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-6070
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar

Map ID	Site	Database(s)	EPA ID Number
	ROSELAND AUTO SALES INC (Continued)		**1004696195**

month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	ROSELAND AUTO SALES INC
Owner/operator address:	10954 MICHIGAN AVE CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-6070
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
70	**WILLIAM RANSOM TRANSPORTATION** **352 WEST 110TH ST.** **CHICAGO, IL 60628**	**LUST**	**S104529463** **N/A**

LUST:

Incident Num:	990399
IL EPA Id:	0316495116
Product:	Gasoline
IEMA Date:	02/19/1999
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	William Ransom Transportation
PRP Contact:	William Ransom, Sr.
PRP Address:	352 West 110th St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7737858480
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/23/1999
45 Report Received:	05/21/1999
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

70	**RANSOM TRANSPORT** **352 W 110TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696953** **ILR000060863**

RCRA-CESQG:

Date form received by agency:	01/28/1999
Facility name:	RANSOM TRANSPORT
Facility address:	352 W 110TH ST CHICAGO, IL 60628
EPA ID:	ILR000060863
Contact:	WILLIAM RANSOM
Contact address:	352 W 110TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 785-8480
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Map ID	Site	Database(s)	EPA ID Number

RANSOM TRANSPORT (Continued) **1004696953**

Owner/Operator Summary:

Owner/operator name:	RANSOM TRANSORT
Owner/operator address:	352 W 110TH ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 785-8480
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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70 **SPILLS** **S111903849**
352 W 110TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19990399
Incident Date:	Not reported
Date Received:	02/19/1999
Facility Address:	352 W 110TH ST
Facility City:	CHICAGO
PRP Name:	WILLIAM RANSOM TRANSPORTATION
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
70	**352 WEST 110 ST** **CHICAGO, IL**	**ERNS**	**93301726** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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70 **RANSOM TRANSPORT BUS GARAGE** **UST** **U001142423**
352 W 110TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2000983
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Eloyse Carney School Bus Ser
Owner Id:	U0004730
Owner Address:	352 W 110Th St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	6/1/1998
OSFM First Notify Date:	1/21/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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71 **PULLMAN BRANCH LIBRARY** **UST** **U001386539**
11011 S INDIANA **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2032004
Facility Status:	CLOSED
Facility Type:	**SCHOOL/COLLEGE**
Owner Name:	Chicago City Of
Owner Id:	U0021498
Owner Address:	400 S State St Chicago Public Library
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/13/1993
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902

Map ID	Site	Database(s)	EPA ID Number
	PULLMAN BRANCH LIBRARY (Continued)		**U001386539**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/13/1993
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

72	**WALGREENS 2210** **11040 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001201905** **ILR000041418**

RCRA-SQG:

Date form received by agency:	08/08/1997
Facility name:	WALGREENS 2210
Facility address:	11040 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILR000041418
Mailing address:	200 WILMONT RD DEERFIELD, IL 60015
Contact:	FRED OWENS
Contact address:	200 WILMONT RD DEERFIELD, IL 60015
Contact country:	US
Contact telephone:	(773) 928-6447
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WALGREENS
Owner/operator address:	200 WILMONT RD DEERFIELD, IL 60015
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 940-2500
Legal status:	Private
Owner/Operator Type:	Owner

Map ID	Site	Database(s)	EPA ID Number

WALGREENS 2210 (Continued) **1001201905**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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74 **SOUTHSIDE COLLEGE PREPATORY ACADEMY** **LUST** **U003668849**
250 EAST 111TH ST. **UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	992547
IL EPA Id:	0316505015
Product:	Other Petro
IEMA Date:	11/13/1999
Project Manager:	Ransdell
Project Manager Phone:	(217) 557-6938
Email:	James.Ransdell@illinois.gov
PRP Name:	Chicago Public Schools
PRP Contact:	Lynn Crivello
PRP Address:	125 South Clark, 17th Fl.
PRP City,St,Zip:	Chicago, IL 60603
PRP Phone:	7735533113
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	04/27/2000
NFA/NFR Letter:	**06/29/2000**
NFR Date Recorded:	10/16/2000

Map ID	Site	Database(s)	EPA ID Number
	SOUTHSIDE COLLEGE PREPATORY ACADEMY (Continued)		**U003668849**

UST:

Facility ID:	2039156
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Chicago Board of Education (CPS)
Owner Id:	U0026761
Owner Address:	125 S. Clark St. Suite 700
Owner City,St,Zip:	Chicago, IL 60603

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	9/17/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	9/17/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	550
Tank Substance:	Mineral Spirits
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
74	**250 E 111TH ST** **CHICAGO, IL**	**SPILLS**	**S111905996** **N/A**

SPILLS:

Incident ID:	19992547
Incident Date:	Not reported
Date Received:	11/13/1999
Facility Address:	250 E 111TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO PUBLIC SCHOOLS
AC:	Not reported

74	**SOUTH SIDE PREP ACADEMY** **250 E 111TH ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001227871** **ILR000041434**

RCRA-SQG:

Date form received by agency:	12/24/2009
Facility name:	SOUTH SIDE PREP ACADEMY
Facility address:	250 E 111TH ST CHICAGO, IL 60628
EPA ID:	ILR000041434
Mailing address:	BOX 1 FLOSSMOOR, IL 60422
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST NO 10 MOKENAO, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

SOUTH SIDE PREP ACADEMY (Continued) **1001227871**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/18/1998
Facility name: SOUTH SIDE PREP ACADEMY
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN

Map ID	Site	Database(s)	EPA ID Number

SOUTH SIDE PREP ACADEMY (Continued) **1001227871**

THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: X002
Waste name: POLYCHLORINATED BIPHENOLS (PCBs)

Violation Status: No violations found

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75 **PALMER PARK** **RCRA-CESQG** **1010563614**
201 E 111TH ST **ILR000150235**
CHICAGO, IL 60602

RCRA-CESQG:
Date form received by agency: 10/31/2007
Facility name: PALMER PARK
Facility address: 201 E 111TH ST
CHICAGO, IL 60602
EPA ID: ILR000150235
Mailing address: 541 N FAIRBANKS
CHICAGO, IL 60611
Contact: LEEANN THOMAS
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (312) 742-4287
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: 541 N FAIRBANKS
CHICAGO, IL 60611
Owner/operator country: US
Owner/operator telephone: Not reported

Map ID	Site	Database(s)	EPA ID Number

PALMER PARK (Continued) **1010563614**

Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 10/31/2007
Owner/Op end date: Not reported

Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: 541 N FAIRBANKS
CHICAGO, IL 60611
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: 10/31/2007
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

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76 **SPILLS** **S111880597**
4 E 111TH ST **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 19911600
Incident Date: Not reported
Date Received: 06/12/1991
Facility Address: 4 E 111TH ST
Facility City: CHICAGO
PRP Name: YMCA
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
76	**YMCA** **4 EAST 111TH ST.** **CHICAGO, IL 60628**	**LUST**	**S104525942** **N/A**

LUST:

Incident Num:	911600
IL EPA Id:	0316495043
Product:	Jet Fuel
IEMA Date:	06/12/1991
Project Manager:	Fernandes
Project Manager Phone:	(217) 558-4071
Email:	Suzanne.Fernandes@illinois.gov
PRP Name:	YMCA
PRP Contact:	Mike Dalgard
PRP Address:	755 West North Ave.
PRP City,St,Zip:	Chicago, IL 60610
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**02/24/2009**
NFR Date Recorded:	Not reported

76	**2 W 111TH** **CHICAGO, IL**	**SPILLS**	**S108045720** **N/A**

SPILLS:

Incident ID:	20041632
Incident Date:	11/21/2004
Date Received:	11/22/2004
Facility Address:	2 W 111TH
Facility City:	CHICAGO
PRP Name:	BP
AC:	Not reported

76	**2 W 111TH ST** **CHICAGO, IL**	**SPILLS**	**S111923145** **N/A**

SPILLS:

Incident ID:	20080184
Incident Date:	Not reported
Date Received:	02/07/2008
Facility Address:	2 W 111TH ST
Facility City:	CHICAGO
PRP Name:	BP PRODUCTS NORTH AMERICA
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
76	**ROSELAND MARATHON** **2 WEST 111TH STREET** **CHICAGO, IL 60628**	**LUST** **UST**	**U001141893** **N/A**

LUST:

Incident Num:	20080184
IL EPA Id:	0316495042
Product:	Unleaded Gas
IEMA Date:	02/07/2008
Project Manager:	Kaiser
Project Manager Phone:	(217) 524-4650
Email:	Karl.Kaiser@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/29/2008
45 Report Received:	03/26/2008
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2023171
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Mohammed Zahir
Owner Id:	U0030411
Owner Address:	2 W. 111th Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**L003715**
Green Tag Issue Date:	**3/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984

Map ID	Site	Database(s)	EPA ID Number

ROSELAND MARATHON (Continued) **U001141893**

Green Tag Decal:	**L003715**
Green Tag Issue Date:	**3/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/25/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1984
Green Tag Decal:	**L003715**
Green Tag Issue Date:	**3/25/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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76 **PHILLIPS 66** **UST** **U003971788**
11100 S. STATE STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2017200
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	A. B. State Petroleum
Owner Id:	U0032765
Owner Address:	Not reported
Owner City,St,Zip:	Not reported

Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003476**
Green Tag Issue Date:	**11/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Currently in use**

Map ID	Site	Database(s)	EPA ID Number

PHILLIPS 66 (Continued) **U003971788**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003476**
Green Tag Issue Date:	**11/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003476**
Green Tag Issue Date:	**11/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003476**
Green Tag Issue Date:	**11/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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77 **ABANDONED SERVICE STATION** **UST** **U003769825**
68 W 111TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2040529
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	City Of Chicago
Owner Id:	U0024652
Owner Address:	30 North LaSalle Street, 25th Floor
Owner City,St,Zip:	Chicago, IL 60602

Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973

Map ID	Site	Database(s)	EPA ID Number

ABANDONED SERVICE STATION (Continued) **U003769825**

OSFM First Notify Date:	Not reported
Tank Status:	**Does Not Exist**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Does Not Exist**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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78 **SPILLS** **S108479871**
100-136 W 111TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20070049
Incident Date:	Not reported
Date Received:	01/18/2007
Facility Address:	100-136 W 111TH ST
Facility City:	CHICAGO
PRP Name:	ROSELAND MEDICAL CENTER
AC:	Not reported

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78 **ANGELICA HEALTHCARE SERVGROUP** **UST** **U001141972**
100 - 140 W. 111TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2008212
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Angelica Corp.
Owner Id:	U0000654
Owner Address:	10176 Corporate Square Dr
Owner City,St,Zip:	Saint Louis, MO 63132

Tank Number:	1
Tank Capacity:	99
Tank Substance:	Diesel Fuel

Map ID	Site	Database(s)	EPA ID Number
	ANGELICA HEALTHCARE SERVGROUP (Continued)		**U001141972**

Last Used Date:	8/1/1985
OSFM First Notify Date:	4/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	99
Tank Substance:	Diesel Fuel
Last Used Date:	8/1/1985
OSFM First Notify Date:	4/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	99
Tank Substance:	Gasoline
Last Used Date:	7/1/1985
OSFM First Notify Date:	4/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	4
Tank Capacity:	3000
Tank Substance:	Solvent
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	ANGELICA HEALTHCARE SERVGROUP (Continued)		**U001141972**

Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	3000
Tank Substance:	Solvent
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	3000
Tank Substance:	Solvent
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	3000
Tank Substance:	Solvent
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	8
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

ANGELICA HEALTHCARE SERVGROUP (Continued) **U001141972**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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78 **ROSELAND MEDICAL CENTER** **LUST** **S108282965**
100-136 WEST 111TH STREET **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20070049
IL EPA Id:	0316495173
Product:	Other Petro
IEMA Date:	01/18/2007
Project Manager:	Jones
Project Manager Phone:	(217) 524-1253
Email:	Steve.Jones@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/06/2007
45 Report Received:	03/02/2007
NFA/NFR Letter:	**01/25/2008**
NFR Date Recorded:	02/19/2008

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79 **ROSELAND COMMUNITY HOSPITAL** **UST** **U003668403**
45 WEST 111TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2038282
Facility Status:	ACTIVE
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Roseland Community Hospital
Owner Id:	U0028039
Owner Address:	45 West 111th Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	12/19/1998
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	ROSELAND COMMUNITY HOSPITAL (Continued)		**U003668403**

Install Date:	Not reported
Green Tag Decal:	**L007710**
Green Tag Issue Date:	**4/8/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

80	**LAKEFRONT SUPPORTING HOUSING** **11023-11045 S WENTWORTH** **CHICAGO, IL 60628**	**ENG CONTROLS** **INST CONTROL** **SRP**	**1000204428** **ILD981960537**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316495014
NFR Letter:	10/21/2005
Date NFR Recorded:	01/19/2006
Type Of Site:	Residential
Comprehensive / Focused:	Focused
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Robert Banta
RA Company:	Lakefront Supportive Housing
RA Address:	247 South State Street
RA Secondary Address:	Suite 810
RA City,St,Zip:	Chicago, IL 60604-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Clean soil barrier/Concrete barrier/Building foundation
Worker Caution:	False
Acres:	1.575

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316495014
NFR Letter:	10/21/2005
Date NFR Recorded:	01/19/2006
Type Of Site:	Residential
Comprehensive / Focused:	Focused
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Robert Banta
RA Company:	Lakefront Supportive Housing
RA Address:	247 South State Street
RA Secondary Address:	Suite 810
RA City,St,Zip:	Chicago, IL 60604-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Clean soil barrier/Concrete barrier/Building foundation
Worker Caution:	False
Acres:	1.575

SRP:

IL EPA Id:	0316495014
US EPA Id:	ILD981960537
Longitude:	-87.62756
Latitude:	41.69306
Contact Name:	Robert Banta
Contact Address:	247 South State Street
Contact Address2:	Suite 810
Contact City,St,Zip:	Chicago, IL 60640-
Contact Phone:	(312) 447-4500
Date Enrolled:	05/22/2003

Map ID	Site	Database(s)	EPA ID Number

LAKEFRONT SUPPORTING HOUSING (Continued) **1000204428**

Point Of Contact:	Carl L. Dawes
Consultant Company:	Mostardi Platt Environmental
Consultant Address:	1520 Kensington Road
Consultant Address2:	Suite 204
Consultant City,St,Zip:	Oak Brook, IL 60523-2139
Consultant Phone:	(630) 993-2100
Proj Mgr Assigned:	Dunn
Sec. 4 Letter Date:	Not reported
NFR Recorded:	01/19/2006
Active:	False
Total Acres:	1.575
No Further Remediation Letter Dt:	10/21/2005
Remediation Applicant Co:	Lakefront Supportive Housing
Remediation Applicant Title:	Vice President
Remediation Applicant Name:	Mr. Robert Banta
Remediation Applicant Company:	Lakefront Supportive Housing
Remediation Applicant Address:	247 South State Street
Remediation Applicant Address 2:	Suite 810
Remediation Applicant City,St,Zip:	Chicago, IL 60604-
Illinois EPA:	0316495014
Site Name:	Angelica Health Services
NFR Letter:	2005-10-21
NFR Letter Date Recorded:	2006-01-19
Site Type:	Residential
Comprehensive/Focused:	Focused
Institutional Controls:	Groundwater use restriction
Barrier:	Clean soil barrier/Concrete barrier/Building foundation
Worker Caution:	False
Acres:	1.575

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80 **STAR CLEANERS** **RCRA-SQG** **1010317282**
149 W 111TH ST **ILR000144154**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	10/27/2006
Facility name:	STAR CLEANERS
Facility address:	149 W 111TH ST CHICAGO, IL 60628
EPA ID:	ILR000144154
Contact:	KI KIM
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(217) 555-1212
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STAR CLEANERS

Map ID	Site	Database(s)	EPA ID Number

STAR CLEANERS (Continued) **1010317282**

Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 10/27/2006
Owner/Op end date: Not reported

Owner/operator name: STAR CLEANERS
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 10/27/2006
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D039
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

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80 **STAR CLEANERS** **DRYCLEANERS** **S111009271**
149 WEST 111TH STREET **N/A**
CHICAGO, IL 60628

DRYCLEANERS:
Facility Id: 2881-5610-04
DC No: DC-00937
Facility Contact: KI CHANG KIM
License Expires: 12/31/2012

Map ID	Site	Database(s)	EPA ID Number
85	**KANG WON H** **11201-227 S MICHIGAN AVE** **CHICAGO, IL 60628**	**UST**	**U003909406** **N/A**

UST:

Facility ID:	2036925
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Kang Won H
Owner Id:	U0027063
Owner Address:	11201-227 S Michigan Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	Not reported
Tank Capacity:	Not reported
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not reported**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

91	**VACANT BULDING** **11321 S WENTWORTH AVENUE** **CHICAGO, IL 60603**	**UST**	**U003193590** **N/A**

UST:

Facility ID:	2035824
Facility Status:	EXEMPT
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Chicago Assoc For Retarded Citizens
Owner Id:	U0026078
Owner Address:	8South Michigan Avenue
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	5/30/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Heating Oil

Map ID	Site	Database(s)	EPA ID Number

VACANT BULDING (Continued) **U003193590**

Last Used Date:	12/1/1973
OSFM First Notify Date:	5/30/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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93 **PULLMAN CO** **LUST** **U001142600**
65 WEST 113TH PLACE **UST** **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	903598
IL EPA Id:	0316495033
Product:	Deisel
IEMA Date:	12/04/1990
Project Manager:	Davis
Project Manager Phone:	(217) 785-7492
Email:	Valerie.A.Davis@illinois.gov
PRP Name:	Illinois Bell Telephone
PRP Contact:	Thomas Scheer
PRP Address:	900 North Villa
PRP City,St,Zip:	Villa Park, IL 60181
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**05/04/2004**
NFR Date Recorded:	11/05/2004

UST:

Facility ID:	2007786
Facility Status:	ACTIVE
Facility Type:	**UTILITY**
Owner Name:	AT&T Corp. d/b/a Illinois Bell
Owner Id:	U0034340
Owner Address:	308 S. Akard, Room 1700
Owner City,St,Zip:	Dallas, TX 75202
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	12/11/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M006121**
Green Tag Issue Date:	**5/5/2011**

Map ID	Site	Database(s)	EPA ID Number
	PULLMAN CO (Continued)		**U001142600**

Green Tag Expire Date: **12/31/2013**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 5760
Tank Substance: Fuel Oil
Last Used Date: 1/1/1970
OSFM First Notify Date: 12/11/1986
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **M006121**
Green Tag Issue Date: **5/5/2011**
Green Tag Expire Date: **12/31/2013**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

Tank Number: 3
Tank Capacity: 2500
Tank Substance: Diesel Fuel
Last Used Date: Not reported
OSFM First Notify Date: 2/21/1991
Tank Status: **Currently in use**
Red Tag Issue Date: Not reported
Install Date: 11/28/1990
Green Tag Decal: **M006121**
Green Tag Issue Date: **5/5/2011**
Green Tag Expire Date: **12/31/2013**
Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: $0.00

93		**SPILLS**	**S111878773**
	65 W 113TH PL **CHICAGO, IL**		**N/A**

SPILLS:
Incident ID: 19903598
Incident Date: Not reported
Date Received: 12/04/1990
Facility Address: 65 W 113TH PL
Facility City: CHICAGO
PRP Name: ILLINOIS BELL
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
94	**135-39 W 114TH ST** **CHICAGO, IL**	**SPILLS**	**S111910374** **N/A**

SPILLS:

Incident ID:	20011638
Incident Date:	Not reported
Date Received:	10/03/2001
Facility Address:	135-39 W 114TH ST
Facility City:	CHICAGO
PRP Name:	MARQUETTE BANK
AC:	Not reported

94	**MARQUETTE BANK** **135-39 WEST 114TH ST.** **CHICAGO, IL 60628**	**LUST**	**S105155384** **N/A**

LUST:

Incident Num:	20011638
IL EPA Id:	0316495139
Product:	Gasoline
IEMA Date:	10/03/2001
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	Marquette Bank
PRP Contact:	James McDonough
PRP Address:	8020 South Harlem Ave.
PRP City,St,Zip:	Bridgeview, IL 60455
PRP Phone:	7739184541
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	10/17/2001
45 Report Received:	11/16/2001
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

94	**VACANT BUILDING** **133-37 W 114TH ST THRID PARTY REMOVAL** **CHICAGO, IL 60628**	**UST**	**U003853337** **N/A**

UST:

Facility ID:	2040973
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Marquette Bank
Owner Id:	U0030607
Owner Address:	8020 S Harlem Ave
Owner City,St,Zip:	Bridgeview, IL 60455
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/18/2001
Tank Status:	**Exempt from registration**

Map ID	Site	Database(s)	EPA ID Number

VACANT BUILDING (Continued) **U003853337**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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97 **TORINO GARAGE** **UST** **U001143217**
11439 S COTTAGE GROVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2001712
Facility Status:	ACTIVE
Facility Type:	**COMMERCIAL / RETAIL**
Owner Name:	Torino Baking Co
Owner Id:	U0015099
Owner Address:	318 E Kensington Co
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	2/20/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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98 **SPILLS** **S111896002**
11442 S MICHIGAN AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19960704
Incident Date:	Not reported
Date Received:	04/30/1996
Facility Address:	11442 S MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	MUSA TADROS
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
98	**GOODYEAR TIRE & RUBBER** **11442 S MICHIGAN AVE** **CHICAGO, IL 60628**	**UST**	**U000865244** **N/A**

UST:

Facility ID:	2012823
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	American Bank & Trust #120064-09
Owner Id:	U0024861
Owner Address:	733 Spruce Rd
Owner City,St,Zip:	Frankfort, IL 60423
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Used Oil
Last Used Date:	1/1/1993
OSFM First Notify Date:	4/15/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1969
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

98	**TADROS, MUSA** **11442 SOUTH MICHIGAN AVE.** **CHICAGO, IL 60628**	**LUST**	**S104522099** **N/A**

LUST:

Incident Num:	960704
IL EPA Id:	0316500008
Product:	Uset Oil
IEMA Date:	04/30/1996
Project Manager:	Blumhorst
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Musa Tadros
PRP Contact:	Not reported
PRP Address:	655 North La Grange Rd.
PRP City,St,Zip:	Frankfort, IL 60423
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	05/16/1996
45 Report Received:	04/02/1997
NFA/NFR Letter:	**01/27/1998**
NFR Date Recorded:	10/21/1998

Map ID	Site	Database(s)	EPA ID Number
98	**GOODYEAR AUTO SERVICE CTR** **11442 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000194572** **ILD149985640**

RCRA-SQG:

Date form received by agency:	11/03/1986
Facility name:	GOODYEAR AUTO SERVICE CTR
Facility address:	11442 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILD149985640
Mailing address:	1501 NICHOLAS BLVD ELK GROVE VILLAGE, IL 60007
Contact:	H BROWN
Contact address:	1501 NICHOLAS BLVD ELK GROVE VILLAGE, IL 60007
Contact country:	US
Contact telephone:	(312) 640-5000
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	GOODYEAR TIRE AND RUBBER CO
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

Map ID	Site	Database(s)	EPA ID Number

GOODYEAR AUTO SERVICE CTR (Continued) **1000194572**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: X001
Waste name: WASTE OILS

Violation Status: No violations found

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100 **SPILLS** **S111920067**
342 E 115TH ST **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 20061096
Incident Date: Not reported
Date Received: 08/29/2006
Facility Address: 342 E 115TH ST
Facility City: CHICAGO
PRP Name: FRIESON, PHYLLIS
AC: Not reported

---

100 **USED APPLLIANCE STORE** **UST** **U004022836**
342-44 E. 115TH STREET **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2043038
Facility Status: EXEMPT
Facility Type: **NONE**
Owner Name: Frieson, Willie
Owner Id: U0033097
Owner Address: 342-344 E. 115th Street
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: 1/23/2006
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**

Map ID	Site	Database(s)	EPA ID Number

USED APPLLIANCE STORE (Continued) **U004022836**

Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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100 **FRIESON, PHYLLIS** **LUST** **S108187373**
342 EAST 115TH STREET **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20061096
IL EPA Id:	0316495171
Product:	Fuel Oil, Other Petro
IEMA Date:	08/29/2006
Project Manager:	Covert
Project Manager Phone:	(217) 785-3943
Email:	Chris.Covert@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	01/29/2007
45 Report Received:	01/29/2007
NFA/NFR Letter:	**05/29/2007**
NFR Date Recorded:	08/08/1988

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100 **SPILLS** **S108046141**
344 E 115TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20051628
Incident Date:	Not reported
Date Received:	12/06/2005
Facility Address:	344 E 115TH ST
Facility City:	CHICAGO
PRP Name:	FRIESON, WILLIE
AC:	Not reported

---

101 **ILLINOIS CENTRAL RAILROAD** **UST** **U003152193**
11500 S COTTAGE GROVE **N/A**
CHICAGO, IL 60430

UST:

Facility ID:	2035501
Facility Status:	EXEMPT
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Name:	Lend Lease Realestate Investors
Owner Id:	U0007233
Owner Address:	455 N Cityfront Plaza Dr Suite 3200

Map ID	Site	Database(s)	EPA ID Number
	ILLINOIS CENTRAL RAILROAD (Continued)		**U003152193**

Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	5000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	500
Tank Substance:	Gasoline
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	275
Tank Substance:	Gasoline
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	4
Tank Capacity:	275
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

ILLINOIS CENTRAL RAILROAD (Continued) **U003152193**

Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	275
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/24/1997
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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101 **ILLINOIS CENTRAL RAILROAD** **RCRA-SQG** **1001123410**
115TH & COTTAGE GROVE **ILR000030551**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	11/14/1996
Facility name:	ILLINOIS CENTRAL RAILROAD
Facility address:	115TH & COTTAGE GROVE CHICAGO, IL 60628
EPA ID:	ILR000030551
Mailing address:	455 N CITY FRONT PLAZA DR CHICAGO, IL 60611
Contact:	MARIO SILLER
Contact address:	455 N CITY FRONT PLAZA DR CHICAGO, IL 60611
Contact country:	US
Contact telephone:	(708) 957-6566
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	ILLINOIS CENTRAL RAILROAD
Owner/operator address:	455 N CITY FRONT PLAZA DR CHICAGO, IL 60611
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 755-7840
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

ILLINOIS CENTRAL RAILROAD (Continued) **1001123410**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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101 **SHERWIN WILLIAMS CHICAGO FACILITY** **UST** **U004123100**
549 E. 115TH ST. **N/A**
CHICAGO, IL 60609

UST:
Facility ID: 2044116
Facility Status: EXEMPT
Facility Type: **COMMERCIAL / RETAIL**
Owner Name: Sherwin Williams Company
Owner Id: U0013875
Owner Address: 101 Prospect Avenue
Owner City,St,Zip: Cleveland, OH 44115

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: Not reported
Tank Status: **Exempt from registration**
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Self Service Permit Inspection Date: **Not reported**

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CHICAGO FACILITY (Continued)		**U004123100**

Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

102	**CURTIS SCHOOL** **32 E 115TH ST** **CHICAGO, IL 60628**	**UST**	**1002889106** **N/A**

UST:

Facility ID:	2040500
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Public Schools
Owner Id:	U0028313
Owner Address:	125 S. Clark, 17th Floor
Owner City,St,Zip:	Chicago, IL 60603
Tank Number:	1
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

102	**CURTIS ELEMENTARY** **32 E 115TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696709** **ILR000056796**

RCRA-CESQG:

Date form received by agency:	10/27/1998
Facility name:	CURTIS ELEMENTARY
Facility address:	32 E 115TH ST CHICAGO, IL 60628
EPA ID:	ILR000056796
Mailing address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST PO BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous

Map ID	Site	Database(s)	EPA ID Number
	CURTIS ELEMENTARY (Continued)		**1004696709**

waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING ROAD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
103	**ABANDONED GAS STATION** **2 WEST 115TH STREET** **CHICAGO, IL 60628**	**LUST** **UST**	**U003668168** **N/A**

LUST:

Incident Num:	980685
IL EPA Id:	0316495103
Product:	Gasoline
IEMA Date:	03/30/1998
Project Manager:	Harlow
Project Manager Phone:	(217) 524-7650
Email:	Robert.Harlow@illinois.gov
PRP Name:	Donna Cox
PRP Contact:	Not reported
PRP Address:	345 South Sacramento
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	7737223797
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	20111008
IL EPA Id:	0316495103
Product:	Gasoline
IEMA Date:	09/22/2011
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

UST:

Facility ID:	2037063
Facility Status:	EXEMPT
Facility Type:	**GOLF COURSE**
Owner Name:	Cox Donna
Owner Id:	U0027202
Owner Address:	345 S Sacramento
Owner City,St,Zip:	Chicago, IL 60612

Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number

ABANDONED GAS STATION (Continued) **U003668168**

Last Used Date:	12/31/1973
OSFM First Notify Date:	3/23/1998
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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103 **SPILLS** **S111900940**
2 W 115TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19980685
Incident Date:	Not reported
Date Received:	03/30/1998
Facility Address:	2 W 115TH ST
Facility City:	CHICAGO
PRP Name:	COX, DONNA
AC:	Not reported

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103 **SPILLS** **S111927173**
2 W 115TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20111008
Incident Date:	Not reported
Date Received:	Not reported
Facility Address:	2 W 115TH ST
Facility City:	CHICAGO
PRP Name:	Donna Cox
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
104	**35 W 115TH ST** **CHICAGO, IL**	**SPILLS**	**S111905773** **N/A**

SPILLS:

Incident ID:	19992324
Incident Date:	Not reported
Date Received:	10/13/1999
Facility Address:	35 W 115TH ST
Facility City:	CHICAGO
PRP Name:	TRIANGLE TRANSMISSIONS
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
104	**TRIANGLE TRANSMISSION** **35 W 115TH ST** **CHICAGO, IL 60628**	**RCRA-SQG** **LUST** **UST**	**1001493094** **ILR000067009**

RCRA-SQG:

Date form received by agency:	08/27/1999
Facility name:	TRIANGLE TRANSMISSION
Facility address:	35 W 115TH ST CHICAGO, IL 60628
EPA ID:	ILR000067009
Contact:	THERON AYTCH
Contact address:	35 W 115TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 458-0054
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TRIANGLE TRANSMISSION
Owner/operator address:	35 W 115TH ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 458-0054
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

Map ID	Site	Database(s)	EPA ID Number

TRIANGLE TRANSMISSION (Continued) **1001493094**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

LUST:
Incident Num: 992324
IL EPA Id: 0316495120
Product: Gasoline
IEMA Date: 10/13/1999
Project Manager: NOT ASSIGNED
Project Manager Phone: Not reported
Email: Not reported
PRP Name: Triangle Transmissions
PRP Contact: Pheron Aytch
PRP Address: 35 West 115th St.
PRP City,St,Zip: Chicago, IL 60628
PRP Phone: 7734680054
Site Classification: Not reported
Section 57.5(g) Letter: 732
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 10/21/1999
45 Report Received: Not reported
NFA/NFR Letter: Not reported
NFR Date Recorded: Not reported

UST:
Facility ID: 2039271
Facility Status: EXEMPT
Facility Type: GOLF COURSE
Owner Name: Triangle Transmission
Owner Id: U0029023
Owner Address: 35 W 115th St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Gasoline
Last Used Date: 12/31/1973
OSFM First Notify Date: 10/21/1999
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: Not reported

Map ID	Site	Database(s)	EPA ID Number

TRIANGLE TRANSMISSION (Continued) **1001493094**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/21/1999
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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105 **ABANDONED SERVICE STATION** **UST** **U003762980**
11500 S PERRY **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2040244
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	5000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**

Map ID	Site	Database(s)	EPA ID Number

ABANDONED SERVICE STATION (Continued) **U003762980**

Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	5000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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105 **CHICAGO, CITY OF** **LUST** **S104872169**
11500 SOUTH PERRY **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	20002342
IL EPA Id:	0316495135
Product:	Gasoline, Uset Oil
IEMA Date:	12/12/2000
Project Manager:	Tucka
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	City of Chicago
PRP Contact:	Dave Graham
PRP Address:	30 North LaSalel St., 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127443639

Map ID	Site	Database(s)	EPA ID Number

CHICAGO, CITY OF (Continued) **S104872169**

Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2001-04-20
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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110 **CATHOLIC CONVENT** **UST** **U004014199**
11515 S. PRAIRIE AVENUE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2042879
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Methodist Youth Services, Inc.
Owner Id:	U0032855
Owner Address:	954 W. Washington Blvd., #4E
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1960
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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110 **SPILLS** **S108045361**
11515 PRAIRIE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20050964
Incident Date:	Not reported
Date Received:	07/12/2005
Facility Address:	11515 PRAIRIE
Facility City:	CHICAGO
PRP Name:	METHODIST YOUTH SERVICES
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
111	**BETTY BRITE CLEANERS** **11518 S MICHIGAN AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004693025** **ILD981954753**

RCRA-CESQG:

Date form received by agency:	03/29/2000
Facility name:	BETTY BRITE CLEANERS
Facility address:	11518 S MICHIGAN AVE CHICAGO, IL 60628
EPA ID:	ILD981954753
Contact:	MIKE HUSSAIN
Contact address:	11518 S MICHIGAN AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 821-9379
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	HUSSAIN HABIB
Owner/operator address:	11518 S MICHIGAN AVE CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 821-9379
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

Map ID	Site	Database(s)	EPA ID Number

BETTY BRITE CLEANERS (Continued) **1004693025**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	D039
Waste name:	TETRACHLOROETHYLENE
Waste code:	D040
Waste name:	TRICHLOROETHYLENE
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Violation Status:	No violations found

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112 **SHERWIN WILLIAMS CO**
11541 S CHAMPLAIN AVE
CHICAGO, IL 60628

CERCLIS **1000371369**
CORRACTS **60628SHRWN11**
RCRA-TSDF
RCRA-LQG

CERCLIS:

Site ID:	0500202
EPA ID:	ILD005456439
Facility County:	COOK
Short Name:	SHERWIN WILLIAMS COMPANY,
Congressional District:	01
IFMS ID:	Not reported
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Y
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

RST Code: Not reported
EPA Region: 05
Classification: Not reported
Site Settings Code: Not reported
NPL Status: Not on the NPL
DMNSN Unit Code: Not reported
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: ESI Start Needed
Non NPL Status Date: 19991123
Site Fips Code: 17031
CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Alias Name(s):
Alias ID: 101
Alias Name: SHERWIN WILLIAMS CO THE
Alias Address: 11541 S CHAMPLAIN AVE
CHICAGO, IL 60628
Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 08/01/1980
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 09/01/1984
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 06/11/1986
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

CORRACTS:

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 01/22/2007
Action: CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/04/1998
Action: CA110 - RFI Workplan Received
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/05/1998
Action: CA110 - RFI Workplan Received
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/1998
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/26/1998
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/31/1994
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/06/1991
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/06/1989
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/06/1990
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/16/1993
Action: CA016
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/20/2001
Action: CA005EE
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/22/1998
Action: CA077

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/25/2004
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/25/2004
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/28/1997
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/28/1997
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 32551
Paint and Coating Manufacturing

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/28/1992
Action: CA086
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 10/28/1998
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/2000
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 11/06/1997
Action: CA100DC - RFI Imposition, Focused data collection required for stabilization evaluation
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 12/06/1999
Action: CA200 - RFI Approved
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/2002
Schedule end date: Not reported

RCRA-TSDF:
Date form received by agency: 03/01/2010
Facility name: SHERWIN WILLIAMS CO
Facility address: 11541 S CHAMPLAIN AVE
CHICAGO, IL 60628
EPA ID: ILD005456439
Mailing address: 101 PROSPECT AVE NW-4M
CLEVELAND, OH 441151075
Contact: PAUL BARDING
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (216) 515-4629

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Contact email: Not reported
EPA Region: 05
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: THE SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CITY NOT REPORTED, OH 99998
Owner/operator country: Not reported
Owner/operator telephone: (216) 566-2000
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: THE SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: Not reported
Owner/operator telephone: (216) 566-2000
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Owner/Operator Type: Owner
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/01/2008
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 12/31/2007
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 08/14/2007
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2006
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2004
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2002
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2000
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1998
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Facility name: SHERWIN WILLIAMS CO

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 10/19/1993
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1992
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1991
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 03/01/1990
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 11/22/1980
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 08/18/1980
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D004
Waste name: ARSENIC

Waste code: D007
Waste name: CHROMIUM

Waste code: D009
Waste name: MERCURY

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: LABP
Waste name: LAB PACK

Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F017
Waste name: Not Defined

Waste code: F018
Waste name: Not Defined

Waste code: K078
Waste name: K078

Waste code: K079
Waste name: K079

Waste code: K081
Waste name: K081

Waste code: K082
Waste name: K082

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: P003

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: ACROLEIN

Waste code: P005
Waste name: ALLYL ALCOHOL

Waste code: P008
Waste name: 4-AMINOPYRIDINE

Waste code: P011
Waste name: ARSENIC OXIDE AS2O3

Waste code: P014
Waste name: BENZENETHIOL

Waste code: P019
Waste name: Not Defined

Waste code: P022
Waste name: CARBON DISULFIDE

Waste code: P028
Waste name: BENZENE, (CHLOROMETHYL)-

Waste code: P029
Waste name: COPPER CYANIDE

Waste code: P030
Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Waste code: P052
Waste name: Not Defined

Waste code: P053
Waste name: Not Defined

Waste code: P054
Waste name: AZIRIDINE

Waste code: P087
Waste name: OSMIUM OXIDE OSO4, (T-4)-

Waste code: P090
Waste name: Not Defined

Waste code: P095
Waste name: CARBONIC DICHLORIDE

Waste code: P100
Waste name: Not Defined

Waste code: P101
Waste name: ETHYL CYANIDE

Waste code: P105
Waste name: SODIUM AZIDE

Waste code: U001

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: ACETALDEHYDE (I)

Waste code: U002
Waste name: ACETONE (I)

Waste code: U003
Waste name: ACETONITRILE (I,T)

Waste code: U004
Waste name: ACETOPHENONE

Waste code: U006
Waste name: ACETYL CHLORIDE (C,R,T)

Waste code: U007
Waste name: ACRYLAMIDE

Waste code: U008
Waste name: ACRYLIC ACID (I)

Waste code: U009
Waste name: ACRYLONITRILE

Waste code: U012
Waste name: ANILINE (I,T)

Waste code: U013
Waste name: Not Defined

Waste code: U017
Waste name: BENZAL CHLORIDE

Waste code: U019
Waste name: BENZENE (I,T)

Waste code: U020
Waste name: BENZENESULFONIC ACID CHLORIDE (C,R)

Waste code: U021
Waste name: BENZIDINE

Waste code: U023
Waste name: BENZENE, (TRICHLOROMETHYL)-

Waste code: U028
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER

Waste code: U031
Waste name: 1-BUTANOL (I)

Waste code: U032
Waste name: CALCIUM CHROMATE

Waste code: U033
Waste name: CARBONIC DIFLUORIDE

Waste code: U037

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: BENZENE, CHLORO-

Waste code: U039
Waste name: P-CHLORO-M-CRESOL

Waste code: U048
Waste name: O-CHLOROPHENOL

Waste code: U052
Waste name: CRESOL (CRESYLIC ACID)

Waste code: U053
Waste name: 2-BUTENAL

Waste code: U054
Waste name: Not Defined

Waste code: U055
Waste name: BENZENE, (1-METHYLETHYL)- (I)

Waste code: U056
Waste name: BENZENE, HEXAHYDRO- (I)

Waste code: U057
Waste name: CYCLOHEXANONE (I)

Waste code: U067
Waste name: ETHANE, 1,2-DIBROMO-

Waste code: U069
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER

Waste code: U070
Waste name: BENZENE, 1,2-DICHLORO-

Waste code: U071
Waste name: BENZENE, 1,3-DICHLORO-

Waste code: U072
Waste name: BENZENE, 1,4-DICHLORO-

Waste code: U073
Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO-

Waste code: U074
Waste name: 2-BUTENE, 1,4-DICHLORO- (I,T)

Waste code: U076
Waste name: ETHANE, 1,1-DICHLORO-

Waste code: U077
Waste name: ETHANE, 1,2-DICHLORO-

Waste code: U078
Waste name: 1,1-DICHLOROETHYLENE

Waste code: U080

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: METHANE, DICHLORO-

Waste code: U081
Waste name: 2,4-DICHLOROPHENOL

Waste code: U082
Waste name: 2,6-DICHLOROPHENOL

Waste code: U088
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER

Waste code: U092
Waste name: DIMETHYLAMINE (I)

Waste code: U102
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER

Waste code: U103
Waste name: DIMETHYL SULFATE

Waste code: U104
Waste name: Not Defined

Waste code: U105
Waste name: BENZENE, 1-METHYL-2,4-DINITRO-

Waste code: U106
Waste name: BENZENE, 2-METHYL-1,3-DINITRO-

Waste code: U107
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER

Waste code: U108
Waste name: 1,4-DIETHYLENEOXIDE

Waste code: U110
Waste name: DIPROPYLAMINE (I)

Waste code: U112
Waste name: ACETIC ACID ETHYL ESTER (I)

Waste code: U113
Waste name: ETHYL ACRYLATE (I)

Waste code: U115
Waste name: ETHYLENE OXIDE (I,T)

Waste code: U117
Waste name: ETHANE, 1,1'-OXYBIS-(I)

Waste code: U118
Waste name: ETHYL METHACRYLATE

Waste code: U119
Waste name: ETHYL METHANESULFONATE

Waste code: U122

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: FORMALDEHYDE

Waste code: U123
Waste name: FORMIC ACID (C,T)

Waste code: U124
Waste name: FURAN (I)

Waste code: U125
Waste name: 2-FURANCARBOXALDEHYDE (I)

Waste code: U126
Waste name: GLYCIDYLALDEHYDE

Waste code: U127
Waste name: BENZENE, HEXACHLORO-

Waste code: U128
Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO-

Waste code: U130
Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO-

Waste code: U131
Waste name: ETHANE, HEXACHLORO-

Waste code: U133
Waste name: HYDRAZINE (R,T)

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)

Waste code: U135
Waste name: HYDROGEN SULFIDE

Waste code: U140
Waste name: ISOBUTYL ALCOHOL (I,T)

Waste code: U145
Waste name: LEAD PHOSPHATE

Waste code: U147
Waste name: 2,5-FURANDIONE

Waste code: U149
Waste name: MALONONITRILE

Waste code: U150
Waste name: MELPHALAN

Waste code: U151
Waste name: MERCURY

Waste code: U152
Waste name: METHACRYLONITRILE (I, T)

Waste code: U154

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: METHANOL (I)

Waste code: U155
Waste name: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)-

Waste code: U159
Waste name: 2-BUTANONE (I,T)

Waste code: U160
Waste name: 2-BUTANONE, PEROXIDE (R,T)

Waste code: U161
Waste name: METHYL ISOBUTYL KETONE (I)

Waste code: U162
Waste name: METHYL METHACRYLATE (I,T)

Waste code: U165
Waste name: NAPHTHALENE

Waste code: U167
Waste name: 1-NAPHTHALENAMINE

Waste code: U168
Waste name: 2-NAPHTHALENAMINE

Waste code: U169
Waste name: BENZENE, NITRO-

Waste code: U170
Waste name: P-NITROPHENOL

Waste code: U171
Waste name: 2-NITROPROPANE (I,T)

Waste code: U183
Waste name: BENZENE, PENTACHLORO-

Waste code: U184
Waste name: ETHANE, PENTACHLORO-

Waste code: U185
Waste name: BENZENE, PENTACHLORONITRO-

Waste code: U186
Waste name: 1-METHYLBUTADIENE (I)

Waste code: U187
Waste name: ACETAMIDE, N-(4-ETHOXYPHENYL)-

Waste code: U188
Waste name: PHENOL

Waste code: U190
Waste name: 1,3-ISOBENZOFURANDIONE

Waste code: U194

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste name: 1-PROPANAMINE (I,T)

Waste code: U196
Waste name: PYRIDINE

Waste code: U201
Waste name: 1,3-BENZENEDIOL

Waste code: U202
Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS

Waste code: U207
Waste name: BENZENE, 1,2,4,5-TETRACHLORO-

Waste code: U208
Waste name: ETHANE, 1,1,1,2-TETRACHLORO-

Waste code: U209
Waste name: ETHANE, 1,1,2,2-TETRACHLORO-

Waste code: U210
Waste name: ETHENE, TETRACHLORO-

Waste code: U211
Waste name: CARBON TETRACHLORIDE

Waste code: U212
Waste name: Not Defined

Waste code: U213
Waste name: FURAN, TETRAHYDRO-(I)

Waste code: U218
Waste name: ETHANETHIOAMIDE

Waste code: U220
Waste name: BENZENE, METHYL-

Waste code: U221
Waste name: BENZENEDIAMINE, AR-METHYL-

Waste code: U223
Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Waste code: U225
Waste name: BROMOFORM

Waste code: U226
Waste name: ETHANE, 1,1,1-TRICHLORO-

Waste code: U227
Waste name: ETHANE, 1,1,2-TRICHLORO-

Waste code: U228
Waste name: ETHENE, TRICHLORO-

Waste code: U229

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Waste name: Not Defined

Waste code: U230
Waste name: Not Defined

Waste code: U231
Waste name: Not Defined

Waste code: U232
Waste name: Not Defined

Waste code: U234
Waste name: BENZENE, 1,3,5-TRINITRO-

Waste code: U238
Waste name: CARBAMIC ACID, ETHYL ESTER

Waste code: U239
Waste name: BENZENE, DIMETHYL- (I,T)

Biennial Reports:

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 256148.7

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 289819.8

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 289819.8

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 216

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 256148.7

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 256148.7

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 256148.7

Waste code: LABP
Waste name: LAB PACK
Amount (Lbs): 7599.3

Corrective Action Summary:

Event date: 07/06/1989
Event: RFA Completed, Assessment was an RFA.

Event date: 07/06/1990
Event: RFA Determination Of Need For An RFI, RFI is Necessary;

Event date: 06/06/1991
Event: CA077

Event date: 09/27/1991
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 09/28/1992
Event: CA086

Event date: 07/16/1993
Event: CA016

Event date: 03/31/1994
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 08/28/1997
Event: Current Human Exposures under Control, More information is needed to make a determination.

Event date: 08/28/1997
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 11/06/1997
Event: RFI Imposition, Focused data collection required for stabilization evaluation.

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Event date: 03/04/1998
Event: RFI Workplan Received

Event date: 03/05/1998
Event: RFI Workplan Received

Event date: 03/26/1998
Event: CA077

Event date: 07/22/1998
Event: CA077

Event date: 10/28/1998
Event: RFI Workplan Approved

Event date: 12/06/1999
Event: RFI Approved

Event date: 07/20/2001
Event: CA005EE

Event date: 08/25/2004
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 08/25/2004
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 01/22/2007
Event: Date For Remedy Selection (CM Imposed)

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 04/09/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 04/09/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.197
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 08/18/1995
Date achieved compliance: 11/06/1997
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/13/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 09/22/1994
Date achieved compliance: 02/14/1995
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 10/24/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 08/05/1987
Date achieved compliance: 02/05/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/06/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.111
Area of violation: Generators - General
Date violation determined: 10/10/1986
Date achieved compliance: 02/26/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(d)(4)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 03/31/1986
Date achieved compliance: 08/07/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/03/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 03/27/1986
Date achieved compliance: 07/18/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/01/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 03/27/1986
Date achieved compliance: 07/18/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/01/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116
Area of violation: TSD - General Facility Standards
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 07/24/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/10/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 05/05/1986
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/18/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 05/05/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/10/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 07/24/1985
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/18/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/07/1985
Date achieved compliance: 06/04/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/05/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/07/1985
Date achieved compliance: 06/04/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/07/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/14/1984
Date achieved compliance: 12/20/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/19/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/15/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/19/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/09/1984
Date achieved compliance: 09/13/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/16/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/19/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 05/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/15/1984
Date achieved compliance: 01/24/1985
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 03/28/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/15/1984
Date achieved compliance: 01/24/1985
Violation lead agency: EPA
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 07/30/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: SR - 725.191

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 10/14/2008

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/24/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation lead agency: State

Evaluation date: 01/23/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/03/2002
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/18/1995
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 03/27/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 03/27/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 01/18/1995
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/14/1995
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/1994

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/14/1995
Evaluation lead agency: State

Evaluation date: 04/20/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 04/20/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Tank System Standards
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Permits - Application
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: LDR - General
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Generators - General
Date achieved compliance: 11/06/1997

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - General
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 01/08/1988
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/05/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/05/1988
Evaluation lead agency: State

Evaluation date: 10/10/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/26/1987
Evaluation lead agency: State

Evaluation date: 03/31/1986
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 08/07/1986
Evaluation lead agency: State

Evaluation date: 03/27/1986
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 07/18/1986
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 01/17/1986

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 04/25/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/24/1985
Evaluation lead agency: State

Evaluation date: 04/25/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/05/1986
Evaluation lead agency: State

Evaluation date: 01/07/1985
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 06/04/1985
Evaluation lead agency: State

Evaluation date: 12/14/1984
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/20/1984
Evaluation lead agency: State

Evaluation date: 10/23/1984
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/19/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 09/19/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/17/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 12/21/1984

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation lead agency: State

Evaluation date: 08/17/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/09/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/13/1984
Evaluation lead agency: State

Evaluation date: 07/16/1984
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 07/16/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 05/17/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 02/15/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 01/24/1985
Evaluation lead agency: EPA

Evaluation date: 11/03/1983
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 04/06/1984
Evaluation lead agency: State

113	**SHERWIN-WILLIAMS COMPANY BOILERHOUSE COMPLEX** **603 EAST KENSINGTON AVENUE** **CHICAGO, IL 60628**	**SRP**	**S111678029** **N/A**

SRP:
IL EPA Id: 0316500003
US EPA Id: ILD005456439
Longitude: -87.60814
Latitude: 41.68350
Contact Name: Gordon Kuntz
Contact Address: 101 Prospect Avenue, NW
Contact Address2: Not reported
Contact City,St,Zip: Cleveland, OH 44115-
Contact Phone: (216) 566-2889
Date Enrolled: 02/21/2012

Map ID	Site	Database(s)	EPA ID Number

SHERWIN-WILLIAMS COMPANY BOILERHOUSE COMPLEX (Continued) **S111678029**

Point Of Contact:	Jennifer Troast
Consultant Company:	Weston Solutions
Consultant Address:	750 East Bunker Court
Consultant Address2:	Suite 500
Consultant City,St,Zip:	Vernon Hills, IL 60061-
Consultant Phone:	(847) 918-4068
Proj Mgr Assigned:	Hall
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	2.870
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	The Sherwin-Williams Company
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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115 **US SCRAP** **SWF/LF** **1008113237**
391 E KENSINGTON **N/A**
CHICAGO, IL 60628

IL WMRC_LF:

Region:	WMRC
General:	Not reported
IEPA ID Number:	316000022
Municipal Waste:	Not reported
Provisional IEPA ID:	Not reported
Septic:	Not reported
NIPC Map Number:	135
Animal:	Not reported
Owner Name:	U S SCRAP
Pathological:	Not reported
Operator:	U S SCRAP
Industrial:	Not reported
PO Box:	Not reported
Foundry Sand:	Not reported
Incinerator Ash:	Not reported
Slag:	Not reported
Hazardous:	Not reported
Hazardous Liquid:	Not reported
Radiation:	Not reported
Demolition:	X
Lat/Long:	414000/873600
Landscaping:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	US SCRAP (Continued)		**1008113237**

Oil Field:	Not reported
Primemer ID:	3
Special:	Not reported
Township:	37N
Other:	Not reported
Range:	14E
Unknown:	Not reported
Section:	27
Quarter Section1:	NW
Quarter Section2:	Not reported
Quarter Section3:	Not reported
Quarter Section4:	Not reported
IEPA:	X
ISGS:	Not reported
PollutionControlBoard:	Not reported
IDM&M:	Not reported
DPH:	Not reported
Operational Status:	CLOSED NO FINAL COVER
Local Agency:	Not reported
Permit Status:	UNPERMITTED UNAUTHORIZED
Agency:	NIPC
IEPA Permit Date:	10174
Source Other:	Not reported
Close Date:	73074
Reaction:	Not reported
RCRA Facility:	Not reported
Date Discover:	Not reported
GW Monitoring:	YES
Date Cleaned:	Not reported
FD Site:	Not reported
Offsite Waste:	Not reported
Landfill Size:	Not reported
Random Dump:	Not reported
Size Fill:	Not reported
Open Dump:	Not reported
Leachate Collected:	Not reported
Abandonment:	Not reported
Other:	Not reported
Recompacted Clay:	Not reported
In-situ Clay:	Not reported
Secured Containers:	Not reported
Combination:	Not reported
Landfill:	X
None:	Not reported
Incineration:	Not reported
Other:	Not reported
Survace Impoundment:	Not reported
Land Application:	Not reported

Map ID	Site	Database(s)	EPA ID Number
115	**U.S. SCRAP** **391 EAST KENSINGTON** **CHICAGO, IL 60628**	**SSU**	**S101467254** **N/A**

SSU:

Facility ID:	0316000022
Facility Type:	Manufacturer - Industrial
Lat/Long:	41.6839332 / -87.613449
Directions:	Take I-55 North.
Region:	Des Plaines
Current Program:	USEPA
Project Manager:	Nickell
Community Relations:	McGinnis
SSU Status:	Transferred
US EPA Id:	ILD980679484
FOS:	NA
Year Completed:	Not reported
Year Entered:	Not reported
Site Size:	9

116	**GONNELLA BAKING CO** **318 E KENSINGTON** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001218857** **ILR000049858**

RCRA-SQG:

Date form received by agency:	04/07/1998
Facility name:	GONNELLA BAKING CO
Facility address:	318 E KENSINGTON CHICAGO, IL 60628
EPA ID:	ILR000049858
Contact:	HOUSTON BICKHEM
Contact address:	318 E KENSINGTON CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(773) 821-1783
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	GONNELA BAKING
Owner/operator address:	318 E KENSINGTON CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 821-1783
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

Map ID	Site	Database(s)	EPA ID Number

GONNELLA BAKING CO (Continued) **1001218857**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Violation Status:	No violations found

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117 **SPILLS** **S111895505**

162 E KENSINGTON AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19960207
Incident Date:	Not reported
Date Received:	02/07/1996
Facility Address:	162 E KENSINGTON AVE
Facility City:	CHICAGO
PRP Name:	KENSINGTON SERVICE STATION
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
117	**KENSINGTON SERV STATION** **162 E KENSINGTON** **CHICAGO, IL 60628**	**LUST**	**1001086793** **ILR000015131**

LUST:

Incident Num:	960207
IL EPA Id:	0316505018
Product:	Gasoline
IEMA Date:	02/07/1996
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Kensington Service Station
PRP Contact:	Hector Vasquez
PRP Address:	162 East Kensington Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

117	**KENSINGTON SERVICE STATION** **162 E KENSINGTON** **CHICAGO, IL 60473**	**UST**	**U003042181** **N/A**

UST:

Facility ID:	2034581
Facility Status:	CLOSED
Facility Type:	**GOLF COURSE**
Owner Name:	Kensington Service Station
Owner Id:	U0024426
Owner Address:	162 E Kensington
Owner City,St,Zip:	Chicago, IL 60473
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995

Map ID	Site	Database(s)	EPA ID Number

KENSINGTON SERVICE STATION (Continued) **U003042181**

Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	1/1/1983
OSFM First Notify Date:	11/30/1995
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1901
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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118 **0707 CLARK SER STATION** **UST** **U000172648**
11555 S MICHIGAN AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2010017
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Clark Retail Enterprises, Inc.
Owner Id:	U0003073
Owner Address:	3003 Butterfield Road, Suite 300
Owner City,St,Zip:	Oak Brook, IL 60523

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline

Map ID	Site	Database(s)	EPA ID Number

0707 CLARK SER STATION (Continued) **U000172648**

Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	7500
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/2/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

118 **CLARK OIL & REFINING** **LUST** **S104525658**
11555 SOUTH MICHIGAN AVE. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	912512
IL EPA Id:	0316535008
Product:	Gasoline
IEMA Date:	09/05/1991
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Clark Oil & Refining
PRP Contact:	Johnna VanKeuran
PRP Address:	8182 Maryland Ave.
PRP City,St,Zip:	Clayton, MO 63105-3721
PRP Phone:	3147520533
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	05/28/1992
NFA/NFR Letter:	**01/09/1995**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
120	**MICHIGAN CITGO** **11600 S MICHIGAN AVE** **CHICAGO, IL 60628**	**UST**	**U001142786** **N/A**

UST:

Facility ID:	2017681
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Michigan Citgo, Inc.
Owner Id:	U0031233
Owner Address:	11600 S Michigan Ave
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	11/10/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003457**
Green Tag Issue Date:	**8/24/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	15000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	11/10/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003457**
Green Tag Issue Date:	**8/24/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	11/10/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003457**
Green Tag Issue Date:	**8/24/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
	MICHIGAN CITGO (Continued)		**U001142786**

Tank Number:	4
Tank Capacity:	6000
Tank Substance:	Kerosene
Last Used Date:	Not reported
OSFM First Notify Date:	11/10/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003457**
Green Tag Issue Date:	**8/24/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

122	**STUARTS CHEMICAL & PAINT** **11740 FRONT ST.** **CHICAGO, IL 60628**	**LUST**	**S104002394** **N/A**

LUST:

Incident Num:	900054
IL EPA Id:	0316005286
Product:	Non Petro
IEMA Date:	01/05/1990
Project Manager:	Heaton
Project Manager Phone:	(217) 524-3312
Email:	Mike.Heaton@illinois.gov
PRP Name:	Stuarts Ind.
PRP Contact:	Marla Kowlaski
PRP Address:	11740 Front St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

123	**SONGHAI LEARNING INSTITUTE** **11725 S PERRY AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1004696903** **ILR000059832**

RCRA-CESQG:

Date form received by agency:	12/15/1998
Facility name:	SONGHAI LEARNING INSTITUTE
Facility address:	11725 S PERRY AVE CHICAGO, IL 60628
EPA ID:	ILR000059832
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10

Map ID	Site	Database(s)	EPA ID Number

SONGHAI LEARNING INSTITUTE (Continued) **1004696903**

MOKENA, IL 60448
Contact country: US
Contact telephone: (708) 923-0202
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICGO PUBLIC SCHOOLS
Owner/operator address: 1819 W PERSHING RD 6WW
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-7038
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Map ID	Site	Database(s)	EPA ID Number
	SONGHAI LEARNING INSTITUTE (Continued)		**1004696903**

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

125	**AMERICAN CLYBOURN FINISHING CO** **11730 S FRONT ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1000359773** **ILT180010019**

RCRA-CESQG:

Date form received by agency:	04/14/1995
Facility name:	AMERICAN CLYBOURN FINISHING CO
Facility address:	11730 S FRONT ST CHICAGO, IL 60628
EPA ID:	ILT180010019
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	FRANK J COLLINS
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

AMERICAN CLYBOURN FINISHING CO (Continued) **1000359773**

Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/19/1980
Facility name: AMERICAN CLYBOURN FINISHING CO
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/28/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/23/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
125	**STUART INDUSTRIAL COATINGS INC** **11740 S FRONT ST** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000614197** **ILD984845073**

RCRA-SQG:

Date form received by agency:	11/19/1991
Facility name:	STUART INDUSTRIAL COATINGS INC
Facility address:	11740 S FRONT ST CHICAGO, IL 60628
EPA ID:	ILD984845073
Contact:	CHARLES KOWALSKI
Contact address:	11740 S FRONT ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 928-0202
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	KOWALSKI CHARLES J
Owner/operator address:	11740 S FRONT ST CHICAGO, IL 60628
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 928-0202
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE

Map ID	Site	Database(s)	EPA ID Number

STUART INDUSTRIAL COATINGS INC (Continued) **1000614197**

FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 02/24/1999
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/23/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

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125 **STUART INDUSTRIAL COATINGS INC** **UST** **U001143189**
11740 S FRONT ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID: 2008210
Facility Status: CLOSED
Facility Type: **INDUSTRIAL / MANUFACTURING**
Owner Name: Stuart Industrial Coatings Inc
Owner Id: U0014654
Owner Address: 11740 S Front St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 3000
Tank Substance: Not reported
Last Used Date: 11/1/1989

Map ID	Site	Database(s)	EPA ID Number
	STUART INDUSTRIAL COATINGS INC (Continued)		**U001143189**

OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	STUART INDUSTRIAL COATINGS INC (Continued)		**U001143189**

Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	11/1/1989
OSFM First Notify Date:	4/28/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
128	**GREATOR CANAAN MBC/VACANT LOT** **11856 S. LAFAYETTE** **CHICAGO, IL 60607**	**UST**	**U004068153** **N/A**

UST:

Facility ID:	2043476
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Greater Canaan MBC
Owner Id:	U0033817
Owner Address:	35 W. 119th Street
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Count: 9 records

FOCUS MAP 7 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU

Focus Map 8

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 8 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	1
CERC-NFRAP	0
CORRACTS	1
RCRA-TSDF	1
RCRA-LQG	1
RCRA-SQG	0
RCRA-CESQG	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	0
UST	0
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
112	**SHERWIN WILLIAMS CO** **11541 S CHAMPLAIN AVE** **CHICAGO, IL 60628**	**CERCLIS** **CORRACTS** **RCRA-TSDF** **RCRA-LQG**	**1000371369** **60628SHRWN11**

CERCLIS:

Site ID:	0500202
EPA ID:	ILD005456439
Facility County:	COOK
Short Name:	SHERWIN WILLIAMS COMPANY,
Congressional District:	01
IFMS ID:	Not reported
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Y
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	ESI Start Needed
Non NPL Status Date:	19991123
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Alias Name(s):

Alias ID:	101
Alias Name:	SHERWIN WILLIAMS CO THE
Alias Address:	11541 S CHAMPLAIN AVE CHICAGO, IL 60628
Alias Comments:	Not reported

Site Description: Not reported

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	08/01/1980
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	09/01/1984
Priority Level:	Low priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	06/11/1986
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

CORRACTS:

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	01/22/2007
Action:	CA400 - Date For Remedy Selection (CM Imposed)
NAICS Code(s):	32551 Paint and Coating Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	03/04/1998
Action:	CA110 - RFI Workplan Received
NAICS Code(s):	32551 Paint and Coating Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	ILD005456439
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	03/05/1998
Action:	CA110 - RFI Workplan Received
NAICS Code(s):	32551 Paint and Coating Manufacturing
Original schedule date:	05/01/1998
Schedule end date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/26/1998
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/31/1994
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/06/1991
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/06/1989
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/06/1990
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/16/1993
Action: CA016
NAICS Code(s): 32551

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/20/2001
Action: CA005EE
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 07/22/1998
Action: CA077
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/25/2004
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/25/2004
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/28/1997
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 08/28/1997
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/28/1992
Action: CA086
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 10/28/1998
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/2000
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 11/06/1997
Action: CA100DC - RFI Imposition, Focused data collection required for stabilization evaluation
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005456439
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 12/06/1999

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Action: CA200 - RFI Approved
NAICS Code(s): 32551
Paint and Coating Manufacturing
Original schedule date: 05/01/2002
Schedule end date: Not reported

RCRA-TSDF:
Date form received by agency: 03/01/2010
Facility name: SHERWIN WILLIAMS CO
Facility address: 11541 S CHAMPLAIN AVE
CHICAGO, IL 60628
EPA ID: ILD005456439
Mailing address: 101 PROSPECT AVE NW-4M
CLEVELAND, OH 441151075
Contact: PAUL BARDING
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (216) 515-4629
Contact email: Not reported
EPA Region: 05
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: THE SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CITY NOT REPORTED, OH 99998
Owner/operator country: Not reported
Owner/operator telephone: (216) 566-2000
Legal status: Private

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: THE SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: Not reported
Owner/operator telephone: (216) 566-2000
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: SHERWIN WILLIAMS CO
Owner/operator address: 101 PROSPECT AVE NW
CLEVELAND, OH 44115
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/01/2008
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 12/31/2007
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 08/14/2007
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2006
Facility name: SHERWIN WILLIAMS CO

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Classification: Large Quantity Generator

Date form received by agency: 03/01/2004
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2002
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/2000
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1998
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 10/19/1993
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1992
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 03/01/1991
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 03/01/1990
Facility name: SHERWIN WILLIAMS CO
Classification: Large Quantity Generator

Date form received by agency: 11/22/1980
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Not a generator, verified

Date form received by agency: 08/18/1980
Facility name: SHERWIN WILLIAMS CO
Site name: SHERWIN WILLIAMS KENSINGTON DSC
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D004
Waste name: ARSENIC

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: D007
Waste name: CHROMIUM

Waste code: D009
Waste name: MERCURY

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: LABP
Waste name: LAB PACK

Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F001
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F004
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F017
Waste name: Not Defined

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: F018
Waste name: Not Defined

Waste code: K078
Waste name: K078

Waste code: K079
Waste name: K079

Waste code: K081
Waste name: K081

Waste code: K082
Waste name: K082

Waste code: K083
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: P003
Waste name: ACROLEIN

Waste code: P005
Waste name: ALLYL ALCOHOL

Waste code: P008
Waste name: 4-AMINOPYRIDINE

Waste code: P011
Waste name: ARSENIC OXIDE AS2O3

Waste code: P014
Waste name: BENZENETHIOL

Waste code: P019
Waste name: Not Defined

Waste code: P022
Waste name: CARBON DISULFIDE

Waste code: P028
Waste name: BENZENE, (CHLOROMETHYL)-

Waste code: P029
Waste name: COPPER CYANIDE

Waste code: P030
Waste name: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Waste code: P052
Waste name: Not Defined

Waste code: P053
Waste name: Not Defined

Waste code: P054
Waste name: AZIRIDINE

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: P087
Waste name: OSMIUM OXIDE OSO4, (T-4)-

Waste code: P090
Waste name: Not Defined

Waste code: P095
Waste name: CARBONIC DICHLORIDE

Waste code: P100
Waste name: Not Defined

Waste code: P101
Waste name: ETHYL CYANIDE

Waste code: P105
Waste name: SODIUM AZIDE

Waste code: U001
Waste name: ACETALDEHYDE (I)

Waste code: U002
Waste name: ACETONE (I)

Waste code: U003
Waste name: ACETONITRILE (I,T)

Waste code: U004
Waste name: ACETOPHENONE

Waste code: U006
Waste name: ACETYL CHLORIDE (C,R,T)

Waste code: U007
Waste name: ACRYLAMIDE

Waste code: U008
Waste name: ACRYLIC ACID (I)

Waste code: U009
Waste name: ACRYLONITRILE

Waste code: U012
Waste name: ANILINE (I,T)

Waste code: U013
Waste name: Not Defined

Waste code: U017
Waste name: BENZAL CHLORIDE

Waste code: U019
Waste name: BENZENE (I,T)

Waste code: U020
Waste name: BENZENESULFONIC ACID CHLORIDE (C,R)

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U021
Waste name: BENZIDINE

Waste code: U023
Waste name: BENZENE, (TRICHLOROMETHYL)-

Waste code: U028
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER

Waste code: U031
Waste name: 1-BUTANOL (I)

Waste code: U032
Waste name: CALCIUM CHROMATE

Waste code: U033
Waste name: CARBONIC DIFLUORIDE

Waste code: U037
Waste name: BENZENE, CHLORO-

Waste code: U039
Waste name: P-CHLORO-M-CRESOL

Waste code: U048
Waste name: O-CHLOROPHENOL

Waste code: U052
Waste name: CRESOL (CRESYLIC ACID)

Waste code: U053
Waste name: 2-BUTENAL

Waste code: U054
Waste name: Not Defined

Waste code: U055
Waste name: BENZENE, (1-METHYLETHYL)- (I)

Waste code: U056
Waste name: BENZENE, HEXAHYDRO- (I)

Waste code: U057
Waste name: CYCLOHEXANONE (I)

Waste code: U067
Waste name: ETHANE, 1,2-DIBROMO-

Waste code: U069
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER

Waste code: U070
Waste name: BENZENE, 1,2-DICHLORO-

Waste code: U071
Waste name: BENZENE, 1,3-DICHLORO-

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U072
Waste name: BENZENE, 1,4-DICHLORO-

Waste code: U073
Waste name: [1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO-

Waste code: U074
Waste name: 2-BUTENE, 1,4-DICHLORO- (I,T)

Waste code: U076
Waste name: ETHANE, 1,1-DICHLORO-

Waste code: U077
Waste name: ETHANE, 1,2-DICHLORO-

Waste code: U078
Waste name: 1,1-DICHLOROETHYLENE

Waste code: U080
Waste name: METHANE, DICHLORO-

Waste code: U081
Waste name: 2,4-DICHLOROPHENOL

Waste code: U082
Waste name: 2,6-DICHLOROPHENOL

Waste code: U088
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER

Waste code: U092
Waste name: DIMETHYLAMINE (I)

Waste code: U102
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER

Waste code: U103
Waste name: DIMETHYL SULFATE

Waste code: U104
Waste name: Not Defined

Waste code: U105
Waste name: BENZENE, 1-METHYL-2,4-DINITRO-

Waste code: U106
Waste name: BENZENE, 2-METHYL-1,3-DINITRO-

Waste code: U107
Waste name: 1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER

Waste code: U108
Waste name: 1,4-DIETHYLENEOXIDE

Waste code: U110
Waste name: DIPROPYLAMINE (I)

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U112
Waste name: ACETIC ACID ETHYL ESTER (I)

Waste code: U113
Waste name: ETHYL ACRYLATE (I)

Waste code: U115
Waste name: ETHYLENE OXIDE (I,T)

Waste code: U117
Waste name: ETHANE, 1,1'-OXYBIS-(I)

Waste code: U118
Waste name: ETHYL METHACRYLATE

Waste code: U119
Waste name: ETHYL METHANESULFONATE

Waste code: U122
Waste name: FORMALDEHYDE

Waste code: U123
Waste name: FORMIC ACID (C,T)

Waste code: U124
Waste name: FURAN (I)

Waste code: U125
Waste name: 2-FURANCARBOXALDEHYDE (I)

Waste code: U126
Waste name: GLYCIDYLALDEHYDE

Waste code: U127
Waste name: BENZENE, HEXACHLORO-

Waste code: U128
Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO-

Waste code: U130
Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5,5-HEXACHLORO-

Waste code: U131
Waste name: ETHANE, HEXACHLORO-

Waste code: U133
Waste name: HYDRAZINE (R,T)

Waste code: U134
Waste name: HYDROFLUORIC ACID (C,T)

Waste code: U135
Waste name: HYDROGEN SULFIDE

Waste code: U140
Waste name: ISOBUTYL ALCOHOL (I,T)

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U145
Waste name: LEAD PHOSPHATE

Waste code: U147
Waste name: 2,5-FURANDIONE

Waste code: U149
Waste name: MALONONITRILE

Waste code: U150
Waste name: MELPHALAN

Waste code: U151
Waste name: MERCURY

Waste code: U152
Waste name: METHACRYLONITRILE (I, T)

Waste code: U154
Waste name: METHANOL (I)

Waste code: U155
Waste name: 1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)-

Waste code: U159
Waste name: 2-BUTANONE (I,T)

Waste code: U160
Waste name: 2-BUTANONE, PEROXIDE (R,T)

Waste code: U161
Waste name: METHYL ISOBUTYL KETONE (I)

Waste code: U162
Waste name: METHYL METHACRYLATE (I,T)

Waste code: U165
Waste name: NAPHTHALENE

Waste code: U167
Waste name: 1-NAPHTHALENAMINE

Waste code: U168
Waste name: 2-NAPHTHALENAMINE

Waste code: U169
Waste name: BENZENE, NITRO-

Waste code: U170
Waste name: P-NITROPHENOL

Waste code: U171
Waste name: 2-NITROPROPANE (I,T)

Waste code: U183
Waste name: BENZENE, PENTACHLORO-

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Waste code: U184
Waste name: ETHANE, PENTACHLORO-

Waste code: U185
Waste name: BENZENE, PENTACHLORONITRO-

Waste code: U186
Waste name: 1-METHYLBUTADIENE (I)

Waste code: U187
Waste name: ACETAMIDE, N-(4-ETHOXYPHENYL)-

Waste code: U188
Waste name: PHENOL

Waste code: U190
Waste name: 1,3-ISOBENZOFURANDIONE

Waste code: U194
Waste name: 1-PROPANAMINE (I,T)

Waste code: U196
Waste name: PYRIDINE

Waste code: U201
Waste name: 1,3-BENZENEDIOL

Waste code: U202
Waste name: 1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS

Waste code: U207
Waste name: BENZENE, 1,2,4,5-TETRACHLORO-

Waste code: U208
Waste name: ETHANE, 1,1,1,2-TETRACHLORO-

Waste code: U209
Waste name: ETHANE, 1,1,2,2-TETRACHLORO-

Waste code: U210
Waste name: ETHENE, TETRACHLORO-

Waste code: U211
Waste name: CARBON TETRACHLORIDE

Waste code: U212
Waste name: Not Defined

Waste code: U213
Waste name: FURAN, TETRAHYDRO-(I)

Waste code: U218
Waste name: ETHANETHIOAMIDE

Waste code: U220
Waste name: BENZENE, METHYL-

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Waste code: U221
Waste name: BENZENEDIAMINE, AR-METHYL-

Waste code: U223
Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Waste code: U225
Waste name: BROMOFORM

Waste code: U226
Waste name: ETHANE, 1,1,1-TRICHLORO-

Waste code: U227
Waste name: ETHANE, 1,1,2-TRICHLORO-

Waste code: U228
Waste name: ETHENE, TRICHLORO-

Waste code: U229
Waste name: Not Defined

Waste code: U230
Waste name: Not Defined

Waste code: U231
Waste name: Not Defined

Waste code: U232
Waste name: Not Defined

Waste code: U234
Waste name: BENZENE, 1,3,5-TRINITRO-

Waste code: U238
Waste name: CARBAMIC ACID, ETHYL ESTER

Waste code: U239
Waste name: BENZENE, DIMETHYL- (I,T)

Biennial Reports:

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 256148.7

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 289819.8

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 289819.8

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 216

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 256148.7

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 256148.7

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 256148.7

Waste code: LABP
Waste name: LAB PACK
Amount (Lbs): 7599.3

Corrective Action Summary:

Event date: 07/06/1989
Event: RFA Completed, Assessment was an RFA.

Event date: 07/06/1990
Event: RFA Determination Of Need For An RFI, RFI is Necessary;

Event date: 06/06/1991
Event: CA077

Event date: 09/27/1991
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 09/28/1992
Event: CA086

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Event date: 07/16/1993
Event: CA016

Event date: 03/31/1994
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 08/28/1997
Event: Current Human Exposures under Control, More information is needed to make a determination.

Event date: 08/28/1997
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 11/06/1997
Event: RFI Imposition, Focused data collection required for stabilization evaluation.

Event date: 03/04/1998
Event: RFI Workplan Received

Event date: 03/05/1998
Event: RFI Workplan Received

Event date: 03/26/1998
Event: CA077

Event date: 07/22/1998
Event: CA077

Event date: 10/28/1998
Event: RFI Workplan Approved

Event date: 12/06/1999
Event: RFI Approved

Event date: 07/20/2001
Event: CA005EE

Event date: 08/25/2004
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 08/25/2004
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 01/22/2007
Event: Date For Remedy Selection (CM Imposed)

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 04/09/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Federal or State Statute
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Manifest/Records/Reporting
Date violation determined: 01/23/2007
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 04/09/2008

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 724.197
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 08/18/1995
Date achieved compliance: 11/06/1997
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/13/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 09/22/1994
Date achieved compliance: 02/14/1995
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 10/24/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.151
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.291
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 702.120
Area of violation: Permits - Application
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.243(e)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.134(c)(i)(i)(i)
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.115(b) 1(d)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 703.181
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Regulation violated: SR - 35 IAC 725.213
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.242
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 722.120
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.116

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 722.111
Area of violation: Generators - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.212
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 728.107
Area of violation: LDR - General

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.247(f)(5)
Area of violation: TSD - Financial Requirements
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.273
Area of violation: TSD - Container Use and Management
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 11/06/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 4700000
Paid penalty amount: 4700000

Regulation violated: SR - 35 IAC 725.295
Area of violation: TSD - Tank System Standards
Date violation determined: 02/14/1992

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 35 IAC 725.113(b)
Area of violation: TSD - General
Date violation determined: 02/14/1992
Date achieved compliance: 11/06/1997
Violation lead agency: EPA
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 07/16/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 08/05/1987
Date achieved compliance: 02/05/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/06/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.111
Area of violation: Generators - General
Date violation determined: 10/10/1986
Date achieved compliance: 02/26/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193(d)(4)
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 03/31/1986
Date achieved compliance: 08/07/1986

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/03/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.242(b)
Area of violation: TSD - Financial Requirements
Date violation determined: 03/27/1986
Date achieved compliance: 07/18/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/01/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.243
Area of violation: TSD - Financial Requirements
Date violation determined: 03/27/1986
Date achieved compliance: 07/18/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/01/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.131
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.116
Area of violation: TSD - General Facility Standards
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.154
Area of violation: TSD - General
Date violation determined: 01/17/1986
Date achieved compliance: 10/21/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 07/24/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/10/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 05/05/1986
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/18/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 05/05/1986
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enforcement action date: 05/10/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/25/1985
Date achieved compliance: 07/24/1985
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 06/18/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/07/1985
Date achieved compliance: 06/04/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/05/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/07/1985
Date achieved compliance: 06/04/1985
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/07/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/14/1984
Date achieved compliance: 12/20/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/10/1984

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/19/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/15/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/19/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/20/1984
Enf. disposition status: Not reported

Map ID	Site	Database(s)	EPA ID Number

SHERWIN WILLIAMS CO (Continued) **1000371369**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/09/1984
Date achieved compliance: 09/13/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/20/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/16/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/19/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 05/17/1984
Date achieved compliance: 12/21/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/15/1984
Date achieved compliance: 01/24/1985
Violation lead agency: EPA
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 03/28/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/15/1984
Date achieved compliance: 01/24/1985
Violation lead agency: EPA
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 07/30/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 9500
Final penalty amount: 9500
Paid penalty amount: Not reported

Regulation violated: SR - 725.191
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.194
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.193
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.192
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/03/1983
Date achieved compliance: 04/06/1984
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/01/1983
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 10/14/2008
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2008
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/04/2008
Evaluation: NON-FINANCIAL RECORD REVIEW

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/25/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/24/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Manifest/Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/2007
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Federal or State Statute
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/03/2002
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/18/1995
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 03/27/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 03/27/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation date: 01/18/1995
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/14/1995
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/1994
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/14/1995
Evaluation lead agency: State

Evaluation date: 04/20/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 04/20/1994
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: State

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Tank System Standards
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Permits - Application
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: LDR - General

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: Generators - General
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - General
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 02/14/1992
Evaluation: CASE DEVELOPMENT INSPECTION
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 11/06/1997
Evaluation lead agency: EPA

Evaluation date: 01/08/1988
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/05/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/05/1988
Evaluation lead agency: State

Evaluation date: 10/10/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/26/1987
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation date: 03/31/1986
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 08/07/1986
Evaluation lead agency: State

Evaluation date: 03/27/1986
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 07/18/1986
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 01/17/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 10/21/1994
Evaluation lead agency: State

Evaluation date: 04/25/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/24/1985
Evaluation lead agency: State

Evaluation date: 04/25/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/05/1986
Evaluation lead agency: State

Evaluation date: 01/07/1985
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 06/04/1985
Evaluation lead agency: State

Evaluation date: 12/14/1984
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/20/1984
Evaluation lead agency: State

Evaluation date: 10/23/1984
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/19/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 09/19/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/17/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/17/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 08/09/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/13/1984
Evaluation lead agency: State

Evaluation date: 07/16/1984
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 07/16/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 05/17/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/21/1984
Evaluation lead agency: State

Evaluation date: 02/15/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 01/24/1985
Evaluation lead agency: EPA

Map ID	Site	Database(s)	EPA ID Number
	SHERWIN WILLIAMS CO (Continued)		**1000371369**

Evaluation date:	11/03/1983
Evaluation:	GROUNDWATER MONITORING EVALUATION
Area of violation:	TSD IS-Ground-Water Monitoring
Date achieved compliance:	04/06/1984
Evaluation lead agency:	State

Count: 23 records

FOCUS MAP 8 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	S108111043	CHICAGO REGIONAL PORT DISTRICT	111TH & CALUMET EXPY	60617	SWF/LF
CHICAGO	1010784332	COMED	113TH & TORRENCE	60617	RCRA-LQG
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S108112646	PAXTON LANDFILL CORP #2	116TH & OGELSBY	60617	SWF/LF
CHICAGO	1014389970	COMED	119TH & PAULINA	60617	RCRA-SQG
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S108111042	CHICAGO MSD #4	124TH & OGELSBY	60617	SWF/LF
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	S108939041	USX REALTY DEVELOPMENT PBR	3426 89TH ST E	60617	SWF/LF
CHICAGO	S107926345	VAN VLISSINGEN PROPERTY	96TH & VAN VLISSINGEN RD	60617	SSU
CHICAGO	U003853346	FORMER PULLMAN FACTORY	11302 CORLISS AVE	60628	UST
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	S108111350	ENVIROTHERM	11700 STONY IS	60617	SWF/LF
CHICAGO	1008150443	PAXTON LANDFILL CORP	TORRENCE AVE	60617	SWF/LF

Focus Map 9

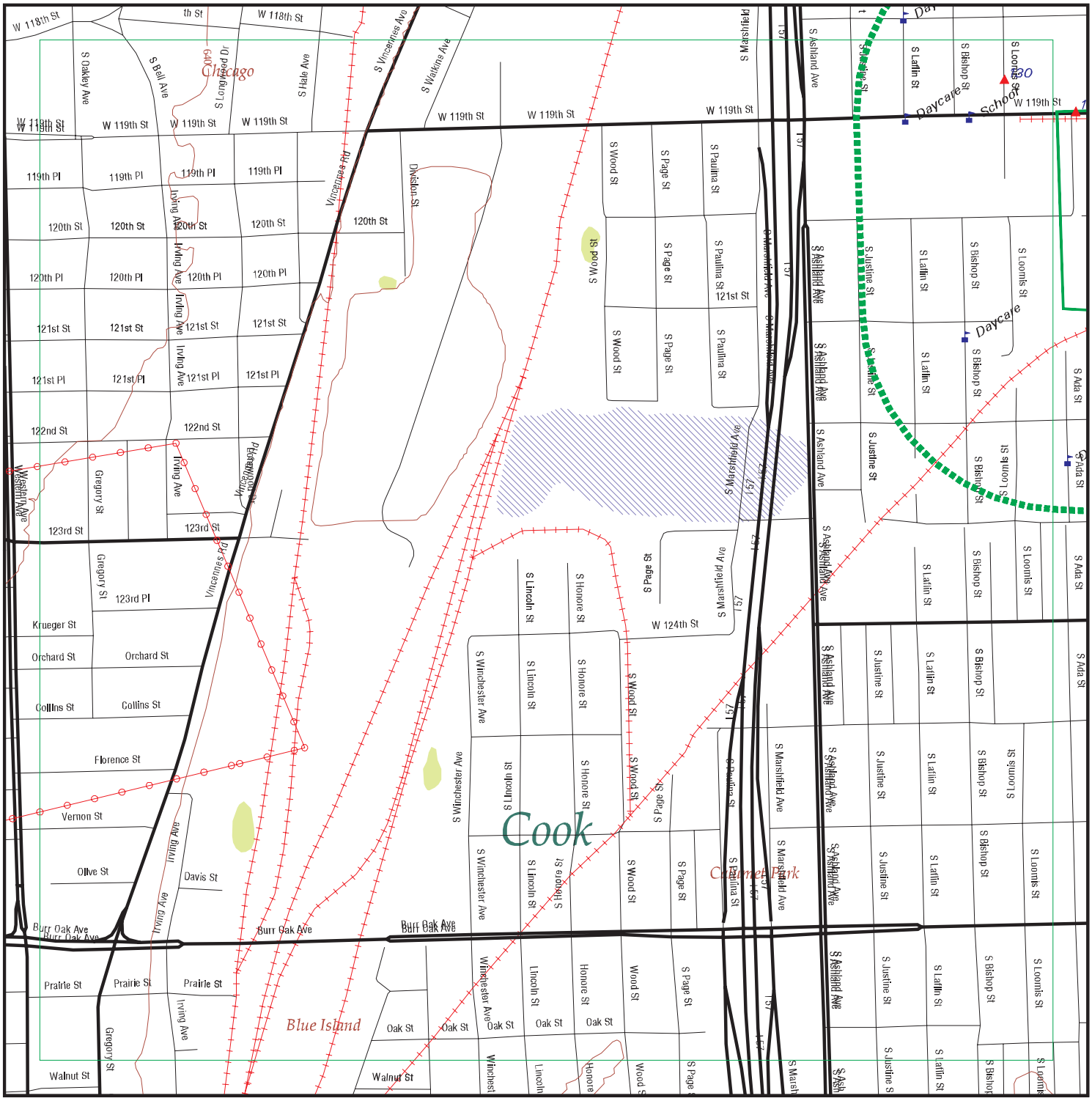

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 9 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	0
RCRA-CESQG	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	0
UST	1
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
SRP	1
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
130	**WEST PULLMAN STUDY AREA NO. 6** **11931 SOUTH LOOMIS STREET** **CHICAGO, IL 60643**	**SRP**	**S104491753** **N/A**

SRP:

IL EPA Id:	0316755104
US EPA Id:	Not reported
Longitude:	-87.65269
Latitude:	41.67681
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	09/23/1999
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Frierdich
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	9.570
No Further Remediation Letter Dt:	06/21/2002
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Deputy Comm.
Remediation Applicant Name:	Mr. David Reynolds
Remediation Applicant Company:	City of Chicago Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	25th Floor
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755104
Site Name:	West Pullman Study Area No. 6
NFR Letter:	2005-09-20
NFR Letter Date Recorded:	2005-09-30
Site Type:	Industrial/Commercial
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	False
Acres:	9.570

IL EPA Id:	0316755104
US EPA Id:	Not reported
Longitude:	-87.65269
Latitude:	41.67681
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	09/23/1999
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive

Map ID	Site	Database(s)	EPA ID Number

WEST PULLMAN STUDY AREA NO. 6 (Continued) **S104491753**

Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Frierdich
Sec. 4 Letter Date:	Not reported
NFR Recorded:	09/30/2005
Active:	False
Total Acres:	9.570
No Further Remediation Letter Dt:	09/20/2005
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Deputy Comm.
Remediation Applicant Name:	Mr. David Reynolds
Remediation Applicant Company:	City of Chicago Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	25th Floor
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755104
Site Name:	West Pullman Study Area No. 6
NFR Letter:	2005-09-20
NFR Letter Date Recorded:	2005-09-30
Site Type:	Industrial/Commercial
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	False
Acres:	9.570

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140 **AMFORGE** **UST** **U004110692**
1324 W. 119TH STREET **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2043836
Facility Status:	EXEMPT
Facility Type:	**VACANT**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Fuel Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2

Map ID	Site	Database(s)	EPA ID Number
	AMFORGE (Continued)		**U004110692**

Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Count: 27 records

FOCUS MAP 9 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLUE ISLAND	1014476085	2001 W 119TH - TOD SITE 11	2001 W 119TH SAINT FREDERICKS CORP	60406	US BROWNFIELDS
BLUE ISLAND	1014476095	2021 120TH ST - TOD SITE 1E	2021 120TH SAINT GREATER OPEN &	60406	US BROWNFIELDS
BLUE ISLAND	1014476096	2025 120TH ST - TOD SITE 1D	2025 120TH SAINT GREATER OPEN &	60406	US BROWNFIELDS
BLUE ISLAND	1014476091	2011 120TH ST - TOD SITE 1G	2011 120TH SAINT MAYTAG	60406	US BROWNFIELDS
BLUE ISLAND	1014476098	2029 120TH PL - TOD SITE 1C	2029 120TH PL GREATER OPEN DEV &	60406	US BROWNFIELDS
BLUE ISLAND	1004694615	BLUE ISLAND CITY OF WATER DEPT	122ND AND HIGHLAND	60406	RCRA-CESQG
BLUE ISLAND	1014476038	12301 VINCENNES AVE - TOD SITE 3A	12301ST VINCENNES AVE W & W AUTO	60406	US BROWNFIELDS
BLUE ISLAND	S108113026	SEXTON	123RD ST & CALIFORNIA	60406	SWF/LF
BLUE ISLAND	1003108961	CLARK/BLUE ISLAND	CLARK REFINERY, 13100 S KEDZIE	60406	CERCLIS
BLUE ISLAND	1003073091	DIVISION STREET BRIDGE MERCURY SPILL	2000 W DIVISION ST	60406	CERC-NFRAP
BLUE ISLAND	S105015149	CLARK BLUE ISLAND REFINERY	1300 S KEDZIE	60406	SSU
BLUE ISLAND	1014390104	NE MIXED-USE COMMERCIAL PARK	12200 S MARSHFIELD AVE	60406	RCRA-CESQG
BLUE ISLAND	1014476046	12451 VINCENNES AVE - TOD SITE 3F	12451 VINCENNES AVE SOUTH PARK	60406	US BROWNFIELDS
BLUE ISLAND	1014476045	12431 VINCENNES AVE - TOD SITE 3E	12431 VINCENNES AVENUE PARK	60406	US BROWNFIELDS
CALUMET PARK	U004183412	TRUE NORTH LOCATION 1967	1620 W 127TH ST	60643	UST
CALUMET PARK	1004696111	EARL SCHEIB PAINT & BODY	1731 W 127TH	60643	RCRA-CESQG
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CALUMET PARK	U001964624	RACEWAY PK	SWC 130TH & ASHLAND	60643	UST
CALUMET PARK	S106779089	CHICAGO COPPER & CHEMICAL	12300 S WINCHESTER AVE	60643	SRP
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S110335776	BEVERLY PROFESSIONAL BUILDERS	10054 S WESTERN AVE	60643	ENG CONTROLS, INST CONTROL, S
CHICAGO	1004696188	HUMANA HEALTH CARE SVCS	983 S WESTERN AVE	60643	RCRA-CESQG

Focus Map 10

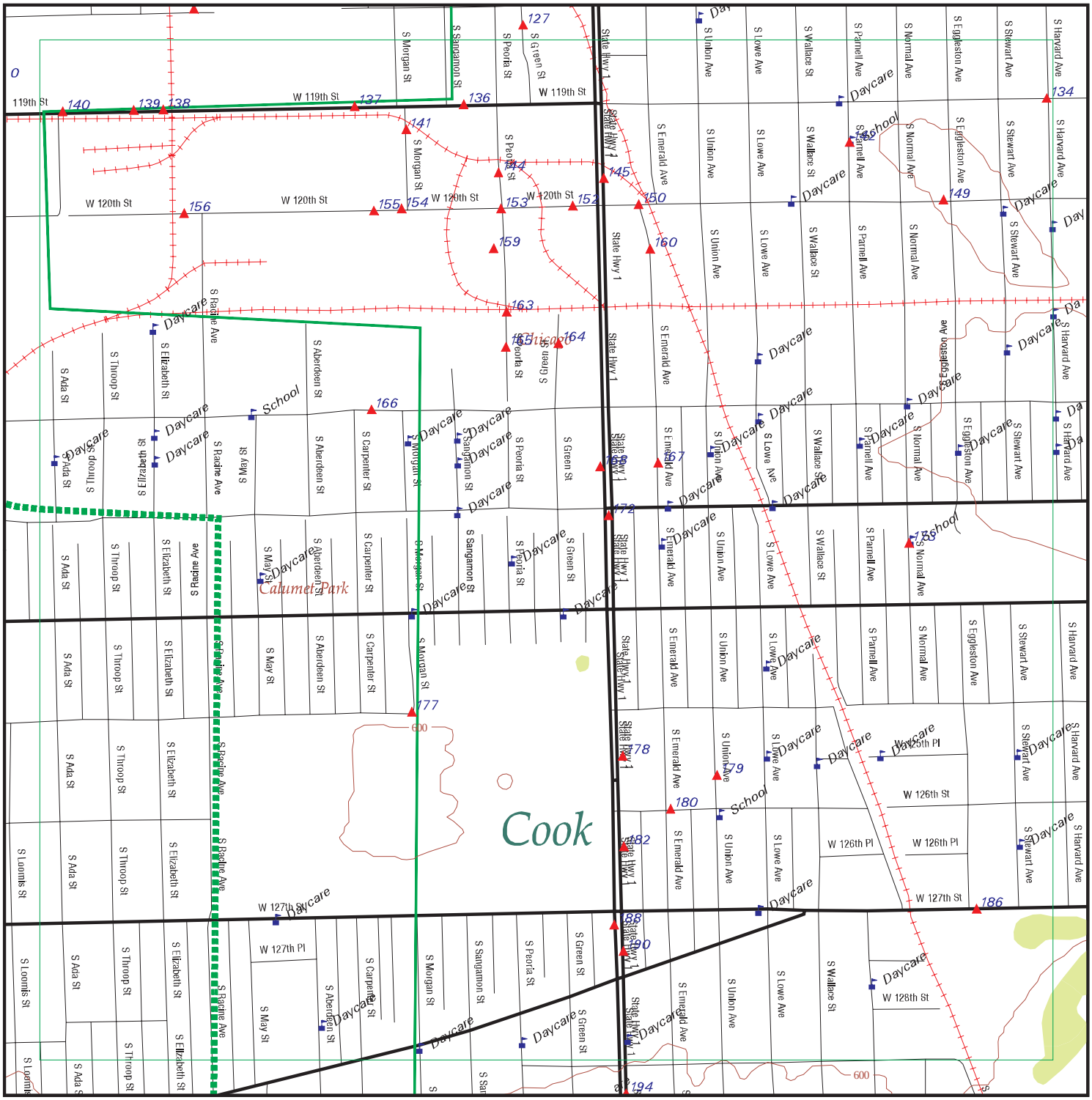

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

Roads
Major Roads
Contour Lines
National Wetlands Inventory
Waterways
Railroads
Study Boundary
100-Yr Flood Zones
Powerlines
Pipelines
Fault Lines
Water
Listed Sites
Sensitive Receptors

0 1/8 1/4
Scale in Miles

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FOCUS MAP 10 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	4
CERC-NFRAP	1
CORRACTS	1
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	9
RCRA-CESQG	4
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	1
STATE AND LOCAL RECORDS	
SSU	1
SWF/LF	0
LUST	8
UST	18
SPILLS	14
ENG CONTROLS	3
INST CONTROL	5
SRP	12
DRYCLEANERS	1
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
126	**WIRA STUDY AREA NUMBER 4** **11801 SOUTH RACINE AVENUE** **CHICAGO, IL 60643**	**INST CONTROL** **SRP**	**S106121987** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755128
NFR Letter:	03/23/2011
Date NFR Recorded:	04/25/2011
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Zachary Clayton
RA Company:	City of Chicago, Department of Environment
RA Address:	30 North LaSalle Street
RA Secondary Address:	2nd Floor
RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	13.64

SRP:

IL EPA Id:	0316755128
US EPA Id:	Not reported
Longitude:	-87.65152
Latitude:	41.67927
Contact Name:	Kimberly Worthington
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-9139
Date Enrolled:	09/08/2003
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	1 South Wacker Drive
Consultant Address2:	37th Floor
Consultant City,St,Zip:	Chicago, IL 60606-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	04/25/2011
Active:	False
Total Acres:	2
No Further Remediation Letter Dt:	03/23/2011
Remediation Applicant Co:	City of Chicago Department of Environment
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Mr. Zachary Clayton
Remediation Applicant Company:	City of Chicago, Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	2nd Floor
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755128
Site Name:	WIRA Study Area 4
NFR Letter:	2011-03-23
NFR Letter Date Recorded:	2011-04-25
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	WIRA STUDY AREA NUMBER 4 (Continued)		**S106121987**

Worker Caution: False
Acres: 13.64

127	**SHELDON HEIGHTS CHURCH OF CHRIST** **11819-11849 SOUTH GREEN STREET** **CHICAGO, IL 60643**	**INST CONTROL** **SRP**	**S105521066** **N/A**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755117
NFR Letter:	10/19/2004
Date NFR Recorded:	11/23/2004
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Willie Carter
RA Company:	Sheldon Heights Church of Christ
RA Address:	11325 South Halsted Street
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60628-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Not reported
Worker Caution:	False
Acres:	2.600

SRP:

IL EPA Id:	0316755117
US EPA Id:	ILR000117911
Longitude:	-87.64303
Latitude:	41.67911
Contact Name:	Willie Carter
Contact Address:	11325 South Halsted Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60628-
Contact Phone:	(773) 568-2929
Date Enrolled:	06/13/2002
Point Of Contact:	Adam M. Moghamis, P.E.
Consultant Company:	Applied GeoScience, Inc.
Consultant Address:	2385 Hammond Drive
Consultant Address2:	Suite 6
Consultant City,St,Zip:	Schaumburg, IL 60173-
Consultant Phone:	(847) 303-0300
Proj Mgr Assigned:	Catlin
Sec. 4 Letter Date:	Not reported
NFR Recorded:	11/23/2004
Active:	False
Total Acres:	2.600
No Further Remediation Letter Dt:	10/19/2004
Remediation Applicant Co:	Sheldon Heights Church of Christ
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Mr. Willie Carter
Remediation Applicant Company:	Sheldon Heights Church of Christ
Remediation Applicant Address:	11325 South Halsted Street
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60628-
Illinois EPA:	0316755117
Site Name:	Sheldon Heights Church of Christ

Map ID	Site	Database(s)	EPA ID Number

SHELDON HEIGHTS CHURCH OF CHRIST (Continued) **S105521066**

NFR Letter:	2004-10-19
NFR Letter Date Recorded:	2004-11-23
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Not reported
Worker Caution:	False
Acres:	2.600

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127 **VACANT LAND** **UST** **U003865079**
11819 - 11849 SOUTH GREEN ST **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2041273
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Sheldon Heights Church of Christ
Owner Id:	U0030886
Owner Address:	11325 S Halsted St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Gasoline
Last Used Date:	1/1/1987
OSFM First Notify Date:	9/3/2002
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1960
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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134 **BIG SAM'S GROCERS** **UST** **U004110603**
333 W. 119TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2043706
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Big Sam's Properties
Owner Id:	U0034216
Owner Address:	333 W. 119th Street
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Fuel Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

BIG SAM'S GROCERS (Continued) **U004110603**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	2500
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
134	**333 W 119TH ST** **CHICAGO, IL**	**SPILLS**	**S111921908** **N/A**

SPILLS:

Incident ID:	20070843
Incident Date:	Not reported
Date Received:	06/20/2007
Facility Address:	333 W 119TH ST
Facility City:	CHICAGO
PRP Name:	BIG SAMS PROPERTIES LLC
AC:	Not reported

134	**BIG SAM'S PROPERTIES** **333 WEST 119TH STREET** **CHICAGO, IL 60628**	**LUST**	**S108649986** **N/A**

LUST:

Incident Num:	20070843
IL EPA Id:	0316505043
Product:	Gasoline, Uset Oil
IEMA Date:	06/20/2007
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

136	**WIRA EAST INGERSOLL PROPERTY** **920 WEST 119TH STREET** **CHICAGO, IL 60643**	**SRP**	**S106121984** **N/A**

SRP:

IL EPA Id:	0316755125
US EPA Id:	Not reported
Longitude:	-87.64740
Latitude:	41.67873
Contact Name:	Kimberly Worthington
Contact Address:	30 North LaSalle Street
Contact Address2:	Room 2500
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-4034
Date Enrolled:	06/02/2003
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700

Map ID	Site	Database(s)	EPA ID Number

WIRA EAST INGERSOLL PROPERTY (Continued) **S106121984**

Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	3
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago, Department of Environment
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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137 **US GEAR CORP/HEAT TREAT CORP** **RCRA-CESQG** **1000394164**
1020-1120 W 119TH ST **ILD093160018**
CHICAGO, IL 60643

RCRA-CESQG:

Date form received by agency:	07/21/2009
Facility name:	US GEAR CORP/HEAT TREAT CORP
Facility address:	1020-1120 W 119TH ST CHICAGO, IL 60643
EPA ID:	ILD093160018
Mailing address:	1020 W 119TH ST CHICAGO, IL 60643
Contact:	PETE HAMBY
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(773) 821-5450
Telephone ext.:	531
Contact email:	PETE@USGEAR.COM
EPA Region:	05
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

Map ID	Site	Database(s)	EPA ID Number

US GEAR CORP/HEAT TREAT CORP (Continued) **1000394164**

hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO TITLE LAND TRUST CO
Owner/operator address:	171 N CLARK ST CHICAGO, IL 60601
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/29/1998
Owner/Op end date:	Not reported

Owner/operator name:	AXLE TECH INTERNATIONAL LLC
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	11/19/2008
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	11/01/2007
Facility name:	US GEAR CORP/HEAT TREAT CORP
Site name:	HEAT TREAT CORP OF AMERICA
Classification:	Not a generator, verified

Date form received by agency:	02/19/1987
Facility name:	US GEAR CORP/HEAT TREAT CORP
Site name:	HEAT TREAT CORP OF AMERICA
Classification:	Large Quantity Generator

Map ID	Site	Database(s)	EPA ID Number

US GEAR CORP/HEAT TREAT CORP (Continued) **1000394164**

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 09/20/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

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138 **SPILLS** **S110278075**

1220 W 119TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID: 20100193
Incident Date: 03/02/2010
Date Received: Not reported
Facility Address: 1220 W 119TH ST
Facility City: CHICAGO
PRP Name: City of Chicago - Department of Environment
AC: Not reported

Incident ID: 20100193
Incident Date: Not reported
Date Received: 03/02/2010
Facility Address: 1220 W 119TH ST
Facility City: CHICAGO
PRP Name: CHICAGO DEPT OF ENVIRONMENT
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
138	**CHICAGO, CITY OF - DEPARTMENT OF ENVIRONMENT** **1220 WEST 119TH STREET** **CHICAGO, IL 60643**	**LUST**	**S110150344** **N/A**

LUST:

Incident Num:	20100193
IL EPA Id:	0316755014
Product:	Fuel Oil
IEMA Date:	03/02/2010
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	03/09/2010
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	20110956
IL EPA Id:	0316755014
Product:	Gasoline
IEMA Date:	09/06/2011
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	09/12/2011
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

138	**CONSTRUCTION SITE (FUTURE RJKCCC)** **1220 W. 119TH STREET** **CHICAGO, IL 60643**	**UST**	**U004151264** **N/A**

UST:

Facility ID:	2044654
Facility Status:	EXEMPT
Facility Type:	**CONSTRUCTION**
Owner Name:	The Salvation Army
Owner Id:	U0013378
Owner Address:	PO Box 43095
Owner City,St,Zip:	Chicago, IL 60643

Map ID	Site	Database(s)	EPA ID Number
	CONSTRUCTION SITE (FUTURE RJKCCC) (Continued)		**U004151264**

Tank Number:	1
Tank Capacity:	50000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	50000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	160
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

CONSTRUCTION SITE (FUTURE RJKCCC) (Continued) **U004151264**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	12/3/2010
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	10/5/2011
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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138 **SPILLS** **S111927136**
1220 WEST 119TH ST. **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20110956
Incident Date:	Not reported
Date Received:	Not reported
Facility Address:	1220 WEST 119TH ST.
Facility City:	CHICAGO
PRP Name:	City of Chicago Department of Environment
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
138	**W.E. DAVIS COMPANY** **1220 -1314 WEST 119TH STREET** **CHICAGO, IL 60643**	**ENG CONTROLS** **INST CONTROL** **SRP**	**S104491750** **N/A**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316755014
NFR Letter:	02/10/2012
Date NFR Recorded:	02/17/2012
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago
RA Address:	30 North LaSalle Street
RA Secondary Address:	Suite 200
RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Clean soil barrier
Worker Caution:	True
Acres:	18.76

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316755014
NFR Letter:	02/10/2012
Date NFR Recorded:	02/17/2012
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago
RA Address:	30 North LaSalle Street
RA Secondary Address:	Suite 200
RA City,St,Zip:	Chicago, IL 60602-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Clean soil barrier
Worker Caution:	True
Acres:	18.76

SRP:

IL EPA Id:	0316755014
US EPA Id:	ILD005523162
Longitude:	-87.65380
Latitude:	41.67808
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	06/09/1999
Point Of Contact:	Carol Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Frierdich
Sec. 4 Letter Date:	Not reported
NFR Recorded:	02/17/2012

Map ID	Site	Database(s)	EPA ID Number

W.E. DAVIS COMPANY (Continued) **S104491750**

Active:	False
Total Acres:	18.76
No Further Remediation Letter Dt:	02/10/2012
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Ms. Kimberly Worthington
Remediation Applicant Company:	City of Chicago
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant Address 2:	Suite 200
Remediation Applicant City,St,Zip:	Chicago, IL 60602-
Illinois EPA:	0316755014
Site Name:	W.E. Davis Company
NFR Letter:	2012-02-10
NFR Letter Date Recorded:	2012-02-17
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Asphalt barrier/Concrete barrier/Clean soil barrier
Worker Caution:	True
Acres:	18.76

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139 **FORMER AMFORGE FACILITY** **US BROWNFIELDS** **1009912690**
1250 W. 119TH STREET **N/A**
CHICAGO, IL 60643

US BROWNFIELDS:

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	18-APR-01
Completed date:	05-APR-06
Acres cleaned up:	Not reported
Cleanup funding:	2220000
Cleanup funding source:	Local Funding
Assessment funding:	Not reported
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported
Cleanup funding entity:	City of Chicago
Grant type:	N/A
Accomplishment type:	Not reported
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4
Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	18-APR-01
Completed date:	05-APR-06
Acres cleaned up:	Not reported
Cleanup funding:	500000
Cleanup funding source:	US EPA - Brownfields RLF Loan
Assessment funding:	Not reported
Assessment funding source:	Not reported
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	Not reported
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Not reported
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4
Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	410000
Assessment funding source:	Local Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	City of Chicago
Cleanup funding entity:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Grant type:	N/A
Accomplishment type:	Phase II Environmental Assessment
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	10000
Assessment funding source:	Local Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	City of Chicago
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Phase I Environmental Assessment
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4
Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported

Recipient name:	Chicago, City of
Grant type:	BCRLF
Property name:	Former AmForge Facility
Property #:	252032039-41, 252032526013-14, 2520327013-14, 2520328034-35.078-079.146
Parcel size:	17.4
Latitude:	41.67771
Longitude:	-87.65267
HCM label:	Address Matching-House Number
Map scale:	Not reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	World Geodetic System of 1984
ACRES property ID:	27681
Start date:	Not reported
Completed date:	Not reported
Acres cleaned up:	Not reported
Cleanup funding:	Not reported
Cleanup funding source:	Not reported
Assessment funding:	1800000

Map ID	Site	Database(s)	EPA ID Number
	FORMER AMFORGE FACILITY (Continued)		**1009912690**

Assessment funding source:	Local Funding
Redevelopment funding:	Not reported
Redev. funding source:	Not reported
Redev. funding entity name:	Not reported
Redevelopment start date:	Not reported
Assessment funding entity:	City of Chicago
Cleanup funding entity:	Not reported
Grant type:	N/A
Accomplishment type:	Supplemental Assessment
Ownership entity:	Government
Current owner:	Not reported
Did owner change:	N
Cleanup required:	Yes
Video available:	No
Photo available:	No
Institutional controls required:	Y
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Y
IC cat. gov. controls:	Y
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	02-JUN-99
State/tribal program ID:	0316329007
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Y
Lead contaminant found:	Y
Lead cleaned up:	Y
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Y
PAHs cleaned up:	Y
PCBs found:	Y
PCBs cleaned up:	Y
Petro products found:	Y
Petro products cleaned:	Y
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Y
Surface water cleaned:	Not reported
Unknown found:	Not reported
VOCs found:	Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER AMFORGE FACILITY (Continued) **1009912690**

VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	17.4
Future use greenspace acreage:	Not reported
Future use residential acreage:	17.4
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Property Description:	Currently vacant. Previously owned or operated by Arvinmeritor, Nailite Int'l and Graham Partners, Inc. for the manufacturing of brakes for rail cars. (PPF-Former AmForge Facility, 1/17/07)

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140 **AMFORGE** **UST** **U004110692**
1324 W. 119TH STREET **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2043836
Facility Status:	EXEMPT
Facility Type:	**VACANT**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Fuel Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

AMFORGE (Continued) **U004110692**

Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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141 **OMNITRAX** **SRP** **S106121983**
11955 SOUTH MORGAN STREET **N/A**
CHICAGO, IL 60643

SRP:

IL EPA Id:	0316755122
US EPA Id:	Not reported
Longitude:	-87.64597
Latitude:	41.67651
Contact Name:	Michael Ogborn
Contact Address:	252 Clayton Street
Contact Address2:	4th Floor
Contact City,St,Zip:	Denver, CO 80206-
Contact Phone:	(303) 393-0033
Date Enrolled:	04/03/2003
Point Of Contact:	Daniel M. Caplice, P.E.
Consultant Company:	K-Plus Environmental Services
Consultant Address:	600 West Van Buren Street
Consultant Address2:	Suite 1000
Consultant City,St,Zip:	Chicago, IL 60607-
Consultant Phone:	(312) 207-1600
Proj Mgr Assigned:	Hall
Sec. 4 Letter Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

OMNITRAX (Continued) **S106121983**

NFR Recorded:	Not reported
Active:	True
Total Acres:	2.600
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Chicago Rail Link, LLC
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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142 **WEST PULLMAN SCHOOL** **RCRA-CESQG** **1004696956**
11941 S PARNELL AVE **ILR000060954**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	02/05/1999
Facility name:	WEST PULLMAN SCHOOL
Facility address:	11941 S PARNELL AVE CHICAGO, IL 60628
EPA ID:	ILR000060954
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	11941 S PARNELL AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Map ID	Site	Database(s)	EPA ID Number
	WEST PULLMAN SCHOOL (Continued)		**1004696956**

Owner/Operator Summary:

Owner/operator name:	CHGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

144	**WEST PULLMAN IRON AND METAL CO** **11954 S PEORIA AVE** **CHICAGO, IL 60643**	**CERC-NFRAP**	**1002885169** **ILD005428651**

CERC-NFRAP:

Site ID:	0500196
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	06/01/1980
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT

Map ID	Site	Database(s)	EPA ID Number

WEST PULLMAN IRON AND METAL CO (Continued) **1002885169**

Date Started:	Not reported
Date Completed:	03/01/1984
Priority Level:	Low priority for further assessment

Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information

Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	12/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information

Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	10/31/1995
Priority Level:	Not reported

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144 **WEST PULLMAN IRON & METAL** **SRP** **1003071152**
11954 SOUTH PEORIA STREET **N/A**
CHICAGO, IL 60643

SRP:

IL EPA Id:	0316750008
US EPA Id:	ILD005428651
Longitude:	-87.64539
Latitude:	41.67703
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	06/06/2001
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 946-6411
Proj Mgr Assigned:	Salch
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	1.8
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago, Department of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	WEST PULLMAN IRON & METAL (Continued)		**1003071152**

Comprehensive/Focused: Not reported
Institutional Controls: Not reported
Barrier: Not reported
Worker Caution: Not reported
Acres: Not reported

145	**11957 S HALSTED ST** **CHICAGO, IL**	**SPILLS**	**S108045376** **N/A**

SPILLS:

Incident ID: 20041132
Incident Date: Not reported
Date Received: 08/12/2004
Facility Address: 11957 S HALSTED ST
Facility City: CHICAGO
PRP Name: SANDHU PETROLEUM
AC: Not reported

Incident ID: 20041362
Incident Date: Not reported
Date Received: 09/30/2004
Facility Address: 11957 S HALSTEAD ST
Facility City: CHICAGO
PRP Name: SAND HU PETROLEUM INC.
AC: Not reported

145	**SANDHU PETROLEUM, INC.** **11957 SOUTH HALSTED STREET** **CHICAGO, IL 60628**	**LUST**	**S106655963** **N/A**

LUST:

Incident Num: 20041132
IL EPA Id: 0316495159
Product: Gasoline
IEMA Date: 08/12/2004
Project Manager: South
Project Manager Phone: (217) 558-0347
Email: Shirlene.South@illinois.gov
PRP Name: Not reported
PRP Contact: Not reported
PRP Address: Not reported
PRP City,St,Zip: Not reported
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: P.A.
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 09/03/2004
45 Report Received: 09/28/2004
NFA/NFR Letter: Not reported
NFR Date Recorded: Not reported

Incident Num: 20041362
IL EPA Id: 0316495159

Map ID	Site	Database(s)	EPA ID Number

SANDHU PETROLEUM, INC. (Continued) **S106655963**

Product:	Other Petro
IEMA Date:	09/30/2004
Project Manager:	South
Project Manager Phone:	(217) 558-0347
Email:	Shirlene.South@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	P.A.
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	10/21/2004
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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145 **CONOCO PHILLIPS 66** **UST** **U000865211**
11959 S. HALSTED **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2014700
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Sandhu Petroleum Corporation Number 2
Owner Id:	U0024145
Owner Address:	301 North Hough Street
Owner City,St,Zip:	Barrington, IL 60010

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/6/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1982
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/6/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1982
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**

Map ID	Site	Database(s)	EPA ID Number

CONOCO PHILLIPS 66 (Continued) **U000865211**

Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/6/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1982
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Kerosene
Last Used Date:	9/4/2004
OSFM First Notify Date:	3/6/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1984
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	1000
Tank Substance:	Kerosene
Last Used Date:	9/4/2004
OSFM First Notify Date:	3/6/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	3/1/1984
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	6
Tank Capacity:	1500
Tank Substance:	Diesel Fuel

Map ID	Site	Database(s)	EPA ID Number

CONOCO PHILLIPS 66 (Continued) **U000865211**

Last Used Date:	Not reported
OSFM First Notify Date:	7/18/2005
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	7
Tank Capacity:	1500
Tank Substance:	Kerosene
Last Used Date:	Not reported
OSFM First Notify Date:	7/18/2005
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**M003430**
Green Tag Issue Date:	**4/22/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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149 **PRAYER WARRIORS BAPTIST CHURCH** **UST** **U004051810**
438 W. 120TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2043168
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Prayer Warriors Baptist Church
Owner Id:	U0033283
Owner Address:	438 W. 120th Street
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	3/17/2006
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
150	**12000 SOUTH EMERALD** **CHICAGO, IL**	**ERNS**	**2003704549** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

152	**WIRA STUDY AREA 9** **820 WEST 120TH STREET** **CHICAGO, IL 60643**	**SRP**	**S106121986** **N/A**

SRP:

IL EPA Id:	0316755127
US EPA Id:	Not reported
Longitude:	-87.64379
Latitude:	41.67622
Contact Name:	Kimberly Worthington
Contact Address:	30 North LaSalle Street
Contact Address2:	Room 2500
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-4034
Date Enrolled:	06/02/2003
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	3
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago Department of Environment
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

Map ID	Site	Database(s)	EPA ID Number
152	**WIRA STUDY AREA NUMBER 14** **815-825 WEST 120TH STREET** **CHICAGO, IL 60643**	**SRP**	**S106499834** **N/A**

SRP:

IL EPA Id:	0316725130
US EPA Id:	Not reported
Longitude:	-87.64342
Latitude:	41.67551
Contact Name:	David Graham
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 744-3639
Date Enrolled:	06/04/2004
Point Of Contact:	Carol L. Nissen, P.E.
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Landers
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	5
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago Department of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

153	**900 W 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111893990** **N/A**

SPILLS:

Incident ID:	19951289
Incident Date:	Not reported
Date Received:	06/16/1995
Facility Address:	900 W 120TH ST
Facility City:	CHICAGO
PRP Name:	MELROSE TRANSPORT SYSTEM
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
153	**DUTCH BOY** **12000 SOUTH PEORIA ST.** **CHICAGO, IL 60643**	**UST**	**U003668676** **N/A**

UST:

Facility ID:	2038815
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	N L Industries Inc
Owner Id:	U0028689
Owner Address:	16825 N Chase Dr Suite 1200
Owner City,St,Zip:	Houston, TX 77060

Tank Number:	1
Tank Capacity:	30000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	30000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	30000
Tank Substance:	Mineral Spirits
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
	DUTCH BOY (Continued)		**U003668676**

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	5
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	6
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	7
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY (Continued) **U003668676**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	8
Tank Capacity:	10000
Tank Substance:	Mineral Spirits
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	9
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/31/1984
OSFM First Notify Date:	5/13/1999
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

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153 **DUTCH BOY PAINTS** **SRP** **S104491477**
12000 SOUTH PEORIA STREET **N/A**
CHICAGO, IL 60643

SRP:

IL EPA Id:	0316005116
US EPA Id:	ILD083084954
Longitude:	-87.64498
Latitude:	41.67517
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60643-
Contact Phone:	(312) 742-0123
Date Enrolled:	06/09/1999
Point Of Contact:	Frances B. Hodge
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY PAINTS (Continued) **S104491477**

Consultant Phone:	(312) 856-8700
Proj Mgr Assigned:	Gross
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	5
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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154 **INGERSOLL** **CERCLIS** **1009218883**
1000 WEST 120TH STREET **ILN000510053**
CHICAGO, IL 60643

CERCLIS:

Site ID:	0510053
EPA ID:	ILN000510053
Facility County:	COOK
Short Name:	INGERSOLL
Congressional District:	02
IFMS ID:	B5CW
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	R
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Removal Only Site (No Site Assessment Work Needed)
Non NPL Status Date:	20050815
Site Fips Code:	17031

Map ID	Site	Database(s)	EPA ID Number

INGERSOLL (Continued) **1009218883**

CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):
Contact ID: 5270178.00000
Contact Name: CHARLES M. GEBIEN
Contact Tel: (312) 353-7645
Contact Title: On-Scene Coordinator (OSC)
Contact Email: Not reported

Contact ID: 5271197.00000
Contact Name: THOMAS COOK
Contact Tel: (312) 886-7182
Contact Title: On-Scene Coordinator (OSC)
Contact Email: Not reported

Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: REMOVAL
Date Started: 01/18/2006
Date Completed: 06/13/2009
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Approved
Urgency Indicator: Time Critical
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 10/07/2011
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Click this hyperlink while viewing on your computer to access
293 additional US CERCLIS Financial: record(s) in the EDR Site Report.

Map ID	Site	Database(s)	EPA ID Number
155	**INTERNATIONAL HARVESTER** **1015 WEST 120TH STREET** **CHICAGO, IL 60643**	**LUST** **ENG CONTROLS** **INST CONTROL** **SRP**	**S108490996** **N/A**

LUST:

Incident Num:	20091219
IL EPA Id:	0316005005
Product:	Uset Oil
IEMA Date:	11/05/2009
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	12/04/2009
45 Report Received:	Not reported
NFA/NFR Letter:	**10/14/2010**
NFR Date Recorded:	Not reported

Incident Num:	20091282
IL EPA Id:	0316005005
Product:	Other Petro
IEMA Date:	11/18/2009
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**10/14/2010**
NFR Date Recorded:	Not reported

ENGINEERING CONTROLS:

Illinois Epa Id:	0316005005
NFR Letter:	10/14/2010
Date NFR Recorded:	11/22/2010
Type Of Site:	Industrial/Commercial
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Edith Ardiente
RA Company:	Navistar, Inc.
RA Address:	4201 Winfield Road
RA Secondary Address:	Not reported

Map ID	Site	Database(s)	EPA ID Number

INTERNATIONAL HARVESTER (Continued) **S108490996**

RA City,St,Zip:	Warrenville, IL 60555-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier
Worker Caution:	True
Acres:	20.75

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316005005
NFR Letter:	10/14/2010
Date NFR Recorded:	11/22/2010
Type Of Site:	Industrial/Commercial
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Edith Ardiente
RA Company:	Navistar, Inc.
RA Address:	4201 Winfield Road
RA Secondary Address:	Not reported
RA City,St,Zip:	Warrenville, IL 60555-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier
Worker Caution:	True
Acres:	20.75

SRP:

IL EPA Id:	0316005005
US EPA Id:	ILD005213285
Longitude:	-87.64700
Latitude:	41.67562
Contact Name:	Edith Ardiente
Contact Address:	303 East Wacker Drive
Contact Address2:	Suite 360
Contact City,St,Zip:	Chicago, IL 60601-
Contact Phone:	(312) 836-3920
Date Enrolled:	04/01/1996
Point Of Contact:	Gregory Vanderlaan
Consultant Company:	ARCADIS, Inc.
Consultant Address:	10 South Riverside Plaza
Consultant Address2:	Suite 1900
Consultant City,St,Zip:	Chicago, IL 60606-
Consultant Phone:	Not reported
Proj Mgr Assigned:	Gross
Sec. 4 Letter Date:	Not reported
NFR Recorded:	11/22/2010
Active:	False
Total Acres:	20.75
No Further Remediation Letter Dt:	10/14/2010
Remediation Applicant Co:	Navistar, Inc.
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Ms. Edith Ardiente
Remediation Applicant Company:	Navistar, Inc.
Remediation Applicant Address:	4201 Winfield Road
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Warrenville, IL 60555-
Illinois EPA:	0316005005
Site Name:	International Harvester
NFR Letter:	2010-10-14

Map ID	Site	Database(s)	EPA ID Number
	INTERNATIONAL HARVESTER (Continued)		**S108490996**

NFR Letter Date Recorded: 2010-11-22
Site Type: Industrial/Commercial
Comprehensive/Focused: Comprehensive
Institutional Controls: Groundwater use restriction
Barrier: Asphalt barrier/Concrete barrier
Worker Caution: True
Acres: 20.75

Map ID	Site	Database(s)	EPA ID Number
155	**1015 WEST 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111925600** **N/A**

SPILLS:
Incident ID: 20091282
Incident Date: 11/18/2009
Date Received: Not reported
Facility Address: 1015 WEST 120TH ST
Facility City: CHICAGO
PRP Name: City of Chicago
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
155	**1015 W 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111925520** **N/A**

SPILLS:
Incident ID: 20091219
Incident Date: 11/05/2009
Date Received: Not reported
Facility Address: 1015 W 120TH ST
Facility City: CHICAGO
PRP Name: City of Chicago - Department of Environment
AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
155	**FORMER WEST PULLMAN WORKS** **1015 W 120TH ST** **CHICAGO, IL 60643**	**UST**	**U003762830** **N/A**

UST:
Facility ID: 2039998
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: City of Chicago Department of Environment
Owner Id: U0028125
Owner Address: 30 North LaSalle Street, 25th floor
Owner City,St,Zip: Chicago, IL 60602

Tank Number: 1
Tank Capacity: 5000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: Not reported
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported

Map ID	Site	Database(s)	EPA ID Number

FORMER WEST PULLMAN WORKS (Continued) **U003762830**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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155 **INTERNATIONAL HARVESTER CO W P** **CERCLIS** **1000216851**
1015 W 120TH ST **CORRACTS** **ILD005213285**
CHICAGO, IL 60643

CERCLIS:

Site ID:	0500184
EPA ID:	ILD005213285
Facility County:	COOK
Short Name:	INTERNATIONAL HARVESTER
Congressional District:	02
IFMS ID:	05YE
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported

Map ID	Site	Database(s)	EPA ID Number

INTERNATIONAL HARVESTER CO W P (Continued) **1000216851**

Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Referred to Removal - NFRAP
Non NPL Status Date:	20010118
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	5270200.00000
Contact Name:	PAUL STEADMAN
Contact Tel:	Not reported
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported

CERCLIS Site Alias Name(s):

Alias ID:	201
Alias Name:	CALUMET HARVESTER
Alias Address:	Not reported
	IL
Alias ID:	301
Alias Name:	INTERNATIONAL HARVESTER, INC.
Alias Address:	401 N. MICHIGAN AVE.
	CHICAGO, IL 60611
Alias ID:	302
Alias Name:	WEST PULLMAN WORKS
Alias Address:	Not reported
	Not reported
Alias Comments:	Not reported

Site Description: ABANDONED 21 ACRE SITE WITH HIGH LEVELS OF PAH'S (E.G. PYRENE, PHEHANTHRNE, FLUORENE). HEAVY METALS AND ASBESTOS CONTAM INATION.ABANDONED 21 ACRE SITE WITH HIGH LEVELS OF PAH'S (E.G. PYRENE, PHEHANTHRNE, FLUORENE). HEAVY METALS AND ASBESTOS CONTAMINATION.

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	06/17/1987
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Map ID	Site	Database(s)	EPA ID Number

INTERNATIONAL HARVESTER CO W P (Continued) **1000216851**

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 08/10/1987
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 10/22/1990
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: 10/01/1995
Date Completed: 01/26/1996
Priority Level: Search Complete, Viable PRPs
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

CORRACTS:

EPA ID: ILD005213285
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 03/11/1993
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): 33272 33299 333111
Turned Product and Screw, Nut, and Bolt Manufacturing
All Other Fabricated Metal Product Manufacturing
Farm Machinery and Equipment Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD005213285
EPA Region: 05
Area Name: ENTIRE FACILITY

Map ID	Site	Database(s)	EPA ID Number

INTERNATIONAL HARVESTER CO W P (Continued) **1000216851**

Actual Date: 12/28/1992
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 33272 33299 333111
Turned Product and Screw, Nut, and Bolt Manufacturing
All Other Fabricated Metal Product Manufacturing
Farm Machinery and Equipment Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

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155 **SPILLS** **S110122202**
1015 W 120TH ST **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 20091282
Incident Date: Not reported
Date Received: 11/18/2009
Facility Address: 1015 W 120TH ST
Facility City: CHICAGO
PRP Name: CHICAGO, CITY OF
AC: Not reported

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155 **SPILLS** **S111906193**
1015 W 120TH ST **N/A**
CHICAGO, IL

SPILLS:
Incident ID: 19992745
Incident Date: Not reported
Date Received: 12/13/1999
Facility Address: 1015 W 120TH ST
Facility City: CHICAGO
PRP Name: WEST PULLMAN ASSOCIATES
AC: Not reported

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156 **VACANT SITE** **UST** **U003909424**
1210 W 120TH ST **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2040504
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: City of Chicago/Dept Of Environment
Owner Id: U0002865
Owner Address: 30 North LaSalle Street, 25th Floor
Owner City,St,Zip: Chicago, IL 60602

Tank Number: Not reported
Tank Capacity: Not reported
Tank Substance: Not reported
Last Used Date: Not reported
OSFM First Notify Date: Not reported
Tank Status: Not reported

Map ID	Site	Database(s)	EPA ID Number
	VACANT SITE (Continued)		**U003909424**

Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

156	**EXELON SOLAR PLANT** **1201 W 120TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1012178820** **ILR000158964**

RCRA-CESQG:
Date form received by agency: 08/13/2009
Facility name: EXELON SOLAR PLANT
Facility address: 1201 W 120TH ST
CHICAGO, IL 60628
EPA ID: ILR000158964
Mailing address: 10 S DEARBORN ST 48TH FL
CHICAGO, IL 60680
Contact: JOHN R SEMINOFF
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (510) 344-6917
Contact email: JOHN.SEMINOFF@SUNPOWERCORP.COM
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CITY OF CHICAGO
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Owner/operator name: EXELON CORP
Owner/operator address: Not reported

Map ID	Site	Database(s)	EPA ID Number

EXELON SOLAR PLANT (Continued) **1012178820**

	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1997
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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156 **VACANT LOT** **UST** **U004142073**
1201 W. 120TH STREET **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2044576
Facility Status:	EXEMPT
Facility Type:	**VACANT**
Owner Name:	City of Chicago Department of Environment
Owner Id:	U0028125
Owner Address:	30 North LaSalle Street, 25th floor
Owner City,St,Zip:	Chicago, IL 60602
Tank Number:	1
Tank Capacity:	600
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

VACANT LOT (Continued) **U004142073**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	25000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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156 **SPILLS** **S109953892**
1201 W 120TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20091066
Incident Date:	09/28/2009
Date Received:	Not reported
Facility Address:	1201 W 120TH ST
Facility City:	CHICAGO
PRP Name:	City of Chicago - Department of Environment
AC:	Not reported

Incident ID:	20091066
Incident Date:	09/15/2009
Date Received:	09/28/2009
Facility Address:	1201 W 120TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO DEPT OF ENVIRONMENTAL
AC:	Not reported

Incident ID:	20091219
Incident Date:	Not reported
Date Received:	11/05/2009
Facility Address:	1201 W 120TH ST
Facility City:	CHICAGO
PRP Name:	CHICAGO DEPT OF ENVIRONMENT
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
156	**CHICAGO MALLEABLE CASTINGS** **1201 WEST 120TH STREET** **CHICAGO, IL 60643**	**LUST** **SRP**	**S104491749** **N/A**

LUST:

Incident Num:	20091066
IL EPA Id:	0316725027
Product:	Other Petro
IEMA Date:	09/28/2009
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	01/11/2010
45 Report Received:	01/11/2010
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

SRP:

IL EPA Id:	0316725027
US EPA Id:	ILR000158964
Longitude:	-87.65435
Latitude:	41.67515
Contact Name:	David Reynolds
Contact Address:	30 North LaSalle Street
Contact Address2:	25th Floor
Contact City,St,Zip:	Chicago, IL 60602-
Contact Phone:	(312) 742-0123
Date Enrolled:	06/09/1999
Point Of Contact:	Frances B. Hodge
Consultant Company:	Tetra Tech EM, Inc.
Consultant Address:	200 East Randolph Drive
Consultant Address2:	Suite 4700
Consultant City,St,Zip:	Chicago, IL 60601-
Consultant Phone:	(312) 946-6440
Proj Mgr Assigned:	Gross
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	False
Total Acres:	9.570
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	City of Chicago, Dept. of Environment
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	CHICAGO MALLEABLE CASTINGS (Continued)		**S104491749**

NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

159	**DUTCH BOY** **WEST PULLMAN 12042 SOUTH PEORIA STREET** **CHICAGO, IL 60643**	**CERCLIS**	**1000401248** **ILD980265797**

CERCLIS:

Site ID:	0500529
EPA ID:	ILD980265797
Facility County:	COOK
Short Name:	DUTCH BOY
Congressional District:	02
IFMS ID:	05VG
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Referred to Removal - NFRAP
Non NPL Status Date:	20000505
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	5271200.00000
Contact Name:	KENNETH THEISEN
Contact Tel:	(312) 886-1959
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported
Contact ID:	5271035.00000
Contact Name:	JANET POPE
Contact Tel:	(312) 353-0628
Contact Title:	Community Involvement Coordinator

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY (Continued) **1000401248**

Contact Email: Not reported

Contact ID: 5000191.00000
Contact Name: DION NOVAK
Contact Tel: (312) 886-4737
Contact Title: Remedial Project Manager (RPM)
Contact Email: novak.dion@epa.gov

CERCLIS Site Alias Name(s):
Alias ID: 101
Alias Name: CARTER WHITE LEAD NL IND
Alias Address: WEST PULLMAN 12042 S PEORIA ST
CHICAGO, IL 60643
Alias ID: 102
Alias Name: DUTCH BOY
Alias Address: Not reported
Not reported
Alias ID: 103
Alias Name: CARTER WHITE LEAD NATIONAL INDUSTRIES
Alias Address: WEST PULLMAN 12042 SOUTH PEORIA STREET
CHICAGO, IL 60643
Alias Comments: Not reported
Site Description: Associated with International Harvester site

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 06/01/1981
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 03/01/1984
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 12/01/1984
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY (Continued) **1000401248**

Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 03/31/1986
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: UNILATERAL ADMIN ORDER
Date Started: Not reported
Date Completed: 03/26/1996
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: 10/01/1995
Date Completed: 08/08/1996
Priority Level: Search Complete, Viable PRPs
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 002
Action: NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started: 04/09/1997
Date Completed: 04/23/1997
Priority Level: Search Complete, No Viable PRPs
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 05/08/2002

Map ID	Site	Database(s)	EPA ID Number

DUTCH BOY (Continued) **1000401248**

Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 002
Action: ISSUE REQUEST LETTERS (104E)
Date Started: Not reported
Date Completed: 08/08/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 05/06/1999
Date Completed: 09/17/2007
Priority Level: Cleaned up
Operable Unit: SITEWIDE
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Time Critical
Action Anomaly: Not reported

Action Code: 001
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: Not reported
Date Completed: 09/03/2009
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

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159 **DUTCH BOY PAINT** **SSU** **S101467563**
12042 SOUTH PEORIA **N/A**
CHICAGO, IL 60643

SSU:
Facility ID: 0316005116
Facility Type: Manufacturer - Paint
Lat/Long: 41.6750984 / -87.644447
Directions: Take I-55 North.
Region: Des Plaines
Current Program: SRP
Project Manager: Frierdich
Community Relations: Britton
SSU Status: Transferred

Map ID	Site	Database(s)	EPA ID Number
	DUTCH BOY PAINT (Continued)		**S101467563**

US EPA Id: ILP083084954
FOS: NA
Year Completed: N/A
Year Entered: Not reported
Site Size: 5.25

160	**HANCOCK HOUSE LLC** **12045 SOUTH EMERALD AVENUE** **CHICAGO, IL 60628**	**LUST** **ENG CONTROLS** **INST CONTROL** **SRP**	**S109685129** **N/A**

LUST:

Incident Num:	20100844
IL EPA Id:	0316495178
Product:	Gasoline
IEMA Date:	08/04/2010
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	08/10/2010
45 Report Received:	10/17/2011
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

ENGINEERING CONTROLS:

Illinois Epa Id:	0316495178
NFR Letter:	11/29/2011
Date NFR Recorded:	01/26/2012
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Brigite Grossman
RA Company:	Hancock House LLC
RA Address:	345 North Canal Street
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60606-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Building foundation
Worker Caution:	True
Acres:	1

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316495178
NFR Letter:	11/29/2011
Date NFR Recorded:	01/26/2012
Type Of Site:	Residential
Comprehensive / Focused:	Comprehensive
Remediation Applicant Title:	Ms.

Map ID	Site	Database(s)	EPA ID Number

HANCOCK HOUSE LLC (Continued) **S109685129**

Remediation Applicant Name:	Brigite Grossman
RA Company:	Hancock House LLC
RA Address:	345 North Canal Street
RA Secondary Address:	Not reported
RA City,St,Zip:	Chicago, IL 60606-
Institutional Controls:	Groundwater use restriction
Engineered Barriers:	Asphalt barrier/Concrete barrier/Building foundation
Worker Caution:	True
Acres:	1

SRP:

IL EPA Id:	0316495178
US EPA Id:	Not reported
Longitude:	-87.64096
Latitude:	41.67434
Contact Name:	Brigite Grossman
Contact Address:	345 North Canal Street
Contact Address2:	Not reported
Contact City,St,Zip:	Chicago, IL 60606-
Contact Phone:	(312) 560-4560
Date Enrolled:	05/19/2009
Point Of Contact:	Michael D. Monteith
Consultant Company:	LFR, Inc.
Consultant Address:	630 Tollgate Road
Consultant Address2:	Suite D
Consultant City,St,Zip:	Elgin, IL 60123-
Consultant Phone:	(847) 649-2037
Proj Mgr Assigned:	Mehra
Sec. 4 Letter Date:	Not reported
NFR Recorded:	01/26/2012
Active:	False
Total Acres:	1
No Further Remediation Letter Dt:	11/29/2011
Remediation Applicant Co:	Hancock House LLC
Remediation Applicant Title:	Ms.
Remediation Applicant Name:	Ms. Brigite Grossman
Remediation Applicant Company:	Hancock House LLC
Remediation Applicant Address:	345 North Canal Street
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Chicago, IL 60606-
Illinois EPA:	0316495178
Site Name:	Hancock House LLC
NFR Letter:	2011-11-29
NFR Letter Date Recorded:	2012-01-26
Site Type:	Residential
Comprehensive/Focused:	Comprehensive
Institutional Controls:	Groundwater use restriction
Barrier:	Asphalt barrier/Concrete barrier/Building foundation
Worker Caution:	True
Acres:	1

Map ID	Site	Database(s)	EPA ID Number
160	**HANCOCK HOUSE, LLC** **12045 S. EMERALD** **CHICAGO, IL 60628**	**UST**	**U004158192** **N/A**

UST:

Facility ID:	2044775
Facility Status:	EXEMPT
Facility Type:	**COMMERCIAL / RETAIL**
Owner Name:	Hancock House, LLC
Owner Id:	U0035891
Owner Address:	345 N. Canal Street #301
Owner City,St,Zip:	Chicago, IL 60606
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	550
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	400
Tank Substance:	Diesel Fuel
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number

HANCOCK HOUSE, LLC (Continued) **U004158192**

Tank Number:	4
Tank Capacity:	400
Tank Substance:	Diesel Fuel
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	400
Tank Substance:	Diesel Fuel
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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160 **SPILLS** **S110613538**

12045 S EMERALD AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20100844
Incident Date:	08/04/2010
Date Received:	Not reported
Facility Address:	12045 S EMERALD AVE
Facility City:	CHICAGO
PRP Name:	Hancock House LLC
AC:	Not reported

Incident ID:	20100844
Incident Date:	Not reported
Date Received:	08/04/2010
Facility Address:	12045 S EMERALD AVE
Facility City:	CHICAGO
PRP Name:	HANCOCK HOUSE LLC
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
163	**CENTRAL STATES PIPE & SUPPLY INC** **12101 S PEORIA** **CHICAGO, IL 60643**	**UST**	**U000791028** **N/A**

UST:

Facility ID:	2029216
Facility Status:	INACTIVE/HEATING OIL
Facility Type:	**NONE**
Owner Name:	Central States Pipe & Supply Inc
Owner Id:	U0018573
Owner Address:	12101 S Peoria
Owner City,St,Zip:	Chicago, IL 60643

Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1901
OSFM First Notify Date:	1/28/1992
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1901
OSFM First Notify Date:	1/28/1992
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

164	**SOUTH GREEN PLATING SHOP** **12130 SOUTH GREEN ST** **CHICAGO, IL 60620**	**CERCLIS**	**1007985322** **ILN000509237**

CERCLIS:

Site ID:	0509237
EPA ID:	ILN000509237
Facility County:	COOK
Short Name:	SOUTH GREEN PLATING SHOP
Congressional District:	01
IFMS ID:	B5AA
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	Not reported

Map ID	Site	Database(s)	EPA ID Number

SOUTH GREEN PLATING SHOP (Continued) **1007985322**

RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	R
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Removal Only Site (No Site Assessment Work Needed)
Non NPL Status Date:	20041006
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	5270375.00000
Contact Name:	MICHAEL HARRIS
Contact Tel:	(312) 886-0760
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported

Alias Comments:	Not reported
Site Description:	Former plating shop with elevated levels of cyanide, chromium, cadmium and lead contamination.

CERCLIS Assessment History:

Action Code:	001
Action:	NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH
Date Started:	10/02/2004
Date Completed:	10/04/2004
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMOVAL
Date Started:	05/16/2005
Date Completed:	07/28/2005
Priority Level:	Cleaned up
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Time Critical
Action Anomaly:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	SOUTH GREEN PLATING SHOP (Continued)		**1007985322**

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	08/16/2005
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Notice Letters Issued
Date Started:	Not reported
Date Completed:	08/16/2005
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	12/29/2005
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	05/09/2006
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004

Map ID	Site	Database(s)	EPA ID Number

SOUTH GREEN PLATING SHOP (Continued) **1007985322**

Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	11/02/2006
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	03/20/2008
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	006
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	Not reported
Date Completed:	02/05/2009
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Click this hyperlink while viewing on your computer to access
69 additional US CERCLIS Financial: record(s) in the EDR Site Report.

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165 **HARBOR TOOL MFG INC** **RCRA-SQG** **1004698325**
12140 S PEORIA AVE **ILR000105692**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	05/14/2001
Facility name:	HARBOR TOOL MFG INC
Facility address:	12140 S PEORIA AVE CHICAGO, IL 60643
EPA ID:	ILR000105692
Contact:	ARNOLD LORENZINI
Contact address:	12140 S PEORIA AVE CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(773) 468-3120

Map ID	Site	Database(s)	EPA ID Number

HARBOR TOOL MFG INC (Continued) **1004698325**

Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: STRATTA JOHN
Owner/operator address: 12140 S PEORIA AVE
CHICAGO, IL 60643
Owner/operator country: Not reported
Owner/operator telephone: (773) 468-3120
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D005
Waste name: BARIUM

Violation Status: No violations found

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166 **MODERN STEEL** **RCRA-SQG** **1001816935**
1010 W 122RD ST **ILR000068262**
CHICAGO, IL 60643

RCRA-SQG:
Date form received by agency: 10/20/1999
Facility name: MODERN STEEL
Facility address: 1010 W 122RD ST
CHICAGO, IL 60643
EPA ID: ILR000068262
Mailing address: 30 N LASALLE ST 15TH FLR
CHICAGO, IL 60602
Contact: RENANTE MARANTE
Contact address: 30 N LASALLE ST 15TH FLR

Map ID	Site	Database(s)	EPA ID Number

MODERN STEEL (Continued) **1001816935**

	CHICAGO, IL 60602
Contact country:	US
Contact telephone:	(312) 742-0123
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CITY OF CHGO DEPT OF ENV
Owner/operator address:	30 N LASALLE ST 25TH FLR CHICAGO, IL 60602
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 742-0123
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
167	**POWER & LIGHT EVANGELIST CHURCH** **12257 S EMERALD ST** **CHICAGO, IL 60628**	**UST**	**U003668010** **N/A**

UST:

Facility ID:	2036855
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Power & Light Evangelist Church
Owner Id:	U0027012
Owner Address:	Pob 288421
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1973
OSFM First Notify Date:	1/1/1902
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

168	**BIG MEL'S LAUNDROMAT** **12256 SOUTH HALSTED** **CHICAGO, IL 60628**	**DRYCLEANERS**	**S106540629** **N/A**

DRYCLEANERS:

Facility Id:	2373-6879-01
DC No:	DC-00846
Facility Contact:	MELVIN STANTON
License Expires:	12/31/2012

168	**BIG MELS CLEANERS** **12256 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000123948** **ILD984781849**

RCRA-SQG:

Date form received by agency:	03/08/1990
Facility name:	BIG MELS CLEANERS
Facility address:	12256 S HALSTED CHICAGO, IL 60643
EPA ID:	ILD984781849
Contact:	MELVIN STANTON
Contact address:	12256 S HALSTED CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(312) 568-2026
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of

Map ID	Site	Database(s)	EPA ID Number

BIG MELS CLEANERS (Continued) **1000123948**

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STANTON MELVIN
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined

Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Map ID	Site	Database(s)	EPA ID Number
	BIG MELS CLEANERS (Continued)		**1000123948**

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
172	**CAL GAS INC.** **12304 S. HALSTED ST.** **CALUMET PARK, IL 60827**	**UST**	**U003668717** **N/A**

UST:

Facility ID:	2038892
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Cal Gas Station, Inc.
Owner Id:	U0028693
Owner Address:	12304 S. Halsted St.
Owner City,St,Zip:	Calumet Park, IL 60827
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	8/23/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/19/2000
Green Tag Decal:	**L001224**
Green Tag Issue Date:	**2/3/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**2/3/2010**
Self Service Permit Expire Date:	**12/31/2012**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	12000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	8/23/2000
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	4/19/2000
Green Tag Decal:	**L001224**
Green Tag Issue Date:	**2/3/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**2/3/2010**
Self Service Permit Expire Date:	**12/31/2012**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number
172	**AAMCO** **12307 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1010317178** **ILR000142984**

RCRA-SQG:

Date form received by agency:	08/17/2006
Facility name:	AAMCO
Facility address:	12307 S HALSTED CHICAGO, IL 60628
EPA ID:	ILR000142984
Contact:	DAN PISKE

Map ID	Site	Database(s)	EPA ID Number

AAMCO (Continued) **1010317178**

Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (773) 568-4747
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: AAMCO
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 08/17/2006
Owner/Op end date: Not reported

Owner/operator name: AAMCO
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 08/17/2006
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE

Map ID	Site	Database(s)	EPA ID Number

AAMCO (Continued) **1010317178**

FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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173 **METCALFE SCHOOL** **RCRA-SQG** **1001116711**
12339 S NORMAL **ILR000027367**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	09/12/1996
Facility name:	METCALFE SCHOOL
Facility address:	12339 S NORMAL CHICAGO, IL 60628
EPA ID:	ILR000027367
Mailing address:	1819 W PERSHING RD CHICAGO, IL 60609
Contact:	ALBERT FOSTER JR
Contact address:	1819 W PERSHING RD CHICAGO, IL 60609
Contact country:	US
Contact telephone:	(312) 535-5590
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No

Map ID	Site	Database(s)	EPA ID Number
	METCALFE SCHOOL (Continued)		**1001116711**

Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

177	**125TH ST & MORGAN CHICAGO, IL**	**SPILLS**	**S109327375 N/A**

SPILLS:
Incident ID: 20081522
Incident Date: Not reported
Date Received: 10/10/2008
Facility Address: 125TH ST & MORGAN
Facility City: CHICAGO
PRP Name: COMED
AC: Not reported

178	**12535 S HALSTED ST CHICAGO, IL**	**SPILLS**	**S111880261 N/A**

SPILLS:
Incident ID: 19911261
Incident Date: Not reported
Date Received: 05/11/1991
Facility Address: 12535 S HALSTED ST
Facility City: CHICAGO
PRP Name: GEORGE FRANKLIN II
AC: Not reported

178	**RED'S CHECKPOINT 12535 SOUTH HALSTED ST. CHICAGO, IL 60632**	**LUST**	**S104526016 N/A**

LUST:
Incident Num: 911261
IL EPA Id: 0316585075
Product: Unleaded Gas
IEMA Date: 05/10/1991
Project Manager: Malcom
Project Manager Phone: (217) 524-9140
Email: James.Malcom@illinois.gov
PRP Name: George Franklin II
PRP Contact: Not reported
PRP Address: 12535 South Halsted St.
PRP City,St,Zip: Chicago, IL 60632
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: 731
Date Section 57.5(g) Letter: Not reported

Map ID	Site	Database(s)	EPA ID Number
	RED'S CHECKPOINT (Continued)		**S104526016**

Non LUST Determination Letter: Not reported
20 Report Received: 10/17/1994
45 Report Received: 07/28/1998
NFA/NFR Letter: 07/11/2002
NFR Date Recorded: 07/25/2002

Map ID	Site	Database(s)	EPA ID Number
178	**FRANKLIN GEORGE** **12535 S HALSTED** **CHICAGO, IL 60628**	**UST**	**U001142473** **N/A**

UST:

Facility ID: 2001206
Facility Status: CLOSED
Facility Type: GOLF COURSE
Owner Name: Franklin George
Owner Id: U0005425
Owner Address: 12535 S Halsted
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 6000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 3/7/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Tank Number: 2
Tank Capacity: 6000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 3/7/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Tank Number: 3
Tank Capacity: 6000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 3/7/1986
Tank Status: Removed
Red Tag Issue Date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	FRANKLIN GEORGE (Continued)		**U001142473**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1000
Tank Substance:	Used Oil
Last Used Date:	Not reported
OSFM First Notify Date:	3/7/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

179	**BROWN ACADEMY** **12607 S. UNION STREET** **CHICAGO, IL 60628**	**UST**	**U003914184** **N/A**

UST:

Facility ID:	2041804
Facility Status:	EXEMPT
Facility Type:	**OTHER**
Owner Name:	Chicago Board of Education (CPS)
Owner Id:	U0026761
Owner Address:	125 S. Clark St. Suite 700
Owner City,St,Zip:	Chicago, IL 60603

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/21/2003
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
179	**NANSEN SCHOOL** **12607 S UNION** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001116716** **ILR000027417**

RCRA-SQG:

Date form received by agency:	09/12/1996
Facility name:	NANSEN SCHOOL
Facility address:	12607 S UNION CHICAGO, IL 60628
EPA ID:	ILR000027417
Mailing address:	1819 W PERSHING RD CHICAGO, IL 60609
Contact:	KAREN WILSON
Contact address:	1819 W PERSHING RD CHICAGO, IL 60609
Contact country:	US
Contact telephone:	(312) 535-5385
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Map ID	Site	Database(s)	EPA ID Number
	NANSEN SCHOOL (Continued)		**1001116716**
	Violation Status: No violations found		
180	**726 W 126TH ST** **CHICAGO, IL**	**SPILLS**	**S111891422** **N/A**

SPILLS:

Incident ID:	19941648
Incident Date:	Not reported
Date Received:	07/25/1994
Facility Address:	726 W 126TH ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

182	**WALGREENS #0186** **12635 S HALSTED** **CHICAGO, IL 60643**	**RCRA-CESQG**	**1004696258** **ILR000042465**

RCRA-CESQG:

Date form received by agency:	09/05/1997
Facility name:	WALGREENS #0186
Facility address:	12635 S HALSTED CHICAGO, IL 60643
EPA ID:	ILR000042465
Contact:	MARCELLUS GORDON
Contact address:	12635 S HALSTED CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(773) 468-6200
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	WALGREENS
Owner/operator address:	12635 S HALSTED CHICAGO, IL 60643
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 468-6200
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

WALGREENS #0186 (Continued) **1004696258**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code: X003
Waste name: OTHER STATE REGULATED WASTES [i.e., DIESEL FUEL, GASOLINE AND HOME HEATING OIL]

Violation Status: No violations found

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186 **NACME STEEL PROCESSING LLC** **RCRA-SQG** **1001218837**
429 W 127TH ST **ILR000049544**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	03/01/2010
Facility name:	NACME STEEL PROCESSING LLC
Facility address:	429 W 127TH ST CHICAGO, IL 60007
EPA ID:	ILR000049544
Contact:	JOHN DUBROCK
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(773) 468-2800
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NACME STEEL PROCESSING LLC
Owner/operator address:	4506 W CLINE AVE EAST CHICAGO, IN 46312
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

NACME STEEL PROCESSING LLC (Continued) **1001218837**

Owner/Operator Type: Owner
Owner/Op start date: 03/27/2003
Owner/Op end date: Not reported

Owner/operator name: NACME STEEL PROCESSING LLC
Owner/operator address: 429 W 127TH ST
CHICAGO, IL 60628
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/27/2003
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: Yes
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 04/01/2006
Facility name: NACME STEEL PROCESSING LLC
Classification: Not a generator, verified

Date form received by agency: 06/12/1998
Facility name: NACME STEEL PROCESSING LLC
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: K062
Waste name: SPENT PICKLE LIQUOR GENERATED BY STEEL FINISHING OPERATIONS OF FACILITIES WITHIN THE IRON AND STEEL INDUSTRY (SIC CODES 331 AND 332).

Biennial Reports:

Map ID	Site	Database(s)	EPA ID Number

NACME STEEL PROCESSING LLC (Continued) **1001218837**

Last Biennial Reporting Year: 2011

Annual Waste Handled:

Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs):	30871
Waste code:	K062
Waste name:	SPENT PICKLE LIQUOR GENERATED BY STEEL FINISHING OPERATIONS OF FACILITIES WITHIN THE IRON AND STEEL INDUSTRY (SIC CODES 331 AND 332).
Amount (Lbs):	30871

Violation Status: No violations found

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188 **CEDAR PARK CEMETERY ASSN INC** **UST** **U001142098**
12540 S HALSTED ST **N/A**
CHICAGO, IL 60643

UST:

Facility ID:	2006553
Facility Status:	CLOSED
Facility Type:	**OTHER**
Owner Name:	Cedar Park Cemetery Assn Inc
Owner Id:	U0002617
Owner Address:	12540 S Halsted St
Owner City,St,Zip:	Chicago, IL 60643
Tank Number:	1
Tank Capacity:	1150
Tank Substance:	Gasoline
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

CEDAR PARK CEMETERY ASSN INC (Continued) **U001142098**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	1050
Tank Substance:	Heating Oil
Last Used Date:	1/1/1993
OSFM First Notify Date:	3/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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188 **CEDAR PARK CEMETERY** **RCRA-SQG** **1001077035**
12540 S HALSTED ST **LUST** **ILR000013557**
CHICAGO, IL 60643

RCRA-SQG:

Date form received by agency:	12/24/2009
Facility name:	CEDAR PARK CEMETERY
Facility address:	12540 S HALSTED ST CHICAGO, IL 60643
EPA ID:	ILR000013557
Contact:	ROBERT ROTHSCHILD
Contact address:	12540 S HALSTED ST CHICAGO, IL 60643
Contact country:	US
Contact telephone:	(312) 785-8840
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of

Map ID	Site	Database(s)	EPA ID Number

CEDAR PARK CEMETERY (Continued) **1001077035**

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CEDAR PARK CEMETARY
Owner/operator address:	12540 S HALSTED CHICAGO, IL 60643
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 785-8840
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	11/28/1995
Facility name:	CEDAR PARK CEMETERY
Classification:	Small Quantity Generator

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Map ID	Site	Database(s)	EPA ID Number

CEDAR PARK CEMETERY (Continued) **1001077035**

Violation Status: No violations found

LUST:

Incident Num:	952568
IL EPA Id:	0316755067
Product:	Gasoline
IEMA Date:	12/22/1995
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Cedar Park Cemetery
PRP Contact:	Alma Fox
PRP Address:	12540 South Halsted
PRP City,St,Zip:	Chicago, IL 60643
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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190 **#008489** **UST** **U000172589**
12731 S HALSTED **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2016822
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Phillips Petroleum Company
Owner Id:	U0011864
Owner Address:	13 D2 Phillips Building
Owner City,St,Zip:	Bartlesville, OK 74004
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00
Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986

Map ID	Site	Database(s)	EPA ID Number

#008489 (Continued) **U000172589**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	560
Tank Substance:	Used Oil
Last Used Date:	7/1/1976
OSFM First Notify Date:	4/16/1986
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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194 **YOUNGS AUTO SUPPLY INC** **RCRA-SQG** **1000315322**
12853 S HALSTED **ILD025355173**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	10/02/1986
Facility name:	YOUNGS AUTO SUPPLY INC
Facility address:	12853 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD025355173
Contact:	VINCE PALERMO
Contact address:	12853 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 568-0001
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PALERMO JOSEPH
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private

Map ID	Site	Database(s)	EPA ID Number

YOUNGS AUTO SUPPLY INC (Continued) **1000315322**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: (312) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

Count: 17 records

FOCUS MAP 10 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET PARK	U004183412	TRUE NORTH LOCATION 1967	1620 W 127TH ST	60643	UST
CALUMET PARK	1004696111	EARL SCHEIB PAINT & BODY	1731 W 127TH	60643	RCRA-CESQG
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	1003870058	LAKE CALUMET QUAD	810 E 124TH ST	60628	CERC-NFRAP
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	S105743962	GASGO SERVICE STATION	150 W 127TH ST	60628	LUST
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS
RIVERDALE	S106121908	TWIN OUTDOOR THEATER	13701 S UNION AVE	60827	SRP

Focus Map 11

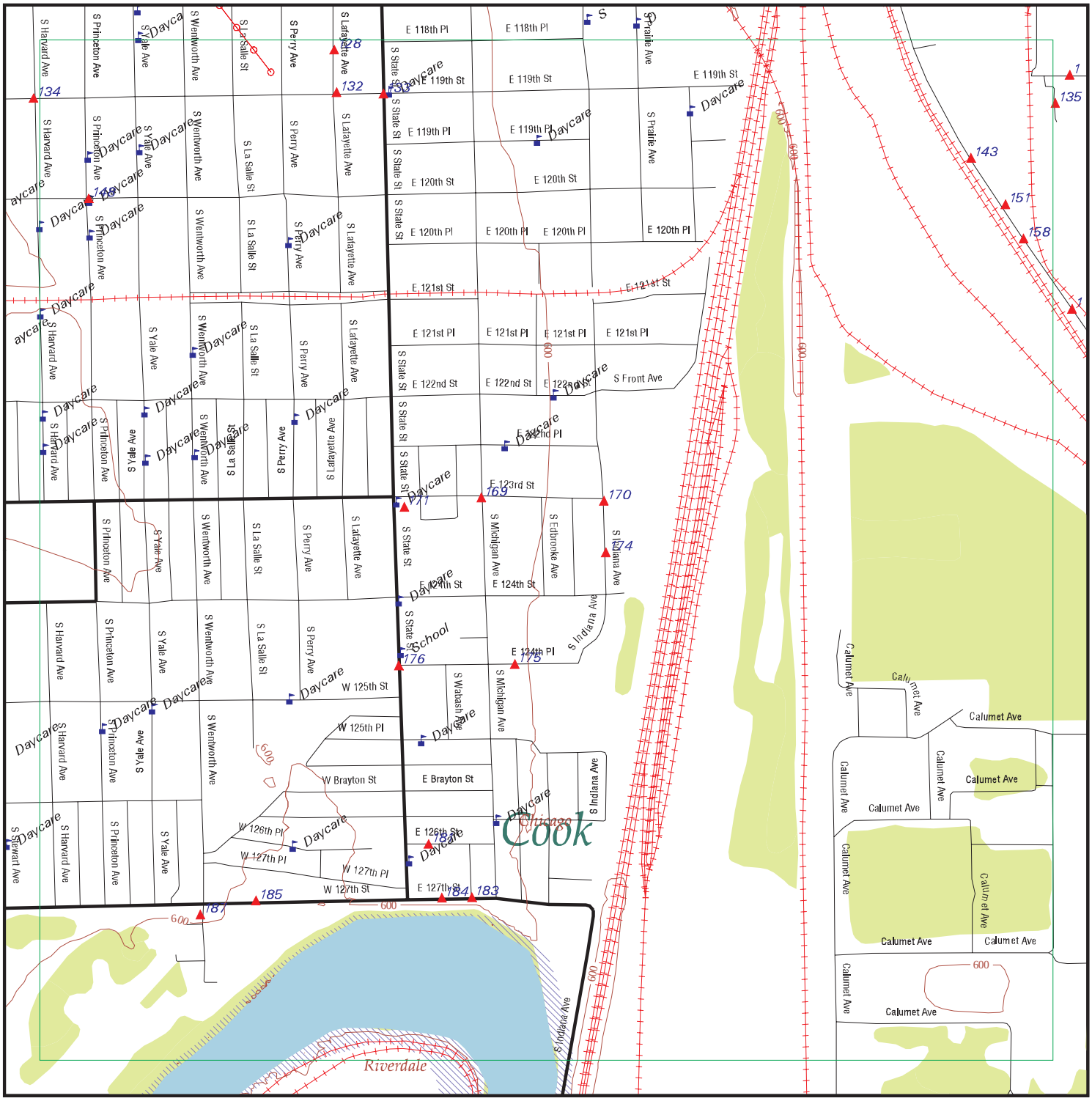

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

Roads
Major Roads
Contour Lines
National Wetlands Inventory
Waterways
Railroads
Study Boundary
100-Yr Flood Zones
Powerlines
Pipelines
Fault Lines
Water
Listed Sites
Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 11 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	1
CERC-NFRAP	1
CORRACTS	1
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	6
RCRA-CESQG	3
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	1
SWF/LF	0
LUST	7
UST	16
SPILLS	7
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
128	**GREATOR CANAAN MBC/VACANT LOT** **11856 S. LAFAYETTE** **CHICAGO, IL 60607**	**UST**	**U004068153** **N/A**

UST:

Facility ID:	2043476
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Greater Canaan MBC
Owner Id:	U0033817
Owner Address:	35 W. 119th Street
Owner City,St,Zip:	Chicago, IL 60607
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

129	**INLAND METAL REFINING COMPANY INCORPORATION** **651 EAST 119TH STREET** **CHICAGO, IL 60628**	**CERC-NFRAP** **CORRACTS** **SSU**	**1000151808** **ILD980503213**

CERC-NFRAP:

Site ID:	0500577
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Alias Name(s):

Alias Name:	INLAND METAL REFINING CO INC
Alias Address:	651 E 119TH ST CHICAGO, IL 60628

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	09/01/1980
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	05/16/1985
Priority Level:	Higher priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	09/23/1986
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information

Map ID	Site	Database(s)	EPA ID Number

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 09/23/1986
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 10/31/1991
Priority Level: Not reported

CORRACTS:

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/01/1987
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 06/01/1987
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

SSU:
Facility ID: 0316500001
Facility Type: Refinery
Lat/Long: 41.6781311 / -87.605331
Directions: Take I-55 North.
Region: Des Plaines
Current Program: SSU
Project Manager: Kershaw
Community Relations: Frost
SSU Status: Backlog
US EPA Id: ILD980503213
FOS: NA
Year Completed: Not reported
Year Entered: Not reported
Site Size: 5

Map ID	Site	Database(s)	EPA ID Number
129	**INLAND METALS REFINING CO INC** **651 E 119TH ST** **CHICAGO, IL 60628**	**UST**	**U000865355** **N/A**

UST:

Facility ID:	2013533
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Inland Metals Refining Co Inc
Owner Id:	U0007543
Owner Address:	651 E 119Th St
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	5/8/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

132	**38 W 119TH ST** **CHICAGO, IL**	**SPILLS**	**S111920638** **N/A**

SPILLS:

Incident ID:	20061440
Incident Date:	Not reported
Date Received:	11/15/2006
Facility Address:	38 W 119TH ST
Facility City:	CHICAGO
PRP Name:	GREATER CANAAN BAPTIST CHURCH
AC:	Not reported

132	**GREATER CANAAN BAPTIST CHURCH** **38 WEST 119TH STREET** **CHICAGO, IL 60628**	**LUST**	**S108255716** **N/A**

LUST:

Incident Num:	20061440
IL EPA Id:	0316495172
Product:	Other Petro
IEMA Date:	11/15/2006
Project Manager:	Rahman
Project Manager Phone:	(217) 782-9848
Email:	Mohammed.Rahman@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported

Map ID	Site	Database(s)	EPA ID Number

GREATER CANAAN BAPTIST CHURCH (Continued) **S108255716**

Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/26/2007
45 Report Received:	02/26/2007
NFA/NFR Letter:	**12/12/2007**
NFR Date Recorded:	07/18/2008

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133 **SPILLS** **S111902545**
N/A

11900 S STATE ST
CHICAGO, IL

SPILLS:

Incident ID:	19982290
Incident Date:	Not reported
Date Received:	09/15/1998
Facility Address:	11900 S STATE ST
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

---

133 **CHICAGO, CITY OF** **LUST** **S105225839**
11900 SOUTH STATE ST. **N/A**
CHICAGO, IL 60628

LUST:

Incident Num:	982290
IL EPA Id:	0316495107
Product:	Gasoline
IEMA Date:	09/15/1998
Project Manager:	Kuhlman
Project Manager Phone:	(217) 785-5715
Email:	Eric.Kuhlman@illinois.gov
PRP Name:	City of Chicago, Dept. of Environment
PRP Contact:	Renante Marante
PRP Address:	30 North La Salle St., 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127420123
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1998-10-08
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
133	**ABANDONED SERVICE STATION** **11900 S STATE STREET** **CHICAGO, IL 60628**	**UST**	**U003668364** **N/A**

UST:

Facility ID:	2038145
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Unknown
Owner Id:	U0018799
Owner Address:	Unknown
Owner City,St,Zip:	Unknown, IL 0

Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	3
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number

ABANDONED SERVICE STATION (Continued) **U003668364**

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Tank Number:	5
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Orphan Tank**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

---

134 **BIG SAM'S GROCERS** **UST** **U004110603**
333 W. 119TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2043706
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Big Sam's Properties
Owner Id:	U0034216
Owner Address:	333 W. 119th Street
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Fuel Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BIG SAM'S GROCERS (Continued)		**U004110603**

Tank Number:	2
Tank Capacity:	2500
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
134	**333 W 119TH ST** **CHICAGO, IL**	**SPILLS**	**S111921908** **N/A**

SPILLS:

Incident ID:	20070843
Incident Date:	Not reported
Date Received:	06/20/2007
Facility Address:	333 W 119TH ST
Facility City:	CHICAGO
PRP Name:	BIG SAMS PROPERTIES LLC

Map ID	Site	Database(s)	EPA ID Number
	(Continued)		**S111921908**

AC: Not reported

Map ID	Site	Database(s)	EPA ID Number
134	**BIG SAM'S PROPERTIES** **333 WEST 119TH STREET** **CHICAGO, IL 60628**	**LUST**	**S108649986** **N/A**

LUST:

Incident Num:	20070843
IL EPA Id:	0316505043
Product:	Gasoline, Uset Oil
IEMA Date:	06/20/2007
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Map ID	Site	Database(s)	EPA ID Number
135	**LAKE CALUMET SMELTING** **11901 S. CHAMPLAIN AVE.** **CHICAGO, IL 60628**	**CERCLIS**	**1007646528** **ILN000509228**

CERCLIS:

Site ID:	0509228
EPA ID:	ILN000509228
Facility County:	COOK
Short Name:	LAKE CALUMET SMELTING
Congressional District:	01
IFMS ID:	B5FM
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	5.70000
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	S
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	ACRE
RBRAC Code:	Not reported

Map ID	Site	Database(s)	EPA ID Number

LAKE CALUMET SMELTING (Continued) **1007646528**

RResp Fed Agency Code: Not reported
Non NPL Status: Assessment Complete - Decision Needed
Non NPL Status Date: 20110715
Site Fips Code: 17031
CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

Alias Comments: Not reported
Site Description: Former secondary smelter of non-ferrous metals such as lead and tin. Smelting these metals created bulk units of babbitt and solder. Not currently known if any metal fabrication was done or if cleaning solvents were used on-site. Preliminary XRF data indicates heavy metal contamination on the soil surface throughout the site as well as on flooring of former sturctures. Residential neighborhoods within 1/4 miles of the property.

CERCLIS Assessment History:

Action Code: 001
Action: PRE-CERCLIS SCREENING
Date Started: Not reported
Date Completed: 09/29/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/18/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: 09/30/2005
Date Completed: 03/20/2008
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: 04/15/2008

Map ID	Site	Database(s)	EPA ID Number

LAKE CALUMET SMELTING (Continued) **1007646528**

Date Completed:	07/15/2011
Priority Level:	Assessment Complete - Decision Needed
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

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143 **SCHNEIDER TANK LINES** **RCRA-SQG** **1000312551**
11861 SOUTH COTTAGE GROVE AVENUE **ILD981789035**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	10/02/1986
Facility name:	SCHNEIDER TANK LINES
Facility address:	11861 S COTTAGE GROVE AVE CHICAGO, IL 60628
EPA ID:	ILD981789035
Contact:	ARTHUR FAVERTY
Contact address:	11861 S COTTAGE GROVE AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 928-8040
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	BULKOA
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

Map ID	Site	Database(s)	EPA ID Number

SCHNEIDER TANK LINES (Continued) **1000312551**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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143 **BULKOA INC** **UST** **U003152281**
11861 S COTTAGE GROVE AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2023462
Facility Status:	CLOSED
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Name:	Bulkoa Inc
Owner Id:	U0025760
Owner Address:	11861 S Cottage Grove Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BULKOA INC (Continued)		**U003152281**

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	4
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/27/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	5
Tank Capacity:	10000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/2002
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number

BULKOA INC (Continued) **U003152281**

Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	6
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/2002
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	7
Tank Capacity:	1000
Tank Substance:	Not reported
Last Used Date:	12/1/1973
OSFM First Notify Date:	1/1/1902
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1902
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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143 **BULKOA INC** **LUST** **1000271640**
11861 S COTTAGE GROVE AVE **ILD000667154**
CHICAGO, IL 60628

LUST:

Incident Num:	971905
IL EPA Id:	0316515005
Product:	Gasoline, Deisel
IEMA Date:	10/07/1997
Project Manager:	Wallace
Project Manager Phone:	(217) 524-1283
Email:	Donna.Wallace@illinois.gov
PRP Name:	Bulkoa
PRP Contact:	Patrick Gaughan
PRP Address:	11861 South Cottage Grove
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7732642200
Site Classification:	HIGH
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	BULKOA INC (Continued)		**1000271640**

Non LUST Determination Letter: Not reported
20 Report Received: 10/20/1997
45 Report Received: 01/20/1998
NFA/NFR Letter: 04/08/2003
NFR Date Recorded: 07/28/2003

Map ID	Site	Database(s)	EPA ID Number
143	**CLEAN HARBORS ENV SERVICES** **11861 COTTAGE GROVE-BLDG 13** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001487584** **ILR000065797**

RCRA-SQG:
Date form received by agency: 12/17/2007
Facility name: CLEAN HARBORS ENV SERVICES
Facility address: 11861 COTTAGE GROVE-BLDG 13
CHICAGO, IL 60628
EPA ID: ILR000065797
Contact: RON PFEIFER
Contact address: 11861 COTTAGE GROVE-BLDG 13
CHICAGO, IL 60628
Contact country: US
Contact telephone: (773) 468-1186
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: MARLEY COOLING
Owner/operator address: 11861 COTTAGE GROVE/10
CHICAGO, IL 60620
Owner/operator country: Not reported
Owner/operator telephone: (773) 995-0611
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Map ID	Site	Database(s)	EPA ID Number

CLEAN HARBORS ENV SERVICES (Continued) **1001487584**

Historical Generators:
Date form received by agency: 07/19/1999
Facility name: CLEAN HARBORS ENV SERVICES
Site name: MARLEY COOLING
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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148 **COMED-MANHOLE**
120TH ST & PRINCETON
CHICAGO, IL 60628
RCRA-SQG **1010317138**
ILR000142562

RCRA-SQG:
Date form received by agency: 03/01/2008
Facility name: COMED-MANHOLE
Facility address: 120TH ST & PRINCETON
CHICAGO, IL 60628
EPA ID: ILR000142562
Mailing address: THREE LINCOLN CTR 3RD FL
OAKBROOK TERRACE, IL 60181
Contact: NEENA HEMMADY
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (630) 576-6724
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: COMED
Owner/operator address: THREE LINCOLN CTR 3RD FL
OAKBROOK TERRACE, IL 60181
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1976
Owner/Op end date: Not reported

Owner/operator name: COM ED
Owner/operator address: THREE LINCOLN CTR 3RD FL

Map ID	Site	Database(s)	EPA ID Number

COMED-MANHOLE (Continued) **1010317138**

OAKBROOK TERRACE, IL 60181
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1976
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/01/2007
Facility name: COMED-MANHOLE
Site name: COMED
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 07/20/2006
Facility name: COMED-MANHOLE
Site name: COM ED
Classification: Large Quantity Generator

Violation Status: No violations found

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151 **KEYWELL LLC** **RCRA-CESQG** **1004693217**
11900 COTTAGE GROVE AVE **ILD984804831**
CHICAGO, IL 60628

RCRA-CESQG:
Date form received by agency: 01/29/1996
Facility name: KEYWELL LLC
Facility address: 11900 COTTAGE GROVE AVE
CHICAGO, IL 60628
EPA ID: ILD984804831
Contact: RONALD GOSTEK
Contact address: 11900 COTTAGE GROVE AVE
CHICAGO, IL 60628
Contact country: US
Contact telephone: (312) 660-2060
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time;

Map ID	Site	Database(s)	EPA ID Number
	KEYWELL LLC (Continued)		**1004693217**

or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/01/1992
Facility name:	KEYWELL LLC
Site name:	KEYWELL CORP
Classification:	Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Violation Status: No violations found

Map ID	Site	Database(s)	EPA ID Number
151	**KEYWELL CO.** **11900 SOUTH COTTAGE GROVE AVE.** **CHICAGO, IL 60628**	**LUST** **SPILLS**	**S108045374** **N/A**

LUST:

Incident Num:	902351
IL EPA Id:	0316495035
Product:	Unleaded Gas
IEMA Date:	08/16/1990
Project Manager:	Rife
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Keywell Co.
PRP Contact:	Ron Gostek
PRP Address:	11900 South Cottage Grove Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/29/1992
45 Report Received:	02/29/1992
NFA/NFR Letter:	**01/24/1996**
NFR Date Recorded:	Not reported

Incident Num:	942202
IL EPA Id:	0316495035
Product:	Deisel
IEMA Date:	09/26/1994
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Keywell Corp.
PRP Contact:	Ron Gostek
PRP Address:	11900 South Cottage Grove Ave.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1994-11-01
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

SPILLS:

Incident ID:	20040961
Incident Date:	07/09/2004
Date Received:	07/09/2004
Facility Address:	11900 COTTAGE GROVE
Facility City:	CHICAGO
PRP Name:	BIG O MOVERS AND STORAGE INC
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
151	**S G KEYWELL CO** **11900 S COTTAGE GROVE AVE** **CHICAGO, IL 60628**	**UST**	**U001143038** **N/A**

UST:

Facility ID:	2012567
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	S G Keywell Co
Owner Id:	U0013327
Owner Address:	11900 S Cottage Grove Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	8/1/1990
OSFM First Notify Date:	4/23/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1971
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	8/1/1990
OSFM First Notify Date:	4/23/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1975
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

158	**TRI CITY TANK WASH** **11901 S COTTAGE GROVE** **CHICAGO, IL 60628**	**UST**	**U001143228** **N/A**

UST:

Facility ID:	2014827
Facility Status:	INACTIVE
Facility Type:	**NONE**
Owner Name:	Tri City Tank Wash
Owner Id:	U0015198
Owner Address:	11901 S Cottage Grove
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	99
Tank Substance:	Not reported

Map ID	Site	Database(s)	EPA ID Number

TRI CITY TANK WASH (Continued) **U001143228**

Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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162 **SPILLS** **S111877539**
11900 S COTTAGE GROVE AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19902351
Incident Date:	Not reported
Date Received:	08/17/1990
Facility Address:	11900 S COTTAGE GROVE AVE
Facility City:	CHICAGO
PRP Name:	SAMUEL G. KEYWELL CO.
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
169	**12300 S MICHIGAN AVE** **CHICAGO, IL**	**SPILLS**	**S111879154** **N/A**

SPILLS:

Incident ID:	19910147
Incident Date:	Not reported
Date Received:	01/16/1991
Facility Address:	12300 S MICHIGAN AVE
Facility City:	CHICAGO
PRP Name:	BANK OF COMMERCE & INDUSTRY
AC:	Not reported

169	**BANK OF COMMERCE & INDUSTRY** **12300 S MICHIGAN AVE** **CHICAGO, IL 60631**	**UST**	**U001142019** **N/A**

UST:

Facility ID:	2026423
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Bank Of Commerce & Industry
Owner Id:	U0001126
Owner Address:	6100 N Nw Hwy
Owner City,St,Zip:	Chicago, IL 60631
Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/1/1980
OSFM First Notify Date:	10/29/1990
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Gasoline
Last Used Date:	1/1/1980
OSFM First Notify Date:	10/29/1990
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	3000

Map ID	Site	Database(s)	EPA ID Number

BANK OF COMMERCE & INDUSTRY (Continued) **U001142019**

Tank Substance:	Gasoline
Last Used Date:	1/1/1980
OSFM First Notify Date:	10/29/1990
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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169 **BANK OF COMMERCE AND IND** **LUST** **1000462986**
12300 S MICHIGAN AVE **ILD984812545**
CHICAGO, IL 60628

LUST:

Incident Num:	910147
IL EPA Id:	0316495037
Product:	Gasoline
IEMA Date:	01/16/1991
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Bank of Commerce & Industry
PRP Contact:	Donald Houder
PRP Address:	6100 North Northwest Hwy.
PRP City,St,Zip:	Chicago, IL 60631
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	02/29/1992
45 Report Received:	02/29/1992
NFA/NFR Letter:	**07/12/1991**
NFR Date Recorded:	Not reported

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170 **METRA KYD YARD** **UST** **U001629890**
12301 S INDIANA AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2032641
Facility Status:	ACTIVE
Facility Type:	**COUNTY**
Owner Name:	Metra Ne Il Regional Rr Corp
Owner Id:	U0010172
Owner Address:	547 W Jackson Blvd
Owner City,St,Zip:	Chicago, IL 60661
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	METRA KYD YARD (Continued)		**U001629890**

OSFM First Notify Date:	10/18/1993
Tank Status:	**Currently in use**
Red Tag Issue Date:	12/3/2009
Install Date:	9/25/1992
Green Tag Decal:	**M006112**
Green Tag Issue Date:	**6/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	10/18/1993
Tank Status:	**Currently in use**
Red Tag Issue Date:	12/3/2009
Install Date:	9/25/1992
Green Tag Decal:	**M006112**
Green Tag Issue Date:	**6/7/2011**
Green Tag Expire Date:	**12/31/2013**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

170	**METRA** **12301 S INDIANA AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1001024735** **ILR000007096**

RCRA-SQG:

Date form received by agency:	03/01/2008
Facility name:	METRA
Facility address:	12301 S INDIANA AVE CHICAGO, IL 60628
EPA ID:	ILR000007096
Mailing address:	547 W JACKSON CHICAGO, IL 60661
Contact:	RONALD COUPET
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(312) 322-6907
Contact email:	Not reported
EPA Region:	05
Land type:	Other land type
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	METRA
Owner/operator address:	547 W JACKSON 4 EAST

Map ID	Site	Database(s)	EPA ID Number

METRA (Continued) **1001024735**

	CHICAGO, IL 60661
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	06/01/1974
Owner/Op end date:	Not reported

Owner/operator name:	METRA
Owner/operator address:	547 W JACKSON 4 EAST
	CHICAGO, IL 60661
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	06/01/1974
Owner/Op end date:	Not reported

Owner/operator name:	REGIONAL COMMUTER RR CORP
Owner/operator address:	547 W JACKSON BLVD
	CHICAGO, IL 60661
Owner/operator country:	US
Owner/operator telephone:	(312) 322-6900
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1974
Owner/Op end date:	Not reported

Owner/operator name:	REGIONAL COMMUTER RR CORP
Owner/operator address:	547 W JACKSON BLVD
	CHICAGO, IL 60661
Owner/operator country:	US
Owner/operator telephone:	(312) 322-6900
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1974
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Map ID	Site	Database(s)	EPA ID Number

METRA (Continued) **1001024735**

Date form received by agency: 05/02/2007
Facility name: METRA
Site name: METRA KYD
Classification: Large Quantity Generator

Date form received by agency: 03/01/2007
Facility name: METRA
Classification: Small Quantity Generator

Date form received by agency: 02/23/2007
Facility name: METRA
Site name: METRA KYD
Classification: Large Quantity Generator

Date form received by agency: 07/21/1995
Facility name: METRA
Site name: METRA RR KENSINGTON YARD
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D005
Waste name: BARIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D018
Waste name: BENZENE

Waste code: D035
Waste name: METHYL ETHYL KETONE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/09/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number
171	**GOMPERS SCH** **12302 S STATE** **CHICAGO, IL 60609**	**RCRA-SQG**	**1001116634** **ILR000026591**

RCRA-SQG:

Date form received by agency:	08/30/1996
Facility name:	GOMPERS SCH
Facility address:	12302 S STATE CHICAGO, IL 60609
EPA ID:	ILR000026591
Mailing address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact:	DIANE GRISSET
Contact address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Contact country:	US
Contact telephone:	(312) 535-5475
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHS
Owner/operator address:	1819 W PERSHING RD 6W N CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Map ID	Site	Database(s)	EPA ID Number
	GOMPERS SCH (Continued)		**1001116634**

Violation Status: No violations found

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174 **KYD 124TH ST SHOP** **UST** **U000791903**
12357 S INDIANA AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2026259
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Metra
Owner Id:	U0011093
Owner Address:	547 West Jackson Boulevard
Owner City,St,Zip:	Chicago, IL 60661
Tank Number:	1
Tank Capacity:	250
Tank Substance:	Lube Oil
Last Used Date:	6/1/1975
OSFM First Notify Date:	7/27/1990
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

---

175 **METROPOLITAN WATER RECLAMATION DIST.** **UST** **U003668649**
129 EAST 124TH PLACE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2038782
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Metropolitan-Water Reclamation Dist.
Owner Id:	U0028605
Owner Address:	100 East Erie
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	13000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number

METROPOLITAN WATER RECLAMATION DIST. (Continued) **U003668649**

Tank Number:	2
Tank Capacity:	13000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	13000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	13000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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175 **MWRD-125TH PUMPING STATION** **UST** **U003668651**
129 E. 124TH PLACE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2038784
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Metropolitan Water Reclamation Dist.
Owner Id:	U0028606
Owner Address:	100 East Erie

Map ID	Site	Database(s)	EPA ID Number

MWRD-125TH PUMPING STATION (Continued) **U003668651**

Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	320
Tank Substance:	Kerosene
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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176 **OWENS JESSE COMMUNITY ACADEMY** **RCRA-CESQG** **1004696856**
12450 S STATE ST **ILR000059196**
CHICAGO, IL 60628

RCRA-CESQG:

Date form received by agency:	12/14/1998
Facility name:	OWENS JESSE COMMUNITY ACADEMY
Facility address:	12450 S STATE ST CHICAGO, IL 60628
EPA ID:	ILR000059196
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD 6WW CHICAGO, IL 60609
Owner/operator country:	Not reported

Map ID	Site	Database(s)	EPA ID Number

OWENS JESSE COMMUNITY ACADEMY (Continued) **1004696856**

Owner/operator telephone: (773) 535-7038
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D006
Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

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181 **ERNS** **2000541927**
25 EAST 126TH STREET **N/A**
CHICAGO, IL 60628

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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183 **COM ED** **RCRA-SQG** **1009217017**
48 E 127TH ST **ILR000140020**
CHICAGO, IL 60628

RCRA-SQG:
Date form received by agency: 02/08/2006
Facility name: COM ED
Facility address: 48 E 127TH ST
CHICAGO, IL 60628
EPA ID: ILR000140020
Mailing address: 3 LINCOLN CTR 3RD FLR
OAK BROOK, IL 60181

Map ID	Site	Database(s)	EPA ID Number

COM ED (Continued) **1009217017**

Contact:	NEENA HEMMADY
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(630) 576-6724
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	COM ED
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	02/08/2006
Owner/Op end date:	Not reported

Owner/operator name:	COM ED
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	02/08/2006
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD

Map ID	Site	Database(s)	EPA ID Number
	COM ED (Continued)		**1009217017**
	Violation Status: No violations found		
184	**26 E 127TH ST** **CHICAGO, IL**	**SPILLS**	**S111908134** **N/A**

SPILLS:

Incident ID:	20001824
Incident Date:	Not reported
Date Received:	09/25/2000
Facility Address:	26 E 127TH ST
Facility City:	CHICAGO
PRP Name:	PROGRESSIVE BAPTIST CHURCH
AC:	Not reported

184	**PROGRESSIVE BAPTIST CHURCH** **26 E 127TH ST** **CHICAGO, IL 60628**	**UST**	**U003762917** **N/A**

UST:

Facility ID:	2040115
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	John Digby Jr
Owner Id:	U0029777
Owner Address:	10622 S Eberhart Ave
Owner City,St,Zip:	Chicago, IL 60628
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	1/1/1970
OSFM First Notify Date:	10/19/2000
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

184	**PROGRESSIVE BAPTIST CHURCH** **26 EAST 127TH ST.** **CHICAGO, IL 60628**	**LUST**	**S104792803** **N/A**

LUST:

Incident Num:	20001824
IL EPA Id:	0316495133
Product:	Other Petro
IEMA Date:	09/26/2000
Project Manager:	Tucka
Project Manager Phone:	(217) 782-6762
Email:	Not reported
PRP Name:	Progressive Baptist Church

Map ID	Site	Database(s)	EPA ID Number
	PROGRESSIVE BAPTIST CHURCH (Continued)		**S104792803**

PRP Contact:	Rev. J.D. Digby Jr.
PRP Address:	735 East 134th St.
PRP City,St,Zip:	Chicago, IL 60627
PRP Phone:	7739288889
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	04/09/2001
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

185	**COMMUNITY GAS** **150 W. 127TH STREET** **CHICAGO, IL 60628**	**UST**	**U000173441** **N/A**

UST:

Facility ID:	2025044
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	M & R Sahloul
Owner Id:	U0033772
Owner Address:	150 S. 127th Street
Owner City,St,Zip:	Chicago, IL 60618

Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	3/10/1989
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	2000
Tank Substance:	Kerosene
Last Used Date:	Not reported
OSFM First Notify Date:	3/10/1989
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Map ID	Site	Database(s)	EPA ID Number

COMMUNITY GAS (Continued) **U000173441**

Tank Number:	3
Tank Capacity:	7500
Tank Substance:	Gasoline
Last Used Date:	7/1/2003
OSFM First Notify Date:	3/10/1989
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	4
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/10/1989
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1985
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	5
Tank Capacity:	7500
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/10/1989
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**L003565**
Green Tag Issue Date:	**7/27/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

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187 **BLUE ISLAND CITGO** **UST** **U003152164**
3196 WEST 127TH STREET **N/A**
BLUE ISLAND, IL 60407

UST:

Facility ID:	2035464
Facility Status:	ACTIVE
Facility Type:	**SELF-SERVICE STATION**
Owner Name:	Madji Darwish
Owner Id:	U0025277
Owner Address:	3196 West 127Th Street

Map ID	Site	Database(s)	EPA ID Number

BLUE ISLAND CITGO (Continued) **U003152164**

Owner City,St,Zip: Blue Island, IL 60407

Tank Number: 1
Tank Capacity: 15000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 8/6/1998
Tank Status: Currently in use
Red Tag Issue Date: Not reported
Install Date: 4/8/1997
Green Tag Decal: L001285
Green Tag Issue Date: 5/18/2010
Green Tag Expire Date: 12/31/2012
Self Service Permit Inspection Date: 5/18/2010
Self Service Permit Expire Date: 12/31/2012
Fee Due: $0.00

Tank Number: 2
Tank Capacity: 10000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 8/6/1998
Tank Status: Currently in use
Red Tag Issue Date: Not reported
Install Date: 4/8/1997
Green Tag Decal: L001285
Green Tag Issue Date: 5/18/2010
Green Tag Expire Date: 12/31/2012
Self Service Permit Inspection Date: 5/18/2010
Self Service Permit Expire Date: 12/31/2012
Fee Due: $0.00

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187 **AIR PRODUCTS & CHEMICALS INC** **UST** **U001141824**
12721 WENTWORTH AVE **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2020533
Facility Status: CLOSED
Facility Type: INDUSTRIAL / MANUFACTURING
Owner Name: Air Products And Chemical Inc
Owner Id: U0026451
Owner Address: Po Box 538
Owner City,St,Zip: Allentown, PA 18105

Tank Number: 1
Tank Capacity: 10000
Tank Substance: Diesel Fuel
Last Used Date: 9/22/1997
OSFM First Notify Date: 5/19/1987
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date: Not reported

Map ID	Site	Database(s)	EPA ID Number
	AIR PRODUCTS & CHEMICALS INC (Continued)		**U001141824**

Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
187	**AIRGAS SPECIALTY GASES** **12722 S WENTWORTH AVE** **CHICAGO, IL 60628**	**RCRA-CESQG**	**1000128672** **ILD097167860**

RCRA-CESQG:

Date form received by agency:	03/12/2009
Facility name:	AIRGAS SPECIALTY GASES
Facility address:	12722 S WENTWORTH AVE CHICAGO, IL 60628
EPA ID:	ILD097167860
Contact:	CURT STEWART
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(773) 785-3000
Telephone ext.:	15
Contact email:	CURTIS.STEWART@AIRGAS.COM
EPA Region:	05
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	AIRGAS INC
Owner/operator address:	6340 SUGARLOAF PKWY STE 300 DULUTH, GA 30097
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	03/01/2002
Owner/Op end date:	Not reported
Owner/operator name:	CURT STEWART
Owner/operator address:	6340 SUGARLOAF PKWY STE 300 DULUTH, GA 30097
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	03/01/2002

Map ID	Site	Database(s)	EPA ID Number

AIRGAS SPECIALTY GASES (Continued) **1000128672**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency: 01/31/1997
Facility name: AIRGAS SPECIALTY GASES
Site name: AIR PRODUCTS AND CHEMICALS INC
Classification: Not a generator, verified

Date form received by agency: 04/01/1985
Facility name: AIRGAS SPECIALTY GASES
Site name: AIR PRODUCTS AND CHEMICALS INC
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 11/19/1996
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported

Map ID	Site	Database(s)	EPA ID Number
	AIRGAS SPECIALTY GASES (Continued)		**1000128672**

Date achieved compliance: Not reported
Evaluation lead agency: State

Count: 14 records

FOCUS MAP 11 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	1003870058	LAKE CALUMET QUAD	810 E 124TH ST	60628	CERC-NFRAP
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	S105743962	GASGO SERVICE STATION	150 W 127TH ST	60628	LUST
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
RIVERDALE	S105427839	PM AG PROD. INC.	3550 S INDIANA AVE	60827	LUST

Focus Map 12

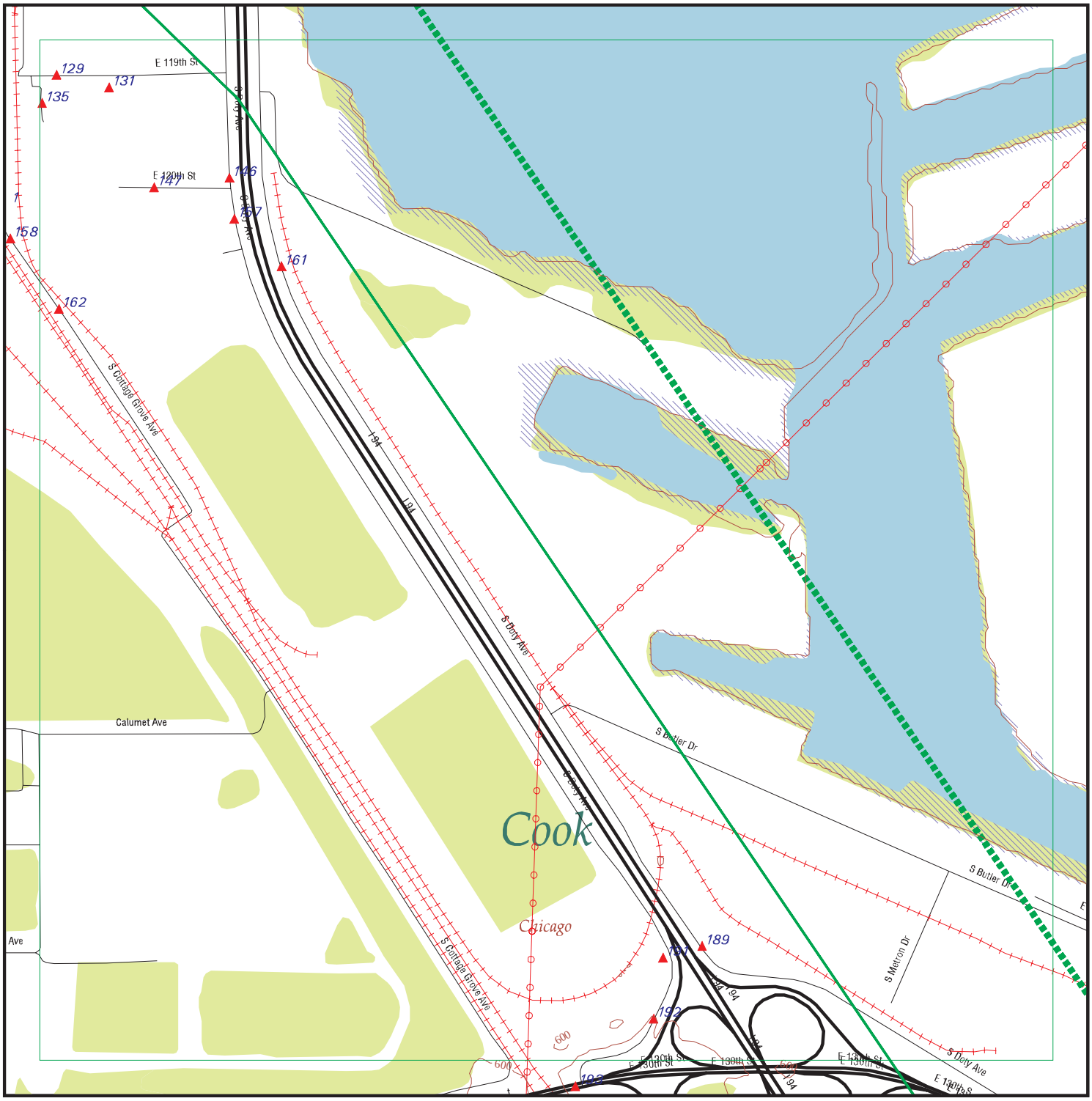

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 12 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	1
CERC-NFRAP	2
CORRACTS	1
RCRA-TSDF	0
RCRA-LQG	1
RCRA-SQG	3
RCRA-CESQG	1
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	4
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	1
SWF/LF	0
LUST	2
UST	6
SPILLS	11
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
129	**INLAND METAL REFINING COMPANY INCORPORATION** **651 EAST 119TH STREET** **CHICAGO, IL 60628**	**CERC-NFRAP** **CORRACTS** **SSU**	**1000151808** **ILD980503213**

CERC-NFRAP:

Site ID:	0500577
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Alias Name(s):

Alias Name:	INLAND METAL REFINING CO INC
Alias Address:	651 E 119TH ST CHICAGO, IL 60628

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	09/01/1980
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	05/16/1985
Priority Level:	Higher priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	09/23/1986
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	09/23/1986
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	10/31/1991
Priority Level:	Not reported

CORRACTS:

EPA ID:	ILD980503213
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	06/01/1987
Action:	CA050 - RFA Completed
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported
EPA ID:	ILD980503213
EPA Region:	05
Area Name:	ENTIRE FACILITY
Actual Date:	06/01/1987
Action:	CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary

Map ID	Site	Database(s)	EPA ID Number

INLAND METAL REFINING COMPANY INCORPORATION (Continued) **1000151808**

NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD980503213
EPA Region: 05
Area Name: ENTIRE FACILITY
Actual Date: 09/27/1991
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

SSU:
Facility ID: 0316500001
Facility Type: Refinery
Lat/Long: 41.6781311 / -87.605331
Directions: Take I-55 North.
Region: Des Plaines
Current Program: SSU
Project Manager: Kershaw
Community Relations: Frost
SSU Status: Backlog
US EPA Id: ILD980503213
FOS: NA
Year Completed: Not reported
Year Entered: Not reported
Site Size: 5

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129 **INLAND METALS REFINING CO INC** **UST** **U000865355**
651 E 119TH ST **N/A**
CHICAGO, IL 60628

UST:
Facility ID: 2013533
Facility Status: CLOSED
Facility Type: NONE
Owner Name: Inland Metals Refining Co Inc
Owner Id: U0007543
Owner Address: 651 E 119Th St
Owner City,St,Zip: Chicago, IL 60628

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Gasoline
Last Used Date: Not reported
OSFM First Notify Date: 5/8/1986
Tank Status: Removed
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
131	**HUFF & HUFF INC.** **651 EAST 179TH ST.** **CHICAGO, IL 60607**	**LUST**	**S103292398** **N/A**

LUST:

Incident Num:	891954
IL EPA Id:	0316280047
Product:	Deisel
IEMA Date:	10/04/1989
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Huff & Huff Inc.
PRP Contact:	Linda Huff
PRP Address:	512 West Burlington, Suite 100
PRP City,St,Zip:	La Grange, IL 60525
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

135	**LAKE CALUMET SMELTING** **11901 S. CHAMPLAIN AVE.** **CHICAGO, IL 60628**	**CERCLIS**	**1007646528** **ILN000509228**

CERCLIS:

Site ID:	0509228
EPA ID:	ILN000509228
Facility County:	COOK
Short Name:	LAKE CALUMET SMELTING
Congressional District:	01
IFMS ID:	B5FM
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	5.70000
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	S
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	ACRE
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Assessment Complete - Decision Needed
Non NPL Status Date:	20110715
Site Fips Code:	17031
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported

Map ID	Site	Database(s)	EPA ID Number

LAKE CALUMET SMELTING (Continued) **1007646528**

Alias EPA ID: Not reported
Site FUDS Flag: Not reported

Alias Comments: Not reported
Site Description: Former secondary smelter of non-ferrous metals such as lead and tin. Smelting these metals created bulk units of babbitt and solder. Not currently known if any metal fabrication was done or if cleaning solvents were used on-site. Preliminary XRF data indicates heavy metal contamination on the soil surface throughout the site as well as on flooring of former sturctures. Residential neighborhoods within 1/4 miles of the property.

CERCLIS Assessment History:

Action Code: 001
Action: PRE-CERCLIS SCREENING
Date Started: Not reported
Date Completed: 09/29/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/18/2004
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: 09/30/2005
Date Completed: 03/20/2008
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: 04/15/2008
Date Completed: 07/15/2011
Priority Level: Assessment Complete - Decision Needed
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported

Map ID	Site	Database(s)	EPA ID Number
	LAKE CALUMET SMELTING (Continued)		**1007646528**

Action Anomaly: Not reported

Map ID	Site	Database(s)	EPA ID Number
146	**BULKMATIC TRANSPORT CO** **12000 S DOTY AVE** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000271480** **ILD053220711**

RCRA-SQG:

Date form received by agency:	07/28/1980
Facility name:	BULKMATIC TRANSPORT CO
Facility address:	12000 S DOTY AVE CHICAGO, IL 60628
EPA ID:	ILD053220711
Contact:	CHUCK APPELQUIST
Contact address:	12000 S DOTY AVE CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 568-1300
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	JB INC
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

Map ID	Site	Database(s)	EPA ID Number

BULKMATIC TRANSPORT CO (Continued) **1000271480**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

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147 **ERNS** **2011991453**
803 EAST 120TH ST. **N/A**
CHICAGO, IL 60628

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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147 **ERNS** **2011992401**
803 EAST 120TH ST. **N/A**
CHICAGO, IL 60628

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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147 **SPILLS** **S111927203**
803 E 120TH ST **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	20111056
Incident Date:	Not reported
Date Received:	Not reported
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	Quala Services, LLC
AC:	VN

Map ID	Site	Database(s)	EPA ID Number
147	**803 E 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111887106** **N/A**

SPILLS:

Incident ID:	19930641
Incident Date:	Not reported
Date Received:	03/17/1993
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	ALL WASTE CONTAINER SERVICES
AC:	Not reported

147	**ALLWASTE CONTAINER SERVICES** **803 E 120TH ST** **CHICAGO, IL**	**SPILLS**	**1008124151** **N/A**

SPILLS:

Incident ID:	20111225
Incident Date:	11/12/2011
Date Received:	03/05/2012
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	Quala Services, LLC
AC:	SR

147	**803 E 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111882010** **N/A**

SPILLS:

Incident ID:	19913018
Incident Date:	10/22/1991
Date Received:	10/22/1991
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	SCHNEIDER NATIONAL BULK CAR.
AC:	Not reported

147	**803 E 120TH ST** **CHICAGO, IL**	**SPILLS**	**S111927204** **N/A**

SPILLS:

Incident ID:	20111057
Incident Date:	Not reported
Date Received:	Not reported
Facility Address:	803 E 120TH ST
Facility City:	CHICAGO
PRP Name:	Quala Services, LLC
AC:	VN

Map ID	Site	Database(s)	EPA ID Number
147	**PSC CONTAINER SERVICES, LLC** **803 EAST 120TH ST.** **CHICAGO, IL 60628**	**LUST**	**S104524045** **N/A**

LUST:

Incident Num:	930641
IL EPA Id:	0316535003
Product:	Deisel
IEMA Date:	03/17/1993
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	PSC Container Services, LLC
PRP Contact:	Garry Risse
PRP Address:	2 South Concourse Pkwy., Suite 750
PRP City,St,Zip:	Atlanta, GA 30324
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	04/08/1993
45 Report Received:	05/03/1993
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

147	**QUALA SERVICES LLC** **803 E 120TH ST** **CHICAGO, IL 60628**	**RCRA-LQG**	**1000462652** **ILD984808022**

RCRA-LQG:

Date form received by agency:	02/17/2011
Facility name:	QUALA SERVICES LLC
Facility address:	803 E 120TH ST CHICAGO, IL 60628
EPA ID:	ILD984808022
Contact:	BEVERLY M BURTON
Contact address:	101 S FRANKLIN ST STE 101 TAMPA, FL 33602
Contact country:	US
Contact telephone:	(813) 466-8424
Contact email:	BBURTON@QUALAWASH.COM
EPA Region:	05
Land type:	Private
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Map ID	Site	Database(s)	EPA ID Number

QUALA SERVICES LLC (Continued) **1000462652**

Owner/operator name: QUALA SERVICES LLC
Owner/operator address: 101 S FRANKLIN ST STE 101
TAMPA, FL 33602
Owner/operator country: US
Owner/operator telephone: (813) 466-8424
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 12/20/1990
Owner/Op end date: Not reported

Owner/operator name: QUALA SERVICES LLC
Owner/operator address: 101 S FRANKLIN ST STE 101
TAMPA, FL 33602
Owner/operator country: US
Owner/operator telephone: (813) 466-8424
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 12/20/1990
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/01/2010
Facility name: QUALA SERVICES LLC
Site name: PSC CONTAINER SVCS LLC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2008
Facility name: QUALA SERVICES LLC
Site name: PSC CONTAINER SERVICES LLC
Classification: Large Quantity Generator

Date form received by agency: 01/30/2008
Facility name: QUALA SERVICES LLC
Site name: PSC CONTAINER SERVICES LLC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2006
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SVC

Map ID	Site	Database(s)	EPA ID Number

QUALA SERVICES LLC (Continued) **1000462652**

Classification: Large Quantity Generator

Date form received by agency: 03/01/2004
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SVC
Classification: Large Quantity Generator

Date form received by agency: 03/01/2002
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 03/01/2000
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 04/13/1998
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1998
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Date form received by agency: 03/01/1992
Facility name: QUALA SERVICES LLC
Site name: ALLWASTE CONTAINER SERVICE
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D004
Waste name: ARSENIC

Waste code: D005
Waste name: BARIUM

Map ID	Site	Database(s)	EPA ID Number
	QUALA SERVICES LLC (Continued)		**1000462652**

Waste code: D006
Waste name: CADMIUM

Waste code: D007
Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D010
Waste name: SELENIUM

Waste code: D011
Waste name: SILVER

Waste code: D012
Waste name: ENDRIN

Waste code: D018
Waste name: BENZENE

Waste code: D019
Waste name: CARBON TETRACHLORIDE

Waste code: D020
Waste name: CHLORDANE

Waste code: D021
Waste name: CHLOROBENZENE

Waste code: D022
Waste name: CHLOROFORM

Waste code: D023
Waste name: O-CRESOL

Waste code: D024
Waste name: M-CRESOL

Waste code: D025
Waste name: P-CRESOL

Waste code: D026
Waste name: CRESOL

Waste code: D027
Waste name: 1,4-DICHLOROBENZENE

Waste code: D028
Waste name: 1,2-DICHLOROETHANE

Biennial Reports:

Last Biennial Reporting Year: 2011

Map ID	Site	Database(s)	EPA ID Number
	QUALA SERVICES LLC (Continued)		**1000462652**

Annual Waste Handled:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs):	94163.2
Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs):	440
Waste code:	U001
Waste name:	ACETALDEHYDE (I)
Amount (Lbs):	93723.2
Waste code:	U019
Waste name:	BENZENE (I,T)
Amount (Lbs):	93723.2
Waste code:	U122
Waste name:	FORMALDEHYDE
Amount (Lbs):	93723.2
Waste code:	U188
Waste name:	PHENOL
Amount (Lbs):	93723.2
Waste code:	U389
Waste name:	CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3,3-TRICHLORO-2-PROPENYL) ESTER (OR) TRIALLATE
Amount (Lbs):	1320

Facility Has Received Notices of Violations:

Regulation violated:	Not reported
Area of violation:	Permits - General Information
Date violation determined:	09/29/2009
Date achieved compliance:	07/09/2010
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/17/2010
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	EPA
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	QUALA SERVICES LLC (Continued)		**1000462652**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: LDR - General
Date violation determined: 09/29/2009
Date achieved compliance: 07/09/2010
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/17/2010
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 09/29/2009
Date achieved compliance: 07/09/2010
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/17/2010
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 09/29/2009
Date achieved compliance: 07/09/2010
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/17/2010
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/29/2009
Date achieved compliance: 07/09/2010
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/17/2010
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID	Site	Database(s)	EPA ID Number

QUALA SERVICES LLC (Continued) **1000462652**

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 01/04/1991
Date achieved compliance: 02/08/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/08/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - General Information
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 09/29/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 07/09/2010
Evaluation lead agency: EPA

Evaluation date: 05/19/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/19/1994
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Map ID	Site	Database(s)	EPA ID Number

QUALA SERVICES LLC (Continued) **1000462652**

Evaluation date:	01/04/1991
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - Pre-transport
Date achieved compliance:	02/08/1991
Evaluation lead agency:	State

---

147 **ALLWASTE CONTAINER SERVICES** **UST** **U001142641**
803 E 120TH ST **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2013510
Facility Status:	CLOSED
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Phillips Services Corp
Owner Id:	U0007681
Owner Address:	803 E 120th St
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	12000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	4000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	6/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	12000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	6/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

ALLWASTE CONTAINER SERVICES (Continued) **U001142641**

Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

---

147 **NORTRU INC TRANSPORTATION GROUP** **RCRA-SQG** **1004694142**
801 E 120TH ST **ILD984890822**
CHICAGO, IL 60628

RCRA-SQG:

Date form received by agency:	10/22/2009
Facility name:	NORTRU INC TRANSPORTATION GROUP
Facility address:	801 E 120TH ST CHICAGO, IL 60628
EPA ID:	ILD984890822
Contact:	JEFFREY O DAVIS
Contact address:	801 E 120TH ST CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(313) 824-5303
Contact email:	JDAVIS@PSCNOW.COM
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NORTRU
Owner/operator address:	801 E 120TH ST CHICAGO, IL 60628
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	03/13/2002
Owner/Op end date:	Not reported
Owner/operator name:	PSC ENVIRONMENTAL SVCS INC
Owner/operator address:	5151 SAN FELIPE DR STE 1600 HOUSTON, TX 77056
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	03/13/2002
Owner/Op end date:	Not reported
Owner/operator name:	WATKINS MOTOR LINES
Owner/operator address:	1144 W GRIFFIN RD PO BOX 95002 LAKELAND, FL 32804
Owner/operator country:	Not reported
Owner/operator telephone:	(813) 687-4545

Map ID	Site	Database(s)	EPA ID Number

NORTRU INC TRANSPORTATION GROUP (Continued) **1004694142**

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: Yes

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Pesticides
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Thermostats
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Historical Generators:
Date form received by agency: 10/11/2007
Facility name: NORTRU INC TRANSPORTATION GROUP
Classification: Small Quantity Generator

Date form received by agency: 06/29/1992
Facility name: NORTRU INC TRANSPORTATION GROUP
Site name: HIGHWAY TRANSPORT
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

Map ID	Site	Database(s)	EPA ID Number

NORTRU INC TRANSPORTATION GROUP (Continued) **1004694142**

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

Waste code: D018
Waste name: BENZENE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

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157 **PRAXAIR DISTRIBUTION INC** **RCRA-CESQG** **1004476903**
12054 SOUTHWEST DOTY AVENUE **ILD082545732**
CHICAGO, IL 60628

RCRA-CESQG:
Date form received by agency: 03/01/2000
Facility name: PRAXAIR DISTRIBUTION INC
Facility address: 12054 SW DOTY AVE
CHICAGO, IL 60628
EPA ID: ILD082545732
Mailing address: 12000 ROOSEVELT RD
HILLSIDE, IL 60162
Contact: DEBBIE BOE
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (773) 568-8840
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No

Map ID	Site	Database(s)	EPA ID Number

PRAXAIR DISTRIBUTION INC (Continued) **1004476903**

Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	02/12/1998
Facility name:	PRAXAIR DISTRIBUTION INC
Classification:	Conditionally Exempt Small Quantity Generator
Date form received by agency:	03/01/1996
Facility name:	PRAXAIR DISTRIBUTION INC
Site name:	LIQUID CARBONIC INDUSTRIES
Classification:	Large Quantity Generator
Violation Status:	No violations found

---

157 **SPILLS** **S111901168**
12054 S DOTY AVE **N/A**
CHICAGO, IL

SPILLS:

Incident ID:	19980913
Incident Date:	04/22/1998
Date Received:	04/22/1998
Facility Address:	12054 S DOTY AVE
Facility City:	CHICAGO
PRP Name:	PRAXAIR INC
AC:	Not reported

---

157 **LIQUID CARBONIC CORP** **UST** **U001142744**
12054 S W DOTY AVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2018568
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Liquid Carbonic Corp
Owner Id:	U0009226
Owner Address:	810 Jorie Blvd
Owner City,St,Zip:	Oak Brook, IL 60521
Tank Number:	1
Tank Capacity:	2500
Tank Substance:	Diesel Fuel
Last Used Date:	9/14/1995
OSFM First Notify Date:	4/1/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

LIQUID CARBONIC CORP (Continued) **U001142744**

Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

---

158 **TRI CITY TANK WASH** **UST** **U001143228**
11901 S COTTAGE GROVE **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2014827
Facility Status:	INACTIVE
Facility Type:	**NONE**
Owner Name:	Tri City Tank Wash
Owner Id:	U0015198
Owner Address:	11901 S Cottage Grove
Owner City,St,Zip:	Chicago, IL 60628

Tank Number:	1
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986
Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	3
Tank Capacity:	99
Tank Substance:	Not reported
Last Used Date:	Not reported
OSFM First Notify Date:	4/15/1986

Map ID	Site	Database(s)	EPA ID Number
	TRI CITY TANK WASH (Continued)		**U001143228**

Tank Status:	**Out of service**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

161	**12101 S DOTY AVE** **CHICAGO, IL**	**SPILLS**	**S111896851** **N/A**

SPILLS:

Incident ID:	19961553
Incident Date:	08/27/1996
Date Received:	08/27/1996
Facility Address:	12101 S DOTY AVE
Facility City:	CHICAGO
PRP Name:	MEDUSA PORTLAND CEMENT
AC:	Not reported

161	**12101 S. DOTY** **CHICAGO, IL 60633**	**ERNS**	**96505325** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

161	**12101 SOUTH DOTY AVE DOCK ON CALUMET RIVER SLIP 3** **CHICAGO, IL**	**ERNS**	**99628634** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

162	**11900 S COTTAGE GROVE AVE** **CHICAGO, IL**	**SPILLS**	**S111877539** **N/A**

SPILLS:

Incident ID:	19902351
Incident Date:	Not reported
Date Received:	08/17/1990
Facility Address:	11900 S COTTAGE GROVE AVE
Facility City:	CHICAGO
PRP Name:	SAMUEL G. KEYWELL CO.

Map ID	Site	Database(s)	EPA ID Number
	(Continued)		**S111877539**

AC: Not reported

189	**AMOOC SS #18717 FACILITY #24277** **12701 SOUTH HALSTED** **CHICAGO, IL 60600**	**UST**	**U001141866** **N/A**

UST:

Facility ID:	2023194
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	BP Products North America, Inc.
Owner Id:	U0000552
Owner Address:	P. O. Box 6038 Environmental Compliance Department
Owner City,St,Zip:	Artesia, CA 90702
Tank Number:	1
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported
Tank Number:	3
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	1/1/1989
OSFM First Notify Date:	4/25/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	AMOOC SS #18717 FACILITY #24277 (Continued)		**U001141866**

Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

189	**12701 S DOTY AVE** **CHICAGO, IL**	**SPILLS**	**S111884590** **N/A**

SPILLS:

Incident ID:	19921832
Incident Date:	Not reported
Date Received:	07/07/1992
Facility Address:	12701 S DOTY AVE
Facility City:	CHICAGO
PRP Name:	RESERVE IRON & METAL
AC:	Not reported

189	**12701 S DOTY AVE** **CHICAGO, IL**	**SPILLS**	**S111905694** **N/A**

SPILLS:

Incident ID:	19992245
Incident Date:	09/30/1999
Date Received:	10/01/1999
Facility Address:	12701 S DOTY AVE
Facility City:	CHICAGO
PRP Name:	TRANS SCHENK
AC:	Not reported

189	**METAL MANAGEMENT MIDWEST INC** **12701 S DOTY AVE-B** **CHICAGO, IL 60633**	**RCRA-SQG**	**1014472131** **ILR000166009**

RCRA-SQG:

Date form received by agency:	03/28/2011
Facility name:	METAL MANAGEMENT MIDWEST INC
Facility address:	12701 S DOTY AVE-B CHICAGO, IL 60633
EPA ID:	ILR000166009
Contact:	DANIEL KOLLMON
Contact address:	12701 S DOTY AVE-B CHICAGO, IL 60633
Contact country:	US
Contact telephone:	(773) 383-9420
Contact email:	DANIEL.KOLLMON@SIMSMM.COM
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Map ID	Site	Database(s)	EPA ID Number

METAL MANAGEMENT MIDWEST INC (Continued) **1014472131**

Owner/Operator Summary:

Owner/operator name:	METAL MGT MIDWEST INC
Owner/operator address:	999 MCCLINTOCK BURR RIDGE, IL 60527
Owner/operator country:	US
Owner/operator telephone:	(630) 288-9400
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	05/23/2011
Owner/Op end date:	Not reported

Owner/operator name:	METAL MGT MIDWEST INC
Owner/operator address:	999 MCCLINTOCK BURR RIDGE, IL 60527
Owner/operator country:	US
Owner/operator telephone:	(630) 288-9400
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	05/23/2011
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
191	**CONTINENTAL GRAIN CO** **127TH & DOTY AVE** **CHICAGO, IL 60633**	**UST**	**U000791610** **N/A**

UST:

Facility ID:	2008867
Facility Status:	CLOSED
Facility Type:	**PORT DISTRICT**
Owner Name:	Il International Port Dist
Owner Id:	U0007390
Owner Address:	3600 E 95Th
Owner City,St,Zip:	Chicago, IL 60617

Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	9/1/1995
OSFM First Notify Date:	4/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	3000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	4/30/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

192	**12900 S DOTY** **CHICAGO, IL**	**SPILLS**	**S108045432** **N/A**

SPILLS:

Incident ID:	20041479
Incident Date:	Not reported
Date Received:	10/25/2004
Facility Address:	12900 S DOTY
Facility City:	CHICAGO
PRP Name:	UNKNOWN
AC:	Not reported

Map ID	Site	Database(s)	EPA ID Number
193	**CALUMET NU-EARTH DIST CENTER** **NORTH 130TH ST & DOTY AVE** **CHICAGO, IL 60628**	**CERC-NFRAP**	**1003870307** **ILD980903686**

CERC-NFRAP:

Site ID:	0500927
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	Low priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	09/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	12/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	10/31/1991
Priority Level:	Not reported

Count: 27 records

FOCUS MAP 12 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	S108111043	CHICAGO REGIONAL PORT DISTRICT	111TH & CALUMET EXPY	60617	SWF/LF
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S108112646	PAXTON LANDFILL CORP #2	116TH & OGELSBY	60617	SWF/LF
CHICAGO	1014389970	COMED	119TH & PAULINA	60617	RCRA-SQG
CHICAGO	1003870122	ILLINOIS CENTRAL RR TRACKS	119TH STREET EAST IL CENTRAL TRACKS	60628	CERC-NFRAP
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S108111042	CHICAGO MSD #4	124TH & OGELSBY	60617	SWF/LF
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	1004695029	ARMY COE LOCK DAM 01	134TH AND CALUMET RIVER	60633	RCRA-CESQG
CHICAGO	S108939041	USX REALTY DEVELOPMENT PBR	3426 89TH ST E	60617	SWF/LF
CHICAGO	U003838643	95TH STREET PROPERTY	95TH ST & COLFAZ AVE	60617	UST
CHICAGO	1001228053	CDOT/BRIDGES	95TH ST BRIDGE/CALUMET RIVER	60617	RCRA-LQG
CHICAGO	S107926345	VAN VLISSINGEN PROPERTY	96TH & VAN VLISSINGEN RD	60617	SSU
CHICAGO	U004158163	T. J. OBRIEN LOCK & DAM	13400 S CALUMET RIV	60633	UST
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	S108111350	ENVIROTHERM	11700 STONY IS	60617	SWF/LF
CHICAGO	1008150443	PAXTON LANDFILL CORP	TORRENCE AVE	60617	SWF/LF
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST	60827	LUST

Focus Map 13

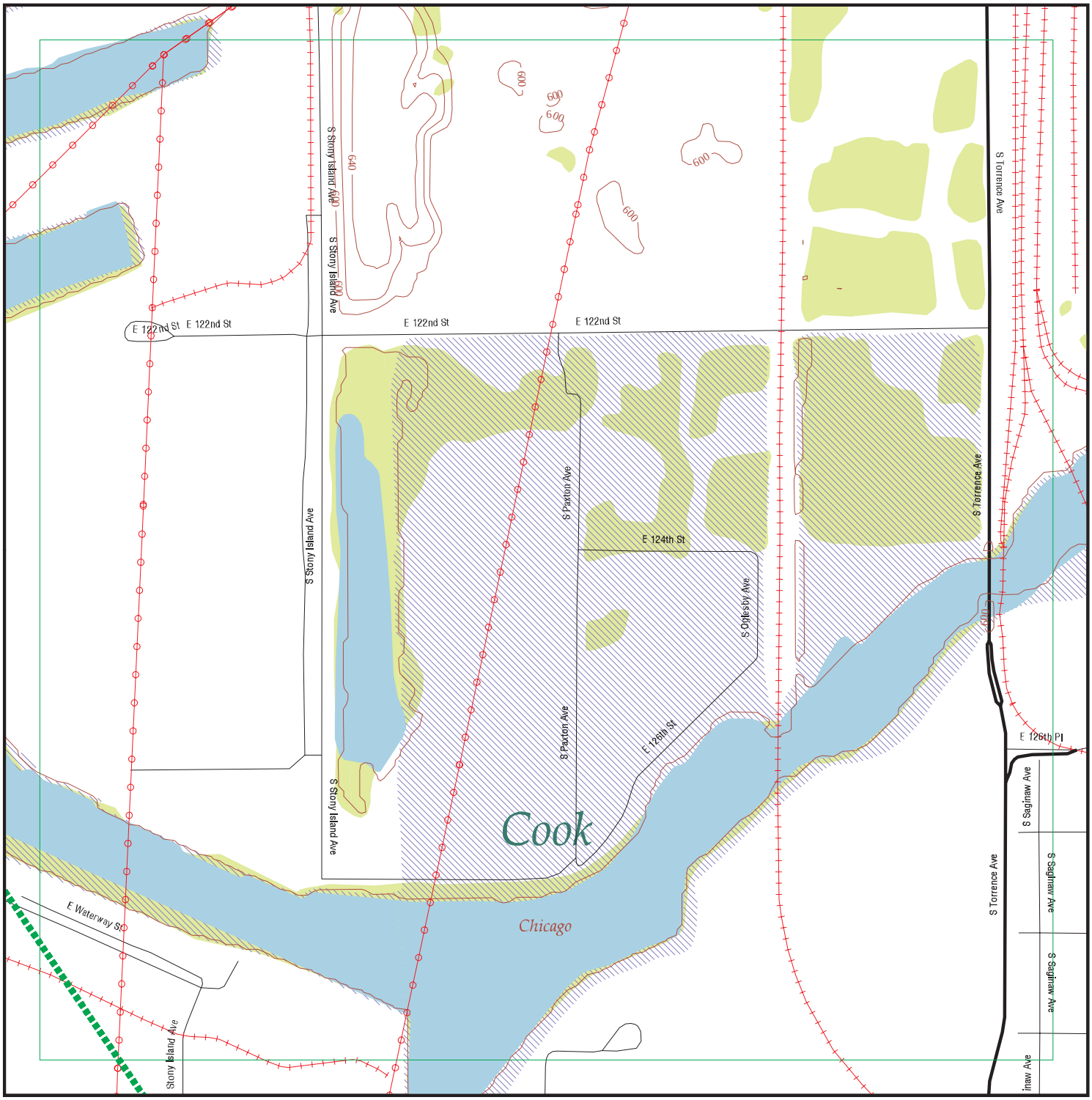

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90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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Count: 20 records

FOCUS MAP 13 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1014390033	COMED	100TH & TORRENCE	60633	RCRA-SQG
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S108111043	CHICAGO REGIONAL PORT DISTRICT	111TH & CALUMET EXPY	60617	SWF/LF
CHICAGO	1010784332	COMED	113TH & TORRENCE	60617	RCRA-LQG
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S108112646	PAXTON LANDFILL CORP #2	116TH & OGELSBY	60617	SWF/LF
CHICAGO	S109756592	CLEAN HARBORS	118TH & STONY ISLAND RD	60633	MANIFEST
CHICAGO	S109756593	CLEAN HARBORS OF CHICAGO INC	118TH & STONY ISLAND RD	60633	MANIFEST
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	S108111042	CHICAGO MSD #4	124TH & OGELSBY	60617	SWF/LF
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S108939041	USX REALTY DEVELOPMENT PBR	3426 89TH ST E	60617	SWF/LF
CHICAGO	S107926345	VAN VLISSINGEN PROPERTY	96TH & VAN VLISSINGEN RD	60617	SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
CHICAGO	S108111350	ENVIROTHERM	11700 STONY IS	60617	SWF/LF
CHICAGO	1008150443	PAXTON LANDFILL CORP	TORRENCE AVE	60617	SWF/LF

Focus Map 14

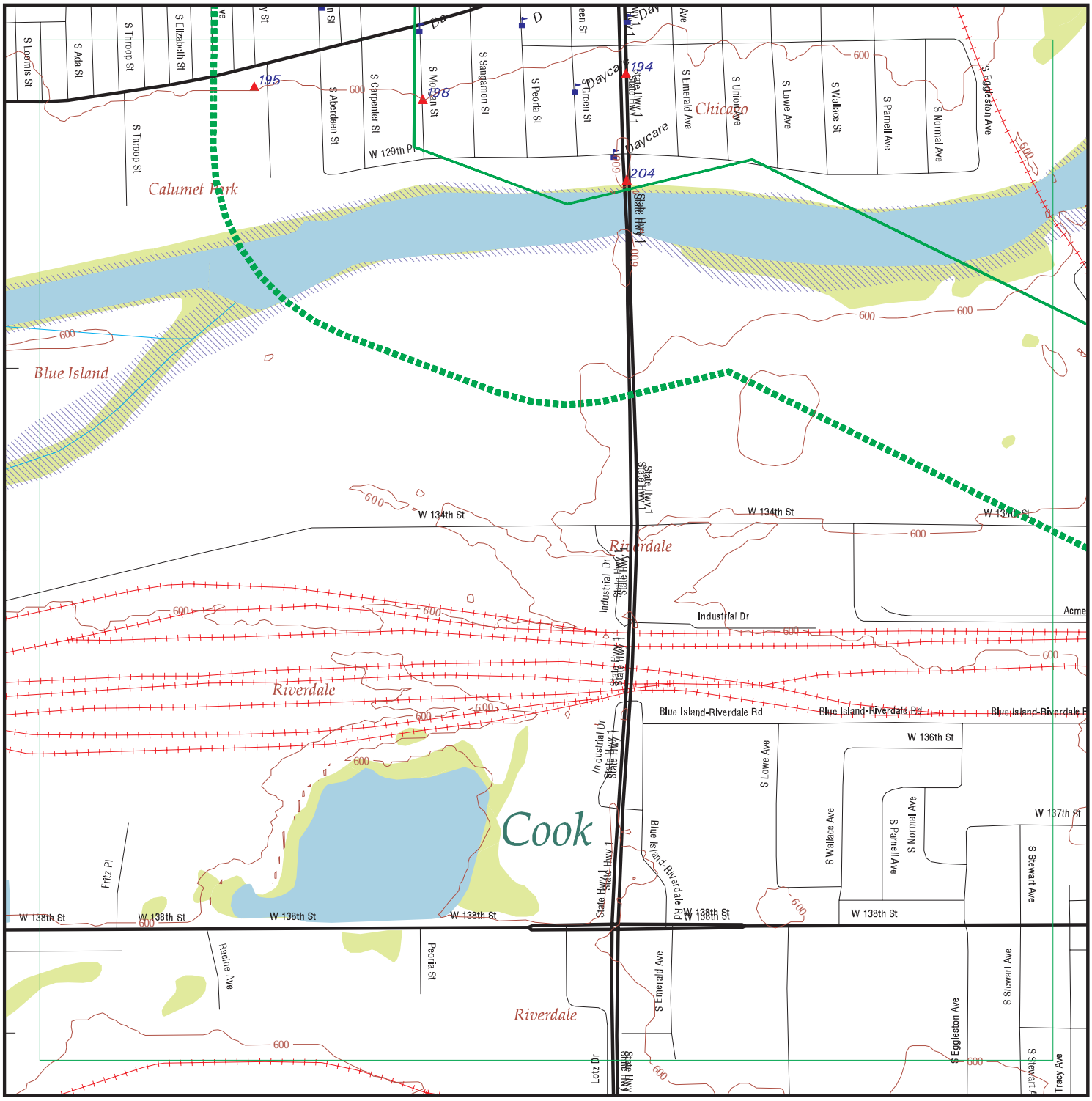

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

N

Legend

- Roads
- Major Roads
- Contour Lines
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- Waterways
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- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

0 1/8 1/4

Scale in Miles

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FOCUS MAP 14 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	1
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	1
RCRA-CESQG	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	1
UST	3
SPILLS	1
ENG CONTROLS	0
INST CONTROL	0
SRP	0
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
194	**YOUNGS AUTO SUPPLY INC** **12853 S HALSTED** **CHICAGO, IL 60628**	**RCRA-SQG**	**1000315322** **ILD025355173**

RCRA-SQG:

Date form received by agency:	10/02/1986
Facility name:	YOUNGS AUTO SUPPLY INC
Facility address:	12853 S HALSTED CHICAGO, IL 60628
EPA ID:	ILD025355173
Contact:	VINCE PALERMO
Contact address:	12853 S HALSTED CHICAGO, IL 60628
Contact country:	US
Contact telephone:	(312) 568-0001
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PALERMO JOSEPH
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

Map ID	Site	Database(s)	EPA ID Number

YOUNGS AUTO SUPPLY INC (Continued) **1000315322**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

---

194 **CHRIST CHURCH BAPTIST** **UST** **U003762893**
12844 S HALSTED ST **N/A**
CHICAGO, IL 60643

UST:
Facility ID: 2040075
Facility Status: EXEMPT
Facility Type: NONE
Owner Name: Christ Church Baptist
Owner Id: U0029746
Owner Address: 12844 S Halsted St
Owner City,St,Zip: Chicago, IL 60643

Tank Number: 1
Tank Capacity: 1000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: Not reported
Tank Status: Exempt from registration
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: Not reported
Green Tag Issue Date: Not reported
Green Tag Expire Date: Not reported
Self Service Permit Inspection Date: Not reported
Self Service Permit Expire Date: Not reported
Fee Due: Not reported

Map ID	Site	Database(s)	EPA ID Number
194	**CHRIST CHURCH** **12844 SOUTH HALSTED ST.** **CHICAGO, IL 60628**	**LUST**	**S104530683** **N/A**

LUST:

Incident Num:	20000796
IL EPA Id:	0316495130
Product:	Other Petro
IEMA Date:	05/01/2000
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Christ Church
PRP Contact:	Rev. Lee Toussaint
PRP Address:	12844 South Halsted St.
PRP City,St,Zip:	Chicago, IL 60628
PRP Phone:	7088498711
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

194	**12844 S HALSTED ST** **CHICAGO, IL**	**SPILLS**	**S111907108** **N/A**

SPILLS:

Incident ID:	20000796
Incident Date:	Not reported
Date Received:	05/01/2000
Facility Address:	12844 S HALSTED ST
Facility City:	CHICAGO
PRP Name:	CHRIST CHURCH
AC:	Not reported

195	**CIZCAR ET AL/VACANT LOT** **1137-1141 VERMONT AVE** **CALUMET PARK, IL 60409**	**CERC-NFRAP**	**1002886325** **ILD980500144**

CERC-NFRAP:

Site ID:	0500575
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	08/01/1980
Priority Level:	Not reported
Action:	CONSENT DECREE
Date Started:	Not reported
Date Completed:	03/25/1982

Map ID	Site	Database(s)	EPA ID Number

CIZCAR ET AL/VACANT LOT (Continued) **1002886325**

Priority Level:	Not reported
Action:	Lodged By DOJ
Date Started:	Not reported
Date Completed:	03/25/1982
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	02/01/1984
Priority Level:	Low priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	03/31/1986
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	08/23/1993
Priority Level:	Not reported

---

198 **TRIPLEX MARINE SERV** **UST** **U000181285**
13100 S MORGAN ST **N/A**
RIVERDALE, IL 60627

UST:

Facility ID:	2028752
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Triplex Marine Serv
Owner Id:	U0018321
Owner Address:	13100 S Morgan St
Owner City,St,Zip:	Riverdale, IL 60627
Tank Number:	1
Tank Capacity:	4000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	11/19/1991
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	No

Map ID	Site	Database(s)	EPA ID Number
204	**RIVERDALE VILLAGE OF** **130TH & HALSTED ST** **RIVERDALE, IL 60627**	**UST**	**U001134487** **N/A**

UST:

Facility ID:	2001711
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Riverdale Village Of
Owner Id:	U0012804
Owner Address:	325 W 142nd St
Owner City,St,Zip:	Riverdale, IL 60827
Tank Number:	1
Tank Capacity:	500
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	1/16/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Count: 20 records

FOCUS MAP 14 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLUE ISLAND	S108113026	SEXTON	123RD ST & CALIFORNIA	60406	SWF/LF
BLUE ISLAND	1014476128	2833 W. 139TH ST - TOD 12E	2833 W 139TH SAINT VACANT LOT	60406	US BROWNFIELDS
BLUE ISLAND	1014476133	2853 W. 139TH ST - TOD SITE 12C	2853 W 139TH SAINT CITY OWNED VACANT	60406	US BROWNFIELDS
BLUE ISLAND	1014476132	2849 W. 139TH ST - TOD SITE 12B	2849 W 139TH SAINT VACANT CHURCH PROP	60406	US BROWNFIELDS
BLUE ISLAND	1014476129	2837 W. 139TH ST - TOD SITE 12F	2837 W 139TH SAINT VACANT LOT	60406	US BROWNFIELDS
BLUE ISLAND	1014476130	2841 W. 139TH ST - TOD SITE 12G	2841 W 139TH SAINT CITY OWNED VACANT	60406	US BROWNFIELDS
BLUE ISLAND	1004693546	KILSBY ROBERTS	2850 W 139TH ST	60406	RCRA-CESQG
BLUE ISLAND	1003108961	CLARK/BLUE ISLAND	CLARK REFINERY, 13100 S KEDZIE	60406	CERCLIS
BLUE ISLAND	S105015149	CLARK BLUE ISLAND REFINERY	1300 S KEDZIE	60406	SSU
CALUMET PARK	1000166385	CHICAGO COPPER AND CHEMICAL COMPANY	INTERSECTION OF WINCHESTER RD & 127 ST.	60643	CERCLIS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS
RIVERDALE	S103292952	RIVERDALE PLATING	6860 W 134TH ST	60827	LUST
RIVERDALE	S106121908	TWIN OUTDOOR THEATER	13701 S UNION AVE	60827	SRP

Focus Map 15

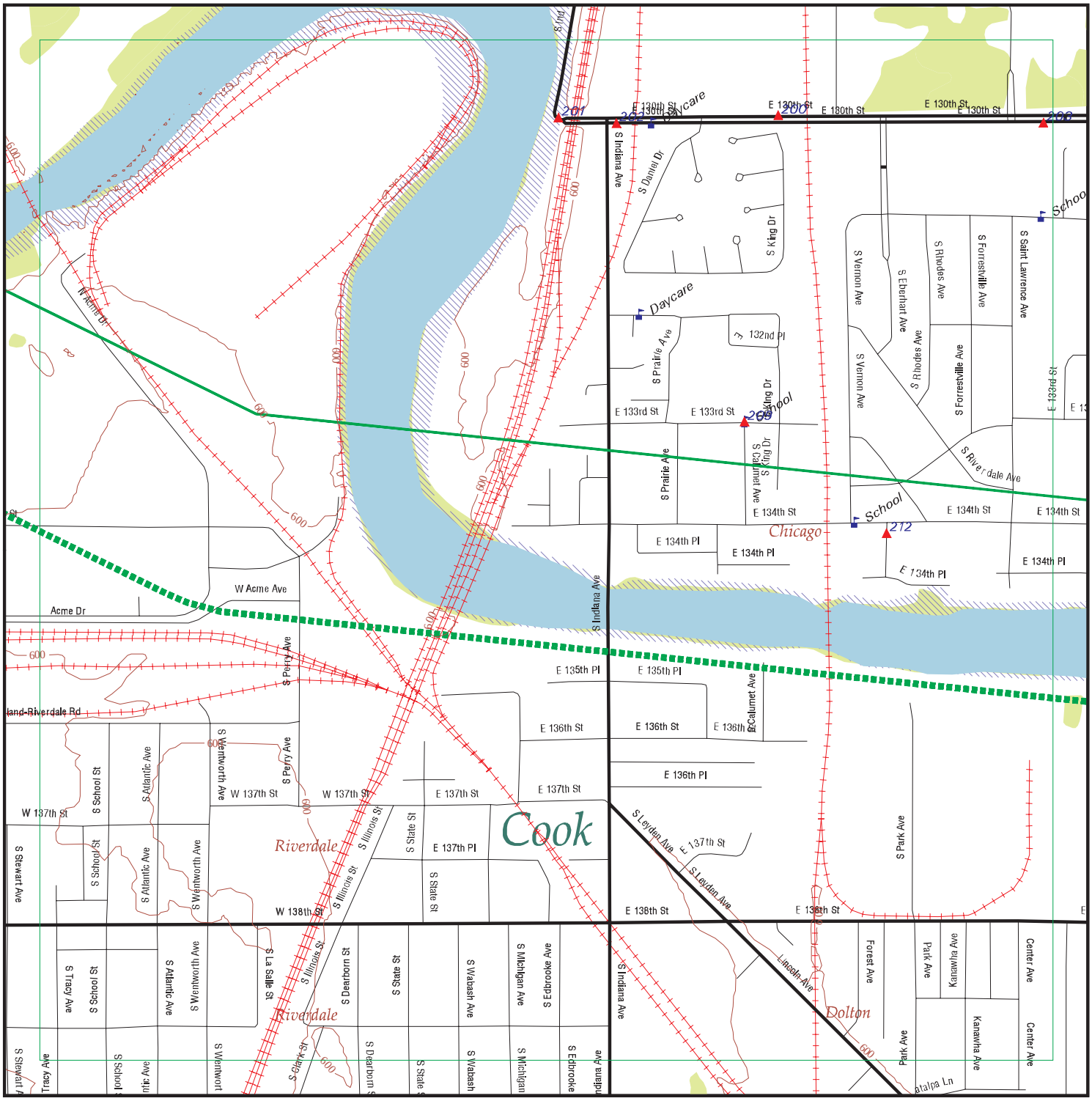

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
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- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 15 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	1
CERC-NFRAP	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	2
RCRA-CESQG	1
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	1
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
IL SSU	0
IL SWF/LF	0
IL LUST	0
IL UST	5
WI MANIFEST	1
IL SPILLS	0
IL ENG CONTROLS	0
IL INST CONTROL	0
IL SRP	0
IL DRYCLEANERS	0
IL BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
200	**MWRDGC METROPOLITAN WATER RECLAMATION DI** **400 E 130TH ST** **CHICAGO, IL 60628**	**RCRA-CESQG** **WI MANIFEST**	**1000131012** **ILD000870832**

RCRA-CESQG:

Date form received by agency:	03/01/1998
Facility name:	MWRDGC METROPOLITAN WATER RECLAMATION DI
Site name:	MWRDGC
Facility address:	400 E 130TH ST CHICAGO, IL 60628
EPA ID:	ILD000870832
Mailing address:	2918 E 95TH ST CHICAGO, IL 60617
Contact:	WILLIAM PAPKE
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(312) 821-2349
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/01/1996
Facility name:	MWRDGC METROPOLITAN WATER RECLAMATION DI
Site name:	MWRDGC

Map ID	Site	Database(s)	EPA ID Number

MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued) **1000131012**

Classification: Large Quantity Generator

Date form received by agency: 02/15/1996
Facility name: MWRDGC METROPOLITAN WATER RECLAMATION DI
Classification: Conditionally Exempt Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: SR - 722.141(a)
Area of violation: Generators - General
Date violation determined: 09/07/1999
Date achieved compliance: 12/07/1999
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 11/05/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.141(a)
Area of violation: Generators - General
Date violation determined: 09/07/1999
Date achieved compliance: 12/07/1999
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 09/13/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 09/07/1999
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 12/07/1999
Evaluation lead agency: State

Evaluation date: 01/29/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

WI MANIFEST:
Year: 10
EPA ID: ILD000870832
FID: Not reported
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported

Map ID	Site	Database(s)	EPA ID Number
	MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued)		**1000131012**

Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 09
EPA ID: ILD000870832
FID: Not reported
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported

Map ID	Site	Database(s)	EPA ID Number
	MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued)		**1000131012**

Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 08
EPA ID: ILD000870832
FID: Not reported
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported

Map ID	Site	Database(s)	EPA ID Number
	MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued)		**1000131012**

Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 07
EPA ID: ILD000870832
FID: 0
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: 0
Contact Telephone: 0
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported

Map ID	Site	Database(s)	EPA ID Number
	MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued)		**1000131012**

Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 06
EPA ID: ILD000870832
FID: 0
ACT Code: 203
ACT Status: A
ACT Code 1: 203
ACT Name: HW Generator - Very Small
Contact First Name: Not reported
Contact Last Name: Not reported
Contact Title: Not reported
Contact Address: Not reported
Contact State: Not reported
Contact City: Not reported
Contact Zip: Not reported
Contact Telephone: Not reported
Contact Extention: Not reported
Contact Email Address: Not reported
Shipped: -
Year: Not reported
Manifest DOC ID: Not reported
Copy Type: Not reported
Gen EPA ID: Not reported
Gen Date: Not reported
TSD Date: Not reported
TSD EPA ID: Not reported
GEN Copy Revd Date: Not reported
TSG Copy Revd Date: Not reported

Transport: -
Year: Not reported
Manifest Doc ID: Not reported
Transporter EPA ID: Not reported
Transport Order Num: Not reported
Transport Date: Not reported

Waste:
Year: Not reported
Manifest DOC ID: Not reported
Waste Page No: Not reported
Waste Line No: Not reported
Waste Code: Not reported
Waste Amount: Not reported
Unit of Measure: Not reported
Waste LBS: Not reported

Year: 05
EPA ID: ILD000870832
FID: 0
ACT Code: 203
ACT Status: A

Map ID	Site	Database(s)	EPA ID Number

MWRDGC METROPOLITAN WATER RECLAMATION DI (Continued) **1000131012**

ACT Code 1:	203
ACT Name:	HW Generator - Very Small
Contact First Name:	Not reported
Contact Last Name:	Not reported
Contact Title:	Not reported
Contact Address:	Not reported
Contact State:	Not reported
Contact City:	Not reported
Contact Zip:	0
Contact Telephone:	0
Contact Extention:	Not reported
Contact Email Address:	Not reported
Shipped:	-
Year:	Not reported
Manifest DOC ID:	Not reported
Copy Type:	Not reported
Gen EPA ID:	Not reported
Gen Date:	Not reported
TSD Date:	Not reported
TSD EPA ID:	Not reported
GEN Copy Revd Date:	Not reported
TSG Copy Revd Date:	Not reported
Transport:	-
Year:	Not reported
Manifest Doc ID:	Not reported
Transporter EPA ID:	Not reported
Transport Order Num:	Not reported
Transport Date:	Not reported

Waste:

Year:	Not reported
Manifest DOC ID:	Not reported
Waste Page No:	Not reported
Waste Line No:	Not reported
Waste Code:	Not reported
Waste Amount:	Not reported
Unit of Measure:	Not reported
Waste LBS:	Not reported

---

200 **CALUMET WATER RECLAMATION PLANT** **IL UST** **U001142814**
400 E. 130TH STREET **N/A**
CHICAGO, IL 60628

UST:

Facility ID:	2018929
Facility Status:	ACTIVE
Facility Type:	**CITY / TOWN**
Owner Name:	Metropolitan Water Reclamation District
Owner Id:	U0010188
Owner Address:	100 East Erie Street
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	15000
Tank Substance:	Diesel Fuel

Map ID	Site	Database(s)	EPA ID Number

CALUMET WATER RECLAMATION PLANT (Continued) **U001142814**

Last Used Date:	Not reported
OSFM First Notify Date:	1/7/1987
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1979
Green Tag Decal:	**L003680**
Green Tag Issue Date:	**3/11/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	1/7/1987
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1976
Green Tag Decal:	**L003680**
Green Tag Issue Date:	**3/11/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	3
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	1/7/1987
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1982
Green Tag Decal:	**L003680**
Green Tag Issue Date:	**3/11/2010**
Green Tag Expire Date:	**12/31/2012**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

---

201 **COOK COUNTY LUMBER CO** **IL UST** **U001142356**
200 E 130TH ST **N/A**
CHICAGO, IL 60627

UST:

Facility ID:	2003404
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	Cook County Lumber Co
Owner Id:	U0003394
Owner Address:	200 E 130Th St
Owner City,St,Zip:	Chicago, IL 60627

Tank Number:	1

Map ID	Site	Database(s)	EPA ID Number
	COOK COUNTY LUMBER CO (Continued)		**U001142356**

Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	3/18/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

202	**INTERNATIONAL TRANSP SER INC** **130TH & INDIANA AVE** **RIVERDALE, IL 60627**	**IL UST**	**U000160789** **N/A**

UST:

Facility ID:	2001838
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Name:	International Transp Ser Inc
Owner Id:	U0007571
Owner Address:	3300 Ne Expressway Ste 1-M
Owner City,St,Zip:	Atlanta, GA 30341
Tank Number:	1
Tank Capacity:	10000
Tank Substance:	Diesel Fuel
Last Used Date:	Not reported
OSFM First Notify Date:	2/13/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

202	**PULLMAN FACTORY** **130TH ST & INDIANA** **CHICAGO, IL 60643**	**CERCLIS**	**1000289828** **ILD981959208**

CERCLIS:

Site ID:	0501149
EPA ID:	ILD981959208
Facility County:	COOK
Short Name:	PULLMAN FACTORY
Congressional District:	02
IFMS ID:	B5JE
SMSA Number:	1600
USGC Hydro Unit:	07120003
Federal Facility:	Not a Federal Facility

Map ID	Site	Database(s)	EPA ID Number

PULLMAN FACTORY (Continued) **1000289828**

DMNSN Number: Not reported
Site Orphan Flag: N
RCRA ID: Not reported
USGS Quadrangle: Not reported
Site Init By Prog: Not reported
NFRAP Flag: Not reported
Parent ID: Not reported
RST Code: Not reported
EPA Region: 05
Classification: Not reported
Site Settings Code: Not reported
NPL Status: Not on the NPL
DMNSN Unit Code: Not reported
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: HRS Start Needed
Non NPL Status Date: 20000120
Site Fips Code: 17031
CC Concurrence Date: Not reported
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

Alias Comments: Not reported
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: Not reported
Date Completed: 06/17/1987
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 08/14/1987
Priority Level: Low priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

Action Code: 001
Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 10/19/1990
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE

Map ID	Site	Database(s)	EPA ID Number

PULLMAN FACTORY (Continued) **1000289828**

Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

Action Code:	001
Action:	EXPANDED SITE INSPECTION
Date Started:	12/21/1993
Date Completed:	01/13/1995
Priority Level:	Recommended for HRS Scoring
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

---

202 **130TH CITGO** **IL UST** **U003971940**
13002 S INDIANA **N/A**
CHICAGO, IL 60627

UST:

Facility ID:	2042131
Facility Status:	NOT INSTALLED
Facility Type:	**NONE**
Owner Name:	Sibi Kabalimato
Owner Id:	U0031927
Owner Address:	1519 W 81st St
Owner City,St,Zip:	Chicago, IL 60620

Tank Number:	1
Tank Capacity:	8000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not Installed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

Tank Number:	2
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Tank Status:	**Not Installed**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**

Map ID	Site	Database(s)	EPA ID Number
	130TH CITGO (Continued)		**U003971940**

Self Service Permit Inspection Date: **Not reported**
Self Service Permit Expire Date: **Not reported**
Fee Due: Not reported

202	**SMITH TIRE SERVICE** **13004 S INDIANA** **CHICAGO, IL 60627**	**RCRA-SQG**	**1001024401** **ILR000003749**

RCRA-SQG:

Date form received by agency:	12/24/2009
Facility name:	SMITH TIRE SERVICE
Facility address:	13004 S INDIANA CHICAGO, IL 60627
EPA ID:	ILR000003749
Contact:	WILLIE SMITH
Contact address:	520 W 127TH PL CHICAGO, IL 60627
Contact country:	US
Contact telephone:	(312) 468-4134
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SMITH WILLIE
Owner/operator address:	520 W 127TH PL CHICAGO, IL 60627
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 568-9847
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Map ID	Site	Database(s)	EPA ID Number

SMITH TIRE SERVICE (Continued) **1001024401**

Historical Generators:
Date form received by agency: 04/28/1995
Facility name: SMITH TIRE SERVICE
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

---

203 **ERNS** **98467878**
633 EAST 130TH ST. **N/A**
DOLTON, IL 60419

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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209 **DUBOIS** **RCRA-SQG** **1001123582**
330 E 133RD ST **ILR000032862**
CHICAGO, IL 60627

RCRA-SQG:
Date form received by agency: 01/08/1997
Facility name: DUBOIS
Facility address: 330 E 133RD ST
CHICAGO, IL 60627
EPA ID: ILR000032862
Contact: JOYCE JOHNSON
Contact address: 330 E 133RD ST
CHICAGO, IL 60627
Contact country: US
Contact telephone: (773) 535-5582
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

Map ID	Site	Database(s)	EPA ID Number
	DUBOIS (Continued)		**1001123582**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
212	**SKIPPER'S MARINA** **13421 S VERNON** **CHICAGO, IL 60827**	**IL UST**	**U000865873** **N/A**

UST:

Facility ID:	2007724
Facility Status:	ACTIVE
Facility Type:	**MARINA**
Owner Name:	Earl Strombeck
Owner Id:	U0014025
Owner Address:	13421 S Vernon
Owner City,St,Zip:	Chicago, IL 608271806
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1997
OSFM First Notify Date:	4/26/1986
Tank Status:	**Removed**
Red Tag Issue Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number
	SKIPPER'S MARINA (Continued)		**U000865873**

Install Date:	Not reported
Green Tag Decal:	**K003801**
Green Tag Issue Date:	**9/1/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Tank Number:	2
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	4/26/1986
Tank Status:	**Currently in use**
Red Tag Issue Date:	Not reported
Install Date:	6/30/1975
Green Tag Decal:	**K003801**
Green Tag Issue Date:	**9/1/2009**
Green Tag Expire Date:	**12/31/2011**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	$0.00

Count: 11 records

FOCUS MAP 15 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S109167302		549 115TH ST		IL LUST, IL SPILLS
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		IL SSU
CHICAGO	S109366427		6700 JEFFREY BLVD		IL LUST, IL SPILLS
CHICAGO	S108891646		11900 LOOMIS		IL LUST, IL SPILLS
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	IL SSU
DOLTON	1012209907	DOLTON HAZMAT	DOLTON AVE EXIT ON THE BISHOP FORD	60419	CERCLIS
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST	60827	IL LUST
RIVERDALE	S103292952	RIVERDALE PLATING	6860 W 134TH ST	60827	IL LUST
RIVERDALE	S105427839	PM AG PROD. INC.	3550 S INDIANA AVE	60827	IL LUST

Focus Map 16

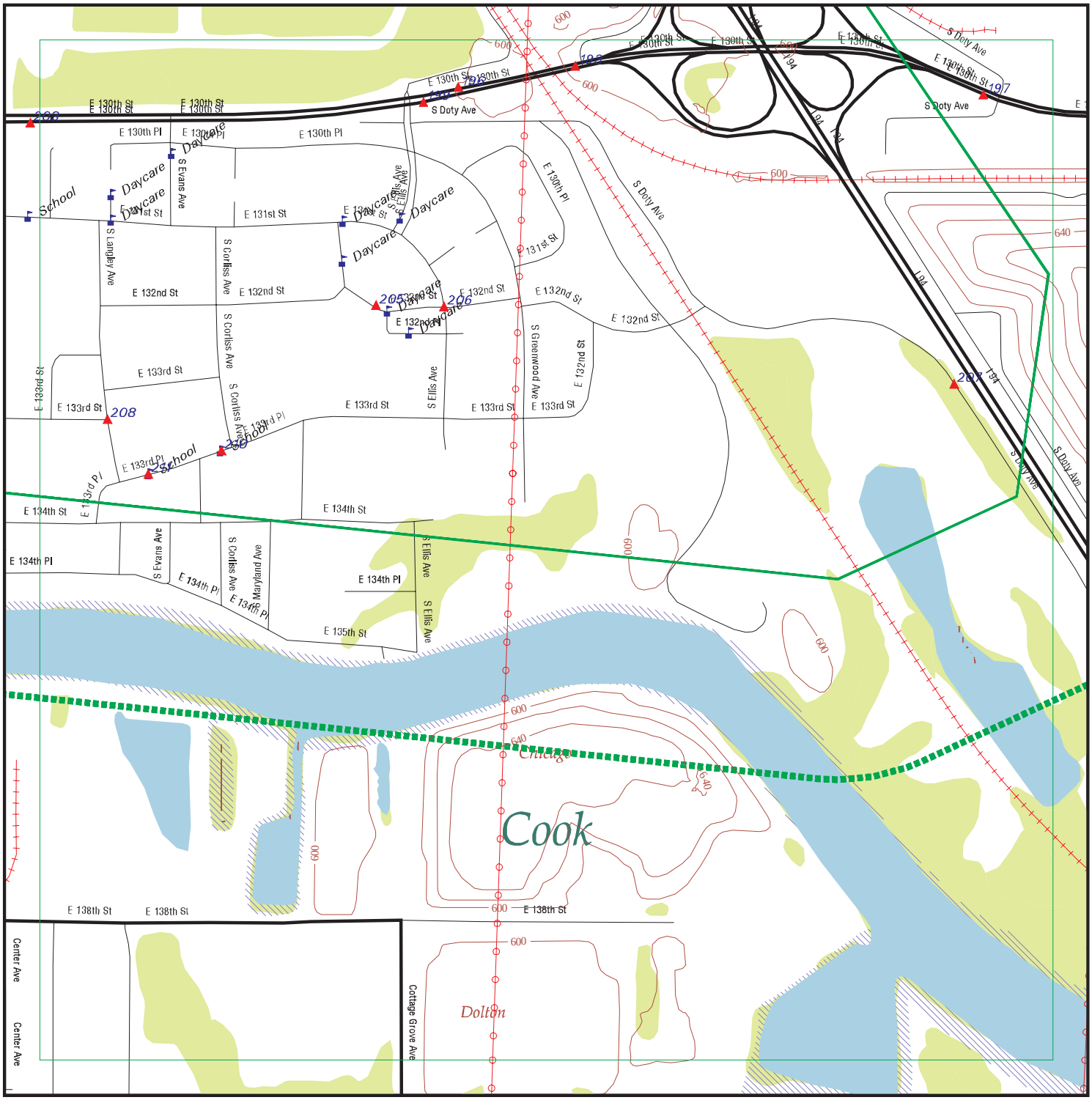

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

- Roads
- Major Roads
- Contour Lines
- National Wetlands Inventory
- Waterways
- Railroads
- Study Boundary
- 100-Yr Flood Zones
- Powerlines
- Pipelines
- Fault Lines
- Water
- Listed Sites
- Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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FOCUS MAP 16 SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
Proposed NPL	0
Delisted NPL	0
CERCLIS	0
CERC-NFRAP	1
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	6
RCRA-CESQG	3
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	3
US BROWNFIELDS	0
STATE AND LOCAL RECORDS	
SSU	0
SWF/LF	0
LUST	1
UST	3
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
SRP	1
DRYCLEANERS	0
BROWNFIELDS	0
EDR PROPRIETARY RECORDS	
Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

Map ID	Site	Database(s)	EPA ID Number
193	**CALUMET NU-EARTH DIST CENTER** **NORTH 130TH ST & DOTY AVE** **CHICAGO, IL 60628**	**CERC-NFRAP**	**1003870307** **ILD980903686**

CERC-NFRAP:

Site ID:	0500927
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	12/01/1984
Priority Level:	Low priority for further assessment
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	09/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	Not reported
Date Completed:	12/20/1985
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	ARCHIVE SITE
Date Started:	Not reported
Date Completed:	10/31/1991
Priority Level:	Not reported

196	**CHICAGO, CITY OF** **1100 E 130TH PL** **CHICAGO, IL 60628**	**RCRA-SQG**	**1006930428** **ILR000122952**

RCRA-SQG:

Date form received by agency:	07/31/2003
Facility name:	CHICAGO, CITY OF
Facility address:	1100 E 130TH PL CHICAGO, IL 60628
EPA ID:	ILR000122952
Mailing address:	30 N LASALLE 25TH FL CHICAGO, IL 60602
Contact:	TERRY SHEAHAN
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(312) 742-4806
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

Map ID	Site	Database(s)	EPA ID Number
	CHICAGO, CITY OF (Continued)		**1006930428**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	07/31/2003
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF CHICAGO
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	07/31/2003
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
197	**MOBILE STORAGE GROUP** **1465 E 130TH ST** **CHICAGO, IL 60633**	**RCRA-SQG**	**1000907064** **IL0000366484**

RCRA-SQG:

Date form received by agency:	06/14/1994
Facility name:	THREE QS AUTO INC
Facility address:	1465 E 130TH ST CHICAGO, IL 60633
EPA ID:	IL0000366484
Contact:	WARREN QUARCINI
Contact address:	1465 E 130TH ST CHICAGO, IL 60633
Contact country:	US
Contact telephone:	(312) 646-1600
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	THREE QS AUTO INC
Owner/operator address:	1465 E 130TH ST CHICAGO, IL 60633
Owner/operator country:	Not reported
Owner/operator telephone:	(312) 646-1600
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

Map ID	Site	Database(s)	EPA ID Number

MOBILE STORAGE GROUP (Continued) **1000907064**

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

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199 **LAND & LAKES TRANSFER STATION** **RCRA-SQG** **1004697781**
1258-1300 E 130TH ST **ILR000081000**
CHICAGO, IL 60827

RCRA-SQG:

Date form received by agency:	09/01/2000
Facility name:	LAND & LAKES TRANSFER STATION
Facility address:	1258-1300 E 130TH ST CHICAGO, IL 60827
EPA ID:	ILR000081000
Mailing address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Contact:	WM KARPAS
Contact address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Contact country:	US
Contact telephone:	(847) 825-5000
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MARINA DEVELOPMENTS INC
Owner/operator address:	123 N NORTHWEST HWY PARK RIDGE, IL 60068
Owner/operator country:	Not reported
Owner/operator telephone:	(847) 825-5000
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No

Map ID	Site	Database(s)	EPA ID Number

LAND & LAKES TRANSFER STATION (Continued) **1004697781**

Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D000
Waste name:	Not Defined
Waste code:	D010
Waste name:	SELENIUM
Waste code:	D018
Waste name:	BENZENE
Violation Status:	No violations found

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203 **ERNS** **98467878**

633 EAST 130TH ST. **N/A**
DOLTON, IL 60419

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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205 **CHICAGO HOUSING AUTHORITY** **LUST** **S108649962**
940 EAST 132ND STREET **SRP** **N/A**
CHICAGO, IL 60627

LUST:

Incident Num:	20070682
IL EPA Id:	0316545003
Product:	Gasoline
IEMA Date:	05/21/2007
Project Manager:	Jones
Project Manager Phone:	(217) 524-1253
Email:	Steve.Jones@illinois.gov
PRP Name:	Not reported
PRP Contact:	Not reported
PRP Address:	Not reported
PRP City,St,Zip:	Not reported
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	07/12/2007
45 Report Received:	08/08/2007
NFA/NFR Letter:	**09/10/2007**
NFR Date Recorded:	10/29/2007

SRP:

IL EPA Id:	0316545003

Map ID	Site	Database(s)	EPA ID Number

CHICAGO HOUSING AUTHORITY (Continued) **S108649962**

US EPA Id:	ILD981098395
Longitude:	-87.59881
Latitude:	41.65668
Contact Name:	John Gerut
Contact Address:	60 East Van Buren Street
Contact Address2:	13th Floor
Contact City,St,Zip:	Chicago, IL 60605-
Contact Phone:	(312) 913-7586
Date Enrolled:	11/23/2011
Point Of Contact:	Ala E. Sassila, P.E.
Consultant Company:	GSG Consultants, Inc.
Consultant Address:	855 West Adams Street
Consultant Address2:	Suite 200
Consultant City,St,Zip:	Chicago, IL 60607-
Consultant Phone:	(312) 733-6262
Proj Mgr Assigned:	Smith
Sec. 4 Letter Date:	Not reported
NFR Recorded:	Not reported
Active:	True
Total Acres:	2.589
No Further Remediation Letter Dt:	Not reported
Remediation Applicant Co:	Chicago Housing Authority
Remediation Applicant Title:	Mr.
Remediation Applicant Name:	Not reported
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	Not reported
Remediation Applicant Address 2:	Not reported
Remediation Applicant City,St,Zip:	Not reported
Illinois EPA:	Not reported
Site Name:	Not reported
NFR Letter:	Not reported
NFR Letter Date Recorded:	Not reported
Site Type:	Not reported
Comprehensive/Focused:	Not reported
Institutional Controls:	Not reported
Barrier:	Not reported
Worker Caution:	Not reported
Acres:	Not reported

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205 **MAINTENANCE BUILDING** **UST** **U004107042**
940 E. 132ND STREET **N/A**
CHICAGO, IL 60661

UST:

Facility ID:	2043650
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Name:	Chicago Housing Authority
Owner Id:	U0002876
Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported

Map ID	Site	Database(s)	EPA ID Number

MAINTENANCE BUILDING (Continued) **U004107042**

Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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205 **CARVER PARK NATATORIUM** **UST** **U001142250**
939 E 132ND ST **N/A**
CHICAGO, IL 60627

UST:

Facility ID:	2030903
Facility Status:	CLOSED
Facility Type:	**OTHER SPECIAL SERVICE DISTRICT**
Owner Name:	Chicago Park District
Owner Id:	U0002888
Owner Address:	541 North Fairbanks Court
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Capacity:	5000
Tank Substance:	Heating Oil
Last Used Date:	10/1/1974
OSFM First Notify Date:	7/1/1992
Tank Status:	**Abandoned in place**
Red Tag Issue Date:	Not reported
Install Date:	1/1/1956
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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205 **CARVER PARK** **RCRA-CESQG** **1010563392**
939 E 132ND ST **ILR000148049**
CHICAGO, IL 60627

RCRA-CESQG:

Date form received by agency:	07/20/2007
Facility name:	CARVER PARK
Facility address:	939 E 132ND ST
	CHICAGO, IL 60627
EPA ID:	ILR000148049
Mailing address:	425 E MCFETRIDGE
	CHICAGO, IL 60605
Contact:	LEEANN THOMAS
Contact address:	Not reported
	Not reported
Contact country:	Not reported
Contact telephone:	(312) 742-4287
Contact email:	Not reported

Map ID	Site	Database(s)	EPA ID Number

CARVER PARK (Continued) **1010563392**

EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 07/20/2007
Owner/Op end date: Not reported

Owner/operator name: CHICAGO PARK DISTRICT
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: 07/20/2007
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Map ID	Site	Database(s)	EPA ID Number
	CARVER PARK (Continued)		**1010563392**

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

205	**941 E 132ND STREET** **CHICAGO, IL**	**ERNS**	**2004710762** **N/A**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

205	**ALTGELD GARDENS** **977 E 132ND STREET** **CHICAGO, IL 60627**	**RCRA-CESQG**	**1004697962** **ILR000101980**

RCRA-CESQG:
Date form received by agency: 12/01/2000
Facility name: ALTGELD GARDENS
Facility address: 977 E 132ND STREET
CHICAGO, IL 60627
EPA ID: ILR000101980
Mailing address: 19156 S 85TH PLACE
MOIENA, IL 60448
Contact: THOOMAS CONNELLY
Contact address: 19156 S 85TH PLACE
MOIENA, IL 60448
Contact country: US
Contact telephone: (815) 469-7007
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHICAGO HOUSING AUTHORITY
Owner/operator address: 626 W JACKSON BLVD
CHICAGO, IL 60606
Owner/operator country: Not reported
Owner/operator telephone: (312) 567-7775

Map ID	Site	Database(s)	EPA ID Number

ALTGELD GARDENS (Continued) **1004697962**

Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 01/01/0001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Violation Status: No violations found

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206 **ERNS** **99618837**
13201 SOUTH ELLIS **N/A**
CHICAGO, IL

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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207 **CARVER MILITARY ACADEMY** **RCRA-SQG** **1001116670**
13100 S DOTY AVE **ILR000026955**
CHICAGO, IL 60827

RCRA-SQG:
Date form received by agency: 07/05/2000
Facility name: CARVER MILITARY ACADEMY
Facility address: 13100 S DOTY AVE
CHICAGO, IL 608271516
EPA ID: ILR000026955
Contact: KAREN RAYMOND
Contact address: 13100 S DOTY AVE
CHICAGO, IL 608271516
Contact country: US
Contact telephone: (773) 535-5250
Contact email: Not reported

Map ID	Site	Database(s)	EPA ID Number

CARVER MILITARY ACADEMY (Continued) **1001116670**

EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: CHICAGO PUBLIC SCHOOLS
Owner/operator address: 13100 S DOTY AVE
CHICAGO, IL 60827
Owner/operator country: Not reported
Owner/operator telephone: (773) 535-5250
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003

Map ID	Site	Database(s)	EPA ID Number

CARVER MILITARY ACADEMY (Continued) **1001116670**

Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D004
Waste name: ARSENIC

Waste code: D007
Waste name: CHROMIUM

Waste code: D009
Waste name: MERCURY

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: P119
Waste name: AMMONIUM VANADATE

Waste code: U052
Waste name: CRESOL (CRESYLIC ACID)

Waste code: U112
Waste name: ACETIC ACID ETHYL ESTER (I)

Waste code: U122
Waste name: FORMALDEHYDE

Waste code: U123
Waste name: FORMIC ACID (C,T)

Waste code: U154
Waste name: METHANOL (I)

Waste code: U196
Waste name: PYRIDINE

Waste code: U220

Map ID	Site	Database(s)	EPA ID Number

CARVER MILITARY ACADEMY (Continued) **1001116670**

Waste name: BENZENE, METHYL-

Waste code: U228
Waste name: ETHENE, TRICHLORO-

Violation Status: No violations found

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208 **SCHOOL / CHURCH** **UST** **U004138018**
13300 S. LANGLEY **N/A**
CHICAGO, IL 60627

UST:

Facility ID:	2044351
Facility Status:	EXEMPT
Facility Type:	**PRIVATE INSTITUTION**
Owner Name:	Our Lady of the Garden
Owner Id:	U0035305
Owner Address:	13300 S. Langley
Owner City,St,Zip:	Chicago, IL 60827
Tank Number:	1
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Tank Status:	**Exempt from registration**
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Self Service Permit Inspection Date:	**Not reported**
Self Service Permit Expire Date:	**Not reported**
Fee Due:	Not reported

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210 **WHEATLEY PHYLLIS CENTER** **RCRA-CESQG** **1004696979**
902 E 133RD PL **ILR000061234**
CHICAGO, IL 60627

RCRA-CESQG:

Date form received by agency:	02/08/1999
Facility name:	WHEATLEY PHYLLIS CENTER
Facility address:	902 E 133RD PL CHICAGO, IL 60627
EPA ID:	ILR000061234
Mailing address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact:	THOMAS CONNELLY
Contact address:	8501 W 191ST ST BOX 10 MOKENA, IL 60448
Contact country:	US
Contact telephone:	(708) 923-0202
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time;

Map ID	Site	Database(s)	EPA ID Number
	WHEATLEY PHYLLIS CENTER (Continued)		**1004696979**

or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHGO PUBLIC SCHOOLS 6WW
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7038
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D006
Waste name:	CADMIUM
Waste code:	D008
Waste name:	LEAD
Waste code:	D009
Waste name:	MERCURY
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
210	**CARVER PRIMARY** **901 E 133RD PL** **CHICAGO, IL 60627**	**RCRA-SQG**	**1001123533** **ILR000032375**

RCRA-SQG:

Date form received by agency:	12/30/1996
Facility name:	CARVER PRIMARY
Facility address:	901 E 133RD PL CHICAGO, IL 60627
EPA ID:	ILR000032375
Contact:	LINDA RANDOLPH
Contact address:	901 E 133RD PL CHICAGO, IL 60627
Contact country:	US
Contact telephone:	(773) 535-5674
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

Map ID	Site	Database(s)	EPA ID Number
211	**CARVER MIDDLE** **801 E 133RD PL** **CHICAGO, IL 60627**	**RCRA-SQG**	**1001123534** **ILR000032383**

RCRA-SQG:

Date form received by agency:	12/30/1996
Facility name:	CARVER MIDDLE
Facility address:	801 E 133RD PL CHICAGO, IL 60627
EPA ID:	ILR000032383
Contact:	CARRIE CLARK
Contact address:	801 E 133RD PL CHICAGO, IL 60627
Contact country:	US
Contact telephone:	(773) 535-5656
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHICAGO PUBLIC SCHOOLS
Owner/operator address:	1819 W PERSHING RD CHICAGO, IL 60609
Owner/operator country:	Not reported
Owner/operator telephone:	(773) 535-7039
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D008
Waste name:	LEAD
Violation Status:	No violations found

Count: 21 records

FOCUS MAP 16 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	1002886378	US SCRAP	123RD & COTTAGE GROVE	60628	CERCLIS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1002886490	METRO SANITARY DISTRICT #3	125TH STREET & DOTY AVENUE	60628	CERC-NFRAP
CHICAGO	1004695029	ARMY COE LOCK DAM 01	134TH AND CALUMET RIVER	60633	RCRA-CESQG
CHICAGO	U003853346	FORMER PULLMAN FACTORY	11302 CORLISS AVE	60628	UST
CHICAGO	1012126998	9705 S. COTTAGE GROVE	9705 S COTTAGE GROVE AVE	60628	US BROWNFIELDS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
CHICAGO	S107926349	LAKE CALUMET CLUSTER SITE	N OF 122ND	60628	SSU
DOLTON	U001629479	MARINE SERV	140TH COTTAGE GRV	60419	UST
DOLTON	1003870419	DOLTON MUNI LDFL	140TH ST & COTTAGE GROVE	60419	CERC-NFRAP
DOLTON	1006930445	THORNRIDGE HIGH SCHOOL	15000 COTTAGE GROVE	60419	RCRA-SQG
DOLTON	1012209907	DOLTON HAZMAT	DOLTON AVE EXIT ON THE BISHOP FORD	60419	CERCLIS
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST	60827	LUST
RIVERDALE	S103292952	RIVERDALE PLATING	6860 W 134TH ST	60827	LUST

Focus Map 17

EDR DataMap® - Environmental Atlas

90786 CTC RLE Hazardous Materials

Legend

Roads
Major Roads
Contour Lines
National Wetlands Inventory
Waterways
Railroads
Study Boundary
100-Yr Flood Zones
Powerlines
Pipelines
Fault Lines
Water
Listed Sites
Sensitive Receptors

N

0 1/8 1/4

Scale in Miles

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Count: 28 records

FOCUS MAP 17 ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALUMET CITY	1012172074	BLOCK A - 15 PROPERTIES IN TIF DISTRICT	(STATE LINE ROAD FROM 153RD ST. TO 152ND. ST.)	60409	US BROWNFIELDS
CALUMET CITY	1012172075	BLOCK B - 75 PROPERTIES IN TIF DISTRICT	(STATE LINE ROAD FROM 154TH ST. TO 153RD. ST.)	60409	US BROWNFIELDS
CALUMET CITY	1014390033	COMED	100TH & TORRENCE	60633	RCRA-SQG
CALUMET CITY	1010317482	COM ED	129TH & CARONDOLET	60409	RCRA-SQG
CALUMET CITY	1008144866	ANTONIETTI CONSTRUCTION PIT	146TH & BURNHAM AVE	60633	SWF/LF
CALUMET CITY	U001133551	SHELL STATION 1182-02	147TH & TORRENCE AVE	60409	UST
CALUMET CITY	1001076920	SHELL OIL CO	147TH AND TORRENCE	60409	RCRA-SQG
CALUMET CITY	U004115056	GREEN LAKE POOL & BUILDINGS	159TH ST & TORRENCE AVE	60409	UST
CALUMET CITY	S108966686	FOREST PRESERVE DISTRICT OF COOK COUNTY	NE COR OF 159TH & TORRENCE ST	60409	LUST
CALUMET CITY	S109366537	FOREST PRESERVE DISTRICT OF COOK COUNTY	NE CORNER 159TH ST & TORRENCE AVE	60409	SRP
CALUMET CITY	1014349679	696 STATE LINE ROAD/A	696 STATE LINE RD	60409	US BROWNFIELDS
CALUMET CITY	1012172139	WENDY'S RESTAURANT	550-552 STATE LINE ROAD	60409	US BROWNFIELDS
CALUMET CITY	1012178502	BENCO CHEMICALS	700 STATE ST-C	60409	RCRA-CESQG
CALUMET CITY	S108414130	620/634 STATE LINE RD.	634 STATE LINE AVE	60409	BROWNFIELDS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	1003870420	CHICAGO REGIONAL PORT DIST	111TH & DOTY AVE	60633	CERC-NFRAP
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	S109756592	CLEAN HARBORS	118TH & STONY ISLAND RD	60633	MANIFEST
CHICAGO	S109756593	CLEAN HARBORS OF CHICAGO INC	118TH & STONY ISLAND RD	60633	MANIFEST
CHICAGO	S101215364	U.S. DRUM	2400 E 119TH ST	60633	SSU
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	1004695029	ARMY COE LOCK DAM 01	134TH AND CALUMET RIVER	60633	RCRA-CESQG
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S108111040	CHICAGO MSD #2	OBRIEN LCK & DAM RD	60633	SWF/LF
DOLTON	1012209907	DOLTON HAZMAT	DOLTON AVE EXIT ON THE BISHOP FORD	60419	CERCLIS
RIVERDALE	S103690079	RIVERDALE, VILLAGE OF	130TH & HALSTED ST	60827	LUST
RIVERDALE	S103292952	RIVERDALE PLATING	6860 W 134TH ST	60827	LUST

Section 3

County Level Orphan Sites

Count: 4347 records

COOK COUNTY, IL - ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	91242062	79 ST & CENTRAL 47ST OF CICERO	79 ST & CENTRAL 47ST OF CICERO		ERNS
CHICAGO	S108968213		RD & OLDFIELD RD		SPILLS
CHICAGO	S111877705		NORTH & LASALLE		SPILLS
CHICAGO	S111882937		NORTH & ASHLAND		SPILLS
CHICAGO	90189323	126 ST & FRONTAGE BY METRO SANITARY DIST	126 ST & FRONTAGE BY METRO SANITARY DIST		ERNS
CHICAGO	90189321	I94 & 130TH SW QUADRANT	I94 & 130TH SW QUADRANT		ERNS
CHICAGO	S111925634		I - RAMP 55ATPULASKI RD		SPILLS
CHICAGO	S111908406		I - 90ATWILSON AVE		SPILLS
CHICAGO	S111913846		I - 190ATMANNHEIM RD		SPILLS
CHICAGO	2011964313	MP 00518 CALUMET YARD DEARBORN DIVISION	MP 00518		ERNS
CHICAGO	2009898893	MP: 09514	MP: 09514		ERNS
CHICAGO	2008898893	MP: 09514	MP: 09514		ERNS
CHICAGO	92282850	1465 E. 100 AND 30TH ST.	1465 E. 100 AND 30TH ST.		ERNS
CHICAGO	S111914075		10000TH W OHARE & OHARE AIRPORT 60666		SPILLS
CHICAGO	S109953775		100TH & DORCHESTER		SPILLS
CHICAGO	8714920	100TH & EWING (ONE BLOCK EAST)	100TH & EWING (ONE BLOCK EAST)		ERNS
CHICAGO	2012103741		S 100TH ST		ERNS
CHICAGO	S111925275		100TH		SPILLS
CHICAGO	S111922136		100TH ST		SPILLS
CHICAGO	S111903512		3259 E 100TH SAINT KCBX TERMINALS COM		SPILLS
CHICAGO	S111891992		W 100TH & S PLYMOUTH CT		SPILLS
CHICAGO	S109327349		101ST & HARLEM AVE		SPILLS
CHICAGO	S111880789		6205 W 101ST ST		SPILLS
CHICAGO	98445288	E 103 STREET MILE POST 510.5	E 103 STREET MILE POST 510.5		ERNS
CHICAGO	S108045277		103RD ST		SPILLS
CHICAGO	S111875405		103RD & YELLOW FREIGHT		SPILLS
CHICAGO	S111875748		103RD & CALUMET		SPILLS
CHICAGO	S111898938		103RD & SPRINGFIELD		SPILLS
CHICAGO	S111877819		103RD ST & STONY ISLAND AVE		SPILLS
CHICAGO	S111903230		325 E 103RD ROW		SPILLS
CHICAGO	S111879357		103RD & DOTY STS		SPILLS
CHICAGO	S111894735		103RD ST & CALUMET CANAL		SPILLS
CHICAGO	S111890747		1100 103RD ST		SPILLS
CHICAGO	S111892600		7711 W 103RD ST		SPILLS
CHICAGO	S111880466		4001 E 103RD AVE		SPILLS
CHICAGO	2002592420	103RD AND KEDZIE	103RD AND KEDZIE	0	ERNS
CHICAGO	2009900518	104TH STREET	104TH STREET		ERNS
CHICAGO	2008900518	104TH STREET	104TH STREET		ERNS
CHICAGO	S111893119		104TH & TORRANCE AVE		SPILLS
CHICAGO	2000531564	104TH STREET	104TH STREET	0	ERNS
CHICAGO	S111907794		4898 E 105TH ST		SPILLS
CHICAGO	S111922937		2016 E 106ST ST		SPILLS
CHICAGO	98455926	106TH STREET	106TH STREET		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111891910		2040 E 106TH SAINT LANDERS YD		SPILLS
CHICAGO	S111925410		2040 E 106TH SAINT CALUMET RAIL YD		SPILLS
CHICAGO	S111882082		2040 E 106TH		SPILLS
CHICAGO	S111889611		2040 106TH ST		SPILLS
CHICAGO	S111912043		2040 E 106TH		SPILLS
CHICAGO	S111919236		2040 E 106TH CALUMET YARD		SPILLS
CHICAGO	S111882964		106TH AVE & INDIANAPOLIS BLVD		SPILLS
CHICAGO	S111878270		3033 106TH ST		SPILLS
CHICAGO	S111879978		2040 E 106TH		SPILLS
CHICAGO	S111915160		1040 W 106TH		SPILLS
CHICAGO	S111875510		2040 E 106TH SAINT RAIL YARDS		SPILLS
CHICAGO	S111881087		106TH ST & AVE O		SPILLS
CHICAGO	S111902576		106TH ST		SPILLS
CHICAGO	S111889998		106TH & AVE B		SPILLS
CHICAGO	90186751	107TH AND TORRENCE AVE. LISTALL COMPANY	107TH AND TORRENCE AVE. LISTALL COMPANY		ERNS
CHICAGO	S111904594		801 107TH ST		SPILLS
CHICAGO	S111894183		1215 W 107TH		SPILLS
CHICAGO	S111878613		107TH & TORRENCE		SPILLS
CHICAGO	S108045299		108TH ST & STONEY IS		SPILLS
CHICAGO	94374534	108TH AND BUFFALO AVE	108TH AND BUFFALO AVE		ERNS
CHICAGO	2004735469	109TH ST AND MICHIGAN AVE	109TH ST AND MICHIGAN AVE		ERNS
CHICAGO	S111899635		109TH ST		SPILLS
CHICAGO	S111898484		109TH 109TH ST & COTTAGE AVE		SPILLS
CHICAGO	2005608751	2040 EAST 10TH ST	2040 EAST 10TH ST		ERNS
CHICAGO	2007321070	11.90	11.90		ERNS
CHICAGO	S111875977		1100TH & KEDZIE		SPILLS
CHICAGO	1012172115	ROSELAND COMMUNITY	110TH PLACE AND MICHIGAN, EAST SIDE OF STATE ST.		US BROWNFIELDS
CHICAGO	S111886669		352 W 110TH		SPILLS
CHICAGO	S111896440		110TH ST		SPILLS
CHICAGO	8865144	111ST AND LANE	111ST AND LANE		ERNS
CHICAGO	2010946025	111 TH STREET	111TH ST		ERNS
CHICAGO	2012101140		111TH ST		ERNS
CHICAGO	S111908715		6040 W 111TH ST		SPILLS
CHICAGO	S111879301		111TH & MONTERY		SPILLS
CHICAGO	S111880670		111TH & LANGLEY		SPILLS
CHICAGO	S111914359		111TH W		SPILLS
CHICAGO	2000551947	112TH STREET	112TH STREET	0	ERNS
CHICAGO	8850281	114TH ST AND TORRENCE AVE	114TH ST AND TORRENCE AVE		ERNS
CHICAGO	S111915596		752 E 114TH W		SPILLS
CHICAGO	2009922898	115TH AND DOTY RD	115TH AND DOTY RD		ERNS
CHICAGO	S109167302		549 115TH ST		LUST, SPILLS
CHICAGO	2006808077	115TH ST.	115TH ST.		ERNS
CHICAGO	S111877798		115TH & KENSINGTON		SPILLS
CHICAGO	S111876815		3200 W 115TH KEDZIE		SPILLS
CHICAGO	S111901591		115TH ST		SPILLS
CHICAGO	S111925540		115TH ST		SPILLS
CHICAGO	S111925539		115TH ST & I 94 DOTY		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111875316		116TH & BURLING		SPILLS
CHICAGO	S111898477		116TH ST & S BARLEY AVE		SPILLS
CHICAGO	S111913243		118TH SAINT COTTAGE GRV		SPILLS
CHICAGO	S111913680		1200 W 11TH ST		SPILLS
CHICAGO	S111883453		735 E 11TH ST		SPILLS
CHICAGO	S111911683		3118 W 11TH ST		SPILLS
CHICAGO	S111882526		2626 W 11TH ST		SPILLS
CHICAGO	96490464	900 WEST 120ST / 2ND SEWER DRAIN AT CORNER OF MORGAN ST	900 WEST 120ST / 2ND SEWER DRAIN AT CORNER OF MORGAN ST		ERNS
CHICAGO	99645303	120TH AND MORGAN	120TH AND MORGAN		ERNS
CHICAGO	2008886792	120TH ST AND MORGAN	120TH ST AND MORGAN		ERNS
CHICAGO	S111924227		120TH ST & MORGAN		SPILLS
CHICAGO	S111880149		120TH ST & RACINE AVE		SPILLS
CHICAGO	S111897595		120TH S TORRENCE AVE		SPILLS
CHICAGO	S111909286		1855 E 121ST ST		SPILLS
CHICAGO	94389275	122ND AND TORRENCE	122ND AND TORRENCE		ERNS
CHICAGO	99646447	122ND AND INDIANA	122ND AND INDIANA		ERNS
CHICAGO	S106526645	UNNAMED PARCEL	122ND ST		BROWNFIELDS
CHICAGO	S110363616		122ND & PRINCETON		SPILLS
CHICAGO	S111895143		1855 W 122ND ST		SPILLS
CHICAGO	S111909484		122ND ST & STONY ISLAND AVE		SPILLS
CHICAGO	S111878392		122ND & TORRENCE AVE		SPILLS
CHICAGO	S111926232		122ND ST & PRINCETON		SPILLS
CHICAGO	S111898012		122ND ST & STONY ISLAND RD		SPILLS
CHICAGO	S111912859		122ND ST & TORRENCE ST		SPILLS
CHICAGO	S111902613		1701 E 122TH ST		SPILLS
CHICAGO	94395307	123RD AND STONEY ISLAND	123RD AND STONEY ISLAND		ERNS
CHICAGO	S101467236	PENN CENTRAL	810 E 124TH ST		SSU
CHICAGO	2011996953		E 126TH ST		ERNS
CHICAGO	S111918596		126TH & DOTY AVE		SPILLS
CHICAGO	S111894230		127TH & CARONDOLET STS		SPILLS
CHICAGO	S111912696		150 W 127TH		SPILLS
CHICAGO	S111898770		128TH & ESCANEBA		SPILLS
CHICAGO	2012102522		MP 1290		ERNS
CHICAGO	S111876826		12958TH S CARONDOLET & D AUTO		SPILLS
CHICAGO	89109245	MP 13 ASHLAND AVE. YARD	MP 13 ASHLAND AVE. YARD		ERNS
CHICAGO	1005636372	ILLINOIS MINING CORP INC	130TH W OF TORRENCE AVE		SPILLS
CHICAGO	2009897414	130TH ST	130TH ST		ERNS
CHICAGO	2008897414	130TH ST	130TH ST		ERNS
CHICAGO	2006810974	130TH ST.	130TH ST.		ERNS
CHICAGO	S108669473		130TH ST & I 94 EB		SPILLS
CHICAGO	S111885360		130TH ST & CALUMET EXPY		SPILLS
CHICAGO	2011995829		130TH ST		ERNS
CHICAGO	S111891972		E 130TH ST		SPILLS
CHICAGO	S111877064		4300 W 130TH ST		SPILLS
CHICAGO	S111927317		130TH ST AND TORRENCE AVE		SPILLS
CHICAGO	S111908455		130TH ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111914525		1100 E 130TH PL		SPILLS
CHICAGO	S111901336		130TH & STONY IS		SPILLS
CHICAGO	S111894790		130TH ST & TORRENCE ST		SPILLS
CHICAGO	S111878584		130TH ST SW		SPILLS
CHICAGO	S110685145		130TH ST & COTTAGE GROVE AVE		SPILLS
CHICAGO	2011993812		1310		ERNS
CHICAGO	S111892985		131ST ST & TRUMBLE ST		SPILLS
CHICAGO	S111921716		940 E 132ND ST		SPILLS
CHICAGO	S111899942		133RD & AVE K		SPILLS
CHICAGO	S111920503		133RD ST & AVE K		SPILLS
CHICAGO	2009905686	134TH ST AND CALUMAT RIVER	134TH ST AND CALUMAT RIVER		ERNS
CHICAGO	2008905686	134TH ST AND CALUMAT RIVER	134TH ST AND CALUMAT RIVER		ERNS
CHICAGO	2011966840	134TH ST. NEAR AVENUE O	134TH SAINT NEAR AVE		ERNS
CHICAGO	S111878642		134TH & STATE LINE		SPILLS
CHICAGO	S111888946		1350TH & 60 N LAKE SHORE DR		SPILLS
CHICAGO	S111924465		135TH AND NEW AVE		SPILLS
CHICAGO	92250546	137TH ST AND HOXIE ST	137TH ST AND HOXIE ST		ERNS
CHICAGO	S111882838		137TH ST & HOXIE		SPILLS
CHICAGO	S111882727		612 E 138TH ST		SPILLS
CHICAGO	S111896483		138TH ST & CALUMET EXPY		SPILLS
CHICAGO	S111900160		138TH & I 94		SPILLS
CHICAGO	S111906591		612 E 138TH ST		SPILLS
CHICAGO	S111892394		138TH ST & CALUMET EXPY		SPILLS
CHICAGO	S111898774		138TH ST & I 94		SPILLS
CHICAGO	S111881930		826 E 138TH ST		SPILLS
CHICAGO	S111915551		138TH & I 94		SPILLS
CHICAGO	S111881111		440 E 138TH ST		SPILLS
CHICAGO	S111907124		440 E 138TH ST		SPILLS
CHICAGO	S111898712		440 E 138TH ST		SPILLS
CHICAGO	S111912667		440 E 138TH ST		SPILLS
CHICAGO	S111912668		440 E 138TH ST		SPILLS
CHICAGO	2012102531		13TH AND SAINT SUBWAY STHY		ERNS
CHICAGO	S111910596		13TH & MORGAN STS		SPILLS
CHICAGO	S111886354		1400TH & W 111TH ST		SPILLS
CHICAGO	S111882902		1400TH W DIVISION & NOBLE		SPILLS
CHICAGO	S111906779		1425 OR 1431 W TAYLOR ST		SPILLS
CHICAGO	8858752	14TH AND WESTERN GLOBAL I RR YARD	14TH AND WESTERN GLOBAL I RR YARD		ERNS
CHICAGO	90159722	14TH AND HALSTED	14TH AND HALSTED		ERNS
CHICAGO	1001024395	GTB AUTO	2407 E 14TH ST		RCRA-SQG
CHICAGO	99651692	14TH STREET YARD AT CANAL (SOUTHERN END OF NORTH YARD BETWEE	14TH STREET YARD AT CANAL (SOUTHERN END OF NORTH YARD BETWEE		ERNS
CHICAGO	S111887196		14TH & INDIANA		SPILLS
CHICAGO	S111875747		14TH & CANAL BURLINGTON NORTHERN YARD		SPILLS
CHICAGO	S111892249		14TH PL & SANGAMON		SPILLS
CHICAGO	S111908909		14TH & HALSTED STS		SPILLS
CHICAGO	S111908862		14TH & CANAL STS		SPILLS
CHICAGO	S111906274		159TH & SIBLEY BLVD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111887661		15TH & CANAL ST		SPILLS
CHICAGO	S111887610		15TH ST & CANAL ST		SPILLS
CHICAGO	S111906022		15TH ST & CANAL		SPILLS
CHICAGO	S111902392		15TH ST & LAKE MICHIGAN FLD		SPILLS
CHICAGO	S111906546		15TH ST & LAKEFRONT MEIGS FLD		SPILLS
CHICAGO	S111919525		1150 W 15TH		SPILLS
CHICAGO	S111888789		15TH ST & LAKEFRONT		SPILLS
CHICAGO	S111884000		15TH ST & LAKE MICHIGAN FLD		SPILLS
CHICAGO	S111882819		15TH & LAKEFRONT FLD		SPILLS
CHICAGO	S111878273		163RD SAINT TOLL PLZ		SPILLS
CHICAGO	S111879761		167TH & CICERO		SPILLS
CHICAGO	2009904959	W. 16TH ST AND S. UNION AVE	W. 16TH ST AND S. UNION AVE		ERNS
CHICAGO	2008904959	W. 16TH ST AND S. UNION AVE	W. 16TH ST AND S. UNION AVE		ERNS
CHICAGO	S109327396		16TH ST & JEFFERSON BRG		SPILLS
CHICAGO	S111880523		2558 W 16TH		SPILLS
CHICAGO	S111892287		1956 S 17TH ST		SPILLS
CHICAGO	S111876974		17TH & WATWORTH		SPILLS
CHICAGO	S111894343		1820TH W 14TH ST & IN ALY		SPILLS
CHICAGO	2007305206	18TH ST YARD	18TH ST YARD		ERNS
CHICAGO	92292345	18TH ST BRIDGE	18TH ST BRIDGE		ERNS
CHICAGO	2009921297	18TH ST. & ROOSEVELT ST.	18TH ST. & ROOSEVELT ST.		ERNS
CHICAGO	2010959606	18TH STREET	18TH ST		ERNS
CHICAGO	S111886026		18TH ST & CHICAGO RIV		SPILLS
CHICAGO	S111887491		18TH & CLARK STS		SPILLS
CHICAGO	S111884255		18TH & CLARK		SPILLS
CHICAGO	S111892387		18TH PL & WOOD ST		SPILLS
CHICAGO	S108045676		18TH ST & THE CHICAGO RIV		SPILLS
CHICAGO	S108047105		1ST & 4 MI N OF PULASKI MM 288 HWY		SPILLS
CHICAGO	S111887583		NB 1ST AVE & GOLFVIEW		SPILLS
CHICAGO	S111910709		1ST & 2ND W OF CENTRAL AVE EXIT		SPILLS
CHICAGO	S111925271		1ST & S 5 MILE N OF 103RD ST 300 FEET DR		SPILLS
CHICAGO	S111907669		1ST & 4 MILE W OF COUNTY LINE RD		SPILLS
CHICAGO	S111891726		1ST & N 2 MILE		SPILLS
CHICAGO	S111912632		1ST & 4 MILE FROM CALIFORNIA AVE MIL		SPILLS
CHICAGO	S111919834		N 200TH STATE LAKE & STATE ST		SPILLS
CHICAGO	S111890337		2040TH E 106TH ST & RR YARD		SPILLS
CHICAGO	S111903428		1345 21ST ST		SPILLS
CHICAGO	S111909292		21ST ST & CANAL PORT AVE		SPILLS
CHICAGO	S111880437		1349 W 21ST		SPILLS
CHICAGO	S108045853		22ND & MORGAN ST		SPILLS
CHICAGO	93327475	22ND AND ARCHER ST	22ND AND ARCHER ST		ERNS
CHICAGO	89128107	22ND AND FEDERAL	22ND AND FEDERAL		ERNS
CHICAGO	S111888150		22ND & CLARK ST		SPILLS
CHICAGO	S111887811		22ND ST & WESTERN AVE		SPILLS
CHICAGO	S111890014		350 E 22ND ST		SPILLS
CHICAGO	S111890359		22TH & CALUMET		SPILLS
CHICAGO	S111895799		2332ND & W CHICAGO AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2003650960	23RD AND MICHIGAN STREET	23RD AND MICHIGAN STREET		ERNS
CHICAGO	S111883427		2550 W 23RD		SPILLS
CHICAGO	94368624	24TH AND UNION STREET NORTH OF I-95	24TH AND UNION STREET NORTH OF I-95		ERNS
CHICAGO	S111890697		24TH & UNION		SPILLS
CHICAGO	S111903927		1345 W 24TH ST		SPILLS
CHICAGO	S111879755		252ND E OHIO ST & FAIRBANKS		SPILLS
CHICAGO	S111927266		2543RD WEST COLUMBUS & LANDERS RAILYARD		SPILLS
CHICAGO	S111890225		2543RD COLUMBUS DR & IN THE LANDERS YARD		SPILLS
CHICAGO	2005617641	426 WEST 25TH STREET	426 W 25TH ST		ERNS
CHICAGO	S111909431		426 N 25TH PL		SPILLS
CHICAGO	S111922268		436 S 25TH PL		SPILLS
CHICAGO	S111925762		426 W 25TH PLACE CANAL ST		SPILLS
CHICAGO	S111894802		25TH PL & SACRAMENTO AVE		SPILLS
CHICAGO	S111896743		2429 W 25TH AVE		SPILLS
CHICAGO	S111925001		436 W 25TH PLACE CANAL ST		SPILLS
CHICAGO	S111890711		2600TH & EDISON ST		SPILLS
CHICAGO	96474197	26TH AND FEDERAL ST	26TH AND FEDERAL ST		ERNS
CHICAGO	2003644943	26TH STREET AND FEDERAL STREET	26TH STREET AND FEDERAL STREET		ERNS
CHICAGO	2008873723	26TH STREET ON THE RED LINE	26TH STREET ON THE RED LINE		ERNS
CHICAGO	S111907471		436 W 26TH PL		SPILLS
CHICAGO	S111889908		26TH ST & FEDERAL		SPILLS
CHICAGO	S111910796		26TH & WENTWORTH		SPILLS
CHICAGO	S111926601		5601 W 26TH ST		SPILLS
CHICAGO	S111920961		26TH & CANAL ST		SPILLS
CHICAGO	S111924220		26TH		SPILLS
CHICAGO	S111892718		26TH ST & FEDERAL		SPILLS
CHICAGO	S111919539		26TH & CANAL ST		SPILLS
CHICAGO	S111895388		26TH & FEDERAL		SPILLS
CHICAGO	S111913858		26TH & FEDERAL		SPILLS
CHICAGO	S110685274		5601 W 26TH ST		SPILLS
CHICAGO	98428956	27TH AND FEDERAL STREETS	27TH AND FEDERAL STREETS		ERNS
CHICAGO	98464382	27TH AND FEDERAL ST	27TH AND FEDERAL ST		ERNS
CHICAGO	S111903103		27TH & FEDERAL ST		SPILLS
CHICAGO	S111900849		27TH & FEDERAL		SPILLS
CHICAGO	S108047067		I 290 WBINBETWEENHARLEM & 1ST AVE		SPILLS
CHICAGO	S111891919		I 290 EB AT		SPILLS
CHICAGO	S111877875		I 290 WB		SPILLS
CHICAGO	S111906792		I 290 WB		SPILLS
CHICAGO	S111908034		I 290 NEAREXIT 24 W		SPILLS
CHICAGO	S108047071		I 294 SB		SPILLS
CHICAGO	S110613499		I 294 & I 88 NBMP		SPILLS
CHICAGO	S110363820		I 294 & I 90 SB		SPILLS
CHICAGO	S111926310		I 294		SPILLS
CHICAGO	S111901815		I 294 SBMP 22		SPILLS
CHICAGO	S111911769		HWY 294 SBMILEPOST 17		SPILLS
CHICAGO	S111884259		I 294 & I 80		SPILLS
CHICAGO	S111926180		I 294		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111920540		I 294 SBMP 31		SPILLS
CHICAGO	S111914599		I 294 & CERMAC RD		SPILLS
CHICAGO	S111896748		I 294 & NEAR THE 1ST TOLL PLAZA NORTHB		SPILLS
CHICAGO	S111919394		I 294 NBNEARCICERO AVE		SPILLS
CHICAGO	S111914117		I 294 NB		SPILLS
CHICAGO	S111893237		I 294 SBATJOLIET RD		SPILLS
CHICAGO	S111925566		I 294 SBMP 20		SPILLS
CHICAGO	S111925567		I 294 SOUTHBOUNDMP 20		SPILLS
CHICAGO	S111901305		I 294 NEARARLINGTON HEIGHTS		SPILLS
CHICAGO	S111910862		29TH & KEDZIE		SPILLS
CHICAGO	92270141	2ND POLE NORTH OF 74TH ST IN AN ALLEY WEST OF	2ND POLE NORTH OF 74TH ST IN AN ALLEY WEST OF		ERNS
CHICAGO	S111920359		2ND BLOCKS E OF 63RD ST & I 94		SPILLS
CHICAGO	S111883783		MM 301		SPILLS
CHICAGO	2006802234	31ST AND ASHLAND AVE.	31ST AND ASHLAND AVE.		ERNS
CHICAGO	S111908683		31ST		SPILLS
CHICAGO	S111891505		1100 E 31ST ST		SPILLS
CHICAGO	S111877001		4421 W 31ST		SPILLS
CHICAGO	S111897125		31ST ST & WOOD		SPILLS
CHICAGO	S111918870		215 W 31ST		SPILLS
CHICAGO	S111894090		31ST & KENTON AVE		SPILLS
CHICAGO	89121211	32ND ST AND CENTRAL PARK AVE	32ND ST AND CENTRAL PARK AVE		ERNS
CHICAGO	S111902053		444 W 330TH ST		SPILLS
CHICAGO	S111894273		3348TH W WARREN BLVD & HOMAN AVE		SPILLS
CHICAGO	S111889654		33RD & LAWNDALE		SPILLS
CHICAGO	S111894094		4500 W 33RD ST		SPILLS
CHICAGO	S111897564		N 3401ST AVE & ROSCOE		SPILLS
CHICAGO	S111881418		34TH & PULASKI		SPILLS
CHICAGO	S111911117		I 355 NBMP 265		SPILLS
CHICAGO	S111904092		3555TH W BELMONT & AMPO		SPILLS
CHICAGO	99638174	WEST 35TH STREET BRIDGE	WEST 35TH STREET BRIDGE		ERNS
CHICAGO	2008882825	35TH ST. BRIDGE	35TH ST. BRIDGE		ERNS
CHICAGO	S111911913		1954 W 35TH SAINT IN ALY		SPILLS
CHICAGO	S111897664		35TH & ASHLAND		SPILLS
CHICAGO	S111919560		1810 35TH ST		SPILLS
CHICAGO	S111894121		35TH & STATE ST		SPILLS
CHICAGO	S111890028		5400 S 35TH ST		SPILLS
CHICAGO	S111897980		35TH & KEDZIE		SPILLS
CHICAGO	S111896843		W 3642ND ST & LAWNDALE AVE		SPILLS
CHICAGO	2007318725	36TH AND PULASKI	36TH AND PULASKI		ERNS
CHICAGO	S111922036		36TH & PULASKI		SPILLS
CHICAGO	S111880537		3021 W 36TH		SPILLS
CHICAGO	S111879503		3000 W 36TH		SPILLS
CHICAGO	91220394	3021 WEST 36TH STREET (WEST OF HWY 41)	3021 WEST 36TH STREET (WEST OF HWY 41)		ERNS
CHICAGO	2002591202	103 36TH SOUTH AVE O.	103 36TH SOUTH AVE O.	0	ERNS
CHICAGO	S111915590		3782ND & 2ND W 79TH ST		SPILLS
CHICAGO	S111876347		37TH & LITHUANICA		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111897052		3025 W 37TH ST		SPILLS
CHICAGO	S111883506		1365 W 37TH		SPILLS
CHICAGO	2002608251	37TH STREET	37TH STREET	0	ERNS
CHICAGO	S111908583		3611 W 38TH SAINT RAIL YARD		SPILLS
CHICAGO	S111925402		3611 W 38TH SAINT CORWITH YARD		SPILLS
CHICAGO	S111919287		3611 W 38TH SAINT CORWITH YARD		SPILLS
CHICAGO	S111919275		3557 38TH ST		SPILLS
CHICAGO	S111919234		3811 W 38TH SAINT CORWITH YARD		SPILLS
CHICAGO	S111880783		3960TH W IRVING PARK & PULASKI		SPILLS
CHICAGO	S109953825		39TH & CICERO		SPILLS
CHICAGO	S111925323		39TH		SPILLS
CHICAGO	S111878496		39TH & KEDZIE		SPILLS
CHICAGO	S111900446		2600 39TH ST		SPILLS
CHICAGO	S111877189		39TH & MORTEN		SPILLS
CHICAGO	2002617674	40TH AND ALBANY AVE	40TH AND ALBANY AVE	0	ERNS
CHICAGO	S111893100		40TH ST & ASHLAND AVE		SPILLS
CHICAGO	S111878687		4040 W 40TH		SPILLS
CHICAGO	2000550320	40TH AND ASHLAND	40TH AND ASHLAND	0	ERNS
CHICAGO	90166402	41ST AND PULASKI	41ST AND PULASKI		ERNS
CHICAGO	S111913718		41ST & PULASKI		SPILLS
CHICAGO	S111905301		41ST & SPRINGFIELD		SPILLS
CHICAGO	2008907906	4950 WEST 41TH STREET	4950 WEST 41TH STREET		ERNS
CHICAGO	S111902644		1445 W 42ND		SPILLS
CHICAGO	S111897127		1445 W 42ND		SPILLS
CHICAGO	S111880182		1445 W 42ND		SPILLS
CHICAGO	S111906165		42ND & ASHLAND STS		SPILLS
CHICAGO	S111909024		I 435 & PRAVEN RD		SPILLS
CHICAGO	S111887549		43RD ST & LAKE SHORE DR		SPILLS
CHICAGO	S111919153		43RD & CANAL ST		SPILLS
CHICAGO	S111893707		4454TH & N ELSTON AVE		SPILLS
CHICAGO	S108046312		44TH		SPILLS
CHICAGO	93308263	44TH STREET BETWEEN INDIANA AND MICHIGAN AVE	44TH STREET BETWEEN INDIANA AND MICHIGAN AVE		ERNS
CHICAGO	S111887079		44TH SAINT BETWEEN INDIAN & MICHIGAN AVE		SPILLS
CHICAGO	S111884406		44TH & BLACKSTONE		SPILLS
CHICAGO	2004733997	45TH AND STATE ST.	45TH AND STATE ST.		ERNS
CHICAGO	89106127	45TH ST OFF OF HALSTON	45TH ST OFF OF HALSTON		ERNS
CHICAGO	S111888261		45TH & ASHLAND		SPILLS
CHICAGO	S111907955		45TH ST & RACINE		SPILLS
CHICAGO	S111905790		4700TH & WELL STS		SPILLS
CHICAGO	99651668	361 WEST 47TH	361 WEST 47TH		ERNS
CHICAGO	99650024	47TH ST TERMINAL	47TH ST TERMINAL		ERNS
CHICAGO	S108669575		47TH ST		SPILLS
CHICAGO	S108480057		47TH ST		SPILLS
CHICAGO	S111927304		361 47TH ST		SPILLS
CHICAGO	S111922938		2300 W 47TH		SPILLS
CHICAGO	S111922791		47TH ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111914233		47TH SAINT YARD		SPILLS
CHICAGO	S111895986		47TH ST & DAN RYAN EXPY		SPILLS
CHICAGO	S111894714		12000 W 4800 N		SPILLS
CHICAGO	S108047758		W 48TH & S CANAL ST		SPILLS
CHICAGO	S111885475		3428 N 48TH PL		SPILLS
CHICAGO	S111909951		1100 48TH ST		SPILLS
CHICAGO	S111878705		48TH PL & OAKLEY		SPILLS
CHICAGO	S111883259		1100 W 48TH		SPILLS
CHICAGO	2004732527	49TH AND VINCENNES	49TH AND VINCENNES		ERNS
CHICAGO	98436895	49TH AND MICHIGAN	49TH AND MICHIGAN		ERNS
CHICAGO	2007315427	49TH AND CERMAK ST	49TH AND CERMAK ST		ERNS
CHICAGO	S111907447		49TH & PRAIRIE STS		SPILLS
CHICAGO	S111891317		49TH SAINT IN THE DAN RYAN EXPY		SPILLS
CHICAGO	S111895516		49TH ST & WABASH AVE		SPILLS
CHICAGO	S111888798		47 W 49TH ST		SPILLS
CHICAGO	S111901380		49TH & MICHIGAN		SPILLS
CHICAGO	2000669045	OF 49TH AND PRAIRIE STREET	OF 49TH AND PRAIRIE STREET		ERNS
CHICAGO	S111907791		2200 W 4TH ST		SPILLS
CHICAGO	S111927766		5000TH 41ST ST & CHICAGO SANITARY SHIP CANAL		SPILLS
CHICAGO	S111919606		500TH W MADISON MADISON & CANAL ST		SPILLS
CHICAGO	S111896668		5035TH W 55TH ST & CHICAGO MID WAY		SPILLS
CHICAGO	2007312186	50TH ST YARD	50TH ST YARD		ERNS
CHICAGO	S111926084		CD 513		SPILLS
CHICAGO	90165019	51ST AND MOBILE RD. CLOROX BLDG	51ST AND MOBILE RD. CLOROX BLDG		ERNS
CHICAGO	2000541439	506 WEST 51ST	506 WEST 51ST	0	ERNS
CHICAGO	2000548268	51ST STREET	51ST STREET	0	ERNS
CHICAGO	98465428	51ST ST YARD	51ST ST YARD		ERNS
CHICAGO	2007303728	51ST AND CHICAGO	51ST AND CHICAGO		ERNS
CHICAGO	S111897822		51ST SAINT YARD		SPILLS
CHICAGO	S111906455		51ST & NORMAL		SPILLS
CHICAGO	S111889239		51ST & CORNELL		SPILLS
CHICAGO	S111882002		5620 W 51ST		SPILLS
CHICAGO	S111903862		51ST & CALUMET AVE		SPILLS
CHICAGO	S111906790		506 W 51ST		SPILLS
CHICAGO	S111903188		51ST & NORMAL		SPILLS
CHICAGO	S111910277		506 ST 51ST ST		SPILLS
CHICAGO	S111879756		51ST & HALSTED		SPILLS
CHICAGO	S111883239		2301 W 51ST		SPILLS
CHICAGO	99651475	506 WEST 51TH ST.	506 WEST 51TH ST.		ERNS
CHICAGO	S111890796		5252ND PALMER AVE & WEBBER HS		SPILLS
CHICAGO	S111900682		5345TH W 55TH ST & MIDWAY AP		SPILLS
CHICAGO	2011994278		5385		ERNS
CHICAGO	S110122311		I 55 & PULASKI ROAD RAMP		SPILLS
CHICAGO	S109327589		I 55 & I 294 SBMP		SPILLS
CHICAGO	S111887551		I 55 NB		SPILLS
CHICAGO	S111912371		I 55 NB		SPILLS
CHICAGO	S111884297		I 55 RIGHTHAND LANE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111902492		I 55 SBMM 28894		SPILLS
CHICAGO	S111922930		I 55 NB & LEMONT RD AND OLDFIELD RD		SPILLS
CHICAGO	S111900509		I 55 & PULASKI RD		SPILLS
CHICAGO	S111897651		I 55 RAMP WBASHLAND AVE		SPILLS
CHICAGO	S111896039		I 55 & HARLEM AVE		SPILLS
CHICAGO	S111894932		I 55 MPEEATASHLAND ST		SPILLS
CHICAGO	S111898860		I 55 & WOOD		SPILLS
CHICAGO	S111895979		I 55 NB & CICERO AVE		SPILLS
CHICAGO	S111899470		55ST YARD		SPILLS
CHICAGO	2007318421	55TH STREET STATION	55TH STREET STATION		ERNS
CHICAGO	S111887481		28800 W 55TH ST		SPILLS
CHICAGO	S111883143		55TH NENA & ARCHER		SPILLS
CHICAGO	S111882156		55TH & CICERO		SPILLS
CHICAGO	S111883850		5035 W 55TH SAINT MIDWAY AIRPORT		SPILLS
CHICAGO	S111903929		55TH & LAGRANGE RD		SPILLS
CHICAGO	S111883276		4950 W 55TH		SPILLS
CHICAGO	S111901394		55TH & COUNTRY LINE RD EXIT		SPILLS
CHICAGO	S111880505		5657TH N BROADWAY & HOLLYWOOD		SPILLS
CHICAGO	2010951078	57TH AND KENTON	57TH		ERNS
CHICAGO	2010957052	57TH STREET	57TH ST		ERNS
CHICAGO	91238388	58TH AND PRAIRIE	58TH AND PRAIRIE		ERNS
CHICAGO	89111593	59TH AND HORNE	59TH AND HORNE		ERNS
CHICAGO	2009925992	59TH AND PRARIE	59TH AND PRARIE		ERNS
CHICAGO	2010940083	59TH AND MASSASOTT	59TH		ERNS
CHICAGO	S111218553		59TH ST & HALSTED		SPILLS
CHICAGO	S111885320		59TH & WENTWORTH		SPILLS
CHICAGO	S111909924		2101 W 59TH		SPILLS
CHICAGO	S111882253		59TH & BISHOP		SPILLS
CHICAGO	S111926929		59TH ST		SPILLS
CHICAGO	S111905285		2801 W 59TH		SPILLS
CHICAGO	S111881755		3301 W 59TH		SPILLS
CHICAGO	S111915272		2101 59TH ST		SPILLS
CHICAGO	S111908487		59TH SAINT BETWEEN DAMON & WESTERN		SPILLS
CHICAGO	S111908378		2101 W 59TH		SPILLS
CHICAGO	S111900002		4452 W 5TH ST		SPILLS
CHICAGO	S111884620		60TH & DORCHESTER		SPILLS
CHICAGO	S111349402		61ST ST		SPILLS
CHICAGO	S111921253		61ST & ELLIS ST		SPILLS
CHICAGO	S111890702		61ST & CICERO		SPILLS
CHICAGO	S111909762		6000 W 623RD ST		SPILLS
CHICAGO	91233172	62ND & LASALLE (EAST SIDE OF TRACKS)	62ND & LASALLE (EAST SIDE OF TRACKS)		ERNS
CHICAGO	S108046564		63RD SAINT INTERMODLE FACILITY		SPILLS
CHICAGO	2004721985	63RD AND ASHLAND	63RD AND ASHLAND		ERNS
CHICAGO	2006814764	63RD STREET	63RD STREET		ERNS
CHICAGO	2008883760	63RD STREET RAIL YARD	63RD STREET RAIL YARD		ERNS
CHICAGO	S111349563		63RD & PULASKI		SPILLS
CHICAGO	S109327514		63RD SAINT ENGLEWOOD YARD		SPILLS

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CHICAGO	S110824974		2800 W 63RD		SPILLS
CHICAGO	2006814727	63RD ST INTERMODAL RAMP	63RD ST INTERMODAL RAMP		ERNS
CHICAGO	2006818594	63RD AND STATE STREET	63RD AND STATE STREET		ERNS
CHICAGO	2010954740	63RD STREET	63RD ST		ERNS
CHICAGO	S111887350		63RD & UNION		SPILLS
CHICAGO	S111886430		5400 W 63RD SAINT MIDWAY AVIATION SUP		SPILLS
CHICAGO	S111881447		63RD & HOMAN		SPILLS
CHICAGO	S111925459		5000 W 63RD SAINT MIDWAY AP		SPILLS
CHICAGO	S111875746		6400 W 63RD		SPILLS
CHICAGO	S111900462		3515 W 63RD SAINT CHICAGO PD 8TH		SPILLS
CHICAGO	S111877019		63RD SAINT LOREL		SPILLS
CHICAGO	S111901688		63RD ST		SPILLS
CHICAGO	S111895740		63RD & LARAMIE		SPILLS
CHICAGO	S111915495		63RD & OAKLEY		SPILLS
CHICAGO	S111927894		7030 W 63RD		SPILLS
CHICAGO	S111890750		63RD & (ST		SPILLS
CHICAGO	S111880671		63RD & KOSTNER		SPILLS
CHICAGO	S111894905		63RD & INDIANA STS		SPILLS
CHICAGO	S108046554		6300 N 6420		SPILLS
CHICAGO	S111878677		64TH & DAN RYAN EXPY		SPILLS
CHICAGO	S111882808		64TH & COTTAGE GRV		SPILLS
CHICAGO	S111888399		66TH & WENTWORTH		SPILLS
CHICAGO	S108891628		67TH AVE & WESTERN AVE		SPILLS
CHICAGO	S111888074		67TH & STONY ISLAND AVE		SPILLS
CHICAGO	S111901190		432 E 67TH ST		SPILLS
CHICAGO	S111919162		67TH ST & MICHIGAN AVE		SPILLS
CHICAGO	877558	AT 69TH AND HARLEM	AT 69TH AND HARLEM		ERNS
CHICAGO	S111909195		69TH SAINT DAN RYAN EXPRESS WAY		SPILLS
CHICAGO	91238491	71ST AND PALLESKY	71ST AND PALLESKY		ERNS
CHICAGO	2011963845	AT THE INSECTION OF 71ST AND BENNETT NONE	71ST		ERNS
CHICAGO	S111888166		71ST & STATE ST		SPILLS
CHICAGO	S111878525		499 W 71ST		SPILLS
CHICAGO	S111877483		71ST ST & LAKE SHORE DR		SPILLS
CHICAGO	2000531550	71ST STREET AND KEDZIE AVE	71ST STREET AND KEDZIE AVE	0	ERNS
CHICAGO	872272	72ND & SAYER	72ND & SAYER		ERNS
CHICAGO	S110824843		73RD ST		SPILLS
CHICAGO	S111895872		73RD & KEDZIE AVE		SPILLS
CHICAGO	S111885537		74TH & WOODS ST		SPILLS
CHICAGO	S111878127		74TH & HARDING		SPILLS
CHICAGO	S111923518		7501ST S LAWNDALE & 33RD HAYFORD		SPILLS
CHICAGO	2009896730	75TH STREET AT	75TH STREET AT		ERNS
CHICAGO	2009905642	75TH ST. & SW HWY	75TH ST. & SW HWY		ERNS
CHICAGO	2008896730	75TH STREET AT	75TH STREET AT		ERNS
CHICAGO	2008905642	75TH ST. & SW HWY	75TH ST. & SW HWY		ERNS
CHICAGO	S111894639		75TH & BELL ST		SPILLS
CHICAGO	S108046690		76TH & CICERO PARKING LOT OF FORD CIT MALL		SPILLS
CHICAGO	S111925251		1400 W 76TH		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2007324296	78TH AND PHILLIPS STREET	78TH AND PHILLIPS STREET		ERNS
CHICAGO	S111907714		78TH & WOODLAWN STS		SPILLS
CHICAGO	1004696268	PUBLIC STORAGE	2640 W 79TH		RCRA-CESQG
CHICAGO	S111887212		79TH & PERRY		SPILLS
CHICAGO	S111895139		79TH & KEDZIE AVE		SPILLS
CHICAGO	S111923553		79TH ST & WESTERN AVE		SPILLS
CHICAGO	S111876849		79TH & MERRILL		SPILLS
CHICAGO	S111921806		79TH & CICERO		SPILLS
CHICAGO	S111899140		79TH & KEDZIE		SPILLS
CHICAGO	S111899413		79TH & KILPATRICK		SPILLS
CHICAGO	873714	7TH FLOOR	7TH FLOOR		ERNS
CHICAGO	2008876881	INTERSTATE 80 EASTBOUND	INTERSTATE 80 EASTBOUND		ERNS
CHICAGO	S111907569		I 80 TOLLBOOTH 45		SPILLS
CHICAGO	S111885209		81ST & INDIANA		SPILLS
CHICAGO	S108046748		822ND N ROCKWELL & N KEATING		SPILLS
CHICAGO	S111886154		8250TH & S COTTAGE GROVE AVE		SPILLS
CHICAGO	S111888213		83RD & PULASKI		SPILLS
CHICAGO	S111876908		1111 E 83RD		SPILLS
CHICAGO	S111898513		2501 E 83RD		SPILLS
CHICAGO	S111883741		83RD & STATE ST		SPILLS
CHICAGO	S111883654		86TH SAINT GATE		SPILLS
CHICAGO	S108046297		440 2 87TH ST		SPILLS
CHICAGO	S111887646		87TH & COTTAGE RD		SPILLS
CHICAGO	S111896937		1730 87TH ST		SPILLS
CHICAGO	S111902165		1400 87TH ST		SPILLS
CHICAGO	S111878094		87TH ST & KING AVE		SPILLS
CHICAGO	S111876074		87TH & MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111898018		87TH & MARTIN LUTHER DR		SPILLS
CHICAGO	S109953838		I 88 E & HIGHLAND AVE		SPILLS
CHICAGO	S111915633		89TH & RACINE		SPILLS
CHICAGO	S109700073		I 90 MP 48		SPILLS
CHICAGO	S111885631		I 90 ONSHOULDERSBDANRYAN & I 94 AT 79TH ST		SPILLS
CHICAGO	S111927573		I 90 WB		SPILLS
CHICAGO	S111876495		I 90 & N I 94 NB		SPILLS
CHICAGO	S111896119		I 90 & I 290 MM		SPILLS
CHICAGO	S111901056		I 90 & I 94 EB		SPILLS
CHICAGO	S111899135		I 90 94 AT 410 AVENUE		SPILLS
CHICAGO	S111895712		I 90 WB		SPILLS
CHICAGO	S111894927		I 90 NEATARMITAGE AVE		SPILLS
CHICAGO	S111883615		125 I 90 WB		SPILLS
CHICAGO	S111883537		I 90 EBMPOTOLL ROAD		SPILLS
CHICAGO	S108480169		I 90 WB		SPILLS
CHICAGO	2000540207	ROUTE 90	ROUTE 90	0	ERNS
CHICAGO	S111880871		9059TH S WESTERN & 91ST		SPILLS
CHICAGO	2008880922	90TH STREET	90TH STREET		ERNS
CHICAGO	S111911279		90TH & ANTHONY ST		SPILLS
CHICAGO	S111891107		925ND & KIMBARK		SPILLS

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CHICAGO	93309560	92ND ST BRIDGE	92ND ST BRIDGE		ERNS
CHICAGO	S111877738		3125 E 92ND		SPILLS
CHICAGO	2000516161	93RD AND SANGAMON STREETS	93RD AND SANGAMON STREETS	0	ERNS
CHICAGO	S109953773		I 94 NB		SPILLS
CHICAGO	S110122315		I 94 EBEXIT 73		SPILLS
CHICAGO	S111349598		I 94		SPILLS
CHICAGO	S109366492		I 94 EBEXIT 68		SPILLS
CHICAGO	2011966167	INTERSTATE 94 EASTBOUND BEFORE THE FULLERTON EXIT	I 94 EASTBOUNDBEFORETHEFULLERTON		ERNS
CHICAGO	S111885871		I 94 NBATPOLK ST		SPILLS
CHICAGO	S111898276		I 94 & 59TH SAINT ENTRANCE RAMP		SPILLS
CHICAGO	S111927566		I 94 & 55TH SAINT EXIT		SPILLS
CHICAGO	S111904380		I 94 EB & MONTROSE		SPILLS
CHICAGO	S111910037		I 94 & 130TH ST NB		SPILLS
CHICAGO	S111912362		I 94 WBEXIT 59B		SPILLS
CHICAGO	S111883105		I 94 & OGDEN ST		SPILLS
CHICAGO	S111910894		I 94 & I 90 AT IRVING PARK RD		SPILLS
CHICAGO	S111925806		I 94 EASTBOUND		SPILLS
CHICAGO	S111893668		I 94 NB		SPILLS
CHICAGO	S111914933		I 94 MM 64 S		SPILLS
CHICAGO	S111903237		I 94 WB		SPILLS
CHICAGO	S111896729		I 94 NB		SPILLS
CHICAGO	S111920177		I 94 S & EXIT 33A		SPILLS
CHICAGO	S111920168		I 94 EXIT 33A S		SPILLS
CHICAGO	S111920145		I 94 SB		SPILLS
CHICAGO	98424429	94TH AND DAN RYAN EXP	94TH AND DAN RYAN EXP		ERNS
CHICAGO	98444633	95TH STREET AT THE BOAT DOCKS	95TH STREET AT THE BOAT DOCKS		ERNS
CHICAGO	2008885493	95TH AND ASHLAND	95TH AND ASHLAND		ERNS
CHICAGO	S109327559		95TH ST & CHICAGO SKWY		SPILLS
CHICAGO	2010936475	95TH AND VINCENNES	95TH		ERNS
CHICAGO	S111885252		1421 2 95TH ST		SPILLS
CHICAGO	2012105009		95TH AND VINCENNES ST		ERNS
CHICAGO	S111881440		2647 E 95TH		SPILLS
CHICAGO	S111876565		4001 E 95TH SAINT CALUMET HBR		SPILLS
CHICAGO	S111910538		95TH ST & COLFAX		SPILLS
CHICAGO	S111888906		49 E 95TH SAINT ABBOTT PARK		SPILLS
CHICAGO	S111904651		1123 E 95TH AVE		SPILLS
CHICAGO	S111920554		95TH & WENTWORTH		SPILLS
CHICAGO	2010951454	MILE POST 9.69	969		ERNS
CHICAGO	2011992364		96TH BLOCK OF COMMERCIAL AVE		ERNS
CHICAGO	2007301682	97TH STREET	97TH STREET		ERNS
CHICAGO	97408920	97TH STREET YARD NORFOLK SOUTHERN RR	97TH STREET YARD NORFOLK SOUTHERN RR		ERNS
CHICAGO	S111920983		97TH SAINT ROCK IS		SPILLS
CHICAGO	876733	99TH ST AND CENTRAL PARK	99TH ST AND CENTRAL PARK		ERNS
CHICAGO	875165	99TH ST. AND AVE. J	99TH ST. AND AVE. J		ERNS
CHICAGO	S111890848		99TH & HALSTEAD		SPILLS
CHICAGO	2000537597	99TH STREET AND WESTERN AVE	99TH STREET AND WESTERN AVE	0	ERNS

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CHICAGO	S111912210		5414 S ABERDEEN		SPILLS
CHICAGO	S111900403		406 N ABERDEEN		SPILLS
CHICAGO	S111915133		114 N ABERDEEN		SPILLS
CHICAGO	2011963768	616 SOUTH ACCESS RD	616 S ACCESS RD		ERNS
CHICAGO	S111912541		611 N ACCESS RD		SPILLS
CHICAGO	S111902943		609 S ACCESS RD		SPILLS
CHICAGO	876135	ACROSS FROM 3440 NORTH LAKESHORE DR, IN BELMONT HARBOR	ACROSS FROM 3440 NORTH LAKESHORE DR, IN BELMONT HARBOR		ERNS
CHICAGO	2010960900	12245 SOUTH ADA	12245 S ADA		ERNS
CHICAGO	S111888659		11250 S ADA		SPILLS
CHICAGO	S111899285		172 N ADA		SPILLS
CHICAGO	S111877769		ADAMS & SANGAMON		SPILLS
CHICAGO	S111895246		1130 W ADAMS		SPILLS
CHICAGO	S111904649		1029 W ADAMS		SPILLS
CHICAGO	S111902090		927 W ADAMS		SPILLS
CHICAGO	S111883547		1114 W ADAMS		SPILLS
CHICAGO	S111913912		1127 W ADAMS		SPILLS
CHICAGO	S111887356		6001 W ADDISON		SPILLS
CHICAGO	S111926696		5200 W ADDISON		SPILLS
CHICAGO	S111912256		3323 W ADDISON AVE		SPILLS
CHICAGO	S111904712		5935 W ADDISON RD		SPILLS
CHICAGO	S111907993		1801 W ADDISON RD		SPILLS
CHICAGO	S111925267		2436 ADDISON ST		SPILLS
CHICAGO	S111903324		4601 W ADDISON		SPILLS
CHICAGO	S111875851		6000 ADDISON		SPILLS
CHICAGO	S111922758		3159 W ADDISON		SPILLS
CHICAGO	S111905549		5935 W ADDISON		SPILLS
CHICAGO	S111896798		6519 W ADDISON AVE		SPILLS
CHICAGO	S111877287		7560 W ADDISON		SPILLS
CHICAGO	S111876140		3555 W ADDISON		SPILLS
CHICAGO	S111888785		2800 W ADDISON		SPILLS
CHICAGO	S111896716		4550 W ADDISON AVE		SPILLS
CHICAGO	S111876013		7560 W ADDISON		SPILLS
CHICAGO	S111876008		4633 ADDISON AVE		SPILLS
CHICAGO	S111883985		4440 W ADDISON		SPILLS
CHICAGO	S111878561		7200 W ADDISON		SPILLS
CHICAGO	S111902548		2500 W ADDISON		SPILLS
CHICAGO	S111876607		3700 W ADDISON		SPILLS
CHICAGO	89124407	ADJACENT TO 9300 S. SANGAMON	ADJACENT TO 9300 S. SANGAMON		ERNS
CHICAGO	S111927545		2319 W AGUSTA BLVD		SPILLS
CHICAGO	S111905860		4560 W AGUSTA BLVD		SPILLS
CHICAGO	S111887521		3206 W AINSLIE		SPILLS
CHICAGO	94382241	AIRCRAFT PARKING LOT NORTH END OF OHARE INT AIRPORT	AIRCRAFT PARKING LOT NORTH END OF OHARE INT AIRPORT		ERNS
CHICAGO	S111877908		US AIRFORCEBASE		SPILLS
CHICAGO	2007319807	ALBANY GRADE CROSSING ON THE BROWN LINE	ALBANY GRADE CROSSING ON THE BROWN LINE		ERNS
CHICAGO	S111885146		ALBANY ST & CHICAGO AVE		SPILLS

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CHICAGO	S111878211		3610 S ALBANY		SPILLS
CHICAGO	S111918682		2417 N ALBANY		SPILLS
CHICAGO	S111902233		3700 S ALBANY		SPILLS
CHICAGO	S111905680		744 W ALDINE		SPILLS
CHICAGO	92296598	ALLEY ADJACENT TO 1669 FARWELL AVE	ALLEY ADJACENT TO 1669 FARWELL AVE		ERNS
CHICAGO	98419775	ALLEY AT 4920 NORTH KENMORE AVENUE	ALLEY AT 4920 NORTH KENMORE AVENUE		ERNS
CHICAGO	97417233	ALLEY NEAR HOLMAN AND 23RD STREET	ALLEY NEAR HOLMAN AND 23RD STREET		ERNS
CHICAGO	90155144	ALLEY BEHIND 3737 N. ASHLAND	ALLEY BEHIND 3737 N. ASHLAND		ERNS
CHICAGO	89118759	IN ALLEY BEHIND, 111 WEST WINONA	IN ALLEY BEHIND, 111 WEST WINONA		ERNS
CHICAGO	99626121	ALLEY BEHIND RUETERS BAKERY/7175 WEST GRAND AVE	ALLEY BEHIND RUETERS BAKERY/7175 WEST GRAND AVE		ERNS
CHICAGO	S111879642		1300 W ALTGELD AVE		SPILLS
CHICAGO	S111913999		5940 W ALTGELD		SPILLS
CHICAGO	S111887832		ALWASTE COMPANY SOUTH COTTAGE GRV		SPILLS
CHICAGO	S111881951		2844 N ALY MILWAUKEE AVE		SPILLS
CHICAGO	S111896501		AMB & OHARE AIRPORT		SPILLS
CHICAGO	92264268	AMERICAN AIRLINES FREIGHT TERMINAL	AMERICAN AIRLINES FREIGHT TERMINAL		ERNS
CHICAGO	S109700034		AMERICAN AIRLINES HANGER 1		SPILLS
CHICAGO	S109700033		AMERICAN AIRLINES HANGER 1		SPILLS
CHICAGO	S111909909		AMERICAN AIRLINES HANGER OHARE		SPILLS
CHICAGO	S111909487		AMERICAN AIRLINES GATE G19		SPILLS
CHICAGO	S111924903		AMERICAN AIRLINES HANGAR 1		SPILLS
CHICAGO	8718690	AMOCO STATION WEST PETERSON ST	AMOCO STATION WEST PETERSON ST		ERNS
CHICAGO	S108045529		1463 AND 1465 W HUBBARD		SPILLS
CHICAGO	93329071	71 ST AND PULASKI ST ADJACENT TO DOMINICKS	71 ST AND PULASKI ST ADJACENT TO DOMINICKS		ERNS
CHICAGO	89127613	130 ST AND TORENCE AVE	130 ST AND TORENCE AVE		ERNS
CHICAGO	873985	130 AND TORRANCE AVENUE JUST SOUTH OF SOUTH SHORE RAIL ROAD	130 AND TORRANCE AVENUE JUST SOUTH OF SOUTH SHORE RAIL ROAD		ERNS
CHICAGO	89119785	A AND B ARE 5 BLOCKS APART.	A AND B ARE 5 BLOCKS APART.		ERNS
CHICAGO	99638599	I-94 AND 130TH STREET	I-94 AND 130TH STREET		ERNS
CHICAGO	98466955	39 TH AND RACIN NEAR RAILROAD	39 TH AND RACIN NEAR RAILROAD		ERNS
CHICAGO	2000670407	AND COLUMBUS ST.	AND COLUMBUS ST.		ERNS
CHICAGO	S111927439		4500 W ANNE LORI PL		SPILLS
CHICAGO	S111912212		3418 W ANSLIE ST		SPILLS
CHICAGO	S111882269		7740 S ANTHONY		SPILLS
CHICAGO	2002598671	ANTHONY STREET	ANTHONY STREET	0	ERNS
CHICAGO	93324425	APEX DOCK ON THE ILLINOIS RIVER	APEX DOCK ON THE ILLINOIS RIVER		ERNS
CHICAGO	S111887926		APEX DOCK		SPILLS
CHICAGO	S108046848		ARCHER & KOSTER AVE		SPILLS
CHICAGO	2004712427	ARCHER AVENUE & KOSTER AVENUE	ARCHER AVENUE & KOSTER AVENUE		ERNS
CHICAGO	S111887303		4400 S ARCHER		SPILLS
CHICAGO	S111885938		4710 S ARCHER		SPILLS
CHICAGO	S111900032		4546 S ARCHER		SPILLS
CHICAGO	S111909973		ARCHER & LOCKWOOD		SPILLS
CHICAGO	S111907499		5434 S ARCHER		SPILLS
CHICAGO	S111925457		ARCHER & CANAL		SPILLS
CHICAGO	S111925458		ARCHER		SPILLS

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CHICAGO	S111882732		4555 S ARCHER		SPILLS
CHICAGO	S111908313		6150 S ARCHER		SPILLS
CHICAGO	S111910533		3956 S ARCHER		SPILLS
CHICAGO	S111924484		ARCHER AND CLARK STS		SPILLS
CHICAGO	S111877409		ARCHER & CENTRAL		SPILLS
CHICAGO	S111893743		3402 S ARCHER		SPILLS
CHICAGO	S111899851		5552 ARCHER		SPILLS
CHICAGO	S111877291		6824 W ARCHER		SPILLS
CHICAGO	S111880751		5889 ARCHER AVE		SPILLS
CHICAGO	S111905725		ARCHER & CICERO AVE		SPILLS
CHICAGO	S111924727		6751 W ARCHER		SPILLS
CHICAGO	S111900992		3583 S ARCHER		SPILLS
CHICAGO	2002608327	AREA 2 GARAGE	AREA 2 GARAGE	0	ERNS
CHICAGO	96501842	2900 WEST ARGYLE FRANCISCO ST AT RIVER PARK	2900 WEST ARGYLE FRANCISCO ST AT RIVER PARK		ERNS
CHICAGO	S111900910		4014 W ARGYLE		SPILLS
CHICAGO	S111894232		1333 ARGYLE ST		SPILLS
CHICAGO	S111911967		4701 W ARMATAGE AVE		SPILLS
CHICAGO	S108047902		ARMITAGE		SPILLS
CHICAGO	S111899643		3839 W ARMITAGE		SPILLS
CHICAGO	S111891969		3920 W ARMITAGE		SPILLS
CHICAGO	S111890623		1955 W ARMITAGE		SPILLS
CHICAGO	S111904745		1135 W ARMITAGE		SPILLS
CHICAGO	S111892222		1135 W ARMITAGE RD		SPILLS
CHICAGO	S111893394		2518 ARMITAGE AVE		SPILLS
CHICAGO	S111892624		2052 W ARMITAGE		SPILLS
CHICAGO	S111883582		6803 ARMITAGE		SPILLS
CHICAGO	S111910152		4740 W ARMITAGE		SPILLS
CHICAGO	S111884834		4447 W ARMITAGE		SPILLS
CHICAGO	S111895626		2317 W ARMITAGE		SPILLS
CHICAGO	S111890355		3400 W ARMITAGE		SPILLS
CHICAGO	S111912634		1768 W ARMITAGE		SPILLS
CHICAGO	S111894278		3247 W ARMNITAGE		SPILLS
CHICAGO	S111912324		2745 ARMSTRONG CT		SPILLS
CHICAGO	S111901434		5419 W ARMSTRONG		SPILLS
CHICAGO	S111880653		5353 N ARMSTRONG AVE		SPILLS
CHICAGO	S108045921		2525 S ARTEGIAN		SPILLS
CHICAGO	S111881808		4825 ARTHINGTON		SPILLS
CHICAGO	S111907628		2954 W ARTHUR ST		SPILLS
CHICAGO	S111891841		4324 S ARTISEN ST		SPILLS
CHICAGO	91232602	3901 ASHLAND AVE	3901 ASHLAND AVE		ERNS
CHICAGO	96517432	ASHLAND AVE MILEPOST UNKNOWN	ASHLAND AVE MILEPOST UNKNOWN		ERNS
CHICAGO	2004733058	ASHLAND AVENUE	ASHLAND AVENUE		ERNS
CHICAGO	90151129	ASHLAND AVE YARD	ASHLAND AVE YARD		ERNS
CHICAGO	2009914875	4024 ASHLAND AVENUE	4024 ASHLAND AVENUE		ERNS
CHICAGO	2008914875	4024 ASHLAND AVENUE	4024 ASHLAND AVENUE		ERNS
CHICAGO	2005620314	4024 ASHLAND AVE	4024 ASHLAND AVE		ERNS

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CHICAGO	2005604687	ASHLAND AVE	ASHLAND AVE		ERNS
CHICAGO	2005601210	4024 ASHLAND AVENUE	4024 ASHLAND AVENUE		ERNS
CHICAGO	2005615233	4107 ASHLAND AVE.	4107 ASHLAND AVE.		ERNS
CHICAGO	2006807909	4024 ASHLAND AVE	4024 ASHLAND AVE		ERNS
CHICAGO	2006797514	4024 ASHLAND AVE	4024 ASHLAND AVE		ERNS
CHICAGO	S111888048		6630 S ASHLAND		SPILLS
CHICAGO	S111887349		4810 S ASHLAND		SPILLS
CHICAGO	S111887205		6501 N ASHLAND		SPILLS
CHICAGO	S111887600		5257 S ASHLAND		SPILLS
CHICAGO	S111885804		4008 S ASHLAND		SPILLS
CHICAGO	S111896674		7531 ASHLAND AVE		SPILLS
CHICAGO	S111877168		7531 S ASHLAND		SPILLS
CHICAGO	S111905995		ASHLAND AVE		SPILLS
CHICAGO	S111900270		2522 N ASHLAND		SPILLS
CHICAGO	S111900269		2522 N ASHLAND		SPILLS
CHICAGO	S111878491		3434 N ASHLAND		SPILLS
CHICAGO	S111927483		4024 ASHLAND AVE		SPILLS
CHICAGO	S111912485		9131 S ASHLAND		SPILLS
CHICAGO	S111913577		4016 S ASHLAND		SPILLS
CHICAGO	S111882740		649 N ASHLAND		SPILLS
CHICAGO	S111878983		100 S ASHLAND		SPILLS
CHICAGO	S111902676		4024 ASHLAND AVE		SPILLS
CHICAGO	S111897809		3656 N ASHLAND		SPILLS
CHICAGO	S111875322		4024 S ASHLAND		SPILLS
CHICAGO	S111925244		4024 ASHLAND AVE		SPILLS
CHICAGO	S111911966		133 S ASHLAND		SPILLS
CHICAGO	S111902630		3931 N ASHLAND		SPILLS
CHICAGO	S111888954		7225 S ASHLAND		SPILLS
CHICAGO	S111888621		11859 ASHLAND		SPILLS
CHICAGO	S111878225		3715 ASHLAND AVE		SPILLS
CHICAGO	S111876462		2545 N ASHLAND		SPILLS
CHICAGO	S111881752		3901 ASHLAND		SPILLS
CHICAGO	S111898942		625 N ASHLAND		SPILLS
CHICAGO	S111892788		1000 N ASHLAND		SPILLS
CHICAGO	S111920063		401 N ASHLAND		SPILLS
CHICAGO	S111895462		3332 N ASHLAND		SPILLS
CHICAGO	S111891530		7520 S ASHLAND		SPILLS
CHICAGO	S111882029		5343 S ASHLAND		SPILLS
CHICAGO	S111922702		ASHLAND AVE		SPILLS
CHICAGO	S111920039		4224 ASHLAND AVE		SPILLS
CHICAGO	S111889871		2352 S ASHLAND		SPILLS
CHICAGO	S111924249		4024 ASHLAND AVE		SPILLS
CHICAGO	S111905030		415 N ASHLAND		SPILLS
CHICAGO	S111905871		2200 S ASHLAND		SPILLS
CHICAGO	S111899471		6837 S ASHLAND		SPILLS
CHICAGO	S111889175		7101 S ASHLAND		SPILLS
CHICAGO	S111879432		8345 S ASHLAND		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111919969		4024 ASHLAND AVE		SPILLS
CHICAGO	S111919211		4024 ASHLAND AVE		SPILLS
CHICAGO	S111915218		7059 S ASHLAND		SPILLS
CHICAGO	S111882512		3700 S ASHLAND		SPILLS
CHICAGO	S111881216		ASHLAND & LAWRENCE		SPILLS
CHICAGO	S111909172		8701 S ASHLAND		SPILLS
CHICAGO	S111889497		4123 N ASHLAND		SPILLS
CHICAGO	S111875588		3737 N ASHLAND		SPILLS
CHICAGO	S111920317		2800 N ASHLAND		SPILLS
CHICAGO	S111891756		OF ASHLAND AVE		SPILLS
CHICAGO	S111880143		2459 N ASHLAND		SPILLS
CHICAGO	S111879985		9420 S ASHLAND		SPILLS
CHICAGO	S111919890		4024 ASHLAND AVE		SPILLS
CHICAGO	S111919871		2730 N ASHLAND		SPILLS
CHICAGO	S111895708		6630 S ASHLAND		SPILLS
CHICAGO	S111888774		ASHLAND YARD		SPILLS
CHICAGO	S111905457		325 N ASHLAND		SPILLS
CHICAGO	S111880683		7059 ASHLAND ST		SPILLS
CHICAGO	S111903522		5900 S ASHLAND		SPILLS
CHICAGO	S111903492		649 N ASHLAND		SPILLS
CHICAGO	S111901940		2020 N ASHLAND		SPILLS
CHICAGO	S111901581		3535 S ASHLAND		SPILLS
CHICAGO	S111903829		5257 S ASHLAND		SPILLS
CHICAGO	S111890400		3130 S ASHLAND		SPILLS
CHICAGO	S111875987		2020 N ASHLAND		SPILLS
CHICAGO	S111879066		ASHLAND & 22ND ST		SPILLS
CHICAGO	S111924188		4024 ASHLAND AVE		SPILLS
CHICAGO	S111915565		8640 S ASHLAND		SPILLS
CHICAGO	S111915294		7101 S ASHLAND		SPILLS
CHICAGO	S111914633		348 ASHLAND AVE		SPILLS
CHICAGO	S111910200		2100 S ASHLAND		SPILLS
CHICAGO	S111884403		5026 N ASHLAND		SPILLS
CHICAGO	S111749785		1430 S ASHLAND		SPILLS
CHICAGO	S109366444		ASIG MOUNT PROSPECT RD NW		SPILLS
CHICAGO	S111924323		RD ASIG MOUNT PROSPECT ENTRANCE H NW		SPILLS
CHICAGO	92253228	ASPHALT RECOVERY SYSTEMS 4835 SOUTH MORG/	ASPHALT RECOVERY SYSTEMS 4835 SOUTH MORGAN		ERNS
CHICAGO	94393029	M-5 AT ACCESS RD AT OHARE AIRPORT BETWEEN TERMINAL 3 AND INT	M-5 AT ACCESS RD AT OHARE AIRPORT BETWEEN TERMINAL 3 AND INT		ERNS
CHICAGO	2009900532	I-57 AT 99TH & HALSTEAD EXIT	I-57 AT 99TH & HALSTEAD EXIT		ERNS
CHICAGO	2008900532	I-57 AT 99TH & HALSTEAD EXIT	I-57 AT 99TH & HALSTEAD EXIT		ERNS
CHICAGO	S111894433		2363 W AUGDEN AVE		SPILLS
CHICAGO	S111888908		4501 W AUGUST BLVD		SPILLS
CHICAGO	S111885906		2405 W AUGUSTA		SPILLS
CHICAGO	S111894681		1700 W AUGUSTA		SPILLS
CHICAGO	S111906482		1260 W AUGUSTA		SPILLS
CHICAGO	S111918585		1949 W AUGUSTA		SPILLS
CHICAGO	S111897818		4801 S AUSTIN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111875905		1900 N AUSTIN		SPILLS
CHICAGO	S111898927		3020 N AUSTIN		SPILLS
CHICAGO	89108912	NORTH AVE AND LASALLE ST	NORTH AVE AND LASALLE ST		ERNS
CHICAGO	S109167113		1425 SW AVE		SPILLS
CHICAGO	S111889368		6131 NORTHWEST AVE		SPILLS
CHICAGO	S111889367		6060 NORTHWEST AVE		SPILLS
CHICAGO	S111909940		1425 SOUTHWEST AVE		SPILLS
CHICAGO	S111905664		10558 AVE NORTH		SPILLS
CHICAGO	S111875954		11610 AVE O		SPILLS
CHICAGO	S111912313		11835 S AVE 0		SPILLS
CHICAGO	S111901173		AVE 0 & 116TH ST		SPILLS
CHICAGO	S111909089		5600 NORTH AVE		SPILLS
CHICAGO	S111899915		12949 AVE O		SPILLS
CHICAGO	S111927231		6740 W AVE		SPILLS
CHICAGO	S111907771		732 SOUTHWEST AVE		SPILLS
CHICAGO	S111898055		11610 AVE O		SPILLS
CHICAGO	S111927791		1425 SW AVE		SPILLS
CHICAGO	S111908413		13600 S AVE N		SPILLS
CHICAGO	S111896019		11610 AVE O		SPILLS
CHICAGO	S111912702		AVE N		SPILLS
CHICAGO	S111897832		NORTH AVE		SPILLS
CHICAGO	91217612	AVE. O & 111TH STREET	AVE. O & 111TH STREET		ERNS
CHICAGO	2005616197	6547 N AVENDALE	6547 N AVENDALE		ERNS
CHICAGO	90169860	11610 AVENUE ZERO	11610 AVENUE ZERO		ERNS
CHICAGO	S111888413		4024 N AVERS		SPILLS
CHICAGO	S111907712		388 N AVERS ST		SPILLS
CHICAGO	S111906041		3360 N AVONDALE		SPILLS
CHICAGO	S111907972		3388 AVONDALE ST		SPILLS
CHICAGO	S111906266		6501 N AVONDALE BLVD		SPILLS
CHICAGO	S111892650		6479 N AVONDALE		SPILLS
CHICAGO	94366797	MM B514	MM B514		ERNS
CHICAGO	99650012	IN BACK OF CAR DEALER	IN BACK OF CAR DEALER		ERNS
CHICAGO	S111912436		8500 S BAKER		SPILLS
CHICAGO	S111905021		13359 S BALTIMORE ST		SPILLS
CHICAGO	S111898806		8491 S BALTIMORE		SPILLS
CHICAGO	92297014	BARR YARD FACILITY	BARR YARD FACILITY		ERNS
CHICAGO	94368478	BARR YARD	BARR YARD		ERNS
CHICAGO	94407403	BARR RAIL YARD TRACK F2	BARR RAIL YARD TRACK F2		ERNS
CHICAGO	S110278199		BARR YARD		SPILLS
CHICAGO	2007308409	BARR RAILYARD	BARR RAILYARD		ERNS
CHICAGO	S111890670		BARR YARD		SPILLS
CHICAGO	S111893146		BARR YARD		SPILLS
CHICAGO	S111896779		BARR YARD IN		SPILLS
CHICAGO	S111892664		BARR YARD		SPILLS
CHICAGO	S111891412		S BARR YARD 13600		SPILLS
CHICAGO	S111907524		BARR RAILYARD		SPILLS
CHICAGO	S111910961		4921 W BARRISON ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2012107030		BEDFORD PARK		ERNS
CHICAGO	93317876	BEHIND QUARRY ON 28TH AND HALLSTON	BEHIND QUARRY ON 28TH AND HALLSTON		ERNS
CHICAGO	93312357	BEHIND BUS STATION AT FOSTER STREET	BEHIND BUS STATION AT FOSTER STREET		ERNS
CHICAGO	8867774	BEHIND FORD MOTOR CO	BEHIND FORD MOTOR CO		ERNS
CHICAGO	S111909791		6650 W BELDEN AVE		SPILLS
CHICAGO	S111909066		6650 W BELDEN AVE		SPILLS
CHICAGO	S111905676		7003 S BELL		SPILLS
CHICAGO	S111891060		4244 N BELL		SPILLS
CHICAGO	S111923381		7100 S BELL		SPILLS
CHICAGO	S111907306		6301 S BELL		SPILLS
CHICAGO	S111877683		342 N BELL		SPILLS
CHICAGO	S111907143		4117 N BELL ST		SPILLS
CHICAGO	2001552751	SH BELL OLD DRY DOCK SLIP	SH BELL OLD DRY DOCK SLIP	0	ERNS
CHICAGO	S111926441		7320 W BELLMONT		SPILLS
CHICAGO	S111882675		7055 W BELLMONT AVE		SPILLS
CHICAGO	S111884055		4200 W BELLMONT AVE		SPILLS
CHICAGO	S111905727		6809 BELLMONT AVE		SPILLS
CHICAGO	2001562904	BELLMONT ROAD	BELLMONT ROAD	0	ERNS
CHICAGO	93349990	BELMONT AND KEDZEE STS	BELMONT AND KEDZEE STS		ERNS
CHICAGO	2004724076	3200 NORTH BELMONT	3200 NORTH BELMONT		ERNS
CHICAGO	2003702829	BELMONT HARBOR	BELMONT HARBOR		ERNS
CHICAGO	S111887682		5001 W BELMONT		SPILLS
CHICAGO	S111886379		4549 BELMONT		SPILLS
CHICAGO	S111885935		3968 W BELMONT		SPILLS
CHICAGO	S111887621		4500 W BELMONT		SPILLS
CHICAGO	S111904780		3500 W BELMONT		SPILLS
CHICAGO	S111899228		1415 W BELMONT		SPILLS
CHICAGO	S111895053		4820 W BELMONT		SPILLS
CHICAGO	S111875235		5400 W BELMONT		SPILLS
CHICAGO	S111898905		5142 W BELMONT		SPILLS
CHICAGO	S111893069		2227 W BELMONT		SPILLS
CHICAGO	S111921792		2858 W BELMONT		SPILLS
CHICAGO	S111894478		4401 W BELMONT		SPILLS
CHICAGO	S111881972		3927 W BELMONT		SPILLS
CHICAGO	S111906293		4700 W BELMONT		SPILLS
CHICAGO	S111888499		6419 BELMONT		SPILLS
CHICAGO	S111899454		5811 W BELMONT		SPILLS
CHICAGO	S111890737		6546 W BELMONT		SPILLS
CHICAGO	S111882827		1525 W BELMONT		SPILLS
CHICAGO	S111898676		3409 W BELMONT		SPILLS
CHICAGO	S111897570		3045 W BELMONT ST		SPILLS
CHICAGO	S111878548		6757 W BELMONT		SPILLS
CHICAGO	S111884819		2001 W BELMONT		SPILLS
CHICAGO	S111899039		5410 W BELMONT		SPILLS
CHICAGO	S111911378		5900 W BELMONT		SPILLS
CHICAGO	S111883236		3416 W BELMONT		SPILLS
CHICAGO	2000533030	BELMONT HARBOR	BELMONT HARBOR	0	ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S109953676		1608 W BELMONTE AVE		SPILLS
CHICAGO	S111925406		1608 W BELMONTE AVE		SPILLS
CHICAGO	96486114	BELT RAILWAY YARD MP: UNKNOWN	BELT RAILWAY YARD MP: UNKNOWN		ERNS
CHICAGO	S111899119		1457 W BELTMONT AVE		SPILLS
CHICAGO	S111920275		2415 W BEMONT AVE		SPILLS
CHICAGO	S111905126		5600 N BENARD		SPILLS
CHICAGO	S111911325		BENSENVILLE RAILROAD YARD		SPILLS
CHICAGO	99621260	BENSONVILLE YARD BETWEEN MANHEIM AND YORK ROAD	BENSONVILLE YARD BETWEEN MANHEIM AND YORK ROAD		ERNS
CHICAGO	S111911109		5555 N BERNARD AVE		SPILLS
CHICAGO	S111909587		1641 W BERRY		SPILLS
CHICAGO	2002625685	3237 W BERTAEU	3237 W BERTAEU	0	ERNS
CHICAGO	S111875681		4514 BERTEAU		SPILLS
CHICAGO	S111900173		4404 W BERTEAU		SPILLS
CHICAGO	2000542071	BERWIN STATION	BERWIN STATION	0	ERNS
CHICAGO	2010952538	BERWYN STATION RED LINE	BERWYN STA		ERNS
CHICAGO	S111882698		1824 N BESLY		SPILLS
CHICAGO	S111888654		10000 BESSIE COLEMAN RD		SPILLS
CHICAGO	S111904847		1000 BESSIE COLEMAN DR		SPILLS
CHICAGO	S111892588		560 BESSIECOLEMAN DR		SPILLS
CHICAGO	91233983	BETWEEN 4.5 TO 5.0	BETWEEN 4.5 TO 5.0		ERNS
CHICAGO	94360249	BETWEEN MAJOR ST AND PARKSIDE AT THE SOUTH EAST CORNER OF 62	BETWEEN MAJOR ST AND PARKSIDE AT THE SOUTH EAST CORNER OF 62		ERNS
CHICAGO	2000534642	BETWEEN LEMONT AND	BETWEEN LEMONT AND	0	ERNS
CHICAGO	99626004	BETWEEN LOWE AND WALLACE TO 81ST STREET	BETWEEN LOWE AND WALLACE TO 81ST STREET		ERNS
CHICAGO	98433927	BETWEEN ADAMS AND JACKSON STREET AT UNION STATION OUTFALL	BETWEEN ADAMS AND JACKSON STREET AT UNION STATION OUTFALL		ERNS
CHICAGO	S111893339		BETWEEN 8514 S KENNETH & N MICHIGAN AVE		SPILLS
CHICAGO	S111906832		BETWEEN GRAYSLAKE & CHICAGO		SPILLS
CHICAGO	S111910210		BETWEEN 111TH & 112TH ON SOUTH AVE N		SPILLS
CHICAGO	S108046717		800 E BISHOP FORD EXPY		SPILLS
CHICAGO	S110278077		12500 S BISHOP FRD		SPILLS
CHICAGO	S111876709		823 W BLACK HAWK		SPILLS
CHICAGO	S111898039		1419 W BLACKHAWK		SPILLS
CHICAGO	S111875500		823 W BLACKHAWK		SPILLS
CHICAGO	98455783	80000 SOUTH BLACKSTONE	80000 SOUTH BLACKSTONE		ERNS
CHICAGO	93345927	4400 BLOCK OF ADDISON ST NEXT TO SPRAGUE IRON WORKS	4400 BLOCK OF ADDISON ST NEXT TO SPRAGUE IRON WORKS		ERNS
CHICAGO	2004727492	2700 BLOCK OF WEST GRAND	2700 BLOCK OF WEST GRAND		ERNS
CHICAGO	98429208	5700 BLOCK OF NORTH MOBILE AVE IN THE MIDDLE OF THE ALLEY	5700 BLOCK OF NORTH MOBILE AVE IN THE MIDDLE OF THE ALLEY		ERNS
CHICAGO	2009922293	1300 BLOCK OF WESTERN AVE.	1300 BLOCK OF WESTERN AVE.		ERNS
CHICAGO	S109327504		600 BLOCK OF KINZIE		SPILLS
CHICAGO	S111884785		3800 BLOCK OF W TAYLOR ST		SPILLS
CHICAGO	S111877926		5000 BLOCK OF CENTRAL AVE		SPILLS
CHICAGO	S111911159		3221 BLOCK OF S WALLACE		SPILLS
CHICAGO	S111881362		2700 BLOCK OF W GRAND AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111919579		4300 BLOCK OF W FOSTER		SPILLS
CHICAGO	S111895449		4500 BLOCK OF W BERTEAU AVE		SPILLS
CHICAGO	S111919397		1200 BLOCK W OF NORTH AVENUE OF BRG S		SPILLS
CHICAGO	2002598894	2300 BLOCK OF NORTH AVE	2300 BLOCK OF NORTH AVE	0	ERNS
CHICAGO	S111903661		5000 BLOOMINGDALE AVE		SPILLS
CHICAGO	S111907691		4940 BLOOMINGDALE AVE		SPILLS
CHICAGO	S111890714		2530 W BLOOMINGDALE		SPILLS
CHICAGO	2003653270	BLUE LINE / O'HARE BRANCH	BLUE LINE / O'HARE BRANCH		ERNS
CHICAGO	2009908230	BLUE LINE CENTRAL STATION	BLUE LINE CENTRAL STATION		ERNS
CHICAGO	2008908230	BLUE LINE CENTRAL STATION	BLUE LINE CENTRAL STATION		ERNS
CHICAGO	2010938905	BLUE LINE	BLUE LINE		ERNS
CHICAGO	S111913352		2584 S BLUE IS		SPILLS
CHICAGO	S111924578		160 S BLUE ISLAND AVE		SPILLS
CHICAGO	S111892462		2584 S BLUE IS		SPILLS
CHICAGO	S111878148		2655 S BLUE ISLAND AVE		SPILLS
CHICAGO	S111907798		2524 S BLUE IS		SPILLS
CHICAGO	S111889753		1801 SOUTHWEST BLVD		SPILLS
CHICAGO	S111896192		1535 N BOSWORTH		SPILLS
CHICAGO	S111914709		1650 N BOSWORTH ST		SPILLS
CHICAGO	S111891070		41 BRAINARD AVENUE TO 130TH AND S AVE		SPILLS
CHICAGO	S108047339		N BRANCH RD & DIVISION ST		SPILLS
CHICAGO	94395395	NORTH BRANCH	NORTH BRANCH		ERNS
CHICAGO	877940	NORTH BRANCH OF THE CHICAGO RIVER	NORTH BRANCH OF THE CHICAGO RIVER		ERNS
CHICAGO	8714268	NORTH BRANCH	NORTH BRANCH		ERNS
CHICAGO	89118757	SO. BRANCH OF CHGO RIVER BETW LAKE & RAN	SO. BRANCH OF CHGO RIVER BETW LAKE & RAN	-	ERNS
CHICAGO	S111891018		S BRANCH CHICAGO RIV		SPILLS
CHICAGO	S111877919		932 N BRANCH ST		SPILLS
CHICAGO	S111900952		1200 N BRANCH ST		SPILLS
CHICAGO	90188490	922 NORTH BRANCH STREET	922 NORTH BRANCH STREET		ERNS
CHICAGO	99633000	SOUTH BREAK WALL / 63RD STREET BEACH	SOUTH BREAK WALL / 63RD STREET BEACH		ERNS
CHICAGO	91227080	6601 N BRIDGE BLVD	6601 N BRIDGE BLVD		ERNS
CHICAGO	S111881181		6601 N BRIDGE BLVD		SPILLS
CHICAGO	2006801026	BRIGHTON PARK	BRIGHTON PARK		ERNS
CHICAGO	S111349440		5821 N BROADWAY		SPILLS
CHICAGO	S111886763		4900 N BROADWAY		SPILLS
CHICAGO	S111887507		4849 N BROADWAY		SPILLS
CHICAGO	S111887501		5625 N BROADWAY		SPILLS
CHICAGO	S111887779		5156 N BROADWAY		SPILLS
CHICAGO	S111897919		4117 N BROADWAY		SPILLS
CHICAGO	S111884883		3440 N BROADWAY		SPILLS
CHICAGO	S111910986		5657 N BROADWAY		SPILLS
CHICAGO	S111876296		5427 N BROADWAY		SPILLS
CHICAGO	S111899247		2836 N BROADWAY		SPILLS
CHICAGO	S111912165		6231 BROADWAY		SPILLS
CHICAGO	S111877353		5427 N BROADWAY IN ALY		SPILLS
CHICAGO	S111911692		3012 N BROADWAY		SPILLS
CHICAGO	S111905888		3829 N BROADWAY		SPILLS

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CHICAGO	S111906834		5027 N BROADWAY		SPILLS
CHICAGO	S111926518		5343 BROADWAY AVE		SPILLS
CHICAGO	S111882856		4916 N BROADWAY		SPILLS
CHICAGO	S111882855		4925 N BROADWAY		SPILLS
CHICAGO	S111882854		4925 N BROADWAY		SPILLS
CHICAGO	S111899411		2840 N BROADWAY		SPILLS
CHICAGO	S111889471		5719 N BROADWAY		SPILLS
CHICAGO	S111927855		3531 N BROADWAY		SPILLS
CHICAGO	S111877180		5427 N BROADWAY		SPILLS
CHICAGO	S111895976		4843 BROADWAY		SPILLS
CHICAGO	2010960866	BROWN LINE AT KEDZIE STATION	BROWN LINE AT KEDZIE STA		ERNS
CHICAGO	S111887767		1939 W BRYN MAWR ST		SPILLS
CHICAGO	S111883885		1404 W BRYN MAWR ST		SPILLS
CHICAGO	S111905127		3434 W BRYN MAWR		SPILLS
CHICAGO	S111889215		3426 W BRYN MAWR		SPILLS
CHICAGO	S111915544		6123 W BRYN MAWR		SPILLS
CHICAGO	93337686	3131 W BRYNMAWR	3131 W BRYNMAWR		ERNS
CHICAGO	S111891567		3131 N BRYNMAWR AVE		SPILLS
CHICAGO	S111907390		8702 S BUFFALO ST		SPILLS
CHICAGO	S111911437		9002 S BUFFALO		SPILLS
CHICAGO	S108047785		BUILDING SERVICE CTR		SPILLS
CHICAGO	S108046885		BUILDING UNITED AIRLINES		SPILLS
CHICAGO	S111887390		BUILDING OHARE AIRPORT		SPILLS
CHICAGO	2011994509		BUILDING SOUTH CARGO RD		ERNS
CHICAGO	S111924536		BUILDING OHARE INTERNATIONAL A		SPILLS
CHICAGO	S111906378		BURHAM HBR		SPILLS
CHICAGO	S111891899		11600 S BURLEY		SPILLS
CHICAGO	S111902409		11600 BURLEY AVE		SPILLS
CHICAGO	S111900767		11600 BURLEY AVE		SPILLS
CHICAGO	S111894536		110600 BURLEY AVE		SPILLS
CHICAGO	S111889147		11600 S BURLEY		SPILLS
CHICAGO	S111878621		11600 S BURLEY		SPILLS
CHICAGO	S111880564		11600 S BURLEY		SPILLS
CHICAGO	S111898997		11800 S BURLEY		SPILLS
CHICAGO	90180914	11600 BURLY AVE	11600 BURLY AVE		ERNS
CHICAGO	90186778	11600 BURLY AVE	11600 BURLY AVE		ERNS
CHICAGO	93331311	BURNHAM PARK HARBOR	BURNHAM PARK HARBOR		ERNS
CHICAGO	94370999	BURNHAM PARK HARBOR MARINA	BURNHAM PARK HARBOR MARINA		ERNS
CHICAGO	2004727889	BURNHAM HARBOR	BURNHAM HARBOR		ERNS
CHICAGO	2009913512	BURNHAM HARBOR	BURNHAM HARBOR		ERNS
CHICAGO	2008913512	BURNHAM HARBOR	BURNHAM HARBOR		ERNS
CHICAGO	2011986593		BURNHAM HBR		ERNS
CHICAGO	S111877590		BURNHAM HBR		SPILLS
CHICAGO	2001566538	BURNHAM HARBOR	BURNHAM HARBOR	0	ERNS
CHICAGO	2000547571	BURNHAM HARBOR YACHT CLUB	BURNHAM HARBOR YACHT CLUB	0	ERNS
CHICAGO	90184467	BURNS DITCH R&C MARINA	BURNS DITCH R&C MARINA		ERNS
CHICAGO	S111882677		70 W BURTON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S108046892		CAL SAG RIV		SPILLS
CHICAGO	91236336	CAL SAG CHANNEL (6 MI E. OF INDIANA AVE)	CAL SAG CHANNEL (6 MI E. OF INDIANA AVE)		ERNS
CHICAGO	91205743	CALAMUT RAIL YARD	CALAMUT RAIL YARD		ERNS
CHICAGO	S111892119		6200 N CALDWELL		SPILLS
CHICAGO	S111891835		2501 N CALIFORNI AVE		SPILLS
CHICAGO	S111886757		958 N CALIFORNIA		SPILLS
CHICAGO	S111887519		1741 N CALIFORNIA		SPILLS
CHICAGO	S111903102		4637 S CALIFORNIA		SPILLS
CHICAGO	S111881901		925 N CALIFORNIA		SPILLS
CHICAGO	S111896620		4658 S CALIFORNIA		SPILLS
CHICAGO	S111884704		CALIFORNIA & ARMITAGE		SPILLS
CHICAGO	S111902177		3711 S CALIFORNIA		SPILLS
CHICAGO	S111893838		CALIFORNIA & WASHINGTON		SPILLS
CHICAGO	S111877444		3301 S CALIFORNIA		SPILLS
CHICAGO	S111884627		1647 N CALIFORNIA		SPILLS
CHICAGO	S111894587		3151 S CALIFORNIA		SPILLS
CHICAGO	S111879294		6655 S CALIFORNIA		SPILLS
CHICAGO	S111879281		1655 N CALIFORNIA		SPILLS
CHICAGO	S111876477		501 S CALIFORNIA		SPILLS
CHICAGO	S111898539		320 N CALIFORNIA		SPILLS
CHICAGO	S111883048		2000 CALIFORNIA		SPILLS
CHICAGO	S111901748		2339 N CALIFORNIA		SPILLS
CHICAGO	S111900508		4925 S CALIFORNIA		SPILLS
CHICAGO	S111902394		502 S CALIFORNIA		SPILLS
CHICAGO	S111902385		6736 N CALIFORNIA		SPILLS
CHICAGO	S111895024		1500 CALIFORNIA		SPILLS
CHICAGO	S111920561		3500 N CALIFORNIA		SPILLS
CHICAGO	S111918977		916 S CALIFORNIA		SPILLS
CHICAGO	S111892384		837 N CALIFORNIA		SPILLS
CHICAGO	S111880141		2026 S CALIFORNIA		SPILLS
CHICAGO	S111915135		3114 N CALIFORNIA		SPILLS
CHICAGO	S111899764		2531 N CALIFORNIA ST		SPILLS
CHICAGO	S111889124		4201 N CALIFORNIA		SPILLS
CHICAGO	S111894023		3401 S CALIFORNIA		SPILLS
CHICAGO	S111891724		3541 S CALIFORNIA		SPILLS
CHICAGO	S111912804		340 S CALIFORNIA ST		SPILLS
CHICAGO	S111912805		340 S CALIFORNIA ST		SPILLS
CHICAGO	S111913887		2710 N CALIFORNIA		SPILLS
CHICAGO	99649653	CALSAG HARBOR BETWEEN MM 305 AND 306.5	CALSAG HARBOR BETWEEN MM 305 AND 306.5		ERNS
CHICAGO	92271530	CALUMEP RIVER	CALUMEP RIVER		ERNS
CHICAGO	S108046893		CALUMET RIV		SPILLS
CHICAGO	2009919708	CALUMET YARD	CALUMET YARD		ERNS
CHICAGO	2010933382	CALUMET RIVER 9402 SOUTH EWING AVE.	9402 CALUMET RIV S		ERNS
CHICAGO	2007321724	CALUMET RAILYARD	CALUMET RAILYARD		ERNS
CHICAGO	2010949502	CALUMET RIVER	CALUMET RIV		ERNS
CHICAGO	2006789187	CALUMET RIVER	CALUMET RIVER		ERNS
CHICAGO	S111886949		CALUMET YARD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111885994		CALUMET RIV		SPILLS
CHICAGO	S111884983		6217 S CALUMET		SPILLS
CHICAGO	S111887496		CALUMET YARD & 106TH ST		SPILLS
CHICAGO	S111875416		4151 S CALUMET		SPILLS
CHICAGO	S111883222		3920 S CALUMET		SPILLS
CHICAGO	S111927484		3259 CALUMET RIV E		SPILLS
CHICAGO	S111922328		CALUMET YARD		SPILLS
CHICAGO	S111908596		CALUMET RIV		SPILLS
CHICAGO	S111900155		CALUMET EXPRESSWAY AT COTTAGE AVE		SPILLS
CHICAGO	S111891884		CALUMET YARDS		SPILLS
CHICAGO	S111908122		5817 S CALUMET		SPILLS
CHICAGO	S111927844		2926 CALUMET RIV E		SPILLS
CHICAGO	S111915066		2822 S CALUMET		SPILLS
CHICAGO	S111894015		3130 N CAMBELL		SPILLS
CHICAGO	S110613600		CAMPBELL RD & IOWA DR		SPILLS
CHICAGO	S111887622		212 S CAMPBELL		SPILLS
CHICAGO	S111892900		10200 S CAMPBELL		SPILLS
CHICAGO	S111912463		2930 N CAMPBELL		SPILLS
CHICAGO	S111901814		3245 N CAMPBELL		SPILLS
CHICAGO	S111892671		2700 N CAMPBELL		SPILLS
CHICAGO	S111892082		300 N CAMPBELL AVE		SPILLS
CHICAGO	S111919759		5703 S CAMPBELL		SPILLS
CHICAGO	S108047914		436 W CANAL ST		SPILLS
CHICAGO	S108047895		CANAL ST		SPILLS
CHICAGO	S108046896		CANAL ST		SPILLS
CHICAGO	91228231	CANAL STREET RAMP CHICAGO	CANAL STREET RAMP CHICAGO		ERNS
CHICAGO	2002597953	CANAL STREET YARD	CANAL STREET YARD	0	ERNS
CHICAGO	2011966290	CANAL STREET	CANAL ST		ERNS
CHICAGO	S111887901		840 N CANAL		SPILLS
CHICAGO	2012104231		CANAL STREET AND 25TH ST		ERNS
CHICAGO	S111876502		155 N CANAL		SPILLS
CHICAGO	S111922227		2148 S CANAL		SPILLS
CHICAGO	S111910488		CANAL		SPILLS
CHICAGO	S111881718		1514 S CANAL		SPILLS
CHICAGO	S111925763		426 W CANAL ST		SPILLS
CHICAGO	S111905014		2148 S CANAL PRT		SPILLS
CHICAGO	S111925132		436 W CANAL ST		SPILLS
CHICAGO	S111926582		1800 S CANAL RD		SPILLS
CHICAGO	S111920433		CANAL ST		SPILLS
CHICAGO	S111883676		CANAL & MADISON ST		SPILLS
CHICAGO	S111896706		1802 CANAL ST		SPILLS
CHICAGO	S111927595		210 S CANAL		SPILLS
CHICAGO	S110685241		1800 S CANAL		SPILLS
CHICAGO	S111907076		2601 CANNON DR		SPILLS
CHICAGO	99647114	RR CAR NO.GATX22983 2040 E. 106TH ST MP B510/RR YARD	RR CAR NO.GATX22983 2040 E. 106TH ST MP B510/RR YARD		ERNS
CHICAGO	S111879803		12800 S CARBONDOLET AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111894135		300 W CARFIELD BLVD		SPILLS
CHICAGO	92263363	CARGO FACILITY O'HARE AIRPORT	CARGO FACILITY O'HARE AIRPORT		ERNS
CHICAGO	S110613734		CARGO FUEL FACILITY OHARE AP		SPILLS
CHICAGO	S111349447		SW CARGO FACILITY OHARE AIRPORT		SPILLS
CHICAGO	U003984894	DELTA AIR LINES/O'HARE INTERNATIONAL AIRPORT	SW CARGO AREA		UST
CHICAGO	S111891065		511 CARGO RD		SPILLS
CHICAGO	S111896980		CARGO RD		SPILLS
CHICAGO	S111883856		CARGO FACILITY OHARE INTERNATI		SPILLS
CHICAGO	S111907727		610 CARGO NORTH BLDG		SPILLS
CHICAGO	S111877817		SW CARGO RD		SPILLS
CHICAGO	S111926512		CARGO FUEL FACILITY OHARE AIRP		SPILLS
CHICAGO	S111892245		844 N CARIBE		SPILLS
CHICAGO	S111878166		1512 W CARMEN		SPILLS
CHICAGO	S108045639		1747 W CARMENT		SPILLS
CHICAGO	2008862757	1250 CAROLINA AVE.	1250 CAROLINA AVE.		ERNS
CHICAGO	S109092838		1250 CAROLINA AVE		SPILLS
CHICAGO	S111885461		12260 S CARONDOLET		SPILLS
CHICAGO	S111896210		12260 S CARONDOLET		SPILLS
CHICAGO	S111900589		12260 S CARONDOLET		SPILLS
CHICAGO	S111896514		12260 S CARONDOLET		SPILLS
CHICAGO	S111896476		12260 S CARONDOLET		SPILLS
CHICAGO	S111896143		12260 S CARONDOLET		SPILLS
CHICAGO	S111877600		12260 S CARONDOLET		SPILLS
CHICAGO	S111895250		212 N CARPENTER		SPILLS
CHICAGO	S111898164		742 N CARPENTER AVE		SPILLS
CHICAGO	S111890965		2155 S CARPENTER		SPILLS
CHICAGO	S111882601		1044 CARPENTER		SPILLS
CHICAGO	S111888932		3120 W CARROL ST		SPILLS
CHICAGO	S111900365		1901 W CARROL ST		SPILLS
CHICAGO	S111885009		3114 W CARROLL ST		SPILLS
CHICAGO	S111884953		2900 W CARROLL		SPILLS
CHICAGO	S111887538		2040 W CARROLL		SPILLS
CHICAGO	S111903738		1220 W CARROLL ST		SPILLS
CHICAGO	S111900539		3039 W CARROLL ST		SPILLS
CHICAGO	S111893099		1658 CARROLL AVE		SPILLS
CHICAGO	S111899170		1220 W CARROLL		SPILLS
CHICAGO	S111895404		3021 W CARROLL ST		SPILLS
CHICAGO	S111905468		2925 W CARROLL		SPILLS
CHICAGO	S111899418		3005 W CARROLL ST		SPILLS
CHICAGO	S111894938		1700 W CARROLL		SPILLS
CHICAGO	S111892946		2100 W CARROLL		SPILLS
CHICAGO	S111896007		1805 W CARROLL ST		SPILLS
CHICAGO	S111897853		1700 W CARROLL ST		SPILLS
CHICAGO	S111913102		2550 W CATALPA		SPILLS
CHICAGO	S111881209		1122 W CATALPA		SPILLS
CHICAGO	S111904525		2601 W CATALPA		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2009918160	MP: CD515	MP: CD515		ERNS
CHICAGO	2007311320	MM CD515	MM CD515		ERNS
CHICAGO	2011989792		CD517		ERNS
CHICAGO	94389597	CENTRAL AND DIVERSY	CENTRAL AND DIVERSY		ERNS
CHICAGO	S109327563		CENTRAL & ROOSEVELT NEW ROCKNEY SCHOOL		SPILLS
CHICAGO	S111888433		5248 S CENTRAL		SPILLS
CHICAGO	S111891640		CENTRAL & DIVERSEY ST		SPILLS
CHICAGO	S111875281		4780 S CENTRAL UNINCORPORATED AREA		SPILLS
CHICAGO	S111905611		1250 N CENTRAL PARK		SPILLS
CHICAGO	S111890916		627 N CENTRAL PARK ST		SPILLS
CHICAGO	S111879289		4075 N CENTRAL		SPILLS
CHICAGO	S111878394		6425 S CENTRAL		SPILLS
CHICAGO	S111906605		CENTRAL INTERMODAL FACILITY CO		SPILLS
CHICAGO	S111889756		5923 S CENTRAL		SPILLS
CHICAGO	S111880908		3935 N CENTRAL PARK		SPILLS
CHICAGO	S111902836		5708 S CENTRAL ST		SPILLS
CHICAGO	S111877253		1802 CENTRAL RD		SPILLS
CHICAGO	S111891373		6900 S CENTRAL		SPILLS
CHICAGO	S111908416		645 CENTRAL AVE		SPILLS
CHICAGO	S111901319		6013 CENTRAL AVE		SPILLS
CHICAGO	S111901316		6013 CENTRAL AVE		SPILLS
CHICAGO	S111898988		1546 N CENTRAL		SPILLS
CHICAGO	S111882059		1440 W CERMAC RD		SPILLS
CHICAGO	92293268	1111 WEST CERMACK ST	1111 WEST CERMACK ST		ERNS
CHICAGO	93334397	1111 WEST CERMACK	1111 WEST CERMACK		ERNS
CHICAGO	S111905319		1111 W CERMACK RD		SPILLS
CHICAGO	S111912357		3855 W CERMACK		SPILLS
CHICAGO	S111900882		1111 W CERMACK RD		SPILLS
CHICAGO	S111894614		1111 W CERMACK		SPILLS
CHICAGO	S111905580		1130 W CERMACK		SPILLS
CHICAGO	S111883365		CERMACK & ASHLAND		SPILLS
CHICAGO	S111910399		ON CERMACK AVE BETWEEN WABASH & MICHIGAN AVE		SPILLS
CHICAGO	S111907663		3148 W CERMACK RD		SPILLS
CHICAGO	S111893382		1111 W CERMACK		SPILLS
CHICAGO	91207322	4204 WEST CERMACK ST.	4204 WEST CERMACK ST.		ERNS
CHICAGO	89118761	CERMAK & MONROE STREET	CERMAK & MONROE STREET		ERNS
CHICAGO	S111885759		977 W CERMAK		SPILLS
CHICAGO	S111886131		1111 W CERMAK		SPILLS
CHICAGO	S111885967		1111 CERMAK		SPILLS
CHICAGO	S111884657		4401 W CERMAK		SPILLS
CHICAGO	S111881358		3925 W CERMAK		SPILLS
CHICAGO	S111893702		4454 W CERMAK		SPILLS
CHICAGO	S111880157		1234 W CERMAK		SPILLS
CHICAGO	S111927783		1111 W CERMAK		SPILLS
CHICAGO	S111901595		CERMAK & CLARK STS		SPILLS
CHICAGO	2012101308		4936 S CHAMPLAIN		ERNS
CHICAGO	S111910701		11541 S CHAMPLAIN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111876350		11541 S CHAMPLIN		SPILLS
CHICAGO	S111885588		3300 E CHELTENHEM AVE		SPILLS
CHICAGO	S111878878		3300 E CHELTMAHN PL		SPILLS
CHICAGO	8867772	CHEMICAL SYSTEMS	CHEMICAL SYSTEMS		ERNS
CHICAGO	S111897551		1301 N CHERRY ST		SPILLS
CHICAGO	S111900491		361 W CHESTNUT		SPILLS
CHICAGO	S108046904		CHICAGO SHIP 318		SPILLS
CHICAGO	S108047916		CHICAGO MIDWAY AIRPORT AT CENT & W 55TH AVE		SPILLS
CHICAGO	2003647496	CHICAGO O'HARE	CHICAGO O'HARE		ERNS
CHICAGO	2004727490	ON CHICAGO & GRAND AVE	ON CHICAGO & GRAND AVE		ERNS
CHICAGO	2009921306	CHICAGO RIVER	CHICAGO RIVER		ERNS
CHICAGO	2009906499	CHICAGO YARD	CHICAGO YARD		ERNS
CHICAGO	2009910273	SOUTH CHICAGO SUB DISTRICT	SOUTH CHICAGO SUB DISTRICT		ERNS
CHICAGO	2009894848	CHICAGO UNION TERMINAL	CHICAGO UNION TERMINAL		ERNS
CHICAGO	2008910273	SOUTH CHICAGO SUB DISTRICT	SOUTH CHICAGO SUB DISTRICT		ERNS
CHICAGO	2008894848	CHICAGO UNION TERMINAL	CHICAGO UNION TERMINAL		ERNS
CHICAGO	S109700006		7256 S CHICAGO ST		SPILLS
CHICAGO	2008906499	CHICAGO YARD	CHICAGO YARD		ERNS
CHICAGO	S109327564		CHICAGO SANITARY SHIP CANAL		SPILLS
CHICAGO	S109366454		CHICAGO SANITARY SHIP CANAL		SPILLS
CHICAGO	S109366453		CHICAGO OHARE AP		SPILLS
CHICAGO	2006806423	CHICAGO O' HARE AIRPORT	CHICAGO O' HARE AIRPORT		ERNS
CHICAGO	2011964102	CHICAGO STATION BLUE LINE	CHICAGO STA		ERNS
CHICAGO	S111887922		CHICAGO RIV		SPILLS
CHICAGO	S111886376		7934 S CHICAGO AVE		SPILLS
CHICAGO	S111885775		8164 S CHICAGO AVE		SPILLS
CHICAGO	S111886967		CHICAGO CANAL		SPILLS
CHICAGO	2012103416		CHICAGO OHARE		ERNS
CHICAGO	S111905375		4224 W CHICAGO		SPILLS
CHICAGO	S111888712		6711 S CHICAGO		SPILLS
CHICAGO	S111875764		CHICAGO AVE & HUDSON		SPILLS
CHICAGO	S111883209		7130 S CHICAGO AVE		SPILLS
CHICAGO	S111903398		CHICAGO OHARE AIRPORT		SPILLS
CHICAGO	S111878498		2500 W CHICAGO		SPILLS
CHICAGO	S111911795		CHICAGO RIVER OF 18TH ST N		SPILLS
CHICAGO	S111891924		9100 S CHICAGO AVE		SPILLS
CHICAGO	S111877968		9347 S CHICAGO AVE		SPILLS
CHICAGO	S111903012		4346 W CHICAGO		SPILLS
CHICAGO	S111889258		CHICAGO OHARA AIRPORT		SPILLS
CHICAGO	S111909564		CHICAGO RIV		SPILLS
CHICAGO	S111924402		CHICAGO OHARE AIRPORT		SPILLS
CHICAGO	S111904600		8410 S CHICAGO AVE		SPILLS
CHICAGO	S111890504		8900 S CHICAGO SKWY		SPILLS
CHICAGO	S111910432		9343 S CHICAGO AVE		SPILLS
CHICAGO	S111919644		CHICAGO AVE & CALIFORNIA AVE		SPILLS
CHICAGO	S111890490		4950 CHICAGO BEACH DR		SPILLS
CHICAGO	S111889188		8640 S CHICAGO		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111925131		407 W CHICAGO		SPILLS
CHICAGO	S111884145		CHICAGO FD CRASH OHARA FLD		SPILLS
CHICAGO	S111896774		7757 S CHICAGO AVE		SPILLS
CHICAGO	S111925112		7256 S CHICAGO ST		SPILLS
CHICAGO	S111891440		755 CHICAGO OHARA INT		SPILLS
CHICAGO	S111892070		405 W CHICAGO		SPILLS
CHICAGO	S111908897		7301 S CHICAGO AVE		SPILLS
CHICAGO	S111890789		8108 S CHICAGO AVE		SPILLS
CHICAGO	S111877227		CHICAGO HBR & INDIANA		SPILLS
CHICAGO	S111909220		7287 S CHICAGO ST		SPILLS
CHICAGO	S111903121		7000 S CHICAGO AVE		SPILLS
CHICAGO	S111907542		6859 S CHICAGO AVE		SPILLS
CHICAGO	S111920681		3319 W CHICAGO		SPILLS
CHICAGO	S111912730		7605 S CHICAGO AVE		SPILLS
CHICAGO	S111912731		7605 S CHICAGO AVE		SPILLS
CHICAGO	S111882801		777 E CHICAGO AVE		SPILLS
CHICAGO	S111906185		9070 S CHICAGO		SPILLS
CHICAGO	S111900619		6838 S CHICAGO AVE		SPILLS
CHICAGO	S111876578		CHICAGO YARDS		SPILLS
CHICAGO	S111926745		CHICAGO RIV		SPILLS
CHICAGO	2010948714	BY CHICAGO'S UNION STATION	BY CHICAGOS UNION STA		ERNS
CHICAGO	S111887730		4800 S CHICAOG BEECHER DR		SPILLS
CHICAGO	S111906049		2300 CHILDRENS PLZ		SPILLS
CHICAGO	S111901266		3915 N CHRISTIANA		SPILLS
CHICAGO	S111878588		865 N CHRISTIANA		SPILLS
CHICAGO	S111907949		2133 W CHURCHILL		SPILLS
CHICAGO	94383435	22 S CICERO EMPTY BUILDING	22 S CICERO EMPTY BUILDING		ERNS
CHICAGO	98450755	CICERO AVE.	CICERO AVE.		ERNS
CHICAGO	S111218770		4900 N CICERO		SPILLS
CHICAGO	S111887311		6000 N CICERO ST		SPILLS
CHICAGO	S111888134		6219 S CICERO		SPILLS
CHICAGO	S111885930		6301 CICERO AVE		SPILLS
CHICAGO	S111885263		7601 S CICERO		SPILLS
CHICAGO	S111899316		8515 S CICERO		SPILLS
CHICAGO	S111890662		3801 S CICERO AVE		SPILLS
CHICAGO	S111910757		2500 N CICERO		SPILLS
CHICAGO	S111905333		119 S CICERO		SPILLS
CHICAGO	S111900252		3255 N CICERO		SPILLS
CHICAGO	S111900253		3255 N CICERO		SPILLS
CHICAGO	S111892874		1001 N CICERO		SPILLS
CHICAGO	S111913621		1914 N CICERO		SPILLS
CHICAGO	S111881393		8330 S CICERO		SPILLS
CHICAGO	S111906088		3544 N CICERO		SPILLS
CHICAGO	S111878792		7905 S CICERO		SPILLS
CHICAGO	S111904331		3350 N CICERO		SPILLS
CHICAGO	S111903315		7401 S CICERO		SPILLS
CHICAGO	S111884204		CICERO & PETERSON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111878754		2515 N CICERO		SPILLS
CHICAGO	S111918726		632 N CICERO		SPILLS
CHICAGO	S111906353		5200 S CICERO		SPILLS
CHICAGO	S111911848		1949 N CICERO ST		SPILLS
CHICAGO	S111919040		4247 S CICERO		SPILLS
CHICAGO	S111920459		749 S CICERO		SPILLS
CHICAGO	S111904206		4600 S CICERO		SPILLS
CHICAGO	S111892698		2950 N CICERO		SPILLS
CHICAGO	S111908115		7201 S CICERO		SPILLS
CHICAGO	S111881139		5140 S CICERO		SPILLS
CHICAGO	S111896027		7401 S CICERO		SPILLS
CHICAGO	S111898025		CICERO GATE		SPILLS
CHICAGO	S111878051		2758 N CICERO		SPILLS
CHICAGO	S111927771		4401 N CICERO		SPILLS
CHICAGO	S111902286		CICERO AVE		SPILLS
CHICAGO	S111902238		3300 N CICERO		SPILLS
CHICAGO	S111920677		4325 N CICERO		SPILLS
CHICAGO	S111894323		CICERO AVE & I 55		SPILLS
CHICAGO	S111927938		CICERO YARD		SPILLS
CHICAGO	S111898725		5945 NORTHWEST CIR		SPILLS
CHICAGO	96516420	CITCO TERMINAL ADDRESS UNKNOWN	CITCO TERMINAL ADDRESS UNKNOWN		ERNS
CHICAGO	S111909065		1840 N CLAIBORNE		SPILLS
CHICAGO	S111907075		5739 S CLAIRMONT AVE		SPILLS
CHICAGO	S111884865		4501 N CLAKE		SPILLS
CHICAGO	S111907000		5739 S CLAREMONT		SPILLS
CHICAGO	S108046415		50512 N CLARK		SPILLS
CHICAGO	94407483	CLARK OIL BLUE ISLAND//CAL SAG	CLARK OIL BLUE ISLAND//CAL SAG		ERNS
CHICAGO	96515012	CLARK BLUE ISLAND	CLARK BLUE ISLAND		ERNS
CHICAGO	S111886134		4001 CLARK ST		SPILLS
CHICAGO	S111885900		6304 N CLARK		SPILLS
CHICAGO	S111909598		6000 N CLARK		SPILLS
CHICAGO	S111881356		2684 W CLARK ST		SPILLS
CHICAGO	S111890593		3650 N CLARK		SPILLS
CHICAGO	S111875602		CLARK & ELM		SPILLS
CHICAGO	S111907234		6800 CLARK ST		SPILLS
CHICAGO	S111884150		CLARK & IRVING		SPILLS
CHICAGO	S111893033		6525 N CLARK		SPILLS
CHICAGO	S111900408		3836 N CLARK		SPILLS
CHICAGO	S111879353		3721 N CLARK		SPILLS
CHICAGO	S111923610		CLARK & CERMAK		SPILLS
CHICAGO	S111901095		7201 N CLARKE ST		SPILLS
CHICAGO	90170305	CLARKE OIL 131ST AND KEEZIE AVE	CLARKE OIL 131ST AND KEEZIE AVE		ERNS
CHICAGO	S111899378		2626 N CLAYBORN		SPILLS
CHICAGO	S111908648		2660 N CLAYBOURN		SPILLS
CHICAGO	S111899224		1970 N CLAYBOURN AVE		SPILLS
CHICAGO	S111911677		2472 N CLAYBOURN		SPILLS
CHICAGO	90174033	CLEARING EAST YARD	CLEARING EAST YARD		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111895183		500 W CLEVELAND ST		SPILLS
CHICAGO	S111900640		3133 N CLIBOURN		SPILLS
CHICAGO	2006796407	CLINTON STREET AND LAKE STREET	CLINTON STREET AND LAKE STREET		ERNS
CHICAGO	S111885090		CLINTON & HARRISON		SPILLS
CHICAGO	S111887185		740 S CLINTON		SPILLS
CHICAGO	2011983620		CLINTON AND CANAL ST		ERNS
CHICAGO	S111912608		324 N CLINTON		SPILLS
CHICAGO	S111903638		700 S CLINTON		SPILLS
CHICAGO	S111896031		1830 S CLINTON		SPILLS
CHICAGO	S111892369		4050 N CLOVER		SPILLS
CHICAGO	S111907230		2746 N CLYBORN		SPILLS
CHICAGO	S111879071		2901 N CLYBORN		SPILLS
CHICAGO	98449420	CLYBOURN AND MAGNOLIA STREETS	CLYBOURN AND MAGNOLIA STREETS		ERNS
CHICAGO	S111886704		CLYBOURN & FULLERTON		SPILLS
CHICAGO	S111881457		2660 N CLYBOURN		SPILLS
CHICAGO	S111912364		2261 CLYBOURN		SPILLS
CHICAGO	S111902201		CLYBOURN & MAGNOLIA		SPILLS
CHICAGO	S111901813		2020 N CLYBOURN		SPILLS
CHICAGO	S111896173		1275 CLYBOURN AVE		SPILLS
CHICAGO	S111919003		2791 N CLYBOURN		SPILLS
CHICAGO	S111880983		2245 N CLYBOURN ST		SPILLS
CHICAGO	S111915094		2283 N CLYBOURN		SPILLS
CHICAGO	S111891729		2145 N CLYBOURN		SPILLS
CHICAGO	S111890371		2600 N CLYBOURN		SPILLS
CHICAGO	2000669016	TH CLYBOURN	TH CLYBOURN		ERNS
CHICAGO	98461976	1501 N CLYBOURNE	1501 N CLYBOURNE		ERNS
CHICAGO	S111893640		2740 N CLYBOURNE AVE		SPILLS
CHICAGO	S111892041		1531 W CLYBOURNE AVE		SPILLS
CHICAGO	S111879206		3068 N CLYBURN		SPILLS
CHICAGO	94355689	1400 COASTMASTER DR	1400 COASTMASTER DR		ERNS
CHICAGO	S111908978		9500 S COLFAX		SPILLS
CHICAGO	S111909306		8721 S COLLEGE GRV		SPILLS
CHICAGO	S111906068		5201 S COLLEGE GRV		SPILLS
CHICAGO	94361432	2543 WEST COLULMBUS	2543 WEST COLULMBUS		ERNS
CHICAGO	S111894505		2543 W COLUMBIA DR		SPILLS
CHICAGO	90184210	COLUMBIA AVE. CLEARING YARD	COLUMBIA AVE. CLEARING YARD		ERNS
CHICAGO	2011968968	LANDERS YARD 543 WEST COLUMBUS AVE	543 W COLUMBUS AVE		ERNS
CHICAGO	2011983239		347 N COLUMBUS		ERNS
CHICAGO	S111899652		2543 W COLUMBUS DR		SPILLS
CHICAGO	S111890295		2543 COLUMBUS DR		SPILLS
CHICAGO	S111890237		2543 COLUMBUS DR		SPILLS
CHICAGO	S111923004		2543 W COLUMBUS		SPILLS
CHICAGO	S111897235		2543 W COLUMBUS DR		SPILLS
CHICAGO	S111909362		3363 COLUMBUS AVE		SPILLS
CHICAGO	S111890526		2043 COLUMBUS AVE		SPILLS
CHICAGO	S111898777		3491 W COLUMBUS DR		SPILLS
CHICAGO	S111895402		2543 W COLUMBUS DR		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111880044		3485 W COLUMBUS		SPILLS
CHICAGO	S111901353		2543 W COLUMBUS DR		SPILLS
CHICAGO	S111899737		2543 W COLUMBUS DR		SPILLS
CHICAGO	S111890334		2543 COLUMBUS DR		SPILLS
CHICAGO	S111908248		8557 S COMMERCIAL		SPILLS
CHICAGO	S111915092		9127 S COMMERCIAL		SPILLS
CHICAGO	S111898832		9100 S COMMERCIAL		SPILLS
CHICAGO	8714257	COMMONWEALTH EDISON?	COMMONWEALTH EDISON?		ERNS
CHICAGO	S110122235		2100 COMMONWEALTH		SPILLS
CHICAGO	S111889670		CONCORD F GATE OHARA AP		SPILLS
CHICAGO	S111888165		CONGRESS & DEARBORN		SPILLS
CHICAGO	S111888158		561 W CONGRESS		SPILLS
CHICAGO	S111894801		316 W CONGRESS PKWY		SPILLS
CHICAGO	94370891	CONRAIL RAIL YARD 63RD STATE ST	CONRAIL RAIL YARD 63RD STATE ST		ERNS
CHICAGO	S111884256		CONRAIL YARD 47TH ST		SPILLS
CHICAGO	94363657	103 CONSTANCE AVE	103 CONSTANCE AVE		ERNS
CHICAGO	S111887609		6907 CONSTANCE AVE		SPILLS
CHICAGO	94358493	COOK COUNTY BUILDING 118 NORTH CLARK ST	COOK COUNTY BUILDING 118 NORTH CLARK ST		ERNS
CHICAGO	S108047341		N COR OF 18TH & BLUE IS		SPILLS
CHICAGO	S111349599		COR OF 53RD		SPILLS
CHICAGO	S111902425		COR DEVON & KEDZIE		SPILLS
CHICAGO	S111879966		SE COR 35TH & INDIANA		SPILLS
CHICAGO	S111902170		11130 S CORLISS		SPILLS
CHICAGO	S111876981		11100 S CORLISS		SPILLS
CHICAGO	S111904124		4805 W CORNELIA		SPILLS
CHICAGO	S111883722		7828 S CORNELL		SPILLS
CHICAGO	S111904973		1711 W CORNELLIA		SPILLS
CHICAGO	2003637212	5701 SOUTH CORNELLL DRIVE	5701 SOUTH CORNELLL DRIVE		ERNS
CHICAGO	S108047370		NW CORNER W AUGUSTA BLVD & KOLMAR AVE		SPILLS
CHICAGO	90158422	SW CORNER LAKE MICHIGAN FROM E. CHICAGO TO CENTER OF LAKE MI	SW CORNER LAKE MICHIGAN FROM E. CHICAGO TO CENTER OF LAKE MI		ERNS
CHICAGO	2000526527	CORNER OF 7021	CORNER OF 7021	0	ERNS
CHICAGO	U003769793	VACANT LOT	SW CORNER OF CENTRAL & FILLMORE		UST
CHICAGO	S111885866		NW CORNER OF CHICAGO AVE & KILPATRICK		SPILLS
CHICAGO	S111893831		W CORNER OF HANGER AREA & OHARA		SPILLS
CHICAGO	S111910967		CORNER OF MONTROSE & RAVENSWOOD		SPILLS
CHICAGO	S111924076		CORNER OF ROOSEVELT AND CENTRA RDS		SPILLS
CHICAGO	S111906413		SE CORNER OF 60TH ST & DORCHESTER AVE		SPILLS
CHICAGO	S111907029		CORNER OF EVERGREEN & HICKORY		SPILLS
CHICAGO	S111907911		NW CORNER OF ASHLAND & WASHBURNE AVE		SPILLS
CHICAGO	S111907910		SW CORNER OF ASHLAND & WASHBURNE AVE		SPILLS
CHICAGO	S111907909		SE CORNER OF PAULINA ST & ROOSEVELT RD		SPILLS
CHICAGO	S111907908		NE CORNER OF PAULINA ST & WASHBURNE AVE		SPILLS
CHICAGO	S111908554		CORNER OF OHIO & DAMEN		SPILLS
CHICAGO	S111898135		SW CORNER OF MADISON & WELLS ST		SPILLS
CHICAGO	S111894436		NW CORNER OF HANGAR AREA		SPILLS
CHICAGO	S111927929		SE CORNER OF IRVING PARK RD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111893288		CORNER OF WESTERN AVE & ADDISON AVE		SPILLS
CHICAGO	2002590248	CORNER OF ROSEVELT AND BLUE ISLAND	CORNER OF ROSEVELT AND BLUE ISLAND	0	ERNS
CHICAGO	2000531554	CORNER OF PINE GROVE AND	CORNER OF PINE GROVE AND	0	ERNS
CHICAGO	S111885575		12260 S CORONDOLET		SPILLS
CHICAGO	S111884011		12260 S CORONDOLET AVE		SPILLS
CHICAGO	S111881984		11260 S CORONDOLETT AVE		SPILLS
CHICAGO	S111909441		2413 W CORTEZ		SPILLS
CHICAGO	S111893341		4520 W CORTEZ		SPILLS
CHICAGO	S111878992		1509 W CORTLAND		SPILLS
CHICAGO	S111884334		4500 W CORTLAND		SPILLS
CHICAGO	S111918764		2940 W CORTLAND		SPILLS
CHICAGO	S111897230		5834 W CORTLAND		SPILLS
CHICAGO	S111883723		4501 W CORTLAND		SPILLS
CHICAGO	S111925633		1509 W CORTLAND		SPILLS
CHICAGO	S111902572		1509 W CORTLAND		SPILLS
CHICAGO	8860817	CORWITH SWITCHING YARD;TRAIN MASTER 312-890-5082	CORWITH SWITCHING YARD;TRAIN MASTER 312-890-5082		ERNS
CHICAGO	S110122299		CORWITH YARD		SPILLS
CHICAGO	2006798826	CORWITH YARD	CORWITH YARD		ERNS
CHICAGO	S111877460		1140 N COSTNER ST		SPILLS
CHICAGO	S108046497		5818 S COTTAGE DR WASHINGTON PARK		SPILLS
CHICAGO	S111885698		8722 S COTTAGE GRV		SPILLS
CHICAGO	S111885007		4414 S COTTAGE GRV		SPILLS
CHICAGO	S111886270		8701 S COTTAGE AVE		SPILLS
CHICAGO	S111886592		5818 S COTTAGE GRV		SPILLS
CHICAGO	S111924950		8127 S COTTAGE GRV		SPILLS
CHICAGO	S111907485		8540 S COTTAGE GRV		SPILLS
CHICAGO	S111893504		10909 COTTAGE GROVE AVE		SPILLS
CHICAGO	S111891976		11900 S COTTAGE GRV		SPILLS
CHICAGO	S111876295		6700 S COTTAGE GRV		SPILLS
CHICAGO	S111899600		11861 S COTTAGE GRV		SPILLS
CHICAGO	S111882111		5601 S COTTAGE GRV		SPILLS
CHICAGO	S111902454		9811 S COTTAGE GRV		SPILLS
CHICAGO	S111895457		7560 S COTTAGE GRV		SPILLS
CHICAGO	S111906570		8540 S COTTAGE GRV		SPILLS
CHICAGO	S111906569		8600 S COTTAGE GRV		SPILLS
CHICAGO	S111897700		6352 S COTTAGE GRV		SPILLS
CHICAGO	S111908954		4257 S COTTAGE GROVE RD		SPILLS
CHICAGO	S111878296		4601 S COTTAGE GRV		SPILLS
CHICAGO	S111908141		4533 S COTTAGE GRV		SPILLS
CHICAGO	S111896307		8651 S COTTAGE GRV		SPILLS
CHICAGO	S111907546		8600 S COTTAGE GRV		SPILLS
CHICAGO	S111911514		9452 S COTTAGE GRV		SPILLS
CHICAGO	S111893660		2049 W COULTER		SPILLS
CHICAGO	S111895142		230 COURT ST		SPILLS
CHICAGO	S110824890		COURTLAND & CLYBOURNE		SPILLS
CHICAGO	S111885368		4701 W COURTLAND AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111899675		3737 W COURTLAND ST		SPILLS
CHICAGO	S111878871		1825 W COURTLAND		SPILLS
CHICAGO	S111881183		2940 COURTLAND ST		SPILLS
CHICAGO	2012102059		CRAIGIN JCT		ERNS
CHICAGO	94391080	CRAWFORD SUBSTATION	CRAWFORD SUBSTATION		ERNS
CHICAGO	89107064	CRAWFORD GENERATING STA. 3501 PULASKI RD.	CRAWFORD GENERATING STA. 3501 PULASKI RD.		ERNS
CHICAGO	S111912302		3501 CRAWFORD GENERATING STA S		SPILLS
CHICAGO	S111927685		6346 NORTH CRK		SPILLS
CHICAGO	S111885640		946 N CROSBY		SPILLS
CHICAGO	S111910509		946 N CROSBY		SPILLS
CHICAGO	S111914620		5318 W CRYSTAL		SPILLS
CHICAGO	S111896702		2619 W CULLERTON		SPILLS
CHICAGO	S111915350		2456 W CULLOM		SPILLS
CHICAGO	S111896154		4938 W CULLUM		SPILLS
CHICAGO	S111905250		4452 W CUNNISON		SPILLS
CHICAGO	S111218489		0 D29		SPILLS
CHICAGO	S111925127		6500 W DAKIN		SPILLS
CHICAGO	S111902249		6535 W DAKIN		SPILLS
CHICAGO	98444510	DALTON YACHT MARINA/ MARINE SERVICES COTTAGE GROVE AVE	DALTON YACHT MARINA/ MARINE SERVICES COTTAGE GROVE AVE		ERNS
CHICAGO	S111887197		2608 S DAMEN		SPILLS
CHICAGO	S111888995		3201 N DAMEN		SPILLS
CHICAGO	S111905657		3306 N DAMEN		SPILLS
CHICAGO	S111908000		5941 S DAMEN		SPILLS
CHICAGO	S111890616		3000 S DAMEN		SPILLS
CHICAGO	S111905625		2309 N DAMEN		SPILLS
CHICAGO	S111905311		2501 N DAMEN		SPILLS
CHICAGO	S111902640		6159 S DAMEN		SPILLS
CHICAGO	S111904589		3000 S DAMEN		SPILLS
CHICAGO	S111894214		6502 S DAMEN		SPILLS
CHICAGO	S111893772		3000 S DAMEN		SPILLS
CHICAGO	S111892179		7050 S DAMEN		SPILLS
CHICAGO	S111927093		3501 DAMEN AVE		SPILLS
CHICAGO	S111920502		DAMEN & W WEBSTER 2300		SPILLS
CHICAGO	S111908121		2801 N DAMEN		SPILLS
CHICAGO	S111882868		4917 N DAMEN		SPILLS
CHICAGO	S111901352		2501 N DAMEN		SPILLS
CHICAGO	S111877243		2064 N DAMEN		SPILLS
CHICAGO	S111892578		7050 S DAMEN		SPILLS
CHICAGO	S111910144		7242 N DAMEN		SPILLS
CHICAGO	S111875923		500 S DAMIEN		SPILLS
CHICAGO	S108046065		3100 S DAMON		SPILLS
CHICAGO	2002600737	2600 SOUTH DAMON	2600 SOUTH DAMON	0	ERNS
CHICAGO	S111349576		3220 N DAMON AVE		SPILLS
CHICAGO	S108891547		2921 N DAMON		SPILLS
CHICAGO	S111877593		2608 S DAMON		SPILLS
CHICAGO	S111914248		2500 S DAMON AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111909125		2639 S DAMON AVE		SPILLS
CHICAGO	S111907832		3000 S DAMON IMX YARD		SPILLS
CHICAGO	S111915714		2608 S DAMON AVE		SPILLS
CHICAGO	S111890741		3000 S DAMON AVE		SPILLS
CHICAGO	S111910237		1238 N DAMON AVE		SPILLS
CHICAGO	S111889397		3354 N DAMON AVE		SPILLS
CHICAGO	S111882355		2501 N DAMON		SPILLS
CHICAGO	S111913930		3354 N DAMON AVE		SPILLS
CHICAGO	S109953799		DAN RYAN EXPY & 67TH ST		SPILLS
CHICAGO	S111925297		DAN RYAN NB AT 67TH ST		SPILLS
CHICAGO	S111880140		4700 S DAN RYAN EXPY		SPILLS
CHICAGO	S111914835		SB DAN RYAN AT 35TH ST		SPILLS
CHICAGO	S111905781		4700 S DAN RYAN EXPY		SPILLS
CHICAGO	S111910075		DAN RYAN EXPY & 47TH ST		SPILLS
CHICAGO	S111882372		1535 N DATON ST		SPILLS
CHICAGO	S111922152		1440 N DAYTON		SPILLS
CHICAGO	S111885269		2001 S DEARBORN		SPILLS
CHICAGO	S111904353		509 N DEARBORN		SPILLS
CHICAGO	S111907648		2624 S DEARBORN		SPILLS
CHICAGO	S111882430		3255 DEARBORN AVE		SPILLS
CHICAGO	S111880697		DEARBORN & ERIE		SPILLS
CHICAGO	S111900106		650 N DEARBORN		SPILLS
CHICAGO	S111909872		641 N DEARBORNE		SPILLS
CHICAGO	S111911135		111 N DEERBORN		SPILLS
CHICAGO	S111884487		253 E DELAWARE ST		SPILLS
CHICAGO	S111878780		DELLA AIR LINES OHARA		SPILLS
CHICAGO	S111903945		3481 N DELMONT HARBOR DR		SPILLS
CHICAGO	S111895352		DELTA AIT LINES CARGO FACILITY		SPILLS
CHICAGO	S111914140		4815 W DEMING ST		SPILLS
CHICAGO	8711762	EAST DEPARTURE YARD	EAST DEPARTURE YARD		ERNS
CHICAGO	S111913549		210 S DES PLAINS ST		SPILLS
CHICAGO	S111878606		300 N DES PLAINS AVE		SPILLS
CHICAGO	S110824891		100000 DESSIE COLEMAN DR		SPILLS
CHICAGO	S111926746		10000 DESSIE COLEMAN DR		SPILLS
CHICAGO	S111897962		3113 W DEVOE AVE		SPILLS
CHICAGO	S110363804		DEVON & KIMBALL		SPILLS
CHICAGO	S111885011		3034 W DEVON		SPILLS
CHICAGO	S111910731		2828 W DEVON ST		SPILLS
CHICAGO	S111895157		1700 W DEVON ST		SPILLS
CHICAGO	S111926288		DEVON & N CAMPBELL AVE		SPILLS
CHICAGO	S111908640		7237 W DEVON ST		SPILLS
CHICAGO	S111892477		2225 W DEVON		SPILLS
CHICAGO	S111879144		3535 W DEVON		SPILLS
CHICAGO	S111899792		2225 W DEVON		SPILLS
CHICAGO	S111885423		5841 W DICKENS		SPILLS
CHICAGO	S111878809		5851 W DICKENS		SPILLS
CHICAGO	S111905069		5801 W DICKENS		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111902609		6201 W DICKENS		SPILLS
CHICAGO	89111614	E. DIKE LOADING/UNLOADING PAD	E. DIKE LOADING/UNLOADING PAD		ERNS
CHICAGO	99626468	DIRECTLY ACROSS STREET FM 2154 WEST WARREI	DIRECTLY ACROSS STREET FM 2154 WEST WARREN		ERNS
CHICAGO	S111892065		3820 W DIVERSERY		SPILLS
CHICAGO	S111885937		2401 W DIVERSEY		SPILLS
CHICAGO	S111885933		5610 W DIVERSEY		SPILLS
CHICAGO	S111897940		4720 W DIVERSEY		SPILLS
CHICAGO	S111877987		4601 W DIVERSEY		SPILLS
CHICAGO	S111895189		2916 W DIVERSEY ST		SPILLS
CHICAGO	S111907432		4626 W DIVERSEY ST		SPILLS
CHICAGO	S111912325		6347 W DIVERSEY		SPILLS
CHICAGO	S111884680		4200 W DIVERSEY		SPILLS
CHICAGO	S111896513		920 W DIVERSEY		SPILLS
CHICAGO	S111905253		1725 W DIVERSEY		SPILLS
CHICAGO	S111882083		4919 W DIVERSEY		SPILLS
CHICAGO	S111898525		3820 W DIVERSEY		SPILLS
CHICAGO	S111891511		5412 W DIVERSEY		SPILLS
CHICAGO	S111902920		5059 W DIVERSEY		SPILLS
CHICAGO	S111889214		1901 W DIVERSEY		SPILLS
CHICAGO	S111909109		5433 W DIVERSEY		SPILLS
CHICAGO	S111889495		1826 W DIVERSEY		SPILLS
CHICAGO	S111881926		1301 W DIVERSEY		SPILLS
CHICAGO	S111878692		4000 W DIVERSEY		SPILLS
CHICAGO	S111896337		6002 W DIVERSEY		SPILLS
CHICAGO	S111892094		4700 W DIVERSEY		SPILLS
CHICAGO	S111875469		3201 W DIVERSEY		SPILLS
CHICAGO	S111876584		6625 W DIVERSEY		SPILLS
CHICAGO	S111883504		6902 W DIVERSEY AVE		SPILLS
CHICAGO	S108480122		DIVERSEY PKWY LINCOLN AVE & N SEMINARY		SPILLS
CHICAGO	2000668929	T DIVERSEY ST	T DIVERSEY ST		ERNS
CHICAGO	S111880720		5049 W DIVERSTY		SPILLS
CHICAGO	2010962009	DIVERSY BRIDGE	DIVERSY BRG		ERNS
CHICAGO	S111879666		5002 W DIVERSY AVE		SPILLS
CHICAGO	S111883797		5955 W DIVERSY		SPILLS
CHICAGO	S111884177		6435 W DIVERSY AVE		SPILLS
CHICAGO	S111880565		5601 DIVERSY		SPILLS
CHICAGO	S111915409		4356 W DIVERSY		SPILLS
CHICAGO	S111878045		DIVERSY HARBOR DIVERSY PKWY		SPILLS
CHICAGO	S111349396		1071 W DIVISION		SPILLS
CHICAGO	2010947297	DIVISION AND HALSTED BRIDGE	DIVISION AND HALSTED BRG		ERNS
CHICAGO	S111886034		3954 DIVISION		SPILLS
CHICAGO	S111885978		2805 W DIVISION		SPILLS
CHICAGO	S111910732		834 W DIVISION		SPILLS
CHICAGO	S111903064		3353 W DIVISION		SPILLS
CHICAGO	S111891599		4500 W DIVISION		SPILLS
CHICAGO	S111884340		4857 W DIVISION		SPILLS
CHICAGO	S111911046		5035 W DIVISION		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111892445		4431 W DIVISION		SPILLS
CHICAGO	S111878200		3401 W DIVISION		SPILLS
CHICAGO	S111891854		901 DIVISION ST		SPILLS
CHICAGO	S111898449		4824 W DIVISION		SPILLS
CHICAGO	S111882907		1334 W DIVISION		SPILLS
CHICAGO	S111882834		2751 W DIVISION AVE		SPILLS
CHICAGO	S111900098		5035 W DIVISION		SPILLS
CHICAGO	S111912726		3855 W DIVISION		SPILLS
CHICAGO	2001563085	DIVISION STREET	DIVISION STREET	0	ERNS
CHICAGO	S111885202		9930 S DOBSON		SPILLS
CHICAGO	S111882593		8133 S DOBSON		SPILLS
CHICAGO	S111891332		8133 S DOBSON		SPILLS
CHICAGO	98446488	J DOCK BURNHAM NEAR SOLDIERS FIE	J DOCK BURNHAM NEAR SOLDIERS FIE		ERNS
CHICAGO	89117859	DOCK #10 JACKSON PARK INNER HARBOR	DOCK #10 JACKSON PARK INNER HARBOR		ERNS
CHICAGO	8867935	DOCK-E	DOCK-E		ERNS
CHICAGO	S111905005		12101 S DODY AVE		SPILLS
CHICAGO	S111903494		DOLLAR RENT A CAR INC OHARE AP		SPILLS
CHICAGO	96507592	8633 DORCHSTER	8633 DORCHSTER		ERNS
CHICAGO	S109700137		W DOTY AVE BETWEEN 126TH & 127TH ST		SPILLS
CHICAGO	S111878421		S DOTY AVE		SPILLS
CHICAGO	S111902403		DOTY ST		SPILLS
CHICAGO	S111903583		10300 S DOTY		SPILLS
CHICAGO	S111925091		DOTY AVE BETWEEN 126TH W & 127TH ST		SPILLS
CHICAGO	2011992370		1400 DOWNS DR		ERNS
CHICAGO	96509929	DUMPING FORM HOLES IN BUILDING	DUMPING FORM HOLES IN BUILDING		ERNS
CHICAGO	8710194	DUMPSTER NEXT TO NOTIFIERS HOUSE IN AN ALLEY	DUMPSTER NEXT TO NOTIFIERS HOUSE IN AN ALLEY		ERNS
CHICAGO	92295829	DUPAGE RIVER	DUPAGE RIVER		ERNS
CHICAGO	S111919105		DUPO YARD		SPILLS
CHICAGO	2009911946	DUSABLE HARBOR MARINA	DUSABLE HARBOR MARINA		ERNS
CHICAGO	2008911946	DUSABLE HARBOR MARINA	DUSABLE HARBOR MARINA		ERNS
CHICAGO	2007319183	2921 NORTH EAMON	2921 NORTH EAMON		ERNS
CHICAGO	91237140	11600 SOUTH EARLY AVENUE	11600 SOUTH EARLY AVENUE		ERNS
CHICAGO	2011991495		40 MI EAST OF CHICAGO ON LAKE		ERNS
CHICAGO	S111888583		1 N EAST LAKE TER		SPILLS
CHICAGO	S111912744		7431 S EAST END		SPILLS
CHICAGO	90165774	39.5 NM EAST OF NORTH BROOK ON 080 RADIO	39.5 NM EAST OF NORTH BROOK ON 080 RADIO		ERNS
CHICAGO	S111888509		2806 W EASTWOOD		SPILLS
CHICAGO	S111900752		EB		SPILLS
CHICAGO	2000668614	EET AND KEDZIE AV	EET AND KEDZIE AV		ERNS
CHICAGO	S111904584		9050 S EGGLESTON		SPILLS
CHICAGO	S111887445		3950 EIGHTH NARRANGANSETT		SPILLS
CHICAGO	S111893035		1251 W EISENHOWER EXPY		SPILLS
CHICAGO	S111889597		600 N ELAINE		SPILLS
CHICAGO	S111884962		4433 N ELFTON AVE		SPILLS
CHICAGO	S111925150		9423 S ELIZABETH		SPILLS
CHICAGO	S111879840		6737 ELIZABETH		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111887934		2929 S ELLIS		SPILLS
CHICAGO	S111887836		2929 S ELLIS		SPILLS
CHICAGO	S111900113		5200 S ELLIS		SPILLS
CHICAGO	S111875511		5640 S ELLIS		SPILLS
CHICAGO	S111907997		2228 N ELLSTON AVE		SPILLS
CHICAGO	S111905287		2604 N ELLSTON		SPILLS
CHICAGO	S111895681		6747 N ELMHURST		SPILLS
CHICAGO	S111926974		2750 N ELSON AVE		SPILLS
CHICAGO	S110825030		2752 N ELSTON		SPILLS
CHICAGO	S111888055		5555 ELSTON AVE		SPILLS
CHICAGO	S111886780		4185 N ELSTON		SPILLS
CHICAGO	S111885824		2480 ELSTON AVE		SPILLS
CHICAGO	S111909949		2062 ELSTON AVE		SPILLS
CHICAGO	S111884911		1401 N ELSTON		SPILLS
CHICAGO	S111913619		1330 N ELSTON		SPILLS
CHICAGO	S111884365		5332 N ELSTON		SPILLS
CHICAGO	S111906121		495 N ELSTON		SPILLS
CHICAGO	S111900915		4721 N ELSTON		SPILLS
CHICAGO	S111893533		1357 N ELSTON		SPILLS
CHICAGO	S111882697		2665 ELSTON AVE		SPILLS
CHICAGO	S111906394		4939 N ELSTON		SPILLS
CHICAGO	S111924587		1901 N ELSTON		SPILLS
CHICAGO	S111895124		3148 N ELSTON		SPILLS
CHICAGO	S111882128		1004 N ELSTON		SPILLS
CHICAGO	S111883806		2407 N ELSTON		SPILLS
CHICAGO	S111898954		5733 N ELSTON		SPILLS
CHICAGO	S111901419		4721 N ELSTON		SPILLS
CHICAGO	S111892447		2315 N ELSTON		SPILLS
CHICAGO	S111907723		2212 N ELSTON		SPILLS
CHICAGO	S111878875		1765 N ELSTON		SPILLS
CHICAGO	S111877868		4505 N ELSTON		SPILLS
CHICAGO	S111892192		3918 ELSTON AVE		SPILLS
CHICAGO	S111877836		4060 N ELSTON		SPILLS
CHICAGO	S111920921		2900 N ELSTON		SPILLS
CHICAGO	S111918867		2600 N ELSTON		SPILLS
CHICAGO	S111894133		5979 ELSTON AVE		SPILLS
CHICAGO	S111893342		5200 N ELSTON		SPILLS
CHICAGO	S111881028		5705 ELSTON AVE		SPILLS
CHICAGO	S111880989		5555 N ELSTON		SPILLS
CHICAGO	S111888753		3401 N ELSTON		SPILLS
CHICAGO	S111892609		1661 N ELSTON		SPILLS
CHICAGO	S111901618		3101 N ELSTON		SPILLS
CHICAGO	S111892934		2604 ELSTON AVE		SPILLS
CHICAGO	S111919792		3246 N ELSTON		SPILLS
CHICAGO	S111900296		3428 N ELSTON		SPILLS
CHICAGO	S111900297		3428 N ELSTON		SPILLS
CHICAGO	S111900597		4258 N ELSTON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111911452		5312 N ELSTON		SPILLS
CHICAGO	S111909071		4201 S EMERAL		SPILLS
CHICAGO	S111908689		4100 S EMERALD		SPILLS
CHICAGO	S111920336		1400 S EMERALD		SPILLS
CHICAGO	S111915064		11020 S EMERALD		SPILLS
CHICAGO	8862413	EMPIRE HARD CHROME INC	EMPIRE HARD CHROME INC		ERNS
CHICAGO	S108046592		6800 SOUTHEAST END AVE		SPILLS
CHICAGO	S108047759		W END OF TRAK		SPILLS
CHICAGO	91225392	NORTH END OF MONROE ST HARBOR	NORTH END OF MONROE ST HARBOR		ERNS
CHICAGO	2003708369	SOUTH END	SOUTH END		ERNS
CHICAGO	89106785	END OF MONROE ST MONROE ST HARBOR	END OF MONROE ST MONROE ST HARBOR		ERNS
CHICAGO	8864519	SOUTH END OF BELMONT HARBOR LAKE MICHIGAN	SOUTH END OF BELMONT HARBOR LAKE MICHIGAN		ERNS
CHICAGO	S111884927		4300 WEST END AVE		SPILLS
CHICAGO	90187130	SOUTH END OF NAVY PIER	SOUTH END OF NAVY PIER		ERNS
CHICAGO	S111877997		1901 N ENGINE		SPILLS
CHICAGO	S111927213		6050 S ENGLESIDE AVE		SPILLS
CHICAGO	S111924137		ENGLEWOOD YARD 63RD ST		SPILLS
CHICAGO	S111898816		500 ENGLEWOOD ST		SPILLS
CHICAGO	2011990843		ENTRANCE TO CALUMET RIV		ERNS
CHICAGO	S110685277		EOLA YARD		SPILLS
CHICAGO	S111889640		700 W ERIE		SPILLS
CHICAGO	S111926580		2140 W ERIE		SPILLS
CHICAGO	S111907609		1250 W ERIE		SPILLS
CHICAGO	S111890459		4600 W ERIE		SPILLS
CHICAGO	S110685237		2140 W ERIE		SPILLS
CHICAGO	S111891267		1945 W EVERGREEN ST		SPILLS
CHICAGO	S111903211		1841 W EVERGREEN ST		SPILLS
CHICAGO	S111884345		9330 EWING AVE		SPILLS
CHICAGO	S111903003		9331 S EWING		SPILLS
CHICAGO	S111883342		9651 S EWING		SPILLS
CHICAGO	S111888940		7670 S EXCHANGE ST		SPILLS
CHICAGO	S111900830		7101 S EXCHANGE		SPILLS
CHICAGO	S111881280		7149 S EXCHANGE		SPILLS
CHICAGO	96506222	EXIT 63 NORTHBOUND I-90	EXIT 63 NORTHBOUND I-90		ERNS
CHICAGO	99651995	I-290W EXIT 13B	I-290W EXIT 13B		ERNS
CHICAGO	S109092825		NB EXIT		SPILLS
CHICAGO	S111899812		NB EXIT		SPILLS
CHICAGO	S111910965		513 EXPRESS CENTER DR		SPILLS
CHICAGO	S111898541		EXPRESSWAY NEAR FOSTER AVE & I 94		SPILLS
CHICAGO	S111913213		194 EXT 59C WB		SPILLS
CHICAGO	8869549	FACILITY	FACILITY		ERNS
CHICAGO	S111883933		710 FAIRBANKS		SPILLS
CHICAGO	S111897212		1414 S FAIRFIELD		SPILLS
CHICAGO	S111881134		2914 N FAIRFIELD		SPILLS
CHICAGO	S111912566		3001 W FAIRMONT AVE		SPILLS
CHICAGO	S111899016		2120 W FARAGUT		SPILLS
CHICAGO	S111876452		2103 W FARRAGUT		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111904011		2051 W FARRGUT		SPILLS
CHICAGO	2006819483	FAYER AVENUE AND	FAYER AVENUE AND		ERNS
CHICAGO	S111899841		3450 S FEDERAL		SPILLS
CHICAGO	S111881792		2025 W FERDINAND		SPILLS
CHICAGO	S111888757		4221 W FERDINAND		SPILLS
CHICAGO	S111897285		3611 W FILLMORE		SPILLS
CHICAGO	S111898752		3700 W FILLMORE		SPILLS
CHICAGO	S111898515		3842 W FILMORE		SPILLS
CHICAGO	S111910890		2542 W FILMORE AVE		SPILLS
CHICAGO	S111920130		2848 W FILMORE		SPILLS
CHICAGO	S111912303		1111 FISK GENERATING STA W		SPILLS
CHICAGO	S111892904		2613 W FLETCHER		SPILLS
CHICAGO	S111897531		2617 W FLETCHER		SPILLS
CHICAGO	S111913681		2540 W FLOURNOY		SPILLS
CHICAGO	S111884217		5201 W FLOURNOY		SPILLS
CHICAGO	S111884188		5000 W FLOURNOY		SPILLS
CHICAGO	S111882568		8229 FOREST PRESERRVE DR		SPILLS
CHICAGO	2000530733	4541 SOUTH FORESTVILLE	4541 SOUTH FORESTVILLE	0	ERNS
CHICAGO	8869682	FOREWAY EXPRESS TERMINAL 6200 SOUTHEAST AVENUE (312)352-0850	FOREWAY EXPRESS TERMINAL 6200 SOUTHEAST AVENUE (312)352-0850		ERNS
CHICAGO	S111875253		11740 FORONT ST		SPILLS
CHICAGO	S111895616		6300 W FORSTER AVE		SPILLS
CHICAGO	2012104791		50 FORT OF DEARBORN AVE E		ERNS
CHICAGO	94366999	FOSTER AVE ON THE RIVER	FOSTER AVE ON THE RIVER		ERNS
CHICAGO	S111886953		2464 W FOSTER		SPILLS
CHICAGO	S111885675		1745 W FOSTER		SPILLS
CHICAGO	S111891020		1800 W FOSTER		SPILLS
CHICAGO	S111878398		4635 W FOSTER		SPILLS
CHICAGO	S111908579		2322 W FOSTER		SPILLS
CHICAGO	S111875629		1800 W FOSTER		SPILLS
CHICAGO	S111924308		1923 W FOSTER ST		SPILLS
CHICAGO	S111880930		3112 FOSTER AVE		SPILLS
CHICAGO	2012107374		FRANCISCO STATION N MANOR AVE		ERNS
CHICAGO	S111902688		4750 N FRANCISCO AVE		SPILLS
CHICAGO	S111910692		4300 N FRANCISCO ST		SPILLS
CHICAGO	S111899005		6519 N FRANCISCO		SPILLS
CHICAGO	S111926675		1 S FRANKLIN		SPILLS
CHICAGO	S111913473		1504 N FREMONT		SPILLS
CHICAGO	S108669591		6000 E FT IN AIR 15		SPILLS
CHICAGO	S111894314		1340 W FULERTON		SPILLS
CHICAGO	S111893463		2111 W FULERTON		SPILLS
CHICAGO	98430046	FULLERTON 1000 WEST DEPAL UNIVERSITY MAINT. DRIVEWAY	FULLERTON 1000 WEST DEPAL UNIVERSITY MAINT. DRIVEWAY		ERNS
CHICAGO	S111887414		FULLERTON & ASHLAND		SPILLS
CHICAGO	S111886933		5021 W FULLERTON		SPILLS
CHICAGO	S111887511		1350 W FULLERTON		SPILLS
CHICAGO	S111898277		1320 W FULLERTON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111891048		1880 W FULLERTON ST		SPILLS
CHICAGO	S111908315		3417 W FULLERTON		SPILLS
CHICAGO	S111877461		1880 W FULLERTON		SPILLS
CHICAGO	S111909707		1900 W FULLERTON ST		SPILLS
CHICAGO	S111884329		5055 W FULLERTON		SPILLS
CHICAGO	S111900842		6001 W FULLERTON		SPILLS
CHICAGO	S111902670		3918 W FULLERTON		SPILLS
CHICAGO	S111889967		4401 W FULLERTON		SPILLS
CHICAGO	S111910536		4444 FULLERTON		SPILLS
CHICAGO	S111903021		1917 W FULLERTON		SPILLS
CHICAGO	S111927267		3959 W FULLERTON		SPILLS
CHICAGO	S111905159		1655 FULLERTON AVE		SPILLS
CHICAGO	S111927101		4140 W FULLERTON		SPILLS
CHICAGO	S111889537		4444 W FULLERTON		SPILLS
CHICAGO	S111904540		4900 W FULLERTON		SPILLS
CHICAGO	S111915676		5000 W FULLERTON		SPILLS
CHICAGO	S111894733		1718 W FULLERTON		SPILLS
CHICAGO	S111890773		2357 W FULLERTON		SPILLS
CHICAGO	S111877204		1650 W FULLERTON		SPILLS
CHICAGO	S111880749		2357 W FULLERTON		SPILLS
CHICAGO	S111880664		1106 W FULLERTON		SPILLS
CHICAGO	S111889432		1880 W FULLERTON		SPILLS
CHICAGO	S111912266		1400 W FULLTERTON AVE		SPILLS
CHICAGO	S111886711		FULTON & UNION STS		SPILLS
CHICAGO	S111877990		3006 W FULTON		SPILLS
CHICAGO	S111881407		1642 W FULTON		SPILLS
CHICAGO	S111891010		2950 W FULTON		SPILLS
CHICAGO	S111912411		3216 FULTON		SPILLS
CHICAGO	S111892267		832 W FULTON MARKET ST		SPILLS
CHICAGO	S111911765		832 W FULTON MARKET ST		SPILLS
CHICAGO	S111922251		1227 W FULTON		SPILLS
CHICAGO	S111908748		1000 W FULTON		SPILLS
CHICAGO	S111896900		1642 W FULTON		SPILLS
CHICAGO	S111878334		5055 W FULTON		SPILLS
CHICAGO	S111893696		2501 W FULTON		SPILLS
CHICAGO	S111883285		832 W FULTON MARKET ST		SPILLS
CHICAGO	S111914896		1813 W FULTON		SPILLS
CHICAGO	S111904577		1745 FULTON ST		SPILLS
CHICAGO	S111897131		1325 W FULTON AVE		SPILLS
CHICAGO	S111907796		1325 W FULTON		SPILLS
CHICAGO	S111892086		832 W FULTON MARKET ST		SPILLS
CHICAGO	S111889459		2128 W FULTON IN ALY		SPILLS
CHICAGO	S111880758		2051 W FULTON AVE		SPILLS
CHICAGO	S111900638		2401 W FULTON		SPILLS
CHICAGO	S111900976		2201 W FULTON		SPILLS
CHICAGO	96474553	2000 GAL ABANDONED STORAGE TANK / DURING TANK REMOVAL	2000 GAL ABANDONED STORAGE TANK / DURING TANK REMOVAL		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	98438241	000 GAL / CONTRACTOR LEFT VALVOPEN	000 GAL / CONTRACTOR LEFT VALVOPEN		ERNS
CHICAGO	S111349414		2630 N GARDEN AVE		SPILLS
CHICAGO	S110613603		9555 W GARFIELD		SPILLS
CHICAGO	S111926398		9555 W GARFIELD		SPILLS
CHICAGO	S111900592		GATE OF K 19TH & RAMP OHARE AIRPORT		SPILLS
CHICAGO	94360367	GENERAL MILLS SLIP	GENERAL MILLS SLIP		ERNS
CHICAGO	94399152	GENERAL MARINE MOUTH OF CALCAG RIVER MILE 333	GENERAL MARINE MOUTH OF CALCAG RIVER MILE 333		ERNS
CHICAGO	S111895101		9351 GENOA AVE		SPILLS
CHICAGO	S111882567		9536 S GENOA		SPILLS
CHICAGO	S111919131		5744 GEORGE ST		SPILLS
CHICAGO	S111892933		1303 W GEORGE		SPILLS
CHICAGO	S111892932		1224 N GEORGE		SPILLS
CHICAGO	S111907303		2711 W GLADYS ST		SPILLS
CHICAGO	S111898194		2720 W GLADYS		SPILLS
CHICAGO	2005610546	GLEN YARD	GLEN YARD		ERNS
CHICAGO	S111889981		6632 N GLENWOOD		SPILLS
CHICAGO	S111875234		5800 GLENWOOD		SPILLS
CHICAGO	2008870345	GLOBAL ONE RAIL YARD	GLOBAL ONE RAIL YARD		ERNS
CHICAGO	S111925831		W GLOBAL 2		SPILLS
CHICAGO	S111913094		GLOBAL FREE YARD ROCKWELL SUBD		SPILLS
CHICAGO	S111919138		GLOBAL 1		SPILLS
CHICAGO	S111914935		GLOBAL ONE		SPILLS
CHICAGO	S111904975		GLOBAL 1		SPILLS
CHICAGO	S111904568		GOBLE ONE		SPILLS
CHICAGO	S111877289		2401 GRACE ST		SPILLS
CHICAGO	2003709193	GRADE CROSSING	GRADE CROSSING		ERNS
CHICAGO	2008875091	GRADE CROSSING	GRADE CROSSING		ERNS
CHICAGO	2008881150	GRAND AVENUE	GRAND AVENUE		ERNS
CHICAGO	S111877458		2027 W GRAND		SPILLS
CHICAGO	S111899558		6655 W GRAND AVE		SPILLS
CHICAGO	S111896464		6935 W GRAND AVE		SPILLS
CHICAGO	S111888951		6918 W GRAND AVE		SPILLS
CHICAGO	S111896878		6935 W GRAND AVE		SPILLS
CHICAGO	S111922968		6505 W GRAND AVE		SPILLS
CHICAGO	S111904634		7020 W GRAND AVE		SPILLS
CHICAGO	S111900790		6655 W GRAND AVE		SPILLS
CHICAGO	S111879242		6704 W GRAND AVE		SPILLS
CHICAGO	S111879241		6722 W GRAND AVE		SPILLS
CHICAGO	S111879240		6750 W GRAND AVE		SPILLS
CHICAGO	S111905502		3834 W GRAND		SPILLS
CHICAGO	S111883260		5555 W GRAND		SPILLS
CHICAGO	S111881218		3175 N GRAND AVE		SPILLS
CHICAGO	S111900727		3965 W GRAND		SPILLS
CHICAGO	S111897656		3909 W GRAND		SPILLS
CHICAGO	S111893345		GRAND AVE & ORLEANS ST		SPILLS
CHICAGO	S111891073		1339 W GRAND		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111925618		7001 W GRAND AVE		SPILLS
CHICAGO	S111910267		6914 W GRAND		SPILLS
CHICAGO	S111878605		6801 W GRAND AVE		SPILLS
CHICAGO	S111903795		3955 W GRAND		SPILLS
CHICAGO	S111894051		2816 GRAND AVE		SPILLS
CHICAGO	S111889874		1807 W GRANDVILLE		SPILLS
CHICAGO	S111907420		5035 W GRANT AVE		SPILLS
CHICAGO	S111911509		5145 W GRANT		SPILLS
CHICAGO	2010960437	GRANVILLE AND RIDGE	GRANVILLE		ERNS
CHICAGO	S111900739		2447 W GRANVILLE		SPILLS
CHICAGO	S111904032		2700 S GREEN ST		SPILLS
CHICAGO	S111907232		106 S GREENBAY AVE		SPILLS
CHICAGO	S111877938		1320 W GREENLEAF		SPILLS
CHICAGO	S111885304		2512 N GREENVIEW		SPILLS
CHICAGO	S111902387		4542 N GREENVIEW		SPILLS
CHICAGO	S111905211		3928 N GREENVIEW ST		SPILLS
CHICAGO	S111895425		9000 S GREENWOOD ST		SPILLS
CHICAGO	99626883	ST. GREGORY HIGH SCHOOL 1637 WEST BRYN MAWR ROAD	ST. GREGORY HIGH SCHOOL 1637 WEST BRYN MAWR ROAD		ERNS
CHICAGO	S111924972		4400 W GRENSHAW		SPILLS
CHICAGO	S111897142		7041 S GRN ST IN THE ALLEY		SPILLS
CHICAGO	S111915291		8915 S GRN BAY		SPILLS
CHICAGO	2010936059	4820 WEST GUNNINSON	4820 W GUNNINSON		ERNS
CHICAGO	S111911295		5918 W GUNNISON		SPILLS
CHICAGO	S111906606		6601 W GUNNISON		SPILLS
CHICAGO	S111920129		5930 W GUNNISON		SPILLS
CHICAGO	S111911414		2525 W GUNNISON AVE		SPILLS
CHICAGO	S111883939		2000 W HADDON		SPILLS
CHICAGO	94378941	830 HAINES RIGHT OFF HOOKER	830 HAINES RIGHT OFF HOOKER		ERNS
CHICAGO	S111891184		830 HAINES		SPILLS
CHICAGO	S111898079		10449 S HALE		SPILLS
CHICAGO	2010929894	4500 S. HALFTED STREET	4500 S HALFTED ST		ERNS
CHICAGO	S111883818		928 HALG OHARE ARFS		SPILLS
CHICAGO	2003648226	1130 SOUTH HALSTAD	1130 SOUTH HALSTAD		ERNS
CHICAGO	S111906302		3737 S HALSTAD ST		SPILLS
CHICAGO	94371388	HALSTEAD STREET	HALSTEAD STREET		ERNS
CHICAGO	97413488	901 N HALSTEAD GREY HOUND MAINTENANCE CENTER	901 N HALSTEAD GREY HOUND MAINTENANCE CENTER		ERNS
CHICAGO	2008887158	4118 S HALSTEAD	4118 S HALSTEAD		ERNS
CHICAGO	2008880664	HALSTEAD @ HUBBARD	HALSTEAD @ HUBBARD		ERNS
CHICAGO	2010948540	2615 N HALSTEAD	2615 N HALSTEAD		ERNS
CHICAGO	S111885666		3600 N HALSTEAD		SPILLS
CHICAGO	S111885939		11500 S HALSTEAD		SPILLS
CHICAGO	S111887110		2300 S HALSTEAD		SPILLS
CHICAGO	S111910763		4512 S HALSTEAD		SPILLS
CHICAGO	S111903056		9420 S HALSTEAD		SPILLS
CHICAGO	S111912365		7100 HALSTEAD AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111912978		1234 N HALSTEAD		SPILLS
CHICAGO	S111912979		1234 N HALSTEAD		SPILLS
CHICAGO	S111926011		2600 N HALSTEAD		SPILLS
CHICAGO	S111905948		111 S HALSTEAD ST		SPILLS
CHICAGO	S111893111		3024 S HALSTEAD AVE		SPILLS
CHICAGO	S111911697		2145 N HALSTEAD		SPILLS
CHICAGO	S111900784		7808 S HALSTEAD		SPILLS
CHICAGO	S111921061		112 S HALSTEAD		SPILLS
CHICAGO	S111903489		4187 S HALSTEAD		SPILLS
CHICAGO	S111914110		5901 S HALSTEAD		SPILLS
CHICAGO	S108047026		HALSTED ST		SPILLS
CHICAGO	S110613501		2615 N HALSTED		SPILLS
CHICAGO	2005630618	HALSTED STREET	HALSTED STREET		ERNS
CHICAGO	2007319874	HALSTED STREET	HALSTED STREET		ERNS
CHICAGO	S111925906		HALSTED		SPILLS
CHICAGO	S111913799		4200 S HALSTED		SPILLS
CHICAGO	S111910568		1218 S HALSTED		SPILLS
CHICAGO	S111882312		HALSTED AVE W		SPILLS
CHICAGO	S111903745		9811 HALSTED		SPILLS
CHICAGO	S111896992		950 S HALSTED		SPILLS
CHICAGO	S111895268		12540 S HALSTED		SPILLS
CHICAGO	S111912243		13600 S HALSTED		SPILLS
CHICAGO	S111903700		11501 HALSTED ST		SPILLS
CHICAGO	S111900568		11226 S HALSTED		SPILLS
CHICAGO	S111897767		11656 S HALSTED		SPILLS
CHICAGO	S111879314		8259 S HALSTED		SPILLS
CHICAGO	S111927370		365 N HALSTED		SPILLS
CHICAGO	S111927342		40 S HALSTED		SPILLS
CHICAGO	S111913452		170 N HALSTED		SPILLS
CHICAGO	S111905255		13600 S HALSTED ST		SPILLS
CHICAGO	S111898547		2600 N HALSTED		SPILLS
CHICAGO	S111889283		9458 S HALSTED		SPILLS
CHICAGO	S111922150		5833 S HALSTED		SPILLS
CHICAGO	S111892429		2733 N HALSTED		SPILLS
CHICAGO	S111921198		HALSTED & HUBBARD		SPILLS
CHICAGO	S111893787		2723 S HALSTED		SPILLS
CHICAGO	S111891503		711 HALSTED		SPILLS
CHICAGO	S111927240		2300 S HALSTED		SPILLS
CHICAGO	S111927238		2300 S HALSTED		SPILLS
CHICAGO	S111921739		4834 S HALSTED		SPILLS
CHICAGO	S111918745		HALSTED ST		SPILLS
CHICAGO	S111881265		6659 S HALSTED		SPILLS
CHICAGO	S111925751		8605 S HALSTED		SPILLS
CHICAGO	S111894501		1560 N HALSTED AVE		SPILLS
CHICAGO	S111890866		901 N HALSTED		SPILLS
CHICAGO	S111924820		1560 N HALSTED		SPILLS
CHICAGO	S111919033		4512 S HALSTED		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111920289		HALSTED ST		SPILLS
CHICAGO	S111908149		2857 S HALSTED		SPILLS
CHICAGO	S111899448		9900 S HALSTED		SPILLS
CHICAGO	S111881003		8801 S HALSTED		SPILLS
CHICAGO	S111905402		10101 S HALSTED AVE		SPILLS
CHICAGO	S111889107		3000 N HALSTED		SPILLS
CHICAGO	S111880767		7100 S HALSTED AVE		SPILLS
CHICAGO	S111919434		HALSTED & KINZIE YARD		SPILLS
CHICAGO	S111927720		3740 N HALSTED		SPILLS
CHICAGO	S111914463		10301 S HALSTED		SPILLS
CHICAGO	S111907558		2145 N HALSTED		SPILLS
CHICAGO	S111911558		2834 N HALSTED		SPILLS
CHICAGO	S111910193		10630 S HALSTED		SPILLS
CHICAGO	S111904830		3539 N HALSTED		SPILLS
CHICAGO	S108480128		HALSTED ST		SPILLS
CHICAGO	S108046821		9500 S HALSTRAD		SPILLS
CHICAGO	S111898193		2630 HAMDEN CT		SPILLS
CHICAGO	S111880970		5956 S HAMILTON		SPILLS
CHICAGO	S111894412		3823 N HAMILTON		SPILLS
CHICAGO	S111920189		7850 S HAMILTON		SPILLS
CHICAGO	S111910159		3215 S HAMIMTON ST		SPILLS
CHICAGO	S111888291		1800 N HAMLIN ST		SPILLS
CHICAGO	S111925519		HANGER 755		SPILLS
CHICAGO	S111889509		HANGER 755		SPILLS
CHICAGO	S111890043		HANGER 2		SPILLS
CHICAGO	2001570505	HANGER 2 BLDG 725	HANGER 2 BLDG 725	0	ERNS
CHICAGO	94364406	HARBOR NEAR NAVY PIER CHESTNUT & LAKESHOR DR	HARBOR NEAR NAVY PIER CHESTNUT & LAKESHORE DR		ERNS
CHICAGO	2000669619	HARBOR	HARBOR		ERNS
CHICAGO	S111913179		3132 N HARDING		SPILLS
CHICAGO	S111920811		1956 N HARDING		SPILLS
CHICAGO	S108047373		O HARE AIRPORT & UNITED HANGAR BLVG 710		SPILLS
CHICAGO	2007309784	HARLEM STREET	HARLEM STREET		ERNS
CHICAGO	U001965186	SHELL SER STATION	7550 N HARLEM MILWAUKEE		UST
CHICAGO	S111887273		3611 N HARLEM		SPILLS
CHICAGO	S111876556		6800 N HARLEM ST		SPILLS
CHICAGO	S111911102		2919 N HARLEM AVE		SPILLS
CHICAGO	S111900902		2001 N HARLEM		SPILLS
CHICAGO	S111900521		2001 N HARLEM AVE		SPILLS
CHICAGO	S111892489		1801 N HARLEM AVE		SPILLS
CHICAGO	S111901780		3200 N HARLEM		SPILLS
CHICAGO	S111895514		5837 S HARLEM		SPILLS
CHICAGO	S111876180		3330 N HARLEM		SPILLS
CHICAGO	S111879221		6256 N HARLEM		SPILLS
CHICAGO	S111882566		5709 S HARLEM		SPILLS
CHICAGO	S111899505		1957 N HARLEM AVE		SPILLS
CHICAGO	S111898470		2801 N HARLEM AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111879191		6800 N HARLEM		SPILLS
CHICAGO	S111879433		1823 N HARLEM AVE		SPILLS
CHICAGO	S111914235		1733 N HARLEM		SPILLS
CHICAGO	S111892364		HARLEM AVE & I 55		SPILLS
CHICAGO	S111892359		7550 N HARLEM		SPILLS
CHICAGO	S111893361		4051 N HARLEM		SPILLS
CHICAGO	S111906761		1733 N HARLEM AVE		SPILLS
CHICAGO	S111910974		3434 N HARLEN		SPILLS
CHICAGO	S111888469		5129 S HARPER		SPILLS
CHICAGO	S111912572		530 S HARPER AVE		SPILLS
CHICAGO	S111883170		9315 S HARPER		SPILLS
CHICAGO	S111880043		5129 S HARPER		SPILLS
CHICAGO	U003104599	MEDICAL CENTER COMM	224359 W HARRISON		UST
CHICAGO	S111887979		3305 W HARRISON		SPILLS
CHICAGO	S111888248		707 W HARRISON		SPILLS
CHICAGO	S111876439		3801 W HARRISON		SPILLS
CHICAGO	S111900827		3707 W HARRISON		SPILLS
CHICAGO	S111894454		4519 W HARRISON		SPILLS
CHICAGO	S111894895		HARRISON & RACINE AVES		SPILLS
CHICAGO	S111876051		3801 W HARRISON		SPILLS
CHICAGO	90182371	HAYFORD INTERLOCKING PLANT 75TH AND HARDIE	HAYFORD INTERLOCKING PLANT 75TH AND HARDIE		ERNS
CHICAGO	S111895209		4544 HAZEL ST		SPILLS
CHICAGO	93352173	4837 NORTH HERMINAGES	4837 NORTH HERMINAGES		ERNS
CHICAGO	S111894215		4625 HERMITAGE AVE		SPILLS
CHICAGO	S111878314		4200 S HERMITAGE		SPILLS
CHICAGO	S111890832		1942 N HERMITAGE		SPILLS
CHICAGO	S111880926		4863 N HERMITAGE IN THE ALLEY BEHIND		SPILLS
CHICAGO	S111900056		435 N HERMITAGE ST		SPILLS
CHICAGO	S111885663		HERTZ SERVICE RETURN OHARE AIR		SPILLS
CHICAGO	2002600940	HICK BRIDGE	HICK BRIDGE	0	ERNS
CHICAGO	S111886098		7159 W HIGGINS		SPILLS
CHICAGO	S111875374		6716 W HIGGINS		SPILLS
CHICAGO	S111910018		820 W HIGGINS AVE		SPILLS
CHICAGO	S111912382		6417 W HIGGINS		SPILLS
CHICAGO	S111903948		6436 W HIGGINS		SPILLS
CHICAGO	S111899229		6842 W HIGGINS		SPILLS
CHICAGO	S111923035		7133 W HIGGINS		SPILLS
CHICAGO	S111889494		5765 W HIGGINS		SPILLS
CHICAGO	S111906848		7201 W HIGGINS		SPILLS
CHICAGO	S111882786		6020 HIGGINS AVE		SPILLS
CHICAGO	S111898638		2201 W HIGHLAND		SPILLS
CHICAGO	S111915225		1743 HIGHLAND AVE		SPILLS
CHICAGO	S111884462		2883 S HILLOCK ST		SPILLS
CHICAGO	S111912226		6257 W HOLBROOK		SPILLS
CHICAGO	S111900181		HOLMAN & 23RD ST		SPILLS
CHICAGO	S111908084		1830 S HOLMAN AVE		SPILLS
CHICAGO	S109327479		4118 S HOLSTEAD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111924234		4118 S HOLSTEAD		SPILLS
CHICAGO	S111883868		2857 S HOLSTED		SPILLS
CHICAGO	S111876775		HOLY CROSS HOSPITAL & 2701ST W 68TH ST		SPILLS
CHICAGO	S111909312		913 HOMAN AVE		SPILLS
CHICAGO	S111906649		234 N HOMAN		SPILLS
CHICAGO	S111913259		2650 S HOMAN		SPILLS
CHICAGO	S111919204		2612 S HOMAN		SPILLS
CHICAGO	S111914452		HOMAN AVE		SPILLS
CHICAGO	S111900938		11600 S HOMAN		SPILLS
CHICAGO	S111749680		43 N HOMAN		SPILLS
CHICAGO	S111912237		2419 W HOMER		SPILLS
CHICAGO	S111911881		4819 HOMER		SPILLS
CHICAGO	S111884173		5142 W HOMER		SPILLS
CHICAGO	900104022	HONEY CRUST BAKERY (312)376-0350 3822 SOUTH MORGAN ST	HONEY CRUST BAKERY (312)376-0350 3822 SOUTH MORGAN ST		ERNS
CHICAGO	2009896503	3550 W. HONEYSIDE AVE.	3550 W. HONEYSIDE AVE.		ERNS
CHICAGO	2008896503	3550 W. HONEYSIDE AVE.	3550 W. HONEYSIDE AVE.		ERNS
CHICAGO	S111884726		1000 N HOOKER		SPILLS
CHICAGO	S111879820		12300 S HOUSTON		SPILLS
CHICAGO	2011963459	HOWARD YARD	HOWARD YARD		ERNS
CHICAGO	2010943926	HOWARD STREET TERMINAL	HOWARD ST		ERNS
CHICAGO	S111904581		1771 W HOWARD		SPILLS
CHICAGO	S111893617		1529 W HOWARD ST		SPILLS
CHICAGO	S111888463		1155 N HOWE		SPILLS
CHICAGO	S111879482		13518 S HOXIE		SPILLS
CHICAGO	S111887768		7115 S HOYNE		SPILLS
CHICAGO	S111913745		4856 HOYNE		SPILLS
CHICAGO	S111883382		226 S HOYNE		SPILLS
CHICAGO	S111888936		11071 S HOYNE ST		SPILLS
CHICAGO	S111894405		4848 S HOYNE		SPILLS
CHICAGO	S111913844		7342 S HOYNE		SPILLS
CHICAGO	S111913778		1446 W HUBBARD		SPILLS
CHICAGO	S111903702		1146 W HUBBARD		SPILLS
CHICAGO	S111909710		2246 W HUBBARD		SPILLS
CHICAGO	S111911028		1725 HUBBARD ST		SPILLS
CHICAGO	S111881245		2121 W HUBBARD		SPILLS
CHICAGO	S111902854		333 W HUBBARD		SPILLS
CHICAGO	S111903486		1373 W HUBBARD		SPILLS
CHICAGO	S111890683		1519 N HUDSON		SPILLS
CHICAGO	S111896938		1800 N HUMBULDT BLVD		SPILLS
CHICAGO	S111891944		11600 HURLEY AVE		SPILLS
CHICAGO	S111906032		942 W HURON		SPILLS
CHICAGO	S111880971		409 W HURON		SPILLS
CHICAGO	S111920822		469 W HURON		SPILLS
CHICAGO	S111915329		333 E HURON		SPILLS
CHICAGO	S111899580		410 E HURRON ST		SPILLS
CHICAGO	S108047098		HWY		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111887325		5450 NORTHWEST HWY		SPILLS
CHICAGO	S111888275		5707 NORTHWEST HWY		SPILLS
CHICAGO	S111926439		6060 NORTHWEST HWY		SPILLS
CHICAGO	S111900204		5292 NORTHWEST HWY		SPILLS
CHICAGO	S111908625		6643 NORTHWEST HWY		SPILLS
CHICAGO	S111889939		6060 NORTHWEST HWY		SPILLS
CHICAGO	S111879323		5349 NORTHWEST HWY		SPILLS
CHICAGO	S111884598		5688 NORTHWEST HWY		SPILLS
CHICAGO	S111883789		5677 NORTHWEST HWY		SPILLS
CHICAGO	S111883788		5601 NORTHWEST HWY		SPILLS
CHICAGO	S111902878		5932 NORTHWEST HWY		SPILLS
CHICAGO	S111898406		5978 NORTHWEST HWY		SPILLS
CHICAGO	S111906239		5540 NORTHWEST HWY		SPILLS
CHICAGO	S111882437		5328 NORTHWEST HWY		SPILLS
CHICAGO	S111889070		5210 NORTHWEST HWY		SPILLS
CHICAGO	S111880779		6405 NORTHWEST HWY		SPILLS
CHICAGO	S111898878		5990 NORTHWEST HWY		SPILLS
CHICAGO	S111893992		5810 NORTHWEST HWY		SPILLS
CHICAGO	S111897518		5400 NORTHWEST HWY		SPILLS
CHICAGO	S111890344		5860 NORTHWEST HWY		SPILLS
CHICAGO	94389410	I-190	I-190		ERNS
CHICAGO	2000534767	ROUTE I-290	ROUTE I-290	0	ERNS
CHICAGO	S111891411		ON IL RIV		SPILLS
CHICAGO	S111892173		ILCALSAG 333MM		SPILLS
CHICAGO	8862767	ILL SCRAP PROCESSING	ILL SCRAP PROCESSING		ERNS
CHICAGO	2002624541	ILLINOIS WATER WAY MILE 319.4	ILLINOIS WATER WAY MILE 319.4	0	ERNS
CHICAGO	98430979	ILLINOIS RIVER MM300	ILLINOIS RIVER MM300		ERNS
CHICAGO	2000534026	ILLINOIS AND COLUMBUS ST.	ILLINOIS AND COLUMBUS ST.	0	ERNS
CHICAGO	99633038	ILLINOIS MARINE FLEET MILE 300 M/V ROSS PICKETT	ILLINOIS MARINE FLEET MILE 300 M/V ROSS PICKETT		ERNS
CHICAGO	2007310111	ILLINOIS AVE AND MCCLURG AVENUE	ILLINOIS AVE AND MCCLURG AVENUE		ERNS
CHICAGO	2008871775	ILLINOIS RIVER	ILLINOIS RIVER		ERNS
CHICAGO	S111907456		201 E ILLINOIS		SPILLS
CHICAGO	S111926005		ILLINOIS RIV		SPILLS
CHICAGO	S111907572		ILLINOIS & COLUMBUS STS		SPILLS
CHICAGO	S111925018		ILLINOIS RIV		SPILLS
CHICAGO	92289906	IMX FACILITY 26TH AND 31ST AVE	IMX FACILITY 26TH AND 31ST AVE		ERNS
CHICAGO	S111888437		IMX RAILYARD ON WESTERN AVE		SPILLS
CHICAGO	S111879297		9915 S IN ALY		SPILLS
CHICAGO	S111902081		W IN FLIGHT 5		SPILLS
CHICAGO	S111910684		6600 S INBOUND SKYWAY NEAR THE ST		SPILLS
CHICAGO	S111914280		INDIAN ROAD WOODS FRST		SPILLS
CHICAGO	S111885760		2241 S INDIANA		SPILLS
CHICAGO	S111883212		3730 S INDIANA		SPILLS
CHICAGO	S111905655		INDIANA ROAD PARK		SPILLS
CHICAGO	S111910042		1730 S INDIANA		SPILLS
CHICAGO	S111884346		1730 S INDIANA		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111905096		13701 S INDIANA		SPILLS
CHICAGO	S111881915		5000 S INDIANA		SPILLS
CHICAGO	S111904954		13759 S INDIANA AVE		SPILLS
CHICAGO	S111915566		13333 S INDIANA		SPILLS
CHICAGO	S111888759		10300 INDIANAPOLIS BLVD		SPILLS
CHICAGO	90173269	INDIANAPOLIS BLVD BRIDGE INDIANA HARBOR CANAL EAST OF CHICAG	INDIANAPOLIS BLVD BRIDGE INDIANA HARBOR CANAL EAST OF CHICAG		ERNS
CHICAGO	S111895476		711 INDUSTRIAL DR		SPILLS
CHICAGO	S111893530		MP INT OF 94		SPILLS
CHICAGO	S111924479		INT 94		SPILLS
CHICAGO	S111899051		INT OGDON & OAKLEY ST		SPILLS
CHICAGO	2008859473	INTERMODAL YARD	INTERMODAL YARD		ERNS
CHICAGO	2008859472	INTERMODAL YARD	INTERMODAL YARD		ERNS
CHICAGO	S108047234		INTERSECTION OF 30TH ST & KEDZIE ST		SPILLS
CHICAGO	S108047858		INTERSECTION OF DUNLAP & HARVARD		SPILLS
CHICAGO	93341562	INTERSECTION OF DAMEN AVE AND CHURCHILL	INTERSECTION OF DAMEN AVE AND CHURCHILL		ERNS
CHICAGO	2010936858	INTERSECTION OF MANNHEIM ROAD	INTERSECTION OF MANNHEIM RD		ERNS
CHICAGO	S111894498		INTERSECTION OF DAMEN & ARCHER		SPILLS
CHICAGO	S111925598		INTERSECTION OF WOOD ST AND WA ST		SPILLS
CHICAGO	S111913948		INTERSECTION OF 47TH ST & LEANINGTON ST		SPILLS
CHICAGO	S111886694		INTERSECTIONOF 83RD & STATE ST		SPILLS
CHICAGO	S111888696		INTERSECTIONOF 37TH & STATE STS		SPILLS
CHICAGO	S111912516		2954 W IRIVING PARK RD		SPILLS
CHICAGO	S111911904		7501 W IRIVING PARK RD		SPILLS
CHICAGO	S111890148		3604 S IRON		SPILLS
CHICAGO	S111881629		3700 S IRON		SPILLS
CHICAGO	S111886858		2337 IRVINE PARK RD		SPILLS
CHICAGO	S111885562		4001 W IRVING		SPILLS
CHICAGO	S111886380		953 IRVING PARK		SPILLS
CHICAGO	S111880190		2033 W IRVING PARK		SPILLS
CHICAGO	S111881428		3020 W IRVING PARK		SPILLS
CHICAGO	S111907476		6100 IRVING RD		SPILLS
CHICAGO	S111898600		3541 W IRVING PARK		SPILLS
CHICAGO	S111901186		777 IRVING PARK RD		SPILLS
CHICAGO	S111877073		IRVING PARK & KENEDY EXPY		SPILLS
CHICAGO	S111878401		7800 W IRVING PARK RD		SPILLS
CHICAGO	S111923083		IRVING PARK RD & CARGO RD		SPILLS
CHICAGO	S111907683		953 IRVING PARK RD		SPILLS
CHICAGO	S111927131		13609 W IRVING PARK RD		SPILLS
CHICAGO	S111893012		11501 W IRVING PARK RD		SPILLS
CHICAGO	S111892347		4323 W IRVING		SPILLS
CHICAGO	S111875552		8000 IRVING PARK RD		SPILLS
CHICAGO	S111882935		4001 W IRVING PARK		SPILLS
CHICAGO	S111911648		841 W IRVING PAEK RD		SPILLS
CHICAGO	S111880750		841 W IRVING PARK		SPILLS
CHICAGO	S111915050		11560 W IRVING PARK RD		SPILLS
CHICAGO	S111924998		2834 IRVING PARK RD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111913990		11560 W IRVING PARK RD		SPILLS
CHICAGO	S111882362		4816 W IRVING PARK		SPILLS
CHICAGO	S110613713		2508 W JACKSON ST		SPILLS
CHICAGO	2010932920	BUSINESS DISTRICT 358 W. JACKSON ST.	358 W JACKSON ST		ERNS
CHICAGO	S111887249		209 W JACKSON		SPILLS
CHICAGO	S111885980		5201 W JACKSON		SPILLS
CHICAGO	S111887884		5201 W JACKSON		SPILLS
CHICAGO	2012101868		77 W JACKSON ST		ERNS
CHICAGO	S111912575		JACKSON PARK GOLF DRIVING RANG DR		SPILLS
CHICAGO	S111913625		4546 W JACKSON		SPILLS
CHICAGO	S111884884		1645 W JACKSON		SPILLS
CHICAGO	S111925491		3236 W JACKSON		SPILLS
CHICAGO	S111925492		3236 W JACKSON		SPILLS
CHICAGO	S111911695		JACKSON PARK HAYES AVE		SPILLS
CHICAGO	S111881270		2100 W JACKSON		SPILLS
CHICAGO	S111907782		1001 W JACKSON		SPILLS
CHICAGO	S111926494		2508 W JACKSON ST		SPILLS
CHICAGO	S111915553		330 W JACKSON		SPILLS
CHICAGO	S111908348		1010 E JACKSON BLVD		SPILLS
CHICAGO	S111883501		1655 W JACKSON		SPILLS
CHICAGO	S111877812		827 S JEFFERSON		SPILLS
CHICAGO	S111884638		1401 S JEFFERSON		SPILLS
CHICAGO	S111889615		1400 S JEFFERSON		SPILLS
CHICAGO	S111914939		7601 S JEFFERSON		SPILLS
CHICAGO	S111883593		1400 S JEFFERSON		SPILLS
CHICAGO	S111912836		180 N JEFFERSON		SPILLS
CHICAGO	S111912837		180 N JEFFERSON		SPILLS
CHICAGO	S111899009		1400 S JEFFERSON		SPILLS
CHICAGO	S111910682		6701 S JEFFERY		SPILLS
CHICAGO	S111888739		6701 S JEFFERY		SPILLS
CHICAGO	S108891660		6701 S JEFFREY		SPILLS
CHICAGO	S109366427		6700 JEFFREY BLVD		LUST, SPILLS
CHICAGO	S111910683		6701 S JEFFREY BLVD		SPILLS
CHICAGO	S111883975		9336 S JEFFREY		SPILLS
CHICAGO	99609148	JFK EXPRESSWAY (RT 90) WEST JUST BEFORE THE 45B EXIT	JFK EXPRESSWAY (RT 90) WEST JUST BEFORE THE 45B EXIT		ERNS
CHICAGO	S109327404		1912 S JOURDAN COURT PEORIA ST		SPILLS
CHICAGO	S111885499		JULIEN & WOOD ST		SPILLS
CHICAGO	94378888	JUST SOUTH OF WASHINGTON ST BRIDGE	JUST SOUTH OF WASHINGTON ST BRIDGE		ERNS
CHICAGO	2007324003	JUST N.E. OF SOLDIER FIELD	JUST N.E. OF SOLDIER FIELD		ERNS
CHICAGO	S111902745		6755 S JUSTINE		SPILLS
CHICAGO	S111890318		309 N JUSTINE		SPILLS
CHICAGO	2000518027	135 SOUTH KADZIE	135 SOUTH KADZIE	0	ERNS
CHICAGO	S111919671		5310 S KARLOV		SPILLS
CHICAGO	S111907501		3115 N KEATING ST		SPILLS
CHICAGO	S111898382		5801 KEATING ST		SPILLS
CHICAGO	S111902616		1438 N KEATING		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S108669593		6033 N KEDALE AVE		SPILLS
CHICAGO	93350395	2759 SOUTH KEDSE AVE	2759 SOUTH KEDSE AVE		ERNS
CHICAGO	S111876900		10759 S KEDSIE		SPILLS
CHICAGO	S111886081		3920 N KEDVALE		SPILLS
CHICAGO	S111884525		1921 N KEDVALE		SPILLS
CHICAGO	94407837	3000 SOUTH KEDZIE SCRAP YARD	3000 SOUTH KEDZIE SCRAP YARD		ERNS
CHICAGO	S111885628		7300 S KEDZIE		SPILLS
CHICAGO	S111886517		3350 N KEDZIE		SPILLS
CHICAGO	S111888296		8700 S KEDZIE		SPILLS
CHICAGO	S111888442		3001 S KEDZIE		SPILLS
CHICAGO	S111888408		2122 N KEDZIE		SPILLS
CHICAGO	S111885391		7300 S KEDZIE		SPILLS
CHICAGO	S111888368		4000 S KEDZIE		SPILLS
CHICAGO	S111877816		3316 N KEDZIE		SPILLS
CHICAGO	S111910595		N KEDZIE AVE		SPILLS
CHICAGO	S111880294		10758 S KEDZIE		SPILLS
CHICAGO	S111900017		5604 N KEDZIE		SPILLS
CHICAGO	S111875974		5808 S KEDZIE		SPILLS
CHICAGO	S111876949		1031 S KEDZIE		SPILLS
CHICAGO	S111910046		4831 S KEDZIE		SPILLS
CHICAGO	S111922462		1701 N KEDZIE		SPILLS
CHICAGO	S111895557		2847 S KEDZIE		SPILLS
CHICAGO	S111877425		5050 KEDZIE AVE		SPILLS
CHICAGO	S111912412		7100 S KEDZIE		SPILLS
CHICAGO	S111899270		3720 N KEDZIE		SPILLS
CHICAGO	S111923987		3301 KEDZIE AVE		SPILLS
CHICAGO	S111908732		101 N KEDZIE		SPILLS
CHICAGO	S111905596		4235 N KEDZIE		SPILLS
CHICAGO	S111890918		1020 N KEDZIE		SPILLS
CHICAGO	S111909533		2800 S KEDZIE		SPILLS
CHICAGO	S111922101		4447 N KEDZIE		SPILLS
CHICAGO	S111876848		1201 S KEDZIE		SPILLS
CHICAGO	S111893723		727 N KEDZIE		SPILLS
CHICAGO	S111876366		4054 N KEDZIE		SPILLS
CHICAGO	S111927168		11040 S KEDZIE		SPILLS
CHICAGO	S111922672		4801 S KEDZIE		SPILLS
CHICAGO	S111919188		2614 S KEDZIE		SPILLS
CHICAGO	S111905518		2021 N KEDZIE		SPILLS
CHICAGO	S111905493		5359 N KEDZIE		SPILLS
CHICAGO	S111899858		1116 N KEDZIE		SPILLS
CHICAGO	S111878143		8200 S KEDZIE		SPILLS
CHICAGO	S111919080		7100 KEDZIE		SPILLS
CHICAGO	S111882493		5050 S KEDZIE		SPILLS
CHICAGO	S111901715		11900 S KEDZIE AVE		SPILLS
CHICAGO	S111894964		5035 N KEDZIE		SPILLS
CHICAGO	S111881916		3247 S KEDZIE		SPILLS
CHICAGO	S111920353		2551 S KEDZIE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111920903		2657 S KEDZIE		SPILLS
CHICAGO	S111878644		6659 N KEDZIE		SPILLS
CHICAGO	S111899132		7625 S KEDZIE		SPILLS
CHICAGO	S111897576		3200 S KEDZIE		SPILLS
CHICAGO	S111896348		10320 S KEDZIE		SPILLS
CHICAGO	S111892109		4910 N KEDZIE		SPILLS
CHICAGO	S111880940		358 S KEDZIE		SPILLS
CHICAGO	S111880825		3947 S KEDZIE		SPILLS
CHICAGO	S111876720		3247 S KEDZIE		SPILLS
CHICAGO	S111880682		7100 S KEDZIE ST		SPILLS
CHICAGO	S111904136		5441 N KEDZIE		SPILLS
CHICAGO	S111914097		5040 N KEDZIE		SPILLS
CHICAGO	S111912849		642 N KEDZIE		SPILLS
CHICAGO	S111912850		642 N KEDZIE		SPILLS
CHICAGO	S111910172		228 S KEDZIE		SPILLS
CHICAGO	S111897377		4646 S KEDZIE		SPILLS
CHICAGO	S111897336		11900 S KEDZIE AVE		SPILLS
CHICAGO	S111912810		3747 N KEDZIE		SPILLS
CHICAGO	S111912811		3747 N KEDZIE		SPILLS
CHICAGO	S111883969		3100 N KEDZIE		SPILLS
CHICAGO	S111902571		412 N KEDZIE		SPILLS
CHICAGO	S111876629		3247 S KEDZIE		SPILLS
CHICAGO	S111920182		4837 S KEDZIE		SPILLS
CHICAGO	S111920124		5440 S KEDZIE		SPILLS
CHICAGO	S111911511		4140 N KEDZIE		SPILLS
CHICAGO	94367889	6900 S KEELER ST	6900 S KEELER ST		ERNS
CHICAGO	90164999	69 KEELER STREET	69 KEELER STREET		ERNS
CHICAGO	S111910602		930 N KENMORE		SPILLS
CHICAGO	S111900364		4920 N KENMORE		SPILLS
CHICAGO	S111878670		4208 KENMORE AVE		SPILLS
CHICAGO	S109700090		NW KENNEDY EXPY & NORTH AVE		SPILLS
CHICAGO	S111903042		SB KENNEDY EXPY		SPILLS
CHICAGO	S111925176		NW KENNEDY EXPRESSWAY AT NORTH AVE		SPILLS
CHICAGO	S111749663		300 S KENNEDY EXPY		SPILLS
CHICAGO	S111925061		2324 S KENNETH		SPILLS
CHICAGO	S111907521		KENOSHA SUBDIVISION		SPILLS
CHICAGO	2006805030	400 N. KENTON AVE	400 N. KENTON AVE		ERNS
CHICAGO	S111890713		1636 N KENTON		SPILLS
CHICAGO	S108046186		3701 W KENZIE		SPILLS
CHICAGO	S111902173		3701 W KENZIE		SPILLS
CHICAGO	S108045321		11039 S KEZIE AVE		SPILLS
CHICAGO	S111891776		4411 S KILBARE		SPILLS
CHICAGO	8850526	1645 S KILBORN ST	1645 S KILBORN ST		ERNS
CHICAGO	2011993247		1821 S KILBORN		ERNS
CHICAGO	S111875834		356 N KILBORN		SPILLS
CHICAGO	2010956033	1821 SOUTH KILBOURN	1821 S KILBOURN		ERNS
CHICAGO	2010956034	1821 SOUTH KILBOURN	1821 S KILBOURN		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111888019		N KILBOURN & W BYRON		SPILLS
CHICAGO	S111892847		2816 S KILBOURN		SPILLS
CHICAGO	S111877630		1330 S KILBOURN		SPILLS
CHICAGO	S111919186		1730 N KILBOURN		SPILLS
CHICAGO	S111898486		750 N KILBOURN		SPILLS
CHICAGO	S111880599		6249 S KILBOURN		SPILLS
CHICAGO	S111898682		5152 S KILBOURN		SPILLS
CHICAGO	S111912840		1821 KILBOURN AVE		SPILLS
CHICAGO	S111886847		2816 S KILBOURNE		SPILLS
CHICAGO	S111884664		902 KILBOURNE ST		SPILLS
CHICAGO	S111876879		1440 S KILBOURNE AVE		SPILLS
CHICAGO	S111876447		3200 S KILBOURNE ST		SPILLS
CHICAGO	S111878673		4940 S KILBOURNE AVE		SPILLS
CHICAGO	S111879169		1810 N KILBOURNE		SPILLS
CHICAGO	S111911634		1810 N KILBOURNE		SPILLS
CHICAGO	S111890018		715 N KILBOURNE		SPILLS
CHICAGO	S111883554		22 N KILDAIR AVE		SPILLS
CHICAGO	S111894670		2100 N KILDARE		SPILLS
CHICAGO	S111893166		1630 N KILDARE		SPILLS
CHICAGO	S111904816		4400 S KILDARE		SPILLS
CHICAGO	S111901228		4220 S KILDARE BLVD		SPILLS
CHICAGO	S111924072		4220 S KILDARE		SPILLS
CHICAGO	S111877664		2649 N KILDARE ST		SPILLS
CHICAGO	S111877382		2649 N KILDARE		SPILLS
CHICAGO	S111894182		2100 N KILDARE ST		SPILLS
CHICAGO	S111879962		4400 S KILDARE BLVD		SPILLS
CHICAGO	S111901304		4220 S KILDARE BLVD		SPILLS
CHICAGO	S111901420		4220 S KILDEAR BLVD		SPILLS
CHICAGO	S111920649		4201 N KILPATRIC AVE		SPILLS
CHICAGO	2010930105	KILPATRICK ST	KILPATRICK ST		ERNS
CHICAGO	S111886128		4117 N KILPATRICK		SPILLS
CHICAGO	S111893210		400 N KILPATRICK		SPILLS
CHICAGO	S111883938		1657 KILPATRICK		SPILLS
CHICAGO	S111884767		4201 N KILPATRICK ST		SPILLS
CHICAGO	S111907795		800 N KILPATRICK		SPILLS
CHICAGO	S111881598		3250 N KILPATRICK		SPILLS
CHICAGO	S111910258		1657 N KILPATRICK		SPILLS
CHICAGO	S111885936		3200 N KIMBALL		SPILLS
CHICAGO	S111883796		5200 N KIMBALL		SPILLS
CHICAGO	S111881168		5155 KIMBALL AVE		SPILLS
CHICAGO	S111908447		5155 KIMBALL		SPILLS
CHICAGO	S111915311		7330 S KIMBART		SPILLS
CHICAGO	S111877515		3330 N KIMBELL		SPILLS
CHICAGO	S111878502		5060 KIMBERLY		SPILLS
CHICAGO	S111879373		5060 N KIMBERLY ST		SPILLS
CHICAGO	S111876640		5155 KIMNBALL		SPILLS
CHICAGO	S111922716		KINDER MORGAN STOLT TERMINAL		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111920445		KINDER MORGAN DOCK		SPILLS
CHICAGO	2009904890	600 WEST KINDIE	600 WEST KINDIE		ERNS
CHICAGO	2008904890	600 WEST KINDIE	600 WEST KINDIE		ERNS
CHICAGO	S109953771		OF KING DR		SPILLS
CHICAGO	S111899680		7850 KING DR		SPILLS
CHICAGO	S111925269		OF KING DR		SPILLS
CHICAGO	S111912936		KING DR & 26TH ST		SPILLS
CHICAGO	871114	KINGSBURY TRANSMISSION SUBSTATION//370 WEST GRANT AVE	KINGSBURY TRANSMISSION SUBSTATION//370 WEST GRANT AVE		ERNS
CHICAGO	2000521705	KINGSBURY AND OHIO STREETS	KINGSBURY AND OHIO STREETS	0	ERNS
CHICAGO	98437399	KINGSBURY STREET AND NORTH AVE.	KINGSBURY STREET AND NORTH AVE.		ERNS
CHICAGO	S111906666		KINGSBURY & OHIO		SPILLS
CHICAGO	S111922142		1800 N KINGSBURY		SPILLS
CHICAGO	S111904272		1436 N KINGSBURY		SPILLS
CHICAGO	S111886172		9 W KINSEY ST		SPILLS
CHICAGO	S111902807		4201 W KINSEY		SPILLS
CHICAGO	S111904668		1750 W KINSIE		SPILLS
CHICAGO	2011996803		KINZIE ST & FULTON ST		ERNS
CHICAGO	S111881368		4656 W KINZIE		SPILLS
CHICAGO	S111879257		4656 W KINZIE		SPILLS
CHICAGO	S111876836		KINZIE & DES PLAINES		SPILLS
CHICAGO	S111926098		600 W KINZIE		SPILLS
CHICAGO	S111893287		1456 KINZIE ST		SPILLS
CHICAGO	S111890345		1650 W KINZIE		SPILLS
CHICAGO	S111915295		600 W KINZIE AVE		SPILLS
CHICAGO	S111884192		4125 N KISTNER		SPILLS
CHICAGO	S111909432		4222 S KNOX		SPILLS
CHICAGO	S111893839		4243 S KNOX		SPILLS
CHICAGO	S111905612		6051 S KNOX		SPILLS
CHICAGO	S111890944		3315 N KNOX		SPILLS
CHICAGO	S111904627		4333 S KNOX		SPILLS
CHICAGO	S111881185		4358 S KNOX		SPILLS
CHICAGO	S111908891		4242 S KNOX		SPILLS
CHICAGO	S111908890		4243 S KNOX		SPILLS
CHICAGO	S111903050		3136 S KOLIN ST		SPILLS
CHICAGO	S108045958		2660 N KOLMAR		SPILLS
CHICAGO	S111901525		3123 N KOLMAR		SPILLS
CHICAGO	S111875259		1745 KOLMAR AVE		SPILLS
CHICAGO	S111890799		5033 N KOLMAR		SPILLS
CHICAGO	94376715	KOPPERS DOCK	KOPPERS DOCK		ERNS
CHICAGO	2010936208	KOPPER'S - ILLINOIS RIVER MILE 317	KOPPERS ILLINOIS RIV		ERNS
CHICAGO	S111891058		KOPPERS DOCK IN		SPILLS
CHICAGO	S111349455		5225 S KOSTNER		SPILLS
CHICAGO	S111887978		7101 S KOSTNER		SPILLS
CHICAGO	2011983894		5225 S KOSTNER		ERNS
CHICAGO	S111910740		7200 KOSTNER		SPILLS
CHICAGO	S111907481		932 KOSTNER RD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111875327		1500 W KOSTNER		SPILLS
CHICAGO	S111912124		3702 N KOSTNER		SPILLS
CHICAGO	S111905264		1270 S KOSTNER ST		SPILLS
CHICAGO	S111927291		1800 N KOSTNER		SPILLS
CHICAGO	S111903863		3600 S KOSTNER		SPILLS
CHICAGO	S111898148		1100 S KOSTNER		SPILLS
CHICAGO	S111921546		3600 S KOSTNER		SPILLS
CHICAGO	S111899477		KOSTNER & EISENHOWER EXPY		SPILLS
CHICAGO	S111915644		7101 S KOSTNER		SPILLS
CHICAGO	S111905740		1300 N KOSTNER ST		SPILLS
CHICAGO	S111876837		1334 N KROSTNER		SPILLS
CHICAGO	2000530517	5142 SOUTH LACROSSE STREET	5142 SOUTH LACROSSE STREET	0	ERNS
CHICAGO	S108046596		6900 S LAFAYETTE RIGHT OFF DAN RYAN EXPY		SPILLS
CHICAGO	S111895035		6152 S LAFAYETTE		SPILLS
CHICAGO	S111878698		8456 LAFAYETTE		SPILLS
CHICAGO	S111878530		1600 S LAFLIN		SPILLS
CHICAGO	S111904684		2400 S LAFLIN		SPILLS
CHICAGO	S111920382		2150 S LAFLIN		SPILLS
CHICAGO	S111914345		9155 S LAFLIN AVE		SPILLS
CHICAGO	S111909187		2441 S LAFLIN		SPILLS
CHICAGO	S111893132		901 S LAGRANGE		SPILLS
CHICAGO	S108047276		LAKE MICHIGAN		SPILLS
CHICAGO	93331465	LAKE MICHIGAN AT BURNHAM HARBOR	LAKE MICHIGAN AT BURNHAM HARBOR		ERNS
CHICAGO	93331555	LAKE MICHIGAN 1 MI E OF THE 4 MI CRIB	LAKE MICHIGAN 1 MI E OF THE 4 MI CRIB		ERNS
CHICAGO	89114226	LAKE MICHIGAN, BY BANK ST	LAKE MICHIGAN, BY BANK ST		ERNS
CHICAGO	89100836	LAKE MICHIGAN ADJACENT ILLINOIS RIVER LOCKS	LAKE MICHIGAN ADJACENT ILLINOIS RIVER LOCKS		ERNS
CHICAGO	2000534034	2900 LAKE SHORE DRIVE	2900 LAKE SHORE DRIVE	0	ERNS
CHICAGO	2009926425	LAKE MICHIGAN	LAKE MICHIGAN		ERNS
CHICAGO	2005615981	4400 NORTH LAKE SHORE DR.	4400 NORTH LAKE SHORE DR.		ERNS
CHICAGO	2008878901	LAKE MICHIGAN	LAKE MICHIGAN		ERNS
CHICAGO	2008867313	LAKE STREET	LAKE STREET		ERNS
CHICAGO	2007328830	LAKE CALUMET	LAKE CALUMET		ERNS
CHICAGO	S111890682		LAKE MICHIGAN		SPILLS
CHICAGO	S111890681		1604 W LAKE		SPILLS
CHICAGO	S111884771		S LAKE LAKE SHORE DR		SPILLS
CHICAGO	S111889627		4611 W LAKE		SPILLS
CHICAGO	S111924364		5050 W LAKE		SPILLS
CHICAGO	S111925665		LAKE MICHIGAN FRONT		SPILLS
CHICAGO	S111889106		2650 LAKE VIEW		SPILLS
CHICAGO	S111915464		5130 S LAKE PARK		SPILLS
CHICAGO	S111891730		LAKE MICHIGAN MONTROSE HBRS		SPILLS
CHICAGO	90172929	LAKE MICHIGAN	LAKE MICHIGAN		ERNS
CHICAGO	2000521849	WEST LAKE STREET	WEST LAKE STREET	0	ERNS
CHICAGO	96506171	285 LAKEPORT	285 LAKEPORT		ERNS
CHICAGO	S111886622		860 LAKESHORE DR		SPILLS
CHICAGO	S111888228		1000 LAKESHORE DR		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111886999		3180 N LAKESHORE DR		SPILLS
CHICAGO	S111894145		2400 LAKEVIEW		SPILLS
CHICAGO	S111887122		3127 N LAKEWOOD		SPILLS
CHICAGO	S111885810		2940 N LAKEWOOD		SPILLS
CHICAGO	S111903424		2325 N LAKEWOOD		SPILLS
CHICAGO	2010950649	4911 SOUTH LAMON ST	4911 S LAMON ST		ERNS
CHICAGO	S110613565		4911 S LAMOND ST		SPILLS
CHICAGO	98459275	LAMONT ROAD 2 MILES SOUTH OF I-55	LAMONT ROAD 2 MILES SOUTH OF I-55		ERNS
CHICAGO	S111894990		4711 N LAMONT AVE		SPILLS
CHICAGO	S111906983		275 LAND WEIR RD		SPILLS
CHICAGO	S111926468		LANDER RAILROAD YARD		SPILLS
CHICAGO	S109953757		LANDERS RAIL YARD		SPILLS
CHICAGO	94363189	LANDERS YARD	LANDERS YARD		ERNS
CHICAGO	S110613678		LANDERS		SPILLS
CHICAGO	2006788888	LANDERS RAIL YARD	LANDERS RAIL YARD		ERNS
CHICAGO	S111894234		LANDERS YARD		SPILLS
CHICAGO	S111925254		LANDERS RAILYARD		SPILLS
CHICAGO	S111893784		LANDERS YARD NORFOLK SOUTHERN		SPILLS
CHICAGO	S111897716		LANDERS YARDS		SPILLS
CHICAGO	S111876541		1101 S LANGLEY		SPILLS
CHICAGO	S111914213		1101 S LANGLEY ST		SPILLS
CHICAGO	S111885627		4410 S LAPORTE ST		SPILLS
CHICAGO	S111891875		4501 N LAPORTE		SPILLS
CHICAGO	S111912538		720 N LARABEE ST		SPILLS
CHICAGO	S111901863		324 S LARAMIE		SPILLS
CHICAGO	S111877402		1010 S LARAMIE		SPILLS
CHICAGO	S111904587		1825 N LARAMIE ST		SPILLS
CHICAGO	S111922800		LARAMIE & ROOSEVELT		SPILLS
CHICAGO	S111900803		4001 N LARAMIE		SPILLS
CHICAGO	S111884468		2013 LARAMIE ST		SPILLS
CHICAGO	S111889801		3900 S LARAMIE AVE		SPILLS
CHICAGO	S111904477		1825 N LARAMIE ST		SPILLS
CHICAGO	99608302	2929 LARGE WESTERN AVE	2929 LARGE WESTERN AVE		ERNS
CHICAGO	S111904479		4753 N LARIMAN		SPILLS
CHICAGO	S111902945		900 N LARRABBE		SPILLS
CHICAGO	S111905705		1409 N LARRABEE		SPILLS
CHICAGO	S111895411		844 N LARRABEE		SPILLS
CHICAGO	99607893	LASALLE AND WACKER	LASALLE AND WACKER		ERNS
CHICAGO	S111885520		135 S LASALLE		SPILLS
CHICAGO	S111898568		135 S LASALLE		SPILLS
CHICAGO	S111892870		327 S LASALLE ST		SPILLS
CHICAGO	S111891966		5923 S LASALLE		SPILLS
CHICAGO	S111884308		121 N LASALLE ST		SPILLS
CHICAGO	S111906404		1660 N LASALLE		SPILLS
CHICAGO	S111908258		427 S LASALLE ST		SPILLS
CHICAGO	S111897786		203 N LASALLE		SPILLS
CHICAGO	S111909407		530 N LASALLE ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111906329		345 N LASALLE ST		SPILLS
CHICAGO	S111883712		LASALLE & HARRISON		SPILLS
CHICAGO	S111893068		327 S LASALLE ST		SPILLS
CHICAGO	S111891812		920 N LASALLE		SPILLS
CHICAGO	S111890116		633 S LASALLE ST		SPILLS
CHICAGO	S111889725		721 N LASALLE ST		SPILLS
CHICAGO	S111903164		707 S LASALLE ST		SPILLS
CHICAGO	S111927724		3100 S LASALLE		SPILLS
CHICAGO	S111920245		2150 S LASLIN		SPILLS
CHICAGO	S111897376		350 N LASLIN		SPILLS
CHICAGO	2004731395	6300 SOUTH LATORBE AVE	6300 SOUTH LATORBE AVE		ERNS
CHICAGO	S111891220		2250 N LATROBE		SPILLS
CHICAGO	S111876621		1946 N LATROBE		SPILLS
CHICAGO	S111903749		2250 N LATROSE		SPILLS
CHICAGO	2009907082	LAURENS AND KENNEDY STREET	LAURENS AND KENNEDY STREET		ERNS
CHICAGO	2008907082	LAURENS AND KENNEDY STREET	LAURENS AND KENNEDY STREET		ERNS
CHICAGO	91215262	LAWERANCE & FRANCISCO STREET	LAWERANCE & FRANCISCO STREET		ERNS
CHICAGO	S111882211		4625 W LAWERENCE		SPILLS
CHICAGO	S111900134		W LAWN PARK & 4233RD W 65TH ST		SPILLS
CHICAGO	2010927643	7601 S. LAWNDALE ST.	7601 S LAWNDALE ST		ERNS
CHICAGO	S111888417		7601 S LAWNDALE		SPILLS
CHICAGO	S111892879		5007 S LAWNDALE		SPILLS
CHICAGO	S111881828		7601 S LAWNDALE		SPILLS
CHICAGO	S111898231		3401 S LAWNDALE		SPILLS
CHICAGO	S111895069		7601 S LAWNDALE		SPILLS
CHICAGO	S111925796		7601 S LAWNDALE		SPILLS
CHICAGO	S111878706		LAWNDALE GARAGE ON CERMAC RD		SPILLS
CHICAGO	S111911834		3314 S LAWNDALE ST		SPILLS
CHICAGO	S111882950		3445 S LAWNDALE		SPILLS
CHICAGO	S111895014		2626 S LAWNDALE		SPILLS
CHICAGO	S111881633		7700 S LAWNDALE		SPILLS
CHICAGO	S111891120		7601 S LAWNDALE		SPILLS
CHICAGO	S111879139		7601 S LAWNDALE		SPILLS
CHICAGO	S111915708		3307 S LAWNDALE		SPILLS
CHICAGO	S111892632		5007 S LAWNDALE		SPILLS
CHICAGO	S111904484		2700 S LAWNDALE		SPILLS
CHICAGO	2008873502	3200 WEST LAWRENCE & KEDCCI	3200 WEST LAWRENCE & KEDCCI		ERNS
CHICAGO	S111885501		1063 LAWRENCE AVE		SPILLS
CHICAGO	S111886338		2800 W LAWRENCE		SPILLS
CHICAGO	S111891024		1124 W LAWRENCE		SPILLS
CHICAGO	S111884351		3111 W LAWRENCE		SPILLS
CHICAGO	S111904688		4825 LAWRENCE		SPILLS
CHICAGO	S111910860		LAWRENCE & AUSTIN		SPILLS
CHICAGO	S111923119		2800 W LAWRENCE		SPILLS
CHICAGO	S111904632		3139 W LAWRENCE		SPILLS
CHICAGO	S111920945		2754 W LAWRENCE		SPILLS
CHICAGO	S111909157		2960 W LAWRENCE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111895981		2306 W LAWRENCE		SPILLS
CHICAGO	8713139	LAYSTORM MFG CO.	LAYSTORM MFG CO.		ERNS
CHICAGO	S111885584		2828 S LCK		SPILLS
CHICAGO	S111885632		3417 S LEAVITT		SPILLS
CHICAGO	S111885509		2550 S LEAVITT		SPILLS
CHICAGO	S111904756		337 S LEAVITT		SPILLS
CHICAGO	S111888901		2555 S LEAVITT		SPILLS
CHICAGO	S111883374		457 N LEAVITT		SPILLS
CHICAGO	S111884825		212 S LEAVITT		SPILLS
CHICAGO	S111910205		2641 S LEAVITT AVE		SPILLS
CHICAGO	S111914370		600 N LEAVITTE ST		SPILLS
CHICAGO	S111896636		1934 N LECLAIR AVE		SPILLS
CHICAGO	90157722	18340 S. LECLAIRE "BACKYARD"	18340 S. LECLAIRE "BACKYARD"		ERNS
CHICAGO	2005624364	LECLAIRE AVE	LECLAIRE AVE		ERNS
CHICAGO	S111895533		3235 NORTH LECLAIRE		SPILLS
CHICAGO	S111878648		3949 N LECLARE		SPILLS
CHICAGO	S111927268		5318 W LELAND		SPILLS
CHICAGO	S111889180		1501 W LELAND ST		SPILLS
CHICAGO	S111908108		3708 LELAND		SPILLS
CHICAGO	2000670910	LEMONT AND CHICAGO	LEMONT AND CHICAGO		ERNS
CHICAGO	S111888754		4935 W LEMOYNE		SPILLS
CHICAGO	S111895485		5834 LEONARD AVE		SPILLS
CHICAGO	8713060	LESTER (LAST NAME UNK)	LESTER (LAST NAME UNK)		ERNS
CHICAGO	S111901189		10 N LEVITT		SPILLS
CHICAGO	S111920373		2730 S LEVITT		SPILLS
CHICAGO	S111909052		2650 LEXINGTON ST		SPILLS
CHICAGO	S111913266		4500 W LEXINGTON		SPILLS
CHICAGO	S111880165		4700 W LEXINGTON		SPILLS
CHICAGO	S111884835		5301 W LEXINGTON		SPILLS
CHICAGO	S111881008		717 W LIBERTY		SPILLS
CHICAGO	S111888144		2000 LINCOLN AVE		SPILLS
CHICAGO	S111899632		6211 N LINCOLN		SPILLS
CHICAGO	S111902147		4257 N LINCOLN		SPILLS
CHICAGO	S111898934		LINCOLN OASIS & I 80		SPILLS
CHICAGO	S111905546		3740 N LINCOLN		SPILLS
CHICAGO	S111914223		5785 LINCOLN AVE		SPILLS
CHICAGO	S111907642		3144 N LINCOLN		SPILLS
CHICAGO	S111893610		5943 N LINCOLN		SPILLS
CHICAGO	S111897073		5601 N LINCOLN ST		SPILLS
CHICAGO	S111893236		6101 LINCOLN AVE		SPILLS
CHICAGO	S111897679		NW LINE BETWEEN HARVARD IL		SPILLS
CHICAGO	S111876459		1500 LINN WHITE DR		SPILLS
CHICAGO	S111907433		2300 LISTER AVE		SPILLS
CHICAGO	S111884196		2227 N LISTER		SPILLS
CHICAGO	S111881385		LITTLE CALUMET RIV		SPILLS
CHICAGO	S111883817		LOADING DOCK OHARA AIRPORT		SPILLS
CHICAGO	98457733	LOCOMOTIVE (CR6400) FUEL TANK/ DERAILMENT OF 2 LOCOMOTIVES O	LOCOMOTIVE (CR6400) FUEL TANK/ DERAILMENT OF 2 LOCOMOTIVES O		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111922884		1600 S LOMBARD		SPILLS
CHICAGO	S111898597		2000 N LONG		SPILLS
CHICAGO	S111884549		1434 N LONG ST		SPILLS
CHICAGO	S111896323		6429 S LONG		SPILLS
CHICAGO	S111907085		1833 N LONG ST		SPILLS
CHICAGO	91233431	7601 S LONGDALE	7601 S LONGDALE		ERNS
CHICAGO	S110613526		LOOMIS SLIP		SPILLS
CHICAGO	S108891646		11900 LOOMIS		LUST, SPILLS
CHICAGO	S111890919		1911 S LOOMIS		SPILLS
CHICAGO	S111927324		LOOMIS SLIP NEAR 5TH POWER STA		SPILLS
CHICAGO	S111892919		2500 S LOOMIS		SPILLS
CHICAGO	S111915597		6869 S LOOMIS		SPILLS
CHICAGO	S111885427		4163 S LOWE		SPILLS
CHICAGO	S111882122		5925 S LOWE		SPILLS
CHICAGO	S111925728		5959 S LOWE		SPILLS
CHICAGO	S111880153		7430 LOWE ST		SPILLS
CHICAGO	S111908065		3501 S LOWE ST		SPILLS
CHICAGO	S111919464		3843 S LOWELL		SPILLS
CHICAGO	S111880728		LUFTHANSA CARGO TERMINAL & OHARE		SPILLS
CHICAGO	S111885015		LUMBER ST		SPILLS
CHICAGO	S111887825		2255 S LUMBER		SPILLS
CHICAGO	S111888436		1600 LUMBER ST		SPILLS
CHICAGO	S111899983		1600 S LUMBER		SPILLS
CHICAGO	S111901497		1400 S LUMBER		SPILLS
CHICAGO	S111895780		1600 S LUMBER		SPILLS
CHICAGO	S111888860		1600 S LUMBER		SPILLS
CHICAGO	S111881103		1500 S LUMBER		SPILLS
CHICAGO	S111878067		2147 S LUMBER		SPILLS
CHICAGO	S111892948		1600 LUMBER ST		SPILLS
CHICAGO	S111926465		1600 S LUMBER		SPILLS
CHICAGO	S111909168		4545 W LYNDALE		SPILLS
CHICAGO	S111898016		4545 W LYNDALE		SPILLS
CHICAGO	S111911869		LYNX CARGO RAMP		SPILLS
CHICAGO	S111906155		8836 S MACKINAW		SPILLS
CHICAGO	S108046393		500 W MADISON MM 6 GENEVA SUB		SPILLS
CHICAGO	2010963447	504 W MADISON	504 W MADISON		ERNS
CHICAGO	S111888053		1800 W MADISON		SPILLS
CHICAGO	S111887272		5727 W MADISON		SPILLS
CHICAGO	S111886438		29 E MADISON		SPILLS
CHICAGO	S111909475		2316 W MADISON AVE		SPILLS
CHICAGO	S111909290		2316 W MADISON AVE		SPILLS
CHICAGO	S111909289		2316 W MADISON AVE		SPILLS
CHICAGO	S111902145		1200 W MADISON AVE		SPILLS
CHICAGO	S111912956		5727 W MADISON		SPILLS
CHICAGO	S111912957		5727 W MADISON		SPILLS
CHICAGO	S111922361		500 W MADISON		SPILLS
CHICAGO	S111896484		1500 W MADISON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111918760		901 MADISON		SPILLS
CHICAGO	S111891539		4700 W MADISON		SPILLS
CHICAGO	S111927167		4111 W MADISON		SPILLS
CHICAGO	S111908496		4940 W MADISON AVE		SPILLS
CHICAGO	S111891430		1633 W MADISON		SPILLS
CHICAGO	S111904969		2324 W MADISON		SPILLS
CHICAGO	S111890783		5118 W MADISON AVE		SPILLS
CHICAGO	S111893604		1633 W MADISON		SPILLS
CHICAGO	S111914735		3801 W MADISON AVE		SPILLS
CHICAGO	S111890392		2320 W MADISON		SPILLS
CHICAGO	S111927432		MAIN LINE CD 5097 & RAIL		SPILLS
CHICAGO	S111892931		14 N MAIN		SPILLS
CHICAGO	S111926463		2 MAIN TRAK		SPILLS
CHICAGO	91203326	MAIN RAIL YARD	MAIN RAIL YARD		ERNS
CHICAGO	S111885453		4900 S MAJOR		SPILLS
CHICAGO	S111883026		4900 S MAJOR		SPILLS
CHICAGO	S111913627		6126 S MANARD		SPILLS
CHICAGO	S111904609		4400 N MANGO		SPILLS
CHICAGO	S111920461		E MANHEIM PROVISO YARD		SPILLS
CHICAGO	S110363845		MANNHEIM RD & IRVING PARK RD		SPILLS
CHICAGO	S111926036		MANNHEIM RD AND IRVING PARK RD		SPILLS
CHICAGO	S111887888		13915 MAPLE ST		SPILLS
CHICAGO	S111891974		3250 MAPLE AVE		SPILLS
CHICAGO	S111907793		7356 S MAPLE		SPILLS
CHICAGO	S111903460		3901 W MAPLE AVE		SPILLS
CHICAGO	S111901990		3715 S MAPLEWOOD ST		SPILLS
CHICAGO	S111894472		1541 N MAPLEWOOD		SPILLS
CHICAGO	S111901610		3715 S MAPLEWOOD		SPILLS
CHICAGO	S111893945		5527 N MAPLEWOOD		SPILLS
CHICAGO	S111898086		1800 N MARCEY		SPILLS
CHICAGO	S111920778		4215 S MARFHIELD AVE		SPILLS
CHICAGO	98449599	37FT PC MARGARET MARY BURNHAM HABR SLIP Q-49	37FT PC MARGARET MARY BURNHAM HABR SLIP Q-49		ERNS
CHICAGO	94364363	MARINE OIL TERMINAL CICERO AVE	MARINE OIL TERMINAL CICERO AVE		ERNS
CHICAGO	S111893190		8400 S MARLAND AVE		SPILLS
CHICAGO	S111888440		403 E MARQUETTE		SPILLS
CHICAGO	S111899130		2010 W MARQUETTE		SPILLS
CHICAGO	S111898346		2010 W MARQUETTE		SPILLS
CHICAGO	S111914996		1600 W MARQUETTE AVE		SPILLS
CHICAGO	S111881909		MARSHALL BLVD		SPILLS
CHICAGO	2010928212	111 MARSHFIELD	111 MARSHFIELD		ERNS
CHICAGO	S111895513		2700 N MARSHFIELD		SPILLS
CHICAGO	S111906532		3342 N MARSHFIELD ST		SPILLS
CHICAGO	S108045920		2524 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	876689	9500 MARTIN LUTHER KING DR SHELL GAS STATION	9500 MARTIN LUTHER KING DR SHELL GAS STATION		ERNS
CHICAGO	S110363727		4415 S MARTIN LUTHER KING DR		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111886424		2400 S MARTIN LUTHER KING JR DR		SPILLS
CHICAGO	S111885931		5514 S MARTIN LUTHER KING		SPILLS
CHICAGO	S111888099		3357 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111905100		2211 S MARTIN LUTHER KING JR BLVD		SPILLS
CHICAGO	S111905953		6341 S MARTIN LUTHER KING JR DR		SPILLS
CHICAGO	S111895483		3731 MARTIN SERVICE STA W		SPILLS
CHICAGO	S111899823		2211 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111888781		9901 MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111880660		2501 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111903812		2211 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111903811		2211 S MARTIN LUTHER KING DR		SPILLS
CHICAGO	S111892058		9500 S MARTIN LUTHER KING		SPILLS
CHICAGO	2000544679	MARTIN LUTHER KING DRIVE	MARTIN LUTHER KING DRIVE	0	ERNS
CHICAGO	S111889565		8018 MARYLAND		SPILLS
CHICAGO	S111883527		4350 N MASON ST		SPILLS
CHICAGO	S111886220		5437 S MASSASOIT		SPILLS
CHICAGO	96484236	MATERIAL WAS IN CONCRETE CONTAINMENT / ABSORBENT MATERIAL AP	MATERIAL WAS IN CONCRETE CONTAINMENT / ABSORBENT MATERIAL AP		ERNS
CHICAGO	S111901191		6901 S MAY		SPILLS
CHICAGO	S111893109		14 N MAY		SPILLS
CHICAGO	S111907831		8150 S MAY		SPILLS
CHICAGO	S111888380		405 MCCLUD CT		SPILLS
CHICAGO	S111880965		3906 W MCLEAN		SPILLS
CHICAGO	S111923993		2245 N MCVICKER		SPILLS
CHICAGO	S111906637		5214 S MCVICKERS		SPILLS
CHICAGO	S111895290		1727 MEDILL LN		SPILLS
CHICAGO	S111876278		1147 MEDILL		SPILLS
CHICAGO	S111914927		2635 W MEDILL		SPILLS
CHICAGO	S111897668		1727 W MEIDILL		SPILLS
CHICAGO	93323553	3234,3236,3240,5606 WEST MELROSE	3234,3236,3240,5606 WEST MELROSE		ERNS
CHICAGO	8749	MERCHANT MART AT WELLS AND NEW ORLEANS, 15TH FLOOR, WEST WIN	MERCHANT MART AT WELLS AND NEW ORLEANS, 15TH FLOOR, WEST WIN		ERNS
CHICAGO	93352422	4700 SOUTH MERIMAC RAIL YARD	4700 SOUTH MERIMAC RAIL YARD		ERNS
CHICAGO	S111889719		4700 S MERIMAC AVE		SPILLS
CHICAGO	2004715154	METRA 45	METRA 45		ERNS
CHICAGO	2004721184	METRO NORTH LINE ON MILWAUKEE DISTRICT	METRO NORTH LINE ON MILWAUKEE DISTRICT		ERNS
CHICAGO	2002594346	2230 MICHGAN AVE	2230 MICHGAN AVE	0	ERNS
CHICAGO	94400021	MICHIGAN AND EAST WACKER	MICHIGAN AND EAST WACKER		ERNS
CHICAGO	S110613624		1508 MICHIGAN AVE		SPILLS
CHICAGO	S111887271		3103 S MICHIGAN		SPILLS
CHICAGO	S111891930		1533 S MICHIGAN		SPILLS
CHICAGO	S111896187		7101 S MICHIGAN		SPILLS
CHICAGO	S111892227		10007 S MICHIGAN		SPILLS
CHICAGO	S111920371		2337 S MICHIGAN		SPILLS
CHICAGO	S111880659		3900 S MICHIGAN		SPILLS
CHICAGO	S111920742		1400 S MICHIGAN		SPILLS
CHICAGO	S111881504		11555 S MICHIGAN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	99631717	MICKE'S DRIVE INN 7829 SOUTHWESTERN AVE	MICKE'S DRIVE INN 7829 SOUTHWESTERN AVE		ERNS
CHICAGO	S108047305		MIDWAY AIRPORT B TERMINAL GATE		SPILLS
CHICAGO	S111349468		MIDWAY AIRPORT		SPILLS
CHICAGO	S111887306		MIDWAY AIRPORT		SPILLS
CHICAGO	S111885496		MIDWAY AIRPORT		SPILLS
CHICAGO	S111911940		MIDWAY AIRPORT SIGNATURE W		SPILLS
CHICAGO	S111911939		MIDWAY AIRPORT GATE B3		SPILLS
CHICAGO	S111889593		MIDWAY AP CONCOURSE C		SPILLS
CHICAGO	S111922749		MIDWAY AIRPORT TERMINAL GATE A		SPILLS
CHICAGO	S111902413		MIDWAY AIRPORT		SPILLS
CHICAGO	S111892344		MIDWAY AIRPORT		SPILLS
CHICAGO	S111927889		MIDWAY AIRPORT GATE B12		SPILLS
CHICAGO	S111927765		MIDWAY AIRPORT 8B9		SPILLS
CHICAGO	S111927661		MIDWAY AIRPORT		SPILLS
CHICAGO	S111912794		MIDWAY AP		SPILLS
CHICAGO	S111885148		MIDWAYAIRPORT 58TH & CICERO		SPILLS
CHICAGO	92254689	MILE MARKER 318	MILE MARKER 318		ERNS
CHICAGO	93333205	MILE 318.8 CHICAGO SANITARY CANAL	MILE 318.8 CHICAGO SANITARY CANAL		ERNS
CHICAGO	96516421	MILE 317.4 RIGHT BANK	MILE 317.4 RIGHT BANK		ERNS
CHICAGO	2002618930	MILE MARKER 317.1	MILE MARKER 317.1	0	ERNS
CHICAGO	93302748	MILE MARKER 277.5	MILE MARKER 277.5		ERNS
CHICAGO	2000523929	MILE 329 LITTLE CALUMAT RIVER	MILE 329 LITTLE CALUMAT RIVER	0	ERNS
CHICAGO	2002590669	MILE POST C11	MILE POST C11	0	ERNS
CHICAGO	99640528	MILE 297.5 ON ILLINOIS RIVER	MILE 297.5 ON ILLINOIS RIVER		ERNS
CHICAGO	99650005	MILE MARKER 306 ON CHICAGO SHIP CANAL	MILE MARKER 306 ON CHICAGO SHIP CANAL		ERNS
CHICAGO	2006791836	MILE 330	MILE 330		ERNS
CHICAGO	2009904976	MILE POST C10.5	MILE POST C10.5		ERNS
CHICAGO	2009908640	MILE MARKER 299.90	MILE MARKER 299.90		ERNS
CHICAGO	2008904976	MILE POST C10.5	MILE POST C10.5		ERNS
CHICAGO	2008876999	MILE CD 518	MILE CD 518		ERNS
CHICAGO	2007315926	MILE POST: CD 517	MILE POST: CD 517		ERNS
CHICAGO	2008908640	MILE MARKER 299.90	MILE MARKER 299.90		ERNS
CHICAGO	2008874437	MILE POST 09514	MILE POST 09514		ERNS
CHICAGO	2008893703	MILE POST 1.0	MILE POST 1.0		ERNS
CHICAGO	S111888448		1 MILE E OF 4 MILE CRIB LAKE		SPILLS
CHICAGO	2001566873	MILE POST 00518	MILE POST 00518	0	ERNS
CHICAGO	2000540433	MILE 317.5 OF THE	MILE 317.5 OF THE	0	ERNS
CHICAGO	2000547095	MILE POST 510	MILE POST 510	0	ERNS
CHICAGO	96477228	MILEPOST B510	MILEPOST B510		ERNS
CHICAGO	2009915231	MILEPOST 8.4	MILEPOST 8.4		ERNS
CHICAGO	2009925953	MILEPOST 12.7	MILEPOST 12.7		ERNS
CHICAGO	2008915231	MILEPOST 8.4	MILEPOST 8.4		ERNS
CHICAGO	2010931620	MILEPOST C10.8 LANDERS YARD INTERMODAL	MILEPOST C108		ERNS
CHICAGO	2010928741	MILEPOST B510	MILEPOST B510		ERNS
CHICAGO	2007321733	MILEPOST 3.7	MILEPOST 3.7		ERNS
CHICAGO	2010942057	MILEPOST CD517	MILEPOST CD517		ERNS
CHICAGO	2010937997	MILEPOST JJJ36	MILEPOST JJJ36		ERNS

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CHICAGO	2010938289	MILEPOST: CD513	MILEPOST CD513		ERNS
CHICAGO	2012106766		MILEPOST CD513		ERNS
CHICAGO	2012103708		MILEPOST UW2		ERNS
CHICAGO	2012101576		MILEPOST CD5097		ERNS
CHICAGO	2012101577		MILEPOST CD7097		ERNS
CHICAGO	98433484	MILEPOST:10.8	MILEPOST:10.8		ERNS
CHICAGO	98441240	MILEPOST:18.0 CANAL STREET YARD	MILEPOST:18.0 CANAL STREET YARD		ERNS
CHICAGO	97410621	MILEPOST:B510.5	MILEPOST:B510.5		ERNS
CHICAGO	97407442	MILEPOST:C-10.8	MILEPOST:C-10.8		ERNS
CHICAGO	S111926883		MILEPOSTS TO D 29		SPILLS
CHICAGO	S109167339		MILES E OF JOLIET		SPILLS
CHICAGO	S111902788		2 MILES S OF		SPILLS
CHICAGO	S111904758		5225 S MILLARD		SPILLS
CHICAGO	S111905770		5600 S MILLARD		SPILLS
CHICAGO	S111349448		MILWAUKEE BETWEEN CANAL		SPILLS
CHICAGO	S111349496		5475 N MILWAUKEE		SPILLS
CHICAGO	S111889683		5514 MILWAUKEE AVE		SPILLS
CHICAGO	S111882729		1820 N MILWAUKEE		SPILLS
CHICAGO	S111925434		1801 N MILWAUKEE		SPILLS
CHICAGO	S111905270		1874 N MILWAUKEE		SPILLS
CHICAGO	S111894177		3845 N MILWAUKEE		SPILLS
CHICAGO	S111902941		4625 N MILWAUKEE		SPILLS
CHICAGO	S111919991		1424 N MILWAUKEE		SPILLS
CHICAGO	S111896814		2037 N MILWAUKEE		SPILLS
CHICAGO	S108045622		1701 N MILWAUKIE		SPILLS
CHICAGO	2007313834	MM09514	MM09514		ERNS
CHICAGO	8714111	MOBIL SERVICE STATION 6700 S. JEFFREY ST	MOBIL SERVICE STATION 6700 S. JEFFREY ST		ERNS
CHICAGO	S111900885		9901 S MOBILE ST		SPILLS
CHICAGO	S111898543		1606 N MOBILE		SPILLS
CHICAGO	S111902610		5625 S MOBILE		SPILLS
CHICAGO	2010962542	2457 WEST MOFFIT	2457 W MOFFIT		ERNS
CHICAGO	S111899935		8650 S MOGAN		SPILLS
CHICAGO	S111887980		4920 S MONITOR		SPILLS
CHICAGO	S111895493		1152 N MONITOR ST		SPILLS
CHICAGO	91227365	MONROE STREET HARBOR	MONROE STREET HARBOR		ERNS
CHICAGO	97406258	MONROE STREET OUTER HARBOR	MONROE STREET OUTER HARBOR		ERNS
CHICAGO	2011993183		MONROE ST		ERNS
CHICAGO	S111903036		400 E MONROE		SPILLS
CHICAGO	S111891600		5222 W MONROE		SPILLS
CHICAGO	S111909035		1065 W MONROE		SPILLS
CHICAGO	S111896884		2608 W MONROE AVE		SPILLS
CHICAGO	S111893740		711 W MONROE		SPILLS
CHICAGO	S111881214		MONROE HARBOR LAKE		SPILLS
CHICAGO	S111914622		2347 W MONROE		SPILLS
CHICAGO	S111892151		1040 W MONROE		SPILLS
CHICAGO	S111901930		2419 W MONROE		SPILLS
CHICAGO	S111911366		400 E MONROE		SPILLS

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CHICAGO	S111919202		1512 W MONTANA		SPILLS
CHICAGO	S111891428		5045 W MONTANA		SPILLS
CHICAGO	S111902911		1830 W MONTEREY		SPILLS
CHICAGO	S111900669		1830 W MONTERY AVENUE CHICAGO PD 22ND STA		SPILLS
CHICAGO	S111900633		1830 W MONTERY		SPILLS
CHICAGO	S111918752		3041 N MONTICELLO		SPILLS
CHICAGO	S111890417		5030 N MONTICELLO		SPILLS
CHICAGO	S111914849		3601 W MONTORESE		SPILLS
CHICAGO	2005615909	MONTROS HARBOR	MONTROS HARBOR		ERNS
CHICAGO	91236314	MONTROSE HARBOR	MONTROSE HARBOR		ERNS
CHICAGO	94391125	MONTROSE HARBOR LAKE MICHIGAN	MONTROSE HARBOR LAKE MICHIGAN		ERNS
CHICAGO	94391456	MONTROSE AVE MONTROSE HARBOR	MONTROSE AVE MONTROSE HARBOR		ERNS
CHICAGO	2003647189	MONTROSE HARBOR	MONTROSE HARBOR		ERNS
CHICAGO	8710205	2800 W. MONTROSE GAS STATION FOR SALE	2800 W. MONTROSE GAS STATION FOR SALE		ERNS
CHICAGO	90169605	MONTROSE AT THE MOUTH OF THE HARBOR	MONTROSE AT THE MOUTH OF THE HARBOR		ERNS
CHICAGO	99642573	MONTROSE DRIVE	MONTROSE DRIVE		ERNS
CHICAGO	S110824860		MONTROSE WB		SPILLS
CHICAGO	S111910756		3601 W MONTROSE		SPILLS
CHICAGO	S111899977		2537 W MONTROSE		SPILLS
CHICAGO	S111926718		MONTROSE ALONT THE KENNEDY EDE JCT		SPILLS
CHICAGO	S111927396		4269 W MONTROSE		SPILLS
CHICAGO	S111908703		4455 W MONTROSE		SPILLS
CHICAGO	S111898219		5520 W MONTROSE		SPILLS
CHICAGO	S111889598		7330 W MONTROSE		SPILLS
CHICAGO	S111910904		810 W MONTROSE		SPILLS
CHICAGO	S111903636		3359 W MONTROSE		SPILLS
CHICAGO	S111889887		2742 W MONTROSE		SPILLS
CHICAGO	S111919870		2450 W MONTROSE		SPILLS
CHICAGO	S111880799		6350 MONTROSE		SPILLS
CHICAGO	S111904951		2424 MONTROSE AVE		SPILLS
CHICAGO	S111879923		2000 W MONTROSE		SPILLS
CHICAGO	S111883556		6001 W MONTROSE		SPILLS
CHICAGO	S111903805		3448 W MONTROSE		SPILLS
CHICAGO	S111897845		2955 W MONTROSE		SPILLS
CHICAGO	2008888071	MONTROSS STATION	MONTROSS STATION		ERNS
CHICAGO	S111885745		1548 S MORGAN		SPILLS
CHICAGO	S111886103		MORGAN & JACKSON		SPILLS
CHICAGO	S111886089		4000 S MORGAN		SPILLS
CHICAGO	S111887146		7900 S MORGAN		SPILLS
CHICAGO	S111887805		3800 S MORGAN		SPILLS
CHICAGO	S111886969		1601 S MORGAN		SPILLS
CHICAGO	S111892869		4309 S MORGAN		SPILLS
CHICAGO	S111890271		4837 S MORGAN		SPILLS
CHICAGO	S111909900		1451 MORGAN AVE		SPILLS
CHICAGO	S111892427		3800 S MORGAN		SPILLS
CHICAGO	S111878898		8051 S MORGAN		SPILLS
CHICAGO	S111898084		318 S MORGAN		SPILLS

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CHICAGO	S111900688		1140 S MORGAN		SPILLS
CHICAGO	S111890751		3800 S MORGAN		SPILLS
CHICAGO	S111890739		3800 S MORGAN RD		SPILLS
CHICAGO	S111904125		4848 S MORGAN		SPILLS
CHICAGO	S111915382		8900 S MORGAN		SPILLS
CHICAGO	S111900133		MOUNT GREENWOOD PARK & 3721ST W 111TH ST		SPILLS
CHICAGO	S111908511		5115 N MOUNT CLAIR		SPILLS
CHICAGO	S111908889		MOUNT PROSPECT RD		SPILLS
CHICAGO	S111912846		MOUNT PROSPECT & TOUGHY OHARE AIRPORT		SPILLS
CHICAGO	93302749	MOUTH OF CHICAGO RIVER AT LOCK	MOUTH OF CHICAGO RIVER AT LOCK		ERNS
CHICAGO	89113350	MOUTH OF BURNHAM HARBOR AT APPROX 2300 S LAKESHORE	MOUTH OF BURNHAM HARBOR AT APPROX 2300 S LAKESHORE		ERNS
CHICAGO	S111899847		4043 N MOZART		SPILLS
CHICAGO	97410255	MPB510	MPB510		ERNS
CHICAGO	2007325433	MULTI UNIT BUILDING	MULTI UNIT BUILDING		ERNS
CHICAGO	S111924180		10459 S MUSKEGAN AVE		SPILLS
CHICAGO	S109167338		4868 4870 N CLARK ST		SPILLS
CHICAGO	S108669664		N		SPILLS
CHICAGO	S111912510		6015 23 N FAIRFIELD		SPILLS
CHICAGO	2002594261	N/A	N/A	0	ERNS
CHICAGO	2010956232	NAGLE ST	NAGLE ST		ERNS
CHICAGO	S111889590		5201 N NAGLE		SPILLS
CHICAGO	S111879468		5759 N NAGLE		SPILLS
CHICAGO	2000543395	NAGLE AVE.	NAGLE AVE.	0	ERNS
CHICAGO	S111927245		7400 S NARAAGAUSETT		SPILLS
CHICAGO	2011992898		7400 S NARAGAUSATTE		ERNS
CHICAGO	2009894288	NARRAGANSEET AVE	NARRAGANSEET AVE		ERNS
CHICAGO	2008894288	NARRAGANSEET AVE	NARRAGANSEET AVE		ERNS
CHICAGO	S111894469		3600 NARRAGANSETT		SPILLS
CHICAGO	S111890464		3134 N NARRAGANSETT		SPILLS
CHICAGO	S111901949		1701 N NARRAGANSETT		SPILLS
CHICAGO	S111902100		5330 S NASHVILLE		SPILLS
CHICAGO	S111902121		2323 N NATCHEZ AVE		SPILLS
CHICAGO	S111891852		2248 N NATCHEZ AVE		SPILLS
CHICAGO	S111911839		2101 N NATCHEZ		SPILLS
CHICAGO	S111890051		2248 N NATCHEZ AVE		SPILLS
CHICAGO	2010931300	1943 NORTH NATOMA AVE.	1943 N NATOMA AVE		ERNS
CHICAGO	93320083	NAVY PIER	NAVY PIER		ERNS
CHICAGO	94375184	NAVY PIER SOUTHSIDE OF PIER	NAVY PIER SOUTHSIDE OF PIER		ERNS
CHICAGO	90186681	NAVY PIER SOUTH SIDE	NAVY PIER SOUTH SIDE		ERNS
CHICAGO	90157711	NAVY PIER	NAVY PIER		ERNS
CHICAGO	8864001	NAVY PIER	NAVY PIER		ERNS
CHICAGO	2000529972	NAVY PIER IN CHICAGO	NAVY PIER IN CHICAGO	0	ERNS
CHICAGO	2007327046	NAVY PIER	NAVY PIER		ERNS
CHICAGO	S111885022		NAVY PIER		SPILLS
CHICAGO	S111880711		NAVY PIER		SPILLS
CHICAGO	S108480186		NAVY PIER		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111896931		NB		SPILLS
CHICAGO	2003702300	NEAR 48TH ST	NEAR 48TH ST		ERNS
CHICAGO	2000549597	NEAR CANAL AND LAKE STREET	NEAR CANAL AND LAKE STREET	0	ERNS
CHICAGO	2000547713	NEAR EXIT 115 STREET	NEAR EXIT 115 STREET	0	ERNS
CHICAGO	99648314	NEAR AIRPORT WEST OF HIGGINS RD ON THUEY RD	NEAR AIRPORT WEST OF HIGGINS RD ON THUEY RD		ERNS
CHICAGO	S111895256		NEAR 25TH & CALIFORNIA		SPILLS
CHICAGO	S111920473		NEAR SAINT EXIT STHY		SPILLS
CHICAGO	S111901926		RD NEAR 103 E		SPILLS
CHICAGO	S111927623		NEAR WEST 79TH ST XING		SPILLS
CHICAGO	2001569847	NEAR ADDISON STATION	NEAR ADDISON STATION	0	ERNS
CHICAGO	2000528773	NEAR WESTERN STREET ON THE BLUE LINE	NEAR WESTERN STREET ON THE BLUE LINE	0	ERNS
CHICAGO	2011964700	NEAREST CROSS STREETS KILBOURN AND KINZIE STREETS	NEAREST CROSS STREETS KILBOURN STS		ERNS
CHICAGO	S108046927		643 NEARPULASKI RD		SPILLS
CHICAGO	S111898366		2952 W NELSON		SPILLS
CHICAGO	S111899829		5838 N NEVA		SPILLS
CHICAGO	94388379	NEW EDITION TO THE UNIVERSITY HOSPITAL	NEW EDITION TO THE UNIVERSITY HOSPITAL		ERNS
CHICAGO	98445339	NEW HOSPITAL SE CORNER OF HURON ST AND ST. CLAIR ST	NEW HOSPITAL SE CORNER OF HURON ST AND ST. CLAIR ST		ERNS
CHICAGO	S111349489		NEW FEDEX CARGO BLDG		SPILLS
CHICAGO	S111892433		2360 N NEWCASTLE		SPILLS
CHICAGO	S111887007		1255 N NOBLE		SPILLS
CHICAGO	S111903487		417 N NOBLE		SPILLS
CHICAGO	2010944765	NONE	NONE		ERNS
CHICAGO	2010947372	NONE	NONE		ERNS
CHICAGO	2011990715		NONE		ERNS
CHICAGO	2011981876		NONE		ERNS
CHICAGO	96497189	NORFOLK SOUTHERN YARD 103RD ST AND DOTY AVE	NORFOLK SOUTHERN YARD 103RD ST AND DOTY AVE		ERNS
CHICAGO	94353725	NORFOLK SOUTHERN DIESEL SHOP AT CHICAGO TRAIN YARD	NORFOLK SOUTHERN DIESEL SHOP AT CHICAGO TRAIN YARD		ERNS
CHICAGO	90159432	NORFOLK SOUTHER RAIL YARD	NORFOLK SOUTHER RAIL YARD		ERNS
CHICAGO	2010928863	NORFOLK SOUTHERN MILE POST 521.1	5211 NORFOLK SOUTHERN		ERNS
CHICAGO	90161024	NORFOLK SOUTHERN RAIL YRD	NORFOLK SOUTHERN RAIL YRD		ERNS
CHICAGO	2004714035	12931 SOUTH NORMA	12931 SOUTH NORMA		ERNS
CHICAGO	S111909056		7851 NORMAL ST		SPILLS
CHICAGO	S111909405		3839 NORMAL AVE		SPILLS
CHICAGO	S111876178		5100 S NORMAL		SPILLS
CHICAGO	S111926532		5834 S NORMAL		SPILLS
CHICAGO	S111907937		2351 N NORMANDY		SPILLS
CHICAGO	S111900721		11236 NORRENCE AVE		SPILLS
CHICAGO	S111887394		301 E NORTH WATER		SPILLS
CHICAGO	S111881459		1137 N NORTH BR		SPILLS
CHICAGO	S111912229		6600 W NORTH AVE		SPILLS
CHICAGO	S111895554		6810 W NORTH AVE		SPILLS
CHICAGO	S111912083		4500 W NORTH AVE N ALY		SPILLS

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CHICAGO	S111904804		6938 W NORTH AVE		SPILLS
CHICAGO	S111908171		7020 W NORTH AVE		SPILLS
CHICAGO	S111902714		926 N NORTHBRANCH AVE		SPILLS
CHICAGO	S111878812		922 N NORTHBRANCH		SPILLS
CHICAGO	S111877046		1092 N NORTHBRANCH		SPILLS
CHICAGO	S111897490		1150 N NORTHBRANCH		SPILLS
CHICAGO	S111886564		1371 N NORTHBRANCH		SPILLS
CHICAGO	S111884020		1150 N NORTHBRANCH		SPILLS
CHICAGO	S111907246		6300 W NORTHWEST HWY		SPILLS
CHICAGO	S109327519		6750 NORTHWESTERN AVE		SPILLS
CHICAGO	S109327393		1656 NORTHWESTERN AVE		SPILLS
CHICAGO	S111218390	SHELL OIL PRODUCTS US	45 NORTHWESTERN		LUST
CHICAGO	S111923504		1800 NORTHWESTERN AVE		SPILLS
CHICAGO	S111898119		333 NORTHWESTERN AVE		SPILLS
CHICAGO	S111920556		1600 NORTHWESTERN		SPILLS
CHICAGO	S111899062		49 NORTHWESTERN AVE		SPILLS
CHICAGO	S111894106		6600 NORTHWESTERN AVE		SPILLS
CHICAGO	S111913975		1651 NORTHWESTERN AVE		SPILLS
CHICAGO	S111900331		6652 NORTHWESTERN AVE		SPILLS
CHICAGO	S111918193		45 NOTRHWESTERN		SPILLS
CHICAGO	97408922	NSRR LANDERS YARD 2543 WEST COLOMBUS DRIV	NSRR LANDERS YARD 2543 WEST COLOMBUS DRIVE		ERNS
CHICAGO	2004715516	O'HARA AIRPORT	O'HARA AIRPORT		ERNS
CHICAGO	93311285	O'HARE AIRPORT SOUTH POL	O'HARE AIRPORT SOUTH POL		ERNS
CHICAGO	91238794	O'HARE INTL AIRPORT POB 66144	O'HARE INTL AIRPORT POB 66144		ERNS
CHICAGO	92266249	O'HARE AFB REFUELING APRON	O'HARE AFB REFUELING APRON		ERNS
CHICAGO	91236320	O'HARE AIRPORT->HIGGINS RD + MANNHEIM #4	O'HARE AIRPORT->HIGGINS RD + MANNHEIM #4		ERNS
CHICAGO	2002625470	O'HARE INTERNATIONAL AIRPORT	O'HARE INTERNATIONAL AIRPORT	0	ERNS
CHICAGO	8870782	O'HARE AIRPORT	O'HARE AIRPORT		ERNS
CHICAGO	89101914	O'HARE INTERNATIONAL AIRPORT (312)686-5211, TWA OPERATIONS,	O'HARE INTERNATIONAL AIRPORT (312)686-5211, TWA OPERATIONS,		ERNS
CHICAGO	89106683	O'HARE FIELD	O'HARE FIELD		ERNS
CHICAGO	2009897823	O'HARE TERMAINAL	O'HARE TERMAINAL		ERNS
CHICAGO	2008897823	O'HARE TERMAINAL	O'HARE TERMAINAL		ERNS
CHICAGO	2007316978	O'HARE AIRPORT	O'HARE AIRPORT		ERNS
CHICAGO	90181005	O'HARE INTERNATIONAL AIRPORT CARGO AREA	O'HARE INTERNATIONAL AIRPORT CARGO AREA		ERNS
CHICAGO	8714913	418 W. OAK	418 W. OAK		ERNS
CHICAGO	S111908663		6800 OAK PARK AVE		SPILLS
CHICAGO	S111908972		2211 N OAK PARK AVE		SPILLS
CHICAGO	S111899549		2221 W OAKDALE		SPILLS
CHICAGO	S111875539		1250 W OAKDALE		SPILLS
CHICAGO	S111891087		517 OAKDALE		SPILLS
CHICAGO	S111880915		350 W OAKDALE		SPILLS
CHICAGO	S111884902		4040 S OAKENWALD		SPILLS
CHICAGO	S111894659		518 N OAKLEY ST		SPILLS
CHICAGO	S111890310		4140 S OAKLEY		SPILLS
CHICAGO	S111900380		1337 S OAKLEY		SPILLS
CHICAGO	S111900381		1337 S OAKLEY		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111915479		610 S OAKLEY		SPILLS
CHICAGO	S111881098		339 N OAKLEY		SPILLS
CHICAGO	S111910140		2825 N OAKLEY		SPILLS
CHICAGO	S111895977		4343 S OAKLEY BLVD		SPILLS
CHICAGO	S111912663		3900 S OAKWOOD		SPILLS
CHICAGO	91237841	SOUTH OF 115 ST WEST OF GREEN ST	SOUTH OF 115 ST WEST OF GREEN ST		ERNS
CHICAGO	94373036	WEST OF FRANSISCO NORTH OF LUNT IN AN UNNAMED ALLEY	WEST OF FRANSISCO NORTH OF LUNT IN AN UNNAMED ALLEY		ERNS
CHICAGO	93326794	W. OF CLYBOURNE ON WEBSTER AVE	W. OF CLYBOURNE ON WEBSTER AVE		ERNS
CHICAGO	93303038	N OF 54TH ST & EAST OF HERMITHGE RD	N OF 54TH ST & EAST OF HERMITHGE RD		ERNS
CHICAGO	94381906	SOUTH OF THE ARGYLE ST BRIDGE ON THE WEST BANK	SOUTH OF THE ARGYLE ST BRIDGE ON THE WEST BANK		ERNS
CHICAGO	S109550473		S OF 130TH ST		SPILLS
CHICAGO	2008883200	NORTH OF 45TH AVE.	NORTH OF 45TH AVE.		ERNS
CHICAGO	S109327619		N OF 45TH ST & E OF STATE ST		SPILLS
CHICAGO	2007321007	SOUTH OF 31ST STREET	SOUTH OF 31ST STREET		ERNS
CHICAGO	S111886747		N OF 54TH ST E		SPILLS
CHICAGO	S111886996		N OF ALLEY BETWEEN BARRY & FLETCHER STS		SPILLS
CHICAGO	S111889709		N OF 47TH SAINT ON DAN RYAN EXPY		SPILLS
CHICAGO	S111922322		S OF 31ST & E OF KARLOV		SPILLS
CHICAGO	S111896469		W OF SACRAMENTO AVE & N OF BELLMONT AVE		SPILLS
CHICAGO	S111890906		W OF FRANCISCO ST N		SPILLS
CHICAGO	S111884595		E OF ASHLAND AVE		SPILLS
CHICAGO	S111911664		N OF 18TH ON BANK OF CHICAGO RIV W		SPILLS
CHICAGO	S111883295		E OF COTTAGE GROVE AVE		SPILLS
CHICAGO	S111924749		S OF 130TH ST		SPILLS
CHICAGO	S111879544		E OF ALY & LASLIN		SPILLS
CHICAGO	S111911416		S OF 116TH SAINT PROBABLY 5		SPILLS
CHICAGO	90181857	EAST OF CHICAGO LAKE MICHIGAN	EAST OF CHICAGO LAKE MICHIGAN		ERNS
CHICAGO	92289021	OFF OF JARVIS AVE	OFF OF JARVIS AVE		ERNS
CHICAGO	92288359	I-55 OFFRAMP TO SOUTH 35TH ST	I-55 OFFRAMP TO SOUTH 35TH ST		ERNS
CHICAGO	1012172065	3701 W. OGDAN	3701 W. OGDAN		US BROWNFIELDS
CHICAGO	99626470	OGDEN SLIP	OGDEN SLIP		ERNS
CHICAGO	99623878	OGDEN SLIP OFF THE CHICAGO RIVER	OGDEN SLIP OFF THE CHICAGO RIVER		ERNS
CHICAGO	S111922533		3450 W OGDEN		SPILLS
CHICAGO	S111906986		4150 OGDEN AVE		SPILLS
CHICAGO	S111877927		2600 W OGDEN		SPILLS
CHICAGO	S111883865		2424 W OGDEN		SPILLS
CHICAGO	S111882138		2256 OGDEN AVE		SPILLS
CHICAGO	S111913280		3315 W OGDEN		SPILLS
CHICAGO	S111884215		2241 OGDEN AVE		SPILLS
CHICAGO	S111902061		355 OGDEN AVE		SPILLS
CHICAGO	S111906624		3801 OGDEN AVE		SPILLS
CHICAGO	S111927160		167 N OGDEN		SPILLS
CHICAGO	S111905835		3124 W OGDEN		SPILLS
CHICAGO	S111899124		4040 OGDEN AVE		SPILLS
CHICAGO	S111889137		333 OGDEN AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111915595		3423 W OGDEN		SPILLS
CHICAGO	S111897839		221 N OGDEN		SPILLS
CHICAGO	91231203	OGDEN SLIP LAKESHORE DRIVE	OGDEN SLIP LAKESHORE DRIVE		ERNS
CHICAGO	2000519176	OGDEN JUNCTION	OGDEN JUNCTION	0	ERNS
CHICAGO	S111906955		3139 W OGDON AVE		SPILLS
CHICAGO	S111880103		7900 S OGELSBY ST		SPILLS
CHICAGO	S111876096		333 N OGEON AVE		SPILLS
CHICAGO	S111927336		OGILVIE TRANSPORTATION CENTER ST & FULTON ST		SPILLS
CHICAGO	S111908219		7900 S OGLESBY		SPILLS
CHICAGO	96516129	OHARA FIELD 10000 WEST OHARA FIELD	OHARA FIELD 10000 WEST OHARA FIELD		ERNS
CHICAGO	S109699842		10000 W OHARA		SPILLS
CHICAGO	2010933730	O'HARA AIRPORT TAXIWAKI, SOUTH OF AIRFIELD	OHARA AIRPORT TAXIWAKI SOUTH O		ERNS
CHICAGO	S111905665		611 OHARA CARGO RD		SPILLS
CHICAGO	S111904070		OHARA AIRPORT TRUCK FILL AREA		SPILLS
CHICAGO	S111875356		OHARA FLD		SPILLS
CHICAGO	S111884344		OHARA FLD		SPILLS
CHICAGO	S111877932		OHARA INTERNATIONAL AP		SPILLS
CHICAGO	S111877911		OHARA INTERNATIONAL CARGO AREA		SPILLS
CHICAGO	S111903650		OHARA INTERNATIONAL AP		SPILLS
CHICAGO	S111889601		10000 OHARA FLD		SPILLS
CHICAGO	S111884552		OHARA AP CARGO AREA GATE		SPILLS
CHICAGO	S111883008		OHARA FLD		SPILLS
CHICAGO	S111876395		OHARA FLD		SPILLS
CHICAGO	S111909004		OHARA AIRPORT		SPILLS
CHICAGO	S111893608		OHARA INTERNATIONAL AP & ARS		SPILLS
CHICAGO	S111925005		10000 W OHARA		SPILLS
CHICAGO	S108045240		10000 OHARE RD		SPILLS
CHICAGO	S108047382		OHARE AP NE RAMP		SPILLS
CHICAGO	2004730063	OHARE AIRPORT	OHARE AIRPORT		ERNS
CHICAGO	S110122279		755 OHARE AIRPORT NORTHWEST AIRLIN		SPILLS
CHICAGO	S110278059		10000 W OHARE DR		SPILLS
CHICAGO	S109550572		OHARE AP AMERICAN AIRLINES FUE CTR		SPILLS
CHICAGO	S109550534		OHARE AP BLDG		SPILLS
CHICAGO	S109550614		OHARE AP		SPILLS
CHICAGO	U001135163	O'HARE NURSARY	10000 W OHARE ST		UST
CHICAGO	S111218688		OHARE FLD		SPILLS
CHICAGO	S111888021		OHARE INT AIRPORT AF		SPILLS
CHICAGO	S111887282		OHARE AIRPORT		SPILLS
CHICAGO	S111885338		OHARE FLD		SPILLS
CHICAGO	S111885043		OHARE FIELD MANHEIM RD		SPILLS
CHICAGO	S111887913		OHARE AIRPORT		SPILLS
CHICAGO	S111886218		OHARE INTERNATIONAL AIRPORT HA		SPILLS
CHICAGO	S111888085		OHARE AIRPORT		SPILLS
CHICAGO	2012102621		OHARE AIRPORT		ERNS
CHICAGO	2011983614		OHARE AIRPORT		ERNS
CHICAGO	S111888666		OHARE AIRPORT		SPILLS
CHICAGO	S111912570		10000 W OHARE OUTSIDE GATE F 10		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111913759		OHARE AIRPORT GATE L5		SPILLS
CHICAGO	S111909948		OHARE INTERNATIONAL AIRPORT TE		SPILLS
CHICAGO	S111909889		OHARE INTERNATIONAL AIRPORT BLDG		SPILLS
CHICAGO	S111909884		723 OHARE INTERNATIONAL AIRPORT BLDG		SPILLS
CHICAGO	S111909829		1000 W OHARE AIRPORT		SPILLS
CHICAGO	S111913641		10000 W OHARE ST		SPILLS
CHICAGO	S111903044		OHARE AP & TRUCK FILL AREA		SPILLS
CHICAGO	S111898610		10000 W OHARE		SPILLS
CHICAGO	S111896964		OHARE AIRPORT		SPILLS
CHICAGO	S111895195		OHARE AIRPORT HERTZ RENT A CAR		SPILLS
CHICAGO	S111927473		OHARE AIRPORT CARGO BLDG		SPILLS
CHICAGO	S111910016		OHARE INTERNATIONAL AIRPORT TE		SPILLS
CHICAGO	S111913003		10000 W OHARE AVE		SPILLS
CHICAGO	S111883901		OHARE FLD & CARGO FACILITY		SPILLS
CHICAGO	S111904723		OHARE INTERNATIONAL AP		SPILLS
CHICAGO	S111908006		10000 W OHARE ST		SPILLS
CHICAGO	S111903996		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111891959		OHARE AIRPORT		SPILLS
CHICAGO	S111927456		502 W OHARE		SPILLS
CHICAGO	S111924904		OHARE AIRPORT AMERICAN AIRLINE		SPILLS
CHICAGO	S111912416		10000 W OHARE		SPILLS
CHICAGO	S111924620		OHARE AIRPORT		SPILLS
CHICAGO	S111906062		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111904822		726 OHARE AIRPORT BLDG		SPILLS
CHICAGO	S111891929		OHARE AIRPORT		SPILLS
CHICAGO	S111878442		OHARE AIRPORT		SPILLS
CHICAGO	S111927354		OHARE CARGO AREA RD		SPILLS
CHICAGO	S111909822		OHARE AIRPORT HANGER		SPILLS
CHICAGO	S111924580		OHARE AIRPORT FUEL CTR		SPILLS
CHICAGO	S111896466		OHARE AIRPORT		SPILLS
CHICAGO	S111912191		10000 W OHARE		SPILLS
CHICAGO	S111875892		OHARE AIRPORT		SPILLS
CHICAGO	S111927263		OHARE AIRPORT		SPILLS
CHICAGO	S111910933		OHARE INTERNATIONAL AIRPORT TE		SPILLS
CHICAGO	S111903916		OHARE INTERNATIONAL AP		SPILLS
CHICAGO	S111903881		OHARE AIRPORT TRUCK FILL AREA		SPILLS
CHICAGO	S111913065		10000 W OHARE		SPILLS
CHICAGO	S111913054		OHARE AIRPORT		SPILLS
CHICAGO	S111921804		OHARE AIRPORT BLDG		SPILLS
CHICAGO	S111921784		OHARE FLD		SPILLS
CHICAGO	S111898143		10000 W OHARE		SPILLS
CHICAGO	S111897702		OHARE AIRPORT BY TERMINAL 5		SPILLS
CHICAGO	S111892175		OHARE AIRPORT AMERICAN AIRLINE		SPILLS
CHICAGO	S111927156		606 OHARE FUELING SOUTHWEST CARGO BLDG		SPILLS
CHICAGO	S111910607		OHARE INTERNATIONAL AIRPORT GA		SPILLS
CHICAGO	S111898476		OHARE AIRPORT LAKE		SPILLS
CHICAGO	S111903593		OHARE AIRPORT		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111897424		OHARE AIRPORT OIL STA		SPILLS
CHICAGO	S111884075		OHARE AIR FORCE BASE		SPILLS
CHICAGO	S111902315		OHARE INTERNATIONAL AP		SPILLS
CHICAGO	S111894428		OHARE AIRPORT BLDG		SPILLS
CHICAGO	S111920800		OHARE AP FUEL FARM LOADING RAC		SPILLS
CHICAGO	S111907138		OHARE AIRPORT		SPILLS
CHICAGO	S111905441		OHARE AIRPORT		SPILLS
CHICAGO	S111901377		OHARE AP		SPILLS
CHICAGO	S111880592		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111883597		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111877178		OHARE AIRPORT		SPILLS
CHICAGO	S111876015		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111914131		OHARE INTERNATIONAL AIRPORT BLDG		SPILLS
CHICAGO	S111908014		OHARE INTERNATIONAL AIRPORT TE		SPILLS
CHICAGO	S111900292		OHARE AIRPORT		SPILLS
CHICAGO	S111897360		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111895652		OHARE OASIS		SPILLS
CHICAGO	S111912817		OHARE AIRPORT BLDG		SPILLS
CHICAGO	S111911483		OHARE INTERNATIONAL AIRPORT TE & GATE B 17		SPILLS
CHICAGO	S111910127		OHARE AIRPORT EAST OF AMC		SPILLS
CHICAGO	S111908362		OHARE INTERNATIONAL AIRPORT		SPILLS
CHICAGO	S111897495		OHARE AIRPORT		SPILLS
CHICAGO	S111927028		OHARE TERMINAL 5		SPILLS
CHICAGO	S111889203		OHAREAIRPORTHANGAR 5A		SPILLS
CHICAGO	S111898281		43 E OHIO		SPILLS
CHICAGO	S111902091		N OHIO ST		SPILLS
CHICAGO	S111902033		1000 E OHIO		SPILLS
CHICAGO	S111908136		OHIO & GRAND STS		SPILLS
CHICAGO	S111906256		1000 E OHIO		SPILLS
CHICAGO	S111883579		450 E OHIO		SPILLS
CHICAGO	94354816	N. OKETO ST	N. OKETO ST		ERNS
CHICAGO	S111890513		5205 N OKETO		SPILLS
CHICAGO	92269315	OLD STREET WALL INSIDE HARBOR	OLD STREET WALL INSIDE HARBOR		ERNS
CHICAGO	S110613668		OLD HWY 10 ON THE RAMP		SPILLS
CHICAGO	S111926457		OLD 10 - ON THE RAMP		SPILLS
CHICAGO	S111887563		6551 N OLMSTED		SPILLS
CHICAGO	S111890471		6645 N OLPHANT AVE		SPILLS
CHICAGO	S111905547		30 W ONTARIO		SPILLS
CHICAGO	S111883249		30 W ONTARIO		SPILLS
CHICAGO	S111878589		76 W ONTARIO		SPILLS
CHICAGO	S111898153		ORD ALSF OHARE INTERNATIONAL A		SPILLS
CHICAGO	S111884809		ORD ASR 4		SPILLS
CHICAGO	S111909500		863 N ORLEANS		SPILLS
CHICAGO	S111906819		1546 N ORLEANS		SPILLS
CHICAGO	S108046501		5900 S OUTBOUND DAN RYAN EXPY		SPILLS
CHICAGO	S111896029		OUTBOUND RAMP		SPILLS
CHICAGO	S108480188		FT OVER LAKE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111914369		UN PACIFIC RAIL YARD ON CANAL		SPILLS
CHICAGO	S111892291		3348 S PALASKI		SPILLS
CHICAGO	S111910482		4343 S PALASKI RD		SPILLS
CHICAGO	S111914392		4650 N PALASKI RD		SPILLS
CHICAGO	S111901287		3900 W PALMER		SPILLS
CHICAGO	S111881904		3563 PALMER ST		SPILLS
CHICAGO	S111905693		4600 W PALMSTER ST		SPILLS
CHICAGO	2009927055	PARK MANOR	PARK MANOR		ERNS
CHICAGO	2011991335		4111 W PARKER		ERNS
CHICAGO	S111927200		4111 W PARKER		SPILLS
CHICAGO	S111918997		4547 W PARKER		SPILLS
CHICAGO	S111877796		1434 N PARKSIDE		SPILLS
CHICAGO	S111875666		3315 S PARNELL		SPILLS
CHICAGO	91202957	MI PAST 326 N BRANCH CHGO RIVER W KINZIE	MI PAST 326 N BRANCH CHGO RIVER W KINZIE		ERNS
CHICAGO	S111911236		4552 W PATTERSON ST		SPILLS
CHICAGO	S111926461		3000 PATTERSON RD		SPILLS
CHICAGO	8857613	1443 PAULINA	1443 PAULINA		ERNS
CHICAGO	S111883908		421 PAULINA ST		SPILLS
CHICAGO	S111902515		2500 S PAULINA		SPILLS
CHICAGO	S111913115		5214 N PAULINA		SPILLS
CHICAGO	S111923400		2500 S PAULINA		SPILLS
CHICAGO	S111897771		1811 S PAULINA		SPILLS
CHICAGO	S111922987		8727 S PAULINA		SPILLS
CHICAGO	S111879136		1924 PAULINA ST		SPILLS
CHICAGO	S111882431		2651 N PAULINA		SPILLS
CHICAGO	S111901393		4311 N PAULINA		SPILLS
CHICAGO	S111919322		2712 N PAULINA		SPILLS
CHICAGO	S111883670		9606 S PAXTON		SPILLS
CHICAGO	S111885703		25 E PEARSON		SPILLS
CHICAGO	S111888962		41 E PEARSON		SPILLS
CHICAGO	S111883632		2558 W PEDERSON		SPILLS
CHICAGO	S111908651		11500 S PERRY		SPILLS
CHICAGO	94366239	3800 PERSHING RD	3800 PERSHING RD		ERNS
CHICAGO	S111887440		1050 PERSHING RD		SPILLS
CHICAGO	S111886288		2101 W PERSHING		SPILLS
CHICAGO	S111922162		2655 W PERSHING		SPILLS
CHICAGO	S111892487		1000 W PERSHING		SPILLS
CHICAGO	S111893458		1819 PERSHING RD		SPILLS
CHICAGO	S111890488		3800 PERSHING RD		SPILLS
CHICAGO	S111915529		1700 W PERSHING		SPILLS
CHICAGO	S111908076		1700 W PERSHING		SPILLS
CHICAGO	S111907094		1400 W PERSHING		SPILLS
CHICAGO	S111896240		454 E PERSHING		SPILLS
CHICAGO	S111890802		2500 PERTERSON AVE		SPILLS
CHICAGO	S111899334		3553 W PETERSEN AVE		SPILLS
CHICAGO	S111900069		4123 W PETERSEN AVE		SPILLS
CHICAGO	S111924937		2838 W PETERSON		SPILLS

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CHICAGO	S111912549		3400 W PETERSON		SPILLS
CHICAGO	S111892889		2542 N PETERSON AVE		SPILLS
CHICAGO	S111900222		2554 W PETERSON ST		SPILLS
CHICAGO	S111900223		2554 W PETERSON ST		SPILLS
CHICAGO	S111900537		3401 PETERSON AVE		SPILLS
CHICAGO	S111883870		3800 W PETERSON		SPILLS
CHICAGO	S111908745		2501 W PETERSON		SPILLS
CHICAGO	S111892787		2812 W PETERSON		SPILLS
CHICAGO	S111921200		2424 W PETERSON		SPILLS
CHICAGO	S111893754		2935 W PETERSON		SPILLS
CHICAGO	S111878761		4025 W PETERSON		SPILLS
CHICAGO	S111883758		3200 PETERSON		SPILLS
CHICAGO	S111898094		3016 W PETERSON		SPILLS
CHICAGO	S111891657		4343 W PETERSON		SPILLS
CHICAGO	S111892892		2108 N PETTERSON AVE		SPILLS
CHICAGO	S111892891		2107 N PETTERSON		SPILLS
CHICAGO	S111892890		2544 N PETTERSON AVE		SPILLS
CHICAGO	S111892888		2540 N PETTERSON AVE		SPILLS
CHICAGO	S111892887		2538 N PETTERSON AVE		SPILLS
CHICAGO	S111892886		2536 N PETTERSON AVE		SPILLS
CHICAGO	S111892885		2534 N PETTERSON AVE		SPILLS
CHICAGO	S111884261		3401 PETTERSON AVE		SPILLS
CHICAGO	S111909797		5625 W PHILMOORE		SPILLS
CHICAGO	S111890810		PIGGY BACK RAMP		SPILLS
CHICAGO	2000668618	F PINE GROVE AND ADISON	F PINE GROVE AND ADISON		ERNS
CHICAGO	S111911996		5500 W PINE		SPILLS
CHICAGO	S111891349		2756 PINE GRV		SPILLS
CHICAGO	S111905197		3805 N PLAINFIELD		SPILLS
CHICAGO	877438	PLYMOUTH CT & EISENHOWER PARKWAY PLYMOUT CT PSS	PLYMOUTH CT & EISENHOWER PARKWAY PLYMOUTH CT PSS		ERNS
CHICAGO	8867459	PMC SPECIALITY	PMC SPECIALITY		ERNS
CHICAGO	875664	PMC CORPORATION OR SHERWIN WILLIAMS 115TH ST AND CHAMPLAIN A	PMC CORPORATION OR SHERWIN WILLIAMS 115TH ST AND CHAMPLAIN A		ERNS
CHICAGO	S111887302		S POL OHARE AIRPORT		SPILLS
CHICAGO	2000552216	700 NORTH POLASKI	700 NORTH POLASKI	0	ERNS
CHICAGO	2010956157	POLK STATION	POLK STA		ERNS
CHICAGO	S111885212		3450 W POLK		SPILLS
CHICAGO	2012104402		1634 W POLK		ERNS
CHICAGO	S111905690		2661 POLK ST		SPILLS
CHICAGO	S111896528		5048 POLK ST		SPILLS
CHICAGO	S111896201		5048 POLK ST		SPILLS
CHICAGO	S111927496		1634 W POLK		SPILLS
CHICAGO	S108047409		POPLAR & ARCHER AVE		SPILLS
CHICAGO	S111894440		3522 W POTOMAC ST		SPILLS
CHICAGO	S111892090		4055 W POTOMAC		SPILLS
CHICAGO	S111885365		3525 W POTOMIC AVE		SPILLS
CHICAGO	S111349389		5226 POTTAWATOMIE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111885056		4120 S PR		SPILLS
CHICAGO	S111885188		5734 S PR		SPILLS
CHICAGO	S111913448		5910 S PR		SPILLS
CHICAGO	S111880835		1915 S PR		SPILLS
CHICAGO	S111902589		1918 S PR		SPILLS
CHICAGO	S111883214		3748 S PRAIRIE ST		SPILLS
CHICAGO	S111908224		6028 PRAIRIE AVE		SPILLS
CHICAGO	S111882375		58 PRAIRIE ST		SPILLS
CHICAGO	S111911813		1712 W PRATT ST		SPILLS
CHICAGO	S111878257		1622 W PRATT		SPILLS
CHICAGO	S111926559		1340 W PRATT		SPILLS
CHICAGO	S111890346		3101 PRATT AVE		SPILLS
CHICAGO	2001559682	PREMIERE WHAREHOUSES	PREMIERE WHAREHOUSES	0	ERNS
CHICAGO	S111898233		39 PRINCETON		SPILLS
CHICAGO	91227438	PRIVATE DRIVEWAY 3175 N. GRAND	PRIVATE DRIVEWAY 3175 N. GRAND		ERNS
CHICAGO	8875211	PRIVATE CITIZEN	PRIVATE CITIZEN		ERNS
CHICAGO	91223529	PROPERTY TAX NO. PIN 26- 07-157-008. ON 100 ST	PROPERTY TAX NO. PIN 26- 07-157-008. ON 100 ST		ERNS
CHICAGO	S108047414		PROVISO		SPILLS
CHICAGO	2004724880	PROVISO YARD	PROVISO YARD		ERNS
CHICAGO	2000550784	PROVISO RAIL YARD	PROVISO RAIL YARD	0	ERNS
CHICAGO	2000525104	PROVISO	PROVISO	0	ERNS
CHICAGO	98456856	PROVISO YARD	PROVISO YARD		ERNS
CHICAGO	S111909017		PROVISO YARD		SPILLS
CHICAGO	S111902105		PROVISO YARD		SPILLS
CHICAGO	S111906881		PROVISO YARD		SPILLS
CHICAGO	S111918825		PROVISO YARD		SPILLS
CHICAGO	S111900702		PROVISO YARD & W MADISON ST		SPILLS
CHICAGO	S111910341		PROVISO YARD		SPILLS
CHICAGO	S111902614		PROVISO YARD		SPILLS
CHICAGO	98451458	5838 NORTH PUASKI RD	5838 NORTH PUASKI RD		ERNS
CHICAGO	S111879661		4646 S PUILASKI RD		SPILLS
CHICAGO	S108047918		OF PULASKI ST		SPILLS
CHICAGO	97407460	PULASKI AVE NORTH OF STEVENSON EXPRESSWA\	PULASKI AVE NORTH OF STEVENSON EXPRESSWAY		ERNS
CHICAGO	89118756	PULASKI RD & SANITARY SHIP CANAL	PULASKI RD & SANITARY SHIP CANAL		ERNS
CHICAGO	2008886505	PULASKI AND FERDINAN STRS	PULASKI AND FERDINAN STRS		ERNS
CHICAGO	2010941633	3501 S. PULASKI	3501 S PULASKI		ERNS
CHICAGO	2010950374	PULASKI AND CONGRESS	PULASKI		ERNS
CHICAGO	S111218699		6500 S PULASKI		SPILLS
CHICAGO	S111885735		3500 S PULASKI		SPILLS
CHICAGO	S111885715		3500 S PULASKI		SPILLS
CHICAGO	S111885574		3925 N PULASKI		SPILLS
CHICAGO	S111887313		4560 N PULASKI AVE		SPILLS
CHICAGO	S111886512		3925 N PULASKI		SPILLS
CHICAGO	S111886468		5255 N PULASKI		SPILLS
CHICAGO	S111886058		2801 W PULASKI		SPILLS
CHICAGO	S111888307		5151 N PULASKI		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111885291		3348 S PULASKI		SPILLS
CHICAGO	S111885369		4500 S PULASKI AVE		SPILLS
CHICAGO	S111905353		826 PULASKI ST		SPILLS
CHICAGO	S111896579		6029 N PULASKI AVE		SPILLS
CHICAGO	S111879725		3400 S PULASKI		SPILLS
CHICAGO	S111879688		3400 S PULASKI		SPILLS
CHICAGO	S111877979		4433 S PULASKI		SPILLS
CHICAGO	S111925325		2345 S PULASKI		SPILLS
CHICAGO	S111892862		3800 S PULASKI		SPILLS
CHICAGO	S111877100		2444 N PULASKI		SPILLS
CHICAGO	S111878981		7401 S PULASKI		SPILLS
CHICAGO	S111882660		4154 N PULASKI AVE		SPILLS
CHICAGO	S111904779		3250 S PULASKI		SPILLS
CHICAGO	S111902481		5500 S PULASKI		SPILLS
CHICAGO	S111925451		5901 S PULASKI		SPILLS
CHICAGO	S111923232		400 N PULASKI		SPILLS
CHICAGO	S111908734		700 N PULASKI		SPILLS
CHICAGO	S111903029		4625 N PULASKI		SPILLS
CHICAGO	S111888590		8251 S PULASKI		SPILLS
CHICAGO	S111878413		6100 N PULASKI		SPILLS
CHICAGO	S111914261		39 N PULASKI		SPILLS
CHICAGO	S111902424		4250 N PULASKI		SPILLS
CHICAGO	S111900135		2200 N PULASKI		SPILLS
CHICAGO	S111891193		7400 S PULASKI		SPILLS
CHICAGO	S111875637		3501 S PULASKI		SPILLS
CHICAGO	S111878380		3501 PULASKI AVE		SPILLS
CHICAGO	S111878350		3741 S PULASKI AVE		SPILLS
CHICAGO	S111922781		400 N PULASKI		SPILLS
CHICAGO	S111878741		5838 N PULASKI		SPILLS
CHICAGO	S111927154		3501 S PULASKI		SPILLS
CHICAGO	S111919290		PULASKI & OGDEN AVE		SPILLS
CHICAGO	S111876797		1230 N PULASKI		SPILLS
CHICAGO	S111920485		6242 S PULASKI		SPILLS
CHICAGO	S111914914		1900 S PULASKI AVE		SPILLS
CHICAGO	S111903582		1747 N PULASKI		SPILLS
CHICAGO	S111908477		5456 S PULASKI		SPILLS
CHICAGO	S111902328		5838 N PULASKI		SPILLS
CHICAGO	S111894132		5860 N PULASKI		SPILLS
CHICAGO	S111889787		4448 N PULASKI AVE		SPILLS
CHICAGO	S111921283		400 N PULASKI		SPILLS
CHICAGO	S111880080		5114 S PULASKI		SPILLS
CHICAGO	S111889738		4118 N PULASKI		SPILLS
CHICAGO	S111905447		3501 S PULASKI		SPILLS
CHICAGO	S111901366		1923 N PULASKI		SPILLS
CHICAGO	S111908861		4859 S PULASKI		SPILLS
CHICAGO	S111908849		5801 N PULASKI AVE		SPILLS
CHICAGO	S111908067		6214 N PULASKI		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111900066		2200 N PULASKI		SPILLS
CHICAGO	S111901971		5609 S PULASKI		SPILLS
CHICAGO	S111897410		6225 S PULASKI ST		SPILLS
CHICAGO	S111876049		10301 S PULASKI		SPILLS
CHICAGO	S111875481		3249 S PULASKI		SPILLS
CHICAGO	S111914486		308 N PULASKI AVE		SPILLS
CHICAGO	S111892051		3050 N PULASKI AVE		SPILLS
CHICAGO	S111890045		4461 N PULASKI AVE		SPILLS
CHICAGO	S111879084		4302 S PULASKI		SPILLS
CHICAGO	S111879082		4900 S PULASKI		SPILLS
CHICAGO	S111924202		3348 S PULASKI		SPILLS
CHICAGO	S111914957		1500 S PULASKI		SPILLS
CHICAGO	S111896220		4340 S PULASKI AVE		SPILLS
CHICAGO	S111876975		6200 S PULASKI		SPILLS
CHICAGO	S111875777		4639 N PULASKI		SPILLS
CHICAGO	S111919340		400 N PULASKI		SPILLS
CHICAGO	S111913902		743 N PULASKI		SPILLS
CHICAGO	S111883482		6311 N PULASKI		SPILLS
CHICAGO	S110685232		40234 N PULASKI		SPILLS
CHICAGO	S111881030		4140 W PULLERTON		SPILLS
CHICAGO	S111877014		3042 S QUINN		SPILLS
CHICAGO	U004082459	2001-03 RACE, INC.	2001 RACE ST		UST
CHICAGO	S111894840		4545 W RACE ST		SPILLS
CHICAGO	S111895324		4545 W RACE ST		SPILLS
CHICAGO	S108046140		3435 S RACINE		SPILLS
CHICAGO	S111887438		2015 S RACINE		SPILLS
CHICAGO	S111887117		4650 S RACINE		SPILLS
CHICAGO	S111885256		3134 N RACINE ST		SPILLS
CHICAGO	2011982152		3500 RACINE		ERNS
CHICAGO	S111896657		4545 S RACINE		SPILLS
CHICAGO	S111880267		4545 S RACINE		SPILLS
CHICAGO	S111910058		4545 S RACINE BUILDING 4549		SPILLS
CHICAGO	S111912454		10507 S RACINE		SPILLS
CHICAGO	S111909590		3340 S RACINE		SPILLS
CHICAGO	S111897168		4750 N RACINE ST		SPILLS
CHICAGO	S111893730		218 N RACINE		SPILLS
CHICAGO	S111881994		4551 S RACINE		SPILLS
CHICAGO	S111882928		RACINE AVE & MILWAUKEE AVE		SPILLS
CHICAGO	S111881164		4551 S RACINE		SPILLS
CHICAGO	S111907813		11830 S RACINE ST		SPILLS
CHICAGO	S111879972		3425 N RACINE		SPILLS
CHICAGO	S111906799		7944 RACINE AVE		SPILLS
CHICAGO	S111904462		222 S RACINE		SPILLS
CHICAGO	S111903516		100 S RACINE		SPILLS
CHICAGO	S111895363		8257 S RACINE		SPILLS
CHICAGO	S111884002		4740 N RACINE		SPILLS
CHICAGO	S111906201		2141 S RACINE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111882349		11731 S RACINE		SPILLS
CHICAGO	S111914385		1312 S RACINE		SPILLS
CHICAGO	2000672067	TH RACINE AVE	TH RACINE AVE		ERNS
CHICAGO	94394439	RAIL YARD TRACK 15	RAIL YARD TRACK 15		ERNS
CHICAGO	2009922369	RAIL YARD	RAIL YARD		ERNS
CHICAGO	2009907064	RAIL YARD	RAIL YARD		ERNS
CHICAGO	2008888947	RAIL YARD	RAIL YARD		ERNS
CHICAGO	2008907064	RAIL YARD	RAIL YARD		ERNS
CHICAGO	S110363854		RAIL LINE CD 513		SPILLS
CHICAGO	89112004	RAIL MILE POST 510	RAIL MILE POST 510		ERNS
CHICAGO	98438453	RAILYARD CHICAGO 2040 EAST 106TH ST CHICAGO	RAILYARD CHICAGO 2040 EAST 106TH ST CHICAGO		ERNS
CHICAGO	2011971442	RAILYARD DIESEL SHOP 400 N. PULASKI	N RAILYARD DIESEL SHOP 400		ERNS
CHICAGO	S111894241		N RAMP NEAR 5320		SPILLS
CHICAGO	S111901184		RAMP SB & CICERO AVE		SPILLS
CHICAGO	S111901805		RAMP BETWEEN DAN RYAN & STEVENSON EXPY		SPILLS
CHICAGO	S111895329		WEST RAMP		SPILLS
CHICAGO	89119300	I-55, RAMP TO MARTIN LUTHER KING DR	I-55, RAMP TO MARTIN LUTHER KING DR		ERNS
CHICAGO	98447408	RANDOLF AND COLUMBUS ST	RANDOLF AND COLUMBUS ST		ERNS
CHICAGO	2009925379	RANDOLPH & LAKE SHORE DR.	RANDOLPH & LAKE SHORE DR.		ERNS
CHICAGO	S111886973		RANDOLPH ST & LAKE SHORE DR		SPILLS
CHICAGO	S111902077		RANDOLPH & COLUMBUS STS		SPILLS
CHICAGO	S111876361		600 RANDOLPH		SPILLS
CHICAGO	S111901719		300 E RANDOLPH		SPILLS
CHICAGO	S111877288		225 W RANDOLPH		SPILLS
CHICAGO	S111896352		RANDOLPH & HALSTEAD		SPILLS
CHICAGO	S111925666		RANDOLPH & LAKE FRONT		SPILLS
CHICAGO	S111909242		RANDOLPH & WASHINGTON STS		SPILLS
CHICAGO	S111903484		1240 W RANDOLPH		SPILLS
CHICAGO	S111909084		4343 N RAVENSWOOD		SPILLS
CHICAGO	S111882543		6445 N RAVENSWOOD		SPILLS
CHICAGO	S111913944		4325 N RAVENSWOOD		SPILLS
CHICAGO	S111901227		4510 N RAVENSWOODS		SPILLS
CHICAGO	S111886929		5115 N RAVENWOOD		SPILLS
CHICAGO	2012100545		W RD UNKNOWN SHEEN INCIDENT 1111		ERNS
CHICAGO	S111889376		6323 N RDG		SPILLS
CHICAGO	S111880227		6401 N RDG		SPILLS
CHICAGO	91235192	4551 S. RECINE ST.	4551 S. RECINE ST.		ERNS
CHICAGO	2005618378	RED LINE	RED LINE		ERNS
CHICAGO	90184306	REPUBLIC ENG. STEEL INC. 11610 S. AVE. O	REPUBLIC ENG. STEEL INC. 11610 S. AVE. O		ERNS
CHICAGO	S111905965		6518 N RICHMOND		SPILLS
CHICAGO	S111888680		6601 RIDGE BLVD		SPILLS
CHICAGO	S111920240		7330 RIDGELAND		SPILLS
CHICAGO	S111884632		5100 N RIDGEWAY		SPILLS
CHICAGO	S111912367		RIGHT BANK OF THE ILLINOIS RIV		SPILLS
CHICAGO	S108046207		3858 W RIGHTWOOD		SPILLS
CHICAGO	2005631002	3858 WEST RIGHTWOOD	3858 WEST RIGHTWOOD		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111912146		1640 W RIGHTWOOD		SPILLS
CHICAGO	S111901896		1310 RITCHIE CT		SPILLS
CHICAGO	S109092962		RIV CALUMET		SPILLS
CHICAGO	S111911050		N RIV BRANCH OF THE CHICAGO OF CALIF S		SPILLS
CHICAGO	S111904280		RIV MP 11		SPILLS
CHICAGO	S111905205		RIV ILLINOIS MP 278		SPILLS
CHICAGO	S111900973		RIV ILLINOIS NEAR HAVANAH MARINE		SPILLS
CHICAGO	96487268	RIVER CANAL IN FRONT OF MERCHANDISE MART ORLEANS AND WELL	RIVER CANAL IN FRONT OF MERCHANDISE MART ORLEANS AND WELL		ERNS
CHICAGO	2009899019	RIVER CITY MARINA	RIVER CITY MARINA		ERNS
CHICAGO	2008899019	RIVER CITY MARINA	RIVER CITY MARINA		ERNS
CHICAGO	2007320879	RIVER MILE 318	RIVER MILE 318		ERNS
CHICAGO	S111889961		RIVER		SPILLS
CHICAGO	S111896319		5540 NE RIVER RD		SPILLS
CHICAGO	2010934829	ROCK ISLAND RAIL YARD, MILEPOST: CD510, SUBDIVISION: DEARBOR	ROCK IS		ERNS
CHICAGO	S111890595		6834 ROCKET AUTO MALL W		SPILLS
CHICAGO	2000518948	ROCKWELL SUBDIVISION	ROCKWELL SUBDIVISION	0	ERNS
CHICAGO	S111888318		3001 N ROCKWELL		SPILLS
CHICAGO	S111887052		6203 N ROCKWELL AVE		SPILLS
CHICAGO	S111907374		4100 ROCKWELL NORTH BRANCH OF CHICA RIV		SPILLS
CHICAGO	S111882296		40101 N ROCKWELL		SPILLS
CHICAGO	S111891917		2800 S ROCKWELL		SPILLS
CHICAGO	S111905125		1825 N ROCKWELL		SPILLS
CHICAGO	S111898196		7400 S ROCKWELL		SPILLS
CHICAGO	S111903855		3022 N ROCKWELL		SPILLS
CHICAGO	S111902913		30143 N ROCKWELL		SPILLS
CHICAGO	S111888851		5747 N ROCKWELL		SPILLS
CHICAGO	S111911607		3145 N ROCKWELL		SPILLS
CHICAGO	S111894403		4130 N ROCKWELL		SPILLS
CHICAGO	S111901970		1825 N ROCKWELL		SPILLS
CHICAGO	S111901609		3715 S ROCKWELL		SPILLS
CHICAGO	S111884021		3500 N ROCKWELL		SPILLS
CHICAGO	S111879087		3029 N ROCKWELL		SPILLS
CHICAGO	S111879077		3029 N ROCKWELL		SPILLS
CHICAGO	S111886629		7240 N ROGERS		SPILLS
CHICAGO	1000177452	FORMER PARCO PRODUCTS INC FACILITY	4710 ROOSEVELT RD		CERC-NFRAP, CORRACTS
CHICAGO	S111885979		534 W ROOSEVELT		SPILLS
CHICAGO	S111887049		3803 W ROOSEVELT		SPILLS
CHICAGO	S111887522		2950 W ROOSEVELT		SPILLS
CHICAGO	S111879635		5700 W ROOSEVELT		SPILLS
CHICAGO	S111909573		5300 W ROOSEVELT ST		SPILLS
CHICAGO	S111876814		3159 ROOSEVELT RD		SPILLS
CHICAGO	S111882014		ROOSEVELT RD & WESTERN		SPILLS
CHICAGO	S111922797		1303 ROOSEVELT RD		SPILLS
CHICAGO	S111898776		7500 W ROOSEVELT RD		SPILLS
CHICAGO	S111880385		ROOSEVELT & OGDEN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111902783		3731 W ROOSEVELT		SPILLS
CHICAGO	S111884942		636 W ROOT		SPILLS
CHICAGO	S111895928		636 W ROOT		SPILLS
CHICAGO	S111881753		636 ROOT ST		SPILLS
CHICAGO	S111877638		636 W ROOT		SPILLS
CHICAGO	S111908965		428 ROOT ST		SPILLS
CHICAGO	2005601156	ROSCO ST	ROSCO ST		ERNS
CHICAGO	S108047761		W ROSCOE ST		SPILLS
CHICAGO	S111894729		2239 W ROSCOE		SPILLS
CHICAGO	S111906289		2740 W ROSEMONT		SPILLS
CHICAGO	98452740	ROUND HOUSE	ROUND HOUSE		ERNS
CHICAGO	93303252	IL ROUTE 137 NEAR GREAT LAKES NAVAL	IL ROUTE 137 NEAR GREAT LAKES NAVAL		ERNS
CHICAGO	S111891837		6030 N RUST ST		SPILLS
CHICAGO	S111922723		RYAN & 30TH ST		SPILLS
CHICAGO	S111886862		7257 59 S JEFFERY		SPILLS
CHICAGO	S111879467		1200 600 S TORRENCE AVE		SPILLS
CHICAGO	S111896321		2419 E S SHORE DR		SPILLS
CHICAGO	S111922442		6320 SACRAMENTO		SPILLS
CHICAGO	S111908731		630 N SACRAMENTO		SPILLS
CHICAGO	S111912898		2811 N SACRAMENTO		SPILLS
CHICAGO	S111912899		2811 N SACRAMENTO		SPILLS
CHICAGO	S111925039		SACRAMENTO & GRAND MP 23		SPILLS
CHICAGO	S111890798		22451 N SACRAMENTO		SPILLS
CHICAGO	S111925630		550 N SACRAMENTO AVE		SPILLS
CHICAGO	S111925629		550 N SACRAMENTO AVE		SPILLS
CHICAGO	S111900104		318 S SACRAMENTO ST		SPILLS
CHICAGO	S111901566		810 N SACRAMENTO		SPILLS
CHICAGO	876449	6101 SOUTH SACREMENTO	6101 SOUTH SACREMENTO		ERNS
CHICAGO	S111893206		3100 S SACREMENTO		SPILLS
CHICAGO	S111893118		404 N SACREMENTO		SPILLS
CHICAGO	S111892115		1400 N SACREMENTO		SPILLS
CHICAGO	S111925030		500 N SACREMENTO BLVD		SPILLS
CHICAGO	S111912857		2628 S SACREMENTO ST		SPILLS
CHICAGO	98427468	SADDLE TANK OF TANKER TRUCK/TRUCK SLID ON ICE IN PARKING LOT	SADDLE TANK OF TANKER TRUCK/TRUCK SLID ON ICE IN PARKING LOT		ERNS
CHICAGO	8857165	SAFETY-KLEEN	SAFETY-KLEEN		ERNS
CHICAGO	2009901502	SAG CANAL	SAG CANAL		ERNS
CHICAGO	2008901502	SAG CANAL	SAG CANAL		ERNS
CHICAGO	2007332346	SAG CHANNEL, MILE MARKER 329	SAG CHANNEL, MILE MARKER 329		ERNS
CHICAGO	S111910549		SAG CANAL		SPILLS
CHICAGO	S108669662		SAINT WB EXIT		SPILLS
CHICAGO	S111885657		SAINT EXIT		SPILLS
CHICAGO	S111887912		3729 S SAINT LOUIS		SPILLS
CHICAGO	S111906725		3200 S SAINT LOUIS		SPILLS
CHICAGO	S111898317		2333 W SAINT PAUL ST		SPILLS
CHICAGO	S111924159		SAINT CHARLES AIR LINE BRIDGE ST		SPILLS
CHICAGO	S111894264		SAINT LAWRENCE & 95TH ST		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111891909		4938 N SAINT LOUIS		SPILLS
CHICAGO	S111906950		SAINT EXIT		SPILLS
CHICAGO	S111878333		1908 S SAINT LOUIS		SPILLS
CHICAGO	S111902895		SAINT EXIT		SPILLS
CHICAGO	S111888769		5500 N SAINT LOUIS		SPILLS
CHICAGO	S111879542		1908 S SAINT LOUIS		SPILLS
CHICAGO	S111915460		4319 S SAINT LAWRENCE		SPILLS
CHICAGO	93339633	LA SALLE	LA SALLE		ERNS
CHICAGO	S111913344		901 N SANGAMON		SPILLS
CHICAGO	S111909761		325 S SANGAMON AVE		SPILLS
CHICAGO	S111909078		3750 S SANGAMON		SPILLS
CHICAGO	S111905510		6300 S SANGAMON		SPILLS
CHICAGO	S111882978		335 S SANGAMON		SPILLS
CHICAGO	S111895743		901 N SANGAMON		SPILLS
CHICAGO	S111927935		123 N SANGAMON		SPILLS
CHICAGO	S111927865		3608 S SANGAMON		SPILLS
CHICAGO	2001557824	3750 SOUTH SANGANON	3750 SOUTH SANGANON	0	ERNS
CHICAGO	91233492	SANITARIA AND SHIP CANAL	SANITARIA AND SHIP CANAL		ERNS
CHICAGO	92294756	SANITARY SHIP CANAL	SANITARY SHIP CANAL		ERNS
CHICAGO	S111881835		SANITARY & SHIP CANAL		SPILLS
CHICAGO	91236307	SANITARY& SHIP CANAL @ I-55 DAMEN BRIDGE	SANITARY& SHIP CANAL @ I-55 DAMEN BRIDGE		ERNS
CHICAGO	S111902410		5248 S SAWYER ST		SPILLS
CHICAGO	S111880077		2357 S SAWYER		SPILLS
CHICAGO	S111885611		2227 SAYER ST N		SPILLS
CHICAGO	S111879595		6300 S SAYRE		SPILLS
CHICAGO	S111910985		SB		SPILLS
CHICAGO	S111884439		88 W SCHILLER		SPILLS
CHICAGO	S111896971		427 W SCOTT		SPILLS
CHICAGO	S111890290		345 W SCOTT		SPILLS
CHICAGO	S111925210		640 W SCOTT		SPILLS
CHICAGO	8863319	ON SE CORNER OF 45TH AND ASHLAND 4501 S. ASHLAND	ON SE CORNER OF 45TH AND ASHLAND 4501 S. ASHLAND		ERNS
CHICAGO	8869431	SEARS TOWER,29TH FLOOR,ELECTRICAL EQUIPMENT ROOM INTERSECTIO	SEARS TOWER,29TH FLOOR,ELECTRICAL EQUIPMENT ROOM INTERSECTIO		ERNS
CHICAGO	S111923042		SECURITY POST		SPILLS
CHICAGO	S111907297		1441 N SEDGEWICH		SPILLS
CHICAGO	S109953715		1805 SEDGWICK AVE		SPILLS
CHICAGO	S111925200		1805 SEDGWICK AVE		SPILLS
CHICAGO	S111902638		7409 SEELEY		SPILLS
CHICAGO	2000519383	6644 SELEY	6644 SELEY	0	ERNS
CHICAGO	S111349429		3216 N SEMINARY		SPILLS
CHICAGO	2011983101		3216 N SEMINARY		ERNS
CHICAGO	S111895720		2500 S SENOUR		SPILLS
CHICAGO	98429516	1111 WEST SERMACK ROAD	1111 WEST SERMACK ROAD		ERNS
CHICAGO	S111909626		SERVICE CTR		SPILLS
CHICAGO	S111891628		4600 W SHAKESPEARE		SPILLS
CHICAGO	96479823	SHEEN SIZE:1MI X UNKNOWN/RAINBOW	SHEEN SIZE:1MI X UNKNOWN/RAINBOW		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	98423866	SHEEN SIZE: UNKNOWN / THIRD PARTY REPORTS OIL SLICK	SHEEN SIZE: UNKNOWN / THIRD PARTY REPORTS OIL SLICK		ERNS
CHICAGO	98458737	SHEEN SIZE: 300-400 YDS X 75 YDS / RAINBOW COLORED / SHEEN H	SHEEN SIZE: 300-400 YDS X 75 YDS / RAINBOW COLORED / SHEEN H		ERNS
CHICAGO	98452229	SHEEN SIZE:100 FT X 20 FT / COLOR: RAINBOW	SHEEN SIZE:100 FT X 20 FT / COLOR: RAINBOW		ERNS
CHICAGO	98448303	SHEEN SIZE: 100 YDS X UNKNOWN WIDTH RAINBOW COLORED	SHEEN SIZE: 100 YDS X UNKNOWN WIDTH RAINBOW COLORED		ERNS
CHICAGO	98469237	SHEEN SIZE: 8-20 FT X 1/2 MILE / COLOR: LIGHT RAINBOW / DIES	SHEEN SIZE: 8-20 FT X 1/2 MILE / COLOR: LIGHT RAINBOW / DIES		ERNS
CHICAGO	98436673	SHEEN SIZE: 30 X 15 FEET COLOR: YELLOW	SHEEN SIZE: 30 X 15 FEET COLOR: YELLOW		ERNS
CHICAGO	98448707	SHEEN SIZE: FOOTBALL FIELD / IN MARINA GOING TO RIVER / RAIN	SHEEN SIZE: FOOTBALL FIELD / IN MARINA GOING TO RIVER / RAIN		ERNS
CHICAGO	S111883878		1555 N SHEFFIELD		SPILLS
CHICAGO	S111890621		1714 N SHEFFIELD		SPILLS
CHICAGO	S111895791		1723 W SHEFFIELD		SPILLS
CHICAGO	S111877862		3532 N SHEFFIELD		SPILLS
CHICAGO	S111880861		1630 N SHEFFIELD		SPILLS
CHICAGO	S111904160		2345 SHEFFIELD AVE		SPILLS
CHICAGO	S111886130		5816 SHERIDAN RD		SPILLS
CHICAGO	S111885096		1034 SHERIDAN RD		SPILLS
CHICAGO	S111899665		5556 N SHERIDAN		SPILLS
CHICAGO	S111892457		7740 N SHERIDAN		SPILLS
CHICAGO	S111896801		1152 SHERIDAN RD		SPILLS
CHICAGO	S111906295		6601 N SHERIDAN		SPILLS
CHICAGO	S111906471		5556 W SHERIDAN		SPILLS
CHICAGO	S111894796		2930 N SHERIDAN		SPILLS
CHICAGO	S111900312		7740 N SHERIDAN		SPILLS
CHICAGO	S111882763		6590 N SHERIDAN		SPILLS
CHICAGO	S111879757		7550 N SHERIDAN		SPILLS
CHICAGO	S111886233		3241 S SHIELDS		SPILLS
CHICAGO	S111896666		3250 S SHIELDS		SPILLS
CHICAGO	S111882236		3229 S SHIELDS		SPILLS
CHICAGO	S111892450		3208 S SHIELDS		SPILLS
CHICAGO	S111900729		3226 S SHIELDS		SPILLS
CHICAGO	S111887324		7337 S SHORE DR		SPILLS
CHICAGO	S111886440		7022 S SHORE DR		SPILLS
CHICAGO	S111898057		7901 S SHORE DR		SPILLS
CHICAGO	S111880690		7050 S SHORE DR		SPILLS
CHICAGO	S111911359		5491 S SHORE DR		SPILLS
CHICAGO	S111890331		7715 S SHORE DR		SPILLS
CHICAGO	2000670414	E SHORE DRIVE	E SHORE DRIVE		ERNS
CHICAGO	S111877457		7034 S SHR		SPILLS
CHICAGO	94391406	SOUTH SIDE OF LOWER WACKER DRIVE INTERSECT CLARK ABOVE	SOUTH SIDE OF LOWER WACKER DRIVE INTERSECT CLARK ABOVE		ERNS
CHICAGO	8875208	EAST SIDE PARKING LOT	EAST SIDE PARKING LOT		ERNS
CHICAGO	8856310	EAST SIDE BELMONT HARBOUR	EAST SIDE BELMONT HARBOUR		ERNS
CHICAGO	98437355	WEST SIDE BURNHAM HARBOR FIRST DOCK NORTH OF THE HARBOR MAST	WEST SIDE BURNHAM HARBOR FIRST DOCK NORTH OF THE HARBOR MAST		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111892533		E SIDE OF STONY IS		SPILLS
CHICAGO	S111893508		4559 SIMONDS DR		SPILLS
CHICAGO	2008875743	SLIP 22	SLIP 22		ERNS
CHICAGO	S111906844		1328 W SMT		SPILLS
CHICAGO	2012105223		11800 S SONEY ISLAND AVE		ERNS
CHICAGO	98445525	SOURCE:OVERSIZED GLASS JAR CONTAINING 3 GLASS CYLANDERS INSI	SOURCE:OVERSIZED GLASS JAR CONTAINING 3 GLASS CYLANDERS INSI		ERNS
CHICAGO	2009925390	116 54 SOUTH THROOP	116 54 SOUTH THROOP		ERNS
CHICAGO	2008860563	900 OF SOUTH ASHLEN AVE	900 OF SOUTH ASHLEN AVE		ERNS
CHICAGO	2012100548		8756361 12600 SOUTH TORRENCE A		ERNS
CHICAGO	S111925858		12500 SOUTH		SPILLS
CHICAGO	873474	SOUTHBOUND FROM LOCKS BTWN CHICAGO RIVER LAKE MICHIGAN	SOUTHBOUND FROM LOCKS BTWN CHICAGO RIVER & LAKE MICHIGAN		ERNS
CHICAGO	S111885928		3601 N SOUTHPORT		SPILLS
CHICAGO	S111885495		3137 N SOUTHPORT		SPILLS
CHICAGO	S111878119		2748 N SOUTHPORT		SPILLS
CHICAGO	2007330921	1425 SOUTHWESTERN AVE	1425 SOUTHWESTERN AVE		ERNS
CHICAGO	S109366337		1425 SOUTHWESTERN AVE		SPILLS
CHICAGO	2011988534		10222 SOUTHWESTERN AVE		ERNS
CHICAGO	2011992609		1425 SOUTHWESTERN AVE		ERNS
CHICAGO	S111895146		10402 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111903718		4711 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111891623		7858 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111911199		4515 SOUTHWESTERN BLVD		SPILLS
CHICAGO	S111906652		4724 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111896446		2502 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111924448		1425 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111902967		3815 SOUTHWESTERN		SPILLS
CHICAGO	S111921939		10700 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111901745		7400 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111891517		4318 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111906912		6603 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111906911		6606 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111899529		5370 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111897698		10133 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111911868		10257 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111896355		2512 SOUTHWESTERN		SPILLS
CHICAGO	S111920220		1425 SOUTHWESTERN		SPILLS
CHICAGO	S111895389		1425 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111927875		1425 SOUTHWESTERN AVE		SPILLS
CHICAGO	S108046095		3201 SOUTHWESTERN AVE		SPILLS
CHICAGO	S111909669		5515 S SOYER AVE		SPILLS
CHICAGO	94391108	3500 N SPALDING	3500 N SPALDING		ERNS
CHICAGO	S111912014		5148 N SPALDING		SPILLS
CHICAGO	S111913690		535 N SPAULDING		SPILLS
CHICAGO	S111901710		3018 S SPAULDING ST		SPILLS
CHICAGO	S111895582		1750 N SPRINGFIELD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111919064		1938 N SPRINGFIELD		SPILLS
CHICAGO	S111890732		1747 N SPRINGFIELD		SPILLS
CHICAGO	91200423	22 ND ST AND ASHLAND ST	22 ND ST AND ASHLAND ST		ERNS
CHICAGO	S111910036		ST		SPILLS
CHICAGO	S111912360		2101 W ST 59TH ST		SPILLS
CHICAGO	S111894256		ST		SPILLS
CHICAGO	S111893142		ST		SPILLS
CHICAGO	S111927201		N ST ALOYSIUS PARISH 1510		SPILLS
CHICAGO	S111889364		STAGING AREA B MOUNT PROSPECTS FLD		SPILLS
CHICAGO	S111909606		4101 S STATE		SPILLS
CHICAGO	S111901197		553 S STATE		SPILLS
CHICAGO	S111898356		8701 S STATE		SPILLS
CHICAGO	S111897367		STATION		SPILLS
CHICAGO	S111919017		8301 S STEWART		SPILLS
CHICAGO	S111900362		6201 S STEWART		SPILLS
CHICAGO	99627482	STOLT HAVEN DOCK CALSAG MI 327.9	STOLT HAVEN DOCK CALSAG MI 327.9		ERNS
CHICAGO	92252272	12500 S STONEY ISLAND CHICAGO STEEL AND PICKEL	12500 S STONEY ISLAND CHICAGO STEEL AND PICKEL		ERNS
CHICAGO	S110278076		12200 S STONEY IS		SPILLS
CHICAGO	S110824930		5800 S STONEY IS		SPILLS
CHICAGO	2011966883	12200 S STONEY ISLAND	12200 S STONEY IS		ERNS
CHICAGO	S110363765		7550 S STONEY ISLAND AVE		SPILLS
CHICAGO	2010938620	7550 SOUTH STONEY ISLAND AVE	7550 S STONEY ISLAND AVE		ERNS
CHICAGO	2007307178	10101 SOUTH STONEY ISLAND	10101 SOUTH STONEY ISLAND		ERNS
CHICAGO	S111926972		11800 S STONEY ISLAND AVE		SPILLS
CHICAGO	S111879366		11700 S STONEY IS		SPILLS
CHICAGO	S111926165		11800 S STONEY ISLAND AVE		SPILLS
CHICAGO	S111925660		11800 S STONEY IS		SPILLS
CHICAGO	S111925661		11800 S STONEY IS		SPILLS
CHICAGO	S111926127		11900 S STONEY ISLAND AVE		SPILLS
CHICAGO	S111926102		122200 S STONEY ISLAND AVE		SPILLS
CHICAGO	2010928199	ETHANOL UNLOADING RACK 12200 SOUTH STONEY ISLAND AVE	12200 S STONEYISLAND AVE		ERNS
CHICAGO	92254413	11700 S. STONY ISL. AVE	11700 S. STONY ISL. AVE		ERNS
CHICAGO	S111886765		8300 S STONY IS		SPILLS
CHICAGO	S111886413		11700 STONY ISLAND AVE		SPILLS
CHICAGO	S111885934		8600 S STONY IS		SPILLS
CHICAGO	S111885885		11700 S STONY AVE		SPILLS
CHICAGO	S111903117		11800 S STONY IS		SPILLS
CHICAGO	S111896675		11800 S STONY IS		SPILLS
CHICAGO	S111884943		18800 S STONY ISLAND AVE		SPILLS
CHICAGO	S111905984		11800 S STONY IS		SPILLS
CHICAGO	S111893201		8555 S STONY IS		SPILLS
CHICAGO	S111877481		11800 S STONY IS		SPILLS
CHICAGO	S111910021		12200 S STONY IS		SPILLS
CHICAGO	S111912300		11800 S STONY IS		SPILLS
CHICAGO	S111883141		11700 S STONY AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111881396		8950 S STONY IS		SPILLS
CHICAGO	S111890618		1220 S STONY ISLAND AVE		SPILLS
CHICAGO	S111883079		11700 S STONY IS		SPILLS
CHICAGO	S111907328		12901 S STONY IS		SPILLS
CHICAGO	S111889262		6650 STONY IS		SPILLS
CHICAGO	S111903654		8702 S STONY IS		SPILLS
CHICAGO	S111892481		12500 S STONY IS		SPILLS
CHICAGO	S111926788		5800 S STONY IS		SPILLS
CHICAGO	S111882589		12200 S STONY IS		SPILLS
CHICAGO	S111908227		11700 STONY ISLAND AVE		SPILLS
CHICAGO	S111899162		11800 S STONY IS		SPILLS
CHICAGO	S111878711		8720 S STONY ISLAND PKWY		SPILLS
CHICAGO	S111882565		6963 S STONY IS		SPILLS
CHICAGO	S111905216		11800 S STONY IS		SPILLS
CHICAGO	S111893050		10101 S STONY IS		SPILLS
CHICAGO	S111892351		7250 STONY ISLAND AVE		SPILLS
CHICAGO	S111878089		11700 S STONY IS		SPILLS
CHICAGO	S111876742		11700 S STONY IS		SPILLS
CHICAGO	S111894129		12200 S STONY IS		SPILLS
CHICAGO	S111914826		5748 S STONY IS		SPILLS
CHICAGO	S111886574		11800 S STONY IS		SPILLS
CHICAGO	S111902823		11800 S STONY IS		SPILLS
CHICAGO	S111907597		8702 S STONY IS		SPILLS
CHICAGO	S111882370		11700 S STONY AVE		SPILLS
CHICAGO	S111903788		7300 S STONY IS		SPILLS
CHICAGO	S111893955		11800 S STONY IS		SPILLS
CHICAGO	S111883965		7169 S STONY IS		SPILLS
CHICAGO	S111897509		8702 S STONY IS		SPILLS
CHICAGO	98463427	STORAGE TANK ABOVE GROUND / CAUSE UNKNOW	STORAGE TANK ABOVE GROUND / CAUSE UNKNOWN		ERNS
CHICAGO	8713142	DA STUART OIL CO	DA STUART OIL CO		ERNS
CHICAGO	S111902795		8400 S STUART		SPILLS
CHICAGO	2011971898	MILE POST 3.82 SUBDIVISION HARVAD	382 SUBDIVISION HARVAD		ERNS
CHICAGO	2012107483		- SUBDIVISION SOUTH CHICAGO		ERNS
CHICAGO	S104792906	HUYNH, NAM	1328 W SUMMIT		LUST
CHICAGO	S111904771		4820 W SUNNYSIDE		SPILLS
CHICAGO	S111904417		5420 W SUNNYSIDE		SPILLS
CHICAGO	S111904834		2212 W SUNNYSIDE		SPILLS
CHICAGO	S111888133		259 E SUPERIOR		SPILLS
CHICAGO	S111875761		SUPERIOR & ORLEANS ST NW COR		SPILLS
CHICAGO	S111882731		417 W SUPERIOR		SPILLS
CHICAGO	S111911979		2001 W SUPERIOR RD		SPILLS
CHICAGO	S111888968		1455 W SUPERIOR		SPILLS
CHICAGO	S111911678		1829 N SUPERIOR ST		SPILLS
CHICAGO	S111880128		SUPERIOR ST & FAIRBANKS CT		SPILLS
CHICAGO	S111905783		360 W SUPERIOR		SPILLS
CHICAGO	2006799199	314 WEST SUPPERIOR	314 WEST SUPPERIOR		ERNS
CHICAGO	S108047374		610 SWEST CARGO		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111877245		TAB CHEMICAL COMPANY & 4801ST S AUSTIN		SPILLS
CHICAGO	S111927868		TAFT AVENUE AND IRVING PARK RD		SPILLS
CHICAGO	90181001	928 TAG/ARF FAC.	928 TAG/ARF FAC.		ERNS
CHICAGO	90183057	928 TAG/ARF FAC.	928 TAG/ARF FAC.		ERNS
CHICAGO	S111921390		7263 S TALCOTT AVE		SPILLS
CHICAGO	S111894371		7432 W TALCOTT		SPILLS
CHICAGO	97412379	2412 N TALLMAN	2412 N TALLMAN		ERNS
CHICAGO	S111915208		5838 S TALMAN ST		SPILLS
CHICAGO	S111895751		4814 N TALMAN ST		SPILLS
CHICAGO	S111898829		3637 TALMAN		SPILLS
CHICAGO	96516458	TANK TRUCK/VALVE ON TANK ACCIDENTALLY OPENED	TANK TRUCK/VALVE ON TANK ACCIDENTALLY OPENED		ERNS
CHICAGO	879839	RR TANK CAR NO.NATX 29908, RR MILE 510 CHICAGO DIST FORT WAY	RR TANK CAR NO.NATX 29908, RR MILE 510 CHICAGO DIST FORT WAY		ERNS
CHICAGO	98457221	TANK FARM 4	TANK FARM 4		ERNS
CHICAGO	94372706	TAYLOR AND HOYNE ST	TAYLOR AND HOYNE ST		ERNS
CHICAGO	S111887268		2537 W TAYLOR		SPILLS
CHICAGO	S111894677		2900 W TAYLOR AVE		SPILLS
CHICAGO	S111913489		TAYLOR ST		SPILLS
CHICAGO	S111913435		3050 W TAYLOR		SPILLS
CHICAGO	S111895465		TAYLOR & DES PLAINES		SPILLS
CHICAGO	S111908553		1717 W TAYLOR		SPILLS
CHICAGO	S111890880		TAYLOR & HOYNE STS		SPILLS
CHICAGO	S111888741		4243 W TAYLOR		SPILLS
CHICAGO	S111899048		840 W TAYLOR		SPILLS
CHICAGO	S109366450		C TERMINAL OHARE FLD		SPILLS
CHICAGO	S111218725		TERMINAL 5		SPILLS
CHICAGO	S111924466		C TERMINAL AT OHARE FLD		SPILLS
CHICAGO	S111921971		TERMINAL 5		SPILLS
CHICAGO	S111911572		W TERMINAL 2		SPILLS
CHICAGO	S109366336		13700 S TERRY		SPILLS
CHICAGO	S111924314		13700 S TERRY		SPILLS
CHICAGO	872210	IN THE FACTORY THERE	IN THE FACTORY THERE		ERNS
CHICAGO	2008883715	THE MOUTH OF THE CHICAGO RIVER	THE MOUTH OF THE CHICAGO RIVER		ERNS
CHICAGO	S111900324		THE ELSDON YARD ON 51ST ST		SPILLS
CHICAGO	S111924611		520 THEDEARBORNSUBDIVISIONNEARUNIO AVE		SPILLS
CHICAGO	S111886227		4950 W THOMAS		SPILLS
CHICAGO	S111876389		4950 W THOMAS		SPILLS
CHICAGO	S111897519		4520 W THOMAS		SPILLS
CHICAGO	2000531893	THOMAS STREET	THOMAS STREET	0	ERNS
CHICAGO	S111890649		10400 THROOP ST		SPILLS
CHICAGO	S111895555		10403 S THROOP		SPILLS
CHICAGO	S111895225		2141 THROOP ST		SPILLS
CHICAGO	S111883395		1612 N THROOP		SPILLS
CHICAGO	98427144	GO TO CARANDOLET AVE GO W. ON 126 ST. TO TERMINAL 2926 EAST	GO TO CARANDOLET AVE GO W. ON 126 ST. TO TERMINAL 2926 EAST		ERNS
CHICAGO	S111894196		ON TO		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111878972		13511 S TORENCE		SPILLS
CHICAGO	S111878436		11236 S TORENCE AVE		SPILLS
CHICAGO	S111895491		11236 S TORENCE AVE		SPILLS
CHICAGO	99637648	11236 TORRANCE AVE	11236 TORRANCE AVE		ERNS
CHICAGO	S111905597		11236 TORRANCE AVE		SPILLS
CHICAGO	S111902659		11236 TORRANCE AVE		SPILLS
CHICAGO	S111894493		11236 S TORRANCE AVE		SPILLS
CHICAGO	93332215	TORRENCE AVE BRIDGE MILE MARKER 328.1	TORRENCE AVE BRIDGE MILE MARKER 328.1		ERNS
CHICAGO	S111885099		11700 TORRENCE		SPILLS
CHICAGO	S111887213		10302 TORRENCE		SPILLS
CHICAGO	2011985606		13227 S TORRENCE		ERNS
CHICAGO	S111905391		11236 TORRENCE AVE		SPILLS
CHICAGO	S111909315		11236 S TORRENCE		SPILLS
CHICAGO	S111897261		11236 TORRENCE AVE		SPILLS
CHICAGO	S111891610		122201 TORRENCE		SPILLS
CHICAGO	S111903957		11236 TORRENCE AVE		SPILLS
CHICAGO	S111902710		11236 TORRENCE AVE		SPILLS
CHICAGO	S111901179		11236 TORRENCE AVE		SPILLS
CHICAGO	S111901455		11236 TORRENCE AVE		SPILLS
CHICAGO	S111909764		11236 S TORRENCE		SPILLS
CHICAGO	S111913519		13327 S TORRENCE YARD		SPILLS
CHICAGO	S111901781		11236 TORRENCE AVE		SPILLS
CHICAGO	S111902104		11236 TORRENCE AVE		SPILLS
CHICAGO	S111900766		11236 TORRENCE AVE		SPILLS
CHICAGO	S111898746		11236 TORRENCE AVE		SPILLS
CHICAGO	S111889481		13000 S TORRENCE		SPILLS
CHICAGO	S111896050		11236 S TORRENCE		SPILLS
CHICAGO	S111902798		11236 TORRENCE AVE		SPILLS
CHICAGO	S111905729		11236 TORRENCE AVE		SPILLS
CHICAGO	S111895349		11236 TORRENCE AVE		SPILLS
CHICAGO	S111906758		10050 S TORRENCE		SPILLS
CHICAGO	S111911510		TORRENCE AVENUE ABOUT 111TH ST		SPILLS
CHICAGO	S111899515		2620 W TOUCHY AVE		SPILLS
CHICAGO	S111877417		11601 W TOUGHY AVE		SPILLS
CHICAGO	S111890367		6401 W TOUGHY AVE		SPILLS
CHICAGO	S111883888		TOUHEY & WESTERN		SPILLS
CHICAGO	S111887307		11601 W TOUHY AVE		SPILLS
CHICAGO	S111888456		11601 TOUHY OHARE AIRPORT		SPILLS
CHICAGO	S111898642		3514 W TOUHY		SPILLS
CHICAGO	S111911183		TOUHY AVE & MOUNT PROSPECT RD HANGER		SPILLS
CHICAGO	S111883440		11601 W TOUHY OHARE INT AIRPORT		SPILLS
CHICAGO	S111893683		11601 W TOUHY AVE		SPILLS
CHICAGO	S111881647		7706 W TOUHY		SPILLS
CHICAGO	S111882443		11601 W TOUHY		SPILLS
CHICAGO	S111889117		6000 W TOUHY		SPILLS
CHICAGO	S111914080		TOUHY & PROSPECT ST		SPILLS
CHICAGO	S111900922		11601 W TOUHY AVE		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S108480172		OF TOUHY AVE		SPILLS
CHICAGO	2000519233	TRACK 5	TRACK 5	0	ERNS
CHICAGO	2000544477	TRACKS	TRACKS	0	ERNS
CHICAGO	2001555601	TRAIN DERAILMENT	TRAIN DERAILMENT	0	ERNS
CHICAGO	S111891925		4343 S TRIPP		SPILLS
CHICAGO	S111875554		3030 N TRIPP		SPILLS
CHICAGO	S111896507		2851 S TROY		SPILLS
CHICAGO	S111905070		2100 S TROY		SPILLS
CHICAGO	S111905907		3836 N TROY		SPILLS
CHICAGO	S111919974		2849 S TROY		SPILLS
CHICAGO	S111883683		2727 S TROY		SPILLS
CHICAGO	S111892140		2431 S TROY		SPILLS
CHICAGO	S111914562		2141 S TROY		SPILLS
CHICAGO	S108047160		N TRUCK IS		SPILLS
CHICAGO	S111903578		401 N TRUMBULL		SPILLS
CHICAGO	S111886937		4100 S UN		SPILLS
CHICAGO	S111903107		4300 S UN		SPILLS
CHICAGO	S111899240		360 N UN		SPILLS
CHICAGO	S111925742		3700 S UN		SPILLS
CHICAGO	S111925743		3700 S UN		SPILLS
CHICAGO	S111892924		5000 S UN		SPILLS
CHICAGO	S111908824		2205 S UN		SPILLS
CHICAGO	94364292	UNDER NEATH THE BRIDGE AT MADISON AVE IN THE CHICAGO RIVER	UNDER NEATH THE BRIDGE AT MADISON AVE IN THE CHICAGO RIVER		ERNS
CHICAGO	1012172077	BOYCE PARK	UNION AVE BETWEEN 42ND & ROOT STREETS		US BROWNFIELDS
CHICAGO	S109550607		UNION AVE		SPILLS
CHICAGO	S111899041		360 N UNION ST		SPILLS
CHICAGO	S111889204		UNITED AIRLINES & KITCHEN OHARE AIRPORT		SPILLS
CHICAGO	91201187	UNITED AIRLINES OHARE TERMINAL NO. 1	UNITED AIRLINES OHARE TERMINAL NO. 1		ERNS
CHICAGO	S111925507		7122 UNIVERSITY		SPILLS
CHICAGO	S108047843		UNKNOWN		SPILLS
CHICAGO	S108047836		UNKNOWN		SPILLS
CHICAGO	S108047834		UNKNOWN		SPILLS
CHICAGO	S108047832		UNKNOWN		SPILLS
CHICAGO	S108047830		UNKNOWN		SPILLS
CHICAGO	S108047828		UNKNOWN		SPILLS
CHICAGO	S108047825		UNKNOWN		SPILLS
CHICAGO	S108047813		UNKNOWN		SPILLS
CHICAGO	S108047808		UNKNOWN		SPILLS
CHICAGO	S108047803		UNKNOWN		SPILLS
CHICAGO	S108047795		UNKNOWN		SPILLS
CHICAGO	S108047794		UNKNOWN		SPILLS
CHICAGO	S108047793		UNKNOWN		SPILLS
CHICAGO	S108047600		UNKNOWN		SPILLS
CHICAGO	S109700127		UNKNOWN		SPILLS
CHICAGO	S109167215		UNKNOWN		SPILLS
CHICAGO	S108047820		UNKNOWN		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111887120		UNKNOWN		SPILLS
CHICAGO	S111911935		UNKNOWN		SPILLS
CHICAGO	S111882598		UNKNOWN		SPILLS
CHICAGO	S111905044		UNKNOWN		SPILLS
CHICAGO	S111883280		UNKNOWN		SPILLS
CHICAGO	S111912652		UNKNOWN		SPILLS
CHICAGO	S111879931		URBAN AREA		SPILLS
CHICAGO	91226485	USAFR AND AIR GUARD BASE O'HARE AIRPORT BLDG NO.4	USAFR AND AIR GUARD BASE O'HARE AIRPORT BLDG NO.4		ERNS
CHICAGO	8857978	VACANT AREA BET.POLK & TAYLOR E OF CANAL	VACANT AREA BET.POLK & TAYLOR E OF CANAL		ERNS
CHICAGO	S111908778		VAN BUREN & WABASH		SPILLS
CHICAGO	S111896178		9700 S VAN VLISSIGEN		SPILLS
CHICAGO	S111880063		1014 W VAN BUREN		SPILLS
CHICAGO	S111879524		2630 W VANBURAN		SPILLS
CHICAGO	S111888140		VANBUREN & ASHLAND		SPILLS
CHICAGO	S111876564		1030 W VANBUREN		SPILLS
CHICAGO	S111911975		71 W VANBUREN ST		SPILLS
CHICAGO	S111911681		9431 S VERNON		SPILLS
CHICAGO	S109699841		10000 VESSIE COLEMAN DR		SPILLS
CHICAGO	S111925006		10 000 VESSIE COLEMAN DR		SPILLS
CHICAGO	2000532134	VICINITY OF 49TH	VICINITY OF 49TH	0	ERNS
CHICAGO	S111900909		9858 S VINCENNES ST		SPILLS
CHICAGO	S111906387		1201 S VINCENNES		SPILLS
CHICAGO	S111881359		7801 S VINCENNES		SPILLS
CHICAGO	S111905191		11816 S VINCENNES		SPILLS
CHICAGO	S111888766		11163 S VINCENNES		SPILLS
CHICAGO	S111880752		7114 VINCENNES AVE		SPILLS
CHICAGO	S111915029		8654 S VINCENNES		SPILLS
CHICAGO	S111893309		7936 S VINCENNES		SPILLS
CHICAGO	S111897959		10658 S VINCENNES		SPILLS
CHICAGO	S111897844		10658 S VINCENNES		SPILLS
CHICAGO	S111876993		VINCENTVILLE YARDS		SPILLS
CHICAGO	S111899176		9906 S VINNCENNES AVE		SPILLS
CHICAGO	S111890990		4764 N VIRGINIA		SPILLS
CHICAGO	S111892224		5 W		SPILLS
CHICAGO	S111880018		1914 16 W IRVING PARK RD		SPILLS
CHICAGO	S111889328		2155 WABANSIA		SPILLS
CHICAGO	S111911181		2255 W WABANSIA		SPILLS
CHICAGO	S111894579		1843 W WABANSIA ST		SPILLS
CHICAGO	S111877892		2213 W WABANSIA		SPILLS
CHICAGO	S111893375		1401 W WABANSIA		SPILLS
CHICAGO	S111887893		1220 WABASH		SPILLS
CHICAGO	S111884984		6215 S WABASH		SPILLS
CHICAGO	S111887493		137 N WABASH		SPILLS
CHICAGO	S111896665		218 S WABASH		SPILLS
CHICAGO	S111913362		9402 S WABASH		SPILLS
CHICAGO	S111906459		5100 S WABASH		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111927389		WABASH AVE AND CHICAGO RIV		SPILLS
CHICAGO	S111927380		4654 S WABASH		SPILLS
CHICAGO	S111913446		8823 S WABASH		SPILLS
CHICAGO	S111901423		1515 WABASH		SPILLS
CHICAGO	S111897239		2705 S WABASH		SPILLS
CHICAGO	S111902448		4256 S WABASH		SPILLS
CHICAGO	S111883759		1608 S WABASH		SPILLS
CHICAGO	S111898104		1415 S WABASH ST		SPILLS
CHICAGO	S111876072		1758 S WABASH		SPILLS
CHICAGO	S111914807		600 S WABASH		SPILLS
CHICAGO	S111893632		219 S WABASH		SPILLS
CHICAGO	S111878563		2111 S WABASH		SPILLS
CHICAGO	2000521948	WABASH YARD	WABASH YARD	0	ERNS
CHICAGO	S111885179		20 N WACKER		SPILLS
CHICAGO	S111890261		311 S WACKER		SPILLS
CHICAGO	S111900757		2204 S WALBASH AVE		SPILLS
CHICAGO	S111885136		411 N WALCOTT		SPILLS
CHICAGO	S111910247		1600 S WALCOTT ST		SPILLS
CHICAGO	S111908808		9952 WALDON PKWY		SPILLS
CHICAGO	92293814	WEST WALL OF TURNING BASIN	WEST WALL OF TURNING BASIN		ERNS
CHICAGO	91236316	WEST WALL OF BURNHAM HARBOR	WEST WALL OF BURNHAM HARBOR		ERNS
CHICAGO	S111882205		8201 S WALLACE		SPILLS
CHICAGO	S111891305		4500 S WALLACE		SPILLS
CHICAGO	S111901230		8201 S WALLACE AVE		SPILLS
CHICAGO	S111892599		2330 S WALLACE		SPILLS
CHICAGO	98434467	8201 SOUTH WALLAS AVE	8201 SOUTH WALLAS AVE		ERNS
CHICAGO	S111897291		2234 W WALNUT		SPILLS
CHICAGO	S111894595		2000 W WALNUT		SPILLS
CHICAGO	S111905779		2332 W WALNUT		SPILLS
CHICAGO	2004733570	140 WALTON ST	140 WALTON ST		ERNS
CHICAGO	S111887409		163 E WALTON		SPILLS
CHICAGO	S111883863		315 W WALTON		SPILLS
CHICAGO	S111881957		1322 W WALTON		SPILLS
CHICAGO	S111877252		3144 W WALTON		SPILLS
CHICAGO	S111913617		4820 W WARNER		SPILLS
CHICAGO	2001554430	WARREN ST	WARREN ST	0	ERNS
CHICAGO	S110613587		1712 W WARREN		SPILLS
CHICAGO	2010951565	1712 WEST WARREN ST.	1712 W WARREN ST		ERNS
CHICAGO	S111895840		1621 W WASHBURN ST		SPILLS
CHICAGO	S111910800		221 N WASHENAW AVE		SPILLS
CHICAGO	94378898	WASHINGTON ST BRIDGE	WASHINGTON ST BRIDGE		ERNS
CHICAGO	S111886202		4353 W WASHINGTON		SPILLS
CHICAGO	S111885312		651 W WASHINGTON		SPILLS
CHICAGO	S111896609		915 W WASHINGTON		SPILLS
CHICAGO	S111890212		55 E WASHINGTON		SPILLS
CHICAGO	S111889890		2627 WASHINGTON BLVD		SPILLS
CHICAGO	S111896149		1145 W WASHINGTON		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111883294		1045 W WASHINGTON		SPILLS
CHICAGO	S111920406		740 W WASHINGTON		SPILLS
CHICAGO	S111914841		909 WASHINGTON ST		SPILLS
CHICAGO	S111927892		1605 N WASHINGTON AVE		SPILLS
CHICAGO	S111927788		1245 W WASHINGTON		SPILLS
CHICAGO	S111883491		1304 W WASHINGTON		SPILLS
CHICAGO	S111877107		735 S WASHTENAW		SPILLS
CHICAGO	S111926670		1260 S WASHTENAW		SPILLS
CHICAGO	S111896441		5802 N WASHTENAW		SPILLS
CHICAGO	S111893809		3250 N WASHTENAW		SPILLS
CHICAGO	S111900082		801 S WASHTENAW		SPILLS
CHICAGO	S111900933		3724 S WASHTENAW		SPILLS
CHICAGO	S111894331		3250 N WASHTENAW		SPILLS
CHICAGO	92264733	40W SOUTH WATER MARKET	40W SOUTH WATER MARKET		ERNS
CHICAGO	98434885	WATER AND SOME KIND OF CHEMICALS	WATER AND SOME KIND OF CHEMICALS		ERNS
CHICAGO	S111887555		23 S WATER MARKET		SPILLS
CHICAGO	S111905413		445 E WATER ST		SPILLS
CHICAGO	90180221	3210 WATLING PLANT 3	3210 WATLING PLANT 3		ERNS
CHICAGO	S111911093		2255 W WAVANSIA		SPILLS
CHICAGO	S111879675		2510 N WAYNE		SPILLS
CHICAGO	S109092813		WB		SPILLS
CHICAGO	S111896503		1334 W WEBSTER		SPILLS
CHICAGO	S111890715		1471 W WEBSTER		SPILLS
CHICAGO	S111886989		911 WEED ST		SPILLS
CHICAGO	S111900937		1001 W WEED		SPILLS
CHICAGO	94355692	WELL ST BRIDGE	WELL ST BRIDGE		ERNS
CHICAGO	2006819150	WELLER AND LAKE STREETS	WELLER AND LAKE STREETS		ERNS
CHICAGO	2008866609	WELLINGTON AVE.	WELLINGTON AVE.		ERNS
CHICAGO	S111879189		1701 W WELLINGTON		SPILLS
CHICAGO	2000671191	H WELLS ST	H WELLS ST		ERNS
CHICAGO	S108669706		WENTWORTH AVE & CERMACK		SPILLS
CHICAGO	S111888398		6550 S WENTWORTH		SPILLS
CHICAGO	S111881887		4600 S WENTWORTH		SPILLS
CHICAGO	S111891981		1800 S WENTWORTH		SPILLS
CHICAGO	S111882078		1934 S WENTWORTH		SPILLS
CHICAGO	S111906575		7626 S WENTWORTH ST		SPILLS
CHICAGO	S111902013		6601 S WENTWORTH		SPILLS
CHICAGO	S111878620		6543 S WENTWORTH		SPILLS
CHICAGO	S108045271		10258 S WEST AVE		SPILLS
CHICAGO	2005616447	600 WEST	600 WEST		ERNS
CHICAGO	S111879781		211 S WEST HILL ST		SPILLS
CHICAGO	S108045996		290 WESTBOUND		SPILLS
CHICAGO	94391467	I-290 WESTBOUND/EAST OF ASHLAND AVE	I-290 WESTBOUND/EAST OF ASHLAND AVE		ERNS
CHICAGO	S111898397		4005 W WESTEND		SPILLS
CHICAGO	S111879285		11030 S WESTER AVE		SPILLS
CHICAGO	S108046688		7600 WESTERN ST		SPILLS
CHICAGO	93331395	WESTERN AVE BETWEEN 26TH AND 31ST STS AT THE RAIL	WESTERN AVE BETWEEN 26TH AND 31ST STS AT THE RAIL		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2002593093	1400 SOUTH WESTERN BLVD	1400 SOUTH WESTERN BLVD	0	ERNS
CHICAGO	974084921	WESTERN AVE. RAILYARD 2741 WEST GRAND	WESTERN AVE. RAILYARD 2741 WEST GRAND		ERNS
CHICAGO	974084920	WESTERN AVE. RAILYARD 2741 WEST GRAND	WESTERN AVE. RAILYARD 2741 WEST GRAND		ERNS
CHICAGO	2009909153	WESTERN AVENUE	WESTERN AVENUE		ERNS
CHICAGO	2008909153	WESTERN AVENUE	WESTERN AVENUE		ERNS
CHICAGO	2008877190	WESTERN STATION	WESTERN STATION		ERNS
CHICAGO	S110824846		5102 S WESTERN		SPILLS
CHICAGO	2006784912	7600 WESTERN ST.	7600 WESTERN ST.		ERNS
CHICAGO	S111887275		1414 S WESTERN		SPILLS
CHICAGO	S111886759		6150 N WESTERN		SPILLS
CHICAGO	S111913491		WESTERN & ROCKWELL		SPILLS
CHICAGO	S111909338		1425 S WESTERN ST		SPILLS
CHICAGO	S111922484		2072 N WESTERN		SPILLS
CHICAGO	S111890955		6455 S WESTERN		SPILLS
CHICAGO	S111905914		2801 N WESTERN		SPILLS
CHICAGO	S111884545		7740 WESTERN AVE		SPILLS
CHICAGO	S111918691		WESTERN AVE & SW HWY LANDERS INTERMODAL YARD		SPILLS
CHICAGO	S111899511		8659 WESTERN		SPILLS
CHICAGO	S111914197		6515 WESTERN AVE		SPILLS
CHICAGO	S111918955		14625 S WESTERN		SPILLS
CHICAGO	S111918631		2133 N WESTERN		SPILLS
CHICAGO	S111880985		7900 S WESTERN		SPILLS
CHICAGO	S111894411		3200 S WESTERN		SPILLS
CHICAGO	S111898374		3223 S WESTERN		SPILLS
CHICAGO	S111915386		225 N WESTERN AREA		SPILLS
CHICAGO	S111906762		WESTERN & IRVING PARK STS		SPILLS
CHICAGO	S111903771		WESTERN AVE		SPILLS
CHICAGO	S111906184		WESTERN AVE		SPILLS
CHICAGO	S111900618		4346 N WESTERN		SPILLS
CHICAGO	90157530	11044 SOUTH WESTERN AVE IN AN ALLEY TO THE WEST OF ABOVE ADD	11044 SOUTH WESTERN AVE IN AN ALLEY TO THE WEST OF ABOVE ADD		ERNS
CHICAGO	2002593045	1400 SOUTH WESTERN BLVD	1400 SOUTH WESTERN BLVD	0	ERNS
CHICAGO	2011991097		7748 WESTGLENLAKE AVE		ERNS
CHICAGO	2011993259		WESTMONT		ERNS
CHICAGO	99610647	1425 SOUTH WESTON GLOBAL YARD	1425 SOUTH WESTON GLOBAL YARD		ERNS
CHICAGO	S111903934		1425 S WESTON		SPILLS
CHICAGO	S111893554		3943 N WHIPPLE		SPILLS
CHICAGO	S111912437		1745 N WHIPPLE		SPILLS
CHICAGO	S111895905		319 N WHIPPLE		SPILLS
CHICAGO	S111884226		319 N WHIPPLE		SPILLS
CHICAGO	S111890404		4801 S WHIPPLE		SPILLS
CHICAGO	S108480121		BP WHITTING FACILITY		SPILLS
CHICAGO	2010938096	5500 N. WILCOCK	5500 N WILCOCK		ERNS
CHICAGO	2009916797	3937 WILCOTT ROAD	3937 WILCOTT ROAD		ERNS
CHICAGO	S110363742		5500 N WILCOX		SPILLS
CHICAGO	S111910988		4219 W WILCOX		SPILLS
CHICAGO	S111909507		1754 N WILMOT		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	2004743433	WILSON ST AND MAIN	WILSON ST AND MAIN		ERNS
CHICAGO	2005632034	105 W WILSON STREET	105 W WILSON ST		ERNS
CHICAGO	S111908769		2751 W WILSON CHICAGO RIV		SPILLS
CHICAGO	S111900202		4808 WILSON AVE		SPILLS
CHICAGO	S111926870		4850 W WILSON		SPILLS
CHICAGO	S111899857		931 W WILSON		SPILLS
CHICAGO	S111893367		OF WILSON AVE		SPILLS
CHICAGO	S111901526		1915 N WINCHESTER		SPILLS
CHICAGO	S111882930		4836 WINCHESTER AVE		SPILLS
CHICAGO	S111897095		1610 N WINCHESTER		SPILLS
CHICAGO	S111891114		1742 N WINCHESTER		SPILLS
CHICAGO	S111894446		8804 S WINCHESTER		SPILLS
CHICAGO	S111880578		4550 N WINCHESTER		SPILLS
CHICAGO	S111919386		7372 N WINCHESTER		SPILLS
CHICAGO	S111894899		1276 WINFIELD MOODY MED CTR N		SPILLS
CHICAGO	S111899923		1801 W WINNEMAC		SPILLS
CHICAGO	S111915710		4826 W WINNEMAC ST		SPILLS
CHICAGO	S108046362		4822 W WINNEMACK		SPILLS
CHICAGO	S111885364		940 W WINONA		SPILLS
CHICAGO	S111881205		1436 W WINONA		SPILLS
CHICAGO	S111887251		4949 S WINTHROP		SPILLS
CHICAGO	S111897777		5934 N WINTHROP		SPILLS
CHICAGO	S111877851		5900 N WINTHROP		SPILLS
CHICAGO	S111877012		5900 WINTHROP		SPILLS
CHICAGO	90179382	WISCONSON STEEL WORK SITE 106TH ST. AND TORRENCE AVE.	WISCONSON STEEL WORK SITE 106TH ST. AND TORRENCE AVE.		ERNS
CHICAGO	874879	WITCO CHEMICAL CO., 6200 WEST 51ST ST	WITCO CHEMICAL CO., 6200 WEST 51ST ST		ERNS
CHICAGO	S111902182		800 S WLS		SPILLS
CHICAGO	S111924451		800 SOUTH WLS		SPILLS
CHICAGO	S111921021		4027 S WLS		SPILLS
CHICAGO	S111878623		5454 N WOLCOT		SPILLS
CHICAGO	S111885606		2434 S WOLCOTT		SPILLS
CHICAGO	S111890696		4331 N WOLCOTT		SPILLS
CHICAGO	S111913579		919 N WOLCOTT		SPILLS
CHICAGO	S111904020		5435 N WOLCOTT		SPILLS
CHICAGO	S111906995		350 N WOLCOTT ST		SPILLS
CHICAGO	S111903004		3210 S WOLCOTT		SPILLS
CHICAGO	S111877048		2764 N WOLCOTT		SPILLS
CHICAGO	S111881061		5555 N WOLCOTT		SPILLS
CHICAGO	S111897894		1378 N WOLCOTT ST		SPILLS
CHICAGO	S111911375		915 N WOLCOTT		SPILLS
CHICAGO	S111918649		WOLF CRK & PROVISO RD		SPILLS
CHICAGO	S111903989		2305 W WOLFRAM		SPILLS
CHICAGO	S111906327		2706 N WOLPOTT		SPILLS
CHICAGO	S110122336		WOOD ST & WASHINGTON ST		SPILLS
CHICAGO	S111912323		6316 S WOOD		SPILLS
CHICAGO	S111893096		1824 S WOOD RD		SPILLS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S111922733		WOOD ST & ASHLAND AVE		SPILLS
CHICAGO	S111908075		2501 E WOOD		SPILLS
CHICAGO	S111885909		7700 S WOODLAWN		SPILLS
CHICAGO	S111906005		7345 S WOODLAWN		SPILLS
CHICAGO	S111908913		7905 S WOODLAWN		SPILLS
CHICAGO	S109366389		3211 S WOODS ST		SPILLS
CHICAGO	S111878366		833 S WOODS ST		SPILLS
CHICAGO	S110613575		WRIGHTWOOD & COSTNER		SPILLS
CHICAGO	S111888057		4132 W WRIGHTWOOD		SPILLS
CHICAGO	S111926374		WRIGHTWOOD		SPILLS
CHICAGO	S111910994		1 S YARD1400WESTERN AVE		SPILLS
CHICAGO	S111927845		1 YARD1425WESTERN AVE		SPILLS
CHICAGO	S111926647		3 N YORK		SPILLS
CHICAGO	S111904229		1819 YORK RD		SPILLS
CHICAGO	S111890130		6825 N YORK RD		SPILLS
CHICAGO	S110685334		3 N YORK		SPILLS
CHICAGO	S109366324		10510 W ZEMKE RD		SPILLS
CHICAGO	S111924380		10510 W ZEMKE RD		SPILLS
COOK COUNTY	2011981404	MP 1.33 ABERDEEN ST	MP 1.33 ABERDEEN ST		ERNS
COOK COUNTY	2011973076	2040 EAST 106TH ST	2040 EAST 106TH ST		ERNS
COOK COUNTY	2010946140	11TH AND CANAL	11TH AND CANAL		ERNS
COOK COUNTY	2011972549	5601 W 26TH ST	5601 W 26TH ST		ERNS
COOK COUNTY	2011972669	MP 29.8 200 YARDS WEST OF BURNHAM AVE	MP 29.8 200 YARDS WEST OF BURNHAM AVE		ERNS
COOK COUNTY	2011980248	MP 6.1	MP 6.1		ERNS
COOK COUNTY	S111927636		8500 W. 68TH ST.		SPILLS
COOK COUNTY	2011980370	8500 W. 68TH STREET	8500 W. 68TH STREET		ERNS
COOK COUNTY	2011974764	7300 WEST 71ST ST	7300 WEST 71ST ST		ERNS
COOK COUNTY	2011972239	7351 SOUTH 78TH AVE	7351 SOUTH 78TH AVE		ERNS
COOK COUNTY	2010960150	95TH AND VINCENNES	95TH AND VINCENNES		ERNS
COOK COUNTY	2010943534	ON A BEARING OF 020 DEG (NNE)	ON A BEARING OF 020 DEG (NNE)		ERNS
COOK COUNTY	2011973021	4551 WEST ADAMS BLVD	4551 WEST ADAMS BLVD		ERNS
COOK COUNTY	2008915423	2436 ADDISON STREET	2436 ADDISON STREET		ERNS
COOK COUNTY	2011977407	87 AND LAGRANGE ST.	87 AND LAGRANGE ST.		ERNS
COOK COUNTY	2011972225	C AND M SUBDIVISION MP B 0.0 TO B 2.9	C AND M SUBDIVISION MP B 0.0 TO B 2.9		ERNS
COOK COUNTY	2011979907	ASHLAND AVE YARD NONE	ASHLAND AVE YARD NONE		ERNS
COOK COUNTY	2011972006	BARR YARD MILE POST DD2 SUBDIVISION CHICAGO	BARR YARD MILE POST DD2 SUBDIVISION CHICAGO		ERNS
COOK COUNTY	2011978847	BEHIND DOCKSIDE STEEL 11828 SOUTH STONY ISLAND AVE.	BEHIND DOCKSIDE STEEL 11828 SOUTH STONY ISLAND AVE.		ERNS
COOK COUNTY	2011973396	BELMONT AND SHEFFIELD ROAD	BELMONT AND SHEFFIELD ROAD		ERNS
COOK COUNTY	2011977640	BENSENVILLE RAILYARD. 11306 FRANKLIN AVE.	BENSENVILLE RAILYARD. 11306 FRANKLIN AVE.		ERNS
COOK COUNTY	2011974200	BENSONVILLE INTERMODEL / ENTRANCE 4 10800 FRANKLIN AVE	BENSONVILLE INTERMODEL / ENTRANCE 4 10800 FRANKLIN AVE		ERNS
COOK COUNTY	2011981499	BENSONVILLE YARD	BENSONVILLE YARD		ERNS
COOK COUNTY	2009899057	BETWEEN MILE POST CD 520	BETWEEN MILE POST CD 520		ERNS
COOK COUNTY	2008899057	BETWEEN MILE POST CD 520	BETWEEN MILE POST CD 520		ERNS
COOK COUNTY	2011974035	BETWEEN RIVER ROAD AND PEARSON ST. MILEPOST: 16.7	BETWEEN RIVER ROAD AND PEARSON ST. MILEPOST: 16.7		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COOK COUNTY	S111927088		BURNHAM AVE. & BRAINERD AVE		SPILLS
COOK COUNTY	2011972659	BURNHAM AVE, MP 29.8	BURNHAM AVE, MP 29.8		ERNS
COOK COUNTY	2011980118	BURNHAM HARBOR //UNKNOWN SHEEN INCIDENT SLIP P54	BURNHAM HARBOR //UNKNOWN SHEEN INCIDENT SLIP P54		ERNS
COOK COUNTY	2011981381	CARONDELET AVE	CARONDELET AVE		ERNS
COOK COUNTY	2011977694	MP; CD515, RAILYARD	MP; CD515, RAILYARD		ERNS
COOK COUNTY	2011975560	CHATHAM, IL CHATHAM STREET	CHATHAM, IL CHATHAM STREET		ERNS
COOK COUNTY	2009899072	CHICAGO UNION STATION	CHICAGO UNION STATION		ERNS
COOK COUNTY	2009906666	CHICAGO RIVER	CHICAGO RIVER		ERNS
COOK COUNTY	2008899072	CHICAGO UNION STATION	CHICAGO UNION STATION		ERNS
COOK COUNTY	2008906666	CHICAGO RIVER	CHICAGO RIVER		ERNS
COOK COUNTY	2010954447	CHICAGO	CHICAGO		ERNS
COOK COUNTY	S111927095		5700 S CICERO AVE (MIDWAY AIRPORT)		SPILLS
COOK COUNTY	2011977864	CLOSE TO A BUSINESS 13800 S. HALSTEAD	CLOSE TO A BUSINESS 13800 S. HALSTEAD		ERNS
COOK COUNTY	2011981839		DEERBORN SUBDIVISION		ERNS
COOK COUNTY	2011979504	FOOD PROCESSING PLANT 945 WEST 38TH ST.	FOOD PROCESSING PLANT 945 WEST 38TH ST.		ERNS
COOK COUNTY	2011977876	FOOD PROCESSOR 2816 S KILBORN AVE	FOOD PROCESSOR 2816 S KILBORN AVE		ERNS
COOK COUNTY	2011976365	GRADE CROSSING THORNTON RD.	GRADE CROSSING THORNTON RD.		ERNS
COOK COUNTY	2011978150	4805 SOUTH HARLEM AVE	4805 SOUTH HARLEM AVE		ERNS
COOK COUNTY	2011980065	AT ICE HOUSE SPUR TRACK NONE	AT ICE HOUSE SPUR TRACK NONE		ERNS
COOK COUNTY	2011980749	INTERSECTION OF 175TH ST AND COMMUNITY ST	INTERSECTION OF 175TH ST AND COMMUNITY ST		ERNS
COOK COUNTY	2011977731	LAKE MICHIGAN WILLAMETTE PUMPING STATION NORTHSHORE CHANNEL	LAKE MICHIGAN WILLAMETTE PUMPING STATION NORTHSHORE CHANNEL		ERNS
COOK COUNTY	2011975662	301 WEST LAKE ST	301 WEST LAKE ST		ERNS
COOK COUNTY	2011979313	LANDERS RAIL YARD (MILEPOST: 09514 / DEARBORN DIVISION) 7540	LANDERS RAIL YARD (MILEPOST: 09514 / DEARBORN DIVISION) 7540		ERNS
COOK COUNTY	2011974989	MAIN STREET	MAIN STREET		ERNS
COOK COUNTY	2011979082	200 N MANNHEIM	200 N MANNHEIM		ERNS
COOK COUNTY	2009919045	MILE 12.2	MILE 12.2		ERNS
COOK COUNTY	2009898297	MILE POST 16.86	MILE POST 16.86		ERNS
COOK COUNTY	2008898297	MILE POST 16.86	MILE POST 16.86		ERNS
COOK COUNTY	2010933409	MILE POST DC27 NONE	MILE POST DC27 NONE		ERNS
COOK COUNTY	2011980032	MILE POST DC9.9	MILE POST DC9.9		ERNS
COOK COUNTY	2011972397	MILEPOST 6.5 NONE	MILEPOST 6.5 NONE		ERNS
COOK COUNTY	2011976175	MOUNT PROSPECT ROAD AND U.S. 14	MOUNT PROSPECT ROAD AND U.S. 14		ERNS
COOK COUNTY	2010937358	NONE	NONE		ERNS
COOK COUNTY	2010944507	O'BRIEN LOCKS SG 226.0	O'BRIEN LOCKS SG 226.0		ERNS
COOK COUNTY	2011979226	O'HARE AIRPORT	O'HARE AIRPORT		ERNS
COOK COUNTY	2011974979	NORTH OF 67TH STREET ON MAIN 2 6630 SOUTH KENTON	NORTH OF 67TH STREET ON MAIN 2 6630 SOUTH KENTON		ERNS
COOK COUNTY	2008883971	OFF OF LAKE STREET	OFF OF LAKE STREET		ERNS
COOK COUNTY	2011979830	OGDEN SLIP, WEST END, CHICAGO, ILLINOIS 455 E ILLINOIS ST SU	OGDEN SLIP, WEST END, CHICAGO, ILLINOIS 455 E ILLINOIS ST SU		ERNS
COOK COUNTY	S111927768		13700 PERRY AVE.		SPILLS
COOK COUNTY	2011974832	17401 SO POLASKI	17401 SO POLASKI		ERNS
COOK COUNTY	2011980534	PORT OF CHICAGO 2150 STONEY ISLAND AVE. CHICAGO	PORT OF CHICAGO 2150 STONEY ISLAND AVE. CHICAGO		ERNS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COOK COUNTY	2011981629	5226 POTTAWATOMIE	5226 POTTAWATOMIE		ERNS
COOK COUNTY	2011980221	PROVISO RAIL YARD 5050 WEST LAKE ST	PROVISO RAIL YARD 5050 WEST LAKE ST		ERNS
COOK COUNTY	2011982154		3500 RACINE		ERNS
COOK COUNTY	2011974559	1111 SMITH ST	1111 SMITH ST		ERNS
COOK COUNTY	2008886889	STATE ST.	STATE ST.		ERNS
COOK COUNTY	2008870404	STATE ROUTE 53 N	STATE ROUTE 53 N		ERNS
COOK COUNTY	2011973999	STORM DRAIN 120 EMERALD DRIVE	STORM DRAIN 120 EMERALD DRIVE		ERNS
COOK COUNTY	2011973706	SUB: CHICAGO ON BNSF MILE 9.6	SUB: CHICAGO ON BNSF MILE 9.6		ERNS
COOK COUNTY	2006799783	TEST	TEST		ERNS
COOK COUNTY	2011976311	THE SOUTH EAST CORNER OF CHICAGO AVE AND DAVIS STREET NONE	THE SOUTH EAST CORNER OF CHICAGO AVE AND DAVIS STREET NONE		ERNS
COOK COUNTY	2011976259	TORRENCE AVE 130TH ST	TORRENCE AVE 130TH ST		ERNS
COOK COUNTY	2006784297	B3 TRACK	B3 TRACK		ERNS
COOK COUNTY	2011978519	UNION STATION	UNION STATION		ERNS
COOK COUNTY	2011976419	556 WATERS EDGE	556 WATERS EDGE		ERNS
COOK COUNTY	S111927287		1425 S. WESTERN AVE		SPILLS
COOK COUNTY	S111927239		7327 S. WOODLAWN AVE.		SPILLS

Section 4

EPA Waste Code Addendum

SECTION 4 - EPA WASTE CODES

There are no epa codes to report for this search area.

Section 5

Databases Searched and Update Dates

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/30/2012	Source: EPA
Date Data Arrived at EDR: 04/05/2012	Telephone: N/A
Date Made Active in Reports: 05/15/2012	Last EDR Contact: 07/05/2012
Number of Days to Update: 40	Next Scheduled EDR Contact: 10/22/2012
	Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/30/2012	Source: EPA
Date Data Arrived at EDR: 04/05/2012	Telephone: N/A
Date Made Active in Reports: 05/15/2012	Last EDR Contact: 07/05/2012
Number of Days to Update: 40	Next Scheduled EDR Contact: 10/22/2012
	Data Release Frequency: Quarterly

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/27/2011	Source: EPA
Date Data Arrived at EDR: 02/27/2012	Telephone: 703-412-9810
Date Made Active in Reports: 03/12/2012	Last EDR Contact: 07/05/2012
Number of Days to Update: 14	Next Scheduled EDR Contact: 09/10/2012
	Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/28/2011	Source: EPA
Date Data Arrived at EDR: 02/27/2012	Telephone: 703-412-9810
Date Made Active in Reports: 03/12/2012	Last EDR Contact: 07/05/2012
Number of Days to Update: 14	Next Scheduled EDR Contact: 09/10/2012
	Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 08/19/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 132

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/07/2012
Next Scheduled EDR Contact: 11/26/2012
Data Release Frequency: Quarterly

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Quarterly

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/15/2012
Date Data Arrived at EDR: 04/04/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/30/2011
Date Data Arrived at EDR: 12/30/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/11/2012
Next Scheduled EDR Contact: 09/24/2012
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/30/2011
Date Data Arrived at EDR: 12/30/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/11/2012
Next Scheduled EDR Contact: 09/24/2012
Data Release Frequency: Varies

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 04/02/2012
Date Data Arrived at EDR: 04/03/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 72

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 07/02/2012
Next Scheduled EDR Contact: 10/15/2012
Data Release Frequency: Annually

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/27/2011
Date Data Arrived at EDR: 06/27/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 78

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/25/2012
Next Scheduled EDR Contact: 10/08/2012
Data Release Frequency: Semi-Annually

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: 09/10/2012
Data Release Frequency: Biennially

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE AND LOCAL RECORDS

SSU: State Sites Unit Listing
The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

Date of Government Version: 07/10/2012
Date Data Arrived at EDR: 07/12/2012
Date Made Active in Reports: 08/02/2012
Number of Days to Update: 21

Source: Illinois Environmental Protection Agency
Telephone: 217-524-4826
Last EDR Contact: 07/12/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Semi-Annually

LF WMRC: Waste Management & Research Center Landfill Database
The Waste Management & Research Center Landfill Database includes records from the Department of Public Health, Department of Mines & Minerals, Illinois Environmental Protection Agency, State Geological Survey, Northeastern Illinois Planning Commission and Pollution Control Board.

Date of Government Version: 12/31/2001
Date Data Arrived at EDR: 10/06/2006
Date Made Active in Reports: 11/06/2006
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 217-333-8940
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: No Update Planned

SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 12/21/2011
Date Made Active in Reports: 12/23/2011
Number of Days to Update: 2

Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Last EDR Contact: 08/03/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Annually

IL NIPC: Solid Waste Landfill Inventory
Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/1988
Date Data Arrived at EDR: 08/01/1994
Date Made Active in Reports: 08/12/1994
Number of Days to Update: 11

Source: Northeastern Illinois Planning Commission
Telephone: 312-454-0400
Last EDR Contact: 05/23/2006
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LUST: Leaking Underground Storage Tank Sites
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/22/2012
Date Data Arrived at EDR: 05/01/2012
Date Made Active in Reports: 05/15/2012
Number of Days to Update: 14

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6762
Last EDR Contact: 07/31/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Semi-Annually

UST: Underground Storage Tank Facility List
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/01/2012
Date Data Arrived at EDR: 05/01/2012
Date Made Active in Reports: 06/01/2012
Number of Days to Update: 31

Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Last EDR Contact: 07/31/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Quarterly

SPILLS: State spills
A listing of incidents reported to the Office of Emergency Response.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 07/23/2012
Date Made Active in Reports: 07/30/2012
Number of Days to Update: 7

Source: Illinois EPA
Telephone: 217-558-1677
Last EDR Contact: 07/12/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Varies

ENG CONTROLS: Sites with Engineering Controls
Sites using of engineered barriers (e.g., asphalt or concrete paving).

Date of Government Version: 07/20/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 07/30/2012
Number of Days to Update: 6

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 07/24/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Quarterly

Inst Control: Institutional Controls
Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

Date of Government Version: 07/20/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 07/30/2012
Number of Days to Update: 6

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 07/24/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Quarterly

SRP: Site Remediation Program Database
The database identifies the status of all voluntary remediation projects administered through the pre-notice site cleanup program (1989 to 1995) and the site remediation program (1996 to the present).

Date of Government Version: 07/20/2012
Date Data Arrived at EDR: 07/24/2012
Date Made Active in Reports: 07/30/2012
Number of Days to Update: 6

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 07/24/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Semi-Annually

DRYCLEANERS: Illinois Licensed Drycleaners
Any retail drycleaning facility in Illinois must apply for a license through the Illinois Drycleaner Environmental Response Trust Fund. Drycleaner Environmental Response Trust Fund of Illinois.

Date of Government Version: 05/28/2012
Date Data Arrived at EDR: 05/31/2012
Date Made Active in Reports: 06/18/2012
Number of Days to Update: 18

Source: Drycleaner Environmental Response Trust Fund of Illinois
Telephone: 800-765-4041
Last EDR Contact: 05/31/2012
Next Scheduled EDR Contact: 09/10/2012
Data Release Frequency: Varies

BROWNFIELDS: Municipal Brownfields Redevelopment Grant Program Project Descriptions
The Illinois Municipal Brownfields Redevelopment Grant Program (MBRGP) offers grants worth a maximum of $240,000 each to municipalities to assist in site investigation activities, development of cleanup objectives, and performance of cleanup activities. Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment.

Date of Government Version: 06/28/2012
Date Data Arrived at EDR: 06/29/2012
Date Made Active in Reports: 07/27/2012
Number of Days to Update: 28

Source: Illinois Environmental Protection Agency
Telephone: 217-785-3486
Last EDR Contact: 07/26/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

BROWNFIELDS: Redevelopment Assessment Database

The Office of Site Evaluations Redevelopment Assessment database identifies the status of all properties within the State in which the Illinois EPA's Office of Site Evaluation has conducted a municipal Brownfield Redevelopment Assessment.

Date of Government Version: 05/01/2012
Date Data Arrived at EDR: 05/01/2012
Date Made Active in Reports: 05/16/2012
Number of Days to Update: 15

Source: Illinois Environmental Protection Agency
Telephone: 217-524-1658
Last EDR Contact: 07/31/2012
Next Scheduled EDR Contact: 11/12/2012
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/21/2012
Date Data Arrived at EDR: 05/22/2012
Date Made Active in Reports: 05/31/2012
Number of Days to Update: 9

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/22/2012
Next Scheduled EDR Contact: 09/03/2012
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 07/20/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 22

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 10/29/2012
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/01/2012
Date Data Arrived at EDR: 05/09/2012
Date Made Active in Reports: 06/14/2012
Number of Days to Update: 36

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/09/2012
Next Scheduled EDR Contact: 11/19/2012
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 04/27/2012
Date Made Active in Reports: 06/05/2012
Number of Days to Update: 39

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/19/2012
Next Scheduled EDR Contact: 11/05/2012
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/31/2012
Number of Days to Update: 39

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/27/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/15/2011
Number of Days to Update: 27

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 07/16/2012
Next Scheduled EDR Contact: 10/01/2012
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Homes & Centers Listing
Source: Department of Children & Family Services
Telephone: 312-814-4150

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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12000 SOUTH EMERALD
CHICAGO, IL

Inquiry Number:
November 2, 2012

EDR Site Report™

EDR® Environmental Data Resources Inc

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Milford, CT 06461
Toll Free: 800.352.0050
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TABLE OF CONTENTS

The EDR-Site Report™ is a comprehensive presentation of government filings on a facility identified in a search of federal, state and local environmental databases. The report is divided into three sections:

Section 1: Facility Summary . . . . . Page 3

Summary of facility filings including a review of the following areas: waste management, waste disposal, multi-media issues, and Superfund liability.

Section 2: Facility Detail Reports . . . . . Page 4

All available detailed information from databases where sites are identified.

Section 3: Databases and Update Information. . . . . Page 7

Name, source, update dates, contact phone number and description of each of the databases for this report.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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SECTION 1: FACILITY SUMMARY

FACILITY AREA	FACILITY 1 12000 SOUTH EMERALD CHICAGO, IL EDR ID #2003704549
WASTE MANAGEMENT Facility generates hazardous waste (RCRA)	NO
Facility treats, stores, or disposes of hazardous waste on-site (RCRA/TSDF)	NO
Facility has received Notices of Violations (RCRA/VIOL)	NO
Facility has been subject to RCRA administrative actions (RAATS)	NO
Facility has been subject to corrective actions (CORRACTS)	NO
Facility handles PCBs (PADS)	NO
Facility uses radioactive materials (MLTS)	NO
Facility manages registered aboveground storage tanks (AST)	NO
Facility manages registered underground storage tanks (UST)	NO
Facility has reported leaking underground storage tank incidents (LUST)	NO
Facility has reported emergency releases to the soil (ERNS)	**YES - p4**
Facility has reported hazardous material incidents to DOT (HMIRS)	NO
WASTE DISPOSAL Facility is a Superfund Site (NPL)	NO
Facility has a known or suspect abandoned, inactive or uncontrolled hazardous waste site (CERCLIS)	NO
Facility has a reported Superfund Lien on it (LIENS)	NO
Facility is listed as a state hazardous waste site (SHWS)	NO
Facility has disposed of solid waste on-site (SWF/LF)	NO
MULTIMEDIA Facility uses toxic chemicals and has notified EPA under SARA Title III, Section 313 (TRIS)	NO
Facility produces pesticides and has notified EPA under Section 7 of FIFRA (SSTS)	NO
Facility manufactures or imports toxic chemicals on the TSCA list (TSCA)	NO
Facility has inspections under FIFRA, TSCA or EPCRA (FTTS)	NO
Facility is listed in EPA's index system (FINDS)	NO
Facility is listed in a county/local unique database (LOCAL)	NO
POTENTIAL SUPERFUND LIABILITY Facility has a list of potentially responsible parties PRP	NO
TOTAL (YES)	1

SECTION 2: FACILITY DETAIL REPORTS

WASTE MANAGEMENT

Facility has reported emergency releases to the soil

DATABASE: Emergency Response Notification System (ERNS)

12000 SOUTH EMERALD
CHICAGO, IL
EDR ID #2003704549

ERNS:

Site ID:	2003704549
Incident cause:	OPERATOR ERROR
Incident desc:	THE CALLER REPORTED RELEASE OF HYDRAULIC OIL FROM TRACTOR WHEN DRIVER HIT FIRE HYDRANT AND PUNCTURED OIL PAN.
Incident type:	MOBILE
Incident date:	20031105
Incident TG:	OCCURRED
Inc location:	Not reported
Incident address:	12000 SOUTH EMERALD CHICAGO, IL
Distance from city:	Not reported
Lat/Long:	0/0
Lat/Long quad:	/
Incident date:	11/05/2003
Township/section/range:	//
WMD flag:	Not reported
Rad flag:	Not reported
Bio flag:	Not reported
Amt material flag:	Not reported
Military:	Not reported
LNG flag:	Not reported
Fire involved:	No
Fire extinguished:	Unknown
Any evacuees:	No
Number of evacs:	Not reported
Who evacuated:	Not reported
Radius of evacuation:	Not reported
Any injuries:	No
Number injured:	Not reported
Number hospitalized:	Not reported
Any fatalities:	No
Any damage:	No
Damage amount:	Not reported
Air corridor desc:	Not reported
Air corridor closed:	Not reported
Water description:	Not reported
Water closed:	No
Water closed time:	Not reported
Road closed:	No
Road closed desc:	Not reported
Road closed time:	Not reported
Closure direction:	Not reported
Major artery:	No
Track closed:	No
Track closed time:	Not reported
Tr. close direction:	Not reported
Track description:	Not reported
Media interest:	NONE
Medium affected:	WATER
Additional medium:	STORM DRAIN
Body of water:	STORM DRAIN
Tributary:	UNKNOWN
Near river:	Not reported
Release secured:	Yes
Est. duration of rel.:	Not reported
Release rate:	Not reported
Rel. rate units:	Not reported
Rel. per units:	Not reported
Remedial action:	CONTRACTOR HAS BEEN HIRED, LAND CLEAN UP COMPLETED, MATERIAL IN WATER IS NON RECOVERABLE
Agency on scene:	Not reported
Other agency:	Not reported
State agency notified:	Not reported
Fed. agency notified:	Not reported
Structure name:	Not reported
Structure type:	Not reported
Struct. operator:	Not reported
Weather:	CLEAR

Air temp:	0
Wind speed:	0
Wind speed unit:	Not reported
Wind direction:	Not reported
Water contaminated:	No
Sheen size:	Not reported
Sheen size units:	Not reported
Sheen color:	Not reported
Sheen direction:	Not reported
Sheen odor:	Not reported
Sheen length:	Not reported
Sheen len. units:	Not reported
Sheen width:	Not reported
Sheen wid. units:	Not reported
Wave condit:	Not reported
Current speed:	0
Current speed units:	Not reported
Current direction:	Not reported
Water temp:	Not reported
Allision:	Not reported
Employees injured:	Not reported
Employee fatalities:	Not reported
Passengers injured:	Not reported
Passenger fatalities:	Not reported
Occupant fatalities:	Not reported
Community impact:	No
Offshore:	No
Addition info:	THE CALLER HAD NO ADDITIONAL INFORMATION.

Aircraft type:	Not reported
Aircraft model:	Not reported
Aircraft ID:	Not reported
Aircraft fuel cap:	Not reported
Capacity units:	Not reported
Fuel onboard:	Not reported
Fuel units:	Not reported
Spot number:	Not reported
AC hanger:	Not reported
AC runway:	Not reported
Mile marker:	Not reported
Building ID:	Not reported
Type fixed obj:	Not reported
Power gen facility:	Unknown
Generation capacity:	Not reported
Fuel type:	Not reported
NPDES:	Not reported
NPDES compliance:	Unknown
Pipe type:	Not reported
DOT regulated:	Unknown
Pipe above:	ABOVE
Exposed underwtr:	No
Pipe covered:	Unknown
Railroad hotline:	Not reported
Grade crossing:	No
Location subdivision:	Not reported
Railroad milepost:	Not reported
Vehicle type:	Not reported
Crossing device:	Not reported
Device operational:	Yes
DOT crossing #:	Not reported
Brakes failed:	No
Tank description:	Not reported
Above ground tank:	ABOVE
Tank regulated:	Unknown
Tank ID:	Not reported
Tank regulated by:	Not reported
Tank capacity:	Not reported
Capacity units:	Not reported
Actual amount:	Not reported
Amount units:	Not reported
Transportable container:	Unknown
Platform rig name:	Not reported
Platform letter:	Not reported
Local area ID:	Not reported
Local block ID:	0
OCSG number:	0
State lease #:	Not reported
Pier dock #:	Not reported
Berth slip #:	Not reported
Initial continuous rel #:	Not reported
Cont. rel permit:	Not reported
Allision:	No
Structure type:	Not reported
Structure:	Not reported
Structure operator:	U

Air bag deployed:	Not reported
Date time normal srvc:	Not reported
Service disruption time:	Not reported
Transit bus flag:	Not reported
Begin date:	Not reported
End date:	Not reported
Change date:	Not reported

Call received date:	20031105
Complete date:	20031105
Call Taker:	AMB7531
Call Type:	INC
Responsible Party:	UNKNOWN
RP telephone:	6516862591
RP tel type:	PRIMARY
RP telephone:	0
RP tel type:	Not reported
Responsible company:	TRANSPORT AMERICA
RC organization type:	PRIVATE ENTERPRISE
PR address:	1715 YANKEE DOODLE ROAD EAGAN, MN
Initial caller:	Not reported
Initial caller tel:	Not reported
Initially reported comp.:	Not reported
On behalf:	Not reported
Source:	TELEPHONE

Spilled material name:	HYDRAULIC OIL
Material CHRIS code:	OHY
Mat. CAS number:	000000-00-0
Material UN #:	Not reported
Amount of spilled mat.:	11
Mat. amount unit:	GALLON(S)
Mat. reached water:	YES
Amount in water:	5
Amount in water units:	GALLON(S)

Involved vehicle #:	TA6397
Trailer #:	Not reported
Vehicle Year:	Not reported
Vehicle make:	Not reported
Vehicle model:	Not reported
Vehicle type:	TRACTOR TRAILER TRUCK
Veh. fuel cap:	Not reported
Cargo capacity:	Not reported
Cargo cap units:	Not reported
Cargo amount:	Not reported
Cargo amount units:	Not reported
HAZMAT:	No
Carrier licensed:	Unknown
Hazmat non-compliance:	Unknown

SECTION 3: DATABASES AND UPDATE DATES

To maintain currency of the following federal, state and local databases, EDR contacts the appropriate government agency on a monthly or quarterly basis as required.

Elapsed ASTM days: Provides confirmation that this report meets or exceeds the 90-day updating requirement of the ASTM standard.

DATABASES FOUND IN THIS REPORT

ERNS: Emergency Response Notification System
Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 04/02/2012
Database Release Frequency: Annually
Date of Last EDR Contact: 10/02/2012
Date of Next Scheduled Update: 01/14/2013

Appendix C
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Appendix S

Water Resources Technical Memorandum

- Final EIS Addendum S, Water Resources Technical Memorandum, July 2022
    - Attachment A, Coordination

Chicago Red Line Extension Project

Water Resources

Final EIS Addendum S

June 2022

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
TranSystems
222 South Riverside Plaza, Suite 610
Chicago, IL 60606

Table of Contents

Section 1 - Summary **1-1**
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-2
3.4 Methods 3-4
Section 4 - Affected Environment **4-1**
4.1 Municipal Water Supply/Wastewater Collection 4-1
4.2 Surface Water 4-1
4.3 Groundwater 4-3
4.4 Water Quality 4-3
4.5 Wetlands 4-3
4.6 Floodplains 4-8
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-1
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4
Figure 3-1: Area of Potential Impact 3-3
Figure 4-1: Waterbodies and Floodplains in the Vicinity of the API 4-2
Figure 4-2: Wetlands Delineated in the API (1 of 2) 4-5
Figure 4-3: Wetlands Delineated in the API (2 of 2) 4-6

Tables

Table 4-1: Documented Wetland Areas 4-4
Table 5-1: Wetland Impact Comparison 5-3

Attachments

Attachment A – Coordination

Abbreviations

AJD	Approved Jurisdictional Determination
API	Area of Potential Impact
CHA	Chicago Housing Authority
CN/MED	Canadian National/Metra Electric District
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
GIS	Geographic Information Systems
HUC	Hydrologic Unit Code
IDNR	Illinois Department of Natural Resources
IEPA	Illinois Environmental Protection Agency
IHB	Indiana Harbor Belt Railroad
MED	Metra Electric District
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NS	Norfolk Southern Railway
NWI	National Wetlands Inventory
RLE	Red Line Extension
TARP	Tunnel and Reservoir Plan
TMLD	Total Maximum Daily Load
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WOTUS	Waters of the United States

Section 1 - Summary

This technical memorandum provides an update on the potential impacts of the Red Line Extension (RLE) Project on water resources, including municipal water supply/wastewater collection, surface water, groundwater, water quality, wetlands, and floodplains in comparison with the Draft Environmental Impact Statement (EIS).

The purpose of the investigation regarding municipal water supply/wastewater collection and surface water, collectively analyzed as drainage impacts, remains the same as described in **Appendix S** of the Draft EIS. The Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative would have the potential to affect stormwater drainage and collection systems. With implementation of mitigation measures, potential impacts related to drainage would not be adverse. Operation of the Red Line following construction of the Preferred Alignment would have no adverse impact on drainage.

The purpose of the investigation regarding groundwater remains the same as described in **Appendix S** of the Draft EIS. The Preferred Alignment would have the potential to affect groundwater through potential dewatering during construction. With implementation of mitigation measures, potential impacts on groundwater would not be adverse. Operation of the Red Line following construction of the Preferred Alignment would have no adverse impact on groundwater.

The purpose of the investigation regarding water quality remains the same as described in **Appendix S** of the Draft EIS. The Preferred Alignment may have a beneficial impact on water quality during operation due to a reduction in automobile trips. There would be a potential for an impact on water quality during construction from erosion and sedimentation. This potential is minor because of the urbanized nature of the corridor combined with development of the RLE Project occurring on or adjacent to impermeable surfaces. With implementation of mitigation measures, potential impacts related to water quality would not be adverse.

The purpose of the investigation regarding wetlands remains the same as described in **Appendix S** of the Draft EIS. The Preferred Alignment would have the potential to affect wetlands by the placement of fill and the discharge of filtered stormwater runoff into wetlands. The total potential impact on wetlands is estimated to be 15.72 acres, compared to 15.34 acres identified in the Draft EIS. With compliance with federal, state, and local regulations regarding wetland impacts, impacts from the Preferred Alignment would not be adverse. The U.S. Army Corps of Engineers (USACE) determined that the area of potential impact (API) does not contain any waterways, wetlands or other areas considered “waters of the United States” under USACE jurisdiction in a letter dated January 19, 2022. The USACE will not require mitigation for implementation of the Preferred

Alignment. Mitigation for temporary construction fill placed in Kensington Marsh will be coordinated with the Metropolitan Water Reclamation District of Greater Chicago (MWRD). The USACE does not object to usage of Kensington Marsh, if usage is implemented as described in the coordination materials. Operation of the Red Line following construction of the Preferred Alignment would have no adverse impact on wetlands.

The purpose of the investigation regarding floodplains remains the same as described in **Appendix S** of the Draft EIS. There are no floodplains located in or adjacent to the Preferred Alignment. There would be no potential to impact floodplains. Operation of the Red Line following construction of the Preferred Alignment would have no impact on floodplains.

Development of the Preferred Alignment in combination with related renovation, new construction, and transportation projects identified in the vicinity of the proposed project would not contribute to cumulative impacts on municipal water supply/wastewater collection, surface water, groundwater, water quality, wetlands, or floodplains.

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic

Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation

of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

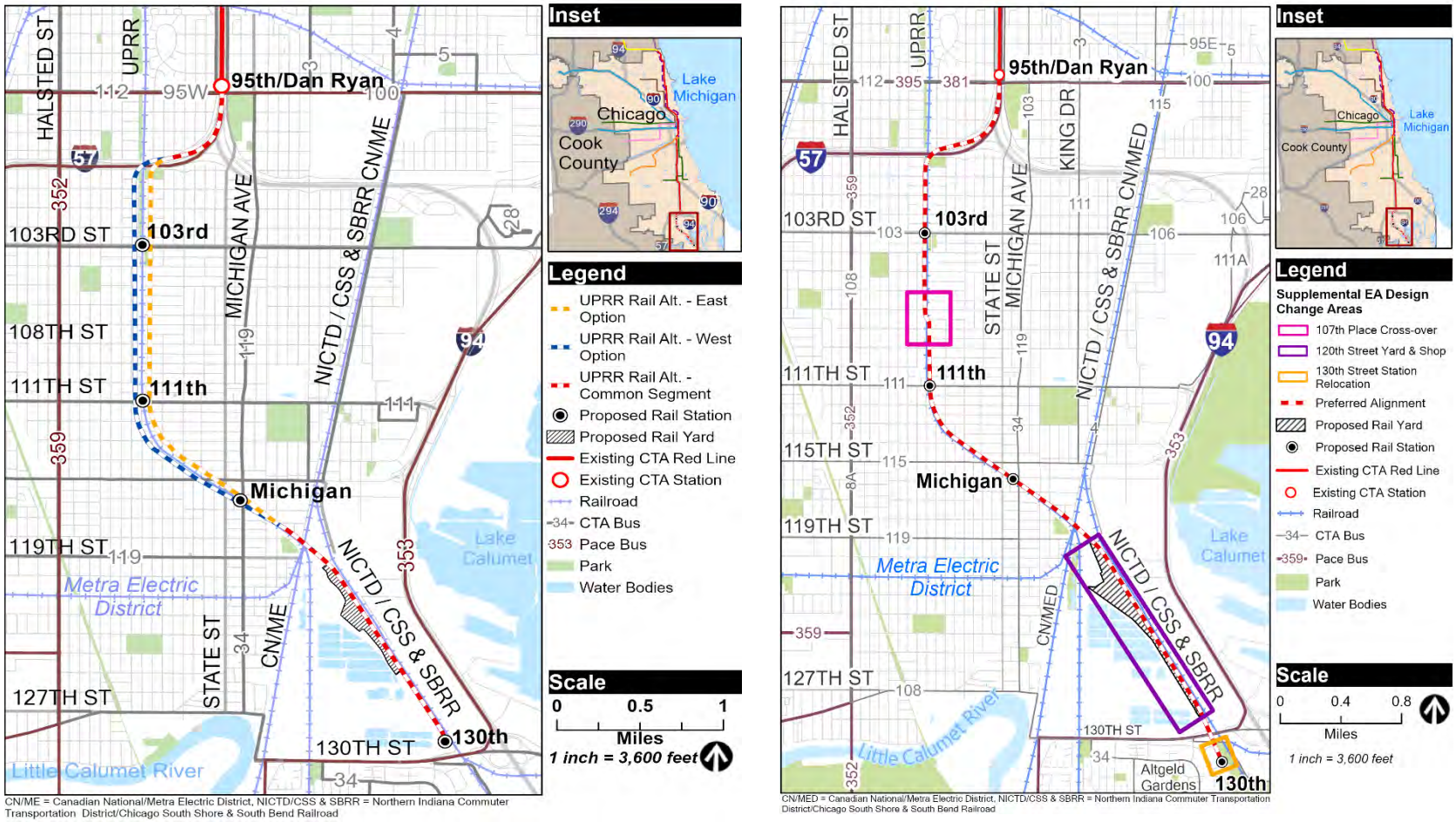

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix S** for the Draft EIS analysis have been carried forward to evaluate the potential impacts on water resources. This section documents the methodology for evaluating impacts on this resource, consistency with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

There are no changes to the applicable state or local regulations referenced in **Appendix S** of the Draft EIS.

Executive Order 11990 directs federal agencies to minimize the destruction, loss, or degradation of wetlands. It also assures the protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable during the planning, construction, funding, and operation of transportation facilities and projects.

The Illinois Interagency Wetlands Policy Act of 1989 (the Act [20 ILCS § 830 et seq.]) is intended to ensure that there is no overall net loss of Illinois' existing wetland acres or their functional values resulting from State-supported activities. The Act charges State agencies with a further duty to "preserve, enhance, and create wetlands where necessary to increase the quality and quantity of the State's wetland resource base." The Act uses the same definition for wetlands as in the 1987 USACE Wetland Delineation Manual used by federal agencies in implementation of the federal Clean Water Act. All three parameters (hydric [wet] soils, hydrophytic [adapted to growing in saturated soil conditions] vegetation, and wetland hydrology) are required for a location to be considered a wetland; however, areas that have been restored or created as the result of mitigation or planned construction projects, and that function as wetlands, are also defined as wetlands under the Act even when all three wetland parameters are not yet present. The Navigable Waters Protection Rule was vacated by a federal court in September 2021. The definition of Waters of the U.S. (WOTUS), in the absence of the rule, is the same as that outlined in the Draft EIS. The analysis of wetlands in this document is conducted under the same pre-2015 WOTUS definition.

3.2 Impact Analysis Thresholds

The National Environmental Policy Act (NEPA) does not set specific thresholds of significance for impacts on water resources. The approach taken in the Draft EIS related to water quality standards, groundwater, aquifers, drainage, stormwater, surface water, and wetlands remains applicable for impact determination in this document. There is no change to the impact analysis thresholds from **Appendix S** in the Draft EIS.

3.3 Area of Potential Impact

The Draft EIS applied an evaluation area of 500 feet from either side of project alternative centerlines. This document takes the same general approach as that outlined in **Appendix S** of the Draft EIS, with all areas that may be disturbed being considered the API. With the extension of the Preferred Alignment south of 130th Street, the API also extends farther south than described in the Draft EIS and now extends into the Beaubien Woods Forest Preserve. The API has generally been adjusted to incorporate all areas that may be disturbed by project implementation. For the purposes of this analysis, all area inside the API is anticipated to be permanently disturbed. Final areas of disturbance are anticipated to be lower than the area inside the API. The API is shown in **Figure 3-1**.

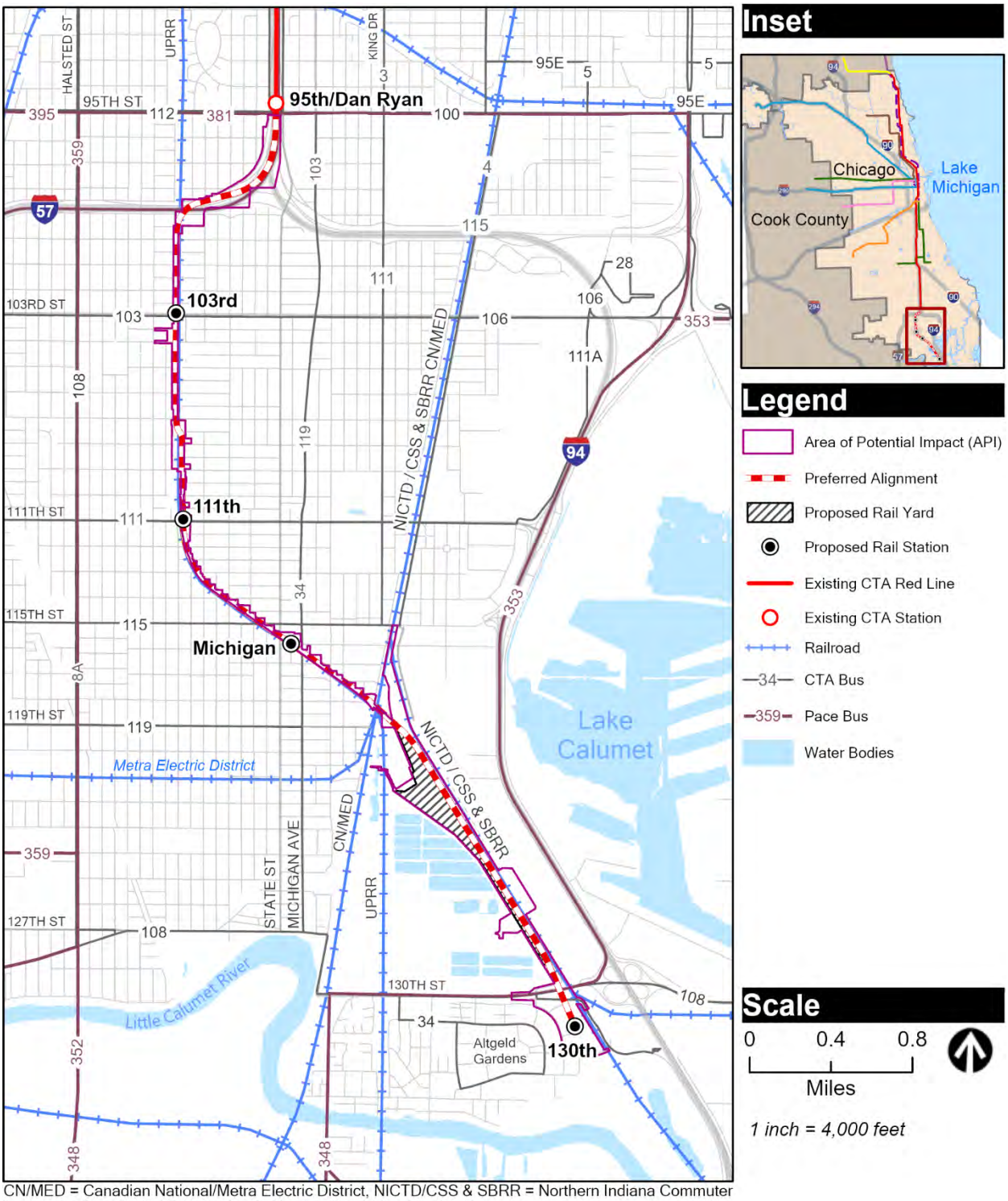

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Area of Potential Impact

3.4 Methods

The analysis of water resources of the RLE Preferred Alignment was performed using the same methods as were documented in the Draft EIS **Appendix S**.

Information collected for the Draft EIS was reviewed and verified. The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) has not been updated since the analysis in the 2015 wetland delineation. Federal Emergency Management Agency (FEMA) maps have also not been updated since the publication of the Draft EIS.

Up-to-date aerial imagery from Google Earth and Nearmap was used for desktop review of previously collected information (Google 2020, Nearmap 2021). Shapefiles (geospatial data for geographic information system (GIS) software) collected during the 2015 wetland delineation were analyzed in ArcGIS against the API to identify wetland areas that may be affected by project construction. Field review included a "windshield" style survey verification of desktop information and information collected during the production of the Draft EIS. The "windshield" survey was completed on October 27, 2020. The October 2020 field effort included traversing all accessible streets in the API. The majority of wetlands identified during the 2015 wetland delineation were located adjacent to publicly accessible areas. A "pre-application" meeting with USACE occurred on March 4, 2021, in advance of submitting an Approved Jurisdictional Determination (AJD) update request for wetlands in the project vicinity. A subsequent site review in advance of the AJD submittal was completed with USACE on May 11, 2021. Additional potential wetland areas were noted during the May 11, 2021 site review with a representative of USACE. These wetlands were mapped by combining site observations with interpretation of aerial imagery. USACE comments were incorporated into a formal AJD request that was submitted on September 15, 2021. USACE determined that the API does not contain any waterways, wetlands or other areas considered "waters of the United States" under USACE jurisdiction in a letter dated January 19, 2022.

All wetlands located in the API are considered to be a permanent loss in this analysis. Temporary construction disturbance is anticipated to occur entirely within this API. The final disturbance area is expected to be smaller than the identified API.

Section 4 - Affected Environment

This section describes updates to the existing water resources in or adjacent to the RLE Project API since the publication of the Draft EIS. This section documents updates to the baseline data and planning horizon, as well as any changes to the water resources planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

Where appropriate, Draft EIS data from **Appendix S** have been included for comparison to provide context to the updates in this addendum. Consistent with the Draft EIS, this document provides information and analysis on the water resources that may be affected by project implementation.

4.1 Municipal Water Supply/Wastewater Collection

Subsequent to publication of the Draft EIS, the South Water Purification Plant referred to in **Appendix S** was renamed to the Sawyer Water Purification Plant. There have been no substantive changes to the municipal water supply/wastewater collection resources described in **Appendix S** of the Draft EIS.

4.2 Surface Water

There have been no substantive changes to the surface water resources described in **Appendix S** of the Draft EIS. The 130th Street station would be located closer to the Little Calumet River than described in the Draft EIS. Drainage in the area of the Preferred Alignment is managed in accordance with the MWRD Tunnel and Reservoir Plan (TARP), as described in the Draft EIS (MWRD 2020). There are currently 39 monitored outfalls in the Little Calumet River, compared to 15 outfalls referenced in **Appendix S** of the Draft EIS (MWRD 2018). None of these outfalls are located within the API.

The Illinois Coastal Management Program boundary follows 130th Street. The 130th Street station in the Draft EIS was outside this boundary. However, the relocated 130th Street station would be within the boundaries of the Illinois Coastal Management Program (IDNR 2011). **Figure 4-1** shows the boundary of the Illinois coastal zone. The 130th Street station would be located within previously developed land and would be designed to meet the policies of the Coastal Management Program.

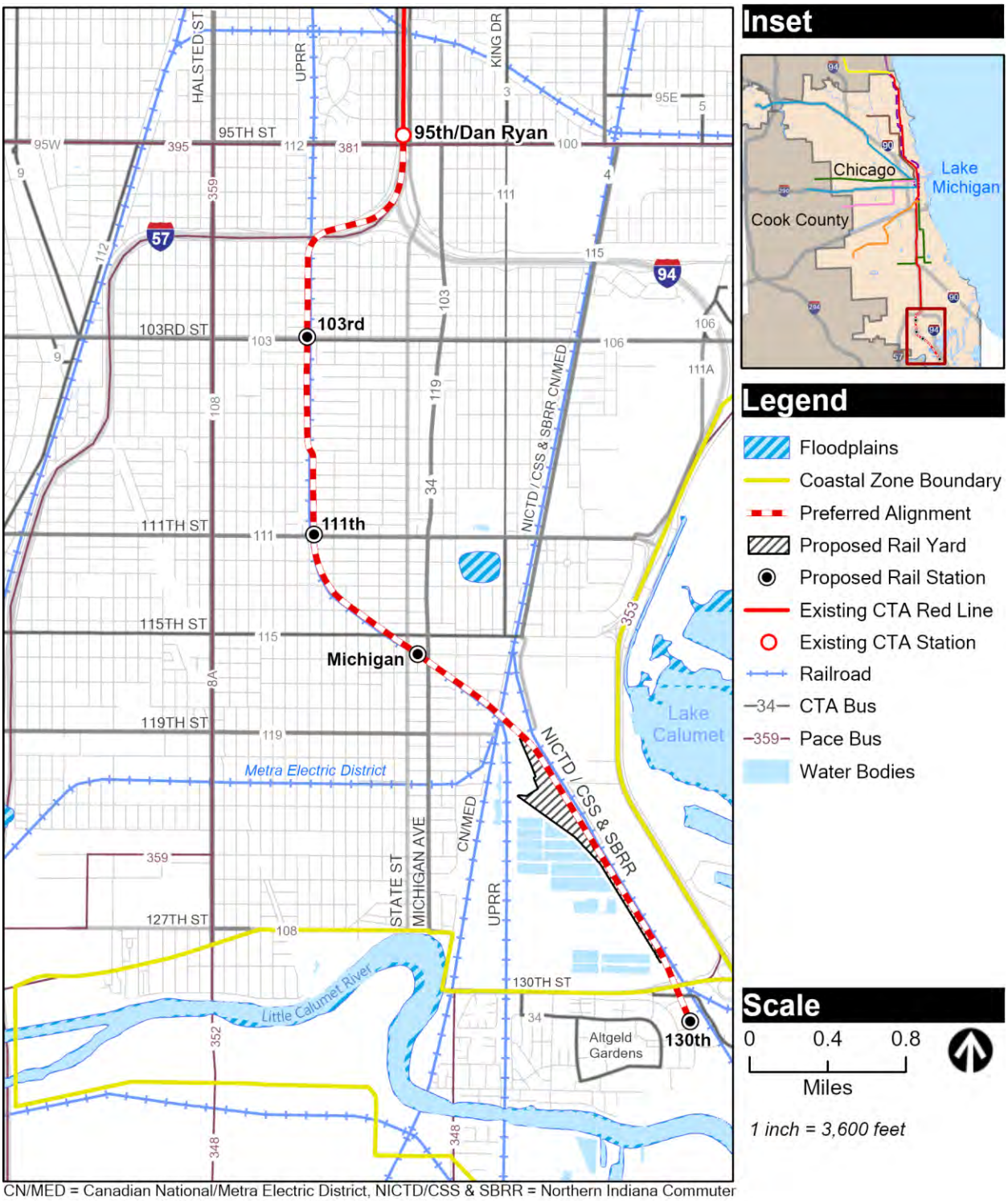

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-1: Waterbodies and Floodplains in the Vicinity of the API

Coordination with the Illinois Department of Natural Resources (IDNR), Illinois Coastal Management Program, occurred on November 20, 2020 and March 31, 2021 regarding the need for a federal consistency review. Per IDNR guidance, CTA submitted an initial federal consistency review request to IDNR on August 27, 2021 requesting a determination as to whether a federal consistency review would be necessary for the RLE Project. In a letter dated October 8, 2021, IDNR concurred that the relocated 130th Street station would comply with the enforceable policies of the Illinois Coastal Management Program and would be conducted in a manner consistent with the Illinois Coastal Management Program. Therefore, the relocated 130th Street station would have no permanent adverse impacts on the Illinois coastal zone; and coordination with IDNR regarding the federal consistency determination is finalized. The coordination with IDNR is provided in **Attachment A**.

4.3 Groundwater

There have been no substantive changes to the groundwater resources described in **Appendix S** of the Draft EIS. Groundwater is not a drinking water source for the City of Chicago and there are no sole source aquifers in proximity to the RLE Project (USEPA 2020). As has been documented, the Cambrian-Ordovician aquifers require wells from 800 to 1,500 feet deep in the Chicago region. Shallow perched groundwater is common in the region but is extensively mapped. Due to the predominance of impervious surfaces throughout the communities adjacent to the RLE Project, minimal percolation to the underlying groundwater occurs. **Figure 4-1** shows waterbodies near the Preferred Alignment.

4.4 Water Quality

The Illinois Environmental Protection Agency (IEPA) has updated impaired waters to the 2018 303(d) list from the 2012 version since development of the Draft EIS. The Little Calumet River has remained on the list of impaired waterways. The Little Calumet River in Hydrologic Unit Code (HUC) 0712000304 is listed for mercury and polychlorinated biphenyls (IEPA 2018). The Draft EIS identified aldrin, iron, dissolved oxygen, total phosphorus, and silver as additional impairments that are not on the current list for the HUC. No Total Maximum Daily Load (TMDL) has been developed, consistent with the Draft EIS analysis. There have been no substantive changes in water quality as described in **Appendix S** of the Draft EIS that are of concern in the Preferred Alignment.

4.5 Wetlands

The existing wetland conditions remain functionally the same as evaluated during the Draft EIS. The 2015 wetland delineation mapped 18.72 acres of wetland. An additional 1.29 acres of potential

wetlands were identified during the May 11, 2021 meeting with USACE based on field observations, primarily in the new project area south of 130th Street. These areas are assumed to meet the three point wetland criteria used by USACE. Wetlands identified are listed in **Table 4-1**. Wetlands 1 through 15 were identified during the 2015 wetland delineation. Wetlands 16 through 19 were identified in coordination with USACE during site reviews. Wetland 20 corresponds to Kensington Marsh, discussed further below. Wetlands identified in 2015 and during the USACE review are shown in **Figure 4-2** and **Figure 4-3**.

Table 4-1: Documented Wetland Areas

Wetland	Mapped Area (Acres)	Wetland Type
1 & 2	0.38	Drainage swale
3	0.83	Marsh
4	1.84	Drainage swale
5	2.75	Drainage swale
6	2.43	Drainage swale & degraded wet prairie
7	1.70	Drainage swale & degraded wet prairie
8	1.77	Degraded marsh
9	1.10	Drainage swale/marsh
10	0.07	Drainage ditch
11	0.18	Drainage ditch
12	3.55	Degraded marsh
13	0.67	Wooded
14	0.88	Drainage swale
15	0.57	Drainage swale
16	0.04	Drainage swale
17	0.12	Drainage swale
18	0.96	Drainage swale
19	0.17	Drainage swale
20 (Kensington Marsh)	8.91	Marsh
Total:	28.92	

Sources: Wetlands 1 through 15 from 2015 Wetland Delineation Report, Wetlands 15 through 20 were identified in coordination with USACE during site reviews and GIS Mapping

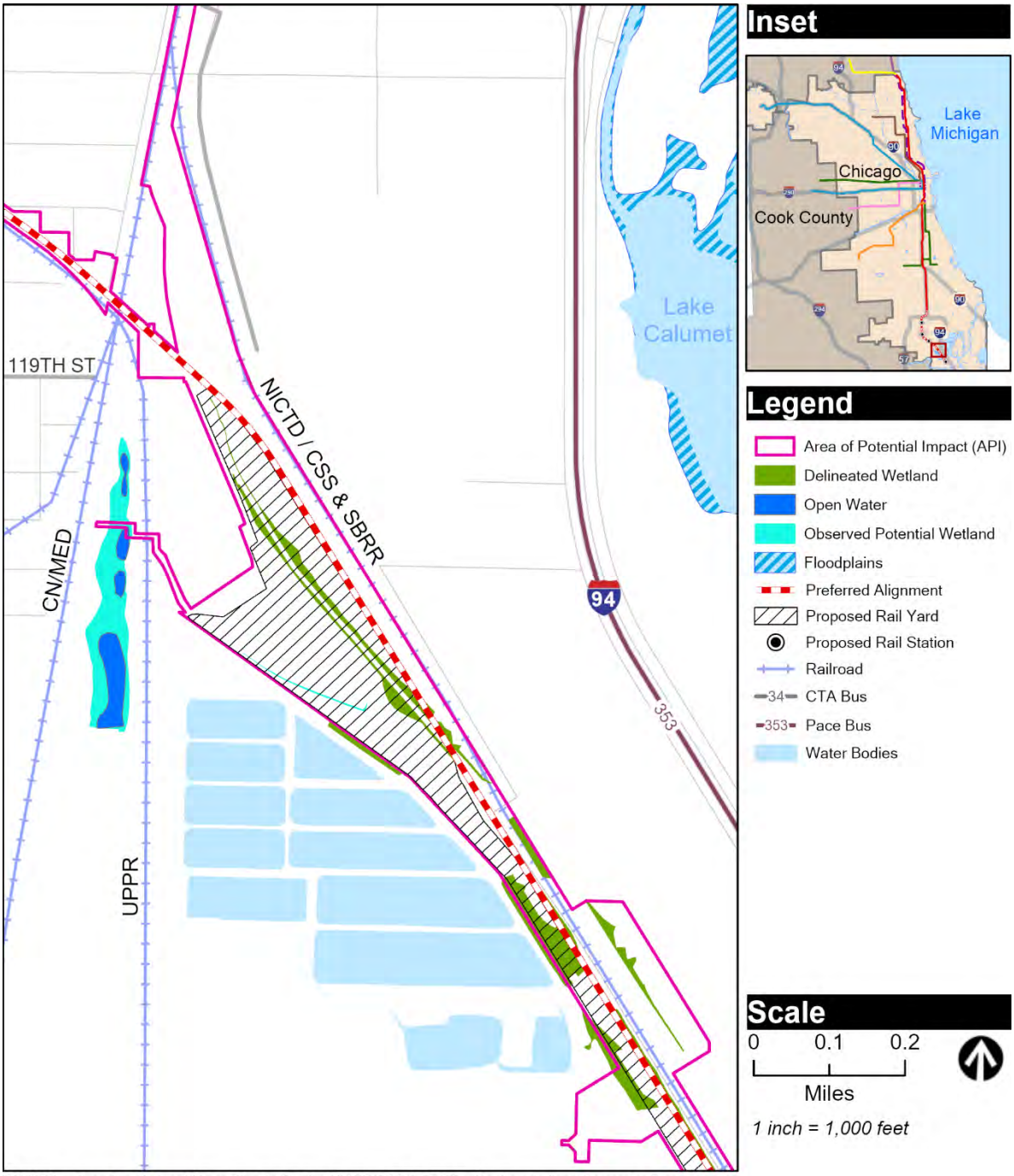

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-2: Wetlands Delineated in the API (1 of 2)

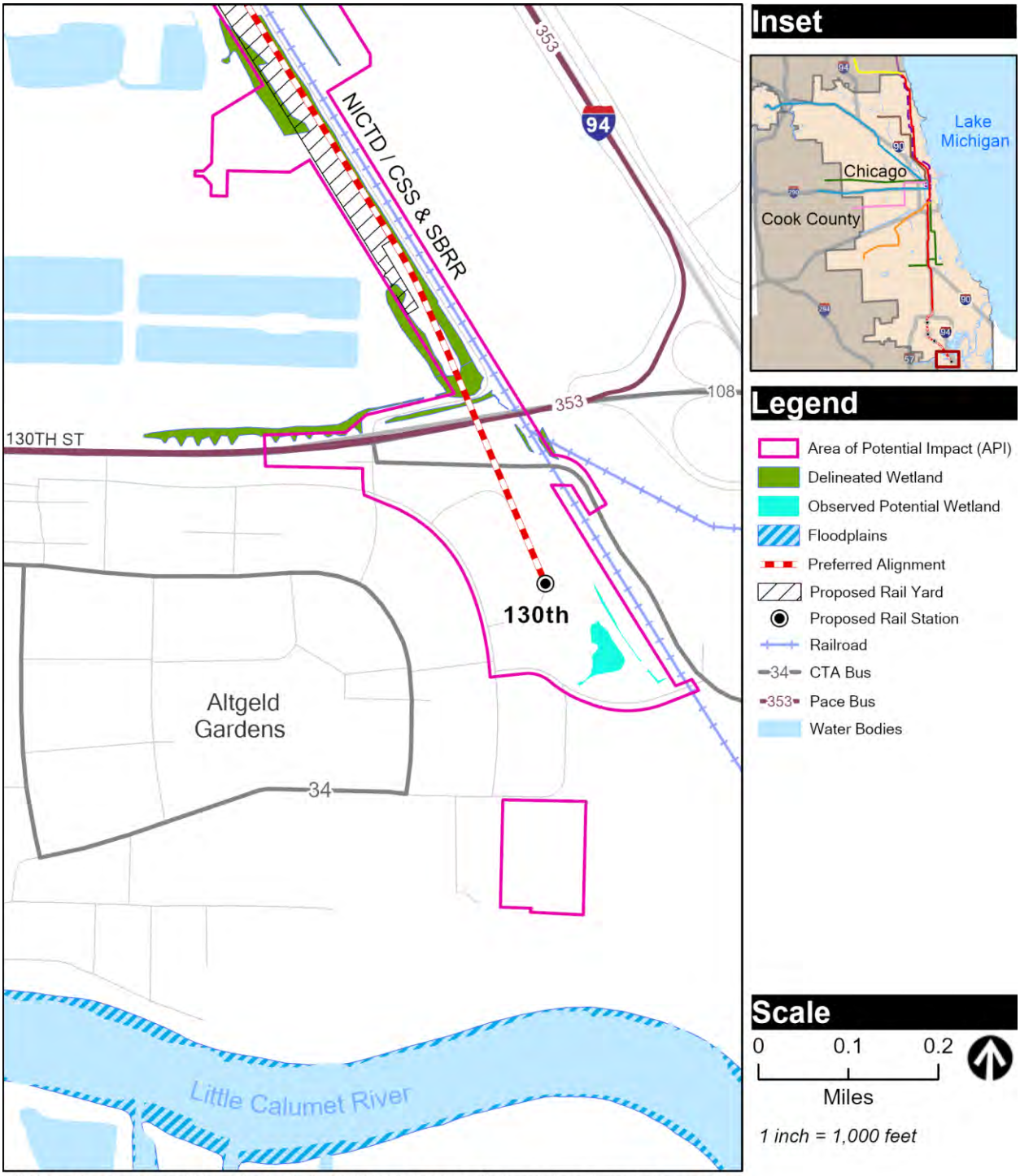

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-3: Wetlands Delineated in the API (2 of 2)

The majority of the Preferred Alignment is urbanized with underground drainage and does not contain wetlands or areas that could contain wetlands. South of the CN/MED tracks, the area near the 120th Street yard and shop and the 130th Street station is less developed and has flat topography. There are depressions with some standing water. These depressions do not exhibit connectivity through surface drainage systems. Fill and other manmade features define most of the wetland boundaries. Isolated depressions within flat topography combined with highly compacted soils lead to the development of wetland conditions in this area. The majority of the wetlands identified were found to be degraded or otherwise low quality due to vegetative dominance of invasive common reed (*Phragmites australis*). Wetlands dominated by common reed were observed to be present generally south of the API in the Beaubien Woods Forest Preserve.

Wetlands 1 through 15 are described in the Draft EIS. Wetlands 16 through 18 are located adjacent in a low drainage swale on either side of a Beaubien Woods Forest Preserve access road north of 132nd Street. These potential wetlands are mowed and maintained areas that receive drainage from the surrounding built environment. No connectivity to other water bodies was identified for these locations. Wetland 19 consists of a strip of land observed to be dominated by common reed, located to the south of the American Recycling facility on the north/east side of the facility access road. This potential wetland area is similar in location and connectivity to wetlands 6, 7, and 15.

Kensington Marsh (Wetland 20) is proposed to be a receiving location for treated stormwater from the 120th Street yard and shop. Kensington Marsh is a compensatory mitigation property developed by MWRD and approved by USACE in 1985 to offset impacts related to construction of the nearby MWRD facilities. The USACE permit for the Kensington Marsh mitigation wetland is associated with Application Number 5108502, effective June 10, 1985. The total marsh area is approximately 9 acres. The marsh consists of open water areas surrounded by emergent wetland vegetation. The vegetated portions of the marsh are dominated by common reed. USACE commented that despite the near monoculture of common reed, the Kensington Marsh project appeared to be functioning as originally designed.

USACE provided an approved jurisdictional determination on October 3, 2016, indicating that there are no waterways, wetlands, or other areas considered "waters of the United States" under their jurisdiction in the delineated area. This AJD was processed under USACE Project Number LRC-2016-00408. The determination was valid for five years from its issue date of June 29, 2016, and it expired in June 2021. USACE determined that the API does not contain any waterways, wetlands or other areas considered "waters of the United States" under USACE jurisdiction in a letter dated January 19, 2022. As part of this coordination, USACE stated that they do not object to the usage of Kensington Marsh as a stormwater drainage overflow location, so long as project impacts to the marsh are implemented as described in the coordination materials. The coordination with the USACE and their approval is provided in **Attachment A**.

4.6 Floodplains

There have been no changes to the floodplain resources described in **Appendix S** of the Draft EIS. The potential for floodplains in the vicinity of the Preferred Alignment was reviewed using the FEMA Flood Insurance Rate Maps. **Figure 4-1** shows the mapped 100-year floodplains in proximity to the Preferred Alignment. The Preferred Alignment would not cross a floodplain or result in any new structures or construction in a floodplain. There are no floodplains present in the API.

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative.

- Permanent impacts relate to system operations after the RLE Project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the RLE Project combined with other past, present, or near future projects within the API.

This section also documents the new or revised mitigation measures for identified project impacts, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning Transportation Improvement Program. No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Appendix S** in the Draft EIS, there would be no impacts on municipal water supply/wastewater collection, surface water, groundwater, water quality, wetlands, or floodplains from the No Build Alternative.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

The Preferred Alignment would have the potential to adversely affect water resources from both permanent impacts and impacts during construction. Consistent with the Draft EIS, with implementation of the described and referenced mitigation measures, there would be no effects on water resources. Operation of the RLE Project following construction of the Preferred Alignment would have no measurable impact on water resources.

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

5.2.1.1 Drainage Impacts

Consistent with the discussion in **Appendix S** in the Draft EIS, the Preferred Alignment would result in impacts on the existing stormwater drainage infrastructure. Drainage impacts are qualitatively described in the Draft EIS. Implementation of the Preferred Alignment would not change the qualitative discussion presented in the Draft EIS for the UPRR Alternative sections. With implementation of mitigation measures, there would be no adverse permanent stormwater drainage impacts associated with the Preferred Alignment. Mitigation measures identified in **Appendix S** in the Draft EIS remain unchanged.

5.2.1.2 Groundwater Impacts

Consistent with the discussion in **Appendix S** in the Draft EIS, there would be no adverse permanent groundwater impacts associated with implementation of the Preferred Alignment.

5.2.1.3 Water Quality Impacts

Consistent with the discussion in **Appendix S** in the Draft EIS, the Preferred Alignment would result in impacts on water quality. Water quality impacts are qualitatively described in the Draft EIS. Implementation of the Preferred Alignment would not change the qualitative discussion presented in the Draft EIS for the UPRR Alternative sections. There would be a reduction in permeable surfaces due to development of the 120th yard and shop and the 130th Street station. A beneficial impact on water quality is expected due to the replacement of automobile trips with RLE Project usage. With implementation of mitigation measures, there would be no adverse permanent water quality impacts associated with the Preferred Alignment. Mitigation measures identified in **Appendix S** in the Draft EIS remain unchanged.

5.2.1.4 Wetland Impacts

Consistent with the discussion in **Appendix S** in the Draft EIS, the Preferred Alignment would result in impacts on wetlands. The 2015 wetland delineation identified 18.72 acres of wetlands. The Draft EIS determined that up to 15.34 acres of these wetlands would be affected by the East and West Options of the UPRR Alternative. In comparison, the Preferred Alignment would affect up to 15.72 acres of wetlands. A comparison of wetland impacts is located in **Table 5-1**.

Table 5-1: Wetland Impact Comparison

Wetland	Draft EIS Impact (acres)	Preferred Alignment Impact (acres)
1 & 2	0.19	0.38
3	0.83	0.69
4	0.07	0.22
5	2.73	2.75
6	2.26	2.34
7	1.63	1.70
8	1.61	1.27
9	1.09	0.40
10	0.07	0.07
11	0.05	0.08
12	3.56	2.95
13	0.53	0.67
14	0.20	0.88
15	0.52	0.03
16	N/A	0.04
17	N/A	0.12
18	N/A	0.96
19	N/A	0.17
20 (Kensington Marsh)	N/A	<0.01
Totals:	15.34	15.72

Source: GIS analysis

With compliance with federal, state, and local regulations regarding wetland impacts, including mitigation, permanent impacts due to the Preferred Alignment would not be adverse. The wetlands identified in the project area are not considered "waters of the United States" under USACE jurisdiction. USACE stated that they do not object to the usage of Kensington Marsh as a stormwater drainage overflow location, so long as the temporary construction impacts to the marsh are implemented as described in the coordination materials. Impact to Kensington Marsh will be coordinated with MWRD.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

5.2.2.1 Drainage Impacts

Consistent with the discussion in **Appendix S** in the Draft EIS, the Preferred Alignment would result in impacts on the existing stormwater drainage infrastructure. Drainage impacts are qualitatively described in the Draft EIS. The implementation of the Preferred Alignment would not change the qualitative discussion presented in the Draft EIS for the UPRR Alternative options. With implementation of mitigation measures, there would be no adverse stormwater drainage impacts associated with the Preferred Alignment from construction. Mitigation measures identified in **Appendix S** in the Draft EIS remain unchanged.

5.2.2.2 Groundwater Impacts

Consistent with the discussion in **Appendix S** in the Draft EIS, the Preferred Alignment would not result in impacts on groundwater. Construction of the Preferred Alignment may require dewatering if groundwater is encountered in the construction phase. With implementation of mitigation measures, there would be no adverse groundwater impacts associated with the Preferred Alignment from construction. Mitigation measures identified in **Appendix S** in the Draft EIS remain unchanged.

5.2.2.3 Water Quality Impacts

Consistent with the discussion in **Appendix S** in the Draft EIS, the Preferred Alignment would result in impacts on water quality. Water quality impacts are qualitatively described in the Draft EIS. Implementation of the Preferred Alignment would not change the qualitative discussion presented in the Draft EIS for the UPRR Alternative options. The potential for concerns with stormwater runoff and erosion remains the same as in the Draft EIS. The potential impact on water quality would be minor due to the highly urbanized nature of the majority of the project corridor. With implementation of mitigation measures, there would be no adverse water quality impacts associated with the Preferred Alignment from construction. Mitigation measures identified in **Appendix S** of the Draft EIS remain unchanged.

5.2.2.4 Wetland Impacts

Consistent with the discussion in **Appendix S** in the Draft EIS, any impact to wetlands would require coordination with USACE or other regulatory authority for construction-related, temporary impacts on wetlands. The AJD request was submitted in compliance with that coordination. Temporary construction access for placement of a drainage outlet to Kensington Marsh would necessitate temporary impacts on wetlands. Placement of the drainage outlet to Kensington Marsh

will occur as described to the USACE. Temporary impacts on the marsh would not exceed 0.19 acre. Temporarily affected areas (related to installation of a stormwater outlet) would be restored to pre-construction conditions and would be monitored for a period of time to be determined in coordination with MWRD. USACE determined they do not object to utilization of Kensington Marsh, provided that coordinated BMPs are implemented. In addition to restoration, BMPs would include nine proposed detention ponds per 30 percent design, which would limit runoff volumes. If modifications are made during final design regarding the outflow or use of detention ponds to limit runoff volumes, then CTA would coordinate with the USACE for concurrence. The USACE will not require mitigation for wetland impacts identified in the AJD. Construction staging areas would be sited outside of wetlands as much as practicable, but if there were any temporary impacts, those areas would be restored to wetlands after construction. No temporary impacts are expected or have been identified. If any staging area is proposed to be sited outside of the previously cleared area, then contractors would coordinate with CTA to review the proposed site for the presence of wetlands.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

Development of the Preferred Alignment in combination with related renovation, new construction, and transportation projects identified in the vicinity of the project would not contribute to cumulative impacts on water resources. A discussion of potential future developments is located in **Appendix T** of the Final EIS.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on water resources as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

Consistent with the findings of the Draft EIS, there would be no measurable impacts on water resources remaining as a result of the Preferred Alignment.

Section 7 - References Cited

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Metropolitan Water Reclamation District of Greater Chicago (MWRD). 2020. Tarp Status Report as of December 21, 2020. Available at https://mwrd.org/sites/default/files/documents/TARPStatusReport_12_20.pdf. Accessed on April 17, 2021.

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Attachment A
Coordination

- USACE Jurisdictional Determination Request and Attachments
- USACE Jurisdictional Determination Approval
- IDNR Coastal Zone Federal Consistency Review Request
- IDNR Coastal Zone Federal Consistency Approval

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

September 10, 2021

Mr. Colin Smalley
Section 408 Coordinator and Regulatory Project Manager
US Army Corps of Engineers
Chicago District
231 South La Salle Street, Suite 1500
Chicago, IL 60604

Re: Approved Jurisdictional Determination Request and Kensington Marsh Coordination
CTA Red Line Extension Project
Chicago, Cook County, Illinois

Dear Mr. Smalley:

The Chicago Transit Authority (CTA) is preparing a Final Environmental Impact Statement (EIS) for the Red Line Extension (RLE) Project and this package is intended to serve as a request for an Approved Jurisdictional Determination (AJD). The AJD would be utilized for permitting commitments to be documented in the Final EIS. Additionally, CTA would like to request a Letter of No Objection for placement of a stormwater drainage outlet into Kensington Marsh. The Metropolitan Water Reclamation District of Greater Chicago (MWRD) has ownership of Kensington Marsh, and requires this statement of no objection for further coordination and approval of placement of a stormwater drainage outlet into Kensington Marsh.

Project Description

CTA, as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. The Preferred Alignment would run south along I-94 from the 95th/Dan Ryan terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) on an elevated structure for nearly ½ mile until reaching and crossing over to the west side of the Union Pacific Railroad (UPRR) corridor in the vicinity of Eggleston Avenue. The alignment would turn south to follow the UPRR corridor on the elevated structure along the west side of the UPRR to 108th Place. At 108th Place the elevated structure would cross over to the east side of the UPRR corridor. The Preferred Alignment would continue along the east side of the UPRR corridor south and southeast to near

119th Street, where it would cross over the Canadian National/Metra Electric District tracks. South of this point, the Preferred Alignment would descend to grade while continuing southeast parallel to the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad corridor, using a portion of the Norfolk Southern Railway right-of-way. The alignment would continue south, going under 130th Street through a new opening in the 130th Street embankment to the terminus (end) of the RLE Project south of 130th Street. The project also includes a new yard and shop. The 120th Street yard and shop would provide a larger, modern railcar storage and repair facility for CTA at the south end of the RLE Project and would replace the function of the existing 98th Street Yard and Shop as a maintenance facility. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

Approved Jurisdictional Determination Request

CTA requests an AJD for wetland and water resources and potential resources located in the RLE Project potential action area. **Enclosure A** includes the standard "Request for a Jurisdictional Determination" form. CTA is submitting this request subsequent to a pre-application meeting held on March 4, 2021, with representatives of USACE, MWRD, and CTA. A site meeting to review resources discussed in this document occurred on May 11, 2021, with representatives of the USACE and CTA.

This AJD request includes 20 resource locations, including Kensington Marsh (wetland 20). Locations are identified on **Figures 1** to **3**, provided in **Enclosure B**. These figures include the area for the AJD request. **Figures 4** to **6** identify the property ownership in the AJD area. The RLE Project previously received an AJD under the USACE Project Number LRC-2016-00408. A copy of this AJD is provided as **Enclosure C**. Wetlands 1 to 15 were identified in the previous AJD as being either isolated waters or exempt from regulation. Documentation of these wetlands was previously provided in a 2015 wetland delineation report by Hey & Associates. This wetland report is provided in **Enclosure D**.

USACE and CTA noted four (4) other potential wetland areas during the May 2021 project site review. These potential wetland areas have been noted on the submitted AJD request figures as wetlands 16 to 19, plus Kensington Marsh (wetland 20). These potential wetlands have been mapped utilizing aerial imagery. No additional delineation has been completed because these potential wetland areas are not expected to be considered waters of the U.S. The areas noted are low drainage areas exhibiting some surface ponding at the time of the visit (potential wetlands 16 - 18) or areas that appeared to be dominated by hydrophytic vegetation (potential wetland 19). The potential wetland areas are described as follows:

- Potential wetlands 16 and 17 are located in a drainage swale between a Beaubien Woods Forest Preserve access road and existing railroad track north of 132nd Street. No overland connectivity was observed for drainage from this area.
- Potential wetland 18 is located in a low area west of a Beaubien Woods Forest Preserve access road, north of 132nd Street. No overland connectivity was observed for drainage from this area.
- Potential wetland 19 consists of a strip of land observed to contain common reed (*Phragmites australis*) located to the south of the American Recycling facility to the

north/east of the facility access road. This potential wetland area is similar in location and connectivity to wetlands 6, 7, and 15.

Kensington Marsh (Wetland 20) is also included in this request. Kensington Marsh consists of constructed wetlands surrounding constructed open water. The dominant wetland vegetation is common reed. The wetland drains into a MWRD inlet at the southeast corner of the property. Kensington Marsh is discussed further below.

CTA requests an AJD of the resources described above and depicted in **Enclosure B**.

Kensington Marsh Letter of No Objection

MWRD constructed Kensington Marsh as part of a mitigation project for wetland impacts from development of their facilities located to the south of the marsh. The permit is associated with Application Number 5108502, effective June 10, 1985. MWRD supplied a copy of this permit to CTA, provided in **Enclosure E**. USACE and CTA observed that the constructed wetland area appears to be operating as designed, despite the dominance of a common reed monoculture.

After reviewing a variety of drainage options for the 120th Street yard and shop required to support the RLE operation, CTA has determined that the only reasonable and feasible drainage option for this location is to outlet a storm drainage pipe to Kensington Marsh. During the preliminary engineering phases, neither MWRD nor USACE has objected to stormwater drainage to Kensington Marsh from the 120th Street yard and shop area. MWRD requires a letter of no objection from the USACE to move forward with further coordination on this item.

The conceptual placement for the stormwater drainage outlet is in the northern third of Kensington Marsh. A preliminary drainage map is provided in **Enclosure F**. The drainage map also identifies detention ponds that will be utilized for the retention and treatment of stormwater runoff. Any stormwater from the 120th Street yard and shop area will be filtered through the detention ponds prior to entering Kensington Marsh. In order to maintain allowable flow rates into Kensington Marsh, nine (9) proposed detention ponds are included (eight above ground and one underground) in the proposed railroad yard project limits. The marsh is considered “open water,” which allows for a higher allowable release rate in comparison to discharging to an underground drainage pipe system. Prior to entering each respective detention pond, runoff would be collected by underdrains wrapped in a permeable filter fabric and located between selected railroad tracks. The underdrains are located in the sub-ballast section. These underdrains connect into pipes that outlet into respective detention ponds. The combination of the ballast, sub-ballast, and underdrains with filter fabric comprise the Volume Control Best Management Practices (VCBMP’s) by minimizing suspended solids entry into the detention ponds. The VCBMP receives credit for the required water quality pre-treatment. Pre-treatment devices such as BaySaver units will be used to filter the parking lot and roof drainage before it enters a detention pond. To mitigate flow rates, the ponds utilize an outlet control structure, which includes orifices, a gate, and discharge pipe. Ultimately, the runoff exits a pond via the discharge pipe and enters the marsh. The access road to the railyard includes catch basins with a deep sump. The deep sump is used to collect sediment. The pipe leaving the catch basins connects into the pipe network that enters the marsh (i.e., the road drainage does not enter the detention

ponds). Volumes and peak flows have been calculated for a variety storm year events and durations, provided in **Enclosure G**.

Placement of the drainage outlet will disturb a small area of the Kensington Marsh wetland. CTA has not finalized grading limits during this preliminary analysis phase, but will not permanently fill more than 0.1 acre of wetland in the marsh. The area of fill is likely to be lower than this maximum quantity. Additionally, CTA will document the site conditions prior to construction and restore any area disturbed for construction to pre-construction conditions. No construction staging area will be placed in Kensington Marsh. All construction and restoration efforts will be coordinated with MWRD.

CTA requests USACE to provide a letter stating no objection to the use of Kensington Marsh for stormwater drainage.

We appreciate your review of these materials at your earliest convenience to complete an AJD and provide a letter stating no objection to use of Kensington Marsh for stormwater drainage. If you have any questions or require further information, please contact me at mfratinardo@transitchicago.com or Mr. Kelsey Kropp at krkropp@transystems.com or 816-490-1319. If preferred, we can set up a virtual meeting to discuss any clarifications or questions you have regarding this request.

Regards,

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority

Enclosures:
Enclosure A – Request for a Jurisdictional Determination Form
Enclosure B – AJD Resource Figures
Enclosure C – Project AJD for LRC-2016-00408
Enclosure D – Hey & Associates 2015 Wetland Delineation Report
Enclosure E – Kensington Marsh Permit 5108502
Enclosure F – Preliminary Drainage Plan
Enclosure G – Kensington Marsh Storm Event Volume and Peak Flow Data

U.S. ARMY CORPS OF ENGINEERS, CHICAGO DISTRICT

REQUEST FOR A JURISDICTIONAL DETERMINATION

For use of this form, see ER 405-1-12; the proponent agency is CELRC-TS-R.

PRIVACY ACT STATEMENT

AUTHORITIES: The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act (*RHA*) of 1899, 33 CFR Section 404 of the Clean Water Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act.

PRINCIPAL PURPOSE: These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into water of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters.

ROUTINE USE*(s):* Information provided on this form will be used in determining Department of the Army jurisdictional boundaries. Information in this application is made a matter of public record.

DISCLOSURE OF THE INFORMATION REQUESTED IS VOLUNTARY: however, the data requested are necessary in order to establish Federal regulatory jurisdiction. If the necessary information is not provided, the jurisdictional determination cannot be completed.

This form can be used when you want to determine if areas on your property fall under regulatory requirements of the U.S. Army Corps of Engineers (*USACE*). Please supply the following information and supporting documents described below. This form can be filled out online and then printed. It must be **SIGNED BY THE PROPERTY OWNER** to be considered a formal request. Submitting this request authorizes the US Army Corps of Engineers to field inspect the property site, if necessary, to help in the determination process. The printed form and supporting documents should be mailed to:

U.S. ARMY CORPS OF ENGINEERS, CHICAGO DISTRICT
REGULATORY BRANCH
231 SOUTH LASALLE STREET, SUITE 1500
CHICAGO, ILLINOIS 60604
FAX NUMBER: 312.353.4110
E-MAIL: ChicagoRequests@usace.army.mil

Additionally, you may either call our branch telephone at 312.846.5530 or view our website at http://www.lrc.usace.army.mil/Portals/36/docs/Regulatory/newapps.pdf to determine which number and project manager has been assigned to your request. Project Manager contact information can be found here: http://www.lrc.usace.army.mil/Missions/Regulatory/ContactInfo.aspx . Please contact us if you need any assistance with filling out this form.

SECTION I - LOCATION AND INFORMATION ABOUT PROPERTY TO BE SUBJECT TO A JURISDICTIONAL DETERMINATION

1. PROPERTY ADDRESS / LOCATION CTA RLE Extension				
2. CITY (*Name*) OR UNINCORPORATED Chicago		3. STATE Illinois		4. ZIP CODE 60627/60628
5. COUNTY Cook		6. TOWNSHIP NAME Lake Calumet		
7. QUARTER	8. SECTION 22, 26, 27, &35	9. TOWNSHIP 37N	10. RANGE 14E	11. PRINCIPAL MERIDIAN (*PM*)
12a. LATITUDE IN DECIMAL DEGREES °NORTH 41.667993		b. LONGITUDE IN DECIMAL DEGREES °WEST -87.602630		
13. SIZE OF PROPERTY IN ACRES 175 Acres		14. TAX PERSONAL IDENTIFICATION NUMBER (*PIN*)		
15. PRIOR OR RELATED USACE PROJECT NUMBER LRC-2016-00408				

16. IS THE PROPERTY SUBJECT TO A CONSERVATION EASEMENT OR DEED RESTRICTION ? ☐ YES ☒ NO IF YES, PLEASE EXPLAIN AND SUBMIT DETAILS OF THE PROJECT AREA.

See attached discussion

17. WAS THE PROPERTY A SITE FOR MITIGATION PURSUANT TO A PROJECT PREVIOUSLY PERMITTED BY USACE? ☒ YES ☐ NO IF YES, PLEASE EXPLAIN AND SUBMIT DETAILS OF THE PROJECT AREA.

See attached discussion

18. IS THE PROPERTY NEIGHBORING / ADJACENT TO / BORDERING A PROJECT PREVIOUSLY PERMITTED BY USACE? ☒ YES ☐ NO
IF YES, PLEASE EXPLAIN AND SUBMIT THE NAME OF THE PROJECT, THE PERMITTEE'S NAME AND / OR ADDRESS, AND CORPS PERMIT NUMBER, IF AVAILABLE.

See attached discussion

SECTION II - PROPERTY OWNER CONTACT INFORMATION

1. PROPERTY OWNER NAME *(Last, First MI) (must be an individual)*
Fratinardo, Marlise (Ms.)(Project Representative)/ Ellen Avery (Ms.)(Property Owner Representative) - See Enclosure B

2. PROPERTY OWNER COMPANY *(if applicable)*
Chicago Transit Authority (CTA)/Metropolitan Water Reclamation District of Greater Chicago (MWRD) - See Enclosure B

3. MAILING ADDRESS *(Post Office Box, Street, City, State and Zip Code)*
567 West Lake Street
Chicago, Illinois 60661-1489

4. DAYTIME TELEPHONE NUMBER	5. FAX NUMBER	6. E-MAIL ADDRESS
312-681-4124		mfratinardo@transitchicago.com

SECTION III - REQUESTOR NON-PROPERTY OWNER CONTACT INFORMATION

IF THE PERSON REQUESTING THE JURISDICTIONAL DETERMINATION IS NOT THE PROPERTY OWNER, PLEASE ALSO SUPPLY THE REQUESTOR'S CONTACT INFORMATION HERE.

1. REQUESTOR'S NAME *(Last, First MI)*
Fratinardo, Marlise (Ms.)

2. REQUESTOR'S COMPANY *(if applicable)*
Chicago Transit Authority (CTA)

3. MAILING ADDRESS *(Post Office Box, Street, City, State and Zip Code)*
567 West Lake Street
Chicago, Illinois 60661-1489

4. DAYTIME TELEPHONE NUMBER	5. FAX NUMBER	6. E-MAIL ADDRESS
312-681-4124		mfratinardo@transitchicago.com

SECTION IV - OTHER DATA AND SIGNATURE CERTIFICATION

1. OTHER DATA / INFORMATION THAT MAY ASSIST WITH DETERMINATION
Please see the attached narrative document. This form is listed as Enclosure A. Enclosures additional to this document include:
Enclosure B – AJD Resource Figures
Enclosure C – Project AJD for LRC-2016-00408
Enclosure D – Hey & Associates 2015 Wetland Delineation Report
Enclosure E – Kensington Marsh Permit 5108502
Enclosure F – Preliminary Drainage Plan
Enclosure G – Kensington Marsh Storm Event Volume and Peak Flow Data

Please provide a map and / or copy of the plat of survey identifying the physical boundaries of the property.

Additionally, if you have any of the following information, please include it with your request: wetland delineation, relevant maps, drain tile survey, topographic survey, and site photographs.

If you are considering doing work on the property, please identify on the required site map, plat of survey, or in a separate drawing: the footprint, location, and type of potential work. It will assist us in the determination process and reduce unnecessary delays of processing subsequent permits, if required.

I hereby certify that the information contained in the Request for a Jurisdictional Determination is accurate and complete:

2a. PROPERTY OWNER *(Last, First MI)*	b. DATE *(YYYYMMDD)*	c. PROPERTY OWNER'S SIGNATURE

Study Area
Observed Potential Wetland
Wetland (Delineated 2015)

Figure 1: AJD Map
130th Street Station

0 250 500 Feet

N

TranSystems
EXPERIENCE | Transportation

CTA RLE
AJD Request Map
Cook County, Illinois
Aerial Imagery: NAIP 2019 Cook County
July 7, 2021

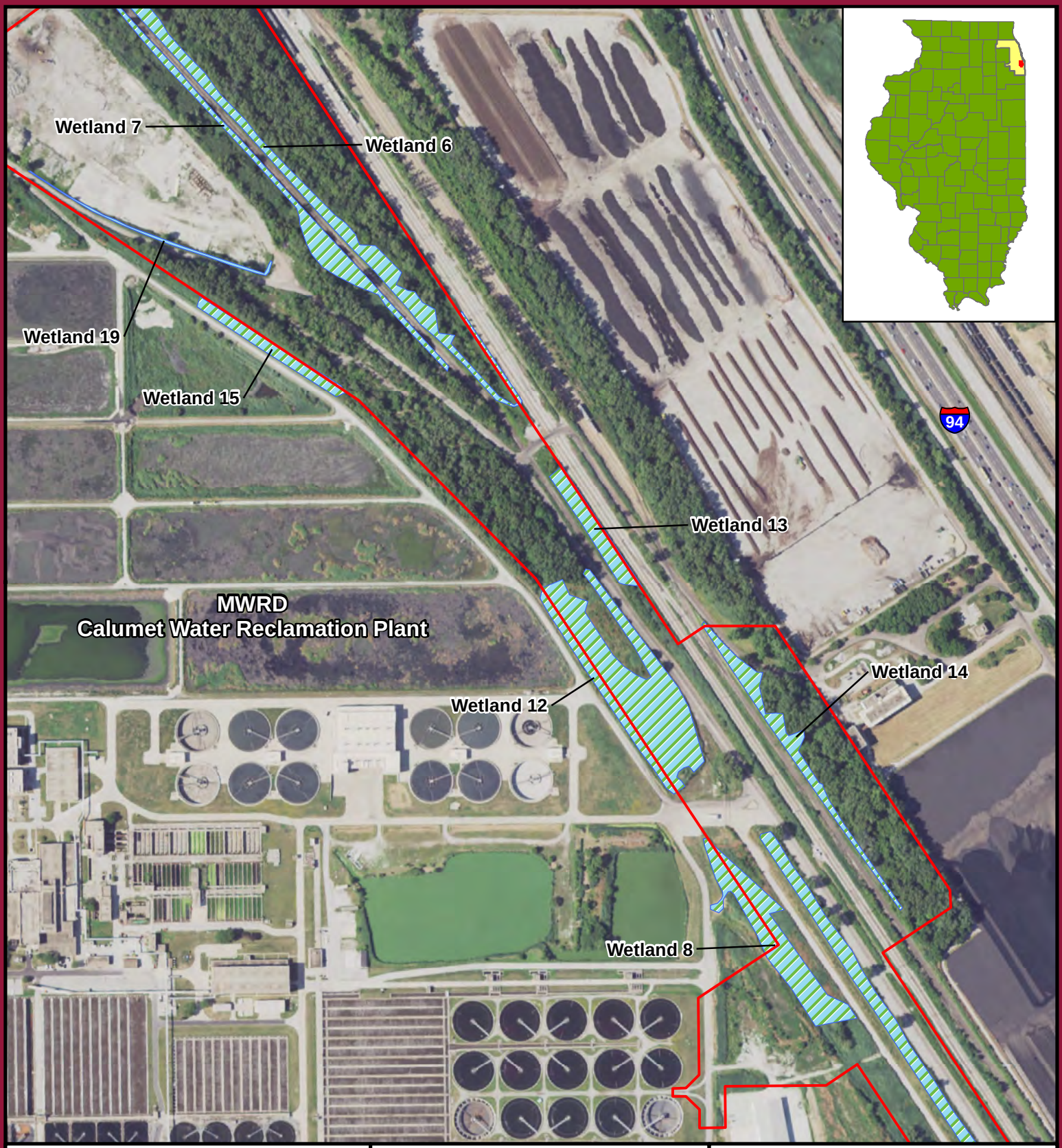

Study Area
Observed Potential Wetland
Wetland (Delineated 2015)

Figure 2: AJD Map
120th Street Yard and Shop

0 250 500 Feet

N

TranSystems
EXPERIENCE | Transportation

CTA RLE
AJD Request Map
Cook County, Illinois
Aerial Imagery: NAIP 2019 Cook County
July 7, 2021

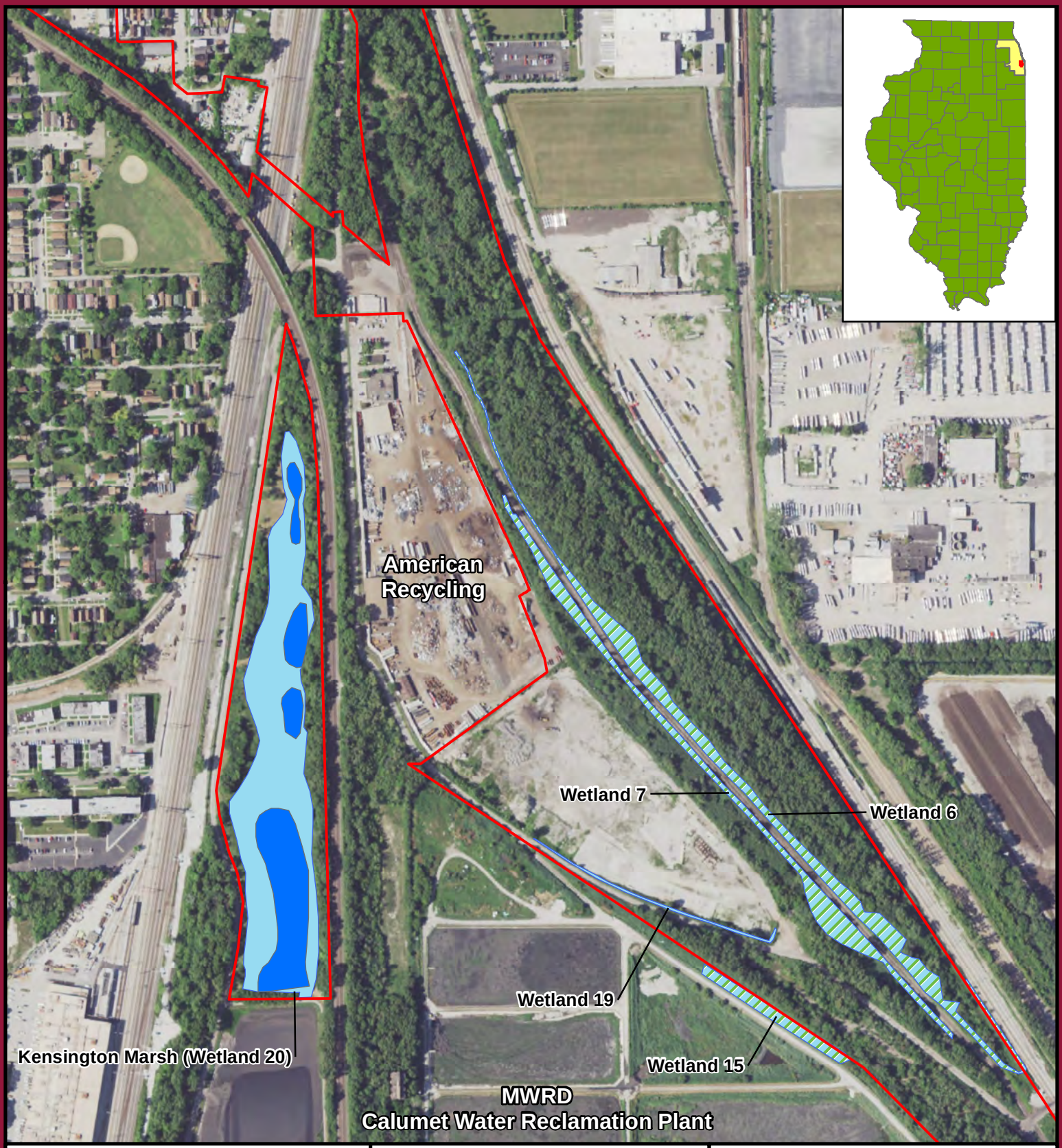

Study Area
Observed Potential Wetland
Wetland (Delineated 2015)
Open Water

Figure 3: AJD Map
120th Street Yard and Shop
& Kensington Marsh

0 250 500 Feet

N

TranSystems
EXPERIENCE | Transportation

CTA RLE
AJD Request Map
Cook County, Illinois
Aerial Imagery: NAIP 2019 Cook County
July 7, 2021

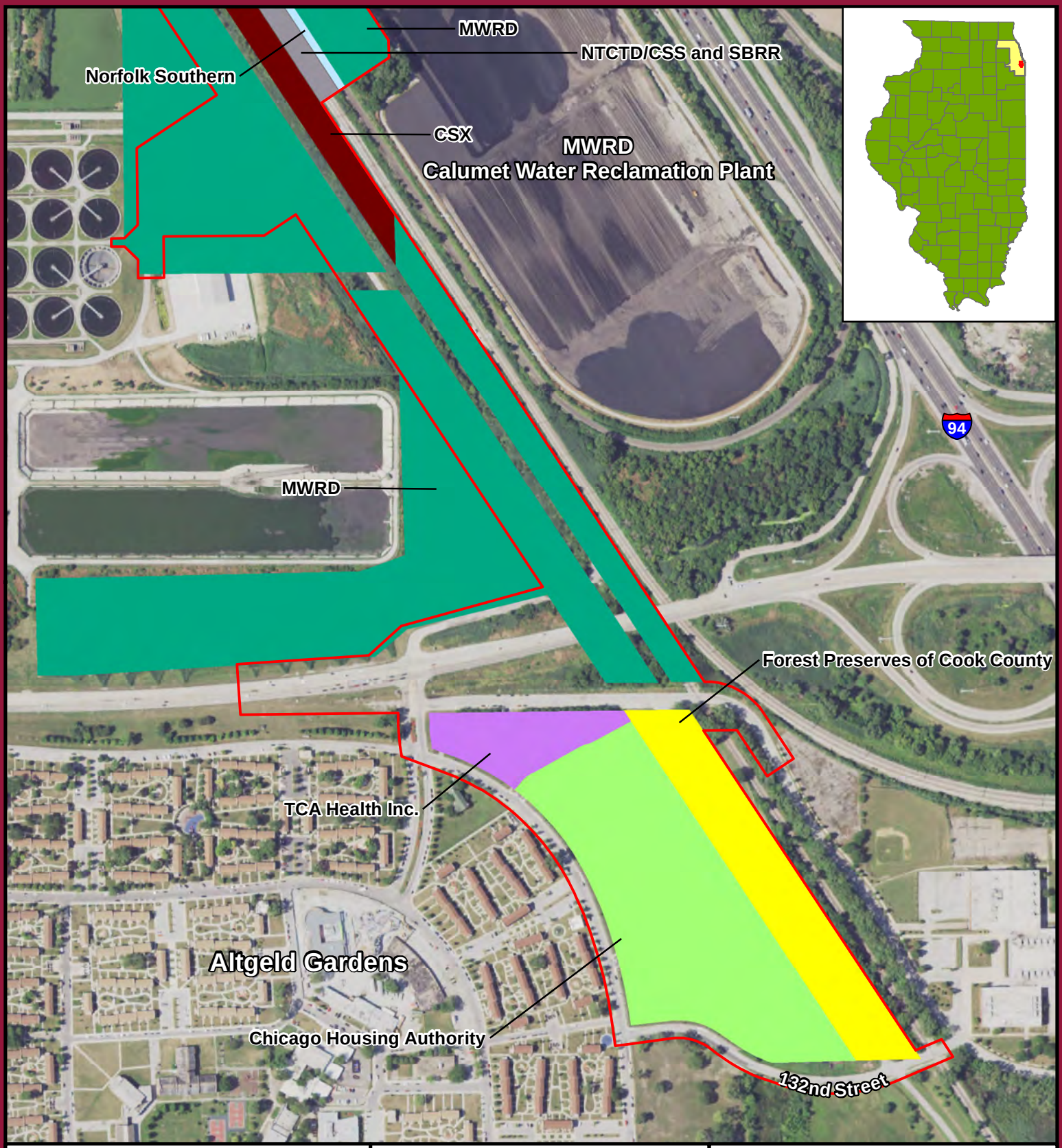

Study Area

Figure 4: Ownership Map
130th Street Station

0 250 500 Feet

N

TranSystems
EXPERIENCE | Transportation

CTA RLE

AJD Request Map

Cook County, Illinois

Aerial Imagery: NAIP 2019 Cook County

July 7, 2021

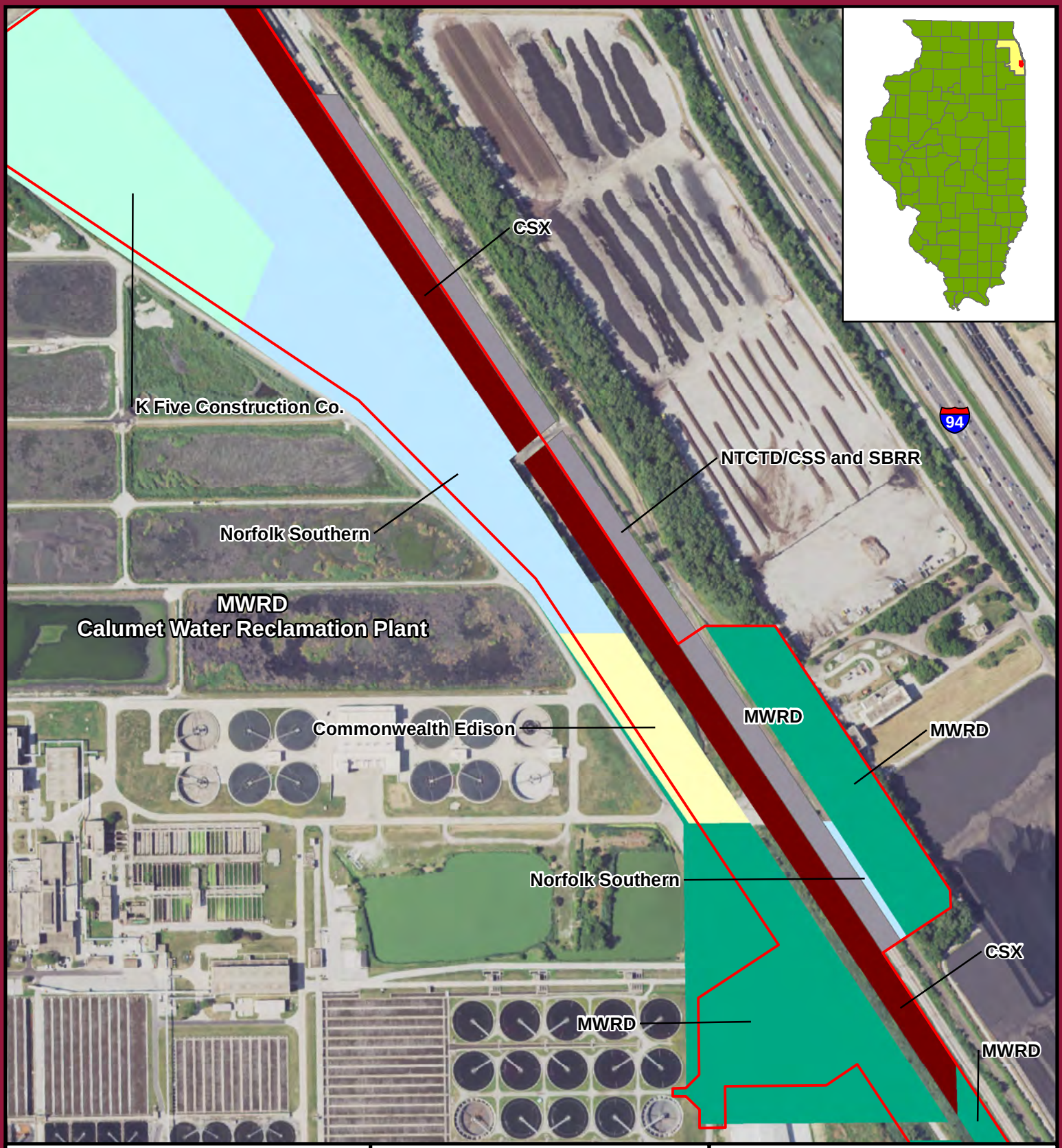

Study Area

Figure 5: Ownership Map
120th Street Yard and Shop

0 250 500 Feet

N

TranSystems
EXPERIENCE | Transportation

CTA RLE

AJD Request Map

Cook County, Illinois

Aerial Imagery: NAIP 2019 Cook County

July 7, 2021

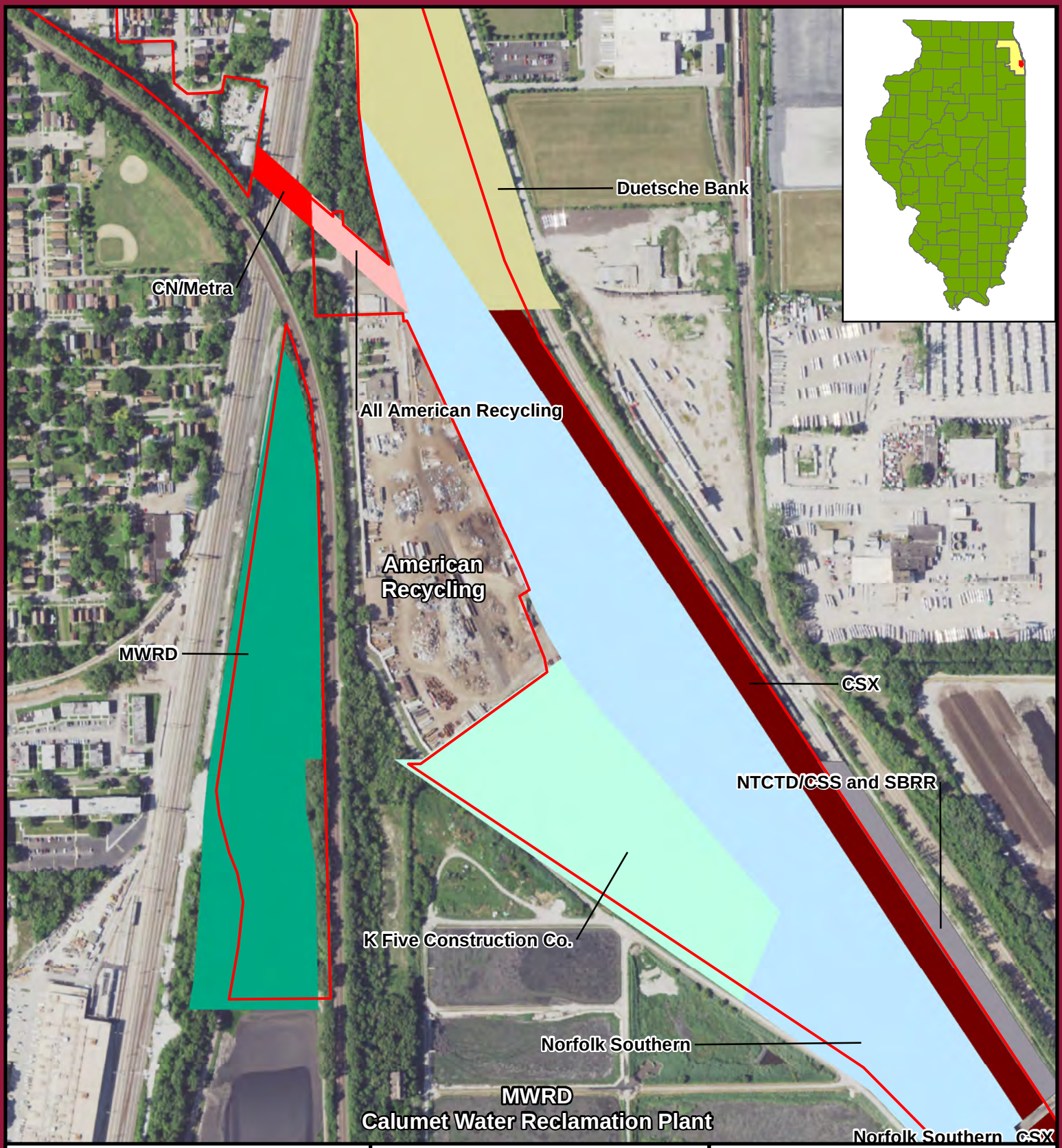

Study Area

Figure 6: Ownership Map 120th Street Yard and Shop & Kensington Marsh

0 250 500 Feet

N

TranSystems
EXPERIENCE | Transportation

CTA RLE

AJD Request Map

Cook County, Illinois

Aerial Imagery: NAIP 2019 Cook County

July 7, 2021

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET
CHICAGO, ILLINOIS 60604-1437

REPLY TO
ATTENTION OF:

October 3, 2016

Technical Services Division
Regulatory Branch
LRC-2016-408

SUBJECT: Request for a Jurisdictional Determination for the CTA Red Line Extension Project Along and East of Cottage Grove Avenue between 119th Street and 130th Street in the Lake Michigan Watershed of the City of Chicago, Cook County, Illinois (41.66428, -87.59925)

Tandon Sanoli
Chicago Transit Authority
567 West Lake Street
Chicago, Illinois 60661

Dear Mr. Sanoli:

This is in response to your request that the U.S. Army Corps of Engineers complete a jurisdictional determination for the above-referenced site submitted on your behalf by Hey and Associates, Inc. The subject project has been assigned number LRC-2016-408. Please reference this number in all future correspondence concerning this project.

Following a review of the information you submitted, this office has determined that there are no waterways, wetlands or other areas considered "waters of the United States" under Corps of Engineers jurisdiction on the site. This site was subject to a previous jurisdictional determination under Chicago District project number LRC-2016-330 which found all of the wetlands and waters identified in your submittal to be either isolated waters or exempt from regulation. A copy of that approved jurisdictional determination is included for your records and is considered by the Chicago District to be valid until five years from the date of its original issuance on June 29, 2016 (see attached letter and basis forms).

It is your responsibility to obtain any required state, county, or local approvals for impacts to wetland areas not under the Department of the Army jurisdiction. For projects located in unincorporated and unauthorized municipalities in Cook County, please contact the Metropolitan Water Reclamation District of Greater Chicago at (312) 751-3247. For projects in incorporated areas of Cook County, contact the authorized municipality for information related to the Watershed Management Ordinance.

Pursuant to Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States, including wetlands. A Department of the Army permit is required for any proposed work involving the discharge of dredged or fill material within the jurisdiction of this office. To initiate the permit process, please submit a joint permit application form along with detailed plans of the proposed

work. Information concerning our program, including the application form and an application checklist, can be found at and downloaded from our website:
http://www.lrc.usace.army.mil/Missions/Regulatory.aspx

If you have any questions, please contact Michael Murphy of my staff by telephone at 312-846-5538 or email at Michael.J.Murphy@usace.army.mil.

Sincerely,

CHERNICH.KATHLEEN.G.
1230365616
2016.11.16 16:40:51
-06'00'

Kathleen G. Chernich
Chief, East Section
Regulatory Branch

Enclosures

Copy Furnished w/out Enclosures
Illinois Department of Natural Resources/OWR (Gary Jereb)
Illinois Environmental Protection Agency (Thad Faught)
Metropolitan Water Reclamation District of Greater Chicago (Dan Feltes)
City of Chicago, Department of Transportation (Oswaldo Chaves)
Hay and Associates, Inc. (Jeff Mengler)

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET
CHICAGO, ILLINOIS 60604-1437

REPLY TO
ATTENTION OF:

June 29, 2016

Technical Services Division
Regulatory Branch
LRC-2016-00330

SUBJECT: Request for a Jurisdictional Determination on the ComEd GRID Z4333 Property North of 130th Street along Cottage Grove Avenue in Chicago, Cook County, Illinois (ComEd ESD #2016-100) (CBBEL Project No. 040532.00804)

Sara Race
Commonwealth Edison
Three Lincoln Center, 3rd Floor
Oakbrook Terrace, Illinois 60181-4260

Dear Ms. Race:

This is in response to your request that the U.S. Army Corps of Engineers complete a jurisdictional determination for the above-referenced site submitted on your behalf by Christopher B. Burke Engineering, Ltd. (CBBEL). The subject project has been assigned number LRC-2016-00330. Please reference this number in all future correspondence concerning this project.

Following a review of the information you submitted, this office has determined that there are no waterways, wetlands or other areas considered "waters of the United States" under Corps of Engineers jurisdiction at the site.

Wetlands #1 & #2 have been determined to be isolated and therefore not subject to Federal regulation. Ditches #1 and #2 are water features Exempt from Federal regulation. Please be informed that this office does not concur with the boundaries of waters not under the jurisdiction of this office.

For a detailed description of our determination please refer to the enclosed decision document. This determination covers only your project as depicted in Request for Jurisdictional Determination Report dated May 10, 2016, prepared by CBBEL.

This determination is valid for a period of five (5) years from the date of the letter, unless new information warrants revision of the determination before the expiration date or a District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

This letter is considered an approved jurisdictional determination for your subject site. If you object to this determination, you may appeal, according to 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and a Request for Appeal (RFA) form. If you request to appeal the above determination, you must submit a completed RFA form to the Great Lakes/Ohio River Division Office at the following address:

Jacob Siegrist
Appeal Review Officer
Great Lakes and Ohio River Division
CELRD-PD-REG
550 Main Street, Room 10032
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

In order to be accepted, your RFA must be complete, meet the criteria for appeal and be received by the Division Office within sixty (60) days of the date of the NAP. If you concur with the determination in this letter, submittal of the RFA form to the Division office is not necessary.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

It is your responsibility to obtain any required state, county, or local approvals for impacts to wetland areas not under the Department of the Army jurisdiction. For projects located in unincorporated and unauthorized municipalities in Cook County, please contact the Metropolitan Water Reclamation District of Greater Chicago at (312) 751-3247. For projects in incorporated areas of Cook County, contact the authorized municipality for information related to the Watershed Management Ordinance.

Pursuant to Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States, including wetlands. A Department of the Army permit is required for any proposed work involving the discharge of dredged or fill material within the jurisdiction of this office. To initiate the permit process, please submit a joint permit application form along with detailed plans of the proposed work. Information concerning our program, including the application form and an application checklist, can be found at and downloaded from our website:
http://www.lrc.usace.army.mil/Missions/Regulatory.aspx

If you have any questions, please contact Mr. Mike Machalek of my staff by telephone at 312-846-5534 or email at Mike.J.Machalek@usace.army.mil.

Sincerely,

CHERNICH.KATHLEEN.G.12
30365616
2016.07.05 16:25:47 -05'00'

Kathleen G. Chernich
Chief, East Section
Regulatory Branch

Enclosures

Copy Furnished w/out Enclosures

Cook County Building and Zoning (Donald Wlodarski)
Metropolitan Water Reclamation District of Greater Chicago (Dan Feltes)
CBBEL (Julie Gangloff)

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Sara Race, Commonwealth Edison	File Number: LRC-2016-00330	Date: June 29, 2016

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A. INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district commander. Your objections must be received by the district commander within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district commander will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district commander will send you a proffered permit for your reconsideration, as indicated in Section B below.

B. PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

C. PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

D. APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

E. PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: Regulatory Branch Chicago District Corps of Engineers 231 South LaSalle Street, Suite 1500 Chicago, IL 60604-1437 Phone: (312) 846-5530 Fax: (312) 353-4110	If you only have questions regarding the appeal process you may also contact: Jacob Siegrist Appeal Review Officer Great Lakes and Ohio River Division CELRD-PD-REG 550 Main Street, Room 10032 Cincinnati, Ohio 45202-3222 Phone: (513) 684-2699 Fax: (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Commanders personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 29, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, ComEd, LRC-2016-330

C. PROJECT LOCATION AND BACKGROUND INFORMATION: NW of I-94 and 130th Street
State: Illinois County/parish/borough: **Cook** City: Chicago
Center coordinates of site (lat/long in degree decimal format): Lat. 41.667957°N, Long. -87.601762° W.
Universal Transverse Mercator: Zone 16
Name of nearest waterbody: Calumet River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Calumet River**
Name of watershed or Hydrologic Unit Code (HUC): **Little Calumet-Galien (04040001)**
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: June 6, 2016
☒ Field Determination. Date(s): May 27, 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

2. Non-regulated waters/wetlands (check if applicable):[1]
☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **Wetlands 1 & 2 are shallow Phragmites dominated wetland in a flat landscape, connected to roadside ditches that don't drain anywhere**.

SECTION III: CWA ANALYSIS

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[2]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

[1] Supporting documentation is presented in Section III.F.
[2] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .

☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource: .

☒ Wetlands: 1.6 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource: .

☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: CBBEL May 10, 2016 Request for Jurisdictional Determination Report.

☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☒ U.S. Geological Survey Hydrologic Atlas:Lake Calumet HA 205, 1966, .

☐ USGS NHD data.

☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Lake Calumet 7.5", 1991, Pick List, Pick List, Pick List, .

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of DuPage and Part of Cook (1979).

☒ National wetlands inventory map(s). Cite name: Lake Calumet, .

☐ State/Local wetland inventory map(s): Pick List, .

☒ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): .

or ☒ Other (Name & Date): .

☐ Previous determination(s). File no. and date of response letter: .

☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature: .

☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Site visit on May 27, 2016 to walk ditches and trace to end.

☒ Area(s) are geographically isolated. Wetlands are shallow isolated depressions in the lake plain region of Lake Michigan.

☒ Area(s) do not have a hydrologic nexus. Water does not drain off-site into any flowing water of the U.S.

☒ Area(s) do not have an ecological nexus. .

☒ Area(s) do not have evidence of a subsurface flow connection to a jurisdictional water. .

☒ Area(s) do not have evidence of surface overland sheet flow. .

☒ Area(s) are not located within the flood plain. .

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

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SECTION I: BACKGROUND INFORMATION

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C. PROJECT LOCATION AND BACKGROUND INFORMATION: NW of I-94 and 130th Street
State: Illinois County/parish/borough: **Cook** City: Chicago
Center coordinates of site (lat/long in degree decimal format): Lat. 41.66796°N, Long. -87.60176° W.
Universal Transverse Mercator: Zone 16
Name of nearest waterbody: Calumet River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Calumet River**
Name of watershed or Hydrologic Unit Code (HUC): **Little Calumet-Galien (04040001)**
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: June 6, 2016
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SECTION II: SUMMARY OF FINDINGS

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B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

2. Non-regulated waters/wetlands (check if applicable):[1]
☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **Two shallow roadside ditches are exempt**.

SECTION III: CWA ANALYSIS

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Other: (explain, if not covered above): **.**

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: CBBEL May 10, 2016 Request for Jurisdictional Determination Report.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☒ U.S. Geological Survey Hydrologic Atlas:Lake Calumet HA 205, 1966, .

[1] Supporting documentation is presented in Section III.F.

☐ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: Lake Calumet 7.5", 1991, Pick List, Pick List, Pick List, .
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of DuPage and Part of Cook (1979).
☒ National wetlands inventory map(s). Cite name: Lake Calumet, .
☐ State/Local wetland inventory map(s): Pick List, .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): .
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Site visit on May 27, 2016 to walk ditches.

☒ Areas are ditches (check all that apply): .
☒ Non-tidal drainage and irrigation ditches excavated on dry land (51 FR 41217, Nov. 13, 1986). .
☒ Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water (USACE JD Form Instructional Guidebook 5/30/2007). .
☐ Ditches that do not have a relatively permanent flow into waters of the U.S. or between two (or more) waters of the U.S. (USACE JD Form Instructional Guidebook 5/30/2007). .

☐ Area(s) are artificial waters created in upland or dry land: .
☐ Artificially irrigated areas which would revert to upland if the irrigation ceased (51 FR 41217, Nov. 13, 1986). .
☐ Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing (51 FR 41217, Nov. 13, 1986). .
☐ Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons (51 FR 41217, Nov. 13, 1986). .
☐ Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States (51 FR 41217, Nov. 13, 1986). .
☐ Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet criteria of this definition) (33 CFR 328.3 (a)). .

☐ Area(s) are swales (USACE JD Form Instructional Guidebook 5/30/2007). .
☐ Area(s) are erosional features (including gullies) (USACE JD Form Instructional Guidebook 5/30/2007). .
☐ Area(s) are prior converted cropland (33 CFR 328.3(a)(8)). .
☐ Area(s) are uplands. .
☐ Other: .

NOTE: AERIAL PHOTOGRAPH TAKEN FROM NEARMAP, DATED: FEBRUARY 4, 2016
*JURISDICTIONAL STATUS & BUFFER WIDTHS ARE SUBJECT TO REGULATORY APPROVAL
SECTIONS 22 AND 27, T37N, R14E / CHICAGO, COOK COUNTY, ILLINOIS

0 590 1,180
Feet
1 inch = 600 feet

CLIENT: ComEd An Exelon Company

TITLE: APPROXIMATE WETLAND DELINEATION

ESD #	2016-100
CBBEL #	04-0532.00804
DATE:	4/28/16

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600 · Rosemont, Illinois 60018 · (847) 823-0500

DSGN.			SCALE:	1 "= 600 '
DWN.	KEK		USER:	kkopija
CHKD.	JRG		PLOT DATE:	5/5/2016
FILE NAME:	040532.00804_INDEX			

EXH IND

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15-0218

WETLAND DELINEATION REPORT

CTA RED LINE EXTENSION – LAKE CALUMET

CHICAGO, COOK COUNTY, ILLINOIS

PREPARED FOR:

CDM Smith
14432 SE Eastgate Way, Suite 100
Bellevue, WA 98007

SEPTEMBER 16, 2015

Revised October 1, 2015

26575 W. COMMERCE DRIVE, SUITE 601, VOLO, ILLINOIS 60073
OFFICE (847) 740-0888 FAX (847) 740-2888

INTRODUCTION

A wetland delineation of the 78.9-acre permanent project envelope for the southern portion of the Chicago Transit Authority's Red Line Extension, near Lake Calumet was conducted on August 13 and 19, 2015. The site is located west of Interstate 94 (Bishop Ford Expressway), north of 130th Street, along the east side of the Metropolitan Water Reclamation District of Greater Chicago's (MWRD) Calumet Waste Water Treatment plant within the City of Chicago, Cook County, Illinois (Exhibit 1). The site is further located in Sections 22, 26, and 27, Township 37 North, Range 14 East. The project permanent envelope includes Cottage Grove Avenue, parts of the MWRD property, railroad lines, and other disturbed urban-industrial landscapes. The property has been disturbed by various grading, dumping, and filling activities over the past decades.

EXISTING DATA

The United States Geological Survey (USGS) topographic map indicates open water at the locations of the MWRD sewage lagoons and sludge drying beds (Exhibit 2), but does not indicate any wetlands or blue line streams within the defined project permanent envelope. The National Wetland Inventory (NWI) map similarly depicts the sewage lagoons and sludge drying beds, but also indicates the presence of wetlands within the project permanent envelope (Exhibit 3) that are designated PF01/EMCd (palustrine, forested, broad-leaved deciduous/emergent seasonally flooded, partially drained/ditched). The Flood Insurance Rate Map indicates no mapped floodplain or floodway within the project permanent envelope (Exhibit 4). The USGS Hydrologic Atlas indicates no flood of record waters within the project permanent envelope (Exhibit 5). The Cook County Soil Survey (Exhibit 6) shows six (6) different soil series of orthents, or urban land within the project permanent envelope.

WETLAND DELINEATION

Wetlands within the project permanent envelope were delineated by Vincent Mosca and Jeffrey Mengler, PWS of Hey and Associates, Inc. using procedures outlined in the 1987 Corps of Engineers' (Corps) Wetland Delineation Manual and the 2010 Regional Supplement: Midwest Region. The entire property was inspected, with areas supporting wetland plant species prioritized for investigation. If inspection revealed that wetland plant species comprised more than 50 percent of the plant cover, the suspected wetland was further examined for field indicators of hydric soil and hydrology. The Corps-accepted field indicators of hydric soil include: gleyed and low chroma matrix and mottle colors, and iron and manganese concretions. Necessary hydric soil indicators were field verified in the wetland area if possible. In most cases in this

project permanent envelope, the gravel and fill precluded investigation with hand tools, and the disturbed profiles would not have been illuminating. The Corps-approved field indicators of hydrology include: visual observation or photographic evidence of soil inundation or saturation during the growing season, oxidized channels associated with living roots and rhizomes, water marks, drift lines, waterborne sediment deposits, waterstained leaves, surface scoured areas and drainage patterns. Wetland hydrologic criteria were met in the areas delineated as wetland.

Lists of observed plant species in the wetland areas were compiled and data were gathered to complete Corps jurisdictional dataforms. A native vegetative quality rating was calculated for each wetland using the Floristic Quality Assessment (FQA) of Swink and Wilhelm as published in *Plants of the Chicago Region,* 1994. The FQA method assigns to plant species a rating that reflects the fundamental conservatism that the species exhibits for natural habitats. A native species that exhibits specific adaptations to a narrow spectrum of the environment is given a high rating. Conversely, a ubiquitous species that exhibits adaptations to a broad spectrum of environmental variables is given a low rating. Utilizing this method, a Floristic Quality Index (FQI) is derived for a given area. The FQI is an indication of native vegetative quality for an area: generally 1-19 indicates low vegetative quality, 20-35 indicates high vegetative quality and above 35 indicates "Natural Area" quality.

RESULTS

Fifteen (15) wetlands totaling 15.34 acres within the project permanent envelope were delineated on the property (Exhibit 7). The wetland boundaries shown on an aerial photograph in Exhibit 7 were recorded with sub-meter accuracy GPS unit in the field on August 13 and 19, 2015. Lists of the observed plant species for the wetland areas are given in Exhibit 8. The Corps' jurisdictional dataforms for upland and wetland areas are included as Exhibit 9. Georeferenced representative color photographs of the upland and wetland areas are provided in Exhibit 10.

Following is a table that summarizes the delineated wetlands. Wetland acreages were calculated based upon the sub-meter accuracy GPS data imported into a Geographical Information System (GIS).

Table 1. Summary of Wetlands within Project Limits.

Wetland	Area within Project Limits (acres)	Total Wetland Area (acres)	FQI[1]	Native Mean C[2]	HQAR[3]	Wetland Type	Dominant Vegetation
1 & 2	0.19	0.38	3.89	1.38	No	Drainage swale	Common reed (*Phragmites australis*)
3	0.83	0.83	6.36	4.5	No[4]	Marsh	Common reed and purple loosestrife (*Lythrum salicaria*)
4	0.07	1.85	6.43	2.43	No	Drainage swale	Common reed
5	2.73	2.73	4.95	1.75	No	Drainage swale	Common reed
6	2.26	2.26	11.13	2.43	No	Drainage swale & degraded wet prairie	Common reed
7	1.63	1.63	13.68	2.79	No	Drainage swale & degraded wet prairie	Common reed
8	1.61	1.77	6.43	2.43	No	Degraded marsh	Common reed
9	1.09	1.09	2.04	0.83	No	Drainage swale/marsh	Common reed
10	0.07	0.07	6.43	2.43	No	Drainage ditch	Common reed
11	0.05	n/a	3.00	1.50	No	Drainage ditch	Common reed
12	3.56	3.56	3.00	1.50	No	Degraded marsh	Common reed
13	0.53	0.66	2.86	1.17	No	Wooded	Box Elder (Acer negundo), Common reed (*Phragmites australis*)
14	0.20	0.88	4.00	1.33	No	Drainage swale	Common reed
15	0.52	n/a	2.00	1.00	No	Drainage swale	Common reed
TOTAL	15.34	17.71					

1 The Floristic Quality Index (FQI) is an indication of native vegetative quality for an area: generally 1-19 indicates low vegetative quality, 20-35 indicates high vegetative quality and above 35 indicates "Natural Area" quality.
2 The Native Mean C is an indication of native vegetative quality for an area. Areas with value of 3.5 or greater are considered high quality.
3 The Chicago District U.S. Army Corps of Engineers has designated various Waters of the United States to be high-quality aquatic resources (HQARs). This designation is based on the definitions found within the Regional Permit Program that became effective April 1, 2007.
4 While this area has a Native Mean C of greater than 3.5, it was based on the presence of only two native species. The remainder of the vegetation was comprised of non-native species and would not be considered high quality in any ecological assessment.

Wetlands 1 and 2 are both part of the same drainage swale along the east-west portion of South Cottage Grove Avenue, just north of 135th Street. It is dominated by common reed and defined on the south by the 135th Street embankment, on the north and west by the Cottage Grove Avenue entrance off 135th Street, and on the east by a railroad access road. It is of very low floristic quality and wetland function, and has debris and trash scattered throughout it.

Wetland 3 is on the north side of the east-west portion of South Cottage Grove Avenue, and is connected to Wetland areas 5 and 9. It is dominated by common reed. It is defined by a gravel road and fill on all sides. This was one of the few areas that had standing water during the August 2015 assessment. It is of

low quality and function. It should be noted that the mean C value is 4.5, which suggests a high quality area, but this mean C value is based on the only 2 native species observed – the other 4 species were all invasive non-native species.

Wetland 4 is another drainage swale that runs from the entrance to the MWRD Calumet Wastewater Treatment Plant (WWTP) west along 135th Street. It is entirely dominated by common reed. The north boundary is defined by a mowed embankment up to the WWTP facility fence, and the southern boundary is defined by 135th Street and shoulder. The mowed area was composed of typical upland turf and weed species and not hydrophytic species, indicating that the edge of mowing corresponded with the edge of wetland. Wetland 4 appears to receive drainage from 135th Street via several stormsewers that create the undulating southern boundary.

Wetland 5 is a drainage swale that runs along the west side of South Cottage Grove Avenue from Wetland 3 north to the entrance and gatehouse for the Calumet WWTP. It is dominated by common reed, with patches of sandbar willow (*Salix interior*) and cottonwood trees (*Populus deltoides*). The eastern boundary is defined by Cottage Grove Avenue and the western boundary is a chain-link fence and mowed turf grass within the MRWDGC property.

Wetland 6 is a wet prairie drainage swale along a Indiana Harbor Belt Railroad line that does not appear to have frequent use. It is generally bounded by the railroad ballast on the west side and higher ground dominated by common buckthorn (*Rhamnus cathartica*) on the east side. Dominant vegetation was common reed, though pockets of native plant species were observed.

Similarly, Wetland 7 is a drainage swale on the west side of the same Indiana Harbor Belt Railroad line through the site. It is also bounded by the railroad ballast and higher ground covered in common buckthorn. It is of moderate floristic quality when calculated to include the scattered native wet prairie species observed, but is largely dominated by the invasive common reed.

Wetland 8 is an area of degraded marsh inside the MWRD Calumet WWTP perimeter fence, located just southeast of the gatehouse and entrance. It is surrounded by areas of fill/gravel that are much higher in elevation than the ground in the wetland area. The embankments around this wetland pocket are very steep and eroded, often at a 1:1 slope or steeper. The vegetation was dominated by common reed. It is an area of very low quality.

Wetland 9 is connected to Wetland 3 and ultimately Wetland 5. At the southern end of Wetland 5, these 3 wetland areas form a u-shaped marsh swale around a gravel fill pad that is 3-4 feet higher in elevation. This

area is bounded by the MWRD Calumet WWTP entrance road and Cottage Grove Avenue. The vegetation was dominated by common reed, and it is of low quality.

Wetland 10 is a small drainage ditch that runs from the 135th Street bridge over the Indiana Harbor Belt Railroad/Metra South Shore rail lines, to Cottage Grove Avenue. It is generally lined by cottonwoods and dead green ash (*Fraxinus pennsylvanica*) with common reed dominant in the ditch. The ditch was also littered with old tires and other refuse.

Wetland 11 is a small part of a wet area between the gravel railroad access road, and the Metra South Shore rail line. Most of the wetland is outside of the project limits and is dominated by common reed.

Wetland 12 is a marsh area located just north of the MWRD Calumet WWTP gatehouse. It is bounded by gravel access roads on the east and west sides, and the entrance road on the south. On the north side the wetland gives way to higher ground dominated by common buckthorn and a variety of upland weeds. The marsh is dominated by common reed.

Wetland 13 is a small wetland drainage swale located between the Metra South Shore Electric railroad line and the Indiana Harbor Belt Railroad freight line. It is dominated by common reed and is bounded by railroad ballast.

Wetland 14 is a swale located on the east side of the Indiana Harbor Belt Railroad/Metra South Shore line, but west of the MWRD fence around some sludge drying beds and other facilities. It is partially wooded by box elder and cottonwood but in open areas remains dominated by common reed.

Wetland 15 refers to a narrow drainage swale dominated by common reed located along a MWRD gravel access road in the northwest part of the project permanent envelope. It is of very low quality.

There are no High Quality Aquatic Resources on the subject property or mapped on adjacent properties. All wetlands observed were dominated by the invasive common reed, often in dense monotypic stands. The surrounding land is primarily developed urban or industrial landscapes.

SUMMARY AND CONCLUSIONS

The wetland delineation revealed 15 wetland areas totaling 15.34 acres within the project permanent envelope as depicted on Exhibit 7. All wetlands were of low quality and dominated by the invasive common reed. Most of the wetland boundaries are defined by fill and other manmade features. A jurisdictional determination will need to be requested from the U.S. Army Corps of Engineers to determine if the wetlands are under their Clean Water Act jurisdiction or if they are isolated wetlands of Cook County.

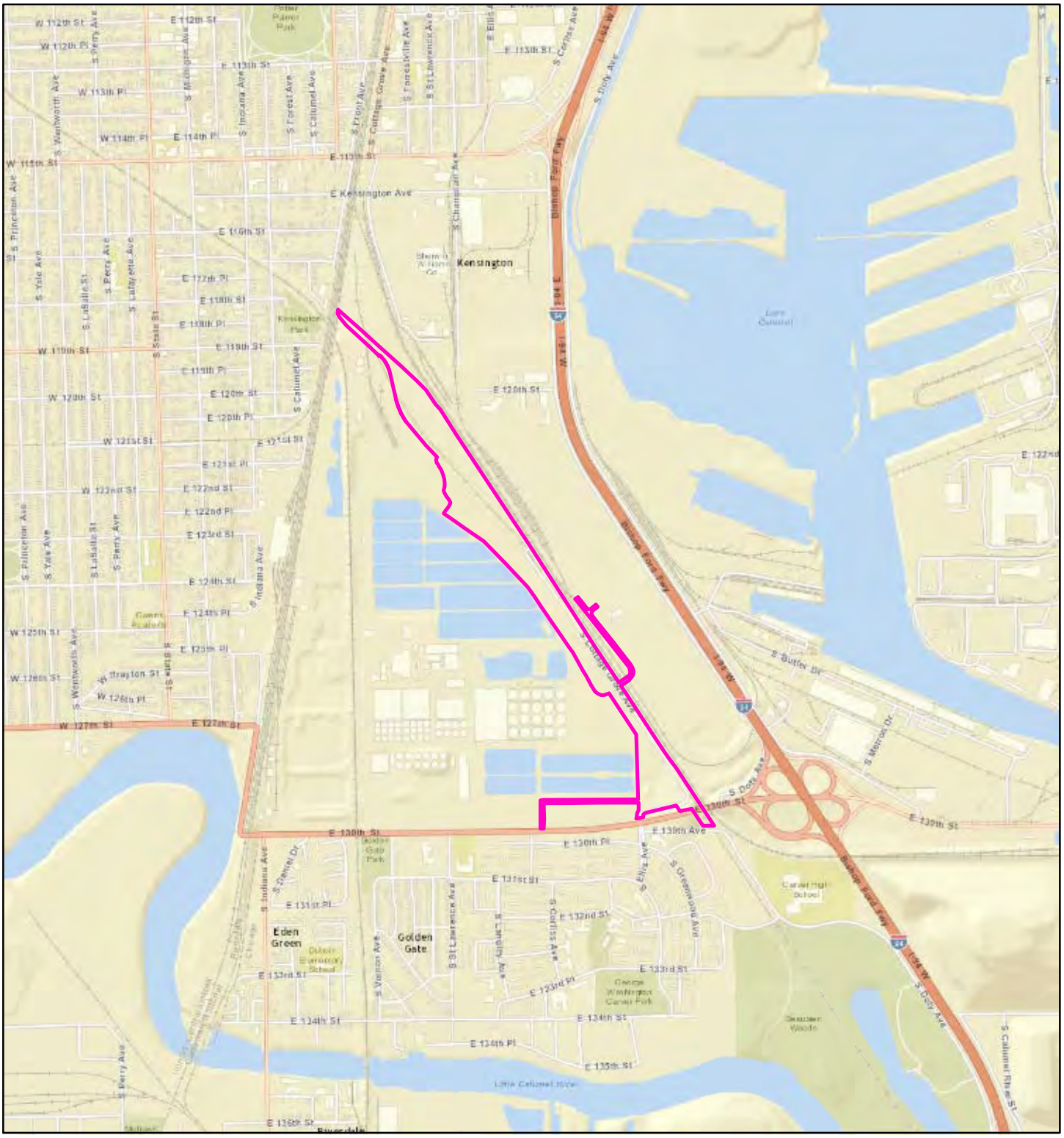

Scale:

0 2,000 Feet

Orientation:

Legend:

Project Permanent Envelope

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Location Information:

T.37N.-R.14E., Sections 22, 26 & 27

Exhibit Title:

Project Location

Exhibit:

1

Scale:

0 2,000 Feet

Orientation:

Legend:

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Location Information:

Lake Calumet Quadrangle

Exhibit Title:

U.S.G.S. Topographic Map

Exhibit:

2

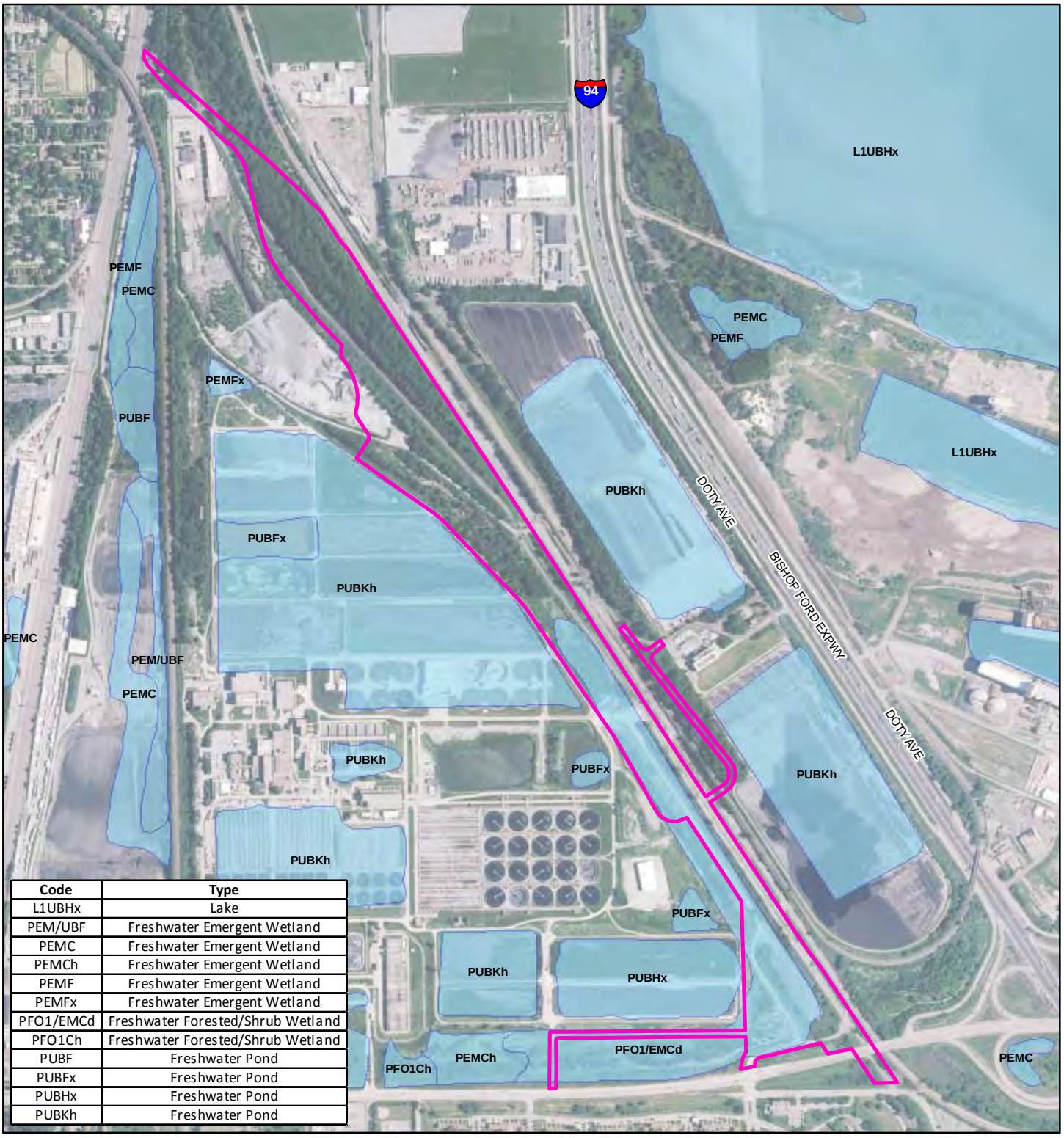

Code	Type
L1UBHx	Lake
PEM/UBF	Freshwater Emergent Wetland
PEMC	Freshwater Emergent Wetland
PEMCh	Freshwater Emergent Wetland
PEMF	Freshwater Emergent Wetland
PEMFx	Freshwater Emergent Wetland
PFO1/EMCd	Freshwater Forested/Shrub Wetland
PFO1Ch	Freshwater Forested/Shrub Wetland
PUBF	Freshwater Pond
PUBFx	Freshwater Pond
PUBHx	Freshwater Pond
PUBKh	Freshwater Pond

Scale:

0 1,000 Feet

Orientation:

Legend:

National Wetland Inventory

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

NWI Date:

1981

Exhibit Title:

National Wetland Inventory

Exhibit:

3

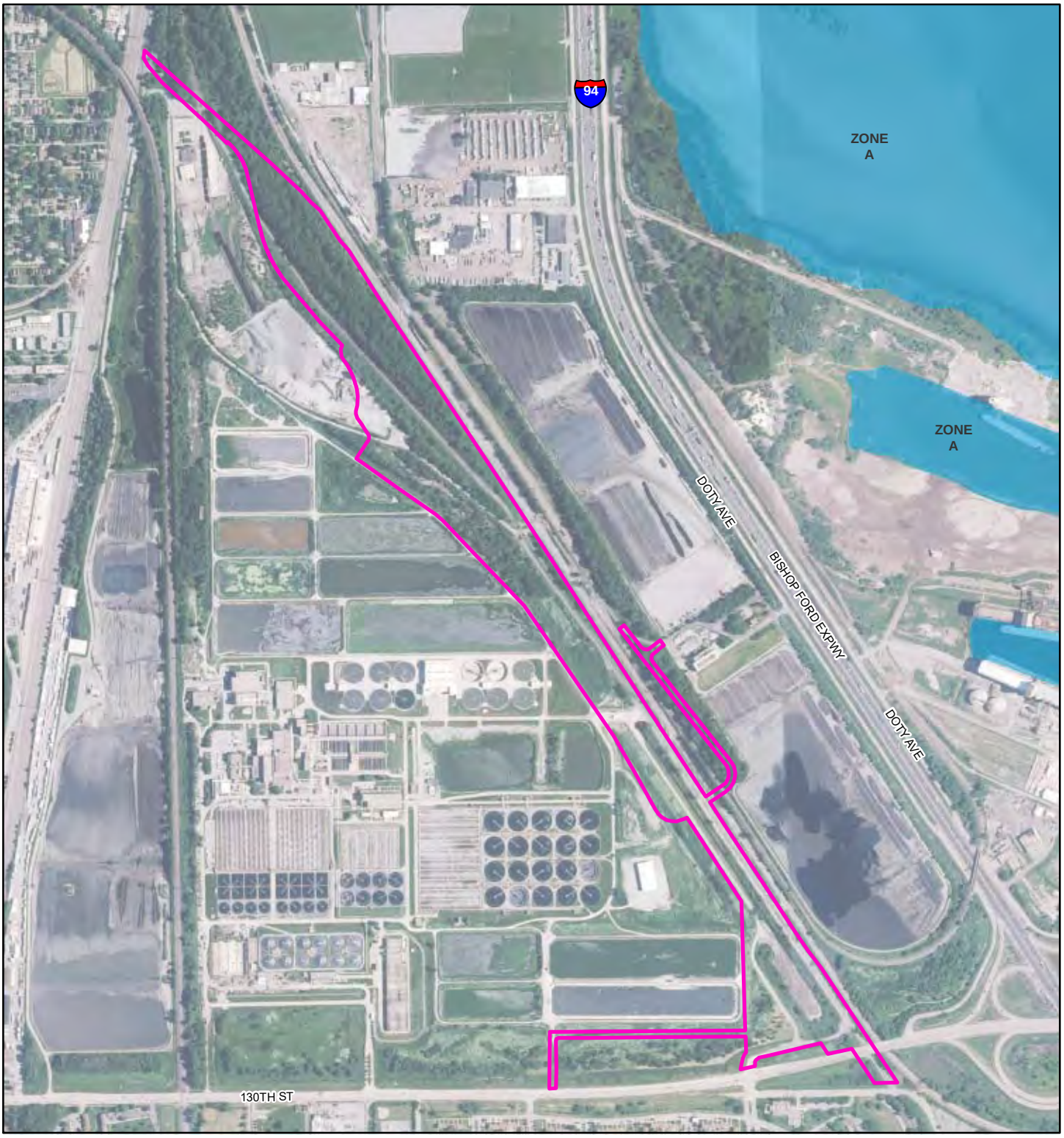

Scale:

0 1,000 Feet

Orientation:

Legend:

100 Year Flood Zone

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Panel #:

17031C0661J

Exhibit Title:

Flood Insurance Rate Map

Exhibit:

4

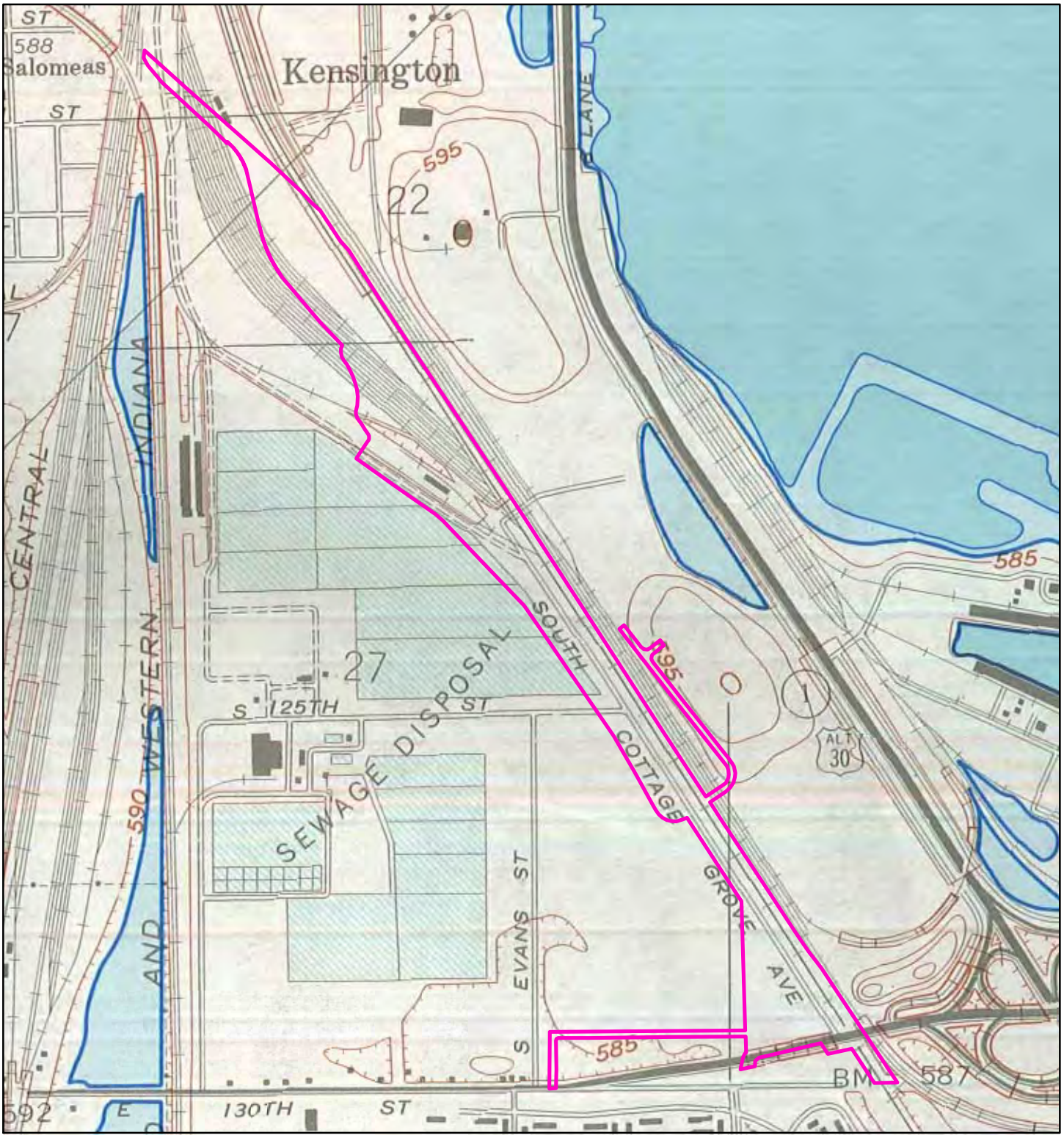

Scale:

0 1,000 Feet

Orientation:

Legend:

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Hydro Atlas Date:

1966

Exhibit Title:

U.S.G.S Hydrologic Atlas

Exhibit:

5

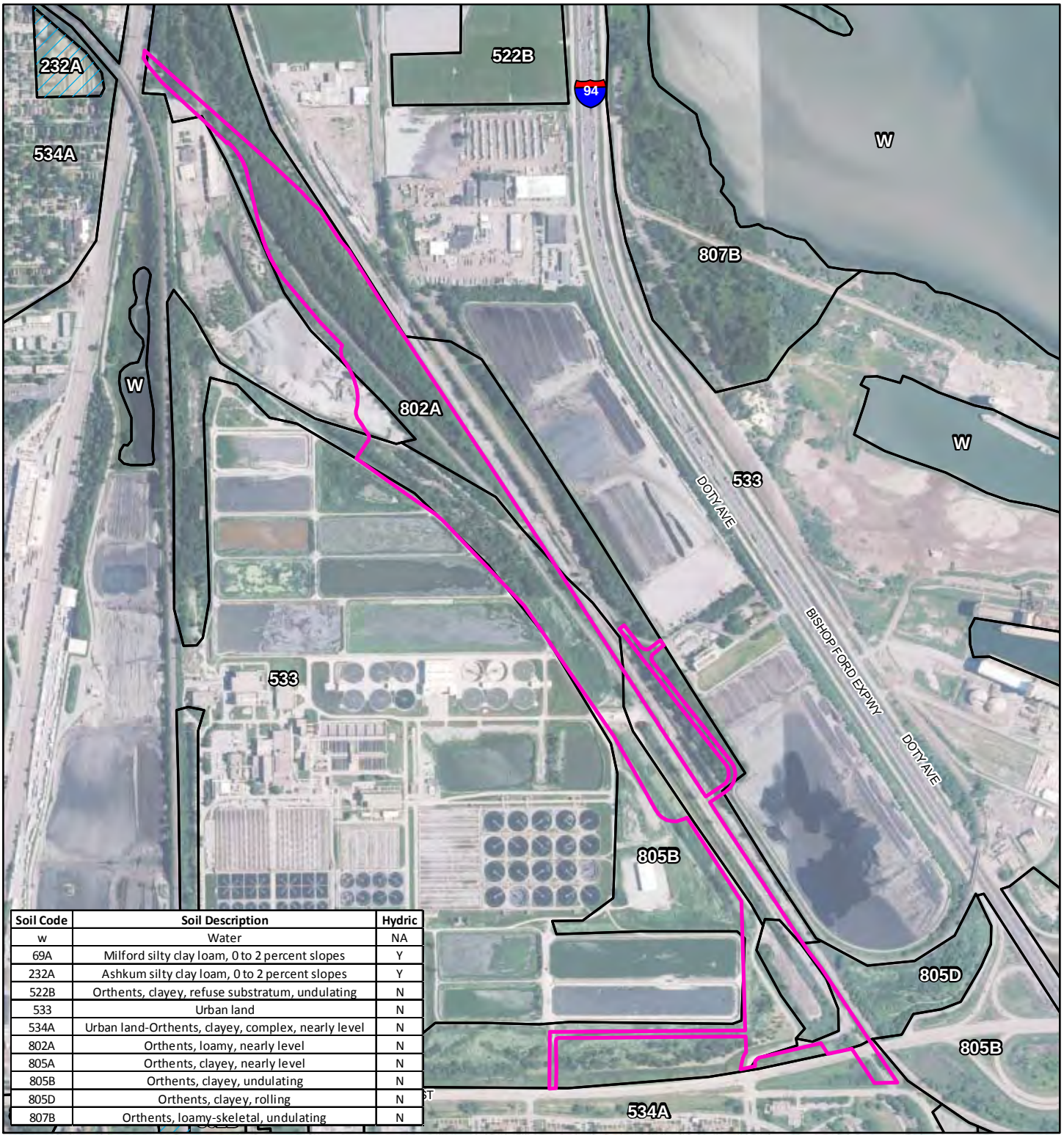

Soil Code	Soil Description	Hydric
w	Water	NA
69A	Milford silty clay loam, 0 to 2 percent slopes	Y
232A	Ashkum silty clay loam, 0 to 2 percent slopes	Y
522B	Orthents, clayey, refuse substratum, undulating	N
533	Urban land	N
534A	Urban land-Orthents, clayey, complex, nearly level	N
802A	Orthents, loamy, nearly level	N
805A	Orthents, clayey, nearly level	N
805B	Orthents, clayey, undulating	N
805D	Orthents, clayey, rolling	N
807B	Orthents, loamy-skeletal, undulating	N

Scale:

0 1,000 Feet

Orientation:

Legend:

Hydric Soils

Soil Units

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Soil Survey Date:

2012

Exhibit Title:

NRCS Soil Survey

Exhibit:

6

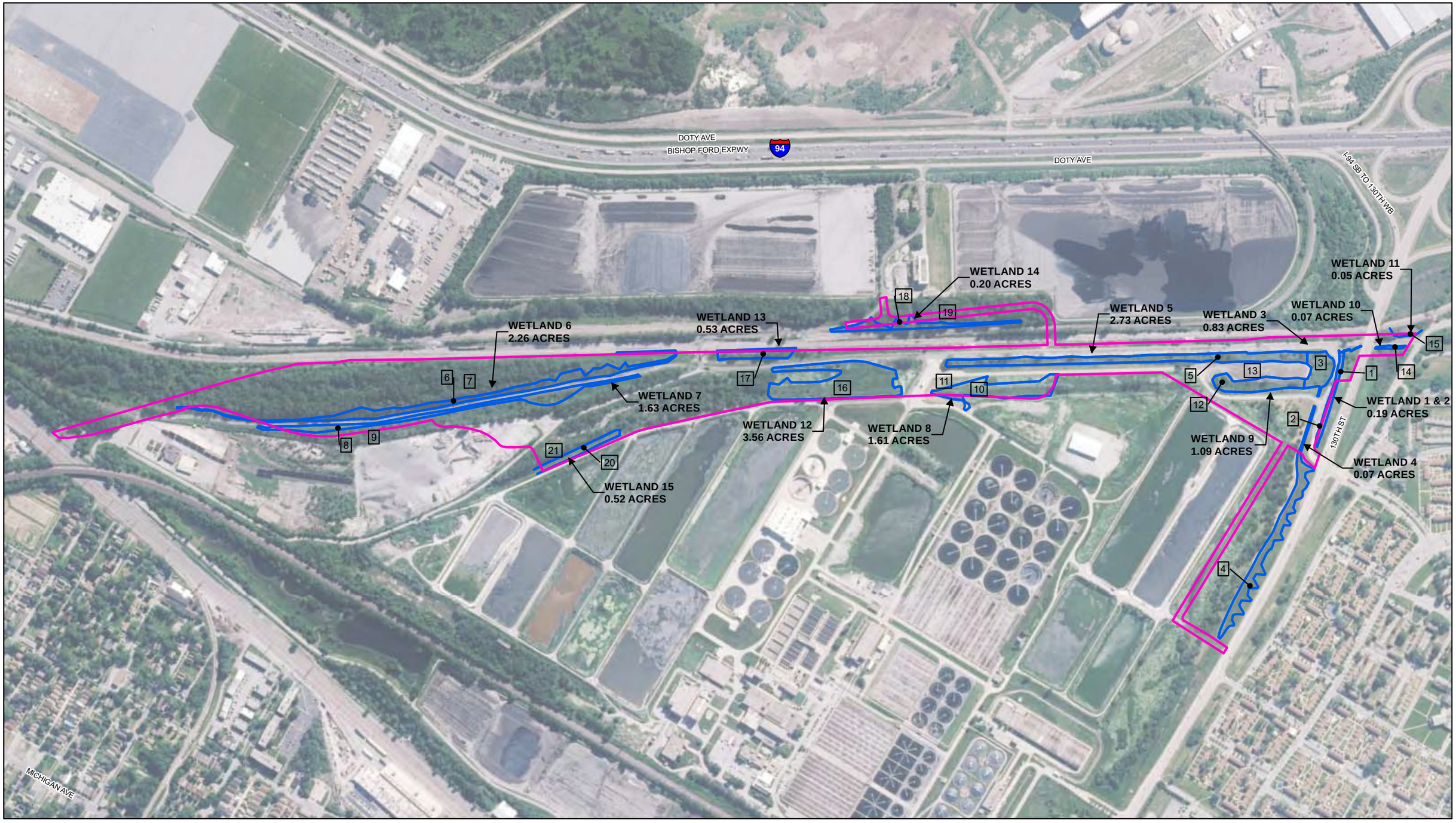

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:
0 600 Feet

Project Number: 15-0218

Orientation:

Latest Revision: 10/1/2015

Legend:
- [x] Data Point
- Surveyed Wetland Boundary (Labled wetland acreages for area within Project Permanent Envelope only)
- Project Permanent Envelope

Project Name:
CTA Red Line Extension

Aerial Date:
2014

Prepared For:
CDM Smith

Exhibit Title:
Wetland Boundary

Exhibit:
7

The following floristic inventories, prepared by Hey and Associates, Inc., follow the nomenclature given in the National Wetland Plant List: (Lichvar, R. W., M. Butterwick, N.C. Melvin, and W. N. Kirchner 2014); The National Wetland Plant List 2014 Update of Wetland Ratings. (Phytoneuron 2014-41:1-42); and bio data/nomenclature follows Kartesz, J. T., 2013 *Floristic Synthesis of North America. Version 1.0 Biota of North American Program.* It also provides local synonymies based on Swink and Wilhelm's 1994 *Plants of the Chicago Region.*

Each species is listed with its database acronym and coefficient of conservatism (0 = weedy, 10 = conservative), and followed by its corresponding National Wetland Category (OBL = obligate wetland species, FACW = facultative wetland, FAC - facultative species, FACU = facultative upland, UPL = upland species), habit, duration, and nativity. Native taxa are those species believed to have been present in the Chicago region prior to European settlement.

The conservatism metric information above the species list provides analysis of the vegetative quality of the site. It shows the total number of species present (species richness), the mean coefficient of conservatism (Mean C), the floristic quality index (FQAI), and mean wetness; calculated separately for native species only and then including the adventive species (W/Adventives). The Mean C datum indicates the average coefficient of conservatism. The FQAI is derived by multiplying the Mean C by the square root of the number of species. If the FQAI of an area registers in the middle 30's or higher, one can be relatively certain that there is sufficient native character to be of rather profound environmental importance in terms of a regional natural area perspective. The wet indicator value indicates the mean or average wet indicator category for all species present, natives only and then with adventives – numbers less than 0 indicate hydrophytic vegetation, while numbers greater than 0 correspond to the upland vegetation categories. The table also provides the number of species in each physiognomic or habit class, native versus adventive along with their percentage of the total inventory.

Source: Herman, B., Sliwinski, R. and S. Whitaker. 2013. Chicago Region FQA (Floristic Quality Assessment) Calculator. U.S. Army Corps of Engineers, Chicago, IL. Version September 29, 2014

SITE: Wetland 1 & 2 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**1.38**
MEAN C (ALL SPECIES)	0.85
MEAN C (NATIVE TREES)	1.50
MEAN C (NATIVE SHRUBS)	1.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	**3.89**
FQAI (ALL SPECIES)	3.05
ADJUSTED FQAI	10.79
% C VALUE 0	0.46
% C VALUE 1-3	0.54
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	13
SPECIES RICHNESS (NATIVE)	8
% NON-NATIVE	0.38
WET INDICATOR (ALL)	-0.23
WET INDICATOR (NATIVE)	-0.50
% HYDROPHYTE (MIDWEST)	0.77
% NATIVE PERENNIAL	0.62
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.92

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
acesai	*Acer saccharinum*	*Acer saccharinum*	Silver Maple	0	FACW	Tree	Perennial	Native
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive
frapen	*Fraxinus pennsylvanica*	*Fraxinus pennsylvanica subintegerrima*	Green Ash	1	FACW	Tree	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
salint	*Salix interior*	*Salix interior*	Sandbar Willow	1	FACW	Shrub	Perennial	Native
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
ulmame	*Ulmus americana*	*Ulmus americana*	American Elm	3	FACW	Tree	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 3 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**4.50**
MEAN C (ALL SPECIES)	1.50
MEAN C (NATIVE TREES)	2.00
MEAN C (NATIVE SHRUBS)	7.00
MEAN C (NATIVE HERBACEOUS)	n/a
FQAI (NATIVE SPECIES)	**6.36**
FQAI (ALL SPECIES)	3.67
ADJUSTED FQAI	25.98
% C VALUE 0	0.67
% C VALUE 1-3	0.17
% C VALUE 4-6	0.00
% C VALUE 7-10	0.17

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	6
SPECIES RICHNESS (NATIVE)	2
% NON-NATIVE	0.67
WET INDICATOR (ALL)	-0.67
WET INDICATOR (NATIVE)	-0.50
% HYDROPHYTE (MIDWEST)	0.83
% NATIVE PERENNIAL	0.33
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.83

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
ribame	*Ribes americanum*	*Ribes americanum*	Wild Black Currant	7	FACW	Shrub	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive

SITE: Wetland 4 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**2.43**
MEAN C (ALL SPECIES)	1.00
MEAN C (NATIVE TREES)	n/a
MEAN C (NATIVE SHRUBS)	n/a
MEAN C (NATIVE HERBACEOUS)	2.67
FQAI (NATIVE SPECIES)	**6.43**
FQAI (ALL SPECIES)	4.12
ADJUSTED FQAI	15.58
% C VALUE 0	0.59
% C VALUE 1-3	0.24
% C VALUE 4-6	0.18
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	17
SPECIES RICHNESS (NATIVE)	7
% NON-NATIVE	0.59
WET INDICATOR (ALL)	-0.18
WET INDICATOR (NATIVE)	-0.43
% HYDROPHYTE (MIDWEST)	0.59
% NATIVE PERENNIAL	0.41
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.82

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
ascinc	*Asclepias incarnata*	*Asclepias incarnata*	Swamp Milkweed	4	OBL	Forb	Perennial	Native
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
carnut	*Carduus nutans*	*CARDUUS NUTANS*	Nodding Plumeless-Thistle	0	FACU	Forb	Biennial	Adventive
cirarv	*Cirsium arvense*	*CIRSIUM ARVENSE*	Canadian Thistle	0	FACU	Forb	Perennial	Adventive
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive
solgra	*Euthamia graminifolia*	*Solidago graminifolia nuttallii*	Flat-Top Goldentop	4	FACW	Forb	Perennial	Native
polsca	*Fallopia scandens*	*Polygonum scandens*	Climbing Black-Bindweed	1	FAC	Vine	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
phyame	*Phytolacca americana*	*Phytolacca americana*	American Pokeweed	1	FACU	Forb	Perennial	Native
scipun	*Schoenoplectus pungens*	*Scirpus pungens*	Three-Square	5	OBL	Sedge	Perennial	Native
soldul	*Solanum dulcamara*	*SOLANUM DULCAMARA*	Climbing Nightshade	0	FAC	Vine	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
solsem	*Solidago sempervirens*	*SOLIDAGO SEMPERVIRENS*	Seaside Goldenrod	0	FACW	Forb	Perennial	Adventive
sonuli	*Sonchus arvensis ssp. uliginosus*	*SONCHUS ULIGINOSUS*	Field Sow-Thistle	0	FACU	Forb	Perennial	Adventive
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive

SITE: Wetland 5 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**1.75**
MEAN C (ALL SPECIES)	1.08
MEAN C (NATIVE TREES)	2.00
MEAN C (NATIVE SHRUBS)	4.00
(NATIVE HERBACEOUS)	0.00
FQAI (NATIVE SPECIES)	**4.95**
FQAI (ALL SPECIES)	3.88
ADJUSTED FQAI	13.73
% C VALUE 0	0.62
% C VALUE 1-3	0.31
% C VALUE 4-6	0.00
% C VALUE 7-10	0.08

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	13
SPECIES RICHNESS (NATIVE)	8
% NON-NATIVE	0.38
WET INDICATOR (ALL)	-0.23
WET INDICATOR (NATIVE)	0.00
% HYDROPHYTE (MIDWEST)	0.69
% NATIVE PERENNIAL	0.38
% NATIVE ANNUAL	0.15
% ANNUAL	0.23
% PERENNIAL	0.69

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
ambart	*Ambrosia artemisiifolia*	*Ambrosia artemisiifolia elatior*	Annual Ragweed	0	FACU	Forb	Annual	Native
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
branig	*Brassica nigra*	*BRASSICA NIGRA*	Black Mustard	0	UPL	Forb	Annual	Adventive
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
oenbie	*Oenothera biennis*	*Oenothera biennis*	Evening Primrose	0	FACU	Forb	Biennial	Native
parqui	*Parthenocissus quinquefolia*	*Parthenocissus quinquefolia*	Virginia-Creeper	2	FACU	Vine	Perennial	Native
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
ribame	*Ribes americanum*	*Ribes americanum*	Wild Black Currant	7	FACW	Shrub	Perennial	Native
salint	*Salix interior*	*Salix interior*	Sandbar Willow	1	FACW	Shrub	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 6 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**2.43**
MEAN C (ALL SPECIES)	1.59
MEAN C (NATIVE TREES)	1.00
MEAN C (NATIVE SHRUBS)	1.00
MEAN C (NATIVE HERBACEOUS)	2.76
FQAI (NATIVE SPECIES)	**11.13**
FQAI (ALL SPECIES)	9.02
ADJUSTED FQAI	19.67
% C VALUE 0	0.50
% C VALUE 1-3	0.25
% C VALUE 4-6	0.22
% C VALUE 7-10	0.03

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	32
SPECIES RICHNESS (NATIVE)	21
% NON-NATIVE	0.34
WET INDICATOR (ALL)	-0.06
WET INDICATOR (NATIVE)	-0.14
% HYDROPHYTE (MIDWEST)	0.66
% NATIVE PERENNIAL	0.53
% NATIVE ANNUAL	0.06
% ANNUAL	0.09
% PERENNIAL	0.78

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
agralb	*Agrostis gigantea*	*AGROSTIS ALBA*	Red Top	0	FACW	Grass	Perennial	Adventive
acnalt	*Amaranthus tuberculatus*	*Acnida altissima*	Rough-Fruit Amaranth	0	OBL	Forb	Annual	Native
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
andger	*Andropogon gerardii*	*Andropogon gerardii*	Big Bluestem	5	FAC	Grass	Perennial	Native
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
ascinc	*Asclepias incarnata*	*Asclepias incarnata*	Swamp Milkweed	4	OBL	Forb	Perennial	Native
cirdis	*Cirsium discolor*	*Cirsium discolor*	Field Thistle	2	FACU	Forb	Biennial	Native
comcom	*Commelina communis*	*COMMELINA COMMUNIS*	Asiatic Dayflower	0	FACU	Forb	Annual	Adventive
cypstr	*Cyperus strigosus*	*Cyperus strigosus*	Straw-Color Flat Sedge	1	FACW	Sedge	Perennial	Native
daucar	*Daucus carota*	*DAUCUS CAROTA*	Queen Anne's Lace	0	UPL	Forb	Biennial	Adventive
eupalt	*Eupatorium altissimum*	*Eupatorium altissimum*	Tall Boneset	0	UPL	Forb	Perennial	Native
solgra	*Euthamia graminifolia*	*Solidago graminifolia nuttallii*	Flat-Top Goldentop	4	FACW	Forb	Perennial	Native
polsca	*Fallopia scandens*	*Polygonum scandens*	Climbing Black-Bindweed	1	FAC	Vine	Perennial	Native
gaubie	*Gaura biennis*	*Gaura biennis*	Biennial Beeblossom	2	FACU	Forb	Biennial	Native
helgro	*Helianthus grosseserratus*	*Helianthus grosseserratus*	Saw-Tooth Sunflower	2	FACW	Forb	Perennial	Native
hyppun	*Hypericum punctatum*	*Hypericum punctatum*	Spotted St. John's-Wort	4	FAC	Forb	Perennial	Native
liapyc	*Liatris pycnostachya*	*Liatris pycnostachya*	Priarie Blazing Star	8	FAC	Forb	Perennial	Native
lycame	*Lycopus americanus*	*Lycopus americanus*	Cut-Leaf Water-Horehound	5	OBL	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
physub	*Physalis subglabrata*	*Physalis subglabrata*	Smooth Ground Cherry	0	UPL	Forb	Perennial	Native
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
samcan	*Sambucus nigra ssp. canadensis*	*Sambucus canadensis*	Elderberry	1	FACW	Shrub	Perennial	Native
sapoff	*Saponaria officinalis*	*SAPONARIA OFFICINALIS*	Bouncing-Bett	0	FACU	Forb	Perennial	Adventive
andsco	*Schizachyrium scoparium*	*Andropogon scoparius*	Little Bluestem	5	FACU	Grass	Perennial	Native
soldul	*Solanum dulcamara*	*SOLANUM DULCAMARA*	Climbing Nightshade	0	FAC	Vine	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive
verhas	*Verbena hastata*	*Verbena hastata*	Blue Vervain	4	FACW	Forb	Perennial	Native

SITE: Wetland 7 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**2.79**
MEAN C (ALL SPECIES)	2.03
MEAN C (NATIVE TREES)	n/a
MEAN C (NATIVE SHRUBS)	0.00
MEAN C (NATIVE HERBACEOUS)	2.79
FQAI (NATIVE SPECIES)	**13.68**
FQAI (ALL SPECIES)	11.66
ADJUSTED FQAI	23.81
% C VALUE 0	0.45
% C VALUE 1-3	0.18
% C VALUE 4-6	0.33
% C VALUE 7-10	0.03

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	33
SPECIES RICHNESS (NATIVE)	24
% NON-NATIVE	0.27
WET INDICATOR (ALL)	-0.18
WET INDICATOR (NATIVE)	-0.21
% HYDROPHYTE (MIDWEST)	0.67
% NATIVE PERENNIAL	0.52
% NATIVE ANNUAL	0.09
% ANNUAL	0.09
% PERENNIAL	0.76

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
achmil	*Achillea millefolium*	*ACHILLEA MILLEFOLIUM*	Common Yarrow	0	FACU	Forb	Perennial	Adventive
agralb	*Agrostis gigantea*	*AGROSTIS ALBA*	Red Top	0	FACW	Grass	Perennial	Adventive
andger	*Andropogon gerardii*	*Andropogon gerardii*	Big Bluestem	5	FAC	Grass	Perennial	Native
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
ascsyr	*Asclepias syriaca*	*Asclepias syriaca*	Common Milkweed	0	FACU	Forb	Perennial	Native
cirdis	*Cirsium discolor*	*Cirsium discolor*	Field Thistle	2	FACU	Forb	Biennial	Native
cypstr	*Cyperus strigosus*	*Cyperus strigosus*	Straw-Color Flat Sedge	1	FACW	Sedge	Perennial	Native
daucar	*Daucus carota*	*DAUCUS CAROTA*	Queen Anne's Lace	0	UPL	Forb	Biennial	Adventive
eriann	*Erigeron annuus*	*Erigeron annuus*	Eastern Daisy Fleabane	0	FACU	Forb	Biennial	Native
erican	*Erigeron canadensis*	*Erigeron canadensis*	Canadian Horseweed	0	FACU	Forb	Annual	Native
eupalt	*Eupatorium altissimum*	*Eupatorium altissimum*	Tall Boneset	0	UPL	Forb	Perennial	Native
eupper	*Eupatorium perfoliatum*	*Eupatorium perfoliatum*	Common Boneset	4	OBL	Forb	Perennial	Native
solgra	*Euthamia graminifolia*	*Solidago graminifolia nuttallii*	Flat-Top Goldentop	4	FACW	Forb	Perennial	Native
rhafra	*Frangula alnus*	*RHAMNUS FRANGULA*	Glossy Buckthorn	0	FACW	Shrub	Perennial	Adventive
helgro	*Helianthus grosseserratus*	*Helianthus grosseserratus*	Saw-Tooth Sunflower	2	FACW	Forb	Perennial	Native
hyppun	*Hypericum punctatum*	*Hypericum punctatum*	Spotted St. John's-Wort	4	FAC	Forb	Perennial	Native
jundud	*Juncus dudleyi*	*Juncus dudleyi*	Dudley's Rush	4	FACW	Forb	Perennial	Native
juntor	*Juncus torreyi*	*Juncus torreyi*	Torrey's Rush	4	FACW	Forb	Perennial	Native
laccan	*Lactuca canadensis*	*Lactuca canadensis*	Canadian Blue Lettuce	2	FACU	Forb	Biennial	Native
lycame	*Lycopus americanus*	*Lycopus americanus*	Cut-Leaf Water-Horehound	5	OBL	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
muhglo	*Muhlenbergia glomerata*	*Muhlenbergia glomerata*	Spiked Muhly	10	FACW	Grass	Perennial	Native
oenbie	*Oenothera biennis*	*Oenothera biennis*	Evening Primrose	0	FACU	Forb	Biennial	Native
pancap	*Panicum capillare*	*Panicum capillare*	Common Panic Grass	1	FAC	Grass	Annual	Native

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
pandic	*Panicum dichotomiflorum*	*Panicum dichotomiflorum*	Fall Panic Grass	0	FACW	Grass	Annual	Native
panvir	*Panicum virgatum*	*Panicum virgatum*	Switch Grass	5	FAC	Grass	Perennial	Native
pendig	*Penstemon digitalis*	*Penstemon digitalis*	Foxglove Beardtongue	4	FAC	Forb	Perennial	Native
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
scipen	*Scirpus pendulus*	*Scirpus pendulus*	Rufous Bulrush	4	OBL	Sedge	Perennial	Native
soldul	*Solanum dulcamara*	*SOLANUM DULCAMARA*	Climbing Nightshade	0	FAC	Vine	Perennial	Adventive
solsem	*Solidago sempervirens*	*SOLIDAGO SEMPERVIRENS*	Seaside Goldenrod	0	FACW	Forb	Perennial	Adventive
traohi	*Tradescantia ohiensis*	*Tradescantia ohiensis*	Spiderwort	2	FACU	Forb	Perennial	Native
verhas	*Verbena hastata*	*Verbena hastata*	Blue Vervain	4	FACW	Forb	Perennial	Native

SITE: Wetland 8 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**2.43**
MEAN C (ALL SPECIES)	1.21
MEAN C (NATIVE TREES)	2.00
MEAN C (NATIVE SHRUBS)	1.00
MEAN C (NATIVE HERBACEOUS)	2.67
FQAI (NATIVE SPECIES)	**6.43**
FQAI (ALL SPECIES)	4.54
ADJUSTED FQAI	17.17
% C VALUE 0	0.57
% C VALUE 1-3	0.21
% C VALUE 4-6	0.21
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	14
SPECIES RICHNESS (NATIVE)	7
% NON-NATIVE	0.50
WET INDICATOR (ALL)	-0.21
WET INDICATOR (NATIVE)	-0.57
% HYDROPHYTE (MIDWEST)	0.79
% NATIVE PERENNIAL	0.36
% NATIVE ANNUAL	0.14
% ANNUAL	0.14
% PERENNIAL	0.79

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
cirarv	*Cirsium arvense*	*CIRSIUM ARVENSE*	Canadian Thistle	0	FACU	Forb	Perennial	Adventive
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive
echlob	*Echinocystis lobata*	*Echinocystis lobata*	Wild Cucumber	5	FACW	Vine	Annual	Native
polsca	*Fallopia scandens*	*Polygonum scandens*	Climbing Black-Bindweed	1	FAC	Vine	Perennial	Native
jundud	*Juncus dudleyi*	*Juncus dudleyi*	Dudley's Rush	4	FACW	Forb	Perennial	Native
juntor	*Juncus torreyi*	*Juncus torreyi*	Torrey's Rush	4	FACW	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
salfra	*Salix fragilis*	*SALIX FRAGILIS*	Crack Willow	0	UPL	Tree	Perennial	Adventive
salint	*Salix interior*	*Salix interior*	Sandbar Willow	1	FACW	Shrub	Perennial	Native
soldul	*Solanum dulcamara*	*SOLANUM DULCAMARA*	Climbing Nightshade	0	FAC	Vine	Perennial	Adventive
solsem	*Solidago sempervirens*	*SOLIDAGO SEMPERVIRENS*	Seaside Goldenrod	0	FACW	Forb	Perennial	Adventive

SITE: Wetland 9 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**0.83**
MEAN C (ALL SPECIES)	0.45
MEAN C (NATIVE TREES)	1.00
MEAN C (NATIVE SHRUBS)	n/a
MEAN C (NATIVE HERBACEOUS)	0.33
FQAI (NATIVE SPECIES)	**2.04**
FQAI (ALL SPECIES)	1.51
ADJUSTED FQAI	6.15
% C VALUE 0	0.73
% C VALUE 1-3	0.27
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	11
SPECIES RICHNESS (NATIVE)	6
% NON-NATIVE	0.45
WET INDICATOR (ALL)	-0.18
WET INDICATOR (NATIVE)	0.00
% HYDROPHYTE (MIDWEST)	0.82
% NATIVE PERENNIAL	0.36
% NATIVE ANNUAL	0.18
% ANNUAL	0.18
% PERENNIAL	0.82

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
erican	*Erigeron canadensis*	*Erigeron canadensis*	Canadian Horseweed	0	FACU	Forb	Annual	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
moralb	*Morus alba*	*MORUS ALBA*	White Mulberry	0	FAC	Tree	Perennial	Adventive
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	Grass	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
salfra	*Salix fragilis*	*SALIX FRAGILIS*	Crack Willow	0	UPL	Tree	Perennial	Adventive
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 10 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.50
MEAN C (ALL SPECIES)	0.75
MEAN C (NATIVE TREES)	1.50
MEAN C (NATIVE SHRUBS)	n/a
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	3.00
FQAI (ALL SPECIES)	2.12
ADJUSTED FQAI	10.61
% C VALUE 0	0.50
% C VALUE 1-3	0.50
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	8
SPECIES RICHNESS (NATIVE)	4
% NON-NATIVE	0.50
WET INDICATOR (ALL)	-0.13
WET INDICATOR (NATIVE)	-0.25
% HYDROPHYTE (MIDWEST)	0.63
% NATIVE PERENNIAL	0.50
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.88

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
frapen	*Fraxinus pennsylvanica*	*Fraxinus pennsylvanica subintegerrima*	Green Ash	1	FACW	Tree	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 11 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	2.00
MEAN C (ALL SPECIES)	1.00
MEAN C (NATIVE TREES)	2.00
MEAN C (NATIVE SHRUBS)	n/a
MEAN C (NATIVE HERBACEOUS)	n/a
FQAI (NATIVE SPECIES)	2.83
FQAI (ALL SPECIES)	2.00
ADJUSTED FQAI	14.14
% C VALUE 0	0.50
% C VALUE 1-3	0.50
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	4
SPECIES RICHNESS (NATIVE)	2
% NON-NATIVE	0.50
WET INDICATOR (ALL)	-1.00
WET INDICATOR (NATIVE)	-0.50
% HYDROPHYTE (MIDWEST)	1.00
% NATIVE PERENNIAL	0.50
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	1.00

SPECIES ACRONYM	SPECIES NAME (NWPL/	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 12 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.50
MEAN C (ALL SPECIES)	0.67
MEAN C (NATIVE TREES)	1.50
MEAN C (NATIVE SHRUBS)	0.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	3.00
FQAI (ALL SPECIES)	2.00
ADJUSTED FQAI	10.00
% C VALUE 0	0.56
% C VALUE 1-3	0.44
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	9
SPECIES RICHNESS (NATIVE)	4
% NON-NATIVE	0.56
WET INDICATOR (ALL)	-0.11
WET INDICATOR (NATIVE)	-0.25
% HYDROPHYTE (MIDWEST)	0.67
% NATIVE PERENNIAL	0.44
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.89

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
Frapen	*Fraxinus pennsylvanica*	*Fraxinus pennsylvanica subintegerrima*	Green Ash	1	FACW	Tree	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 13 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.17
MEAN C (ALL SPECIES)	0.78
MEAN C (NATIVE TREES)	1.00
MEAN C (NATIVE SHRUBS)	1.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	2.86
FQAI (ALL SPECIES)	2.33
ADJUSTED FQAI	9.53
% C VALUE 0	0.44
% C VALUE 1-3	0.56
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	9
SPECIES RICHNESS (NATIVE)	6
% NON-NATIVE	0.33
WET INDICATOR (ALL)	-0.67
WET INDICATOR (NATIVE)	-0.17
% HYDROPHYTE (MIDWEST)	0.89
% NATIVE PERENNIAL	0.67
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	1.00

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
samcan	*Sambucus nigra ssp. canadensis*	*Sambucus canadensis*	Black Elderberry	1	FACW	Shrub	Perennial	Native
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 14 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.33
MEAN C (ALL SPECIES)	0.86
MEAN C (NATIVE TREES)	1.67
MEAN C (NATIVE SHRUBS)	0.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	4.00
FQAI (ALL SPECIES)	3.21
ADJUSTED FQAI	10.69
% C VALUE 0	0.50
% C VALUE 1-3	0.50
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	14
SPECIES RICHNESS (NATIVE)	9
% NON-NATIVE	0.36
WET INDICATOR (ALL)	-0.29
WET INDICATOR (NATIVE)	-0.44
% HYDROPHYTE (MIDWEST)	0.79
% NATIVE PERENNIAL	0.57
% NATIVE ANNUAL	0.07
% ANNUAL	0.07
% PERENNIAL	0.86

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	Grass	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
sonuli	*Sonchus arvensis ssp. uliginosus*	*SONCHUS ULIGINOSUS*	Field Sow-Thistle	0	FACU	Forb	Perennial	Adventive
typlat	*Typha latifolia*	*Typha latifolia*	Broad-Leaf Cat-Tail	1	OBL	Forb	Perennial	Native
ulmame	*Ulmus americana*	*Ulmus americana*	American Elm	3	FACW	Tree	Perennial	Native
urtpro	*Urtica dioica ssp. gracilis*	*Urtica procera*	Tall Nettle	2	FACW	Forb	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 15 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.00
MEAN C (ALL SPECIES)	0.50
MEAN C (NATIVE TREES)	0.00
MEAN C (NATIVE SHRUBS)	0.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	2.00
FQAI (ALL SPECIES)	1.41
ADJUSTED FQAI	7.07
% C VALUE 0	0.63
% C VALUE 1-3	0.38
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	8
SPECIES RICHNESS (NATIVE)	4
% NON-NATIVE	0.50
WET INDICATOR (ALL)	-0.63
WET INDICATOR (NATIVE)	0.00
% HYDROPHYTE (MIDWEST)	0.88
% NATIVE PERENNIAL	0.50
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	1.00

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 1

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T34N R14E S26

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.660019 | Long: -87.595429 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 1

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Populus deltoides*	20	Y	FAC
2 *Acer saccharinum*	20	Y	FACW
3 *Ulmus americana*	5	N	FACW
4			
5			
	45	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1 *Salix interior*	15	Y	FACW
2 *Populus deltoides*	10	Y	FAC
3 *Fraxinus pennsylvanica*	5	N	FACW
4			
5			
	30	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	95	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	95	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	140	x 2 =	280
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	170 (A)		370 (B)

Prevalence Index = B/A = 2.18

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along road at base of another road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches):	___
Water table present?	Yes	___	No	X	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within ditch channel lined by hydrophytes.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 2

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.6906323 | Long: -87.6205465 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 2

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	95	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	95	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	95 (A)		190 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along road at base of another road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):	0-Jan
Water table present?	Yes		No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within ditch channel lined by hydrophytes.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 3

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.660463 | Long: -87.59576 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 3

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	95	Y	FACW
2 *Lythrum salicaria*	10	N	OBL
3			
4			
5			
6			
7			
8			
9			
10			
	105	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	10	x 1 =	10
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	105 (A)		200 (B)

Prevalence Index = B/A = 1.90

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel parking lot and gravel road. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within ditch/swale channel at lowest point in local landscape.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 4

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale at toe of slope | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.659641 | Long: -87.599965 | Datum:

Soil Map Unit Name: orthents, clayey undulating | NWI Classification: PF01/EMCd

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 4

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2 *Lythrum salicaria*	20	N	OBL
3			
4			
5			
6			
7			
8			
9			
10			
	120	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	20	x 1 =	20
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	120 (A)		220 (B)

Prevalence Index = B/A = 1.83

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located road and berm around sewage lagoons.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within swale channel at lowest point in local landscape.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 5

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26 & 27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.663596 | Long: -87.598043 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 5

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between roads

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches):	___
Water table present?	Yes	___	No	X	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along road.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 6

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.669077 | Long: -87.601542 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 6

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	80	Y	FACW
2 *Lythrum salicaria*	10	N	OBL
3 *Typha angustifolia*	10	N	OBL
4 *Helianthus grosseserratus*	2	N	FACW
5 *Verbena hastata*	2	N	FACW
6			
7			
8			
9			
10			
	104	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	20	x 1 =	20
FACW species	84	x 2 =	168
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	104 (A)		188 (B)

Prevalence Index = B/A = 1.81

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between road and railroad.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along railroad.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 7

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.669077 | Long: -87.601542 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	N
Wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Rhamnus cathartica*	100	Y	FAC
2			
3			
4			
5			
	100	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1	80	Y	
2	10	N	
3	10	N	
4	2	N	
5	2	N	
6			
7			
8			
9			
10			
	104	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	100	x 3 =	300	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column totals	100	(A)	300	(B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and 2-3 feet higher in elevation than adjacent wetland swales.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): 0

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2-3 feet higher in elevation than adjacent wetland swales with no evidence of hydrology

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 8

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S22 & 27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.672876 | Long: -87.607044 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 7

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	80	Y	FACW
2 *Lythrum salicaria*	10	N	OBL
3 *Solidago graminifolia*	10	N	FACW
4 *Helianthus grosseserratus*	2	N	FACW
5 *Verbena hastata*	2	N	FACW
6			
7			
8			
9			
10			
	104	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	10	x 1 =	10
FACW species	94	x 2 =	188
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	104 (A)		198 (B)

Prevalence Index = B/A = 1.90

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between railroad and gravel contractor yard.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along railroad.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 9

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.669077 | Long: -87.601542 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	N
Wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Rhamnus cathartica*	100	Y	FAC
2			
3			
4			
5			
	100	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1	80	Y	
2	10	N	
3	10	N	
4	2	N	
5	2	N	
6			
7			
8			
9			
10			
	104	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across all Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50.00%	(A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	100	x 3 =	300	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column totals	100	(A)	300	(B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and 2-3 feet higher in elevation than adjacent wetland swales.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): 0

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2-3 feet higher in elevation than adjacent wetland swales with no evidence of hydrology

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension City/County: Cook Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD State: Illinois Sampling Point: 10

Investigator(s): J Mengler, V Mosca Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): swale

Slope (%): Lat: 41.65712 Long: -87.600738 Datum:

Soil Map Unit Name: orthents, loamy, nearly level NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 8

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel roads.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along roads.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension City/County: Cook Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD State: Illinois Sampling Point: 11

Investigator(s): J Mengler, V Mosca Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): swale

Slope (%): Lat: 41.665712 Long: -87.600738 Datum:

Soil Map Unit Name: orthents, loamy, nearly level NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?		If yes, optional wetland site ID:	
Wetland hydrology present?	N		

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1 *Ambrosia trifida*			FAC
2 *Artemisia vulgaris*			UPL
3 *Melilotus albus*			FACU
4 *Arctium minus*			FACU
5 *Lotus corniculata*			FACU
6			
7			
8			
9			
10			
	0	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 0 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	0 (A)		0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and 2-4 feet higher in elevation than adjacent wetland swales.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): 0

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2-4 feet higher in elevation than adjacent wetland swales with no evidence of hydrology

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 12

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.661704 | Long: -87.597341 | Datum:

Soil Map Unit Name: orthents, clayey, undulating | NWI Classification: PF01/EMCd

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 9

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel parking pad and road.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along higher ground.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 13

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.661704 | Long: -87.597341 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?		If yes, optional wetland site ID:	
Wetland hydrology present?	N		

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Polygonum lapathifolium*	10	Y	FACW
2 *Carduus nutans*	10	Y	FACU
3 *Medicago lupulina*	10	Y	FACU
4 *Helianthus annuus*	10	Y	FACU
5 *Acnida altissima*	10	Y	OBL
6 *Lotus corniculata*	10	Y	FACU
7			
8			
9			
10			
	60	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 33.33% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	10	x 1 =	10
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column totals	60 (A)		190 (B)

Prevalence Index = B/A = 3.17

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and a gravel parking pad 2-4 feet higher than surrounding wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): 0

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2-4 feet higher in elevation than adjacent wetland swales with no evidence of hydrology

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 14

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.659598 | Long: -87.594462 | Datum:

Soil Map Unit Name: urban land- orthents, clayey, complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 10

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located at base of roadway embankment and along railroad

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches):	___
Water table present?	Yes	___	No	X	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along higher ground, wet mud among old tires.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 15

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S26

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.660019 | Long: -87.595429 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 11

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1 *Salix interior*			FACW
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along road at base of a railroad embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches):	___
Water table present?	Yes	___	No	X	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension City/County: Cook Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD State: Illinois Sampling Point: 16

Investigator(s): J Mengler, V Mosca Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch Local relief (concave, convex, none): ditch

Slope (%): Lat: 41.667542 Long: -87.602091 Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 12

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along road at base of a road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	X	No		Depth (inches):	0-2
Water table present?	Yes		No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 17

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.669078 | Long: -87.602444 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 13

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along railroad embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	X	No		Depth (inches):	0-2
Water table present?	Yes		No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 18

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.667289 | Long: -87.600100 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 14

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1 *Vitis riparia*	20	Y	FACW
2 *Convolvulus sepium*	15	Y	FAC
	35	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel roads. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	X	No		Depth (inches):	0-2
Water table present?	Yes		No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 19

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.667289 | Long: -87.600100 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N		
Hydric soil present?		**Is the sampled area within a wetland?**	N
Wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Morus alba*	40	Y	FAC
2 *Acer negundo*	20	Y	FAC
3			
4			
5			
	60	= Total Cover	
Sapling/Shrub stratum (Plot size: 4.6 m)			
1 *Prunus serotina*	15	Y	FACU
2			
3			
4			
5			
	15	= Total Cover	
Herb stratum (Plot size: 1 m sq)			
1 *Eupatorium rugosum*	10	Y	FACU
2 *Arctium minus*	10	Y	FACU
3 *Geum laciniatum*	5	Y	FACW
4			
5			
6			
7			
8			
9			
10			
	25	= Total Cover	
Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0	
FACW species	5	x 2 =	10	
FAC species	60	x 3 =	180	
FACU species	35	x 4 =	140	
UPL species	0	x 5 =	0	
Column totals	100	(A)	330	(B)

Prevalence Index = B/A = 3.30

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel roads. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): ___

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No evidence of hydrology observed, Ground cover mostly dry undisturbed leaf litter.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 20

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.671562 | Long: -87.607147 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 15

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and along steep road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 21

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.671562 | Long: -87.607147 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N		
Hydric soil present?		**Is the sampled area within a wetland?**	N
Wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Rhamnus cathartica*	80	Y	FAC
2 *Morus alba*	20	Y	FAC
3			
4			
5			
	100	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1 *Glechoma hederacea*	15	Y	FACU
2 *Arctium minus*	15	Y	FACU
3			
4			
5			
6			
7			
8			
9			
10			
	30	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	100	x 3 =	300	
FACU species	30	x 4 =	120	
UPL species	0	x 5 =	0	
Column totals	130	(A)	420	(B)

Prevalence Index = B/A = 3.23

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and along steep road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
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- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): ___

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

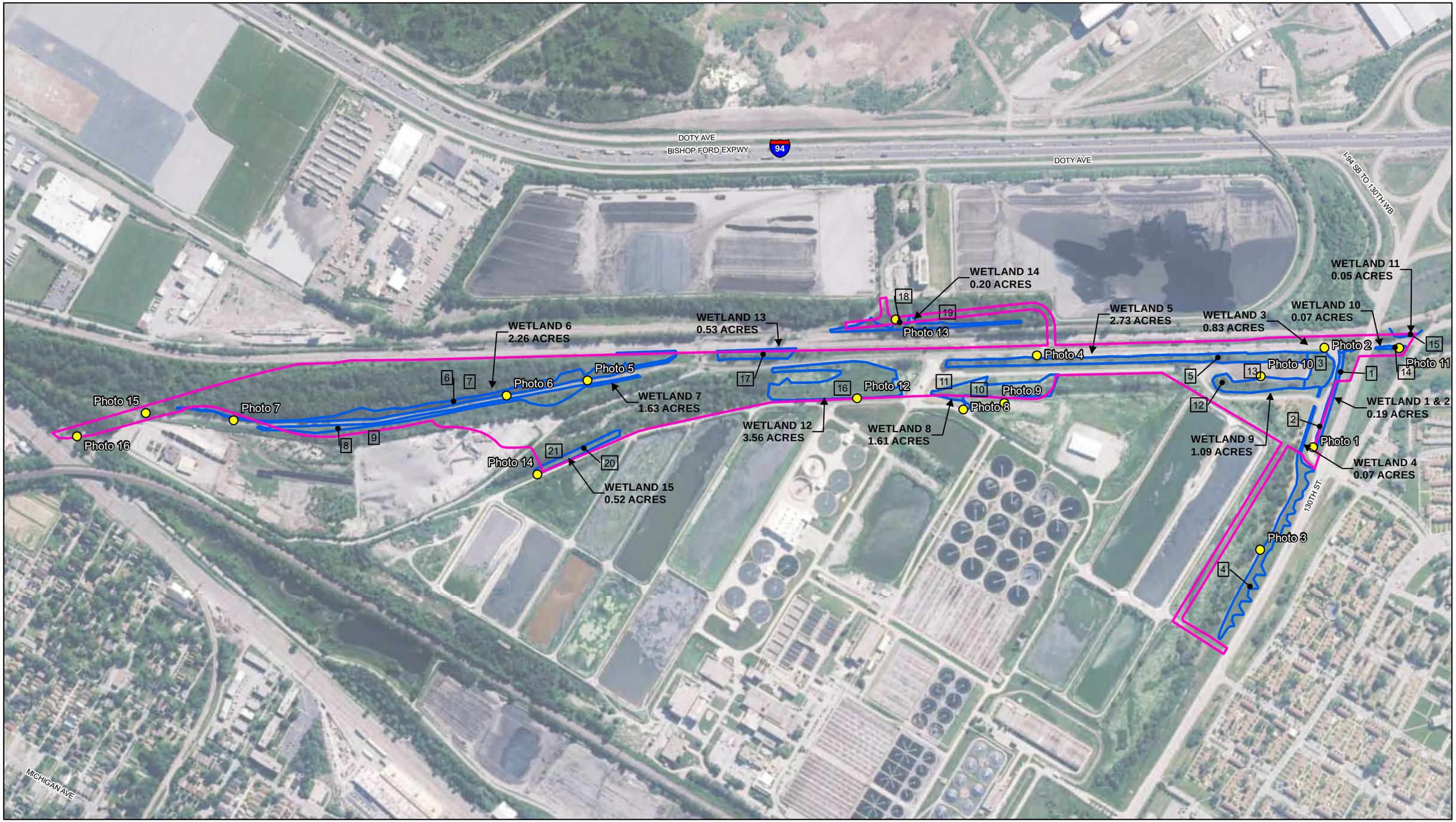

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:
0 600 Feet

Project Number: 15-0218

Orientation:

Latest Revision: 10/5/2015

Legend:
- Data Point
- Photo Locations
- Surveyed Wetland Boundary (Labled wetland acreas for Project Permanent Envelope only)
- Project Permanent Envelope

Project Name:
CTA Red Line Extension

Prepared For:
CDM Smith

Aerial Date:
2014

Exhibit Title:
Photograph Locations

Exhibit:
10

Photograph 1:

Wetland 1 looking east from west end.

Photograph 2:

Existing fly dumping piles along Cottage Grove Road and edge of Wetland 3.

Photograph 3:

North edge of Wetland 4 looking west – mostly out of project area.

Photograph 4:

Edge of Wetland 5 along Cottage Grove Road looking south.

Photograph 5:

Wetland 6 along railroad looking south.

Photograph 6:

Evidence of hydrology along railroad and edge of Wetland 6.

Photograph 7:

Remnant prairie plants in Wetland 7 along railroad.

Photograph 8:

Mowed edge of Wetland 8.

Photograph 9:

Existing upland gravel area next to Wetland 8.

Photograph 10:

Wetland 9.

Photograph 11:

Existing trash piles in Wetland 10.

Photograph 12:

Wetland 12.

Photograph 13:

Wetland 14.

Photograph 14:

Wetland 15.

Photograph 15:

Upland in northwest finger of project area looking north.

Photograph 16:

Northwest extent of project area.

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

CONTRACT 84-270-2P

SLUDGE DRYING AREA-WEST, CALUMET S.T.W.

APPENDIX A - TABLE OF CONTENTS

Page No.	R.O.W. Document File No.	
1-13	1.	Department of the Army Permit No. 5108502 Mr. Tom Slowinski (Phone: 353-6428)
14-18	2.	City of Chicago, Department of Streets and Sanitation, Bureau of Forestry, Parkways and Beautification, Permit No. 85-62 Ms. Karen Nowacki-Forestry (Phone: 744-4391) Mr. R. E. Baker-Water Distribution (Phone: 744-5067)
19-21	3.	Cook County Department of Highways Permit No. 85-3-155 Mr. Gabriel Ditore (443-5988)
22	4.	Commonwealth Edison Co. Letter of Notification Mr. Orville Burandt (Phone: 294-3270)
22	- - -	Last Page of Right-of-Way Documents

Application No. 5108502

Name of Applicant Metropolitan Sanitary District of Greater Chicago

Effective Date 10 June 1985 H.O.W. FILE #1

Expiration Date (*If applicable*) 10 June 1988

DEPARTMENT OF THE ARMY
PERMIT

Referring to written request dated 24 January 85 **for a permit to:**

( ) **Perform work in or affecting navigable waters of the United States, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (*33 U.S.C. 403*);**

(x) **Discharge dredged or fill material into waters of the United States upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 404 of the Clean Water Act (*33 U.S.C. 1344*);**

( ) **Transport dredged material for the purpose of dumping it into ocean waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (*86 Stat. 1052; P.L. 92-532*);**

Metropolitan Sanitary District of Greater Chicago
100 East Erie Street
Chicago, Illinois 60629

is hereby authorized by the Secretary of the Army:

to construct a municipal sludge drying facility

in a wetland near the Little Calumet River

at W½ of Section 27, T37N, R14E, near 130th and Indiana Avenue, Chicago, Cook County, Illinois

in accordance with the plans and drawings attached hereto which are incorporated in and made a part of this permit (*on drawings, give file number or other definite identification marks.*)

24 January 1985 permit application and plans
29 May 1985 letter and enclosures

subject to the following conditions:

I. General Conditions:

a. That all activities identified and authorized herein shall be consistent with the terms and conditions of this permit; and that any activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of this permit which may result in the modification, suspension or revocation of this permit, in whole or in part, as set forth more specifically in General Conditions j or k hereto, and in the institution of such legal proceedings as the United States Government may consider appropriate, whether or not this permit has been previously modified, suspended or revoked in whole or in part.

b. That all activities authorized herein shall, if they involve, during their construction or operation, any discharge of pollutants into waters of the United States or ocean waters, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards and management practices established pursuant to the Clean Water Act (*33 U.S.C. 1344*), the Marine Protection, Research and Sanctuaries Act of 1972 (*P.L. 92-532, 86 Stat. 1052*), or pursuant to applicable State and local law.

c. That when the activity authorized herein involves a discharge during its construction or operation, or any pollutant (*including dredged or fill material*), into waters of the United States, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such revised or modified standards, or within such longer period of time as the District Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

d. That the discharge will not destroy a threatened or endangered species as identified under the Endangered Species Act, or endanger the critical habitat of such species.

e. That the permittee agrees to make every reasonable effort to prosecute the construction or operation of the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife, and natural environmental values.

f. That the permittee agrees that he will prosecute the construction or work authorized herein in a manner so as to minimize any degradation of water quality.

g. That the permittee shall allow the District Engineer or his authorized representative(s) or designee(s) to make periodic inspections at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

h. That the permittee shall maintain the structure or work authorized herein in good condition and in reasonable accordance with the plans and drawings attached hereto.

i. That this permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

j. That this permit does not obviate the requirement to obtain state or local assent required by law for the activity authorized herein.

k. That this permit may be either modified, suspended or revoked in whole or in part pursuant to the policies and procedures of 33 CFR 325.7.

l. That in issuing this permit, the Government has relied on the information and data which the permittee has provided in connection with his permit application. If, subsequent to the issuance of this permit, such information and data prove to be materially false, materially incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Government may, in addition, institute appropriate legal proceedings.

m. That any modification, suspension, or revocation of this permit shall not be the basis for any claim for damages against the United States.

n. That the permittee shall notify the District Engineer at what time the activity authorized herein will be commenced, as far in advance of the time of commencement as the District Engineer may specify, and of any suspension of work, if for a period of more than one week, resumption of work and its completion.

o. That if the activity authorized herein is not completed on or before _____ day of _____, 19_____, (*three years from the date of issuance of this permit unless otherwise specified*) this permit, if not previously revoked or specifically extended, shall automatically expire.

p. That this permit does not authorize or approve the construction of particular structures, the authorization or approval of which may require authorization by the Congress or other agencies of the Federal Government.

q. That if and when the permittee desires to abandon the activity authorized herein, unless such abandonment is part of a transfer procedure by which the permittee is transferring his interests herein to a third party pursuant to General Condition t hereof, he must restore the area to a condition satisfactory to the District Engineer.

r. That if the recording of this permit is possible under applicable State or local law, the permittee shall take such action as may be necessary to record this permit with the Register of Deeds or other appropriate official charged with the responsibility for maintaining records of title to and interests in real property.

2.

s. That there shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein.

t. That this permit may not be transferred to a third party without prior written notice to the District Engineer, either by the transferee's written agreement to comply with all terms and conditions of this permit or by the transferree subscribing to this permit in the space provided below and thereby agreeing to comply with all terms and conditions of this permit. In addition, if the permittee transfers the interests authorized herein by conveyance of realty, the deed shall reference this permit and the terms and conditions specified herein and this permit shall be recorded along with the deed with the Register of Deeds or other appropriate official.

u. That if the permittee during prosecution of the work authorized herein, encounters a previously unidentified archeological or other cultural resource within the area subject to Department of the Army jurisdiction that might be eligible for listing in the National Register of Historic Places, he shall immediately notify the district engineer.

II. **Special Conditions:** (*Here list conditions relating specifically to the proposed structure or work authorized by this permit*):

1. That the permittee notify Mr. Tom Slowinski, Chief, Regulatory Functions Branch, Chicago District Office, 219 South Dearborn Street, Chicago, Illinois 60604-1797, telephone 312/353-6428 at least five days in advance of commencement and completion of the work authorized herein.

2. That the permittee supply a copy of this permit with all attachments to his contractor or project engineer so that all terms and conditions are fully known and understood.

3. That the permittee submit any revisions of plans or location to this issuing office for approval before work is begun.

4. That the permittee comply with the Illinois Environmental Protection Agency's conditions (attached), as stated in their 22 March 1985 water quality certification for the project under Section 401 of the Clean Water Act (Public Law 95-217).

5. That the permittee develop and implement the wetland mitigation plan in accordance with their 29 May 1985 letter and enclosures.

3.

The following Special Conditions will be applicable when appropriate: 4.

STRUCTURES IN OR AFFECTING NAVIGABLE WATERS OF THE UNITED STATES:

a. That this permit does not authorize the interference with any existing or proposed Federal project and that the permittee shall not be entitled to compensation for damage or injury to the structures or work authorized herein which may be caused by or result from existing or future operations undertaken by the United States in the public interest.

b. That no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized by this permit.

c. That if the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.

d. That the permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the authorized structure or work, shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.

e. Structures for Small Boats: That permittee hereby recognizes the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels. The issuance of this permit does not relieve the permittee from taking all proper steps to insure the integrity of the structure permitted herein and the safety of boats moored thereto from damage by wave wash and the permittee shall not hold the United States liable for any such damage.

MAINTENANCE DREDGING:

a. That when the work authorized herein includes periodic maintenance dredging, it may be performed under this permit for _____ years from the date of issuance of this permit (*ten years unless otherwise indicated*);

b. That the permittee will advise the District Engineer in writing at least two weeks before he intends to undertake any maintenance dredging.

DISCHARGES OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES:

a. That the discharge will be carried out in conformity with the goals and objectives of the EPA Guidelines established pursuant to Section 404(b) of the Clean Water Act and published in 40 CFR 230;

b. That the discharge will consist of suitable material free from toxic pollutants in toxic amounts.

c. That the fill created by the discharge will be properly maintained to prevent erosion and other non-point sources of pollution.

DISPOSAL OF DREDGED MATERIAL INTO OCEAN WATERS:

a. That the disposal will be carried out in conformity with the goals, objectives, and requirements of the EPA criteria established pursuant to Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, published in 40 CFR 220-228.

b. That the permittee shall place a copy of this permit in a conspicuous place in the vessel to be used for the transportation and/or disposal of the dredged material as authorized herein.

This permit shall become effective on the date of the District Engineer's signature.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

Frederick G. Julianno — 6-10-85

PERMITTEE — DATE

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Frank R. Finch — 10 June 85

LTC FRANK R. FINCH, P.E. — DATE

DISTRICT ENGINEER,
U.S. ARMY, CORPS OF ENGINEERS

Transferee hereby agrees to comply with the terms and conditions of this permit.

_____ — _____

TRANSFEREE — DATE

U.S. GOVERNMENT PRINTING OFFICE : 1983 O - 404-308

4.

DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS

NOTICE OF AUTHORIZATION

10 June 19 85

A PERMIT TO construct a municipal sludge drying facility in a wetland near the Little Calumet River

AT W½ of Section 27, T37N, R14E, near 130th Street and Indiana Avenue Chicago, Cook County, Illinois

HAS BEEN ISSUED TO Metropolitan Sanitary District of Greater Chicago ON 10 June 19 85

ADDRESS OF PERMITTEE 100 East Erie Street Chicago, Illinois 60629

PERMIT NUMBER 5108502

District Engineer

LTC FRANK R. FINCH, P.E.

ENG Form 4336
Jul 70

THIS NOTICE MUST BE CONSPICUOUSLY DISPLAYED AT THE SITE OF WORK.

JOINT APPLICATION FORM

1. Application Number (To be assigned by Agency)

2. Date: 24 (Day) Jan. (Month) 85 (Year)

3. For Agency use only (Date Received)

4. Name and address of applicant
Metropolitan Sanitary District of
Greater Chicago
100 East Erie Street
Chicago, Ill. 60629
Telephone no. during business hours
A/C ( )
A/C (312) 751-5868

5. Name, address, and title of authorized agent
N/A
Telephone no. during business hours
A/C ( )
A/C ( )

6. Describe in detail the proposed activity, its purpose, and intended use. If additional space is needed, attach additional support information to each agency application.

See Attachment

7. Names, addresses, and telephone numbers of all adjoining and potentially affected property owners, including the owner of subject property if different from applicant.

None

8. Location of activity
Address:
300 East 130th Street
Street, road, or other descriptive location
Chicago
In or near city or town
Cook (County) Illinois (State) 60628 (Zip Code)

Legal Description:
N.W. (S.I.B.L) / N.W. (N.I.B.L) (1/4) 27 (Sec.) 37 (Twp.) 14 (Rge.) 3 (P.M.)

Tax Assessor's Description (if known):
Map No. Subdiv. No. Lot No.

Name of waterway at location of the activity
Wet lands

9. Date activity is proposed to commence March, 1985 Date activity is expected to be completed November, 1985

10. Is any portion of the activity for which authorization is sought now complete? ___ Yes ___ No If answer is "Yes" give reasons in the remark section. Month and Year the activity was completed _____ Indicate the existing work on drawings.

11. List all approvals or certifications required by other federal, interstate, state, or local agencies for any structures, construction, discharges, deposits, or other activities described in this application. If this form is being used for concurrent application to the Corps of Engineers, Illinois Department of Transportation, and Illinois Environmental Protection Agency, these agencies need not be listed.

Issuing Agency	Type Approval	Identification No.	Date of Application	Date of Approval
None				

12. Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein.
___ Yes ___ No (If "Yes", explain in remarks.)

13. Remarks This contract is designated as: "Sludge Drying Area - West at Calumet Sewerage Treatment Plant" (84-270-2P)

14. Application is hereby made for authorizations of the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Frank E. Dalton
Signature of Applicant or Authorized Agent
Frank E. Dalton
Chief Engineer

NCR FORM 426
01 JUNE 81

APPLICANT'S COPY

6

JOINT APPLICATION FORM

INFORMATION

Information in the application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested is necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

18 United States Code Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Applicant is informed that all approvals must be obtained before work can be started.

INSTRUCTIONS

General:
It is very important that you provide a complete and accurate application (form, drawings, and support information) concerning your project. If the application is incomplete or unacceptable, it will be returned. This usually results in delaying the evaluation of your application.

Submit one copy of the application (form, drawings, and support information) to each regulatory agency (Corps of Engineers, Illinois Department of Transportation, Division of Water Resources (IDOT/DWR), and the Illinois Environmental Protection Agency). For addresses see attached "Protecting Illinois Waters" and jurisdictional boundary map. (For the construction of dams, the IDOT/DWR copy of the application should always be sent to the Springfield office.)

Application:
Item 6 of the application must provide a complete description of the activity and always include the purpose and intended use. For any major activity, additional support information should be provided by attached sheets to the application.

Dredging and Fill Activities - Describe the location, type, composition and quantity of material to be dredged/filled, method of dredging/filling, and method of transportation to disposal/fill site. Also describe the disposal/fill site by including location, quantity of material it will hold, composition of receiving soil, and method of containment. Provide Illinois Environmental Protection Agency material analysis data as required.

The application must be signed by the applicant; however:
1. It may be signed by a duly authorized agent (named in Item 5) if this form is accompanied by a statement by the applicant designating the agent and agreeing to furnish upon request supplemental information in support of the application.
2. If the applicant is a corporation, the president or other authorized officer shall sign the application form.
3. If the applicant is a county, city or other political subdivision, the application form shall be signed by an appropriate authorized officer.
4. If the applicant is a partnership, each partner shall sign the application form.
5. If the applicant is a trust, the trust officer shall sign the name of the trustee by him (her) as trust officer. A disclosure affidavit must be filed with the application, identifying each beneficiary of the trust by name and address and defining the respective interests therein.

Environmental Assessment:
Pursuant to Section 102 of the National Environmental Policy Act, Public Law 91-190, an assessment of the environmental impacts and determination of need for an environmental impact statement must be made for Federally permitted activities. The environmental assessment will, in part, be based on the following written support information (attached sheets to application) which you must submit:

1. Complete description of project (Item 6 of application).
2. Analysis of the need and purpose of the proposed project.
3. Description of the environment in the vicinity of the project which would be directly affected by the permitted action as well as any of the secondary effects.

a. Ecological and Natural Resource Impacts
(permanent and temporary)
(1) Fish and wildlife populations (include threatened and endangered species)
(2) Aquatic habitat (include shellfish and benthic life)
(3) Vegetation habitat
(4) Wetland area (marshes, bogs, swamps, etc.)
(5) Water resources
  (a) Public water supply (surface, ground)
  (b) Water conservation (reuse, reduction of use)
  (c) Water quality (chemical, physical, and biological integrity of general area)
(6) Air quality and noise
(7) Soil erosion and siltation

b. Social and Economical Impacts
(permanent and temporary)
(1) Aesthetics
(2) Cultural values
  (a) Historic and archaeological sites
  (b) Other (national rivers, wilderness areas, recreation areas, parks, monuments, wild and scenic rivers, etc.)
(3) Recreational areas (present and potential)
(4) Public facilities and services (health, safety, etc.)
(5) Navigation (commercial and small craft)
(6) Flood damage prevention and effect on local flood heights
(7) Shore erosion and accretion
(8) Land use
  (a) Conservation
  (b) Prime and unique farmlands
  (c) Food production
  (d) Existing and potential use (zoning and planning)
(9) Economic
  (a) Energy needs
  (b) Employment (regional growth)
  (c) Tax base (property values)

4. Identification of practical alternatives (methods and locations) to the proposed action which would accomplish all the objectives desired, those which would provide only a partial solution to the objectives of the project, and the alternative of no action. This analysis is required so that the final project recommendation is made in the best overall public interest.

Drawings:
Each sheet of drawings submitted should contain a title block in the lower right hand corner identifying the proposed activity and contain the name of the body of water, river mile (if applicable), number of the sheet and total number of sheets in set, and date the drawing was prepared.

The first sheet of the drawings should include a vicinity map which shows:

1. Project site
2. Name of waterway
3. All applicable boundary lines
4. Name of and distance to local town, community or other identifying location
5. Names of all roads in the vicinity of the site
6. Graphic or numerical scale
7. North arrow

The drawings should also include a plan view of the project showing:

1. Existing shoreline and the normal water surface elevation (if Mean Sea Level datum is not used, adjustment should be indicated)
2. Adjacent property lines and ownership as listed in item 7 of the application form
3. Principal dimensions of the structure or work and extent of encroachment into the waterway (as measured from a fixed structure or object)
4. Distance between proposed activity and navigation channel, when applicable
5. Floodway/Floodplain lines if established and if known
6. North arrow
7. Graphic or numerical scale
8. A note describing the proposed method of revegetion or stabilization of disturbed areas

The drawings should also contain a section view of the project showing:

1. Shoreline, elevations, extent of encroachment, and principal dimensions of the work as shown in plan view
2. Graphic or numerical scales (horizontal and vertical)

ATTACHEMENT TO PERMIT APPLICATION, PARAGRAPH 6

This project will develop an area of 70 net acres in size, for use as an "agitation" drying facility. Sludge having a concentration of 15% to 30% will be delivered to the "agitation" drying facility. The latter relatively "wet" sludge will be spread in thin layers over the drying facility area and subjected to agitation and compression by operating heavy construction equipment, such as bulldozers and tractor mounted horizontal augers, over its surface. The "agitation" drying areas shall be prepared by sealing the ground over the entire area with clay, or other suitable material, to obtain an adequate impermeable surface. The use of existing onsite materials as well as excavated materials from other MSDGC construction activities shall be considered. A crushed stone base, a bituminous base course, and a bituminous wearing surface shall be laid in adequate thickness over the impervious surface. Drainage from each parcel shall be returned to the closest appropriate MSDGC sewer from a draw-off box.

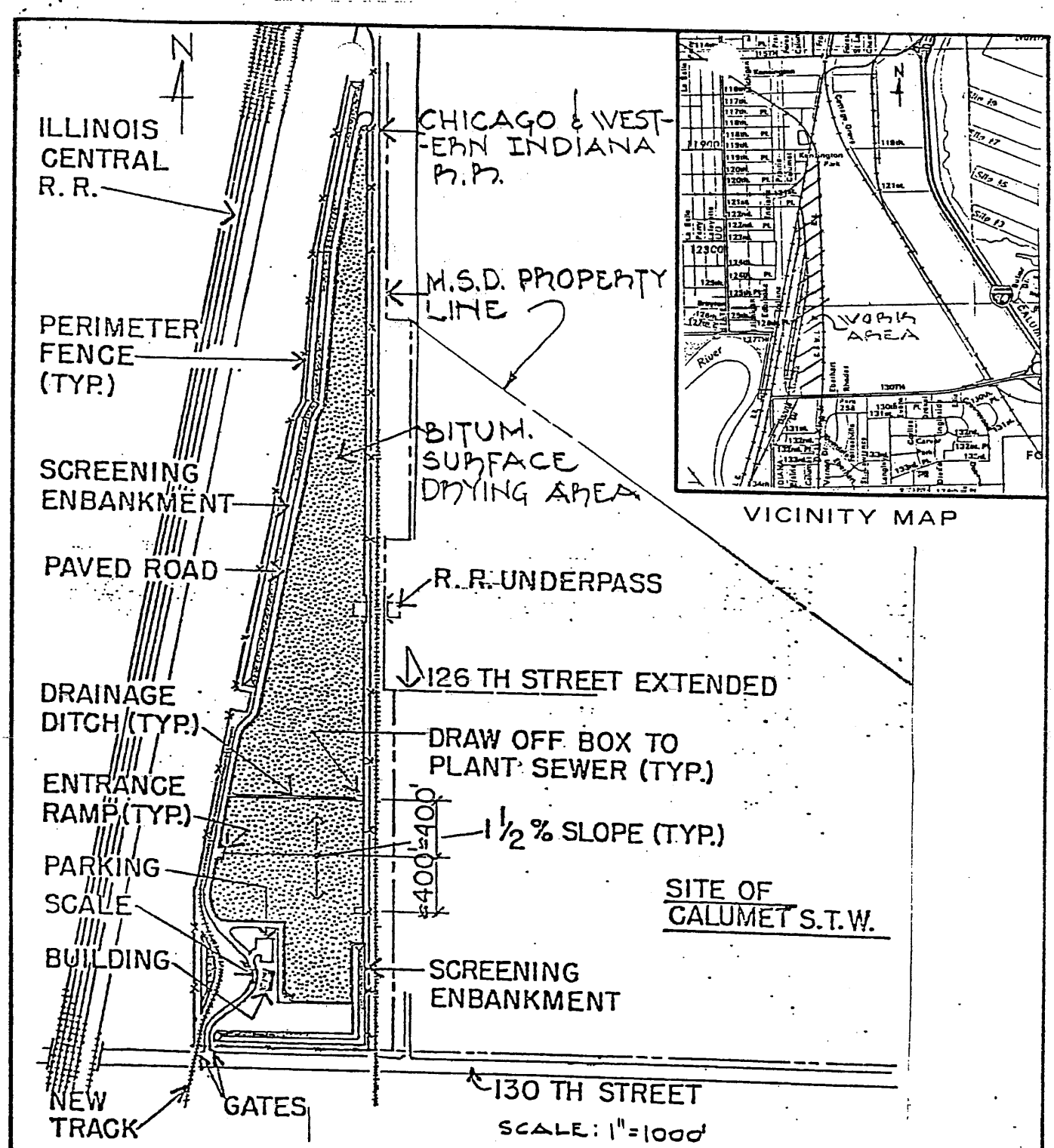

LIST OF ADJACENT PROPERTY OWNERS

NO.	NAME	ADDRESS
1.		
2.		
3.		
4.		

PROJECT DESCRIPTION:
SLUDGE DRYING AREA - WEST CALUMET S.T.P.
(84-270-2P)

LOCATION:
300 E. 130th ST
CHICAGO, ILL.

SHEET 1 OF 1

NCR FORM 427
01 JUNE 81

APPLICANTS COPY

8

NICHOLAS J. MELAS
PRESIDENT

BOARD OF COMMISSIONERS
JOANNE H. ALTER
THOMAS S. FULLER
NELLIE L. JONES
JAMES C. KIRIE
GLORIA MAJEWSKI
NICHOLAS J. MELAS
AURELIA PUCINSKI
RICHARD J. TROY
LOUIS S. VIVERITO

May 29, 1985

Lieutenant Colonel Frank R. Finch, P.E.
District Engineer
U.S. Army Corps of Engineers
219 South Dearborn Street
Chicago, IL 60604

Subject: Application for Permit to Site Sludge Drying Facility in a Wetland West of Calumet Sewage Treatment Plant, Chicago, Cook County, Illinois (R.O.W. File #1, 84-270-2P) - Response to Corps' Comments

Dear Colonel Finch:

The Sanitary District is in receipt of your letter and attachments dated May 10, 1985. In reviewing your transmittal we note that you have identified three aspects of the proposed project as requiring clarification. These aspects are: a) review of alternatives; b) protection of groundwater; and c) mitigation of wetland laws.

Further detail regarding each of the three aspects is provided below in sufficient detail, we believe, to make it unnecessary for us to prepare individual responses to each of the parties who submitted comments to you relative to this project.

(1) Review of alternatives

Detail studies and cost-effective analyses have been made of solids handling alternatives by the MSDGC. At the conclusion of the studies, the analyses showed that the most feasible alternative for handling Calumet STW and WSW-STW sludges would be to dry them to 60% solids and dispose of them in a landfill. A summary of the studies is contained in the attached Facilities Planning Study, Solids Update - April 1985 (Exhibit A).

The site chosen for Project 84-270-2P is the closest available agitation drying site at the Calumet STW. It possesses abundant area, roads, and utility services which contribute to providing very efficient land use. Also, the location so near the Calumet STW will result in the minimum operational costs for sludge hauling.

(2) Protection of the groundwater

A 2' minimum impervious clay seal will be provided beneath the sludge drying area to prevent groundwater contamination. Also, water stops in the concrete retaining walls will be provided to contain liquids in the drying area. The clay seal will be a cohesive impervious material having the following properties:

Item	Specification
Maximum percent retained on No. 4 sieve	15
Minimum percent passing No. 200 sieve	25
Maximum liquid limit	50
Minimum plasticity index	10
Maximum coefficient of permeability	10^{-7} cm/sec

The facility is designed so that all surface runoff from the drying cells and any passage into the granular subbase beneath the bituminous surface is transported via sewers and underdrains back to the treatment plant.

Four groundwater monitoring wells will be provided on the Calumet-West site which will be sampled on a regular basis by our R&D Department. The water quality data will be transmitted to IEPA. A copy of the groundwater monitoring data from Project 80-159-2P "LASMA Solids Drying Site-WSW STW," which was submitted to the IEPA on April 9, 1985, is attached (Exhibit B). The LASMA drying site is similar to the proposed project.

(3) Mitigation of wetland laws

Attached as Exhibit C is a proposed wetland and support area located within the Sanitary District's property line. This proposed development represents a 15½-acre site removed from project development and proposed to be set aside permanently as a quality wetland area.

The proposed development is a result of staff meetings and site review between the Sanitary District, the Corps, and the U.S. Fish and Wildlife Service. The proposed development includes a surface water lake of 7½ acres, a wet zone of 4½ acres and an upland support area of 3½ acres. It has been designed in a naturalistic configuration to enhance its visual quality and provide quality wetland habitat and support.

The Sanitary District is proposing that this 15½-acre development area be removed from the sludge drying area contract, and be developed into a quality wetland on the basis of the following schedule:

- completion of preliminary design - September 1985,
- completion of design contract documents - January 1986,
- and award and construction - summer 1986.

The Sanitary District agrees to consult with the Corps, the Fish and Wildlife Service, and the Illinois Department of Conservation in the development of design criteria, preliminary design, and final contract documents.

In addition to the proposed 15½-acre development, the design for the project drainage system includes approximately 6 acres of surface drainage swales. They fit into the Corps' definition of wetland area, and should be considered as part of the mitigation proposal.

It is the judgment of the Sanitary District that the above responds to the issues raised in the Corps' summary letter and attachments. Therefore, the Sanitary District requests that the Corps issue the permit which will allow the construction of this project to commence at the earliest possible time.

Sincerely yours,

METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

Frank E. Dalton

Frank E. Dalton
Chief Engineer

FED:mt
Enclosures
GT:
bcc: Barbolini
DiVita
Kelly
File

Illinois Environmental Protection Agency · 2200 Churchill Road, Springfield, IL 62706

217/782-0610

MSDGC (Cook County)
Sludge Drying Facility -- Isolated Wetland
Log #C-73-85

March 22, 1985

Department of the Army
Chicago District
Corps of Engineers
219 South Dearborn Street
Chicago, Illinois 60604

Gentlemen:

This Agency received a request on February 1, 1985, from the Metropolitan Sanitary District of Greater Chicago requesting necessary comments for environmental consideration concerning the construction of a sludge drying facility on approximately 70 acres adjacent to the Calumet Sewage Treatment Works. We offer the following comments.

Based on the information included in this submittal, it is our engineering judgment that the proposed project may be completed without causing water pollution as defined in the Illinois Environmental Protection Act, provided the project is carefully planned and supervised.

These comments are directed at the effect on water quality of the construction procedures involved in the above described project and is not an approval of any discharge resulting from the completed facility, nor an approval of the design of the facility. These comments do not supplant any permit responsibilities of the applicant towards this Agency.

This Agency hereby issues certification under Section 401 of the Clean Water Act (PL 95-217), subject to the applicant's compliance with the following conditions:

1. The applicant shall not cause:

   a. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulations;

   b. water pollution as defined and prohibited by the Illinois Environmental Protection Act; and

   c. interference with water use practices near public recreation areas or water supply intakes.

2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.

3. Any spoil material excavated, dredged or otherwise produced must not be returned to the river or stream but must be deposited in a self-contained area in compliance with all State statutes, regulations and permit requirements with no discharge to the waters of the State unless a permit has been issued by this Agency. Any back filling must be done with clean material and placed in a manner to prevent violation of stream water quality standards.

4. The applicant shall comply with the Subtitle C permit issued for these facilities by the Agency.

5. This certification becomes effective when the Department of the Army, Corps of Engineers, includes the above conditions #1 through 4 as conditions of the requested permit issued pursuant to Section 404 of PL 95-217.

This certification does not grant immunity from any enforcement action found necessary by this Agency to meet its responsibilities in prevention, abatement, and control of water pollution.

Very truly yours,

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:BY:sd/600e/55-56

Attachment

cc: IEPA, DWPC, Records Unit
DWPC, Field Operations Section, Region 2
IDOT, Division of Water Resources, Schaumburg
USEPA, Region V
MSDGC — Field Services Section

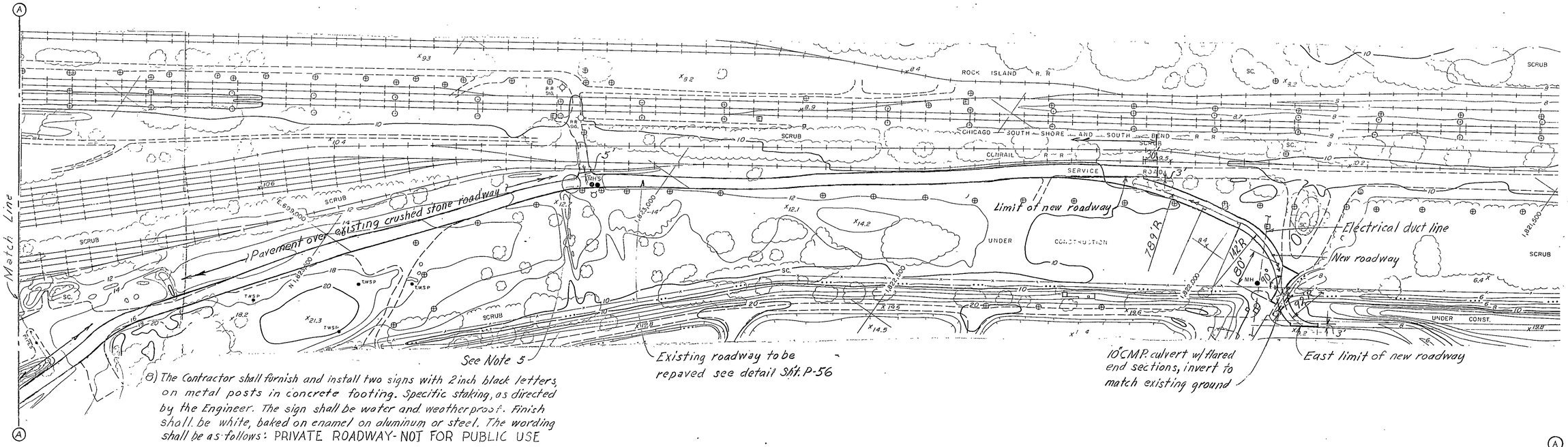

8) The Contractor shall furnish and install two signs with 2 inch black letters, on metal posts in concrete footing. Specific staking, as directed by the Engineer. The sign shall be water and weatherproof. Finish shall be white, baked on enamel on aluminum or steel. The wording shall be as follows: PRIVATE ROADWAY-NOT FOR PUBLIC USE

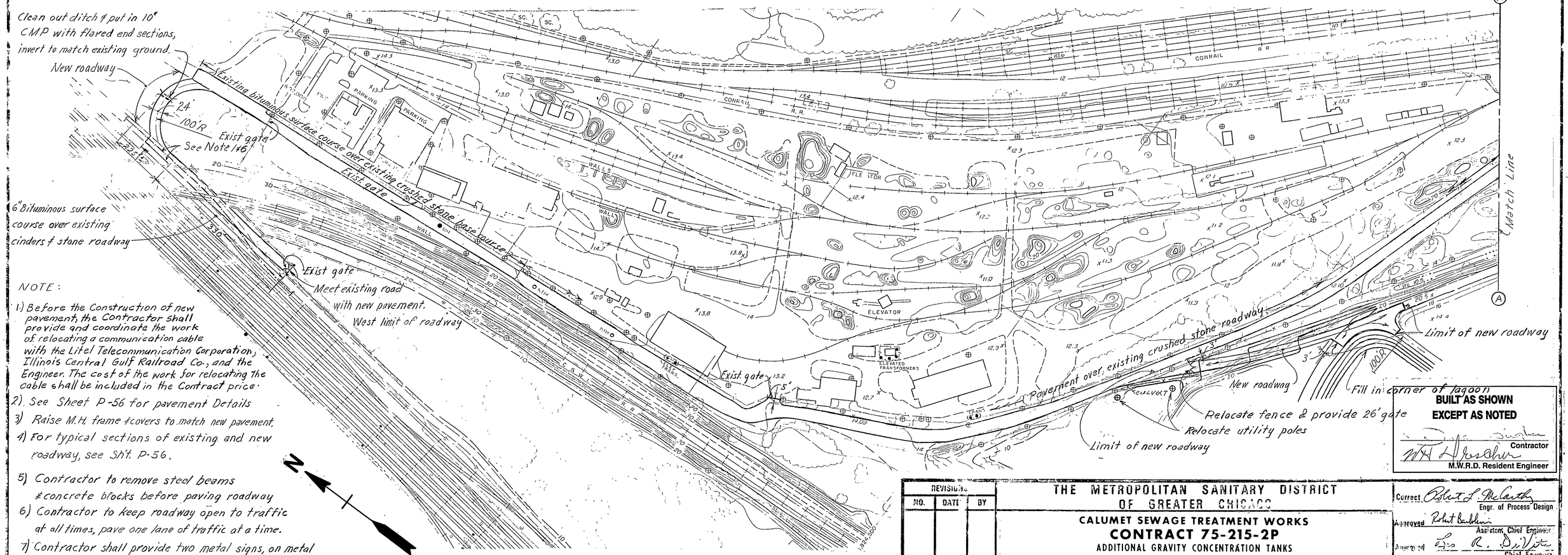

NOTE:

1.) Before the Construction of new pavement, the Contractor shall provide and coordinate the work of relocating a communication cable with the Lite1 Telecommunication Corporation, Illinois Central Gulf Railroad Co., and the Engineer. The cost of the work for relocating the cable shall be included in the Contract price.

2). See Sheet P-56 for pavement Details

3) Raise M.H. frame & covers to match new pavement.

4) For typical sections of existing and new roadway, see Sht. P-56.

5) Contractor to remove steel beams & concrete blocks before paving roadway

6) Contractor to keep roadway open to traffic at all times, pave one lane of traffic at a time.

7) Contractor shall provide two metal signs, on metal poles installed in concrete footing. Sign shall read

SCALE: 1" = 100'-0" 100' 0' 100' 200' unless noted

BUILT AS SHOWN
EXCEPT AS NOTED

Contractor

M.W.R.D. Resident Engineer

REVISIONS		
NO.	DATE	BY

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

CALUMET SEWAGE TREATMENT WORKS

CONTRACT 75-215-2P

ADDITIONAL GRAVITY CONCENTRATION TANKS

SERVICE ROAD TO CALUMET-WEST

Correct Robert L. McCarthy — Engr. of Process Design

Approved Robert Bachlin — Assistant Chief Engineer

Approved Leo R. DiVito — Chief Engineer

SCALES SHOWN ARE SCALES OF TRACINGS

Designed RK	Drawn RK	Checked	Reviewed W. A. Boyer	DATE	SHEET NO P-43

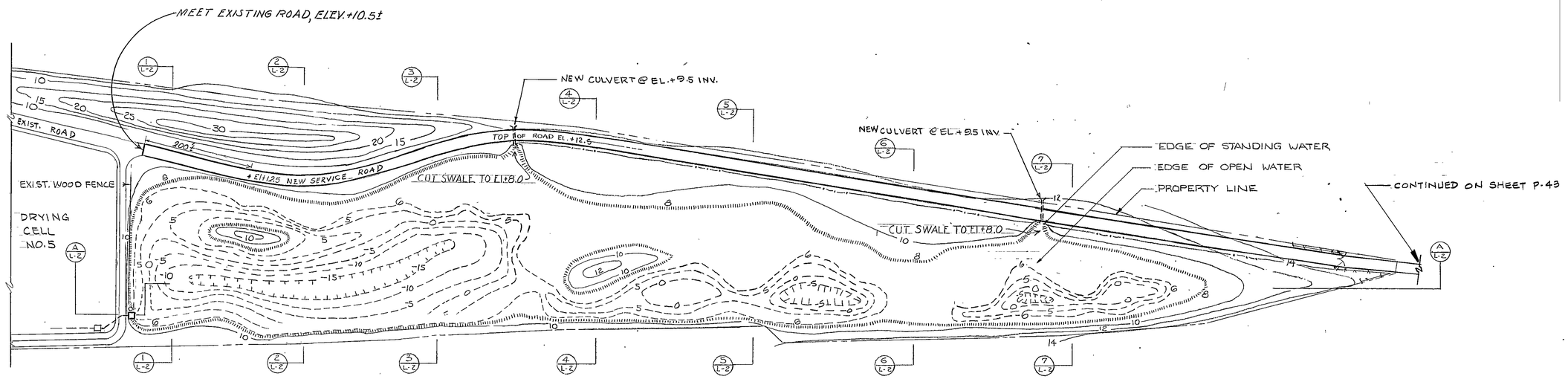

TOPOGRAPHIC PLAN

SCALE: 1" = 100'-0"

LEGEND

- ABOVE WATER CONTOUR
- SUBSURFACE CONTOUR
- EDGE OF STANDING WATER

N

NOTES:

2- THE UPLAND (DRY) ZONE AREA SHALL BE CONSTRUCTED TO MEET THE NEW SERVICE ROAD AND SHALL DRAIN TO OPEN WATER.

3- ALL PEAT AND SIMILAR MATERIALS AS DIRECTED BY THE ENGINEER SHALL BE REMOVED FROM THE SWAMP AREA AND STOCKPILED SEPARATELY FOR USE IN CONSTRUCTION OF THE WET ZONE AREA. DRYING CELL NO. 5, SOUTH OF THE WETLANDS, MAY BE USED FOR THIS PURPOSE.

4- THE CONTRACTOR SHALL REMOVE AND DELIVER APPROXIMATELY 114-3'x3'x3' CONCRETE BLOCKS, LOCATED ALONG THE SOUTHERN BOUNDRY OF THE WETLANDS, TO THE CALUMET S.T.W. AT A SITE AS DIRECTED BY THE ENGINEER.

5. ANY MARINE OR OTHER WILDLIFE HELPLESSLY STRANDED BY THE DRAINING OF THE SWAMPY AREA SHALL BE TRANSPORTED TO CELL NO. 5 AS DIRECTED BY ENGINEER.

6. THE CONTRACTOR SHALL FILL THE WETLANDS, AFTER COMPLETION, WITH UNCONTAMINATED STORM WATER OR GROUND WATER TAKEN FROM THE UNDERDRAIN SYSTEM AT THE CALUMET SLUDGE DRYING AREA - WEST. STORM WATER RETAINED IN CELL NO. 5 MAY ALSO BE USED.

7. IF INSUFFICIENT WATER IS AVAILABLE TO FILL THE WETLANDS, THE CONTRACTOR MAY USE A WELL OR 1 PART MSDGC FINAL PLANT EFFLUENT WATER, TAKEN FROM THE PLANT EFFLUENT, IN A MANNER APPROVED BY THE ENGINEER, TO EVERY 3 PARTS STORM WATER. ALL PUMPS, WELLS, HOSE, ELECTRICAL SERVICE, ETC. REQUIRED TO PROVIDE WATER TO FILL THE WET LANDS SHALL BE PROVIDED BY THE CONTRACTOR UNDER THE CONTRACT.

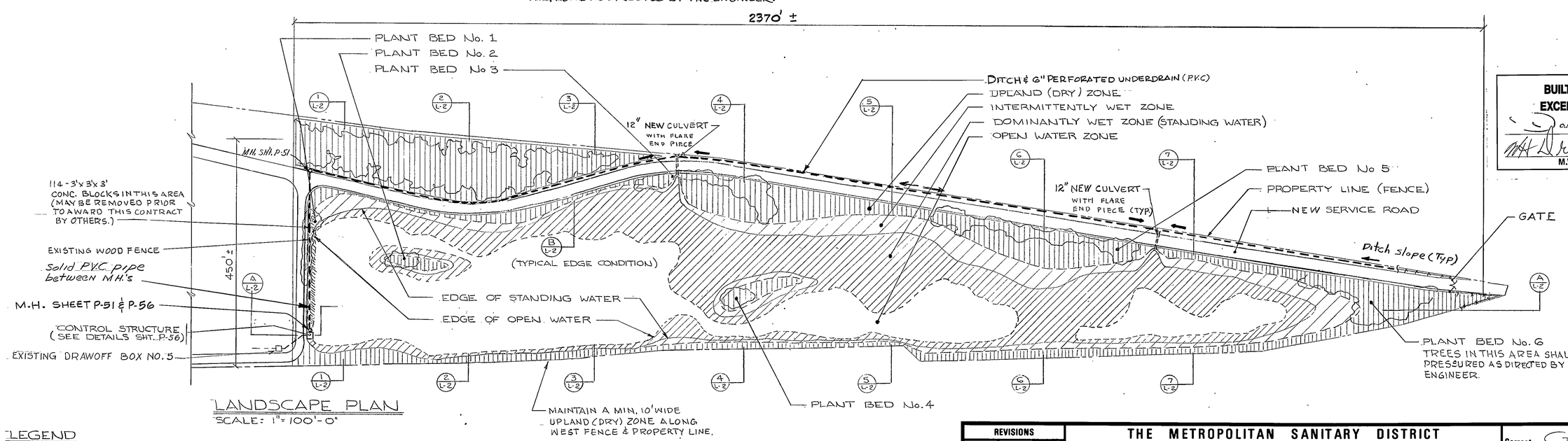

LANDSCAPE PLAN

SCALE: 1" = 100'-0"

LEGEND

- OPEN WATER (3' OR MORE DEEP)
- WET ZONE
  - INTERMITTENTLY WET
  - DOMINANTLY WET
- UPLAND (DRY) ZONE

N

1 THIS SHEET P-44 IS COMPLETELY REVISED

BUILT AS SHOWN EXCEPT AS NOTED

Contractor

M.W.R.D. Resident Engineer

REVISIONS		
NO.	DATE	BY
1	11-20-86	WAT

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

CALUMET SEWAGE TREATMENT WORKS

CONTRACT 75-215-2P

ADDITIONAL GRAVITY CONCENTRATION TANKS

WETLAND IMPROVEMENTS

Correct George J. Kelly

Approved Robert Burkhart — Assistant Chief Engineer

Approved Leo R. DiVita — Chief Engineer

SCALES SHOWN ARE SCALES OF TRACINGS

Designed GTK | Drawn RAC | Checked | Reviewed | DATE OCT., 1986 | SHEET NO. P-44

As built MF 2/20/92

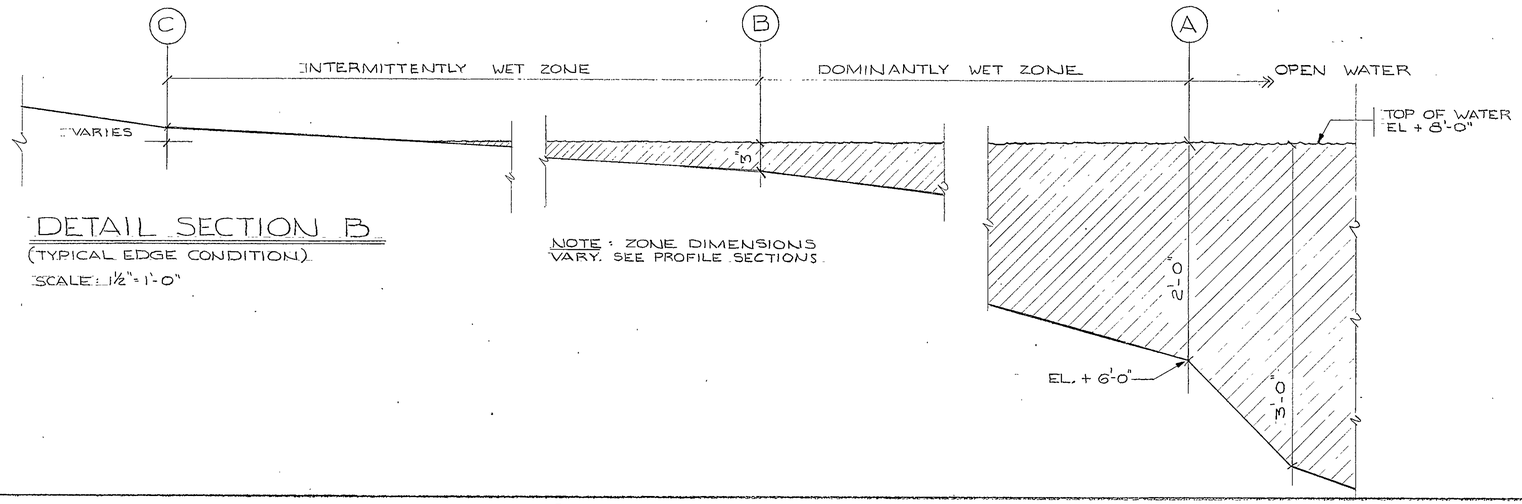

DETAIL SECTION B

(TYPICAL EDGE CONDITION)

SCALE: 1½" = 1'-0"

NOTE: ZONE DIMENSIONS VARY. SEE PROFILE SECTIONS.

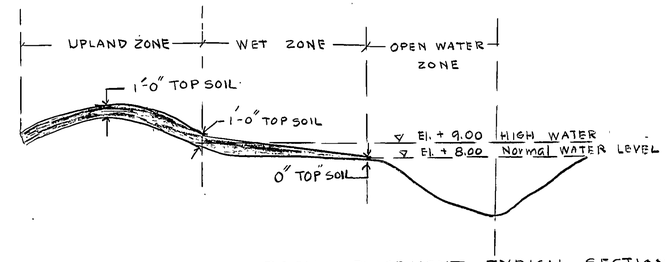

TOPSOIL PLACEMENT TYPICAL SECTION

NTS

Note:

1. Topsoil from "OFF-SITE" sources shall meet the requirements specified under Art. 717.04 of the IDOT Standard Specifications. Sludge is not permitted to be used in Wetland
2. The Contractor shall replace the peat, removed during construction of the wetlands, into the open water zone and into the dominantly wet zone to the depth of 1 ft. Peat containing cinders and debris shall not be returned to the wetlands but may be used in construction of the hillmass.

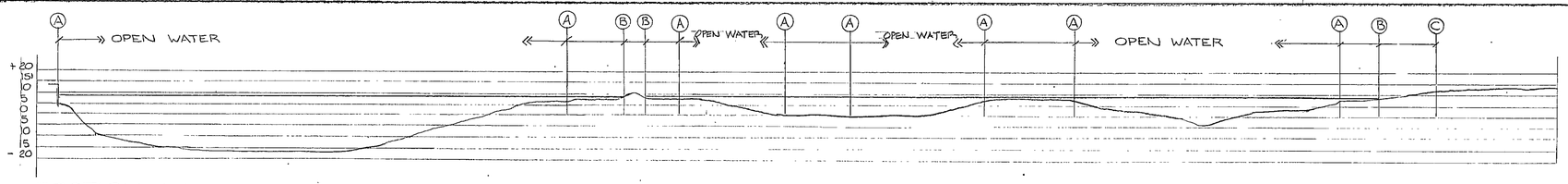

SECTION A-A

VERTICAL SCALE: 1" = 30'-0"
HORIZONTAL SCALE: 1" = 100'-0"

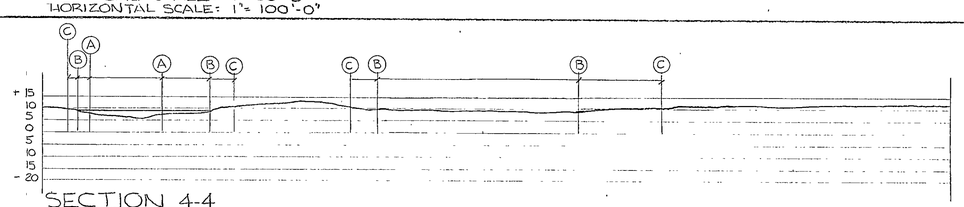

SECTION 4-4

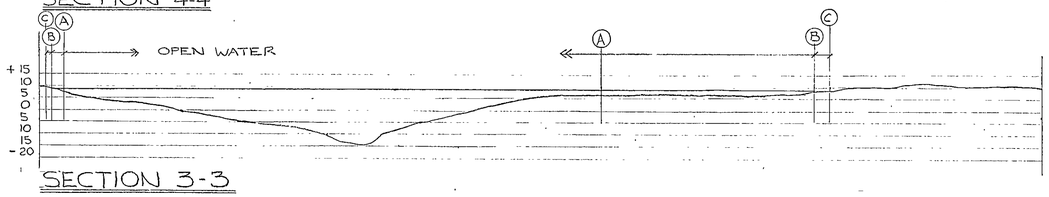

SECTION 3-3

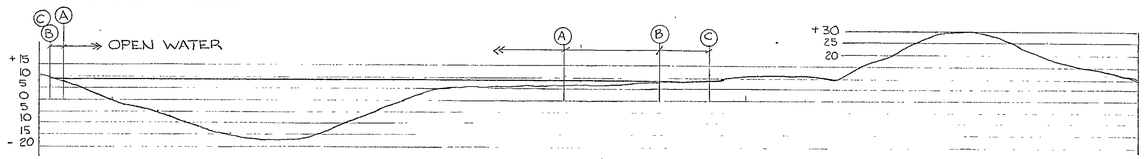

SECTION 2-2

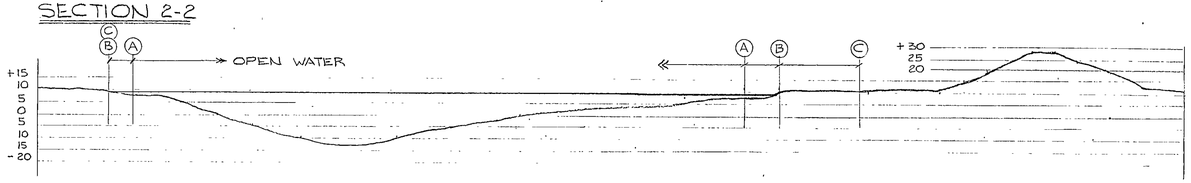

SECTION 1-1

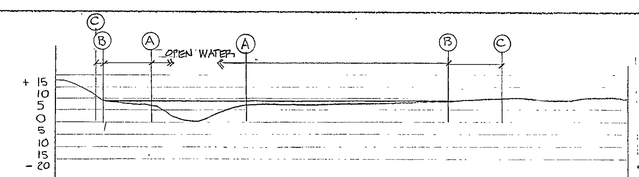

SECTION 7-7

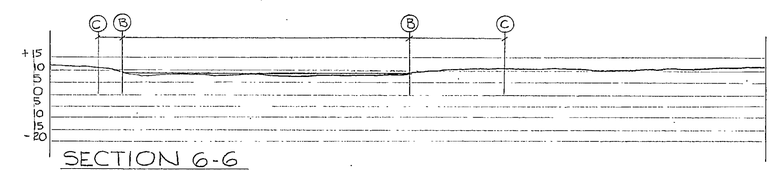

SECTION 6-6

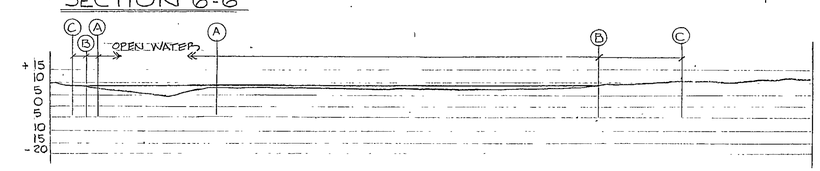

SECTION 5-5

PROFILE SECTIONS

SCALE: 1" = 30'-0"
(HORIZONTAL & VERTICAL)

SEE SHEET L-1 FOR LOCATIONS

BUILT AS SHOWN EXCEPT AS NOTED

Contractor

M.W.R.D. Resident Engineer

REVISIONS		
NO.	DATE	BY

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

CALUMET SEWAGE TREATMENT WORKS

CONTRACT 75-215-2P

ADDITIONAL GRAVITY CONCENTRATION TANKS

WETLAND IMPROVEMENTS

Correct

Approved Assistant Chief Engineer

Approved Chief Engineer

SCALES SHOWN ARE SCALES OF TRACINGS

Designed | Drawn | Checked | Reviewed | DATE OCT., 1986 | SHEET NO. P-45

As built MF 2/20/92

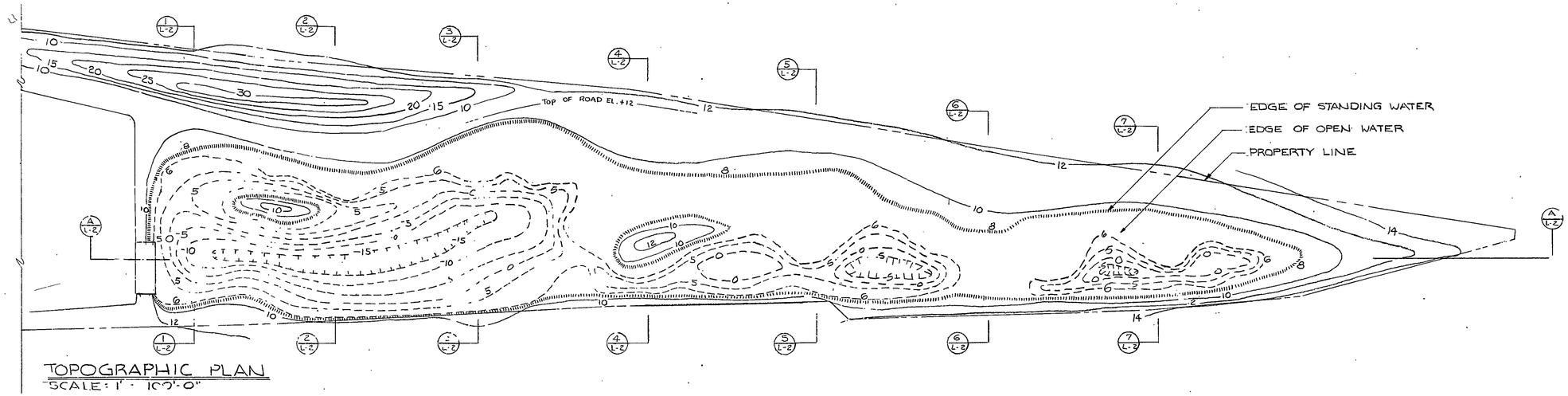

TOPOGRAPHIC PLAN
SCALE: 1" = 100'-0"

LEGEND

- ABOVE WATER CONTOUR
- SUBSURFACE CONTOUR
- EDGE OF STANDING WATER

→ N

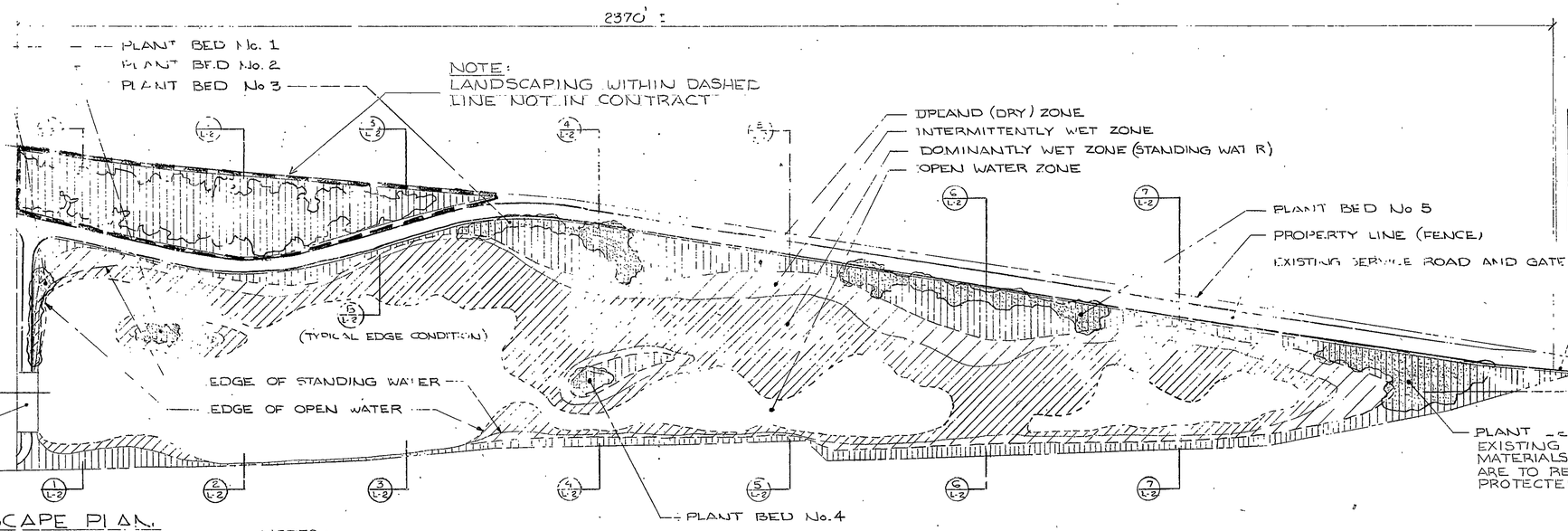

LANDSCAPE PLAN
SCALE: 1" = 100'-0"

→ N

LEGEND

- OPEN WATER (3' OR MORE DEEP)
- WET ZONE
  - INTERMITTENTLY WET — SEED MIX A (2 ACRES)
  - DOMINANTLY WET — SEED MIX B (4½ ACRES)
  - UPLAND (DRY) ZONE — SEED MIX C (3½ ACRES)

NOTES:

- PLANT MATERIAL LOCATIONS WITHIN PLANTING BEDS WILL BE FIELD LOCATED AND STAKED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. (SEE DIAGRAMS - SH L-2)
- SEED MIX AREAS ARE TO BE CONSIDERED AS OVERLAPING BY 10± FT. AND NOT ISOLATED AND DISTINCT ZONES.

BUILT AS SHOWN EXCEPT AS NOTED

LOPI STEELE MELLON STUART — Contractor

M.S.D. Resident Engineer

REVISIONS		
NO.	DATE	BY

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

CALUMET SEWAGE TREATMENT WORKS

CONTRACT 75-215-2P

ADDITIONAL GRAVITY CONCENTRATION TANKS

LANDSCAPING

OCT., 1986

L-1

As built MF 8/25/97

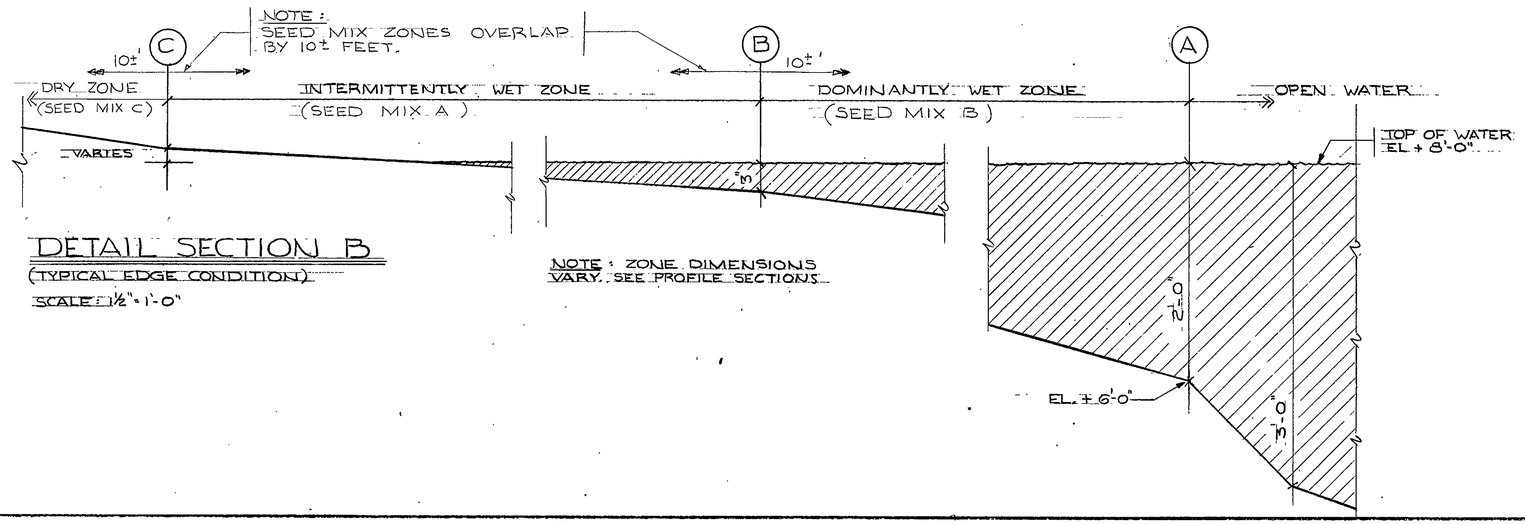

DETAIL SECTION B

(TYPICAL EDGE CONDITION)

SCALE: 1/2" = 1'-0"

NOTE: ZONE DIMENSIONS VARY. SEE PROFILE SECTIONS.

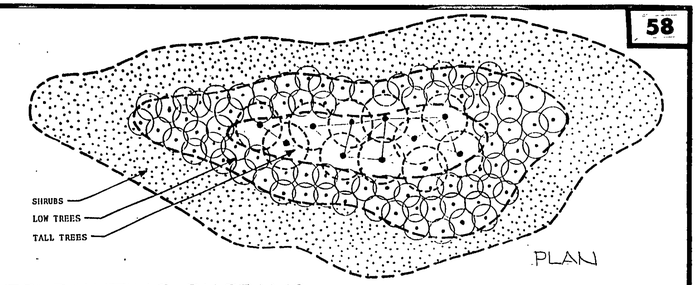

PLAN

PROTOTYPE PLANTING DIAGRAMS

(NOT TO SCALE)

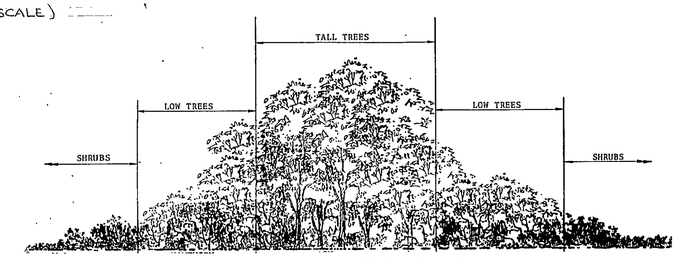

SECTION

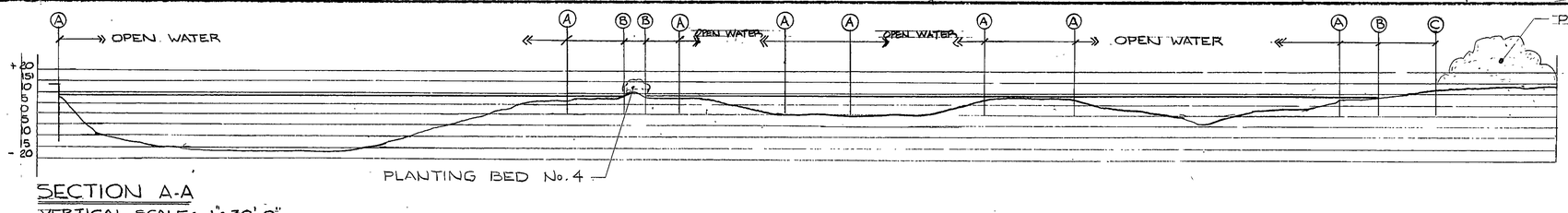

SECTION A-A

VERTICAL SCALE: 1" = 30'-0"
HORIZONTAL SCALE: 1" = 100'-0"

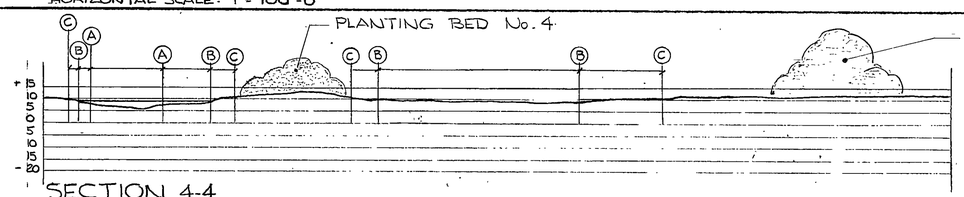

SECTION 4-4

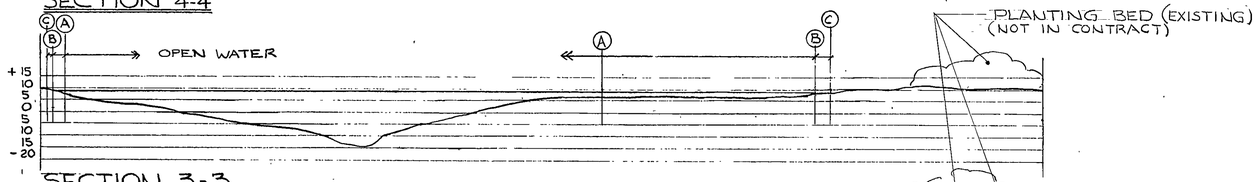

SECTION 3-3

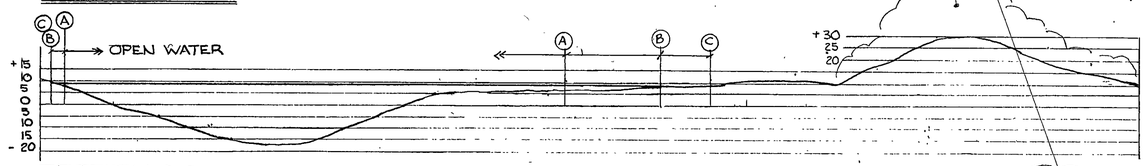

SECTION 2-2

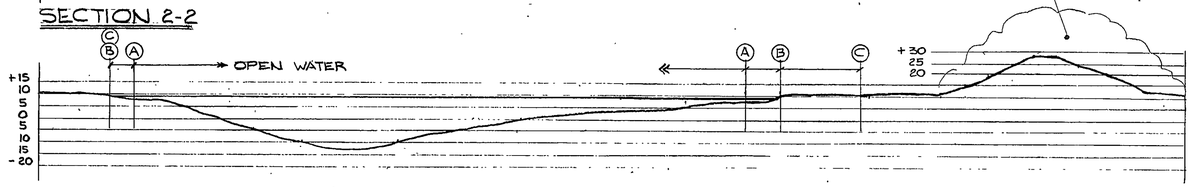

SECTION 1-1

PROFILE SECTIONS

SCALE: 1" = 30'-0"
(HORIZONTAL & VERTICAL)

SEE SHEET L-1 FOR LOCATIONS

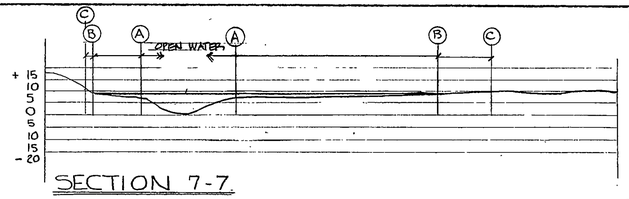

SECTION 7-7

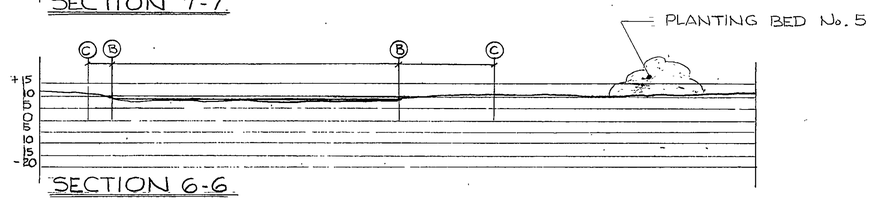

SECTION 6-6

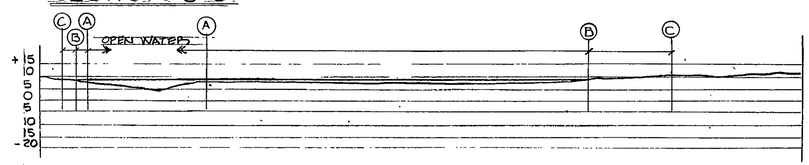

SECTION 5-5

BUILT AS SHOWN EXCEPT AS NOTED

LORI STEELE - MELVIN STUART CO
Contractor

M.S.D. Resident Engineer

REVISIONS		
NO.	DATE	BY

THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO

CALUMET SEWAGE TREATMENT WORKS

CONTRACT 75-215-2P

ADDITIONAL GRAVITY CONCENTRATION TANKS

LANDSCAPING

Designed DTB Drawn GJK Checked DTB Reviewed DATE OCT., 1986

Correct George J. Kaes
Approved Robert Barbieri
Assistant Chief Engineer
Approved
Chief Engineer

SCALES SHOWN ARE SCALES OF TRACING

As built MF 2/25/92

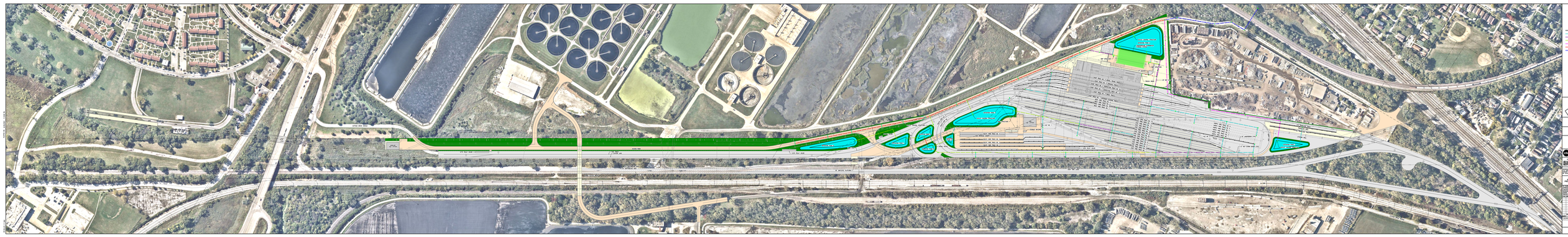
CHICAGO TRANSIT AUTHORITY
DESIGN BUILD OF CHICAGO TRANSIT AUTHORITY
DESIGN BUILD TECHNICAL SPECIFICATIONS
EK-111

Kensington Marsh - Drainage Runoff from Proposed Rail Yard

In order to maintain allowable flow rates into the Kensington Marsh (Marsh), nine (9) proposed detention ponds are included (8 above ground and 1 underground) in the proposed railroad yard project limits. The Marsh is considered "open water" which allows for a higher allowable release rate in comparison to discharging to an underground drainage pipe system. Prior to entering each respective detention pond, runoff would be collected by underdrains wrapped in a permeable filter fabric and located between selected railroad tracks. The underdrains are located in the sub-ballast section. These underdrains connect into pipes that outlet into respective detention ponds. The combination of the ballast, sub-ballast, and underdrains with filter fabric comprise the Volume Control Best Management Practices (VCBMP's) by minimizing suspended solids entry into the detention ponds. The VCBMP receives credit for the required water quality pre-treatment. Pre-treatment devices such as BaySaver units will be used to filter the parking lot and roof drainage before it enters a respective detention ponds. To mitigate flow rates, the ponds utilize an outlet control structure, which includes orifices, a grate, and discharge pipe. Ultimately, the runoff exits the pond via the discharge pipe and enters the Marsh. The access road to the railyard includes catch basins with a deep sump. The deep sump is used to collect sediment. The pipe leaving the catch basins connects into the pipe network that enters the Marsh (i.e. the road drainage does not enter the detention ponds). See Table A: Kensington Marsh (DP-Marsh) for volume of runoff and flow rates entering the Marsh.

Table A: Kensington Marsh (DP-Marsh)											
2 Year Storm Event			10 Year Storm Event			50 Year Storm Event			100 Year Storm Event		
Storm Duration	Volume	Peak Flow	Storm Duration	Volume	Peak Flow	Storm Duration	Volume	Peak Flow	Storm Duration	Volume	Peak Flow
	CF	CFS		CF	CFS		CF	CFS		CF	CFS
1 Hour	79,873	7.52	1 Hour	170,197	13.71	1 Hour	350,578	33.35	1 Hour	455,635	43.13
2 Hour	141,331	9.39	2 Hour	269,944	16.64	2 Hour	508,573	40.75	2 Hour	644,144	**50.92**
3 Hour	176,322	9.54	3 Hour	311,745	16.19	3 Hour	574,471	**40.82**	3 Hour	723,780	49.41
6 Hour	242,810	9.33	6 Hour	406,492	15.39	6 Hour	721,896	38.40	6 Hour	899,008	46.61
12 Hour	315,818	10.41	12 Hour	511,681	**17.14**	12 Hour	880,240	32.70	12 Hour	1,089,392	41.61
18 Hour	356,867	**10.86**	18 Hour	552,672	16.97	18 Hour	943,916	32.66	18 Hour	1,164,225	41.72
24 Hour	**391,399**	10.13	24 Hour	**621,435**	15.70	24 Hour	**1,047,428**	30.32	24 Hour	**1,290,140**	38.29

* The Peak Flow Rates are generated from critical duration analysis. The critical durations for each storm event are 1 hour, 2, hour, 3 hour, 6 hour, 12 hour, 18 hour, and 24 hour. The **BOLD** represents the Peak Flow Rate for each respective Storm Event.

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET
CHICAGO, ILLINOIS 60604-1437

REPLY TO
ATTENTION OF:

January 19, 2022

Regulatory Branch
LRC-2016-00408

SUBJECT: Request for a Jurisdictional Determination for the CTA Red Line Extension Project Along and East of Cottage Grove Avenue between 127th Street and 130th Street in the Lake Michigan Watershed of the City of Chicago, Cook County, Illinois (41.66428, -87.59925)

Marlise Fratinardo
Chicago Transit Authority
567 West Lake Street
Chicago, Illinois 60661

Dear Ms. Fratinardo:

This is in response to your request for a jurisdictional determination and an opinion on effects on a previous permittee-responsible mitigation site, submitted on your behalf by TranSystems, Inc., for the above-referenced project. This office has determined that there are no waterways, wetlands or other areas considered "waters of the United States" under Corps of Engineers jurisdiction at the site. Therefore, a Department of the Army permit under Section 404 of the Clean Water Act is not required. Specifically, Wetlands 1&2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 are isolated, intra-state, non-navigable waters with no connection to one or more traditionally navigable waters. Please note that this office does not concur with the boundaries of waters not under federal jurisdiction.

This determination covers only your project as described above and as shown in the figures titled “AJD Map, 120th Street Yard and Shop & Kensington Marsh”, “AJD Map, 120th Street Yard and Shop”, and “AJD Map, 130th Street Station”, all dated July 7, 2021, prepared by TranSystems, Inc. Enclosed, please find a copy of the decision document for our determination. Although this determination provides a notification of the presence of waters not under Federal jurisdiction, this determination does NOT finalize the wetland boundary.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

This determination is valid for a period of five (5) years from the date of the letter, unless new information warrants revision of the determination before the expiration date or a District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

This letter is considered an approved jurisdictional determination for your subject site. If you object to this determination, you may appeal, according to 33 CFR Part 331. Because CTA is not the landowner, we are copying the various landowners[1] on this letter, as they also have appeal rights. Enclosed, you and the landowners will find a Notification of Appeal Process (NAP) fact sheet and a Request for Appeal (RFA) form. If you request to appeal the above determination, you must submit a completed RFA form to the Great Lakes/Ohio River Division Office at the following address:

Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

In order to be accepted, your RFA must be complete, meet the criteria for appeal and be received by the Division Office within sixty (60) days of the date of the NAP. If you concur with the determination in this letter, submittal of the RFA form to the Division office is not necessary.

It is your responsibility to obtain any required state, county, or local approvals for impacts to wetland areas not under the Department of the Army jurisdiction. For projects located in unincorporated and unauthorized municipalities in Cook County, please contact the Metropolitan Water Reclamation District of Greater Chicago at (312) 751-3247.

You also requested an opinion from this office as to whether we object to the Red Line Extension's 120th Street Yard stormwater draining to Kensington Marsh, which was constructed as permittee-responsible mitigation by the Metropolitan Water Reclamation District of Greater Chicago (MWRD) pursuant to and as required by DA Permit No. 5108502 dated June 10, 1985. Because that permit was issued to a municipal body, we did not require legal site protection such as a deed restriction or conservation easement on the mitigation. However, we appreciate MWRD requesting a review from our office of potential impacts to the Kensington Marsh restoration project.

---

[1] The information you provided states that the Metropolitan Water Reclamation District owns all or part of wetlands 1, 2, 3, 4, 5, 8, 9, 10, 11, 13, 14, and 20. Conrail/CSX Transportation, Inc. owns all or part of Wetlands 5, 6, 12, and 20. Norfolk Southern Corporation owns all or part of Wetlands 6, 7, 12, and 15. The Forest Preserve District of Cook County and the Chicago Housing Authority both own parts of Wetlands 16, 17, and 18. K-Five Construction Corporation owns all or part of Wetlands 15 and 19. Commonwealth Edison owns part of Wetland 12.

Based on the restoration plan for the marsh, the as-built plans provided by MWRD, the Preliminary Drainage Plan dated 6/29/2021, the peak flow and volume calculations provided, and your narrative, the Corps does not object to this plan to route the 120th Street Yard stormwater to Kensington Marsh, provided the Best Management Practices contemplated in your submittal are carried out. Should your plans change, we are happy to review them again, consistent with our ongoing responsibility to ensure compliance with MWRD's 1985 permit.

Finally, our office has considerable expertise in evaluating project impacts on wetlands and other water resources. Should the CTA and/or the Federal Transit Administration see a need, we would be willing to participate in the preparation of the Final Environmental Impact Statement as a participating or cooperating agency to provide our expertise in wetlands and water resources.

This letter is considered an approved jurisdictional determination for your subject site. If you wish to appeal this decision or if you have any questions please contact Mr. Colin C. Smalley, PG of my staff by telephone at (312) 846-5538 or email at Colin.C.Smalley@usace.army.mil. You may also visit our website at http://www.lrc.usace.army.mil/Missions/Regulatory.aspx for information on our program.

Sincerely,

Kathleen G. Chernich 2022.01.19 19:11:40 -06'00'

Kathleen G. Chernich
Assistant Chief
Regulatory Branch

Enclosures

cc:
U.S. Department of Transportation, Federal Transit Administration (Elizabeth Breiseth)
U.S. Department of Transportation, Federal Highway administration (Matt Fuller)
U.S. Environmental Protection Agency (Ken Westlake)
Metropolitan Water Reclamation District of Greater Chicago (Ellen Avery, Maureen Durkin)
City of Chicago, Department of Transportation (Oswaldo Chaves)
Forest Preserves of Cook County (Chris Slattery)
Chicago Housing Authority (Kevin Hall)
Conrail/CSX Transportation, Inc. (Ryan Hill)
Norfolk Southern Corporation (Melita Walker)
Commonwealth Edison (Felicia Bradley)
K-Five Construction Corporation (Robert Krug)
TranSystems, Inc. (Kelsey Kropp)

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): January 19, 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, CTA Red Line Extension, LRC-2016-00408

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Illinois County/parish/borough: **Cook** City: Chicago
Center coordinates of site (lat/long in degree decimal format): Lat. 41.66428°N, Long. -87.59925° W.
Universal Transverse Mercator: Zone 16
Name of nearest waterbody: Little Calumet River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Pick List**
Name of watershed or Hydrologic Unit Code (HUC): **Chicago (07120003)**
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 13-Dec-2021
☒ Field Determination. Date(s): 11-May-2021

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

2. Non-regulated waters/wetlands (check if applicable):[1]
☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **The nineteen wetlands within the review area are isolated, intra-state, non-navigable waters**.

SECTION III: CWA ANALYSIS

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[2]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

[1] Supporting documentation is presented in Section III.F.
[2] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .

☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource: .

☒ Wetlands: 29.93 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource: .

☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: CTA RLE AJD Request Map, TranSystems, 7-Jul-2021.

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒ Office concurs with data sheets/delineation report. Wetland Delineation report, Hey & Associates, 2015.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☒ U.S. Geological Survey Hydrologic Atlas:Pick List, NHD GIS data, accessed 13-Dec-2021.

☐ USGS NHD data.

☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Lake Calumet 7.5", 1991, Pick List, Pick List, Pick List, .

☐ USDA Natural Resources Conservation Service Soil Survey. Citation: Pick List.

☒ National wetlands inventory map(s). Cite name: Lake Calumet, .

☐ State/Local wetland inventory map(s): Pick List, .

☒ FEMA/FIRM maps: NFHL GIS Data, accessed 13-Dec-2021.

☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): .

or ☒ Other (Name & Date): .

☒ Previous determination(s). File no. and date of response letter: LRC-2016-00330, 29-Jun-2016.

☐ Applicable/supporting case law: .

☐ Applicable/supporting scientific literature: .

☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: There are 19 aquatic resources, all appeared to meet the wetland criteria but do not drain to WOTUS. I verified that the Norfolk Southern Railway line is a topographic high and water does not flow to the east to Lake Calumet. No evidence of any hydrologic connection to any other aquatic resource whatsoever was found for Wetlands 1&2, 6, 7, 8, 10, 11, 12, 13, 14, 15, 18 and 19. Wetland 4 is connected to Wetland 3 by a culvert, and Wetland 3 is abutting Wetlands 5 and 9, and so all four wetlands function as one complex; however, this complex does not flow to any aquatic resource and therefore is isolated from the nearest relatively permanent water. (Note, there is a culvert at the southeast corner of Wetland 3. That culvert appears to allow a ditch on the other side of the watershed divide spill into Wetland 3 as a flood control measure to avoid flooding of the interstate highway and/or the railroad. Despite recent rains at the time of my site visit, there was no evidence that Wetland 3 flowed across the watershed divide to the east.) Wetlands 16 and 17 have a perched culvert in a berm between them, but even if considered connected, do not as a complex connect to any other aquatic resources and therefore have no connection to downstream relatively permanent waters. Wetland 20 drains to the MWRD treatment system through a drop structure as designed during the mitigation project that created the wetland in its current form. Accordingly, there is no connection to nearby relatively permanent waters. Wetland 20 is the closest wetland on site to the Little Calumet River (the nearest RPW, also a TNW), and it is 2/3 of a mile away through dense urban development. Most on-site isolated wetlands are approximately one mile away from the Little Calumet River. These wetlands do not have an ecological connection to a WOTUS.

There is no known information to show that any of the wetlands within the review area support a link to interstate or foreign commerce. There is no known information to suggest that any of the wetland within the review area is or may be used interstate or foreign travelers for recreation or other purposes; produces fish or shellfish that could be taken and sold in interstate or foreign commerce, or used for industrial purposes by industries in interstate or foreign commerce. The wetlands were determined to not be a WOTUS and not to be jurisdictional under the CWA..

- ☒ Area(s) are geographically isolated. Wetlands are shallow isolated depressions in the lake plain region of Lake Michigan.
- ☒ Area(s) do not have a hydrologic nexus. Water does not drain off-site into any flowing water of the U.S.
- ☒ Area(s) do not have an ecological nexus. .
- ☒ Area(s) do not have evidence of a subsurface flow connection to a jurisdictional water. .
- ☒ Area(s) do not have evidence of surface overland sheet flow. .
- ☒ Area(s) are not located within the flood plain. .

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Marlise Fratinardo Chicago Transit Authority	File Number: LRC-2016-00408	Date: January 19, 2022

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A. INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district commander. Your objections must be received by the district commander within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district commander will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district commander will send you a proffered permit for your reconsideration, as indicated in Section B below.

B. PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

C. PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

D. APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

E. PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Regulatory Branch
Chicago District Corps of Engineers
231 South LaSalle Street, Suite 1500
Chicago, IL 60604-1437
Phone: (312) 846-5530
Fax: (312) 353-4110

If you only have questions regarding the appeal process you may also contact:

Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Commanders personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

August 27, 2021

Mr. James Casey, Chief
Lake Michigan Management Section
Illinois Department of Natural Resources
Office of Water Resources
160 N. LaSalle Street, Suite S-703
Chicago, IL 60601

Re: Illinois Coastal Management Federal Consistency Review
CTA Red Line Extension Project
Chicago, Cook County, Illinois

Dear Mr. Casey:

The Chicago Transit Authority (CTA) is preparing a Final Environmental Impact Statement (EIS) for the Red Line Extension (RLE) Project and we are submitting this letter and enclosures for your review and initial determination as to whether a federal consistency review would be required for the RLE Project. This letter describes the project including detailing the portion of the RLE Project that is within the Illinois coastal zone boundaries and the federal financial assistance.

Project Description

CTA, as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

CTA and FTA published a Draft Environmental Impact Statement (EIS) on October 6, 2016 that evaluated the environmental impacts of constructing and operating the RLE Project. The Draft EIS proposed a terminal station, the 130th Street station, located north of 130th Street adjacent to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) Calumet Water Reclamation Plant.

In 2017, the Chicago Housing Authority demolished three housing blocks of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station to the area of the demolished blocks. In 2019, CTA began exploring this opportunity to relocate the 130th Street station adjacent to the Altgeld Gardens neighborhood. The relocated 130th Street station would be constructed in a previously developed area within the Illinois coastal zone. As the project location map depicts (**Enclosure A**), the Illinois Coastal Management Program boundary follows 130th Street in this location. The 130th Street station in the Draft EIS was outside this boundary. However, the relocated 130th Street station (located south of 130th Street) would be within the Illinois coastal zone boundaries. The new station location is currently being evaluated as part of a Supplemental Environmental Assessment (EA).

The 130th Street station would include an at-grade station platform located south of 130th Street. A station entrance would be located at the terminus of the extension north of 132nd Street. A five-bay bus turnaround would be located to the west of the main station for direct transfers. A park & ride facility would be located northwest of the station platform, with another station entrance at the top level to bridge over the tracks to access the station platform for park & ride transfers. CTA Transportation Offices would also be located at the terminus, with a connection to the park & ride facility and nearby station entrance. The Transportation Offices would include office space and restroom facilities for station personnel.

The RLE Project would improve transit access and pedestrian connections to the Forest Preserves of Cook County Beaubien Woods Forest Preserve, located south of the project, and its amenities, including access to the Little Calumet River and the boat launch located within the forest preserve. The RLE Project would open up opportunities to create a gateway to the Beaubien Woods Forest Preserve from the rest of the city and surrounding suburbs through direct connection to the rail transit network through a new station, enhanced bus service connections at the station, and a proposed park & ride facility directly adjacent to the forest preserve.

Although there are wetlands located within the Illinois coastal zone boundaries (between 130th Street and Old 130th Street on both sides of the existing Conrail railroad tracks), these wetlands would not be impacted by the RLE Project.

Stormwater drainage from the relocated 130th Street station would be sent to the existing city stormwater system. Design features would be included to manage stormwater drainage so as not to overload the existing stormwater system.

Federal Financial Assistance

This RLE Project would be funded, in part, by the FTA Capital Investment Grants – New Starts Program, which is a listed federal financial program in the Illinois Coastal Management Program. CTA submitted a request for entry into the Project Development phase in November 2020 and received approval in December 2020. **Enclosure B** includes the letter from FTA approving the RLE Project for entry into Project Development.

We appreciate your review of these materials at your earliest convenience to determine whether a full federal consistency review would be required for the RLE Project. If you have any questions or require further information, please contact me at mfratinardo@transitchicago.com or Robin

Martel at rmartel@wightco.com or 312.261.5730. If preferred, we can set up a virtual meeting to discuss any clarifications or questions you have regarding this request.

Regards,

Marlise Fratinardo

Digitally signed by Marlise Fratinardo
DN: cn=Marlise Fratinardo, o, ou, email=mfratinardo@transitchicago.com, c=US
Date: 2021.08.27 17:43:00 -05'00'

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority

Enclosures:
Enclosure A – Project Location Map with Illinois Coastal Zone Boundaries
Enclosure B – FTA Project Development Initiation Letter

Enclosure A – Project Location Map

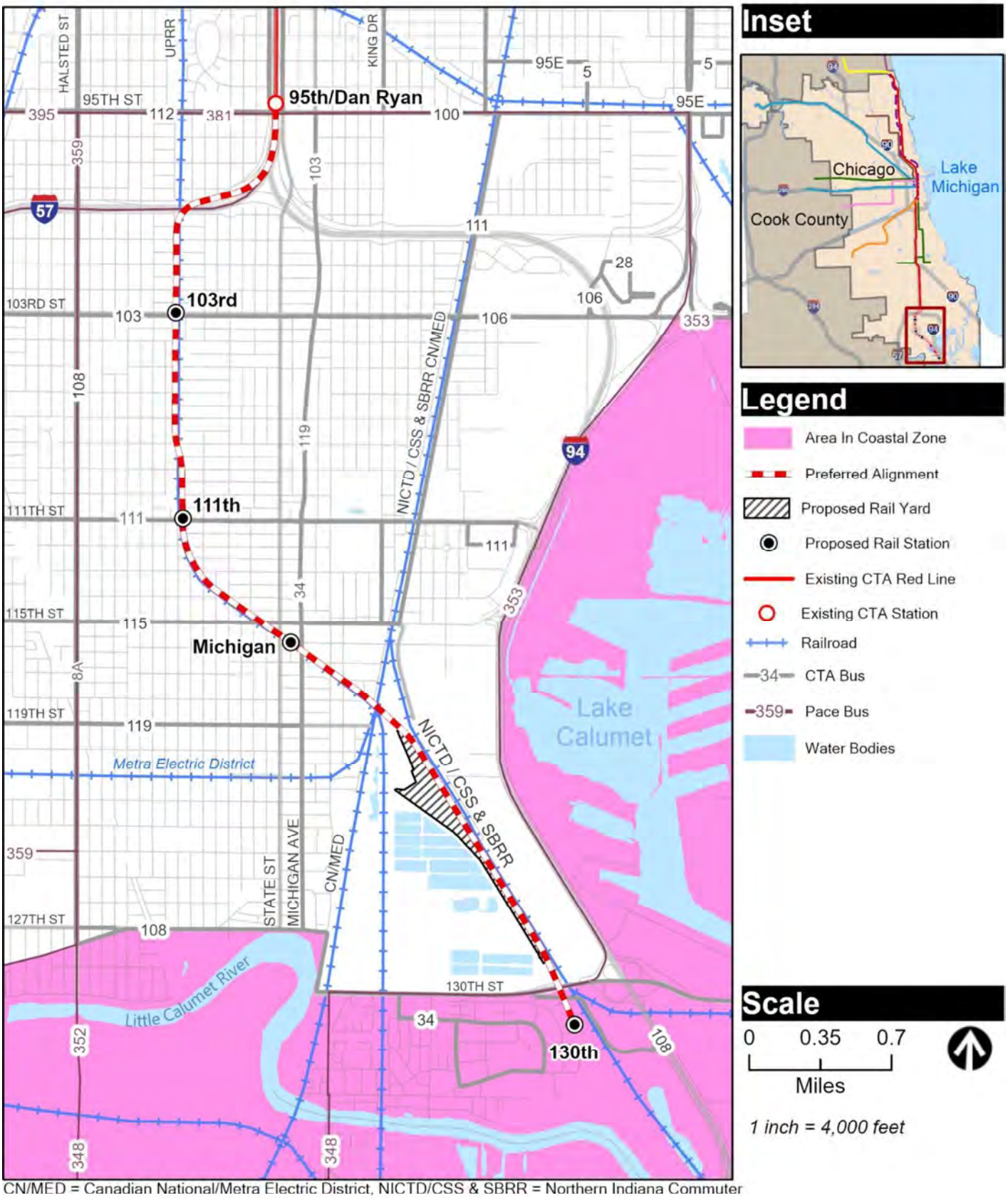

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Enclosure B - FTA's Project Development Initiation Letter

U.S. Department
Of Transportation
Federal Transit
Administration

Headquarters

1200 New Jersey Avenue S.E.
Washington DC 20590

Mr. Dorval R. Carter, Jr.
President
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Re: Project Development Initiation – Red Line Extension

Dear Mr. Carter:

Thank you for your letter, dated November 3, 2020, requesting entry into the Project Development (PD) phase under the Federal Transit Administration's (FTA) Capital Investment Grants (CIG) New Starts program for the Chicago Transit Authority's (CTA) Red Line Extension (RLE) project (the Project). After reviewing your initial letter, FTA requested additional information including an updated map and supporting documentation for available funding on November 17, 2020, and received response on November 27, 2020. At that time, FTA determined that the information provided was sufficient to enter the PD phase.

Please note that the CTA undertakes the PD work at its own risk, and that the Project must still progress through further steps in the CIG program to be eligible for consideration to receive CIG funding.

Per the requirements of the Fixing America's Surface Transportation (FAST) Act, the following activities must be completed during PD:

- Select a locally preferred alternative;
- Have the locally preferred alternative adopted into the fiscally constrained long range transportation plan;
- Complete the environmental review process; and
- Complete the activities required to develop sufficient information for evaluation and rating under the CIG criteria.

The FTA encourages you to familiarize yourself with the information found on the CIG program webpage at https://www.transit.dot.gov/funding/grant-programs/capital-investments/about-program. There you will find more details and information on the activities mentioned above including answers to frequently asked questions and the information that must be provided to FTA for eventual project evaluation and rating.

The FTA will be in contact to discuss its technical assistance and project oversight plans as the Project moves through PD. The FTA would appreciate periodic updates from CTA on the status

of completion of PD activities. CTA must contact FTA no later than six months prior to your anticipated request to enter the Engineering phase so that we can proceed with our formal project oversight process and take the steps necessary to undertake our evaluation and rating.

CTA must formally request an extension from FTA if the PD activities mentioned above and outlined more fully on our website cannot be completed within the two-year timeframe specified in the FAST Act. In determining whether to grant an extension, FTA will consider the reasons an extension is needed, the reasonableness of the proposed revised schedule, and the timeframe needed to complete PD activities. The FTA anticipates extensions will be granted only on an occasional basis rather than on a routine basis, and only for unforeseen and unusual circumstances that might arise. If an extension to the two-year timeframe is not granted by FTA, the Project will be withdrawn from PD. CTA will be asked to complete additional work before being allowed to reapply for entry into the program.

With this entry into PD, CTA has pre-award authority to incur costs for PD activities prior to grant approval and to retain eligibility of those activities for future FTA grant assistance. PD activities include the work necessary to complete the environmental review process and as much engineering and design activities as CTA believes are necessary to support the environmental review process. Upon completion of the environmental review process, FTA extends pre-award authority to project sponsors in PD to incur costs for as much engineering and design as necessary to develop a reasonable cost estimate and financial plan, utility relocation, and real property acquisition and associated relocations. This pre-award authority does not constitute a commitment that future Federal funds will be approved for PD or any other Project cost. As with all pre-award authority, relevant Federal requirements must be met prior to incurring costs in order to preserve eligibility of the costs for future FTA grant assistance.

If you have any questions or comments, please contact Faisal Chowdhury at (202) 366-9851 or faisal.chowdhury@dot.gov.

Sincerely,

X Felicia L. James December 15, 2020

Felicia L. James
Associate Administrator for Planning and En...
Signed by: FELICIA LANISE JAMES

Felicia L. James
Associate Administrator for Planning
and Environment

cc: Kelley Brookins, Regional Administrator, TRO-5

BJ Pritzker, Governor
Colleen Callahan, Illinois Department of Natural Resources Director
160 N. LaSalle St., Suite S-703 • Chicago, Illinois 60601 • 312-814-1405 • www.dnr.illinois.gov/cmp

October 8, 2021

Marlise Fratinardo
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

RE: IDNR/CMP Federal Consistency Certificate IFC2021017 by the Chicago Transit Authority for the extension of the Red Line from the existing 95th/Dan Ryan terminal to 130th Street, in Chicago, IL

Dear Ms. Fratinardo,

Thank you for the above referenced Illinois Coastal Management Program (ICMP) Federal Consistency Certificate (FCC) dated August 27, 2021. Department staff has reviewed the FCC and concur that the proposed activity complies with the enforceable policies of the ICMP and will be conducted in a manner consistent with the ICMP.

If you have any questions, feel free to contact me at 312 793-5947 or james.casey@illinois.gov.

Sincerely,

James P. Casey

Appendix S

Water Resources Technical Memorandum

- Draft EIS Appendix S, Water Resources Technical Memorandum, July 2015
  - Appendix A, EcoCAT Report
  - Appendix B, Natural Resources Conservation Service Web Soil Survey Summary
  - Appendix C, Wetlands and Deepwater Habitats Classification
  - Appendix D, Photographs from August 13, 2012 Field Visit
  - Appendix E, Soil Sample Summary
  - Appendix F, FEMA FIRM Summary
  - Appendix G, 2014–2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Water Resources
Technical Memorandum

January 22, 2013
Updated July 28, 2015

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
CWC Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Summary 2-1

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-6
3.3 Area of Potential Impact 3-7
3.4 Methods 3-7

Section 4 Affected Environment 4-1

4.1 Municipal Water Supply/Wastewater Collection 4-1
4.2 Surface Water 4-1
4.3 Groundwater 4-3
4.4 Water Quality 4-4
4.5 Wetlands 4-5
4.6 Floodplains 4-16

Section 5 Impacts and Mitigation 5-1

5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-4
5.4 Union Pacific Railroad Rail Alternative - East Option 5-8
5.5 Union Pacific Railroad Rail Alternative - West Option 5-9
5.6 Halsted Rail Alternative 5-10

Section 6 Impacts Remaining After Mitigation 6-1

6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-1
6.5 Union Pacific Railroad Rail Alternative - West Option 6-1
6.6 Halsted Rail Alternative 6-1

Section 7 References Cited 7-1

Appendices

Appendix A - EcoCAT Report
Appendix B - Natural Resources Conservation Service Web Soil Survey Summary
Appendix C - Wetlands and Deepwater Habitats Classification
Appendix D - Photographs from August 13, 2012 Field Visit
Appendix E - Soil Sample Summary
Appendix F - FEMA FIRM Summary
Appendix G - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 4-1: Project Area including Waterbodies 4-2
Figure 4-2: Ducks Unlimited National Wetland Inventory Map 4-8
Figure 4-3: Field Survey Area and Test Pit Locations 4-12

Tables

Table 1-1: Maximum Potential Water Resources Impacts 2-4
Table 4-1: Hydric Soils within Bus Rapid Transit Alternative Area of Potential Impact 4-5
Table 4-2: National Wetland Inventory Areas within Bus Rapid Transit Alternative Area of Potential Impact 4-6
Table 4-3: Hydric Soils within Segment UA of Union Pacific Railroad Rail Alternative Area of Potential Impact 4-9
Table 4-4: Hydric Soils within Segment UB of the Union Pacific Railroad Rail Alternative Area of Potential Impact 4-10
Table 4-5: National Wetland Inventory Areas within Segment UB of the Union Pacific Railroad Rail Alternative Area of Potential Impact 4-10
Table 4-6: Plants Identified in the Union Pacific Railroad Rail Alternative Area of Potential Impact 4-13
Table 4-7: August 2012 Field Visit Summary 4-13
Table 4-8: National Wetland Inventory Areas within Halsted Rail Alternative Area of Potential Impact 4-16

Abbreviations

API	Area of Potential Impact
BRT	Bus Rapid Transit
CCSMP	Cook County Stormwater Management Plan
CFR	Code of Federal Regulations
CTA	Chicago Transit Authority
CWA	Clean Water Act
DWRM	Division of Water Resource Management
EcoCAT	Ecological Compliance Assessment Tool
EIS	Environmental Impact Statement
IDNR	Illinois Department of Natural Resources
IEPA	Illinois Environmental Protection Agency
ILCS	Illinois Compiled Statutes
ILRDSS	Illinois River Decision Support System
ISWS	Illinois State Water Survey
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
RLE	Red Line Extension
ROW	right-of-way
TARP	Tunnel and Reservoir Plan
TMDLs	Total Maximum Daily Loads
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WMO	Watershed Management Ordinance

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on water resources, including surface and groundwater resources, the local drainage system, water quality, and wetlands. Potential impacts on floodplains are not discussed in this technical memorandum; potential impacts on floodplains will be included in the Draft Environmental Impact Statement (EIS).

The areas of potential impact (APIs) for the water resources evaluation included an area 500 feet on either side of the alternative centerlines; the API is different for each alternative and each alternative option. In order to determine alternative-specific impacts on water resources, existing data on surface and groundwater resources, drainage patterns, water quality, the water supply, and wetlands were reviewed. A field visit was conducted to evaluate potential wetlands.

Lake Michigan is the dominant topographic feature in the region and is approximately 4.8 miles from the RLE alignment at its closest point. Lake Calumet is in the eastern portion of the project area, and the Little Calumet River flows along the southern boundary of the project area. The project area is urbanized and is primarily made up of commercial and residential development. The APIs are in portions of two watersheds: the Chicago/Calumet watershed and the Lake Michigan watershed. The features of all alternatives would be within the Chicago/Calumet watershed. The Lake Michigan watershed is to the east of Union Pacific Railroad (UPRR) Rail Alternative Segment UB; the only portion of the project area that would be in the Lake Michigan watershed is an access road (Illinois River Decision Support System [ILRDSS] 2009). The APIs are not within the Inland Waterway Coastal Zone boundary or a sole source aquifer. The Little Calumet River is on the Illinois 303(d) list of impaired waterways; it is listed as impaired for mercury, polychlorinated biphenyls, aldrin, iron, dissolved oxygen, total phosphorus, and silver (Illinois Environmental Protection Agency [IEPA] 2012b). No Total Maximum Daily Loads (TMDLs) have been developed for this portion of the Little Calumet River. Due to the predominance of impervious surfaces throughout the APIs, minimal percolation to the underlying groundwater occurs.

Potential wetlands were identified at the sites of the Bus Rapid Transit (BRT) Alternative 130th Street park & ride; UPRR Rail Alternative South Station Option and West Station Option; and the 120th Street yard and shop. All sites are highly disturbed and hydrophytic vegetation is present. It is likely that large portions of these sites would be considered wetlands, but not all of the areas may be jurisdictional wetlands subject to regulation. As a basis for impact analysis and to evaluate the maximum potential impact, the following areas (approximate) were considered to be potential wetlands:

- 1.5 to 9 acres of the BRT Alternative 130th Street park & ride site (final impact acreage will be dependent on a formal wetland delineation)

- 14 acres in the vicinity of the UPRR Rail Alternative 120th Street yard and shop location
- 7 acres associated with the UPRR Rail Alternative South Station Option
- 6 acres associated with the UPRR Rail Alternative West Station Option

It is likely that some surface water connections exist between these wetland areas and the Little Calumet River, making some of these areas jurisdictional wetlands. It is more likely that a surface water connection exists from the sites of the BRT Alternative park & ride and UPRR Rail Alternative stations to the river than from the yard site to the river. Due to the highly disturbed topography, a connection would require extensive research and fieldwork to confirm. The fieldwork and formal wetland delineation would take place at the time of the permit application, concurrent with final design.

This analysis identifies maximum potential wetland impacts; formal wetland delineations and confirmation of impacts would be performed following the determination of an environmentally preferred alternative and concurrent with final design. Actual impacts would likely be fewer and/or smaller than the maximum impacts described in this report. Table 1-1 (at the end of this section) summarizes the impacts on water resources including drainage, groundwater, water quality, and wetlands.

The physical modifications associated with the alternatives would result in impacts on the existing stormwater drainage infrastructure, particularly where park & ride facilities would be constructed. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed. Following mitigation, there would be no adverse permanent impacts on stormwater drainage associated with the alternatives.

Mitigation options proposed herein would be confirmed during the design and engineering process in the event that contaminated groundwater was encountered and it was determined that there would be the potential for the contamination to spread. Additional best management practices that would address potential impacts from encountering contaminated groundwater and groundwater dewatering are proposed in the *Hazardous Materials Technical Memorandum*.

There would be no adverse permanent or construction impacts on water quality associated with the alternatives following mitigation. The transit system would replace automobile trips and there would be an associated reduction in roadway pollutants. The introduction of new impervious surfaces would have the potential to increase the concentration and accumulation of runoff contaminants; however, there would be no adverse permanent or construction impacts following mitigation. Due to the predominance of impervious surfaces throughout the project area, minimal percolation to the underlying groundwater occurs in the APIs. Therefore, any potential increases in contaminated surface water runoff would have no adverse impact on groundwater quality.

The RLE Project, with compensatory mitigation, either through creation, restoration, enhancement, or preservation of wetlands, would result in no adverse permanent impacts on

affected wetlands in the APIs. There are several potential underutilized or vacant industrial land areas, with a connection to the Little Calumet River, that exist within 3 miles of the alternative alignments; these land areas could be restored as compensatory mitigation. Construction staging areas would be sited outside of wetlands as much as possible, but if there were any temporary impacts, those areas would be reconstructed as wetlands following construction.

Development of the BRT Alternative, UPRR Rail Alternative, or Halsted Rail Alternative in combination with related renovation, new construction, and transportation projects identified in the vicinity of the proposed project would not contribute to substantial cumulative water quality, hydrology, and/or drainage impacts.

Updated July 28, 2015
In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix G of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix G supersedes information presented in other chapters of this technical memorandum.

Table 1-1: Maximum Potential Water Resources Impacts

	Permanent				Construction			
	Drainage	Groundwater	Water Quality	Wetlands	Drainage	Groundwater	Water Quality	Wetlands
No Build Alternative	No impacts	No impacts	No impacts	No wetlands - No impacts	No impacts	No impacts	No impacts	No wetlands - No impacts
BRT Alternative	No adverse impacts	No adverse impacts	No adverse impacts after mitigation	Compensatory mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	Compensatory mitigation
UPRR Rail Alternative ROW Option Segment UA	No adverse impacts after mitigation - pump station	No adverse impacts	No adverse impacts after mitigation	No wetlands - No impacts	No adverse impacts after mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	No wetlands - No impacts
UPRR Rail Alternative East Option Segment UA	No adverse impacts after mitigation - pump station	No adverse impacts	No adverse impacts after mitigation	No wetlands - No impacts	No adverse impacts after mitigation - pump station	No adverse impacts after mitigation	No adverse impacts after mitigation	No wetlands - No impacts
UPRR Rail Alternative West Option Segment UA	No adverse impacts after mitigation	No adverse impacts	No adverse impacts after mitigation	No wetlands - No impacts	No adverse impacts after mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	No wetlands - No impacts
UPRR Rail Alternative Segment UB	No adverse impacts after mitigation	No adverse impacts	No adverse impacts after mitigation	Compensatory mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	Compensatory mitigation
UPRR Rail Alternative 120th Street Yard & Shop	No adverse impacts after mitigation	No adverse impacts	No adverse impacts after mitigation	Compensatory mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	Compensatory mitigation
Halsted Rail Alternative Segment HA	No adverse impacts after mitigation	No adverse impacts	No adverse impacts after mitigation	No wetlands - No impacts	No adverse impacts after mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	No wetlands - No impacts

	Permanent				Construction			
	Drainage	Groundwater	Water Quality	Wetlands	Drainage	Groundwater	Water Quality	Wetlands
Halsted Rail Alternative Segment HB	No adverse impacts after mitigation	No adverse impacts	No adverse impacts after mitigation	No wetlands - No impacts	No adverse impacts after mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	No wetlands - No impacts
Halsted Rail Alternative 119th Street Yard & Shop	No adverse impacts after mitigation	No adverse impacts	No adverse impacts after mitigation	No wetlands - No impacts	No adverse impacts after mitigation	No adverse impacts after mitigation	No adverse impacts after mitigation	No wetlands - No impacts

Notes:
BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad, ROW = right-of-way

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed Red Line Extension (RLE) would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- Bus Rapid Transit (BRT) Alternative
- Union Pacific Railroad (UPRR) Rail Alternative
    - Right-of-Way (ROW) Option
    - East Option
    - West Option
- Halsted Rail Alternative

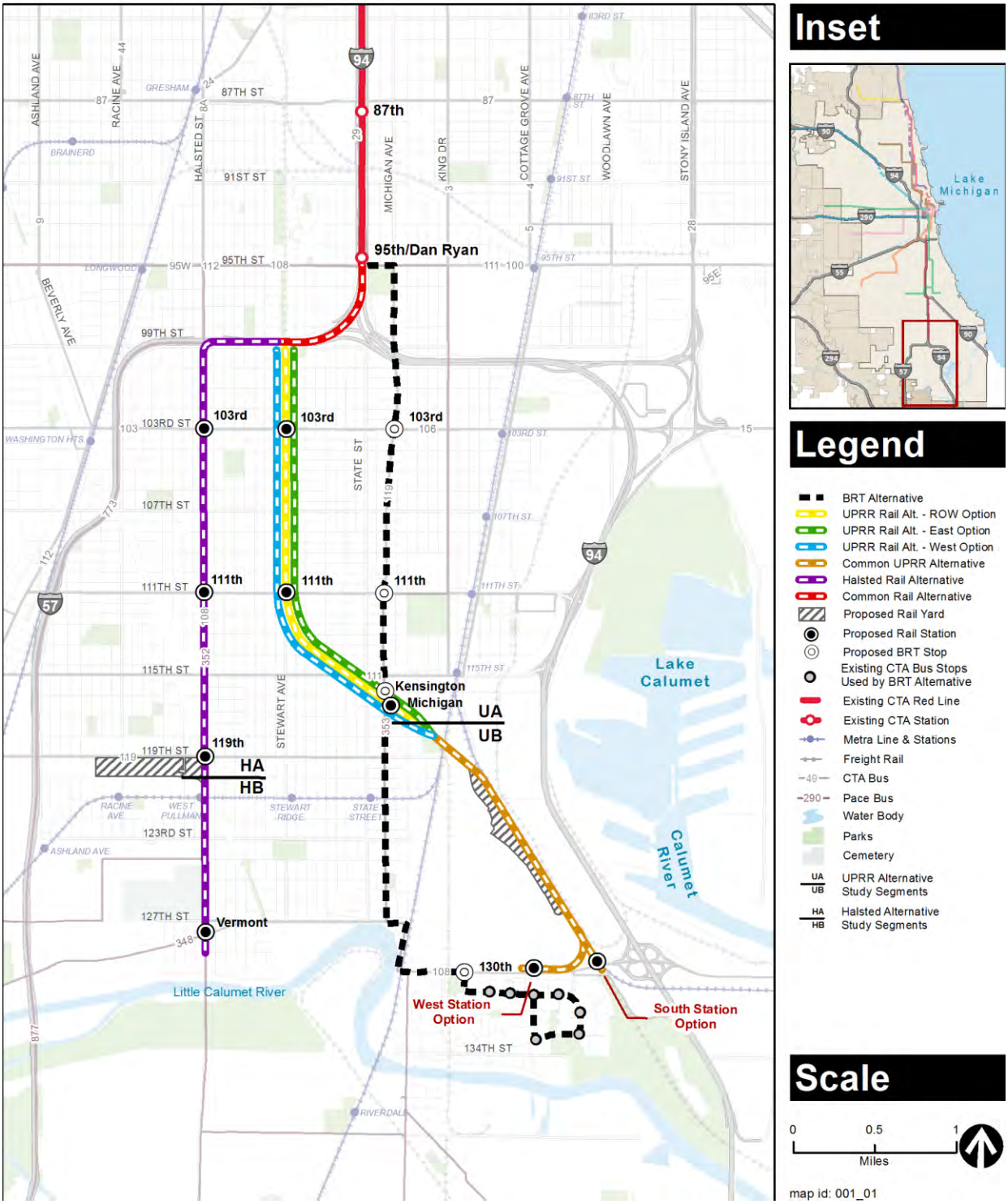

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which would operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours

of operation for the UPRR Rail Alternative would be the same as for the current Red Line (24 hours every day of the year), and the service frequency is expected to be the same as current service. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation for the Halsted Rail Alternative would be the same as for the current Red Line (24 hours every day of the year), and the service frequency is expected to be the same as current service. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont station.

Section 3
Methods for Impact Evaluation

This analysis included an evaluation of the existing water resources, including wetlands, within an API of 500 feet around each alternative alignment. The analysis also resulted in the identification of proposed best management practices and mitigation measures to avoid, minimize, mitigate, and compensate for adverse impacts. Although floodplain impacts are not analyzed in this technical report, the EIS document reports the results of the floodplain analysis.

3.1 Regulatory Framework

This section describes federal, state, regional, and local regulations and requirements related to water resources.

3.1.1 Federal

3.1.1.1 Clean Water Act (33 United States Code 1251)

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into waters of the United States and gives the U.S. Environmental Protection Agency (USEPA) the authority to implement pollution control programs and actions, such as setting wastewater standards for industries.

3.1.1.2 Clean Water Act (Section 303(d))

Section 303(d) of the CWA requires states, territories, and authorized tribes to develop a list of water quality-impaired segments of waterways. The 303(d) list includes water bodies that do not meet water quality standards for their specified beneficial uses, even after point sources of pollution have the minimum required levels of pollution control technology. The law requires that jurisdictions establish priority rankings for water bodies on their 303(d) lists and implement a process, called TMDLs, to meet water quality standards.

Section 4 describes the existing condition of waterways and groundwater in the project area, established beneficial uses, and associated TMDLs. These water quality regulations would be applicable during construction and operation of the project alternatives.

3.1.1.3 Clean Water Act (Section 401)

Section 401 of the CWA requires a State Water Quality Certification to show that the proposed project will comply with State water quality standards for any activity that results in a discharge to a water body. In the event that a proposed alternative requires permitting under CWA Section 404 (described below, Section 404 regulates the discharge of dredged or fill material into waters of the United States), a water quality certification is required under CWA Section 401. These regulatory requirements are applicable during construction.

3.1.1.4 Clean Water Act - National Pollution Discharge Elimination System (Section 402)

The National Pollution Discharge Elimination System (NPDES) permit process provides a regulatory mechanism for the control of point source discharges—a municipal or industrial discharge from a specific location or pipe—to surface waters of the United States. Two exceptions that are regulated under the NPDES program are (1) diffuse source discharges caused by general construction that disturb more than 1 acre, and (2) stormwater discharges from municipal stormwater systems that are a separate system in which runoff is carried through a developed conveyance system to specific discharge locations.

The NPDES program regulates pollution generated by runoff from construction, industrial activities, and general and urban land use, including runoff from streets. Federal stormwater regulations require municipalities to obtain NPDES permits for stormwater discharges from municipal storm drains to surface waters. In 1990, USEPA established final regulations for stormwater discharges through the implementation of Section 402(p) of the CWA. The two permits that enforce Section 402(p), the General Industrial Permit and the General Construction Permit, are major attempts to control non-point source pollutants that discharge to local storm drain systems and receiving waters in urban runoff. A General Construction Permit would be required during construction of the proposed alternatives.

3.1.1.5 Clean Water Act (Section 404)

Section 404 of the CWA authorizes the U.S. Army Corps of Engineers (USACE) to issue permits for the discharge of dredged or fill material into waters of the United States, including wetlands (33 United States Code [USC] 1344). The USEPA guidelines (40 Code of Federal Regulations [CFR] 230 et seq.), USACE regulatory guidelines (33 CFR 320 et seq.), and NEPA guidelines (40 CFR 1500 et seq.) are the substantive environmental criteria used to evaluate permit applications submitted to USACE. The USEPA's guidelines suggest a sequential approach to project planning; mitigation measures are considered only after the applicant shows that no practicable alternatives are available to achieve the basic project purpose with a lesser environmental impact. The USACE evaluation of permit applications includes an analysis of practicable alternatives, which is the primary screening mechanism used to determine the appropriateness of permitting a discharge. Section 404(b)(1) guidelines prohibit discharges of dredged or fill material into waters of the United States, including wetlands, if a practicable alternative to the proposed discharge exists that would have less adverse impacts on the aquatic ecosystem (provided that the alternative does not cause other significant adverse environmental impacts) (40 CFR 230[a]).

The 1987 USACE *Wetland Delineation Manual* (USACE 1987) is the current federal delineation manual used in the CWA Section 404 for the identification and delineation of wetlands. The three parameters for defining wetlands are as follows:

- Hydric soils (soils formed under saturation, flooding, or ponding conditions long enough during the growing season to develop anaerobic conditions)

- Wetland hydrology ("areas that are periodically inundated or have soils saturated to the surface at some time during the growing season" [USACE 1987])
- Hydrophytic vegetation (vegetation that thrives in wet conditions)

All three parameters are required "under normal circumstances" for a location to be considered a wetland. Determining whether normal circumstances exist in a disturbed area "involves an evaluation of the extent and relative permanence of the physical alteration of wetland hydrology and hydrophytic vegetation" and consideration of the "purpose and cause of the physical alterations to hydrology and vegetation" (USACE 1987). The Supreme Court refined the requirements for wetlands to be considered jurisdictional based on its 2001 decision *Solid Waste Agency of Northern Cook County v. USACE*, which concluded that a wetland is required to be hydrologically connected to a jurisdictional water of the United States.

3.1.1.6 Rivers and Harbors Appropriation Act of 1899 (33 United States Code 403)

Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section provides that the construction of any structure in or over any navigable water of the United States, or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters is unlawful unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. The Secretary of the Army's approval authority has since been delegated to the Chief of Engineers.

3.1.1.7 Sole Source Aquifers (40 Code of Federal Regulations 149)

Sole source aquifer designation is one tool to protect drinking water supplies in areas with few or no alternative sources to the groundwater resource, and where, if contamination occurred, using an alternative source would be extremely expensive. The designation protects an area's groundwater resource by requiring USEPA to review all proposed projects within the designated area that will receive federal financial assistance. All proposed projects receiving federal funds are subject to review, to ensure that the projects do not endanger the groundwater source.

The USEPA defines a sole or principal source aquifer as one that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas may have no alternative drinking water source(s) that could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. For convenience, all designated sole or principal source aquifers are referred to as "sole source aquifers."

3.1.1.8 Protection of Wetlands (Executive Order 11990)

Executive Order 11990 directs federal agencies to minimize the destruction, loss, or degradation of wetlands. It also assures the protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable during the planning, construction, funding, and operation of transportation facilities and projects.

3.1.1.9 Floodplain Management (Executive Order 11988)

Executive Order 11988 directs federal agencies to avoid conducting, allowing, or supporting actions on a floodplain. The order requires that the federal agency evaluate the potential effects of any actions that it may take in a floodplain.

3.1.2 State

Title 17 of the Illinois Administrative Code covers conservation; Part 3704 covers Regulation of Public Waters. The Division of Water Resource Management (DWRM) of the Illinois Department of Natural Resources (IDNR) issues permits for construction and other activities in public waters of the State. Public waters may generally be described as commercially navigable lakes and streams of the State and the backwater areas of those streams. There are certain public rights in public waters that are reserved for the citizens of the State.

The DWRM reviews proposed activities in public waters to ensure that the public's rights are not diminished by the activity. Activities that require review are not limited to construction. A permit is issued to demonstrate that the activity does not diminish the public's rights. A construction project in public waters may also require review under Parts 3700 (Construction in Floodways of Rivers, Lakes, and Streams), 3702 (Construction and Maintenance of Dams), or 3708 (Floodway Construction in Northeastern Illinois), as well as the Part 3704 rules. A number of common, minor construction activities regulated under Part 3704 are automatically authorized by statewide permits or by Regional Permit No. 3 (Authorizing Construction of Minor Projects in Northeastern Illinois Regulatory Floodways). A permit application submittal to DWRM is not needed for a construction activity that meets the terms and conditions of one or more of these statewide or regional permits.

3.1.2.1 Illinois Coastal Program

The Illinois Coastal Management Program was approved in November 2011. The program defines Inland Waterway Coastal Zone Boundaries, which consist of waterways close to the shore of Lake Michigan and designated land on either side of waterways. These areas are subject to the requirements of the federal Coastal Zone Management Act.

3.1.2.2 Illinois Interagency Wetland Policy Act of 1989

The Illinois Interagency Wetlands Policy Act of 1989 (the Act [20 Illinois Compiled Statues (ILCS) 830 et seq.]) is intended to ensure that there is no overall net loss of the State's existing wetland acres or their functional values resulting from State-supported activities.

The Act charges State agencies with a further duty to "preserve, enhance, and create wetlands where necessary to increase the quality and quantity of the State's wetland resource base" (20 ILCS 830/1-4). The Act uses the same definition for wetlands as defined in the 1987 USACE *Wetland Delineation Manual* used by federal agencies in implementation of the federal CWA.

All three parameters (hydric soils, wetland hydrology, and hydrophytic vegetation) are required for a location to be considered a wetland. However, areas that have been restored or created as

the result of mitigation or planned construction projects, and that function as wetlands, are also defined as wetlands under the Act even when all three wetland parameters are not yet present.

3.1.2.3 Illinois Rivers, Lakes, and Streams Act

The Illinois Rivers, Lakes, and Streams Act regulates construction in floodplains and focuses on preserving the hydrological integrity of the State's public waters. There are two separate but similar floodplain regulatory programs established in the Illinois Rivers, Lakes, and Streams Act. One is for the six metropolitan counties in northeastern Illinois: Cook, DuPage, Kane, Lake, McHenry, and Will. The second program is for the rest of Illinois. The purpose of both programs is to "protect the rights, safety, and welfare of private and public landowners by the regulation of floodway development, [because] construction activities which restrict a stream's capacity to carry flood flows may result in channel instability and increased flood damages to neighboring properties" (State of Illinois 1994). The Northeastern Illinois Program requires permits be issued for construction in any regulated floodway.

3.1.3 Local

3.1.3.1 Cook County Watershed Management Ordinance

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) began developing a countywide stormwater management regulatory ordinance to be known as the Cook County Watershed Management Ordinance (WMO) in 2007. The WMO's goal is to establish uniform, minimum, countywide stormwater management regulations. Components that may be regulated under the WMO include drainage and detention, floodplain management, wetland protection, stream habitat and riparian environment protection, soil erosion and sediment control, and water quality.

3.1.3.2 Cook County Stormwater Management Plan

On February 15, 2007, the MWRD's Board of Commissioners adopted the Cook County Stormwater Management Plan (CCSMP) by ordinance. The CCSMP is a high-level organizational plan wherein the overall framework for the countywide program is established and which MWRD is required to adopt as a first step in establishing its countywide stormwater management program. The CCSMP is not a regulatory ordinance and does not set forth any rules, regulations, or standards to which a municipality will be held or be required to enforce.

3.1.3.3 City of Chicago Stormwater Management Ordinance

It is the policy of the City of Chicago to encourage and promote programs with the following goals:

- Minimize the negative stormwater impacts of new development and redevelopment.
- Protect and conserve land and water resources in conjunction with orderly and responsible property development.
- Prevent pollution of local waters, groundwater, and land.

- Minimize stormwater flows into the combined sewer system by minimizing impervious surfaces, promoting infiltration, or discharging to local waters, where appropriate.
- Preserve the natural characteristics of stream corridors in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits, and enhance community and economic development.
- Preserve the natural hydrologic and hydraulic functions of watercourses, floodplains, and wetlands.
- Facilitate existing and future intergovernmental agreements for stormwater management.
- Manage stormwater on the site of a regulated development to the fullest feasible extent.

To achieve these goals, the primary stormwater management objectives for development sites are to (1) reduce impervious areas, (2) capture stormwater on site, and (3) either use or retain the stormwater on-site for evaporation and absorption into the ground. Stormwater that is not used or retained may be discharged into a city-owned combined sewer, storm sewer, or open waterway.

3.1.3.4 Village of Calumet Park

Chapter 151 of the Calumet Park Code of Ordinances regulates Flood Protection and Prevention in order to maintain the "Village's eligibility in the National Flood Insurance Program; to minimize potential losses due to periodic flooding including loss of life, loss of property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare; and to preserve and enhance the quality of surface waters, conserve economic and natural values and provide for the wise utilization of water and related land resources" (Village of Calumet Park 2008).

Calumet Park Ordinance 98-712 prohibits the use of groundwater as a potable water supply.

3.2 Impact Analysis Thresholds

While NEPA does not specify federal thresholds of significance for impacts on water resources, it does require that EISs be integrated with the environmental analyses and related surveys and studies required by other federal statutes. Based upon the regulatory framework established by the regulations discussed in Section 3.1, a qualitative evaluation was performed to evaluate potential impacts on water resources.

For the purpose of this EIS, an impact would be adverse if it would do any of the following:

- Violate any applicable water quality standards or waste discharge requirements.

- Affect the rate or change the direction of movement of existing groundwater contaminants, or expand the area affected by contaminants.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.
- Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Destruction, loss, or degradation of wetlands, including any net loss of their functional values.
- Discharges of dredged or fill material into wetlands.
- Otherwise substantially degrade water quality.

3.3 Area of Potential Impact

The APIs for the water resources evaluation extend 500 feet on either side of the project alternative centerlines; the API is different for each alternative and each alternative option. The RLE alternatives are shown in Figure 2-1. Given that the project would occur in a highly urbanized environment, the effects of construction and operation on water resources would not be expected to extend beyond 500 feet.

3.4 Methods

Existing data sources were reviewed to evaluate potential impacts on water resources. The evaluation of potential wetland impacts included a field reconnaissance to establish the potential presence and condition of wetlands within the project area. The potential permanent and/or construction effects of each alternative on identified water resources were evaluated. Measures to avoid, minimize, mitigate, and compensate for potential adverse impacts were proposed.

3.4.1 Review Existing Data

In order to determine alternative-specific impacts on water resources, existing data on surface and groundwater resources, drainage patterns, water quality, and water supply were reviewed. Existing TMDLs and NPDES permits, which could affect the project, were also reviewed. Information from USEPA Region V was reviewed to determine whether the project area has any sole source aquifers. The APIs were reviewed to determine whether they are within the designated coastal zone.

Existing wetland data was obtained from the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) and also from the updated coverage prepared by Ducks Unlimited under contract with USFWS. To help locate wetland sites that may have been missed, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey website was used, where available, to locate areas of potentially hydric soils. The IDNR Ecological Compliance Assessment Tool (EcoCAT) was reviewed to identify resources mapped by IDNR.

3.4.2 Field Review

A general field reconnaissance was conducted to identify potential wetlands within the project area. Aerial photographs were used to evaluate existing mapped wetlands and to help pinpoint potential sensitive areas that may not be included in any of the existing wetland maps or inventories. Potential wetlands within the APIs were evaluated to locate any potential wetland resources intersecting the project area.

The 1987 USACE *Wetland Delineation Manual* was used to determine the presence of wetlands in the project area; the *Wetland Delineation Manual* defines areas as wetland if they meet all three parameters (hydric soils, wetland hydrology, and hydrophytic vegetation). Reconnaissance level wetland assessments were completed and no formal wetland delineations were conducted, although an estimate of wetland size was calculated from aerial photographs after the field review confirmed the presence and extent of wetland areas. Using the USACE manual, each potential wetland site was evaluated for the presence or absence of hydric soils, the dominance of hydrophytic vegetation, and the presence or absence of wetland hydrology.

3.4.3 Impact Analysis

Potential impacts that would be associated with the alternatives were identified, then categorized and analyzed separately based on whether the impacts would be related to permanent activities or construction-period activities. Results of the field survey were used to determine whether wetlands might be present and whether they might be affected within the project area. Wetland resources were described at a reconnaissance level of detail and each alternative was assessed for potential impacts on wetlands within the project area.

Permanent impacts on water resources could result from stormwater runoff, changes in impervious surfaces throughout the APIs (resulting in changes to groundwater infiltration), and surface water and groundwater contamination. Each of these potential permanent impacts was analyzed in relation to applicable permits and regulations.

Construction-related potential impacts on water resources could result from stormwater runoff as well as impacts on the existing drainage infrastructure. Existing water quality conditions and beneficial uses in project area watersheds were assessed. Water quality regulations that would apply to construction of the project alternatives were identified. Each of the alternatives was analyzed for potential construction-related surface water sedimentation impacts generated by erosion and runoff from construction staging areas. Possible groundwater contamination

resulting from implementation of the alternatives was considered. Mitigation options were identified to address these potential effects in accordance with applicable NPDES permit requirements and other water resources regulations.

For potential wetlands identified in the API of the NEPA preferred alternative, formal wetland delineations would be performed at the time of permit application submittal, concurrent with final design, to refine the specific area of impacts. The NEPA analysis would support the permit application and review in compliance with wetlands regulations as appropriate. This analysis identifies maximum potential wetland impacts; formal wetland delineations and confirmation of impacts would be performed for the NEPA preferred alternative. Actual impacts would likely be fewer and/or smaller than the maximum impacts described in this report.

Each project alternative was qualitatively assessed for potential impacts on water resources within the project area and recommendations were identified for avoiding and minimizing water resources impacts, as well as potential mitigation measures.

Section 4
Affected Environment

Lake Michigan is the dominant topographic feature in the region and is approximately 4.8 miles from the project area at its closest point near the UPRR Rail Alternative alignment. Lake Calumet is in the eastern portion of the project area, and the Little Calumet River flows along the southern boundary of the project area. The project area is urbanized and is primarily made up of commercial and residential development. Figure 4-1 depicts a regional view of the project area and identifies Lake Calumet and the Little Calumet River.

4.1 Municipal Water Supply/Wastewater Collection

The City of Chicago Department of Water Management is responsible for treating and supplying potable water in the project area. Lake Michigan is the drinking water source for Chicago and its suburbs. Groundwater is not a drinking water source within the project area. The Jardine Water Purification Plant draws raw water from Lake Michigan and serves the northern areas of the City and suburbs, while the South Water Purification Plant draws raw water from Lake Michigan and serves southern areas of the City and suburbs. The Village of Calumet Park also receives water from Lake Michigan.

The MWRD is responsible for wastewater collection and treatment in the project area, including the Village of Calumet Park, which has a combined sewer system to collect both sanitary sewage and stormwater runoff. This agency maintains regional sewer interceptors within the project area.

4.2 Surface Water

4.2.1 Regional Surface Water Setting and Conditions

The APIs are in two watersheds: the Chicago/Calumet watershed and the Lake Michigan watershed. The features of all alternatives would be within the Chicago/Calumet watershed. The Lake Michigan watershed is to the east of Segment UB; the only portion of the project that would be in the Lake Michigan watershed is an access road (ILRDSS 2009).

The Lake Michigan watershed (U.S. Geological Survey [USGS] Cataloging Unit 04040002) lies along the Lake Michigan shoreline, and has a drainage area of about 90 square miles (ILRDSS 2011b). The Chicago/Calumet watershed (USGS Cataloging Unit 07120003) lies directly west of the Lake Michigan watershed, and covers about 580 square miles. Both watersheds are primarily residential and urban, with some forests throughout. The far south of the Chicago/Calumet watershed contains a few agricultural areas (ILRDSS 2011a).

Lake Michigan borders Illinois, Indiana, Michigan, and Wisconsin. It is the second largest Great Lake by volume, with 1,180 cubic miles of water. Lake Michigan is the third largest Great Lake by area.

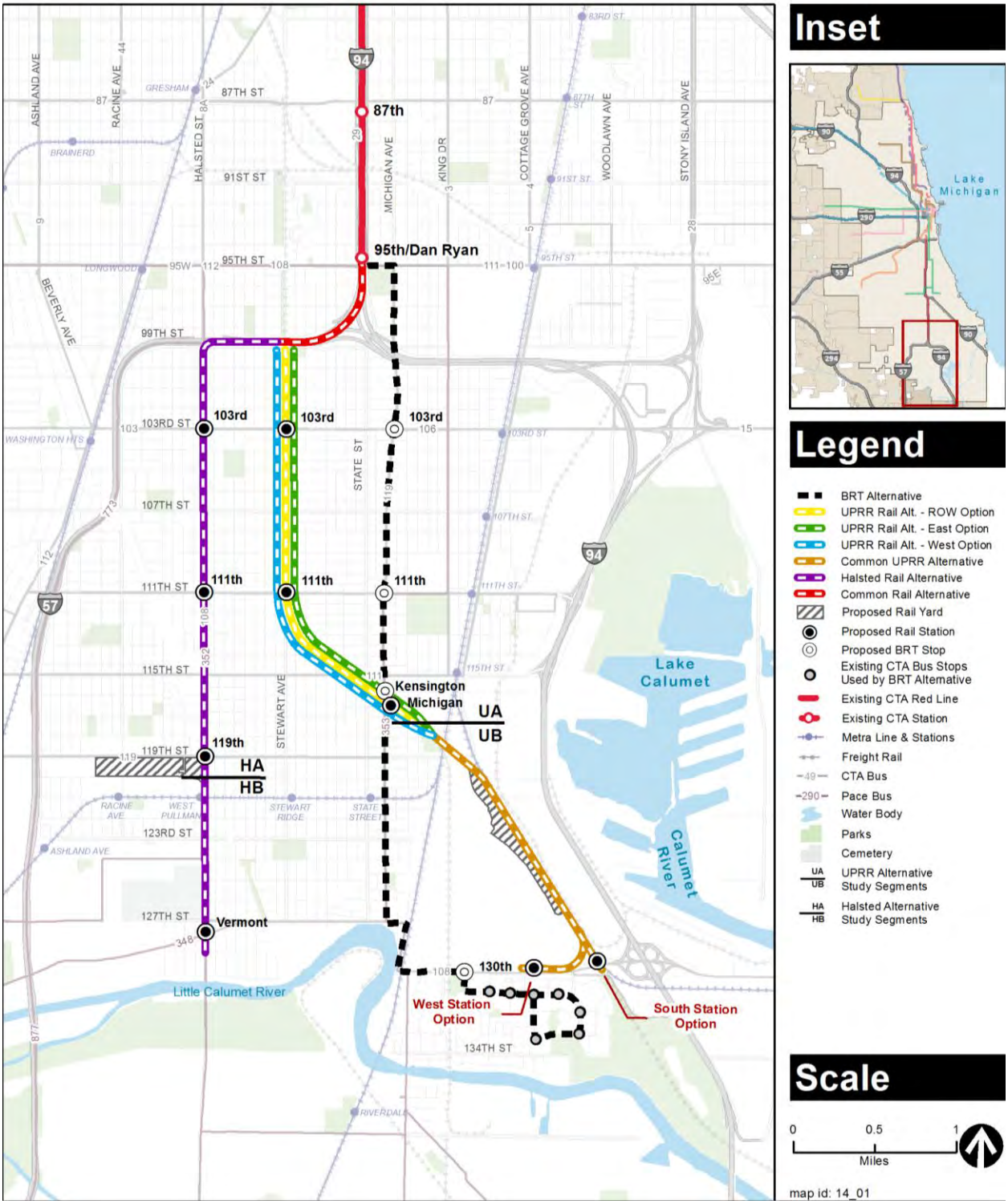

Figure 4-1: Project Area including Waterbodies

The climate for the project area is typically continental with cold winters and warm summers. The average temperature for the project area is around 52 degrees Fahrenheit (°F), with the average high around 83°F in the summer and the average low around 21°F in the winter. There are about 130 rain days per year (Illinois State Water Survey [ISWS] - Illinois State Climatologist Data 2012). Lake Michigan moderates the regional temperature and causes cooler summers and warmer winters (ISWS - Institute of Natural Resource Sustainability 2012) than other areas of the state. Per the Chicago Climate Change Task Force (2007), peak runoff is predicted to increase and levels in Lake Michigan are likely to decrease. Peak flows in local rivers are expected to increase slightly, increasing the risk of flooding and associated damages.

Local topography typically varies less than 40 feet, with a minimum elevation of 580 feet and a maximum elevation of 620 feet above sea level.

4.2.2 Local Surface Water Setting and Conditions

The alternative alignments would not cross or come in contact with any local water bodies.

The Little Calumet River flows along the southern boundary of the project area. The Little Calumet River flows to the west, away from Lake Michigan. The river flows into the Cal-Sag Channel then into the Chicago Sanitary and Ship Canal, and then into the Des Plaines River.

Lake Calumet is approximately 0.5 mile east of the UPRR Rail Alternative alignment. The lake is owned by the Illinois International Port District and is 8.6 acres in size.

Lake Calumet lies within the Inland Waterway Coastal Zone boundary, but the APIs do not. The inland waterway corridor consists of both the waterway and designated land area on either side of the waterway, and meets the requirements of federal regulations and guidelines for the inclusion within the coastal zone of rivers (waterways), on which uses may have direct impacts on coastal waters (IDNR 2011).

4.2.3 Surface Water Drainage

Storm drains throughout the project area divert water into the Tunnel and Reservoir Plan (TARP), maintained by MWRD. The TARP is a system of deep rock tunnels and surface reservoirs that capture, convey, and store combined sewage during storms until it can be distributed to MWRD's treatment plants as capacity becomes available. The project area is along the Mainstream tunnel of the TARP system (MWRD 2012b). The combined sewers in the Village of Calumet Park carry runoff to the MWRD interceptors. Stormwater runoff exceeding MWRD interceptor capacity is conveyed to the TARP system. In the event of high flows, TARP discharges to the Little Calumet River, which receives discharges from 15 permitted outfalls (MWRD 2012a).

4.3 Groundwater

Groundwater in the project area is in the deep bedrock Cambrian-Ordovician aquifers. Wells drilled into this aquifer range from 800 to 1,500 feet deep. The estimated sustained yield for the Cambrian-Ordovician aquifer system is 65 million gallons per day; by 1979, pumping from this

aquifer reached 182.9 million gallons per day. This pumping caused the groundwater levels to drop over 850 feet by 1980. Lake Michigan became a water resource to DuPage, Kane, Lake, McHenry, and Will counties in the early 1980s. Current withdrawals from the Cambrian-Ordovician aquifers are close to the estimated sustainable yield (ISWS - Center for Groundwater Science 2012).

Smaller aquifers overlying the Cambrian-Ordovician aquifers are not widespread and are not utilized for municipal or private water use. Shallow perched groundwater is commonly identified in the Chicago area, though the substrate materials confining the water are characterized as discontinuous lenses and are not laterally continuous. Groundwater generally flows from areas of higher surface elevation to areas of lower surface elevation and toward the nearest surface water body. The flow direction for groundwater underlying the site is assumed to be to the northeast towards Lake Michigan. Localized perched groundwater may flow toward shallower surface water bodies such as Lake Calumet, the Calumet River, or the Little Calumet River.

There are no sole source aquifers in the project area. The closest sole source aquifer is the St. Joseph Aquifer System in northern Indiana, about 70 miles to the east (USEPA Ground Water Branch 2012).

4.4 Water Quality

4.4.1 Surface Water Quality

Urban stormwater runoff from the project area may have negative impacts on surface water quality. Runoff washes residues from the land surface, including deposits from street surfaces, parking surfaces, facility grounds, vehicles, pesticides, and pet waste into the storm drain system.

The Little Calumet River is regulated under the Secondary Contact and Indigenous Aquatic Life Standards. Water bodies regulated under this standard are suited for secondary contact uses and are capable of supporting indigenous aquatic life (IEPA 2012a).

The Little Calumet River is on Illinois 303(d) list of impaired waterways; it is listed as impaired for mercury, polychlorinated biphenyls, aldrin, iron, dissolved oxygen, total phosphorus, and silver (IEPA 2012b). A TMDL analysis has not been developed for this segment of the Little Calumet River system.

4.4.2 Groundwater Quality

The Cambrian-Ordovician aquifers are known to contain high concentrations of naturally occurring barium and radium. The greatest risk for deep aquifer contamination is through contaminant pathways such as abandoned wells; however, vertical migration of chemicals from the land surface poses a low risk of groundwater contamination. Based on information from the Illinois Groundwater Consortium, concentrations of chloride and total dissolved solids have increased in shallow aquifers in the last 20 years (ISWS - Center for Groundwater Science 2012).

4.5 Wetlands

4.5.1 Bus Rapid Transit Alternative

A data review obtained the following about existing conditions within the BRT Alternative API:

- Aerial Photographs

  A review of the aerial photographs confirmed that the API is heavily urbanized and is characterized by paved surfaces and structures (Google Earth 2012). Few, if any, potential wetland areas would be expected to occur in the API based on the review of aerial photographs.

- IDNR EcoCAT

  A review of the IDNR EcoCAT identified no wetlands (IDNR 2012). Appendix A contains the EcoCAT report.

- NRCS Soil

  The NRCS Web Soil Survey website defines four soil types within the BRT Alternative API as hydric soils, as described in Table 4-1 (USDA 2012a, USDA 2012k).

Table 4-1: Hydric Soils within Bus Rapid Transit Alternative Area of Potential Impact

Location	Approximate Distance from Alignment	Soil Type
Southeast quadrant of the intersection of 98th Street and Indiana Avenue	440 feet east	232A
Southwest quadrant of the intersection of 117th Street and Indiana Avenue	Adjacent to the west	2232A
South of the intersection of 130th Street and the UPRR tracks	Adjacent to the south	69A
South of the intersection of 130th Street and Eberhart Avenue, along Eberhart Avenue	Along the alignment	2232A

Notes:
UPRR = Union Pacific Railroad
See references USDA 2012a and USDA 2012k for soil type definitions

Appendix B includes a summary of information from the NRCS Web Soil Survey website.

- NWI

  The NWI classifies several wetland areas within the BRT Alternative API. Updated wetland coverage was confirmed using the Ducks Unlimited web database; data is summarized in Table 4-2 (Ducks Unlimited 2012) and shown on Figure 4-2. Table 4-2 provides the wetland location, approximate distance from the alignment, wetland category, and wetland type.

Wetland categories correspond to the classification nomenclature that best describes the habitat; definitions are included in Appendix C.

Table 4-2: National Wetland Inventory Areas within Bus Rapid Transit Alternative Area of Potential Impact

Location	Approximate Distance from Alignment	Wetland Category	Wetland Type
Little Calumet River	50 feet west	R2UBH	Riverine
Kensington Marsh - north of 130th Street, west of the MWRD facility	350 feet north	LTU2BKh	Wetland Type Not Provided
North of the intersection of 130th Street and Eberhart Avenue, south of the MWRD facility, on the 130th Street park & ride site	On the 130th Street park & ride site	PFO1C	Freshwater Shrub/Forested Wetland
Northeast of the intersection of 130th Street and Eberhart Avenue, south of the MWRD facility, west of the MWRD access road, on the 130th Street park & ride site	On the 130th Street park & ride site	PEM1Ch	Freshwater Emergent Wetland
North of 130th Street and east of the 130th Street park & ride site	130 feet east	PFO1C	Freshwater Forested/Shrub Wetland
North of 130th Street and east of the 130th Street park & ride site	400 feet east	PEM1Ch	Freshwater Emergent Wetland

Notes:
MWRD = Metropolitan Water Reclamation District of Greater Chicago
See reference Ducks Unlimited 2012 for more info on Wetland Types

- Field Visit

A field visit was conducted on August 8, 2012 to look for evidence of potential wetlands within the BRT Alternative API. Wetland resources were evaluated at a reconnaissance level of detail; no formal wetland delineations were conducted. The field reconnaissance found some standing water, indicative of potential wetland areas at the proposed 130th Street park & ride location.

The BRT Alterative 130th Street park & ride site is highly disturbed in both soil and topography. Although hydrophytic vegetation is present, the results of this cursory field investigation were inconclusive. As a basis for impact analysis and to evaluate the maximum potential impact, between approximately 1.5 and 9 acres of the 130th Street park & ride site are considered a potential wetland, dependent on a formal wetland delineation. It is likely that there is a surface water connection between this wetland area and the Little Calumet River, indicating that this is a jurisdictional wetland.

Following the determination of an environmentally preferred alternative and as the design is finalized, a formal wetland delineation would be conducted and the amount and type of impact would be refined. As part of obtaining permits for work on the project, mitigation would be needed if wetlands would be affected. Coordination with the local USACE district is recommended.

4.5.2 Union Pacific Railroad Rail Alternative

4.5.2.1 Segment UA

A data review obtained the following about existing conditions within the UPRR Rail Alternative Segment UA API:

- Aerial Photographs

  A review of the aerial photographs confirmed that most of the API is heavily urbanized and is characterized by paved surfaces and structures (Google Earth 2012). Few, if any, potential wetland areas would be expected to occur in the API in Segment UA.

- IDNR EcoCAT

  A review of the IDNR EcoCAT found no wetlands (IDNR 2012). Appendix A contains the EcoCAT report.

- NRCS Soil

  The NRCS Web Soil Survey website defines one soil type within the UPRR Rail Alternative Segment UA API as hydric soil, as described in Table 4-3 (USDA 2012a, USDA 2012k).

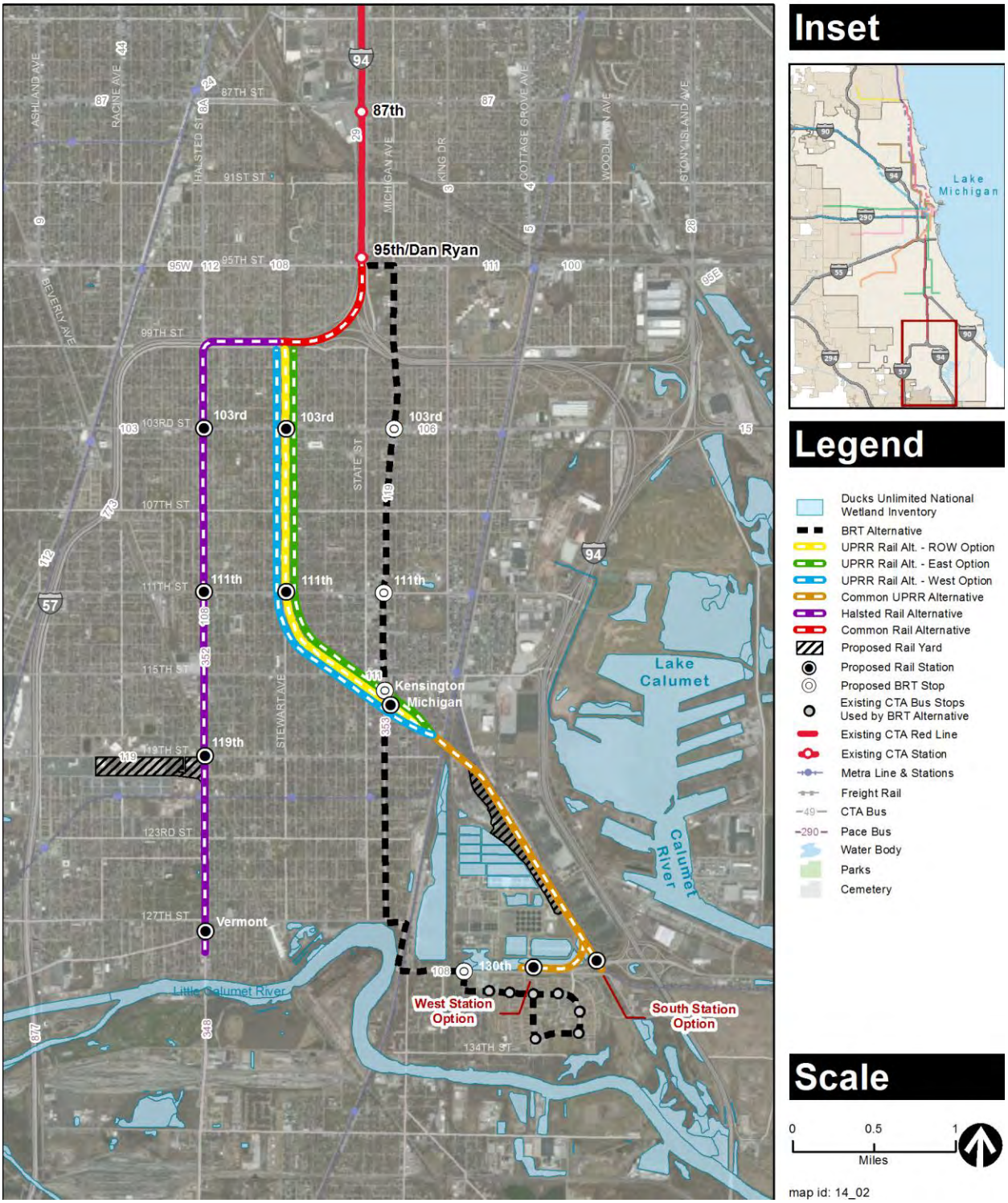

Figure 4-2: Ducks Unlimited National Wetland Inventory Map

Table 4-3: Hydric Soils within Segment UA of Union Pacific Railroad Rail Alternative Area of Potential Impact

Location	Distance from Alignment	Soil Type
Southwest quadrant of the intersection of 117th Street and Indiana Avenue	0 feet	2232A

Notes:
See references USDA 2012a, USDA 2012k for more info on soil types

A summary of information from the NRCS Web Soil Survey website is included in Appendix B.

- NWI

  The NWI does not classify any wetland areas within Segment UA of the UPRR Rail Alternative API.

- Field Visit

  A field visit was conducted on August 13, 2012 to look for evidence of potential wetlands along Segment UA of the UPRR Rail Alternative alignment. Wetland resources were evaluated at a reconnaissance level of detail; no formal wetland delineations were conducted. The field reconnaissance found no evidence of potential wetland areas.

4.5.2.2 Segment UB

A data review obtained the following about existing conditions within Segment UB of the UPRR Rail Alternative API:

- Aerial Photographs

  Aerial photographs display potentially sensitive areas east of the Canadian National/Metra Electric crossing along the southern end of the UPRR Rail Alternative API, between the MWRD treatment plant and the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad tracks. A review of the aerial photographs confirmed that most of the API is heavily urbanized and is characterized by paved surfaces and structures (Google Earth 2012). Few, if any, potential wetland areas would be expected to occur in the API other than in the vicinity of the 120th Street yard and shop, South Station Option, and West Station Option.

- IDNR EcoCAT

  A review of the IDNR EcoCAT found no wetlands (IDNR 2012). Appendix A contains the EcoCAT report.

- NRCS Soil

The NRCS Web Soil Survey website defines two soil types within Segment UB of the UPRR Rail Alternative API as hydric soils, as described in Table 4-4 (USDA 2012a, USDA 2012k).

Table 4-4: Hydric Soils within Segment UB of the Union Pacific Railroad Rail Alternative Area of Potential Impact

Location	Distance from Alignment	Soil Type
Southwest quadrant of the intersection of 117th Street and Indiana Avenue	0 feet	2232A
Kensington Park	70 feet to the southwest	232A

Notes:
See references USDA 2012a, USDA 2012k for more info on soil types

A summary of information from the NRCS Web Soil Survey website is included in Appendix B.

- NWI

The NWI classifies several wetland areas within Segment UB of the UPRR Rail Alternative API. Updated wetland coverage was confirmed using the Ducks Unlimited web database; data is summarized in Table 4-5 (Ducks Unlimited 2012) and shown on Figure 4-2 in relation to the API. Table 4-5 provides the wetland location, approximate distance from the alignment, wetland category, and wetland type. Wetland categories correspond to the classification nomenclature that best describes the habitat; definitions are included in Appendix C. The MWRD drying ponds, which are within the API, are classified as freshwater ponds.

Table 4-5: National Wetland Inventory Areas within Segment UB of the Union Pacific Railroad Rail Alternative Area of Potential Impact

Location	Approximate Distance from Alignment	Wetland Category	Wetland Type
Five MWRD drying ponds	75-200 feet west	PUBKh	Freshwater Ponds
West of UPRR Rail Alternative, south of yard, north of South Station Option site	180 feet west	PUBGx	Freshwater Pond
Along South Station Option site, north of 130th Street	0 feet	PEM1Kh	Freshwater Forested/Shrub Wetland
West of South Station Option site, north of 130th Street	58 feet west	PUBKh	Freshwater Pond
Along West Station Option site, north of 130th Street	0 feet	PEM1Kh	Freshwater Forested/Shrub Wetland
Along West Station Option site, north of 130th Street	0 feet	PEM1Ch	Freshwater Emergent Wetland
North of West Station Option site, north of 130th Street	100 feet north	PUBKh	Freshwater Pond

Location	Approximate Distance from Alignment	Wetland Category	Wetland Type
Along West Station Option site, north of 130th Street	0 feet	PFO1C	Freshwater Forested/Shrub Wetland
West of West Station Option site, north of 130th Street	25 feet west	PEM1Ch	Freshwater Emergent Wetland
West of West Station Option site, north of 130th Street	415 feet west	PFO1C	Freshwater Forested/Shrub Wetland

Notes:
MWRD = Metropolitan Water Reclamation District of Greater Chicago, UPRR = Union Pacific Railroad
See reference Ducks Unlimited 2012 for more info on wetland types

- Field Visit

A field visit was conducted on August 13, 2012 to look for evidence of potential wetlands along the UPRR Rail Alternative alignment. The field visit focused on the area along the southern end of the UPRR Rail Alternative alignment, in Segment UB, from the Canadian National/Metra Electric crossing to 130th Street, as shown in Figure 4-3. Wetland resources were evaluated at a reconnaissance level of detail; no formal wetland delineations were conducted. During the site visit, notes regarding potential wetland hydrology, soils, and vegetation were collected. Soils within four hand-dug test pits were evaluated for hydric characteristics. Test pits were dug at representative locations where there appeared to be differences in the vegetation, topography, or soils. Several test pits were dug in an attempt to identify variations in soils that could be useful in differentiating between wetland and non-wetland areas. Test pit locations (Figure 4-3) were in the vicinity of the 120th Street yard and shop. Appendix D contains photographs from the field visit.

The area in the vicinity of the 120th Street yard and shop is highly disturbed. The area is characterized by a young cottonwood forest with pockets of phragmites. At the time of the field visit, the cottonwoods were generally 6 inches in diameter. Based on historical aerial photos (Google Earth 1998, 2002, 2004, 2005, 2007, 2008, 2009, 2010, 2011, 2012), the area to the southwest of the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad train tracks began to become forested around 2005/2007 (Google Earth 2012). Table 4-6 summarizes the plants identified throughout the area.

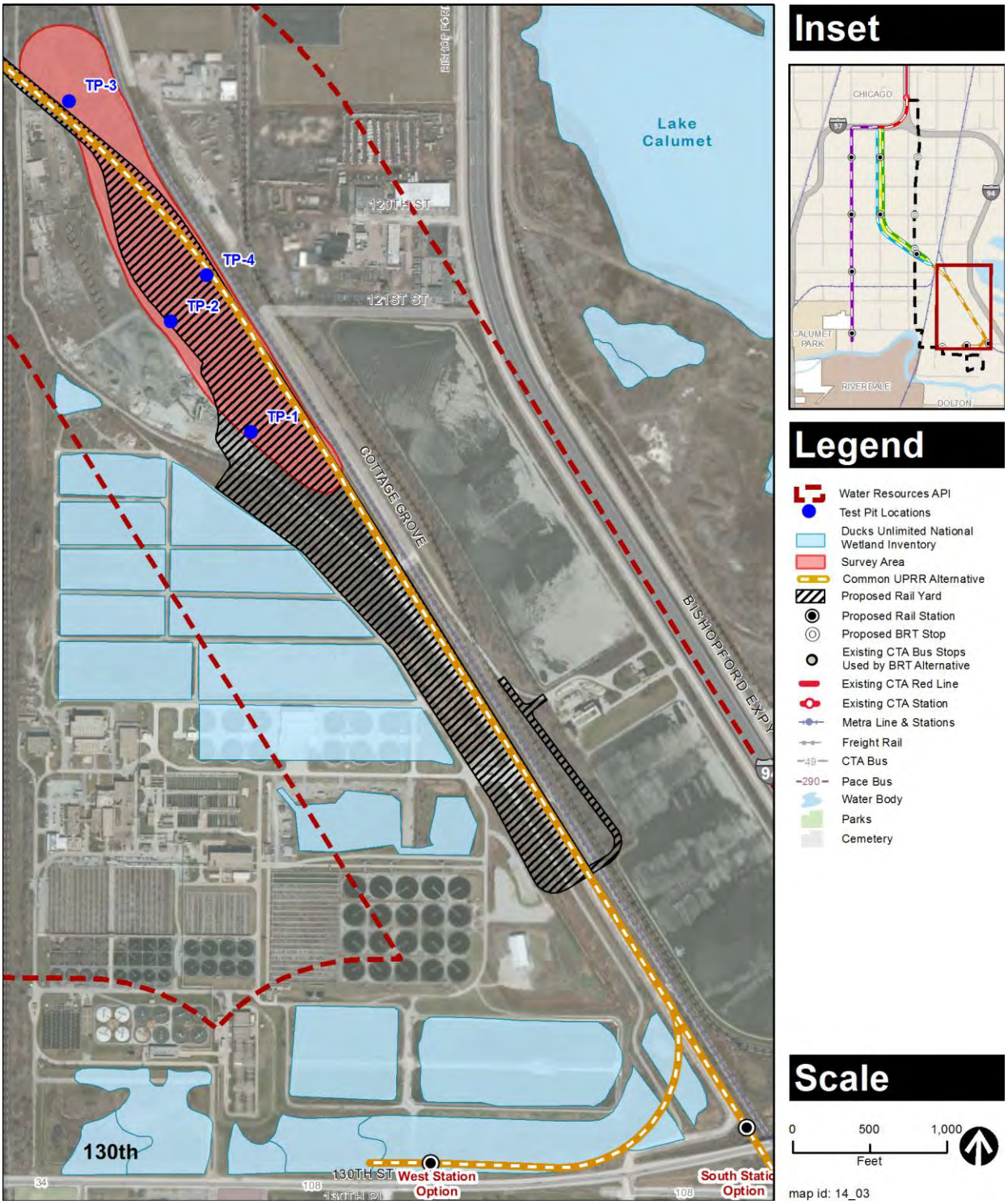

Figure 4-3: Field Survey Area and Test Pit Locations

Table 4-6: Plants Identified in the Union Pacific Railroad Rail Alternative Area of Potential Impact

Scientific Name	Common Name	Wetland Indicator Status
Acer negundo	boxelder	FACW-
Daucus carota	Queen Anne's lace	--
Phragmites australis	common reed	FACW+
Populous deltoides	eastern cottonwood	FAC+
Prunus virginiana	chokecherry	FAC-
Rhamnus cathartica	common buckthorn	FACU
Rhus typhina	staghorn sumac	--
Ulmus americana	American elm	FACW

Notes:
- **FACW =** Facultative Wetland (usually occurs in wetlands but occasionally found in non-wetland), **FAC =** Facultative (equally likely to occur in wetlands or non-wetlands), **FACU =** Facultative Upland (usually occurs in non-wetlands, but occasionally found on wetlands)
- A positive (+) or negative (-) sign more specifically defines the regional frequency of occurrence in wetlands.
- References: USDA 2012b, USDA 2012c, USDA 2012d, USDA 2012e, USDA 2012f, USDA 2012g, USDA 2012h, USDA 2012i, USDA 2012j

The soils appeared to be highly disturbed and likely include material imported from other locations. Railroad ties and potential slag were identified throughout the area. Four test pits were hand dug (using a shovel) to evaluate for hydric soil characteristics. Figure 4-2 shows the test pit locations. The evaluated soils appeared to be imported fill; the soil was heavily compacted shortly below the ground surface. Test pits TP-1, TP-2, and TP-3 showed similar dark, organic soils with unnatural objects, including slag. From 0 to 8 inches below grade, test pit TP-4 had organic soils; from 8 inches to the bottom of the text pit was sand with red features. Data collected from the test pits is presented in Appendix E and summarized in Table 4-7.

Table 4-7: August 2012 Field Visit Summary

Test Pit	Hydrophytic Vegetation Present?	Wetland Hydrology Present?	Hydric Soil Present?
TP-1	Yes	Unknown	No
TP-2	Yes	Unknown	No
TP-3	Yes	Unknown	Yes
TP-4	Yes	Unknown	No

The 2012 January–August period was the warmest and fourth driest on record in Illinois. During January–August 2012, statewide average precipitation was a total of 17.5 inches, 7.3 inches below normal. The statewide average temperature during January–August was 59.0°F, 4.2°F above normal (ISWS - Prairie Research Institute 2012). These unusually dry conditions may have contributed to the lack of evident signs of seepage, springs, or ponding visible during the field survey of the 120th Street yard and shop location; however, it is possible that the soil could be saturated to the surface during the spring. The area surveyed has flat topography; there were no obvious drainages and there were depressions where there was some standing water. The flat

topography, combined with the highly compacted soils, likely holds water at the surface for the required two weeks in the spring growing season, leading to the preponderance of wetland vegetation observed.

Both the South Station Option and West Station Option terminal locations include a drainage ditch (along the north side of 130th Street, south of the MWRD facility); phragmites were identified in the drainage ditch.

The soils and topography of the 120th Street yard and shop site, the South Station Option site, and the West Station Option site are all highly disturbed. Although the vegetation is predominantly hydrophytic, the results of this cursory field investigation were inconclusive. As a basis for impact analysis and to evaluate the maximum potential impact, approximately 14 acres in the vicinity of the 120th Street yard and shop, 7 acres associated with the South Station Option, and 6 acres associated with the West Station Option are considered potential wetlands. It is likely that there is a surface water connection between these wetland areas and the Little Calumet River, making these jurisdictional wetlands. It is more likely that a surface water connection exists from the proposed stations to the river than from the yard site to the river, but due to the highly disturbed topography a connection would require extensive research and fieldwork to confirm. The fieldwork would take place at the time of the permit application, concurrent with final design.

This analysis identifies maximum potential wetland impacts; formal wetland delineations and confirmation of impacts would be performed for the NEPA preferred alternative. Actual impacts would likely be fewer and/or smaller than the maximum impacts described in this report. As part of obtaining permits for work on the project, mitigation would be needed. Coordination with the local USACE district is recommended.

4.5.3 Halsted Rail Alternative

4.5.3.1 Segment HA

A data review obtained the following information about existing conditions within Segment HA of the Halsted Rail Alternative API:

- Aerial Photographs

  A review of the aerial photographs confirmed that the Halsted Rail Alternative API is heavily urbanized and is characterized by paved surfaces and structures (Google Earth 2012). Few, if any, potential wetland areas would be expected to occur in the API based on the review of aerial photographs.

- IDNR EcoCAT

  A review of the IDNR EcoCAT identified no wetlands in Segment HA of the Halsted Rail Alternative API (IDNR 2012). Appendix A contains the EcoCAT report.

- NRCS Soil

  The NRCS Web Soil Survey website defines no soil types within the Halsted Rail Alternative API as hydric soils (USDA 2012a, USDA 2012k). Sites containing soils classified as "not hydric" are unlikely to contain wetlands. Appendix B contains a summary of information from the NRCS Web Soil Survey website.

- NWI

  The NWI classifies no wetland areas within Segment HA of the Halsted Rail Alternative API.

- Field Visit

  A field visit was conducted on August 13, 2012 to look for evidence of potential wetlands within the Halsted Rail Alternative API. Wetland resources were evaluated at a reconnaissance level of detail and no formal wetland delineations were conducted. The field reconnaissance found no evidence of potential wetland areas.

  The USACE *Wetland Delineation Manual* defines areas as wetland if they meet all three parameters (hydric soils, wetland hydrology, and hydrophytic vegetation). No areas along the Halsted Rail Alternative Segment HA would be considered a wetland according to this definition.

4.5.3.2 Segment HB

A data review obtained the following information about existing conditions within Segment HB of the Halsted Rail Alternative API:

- Aerial Photographs

  A review of the aerial photographs confirmed that the Halsted Rail Alternative API is heavily urbanized and is characterized by paved surfaces and structures (Google Earth 2012). Few, if any, potential wetland areas would be expected to occur in the API based on the review of aerial photographs.

- IDNR EcoCAT

  A review of the IDNR EcoCAT identified the Riverdale Marsh within the vicinity of the southern end of the Halsted Rail Alternative alignment (IDNR 2012). No other wetlands were identified in Segment HB of the Halsted Rail Alternative API. Appendix A contains the EcoCAT report.

- NRCS Soil

  The NRCS Web Soil Survey website defines no soil types within the Halsted Rail Alternative API as hydric soils (USDA 2012a, USDA 2012k). Sites containing soils classified as "not hydric"

are unlikely to contain wetlands. Appendix B contains a summary of information from the NRCS Web Soil Survey website.

- NWI

  The NWI classifies two wetland areas within the Halsted Rail Alternative API. Updated wetland coverage was confirmed using the Ducks Unlimited web database; the data is summarized in Table 4-8 (Ducks Unlimited 2012) and shown on Figure 4-2. Table 4-8 provides the wetland location, approximate distance from the alignment, wetland category, and wetland type. Wetland categories correspond to the classification nomenclature that best describes the habitat; definitions are included in Appendix C.

Table 4-8: National Wetland Inventory Areas within Halsted Rail Alternative Area of Potential Impact

Location	Approximate Distance from Alignment	Wetland Category	Wetland Type
Northwest of intersection of 125th Street and Halsted Avenue, in Cedar Park Cemetery	120 feet west	PUBGx	Freshwater Pond
Little Calumet River	100 feet south	R2UBH	Riverine

Notes:
See reference Ducks Unlimited 2012 for more information on wetland types

- Field Visit

  A field visit was conducted on August 13, 2012 to look for evidence of potential wetlands within the Halsted Rail Alternative API. Wetland resources were evaluated at a reconnaissance level of detail and no formal wetland delineations were conducted. The field reconnaissance found no evidence of potential wetland areas.

  The USACE *Wetland Delineation Manual* defines areas as wetland if they meet all three parameters (hydric soils, wetland hydrology, and hydrophytic vegetation). No areas along the Halsted Rail Alternative Segment HB would be considered a wetland according to this definition.

4.6 Floodplains

There are no floodplains in the APIs; see map in Appendix F.

Section 5
Impacts and Mitigation

5.1 No Build Alternative

The No Build Alternative represents existing conditions for water resources in the project area.

5.1.1 Permanent Impacts and Mitigation - No Build Alternative

It is anticipated that there would be no permanent impacts on water resources as a result of the No Build Alternative.

5.1.2 Construction Impacts and Mitigation - No Build Alternative

It is anticipated that there would be no construction impacts on water resources as a result of the No Build Alternative.

5.2 Bus Rapid Transit Alternative

5.2.1 Permanent Impacts and Mitigation - Bus Rapid Transit Alternative

5.2.1.1 Drainage Impacts

The physical modifications associated with the BRT Alternative would result in impacts on the existing stormwater drainage infrastructure, particularly where park & ride facilities would be constructed. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed. There would be no adverse permanent impacts on stormwater drainage associated with the BRT Alternative.

With the exception of the park & ride facilities at 102nd Street and 130th Street, proposed construction would take place on already impervious land, and therefore would not substantially increase the amount or peak flow rate of stormwater runoff entering the storm drain system. The decrease in pervious area in the vicinity of the 102nd Street and 130th Street park & ride facilities could be mitigated by incorporating new stormwater management structures.

An additional potential mitigation measure to protect water resources is listed below.

- Establishing an erosion control plan prior to the initiation of construction. The erosion control plan could include the following:
    - Use of natural drainage, detention ponds, sediment ponds, or infiltration pits to allow runoff to collect and reduce or prevent erosion
    - Use of barriers to direct and slow the rate of runoff and to filter out large-sized sediments
    - Use of down-drains or chutes to carry runoff from the top of a slope to the bottom

5.2.1.2 Groundwater Impacts

There would be no adverse permanent groundwater impacts associated with the BRT Alternative.

5.2.1.3 Water Quality Impacts

There would be no adverse permanent water quality impacts associated with the BRT Alternative. The BRT Alternative would supplement the existing #34 bus route along Michigan Avenue; the transit system would replace automobile trips and there would be an associated reduction in roadway pollutants. There would be a minimal change from existing conditions in the buildup of typical runoff contaminants that collect on streets (i.e., oil, grease, and metals).

The introduction of new impervious surfaces resulting from the construction of park & ride facilities associated with the BRT Alternative would have the potential to increase the concentration and accumulation of runoff contaminants. Due to the predominance of impervious surfaces throughout the project area, minimal percolation to the underlying groundwater occurs in the API. Therefore, any potential increases in contaminated surface water runoff would have no adverse impact on groundwater quality.

Potential impacts on water resources stemming from both construction and operation could be mitigated with the following measures as appropriate:

- Project design that includes properly designed and maintained biological oil and grease removal systems in new storm drain systems to treat water before it leaves project construction areas
- Proper storage of hazardous materials to prevent contact with precipitation and runoff
- Development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials
- Placement of equipment to be repaired or maintained in covered areas on a pad of absorbent material to contain leaks, spills, or small discharges
- Periodic and consistent removal of landscape and construction debris
- Removal of any significant chemical residue on the project sites through appropriate methods
- Use of non-toxic alternatives for any necessary applications of herbicides or fertilizers
- Installation of detention basins or other landscaping features to remove suspended solids by settlement
- Periodic monitoring of runoff water quality before discharge from the site and into the storm drainage system

5.2.1.4 Wetland Impacts

The BRT Alternative park & ride facility could affect between 1.5 and 9 acres of wetlands, dependent on a formal wetland delineation. Following compensatory mitigation, either through creation, restoration, enhancement, or preservation of wetlands, the BRT Alternative would have no adverse permanent impacts on wetlands in the API. Compensatory mitigation is regulated under the 2008 CWA Section 404 Final Compensatory Mitigation Rule and is intended to replace lost aquatic resource functions and area with the goal of "no net loss" of wetlands (USEPA 2008). Compensatory mitigation should take place on public or private land at or adjacent to the impact site or at another location generally within the same watershed where it is most likely to replace lost functions. There are several potential underutilized or vacant industrial land areas, with a connection to the Little Calumet River, that exist within 3 miles of the alignment; these land areas could be restored as compensatory mitigation.

5.2.2 Construction Impacts and Mitigation - Bus Rapid Transit Alternative

5.2.2.1 Drainage Impacts

The physical modifications associated with the BRT Alternative would result in potential impacts on the existing stormwater drainage infrastructure, particularly where park & ride lots and structures would be constructed. These alterations would not greatly affect the direction or volume of drainage through the API. In areas where construction could result in the need to relocate certain drainage infrastructure, temporary lines would be installed during the construction period.

In addition to the mitigation measures recommended in Section 5.2.1.1, controlled use of water for irrigation and dust control is also recommended to avoid off-site runoff.

5.2.2.2 Groundwater Impacts

There would be a potential need for dewatering by removing groundwater from the construction site by pumping if groundwater were encountered during construction. Dewatering during construction could temporarily affect local shallow groundwater levels. Given the likelihood of encountering contaminated groundwater, compliance with federal, state, and local laws and regulations (as described in the *Hazardous Materials Technical Memorandum*) would be required during construction.

5.2.2.3 Water Quality Impacts

Water quality impacts could result from construction of the BRT Alternative. Construction would have the potential to increase erosion and sedimentation around proposed construction and staging areas. Grading associated with construction could result in a temporary increase in the amount of suspended solids in stormwater running off construction sites. In the case of a storm event, construction site runoff would result in sheet erosion of exposed soil. If not adequately controlled, contaminated runoff from these areas would have the potential to degrade surface water quality.

The impacts of construction of the BRT Alternative on water quality would be minor because the project area is already highly urbanized. In order to ensure that surface water runoff would not have adverse impacts on water quality, human health, or safety, appropriate measures would be taken to control runoff during implementation. Some examples of these mitigation measures include establishing an erosion control plan, ensuring the proper storage and handling of hazardous materials including paints, solvents, fuels, and hydraulic fluids, and periodic monitoring of the water quality of runoff leaving the site. Section 5.2.1.3 summarizes proposed mitigation measures.

5.2.2.4 Wetland Impacts

Compensatory mitigation would be needed for construction related, temporary impacts on wetlands. Construction staging areas would be sited outside of wetlands as much as possible, but if there were any temporary impacts, those areas would be reconstructed as wetlands following construction.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1 Permanent Impacts and Mitigation - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1.1 Segment UA

5.3.1.1.1 Drainage Impacts

The physical modifications associated with the UPRR Rail Alternative ROW Option would result in impacts on the existing stormwater drainage infrastructure. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed.

Much of the proposed construction would take place on already impervious land and therefore would not significantly increase the amount or peak flow rate of stormwater runoff entering the storm drain system. Pervious area is anticipated to decrease in the following areas under the ROW Option: along I-57, through the northwest corner of Wendell Smith Park and across the UPRR ROW to the west of Wendell Smith Park, around stations, and at the park & ride facilities and substations. The decrease in pervious area could be mitigated by incorporating new stormwater management structures.

After mitigation, there would be no adverse permanent stormwater drainage impacts associated with the UPRR Rail Alternative ROW Option.

The Roseland Pump Station is east of the UPRR Rail Alternative ROW Option at 104th Street. The Roseland Pump Station is a major water distribution facility supplying water to the City of Chicago and surrounding suburbs. There are underground pipes and structures running west from the pump station. Other major underground pipes and structures include the 10-foot-diameter Stewart Avenue water tunnel, the 10-foot-diameter sewer underneath Wentworth

Avenue near 114th Street, and the 17.5-foot, horseshoe-shaped MWRD Calumet Intercepting Sewer tunnel. Stormwater drainage and water structures would need to be designed to accommodate the pump station and other underground utilities.

Section 5.2.1.1 summarizes proposed mitigation measures.

5.3.1.1.2 Groundwater Impacts

There would be no adverse permanent groundwater impacts associated with the UPRR Rail Alternative ROW Option.

5.3.1.1.3 Water Quality Impacts

The operation of the Red Line under the ROW Option would replace automobile trips; there would be an associated reduction in runoff contaminants that collect on streets (i.e., oil, grease, and metals). For this reason, the ROW Option is anticipated to have a minor but positive water quality impact.

The introduction of new impervious surfaces would have the potential to increase the concentration and accumulation of runoff contaminants. Due to the predominance of impervious surfaces throughout the project area, minimal percolation to the underlying groundwater occurs in the API. Therefore, any potential increases in contaminated surface water runoff would have no adverse impact on groundwater quality.

After mitigation, there would be no adverse permanent water quality impacts associated with the UPRR Rail Alternative ROW Option. Section 5.2.1.3 summarizes proposed mitigation measures.

5.3.1.1.4 Wetland Impacts

Because there are no wetlands in Segment UA of the UPRR Rail Alternative, there would be no permanent impacts on wetlands.

5.3.1.2 Segment UB

5.3.1.2.1 Drainage Impacts

The physical modifications associated with the UPRR Rail Alternative ROW Option would result in impacts on the existing stormwater drainage infrastructure. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed.

Much of the proposed construction would take place on already impervious land and therefore would not substantially increase the amount or peak flow rate of stormwater runoff entering the storm drain system. Pervious area is anticipated to decrease in the following areas under the ROW Option: around stations, at the park & ride facilities, and from north of Kensington Park where the UPRR Rail Alternative splits from the existing UPRR tracks through the southern end of the UPRR Rail Alternative, including both terminal options. The decrease in pervious area could be mitigated by incorporating new stormwater management structures.

After mitigation, there would be no adverse permanent stormwater drainage impacts associated with the UPRR Rail Alternative ROW Option. Section 5.2.1.1 summarizes proposed mitigation measures.

5.3.1.2.2 Groundwater Impacts

There would be no adverse permanent groundwater impacts associated with the UPRR Rail Alternative ROW Option.

5.3.1.2.3 Water Quality Impacts

See Section 5.3.1.1.3.

5.3.1.2.4 Wetland Impacts

The UPRR Rail Alternative ROW Option South Station Option and West Station Option facilities could affect approximately 7 and 6 acres of wetlands, respectively. Following compensatory mitigation these options would have no adverse permanent impacts on wetlands in the API. Section 5.2.1.4 discusses compensatory mitigation.

5.3.2 Construction Impacts and Mitigation - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.2.1 Segment UA

5.3.2.1.1 Drainage Impacts

The physical modifications associated with the UPRR Rail Alternative ROW Option would result in impacts on the existing stormwater drainage infrastructure. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed. In areas where construction could result in the need to relocate certain drainage infrastructure, temporary lines would be installed during the construction period. Care would need to be taken during construction in the vicinity of the Roseland Pump Station at 104th Street, as well as the other underground utilities called out in Section 5.3.1.1.1, in order to not damage existing structures. Proposed mitigation measures are summarized in Section 5.2.1.1 and 5.2.2.1.

5.3.2.1.2 Groundwater Impacts

See Section 5.2.2.2.

5.3.2.1.3 Water Quality Impacts

See Section 5.2.2.3.

5.3.2.1.4 Wetland Impacts

Because there are no wetlands in Segment UA of the UPRR Rail Alternative, there would be no construction impacts on wetlands.

5.3.2.2 Segment UB

5.3.2.2.1 Drainage Impacts

See Section 5.3.2.1.1.

5.3.2.2.2 Groundwater Impacts
See Section 5.2.2.2.

5.3.2.2.3 Water Quality Impacts
See Section 5.2.2.3.

5.3.2.2.4 Wetland Impacts
See Section 5.2.2.4.

5.3.3 120th Street Yard and Shop

5.3.3.1 Permanent Impacts and Mitigation

5.3.3.1.1 Drainage Impacts
The physical modifications associated with the UPRR Rail Alternative 120th Street yard and shop would result in impacts on the existing stormwater drainage infrastructure. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed.

The proposed construction would take place on pervious area; the decrease in pervious area could be mitigated by incorporating new stormwater management structures.

After mitigation, there would be no adverse permanent stormwater drainage impacts associated with the UPRR Rail Alternative 120th Street yard and shop. Section 5.2.1.1 summarizes proposed mitigation measures.

5.3.3.1.2 Groundwater Impacts
There would be no adverse permanent groundwater impacts associated with the UPRR Rail Alternative 120th Street yard and shop.

5.3.3.1.3 Water Quality Impacts
The introduction of new impervious surfaces would have the potential to increase the concentration and accumulation of runoff contaminants. After mitigation, there would be no adverse permanent water quality impacts associated with the 120th Street yard and shop. Section 5.2.1.3 summarizes proposed mitigation measures.

5.3.3.1.4 Wetland Impacts
Development of the 120th Street yard and shop facility could affect approximately 14 acres of wetlands. Following compensatory mitigation, the 120th Street yard and shop would have no adverse permanent impacts on wetlands in the API. Compensatory mitigation is discussed in Section 5.2.1.4.

5.3.3.2 Construction Impacts and Mitigation

5.3.3.2.1 Drainage Impacts
See Section 5.3.2.1.1.

5.3.3.2.2 Groundwater Impacts
See Section 5.2.2.2.

5.3.3.2.3 Water Quality Impacts
See Section 5.2.2.3.

5.3.3.2.4 Wetland Impacts
See Section 5.2.2.4.

5.4 Union Pacific Railroad Rail Alternative - East Option

5.4.1 Permanent Impacts and Mitigation - Union Pacific Railroad Rail Alternative - East Option

5.4.1.1 Segment UA

5.4.1.1.1 Drainage Impacts
Impacts associated with the UPRR Rail Alternative East Option would be similar to those discussed in Section 5.3.1.1.1. The UPRR Rail Alternative East Option alignment would be closer to the Roseland Pump Station than the ROW Option alignment; consequently, it would be more complex from a drainage standpoint. Stormwater drainage and water structures would need to be designed to accommodate the pump station as well as the other underground utilities called out in Section 5.3.1.1.1. Section 5.2.1.1 summarizes proposed mitigation measures.

5.4.1.1.2 Groundwater Impacts
There would be no adverse permanent groundwater impacts associated with the UPRR Rail Alternative East Option.

5.4.1.1.3 Water Quality Impacts
See Section 5.3.1.1.3.

5.4.1.1.4 Wetland Impacts
Because there are no wetlands in Segment UA of the UPRR Rail Alternative, there would be no permanent impacts on wetlands.

5.4.1.2 Segment UB

See Section 5.3.1.2.

5.4.2 Construction Impacts and Mitigation - Union Pacific Railroad Rail Alternative - East Option

5.4.2.1 Segment UA

5.4.2.1.1 Drainage Impacts
See Section 5.3.2.1.1. Additional care would need to be taken in the vicinity of the Roseland Pump Station at 104th Street and near the other underground utilities called out in Section 5.3.1.1.1. Mitigation measures are summarized in Section 5.2.1.1 and 5.2.2.1.

5.4.2.1.2 Groundwater Impacts
See Section 5.2.2.2.

5.4.2.1.3 Water Quality Impacts
See Section 5.2.2.3.

5.4.2.1.4 Wetland Impacts
Because there are no wetlands in Segment UA along the UPRR Rail Alternative, there would be no construction impacts on wetlands.

5.4.2.2 Segment UB
See Section 5.3.2.2.

5.4.3 120th Street Yard and Shop
See Section 5.3.3.

5.5 Union Pacific Railroad Rail Alternative - West Option

5.5.1 Permanent Impacts and Mitigation - Union Pacific Railroad Rail Alternative - West Option

5.5.1.1 Segment UA

5.5.1.1.1 Drainage Impacts
The physical modifications associated with the UPRR Rail Alternative West Option would result in impacts on the existing stormwater drainage infrastructure. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed.

Much of the proposed construction would take place on already impervious land and therefore would not substantially increase the amount or peak flow rate of stormwater runoff entering the storm drain system. Pervious area is anticipated to decrease in the following areas under the West Option: along I-57, along Fernwood Parkway, around stations, and at the park & ride facilities and substations. The decrease in pervious area could be mitigated by incorporating new stormwater management structures.

After mitigation, there would be no adverse permanent impacts on stormwater drainage associated with the UPRR Rail Alternative West Option. Section 5.2.1.1 summarizes proposed mitigation measures. Among the build alternatives, the UPRR Rail Alternative West Option would have the least impact on the Roseland Pump Station.

5.5.1.1.2 Groundwater Impacts
There would be no adverse permanent groundwater impacts associated with the UPRR Rail Alternative West Option.

5.5.1.1.3 Water Quality Impacts
See Section 5.3.1.1.3.

5.5.1.1.4 Wetland Impacts
Because there are no wetlands in Segment UA of the UPRR Rail Alternative, there would be no permanent impacts on wetlands.

5.5.1.2 Segment UB
See Section 5.3.1.2.

5.5.2 Construction Impacts and Mitigation – Union Pacific Railroad Rail Alternative - West Option

5.5.2.1 Segment UA

5.5.2.1.1 Drainage Impacts
See Section 5.3.2.1.1.

5.5.2.1.2 Groundwater Impacts
See Section 5.2.2.2.

5.5.2.1.3 Water Quality Impacts
See Section 5.2.2.3.

5.5.2.1.4 Wetland Impacts
Because there are no wetlands in Segment UA of the UPRR Rail Alternative, there would be no construction impacts on wetlands.

5.5.2.2 Segment UB
See Section 5.3.2.2.

5.5.3 120th Street Yard and Shop
See Section 5.3.3.

5.6 Halsted Rail Alternative

5.6.1 Permanent Impacts and Mitigation - Halsted Rail Alternative

5.6.1.1 Segment HA

5.6.1.1.1 Drainage Impacts
The physical modifications associated with the Halsted Rail Alternative would result in impacts on the existing stormwater drainage infrastructure. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed.

Much of the proposed construction would take place on already impervious land and therefore would not substantially increase the amount or peak flow rate of stormwater runoff entering the storm drain system. Pervious area is anticipated to decrease along I-57 and around stations, park & ride facilities, and substations. The decrease in pervious area could be mitigated by incorporating new stormwater management structures.

After mitigation there would be no adverse permanent stormwater drainage impacts associated with the Halsted Rail Alternative. Section 5.2.1.1 summarizes proposed mitigation measures.

5.6.1.1.2 Groundwater Impacts

There would be no adverse permanent groundwater impacts associated with the Halsted Rail Alternative.

5.6.1.1.3 Water Quality Impacts

See Section 5.3.1.1.3.

5.6.1.1.4 Wetland Impacts

Because there are no wetlands in Segment HA of the Halsted Rail Alternative, there would be no permanent impacts on wetlands.

5.6.1.2 Segment HB

5.6.1.2.1 Drainage Impacts

The physical modifications associated with the Halsted Rail Alternative would result in impacts on the existing stormwater drainage infrastructure. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed.

Much of the proposed construction would take place on already impervious land and therefore would not substantially increase the amount or peak flow rate of stormwater runoff entering the storm drain system. Pervious area is anticipated to decrease along I-57 and around stations, park & ride facilities, and substations. The decrease in pervious area could be mitigated by incorporating new stormwater management structures.

After mitigation, the Halsted Rail Alternative would have no adverse permanent impacts on stormwater drainage. Section 5.2.1.1 summarizes proposed mitigation measures.

5.6.1.2.2 Groundwater Impacts

The Halsted Rail Alternative would have no adverse permanent impacts on groundwater.

5.6.1.2.3 Water Quality Impacts

See Section 5.3.1.1.3.

5.6.1.2.4 Wetland Impacts

Because there are no wetlands in Segment HB of the Halsted Rail Alternative, there would be no permanent impacts on wetlands.

5.6.2 Construction Impacts and Mitigation - Halsted Rail Alternative

5.6.2.1 Segment HA

5.6.2.1.1 Drainage Impacts

See Section 5.3.2.1.1.

5.6.2.1.2 Groundwater Impacts

See Section 5.2.2.2.

5.6.2.1.3 Water Quality Impacts

See Section 5.2.2.3.

5.6.2.1.4 Wetland Impacts

Because there are no wetlands in Segment HA of the Halsted Rail Alternative, there would be no construction impacts on wetlands.

5.6.2.2 Segment HB

5.6.2.2.1 Drainage Impacts

See Section 5.3.2.1.1.

5.6.2.2.2 Groundwater Impacts

See Section 5.2.2.2.

5.6.2.2.3 Water Quality Impacts

See Section 5.2.2.3.

5.6.2.2.4 Wetland Impacts

Because there are no wetlands in Segment HB of the Halsted Rail Alternative, there would be no construction impacts on wetlands.

5.6.3 119th Street Yard and Shop

5.6.3.1 Permanent Impacts and Mitigation

5.6.3.1.1 Drainage Impacts

The physical modifications associated with the Halsted Rail Alternative 119th Street yard and shop would result in impacts on the existing stormwater drainage infrastructure. These alterations would not greatly affect the direction of drainage through the project area and would not change drainage within the watershed.

Much of the proposed construction would take place on already impervious land and therefore would not substantially increase the amount or peak flow rate of stormwater runoff entering the

storm drain system. The decrease in pervious area could be mitigated by incorporating new stormwater management structures.

After mitigation, the development of the 119th Street yard and shop would have no adverse permanent impacts on stormwater drainage. Section 5.2.1.1 summarizes proposed mitigation measures.

5.6.3.1.2 Groundwater Impacts

There would be no adverse permanent groundwater impacts associated with the 119th Street yard and shop.

5.6.3.1.3 Water Quality Impacts

See Section 5.3.1.1.3.

5.6.3.1.4 Wetland Impacts

Because there are no wetlands at the 119th Street yard and shop site, there would be no permanent impacts on wetlands.

5.6.3.2 Construction Impacts and Mitigation

5.6.3.2.1 Drainage Impacts

See Section 5.3.2.1.1.

5.6.3.2.2 Groundwater Impacts

See Section 5.2.2.2.

5.6.3.2.3 Water Quality Impacts

See Section 5.2.2.3.

5.6.3.2.4 Wetland Impacts

Because there are no wetlands at the 119th Street yard and shop site, there would be no construction impacts on wetlands.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

After mitigation, there would be no effects on water resources.

6.2 Bus Rapid Transit Alternative

After mitigation, there would be no effects on water resources.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

After mitigation, there would be no effects on water resources.

6.4 Union Pacific Railroad Rail Alternative - East Option

After mitigation, there would be no effects on water resources.

6.5 Union Pacific Railroad Rail Alternative - West Option

After mitigation, there would be no effects on water resources.

6.6 Halsted Rail Alternative

After mitigation, there would be no effects on water resources.

Section 7
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Appendix A
EcoCAT Report

EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
Contact: Claudia Lea
Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304095
Date: 09/12/2012

Project: CTA Red Line Extension Project
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 3	37N, 14E, 4
37N, 14E, 9	37N, 14E, 10
37N, 14E, 15	37N, 14E, 22

IL Department of Natural Resources Contact

Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
Contact: Claudia Lea
Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304098
Date: 09/12/2012

Project: CTA Red Line Extension
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 3
37N, 14E, 4
37N, 14E, 8
37N, 14E, 9
37N, 14E, 10

IL Department of Natural Resources Contact

Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
Contact: Claudia Lea
Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304099
Date: 09/12/2012

Project: CTA Red Line Extension
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Riverdale Marsh INAI Site
Black-Crowned Night Heron *(Nycticorax nycticorax)*
Little Blue Heron *(Egretta caerulea)*
Yellow-Crowned Night Heron *(Nyctanassa violacea)*
Yellow-Headed Blackbird *(Xanthocephalus xanthocephalus)*

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 8	37N, 14E, 9
37N, 14E, 16	37N, 14E, 17
37N, 14E, 20	37N, 14E, 21
37N, 14E, 22	37N, 14E, 28
37N, 14E, 29	37N, 14E, 32
37N, 14E, 33	

IL Department of Natural Resources Contact
Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

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EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
Contact: Claudia Lea
Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304096
Date: 09/12/2012

Project: CTA Red Line Extension
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Lake Calumet INAI Site
Blanding'S Turtle *(Emydoidea blandingii)*
Common Moorhen *(Gallinula chloropus)*
Little Blue Heron *(Egretta caerulea)*
Peregrine Falcon *(Falco peregrinus)*
Yellow-Crowned Night Heron *(Nyctanassa violacea)*
Yellow-Headed Blackbird *(Xanthocephalus xanthocephalus)*

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 15	37N, 14E, 22
37N, 14E, 26	37N, 14E, 27
37N, 14E, 28	37N, 14E, 33
37N, 14E, 34	37N, 14E, 35

IL Department of Natural Resources Contact
Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

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EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
Contact: Claudia Lea
Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304295
Date: 09/18/2012

Project: CTA Red Line Extension Project
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Riverdale Marsh INAI Site
Black-Crowned Night Heron *(Nycticorax nycticorax)*

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 28 37N, 14E, 29
37N, 14E, 32 37N, 14E, 33

IL Department of Natural Resources Contact
Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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Appendix B
Natural Resources Conservation Service Web Soil Survey Summary

Soil Map—Cook County, Illinois
(RLE TSM/BRT Alternative)

Map Scale: 1:45,000 if printed on A size (8.5" x 11") sheet.

N

Meters
0 400 800 1,600 2,400

Feet
0 1,500 3,000 6,000 9,000

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Gully

Short Steep Slope

Other

Political Features

Cities

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

MAP INFORMATION

Map Scale: 1:45,000 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cook County, Illinois
Survey Area Data: Version 6, Nov 2, 2011

Date(s) aerial images were photographed: 7/30/2007; 8/3/2007

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Cook County, Illinois (IL031)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
69A	Milford silty clay loam, 0 to 2 percent slopes	17.7	1.1%
146A	Elliott silt loam, 0 to 2 percent slopes	1.8	0.1%
232A	Ashkum silty clay loam, 0 to 2 percent slopes	2.7	0.2%
533	Urban land	264.9	16.3%
534A	Urban land-Orthents, clayey, complex, nearly level	834.7	51.2%
802A	Orthents, loamy, nearly level	6.7	0.4%
802B	Orthents, loamy, undulating	5.0	0.3%
805A	Orthents, clayey, nearly level	151.0	9.3%
805B	Orthents, clayey, undulating	109.3	6.7%
805D	Orthents, clayey, rolling	31.6	1.9%
811B	Alfic Udarents, clayey, 2 to 6 percent slopes	19.6	1.2%
1409A	Aquents, clayey, undrained, nearly level	14.0	0.9%
2049A	Orthents, loamy-Urban land-Watseka complex, 0 to 2 percent slopes	0.1	0.0%
2232A	Orthents, clayey-Urban land-Ashkum complex, 0 to 2 percent slopes	99.4	6.1%
W	Water	71.2	4.4%
Totals for Area of Interest		**1,629.8**	**100.0%**

Soil Map—Cook County, Illinois
(RLE UPRR Alternative)

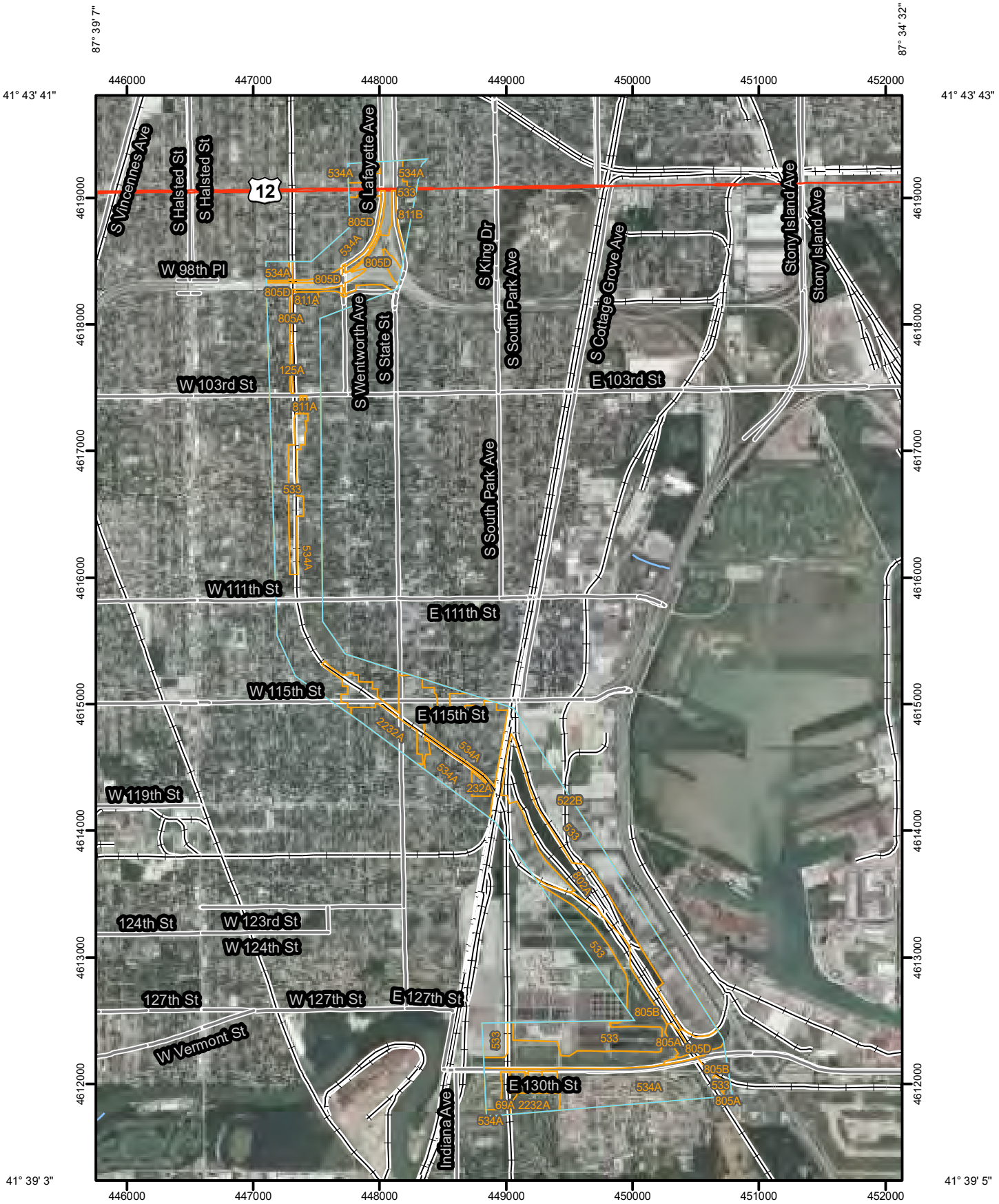

Map Scale: 1:40,900 if printed on A size (8.5" x 11") sheet.

N

Meters
0 350 700 1,400 2,100

Feet
0 1,500 3,000 6,000 9,000

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Gully

Short Steep Slope

Other

Political Features

Cities

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

MAP INFORMATION

Map Scale: 1:40,900 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cook County, Illinois
Survey Area Data: Version 6, Nov 2, 2011

Date(s) aerial images were photographed: 7/30/2007; 8/3/2007

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Cook County, Illinois (IL031)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
69A	Milford silty clay loam, 0 to 2 percent slopes	7.7	0.6%
125A	Selma loam, 0 to 2 percent slopes	2.1	0.2%
232A	Ashkum silty clay loam, 0 to 2 percent slopes	4.6	0.3%
522B	Orthents, clayey, refuse substratum, undulating	0.1	0.0%
533	Urban land	432.1	31.4%
534A	Urban land-Orthents, clayey, complex, nearly level	590.1	42.9%
802A	Orthents, loamy, nearly level	90.6	6.6%
802B	Orthents, loamy, undulating	5.0	0.4%
805A	Orthents, clayey, nearly level	14.4	1.0%
805B	Orthents, clayey, undulating	111.7	8.1%
805D	Orthents, clayey, rolling	55.8	4.1%
811A	Alfic Udarents, clayey, 0 to 2 percent slopes	5.4	0.4%
811B	Alfic Udarents, clayey, 2 to 6 percent slopes	11.4	0.8%
2232A	Orthents, clayey-Urban land-Ashkum complex, 0 to 2 percent slopes	43.4	3.2%
Totals for Area of Interest		**1,374.3**	**100.0%**

Soil Map—Cook County, Illinois
(RLE Halsted Rail Alternative)

Map Scale: 1:41,200 if printed on A size (8.5" x 11") sheet.

N

Meters
0 350 700 1,400 2,100

Feet
0 1,500 3,000 6,000 9,000

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Gully

Short Steep Slope

Other

Political Features

Cities

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

MAP INFORMATION

Map Scale: 1:41,200 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cook County, Illinois
Survey Area Data: Version 6, Nov 2, 2011

Date(s) aerial images were photographed: 7/30/2007; 8/3/2007

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Cook County, Illinois (IL031)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
141A	Wesley fine sandy loam, 0 to 2 percent slopes	4.2	0.3%
293A	Andres silt loam, 0 to 2 percent slopes	0.6	0.0%
294B	Symerton silt loam, 2 to 5 percent slopes	2.9	0.2%
392A	Urban land-Orthents, loamy, complex, nearly level	273.7	21.9%
533	Urban land	348.4	27.8%
534A	Urban land-Orthents, clayey, complex, nearly level	480.8	38.4%
740A	Darroch silt loam, 0 to 2 percent slopes	23.2	1.9%
802D	Orthents, loamy, rolling	0.8	0.1%
805A	Orthents, clayey, nearly level	2.2	0.2%
805D	Orthents, clayey, rolling	41.6	3.3%
807A	Orthents, loamy-skeletal, nearly level	0.1	0.0%
811A	Alfic Udarents, clayey, 0 to 2 percent slopes	8.0	0.6%
811B	Alfic Udarents, clayey, 2 to 6 percent slopes	21.6	1.7%
2049A	Orthents, loamy-Urban land-Watseka complex, 0 to 2 percent slopes	27.5	2.2%
W	Water	16.3	1.3%
Totals for Area of Interest		**1,251.9**	**100.0%**

Appendix C
Wetlands and Deepwater Habitats Classification

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION

System	M - Marine							
Subsystem	1 - Subtidal				2 - Intertidal			
Class	RB – Rock Bottom	UB – Unconsolidated Bottom	AB – Aquatic Bed	RF – Reef	AB – Aquatic Bed	RF – Reef	RS – Rocky Shore	US – Unconsolidated Shore
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud	1 Algal 3 Rooted Vascular	1 Coral 3 Worm	1 Algal 3 Rooted Vascular	1 Coral 3 Worm	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic

System	E - Estuarine											
Subsystem	1 - Subtidal				2 - Intertidal							
Class	RB – Rock Bottom	UB – Unconsolidated Bottom	AB – Aquatic Bed	RF – Reef	AB – Aquatic Bed	RF – Reef	SB – Streambed	RS – Rocky Shore	US – Unconsolidated Shore	EM – Emergent	SS – Scrub-Shrub	FO – Forested
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 3 Rooted Vascular 4 Floating Vascular	2 Mollusk 3 Worm	1 Algal 3 Rooted Vascular 4 Floating Vascular	2 Mollusk 3 Worm	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Mud 6 Organic	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Persistent 2 Non-persistent 5 *Phragmites australis*	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen

System	R - Riverine				
Subsystem	1 - Tidal	2 – Lower Perennial	3 – Upper Perennial	4* - Intermittent	5* – Unknown Perennial

Class	RB** – Rock Bottom	UB – Unconsolidated Bottom	SB** – Streambed	AB – Aquatic Bed	RS – Rocky Shore	US – Unconsolidated Shore	EM – Emergent
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Mud 6 Organic 7 Vegetated	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	2 Nonpersistent

* **Intermittent** is limited to the **Streambed** Class;
Unknown Perennial is limited to **Unconsolidated Bottom** Class code **R5UB** only
** **Rock Bottom** is not permitted for the **Lower Perennial** Subsystem;
Streambed is limited to **Tidal** and **Intermittent** Subsystems

Classification of Wetlands and Deepwater Habitats of the United States, Cowardin *et al*. 1979

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION

System	L - Lacustrine											
Subsystem	1 - Limnetic			2 - Littoral								
Class	RB – Rock Bottom	UB – Unconsolidated Bottom	AB – Aquatic Bed	RB – Rock Bottom	UB – Unconsolidated Bottom	AB – Aquatic Bed	RS – Rocky Shore	US – Unconsolidated Shore	EM – Emergent			
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	2 Nonpersistent			

System	P - Palustrine							
Class	RB – Rock Bottom	UB – Unconsolidated Bottom	AB – Aquatic Bed	US – Unconsolidated Shore	ML – Moss-Lichen	EM – Emergent	SS – Scrub-Shrub	FO – Forested
Subclass	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	1 Moss 2 Lichen	1 Persistent 2 Nonpersistent 5 *Phragmites australis*	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen

MODIFIERS

In order to more adequately describe the wetland and deepwater habitats, one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farmed modifier may also be applied to the ecological system.

Water Regime			Special Modifiers	Water Chemistry			Soil
Nontidal	**Saltwater Tidal**	**Freshwater Tidal**		**Coastal Halinity**	**Inland Salinity**	**pH Modifiers for all Fresh Water**	
A Temporarily Flooded	L Subtidal	S Temporarily Flooded-Tidal	b Beaver	1 Hyperhaline	7 Hypersaline	a Acid	g Organic
B Saturated	M Irregularly Exposed	R Seasonally Flooded-Tidal	d Partly Drained/Ditched	2 Euhaline	8 Eusaline	t Circumneutral	n Mineral
C Seasonally Flooded	N Regularly Flooded	T Semipermanently Flooded-Tidal	f Farmed	3 Mixohaline (Brackish)	9 Mixosaline	i Alkaline	
E Seasonally Flooded/ Saturated	P Irregularly Flooded	V Permanently Flooded-Tidal	h Diked/Impounded	4 Polyhaline	0 Fresh		
F Semipermanently Flooded			r Artificial	5 Mesohaline			
G Intermittently Exposed			s Spoil	6 Oligohaline			
H Permanently Flooded			x Excavated	0 Fresh			
J Intermittently Flooded							
K Artificially Flooded							

Appendix D
Photographs from August 13, 2012 Field Visit

Potential wetland area with phragmites and cottonwoods near test pit TP-1, facing east

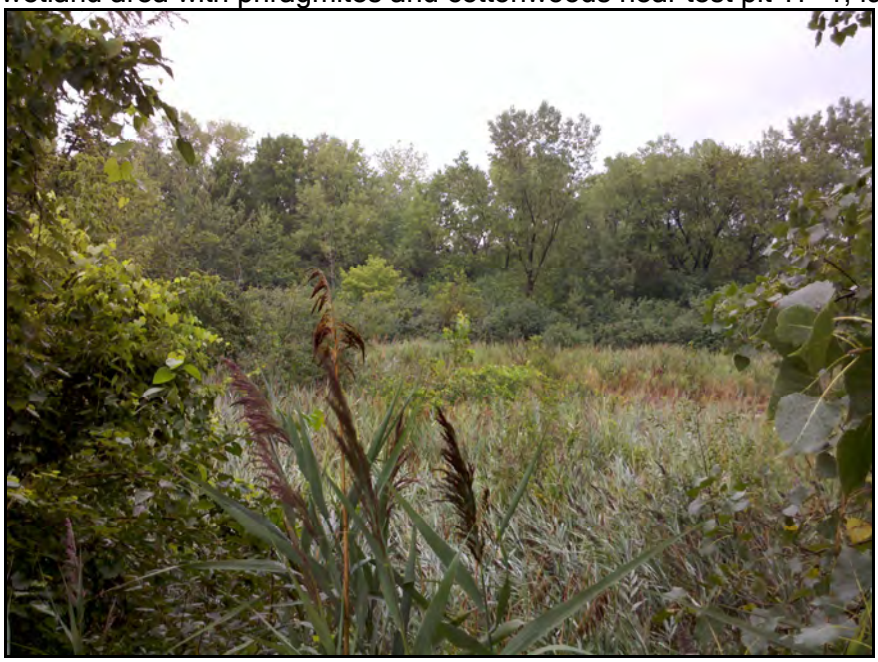

Vegetation near test pit TP-1, facing west

Along existing train tracks near test pit TP-2, facing northwest

Vegetation near TP-3, facing northwest

Train tracks between test pits TP-3 and TP-4, facing northwest

Phragmites near intersection of 130th Street and Cottage Grove Avenue, facing northwest

Scientific name: *Daucus carota*
Common name: Queen Anne's lace

Scientific Name: *Phragmites australis*
Common Name: common reed

Scientific name: *Populous deltoides*
Common name: eastern cottonwood

Scientific name: *Prunus virginiana*
Common name: chokecherry

Scientific name: *Rhamnus cathartica*
Common name: common buckthorn

Scientific name: *Rhus typhina*
Common name: staghorn sumac

Scientific name: *Ulmus americana*
Common name: American elm

Appendix E
Soil Sample Summary

Sampling Point	TP-1
Location	UPRR Rail Alternative
City	Chicago
County	Cook
State	IL
Sampling Date	August 13, 2012
Is vegetation significantly disturbed?	Yes
Is soil significantly disturbed?	Yes
Is hydrology disturbed?	Yes
Is hydrophytic vegetation present?	Yes
Is hydric soil present?	Indeterminate/disturbed
Is wetland hydrology present?	Unknown/dry season

Vegetation

Type	Indicator Status
Populous deltoids (eastern cottonwood)	FAC+
Phragmites australis (phragmites)	FACW+
Daucus carota (Queen Anne's Lace)	--
Prunus virginiana (Chokecherry)	FAC-

Legend: OBL - Obligate Wetland; FACW - Facultative Wetland; FAC - Facultative;
FACU - Facultative Upland; UPL - Obligate Upland
(+) and (-) indicate regional frequency of occurrence in wetlands

Soil

0"-12" -- 2.5Y 2.5/1 (black)
uniformly same color to 12" below grade
50% small gravel, some fines including silts

Hydrology

No surface water present
No water table present
No saturation present
No obvious hydrology at the time of the field survey

Sampling Point	TP-2
Location	UPRR Rail Alternative
City	Chicago
County	Cook
State	IL
Sampling Date	August 13, 2012
Is vegetation significantly disturbed?	Yes
Is soil significantly disturbed?	Yes
Is hydrology disturbed?	Yes
Is hydrophytic vegetation present?	Yes
Is hydric soil present?	Indeterminate/disturbed
Is wetland hydrology present?	Unknown/dry season

Vegetation

Type	Indicator Status
Populous deltoids (eastern cottonwood)	FAC+
Daucus carota (Queen Anne's Lace)	--
Ulmus americana (American Elm)	FACW

Legend: OBL - Obligate Wetland; FACW - Facultative Wetland; FAC - Facultative;
FACU - Facultative Upland; UPL - Obligate Upland
(+) and (-) indicate regional frequency of occurrence in wetlands

Soil

0"-2" -- 10 YR 2/1 (black) organic
2"-7" -- 5 Y 3/1 (very dark gray) gravelly fill
7"-9" -- 5 Y 2.5/2 (black)

Hydrology

No surface water present
No water table present
No saturation present
No obvious hydrology at the time of the field survey

Sampling Point	TP-3
Location	UPRR Rail Alternative
City	Chicago
County	Cook
State	IL
Sampling Date	August 13, 2012
Is vegetation significantly disturbed?	Yes
Is soil significantly disturbed?	Yes
Is hydrology disturbed?	Yes
Is hydrophytic vegetation present?	Yes
Is hydric soil present?	Indeterminate/disturbed
Is wetland hydrology present?	Unknown/dry season

Vegetation

Type	Indicator Status
Populous deltoids (eastern cottonwood)	FAC+
Daucus carota (Queen Anne's Lace)	--
Rhus typhina (Staghorn sumac)	--

Legend: OBL - Obligate Wetland; FACW - Facultative Wetland; FAC - Facultative;
FACU - Facultative Upland; UPL - Obligate Upland
(+) and (-) indicate regional frequency of occurrence in wetlands

Soil

0"-3" -- organic

3"-12" -- 5 Y 4/1 (dark gray) compacted clay/silt; potentially fill; potentially hydric

Hydrology

No surface water present
No water table present
No saturation present
No obvious hydrology at the time of the field survey

Sampling Point	TP-4
Location	UPRR Rail Alternative
City	Chicago
County	Cook
State	IL
Sampling Date	August 13, 2012
Is vegetation significantly disturbed?	Yes
Is soil significantly disturbed?	Yes
Is hydrology disturbed?	Yes
Is hydrophytic vegetation present?	Yes
Is hydric soil present?	Indeterminate/disturbed
Is wetland hydrology present?	Unknown/dry season

Vegetation

Type	Indicator Status
Populous deltoids (eastern cottonwood)	FAC+
Daucus carota (Queen Anne's Lace)	--
Rhus typhina (Staghorn sumac)	--

Legend: OBL - Obligate Wetland; FACW - Facultative Wetland; FAC - Facultative;
FACU - Facultative Upland; UPL - Obligate Upland
(+) and (-) indicate regional frequency of occurrence in wetlands

Soil

0"-8" -- 10 YR 2/1 organic
8"-12" -- 10 YR 7/3 with red features (7.5 YR 5/8)

Hydrology

No surface water present
No water table present
No saturation present
No obvious hydrology at the time of the field survey

Appendix F
FEMA FIRM Summary

Map Number 17031C0655J

NOTES TO USERS

PANEL INDEX

Panel Not Printed

LEGEND

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0655J

FIRM

FLOOD INSURANCE RATE MAP

COOK COUNTY, ILLINOIS

AND INCORPORATED AREAS

PANEL 655 OF 832

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

MAP NUMBER 17031C0655J

MAP REVISED AUGUST 19, 2008

Federal Emergency Management Agency

Map Number 17031C0661J

NOTES TO USERS

PANEL INDEX

Panel Not Printed

LEGEND

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 661J

FIRM

FLOOD INSURANCE RATE MAP

COOK COUNTY, ILLINOIS

AND INCORPORATED AREAS

PANEL 661 OF 832

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

MAP NUMBER 17031C0661J

MAP REVISED AUGUST 19, 2008

Federal Emergency Management Agency

Map Number 17031C0645J

NOTES TO USERS

PANEL INDEX

Panel Not Printed

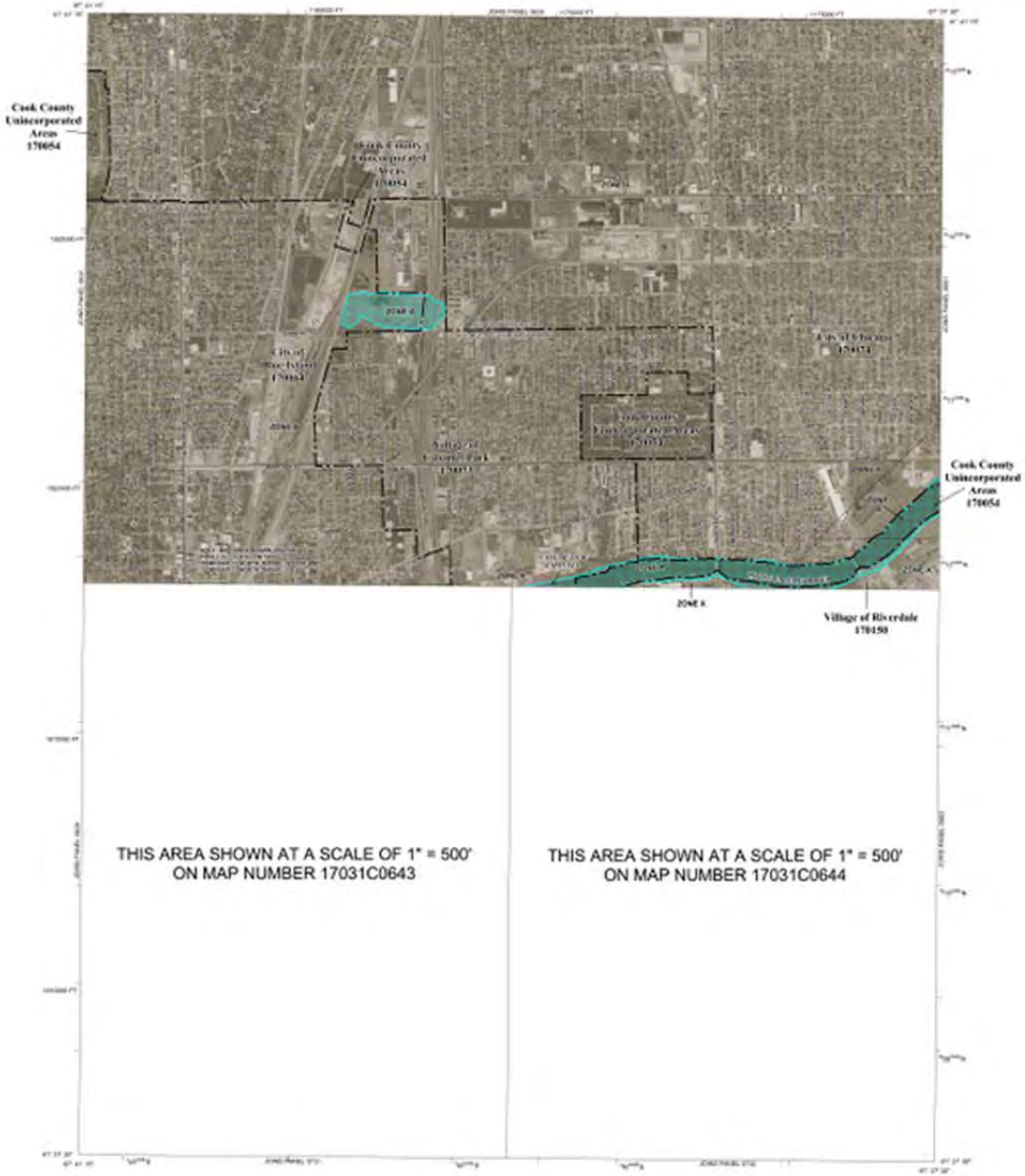

LEGEND

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0645J

FIRM

FLOOD INSURANCE RATE MAP

COOK COUNTY, ILLINOIS

AND INCORPORATED AREAS

PANEL 645 OF 832

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

MAP NUMBER 17031C0645J

MAP REVISED AUGUST 19, 2008

Federal Emergency Management Agency

Appendix G
2014–2015 Red Line Extension Project Update

2014-2015 Red Line Extension Project Update

From 2012-2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012-2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative–the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Water Resources

In August 2015, CTA completed a wetland delineation of the areas identified as containing potential wetlands and applied the general procedures detailed in the 1987 USACE *Wetland Delineation Manual* and the 2010 *Regional Supplement-Midwest Region*.

Based on the results of the wetland delineation, CTA identified 15 wetland areas totaling 15.34 acres of potentially affected wetlands at the site of the 130th Street station and the 120th Street yard and shop. All wetland areas throughout this area are of low floristic quality and wetland function.

The wetland delineation report is included with this appendix, and contains detailed information about the fieldwork and findings.

15-0218

WETLAND DELINEATION REPORT

CTA RED LINE EXTENSION – LAKE CALUMET

CHICAGO, COOK COUNTY, ILLINOIS

PREPARED FOR:

CDM Smith
14432 SE Eastgate Way, Suite 100
Bellevue, WA 98007

SEPTEMBER 16, 2015

Revised October 1, 2015

26575 W. COMMERCE DRIVE, SUITE 601, VOLO, ILLINOIS 60073
OFFICE (847) 740-0888 FAX (847) 740-2888

INTRODUCTION

A wetland delineation of the 78.9-acre permanent project envelope for the southern portion of the Chicago Transit Authority's Red Line Extension, near Lake Calumet was conducted on August 13 and 19, 2015. The site is located west of Interstate 94 (Bishop Ford Expressway), north of 130th Street, along the east side of the Metropolitan Water Reclamation District of Greater Chicago's (MWRD) Calumet Waste Water Treatment plant within the City of Chicago, Cook County, Illinois (Exhibit 1). The site is further located in Sections 22, 26, and 27, Township 37 North, Range 14 East. The project permanent envelope includes Cottage Grove Avenue, parts of the MWRD property, railroad lines, and other disturbed urban-industrial landscapes. The property has been disturbed by various grading, dumping, and filling activities over the past decades.

EXISTING DATA

The United States Geological Survey (USGS) topographic map indicates open water at the locations of the MWRD sewage lagoons and sludge drying beds (Exhibit 2), but does not indicate any wetlands or blue line streams within the defined project permanent envelope. The National Wetland Inventory (NWI) map similarly depicts the sewage lagoons and sludge drying beds, but also indicates the presence of wetlands within the project permanent envelope (Exhibit 3) that are designated PF01/EMCd (palustrine, forested, broad-leaved deciduous/emergent seasonally flooded, partially drained/ditched). The Flood Insurance Rate Map indicates no mapped floodplain or floodway within the project permanent envelope (Exhibit 4). The USGS Hydrologic Atlas indicates no flood of record waters within the project permanent envelope (Exhibit 5). The Cook County Soil Survey (Exhibit 6) shows six (6) different soil series of orthents, or urban land within the project permanent envelope.

WETLAND DELINEATION

Wetlands within the project permanent envelope were delineated by Vincent Mosca and Jeffrey Mengler, PWS of Hey and Associates, Inc. using procedures outlined in the 1987 Corps of Engineers' (Corps) Wetland Delineation Manual and the 2010 Regional Supplement: Midwest Region. The entire property was inspected, with areas supporting wetland plant species prioritized for investigation. If inspection revealed that wetland plant species comprised more than 50 percent of the plant cover, the suspected wetland was further examined for field indicators of hydric soil and hydrology. The Corps-accepted field indicators of hydric soil include: gleyed and low chroma matrix and mottle colors, and iron and manganese concretions. Necessary hydric soil indicators were field verified in the wetland area if possible. In most cases in this

project permanent envelope, the gravel and fill precluded investigation with hand tools, and the disturbed profiles would not have been illuminating. The Corps-approved field indicators of hydrology include: visual observation or photographic evidence of soil inundation or saturation during the growing season, oxidized channels associated with living roots and rhizomes, water marks, drift lines, waterborne sediment deposits, waterstained leaves, surface scoured areas and drainage patterns. Wetland hydrologic criteria were met in the areas delineated as wetland.

Lists of observed plant species in the wetland areas were compiled and data were gathered to complete Corps jurisdictional dataforms. A native vegetative quality rating was calculated for each wetland using the Floristic Quality Assessment (FQA) of Swink and Wilhelm as published in *Plants of the Chicago Region,* 1994. The FQA method assigns to plant species a rating that reflects the fundamental conservatism that the species exhibits for natural habitats. A native species that exhibits specific adaptations to a narrow spectrum of the environment is given a high rating. Conversely, a ubiquitous species that exhibits adaptations to a broad spectrum of environmental variables is given a low rating. Utilizing this method, a Floristic Quality Index (FQI) is derived for a given area. The FQI is an indication of native vegetative quality for an area: generally 1-19 indicates low vegetative quality, 20-35 indicates high vegetative quality and above 35 indicates "Natural Area" quality.

RESULTS

Fifteen (15) wetlands totaling 15.34 acres within the project permanent envelope were delineated on the property (Exhibit 7). The wetland boundaries shown on an aerial photograph in Exhibit 7 were recorded with sub-meter accuracy GPS unit in the field on August 13 and 19, 2015. Lists of the observed plant species for the wetland areas are given in Exhibit 8. The Corps' jurisdictional dataforms for upland and wetland areas are included as Exhibit 9. Georeferenced representative color photographs of the upland and wetland areas are provided in Exhibit 10.

Following is a table that summarizes the delineated wetlands. Wetland acreages were calculated based upon the sub-meter accuracy GPS data imported into a Geographical Information System (GIS).

Table 1. Summary of Wetlands within Project Limits.

Wetland	Area within Project Limits (acres)	Total Wetland Area (acres)	FQI[1]	Native Mean C[2]	HQAR[3]	Wetland Type	Dominant Vegetation
1 & 2	0.19	0.38	3.89	1.38	No	Drainage swale	Common reed (*Phragmites australis*)
3	0.83	0.83	6.36	4.5	No[4]	Marsh	Common reed and purple loosestrife (*Lythrum salicaria*)
4	0.07	1.85	6.43	2.43	No	Drainage swale	Common reed
5	2.73	2.73	4.95	1.75	No	Drainage swale	Common reed
6	2.26	2.26	11.13	2.43	No	Drainage swale & degraded wet prairie	Common reed
7	1.63	1.63	13.68	2.79	No	Drainage swale & degraded wet prairie	Common reed
8	1.61	1.77	6.43	2.43	No	Degraded marsh	Common reed
9	1.09	1.09	2.04	0.83	No	Drainage swale/marsh	Common reed
10	0.07	0.07	6.43	2.43	No	Drainage ditch	Common reed
11	0.05	n/a	3.00	1.50	No	Drainage ditch	Common reed
12	3.56	3.56	3.00	1.50	No	Degraded marsh	Common reed
13	0.53	0.66	2.86	1.17	No	Wooded	Box Elder (Acer negundo), Common reed (*Phragmites australis*)
14	0.20	0.88	4.00	1.33	No	Drainage swale	Common reed
15	0.52	n/a	2.00	1.00	No	Drainage swale	Common reed
TOTAL	15.34	17.71					

1 The Floristic Quality Index (FQI) is an indication of native vegetative quality for an area: generally 1-19 indicates low vegetative quality, 20-35 indicates high vegetative quality and above 35 indicates "Natural Area" quality.
2 The Native Mean C is an indication of native vegetative quality for an area. Areas with value of 3.5 or greater are considered high quality.
3 The Chicago District U.S. Army Corps of Engineers has designated various Waters of the United States to be high-quality aquatic resources (HQARs). This designation is based on the definitions found within the Regional Permit Program that became effective April 1, 2007.
4 While this area has a Native Mean C of greater than 3.5, it was based on the presence of only two native species. The remainder of the vegetation was comprised of non-native species and would not be considered high quality in any ecological assessment.

Wetlands 1 and 2 are both part of the same drainage swale along the east-west portion of South Cottage Grove Avenue, just north of 135th Street. It is dominated by common reed and defined on the south by the 135th Street embankment, on the north and west by the Cottage Grove Avenue entrance off 135th Street, and on the east by a railroad access road. It is of very low floristic quality and wetland function, and has debris and trash scattered throughout it.

Wetland 3 is on the north side of the east-west portion of South Cottage Grove Avenue, and is connected to Wetland areas 5 and 9. It is dominated by common reed. It is defined by a gravel road and fill on all sides. This was one of the few areas that had standing water during the August 2015 assessment. It is of

low quality and function. It should be noted that the mean C value is 4.5, which suggests a high quality area, but this mean C value is based on the only 2 native species observed – the other 4 species were all invasive non-native species.

Wetland 4 is another drainage swale that runs from the entrance to the MWRD Calumet Wastewater Treatment Plant (WWTP) west along 135th Street. It is entirely dominated by common reed. The north boundary is defined by a mowed embankment up to the WWTP facility fence, and the southern boundary is defined by 135th Street and shoulder. The mowed area was composed of typical upland turf and weed species and not hydrophytic species, indicating that the edge of mowing corresponded with the edge of wetland. Wetland 4 appears to receive drainage from 135th Street via several stormsewers that create the undulating southern boundary.

Wetland 5 is a drainage swale that runs along the west side of South Cottage Grove Avenue from Wetland 3 north to the entrance and gatehouse for the Calumet WWTP. It is dominated by common reed, with patches of sandbar willow (*Salix interior*) and cottonwood trees (*Populus deltoides*). The eastern boundary is defined by Cottage Grove Avenue and the western boundary is a chain-link fence and mowed turf grass within the MRWDGC property.

Wetland 6 is a wet prairie drainage swale along a Indiana Harbor Belt Railroad line that does not appear to have frequent use. It is generally bounded by the railroad ballast on the west side and higher ground dominated by common buckthorn (*Rhamnus cathartica*) on the east side. Dominant vegetation was common reed, though pockets of native plant species were observed.

Similarly, Wetland 7 is a drainage swale on the west side of the same Indiana Harbor Belt Railroad line through the site. It is also bounded by the railroad ballast and higher ground covered in common buckthorn. It is of moderate floristic quality when calculated to include the scattered native wet prairie species observed, but is largely dominated by the invasive common reed.

Wetland 8 is an area of degraded marsh inside the MWRD Calumet WWTP perimeter fence, located just southeast of the gatehouse and entrance. It is surrounded by areas of fill/gravel that are much higher in elevation than the ground in the wetland area. The embankments around this wetland pocket are very steep and eroded, often at a 1:1 slope or steeper. The vegetation was dominated by common reed. It is an area of very low quality.

Wetland 9 is connected to Wetland 3 and ultimately Wetland 5. At the southern end of Wetland 5, these 3 wetland areas form a u-shaped marsh swale around a gravel fill pad that is 3-4 feet higher in elevation. This

area is bounded by the MWRD Calumet WWTP entrance road and Cottage Grove Avenue. The vegetation was dominated by common reed, and it is of low quality.

Wetland 10 is a small drainage ditch that runs from the 135th Street bridge over the Indiana Harbor Belt Railroad/Metra South Shore rail lines, to Cottage Grove Avenue. It is generally lined by cottonwoods and dead green ash (*Fraxinus pennsylvanica*) with common reed dominant in the ditch. The ditch was also littered with old tires and other refuse.

Wetland 11 is a small part of a wet area between the gravel railroad access road, and the Metra South Shore rail line. Most of the wetland is outside of the project limits and is dominated by common reed.

Wetland 12 is a marsh area located just north of the MWRD Calumet WWTP gatehouse. It is bounded by gravel access roads on the east and west sides, and the entrance road on the south. On the north side the wetland gives way to higher ground dominated by common buckthorn and a variety of upland weeds. The marsh is dominated by common reed.

Wetland 13 is a small wetland drainage swale located between the Metra South Shore Electric railroad line and the Indiana Harbor Belt Railroad freight line. It is dominated by common reed and is bounded by railroad ballast.

Wetland 14 is a swale located on the east side of the Indiana Harbor Belt Railroad/Metra South Shore line, but west of the MWRD fence around some sludge drying beds and other facilities. It is partially wooded by box elder and cottonwood but in open areas remains dominated by common reed.

Wetland 15 refers to a narrow drainage swale dominated by common reed located along a MWRD gravel access road in the northwest part of the project permanent envelope. It is of very low quality.

There are no High Quality Aquatic Resources on the subject property or mapped on adjacent properties. All wetlands observed were dominated by the invasive common reed, often in dense monotypic stands. The surrounding land is primarily developed urban or industrial landscapes.

SUMMARY AND CONCLUSIONS

The wetland delineation revealed 15 wetland areas totaling 15.34 acres within the project permanent envelope as depicted on Exhibit 7. All wetlands were of low quality and dominated by the invasive common reed. Most of the wetland boundaries are defined by fill and other manmade features. A jurisdictional determination will need to be requested from the U.S. Army Corps of Engineers to determine if the wetlands are under their Clean Water Act jurisdiction or if they are isolated wetlands of Cook County.

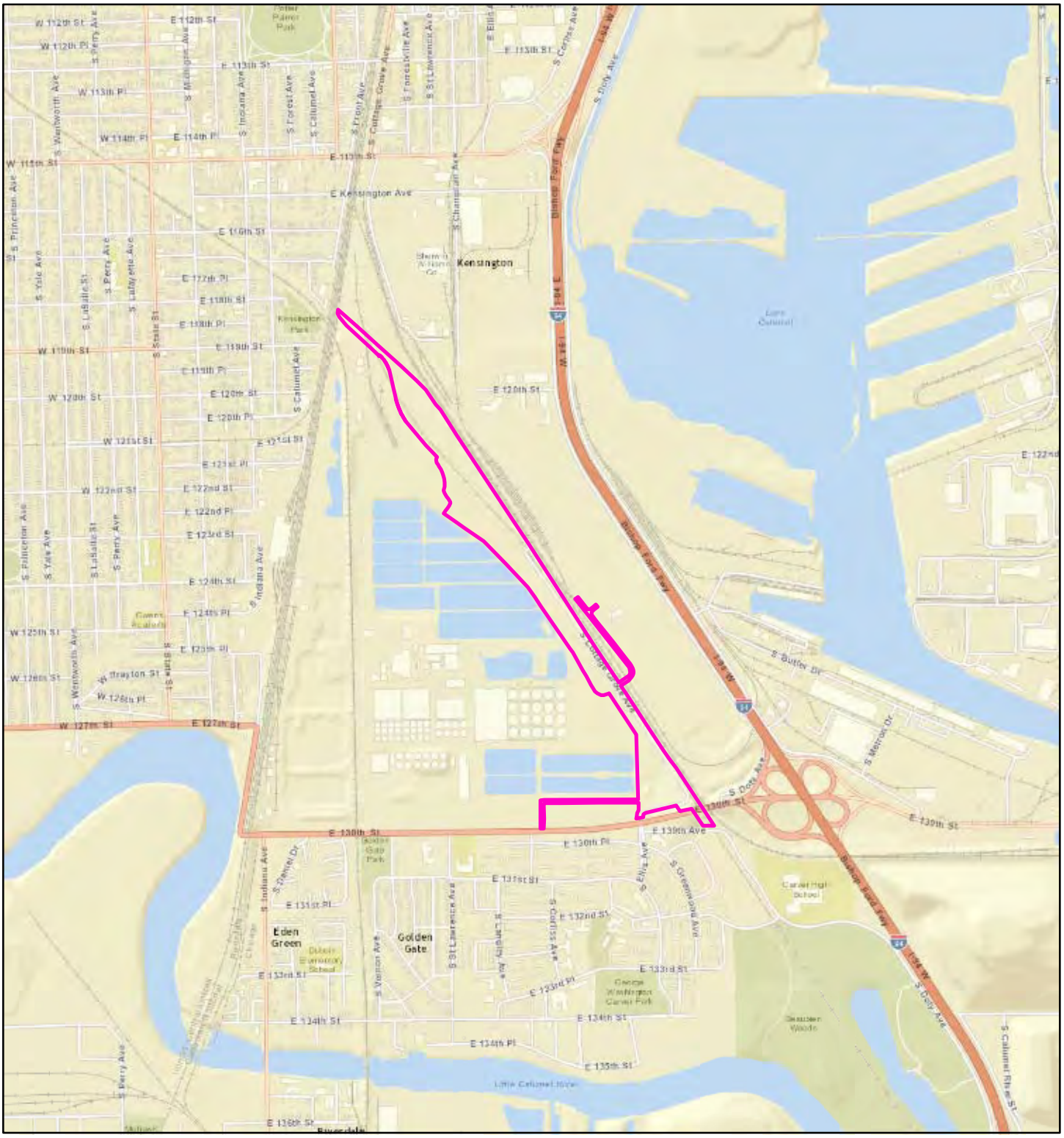

Scale:

0 2,000 Feet

Orientation:

Legend:

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Location Information:

T.37N.-R.14E., Sections 22, 26 & 27

Exhibit Title:

Project Location

Exhibit:

1

Scale:

0 2,000 Feet

Orientation:

Legend:

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Location Information:

Lake Calumet Quadrangle

Exhibit Title:

U.S.G.S. Topographic Map

Exhibit:

2

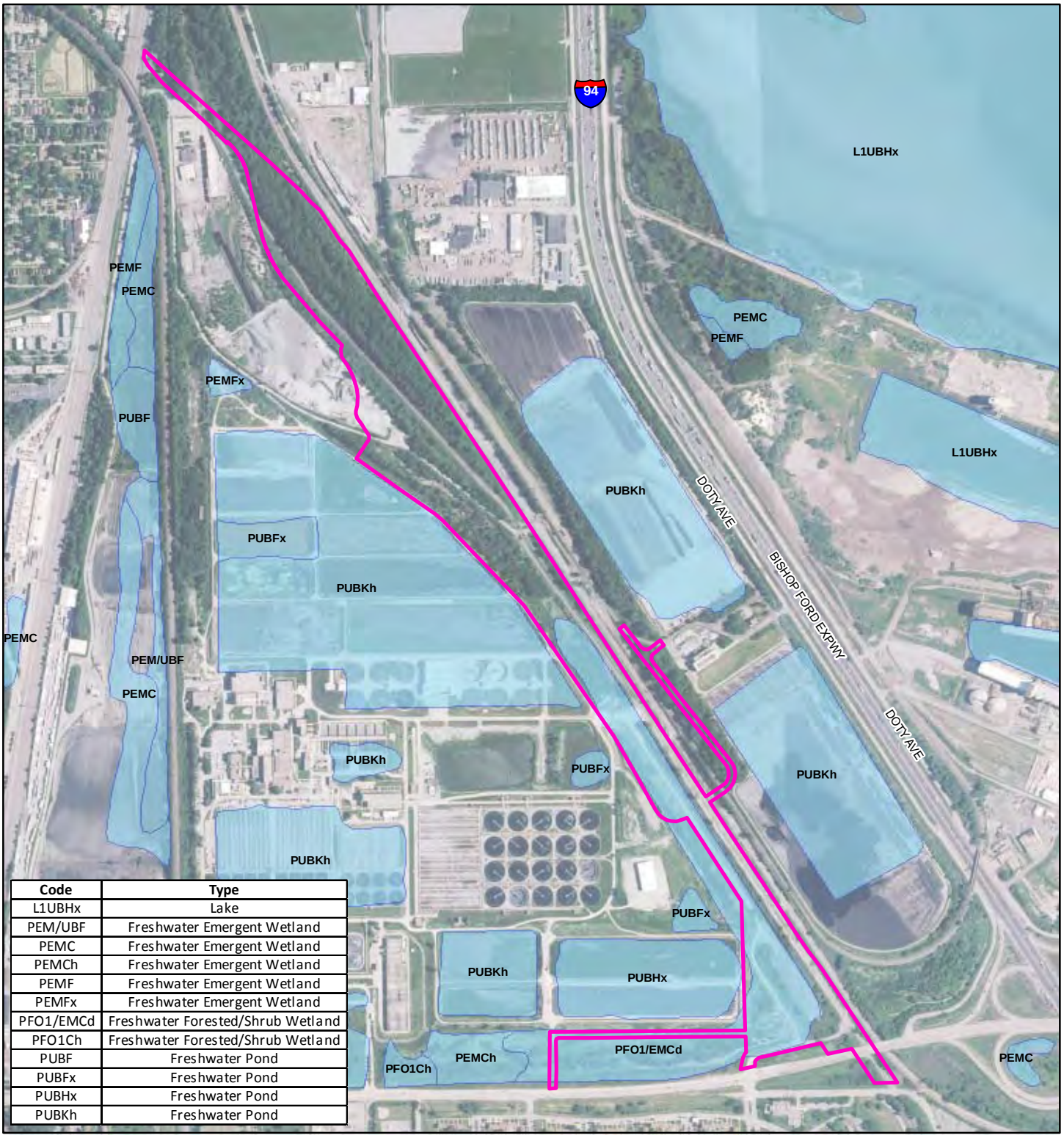

Code	Type
L1UBHx	Lake
PEM/UBF	Freshwater Emergent Wetland
PEMC	Freshwater Emergent Wetland
PEMCh	Freshwater Emergent Wetland
PEMF	Freshwater Emergent Wetland
PEMFx	Freshwater Emergent Wetland
PFO1/EMCd	Freshwater Forested/Shrub Wetland
PFO1Ch	Freshwater Forested/Shrub Wetland
PUBF	Freshwater Pond
PUBFx	Freshwater Pond
PUBHx	Freshwater Pond
PUBKh	Freshwater Pond

Scale:

0 1,000 Feet

Orientation:

Legend:

National Wetland Inventory

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

NWI Date:

1981

Exhibit Title:

National Wetland Inventory

Exhibit:

3

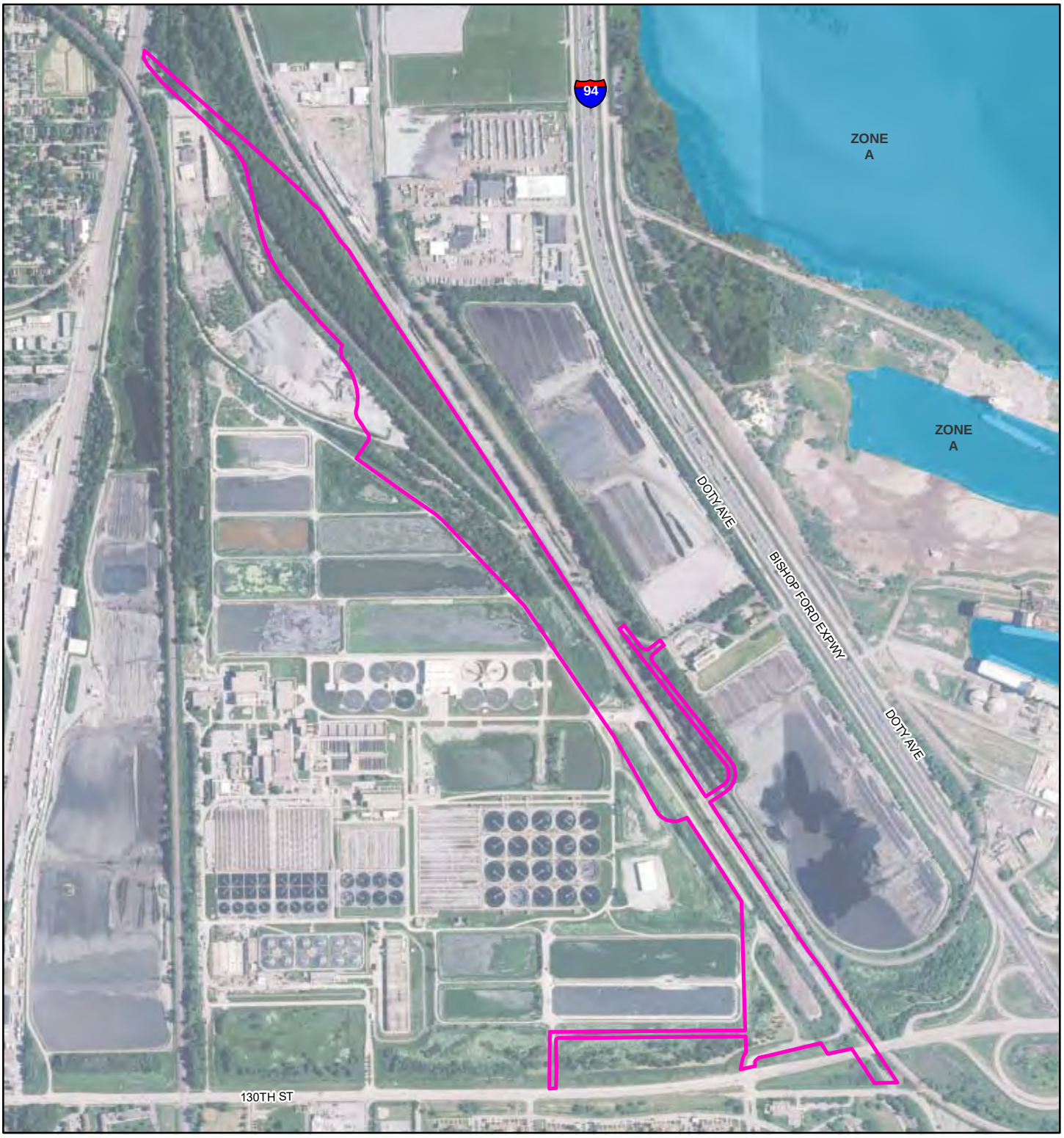

Scale:

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Orientation:

Legend:

100 Year Flood Zone

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Panel #:

17031C0661J

Exhibit Title:

Flood Insurance Rate Map

Exhibit:

4

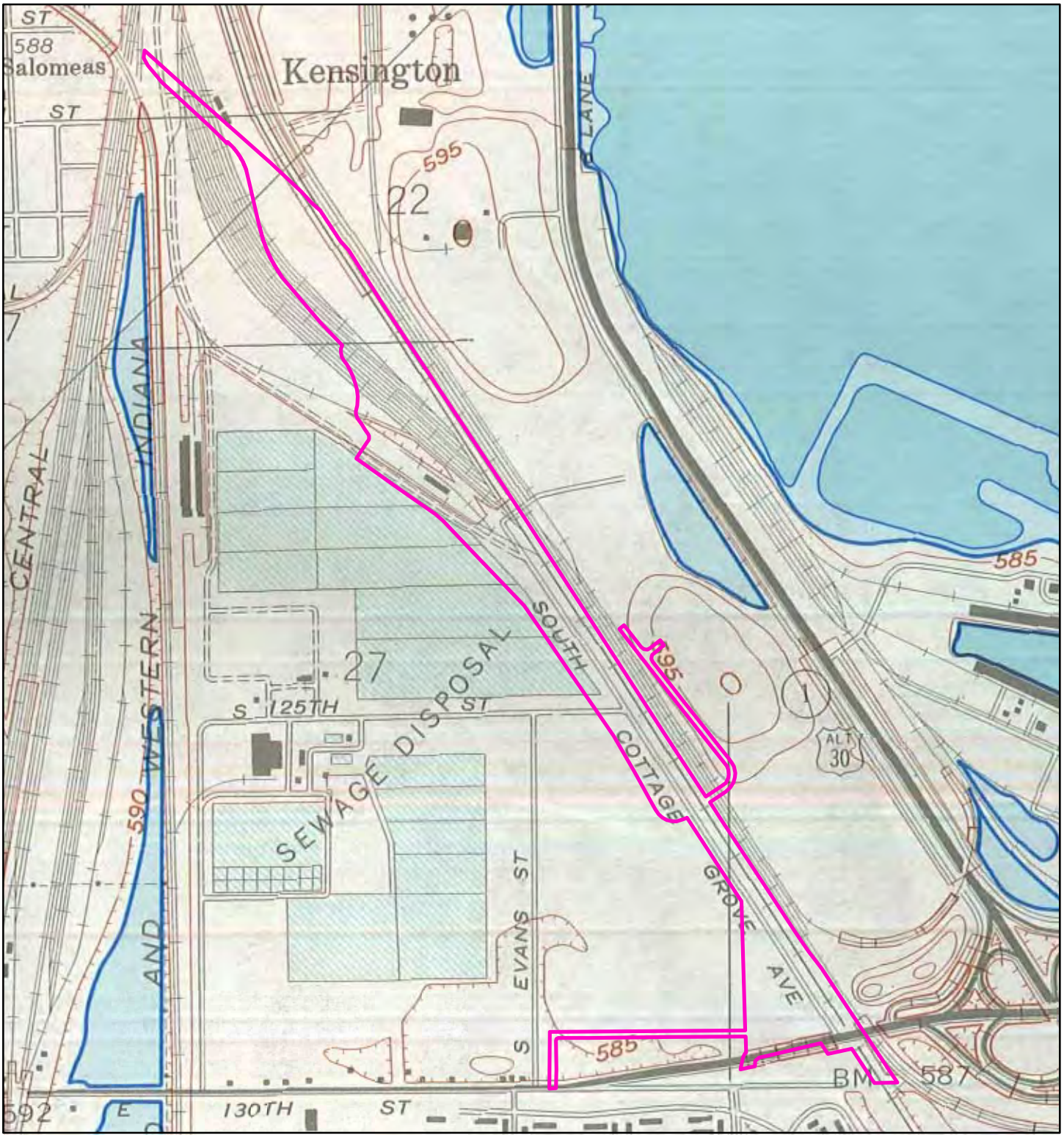

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Orientation:

Legend:

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Hydro Atlas Date:

1966

Exhibit Title:

U.S.G.S Hydrologic Atlas

Exhibit:

5

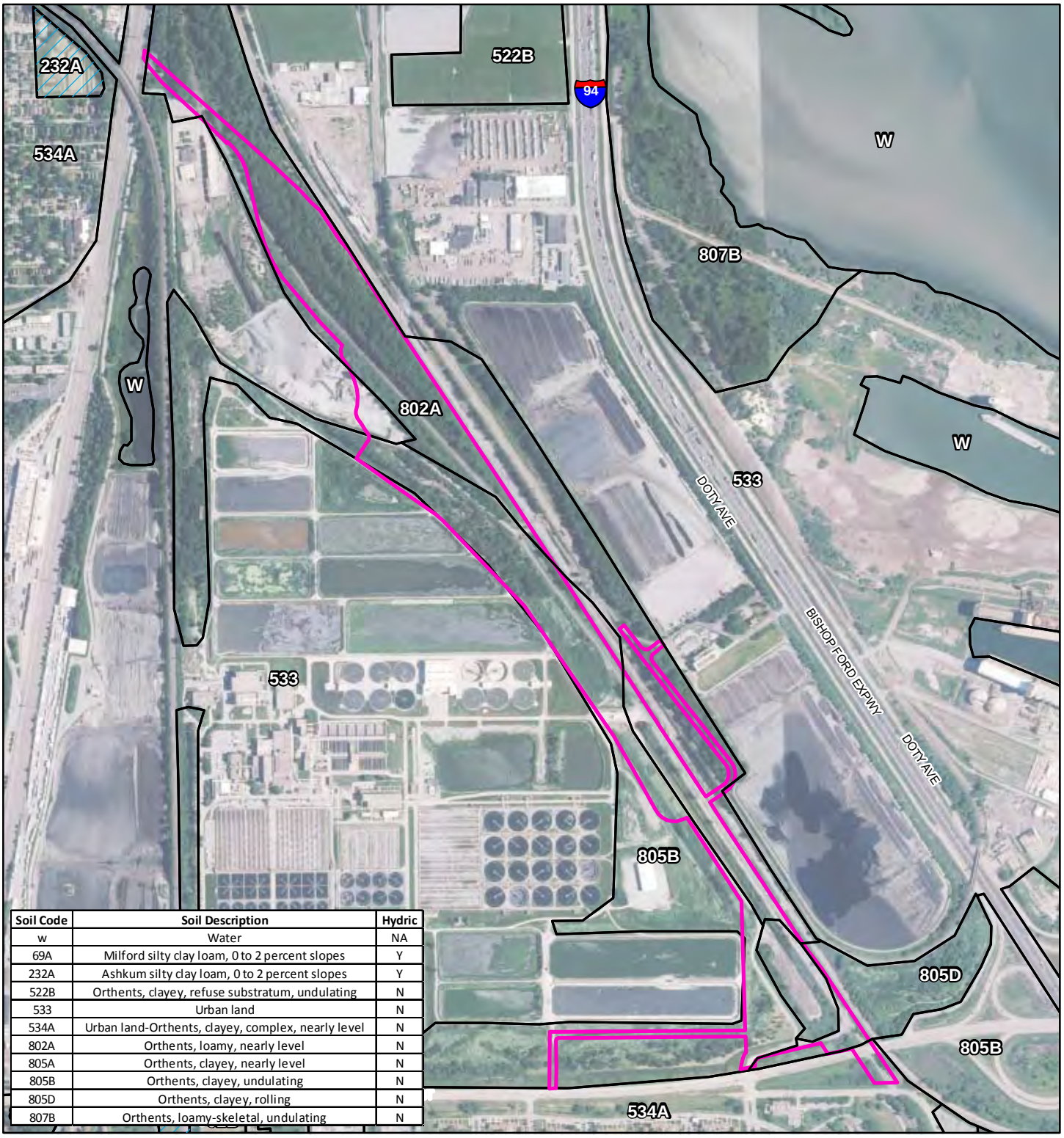

Soil Code	Soil Description	Hydric
w	Water	NA
69A	Milford silty clay loam, 0 to 2 percent slopes	Y
232A	Ashkum silty clay loam, 0 to 2 percent slopes	Y
522B	Orthents, clayey, refuse substratum, undulating	N
533	Urban land	N
534A	Urban land-Orthents, clayey, complex, nearly level	N
802A	Orthents, loamy, nearly level	N
805A	Orthents, clayey, nearly level	N
805B	Orthents, clayey, undulating	N
805D	Orthents, clayey, rolling	N
807B	Orthents, loamy-skeletal, undulating	N

Scale:

0 1,000 Feet

Orientation:

Legend:

Hydric Soils

Soil Units

Project Permanent Envelope

Project Name:

CTA Red Line Extension

Prepared for:

CDM Smith

Project Number: 15-0218

Latest Revision: 10/1/2015

Prepared by:

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

Soil Survey Date:

2012

Exhibit Title:

NRCS Soil Survey

Exhibit:

6

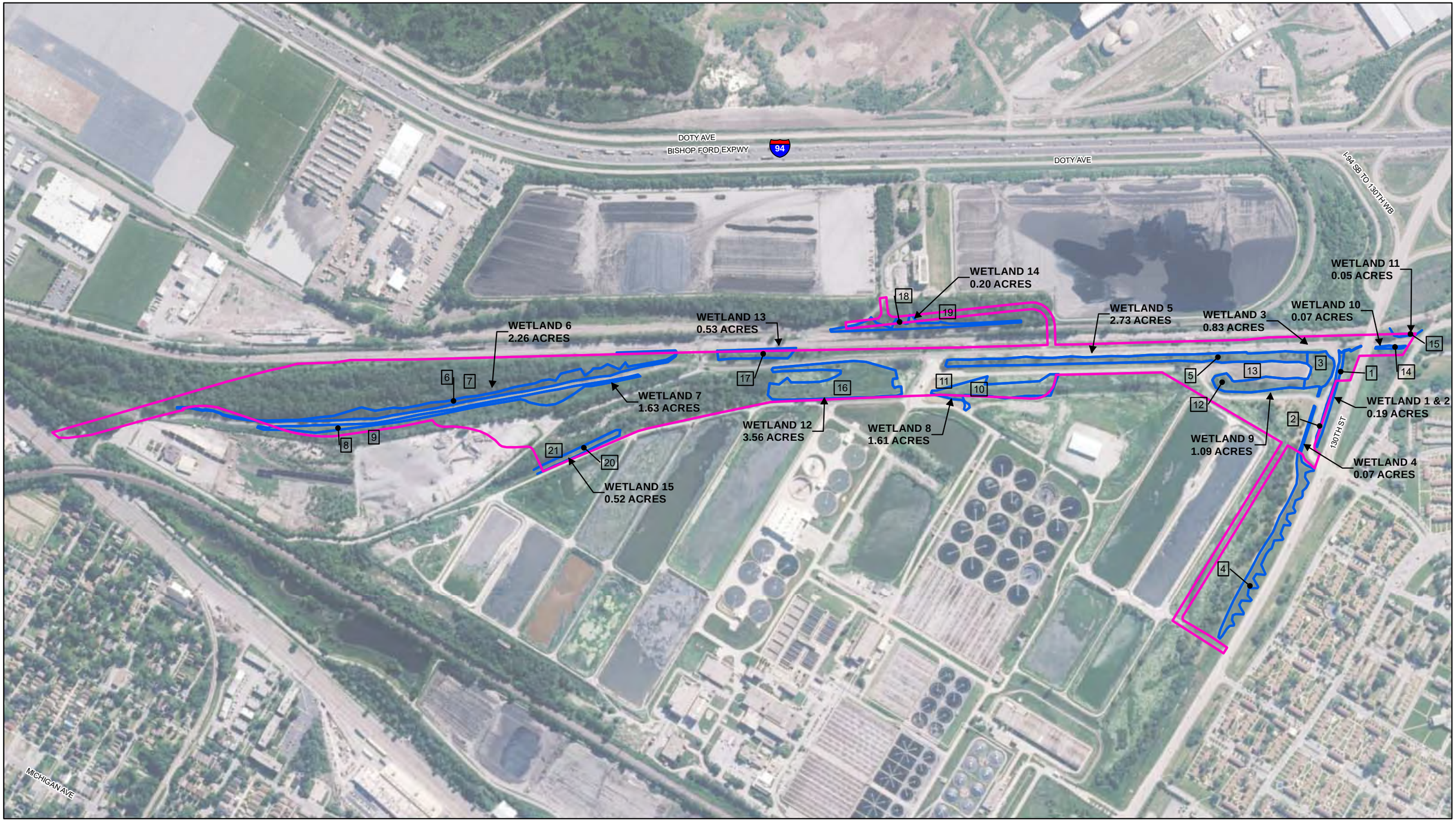

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:
0 600 Feet

Project Number: 15-0218

Orientation:

Latest Revision: 10/1/2015

Legend:
- [x] Data Point
- Surveyed Wetland Boundary (Labled wetland acreages for area within Project Permanent Envelope only)
- Project Permanent Envelope

Project Name:
CTA Red Line Extension

Aerial Date:
2014

Prepared For:
CDM Smith

Exhibit Title:
Wetland Boundary

Exhibit:
7

The following floristic inventories, prepared by Hey and Associates, Inc., follow the nomenclature given in the National Wetland Plant List: (Lichvar, R. W., M. Butterwick, N.C. Melvin, and W. N. Kirchner 2014); The National Wetland Plant List 2014 Update of Wetland Ratings. (Phytoneuron 2014-41:1-42); and bio data/nomenclature follows Kartesz, J. T., 2013 *Floristic Synthesis of North America. Version 1.0 Biota of North American Program.* It also provides local synonymies based on Swink and Wilhelm's 1994 *Plants of the Chicago Region.*

Each species is listed with its database acronym and coefficient of conservatism (0 = weedy, 10 = conservative), and followed by its corresponding National Wetland Category (OBL = obligate wetland species, FACW = facultative wetland, FAC - facultative species, FACU = facultative upland, UPL = upland species), habit, duration, and nativity. Native taxa are those species believed to have been present in the Chicago region prior to European settlement.

The conservatism metric information above the species list provides analysis of the vegetative quality of the site. It shows the total number of species present (species richness), the mean coefficient of conservatism (Mean C), the floristic quality index (FQAI), and mean wetness; calculated separately for native species only and then including the adventive species (W/Adventives). The Mean C datum indicates the average coefficient of conservatism. The FQAI is derived by multiplying the Mean C by the square root of the number of species. If the FQAI of an area registers in the middle 30's or higher, one can be relatively certain that there is sufficient native character to be of rather profound environmental importance in terms of a regional natural area perspective. The wet indicator value indicates the mean or average wet indicator category for all species present, natives only and then with adventives – numbers less than 0 indicate hydrophytic vegetation, while numbers greater than 0 correspond to the upland vegetation categories. The table also provides the number of species in each physiognomic or habit class, native versus adventive along with their percentage of the total inventory.

Source: Herman, B., Sliwinski, R. and S. Whitaker. 2013. Chicago Region FQA (Floristic Quality Assessment) Calculator. U.S. Army Corps of Engineers, Chicago, IL. Version September 29, 2014

SITE: Wetland 1 & 2 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**1.38**
MEAN C (ALL SPECIES)	0.85
MEAN C (NATIVE TREES)	1.50
MEAN C (NATIVE SHRUBS)	1.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	**3.89**
FQAI (ALL SPECIES)	3.05
ADJUSTED FQAI	10.79
% C VALUE 0	0.46
% C VALUE 1-3	0.54
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	13
SPECIES RICHNESS (NATIVE)	8
% NON-NATIVE	0.38
WET INDICATOR (ALL)	-0.23
WET INDICATOR (NATIVE)	-0.50
% HYDROPHYTE (MIDWEST)	0.77
% NATIVE PERENNIAL	0.62
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.92

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
acesai	*Acer saccharinum*	*Acer saccharinum*	Silver Maple	0	FACW	Tree	Perennial	Native
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive
frapen	*Fraxinus pennsylvanica*	*Fraxinus pennsylvanica subintegerrima*	Green Ash	1	FACW	Tree	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
salint	*Salix interior*	*Salix interior*	Sandbar Willow	1	FACW	Shrub	Perennial	Native
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
ulmame	*Ulmus americana*	*Ulmus americana*	American Elm	3	FACW	Tree	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 3 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**4.50**
MEAN C (ALL SPECIES)	1.50
MEAN C (NATIVE TREES)	2.00
MEAN C (NATIVE SHRUBS)	7.00
MEAN C (NATIVE HERBACEOUS)	n/a
FQAI (NATIVE SPECIES)	**6.36**
FQAI (ALL SPECIES)	3.67
ADJUSTED FQAI	25.98
% C VALUE 0	0.67
% C VALUE 1-3	0.17
% C VALUE 4-6	0.00
% C VALUE 7-10	0.17

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	6
SPECIES RICHNESS (NATIVE)	2
% NON-NATIVE	0.67
WET INDICATOR (ALL)	-0.67
WET INDICATOR (NATIVE)	-0.50
% HYDROPHYTE (MIDWEST)	0.83
% NATIVE PERENNIAL	0.33
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.83

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
ribame	*Ribes americanum*	*Ribes americanum*	Wild Black Currant	7	FACW	Shrub	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive

SITE: Wetland 4 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**2.43**
MEAN C (ALL SPECIES)	1.00
MEAN C (NATIVE TREES)	n/a
MEAN C (NATIVE SHRUBS)	n/a
MEAN C (NATIVE HERBACEOUS)	2.67
FQAI (NATIVE SPECIES)	**6.43**
FQAI (ALL SPECIES)	4.12
ADJUSTED FQAI	15.58
% C VALUE 0	0.59
% C VALUE 1-3	0.24
% C VALUE 4-6	0.18
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	17
SPECIES RICHNESS (NATIVE)	7
% NON-NATIVE	0.59
WET INDICATOR (ALL)	-0.18
WET INDICATOR (NATIVE)	-0.43
% HYDROPHYTE (MIDWEST)	0.59
% NATIVE PERENNIAL	0.41
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.82

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
ascinc	*Asclepias incarnata*	*Asclepias incarnata*	Swamp Milkweed	4	OBL	Forb	Perennial	Native
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
carnut	*Carduus nutans*	*CARDUUS NUTANS*	Nodding Plumeless-Thistle	0	FACU	Forb	Biennial	Adventive
cirarv	*Cirsium arvense*	*CIRSIUM ARVENSE*	Canadian Thistle	0	FACU	Forb	Perennial	Adventive
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive
solgra	*Euthamia graminifolia*	*Solidago graminifolia nuttallii*	Flat-Top Goldentop	4	FACW	Forb	Perennial	Native
polsca	*Fallopia scandens*	*Polygonum scandens*	Climbing Black-Bindweed	1	FAC	Vine	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
phyame	*Phytolacca americana*	*Phytolacca americana*	American Pokeweed	1	FACU	Forb	Perennial	Native
scipun	*Schoenoplectus pungens*	*Scirpus pungens*	Three-Square	5	OBL	Sedge	Perennial	Native
soldul	*Solanum dulcamara*	*SOLANUM DULCAMARA*	Climbing Nightshade	0	FAC	Vine	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
solsem	*Solidago sempervirens*	*SOLIDAGO SEMPERVIRENS*	Seaside Goldenrod	0	FACW	Forb	Perennial	Adventive
sonuli	*Sonchus arvensis ssp. uliginosus*	*SONCHUS ULIGINOSUS*	Field Sow-Thistle	0	FACU	Forb	Perennial	Adventive
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive

SITE: Wetland 5 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**1.75**
MEAN C (ALL SPECIES)	1.08
MEAN C (NATIVE TREES)	2.00
MEAN C (NATIVE SHRUBS)	4.00
(NATIVE HERBACEOUS)	0.00
FQAI (NATIVE SPECIES)	**4.95**
FQAI (ALL SPECIES)	3.88
ADJUSTED FQAI	13.73
% C VALUE 0	0.62
% C VALUE 1-3	0.31
% C VALUE 4-6	0.00
% C VALUE 7-10	0.08

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	13
SPECIES RICHNESS (NATIVE)	8
% NON-NATIVE	0.38
WET INDICATOR (ALL)	-0.23
WET INDICATOR (NATIVE)	0.00
% HYDROPHYTE (MIDWEST)	0.69
% NATIVE PERENNIAL	0.38
% NATIVE ANNUAL	0.15
% ANNUAL	0.23
% PERENNIAL	0.69

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
ambart	*Ambrosia artemisiifolia*	*Ambrosia artemisiifolia elatior*	Annual Ragweed	0	FACU	Forb	Annual	Native
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
branig	*Brassica nigra*	*BRASSICA NIGRA*	Black Mustard	0	UPL	Forb	Annual	Adventive
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
oenbie	*Oenothera biennis*	*Oenothera biennis*	Evening Primrose	0	FACU	Forb	Biennial	Native
parqui	*Parthenocissus quinquefolia*	*Parthenocissus quinquefolia*	Virginia-Creeper	2	FACU	Vine	Perennial	Native
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
ribame	*Ribes americanum*	*Ribes americanum*	Wild Black Currant	7	FACW	Shrub	Perennial	Native
salint	*Salix interior*	*Salix interior*	Sandbar Willow	1	FACW	Shrub	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 6 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**2.43**
MEAN C (ALL SPECIES)	1.59
MEAN C (NATIVE TREES)	1.00
MEAN C (NATIVE SHRUBS)	1.00
MEAN C (NATIVE HERBACEOUS)	2.76
FQAI (NATIVE SPECIES)	**11.13**
FQAI (ALL SPECIES)	9.02
ADJUSTED FQAI	19.67
% C VALUE 0	0.50
% C VALUE 1-3	0.25
% C VALUE 4-6	0.22
% C VALUE 7-10	0.03

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	32
SPECIES RICHNESS (NATIVE)	21
% NON-NATIVE	0.34
WET INDICATOR (ALL)	-0.06
WET INDICATOR (NATIVE)	-0.14
% HYDROPHYTE (MIDWEST)	0.66
% NATIVE PERENNIAL	0.53
% NATIVE ANNUAL	0.06
% ANNUAL	0.09
% PERENNIAL	0.78

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
agralb	*Agrostis gigantea*	*AGROSTIS ALBA*	Red Top	0	FACW	Grass	Perennial	Adventive
acnalt	*Amaranthus tuberculatus*	*Acnida altissima*	Rough-Fruit Amaranth	0	OBL	Forb	Annual	Native
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
andger	*Andropogon gerardii*	*Andropogon gerardii*	Big Bluestem	5	FAC	Grass	Perennial	Native
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
ascinc	*Asclepias incarnata*	*Asclepias incarnata*	Swamp Milkweed	4	OBL	Forb	Perennial	Native
cirdis	*Cirsium discolor*	*Cirsium discolor*	Field Thistle	2	FACU	Forb	Biennial	Native
comcom	*Commelina communis*	*COMMELINA COMMUNIS*	Asiatic Dayflower	0	FACU	Forb	Annual	Adventive
cypstr	*Cyperus strigosus*	*Cyperus strigosus*	Straw-Color Flat Sedge	1	FACW	Sedge	Perennial	Native
daucar	*Daucus carota*	*DAUCUS CAROTA*	Queen Anne's Lace	0	UPL	Forb	Biennial	Adventive
eupalt	*Eupatorium altissimum*	*Eupatorium altissimum*	Tall Boneset	0	UPL	Forb	Perennial	Native
solgra	*Euthamia graminifolia*	*Solidago graminifolia nuttallii*	Flat-Top Goldentop	4	FACW	Forb	Perennial	Native
polsca	*Fallopia scandens*	*Polygonum scandens*	Climbing Black-Bindweed	1	FAC	Vine	Perennial	Native
gaubie	*Gaura biennis*	*Gaura biennis*	Biennial Beeblossom	2	FACU	Forb	Biennial	Native
helgro	*Helianthus grosseserratus*	*Helianthus grosseserratus*	Saw-Tooth Sunflower	2	FACW	Forb	Perennial	Native
hyppun	*Hypericum punctatum*	*Hypericum punctatum*	Spotted St. John's-Wort	4	FAC	Forb	Perennial	Native
liapyc	*Liatris pycnostachya*	*Liatris pycnostachya*	Priarie Blazing Star	8	FAC	Forb	Perennial	Native
lycame	*Lycopus americanus*	*Lycopus americanus*	Cut-Leaf Water-Horehound	5	OBL	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
physub	*Physalis subglabrata*	*Physalis subglabrata*	Smooth Ground Cherry	0	UPL	Forb	Perennial	Native
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
samcan	*Sambucus nigra ssp. canadensis*	*Sambucus canadensis*	Elderberry	1	FACW	Shrub	Perennial	Native
sapoff	*Saponaria officinalis*	*SAPONARIA OFFICINALIS*	Bouncing-Bett	0	FACU	Forb	Perennial	Adventive
andsco	*Schizachyrium scoparium*	*Andropogon scoparius*	Little Bluestem	5	FACU	Grass	Perennial	Native
soldul	*Solanum dulcamara*	*SOLANUM DULCAMARA*	Climbing Nightshade	0	FAC	Vine	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive
verhas	*Verbena hastata*	*Verbena hastata*	Blue Vervain	4	FACW	Forb	Perennial	Native

SITE: Wetland 7 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**2.79**
MEAN C (ALL SPECIES)	2.03
MEAN C (NATIVE TREES)	n/a
MEAN C (NATIVE SHRUBS)	0.00
MEAN C (NATIVE HERBACEOUS)	2.79
FQAI (NATIVE SPECIES)	**13.68**
FQAI (ALL SPECIES)	11.66
ADJUSTED FQAI	23.81
% C VALUE 0	0.45
% C VALUE 1-3	0.18
% C VALUE 4-6	0.33
% C VALUE 7-10	0.03

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	33
SPECIES RICHNESS (NATIVE)	24
% NON-NATIVE	0.27
WET INDICATOR (ALL)	-0.18
WET INDICATOR (NATIVE)	-0.21
% HYDROPHYTE (MIDWEST)	0.67
% NATIVE PERENNIAL	0.52
% NATIVE ANNUAL	0.09
% ANNUAL	0.09
% PERENNIAL	0.76

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
achmil	*Achillea millefolium*	*ACHILLEA MILLEFOLIUM*	Common Yarrow	0	FACU	Forb	Perennial	Adventive
agralb	*Agrostis gigantea*	*AGROSTIS ALBA*	Red Top	0	FACW	Grass	Perennial	Adventive
andger	*Andropogon gerardii*	*Andropogon gerardii*	Big Bluestem	5	FAC	Grass	Perennial	Native
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
ascsyr	*Asclepias syriaca*	*Asclepias syriaca*	Common Milkweed	0	FACU	Forb	Perennial	Native
cirdis	*Cirsium discolor*	*Cirsium discolor*	Field Thistle	2	FACU	Forb	Biennial	Native
cypstr	*Cyperus strigosus*	*Cyperus strigosus*	Straw-Color Flat Sedge	1	FACW	Sedge	Perennial	Native
daucar	*Daucus carota*	*DAUCUS CAROTA*	Queen Anne's Lace	0	UPL	Forb	Biennial	Adventive
eriann	*Erigeron annuus*	*Erigeron annuus*	Eastern Daisy Fleabane	0	FACU	Forb	Biennial	Native
erican	*Erigeron canadensis*	*Erigeron canadensis*	Canadian Horseweed	0	FACU	Forb	Annual	Native
eupalt	*Eupatorium altissimum*	*Eupatorium altissimum*	Tall Boneset	0	UPL	Forb	Perennial	Native
eupper	*Eupatorium perfoliatum*	*Eupatorium perfoliatum*	Common Boneset	4	OBL	Forb	Perennial	Native
solgra	*Euthamia graminifolia*	*Solidago graminifolia nuttallii*	Flat-Top Goldentop	4	FACW	Forb	Perennial	Native
rhafra	*Frangula alnus*	*RHAMNUS FRANGULA*	Glossy Buckthorn	0	FACW	Shrub	Perennial	Adventive
helgro	*Helianthus grosseserratus*	*Helianthus grosseserratus*	Saw-Tooth Sunflower	2	FACW	Forb	Perennial	Native
hyppun	*Hypericum punctatum*	*Hypericum punctatum*	Spotted St. John's-Wort	4	FAC	Forb	Perennial	Native
jundud	*Juncus dudleyi*	*Juncus dudleyi*	Dudley's Rush	4	FACW	Forb	Perennial	Native
juntor	*Juncus torreyi*	*Juncus torreyi*	Torrey's Rush	4	FACW	Forb	Perennial	Native
laccan	*Lactuca canadensis*	*Lactuca canadensis*	Canadian Blue Lettuce	2	FACU	Forb	Biennial	Native
lycame	*Lycopus americanus*	*Lycopus americanus*	Cut-Leaf Water-Horehound	5	OBL	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
muhglo	*Muhlenbergia glomerata*	*Muhlenbergia glomerata*	Spiked Muhly	10	FACW	Grass	Perennial	Native
oenbie	*Oenothera biennis*	*Oenothera biennis*	Evening Primrose	0	FACU	Forb	Biennial	Native
pancap	*Panicum capillare*	*Panicum capillare*	Common Panic Grass	1	FAC	Grass	Annual	Native

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
pandic	*Panicum dichotomiflorum*	*Panicum dichotomiflorum*	Fall Panic Grass	0	FACW	Grass	Annual	Native
panvir	*Panicum virgatum*	*Panicum virgatum*	Switch Grass	5	FAC	Grass	Perennial	Native
pendig	*Penstemon digitalis*	*Penstemon digitalis*	Foxglove Beardtongue	4	FAC	Forb	Perennial	Native
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
scipen	*Scirpus pendulus*	*Scirpus pendulus*	Rufous Bulrush	4	OBL	Sedge	Perennial	Native
soldul	*Solanum dulcamara*	*SOLANUM DULCAMARA*	Climbing Nightshade	0	FAC	Vine	Perennial	Adventive
solsem	*Solidago sempervirens*	*SOLIDAGO SEMPERVIRENS*	Seaside Goldenrod	0	FACW	Forb	Perennial	Adventive
traohi	*Tradescantia ohiensis*	*Tradescantia ohiensis*	Spiderwort	2	FACU	Forb	Perennial	Native
verhas	*Verbena hastata*	*Verbena hastata*	Blue Vervain	4	FACW	Forb	Perennial	Native

SITE: Wetland 8 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**2.43**
MEAN C (ALL SPECIES)	1.21
MEAN C (NATIVE TREES)	2.00
MEAN C (NATIVE SHRUBS)	1.00
MEAN C (NATIVE HERBACEOUS)	2.67
FQAI (NATIVE SPECIES)	**6.43**
FQAI (ALL SPECIES)	4.54
ADJUSTED FQAI	17.17
% C VALUE 0	0.57
% C VALUE 1-3	0.21
% C VALUE 4-6	0.21
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	14
SPECIES RICHNESS (NATIVE)	7
% NON-NATIVE	0.50
WET INDICATOR (ALL)	-0.21
WET INDICATOR (NATIVE)	-0.57
% HYDROPHYTE (MIDWEST)	0.79
% NATIVE PERENNIAL	0.36
% NATIVE ANNUAL	0.14
% ANNUAL	0.14
% PERENNIAL	0.79

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
cirarv	*Cirsium arvense*	*CIRSIUM ARVENSE*	Canadian Thistle	0	FACU	Forb	Perennial	Adventive
diplac	*Dipsacus laciniatus*	*DIPSACUS LACINIATUS*	Cut-Leaf Teasel	0	UPL	Forb	Biennial	Adventive
echlob	*Echinocystis lobata*	*Echinocystis lobata*	Wild Cucumber	5	FACW	Vine	Annual	Native
polsca	*Fallopia scandens*	*Polygonum scandens*	Climbing Black-Bindweed	1	FAC	Vine	Perennial	Native
jundud	*Juncus dudleyi*	*Juncus dudleyi*	Dudley's Rush	4	FACW	Forb	Perennial	Native
juntor	*Juncus torreyi*	*Juncus torreyi*	Torrey's Rush	4	FACW	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
salfra	*Salix fragilis*	*SALIX FRAGILIS*	Crack Willow	0	UPL	Tree	Perennial	Adventive
salint	*Salix interior*	*Salix interior*	Sandbar Willow	1	FACW	Shrub	Perennial	Native
soldul	*Solanum dulcamara*	*SOLANUM DULCAMARA*	Climbing Nightshade	0	FAC	Vine	Perennial	Adventive
solsem	*Solidago sempervirens*	*SOLIDAGO SEMPERVIRENS*	Seaside Goldenrod	0	FACW	Forb	Perennial	Adventive

SITE: Wetland 9 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	**0.83**
MEAN C (ALL SPECIES)	0.45
MEAN C (NATIVE TREES)	1.00
MEAN C (NATIVE SHRUBS)	n/a
MEAN C (NATIVE HERBACEOUS)	0.33
FQAI (NATIVE SPECIES)	**2.04**
FQAI (ALL SPECIES)	1.51
ADJUSTED FQAI	6.15
% C VALUE 0	0.73
% C VALUE 1-3	0.27
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	11
SPECIES RICHNESS (NATIVE)	6
% NON-NATIVE	0.45
WET INDICATOR (ALL)	-0.18
WET INDICATOR (NATIVE)	0.00
% HYDROPHYTE (MIDWEST)	0.82
% NATIVE PERENNIAL	0.36
% NATIVE ANNUAL	0.18
% ANNUAL	0.18
% PERENNIAL	0.82

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
erican	*Erigeron canadensis*	*Erigeron canadensis*	Canadian Horseweed	0	FACU	Forb	Annual	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
moralb	*Morus alba*	*MORUS ALBA*	White Mulberry	0	FAC	Tree	Perennial	Adventive
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	Grass	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
salfra	*Salix fragilis*	*SALIX FRAGILIS*	Crack Willow	0	UPL	Tree	Perennial	Adventive
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 10 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.50
MEAN C (ALL SPECIES)	0.75
MEAN C (NATIVE TREES)	1.50
MEAN C (NATIVE SHRUBS)	n/a
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	3.00
FQAI (ALL SPECIES)	2.12
ADJUSTED FQAI	10.61
% C VALUE 0	0.50
% C VALUE 1-3	0.50
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	8
SPECIES RICHNESS (NATIVE)	4
% NON-NATIVE	0.50
WET INDICATOR (ALL)	-0.13
WET INDICATOR (NATIVE)	-0.25
% HYDROPHYTE (MIDWEST)	0.63
% NATIVE PERENNIAL	0.50
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.88

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
frapen	*Fraxinus pennsylvanica*	*Fraxinus pennsylvanica subintegerrima*	Green Ash	1	FACW	Tree	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 11 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	2.00
MEAN C (ALL SPECIES)	1.00
MEAN C (NATIVE TREES)	2.00
MEAN C (NATIVE SHRUBS)	n/a
MEAN C (NATIVE HERBACEOUS)	n/a
FQAI (NATIVE SPECIES)	2.83
FQAI (ALL SPECIES)	2.00
ADJUSTED FQAI	14.14
% C VALUE 0	0.50
% C VALUE 1-3	0.50
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	4
SPECIES RICHNESS (NATIVE)	2
% NON-NATIVE	0.50
WET INDICATOR (ALL)	-1.00
WET INDICATOR (NATIVE)	-0.50
% HYDROPHYTE (MIDWEST)	1.00
% NATIVE PERENNIAL	0.50
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	1.00

SPECIES ACRONYM	SPECIES NAME (NWPL/	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 12 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/13/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.50
MEAN C (ALL SPECIES)	0.67
MEAN C (NATIVE TREES)	1.50
MEAN C (NATIVE SHRUBS)	0.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	3.00
FQAI (ALL SPECIES)	2.00
ADJUSTED FQAI	10.00
% C VALUE 0	0.56
% C VALUE 1-3	0.44
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	9
SPECIES RICHNESS (NATIVE)	4
% NON-NATIVE	0.56
WET INDICATOR (ALL)	-0.11
WET INDICATOR (NATIVE)	-0.25
% HYDROPHYTE (MIDWEST)	0.67
% NATIVE PERENNIAL	0.44
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	0.89

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
artvul	*Artemisia vulgaris*	*ARTEMISIA VULGARIS*	Common Mugwort	0	UPL	Forb	Perennial	Adventive
Frapen	*Fraxinus pennsylvanica*	*Fraxinus pennsylvanica subintegerrima*	Green Ash	1	FACW	Tree	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 13 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.17
MEAN C (ALL SPECIES)	0.78
MEAN C (NATIVE TREES)	1.00
MEAN C (NATIVE SHRUBS)	1.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	2.86
FQAI (ALL SPECIES)	2.33
ADJUSTED FQAI	9.53
% C VALUE 0	0.44
% C VALUE 1-3	0.56
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	9
SPECIES RICHNESS (NATIVE)	6
% NON-NATIVE	0.33
WET INDICATOR (ALL)	-0.67
WET INDICATOR (NATIVE)	-0.17
% HYDROPHYTE (MIDWEST)	0.89
% NATIVE PERENNIAL	0.67
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	1.00

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
samcan	*Sambucus nigra ssp. canadensis*	*Sambucus canadensis*	Black Elderberry	1	FACW	Shrub	Perennial	Native
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 14 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.33
MEAN C (ALL SPECIES)	0.86
MEAN C (NATIVE TREES)	1.67
MEAN C (NATIVE SHRUBS)	0.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	4.00
FQAI (ALL SPECIES)	3.21
ADJUSTED FQAI	10.69
% C VALUE 0	0.50
% C VALUE 1-3	0.50
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	14
SPECIES RICHNESS (NATIVE)	9
% NON-NATIVE	0.36
WET INDICATOR (ALL)	-0.29
WET INDICATOR (NATIVE)	-0.44
% HYDROPHYTE (MIDWEST)	0.79
% NATIVE PERENNIAL	0.57
% NATIVE ANNUAL	0.07
% ANNUAL	0.07
% PERENNIAL	0.86

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
ambtri	*Ambrosia trifida*	*Ambrosia trifida*	Great Ragweed	0	FAC	Forb	Annual	Native
arcmin	*Arctium minus*	*ARCTIUM MINUS*	Lesser Burrdock	0	FACU	Forb	Biennial	Adventive
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
phaaru	*Phalaris arundinacea*	*PHALARIS ARUNDINACEA*	Reed Canary Grass	0	FACW	Grass	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
popdel	*Populus deltoides*	*Populus deltoides*	Eastern Cottonwood	2	FAC	Tree	Perennial	Native
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
sonuli	*Sonchus arvensis ssp. uliginosus*	*SONCHUS ULIGINOSUS*	Field Sow-Thistle	0	FACU	Forb	Perennial	Adventive
typlat	*Typha latifolia*	*Typha latifolia*	Broad-Leaf Cat-Tail	1	OBL	Forb	Perennial	Native
ulmame	*Ulmus americana*	*Ulmus americana*	American Elm	3	FACW	Tree	Perennial	Native
urtpro	*Urtica dioica ssp. gracilis*	*Urtica procera*	Tall Nettle	2	FACW	Forb	Perennial	Native
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

SITE: Wetland 15 - CTA Red Line Extension
LOCALE: Lake Calumet
BY: J Mengler, V Mosca
DATE: 8/19/2015

CONSERVATISM-BASED METRICS

MEAN C (NATIVE SPECIES)	1.00
MEAN C (ALL SPECIES)	0.50
MEAN C (NATIVE TREES)	0.00
MEAN C (NATIVE SHRUBS)	0.00
MEAN C (NATIVE HERBACEOUS)	1.00
FQAI (NATIVE SPECIES)	2.00
FQAI (ALL SPECIES)	1.41
ADJUSTED FQAI	7.07
% C VALUE 0	0.63
% C VALUE 1-3	0.38
% C VALUE 4-6	0.00
% C VALUE 7-10	0.00

ADDITIONAL METRICS

SPECIES RICHNESS (ALL)	8
SPECIES RICHNESS (NATIVE)	4
% NON-NATIVE	0.50
WET INDICATOR (ALL)	-0.63
WET INDICATOR (NATIVE)	0.00
% HYDROPHYTE (MIDWEST)	0.88
% NATIVE PERENNIAL	0.50
% NATIVE ANNUAL	0.00
% ANNUAL	0.00
% PERENNIAL	1.00

SPECIES ACRONYM	SPECIES NAME (NWPL/ MOHLENBROCK)	SPECIES (SYNONYM)	COMMON NAME	C VALUE	MIDWEST WET INDICATOR	HABIT	DURATION	NATIVITY
aceneg	*Acer negundo*	*Acer negundo var. violaceum*	Box Elder	0	FAC	Tree	Perennial	Native
consep	*Calystegia sepium*	*Convolvulus sepium*	Hedge False Bindweed	1	FAC	Forb	Perennial	Native
lytsal	*Lythrum salicaria*	*LYTHRUM SALICARIA*	Purple Loosestrife	0	OBL	Forb	Perennial	Adventive
phrausu	*Phragmites australis ssp. australis*	*Phragmites australis*	Common Reed	0	FACW	Grass	Perennial	Adventive
rhacat	*Rhamnus cathartica*	*RHAMNUS CATHARTICA*	European Buckthorn	0	FAC	Shrub	Perennial	Adventive
solalt	*Solidago altissima*	*Solidago altissima*	Tall Goldenrod	1	FACU	Forb	Perennial	Native
typang	*Typha angustifolia*	*Typha angustifolia*	Narrow-Leaf Cat-Tail	0	OBL	Forb	Perennial	Adventive
vitrip	*Vitis riparia*	*Vitis riparia*	River-Bank Grape	2	FACW	Vine	Perennial	Native

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 1

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T34N R14E S26

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.660019 | Long: -87.595429 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 1

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Populus deltoides*	20	Y	FAC
2 *Acer saccharinum*	20	Y	FACW
3 *Ulmus americana*	5	N	FACW
4			
5			
	45	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1 *Salix interior*	15	Y	FACW
2 *Populus deltoides*	10	Y	FAC
3 *Fraxinus pennsylvanica*	5	N	FACW
4			
5			
	30	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	95	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	95	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	140	x 2 =	280
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	170 (A)		370 (B)

Prevalence Index = B/A = 2.18

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along road at base of another road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches):	___
Water table present?	Yes	___	No	X	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within ditch channel lined by hydrophytes.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 2

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.6906323 | Long: -87.6205465 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 2

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	95	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	95	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	95 (A)		190 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along road at base of another road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes		No	X	Depth (inches):	0-Jan
Water table present?	Yes		No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within ditch channel lined by hydrophytes.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 3

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.660463 | Long: -87.59576 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 3

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	95	Y	FACW
2 *Lythrum salicaria*	10	N	OBL
3			
4			
5			
6			
7			
8			
9			
10			
	105	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	10	x 1 =	10
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	105 (A)		200 (B)

Prevalence Index = B/A = 1.90

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel parking lot and gravel road. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within ditch/swale channel at lowest point in local landscape.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 4

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale at toe of slope | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.659641 | Long: -87.599965 | Datum:

Soil Map Unit Name: orthents, clayey undulating | NWI Classification: PF01/EMCd

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 4

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2 *Lythrum salicaria*	20	N	OBL
3			
4			
5			
6			
7			
8			
9			
10			
	120	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	20	x 1 =	20
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	120 (A)		220 (B)

Prevalence Index = B/A = 1.83

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located road and berm around sewage lagoons.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within swale channel at lowest point in local landscape.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 5

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26 & 27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.663596 | Long: -87.598043 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 5

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between roads

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches):	___
Water table present?	Yes	___	No	X	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along road.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 6

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.669077 | Long: -87.601542 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 6

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	80	Y	FACW
2 *Lythrum salicaria*	10	N	OBL
3 *Typha angustifolia*	10	N	OBL
4 *Helianthus grosseserratus*	2	N	FACW
5 *Verbena hastata*	2	N	FACW
6			
7			
8			
9			
10			
	104	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	20	x 1 =	20
FACW species	84	x 2 =	168
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	104 (A)		188 (B)

Prevalence Index = B/A = 1.81

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between road and railroad.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along railroad.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 7

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.669077 | Long: -87.601542 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	N
Wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Rhamnus cathartica*	100	Y	FAC
2			
3			
4			
5			
	100	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1	80	Y	
2	10	N	
3	10	N	
4	2	N	
5	2	N	
6			
7			
8			
9			
10			
	104	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	100	x 3 =	300	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column totals	100	(A)	300	(B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and 2-3 feet higher in elevation than adjacent wetland swales.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): 0

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2-3 feet higher in elevation than adjacent wetland swales with no evidence of hydrology

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 8

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S22 & 27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.672876 | Long: -87.607044 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 7

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	80	Y	FACW
2 *Lythrum salicaria*	10	N	OBL
3 *Solidago graminifolia*	10	N	FACW
4 *Helianthus grosseserratus*	2	N	FACW
5 *Verbena hastata*	2	N	FACW
6			
7			
8			
9			
10			
	104	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	10	x 1 =	10
FACW species	94	x 2 =	188
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	104 (A)		198 (B)

Prevalence Index = B/A = 1.90

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between railroad and gravel contractor yard.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along railroad.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 9

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.669077 | Long: -87.601542 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?		If yes, optional wetland site ID:	
Wetland hydrology present?	N		

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Rhamnus cathartica*	100	Y	FAC
2			
3			
4			
5			
	100	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1	80	Y	
2	10	N	
3	10	N	
4	2	N	
5	2	N	
6			
7			
8			
9			
10			
	104	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across all Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50.00%	(A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	100	x 3 =	300	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column totals	100	(A)	300	(B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and 2-3 feet higher in elevation than adjacent wetland swales.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): 0

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2-3 feet higher in elevation than adjacent wetland swales with no evidence of hydrology

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension City/County: Cook Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD State: Illinois Sampling Point: 10

Investigator(s): J Mengler, V Mosca Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): swale

Slope (%): Lat: 41.65712 Long: -87.600738 Datum:

Soil Map Unit Name: orthents, loamy, nearly level NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 8

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel roads.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along roads.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension City/County: Cook Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD State: Illinois Sampling Point: 11

Investigator(s): J Mengler, V Mosca Section, Township, Range: T37N, R14E, S27

Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): swale

Slope (%): Lat: 41.665712 Long: -87.600738 Datum:

Soil Map Unit Name: orthents, loamy, nearly level NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?		If yes, optional wetland site ID:	
Wetland hydrology present?	N		

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Ambrosia trifida*			FAC
2 *Artemisia vulgaris*			UPL
3 *Melilotus albus*			FACU
4 *Arctium minus*			FACU
5 *Lotus corniculata*			FACU
6			
7			
8			
9			
10			
	0	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 0 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	0 (A)		0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and 2-4 feet higher in elevation than adjacent wetland swales.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): 0

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2-4 feet higher in elevation than adjacent wetland swales with no evidence of hydrology

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 12

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.661704 | Long: -87.597341 | Datum:

Soil Map Unit Name: orthents, clayey, undulating | NWI Classification: PF01/EMCd

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 9

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel parking pad and road.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along higher ground.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 13

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.661704 | Long: -87.597341 | Datum:

Soil Map Unit Name: orthents, loamy, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	**Is the sampled area within a wetland?**	N
Hydric soil present?		If yes, optional wetland site ID:	
Wetland hydrology present?	N		

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Polygonum lapathifolium*	10	Y	FACW
2 *Carduus nutans*	10	Y	FACU
3 *Medicago lupulina*	10	Y	FACU
4 *Helianthus annuus*	10	Y	FACU
5 *Acnida altissima*	10	Y	OBL
6 *Lotus corniculata*	10	Y	FACU
7			
8			
9			
10			
	60	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 33.33% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	10	x 1 =	10
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column totals	60 (A)		190 (B)

Prevalence Index = B/A = 3.17

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and a gravel parking pad 2-4 feet higher than surrounding wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): 0

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

2-4 feet higher in elevation than adjacent wetland swales with no evidence of hydrology

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/13/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 14

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N, R14E, S26

Landform (hillslope, terrace, etc.): swale | Local relief (concave, convex, none): swale

Slope (%): | Lat: 41.659598 | Long: -87.594462 | Datum:

Soil Map Unit Name: urban land- orthents, clayey, complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

(If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 10

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located at base of roadway embankment and along railroad

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches):	___
Water table present?	Yes	___	No	X	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation within drainage swale along higher ground, wet mud among old tires.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 15

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S26

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.660019 | Long: -87.595429 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 11

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1 *Salix interior*			FACW
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along road at base of a railroad embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches):	___
Water table present?	Yes	___	No	X	Depth (inches):	___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 16

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.667542 | Long: -87.602091 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 12

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along road at base of a road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	X	No		Depth (inches):	0-2
Water table present?	Yes		No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 17

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.669078 | Long: -87.602444 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 13

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located along railroad embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	X	No		Depth (inches):	0-2
Water table present?	Yes		No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 18

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.667289 | Long: -87.600100 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 14

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)			
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)			
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)			
1 *Vitis riparia*	20	Y	FACW
2 *Convolvulus sepium*	15	Y	FAC
	35	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel roads. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	X	No		Depth (inches):	0-2
Water table present?	Yes		No	X	Depth (inches):	
Saturation present? (includes capillary fringe)	Yes	X	No		Depth (inches):	0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 19

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.667289 | Long: -87.600100 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N		
Hydric soil present?		**Is the sampled area within a wetland?**	N
Wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Morus alba*	40	Y	FAC
2 *Acer negundo*	20	Y	FAC
3			
4			
5			
	60	= Total Cover	
Sapling/Shrub stratum (Plot size: 4.6 m)			
1 *Prunus serotina*	15	Y	FACU
2			
3			
4			
5			
	15	= Total Cover	
Herb stratum (Plot size: 1 m sq)			
1 *Eupatorium rugosum*	10	Y	FACU
2 *Arctium minus*	10	Y	FACU
3 *Geum laciniatum*	5	Y	FACW
4			
5			
6			
7			
8			
9			
10			
	25	= Total Cover	
Woody vine stratum (Plot size: 1 m sq)			
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0	
FACW species	5	x 2 =	10	
FAC species	60	x 3 =	180	
FACU species	35	x 4 =	140	
UPL species	0	x 5 =	0	
Column totals	100	(A)	330	(B)

Prevalence Index = B/A = 3.30

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and located between gravel roads. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): ___

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No evidence of hydrology observed, Ground cover mostly dry undisturbed leaf litter.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 20

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.671562 | Long: -87.607147 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	Y		
Hydric soil present?		**Is the sampled area within a wetland?**	Y
Wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 15

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1 *Phragmites australis*	100	Y	FACW
2			
3			
4			
5			
6			
7			
8			
9			
10			
	100	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column totals	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- X Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and along steep road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	X	No	___	Depth (inches): 0

Wetland hydrology present? Y

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lake Calumet CTA Red Line Extension | City/County: Cook | Sampling Date: 8/19/2015

Applicant/Owner: CTA/MWRD | State: Illinois | Sampling Point: 21

Investigator(s): J Mengler, V Mosca | Section, Township, Range: T37N R14E S27

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): ditch

Slope (%): | Lat: 41.671562 | Long: -87.607147 | Datum:

Soil Map Unit Name: urban land-orthents clayey complex, nearly level | NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation ____, soil Y, or hydrology ____ significantly disturbed? Y

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? N

Are "normal circumstances" present? Y

SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	N		
Hydric soil present?		**Is the sampled area within a wetland?**	N
Wetland hydrology present?	N	If yes, optional wetland site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

Relied primarily upon vegetation and landscape position due to dry time of season, and mostly urbanland/fill for substrate.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 9 m)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
3			
4			
5			
	0	= Total Cover	

Sapling/Shrub stratum (Plot size: 4.6 m)	Absolute % Cover	Dominant Species	Indicator Status
1 *Rhamnus cathartica*	80	Y	FAC
2 *Morus alba*	20	Y	FAC
3			
4			
5			
	100	= Total Cover	

Herb stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1 *Glechoma hederacea*	15	Y	FACU
2 *Arctium minus*	15	Y	FACU
3			
4			
5			
6			
7			
8			
9			
10			
	30	= Total Cover	

Woody vine stratum (Plot size: 1 m sq)	Absolute % Cover	Dominant Species	Indicator Status
1			
2			
	0	= Total Cover	

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	100	x 3 =	300	
FACU species	30	x 4 =	120	
UPL species	0	x 5 =	0	
Column totals	130	(A)	420	(B)

Prevalence Index = B/A = 3.23

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

SOIL

Sampling Point: 21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type*	Loc**	Texture	Remarks

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils:

- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L)**
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):
Type: gravel, ballast, fill
Depth (inches): not determined

Hydric soil present? _____

Remarks:

Area mapped as urban land, and along steep road embankment. Probe refusal within 2-4 inches due to gravel and fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	Yes	___	No	X	Depth (inches): ___
Water table present?	Yes	___	No	X	Depth (inches): ___
Saturation present? (includes capillary fringe)	Yes	___	No	X	Depth (inches): ___

Wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

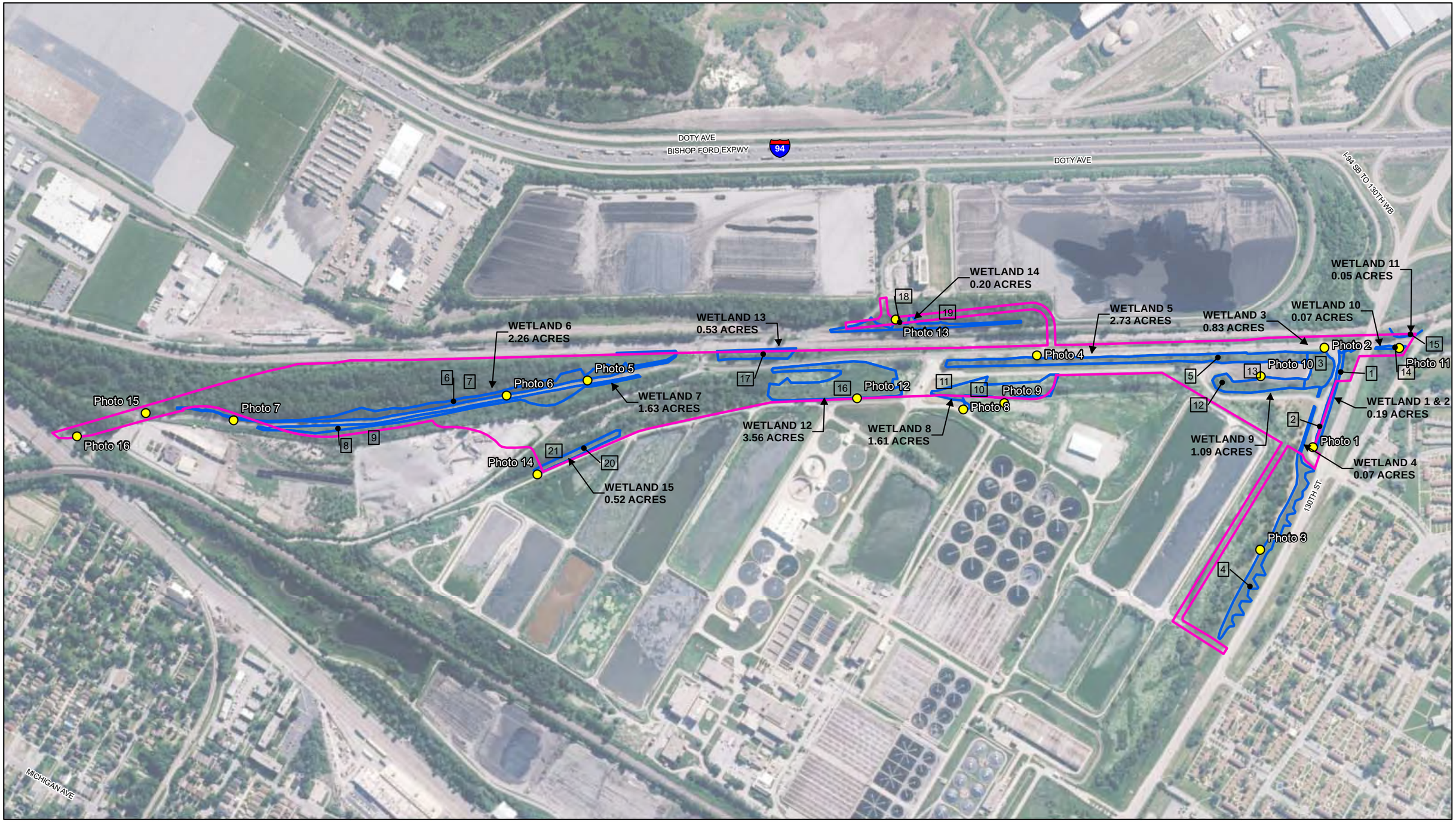

Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale:
0 600 Feet

Project Number: 15-0218

Orientation:

Latest Revision: 10/5/2015

Legend:
- Data Point
- Photo Locations
- Surveyed Wetland Boundary (Labled wetland acreas for Project Permanent Envelope only)
- Project Permanent Envelope

Project Name:
CTA Red Line Extension

Prepared For:
CDM Smith

Aerial Date:
2014

Exhibit Title:
Photograph Locations

Exhibit:
10

Photograph 1:

Wetland 1 looking east from west end.

Photograph 2:

Existing fly dumping piles along Cottage Grove Road and edge of Wetland 3.

Photograph 3:

North edge of Wetland 4 looking west – mostly out of project area.

Photograph 4:

Edge of Wetland 5 along Cottage Grove Road looking south.

Photograph 5:

Wetland 6 along railroad looking south.

Photograph 6:

Evidence of hydrology along railroad and edge of Wetland 6.

Photograph 7:

Remnant prairie plants in Wetland 7 along railroad.

Photograph 8:

Mowed edge of Wetland 8.

Photograph 9:

Existing upland gravel area next to Wetland 8.

Photograph 10:

Wetland 9.

Photograph 11:

Existing trash piles in Wetland 10.

Photograph 12:

Wetland 12.

Photograph 13:

Wetland 14.

Photograph 14:

Wetland 15.

Photograph 15:

Upland in northwest finger of project area looking north.

Photograph 16:

Northwest extent of project area.

Appendix T

Cumulative Impacts Technical Memorandum

- Final EIS Addendum T, Cumulative Impacts Technical Memorandum, July 2022
    - Attachment A: Approval of Altgeld Gardens - Phillip Murray Homes Historic District to the National Register of Historic Places

Chicago Red Line Extension Project

Cumulative Impacts

Final EIS Addendum T

July 2022

Prepared for:
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567 W. Lake Street
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Table of Contents

Section 1 - Summary **1-1**
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Area of Potential Impact 3-1
3.3 Methods 3-1
Section 4 - Affected Environment **4-1**
4.1 Transportation Improvement Program (TIP) 4-1
4.2 Fiscally Constrained Major Capital Projects 4-2
4.3 State, Regional, and Local Plans 4-3
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative - Preferred Alignment 5-1
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS) 2-4

Tables

Table 4-1: Projects in the CMAP TIP (2019-2024) 4-1
Table 4-2: *ON TO 2050* Fiscally Constrained Major Capital Projects 4-3
Table 4-3: State, Regional, and Local Plans 4-4

Abbreviations

ADA	Americans with Disabilities Act
API	area of potential impact
BRT	Bus Rapid Transit
CHA	Chicago Housing Authority
CIP	CREATE 75th Street Corridor Improvement Project
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CN/MED	Canadian National/Metra Electric District
CREATE	Chicago Region Environmental and Transportation Efficiency
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
eTOD	equitable Transit Oriented Development
FPCC	Forest Preserves of Cook County
FTA	Federal Transit Administration
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt Railroad
ISTHA	Illinois State Toll Highway Authority
MED	Metra Electric District
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NICTD	Northern Indiana Commuter Transportation District
NRHP	National Register of Historic Places
NS	Norfolk Southern Railway
RLE	Red Line Extension
RPM	Red and Purple Modernization Program
SES	Metra Southeast Service
TIP	Transportation Improvement Program
TSD	Transit Supportive Development
UPRR	Union Pacific Railroad

Section 1 - Summary

This technical memorandum analyzes the potential cumulative impacts that would occur with the implementation of the Red Line Extension (RLE) Project, updating any changes since the Draft Environmental Impact Statement (EIS).

As stated in **Appendix T** of the Draft EIS, per Federal Transit Administration (FTA) guidance, a cumulative impact would be an impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.

In general, the area of potential impact (API) for determining potential cumulative impacts and benefits for the RLE Project is a broader geographic area than those for direct impacts. The API for cumulative impacts reflects the distribution of the individual resources and is not limited to the project area. The API consists instead of the boundaries specific to the resource, such as the construction limits for a transportation improvement, private development, or other public infrastructure project that is near enough to the project and being performed at the same time, potentially inducing cumulative impacts.

Cumulative impacts were identified based on the updated API for the individual resources for the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. The cumulative impact analysis also considered any new or updated reasonably foreseeable future actions near the RLE Project since the Draft EIS.

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic

Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation

of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

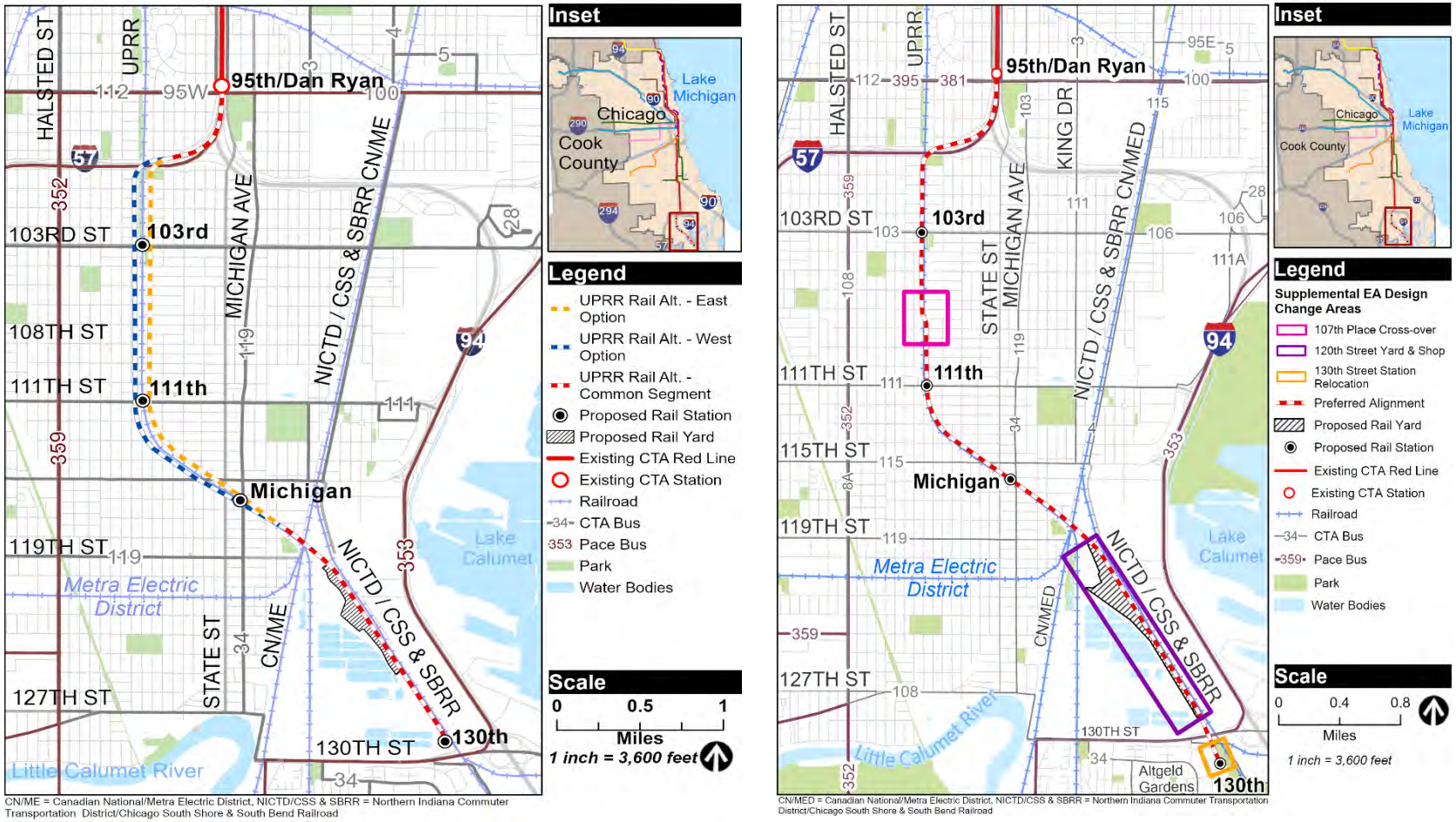

Figure 2-1: Left - East and West Options of the UPRR Rail Alternative (Draft EIS), Right - Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix T** of the Draft EIS have been carried forward to analyze the potential cumulative impacts. This section documents the consistency with Draft EIS **Appendix T** and associated updates to the corresponding guidelines directing the methods.

3.1 Regulatory Framework

There are no changes to the applicable federal or state regulations referenced in **Appendix T** of the Draft EIS. **Appendix T** further notes there are no local requirements for cumulative effect analyses.

3.2 Area of Potential Impact

The API for each resource is presented in a separate technical memorandum specific to each resource. In general, the impact areas for cumulative impacts are broader geographic areas than those for direct impacts. The API for cumulative impacts reflects the distribution of the individual resource and is not limited to the API. The API consists instead of the boundaries specific to the resource, such as the construction limits for a transportation improvement, private development, or other public infrastructure project that is near enough to the project and being performed at the same time, potentially inducing cumulative impacts.

3.3 Methods

The analysis of potential cumulative impacts of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS consistent with of **Appendix T**.

The projects evaluated in this addendum for cumulative impacts are those currently approved and within the general vicinity of the RLE Project and therefore considered reasonably foreseeable to be implemented. Projects identified in the Chicago Metropolitan Agency for Planning's (CMAP) *ON TO 2050* comprehensive regional transportation plan were also considered. The analysis was based on known projects from information available from CTA, the City of Chicago, CMAP, the Chicago Region Environmental and Transportation Efficiency Program (CREATE), the Illinois Department of Transportation (IDOT), the Illinois State Toll Highway Authority (ISTHA), Metra, and the Northwest Indiana Commuter Transportation District (NICTD).

Section 4 - Affected Environment

The RLE Project encompasses a diverse mix of land uses including residential, commercial, and light industrial. South of I-57, the Preferred Alignment runs along an existing railroad corridor that is surrounded by a mix of residential and light commercial districts. The southern end of the Preferred Alignment is adjacent to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) and the terminus is adjacent to the Altgeld Gardens neighborhood.

This section describes any updates to cumulative impacts since the publication of the Draft EIS.

The specific projects discussed in this section are projects that have not been completed since the Draft EIS was released or are new projects identified after the publication of the Draft EIS, which have the potential for cumulative impacts when considered with the RLE Project. The projects that were considered were reasonably foreseeable within the vicinity of the RLE Project, anticipated to be completed before the start of construction in 2025 or may be under construction during the RLE Project's proposed construction period of 2025–2029. The analysis was based on known projects from information available from CTA, the City of Chicago, CREATE, IDOT, ISTHA, Metra, and NICTD. No capital projects previously identified in the Draft EIS have been fully constructed since the time of publication of the Draft EIS. Construction of the CTA Red and Purple Modernization Program Phase 1 project and construction of the I-294/I-57 interchange addition Phase 2 have begun since the time of publication of the Draft EIS.

4.1 Transportation Improvement Program (TIP)

Table 4-1 lists the larger infrastructure projects that are included the CMAP *Fiscal Year 2019-2024 Transportation Improvement Program* (TIP) and that were identified for analyzing potential cumulative benefits or impacts. These projects are either currently underway or reasonably foreseeable future actions within or near the API.

Table 4-1: Projects in the CMAP TIP (2019-2024)

Agency	Project Name	Description	Timeframe of Action in Relation to RLE Project	Referenced in Draft EIS
IDOT	I-94 at 111th Street	Bridge Replacement	2021-2023	Yes
IDOT	I-94 Bishop Ford Expressway Reconstruction	Road Modernization	Future	Yes
IDOT	130th Street to Indiana Avenue	Road Maintenance	2021	No

Agency	Project Name	Description	Timeframe of Action in Relation to RLE Project	Referenced in Draft EIS
Metra	147th Street/Sibley Boulevard Station, Metra Electric District (MED)	Improvements to existing 147th Street Station on the MED including American with Disabilities Act (ADA) accessible improvements	2021	No
Metra	Harvey Transportation Center	Improvements to the Harvey Transportation Center	2021	No
Pace	Pulse 95th Street Line	Bus Rapid Transit (BRT) service from Harlem to CTA Red Line 95th Street Station	Future	No
Pace	Pulse Halsted Street Line	BRT service from 95th Street to 159th Street	Future	No
NICTD	West Lake Corridor Project Note: Project located in Indiana.	NICTD is constructing the West Lake Corridor Project, an approximately 9-mile alignment that would extend the NICTD South Shore Line from Dyer to Hammond, Indiana. The West Lake Corridor Project alignment would run through the east side of the RLE API. A Final EIS/ROD was issued for the project by FTA in March 2018 and the Design/Build contractor was selected by NICTD in 2020. Construction is underway and completion is expected in late 2024 with passenger service starting in early 2025.	Concurrent	No

4.2 Fiscally Constrained Major Capital Projects

Table 4-2 lists fiscally constrained major capital projects that are included in the CMAP *ON TO 2050* (CMAP 2018). These projects were identified for analyzing potential cumulative benefits or impacts. Note that the RLE Project is also included as a fiscally constrained major capital project.

Table 4-2: *ON TO 2050* Fiscally Constrained Major Capital Projects

Agency	Project Name	Description	Timeframe of Action in Relation to RLE Project	Referenced in Draft EIS
Metra	Metra Rock Island District Guideway Improvements	16th Street south to Gresham Junction; addition of a third track, new signals, and an expanded 47th Street Yard to provide capacity for additional service	Future	Yes
Metra	West Loop Transportation Center	Expansion on Phase I improvements to Union Station building north-south and east-west subway tunnels	Future	Yes
CTA	South Halsted BRT	BRT service on Halsted between the 79th Street Red Line Station and the Harvey Transportation Center	Future	No
CTA	Red Purple Modernization (RPM) Program	The RPM Program is a series of proposed improvements to the North Red Line (from just north of Belmont station to the northern terminus of the Red Line at Howard station) and the Purple Line (from just north of Belmont station to Linden station). The first phase of the RPM Program is currently under construction.	Concurrent	Yes
Tollway	I-294/I-57 Interchange Addition	Final phase of connection of two interstates for improved north-south regional travel.	Concurrent	Yes
CREATE	75th Street Corridor Improvement Project (CIP)	The project would provide improvements in the UPRR corridor. The program and rail traffic expectations remain in line with those at the time of the Draft EIS. Initial contracts have been let, and final engineering design on other parts is ongoing.	Concurrent	Yes

4.3 State, Regional, and Local Plans

Table 4-3 lists the other actions or studies within or near the API that are not included in the TIP or on the list of fiscally constrained plans but that were identified for analyzing potential cumulative benefits or impacts.

Table 4-3: State, Regional, and Local Plans

Agency	Project Name	Description	Timeframe of Action in Relation to the RLE Project	Referenced in Draft EIS
Metra	Southeast Service (SES) Expansion Project	Metra's SES expansion project consists of 33.2 miles of proposed rail line from LaSalle Street station to a terminal near Balmoral Park. The rail line would run along the following four existing railroad rights-of-way The SES would, if implemented, run along the UPRR tracks adjacent to the RLE. As part of the Metra Strategic Plan–System-wide Cost Benefit Analysis of Major Capital Improvements, Final Report, January 16, 2019. No formal timeline has been announced.	Future	Yes
Crown Commercial Real Estate and Development	Roseland Plaza	The Crown Commercial Real Estate & Development - Roseland Plaza redevelopment is a 6-acre site zoned commercial, located at the Michigan Avenue station location (in the area bounded by the UPRR tracks, State Street, 115th Street, and Michigan Avenue). It was expected to be a strip mall. The project has not moved forward since the Draft EIS.	Future	Yes
National Park Service	Pullman Historic District	The Pullman Historic District was declared a National Monument on February 19, 2015. The park is on the east side of the API. The designation as a National Monument under the National Park Service is expected to bring economic opportunities to the surrounding communities.	Before/Concurrent	No
Illinois Coastal Management Program	Great Lakes Restoration Initiative Action Plan	Environmental Impact Statement was prepared through the National Oceanic and Atmospheric Administration. Plan was adopted in 2011. Plan for preserving, restoring, and protecting the coastal resources in Illinois. In the Little Calumet and Grand	Concurrent	Yes

Agency	Project Name	Description	Timeframe of Action in Relation to the RLE Project	Referenced in Draft EIS
		Calumet River corridors, Lake Calumet and Calumet River and surrounding wetland areas and degraded industrial areas would be addressed.		
CHA	Altgeld Gardens- Philip Murray Homes Historic District	Altgeld Gardens-Philip Murray Homes was added to the National Register of Historic Places in April 2022. The designation as a historic district may bring economic opportunities to the Altgeld Gardens neighborhood.	Concurrent	No
CHA	Altgeld Gardens - Philip Murray Homes Master Plan	The Master Plan charts a course for opportunities for diverse housing options, access to jobs and training, efficient transportation infrastructure, expanded learning and recreational spaces, historic preservation, and sustainable design. The plan states that the RLE Project would provide residents with greater accessibility to jobs, retail, and services in other parts of the city.	Concurrent	No
CTA	Transit Supportive Development (TSD) Comprehensive Plan	A plan that identifies methods and resources to enable mixed-use development and enhance economic vitality, multimodal connectivity, and the pedestrian environment. The TSD would utilize an equitable Transit Oriented Development (eTOD) planning approach. eTOD planning seeks to promote development without displacement and realize community-focused benefits, such as affordable housing, local economic development, and environmental sustainability.	Concurrent	No
Center for Neighborhood Technology	The Real Estate Mantra - Locate Near Public Transportation	This report compares the performance of residential and commercial property sales near fixed-guideway stations with areas without public transit access between 2012 and 2016 in	Concurrent	No

Agency	Project Name	Description	Timeframe of Action in Relation to the RLE Project	Referenced in Draft EIS
		seven regions around the United States. Research results indicate that the presence of fixed-guideway public transportation (rail and bus rapid transit) has a strong correlation to higher property values.		
City of Chicago	INVEST South/West	INVEST South/West is a community initiative implemented by the City of Chicago to marshal the resources of multiple City departments, community organizations and corporate and philanthropic partners towards 10 communities on Chicago's South and West sides. With a focus on 12 key commercial corridors in the 10 communities, INVEST South/West collectively supports infrastructure development, improved programming for residents and businesses and policies that impact each of the community areas surrounding the corridors to create lasting impact. Target areas include the Roseland, Pullman, and West Pullman areas, which are within the API. Priority corridors include South Michigan Avenue and 111th Street.	Concurrent/Future	No

Section 5 - Impacts and Mitigation

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the Fiscal Year 2019-2024 TIP. TIP projects consist of several road improvement projects including resurfacing and coordination of signal timing, work on Metra's MED district facilities to replace electrical systems, construction of a bicycle/pedestrian multi-use trail south and east of the API, and preservation of historic facilities.

The No Build Alternative would not contribute to cumulative benefits or impacts for the following resources: transportation; land use and economic development; displacements and relocations; parklands and community facilities; visual and aesthetic conditions; noise and vibration; safety and security; historic and cultural resources; hazardous materials; water resources; wetlands; floodplains; vegetation and wildlife habitat; threatened and endangered species; geology and soils; energy; and environmental justice. Only resources that would incur cumulative impacts due to multiple projects are presented in this section. The following sections discuss environmental resources with the potential to be subject to cumulate benefits or impacts with the No Build Alternative.

5.1.1 Neighborhood and Communities

The No Build Alternative would not cause any adverse impacts to neighborhoods and communities; however, the lack of improved transportation options and new infrastructure would do little to reverse the disinvestment in the RLE Project area and vicinity that has occurred over the past several decades.

5.1.2 Air Quality

The RPM Program and the NICTD West Lake Corridor Project are reasonably foreseeable actions that would result in beneficial air quality impacts because they would increase ridership, which would reduce trips made by vehicles. The cumulative impacts would result in a reduction of air emissions and would be beneficial. The air quality benefits of the No Build Alternative would be smaller in scale than for the Preferred Alignment.

5.2 Union Pacific Railroad Alternative - Preferred Alignment

The following discusses environmental resources with the potential to be subject to cumulative benefits or impacts with the Preferred Alignment.

5.2.1 Transportation

Beneficial cumulative impacts would occur for CTA passengers because of the new, direct rail service for the communities near the RLE Project, which would provide new and better access to employment, health care, and recreation opportunities. Additional cumulative benefits would occur for bicyclists and pedestrians due to improved access near the RLE Project.

The 130th Station would result in changes in vehicular and pedestrian circulation. The impacts on vehicular and pedestrian circulation would not be adverse due to the relocation of 130th Street station. No mitigation measures would be required.

Although the RLE Project would not increase the number of freight trains, the increased traffic utilizing stations (including bus traffic, bicyclists, and pedestrians) may increase delays at the at-grade crossings. Mitigation measures would be implemented to offset the portion of the level of service deterioration or insufficient storage length attributable to the Preferred Alignment, improving the flow of traffic near the RLE Project. Park & ride facilities were also located near the station entrances on the same side of the UPRR tracks as the proposed stations to reduce the amount of pedestrian traffic at the at-grade crossings. The impacts would not be adverse after mitigation.

A minor change from the Draft EIS is that the relocation of the 130th Street station south of 130th Street lessens opportunity for a future connection between the NICTD South Shore Line and the Red Line, as the 130th Street station would be located farther (approximately 370 feet) from the NICTD South Shore Line than it was at the time of the Draft EIS.

5.2.2 Land Use and Economic Development

The demolition of the CHA Blocks 11, 12, and 13 within Altgeld Gardens has contributed cumulatively on the proposed relocation of the 130th Street station adjacent to the Altgeld Gardens neighborhood. The relocated 130th Street station would be closer to the Altgeld Gardens neighborhood and the Beaubien Woods Forest Preserve than the 130th Street station located north of 130th Street that was presented in the Draft EIS. The Beaubien Woods Forest Preserve is owned by the Forest Preserves of Cook County (FPCC) and is located east and south of the relocated 130th Street station.

Relocating the 130th Street station south of 130th Street would enable residents of the Altgeld Gardens neighborhood access to the station through neighborhood roadways and their associated sidewalks without having to cross 130th Street. The relocation of the 130th Street station would also improve pedestrian connections to the Beaubien Woods Forest Preserve and its amenities. The station relocation would provide opportunities to create a gateway to the Beaubien Woods Forest Preserve from the rest of the city and surrounding suburbs. The relocated 130th Street station would provide direct connection to the rail transit network through a new station, enhanced bus service

connections at the station, and a proposed park & ride facility directly adjacent to the forest preserve.

Construction of the 130th Street station would close Old 130th Street and eliminate connection to the access road into the Beaubien Woods Forest Preserve from Old 130th Street. Mitigation measures would be implemented to minimize impacts to the Beaubien Woods Forest Preserve, including the transfer of two-City owned parcels into FPCC ownership. CTA would work with the City of Chicago to modify the zoning for the station and for the two City-owned parcels currently zoned as residential and planned development. The impacts to land use would not be adverse.

Beneficial cumulative impacts would be the result of the economic development benefits that would accrue to all communities in the API from improved public transportation options and development potential adjacent to the transit stations. There would be cumulative beneficial impacts on the neighborhoods that are focusing on improving employment accessibility to the Chicago region, attracting development adjacent to the RLE stations, and improving the overall livability of neighborhoods through local and regional planning. Implementation of INVEST South/West and the Transit Supportive Development (TSD) Comprehensive Plan are initiatives focused on the communities along the RLE Project.

5.2.3 Neighborhood and Communities

The cumulative impacts to neighborhood and communities are the same as those described in **Appendix T** of the Draft EIS. The Draft EIS stated that the CREATE 75th Street Corridor Improvement Project (CIP), the West Lake Corridor Project, and the Metra Southeast Service (SES) line are reasonably foreseeable actions that would result in both beneficial and adverse impacts to the community. The Draft EIS stated that the permanent cumulative impacts of these projects would be beneficial to the surrounding communities because they would improve access to jobs, places of interest, and residences.

5.2.4 Parklands and Community Facilities

The cumulate impacts to parklands and community facilities are similar to those described in **Appendix T** of the Draft EIS, unless otherwise noted below. The Preferred Alignment track structure would run through two parcels of Fernwood Parkway between 99th Street and 103rd Street. Elevated track structure supports would be placed permanently in the parkway, resulting in a permanent incorporation of 4.5 acres of Fernwood Parkway. This constitutes a Section 4(f) use. The adverse impacts to Fernwood Park due to its use for the Preferred Alignment would be mitigated through the creation of 4.5 acres of smaller pocket parks within the Washington Heights community area, along the Major Taylor Bike Trail, and other locations based on additional coordination.

Although there is no Section 4(f) use of the Beaubien Woods Forest Preserve, mitigation includes land transfer of City-owned parcels that would add 7 acres to the Beaubien Woods Forest Preserve.

Beneficial cumulative impacts would occur with the increase in parklands throughout the neighborhoods in the form of pocket parks, increasing residents' ability to access open space and recreational areas. Improved transit near the communities along the corridor would result in improved access to parklands and community facilities beyond the immediate area.

5.2.5 Visual and Aesthetics

The Preferred Alignment would have permanent high and adverse visual and aesthetic impacts north of I-57, between 99th Street and the 103rd Street station area, near the 107th Place cross-over, at 117th Street and Prairie Avenue, and at the 130th Street station, despite implementation of mitigation measures. These impacts to the respective neighborhoods also include the visual impacts of the permanent elevated structure through Fernwood Parkway, to the Altgeld Gardens neighborhood, and Beaubien Woods Forest Preserve. Visual impacts would remain despite mitigation. Future developments near the train stations could cumulatively contribute to visual changes to the surrounding communities.

5.2.6 Noise and Vibration

Noise impacts were determined using FTA criteria based on a comparison of future project noise with existing noise. The noise increases would be highest at locations close to the Preferred Alignment and would be lower at locations farther away. Mitigation in the form of a minimum height of 3.5-foot noise barriers in accordance with FTA guidelines was recommended to eliminate all severe impacts and as many of the moderate impacts as possible. There would be some impacts despite mitigation to 15 residences, primarily because of their proximity to track turnouts and crossovers.

The Preferred Alignment would have a cumulative noise impact due to the increased freight traffic volumes. However, highway or rail improvements would need to double their capacity to noticeably increase noise levels for the average person (i.e., an increase of 3 decibels) and there are no major projects that would increase the capacity of the roadways planned or within the feasible future that would create an adverse cumulate impact on noise.

5.2.7 Safety and Security

In addition to the expected increase in automobile and pedestrian traffic volumes as a result of the RLE Project compared to the No Build Alternative, the number of freight trains using the UPRR tracks is expected to increase from the existing 14 trains per day to 25 per day, a 79 percent increase over existing conditions. This increase in train volumes, pedestrian volumes, and motor vehicle

volumes near the 103rd Street, 111th Street, Michigan Avenue, and 130th Street stations would have cumulative and permanent adverse impacts on pedestrian safety due to potential conflicts between pedestrians and vehicles. The station areas and associated parking would be designed to minimize pedestrian and vehicle interaction by placing the park & ride facilities on the same side as the station entrances. Mitigation measures include visible crossing pavement markings near the stations.

The potential for an increase in crash frequencies at the UPRR at-grade rail crossings adjacent to the RLE stations would be mitigated by creating parking on the same side of the tracks so riders that use park & ride facilities would not have to cross the UPRR tracks. CTA would coordinate with the UPRR regarding fencing or other appropriate design elements, and the agreed upon design features would be included in final design of the RLE Project to deter trespassing into UPRR property. Pedestrian gates would also be included in final design to enhance at-grade crossing protections. These proposed at-grade crossing improvements are indicative of the level of protection expected. As coordination with UPRR and CDOT take place, details may change, but the protection level would be similar.

There would be beneficial cumulative impacts to safety and security with an improvement in traffic control and pedestrian crossing once mitigation measures are in place.

5.2.8 Historic and Cultural Resources

The Michigan Avenue station is located near historic properties that are eligible for the National Register of Historic Places (NRHP). The station improvements coupled with the INVEST South/West focus along the Michigan Avenue corridor would help to activate the neighborhood and increase economic opportunities and investment within the Roseland community. The historic properties would benefit from the investment within the community.

The Altgeld Gardens-Philip Murray Homes Historic District was added to the NRHP in April 2022. The designation as a historic district could bring economic opportunities to the Altgeld Gardens neighborhood. The proximity of the station and improved transit access and mobility adjacent to Altgeld Gardens would result in beneficial cumulative impacts to the historic district.

There would be beneficial cumulative impacts to historic and cultural resources.

5.2.9 Air Quality

The RPM Program and the NICTD West Lake Corridor Project are reasonably foreseeable actions that would result in beneficial air quality impacts because they would increase ridership, which would reduce trips made by vehicles. The cumulative impacts would result in a reduction of air emissions and would be beneficial.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent cumulative impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, because there would be no adverse cumulative impacts, no mitigation measures would be required for the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

6.2.1 Visual and Aesthetics

Cumulative impacts to the neighborhoods adjacent to station areas would include the visual impacts of future developments that may occur in addition to the visual impacts of the RLE Project.

6.2.2 Noise

Noise impacts would occur at locations close to the Preferred Alignment and would be lower at locations farther away. There would be some cumulative impacts despite mitigation of 3.5-foot noise barriers to a small group of residents due to the increased number of projected freight traffic on the UPRR tracks.

Section 7 - References Cited

Chicago Metropolitan Agency for Planning (CMAP). 2018. ON TO 2050. Accessed at https://www.cmap.illinois.gov/2050/. Accessed on July 20, 2021.

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City of Chicago. 2019. INVEST South/West. Accessed at https://www.chicago.gov/city/en/sites/invest_sw/home.html. Accessed on July 20, 2021.

Illinois Department of Natural Resources. 2020. Great Lakes Restoration Initiative. Accessed at https://www2.illinois.gov/dnr. Accessed on July 20, 2021.

Metra. 2017. On Track to Excellence. Accessed at https://metra.com/sites/default/files/assets/booklet9.25x8.5_metrastrategicplan2018-22_lr.pdf. Accessed on July 20, 2021

Attachment A: Approval of Altgeld Gardens - Phillip Murray Homes to the National Register of Historic Places

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).**

1. Name of Property

historic name Altgeld Gardens – Philip Murray Homes Historic District

other names/site number N/A

Name of Multiple Property Listing N/A

(Enter "N/A" if property is not part of a multiple property listing)

2. Location

street & number E. 130th St., E. 130th Pl., S. Greenwood Ave., E. 133rd Pl., E. 133rd St., E. 134th St., & S. St. Lawrence Ave. ☐ not for publication

city or town Chicago ☐ vicinity

state Illinois county Cook zip code 60827

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this x nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property x meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance: x **national** ___ **statewide** x **local**

Applicable National Register Criteria: x **A** x **B** x **C** ___ **D**

Carey L Mayer 3/1/2022

Signature of certifying official/Title: Deputy State Historic Preservation Officer Date

Illinois Department of Natural Resources - SHPO

State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official Date

Title State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

X entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:)

James Gabbert 4-13-2022

Signature of the Keeper Date of Action

Altgeld Gardens – Philip Murray Homes Historic District
Name of Property

Cook County, Illinois
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply.)

X	private
X	public - Local
	public - State
	public - Federal

Category of Property
(Check only **one** box.)

	building(s)
X	district
	site
	structure
	object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
191	8	buildings
1	0	site
24	10	structure
0	9	object
216	27	**Total**

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions.)

Commerce / Trade: Business
Domestic: Multiple Dwelling; Education: School
Government: Public Works; Landscape: Park
Recreation: Auditorium
Recreation: Sports Facility
Religion: Religious Facility

Current Functions
(Enter categories from instructions.)

Commerce / Trade: Business
Domestic: Multiple Dwelling; Education: School
Education: Library; Government: Public Works
Landscape: Park; Recreation: Auditorium
Recreation: Sports Facility
Vacant / Not in Use

7. Description

Architectural Classification
(Enter categories from instructions.)

Late 19th and 20th Century Revivals: Colonial Revival
Modern Movement: Art Deco

Materials
(Enter categories from instructions.)

foundation: Concrete
walls: Brick, Concrete, Stone, Glass, Terra Cotta
roof: Asphalt
other:

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity).

Summary Paragraph

The Altgeld Gardens – Philip Murray Homes Historic District is located in the Riverdale community area on the Far South Side of Chicago, Illinois. The district is bounded by E. 130th Street to the north, S. Greenwood Avenue to the east, E. 133rd Street, E. 134th Street, and E. 133rd Place to the south, and S. St. Lawrence Avenue to the west. The district includes the Altgeld Gardens and Philip Murray Homes housing developments, public schools, and privately owned retail and church buildings constructed in the 1940s through the 1970s. Commissioned by the Chicago Housing Authority (CHA) in the early 1940s, Altgeld Gardens Homes (known simply as Altgeld Gardens) was constructed between 1944 and 1945 with site planning and individual building designs by the Chicago architectural firm Shaw, Naess & Murphy. The Altgeld Gardens development originally consisted of 162 two-story brick rowhouse-style apartment buildings, as well as community buildings, public schools, and a public park. A privately-owned Shop Building designed by Chicago architects Keck & Keck was constructed at the center of the development and completed in 1945. In response to the overwhelming need for additional housing, the CHA recommissioned Altgeld's original architects, then known as Naess & Murphy, to design an expansion to Altgeld Gardens in 1951; constructed between 1952 and 1953, the housing expansion named the Philip Murray Homes was sited on three separate parcels of vacant land immediately west and south of Altgeld Gardens and consisted of 63 two-story brick rowhouse apartments. The district also contains six public school buildings; two privately-owned churches; Carver Park with an indoor swimming pool; and two CHA community centers, all constructed in the decades after Altgeld Gardens' completion to accommodate the growing community. The Altgeld Gardens and Philip Murray Homes developments continue to operate as a public housing community operated by the CHA and retain 136 of the original two-story brick rowhouse apartment buildings, as well as all of the original community buildings, schools, and the public park. Later changes to the community include the re-landscaping of all Altgeld Gardens and Philip Murray Homes interior courtyards between 2005 and 2017; the demolition of 26 apartment buildings in Altgeld Gardens between 2017-2018 and 25 apartment buildings belonging to the Philip Murray Homes between 2016-2017; the exterior and interior renovation of Altgeld Gardens' rowhomes; and the completion of the Altgeld Family Resource Center in 2020. Despite these changes, most buildings dating from the district's period of significance remain and the original design of the Altgeld Gardens – Philip Murray Homes Historic District remains clearly legible. The district's extant resources retain sufficient integrity to convey its significance under National Register Criteria A, B, and C.

Narrative Description

Altgeld Gardens – Philip Murray Historic District Resource Descriptions

The proposed Altgeld Gardens - Philip Murray Homes Historic District contains a total of two hundred-and-forty-three (243) resources. Of this number, one hundred-and-seventy-four (174) rowhouse apartment buildings, seventeen (17) non-residential buildings, twenty-four (24) structures, and one (1) site account for a total two hundred-and-sixteen (216) contributing resources. The remaining twenty-seven (27) resources are non-contributing buildings, structures, and objects. See the attached Resource Map and Inventory spreadsheet for an outline of all resources with addresses, construction dates, architects, C/NC status, etc.

Note that resources were considered contributing ("C") if they fall within the period of significance established for their respective significance criteria and retain sufficient integrity to express that significance. Non-contributing ("NC") resources are those that either do not contribute to the significance of the district, date from outside the established periods of significance, or no longer retain sufficient integrity.

All features within the proposed district that are not counted due to size or lack of importance, such as fencing, are considered non-contributing.

Contributing Resources

1. Altgeld Gardens – Philip Murray Site (completed 1944-45; 1953)
Contributing under Criterion A, POS 1944-1972

The Altgeld Gardens – Philip Murray Homes Historic District is located just west of Lake Calumet Industrial District on the Far South Side of Chicago, in the Riverdale community area just north of the Little Calumet River. The district is bounded by E. 130th Street to the north, S. Greenwood Avenue to the east, E. 133rd Street, E. 134th Street, and E. 133rd Place to the south, and S. St. Lawrence Avenue to the west. The district's site has a highly residential character and is predominantly composed of low-rise masonry buildings deliberately arranged on blocks set between a connected web of paved curvilinear streets.

Immediately outside the district boundary to the southeast and bounded to the east by Interstate-94 (Bishop Ford Freeway) is Beaubien Woods, a small forest preserve with prairie, woodland, and wetland habitats. Small, unassociated residential neighborhoods known as Golden Gate and Eden Green are located immediately to the west of the district and are composed of detached single-family homes and apartment complexes that predominantly date from the late 1960s and 1970s. These neighborhoods are bounded to the west by a heavy rail line for the Metra Electric District and a northern curve in the Little Calumet River.

The larger area surrounding the district has a heavily industrial character. Directly north of the district is the Metropolitan Water Reclamation District of Greater Chicago, a sewage treatment plant. East of Interstate-94 are heavy industrial areas and landfills and the Lake Calumet Industrial District. Additional industrial sites are located across the Little Calumet River to the south and east, including the former Acme Steel plant.

Altgeld Gardens (See Photos #1-5, 11-25, 32-33)

The Altgeld Gardens section, which was originally planned by architects Shaw, Naess, & Murphy and completed between 1944-1945, is composed of fourteen (14) blocks. The residential blocks, which include Blocks 1, 2, 3, 4, 5, 6, 9, 10, wrap around the development's central core and surround it to the east, north, and west. Blocks 11, 12, and 13 encompassed all of the residential buildings east of S. Greenwood Avenue; however, as all of these buildings were demolished in 2018, Blocks 11, 12, and 13 are being excluded from the district.

All residential blocks feature a common layout (Photos #1-5). Each block is divided into four symmetrical quadrants that are divided by two paved parking lots that flank a pair of two-story rowhouse apartment buildings at center. (The exception to this is Block 8, which features the Altgeld Gardens Community Building No. 2 at its NE quadrant). Each quadrant has three two-story rowhouse apartment buildings arranged in a U-shape that is oriented so that the open end faces a parking lot. Within each U-shape configuration are landscaped courtyards composed of grassy lawns, a curving concrete walkway, and a paved community area with benches. Grassy lawns appear along the outside of the U-shape configurations and act as buffers between the apartment buildings and the paved roads. Rectilinear concrete walkways facilitate circulation between front and rear entries of each apartment unit and the rest of the block. Concrete sidewalks line the outer edges of each block. Black metal fences typically divide the sidewalks from street-facing front yards. Planted trees are scattered throughout the site and exist in street-facing front yards and within inner courtyards. Eight playgrounds/splash pads exist and are located at Blocks 4, 5, 6, 7, 8, 9, 10 and one between Blocks 1 and 2.

Although the layouts remain mostly as was originally designed by Shaw, Naess & Murphy, each of the residential blocks received landscape improvements between c.2007 and 2017. This work, which was undertaken by Holabird & Root and reviewed/approved by IL SHPO, included the removal/replanting of trees, the replacement of deteriorated concrete walkways and sidewalks, the installation of black metal fencing along sidewalks, and the addition of the eight playground islands/splashpads. Other work included the construction of new small, one-story laundromats and utility buildings. The original parking lots were retained but slightly reconfigured with new circulation around new parking lot islands. Changes were also made to the courtyards within the U-shaped configurations of apartments. Previously, these inner courtyards had a large, paved area that was surrounded by a perimeter of small grassy yards belonging to the apartments except at the end where it was connected to the parking lot. The relandscaping work removed these paved areas and added the grassy lawns, concrete walkways, and community areas that exist today. Although this work was completed following IL SHPO review and approval, it is all considered non-contributing to the site because it falls outside of the period of significance for Criterion A.

The site's central core, which was designed as part of the original master plan of Altgeld Gardens, includes an unnumbered block bounded by S. Corliss Avenue to the west, E. 132nd Street to the north, E.133rd Place to the south, and Block 8 and E. 132nd Place to the east. This section features the contributing Children's Building (Photo #13), Carver Park Indoor Pool (Photo #22), and Altgeld Gardens Community Building No. 2 (Photo #23) clustered together at the northeast corner. Four contributing original school buildings (Buildings A, B, C, D; Photos #14-17) wrap along the western and northern edge of the northern half of Carver Park. Prior to the establishment of Carver Park around 1955, this northern half of the park was designed by Shaw, Naess & Murphy as part of the original master plan for Altgeld Gardens. Early drawings show that it was originally intended to serve as an athletic field for use by the residents of the development. Historic aerial photographs confirm that the original boundary framed by the contributing buildings to the west, north, east, and E.133rd Place to the south, has remained intact and that park area has always remained an open space. Historic aerials show that a non-grassy, perhaps paved, area had existed between the late 1960s to 1980s; however, the park was relandscaped to its current appearance sometime by 1998. Today, the northern portion remains an open, flat grassy field. Planted trees and shrubs are scattered throughout. This northern portion of Carver Park also features a sand pit, basketball courts, children's playgrounds, and picnic tables.

The central core also includes Block 14 to the northeast. Block 14 was designed as part of the original master plan of Altgeld Gardens to serve as the community's commercial and administrative center. It retains its original wedge-shape and includes the contributing Shop Building and Administration Building (Photos #11-12, 18-20). An original paved parking lot exists, and curves, along the northeast facade of the Shop Building. The Altgeld Family Resource Center designed by KOO Architecture and completed in 2020 exists at the northwest corner of Block 14 (Photo #33). Site work around the new building included new concrete paving, gardens along the façade of the new building, and new paved street adjacent parking areas to the north and west of the new building.

The Altgeld Gardens portion of the site features a web of paved curvilinear vehicular streets that surround the central core in a roughly U-shape. The site's main access point is located at the northeast corner. Here, S. Ellis Avenue runs from E. 130th Street and gently curves southwest into the development. Main bisecting paved two-way vehicular roads that curve through the development from the north to east include E. 130th Place, S. Greenwood Avenue, E. 131st Street and S. Ellis Avenue. On the western end, S. Corliss Avenue and S. Langley Avenue run north-south with a gentle curve between E. 133rd Place to the south and E. 132nd Street to the north. Smaller, paved, one-way streets run between the individual blocks and include the north-south running S. Evans Avenue, and the east-west running E. 132nd Street and E. 133rd Street. Bounding the site's curvilinear roads along the southern edge of the site, and generally running east-west, are E. 133rd Street which continues into E. 133rd Place and E. 134th Street, which are also paved two-way vehicular roads.

Philip Murray Homes (Photos #6-10)

Philip Murray Homes is composed of one block, Block 17, which is located to the west of Altgeld Gardens Blocks 4, 5, and 6.

This block includes rowhouse style apartment buildings of varying lengths that are mostly oriented north-south. A series of three apartment buildings flank a central greenspace. Four apartment buildings arranged in a wedge-shape with a grassy courtyard are located east of the central green space. The central greenspace is bounded on the west by S. St. Lawrence Street and features a large flat grassy lawn, a playground/splash pad accessed by curving concrete sidewalks, and single basketball courts to the north and south. The residential areas north and south of the central greenspace are accessed by straight paved roads that connect to narrow, north-south oriented parking lots situated in the center of the apartment buildings. Apartment buildings feature grassy lawns. Circulation for pedestrian traffic within the block is facilitated by curving central concrete walkways between buildings with straight walkways that run to individual apartment entries. A limited number of planted trees are scattered throughout the block. Non-contributing black metal fencing lines the perimeter of the block and divides grassy lawns from the street adjacent sidewalks.

Historic aerials show that the Philip Murray Homes development originally featured large simple grassy lawns and straight concrete walkways between the buildings. Over time, some of the grassy areas between the apartment buildings appear to have been paved over. The Philip Murray Homes site was re-landscaped in 2007. Although the access roads and central parking lots were retained, all new grassy lawns and concrete walkways were added between buildings, new trees were planted, fencing added, and the playground/splash pad added to the central greenspace.

The Philip Murray Homes development originally featured two additional non-contiguous residential blocks (Blocks 15 and 16) along E. 133rd Street and E. 133rd Place south of Altgeld Gardens. As these additional areas were completely demolished between 2016 and 2017, Blocks 15 and 16 have been excluded from the district.

Site Perimeter (Photos #24, 26-31)

Along the southern perimeter of the district, across E. 133rd Street and 133rd Place, is the southern portion of Carver Park and two school buildings: George Washington Carver Primary School and the now vacant former Carver High School, which was most recently known as the Chicago International Charter School (CICS) Larry Hawkins.

The southern portion of Carver Park was created as part of Carver Park around 1955 and remains very much intact (Photo #24). Unlike the northern half, which is owned by CHA, it was and remains owned by the Chicago Park District. This southern half has a roughly rectangular shape and features a grassy play field with baseball diamonds which, as evidence by historic aerials, appear to be original despite having been upgraded throughout the years. A small, non-historic masonry building with restrooms is located adjacent to a children's playground that was added to the park sometime by the mid-1980s.

The two contributing schools now known as George Washington Carver Primary School (Photo #30) and the vacant former Carver High School (Photos #26-27) retain original grassy lawns and concrete walkways in front with non-contributing black metal fencing along E. 133rd Place. The rear (south) of the buildings appears to have always served as parking or recreational space. The formal parking lot between the buildings appears to have been created by the late 1970s or early 1980s. Much of this parking lot was repaved in 2007 and new curbs added.

In the southwest corner of the district is the contributing Our Lady of the Gardens Catholic church and school building (Photo #29), known today as CICS Lloyd Boyd, and the contributing Our Lady of the Gardens gymnasium (Photo #28). These buildings have always featured an open lawn to the west and south that is bounded by S. St. Lawrence Street and E. 134th Street. To the east, opens lawns with a few trees and shrubs exist between the buildings and S. Langley Street. Straight concrete walkways exist at the east and north lawns. Paved parking lots are located adjacent to E. 133rd street north of the school and between the school and gymnasium building to the south. A playground/basketball court is located west of the building and was added around 2010. These buildings are accessed via the concrete walkways or from a curved drive east of the gymnasium building.

The final perimeter school building, Ira F. Aldridge Elementary School, is located at the northwest corner of the district (Photo #31). This school is bounded by E. 131st Street to the south, E.130th Street to the north, a narrow overgrown portion of S. Lawrence Avenue to the west, and S. Champlain Avenue to the east. The school grounds include grassy lawns, original concrete walkways, and paved parking lots at the southeast corner and behind the school to the north. The rear parking lot dates to around 1967 while the southeast parking lot was added sometime in the early 2000s. North of the rear parking lot is a grassy playfield. A few planted trees and shrubs are located around the school perimeter.

Site Integrity

Overall, the Altgeld Gardens-Philip Murray Homes site retains a high degree of integrity. Most of the original layout remains intact. At Altgeld Gardens, the circulation pattern remains defined by curved, connecting roads and deliberately placed residential blocks that surround a central core of non-residential/community buildings and Carver Park. The rowhouse apartment buildings also retain their original U-shaped arrangement with inner courtyards and central parking lots. The block that remains of the Philip Murray Homes development also retains its original layout and distinctive arrangement of rowhouse apartments clustered together between parking lots and central lawns. The non-residential buildings within the district, such as the schools and the community buildings, largely retain their original forms and massing.

As discussed above, a number of changes to the site have occurred within the last 20 years that have resulted in a limited loss of integrity. This work includes the demolition of 26 Altgeld Gardens apartment buildings located to the east of S. Greenwood Avenue in Blocks 11, 12, and 13. Additionally, 25 Philip Murray Homes apartment buildings were demolished on Blocks 15 and 16 south of E. 133rd Place and E. 133rd Street. Other notable changes included work done by Holabird & Root in the 2000s and 2010s, all of which was approved by IL SHPO. Site related work by Holabird & Root involved the relandscaping at all blocks. including new lawns, the replacement and addition of walkways, community areas, and playgrounds/splash pads. New metal fencing was added along the perimeter of many blocks. Original parking lots received new curbing, landscape islands, and circulation patterns. Also, all of the residential buildings were rehabilitated, and new single-story laundry and utility buildings were constructed throughout the site. A more recent change, also approved by IL SHPO, included the construction of the Altgeld Family Resource Center designed by KOO architects. For more information on these buildings see their respective sections below.

The loss of Blocks 11, 12, and 13 (Altgeld Gardens) and Blocks 15 and 16 (Philip Murray Homes) along the eastern and southern edges of the development, the relandscaping of all blocks, the rehabilitation of all residential buildings, and the construction of new buildings has not overtly disrupted the original plan of the Altgeld Gardens – Philip Murray Homes development. Therefore, the changes described have not been found to substantially degrade the ability of the community to convey its significance. Additionally, this work was all undertaken following IL SHPO review and approval. The Altgeld Gardens – Philip Murray Homes site has been found to retain enough integrity to reflect its significance under Criterion A and C.

2. Parking Lots (24 resources) (completed 1944-1952)
Contributing under Criterion A, POS 1944-1972

Residential Block Parking Lots (22 resources)
All of the original residential block parking lots for the Altgeld Gardens and Philip Murray Homes developments remain. In Altgeld Gardens, two central parking lots exist per residential block creating a total of twenty (19). At Philip Murray Homes, two (2) narrow parking lots exist centered between apartment buildings. These parking lots remain in their original locations and are generally accessed in the same manner they were historically – vehicular access from the street and pedestrian access to the apartment buildings on the sides.

Changes to these residential block parking lots were undertaken between c.2007 and 2017.

The Altgeld Gardens residential block parking lots originally had an L-shaped layout. A single entry/exit existed at the street for vehicles. A small grassy lawn existed adjacent to the single entry/exit point. The paved parking area extended back from the entry/exit point and wrapped around the rear of the grassy lawn creating the L-shape. The c.2007-2017 improvements at each parking lot included the removal of the L-shaped layout. The small grassy lawn was removed, and a wider entry/exit point was added at the street. The circulation for entering and exiting vehicles was reconfigured into a loop around a long, central grassy island. New curbing and pedestrian walkways were added along the edges of the parking lots.

The two parking lots at the extant Philip Murray Homes block remain at their original location and appear to retain much of their of original layouts. These parking lots are narrow with a central two-way lane for vehicles in the center and parking spaces to either side. Both parking lots are oriented north-south and are centrally located between rowhouse apartment buildings. Both parking lots have two entry/exit points and a two-way paved road that provides access to, and runs centrally through, the parking areas Improvements that were made to these parking lots in c. 2007 include new paving and curbs, but the narrow layouts and access points/roads remain intact.

These parking lots have been counted as individual contributing resources (structures) as they are significant original features.

Commercial/Administration Block (Block 14) Parking Lot

An original paved parking areas exists, and curves, along the northeast façade of the Shop Building.

This parking lot originally curved along the entire length of Block 14's northeastern boundary, from the intersection of E. 131st Street and S. Ingleside Avenue eastward and down, along S. Ellis Avenue, to E. 132nd Street. This parking lot was designed as part of the original master plan and provided parking for the community's commercial/administration center. An area of the curving parking lot along E. 131st Street has been altered as part of the construction of the Altgeld Family Resource Center completed 2020. Although some parking still remains, a small portion of the original parking lot is now occupied by part of the new building and an access road has been added. The section of the curving parking lot along S. Ellis Avenue remains intact but has received new asphalt paving.

Although a portion of this parking lot has been altered, much of it remains intact and in use as a parking lot for the community's commercial/administration center. It is considered a contributing resource (structures) because it is a unique feature of the Block 14's wedge-shaped design, a critically important component of Shaw, Naess & Murphy's original master plan, and enough of the parking lot remains intact and readable to convey this.

Dorothy Gautreaux Child Development Center Parking Lot.

A paved, rectangular parking lot is located east of the non-contributing Dorothy Gautreaux Child Development Center and fronts S. Ellis Avenue between E. 132nd Street and E. 132nd Place. This parking lot is a continuation of the original curving parking lot to the north, which runs along the northeast façade of the Shop building, and originally provided parking for the community's commercial/administration center. As an original part of the unique design for the community's central core, this parking lot remains an important component in conveying the significance of the site. Based on historic aerials, no significant changes have occurred to this parking lot over time. Non-historic metal posts linked by chains line the north, east, and south boundary of the parking lot. Planted trees also exist along a narrow grassy strip along S. Ellis Avenue.

This parking lot is considered its own contributing resource, separate from the *Commercial/Administration Block (Block 14) Parking Lot,* because A.) divided by E. 132nd Street, it is not physically connected to the wedge-shaped Block 14; B.) it now distinctly functions as a parking lot for the *Dorothy Gautreaux Child Development Center.*

3. Altgeld Gardens Apartment Buildings (136 resources) (completed 1945)
Contributing under Criterion A, POS 1944-1972
Contributing under Criterion C, POS 1944-1950
See Photos #1-5

There is a total of one hundred-and-thirty-six (136) extant rowhouse apartment buildings within the original Altgeld Gardens development. Of these, there are five different apartment types: A, B, CL, CR, and D. These five types were originally designed by the architects Shaw, Naess & Murphy as part of the original master plan of Altgeld Gardens. Each of the five types share a similar design language. Each type is a walkup, two-story, rowhouse-style, residential building with a box-like massing and rectangular footprint, and each utilize the same materials and construction. Typical elements of these apartment buildings include a concrete foundation, exterior walls of common brick laid in common bond, a gabled roof with 3-tab asphalt shingles, metal gutters and downspouts, and stepped gable ends that extend upward from the building's brick end walls. Primary elevations typically feature a mix of single and grouped exterior unit doors under a metal canopy (the original concrete canopies were removed and replaced in renovations of the 2010s). Exterior doors are typically metal paneled single leaf doors. All types have punched window openings with a concrete sill and anodized aluminum, one-over-one, double-hung, replacement windows with aluminum screens. Each apartment type has a standard fenestration pattern of on each elevation. Each type features concrete pads that abut the front and rear entry doors. These pads connect to concrete walkways that cross grassy lawns and lead to both street adjacent sidewalks and interior courtyards.

The typical differences between the rowhouse apartment building types are the number of units they contain, their overall length, and fenestration patterns. Type "A" apartment buildings contain six (6) units. Type "B" Buildings are identical to Type "A" buildings but feature an excavated basement that is accessed by exterior concrete steps. Type "CL" and Type "CR" apartment buildings contain twelve (12) units and are mirrored reflections of each other. They are both composed of three distinct sections that each contain four (4) units. These sections each have a rectangular footprint and are set back slightly from one another, giving the overall building a staggered massing that angles backward. Type "D" apartment buildings contain four (4) units and have the shortest length of the five types.

All units typically housed between one to four bedrooms. Each unit also typically had a layout with living space in the front of the unit and the kitchen, pantry, and bathrooms in the rear. Interior concrete stairs accessed the second stories which typically housed hallways flanked by bedrooms and bathrooms. The interiors of most units were reconfigured during renovations of the 2010s.

The residential blocks are composed of four quadrants in which the apartment buildings are arranged in a distinctive U-shape that encloses an internal landscaped courtyard. Two additional apartment buildings are situated parallel from each other in the center of each block. Narrow, paved parking lots are located on both sides of these central apartment buildings.

Playgrounds/splash pads were added to most of the residential blocks between 2007 and 2017.

4. Philip Murray Homes Apartment Buildings (38 resources) (completed 1953)
Contributing under Criterion A, POS 1944-1972
See Photos #6-10

There are 38 extant rowhouse apartment buildings within the Philip Murray Homes, constructed between in 1952 and 1953. Of these, there are six different types: A, B, C, D, E, G. These types were originally designed in 1951 by the architects Naess & Murphy as part of the original plan of the Philip Murray Homes. While each of the apartment types differ in terms of the number of units, all of the apartment buildings share a standard design language. Each rowhouse apartment building type is a walkup, two-story, rowhouse-style, residential building with a rectangular footprint, box-like massing, and a regular fenestration pattern with punched window openings. Each type has a concrete foundation, exterior walls of common brick, a gabled roof with 3-tab asphalt shingles, metal gutters and downspouts, one-over-one anodized aluminum replacement windows and concrete sills, paired metal unit doors and storm doors and a concrete canopy. Each type features concrete pads that abut the front and rear entry doors. These pads connect to concrete walkways that cross grassy lawns.

Type “A” apartments contain four (4) units. Type “B” apartments contain eight (8) units. Type “C” apartments also have eight (8) units and are but have a slightly different interior plan. Type “D” apartments have twelve (12) units. Type “E” has ten (10) units. Type “F” has six (6) units.

The Philip Murray Homes apartment types have a virtually identical, two-story, interior plan. Units typically have a first floor divided with a living room and a stair to the second story in the front half and a kitchen and dining room in the rear half. The second story typically contains bedrooms and a bathroom. Type “C” apartment types have a few, central, one-bedroom units on each story. These one-bedroom units have a similar layout, but a slightly larger living/dining room with an adjacent bedroom in the front and a kitchen and bathroom in the back.

All of the extant Philip Murray Homes apartment buildings are located on Block 17, west of the original Altgeld Gardens development. The block is composed of three sections. The northern and southern sections feature apartment buildings arranged in a cluster between a narrow, central, paved parking lot. Concrete walkways cross grassy lawns and run between the apartment buildings and provide access to the central parking lots, S. St. Lawrence Street to the west and S. Langley Avenue to the east. The block’s center section features four apartment buildings arranged roughly in a circle with a large public greenspace to the west. The greenspace has an open grassy lawn and children’s playgrounds.

5. Administration Building (completed 1944)
Contributing under Criterion A, POS 1944-1972
Contributing under Criterion C, POS 1944-1950
See Photos #11-12

The Administration Building was designed by Shaw, Naess & Murphy as part of the original master plan for Altgeld Gardens and was completed in 1944. The Administration Building is a one-story office/service/storage building with an elongated L-shaped footprint. A small, excavated basement area

houses a boiler room. The building has a concrete foundation, exterior walls of common brick laid in common bond, and a flat built up roof with slightly projecting cornice covered in metal sheeting. The building's north and south facing elevations serve as primary elevations, with the north elevation facing a landscaped public area and the south elevation facing E. 132nd Street. A large, covered passage divides the western one-third of the building from its eastern two-thirds. Concrete steps and a ramp with metal handrails provide access to the raised covered passage, which features brick exterior walls with the building's main entrances. The north and south elevations a feature series of punched window openings positioned high on the exterior walls, just below the projecting cornice. A continuous stone sill runs the length of each series of windows. The north and south elevations west of the covered passage feature large double-hung wood sash windows covered by metal screens. These double-hung windows have a three-over-three light pattern with each sash having a stack of three horizontal glass lights. The north and south elevations east of the covered passage feature smaller window openings containing hinged wood awning sashes, each with the three horizontal glass lights. The south elevation also features secondary service entrances that flank an overhead garage door. A diamond-shaped brick boiler stack is located off the north elevation, adjacent to the covered passageway. The short east and west (side) elevations feature windows of the same type as seen on the north and south elevations and have additional service entrances.

A notable feature of the Administration Building's exterior is a large terra cotta panel at is north façade adjacent to the center covered passage. The terra cotta panel depicts an abstracted version of Altgeld Gardens' original 1944 plan, notably missing the 1945 Shop Building.

Inside the Administration Building are CHA offices and maintenance spaces that continue to serve the community today.

6. **Children's Building (completed 1944)**
Contributing under Criterion A, POS 1944-1972
Contributing under Criterion C, POS 1944-1950
See Photo #13

The Children's Building was designed for community and child care purposes by Shaw, Naess & Murphy as part of the original master plan for Altgeld Gardens and was completed in 1944. It is a one-story building with an irregular footprint, asymmetrical elevations, and flat roofs of varying heights. Its irregular form is the result of the building's various functions, which included a health center, club rooms, offices, gymnasium/auditorium, and nurseries. The double height, rectangular-shaped gymnasium/auditorium is located roughly in the center of the building and makes up part of the primary north elevation. Three one-story projecting wings are located at the east side of the gymnasium and make up the east elevation. A one-story U-shaped portion is located on the west side of the gymnasium and makes up the west elevation. A one-story L-shaped portion is located to the south, connecting the west and east portions of the building, and encloses an open, concrete paved courtyard.

Two main entrances are located underneath a concrete canopy that cantilevers out at the first story level of the gymnasium/auditorium's north facing elevation. The building has a concrete foundation and exterior walls of common brick. The exterior of the double height gymnasium/auditorium features exposed concrete piers regularly spaced between spans of brick. Each elevation has a different fenestration pattern, which is typically irregular due to a few previous openings that have been resized or completely infilled with brick. Typical first story windows contain one-over-one anodized aluminum double hung sashes set within punched openings. First story window openings typically are located in a series. A continuous stone sill typically runs the length of each series of windows. A continuous concrete lintel is located above first story windows on the north and west elevations. The north, west, and south elevations of the two-story gymnasium features glass block windows positioned just below a slightly projecting cornice. The west elevation windows have been boarded over with plywood.

As at the Administration Building north across East 132nd Street, notable features of the Children's Building's exterior are two large terra cotta panels at its gymnasium and classroom entrances. Each panel displays an abstracted plan of the Children's Building.

Inside the Children's Building houses classrooms, a gymnasium, fitness rooms, locker rooms, and an office facility that continue to serve the community today.

7. Original School Buildings (4 Resources)
Building A (completed 1944)
Building B (completed 1944)
Building C (completed 1944)
Building D (completed 1945)
Contributing under Criterion A, POS 1944-1972
Contributing under Criterion C, POS 1944-1950
See Photos # 14-17

Four original school buildings were designed in the Colonial Revival style by Chicago Board of Education architect John C. Christensen and were constructed as part of the original master plan for Altgeld Gardens. These buildings wrap around the western and north edge of Carver Park. They each originally served different uses and are identified herein as Buildings A, B, C and D.

The northeast school building adjacent to the Children's Building, Building C was constructed in 1944 and originally served as a high school. The northwest school building, aligned on a diagonal with the intersection of East 132nd Street and South Corliss Avenue, Building B was constructed in 1944 and served as an assembly hall/gymnasium. Building A to the south of Building B was built in 1944 and originally served as a grammar school. The southernmost Building D was constructed in 1945 and served as an additional grammar school with rooms for kindergarten.

The high school and two grammar schools (Buildings A, C and D) are practically identical is design. They are each a one-story building with a T-shaped footprint, and pitched roofs with a tall brick chimney centered at the intersection of the T-shaped plan. These schools have a concrete foundation, exterior walls of common brick laid in common bond, and regularly arranged fenestration. Each wing of the T-shaped plan terminates at short gable ends with classically inspired roof lines capped with a stone coping. The main elevation of each school building is the street facing gable end. This main elevation features concrete steps that ascend to a central entrance framed with a classical stone entablature and columns in antis. Centered above the entrance and set into the brick is a classically detailed stone block with the year of construction carved into it (Buildings A and C have "1944" and Building D has "1945"). The long side elevations each have a subtle brick dentil course and a series of regularly sized window openings with stone sills. Building C's window openings have been boarded over. The windows at Building A are non-historic multilight, typically nine-over-nine, double hung sash. The windows at Building D are typically non-historic one-over-one double hung sash with a fixed transom. The Carver Park-facing elevations of each building feature a pedimented stone portico with columns in antis. Each portico covers a recessed entry with decorative stone trim. Metal doors are located below fixed glass or infilled transoms.

Building B, the original assembly hall and gymnasium, is a one-story building with a T-shaped footprint. The building has a concrete foundation and exterior walls of common brick laid in a common bond. The vertical bottom wing of the T-shaped building has a tall, pitched roof that terminates at gable ends with classically inspired roof lines capped with a stone coping. Its primary façade is the short gable end that faces northwest toward the intersection of S. Corliss Avenue and E. 132nd Street. Here, a shed roofed projection extends out from the gable end and features a central entrance framed by a pedimented stone door surround. The

horizontal, top wing of the T-shaped building has a lower, flat roof and its side elevations angle out to form right angles, creating a roughly hexagonal shape.

Buildings A, B, and D are joined together by one-story masonry hyphen-links that are located between the buildings, connecting at the side elevations of their horizontal wings.

Building C is vacant and in poor condition. The remaining three buildings remain in use as community and school buildings.

8. Shop Building (completed 1945)
Contributing under Criterion A, POS 1944-1972
Contributing under Criterion B, POS 1979-2011
See Photos #18-19

The Shop Building was designed by the architectural firm of Keck & Keck and was constructed in 1945 Although it was privately owned, as remains so today, the Shop Building was built as part of the original master plan of Altgeld Gardens.

The Shop Building is notable for the International Style design of its white-painted concrete frame and roof structure and its expansive use of glass (most infilled today), distinct from the mostly Colonial Revival architecture of the remainder of Altgeld Gardens.

The Shop Building is a one-story commercial building with a curved, crescent-like footprint. The Shop Building has a concrete foundation, exterior walls of painted brick, and a flat built-up roof. A curving, white-painted concrete canopy cantilevers out from the roof line, runs the length of the west elevation and wraps around the northwest corner to the short, north (side) elevation. The west facade is the primary elevation, facing a landscaped public area with paved walkways. The west facade historically featured glazed storefronts; these storefronts were removed and infilled with brick in the mid-to-late-1970s, based on historic photographs and accounts from Altgeld residents. A few door openings remain, some of which are boarded up or locked behind security gates. The east (rear) elevation facing South Ellis Avenue and features bands of boarded up windows highly positioned just below the metal cornice. Rear entry doors for each of the former commercial spaces are irregularly spaced along the east elevation beneath the bands of windows.

A covered outdoor passage is located near the southern end of the building. This passage has a concrete floor and painted concrete ceiling with a covered skylight. The south wall within the passage features boarded up storefronts. The north wall within the passage is of painted brick and concrete and features the hand painted names of Altgeld Gardens – Philip Murray Homes residents who have died due to violence and medical complications resulting from the environmental hazards facing the community. This Memorial Wall, first started by Altgeld residents in the 1960s, has sadly grown to include most of the passage's north wall and has become a significant feature in its own right, a reminder of the challenges faced by Altgeld residents.

Inside the Shop Building is mostly vacant and houses former retail and office spaces, including the former offices of Hazel Johnson's People for Community Recovery organization.

9. United Church of Altgeld Gardens (completed 1952)
Contributing under Criterion A, POS 1944-1972
See Photo #21

The United Church of Altgeld Gardens was completed in 1952 and was designed in the Colonial Revival style by architects Michelsen, Rabig & Ramp. The church constructed by a private owner on a prominent site

along Altgeld Gardens' South Ellis Avenue entry boulevard on a site left empty in the original site plan, possibly for such a purpose.

The United Church of Altgeld Gardens is a one-story building with a raised basement and an L-shaped footprint. The building has a concrete foundation, exterior walls of red brick, gable ends of painted concrete masonry units, and a gabled roof covered in 3-tab shingles. The building is oriented to the northwest, with its primary elevation facing southwest toward South Ellis Avenue. The main entrance is located at the intersecting gable end that projects out from the southern end of the building at a right angle. The main entry is centrally located in this projecting gable end and features an ornate, classically inspired door surround with a broken pediment. Brick quoining is located at the corners of the projecting intersecting gable end. Punched windows are regularly arranged, typically with one window per bay at the basement and first-story levels. Except for a pair of basement windows, the northwest facing elevation features uninterrupted spans of brick with decorative brick quoining and a central stone crucifix. Semi-circular wood vents are centered in the gable ends. A Georgian-inspired spire is located on the ridge of the gable roof near the northwest facing elevation.

Inside the building today houses an education nonprofit for children. The building's original layout overall remains intact with its original upper floor sanctuary subdivided for classrooms.

10. Carver Park Indoor Pool (completed 1958)
Contributing under Criterion A, POS 1944-1972
See Photo #22

The Carver Park Indoor Pool was designed by the firm Ralph H. Burke, Inc. and was completed in 1958. It is a one-story building with a rectangular footprint constructed by the Chicago Park District within Carver Park as an addition to the Altgeld Gardens' Children's Building.

The southern two-thirds of the building is double height and houses an indoor pool. The exterior is composed of a steel frame with masonry infill at ground level and glass block above. The northern one-third of the building is of standard height, features exterior walls of brick, and houses locker and shower rooms. A flat, retractable roof covers the double height pool and was designed to be retractable over the northern portion. A large rectangular brick chimney is located on the east elevation. A narrow hyphen-link of masonry construction connects the northwest corner of the building to the Children's Building.

11. Altgeld Gardens Community Building No. 2 (completed 1972)
Contributing under Criterion A, POS 1944-1972
See Photo #23

The Altgeld Gardens Community Building No. 2 was designed by the architectural firm of Pereira, Bernheim & Kahn between 1969 and 1970 and was completed in 1972. It is a one-story building with a roughly L-shaped footprint. The building is divided into two distinct portions – a north-south oriented rectangular portion to the west, which housed offices and meeting rooms, and to the east, a rectilinear projection with exterior walls that angle outward, which housed a multi-purpose/auditorium space with a stage. The building has a concrete foundation and walls of red brick. The east and west portions of the building have flat built up roofs of different heights. A brick penthouse is located on the roof of the west portion. The west portion of the building features regularly arranged and evenly spaced windows on each of its elevations. The windows on the exposed east and north elevations are vertical strips that extend from the foundation to the roofline and contain two, stacked, one-over-one aluminum framed windows. The west and south elevations have smaller punched windows with one-over one aluminum windows. The primary entrance is located on the north elevation of the west portion. A secondary entrance is located on the south elevation. The east portion containing the auditorium space has no windows and each façade is composed of uninterrupted spans of brick, except for a metal double door near the northwest corner of the east elevation.

Inside, the building continues to house a gymnasium / auditorium and classrooms that serve the community today.

12. Carver Park Pump House (completed 1945)
Contributing under Criterion A, POS 1944-1972
Contributing under Criterion C, POS 1944-1950

The Carver Park Pump House is located within Carver Park and is adjacent to the sidewalk along E. 133rd Place. It was designed by architects Shaw, Naess & Murphy and was constructed in 1945 as part of the original master plan for Altgeld Gardens. It is a one-story utility building with a square footprint. It has a concrete foundation, exterior walls of common brick laid in common bond, and a flat roof. Original window openings with concrete sills that have been infilled with brick are located at all corners of the building and are located just below the overhanging eaves. A metal double door is centered on the east elevation.

13. Utility Building (completed 1945)
Contributing under Criterion A, POS 1944-1972
Contributing under Criterion C, POS 1944-1950

The Utility Building is located adjacent to the apartment buildings of Block 1, and is near the north perimeter of the district, along E. 130th Street. It was designed by architects Shaw, Naess & Murphy and was completed in 1945 as part of the original master plan for Altgeld Gardens. It is a one-story utility building with a rectangular footprint. It has a concrete foundation, exterior walls of common brick laid in common bond, and a flat roof that overhangs a recessed concrete cornice. The Utility Building has no windows. A non-historic metal paneled double door that extends from the foundation to the cornice is located behind a security gate on the north elevation. Metal single leaf doors are located on the north and south elevation.

14. Carver High School / School Building E (CICS Larry Hawkins) (completed 1950)
Contributing under Criterion A, POS 1944-1972
Contributing under Criterion C, POS 1944-1950
See Photos #26-27

The Carver High School was designed in a restrained Art Deco style of architecture by Chicago School Board of Education architect John C. Christensen in 1947. Construction was completed in 1950 to relieve the overcrowded 1944-1945 public schools built for Altgeld Gardens. It is a two-story with raised basement school building with an O-shaped footprint and a flat asphalt roof. The building has a concrete foundation and a masonry exterior composed of orange face brick with grey stone detailing. The base of the building features courses of darker brick that wrap around each elevation and convey the streamline motif common to the Art Deco aesthetic. A light well for the second story is located north of the building's center and an open, grassy courtyard is located south of center. The building is oriented to the north with its primary elevation facing E. 133rd Place. The primary elevation features two, full height, projecting entry bays set between nine bays with a symmetrical window arrangement. Each bay features a group of three windows at each level. Stone panels with stylized Art Deco motifs carved in bas relief are located below a stone string course on the primary elevation. The east and west elevations each have a single projecting entry bay located near their center. Windows are located on the east and west elevations at each level in groups of three. All second story windows feature restrained classically inspired lintels. Projecting entry bays also are located centered on the two-story and basement portions of the south elevation, which flank a one-story central portion with an exterior wall that angles out southward. All projecting entry bays feature concrete steps and door surround, brick corbeling on at the corners, and a circular, stone ornament with the Chicago Board of Education's period logo carved in bas-relief.

The Carver High School is currently vacant.

15. Our Lady of the Gardens Catholic Church & School (CICS Lloyd Bond) (completed 1952)
Contributing under Criterion A, POS 1944-1972
See Photo #29

Our Lady of the Gardens Catholic Church & School was designed in a Wrightian-inspired Modern style by architect Edo Belli. The building was completed in 1952 for the residents of Altgeld Gardens who at that time lacked a dedicated worship space and attended overcrowded schools. Originally identified in news articles as Our Lady of the Garden Catholic Church and School, this pair of buildings has been more commonly referred to as Our Lady of the Gardens Catholic Church until changing its name to CICS Lloyd Bond.

The combined church and school is a one-story, L-shaped building with a classroom wing set perpendicular to a double height auditorium. The building has a concrete foundation, exterior walls clad in yellow face brick, and low-pitched gable roofs. The east (primary) elevation faces S. Langley Avenue and features an asymmetrical façade with a central, recessed, main entrance covered by overhanging eaves. The classroom bays to the south of the main entrance feature bands of large windows set above short brick walls. The bays north of the feature projecting and recessed wall planes composed of wide spans of brick. The north and south elevations of the double height auditorium are also composed of yellow brick and features evenly spaced window openings that span the height of the elevations and contain large aluminum framed windows. Small appendages of similar materials and style are located off the north elevation of the classroom wing and off the south elevation of the auditorium. Landscaped lawns with concrete walkways are located to the east (front) and west) rear of the building. A small parking lot is located to the north and is accessed by E 133rd Street. A non-historic detached garage is located adjacent to the west elevation of the auditorium wing. A basketball court and children's playground are located on the grounds to the rear of the building. To the south is another paved parking lot and the Our Lady of the Gardens Gymnasium (Resource #16).

16. Our Lady of the Gardens Gymnasium (CICS Lloyd Bond) (completed 1959)
Contributing under Criterion A, POS 1944-1972
See Photo #28

Our Lady of the Gardens Gymnasium was built by the Catholic parish in 1959 for use by the church and the community. Originally identified in news articles as Our Lady of the Garden Catholic Church and School, this pair of buildings has been more commonly referred to as Our Lady of the Gardens Catholic Church until changing its name to CICS Lloyd Bond. The gymnasium is a one-story, double height building with a rectangular footprint and large gable roof. The building has a concrete foundation and exterior walls of yellow face brick. The bottom half of all elevations are painted while the upper half remains exposed brick. The east facing gable end elevation is the primary façade and it features a wide central entry with a group of metal doors. The exterior wall of the central bay above the entry doors is recessed and composed of painted concrete. Three vertically oriented strips of windows with concrete spandrels are located within the brick exterior to either side of the central bay. The windows below the spandrels have been infilled with brick. The upper windows are aluminum framed. The long north and south side elevations feature a continuous band or windows along the top of the exterior wall, just below the roof line. The west (rear) elevations also features a continuous band of windows above two evenly spaced groups of doors.

17. George Washington Carver Primary School / Newton Elementary School (completed 1954)
Contributing under Criterion A, POS 1944-1972
See Photo #30

The George Washington Carver Primary School was completed in 1954 by the Chicago School Board of Education as a public school for use by the children of Altgeld Gardens and Philip Murray Homes. It is a two-

story school building with a long rectangular footprint. It oriented horizontally towards E. 133rd Place so that its north (primary) elevation and south (rear) elevations are the long sides of the building and the east and west elevations are the short sides. The building has a concrete foundation and a masonry clad exterior of brick with grey stone sills and coping along the roof line. The east and west elevations are entirely composed of a dark, almost purple colored brick. On the north and south elevations, this dark colored brick clads the projecting entrance bays and frames orange colored brick used as piers and spandrels between first and second story windows. The north and south elevations have a regularly arranged windows with groups of three double-hung windows located in each bay at the first and second story. The west elevation has no windows but does have a central projecting entrance bay. The east elevation has shorter roof height and four groups of a two windows.

The building remains in use today as a public school.

18. Ira F. Aldridge Elementary School (completed 1960, addition completed 1963)
Contributing under Criterion A, POS 1944-1972
See Photo #31

The Ira F. Aldridge Elementary School was designed by architects Walter H. Sobel & J. Stewart Stein and was completed in 1960 as a primary school for the children of Altgeld Gardens and Philip Murray Homes. A large addition that doubled the size of the school was completed in 1963.

It is a sprawling one-story building with a two-story rear portion located at the northeast corner. The building has a U-shaped footprint that encloses a lawn and parking lot to the north. Designed in a style reflective of the Modern Movement, the school has a concrete foundation, masonry walls of light brown brick with some stone and concrete detailing, and several flat roofs that vary in height. The primary elevation faces south towards E. 131st Street and has a wide, covered front entrance with a metal and glass storefront system near the eastern end. A secondary entrance is located near the western end of the south elevation. The south (primary) and east elevations feature bays composed a regular bands of large aluminum windows set above glazed block fill. Each of the bays, which are reflective of individual classrooms within, are divided by vertical strips of brick. This composition is typical of the courtyard facing elevations. The west elevation is irregular and features spans of brick with aluminum windows. The two-story portion to the north features a regular fenestration pattern on the east and west elevations. Pairs of aluminum windows are located at the first and second stories and are set within a façade of light brown brick. Exposed concrete piers divide each of the two-story bays. A rear entrance is located on the north facing elevation with a group of three aluminum windows above.

The building remains in use today as a public school.

<u>Non-Contributing Resources</u>

19. Dorothy Gautreaux Child Development Center (completed c.1979)
See Photo #25

The Dorothy Gautreaux Child Development Center was completed c.1979. It is a one-story building with a rectangular footprint, a concrete foundation, exterior walls of red brick, and a flat, built up roof. Metal and glass storefront windows and entrances are centered on the long sided (north and south) elevations. Additional metal and glass storefront windows are located on the short side (east and west) elevations. A paved parking lot is located to the east of the building and provides access from E. 132nd Street and E. 132nd Place. To the west of the building is a lawn and paved area with benches.

Inside, the building continues to house classrooms that serve the community today.

This building is considered a non-contributing resource because it was completed after the period of significance for Criterion A and is not significant under Criterion C or B.

20. Power Stations (2 resources) (completed 2005-2007)

Two power stations were built in Blocks 5 and 8 of Altgeld Gardens between 2005 and 2007. The power stations are small, one-story buildings with rectangular footprints. Their design is similar to the 1945 Utility Building (See #13 above). They have a concrete foundation, red brick exterior walls laid in a running bond, a tall metal paneled door set behind a security gate, and recessed concrete cornices covered by a flat roof.

These resources are considered non-contributing buildings because they were completed after the period of significance for Criterion A and are not significant under Criterion C or B.

21. Laundry Buildings (4 resources) (completed 2005-2009)
See Photo #32

Four laundry buildings were designed for the residents of Altgeld Gardens and Philip Murray Homes by the architectural firm Holabird & Root and built sometime between 2005 - 2009. They are one-story, purpose-built buildings with a small, square footprints. They have a concrete slab foundation, stuccoed exterior walls, metal and glass storefronts. They are located in Blocks 3, 5, 7, and 10.

These resources are considered non-contributing buildings because they were completed after the period of significance for Criterion A and are not significant under Criterion C or B.

22. Altgeld Family Resource Center (completed 2020)
See Photo #33

The Altgeld Family Resource Center is a community center that also houses the Altgeld Gardens branch of the Chicago Public Library. It was designed by Chicago-based KOO Architecture and completed in 2020. The building is situated along E. 131st Street and sited just west of the Keck & Keck designed Shop Building (See #8 above). This contemporary style structure is a tall, one-story building with an irregular, curving footprint. It has a concrete slab foundation and exterior walls of dark grey and brown brick. It is irregularly fenestrated, with rectangular shaped single light windows of varying sizes arranged is various positions along the entire exterior. The building has a flat roof that is angled to create a double height library space on the eastern side. The main, recessed entrance faces north toward E. 131st Street. The building has two open courtyards with landscaping elements, public seating, and playground equipment.

This resource is considered a non-contributing building because it was completed after the period of significance for Criterion A and is not significant under Criterion C or B.

23. Playgrounds/Splash Pads (9 resources) (completed c.2007-2017)

During the work carried out by Holabird & Root between c.2007 and 2017, eight playgrounds/splash pads were added to the Altgeld Gardens development at Blocks 4, 5, 6, 7, 8, 9, 10 and one between Blocks 1 and 2. One playground/splashpad was added to the central greenspace at the Philip Murray Homes development.

These nine resources are considered non-contributing objects because they were completed after the period of significance for Criterion A and are not significant under Criterion C or B.

Note that a few other non-historic playgrounds exist within Carver Park, in the paved recreational area of the Children's Building, at the rear (west) of Our Lady of the Gardens Catholic Church & School, and in the grassy playfield behind (south of) George Washington Carver Primary School. These playgrounds were not counted as they A.) are minor resources that do not strongly contribute to any of the significance criteria; B.) are considered features of their larger, more important, resources; and C.) fall outside all periods of significance.

24. Non-Contributing Parking Lots (10 resources) (completed late 1970s-2000s)

George Washington Carver Primary School Parking Lot
The formal paved parking lot between the buildings was created by the late 1970s or early 1980s. Much of this parking lot was repaved in 2007 and new curbs added. It is considered a non-contributing structure because it falls outside the period of significance for all applicable significance criteria.

Parking Lots for school Buildings A and D (3 resources)
Three small, paved parking lots exist between the original schools identified as Buildings A and D. These lots were added between the 1980s and 2000s. They are considered non-contributing structures because they fall outside the period of significance for all applicable significance criteria.

Children's Building Parking Lot
This is a paved parking lot at the southeast corner of the Children's Building and is accessed from E. 132nd Street. This parking lot was created between the late 1970s and early 1980s. It is considered a non-contributing structure because it falls outside the period of significance for all applicable significance criteria.

Altgeld Gardens Community Building No. 2 Building Parking Lot
A small, paved parking lot exists at the west (rear) of the building. This parking lot appears to date to the 1972 construction of the community building; however, it is a minor resource that does not strongly contribute to the significance of the district. Therefore, it is considered a non-contributing structure.

Our Lady of the Gardens Parking Lots (2 resources)
The small paved lot north of the building, which is accessed by E. 133rd Street, was created sometime around 2007. It is considered a non-contributing structure because it falls outside the period of significance for all applicable significance criteria.

The paved south lot between the church & school building and the gymnasium dates from the early 1960s. This lot is a minor resource that does not strongly contribute to the significance of the district and, therefore, is considered a non-contributing structure.

Ira F. Aldridge Elementary School Parking Lots (2 resources)
The large, paved parking lot to the north (rear) of the school dates to around 1967. This lot was not found to strongly contribute to the significance of the district and, therefore, is considered a non-contributing structure.

The small parking lot southeast of the building, and accessed by E. 131st Street, was added sometime in the early 2000s and falls outside the period of significance for all applicable significance criteria.

Integrity

Location: The Altgeld Gardens – Philip Murray Homes Historic District encompasses the original location of the developments and their contributing buildings. The Altgeld Gardens and Philip Murray Homes developments are

located where they were originally planned and constructed. All educational buildings from the original period of construction and later and their associated resources are also located where they were originally constructed.

Setting: Altgeld Gardens and Philip Murray Homes were developed in a remote area on Chicago's Far South Side along the Little Calumet River. The site has always had a planned residential character created by the sprawling nature of the development, its low-rise masonry buildings, and paved curvilinear streets that wrap around a central core of non-residential/community buildings. The community remains remote with few changes to its community area, most notably the construction of Interstate 94 to its east in the 1950s.

Design: The Altgeld Gardens – Philip Murray Homes Historic District retains good integrity of design. The vast majority of the original street plan and buildings remain intact. The development still retains its distinctively curved, connecting roads and deliberately placed residential blocks that surround a central core of non-residential/community buildings and Carver Park. The individual, low-rise, masonry rowhouse apartment buildings retain their massing and form and reflect the original rowhouse-style design. The rowhouse apartment buildings for Altgeld Gardens retain their original U-shaped arrangement with inner courtyards and central parking lots. The Philip Murray Homes also retain their own original and distinctive arrangement, clustered together between parking lots and central greenspace. The non-residential buildings within the district, such as the schools and the community buildings, largely retain their original forms and massing. Although the original storefronts are either missing or covered up, the Shop Building retains its distinctively International Style massing, brick exterior, and curved concrete canopy designed by Keck & Keck. The Carver Park Indoor Pool retains its retractable roof and glazed doubled height indoor pool. Carver Park remains a public park with open lawns.

A number of undertakings within the last 20 years have resulted in the limited loss of integrity to the historic district. Included in these undertakings is the demolition of 26 Altgeld Gardens apartment buildings located on the periphery of the complex, east of S. Greenwood Avenue in Blocks 11, 12, and 13. Additionally, 25 Philip Murray Homes apartment buildings were demolished on Blocks 15 and 16 south of E. 133rd Place and E. 133rd Street – these were also on the periphery of the complex. The demolition of these buildings occurred between 2016 – 2018 and was approved by IL SHPO. The loss of these buildings does not overtly disrupt the original plan of the Altgeld Gardens – Philip Murray Homes development and has not been found to substantially degrade the ability of the community to convey its significance.

Other work included the rehabilitation of all Altgeld Gardens and Philip Murray Homes rowhome apartments by Holabird & Root during the 2010s. This work was also reviewed/approved by IL SHPO. Typical work included the replacement of windows, doors, and roofs, as well as exterior masonry repairs. Additional rehabilitation work specific to the Altgeld Gardens rowhomes included moving the locations of some original doors and windows. Cantilevered concrete entry canopies were replaced with metal canopies. Also, original mechanical room additions were removed and replaced with new mechanical room additions. Despite these changes, a majority of these buildings' character-defining features remain intact, including the two-story, elongated, rowhouse-type massing, the exterior common brick cladding, and the shallow-pitched gable roofs. The Altgeld Gardens rowhome buildings also retain their distinctive stepped gable ends and the Philip Murray Homes retain their concrete entry canopies. Due to these factors, the 136 apartment buildings within Altgeld Gardens and the 38 apartments buildings of the Philip Murray Homes still greatly add to the district's sense of time, place and historical development.

Other changes within the proposed historic district include additional work by Holabird & Root. This work, which was completed throughout the 2000s and 2010s and likewise reviewed and approved by IL SHPO, involved the relandscaping of all blocks, including new lawns, the replacement and addition of sidewalks and walkways, community areas, and playgrounds/splash pads. Inner courtyards between rowhome apartments were redesigned to feature a new circulation pattern with curving walkways. New metal fencing was added along the perimeter of many blocks. Original parking lots received new curbing, landscape islands, and circulation patterns.

The most recent change within the proposed historic district was the construction of the Altgeld Family Resource Center designed by KOO architects. Work also included new paving, gardens, and parking around the building. Completed in 2020, this project was also reviewed and approved by IL SHPO. This new construction occurred at Block 14, the community's original wedge-shaped commercial/administration center, and is situated on formerly vacant land adjacent to the Shop Building and the Administration Building. Despite its contemporary design, its siting on Block 14 does not significantly impact the original layout of Altgeld Gardens designed by Shaw, Naess, & Murphy, nor does it degrade the ability of the community to convey its significance.

Overall, the proposed district possesses sufficient integrity of design. Despite the changes described above, most of the original architect designed layouts remain intact. At Altgeld Gardens, the circulation pattern remains defined by curved, connecting roads and deliberately placed residential blocks that surround a central core of non-residential/community buildings and Carver Park. The rowhouse apartment buildings also retain their original U-shaped arrangement with inner courtyards and central parking lots. The block that remains of the Philip Murray Homes development also retains its original layout and distinctive arrangement of rowhouse apartments clustered together between parking lots and central lawns. The non-residential buildings within the district, such as the schools and the community buildings, largely retain their original forms and massing

Materials: The Altgeld Gardens – Philip Murray Homes Historic District retains good integrity of materials. Apartment and non-residential/community buildings still feature original brick exterior walls with concrete and stone detailing. The curving, connected roads, sidewalks, and parking lots are still paved asphalt. Carver Park remains an open lawn with planted shrubs and trees throughout. Although residential buildings no longer retain their original windows and doors, this loss does not significantly detract from the their ability to convey their historic significance.

Workmanship: The Altgeld-Gardens – Philip Murray Homes retains integrity of workmanship. The original residential and non-residential buildings of Altgeld Gardens and the Philip Murray Homes exemplify the period workmanship typical of wartime and post-war public housing in Chicago. This is clearly evident in the repetitive and cost-effective designs, construction methods, and materials used to create the buildings. The original buildings are typically low-rise, with utilitarian forms and massing that were dictated by function, had simple roof lines, and were composed of common brick and concrete. The original schools were small, had simple T-shape plans, and reflect older schoolhouse designs. They were ornamented with impressive classically inspired details and door surrounds, which also reflect the workmanship of the wartime period. Although designed and built just a couple years after the original schools, the Carver High School reflects distinctive era of postwar workmanship through its large massing, masonry construction and restrained Art Deco motifs and ornament. The later school buildings, such as Our Lady of the Gardens Catholic Church & School and Ira F. Aldridge Elementary School reflect later post-war workmanship through design and materials that are reflective of the Modern Movement. The Carver Park Indoor Pool, with its steel frame, glass block infill, and retractable roof is a special example of innovative post-war workmanship.

Feeling: The Altgeld Gardens – Philip Murray Historic District retains a strong integrity of feeling. Not only does the district retain its block sizes, layout, and a large number of contributing resources to strongly reflect its original master plan and how it evolved during the period of significance, but the resources themselves retain enough integrity to reflect their original appearance. These aspects strongly express both the aesthetic and historic sense of the development during its period of significance.

Association: The Altgeld Gardens – Philip Murray Historic District retains integrity of association. The development is still mostly owned and operated by CHA. Most buildings retain their original use. The original apartment buildings remain residential, the original Administration Building remains as the hub of for the development's administrative and management services. Other buildings, such as the Children's Building, the Altgeld Gardens Community Center No. 2, the Carver Park Indoor Pool, and the United Church of Altgeld

Gardens all remain used for community functions. Carver Park remains and active public park. The George Washington Carver School, the Our Lady of the Gardens Church & School and Gymnasium, and the Ira F. Aldridge Elementary School are still active schools.

Conclusion
The Altgeld Gardens – Philip Murray Historic District has been found to retain all seven aspects of integrity. Despite a number of undertakings throughout the 2000s and 2010s, which resulted in most apartment building losing their original doors and windows, as well as the demolition of three residential blocks along the eastern and southern edges of the development, and the construction of new community center/library and laundry and utility buildings, the Altgeld Gardens – Philip Murray Homes Historic District has been found to retain enough integrity to reflect its significance under Criterion A, B, and C.

Integrity – Shop Building

Since the Shop Building is considered an individually eligible building significant under Criteria A and B this section provides an integrity argument specifically for the Shop Building.

Location – the Shop Building remains at its original location.

Setting – The Shop Building retains good integrity of setting. It remains set within the Altgeld Gardens development, specifically within the central core originally designed to be the community's commercial/administrative center. The building's immediate setting within this central core remains much as it was originally, situated on a wedge-shaped block with a curved parking lot along the street, a central open public space, and the Administration Building to the southeast. Blocks of rowhouse apartments surround the central core to the east, north, and west. Additional non-residential/community buildings are located to the southeast. The non-contributing Altgeld Family Resource Center, constructed in 2020, is located west of the Shop Building. New site work around the new building included new paving, gardens, an access road, and street parking. This new work occurred at a previously vacant area of wedge-shaped block and was reviewed and approved by IL SHPO. The existence of this new community building and site work does not significantly degrade the integrity of setting because the Shop Building remains set in a non-residential block of community buildings surrounding a central public space within the Altgeld Gardens development.

Design – The Shop Building retains sufficient integrity of design to convey its significance under Criterion A and B. The one-story commercial building was uniquely designed with a curved, crescent-like footprint by the architecture firm of Keck & Keck to fit the wedge-shaped block that was designed in the original master plan to function as a commercial/administrative center for Altgeld Gardens. As Altgeld Gardens was so remote, this commercial building was critical to the original design of a self-contained public housing complex. Today, the Shop Building remains a one-story building with its character-defining curved, crescent-like footprint and massing intact. The concrete foundation, brick exterior walls, and a flat built-up roof also remain intact. It also retains its curving, white-painted concrete canopy that cantilevers out from the roof line along the north and west elevations. The original covered outdoor passage also remains intact near the southern end of the building. The Memorial Wall within the covered passage featuring the hand painted names of residents who have died due to violence and medical complications resulting from the environmental hazards also remains intact. Although not part of the original design, this wall was started by Altgeld residents in the 1960s and has become a significant feature in its own right.

The most significant impacts to the design of the building have been changes to the fenestration. The glazed storefronts along the west façade were removed and infilled with brick in the mid-to-late-1970s. A few original door openings still remain but have been boarded up or locked behind security gates. The east (rear) elevation facing South Ellis Avenue still features original bands of window below the metal cornice, although many of these have been boarded up. Rear entry doors for each of the former commercial spaces still exist.

Inside the Shop Building is mostly vacant, but the spaces that housed the former shops and offices, including the former offices of Hazel Johnson's People for Community Recovery organization, remain.

Due to the loss of the storefronts, the Shop Building does not retain enough integrity of design to convey its significance under Criterion C. However, enough of the building's integrity of design remains to convey its significance under Criteria A, as it is still readable as the one-story crescent-shaped commercial building that was central to the life of the community and was a critical component of the Altgeld Gardens' self-contained design. The building also retains good integrity of design to convey its significance under Criterion B as the storefront windows were infilled prior to the 1979-2011 period of significance.

Materials: The Shop Building retains good integrity of materials as the original concrete foundation, brick exterior walls, curving canopy, and built-up roof remain intact. The original glass storefront windows have been lost and infilled with brick.

Workmanship: Evidenced by the unique crescent-shaped footprint, original materials, and original features such as the curving cantilevered canopy, the Shop Building retains good integrity by which it conveys its unique, mid-century workmanship.

Feeling: The Shop Building retains a strong integrity of feeling. Not only does the building's intact location, setting, design, materials, and workmanship make strongly reflect its original design, but the features like the Memorial Wall reflect how the building evolved during its periods of significance. Despite the loss of the storefront windows, the aesthetic and historic sense of the building are still strongly expressed.

Association: The Shop Building retains a strong integrity of association. Enough remains of the building to retain its association with the original master plan designed by Shaw, Naess, and Murphy. As the storefront windows were removed and infilled by the late 1970s, the building no longer retains a strong association with the original design by Keck & Keck. However, the building does remains very much as it existed during the years of its association with Hazel Johnson and PCR.

Conclusion

The Shop Building has been found to retain enough integrity to convey its significance under Criteria A and B. The loss of the storefronts along the west façade has been found to be too significant an impact to the building's integrity that it cannot appropriately convey significance under Criterion C. The Shop Building may be individually eligible under Criterion C if the currently infilled storefront windows were restored.

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

[X] A Property is associated with events that have made a significant contribution to the broad patterns of our history.

[X] B Property is associated with the lives of persons significant in our past.

[X] C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

[ ] D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

[ ] A Owned by a religious institution or used for religious purposes.

[ ] B removed from its original location.

[ ] C a birthplace or grave.

[ ] D a cemetery.

[ ] E a reconstructed building, object, or structure.

[ ] F a commemorative property.

[X] G less than 50 years old or achieving significance within the past 50 years.

Altgeld Gardens – Philip Murray Homes Historic District
Name of Property

Cook County, Illinois
County and State

Areas of Significance
(Enter categories from instructions.)

Community Planning and Development
Politics and Government
Social History
Architecture
Ethnic Heritage

Period of Significance

Criterion A: 1944-1972
Criterion B: 1979-2011
Criterion C: 1944-1950

Significant Dates

1945 – Completion of Altgeld Gardens
1953 – Completion of Philip Murray Homes
1994 – Executive Order 12898 signed
2011 – Death of Hazel Johnson

Significant Person
(Complete only if Criterion B is marked above.)

Hazel Johnson (1935-2011)

Cultural Affiliation (if applicable)

Architect/Builder

Shaw, Naess & Murphy / Naess & Murphy (original Altgeld Gardens and Philip Murray Homes design)
Keck & Keck (Shop Building)
John C. Christensen (schools)
Ralph H. Burke, Inc. (Carver Park Covered Pool)
Michelson, Rabig, & Ramp ()

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations).

The Altgeld Gardens – Philip Murray Homes Historic District is significant under three National Register Criteria:

- Criterion A for the district's local level of significance in the areas of Community Planning and Development, Politics / Government, Social History, and Ethnic Heritage (Period of Significance 1944-1972);
- Criterion B for the district's national significance in association with longtime Altgeld Gardens resident Hazel Johnson (1935-2011), widely recognized as a leader of the American environmental justice movement (Period of Significance 1979-2011); and
- Criterion C for the district's local significance in the area of Architecture (Period of Significance 1944-1950)

The Altgeld Gardens – Philip Murray Homes Historic District (also known as Altgeld Gardens or simply Altgeld) was constructed over a span of several decades and includes residential, commercial, and institutional buildings designed by numerous notable architects. As a result, this resource conveys multiple interweaving stories of early- to mid-20th century Chicago community planning and architecture along with issues of environmental justice, grassroots social movements, and environmental and housing inequalities that have disproportionately affected Black Chicagoans and communities of color across the United States. Situated on the far south side of the city, Altgeld was built to house African American war workers and their families, and the community was strategically constructed in the heart of a dense industrial area that provided jobs for many of the residents. The planning of Altgeld Gardens can be traced back to earlier experimentation in 20th century housing reform. While most of these early planned communities were built for White families, between 1939 and 1941 in the Bronzeville neighborhood of Chicago, the Ida B. Wells Homes was constructed as the first Chicago Housing Authority development built exclusively for African Americans. Altgeld was a continuation of the legacy of Ida B. Wells Homes and was an attempt by the Chicago Housing Authority (CHA) to address the very real needs of African Americans in the city to obtain affordable and quality housing, particularly during World War II when individuals and families alike flooded the city to find work in the defense industries and racial segregation and housing shortages reached an apex.

The CHA, in partnership with numerous notable architecture firms over several decades, worked to create and improve upon modern housing reform in Chicago. The architecture of Altgeld is a bridge between the traditional and the modern utilizing the more familiar Colonial Revival and classically inspired styles with elements of modern design for residential buildings. The Shop Building, Children's Building, and Administration buildings further pushed the boundary of experiments in Modernism with variations on the International Style. The district is for its unique and intact collection of 1940s and 1950s residential, commercial, and institutional building. The district's most significant buildings were built by three public entities – the Chicago Housing Authority, Chicago Public Schools, and the Chicago Park District. The initial Altgeld Gardens development (1944-1945), designed by the Chicago architecture firm Shaw, Naess & Murphy was built by the Chicago Housing Authority as one of the city's largest self-contained early public housing complexes. The residential complex was supplemented first by four wartime public school buildings (1944-1945) designed by Chicago Board of Education architect John Christensen (1878-1967), then by a large public high school (1950) also designed by Christensen, and finally by additional rowhome housing units (Philip Murray Homes,1953) designed by the renamed Naess & Murphy.

Some notable Altgeld residents played an important role in housing reform and environmental justice efforts on a national level. Altgeld resident Dorothy Gautreaux (1927-1968) was the lead plaintiff in a 1966 landmark lawsuit

against the Chicago Housing Authority for perpetuating racial segregation at Altgeld Gardens, a case that marked the first major lawsuit concerning desegregation in public housing in the country. Altgeld was also home to long-time resident Hazel Johnson (1935-2011), a nationally recognized leader in the American environmental justice movement that emerged in the 1970s and 1980s. Johnson's grassroots activism was shaped by the conditions she experienced and witnessed at Altgeld, and her work with the People for Community Recovery (a community organization she founded in 1979) brought much needed attention to the issues of environmental injustice in communities of color while improving the environmental conditions within Altgeld and Chicago's Southeast Side. Altgeld was also an early center of activity for a young community organizer who would eventually go on to become the first African American president of the United States, Barack Obama. Obama worked alongside Hazel Johnson and other community members to hold CHA accountable for remediating toxic materials in residences including lead and asbestos.

Historian Deveraux Bowley, Jr., described Altgeld as "the most self-contained and comprehensive housing project ever built in Chicago." Through its extant and intact built and natural environment, the Altgeld Gardens – Philip Murray Homes Historic District is still an active community illustrating the significance of major twentieth century movements ranging from housing reform to environmental justice. Through these larger historical contexts, the stories of Altgeld, including those who designed, built, and lived in the community are significant under multiple National Register Criteria.

Though each criterion has its own specific period of significance, this nomination focuses on events that occurred starting in 1944 with the initial occupation of Altgeld Gardens by the first 100 families, and ends in 2011, the year Hazel Johnson died. This district satisfies the requirements of Criteria Consideration G for the period of significance under Criterion B. Altgeld Gardens resident Hazel Johnson maintained her critical role in the operations of the People for Community Recovery until her death in 2011.Her continued activism for Altgeld Garden residents and the surrounding community, her important role in the founding and growth of the American environmental justice movement in the late twentieth and early twenty-first century, and her work advocating for passage of Executive Order 12898 and other important environmental justice policies are of exceptional importance and justify the district's period of significance ending in the year 2011.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

History of Chicago's Riverdale Community and the Lake Calumet Industrial District

The public housing developments of Altgeld Gardens and Philip Murray Homes were built at the remote southern edge of Chicago's Riverdale community area on vacant land which had served as an industrial waste site for over half a century. Historically, "Riverdale" referred to a small settlement that was centered around the Little Calumet River and Indiana Avenue (historically known as Chicago-Thornton Road). In the 1920s, sociologists at the University of Chicago defined 77 community areas in Chicago, including Riverdale, which was created from a combination of the original community and industrial lands to the north. Riverdale's boundaries were defined as the Illinois Central Railroad to the west, Interstate 94 to the east, 115th Street to the north, and the city limits at 138th Street to the south. Surrounding Chicago community areas include Pullman to the north, West Pullman to the northwest, South Deering and Lake Calumet to the northeast, Hegewisch to the east, and the Village of Dolton (outside Chicago's city limits) to the south.

During the 19th century, the marshy land west of Lake Calumet was slow to develop. Early non-Native settlement began in the 1830s following the sale of government lands. Farms operated along the Little Calumet River, and a chain ferry and in 1842 a toll bridge, operated across the river at Indiana Avenue. Early residents include George Dolton, for whom the village of Dolton was named, who arrived with his family in Riverdale in 1835. Until

the early 1850s, there were only about one dozen families living in the area immediately west of Lake Calumet.[1] One family was that of Dutch abolitionist Jan "John" Ton (1826-1896), who bought a farm owned by Dolton near the current intersection of St. Lawrence and 134th, which is today just south of the Philip Murray Homes. Ton's home served as a stop along the Underground Railroad and the site of the Ton Farm is today recognized for its historic significance by the National Park Service Network to Freedom Program.[2]

In 1852, the Illinois Central Railroad built a line from Chicago that ran southward across central Illinois. Several stations opened along the line, including at 115th Street near the railroad's intersection with the Michigan Central Railroad line. Known as "Calumet Junction," the area around 115th Street developed during the mid- to late-19th century into the manufacturing Town of Kensington, which became part of the community of West Pullman. Two stations served the Riverdale area, including the Wildwood station at 130th Street, next to the horseshoe-shaped bend in the Little Calumet River, and the Riverdale station on the south side of the river near 136th Street.[3] The new rail lines opened additional land, which attracted new settlers. Irish, German, and Scandinavian immigrants and residents moving westward from the East Coast built homes in the area during the 1850s.[4] By the early 1870s, the population of Riverdale and surrounding lands had reached 600.[5]

Following the Great Chicago of 1871, new residents and several manufacturers moved to the area west of Lake Calumet; however, most of this settlement occurred north of 123rd Street. One exception was Colonel James H. Bowen, who after losing his home to the fire bought a large farm near the bend in the Little Calumet River. There, he built a summer estate named "Wildwood," which remained a popular gathering place for Chicago's elite during the 1870s and 1880s.[6] In 1873, Bowen added to the Riverdale settlement by subdividing land northeast of the intersection of Indiana Avenue and 134th Street into three new blocks of buildable lots. This small pocket of platted land soon attracted residents who built small frame cottages, several of which are still extant. Residents who built these homes likely worked in the community's two primary businesses: the Union Copper Distilling Company of Chicago, established in 1871; and the Riverdale Lumber Company, formed in 1879.[7] To the east, at the current location of Altgeld Gardens, a set of blocks between 130th and 134th streets were subdivided in 1872. The blocks were platted on paper and published in maps during the late-19th century.[8] However, these blocks were never paved or prepared for development.

In contrast, the area to the north of 123rd Street grew rapidly, especially following the opening of George M. Pullman's factory town in 1880. Dozens of other manufacturers moved into the areas west of Pullman's town and attracted new waves of residents who bought lots and homes in new real estate subdivisions. One such development was the village of Gano, which was platted near Kensington in the 1880s by developers from Cincinnati, Ohio, who were seeking to profit from growing demand for land in the area. Gano and Kensington were later folded into the community area known as West Pullman.[9] The town of Pullman, West Pullman, and Riverdale were all annexed to the city of Chicago in 1889. Annexation linked the area to the Chicago's utilities, fire and police protection, telegraph lines, mail systems, and to the public school system. The benefits of city utilities and services combined with thousands of new jobs led to rapid development and growth in the areas

[1] Alfred T. Andreas, *History of Cook County, Illinois: From the Earliest Period to the Present Time* (Chicago: A. T. Andreas, Publisher, 1884) 601-602.
[2] "Jan and Aagje Ton Farm," National Park Service, accessed September 16, 2021, https://www.nps.gov/places/jan-and-aagje-ton-farm.htm.
[3] Rand McNally and Company, *Rand McNally and Co.'s Standard Map of Chicago* (Chicago: Rand McNally & Co., 1888) The University of Chicago Map Collection, website: www.lib.uchicago.edu, accessed April 15, 2021.
[4] Matthew Wicklund and Lara Ramsey, National Register of Historic Places Registration Form, "West Pullman Elementary School," United States Department of the Interior, 2018: 12.
[5] Andreas, 602.
[6] Janice L. Reiff, "Riverdale" in *Encyclopedia of Chicago*, website: http://www.encyclopedia.chicagohistory.org/pages/1077.html, accessed April 14, 2021.
[7] Andreas, 602.
[8] Rand McNally and Company, 1888.
[9] Wicklund, 12.

west of Pullman during the 1890s and early 1900s. Between 1890 and 1900, the city ward that included West Pullman grew at a faster rate than Chicago itself. Chicago's population increased at a rate of 54 percent, while West Pullman and surrounding areas increased by 202 percent, or by 60,933 new residents.[10] However, the Riverdale community around Indiana Avenue and the Little Calumet River was not connected to city water and sewer lines until well into the 20th century. The lack of utilities and a smaller number of job sources limited Riverdale's residential growth.

The marshy land south of Pullman and north of the Riverdale settlement consisted primarily of farmland well into the 20th century. Residential blocks were limited to the Kensington area around 115th Street and to the Riverdale settlement. Undisturbed patches of forest and wetlands survived along the Little Calumet River, between industrial sites. As early as 1904, plans for forest preserves and parks linking natural areas around Chicago were drawn to include the unique landscape south of Lake Calumet. The Forest Preserve District was formed in 1916 and began acquiring land for preserves. Land for Whistler Woods Forest Preserve on the south bank of the Little Calumet River and east of Halsted Street was acquired in 1921, while land for Beaubien Woods was purchased later.[11]

Industry continued to expand around both Pullman and Lake Calumet during the early-20th century. Several new factories opened south of Pullman, including the Sherwin-Williams paint factory, the Chicago Drop Forge, the Illinois Terra Cotta Works, and the Swift and Sons and Knickerbocker Ice Company ice plants along the shore of Lake Calumet.[12] The Michigan Central Railroad built a large rail yard between 116th and 123rd Streets. However, much of the soggy land was given over to farmland. Dozens of farmhouses and agricultural fields filled the area between the Illinois Central Railroad lines and Lake Calumet. Many of these industries relied on Lake Calumet for water transportation to Lake Michigan and for disposal of waste. In 1920, Arend Van Vlissengen created a plan to transform the shallow lake into Lake Calumet Harbor, a dredged waterway that required filling the east and west shores of the lake to create dozens of long boat slips and docks.[13] The City of Chicago adopted the plan in 1921 and Van Vlissengen's concept of creating slips influenced future lake filling and dredging.

Lake Calumet connects to Lake Michigan via the narrow Calumet River, which curves northward from the lake's southern end and connects with Lake Michigan. Both Lake Calumet and its tributaries became highly polluted during the 20th century because industries and waste disposal sites lined the water and made the Calumet River a major shipping passage. Industrial effluence and waste both flowed into and was directly dumped into the water. A significant contributor to waste were the area's steel mills to the east of Lake Calumet. In addition, area homes continued to lack city sewer service through the mid-20th century. Consequently, sewage was dumped directly into the lake and waterways. The limited currents in the lake were insufficient to carry waste away. In 1922, The Metropolitan Sanitary District (Metropolitan Water Reclamation District of Greater Chicago) dug the Calumet-Saganashkee (or Cal-Sag) Channel from the Little Calumet River to the Sanitary and Ship Canal, which helped send waste from Lake Calumet downstate via the Illinois River. At the same time, the sanitary district built the Calumet Sewage Treating Plant at roughly 126th Street and Vernon Avenue to treat sewerage from the growing communities and industries of the Calumet region.[14] The original treatment pools remain extant. To the south of the treatment plant, 130th Street was widened to accommodate greater traffic volume in 1923.[15] To the east, South Stony Island Avenue was extended southward from 95th Street along the western shore of Lake Calumet to 130th Street.

[10] West Pullman Land Association, *West Pullman and Stewart Ridge – Chicago, Illinois – 1892-1900*, 1900: 14.
[11] "Little Calumet Tract to Become New Wood Park," *The Chicago Daily Tribune*, August 2, 1921: 20.
[12] Reiff.
[13] Arend Van Vlissingen Plan for Lake Calumet Harbor, 1920, IChi-37313, Chicago History Museum.
[14] Craig E. Colten, *Industrial Wastes in the Calumet Area, 1869–1970: An Historical Geography.* Hazardous Waste Research and Information Center, Illinois Department of Energy and Natural Resources, September 1985.
[15] Chicago 80-Acre Map, E ½ NE ¼ Section 34.37.14, Chicago 80 Acre Map Library, website: https://gisapps.chicago.gov/KioskMap/ accessed April 15, 2021.

New residential development continued through the 1930s and 1940s around Lake Calumet despite the continued presence of industry and increasing pollution. In 1937, the extant Riverdale Public School was built at 310 East 133rd Street at the north end of the Riverdale settlement area. In 1938, the Chicago Housing Authority built the 434-unit Trumbull Park development as the last of three Public Works Administration housing projects in the city. The project consisted of dozens of two-story townhouses and was completed on 21-acres of unimproved land on the eastern shore of Lake Calumet, south of 105th Street between Oglesby and Bensley Avenues. According to historic aerial photographs, by 1938, the community areas of Pullman and West Pullman to the north and northwest were largely developed with a grid of paved streets lined by rows of houses. However, several blocks south of 123rd Street remained only sporadically undeveloped. Except for the water treatment facility, the land between Lake Calumet and the Illinois Central Railroad lines continued to serve as farmland. The original Riverdale settlement around the Little Calumet River and Indiana Avenue was still isolated from other residential areas, but industrial sites, material storage yards, and some unregulated landfills surrounded the community and flanked the river.

Construction of CHA's Altgeld Gardens public housing development began in 1944 on vacant farmland between 130th Street and the Little Calumet River. In 1945, the Chicago Plan Commission completed a study of vacant land across the Chicago area. It identified 6.6-acres of unimproved and unsubdivided land where homes could be built to alleviate post World War II housing shortages. Some of this land was located in the Scottsdale community area around 87th Street and Cicero Avenue on the city's far southwest side, but the majority was located south of Lake Calumet around the Altgeld Gardens site.[16] Although the vacant lands near Altgeld Gardens were proposed for future residential construction, only the Philip Murray Homes to the west of Altgeld Gardens was completed in 1953.

Throughout the 1950s and 1960s the Lake Calumet area experienced new growth. The Calumet Expressway (Bishop Louis Henry Ford Expressway, Interstate 94) was built during the 1950s along the western shore of Lake Calumet along the route the 1920s extension of Stony Island Avenue. A large cloverleaf type of interchange was completed at 130th Street, to the northeast of Altgeld Gardens. The expressway was built along the east side of Beaubien Woods, which stands east of Altgeld Gardens. The woods were improved with the addition of Flatfoot Lake in 1957 and a boat launch on the Little Calumet River in 1964.[17]

During the same period, new industry came to Lake Calumet and the opening of the Saint Lawrence Seaway to deep water cargo ships in 1959 led to the improvement of the lake. Significant portions of the lake were infilled, while the center was dredged to accommodate a turning basin for deep water ships. The lake became the International Port of Illinois in 1959. Two of the largest fill sites were the Paxton and Land & Lakes landfills, which substantially expanded the lake's eastern shore. In the early 1960s, the Joint Tank Car Company infilled the lake's southern end near the mouth of the Little Calumet River and built a bulk liquid terminal with dozens of tanks for the storage of various oils and fuels. This site was followed by the construction of three boat slips during the late 1960s. A pair of large landfills, known as CID Landfill #3 and #4, opened in 1967 on the west shore of the Calumet River south of 130th Street. This 400-acre fill site accepted hazardous waste and is separated from Beaubien Woods to the west by Interstate-94.[18] The site was capped with soil by 2015, with a portion converted to parkland.

The Riverdale community area and the greater Calumet region were largely industrialized by the 1960s. However, the development of federal housing projects including Altgeld Gardens and Philip Murray Homes increased Riverdale's population from nearly 1,500 before World War II to almost 11,500 by 1960. The rapid growth severely burdened both the limited utilities and available services. Few hospitals existed in the greater

[16] Chicago Plan Commission, *Vacant land suitable for residential development, December 1945*, The University of Chicago Map Collection, website: www.lib.uchicago.edu, accessed April 15, 2021.
[17] "Lake Digging to Be Begun in New Preserve," *The Chicago Daily Tribune*, April 5, 1957: 8; "Boating Center OK'd at 135th Street Site," *Chicago Tribune*, March 26, 1964: 2A-3.
[18] Michael Hawthorne, "Neighborhood Trashes Landfill Plan," *Chicago Tribune*, December 8, 2004.

area, with the majority serving the predominantly White community areas of Pullman and West Pullman to the north and northwest. In 1968, the Eden Green townhouse and apartment development to the west of the Philip Murray Homes opened as the nation's first to be majority African American-owned and -operated. The homes raised Riverdale's population to its peak of over 15,000 by 1970.

The closure of area steel mills, the Sherwin Williams Paint factory, and several other facilities in the 1970s and 1980s lead to a great decline in employment opportunities. In addition, the extensive pollution of both soil and water from decades of industrial production, material and waste storage, and landfills promoted Riverdale's image as a "toxic doughnut". Exposure to the asbestos, fiberglass, and lead used in the construction of the housing units, as well as severe environmental pollution was also found to be responsible for an alarming increase in serious illnesses which disproportionately affected the area's predominantly African American population. The toxic environment and deteriorating building conditions of Altgeld Gardens motivated the creation of the People for Community Recovery (PCR), an influential environmental justice organization that was led by Altgeld Gardens resident Hazel M. Johnson (1935-2011). The organization advocated for the removal of the toxic building materials used to build the Altgeld Gardens project and protested against a number of those companies responsible for polluting the area. Due to the efforts of the PCR, Altgeld Gardens is regarded as an important center of activism within the history of the American Environmental Justice movement.

History and Development of Altgeld Gardens and the Philip Murray Homes

In 1940, the U.S. Lanham Act prohibited new construction of public housing except for projects intended to house war workers.[19] A provision to this ruling, however, stipulated "that in the case of projects planned for low-rent occupancy, but whose proposed sites were in areas with a real need for war-worker housing, construction might proceed, subject to the limitation that such projects would house war workers only."[20] With this provision, and with the desire to assist in the war effort, the Chicago Housing Authority (CHA) decided to move forward with the development of projects built specifically to house war workers while planning to eventually revert its primary focus back to low-income tenants after the war ended. Although the United States would not enter World War II until December 1941, the Lanham Act was an example of how the country getting on wartime footing shortly after 1939 with the outbreak of war in Europe.

At a cost of $9 million, one of the largest of the CHA's war worker housing projects was the Altgeld Gardens public housing development, which was designed by the architectural firm Shaw, Naess & Murphy and built between 1943 and 1945 on the far south side of the city. Named in honor of John Peter Altgeld (1847-1902), governor of Illinois from 1893 to 1897, and built adjacent to the Little Calumet River on a 157-acre site at 130th Street and Ellis Avenue, the housing development was comprised of 162 two-story brick row houses for about 1,500 African American families. The first tenants of Altgeld Gardens consisted of nearly 100 families. They moved into the development in September of 1944 and the community was dedicated almost a year later on August 27, 1945.[21]

Altgeld Gardens was one of the CHA's most unique public housing projects in that, because of its isolated location on the border of Chicago and Riverdale, Illinois, far from any substantially developed areas or methods of public transit, many essential community facilities were included within the master plan.[22] In addition to the row houses, two common buildings for the community were begun in 1944. These included an Administration

[19] Altgeld-Carver Alumni Association, *History of Altgeld Gardens, 1944-1960* (Chicago: The Association, 1993).
[20] Ibid.
[21] John Peter Altgeld was a reformist politician and Progressive Movement leader who, as governor, fought for improvements to the penal system and for child labor and occupational safety laws. He is also known for pardoning men convicted in the 1886 Haymarket bombing and for his refusal to intervene in the Pullman railroad strike.
"Housing Units to Be Dedicated," *The Chicago Daily News*, August 10, 1945; "Family of Four in Room First In Altgeld Homes," *Chicago Daily Times*, September 13, 1944.
[22] Deveraux Bowley, Jr., *The Poor House: Subsidized Housing in Chicago* (Carbondale: Southern Illinois University Press, 1978).

Building and Children's Building (also called the Community and Child Care Building) on 132nd Street at Ingleside Avenue. The following year, Chicago Board of Education architect John C. Christensen designed three similar single-story public buildings along Corliss Avenue and 132nd Street. These included an elementary school at 13301 South Corliss Avenue, a high school at 901 East 132nd Street, and a library at 13201 South Corliss Avenue.[23] A fourth school building similar in design to the first two was completed in 1945 at 13325 South Corliss Avenue.[24] In 1945, additional amenities were completed in the form of a privately-owned, single-story shopping center on Ellis Avenue at 131st Street. The streamlined International Style block featured what were deemed to be community essentials, such as a supermarket, drug store, beauty parlor, barber shop, and laundromat. The retail block was designed by architect George Fred Keck of the Chicago-based firm of Keck & Keck; Keck also designed a retail addition in 1947.[25]

The idea for a self-sufficient community was championed by CHA Executive Director Elizabeth Wood (1899-1993), who pushed planners and architects to turn public housing projects into real readymade neighborhoods.[26] Wood, who served as the CHA's executive secretary from 1937 to 1954, was also a strong proponent of racial and economic integration, which she sought to see realized in later public housing projects.[27] Elizabeth Wood was teacher and a writer with an extensive background in social work before she served as executive secretary of the Illinois Housing Board starting in 1935. She maintained this position when the CHA was formally created in 1937 and served until 1954. Under her leadership, Wood pushed for smaller, more dispersed projects rather than dense high rises. She also sought to provide services, such as social workers, to families and invested in human-scale architecture and planning in public housing. Her influence can directly be seen in the planning of Altgeld Gardens. Woods urged CHA planners and architects to consider "…shops, churches, and even pubs to turn housing complexes into real neighborhoods instead of human warehouses."[28] Perhaps most controversially, she was a champion of racial integration in public housing.[29] Wood was eventually pushed out of her position at CHA, largely attributed to the fact that she regularly clashed with city alderman. These clashes came to a head when Wood was spearheading an attempt to integrate Trumbull Park Homes. The Trumbull Park Race Riots took place between 1953-1954, and Wood was largely blamed for this violence.[30] CHA authorities created a new title for Wood of executive director (a new position with no real powers), and Wood resigned. Under Wood, such projects were realized like Lathrop Homes (1938, extant and NR Listed #12000025) and Trumbull Park Homes (1938, extant). Wood later worked as a housing consultant in New York City and as an administrator for the federal Department of Housing and Urban Development.

The overall community plan of Altgeld Gardens was designed with a park, shopping center, community building, administration building and schools all clustered near the center of the development and surrounded by the blocks of two-story rowhouse style apartment buildings and courtyards. As stated in the CHA's 1944 "Handbook for Residents of Altgeld Gardens," from the very beginning the project was designed to be a "city within itself".[31] Altgeld Gardens was later described by historian Deveraux Bowley, Jr., as "the most self-contained and comprehensive housing project ever built in Chicago."[32]

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[23] Chicago Building Permit #65222, August 10, 1944; Chicago Building Permit #65223, August 10, 1944; Chicago Building Permit #65224, August 10, 1944; "Pupils Go to School in Homes at South Side Housing Projects," *The Chicago Daily Tribune*, January 28, 1945.
[24] Chicago Building Permit #66542, April 19, 1945; "Altgeld Gardens Get New School Costing $179,896," *The Chicago Daily News*, March 27, 1945.
[25] "Plan Private Shop in CHA Home Project," *The Chicago Daily Tribune*, June 25, 1944; Chicago Building Permit #66502, April 6, 1945; Chicago Building Permit #B04686, September 24, 1947.
[26] "Elizabeth Wood, 93, Innovator In Early Days of Public Housing," *The New York Times*, January 17, 1993.
[27] Ibid.
[28] "Elizabeth Wood, 93, Innovator In Early Days of Public Housing," *The New York Times*, January 17, 1993.
[29] Kenan Heise, "Elizabeth Wood, 93, CHA Crusader," *Chicago Tribune,* January 19, 1993.
[30] D. Bradford Hunt, "Trumbull Park Homes Race Riots, 1953-1954," Encyclopedia of Chicago, accessed January 25, 2022, http://www.encyclopedia.chicagohistory.org/pages/2461.html
[31] Chicago Housing Authority, *Handbook for Residents of Altgeld Gardens* (Chicago Housing Authority, August 1944).
[32] Bowley, Jr., *The Poor House,* 44.

As a self-contained site, Altgeld is reminiscent of company towns found across the United States, including many prominent examples in the upper Midwestern Rust Belt. These planned communities were typically built as employee housing for a single company and included amenities such as religious facilities, schools, commercial enterprises, and recreational facilities. One of the best-known examples is the company town of Pullman (National Register Listed, 1969), just north of Altgeld Gardens in Chicago. Pullman was established in the 1880s by George Pullman to house workers employed at the Pullman Car Company building sleeping cars for railroads. The town was entirely company owned and consisted of cohesive blocks of rowhouses outfitted with modern amenities. It is heralded as the first planned industrial community in the United States.[33] Also on the city's far south side and east of Altgeld is the community area of Hegewisch. Originally established in the 1880s, Hegewisch was home to workers for the U.S. Rolling Stock Company. The area was selected by president of the company, Adolph Hegewisch, to build a company town that would be "an ideal workingman's community."[34] In East Chicago, Indiana is the company town of Sunnyside, built as a neighborhood with housing for workers at nearby Inland Steel Company. Like Altgeld, Sunnyside expanded over several decades with the earliest housing built in 1918 and later additions constructed into the 1960s. Other well-known company towns in the upper Midwest included Gary, Indiana (U.S. Steel Corporation's Gary Works, 1906); and Marktown in East Chicago, Indiana (Mark Manufacturing Company, 1916, National Register Listed 1975). Altgeld was a community purposefully built by the Chicago Housing Authority to house African American war workers and their families and was later redesignated for low income residents after World War II. It is a distinct example of a planned and self-contained community built for workers in the nearby factories and plants, much like these company towns in the region.

Shortly after the end of World War II in 1945, the CHA sought to amend its rental policies and established new standards for tenant selection. Although veterans and war workers were still eligible for tenancy, the CHA focused its policy towards the lowest-income families.[35] Development also continued within the housing project. A children's dental clinic was established in 1948;[36] Carver High School at 801-831 East 133rd Place was designed by John C. Christensen, completed in 1950, and named for African American scientist and inventor George Washington Carver (1864-1943);[37] and additions to the Administration Building and the Children's Building were designed by Shaw, Naess & Murphy and completed in 1952.[38] Also during 1952, Altgeld Gardens saw the construction of two houses of worship. On the western edge of the community, at 13300 South Langley Avenue, the Society of the Divine Word commissioned architect Edo Belli to design Our Lady of the Gardens Catholic church. The $200,000 single-story building consisted of a chapel, auditorium, school, and a rectory.[39] At the eastern end of the site, at 13015 South Ellis Avenue, the United Church of Altgeld Gardens was constructed in 1952 and designed by architectural firm of Michelsen, Rabig & Ramp.[40] Originally identified in news articles as Our Lady of the Garden Catholic Church and School, this pair of buildings has been more commonly referred to as Our Lady of the Gardens Catholic Church.

In the early 1950s, the need for additional housing in the city and in the Riverdale area became clear. The CHA first proposed a 660-unit extension of Altgeld Gardens to the west in 1950. The proposal was initially turned down by City Council, but at the urging of CHA a new proposal limited to only around 500 units was approved in

[33] National Park Service, "Illinois, Pullman National Monument," accessed June 30, 2021, website: https://www.nps.gov/places/pullman-national-monument.htm.
[34] Mary Zangs, *The Chicago 77: A Community Area Handbook,* (Charleston, SC: The History Press, 2014).
[35] Wayne McMillen, "Public Housing in Chicago, 1946," *Social Source Review* 20, no. 2 (June 1946): 153; "Dedicate homes project today," Chicago Daily Times, August 26, 1945.
[36] "Dental Clinic at Altgeld," *Chicago Sun-Times,* June 14, 1948.
[37] "Carver High Pupils Enjoy New Building: Carver High Pupils Move for 3rd Time," *Chicago Tribune*, May 7, 1950.
[38] Chicago Building Permit #B71335, March 20, 1952; Chicago Building Permit #B71336, March 20, 1952.
[39] "China Cleric to Bless New S.Side Church," *The Chicago Daily Tribune*, July 20, 1952: 3-1; the former church was converted to serve as the Loyd Bond Chicago International Charter School.
[40] "Dedicate Site of Church in Rites Today," *Chicago Daily Tribune*, September 25, 1949; "Altgeld Church Cornerstone To Be Laid Today: Plan to Finish by November," *Chicago Tribune*, September 21, 1952; Chicago Building Permit #B72056, April 4, 1952.

1952. This initial denial was a result of three alderman objecting, citing a need for the building and zoning committee to complete proper zoning studies on several new proposed projects, one of them being Philip Murray. While the zoning concerns seemed to have largely been tied to the zoning of LeClair Courts (proposed to shift from single to multi-family construction), Alderman Du Bois of the 9th district where Altgeld is located stated that plans for extension to Altgeld Gardens were lacking in specifics of materials to be used and wanted additional details and time to review the proposed project. Du Bois however, was widely known as an outspoken opponent of public housing. At the time, he was also spearheading an effort to have a public housing referendum placed on the February 1951 ballot of the aldermanic election. There were also concerns about increasing the number of residential units and the burden it could place on the schools in Altgeld, which were getting closer and closer to reaching capacity.[41] Regardless of this political opposition and concerns, the construction of this extension moved forward.

This expansion was named the Philip Murray Homes in honor of Congress of Industrial Organizations (CIO) president Philip Murray (1886-1952) who died just before the project's completion.[42] The Philip Murray expansion of Altgeld Gardens was the first in a series of south side housing projects in the early 1950s. As one of thirteen sites slated for development, funding came from President Truman's "multi-billion-dollar housing program."[43] The development consisted of blocks of row houses similar to those in Altgeld Gardens. The architectural firm who designed Altgeld Gardens, recently renamed Naess & Murphy, was again commissioned to design the homes, which were expected to cost $10,000 per unit and a total of $5 million. The architectural firm rushed plans in order for ground to be broken before the close of 1950. The project was dedicated in 1953.[44]

During the late 1950s, additional improvements and new facilities complemented Altgeld Gardens. In 1958, construction of the ultra-modern, glass enclosed indoor-outdoor Carver Park Swimming Pool designed by Ralph H. Burke, Inc. was completed in the central Carver Park. The pool facility was noted as the first public natatorium in the city with a sliding glass roof, which allowed the pool to be used year-round.[45] Engineer Edward Purcell contributed to the design of the building's innovative glass roof.[46] Additional educational facilities were also completed, with the construction of the two-story brick and terra cotta Newton Elementary school to the east of Carver High School at 901 East 133rd Place in 1954.[47] In 1960, the Board of Education commissioned the architecture firm of Walter H. Sobel & J. Stewart Stein to design the Ira F. Aldridge Elementary School in the northwest corner of Altgeld Gardens at 616 East 131st; the school was named for prominent 19th century African American actor and playwright Ira F. Aldridge (1807-1867).[48] An addition to the Aldridge Elementary School was designed by the architectural firm of Barry & Kay in and completed in 1962.[49]

During the 1970s, Altgeld Gardens gained two new community buildings following the CHA's "modernization program". In 1969, the architectural firm of Pereira, Bernheim and Kahn designed the single-story Altgeld Gardens Community Center No. 2 at 975 East 132nd Street. The building was one of twelve such facilities designed by the firm to be completed in housing sites across Chicago. Inside the 15,00 square foot building there were spaces that included a multi-purpose area with a stage and seating for 500, several club rooms, lavatories, and cloak rooms.[50] In 1979, the single-story brick Dorothy Gautreaux Child Development Center was constructed

[41] Thomas Buck, "Public Housing Program Puts Altgeld First," *Chicago Daily Tribune,* September 3, 1950.
[42] "Name Housing Project for Philip Murray," *The Chicago Daily Tribune*, November 25, 1952: 13.
[43] Thomas Buck, "Public Housing Program Puts Altgeld First," *Chicago Daily Tribune,* September 3, 1950.
[44] "Housing Dedication," *The Chicago Daily Tribune*, May 7, 1953: 35.
[45] "Park District to Build First Glass Roofed Swim Pool," *Chicago Daily Tribune*, November 25, 1956.
[46] Edward Purcell, "Indoor-Outdoor Pool," *Park Maintenance*, 1959: 56.
[47] Chicago Building Permit #B118238, September 15, 1954.
[48] Suzanne Avery, "New Mayo School Plans Ok'd," *Chicago Tribune*, December 31, 1959: 31.
[49] Suzanne Avery, "School Board Moves Ahead on 2 Buildings," *Chicago Tribune*, May 31, 1962: 55.
[50] "Altgeld Will Get Edifice," *Chicago Tribune*, January 30, 1969: S3; "Altgeld Gardens Center Receives City Approval," *Chicago Tribune*, August 7, 1969.

south of the Children's Building and named for Altgeld resident Dorothy Gautreaux who helped launch a 1966 desegregation class-action lawsuit against the Chicago Housing Authority.[51]

The 1970s and 1980s proved difficult for Altgeld Gardens and much of Chicago. The closure of area steel mills, the Sherwin Williams Paint factory, and several other facilities in the area lead to widespread unemployment and lack of access to well-paying jobs. In addition, the extensive pollution of both soil and water from decades of industrial production, material and waste storage, and landfills promoted Riverdale's image as a "toxic doughnut". Within the residential units themselves, exposure to the asbestos, fiberglass, and lead used in the construction of the housing units, as well as severe environmental pollution was also found to be responsible for an alarming increase in serious illnesses which disproportionately affected the area's predominantly African American population. It was in this environment surrounding by deteriorating building conditions of Altgeld Gardens that the People for Community Recovery (PCR), an influential environmental justice organization that was founded by Altgeld Gardens resident Hazel M. Johnson (1935-2011). The organization advocated for the removal of the toxic building materials used to build the Altgeld Gardens project and protested against a number of those companies responsible for polluting the area. Due to the efforts of the PCR and Hazel Johnson, Altgeld Gardens is regarded as an important center of activism within the history of the American Environmental Justice movement.

Woven into the story of Altgeld Gardens were other forms of community organizing. In addition to the offices of PCR, Altgeld Gardens was also home to activity for the Illinois chapter of the Black Panther Party.[52] Although it was geographically isolated from the larger Chicago area and the official South Side office was at 109th and Racine outside of the Altgeld community, Altgeld Gardens still played a role in the national Black Panther movement. An apartment unit in Altgeld was reported to have been a "Panther Pad" where members would meet and stay, and the Our Lady of the Gardens Church was home to a Black Panther Party breakfast program.[53] As the Black Panther Party and larger ideas of Black Power began to enter the public discourse, writing on the walls of the outdoor passage at the Shop Building (locally known as the Up-Top) began in the 1960s expressing sentiments of racial justice.[54] Eventually, the community began to commemorate the dead on the same walls of the Shop Building located in the heart of the community. This Memorial Wall commemorates community members lost to environmentally related health issues, violence, and other causes.[55]

In 1992, Altgeld Gardens was determined eligible for listing in the National Register of Historic Places under Criterion A for Community Planning and Development and Criterion C for Architecture.[56] In 1994, a Determination of Eligibility Report from the National Park Service again confirmed Altgeld Gardens eligibility, this time under Criterion A only, in the areas of Community Development and Planning and Social History.[57] Units in Altgeld Gardens were renovated in the 1990s, and several blocks of homes were demolished in the 2010s. Demolition included blocks of homes in the Philip Murray Homes south of 133rd Place and several blocks at the eastern end of Altgeld Gardens, east of Greenwood Avenue. Other improvements during the 2010s included new landscaping and several playgrounds throughout the site. In 2020, the Altgeld Family Resource Center with a branch of the Chicago Public Library opened in a new building designed by the architectural firm of KOO LLC at Ellis Avenue and 131st Street.

[51] "Pulley: U.S. Should Stop Attacks" *Chicago Metro News,* February 9, 1980.
[52] Samuel Hogsette, "Bobby L. Rush, Rise of A Black Panther Politician: The Price of Resistance in America," *Wayne State University Dissertations* (2019), 2284*,* 23.
[53] Leila Willis (former resident), interview with MacRostie Historic Advisors, July 2, 2021.
[54] The Tactical Gardens, "A Virtual Tour of Altgeld Gardens," accessed June 30, 2021, website: https://thetacticalgardens.com/A-Virtual-Tour-of-Altgeld-Gardens.
[55] Ibid.
[56] SHPO Log #006030917, March 29, 2018; IHPA Log #01092192 October 22, 1992.
[57] National Register of Historic Places, National Park Service, "Determination of Eligibility Notification, Chicago Housing Authority Properties," Requested by HUD/Joseph P. Garaffa, July 15, 1994.

Criterion A: Community Planning and Development, Politics / Government, Social History, and Ethnic Heritage

Summary Statement of Significance: Criterion A

The Altgeld Gardens – Philip Murray Historic District is historically significant at the local level under Criterion A in the areas of Community Planning and Development, Politics / Government, Social History, and Ethnic Heritage as a major World War II-era public housing development for African American defense industry workers and their families. Altgeld Gardens was a distinctive product of its time, embodying several historic patterns and events that characterized this important period in the history of Chicago and in the country more broadly. These include the federal housing policies enacted under the 1940 Lanham Act and carried out locally by the Chicago Housing Authority; the de facto racial segregation that occurred under these policies; the industrial boom and ensuing housing shortage that took place in the country's wartime industrial centers, including Chicago, due to the influx of millions of civilian defense workers within a brief period; and, finally, Chicago's longtime role as a primary destination for the nation's African Americans in search of a better life, which can be traced from the city's origins as a trading settlement up through the post-World War II period. The period of significance under Criterion A begins in 1944, the year Altgeld Gardens' earliest buildings were completed, and ends in 1972. This encompasses the time marking the construction of Altgeld Gardens to the fifty-year cut-off as established by National Register Bulletin 15 in which a property less than fifty years of age would need to be of exceptional importance to be considered eligible for listing on the National Register.

History of Chicago's African American Community

The history of the Chicago's African American community is integral to the city's history as a whole, from its earliest days as an eighteenth-century settlement to the post-World War II period and beyond. Jean Baptiste Point du Sable (c. 1740-1818), a trader of African descent and widely considered to be the founder of Chicago, settled on Lake Michigan at the mouth of the Chicago River around 1775 which marked the genesis of the American city. Du Sable grew his commercial activities including a thriving fur trading business into a six-square-mile settlement with a large homestead. He maintained amicable relations with the Potawatomi, the primary local indigenous tribe, and his ability to speak their language and his marriage to one of their own were key to his success in the area. By the end of the eighteenth century, du Sable's settlement had caught the interest of American authorities, who gradually expanded into the region following du Sable's decampment southward into French territory in 1800. The next community of African Americans did not coalesce in Chicago until the 1830s but du Sable's legacy of freedom and personal agency on the frontier provided a foundation for the city's future as a hub of Black aspiration and achievement in the centuries to come.[58]

Chicago was predominantly White when it was incorporated as a town in 1833, then as a city in 1837. Nevertheless, there were several African American residents who operated businesses in Chicago's earliest days, including two of the town's three bathhouses and a barbershop.[59] While these individuals were not immune to racial discrimination, the presence of abolitionists in Chicago and the broader "passive liberation" of the antebellum North, where slavery was illegal, made it possible for the city's African American citizens to achieve some degree of economic independence.[60] In the decades leading up to the Civil War, Chicago was a "City of Refuge," hosting increasing numbers of refugees from the slavery of the South.[61] In 1860 there were nearly one thousand African Americans in Chicago, mostly inhabiting the First, Second, and Third Wards south of the Chicago River near the lake.[62] These individuals established churches and fraternal organizations, were gainfully

[58] Christopher Robert Reed, *Black Chicago's First Century, Volume I: 1833-1900* (Columbia: University of Missouri Press, 2005), 27-31.
[59] Reed, *Black Chicago's First Century,* 31.
[60] Reed, *Black Chicago's First Century,* 38.
[61] Reed, *Black Chicago's First Century,* 94.
[62] Reed, *Black Chicago's First Century,* 50-52.

employed or operated their own businesses, started families, and owned property.[63] Despite these comparative freedoms, however, the lives of these residents were restricted by pervasive prejudice and the Black Laws of Illinois (1819-1865) which severely limited Black Chicagoans' civil rights, including the right to vote.[64]

Meanwhile, Chicago had grown into a major transportation hub with the opening of the Illinois and Michigan Canal in the late 1840s and the construction of over thirty railroad lines into the city by the 1850s. As the fast-growing commercial heart of the Midwest, the city's industrial economy expanded with warehousing for numerous trans-national businesses, including lumber and wheat; processing facilities; and meatpacking, which grew into a major national industry with the invention of refrigerated rail cars in the 1870s.

The American Civil War (1861-1865) and its impacts on the national economy initiated a period of substantial growth in Chicago. While its industries expanded to produce food and supplies for Union troops, the city also took in numerous refugees from the Confederate South. Many of its African American citizens joined regiments of the U. S. Colored Troops to fight with the Union army.[65] Following the Emancipation Proclamation of 1863 and the end of the war in 1865, many hundreds of formerly enslaved African Americans fled the South in search of work in the great Midwestern metropolis, where they were required to adjust to a different kind of urban and industrial environment.[66] For Black Chicagoans, the war also marked a significant moment of transition; before the war, a better life for African Americans was possible in Chicago, whereas after the war, and the legal end of slavery, it was not only possible but probable.[67] By 1870, the city's African American population had reached to nearly 4,000 and its overall population had climbed to nearly 300,000.[68]

Chicago's growing African American population expanded into the southern part of the city and diversified into laboring and professional classes. The well-known "Black Belt" developed during this period along Clark Street and nearby thoroughfares and extended southward below Twenty-second Street. Poor and working-class families mostly settled above Twenty-second Street, while to the south a wealthier and more cosmopolitan section emerged, sowing the seeds for the Black Metropolis of the 1920s.[69] Chicago's first African American attorney passed the Illinois bar exam in 1869, its first African American newspaper was established in 1878, and its first African American business directory, *The Colored Men's Professional and Business Directory* was published in 1885.[70] The Chicago-based Pullman Company, which designed and manufactured railroad sleeping cars and hired exclusively African American porters, provided a low-paying but reliable source of employment for thousands of African American men, known as Pullman porters, from the 1860s until well into the twentieth century.[71]

The World's Columbian Exposition of 1893, an internationally promoted event and a symbol of Chicago's resilience following the Fire of 1871, instigated another wave of African American immigration to Chicago. Whether it was to work at the 1893 World's Fair or to visit, these newcomers led to an increase in African American-owned businesses such as restaurants, saloons, and hotels, as well as an increase in the city's African American population, which reached approximately 30,000 in 1900 (out of a total population of 1.7 million).[72]

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[63] Reed, *Black Chicago's First Century,* 55-75.
[64] Reed, *Black Chicago's First Century,* 94.
[65] Reed, *Black Chicago's First Century,* 111.
[66] Reed, *Black Chicago's First Century,* 167.
[67] Reed, *Black Chicago's First Century,* 171.
[68] Reed, *Black Chicago's First Century,* 112; and United States Census Bureau, "Pop Culture: 1870," https://www.census.gov/history/www/through_the_decades/fast_facts/1870_fast_facts.html, accessed April 12, 2021.
[69] Reed, *Black Chicago's First Century,* 170-171.
[70] Reed, *Black Chicago's First Century,* 172.
[71] Christopher Robert Reed, *Knock at the Door of Opportunity: Black Migration to Chicago, 1900-1919* (Carbondale: Southern Illinois University Press, 2014), 142-152.
[72] Reed, *Black Chicago's First Century,* 32, 339; and Reed, *Knock at the Door of Opportunity*, 22.

According to historian Dr. Christopher Robert Reed, the "fabled 'White City'" drew not only laborers but a "refined element" known as the "Talented Tenth" who were attracted in large part by the economic opportunities that were generated by the fair. Included in these newcomers were civic activist Ida B. Wells (1862-1931) who moved to Chicago in 1895; activist AME ministers Reverdy C. Ransom(1861-1959) and Archibald J. Carey, Sr. (1868-1931), who moved to the city in 1896 and 1897 respectively; and entrepreneurs such as Jesse Binga (1865-1950) who established Chicago's first African American-owned bank in 1908, and Julius F. Taylor (1853-1934) publisher of the political newspaper the *Broad Ax.*[73] Geographically, the city's African American lived in the ever-expanding Black Belt on the South Side, which was now a veritable "city-within-a-city," as well as in growing enclaves on the North Side and West Side.[74]

Among the most transformative periods in the history of Black Chicago was the Great Migration, a massive demographic shift between 1900 and 1920 in which more than half a million African Americans moved from the rural South into the industrial cities of the Midwest and Northeast, including Philadelphia, Baltimore, Chicago, Detroit, Cleveland, and Buffalo. Between 1915 and 1918 alone, Chicago gained fifty thousand residents, all of whom were searching for work and a better life than the impoverished sharecropping and similar slavery-adjacent occupations available to them in the Jim Crow South.[75] In Chicago, they mostly settled on the South Side where the Black Belt had grown to five miles in length and was bordered to the west by railroads and industrial properties, to the east by affluent residential neighborhoods, and extended south from Van Buren Street to Thirty-Ninth Street.[76] In 1920, the city's African American population had reached 109,548, which constituted a 148-percent increase in a single decade.[77] The South Side was home to approximately 85 percent of this population.[78] The Chicago Urban League, one of the first branch offices of the National Urban League, was founded in 1916 to help support and advocate for the city's many newcomers.

The *Chicago Defender,* an influential African American-owned newspaper with nationwide circulation, was founded in 1905 by Robert S. Abbott (1868-1940). To reach a wider audience, Abbott coordinated unofficially with Pullman porters to disseminate his paper throughout the South, and the contents of his paper, particularly the passionate editorials on civil rights issues, is now credited in large part with making Chicago one of the primary destinations of the Great Migration era.

In addition to gains in population, early twentieth-century Chicago's African American community was fueled by an increasing economic independence which in turn led to better access to financial resources, such as Jesse Binga's Binga Bank at the corner of State Street and Thirty-Sixth Place. No longer beholden to the established White financial community, Black Chicagoans expanded into a wide variety of manufacturing, professional, and commercial enterprises. Many of these enterprises were concentrated in an area of the Black Belt known as the Black Metropolis, which "gained nationwide publicity as a model of Black achievement."[79] Increased economic independence and prosperity began opening doors to the local political arena, which began with the 1915 election of Oscar De Priest (1871-1951), the city's first African American alderman.[80]

While the Great Migration was a catalyst for great achievements in the areas of independence, both economically and socially, these burgeoning African American communities were met with new challenges in the northern cities they called home. As African Americans filled factory and industry jobs in the city, their white neighbors

[73] Reed, *Black Chicago's First Century,* 339; and Timothy Samuelson, "Black Metropolis Thematic Nomination, Chicago, Cook County, Illinois," National Register of Historic Places, 1986, np.
[74] Reed, *Black Chicago's First Century,* 341; and Samuelson, "Black Metropolis Thematic Nomination," np.
[75] Reed, *Black Chicago's First Century,* 340.
[76] Samuelson, "Black Metropolis Thematic Nomination," np.
[77] Samuelson, Samuelson, "Black Metropolis Thematic Nomination," Section 8, page 1.
[78] Arnold R. Hirsch, *Making the Second Ghetto: Race & Housing in Chicago 1940-1960* (Chicago: The University of Chicago Press, 1998), 3-4.
[79] Samuelson, "Black Metropolis Thematic Nomination," Section 8, page 2.
[80] Samuelson, "Black Metropolis Thematic Nomination," Section 8, page 2.

viewed this as a threat economically. Growing numbers in these communities were also perceived as a threat with a newly established voting base. In 1919, between July 27 and July 30, riots in the city left 38 people dead and over 500 individuals injured. Members of the white community spent days setting fire to Black-owned homes and business, leaving large numbers in the community homeless, injured, or dead. The white rioters were eventually tamed by the deployment of reserve guardsman, only after days of warfare took hold of the streets of Chicago.[81] Part of the greater Red Summer that the United States experienced, with similarly horrifying riots occurring in as many as three dozen American cities.

While the Great Migration fueled a remarkable period of growth and prosperity within Chicago's African American community, it also precipitated the labor and housing shortages that would impact the population to varying degrees over the next several decades. Even as early as the 1920s, new arrivals began to outpace employment opportunities which increased unemployment levels and impacted the health of local businesses on the South Side. The Great Depression of the 1930s compounded these issues to a catastrophic degree and fully dismantled the advancements of the Black Metropolis. Unemployment soared among the African American population, which had hit nearly 234,000 in 1930. Financial institutions collapsed, businesses closed, and slum-like housing conditions increased as the South Side's aging and increasingly overcrowded housing stock went unaddressed.[82]

According to historian Arnold R. Hirsch, the growth of Chicago's African American population slowed significantly in the 1930s, which instead was characterized by a period of "territorial consolidation," or demographic shifts along neighborhood boundaries and within previously mixed communities. By 1940, the African American community in Chicago had reached an apex of racial concentration, a phenomenon that paved the way for the federal housing policies of the 1940s and beyond. This racial concentration was exacerbated by the National Housing Act of 1934 which resulted in the ranking of races and nationalities by order of "desirability."[83] Individuals and families from Anglo Saxon and northern European descent were ranked as more desirable, while those from the Mediterranean and Eastern Europe, followed by African Americans and Central and South Americans, who were ranked as less desirable. This ranking was employed by the FHA's chief economist Homer Hoyt. The FHA would go on to employ Hoyt's racial hierarchy to standardize the mortgage lending process in an attempt to protect the government against risky lending. This resulted in the creation of racial maps of cities across the country. In these maps, Hoyt's hierarchy was color coded, with low-risk investment areas represented with blue and green, moderate risk areas were yellow, and high-risk areas, largely inhabited by African Americans, were red. Known today as "redlining," the long-term effects of this categorization can still be seen in neighborhoods to this day. With residential segregation already largely mandated by multiple levels of government, this new redlining policy presented yet an another barrier to minority communities by largely denying them access to mortgage loans and decreasing opportunity for home ownership in large swaths of urban areas. At the same time, the city of Chicago had also adopted its own forms of restrictive covenants resulting in white homeowners being legally barred from selling their property to nonwhites, further intertwining racial prejudice into the history and urban fabric of Chicago.[84]

As discussed more thoroughly in the following section, federal housing reform arose from the dire nationwide economic impacts of the Great Depression and originated as part of the federal government's New Deal program under President Franklin D. Roosevelt. Its earliest iteration was managed by the housing division of the Public Works Administration which financed the first federal housing project exclusively for African American families in Chicago, the Ida B. Wells Homes on the South Side at Thirty-Ninth Street and South Parkway (1939-1941;

[81] Adam Green, "How a Brutal Race Riot Shaped Modern Chicago," *The New York Times*, August 3, 2019.
[82] Christopher Robert Reed, *The Depression Comes to the South Side: Protest and Politics in the Black Metropolis, 1930-1933* (Bloomington: Indiana University Press, 1994), 9-10.
[83] Digital Chicago, "Racial Restriction and Housing Discrimination in the Chicagoland Area," Lake Forest College, accessed January 25, 2022.
[84] Adam Green, "How a Brutal Race Riot Shaped Modern Chicago," *The New York Times*, August 3, 2019; Cheryl W. Thompson, et al, "Racial covenants, a relic of the past, ares still on the books across the country," National Public Radio, November 17, 2021.

demolished). The 1,662-unit development, which was completed by the newly formed Chicago Housing Authority, involved the demolition of 47 acres of "ghetto" housing at a cost of $9 million.[85] From this point through the remainder of the twentieth century, federal public housing played a critical role, for better and for worse, in the lives of countless thousands of African Americans across the country.

The United States' involvement in World War II produced an industrial boom in Chicago that attracted a new wave of African American migration from the South. Between 1940 and 1950, the city's African American population swelled by approximately 270,000 but this time the city had more than enough jobs to employ them, particularly in the defense industries.[86] However, the intensive influx created a crisis-level housing shortage. The addition of two more exclusively African American federal housing projects in the wartime years, the Robert H. Brooks Homes (834 units; 1943) and Altgeld Gardens (1,500 units; 1944), plus the reservation of a small percentage of units in other new projects for African American families, provided a total of 4,000 new units. However, in many cases new housing construction involved the demolition of older existing housing in established African American neighborhoods in an effort to clear slums, creating more housing problems while solving others (Altgeld Gardens, established in the largely undeveloped Riverdale area, was a notable exception). These efforts, coupled with the National Housing Agency's Neighborhood Composition Rule, which required the racial composition of federal housing projects to reflect their host neighborhoods, resulted in a net loss of units overall and thus further exacerbated the wartime housing crisis.[87] According to Hirsch, these wartime construction efforts "were neither sufficient to meet the incoming flood of war workers, nor a solution to the city's preexisting housing problems."[88] By 1942, the city's overall vacancy rate had dipped to 0.9%.[89]

Following the end of the war in 1945, Chicago continued to gain African American residents who accounted for nearly 30 percent, or more than 800,000, of the city's population by the mid-1960s.[90] Due to the overcrowding and lack of decent housing on the South Side and other African American enclaves, the established "racial barriers" between Black and White / mixed-race areas began to dissolve.[91] The departure of White residents out of the inner city and into new post-war suburbs amplified this trend, as did the demolition of entire blocks of older housing to make way for new low-income public housing projects for predominantly African American residents. The United States Supreme Court's abolition of restrictive covenants in 1948, a racist tactic used to exclude African Americans and other minorities from certain neighborhoods, was another factor in the breakdown of barriers. Previously White neighborhoods in Chicago such as Chatham on the South Side became predominantly middle-class African American enclaves beginning in the 1950s. In the spirit of urban renewal, the Chicago Housing Authority built several high-rise public housing projects in poorer areas to replace existing "ghettos," such as the 4,415-unit Robert Taylor Homes (1960-62) in the old Black Belt.[92] The CHA also shifted previously Whites-only or predominantly White projects to African American occupancy, including the Frances Cabrini Homes, a wartime housing project on Chicago's Near North Side that gained several high-rise buildings between 1958 and 1962.[93] Efforts to build more public housing in less congested and more diverse areas sparked a series of racially fueled clashes that relocated newer housing projects in increasingly dense racially segregated neighborhoods.

Civil Rights activism grew in the 1960s to combat racial discrimination in housing and in schools. The Chicago Freedom Movement, led by local school teacher Al Raby (1933-1988), drew Martin Luther King Jr. and the

[85] Hirsch, *Making the Second Ghetto,* 10-11.
[86] Neil A. Wynn, *The African American Experience During World War II* (Lanham, Maryland: Rowman & Littlefield Publishers, 2010), 64.
[87] Hirsch, *Making the Second Ghetto,* 13; and ""FDR Will Get Plea to Provide Negro Housing. – New Buildings Only Increase Shortage, Says Frayser Lane," *Chicago Sun,* June 19, 1942.
[88] Hirsch, *Making the Second Ghetto,* 20.
[89] Hirsch, *Making the Second Ghetto,* 20.
[90] Hirsch, *Making the Second Ghetto,* 3, 17.
[91] Hirsch, *Making the Second Ghetto,* 5.
[92] Hirsh, *Making the Second Ghetto,* 262.
[93] Hirsh, *Making the Second Ghetto,* 262.

Southern Christian Leadership Conference (SCLC) to Chicago in 1965 to lead a series of protests. By 1969, 99 percent of CHA's low-income housing was occupied by African Americans, and virtually all of this housing was located in dense, racially segregated areas.[94] These areas, and the projects themselves, were plagued by violence and crime fueled by overcrowding, poverty, and a pervasive sense of despair. According to historian D. Bradford Hunt, Chicago's public housing of this period "perpetuated racial segregation and symbolized second-class citizenship."[95] Many thousands of African Americans were thus struggling to achieve the dream of a better life that they or their predecessors had arrived in the city to pursue. Meanwhile, Chicago's African American population was climbing to its all-time high of nearly 1.2 million in 1980.[96]

In 1983, the African American community, with support from Latinos and liberal White residents, succeeded in electing the city's first African American mayor Harold Washington (1922-1987) who sought to reverse the decades of neglect that the city's African American had experienced under its White political machine. While more African Americans made strides in the political arena, however, police discrimination and brutality, along with violence, grew increasingly worse in the 1980s and beyond, and by 2000 Chicago was experiencing an unprecedented exodus of its African American population, which for so many decades had been an integral part of its social and cultural identity. Despite efforts on the part of the City and CHA to replace dozens of housing projects with more equitable mixed-income housing, the de-population trend continued, and in 2017 the African American population had plummeted to just under 800,000.[97]

Overview of Public Housing in the United States

The New Deal and Early Public Housing in the United States

The modern-day concept of public housing in the United States – government-built and -operated multi-unit residential complexes for low income families – originated in the 1930s during the Great Depression, when a nationwide confluence of unemployment, worsening conditions in urban slums, and a dearth of decent housing prompted the federal government to include a housing initiative as part of President Franklin D. Roosevelt's New Deal economic recovery program. In June 1933, the National Industrial Recovery Act (NIRA) allotted $3.3 billion to form the Federal Emergency Administration of Public Works (also known as the Public Works Administration [PWA]), which was designed in part to alleviate unemployment and the housing crisis by coordinating the clearance of slums and the erection of low-income housing in cities throughout the nation.[98] The new PWA was folded into the U.S. Department of the Interior under the administration of Harold L. Ickes (1874-1952), who created a Housing Division within the PWA to manage the agency's housing related projects.

Initially the PWA sought to improve and increase housing stock by providing low interest loans to limited-dividend housing corporations. The agency received over five hundred requests but only seven projects ultimately received the loans, and all seven were intended for White occupants only. Additionally, all were built on vacant land rather than former slum areas. Completed in 1933-1935, the first PWA-funded developments included the Carl Mackley Houses in Philadelphia, the Hillside Homes in New York City, and Neighborhood Gardens in St. Louis. Their designs were inspired by European Modernism and the Garden City Movement and modeled after the successful large scale public housing built after World War I in European countries such as Austria and Germany. Architects for these initial PWA-funded projects were encouraged to be creative in their designs and

[94] Hirsch, *Making the Second Ghetto,* 265.
[95] D. Bradford Hunt, *Blueprint for Disaster: The Unraveling of Chicago Public Housing* (Chicago: University of Chicago Press, 2009) , 6.
[96] Great Cities Institute, "Fact Sheet: Black Population Loss in Chicago," https://greatcities.uic.edu/wp-content/uploads/2019/08/Black-Population-Loss-in-Chicago.pdf, accessed April 13, 2021.
[97] Great Cities Institute, "Fact Sheet: Black Population Loss in Chicago," https://greatcities.uic.edu/wp-content/uploads/2019/08/Black-Population-Loss-in-Chicago.pdf, accessed April 13, 2021; and Julie Bosman, "Black Families Came to Chicago by the Thousands," *New York Times,* February 16, 2020, accessed April 13, 2021.
[98] National Park Service, "Public Housing in the United States, 1933-1949," unpublished draft, December 2004, E-18.

received little government oversight. Common features included the use of superblock site arrangements, low-rise building heights, low-density site coverage, compact building interiors, community amenity buildings and gardens, and a public art component. While the quality of design and construction of these developments was high and "provided an important first step…in establishing a federal role in housing reform," the limited-dividend housing program failed in its goal to alleviate housing conditions among the urban poor.[99] Even with the program's liberal loan terms, the rents required to make the projects work financially were well above the means of lower-income tenants.

Between February 1934, when Ickes suspended the loan program, and 1937, the PWA transitioned to take on a more direct role in American low income housing development. The agency acquired the land for new housing projects; contracted out slum clearance, design, and construction, which was overseen by its own qualified staff; and managed the completed properties. During this period the agency constructed or initiated 51 projects in 36 cities. Twenty-one projects were allotted for African American tenants only, 24 for Whites only, and 6 had segregated buildings for Black and White tenants.[100] The character of the PWA's direct-build housing projects was similar to the loan program projects in their low density; low-rise building heights; rowhouse-type (rather than detached) units; selection of quality construction materials; integration of open spaces and recreational areas within a superblock arrangement; provision of amenity buildings such as community centers and nursery schools; and exterior designs chosen by local architects to reflect regional architectural preferences.[101] The program provided a total of nearly 22,000 units, cleared 10,000 slum units, and employed thousands. Examples include Techwood Homes (extant) and University Homes (demolished) in Atlanta (1936); Lakeview Terrace in Cleveland (1935-1937, extant); the Harlem River Houses in New York City (1936-1937, extant); the Langston Terrace Dwellings in Washington D.C. (1936-1938, extant); and the Julia C. Lathrop Homes in Chicago (1938, extant). Operating under the George-Healey Act of 1936, which required that the PWA fix rents at a certain level and limit tenant selection based on income, made this second phase of federal housing more affordable than the first, although the units still were not affordable for the poorest among those displaced by slum clearances.[102]

As the PWA administered its own direct-build housing program, it also encouraged states to pass legislation to better enable local participation in housing activities. By 1938, thirty states had passed such legislation and fifty communities had established local housing authorities that took over management of thirteen of the PWA's new developments. This increased engagement at the local level set the stage for the federal-local partnership that was codified under the United States Housing Act of 1937.

The United States Housing Act of 1937, also known as the Wagner-Steagall Act, decentralized public housing by creating a permanent federal housing program that provided financial assistance for low-income housing to be constructed and operated by state-chartered local housing authorities. The goals of the program, which would be administered by the newly created United States Housing Authority within the Department of the Interior, were "the elimination of unsafe and insanitary housing conditions…the eradication of slums…the provision of decent, safe, and sanitary dwelling for families of low income, and…the reduction of unemployment and the stimulation of business activity."[103] The program was guaranteed funding through 1939, after which it would require additional appropriations from Congress. President Roosevelt appointed Nathan Straus as the USHA's first administrator.

Using federal funds, local authorities were responsible for executing all aspects of the housing development process, from selecting sites to design, construction, tenant selection, and building management. In addition to

[99] National Park Service, "Public Housing in the United States, 1933-1949," E-23.
[100] National Park Service, "Public Housing in the United States, 1933-1949," E-24.
[101] National Park Service, "Public Housing in the United States, 1933-1949," E-27.
[102] National Park Service, "Public Housing in the United States, 1933-1949," E-31; and Gilbert A. Cam, "United States Government Activity in Low-Cost Housing, 1932-38," Journal of Political Economy Vol. 47, No. 3 (June 1939): 364.
[103] United States Housing Authority, "The United States Housing Act of 1937, as Amended" (Washington D.C.: United States Department of the Interior, 1937).

the more decentralized arrangement of public housing development under the USHA, another important component of the act was that it offered deeper subsidies to ensure that even the poorest citizens could afford the rents.[104] In its first few years of existence, the USHA financed nearly 120,000 new units at a cost of $540 million. In addition to increased involvement at the local level, these projects also differed from those of the PWA era in their increased emphasis on economy and standardization, which was deemed essential to keeping rents low. They were typically designed in the International Style, with regular fenestration patterns, flat roofs, and little to no ornament, and they offered fewer amenities. However, PWA-era features such as low-rise building heights, superblock site arrangements, and the incorporation of green space continued to be used. Early examples of USHA-funded housing developments include Edison Courts in Miami (1939-1940, extant) and the James Weldon Johnson Homes in Philadelphia (1940, extant). Though socially progressive, the early movement for public housing in the United States could not contend with the ever-present specter of racial segregation, even in Northern cities like Chicago. The PWA- and USHA-funded projects of the 1930s and early 1940s were intended for both Black and White tenants but on a segregated basis. The programs adhered to the unwritten "Neighborhood Composition Rule" which required a project's tenants to be of the same race as the majority of residents in its host neighborhood. In areas of mixed population, the project matched that ratio in number of segregated units. Thus, the de jure residential segregation that had been in place throughout the country for decades was now formalized through federal housing policy.

U.S. Public Housing during World War II

As the nation emerged from the Great Depression at the end of the 1930s, the perceived need for public housing waned, and the federal government determined that future housing needs should rest in the hands of the private sector. In 1939, Congress refused to fund the USHA program beyond its original three-year period. Yet as and the threat of world war loomed and the nation's industries pivoted to wartime production, a lack of accommodations for millions of defense workers created a new housing crisis that required government intervention. In 1940-1941 alone, approximately three million defense workers and their families (both Black and White) relocated to the nation's industrial centers, primarily Chicago, Detroit, Philadelphia, and New York, and only half of these families were able to secure decent housing within existing markets.[105]

In June 1940 the federal government reinstituted a version of its public housing program under the National Defense Act. Under Public Law 671 of the act, the USHA was authorized to acquire land, finance 100 percent of housing development costs, and reassign in-progress developments for defense housing. The law also eliminated the low income requirement for tenancy, requiring instead that rents be fixed at variable rates that were within reach of defense worker families, and it exempted local authorities from the "equivalent elimination" clause regarding slum removal.[106] By 1942, more than 6,500 in-progress units had been converted for defense worker housing; one large-scale example is San Felipe Courts in Houston (1939-1944, demolished). The USHA also issued loans for a total of 6,344 purpose-built defense housing units with the goal of converting them for low-income use after the war.[107] Due to the pressing need for housing, material shortages, and financing constraints, these new developments were more restrained and regularized than ever before, prioritizing speed and efficiency over creativity and quality. The Moreno Court development in Pensacola (1940, extant), for example, was a 220-unit defense housing development completed in less than three months.[108]

Although the United States would not enter the War until December 1941, the nation was preparing for wartime footing as America's allies in Europe descended into war in 1939. In October 1940, the emergency housing policies under the National Defense Act were replaced by the Lanham Act, a wartime bill that prioritized temporary federally built housing that would not compete with private enterprise. Under the Lanham Act, the

[104] Hunt, *Blueprint for Disaster*, 25.
[105] National Park Service, "Public Housing in the United States, 1933-1949," E-54.
[106] National Park Service, "Public Housing in the United States, 1933-1949," E-55.
[107] National Park Service, "Public Housing in the United States, 1933-1949," E-57.
[108] National Park Service, "Public Housing in the United States, 1933-1949," E-58.

government built approximately 625,000 units of housing, about 58,000 of which were temporary construction, e.g., plywood dormitories, Quonset huts, and trailers. The program restricted per-unit construction costs to a level well below USHA standards and forbade conversion of its temporary housing for low-income use after the war. In 1942, President Roosevelt consolidated the government's various housing agencies into the National Housing Agency (NHA), which joined other federal construction programs under the Federal Public Housing Administration (FPHA). Meanwhile, private developers built nearly 900,000 wartime housing units, primarily single-family homes on the outskirts of industrial centers that would catalyze postwar suburbanization.

In November 1944, in anticipation of the end of the war and the massive re-integration effort of veterans, the NHA published its estimate of the nation's postwar housing needs. According to the report, the country would require 12.6 million new housing units to accommodate the population in the first ten years after the war, and 36 percent of these would need to be low-income units. While the Servicemen's Readjustment Bill of 1944 (known as the G. I. Bill) guaranteed special home loans for veterans, public housing was intended to provide a critical stop-gap measure until the private construction industry could catch up with demand. In 1945, an executive order prioritized the use of housing built under the National Defense Act as veteran housing managed by local housing authorities, followed by a gradual conversion to low-income housing.[109]

The temporary housing built under the Lanham Act also supplemented veteran housing into the early 1950s despite mandates for its immediate demolition, and over 24,000 units of permanent housing were transferred to local housing authorities under the Housing Act of 1950, which was administered by the FPHA's postwar successor, the Public Housing Administration (PHA). One example of a converted permanent Lanham Act project is Chicago's Altgeld Gardens, the subject property.

Postwar U.S. Public Housing

The public housing programs of the 1930s and World War II period demonstrated that the federal government had an important role to play in the housing sphere, and this role continued to evolve in the postwar period. The next important step in this evolution was the passage of the Housing Act of 1949, a landmark piece of legislation that declared, for the first time, that "every American family" deserved decent housing:

> [T]he general welfare and security of the Nation and the health and living standards of its people require housing production and related community development sufficient to remedy the serious housing shortage, the elimination of substandard and other inadequate housing through the clearance of slums and blighted areas, the realization as soon as feasible of the goal of a decent home and suitable living environment for every American family…[110]

To meet these goals, the PHA provided financing to local housing authorities for slum clearance and the construction of more than 800,000 new housing units. In direct contrast to earlier projects, however, postwar public housing projects were typically constructed as high-rise towers that symbolized "economic efficiency, social order, and modern design."[111] Strict per-unit cost caps forced an increase in density per building and a greater density of buildings per complex. Amenities were reduced or eliminated altogether.

In addition to changes in design and planning philosophies, public housing experienced an important policy shift in this period as well. Whereas earlier housing projects targeted low-income wage earners, both Black and White, postwar housing was conceived of as a way to alleviate housing conditions for the poorest citizens, who by the late 1950s were disproportionately African American. Furthermore, the Urban Renewal Act of 1954, which was intended to improve declining inner cities in the face of postwar suburbanization, displaced an overwhelming

[109] National Park Service, "Public Housing in the United States, 1933-1949," E-63-65.
[110] United States Senate, "Housing Act of 1949," (Washington DC: United States Government Printing Office, 1949), 1.
[111] National Park Service, "Public Housing in the United States, 1933-1949," E-66.

number of poor African Americans from razed slums who then had little choice but to crowd into public housing as their only feasible means of shelter.

The lofty goals of the 1949 act instigated perhaps the most controversial period in the country's history of public housing. Critics described postwar projects as "warehousing" for the predominantly African American urban poor, and in the 1960s housing projects became touchstones of racial violence and Civil Rights activism. This trend continued into the 1970s and 1980s, as drug use and gun violence escalated. Once conceived of as a temporary respite for the working class families on their path to a better life, public housing had become a prison of poverty that was nearly impossible to escape.

In 1965, President Lyndon B. Johnson created the United States Department of Housing and Urban Development (HUD) as a Cabinet-level agency to oversee housing issues. The 1968 Fair Housing Act, which HUD was tasked with enforcing, illegalized discrimination in the housing industry based on qualities such as race, gender, religion, and nationality. At the same time, the federal government shifted to a public-private arrangement of housing development in which it provided federal subsidies to private low-income housing developers (both for-profit and non-profit). This type of development, known as affordable housing, continues to provide the primary form of low income housing today.[112]

Public Housing in Chicago

As a fast-growing city with a large proportion of poor and working class residents, both Black and White, Chicago faced several housing challenges over the course of the twentieth century. Until the creation of federal housing policies under the 1930s New Deal program, these challenges were addressed, with varying success, by the private sector and by the accretion of slum districts. With its first four public housing projects of the 1930s, however, Chicago fully embraced public housing as a viable solution to its housing challenges, erecting many thousands of subsidized units that transformed its cityscape. In many ways, the city's history of public housing mirrors the evolution of policy and design that occurred at a national level, but the ways and places in which it manifested are in other ways unique to Chicago's history as both an industrial center and as a mecca of African American urbanity.

Prior to the initiation of federal public housing under the 1930s New Deal, Chicago's housing shortage following the Great Migration of the 1910s, and the increasingly dire conditions of its slums, caught the attention of philanthropic progressives who determined that the problem could be solved via private investment. In 1919, the Chicago Housing Association was formed by businessman Benjamin J. Rosenthal and a group of like-minded Chicago businessmen, who believed that home ownership was the key to a stable society. Well aware of the dehumanizing conditions in the city's slums, and that many of its board members' employees were housed there, the association endeavored to finance and build modest homes that working-class families could afford to purchase.[113] In 1920, the group completed the Garden Homes development, a collection of 154 single-family and duplex residences for White families in the Chatham neighborhood (extant, NRHP, 2005). The project, hailed as "the most ambitious housing project in the history of Chicago," struggled with foreclosures in the 1930s and was the only development the association ever built.[114]

In 1929, Julius Rosenwald (1862-1932), Chicago philanthropist and president of Sears, Roebuck, & Company, constructed the Michigan Boulevard Garden Apartments, a 454-unit, five-story housing complex for African American families on the booming South Side (extant, NRHP, 1981). While Rosenwald's goal was to provide affordable rental housing, the high cost of the project resulted in middle class rents and thus did little to alleviate

[112] Alexander Von Hoffman, "To Preserve Affordable Housing in the United States: A Policy History," Harvard Joint Center for Housing Studies (March 2016): 7-12.
[113] "Garden Homes Historic District, Chicago, Cook County, Illinois," National Register of Historic Places, 2005, Section 8, pp. 8-9.
[114] "Garden Homes Historic District, Chicago, Cook County, Illinois," Section 8, p. 11.

housing conditions for the poor of Chicago's Bronzeville. Nevertheless, the complex, which continued to provide quality housing for middle class African Americans for decades to come, marked an important step in localized housing relief efforts. A similar development for White families was the Marshall Field Apartments in Chicago's Old Town neighborhood on the Near North Side, a 628-unit complex financed and built by the estate of merchant entrepreneur Marshall Field in 1929 (extant, NRHP, 1991).[115] Like Rosenwald's development, the rents ended up being too high for its intended demographic.

As overcrowding and unemployment increased, Depression era Chicago was a leading candidate for the federal government's PWA direct-build and USHA-funded housing programs of the 1930s. Between 1935 and 1941, the city gained four projects: 1) the Julia C. Lathrop Homes (1938, extant), 2) the Jane Addams Houses (1938, demolished), 3) the Trumbull Park Homes (1938, extant), and 4) the Ida B. Wells Homes (1939-1941, demolished). All four were designed in accordance with the programs' ideals of high-quality design and construction, low density, and the provision of green space and indoor amenities such as community centers and nursery schools. All four were managed by the Chicago Housing Authority (CHA) following its creation in 1937.

The Julia C. Lathrop Homes were completed as a PWA direct-build project on the North Side of Chicago in 1938. Its 925 units in two- to four-story rowhouse and apartment buildings were allocated for White families (NRHP, 2010).[116] The project was named after Illinois social reformer Julia C. Lathrop (1858-1932), who was involved in several charitable and civil rights causes throughout her career. A fifteen-member consortium of architects designed the project under the leadership of Chicagoan Robert DeGolyer. Today, the property is historically significant as an intact pre-World War II public housing complex in Chicago. It is currently operated by the CHA.

The Jane Addams Houses was a PWA direct-build project completed in 1938 on the Near West Side. In accordance with the federal government's "Neighborhood Composition Rule," 2.5 percent of its 1,027 units were reserved for African American families and the rest were designated for Whites.[117] The team of architects included John Holabird, John Armstrong, Ernest Grunsfeld Jr., Elmer Jensen, and Philip Maher.[118] The complex of 1,027 units in 32 three-story buildings, named for progressive social reformer and activist Jane Addams (1860-1935), was demolished between 2002 and 2007.

Trumbull Park Homes, also completed in 1938, was a comparatively small PWA project on the Southeast Side, three blocks from the Wisconsin Steel Works, that comprised 426 units for White families. The two-story row houses and four-story apartment buildings were designed by the same architectural team as the Jane Addams Houses and are similar in appearance. When the CHA attempted to integrate Trumbull Park Homes in 1953, the complex endured seven months of daily race riots followed by years of racial attacks and protests that made national headlines. The complex is extant and operated by the CHA.

The Ida B. Wells Homes, constructed between 1939 and 1941, was the only Chicago public housing development from this era designed exclusively for African American families. The large 1,662-unit complex replaced slums on the South Side and was named for local activist Ida B. Wells (1862-1931). The Wells Homes also differed from the others in that it was planned under the PWA but constructed by the CHA. The complex was expanded in 1955 with ten seven-story buildings. The site was cleared gradually between 2002 and 1994.

Illinois was among the nation's first thirty states to authorize the creation of local housing authorities under the United States Housing Act of 1937. Formed that same year, the Chicago Housing Authority was, and still is, a non-profit municipal corporation governed by a mayor-appointed executive secretary and board of

[115] "Marshall Field Garden Apartments, Chicago, Cook County, Illinois," National Register of Historic Places, 1991, Section 8, p. 1.
[116] "Julia C. Lathrop Homes, Chicago, Cook County, Illinois," National Register of Historic Places, 2010, Section 8.
[117] Hirsch, *Making the Second Ghetto,* 14.
[118] Devereux Bowley Jr., *The Poorhouse: Subsidized Housing in Chicago, Second Edition* (Carbondale: Southern Illinois University Press, 2012), 21.

commissioners. Social reformer Elizabeth Wood served as the CHA's first executive secretary from 1937 until 1954. Under Wood's leadership, the CHA endeavored to "design projects that were 'assets to the community and integrated'….[and] maintain racial balance in at least some buildings."[119] These attempts at "racial balance" and integration led to frequent political clashes, lawsuits, and, most notably at Trumbull Park Homes, violent riots and attacks. Despite its noble intentions, the CHA was in its early years plagued by conflict, dissatisfaction in both the White and Black communities, and a seemingly insurmountable deficiency of affordable housing.

The city's housing shortage of the 1920s and 1930s was compounded during World War II with the arrival of thousands of defense workers.[120] In response, the CHA converted four planned low-income projects into defense worker housing per federal mandate and secured financing to build a fifth project.[121] Between 1941 and 1945, the CHA completed 1) Frances Cabrini Homes (1941-1942,extant); 2) Lawndale Gardens (1942, extant); 3) Robert H. Brooks Homes (1943, extant); 4) Bridgeport Homes (1943, extant); and 5) Altgeld Gardens (1944; the subject property). Two additional developments, the Collin P. Kelley Homes and Maurice J. Dorney Homes, were planned but never realized due to material shortages.[122]

Chicago's wartime developments continued to be racially segregated per the federal government's Neighborhood Composition Rule; a brief attempt at integration as an emergency wartime measure led to violent confrontations and was quickly abandoned. In terms of design, the wartime projects were more stripped down and standardized than their pre-war counterparts to maximize speed and efficiency of construction. Nevertheless, they still maintained the low-rise, low-density character, building arrangement within superblocks, and integrated green spaces of the PWA-era developments.

CHA's first completed wartime housing project was the Frances Cabrini Homes on the Near North Side (1941-1942). The original 56 low-rise buildings replaced a notorious slum district and were segregated to match the racial composition of the population that was displaced, reserving 80 percent for White families (of predominantly Italian descent) and 20 percent for African American families.[123] (By 1949, as neighborhood demographics changed, African American families comprised about 40 percent of the tenants.) Amenities in the development were limited to small tenant yards and shared green space, while the size of the units, averaging 4.4 rooms each, were the largest among the CHA's developments.[124] At the dedication ceremony, Mayor Edward Kelley described the Cabrini Homes as a model of Chicago's future:

> "These homes, built by the Chicago Housing Authority, symbolize the Chicago that is to be. We cannot continue as a nation, half slum and half palace. This project sets an example for the wide reconstruction of substandard areas which will come after the war."[125]

Between 1958 and 1962, the site was expanded with several mid- and high-rise buildings known as the William H. Green Homes, and together the Cabrini-Green site housed 15,000 residents, nearly all of them African American families.[126] In the 1970s and 1980s, Cabrini-Green devolved into a pit of institutionalized poverty and gang-related gun violence, becoming a national symbol of the failures of public housing. Demolition of the post-war buildings occurred gradually between 1994 and 1995; the original wartime development is extant and operated by the CHA.

[119] Kenan Heise, "Elizabeth Wood, 93, CHA Crusader," *Chicago Tribune,* January 19, 1933.
[120] "WHC Head Warns of Housing Crisis. – Mayor Supports Demand for New Quota of Homes," *Chicago Tribune*, September 21, 1943.
[121] Bowley Jr., *The Poorhouse,* 30.
[122] "Scarcities Halt Housing Unit on South Side," *Chicago Tribune*, August 8, 1942.
[123] "Story of City's Big Problem: Negro Housing," *Chicago Tribune,* December 30, 1949; and Hirsch, *Making the Second Ghetto,* 45.
[124] Bowley Jr., *The Poorhouse,* 32.
[125] "Dedicate Frances Cabrini Homes," *Chicago Tribune,* August 30, 1942.
[126] Bowley Jr., *The Poorhouse,* 32.

Lawndale Gardens was a small-scale housing development completed in December 1942 in the West Wide community of Lawndale. The 128 two-story rowhouse units were built on a vacant site north of the International Harvester manufacturing complex (demolished) and were designated for White families only.[127] The development is extant and operated by the CHA.

The large-scale Robert H. Brooks Homes were completed in 1943 as an African American housing development on the Near West Side named for a fallen Black private from Chicago.[128] Occupying eight city blocks, the development comprised 834 units in two-story row houses that were located adjacent to the pre-war Jane Addams Houses, serving as an extension of that complex. In addition to dwelling units, the Brooks Homes included a city park and community center. The buildings replaced a blighted neighborhood of 864 homes, and while the new units provided better-quality housing they also created a net loss of total housing units for the city, thus doing nothing to alleviate the wartime housing shortage.[129] In 1961, the complex was expanded with three 16-story towers that were demolished between 1998 and 2001. The original 1943 buildings were renovated in the early 2000s as part of a mixed-income redevelopment project and are operated by the CHA.

Bridgeport Homes, like Lawndale Gardens, was a small-scale wartime housing development for White families in the South Side community of Bridgeport. It was completed in 1943 on a vacant parcel and comprised 141 units in eighteen two-story rowhouse buildings.[130] The location was near the Central Manufacturing District, where several factories were working on wartime contracts when the development was completed.[131] Bridgeport Homes is extant and operated by the CHA.

The fifth and final wartime public housing development completed in Chicago was Altgeld Gardens, the subject property. This particularly large 1,500-unit development, designated for African American families, was constructed between 1944 and 1945 on the Far South Side of Chicago in the Riverdale neighborhood. Named in honor of Illinois politician John Peter Altgeld (1847-1902), the community was designed to be self-contained given its relative isolation. In addition to 162 two-story rowhouse-style brick buildings containing 1,500 apartment units, Altgeld Gardens also had a community center, shopping center with grocery store, administration building, library, elementary and high schools, and integrated green space, including a public park. Historian Deveraux Bowley, Jr., described Altgeld as “the most self-contained and comprehensive housing project ever built in Chicago.”[132] In 1954, Altgeld was expanded with a 500-unit addition of two-story rowhouses known as the Philip Murray Homes, one of only two low-rise postwar projects.[133] For an in-depth history of the site, please refer to “History and Development of Altgeld Gardens and the Philip Murray Homes” at the beginning of Section 8 of this document.

A sixth project, Wentworth Gardens, was developed in an industrial section of the South Side by the Federal Public Housing Authority (FPHA), not the CHA, which was in charge of its operation only (the CHA finally gained ownership in 1956).[134] The 422 unit-complex for African American families began construction as defense worker housing in 1945 but was not completed until after the war, and from that time onward served as low-income housing. The 37 two- to three-story buildings are extant and managed by the CHA.

Following the end of World War II in 1945, the CHA’s defense worker housing was gradually converted into low-income units, although returning veterans received priority status in the immediate postwar years. As housing shortages continued, the CHA decided to abandon the restrictive Neighborhood Composition Rule by moving

[127] Bowley Jr., *The Poorhouse,* 32-33.
[128] “Name Housing Project After Negro Soldier,” *Chicago Tribune*, June 21, 1942.
[129] Bowley Jr., *The Poorhouse,* 36.
[130] Bowley Jr., *The Poorhouse,* 34.
[131] “Stepup Work on Big Chicago Housing Authority Project,” *Chicago Tribune*, July 19, 1942.
[132] Bowley Jr., *The Poorhouse,,* 44.
[133] Bowley Jr., *The Poorhouse,* 75.
[134] Bowley Jr., *The Poorhouse,,* 45-46.

some African American veterans into Whites-only sections of its temporary housing developments, including Airport Homes and Fernwood Park (both demolished). This early attempt at integration was in line with the attitudes of CHA's leadership at the time; Executive Secretary Wood was a known proponent of racial and economic integration and Robert Taylor (1899-1957), the chairman of CHA's board and an African American, was well aware of the housing issues within the African American community.[135] A series of protests, some violent, at the housing sites deterred most African American families from trying to move in, and the CHA soon abandoned its efforts.

By 1950, the CHA had grown to a staff of 449 managing more than 11,000 units (3,200 temporary units and more than 7,500 permanent units).[136] In its first decade of existence, according to Bowley Jr., "the CHA had established a good record in regard to efficiency of construction and maintenance… [but] the question of integration…remained largely unresolved, as did the larger question of the advisability of publicly created enclaves exclusively for poor people."[137]

Freed from the emergency constraints of the Depression and World War II, the CHA was confronted with a new set of challenges in the postwar period. Postwar suburbanization, and the construction of thousands of government-insured single-family homes on the city's outskirts and beyond, finally alleviated the housing shortage among most Whites (both working and middle class) and middle-class African Americans. In addition, the latter group made some headway into the housing market following the illegalization of restrictive covenants in 1948, although implicit racial discrimination continued to limit opportunities. This exodus from the urban core in the late 1940s through the 1960s left behind a poor and mostly African American population that was concentrated on the city's the South and West Sides. These areas became the target of CHA's slum-clearance and low-income housing construction efforts. The CHA's postwar housing projects followed national trends of increased density (both in its buildings and its sites), increased building heights to an average of 12 stories, reduction of site amenities, and monolithic architecture that prioritized cost over design.

The CHA's first postwar projects were unusual in a number of ways. The South Side's Dearborn Homes, initiated in 1946 and completed in 1950, was a complex for African American families consisting of sixteen six- to nine-story buildings and was the first CHA project to include elevators (extant). Because it was developed prior to the Housing Act of 1949, it was financed by a combination of city, state, and federal funds.[138] Between 1947 and 1952, the CHA developed eight "Court" projects (Racine Courts, LeClaire Courts, Harrison Courts, Maplewood Courts, Ogden Courts, Archer Courts, and Loomis Courts) to house families displaced by specific urban renewal and public projects such as the Illinois Institute of Technology campus expansion and the construction of the Congress Street (now Eisenhower) Expressway. Using state rather than federal funding for these developments, and thus less confined by increasingly stringent per-unit cost caps, CHA built a mix of low-rise rowhouse buildings and mid-rise elevator apartment buildings that maintained some of the design qualities of its earliest projects. All but the Prairie Avenue Courts are extant.

Based on two housing studies conducted in 1950, the CHA determined that the city was carrying a 292,000-unit deficit of low-income housing, and that the deficit was disproportionately affecting the African American Chicagoan community. The CHA announced ambitious plans to construct 40,900 new units in a six-year period, with more than half slated to be completed within the first two years. However, the controversy surrounding the site selection of these new developments "so damaged the CHA that it never fully recovered."[139] The CHA faced fierce opposition from an influential group of White aldermen and their constituents who refused to approve the CHA's choice of mostly vacant sites on the city's outskirts. Instead, the city council insisted that the majority of the units be constructed in existing African American neighborhoods as slum-clearance projects, which would

[135] Bowley Jr., *The Poorhouse,,* 43.
[136] Bowley Jr., *The Poorhouse,,* 48.
[137] Bowley Jr., *The Poorhouse,* 48.
[138] Bowley Jr., *The Poorhouse,* 54-55.
[139] Bowley Jr., *The Poorhouse,* 68.

not only reinforce racial segregation but also net the city virtually no new housing units. Despite protests from members of both the Black and White communities, and pleas for federal intervention, the so-called "Duffy-Lancaster compromise program" was accepted.[140] Far from improving the housing issue, the ensuing building program "reinforced the city's pattern of racial segregation and placed its greatest burdens on the African American population."[141]

Meanwhile, CHA renewed its integration efforts with the introduction of non-White families into Trumbull Park Homes in the early 1950s followed by a vote in 1953 to integrate all projects.[142] Trumbull Park endured years of violent race riots instigated by the White community as Black families gradually moved in. Despite a few gains, however, the CHA's goal of full integration would not be achieved once again. A gradual shift within the CHA commission from liberal to conservative eventually pushed Executive Secretary Wood out; in 1954 she was fired from her position and replaced with William B. Kean, a retired army lieutenant general tasked with prioritizing the business of the CHA over its social agenda. By this time, the CHA had grown into a $100 million corporation and the largest landlord in Chicago, and Wood's efforts to racially integrate were jeopardizing that status. Wood's departure and the transfer of power to a conversative leadership ushered in the CHA's darkest period of racial strife and, ultimately, the failure of public housing in Chicago.[143]

The city's thirty-three public housing projects constructed in the 1950s and 1960s were built in census tracts that were already 75 percent African American or undergoing a racial transition that would reach that demographic ratio by the building's date of completion.[144] Some were extensions of older projects, including Grace Abbott Homes and the William H. Green Homes. Philip Murray Homes (subject property) was another such extension to an older CHA project; its three blocks of new low-rise rowhomes adjacent to Altgeld Gardens were completed in 1953.

Among the larger projects on Chicago's South Side were the 1955 Harold L. Ickes Homes (797 units in eight massive 5- to 9-story buildings; demolished); the 1958 Stateway Gardens (1,684 units in eight 10- to 17-story buildings; demolished); and the 1960-65 Robert Taylor Homes (demolished), the largest public housing project in Chicago and the largest in the world at the time of its construction.[145] Its twenty-eight 16-story buildings contained more than 4,000 units housing 27,000 residents, more than half of whom received public aid and nearly all of whom were African American. Together, the Stateway Gardens and Taylor Home formed the "South Street Corridor," a public housing zone more than four miles long.

Examples of Chicago West Side projects include the 1955 Grace Abbott Homes (1,200 units in 40 buildings, including seven 15-story towers; demolished) and the 1957 Horner Homes (920 units in seven 7- to 15-story buildings and expanded in 1961 with an additional 736 units; demolished).

A major extension program of the Frances Cabrini Homes on Chicago's NearNorth Side took place in two phases (both phases demolished). In 1958, the Cabrini Extension added 1,952 units in 15 buildings of 7 to 19 stories, which when completed "was the largest public housing project ever constructed in Chicago."[146] In 1962, the William H. Green Homes created another 1,096 units in eight 15- to 16-story buildings for a total of more than 3,600 units overall.

By the 1960s, it was apparent that the high-rise design of Chicago's postwar projects and their confinement to African American enclaves created serious issues, from physical maintenance (elevators were frequently out of

[140] Hirsch, *Making the Second Ghetto,* 226-227.
[141] Hirsch, *Making the Second Ghetto,* 228.
[142] Bowley Jr., *The Poorhouse,* 71.
[143] Bowley Jr., *The Poorhouse,* 98.
[144] Hirsch, *Making the Second Ghetto,* 242-243.
[145] Bowley Jr., *Poorhouse,* 109.
[146] Bowley Jr., *The Poorhouse,* 102.

order and expensive to fix, while the sheer number of buildings and units made regular site inspections nearly impossible) to extreme concentrations of impoverished and desperate people. In a 1966 class-action lawsuit, *Gautreaux v. Chicago Housing Authority,* a group of Altgeld Gardens tenants led by Dorothy Gautreaux sued the CHA for perpetuating racial segregation, which ultimately resulted in a federal judge enjoining the authority from building additional projects in African American neighborhoods.[147] It was the first major public housing desegregation lawsuit in the country. Following *Gautreaux,* the CHA's few new projects were scattered throughout the city and almost all of them were designated for elderly tenants. By the late 1970s, the CHA was managing approximately 30,000 family units plus another 10,000 units for the elderly. The lawsuit was a major turning point in the CHA's history, although its existing projects continued to be plagued by violence and physical deterioration for the next three decades.

In 1996, HUD took control of the CHA on the grounds of mismanagement and began advocating for the demolition of high-rise public housing, which occurred gradually over the next two decades.[148] The city regained control of the CHA in 2000 and instituted a 25-year "Plan for Transformation" involving "the demolition of notorious high-rise developments, the comprehensive rehabilitation of all the other scattered-site, senior and lower-density family properties, and the construction of new mixed-income/mixed-finance developments," according to its website.[149]

Criterion A: Community Planning and Development, Politics / Government, Social History, and Ethnic Heritage

The Altgeld Gardens – Philip Murray Homes Historic District is historically significant at the local and national levels under Criterion A in the areas of Community Planning and Development, Politics / Government, Social History, and Ethnic Heritage as a major World War II-era public housing development for African American defense industry workers. Altgeld Gardens was a distinctive product of its time, embodying several historic patterns and events that characterized this important period in the history of Chicago and in the country more broadly. These include the combination of federal and local housing policies as they were enacted under the 1940 Lanham Act; the de facto racial segregation that occurred under these policies; the industrial boom and ensuing housing shortage that took place in the country's wartime industrial centers, including Chicago, due to the influx of millions of civilian defense workers within a brief period; and, finally, Chicago's longtime role as a primary destination for the nation's African Americans in search of a better life, which can be traced from the city's origins as a trading settlement up through the post-World War II period. The period of significance under Criterion A begins in 1944, when plans were announced for the development of site, and ends in 1972.

Many dozens of public housing projects were constructed in Chicago between the 1930s and 1960s. As described in the historic contexts above, these projects were associated with various periods in the evolution of federal and local housing policies and were executed in response to different historic periods of social and political change, including the Great Depression, World War II, and postwar suburbanization. Altgeld Gardens is associated with the period of public housing as it manifested in Chicago and nationally during the World War II period. Thus a comparative analysis limited to wartime public housing developments aids in contextualizing the significance of the subject property at both the local and national levels.

At the local level, Altgeld Gardens was among five public housing developments completed for the purpose of housing defense workers employed in Chicago's war industries. However, it was the only purpose-built wartime housing development constructed by the Chicago Housing Authority, as the other four—Frances Cabrini Homes, Lawndale Gardens, Robert H. Brooks Homes, and Bridgeport Homes—were planned before the war as low-

[147] Bowley Jr., *The Poorhouse,* 166-171.
[148] "HUD tired of CHA failures," *Chicago Tribune,* May 28, 1995.
[149] Chicago Housing Authority, "History," https://www.thecha.org/about, accessed April 16, 2021.

income developments that were reassigned as defense working under the National Defense Act of 1940. This difference at the planning stage is significant in terms of the chosen sites and sizes of the developments.

Altgeld was built at a remote vacant site on the far South Side, near the Pullman Shipyards and steel companies, that provided sufficient space to build a village-like community. Two of the other CHA developments, Frances Cabrini Homes and Robert H. Brooks Homes, were similar in scale to Altgeld but doubled as slum-clearance projects in accordance with the federal slum-clearance policy that was suspended under the National Defense Act. The Brooks Homes are the most similar to Altgeld in that they were designated for African American families only, whereas the Cabrini Homes were designated as predominantly White.

The remaining two CHA developments, Lawndale Gardens and Bridgeport Homes, were small-scale projects adjacent to established communities after which they were named, and both further differed from Altgeld in that they were for White families only. Therefore, Altgeld Gardens is distinct in that it was a CHA wartime development that was purposely built rather than reassigned from a pre-war plan; it was developed under the Lanham Act and thus not tied to a slum-clearance agenda; and it was the largest of the developments designated for African American families. Furthermore, Altgeld Gardens differs from the others in its design as a self-contained community, offering numerous amenities to residents, including schools and a shopping center; in contrast, the other developments including very few amenities given their proximity to developed areas and restrictions on wartime spending.

A sixth wartime development for African American defense worker families in Chicago, Wentworth Gardens, differs from Altgeld Gardens in several ways. It was developed by the Federal Public Housing Authority (FPHA) rather than the CHA, it was not completed until after the war and thus never actually served its intended purpose, and it was much smaller in scale than Altgeld, comprising only 422 units.

At the national level, many thousands of wartime housing units were built throughout the United States, from vast complexes such as Altgeld Gardens to small developments with less than a hundred apartments (e.g., Ramsey Homes in Alexandria, VA). A small percentage of the units, including those at Altgeld, were built as permanent housing to serve low-income populations after the war, but most were intended for temporary use to limit competition with the private sector (e.g., Vanport, Oregon, and Planeview, Kansas). In addition to public housing, nearly one million wartime housing units, including entire communities, were constructed by private developers with the support of the federal government.

Two other extant permanent wartime public housing projects that are comparable in scale to Altgeld Gardens are discussed below:

- The partially extant San Felipe Courts in Houston was a large-scale public housing development conceived as a slum-clearance USHA project but reassigned as defense worker housing after the onset of the war (NRHP, 1988).[150] Constructed between 1939 and 1944 for white families only, it consisted of 1,000 units in 68 two-story apartment buildings and 12 three-story blocks.[151] The 37-acre site also included a community center and a high proportion of shared green space. In the 1990s, approximately three-quarters of the buildings were demolished.[152] San Felipe Courts differs from the subject property in that it was planned as a pre-war slum-clearance/low-income housing development, it was for white families only, and the majority of the development has been lost to demolition.

[150] *Public Housing in the United States,* E-56-57.
[151] "San Felipe Courts Historic District, Houston, Harris County, Texas," National Register of Historic Places, February 1988, Section 7 p. 1.
[152] "San Felipe Courts Historic District (boundary revision), Houston, Harris County, Texas," National Register of Historic Places, March 1998, Section 7 p. 5.

- The Linda Vista community in San Diego was developed as a large low-income community on the outskirts of the city and was the first public defense housing project planned under the Lanham Act. The largest low-income housing development in the world at the time, Linda Vista was designed to house up to 13,000 people in 3,000 permanent units of single-family homes and duplexes, plus 1,845 temporary units. The project was completed in November 1941 with additional temporary units added through 1943; by that year, the population reached 20,000 residents.[153] The Linda Vista Shopping Center opened in 1943 (demolished 1972). Dedicated by Eleanor Roosevelt, the shopping center was among the first to be erected in the United States.[154] The Linda Vista community was designated for White families only and evolved into a middle-class White suburb following the war.[155] It differs from the subject property in that it was designed as a collection of single-family homes and duplexes rather than rowhouse blocks and was designated for White families only.

Altgeld Gardens stands apart as the only large-scale permanent public housing project built for African American defense workers in the United States, and one of the few such developments that survives into the present day. This distinction underscores the significance of the site not only within the context of Chicago's legacy of public housing and the vibrant history of the city's African American community, but also in its association with the twentieth-century African American experience on a national scale.

[153] "Business Area in Linda Vista Built to Order," *San Diego Union,* October 16, 1943.
[154] Christine Killory, "Temporary Suburbs," The Journal of San Diego History Spring 1993, Volume 39, Numbers 1 & 2, https://sandiegohistory.org/journal/1993/january/suburbs/, accessed April 19, 2021.
[155] Vicenta Martinez Govea, "America's Finest Housing Crisis: Racialized Housing and Suburban Development," University of San Diego, McNair Summer Research Program (August 2020): 1.

Criterion B: Hazel Johnson (1935-2011) and the American Environmental Justice Movement

Summary Statement of Significance: Criterion B

Altgeld Gardens is locally and nationally significant under National Register Criterion B in the area of Social History for its association with Hazel Johnson, a nationally recognized leader in the environmental justice movement that emerged in the 1970s and 1980s, which sought to "unite environmentalism and social justice into a single framework" to provide equal access to clean air, clean water, and a safe environment for communities of color.[156]

In 1979, Altgeld resident Hazel Johnson founded the People for Community Recovery (PCR), a grassroots community organization for Altgeld Garden residents. Although initially formed to help bring maintenance issues and tenant concerns to the attention of the Chicago Housing Authority (CHA), by the time PCR incorporated as a not-for-profit in 1982, Johnson had shifted the focus of the organization to addressing the specific issues of environmental contamination at Altgeld Gardens and the impact of these hazardous conditions on the health of the community's residents. PCR was one of the first Black environmental justice organizations to form in the Midwest, and Hazel Johnson quickly became a leading figure in the national environmental justice movement, which emerged in the late 1970s and early 1980s as a response to widespread environmental injustices across the United States. From 1979 until her death in 2011, Hazel Johnson worked tirelessly as the leader of PCR to improve the environmental conditions within her community and to further the goals of the larger environmental justice movement.

For 28 years, PCR operated out of leased office space at 13116 South Ellis Street, in the one-story Shop Building in Altgeld Gardens designed by Keck & Keck and completed in 1945 as part of the original master plan for the project. Although Hazel Johnson was a long-time resident of Altgeld Gardens, the property that is most closely associated with her environmental justice work and the work of PCR is the Shop Building. The period of significance under Criterion B begins in 1979, when Hazel Johnson founded PCR, and ends in 2011, the year she died, reflecting the years during which she was actively engaged in the operations of PCR and the environmental justice movement.

Industry, Waste, and Contamination in the Calumet Lake Region

When Altgeld Gardens was completed in 1945, it was hailed by housing officials, policy makers, and the public as a utopian community and a model for post-war housing reforms. The area surrounding the complex, while decidedly industrial, was also close to water and open green space—a seemingly ideal combination for African American war workers and their young children. To compensate for the lack of residential amenities in the surrounding industrial district, the Chicago Housing Authority designed the complex with a host of supporting facilities so that residents enjoyed access to a public school, a public library, playgrounds, a community center, a city park, and shopping center, all within the boundaries of their new community on the Little Calumet River. For Black residents moving from the South and from overcrowded, dilapidated, and segregated neighbors in Chicago—the product of decades of local, state, and federal policies designed specifically to restrict Black mobility—Altgeld Gardens must have seemed a golden opportunity to live in an optimal, sustainable, and self-contained environment.

Beneath the surface, however, the environment at Altgeld Gardens and surrounding residential neighborhoods in the Calumet region of Chicago's far south side was far from ideal. The region's long history as one of the largest industrial districts in the country, built improbably on top of a marshy wetland, produced not only a visible landscape of massive iron and steel mills, factories, water and sewage treatment plants, refineries, and landfills but also a largely invisible landscape of polluted air, contaminated waterways, and toxic soil. Unknown to most residents, Altgeld Gardens itself was built on top of an unregulated industrial landfill and along the edge of a

[156] Robert D. Bullard, ed., *Confronting Environmental Racism: Voices from the Grassroots* (Boston: South End Press, 1993), 7.

"sewage farm" built by the Pullman Car Company in 1880 as a dumping site for Pullman's municipal and industrial waste. By the early 1970s, a century of unregulated and under-regulated waste disposal in the Calumet region had created "one of the greatest ecological disasters in the history of North America" and turned the dream of Altgeld Gardens into a public health crisis for its residents.[157]

Early History of the Calumet Industrial District (1869-1940)

The transformation of Chicago's Southeast Side from a low-lying marshland into a "mighty industrial center" began in 1869, when the US Army Corps of Engineers put forth the first proposal to create a harbor on Lake Michigan at the mouth of the Calumet River to relieve the crowded conditions of Chicago's main ports. The same year, local entrepreneurs established the Calumet and Chicago Canal and Dock Company and consolidated 5,000 acres of land along the Calumet River to market for industrial development. Although the natural landscape was not conducive to industry, the situational advantages of the area—water access for shipping and processing, rail connections, lower property prices, and lower tax rates—lured the first industries to the area in the early 1870s, and the Army Corps of Engineers began the long and arduous task of restructuring the landscape to fit the new use.[158]

By 1896, the Army Corps of Engineers had dredged the river, established piers at the harbor, and dug several large channels to accommodate freighters carrying bulk cargo. At the same time, several industries—including three steel mills and a shipyard—had already established themselves along the river, dredging their sections of the river and using the dredge to create additional buildable land. Similar "land-building" efforts were completed by other manufacturers in the area. In 1880, dredge from Lake Calumet was used to raise to the land west of the lake by five feet to create a suitable building site for George Pullman's massive factory and company town.[159]

By the early twentieth century, dozens of industrial concerns lined the shores of the Calumet River and Lake Calumet. These were primarily iron and steel mills and related support industries such as chemical factories, but the area also contained several grain handlers and various industries related to construction. The increasing concentration of industry in the Calumet region inevitably produced a plethora of industrial waste. Iron and steel manufacturing by-products included phenols, cyanides, and naphthalene, as well as copious amounts of slag. Chemical firms produced waste that contained nitric, sulphuric and muriatic acid. Liquid waste produced by the Calumet Paint Company (later Sherwin Williams) contained sulfuric acid, arsenic, copper, lead, zinc, chromium, iron, and sodium sulfide.[160]

Although municipal leaders and public health officials had recognized the need to control and remove biological wastes in Chicago as early as the 1870s to prevent disease and contamination of potable water supplies, this concern did not generally extend to the types of industrial waste that were produced in the Calumet district. Through the early 1920s, industrial waste disposal in Chicago continued to be largely exempt from municipal oversight, with the obvious exception of meatpacking wastes. Some sanitation experts even argued that industrial wastes had beneficial "germicidal" properties, although this may have been a ploy to placate residents and workers in industrial areas who complained of odor and taste problems. As dryly noted in a 1985 geographical history of the Calumet industrial region produced by the Illinois Department of Energy and Natural Resources (later reorganized into the Illinois Department of Natural Resources, or IDNR, in 1995), at that time "the dangers of most other industrial wastes were poorly understood."[161]

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[157] David N. Pellow, *Garbage Wars*: *The Struggle for Environmental Justice in Chicago* (Cambridge, Mass.: MIT Press, 2002), 67.
[158] Craig E. Colton, *Industrial Wastes in the Calumet Area, 1869-1970: An Historical Geography* (Springfield, IL: Hazardous Waste Research and Information Center, Illinois Department of Energy and Natural Resources, 1985), 14, 18-20.
[159] Ibid, 20.
[160] Ibid, 5; Sylvia Hood Washington, *Packing Them In: An Archeology of Environmental Racism in Chicago, 1865-1954* (Bloomington, IN: iUniverse, 2017), 199.
[161] Ibid, 22.

With no restrictions, industries in Calumet chose the easiest and most economical means for disposing of their waste. Liquid waste and some solids were dumped into nearby waterways. Bulkier wastes were dumped on site, piled in the marsh, or deposited in the numerous clay pits used by brick manufacturers. These dumping practices remained customary through 1940, despite increasing research suggesting the dangers of such indiscriminate disposal methods for industrial waste.

Ever the progressive industrialist, George Pullman chose a different (though not ultimately better) method for sewage and waste removal for his factory and town. Although the drinking water for Pullman came from Lake Michigan, the company's shops used water from Lake Calumet. Fearing that disposal of sewage and industrial waste into the lake "would make a cesspool of that body of water," Pullman's engineers designed a state-of-the-art sewer system that connected to a "sewage farm" near the Little Calumet River, at Indiana Avenue and 130th Street. In its first year of operation, 211 million gallons of municipal and industrial sewage sludge from the Pullman factory and town were pumped to the site and spread on the fields. The Pullman system also handled liquid waste from Sherwin Williams. Confident that the percolation of the liquid sewage and wastes through the soil would both filter the wastes and fertilize the soil, Pullman initially grew crops for his workers on the farm, including onions, potatoes, cabbages, celery, and beets. By 1887, however, most of the sewage from the system had been redirected to Lake Calumet "in order to save the crops."[162] Mechanical difficulties with the system ultimately forced Pullman to abandon the sewage farm in 1907, after which time "Pullman's sewage went untreated into the Little Calumet River," but the site continued to serve as a dumping ground for industrial wastes until plans for Altgeld Gardens were unveiled in the early 1940s.[163]

Pullman's sewage problems were ultimately solved in 1921, when the Chicago Sanitary District constructed a sewage treatment plant and established a domestic sewage system to serve the increasing residential developments in the Calumet region. The new system, coupled with the opening of the Cal-Sag Channel in 1922, effectively reduced the amount of pollution to Lake Michigan but did little to solve the larger problem of industrial waste disposal. Even within the growing scientific community studying industrial wastes, the primary concern was keeping wastes out of sight rather than reducing volume.[164] Unfortunately for the residents of the Calumet region, in the eyes of most Chicagoans and municipal officials, the far southeast side of Chicago—relatively unpopulated, primarily industrial, and geographically separated from the rest of the city—was a perfectly suitable "out-of-sight" location for waste disposal.

The Rise of the Landfill in the Calumet Region (1940-1970)

The period between 1940 and 1970 saw increasing awareness of the dangers of industrial waste disposal and the first attempts at state and federal legislation to control it. In 1948, the federal government passed the Water Pollution Control Act, which delegated enforcement of water pollution to state and municipal bodies, while providing funding for research and construction of sewage treatment facilities throughout the county. In the late 1940s, the Illinois and the Metropolitan Sanitary District enacted statutes prohibiting waste disposal in waterways and requiring violators to pay a moderate fine. Such statutes were aimed solely at reducing waste in water supplies, without addressing the volume of hazardous waste that industrial concerns produced.[165]

These tentative steps towards regulation also came at a time when new industrial technologies increased production and consequently, significantly increased the volume of wastes. The development, production, and widespread use of modern synthetic products such as DDT (an insecticide developed in the 1940s and now classified as a persistent organic pollutant and probable carcinogen) also introduced completely new toxic substances into the region.[166]

[162] Washington, 198-199; Colton, 23-24.
[163] Colton, 24.
[164] Colton, 34-37.
[165] Ibid.
[166] Ibid.

Sanitary officials in Chicago pushed for reduction of waste disposal in waterways by promoting landfills as the most efficient means of dealing with municipal and industrial waste. In 1940, the city opened the first "sanitary" landfill in the Calumet region, a 300-acre site at the northern end of Lake Calumet, and several more opened in the following decades. The sanitary landfill practice--compacting waste daily and covering each layer of compacted waste with soil—was seen as posing fewer health hazards than the open dumps that already existed in the region. Proponents also favored sanitary landfills because the "low quality" land could be reclaimed at minimal cost for new recreational, industrial, or even residential development after the landfill was full. Although critics argued that residential redevelopment was unwise, given that fills "continued to settle for up to thirty years" and gases such as carbon dioxide and methane could migrate into basements and cause explosions, after 1945 landfills in the Calumet region "received a huge share of municipal and industrial waste."[167] Many of these landfills operated without permits to avoid regulation. Open dumping and burning of wastes were also permitted until 1966, when a state law was passed. Even after these practices became illegal, enforcement was lax and illegal and undocumented dumping continued to be a problem. [168]

Not until the 1960s did federal and state agencies begin to explore the environmental impact of a century of waste disposal in the Calumet region. An investigation of pollution in the Calumet River system conducted by the US Department of Health, Education, and Welfare found, not surprisingly, that all three rivers were severely polluted. The Grand Calumet was described in the investigation as biologically barren, with "high concentrations of toxic pollutants and dropping levels of dissolved oxygen" that "prevented the survival of even sludge worm communities." Subsequent investigations, decades later, found little improvement. A 1985 report from the Illinois Department of Energy and Natural Resources concluded that "modifications in the natural landscape have destroyed substantial areas of prime habitat and contamination of surface waters has eliminated many species in the marshes. Overall, this has caused a noticeable reduction in the biological diversity of the Calumet area."

In most of these reports, investigations into the negative impacts of pollution and waste in the Calumet region focused almost exclusively on the impact to the waterways, marshlands, and wildlife. The impact on human health was generally characterized as unknown or difficult to assess. The 1985 Illinois Department of Energy and Natural Resources report on the Calumet region vaguely acknowledged the potential for human health impacts from direct exposure to a variety of hazardous substances—methane, lead, arsenic, and leachates from landfills and on-site waste dumps—but noted that the Illinois Environmental Protection Agency had "reported no unusual mortality figures for the years 1969 to 1981." The report ended its summary of waste disposal impacts with the following astonishing statement:

> *In addition, two residential areas have been constructed on top of former dumping grounds…Much of the area between 95th, Van Vlissingen, and Torrence is built over a former slag dump. To the southwest, a portion of Altgeld Gardens is over the former Pullman sewage farm. For a few years in the 1880's domestic and industrial sewage was piped to this site for natural soil infiltration. It is uncertain what dangers juxtaposing a modern housing complex and an old sewage farm presents, since IEPA did not take soil samples from this portion of the project.*[169]

It was in this environment that Hazel Johnson began her quest for environmental justice for Altgeld Gardens.

Human Sacrifice Zones: Origins of the National Environmental Justice Movement

The Beginnings and Evolution of the Traditional Environmental Movement

The origins of the environmental movement in the United States stretch back to the late nineteenth and early twentieth century, but groups such as the Sierra Club (founded in 1892) and the National Audubon Society (founded in 1905) focused primarily on preserving natural landscapes and protecting wildlife amid rising

[167] Ibid, 57.
[168] Ibid, 57-59.
[169] Ibid, 59

urbanization and industrialization. By the 1960s, however, several factors combined to bring national attention to the human health costs of environmental pollution. Rachel Carson's seminal book, *Silent Spring*, published in 1962, outlined the dangers of widespread use of the insecticide DDT. In the early 1960s, Mexican American labor activist Cesar Chavez organized Latino farm workers in California to push for workplace rights, including protection from harmful pesticides. In 1969, a fire on an oil slick in the polluted Cuyahoga River in Cleveland gained national press coverage. Although fires on the river were not uncommon (a fire in 1952 was larger and caused much more damage than the 1969 fire), the event garnered national press coverage and became an arresting symbol of the dangers of industrial pollution.[170]

In the wake of these developments, pollution became a primary concern for the country's citizens and the push for legislative action reached a tipping point. Wisconsin Senator Gaylord Nelson, a staunch environmentalist, organized the first Earth Day on April 22, 1970. More than 20 million Americans participated, holding rallies, marches, and programs across the country to raise awareness of environmental issues. In November 1970, President Richard Nixon established the Environmental Protection Agency with the stated mission to "protect human health by safeguarding the air we breathe, water we drink, and land on which we live."[171] A dizzying array of legislative actions quickly followed in the early 1970s, including the Clean Air Act (1970), the Lead-Based Paint Poisoning Prevention Act (1971), the Great Lakes Water Quality Agreement (1972), the EPA ban on DDT (1972), the Clean Water Act (1972), the Ocean Dumping Act (1972), regulations to reduce leaded gasoline (1973), and the Safe Drinking Water Act (1974), among others.[172] Similar legislation was enacted at the state level during the early 1970s. The Illinois Environmental Protection Act of 1970 established the Illinois Environmental Protection Agency to enforce state and federal environmental laws and regulations.

While new legislation in the early 1970s focused primarily on cleaning water ways, reducing air pollution, and reducing postconsumer waste, the regulation of industrial wastes was an afterthought at best. This was largely due to the fact that the general public was not yet fully aware of the dangers of toxic exposure from these types of wastes. A 1973 EPA survey showed that "60 percent of respondents favored or strongly favored placement of a national disposal site [a hazardous waste disposal facility] in their county; 58 percent thought that such siting would either leave property values unchanged or actually increase those values." At the same time, industry lobbied heavily in Congress to avoid any regulations that would inhibit waste production. The resulting legislation, the Resource Conservation and Recovery Act of 1976, regulated disposal but not production. This required a great number of new waste disposal and treatment facilities to properly contain industrial waste that was now categorized as hazardous and regulated by the EPA. Although this was not an issue for most communities in the early 1970s, by 1980 several high-profile toxic wastes disasters throughout the United States had solidified public opinion against locating waste facilities anywhere near their communities.[173]

The most infamous of these environmental disasters was Love Canal in Niagara Falls, New York. Originally envisioned as an idyllic community centered on a man-made canal between the upper and lower Niagara Falls, by 1910 developer William T. Love had abandoned the project after digging only a partial ditch. In the 1920s, the ditch was converted to a municipal dump site. In the 1940s, the Hooker Chemical Company purchased the property and converted it into a 16-acre chemical landfill. In 1953, Hooker covered the canal with earth and sold it to city of Niagara Falls for $1. By the 1960s, the site contained a school and over 1,000 homes and low-income apartments. After a record snowfall in 1977 significantly raised the water table, contaminated water containing at least 11 carcinogens (including benzene, dioxin, and polychlorinated biphenyls) began leaching into the

[170] Lorraine Boissoneault, "The Cuyahoga River Caught Fire at Least a Dozen Times, but No One Cared Until 1969," *Smithsonian Magazine*, June 19, 2019. https://www.smithsonianmag.com/history/cuyahoga-river-caught-fire-least-dozen-times-no-one-cared-until-1969-180972444/.
[171] "Milestones in EPA and Environmental History," https://www.epa.gov/history/milestones-epa-and-environmental-history.
[172] Ibid.
[173] Andrew Szasz, *EcoPopulism: Toxic Waste and the Movement for Environmental Justice* (Minneapolis: University of Minnesota Press, 1994), 14-23.

backyards and basements of residents' homes. Subsequent investigation found that the contamination was linked to birth defects, leukemia, and chromosome damage, and the residents of Love Canal were relocated.[174]

The tragedy at Love Canal, together with similar incidents in Missouri, Kentucky, and California, transformed toxic industrial waste from a back-burner issue into a nightly national news story and a top legislative priority. In 1980, Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (the Superfund Act), which authorized the EPA to identify parties responsible for contamination and compel the parties to clean up the sites. Love Canal was the first site in the country to be designated as a Superfund site, but EPA officials quietly suspected that there were hundreds, if not thousands, of these "ticking time bombs" of toxic waste across the country. [175] By 1985, these suspicions were confirmed, and the EPA had inventoried approximately 20,000 uncontrolled (i.e., closed and abandoned) toxic wastes sites throughout the United States.[176]

Racial Inequality in Environmental Policy and the Warren County Protests of 1982

As public knowledge of the dangers of toxic industrial waste grew, so did opposition to siting for the new facilities necessary to contain that waste. Unlike the environmental successes of the early 1970s, driven by a national movement, opposition to existing and new waste facilities and polluting industries in the late 1970s and early 1980s was fought very much at the local level. And as local protests to garbage dumps, sewage treatment plants, and containment landfills grew, it was impossible not to notice a commonality. The vast majority of these toxic sites (both existing and proposed) were located in communities of color, and the laws and regulations brought about by the legislation of the early 1970s did little to protect these communities from environmental hazards.

Examples of minority resistance to hazardous waste facilities can be found as early as the 1960s and were often organized in conjunction with civil rights organizations. In 1967, a group of Black students from the Friends of SNCC[177] chapter at Texas Southern University joined with Black residents in Houston to protest after a child drowned in an unfenced city garbage dump. In 1968, residents of West Harlem organized to protest a proposed new sewage treatment plant in their community.[178] In 1979, sociologist Robert F. Bullard and his wife, attorney Linda McKeever Bullard, joined Black residents in Houston to fight a city landfill proposed in their middle-class, suburban neighborhood. Linda McKeever Bullard represented the residents in a lawsuit, *Bean v. Southwestern Waste Management, Inc*., which was the "first of its kind in the United States that charged environmental discrimination in waste facility siting under civil rights laws." Dr. Robert Bullard served as an expert witness, conducting a study which documented that "all five city-owned garbage dumps, six of eight city-owned garbage incinerators, and three of the four privately owned landfills were sited in Black neighborhoods," even though only 25% of the city's population was Black. [179] These protests were important indicators of the struggle against environmental threats faced by communities of color but failed to garner widespread national attention.

Ultimately, it was an environmental protest by Black farmers in Warren County, North Carolina that would bring these isolated struggles together to form a national movement. In 1982, Black residents in rural Warren County joined forces to protest the construction of a chemical containment landfill in the town of Afton, where the state planned to bury 400,000 cubic yards of soil contaminated with highly toxic PCBs (polychlorinated biphenyls).

[174] Eckardt C. Beck, "The Love Canal Tragedy," *EPA Journal*, January 1979, https://archive.epa.gov/epa/aboutepa/love-canal-tragedy.html.
[175] EPA Timeline; Beck, "The Love Canal Tragedy."
[176] Commission on Racial Justice, United Church of Christ, *Toxic Wastes and Race: A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites* (New York: United Church of Christ Commission for Racial Justice, 1987), xii.
[177] Student Non-Violent Coordinating Committee, a civil rights group formed in the early 1960s to give younger Black activists more of a voice in the larger civil rights movement.
[178] Environmental Justice Timeline, Alabama Center for Rural Enterprise, https://www.arcgis.com/apps/Cascade/index.html?appid=b3ab68df37ff4ec3b8bdd156929174aa.
[179] Gregory Dicum, "Meet Robert Bullard, the Father of Environmental Justice," Grist, March 15, 2006. https://grist.org/article/dicum/."Robert D. Bullard," Wikipedia, last modified March 5, 2021, 03:17, https://en.wikipedia.org/wiki/Robert_D._Bullard.

The soil, which came from 51 sites in 14 counties across the state, was contaminated in 1978 when the Ward Transformer Company illegally dumped liquid PCB waste along roadsides to avoid the costs associated with proper containment. Upon discovery of the contamination, the state considered several sites for disposal before selecting a parcel of agricultural land 2.5 miles north of Afton, despite the fact that the water table and soil at the site failed to meet EPA requirements for PCB containment.[180] It was, however, located in the county with the highest percentage of Black residents, and one of the poorest counties in the state. Landowners adjacent to the proposed site filed a lawsuit in 1979 to stop the landfill. A separate suit was filed that year by the Warren County Board of Commissioners. The NAACP also filed a lawsuit in 1982 explicitly arguing that racial discrimination was the driving force behind the state's selection of the landfill site. All three lawsuits were unsuccessful, and preparations for the landfill proceeded quickly.[181]

Warren County residents, however, were not ready to give up the fight. On September 15, 1982, 500 people—including members of the locally-organized Warren County Citizens Concerned About PCBs (WCCC) and civil rights activists such as US Representative Walter Fauntroy and leaders from the United Church of Christ's Commission for Racial Justice and the Southern Christian Leadership Conference—met the first dump trucks en route to the landfill and blocked their path. Fifty-five people were arrested "by state patrol officers dressed in full riot gear" on the first day of protest.[182] Six weeks of demonstrations followed; 523 adults and children were arrested and Army troops from Fort Bragg were called in the quell the protest. Photographs of Black protesters lying across the road in front of the trucks made front-page news across the country.[183]

Environmental Racism and the Beginnings of the National Environmental Justice Movement

Although ultimately unsuccessful, the 1982 protests in Warren County served as a coalescing moment for the host of scholars, civil rights activists, and grassroots organizations who all recognized that communities of color in America bore "the brunt of the nation's pollution problems"—they were victims of what civil rights activist Reverend Benjamin F. Chavis, Jr. would label "environmental racism."[184] The documentation and dismantling of environmental racism—defined as discrimination in environmental policy-making, enforcement of regulations, siting of waste facilities and polluting industries, and the exclusion of minorities from the environmental decision-making process—would form the core mission of the national environmental justice movement in the United States.

In the years immediately following the Warren County protest, academics, civil rights leaders, and a host of grass-roots organizations would form the coalition of the environmental justice movement. Each of these groups would bring their own unique expertise and contribute their owns ideas about the ultimate goals of the movement. Civil rights advocates brought experience with direct action and civil disobedience—the protests in Warren County used techniques of non-violent resistance that had been used effectively to garner national media exposure the 1950s and 1960s. Civil rights leaders that had risen to positions of power and influence also helped to bring environmental justice to the attention of legislatures. Spurred by his participation in the Warren County protests, in 1983 US Representative Walter Fauntroy enlisted the US General Accounting Office (GAO) to review hazardous waste siting decisions in EPA's Region 4, which included North Carolina and seven other states in the southeastern United States. The study found that three of four new hazardous waste facilities were located in majority black, poor communities; the study ultimately lead to new guidelines and standards for selecting

[180] Dorceta E. Taylor, *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility* (New York: New York University Press, 2014), 13-15. EPA regulations required that groundwater be at least 50 feet below the landfill bottom; groundwater at the Afton site was seven feet below the surface. The state also requested that the EPA waive the requirements for an artificial liner and under-liner leachate collection system to prevent leaks. The final design for the landfill did include a liner and collection system.
[181] Ibid, 16-17.
[182] Ibid, 17.
[183] Ibid.
[184] Richard J. Lazarus, "Environmental Racism! That's What It Is," *Georgetown Law Faculty Publications*, January 2010, https://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=1151&context=facpub.
Chavis coined the term environmental racism in 1987 during his preparations to present the findings from *Toxic Waste and Race in the United States* to the National Press Club.

landfill locations.[185] The United Church of Christ's Commission on Racial Justice, under the leadership of Rev. Benjamin F. Chavis, Jr., followed in 1987 with *Toxic Wastes and Race in the United States*, the first report to comprehensively document the relationship between waste siting decisions and race across the country. The study, which concluded that race was the most significant factor in siting decisions for hazardous waste facilities, was widely circulated in minority communities and among minority activists.[186]

Academics also played a critical role in documenting the claims of environmental racism and providing a basis for policy changes at the local, state, and national level. Dr. Robert Bullard, widely considered the father of the environmental justice movement, expanded on his research from the 1970s in Houston to document patterns of environmental racism across the American South, publishing articles in several scholarly journals through the 1980s. His first book, *Dumping in Dixie: Race, Class, and Environmental Quality*, published in 1990, was heralded as the first publication to "fully articulate the concept of environmental justice."[187] In 1990, Bullard would join with other academics, led by Bunyan Bryant at the University of Michigan and Charles Lee, co-author of the UCC study, *Toxic Wastes and Race in the United States*, to advocate for a government response to their findings on disparate impacts in waste siting. Known as the Michigan Group, these academics would eventually succeed in convincing the EPA to establish a Work Group on Environmental Equity in 1990 and an Office of Environmental Equity in 1992.[188]

While academics and civil rights organizations were (and continue to be) critical players in the environmental justice movement, from the beginning, grassroots organizations from across the country formed the backbone of the movement and were its most important stakeholders. Grassroots activists were the direct victims of environmental racism. They were motivated by deeply personal and immediate motives—the health of their families, the lives of their children, and the safety of their homes, schools, and neighborhoods. As people of color from largely poor and working-class communities, these grassroots advocates recognized that environmental racism was not an isolated issue but part of a larger system of institutional failings, which also included "inner-city disinvestment, residential segregation, lack of decent health care, joblessness, and unequal access to education."[189] In their eyes, environmental justice extended beyond "simply stopping a local polluter or toxic dumper" and necessitated broader structural reforms to improve the quality of life in their communities.[190]

The geographical diversity of grassroots organizations within the environmental justice movement reflected the pervasiveness of environmental racism in the United States. They included organizations who rallied behind a specific environmental threat—such as the Citizen's Clearinghouse for Hazardous Waste in New York state, founded by former Love Canal resident Lois Gibbs in 1981--as well as organizations whose missions were much more broadly defined. In New Mexico, Richard Moore founded the Southwest Organizing Project in 1981 to deal with "a host of issues including affordable housing, neighborhood economic development, and voter registration;" by the end of the decade, the group had expanded its mission to include environmental hazards, while also reframing its work on larger social issues as inextricably linked to the fight for environmental justice.[191] The Gulf Coast Tenants Organization, formed in 1983 by housing activists in Louisiana, Mississippi, and Alabama, worked with residents in public housing projects across the region for over a decade before expanding its work to

[185] "Environmental Justice History," Office of Legacy Management, Department of Energy, https://www.energy.gov/lm/services/environmental-justice/environmental-justice-history; Anne Braden, "Environmental Justice = Social Justice: Southern Organizing Heralds New Movement," *Labor Research Review*, Cornell University, Vol. 1 Number 20, 1993. file:///C:/Users/EMILYR~1/AppData/Local/Temp/5116822.pdf.
[186] *Toxic Waste and Race in the United States*, xiii – xv.
[187] Dicum, "Meet Robert Bullard, the Father of Environmental Justice," https://grist.org/article/dicum/.
[188] Luke W. Cole and Sheila R. Foster, *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement* (New York: New York University Press, 2001), 24-26.
[189] Cole and Foster, *From the Ground Up*, 32-33.
[190] Ibid, 33.
[191] Patrick Novotny, *Where We Live, Work, and Play: The Environmental Justice Movement and the Struggle for a New Environmentalism*, Praeger Series in Transformational Politics and Political Science, 2000, 29-30.

specifically target environmental hazards related to intensive exploitation of the region by the chemical industry.[192]

The seemingly disparate struggles of these grassroots organizations united at the First National People of Color Environmental Leadership Summit, held in Washington, D.C. in October 1991. Three hundred delegates and over 400 attendees, representing Black, Latino, Asian-American and Indigenous communities from all 50 states, joined for the first time to form an unprecedented alliance and establish the guiding principles of the national environmental justice movement.[193]

Among the speakers at the 1991 summit was Altgeld Gardens resident Hazel Johnson, founder and chief executive officer of the People for Community Recovery (PCR). Founded in 1979, PCR was one of the earliest Black environmental grass roots organizations in the Midwest. Hazel Johnson's story of resistance and vigilance against environmental racism in one of the region's most polluted urban neighborhoods, and her ability to speak plainly and powerfully about her community's struggle, served as an inspiring example of grassroots activism for members of the fledgling national movement. Her impassioned statement to the delegates underscored the importance of the moment and her role in it:

> *This is a dream. I told Ben Chavis a year ago that I would like to see some people of color getting together. I have been fighting around environmental issues for nine years on a daily basis…Mostly everywhere I went for the past eight years speaking on the environment, I was the only black among three, four, or five hundred whites. And I am happy to see so many of my sisters and brothers are here today to fight for this struggle….I have never been to university or college. But I am going in making speeches. I am here to tell you that I have shaken up Illinois' EPA. Now when they hear the name Hazel Johnson, they move.*[194]

After the summit, Johnson emerged as a national figurehead for environmental justice and was christened "the mother of the Environmental Justice Movement" in the United States. In the decades that followed, she would serve as a prominent representative of the movement on the national and global stage, while still continuing and expanding her grassroots work with PCR to effect change within her own community.

From Cancer Alley to the Toxic Doughnut: Hazel Johnson and the Beginnings of People for Community Recovery (1935-1982)

Hazel Johnson's path toward environmental activism began in one of the country's most toxic regions. She was born on January 28, 1935, in New Orleans, in the Gulf Coast region of Louisiana and Mississippi that would eventually become known as "Cancer Alley" due to its concentration of toxic chemical industries. The oldest of four siblings, Hazel was the only child in her family to live past their first birthday. When Hazel was 11 years old, her mother, Mary Dunmore, contracted tuberculosis. Hazel was sent to a Catholic orphanage school because her father, Clarence Washington, was often on the road in his job as a truck driver and unable to care for her. By the time she was 12, both of Hazel's parents had died. She moved with an aunt to Los Angeles and attended Thomas Jefferson High School but left after her sophomore year and returned to New Orleans to live with her grandmother. She met her husband, John Johnson, less than a year later and in June of 1955 they moved with their two young children to the Woodlawn neighborhood on the south side of Chicago.[195]

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[192] Ibid, 13-15.
[193] Dana Altson, "The Summit: Transforming a Movement," *Race, Poverty, & the Environment*, Spring 2010.
[194] "Living in Chicago's Toxic Doughnut," transcript of Hazel Johnson's remarks for the First National People of Color Environmental Leadership Summit, PCR Archives.
[195] Various biographies, PCR Archives, Chicago Public Library, Woodson Regional Library, Vivan G. Harsh Research Collection of Afro-American History and Literature; Josh Getlin, "Fighting Her Good Fight," *Los Angeles Times*, February 18, 1993. https://www.latimes.com/archives/la-xpm-1993-02-18-vw-458-story.html; Brian Roewe, "Hazel Johnson, the mother of environmental justice, was Catholic," *Earth Beat*, February 26, 2021, https://www.ncronline.org/news/earthbeat/hazel-johnson-mother-environmental-justice-was-catholic.

Soon after moving to the city, Hazel Johnson became involved in community activism, joining a grassroots campaign against housing segregation. The work energized her and suited her outgoing personality—as she told the *Los Angeles Times* in 1993, "I was always an outspoken kid, with a good independent streak…. People told me to watch my mouth from an early age."[196] In 1962, the Johnsons moved to Altgeld Gardens. It seemed the perfect place for their family, which had by that time grown to seven children. Hazel Johnson had "fallen in love with the place" after visiting her brother-in-law, a veteran, who was living there. In contrast to the public housing projects closer to the center of Chicago, Altgeld was peaceful, quiet, and close to nature, with lots of room for her children to explore.[197] Hazel immediately got involved in her new community—she became a community representative, organizing summer field trips and block parties for neighborhood children, many of whom called her "Mama Hazel," and was active in her local school council.[198]

Hazel Johnson's life took a dramatic turn in 1969, when her husband, John, was diagnosed with lung cancer. He passed away within weeks of his diagnosis at the age of 41. His early death shocked Hazel and mystified doctors since he had been only an occasional smoker and had no other risk factors for the disease. As news of John's death spread through Altgeld Gardens, neighbors told Hazel similar stories of residents stricken with cancer and other lung ailments including asthma. Several mothers had children with birth defects, and many suffered miscarriages. She noticed her own children, like many children in the community, had developed skin and respiratory problems since moving to Altgeld.[199] These stories gnawed at Johnson, now a widow with seven children ranging in age from two to seventeen years.

Her community activism in the early 1970s focused on more immediate and obvious issues related to the Chicago Housing Authority's poor maintenance of Altgeld Gardens. In 1970, she ran for office as block captain and gained a seat on the Altgeld Gardens Local Advisory Council (a position she would hold until 1979), organizing the community to force CHA to fix leaking roofs, peeling paint, and low water pressure. In 1979, Johnson, along with a group of other women at Altgeld Gardens, formed the People for Community Recovery (PCR), a grassroots organization that was initially envisioned as an outgrowth of Johnson's efforts to compel CHA to maintain the buildings in the complex.

Around the same time, however, several events caused Johnson to re-examine the pervasive and widespread health issues in Altgeld Gardens. First, she learned that four women who had grown up next door to each other in Altgeld had babies that were all diagnosed with cancer. None of the four girls lived past their seventh birthday. Hazel's daughter, Cheryl Johnson, remembered her mother being struck by the news and convinced that it was more than a tragic coincidence. But at the time, Cheryl noted, "Nobody was talking about it…. cancer during that period of time was shameful; people kept it hidden. Instead of understanding that when you have a cluster of same types of cancer in a defined area, it's signifying that something is going on."[200]

Soon after, Johnson was watching television when a news story reported that an Illinois Department of Health Study showed that cancer rates in the southeast side of Chicago were significantly higher than the rest of the city. The reporter listed Altgeld Gardens and Calumet City as the two residential areas with the highest rates of cancer. Suddenly, Johnson had the key piece of information that connected all of the stories she had heard from

[196] Getlin, "Fighting Her Good Fight."
[197] Lisen Holmstrom, "The Mother of Environmental Justice," *Q Magazine*, May 23, 2018. https://q.sustainability.illinois.edu/hazel-johnson-and-the-toxic-doughnut/.
[198] Roewe, "Hazel Johnson, the mother of environmental justice, was Catholic."; Hazel Johnson, "Surviving Chicago's Toxic Doughnut," Voices from the Grassroots series, Environmental Justice Resource Center, clipping dated 2006 from PCR Archives.
[199] Hazel Johnson, "My Life as Environmental Activist," c. 1992-1993 handwritten document in PCR Archives; Getlin, "Fighting Her Good Fight."
[200] Lisen Holmstrom, "The Mother of Environmental Justice," *Q Magazine*, May 23, 2018. https://q.sustainability.illinois.edu/hazel-johnson-and-the-toxic-doughnut/.

residents. "I was stunned and angry," she told the *Chicago Tribune* in 1995. "I decided to make it my mission not only to find out what was really going on but also to do something about it."[201]

Over the following months, Johnson called local and state public health authorities and environmental agencies, began researching environmental pollution and its health effects, and reached out to academics and activists in the environmental and public health fields. What she found was that Altgeld Gardens "lay in the center of a 140-square-mile ring of pollution stretching from Chicago's Southeast Side to Northwest Indiana," which housed over 50 landfills, a chemical incinerator, a water and sewage treatment facility, steel mills, paint factories, scrap yards, and abandoned industrial dump sites. She also discovered, to her horror, that Altgeld Gardens itself was built over a former industrial waste dump.[202]

Armed with this knowledge and determined to act, Johnson shifted the focus of PCR's efforts to reducing or eliminating the environmental hazards surrounding her community, which she coined "the toxic doughnut." In 1982, PCR officially incorporated as a not-for-profit organization, with Hazel Johnson serving as president and executive director.[203] Over the next several decades, Johnson and PCR would wage the environmental justice war on multiple fronts and secure key victories for Altgeld residents and surrounding communities —including extension of water and sewage service, construction of a new health clinic, asbestos and PCB removal, lead abatement, and a moratorium on new or expanded landfills in Chicago. In the process, Johnson would work in conjunction with other grassroots community organizations on the Southeast Side and bring national attention to the fight for environmental justice through her work with PCR.

People for Community Recovery as a Grassroots Environmental Justice Organization (1982-1990)

In the years following its incorporation, PCR focused its efforts on lobbying city and state officials to address hazardous wastes, documenting the extent of the health issues in Altgeld Gardens, and directly confronting polluting industries. During this time, Hazel Johnson also developed important working relationships with other community organizations that were active in Chicago's Southeast Side and with local academic institutions that could support the work of PCR. She also reached out to national environmental organizations including the Sierra Club and Greenpeace and attended environmental conferences to gain insights on the tactics of environmental activism and tell her community's story.

One of PCR's first major challenges was to formally document the health issues in the Altgeld Gardens community. In 1983, Johnson testified at an Illinois EPA hearing, voicing her concerns about the link between environmental hazards and elevated rates of cancer and respiratory diseases in Altgeld Gardens. IEPA officials responded by providing Johnson with a handful of citizen complaint forms. She later recalled, "I guess (agency personnel) thought they'd never hear from me again. But as it turned out, they've never been able to get rid of me."[204] Johnson made more than 1,000 copies of the forms and dispatched a group of PCR volunteers to distribute the forms and collect responses. The results of the informal survey, as Johnson expected, showed that many residents were suffering from "asthma, chronic respiratory conditions, cancer, allergies, difficult pregnancies and complicated births."[205] When the IEPA concluded that the survey did not provide evidence of any health impacts at Altgeld Gardens which could be directly contributed to environmental hazards, Johnson learned a hard lesson—proving that environmental hazards were directly linked to poor health in minority communities would be an uphill battle.

Undeterred, Johnson used the findings of the survey to connect with government leaders and the scientific community, including newly-elected Chicago Mayor Harold Washington, the Centers for Disease Control, and Illinois US Senator Charles H. Percy, among others, and plead for action. Harold Washington developed a productive, if sometimes strained, working relationship with Johnson and PCR, meeting with the community

[201] Heather M. Little, "Toxin Shock," *Chicago Tribune*, January 15, 1995.
[202] Ibid.
[203] People for Community Recovery incorporation records, PCR archives.
[204] Little, "Toxin Shock" *Chicago Tribune;* "Homesick—From the Fumes," *USA Weekend*, April 17-19, 1992, p.19.
[205] Ibid.

multiple times between 1983 and 1987 (when he died of a heart attack) and actively promoting several components of the organization's agenda. Influenced by PCR's push against the expansion of landfills, Washington created a Task Force on Solid Waste Management in 1985 and placed a moratorium on the expansion of existing landfills and creation of new landfills in Chicago.[206]

PCR's First Environmental Victory: Maryland Manor

PCR claimed its first major environmental justice victory in 1985, when it successfully lobbied the city to install water and sewer lines in Maryland Manor, a small development of elderly and low-income Black residences adjacent to Altgeld Gardens. Developed in the 1960s, the community was never connected to city's water and sewage system, despite the fact that residents, who were Black, elderly, and low-income, paid taxes for these services. Residents used well water, which was contaminated with cyanide, benzine, touline, lead, sulfur, fecal coliform, and other compounds. As the *Chicago Tribune* reported in 1985, "Though residents waited for development to bring water and sewer improvements, they didn't need chemists to tell them something was wrong with the murky water that spurted from their faucets. The pungent smell made it impossible to drink, and several said they added chlorine bleach for dishwashing."[207] Between 1984 and 1987, PCR worked closely with Maryland Manor residents, bringing attention to the problem, and pushing the city to bring in water and sewage service. Hazel Johnson persuaded the Chicago Board of Health to request testing, attended meetings on behalf of the residents, and gained vocal support from local officials, including 2nd Ward Alderman Bobby Rush, chairman of the Chicago City Council's Committee on Energy, Environmental Protection, and Public Utilities. When asked to speak on the issue at a legislative hearing in Chicago, she testified that she had provided information to an Illinois EPA director, but he had seemed unconcerned. Recalling the hearing in 1988, Johnson said, "Then I turned around and pointed him out so they could see I wasn't trying to talk behind his back."[208]

After nearly two years, the city council approved funding to install water and sewer lines that would connect Maryland Manor to the city's system.[209] Hazel Johnson stood next to Mayor Washington at the 1987 ceremony to mark the official connection.[210]

No More Dumps: PCR and the Fight Against Landfills

At the same time PCR was pressing for water quality in Maryland Manor, the organization was also waging a long and protracted battle against the sea of landfills surrounding Altgeld Gardens. By the mid-1980s, waste disposal had reached a crisis point in Chicago. Municipal landfills established only a few decades ago were rapidly reaching capacity, and communities were increasingly unwilling to serve as the city's dumping grounds. In 1986, the city's Task Force on Solid Waste Management issued a report urging the city to shift from landfills to recycling and incineration. Reflecting the growing impact from the environmental justice movement and grassroots organizations such as PCR, the report specifically noted, "The city must phase out the use of landfills…because of potential health and environmental problems, negative impacts on neighborhoods, and limited availability of land."[211] Hazel Johnson joined the task force in 1987, giving PCR a literal seat at the table regarding decisions around municipal waste disposal.[212]

Through the 1980s, PCR worked to form partnerships with other community organizations, grassroots activists, sympathetic government officials, and national environmental organizations to advocate for change, but progress was distressingly slow. Responding to community pressures, the Illinois EPA conducted testing and surveyed the area in 1984 and 1986; despite results showing that "46 million pounds of toxic emissions are being pumped

[206] Tom Gibbons, "Scrap Dumps, Task Force Tells City," *Chicago Sun-Times*, April 23, 1986.
[207] Jean Davidson, "Families So Close, Yet So Far from Solution to Tainted Water," *Chicago Tribune*, December 1, 1985.
[208] Virginia Mullery, "Interview with Hazel Johnson," *Salt of The Earth*, 1988, clipping from PCR archives.
[209] "Fund Pipeline Opening for Water, Sewer Service to Far South Side Area," *Chicago Tribune*, August 19, 1986.
[210] PCR Archives, Box 1 Folder 19.
[211] "Scrap Dumps, Task Force Tells City," *Chicago Sun-Times*, April 23, 1986.
[212] Letter Hazel Johnson to Mr. Mosi K. Kitwana, Department of Streets and Sanitation, dated March 9, 1897, from PCR Archives.

into the area's air annually," the agency failed to develop a plan of action to deal with pollution.[213] Chicago's Southeast Side remained the largest dumping ground for municipal and industrial wastes in the city, and the body of evidence for negative health impacts in these communities was growing.

In the mid-1980s, Hazel Johnson joined forces with other local grassroots activists, including well-known environmental leader Marian Byrnes, who headed the Committee to Protect the Prairie. Johnson and Byrnes created Citizen's United to Reclaim the Environment (CURE), a coalition of five Southeast Side grassroots organizations with varied environmental goals—Hegewisch Organized to Protect the Environment (HOPE), the Pullman Civic Organization, PCR, Committee to Protect the Prairie, and Progressive Independent People's Community Organization (PIPCO)— to form a united front against landfills in the Southeast Side.[214] In the fall of 1986, frustrated by lack of progress in their negotiations with the city, CURE pushed the administration for a referendum to propose outlawing new waste disposal operations in their communities. Johnson told the *Chicago Tribune* in November that the referendum was needed to show the Chicago City Council "how we feel about landfills, and the health hazards…. We feel the mayor promised in 1984 that the landfills would be banned, and they have not been banned." She also pointed to the results of a second community health study of 500 Altgeld Garden residents that showed "birth defects, cancer, asthma attacks, and unexplained nosebleeds." Fellow CURE member Virginia Cap, Hegewisch resident and chairman of HOPE, concurred, saying "We don't seem to be getting any kind of help against these landfills…. So we had to take things in our own hands."[215]

Consistent pressure from CURE helped bring increased media attention to the issue of pollution in the Lake Calumet region. In early June of 1987, the *Chicago Sun-Times* published a series of scathing articles entitled "Far South Side: Our Toxic Trap," focusing on the "brewing environmental crisis on the city's Far South Side" and the continued inaction from city, state, and federal governments. The series reported that only one of the 50 active or abandoned industrial waste sites identified in the area had been designated a Superfund site, qualifying for comprehensive cleanup, but that internal Illinois EPA records showed that many of the sites posed "serious health and safety threats…to people, wildlife, and the environment." *Sun-Times* reporters highlighted several of the contaminated sites that were deemed ineligible for cleanup, including three sites owned by the Paxton Company and two landfills owned by the Land & Lakes Corporation, all of which were in close proximity to Altgeld Gardens. The Paxton Avenue Lagoons was an "illegal toxic waste dump wedged between two active landfills," that contained high concentrations of PCBs. The abandoned Paxton landfill at 116th Street and Paxton Avenue housed millions of gallons of heavy metals, solvents, and other industrial wastes, with no collection system to stop the toxic materials from leaching into waterways and contaminating groundwater. The Land & Lakes Corporation was charged by the US EPA in 1986 for accepting illegal hazardous waste at both of its Calumet facilities. The EPA had also charged Paxton for illegal hazardous waste dumping at its active landfill but had dropped the charges on all three sites by 1987.[216]

Despite the damning press coverage, state and federal environmental agencies issued permits in June 1987 to Waste Management, Inc. (the nation's largest waste disposal corporation and a frequent subject of criticism for its poor environmental record), allowing the company to continue operating a 32-acre toxic waste dump at its massive CID landfill at 138th Street and the Calumet Expressway, just east of Altgeld Gardens. The permits also allowed for continued toxic waste disposal at an incinerator managed by Waste Management subsidiary Service Corporation of America (SCA) at 11700 South Stony Island Avenue, which since 1983 had been burning toxic PCB wastes removed from nearby Superfund sites.[217]

In response, CURE staged a highly-publicized demonstration at the CID landfill on July 28, 1987. Joined by members of the national environmental organization Greenpeace, and the Lake Calumet Study Committee (headed by James E. Landing from the University of Illinois at Chicago), demonstrators gathered at the entrance

[213] "We Must Act Fast on Toxic Trap," *Chicago Sun-Times*, June 1, 1987.
[214] "Say 'No' To Waste Management," flyer c. 1989, PCR Archives.
[215] "Waste Fight Turning to Ballot Box," Chicago Tribune, November 3, 1986.
[216] "Waste Pits Poisoning Air, Water," *Chicago Sun-Times*, June 1, 1987.
[217] "Southeast Side Fights to Shut Toxic Dumps," *Chicago Tribune*, June 14, 1987.

to the landfill and blocked the gate to prevent a line of approaching dump trucks from entering the facility. In five hours, the group halted 57 trucks filled with hazardous waste. Seventeen protesters were arrested, including Hazel Johnson and other members of PCR.[218]

The demonstration proved to be a successful stop-gap strategy; the temporary EPA permits for both sites were revoked in late 1987. Chicago Mayor Eugene Sawyer publicly declared that the moratorium on new or expanded landfills established by his predecessor, the late Harold Washington, would remain in effect for the Southeast Side "until a safe and acceptable alternative to landfilling and landfill control are developed."[219] In 1988, residents turned down a $25 million "cash-for-cooperation" offer from Waste Management that included "job training, scholarships, housing, health centers, and new recycling enterprises" in exchange for allowing the company to expand its landfill operations near Lake Calumet. CURE representative Virginia Cap told reporters at a news conference, "We have paid for our land on the Southeast Side. We have paid in cancer deaths, in birth deformities, in respiratory diseases, in nausea from foul odors, day by day and night by night…We have paid dearly, and we declare that this land is not for sale."[220]

The battle against Waste Management stretched through the early 1990s, with Hazel Johnson and other members of CURE leading the fight. PCR rallied Altgeld Gardens residents in 1989 to successfully protest Waste Management's proposal to construct a new $3 million incinerator at the CID landfill. After an explosion at the company's Stony Island incinerator (renamed the Chemical Waste Management incinerator) in 1991, PCR "joined persistent local lobbying of EPA, helped fight the Retail Rate Law that rewarded unsafe waste incineration, testified at hearings, and made public statements" which eventually helped lead to a 1992 consent decree with the US Environmental Protection Agency. Under the agreement, Waste Management paid over $3 million in fines; in an effort to mollify CURE and other opponents of the landfill and incinerator, the Illinois EPA required that the company hire community residents to monitor operations at the facility going forward.[221] This would form the basis of PCR's later push to establish programs that provided environmental jobs training for community residents and linked "pollution control with employment opportunities."[222]

PCR and CURE waged similar battles against other landfill operators in the Calumet region through the 1980s and early 1990s, as well as the Metropolitan Sanitary District (MSD), which operated a huge sewage treatment plant in the area. In 1988, PCR partnered again with Greenpeace to conduct chemical testing along drainpipes of the CID landfill, the Land & Lakes landfill, and the MSD plant. Greenpeace and PCR held a rally and press conference at Skipper's Marina along the Calumet River, where Greenpeace's ship, the Beluga, was docked. Joe Thornton, a spokesperson for Greenpeace, reported that the testing confirmed that the MSD discharged "as much as 20 million pounds of toxic chemicals into the environment every year." Johnson spoke as a representative of the community, stressing that the sanitary district's dumping contributed to the "high rates of cancer, respiratory ailments, and birth deformities in the area." [223]

In the early 1990s, increasing resistance to landfills and incinerators led to other victories. Residents successfully blocked a city proposal to open a new municipal landfill near the O'Brien Locks on the Little Calumet River. After a prolonged battle with the Paxton Landfill Corporation, the city also permanently closed the Paxton Landfill at 122nd Street, which had operated without a permit since 1983 and was briefly shut down by the city in 1987. PCR and other community organizations had been advocating for the closure for years.[224]

[218] Flyers and clipping from Chicago Tribune dated July 29, 1987, PCR Archives.
[219] "Firm May Sue to Expand Landfill," *Chicago Tribune*, February 20, 1988.
[220] Ibid.
[221] Historical Notes, PCR Archives, https://www.chipublib.org/fa-people-for-community-recovery-archives/; "3 Million Fine Assessed for Incinerator Violations," *Chicago Tribune*, June 23, 1992, A6.
[222] "People for Community Recovery Archives – Historical Note," Chicago Public Library, https://www.chipublib.org/fa-people-for-community-recovery-archives/
[223] Rudolph Unger, "Sanitary District Accused of Being Top Polluter, *Chicago Tribune*, August 9, 1988, D2.
[224] "South Side Landfill in Use Without Permits Since 1983," *Chicago Sun-Times*, October 16, 1987; "City Shuts Landfill After 9-Year Battle," *Chicago Tribune*, April 22, 1992.

Toxic Homes: PCR and Asbestos Contamination at Altgeld Gardens

In addition to fighting the significant environmental threats that surrounded Altgeld Gardens, Hazel Johnson and PCR lobbied the Chicago Housing Authority and the city for years in the late 1980s for removal of toxic materials within their homes. Hazel Johnson had been involved in contentious negotiations with CHA over building maintenance at Altgeld Gardens beginning in the late 1970s, when she had served on the Local Advisory Council. By the early 1980s, armed with years of research on environmental hazards and toxic substances, Johnson recognized that many of the building materials that had been used in the construction of Altgeld Garden were now known to be toxic. Asbestos, a fire-resistant fibrous silicate mineral, had been a common component in construction materials since the late 1800s, and was used in a variety of applications, including thermal insulation. Evidence emerged as early as the 1930s linking asbestos exposure to serious lung diseases—including pulmonary fibrosis and a rare lung cancer known as mesothelioma—but asbestos continued to be widely used in the United States in construction through the post-war period, peaking in 1973.[225]
The US EPA began regulating asbestos use in 1973 and banned the installation of molded or wet-applied asbestos insulation in 1975.[226] By that time, however, asbestos insulation had been installed in millions of buildings, including nearly all of CHA's public housing projects built before the late 1950s. Although asbestos insulation that was intact and in good condition did not pose an immediate health risk to residents, by the early 1980s many of the older complexes constructed by CHA (including Altgeld Gardens and the Ida B. Wells Homes) were suffering from deferred maintenance due to CHA budget shortfalls and skyrocketing annual operating costs. Residents across the system lived in apartments with failing plaster and flooring, peeling paint, faulty electrical wiring, leaking plumbing, broken cabinets and missing or broken interior doors. In December 1986, the *Chicago Tribune* reported that CHA's deferred maintenance costs amounted to $724 million, "more than all the federal money available nationwide this year to rehab public housing." CHA executive director Zirl Smith told the *Tribune*, "We're very behind on deferred maintenance…We have to reach up to touch bottom."[227]

The most urgent of these issues was the crumbing asbestos insulation that coated exposed pipes throughout older CHA complexes. CHA's 1986 budget included $8.9 million from the United States Department of Housing and Urban Development (HUD) to identify and remove asbestos in five developments—including Altgeld Gardens—but CHA made little effort to alert residents to the potential dangers of the asbestos in their homes. Residents at Altgeld were more informed than most; Hazel Johnson and PCR had worked to educate residents on the dangers of asbestos, filed multiple resident complaint forms with CHA, and pushed for a meeting with CHA representatives after reports circulated that CHA had identified asbestos at Altgeld and the Ida B. Wells Homes. CHA met with Altgeld residents on May 28 and confirmed that additional testing would proceed, with results anticipated by June 9.[228] The following week, a damning investigative report on CHA's asbestos problem appeared in the *Chicago Reporter*, charging that CHA had quietly removed asbestos piping from two offices at Ida B. Wells but had not tested or removed deteriorated asbestos in any apartments.[229] Residents at Wells and Altgeld angrily confronted CHA executive director Zirl Smith in a series of community meetings in early June. Smith continued to downplay the severity of the issue, telling residents that the problem "may not be as serious as everyone believes," while also telling them "not to touch the asbestos insulation or dust, sweep it up, or let their children play around it."[230] Angered by Smith's dismissive stance amidst growing fears from residents, Hazel Johnson urged Mayor Washington to intervene, telling the *Chicago Sun-Times*, "We're asking for the mayor to

[225] Although the last asbestos mine closed in 2002, asbestos is not banned in the United States. A 1989 ban of most asbestos-containing product was overturned by the Fifth Circuit Court of Appeals in New Orleans in 1991. Although still a legal commodity, the knowledge of health risks has significantly reduced the use of the product in the US. https://www.asbestos.com/asbestos/history/
[226] "Asbestos, "United States Environmental Protection Agency website, https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos, accessed April 21, 2021.
[227] "CHA Finances Falling Apart as Quickly as Its Buildings," *Chicago Tribune*, December 5, 1986.
[228] "Asbestos Test Worries Altgeld Garden Residents," *Chicago Tribune*, May 29, 1986.
[229] "Asbestos in CHA Apartments Poses Possible Health Hazards," *The Chicago Reporter*, June 1, 1986.
[230] "Asbestos Tests Slated for Well Homes," *Chicago Tribune*, June 3, 1986.

save our children and ourselves. We don't have faith in the promises from CHA management."[231] At a June 9 meeting at Altgeld, over 700 residents demanded answers from Smith. Smith's responses were vague and met with boos and cries of "no more rent" from the crowd.[232]

The battle over asbestos removal at Altgeld continued through 1987, with PCR and other community organizations (including the Developing Communities Project, a faith-based organization led by young community activist Barack Obama) keeping constant pressure on CHA as the agency sought to minimize the scope of the abatement to keep the project within budget. Abatement work at Altgeld Gardens and Ida B. Wells was finally completed in 1988, two years after the problem was first documented in the developments.[233]

Toxic Tours, Town Halls, and Connection to the National Environmental Justice Movement

By the end of the 1980s, Hazel Johnson's work at PCR had turned her into a seasoned and well-respected grassroots activist. She was a long-time resident of Altgeld Gardens whose personal story resonated with others in the community; neighbors trusted her as a knowledgeable and persistent advocate. She was also an effective collaborator and networker, connecting with a wide array of stakeholders across the spectrum of the environmental movement to help further PCR's goals. Johnson was also increasingly determined to bring broader attention to the environmental issues affecting Altgeld Gardens. In the early 1990s, PCR began giving "Toxic Tours" of southeast Chicago to give outsiders a real-life glance at the pollution and industrial hazards that residents dealt with every day. In May of 1990, PCR participated in a televised Town Hall meeting on environmental issues on the Southeast Side, which aired on WTTW-Chicago. Hazel Johnson's exchange with moderators over shutting down industries was a highlight of the program and illustrated her effectiveness at speaking plainly and passionately against industrial pollution in the region:

> ***Moderator:*** *May I ask you what you think needs to be done in order to deal with this problem? Do you want to shut down all the industry around here, do you want to move people out? What do you want to do?*
>
> ***Johnson:*** *Close all the industry down and relocate the people. I've been asking that for years.*
>
> ***Moderator:*** *You want to close all the industries?*
>
> ***Johnson:*** *Sure I do! Human health comes first. You know, that's the problem with all the industries, the politicians and everybody else that care about the buck. But what is happening to people's health?*
>
> ***Moderator:*** *But people have to eat, don't they need jobs?*
>
> ***Johnson:*** *Sure, but let's put that in an area where no one lives, in an un-residential area. Instead of piling all this around us. We are like sitting in the center of a doughnut, we have steel mills, treatment plans, hazardous waste incinerators, paint factories, we have it all. And I don't think that my community should share the burden for the whole city of Chicago, and we've been doing it ever since 1863. (applause) Now it's time for them to do something for us.*
>
> ***Moderator:*** *Is there a middle ground, can you come to some kind of agreement with these companies?*

[231] "Mayor's Aid Asked to Remove Asbestos," *Chicago Sun-Times*, June 5, 1989.
[232] "CHA Director Booed from Talks on Asbestos," *Chicago Tribune*, June 10, 1986.
[233] "CHA Plans to Remove Asbestos at 2 Developments in January," *Chicago Tribune*, November 10, 1987.

> ***Johnson****: No. We're not compromising with these people in the companies. We want them closed down because we feel that they are affecting our health while they are making millions of dollars each year.*[234]

Johnson's comments at the WTTW Town Hall were a succinct grassroots summary of the concepts of environmental racism and environmental justice as they were beginning to take shape. By the late 1980s, she was increasingly connected to other key players in the emerging national environmental justice movement, including sociologist Robert L. Bullard, Rev. Benjamin Chavis at UCC, Lois Gibbs with CCHW, others. In the 1990s, Hazel Johnson would find a national audience for her story and PCR's environmental mission.

Hazel Johnson and the National Environmental Justice Movement (1991-2011)

1991 was a pivotal year for PCR and for grassroots environmental justice organizations across the country. The first National People of Color Environmental Leadership Summit, held in Washington, DC, brought delegates from around the country together and saw communities of color united under seventeen founding principles of the national environmental justice movement, merging environmentalism and social justice into a single, unified framework. The summit also criticized traditional environmental groups (which were overwhelming white and middle-class) that prioritized wildlife and natural landscapes over the health and well-being of communities of color. [235] The work that PCR and Hazel Johnson had been doing in Chicago for over a decade epitomized the principles of the environmental justice movement; Altgeld Gardens "was like a postcard for environmental justice and racial justice," Robert Bullard stated. "There was no separation."[236] The summit moved Hazel Johnson and PCR to the national stage, and Johnson was declared the "mother of the environmental justice movement." Through the 1990s and early 2000s, Johnson would remain at the center of the national movement while continuing her grassroots activism in Chicago through her work with PCR.

As the figurative "parents' of the emerging movement, Hazel Johnson and Robert Bullard became national public figures in the early 1990s, as issues of environmental racism and environmental justice became increasingly part of the public discourse. In 1992, they traveled to the first United Nations Conference on Environment and Development (known as Earth Summit) in Rio de Janeiro, Brazil, with Johnson representing the grassroots side of the movement and Bullard the academic side.[237] They would speak at subsequent summits on climate and racism together throughout the 1990s. Johnson received a flood of speaking invitations and traveled across the country to share what she had learned through her work with PCR and collaborate with fellow activists. Bullard would later reflect that Johnson's effectiveness as a spokesperson for the movement stemmed from her ability to tell her story in a way that connected with people from a wide range of backgrounds: "Housing, issues around health, the issues around land use, issues around transportation, around jobs and employment, education—all of that. She could lay all of it out, and so that people could really understand it."[238]

The combined efforts of Johnson and other environmental justice leaders, united under the national movement, led to modest but significant changes in environmental policy at the federal level during the early 1990s. For the first time, the federal government was forced to acknowledge the disparate environmental burdens placed on communities of color and take steps to address the impacts. In 1992, the US EPA formed the Office of Environmental Justice to "address the needs of vulnerable populations by decreasing environmental burdens, increasing environmental issues, and working collaboratively to build healthy, sustainable communities."[239] That same year, PCR became the first grassroots environmental justice organization to receive the EPA's prestigious

[234] Letter from Carolyn Broughton, WTTW Special Events, to Hazel Johnson dated April 24, 1990, PRC Archives. WTTW Archives, Town Hall May 9, 1990, https://interactive.wttw.com/playlist/2020/02/24/hazel-johnson.
[235] Bullard, *Confronting Environmental Racism*, 7.
[236] Roewe, "Hazel Johnson, the Mother of the Environmental Movement, Was Catholic."
[237] Ibid.
[238] Ibid.
[239] Office of Environmental Justice Fact Sheet, United States Environmental Protection Agency, https://www.epa.gov/sites/production/files/2017-09/documents/epa_office_of_environmental_justice_factsheet.pdf

Environmental and Conservation Challenge Award. President George H.W. Bush presented the award to Hazel Johnson at a ceremony in the Oval Office, stating that it was leaders like her "who realize that the greening of America is truly a grassroots operation."[240] On September 30, 1994, the Environmental Protection Agency formed the National Environmental Justice Advisory Council (NEJAC), a federal advisory committee of stakeholders that would advise the EPA and make recommendations on policy related to environmental justice issues. In recognition of PCR's role as a leading grassroots environmental justice organization, Hazel Johnson was invited to serve on NEJAC in 1995 and remained an active participant for several years.[241]

As the national environmental justice movement gained momentum, Johnson and PCR garnered media attention from across the country and were featured in national publications such as *Time* Magazine, *USA Today,* and *Woman's Day*. In 1993, the *Los Angeles Times* published a lengthy profile on Hazel Johnson entitled, "Fighting Her Good Fight," calling her "a leader of the fledgling environmental justice movement and a thorn in the side of the hazardous waste industry."[242] Her story was also featured in national environmental publications such as *National Wildlife*, illustrating the increasing influence of the environmental justice movement on the traditional conservation movement.[243] In February of 1993, Hazel Johnson was inducted into the Grassroots Movement for Environmental Justice Honor Roll and Hall of Fame, for her role in "advancing the work of the grassroots movement for environmental justice. Ralph Nadar presented the award to Johnson at the CCHW Grassroots Convention held in New York.[244]

On the legislative side, Hazel Johnson continued to work with local and federal officials on environmental policy issues, testifying before members of the US House of Representatives Judiciary Committee at a hearing on environmental justice in 1993 and consulting with US Senator Carol Moseley-Braun on a proposed bill (the Environmental Justice Act of 1993) to ensure that all hazardous waste facilities, particularly those in minority communities, complied with environmental, health and safety laws and regulations.[245]

The environmental justice movement secured a landmark victory on February 11, 1994, when President William J. Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The order was the first major federal action on environmental justice and generated a number of EPA initiatives that activists were hopeful would lead to meaningful changes within their communities. The EPA established an interagency working group to integrate environmental justice principles throughout 17 government agencies, incorporated environmental justice as a component of decision-making for environmental policy, and created an environmental justice small grants program. Public-private partnerships, such as the National Advisory Committee on Environmental Policy and Technology, were established by the EPA to "stimulate sustainable economic growth, assess brownfields, and oversee superfund toxic cleanups." PCR was an active participant in many of these programs, and Hazel Johnson was one of a small group of stakeholders invited to attend the signing of the order.[246]

As the national environmental justice movement continued to grow through the turn of the century, Hazel Johnson served as the movement's primary representative for grassroots activism in African American and urban communities. In 1996, President Clinton invited Hazel Johnson back to the White House for a ceremony honoring

[240] Remarks at the Presentation Ceremony for the President's Environment and Conservation Challenge Awards, December 2, 1992, https://www.presidency.ucsb.edu/documents/remarks-the-presentation-ceremony-for-the-presidents-environment-and-conservation.
[241] "National Environmental Justice Advisory Council: 20 Year Retrospective Report (1994-2014)," United States Environmental Protection Agency, 60, https://www.epa.gov/sites/production/files/2019-10/documents/nejac_20_year_retrospective_report.pdf
[242] Getlin, "Fighting Her Good Fight."
[243] "Johnson Takes on Polluters," *National Wildlife*, October/November 1993, 50-51.
[244] Letter from Lois Gibbs to Hazel Johnson, dated February 23, 1993, PCR Archives.
[245] Press release from Senator Carol Moseley-Braun dated July 6, 1993 and letter from Jack Brooks to Hazel Johnson dated February 17 ,1993, PCR Archives.
[246] Albert Huang, "The 20th Anniversary of President Clinton's Executive Order 12898 on Environmental Justice," *National Resource Defense Council*, February 10, 2014, https://www.nrdc.org/experts/albert-huang/20th-anniversary-president-clintons-executive-order-12898-environmental-justice.

the work of 100 environmental groups from across the country. PCR was the only Black-run grassroots organization among the groups that were recognized. Johnson would later serve as an advisor for former Vice President Al Gore's climate and environmental platform during his presidential campaign in 2000. She was also one of eleven women of color to be honored at the Second People of Color Summit in 2002.

PCR After 1991: Focusing on Jobs, Health, and a Better Community

In spite of the awards and accolades, Hazel's work at PCR continued to be an arduous, and often frustrating, uphill battle. Keeping the community engaged and focused on environmental hazards was difficult when residents were also struggling with poverty, unemployment, and a host of other social issues. Praise from government officials and environmental groups mattered less to her than the support of her neighbors in Altgeld Gardens. "Sometimes I get discouraged," Johnson told a reporter in 1988, "more with my own people than with others, because some of the people who are affected the most don't seem to care. When I go out and meet other people and they say, 'Oh, what a beautiful job you're doing,' it hurts because I want to hear those same words from my own people and not from an outsider."[247] PCR also faced fierce resistance from local politicians firmly aligned with industry and from hazardous waste officials who accused her of distorting health statistics and relying on scare tactics to attract attention.[248] Documenting health consequences through scientific studies took years, and companies routinely dismissed such evidence when it was released. The sheer number of polluting industries and sites surrounding Altgeld Gardens made it nearly impossible to prove that health issues were directly caused by contamination from specific companies; Waste Management, Sherwin Williams, and other industries in the Calumet region were often able to deflect blame and resist the community's calls for them to clean up their sites.[249]

Undeterred, Johnson searched for creative ways to engage her community, focusing on programs that would not only address environmental issues but also provide concrete benefits to residents. The initiatives launched by PCR in the 1990s reflected Johnson's belief that true environmental justice could not be achieved without also addressing issues of poverty, unemployment, and education. As she told the *Chicago Tribune*, "You have to motivate people, and economics motivates best. When you combine environmental activism with economic liberation, you have the recipe for real community recovery."[250] In 1995, PCR partnered with DePaul University's Office of Applied Innovation and Laubach Literacy International's Center for Workforce Education to create an environmental training program for inner city youth. The innovative program, touted as the first of its kind in the city and a "model for the nation," was designed to improve employment opportunities for young residents in environmentally disadvantaged communities by providing practical training in environmental fields, targeting skills such as underground storage tank removal and lead abatement.[251] In addition to specific work training, the program also provided academic support and assistance with general employability and life skills for participants. Additional funding through the US EPA allowed PCR to offer lead-based paint abatement training to other unemployed residents at Altgeld Gardens.[252] The following year, PCR received a grant from the US EPA and the US Department of Housing and Urban Development (HUD) to launch the Residents Education About Lead (REAL) project, the first EPA-sponsored lead education and intervention program in the country. Partnering with CHA and the City of Chicago Department of Health, PCR canvassed CHA communities, going door-to-door to provide education on the dangers of lead exposure and strategies for risk reduction, conduct informal lead inspections, and coordinate lead testing for children. Altgeld residents were hired and trained as paid community

[247] Virginia Mullery, "Interview with Hazel Johnson," *Salt of The Earth*, 1988, clipping from PCR archives.
[248] Getlin, "Fighting Her Good Fight."
[249] Line Cohen, "Waste Dumps Toxic Traps for Minorites," *The Chicago Reporter*, April 1, 1992, 1.
[250] Little, "Toxin Shock."
[251] Flyer for Commencement Ceremony for Inner-City Youth Environmental Training Program, April 27, 1996, PCR Archives.
[252] People for Community Recovery, "Educational Intervention and Lead Hazard Reduction for Inner-City Residents Coupled with Sustainable Community Economic Development," submitted to United States Environmental Protection Agency Region 5, dated January 4, 1995, PCR Archives.

educators to implement the program, providing another example of how PCR successfully integrated job training and employment opportunities with environmental activism.[253]

PCR also continually worked with local industries to encourage the companies surrounding Altgeld Gardens to employ local residents, arguing that manufacturers within walking distance of Altgeld Gardens consistently excluded these residents from their workforce. In 2001, PCR successfully lobbied the Chicago Ford Company Assembly Plant, which drew 70% of its workers from nearby Indiana despite receiving significant financial incentives from the City of Chicago and State of Illinois, to expand its employment recruitment centers to include three unemployment offices close to the plant.[254]

While pursuing projects that would increase economic opportunities for Altgeld residents, PCR continued to collaborate with other environmental organizations and institutions to document and reduce environmental hazards throughout southeast Chicago. PCR partnered with University of Illinois-Chicago School of Health and toxicologist Dr. Robert Ginsburg (who also served as director of Citizens for a Better Environment), to conduct a more expansive health survey of over 800 Altgeld residents, modeled after the Michigan Toxic Substance Control Commission Citizen's Guide for collecting data and establishing community health trends. The results of the survey, published in 1993, showed that 27% of surveyed residents had been diagnosed with asthma, bronchitis, or emphysema, with 68% reporting that symptoms improved when they were away from home. More troubling, the survey revealed that more than half of 270 pregnancies reported resulted in miscarriages, stillbirths, premature births, or babies with birth defects or severe health problems.[255] In the early 1990s PCR also successfully lobbied the Agency for Toxic Substances and Disease Registry, a branch of the Centers for Disease Control, to initiate a study of environmental health impacts in the Calumet region. In 1995, PCR joined with the Chicago Legal Clinic, Citizens for a Better Environment, and the Center for Neighborhood Technology to form the Southeast Chicago Environmental Initiative (SCEI), one of several pilot programs launched by the US EPA as part of Executive Order 12898 to encourage collaboration between the EPA and local communities in the development of solutions to air, water, and soil pollution in the region. Working as part of the SCEI, PCR monitored environmental clean-up sites and sponsored educational programs to encourage community involvement.[256]

In addition to collaborating with established organizations, Johnson also mentored college students and young activists who would form the next generation of the environmental justice movement. In the mid-1980s, she helped Barack Obama, then a fledgling community organizer working on Chicago's south side, to gain traction with residents over the fight to remove asbestos from Altgeld Gardens.[257] David Pellow, Director of the Global Environmental Justice Project, and chair of the Environmental Studies Department at the University of California-Santa Barbara, first worked on environmental justice issues as a volunteer for PCR in the 1990s, while a student at Northwestern University. His experiences with Hazel Johnson would help form the basis of a life-long career in environmental justice.[258] Johnson also led environmental bus tours for DePaul students alongside DePaul University professor Sylvia Hood Washington and later collaborated with Washington on a film on environmental justice produced for the Knights of Peter Claver and the US Conference of Catholic Bishops.[259] Most importantly, Hazel mentored the next generation of leadership within PCR. Cheryl Johnson, Hazel's daughter, worked alongside her mother from the beginnings of the organization. By the mid-1980s, she had left her job as a data

[253] Ibid.
[254] PCR website, http://www.peopleforcommunityrecovery.org/accomplishments.html; Letter from Cheryl Johnson to Alderman Anthony Beale (9th Ward) dated October 11, 2002; PCR Archives.
[255] PCR's Community Health Survey Results, undated document in PCR Archives.
[256] Historical Notes, PCR Archives, https://www.chipublib.org/fa-people-for-community-recovery-archives/
Little, "Toxin Shock."
[257] William Wan, "At the Housing Project Where Obama Began His Career, Residents are Filled with Pride—and Frustration," *The Washington Post*, January 8, 2017.
[258] Roewe, "Hazel Johnson, the Mother of the Environmental Movement, Was Catholic."
[259] Ibid.

coordinator at Argonne National Laboratory to devote herself to PCR full time, eventually stepping into her mother's role as president and executive director of PCR in 2009.

While adding new programs and tackling new issues, PCR continued to work on the ever-present threats surrounding waste disposal, industrial pollution, and toxic waste cleanup. In 1997, an explosion at a nearby chemical plant owned by PMC Specialty Group released a massive cloud of sulfur trioxide over the Southeast Side, shutting down highways and forcing evacuations at Altgeld Gardens and several nearby communities. PCR organized residents to demand cleanup and coordinated with the Chicago Legal Clinic to explore legal options.[260] The following year, PCR teamed with Northwestern University and the Chicago Legal Clinic to urge the US EPA to remove soil at Altgeld Gardens that was contaminated with excessively high levels of poly aromatic hydrocarbons (PAH), a chemical known to cause rashes and skin cancer.[261]

One of the longest battles waged by PCR in the 1990s and 2000s involved clean up of toxic PCB oils within Altgeld Gardens. Between the mid-1970s and 1984, discarded electric transformers containing PCBs had been dumped into a storage yard in the middle of the complex. CHA employees dismantled the transformers on the site to salvage copper, releasing the PCBs into the soil. Although CHA was aware of the environmental hazard posed by the PCBs and reported the problem to the Illinois EPA in 1984, initial cleanups were intermittent, and the site was not completely cleared until 1999.[262] The issue pushed the already strained relationship between Altgeld residents and CHA to a breaking point, and nearly 6,000 current and former residents filed a lawsuit against CHA in the summer of 1999, charging the agency with negligence and claiming that the CHA exposed them to potential harm by failing to properly clean the site.[263] PCR worked with the lead plaintiff attorney, S. Jerome Levy, to bring plaintiffs into the suit and helped residents file the necessary paperwork for the case. After four years of litigation, a settlement was reached in 2004 and CHA agreed to pay a total of $10.5 million to residents in the form of rent abatement, amounting to an average of $750 per plaintiff.[264]

While a major victory for PCR, the settlement ultimately had little impact on the day-to-day lives of the people in Altgeld Gardens. Although the lawsuit brought much-needed attention to the issue of environmental contamination at CHA properties and led CHA to handle environmental issues more closely going forward, CHA was not found to be negligent, and the agency refused to acknowledge any wrongdoing as part of the settlement. The decision to pay the plaintiffs in rent credits instead of cash also angered many Altgeld residents, who felt it was demeaning to not be allowed control over the money they were awarded. One Altgeld resident, speaking to a reporter, summed up the result: "Short term, we won. Long term, we lost. The main element was environmental, and we lost."[265]

The 2004 settlement with CHA reflected a hard reality that grassroots activists like Hazel Johnson faced on a daily basis when confronting environmental inequity. Progress was inevitably slow and incremental at best, with many setbacks along the way. Victories, though hard-won, often fell short of PCR's demands, and there was always another battle to fight. Hazel Johnson's continued activism through the 1990s and 2000s showed a remarkable ability to persevere despite seemingly insurmountable odds. As the *Los Angeles Times* noted in its profile on Johnson, her work with PCR quickly taught her "that environmental wars go on forever and that people who expect miracles burn out quickly."[266] Ultimately, it was her commitment to her community, and her belief that everyone should have the right to a clean environment no matter where they lived, that drove Johnson to stay and keep fighting. Despite its problems, Altgeld Gardens was her home, and solving environmental issues there was the necessary first step in solving global environmental issues. She told the *Chicago Tribune* in 1995:

[260] "$10 Million Payout Near Over CHA Contamination," *Chicago Sun-Times*, August 15, 2003, 18.
[261] PCR website, http://www.peopleforcommunityrecovery.org/accomplishments.html
[262] *Chicago Sun-Times*, August 15, 2003, 18.
[263] Aaron et al. v. Chicago Housing Authority, case number 99 L 11738.
[264] *Chicago Sun-Times*, August 15, 2003, 18
[265] "Altgeld Gardens Lawsuit Settlement," *Residents' Journal*, February 9, 2004, https://wethepeoplemedia.org/altgeld-gardens-lawsuit-settlement/
[266] Getlin, "Fighting Her Good Fight."

> *Every day I complain, protest and object, but it takes such vigilance and activism to keep legislators on their toes and government accountable to the people on environmental issues. I've been thrown in jail twice for getting in the way of big business. But I don't regret anything I've ever done, and I don't think I'll ever stop as long as I'm breathing. We have abused the planet mercilessly for years, and now we are paying the price. If we want a safe environment for our children and grandchildren, we must clean up our act, no matter how hard a task it might be.*[267]

Despite an increasing number of health problems, Hazel Johnson remained actively engaged in PCR's work until her death from congestive heart failure on January 12, 2011 at the age of 75. Toward the end of Hazel's life, Cheryl Johnson gradually assumed responsibility for day-to-day operations of the organization, finally succeeding her mother as Executive Director of PCR in 2009.

Hazel Johnson's Legacy: PCR from 2011 to the Present Day

Having devoted most of her life and limited financial resources to pursuing environmental justice for her community, Hazel Johnson died in poverty; but her work in the environmental justice movement left a lasting legacy both within Altgeld Gardens and across the country. Reflecting on her mother's sacrifices, Cheryl Johnson told the *Chicago Tribune* in 2011, "My mother used her Social Security checks to educate herself about environmental issues. She paid for buses for residents to go down and protest. She paid to print flyers. For years, she didn't know anything about writing grant proposals to get funding. She paid out of her pocket…. [She] didn't get involved in environmental justice to make money. She got involved to make change in people's lives."[268]

Cheryl Johnson and PCR staff carry on the work begun by Hazel Johnson, leading toxic tours, directing environmental training and educational programs, providing employment services, and assisting residents with housing issues and grant applications. When CHA unveiled plans in 2012 to demolish over 600 vacant apartment units in Altgeld Gardens as part of its *Plan for Transformation*, PCR partnered with the Chicago Housing Initiative, Preservation Chicago, and Architecture for Humanity to form the Save Altgeld Coalition, rallied hundreds of Altgeld residents to protest the proposal, and successfully lobbied for rehabilitation over large-scale demolition.[269] Building on PCR's history of linking environmentalism with local job opportunities, the organization joined with other members of the Illinois Clean Jobs Coalition and Illinois State Legislature to pass the Future Energy Jobs Act (FEJA) in 2016, which included $750 million in funding to bring clean energy developments and related employment opportunities to low-income neighborhoods. After 2016, PCR advocated for installation of a solar farm to provide electricity at Altgeld Gardens; CHA approved the plan in 2020. In a nod to environmental justice advocates, CHA's Director of Sustainable Initiatives, Ellen Sargent, told *Forbes* Magazine, "Putting clean energy and renewable projects close to communities that have a long history of environmental injustice would be a way to balance that scale."[270]

For environmental justice leaders, Hazel Johnson's work with PCR and her unique perspective on environmental issues has left an indelible mark on the national environmental movement. Nearly 40 years after Johnson founded PCR, environmental justice has found its way into local, state, and federal legislation and policy and is studied at colleges and universities across the world. Environmental justice organizations have flourished and multiplied. "It's not a footnote now," Robert Bullard told *Earth Beat* in February 2021, "It's a headline. Environmental justice has reached all the way up to the level where it's part of national policy across the board. [Hazel Johnson] would think it's about damn time, even though she wouldn't use 'damn.' She would be the first

[267] Little, "Toxin Shock."
[268] "Final Tribute Sought for Altgeld Gardens Community Activist," *Chicago Tribune*, July 18, 2011, 1.4.
[269] Spencer McAvoy, "Lost in the Shuffle," *South Side Weekly*, January 8, 2014, https://southsideweekly.com/lost-in-the-shuffle/.
[270] John Lippert, "As the World Turns to Solar Power, Black Chicagoans Jump on the Bandwagon," *Forbes*, March 8, 2020. https://www.forbes.com/sites/johnlippert/2020/03/08/as-the-world-turns-to-solar-power-blacks-chicagoans-jump-on-the-bandwagon/?sh=64fed3e549b5.

to say, 'It's about time. You're very smart people, why are you just getting to this?' This is what she had been saying for decades."[271]

In recognition of Hazel Johnson's significant contributions to the environmental justice movement, US Representative Bobby Rush (D-IL) introduced legislation in 2019 to honor Johnson's contributions by posthumously awarding her the Congressional Gold Medal, commissioning a commemorative stamp, and designating April as the Hazel M. Johnson Environmental Justice Month. The bill was reintroduced in April 2021, with Robert Bullard and Cheryl Johnson joining Rush in Washington DC to promote the legislation. "So often," Rush stated, "Black activists are overlooked for their contributions to the environmental and environmental justice movements. Ms. Johnson was a visionary who used her voice to shine a bright light on the environmental injustices suffered by low-income, minority communities."[272]

Criterion Consideration G

The environmental justice movement in the United States transitioned from isolated acts of resistance to a cohesive national movement in the last decades of the twentieth century. Consequently, the entire movement is less than 50 years old. However, the historical importance of the environmental justice movement and its impact are well documented. Environmental justice activists brought much needed public attention to issues surrounding environmental racism and inequality and forced changes in policy and legislation at the local, state, and national level. Like other twentieth-century social justice movements in the United States, most notably the civil rights movement, the environmental justice movement fought environmental racism on two fronts—activists worked on the local level to facilitate change in their communities, while also pushing for legislation and recognition at the national level. Hazel Johnson's work with PCR was, by its very nature, a local endeavor that aimed specifically to effect change within Altgeld Gardens and the surrounding communities of Chicago's far south side. In this way, her path was similar to other leaders in the national environmental justice movement who were working towards similar goals in their own communities across the county. However, as the national movement developed in the 1980s and 1990s, Hazel Johnson rose to national prominence as a representative of the environmental justice movement in the United States. Her experience in Altgeld Gardens gave voice to the environmental inequities faced by communities of color and she often served as the primary symbol for their struggles on the national stage.

Within the context of the national environmental justice movement, Altgeld Gardens exemplifies the significant work of Hazel Johnson and PCR and meets Criterion Consideration G for properties that have attained significance within the past 50 years.

[271] Roewe, "Hazel Johnson, Mother of Environmental Justice, was Catholic."
[272] Office of United States Congressman Bobby L. Rush, "On Earth Day, Rush Champions Legislation to Honor Legacy of Hazel M. Johson, Mother of Environmental Justice Movement and Activist from Chicago's South Side," press release, April 22, 2201, https://rush.house.gov/media-center/press-releases/on-earth-day-rush-champions-legislation-to-honor-legacy-of-hazel-m.

Criterion C: Architecture

Summary Statement of Significance: Criterion C

The Altgeld Gardens – Philip Murray Historic District is locally significant under Criterion C in the area of Architecture as one of the largest self-contained public housing complexes in Chicago. The district is notable not just for its housing component, but also for the inclusion of administrative, educational, recreational, and retail amenities that were integral to the project's design. While developed during World War II and subject to stringent cost and efficiency requirements, Altgeld Gardens' low-rise rowhouses and courtyards, anchored by larger public buildings around a central green, represented the type of human-scaled community-oriented architecture reflective of early public housing's Garden City ideals and the Public Works Administration design principles. The expansive project's remote location on Chicago's Far South Side required the provision of neighborhood amenities to a degree not seen in prior public housing projects in Chicago.

The first half of this section establishes a national context for public housing design by describing: the philosophies and international trends that influenced architects and planners of low-rent housing; how site and unit designs were codified by federal housing agencies and disseminated by professional journals; and how the resulting architecture of public housing changed as federal policies evolved between 1933 and 1949. This period corresponds to the National Park Service's Multiple Property Submission "Public Housing in the United States, 1933-1949," which asserts that the character of public housing changed dramatically after passage of the United States Housing Act of 1949 in terms of site planning, building massing, materials, detailing, and architectural style.[273] While public housing projects built in the 1930s and 1940s were typically planned communities with low-rise buildings, courtyards, parks, and amenities, projects constructed in the 1950s and 1960s favored dense modernist mid- and high-rise apartment towers on minimally landscaped superblocks. The second half of this section provides an overview of early public housing projects in Chicago, establishing the significance of Altgeld Gardens within its local context. Projects in Chicago responded to national requirements but were adapted to specific sites by the local architects and planners hired for each development.

The district's period of significance under Criterion C begins in 1944 when the first units within the complex were completed and ends in 1950 with the completion of the last large public school building designed by architect John C. Christensen.

Design of Public Housing in the United States

Even before the New Deal and the creation of the Housing Division within the Public Works Administration in 1933, the architectural and planning professions in the United States were considering the pressing challenge of urban slums. In many of the cities that emerged as economic and industrial centers in the early decades of the 20th century, working class residents were concentrated in dense neighborhoods with inadequate infrastructure and deteriorating older buildings. Families crowded into tenement apartments, often sharing living quarters and bathrooms. Few buildings had adequate plumbing, heat, or electricity. Unsanitary conditions were compounded by a lack of open space, natural light, and adequate ventilation, leading reformers to raise concerns over public health and safety.

Problems of both housing quantity (insufficient supply) and quality (poor condition) continued to worsen through the 1920s. State, local, and charitable measures were insufficient to address the magnitude of the situation. As unemployment soared during the Great Depression, the federal government was spurred to take action relative to the housing crisis. The PWA's 1933 slum clearance and housing development program, overseen by the

[273] National Park Service, "Public Housing in the United States, 1933-1949," December 2004, E3.

newly created Housing Division, was conceived of as a way to create jobs and boost the stagnant construction industry while simultaneously addressing the squalid living conditions plaguing urban centers.[274]

Rather than rehabilitate existing building stock, government officials and planners favored wholesale slum clearance and new construction. One of the questions asked in the early years of public housing was whether the new projects should meet "only the most basic standards of health, safety, and comfort within a carefully prescribed budget, or should innovative housing design be encouraged both for the benefit of the residents and community as a whole?"[275] Architects and planners largely fell into the latter camp, seeking to solve the physical—and by extension social—problems of urban housing through good design.

The design professions in the United States were aware of new housing models emerging in Europe. The Garden City movement, pioneered by British planner and theorist Ebenezer Howard in the late 19th century, promoted the creation of self-sufficient new towns that featured clearly delineated green spaces, designated building areas, winding streets, and public amenities. As non-speculative planned developments, these new cities were able to maintain housing affordability. The first Garden Cities to be built were Letchworth (1903) and Welwyn (1919) outside of London. Tenets of Garden City design spread to the United States and were embraced by members of the newly formed Regional Planning Association of America (RPAA), which included writers Lewis Mumford and Catherine Bauer, as well as architects Clarence Stein and Henry Wright.

Faced with major housing shortages after the devastation of World War I, many European cities embarked on ambitious housing construction programs. In Vienna, new apartment complexes included facilities such as libraries, kindergartens, meeting halls, and recreation centers that "reflected the social agenda of the city leaders."[276] German projects were seen as more modern and experimental, combining new materials and cost-efficient construction with bold rational-functional forms and a modernist aesthetic.[277] Via trips to Europe in 1926-27 and again in 1930, housing scholar Catherine Bauer became acquainted with these European examples, which she featured in her influential book *Modern Housing* in 1934. One of the developments she profiled was Ernst May's Estate Römerstadt (1926-1928), a 1,200-unit housing development near Frankfurt comprising apartment buildings and rowhouses, shared gardens, laundries, day care facilities, and retail Shop.[278] Bauer also wrote extensively of the work of other European Modernists working in the social housing sphere, including France's Le Corbusier, the Netherlands' J.J.P. Oud, and Germany's Walter Gropius, founder of the Bauhaus design school.

These architects and others were featured in the landmark "Modern Architecture: International Exhibition" at the Museum of Modern Art in 1932. The exhibit was divided into two sections covering architecture and housing. In the three years following its debut in New York, the exhibit traveled to several cities including Philadelphia, Los Angeles, Cleveland, and Milwaukee to disseminate the ideals of Modern design and showcase exemplary projects. In November 1931, MoMA's Board of Trustees invited President Hoover's Conference on Home Ownership and Home Building to attend the exhibit opening:

> It is the sincere belief of the Museum that the Exhibition of Modern Architecture will exert a most beneficial influence on architecture and building in the United States and particularly in the field of multiple dwelling developments both urban and suburban . . . There will be two main divisions of the Exhibition, the second of which has, in the opinion of the Director, particular significance for those attending the Washington Conference. This section is devoted to the most recent solution of multiple dwelling problems by leading architects of the world . . .

[274] National Park Service, "Public Housing in the United States, 1933-1949," E4-E5.
[275] National Park Service, "Public Housing in the United States, 1933-1949," E4.
[276] National Park Service, "Public Housing in the United States, 1933-1949," E12.
[277] National Park Service, "Public Housing in the United States, 1933-1949," E12.
[278] National Park Service, "Public Housing in the United States, 1933-1949," E12.

> Housing of minimum wage earners is a subject claiming the attention of the nation. Private enterprise, under existing construction methods, realizes a return of but 2% on capital invested. The State and City governments are faced with the problem of subsidizing this type of building. The model solutions take into account lower construction costs while maintaining a high standard of living condition.[279]

Whereas most European examples of public housing were financed by generous government subsidies, no similar federal model existed in the United States. Prior to the New Deal legislation of 1933, the responsibility for regulating and incentivizing low-rent housing rested almost exclusively with state and local governments, charitable groups, and civic-minded private enterprise. The RPAA, founded in 1923, promoted government policies that would increase the supply of low-rent housing and reduce its cost. Encouraged by the European precedents, the organization advocated for the creation of "large-scale, planned residential communities accessible to low-income groups."[280]

RPAA members Stein and Wright developed community planning principles that emphasized low-rise, durable residential buildings set within protected green spaces that encouraged outdoor play and interaction on the part of the residents.[281] To put their theories to the test, members formed the City Housing Corporation to design, finance, and build two demonstration projects outside of New York City: Sunnyside Gardens in Queens (1924) and Radburn, New Jersey (1928).[282] Sunnyside Gardens comprised over 600 buildings on 16 blocks, and included a park and community center. Radburn, set on 149 acres, combined residential buildings with a community center, administrative offices, a library, gymnasium, clubroom, pre-school, and maintenance Shop. Both developments ultimately proved too expensive to be considered affordable to lower-income working classes. Nevertheless, their lasting impact on residential housing design has been significant.

Other examples of privately financed large-scale housing projects undertaken prior to federal involvement include a 300-unit project in the Bronx for the Amalgamated Clothing Workers Union (1926), which combined two 5-story winding buildings with a cooperative store, community rooms, nursery, library, and other amenities.[283] Similar developments in Chicago were the Michigan Boulevard Garden Apartments (1929) and the Marshall Field Garden Apartments (1930).

New Deal and World War II-era Public Housing (1933-1949)

As part of the National Industrial Recovery Act (NIRA) of June 1933, the Federal Emergency Administration of Public Works (PWA) was created to provide "massive work relief activities quickly."[284] Included within this authorization were slum clearance activities and the construction of low-cost housing. To accomplish the mandate, the PWA was permitted to "make loans to limited-divided corporations, award grants to state or local agencies, or build projects on its own."[285] Secretary of the Interior Harold Ickes appointed architect Robert D. Kohn, AIA president and founding member of the RPAA, as the first head of the PWA's Housing Division in 1933.

The PWA's initial program (1933-1934) provided low-interest loans to limited-dividend housing corporations, essentially providing liberal financing terms to organizations that agreed to limit their profits. Out of over 500 applications, only seven projects received funding and were ultimately constructed. These seven projects were located in St. Louis, Raleigh, Philadelphia, New York City (Bronx and Queens), Virginia, and Ohio.

[279] Museum of Modern Art Architectural Exhibition, Press release, marked copy, dated November 27, 1931. https://www.moma.org/calendar/exhibitions/2044.
[280] National Park Service, "Public Housing in the United States, 1933-1949," E13.
[281] "Julia C. Lathrop Homes Historic District, Chicago, Cook County, Illinois," National Register of Historic Places, 2010, p. 25.
[282] National Park Service, "Public Housing in the United States, 1933-1949," E14.
[283] "Julia C. Lathrop Homes Historic District, Chicago, Cook County, Illinois," National Register of Historic Places, 2010, p. 26.
[284] National Park Service, "Public Housing in the United States, 1933-1949," E18.
[285] National Park Service, "Public Housing in the United States, 1933-1949," E18

These early limited-dividend PWA projects showed the influence of both the Garden City and European Modernist movements.[286] Applicants were free to select their own design teams, and architects were encouraged to be creative. Formal design requirements were minimal; in general, buildings were limited to a maximum of six floors, buildings could cover no more than 35% of a parcel, and units were required to have private bathrooms and kitchens.[287] As loan terms were more favorable for projects constructed of durable masonry, most homes were clad with brick. Shared characteristics included the use of "superblocks" to organize neighborhoods, low lot coverage ratios (i.e., building footprints as a percentage of the overall lot area), compact and efficient unit plans that eliminated corridors, and the incorporation of amenities such as community centers and parks.

In 1934, the PWA replaced the limited-dividend program with a new direct-build program, placing responsibility for public housing construction firmly in the hands of the federal government. Horatio Hackett, a Chicago architect and engineer, replaced Kohn as head of the Housing Division. Hackett made no major changes to the general approach to public housing design, which remained true to RPAA planning principles. He did, however, begin to standardize the design process.

Projects were most often designed by consortiums of local architects and planners. As the PWA's charge was job creation, the intent was to divide the labor fairly and employ architects from multiple firms. Local architects coordinated with the staff of the Housing Division, who reviewed and approved submitted plans. In March 1935, the Housing Division published *Unit Plans: Typical Room Arrangements, Site Plans and Details for Low-Rent Housing*. The manual included a variety of typical site plans and floor plans for use by architects and engineers. Such technical information was exceedingly useful, as projects were being built throughout the country yet not all local design teams were familiar with the specific challenges of public housing. Tested strategies to minimize materials, standardize details, and speed construction times were critical to staying within the cost limits established by the housing program.

In terms of site planning, *Unit Plans* called for neighborhood scale development, limited points of entry and the incorporation of street closures, curving interior streets, subdivision of a site into "blocks," and the incorporation of open space. In terms of building design, care was taken to efficiently arrange living spaces within units, and efficiently arrange units within buildings. Materials were selected for their durability and maintenance.

The *Unit Plans* publication proved highly influential throughout the duration of the direct-build program. Between 1934 and 1937, nearly 22,000 dwelling units were constructed in 51 projects across 20 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.[288] While the guidelines led to a recognizable uniformity in the overall design and planning of the housing projects, architects were free to modify facades to reflect local preferences. The most prevalent architectural styles were stripped-down versions of Colonial Revival and Modern, though some Spanish Revival projects were built as well. Most PWA projects incorporated only minimal ornamental detailing usually limited to entrance canopies, patterned brickwork, or simplified quoining.

When the United States Housing Act of 1937 formally ended the PWA's role, the Housing Division was replaced by the United States Housing Authority (USHA). The newly created agency was tasked with overseeing the federal housing program and coordinating with local housing authorities. This new arrangement placed more control over site selection and planning in the hands of local authorities, though the USHA continued to review plans and set design and construction standards. New regulations focused on efficiency and cost drove further regularization of the projects.

[286] National Park Service, "Public Housing in the United States, 1933-1949," E19.
[287] "Julia C. Lathrop Homes Historic District, Chicago, Cook County, Illinois," National Register of Historic Places, 2010, p. 27.
[288] Margaret Schoenfeld, "Progress of Public Housing in the United States," *Monthly Labor Review* 51, no. 282 (August 1940): 270-272.

In general, the basic building typologies established by the PWA persisted under the USHA, and the agency continued its adherence to site principles established by the RPAA. Starting in 1938, the USHA issued a series of bulletins on policies and procedures relating to public housing planning, design, and construction. Bulletin No. 12 focused on dwelling unit planning (and was essentially an update of the PWA's *Unit Plans*), while Bulletin No. 11 focused on site planning, That publication's introduction provides insight into the goals of the agency at the time, which was still very committed to the creation of vibrant, human-centered communities:

> In low-rent housing, it is in the plan of the project as a whole—in the relation of the buildings to each other and to the land—that we may provide both insurance against deterioration of the neighborhood and the opportunities for the growth of a better community life. These opportunities for a better way of life may be discussed in terms which are both simple and specific: privacy for each family within the four walls of the home and opportunity for group life outside the home; adequate space, sunlight and ventilation in the rooms; and adequate space out of doors for active games and for rest and relaxation . . . The purpose of public housing is to improve the health, happiness, and social usefulness of the low-income groups in the community. Every step in the development of the housing project should be considered in the light of that fundamental purpose.[289]

Beginning in 1940, federal attention shifted to housing for defense workers. While many defense housing projects were designed as temporary, some (such as Altgeld Gardens) were planned by local housing authorities as permanent communities that would ultimately serve as low-rent housing. Again, there was no significant change in the planning or design approach to such projects, though amplified concerns over development costs and speed of construction led to further simplification where possible.

Building on the type of guidance previously issued by the PWA and USHA, the Office for Emergency Management's Division of Defense Housing Coordination published the *Summary of Standards for Defense Housing* in January 1941. Professional architecture journals also provided extensive information to their readership on defense housing, often including excerpts of federal directives and case studies of completed projects. The November 1940 issue of *Architectural Forum*, themed "Building for Defense," dedicated over 30 pages to the subject of housing. The November 1941 issue of *Architectural Record* included a 25-page "building types study," as well as a critical essay titled "Defense Housing—Are We Building Future Slums or Planned Communities?"[290]

The character of American public housing changed after passage of the United States Housing Act of 1949.[291] The legislation, which renewed federal subsidies to local housing authorities, tied public housing to new urban renewal efforts. Preferences shifted from the low-rise low-density housing models based on Garden City ideals and pioneered by the PWA, to mid- and high-rise apartments. Sited on large open blocks, the new buildings often read as "objects in a landscape" rather than as part of a harmonious and integrated plan, and many developments were out of scale with the low-rise neighborhoods that surrounded them. A lack of architectural ornamentation, consistent with the Modern style favored at the time, lent the looming post-1949 developments a stark and minimalist appearance.

Today, the trend in public housing is once again for lower-density low-rise buildings. Many of the high-rise 1950s- and 1960s-era public housing projects have been demolished in recent years and replaced with new mixed

[289] United States Housing Authority, *Design of Low-Rent Housing Projects: Planning the Site*, Bulletin 11 (Washington, D.C.: Government Printing Office): 3.
[290] "Defense Housing," *Architectural Forum* 73, no. 5 (November 1940): 437-468 and 58-66; Dorothy Rosenman, "Defense Housing—Are We Building Future Slums or Planned Communities?" *Architectural Record* 90, no. 5 (November 1941): 71-96; "Housing for Defense: A Building Types Study," *Architectural Record* 90, no. 5 (November 1941): 71-96.
[291] National Park Service, "Public Housing in the United States, 1933-1949," E3.

income communities. These transformations have typically taken place under the direction of local housing authorities with the support of the federal Department of Housing and Urban Development.

Public Housing in Chicago

As a major economic and industrial center with a growing population and congested urban core, Chicago, like New York, was at the forefront of efforts to clear slums and address housing deficiencies in the first half of the 20th century. Between 1933 and 1949, 11 public housing projects were built in Chicago under the federal housing programs described in the previous section (see Table 1). These projects conformed to the guidance set forth by federal agencies such as the PWA's Housing Division, the USHA, and later the Division of Defense Housing Coordination. Projects designed and constructed after 1937 were coordinated locally by the Chicago Housing Authority, formed that same year.

The first three public housing projects in Chicago—the Jane Addams Homes (1935-1938), Julia C. Lathrop Homes (1936-1938), and Trumbull Park Homes (1936-1938)—were initiated under the PWA's direct-build program. All three featured low-rise brick buildings ranging from two to four stories in height. Buildings were organized to form interior courtyards, and each development was anchored by a central open space.

The Jane Addams Homes, located in the city's Near West Side neighborhood, was the first PWA project to break ground in 1935, and the final one completed in December 1938. It was the largest of the three complexes with 1,027 units. The project was designed by a consortium of architects led by John Holabird with John Armstrong, Ernest Grunsfeld Jr., Elmer Jensen, and Philip Maher. All buildings had flat roofs and appeared quite modern, with little ornament save for a small number of balconies with curved metal guardrails and flat-roofed canopies at principal entrances. Some of the larger buildings incorporated ground floor passageways to connect courtyards. The project included a significant public art component in the form of a grouping of Edgar Miller-designed animal sculptures in the central courtyard. The Jane Addams Homes along with later high-rise extensions, was demolished between 2002 and 2007, with the exception of one original building that is slated to become the National Public Housing Museum.

Trumbull Park Homes, the smallest of the three PWA projects with 426 units, was built in the South Deering neighborhood on the city's far south side. As the project was designed by five members of the same architectural team as the Jane Addams Homes, Trumbull Park's buildings were similar in their simplified modern style, mostly rectangular forms, and flat roofs. Unit entrances at rowhouses featured curved concrete canopies, while horizontal lines were accentuated by cast stone sills and parapet copings. The project is extant and retains most original character defining features.

Lathrop Homes, located along the Chicago River in the North Center and Lincoln Park neighborhoods, was listed in the National Register of Historic Places in 2010. The 925-unit project was designed by a consortium of architects led by Robert DeGolyer. The team working under DeGoyler included Hubert Burnham (son of Daniel Burnham), Roy Christensen, Hugh Garden, Everett Quinn, Thomas Tallmadge, Vernon Watson, Bertram Weber, Charles White, Edwin H. Clark, Israel S. Lowenberg, Max L. Lowenberg, Ernest Mayo, Peter Mayo, E.E. Roberts, and Elmer C. Roberts, with the landscape design attributed to Jens Jensen. Lathrop Home's relatively simple flat-roofed buildings incorporated some Classical-style detailing such as brick quoins, applied stone trim suggestive of gables, and finials. Building entrances were trimmed with limestone, and some buildings were connected with brick arches. Like the Jane Addams and Trumbull Park Homes, Lathrop Homes included laundry facilities and recreational rooms in the basements of the residential buildings. In addition, Lathrop had a separate administration building and central heating plant. In 2020, the complex was extensively rehabilitated and 21 original buildings were retained.

The 1,662-unit Ida B. Wells Homes (1939-1941) was located in the Douglas neighborhood on the city's south side. The site was initially selected and assembled under the PWA's direct-build program, but constructed

between 1939 and 1941 by the Chicago Housing Authority under the United States Housing Authority's program. Nationally, it was the last of the USHA's pre-World War II projects built under the 1937 Housing Act.[292] The project was the largest in Chicago at the time, and one of the largest in the country. Noted African American Architect Beverly Lorraine Greene (1915-1957) is worked on this project in her time at CHA between 1938-1941. It seems that her departure from CHA predated the planning and construction of Altgeld Gardens, and no evidence was found to support that she played a part in the planning and design of the subject district.[293]

The Ida B. Wells Homes design team was led by Alfred Shaw of Shaw, Naess and Murphy (who later designed Altgeld Gardens), in association with three other firms: Theilbar and Fugard; Nimmons, Carr, and Wright; and Metz and Gunderson. Shaw, once engaged on the project, revised the PWA's preliminary plans by increasing the number of rowhouses, cutting back on the number of apartment buildings, and expanding the playgrounds.[294] Low-rise two- to four-story brick buildings were grouped around individual courtyards. The project was the first in the city to include a city park within its site plan. The simple rectangular buildings employed a combination of low-pitched hipped and flat roofs. Banded brickwork and copper canopies at entrances provided visual interest on building exteriors. In addition to the residential buildings, the Ida B. Wells Homes had a separate administration building, community center, and central heating plant. The entire complex of buildings was demolished between 2002 and 1994.

Five projects were constructed in Chicago to provide housing for defense workers. Four of these—the Frances Cabrini Homes (1941-1942), Lawndale Gardens (1942), Bridgeport Homes (1942-1943), and Robert H. Brooks Homes (1942-1943)—were already in the planning stages as USHA low-income projects in the lead up to World War II. They were reclassified as defense housing, then converted to low-income use after the war. Altgeld Gardens (1944-1945) was planned and constructed specifically as defense housing under the Lanham Act, with the intention of converting the project to low-income housing at the conclusion of the war.

The 586-unit Frances Cabrini Homes were built in Chicago's near North Side neighborhood. The initial project consisted of 56 two- and three-story buildings arranged in barracks-style rows. Most units fronted on north-south streets cut off from the city's grid, while rear yards were shared (originally these served as "victory" gardens). Brick buildings were rectangular in form, with flat roofs and slightly projecting eaves. Two colors of brick cladding lent a vaguely striped effect to the facades. Flat roofed canopies shaded unit entrances. Overall, the buildings were starkly modern and minimalist in their appearance. The project was designed by a consortium of architects including Henry Holsman, George Burmeister, Maurice Rissman, Ernest Grunsfeld Jr., L.R. Solomon, G.M. Jones, K.M. Vitzhum, I.S. Loewenberg, and Frank McNally. Later expansions in 1958-1962 included several high-rise apartment buildings, all of which were subsequently demolished. The majority of the original low-rise buildings are extant.

With only 128 units, Lawndale Gardens on the city's southwest side represented the Chicago Housing Authority's first experiment with small-scale public housing.[295] The project comprised four long rows of staggered buildings bisected by a central green. The unadorned modern buildings had flat roofs with slightly projecting eaves. Frank McNally, who had previously worked on the Frances Cabrini Homes, designed the project with Eric Hall. All original buildings are extant.

Bridgeport Homes on the city's southwest side was another small-scale project with only 141 units. It was designed by the architectural firm Burnham & Hammond, Inc., whose principal Hubert Burnham had previously worked on Lathrop Homes. The simple masonry buildings resembled those of Lawndale Gardens, though the Bridgeport rowhouses had a brick belt course at the second floor windowsills. The original flat canopies over the

[292] National Park Service, "Public Housing in the United States, 1933-1949," E52.
[293] "Beverly Lorraine Greene," Pioneering Woman of American Architecture, accessed January 25, 2022, https://pioneeringwomen.bwaf.org/beverly-lorraine-greene/.
[294] Devereux Bowly, Jr., *The Poor House: Subsidized Housing in Chicago* (Carbondale: Southern Illinois University Press, 1978), 26.
[295] Bowley, 32.

unit entrances have since been replaced by curved awnings. The master plan was simple, with buildings oriented both north-south and east-west across the site. Most original buildings are extant.

The Robert H. Brooks Homes, located adjacent to the Jane Addams Homes, contained 834 units in two-story rowhouses on eight square blocks. Initially, simple flat-roofed brick buildings were arranged barracks style in long rows. A separate community center and city park were included in the plan. The project was designed by the same architectural team as the Frances Cabrini Homes. Today, a total of 330 of the original units remain, though most buildings have had their flat roofs replaced with gable roofs. Sites where rowhouses were demolished have been converted to green space and play yards, reducing the project's density and lot coverage.

Altgeld Gardens, located approximately fourteen miles south of the city center in the Riverdale community area, was the city's largest public housing project at the time with 1,500 units built on 157 acres. Due to its remote location, it was planned as a self-contained community with a full range of programs and services for families, from libraries, nurseries, gymnasiums and schools to grocery stores and barber Shop. Shaw, Naess, and Murphy developed the master plan and designed the residential buildings, community center, and administration building, School Board architect John C. Christensen designed the four one-story schools, and Keck & Keck designed the retail component.

Curving streets divided the Altgeld Gardens site into separate blocks. Two-story rowhouses were arranged to form interior courtyards on each residential block; educational and recreational functions were located towards the center of the development bordering a city park; and the commercial functions were sited near the project's main entrance on 130th Street. While the unit plans followed typical rowhouse configurations, the buildings' exteriors stood apart from other Chicago Housing Authority projects at the time. Each building was designed with a slate-covered gabled roof and Dutch-style stepped parapets at each end. Unit entrances featured concrete canopies and playful screening elements. Altgeld Gardens was extended in 1953 with the addition of the 500-unit Philip Murray Homes to the west, whose stripped-down cost-efficient modern exteriors stand in contrast to the earlier 1940s buildings. Today, 136 of Altgeld Gardens original 162 rowhouses are extant along with all of its community and educational facilities.

Two public housing projects were completed between the end of World War II and the passage of the 1949 Housing Act. Wentworth Gardens (1945-1947) was a 422-unit project initially designed to serve defense workers and converted to low-income housing at the close of the war. Architects Loebl & Schlossman organized flat-roofed two- and three-story buildings around courtyards and play yards, while a larger park anchored the center of the development. Most original buildings are extant.

Dearborn Homes (1948-1949) was initially considered for low-income housing before the war, then for defense housing, but construction did not get underway until 1948 in part due to difficulties clearing the site. The project was comprised of 16 cruciform-shaped six- to nine-story buildings. It was the Chicago Housing Authority's first project to use elevator buildings, establishing a new model for the agency's subsequent developments. The architectural firm selected for the project was Loebl, Schlossman & Bennett, whose principals had prior experience designing Wentworth Gardens. Most original buildings are extant.

Significance Under Criterion C

In 1994, the National Park Service found that six Chicago housing projects were eligible for listing in the National Register of Historic Places. These included the three PWA projects—the Jane Addams Homes, Trumbull Park Homes, and Julia C. Lathrop Homes—along with the Ida B. Wells Homes, Frances Cabrini Homes, and Altgeld Gardens. The report found that the six projects were "historically significant for their association with this country's earliest efforts to provide large-scale public housing for the urban poor. [They] represent the built response of governmental agencies—at both the national and local levels—to the development of new policies for city planning and urban housing on a scale never before attempted." Since that time, Lathrop Homes has

been listed in the National Register (2010) and rehabilitated; unfortunately, the Jane Addams Homes and Ida B. Wells Homes have been demolished.

The 1994 report affirmed Altgeld Gardens' significance as "one of the most self-contained of the early public housing developments in Chicago." Others have echoed that assessment, with historian Devereux Bowly calling it "the most self-contained and comprehensive public housing project ever constructed in Chicago." [296] Despite the recent loss of 26 of the original 162 original buildings east of Greenwood Avenue, and the addition of a contemporary new public library designed by Koo Architects in 2020, the project retains the key design and planning features that set it apart from other Chicago public housing projects in the 1930s and 1940s. These include the site's curving streets, organization into smaller blocks, building and courtyard configurations, and the careful placement of the amenity buildings around public open spaces and key access points. More than any other public housing project in Chicago, Altgeld Gardens exemplifies the ideals of the Garden City movement that inspired early public housing planners and architects.

Concerning the six eligible projects' residential architecture, the 1994 eligibility report noted that "[t]he rather austere designs that make the buildings seem so visually "unremarkable" today are in fact the architectural features that constitute important design principles within the context of period planning and design for low-income public housing." Altgeld Gardens' rowhouses embody several key character defining features including: compact and efficient unit plans derived from federal standards and guidelines, room arrangements designed to maximize light and cross ventilation, the incorporation of durable materials (e.g., masonry exteriors, plaster walls, and terrazzo flooring), and canopies at unit entrances. The incorporation of gabled roofs, stepped parapets, and perforated screening devices at entrances suggest a higher quality of design relative to other Chicago public housing projects of the same period.

Architects

*Shaw, Naess and Murphy (*Altgeld Gardens Master Plan and Multiple Buildings, 1944-45)
Shaw, Naess and Murphy (1937-1946) was formed by three architects who had previously worked together at the office of Graham, Anderson, Probst and White. [297] Alfred Shaw (1895-1970) was born in Dorchester, Massachusetts. After completing his studies at the Boston Architectural Club in 1917, he worked for various firms in Boston and New York before accepting a position with Ernest Graham in Chicago in 1922. While with Graham, Shaw was the chief architect of Chicago's Merchandise Mart (1930) and also contributed to the design of the Pittsfield Building (1927), Civic Opera House (1929), and Field Building (1934).[298] Sigurd E. Naess (1886-1970), a native of Norway, began working for D.H. Burnham & Co. in 1906 while studying at the Armour Institute.[299] Charles F. Murphy, Sr. (1890-1985) was born in New Jersey. He entered the architectural field first as a stenographer, serving as personal assistant to Ernest Graham while both were employed by Daniel Burnham.[300] Murphy and Naess followed Graham when Graham, Anderson, Probst and White was established in 1917. After Graham's death in 1936, Shaw, Naess, and Murphy formed their own firm the following year. In 1946, Shaw left the partnership, which continued on as Naess and Murphy until Naess's retirement in 1959. Murphy then formed C.F. Murphy Associates, which became Murphy/Jahn in 1981.

Notable projects by Shaw, Naess and Murphy included the Ida B. Wells Homes (1941) and Altgeld Gardens (1945) public housing complexes, with Alfred Shaw as the lead designer. Shaw had served as president of the Chicago Metropolitan Housing Council and was active in local efforts to ameliorate substandard housing stock

[296] 1994 National Register Eligibility Study ; Bowly, 37.
[297] Information adapted from Maurice Blanks, "Biographical Glossary" in John Zukowsky and Mark Jansen Bouman, *Chicago Architecture and Design, 1923-1993: Reconfiguration of an American Metropolis* (Munich, Germany: Prestel, 1993), 468, 471.
[298] "Architect Alfred P. Shaw Dies," *Chicago Tribune*, December 2, 1970.
[299] "Architect Sigurd E. Naess, 83, Designed New Herald Building," *Miami Herald*, March 5, 1970.
[300] "Charles F. Murphy," Interview by Carter Manny, June 1, 1981. Chicago Architects Oral History Project, Ryerson and Burnham Art and Architecture Archive, Art Institute of Chicago.

in the city.[301] Notable projects undertaken by Naess and Murphy included the Prudential Building (1955), Chicago Sun Times Building (1957), the original McCormick Place (1960), and O'Hare International Airport (1963).

John C. Christensen (multiple Altgeld Gardens schools, 1944, 1945, 1950)

John C. Christensen (1878-1967) served as the Chief Architect for the Chicago Board of Education from 1921-1924, 1926-1928, and 1931-1959, overseeing both new construction and additions for all public schools within the city. Christensen was a native of Denmark who immigrated to the United States as a child. He began working in the Architect's Department of the Board of Education under Dwight Perkins in 1906. Christensen was promoted to the supervisory role of Chief Architect in 1921, a position he held on and off until 1959. Christensen worked in multiple architectural styles ranging from Art Deco, Prairie Style, and eventually Modern, to streamlined versions of revival styles (e.g., Neoclassical, Gothic, and Tudor.) Examples of his work include the Lucy Flower Vocational High School (1927), Newberry School (1937), Chicago Vocational School (1940), and South Shore High School (1940). Christensen designed the four initial school buildings at Altgeld Gardens (1945) in addition to the adjacent Carver High School (1950), all of which are included as contributing resources within this National Register nomination. While working for the School Board, Christensen also maintained a private practice focused mainly on residential design.[302]

Conclusion

The Altgeld Gardens – Philip Murray Homes Historic District is significant under three different National Register Criteria:

- Criterion A for the district's local level of significance in the areas of Community Planning and Development, Politics / Government, Social History, and Ethnic Heritage (Period of Significance 1944-1972);
- Criterion B for the district's national significance in association with longtime Altgeld Gardens resident Hazel Johnson (1935-2011), widely recognized as a founder of the American environmental justice movement (Period of Significance 1979-2011); and
- Criterion C for the district's local significance in the area of Architecture (Period of significance 1944-1950)

For these reasons, the Altgeld Gardens – Philip Murray Homes historic district is a resource that is rich in significance from multiple perspectives that illustrate the decisions that went into the establishment of Altgeld Gardens and the later Philip Murray Homes residential communities. Further, Altgeld's buildings were constructed over a span of several decades including various building types designed by an array of notable architects. Altgeld itself is an example of purposefully built government-sponsored housing effort built during World War II for African American war workers and their families. The self-contained nature of the district is unmatched by other extant or recorded housing projects in Chicago. Historian Deveraux Bowley, Jr., described Altgeld as "the most self-contained and comprehensive housing project ever built in Chicago." While the self-contained character of Altgeld was designed to support a geographically isolated community, its location within a so-called "toxic doughnut" and the effects of historic and ongoing pollution on residents is also at the center of the story of Altgeld and those who lived and live there.

[301] "Architect Shaw Chosen Head of Housing Council," *Daily Times*, June 4, 1937.
[302] Information adapted from "John C. Christensen (1878-1967)," chicagohistoricschools.wordpress.com, by Frances O'Cherony Archer, February 8, 2013. The online project showcases the work of historians Julia S. Bachrach and Elizabeth A. Patterson and architect Bill Latoza who, since the early 2000s, have been documenting Chicago's historic schools. The project was funded in part by a grant from the Graham Foundation for the Advanced Studies in the Fine Art; See also, *Chicago Public School Buildings Pre-1940 Context Statement*, City of Chicago.

The troubles at Altgeld were catalysts for major, ground-breaking movements in the country including the larger Environmental Justice movement in the United States pioneered by Altgeld resident Hazel Johnson. Altgeld tells an all too common story of unwise residential encroachment into industrial areas, communities suffering from the effects of pollution, and the struggle with governments for environmental justice. The work of Hazel Johnson in particular is at the core of Altgeld's narrative as her work grew out of the problems she bore witness to. Her work eventually reached the executive branch of the United States government. The unique history of Altgeld tells the arduous and continuous story of racial justice and environmental justice through the built environment and the surrounding landscape.

Altgeld is one of the oldest surviving Chicago public housing projects built for African Americans and one of the few that has survived without significant alterations. Further, it is one of the largest extant examples of wartime public housing projects in the country. Through the extant and intact resources associated with this historic district, Altgeld tells a story that many Americans, communities of color in particular, have experienced and lived through, but one that few outside of the experience know about. Its significance under multiple National Register Criteria is a testament to the importance of the story of Altgeld, including those who planned it, why they did so, and stories of those who lived there.

Though each criterion has its own specific period of significance, this nomination focuses on events that occurred starting in 1944 with the initial occupation of Altgeld Gardens by the first 100 families, and ends in 2011, the year Hazel Johnson died. This district satisfies the requirements of Criteria Consideration G for the period of significance under Criterion B. Altgeld Gardens resident Hazel Johnson maintained her critical role in the operations of the People for Community Recovery until her death in 2011.Her continued activism for Altgeld Garden residents and the surrounding community, her important role in the founding and growth of the American environmental justice movement in the late twentieth and early twenty-first century, and her work advocating for passage of Executive Order 12898 and other important environmental justice policies are of exceptional importance and justify the district's period of significance ending in the year 2011.

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Previous documentation on file (NPS):

__x__preliminary determination of individual listing (36 CFR 67 has been requested)
____previously listed in the National Register
____previously determined eligible by the National Register
____designated a National Historic Landmark
____recorded by Historic American Buildings Survey #_____
____recorded by Historic American Engineering Record # _____
____recorded by Historic American Landscape Survey # _____

Primary location of additional data:

__x__State Historic Preservation Office
____Other State agency
____Federal agency
____Local government
____University
____Other
Name of repository: _____

Historic Resources Survey Number (if assigned):

Altgeld Gardens – Philip Murray Homes Historic District
Name of Property

Cook County, Illinois
County and State

10. Geographical Data

Acreage of Property 193
(Do not include previously listed resource acreage; enter "Less than one" if the acreage is .99 or less)

Latitude/Longitude Coordinates

Datum if other than WGS84:
(enter coordinates to 6 decimal places)

1	41.659253	-87.60775	3	41.651733	-87.594576
	Latitude	Longitude		Latitude	Longitude
2	41.659633	-87.594850	4	41.651764	-87.607719W
	Latitude	Longitude		Latitude	Longitude

Verbal Boundary Description (Describe the boundaries of the property.)

The Altgeld Gardens – Philip Murray Homes Historic District is roughly bounded by E. 130th Street to the north, S. Ellis Avenue, S. Greenwood Avenue, and Carver Park to the east, E. 133rd Street, E. 134th Street, and E. 133rd Place to the south, and S. St. Lawrence Avenue to the west. This boundary includes the street and opposite street curb all the way around the site with the exception of the northern boundary that follows 130th Street which includes the landscaped greenway, sidewalk, and ends at the curb on the south side of the street. The other exception is the portion of southeastern boundary which follows the natural curvature of Carver Park. This boundary as described encompasses the majority of the original 1944 Altgeld Gardens and 1951 Philip Murray Homes sites as developed by the Chicago Housing Authority.

Blocks 11, 12, and 13 of Altgeld Gardens (east of S. Greenwood Avenue) and Blocks 15 and 16 of Philip Murray Homes (south of E. 133rd Place and E. 133rd Street) are excluded from the boundary because all of their residential buildings associated with the district have been demolished.

In addition to the intact original sites of Altgeld Gardens and Philip Murray Homes, the district boundary also jogs south to E. 134th Street to include Carver Park, George Washington Carver Primary School and the former Carver High School. The district boundary also includes the school and gymnasium buildings associated with Our Lady of the Gardens (CICS Lloyd Bond) at the southwest corner and the Ira F. Aldridge Elementary School at the northwest corner.

Starting at the intersection of S. St. Lawrence Avenue and E. 130th Street, the boundary travels east for 2,772 feet, following the southern curb of E. 130th Street. The boundary then turns south at S. Ellis Avenue and follows the eastern curb of the street for 271 feet before following the natural curve of E. 130th Place and S. Greenwood Avenue in a south/southeasterly direction for 2,090 feet before reaching E. 133rd Street and turning west. The boundary travels west for 545 feet until S. Ellis Avenue intersects with E. 133rd Street at which point the boundary travels south/southeast for 720 feet following the natural, tree lined boundary of Carver Park. The boundary then travels west, meeting up with E. 134th Street, for 1,843 feet. This boundary line follows the southern curb of the

street before traveling north for 400 feet along S. Corliss Avenue, following the street's western curb. At the intersection of S. Corliss Avenue and E. 133rd Place the boundary travels west/southwest following the southern curb of E. 133rd Place for 655 feet before traveling south for 185 feet and back to E. 134th Street. The boundary extends to the southern curb of E. 134th Street and moves west for 685 feet until meeting up with S. St. Lawrence Avenue. The boundary then follows the western curb of S. St. Lawrence Avenue and travels north for 2,637 feet back to the point of origin. All measurements are approximate.

Boundary Justification (Explain why the boundaries were selected.)

The boundaries of the Altgeld Gardens – Philip Murray Homes Historic District encompass the majority of the original 1944 Altgeld Gardens and 1953 Philip Murray Homes sites developed by the Chicago Housing Authority. In addition to original CHA residential, administrative, and amenity structures, within this original development boundary are other publicly-owned and privately-owned structures and publicly-owned Carver Park with were constructed after 1944.

Due to their lack of historic integrity, demolished Altgeld Gardens housing parcels east of Greenwood Avenue ("Blocks 11, 12, and 13"), the 1990s health center site at the northeast corner of Greenwood Avenue and Ellis Avenue, and demolished Philip Murray housing parcels south of 133rd Street ("Blocks 15 and 16") are not included in the district boundary.

A landscaped greenway that was historically part of the original 1944 Altgeld Gardens site plan between the Altgeld Gardens development and 130th Street is also included within the district boundary.

Also included within in the district boundary are five large public facilities abutting the original Altgeld Gardens – Murray Homes development that played a significant part in life at Altgeld Gardens – Philip Murray Homes and in the community's early development: Our Lady of the Gardens Church / School and Gymnasium, Carver High School (CICS Larry Hawkins), Carver Primary School, and Aldridge Elementary School.

The portion of Carver Park south of 133rd Street which has played a significant part in life at Altgeld Gardens – Philip Murray Homes has also been included within in the district boundary.

11. Form Prepared By

Rachel Barnhart, Gabrielle Begue, John Cramer, Beth Jacob,
Emily Ramsey, Chris Usler, Matt Wicklund, Shannon Winterhalter, Lara
Ramsey, Dr. Christopher Reed (Peer Reviewer)

name/title Ramsey, Dr. Christopher Reed (Peer Reviewer) date September 20, 2021
organization MacRostie Historic Advisors, LLC telephone 312-973-3904
street & number 53 W. Jackson Blvd., Suite 1142 email jcramer@mac-ha.com
city or town Chicago state IL zip code 60604

Additional Documentation

Submit the following items with the completed form:

- **GIS Location Map (Google Earth or BING)**

- **Local Location Map**
- **Site Plan**
- **Floor Plans (As Applicable)**
- **Photo Location Map** (Include for historic districts and properties having large acreage or numerous resources. Key all photographs to this map and insert immediately after the photo log and before the list of figures).

Altgeld Gardens – Philip Murray Homes Historic District
Name of Property

Cook County, Illinois
County and State

Photographs:

Submit clear and descriptive photographs. The size of each image must be 3000x2000 pixels, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Altgeld Gardens – Philip Murray Homes Historic District

City or Vicinity: Chicago

County: Cook State: IL

Photographer: Rachel Barnhart, John Cramer, Chris Usler

Date Photographed: January 2020, March 2021

Description of Photograph(s) and number, include description of view indicating direction of camera:

Photo 1 of 33: Altgeld Gardens Apartments, west and south elevations, view northeast
Photo 2 of 33: Altgeld Gardens Apartments, west and south elevations, view northeast
Photo 3 of 33: Altgeld Gardens Apartments, south elevation, view north
Photo 4 of 33: Altgeld Gardens Apartments, east, south, and north elevations, view southeast
Photo 5 of 33: Altgeld Gardens Courtyard, view west
Photo 6 of 33: Philip Murray Apartments, west elevation, view east
Photo 7 of 33: Philip Murray Apartments, south and east elevations, view northwest
Photo 8 of 33: Philip Murray Apartments, south and east elevations, view northwest
Photo 9 of 33: Philip Murray Apartments, south and east elevations, view northeast
Photo 10 of 33: Philip Murray Apartments, overview, view west
Photo 11 of 33: Administrative Building, northeast elevation, view southwest
Photo 12 of 33: Administrative Building, northwest and northeast elevations, view southeast
Photo 13 of 33: Children's Building, northeast and northwest elevations, view southwest
Photo 14 of 33: School Building A, west and south elevations, view northeast
Photo 15 of 33: School Building B, southeast elevation, view northwest
Photo 16 of 33: School Building C, south elevation, view north
Photo 17 of 33: School Building D, west and north elevations, view southeast
Photo 18 of 33: Shop Building, northwest and southwest elevations, view southeast
Photo 19 of 33: Shop Building, southwest elevation, view northwest
Photo 20 of 33: Central Plaza, view north/northwest
Photo 21 of 33: United Church of Altgeld, northwest and southwest elevations, view south/southeast
Photo 22 of 33: Carver Park Indoor Pool, southeast elevation, view northwest
Photo 23 of 33: Community Building No. 2, west and south elevations, view northeast
Photo 24 of 33: Carver Park, view southeast
Photo 25 of 33: Dorothy Gautreaux Child Development Center, east and north elevations, view southwest
Photo 26 of 33: Carver High School, south and east elevations, view northwest
Photo 27 of 33: Carver High School, west and north elevations, view southeast
Photo 28 of 33: Our Lady of the Gardens Catholic Gymnasium (CICS Lloyd Bond), south and east elevations, view northwest
Photo 29 of 33: Our Lady of the Gardens Catholic Church and School (CICS Lloyd Bond), north and east elevations, view southwest
Photo 30 of 33: George Washington Carver Primary School, southeast elevation, view north/northeast
Photo 31 of 33: Ira F. Aldridge Elementary School, east elevation, view northwest

Photo 32 of 33: Laundry Building, Non-contributing, south and east elevations, northwest
Photo 33 of 33: Altgeld Family Resource Center, Non-contributing, north and east elevations, view southwest

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).
Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington,

List of Figures
(Resize, compact, and paste images of maps and historic documents in this section. Place captions, with figure numbers above each image. Orient maps so that north is at the top of the page, all document should be inserted with the top toward the top of the page.

Figure 1. Altgeld Gardens – Philip Murray Homes Historic District, GIS Location Map with National Register Boundary, 2021
Figure 2. Altgeld Gardens – Philip Murray Homes Historic District, Context Map, 2021.
Figure 3. Altgeld Gardens – Philip Murray Homes Historic District Block Numbering System
Figure 4. Altgeld Gardens – General Site Plan, Original 1944 Drawing Set
Figure 5. Administration Building (completed 1944). North façade terra cotta panel showing original Altgeld Gardens site plan. Note that the Shop Building and School Building D, both completed in 1945, are missing from this 1944 panel
Figure 6. Altgeld Gardens – Typical Rowhome Floor Plans, Original 1944 Drawing Set
Figure 7. Altgeld Gardens – Typical Rowhome Elevations, Original 1944 Drawing Set
Figure 8. Altgeld Gardens – View of Rowhomes, c. 1944
Figure 9. Altgeld Gardens – View of Rowhomes, c. 1944
Figure 10. Altgeld Gardens – View of Rowhomes, c. 1944
Figure 11. Altgeld Gardens – Administration Building Floor Plans, Original 1944 Drawing Set
Figure 12. Altgeld Gardens – Administration Building Elevations, Original 1944 Drawing Set
Figure 13. CHA President Elizabeth Wood at Altgeld Gardens' opening, 1944
Figure 14. Altgeld Gardens – Community and Child Care Building Floor Plan, Original 1944 Drawing Set
Figure 15. Altgeld Gardens – Community and Child Care Building Elevations, Original 1944 Drawing Set
Figure 16. 1945 Carver High School, Assembly Hall, and Elementary School Buildings – "Plan Four Unit School for Altgeld Housing Project."
Figure 17. Altgeld Gardens Shop Building, c. 1945
Figure 18. Altgeld Gardens Shop Building, c. 1945
Figure 19. Altgeld Gardens Shop Building, c. 1945
Figure 20. Altgeld Gardens Shop Building, c. 1945
Figure 21. Altgeld Gardens Consumer Co-operative ("Co-op") members, c. 1945
Figure 22. Carver High School – "$2,200,000 School Designed for Altgeld Gardens."
Figure 23. "Altgeld Gardens manager Robert Murphy hands keys to the last family to move out of temporary veterans housing and into permanent public housing, 1950s."
Figure 24. Our Lady of the Gardens – "Plan for New Church for Altgeld Gardens Area."
Figure 25. Aerial plan showing locations of new Philip Murray Homes, 1950.
Figure 26. Philip Murray Homes – General Site Plan, Original 1950 Drawing Set
Figure 27. Philip Murray Homes – Typical Rowhome Floor Plans, Original 1950 Drawing Set
Figure 28. Philip Murray Homes – Typical Rowhome Elevations, Original 1950 Drawing Set
Figure 29. Opening of Philip Murray Homes, 1954
Figure 30. Altgeld Gardens – Philip Murray Homes – Aerial view from the southwest, c. 1953

Figure 31. Altgeld Gardens – Aerial view from the southeast, 1958
Figure 32. 1881 Map of the Calumet Region
Figure 33. Plan of Pullman Sewage Farm, 1880
Figure 34. 1930 aerial view of the Lake Calumet Industrial District
Figure 35. 1938 aerial photo of steel mills along the Calumet River
Figure 36. Whispering Pines protest, 1979
Figure 37. Reverend Benjamin Chavis at the Warren County, North Carolina PCB protest, 1982.
Figure 38. Warren County, North Carolina PCB protest, 1982.
Figure 39. Cover of *Toxic Wastes and Race in the United States.*
Figure 40. People for Community Recovery's original office location sign at Altgeld Gardens' Shop Building, c. 1985.
Figure 41. People for Community Recovery's 1987 publication *Save Your Life from the Toxic Trap*
Figure 42. Undated photograph of Hazel Johnson outside the office of People for Community Recovery
Figure 43. Hazel Johnson alongside Chicago Mayor Harold Washington at a January 1987 ceremony celebrating the connection of Maryland Manor homes to municipal water and sewer lines
Figure 44. Google Map of Altgeld Gardens' "Toxic Doughnut Map."
Figure 45. U.S. President George H. W. Bush presenting Hazel Johnson with the President's Environmental and Conservation Challenge Award from at a 1992 White House ceremony
Figure 46. Hazel Johnson at the White House, 1992
Figure 47. Hazel Johnson (fifth from the right) at the 1992 United Nations Conference on Environment and Development (UNCED) Earth Summit in Rio de Janeiro, Brazil
Figure 48. U.S. President Bill Clinton signing Executive Order 12898 at a 1994 Oval Office ceremony with Hazel Johnson in attendance (third from right)
Figure 49. Altgeld Gardens – Philip Murray Homes Historic District, Resource Map – Sites, Structures, and Objects, 2021.
Figure 50. Altgeld Gardens – Philip Murray Homes Historic District, Resource Map – Buildings, 2021.

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Figure 1. Altgeld Gardens – Philip Murray Homes Historic District, GIS Location Map with National Register Boundary, 2021.
Source: Google Earth, 2021.

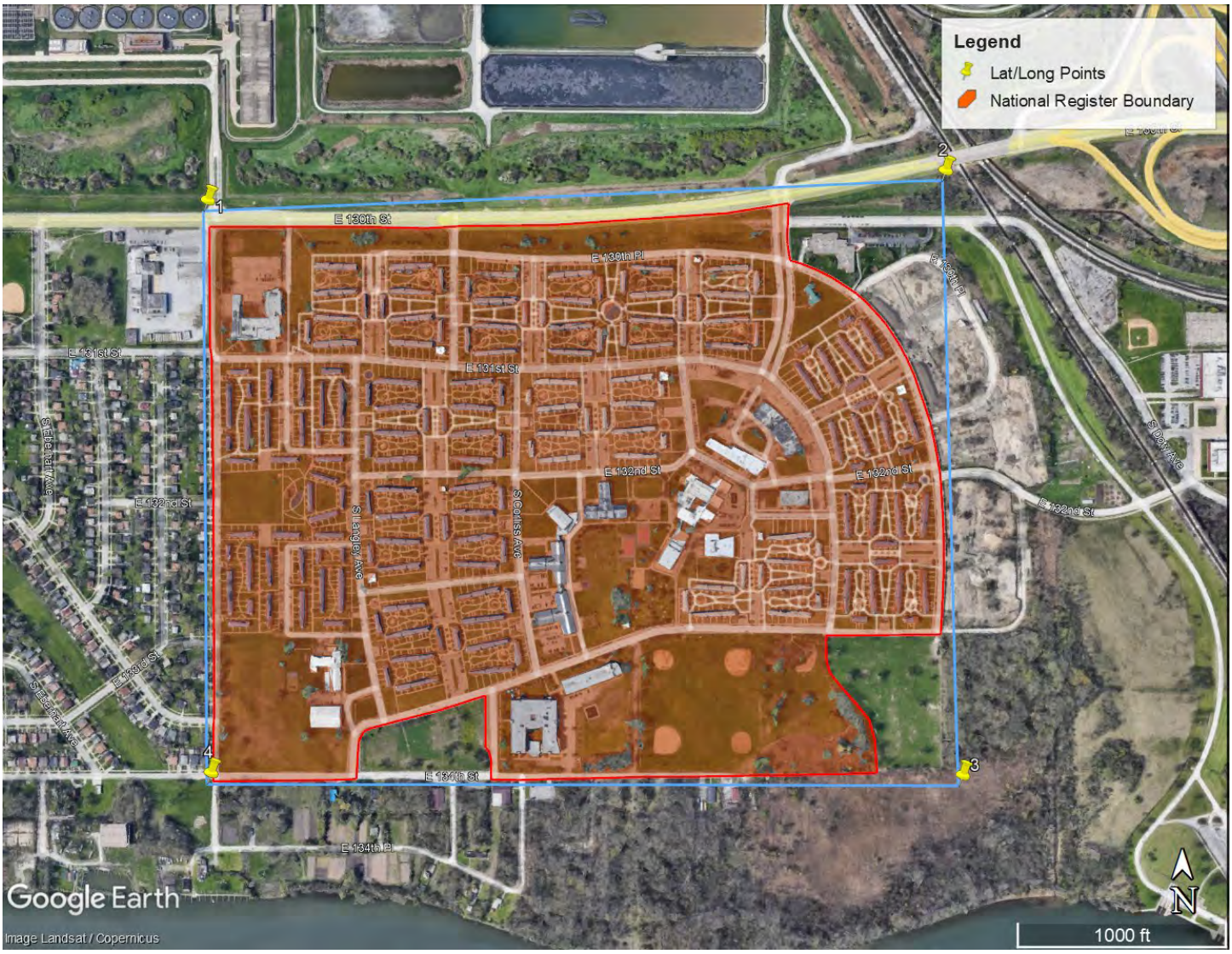

1. 41°39'33.31"N, 87°36'27.99"W
2. 41°39'34.68"N, 87°35'41.46"W
3. 41°39'6.24"N, 87°35'40.44"W
4. 41°39'6.35"N, 87°36'27.79"W

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Figure 2. Altgeld Gardens – Philip Murray Homes Historic District, Context Map, 2021.
Source: Bing Maps, 2021.

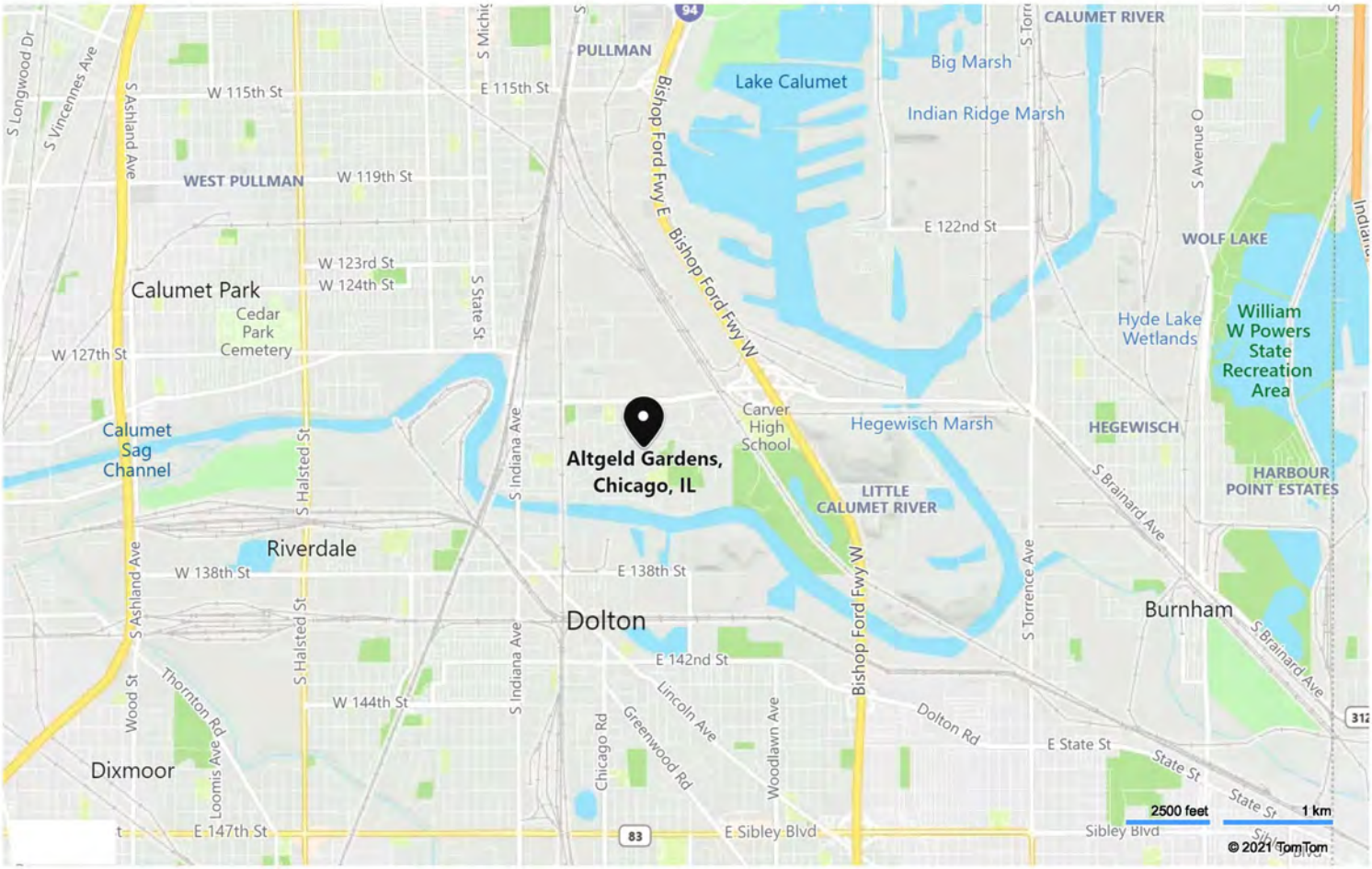

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Figure 3. Altgeld Gardens – Philip Murray Homes Historic District, Block Numbering System
2021, MacRostie Historic Advisors

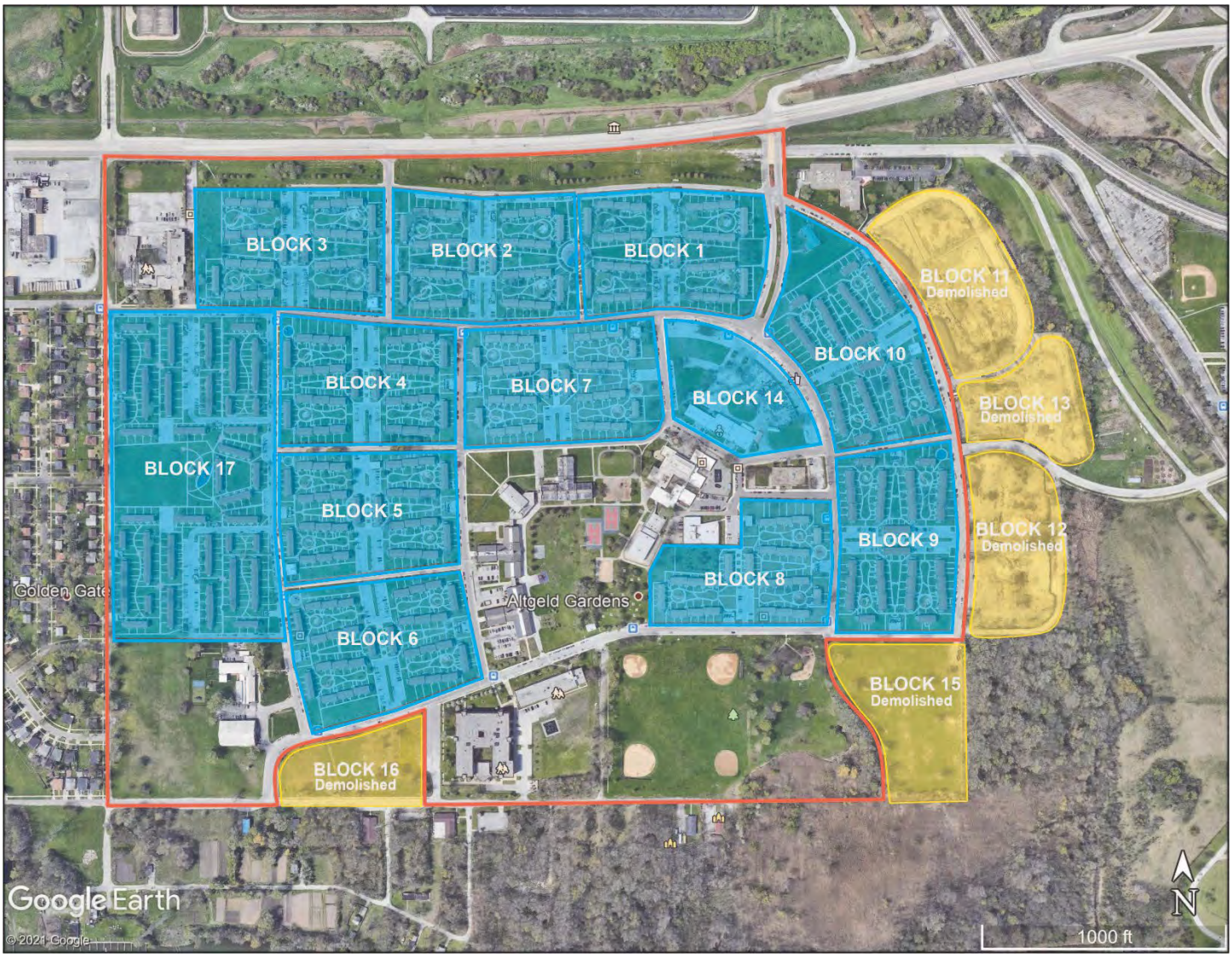

Figure 4. Altgeld Gardens – General Site Plan, Original 1944 Drawing Set
Source: 10117 – IL.2-007 , Chicago Housing Authority Archives.

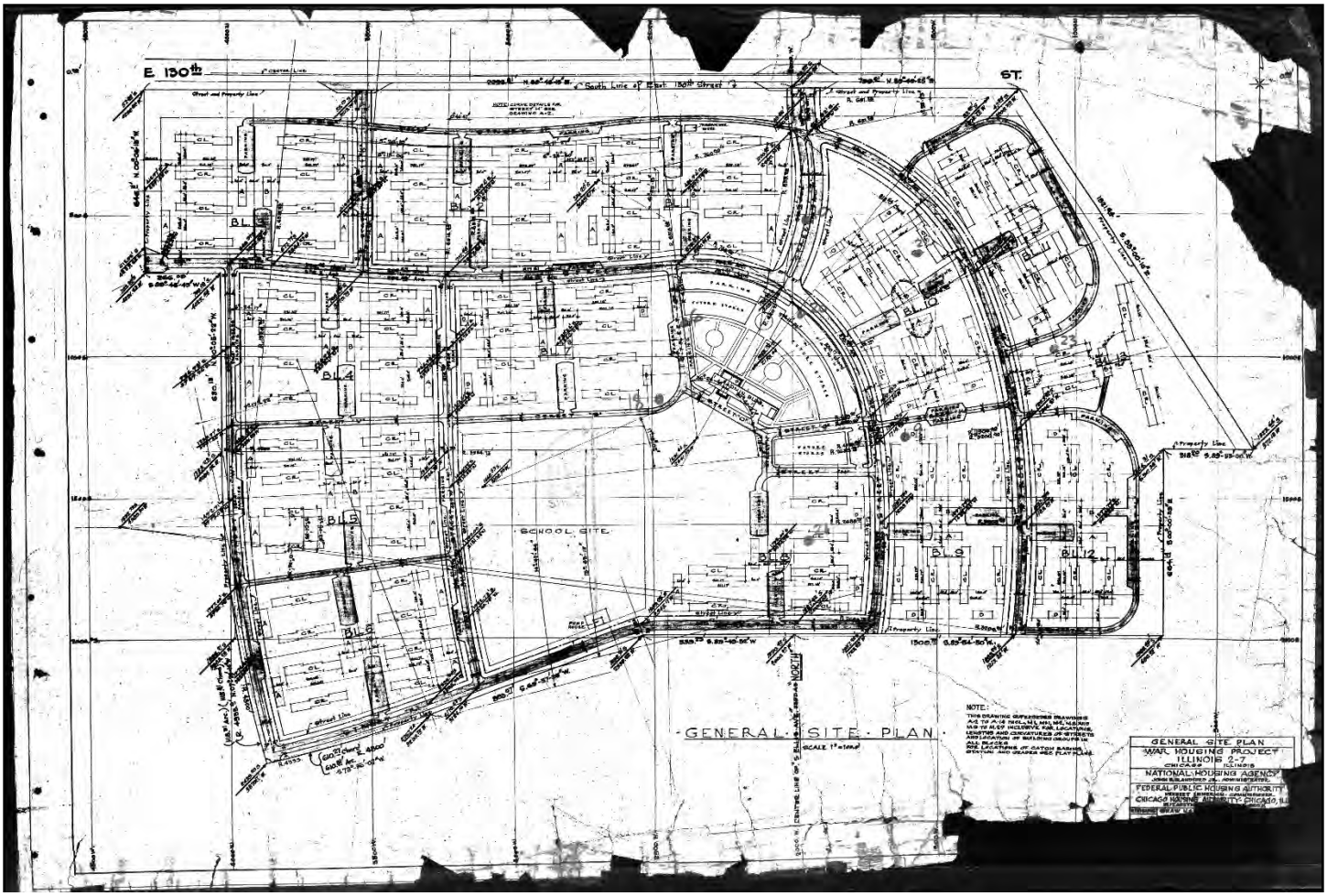

Figure 5. Administration Building (completed 1944). North façade terra cotta panel showing original Altgeld Gardens site plan. Note that the Shop Building and School Building D, both completed in 1945, are missing from this 1944 panel
Source: MacRostie Historic Advisors, LLC. 2021 photograph.

Figure 6. Altgeld Gardens – Typical Rowhome Floor Plans, Original 1944 Drawing Set
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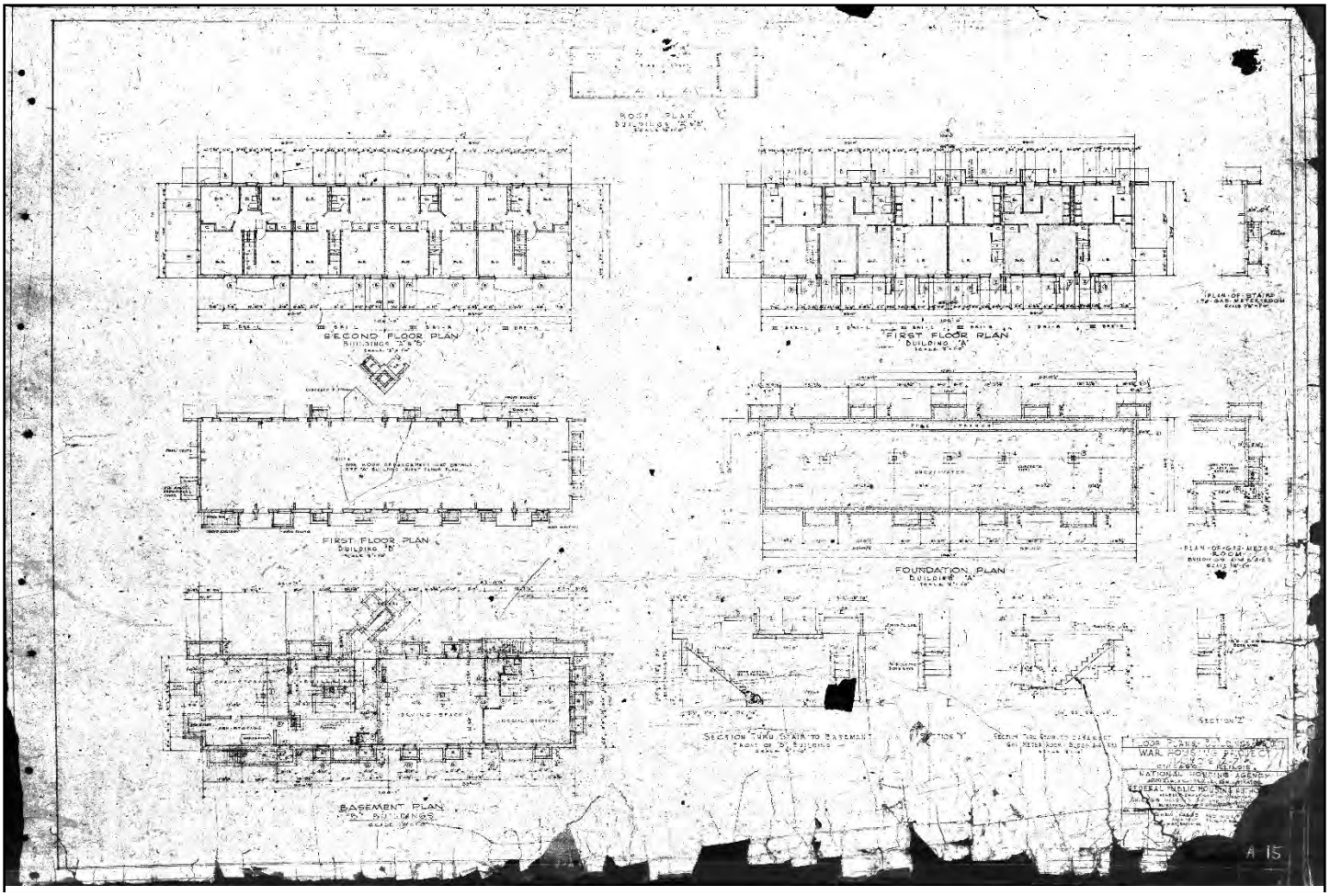

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Figure 7. Altgeld Gardens – Typical Rowhome Elevations, Original 1944 Drawing Set
Source: 10117 – IL.2-007 , Chicago Housing Authority Archives

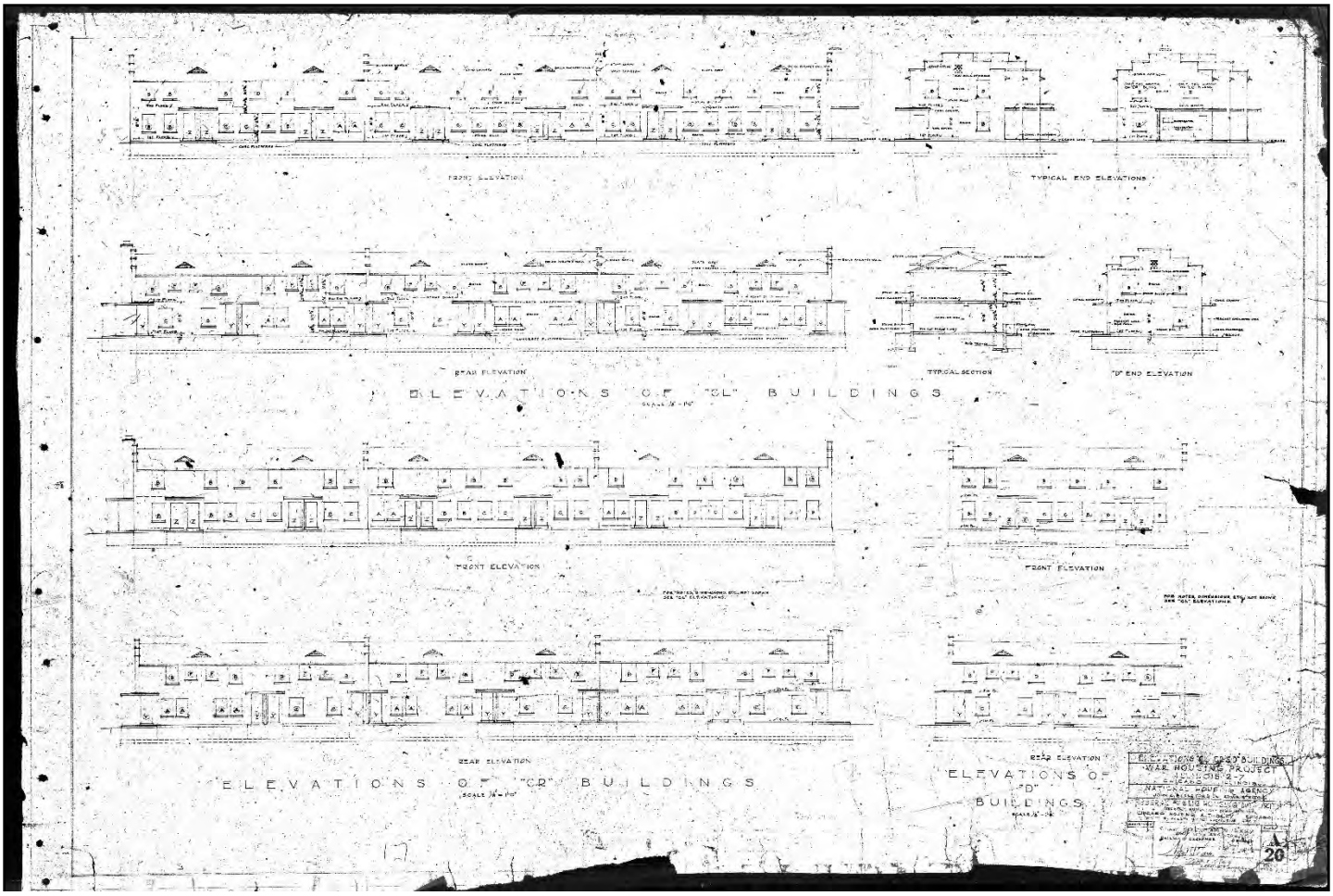

Figure 8. Altgeld Gardens – View of Rowhomes, c. 1944
Source: *The Poorhouse: Subsidized Housing in Chicago*

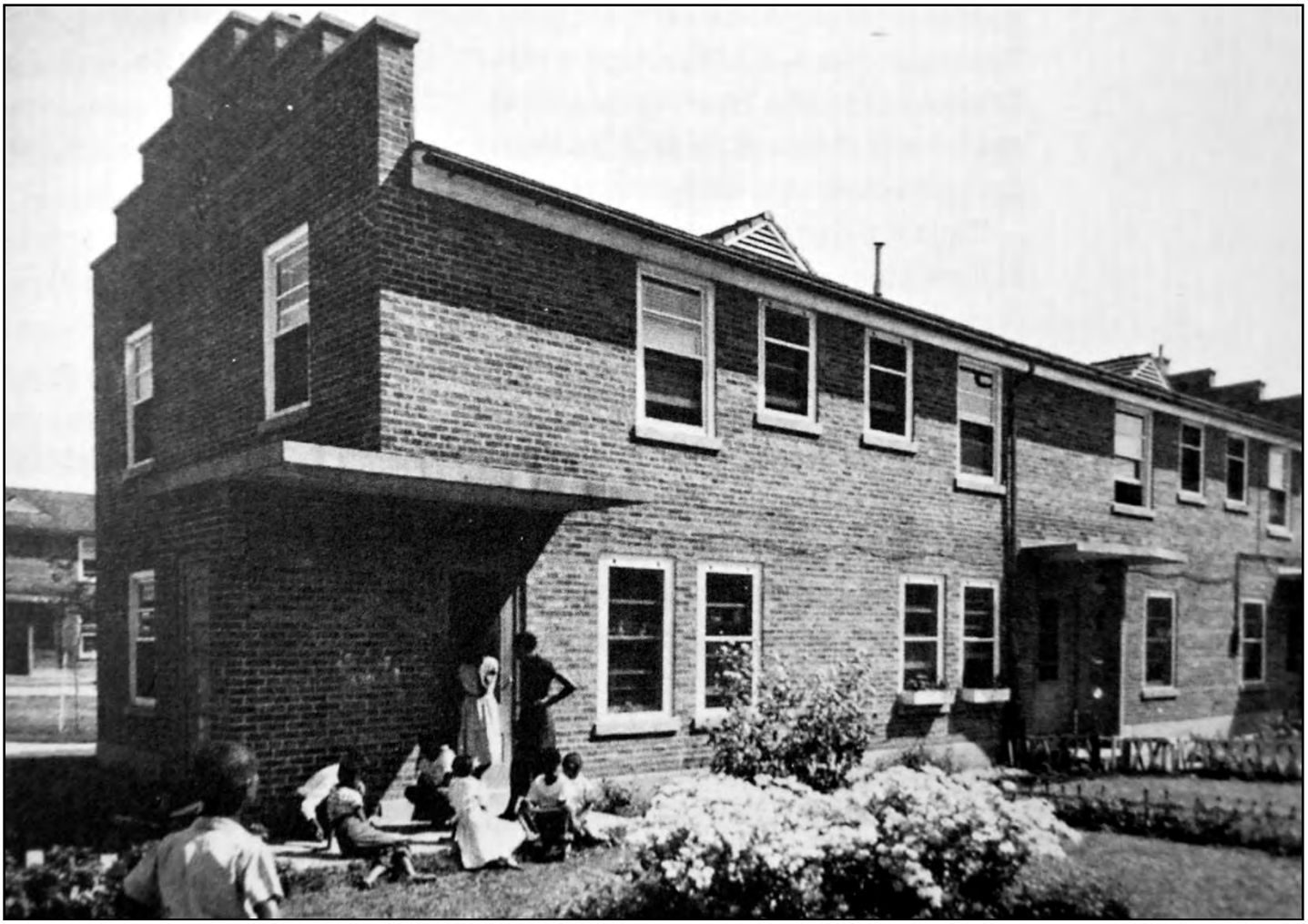

Figure 9. Altgeld Gardens – View of Rowhomes, c. 1944
Source: *History of Altgeld Gardens*

Figure 10. Altgeld Gardens – View of Rowhomes, c. 1944
Source: *Chicago Architecture and Design 1923-1993: Reconfiguration of an American Metropolis*, p. 239

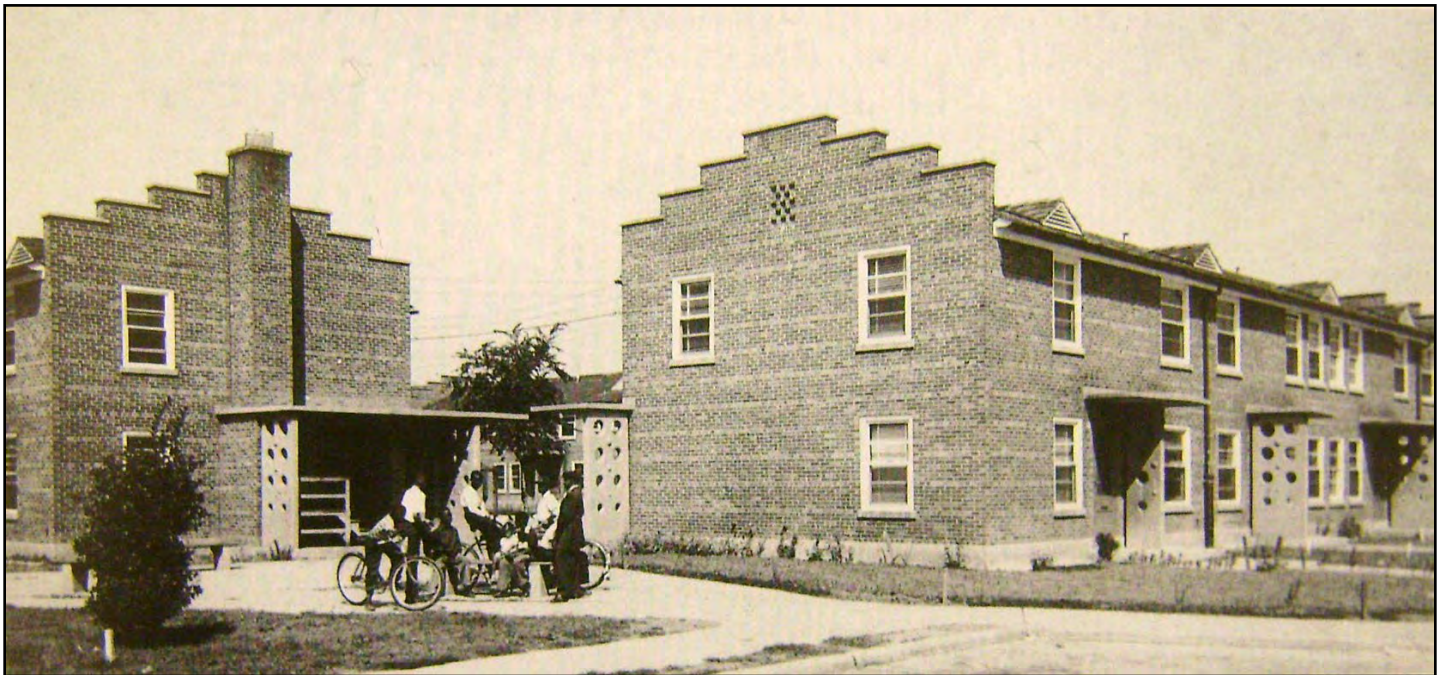

Figure 11. Altgeld Gardens – Administration Building Floor Plans, Original 1944 Drawing Set
Source: 10117 – IL.2-007 , Chicago Housing Authority Archives

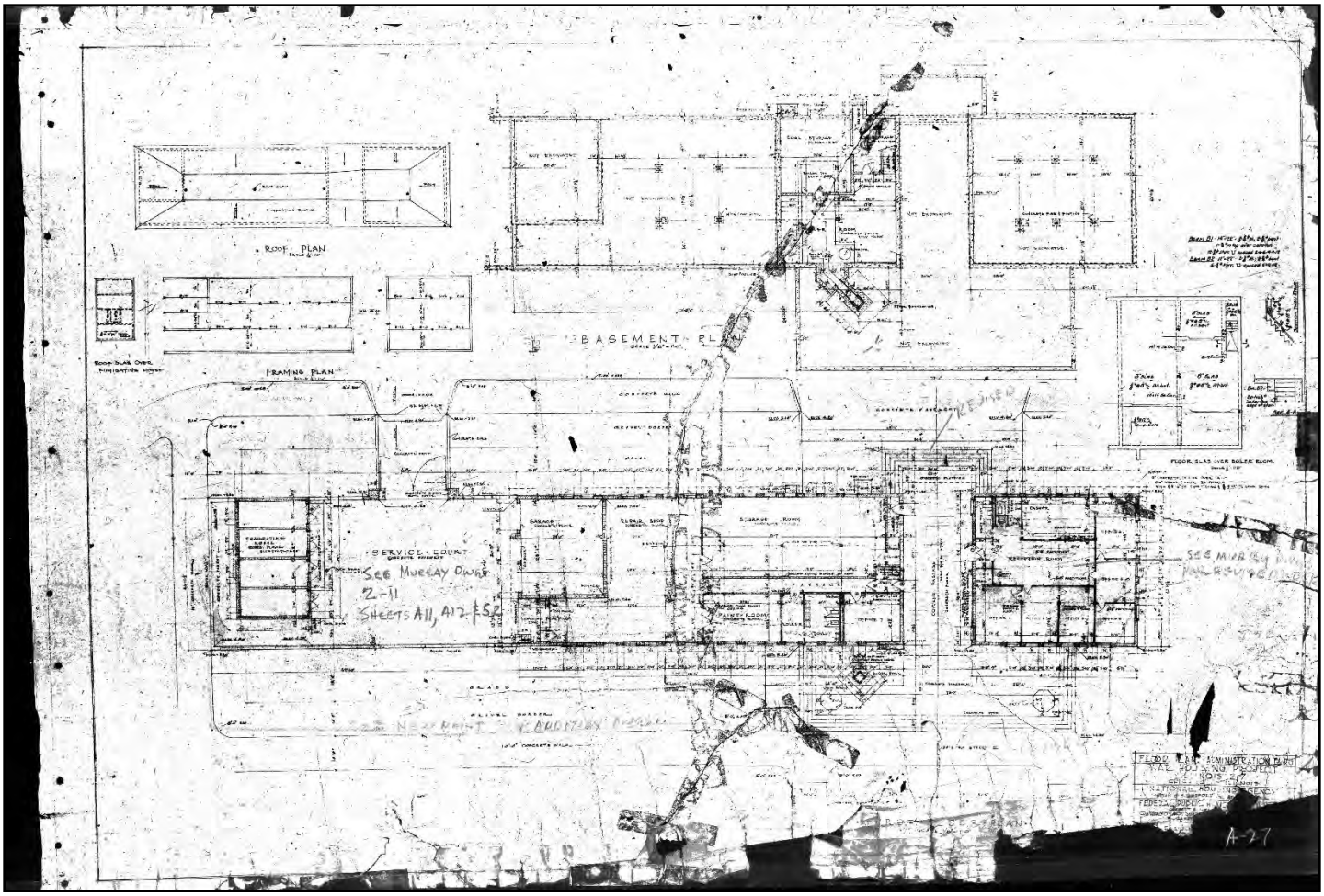

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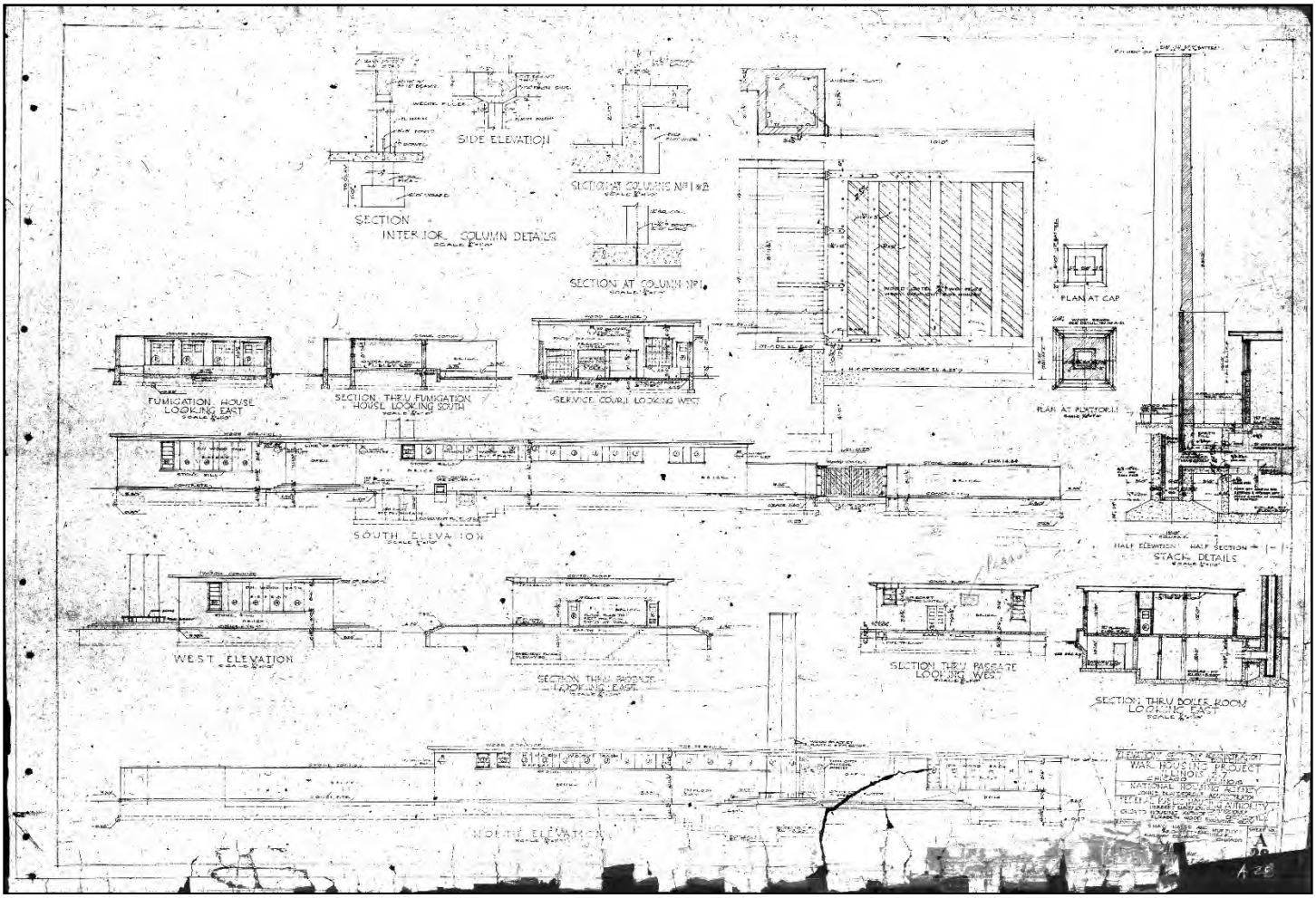

Figure 13. CHA President Elizabeth Wood at Altgeld Gardens' opening, 1944
Source: Chicagotribute.org

Figure 14. Altgeld Gardens – Community and Child Care Building Floor Plan, Original 1944 Drawing Set
Source: 10103 – IL.2-007 , Chicago Housing Authority Archives

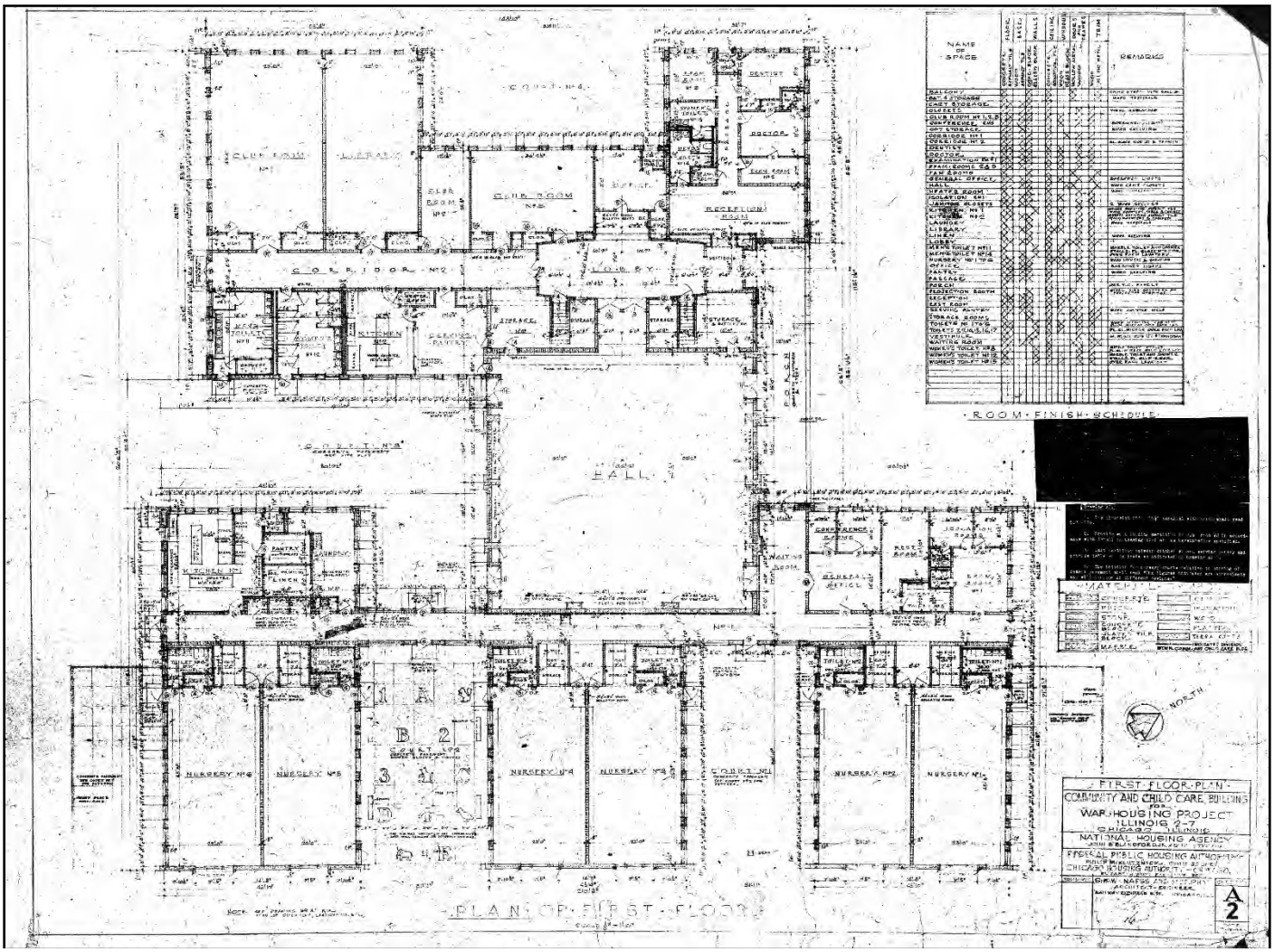

Figure 15. Altgeld Gardens – Community and Child Care Building Elevations, Original 1944 Drawing Set
Source: 10103 – IL.2-007 , Chicago Housing Authority Archives

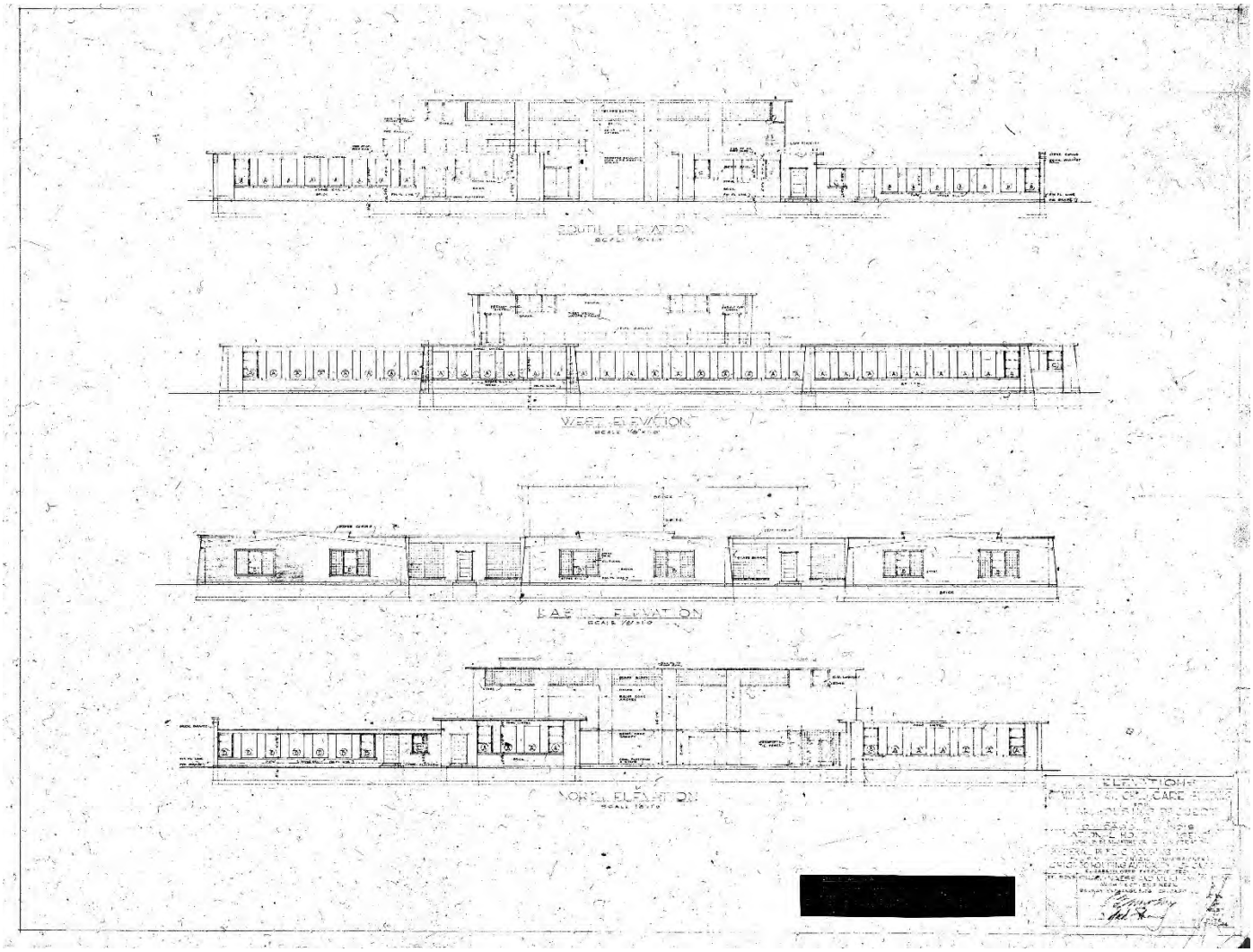

Figure 16. 1945 Carver High School, Assembly Hall, and Elementary School Buildings – "Plan Four Unit School for Altgeld Housing Project."
Source: *Chicago Daily Tribune,* April 22, 1945

Figure 17. Altgeld Gardens Shop Building, c. 1945
Source: *Chicago History Museum*

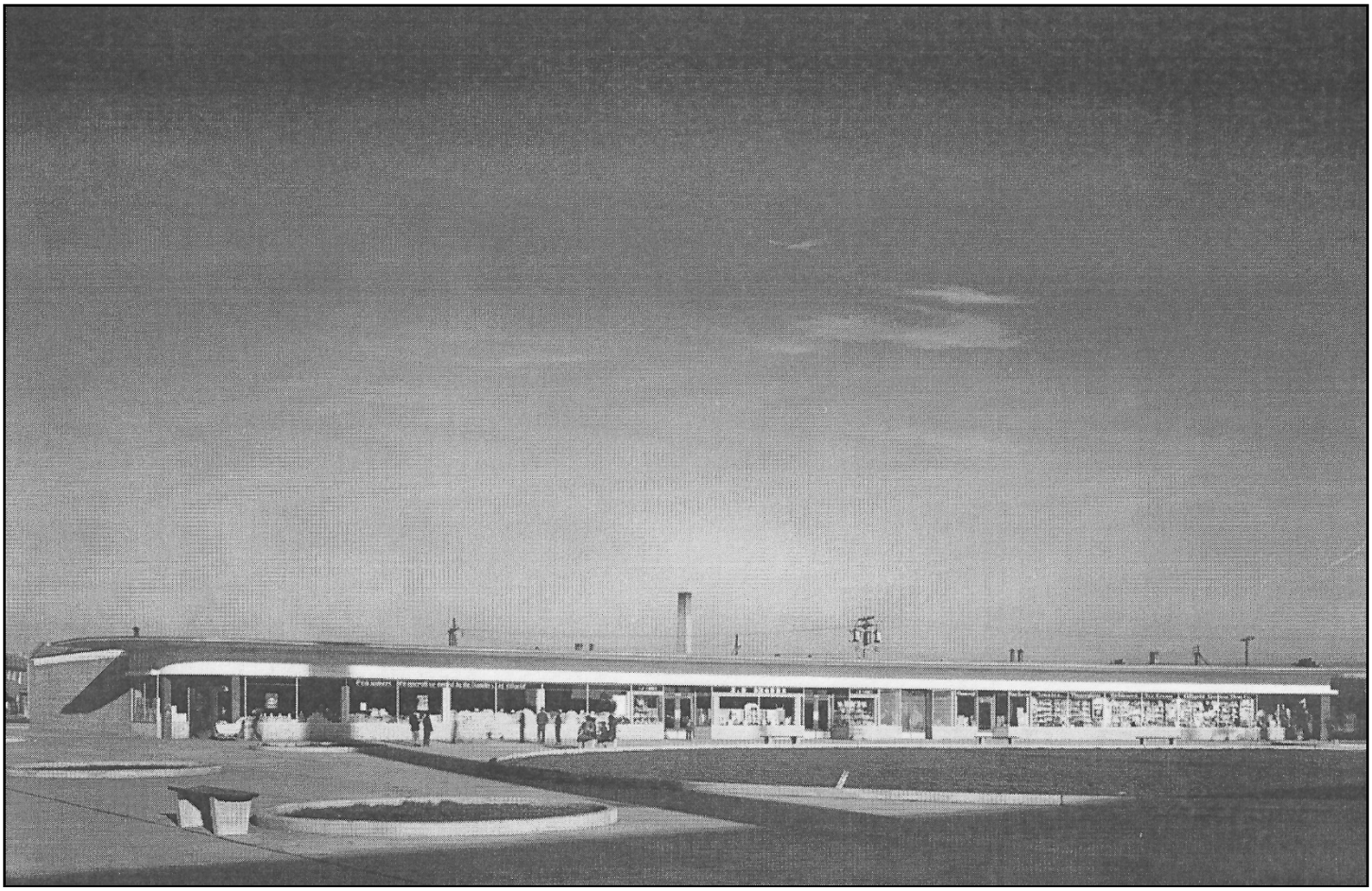

Figure 18. Altgeld Gardens Shop Building, c. 1945
Source: *Chicago History Museum*

Figure 19. Altgeld Gardens Shop Building, c. 1945
Source: *Wisconsin Historical Society*

Figure 20. Altgeld Gardens Shop Building, c. 1945
Source: *History of Altgeld Gardens*

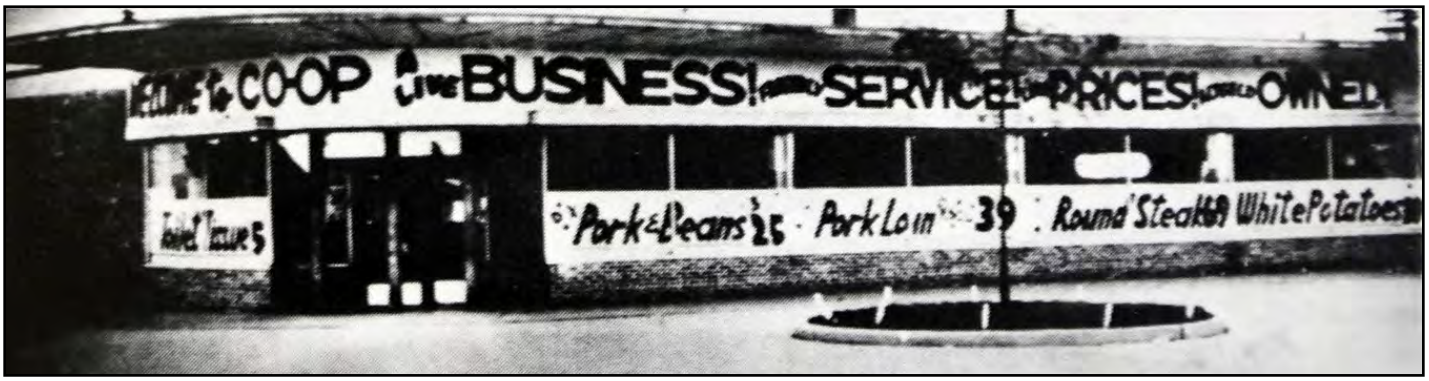

Figure 21. Altgeld Gardens Consumer Co-operative ("Co-op") members, c. 1945
Source: *History of Altgeld Gardens*

Figure 22. Carver High School – "$2,200,000 School Designed for Altgeld Gardens."
Source: *Chicago Daily Tribune,* September 28, 1947.

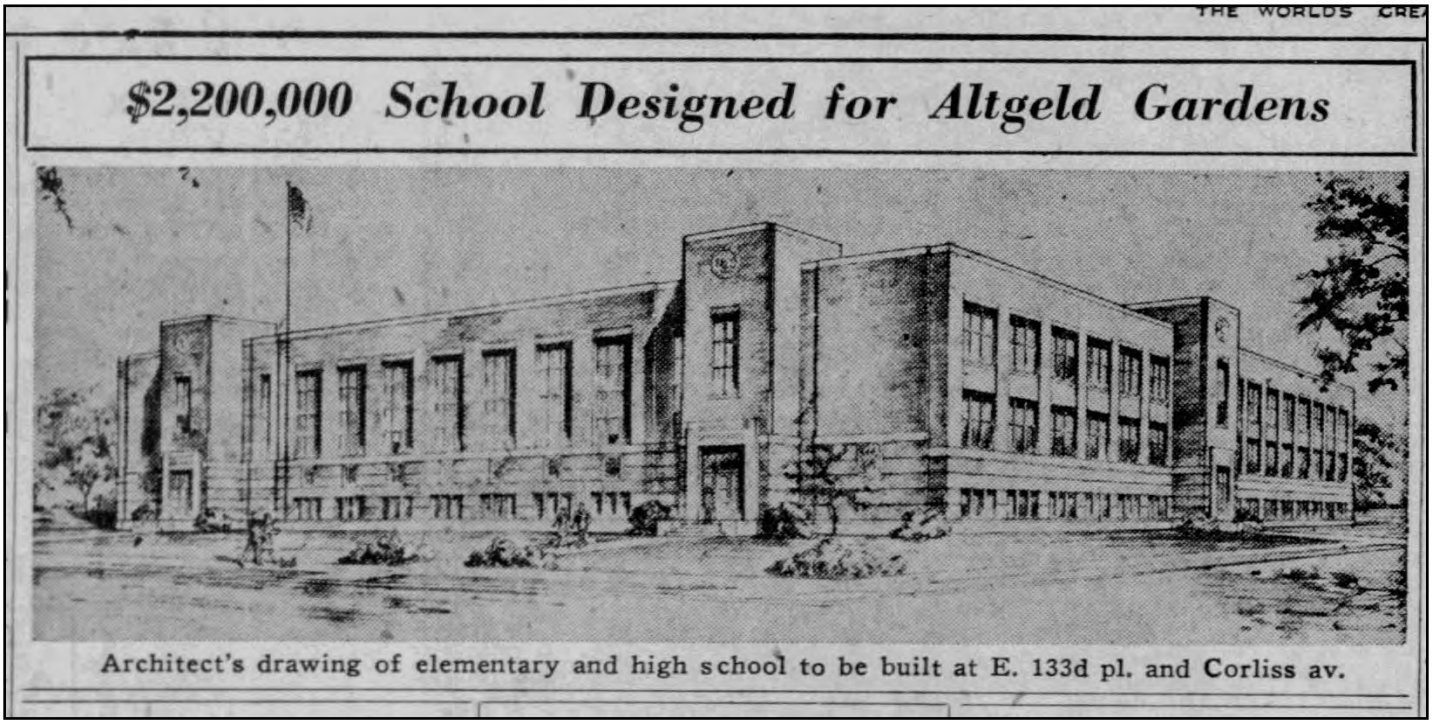

THE WORLD'S GRE

$2,200,000 School Designed for Altgeld Gardens

Architect's drawing of elementary and high school to be built at E. 133d pl. and Corliss av.

Figure 23. "Altgeld Gardens manager Robert Murphy hands keys to the last family to move out of temporary veterans housing and into permanent public housing, 1950s."
Source: *The Promise of Public Housing*, Plate 51.

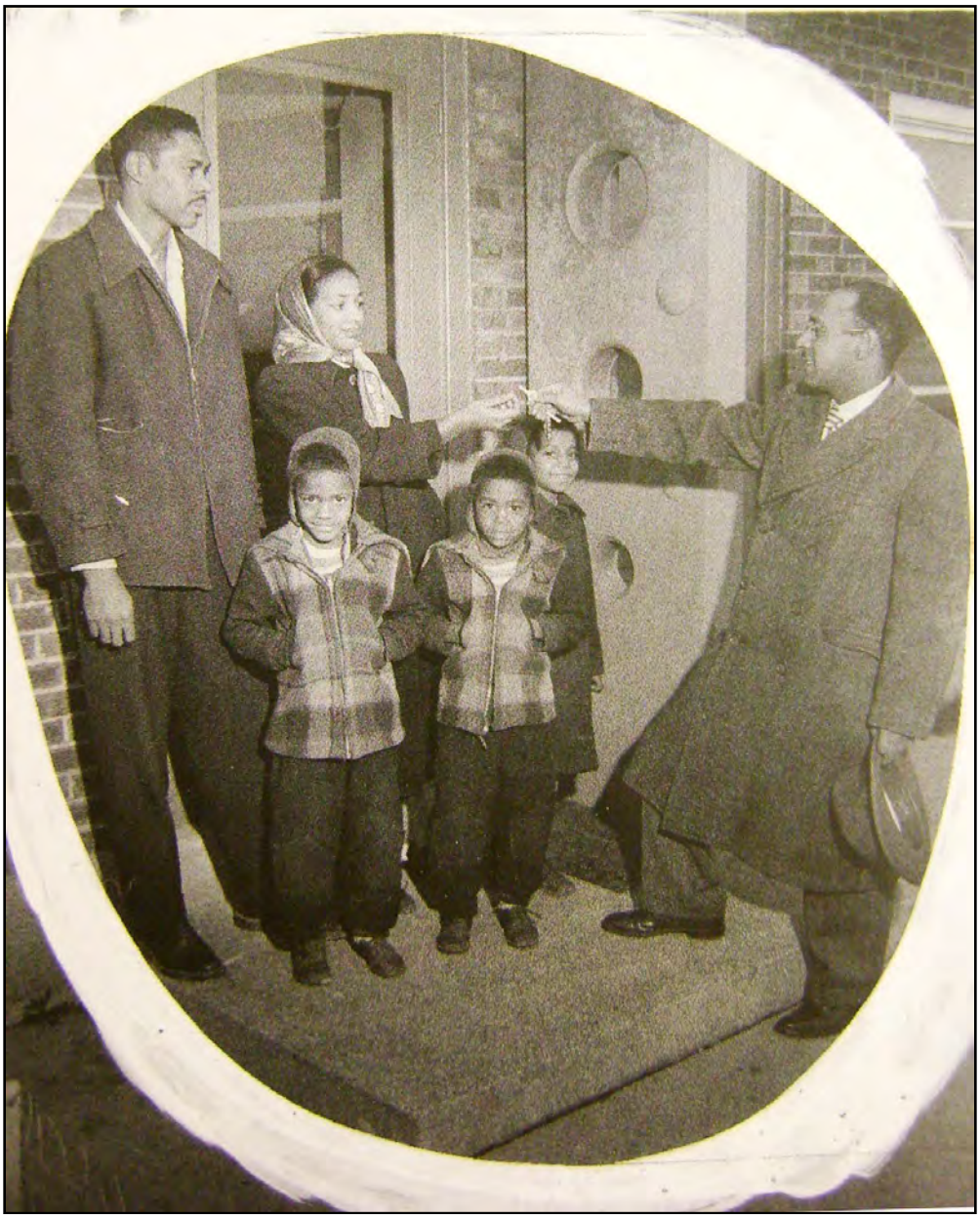

Figure 24. Our Lady of the Gardens – "Plan for New Church for Altgeld Gardens Area."
Source: *Chicago Daily Tribune,* July 20, 1952, p. 2.

Plan New Church for Altgeld Gardens Area

(Story on page 1)

Architect's drawing of Our Lady of the Garden Catholic church being built at 13391 Langley av., to serve Altgeld Gardens residents. The corner stone will be laid at 3 p. m. today. The church building will consist of a chapel, auditorium, school, and rectory.

Figure 25. Aerial plan showing locations of new Philip Murray Homes, 1950
Source: Chicago Daily Tribune, September 3, 1950, p.51

Photo by Chicago Aerial Survey company showing Altgeld areas where 500 new dwelling units are to be built. The additional Gardens public housing project at 130th st. and St. Lawrence av., and units were voted by the city council over property owners' protests.

Figure 26. Philip Murray Homes – General Site Plan, Original 1950 Drawing Set
Source: 10115 – IL.2-011 , Chicago Housing Authority Archives

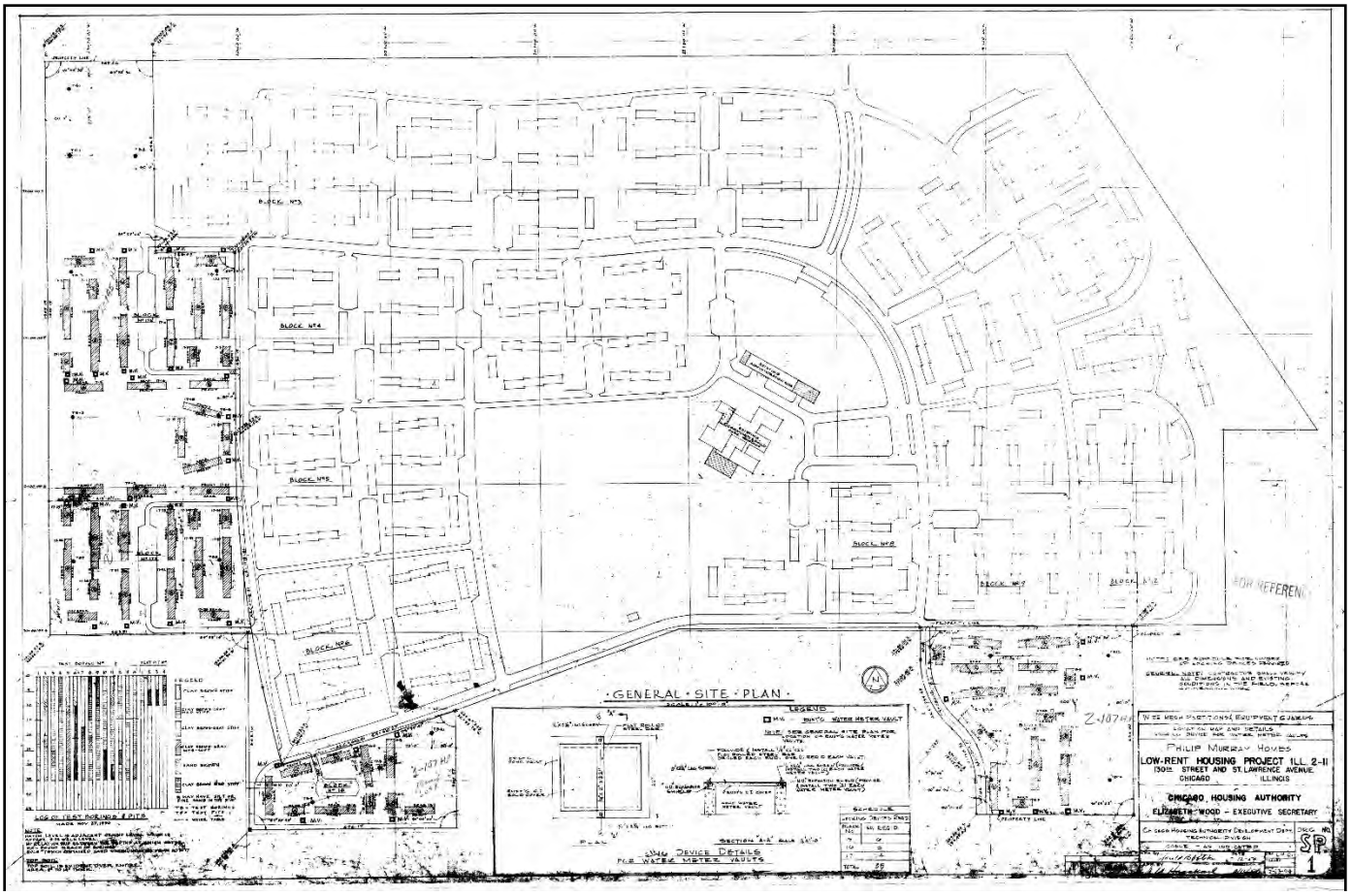

Figure 27. Philip Murray Homes – Typical Rowhome Floor Plans, Original 1950 Drawing Set
Source: 10115 – IL.2-011 , Chicago Housing Authority Archives

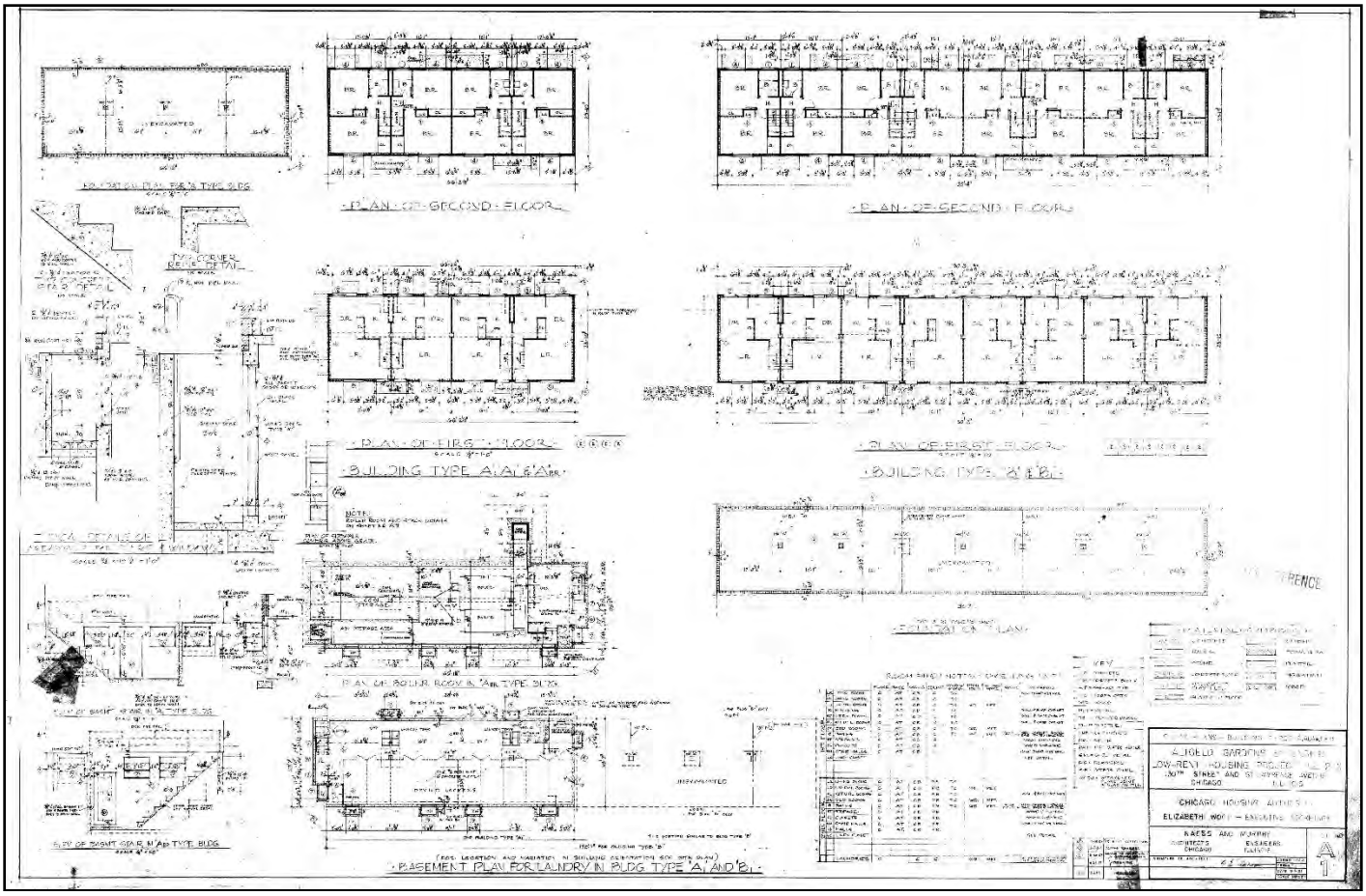

Figure 28. Philip Murray Homes – Typical Rowhome Elevations, Original 1950 Drawing Set
Source: 10115 – IL.2-011 , Chicago Housing Authority Archives

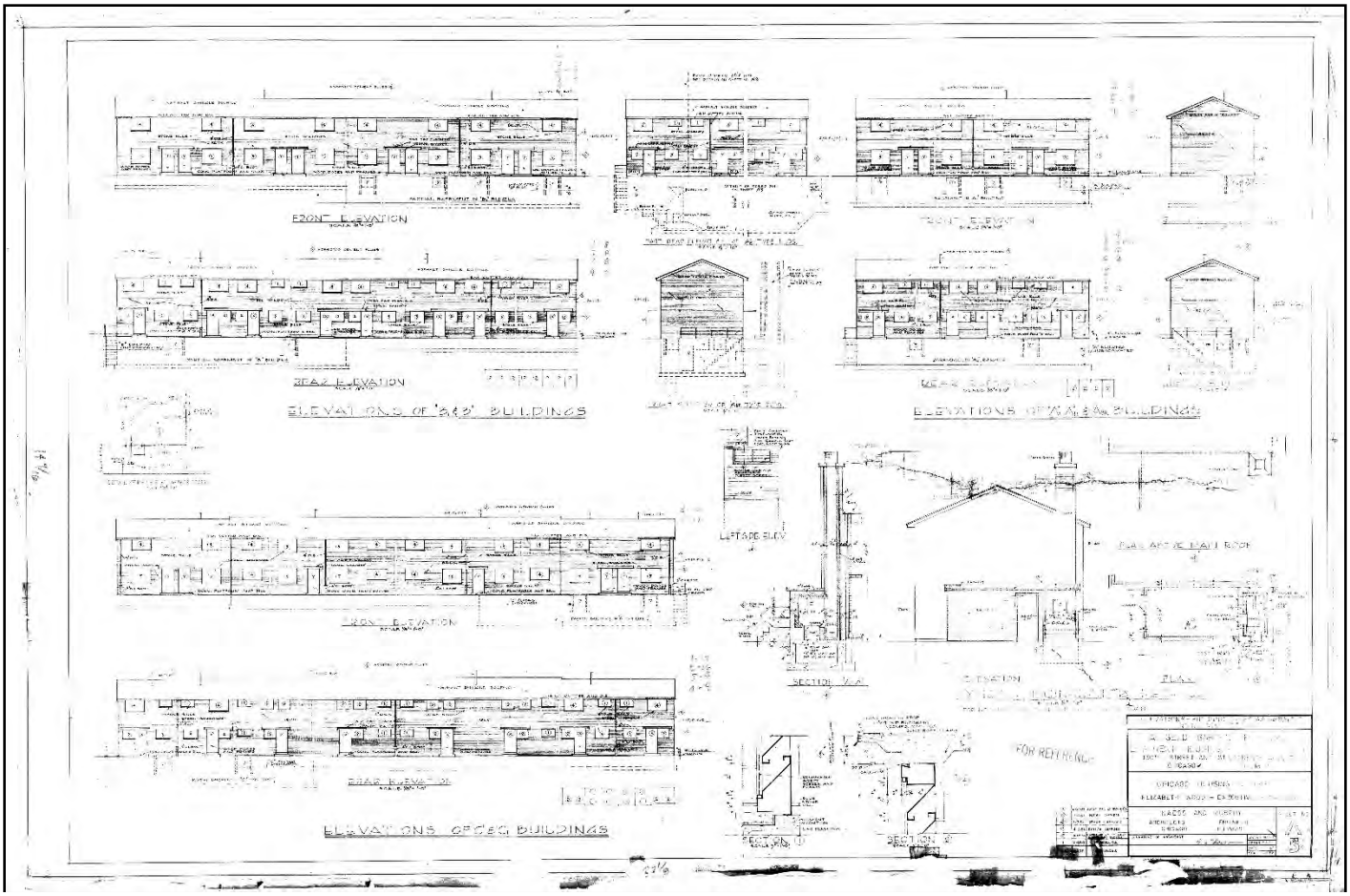

Figure 29. Opening of Philip Murray Homes, 1954
Source: *History of Altgeld Gardens*

Figure 30. Altgeld Gardens – Philip Murray Homes – Aerial view from the southwest, c. 1953
Source: *The Poorhouse: Subsidized Housing in Chicago*

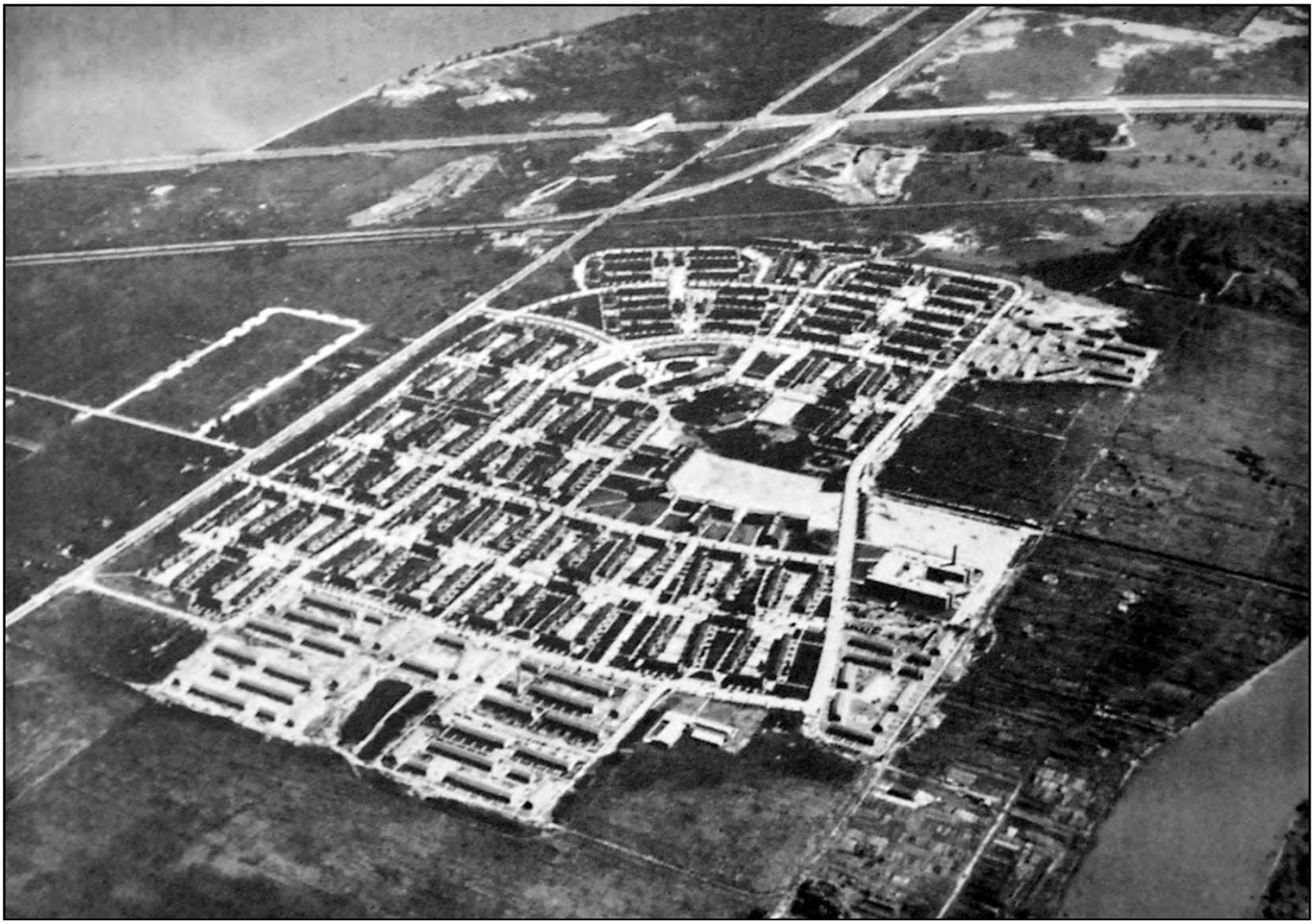

Figure 31. Altgeld Gardens – Aerial view from the southeast, 1958
Source: *History of Altgeld Gardens*

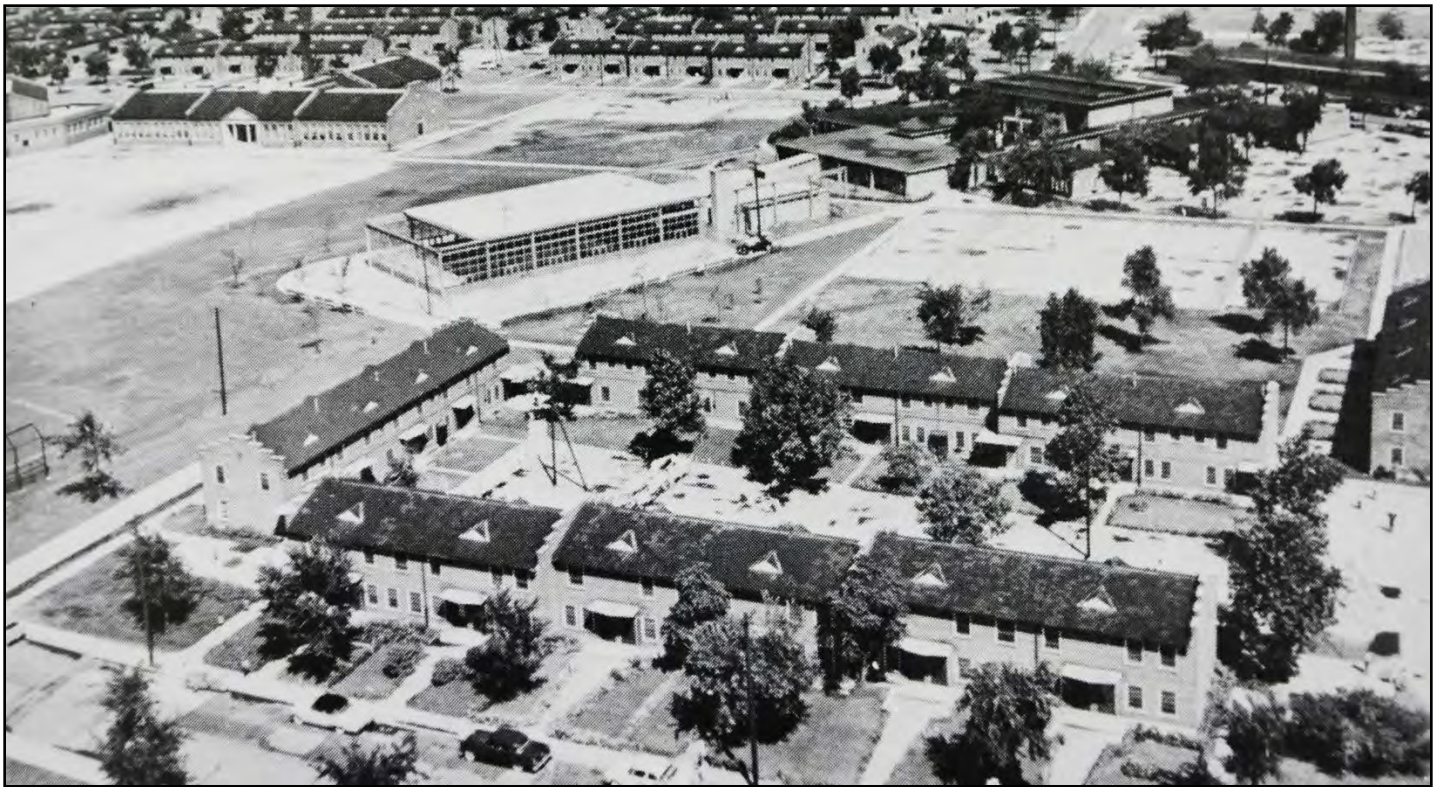

Figure 32. 1881 Map of the Calumet Region
Source: *Illinois DNR Report, 1985.*

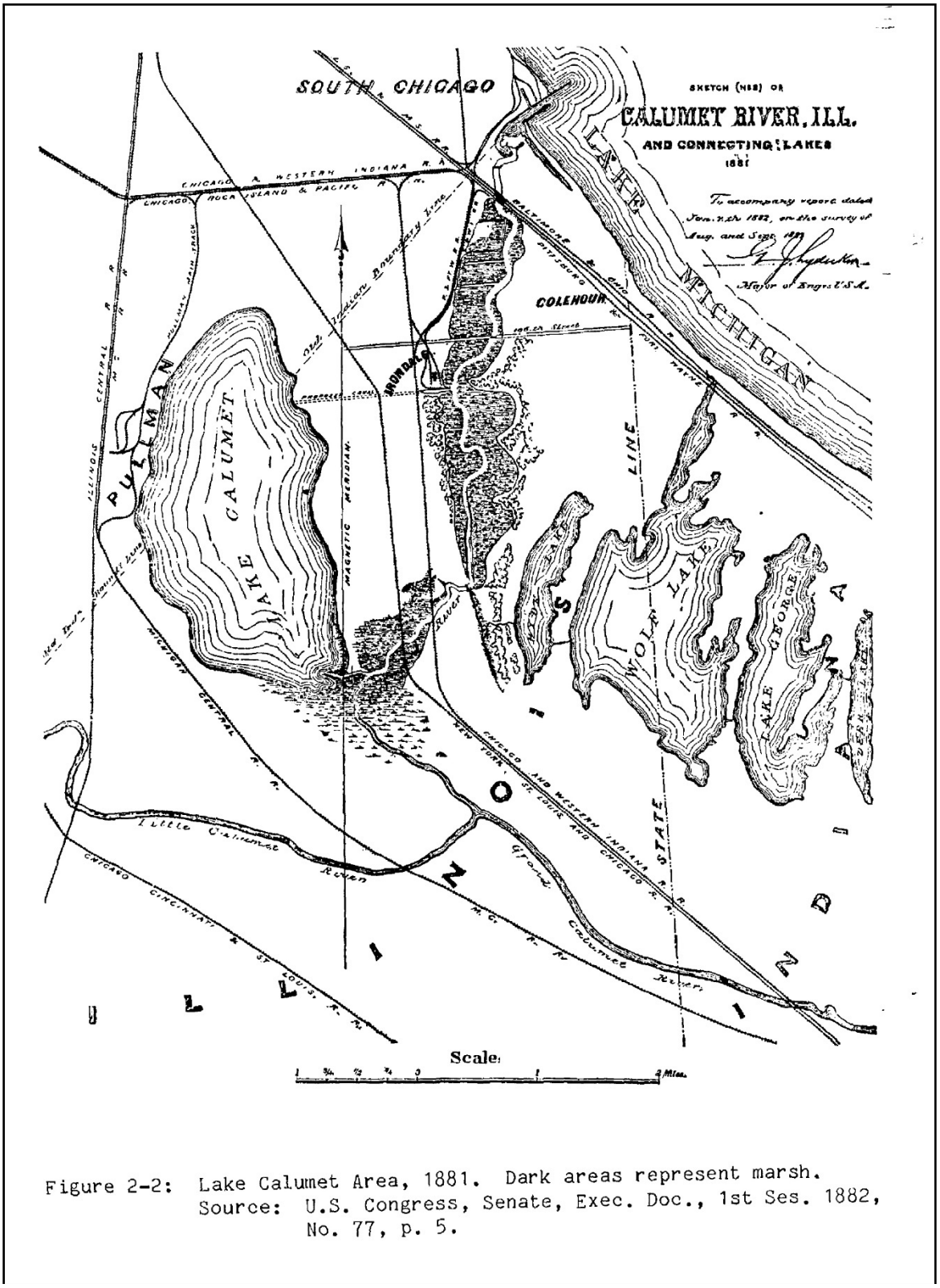

Figure 2-2: Lake Calumet Area, 1881. Dark areas represent marsh.
Source: U.S. Congress, Senate, Exec. Doc., 1st Ses. 1882, No. 77, p. 5.

Figure 33. Plan of Pullman Sewage Farm, 1880
Source: *Sewage Disposal in the United States, p. 463.*

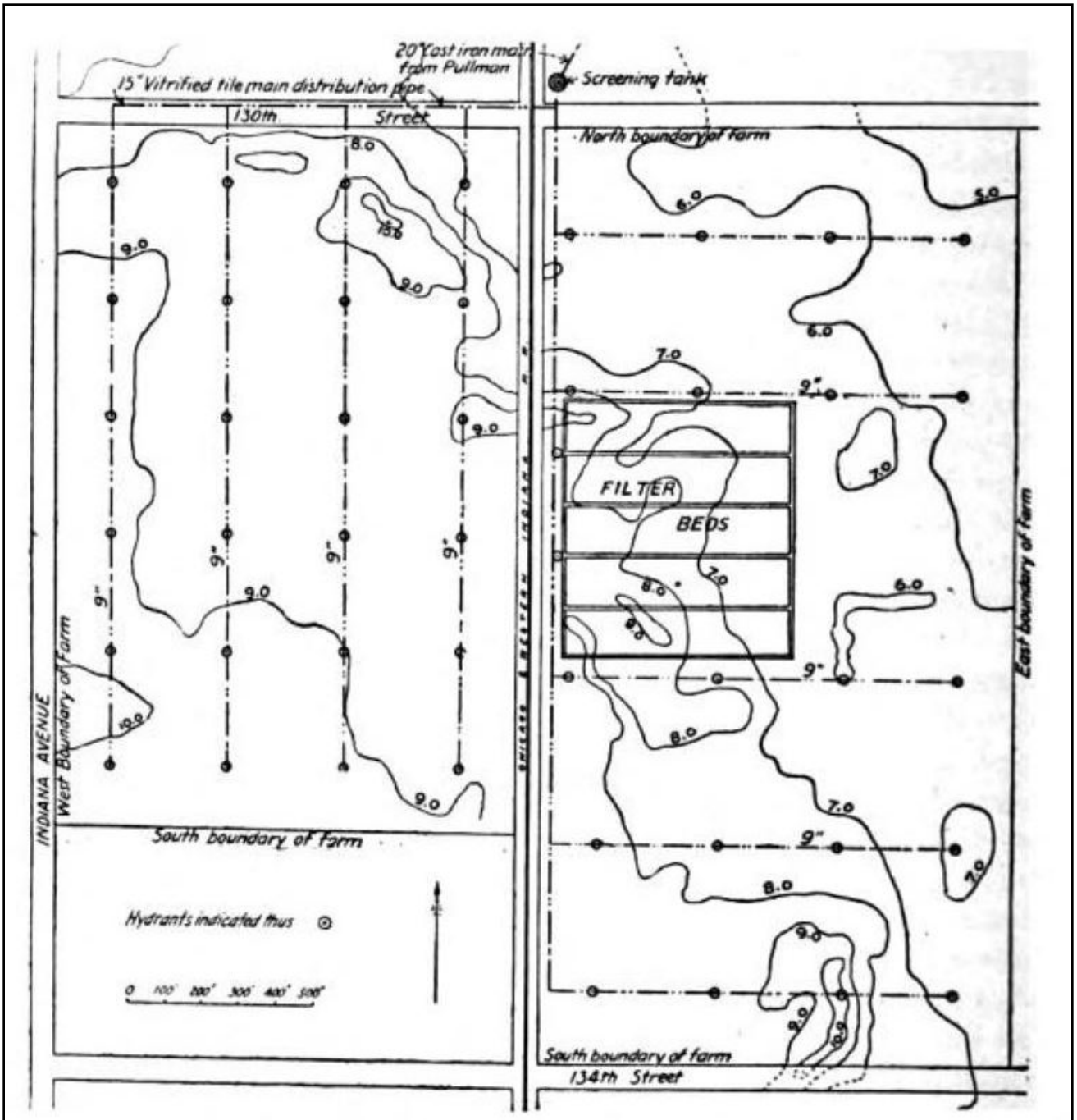

FIG. 70.—PLAN OF SEWAGE FARM AT PULLMAN, ILL., AS LAID OUT IN 1880.

Figure 34. 1930 aerial view of the Lake Calumet Industrial District
Source: *Chicago Aerial Survey.*

Figure 35. 1938 aerial photo of steel mills along the Calumet River
Source: *Chicago Aerial Survey.*

Figure 36. Whispering Pines protest, 1979
Source: *"Environmental Justice and the Politics of Garbage," Robert Bullard*.

Figure 37. Reverend Benjamin Chavis at the Warren County, North Carolina PCB protest, 1982
Source: *The Washington Post*

Figure 38. Warren County, North Carolina PCB protest, 1982
Source: climateandjustice.com

Figure 39. Cover of *Toxic Wastes and Race in the United States*
Source: *UCC report, 1987.*

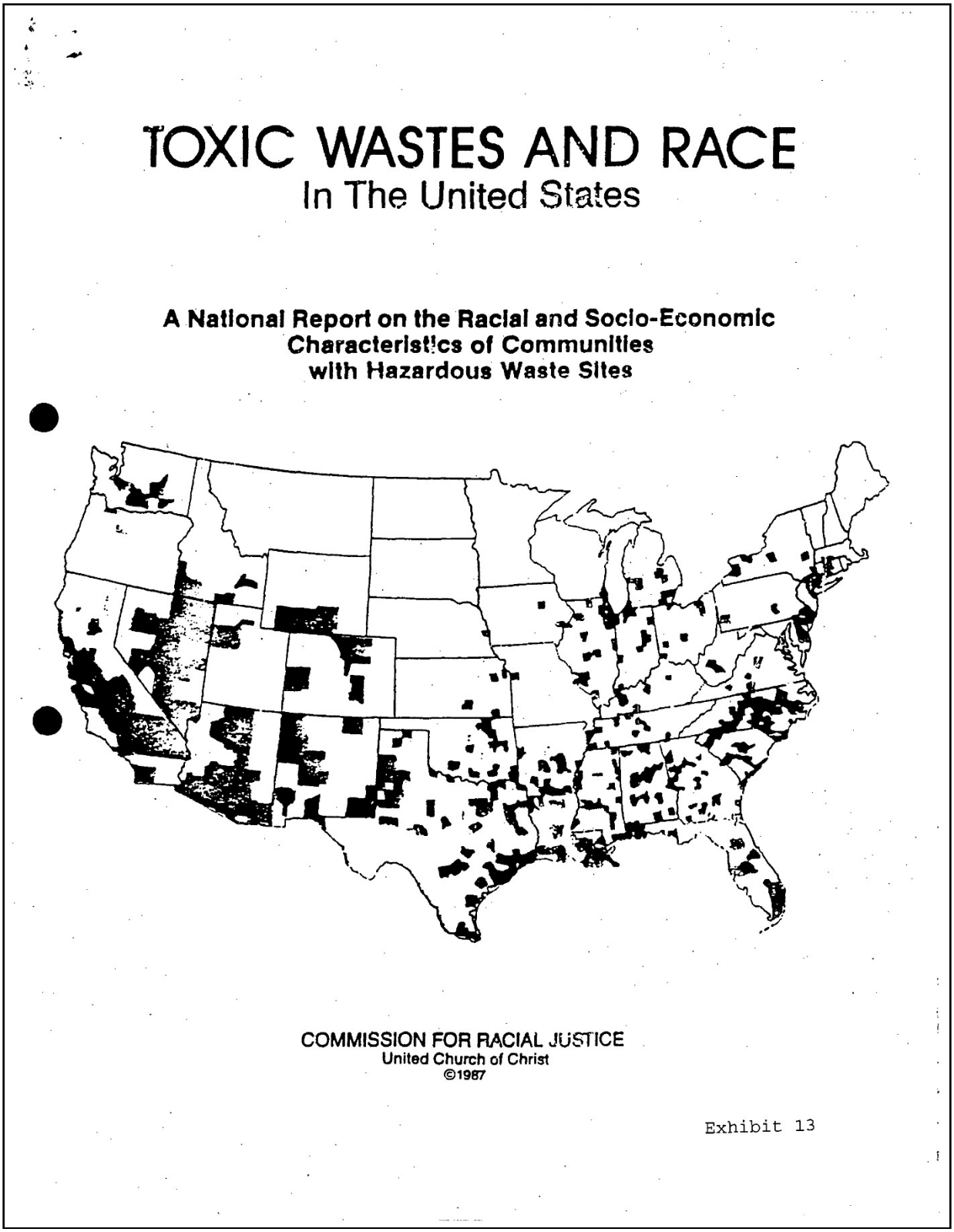

Figure 40. People for Community Recovery's original office location sign at Altgeld Gardens' Shop Building, c. 1985
Source: *People for Community Recovery Archive, Woodson Regional Library.*

Figure 41. People for Community Recovery's 1987 publication *Save Your Life from the Toxic Trap*
Source: *People for Community Recovery Archive, Woodson Regional Library.*

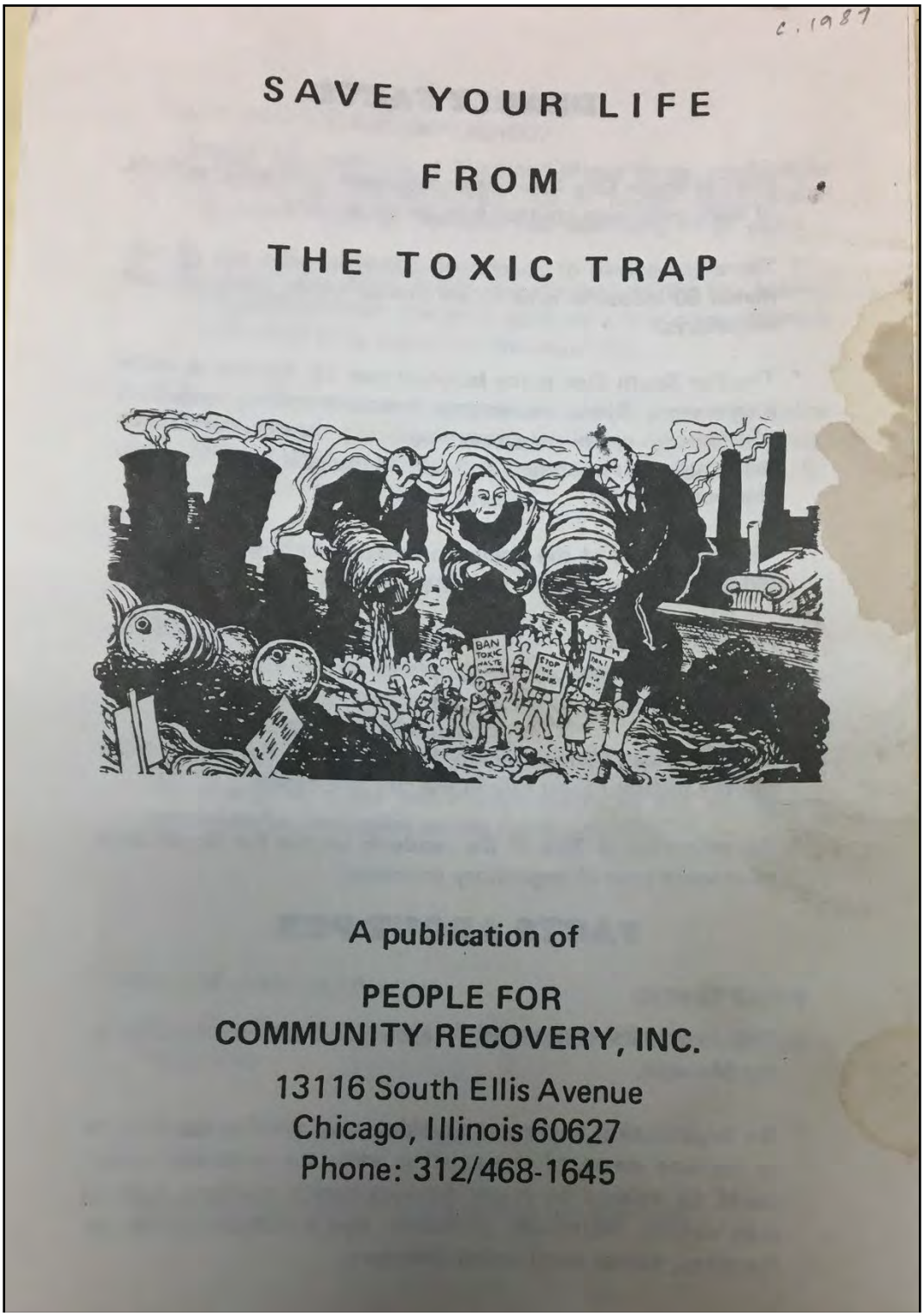

Figure 42. Undated photograph of Hazel Johnson outside the office of People for Community Recovery
Source: *People for Community Recovery, Earth Beat 2-21-2021.*

Figure 43. Hazel Johnson alongside Chicago Mayor Harold Washington at a January 1987 ceremony celebrating the connection of Maryland Manor homes to municipal water and sewer lines
Source: *People for Community Recovery Archive, Woodson Regional Library.*

Mayor Washington joins area leaders at Maryland Manor celebration

Mayor Harold Washington recently joined resident of the Maryland Manor community in a ceremony at the home of one of the residents, the Walker family, to mark the connection of the homes to municipal water and sewer lines for the first time ever. The residents of the seven homes located in the vicinity of 134th Place and St. Lawrence Avenue have been without these services since their houses were built in the early 1960's.

After the ceremony, several of the participants posed for a photograph outside: John Halpin, Commissioner, Department of Streets & Sanitation; John Beasley, a resident; State Rep. William Shaw; (identity not known); Samuel Hurley, Jr., Commissioner, Department of Sewers; Mayor Washington; Ald. Perry Hutchinson; Hazel Johnson, President of People for Community Recovery; Lester Dickinson, Commissioner, Department of Water; State Sen. Emil Jones; and Mr. Greenwell, a resident.

Figure 44. Google Map of Altgeld Gardens' "Toxic Doughnut Map."
Source: *People for Community Recovery, Google Maps.*

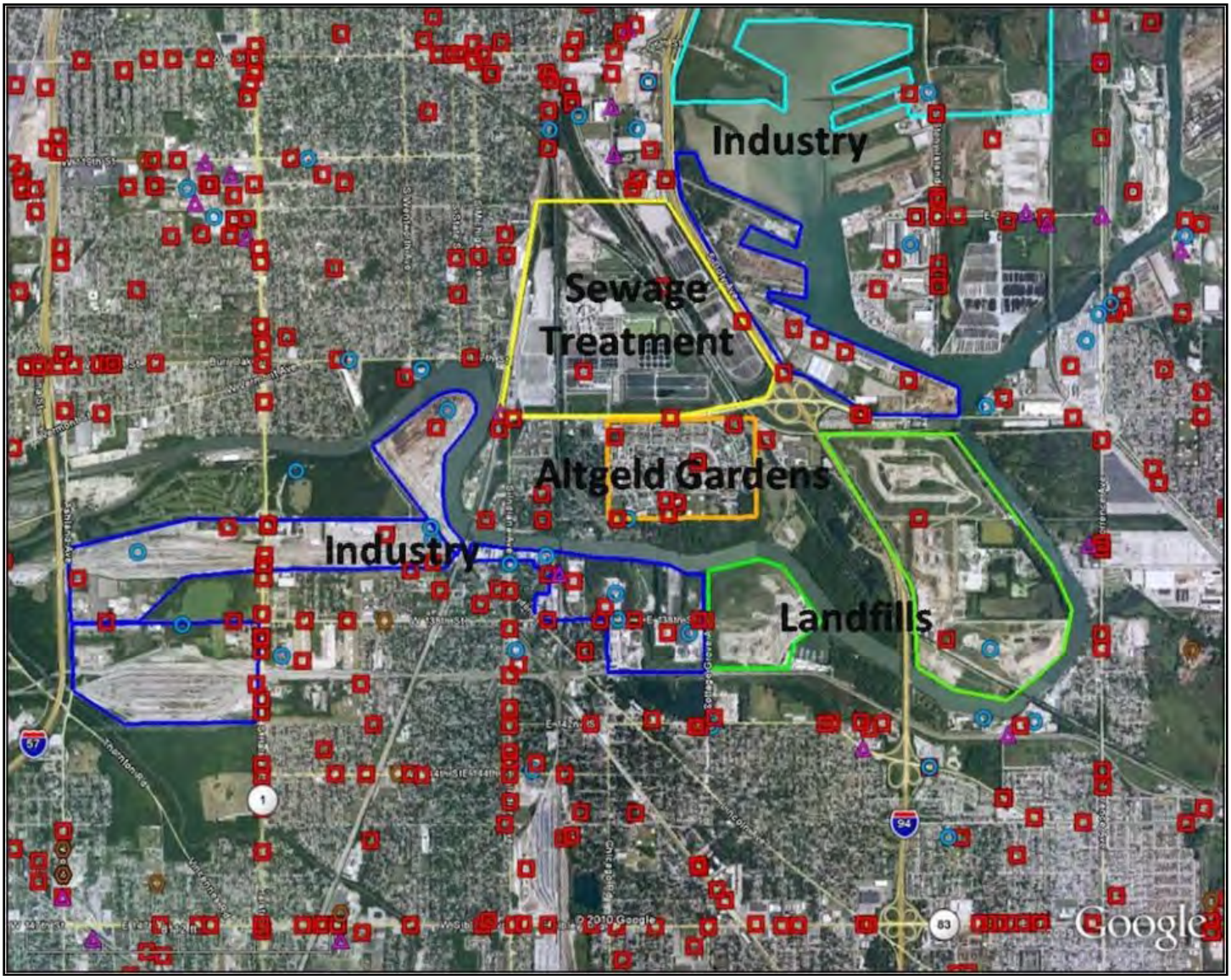

Figure 45. U.S. President George H. W. Bush presenting Hazel Johnson with the President's Environmental and Conservation Challenge Award from at a 1992 White House ceremony
Source: *People for Community Recovery Archive, Woodson Regional Library.*

Figure 46. Hazel Johnson at the White House, 1992
Source: *People for Community Recovery Archive, Woodson Regional Library.*

Figure 47. Hazel Johnson (fifth from the right) at the 1992 United Nations Conference on Environment and Development (UNCED) Earth Summit in Rio de Janeiro, Brazil
Source: *People for Community Recovery Archive, Woodson Regional Library.*

Figure 48. U.S. President Bill Clinton signing Executive Order 12898 at a 1994 Oval Office ceremony with Hazel Johnson in attendance (third from right)
Source: *People for Community Recovery Archive, Woodson Regional Library.*

Figure 49. Altgeld Gardens – Philip Murray Homes Historic District, Resource Map – Sites, Structures, and Objects, 2021.
Source: Google Earth, 2021

* Resource numbers correspond with the numbers assigned in Table C: Resource Inventory

Figure 50. Altgeld Gardens – Philip Murray Homes Historic District, Resource Map – Buildings, 2021.
Source: Google Earth, 2021

* Resource numbers correspond with the numbers assigned in Table C: Resource Inventory

Table A: Chicago Public Housing Projects, 1933-1949

Name (Program)*	Construction Dates	No. Units	Architect	Status
Jane Addams Houses (PWA)	1935-1938	1,027	Consortium led by John Holabird with John Armstrong, Ernest Grunsfeld Jr., Elmer Jensen, Philip Maher, John Merrill, Melville Chatton, Frederick Hodgdon, Ralph Huszagh, and Chester Wolcott	Demolished 2002-2007 (one original building remains)
Trumbull Park Homes (PWA)	1936-1938	426	Consortium led by John Holabird with John Armstrong, Ernest Grunsfeld Jr., Elmer Jensen, and Philip Maher	Extant
Julia C. Lathrop Homes (PWA)	1936-1938	925	Consortium led by Robert DeGolyer. Jens Jensen for landscape.	21 out of 31 original buildings extant (rehabilitated 2017-2020)
Ida B. Wells Homes (USHA)	1939-41;	1,662	Alfred Shaw (Shaw, Naess, and Murphy) with Theilbar and Fugard; Nimmons, Carr, and Wright; and Metz and Gunderson	Demolished 2002-1994.
Francis Cabrini Homes (Defense)	1941-42	586	Consortium led by Henry Holsman with George Burmeister, Maurice Rissman, Ernest Grunsfeld Jr., L.R. Solomon, G.M. Jones, K.M. Vitzhum, I.S. Loewenberg, Frank McNally.	Most original buildings are extant.
Lawndale Gardens (Defense)	1942	128	Eric Hall and Frank McNally	Extant
Bridgeport Homes (Defense)	1942-1943	141	Burnham & Hammond, Inc.	Most original buildings are extant.
Robert H. Brooks Homes (Defense)	1942-43	834	Consortium with Henry Holsman, George Burmeister, Maurice Rissman, Ernest Grunsfeld Jr., L.R. Solomon, G.M. Jones, K.M. Vitzhum, I.S. Loewenberg, Frank McNally.	Some original buildings are extant.
Altgeld Gardens (Defense)	1943-1945	1,500	Shaw, Naess & Murphy;	Most original buildings extant.
Wentworth Gardens (USHA)	1945-1947	422	Loebl & Schlossman	Most original buildings extant.
Dearborn Homes (USHA)	1948-1949	800	Loebl, Schlossman & Bennett	Most original buildings extant.

*Corresponds to the categories used in the National Park Service, "Public Housing in the United States, 1933-1949," Volume I, Appendix IV, page 6.

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table B: Altgeld Gardens – Philip Murray Homes Owner Information

Owner Entity	Mailing Address	Email	Phone Number
Archdiocese of Chicago	835 North Rush Street, Chicago, IL 60611	jrigg@archchicago.org / (Jim Rigg, Ph. D., Superintendent of Catholic Schools)	312-534-8200
By the Hand Club for Kids	415 N. Laramie Avenue, Chicago, IL 60644	info@bythehand.org	773-413-0895
Chicago Housing Authority	60 E. Van Buren Street #12, Chicago IL 60605	hcv@thecha.org	312-742-8500
Chicago Park District	541 N. Fairbanks Court, Chicago, IL 60611	play@chicagoparkdistrict.com	312-742-7529
Chicago Public Schools	42 W. Madison Street, Chicago, IL 60602	esmith78@cps.edu (Eben Smith, Director of Planning and Design)	773-553-2900
Garden Building LLC	13106 S. Ellis, Chicago, IL 60827 / 1150 S. Harlem Avenue, Worth, IL 60482	N/A	N/A

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
1	Site	Altgeld Gatdens-Philip Murray Site (includes Carver Park)						Chicago	Cook	IL	1944/5; 1953		Shaw, Naess & Murphy; Naess & Murphy	C	Chicago Housing Authority
2	Structure	Residential Block Parking Lot	1					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
3	Structure	Residential Block Parking Lot	1					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
4	Structure	Residential Block Parking Lot	2					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
5	Structure	Residential Block Parking Lot	2					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
6	Structure	Residential Block Parking Lot	3					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
7	Structure	Residential Block Parking Lot	3					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
8	Structure	Residential Block Parking Lot	4					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
9	Structure	Residential Block Parking Lot	4					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
10	Structure	Residential Block Parking Lot	5					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
11	Structure	Residential Block Parking Lot	5					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
12	Structure	Residential Block Parking Lot	6					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
13	Structure	Residential Block Parking Lot	6					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
14	Structure	Residential Block Parking Lot	7					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
15	Structure	Residential Block Parking Lot	7					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
16	Structure	Residential Block Parking Lot	8					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
17	Structure	Residential Block Parking Lot	8					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
18	Structure	Residential Block Parking Lot	9					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
19	Structure	Residential Block Parking Lot	9					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
20	Structure	Residential Block Parking Lot	10					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
21	Structure	Residential Block Parking Lot	10					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
22	Structure	Residential Block Parking Lot	17					Chicago	Cook	IL	1952		Naess & Murphy	C	Chicago Housing Authority
23	Structure	Residential Block Parking Lot	17					Chicago	Cook	IL	1952		Naess & Murphy	C	Chicago Housing Authority
24	Structure	Commercial/Administration Block Parking Lot	14					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
25	Structure	Dorothy Gautreaux Child Devel. Center Parking Lot	n/a					Chicago	Cook	IL	1944-45		Shaw, Naess & Murphy	C	Chicago Housing Authority
26	Building	Altgeld Gardens Apartment Building	1	901-23	E	130th	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
27	Building	Altgeld Gardens Apartment Building	1	933-55	E	130th	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
28	Building	Altgeld Gardens Apartment Building	1	13017-27	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
29	Building	Altgeld Gardens Apartment Building	1	13029-51	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
30	Building	Altgeld Gardens Apartment Building	1	13053-63	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
31	Building	Altgeld Gardens Apartment Building	1	13065-87	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
32	Building	Altgeld Gardens Apartment Building	1	13089-99	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
33	Building	Altgeld Gardens Apartment Building	1	13016-26	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
34	Building	Altgeld Gardens Apartment Building	1	13028-50	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
35	Building	Altgeld Gardens Apartment Building	1	13052-62	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
36	Building	Altgeld Gardens Apartment Building	1	13064-86	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
37	Building	Altgeld Gardens Apartment Building	1	13088--98	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
38	Building	Altgeld Gardens Apartment Building	1	900-22	E.	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
39	Building	Altgeld Gardens Apartment Building	1	932-54	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
40	Building	Altgeld Gardens Apartment Building	2	743-65	E	130th	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
41	Building	Altgeld Gardens Apartment Building	2	801-23	E	130th	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
42	Building	Altgeld Gardens Apartment Building	2	13017-27	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
43	Building	Altgeld Gardens Apartment Building	2	13029-51	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
44	Building	Altgeld Gardens Apartment Building	2	13053-63	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
45	Building	Altgeld Gardens Apartment Building	2	13065-87	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
46	Building	Altgeld Gardens Apartment Building	2	13089-99	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
47	Building	Altgeld Gardens Apartment Building	2	13016-26	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
48	Building	Altgeld Gardens Apartment Building	2	13028-50	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
49	Building	Altgeld Gardens Apartment Building	2	13052-62	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
50	Building	Altgeld Gardens Apartment Building	2	13064-86	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
51	Building	Altgeld Gardens Apartment Building	2	13088-98	S	DREXEL	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
52	Building	Altgeld Gardens Apartment Building	2	742-64	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
53	Building	Altgeld Gardens Apartment Building	2	800-22	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
54	Building	Altgeld Gardens Apartment Building	3	643-65	E	130th	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
55	Building	Altgeld Gardens Apartment Building	3	701-23	E	130th	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
56	Building	Altgeld Gardens Apartment Building	3	13029-51	S	CHAMPLAIN	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
57	Building	Altgeld Gardens Apartment Building	3	13053-63	S	CHAMPLAIN	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
58	Building	Altgeld Gardens Apartment Building	3	13065-87	S	CHAMPLAIN	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
59	Building	Altgeld Gardens Apartment Building	3	13089-99	S	CHAMPLAIN	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
60	Building	Altgeld Gardens Apartment Building	3	13016-26	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
61	Building	Altgeld Gardens Apartment Building	3	13028-50	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
62	Building	Altgeld Gardens Apartment Building	3	13052-62	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
63	Building	Altgeld Gardens Apartment Building	3	13064-86	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
64	Building	Altgeld Gardens Apartment Building	3	13088-98	S	EVANS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
65	Building	Altgeld Gardens Apartment Building	3	642-64	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
66	Building	Altgeld Gardens Apartment Building	3	700-22	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
67	Building	Altgeld Gardens Apartment Building	4	701-23	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
68	Building	Altgeld Gardens Apartment Building	4	733-55	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
69	Building	Altgeld Gardens Apartment Building	4	13101-11	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
70	Building	Altgeld Gardens Apartment Building	4	13113-35	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
71	Building	Altgeld Gardens Apartment Building	4	13137-47	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
72	Building	Altgeld Gardens Apartment Building	4	13149-71	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
73	Building	Altgeld Gardens Apartment Building	4	13173-83	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
74	Building	Altgeld Gardens Apartment Building	4	13100-10	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
75	Building	Altgeld Gardens Apartment Building	4	13112-34	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
76	Building	Altgeld Gardens Apartment Building	4	13136-46	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
77	Building	Altgeld Gardens Apartment Building	4	13148-70	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
78	Building	Altgeld Gardens Apartment Building	4	13172-82	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
79	Building	Altgeld Gardens Apartment Building	4	700-22	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
80	Building	Altgeld Gardens Apartment Building	4	732-54	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
81	Building	Altgeld Gardens Apartment Building	5	701-23	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
82	Building	Altgeld Gardens Apartment Building	5	733-55	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
83	Building	Altgeld Gardens Apartment Building	5	13201-11	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
84	Building	Altgeld Gardens Apartment Building	5	13213-35	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
85	Building	Altgeld Gardens Apartment Building	5	13237-47	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
86	Building	Altgeld Gardens Apartment Building	5	13249-71	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
87	Building	Altgeld Gardens Apartment Building	5	13279-83	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
88	Building	Altgeld Gardens Apartment Building	5	13200-10	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
89	Building	Altgeld Gardens Apartment Building	5	13212-34	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
90	Building	Altgeld Gardens Apartment Building	5	13236-46	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
91	Building	Altgeld Gardens Apartment Building	5	13248-70	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
92	Building	Altgeld Gardens Apartment Building	5	13272-82	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
93	Building	Altgeld Gardens Apartment Building	5	700-22	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
94	Building	Altgeld Gardens Apartment Building	5	732-54	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
95	Building	Altgeld Gardens Apartment Building	6	701-23	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
96	Building	Altgeld Gardens Apartment Building	6	733-55	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
97	Building	Altgeld Gardens Apartment Building	6	13301-11	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
98	Building	Altgeld Gardens Apartment Building	6	13313-35	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
99	Building	Altgeld Gardens Apartment Building	6	13337-47	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
100	Building	Altgeld Gardens Apartment Building	6	13349-71	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
101	Building	Altgeld Gardens Apartment Building	6	13373-83	S	LANGLEY	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
102	Building	Altgeld Gardens Apartment Building	6	13300-10	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
103	Building	Altgeld Gardens Apartment Building	6	13312-34	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
104	Building	Altgeld Gardens Apartment Building	6	13336-46	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
105	Building	Altgeld Gardens Apartment Building	6	13348-70	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
106	Building	Altgeld Gardens Apartment Building	6	13372-82	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
107	Building	Altgeld Gardens Apartment Building	6	700-22	E	133rd	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
108	Building	Altgeld Gardens Apartment Building	6	732-54	E	133rd	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
109	Building	Altgeld Gardens Apartment Building	7	801-23	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
110	Building	Altgeld Gardens Apartment Building	7	901-23	E	131st	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
111	Building	Altgeld Gardens Apartment Building	7	13101-07	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
112	Building	Altgeld Gardens Apartment Building	7	13109-31	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
113	Building	Altgeld Gardens Apartment Building	7	13132-42	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
114	Building	Altgeld Gardens Apartment Building	7	13133-43	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
115	Building	Altgeld Gardens Apartment Building	7	13145-67	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
116	Building	Altgeld Gardens Apartment Building	7	13169-75	S	CORLISS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
117	Building	Altgeld Gardens Apartment Building	7	13100-06	S	INGLESIDE	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
118	Building	Altgeld Gardens Apartment Building	7	13108-30	S	INGLESIDE	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
119	Building	Altgeld Gardens Apartment Building	7	13144-66	S	INGLESIDE	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
120	Building	Altgeld Gardens Apartment Building	7	13168-74	S	INGLESIDE	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
121	Building	Altgeld Gardens Apartment Building	7	800-22	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
122	Building	Altgeld Gardens Apartment Building	7	900-22	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
123	Building	Altgeld Gardens Apartment Building	8	967-89	E	132nd	PL	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
124	Building	Altgeld Gardens Apartment Building	8	13218-24	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
125	Building	Altgeld Gardens Apartment Building	8	13226-48	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
126	Building	Altgeld Gardens Apartment Building	8	13250-60	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
127	Building	Altgeld Gardens Apartment Building	8	13262-84	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
128	Building	Altgeld Gardens Apartment Building	8	13286-92	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
129	Building	Altgeld Gardens Apartment Building	8	900-10	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
130	Building	Altgeld Gardens Apartment Building	8	912-34	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
131	Building	Altgeld Gardens Apartment Building	8	936-46	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
132	Building	Altgeld Gardens Apartment Building	8	948-70	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
133	Building	Altgeld Gardens Apartment Building	8	972-94	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
134	Building	Altgeld Gardens Apartment Building	9	1001-07	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
135	Building	Altgeld Gardens Apartment Building	9	1009-31	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
136	Building	Altgeld Gardens Apartment Building	8	1033-43	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
137	Building	Altgeld Gardens Apartment Building	9	1045-67	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
138	Building	Altgeld Gardens Apartment Building	9	1069-75	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
139	Building	Altgeld Gardens Apartment Building	9	13201-23	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
140	Building	Altgeld Gardens Apartment Building	9	13241-63	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
141	Building	Altgeld Gardens Apartment Building	9	13200-22	S	GREENWOOD	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
142	Building	Altgeld Gardens Apartment Building	9	13240-62	S	GREENWOOD	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
143	Building	Altgeld Gardens Apartment Building	9	1000-06	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
144	Building	Altgeld Gardens Apartment Building	9	1008-30	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
145	Building	Altgeld Gardens Apartment Building	9	1032-42	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
146	Building	Altgeld Gardens Apartment Building	9	1044-66	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
147	Building	Altgeld Gardens Apartment Building	9	1068-74	E	133rd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
148	Building	Altgeld Gardens Apartment Building	10	13023-45	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
149	Building	Altgeld Gardens Apartment Building	10	13047-57	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
150	Building	Altgeld Gardens Apartment Building	10	13059-81	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
151	Building	Altgeld Gardens Apartment Building	10	13083-89	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
152	Building	Altgeld Gardens Apartment Building	10	13101-23	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
153	Building	Altgeld Gardens Apartment Building	10	13133-55	S	ELLIS	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
154	Building	Altgeld Gardens Apartment Building	10	13022-28	S	GREENWOOD	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
155	Building	Altgeld Gardens Apartment Building	10	13030-52	S	GREENWOOD	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
156	Building	Altgeld Gardens Apartment Building	10	13072-94	S	GREENWOOD	AVE	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
157	Building	Altgeld Gardens Apartment Building	10	1000-06	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
158	Building	Altgeld Gardens Apartment Building	10	1008-30	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
159	Building	Altgeld Gardens Apartment Building	10	1032-42	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
160	Building	Altgeld Gardens Apartment Building	10	1044-66	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
161	Building	Altgeld Gardens Apartment Building	10	1068-74	E	132nd	ST	Chicago	Cook	IL	1944-1945	Mixed - Modern / Colonial Revival	Shaw, Naess & Murphy	C	Chicago Housing Authority
162	Building	Philip Murray Homes Apartment Building	17	601-05A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
163	Building	Philip Murray Homes Apartment Building	17	607-09A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
164	Building	Philip Murray Homes Apartment Building	17	611-21A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
165	Building	Philip Murray Homes Apartment Building	17	623-31A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
166	Building	Philip Murray Homes Apartment Building	17	633-39A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
167	Building	Philip Murray Homes Apartment Building	17	641-49A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
168	Building	Philip Murray Homes Apartment Building	17	651-57A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
169	Building	Philip Murray Homes Apartment Building	17	659-61A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
170	Building	Philip Murray Homes Apartment Building	17	663-73A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
171	Building	Philip Murray Homes Apartment Building	17	675-79A	E	131st	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
172	Building	Philip Murray Homes Apartment Building	17	13101-23	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
173	Building	Philip Murray Homes Apartment Building	17	13125-31	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
174	Building	Philip Murray Homes Apartment Building	17	13133-47	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
175	Building	Philip Murray Homes Apartment Building	17	13149-63	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
176	Building	Philip Murray Homes Apartment Building	17	13201-15	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
177	Building	Philip Murray Homes Apartment Building	17	13217-31	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
178	Building	Philip Murray Homes Apartment Building	17	13233-47	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
179	Building	Philip Murray Homes Apartment Building	17	13249-55	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
180	Building	Philip Murray Homes Apartment Building	17	13257-79	S	ST. LAWRENCE	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
181	Building	Philip Murray Homes Apartment Building	17	13100-22	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
182	Building	Philip Murray Homes Apartment Building	17	13124-30	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
183	Building	Philip Murray Homes Apartment Building	17	13132-46	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
184	Building	Philip Murray Homes Apartment Building	17	13148-62	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
185	Building	Philip Murray Homes Apartment Building	17	13200-10	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
186	Building	Philip Murray Homes Apartment Building	17	13212-26	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
187	Building	Philip Murray Homes Apartment Building	17	13228-42	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
188	Building	Philip Murray Homes Apartment Building	17	13244-50	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
189	Building	Philip Murray Homes Apartment Building	17	13252-74	S	LANGLEY	AVE	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
190	Building	Philip Murray Homes Apartment Building	17	600-04A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
191	Building	Philip Murray Homes Apartment Building	17	606-08A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
192	Building	Philip Murray Homes Apartment Building	17	610-20A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
193	Building	Philip Murray Homes Apartment Building	17	622-30A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
194	Building	Philip Murray Homes Apartment Building	17	632-38A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
195	Building	Philip Murray Homes Apartment Building	17	640-48A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
196	Building	Philip Murray Homes Apartment Building	17	650-56A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
197	Building	Philip Murray Homes Apartment Building	17	658-60a	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
198	Building	Philip Murray Homes Apartment Building	17	662-72A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
199	Building	Philip Murray Homes Apartment Building	17	674-78A	E	133rd	ST	Chicago	Cook	IL	1953	Modern	Naess & Murphy	C	Chicago Housing Authority
200	Building	Administration Building	14	940	E	133rd	ST	Chicago	Cook	IL	1944	International Style	Shaw, Naess & Murphy	C	Chicago Housing Authority
201	Building	Children's Building		941	E	133rd	ST	Chicago	Cook	IL	1944	International Style	Shaw, Naess & Murphy	C	Chicago Housing Authority
202	Building	School Building A (Grammar School)		902	S	CORLISS	AVE	Chicago	Cook	IL	1944	Colonial Revival	John C. Christensen	C	Chicago Public Schools
203	Building	School Building B (Assembly Hall/Gym)		902	S	CORLISS	AVE	Chicago	Cook	IL	1944	Colonial Revival	John C. Christensen	C	Chicago Public Schools
204	Building	School Building C (High Schooll)		901	E	132nd	ST	Chicago	Cook	IL	1944	Colonial Revival	John C. Christensen	C	Chicago Public Schools
205	Building	School Building D (Grammar School)		902	S	CORLISS	AVE	Chicago	Cook	IL	1945	Colonial Revival	John C. Christensen	C	Chicago Public Schools
206	Building	Shop Building	14	13106-24	S	ELLIS	AVE	Chicago	Cook	IL	1945	International Style	Keck & Keck	C	Garden Building LLC
207	Building	United Church of Altgeld Gardens		13015	S	ELLIS	AVE	Chicago	Cook	IL	1952	Colonial Revival	Michelsen, Rabig & Ramp	C	By the Hand Club for Kids
208	Building	Carver Park Indoor Pool		939	E	132nd	ST	Chicago	Cook	IL	1958	No Style	Ralph H. Burke, Inc.	C	Chicago Parks District
209	Building	Altgeld Gardens Community Building No. 2		951	E	132nd	PL	Chicago	Cook	IL	1972	No Style	Pereira, Bernheim & Kahn	C	Chicago Housing Authority
210	Building	Carver Park Pump House		939	E	132nd	ST	Chicago	Cook	IL	1945	Modern	Shaw, Naess & Murphy	C	Chicago Parks District
211	Building	Utility Building	1	929	E	130th	PL	Chicago	Cook	IL	1945	No Style	Shaw, Naess & Murphy	C	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
212	Building	Carver High School (CICS Larry Hawkins)		801	E	133rd	PL	Chicago	Cook	IL	1950	Art Deco	John C. Christensen	C	Chicago Public Schools
213	Building	George Washington Carver Primary School		901	E	133rd	PL	Chicago	Cook	IL	1954	Modern	N/A	C	Chicago Public Schools
214	Building	Our Lady of the Gardens Catholic Church & School		13300	S	LANGLEY	AVE	Chicago	Cook	IL	1952	Modern	Edo Belli	C	Archdiocese of Chicago
215	Building	Our Lady of the Gardens Gymnasium		13300	S	LANGLEY	AVE	Chicago	Cook	IL	1959	Modern	N/A	C	Archdiocese of Chicago
216	Building	Ira F. Aldridge Elementary School		630	E	131st	ST	Chicago	Cook	IL	1960; 1963	Modern	Walter H. Sobel & J. Stewart Stein	C	Chicago Public Schools
217	Building	Dorothy Gautreaux Child Devel. Center		975	E	132nd	ST	Chicago	Cook	IL	1979	Modern	N/A	NC	Chicago Housing Authority
218	Building	Power Station	5	N/A	N/A	N/A	N/A	Chicago	Cook	IL	2005-2007	No Style	N/A	NC	Chicago Housing Authority
219	Building	Power Station	8	N/A	N/A	N/A	N/A	Chicago	Cook	IL	2005-2007	No Style	N/A	NC	Chicago Housing Authority
220	Building	Laundry Building	3	N/A	N/A	N/A	N/A	Chicago	Cook	IL	2005-2009	No Style	Holabird & Root	NC	Chicago Housing Authority
221	Building	Laundry Building	5	N/A	N/A	N/A	N/A	Chicago	Cook	IL	2005-2009	No Style	Holabird & Root	NC	Chicago Housing Authority
222	Building	Laundry Building	7	N/A	N/A	N/A	N/A	Chicago	Cook	IL	2005-2009	No Style	Holabird & Root	NC	Chicago Housing Authority
223	Building	Laundry Building	10	N/A	N/A	N/A	N/A	Chicago	Cook	IL	2005-2009	No Style	Holabird & Root	NC	Chicago Housing Authority
224	Building	Altgeld Family Resource Center	14	955	E	131st	ST	Chicago	Cook	IL	2020	Contemporary	KOO Architecture	NC	Chicago Housing Authority
225	Object	Playground/Splash Pad	1/2					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority
226	Object	Playground/Splash Pad	4					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
227	Object	Playground/Splash Pad	5					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority
228	Object	Playground/Splash Pad	6					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority
229	Object	Playground/Splash Pad	7					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority
230	Object	Playground/Splash Pad	8					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority
231	Object	Playground/Splash Pad	9					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority
232	Object	Playground/Splash Pad	10					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority
233	Object	Playground/Splash Pad	17					Chicago	Cook	IL	c2007-2017			NC	Chicago Housing Authority
234	Structure	George Washington Carver Primary School Parking Lot		901	E	133rd	PL	Chicago	Cook	IL	late 1970s			NC	Chicago Public Schools
235	Structure	Parking Lot for school Buildings A and D		902	S	CORLISS	AVE	Chicago	Cook	IL	1980s-2000s			NC	Chicago Public Schools
236	Structure	Parking Lot for school Buildings A and D		902	S	CORLISS	AVE	Chicago	Cook	IL	1980s-2000s			NC	Chicago Public Schools
237	Structure	Parking Lot for school Buildings A and D		902	S	CORLISS	AVE	Chicago	Cook	IL	1980s-2000s			NC	Chicago Public Schools
238	Structure	Children's Building Parking Lot		941	E	133rd	ST	Chicago	Cook	IL	late 1970s			NC	Chicago Housing Authority
239	Structure	Altgeld Gardens Community Building No. 2 Parking Lot		951	E	132nd	PL	Chicago	Cook	IL	c.1972			NC	Chicago Housing Authority
240	Structure	Our Lady of the Gardens Parking Lot		13300	S	LANGLEY	AVE	Chicago	Cook	IL	2007			NC	Archdiocese of Chicago
241	Structure	Our Lady of the Gardens Parking Lot		13300	S	LANGLEY	AVE	Chicago	Cook	IL	c.1960s			NC	Archdiocese of Chicago

Property name: Altgeld Gardens – Philip Murray Homes Historic District
Illinois, County: Cook

Table C: Resource Inventory

Resource No.	NR Resouce Category	Resource Name	Block No.	Street No.	Street Direction	Street Name	Street Type	City	County	State	Date of Construction	Style	Architect	C/NC	Owner Entity
242	Structure	Ira F. Aldridge Elementary School Parking Lot		630	E	131st	ST	Chicago	Cook	IL	1967			NC	Chicago Public Schools
243	Structure	Ira F. Aldridge Elementary School Parking Lot		630	E	131st	ST	Chicago	Cook	IL	2000s			NC	Chicago Public Schools

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photo Key

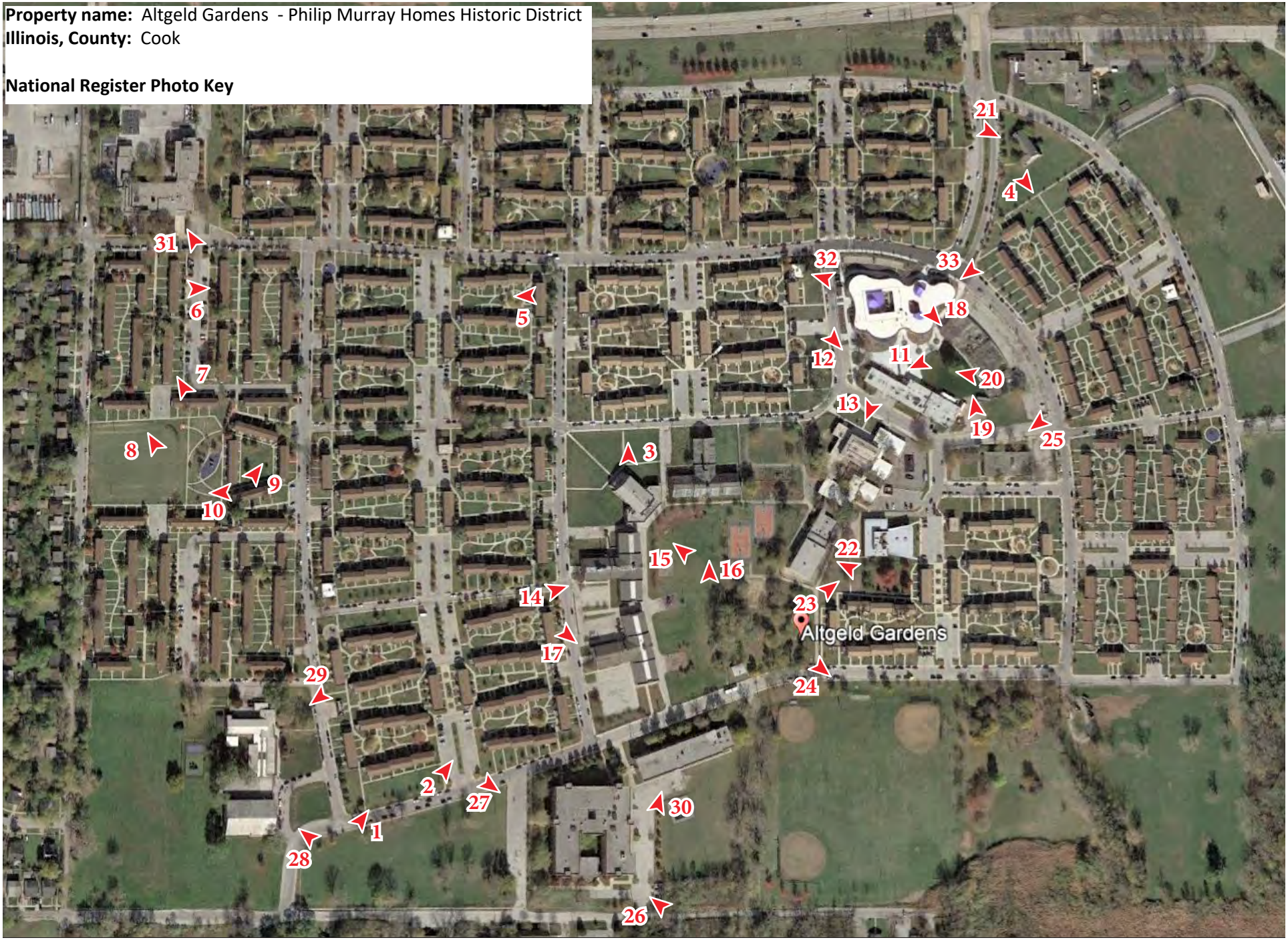

MHA MacRostie Historic Advisors LLC
Bringing strategy, equity, and experience to historic building development

Altgeld Gardens - Philip Murray Homes Historic District
Chicago, Cook County, Illinois

National Park Service
NR Photo Key

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

1. Altgeld Gardens Apartments, west and south elevations, view northeast.

2. Altgeld Gardens Apartments, west and south elevations, view northeast.

MHA MacRostie Historic Advisors LLC
Bringing strategy, equity, and experience to historic building development

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

3. Altgeld Gardens Apartments, south elevation, view north.

4. Altgeld Gardens Apartments, east, south, and north elevations, view southeast.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

5. Altgeld Gardens Courtyard, view west.

6. Philip Murray Apartments, west elevation, view east.

MHA MacRostie Historic Advisors LLC
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Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

7. Philip Murray Apartments, south and east elevations, view northwest.

8. Philip Murray Apartments, south and east elevations, view northwest.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

9. Philip Murray Apartments, south and east elevations, view northeast.

10. Philip Murray Apartments overview, view west.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

11. Administrative Building, northeast elevation, view southwest.

12. Administrative Building, northwest and northeast elevations, view southeast.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

13. Children's Building, northeast and northwest elevations, view southwest.

14. School Building A, west and south elevations, view northeast.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

15. School Building B, southeast elevation, view northwest.

16. School Building C, south elevation, view north.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

17. School Building D, west and north elevations, view southeast.

18. Shop Building, northwest and southwest elevations, view southeast.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

19. Shop Building, southwest elevation, view northwest.

20. Central Plaza, view north/northwest.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

21. United Church of Altgeld, northwest and southwest elevations, view south/southeast.

22. Carver Park Indoor Pool, southeast elevation, view northwest.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

23. Community Building No. 2, west and south elevations, view northeast.

24. Carver Park, view southeast.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

25. Dorothy Gautreaux Child Development Center, east and north elevations, view southwest.

26. Carver High School, south and east elevations, view northwest.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

27. Carver High School, west and north elevations, view southeast.

28. Our Lady of the Gardens Catholic Gymnasium (CICS Lloyd Bond), south and east elevations, view northwest.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

29.Our Lady of the Gardens Catholic Church and School (CICS Lloyd Bond), north and east elevations, view southwest.

30. George Washington Carver Primary School, southeast elevation, view north/northeast.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

31. Ira F. Aldridge Elementary School, east elevation, view northwest.

32. Laundry Building, Non-contributing, south and east elevations, northwest.

Property name: Altgeld Gardens - Philip Murray Homes Historic District
Illinois, County: Cook

National Register Photos

33. Altgeld Family Resource Center, Non-contributing, north and east elevations, view southwest.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action:	Nomination
Property Name:	Altgeld Gardens–Philip Murray Homes Historic District
Multiple Name:	
State & County:	ILLINOIS, Cook

Date Received:	Date of Pending List:	Date of 16th Day:	Date of 45th Day:	Date of Weekly List:
3/1/2022	3/18/2022	4/4/2022	4/15/2022	

Reference number:	SG100007590
Nominator:	Other Agency, SHPO

Reason For Review:

__ Appeal	X PDIL	__ Text/Data Issue
__ SHPO Request	__ Landscape	__ Photo
__ Waiver	__ National	__ Map/Boundary
__ Resubmission	__ Mobile Resource	__ Period
__ Other	__ TCP	X Less than 50 years
	X CLG	

__X__ Accept _____ Return _____ Reject __4/13/2022__ Date

Abstract/Summary Comments: Locally significant housing project constructed in 1945 for defense workers and converted into homes for African American veterans after the war. Significant in community planning/development, ethnic heritage, politics/government. and social history. Nationally significant for its association with Hazel Johnson, a leader in the environmental justice movement. Johnson was a resident of the complex and her non-profit organization was housed in one of the commercial spaces. Johnson was active until her death in 2011, and was recognized by 2 presidents (GHW Bush and B Clinton) for her work. Meets the exceptional significance consideration under B.

Recommendation/ Criteria: Accept / A, B, & C

Reviewer Jim Gabbert Discipline Historian

Telephone (202)354-2275 Date

DOCUMENTATION: see attached comments : No see attached SLR : No

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.

ILLINOIS
DEPARTMENT OF NATURAL RESOURCES

Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

March 1, 2022

Jeff Mansell, National Park Service
National Register of Historic Places
1849 C Street, NW, Mail Stop 7228
Washington, DC 20240

Dear Mr. Mansell:

Following is the PDF file that contains the true and correct copy of the National Register nomination with embedded photographs for the Altgeld Gardens – Philip Murray Homes Historic District in Chicago, Cook County. The property was recommended for nomination by the Illinois Historic Sites Advisory Council at its October 29, 2021 meeting and the nomination was signed by Deputy State Historic Preservation Officer Carey Mayer on March 1, 2022.

The nomination is supported by the majority of property owners, most of which are Chicago-owned. It did receive one objection of the three private property owners. The property is located within a Certified Local Government; at its October 7, 2021 meeting, the Commission on Chicago Landmarks voted that it met the criteria for listing in the National Register of Historic Places.

Please contact Amy Hathaway, Survey and National Register Specialist at amy.hathaway@illinois.gov if you need any additional information. Thank you for your attention to this matter.

Sincerely,

Andrew Heckenkamp, Coordinator
Survey and National Register program
Illinois State Historic Preservation Office/Illinois Department of Natural Resources

Appendix T

Cumulative Impacts Technical Memorandum

- Draft EIS Appendix T, Cumulative Impacts Technical Memorandum, September 2015
  - Appendix A, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Cumulative Impacts
Technical Memorandum

January 20, 2014
Updated September 9, 2015

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
CWC Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Summary 1-1

Section 2 Project Description 2-3

Section 3 Methods for Impact Evaluation 3-1
- 3.1 Regulatory Framework 3-1
  - 3.1.1 Federal 3-1
  - 3.1.2 State 3-1
  - 3.1.3 Local 3-1
- 3.2 Impact Analysis Thresholds 3-1
- 3.3 Area of Potential Impact 3-2
- 3.4 Methods 3-2

Section 4 Affected Environment 4-1
- 4.1 Transportation Improvement Program 4-1
- 4.2 Fiscally Constrained Major Capital Projects 4-3
- 4.3 State, Regional, and Local Plans 4-4

Section 5 Impacts and Mitigations 5-1
- 5.1 No Build Alternative 5-1
  - 5.1.1 Neighborhood and Community Impacts 5-1
  - 5.1.2 Air Quality 5-1
- 5.2 Bus Rapid Transit Alternative 5-1
  - 5.2.1 Neighborhood and Community Impacts 5-2
  - 5.2.2 Parklands and Community Facilities 5-2
  - 5.2.3 Air Quality 5-2
- 5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-2
  - 5.3.1 Transportation 5-3
  - 5.3.2 Noise and Vibration 5-3
  - 5.3.3 Safety and Security 5-3
  - 5.3.4 Land Use and Economic Development 5-3
    - 5.3.4.1 Segment UA 5-3
    - 5.3.4.2 Segment UB 5-4
  - 5.3.5 Neighborhood and Community Impacts 5-4
  - 5.3.6 Parklands and Community Facilities 5-4

5.3.7 Air Quality 5-4
5.4 Union Pacific Railroad Rail Alternative - East Option 5-4
5.4.1 Transportation 5-5
5.4.2 Land Use and Economic Development 5-5
5.4.3 Neighborhood and Community Impacts 5-5
5.4.4 Parklands and Community Facilities 5-5
5.4.5 Safety and Security 5-5
5.4.6 Air Quality 5-6
5.5 Union Pacific Railroad Rail Alternative - West Option 5-6
5.5.1 Transportation 5-6
5.5.2 Land Use and Economic Development 5-6
5.5.3 Neighborhood and Community Impacts 5-6
5.5.4 Parklands and Community Facilities 5-6
5.5.5 Safety and Security 5-7
5.5.6 Air Quality 5-7
5.6 120th Street Yard and Shop 5-7
5.7 Halsted Rail Alternative 5-7
5.7.1 Land Use and Economic Development 5-7
5.7.1.1 Segment HA 5-7
5.7.1.2 Segment HB 5-7
5.7.2 Parklands and Community Facilities 5-8
5.7.3 Air Quality 5-8
5.8 119th Street Yard and Shop 5-8

Section 6 Impacts Remaining After Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative – Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative – East Option 6-1
6.4.1 Transportation 6-1
6.4.2 Land Use and Economic Development 6-1
6.4.3 Neighborhood and Community Impacts 6-1
6.4.4 Parklands and Community Facilities 6-1
6.4.5 Safety and Security 6-1
6.4.6 Air Quality 6-2
6.5 Union Pacific Railroad Rail Alternative – West Option 6-2

6.5.1 Transportation 6-2
6.5.2 Land Use and Economic Development 6-2
6.5.3 Neighborhood and Community Impacts 6-2
6.5.4 Parklands and Community Facilities 6-2
6.5.5 Safety and Security 6-2
6.5.6 Air Quality 6-2
6.6 120th Street Yard and Shop 6-2
6.7 Halsted Rail Alternative 6-2
6.7.1 Land Use and Economic Development 6-2
6.7.2 Parklands and Community Facilities 6-3
6.7.3 Air Quality 6-3
6.8 119th Street Yard and Shop 6-3

Section 7 References Cited 7-1

Appendix

Appendix A 2014-2015 Red Line Extension Project Update

Tables

Table 4-1: 2010-2015 Chicago Metropolitan Agency for Planning Transportation Improvement Program Projects in the Project Area; Projects Assumed in No Build Alternative 4-2
Table 4-2: GO TO 2040 Fiscally Constrained Major Capital Projects 4-3
Table 4-3: Existing, Current, and Reasonably Foreseeable Future Actions 4-4

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-4

Abbreviations

BRC	Belt Railway of Chicago
BRT	Bus Rapid Transit
CDOT	Chicago Department of Transportation
CEQ	Council on Environmental Quality
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CREATE	Chicago Region Environmental and Transportation Efficiency
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
IDOT	Illinois Department of Transportation
IHB	Indiana Harbor Belt Railroad
NEPA	National Environmental Policy Act
ME	Metra Electric
NICTD	Northern Indiana Commuter Transportation District
NOAA	National Oceanic and Atmospheric Administration
NS	Norfolk Southern
Pace	Pace Suburban Bus
RLE	Red Line Extension
RPM	Red and Purple Modernization
ROW	right-of-way
TIF	tax-increment financing
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad

Section 1
Summary

This technical memorandum analyzes the potential cumulative impacts that would occur with the implementation of the Red Line Extension (RLE) Project. The alternatives analyzed include the No Build Alternative, Bus Rapid Transit (BRT) Alternative, Union Pacific Railroad (UPRR) Rail Alternative Right-of-Way Option (ROW Option), UPRR Rail Alternative East Option (East Option), UPRR Rail Alternative West Option (West Option), and the Halsted Rail Alternative.

The No Build Alternative would not involve any construction and would not have cumulative impacts. The No Build Alternative would not result in the cumulative benefits from transit improvement, as the build alternatives would. The BRT Alternative would have beneficial cumulative impacts due to improved transit facilities, improved access and mobility, and reduction in air emissions. The UPRR Rail Alternative options all would have similar beneficial cumulative impacts due to transit improvements, improved land use and economic development, improved access and mobility, and reduction in air emissions.

The Chicago Department of Transportation (CDOT) is preparing the Far South Railroad Relocation Feasibility Study, which examines a possible project to move the existing freight operations out of the UPRR corridor, leaving the corridor vacant. The Chicago Transit Authority (CTA) would implement the ROW Option only if this separate project occurs prior to the RLE. If the relocation project does not occur, then the CTA would need to choose either the East Option or West Option in order to pursue the UPRR Rail Alternative. The ROW Option would have more beneficial cumulative impacts than the East and West Options when considered cumulatively with relocation of the UPRR, a separate project that would occur prior to implementation of the ROW Option. Due to the elimination of freight rail, there would be less noise and vibration and fewer traffic delays associated with the ROW Option than with the other UPRR Rail Alternative options.

The East and West Options would have adverse cumulative impacts for transportation and safety and security. In the East and West Options, the existing UPRR tracks would not be relocated as part of a separate, unrelated project, and highway-rail grade crossings would remain at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Wentworth Avenue, 115th Street, and State Street. The number of trains using the existing UPRR tracks would increase substantially under the Chicago Region Environmental and Transportation Efficiency (CREATE) Program. This increase in trains may result in increased traffic, commuter delays, and increase in potential for crash frequency. Mitigation measures to address the increased potential for vehicular and pedestrian crashes can include pedestrian gates at sidewalks, intertrack fence, and fence along the parking area and ROW. To mitigate for commuter delays caused by traffic, passenger trains and UPRR freight train schedules can be synchronized to avoid or reduce trains crossing at peak hours such as morning rush hour.

The Halsted Rail Alternative would have beneficial cumulative impacts due to transit improvements, improved land use and economic development, improved access and mobility, and reduction in air emissions.

Updated July 27, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix A of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix A supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The CTA proposes to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - ROW Option
  - East Option
  - West Option
- Halsted Rail Alternative

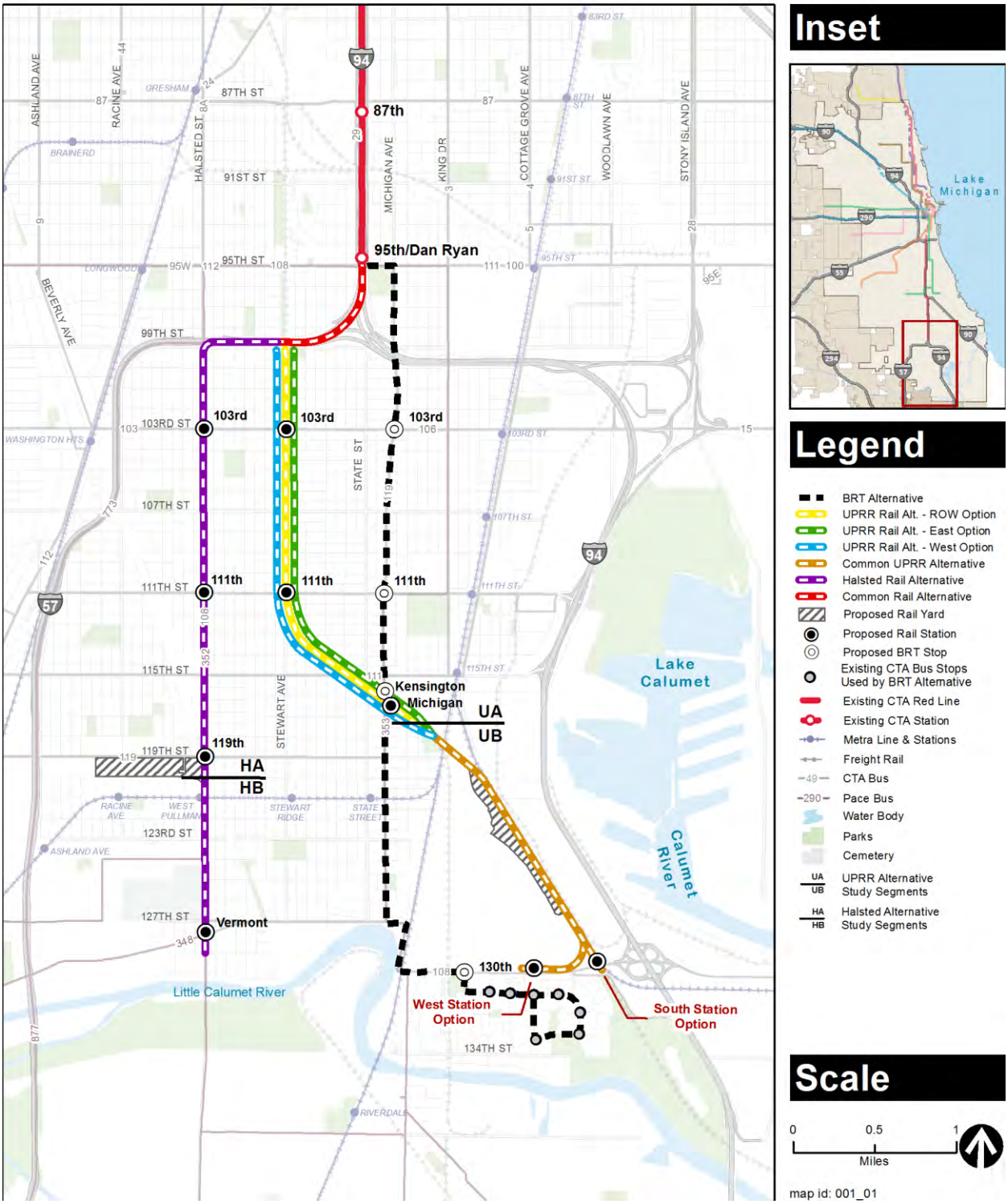

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP), which includes the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District (CN/ME District) tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed

to be the same as for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

3.1 Regulatory Framework

3.1.1 Federal

The National Environmental Policy Act of 1969 ([NEPA] 42 United States Code 4332) requires that federal agencies consider environmental impacts before taking actions that could affect the human environment. As interpreted by the Council on Environmental Quality (CEQ), NEPA requires that "reasonably foreseeable" direct, indirect, and cumulative effects of a proposed action be considered in the decision-making process. As defined by the CEQ, the term "effects" includes "ecological, aesthetic, historic, cultural, economic, social, or health" effects.

The CEQ defines a cumulative impact as an impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.

3.1.2 State

The State of Illinois Department of Natural Resources defines Cumulative Effects in its regulations governing impacts on endangered species (17 Illinois Administrative Code Part 1075):

> "Direct and indirect effects of a proposed action(s) together with the identifiable effects of actions that are interrelated or interdependent with the action. Indirect effects are those that are caused by the action but are later in time or farther in distance. Interrelated actions are those that are a part of a larger action. Interdependent actions are those that have independent utility apart from the action."

3.1.3 Local

There are no local requirements for cumulative effect analyses.

3.2 Impact Analysis Thresholds

Each resource area was analyzed independently to determine whether the impacts of the proposed alternatives would meet a threshold of significance. These analyses were presented in separate technical memoranda for each of the resource areas.

A cumulative impact would occur if an alternative had environmental impacts that were individually limited, but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project would be significant when viewed in connection with

the impacts of past projects, the impacts of other current projects, and the impacts of probable future projects or expected growth.

The standards for "cumulatively considerable" were based on the established significance thresholds for each resource area or professional judgment if thresholds were not established for that resource. Determinations regarding whether a cumulative impact would be "considerable" also considered the effectiveness of mitigation measures in reducing the impact on a resource.

Compliance with previously approved plans or mitigation programs was an indicator that an impact would not be significant. Depending on the discipline area, a project's inclusion in a regional plan or projection may be a measure of whether the project would contribute to cumulative impacts.

3.3 Area of Potential Impact

The area of potential impact for each resource is presented in a separate technical memorandum specific to each resource (see Section 7, References). In general, the impact areas for cumulative impacts are broader geographic areas than those for direct impacts. The area of potential impact for cumulative impacts reflects the distribution of the individual resource and is not limited to the project area; it consists instead of the boundaries specific to the resource, such as the construction limits for a transportation improvement, private development, or other public infrastructure project that is near enough to the project and being performed at the same time, potentially inducing cumulative impacts.

3.4 Methods

The following resources were used in developing methods and determining cumulative impacts:

- Environmental Impact and Related Procedures (Code of Federal Regulations Title 23 Part 771).
- *Consideration of Cumulative Impacts in EPA Review of NEPA Documents* (U. S. Environmental Protection Agency 1999)
- *Considering Cumulative Effects Under the National Environmental Policy Act* (CEQ 1997)
- *National Cooperative Highway Research Program Report 466 - Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects* (Transportation Research Board 2002)

Information on proposed actions within the study area was reviewed to determine whether the action was appropriate to include in the cumulative analysis. The future action information was obtained from multiple public agencies. The future actions include transportation projects and rail projects (through CREATE). Many of the resources used were from online sources; however, some project information was obtained from public comments during the scoping process. The future project information was obtained from the following agencies or programs:

- CMAP
- City of Chicago
- CREATE
- Illinois Department of Transportation (IDOT)
- Metra
- Metropolitan Water Reclamation District of Greater Chicago
- Northeastern Indiana Commuter Transportation District (NICTD)
- Pace
- Regional Transit Authority
- Village of Calumet Park

Cumulative impacts analysis considers the past, present, and reasonably foreseeable future actions. The past conditions were addressed in the Affected Environment section. The cumulative analysis started with the present day conditions and included the reasonably foreseeable future conditions to the year 2030.

The following steps were used to determine the cumulative impacts for each of the resource categories:

- Define the baseline existing conditions for the resources, ecosystems, and communities. This step was documented in the technical memorandum for each resource as part of the Affected Environment section and in the description of the No Build Alternative.
- Identify the impacts of the proposed alternatives. Present the impacts as part of the analysis in the technical memorandum.
- Identify the present and reasonably foreseeable future actions and their possible impacts.
- Identify cumulative impacts for each resource.
- Identify mitigation measures for cumulative impacts, if appropriate.
- Summarize all of the cumulative impacts for the RLE Project.

The results of the final step above are included in this technical memorandum. If the RLE Project would have no direct impacts on a resource or discipline area, then there would also not be any cumulative impacts.

Section 4
Affected Environment

The project area encompasses a diverse mix of land uses including residential, commercial, and light industrial. Each RLE alternative alignment, except for that of the BRT Alternative, would begin at the existing 95th Street Terminal and would run south along I-94, then curve west to follow I-57.

The BRT Alternative would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. The corridor consists of one- to two-story residential and light commercial structures. On-street parking and generous sidewalks flank both sides of Michigan Avenue. The portion of the route south of 120th Place is partially lined with trees and consists of mostly residential. The portion of the BRT Alternative alignment south of Michigan Avenue runs through a low-density residential and light commercial district until 130th Street and Eberhart Avenue, near the Altgeld Gardens neighborhood.

South of I-57 the UPRR Rail Alternative alignment runs along an existing railroad corridor that is surrounded by a mix of residential and light commercial districts. The UPRR Rail Alternative alignment south of Michigan Avenue runs along the Metropolitan Water Reclamation District property and terminates just north of the Altgeld Gardens neighborhood.

The Halsted Rail Alternative alignment runs south along Halsted Street through a light commercial and retail corridor surrounded by residential districts. Large sidewalks and parking lanes flank both sides of Halsted Street, while the street itself contains two through lanes in either direction. The Halsted Rail Alternative alignment runs past Cedar Park Cemetery and terminates north of the bridge that carries Halsted Street over the Little Calumet River.

The following tables identify projects within the general project area that are either anticipated to be completed prior to the start of RLE construction in 2022 or that may be under construction during the RLE's proposed construction period of 2022–2026.

The project list was developed from information available from the City of Chicago, CMAP, CREATE, IDOT, Illinois State Toll Highway Authority, and CTA.

4.1 Transportation Improvement Program

Table 4-1 lists the infrastructure improvement projects that are already in the CMAP Fiscal Year 2010–2015 TIP. The projects listed in Table 4-1 are expected to be completed prior to 2022.

Table 4-1: 2010-2015 Chicago Metropolitan Agency for Planning Transportation Improvement Program Projects in the Project Area; Projects Assumed in No Build Alternative

Agency	Location	Project	Expected Completion Date
IDOT	I-94 Bishop Ford Expressway from Stony Island Avenue feeder; includes Blue Island Avenue	Repair/replace two bridges	2016
IDOT	Bridge over I-94 Bishop Ford Expressway at 111th Street	Repair bridge	2013
IDOT	I-57 from US 30 (Lincoln Highway) to I-94 (Dan Ryan Expressway/Mainline)	Repair bridge	2013
CDOT	95th Street from Western Avenue to Ewing Avenue	Coordinate traffic signal timing	2016
IDOT	Vermont Street from Western Avenue to 127th Street	Resurface road	2013
IDOT	IL 1 (Halsted Street) from 127th Street to 152nd Street	Resurface road	2013
IDOT	127th Street from Ashland Avenue to Carpenter Street	Resurface road	2014
IDOT	CREATE Western Avenue Corridor	Includes CREATE projects WA1 through WA5, WA7, WA10, WA11	2015
IDOT	CREATE East-West Corridor	Include CREATE projects EW-1, EW-2, EW-3, EW-4	2021
Metra	Regionwide	Acquire shop facility and/or equipment; work on rail tower or yard; work on vehicle maintenance facility	2016
Metra	Metra 3246 Catenary Wire, ME	Replace catenary wire at selected locations along the ME District right of way.	2014
IDOT	Bike Facility: Palos Heights - Cal-Sag Multi-Use Greenway from Centennial Trail to Burnham Greenway	Build bicycle and pedestrian facility	2014
IDOT	Hotel Florence from 11111 South Forestville, Pullman Historic District	Preserve historic facility	2012
IDOT	North Pullman Historic District Area	Conduct landscaping, preserve historic facility	2013

Notes: IDOT = Illinois Department of Transportation, CREATE = Chicago Region Environmental and Transportation Efficiency, CDOT= Chicago Department of Transportation, ME = Metra Electric

4.2 Fiscally Constrained Major Capital Projects

The *GO TO 2040 Comprehensive Regional Plan* (GO TO 2040, CMAP 2010) is a comprehensive plan for the Chicago land region. The plan outlines goals in the following areas: livable communities, human capital, efficient government, and regional mobility. *GO TO 2040* describes strategies focused on regional mobility: investing in transportation, improving public transportation, and creating a more efficient freight network. The projects listed in Table 4-2 are some of the fiscally constrained major transportation projects that may have the potential for cumulative impacts with the RLE. The expected construction dates of these projects in relation to the RLE are identified in Table 4-2.

Table 4-2: *GO TO 2040* Fiscally Constrained Major Capital Projects

Agency	Project Name	Description	Timeframe of Action in Relation to RLE Project
IDOT/Tollway	I-294/I-57 Interchange	Construction of proposed interchange at the junction of the two interstates.	Before
IDOT	I-80 Add Lanes	Construction of two lanes from River Road to I-294	Before
Metra	Metra Rock Island Improvements	Construction of a third track to the 9-mile double-track portion of the Rock Island District Line. A new flyover bridge over the NS Railroad at 63rd Street, new bi-directional signals, several new bridges over city streets, and the expansion and modernization of the 47th Street Yard.	Before
Metra	SouthWest Service Improvements	Service will be rerouted to terminate at LaSalle Station. Construction of a 2-mile segment beginning west of Belt Junction to carry trains over the parallel NS service along 74th Street over the Rock Island District tracks.	Concurrent
CDOT	West Loop Transportation Center	Construction of a proposed transportation terminal located between the Eisenhower Expressway and Lake Street. As part of this project, improvements to Union Station will be done to increase capacity.	Concurrent
CTA	Red Purple Modernization Project	Reconstruction improvements of the existing rail and stations between Belmont and Howard stations on the Red Line, and between Howard and Linden stations on the Evanston Branch.	Before/Concurrent

Agency	Project Name	Description	Timeframe of Action in Relation to RLE Project

Notes: RLE = Red Line Extension, IDOT= Illinois Department of Transportation, Tollway = Illinois State Toll Highway Authority, CDOT = Chicago Department of Transportation, CTA = Chicago Transit Authority, NS = Norfolk Southern

4.3 State, Regional, and Local Plans

Table 4-3 lists the other actions or studies within or near the project area that are not included in either the TIP or are on the list of fiscally constrained projects. Many of the actions listed in Table 4-3 establish an outline of strategies to improve the livability and safety in the City of Chicago. Although most of these do not list specific planned projects, they may lead to future projects within the project area.

Table 4-3: Existing, Current, and Reasonably Foreseeable Future Actions

Location and Action	Description of Action	Timeframe of Action in Relation to RLE Project
Illinois Department of Natural Resources		
Illinois Coastal Management Program	Environmental Impact Statement was prepared through NOAA. Plan was adopted in 2011. Plan for preserving, restoring, and protecting the coastal resources in Illinois. In the little Calumet and Grand Calumet River corridors, Lake Calumet and Calumet River and surrounding wetland areas and degraded industrial areas will be addressed.	Concurrent
Millennium Reserve	Millennium Reserve stretches from downtown Chicago east to the Indiana border and southwest to Midewin National Tallgrass Prairie in Wilmington, Illinois. The immediate focus within this area is the Calumet Core region, encompassing numerous neighborhoods on Chicago's south side, the southeast lakefront, and 35 south suburban municipalities. Governed by Illinois State Executive Order 13-03.	Before
Illinois Department of Transportation FY 2012-2017 Highway Improvement Program		
I-90/94 at 63rd Street	Bridge replacement and utility adjustments	Before
IL 1 (Halsted Street)	Little Calumet River, Bridge Repair	Before
111th Street FAU 1583	Resurfacing Vincennes Avenue to Halsted Street	Before
138th Street and Ashland Avenue	Pump station and drainage	Before
135th Street and Ashland Avenue Bridge	Bridge Rehabilitation	Before
Wood Street Reconstruction	Wood Street from Little Calumet River to US 6 Reconstruction	Before
Eggleston Ave Phase 1	US Routes 12/20 to 95th Street at Eggleston Avenue	Before
IDOT High Speed Rail	High Speed Rail - Chicago to St. Louis	Before
Illinois State Toll Highway Authority (Tollway)		

Location and Action	Description of Action	Timeframe of Action in Relation to RLE Project
Move Illinois: The Illinois Tollway Driving the Future	Reconstruct 8 Lanes of I-294 95th Street to Balmoral Avenue.	After
Move Illinois: The Illinois Tollway Driving the Future	I-294/I-57 interchange. New ramps, structures and toll plazas. New ramps to and from Memphis and 147th Street ramps.	Before
Indiana Department of Transportation		
Indiana State Rail Plan	NICTD is completing a bypass of the Kensington Station in Illinois, which will give the South Shore line a second route through the Kensington Interlocking.	Before
Illiana Expressway Feasibility Study	The Illiana study area is in southern Will County and northern Kankakee County in Illinois and southern Lake County in Indiana. The study area is generally between I-65 on the east, I-55 on the west, US 30 on the north, and north Kankakee County on the south. The study proposes an east-west corridor extending from I-55 to I-65 with potential interchange to I-57. A record of decision was issued for the Illiana Corridor in January 2013.	Concurrent
Northwest Indiana Regional Development Authority		
Comprehensive Economic Strategic Plan - Phase II	As part of the West Lake Corridor expansion project, plans to expand the NICTD line from Munster to the existing South Shore line in Chicago.	Concurrent
Forest Preserve District of Cook County		
Final Capital Improvement Plan 2012-2016.	Proposed bike and equestrian trails including the Cal-Sag Trail, Beaubien Woods parking projects and site identification, and Dan Ryan woods paved trail	Before
Chicago Transit Authority		
Ashland Bus Rapid Transit	Analysis of potential service options on Western and Ashland Avenues in a study area extending approximately 21 miles in length from about Howard Street on the north, Western Avenue on the west, Ashland Avenue on the east, and 95th Street on the south	Concurrent
City of Chicago		
Chicago Climate Action Plan	This plan lists five strategies to make the City of Chicago more resilient to the effects of Climate Change, including improved transportation options. The following actions are listed under this strategy: invest in more transit, expand transit incentives, promote transit-oriented development, improve fleet efficiency, switch to cleaner fuels, make walking and biking easier, support intercity rail, and improve freight movement.	Concurrent
Chicago Railroad Economic Opportunity Plan	Study examined Chicago's industrial corridors for the sustainability of the railroad industry. The Calumet Industrial Corridor was identified as one of the five areas most suitable for rail-based industries to be	Concurrent

Location and Action	Description of Action	Timeframe of Action in Relation to RLE Project
	studied in depth. Within this corridor the following projects are included: the NS grade crossings at Torrence Avenue and 130th Street out of the Ford Assembly Plant and the connection from CREATE's east-west corridor from Pullman Junction to the NS mainline.	
Chicago Streets for Cycling Plan	Chicago Streets for Cycling Plan 2020 is a complementary plan to Bike 2015 Plan. The three principles in the plan are to provide a bicycle accommodation within ½ mile of every Chicagoan, provide a greater number of bikeways where more people live, and increase the amount of infrastructure where ridership is high, while establishing a strong backbone of infrastructure where ridership is currently lower. The plan calls for 100 miles of protected bike lanes, 10 miles of neighborhood greenways, 20 miles of bike lanes on Neighborhood Bike Routes, and continuous bikeways on three Spoke Routes by 2015. The plan calls for the following by 2020: continuous bikeways on all Spoke Routes, an additional 50 miles of protected bike lanes, an additional 30 miles of neighborhood greenways, an additional 40 miles of bike lanes on Neighborhood Bike Routes, and marking and/or signage on all Neighborhood Bike Routes.	Concurrent
Chicago Pedestrian Plan	The Chicago Pedestrian Plan has the following goals: 1) Improve pedestrian safety by eventually eliminating pedestrian fatalities, designing and building safer streets for pedestrians, and improving safety by reducing crime. 2) Improve connectivity by identifying and eliminating gaps and barriers in the pedestrian network, improving pedestrian connectivity to transit, and improving at-grade railroad crossings. 3) Increase livability by increasing the amount and quality of pedestrian space and increasing activity in pedestrian space. 4) Improve health by increasing the number of pedestrian trips for enjoyment, school, work, and daily errands and increasing the mode share of pedestrian trips.	Concurrent
Far South Railroad Relocation Study	Study to potentially relocate the UPRR to another railroad ROW.	Before

Location and Action	Description of Action	Timeframe of Action in Relation to RLE Project
South Lakefront Corridor Transit Study	CDOT and Department of Housing and Economic Development have commissioned this study to identify ways to improve public transportation in the corridor, enhance mobility for residents, and increase access to jobs located throughout the city and surrounding areas. The study area includes northern stops on the Red Line and the Metra Electric District line.	Concurrent
Transit Friendly Development Guide/Station Area Typology Study	The Transit Friendly Development Guide designates each rail station with one of seven typologies that are common across the rail system. The designations are intended to shape the public's expectations about potential development while identifying the nearby zoning and infrastructure assets that maximize each station as a community anchor.	Concurrent
Calumet Area Land use Plan	Study lists potential uses for land. Document intended to direct future development in the Calumet area.	Concurrent
Ford Calumet Environmental Center	A proposed center for research and learning located within the Hegewisch Marsh area, a 130-acre wetland undergoing restoration.	Concurrent
Chicago Union Station Master Plan	The study identified potential ideals for adding tracks and platforms, as well as increasing the capacity of the station. Long-term concepts include developing a new station facility at 300 South Riverside or proposing a new commuter and intercity passenger train station on the 200 South Riverside block.	Concurrent
North Pullman TIF District	The North Pullman TIF District was created to promote ongoing investment in the district's existing buildings and vacant properties, especially the retail and commercial buildings on 103rd Street and the 11.5-acre Union Foundry site near 104th Street and Maryland Avenue. Expires in 2033.	Concurrent/After
West Pullman Industrial TIF District	Created to support ongoing industrial investments within the West Pullman Industrial Park. Intended to foster the area's revitalization through site assembly efforts, soil remediation projects, and numerous infrastructure improvements. Infrastructure projects included were the reconstruction of 119th Street, 120th Street, and Morgan Street, and portions of Loomis Street and Racine Avenue. Expires in 2021.	Concurrent
Calumet River TIF District	Redevelopment plan for area includes plan for remediation	Concurrent
Mercy Housing	Pullman Wheelworks: A nationally registered Historical building at 901 E. 104th Street. The project includes a renovation of the 210-unit rental complex.	Before
Urban Land Institute - Pullman Study	Study recommends redeveloping the area in phases as a mixed-use development. The study recommends reuse of existing buildings.	Before

Location and Action	Description of Action	Timeframe of Action in Relation to RLE Project
Chicago Neighborhood Initiatives - Pullman Park	Pullman Park will be a 180-acre, sustainable, mixed-use development that provides retail services, diverse recreational opportunities, and quality housing to the greater Pullman and Roseland Communities on the south side of Chicago. The first phase of development will include the reconstruction of Doty Avenue and a new 150,000-square-foot Walmart store.	Concurrent
Chicago Park District		
2012-2016 Capital Improvement Plan	Development of Calumet area properties is part of the 2012-2016 Plan. Properties include Hegewisch Marsh Expansion, Big Marsh Expansion, Kensington Park, Park development - 114th Street and Champlain Avenue, West Pullman Transition plan access improvements, and Palmer Field House.	Concurrent
Friends of the Cal-Sag Trail	Proposed trail along the Little Calumet River and Cal-Sag Channel.	Before
Chicago State University		
Master Plan	Master plan includes campus improvements, proposed buildings, and a transit facility for a proposed Metra station and CTA bus turnaround.	Concurrent
CREATE		
Traffic Control System Blue Island (B15) - Signalization of Blue Island Yard Running Tracks	The project includes installation of new bi-directional computerized traffic control system between the intersections of 140th Street and Western Avenue in Blue Island and the intersection of 140th Street and Indiana Avenue in Dolton, Illinois, to improve speed of freight trains, reducing freight conflicts with Amtrak.	Before
75th Street Corridor Improvement Project	Includes CREATE projects EW2, GS19, P2, and P3[1]	Before
EW2 & P2	The project will consider reconfiguring and building a third BRC main track and constructing a flyover to connect the Metra Southwest Service to the Rock Island Line in the vicinity of 74th Street and Normal Avenue and 75th Street and Parnell Avenue.	Before
P3	This project will consider constructing a bridge that significantly reduces conflicts between CSX and BRC, Metra (Rock Island District) and NS.	Before
GS19	The project will consider a road-rail grade separation of 71st Street and CSX freight.	Before

[1] Table 4-1 lists the CREATE projects that have been included in the 2010-2015 Transportation Improvement Program.

Location and Action	Description of Action	Timeframe of Action in Relation to RLE Project
95th Street & Union Pacific Grade Separation (GS21a)	95th Street and Eggleston Avenue. The project will consider eliminating the at-grade crossing of 95th Street and two UPRR tracks with an overpass or underpass for vehicles using 95th Street.	Concurrent
Cottage Grove & IHB/CSX Grade Separation (GS23a)	The project will consider eliminating at-grade crossing of Cottage Grove Avenue and the four IHB and CSX tracks with an overpass or underpass for vehicles.	Concurrent
Canadian National Railway		
Logistics Park	Proposed Logistics Park that will connect directly to CN's Chicago Intermodal Terminal. Located south of I-80/294 between Ashland Avenue and Dixie Highway.	Concurrent
Metra		
Southeast Corridor Alternatives Analysis	33.2 miles of proposed line from LaSalle Street Station to terminal near Balmoral Park. Would run along the following four existing railroad ROWs: Joint Union Pacific/CSX Transportation freight corridor from Balmoral Park to Dolton junction, UPRR from Dolton Junction to Oakdale Junction, Chicago Rail Link From Oakdale Junction to Gresham Interlocking, Metra Rock Island District from Gresham interlocking to LaSalle Street Station. Ten new stations and three existing stations (existing Rock Island District stations).	Concurrent/After
Metropolitan Water Reclamation District		
Calumet Waste Water Treatment Plant	Proposed improvements to the Calumet Waste Water Treatment Plant disinfection system.	Before
Village of Riverdale		
Northeast Riverdale Sewer System	New storm sewers and existing sewer improvements.	Before
Calumet-Sangamon Bike Trail Project:	33 miles of constructed bike trail through Riverdale.	Before

Location and Action	Description of Action	Timeframe of Action in Relation to RLE Project
Private		
Crown Commercial Real Estate & Development – Roseland Plaza	Roseland Plaza redevelopment would be adjacent to the Michigan Avenue station. The proposal includes a strip mall within a 91,000-square-foot property with 250 parking spaces. There would be 49,000 square feet of commercial space, which would include a grocery store, pharmacy, clothing store, and a bank. The City's Community Development Commission designated the developer in February 2005. The City approved the sale of its land and land write-down costs in May 2009. The developer modified its proposal and received approval of its Planned Development application from the Chicago Plan Commission in October 2011.	Before/Concurrent

Notes: NOAA = National Oceanic and Atmospheric Administration, IDOT = Illinois Department of Transportation, NICTD = Northern Indiana Commuter Transportation District, NS = Norfolk Southern, CREATE = Chicago Region Environmental and Transportation Efficiency, ROW = right-of-way, UPRR = Union Pacific Railroad, CDOT = Chicago Department of Transportation, CTA = Chicago Transit Authority, TIF = tax-increment financing, BRC = Belt Railway of Chicago, IHB = Indiana Harbor Belt Railroad, CN = Canadian National

Section 5
Impacts and Mitigations

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the CMAP Fiscal Year 2010–2015 TIP. Table 4-1 lists the TIP projects within the project area, consisting of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities.

The No Build Alternative would not contribute to cumulative benefits or impacts for the following resources: transportation; land use and economic development; displacements and relocations; parklands and community facilities; visual and aesthetic conditions; noise and vibration; safety and security; historic and cultural resources; hazardous materials; water resources; wetlands; floodplains; vegetation and wildlife habitat; threatened or endangered species; geology and soils; energy; and environmental justice. These resources could be independently affected by the project and were analyzed separately. Only resources that would incur cumulative impacts due to multiple projects are presented in this section. The following sections discuss environmental resources with the potential to be subject to cumulative benefits or impacts with the No Build Alternative.

5.1.1 Neighborhood and Community Impacts

Although the No Build Alternative would not have adverse cumulative impacts, the lack of improved transportation options and lack of new infrastructure would do little to reverse the disinvestment in the project area that has occurred over the past several decades.

5.1.2 Air Quality

The Red and Purple Modernization (RPM) Project is a reasonably foreseeable action that would result in beneficial air quality impacts, as it is anticipated to have an increase in ridership with a corresponding reduction in trips made by vehicles. The cumulative impacts would result in a reduction of air emissions and would be beneficial. The air quality benefits of the No Build Alternative would be smaller in scale than those of any of the other RLE alternatives.

5.2 Bus Rapid Transit Alternative

The BRT Alternative is a 5.5-mile long BRT route that would provide an enhanced bus route with transit signal priority along the existing #34 South Michigan bus route. Four stops with improved bus shelters and parking would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue.

The BRT Alternative would not contribute to cumulative benefits or impacts for the following resources: transportation; land use and economic development; displacements and relocations; visual and aesthetic conditions; noise and vibration; safety and security; historic and cultural resources; hazardous materials; water resources; wetlands; floodplains; vegetation and wildlife habitat; threatened or endangered species; geology and soils; energy; and environmental justice. These resources could be independently affected by the project and were analyzed separately. Only resources that would incur cumulative impacts due to multiple projects are presented in this section. The following sections discuss environmental resources with the potential to be subject to cumulative benefits or impacts with the BRT Alternative.

5.2.1 Neighborhood and Community Impacts

The minimal improvements of transportation options and new infrastructure would do little to reverse the disinvestment in the project area that has occurred over the past several decades. The cumulative impacts on neighborhood and communities would not be adverse and would not require mitigation measures.

5.2.2 Parklands and Community Facilities

The construction and operation of the BRT Alternative would not reduce the overall health of the parklands and/or community facilities in the project area. Improved transit in the project area would result in improved access to parklands and community facilities beyond the project area and within walking distance of CTA's greater rail network.

5.2.3 Air Quality

The RPM Project is a reasonably foreseeable action that would result in beneficial air quality impacts, as it is anticipated to have an increase in ridership with a corresponding reduction in trips made by vehicles. The cumulative impacts would be beneficial due to the reduction of air emissions.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative would extend the Red Line from the existing 95th Street Terminal to 130th Street, just west of I-94. Under the UPRR Rail Alternative ROW Option (ROW Option) the CTA tracks would be placed in the UPRR ROW between I-57 and the CN/ME tracks. As part of a separate project, the existing freight operations would be moved out of the UPRR corridor, leaving the corridor vacant. The CTA could implement the ROW Option only if this separate project occurs prior to RLE. Four stations would be included in the ROW Option: 103rd Street, 111th Street, Michigan Avenue, and 130th Street. One terminal station at 130th Street is under evaluation with two options: the South Station Option and the West Station Option. Substations are tentatively proposed for the following locations: west of the CTA tracks between 104th and 105th Streets, west of the CTA tracks between Perry and Lafayette Avenues, and west of the CTA tracks north of the proposed parking structure for the South Station Option or along the curve of the CTA tracks near 130th Street for the West Station Option. An additional substation within the 120th Street yard and shop facility is proposed.

The ROW Option would not contribute to cumulative benefits or impacts for the following resources: displacements and relocations; visual and aesthetic conditions; historic and cultural resources; hazardous materials; water resources; wetlands; floodplains; vegetation and wildlife habitat; threatened or endangered species; geology and soils; energy; and environmental justice. These resources could be independently affected by the project and were analyzed separately. Only resources that would incur cumulative impacts due to multiple projects are presented in this section. The following sections discuss environmental resources with the potential to be subject to cumulative benefits or impacts with the ROW Option.

5.3.1 Transportation

There could be beneficial impacts on traffic due to the relocation of the UPRR. There would be fewer traffic delays with the ROW Option than with the East or West Options.

5.3.2 Noise and Vibration

There could be beneficial impacts on noise and vibration from the ROW Option when considering the relocation of the UPRR. Because UPRR freight operations would be relocated, the ROW Option would result in less noise and vibration than under the No Build Alternative, and would result in less noise and vibration than the East and West Options would.

5.3.3 Safety and Security

The ROW Option could have beneficial impacts on safety due to the relocation of the UPRR. The relocation of the UPRR would eliminate conflicts between freight trains and motor vehicles or pedestrians accessing the transit facilities.

5.3.4 Land Use and Economic Development

Land use and economic development impacts for the UPRR Rail Alternative were analyzed for two segments in the project area, Segment UA and UB, as shown on Figure 2-1.

5.3.4.1 Segment UA

Implementation of the ROW Option would have a beneficial cumulative impact on land use and economic development due to new employment accessibility, attraction of new development adjacent to RLE stations, and overall livability improvements. The private sector would likely perceive the ROW Option as a public sector commitment to improve the overall project area and regain confidence in the area's economic development market. The affected neighborhoods include Washington Heights, Roseland, and West Pullman. The UPRR ROW Option would only be implemented if the UPRR were relocated as part of a separate, independent project prior to the construction of the UPRR ROW Option. This action would benefit adjacent residential neighborhoods that would be relieved of the noise, vibration, and traffic delays caused by the UPRR operations.

5.3.4.2 Segment UB

The cumulative land use and economic development impacts would be similar to those described for Segment UA (Section 5.3.1.1). The cumulative land use and economic development impacts would be considered beneficial in West Pullman and Riverdale.

5.3.5 Neighborhood and Community Impacts

The retail and commercial space on the ground floor of the Michigan Avenue station's park & ride garage, combined with the proposed Roseland Plaza north of the station site, would help activate the neighborhood and enhance the station's role as a focal point of community activity and services. The station and retail improvements may contribute to a southward expansion of the current commercial and entertainment district along Michigan Avenue between 111th and 113th Streets. The relocation of the UPRR would benefit adjacent residential neighborhoods that would be relieved of the noise, vibration, and traffic delays caused by the UPRR operations.

5.3.6 Parklands and Community Facilities

The construction and operation of the ROW Option would not reduce the overall health of the parklands and/or community facilities in the project area. Improved transit in the project area would result in improved access to parklands and community facilities beyond the project area and within walking distance of CTA's greater rail network.

5.3.7 Air Quality

The RPM Project is a reasonably foreseeable action that would result in beneficial air quality impacts, as it is anticipated to have an increase in ridership with a corresponding reduction in trips made by vehicles. The cumulative impacts would be beneficial due to the reduction of air emissions.

5.4 Union Pacific Railroad Rail Alternative - East Option

In the UPRR Rail Alternative East Option (East Option), the CTA tracks would be placed immediately adjacent to and east of the UPRR ROW between I-57 and the CN/ME tracks. The UPRR is evaluating adding a third track to the east of its two existing tracks. The East Option would include substations at the following locations: west of the UPRR tracks between 104th and 105th Streets, west of the UPRR tracks between Perry Avenue and Lafayette Avenue, and west of the CTA tracks south of the proposed yard near the 130th Street station. An additional substation within the 120th Street yard and shop facility is proposed. Four stations would be included in the East Option: 103rd Street, 111th Street, Michigan Avenue, and 130th Street. One terminal station at 130th Street is under evaluation with two options: the South Station Option and the West Station Option.

The East Option would have no or limited impacts on the following resources: displacements and relocations; visual and aesthetic conditions; noise and vibration; historic and cultural resources; hazardous materials; water resources; wetlands; floodplains; vegetation and wildlife habitat; threatened or endangered species; geology and soils; energy; and environmental justice. This alternative would therefore not contribute to cumulative impacts for the environmental resources

listed above. The environmental resources that have the potential to be subject to cumulative impacts are discussed in the following sections for the East Option.

5.4.1 Transportation

The CREATE 75th Street Corridor Improvement Project would increase freight volumes substantially by the forecasted 2029 build year. Because the UPRR tracks would remain with the East Option, freight trains may have potential impacts on pedestrian and vehicular traffic near the proposed stations, which could affect travel times for bus transit serving the stations and increase delays for commuters who choose to park and ride. Potential mitigation measures could include the coordination of passenger and UPRR freight train schedules to avoid or reduce trains crossing at peak hours such as morning rush hour. CTA train and bus schedules could also be coordinated with passenger and UPRR trains to reduce commuter delays.

5.4.2 Land Use and Economic Development

Cumulative land use and economic development impacts for the East Option would be similar to those stated in Section 5.3.4 for the ROW Option for Segments UA and UB, with the exception of the additional benefits of the ROW Option considered cumulatively with the UPRR relocation project, a separate project that would occur before implementation of the UPRR ROW Option.

5.4.3 Neighborhood and Community Impacts

Cumulative neighborhood and community impacts for the East Option would be similar to those stated in Section 5.3.5 for the ROW Option, with the exception of the additional benefits that the ROW Option would have due to the prior relocation of the UPRR.

5.4.4 Parklands and Community Facilities

Cumulative parklands and community facilities impacts for the East Option would be similar to those stated in Section 5.3.6 for the ROW Option.

5.4.5 Safety and Security

In addition to the expected increase in automobile and pedestrian traffic volumes as a result of the RLE Project when compared to the No Build Alternative, the full implementation of the CREATE program would increase the number of trains using the UPRR tracks from 26 to 48 per day. The proposed Metra SouthEast Service Line, if implemented, could also increase the number of passenger trains per day on the line beyond the existing two Amtrak trains per day. The increase in train volumes could correlate to an increase in potential crash frequency at highway-rail grade crossings. This increase in crash potential would be an adverse impact at the existing highway-rail grade crossings along the UPRR tracks at 101st Street, 103rd Street, 107th Street, 109th Street, 111th Street, Wentworth Avenue, 115th Street, and State Street. All of these crossings currently have gates on both roadway approaches and flashing lights. Crash potential could be further mitigated by installing safety protection technologies for vehicles and pedestrians to prevent drivers from going around the gates, and by installing pedestrian gates on the sidewalks.

5.4.6 Air Quality

Cumulative air quality impacts for the East Option would be similar to those stated in Section 5.3.7 for the ROW Option.

5.5 Union Pacific Railroad Rail Alternative - West Option

In the UPRR Rail Alternative West Option (West Option), the CTA tracks would be placed immediately adjacent to and west of the UPRR ROW between I-57 on the north end and the UPRR tracks near Kensington Park on the south end. The West Option would include substations at the following locations: east of the UPRR tracks between 105th Street and 105th Place, west of the UPRR tracks between Perry Avenue and Lafayette Avenue, and east of the CTA tracks south of the proposed yard near the 130th Street station. An additional substation within the 120th Street yard and shop facility is proposed. Four stations would be included in the West Option: 103rd Street, 111th Street, Michigan Avenue, and 130th Street. One terminal station with two options is under evaluation for the 130th Street station: the South Station Option and the West Station Option.

The West Option would have limited or no impacts on the following resources: displacements and relocations; visual and aesthetic conditions; noise and vibration; historic and cultural resources; hazardous materials; water resources; wetlands; floodplains; vegetation and wildlife habitat; threatened or endangered species; geology and soils; energy; and environmental justice. This alternative would therefore not contribute to substantial cumulative impacts for the environmental resources listed above. The environmental resources that have the potential to be subject to cumulative impacts are discussed in the following sections for the West Option.

5.5.1 Transportation

Cumulative transportation impacts for the West Option would be similar to those stated in Section 5.4.1 for the East Option.

5.5.2 Land Use and Economic Development

Cumulative land use and economic development impacts for the West Option would be similar to those stated in Section 5.3.4 for the ROW Option for Segments UA and UB with the exception of the additional benefits of the ROW Option considered cumulatively with the UPRR relocation project.

5.5.3 Neighborhood and Community Impacts

Cumulative neighborhood and community impacts for the West Option would be similar to those stated in Section 5.3.5 for the ROW Option with the exception of the additional benefits of the ROW Option considered cumulatively with the UPRR relocation project.

5.5.4 Parklands and Community Facilities

Cumulative parklands and community facilities impacts for the West Option would be similar to those stated in Section 5.3.6 for the ROW Option.

5.5.5 Safety and Security

Cumulative safety and security impacts for the West Option would be similar to those stated in Section 5.4.5 for the East Option.

5.5.6 Air Quality

Cumulative air quality impacts for the West Option would be similar to those stated in Section 5.3.7 for the ROW Option.

5.6 120th Street Yard and Shop

There would be no cumulative impacts associated with the 120th Street yard and shop.

5.7 Halsted Rail Alternative

The proposed Halsted Rail Alternative is a 5-mile extension of the existing Red Line. It would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. It would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. Four stations would be built at 103rd Street, 111th Street, 119th Street, and Vermont Avenue.

The Halsted Rail Alternative would have limited or no impacts on the following resources: transportation; displacements and relocations; neighborhoods and community facilities; visual and aesthetic conditions; noise and vibration; safety and security; historic and cultural resources; hazardous materials; water resources; wetlands; floodplains; vegetation and wildlife habitat; threatened or endangered species; geology and soils; energy; and environmental justice. This alternative would therefore not contribute to substantial cumulative impacts for the environmental resources listed above. The environmental resources that have the potential to be subject to cumulative impacts are discussed in the following sections for the Halsted Rail Alternative.

5.7.1 Land Use and Economic Development

Land use and economic development impacts for the Halsted Rail Alternative were analyzed for two segments in the project area, Segment HA and HB, as shown on Figure 2-1.

5.7.1.1 Segment HA

Cumulative land use and economic development impacts for the Halsted Rail Alternative would be similar to those stated in Section 5.3.4 for the UPRR ROW Option including the community of Morgan Park. The cumulative land use and economic development impacts would be beneficial for Washington Heights, Roseland, West Pullman, and Morgan Park.

5.7.1.2 Segment HB

The cumulative land use and economic development impacts would be similar to those stated in Section 5.3.4 for the UPRR ROW Option with the exception that only West Pullman would receive beneficial cumulative impacts from the Halsted Rail Alternative.

5.7.2 Parklands and Community Facilities

The construction and operation of the Halsted Rail Alternative would not reduce the overall health of the parklands and/or community facilities in the project area. Improved transit in the project area would result in improved access to parklands and community facilities beyond the project area and within walking distance of CTA's greater rail network.

5.7.3 Air Quality

The RPM Project is a reasonably foreseeable action that would result in beneficial air quality impacts, as it is anticipated to have an increase in ridership with a corresponding reduction in trips made by vehicles. The cumulative impacts would be beneficial due to the reduction of air emissions.

5.8 119th Street Yard and Shop

There would be no cumulative impacts associated with the 119th Street yard and shop.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

Because there would be no adverse cumulative impacts, no mitigation measures would be required for the No Build Alternative.

6.2 Bus Rapid Transit Alternative

Because there would be no adverse cumulative impacts, no mitigation measures would be needed for the BRT Alternative. There would be beneficial cumulative impacts on air quality due to the reduction in air emissions.

6.3 Union Pacific Railroad Rail Alternative – Right-of-Way Option

Because there would be no adverse cumulative impacts, no mitigation measures would be needed for the ROW Option. The ROW Option would have beneficial impacts for land use and economic development, neighborhoods and communities, parklands, and air quality.

6.4 Union Pacific Railroad Rail Alternative – East Option

6.4.1 Transportation

There would be no adverse impacts remaining after the mitigation measures discussed in Section 5.4.1 are implemented.

6.4.2 Land Use and Economic Development

There would be beneficial cumulative impacts on land use and economic development; therefore, no mitigation measures would be needed.

6.4.3 Neighborhood and Community Impacts

There would be beneficial cumulative impacts on neighborhoods and communities; therefore, no mitigation measures would be needed.

6.4.4 Parklands and Community Facilities

There would be beneficial cumulative impacts on parklands and community facilities; therefore, no mitigation measures would be needed.

6.4.5 Safety and Security

There would be no adverse impacts remaining after mitigation measures discussed in Section 5.4.5 are implemented.

6.4.6 Air Quality

There would be beneficial impacts on air quality with or without the RPM Project, a reasonably foreseeable action. No mitigation measures would be required.

6.5 Union Pacific Railroad Rail Alternative – West Option

6.5.1 Transportation

There would be no adverse impacts remaining after the mitigation measures discussed in Section 5.4.1 are implemented.

6.5.2 Land Use and Economic Development

There would be beneficial cumulative impacts on land use and economic development; therefore, no mitigation measures would be needed.

6.5.3 Neighborhood and Community Impacts

There would be beneficial cumulative impacts on neighborhoods and communities; therefore, no mitigation measures would be needed.

6.5.4 Parklands and Community Facilities

There would be beneficial cumulative impacts on parklands and community facilities; therefore, no mitigation measures would be needed.

6.5.5 Safety and Security

There would be no adverse impacts remaining after the mitigation measures discussed in Section 5.4.5 are implemented.

6.5.6 Air Quality

There would be beneficial impacts on air quality with or without the RPM Project, a reasonably foreseeable action. No mitigation measures would be needed.

6.6 120th Street Yard and Shop

There would be no cumulative impacts for the 120th Street yard and shop; therefore, no mitigation measures would be needed.

6.7 Halsted Rail Alternative

6.7.1 Land Use and Economic Development

There would be beneficial cumulative impacts on land use and economic development; therefore no mitigation measures would be needed.

6.7.2 Parklands and Community Facilities

There would be beneficial cumulative impacts on parklands and community facilities; therefore, no mitigation measures would be needed.

6.7.3 Air Quality

There would be beneficial impacts on air quality with or without the RPM Project, a reasonably foreseeable action. No mitigation measures would be needed.

6.8 119th Street Yard and Shop

There would be no cumulative impacts associated with the 119th Street yard and shop; therefore, no mitigation measures would be needed.

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Appendix A
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Appendix U

Air Quality Technical Memorandum

- Final EIS Addendum U, Air Quality Technical Memorandum, July 2022

Chicago Red Line Extension Project

Air Quality

Final EIS Addendum U

July 2022

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Table of Contents

Section 1 - Summary 1-1
Section 2 - Project Description and Background 2-1
Section 3 - Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-2
3.4 Methods 3-2
Section 4 - Affected Environment 4-1
4.1 Measured Ambient Air Quality Concentrations 4-1
4.2 Planning and Policy Framework 4-1
Section 5 - Impacts and Mitigation 5-1
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative - Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited 7-1

Figure

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4

Table

Table 1-1: Air Quality Impact Summary 1-1

Abbreviations

API	area of potential impact
BMPs	best management practices
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
CNG	compressed natural gas
CO	carbon monoxide
Conrail	Consolidated Rail Corporation
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
FMVECP	Federal Motor Vehicle Emission Control Program
FTA	Federal Transit Administration
GHG	greenhouse gas
IAAQS	Illinois Ambient Air Quality Standards
IEPA	Illinois Environmental Protection Agency
IHB	Indiana Harbor Belt Railroad
MSAT	mobile source air toxics
NAAQS	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
NS	Norfolk Southern
Pace	Pace Suburban Bus Service
PM_{10}	particulate matter with an aerodynamic diameter of 10 micrometers and less
$PM_{2.5}$	particulate matter with an aerodynamic diameter of 2.5 micrometers and less
ppm	parts per million
RLE	Red Line Extension
RTP	Regional Transportation Plan
SIP	State Implementation Plan
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad
USEPA	U.S. Environmental Protection Agency
VMT	vehicle-miles traveled
$\mu g/m^3$	micrograms per cubic meter

Section 1 - Summary

This Air Quality Addendum updates the analyses of air quality impacts under the No Build Alternative and the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative compared with the Draft Environmental Impact Statement (EIS). For the Preferred Alignment, this Air Quality Addendum considers existing air quality, potential air quality impacts during construction and operation, mitigation measures, and conformity with the Clean Air Act. The air pollutants evaluated are carbon monoxide (CO) at congested intersections, greenhouse gas (GHG) emissions from project-related vehicles, particulate matter from vehicles, mobile source air toxics (MSAT), and emissions during construction activities.

The air quality impacts under the Preferred Alignment are summarized in **Table 1-1** below. Consistent with the findings of the Draft EIS and **Appendix U**, there would be no adverse impacts on regional and local air quality as a result of either the No Build Alternative or the Preferred Alignment.

Table 1-1: Air Quality Impact Summary

Alternative	Permanent Impacts		Construction Impacts
	Regional Air Emissions	Local Air Emissions	
No Build Alternative	No Impacts	No impacts	No impacts
Preferred Alignment	Beneficial, from passenger diversions to the Red Line	No adverse impacts	Impacts would not be adverse after mitigation

For the air quality analyses, the Draft EIS and **Appendix U** discussed the East and West Options of the UPRR Rail Alternative as one alternative. Because nearly all of the project-related air pollutant emissions would come from motor vehicles, and because the project-related motor vehicles would move throughout the entire area of potential impact (API), the results of the air quality analysis applied equally to all of the UPRR options in the Draft EIS as well as to the 120th Street yard and shop. It made no difference in the air quality analyses whether the Red Line trains would be on the east side or on the west side of the UPRR right-of-way, and air pollutant emissions would be the same in each case (**Appendix U**).

Under the Preferred Alignment, air pollutant emissions would be the same as for the East and West Options as discussed in the Draft EIS. The 130th Street station relocation would not change the number of project-related vehicles moving throughout the API. Shifting its location approximately 100 feet to the west would not change the air emissions of the 120th Street yard and shop, and its associated emissions would not be markedly different. Because it makes no difference in the air quality analysis whether the Red Line trains would be on the east or west side of the UPRR, the 107th Place cross-over under the Preferred Alignment would not change air quality impacts evaluated in the Draft EIS.

During operation of the Preferred Alignment, the regional emissions of air pollutants from project-related vehicles would be the same as for the East and West Options in the Draft EIS. The Preferred Alignment would reduce vehicle miles traveled (VMTs) resulting from passenger diversions to the Red Line, and therefore the Preferred Alignment would slightly lower regional emissions of GHGs, particulate matter, and MSAT as compared with the No Build Alternative. Because the modeled CO concentrations at congested intersections in the Draft EIS were well below state and federal standards, and because vehicular traffic would not considerably change under the Preferred Alignment, CO concentrations under the Preferred Alignment are not anticipated to exceed the air quality standards. No adverse air quality impacts are expected to occur during operation of the Preferred Alignment, and additional air quality mitigation would not be required.

Because the API is located within a nonattainment area for ozone, the Preferred Alignment must comply with the transportation conformity regulations under the Clean Air Act. The Red Line Extension (RLE) Project is included in the Chicago Metropolitan Agency for Planning's (CMAP) *ON TO 2050*, which is the conforming regional transportation plan (RTP) for the Chicago region. The RLE Project also is included in CMAP's *FFY 2019-2024 Transportation Improvement Program* (TIP). Because it is included in *ON TO 2050* and the TIP, the Preferred Alignment conforms to the State Implementation Plan (SIP) for ozone.

Impacts during construction would be associated with temporary and localized emissions of particulate matter and engine exhaust from construction vehicles and equipment. Construction air emissions and mitigation measures under the Preferred Alignment would be similar to the East and West Options in the Draft EIS. Construction mitigation would include best management practices (BMPs) to reduce construction dust, emissions controls on construction equipment, use of low-sulfur fuels, and limiting equipment operations such as excessive idling. In addition, the contractor would follow Chicago's Clean Diesel Construction Ordinance, which would reduce the potential for construction-related air quality impacts. No additional construction mitigation measures would be

required under the Preferred Alignment. Construction impacts on air quality would not be adverse after mitigation.

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the

cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

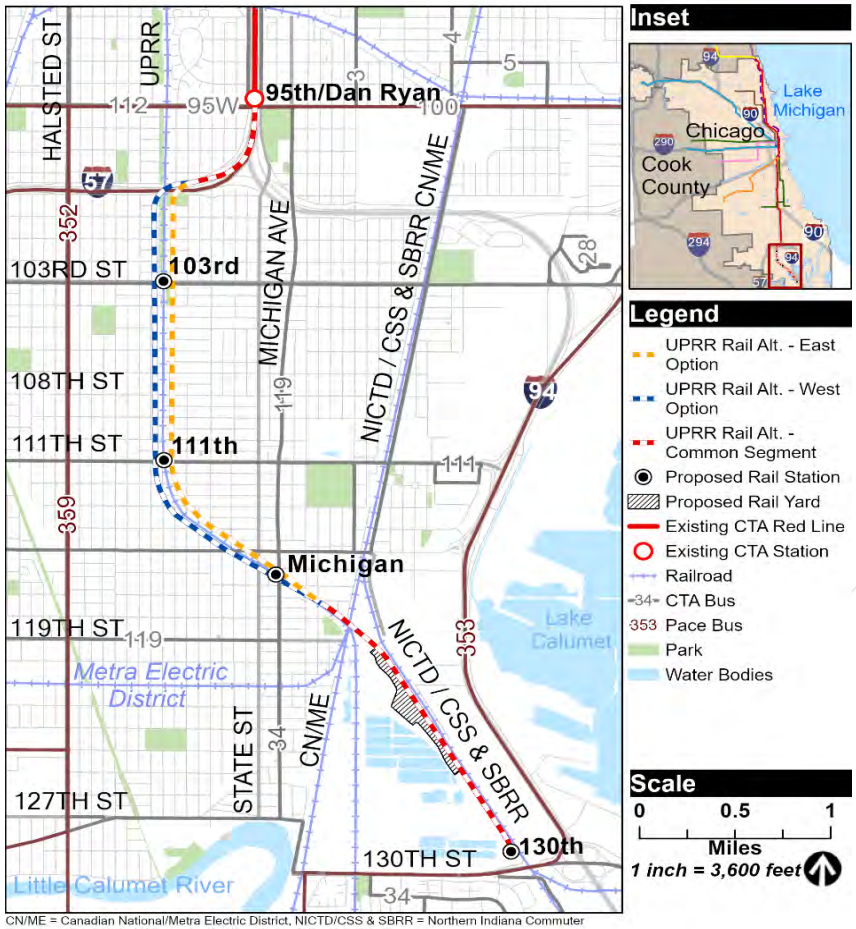

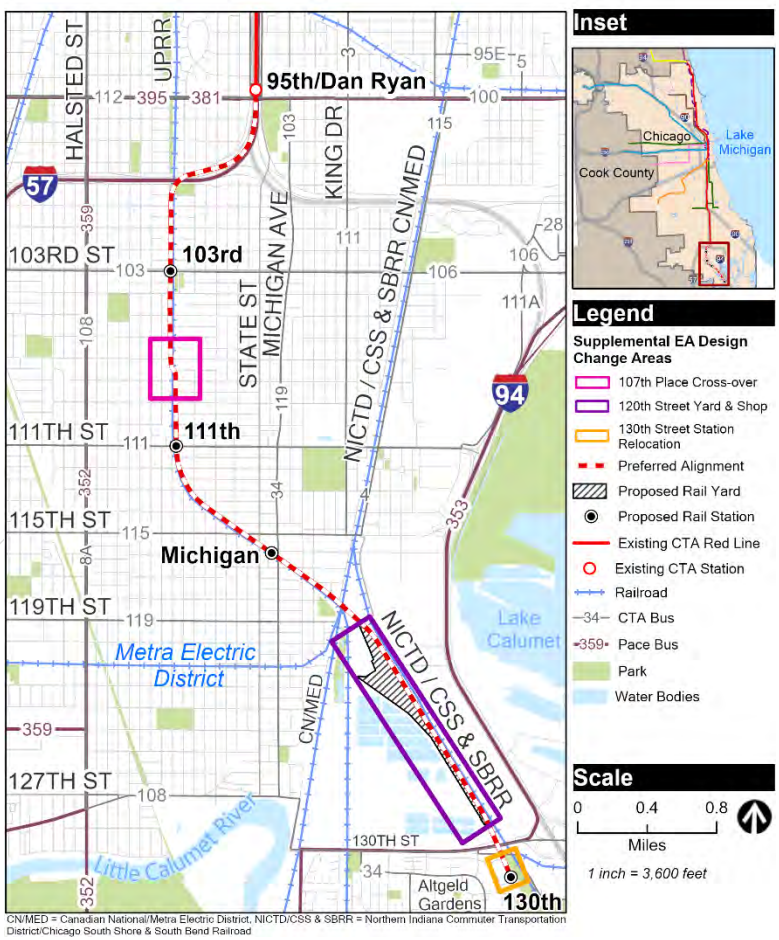

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix U** for the Draft EIS analysis have been carried forward to evaluate the potential air quality impacts and mitigation. This section documents the methodology for evaluating this resource, consistency with the methodology used in the Draft EIS and **Appendix U**, and any methodological changes.

3.1 Regulatory Framework

Under authority of the Clean Air Act and its amendments, the U.S. Environmental Protection Agency (USEPA) has established the National Ambient Air Quality Standards (NAAQS) for criteria pollutants to protect the public health and welfare. The criteria pollutants that are of greatest concern to the transportation sector include CO, nitrogen dioxide (NO_2), ozone, particulate matter with an aerodynamic diameter of 10 micrometers and less (PM_{10}), and particulate matter with an aerodynamic diameter of 2.5 micrometers and less ($PM_{2.5}$).

The NAAQS for ozone and $PM_{2.5}$ have changed from those summarized in **Appendix U** of the Draft EIS. For the annual $PM_{2.5}$ standard, the USEPA established in 2012 the primary standard of 12.0 micrograms per cubic meter (µg/m^3) and a secondary standard of 15.0 µg/m^3. The primary and secondary standards for ozone, established in 2015, are 0.070 parts per million (ppm), as the fourth-highest daily maximum 8-hour concentration, averaged across three consecutive years (USEPA 2021a). However, the updated ozone and $PM_{2.5}$ standards have no effects on the analysis of air quality impacts at the project level for the Preferred Alignment.

The Draft EIS identified that the API was designated as nonattainment areas for ozone and $PM_{2.5}$. A nonattainment area is a region where recent air quality monitoring data have exceeded the NAAQS. The API is still classified as nonattainment for ozone, but not for $PM_{2.5}$ (USEPA 2021b).

Since publication of the Draft EIS, the API has been redesignated as unclassifiable/attainment for $PM_{2.5}$. Because the API is in attainment with the $PM_{2.5}$ standards, a project-level conformity analysis for $PM_{2.5}$ is not required for the Preferred Alignment.

3.2 Impact Analysis Thresholds

The Draft EIS defined an impact to be adverse if operational emissions of air pollutants would exceed the NAAQS. The NAAQS for ozone and $PM_{2.5}$ have changed from those summarized in **Appendix U** of the Draft EIS. However, the updated ozone and $PM_{2.5}$ standards have no effects on

the project-level analysis of air quality impacts for the Preferred Alignment. There are no quantitative impact thresholds for GHG emissions.

3.3 Area of Potential Impact

Consistent with the Draft EIS approach in **Appendix U**, the API for determining air quality impacts is both regional and local. The API in the Draft EIS for the regional air analysis follows the analysis area adopted by the traffic analysis, which is a corridor bounded on the north by 91st Street, on the south by a varying boundary that includes 134th Street, on the west by a varying boundary that includes Halsted Street, and on the east by a varying boundary that includes I-94. The local air quality analysis is limited to the individual RLE stations, their associated parking facilities, and nearby intersections affected by traffic entering and exiting the stations (**Appendix U**).

The Preferred Alignment includes the following changes since the evaluation conducted for the Draft EIS: addition of the 107th Place cross-over, adjustment to the location of the 120th Street yard and shop, and relocation of the 130th Street station (moving south of 130th Street). These locations are still within the identified API included in the Draft EIS. The API for this Air Quality Addendum is consistent with the API used in the Draft EIS and **Appendix U**.

3.4 Methods

The analysis of air quality impacts of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS consistent with the following analyses of **Appendix U**.

The Draft EIS evaluated the emissions of GHGs, $PM_{2.5}$, and MSAT from project-related vehicles by comparing the air emissions based on regional VMT for the alternatives. This Air Quality Addendum compares VMT under the Preferred Alignment with VMTs for the UPRR Alternative in the Draft EIS. The regional VMTs under the Preferred Alignment would be the same as those evaluated for the East and West Options of the UPRR Alternative. The 130th Street station relocation, 120th Street yard and shop refinement, and 107th Place cross-over under the Preferred Alignment would not change VMT from the VMT evaluated in the Draft EIS.

The Draft EIS evaluated air emissions from fossil-fuel power plants during operation of RLE trains but did not quantify the air emissions of the Red Line trains associated with electrical power consumption. This Air Quality Addendum compares the air emissions from propulsion of RLE trains under the Preferred Alignment with the air emissions for the UPRR Alternative in the Draft EIS. With the relocation of the 130th Street station, the RLE Project length increased from 5.3 to 5.6

miles. Extrapolating for the additional 0.3 miles of tracks to the relocated 130th Street station, air emissions for train propulsion under the Preferred Alignment would be approximately 6 percent higher than the East and West Options in the Draft EIS. The air emissions from electrical power consumption for the four new stations under the Preferred Alignment would be the same for the East and West Options.

Section 4 - Affected Environment

This section describes any updates to the existing air quality conditions near the RLE Project since the publication of the Draft EIS. This section documents updates to the baseline data, as well as any changes to the air quality planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

4.1 Measured Ambient Air Quality Concentrations

The Draft EIS summarized Illinois Environmental Protection Agency (IEPA) ambient air quality measurements for the region including the API. The IEPA maintains a statewide network of monitoring stations that continuously measure pollutant concentrations in the ambient air. **Table 4-1** in **Appendix U** presented the maximum ambient concentrations measured at representative monitoring stations nearest to the project corridor in 2011. Except for the exceedance of the 8-hour ozone at the Lawndale Street Station, there were no exceedances in the API of any of the NAAQS or Illinois Ambient Air Quality Standards (IAAQS) in 2011 (**Appendix U**).

Since publication of the Draft EIS, air monitoring data are available through calendar year 2020. The 8-hour ozone measurement of 0.084 ppm for 2020 at the 7801 Lawndale monitoring site (approximately 5 miles northwest of the API) has exceeded the NAAQS of 0.070 ppm (USEPA 2021c). However, the updated air quality monitoring data have no effects on the project-level analyses of air quality impacts for the Preferred Alignment.

4.2 Planning and Policy Framework

The Draft EIS identified that the API was designated as a nonattainment area for ozone and $PM_{2.5}$ (see **Section 3.1** above). A nonattainment area is a region where recent air quality monitoring data have exceeded the NAAQS. The API is still classified as nonattainment for ozone, but not for $PM_{2.5}$ (USEPA 2021b). Because the API is in attainment with the $PM_{2.5}$ standards, a project-level conformity analysis for $PM_{2.5}$ is not required for the Preferred Alignment.

CTA has been implementing measures to reduce GHG emissions and improve energy efficiency at rail stations, offices, and maintenance facilities by implementing sustainable features in new buildings and retrofitting existing buildings to conserve energy. Energy efficient features at other CTA facilities include more energy-efficient lighting such as LED lighting, solar panels, and green roofs. Green roofs conserve energy, reduce stormwater runoff, and reduce urban heat island effects.

Measures to improve energy efficiency would reduce the emissions of GHGs and other air pollutants.

To reduce potential diesel emissions from buses operating at the new stations, CTA has been updating its bus fleet to include electric buses and clean-diesel buses that would continue to meet current USEPA emissions requirements. CTA has committed to a full electrification of its bus fleet by 2040, which would bring air quality improvements to the region and the immediate vicinity of the facilities.

CTA is a partner in the *Chicago Climate Action Plan* (City of Chicago 2008). The City of Chicago has issued the *Chicago Climate Action Plan* to reduce carbon pollution and prepare for a changing climate. Major strategies of the *Chicago Climate Action Plan* are reducing energy use in buildings, investing in transit improvements, and promoting transit-orientated development.

The Draft EIS identified that the RLE Project was included in CMAP's *GO TO 2040*, which was a conforming RTP published in 2010. Since publication of the Draft EIS, CMAP has adopted *ON TO 2050* as the RTP for the region (CMAP 2018b). The Preferred Alignment is included in *ON TO 2050*, as it was in *GO TO 2040*. In 2018, CMAP adopted the *FFY 2019-2024 Transportation Improvement Program (TIP)*, which also includes the RLE Project (CMAP 2018a).

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to emissions of air pollutants.

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

This section also documents the new or revised mitigation measures for identified project impacts, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East and West Options of the UPRR Alternative evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current CMAP Transportation Improvement Program (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Appendix U** in the Draft EIS, there would be no adverse impacts on air quality under the No Build Alternative. The No Build Alternative would not result in air quality emissions related to construction activities. The No Build Alternative would have no change in Red Line ridership resulting from the RLE Project, therefore air emissions from electrical power consumption for Red Line trains would not increase.

The No Build Alternative would not be expected to change regional VMTs by diversion from motor vehicles to trains. However, some growth in VMT for the project corridor that would be unrelated to the RLE Project would still take place. The increases in regional VMT would lead to increases in

GHG emissions from vehicles under the No Build Alternative, when compared to existing conditions. The Draft EIS calculated the GHG emissions from the total regional VMT under the No Build Alternative to serve as a baseline for comparison to the RLE Project. CO concentrations were predicted at congested intersections under the No Build Alternative and all of the modeled CO concentrations were well below the state and federal standards. Future emissions of $PM_{2.5}$ and of MSAT from regional motor vehicles would decrease under the No Build Alternative compared with existing conditions, because of the Federal Motor Vehicle Emission Control Program (FMVECP).

GHG emissions from regional vehicular traffic and CO concentrations at local intersections under the No Build Alternative would be the same as those evaluated in the Draft EIS. Air quality impacts under the No Build Alternative would not be adverse, and no mitigation is required.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

The air quality study in the Draft EIS evaluated potential air quality impacts and mitigation measures resulting from construction and operation of the RLE Project. The Air Quality Technical Memorandum analyzed CO at congested intersections, GHG emissions from project-related vehicles, particulate matter, MSAT, and construction emissions (**Appendix U**).

The Preferred Alignment would be consistent with the *Chicago Climate Action Plan* (City of Chicago 2008). Major strategies of the *Chicago Climate Action Plan* are reducing energy use in buildings, investing in transit improvements, and promoting transit-orientated development.

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

For the air quality analyses, the Draft EIS and **Appendix U** discussed the East and West Options of the UPRR Alternative as one alternative. Because nearly all of the project-related air pollutant emissions would come from motor vehicles and because the project-related motor vehicles would move throughout the entire API, the results of the air quality analysis applied equally to all of the UPRR options in the Draft EIS, as well as to the 120th Street yard and shop. It made no difference in the air quality analysis whether Red Line trains would be on the east side or on the west side of the UPRR right-of-way; air pollutant emissions would be the same for the East and West Options. In addition, the Draft EIS determined air pollutant emissions associated with the 120th Street yard and shop would not be substantial, and further separate analysis of the 120th Street yard and shop was not conducted (**Appendix U**).

Under the Preferred Alignment, the air pollutant emissions would be the same as for the East and West Options discussed in the Draft EIS. The 130th Street station relocation would not change the number of project-related vehicles moving throughout the API. Shifting its location approximately 100 feet to the west would not change the air emissions of the 120th Street yard and shop, and its associated emissions would not be sizable. Because it makes no difference in the air quality analysis whether the Red Line trains would be on the east or west side of the UPRR right-of-way, the 107th Place cross-over under the Preferred Alignment would not change air quality impacts evaluated in the Draft EIS.

5.2.1.1 Regional Emissions and Greenhouse Gases

The Draft EIS evaluated the regional emissions of GHGs, $PM_{2.5}$, and MSAT from project-related vehicles. Changes in vehicular use under the RLE Project would be regional because a portion of travelers would change modes from automobile to transit for trips between the API and downtown Chicago. Regional air emissions from motor vehicles under the RLE Project are based on regional VMT. The annual VMT are the total number of miles driven by all vehicles within a year in the API. The RLE Project is expected to cause a small decrease in regional VMT compared with the No Build Alternative because of vehicular trip distance changes (people would be nearer to transit stations) and mode changes (people would change their travel mode from personal vehicles to transit).

The Draft EIS determined that VMT in the API under the East and West Options of the UPRR Alternative would be slightly lower than the No Build Alternative VMT by about 0.02 percent, resulting from passenger diversions to the Red Line. Because it would reduce VMTs, the UPRR Alternative would slightly lower regional emissions of GHGs, $PM_{2.5}$, and MSAT as compared with the No Build Alternative (**Appendix U**).

Regional VMTs under the Preferred Alignment would be the same as those evaluated for the East and West Options of the UPRR Alternative in the Draft EIS. The 130th Street station relocation, 120th Street yard and shop refinement, and 107th Place cross-over under the Preferred Alignment would not change VMT from the VMT discussed in the Draft EIS. Because regional VMT would be the same as the UPRR Alternative, the regional emissions of GHGs, $PM_{2.5}$, and MSAT under the Preferred Alignment would be the same as those evaluated in the Draft EIS. The Preferred Alignment would reduce VMTs, and therefore it would slightly lower regional emissions of GHGs, $PM_{2.5}$, and MSAT as compared with the No Build Alternative.

5.2.1.2 Local Emissions

The Draft EIS included a project-level CO hot-spot analysis, which modeled CO concentrations at congested intersections and then compared the predicted CO concentrations to the NAAQS. Under the UPRR Alternative, all of the modeled 1-hour CO concentrations were well below the 1-hour CO standard of 35 ppm and all of the modeled 8-hour CO concentrations also were well below the 8-hour CO standard of 9 ppm (**Appendix U**). The Draft EIS concluded that no adverse air quality impacts are expected to occur with any of the build alternatives. Based on the CO hot-spot analysis in the Draft EIS, no air quality mitigation measures would be required for any of the traffic intersections analyzed for any of the build alternatives.

The environmental consequences of the Preferred Alignment on vehicular traffic are not considerably different than those of the East and West Options of the UPRR Alternative shown in the Draft EIS. Because modeled CO concentrations in the Draft EIS were well below the NAAQS, and vehicular traffic would not considerably change under the Preferred Alignment, CO concentrations under the Preferred Alignment are not anticipated to exceed the NAAQS. No adverse air quality impacts from CO emissions are expected to occur under the Preferred Alignment, and additional air quality mitigation would not be required.

With the extension of the Red Line, some existing bus routes would be rerouted to feed into the new stations. A network of CTA and Pace Suburban Bus Service (Pace) bus routes serves the surrounding Far South Side.

To reduce potential diesel emissions from buses operating at the new stations, CTA has been updating its bus fleet to include electric buses and clean-diesel buses that would continue to meet current USEPA emissions requirements. CTA has committed to a full electrification of its bus fleet by 2040, which would provide air quality improvements to the region and the immediate vicinity of the facilities. Similarly, the Pace bus fleet at the relocated 130 Street station would meet USEPA guidelines for clean diesel, and many Pace buses serving the Far South Side use compressed natural gas (CNG), a fuel source that emits fewer greenhouse gases than diesel.

5.2.1.3 Electrical Power Consumption

The Draft EIS determined that Red Line trains would not cause any direct emissions of air pollutants because the trains would run on electricity. Electricity would come from the electric utility grid, which may include local, fossil-fuel power plants. An increase in indirect emissions of air pollutants from electrical power consumption by Red Line trains would be expected under the UPRR Alternative.

The Preferred Alignment would result in similar emissions of air pollutants from fossil-fuel power plants because of increased electrical energy demand for the RLE Project. Red Line trains operating under the Preferred Alignment would travel on an additional 0.3 miles of tracks to the relocated 130th Street station, which would result in a negligible change in air emissions from fossil-fuel power plants as compared with the East and West Options in the Draft EIS. The RLE Project would include four new passenger stations, a new maintenance yard and shop, and six new and upgraded substations, all of which would be powered by electricity and would increase emissions from fossil-fuel power plants.

5.2.1.4 Conformity

The RLE Project must comply with the USEPA transportation conformity regulations under the Clean Air Act. The Draft EIS identified that the RLE Project was included in CMAP's *GO TO 2040*, which was a conforming RTP published in 2010. The Draft EIS concluded that the RLE Project would conform to the SIP because it was included in CMAP's *GO TO 2040* and because it would decrease regional $PM_{2.5}$ emissions.

Because the API is in nonattainment for ozone, the Preferred Alignment must conform to the SIP for ozone. Conformity for ozone can be demonstrated by documenting that the Preferred Alignment is specifically included in a conforming RTP and TIP. Since publication of the Draft EIS, CMAP adopted *ON TO 2050* (CMAP 2018b) as the RTP and *FFY 2019-2024 Transportation Improvement Program* (CMAP 2018a) as the TIP. CMAP's *ON TO 2050* and the TIP include the RLE Project; therefore, the Preferred Alignment conforms to the SIP for ozone. In 2018, the USEPA approved Illinois's request to revise the state's designation for $PM_{2.5}$ from unclassifiable to unclassifiable/attainment, and a project-level conformity analysis for $PM_{2.5}$ is not required for the Preferred Alignment.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

Impacts during construction would be associated with temporary and localized emissions of particulate matter (dust, $PM_{2.5}$ and PM_{10}) from earthmoving and demolition activities, and of small amounts of CO, nitrogen oxide (NO_x), GHGs, and particulate matter in engine exhaust from construction trucks and equipment. The Draft EIS determined no adverse air quality impacts during construction of the UPRR Alternative because mitigation measures would be incorporated into the project construction plans. Construction air emissions and mitigation measures under the Preferred Alignment would be the same as the East and West Options of the UPRR Alternative disclosed in the Draft EIS.

To minimize air quality impacts during construction, CTA would require contractors to implement best management practices (BMPs) to reduce construction dust, to provide emissions controls on construction equipment, to use low sulfur fuels, and to limit equipment operations such as excessive idling. Contractors would develop and implement a Dust Control Plan, which would address, in detail, how dust would be controlled at the construction site, the staging areas, and the access and egress routes. In addition, the contractor would follow Chicago's Clean Diesel Construction Ordinance which would reduce the potential for construction related air quality impacts. No additional construction mitigation measures would be required under the Preferred Alignment.

With the use of appropriate construction-related mitigation measures as described in the Draft EIS, no adverse air quality impacts during construction would be anticipated with the Preferred Alignment.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

Cumulative impacts include those from the RLE Project when combined with those of other past, present, and reasonably foreseeable projects. The cumulative air quality impacts under the Preferred Alignment are the same as the UPRR Alternative described in **Appendix U** of the Draft EIS.

The RLE Project, when combined with the existing Red Line train operations and other future CTA transit projects would increase transit ridership and reduce vehicle trips. The cumulative impacts of reduced vehicle trips would result in a reduction of air emissions from vehicles and would be a beneficial impact.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on air quality as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

Consistent with the findings of the Draft EIS, there would be no adverse impacts on regional and local air quality during construction and operation of the Preferred Alignment.

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Appendix U

Air Quality Technical Memorandum

- Draft EIS Appendix U, Air Quality Technical Memorandum, July 2015
  - Appendix A, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Air Quality
Technical Memorandum

June 21, 2013
Updated July 27, 2015

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Table of Contents

Section 1 Summary **1-1**

Section 2 Project Description **2-1**

Section 3 Methods for Impact Evaluation **3-1**

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-3
3.3 Area of Potential Impact 3-3
3.4 Methods 3-3

Section 4 Affected Environment **4-1**

4.1 Measured Ambient Air Quality Concentrations 4-1
4.2 CO Hot Spot Analysis 4-2
4.3 Greenhouse Gas Analysis 4-3
4.4 $PM_{2.5}$ Hot Spot Analysis 4-4
4.5 Mobile Source Air Toxics Analysis 4-5

Section 5 Impacts and Mitigations **5-1**

5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-5
5.3 Union Pacific Railroad Rail Alternative 5-9
5.4 Halsted Rail Alternative 5-12

Section 6 Impacts Remaining After Mitigation **6-1**

6.1 Bus Rapid Transit Alternative 6-1
6.2 Union Pacific Railroad Rail Alternative 6-1
6.3 Halsted Rail Alternative 6-1

Section 7 References Cited **7-1**

Appendix

Appendix A 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 3-1: Traffic Intersections Analyzed in the Air Quality Analysis 3-6

Tables

Table 3-1: National Ambient Air Quality Standards for Criteria Pollutants 3-2
Table 3-2: Intersections Selected for the Detailed Air Quality Analysis by Alternative 3-5
Table 4-1: Measured Ambient Air Quality in the Project Area for 2011 4-2
Table 4-2: Estimated Maximum 1-Hour and 8-Hour Carbon Monoxide Concentrations for the Existing Conditions 4-3
Table 5-1: Summary of Estimated Maximum 1-hour Carbon Monoxide Concentrations* by Project Alternative 5-2
Table 5-2: Summary of Estimated Maximum 8-Hour Carbon Monoxide Concentrations* by Project Alternative 5-3
Table 5-3: Project-Related Greenhouse Gas Emissions by Project Alternative 5-4

Abbreviations

BRT	Bus Rapid Transit
CAA	Clean Air Act
CFR	Code of Federal Regulations
CH4	methane
CMAP	Chicago Metropolitan Agency for Planning
CO	carbon monoxide
CO2	carbon dioxide
CO2e	carbon dioxide equivalent
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
FMVECP	Federal Motor Vehicle Emissions Control Program
FTA	Federal Transit Administration
FHWA	Federal Highway Administration
GHG	greenhouse gas
GWP	Global Warming Potential
IAAQS	Illinois Ambient Air Quality Standards
IDOT	Illinois Department of Transportation
IEPA	Illinois Environmental Protection Agency
LOS	level of service
MSAT	mobile source air toxics
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
N2O	nitrous oxide
NO2	nitrogen dioxide
NOx	oxides of nitrogen
PM10	particulate matter with an aerodynamic diameter of 10 micrometers and less
PM2.5	particulate matter with an aerodynamic diameter of 2.5 micrometers and less
ppb	parts per billion
ppm	parts per million
RLE	Red Line Extension
ROW	right-of-way
RPM	Red and Purple Modernization
RTP	Regional Transportation Plan
SIP	State Implementation Plan
TIP	Transportation Improvement Program
tpy	tons per year

UPRR	Union Pacific Railroad
USC	United States Code
USEPA	U.S. Environmental Protection Agency
VMT	vehicle-miles traveled
VOCs	volatile organic compounds
µg/m3	micrograms per cubic meter

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on carbon monoxide (CO) hot spots, project-related greenhouse gas (GHG) emissions, fine particulate matter (particulate matter with an aerodynamic diameter of 2.5 micrometers and less [$PM_{2.5}$]) hot spots, mobile source air toxics (MSAT), impacts of construction, possible mitigation measures, and cumulative impacts.

The project area is in Cook County, Illinois, which has been designated as a nonattainment area with respect to the ozone national ambient air quality standard (NAAQS). The U.S. Environmental Protection Agency (USEPA) has also designated it as a nonattainment area with respect to the $PM_{2.5}$ NAAQS. The Illinois Environmental Protection Agency (IEPA) is seeking a redesignation from USEPA to attainment for $PM_{2.5}$. Because the RLE Project is in a "Moderate" ozone nonattainment area, it is the Federal Transit Administration's (FTA's) responsibility, as the federal funding agency, to ensure that the proposed project conforms to the Illinois State Implementation Plan (SIP).

Conformity can be demonstrated by showing that the proposed project is included in a conforming Regional Transportation Plan (RTP). The RLE Project is included in the Chicago Metropolitan Agency for Planning's (CMAP's) *GO TO 2040,* which is a conforming RTP published in 2010. Therefore, this project conforms to the objectives of the SIP, and further demonstration of the project compliance with the transportation conformity rule is not required. However, for the purpose of National Environmental Policy Act (NEPA) disclosure, an evaluation of project impacts was conducted.

Based on the results of the air quality analysis presented here, all build alternatives of the RLE Project would provide a regional net air quality benefit.

Based on the results of the CO modeling analysis at selected traffic intersections in the project area, implementation of any of the RLE Project build alternatives would not lead to exceedances of the Illinois Ambient Air Quality Standards (IAAQS) and NAAQS and no adverse air quality impacts are expected to occur with any of the build alternatives. Based on the CO hot spot analysis, no air quality mitigation measures would be required for any of the traffic intersections analyzed for any of the build alternatives.

The FMVECP (Federal Motor Vehicle Emission Control Program) (40 United States Code [USC] § 7521), which has been very effective in controlling emissions of all of the criteria pollutants, has little or no impact on GHG emissions from motor vehicles. The same technology that leads to more efficient fuel use also leads to lower carbon dioxide (CO_2) emissions. Because estimated changes in vehicle-miles traveled (VMT) would be quite small, the changes in GHG emissions in the project area would also be quite small. Compared to the No Build Alternative, the total carbon dioxide equivalent (CO_2e) emissions from any of the alternatives would be about 0.02 percent

lower. Indirect emissions from the fossil-fueled power plants would increase because of increased electrical energy demand for the project.

The $PM_{2.5}$ emissions factors for motor vehicles in the Chicago area are expected to decline by over 38 percent between 2012 and 2030. In addition, VMT in the project area under all of the build alternatives (including VMT generated by additional bus operations) would be slightly lower than under the No Build Alternative VMT, by about 0.02 percent, due to passenger diversions to the RLE Project. When taken together, the regional $PM_{2.5}$ emissions with implementation of the build alternatives would be slightly lower than with the No Build Alternative. In addition to the federal exhaust emissions control programs and fuel reformulation programs, statewide efforts to reduce congestion and vehicle idling are also expected to have a direct benefit by reducing $PM_{2.5}$ concentrations at the local level.

The USEPA's FMVECP is expected to reduce MSAT emissions by 54 percent in the project area between 2012 and 2030. In addition, VMT in the project area for all build alternatives are expected to be slightly lower than under the No Build Alternative, by about 0.02 percent, due to passenger diversions to the Red Line. When taken together, regional MSAT emissions under any of the build alternatives in 2030 would be slightly lower than with the No Build Alternative.

The potential air quality impacts during construction would primarily be associated with dust and vehicle exhaust emissions. The IEPA has strict guidelines for controlling fugitive dust, diesel soot emissions, and GHG emissions. Impacts on local traffic movements could also result from trucks and construction equipment entering and leaving the construction sites and staging areas. There would be no adverse air quality impacts due to construction activities because mitigation measures would be incorporated into the project construction plan.

To minimize air quality impacts during construction, CTA would direct the contractor to prepare and implement a Dust Control Plan; retrofit diesel-powered equipment and vehicles to have emission control devices and use ultra-low sulfur diesel to control diesel particulate emissions; and develop a plan to allow construction trucks to access and egress the construction sites and staging area without adverse impacts on the local traffic. These plans would follow the guidelines from Illinois Department of Transportation (IDOT). The GHG emissions during construction could also be minimized by limiting truck and equipment idling times, maintaining equipment in proper working order, using alternative fuels for generators, reducing electricity consumption at the construction sites, and substituting single occupancy vehicle use with carpooling, shuttle vans, and transit passes for construction workers.

Updated July 27, 2015. In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix A of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix A supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the NEPA scoping process:

- No Build Alternative
- Bus Rapid Transit (BRT) Alternative
- Union Pacific Railroad (UPRR) Rail Alternative
    - Right-of-Way (ROW) Option
    - East Option
    - West Option
- Halsted Rail Alternative

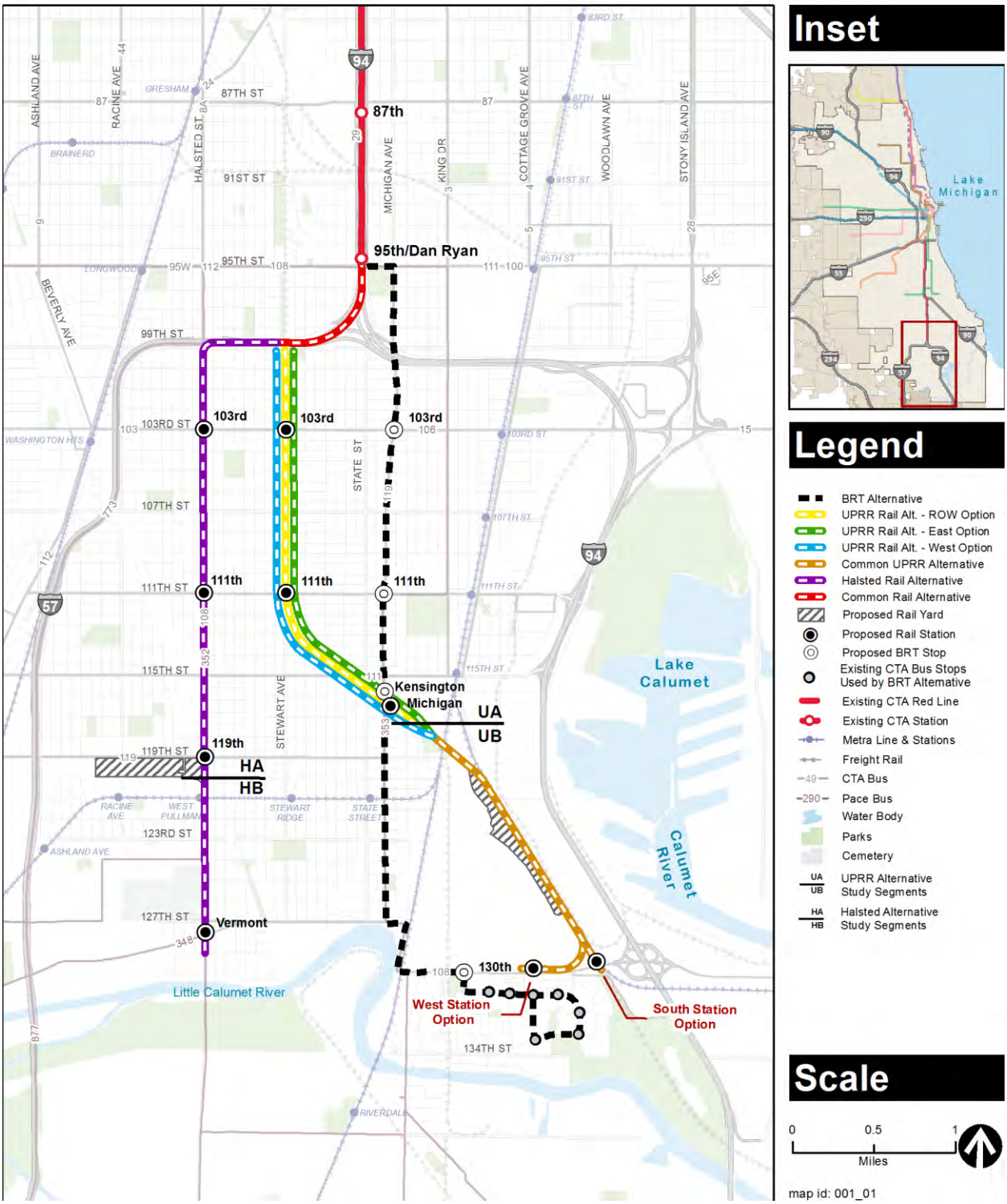

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the CMAP Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

3.1 Regulatory Framework

3.1.1 Federal

Under authority of the Clean Air Act (CAA) and its amendments, the USEPA has established NAAQS for criteria pollutants to protect the public health and welfare (U.S. Congress 1970, 1977, 1990). The criteria pollutants that are of greatest significance to the transportation sector include CO, nitrogen dioxide (NO_2), ozone, particulate matter with an aerodynamic diameter of 10 micrometers and less (PM_{10}) and particulate matter with an aerodynamic diameter of 2.5 micrometers and less ($PM_{2.5}$). The NAAQS are summarized in Table 3-1. Although not shown in this table, the IAAQS are identical to the NAAQS.

3.1.2 State

The RLE Project and its associated stations would be in Cook County, Illinois. This county has been designated by the USEPA as a moderate nonattainment area with respect to the 8-hour ozone NAAQS. Cook County is also a nonattainment area for $PM_{2.5}$ and for lead. Illinois, through its SIP, specifies target dates for achieving compliance with the NAAQS, and identifies specific emission reduction goals for nonattainment or maintenance areas.

The RLE Project is included in a conforming RTP. Therefore, a regional analysis of project emissions would not be required for purposes of demonstrating compliance with the transportation conformity rules.

3.1.3 Local

There are no local ordinances that address transportation projects such as the RLE Project. There are also no local regulations that pertain to emissions of CAA criteria pollutants. Emissions of CO from parking facilities are not, for example, covered by local regulations.

Table 3-1: National Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Standard Type	Averaging Period	National	Form
Carbon Monoxide	Primary	1-hour 8-hour	40 mg/m^3 (35 ppm)(1) 10 mg/m^3 (9 ppm)	Not to be exceeded more than once per year
Lead	Primary and Secondary	Rolling 3-Month	0.15 µg/m^3 (2)	Not to be exceeded
Nitrogen Dioxide	Primary Primary and Secondary	1-hour Annual	100 ppb 53 ppb(3) (100 µg/m^3)	98th percentile, averaged over 3 years Annual arithmetic mean
Ozone	Primary and Secondary	8-hour	0.075 ppm(5)	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
PM_{10}	Primary and Secondary	24-hour	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
$PM_{2.5}$	Primary and Secondary Primary and Secondary	Annual 24-hour	15 µg/m^3 (6) 35 µg/m^3 (6)	Annual arithmetic mean, averaged over 3 years 98th percentile, averaged over 3 years
Sulfur Dioxide	Primary Secondary	1-hour 3-hour	75 ppb (7) 0.5 ppm	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years Not to be exceeded more than once per year

Source: USEPA, National Primary and Secondary Ambient Air Quality Standards (40 Code of Federal Regulations 50)

(1) The units of pollutant concentrations are in milligrams per cubic meter (mg/m^3), micrograms per cubic meter (µg/m^3), parts per million by volume (ppm), or parts per billion by volume (ppb).

2) Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m^3 as a calendar quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in designated nonattainment areas for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved. The metropolitan Chicago area is no longer subject to the 1978 lead standard.

(3) The official level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour NO_2 standard.

(4) USEPA revoked the 1-hour ozone standard in most areas of the United States.

(5) Final rule signed March 12, 2008. The 1997 ozone standard (0.08 ppm, annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) and related implementation rules remain in place. EPA revoked the 1-hour ozone standard (0.12 ppm, not to be exceeded more than once per year) in most areas of the United States as of June 15, 2005, although some areas have continued obligations under that standard ("anti-backsliding"). The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.

(6) The $PM_{2.5}$ standards are referenced to local conditions of temperature and pressure rather than standard conditions (760 mm and 25 degrees C).

(7) Final rule signed June 2, 2010. The 1971 annual and 24-hour sulfur dioxide standards were revoked in that same rulemaking. However, these standards remain in effect until 1 year after an area is designated for the 2010 standard, except in designated nonattainment areas for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved. The metropolitan Chicago area is no longer subject to the 1971 annual and 24-hour sulfur dioxide standards.

3.2 Impact Analysis Thresholds

3.2.1 During Construction

There is no quantitative basis for impact thresholds during construction, with the exception of the NAAQS for such pollutants as particulate matter (PM_{10} and $PM_{2.5}$) and CO. Most state transportation and environmental review agencies expect to see dust control and traffic management addressed and mitigated. The IDOT, for instance, has formal requirements for the contractor to prepare a Dust Control Plan, a Traffic Management Plan, and emission controls and low sulfur fuels for diesel-powered equipment.

3.2.2 During Operation

The impact thresholds during operation are the NAAQS. The thresholds for criteria pollutants during project operation are limited to controlling emissions that affect the nonattainment or maintenance status of the pollutants. For ozone nonattainment, the controls are focused on the precursors; namely, oxides of nitrogen (NOx) and volatile organic compounds (VOCs).

The SIP provides the emissions control strategy and implementation schedules for achieving and maintaining the NAAQS, such as the 8-hour ozone standard. If a proposed transportation project is in the RTP, and the RTP conforms to the SIP, then a separate conformity analysis of the specific project is not warranted because its impacts on region-wide emissions have already been taken into account.

Some states have impact thresholds for MSAT that are either related to emissions or exposure levels. But neither IEPA nor the FTA has any such requirements. Likewise, there are no quantitative impact thresholds for GHG emissions. Many states, including Illinois, have policies or guidance that encourage project proponents to minimize GHG emissions through conservation (using less energy) and use of alternative fuels (using less fossil fuel and more renewable energy such as solar or wind).

3.3 Area of Potential Impact

For an air quality assessment, impacts could be regional or localized; thus, the area of potential impact has both a regional and a local component. The regional component follows the analysis area adopted by the traffic analysis, which is a corridor bounded on the south by a varying boundary that includes 134th Street, on the north by 91st Street, on the west by a varying boundary that includes Halsted Street, and on the east by a varying boundary that includes I-94. The local component would be limited to the individual stations, their associated parking facilities, and nearby intersections affected by traffic entering and exiting the stations.

3.4 Methods

3.4.1 Air Quality Effects

The overall air quality effects from project operations are normally evaluated by quantifying the selected criteria pollutant emissions on a regional basis, and at local hot spots where motor vehicle congestion can take place. The RLE Project is included in a conforming RTP, and a

corridor-wide emissions inventory analysis is therefore not necessary to demonstrate transportation conformity. The IEPA is trying to seek a re-designation of its $PM_{2.5}$ nonattainment status from USEPA. The RLE Project is not considered to be a project of local air quality concern (for example, a project that involves a significant increase in diesel buses or trucks). Under these circumstances, therefore, a qualitative hot spot analysis of $PM_{2.5}$ was prepared for the existing conditions, and the No Build Alternative, the BRT Alternative, the UPRR Rail Alternative (with its three options), and the Halsted Rail Alternative for the year 2030.

3.4.2 CO Hot Spot Analysis

A project-level CO hot spot analysis is performed as part of the NEPA process, for purposes of identifying and disclosing substantial impacts, and to evaluate possible mitigation measures. CO concentrations caused by local traffic at critical intersections must be estimated for comparison with the federal and state 1-hour and 8-hour CO standards. Concentrations must be estimated using the current, state-of-the-art approved emission factor programs and a dispersion model approved by USEPA to determine whether sensitive receptors would experience new or worsened violations of the federal CO standards.

Local CO dispersion modeling analysis was conducted at three "worst case" selected intersections for each project alternative. The "worst case" intersections for each alternative were selected based on level of service and total traffic volumes during the peak hour, as described in the USEPA's (1992) *Guideline for Modeling Carbon Monoxide from Roadway Intersections*. Table 3-2 presents the list of intersections selected for detailed analysis by project alternative. The listed ID numbers correspond to ID numbers in the *Transportation Technical Memorandum*. Figure 3-1 shows the location of each of the intersections analyzed.

The CO emission factors were developed using the USEPA's MOBILE6.2 program (USEPA 2004) and guidance from IEPA. Intersections were evaluated using EPA's CAL3QHC program (USEPA 1993). The estimated maximum 1-hour CO concentrations at each intersection were used to determine the 8-hour CO concentrations by multiplying the 1-hour concentration by a persistence factor approved by the IEPA of 0.7 (IEPA Personal communication 2012).

Total CO concentrations were derived by adding the modeled maximum concentrations to a background level to account for CO sources other than the traffic at the intersection being modeled. The background values represent worst-case, ambient CO levels that are assumed to occur independently of the vehicle traffic being analyzed. The nearest representative monitoring site to the project area is at 321 S. Franklin Street in Chicago. In consultation with IEPA (IEPA Personal communication 2012), background levels of 3.0 parts per million (ppm) for the 1-hour concentration and 1.7 ppm for 8-hour concentration were used based on the highest second-highest measured concentrations from the most recent 3 full years of monitoring data (2009–2011). These background levels are intended to represent worst-case urban conditions. The background concentrations were conservatively held constant for all analysis years and project alternatives. The maximum 1-hour and 8-hour CO concentrations (including an appropriate background concentration) were compared to the NAAQS for CO to determine impacts.

Table 3-2: Intersections Selected for the Detailed Air Quality Analysis by Alternative

Alternative	ID No.	Intersection Name	LOS	Total Volume
Existing	5	98th Place and Halsted Street	F	3,506
	14	103rd Street and Vincennes Avenue and Beverly Avenue	F	3,023
	59	119th Street and Ashland Avenue	F	1,922
No Build	5	98th Place and Halsted Street	F	3,742
	14	103rd Street and Vincennes Avenue and Beverly Avenue	F	3,598
	59	119th Street and Ashland Avenue	F	3,511
Bus Rapid Transit	5	98th Place and Halsted Street	F	3,688
	59	119th Street and Ashland Avenue	F	2,267
	73	130th Street and Indiana Avenue	F	2,602
Union Pacific Railroad Rail*	5	98th Place and Halsted Street	F	3,770
	62	119th Street and State Street	F	1,713
	73	130th Street and Indiana Avenue	F	3,479
Halsted Rail	5	98th Place and Halsted Street	F	3,771
	68	127th Street and Halsted Street	F	3,543
	70	127th Street and Vermont Avenue and Wallace Street	F	3,054

Source: KM Chng Environmental Inc., November 2012.
Notes:
LOS (level of service) and total volume data are for the peak hour.
Total volume is the number of vehicles entering an intersection from all approaches in the peak hour.
* = Results are the same for all UPRR Options.

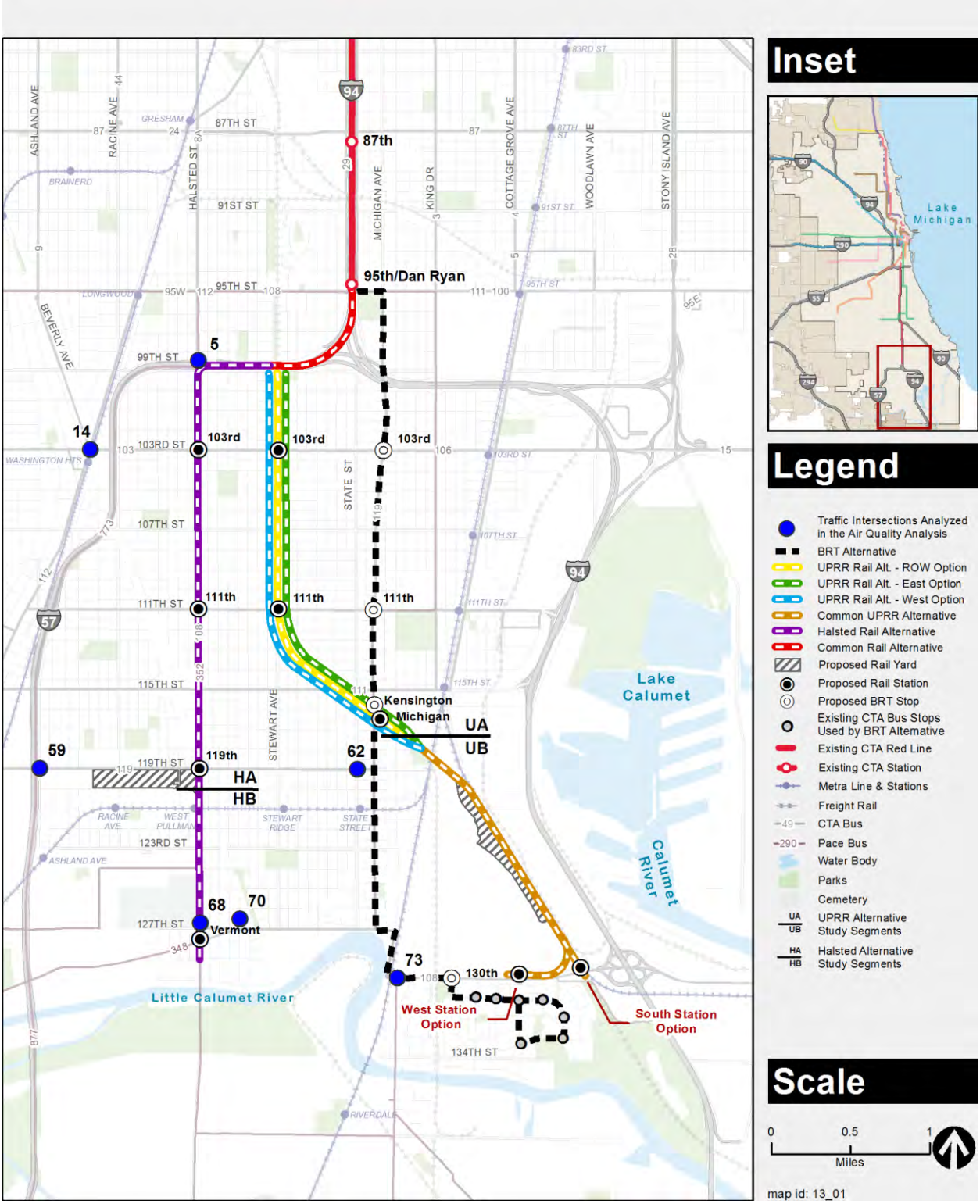

Figure 3-1: Traffic Intersections Analyzed in the Air Quality Analysis

3.4.3 Greenhouse Gases

A GHG is a gas in the atmosphere that absorbs and emits radiation within the thermal infrared range. Some GHGs are emitted by natural sources, such as respiration of plants and living organisms. GHGs can also be man-made, with sources such as the combustion of fossil fuels in transportation, residential space heating and utility power plants. Greenhouse gases act like a blanket around Earth, trapping energy in the atmosphere and causing it to warm. This phenomenon is called the greenhouse effect and is natural and necessary to support life on Earth. However, the buildup of GHG can change Earth's climate and result in dangerous effects on human health and welfare and on ecosystems. The primary GHG in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone. In addition, sulfur hexafluoride (SF6) is also a known GHG and is used in transformers and electrical equipment. Water vapor is not regulated in any way and ozone is regulated under the CAA; therefore, these two compounds will not be addressed further in this technical memorandum.

Of the GHGs that are implicated in global climate change, CO_2 is the most dominant GHG in the atmosphere, by far. The GHGs differ in their ability to trap heat. For example, 1 ton of emissions of CO_2 has a different effect than 1 ton of emissions of methane. To compare emissions of different GHGs, emissions were computed using a weighting factor called a Global Warming Potential (GWP). To use a GWP, the heat-trapping ability of 1 metric ton (1,000 kilograms) of CO_2 is taken as the standard, and emissions are expressed in terms of CO_2e. Therefore, the GWP of CO_2 is 1. The GWP of methane is 21, while the GWP of nitrous oxide is 310. Total GHG emissions were determined by converting CO_2, methane (CH_4), and N_2O emissions from each of the major source categories into total CO_2e emissions by multiplying each compound by its respective GWP and summing the results.

The CO_2e emissions were estimated for the existing conditions and each of the project alternatives in 2030. The USEPA's MOBILE6.2 program was used to determine CO_2 emission factors from motor vehicles (cars, trucks, and buses). Emission factors for CH_4 and nitrous oxide N_2O were taken from Table 13.4 of *The Climate Registry - General Reporting Protocol* (TCR 2012). Vehicle fuel economy was assumed to be the national average of 23.8 miles per gallon (taken from Table 4-23 of the *National Transportation Statistics Report*, [Bureau of Transportation Statistics 2011]). Emission factors were combined with motor vehicle-generated VMT to estimate GHG emissions.

The quantitative assessment of project-related GHG benefits and/or impacts on climate change was conducted in accordance with the *Illinois Climate Change Advisory Group's Final Recommendations to the Governor (ICCAG 2007)*. These changes in GHG emissions reflect differences in VMT, travel speed, fuel consumption, and delay along the project corridor. This comparison of GHG emissions was supplemented by a qualitative assessment of project-related GHG benefits and/or impacts on global climate change. If any of the project alternatives were to lead to increased electricity use, this increase could lead to increased GHG emissions from local power plants supplying electricity to the grid.

The FTA issued new New Starts Guidance in January 2013 (Federal Transit Administration, *Proposed New Starts and Small Starts Policy Guidance*, January 9, 2013), which provides rates for converting VMT to CO, NOx, $PM_{2.5}$, VOCs, and GHG (CO_2e). The guidance was not available at the time this analysis was prepared; it was released long after the GHG analysis for this project was completed and the analysis has not been redone. The GHG emission factors used in this analysis are conservative (about 20 percent higher than the new FTA values). Thus, while the magnitude of the GHG impacts (actually improvements) would be smaller when using the FTA values, the overall conclusions would not change.

3.4.4 $PM_{2.5}$ Hot Spot Analysis

A hot spot analysis is defined in 40 Code of Federal Regulations (CFR) 93.101 as an estimation of likely future localized $PM_{2.5}$ pollutant concentrations and a comparison of those concentrations to the relevant air quality standards. A hot spot analysis assesses the air quality impacts on a scale smaller than an entire nonattainment or maintenance area. Such an analysis is a means of demonstrating that a transportation project meets CAA conformity requirements to support state and local air quality goals with respect to potential localized air quality impacts.

The qualitative $PM_{2.5}$ hot spot analysis followed USEPA's latest guidance (USEPA 2006). The analysis was based on direct emissions only. No precursor or secondary reaction products were taken into account. Based on the USEPA guidance, construction phase impacts were not required to be addressed in the $PM_{2.5}$ hot spot analysis. The method chosen to complete the $PM_{2.5}$ analysis is a combination of (1) performing and evaluating air quality studies for the proposed project location, and (2) using results of other studies for the general project location, including the Illinois SIP for $PM_{2.5}$ (CMAP 2008, 2010a, 2010b, 2010c). Various federal regulations requiring lower particulate emissions and fuel reformulations, including low-sulfur diesel fuels, have a significant role in reducing $PM_{2.5}$ emissions from mobile sources.

3.4.5 Mobile Source Air Toxics

Mobile source air toxics (MSAT) are compounds emitted from highway vehicles and non-road equipment and that are known or suspected to cause cancer or other serious health and environmental effects. Mobile sources are responsible for direct emissions of air toxics and contribute to precursor emissions that react to form secondary pollutants. The NEPA process requires the examination and avoidance of potential impacts on the natural and human environment when considering approval of proposed transportation projects.

The RLE Project would not have a high potential of MSAT effects, because direct emissions of MSAT from motor vehicles on the roadways are expected to decrease substantially with time. Project impacts on air toxics were assessed qualitatively, following the Federal Highway Administration's (FHWA's) 2009 guidelines (FHWA 2009). A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented here is derived in part from a study conducted by the FHWA titled *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives* (FHWA 2011).

This assessment includes a description and discussion of national trend data projecting substantial overall reductions in emissions due to stricter engine and fuel regulations issued by USEPA, a discussion of information that is incomplete or unavailable for a project-specific assessment of MSAT impacts in compliance with the Council on Environmental Quality regulations (40 CFR 1502.22(b)), and a summary of current studies regarding the health impacts of MSAT, in compliance with 40 CFR 150.22(b). A qualitative comparison of MSAT from the various project alternatives was developed from the estimates of VMT, which were used as a surrogate for indicating trends in MSAT emissions.

3.4.6 Construction Impacts

Potential air quality impacts during construction were addressed qualitatively for construction vehicle emissions, including particulate matter (PM_{10} and $PM_{2.5}$) emissions and fugitive dust emissions. The focus of the assessment was to identify various mitigation measures to minimize or avoid these potential impacts.

3.4.7 Mitigation Measures

Mitigation of emissions during construction activities was addressed in Section 3.4.6. Following construction, operation of the project would result in no direct emissions. There could be an overall decrease in motor vehicle emissions due to diversion of passengers from motor vehicles to transit. During operation, none of the build alternatives would be likely to lead to any of the following:

- Emissions causing or contributing to a new violation of the NAAQS in the project area.
- An increase in the frequency or severity of an existing violation of the NAAQS.
- A delay of timely attainment of the NAAQS or other emissions reduction milestones in the project area.

Therefore, no mitigation measures would be needed for operation of the project.

Section 4
Affected Environment

As described in Section 3.1.2, Cook County, Illinois has been designated as a moderate nonattainment area with respect to the 8-hour ozone NAAQS. The IEPA, through the SIP, specifies target dates for achieving compliance with the ozone standard, and identifies specific emission reduction goals for NO_2 and non-methane hydrocarbons, which are precursors of ozone. The USEPA has designated Cook County a nonattainment area for $PM_{2.5}$, but current air quality data show that Cook County is meeting the $PM_{2.5}$ NAAQS. The IEPA has requested a redesignation, but to date, the USEPA has not acted on this request. The USEPA has designated a portion of Cook County a nonattainment area for lead, but that nonattainment area is not in the project area.

Because the project would occur in a "moderate" ozone nonattainment area, it is the FTA's responsibility, as the federal lead agency, to ensure that the proposed project conforms to the Illinois SIP. A "conforming" project is defined as one that meets the SIP's objectives of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of those standards.

Federally funded transit projects are subject to the USEPA transportation conformity rule (40 CFR Part 93 Subpart A). Conformity is demonstrated by showing that the proposed project is included in a conforming RTP and also meets the project-level requirements contained in the transportation conformity rule. The Long-Range RTP for the region is the *2030 Regional Transportation Plan for Northeastern Illinois* ([2030 RTP] CMAP 2008). The Board of the CMAP and the Metropolitan Planning Organization Policy Committee approved an update to the 2030 RTP on October 8 and October 9, 2008, respectively. The region's TIP, *Federal Fiscal Year 2010–2015 Transportation Improvement Program* (CMAP 2010) was accepted by the U.S. Department of Transportation on October 25, 2010, following approvals by the CMAP Metropolitan Planning Organization Policy Committee, IDOT, IEPA, and USEPA. All of the projects in the TIP are included in the conforming 2030 RTP. The 2030 RTP was replaced by the *GO TO 2040* comprehensive regional plan (CMAP 2010) in January 2012. The updated RTP (*GO TO 2040)* continues to carry the RLE Project. Because the RLE Project is in a conforming RTP, a regional analysis of project emissions is not required to demonstrate compliance with the transportation conformity rule.

4.1 Measured Ambient Air Quality Concentrations

This section summarizes measured ambient air quality data for the region including the project area. The IEPA maintains a statewide network of monitoring stations that continuously measure pollutant concentrations in the ambient air. These stations provide data to assess compliance with the NAAQS and the IAAQS and to evaluate the effectiveness of pollution control strategies. The pollutants of concern are CO, NOx, Ozone, PM_{10}, $PM_{2.5}$, and sulfur dioxide. Table 4-1 presents the maximum ambient concentrations for these pollutants measured at representative monitoring stations nearest to the project corridor for the most recently available full year of data, calendar

year 2011. As shown in Table 4-1, except for one exceedance of the 8-hour ozone at the Lawndale Street Station, there were no exceedances in the project area of any of the NAAQS or IAAQS in 2011.

Table 4-1: Measured Ambient Air Quality in the Project Area for 2011

Pollutant	Monitor Location	Averaging Period	Monitored Value	Standard
Carbon Monoxide	321 S. Franklin (Chicago, IL)	1-hour	3.3 ppm	35.0 ppm
Carbon Monoxide	321 S. Franklin (Chicago, IL)	8-hour	1.5 ppm	9.0 ppm
Nitrogen Dioxide	321 S. Franklin (Chicago, IL)	1-hour	89 ppb	100 ppb
Ozone	7801 Lawndale (Chicago, IL)	8-hour	**0.082 ppm**	0.075 ppm
PM_{10}	750 Dundee Rd. (Northbrook, IL)	24-hour	38 µg/m^3	150 µg/m^3
$PM_{2.5}$	3535 E.114th St. (Chicago, IL)	24-hour	28.5 µg/m^3	35 µg/m^3
$PM_{2.5}$	3535 E.114th St. (Chicago, IL)	Annual	12.6 µg/m^3	15.0 µg/m^3
Sulfur Dioxide	7801 Lawndale (Chicago, IL)	1-hour	29 ppb	75 ppb
Sulfur Dioxide	7801 Lawndale (Chicago, IL)	24-hour	7 ppb	140 ppb

Source: EPA, Airdata website (http://www.epa.gov/airdata), Monitor Values Report accessed October 15, 2012.
Units of measure are parts per million (ppm) or parts per billion (ppb) by volume, and micrograms per cubic meter of air (µg/m3).
Values in **bold** exceed the applicable standard, but do not constitute a violation.

4.2 CO Hot Spot Analysis

Following the methods described in Section 3.4.2, a CO hot spot analysis was conducted for the existing conditions using EPA's MOBILE6.2 emission factors program and EPA's CAL3QHC dispersion model. A summary of the modeled maximum 1-hour CO concentrations at each of the street intersections selected for analysis (98th Place and Halsted Street, 103rd Street and Vincennes Avenue and Beverly Avenue, and 119th Street and Ashland Avenue) is presented in Table 4-2. These concentrations include a background level of 3.0 parts per million (ppm), which was determined to remain constant with time. The 8-hour CO concentrations were estimated by multiplying the modeled 1-hour results (without the background) by a persistence factor of 0.7 and adding a background of 1.7 ppm (also assumed to remain constant with time). A summary of the modeled maximum 8-hour CO concentrations for the selected intersections for the existing conditions is also presented in Table 4-2.

Table 4-2: Estimated Maximum 1-Hour and 8-Hour Carbon Monoxide Concentrations for the Existing Conditions

ID No.	Intersection Description	Maximum 1-hour* (ppm)	Maximum 8-hour** (ppm)
5	98th Place and Halsted Street	5.7	3.6
14	103rd Street and Vincennes Avenue and Beverly Avenue	5.1	3.2
59	119th Street and Ashland Avenue	5.0	3.1

Source: KM Chng Environmental Inc., 2012.
* Values include a background 1-hour CO concentration of 3.0 ppm.
** Values include a background 8-hour CO concentration of 1.7 ppm.
ppm = parts per million

As shown in Table 4-2, the maximum modeled 1-hour CO concentration at any of the three intersections analyzed for the existing conditions was estimated to be 5.7 ppm, including a background concentration of 3.0 ppm, for the intersection of 98th Place and Halsted Street. This maximum 1-hour CO concentration occurred at a receptor located along the southbound approach of Halsted Street about 3 meters from the intersection with 98th Place. All of the modeled 1-hour CO concentrations for the existing conditions were well below the 1-hour CO National and Illinois standard of 35 ppm.

The maximum 8-hour CO concentration for the existing conditions occurred at the same receptor at the same intersection as the 1-hour concentration and was estimated to be 3.6 ppm, including a background CO concentration of 1.7 ppm. All of the modeled 8-hour CO concentrations for the existing conditions were also well below the corresponding 8-hour CO National and Illinois standards of 9 ppm.

4.3 Greenhouse Gas Analysis

A GHG is a gas in the atmosphere that absorbs and emits radiation within the thermal infrared range. The quantitative assessment of project-related GHG benefits and/or impacts on climate change presented here was conducted to reflect the changes in GHG emissions based on differences in VMT, travel speed, fuel consumption, and delay along the project corridor.

The six-county Chicago metropolitan area, including Cook County, was estimated to have emissions of about 105 million metric tons of CO_2e in calendar year 2000. The transportation sector was responsible for up to 31 percent of the CO_2 emissions, and on-road vehicles generated approximately 90 percent of the CO_2e emissions from transportation sources (McGraw et al. 2010).

The GHG emissions in the project area for the existing conditions in 2012 were estimated to be about 53,048,993 tons per year (tpy) of CO_2, about 1,704 tpy of CH4, and about 2,613 tpy of N_2O.

When converted to total CO_2e using the GWP conversion factors, the total GHG is 53,894,714 tpy of CO_2e.

4.4 $PM_{2.5}$ Hot Spot Analysis

The method chosen to complete the qualitative $PM_{2.5}$ analysis is a combination of (1) performing and evaluating air quality studies for the proposed project location, and (2) using results of other studies for the general project location (including the Illinois SIP for $PM_{2.5}$).

Diesel particulate matter is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is commonly found throughout the environment and is estimated by EPA to contribute to the human health risk. Diesel exhaust is composed of two phases, either gas or particle and both phases contribute to the risk. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde and polycyclic aromatic hydrocarbons. The particle phase also has many different types of particles that can be classified by size or composition. The sizes of diesel particulates that are of greatest health concern are those that are in the categories of fine and ultra-fine particles. The composition of these fine and ultra-fine particles may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines; the on road diesel engines of trucks, buses and cars and the off road diesel engines that include locomotives, marine vessels, and heavy duty equipment.

Diesel exhaust causes health effects from both short-term or acute exposures and also long-term chronic exposures, such as repeated occupational exposures. The type and severity of health effects depends upon several factors including the amount of chemical one is exposed to and the length of time one is exposed. Individuals also react differently to different levels of exposure. There is limited information on exposure to just diesel particulate matter but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes acute and chronic health effects. Acute exposure to diesel exhaust may cause irritation to the eyes, nose, throat and lungs, and some neurological effects such as lightheadedness. Acute exposure may also elicit a cough or nausea as well as exacerbate asthma. Based upon human and laboratory studies, there is considerable evidence that diesel exhaust is a likely carcinogen. Human epidemiological studies demonstrate an association between exposure to diesel exhaust and increased lung cancer rates in occupational settings.

The USEPA has designated Cook County as a nonattainment area for $PM_{2.5}$, but current air quality data show that Cook County is meeting the $PM_{2.5}$ NAAQS. As noted above, the IEPA has also requested a redesignation to attainment status, but to date, the USEPA has not acted on this request. Following joint guidance issued by EPA and FHWA (USEPA 2006), the following qualitative assessment of $PM_{2.5}$ hot spot analysis was conducted. Air quality monitoring of $PM_{2.5}$ in Cook County and across the state shows a decrease in $PM_{2.5}$ concentrations of 24 percent over the past decade (2001–2010). For the existing conditions, monitored ambient $PM_{2.5}$ concentrations in the vicinity of the RLE Project show no exceedances of the $PM_{2.5}$ standard in 2011 (the most recent year for which complete data is available).

4.5 Mobile Source Air Toxics Analysis

Mobile source air toxics are emitted from motor vehicles and non-road construction equipment. The MSAT can be present in the fuels, formed from incomplete combustion of fossil fuels, or formed as secondary reaction products from the combustion emissions in the atmosphere. A qualitative comparison of MSAT from the various project alternatives was developed from the estimates of VMT, which were used as a surrogate for indicating trends in MSAT, and the comparisons are provided below. Although a qualitative analysis cannot identify and measure health impacts from MSAT, it provides a basis for comparing and contrasting the various alternatives with respect to MSAT emissions. The qualitative analysis of MSAT for this project assumes the change in the amount of MSAT emitted between the No Build and the RLE Project Alternatives will be proportional to the change in the project-related VMT.

Mobile source air toxics are a subset of the 188 air toxics defined by the CAA. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), and stationary sources (e.g., factories or refineries). Metal air toxics also result from engine wear or from impurities in oil or gasoline. The USEPA has assessed the list of 188 air toxics in its latest rule on the Control of Hazardous Air Pollutants from Mobile Sources and identified a group of 93 compounds emitted from mobile sources that are listed in its Integrated Risk Information System. There currently are no established ambient air quality standards for MSAT. In accordance with the FHWA's guidance regarding air toxic analysis (FHWA 2009), a qualitative assessment of MSAT is also included in the air quality analysis.

Of the many MSAT that are regulated by the USEPA, six are judged to be significant for transportation sources partly because of their suspected carcinogenicity and their relative abundance in vehicle exhaust. According to USEPA's *Control of Emissions of Hazardous Air Pollutants from Mobile Sources Final Rule* (USEPA 2007), these six priority MSAT include benzene, acrolein, formaldehyde, 1,3-butadiene, acetaldehyde, and diesel particulate matter. As a result of the FMVECP (40 USC § 7521), the FHWA estimates that even with an assumed 64 percent increase in VMT from 2000 to 2020, emissions of the various non-diesel MSAT would decrease by 57 to 65 percent. For diesel particulates and diesel organic gases, the reduction was estimated at 87 percent. A qualitative comparison of MSAT from the various project alternatives was developed from the estimates of VMT, which were used as a surrogate for indicating trends in MSAT emissions.

Section 5
Impacts and Mitigations

This section describes the analyses performed and assesses the results in comparison to the No Build Alternative.

5.1 No Build Alternative

The No Build Alternative in 2030 is defined as the existing transportation system plus any committed transportation improvements that are already in the CMAP Fiscal Year 2010–2015 TIP. The TIP projects within the project area include four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. No new infrastructure would be constructed as part of the No Build Alternative.

5.1.1 Permanent Impacts and Mitigations – No Build Alternative

With the No Build Alternative, there would be no changes in ridership due to the proposed RLE Project; therefore, there would be no changes in direct emissions due to the proposed project. The Red Line trains run on electricity; therefore, they cause no direct emissions. Their electricity comes from the electric utility grid, which may include local, fossil-fueled power plants. No increase in electrical power consumption would be expected under the No Build Alternative; therefore, no change in indirect emissions would be expected with the No Build Alternative.

5.1.1.1 CO Hot Spot Analysis

A summary of the modeled maximum 1-hour CO concentrations at all of the street intersections selected for analysis is presented in Table 5-1. A summary of the modeled maximum 8-hour CO concentrations for the selected intersections is presented in Table 5-2. For comparison purposes, the results for all project alternatives are presented in these tables. The three "worst case" intersections for each alternative were selected based on level of service (LOS) and total traffic volumes during the peak hour, as required by USEPA guidance (USEPA 1992). These intersections may not be the same for each alternative based on the traffic analysis LOS results.

As shown in Table 5-1, the maximum modeled 1-hour CO concentration at any of the three intersections analyzed for the No Build Alternative (98th Place and Halsted Street, 103rd Street and Vincennes Avenue and Beverly Avenue, and 119th Street and Ashland Avenue) was estimated to be 5.1 ppm, including a background concentration of 3.0 ppm, and occurred at the intersection of 98th Place and Halsted Street. This maximum 1-hour CO concentration occurred at a receptor located along the eastbound departure of 98th Place about 3 meters from the intersection with Halsted Street. All of the modeled 1-hour CO concentrations for the No Build Alternative were well below the 1-hour CO National and Illinois standards of 35 ppm.

Table 5-1: Summary of Estimated Maximum 1-hour Carbon Monoxide Concentrations* by Project Alternative

ID No.	Intersection Description	Existing (ppm)	No Build (ppm)	BRT (ppm)	UPRR (ppm)	Halsted (ppm)
5	98th Place and Halsted Street	5.7	5.1	5.1	5.1	5.1
14	103rd Street and Vincennes Avenue and Beverly Avenue	5.1	4.9	na	na	na
59	119th Street and Ashland Avenue	5.0	4.6	4.7	na	na
62	119th Street and State Street	na	na	na	3.9	na
68	127th Street and Halsted Street	na	na	na	na	4.6
70	127th Street and Wallace Street and Vermont Avenue	na	na	na	na	4.7
73	130th Street and Indiana Avenue	na	na	4.4	4.8	na

Source: KM Chng Environmental Inc., 2012.

* Values include a background 1-hour CO concentration of 3.0 ppm.

na means this intersection was not analyzed for this alternative.

ppm = parts per million, BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad

As shown in Table 5-2, the maximum 8-hour CO concentration for the No Build Alternative was for the same receptor at the same intersection as the 1-hour concentration and was estimated to be 3.2 ppm, including a background CO concentration of 1.7 ppm. All of the modeled 8-hour CO concentrations for the No Build Alternative were also well below the corresponding 8-hour CO National and Illinois standards of 9 ppm.

Table 5-2: Summary of Estimated Maximum 8-Hour Carbon Monoxide Concentrations* by Project Alternative

ID No.	Intersection Description	Existing (ppm)	No Build (ppm)	BRT (ppm)	UPRR (ppm)	Halsted (ppm)
5	98th Place and Halsted Street	3.6	3.2	3.2	3.2	3.2
14	103rd Street and Vincennes Avenue and Beverly Avenue	3.2	3.0	na	na	na
59	119th Street and Ashland Avenue	3.1	2.8	2.9	na	na
62	119th Street and State Street	na	na	na	2.3	na
68	127th Street and Halsted Street	na	na	na	na	2.8
70	127th Street and Vermont Avenue and Wallace Street	na	na	na	na	2.9
73	130th Street and Indiana Avenue	na	na	2.7	3.0	na

Source: KM Chng Environmental Inc., 2012.
* Values include a background 8-hour CO concentration of 1.7 ppm.
na means this intersection was not analyzed for this alternative.
ppm = parts per million, BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad

5.1.1.2 Greenhouse Gas Analysis

A quantitative assessment of project-related GHG benefits and/or impacts on climate change was conducted to reflect the changes in GHG emissions based on differences in VMT, travel speed, fuel consumption, and delay along the project corridor. There would be no growth in VMTs or delay due to the RLE Project in the No Build Alternative. Following the methods described in Section 3.4.3, emissions of GHG were estimated for each of the project alternatives.

A summary of the results of that analysis is presented in Table 5-3 by alternative for comparison purposes. The No Build Alternative would not be expected to change the ridership or to result in changes in diversion from motor vehicles to trains. However, some growth in VMT for the project corridor that would be unrelated to the proposed project would still take place. The increases in regional VMT would lead to increases in GHG (CO_2e) emissions under the No Build Alternative.

Table 5-3: Project-Related Greenhouse Gas Emissions by Project Alternative

Alternative	CO_2 (tpy)	CH_4 (tpy)	N_20 (tpy)	Total GHG (tpy)	GWP* (tons CO2e/year)
Existing Conditions	53,048,993	1,704	2,613	53,053,310	53,894,714
No Build Alternative	62,539,690	1,980	3,036	62,544,707	63,522,530
BRT Alternative	62,532,636	1,980	3,036	62,537,652	63,515,365
UPRR Rail Alternative	62,527,538	1,979	3,036	62,532,553	63,510,186
Halsted Rail Alternative	62,528,056	1,979	3,036	62,533,071	63,510,713

Source: KM Chng Environmental Inc., 2012.
Notes:
CO_2 = carbon dioxide, CH_4 = methane, N_2O = nitrous oxide, GHG = greenhouse gas, tpy = tons per year, GWP = Global Warming Potential in units of tons of carbon dioxide equivalents per year (CO_2e/year), BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad

With the No Build Alternative, estimated project-related GHG emissions would be about 62,539,690 tpy of CO_2, about 1,980 tpy of CH4, and about 3,036 tpy of N_2O. These emissions would be an increase of 17.9, 16.1, and 16.2 percent, respectively when compared to the existing conditions GHG emissions. The sum of project-related GHG emissions for the No Build Alternative is 62,544,707 tpy or about 18 percent more than the 53,053,310 tpy of total project-related GHG emissions for the existing conditions.

When converted to total CO_2e emissions using the GWP conversion factors, the total emissions of project-related CO_2e for the No Build Alternative would be 63,522,530 tpy of CO_2e. Compared to the existing conditions CO_2e emissions of 53,894,714 tpy, this would be an increase of about 18 percent.

5.1.1.3 $PM_{2.5}$ Hot Spot Analysis

For the No Build Alternative in 2030, project-related $PM_{2.5}$ emissions in the Northeastern Illinois Nonattainment Area (CMAP 2008) were estimated to be 1,981 tpy. Specifically, $PM_{2.5}$ emissions factors for motor vehicles in the Chicago area are expected to decline by over 38 percent between 2012 and 2030. However, VMT in the project area in the No Build Alternative are expected to increase compared to the existing conditions VMT by about 14 percent. When taken together, these two factors would result in a reduction in regional $PM_{2.5}$ emissions by 2030. In addition to the federal exhaust emissions control programs and fuel reformulation programs, statewide efforts to reduce congestion and vehicle idling are also expected to have a direct benefit by reducing $PM_{2.5}$ concentrations at the local level.

In its conformity analysis, CMAP concluded that the *GO TO 2040* plan and the TIP meet all applicable requirements for conformity for the annual $PM_{2.5}$ standard; *GO TO 2040* and the TIP have also been recommended for approval by USDOT.

5.1.1.4 MSAT Analysis

A qualitative comparison of MSAT from the various project alternatives was developed from the estimates of VMT, which were used as a surrogate for indicating trends in MSAT emissions, and the comparisons are provided below.

The No Build Alternative would not be expected to change the ridership or result in substantial diversion from motor vehicles to trains. The EPA's FMVECP is expected to reduce MSAT emissions by about 54 percent in the project area between 2012 and 2030. However, VMT in the project area in the No Build Alternative are expected to increase compared to the existing conditions VMT by about 14 percent. When taken together, these two factors would result in a reduction in regional MSAT emissions for the No Build Alternative compared to the existing conditions.

5.1.2 Construction Impacts and Mitigations – No Build Alternative

Under the No Build Alternative, no new infrastructure would be constructed. However, it is assumed that necessary repairs to keep the Red Line running would take place. Therefore, there would be no new emissions due to construction, except for projects that were already planned. Potential impacts on air quality due to the No Build Alternative would be minimal and no mitigation is proposed for the No Build Alternative.

5.1.3 Cumulative Impacts and Mitigations – No Build Alternative

The only project that might be related to the No Build Alternative with respect to air quality impacts is CTA's Red and Purple Modernization (RPM) Project. Without improvements to the existing Red Line, the RLE might not be able to achieve its full potential. The impact on air quality would not be adverse.

5.2 Bus Rapid Transit Alternative

The proposed Bus Rapid Transit Alternative (BRT Alternative) is a BRT route that would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue via 95th Street, Michigan Avenue, 127th Street, Indiana Avenue, and 130th Street. Four stops with improved bus shelters would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. The bus route would continue through Altgeld Gardens with stops at 131st Street and Langley Avenue, 131st Street and Corliss Avenue, 131st Street and Ingleside Avenue, 132nd Street and Ellis Avenue, 133rd Street and Ellis Avenue, and 133rd Place and Corliss Avenue. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal.

5.2.1 Permanent Impacts and Mitigations – Bus Rapid Transit Alternative

The Red Line trains run on electricity; therefore, they cause no direct emissions. Their electricity comes from the electric utility grid, which may include local, fossil-fueled power plants. No increase in direct project-related emissions from Red Line Trains would be expected under the BRT Alternative. However, with the increase in bus miles travelled, a slight change in direct emissions would be expected with the BRT Alternative.

5.2.1.1 CO Hot Spot Analysis

A summary of the modeled maximum 1-hour CO concentrations at each of the street intersections selected for analysis (98th Place and Halsted Street, 103rd Street and Vincennes Avenue and Beverly Avenue, and 119th Street and Ashland Avenue) is presented in Table 5-1. A summary of the modeled maximum 8-hour CO concentrations for the selected intersections is also presented in Table 5-2. The three "worst case" intersections for each alternative were selected based on LOS and total traffic volumes during the peak hour, as required by USEPA guidance (USEPA 1992). These intersections may not be the same for each alternative based on the traffic analysis LOS results.

As shown in Table 5-1, the maximum modeled 1-hour CO concentration at any of the three intersections analyzed for the BRT Alternative was estimated to be 5.1 ppm, including a background concentration of 3.0 ppm, and occurred at the intersection of 98th Place and Halsted Street. This maximum 1-hour CO concentration occurred at a receptor located along the eastbound departure of 98th Place about 3 meters from the intersection with Halsted Street. All of the modeled 1-hour CO concentrations for the BRT Alternative were well below the 1-hour CO National and Illinois standards of 35 ppm.

As also shown in Table 5-2, the maximum 8-hour CO concentration for the BRT Alternative occurred at the same receptor at the same intersection as the 1-hour concentration and was estimated to be 3.2 ppm, including a background CO concentration of 1.7 ppm. All of the modeled 8-hour CO concentrations for the BRT Alternative were also well below the corresponding 8-hour CO National and Illinois standards of 9 ppm.

Based on the above analysis, no mitigation measures would be required for any of the traffic intersections analyzed for the BRT Alternative. Also, no adverse air quality impacts from CO emissions are expected to occur with this alternative.

5.2.1.2 Greenhouse Gas Analysis

This quantitative assessment of project-related GHG benefits and/or impacts on climate change presented here was conducted based on the methods described in Section 3.4.3. The BRT Alternative is expected to cause a small change in ridership to divert from motor vehicles to transit, and to also cause a very small increase in additional BRT Alternative bus VMT. This would lead to a small decrease in VMT of 31,182. Thus, this decrease in VMT would lead to a small decrease in GHG emissions under the BRT Alternative.

As shown in Table 5-3, the estimated BRT Alternative project-related GHG emissions would be about 62,532,636 tpy of CO_2, about 1,980 tpy of CH4, and about 3,036 tpy of N_2O. When compared to the existing conditions, project-related GHG emissions for the BRT Alternative would represent an increase of over 16 percent for each pollutant. However, when the BRT Alternative GHG emissions are compared to the No Build Alternative GHG emissions, they would be smaller by about 0.01 percent for each pollutant.

The sum of project-related GHG emissions for the BRT Alternative is 62,537,652 tpy or about 15 percent higher than the 53,053,310 tpy of total project-related GHG emissions for the existing conditions. However, the sum of project-related GHG emissions for the BRT Alternative is about 0.01 percent less than the 62,544,707 tpy of total project-related GHG emissions for the No Build Alternative.

When converted to total CO_2e emissions using the GWP conversion factors, the total project-related GHG emissions for the BRT Alternative would be 63,515,365 tpy of CO_2 equivalents. Total project-related CO_2e emissions for the BRT Alternative would be about 15 percent higher than the 53,894,714 tpy of total project-related CO_2e emissions for the existing conditions. However, compared to the No Build Alternative, the CO_2e emissions for the BRT Alternative would be about 0.01 percent lower in total CO_2e emissions. Therefore, no adverse air quality impacts from GHG emissions are anticipated due to this alternative.

5.2.1.3 $PM_{2.5}$ Hot Spot Analysis

The $PM_{2.5}$ emissions factors for motor vehicles in the Chicago area are expected to decline by over 38 percent between 2012 and 2030. In addition, VMT in the project area in the BRT Alternative (including VMT generated by additional bus operations) are expected to be slightly lower than in the No Build Alternative VMT, by about 0.01 percent, due to passenger diversions. When taken together, these two factors would result in the BRT Alternative having slightly lower regional $PM_{2.5}$ emissions than the No Build Alternative. In addition to the federal exhaust emissions control programs and fuel reformulation programs, statewide efforts to reduce congestion and vehicle idling are also expected to have a direct benefit by reducing $PM_{2.5}$ concentrations at the local level.

In its conformity analysis, CMAP concluded that the *GO TO 2040* plan and the TIP meet all applicable requirements for conformity for the annual $PM_{2.5}$ standard; *GO TO 2040* and the TIP have also been recommended for approval by USDOT. Therefore, no adverse air quality impacts from $PM_{2.5}$ emissions are anticipated due to this alternative.

5.2.1.4 MSAT Analysis

The EPA's FMVECP is expected to reduce MSAT emissions by about 54 percent in the project area between 2012 and 2030. In addition, VMT in the project area with the BRT Alternative (including VMT generated by additional bus operations) are expected to be slightly lower than in the No Build Alternative VMT, by about 0.01 percent, due to passenger diversions. When taken together, these factors would result in the regional MSAT emissions with the BRT Alternative being slightly

lower than with the No Build Alternative. Therefore, no adverse air quality impacts from MSAT emissions are anticipated due to this alternative.

5.2.2 Construction Impacts and Mitigations – Bus Rapid Transit Alternative

Construction activities for the BRT Alternative would be grouped by type of work and location. Overall schedule and coordination would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street Yard and Shop, and to maintain vehicular traffic on affected expressways and roadways. Construction for the BRT corridor could be sequenced to coordinate with CTA operations at the 95th Street Terminal.

Emissions from construction equipment would occur during site preparation activities such as grading, installing curbs, or grubbing and removal of vegetation to prepare a site for construction. Impacts during construction would be primarily associated with fugitive dust and emissions from on-road and non-road vehicles. The equipment producing these emissions could include haul trucks, concrete trucks, front-end loaders, excavators, cranes, drill rigs, compressors, flatbed trucks, and generators. Most state air quality agencies, including IEPA, have strict guidelines for controlling fugitive dust (usually by good housekeeping practices), diesel particulate emissions (by exhaust emission controls and use of low sulfur fuels), and GHG emissions (by limiting equipment operations such as excessive idling and by using alternative fuels).

Construction activities can also result in traffic disruption, rerouting, and temporary shutdown of traffic. Traffic disruption, such as decreased roadway capacity or detouring, can lead to increased traffic congestion, thereby increasing motor vehicle exhaust emissions on nearby roadways, and resulting in elevated localized pollutant concentrations. Temporary shutdown of traffic would occur at nighttime and during low traffic volume intervals per IDOT approval. Work would be sequenced to minimize impacts on adjacent roadways and commercial and residential buildings. Existing utilities would be protected during construction of the BRT stations, park & ride facilities, and traffic signal improvements.

Proper traffic management during the construction period would mitigate any potential adverse effects. This would include finding less congested routes for construction-related truck traffic, creating temporary detours for regular roadways where capacities have been diminished, providing traffic control, routing trucks away from residential neighborhoods, and restricting construction activities during hours of high traffic volumes on the existing roadways. Staging areas and worker parking areas would be established away from sensitive receptors.

Many state agencies such as IDOT require the contractor to develop a Dust Control Plan that would address in detail how dust would be controlled at all times at the construction site, the staging areas, and the access and egress routes. The agencies also require all diesel-powered equipment and vehicles to be retrofitted with emissions control devices and to use ultra-low sulfur diesel to control diesel particulate emissions.

CTA would require the contractor to develop a plan and schedule to allow construction trucks to access and egress the construction sites and staging areas without excessive disruption and impacts on residences and commercial establishments.

Compared with the other two build alternatives, construction activities for the BRT Alternative would be noticeably fewer and smaller in scale. With the use of appropriate mitigation measures as described above, no violations of any of the IAAQS are anticipated for this alternative. Therefore, with appropriate mitigation measures in place, no adverse air quality impacts due to construction activities are anticipated due to this alternative.

5.2.3 Cumulative Impacts and Mitigations – Bus Rapid Transit Alternative

The only project that might be related to the BRT Alternative with respect to air quality impacts is CTA's RPM Project. Without improvements to the existing Red Line, the RLE might not be able to achieve its full potential. The impact on air quality with or without the RPM Project would not be adverse.

5.3 Union Pacific Railroad Rail Alternative

The UPRR Alternative would extend the heavy rail transit Red Line from the existing 95th Street Terminal to 130th Street, just west of I-94. The UPRR Rail Alternative would be an extension of the existing Red Line. Three UPRR Rail Alternative options for the segment between I-57 and the CN/Metra Electric tracks are assessed here:

- ROW Option: CTA tracks placed in the UPRR ROW.
- East Option: CTA tracks placed immediately adjacent to and east of the UPRR ROW.
- West Option: CTA tracks placed immediately adjacent to and west of the UPRR ROW.

The air quality analysis presented here applies to the project area as a whole. Because nearly all of the project-related air pollutant emissions would come from motor vehicles and because the project-related motor vehicles would move throughout the entire project area, the results of the air quality analysis apply equally to all of the UPRR options mentioned above, as well as to the 120th Street yard and shop. That is, it makes no difference in the analysis whether the Red Line Trains would be on the UPRR ROW, on the east side, or on the west side of the ROW; the pollutant emissions would be the same in each case. In addition, the air pollutant emissions associated with the 120th Street yard and shop would be quite unsubstantial. Further separate analysis of the 120th Street yard and shop was not conducted. Therefore, the UPRR Rail Alternative and all of its options are discussed as only one alternative.

5.3.1 Permanent Impacts and Mitigations – Union Pacific Railroad Rail Alternative

The Red Line trains run on electricity; therefore, they cause no direct emissions. Their electricity comes from the electric utility grid, which may include local, fossil-fueled power plants. An

increase in indirect emissions due to electrical power consumption by the Red Line trains would be expected under the UPRR Rail Alternative.

5.3.1.1 CO Hot Spot Analysis

A summary of the modeled maximum 1-hour CO concentrations at each of the street intersections selected for analysis (98th Place and Halsted Street, 119th Street and State Street, and 130th Street and Indiana Avenue) is presented in Table 5-1. A summary of the modeled maximum 8-hour CO concentrations for the selected intersections is also presented in Table 5-2. The three "worst case" intersections for each alternative were selected based on LOS and total traffic volumes during the peak hour, as required by USEPA guidance (USEPA 1992). These intersections may not be the same for each alternative based on the traffic analysis LOS results.

As shown in Table 5-1, the maximum modeled 1-hour CO concentration at any of the three intersections analyzed for the UPRR Rail Alternative was estimated to be 5.1 ppm, including a background concentration of 3.0 ppm, and occurred at the intersection of 98th Place and Halsted Street. This maximum 1-hour CO concentration occurred at a receptor located along the eastbound departure of 98th Place about 3 meters from the intersection with Halsted Street. All of the modeled 1-hour CO concentrations for the UPRR Rail Alternative were well below the 1-hour CO National and Illinois standards of 35 ppm.

As also shown in Table 5-2, the maximum 8-hour CO concentration for the UPRR Rail Alternative occurred at the same receptor at the same intersection as the 1-hour concentration and was estimated to be 3.2 ppm, including a background CO concentration of 1.7 ppm. All of the modeled 8-hour CO concentrations for the UPRR Rail Alternative were also well below the corresponding 8-hour CO National and Illinois standards of 9 ppm.

Based on the above analysis, no mitigation measures would be required for any of the traffic intersections analyzed for the UPRR Rail Alternative. Also, no adverse air quality impacts from CO emissions are expected to occur with this alternative.

5.3.1.2 Greenhouse Gas Analysis

This quantitative assessment of project-related GHG benefits and/or impacts on climate change presented here was conducted based on the methods described in Section 3.4.3. The UPRR Rail Alternative is expected to cause a small change in ridership to divert from motor vehicles to trains leading to a small decrease in VMT of 53,718. Thus, this decrease in VMT would lead to a small decrease in GHG emissions under the UPRR Rail Alternative.

As shown in Table 5-3, the UPRR Rail Alternative project-related GHG emissions would be about 62,527,538 tpy of CO_2, about 1,979 tpy of CH4, and about 3,036 tpy of N_2O. When compared to the existing conditions, project-related GHG emissions for the UPRR Rail Alternative would be an increase of over 16 percent for each pollutant. However, when compared to the No Build Alternative GHG emissions, these results would be 0.02 percent lower for each pollutant.

When converted to total CO_2e using the GWP conversion factors, the total of GHG emissions for the UPRR Rail Alternative would be 63,510,186 tpy of CO_2 equivalents. Total project-related CO_2e emissions for the UPRR Rail Alternative would be about 17.9 percent higher than the 53,894,714 tpy of total project-related CO_2e emissions for the existing conditions. However, compared to the No Build Alternative, GHG emissions for the UPRR Rail Alternative would be about 0.02 percent lower in total CO_2e emissions. Therefore, no adverse air quality impacts from GHG emissions are anticipated due to this alternative.

5.3.1.3 $PM_{2.5}$ Hot Spot Analysis

The $PM_{2.5}$ emissions factors for motor vehicles in the Chicago area are expected to decline by over 38 percent between 2012 and 2030. In addition, VMT in the project area in the UPRR Rail Alternative would be slightly lower than the No Build Alternative VMT, by about 0.02 percent, due to passenger diversions to the Red Line. When taken together, these two parameters would result in reduction in existing regional $PM_{2.5}$ emissions with the UPRR Rail Alternative. In addition to the federal exhaust emissions control programs and fuel reformulation programs, statewide efforts to reduce congestion and vehicle idling are also expected to have a direct benefit by reducing $PM_{2.5}$ concentrations at the local level.

In its conformity analysis, CMAP concluded that the *GO TO 2040* plan and the TIP meet all applicable requirements for conformity for the annual $PM_{2.5}$ standard; *GO TO 2040* and the TIP have also been recommended for approval by USDOT. Therefore, no adverse air quality impacts from $PM_{2.5}$ emissions are anticipated due to this alternative.

5.3.1.4 MSAT Analysis

The EPA's FMVECP is expected to reduce MSAT emissions by 54 percent in the project area between 2012 and 2030. In addition, VMT in the project area in the UPRR Rail Alternative would be slightly lower than the No Build Alternative VMT, by about 0.02 percent, due to passenger diversions. When taken together, this would result in MSAT emissions with the UPRR Rail Alternative being lower than under the No Build Alternative. Therefore, no adverse air quality impacts from MSAT emissions are anticipated due to this alternative.

5.3.2 Construction Impacts and Mitigations – Union Pacific Railroad Rail Alternative

Construction activities for all of the UPRR Rail Alternative options would be grouped by type of work and location. Overall schedule and coordination would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street Yard and Shop, and to maintain vehicular traffic on affected expressways and roadways. Special or temporary track work might be required between the 95th Street Terminal and the 98th Street Yard and Shop. Because construction would occur in the middle of the expressway, road closures and traffic diversions would occur. The corridor is divided into seven segments for the purposes of describing construction activities; construction for individual segments or groups of adjacent segments could be sequenced to coordinate with CTA operations at the 95th Street Terminal. See Section 5.2.2 for

a discussion of emissions, construction sequencing, traffic management, dust control, and construction truck access that would also apply to the UPRR Rail Alternative.

Compared with the other two build alternatives, construction activities for the UPRR Rail Alternative would be the most extensive of any of the three build alternatives being analyzed. However, with the use of appropriate mitigation measures as described above, no violations of any of the IAAQS or NAAQS are anticipated due to this alternative. Therefore, with appropriate mitigation measures in place, no adverse air quality impacts due to construction activities are anticipated due to this alternative.

5.3.3 Cumulative Impacts and Mitigations – Union Pacific Railroad Rail Alternative

The only project that might be related to the UPRR Rail Alternative with respect to air quality impacts is CTA's RPM Project. Without improvements to the existing Red Line, the RLE might not be able to achieve its full potential. The impact on air quality with or without the RPM Project would not be adverse.

5.4 Halsted Rail Alternative

The Halsted Rail Alternative would include a 5-mile extension of the existing Red Line. It would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. It would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. Four stations would be at 103rd Street, 111th Street, 119th Street, and Vermont Avenue.

The air quality analysis presented here applies to the project area as a whole. Because nearly all of the project-related air pollutant emissions would come from motor vehicles and because the project-related motor vehicles would move throughout the entire project area, the air quality analysis applies equally to each part of the Halsted Rail Alternative. In addition, the air pollutant emissions associated with the 119th Street yard and shop would be quite unsubstantial. Therefore, the Halsted Rail Alternative is discussed here in its entirety, rather than by segment or feature.

5.4.1 Permanent Impacts and Mitigations – Halsted Rail Alternative

The Red Line trains run on electricity; therefore, they cause no direct emissions. Their electricity comes from the electric utility grid, which may include local, fossil-fueled power plants. An increase in indirect emissions due to electrical power consumption by the Red Line trains would be expected under the Halsted Rail Alternative.

5.4.1.1 CO Hot Spot Analysis

A summary of the modeled maximum 1-hour CO concentrations at each of the street intersections selected for analysis (98th Place and Halsted Street, 127th Street and Halsted Street, and 127th Street and Wallace Street and Vermont Avenue) is presented in Table 5-1. A summary of the modeled maximum 8-hour CO concentrations for the selected intersections is also presented in Table 5-2.

As shown in Table 5-1, the maximum modeled 1-hour CO concentration at any of the three intersections analyzed for the Halsted Rail Alternative was estimated to be 5.1 ppm, including a background concentration of 3.0 ppm, and occurred at the intersection of 98th Place and Halsted Street. This maximum 1-hour CO concentration occurred at a receptor located along the eastbound departure of 98th Place about 3 meters from the intersection with Halsted Street. All of the modeled 1-hour CO concentrations for the Halsted Rail Alternative were well below the 1-hour CO National and Illinois standards of 35 ppm.

As also shown in Table 5-2, the maximum 8-hour CO concentration for the Halsted Rail Alternative occurred at the same receptor at the same intersection as for the 1-hour concentration and was estimated to be 3.2 ppm, including a background CO concentration of 1.7 ppm. All of the modeled 8-hour CO concentrations for the Halsted Rail Alternative were also well below the corresponding 8-hour CO National and Illinois standards of 9 ppm.

Based on the above analysis, no mitigation measures would be required for any of the traffic intersections analyzed for the Halsted Rail Alternative. Also, no adverse air quality impacts from CO emissions are expected to occur with this alternative.

5.4.1.2 Greenhouse Gas Analysis

This quantitative assessment of project-related GHG benefits and/or impacts on climate change presented here was conducted based on the methods described in Section 3.4.3. The Halsted Rail Alternative is expected to cause a small change in ridership to divert from motor vehicles to trains leading to a small decrease in VMT of 51,427. Thus, this decrease in VMT would lead to a slightly lower amount of GHG emissions under the Halsted Rail Alternative compared to the No Build Alternative.

As shown in Table 5-3, the Halsted Rail Alternative project-related GHG emissions would be about 62,528,056 tpy of CO_2, about 1,979 tpy of CH4, and about 3,036 tpy of N_2O. These results would be an increase of over 16 percent for each pollutant when compared to the existing conditions GHG emissions. When compared to the No Build Alternative GHG emissions, GHG emissions for the Halsted Rail Alternative would be 0.02 percent lower.

When converted to total CO_2e using the GWP conversion factors, the total emissions of GHGs for the Halsted Rail Alternative would be 63,510,713 tpy of CO_2 equivalents. Total project-related CO_2e emissions for the Halsted Rail Alternative would be about 18 percent higher than the 53,894,714 tpy of total project-related CO_2e emissions for the existing conditions. However, compared to the No Build Alternative, the CO_2e emissions for the Halsted Rail Alternative would be lower by about 0.02 percent. Therefore, no adverse air quality impacts from GHG emissions are anticipated due to this alternative.

5.4.1.3 $PM_{2.5}$ Hot Spot Analysis

The $PM_{2.5}$ emissions factors for motor vehicles in the Chicago area are expected to decline by over 38 percent between 2012 and 2030. In addition, VMT in the project area in the Halsted Rail Alternative would be slightly lower than the No Build Alternative VMT, by about 0.02 percent,

due to passenger diversions. When taken together, these two parameters would result in a small reduction in existing regional $PM_{2.5}$ emissions with the Halsted Rail Alternative. In addition to the federal exhaust emissions control programs and fuel reformulation programs, statewide efforts to reduce congestion and vehicle idling are also expected to have a direct benefit by reducing $PM_{2.5}$ concentrations at the local level.

In its conformity analysis, CMAP concluded that the *GO TO 2040* plan and the TIP meet all applicable requirements for conformity for the annual $PM_{2.5}$ standard; *GO TO 2040* and the TIP have also been recommended for approval by USDOT. Therefore, no adverse air quality impacts from $PM_{2.5}$ emissions are anticipated due to this alternative.

5.4.1.4 MSAT Analysis

The EPA's FMVECP is expected to reduce MSAT emissions by 54 percent in the project area between 2012 and 2030. In addition, VMT in the project area in the Halsted Rail Alternative would be slightly lower than the No Build Alternative VMT, by about 0.02, percent due to passenger diversions. When taken together, these results would result in regional MSAT emissions with the Halsted Rail Alternative being lower than the No Build Alternative. Therefore, no adverse air quality impacts from MSAT emissions are anticipated due to this alternative.

5.4.2 Construction Impacts and Mitigations – Halsted Rail Alternative

Construction activities for the Halsted Rail Alternatives would be grouped by type of work and location. Overall schedule and coordination of all construction segments would be phased and scheduled to maintain CTA operations at the 95th Street Terminal and 98th Street Yard and Shop, and vehicular traffic on affected expressways and roadways. Special or temporary track work might be required between the 95th Street Terminal and the 98th Street Yard and Shop. Because construction would occur in the middle of the expressway, road closures and traffic diversions would occur. The corridor is divided into five segments for the purposes of describing construction activities; construction for individual segments or groups of adjacent segments could be sequenced to coordinate with CTA operations at the 95th Street Terminal. See Section 5.2.2 for a discussion of emissions, construction sequencing, traffic management, dust control, and construction truck access that would also apply to the UPRR Rail Alternative.

Compared with the other two build alternatives, construction activities for the Halsted Rail Alternative would be less than the UPRR Rail Alternative and somewhat more than the BRT Alternative. However, with the use of appropriate mitigation measures as described above, no violations of any of the IAAQS or NAAQS are anticipated due to this alternative. Therefore, with appropriate mitigation measures in place, no adverse air quality impacts due to construction activities are anticipated due to this alternative.

5.4.3 Cumulative Impacts and Mitigations – Halsted Rail Alternative

The only project that might be related to the Halsted Rail Alternative with respect to air quality impacts is CTA's RPM Project. Without improvements to the existing Red Line, the RLE might not be able to achieve its full potential. The impact on air quality with or without the RPM Project

would not be adverse. However, the basis for the regional plan and the TIP would have changed, possibly triggering a need to update the SIP.

Section 6
Impacts Remaining After Mitigation

Based on the results of the air quality analysis presented here, all build alternatives of the RLE Project would provide a regional net air quality benefit when compared to existing conditions or the No Build Alternative.

6.1 Bus Rapid Transit Alternative

With the BRT Alternative, no adverse air quality impacts were identified in any the air quality analyses performed for this alternative. The CO hot spot analysis demonstrated compliance with the IAAQS and NAAQS for CO; the GHG analysis showed fewer GHG emissions compared to the No Build Alternative; the $PM_{2.5}$ assessment demonstrated that lower $PM_{2.5}$ emissions are likely compared to the No Build Alternative; and the assessment of MSAT also demonstrated that lower emissions of MSAT are likely compared to the No Build Alternative.

6.2 Union Pacific Railroad Rail Alternative

As described previously, the air quality analysis presented here applies equally to all of the UPRR Rail Alternative options, as well as to the 120th Street yard and shop. With the UPRR Rail Alternative, no adverse air quality impacts were identified in any the air quality analyses performed for this alternative. The CO hot spot analysis demonstrated compliance with the IAAQS and NAAQS for CO; the GHG analysis showed lower GHG emissions compared to the No Build Alternative; the $PM_{2.5}$ assessment demonstrated that lower $PM_{2.5}$ emissions than with the No Build Alternative would be likely; and the assessment of MSAT also demonstrated that lower emissions of MSAT than with the No Build Alternative would be likely.

6.3 Halsted Rail Alternative

No adverse air quality impacts were identified for the Halsted Rail Alternative. The CO hot spot analysis demonstrated compliance with the IAAQS and NAAQS for CO; the GHG analysis showed lower GHG emissions compared to the No Build Alternative; the $PM_{2.5}$ assessment demonstrated that lower $PM_{2.5}$ emissions than with the No Build Alternative would be likely; and the assessment of MSAT also demonstrated that lower emissions of MSAT than with the No Build Alternative would be likely.

Based on the results of the air quality analysis presented here, all build alternatives of the RLE Project would provide a regional net air quality benefit when compared to existing conditions or the No Build Alternative.

Section 7
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Appendix A
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Appendix V

Biological Resources Technical Memorandum

- Final EIS Addendum V, Biological Resources Technical Memorandum, July 2022
    - Attachment A, Coordination

RED AHEAD

Red Line Extension

Chicago Red Line Extension Project

Biological Resources

Final EIS Addendum V

July 2022

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Table of Contents

Section 1 - Summary **1-1**
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-1
3.4 Methods 3-2
Section 4 - Affected Environment **4-1**
4.1 Vegetation and Wildlife Habitat 4-1
4.2 Threatened and Endangered Species 4-2
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative - Preferred Alignment 5-1
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4

Tables

Table 4-1: Acres of Tree Vegetation 4-2
Table 4-2: State-Listed Species Updates 4-3
Table 4-3: Additional State-Listed Species 4-4

Attachments

Attachment A - Coordination

Abbreviations

API	Area of Potential Impact
CHA	Chicago Housing Authority
CN/MED	Canadian National/Metra Electric District
CTA	Chicago Transit Authority
EA	Environmental Assessment
EcoCAT	Ecological Compliance Assessment Tool
ECOS	Environmental Conservation Online System
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
IDNR	Illinois Department of Natural Resources
IPaC	Information for Planning and Consultation
IHB	Indiana Harbor Belt Railroad
MBTA	Migratory Bird Treaty Act
MED	Metra Electric District
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act
NS	Norfolk Southern Railway
RLE	Red Line Extension
UPRR	Union Pacific Railroad
USFWS	U.S. Fish and Wildlife Service

Section 1 - Summary

This technical memorandum provides an update on the potential impacts of the Red Line Extension (RLE) Project on biological resources, including threatened and endangered species and their habitats, vegetation, and other wildlife habitats, in comparison with the Draft Environmental Impact Statement (EIS).

The purpose of investigation regarding vegetation and wildlife habitat remains the same as described in **Appendix V** of the Draft EIS. The Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative would have the potential to require the removal of trees within the area of potential impact (API). As evaluated in blocks of habitat, the Preferred Alignment may remove up to 64.1 acres of trees, as estimated through canopy coverage, plus isolated trees. This number represents a maximum potential acreage quantity. The final acreage of tree removal is anticipated to be lower, as it would likely not be necessary to clear all trees in the analyzed area. Tree removal in any part of the API might affect birds protected under the Migratory Bird Treaty Act (MBTA) and, depending on what part of the API the trees are located, tree removal might also be regulated by local ordinances. Tree removal has the potential to adversely affect vegetation and wildlife; however, with implementation of mitigation measures, potential impacts on vegetation and wildlife would not be significant. Operation of the Red Line following construction of the Preferred Alignment would have minor adverse impacts on vegetation and wildlife habitat.

The purpose of the investigation regarding threatened and endangered species remains the same as described in **Appendix V** of the Draft EIS. Of the 114 species identified in the Draft EIS, two were federally listed only, nine were delisted, and four underwent a scientific name change. There are currently 135 state-listed species that potentially occur within Cook County. Two of these state listed species are newly listed at the federal level as well. One additional newly listed species is only listed at the federal level. The peregrine falcon, identified in the Draft EIS, is no longer a listed species. Removal of suitable roost trees has the potential to adversely affect the northern long-eared bat; however, with the implementation of proposed standard mitigation measures, the potential to affect threatened and endangered species would not be significant. The USFWS determined the RLE Project "May Affect – Not Likely to Adversely Affect" the northern long-eared bat. IDNR has determined that impacts are unlikely, with inclusion of proposed mitigation measures. Operation of the Red Line following construction of the Preferred Alignment would have no measurable impacts on listed species.

Development of the Preferred Alignment in combination with related renovation, new construction, and transportation projects identified in the API would not contribute to cumulative impacts on wildlife, vegetation, or listed species.

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th

Place would preserve viable businesses; minimize impacts on schools, residences, and the historic Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid

Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

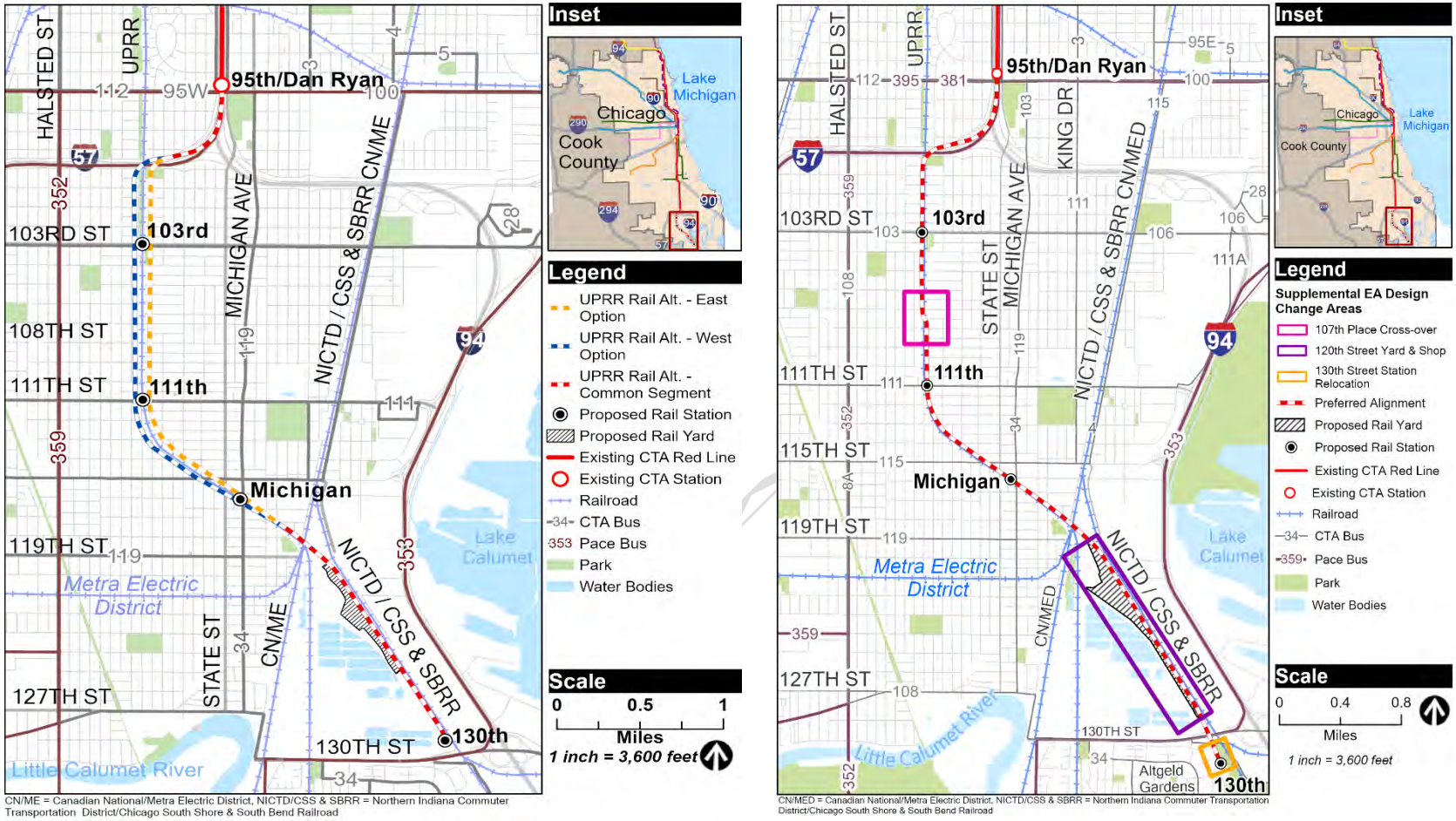

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix V** for the Draft EIS analysis have been carried forward to evaluate biological resources. This section documents the methodology for evaluating this resource, consistency with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

There are no changes to the applicable federal or state regulations referenced in **Appendix V** of the Draft EIS. **Appendix V** further notes there are no local regulations requiring analysis of threatened or endangered species impacts. There are local regulations regarding the removal of landscape trees without a permit, as documented in the Draft EIS.

3.2 Impact Analysis Thresholds

The National Environmental Policy Act (NEPA) does not set specific thresholds of significance for impacts on threatened and endangered species, vegetation, or wildlife habitats. The approach taken in the Draft EIS based on disturbance or impact to threatened and endangered species, habitat, or sensitive environments is maintained as thresholds of impact for this project. There is no change to the impact analysis thresholds from the Draft EIS **Appendix V**.

3.3 Area of Potential Impact

The Draft EIS defined the evaluation area as a ¼ mile radius from the proposed alignments, stations, park & ride lots, and maintenance yards for each project alternative. This approach is applied in a manner consistent with the Draft EIS. Specific attention is given to the project defined action area in calculating disturbance to potential species habitats. The approach to identifying an API is the same as in the Draft EIS and is applied to the Preferred Alignment. With the extension of the Preferred Alignment south of 130th Street, the API also extends farther south than described in the Draft EIS and now extends into the Beaubien Woods Forest Preserve.

3.4 Methods

The analysis of biological resources of the RLE Preferred Alignment was performed using the same methods as were documented in the Draft EIS consistent with **Appendix V**.

Information collected for the Draft EIS was reviewed and verified. Vegetation was classified based on aerial desktop review using Google Earth and Nearmap aerial imagery (Google 2020, Nearmap 2021). Updated lists of protected species that may occur in the API were generated from the Illinois Ecological Compliance Assessment Tool (EcoCAT) (IDNR 2021). The EcoCAT was utilized to submit the project for formal project consultation, completed in November 2021. General lists of species likely to occur in Cook County were obtained from the Illinois Department of Natural Resources (IDNR) and USFWS (USFWS 2017). The USFWS Information for Planning and Consultation (IPaC) system was not in operation at the time of the preparation for the Draft EIS. This system was used for generating a project-specific list in a similar manner as the EcoCAT system. Field review included a "windshield" style survey verification of desktop information and information collected during the production of the Draft EIS. The "windshield" survey was completed on October 27, 2020. A second subsequent visit was completed on May 11 and 12, 2021. The October 2020 field effort included traversing all accessible streets in the API where potential habitat was present. The May 2021 field effort included similar street side reviews as the October 2020 site review, as well as pedestrian reviews into wooded areas away from the roadways. The site reviews included general observations of habitat, landscape, and plant species composition. The landscape review did not include any protocol level surveys and was based on general observations of the API. EcoCAT results and the updated IPaC list are provided in **Attachment A.**

Section 4 - Affected Environment

This section describes updates to the existing biological resources conditions near the RLE Project since the publication of the Draft EIS. This section documents the updates to the baseline data and planning horizon, as well as any changes to the biological resources planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

Where appropriate, Draft EIS data from **Appendix V** have been included for comparison to provide context to the updates in this addendum. Consistent with the Draft EIS, this document provides information and analyses on the threatened and endangered species that potentially occur in the project vicinity and habitats that may be affected by project implementation. IDNR and USFWS lists of threatened and endangered species have been updated since development of the Draft EIS.

4.1 Vegetation and Wildlife Habitat

Regulations governing vegetation and wildlife habitats have not changed in any way that changes the analysis of biological resources in the Draft EIS. The general description of habitats present along the Preferred Alignment included urban woodland forest and city neighborhoods. The 130th Street station is now located farther south, as described in **Section 2**. The area where housing Blocks 11 and 13 were located and where the 130th Street station would be located was converted to open space dominated by mowed/maintained turf grasses following the demolition of the structures. Mature landscape trees located in the area surrounding the demolition were kept in place. Other trees are present in two main areas south of 130th Street: the railroad right-of-way and in a strip immediately east of the Altgeld Gardens demolished housing blocks. The two tree corridors are generally described as including early successional native and non-native species located in two distinct bands or corridors. Observed dominant species include eastern cottonwood (*Populus deltoides*) and oak species (*Quercus sp.*). Trees in the area south of 130th Street are fragmented from any nearby forested areas by transportation infrastructure and urban maintenance.

The removal of residential buildings from Altgeld Gardens increased the open green space in the area by approximately 23 acres. The open green space does not provide unique habitat opportunities in comparison to the surrounding area. Habitats in this segment include open, mowed grass and two strips of early successional tree species.

Habitats in the 120th yard and shop area and the 107th Place cross-over have not considerably changed from those described in the Draft EIS. As documented in the Draft EIS, Lake Calumet is located east of the 120th yard and shop. Lake Calumet is an Illinois Natural Area Inventory Site. Beaubien Woods Forest Preserve, the main part of which is located to the south and southeast of

the API, has higher quality habitat opportunities in comparison to areas affected by the Preferred Alignment because it has larger areas of contiguous forest, a wetland complex, Flatfoot Lake, and the Little Calumet River. Trees north of 132nd Street are separated from the larger forest area by only the street and may provide opportunities for wildlife to shelter in and travel through.

Table 4-1 provides acreages of trees in the API based on aerial photography interpretation. Acreages are based on three project segments:

- North Segment: Vegetation from the 95th/Dan Ryan terminal to the CN/MED crossing
- 120th Street yard and shop: Vegetation from the CN/MED crossing to 130th Street
- 130th Street station: Vegetation from 130th Street to 132nd Street

Table 4-1: Acres of Tree Vegetation

Segment	Acreage
North Segment	15.5
120th Street yard and shop	42.9
130th Street station	5.7
Total	64.1

Kensington Marsh has been identified as a receiving location for treated stormwater from the 120th Street yard and shop. Kensington Marsh is a Metropolitan Water Reclamation District of Greater Chicago (MWRD) developed compensatory mitigation property approved by the U.S. Army Corps of Engineers in 1985 to offset impacts related to construction of the nearby MWRD facilities. The total marsh area is approximately 9 acres. The marsh consists of open water areas surrounded by emergent wetland vegetation. The vegetated portions of the marsh are dominated by common reed (*Phragmites australis*).

4.2 Threatened and Endangered Species

There are 135 state-listed species that potentially occur within Cook County (IDNR 2020). Of the 114 species identified in the Draft EIS, two were federally listed only, nine were delisted, and four underwent a scientific name change. Changes in federal- and state-listed species status are documented in **Table 4-2**. The updated species list includes 30 additions to the state list, which are documented in **Table 4-3**. Additionally, three federal species are newly accounted for on the species list, with some overlap on the state list.

Table 4-2: State-Listed Species Updates

Scientific Name in Draft EIS	Common Name	Updated Information
Alasmidonta viridis	Slippershell	Delisted
Carex woodii	Pretty Sedge	Delisted
Cypripedium candidum	White Lady's slipper	Delisted
Deschampsia flexuosa	Hairgrass	Updated to *Avenella flexuosa*
Ethiostoma exile	Iowa Darter	Delisted
Falco peregrinus	Peregrine Falcon	Delisted
Gallinua chloropus	Common Gallinule	Updated to *Gallinua galeata*
Juncus alpinus	Richardson's Rush	Updated to *Juncus alpinoarticulatus*
Liatris scariosa var nieuwlandi	Blazing Star	Delisted
Oenothera perennis	Small Sundrops	Delisted
Spermophilus franklinii	Franklin's Ground Squirrel	Updated to *Poliocitellus franklinii*
Tomanthera auriculata	Ear-leafed Foxglove	Delisted
Viola conspersa	Dog Violet	Delisted

Source: IDNR 2020.

Table 4-3: Additional State-Listed Species

Scientific and Common Name	Status	Habitat Requirements	Likelihood of Occurrence
Agalinis skinneriana Pale False Foxglove	LT	Moist to wet sandy prairies and on loess hill prairies	Unlikely, habitat does not occur in the API.
Antrostomus carolinensis Chuck-will's-widow	LT	Deciduous forest, pine-oak association, live-oak groves, and edges of clearings.	Unlikely, habitat does not occur in the API.
Arctostaphylos uva-ursi Bearberry	LE	Dry sandy woodlands, dry sandy prairies, sandstone glades, exposed sandstone cliffs, and sand dunes.	Unlikely, habitat does not occur in the API.
Asio flammeus Short-eared Owl	LE	Fresh and saltwater marshes, bogs, dunes, prairies, grassy plains, old fields, tundra, moorlands, river valleys, meadows, savanna.	Unlikely, habitat does not occur in the API.
Bombus affinis Rusty Patched Bumble Bee	FE, LE	Nests underground in deserted mammal burrows close to or within woodlands, urban parks, and gardens.	Unlikely, the project is outside of the known species range.
Botaurus lentiginosus American Bittern	LE	Marshes, including lake and pond edges with cattails, sedges, or bulrushes and with patches of open water.	Unlikely, habitat does not occur in the API.
Buchnera americana Blue Hearts	LT	Sandy or gravelly soil of upland woods or prairies where fire is part of a natural disturbance regime.	Unlikely, habitat does not occur in the API.
Calephelis muticum Swamp Metalmark	LE	Shrub swamps, fens, lake, and pond shores with *Cirsium* species available as food plants.	Unlikely, habitat does not occur in the API.
Carex cryptolepis Sedge	LT	Moist meadows, swales, lower banks of streams, shorelines of ponds or small lakes, and seeps.	Unlikely, habitat does not occur in the API.
Calidris canutus rufa Red Knot	FT	Coastal areas or large wetland complexes for migratory stopovers.	Unlikely, habitat does not occur in the API.
Castilleja sessiliflora Downy Yellow Painted Cup	LE	Dry plains and hills.	Unlikely, habitat does not occur in the API.
Cimicifuga racemosa False Bugbane	LE	Mesic deciduous forest, forest coves, and ravines with fertile soils and circumneutral to basic soil pH.	Unlikely, habitat does not occur in the API.

Scientific and Common Name	Status	Habitat Requirements	Likelihood of Occurrence
Circus hudsonius Northern Harrier	LE	Sloughs, wet meadows, marshlands, swamps, prairies, plains, grasslands, and shrublands.	Unlikely, habitat does not occur in the API.
Coccyzus erythropthalmus Black-billed Cuckoo	LT	Forest edge and open woodland with dense deciduous thickets.	Unlikely, habitat does not occur in the API.
Coregonus artedi Cisco	LE	Open waters of lakes and large rivers.	Unlikely, habitat does not occur in the API.
Cottus bairdii Mottled Sculpin	LT	Headwaters, creeks, springs, small rivers, and lakes, with sand and gravel or rocky substrate.	Unlikely, habitat does not occur in the API.
Dendrolycopodium hickeyi Hickey's groundpine	LT	Sandy acidic soils in hardwood, mixed, and coniferous forests.	Unlikely, habitat does not occur in the API.
Epilobium strictum Downy Willow Herb	LT	Fens, marshes, and sedge meadows.	Unlikely, habitat does not occur in the API.
Eurynia dilatata Spike	LE	Medium streams to large rivers primarily in shoal habitat of unimpounded streams and rivers.	Unlikely, habitat does not occur in the API.
Fundulus dispar Starhead Topminnow	LE	Well-vegetated swamps, marshes, floodplain sloughs, lakes, and other standing water bodies.	Unlikely, habitat does not occur in the API.
Hybognathus hankinsoni Brassy Minnow	LT	Small, clear, sluggish weedy creeks or small rivers with sand, gravel, or mud bottoms.	Unlikely, habitat does not occur in the API.
Juglans cinerea Butternut	LE	Mesophytic forests, lower slopes, ravines, and various types of bottomland.	Unlikely, habitat does not occur in the API.
Lonicera dioica Red Honeysuckle	LE	Rocky banks, dry woods and thickets in hardwood to mixed forests.	Unlikely, habitat does not occur in the API.
Moxostoma cariatum River Redhorse	LT	Large creeks and rivers, or occasionally in natural lakes and reservoirs.	Unlikely, habitat does not occur in the API.
Myotis septentrionalis Northern Long-eared Bat	FT, LT	Winter habitat includes caves and mines suitable for hibernation. Summer habitat includes trees with loose (exfoliating) bark or crevices of live trees or snags.	Potentially to occur due to potential suitable habitat in the API.

Scientific and Common Name	Status	Habitat Requirements	Likelihood of Occurrence
Orobanche fasciculata Clustered Broomrape	LE	Dry prairies, dunes, and savannas.	Unlikely, habitat does not occur in the API.
Pinus banksiana Jack Pine	LE	Pure stands on poor, sandy soil in areas of regular fire disturbance.	Unlikely, habitat does not occur in the API.
Potamogeton strictifolius Stiff Pondweed	LE	Fresh or somewhat alkaline, shallow water of lakes.	Unlikely, habitat does not occur in the API.
Sanguisorba canadensis American Burnet	LE	Peaty or boggy soils in non-forested seasonal wetlands.	Unlikely, habitat does not occur in the API.
Speyeria idalia Regal Fritillary	LT	Tallgrass prairie and prairie pastures with dry, mesic, and wet soils.	Unlikely, habitat does not occur in the API.
Triglochin maritima Common Bog Arrow Grass	LT	Fens, calcareous gravelly seeps, marl flats, and calcareous sandy pannes.	Unlikely, habitat does not occur in the API.

Sources: IDNR 2020, MDNR 2018, MFO 2011, NatureServe 2021, Snyder 1993, USFWS 2017, USFWS 2021, Walsh 1993.
Status Legend: FT – Federally Threatened, FE – Federally Endangered, LT – State Threatened, LE – State Endangered

The Draft EIS identified the peregrine falcon (*Falco peregrinus*) as the only state-listed species with potential to occur in the API. Due to removal from the list, this species is no longer considered a state-listed species concern. As a migratory bird, protections of the MBTA still apply to this species.

In addition to the species identified in the Draft EIS, the updated EcoCAT search listed the state-endangered osprey (*Pandion haliaetus*). No suitable habitat for this species was identified in the project action area in the Draft EIS. Observations during the windshield survey are consistent with this determination. The addition of the area associated with the 130th Street station did not add any habitat for the osprey to the API. During the consultation process, IDNR indicated that here are records of osprey in the project vicinity. No osprey nests have been documented in the project API.

The rusty patched bumble bee (*Bombus affinis*) was added to the federal species list for Cook County since the Draft EIS analysis. The API is outside the range of this species, as identified by the USFWS Environmental Conservation Online System (ECOS). The IPaC system review did not indicate this species to be of concern for the project area.

The IPaC system review indicated the rufa red knot (*Calidris canutus rufa*) may occur in the API and vicinity. No suitable habitat (i.e., coastal areas of large wetland complexes for migratory stopovers) for the rufa red knot was identified in the API during the windshield survey nor was any described in the Draft EIS. Therefore, the rufa red knot is unlikely to occur in the API.

The IPaC system review also indicated that the northern long-eared bat (*Myotis septentrionalis*) may be of concern for project activities. The bat species is also listed on the Cook County state list. The EcoCAT review did not provide any indications of presence in the screening area. Suitable habitat for the northern long-eared bat may be present in limited quantities in the proposed 120th Street yard and shop area. The bat spends winter months hibernating in caves and mines, referred to as hibernacula (USFWS 2015). Summer roosting habitat for the northern long-eared bat includes loose (exfoliating) tree bark, tree crevices, or snags. The northern long-eared bat has also been known to roost in man-made structures. Foraging habitat includes forest and below-canopy areas in primarily upland forests on hillsides and ridges as well as along paths, ponds, and streams at forest edges.

The wooded area in the 120th Street yard and shop API has not been formally assessed for the presence of suitable bat habitat trees at this time. Trees described in the Draft EIS and observed during the windshield survey in the API have grown in the area since removal of a railyard after 1974 (based on review of aerial photography), and do not exhibit the characteristics of older tree damage that create suitable bat roost opportunities. Trees with exfoliating bark, such as shagbark hickory (*Carya ovata*), were not observed in the project action area during the October 2020 or May

2021 site reviews. Suitable habitat is assumed to be potentially present in the absence of a formal survey.

USFWS considers information about Indiana bat (*Myotis sodalis*) habitat requirements and responses to impacts to be applicable to the northern long-eared bat because the species have similar life histories, habitat requirements, and ranges. Indiana bats have been shown to have a low likelihood of roosting within 100 feet of a roadway (USFWS 2018). USFWS found that less than four percent of all Indiana bat roosts identified were within 100 feet from roadways and less than 13 percent of roosts were within 300 feet. The entirety of the API with trees that may be removed is 300 feet or less to a currently active rail line or roadway. Northern long-eared bats may be transient through the area, but more suitable foraging and roost habitat is likely to be present in the wooded areas and riverine corridor along the Little Calumet River. It is assumed that there is a low probability for the presence of this bat species to be present in the project action area for the reasons described above.

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impact and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative.

- Permanent impacts relate to system operations after the RLE Project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the RLE Project combined with other past, present, or near future projects within the API.

This section also documents new or revised mitigation measures for identified project impacts, where applicable. If there is no change in mitigation, this section indicates where there is no change when compared to the East and West Options evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning Transportation Improvement Program. No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Appendix V** in the Draft EIS, there would be no impacts on vegetation and wildlife habitat or threatened and endangered species from the No Build Alternative.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

The Preferred Alignment would have the potential to adversely affect vegetation and wildlife habitat both permanently and during construction. Consistent with the Draft EIS, implementation of the described and referenced mitigation measures would render the potential for impacts to be not significant. Operation of the RLE Project following construction would have minor adverse impacts on listed species if they are present.

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

Permanent impacts on vegetation and wildlife habitat under the Preferred Alignment include removal of up to 64.1 acres of trees from the project action area. Vegetation removal was identified in the Draft EIS as up to 70.2 acres for the East Option and 76 acres for the West Option. A permanent reduction in habitat would occur but the loss would not constitute a substantial impact because the existing habitats are fragmented and somewhat isolated by surrounding industrial and transportation uses. The loss of trees would reduce migratory bird habitat. Migratory species passing through Chicago are likely to be adapted to urban habitats and are highly mobile, enabling them to overcome industrial and land use barriers between the API and more natural areas. Mitigation measures would be required, as defined in the Draft EIS, including following local tree ordinances, timing of construction, and nesting bird surveys. An additional concern subsequent to development of the Draft EIS includes concerns related to the northern long-eared bat. Suitable bat roost trees have a minimal likelihood of being present. Coordination was submitted to the USFWS on September 3, 2021. The USFWS responded on September 28, 2021, finalizing any determinations regarding potential impacts on the northern long-eared bat. Under the *Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana bat and Northern Long-Eared Bat (USFWS)* a "May Affect – Not Likely to Adversely Affect" determination was provided by the USFWS. The USFWS concurred with the following mitigation measures: tree removal activities would occur outside of the northern long-eared bat active season (April 1 through October 31).

In addition, the coordination letter response received from the USFWS on September 28, 2021 agreed with the finding of "No Effect" for the threatened and endangered species listed in Cook County, Illinois, except for the northern long-eared bat, as noted above. The submittal package and response is provided in **Attachment A.**

CTA requested a formal consultation from IDNR on November 17, 2021. IDNR provided a determination that impacts are unlikely with implementation of recommendations on November 24, 2021. Recommendations will be incorporated, as described below. The submittal package and response is provided in **Attachment A.**

For the protection of wildlife associated with Lake Calumet, IDNR requested implementation of the following mitigation measures related to lighting: All lighting should be fully shielded fixtures that emit no light upward. Only "warm-white" or filtered LEDs (CCT < 3,000 K; S/P ratio <1.2) should be used to minimize blue emission. Only light the exact space with the amount (lumens) needed to meet industry safety requirements.

With the exception of the potential to adversely impact suitable northern long-eared bat roost trees (presence assumed), the nature of permanent impacts has remained the same as those described in

Appendix V of the Draft EIS. Mitigation would be implemented in the same manner as described in **Appendix V** of the Draft EIS.

After mitigation, there would be minor adverse impacts on biological resources.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

Construction impacts are related to vegetation removal in quantities similar to those described above and in the Draft EIS. Tree removal would potentially affect migratory birds and urban-adapted wildlife through removal of roosting, feeding, and breeding areas. Tree removal would potentially affect migratory birds during construction. In addition, any removal of suitable bat roost trees, if present, would have the potential to affect the northern long-eared bat. Mitigation would be implemented in the same manner as described in **Appendix V** of the Draft EIS. An additional mitigation measure related to removal of suitable bat roost trees is described in **Section 5.2.1** and would apply to construction impacts in the same manner. Mitigation measures related to lighting would also apply to any temporary construction lighting.

Mitigation measures requested by IDNR for protection of the osprey include the following: Removal of vertical structures such as telephone poles, light poles, etc. would be done outside of the osprey active season (April 1 through October 31). If these dates cannot be accommodated, a nesting survey will be conducted to determine if species are utilizing structures in the project area. Survey results will be coordinated with IDNR.

After mitigation, there would be minor adverse impacts on biological resources.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

As described in **Appendix V** of the Draft EIS, development of the Preferred Alignment in combination with related renovation, new construction, and transportation projects identified in the vicinity of the project would not contribute to cumulative impacts on wildlife, vegetation, or listed species.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on biological resources as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

There would be minor adverse impacts on biological resources remaining as a result of the Preferred Alignment.

Section 7 - References Cited

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Attachment A
Coordination

- CTA Request to USFWS - September 3, 2021
- USFWS Response - September 28, 2021
- CTA EcoCAT Request - November 17, 2021
- IDNR EcoCAT Response - November 24, 2021

CHICAGO TRANSIT AUTHORITY

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September 3, 2021

Ms. Louise Clemency
Field Supervisor
U.S. Fish and Wildlife Service
Chicago Illinois Field Office
230 South Dearborn Street, Suite 2938
Chicago, IL 60604

Re: Evaluation of Effects on Federally Listed Species and Critical Habitats
CTA Red Line Extension Project
Chicago, Cook County, Illinois

Dear Ms. Clemency:

The Chicago Transit Authority (CTA) is preparing a Final Environmental Impact Statement (EIS) for the Red Line Extension (RLE) Project (Proposed Action). Part of this process includes an evaluation of the project's impact on endangered species and critical habitat.

Project Description

CTA, as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Preferred Alignment potential action area is shown in **Enclosure A** as **Figure 1: Project Location**.

Endangered Species Act Federally Listed Species

The USFWS Chicago Ecological Services Field Office was contacted through the Information for Planning and Consultation (IPaC) system regarding the potential presence of species under the jurisdiction of USFWS within the Preferred Alignment potential action area (Consultation Code: 03E13000-2021-SLI-0700). This list was generated using a quarter mile buffer around the Preferred Alignment. The USFWS Official Species List is included as **Enclosure B** of this document. Species lists were previously generated for different project segments as follows: 108th Street crossover (03E13000-2021-E-01134), 120th Street yard and shop (03E13000-2021-E-01136), and 130th Street station (E03E13000-2021-E-01138). Listed species are the same

across all three segments. The IPaC system review indicates that eight (8) threatened, endangered, or candidate species may occur within the area: Northern long-eared bat (*Myotis septentrionalis*), piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), eastern massasauga (*Sistrurus catenatus*), Hine's emerald dragonfly (*Somatochlora hineana*), eastern prairie fringed orchid (*Platanthera leucophaea*), leafy prairie-clover (*Dalea foliosa*), and prairie bush-clover (*Lespedeza leptostachya*). **Table 1** presents a list of the federally listed species and their preferred habitat. Additional descriptions of these species and their habitats are summarized below.

Table 1: USFWS IPaC Identified Species

Federal Threatened and Endangered Species Matrix				
Common Name	**Species Name**	**Status**	**Habitat**	**Presence**
Mammals				
Northern Long-eared Bat	*Myotis septentrionalis*	T	Winter habitat includes caves and mines suitable for hibernation. Summer habitat includes trees with loose (exfoliating) bark or crevices of live trees or snags.	Suitable habitat may be present
Birds				
Piping Plover	*Charadrius melodus*	E	Wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands.	Suitable habitat is not present
Red Knot	*Calidris canutus rufa*	T	Coastal areas or large wetland complexes for migratory stopovers.	Suitable habitat is not present
Reptiles				
Eastern Massasauga	*Sistrurus catenatus*	T	Wet areas including wet prairies, marshes, and low areas along rivers and lakes. Also uses adjacent uplands during part of the year. Often hibernates in crayfish burrows but may also be found under logs and tree roots or in small mammal burrows.	Suitable habitat is not present
Insects				
Hine's Emerald Dragonfly	*Somatochlora hineana*	E	Spring fed wetlands, wet meadows, and marshes.	Suitable habitat is not present
Plants				
Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	T	Moist to mesic black soil prairies, sand prairies, thickets, pothole marshes, and fens.	Suitable habitat is not present

Federal Threatened and Endangered Species Matrix				
Common Name	**Species Name**	**Status**	**Habitat**	**Presence**
Leafy Prairie-clover	*Dalea foliosa*	E	Prairie remnants along the Des Plains River in Illinois, in thin soils over limestone substrate.	Suitable habitat is not present
Prairie Bush-clover	*Lespedeza leptostachya*	T	Dry to mesic prairies with gravelly soil.	Suitable habitat is not present

Status Key: C = Candidate, CH = Critical Habitat, E = Endangered, T = Threatened

Preferred Alignment Habitat

Vegetation in the northern two thirds of the Preferred Alignment potential action area and vicinity primarily consists of parkway trees and landscaping around buildings. According to the descriptions in the *Chicago Nature and Wildlife Plan*, the Preferred Alignment potential action area is comprised of woodland forest and city neighborhoods habitat. The majority of woodland forest is in the 120th Street yard and shop area located roughly between Kensington Avenue and 130th Street on the west side of Cottage Grove Avenue. Some smaller wooded sections are also present south of 130th Street. Observed species include eastern cottonwood (*Populus deltoides*) and oak species (*Quercus* sp.). Cottonwood trees are the primary dominant tree species in the vicinity. Common reed (*Phragmites australis*) dominated wetlands are present in the Preferred Alignment potential action area, generally adjacent to the "woodland forest" areas. These wetlands are low quality wetlands with low plant diversity. The remaining area includes urban lots and maintained landscapes.

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) operates the Calumet Water Reclamation Plant in the area south of Kensington Avenue. The American Recycling facility is located immediately north of the proposed 120th Street yard and shop location. Both operations involve regular passage of heavy vehicle traffic through the "woodland forest" segments. Existing rail and roads are present throughout the Preferred Alignment potential action area.

No Effect Finding

CTA, in coordination with FTA, has determined that implementation of the Proposed Action would have No Effect on the piping plover, red knot, eastern massasagua, Hine's emerald dragonfly, eastern prairie fringed orchid, leafy prairie-clover, or prairie bush-clover. The following species accounts are sourced from USFWS descriptions.

Piping Plover: Piping plovers are a migratory shorebird that nests in North America and winters along the coast of the Gulf of Mexico, or further south. It includes the Great Lakes in its breeding grounds. Piping plovers use wide, flat, open, sandy beaches with limited grass or other vegetation. No suitable habitat is present in the Preferred Alignment potential action area.

Red Knot: Similar to the piping plover, the red knot is a migratory shorebird that nests in North America and migrates south for the winter. Primary habitat includes sandy or gravelly beaches

and sandbars or alkaline wetlands. No suitable habitat is present in the Preferred Alignment potential action area.

Eastern Massasagua: Eastern Massasagua are found in wet areas, including wet prairies, marshes, and low areas along rivers and lakes. They use adjacent uplands during part of the year, including areas of open canopy for basking, and areas of suitable foraging and retreat sites. They often hibernate in crayfish burrows, the burrows of other small animals, or under logs and tree roots. Generally, the eastern massasagua requires non-fragmented connections between the different habitat areas inhabited throughout the year. Population persistence declines in populations of less than 130 individuals. Home ranges can vary from 2.5 acres to 336 acres. No suitable habitat is present in the Preferred Alignment potential action area.

Hines Emerald Dragonfly: Hine's emerald dragonfly lives in calcerous spring-fed marshes and sedge meadows that overlie dolomite bedrock. No suitable habitat is present in the Preferred Alignment potential action area.

Eastern Prairie Fringed Orchid: Eastern prairie fringed orchid are found in wet to mesic prairie or wetland communities, such as sedge meadows, fens, or marsh edges. No suitable habitat is present in the Preferred Alignment potential action area.

Leafy Prairie-clover: In Illinois, leafy prairie-clover is found along the Des Plaines River in prairie remnants in thin soils over limestone substrate. It prefers sites with a wet spring and fall and a dry summer with open sun. No suitable habitat is present in the Preferred Alignment potential action area.

Prairie Bush-clover: Prairie bush-clover is found in mesic prairies that have gravelly soil. No suitable habitat is present in the Preferred Alignment potential action area.

Northern Long-eared Bat Determinations

A Project Submittal Form for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat is attached as **Enclosure C**.

The northern long-eared bat spends winter months in hibernacula located in caves and mines. Summer roosting habitat for the northern long-eared bat includes loose (exfoliating) tree bark, tree crevices, or snags. The northern long-eared bat has also been known to roost in man-made structures. Foraging habitat includes forest and below-canopy areas in primarily upland forests on hillsides and ridges as well as along paths, ponds, and streams at forest edges.

The Preferred Alignment has not been formally surveyed for the presence of suitable bat habitat trees at this time. Historically, a railyard occupied the wooded area of the 120th Street yard and shop, as identified through aerial review. Early successional woody vegetation has colonized the area since the removal of the railyard. Specific removal dates are unknown. The yard was reduced in size after 1952 and was still present at least until 1974. Images for 1988 and 1998 appear to show an apparent increase in woody vegetation in the former yard area. Trees observed during non-protocol level field reviews of the Preferred Alignment tend to be relatively young

(many greater than 8 inches in diameter), and do not yet exhibit the characteristics of older tree damage that create suitable bat roost opportunities. The majority of trees observed in the Preferred Alignment potential action area are eastern cottonwoods. Trees with exfoliating bark, such as shagbark hickory (*Carya ovata*), have not been observed. Suitable habitat is assumed to be potentially present in the absence of any formal summer habitat survey.

Tree removal has been analyzed for the Preferred Alignment potential action area. Tree removal quantities discussed represent the maximum acreage to be removed. The final acreage of trees removed is anticipated to be lower. From the existing crossing of the Union Pacific Railroad tracks over the Canadian National/Metra Electric District tracks near Kensington Park, to the northern connection with the existing 95th Street/Dan Ryan terminal, approximately 15.5 acres of trees may be removed. These trees are in the urban environment and are within 100 feet of existing roadways and railroad tracks. These trees are unlikely to provide suitable bat roosting opportunities due to their location in a dense urban environment. The alignment to the southeast of this segment (the 120th Street yard and shop and 130th Street station vicinities) is assumed to contain suitable bat roosts. No suitable habitat has been formally documented. There will be up to 30.4 acres of trees removed within 100 feet of existing road or rail surfaces. Up to 18.2 additional acres of trees will be removed between 100 and 300 feet of existing road or rail surfaces. Refer to **Enclosure A**, **Figure 2: Tree Removal 120th Street Yard and Shop, 130th Street Station**.

CTA, on behalf of FTA, has completed this review under the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat, as revised February 2018. A project submittal form is included in this package. CTA intends to implement avoidance and minimization measures as indicated in the included project submittal form. The standard sheet of Avoidance and Minimization Measures has been included as **Enclosure D** for reference. CTA intends to avoid all tree removal during the active season. Because tree removal would occur between 100 and 300 feet from roads and rail and habitat is assumed to be present, the project would fall under a May Affect, Likely to Adversely Affect (LAA) determination. CTA requests that USFWS either provide concurrence with this effect determination or coordinate with any agency information that indicates this location does not contain suitable habitat for the northern long-eared bat.

We appreciate your review of these materials at your earliest convenience to provide concurrence with the determination and any supplemental supporting information that may be available. Please advise if there are any further actions needed to facilitate the implementation of the Proposed Action in a manner that avoids or minimizes adverse effects to federally listed species. If you have any questions or require further information, please contact me at mfratinardo@transitchicago.com or Mr. Kelsey Kropp at krkropp@transystems.com or 816-490-1319. If preferred, we can set up a virtual meeting to discuss any clarifications or questions you have regarding this request.

Regards,

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority

Enclosures:
Enclosure A – Project Figures
Enclosure B – IPaC Species List
Enclosure C – Project Submittal Form
Enclosure D – AMM List Revised February 2018

cc:
Leah Mooney, CTA – Planning
Sonali Tandon, CTA – Planning

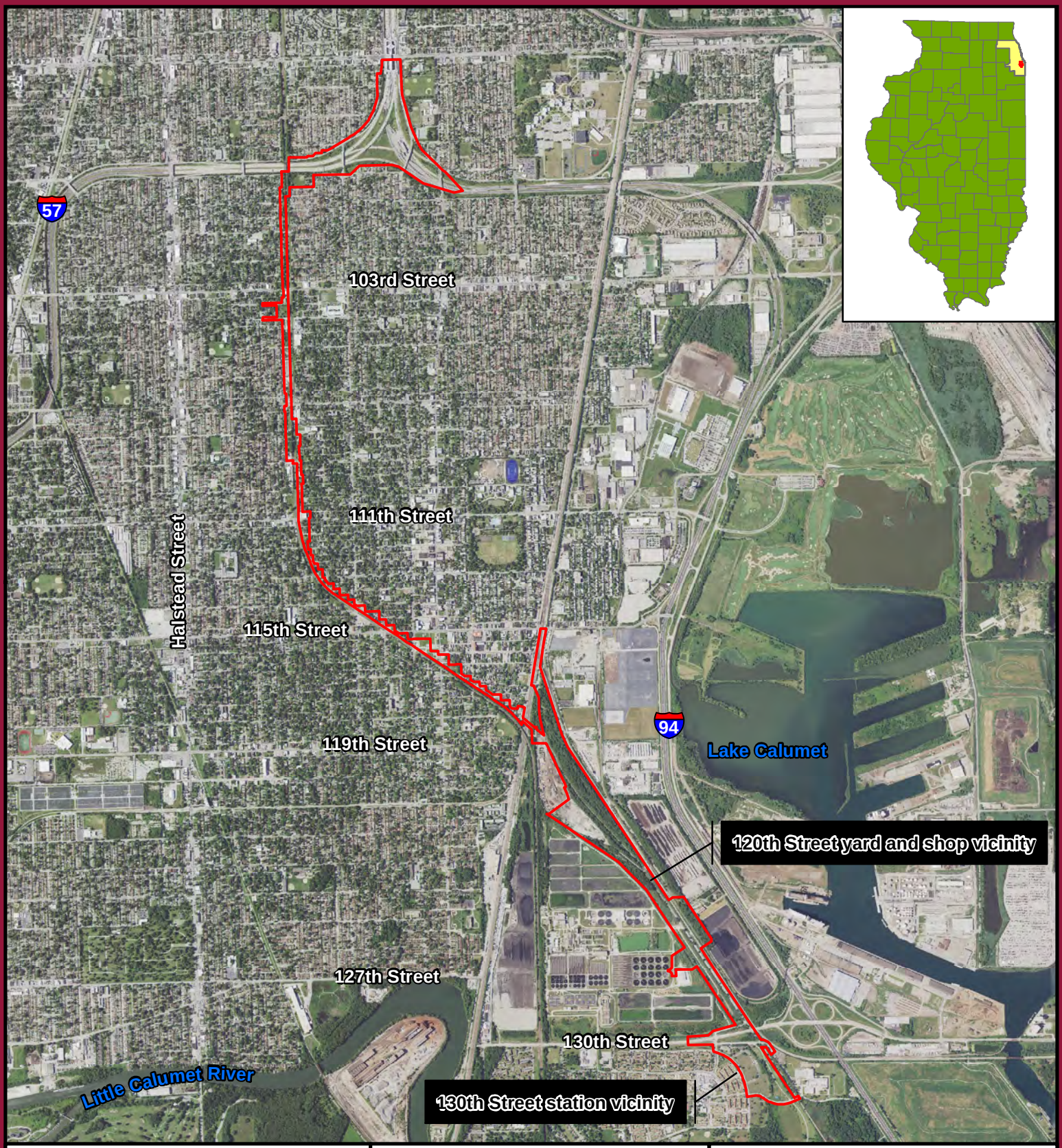

Potential Action Area

Figure 1: Project Location

0 1,500 3,000 Feet

N

CTA RLE

USFWS Coordination Map

Cook County, Illinois

Aerial Imagery: NAIP 2019 Cook County

July 27, 2021

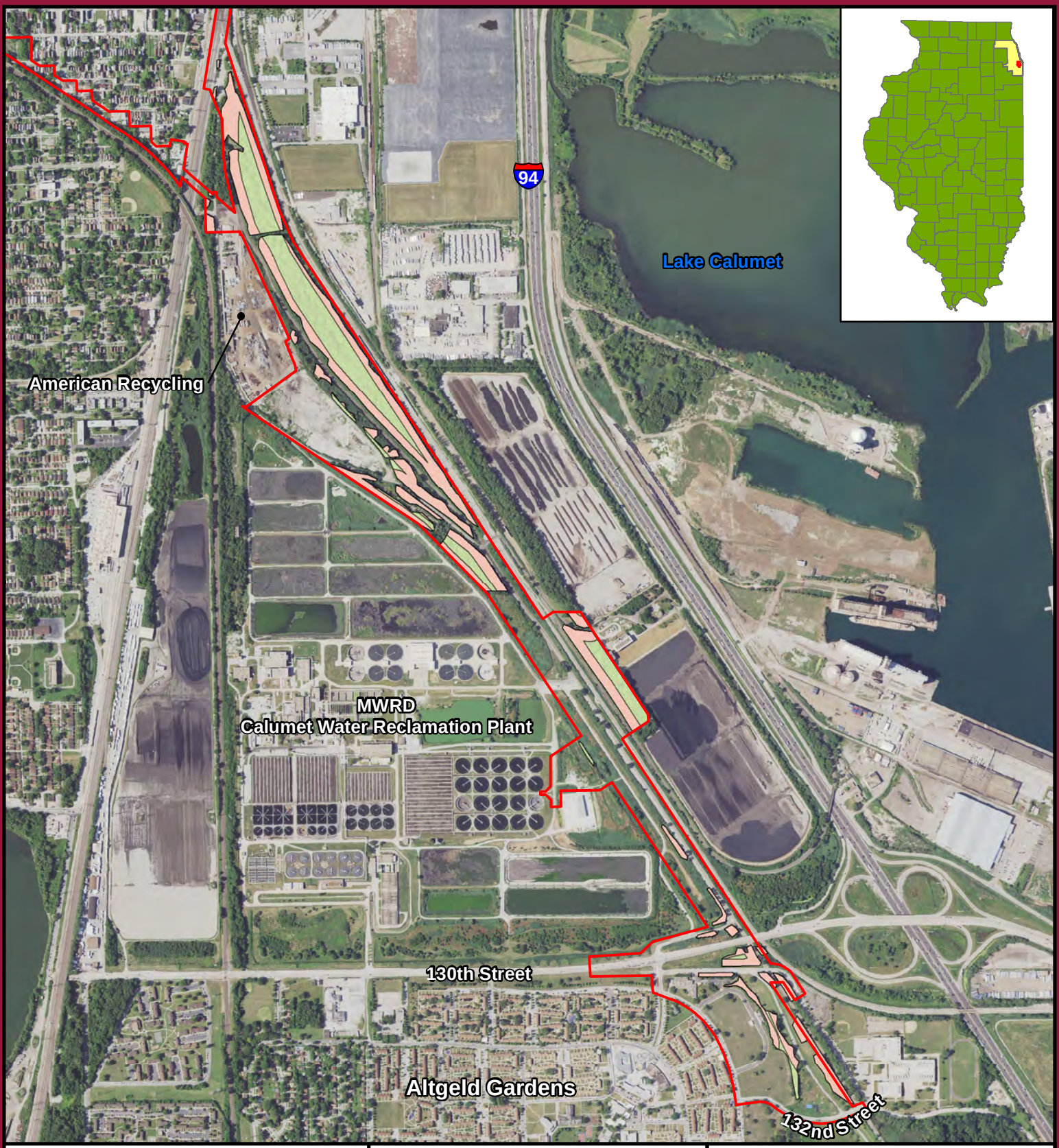

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Aerial Imagery: NAIP 2019 Cook County

July 27, 2021

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chicago Ecological Service Field Office
U.s. Fish And Wildlife Service Chicago Ecological Services Office
230 South Dearborn St., Suite 2938
Chicago, IL 60604-1507
Phone: (312) 485-9337 Fax:
http://www.fws.gov/midwest/endangered/section7/s7process/7a2process.html

In Reply Refer To: July 26, 2021
Consultation Code: 03E13000-2021-SLI-0700
Event Code: 03E13000-2021-E-01692
Project Name: CTA Redline Extension

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Please note! For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

For all other projects, continue the Section 7 Consultation process by going to our Section 7 Technical Assistance website at http://www.fws.gov/midwest/endangered/section7/s7process/index.html. If you are familiar with this website, you may want to go to Step 2 of the Section 7 Consultation process at http://www.fws.gov/midwest/endangered/section7/s7process/step2.html.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chicago Ecological Service Field Office
U.s. Fish And Wildlife Service Chicago Ecological Services Office
230 South Dearborn St., Suite 2938
Chicago, IL 60604-1507
(312) 485-9337

Project Summary

Consultation Code: 03E13000-2021-SLI-0700
Event Code: 03E13000-2021-E-01692
Project Name: CTA Redline Extension
Project Type: TRANSPORTATION
Project Description: CTA, as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.6851895,-87.62411376600002,14z

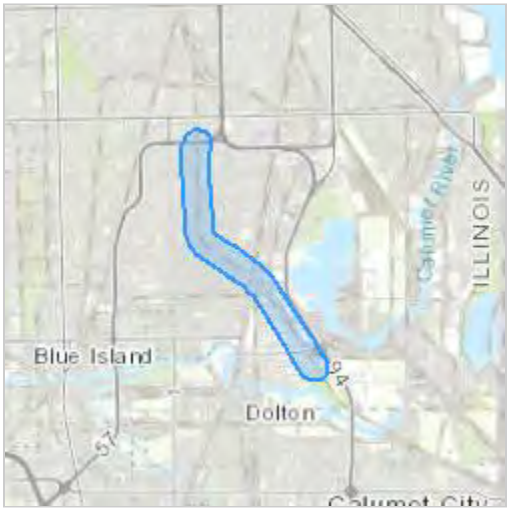

Counties: Cook County, Illinois

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Great Lakes watershed DPS] - Great Lakes, watershed in States of IL, IN, MI, MN, NY, OH, PA, and WI and Canada (Ont.) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6039	Endangered
Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

Reptiles

NAME	STATUS
Eastern Massasauga (=rattlesnake) *Sistrurus catenatus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2202	Threatened

Insects

NAME	STATUS
Hine's Emerald Dragonfly *Somatochlora hineana* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7877	Endangered

Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid *Platanthera leucophaea* No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ Follow the guidance provided at https://www.fws.gov/midwest/endangered/section7/s7process/plants/epfos7guide.html Species profile: https://ecos.fws.gov/ecp/species/601	Threatened
Leafy Prairie-clover *Dalea foliosa* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5498	Endangered
Prairie Bush-clover *Lespedeza leptostachya* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4458	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and Federal Transit Administration (FTA)

Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat

Project Submittal Form

Updated June 2019

The use of the Assisted Determination Key in the U.S. Fish and Wildlife Service (Service) Information for Planning and Conservation (IPaC) System is strongly recommended for submitting project-level information to the Service for use of the range-wide programmatic consultation covering actions that may affect the Indiana bat and/or northern long-eared bat (NLEB). However, if not using the key, transportation agencies must provide this submittal form (or a comparable Service approved form) with project-level information to the Service. The completed form should be submitted to the appropriate Service Field Office prior to project commencement. For more information, see the Standard Operating Procedure for Site Specific Project(s) Submission in the User's Guide (Section 3).

By submitting this form, the transportation agency ensures that each component of the proposed project(s) adheres to the criteria and conditions of the range-wide programmatic consultation, as outlined in the biological assessment (BA) and biological opinion (BO). Upon submittal of this form, the appropriate Service Field Office may review the project-specific information provided and request additional information. For projects that may affect, but are not likely to adversely affect (NLAA) the Indiana bat and/or NLEB, if the applying transportation agency is not contacted by the Service with any questions or concerns within 14 calendar days of form submittal, it may proceed under the range-wide programmatic consultation and assume concurrence of the NLAA determination made by the Service in the BO. For projects that may affect, and are likely to adversely affect (LAA) the Indiana bat and/or the NLEB, the appropriate Service Field Office will respond[1] within 30 calendar days of receiving a complete project-level submission, which includes, but may not be limited to this completed form.

Further instructions on completing the submittal form can be found by hovering your cursor over each text box.

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1. Date: 7/27/2021

2. Lead agency: FTA
*This refers to the **Federal governmental** lead action agency initiating consultation; select **FHWA, FRA or FTA** as appropriate.*

3. Requesting agency: Chicago Transit Authority (CTA)
This refers to the transportation agency completing the form (it may or may not be the same as the Lead Agency.

- Name: Marlise Fratinardo

[1] Service Field Offices should use the response letter template for projects that may affect, and are likely to adversely affect the Indiana bat and/or NLEB.

- Title: RLE Senior Project Manager
- Phone: 312-681-4124
- Email: mfratinardo@transitchicago.com

4. Consultation code:[2] 03E13000-2021-SLI-0700

5. Project name(s): CTA Red Line Extension (RLE)

6. Project description:
Please attach additional documentation or explanatory text if necessary.

This project involves the extension of the CTA Red Line by 5.6 miles. Please refer to the description in the accompanying coordination letter for further description.

7. Project location (county, state): Chicago, Cooke County, Illinois
If not delineated in IPaC, attach shape files.

8. For species other than Indiana bat and NLEB (from IPaC official species list):

☑ No effect – project(s) are inside the range, but no suitable habitat (see additional information attached).

☐ May affect – see additional information provided for those species (see attached or forthcoming).

Please confirm and identify how each component of the proposed project(s) adheres to the criteria of the BO by completing the following (see User Guide Section 2.0):

[2] Available through IPaC System Official Species List: https://ecos.fws.gov/ipac/

NO EFFECT

9. For Indiana bat/NLEB, if applicable, select your no effect determination:

☐ No effect – project(s) are outside the species' range.

☐ No effect – project(s) are inside the species range with no suitable summer habitat within the project action area; project(s) must also be greater than 0.5 miles from any hibernaculum unless meeting exceptions listed below.

☐ No effect – project(s) do not involve any construction activities[3] (e.g., bridge/ abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales).

☐ No effect – project(s) do not cause any stressors to the bat species, including as described in the BA/BO (i.e., do not involve habitat removal, tree removal/ trimming, bridge or structure activities, temporary or permanent lighting, or use of percussives (e.g., lining roadways, unlighted signage, rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.)).

☐ No effect - project(s) within 0.5 mile of hibernacula that are limited to the maintenance of the surrounding landscape at existing facilities (e.g., rest areas, stormwater detention basins) located outside suitable summer habitat – no new ground disturbance.[4]

☐ No effect – project(s) are within 300 feet from the existing road/rail surface surface (must also be greater than 0.5 miles of a hibernacula) that include percussives or other activities that increase noise above existing traffic/background levels:

- within areas that contain suitable habitat **(documented or undocumented),**
- conducted during the **inactive season**, and
- does not involve tree removal/trimming or bridge/structure work.

☐ No effect – project(s) includes removal, replacement, or maintenance of bridge(s) and/or structure(s) without any signs of bats (bridge/structure assessment documents no sign of bat use (bats, guano, etc.)) and does not impact suitable summer habitat within the project action area.

Proceed with this form to identify how other components of the proposed project adhere to the criteria of the BO.

[3] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

[4] Ground disturbance is defined as any activity that compacts or disturbs the ground. Ground disturbance can be caused by the use of hand tools (shovels, pick axe, posthole digger, etc.), heavy equipment (excavators, backhoes, bulldozers, trenching and earthmoving equipment, etc.), and heavy trucks (large four wheel drive trucks, dump trucks and tractor trailers, etc.). Note that ground disturbance can be a component of other actions (e.g., bulldozing trees). Contact the local Service Field Office, as needed, to assist in determining if and how ground disturbance may affect bat hibernacula.

MAY AFFECT, NOT LIKELY TO ADVERSELY EFFECT – W/O AMMS

10. For Indiana bat/NLEB, if applicable, select your may affect, NLAA determination (without implementation of AMMs):

☐ NLAA – project(s) are inside the species range and within suitable bat habitat, but **negative** bat presence/absence (P/A) surveys; must also be greater than 0.5 miles from any hibernaculum.

☐ NLAA – project(s) are within 300 feet of the existing road/rail surface (must also be greater than 0.5 miles of a hibernacula) that include percussives or other activities that increase noise above existing traffic/background levels:

- within areas that contain **undocumented** habitat
- conducted during the **active season**
- does not involve tree removal/trimming or bridge/structure work.

☐ NLAA – project(s) are limited to slash pile burning (must also be greater than 0.5 miles from any hibernaculum).

☐ NLAA – project(s) are limited to wetland or stream protection activities associated with compensatory wetland/stream mitigation that do not clear suitable habitat (must also be greater than 0.5 miles from any hibernaculum).

☐ NLAA – project(s) within 0.5 mile of hibernacula that are limited to the maintenance of the surrounding landscape at existing facilities (e.g., rest areas, stormwater detention basins) located within suitable summer habitat – no new ground disturbance or tree removal/trimming.

Proceed with this form to identify how other components of the proposed project adhere to the criteria of the BO.

MAY EFFECT, NOT LIKELY TO ADVERSELY AFFECT – WITH AMMs

11. For Indiana bat/NLEB, if applicable, document your may affect, NLAA determination (**with implementation of AMMs)** by completing the following section; use #13 to document AMMs).

Affected Resource/Habitat Type:

a. Trees

☐ Verify that the project is within 100 feet of existing road/rail surfaces.

☐ Verify that all tree removal/trimming occurs greater than 0.5 mile from any hibernaculum.

☐ Verify that all trees to be removed/trimmed are clearly demarcated.

☐ Verify that no documented Indiana bat and/or NLEB roosts and/or surrounding summer habitat within 0.25 mile of documented roosts will be impacted.

☐ Verify that all tree removal/trimming will occur outside the active season (i.e., will occur in winter):[5]

Or

☐ Verify that tree removal/trimming will include 10 or fewer trees[6] per project during the active season, and visual emergence survey[7] observed no bats. Acres of trees 0-100 feet of existing road/rail surface proposed for removal/ trimming: 45.9

☐ Verify that all applicable lighting minimization measures will be implemented.

b. Bridge/Structure Work

Projects Proposed work:

Timing of work:

Signs of bat activity on/in bridge/structure? Yes: ◯ No: ◯

☐ Verify that work will be conducted outside the active season, or if during the active season, verify that no roosting bats will be harmed or disturbed in any way:[8]

☐ Verify that work will maintain suitable roosting habitat.[9]

☐ Verify that all applicable lighting minimization measures will be implemented.

Proceed with this form to identify how other components of the proposed project adhere to the criteria of the BO.

MAY AFFECT, LIKELY TO ADVERSELY AFFECT

12. For Indiana bat/NLEB, if applicable, document your may affect, LAA determination by completing the following section (use #13 to document AMMs).

[5] Coordinate with the local Service Field Office for appropriate dates.

[6] Areas containing more than 10 trees will be assessed by the local Service Field Office on a case-by-case basis with the project proponent.

[7] Refer to http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html

[8] See page 12 of the User Guide for a description of activities that are NLAA roosting bats during the active season.

[9] This only applies when assessment documents signs of bat use of when bat use is assumed.

Affected Resource/Habitat Type:

a. Trees

Project Location:

- [x] 0-100 feet from edge of existing road/rail surface
- [x] 100-300 feet from edge of existing road/rail surface
- [x] Verify that all tree removal/trimming occurs greater than 0.5 mile from any hibernaculum

Timing of tree removal/trimming:

- [x] Verify that no documented Indiana bat roosts or surrounding summer habitat within 0.25 mile of documented roosts will be impacted between May 1 and July 31.
- [x] Verify that no documented NLEB roosts or surrounding summer habitat within 150 feet of documented roosts will be impacted between June 1 and July 31.

Acres of trees 0-100 feet of existing road/rail surface proposed for removal/trimming: 45.9

Acres of trees 100-300 feet of existing road/rail surface proposed for removal/ trimming: 18.2

- [x] Verify that all applicable lighting minimization measures will be implemented.

b. Bridge/Structure Work Projects

Proposed work:

Timing of work:

- [ ] Verify no signs of a maternity colony.
- [ ] Verify that work will maintain suitable roosting habitat.[10]
- [ ] Verify that all applicable lighting minimization measures will be implemented.

13. For Indiana bat/NLEB, if applicable to the action type, the following AMMs will be implemented[11] unless P/A surveys and/or bridge/structure assessments document that

[10] This only applies when assessment documents signs of bat use or when bat use is assumed.

[11] See AMMs Fact Sheet (Appendix C) for more information on AMMs.

the species are not likely to be present:

- [x] General AMM 1 (required for all projects)

- [x] Tree Removal AMM 1
- [x] Tree Removal AMM 2 (required for NLAA)
- [x] Tree Removal AMM 3 (required for all projects)
- [x] Tree Removal AMM 4 (required for NLAA)
- [x] Tree Removal AMM 5 (required for LAA)
- [x] Tree Removal AMM 6 (required for LAA)
- [x] Tree Removal AMM 7 (required for LAA)

- [ ] Bridge AMM 1
- [ ] Bridge AMM 2 (required for NLAA during active season)
- [ ] Bridge AMM 3 (required for NLAA during active season)
- [ ] Bridge AMM 4 (required for all projects)

- [ ] Structure AMM 1 (required for all projects for Indiana bat and required for NLAA for NLEB)
- [ ] Structure AMM 2 (required for NLAA for both bat species) or
- [ ] Structure AMM 3 (required for NLAA for both bat species)
- [ ] Structure AMM 4 (required for all projects for Indiana bat and required for NLAA for NLEB)

- [ ] Lighting AMM 1 (required for all projects during the active season)
- [ ] Lighting AMM 2 (required for all projects)

- [ ] Hibernacula AMM 1 (required for all projects)

14. For Indiana bat, if applicable, compensatory mitigation measures will also be required to offset adverse effects on the species (see Section 2.10 of the BA). Please verify the mechanism in which compensatory mitigation will be implemented and that sufficient information is provided to the Service.

    Range-wide In-Lieu Fee Program, The Conservation Fund ☐

    State, Regional, Recovery Unit-Specific In-Lieu Fee
    Program Name:

    Conservation Bank
    Name:
    Location:

    Local Conservation Site(s)
    Name:
    Location:
    Description:

Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and Federal Transit Administration (FTA)

Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat

Avoidance and Minimization Measures

Updated January 2018

For projects to be covered by the Programmatic Biological Opinion (BO), specific avoidance and minimization measures (AMMs) related to the Indiana bat and northern long-eared bat (NLEB) will be implemented where applicable. AMMs, if adopted under appropriate circumstances, are expected to reduce the potential impacts of the proposed action on both bat species. In some instances, impacts will be reduced to levels that are insignificant or discountable; therefore, not likely to adversely affect (NLAA) either species. In other cases, take will be unavoidable even with the implementation of AMMs; therefore, likely to adversely affect (LAA) either species.

The following AMMs are necessary to avoid and minimize impacts to the Indiana bat and NLEB, and where applicable, are required for projects using the range-wide programmatic consultation.

AMMs for Projects NLAA

Unless presence and absence (P/A) summer surveys[1] document that the species are not likely to be present, the following AMMs are <u>REQUIRED</u>, as applicable, in order for projects to NLAA the Indiana bat and the NLEB (i.e., projects qualify to use the range-wide programmatic informal consultation).

All NLAA Projects

<u>General AMM 1.</u> Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

Lighting

<u>Lighting AMM 1.</u> Direct temporary lighting away from suitable habitat during the active season.

<u>Lighting AMM 2.</u> When installing new or replacing existing permanent lights, use downward-facing, full cut-off[2] lens lights (with same intensity or less for replacement lighting); or for those transportation

[1] P/A summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernacula (contact local USFWS Field Office for appropriate home range) that result in a negative finding requires additional consultation with the local USFWS Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[2] http://www.lithonia.com/micro_webs/nighttimefriendly/cutoff.asp

agencies using the BUG system developed by the Illuminating Engineering Society,[3] the goal is to be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

Tree Removal

The word "trees" as used in the AMMs refers to trees that are suitable habitat[4] for each species within their range. The word **documented** means habitat where bats have actually been captured and/or tracked.

Tree Removal AMM 1. Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal in excess of what is required to implement the project safely.
Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented.

Tree Removal AMM 2. Apply time of year (TOY) restrictions for tree removal[5] when bats are not likely to be present, or
Limit tree removal to 10 or fewer trees[6] per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat[7] or travel corridors;[8] visual emergence survey must be conducted **with no bats observed**.[9]

Tree Removal AMM 3. Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

Tree Removal AMM 4. Do not remove:

- **documented** Indiana bat or NLEB roosts that are still suitable for roosting; or
- trees within 0.25 miles of roosts; or
- **documented** foraging habitat any time of year.

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[3] http://www.ies.org/pdf/education/ies-fol-addenda-1-%20bug-ratings.pdf
http://shop.innovativelight.com/media/cms/BUG_ratings_3044A7612FA89.pdf
[4] See the USFWS' current summer survey guidance for our latest definitions of suitable habitat.
[5] Coordinate with the local USFWS Field Office for appropriate dates.
[6] Areas containing more than 10 trees will be assessed by the USFWS local field office on a case-by-case basis with the project proponent.
[7] Documented roosting or foraging habitat – for the purposes of this BA, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.
[8] Documented travel corridor - for the purposes of this BA, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked by using (1) radio telemetry; or (2) tree corridors located directly between documented roosting and foraging habitat.
[9] Refer to http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html

Bridges

The following Bridge AMMs are REQUIRED, as applicable, in order for projects to NLAA the Indiana bat and the NLEB (i.e., projects qualify to use the range-wide programmatic informal consultation) unless one or more of the following criteria apply:

- the bridge is 1000 feet or more from suitable bat habitat; or
- bridge assessments[10] have occurred to document no signs of bat use; or
- P/A surveys have occurred[11] to document that the bat species are not likely to be present.

Bridge AMM 1. To completely avoid direct effects to roosting bats, perform any bridge removal, replacement, and/or maintenance work during the winter hibernation period[12] unless a hibernating colony of bats is present. Also, follow Bridge AMM 4.
Note: Bridge AMM 1 is an avoidance measure for direct effects, the full implementation of which may not be practicable. If bridge removal, replacement, and/or maintenance work must be performed outside of the winter hibernation period, then follow Bridge AMMs 2-4.

Bridge AMM 2. - Colony or Assuming Presence of Bats
If assuming presence of bats or if bridge assessment or P/A surveys suggest presence of a colony of bats, and work is conducted during the active season, ensure activity will not disturb bats. The following types of bridge work can generally be conducted with the presence of bats:

- above deck work where construction equipment or materials do not extend to the underside of deck where bats may be located (e.g., materials that may drip down to underside of deck), and does not include percussives (vibration) or noise levels above general traffic (e.g., road line painting, wing-wall work).
- below deck work that is conducted away from roosting bats and does not involve percussives or noise level above general traffic (e.g., wing-wall work, some abutment, beam end, scour, or pier repair).

Bridge AMM 3. - Small Number of Bats
If bridge assessment or P/A surveys suggest presence of a small number of bats (≤5 – not a colony),[13] and work is conducted during the active season, the following types of bridge work can generally be conducted with the presence of bats:

- above deck work where construction equipment or materials do not extend to the underside of deck where bats may be located (e.g., materials that may drip down to underside of deck), and does not include percussives (vibration) or noise levels above general traffic (e.g., road line painting, wing-wall work).

[10] Bridge/structure assessments are valid for two years.
[11] Ensure coordination with local Service FO regarding the applicability of P/A surveys for this use.
[12] Coordinate with the local USFWS Field Office for appropriate dates.
[13] This number is far lower than the typical maternity colony size (USFWS 2007, 2014).

- below deck work that is conducted away from roosting bats and does not involve percussives or noise level above general traffic (e.g., wing-wall work, some abutment, beam end, scour, or pier repair).
- any other bridge repair, retrofit, maintenance, and/or rehabilitation (which may include activities with percussives) conducted in the evening while the bats are feeding, starting one hour after sunset, and ending one hour before daylight excluding the hours between 10 p.m. and midnight[14] and keep the light localized.

Bridge AMM 4. If assuming presence of bats, or if bridge assessment or P/A survey suggests presence of bats, ensure suitable roosting habitat is maintained. Suitable roosting sites may be incorporated into the design of a new bridge.

Structures

This category is intended to capture manmade structures that may provide bat roosting or hibernation habitat that are not bridges. They may include, but are not limited to, rest areas, offices, sheds, outbuildings, barns, and parking garages.

Unless structure assessments[15] have occurred to document that the species are not likely to be present, the following AMMs are REQUIRED, as applicable, in order for projects to NLAA the Indiana bat and the NLEB (i.e., projects quality to use the range-wide programmatic informal consultation).

Structure AMM 1. If the goal of the project is to exclude bats, coordinate with your local USFWS Field Office and follow Acceptable Management Practices for Bat Control Activities in Structures guidance document (White-nose Syndrome Conservation and Recovery Working Group 2015).[16]

Structure AMM 2. If structure maintenance, repair, and/or alteration will be performed **during the winter hibernation period**,[17] determine if work will occur in an area with hibernating bats. If hibernating bats or signs of frequent bat activity are observed, Transportation Agencies and State DOTs will conduct maintenance activity or similar structure alteration in a manner that will not disturb bats using the structure.

Structure AMM 3. If structure maintenance, repair, and/or alteration will be performed **outside of the winter hibernation period**, determine if work will occur in an area with roosting bats. If bat activity or signs of frequent bat activity (e.g., guano stains) are observed, Transportation Agencies and State DOTs will conduct maintenance activity or similar structure alteration in a manner that will not disturb bats using the structure.

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[14] Keeley and Tuttle (1999) indicated peak night roost usage is between 10:00 p.m. to midnight.
[15] Structure assessment for occupied buildings means a cursory inspection for bat use. For abandoned buildings a more thorough evaluation is required (See Appendix D for bridge/structure assessment guidance).
[16] https://www.whitenosesyndrome.org/sites/default/files/resource/wns_nwco_amp_1_april_2015_0.pdf
[17] Coordinate with the local USFWS Field Office for appropriate dates.

Structure AMM 4. If bat activity or signs of frequent bat activity is observed, Transportation Agencies and State DOTs will not remove the structure.
Note: If there are concerns about human health/safety/property, coordinate with a nuisance wildlife control officer and the local USFWS Field Office.

Hibernacula

The following AMM is REQUIRED, as applicable, in order for projects to NLAA the Indiana bat and the NLEB (i.e., projects qualify to use the range-wide programmatic informal consultation).

Hibernacula AMM 1. For projects located within karst areas, on-site personnel will use best management practices,[18] secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography.

AMMs for Programmatic LAA

Unless P/A summer surveys[19] document that the species are not likely to be present, the following AMMs will be implemented (as specified below) for projects LAA the Indiana bat and NLEB (i.e., projects qualify to use the range-wide programmatic formal consultation).

All LAA Projects

General AMM 1. Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all Transportation Agency environmental commitments, including all applicable AMMs. *{REQUIRED for programmatic NLAA or LAA}*

Lighting

Lighting AMM 1. Direct temporary lighting away from suitable habitat during the active season. *{REQUIRED for programmatic NLAA or LAA}*

Lighting AMM 2. When installing new or replacing existing permanent lights, use downward-facing, full cut-off[20] lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society,[21] the goal is to be as

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[18] Coordinate with the appropriate Service Field Office on recommended best management practices for karst in your State.
[19] P/A summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernacula (contact local USFWS Field Office for appropriate home range) that result in a negative finding requires additional consultation with the local USFWS Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.
[20] http://www.lithonia.com/micro_webs/nighttimefriendly/cutoff.asp
[21] http://www.ies.org/pdf/education/ies-fol-addenda-1-%20bug-ratings.pdf and http://shop.innovativelight.com/media/cms/BUG_ratings_3044A7612FA89.pdf

close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. *(REQUIRED for programmatic NLAA OR LAA)*

Tree Removal

The word "trees" as used in the AMMs refers to trees that are suitable habitat[22] for each species within their range. The word **documented** means habitat where bats have actually been captured and/or tracked.

Tree Removal AMM 1. Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal in excess of what is required to implement the project safely.
Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable.

Tree Removal AMM 2. – *Not required for LAA*

Tree Removal AMM 3. Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). *{REQUIRED for programmatic NLAA or LAA}*

Tree Removal AMM 4. – *Not required for LAA*

Tree Removal AMM 5. Avoid conducting tree removal within **documented** Indiana bat roosting/foraging habitat[23] or travel corridors from May 1-July 31. *{REQUIRED for programmatic LAA}*

Tree Removal AMM 6. Minimize tree removal within suitable Indiana bat habitat (no documented habitat) from May 1-July 31 in the following manner. *{REQUIRED for programmatic LAA}*

1) Limit clearing such that all trees can be visually assessed.

2a) Conduct visual emergence surveys if trees are greater than or equal to 9 inches diameter at breast height (dbh).
   - If no bats are observed, proceed with clearing the following day (NLAA).
   - If bats observed, modify project to conduct tree removal after August 1 (LAA).

   or

2b) If trees are <9 inches dbh, no emergence survey required (LAA).

---

[22] See the USFWS's current summer survey guidance for our latest definitions of suitable habitat.

[23] Documented roosting or foraging habitat – for the purposes of this BA, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.

Tree Removal AMM 7. Avoid removing documented NLEB maternity roosts and trees within 150 feet of those roosts from June 1-July 31. *{REQUIRED for programmatic LAA}*

Bridges

The following Bridge AMMs will be applied (as specified below) for projects LAA the Indiana bat and the NLEB (i.e., projects qualify to use the range-wide programmatic formal consultation) unless one or more of the following criteria apply:

- the bridge is 1000 feet or more from suitable bat habitat; or
- bridge assessments[24] have occurred to document no signs of bat use; or
- P/A surveys have occurred[25] to document that the bat species are not likely to be present.

Bridge AMM 1. To completely avoid direct effects to roosting bats, perform any bridge removal, replacement, and/or maintenance work during the winter hibernation period[26] unless a hibernating colony of bats is present. Also, follow Bridge AMM 4.
Note: Bridge AMM 1 is an avoidance measure, the full implementation of which may not be practicable. If bridge removal, replacement, and/or maintenance work must be performed outside of the winter hibernation period, the remaining Bridge AMMs will be applied as specified below.

Bridge AMM 2. – *Not required for LAA*
Bridge AMM 3. – *Not required for LAA*

Bridge AMM 4. If assuming presence of bats, or bridge assessment or P/A surveys suggests presence of bats, ensure suitable roosting habitat is maintained. Suitable roosting sites may be incorporated into the design of a new bridge. *{REQUIRED for programmatic NLAA or LAA}*

Structures

This category is intended to capture manmade structures that may provide bat roosting or hibernation habitat that are not bridges. They may include, but are not limited to, rest areas, offices, sheds, outbuildings, barns, and parking garages.

Unless structure assessments[27] have occurred to document that the species are not likely to be present, the Structure AMMs will applied (as specified below) for projects LAA the Indiana bat and NLEB (i.e., projects qualify to use the range-wide programmatic formal consultation).

Structure AMM 1. If the goal of the project is to exclude bats, coordinate with your local USFWS Field Office and follow Acceptable Management Practices for Bat Control Activities in Structures guidance document.[28] *{REQUIRED for programmatic NLAA and LAA Indiana bat, and NLAA NLEB}*

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[24] Bridge/structure assessments are valid for two years.
[25] Ensure coordination with local Service FO regarding the applicability of P/A surveys for this use.
[26] Coordinate with local USFWS Field Office for appropriate dates.
[27] Structure assessment for occupied buildings means a cursory inspection for bat use. For abandoned buildings a more thorough evaluation is required (See Appendix D for bridge/structure assessment guidance).

Structure AMM 2. – *Not required for LAA*
Structure AMM 3. – *Not required for LAA*

Structure AMM 4. If bat activity (or signs of frequent bat activity) is observed, Transportation Agencies and State DOTs will not remove the structure. *{REQUIRED for programmatic NLAA and LAA Indiana bat, and NLAA NLEB.}*
Note: If there are concerns about human health/safety/property, coordinate with a nuisance wildlife control officer and the local USFWS field office.

Hibernacula

The following AMM is REQUIRED, as applicable, for projects LAA the Indiana bat and the NLEB (i.e., projects qualify to use the range-wide programmatic formal consultation).

Hibernacula AMM 1. For projects located within karst areas, on-site personnel will use best management practices,[29] secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography. *{REQUIRED for programmatic NLAA or LAA}*

[28] White-nose Syndrome Conservation and Recovery Working Group 2015, available at: https://www.whitenosesyndrome.org/sites/default/files/resource/wns_nwco_amp_1_april_2015_0.pdf
[29] Coordinate with the appropriate Service Field Office on recommended best management practices for karst in your State.

From: Fratinardo, Marlise
To: Dunn, Patrick (CDM)
Cc: Tandon, Sonali; Littrell, Joanna (HNTB)
Subject: FW: [EXTERNAL] CTA Red Line Extension: Effects on Federally Listed Species/Critical Habitat
Date: Tuesday, September 28, 2021 5:42:34 PM

Fyi...

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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From: Cirton, Shawn [mailto:shawn_cirton@fws.gov]
Sent: Tuesday, September 28, 2021 4:56 PM
To: Fratinardo, Marlise
Cc: Clemency, Louise; Tandon, Sonali; Mooney, Leah Dawson
Subject: Re: [EXTERNAL] CTA Red Line Extension: Effects on Federally Listed Species/Critical Habitat

You don't often get email from shawn_cirton@fws.gov. Learn why this is important [aka.ms]

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Ms. Fratinardo,

We have reviewed your correspondence and request for concurrence. We agree with your "No Effect" determinations for the species located in Cook County, IL. The Service does not provide concurrence on "No Effect" (NE) determinations. Regarding your "May Affect- Likely to Adversely Affect" (MA-LAA) determination, your letter notes that, CTA, on behalf of FTA, has completed its review under the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat and that CTA intends to implement avoidance and minimization measures as indicated in the included project submittal form (including avoiding all tree removal during the active bat season). Therefore, a "May Affect- Not Likely to Adversely Affect" (MA-NLAA) determination is warranted. As noted in the Programmatic Biological Opinion, "Projects included in the programmatic scope of this consultation include those that result in no effect (NE) or may affect for the Indiana bat and/or the NLEB. It provides advance USFWS concurrence with “not likely to adversely affect” (NLAA) determinations that are consistent with these criteria, subject to project-level verification." Therefore, Service concurrence is not required for the Service recommended MA-NLAA determination.

We plan to review the EIS when the document is available for review. If you have any questions, please feel free to contact me.

Shawn Cirton
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Chicago Illinois Field Office
230 South Dearborn Street, Suite 2938
Chicago, IL 60604
(847)366-2345

From: Clemency, Louise <Louise_Clemency@fws.gov>
Sent: Tuesday, September 7, 2021 9:58 AM
To: Cirton, Shawn <shawn_cirton@fws.gov>
Subject: Fw: [EXTERNAL] CTA Red Line Extension: Effects on Federally Listed Species/Critical Habitat

Good morning Shawn, Please review and prepare a response for us - thank you.

From: Fratinardo, Marlise <mfratinardo@transitchicago.com>
Sent: Friday, September 3, 2021 3:07 PM
To: Clemency, Louise <Louise_Clemency@fws.gov>
Cc: Tandon, Sonali <STandon@transitchicago.com>; Mooney, Leah Dawson <LMooney@transitchicago.com>
Subject: [EXTERNAL] CTA Red Line Extension: Effects on Federally Listed Species/Critical Habitat

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Dear Ms. Clemency,

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line 5.6 miles south from the existing 95th/Dan Ryan terminal to 130th Street. In accordance with the National Environmental Policy Act, CTA is completing an Environmental Impact Statement (EIS). Part of this process includes an evaluation of the project's effects on federally listed species and critical habitat. Please find attached a letter and supporting information requesting concurrence on effects to federally listed species and critical habitat for the Red Line Extension (RLE) Project. Included in this request is documentation for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared bat.

CTA requests your review and concurrence of the attached provided materials. Please reach out with any questions. Thank you!

Best,
Marlise

Marlise Fratinardo
Chicago Transit Authority

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EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant:	TranSystems	*IDNR Project Number:*	2207119
Contact:	Kelsey Kropp	*Date:*	11/17/2021
Address:	2400 Pershing Road Suite 2400 Kansas City, MO 64108	*Alternate Number:*	P404140019, 2107455

Project: CTA Redline Extension
Address: 95th Street Terminal, Chicago

Description: Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the Red Line from the existing 95th/Dan Ryan terminal to 130th Street. The proposed 5.6-mile extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Lake Calumet INAI Site
Blanding's Turtle *(Emydoidea blandingii)*
Little Blue Heron *(Egretta caerulea)*
Osprey *(Pandion haliaetus)*
Yellow-Crowned Night Heron *(Nyctanassa violacea)*
Yellow-Headed Blackbird *(Xanthocephalus xanthocephalus)*

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:
37N, 14E, 9
37N, 14E, 10
37N, 14E, 16
37N, 14E, 21
37N, 14E, 22
37N, 14E, 22
37N, 14E, 26
37N, 14E, 27
37N, 14E, 27
37N, 14E, 34
37N, 14E, 35

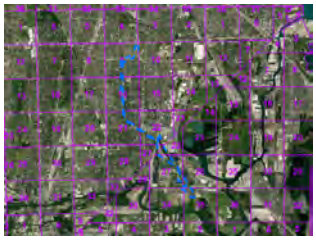

IL Department of Natural Resources Contact
Kyle Burkwald
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
Chicago Transit Authority
Kelsey Kropp
2400 Pershing Road
Suite 400
Kansas City, Illinois 64111

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

EcoCAT Receipt

Project Code 2207119

APPLICANT	DATE
TranSystems Kelsey Kropp 2400 Pershing Road Suite 2400 Kansas City, MO 64108	11/17/2021

DESCRIPTION	FEE	CONVENIENCE FEE	TOTAL PAID
EcoCAT Consultation	$ 125.00	$ 2.81	$ 127.81

TOTAL PAID $ 127.81

Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
217-785-5500
dnr.ecocat@illinois.gov

Illinois Department of
Natural Resources
One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

November 24, 2021

Kelsey Kropp
TranSystems
2400 Pershing Road
Suite 2400
Kansas City, MO 64108

RE: CTA Redline Extension
Consultation Program
EcoCAT Review #2207119
Cook County

Dear Mr. Kropp,

The Department has received your submission of this project for the purposes of consultation pursuant to the Illinois Endangered Species Protection Act [520 ILCS 10/11], the Illinois Natural Areas Preservation Act [525 ILCS 30/17], and Title 17 Illinois Administrative Code Part 1075. Additionally, the Department may offer advice and recommendations for species covered under the Fish & Aquatic Life Code [515 ILCS 5, et seq.]; the Illinois Wildlife Code [520 ILCS 5, et seq.]; and the Herptiles-Herps Act [510 ILCS 69].

The proposed action consists of extending the existing Chicago Transit Authority (CTA) Redline from the existing 95th/Dan Ryan terminal to 130th Street 5.6 miles south and terminating at 130th street in Chicago, IL.

EcoCAT has indicated records for the following state listed species and Illinois Natural Area Inventory sites within the project vicinity:

State Listed
Osprey *(Pandion haliaetus)*

Illinois Natural Area Inventory Sites
Lake Calumet

Due to the project location and proximity to threatened resources, the Department recommends the following actions be considered in order to avoid causing adverse impacts:

Osprey
This large bird of prey is known to build nests on top of man-made structures such as cell towers and telephone poles

1. Removal of vertical structures such as telephone poles, light poles, etc. should be done between the dates of November 1st and March 31st.
2. If these dates cannot be accommodated, a nesting survey should be conducted to determine if species are utilizing structures in the project area.
    a. Please forward survey results and methodology to the Department for review and concurrence.

Lake Calumet
If temporary or permanent lighting is required, the Department recommends the following to minimize adverse effects to wildlife:

- All lighting should be fully shielded fixtures that emit no light upward.
- Only "warm-white" or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) should be used to minimize blue emission.
- Only light the exact space with the amount (lumens) needed to meet industry safety requirement.
- If LEDs are to be used, avoid the temptation to over-light based on the higher luminous efficiency of LEDs.

Given the above recommendations are adopted, the Department has determined that impacts are unlikely.

In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.

Consultation on the part of the Department is closed unless additional information or advice related to this proposal is required. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

Please contact Kyle Burkwald of this office at 217-785-4984 or Kyle.Burkwald@illinois.gov for additional information on this review, or if providing a response to this correspondence.

Thank you,

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Appendix V

Biological Resources Technical Memorandum

- Draft EIS Appendix V, Biological Resources Technical Memorandum, July 2015
  - Appendix A, EcoCAT Report
  - Appendix B, Monk Parakeet Photographs
  - Appendix C, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Biological Resources
Technical Memorandum

May 6, 2013
Updated July 27, 2015

Prepared for:
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Table of Contents

Section 1 Summary **1-1**

Section 2 Project Description **2-1**

Section 3 Methods for Impact Evaluation **3-1**

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-5
3.3 Area of Potential Impact 3-6
3.4 Methods 3-6

Section 4 Affected Environment **4-1**

4.1 Vegetation and Wildlife Habitat 4-1
4.2 Threatened and Endangered Species 4-10

Section 5 Impacts and Mitigations **5-1**

5.1 No Build Alternative 5-1
5.2 Bus Rapid Transit Alternative 5-1
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-3
5.4 Union Pacific Railroad Rail Alternative - East Option 5-6
5.5 Union Pacific Railroad Rail Alternative - West Option 5-6
5.6 Halsted Rail Alternative 5-7

Section 6 Impacts Remaining After Mitigation **6-1**

6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-1
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-1
6.4 Union Pacific Railroad Rail Alternative - East Option 6-1
6.5 Union Pacific Railroad Rail Alternative - West Option 6-1
6.6 Halsted Rail Alternative 6-1

Section 7 References Cited **7-1**

Appendices

Appendix A: EcoCAT Report

Appendix B: Monk Parakeet Photographs

Appendix C: 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2

Figure 4-1: Nature Areas Identified in the *Chicago Nature & Wildlife Plan* within the Areas of Potential Impact 4-3

Figure 4-2: Project Area including Segments 4-8

Tables

Table 4-1: Potentially Affected Vegetation - Bus Rapid Transit Alternative 4-6

Table 4-2: Potentially Affected Vegetation - Union Pacific Railroad Rail Alternative (acres) 4-6

Table 4-3: Potentially Affected Vegetation - Halsted Rail Alternative 4-7

Table 4-4: Listed Species in Cook County 4-11

Abbreviations

API	area of potential impact
BGEPA	Bald and Golden Eagle Protection Act
BRT	Bus Rapid Transit
CN	Canadian National
CFR	Code of Federal Regulations
CTA	Chicago Transit Authority
EcoCAT	Illinois Ecological Compliance Assessment Tool
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FTA	Federal Transit Administration
IDNR	Illinois Department of Natural Resources
IESA	Illinois Endangered Species Act
ILCS	Illinois Compiled Statutes
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NWI	National Wetlands Inventory
RLE	Red Line Extension
ROW	right-of-way
UPRR	Union Pacific Railroad
USC	United States Code
USFWS	U.S. Fish and Wildlife Service

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on biological resources, including threatened and endangered species and their habitats, vegetation, and other wildlife habitats.

The purpose of the vegetation and wildlife habitat investigation is to describe the existing biological resources (plants, animals, and fish) in the RLE Project vicinity and to evaluate potential impacts on vegetation and wildlife habitats. The area of potential impact (API) for the biological resources evaluation included an area ¼ mile on either side of the alternative centerlines; the API is different for each alternative and each alternative option. Vegetation that provides wildlife habitat occurs in portions of the API around each proposed alternative alignment, stations, and maintenance yards. Local regulations protect some trees and the investigation evaluated the potential impacts on trees as well as on wildlife habitats.

The purpose of the threatened and endangered species investigation is to describe threatened and endangered species that may occur in the project area and the existing habitat conditions including any designated critical habitats. The analysis evaluated potential impacts on species and the habitats of species listed as threatened or endangered by either the federal government or the State of Illinois. Threatened and endangered species or their habitats are found in some portions of the API around each proposed alternative alignment and around stations and maintenance yards. The species most likely to be present is the peregrine falcon and it may be found throughout all of the alternatives' APIs.

The Bus Rapid Transit (BRT) Alternative, Union Pacific Railroad (UPRR) Rail Alternative, and Halsted Rail Alternative each have the potential to require the removal of trees within the API. Most of the trees potentially affected under the BRT Alternative occur at the park & ride facility locations; trees along the UPRR Rail Alternative alignment occur in a narrow band immediately adjacent to the proposed rail line, in the vicinity of the proposed 120th Street yard and shop, and at properties along the corridor. The trees along the Halsted Rail Alternative alignment occur primarily in the median and the sidewalks of Halsted Street. These narrow bands of trees have a lower value to wildlife than blocks of habitat and thus reduce the potential for street tree removal to affect wildlife. Tree removal in any part of the API might affect birds protected under the Migratory Bird Treaty Act (MBTA) and, depending on what part of the API the trees are in, tree removal might also be regulated by local ordinances.

Tree removal has the potential to adversely affect vegetation and wildlife; however, with implementation of mitigation measures, potential impacts on vegetation and wildlife would be less than adverse. Operation of the Red Line following construction of any of the alternatives would have no measurable impact on vegetation and wildlife habitat.

There is a combined total of 114 federal- and state-listed species that potentially occur in Cook County. Listed species with a potential to occur within the API include one bird species (peregrine falcon) and two plant species (hairy white violet and spotted coral-root orchid). There are no known nesting pairs of peregrine falcons within the API, and none of the alternatives would adversely affect foraging habitat. A field visit in August 2012 confirmed no potential habitat for the two plant species.

The conclusion of this investigation is that none of the alternatives would have adverse impacts on listed animal and plant species and no mitigation measures for listed species would be required. Operation of the Red Line following construction of any of the alternatives would have no measurable impacts on listed species.

Development of the BRT Alternative, UPRR Rail Alternative, or Halsted Rail Alternative in combination with related renovation, new construction, and transportation projects identified in the vicinity of the proposed project would not contribute to substantial cumulative impacts on listed species.

The remainder of this memorandum discusses the methods used in the evaluation (Section 3), the affected environment (Section 4), potential impacts and mitigation measures (Section 5), and impacts (none anticipated) that may remain after mitigation (Section 6).

Updated July 27, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix C of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix C supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
  - Right-of-Way (ROW) Option
  - East Option
  - West Option
- Halsted Rail Alternative

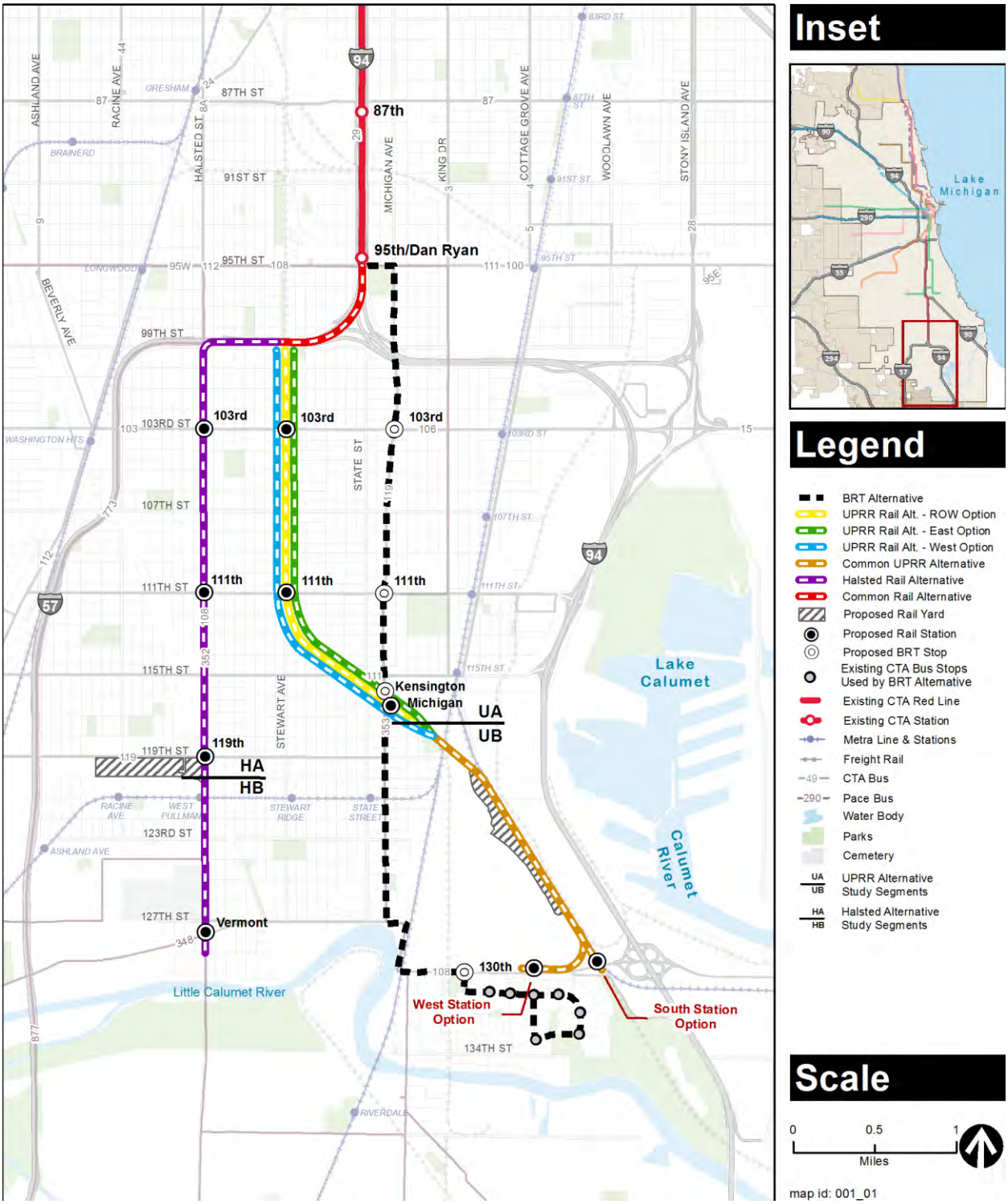

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning Fiscal Year 2010–2015 Transportation Improvement Program and the improvements to 95th Street Terminal. The Transportation Improvement Program projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

This technical memorandum on biological resources includes consideration of threatened and endangered species, vegetation, and wildlife habitats.

3.1 Regulatory Framework

3.1.1 Federal

3.1.1.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires a discussion of environmental impacts of a proposal and of a reasonable range of alternatives including the No Build Alternative (40 Code of Federal Regulations [CFR] 1502.1). NEPA does not specify federal thresholds of significance for impacts on vegetation, wildlife habitats, and threatened and endangered species. However, NEPA requires considerations of both context and intensity in determining the significance of potential impacts on a resource. Context means that the significance of an action must be analyzed in the context of the affected region and the locality and not just from a federal perspective. Intensity means that the analysis must consider unique characteristics of the geographic area, such as proximity to ecologically critical areas and whether the action threatens a violation of federal, state, or local laws or requirements imposed for the protection of the environment (40 CFR 1508.27).

In addition, federal courts look to resource agencies such as the Illinois Department of Natural Resources (IDNR) as the public sector subject matter experts, and failure on the part of the lead agency to adequately respond to their comments or address their concerns can present problems during litigation. A NEPA document that does not adequately address the requirements of applicable state laws may be viewed as not legally sufficient (American Association of State Highway and Transportation Officials 2006).

Section 1502.25 of the NEPA regulations further requires that draft EISs be prepared concurrently and integrated with environmental analyses and related surveys and studies required by other federal statutes, including the Endangered Species Act (ESA, 16 United States Code [USC] 1531 et seq.), the MBTA, and others (40 CFR 1502.25).

3.1.1.2 Endangered Species Act

The ESA and subsequent amendments provide for the conservation of threatened and endangered species and the ecosystems upon which they depend. Threatened species are those that are likely to become endangered within all or most of their range in the near future. Endangered species are species that are present in such low numbers that they are in danger of becoming extinct. Section 7 of the ESA requires federal agencies to aid in the conservation of listed species, and to ensure that the activities of federal agencies will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. Critical habitat includes those areas determined to be essential to conservation of a listed species. At the federal level, the United States Fish and

Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) are responsible for administration of the ESA.

Section 7 of the ESA requires that all federal agencies consult with the Secretary of the Interior on any prospective agency action if an endangered species or a threatened species may be present in the area affected by the project and if implementation of such action will likely affect such species (16 USC 1531). As part of that consultation, the agency must determine whether any species that is listed or proposed to be listed may be present in the area of the proposed action (Section 7(c)). If any such species may be present, then the agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species that are likely to be affected by the proposed action. Such assessment may be undertaken as part of a federal agency's compliance with the requirements of Section 102 of NEPA (42 USC 4332).

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." The USFWS regulations define harass as "to intentionally or negligently, through act or omission, create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, and sheltering." The threshold for an impact under the ESA is, therefore, very low. For example, any action that could cause an individual of a listed species to alter a breeding location (such as nesting in a different spot due to vegetation clearing) or alter feeding behavior, even for a short period of time (such as foraging in a different portion of an open space area due to construction noise), would be considered harassment.

Under the ESA, federal agencies must also determine whether a proposed project is likely to jeopardize the continued existence of listed species or adversely modify designated critical habitat. For the purpose of this EIS, an adverse impact would be one that would be likely to result in a take of a listed species, and/or jeopardize the continued existence of any endangered or threatened species, and/or destroy or adversely modify designated critical habitat.

There are at least seven federal-listed species in Cook County; none of these species is under the jurisdiction of NMFS. The ESA effects determinations for each listed species are provided in this technical memorandum where it is possible to make such a determination. If there may be an impact (either beneficial or adverse) on a listed species, then Federal Transit Administration (FTA) would initiate coordination with USFWS under Section 7 of the ESA to determine whether the project would jeopardize the continued existence of the species and to identify appropriate conservation measures to limit a take (50 CFR 402). This consultation process would occur during the preparation of a Final EIS. USFWS may develop conservation measures during the consultation process to offset potential impacts on federal-listed species. These conservation measures may be based on the mitigation measures developed through the NEPA process, as appropriate. An incidental take permit may also be issued through that process.

3.1.1.3 Migratory Bird Treaty Act

The MBTA decrees that all migratory birds and their parts (including eggs, nests, and feathers) are fully protected. Nearly all native North American bird species are protected by the MBTA. Under the MBTA, taking, killing, or possessing migratory birds is unlawful. Projects that are likely to result in taking of birds protected under the MBTA require the issuance of take permits from the USFWS. Activities that would require such a permit include destruction of migratory bird nesting habitat during the nesting season when eggs or young are likely to be present. Under the MBTA, surveys are required to determine whether nests would be disturbed and, if so, a buffer area with a specified radius around the nest would be established so that no disturbance or intrusion would be allowed until the young had fledged and left the nest. The size of the buffer area would vary depending on species and local conditions (e.g., presence of busy roads), and would be based on the professional judgment of a monitoring biologist.

3.1.1.4 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires consultation with USFWS and IDNR where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be ... modified" by any agency under a federal permit or license. Consultation is to be undertaken for the purpose of preventing loss of and damage to wildlife resources (16 USC 662). The Fish and Wildlife Coordination Act applies to all fish and wildlife resources that may be present in the project area, if there are stream or wetland impacts.

3.1.1.5 Bald and Golden Eagle Protection Act

Bald eagles, delisted in 2007, are primarily protected under the Bald and Golden Eagle Protection Act (BGEPA). Administered by the USFWS, this law provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The BGEPA prohibits unregulated take and makes it illegal to kill, wound, pursue, shoot, shoot at, poison, capture, trap, collect, molest, or disturb bald or golden eagles. If disturbance will occur in potential violation of the act, a permit to authorize take of eagles is required. This permit authorizes incidental take of bald and golden eagles, as well as bald eagle incidental take that complies with the terms and conditions of a previously granted Section 7 incidental take statement. Projects permitted under the BGEPA do not need a permit under the MBTA. Both bald and golden eagles occur in Illinois and would be found primarily along rivers and lakeshore areas with suitable habitat.

3.1.2 State

3.1.2.1 Illinois Endangered Species Act

The IDNR is responsible for administration of the Illinois Endangered Species Act (IESA, 520 Illinois Compiled Statutes [ILCS] 10). Like the federal ESA, the IESA contains procedures for consultation between the project proponent (in this case CTA) and IDNR. The agency proposing an action would prepare a Detailed Action Report to assist the consultation process with IDNR. In cases where there may be an adverse impact on listed species, IDNR will provide recommended

mitigation measures to avoid those impacts (Illinois Administrative Code Part 1075). There are approximately 114 species listed by the State of Illinois in Cook County (IDNR 2011).

3.1.2.2 Illinois Compiled Statutes

The IDNR has the authority to manage and regulate all fish and wildlife of the state. The 520 ILCS 5 Wildlife Code states that "the ownership of and title to all wild birds and wild mammals within the jurisdiction of the State are hereby declared to be in the State, and no wild birds or wild mammals shall be taken or killed, in any manner or at any time" without authorization of IDNR (520 ILCS 5/2.1). The 515 ILCS Fish and Aquatic Life Code provides similar authority over all fish and aquatic life, including reptiles and amphibians.

3.1.3 Local

The City of Chicago and the Village of Calumet Park do not have specific policies or regulations related to threatened or endangered species. In addition, the Village of Calumet Park does not have specific regulations related to vegetation or wildlife habitats.

3.1.3.1 City of Chicago

Administered by the Chicago Bureau of Forestry in the Department of Streets and Sanitation, the Chicago Landscape Ordinance prohibits the removal of landscape trees without a permit (Chicago No Date). This ordinance specifies tree replacement standards and protection measures to be employed during construction. No person other than the deputy commissioner shall plant, remove, trim, spray or chemically inject or treat, or in any way affect the general health or structure of a parkway tree or shrub (vegetation planted along streets) without first having obtained a permit to do so (Municipal Code of Chicago 10-32-060). There is no minimum size tree that is exempt from this regulation. The landscape ordinance requires the planting of trees along streets (parkway trees), parking lots, and principal buildings (principal buildings are undefined in the Municipal Code of Chicago). The ordinance does not require parkway trees to be installed or maintained when below or within 50 feet of an elevated rail line (Municipal Code of Chicago 17-11-0103-B).

Chicago's *Urban Forest Agenda* recognizes the value of urban forests to the city and sets a goal of increasing the urban forest canopy from 17 percent (the 2008 level) to 20 percent by 2020 (Chicago 2009). From 1991 through 2007 over 112,000 trees were planted within the City (Chicago 2009).

In February 2006, Chicago adopted the *Chicago Nature and Wildlife Plan*, a strategy to enhance the health and diversity of wildlife within the city. Developed by the Chicago Department of Planning and Development and the Mayor's Nature and Wildlife Committee with support from over 30 conservation organizations, this Plan, which was updated in 2011, is now part of the City of Chicago's formal planning and development initiatives. The Boards of Commissioners of the Chicago Park District and the Forest Preserve District of Cook County have also directed their staffs to work closely towards achieving the objectives of the *Chicago Nature and Wildlife Plan* (Chicago 2006b).

The southern edge of the project area is near the Calumet Industrial Corridor, which is governed by a special set of landscaping requirements that differ slightly from the standard City of Chicago requirements (Chicago Municipal Code 10-32-17-11-0401) (Chicago 2004). The Calumet Industrial Corridor is set within the Calumet Open Space Reserve and the landscaping requirements are intended to reflect the integration of the area with significant areas of natural wildlife habitats. While these regulations may not apply directly to the proposed project, a potential station at 130th Street may be required to conform to the standards that apply to projects immediately west of I-94. These requirements emphasize more naturalistic design standards, such as planting landscaping trees in clusters and the use of native plant species.

The project area is also very close to portions of the Calumet Open Space Reserve, which is governed by the adopted *Calumet Open Space Reserve Plan* (Chicago 2005a). This plan identifies 4,877 acres of open space and natural habitats that are protected or are planned to be protected in the Lake Calumet area.

3.2 Impact Analysis Thresholds

The NEPA regulations do not specify federal thresholds of significance for impacts on threatened and endangered species, vegetation, or wildlife habitats. However, Section 1502.25 of NEPA requires that draft EISs be prepared concurrently and integrated with environmental analyses and related surveys and studies required by other federal statutes including the ESA (16 USC 1531 et seq.) (40 CFR 1502.25). Therefore, for the purpose of this EIS, an impact on a threatened or endangered species would be adverse if it would

- Result in a take of a listed species,
- Jeopardize the continued existence of any listed species, or
- Destroy or adversely modify designated critical habitat.

With respect to impacts on vegetation and wildlife habitats, the significance of potential impacts may also be related to the degree to which a proposal is consistent with federal, state, and local regulations and policies. Potential impacts on vegetation and wildlife habitat are evaluated qualitatively based on whether each alternative would result in the following:

- An adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by USFWS or IDNR.
- An adverse impact on any riparian, wetland, or aquatic habitat or other sensitive natural community.
- Substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedance of the use of native wildlife nursery sites.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Potential adverse impacts are further evaluated based on their location and potential duration and intensity.

3.3 Area of Potential Impact

For potential impacts on threatened and endangered species, designated critical habitats, vegetation, and other wildlife habitats an area within ¼ mile of the proposed alignments, stations, park & ride lots, and maintenance yards for each of the project alternatives was evaluated. The selection of a ¼-mile radius as the API represents a conservative approach for evaluating potential impacts on biological resources from changes to existing habitats and the introduction of noise, light, and construction impacts. The ¼-mile radius is intended to identify sensitive wildlife species and their habitats that may be subject to impacts that may travel larger distances (e.g., light and noise). Given that the project is in a highly urbanized environment with high existing levels of noise, light, and human activity, the impacts of construction and operation on available habitats and associated wildlife would not be expected to extend beyond ¼ mile. Because the potential alignments differ among alternatives, the API also varies. Identified construction areas (including staging areas) were included in the API.

Under ESA an "action area" would be identified that corresponds to the API for the NEPA preferred alternative specified in the Final EIS. If there would be an impact on a listed species, then FTA would consult with USFWS about proposed activities within the action area. The action area would be described in the Final EIS. Under IESA, if there would be an adverse impact on a state-listed species, FTA and CTA would consult with IDNR to develop a conservation plan and measures to minimize and/or mitigate adverse impacts on listed species.

3.4 Methods

The purpose of this biological resources investigation is to describe the existing resources in the RLE Project vicinity and to evaluate potential impacts on listed species and their habitats. Biological resources, including listed species, vegetation, and wildlife habitats within the project area, would be protected by federal, state, and local laws and policies, depending on the specific resources, their location, and applicable federal, state, or local laws. Resources within ¼ mile of each proposed alternative alignment, stations, and maintenance yards were evaluated.

Objectives of this study included the following:

- Identify any federal- or state-listed species reported to potentially occur within the project area and other important biological resources.

- Describe potential threatened and endangered species habitats, fish and wildlife habitat conditions, and plant communities that may be affected by the project.
- Describe potential impacts on biological resources that may result from the project alternatives, including short-term construction impacts, long-term operational impacts, and cumulative impacts.
- Propose mitigation measures to avoid, minimize, and compensate for any adverse impacts.

The methods used to evaluate potential impacts on biological resources included several steps:

- A review of existing data sources.
- Reconnaissance-level field review to establish the presence and existing condition of resources within the project area.
- An evaluation of the potential impacts of construction and operation of each alternative on any of the identified resources.
- Development of proposed mitigation measures for identified impacts, as appropriate.

Each step is described below.

3.4.1 Review Existing Data

The Illinois Ecological Compliance Assessment Tool (EcoCAT) and IDNR lists of species of concern within Cook County were reviewed to identify listed plants and animals with the potential to occur in the project area (IDNR 2012). The USFWS database for species likely to occur in Cook County was also consulted (USFWS 2012). This step included the identification and description of habitat requirements of each listed species that has the potential to occur in Cook County.

Habitats that are potentially present in the project area were identified through existing data sources such as the USFWS National Wetlands Inventory (NWI), the updated NWI mapping created by Ducks Unlimited under contract with the USFWS, the most current available aerial photography, and other data sources that were available from entities such as the City of Chicago.

Habitat areas with the potential to support listed species or other important biological resources were highlighted for field verification in a subsequent step. Wetlands and riparian areas (habitats along the banks of a water course that provide both water and land resources) are important habitat features.

3.4.2 Field Review

Reconnaissance level field verification of identified habitat areas was conducted to confirm the existing condition of each area. Field reviews were conducted on May 15, 16, and 17, 2012; August 13, 2012; and October 15, 2012. The field review included parks and other public open spaces within

¼ mile of either side of the proposed alignments and within ¼ mile of proposed construction staging areas, stations, park & ride lots, and maintenance yards. Undeveloped areas that appear to provide habitat were also investigated to assess their condition and value for wildlife.

Any area of potential habitat for listed species within the API was field verified. The field review consisted of visual observation and photographic documentation of all parks and open space areas. These areas were assessed for their potential to support listed species and/or migratory birds during the breeding season. The condition of each area was noted, including factors such as understory vegetation and levels of human activity that may affect the suitability of each area for use by wildlife.

The existing conditions were used to describe the environmental baseline under the ESA. The environmental baseline represents a basal set of conditions to which the impacts of the proposed action were added. The environmental baseline conditions are specific for each species.

3.4.3 Impact Analysis Methods

The results of the field review were used to determine whether listed species, vegetation and wildlife habitats, including sensitive ecological areas, wetlands, wildlife migratory corridors, and/or habitat conservation areas, occur within the project area. With respect to listed species, the impact evaluation included an assessment of the potential for listed species to be present in the project area, an assessment of existing habitat conditions, the potential impacts of construction and operation of each alternative, and the importance of the existing environment with respect to maintaining each listed species. With respect to vegetation and other wildlife habitats, the impact evaluation included an assessment of whether the project could potentially have direct or indirect impacts, through impacts on individuals or their habitat. If there would be a potential for either direct or indirect impacts, mitigation measures would be required to address those impacts.

3.4.3.1 Threatened and Endangered Species Effects Determination

The USFWS and IDNR identify which listed species occur in Cook County. Those species do not occur uniformly throughout the County and may not occur within the project area. During the field reconnaissance, a qualified biologist determined whether suitable habitat is present for many species. If suitable habitat is not present, the species would not occur within the project area and there would be "*no effect*" on that species from proposed activities within the project area. For those species for which there may be suitable habitat present and which are likely to be present, an effects determination is made based on the following criteria:

- The relevance of the environmental baseline to the species' current status.
- Whether the proposed action would restore, maintain, or degrade the existing baseline conditions.
- The potential impacts of the proposed alternatives on each listed species.

- A determination of whether the species could be expected to survive with an adequate potential for recovery given the impacts of the project, the environmental baseline and any cumulative impacts, and considering measures for survival and recovery specific to all life stages.

If the project could have impacts on threatened or endangered species, by affecting either individuals or habitat, there would be a potential for adverse impacts. If federal-listed species could be affected, FTA would coordinate with USFWS to develop conservation measures to address those impacts. For state-listed species, IDNR would be consulted and mitigation measures would be developed.

If either the Record of Decision or construction occurs more than two years after the consultation on impacts on listed species, then the conclusions of this impact analysis would be reviewed to confirm the results are still valid. This review would include confirmation that the list of species potentially affected has not changed and that there has not been a significant change in the existing condition that would affect the impact analysis conclusions. If the impact analysis review shows that there would be an impact on a new listed species or on one that was not previously affected, then the consultation would need to be re-initiated.

3.4.3.2 Vegetation and Wildlife Habitats Impact Analysis

The results of the field review were used to determine whether valuable vegetation and wildlife habitats occur within the project area. For the build alternatives, the evaluation of potential impacts on vegetation included potential disturbance of protected vegetation, including street trees. Street trees were counted and are tabulated in Section 4. The evaluation of potential impacts on wildlife habitat included a review of areas where mature trees that may provide potential nesting sites for raptors and other birds might be disturbed. These mature trees may be found in parks, cemeteries, and in undeveloped vegetated parcels along the proposed alignments, and around proposed stations, park & ride lots, and maintenance yards. For the analysis of potential impacts on wildlife habitat, these areas were noted as areas of potential habitat and did not include individual tree counts. Removal or disturbance of trees during the nesting season could affect habitat or individuals of special-status species; therefore, an evaluation of these potential impacts for all proposed alternatives was performed.

Areas of potentially sensitive habitats, such as riparian or wetland areas, were identified and assessed for their condition and value for wildlife. Recommendations for avoiding and minimizing impacts on vegetation and wildlife habitats, as well as potential mitigation activities, were developed.

Section 4
Affected Environment

4.1 Vegetation and Wildlife Habitat

Vegetation in the API consists primarily of parkway trees and landscaping around buildings. The API has some remnants of natural vegetation left in small pockets or nature preserves and there may be areas where vegetation has re-established itself following disturbance. Urban wildlife is adapted to this mix of conventional landscaping and remnant patches that comprises the urban vegetative community. When patches of natural vegetation or nature preserves are of a significant size or are connected to other natural areas, a greater diversity of wildlife may be present. Migratory birds may use a wide variety of vegetation types during migration and may be found even in very urbanized landscapes, such as those found in the API. Section 4.2 discusses the listed species identified as potentially occurring within the project area.

In addition to providing wildlife habitat, vegetation in the urban landscape provides a variety of benefits to the human community, including the following:

- Improved air quality
- Reduction of greenhouse gases
- Reduction of the urban heat island effect
- Shade for houses, reducing energy use
- Increased psychological well-being
- Improved aesthetics
- Increased property values
- Stormwater attenuation

In 1837, the City of Chicago incorporated with *Urbs in Horto* (City in a Garden) as its motto (Chicago 2009). Today, Chicago's urban forest comprises over 3.6 million trees, the value of which exceeds $7 million for carbon sequestration and air pollution reduction, not including the carbon storage value of $14.8 million dollars and structural value of $2.3 billion (Chicago 2011). Further value can be seen in the stormwater management, noise abatement, and public health benefits of trees. As described in Section 3.1.3.1, the Chicago Trees Initiative has committed to increasing Chicago's tree canopy (Chicago 2011).

Based on an inventory of city land, the *Chicago Nature and Wildlife Plan* identifies over 4,800 acres of existing prairies, savannas, dunes, woodlands, wetlands, and riparian edges and 920 acres

potentially suitable for restoration (Chicago 2006b). That plan identifies the following habitat types:

- Woodland/Forest (1,772 acres in Chicago) - An area with more than 50 percent tree cover.
- Wetland (535 acres in Chicago) - An area saturated with water for a sufficient part of the year that supports emergent reeds, grasses and other aquatic plants.
- Riparian/Water Edge (290 acres in Chicago) - A transitional area between dry and wet environments.
- Beach/Dune (22 acres in Chicago) - A hill or ridge of sand piled by the wind that supports plant life.
- Prairie/Grassland (170 acres in Chicago) - An area dominated by grasses or one possessing less than 10 percent tree cover.
- Savannas (36 acres in Chicago) - An area with 10 to 50 percent tree cover and a native grass and wildflower understory.
- City neighborhoods: Parks, yards, city streets.

The natural habitats of Chicago and its adjacent suburbs support more than 400 species of mammals, birds, reptiles, amphibians, and fish (Chicago 2006b). Of those 400 species, about 300 are birds. Chicago is on the Mississippi Flyway, which is part of a larger bird migration route that extends from the Mackenzie Valley in northwest Canada, along the Great Lakes, and down the Mississippi River Valley. Each year, more than 250 species of migratory birds use this flyway to travel between their winter homes in the southern United States and Central and South America, and their summer homes in North America. With Lake Michigan to the east and farmland to the far west, Chicago's green spaces, especially those with native plants and trees, provide a variety of plant life and habitat for resting and refueling. About 50 species of resident native birds also find a range of suitable habitats in Chicago (Chicago 2006a).

Based on the habitat types described in the *Chicago Nature and Wildlife Plan*, woodland forest and city neighborhoods habitat types are present within the API. "Woodland forest" occurs primarily in the area near the 120th Street yard and shop, but there are also a number of patches along the UPRR Rail Alternative alignment between 107th Street and 111th Street and around Kensington Park. All other portions of the API would be considered "city neighborhoods." Nature areas within the API that are designated in the *Chicago Nature and Wildlife Plan* (Chicago 2006b) are shown in relation to the API on Figure 4-1 and include the following:

- West Pullman Park Savanna - 401 W. 123rd Street, west of Princeton Street between 123rd and 124th Street. This site of an ancient river bluff remnant is host to a grove of over 60 white, red, and black oak and hickory trees (Chicago 2005e).

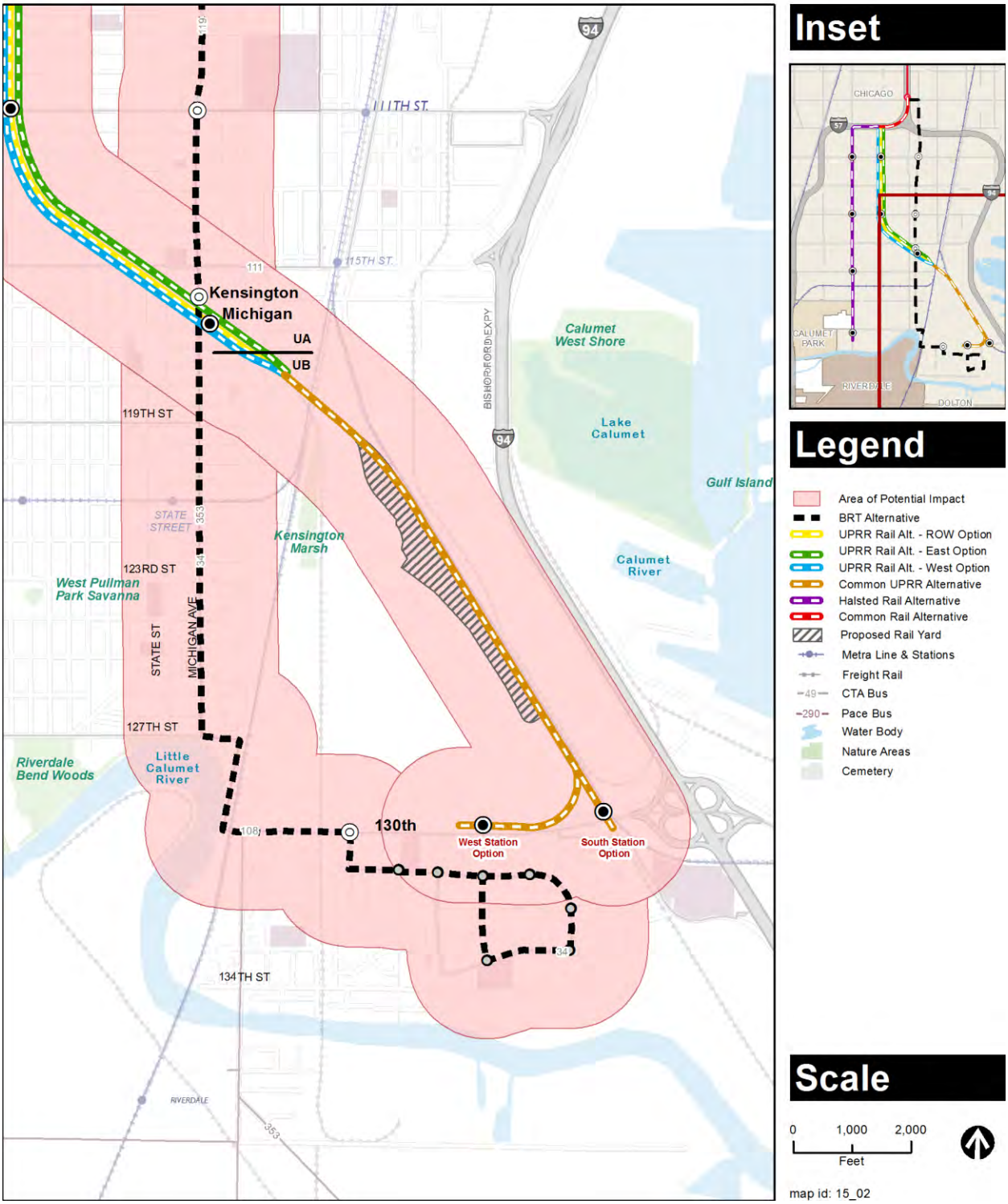

Figure 4-1: Nature Areas Identified in the *Chicago Nature & Wildlife Plan* within the Areas of Potential Impact

- Riverdale Bend Woods - 12700 S. Stewart Avenue, near 127th Street along the Little Calumet River. This site is part of the Calumet Open Space Reserve (Chicago 2005d).

- Kensington Marsh - 12400 S. Indiana Avenue, north of the Metropolitan Water Reclamation District's Calumet Plant on 130th Street. This marsh was built in 1986 as part of United States Army Corps of Engineers mitigation project, consisting of open water, wetlands, and upland habitat (Chicago 2005c).

- Outside of the project area but just to the east of the UPRR Rail Alternative is Calumet West Shore and Gull Island site, at 11500 Doty Avenue, with over 228 acres of wooded areas, meadows, wetlands, and mud flats on the western shore of Lake Calumet (Chicago 2005b). This site is approximately 0.9 mile to the east of the project, as shown in Figure 4-1.

The IDNR EcoCAT database, which records information based on historical records within the nearest Section/Township/Range, was reviewed. A review of the IDNR EcoCAT database identified the Lake Calumet Illinois Natural Areas Inventory Sites near Lake Calumet west of the UPRR Rail Alternative alignment and the Riverdale Marsh Site beyond the southern end of the Halsted Rail Alternative alignment at the intersection of 138th Street and Halsted Street. The IDNR EcoCAT database recorded occurrences of seven listed species within the sections that encompass the project area, including black-crowned night heron (*Nycticorax nycticorax*), Blanding's turtle (*Emydoidea blandingii*), common moorhen (*Gallinule chloropus*), little blue heron (*Egretta caerulea*), peregrine falcon (*Falco peregrinus*), yellow-crowned night heron (*Nyctanassa violacea*), and yellow-headed blackbird (*Xanthocephalus xanthocephalus*).

These historic records are not necessarily for locations within the API, so even with this more focused data, it is necessary to compare each species' habitat requirements with the existing habitats within the project area. It is also important to understand that this historical data does not provide proof of absence. Results from the IDNR EcoCAT database review are presented in Appendix A.

A review of the NWI information identified wetland areas within the API. See the *Water Resources Technical Memorandum* for more information about wetlands.

Based on inspection of aerial photography, all areas within ¼ mile of the proposed project alignments that appeared to contain approximately ½ acre or more of contiguous habitat cover were identified. In a heavily urbanized area, this area provides a minimum amount of cover where wildlife not generally found in residential yards might be found. During the field investigation, all of these areas were visited and evaluated. With the exception of the forested habitats in the vicinity of the 120th Street yard and shop (approximately 14 acres), none of these areas would support wildlife communities that are significantly different from the surrounding residential and commercial areas.

Trees within the proposed construction footprint of each alternative were counted. Trees may provide nesting and foraging sites for migratory birds and certain trees may be protected by local ordinances. Field surveys were conducted in May and August 2012. An inventory of the number of

trees was developed. The City of Chicago landscape ordinance does not apply to trees within 50 feet of a railroad; however, for the purposes of this evaluation, such trees were included as they provide an indicator of the habitat values that might be affected by each alternative.

When applications for local construction permits are filed, it may be necessary to prepare more detailed tree inventories and to update the results of this investigation as some trees would have been removed and others may have been planted.

Tables 4-1, 4-2, and 4-3 show the amount of vegetation or potential wildlife habitat that would be potentially affected by each alternative. The data is shown by vegetation segment. Trees are not evenly distributed along the project corridor, and work in some areas could have greater impacts on vegetation and wildlife than in other segments. In addition, some portions of the UPRR Rail and Halsted Rail Alternative alignments would follow similar routes; therefore, the data is presented by sub-segments to better identify the differences between alternatives.

Portions of the BRT and Halsted Rail Alternative alignments would be within street ROWs and would have the potential to affect street trees; therefore, the data presents the number of trees potentially affected by each alternative. The UPRR Rail Alternative would have the potential to affect blocks of habitat rather than individual street trees; therefore, acres of potentially affected habitat are provided in Table 4-2. As described below, blocks of habitat may provide greater wildlife benefits than street trees, while street trees may be protected by local ordinance.

Figure 4-2 shows the project area including the vegetation segments for which the data in Tables 4-1, 4-2, and 4-3 are presented. The vegetation segments for each alternative are defined as follows:

- BRT Alternative - from the 95th Street Terminal to the 130th Street stop
- UPRR Rail Alternative:
    - Vegetation Segment UA-1: From the 95th Street Terminal to the beginning of the horizontal curve at the UPRR crossing
    - Vegetation Segment UA-2: The horizontal curve at the UPRR crossing
    - Vegetation Segment UA-3: From the end of the horizontal curve at the UPRR crossing to the Canadian National (CN)/Metra Electric crossing
    - Vegetation Segment UB: From the CN/Metra Electric crossing to the beginning of the 130th Street station sites
    - South Station Option
    - West Station Option

- 120th Street Yard and Shop

- Halsted Rail Alternative:
  - Vegetation Segment HA-1: From the 95th Street Terminal along the I-57 corridor to the beginning of the horizontal curve at the I-57 crossing
  - Vegetation Segment HA-2: The horizontal curve at the I-57 crossing
  - Vegetation Segment HA-3: From the end of the horizontal curve at the I-57 crossing to the 119th Street station
  - Vegetation Segment HB: From the 119th Street station to Vermont Avenue
  - 119th Street Yard and Shop

Table 4-1: Potentially Affected Vegetation - Bus Rapid Transit Alternative

Vegetation Segment	Number of Street/Landscape Trees
BRT Alternative	90
Total	**90**

Table 4-2: Potentially Affected Vegetation - Union Pacific Railroad Rail Alternative (acres)

Alignment Segment	Vegetation Segment	Right-of-Way Option	East Option	West Option
UA	Segment UA-1	1.1	1.1	1.1
	Segment UA-2	0.1	0.2	0.2
	Segment UA-3	2.8	7.5	13.3
UB	Segment UB	9.5	9.3	9.3
	South Station Option	1.0	1.0	1.0
	West Station Option	9.2	9.2	9.2
	120th Street Yard and Shop	41.9	41.9	41.9
Total		**65.6**	**70.2**	**76.0**

Table 4-3: Potentially Affected Vegetation - Halsted Rail Alternative

Alignment Segment	Vegetation Segment	Number of Street/Landscape Trees	Acres of Urban Habitat
HA	Segment HA-1	54	n/a
	Segment HA-2	2	n/a
	Segment HA-3	350	n/a
HB	Segment HB	114	n/a
	119th Street Yard and Shop	n/a	7.0
Total		**516**	**7.0**

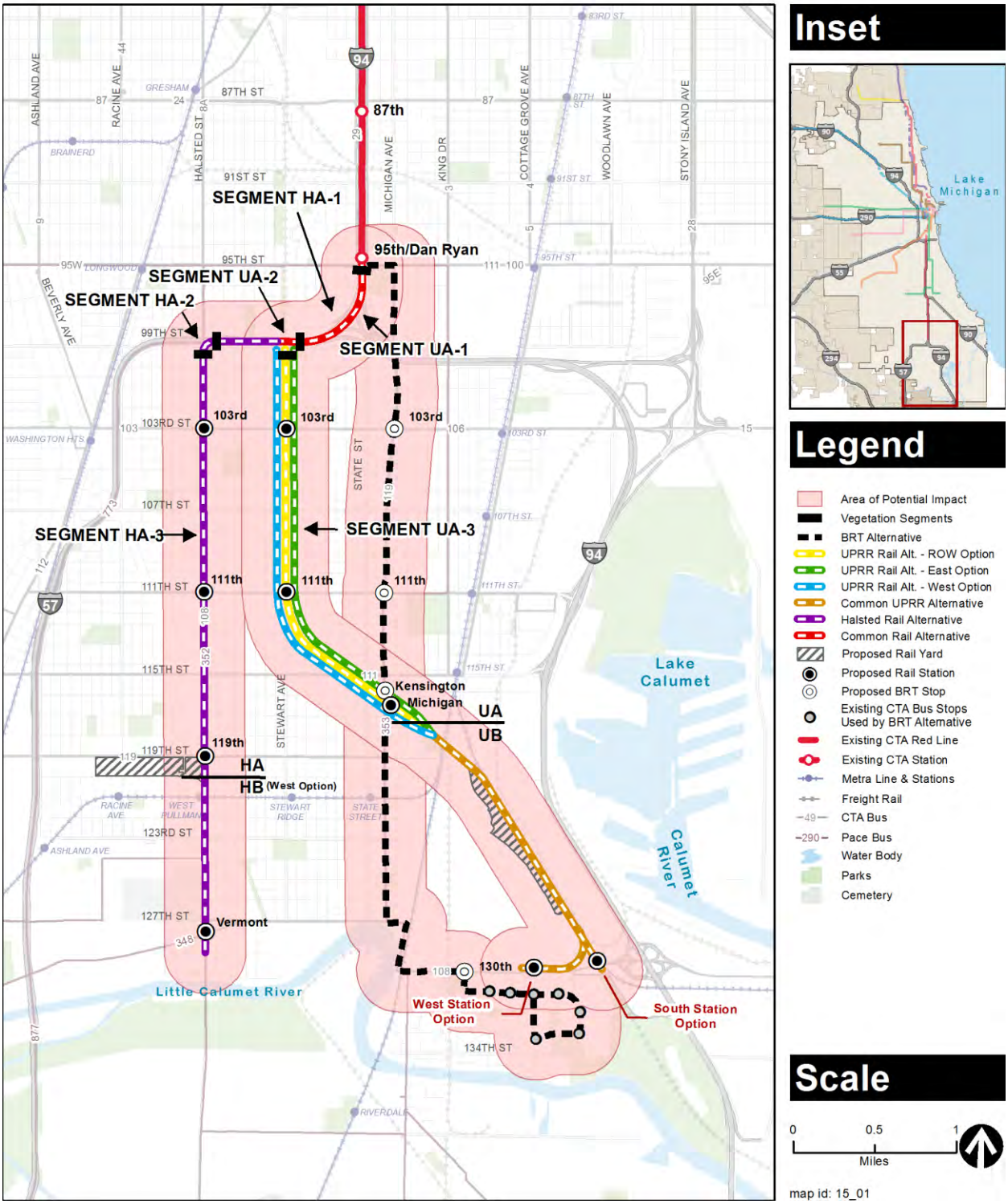

Figure 4-2: Project Area including Segments

The trees potentially affected by the BRT Alternative (Table 4-1) are in the park & ride sites; some of these trees are parkway trees along streets in sidewalks and some are landscape trees on private lands around buildings.

The trees potentially affected by the UPRR Rail Alternative (Table 4-2) are in backyards and abandoned industrial parcels and along the railroad embankment. West of the UPRR tracks between 108th and 111th Streets, several abandoned industrial parcels have regrown with a mix of native and non-native trees, small trees, and shrubs. These patches of habitat are disconnected from other larger habitat patches, but they have developed several vegetative layers and have a good understory of shrubs, small trees and herbaceous cover. This provides a variety of habitats for urban adapted species. These areas are likely to support a greater variety and number of urban wildlife species than the narrow bands of trees along the railroad embankment further to the south. These areas would be more valuable for wildlife than most street trees or isolated specimen trees in backyards.

Many of the trees along the UPRR Rail Alternative alignment are in narrow bands along the existing rail corridor. Some of the trees included are parkway trees planted along streets in sidewalks and some are landscape trees on private lands around buildings. Narrow rows of trees provide many of the benefits identified by the Chicago Urban Forest Agenda (Chicago 2009). However, they provide fewer wildlife benefits than if the same number of trees were organized into a clump. Due to their mobility, some migratory bird species may utilize these trees during migration. In addition, there is the potential for migratory birds to use existing mature trees within the project area for breeding. The frequent passing of trains and the associated noise and vibration would reduce the value of narrow bands of trees for bird use.

Most of these areas are isolated from other parks or patches of habitat and thus would not be as valuable as might be expected based on the number of trees alone. The forested areas are affected by human disturbances and urban influences, such as traffic and rail noise, trash, and light pollution. The forested areas that are becoming established at the south end of the UPRR Rail Alternative alignment represent the best habitat within the entire API, followed closely by the patches along the West Option between 108th and 111th Streets.

Minimal habitat exists along the Halsted Rail Alternative alignment (Table 4-3); trees are primarily in the median and sidewalks of Halsted Street. The habitat within the proposed maintenance yard for the Halsted Rail Alternative is composed of vegetation that has re-established in several patches following abandonment of previous urban uses. It is not as well developed as similar patches found along the UPRR Rail Alternative West Option alignment.

Large birds such as herons, hawks, and eagles make large nests that persist through the winter months. These birds will return to the same nesting territory year after year and reuse the same nests. Their nests can be very visible in the winter when the leaves are off the trees. No large nests indicating the presence of herons, hawks, or eagles were observed in the API during the May, August, or October 2012 field visits. Eagles perch on tall trees near water or open spaces or on the

ground in more open areas. There do not appear to be suitable perching areas for eagles within the API.

During a field visit on October 15, 2012, monk parakeet (*Myiopsitta monachus*) nests were identified in and around a cell phone tower at the northeast corner of 119th Street and Halsted Street. Approximately six nests were identified within the cell phone tower, and green monk parakeets were seen entering and exiting the nests. Photos of the nests are included in Appendix B.

The Cedar Park Cemetery at 12540 South Halsted Street in Calumet Park is home to a small herd of non-native Japanese Sika deer (*Cervus nippon*). The herd has been living in the cemetery since the 1920s and they graze off the land. The deer do not leave the confines of the cemetery. The Cedar Park Cemetery also contains several patches of habitat where there is an understory layer under the mature tree canopy. Areas with an understory layer of shrubs and small trees are more valuable for wildlife than areas that only contain mature trees with maintained grass underneath. These habitat areas are not in areas that would be affected by any of the alternatives.

4.2 Threatened and Endangered Species

There are 114 federal- and state-listed species that potentially occur within Cook County. Listed species include those listed as threatened, endangered, or candidates for listing as threatened or endangered. The entire API is within Cook County. Table 4-4 lists each species, its status (e.g., federally threatened, state endangered), a brief description of its habitat requirements, and an assessment of whether the species has the potential to occur within the API. Each species' habitat requirements were compared against the existing habitats within the API to determine the likelihood that a species could occur within the project area. Only those species that could potentially occur within the project area are considered further. The shaded row in Table 4-4 indicates the species with the potential to occur within the API.

The IDNR EcoCAT database was consulted for information about known occurrences of listed species within the project area. The IDNR EcoCAT database identified seven species within the sections that encompass the project area, as discussed in Section 4.0 (Appendix A). These species are most likely included due to the proximity of the API to the Little Calumet River and natural areas next to the river and do not occur within the API. Other than the peregrine falcon (discussed below), there is no suitable habitat for the other six species in the API.

Table 4-4: Listed Species in Cook County

Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Invertebrates			
Slippershell (freshwater mussel) *Alasmidonta viridis*	ST	Creeks and headwaters of rivers in sand or gravel substrates with high gradients or riffles. Occasionally in larger rivers and lakes and in mud substrates.	Unlikely, habitat does not occur in the project area.
Elfin Skimmer (dragonfly) *Nannothemis bella*	ST	Bogs and occasionally in calcareous fens with sedge meadows and marl deposits.	Unlikely, habitat does not occur in the project area.
Eryngium Stem Borer (moth) *Papaipema eryngii*	SE	Mesic and wet-mesic prairie. In Illinois, associated with moderately disturbed to relatively undisturbed prairie.	Unlikely, habitat does not occur in the project area.
Hine's Emerald Dragonfly *Somatochlora hineana*	FE, CH, SE	Spring fed wetlands, wet meadows, and marshes. Project area is not within designated critical habitat.	Unlikely, habitat does not occur in the project area.
Amphibians			
Mudpuppy (salamander) *Necturus maculosus*	ST	Rivers, lakes, and other permanent water sources with hard cover such as rocks, logs, and overhangs. Will also utilize debris, reeds, mud, stream banks, and other areas.	Unlikely, habitat does not occur in the project area.
Reptiles			
Blanding's Turtle *Emydoidea blandingii*	SE	Quiet waters in marshes, prairie wetlands, wet sedge meadows, and shallow, vegetated portions of lakes.	Unlikely, habitat does not occur in the project area.
Kirtland's Snake *Clonophis kirtlandi*	ST	Prairie wetlands, wet meadows, and grassy edges of creeks, ditches, and ponds, usually in association with crayfish burrows. Has been found in damp habitat remnants in vacant lots of urban settings.	Unlikely, habitat does not occur in the project area.
Eastern Massasauga *Sistrurus catenatus catenatus*	FC, SE	Wet areas including wet prairies, marshes, and low areas along rivers and lakes. Also uses adjacent uplands during part of the year. Often hibernates in crayfish burrows but may also be found under logs and tree roots or in small mammal burrows.	Unlikely, habitat does not occur in the project area.

Status Legend
Federally protected:
FE - Federal Endangered (listed)
FT - Federal Threatened (listed)
FC - Federal Candidate
CH - Critical habitat has been designated (federal) in Cook County.

State Protected:
SE - State Endangered
ST - State Threatened

Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Fish			
Longnose Sucker *Catostomus catostomus*	ST	Cool, spring-fed creeks, lakes and their tributary streams.	Unlikely, habitat does not occur in the project area.
Iowa Darter *Etheostoma exile*	ST	Cool, clear to slightly turbid, slow moving vegetated brooks and weedy portions of glacial lakes, marshes and ponds.	Unlikely, habitat does not occur in the project area.
Banded Killifish *Fundulus diaphanus*	ST	Shallow, clear and quiet water streams, rivers, ponds and lakes with sand, gravel or mud substrates. Often found near submerged aquatic vegetation.	Unlikely, habitat does not occur in the project area.
Blackchin Shiner *Notropis heterodon*	ST	Very clear waters of glacial lakes and marshes with an abundance of submerged aquatic vegetation.	Unlikely, habitat does not occur in the project area.
Birds*			
Least Bittern *Ixobrychus exilis*	ST	Emergent vegetation in freshwater marshes and occasionally saltwater or brackish marshes.	Unlikely, habitat does not occur in the project area.
Snowy Egret *Egretta thula*	SE	Emergent wetlands associated with freshwater marshes and along the periphery of large water bodies.	Unlikely, habitat does not occur in the project area.
Little Blue Heron *Egretta caerulea*	SE	Swamps, estuaries, rivers, ponds, and lakes.	Unlikely, habitat does not occur in the project area.
Black-crowned Night Heron *Nycticorax nycticorax*	SE	Forests, scrub/shrub, marshes, and ponds serve as nesting, roosting, and foraging habitats. Colonies may be located in wooded swamps, coastal dune forests, vegetated dredge spoil islands, scrub thickets, or marshes in close proximity to water. Migratory.	Unlikely, habitat does not occur in the project area.
Yellow-crowned Night Heron *Nyctanassa violacea*	SE	Nest on barrier islands, dredge spoil islands, and bay islands that contain forested wetlands or scrub/shrub thickets. Colonies may be located in dense shrubby thickets, forests with an open understory or suburban parks and yards that offer suitable habitat. Migratory.	Unlikely, habitat does not occur in the project area.
Osprey *Pandion haliaetus*	SE	Nests in all forested vegetation types with large trees near water, as well as on platforms erected in less optimal habitat. Migratory.	Unlikely, habitat does not occur in the project area.

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FC - Federal Candidate
CH - Critical habitat has been designated (federal) in Cook County.

State Protected:
SE - State Endangered
ST - State Threatened

Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Peregrine Falcon *Falco peregrinus*	ST	Nests on cliff ledges above or near open water including lakes, ponds, rivers, and seas. Uses a wide variety of foraging habitats, including croplands and riparian areas along rivers, ponds, marshes, and meadows, and open areas where avian prey are vulnerable, including pastures, grasslands, mountain valleys, and gorges. Migratory.	Potential to occur in suitable habitat within the project area.
King Rail *Rallus elegans*	SE	Emergent vegetation in freshwater marshes and brackish tidal marshes.	Unlikely, habitat does not occur in the project area.
Common Moorhen *Gallinula chloropus*	SE	Freshwater and brackish marshes, lakes, canals and ponds with cattails and other aquatic vegetation.	Unlikely, habitat does not occur in the project area.
Piping Plover *Charadrius melodus*	FE	Wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands.	Unlikely, habitat does not occur in the project area.
Upland Sandpiper *Bartramia longicauda*	SE	Open prairies, grasslands, pastures, wet meadows and hayfields.	Unlikely, habitat does not occur in the project area.
Wilson's Phalarope *Phalaropus tricolor*	SE	Nests in shallow, prairie wetlands. During migration, inhabits shallow ponds, flooded fields, and sometimes mudflats.	Unlikely, habitat does not occur in the project area.
Black Tern *Chlidonias niger*	SE	Nests in emergent vegetation along the shoreline periphery of freshwater lakes, wetlands, and marshes along rivers and ponds. Forages in wet meadows, pastures, agricultural fields, and water.	Unlikely, habitat does not occur in the project area.
Yellow-headed Blackbird *Xanthocephalus xanthocephalus*	SE	Nests in deep-water marshes, sloughs, forested wetlands, and along lake edges. Can sometimes be found in huge flocks in open fields and pastures during migration and in winter.	Unlikely, habitat does not occur in the project area.
Mammals			
Franklin's Ground Squirrel *Spermophilus franklinii*	ST	Tall grass and mid-grass prairies. Also uses riparian areas (marsh edges), forest-field edges, fields, hedgerows, and unmowed strips along railroad rights-of-way and roadsides. Generally avoids short grass habitats. Nests are in underground burrows.	Unlikely, habitat does not occur in the project area.

Status Legend
Federally protected:
FE - Federal Endangered (listed)
FT - Federal Threatened (listed)
FC - Federal Candidate
CH - Critical habitat has been designated (federal) in Cook County.

State Protected:
SE - State Endangered
ST - State Threatened

Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Plants			
Shadbush *Amelanchier interior*	ST	Dry woods, bluffs above rivers, rocky areas and slopes, banks of streams, fields, thickets, and sandy areas; less often in wetlands.	Unlikely, habitat does not occur in the project area. Field survey did not detect.
Shadbush Amelanchier sanguinea	SE	Margins of woods, river ledges, shorelines, rocky slopes, crevices of open rock faces and cliffs, non-calcareous to slightly calcareous sites.	Unlikely, habitat does not occur in the project area.
Marram Grass *Ammophila breviligulata*	SE	Drier areas of sandy beaches and unstabilized or partially stabilized sand dunes along coastal areas including the Great Lakes.	Unlikely, habitat does not occur in the project area.
Wooly Milkweed *Asclepias lanuginosa*	SE	Dry, sandy, or gravelly hillside prairies.	Unlikely, habitat does not occur in the project area.
Mead's Milkweed *Asclepias meadii*	FT	Moderately wet (mesic) to moderately dry (dry mesic) upland tallgrass prairie or glade/barren habitat characterized by vegetation adapted for drought and fire. Persists in stable late-successional prairie.	Unlikely, habitat does not occur in the project area.
Oval Milkweed *Asclepias ovalifolia*	SE	Hill prairies and dry sand prairies, typical savannas and sandy savannas, and openings in upland oak woodlands.	Unlikely, habitat does not occur in the project area.
Forked Aster *Aster furcatus*	ST	Glacial moraines, sedge meadows or woodland ponds.	Unlikely, habitat does not occur in the project area.
American Slough Grass *Beckmannia syzigachne*	SE	Marshes, low wet ground or “sloughs,” floodplains, pond shores, lakes, streams, ditches, and other types of open wetland habitats.	Unlikely, habitat does not occur in the project area.
Kittentails *Besseya bullii*	ST	Dry sand prairies, dry gravel prairies, hill prairies, barren savannas, thinly wooded bluffs, and sandy or gravelly riverbanks.	Unlikely, habitat does not occur in the project area.
Northern Grape Fern *Botrychium multifidum*	SE	Old pastures, meadows, woodland margins, riverbanks, and bottomlands in subacid soil.	Unlikely, habitat does not occur in the project area.
Dwarf Grape Fern *Botrychium simplex*	SE	Meadows, barrens, and woods, usually in subacid soil.	Unlikely, habitat does not occur in the project area.
Sea Rocket *Cakile edentula*	ST	Sand shores and low dunes, often found on the ridge of wind-blown sand behind the high-tide line of beaches.	Unlikely, habitat does not occur in the project area.

Status Legend
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Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Grass Pink Orchid *Calopogon tuberosus*	SE	Moist prairie and acid-soiled boggy areas, typically growing in sphagnum.	Unlikely, habitat does not occur in the project area.
Golden Sedge *Carex aurea*	ST	Moist, open or shaded habitats, especially meadows and seepage slopes, usually on basic soils.	Unlikely, habitat does not occur in the project area.
Sedge *Carex bromoides*	ST	Soggy deciduous woodlands, muddy margins and shallow water of vernal pools in wooded areas, hardwood swamps, typical seeps and gravelly seeps in wooded areas, bogs, edges of marshes, and sedge meadows. Found in higher quality natural areas.	Unlikely, habitat does not occur in the project area.
Sedge *Carex echinata*	SE	Bogs, swamps, peaty or sandy shores of streams or lakes, wet meadows, usually in acidic soils.	Unlikely, habitat does not occur in the project area.
Sedge *Carex formosa*	SE	Mesic to dry deciduous forests and ravines, moist meadows, usually associated with calcareous soils.	Unlikely, habitat does not occur in the project area.
Sedge *Carex garberi*	SE	Moist shores, meadows, fens, on base-rich soils.	Unlikely, habitat does not occur in the project area.
Swollen Sedge *Carex intumescens*	ST	Dry-mesic to wet coniferous, mixed, and deciduous forests, forest openings, thickets, wet meadows, ditches.	Unlikely, habitat does not occur in the project area.
Tuckerman's Sedge *Carex tuckermanii*	SE	Deciduous swamp forests, thickets, often along streams or pond shores, wet meadows.	Unlikely, habitat does not occur in the project area.
Little Green Sedge *Carex viridula*	ST	Sandy to rocky, often marly, open or marshy shores, beach pools, and interdunal swales; often in early successional habitats with bare soil.	Unlikely, habitat does not occur in the project area.
Pretty Sedge *Carex woodii*	ST	Usually dry, calcareous woodlands.	Unlikely, habitat does not occur in the project area.
Leatherleaf *Chamaedaphne calyculata*	ST	Boreal and subarctic peatlands, margins of boggy swamps and streams in coniferous forests, pocosins in coastal plain, often forming dense thickets.	Unlikely, habitat does not occur in the project area.
Seaside Spurge *Chamaesyce polygonifolia*	SE	Sandy beaches and dunes along Lake Michigan.	Unlikely, habitat does not occur in the project area.
Spotted Wintergreen *Chimaphila maculata*	SE	Coniferous, mixed, and deciduous forests, xeric sand communities.	Unlikely, habitat does not occur in the project area.

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Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Pitcher's (Dune) Thistle *Cirsium pitcheri*	ST	Beach and dune habitats around lakes Huron, Michigan, and Superior. Was extirpated from portions of its former range at the southern end of Lake Michigan.	Unlikely, habitat does not occur in the project area.
Sweetfern *Comptonia peregrina*	SE	Dry, sterile, sandy to rocky soils in pinelands or pine barrens, clearings, or edges of woodlots.	Unlikely, habitat does not occur in the project area.
Spotted Coral-root Orchid *Corallorhiza maculata*	ST	Habitats vary from deciduous forests and mixed coniferous/deciduous forests to predominantly coniferous forests.	Unlikely, habitat does not occur in the project area. Field survey did not detect.
White Lady's Slipper *Cypripedium candidum*	ST	Mesic to wet prairies and fen meadows, very rarely open wooded slopes.	Unlikely, habitat does not occur in the project area.
Leafy-prairie Clover *Dalea foliosa*	FE, SE	Prairie remnants along the Des Plains River in Illinois, in thin soils over limestone substrate.	Unlikely, habitat does not occur in the project area.
Hairgrass Deschampsia flexuosa	SE	Oak savanna and woodland habitat.	Unlikely, habitat does not occur in the project area.
Northern Panic Grass *Dichanthelium boreale*	SE	Semi-open areas in damp or sandy woodlands, thickets, or on banks.	Unlikely, habitat does not occur in the project area.
Narrow-leaved Sundew *Drosera intermedia*	ST	Constantly moist to wet bogs, fens, and marshes. It prefers nutrient free soils, such as sphagnum peat moss or sandy ground, and open, sunny habitats.	Unlikely, habitat does not occur in the project area.
Round-leaved Sundew *Drosera rotundifolia*	SE	Most often bogs, but also swamps, rotting logs, mossy crevices in rocks, or damp sand along stream, lake, or pond margins.	Unlikely, habitat does not occur in the project area.
Capitate Spikerush *Eleocharis olivacea*	SE	A variety of wet, open situations: shores, pond margins, bog mats, fields; often in deeper water than many other spike-rushes.	Unlikely, habitat does not occur in the project area.
Few-flowered Spikerush *Eleocharis pauciflora*	SE	Damp calcareous shores, ledges and swamps.	Unlikely, habitat does not occur in the project area.
Spike Rush *Eleocharis rostellata*	ST	Very wet calcareous or brackish fens, springs, shores.	Unlikely, habitat does not occur in the project area.
Bearded Wheat Grass *Elymus trachycaulus*	ST	Adapted to a wide range of soils and climates. Grows in very dry to very boggy habitats. In Illinois, found in mesic prairies and wet dolomite outcrops.	Unlikely, habitat does not occur in the project area.

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Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Queen-of-the-prairie *Filipendula rubra*	SE	Fens, calcium-rich peat producing wetlands.	Unlikely, habitat does not occur in the project area.
Northern Cranesbill *Geranium bicknellii*	SE	Woodland openings, sandy Black Oak woodlands, typical and sandy savannas, and rocky outcrops.	Unlikely, habitat does not occur in the project area.
Tall Sunflower *Helianthus giganteus*	SE	Thickets, swamps, and meadows.	Unlikely, habitat does not occur in the project area.
Kalm's St. John's Wort *Hypericum kalmianum*	SE	Moist; dunes, shores; in rocky, sandy soil.	Unlikely, habitat does not occur in the project area.
Richardson's Rush *Juncus alpinus*	SE	Wet, open to semi-open situations; in sandy, usually calcareous soil: shores of lakes and ponds, marshes, ditches, wet meadows, and wet areas of abandoned limestone quarries.	Unlikely, habitat does not occur in the project area.
Ground Juniper *Juniperus communis*	ST	Dry, open, rocky, wooded hillsides, sand terraces, maritime escarpments, and on exposed slopes and plateaus. It is found on dunes or dune heath in coastal areas, on isolated mountains, and may spread into fields and pastures.	Unlikely, habitat does not occur in the project area.
Pale Vetchling *Lathyrus ochroleucus*	ST	Open woods, thickets, and clearings on well drained, usually calcareous substrate.	Unlikely, habitat does not occur in the project area.
Prairie Bush Clover *Lespedeza leptostachya*	FT, SE	Dry to mesic prairies with gravelly soil.	Unlikely, habitat does not occur in the project area.
Blazing Star *Liatris scariosa* var. *nieuwlandii*	ST	Savannas and prairies or at woodland edges or forest openings, primarily on aged glacial till or loess soils.	Unlikely, habitat does not occur in the project area.
Indian Cucumber Root *Medeola virginiana*	SE	Moist slopes, mesic woods.	Unlikely, habitat does not occur in the project area.
Slender Sandwort *Minuartia patula*	ST	Prairies, meadows, limestone barrens, and rocky outcrops in sandy, clayey, or gravelly soils.	Unlikely, habitat does not occur in the project area.
Small Sundrops *Oenothera perennis*	ST	Dry to moist open ground, open woods, fields, and meadows.	Unlikely, habitat does not occur in the project area.

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Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Heart-leaved Plantain *Plantago cordata*	SE	Wet woods, sloughs, rocky streambeds, springs.	Unlikely, habitat does not occur in the project area.
Orange Fringed Orchid *Platanthera ciliaris*	SE	Moist sandy and peaty meadows, marshes, prairies, pine savannas, open woods, wet wooded flats, seeping slopes, roadsides, dry wooded slopes, sphagnum bogs.	Unlikely, habitat does not occur in the project area.
Wood Orchid *Platanthera clavellata*	SE	Sphagnum bogs, sphagnous seeps and meadows, wet sandy and peaty meadows, marshes, low woods, wet prairies, and roadsides.	Unlikely, habitat does not occur in the project area.
Tubercled Orchid *Platanthera flava* var. *herbiola*	ST	Alluvial forests, riparian thickets, wet meadows, wet prairies, seeps, salt marshes.	Unlikely, habitat does not occur in the project area.
Eastern Prairie Fringed Orchid *Platanthera leucophaea*	FT, SE	Moist to mesic black soil prairies, sand prairies, thickets, pothole marshes, and fens.	Unlikely, habitat does not occur in the project area.
Purple Fringed Orchid *Platanthera psycodes*	SE	Alluvial and swamp forests, stream banks, riparian meadows, moist and seeping slopes, marshes, roadside banks, ditches, old fields.	Unlikely, habitat does not occur in the project area.
Weak Bluegrass *Poa languida*	SE	Along the edges of wetlands on gravelly, well drained, calcareous substrates.	Unlikely, habitat does not occur in the project area.
Snake-mouth *Pogonia ophioglossoides*	SE	Sphagnum bogs, poor fens, moist acidic sandy meadows and prairies, open wet woods, wet pine flatwoods, pine savannas, cypress swamps, sandy-peaty stream banks, seepage slopes, ditches, roadcuts, rarely calcareous fens.	Unlikely, habitat does not occur in the project area.
Downy Solomon's Seal *Polygonatum pubescens*	SE	Rich, moist, wooded slopes and coves.	Unlikely, habitat does not occur in the project area.
Carey's Heartsease *Polygonum careyi*	SE	Moist, open to semi-open areas, often in sandy soil: swamps, thickets, riverbeds, sand prairies, and disturbed areas such as fields, meadows, clearings, recent barns, and cultivated ground.	Unlikely, habitat does not occur in the project area.
Balsam Poplar *Populus balsamifera*	SE	Open, rich, low woods, cool, seasonally wet soils, bog margins in boreal forests, aspen parklands, montane streamsides, rocky slopes, gallery forests within tundra.	Unlikely, habitat does not occur in the project area.
Grass-leaved Pondweed Potamogeton gramineus	ST	Ponds, lakes, streams, and rivers.	Unlikely, habitat does not occur in the project area.

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Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Fern Pondweed *Potamogeton robbinsii*	SE	Shallow to deep water of ponds, lakes, and slow-flowing rivers.	Unlikely, habitat does not occur in the project area.
Beaked Rush *Rhynchospora alba*	ST	Acid, sphagnous, boggy, open sites, poor fens, often on floating mats or peaty interstices of rocky shores.	Unlikely, habitat does not occur in the project area.
Purple-flowering Raspberry *Rubus odoratus*	SE	Moist, shady places; woodland edges.	Unlikely, habitat does not occur in the project area.
Dwarf Raspberry *Rubus pubescens*	ST	Rich, moist mixed woodland and boreal forests, bog hummocks, thickets, and stream margins.	Unlikely, habitat does not occur in the project area.
Bristly Blackberry *Rubus schneideri*	ST	Wet, open habitats; often occurs on sand prairies or shrub prairies.	Unlikely, habitat does not occur in the project area.
Bulrush *Scirpus hattorianus*	SE	Moist meadows, marshes, and ditches.	Unlikely, habitat does not occur in the project area.
Royal Catchfly *Silene regia*	SE	Dry, mesic barrens and prairies.	Unlikely, habitat does not occur in the project area.
Mountain Blue-eyed Grass *Sisyrinchium montanum*	SE	Moist, sandy meadows and open woods.	Unlikely, habitat does not occur in the project area.
Green-fruited Burreed *Sparganium emersum*	SE	Still to flowing eutrophic and mesotrophic, circumneutral to somewhat alkaline waters.	Unlikely, habitat does not occur in the project area.
Yellow-lipped Ladies' Tresses *Spiranthes lucida*	SE	Rocky and sandy riverbanks, calcareous seeps, fens.	Unlikely, habitat does not occur in the project area.
Great Chickweed *Stellaria pubera*	SE	Rich deciduous woods, alluvial bottomlands.	Unlikely, habitat does not occur in the project area.
Lakeside Daisy *Tetraneuris herbacea*	SE	Alvars (limestone flats), openings in woods.	Unlikely, habitat does not occur in the project area.
False Asphodel *Tofieldia glutinosa*	ST	Open, calcareous fens and sedge meadows.	Unlikely, habitat does not occur in the project area.
Ear-leafed Foxglove *Tomanthera auriculata*	ST	Disturbed prairies and savannas, thickets containing grasses and occasional shrubs, woodland borders, abandoned fields.	Unlikely, habitat does not occur in the project area.

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Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Star-flower *Trientalis borealis*	SE	Moist to wet coniferous forest, open heath lands, mature northern hardwood forests.	Unlikely, habitat does not occur in the project area.
Slender Bog Arrow Grass *Triglochin palustris*	ST	Coastal and mountain marsh areas and moist alkaline meadows.	Unlikely, habitat does not occur in the project area.
Nodding Trillium *Trillium cernuum*	SE	Rich, mostly deciduous forest southward, mixed deciduous-coniferous forests, swamps, moist coniferous forests northward.	Unlikely, habitat does not occur in the project area.
Flat-leaved Bladderwort *Utricularia intermedia*	ST	Shallow ponds, slow-moving streams, and wet sedge or rush meadows.	Unlikely, habitat does not occur in the project area.
Small Bladderwort *Utricularia minor*	SE	Shallow waters or sometimes emergent on the wet margins of pools.	Unlikely, habitat does not occur in the project area.
Large Cranberry *Vaccinium macrocarpon*	SE	Bogs, swamps, mires, wet shores and headlands.	Unlikely, habitat does not occur in the project area.
Small Cranberry *Vaccinium oxycoccos*	SE	Half buried in sphagnum hummocks in bogs, fens, muskeg, arctic-alpine tundra.	Unlikely, habitat does not occur in the project area.
Marsh Speedwell *Veronica scutellata*	ST	Marshes, wet meadows, low areas along springs, low muddy areas along ponds, and swamps.	Unlikely, habitat does not occur in the project area.
Hairy White Violet *Viola blanda*	SE	Dry to very moist woods, thickets, clearings, forested fens and mesic forests on river bluffs.	Unlikely, habitat does not occur in the project area. Field survey did not detect.
Canada Violet *Viola canadensis*	SE	Moist, open, wooded areas.	Unlikely, habitat does not occur in the project area.

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Cook County, Illinois Federal- and State-Listed Species			
Species	Status	Habitat Requirements	Likelihood of Occurrence
Dog Violet *Viola conspersa*	ST	Moist woodlands, meadows.	Unlikely, habitat does not occur in the project area.

Sources
Species lists from
USFWS, Midwest Region, Federally Endangered, Threatened, Proposed, and Candidate Species, revised March 2012, Accessed at:
http://www.fws.gov/midwest/endangered/lists/illinois-cty.html
Illinois Natural Heritage Database, Threatened and Endangered Species by County as of September 12, 2011, Accessed at:
http://www.dnr.illinois.gov/ESPB/Documents/ETListCounty2011.pdf
Species Accounts from:
Herkert and Ebinger 2002, IDNR 2012, Minnesota Department of Natural Resources 2012, NatureServe Explorer 2012, Northern Ontario Plant Database 2012, Nyboer and Ebinger 2004, Robert W. Freckmann Herbarium 2012, USFWS 2012
* Birds receive additional federal protection through the Migratory Bird Treaty Act (excludes house sparrows, rock pigeons, European starlings) and the Bald and Golden Eagle Protection Act.

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Peregrine falcons are large falcons that are specialized for capturing smaller birds in the air. They typically nest on cliff ledges and in urban areas they have been found nesting on ledges of tall buildings and high bridges. The EcoCAT database returned several records for peregrine falcons within the sections/townships/ranges that encompass the project area. There are no known nesting pairs within the API. Tall buildings that would be likely to be attractive to nesting falcons do not appear to occur within the API. Falcons could be expected to forage for small birds and pigeons throughout the project area. They would be found flying high above the project area and perched on buildings and other structures within the project area. Although peregrine falcons are migratory, falcons have been observed in the Chicago area in the winter in recent years. With the exception of the 120th Street yard and shop site, the project area is characterized by dense residential, multifamily, and commercial uses that contain a wide variety of structures and activity levels. There is no part of the API that would be expected to provide unique or particularly rich foraging habitat for peregrine falcons. However, the semi-natural habitats in the vicinity of the 120th Street yard and shop site, and large parks and open spaces (such as large cemeteries) might be expected to provide slightly greater foraging opportunities for falcons. In addition, the API represents a small proportion of a falcon's foraging territory.

Section 5
Impacts and Mitigations

The BRT Alternative, UPRR Rail Alternative, and Halsted Rail Alternative would all have the potential to adversely affect vegetation and wildlife habitat during construction; however, with the implementation of the proposed mitigation measures, potential impacts would be less than adverse. Operation of the Red Line following construction of any of the alternatives would have no measurable impact on listed species.

Development of the BRT Alternative, UPRR Rail Alternative, or Halsted Rail Alternative in combination with related renovation, new construction, and transportation projects identified in the vicinity of the proposed project would not contribute to substantial cumulative impacts on listed species.

5.1 No Build Alternative

The No Build Alternative represents existing conditions for biological resources in the project area.

5.1.1 Permanent Impacts and Mitigations - No Build Alternative

There would be no permanent impacts anticipated on biological resources as a result of the No Build Alternative.

5.1.2 Construction Impacts and Mitigations - No Build Alternative

There would be no construction impacts anticipated on biological resources as a result of the No Build Alternative.

5.2 Bus Rapid Transit Alternative

The BRT Alternative API has existing bus service, and there would be minimal change in activity levels.

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

There would be some loss of vegetation at the 130th Street park & ride lot. However, this area is isolated from other habitats by 130th Street and the Metropolitan Water Reclamation District treatment plant. The area has some trees, but they do not appear to be mature. The area would provide minimal potential for migratory bird use. Therefore, with compliance with local tree protection ordinances, potential impacts would not be adverse. After mitigation, there would be no measurable impacts on biological resources remaining.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

A small number of trees would likely be removed as a result of construction activities under the BRT Alternative. Most of the removal would likely occur at the park & ride facilities.

Local tree protection ordinances address the values that trees provide to the human environment. Removal of trees may have adverse impacts on the human environment as well as wildlife habitat. Compliance with local tree protection ordinances would result in less than adverse impacts on the human environment from tree removal. Additional mitigation measures may be required to reduce potential impacts on wildlife habitat.

During project permitting, a detailed tree inventory would need to be prepared for each work zone. Compliance with local tree protection ordinances would be required to address potential impacts on trees.

If construction occurs at night, then the necessary lighting would generate a temporary adverse impact on wildlife. Throughout much of the corridor, there is considerable night lighting close to the proposed alignments. Light impacts would not be expected to affect birds during the spring or fall migration because migrating birds would experience greater light impacts from the surrounding urban areas. With the implementation of mitigation measures to avoid impacts on nesting migratory birds (described below), potential light impacts during construction would not be adverse.

In summary, construction impacts under the BRT Alternative would include potential adverse impacts on the following vegetation and wildlife habitat resources:

- The urban tree inventory, due to tree removal. This impact would be reduced to a less than adverse level by compliance with local tree protection regulations.
- Migratory birds wherever tree clearing occurs. This impact would be reduced to a less than adverse level by the implementation of mitigation measures.

Mitigation measures would be required for compliance with the MBTA, with local tree protection ordinances, and to reduce potential impacts on wildlife habitat. Bird species that may utilize trees that could be removed or disturbed during construction could be affected. Potential mitigation measures that would reduce adverse impacts would include the following:

- Tree removal would be timed as much as possible to occur outside the migratory bird nesting season, which occurs generally from April 1–September 15 and as early as March 1 for some species.
- If construction must occur during the nesting season, two biological surveys would be conducted: one 15 days prior and a second 72 hours prior to the construction that would remove or disturb suitable nesting habitat. The surveys would be performed by a biologist

with experience conducting breeding bird surveys. The biologist would prepare survey reports documenting the presence or absence of any protected bird in the habitat to be removed and any other such habitat within 300 feet of the construction work area. If a protected bird is found, surveys would be continued in order to locate any nests. If an active nest is located, construction within 300 feet of the nest would be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.

- Avoidance measures would be incorporated into the design of the project during preliminary engineering where feasible. However, if construction of the project requires removal of a protected tree, a permit would be required in accordance with applicable local codes and ordinances of the city in which the affected tree is located. Tree removal permits may require replanting of protected trees within the project area or at another location to mitigate for the removal of these trees. Replanting would be done according to the ratios required by tree removal permits and in a size that is appropriate for the species and setting as determined by an arborist. In addition, planted trees would be maintained such that ninety percent are in good condition after six months and irrigation would be carried out until the tree is established.

After mitigation, there would be no measurable impacts on biological resources remaining.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1.1 Segment UA (Vegetation Segments UA-1 to UA-3)

Vegetation segments UA-1 to UA-3 from the 95th Street Terminal to approximately 119th Street are in areas with existing rail service and urban levels of activity. Although the number of trains through the corridor would increase under the UPRR Rail Alternative, the noise and lighting levels would not increase appreciably from the existing condition.

Of all the alternatives, the ROW Option would have the least impact on existing vegetation, primarily removing young trees from the I-57 median. However, this area is isolated from other habitats by the freeways. In addition, these trees do not appear to be mature. The area would provide minimal potential for migratory bird use. Therefore, with compliance with local tree protection ordinances, potential impacts would not be adverse.

In addition, the largest block of habitat between 110th and 111th Streets would be affected by the proposed park & ride. This area has multiple vegetation layers and relatively mature trees, providing a relatively good patch of habitat for urban adapted species. The area would be used by migratory birds. Mitigation measures would be implemented during construction to avoid potential impacts (Section 5.2.2). After mitigation, there would be no measurable impacts on biological resources remaining.

5.3.1.2 Segment UB (Vegetation Segments UB and Station Options)

While a relatively large amount of habitat would be affected in Vegetation Segment UB, the area is dominated by young cottonwood trees and invasive, non-native species and represents low quality habitat. It is fragmented and somewhat isolated by the surrounding industrial and transportation land uses. The area provides habitat for migratory birds and may be somewhat more valuable than other areas due to its proximity to designated natural areas near Lake Calumet and the Calumet River. However, this added value would only be useful to more mobile species such as birds that can overcome the industrial and land use barriers between the API and other more natural areas.

Operations in Vegetation Segment UB would further fragment the existing habitats and introduce new activity levels into the area. Because the forest cover is not mature, the vegetation is dominated by early successional and invasive, non-native species. Because the area is surrounded by heavy industrial and transportation land uses, the area likely only provides habitat for urban-adapted species. Therefore, the potential impacts would not likely be adverse.

The 130th Street station South and West option sites of the UPRR Rail Alternative are in areas with existing rail service and urban levels of activity.

After mitigation, there would be no measurable impacts on biological resources remaining.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.2.1 Segment UA (Vegetation Segments UA-1 to UA-3)

A small number of trees would likely be removed as a result of construction activities in Segments UA-1 to UA-3 of the ROW Option. Most of the removal would likely occur at the park & ride facilities, and in the median of the freeway just south of the 95th Street Terminal.

As described for the BRT Alternative, compliance with local tree protection ordinances would result in less than adverse impacts on the human environment from tree removal. Additional mitigation measures may be required to reduce potential impacts on wildlife habitat. As it would be for the BRT Alternative, a detailed tree inventory would need to be prepared for each work zone during project permitting.

Night construction would generate a temporary adverse impact on wildlife, as described for the BRT Alternative. With the implementation of mitigation measures to avoid impacts on nesting migratory birds, potential light impacts during construction would not be adverse (See Section 5.2.2).

In summary, construction impacts under the UPRR Rail Alternative would include potential adverse impacts on the following vegetation and wildlife habitat resources:

- The urban tree inventory, due to tree removal. This impact would be reduced to a less than adverse level by compliance with local tree protection regulations.

- Migratory birds wherever tree clearing occurs. This impact would be reduced to a less than adverse level by the implementation of mitigation measures.

Potential mitigation measures that would reduce adverse impacts are discussed in Section 5.2.2. After mitigation, there would be no measurable impacts on biological resources remaining.

5.3.2.2 Segment UB (Vegetation Segments UB and Station Options)

Trees would be removed as a result of construction activities in UPRR Rail Alternative Segment UB. Some additional trees and low quality habitat, dominated by non-native invasive species, would be affected in the South and West Station Option locations.

As described for the BRT Alternative, compliance with local tree protection ordinances would result in less than adverse impacts on the human environment from tree removal. Additional mitigation measures may be required to reduce potential impacts on wildlife habitat. As it would be for the BRT Alternative, a detailed tree inventory would need to be prepared for each work zone during project permitting.

Night construction would generate a temporary adverse impact on wildlife, as described for the BRT Alternative. With the implementation of mitigation measures to avoid impacts on nesting migratory birds, potential light impacts during construction would not be adverse (See Section 5.2.2).

In summary, construction impacts under the UPRR Rail Alternative would include potential adverse impacts on the following vegetation and wildlife habitat resources:

- The urban tree inventory, due to tree removal. This impact would be reduced to a less than adverse level by compliance with local tree protection regulations.

- Migratory birds wherever tree clearing occurs. This impact would be reduced to a less than adverse level by the implementation of mitigation measures.

Potential mitigation measures that would reduce adverse impacts are discussed in Section 5.2.2. After mitigation, there would be no measurable impacts on biological resources remaining.

5.3.3 120th Street Yard and Shop

5.3.3.1 Permanent Impacts and Mitigations

See Section 5.3.1.2.

5.3.3.2 Construction Impacts and Mitigations

See Section 5.3.2.2.

Potential mitigation measures that would reduce adverse impacts are discussed in Section 5.2.2.

5.4 Union Pacific Railroad Rail Alternative - East Option

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.1.1 Segment UA (Vegetation Segments UA-1 to UA-3)

See Section 5.3.1.1. Although the East Option would affect a larger amount of vegetation than the ROW Option, the potential impacts would be similar to those described in Section 5.3.1.

5.4.1.2 Segment UB (Vegetation Segments UB and Station Options)

See Section 5.3.1.2.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.2.1 Segment UA (Vegetation Segments UA-1 to UA-3)

See Section 5.3.2.1. Although the East Option would affect a larger amount of vegetation than the ROW Option, the potential impacts would be similar to those described in Section 5.3.2.1.

5.4.2.2 Segment UB (Vegetation Segments UB and Station Options)

See Section 5.3.2.2.

5.4.3 120th Street Yard and Shop

See Section 5.3.4.

5.5 Union Pacific Railroad Rail Alternative - West Option

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.1.1 Segment UA (Vegetation Segments UA-1 to UA-3)

See Section 5.3.1.1. Of the UPRR options, the West Option would affect the greatest amount of vegetation, including several patches with relatively diverse vegetation regenerating in abandoned industrial sites between 108th and 111th Streets. The potential impacts would be similar to those described in Section 5.3.1.1.

5.5.1.2 Segment UB (Vegetation Segments UB and Station Options)

See Section 5.3.1.2.

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.2.1 Segment UA (Vegetation Segments UA-1 to UA-3)

See Section 5.3.2.1.

5.5.2.2 Segment UB (Vegetation Segments UB and Station Options)

See Section 5.3.2.2.

5.5.3 120th Street Yard and Shop

See Section 5.3.4.

5.6 Halsted Rail Alternative

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

5.6.1.1 Segment HA (Vegetation Segments HA-1 to HA-3)

Halsted Street is currently developed with commercial land uses. The operation of an elevated rail line would have no impact on vegetation and wildlife habitats along this route.

5.6.1.2 Segment HB (Vegetation Segment HB)

Halsted Street is currently developed with commercial land uses. The operation of an elevated rail line would have no impact on vegetation and wildlife habitats along this route.

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

5.6.2.1 Segment HA (Vegetation Segments HA-1 to HA-3)

A number of trees would likely be removed as a result of construction activities under the Halsted Rail Alternative. Most of the removal would likely affect trees from the Halsted Street median and sidewalks.

Compliance with local tree protection ordinances would result in less than adverse impacts on the human environment from tree removal. Additional mitigation measures, such as the measures to protect migratory birds as described in Section 5.2.2, may be required to reduce potential impacts on wildlife habitat. As it would be for the BRT Alternative and UPRR Rail Alternative, a detailed tree inventory would need to be prepared for each work zone during project permitting.

Night construction would generate a temporary adverse impact on wildlife, as described for the BRT Alternative. With the implementation of mitigation measures to avoid impacts on nesting migratory birds, potential light impacts during construction would not be adverse (See Section 5.2.2).

In summary, construction impacts under the Halsted Rail Alternative would include potential adverse impacts on the following vegetation and wildlife habitat resources:

- The urban tree inventory, due to tree removal. This impact would be reduced to a less than adverse level by compliance with local tree protection regulations.
- Migratory birds wherever tree clearing occurs. This impact would be reduced to a less than adverse level by the implementation of mitigation measures.

Suitable habitat for listed plant species does not appear to be present in the API.

Potential mitigation measures that would reduce adverse impacts are discussed in Section 5.2.2. After mitigation, there would be no measurable impacts on biological resources remaining.

5.6.2.2 Segment HB (Vegetation Segment HB)

See Section 5.6.2.1.

5.6.3 119th Street Yard and Shop

5.6.3.1 Permanent Impacts and Mitigations

There are a few relatively small patches of regenerating vegetation within the proposed yard and shop area that would be used by migratory birds. Mitigation measures would be implemented during construction to avoid potential impacts.

5.6.3.2 Construction Impacts and Mitigations

See Section 5.6.2.

Section 6
Impacts Remaining After Mitigation

6.1 No Build Alternative

After mitigation, no measurable impacts on biological resources would remain.

6.2 Bus Rapid Transit Alternative

After mitigation, no measurable impacts on biological resources would remain.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

After mitigation, no measurable impacts on biological resources would remain.

6.4 Union Pacific Railroad Rail Alternative - East Option

After mitigation, no measurable impacts on biological resources would remain.

6.5 Union Pacific Railroad Rail Alternative - West Option

After mitigation, no measurable impacts on biological resources would remain.

6.6 Halsted Rail Alternative

After mitigation, no measurable impacts on biological resources would remain.

Section 7
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Appendix A
EcoCAT Report

EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
Contact: Claudia Lea
Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304095
Date: 09/12/2012

Project: CTA Red Line Extension Project
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 3	37N, 14E, 4
37N, 14E, 9	37N, 14E, 10
37N, 14E, 15	37N, 14E, 22

IL Department of Natural Resources Contact

Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
Contact: Claudia Lea
Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304098
Date: 09/12/2012

Project: CTA Red Line Extension
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 3
37N, 14E, 4
37N, 14E, 8
37N, 14E, 9
37N, 14E, 10

IL Department of Natural Resources Contact

Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

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EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
Contact: Claudia Lea
Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304099
Date: 09/12/2012

Project: CTA Red Line Extension
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Riverdale Marsh INAI Site
Black-Crowned Night Heron *(Nycticorax nycticorax)*
Little Blue Heron *(Egretta caerulea)*
Yellow-Crowned Night Heron *(Nyctanassa violacea)*
Yellow-Headed Blackbird *(Xanthocephalus xanthocephalus)*

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 8	37N, 14E, 9
37N, 14E, 16	37N, 14E, 17
37N, 14E, 20	37N, 14E, 21
37N, 14E, 22	37N, 14E, 28
37N, 14E, 29	37N, 14E, 32
37N, 14E, 33	

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EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
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Chicago, IL 60606

IDNR Project #: 1304096
Date: 09/12/2012

Project: CTA Red Line Extension
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Lake Calumet INAI Site
Blanding'S Turtle *(Emydoidea blandingii)*
Common Moorhen *(Gallinula chloropus)*
Little Blue Heron *(Egretta caerulea)*
Peregrine Falcon *(Falco peregrinus)*
Yellow-Crowned Night Heron *(Nyctanassa violacea)*
Yellow-Headed Blackbird *(Xanthocephalus xanthocephalus)*

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 15	37N, 14E, 22
37N, 14E, 26	37N, 14E, 27
37N, 14E, 28	37N, 14E, 33
37N, 14E, 34	37N, 14E, 35

IL Department of Natural Resources Contact
Impact Assessment Section
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Division of Ecosystems & Environment

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EcoCAT
Ecological Compliance Assessment Tool

Applicant: CDM Smith
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Address: 125 S Wacker Drive
Suite 600
Chicago, IL 60606

IDNR Project #: 1304295
Date: 09/18/2012

Project: CTA Red Line Extension Project
Address: 95th Street Terminal, Chicago

Description: The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the 95th Street Station to the vicinity of 130th Street.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Riverdale Marsh INAI Site
Black-Crowned Night Heron *(Nycticorax nycticorax)*

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Cook

Township, Range, Section:

37N, 14E, 28 37N, 14E, 29
37N, 14E, 32 37N, 14E, 33

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Appendix B
Monk Parakeet Photographs

Cell phone tower at the northwest corner of 119th Street and Emerald Avenue with monk parakeet nests

Appendix C
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

The refined East and West Option alignments would have no additional or different impacts from those described in the technical memoranda for the following resource areas: construction, transportation, land use and economic development, historic and cultural resources, safety and security, hazardous materials, indirect and cumulative, air quality, floodplains, vegetation and wildlife habitat, threatened and endangered species, and geology and soils.

Appendix W

Energy Technical Memorandum

- Final EIS Addendum W, Energy Technical Memorandum, July 2022

Chicago Red Line Extension Project

Energy

Final EIS Addendum W

July 2022

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:
TranSystems
222 S. Riverside Plaza, Suite 610
Chicago, IL 60606

Table of Contents

Section 1 - Summary 1-1
Section 2 - Project Description and Background 2-1
Section 3 - Methods for Impact Evaluation 3-1
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-1
3.4 Methods 3-2
Section 4 - Affected Environment 4-1
4.1 Existing Energy Resources 4-1
4.2 Planning and Policy Framework 4-1
Section 5 - Impacts and Mitigation 5-1
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative – Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited 7-1

Figures

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4

Tables

Table 1-1: Energy Impact Summary 1-1

Abbreviations

API	area of potential impact
BTU	British thermal unit
CHA	Chicago Housing Authority
CMAP	Chicago Metropolitan Agency for Planning
CN/MED	Canadian National/Metra Electric District
ComED	Commonwealth Edison Company
Conrail	Consolidated Rail Corporation
CTA	Chicago Transit Authority
EA	Environmental Assessment
EIS	Environmental Impact Statement
FTA	Federal Transit Administration
GHGs	greenhouse gases
IHB	Indiana Harbor Belt Railroad
NS	Norfolk Southern
RLE	Red Line Extension
RTP	Regional Transportation Plan
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad
VMT	vehicle miles traveled

Section 1 - Summary

This Energy Addendum updates the analyses of energy consumption under the No Build Alternative and the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative. The Energy Addendum also compares the energy impacts and benefits under the Preferred Alignment to the East and West Options of the UPRR Rail Alternative in the Draft Environmental Impact Statement (EIS). For the Preferred Alignment, this Energy Addendum considers long-term energy consumption from operation of Red Line Extension (RLE) trains and passenger stations and from project-related vehicles. Short-term energy use includes production of materials used in construction and the operation of construction equipment. The energy sources for operation of the RLE Project would primarily be electricity for Red Line trains and passenger stations, and gasoline and diesel fuel for project-related vehicles.

The energy impacts under the Preferred Alignment are summarized in **Table 1-1** below. Consistent with the findings of the Draft EIS and **Appendix W**, there would be no adverse impacts on energy as a result of either the No Build Alternative or the Preferred Alignment.

Table 1-1: Energy Impact Summary

Alternative	Permanent Impacts		Construction Impacts
	Regional Vehicles	RLE Trains and Station	
No Build Alternative	No Impacts	No impacts	No impacts
Preferred Alignment	Beneficial, from passenger diversions to the Red Line	No adverse impacts	No adverse impacts

The Draft EIS evaluated the long-term energy consumption from Red Line train propulsion and operation of four new stations. With the relocation of the 130th Street station, the Preferred Alignment length increased from 5.3 to 5.6 miles. Extrapolating for the additional 0.3 miles of tracks to the relocated 130th Street station, energy consumption for train propulsion under the Preferred Alignment would be approximately 6 percent higher than the East and West Options. Energy

consumption at the four new stations under the Preferred Alignment would be the same as the East and West Options. The long-term energy consumption for the operation of Red Line trains and four new stations under the Preferred Alignment would increase compared with the No Build Alternative.

The Draft EIS also evaluated the long-term energy consumption from project-related vehicles based on regional vehicle miles traveled (VMT). VMT are the total number of miles driven by all vehicles in the area of potential impact (API) and would slightly decrease under the RLE Project because of the diversion of passengers to the Red Line. The Draft EIS determined that the East and West Options would result in lower vehicular energy consumption as compared with the No Build Alternative. The energy consumption from regional VMTs under the Preferred Alignment would be the same as those evaluated for the East and West Options. The Preferred Alignment would reduce VMTs; and therefore it would slightly lower energy consumption from vehicles as compared with the No Build Alternative.

The Draft EIS determined the total long-term energy impacts for the RLE Project by adding the energy consumption from operation of Red Line trains and stations, and then subtracting the energy benefit from reduced VMTs resulting from passenger diversions to the Red Line. The East and West Options would require slightly more long-term energy than the No Build Alternative. The energy needed for operations would be far lower than the existing surplus generating capacity for the region. The additional demand for the RLE Project would be less than 0.02 percent of the surplus generating capacity in the regional transmission territory. The Draft EIS concluded that the operation of the UPRR Rail Alternative would not have an adverse impact on regional energy sources.

Under the Preferred Alignment, long-term energy consumption would be similar to the East and West Options. The Preferred Alignment would require slightly more long-term energy use to operate Red Line trains, because the Preferred Alignment length would increase from 5.3 to 5.6 miles to the relocated 130th Street station. The additional energy demand for operation of the Preferred Alignment would be well below the available energy supply, and therefore the Preferred Alignment would not have an adverse impact on regional energy sources.

Construction of the RLE Project would use energy for the production of the guideway and station components (including steel, cement, copper, and glass), and for the operation of construction equipment. Because construction energy use would be a small fraction of energy use in the region, the Draft EIS determined that construction of the RLE Project would not have an adverse impact

on regional energy consumption and no construction mitigation was required. Under the Preferred Alignment, short-term construction energy consumption would be similar as the East and West Options discussed in the Draft EIS. No adverse energy impacts during construction would be anticipated under the Preferred Alignment, and no additional construction mitigation would be required.

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic

Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station

would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

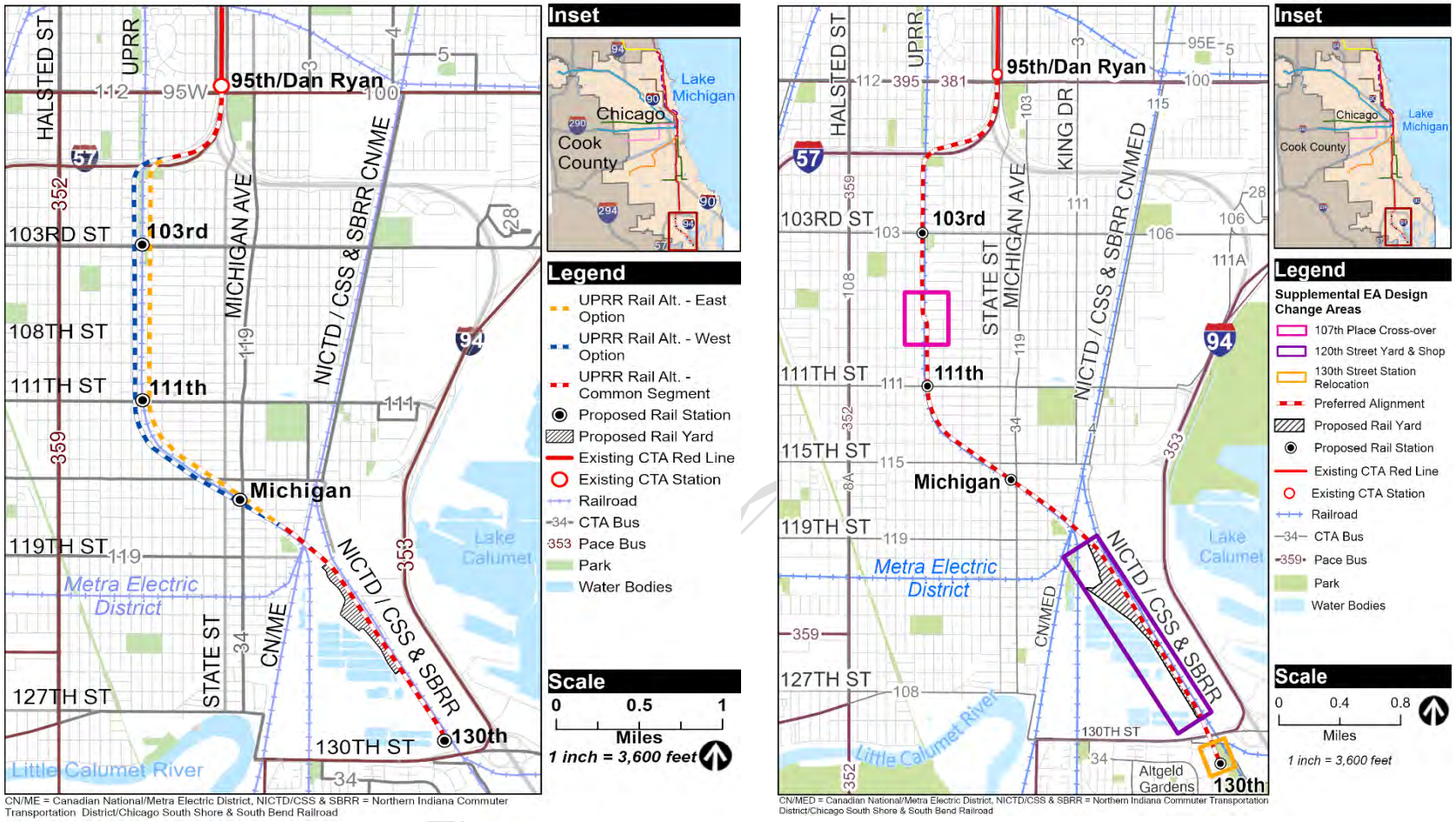

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix W** for the Draft EIS analyses have been carried forward to evaluate the potential energy impacts and mitigation. This section documents the methodology for evaluating this resource, consistency with the methodology used in the Draft EIS and **Appendix W**, and any methodological changes.

3.1 Regulatory Framework

There are no changes to the applicable federal or state regulations referenced in **Appendix W** of the Draft EIS.

3.2 Impact Analysis Thresholds

The thresholds for the analyses of energy impacts for this Energy Addendum are the same as the impact analysis thresholds in the Draft EIS and **Appendix W**. The Draft EIS defined an impact to be adverse if it would result in a permanent increase in annual energy or fuel usage that could not be accommodated by the regional (Cook County) supply.

3.3 Area of Potential Impact

The API for this Energy Addendum is consistent with the API used in the Draft EIS and **Appendix W.** The API for the energy analysis in the Draft EIS was on the north by 91st Street, on the south by a varying boundary that includes Jackson Street/134th Street, on the east by a varying boundary that includes Martin Luther King Drive, Michigan Avenue, and I-94, and on the west by a varying boundary that includes Halsted Avenue, Vincennes Avenue, and I-57.

While the RLE Project would occur within the API, both long-term (vehicular and transit operations) and short-term (construction) energy use associated with the project would extend well outside the API. Changes in vehicular energy use would be regional because a portion of travelers would change modes from automobile to transit for trips between the API and downtown Chicago. Energy generation for transit operations would be dispersed over a wide region, and electric power generation for rail transit would take place anywhere within a 13-state region.

3.4 Methods

The analysis of energy impacts of the Preferred Alignment was performed using the same methods as were documented in the Draft EIS consistent with the following analyses of **Appendix W**.

The Draft EIS evaluated the long-term energy consumption from project-related vehicles by comparing the energy consumption based on regional VMTs for the alternatives. Regional VMTs under the Preferred Alignment would be the same as those evaluated for the East and West Options. The 130th Street station relocation, 120th Street yard and shop refinement, and 107th Place cross-over under the Preferred Alignment would not change the VMT from the VMT evaluated in the Draft EIS.

The Draft EIS evaluated the long-term energy consumption during operation of the RLE trains and the four new passenger stations. This Energy Addendum compares the energy required for propulsion of RLE trains under the Preferred Alignment with the energy demand for the UPRR Alternative in the Draft EIS. With the relocation of the 130th Street station, the RLE Project length increased from 5.3 to 5.6 miles. Extrapolating for the additional 0.3 miles of tracks to the relocated 130th Street station, energy consumption for train propulsion under the Preferred Alignment would be approximately 6 percent higher than the East and West Options in the Draft EIS. The energy consumption at the four new stations under the Preferred Alignment would be the same for the East and West Options.

Section 4 - Affected Environment

This section describes any updates to the existing energy conditions near the RLE Project since the publication of the Draft EIS. This section documents updates to the baseline data, as well as any changes to energy planning and policy framework in the communities and jurisdictions affected by the Preferred Alignment.

4.1 Existing Energy Resources

The existing energy resources for this Energy Addendum are the same as the existing energy resources in the Draft EIS and **Appendix W**. CTA receives its power from the Commonwealth Edison Company (ComEd), which is purchased primarily from alternative retail electricity suppliers.

The Draft EIS concluded that ComEd has ample surplus energy for the operation of the RLE Project (as **Appendix W** describes, the additional demand from the RLE Project would be less than 0.02 percent of the surplus generating capacity in the regional transmission territory).

4.2 Planning and Policy Framework

CTA has been implementing measures to improve energy efficiency at rail stations, offices, and maintenance facilities by incorporating sustainable features in new buildings and retrofitting existing buildings to conserve energy. Energy efficiency features at other CTA facilities include more energy-efficient lighting such as LED lighting, solar panels, and green roofs. Green roofs conserve energy, reduce stormwater runoff, and reduce urban heat island effects. Measures to improve energy efficiency also reduce the emissions of greenhouse gases (GHGs) and other air pollutants.

CTA is a partner in the *Chicago Climate Action Plan* (City of Chicago 2008). The City of Chicago has issued the *Chicago Climate Action Plan* to reduce carbon pollution and prepare for a changing climate. Major strategies of the *Chicago Climate Action Plan* include reducing energy use in buildings, investing in transit improvements, and promoting transit-orientated development.

The Draft EIS identified that the RLE Project was included in the Chicago Metropolitan Agency for Planning's (CMAP) *GO TO 2040*, which was the regional transportation plan (RTP) for the Chicago region. Since publication of the Draft EIS, CMAP has adopted *ON TO 2050*, as the RTP for the region (CMAP 2018b). The Preferred Alignment is included in *ON TO 2050*, as it was in *GO TO 2040*. CMAP in 2018 adopted the *FFY 2019-2024 Transportation Improvement Program* (CMAP 2018a), which also includes the RLE Project.

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to energy consumption and resources.

- Permanent impacts relate to system operations after the project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the project combined with other past, present, or near future projects within the API.

This section also documents the new or revised mitigation measures for identified project impacts, where applicable. If there is no change in the mitigation, this section indicates where there is no change when compared to the East and West Options evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current CMAP Transportation Improvement Program (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Appendix W** in the Draft EIS, there would be no impacts on energy resources under the No Build Alternative. The No Build Alternative would not result in energy impacts related to construction activities. The No Build Alternative would have no change in Red Line ridership resulting from the RLE Project, and therefore power consumption for Red Line trains and stations would not increase.

The No Build Alternative would not be expected to change the regional VMTs from diversion of motor vehicles to trains. However, some growth in VMT for the project corridor that would be unrelated to the project would still take place. The increases in regional VMT would lead to increases in energy consumption by vehicles under the No Build Alternative. The Draft EIS

calculated the energy consumption from the total regional VMT under the No Build Alternative to serve as a baseline for comparison to the RLE Project.

Regional VMTs under the No Build Alternative would be the same as those evaluated in the Draft EIS. Energy impacts under the No Build Alternative would not be adverse, and no mitigation is required.

5.2 Union Pacific Railroad Alternative – Preferred Alignment

The energy analysis examines two components of energy demand: long-term energy consumption and short-term energy consumption. Long-term energy consumption is ongoing energy use that continues year after year. The analyses of long-term energy consumption included regional transportation-related energy consumption based on VMT and on transit operations. Transit operations include energy for propulsion of RLE trains and operation of RLE stations and other CTA facilities. Short-term energy use includes production of materials used in construction and the operation of construction equipment.

The Preferred Alignment would be consistent with the *Chicago Climate Action Plan* (City of Chicago 2008). Major strategies of the *Chicago Climate Action Plan* are to reduce energy use in buildings, invest in transit improvements, and promote transit-orientated development.

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

5.2.1.1 Regional Vehicular Energy Consumption

The Draft EIS evaluated the long-term energy consumption from project-related vehicles. Changes in vehicular use under the RLE Project would be regional because a portion of travelers would change modes from automobile to transit for trips between the API and downtown Chicago. Energy consumption from motor vehicles under the RLE Project is based on regional VMT. The annual VMT are the total number of miles driven by all vehicles within a year in the API. The RLE Project would cause a small decrease in annual VMT compared with the No Build Alternative due to vehicular trip distance changes (people would be nearer to transit stations) and mode changes (people would change their travel mode from personal vehicles to transit). Energy consumption by vehicles is primarily in the form of gasoline and diesel fuel.

The Draft EIS determined that the East and West Options would result in lower regional VMT than the No Build Alternative as a result of passenger diversions to the Red Line. Because it would reduce VMTs, the UPRR Alternative would result in lower vehicular energy consumption as compared with

the No Build Alternative (**Appendix W**). The energy consumption from vehicles would be the same for the East and West Options.

Regional VMTs under the Preferred Alignment would be the same as those evaluated for the East and West Options in the Draft EIS. The 130th Street station relocation, 120th Street yard and shop refinement, and 107th Place cross-over under the Preferred Alignment would not change the VMT from the VMT discussed in the Draft EIS. Because regional VMT would be the same, the energy consumption for motor vehicles under the Preferred Alignment would be the same as those evaluated for the East and West Options in the Draft EIS. The Preferred Alignment would reduce VMTs, and therefore it would slightly lower energy consumption from vehicles as compared with the No Build Alternative.

5.2.1.2 Red Line Passenger Stations

The RLE Project would include four new stations at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The Draft EIS evaluated the long-term energy consumption during operation of the new passenger stations. Station energy was calculated based on similar CTA Red Line elevated stations. The Draft EIS calculated that the four stations associated with the UPRR Alternative would use approximately 6.8 billion British thermal units (BTU) annually, which would be an increase over the No Build Alternative (**Appendix W**). The energy consumption at the stations would be the same for the East and West Options. The primary source of energy for the stations would be electricity.

Under the Preferred Alignment, the 130th Street station relocation would not change the energy consumption at stations as discussed in the Draft EIS. Energy consumption at the four new stations under the Preferred Alignment would increase compared with the No Build Alternative.

The RLE Project also would include a new maintenance yard and shop and six new and upgraded substations. Substations are buildings along the alignment that house equipment to regulate the flow of electricity to the third rail, which supplies power to the trains. Long-term energy consumption at the new substations and yard under the Preferred Alignment would be the same as under the East and West Options. The 120th Street yard and shop refinement under the Preferred Alignment would not change long-term energy consumption.

5.2.1.3 Red Line Train Propulsion

The primary source of energy for operation of the RLE trains would be electricity. The Draft EIS evaluated the long-term energy consumption from train propulsion. For the rail alternatives, operational energy consumption was calculated from the total additional annual railcar miles and the average kilowatt-hour per revenue car mile provided by CTA. The Draft EIS calculated that operation of the RLE trains under the UPRR Alternative would use approximately 128 billion BTU annually, which would be an increase over the No Build Alternative (**Appendix W**). The energy consumption by RLE trains would be the same for the East and West Options.

The Preferred Alignment would result in similar long-term energy consumption for the operation of RLE trains. With the relocation of the 130th Street station, the RLE Project length would increase from 5.3 to 5.6 miles. Extrapolating for the additional 0.3 miles of tracks to the relocated 130th Street station, energy consumption for train propulsion under the Preferred Alignment would be approximately 6 percent higher than the East and West Options in the Draft EIS. Similar to the UPRR Alternative, energy consumption for RLE trains under the Preferred Alignment would increase compared with the No Build Alternative.

5.2.1.4 RLE Project Energy Consumption

The Draft EIS determined the total long-term energy impacts for the RLE Project by adding the energy consumption from operation of RLE trains and stations and then subtracting the energy benefit from reduced VMT. The total long-term energy consumption for the UPRR Alternative was then compared with the available energy supply. The Draft EIS defined an adverse impact as a permanent increase in annual energy or fuel usage consumption that could not be accommodated by the regional (Cook County) energy supply.

The Draft EIS determined that the UPRR Alternative would require slightly more long-term energy than the No Build Alternative. The energy needed for operation would be far less than the existing surplus generating capacity for the region. The additional demand from the UPRR Alternative would be less than 0.02 percent of the surplus generating capacity in the regional transmission territory (**Appendix W**). The Draft EIS concluded that the operation of the UPRR Alternative would not have an adverse impact on regional energy sources.

Under the Preferred Alignment, long-term energy consumption would be similar to the East and West Options of the UPRR Alternative. The Preferred Alignment would require slightly more long-term energy use to operate RLE trains, because the RLE Project length would increase from 5.3 to 5.6 miles, due to the relocation of the 130th Street station. The additional energy demand for

operation of the Preferred Alignment would be well below the available energy supply, and therefore, the Preferred Alignment would not have an adverse impact on regional energy sources.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

Energy would be required for construction of the RLE Project. Energy would be used for the production of the guideway and station components (including steel, cement, copper, and glass). Energy also would be used for the operation of construction equipment. Construction impacts would be temporary and would be spread out over the 1 year of construction staging and utility relocations and the 3- to 4-year construction phase of the RLE Project.

The one-time irreversible commitment of energy resources for construction of the UPRR Alternative would amount to less than 1.2 percent of the total annual of Cook County energy consumption (**Appendix W**). Because construction energy use would be a small fraction of energy use in the region, the Draft EIS determined that construction of the RLE Project would not have an impact on energy consumption in Cook County or the Chicago Metropolitan area. Construction energy impacts would not be adverse under the UPRR Alternative, and no mitigation during construction would be required.

Under the Preferred Alignment, short-term construction energy consumption would be similar to the East and West Options discussed in the Draft EIS. No adverse energy impacts during construction would be anticipated under the Preferred Alignment, and no construction mitigation would be required.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

Cumulative impacts include those from the RLE Project when combined with those of other past, present, and reasonably foreseeable projects. The cumulative energy impacts under the Preferred Alignment are the same as the UPRR Alternative as described in **Appendix W** of the Draft EIS.

The RLE Project, when combined with the existing Red Line train operations and other future CTA transit projects, would increase transit ridership and reduce vehicle trips. The cumulative impacts of reduced vehicle trips would result in a reduction of energy demand from vehicles and would be a beneficial impact.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on energy as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

Consistent with the findings of the Draft EIS, there would be no adverse impacts on regional energy resources during construction and operation of the Preferred Alignment.

Section 7 - References Cited

Chicago Metropolitan Agency for Planning (CMAP), 2018a. FFY 2019-2024 Transportation Improvement Program. Accessed at https://www.cmap.illinois.gov/programs/tip/tip-documentation. Accessed on July 30, 2021.

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Appendix W

Energy Technical Memorandum

- Draft EIS Appendix W, Energy Technical Memorandum, July 2015
  - Appendix A, 2014-2015 Red Line Extension Project Update

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Energy
Technical Memorandum

July 10, 2013
Updated July 28, 2015

Prepared for:
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Table of Contents

Section 1 Summary 1-1

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1

3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-2
3.3 Area of Potential Impact 3-2
3.4 Methods 3-5

Section 4 Affected Environment 4-1

Section 5 Impacts and Mitigations 5-1

5.1 No Build Alternative 5-2
5.2 Bus Rapid Transit Alternative 5-3
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-4
5.4 Union Pacific Railroad Rail Alternative - East Option 5-6
5.5 Union Pacific Railroad Rail Alternative - West Option 5-7
5.6 Halsted Rail Alternative 5-8
5.7 Cumulative Impacts 5-9

Section 6 Conclusions 6-1

Section 7 References Cited 7-1

Appendix

Appendix A: 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 3-1: Energy Area of Potential Impact 3-4

Tables

Table 1-1: Estimated Annual Long-Term Energy Use of Alternatives for Year 2030 1-2
Table 1-2: Estimated Short-Term Energy Use of Alternatives 1-2
Table 3-1: Energy Use Factors for Operations 3-6
Table 3-2: Energy Factors for Construction 3-2
Table 5-1: Estimated Difference in Long-Term Energy Use of Alternatives for Year 2030 (Billion BTU Annually) 5-2
Table 5-2: Estimated Short-Term Energy Use of Alternatives 5-2
Table 5-3: Estimated Energy Consumption from Construction Activities - Bus Rapid Transit Alternative 5-4
Table 5-4: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-5
Table 5-5: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - East Option 5-7
Table 5-6: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - West Option 5-8
Table 5-7: Estimated Energy Consumption from Construction Activities - Halsted Rail Alternative 5-9

Abbreviations

API	area of potential impact
BRT	Bus Rapid Transit
BTU	British thermal unit
CMAP	Chicago Metropolitan Agency for Planning
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act
PJM	PJM Interconnection
RLE	Red Line Extension
ROW	right-of-way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
UPRR	Union Pacific Railroad
USC	United States Code
VMT	vehicle miles traveled

Section 1
Summary

This technical memorandum presents the potential effects of the Red Line Extension (RLE) Project on transportation-related energy consumption including fossil fuels and electric energy. Energy usage is associated with construction and operation of the proposed project. Net energy demand is associated with changes in travel patterns and mode choice within the regional transportation network related to the project.

Two components of energy consumption were examined: long-term energy consumption and short-term energy consumption. Long-term energy consumption is ongoing energy use that continues year after year. Analysis of long-term energy consumption changes included regional transportation-related energy consumption based on vehicle miles traveled (VMT) and transit operations. Annual VMT is the total number of miles driven by all vehicles within a year in a defined a geographic area. Annual VMT is an output of the Chicago Metropolitan Agency for Planning (CMAP) Travel Demand Model. Transit operations include energy for vehicle propulsion and operation of stations. The second component, short-term energy use, includes construction impacts, which are temporary. Construction impacts include production of materials used in construction and the operation of construction equipment.

Energy impacts are determined by comparing the energy consumption of build alternatives versus the No Build Alternative for the horizon year of 2030. Table 1-1 presents a summary of the energy for long-term energy consumption. As Table 1-1 shows, the difference in projected energy use (regional transportation plus transit operations) between any of the build alternatives and the No Build Alternative would not be greater than the margin of error for regional modeling.

The projected annual transportation-related energy consumption in the region for the No Build Alternative is approximately 368 trillion British thermal units (BTU), based on output from the CMAP Regional Travel Model. The projected regional travel demand for each of the build alternatives is marginally smaller than for the No Build Alternative. The build alternatives would result in 11.4 to 19.6 million fewer annual VMT than with the No Build Alternative.

All of the build alternatives would require energy for operations. The net difference in energy use for any of the build alternatives would be less than +/- 0.02 percent, which is smaller than the margin of error for regional modeling. The difference in energy use between any of the alternatives and the No Build Alternative (368 trillion BTU for regional vehicular travel in 2030) would be negligible and would not have an impact on regional energy consumption.

Table 1-1: Estimated Annual Long-Term Energy Use of Alternatives for Year 2030

Alternative	Estimated Annual Energy Use - Trillion BTU
No Build	368.3
Bus Rapid Transit	368.3
UPRR Rail Options	368.3
Halsted Rail	368.3

Total long-term energy is the sum of energy for regional vehicular travel, transit operations, and station energy.

The total operational energy is rounded to four significant digits, which is appropriate for the confidence level in the regional travel demand modeling. To show differences in estimated operational energy, display of five to six significant digits would be required.

BTU = British thermal unit, UPRR = Union Pacific Railroad

Energy would be required for construction of any of the build alternatives. For the rail alternatives, energy would be used for the production of the guideway and station components (including steel, cement, copper, and glass). Energy would also be used for the operation of construction equipment. Energy use by construction equipment would be localized and temporary. Construction energy use for the rail alternatives would be relatively large, because the rail alternatives would involve construction of elevated structures and substantial elevated stations. Table 1-2 summarizes energy consumption for construction. Construction energy use for the Bus Rapid Transit (BRT) Alternative would be relatively small. The BRT Alternative would use existing at-grade streets; therefore, construction of elevated guideways would not be required. Stops for the BRT Alternative would be at grade and would occupy a smaller footprint than the stations in the rail alternatives.

Table 1-2: Estimated Short-Term Energy Use of Alternatives

Alternative	Construction Energy Use - Billion BTU
No Build	0
Bus Rapid Transit	91
UPRR Rail - ROW Option	6,130
UPRR Rail - East Option	6,110
UPRR Rail - West Option	6,120
Halsted Rail	6,650

Notes:
Energy use is rounded in this summary table
BTU = British thermal unit, UPRR = Union Pacific Railroad,
ROW = right-of-way

The one-time irreversible commitment of energy resources for construction would amount to less than 1.3 percent of the total annual energy consumption for Cook County, which is 530 trillion BTU (CNT Energy 2009). Construction of any alternative would not have an impact on energy consumption in the area of potential impact (API), Cook County, or the Chicago Metropolitan Area.

Updated July 28, 2015
In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix A of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix A supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- Union Pacific Railroad (UPRR) Rail Alternative
    - Right-of-Way (ROW) Option
    - East Option
    - West Option
- Halsted Rail Alternative

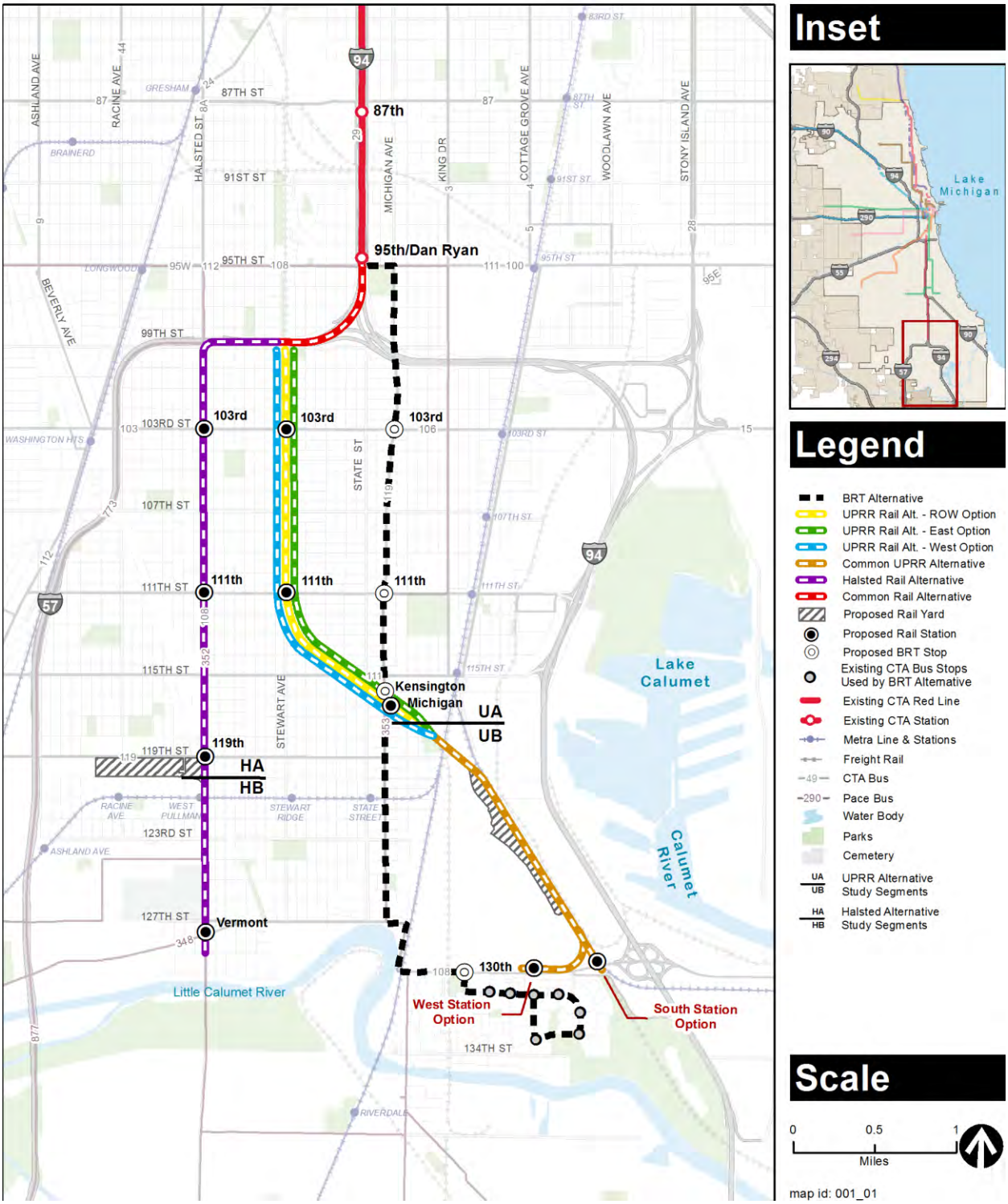

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the CMAP Fiscal Year 2010–2015 Transportation Improvement Program and the improvements to 95th Street Terminal. The Transportation Improvement Program projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

3.1 Regulatory Framework

3.1.1 Federal

The National Environmental Policy Act of 1969 (NEPA) requires that federal agencies consider environmental impacts before taking actions that could affect the human environment. As interpreted by the Council on Environmental Quality, NEPA requires that "reasonably foreseeable" impacts of a proposed action be considered in the decision making process. As defined by NEPA, the term "impacts" includes "aesthetic, historic, cultural, economic, social, or health" impacts. Energy use is one of the environmental elements typically assessed in NEPA documentation. Applicable federal regulation for the analysis of transit projects also includes the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Public Law 109-59, August 10, 2005. SAFETEA-LU focuses on reducing traffic congestion, increasing intermodal connectivity, and protecting the environment. SAFETEA-LU gives state and local transportation decision makers more flexibility over previous legislation for solving transportation problems in their communities (Federal Highway Administration 2005). The Federal Public Transportation Act of 2012, effective October 1, 2012, continues reference to NEPA and does not alter the regulatory framework regarding evaluation of alternatives with regard to energy.

Title 42 of the United States Code (USC) concerns public health and welfare and has 159 chapters. The following sections of Title 42 of the USC focus on energy conservation, reduced reliance on foreign energy sources (mainly petroleum), use of alternative fuels, and increased efficiency in energy use:

- Providing for improved energy efficiency in motor vehicles (42 USC 6201)
- Increasing economic efficiency by meeting future needs for energy services at the lowest cost, considering technologies that improve the efficiency of energy end use, while conserving energy supplies such as oil (42 USC 13401)
- Reducing air, water, and other environmental impacts (including emissions of greenhouse gases) related to energy production, distribution, transportation, and use by development of an environmentally sustainable energy system (42 USC 13401)
- Reducing demand for oil in the transportation sector for all motor vehicles (42 USC 13431)

The Energy Policy Act of 2005 was amended and now supersedes several previous energy policy acts, including the National Energy Act of 1978 (PL 95-619), the Energy Policy and Conservation Act Amendments of 1985 (PL 99-58), and the Energy Policy Act of 1992 (PL 102-486). The Energy

Policy Act of 2005 includes transportation-related provisions that reduce reliance on foreign energy sources (mainly petroleum) and increase use of recovered mineral content in federally funded projects involving procurement of cement or concrete.

3.1.2 State

The Illinois Sustainable Energy Plan (State of Illinois 2005) includes both a Renewable Energy Portfolio Standard and an Energy Efficiency Portfolio Standard for energy production and consumption in Illinois. This plan recommends an increase in percent of renewable energy in the portfolio of electric energy suppliers. There is no guidance in the plan for energy impact assessment.

3.1.3 Local

The City of Chicago's Energy Conservation Code was adopted by the City Council on November 5, 2008. The code is underpinned by the American Society of Heating, Refrigerating and Air-Conditioning Engineers/Illuminating Engineering Society of North America 90.1-2004. The code is related to residential and commercial buildings. While the code does not provide guidance for energy assessment of transportation systems, the code's discussion of heat island effects may be applicable during design.

The Village of Calumet Park's Code of Ordinances (§152.08) adopts the International Energy Conservation Code. The International Energy Conservation Code establishes minimum requirements for energy efficiency of commercial and residential buildings, but does not provide guidance for energy assessment of transportation systems.

3.2 Impact Analysis Thresholds

NEPA does not set specific thresholds of significance for energy impacts. Title 40 Code of Federal Regulations § 1502.16(e) directs that EISs include a discussion of the "energy requirements and conservation potential of various alternatives…natural or depletable resource requirements, and conservation potential of various alternatives," and potential mitigation measures. For the purpose of this EIS, an impact would be adverse if it would result in a permanent increase in annual energy or fuel usage that could not be accommodated by the regional (Cook County) supply.

3.3 Area of Potential Impact

The project area is 11 miles south of the City of Chicago's central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway (I-57) and I-94 Bishop Ford Freeway (I-94) cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The

South Red Line currently terminates at the 95th Street Terminal. The API (Figure 3-1) for the operational energy analysis was defined as follows:

- On the north by 91st Street (four blocks north of the existing 95th Street Terminal)
- On the south by a varying boundary that includes Jackson Street/134th Street (four blocks south of both the UPRR Rail Alternative and Halsted Rail Alternative terminal) station locations
- On the east by a varying boundary that includes Martin Luther King Drive, Michigan Avenue, and I-94 (from the north to south)
- On the west by a varying boundary that includes Halsted Avenue, Vincennes Avenue, and I-57 (from north to south)

While the project would occur within the API, both long-term (vehicular and transit operations) and short-term (construction) energy use associated with the project would extend well outside the API. Changes in vehicular energy use would be regional because a portion of travelers would change modes from automobile to transit for trips between the project area and downtown Chicago. Because changes in vehicular energy use would be regional, the regional CMAP travel demand model was used to assess changes in VMT. This regional model includes the six-county metropolitan area.

Energy for transit operations and for construction was determined for the API; however, energy use would be distributed well beyond the API. Only energy use caused by the project is assessed in this document. For transit operations, energy generation can be dispersed over a wide region. For instance, electric power generation for rail transit can take place anywhere within a 13-state region. Manufacture of materials (such as rail, reinforcement steel, and cement) for the project would also be distributed well beyond the API. Construction energy includes manufacture of components, transportation to the project site, and the localized construction activities.

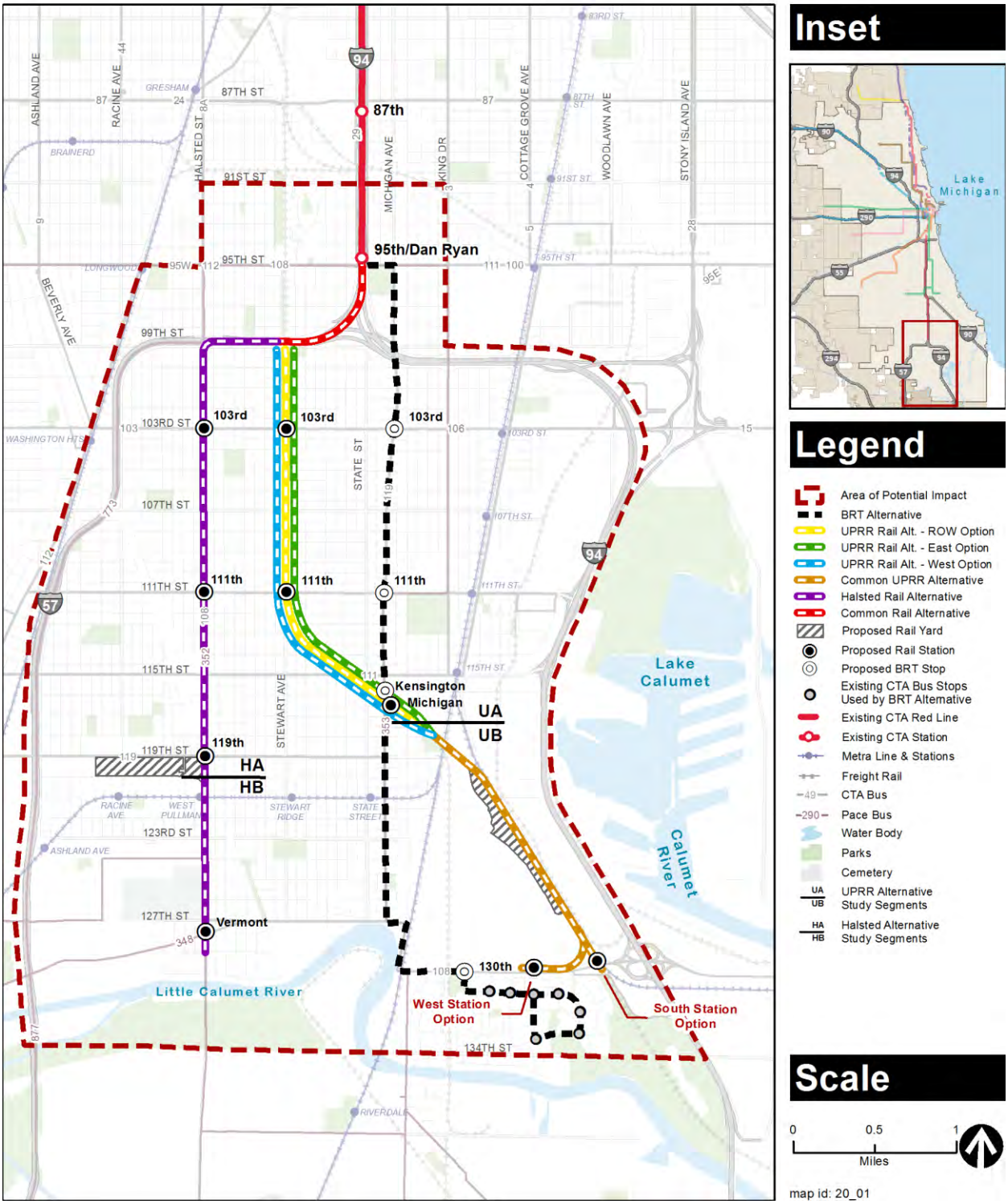

Figure 3-1: Energy Area of Potential Impact

3.4 Methods

The following methods were used to determine impacts for energy consumption under the No Build Alternative and the build alternatives.

The construction and operation (bus operations and stops, or rail operations and stations) energy usage was calculated for each of the build alternatives. The alternatives considered for the RLE were measured against the baseline conditions (No Build Alternative). The methods for calculating long-term (regional vehicular travel and transit operations) and short-term (construction) energy usage are described below.

Long-Term Energy Analysis

The baseline energy consumption was determined from the total regional VMT for the No Build Alternative in 2030, as estimated by the CMAP regional travel demand model. The entire CMAP region was used in assessing vehicular travel, because the project would affect travel outside of the API. The VMT was then converted to BTU using 3,650 BTU per vehicle mile traveled, a value derived from an estimated achieved fuel economy of 34.5 miles per gallon for cars and light trucks in 2025 from Corporate Average Fuel Economy standards (National Highway Traffic Safety Administration 2012).[1] (Miles traveled by transit vehicles, other than those associated with the project, would not differ among the alternatives; therefore, separating out transit vehicles and applying different energy consumption factors is not necessary to calculate the difference in energy use between the build alternatives and the No Build Alternative.) Any of the build alternatives would result in lower regional VMT than with the No Build Alternative, and would thus result in less vehicular energy consumption than the No Build Alternative. Energy consumption by vehicles is primarily in the form of gasoline and diesel fuel.

For the BRT Alternative, operational energy consumption was calculated from additional annual bus miles and the national average BTU per bus mile from the United States Department of Energy's Energy Data Book (Edition 31). The BRT stop energy was calculated from total platform area and estimated energy use per square foot (primarily for lighting) from *Transit Cooperative Research Board Project J-11/Task 9* (Center for Neighborhood Technology 2010).[2]

[1] A gallon of gasoline supplies 125,000 BTU. A gallon of diesel fuel supplies 139,000 BTU. For future years, the estimated 2025 achievable fleet-wide fuel economy of 34.5 miles per gallon is used (forecast under the Corporate Average Fuel Economy "No Action" Alternative). Diesel was estimated to make up a higher percentage of fleets (compared to only 2.9 percent in 2012) because diesel automobiles get better mileage per gallon than gasoline automobiles. For the energy calculations, 6.6 percent was used for the percentage of diesel vehicles in future analysis years.

[2] Average building energy use for the buildings in the research is 89,900 BTU per square foot per year, with 52 percent used for heating, ventilation, and air conditioning, and 20 percent used for lighting. For BRT platforms, where the primary energy use is lighting, 20 percent (or 18,000 BTU per square foot) was applied.

For the rail alternatives, operational energy consumption was calculated from the total additional annual railcar miles and the average kilowatt-hour per revenue car mile provided by CTA.[3] Kilowatt-hours were then converted to BTU. Station energy was calculated based on similar CTA Red Line elevated stations (based on 2010 data provided by CTA). Table 3-1 lists the energy use factors for operations.

Table 3-1: Energy Use Factors for Operations

Operational Element	Operational Energy Use (BTU)	Primary Source of Energy
Transit Bus	36,000 BTU/vehicle mile	Diesel Fuel
CTA Railcar	26,785 BTU/revenue car mile	Electricity
Platform Lighting	18,000 Annual BTU/square foot	Electricity
ADA Accessible Elevated Station	1,700 Million BTU Annually/station	Electricity
Elevators	25,000,000 Annual BTU (each)	Electricity
Escalators	70,000,000 Annual BTU (each)	Electricity

BTU = British thermal unit, CTA = Chicago Transit Authority, ADA = Americans with Disabilities Act

Construction Energy Analysis

The construction energy consumption was evaluated for each of the build alternatives to determine the short-term impacts of the project on the regional energy use. Capital cost estimates were used to determine the construction energy consumption by applying an energy cost factor from *Energy and Transportation Systems* (California Department of Transportation 1983). Energy was expressed using BTU. The reference document states energy use per construction dollar (shown in Table 3-2) should be viewed as "informed estimates." Energy use includes both manufacture of components and construction activities to install the components.

3 A revenue car mile is one CTA rail car traveling 1 mile while in revenue service. Energy use per revenue car mile was provided by CTA. The figure is for 2010 and is based on the system-wide average. The energy use may decrease with future vehicles and use of regenerative braking.

Table 3-2: Energy Factors for Construction

Construction Element	Construction Energy Cost Factor (BTU/$)[1]	Typical Elements
Track and Guideway	5,940	Structures, Track, Steel, Concrete
Stations	5,940	Platform, Canopy, Stairs, Escalator, Elevator, Station House
Facilities	7,310	Maintenance Building and Yard
Site Work	5,940	Utilities, Excavation, Removal, Hauling
Systems	9,130	Communications, Signals, Fare Collection, Traction Power, Substations

BTU = British thermal unit

1. Construction energy per dollar figures are for 2012, derived from *Energy and Transportation Systems* (California Department of Transportation 1983).

Section 4
Affected Environment

According to the City of *Chicago Climate Action Plan*, prepared in 2008, 21 percent of the city's greenhouse gas emissions are produced by cars, trucks, buses, and trains. Regional daily VMT are projected by the CMAP 2030 regional travel model to be 276,438,000. On an average weekday, over 1.6 million trips are made on CTA trains and buses (as of January 2013). If these trips were made in passenger vehicles rather than on CTA trains and buses, several hundred thousand vehicles would potentially be added to the regional roads each weekday.

To reduce its emission of greenhouse gases and energy use, the CTA is implementing the use of diesel-electric hybrid buses and exploring green technologies such as all-electric buses. The CTA has upgraded its support vehicle fleet to include hybrid-electric vehicles, vehicles that can use E-85 fuel, and vehicles that run on compressed natural gas. The E-85 fuel and compressed natural gas have a lower equivalent BTU amount than gasoline. The CTA is working to decrease the environmental impact of rail stations, offices, and maintenance facilities by implementing sustainable features in new buildings and retrofitting existing buildings to increase energy efficiency. The CTA currently uses approximately 9.8 trillion BTU annually for rail operations. (As Section 5 describes, any of the rail alternatives would result in 1.3 percent more energy use than the No Build Alternative.)

The CTA receives its power from Commonwealth Edison Company (purchased primarily from alternative retail electricity suppliers). Commonwealth Edison is part of the PJM Interconnection (PJM, a regional transmission organization) territory, which includes all or part of 13 states and the District of Columbia. The PJM region has 214,000 square miles, a population of about 60 million and a peak demand of 158,448 megawatts (in 2011). Renewable energy sources account for 5.3 percent of the total generating capacity for the region, which is 185,600 megawatts. The difference between the peak demand and the existing generating capacity is called the surplus generating capacity and is equal to 27,000 megawatts. (As Section 5 describes, the additional demand from the project would be less than 0.02 percent of the surplus generating capacity in the regional transmission territory.) As of June 27, 2011 there were 88,674 megawatts of planned generating station projects (in addition to existing generating capacity) for the PJM, and renewable energy sources account for 48.3 percent of the proposed projects. (PJM 2012)

Section 5
Impacts and Mitigations

This section describes the energy impacts for each of the four alternatives under consideration for the RLE Project, including the No Build Alternative. Impacts are discussed in three categories for each alternative: long-term operational impacts, short-term construction impacts, and cumulative impacts. Long-term operational impacts would occur after the project is fully constructed and operational. Long-term impacts include both regional vehicular travel and transit operations. Construction impacts would occur during the construction phase of the project and would be temporary in nature. Cumulative impacts would result from the incremental impact of the alternative combined with other past, present, and reasonably foreseeable future actions.

While other technical memoranda analyze alternatives by segment, the affected environment for energy is regional and widespread. (Compare the affected environment for energy with that of noise, for example. Noise generation occurs along the corridor and affects receptors adjacent to the corridor, and analysis within any discrete geographic area can be performed. Energy use, in contrast, is regional. Energy sources—whether for electricity, gasoline, or manufacture of construction components—extend far beyond the corridor.) See further discussion on page 3-3 of this technical memorandum.

A summary of impacts is presented and discussed below for all alternatives. Please see Sections 5.1 through 5.6 for specific details regarding impacts for the alternatives.

Table 5-1 provides a summary of the differences in long-term energy between the build alternatives and the No Build Alternative. The total long-term energy use for the No Build Alternative in 2030 would be approximately 368 trillion BTU, almost all of which would be the energy use of regional vehicular travel. The BRT Alternative would result in slightly less energy use than the No Build Alternative. The rail alternatives would require slightly more long-term energy than the No Build Alternative. Compared to the energy use for the No Build Alternative, the difference in energy use with any build alternative would be less than 0.02 percent of the total long-term energy use. The scale of the difference (less than 65 billion BTU annually) would be very small in comparison to the total operational energy use (approximately 368 trillion BTU annually). The percentage difference (less than 0.02 percent) would be less than the margin of error for regional modeling and less than the margin of error for assumptions regarding future automobile, bus, and rail vehicle energy efficiency. The additional demand from the project would be less than 0.02 percent of the surplus generating capacity in the regional transmission territory (See Section 4). Operation of any of the alternatives would not have an impact on regional energy consumption.

Table 5-2 provides a summary of the construction energy for alternatives. Energy used for construction is a one-time irreversible commitment of resources. Construction energy for the BRT Alternative would be relatively small compared to the rail alternatives, as the BRT Alternative

features would be at grade. In contrast, construction for the rail alternatives would involve elevated structures and substantial stations.

Table 5-1: Estimated Difference in Long-Term Energy Use of Alternatives for Year 2030 (Billion BTU Annually)

Alternative	Regional Vehicular Travel	Operation of Alternative	Energy Use at Stations	Total Long-Term Energy
No Build	0	0	0	0
Bus Rapid Transit	(41.5)	21	0.2	(20.3)
UPRR Rail	(71.6)	128	6.8	63.2
Halsted Rail	(68.5)	121	7.5	59.9

() Parentheses indicate a negative difference in energy use (a lower estimate of energy use than for the No Build Alternative). All UPRR Rail Alternative Options would have the same operational energy use. Transit operational energy (including transit vehicle operations and energy use at stops/stations) for any of the rail alternatives would represent an increase of approximately 1.3 percent over existing CTA rail energy use.

BTU = British thermal unit, UPRR = Union Pacific Railroad

Table 5-2: Estimated Short-Term Energy Use of Alternatives

Alternative	Construction Energy Use - Billion BTU
No Build	0
Bus Rapid Transit	91
UPRR Rail - ROW Option	6,130
UPRR Rail - East Option	6,110
UPRR Rail - West Option	6,120
Halsted Rail	6,650

Energy use is rounded in this summary table.

BTU = British thermal unit, UPRR = Union Pacific Railroad,
ROW = right-of-way

5.1 No Build Alternative

The No Build Alternative is the baseline against which the build alternatives are compared. The baseline condition (year 2030 conditions) is the energy usage that would occur under the No Build Alternative. The energy usage under this alternative is based on the predicted increase (from existing conditions) in VMT if none of the build alternatives are implemented.

5.1.1 Permanent Impacts and Mitigations - No Build Alternative

Under the No Build Alternative, travel patterns are assumed to remain the same as under existing conditions. Existing bus routes within the project area are expected to remain the same as under existing conditions. Regional daily VMT is projected by the CMAP 2030 regional travel model to be 276,438,000 miles per day.

5.1.2 Construction Impacts and Mitigations - No Build Alternative

No new infrastructure would be constructed as part of the No Build Alternative other than projects already committed through the CMAP Transportation Improvement Program and regular maintenance of existing track and structures. This alternative would not result in energy impacts related to construction activities.

5.2 Bus Rapid Transit Alternative

The BRT Alternative would add a limited-stop, enhanced bus route along the existing #34 Michigan Avenue bus route to 130th Street. The BRT Alternative would utilize traffic signal priority at signalized intersections along 95th Street, Michigan Avenue, and 130th Street. No dedicated bus lanes would be provided for the BRT Alternative. The BRT Alternative would require a net increase of twelve 60-foot articulated buses plus two spares.

The BRT Alternative bus would run 24 hours per day. Bus frequencies would be adjusted during peak periods to a 4-minute frequency between 6 AM and 8 PM on weekdays and a 12-minute frequency on the existing route #34 to better serve anticipated demand.

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

Permanent (long-term) impacts would include three components: change in regional VMT, energy use for the transit vehicles, and energy use for the stops. The BRT Alternative would decrease regional VMT due to changes in vehicular trip distance (as BRT stops with the project would be closer to trip origins) and mode shift from personal vehicles to transit. The projected regional daily VMT for this alternative in the CMAP 2030 model would be 276,407,000, or approximately 31,000 VMT per day lower (less than 0.02 percent) than with the No Build Alternative. At 3,650 BTU per vehicle mile traveled, this would equate to an annual difference in energy use of 41.5 billion BTU.

The BRT Alternative would result in approximately 583,000 more bus miles annually than with the No Build Alternative. At 36,000 BTU/bus-mile, energy use for bus operations associated with this alternative would be 21 billion BTU more than with the No Build Alternative (U.S. Department of Energy 2012).

The third component of energy use is the operation of additional bus stops. The BRT stops would have bus shelters; therefore, the energy use would primarily be for lighting. Using 18,000 BTU per square foot of platform, the BRT platforms would require approximately 216 million BTU annually. Energy consumption for stops would be primarily electric energy.

As shown in Table 5-1, the total annual operational energy for the BRT Alternative would be approximately 20.3 billion BTU less than with the No Build Alternative. The total annual difference in long-term energy includes the total of the difference in energy for regional vehicular travel plus operational energy requirements for the transit vehicles and BRT stops.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

Energy impacts from construction activities were computed based on typical values for construction categories. Table 5-3 provides a summary of construction energy consumption for the BRT Alternative. Construction energy use would be a very small fraction of energy use in the region. The estimated 91 billion BTU for construction of the BRT Alternative would be less than 0.02 percent of the Cook County annual energy use, which is 530 trillion BTU. This 0.02 percent portion is well within the variations in annual energy use due to fluctuations in average temperature, regional employment, and manufacturing. The BRT Alternative would result in no construction energy impact and no mitigation is proposed.

Table 5-3: Estimated Energy Consumption from Construction Activities - Bus Rapid Transit Alternative

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Guideway	5,940	239	1	Concrete, Reinforcing Steel
Stops	5,940	702	4	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures
Maintenance Facilities	7,310	0	0	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	7,990	48	Earthwork, Removals, Utility Relocations
Systems	9,130	4,130	38	Signals, Fare Vending, Communications, Traffic Signal Priority System
Total Estimated Construction BTU			91	

BTU = British thermal units *All construction estimates in this document use April 2013 draft estimates.*

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option would place the CTA tracks in the UPRR ROW between I-57 and the Canadian National/Metra Electric tracks. The UPRR trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE implementation.

Operation for the ROW Option would have train sets consisting of eight cars. Although the proposed platform design would accommodate ten-car trains, the service plan would be for eight-car trains as are in operation today. The hours of operation for the UPRR Rail Alternative would be the same as for the current Red Line, which operates 24 hours every day of the year.

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

The ROW Option would result in lower regional VMT than the No Build Alternative because of vehicular trip distance changes (people would be nearer to transit stations) and mode changes

(people would change their travel mode from personal vehicles to transit). The projected regional daily VMT for the UPRR Rail Alternative in the CMAP 2030 model is 276,384,000, which would be approximately 53,700 VMT per day less than with the No Build Alternative. At 3,650 BTU per vehicle mile traveled, the annual energy use with the ROW Option would be 71.6 billion BTU less than with the No Build Alternative.

The ROW Option would result in approximately 4,774,000 more railcar-miles annually than with the No Build Alternative. At 26,785 BTU/railcar-mile, annual energy use for rail operations associated with the ROW Option would be 127,873 million BTU more than with the No Build Alternative. Energy use per railcar-mile is based on CTA's actual traction power use and actual revenue railcar-miles.

The third component of energy use is operation of stations. Using the methods described in Section 3.4, the four stations associated with the ROW Option would use approximately 6.8 billion BTU annually.

The total annual long-term energy for the ROW Option would be a 63.2 billion BTU higher than it would be with the No Build Alternative. The rail alternatives would be more operationally intensive than the BRT Alternative, so overall energy use would be greater. The rail alternatives would provide six times the annual passenger capacity of the BRT Alternative.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

Energy impacts from construction activities were computed based on typical values for construction categories. Construction energy use would vary slightly between the UPRR Rail Alternative options. For the UPRR Rail Alternative ROW Option, Table 5-4 provides a summary of the energy use during construction. Construction energy use would be a very small fraction of energy use in the region—approximately 6 trillion BTU compared to the total annual Cook County energy consumption of 530 trillion BTU, or less than 1.2 percent of the total annual Cook County energy consumption. There would be no temporary energy impacts and no mitigation is proposed.

Table 5-4: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - Right-of-Way Option

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Track and Guideway	5,940	245,000	1,455	Structural Steel, Track, Concrete, Reinforcing Steel
Stations	5,940	138,000	820	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures, Glass
Maintenance Facilities	7,310	154,000	1,126	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	104,000	618	Earthwork, Removals, Utility Relocations

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Systems	9,130	231,000	2,109	Signals, Fare Vending, Communications, Traction Power, Substations
Total Estimated Construction BTU			6,128	

BTU = British thermal units

5.4 Union Pacific Railroad Rail Alternative - East Option

In the UPRR Rail Alternative East Option, CTA tracks would be placed immediately adjacent to and east of the UPRR ROW between I-57 and the Canadian National/Metra Electric tracks. The service plan would be for eight-car trains and 24-hour service, as described for the ROW Option in Section 5.3.

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

Because the operational energy consumption is calculated based on regional VMT and operation of the trains and stations, the energy consumption for the UPRR Rail Alternative East Option would be the same as for the ROW Option. The total annual operational energy would be 68.6 billion BTU more than with the No Build Alternative.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

Table 5-5 provides a summary of construction-related energy use for the UPRR Rail Alternative East Option. Construction energy use would be a very small fraction of the energy use in the region—approximately 6 trillion BTU compared to the total annual Cook County energy consumption of 530 trillion BTU, or less than 1.2 percent of the total annual Cook County energy consumption. There would be no temporary impacts on energy and no mitigation is proposed.

Table 5-5: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - East Option

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Track and Guideway	5,940	243,000	1,443	Structural Steel, Track, Concrete, Reinforcing Steel
Stations	5,940	138,000	820	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures, Glass
Maintenance Facilities	7,310	154,000	1,126	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	100,000	594	Earthwork, Removals, Utility Relocations
Systems	9,130	233,000	2,127	Signals, Fare Vending, Communications, Traction Power, Substations
Total Estimated Construction BTU			6,110	

BTU = British thermal units

5.5 Union Pacific Railroad Rail Alternative - West Option

In the UPRR Rail Alternative West Option, CTA tracks would be placed immediately adjacent to and west of the UPRR ROW between I-57 on the north end and the UPRR tracks near Kensington Park on the south end. The service plan would be for eight-car trains and 24-hour service, as described for the ROW Option in Section 5.3.

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

Because the operational energy consumption is calculated based on regional VMT and operation of the trains and stations, the energy consumption for the UPRR Rail Alternative West Option would be the same as for the ROW and East Options. The total annual operational energy would be 68.6 billion BTU more than it would be with the No Build Alternative.

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

Table 5-6 provides a summary of construction-related energy use for the UPRR Rail Alternative West Option. Construction energy use would be a very small fraction of the energy use in the region—approximately 6 trillion BTU compared to the total annual Cook County energy consumption of 530 trillion BTU, or less than 1.2 percent of the total annual Cook County energy consumption. There would be no temporary energy impacts and no mitigation is proposed.

Table 5-6: Estimated Energy Consumption from Construction Activities - Union Pacific Railroad Rail Alternative - West Option

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Track and Guideway	5,940	246,000	1,461	Structural Steel, Track, Concrete, Reinforcing Steel
Stations	5,940	138,000	820	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures, Glass
Maintenance Facilities	7,310	154,000	1,126	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	102,000	606	Earthwork, Removals, Utility Relocations
Systems	9,130	231,000	2,109	Signals, Fare Vending, Communications, Traction Power, Substations
Total Estimated Construction BTU			6,122	

BTU = British thermal unit

5.6 Halsted Rail Alternative

The proposed Halsted Rail Alternative is a 5.0-mile extension of the existing Red Line. It would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The service plan would be for eight-car trains and 24-hour service, as described for the ROW Option in Section 5.3.

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

The Halsted Rail Alternative would result in lower regional VMT than the No Build Alternative because of vehicular trip distance changes (people would be nearer to transit stations) and mode changes (people would change their travel mode from personal vehicles to transit). The projected regional daily VMT for the Halsted Rail Alternative in the CMAP 2030 model is 276,387,000, which would be approximately 51,400 vehicle miles per day less than with the No Build Alternative. At 3,650 BTU per vehicle mile traveled, the annual energy use would be 68.5 billion BTU less than with the No Build Alternative.

The Halsted Rail Alternative would result in approximately 4,504,000 more railcar-miles annually than with the No Build Alternative. At 26,785 BTU/railcar-mile, additional annual energy use for rail operations associated with this alternative would be 121 billion BTU more than with the No Build Alternative.

The four stations associated with the Halsted Rail Alternative would use approximately 7.5 billion BTU annually. This energy use would be higher than with the UPRR Alternative options because the Halsted Alternative's side platforms would require additional vertical circulation.

The total annual long-term energy for the Halsted Rail Alternative would be a 59.9 billion BTU higher than it would be with the No Build Alternative.

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

Table 5-7 provides a summary of the energy use during construction for the Halsted Rail Alternative. Construction energy use would be a very small fraction of energy use in the region—approximately 7 trillion BTU compared to the total annual Cook County energy consumption of 530 trillion BTU, or less than 1.3 percent of the total annual Cook County energy consumption. There would be no temporary energy impacts and no mitigation is proposed.

Table 5-7: Estimated Energy Consumption from Construction Activities - Halsted Rail Alternative

Construction Component	BTU/2012$	Construction Estimate (2012 $1,000)	Billion BTU	Typical Elements
Track and Guideway	5,940	337,000	2,002	Structural Steel, Track, Concrete, Reinforcing Steel
Stations	5,940	140,000	832	Concrete, Reinforcing Steel, Canopy, Conduits, Lighting Fixtures, Glass
Maintenance Facilities	7,310	147,000	1,075	Maintenance Building, Equipment, Heating, Ventilation, Air Conditioning
Site Work	5,940	93,000	552	Earthwork, Removals, Utility Relocations
Systems	9,130	240,000	2,191	Signals, Fare Vending, Communications, Traction Power, Substations
Total Estimated Construction BTU			6,652	

BTU = British thermal unit

5.7 Cumulative Impacts

As energy use for all build alternatives would be a small fraction of regional energy use, and as projected surplus generating capacity also far outweighs energy use for any build alternative, there would be no cumulative impacts.

There are no planned major highway projects (such as I-94 or I-57) that would affect regional energy use. Other than the 95th Street Terminal, there are no planned CTA projects in the projects beyond the RLE Project. One CREATE (Chicago Region Environmental and Transportation Efficiency Program) project (grade separation of 95th Street and the Union Pacific tracks, CREATE project GS21a) is located within the project area and is listed as a future grade separation project that depends on future availability of funding.

Section 6
Conclusions

For any of the build alternatives, the permanent changes in energy use would amount to less than 0.02 percent of transportation-related energy use for the region (63 billion BTU more for the UPRR Alternative than for the No Build Alternative, which would require 368 trillion BTU). The energy needed for operations would be far less than the existing surplus generating capacity for the region (which is 17 percent greater than existing generating demand). The net difference in energy use for any of the build alternatives would be less than +/- 0.02 percent, which is smaller than the margin of error for regional modeling. The difference in energy use would be negligible for any of the alternatives compared to the energy use for the No Build Alternative (368 trillion BTU for regional vehicular travel in 2030) and would not have an impact on regional energy consumption.

For all of the build alternatives, the total temporary construction energy use would be less than 1.3 percent of the total annual energy consumption in Cook County. Construction energy use would be spread out over the duration of construction, approximately 3 to 5 years. The one-time irreversible commitment of energy resources for construction would have negligible impacts, if any.

Section 7
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Appendix A
2014–2015 Red Line Extension Project Update

2014–2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Energy

CTA revised cost estimates for the East and West Options after completing the additional engineering on those options in late 2014 and early 2015. Based on the refined alignments, the East Option would use approximately 6,130 billion BTU for construction and the West Option would use approximately 6,170 billion BTU for construction.

The one-time irreversible commitment of energy resources for construction would amount to less than 1.2 percent of the total annual energy consumption for Cook County, which is 530 trillion BTU (CNT Energy 2009).

Appendix X

Environmental Justice Technical Memorandum

- Final EIS Addendum X, Environmental Justice Technical Memorandum, July 2022

Chicago Red Line Extension Project

Environmental Justice

Final EIS Addendum X

July 2022

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Table of Contents

Section 1 - Summary **1-1**
Section 2 - Project Description and Background **2-1**
Section 3 - Methods for Impact Evaluation **3-1**
3.1 Regulatory Framework 3-1
3.2 Impact Analysis Thresholds 3-1
3.3 Area of Potential Impact 3-1
3.4 Methods 3-2
Section 4 - Affected Environment **4-1**
4.1 Minority Populations 4-1
4.2 Low-Income Groups 4-4
4.3 Limited English Proficiency Groups 4-8
4.4 Older Adults 4-11
4.5 Persons with a Disability 4-13
4.6 Identification of Environmental Justice Populations 4-13
Section 5 - Impacts and Mitigation **5-1**
5.1 No Build Alternative 5-1
5.2 Union Pacific Railroad Alternative - Preferred Alignment 5-2
Section 6 - Impacts Remaining after Mitigation **6-1**
6.1 No Build Alternative 6-1
6.2 Union Pacific Railroad Alternative - Preferred Alignment 6-1
Section 7 - References Cited **7-1**

Figures

Figure 1-1: Community Areas 1-3
Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS) 2-4
Figure 4-1: Percent of Minority Populations 4-2
Figure 4-2: Median Household Income 4-6
Figure 4-3: Low-income Block Groups 4-7
Figure 4-4: Limited English Proficiency Population 4-10
Figure 4-5: Percentage of Population 65 Years and Older in API 4-12
Figure 4-6: Percentage of Population with a Disability 4-14

Tables

Table 1-1: Adverse Impacts Remaining After Mitigation (Not Disproportionate)..... 1-2
Table 4-1: Percent Minority Population..... 4-1
Table 4-2: Racial Composition within the API..... 4-3
Table 4-3: U.S. Department of Health and Human Services 2018 Poverty Guidelines 4-4
Table 4-4: Median Household Income in Affected Community Areas 4-5
Table 4-5: Block Groups in the API with Populations below Poverty Level 4-5
Table 4-6: Unemployment Rates in Affected Community Areas 4-8
Table 4-7: Housing Costs in Affected Community Areas 4-8
Table 4-8: Languages Spoken at Home within the Affected Community Areas 4-9
Table 4-9: Percentage of Population 65 Years and Older in Affected Communities..... 4-11
Table 4-10: Percentage of Population with a Disability..... 4-13

Abbreviations

ACS	American Community Survey
API	area of potential impact
BMPs	best management practices
CHA	Chicago Housing Authority
CN/MED	Canadian National/Metra Electric District
CMAP	Chicago Metropolitan Agency for Planning
CTA	Chicago Transit Authority
EA	Environmental Assessment (EA)
EIS	Environmental Impact Statement
EJ	Environmental Justice
FTA	Federal Transit Administration
IHB	Indiana Harbor Belt
LBP	Lead Based Paint
LEP	Limited English Proficiency
MSAT	mobile source air toxics
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
NS	Norfolk Southern

RLE	Red Line Extension
TIP	Transportation Improvement Program
TSD	Transit-Supportive Development
UPRR	Union Pacific Railroad

Section 1 - Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on Environmental Justice (EJ) communities. The EJ analysis and outreach process were undertaken to accomplish the following goals, consistent with Federal Transit Administration (FTA) Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration* (August 2012), and Circular 4702.1B, *Title VI Requirements and Guidelines for Federal Transit Administration Recipients* (October 2012):

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

While project areas comprising entirely EJ populations do not necessarily preclude disproportionately high and adverse effect findings, the following characteristics are true of the area of potential impact (API) surrounding the Preferred Alignment of the Union Pacific Railroad (UPRR) Rail Alternative:

- The entire API comprises predominantly minority populations. All communities in the API contain 90 percent or more minority populations, and the API comprises 98.0 percent minority populations.
- All of the impacts and benefits of the RLE Project would accrue to the same minority populations, and few project benefits would occur outside the API.
- The purpose of this community-initiated project includes connecting disadvantaged communities to Chicago's major employment and activity centers in an effort to spur economic development and improve livability. The RLE Project would help remediate the geographic isolation and lack of employment and development opportunities that currently exist in the API.

Given these findings, the Preferred Alignment would not result in disproportionately high and adverse impacts on EJ populations. Some adverse impacts on EJ communities presented in the Draft Environmental Impact Statement (EIS) remain under the Preferred Alignment; however, these impacts would not be disproportionate. In some instances, impacts would remain adverse despite

implementation of mitigation measures, as shown in **Table 1-1** and described further in **Section 5**. These remaining adverse impacts would be associated with the change in community and visual characteristics caused by locating an elevated rail structure and parking structures in low-density residential areas. **Figure 1-1** shows where each affected community area is located.

Table 1-1: Adverse Impacts Remaining After Mitigation (Not Disproportionate)

Impact Category	No Build Alternative	Preferred Alignment
Displacements	No	No
Land Use and Economic Development	No	No
Noise and Vibration	No	No
Energy	No	No
Air Quality and Climate Change	No	No
Biological Resources	No	No
Hazardous Materials	No	No
Neighborhood and Community	No	Yes
Parklands and Community Facilities	No	No
Safety and Security	No	No
Visual and Aesthetic Conditions	No	Yes
Water Resources	No	No
Transportation	No	No
Historical and Cultural Resources	No	No
Geology and Soils	No	No
Cumulative	No	No

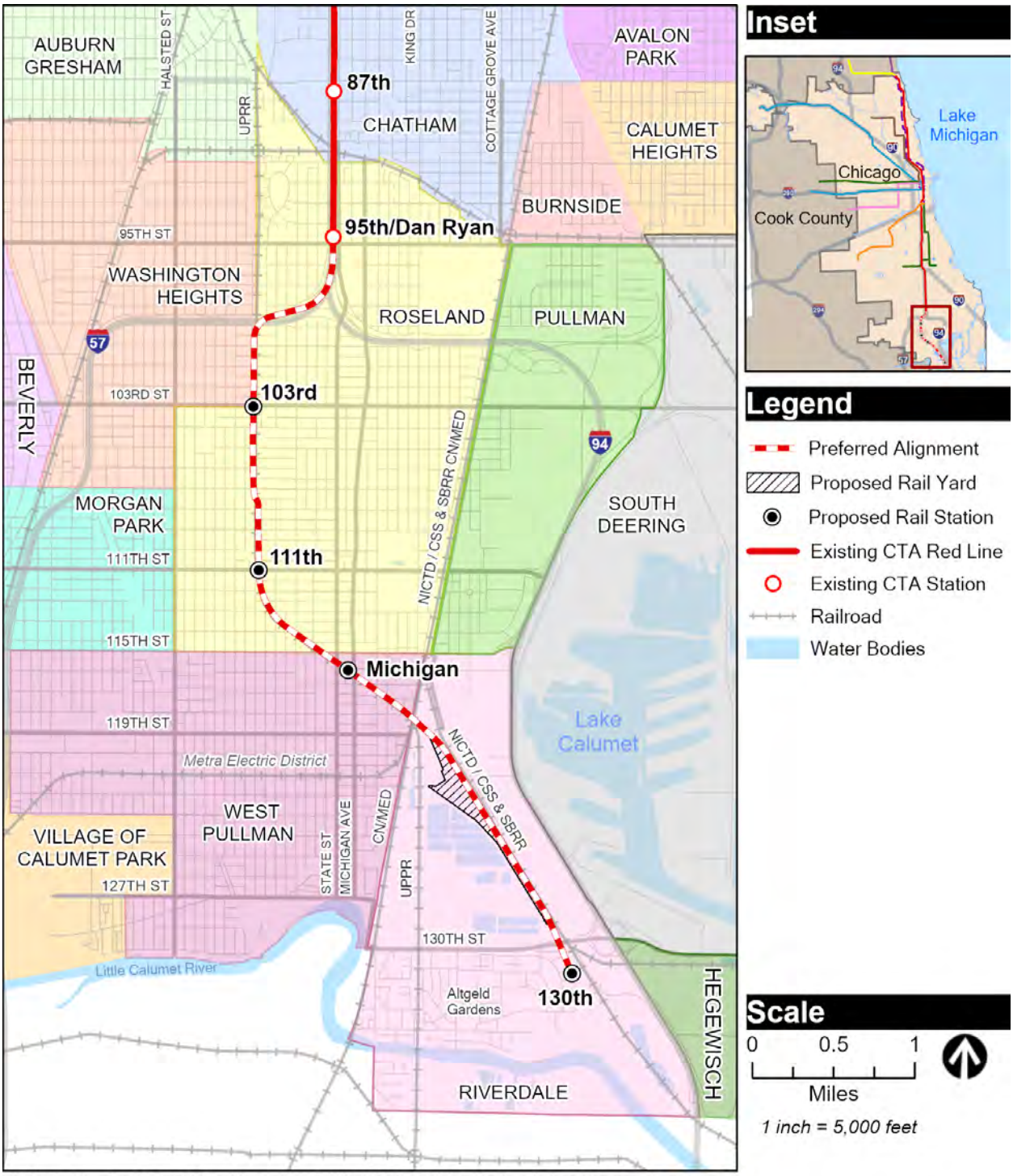

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-1: Community Areas

Section 2 - Project Description and Background

The Chicago Transit Authority (CTA), as project sponsor to the FTA, proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th/Dan Ryan terminal to Chicago's Far South Side. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The Red Line provides rapid transit services 24/7 and is the most heavily traveled rail line in the CTA System.

The RLE Project would reduce commute times for residents, improve mobility and accessibility, and provide connection to other transportation modes. The RLE Project could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization and help reverse decades of disinvestment in local business districts. The RLE Project would also provide a modern, efficient railcar storage yard and shop facility.

CTA undertook an extensive Alternatives Analysis process from 2006 to 2009 that considered multiple modes and corridor options for the RLE Project. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative on August 12, 2009. Based on further technical analysis and public input, CTA selected the UPRR Rail Alternative as the NEPA Preferred Alternative in August 2014. The Draft EIS, published on October 6, 2016, disclosed the environmental benefits and impacts of the No Build Alternative and the two UPRR Rail Alternative options: the East Option and the West Option shown in **Figure 2-1**.

Subsequent to the publication of the Draft EIS, continued design and outreach by CTA resulted in the selection of the Preferred Alignment for the RLE Project. The Preferred Alignment was announced to the public on January 26, 2018. The Preferred Alignment is a hybrid of the East and West Options of the UPRR Rail Alternative presented in the Draft EIS. CTA reviewed multiple locations for a cross-over area that would maximize the benefits and reduce the impacts of the East and West Options.

The UPRR provided comments on the Draft EIS where they expressed their preference for the West Option due to concerns for the proximity of the East Option to their tracks. UPRR noted that the location of the Roseland Pumping Station could not accommodate UPRR's requested clearance of 25 feet between the centerlines of the UPRR's potential tracks and the proposed East Option. Therefore, all hybrid options considered in selecting the Preferred Alignment started with the West Option and crossed over from the west to the east side of the UPRR tracks south of the pumping station and north of 115th Street to minimize property impacts. Comparative analysis of parcel impacts and alignment with the goals of the RLE Project identified the vicinity of 108th Place as the cross-over location that would provide the greatest benefit. A cross-over in the vicinity of 108th Place would preserve viable businesses; minimize impacts on schools, residences, and the historic

Roseland Pumping Station; and preserve properties slated for future development surrounding the station areas. However, additional engineering refined the alignment further, which moved the UPRR crossing north from 108th Place to 107th Place. The refinement would lower the 111th Street station platform height and would lower the profile of the elevated structure.

After the announcement of the Preferred Alignment in 2018, CTA continued to conduct stakeholder coordination and further develop design plans. Norfolk Southern Railway (NS) shared their plans for future potential access to Canadian National/Metra Electric District (CN/MED) tracks to the north of Kensington Yard and the national freight rail network at that location. This access would allow restoration of a former connection that the Michigan Central Railroad had with the CN/MED tracks, which were then owned by the Illinois Central Railroad. The 120th Street yard and shop presented in the Draft EIS would have precluded future potential access to those tracks as well as access to All American Recycling located west of the railroad tracks (11900 S. Cottage Grove Avenue). The All American Recycling facility is served by the NS via its joint ownership of Conrail and the Indiana Harbor Belt Railroad (IHB). This coordination with NS resulted in additional adjustments to the Preferred Alignment near the 120th Street yard and shop. The 120th Street yard and shop and the tracks south to 130th Street were shifted approximately 100 feet to the west to accommodate NS railroad access to the All American Recycling and potential improvements to the national freight rail network, namely a future connection from the NS track to CN tracks along the MED corridor. In addition, this design refinement would provide a rail connection to facilitate rail delivery of ballast, ties, and other material to support CTA operations.

In 2019, CTA began exploring an opportunity to relocate the 130th Street station, the terminating station of the RLE Project, to a location south of 130th Street. The Draft EIS had originally proposed the station location north of 130th Street. In 2017, after publication of the Draft EIS, the Chicago Housing Authority (CHA) demolished Blocks 11, 12, and 13 of the Altgeld Gardens neighborhood, creating an opportunity to relocate the station south of 130th Street to the area of the demolished blocks. The demolition of Blocks 11, 12, and 13 of Altgeld Gardens was an activity completed by CHA and was independent and unrelated to the RLE Project. CTA evaluated the station relocation for feasibility. Meetings were held with partner agencies and stakeholder groups of residents in the station area with these agencies and groups expressing support for the station relocation. The design refinement relocated the station from north of 130th Street, as presented in the Draft EIS, to south of 130th Street, adjacent to the Altgeld Gardens neighborhood.

Since the publication of the Draft EIS and selection of the Preferred Alignment, three design refinements were made as discussed above: (1) the location of the 107th Place cross-over between UPRR East and West alignment options evaluated in the Draft EIS required for selection of a hybrid Preferred Alignment; (2) refinement of the 120th Street yard and shop location; and (3) relocation of the 130th Street station to extend the Preferred Alignment farther south so the 130th Street station

would be within the Altgeld Gardens neighborhood. These design refinements were evaluated in a Supplemental Environmental Assessment (EA). The agency coordination and outreach associated with the Supplemental EA have influenced the design refinements incorporated into the Preferred Alignment and that is analyzed in this Final EIS.

Additional details about the Preferred Alignment may be found in **Appendix E**.

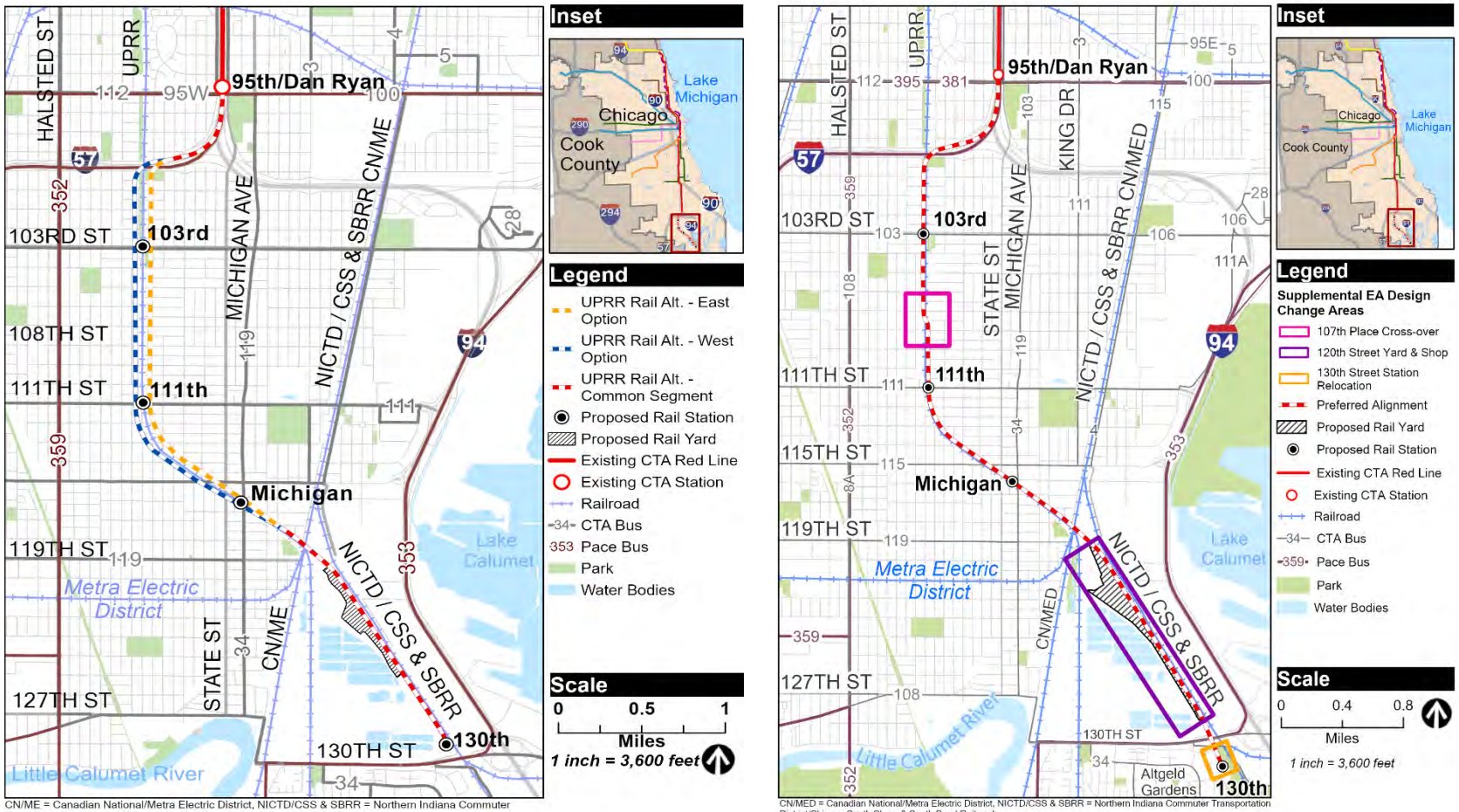

Figure 2-1: Left- East and West Options of the UPRR Rail Alternative (Draft EIS), Right- Preferred Alignment (Final EIS)

Section 3 - Methods for Impact Evaluation

Methods presented in **Appendix *X*** for the Draft EIS analysis have been carried forward to evaluate EJ. This section documents the methodology for evaluating this resource, consistent with the methodology used in the Draft EIS, and any methodological changes.

3.1 Regulatory Framework

There are no changes to the applicable federal or state regulations referenced in **Appendix X** of the Draft EIS. FTA issued its most recent guidance for meeting the requirements of EO 12898 as Circular 4703.1 in August 2012.

3.2 Impact Analysis Thresholds

There are no changes to the impact analysis thresholds referenced in **Appendix X** of the Draft EIS. As noted above, FTA issued its most recent guidance for meeting the requirements of EO 12898 as Circular 4703.1 in August 2012.

3.3 Area of Potential Impact

The geographic area of the API for analyzing permanent, construction, and cumulative impacts was established based on FTA Circular 4703.1 (August 2012), which recommends the following:

- Identifying the presence of distinct minority and/or low-income communities residing both within and in proximity to the RLE Project or activity.
- Identifying those minority and/or low-income groups that utilize or are dependent on natural resources and the human environment that could be potentially affected by the RLE Project.

Adverse impacts would be likely to occur within a ¼ mile radius of the RLE Project infrastructure, whereas beneficial impacts would accrue to a larger area of approximately ½ mile or more around station locations. Identification of EJ populations affected by the RLE Project was conducted pursuant to NEPA guidance (40 Code of Federal Regulations 1508) and FTA Circular 4703.1 (August 2012). For the purposes of locating EJ communities, all block groups within ½ mile of the Preferred Alignment right-of-way were included in the analysis, with the exception of selected block groups that do not have any population living within ½ mile of the Preferred Alignment right-of-way.

This methodology is consistent with the Draft EIS but results in a smaller area. While the Draft EIS included multiple alignments, this report focuses on the potential impacts of the Preferred Alignment on EJ populations. Therefore, comparisons between the EJ figures presented in the Draft

EIS and those presented in this report must consider both the changed parameters of this study and changing demographics in the City of Chicago.

3.4 Methods

The analysis of the Preferred Alignment's impact on EJ populations was performed using the same methods as were documented in the Draft EIS consistent with **Appendix X**. Updated data from the U.S. Census Bureau 2018 5-Year American Community Survey (ACS) were used to identify EJ populations. The API for EJ populations is defined as the area within ½ mile of the Preferred Alignment. All block groups within ½ mile of the Preferred Alignment right-of-way were included in the analysis, with the exception of selected block groups that do not have any population living within ½ mile of the Preferred Alignment right-of-way.

Section 4 - Affected Environment

This section describes any updates to the EJ populations near the RLE Project since the publication of the Draft EIS. This section documents updates to the baseline data and planning horizon.

4.1 Minority Populations

Consistent with the Draft EIS, this analysis defines a minority population as a population that meets one or both of the following descriptions:

- Any readily identifiable group of persons and/or a community who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans), who experience common conditions of exposure or impact.
- A group consisting of persons classified by the U.S. Census Bureau as minority, including those persons of two or more races.

As shown in **Table 4-1**, the U.S. Census Bureau's 2018 5-Year ACS was used to identify minority population in the API as a whole and the specific affected communities in the API. Most of the populated portions of the API contain predominantly minority populations; the API population consists of 98.0 percent minority persons. The communities with the highest percentage of minority persons are West Pullman and Washington Heights, followed closely by Roseland and Riverdale. The community with the lowest percentage of minority persons is Pullman. **Figure 4-1** identifies the percent minority populations in the API at the census block level.

Table 4-1: Percent Minority Population

Area	Percent Minority
City of Chicago	67.2%
API	**98.0%**
Washington Heights	99.0%
Roseland	98.8%
West Pullman	99.3%
Pullman	90.1%
Riverdale	98.2%

Source: U.S. Census Bureau 2014-2018a.

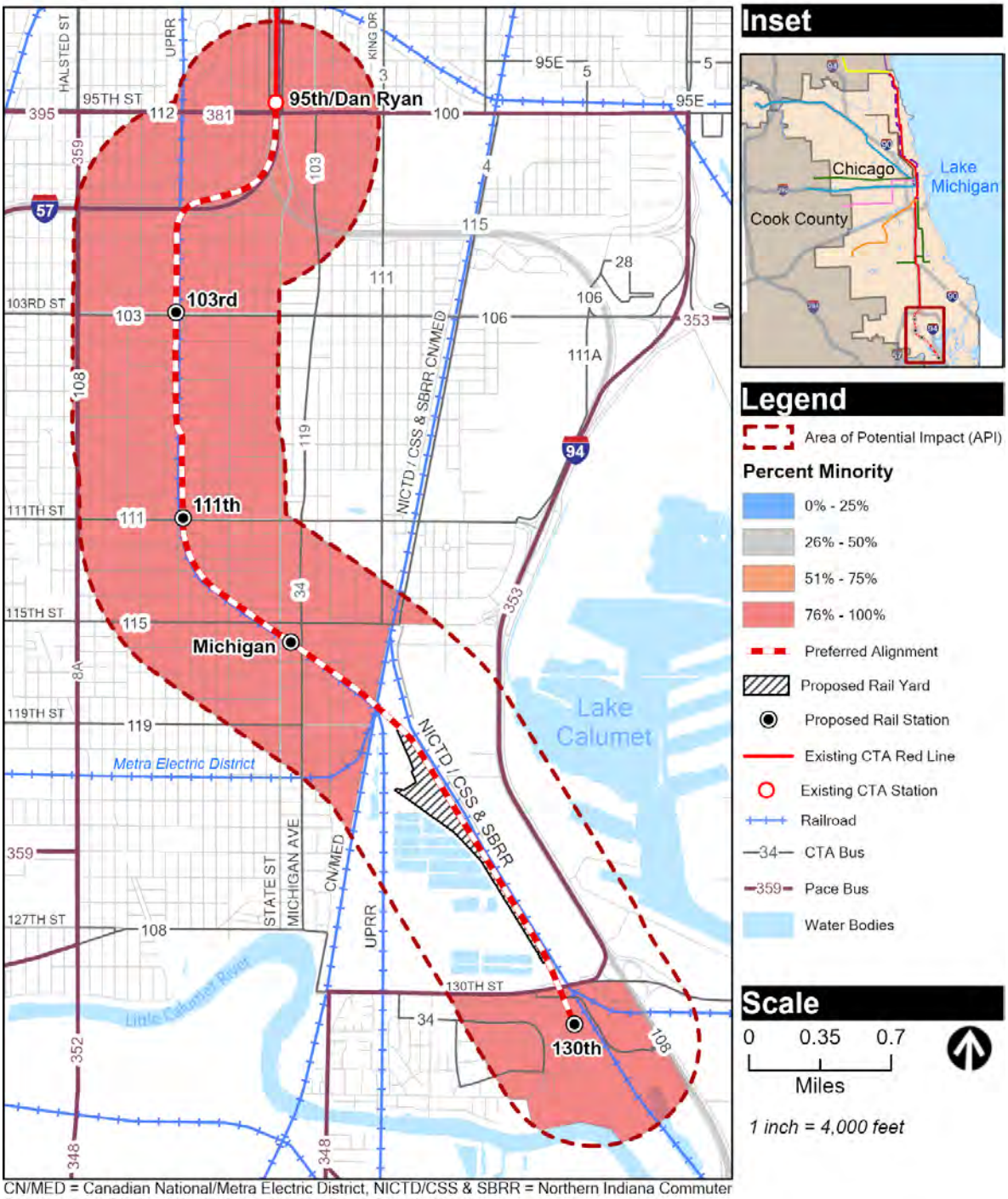

[1] Block groups with no data have no population living within ½ mile of the Preferred Alignment right-of-way. No block groups have below 76% minority populations.

Figure 4-1: Percent of Minority Populations

The racial composition of the API is shown in **Table 4-2**. All communities in the API have a majority Black or African American population. The second largest ethnicity in the API is Hispanic.

Table 4-2: Racial Composition within the API

Area	White Alone	Hispanic	Black or African American Alone	American Indian/Native Alaskan Alone	Asian Alone	Native Hawaiian and Other Pacific Islander Alone	Some Other Race Alone	Multiracial
City of Chicago	32.8%	29.0%	29.7%	0.1%	6.4%	0.0%	0.2%	1.8%
API	**2.0%**	**3.8%**	**92.3%**	**0.1%**	**0.2%**	**0.0%**	**0.5%**	**1.0%**
Washington Heights	1.0%	0.6%	96.9%	0.0%	0.1%	0.0%	0.0%	1.3%
Roseland	1.2%	1.2%	96.1%	0.1%	0.4%	0.0%	0.5%	0.5%
West Pullman	0.7%	5.7%	92.1%	0.1%	0.1%	0.0%	0.2%	1.2%
Pullman	9.9%	4.4%	83.5%	0.0%	0.1%	0.0%	0.1%	2.0%
Riverdale	1.8%	2.6%	95.3%	0.0%	0.3%	0.0%	0.0%	0.0%

Source: U.S. Census Bureau 2014-2018a

4.2 Low-Income Groups

The low-income classification remains the same as the Draft EIS: persons whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines. Median household income data in the 2018 5-year ACS are reported in 2018 dollars in order to compare the 2018 poverty guidelines. **Table 4-3** shows the U.S. Department of Health and Human Services 2018 Poverty Guidelines.

Table 4-3: U.S. Department of Health and Human Services 2018 Poverty Guidelines

People in Household	Income
1	$12,140
2	$16,460
3	$20,780
4	$25,100
5	$29,420
6	$33,740
7	$38,060
8	$42,380

Source: U.S. Department of Health and Human Services 2018

According to the 2014-2018 ACS, the median household income for the API was $39,529, which is less than the median household income for the City of Chicago ($55,198). **Table 4-4** shows the median household income in affected communities. Median household income for each block group within the API is shown in **Figure 4-2** (except four block groups for which data are unavailable due to a low volume of respondents). Since the Draft EIS, the median household income in the City of Chicago has increased by 17 percent. In contrast, the median household income for the new API decreased. The decrease in median income for households in the API can be attributed to re-defining the API to ½ mile within the Preferred Alignment. Some communities surrounding the API experienced a decrease in median household income (-4.5 percent in Roseland), while other communities experienced an increase (+7.3 percent in Washington Heights). The median income in Riverdale increased the most, more than 53 percent from the former median income of $11,181 when the Draft EIS was published.

Table 4-4: Median Household Income in Affected Community Areas

Area	Median Household Income
City of Chicago	$55,198
API	**$39,529**
Washington Heights	$52,212
Roseland	$40,032
West Pullman	$38,824
Pullman	$44,633
Riverdale	$17,097

Source: U.S. Census Bureau 2014-2018b

According to the U.S. Department of Health and Human Services 2018 Poverty Guidelines, six block groups (out of 56) in the API have populations with median household income below poverty guidelines for the average household size. As shown in **Table 4-5**, three of those block groups are in Riverdale and three are in Roseland. **Figure 4-3** shows where these low-income block groups are located.

Table 4-5: Block Groups in the API with Populations below Poverty Level

Block Group	Median Household Income	Average Household Size	Community Area
Block Group 3, Census Tract 5401.01, Cook County, Illinois	$8,356	2.78	Riverdale
Block Group 2, Census Tract 4910, Cook County, Illinois	$17,237	3.81	Roseland
Block Group 2, Census Tract 5401.02, Cook County, Illinois	$17,719	2.87	Riverdale
Block Group 5, Census Tract 4910, Cook County, Illinois	$21,250	3.81	Roseland
Block Group 1, Census Tract 4914, Cook County, Illinois	$18,382	3.13	Roseland
Block Group 4, Census Tract 5401.01, Cook County, Illinois	$7,868	2.78	Riverdale

Note: Household size data not available at block group level.
Source: U.S. Census Bureau 2014-2018b, c

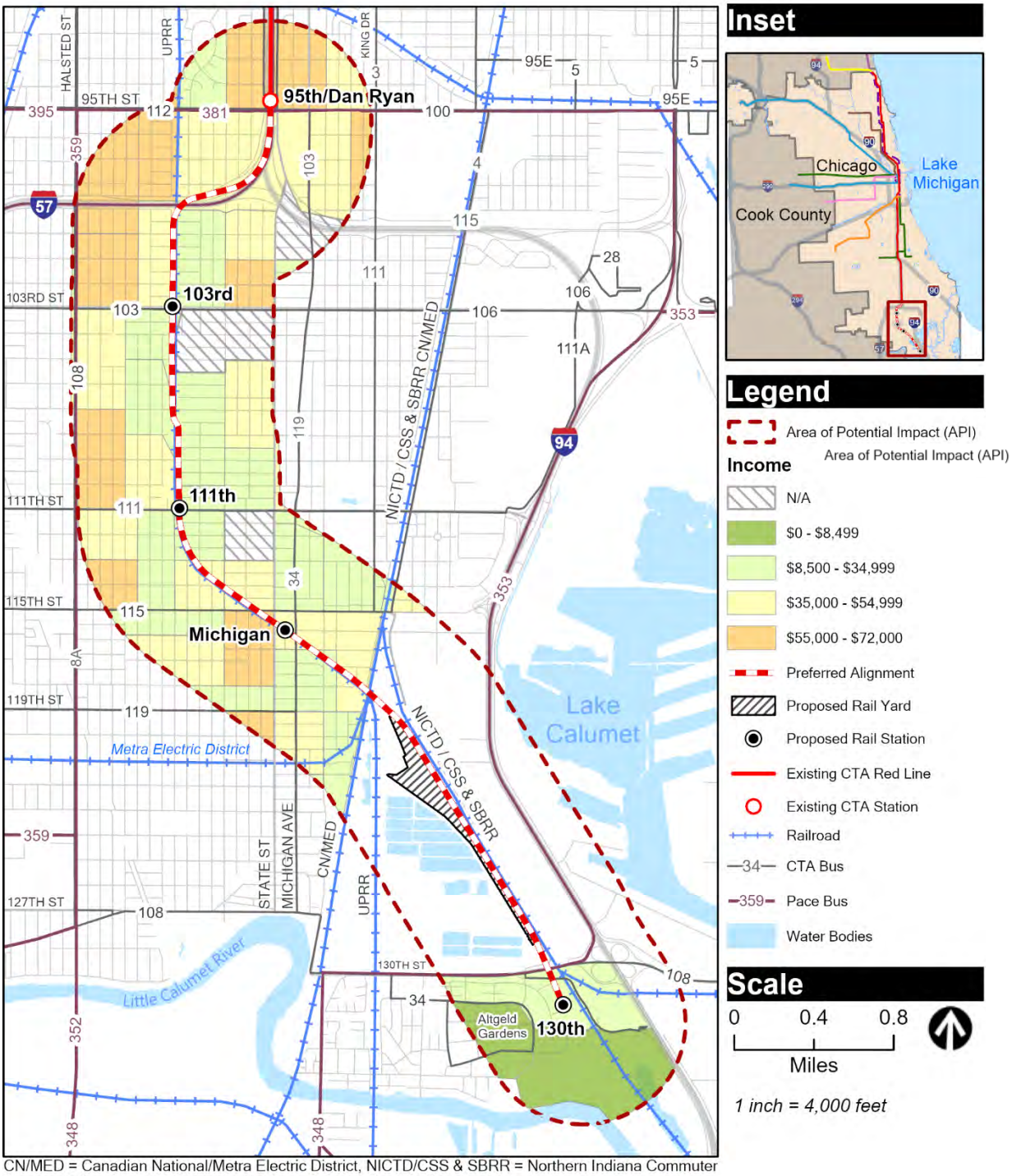

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

[1] No data are available for four block groups due to a low volume of census respondents.

Figure 4-2: Median Household Income

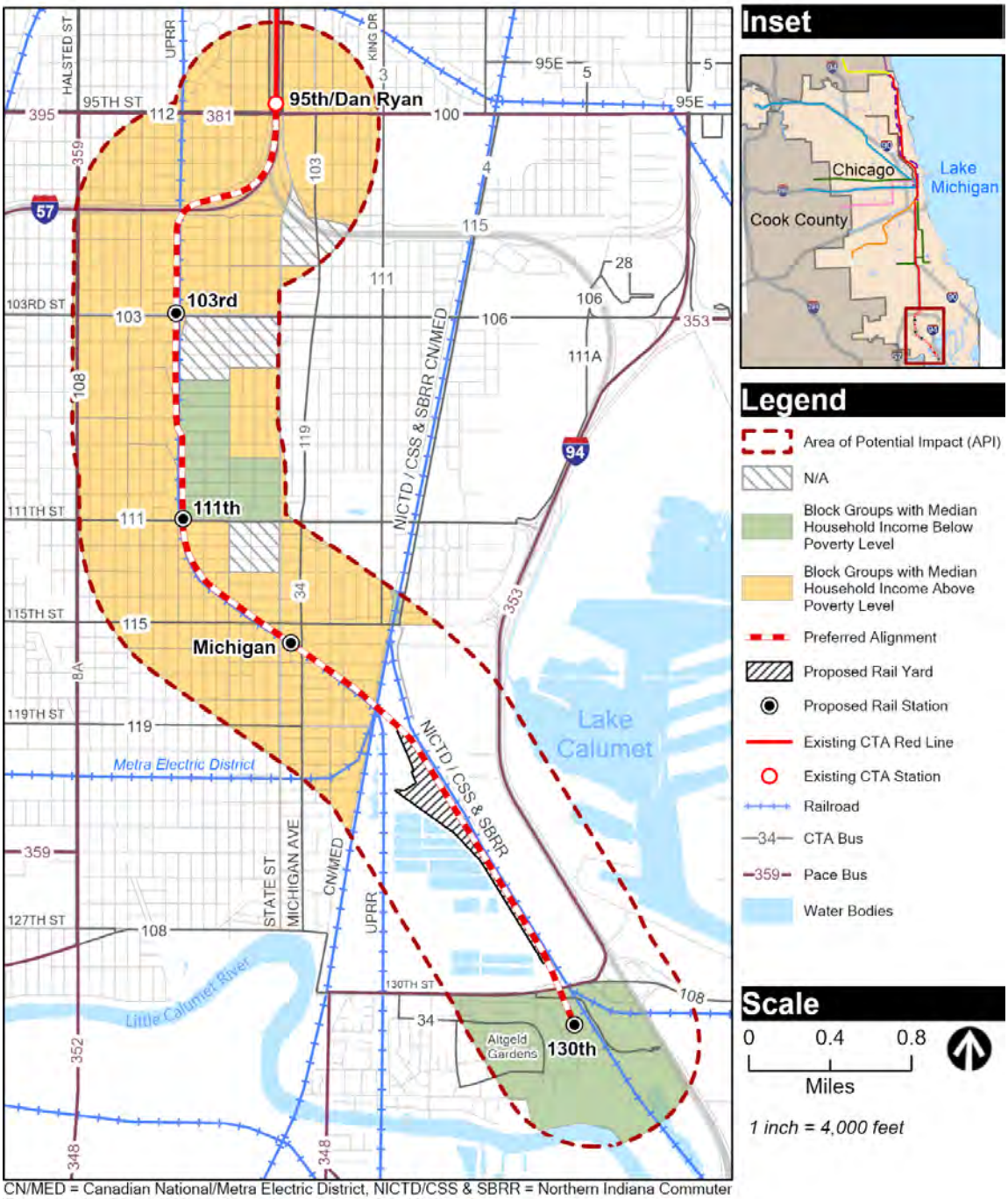

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

[1] No data are available for four block groups due to a low volume of census respondents.

Figure 4-3: Low-income Block Groups

As shown in **Table 4-6**, the unemployment rate for the entire API is nearly 23 percent. Since the Draft EIS, the unemployment rate has decreased in the City of Chicago, Washington Heights, and Pullman; however, unemployment rates have increased in the communities of Roseland, West Pullman, and Riverdale.

Table 4-6: Unemployment Rates in Affected Community Areas

Area	Draft EIS	Update
City of Chicago	12.0%	8.9%
API		**22.6%**
Washington Heights	18.8%	18.2%
Roseland	21.2%	22.9%
West Pullman	18.5%	23.4%
Pullman	21.4%	16.8%
Riverdale	34.8%	33.3%

Source: U.S. Census Bureau 2014-2018d

According to the 2018 5-Year ACS, the median home value in the City of Chicago was approximately $246,500, and the median rent was $930. Home values and rental prices in the API and surrounding community areas are lower than the City of Chicago, as shown in **Table 4-7**.

Table 4-7: Housing Costs in Affected Community Areas

Area	Median Home Value	Median Monthly Rent
City of Chicago	$246,500	$930
API	**$117,792**	**$807**
Washington Heights	$143,891	$913
Roseland	$123,015.00	$862.55
West Pullman	$105,809	$780
Pullman	$125,029	$783
Riverdale	$68,267	$474

Source: U.S. Census Bureau 2014-2018e, f

4.3 Limited English Proficiency Groups

Limited English Proficiency (LEP) persons are defined as individuals for whom English is not their primary language and who have limited ability to read, write, speak, or understand English. Similar to the Draft EIS, the majority of households in the API speak English, with Spanish as the second most common language spoken at home. **Table 4-8** displays the languages spoken at home within the City of Chicago, the API, and the surrounding communities. The study area around the Preferred Alignment no longer includes some of the block groups from the Draft EIS with the

highest percentage of LEP populations. **Figure 4-4** identifies the percentage of LEP populations in the API.

Table 4-8: Languages Spoken at Home within the Affected Community Areas

Area	English	Spanish	Other Indo-European Languages	Asian or Pacific Island Languages	Other Languages
City of Chicago	66.3%	19.9%	7.6%	4.4%	1.8%
API	**93.2%**	**5.0%**	**1.1%**	**0.3%**	**0.5%**
Washington Heights	97.6%	1.0%	1.1%	0.3%	0.0%
Roseland	95.0%	2.2%	1.5%	0.5%	0.7%
West Pullman	90.9%	7.0%	1.2%	0.0%	0.9%
Pullman	92.7%	4.2%	2.5%	0.0%	0.6%
Riverdale	96.7%	2.7%	0.0%	0.3%	0.4%

Source: U.S. Census Bureau 2014-2018i

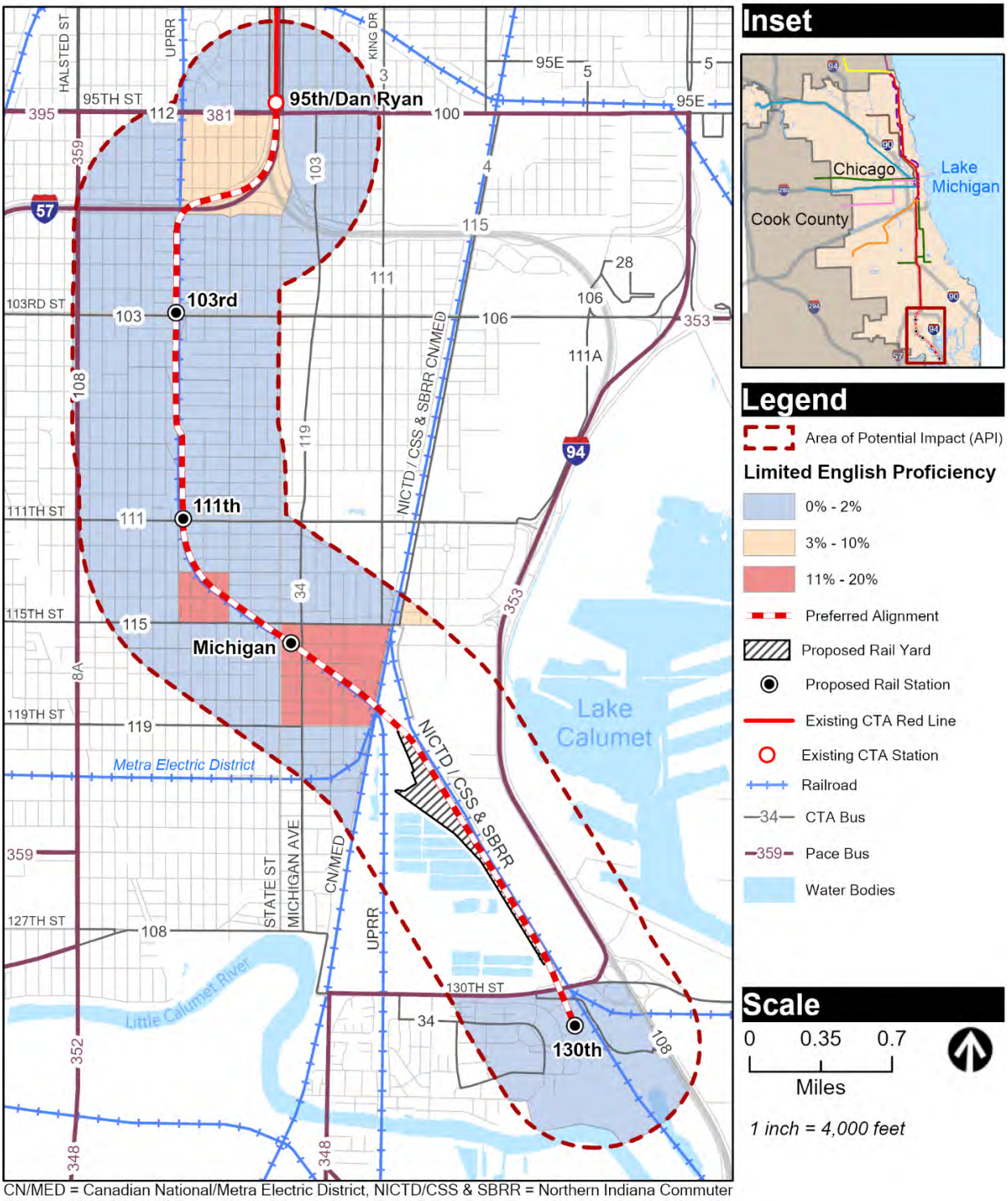

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-4: Limited English Proficiency Population

4.4 Older Adults

According to the 2018 5-year ACS, 15.5 percent of the population in the API is older adults, defined as 65 years of age and older. As shown in **Table 4-9**, the areas with the highest percentage of older adults are Washington Heights (19.9 percent) and Roseland (17.3 percent). Riverdale (4.9 percent) is the only community area with a percentage of older adults lower than the City of Chicago (12.0 percent). **Figure 4-5** shows the percentage of older adults living in the API.

Table 4-9: Percentage of Population 65 Years and Older in Affected Communities

Area	Percent of Population
City of Chicago	12.0%
API	**15.5%**
Washington Heights	19.9%
Roseland	17.3%
West Pullman	14.7%
Pullman	15.8%
Riverdale	4.9%

Source: U.S. Census Bureau 2014-2018g

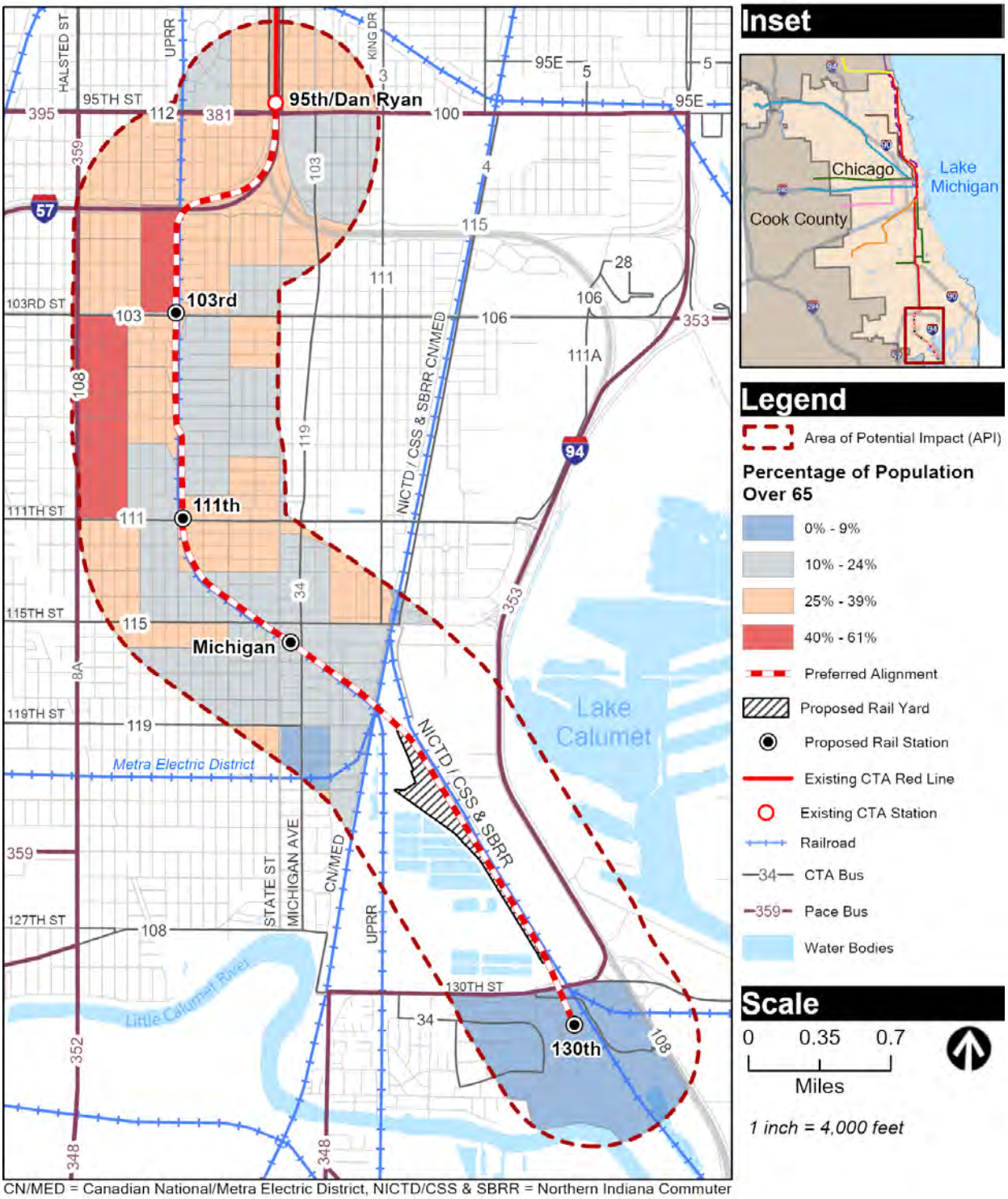

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-5: Percentage of Population 65 Years and Older in API

4.5 Persons with a Disability

According to the 2018 5-Year ACS, the percentage of people with a disability in the API is approximately 16 percent. This figure is considerably lower than the API for the Draft EIS, which reported 24.8 of the population with a disability. However, the percentage of the population with a disability is higher in the API than the City of Chicago. **Table 4-10** shows the percentage of the population with a disability in the API and affected communities. **Figure 4-6** shows the percentage of the population with a disability at the census tract level, although disability data are not available at the block group level.

Table 4-10: Percentage of Population with a Disability

Area	Percentage of Population with Disabilities	Percentage of Male Population with a Disability	Percentage of Female Population with a Disability
City of Chicago	10.5%	9.7%	11.2%
API	**16.0%**	**15.1%**	**16.0%**
Washington Heights	17.0%	17.0%	17.0%
Roseland	17.2%	16.4%	17.8%
West Pullman	13.7%	13.3%	14.0%
Pullman	18.3%	14.8%	21.3%
Riverdale	8.2%	6.3%	9.3%

Source: U.S. Census Bureau 2014-2018h
Note: Data not available at block group level.

4.6 Identification of Environmental Justice Populations

The API was evaluated in the above subsections using census tract and block group level data. Based on field observations and research, these geographic boundaries do not artificially dilute or inflate the affected minority population and/or low-income population findings. Every affected community in the API comprises mostly minority populations, ranging from Pullman with 90.1 percent minority population to West Pullman with 99.3 percent minority population. The API has a median household income ($39,529) that is lower than the citywide median ($55,198), and some communities have an even lower median income, such as Riverdale ($17,097). The API and surrounding communities also experience a higher unemployment rate than the citywide average. There are a higher percentage of older adults and persons with a disability in the API compared to the citywide average as well.

These findings are similar to those presented in the Draft EIS. Compared to Chicago as a whole, the API has a lower median household income, higher unemployment rate, higher percentage of minority communities, and a higher percentage of population over the age of 65. As such, the

analyzed demographic data indicate that the entire API and surrounding communities are made up of EJ communities.

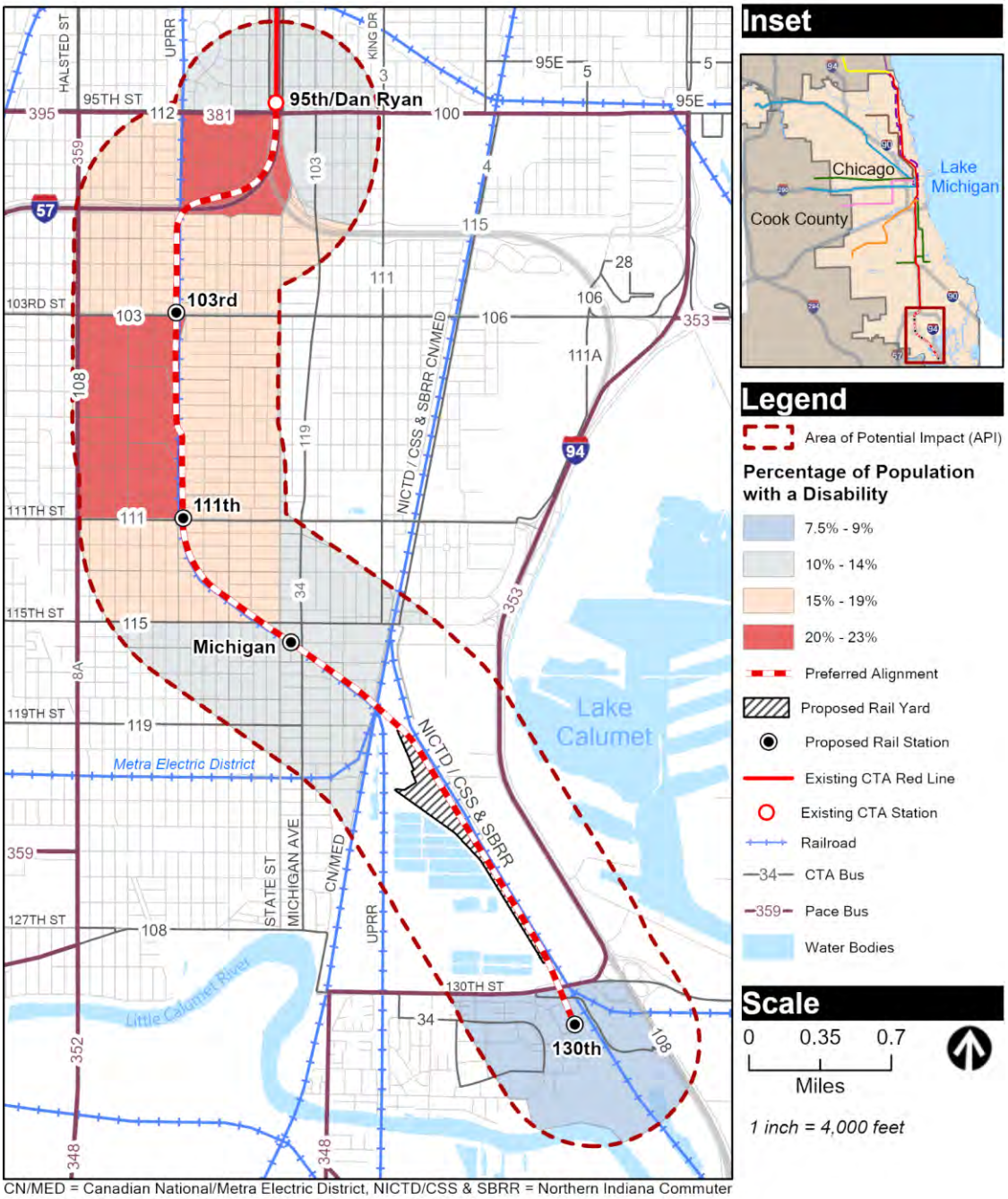

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Figure 4-6: Percentage of Population with a Disability

Section 5 - Impacts and Mitigation

Consistent with the Draft EIS, the impacts and mitigation summaries are organized into three impact categories—permanent, construction, and cumulative—with references to affected communities (see **Figure 1-1**).

- Permanent impacts relate to system operations after the RLE Project has been constructed, as well as land acquisitions necessary for the permanent right-of-way.
- Construction impacts are temporary and are anticipated to occur for the construction phase of the project, up to five years, including construction staging and utility relocations.
- Cumulative impacts are those of the RLE Project combined with other past, present, or near future projects within the API.

This section also documents the new or revised mitigation measures for identified project impacts, where applicable. If there is no change in the mitigation measures, this section indicates where there is no change when compared to the East or West Options of the UPRR Alternative evaluated in the Draft EIS. Likewise, this section indicates what additional (or fewer) measures apply to the Preferred Alignment. More detailed information about mitigation measures can be found in the respective resource sections of the Final EIS.

5.1 No Build Alternative

The No Build Alternative is defined as the existing transportation system plus any committed transportation improvements that are already in the current Chicago Metropolitan Agency for Planning (CMAP) Transportation Improvement Program (TIP). No new infrastructure would be built as part of the RLE Project under the No Build Alternative. The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of implementing the Preferred Alignment.

As described in **Appendix X** in the Draft EIS, the No Build Alternative would have no adverse impacts within EJ communities. The EJ communities in the API are, however, currently underserved by the CTA rail system compared to many other parts of Chicago, and the No Build Alternative would lack the beneficial increase in livability and economic development that the RLE Project would provide.

5.2 Union Pacific Railroad Alternative - Preferred Alignment

The August 2012 FTA Circular 4703.1, Environmental Justice Policy Guidance for Federal Transit Administration, and subsequent FTA webinar presentations indicate that projects in areas consisting entirely of EJ communities do not necessarily preclude disproportionately high and adverse effect findings; however, the following characteristics are true of the API:

- The entire API is predominantly minority populations. No community area contains less than 90.1 percent minority populations and the API as a whole contains 98.0 percent minority populations.
- All of the impacts and benefits of the Preferred Alignment would accrue to the same minority populations, and few project benefits would occur outside the API.
- The purpose of this community-initiated project includes connecting disadvantaged communities to Chicago's major employment and activity centers in an effort to spur economic development and improve livability. The RLE Project would help remediate the geographic isolation and lack of employment and development opportunities that currently exist in the API.

Given these findings, the Preferred Alignment would not result in disproportionately high and adverse impacts on EJ communities, consistent with findings presented in the Draft EIS. To provide a complete picture of how the Preferred Alignment would affect EJ communities, this section summarizes the adverse impacts that would occur in EJ communities, as well as the associated mitigation measures.

5.2.1 Permanent Impacts and Mitigation – Preferred Alignment

5.2.1.1 Resources with No Adverse Permanent Impacts

- Air Quality: No adverse air quality impacts from carbon monoxide, greenhouse gases, particulate matter with an aerodynamic diameter of 2.5 micrometers and less, or mobile source air toxics are anticipated. Because the Preferred Alignment would divert passenger trips to the Red Line, regional emissions from motor vehicles would decrease.
- Historic and Cultural Resources: The APE includes 73 historic properties eligible for listing on the National Register of Historic Places (NRHP). A complete listing and evaluation of NRHP eligibility can be found in **Appendix Q**. No adverse effects on historic properties are anticipated to occur.

- Energy: Compared to existing conditions, energy consumption would increase to operate Red Line trains and the four new stations. The increase in energy demand would not be adverse, as it is not expected to affect local or regional energy availability or require the development of new sources. Some beneficial reduction in fuel consumption would occur because the RLE Project would cause motorists to begin using transit for some trips.

- Geology and Soils: Operation of the Preferred Alignment would not cause adverse changes to geology or soil resources.

- Cumulative: No adverse cumulative impacts are expected.

5.2.1.2 Resources with No Adverse Permanent Impacts after Mitigation

- Biological Resources: Permanent impacts on vegetation and wildlife habitat under the Preferred Alignment would include removal of up to 64.1 acres of trees. Tree removal mitigation measures would be required, as defined in the Draft EIS, including following local tree ordinances and nesting bird surveys.

- Displacements: The Preferred Alignment would require 228 parcel acquisitions and 97 building displacements. The permanent impacts would not be adverse, because of compensation and relocation assistance per the Uniform Act (42 USC § 4601, et seq.), the general availability of vacant land near the project, the beneficial impacts of the project, and new development opportunities in the vicinity of the project.

- Hazardous Materials: Implementation of the Preferred Alignment would result in beneficial impacts through the cleanup and/or removal of contaminated material. Without implementation of the Preferred Alignment, this cleanup and removal would occur either at a later date or not at all. The Preferred Alignment also has the potential for hazardous material impacts associated with adjacent freight rail lines. Although there would be no permanent adverse impacts related to hazardous materials, CTA would adhere to all applicable federal, state, and local regulations, as well as existing system-wide hazardous material usage, storage, and disposal plans and procedures, which would further minimize the potential for hazardous material impacts.

- Land Use and Economic Development: The Preferred Alignment would cause displacements as a result of construction of the track structure and park & ride facilities. With the compensation and relocation assistance to be provided, the displacement impacts would not be adverse after mitigation. Facilities would be designed to be compatible with surrounding uses. Implementation of the Preferred Alignment could foster economic benefits by providing new public transit options and opportunities for economic

development. CTA has completed a Transit-Supportive Development (TSD) plan that would help minimize adverse impacts due to incompatible land use types resulting from the RLE Project.

- Noise and Vibration: Without mitigation, the Preferred Alignment would result in noise impacts at a total of 369 residences, with moderate impacts at 278 residences and severe impacts at 91 residences. A noise barrier with a minimum height of 3.5 feet above the top-of-rail elevation would provide a noise reduction of up to 15 decibels for RLE Project train noise. The noise barrier would mitigate all severe noise impacts, but 15 moderate noise impacts would remain after mitigation along the corridor. No noise impacts are projected at any noise-sensitive institutional locations after noise mitigation. Vibration levels would be below the FTA impact criterion, and there would be no vibration impacts from RLE train operations. No adverse noise or vibration impacts would remain after mitigation.

- Parklands and Community Facilities: Of the 10 parklands within the API, the Preferred Alignment would permanently affect two parklands: Fernwood Parkway and Beaubien Woods Forest Preserve. The visual impacts due to removal of vegetation on Fernwood Parkway would be mitigated. After mitigation, these impacts on Fernwood Parkway would still remain; however, they would not be adverse. The elevated track structure and the 103rd Street station would be constructed over a portion of Fernwood Parkway from 99th Street to 103rd Street between the existing UPRR tracks on the east and Eggleston Avenue on the west. The impacts from reduction in open space in Fernwood Parkway would be mitigated with 4.5 acres of replacement park in the form of pocket parks within the Washington Heights community and along the Major Taylor Trail. These pocket park sites would be directly adjacent to the Major Taylor Trail, or additional areas based on future coordination with the Chicago Park District. The 130th Street station access road requires closure of Old 130th Street at the new RLE track crossing. Old 130th Street provides an existing connection to the Beaubien Woods Forest Preserve access road east of the new RLE at-grade track crossing. Closure of Old 130th Street would eliminate the access road connection into the Beaubien Woods Forest Preserve from Old 130th Street. However, the main access route to the Beaubien Woods Forest Preserve would continue to be from Ellis Avenue to Greenwood Avenue to 132nd Street. After mitigation and enhancement measures, coordinated with the Forrest Preserves of Cook County, no adverse impacts to Beaubien Woods Forest Preserve are anticipated. The *Parklands and Community Facilities Technical Memorandum* (**Appendix M**) contains a full listing of the community and park resources. The number of community resources has been updated to reflect resources within the API of the Preferred Alignment. There are 101 community facilities within the API of the Preferred Alignment compared to 76 community facilities within the API for the East and West Options in the Draft EIS. They included: 62 religious facilities, 12 schools, six community centers, three fire

stations, four healthcare centers or hospitals, one library, nine landmarks, and five government facilities. By improving travel time, the Preferred Alignment would improve access to parklands and community facilities within walking distance (½ mile) of station locations when compared to the No Build Alternative. After mitigation, there would be no adverse construction/permanent impacts on any of the parklands or community facilities.

- Safety and Security: A large volume of pedestrians would be expected to cross the major streets near the stations without positive traffic control. This would be an adverse impact on pedestrian safety without additional improvements or mitigation measures. The final design of the four RLE stations would include appropriate improvements to enhance safety for crossing pedestrians, resulting in no permanent adverse impacts after mitigation. All potential improvements would be coordinated with CDOT. The Preferred Alignment would improve safe access for transit users. New train stations would be unlikely to have much, if any, impact on neighborhood crime. Mitigation measures would include lighting under the elevated structure in station, parking, and on CTA right-of-way to contribute to improved safety and security, and to improve surveillance visibility.

- Water Resources: The Preferred Alignment would not cross any waterbody or result in any new structures or construction in a waterbody. No permanent adverse impacts are anticipated on the Illinois coastal zone. The Preferred Alignment would not cross a floodplain or result in any new structures or construction in a floodplain. The Preferred Alignment would affect up to 15.7 acres of wetlands, primarily in the vicinity of the 120th Street yard and shop. All federal, state, and local regulations regarding wetland impacts would be adhered to, which may require compensatory mitigation of wetland impacts.

- Transportation: During peak travel times, the Preferred Alignment would increase traffic congestion beyond applicable thresholds at some intersections, largely due to cars accessing the park & ride facilities at stations. CTA has provided RLE Project traffic analysis to agencies of jurisdiction through ongoing coordination and recommended improvements as documented in the Final EIS through 30 percent design. CTA would coordinate intersection improvements with Illinois Department of Transportation, Chicago Department of Transportation, and Cook County Department of Transportation and Highways for intersections affected by the change in traffic volumes and patterns associated with the final design of the RLE Project. However, the mitigation measures would be based on actual (measured) traffic volumes, agency requirements, coordination within the traffic network, and any traffic demand management and/or traffic calming measures being implemented at the time of mitigation. The park & ride facilities may also draw some motorists away from nearby highways, thereby improving traffic flow for automobiles and freight trucks. The Preferred Alignment would not affect freight rail operations. CTA would coordinate with

Pace Suburban Bus Service and existing bus routes would be adjusted to interface better with the RLE stations and service. Pedestrian and bicycle access would also be included in the final design of the RLE Project, which would improve transit connections. Transit access to the API would improve, particularly for low-income residents who do not have access to automobiles.

5.2.1.3 Resources with Adverse Permanent Impacts after Mitigation

- Visual and Aesthetic Conditions: Due to the proximity and height of the elevated structure and stations near residential areas, impacts on visual and aesthetic conditions would remain adverse after mitigation. The Preferred Alignment would have permanent adverse visual and aesthetic impacts north of I-57, between 99th Street and the 103rd Street station area, near the 107th Place cross-over, at 117th Street and Prairie Avenue, and at the 130th Street station, despite implementation of mitigation measures. Mitigation measures to reduce visual impacts would include landscaping (trees), using urban design techniques to reduce adverse impacts, and creating pedestrian-friendly surroundings.

- Neighborhood and Community Impacts: The Preferred Alignment would have permanent adverse impacts on community character and cohesion that could not be mitigated due to the visual encroachment of the elevated structure into adjacent neighborhoods. Because of the relocated 130th Street station, the residential character and scale would be noticeably altered by the removal of vegetation and the addition of the park & ride facility and station for the residences that front on Greenwood Avenue. However, the RLE Project would allow residents to easily access community resources in other neighborhoods and could serve as a focal point for the development of additional community resources. The Preferred Alignment would improve transit accessibility and provide residents with fast, reliable transit service to job centers to the north and areas where more services are available. The Preferred Alignment would reduce travel times for communities surrounding the API and would enhance their connection with major job and activity centers north of the API.

5.2.1.4 Changes to Adverse Permanent Impacts and Mitigation since the Draft EIS

The Preferred Alignment, when compared to the options evaluated in the Draft EIS, would reduce adverse permanent impacts and the requirement for mitigation measures. Community input, as well as alignment refinement, has resulted in fewer impacts on EJ communities.

5.2.2 Construction Impacts and Mitigation - Preferred Alignment

5.2.2.1 Resources with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent right-of-way, there would be no temporary displacement or relocation impacts associated solely with the construction phase.
- Historic and Cultural Resources: There would be no adverse effects on historic resources during construction.
- Energy: The construction activities would not require fuel consumption and energy use at a scale that would adversely affect energy availability and would not require development of new energy sources. No adverse impacts would occur.
- Geology and Soils: Construction of the Preferred Alignment would not have adverse impacts on geologic or soil resources, because all of the features of the Preferred Alignment would be located primarily on or within existing transportation use areas such as streets and railroad corridors. No mitigation measures would be required.
- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE Project. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.2.2.2 Resources with No Adverse Construction Impacts After Mitigation

- Air Quality: Impacts during construction would be associated with temporary and localized emissions of fugitive dust and exhaust from construction vehicles and equipment. Construction air emissions under the Preferred Alignment would be similar to the East Option and West Option in the Draft EIS. Construction mitigation measures would include best management practices (BMPs) to reduce construction dust, to provide emissions controls on construction equipment, to use low-sulfur fuels, and to limit equipment operations such as excessive idling. In addition, the contractors performing primary construction activities would develop and implement a Dust Control Plan, which would address, in detail, how dust would be controlled at the construction site, the staging areas, and the access and egress routes. CTA would require contractors to follow Chicago's Clean Diesel Construction Ordinance, which would reduce the potential for construction-related air quality impacts. No additional construction mitigation measures would be required

under the Preferred Alignment. Construction impacts on air quality would not be adverse after mitigation.

- Noise and Vibration: Construction noise levels are not expected to exceed the FTA construction noise limits, with mitigation measures to limit nighttime construction and impact pile driving near noise-sensitive receivers. Construction-related vibration impacts are not expected. Construction BMPs would be used to reduce noise and vibration.

- Biological Resources: The Preferred Alignment would potentially have adverse impacts on vegetation and wildlife habitat during construction due to tree removal. Compliance with local tree protection ordinances would mitigate the impacts of tree removal. As needed, mitigation measures to reduce potential impacts on wildlife habitat would be performed, including replanting trees as required by applicable local codes and ordinances, lighting restrictions for the protection of wildlife associated with Lake Calumet, and timing tree removal for the protection of migratory birds, northern long-eared bat, and the osprey.

- Hazardous Materials: Construction would require the demolition of existing structures that were likely constructed before 1978–1979, which could result in a release of asbestos fibers and lead dust during construction. Prior to demolition of any structures, CTA would test for lead and asbestos and remediate, as necessary. Construction-related impacts would not be adverse after the implementation of BMPs and standard practices, such as following the local, state, and federal laws regarding handling of hazardous materials. Detailed information about mitigation can be found in the Final EIS.

- Land Use and Economic Development: Construction would take up to 5 years and would cause temporary impacts on adjacent residential neighborhoods due to noise, vibration, fugitive dust, truck traffic, and roadway detours. Mitigation methods would include focusing construction activities primarily during the least impactful times of day and other BMPs. CTA would develop a Construction Outreach and Coordination Plan. CTA would also coordinate with the communities, businesses, and aldermen's local ward offices, and contractors performing primary construction activities to finalize and implement a Construction Outreach and Coordination Plan. There would be short-term beneficial economic impacts from construction jobs. The land use impacts from construction would not be adverse after mitigation. The overall economic development impact from construction would be beneficial.

- Neighborhood and Community Impacts: Construction activities would cause temporary impacts such as noise, vibration, dust, truck traffic, and roadway detours. Impacts on the EJ communities would not be adverse provided that BMPs were employed and nighttime construction near residences was limited to the extent practicable. Storage of materials,

equipment, and trucks would introduce temporary intermittent visual impacts within communities, but these impacts would not be adverse given their temporary nature and CTA's use of BMPs. Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. This potentially adverse impact would be mitigated through early notification of construction activities, provision of temporary alternate access routes, and advertising programs to increase the visibility of affected businesses during construction.

- Parklands and Community Facilities: The adverse impacts would be mitigated using construction BMPs, clearly marked detour routes, and notification to nearby schools and community centers regarding the construction schedule.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site, would not be adverse after mitigation, which would include minimizing detour lengths. CTA would prepare traffic management and maintenance of traffic plans that identify traffic detours and emergency response access routes.

- Visual and Aesthetic Conditions: Construction-related visual impacts would include construction fencing, demolition of existing buildings, temporary street closures and related signage, temporary lighting or entrances, and/or shoring of concrete structures or existing viaducts. CTA would maintain as much existing vegetation as practical, including shielding of tree root zones to prevent construction damage to existing trees that would remain. Temporary construction impacts on neighborhoods would be minimized by limiting construction light infiltration into adjacent neighborhoods when nighttime work would be required. In addition, BMPs and debris-free construction areas would mitigate temporary visual impacts from the construction sites. There would be no adverse construction impacts after mitigation.

- Water Resources: There would be no adverse construction impacts on water resources after mitigation. Stormwater drainage mitigation measures would include incorporating new stormwater management structures and establishing an erosion control plan, including for construction activities at the locations of park & ride facilities. Water quality mitigation measures would include installing properly designed and maintained biological oil and grease removal systems, proper storage of hazardous materials, development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials, proper storage and maintenance of equipment, periodic removal of landscape and construction debris, installation of detention basins to remove suspended solids, and regular monitoring of runoff water quality. Temporary construction access for installation of a stormwater outlet to Kensington Marsh would necessitate temporary impacts on wetlands. Temporary impacts on the marsh would not exceed 0.19 acre.

Construction staging areas would be sited outside of wetlands as much as practicable. Any areas temporarily impacted would be restored to pre-construction condition after construction.

- Transportation: Construction of rail facilities, parking structures, and park & ride facilities would require lane and sidewalk closures that would temporarily reduce roadway capacity. These closures may lead to temporarily increased travel times for both motorists and transit riders, and bus stop locations may be temporarily relocated. Bicycles and pedestrians would need to be rerouted around work areas. Detours would be provided to maintain access, and closures would be scheduled during low-traffic periods to the extent feasible to minimize impacts. Construction would also be phased to minimize disruption to passenger and freight rail services. CTA would require contractors performing primary construction activities to sequence the proposed structure construction in the vicinity of the I-94/I-57 interchange to limit effect on I-57 traffic flow to the extent practicable per IDOT traffic management requirements. The UPRR freight tracks would remain active during construction. Temporary intermittent track closures may be needed; however, construction would be staged to minimize disruption. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur after mitigation.

5.2.2.3 Resources with Adverse Construction Impacts After Mitigation

No adverse construction impacts would remain after mitigation.

5.2.2.4 Changes to Construction Impacts since the Draft EIS

Construction impacts and mitigation measures are consistent with those presented in the Draft EIS.

5.2.3 Cumulative Impacts and Mitigation - Preferred Alignment

No cumulative adverse impacts are expected. This is consistent with the Draft EIS.

Section 6 - Impacts Remaining after Mitigation

This section describes the permanent impacts of the RLE Project remaining after mitigating for impacts as described in **Section 5**.

6.1 No Build Alternative

Consistent with the findings of the Draft EIS, there would be no adverse impacts on EJ communities as a result of the No Build Alternative.

6.2 Union Pacific Railroad Alternative - Preferred Alignment

The Preferred Alignment reduces the amount of adverse permanent impacts on EJ communities, compared to East and West Options presented in the Draft EIS. However, despite mitigation efforts, adverse permanent impacts would occur in the API.

6.2.1 Resources with Adverse Permanent Impacts after Mitigation

The Preferred Alignment would have adverse impacts remaining after mitigation in the following categories:

- Visual and Aesthetic Conditions (related to community visual character)
- Neighborhood and Community Impacts (related to community visual character)

Impacts and benefits would occur entirely within the same minority and low-income communities. As such, no disproportionately high and adverse effects on minority or low-income communities would occur.

6.2.2 Resources with Adverse Construction Impacts After Mitigation

No adverse construction impacts would remain after mitigation.

6.2.3 Resources with Cumulative Impacts After Mitigation

No cumulative adverse impacts are expected. This is consistent with the Draft EIS.

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Appendix X

Environmental Justice Technical Memorandum

- Draft EIS Appendix X, Environmental Justice Technical Memorandum, September 2015

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Environmental Justice
Technical Memorandum

May 8, 2015
Updated September 13, 2015

Prepared for:
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Table of Contents

Section 1 Summary 1-1

Section 2 Project Description 2-1

Section 3 Methods for Impact Evaluation 3-1

3.1 Regulatory Framework 3-1
3.1.1 Federal 3-2
3.1.2 State 3-3
3.1.3 Local 3-3
3.2 Impact Analysis Thresholds 3-3
3.2.1 Environmental Justice Populations 3-3
3.2.2 Disproportionately High and Adverse Effects 3-4
3.2.3 Receipt of Benefits 3-4
3.3 Area of Potential Impact 3-5
3.4 Methods 3-5

Section 4 Affected Environment 4-1

4.1 Minority Groups 4-4
4.2 Low-Income Groups 4-7
4.3 Minority and Low-Income Groups 4-13
4.4 Limited English Proficiency Groups 4-15
4.5 Elderly Groups 4-18
4.6 People with Disabilities 4-20
4.7 Identification of Environmental Justice Populations 4-22

Section 5 Impacts and Mitigations 5-1

5.1 No Build Alternative 5-1
5.1.1 Permanent Impacts and Mitigations - No Build Alternative 5-1
5.1.2 Construction Impacts and Mitigations - No Build Alternative 5-2
5.2 Bus Rapid Transit Alternative 5-2
5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative 5-2
5.2.1.1 Topics with No Adverse Permanent Impacts 5-2
5.2.1.2 Topics with No Adverse Permanent Impacts After Mitigation 5-3
5.2.1.3 Topics with Adverse Permanent Impacts After Mitigation 5-4
5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative 5-4

5.2.2.1 Topics with No Adverse Construction Impacts 5-4
5.2.2.2 Topics with No Adverse Construction Impacts After Mitigation 5-5
5.2.2.3 Topics with Adverse Construction Impacts After Mitigation 5-7
5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-7
5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-8
5.3.1.1 Segment UA 5-8
5.3.1.1.1 Topics with No Adverse Permanent Impacts 5-8
5.3.1.1.2 Topics with No Adverse Permanent Impacts After Mitigation 5-8
5.3.1.1.3 Topics with Adverse Permanent Impacts After Mitigation 5-11
5.3.1.2 Segment UB 5-11
5.3.1.2.1 Topics with No Adverse Permanent Impacts 5-11
5.3.1.2.2 Topics with No Adverse Permanent Impacts After Mitigation 5-12
5.3.1.2.3 Topics with Adverse Permanent Impacts After Mitigation 5-13
5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option 5-13
5.3.2.1 Segment UA 5-13
5.3.2.1.1 Topics with No Adverse Construction Impacts 5-13
5.3.2.1.2 Topics with No Adverse Construction Impacts After Mitigation 5-14
5.3.2.1.3 Topics with Adverse Construction Impacts After Mitigation 5-17
5.3.2.2 Segment UB 5-17
5.3.2.2.1 Topics with No Adverse Construction Impacts 5-17
5.3.2.2.2 Topics with No Adverse Construction Impacts After Mitigation 5-17
5.3.2.2.3 Topics with Adverse Construction Impacts After Mitigation 5-19
5.3.3 120th Street Yard and Shop 5-19
5.3.3.1 Permanent Impacts and Mitigations 5-19
5.3.3.1.1 Topics with No Adverse Permanent Impacts 5-19
5.3.3.1.2 Topics with No Adverse Permanent Impacts After Mitigation 5-20
5.3.3.1.3 Topics with Adverse Permanent Impacts After Mitigation 5-21
5.3.3.2 Construction Impacts and Mitigations 5-21

5.3.3.2.1 Topics with No Adverse Construction Impacts 5-21
5.3.3.2.2 Topics with No Adverse Construction Impacts After Mitigation 5-22
5.3.3.2.3 Topics with Adverse Construction Impacts After Mitigation 5-24
5.4 Union Pacific Railroad Rail Alternative - East Option..... 5-24
5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option 5-24
5.4.1.1 Segment UA 5-24
5.4.1.1.1 Topics with No Adverse Permanent Impacts..... 5-24
5.4.1.1.2 Topics with No Adverse Permanent Impacts After Mitigation 5-25
5.4.1.1.3 Topics with Adverse Permanent Impacts After Mitigation 5-27
5.4.1.2 Segment UB 5-27
5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option 5-27
5.4.2.1 Segment UA 5-27
5.4.2.1.1 Topics with No Adverse Construction Impacts 5-27
5.4.2.1.2 Topics with No Adverse Construction Impacts After Mitigation 5-28
5.4.2.1.3 Topics with Adverse Construction Impacts After Mitigation 5-29
5.4.2.2 Segment UB 5-29
5.4.3 120th Street Yard and Shop..... 5-29
5.5 Union Pacific Railroad Rail Alternative - West Option..... 5-30
5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option 5-30
5.5.1.1 Segment UA 5-30
5.5.1.1.1 Topics with No Adverse Permanent Impacts..... 5-30
5.5.1.1.2 Topics with No Adverse Permanent Impacts After Mitigation 5-31
5.5.1.1.3 Topics with Adverse Permanent Impacts After Mitigation 5-33
5.5.1.2 Segment UB 5-33
5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option 5-34
5.5.2.1 Segment UA 5-34
5.5.2.1.1 Topics with No Adverse Construction Impacts 5-34

5.5.2.1.2 Topics with No Adverse Construction Impacts After Mitigation 5-34
5.5.2.1.3 Topics with Adverse Construction Impacts After Mitigation 5-35
5.5.2.2 Segment UB 5-36
5.5.3 120th Street Yard and Shop 5-36
5.6 Halsted Rail Alternative 5-36
5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative 5-36
5.6.1.1 Segment HA 5-36
5.6.1.1.1 Topics with No Adverse Permanent Impacts 5-36
5.6.1.1.2 Topics with No Adverse Permanent Impacts After Mitigation 5-37
5.6.1.1.3 Topics with Adverse Permanent Impacts After Mitigation 5-39
5.6.1.2 Segment HB 5-39
5.6.1.2.1 Topics with No Adverse Permanent Impacts 5-39
5.6.1.2.2 Topics with No Adverse Permanent Impacts After Mitigation 5-39
5.6.1.2.3 Topics with Adverse Permanent Impacts After Mitigation 5-40
5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative 5-41
5.6.2.1 Segment HA 5-41
5.6.2.1.1 Topics with No Adverse Construction Impacts 5-41
5.6.2.1.2 Topics with No Adverse Construction Impacts After Mitigation 5-42
5.6.2.1.3 Topics with Adverse Construction Impacts After Mitigation 5-44
5.6.2.2 Segment HB 5-44
5.6.2.2.1 Topics with No Adverse Construction Impacts 5-44
5.6.2.2.2 Topics with No Adverse Construction Impacts After Mitigation 5-45
5.6.2.2.3 Topics with Adverse Construction Impacts After Mitigation 5-46
5.6.3 119th Street Yard and Shop 5-46
5.6.3.1 Permanent Impacts and Mitigations 5-46
5.6.3.1.1 Topics with No Adverse Permanent Impacts 5-46
5.6.3.1.2 Topics with No Adverse Permanent Impacts After Mitigation 5-47
5.6.3.1.3 Topics with Adverse Permanent Impacts After Mitigation 5-48

5.6.3.2 Construction Impacts and Mitigations 5-48
5.6.3.2.1 Topics with No Adverse Construction Impacts 5-48
5.6.3.2.2 Topics with No Adverse Construction Impacts After Mitigation 5-49
5.6.3.2.3 Topics with Adverse Construction Impacts After Mitigation 5-50

Section 6 Impacts Remaining After Mitigation 6-1
6.1 No Build Alternative 6-1
6.2 Bus Rapid Transit Alternative 6-2
6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option 6-2
6.3.1 Segment UA 6-2
6.3.2 Segment UB 6-2
6.3.3 120th Street Yard and Shop 6-2
6.4 Union Pacific Railroad Rail Alternative - East Option 6-2
6.4.1 Segment UA 6-2
6.4.2 Segment UB 6-2
6.4.3 120th Street Yard and Shop 6-3
6.5 Union Pacific Railroad Rail Alternative - West Option 6-3
6.5.1 Segment UA 6-3
6.5.2 Segment UB 6-3
6.5.3 120th Street Yard and Shop 6-3
6.6 Halsted Rail Alternative 6-3
6.6.1 Segment HA 6-3
6.6.2 Segment HB 6-4
6.6.3 119th Street Yard and Shop 6-4

Section 7 Environmental Justice Public Involvement 7-1

Section 8 References Cited 8-1

Appendices

Appendix A - Limited English Proficiency (LEP) Assessment

Appendix B - 2014-2015 Red Line Extension Project Update

Figures

Figure 2-1: Red Line Extension Project Alternatives 2-2
Figure 4-1: Community Areas 4-2
Figure 4-2: Concentrations of Community Resources 4-3
Figure 4-3: Minority Populations - Percentage 4-6
Figure 4-4: Median Household Income 4-9
Figure 4-5: Low-Income Block Groups 4-11
Figure 4-6: Low-Income and Minority Populations - Percentage 4-14
Figure 4-7: Population that has Limited English Proficiency - Percentage 4-17
Figure 4-8: Elderly Populations - Percentage 4-19
Figure 4-9: Population with Disabilities - Percentage 4-21

Tables

Table 1-1: Adverse Impacts Remaining After Mitigation by Alternative (Not Disproportionate) 1-2
Table 4-1: Percent of Population that is Minority 4-5
Table 4-2: Racial Composition within the Area of Potential Impact as a Whole 4-7
Table 4-3: U.S. Department of Health and Human Services 2012 Poverty Guideline 4-8
Table 4-4: Median Household Income in Affected Communities 4-8
Table 4-5: Block Groups with Populations Below Poverty Level in the Area of Potential Impact 4-10
Table 4-6: Unemployment Rates in Affected Communities 4-12
Table 4-7: October 2012 Average Home and Rental Prices in Affected Communities 4-12
Table 4-8: Languages Spoken at Home within the Affected Communities 4-16
Table 4-9: Percentage of Population 65 Years and Older in Affected Communities 4-18
Table 4-10: Percentage of Population with Disabilities within the Area of Potential Impact as a Whole 4-20
Table 6-1: Adverse Impacts Remaining After Mitigation by Alternative (Not Disproportionate) 6-1

Abbreviations

API	area of potential impact
BRT	Bus Rapid Transit
CMAP	Chicago Metropolitan Agency for Planning
CO	carbon monoxide
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
EO	Executive Order
FSRRFS	Far South Railroad Relocation Feasibility Study
FTA	Federal Transit Administration
GHG	greenhouse gases
LEP	limited English proficiency
MSAT	mobile source air toxics
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
PM2.5	particulate matter smaller than 2.5 micrometers
RLE	Red Line Extension
ROW	right-of-way
Uniform Act	Uniform Relocation and Real Property Assistance Act of 1970
UPRR	Union Pacific Railroad
USDOT	United States Department of Transportation

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on Environmental Justice. The Environmental Justice analysis and outreach process was undertaken to accomplish the following goals, consistent with Federal Transit Administration (FTA) Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration* (August 2012), and Circular 4702.1B, *Title VI Requirements and Guidelines for Federal Transit Administration Recipients* (October 2012):

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The analysis and outreach process is also consistent with the legislation that defines requirements for Environmental Justice compliance: the February 1994 Executive Order (EO) 12898, *Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations,* and the May 2012 U.S. Department of Transportation (USDOT) Order 5610.2, *Order to Address Environmental Justice in Minority Populations and Low-Income Populations*.

Although projects in areas comprising entirely Environmental Justice populations do not necessarily preclude disproportionately high and adverse effect findings, the following characteristics are true of the project area and the RLE alternatives:

- The entire project area comprises predominantly minority populations. No community in the project area contains less than 92.9 percent minority populations, and the project area as a whole contains 97.9 percent minority populations.
- All of the impacts and benefits of the alternatives would accrue to the same minority populations, and few project benefits would occur outside the project area.
- The purpose of this community-initiated project includes connecting disadvantaged communities to Chicago's major employment and activity centers in an effort to spur economic development and improve livability. The project would help remediate the geographic isolation and lack of employment and development opportunities that currently exist in the project area.

Given these findings, none of the alternatives would result in disproportionately high and adverse effects on Environmental Justice populations. Some alternatives would still have adverse impacts on Environmental Justice communities; however, these impacts would not be disproportionate. In some instances, impacts would remain adverse despite implementation of mitigation measures, as shown in Table 1-1 and described further in Section 5. These remaining adverse impacts would be associated with the change in community and visual character caused by locating an elevated rail structure and parking structures in low-density residential areas. In the case of the Halsted Rail Alternative, impacts would also stem from the proximity of the elevated rail structure to historic resources.

Table 1-1: Adverse Impacts Remaining After Mitigation by Alternative (Not Disproportionate)

Impact Category	No Build	BRT	UPRR ROW Option	UPRR East Option	UPRR West Option	Halsted
Displacements	No	No	No	No	No	No
Land Use and Economic Development	No	No	No	No	No	Yes
Noise and Vibration	No	No	No	No	No	No
Energy	No	No	No	No	No	No
Air Quality and Climate Change	No	No	No	No	No	No
Biological Resources	No	No	No	No	No	No
Hazardous Materials	No	No	No	No	No	No
Neighborhood and Community	No	No	No	Yes	Yes	Yes
Parklands and Community Facilities	No	No	No	No	No	No
Safety and Security	No	No	No	No	No	No
Visual and Aesthetic Conditions	No	No	No	Yes	Yes	Yes
Water Resources	No	No	No	No	No	No
Transportation	No	No	No	No	No	No
Historic and Cultural Resources	No	No	No	No	No	Yes
Geology and Soils	No	No	No	No	No	No
Cumulative	No	No	No	No	No	No

BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad, ROW = Right-of-Way

Reference to the public involvement summary in Section 7 to be added following completion of the Environmental Justice outreach process.

Updated July 29, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015,

CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix B of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix B supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- Bus Rapid Transit (BRT) Alternative
- Union Pacific Railroad (UPRR) Rail Alternative
    - Right-of-Way (ROW) Option
    - East Option
    - West Option
- Halsted Rail Alternative

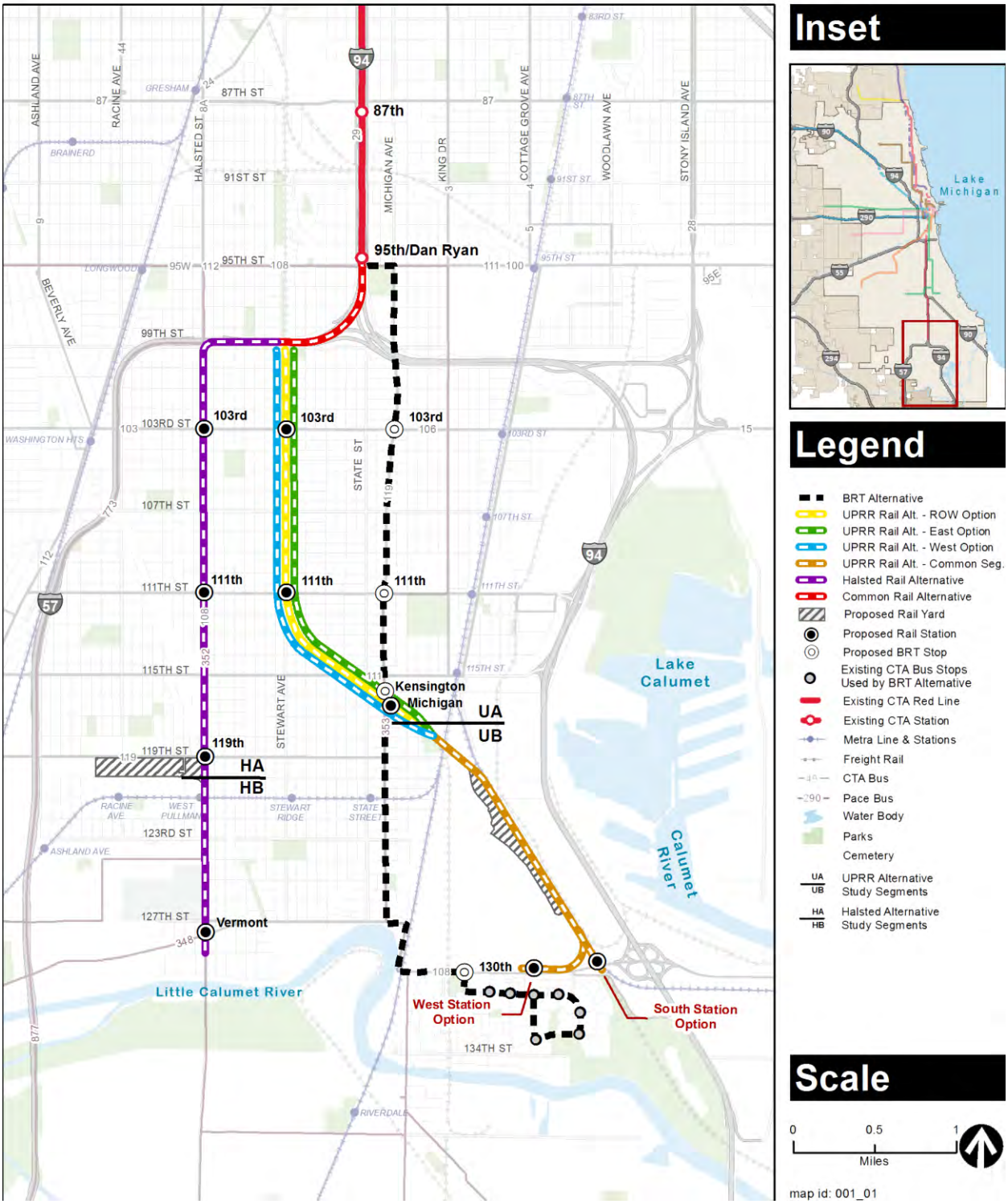

Figure 2-1: Red Line Extension Project Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program, which includes the improvements to 95th Street Terminal. The Transportation Improvement Program projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra's facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National/Metra Electric District tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

According to EO 12898 signed in February 1994 and the guidance provided in FTA Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration* issued in August 2012, the Environmental Justice process and analysis developed for the RLE Project is designed to achieve the following:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The Environmental Justice analysis for the RLE Project is consistent with the August 2012 FTA Circular and is tailored to the unique characteristics and needs of the population in the area. Because the entire project area consists of predominantly African American populations with some Spanish-speaking groups, as discussed further in Section 4, all public outreach efforts were targeted to Environmental Justice populations. In addition to traditional public meetings and internet-based outreach, information about the project and opportunities for input were provided through newsletters, standing community group meetings, and individual stakeholder interviews to ensure full and fair participation. Information gathered during stakeholder interviews was used to plan focused, grassroots meetings to work through community concerns and identify appropriate mitigation measures. All outreach was conducted in both English and Spanish languages. Concerns about potential impacts raised during outreach were analyzed in conjunction with the impacts from the other RLE technical reports to determine whether disproportionately high and adverse effects would potentially occur. The results of the impact analysis are presented in detail in Section 5.

3.1 Regulatory Framework

The following subsections summarize the federal and related state laws that define Environmental Justice requirements for federally funded transit projects. The Environmental Justice analysis and outreach process for the RLE Project was conducted in accordance with these requirements. The methods outlined in the cited guidance documents were used to develop the methods for this analysis, as described in Sections 3.2 through 3.4 below.

3.1.1 Federal

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations* (1994), requires each federal agency "to make achieving Environmental Justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations" (Federal Register, Volume 59, No. 32, 7629-7633, February 16, 1994). Each federal agency must analyze the environmental impacts, including human health, economic, and social impacts, of federal actions including impacts on minority and low-income communities, when such analysis is required by NEPA. Federal agencies are also required to provide opportunities for community input in the NEPA process, identify potential impacts and mitigation measures in consultation with affected communities, and improve the accessibility of meetings, crucial documents, and notices (Council on Environmental Quality 1997).

As discussed above, FTA issued its most recent guidance for meeting the requirements of EO 12898 as Circular 4703.1 in August 2012. The circular provides recommendations for the following:

- Identifying low-income and minority populations using Census data, outreach, and field observations.
- Determining whether disproportionately high and adverse effects would occur as a result of the project.
- Implementing traditional and non-traditional public outreach methods to ensure effective engagement of minority and low-income communities in the planning and decision-making process.
- Incorporating Environmental Justice into the NEPA process.

These recommendations have been incorporated as guiding principles into the analysis and outreach performed for the RLE Project. More detailed information regarding the specific methods used to comply with these recommendations is provided in Section 3.4.

Executive Order 13166 (2000), *Improving Access to Services for Persons with Limited English Proficiency (LEP),* requires that people who are not proficient in the English language have access to meaningful communications about and participation in any program or activity receiving federal assistance. It requires federal agencies to examine the services they provide for persons who, as a result of national origin, have LEP. It calls for agencies to identify whether LEP populations are in need of their services, and to develop and implement a system to provide those services so LEP persons can have meaningful access to them. The LEP analysis for the RLE Project is attached to this technical memorandum as Appendix A. The LEP analysis states that outreach for the project should be conducted in both English and Spanish languages.

In May 2012, the USDOT issued Order 5610.2, *Order to Address Environmental Justice in Minority Populations and Low-Income Populations,* in compliance with the February 1994 EO 12898. It provides guidance for transportation agencies to achieve Environmental Justice and establishes a policy to promote the principles of Environmental Justice in all USDOT programs, policies, and activities. It also requires that Environmental Justice principles be fully considered throughout planning and decision-making processes. The Environmental Justice analysis for the RLE Project incorporates the direction from Order 5610.2 (May 2012) as referenced and interpreted in FTA Circular 4703.1 (August 2012).

Title VI, which is related to Environmental Justice, imposes a statutory obligation on FTA recipients to (1) ensure that the level and quality of public transportation service is provided equitably without regard to race, color, or national origin; (2) promote full and fair participation in public transportation decision-making without regard to race, color, or national origin; and (3) ensure meaningful access to transit-related programs and activities by persons with LEP. A separate Title VI analysis will be prepared for this project by CTA.

3.1.2 State

Article XI of the *Constitution of the State of Illinois* (Article XI) establishes the legislative responsibility of the state "to provide and maintain a healthful environment for the benefit of this and future generations" and provides each person with the individual right to a "healthful environment" (Illinois General Assembly, Constitution of the State of Illinois).

In furtherance of Article XI, State Bill 2193, referred to as the Environmental Justice Act, was enacted on August 16, 2011 and established the Commission on Environmental Justice in the state of Illinois. The Commission on Environmental Justice is charged with advising state entities on Environmental Justice issues, reviewing and analyzing current state laws and policies, and recommending options to rectify Environmental Justice concerns. This Act ensures that no segment of the population in the state of Illinois, "regardless of race, national origin, age, or income, should bear disproportionately high or adverse effects of environmental pollution" (Illinois General Assembly, Public Act 097-0391). Demographic analysis of elderly populations is included in Section 4 to address these goals.

3.1.3 Local

Local agencies are subject to the above federal and state laws, as applicable. Cook County, the City of Chicago, and the Village of Calumet Park do not have additional regulatory requirements pertaining to Environmental Justice.

3.2 Impact Analysis Thresholds

3.2.1 Environmental Justice Populations

The FTA's Circular 4703.1 (August 2012) recommends identifying minority and low-income populations using a combination of Census data analysis and non-traditional data gathering techniques such as outreach to community-based organizations. Census data was used to

preliminarily identify minority and low-income populations. Preliminary identifications were then supplemented with field visits (windshield and walking surveys conducted in 2012) and stakeholder outreach to confirm the presence of minority and low-income populations. Based on field observation and research, the Census tract and block-group boundaries used do not artificially dilute or inflate the affected minority population and/or low-income population findings, and allow for differentiation of impacts around the yard and shop locations versus those around the alternative alignments. A LEP analysis was also performed to identify populations in the project area who are linguistically isolated and do not speak English well. The LEP analysis results are included in this technical memorandum as Appendix A.

3.2.2 Disproportionately High and Adverse Effects

Once Environmental Justice populations were identified in all parts of the project area, analysis was performed to identify potentially adverse impacts and to verify that no disproportionately high and adverse effects would occur. The August 2012 FTA Circular 4701.3 cites USDOT Order 5610.2, issued in May 2012, to define adverse impacts. The topics comprising adverse impacts, ranging from community impacts to natural environment impacts, are analyzed in the RLE technical memoranda. Potentially adverse impacts are discussed in Section 5 of this report, as the entire project area consists of Environmental Justice communities. The circular also cites the USDOT order's definition of a disproportionately high and adverse effect on human health or the environment as one that would be predominantly borne by a minority population and/or a low-income population, or would be suffered by the minority population and/or low-income population and would be appreciably more severe or greater in magnitude than the adverse impact that would be suffered by the non-minority population and/or non-low-income population.

Disproportionately high and adverse effects would only be possible if the project area contained both Environmental Justice and non-Environmental Justice populations, and there would be unevenness in the level of impacts and benefits between the two. Because all of the populations that would benefit from and be affected by the project comprise predominantly minority and/or low-income persons, disproportionately high and adverse effects would not occur. Section 5 describes the analysis, which identified the adverse impacts that would occur in minority and low-income communities (i.e., all of the impacts of the alternatives, none of which would be disproportionately high and adverse), and addressed the concerns raised during the outreach process.

Identification of mitigation measures is required for any identified disproportionately high and adverse effects on Environmental Justice populations. Because no such impacts would result from any of the RLE alternatives, there is no requirement to identify mitigation measures beyond those presented in other RLE technical memoranda (and summarized in Section 5 of this report).

3.2.3 Receipt of Benefits

Similarly to the analysis of potentially adverse impacts described in Section 3.2.2, the RLE technical memoranda were also reviewed to identify the benefits of the project. Analysis was

performed to verify that the benefits of the alternatives would be distributed evenly throughout the project area, and that they would accrue simultaneously to all of the adversely affected communities.

3.3 Area of Potential Impact

The area of potential impact (API) for analyzing permanent, construction, and cumulative impacts was established based on FTA Circular 4703.1 (August 2012), which recommends the following:

- Identifying the presence of district minority and/or low-income communities residing both within and in proximity to the project or activity.
- Identifying those minority and/or low-income groups that utilize or are dependent on natural resources and the human environment that could be potentially affected by the proposed action.

The API is also based on the findings of the other RLE technical memoranda relevant to Environmental Justice, most of which are focused within a one-block radius of the proposed alignments. Potential benefits of the project, such as improved transit access, would accrue to the larger catchment areas around the station locations, roughly ½ mile. The combined area of potential benefits and impacts covers most of the project area designated in the *Purpose and Need Report*.

Identification of Environmental Justice populations affected by the RLE Project was conducted pursuant to NEPA guidance (40 Code of Federal Regulations 1508) and FTA Circular 4703.1 (August 2012). For the purposes of locating minority communities, the API includes blocks/block groups within the project area defined in the Purpose and Need Statement. This API results in an area of approximately ½ mile around the proposed ROW for the each of the alternatives, with some modifications to account for key geographic features such as waterways and major streets. Impacts are reported based on the API assumed for each resource in its technical memorandum.

3.4 Methods

The FTA's Circular 4703.1 (August 2012) outlines a process of analyzing demographic data to identify the presence of Environmental Justice populations, identifying adverse effects that may be disproportionately high and adverse, evaluating benefits, and achieving meaningful public engagement in the decision-making process. The RLE Project incorporated the guiding principles of the circular through the following analytical and outreach steps:

- Demographic Analysis and Initial Community Outreach - Socioeconomic data from the 2010 Census and the American Community Survey were used to describe the population in the project area. Income, ethnicity, employment, age, housing characteristics, and English proficiency were used in conjunction with field observations and stakeholder interviews to help identify the presence of Environmental Justice populations. Results of the data analysis

are provided in Section 4, and the LEP analysis is presented in Appendix A. The results show that the entire project area consists of predominantly minority populations, with some concentrations of low-income groups. Pockets of Spanish-speaking populations were also identified, indicating the need for outreach in both English and Spanish languages.

- Environmental Analysis to Identify Adverse Impacts and Benefits - All of the benefits and impacts of the projects would accrue to the same minority and low-income populations. As such, the RLE Project, as a community-initiated project intended to spur mobility and economic development in minority and low-income communities, would not have the potential for disproportionately high and adverse effects. The Environmental Justice-specific environmental analysis focused on identifying all adverse impacts and mitigations of the alternatives because they would all affect Environmental Justice populations. Benefits that offset the potential impacts were also identified and included in the analysis. Identification of additional mitigations specifically for Environmental Justice purposes would not be necessary for the RLE Project, because none of the effects would be disproportionately high and adverse. No additional mitigation measures—beyond those identified in the other RLE technical memoranda—would be needed to meet Environmental Justice requirements. Section 5 presents the results of the environmental analysis.

- Engagement with Environmental Justice Populations in the Public Outreach and Decision-Making Process - The stakeholder interview process and CTA's ongoing community relations efforts helped identify effective outreach methods. Traditional outreach methods such as public meetings and comment periods were augmented by non-traditional outreach. Non-traditional activities included website postings, presentations at standing meetings of local community groups, e-mail and direct mail newsletters, and one-on-one meetings with elected officials and community group leaders. Section 7 presents the results of the outreach process.

- Incorporation of Input from Environmental Justice Populations into the NEPA Process: - *To be filled in after outreach is completed.*

Section 4
Affected Environment

This section describes the low-income, minority, and LEP populations in the project area, which constitute the Environmental Justice populations for the purposes of this technical analysis. Elderly and disabled populations are also identified per state guidance. Demographic statistics were gathered at the most detailed level available from the U.S. Census Bureau for race, ethnicity, income, and age and were analyzed at the census block group level to define the Environmental Justice areas. Within the project area, all of the block groups were identified as Environmental Justice areas based on minority statues. Concentrations of block groups in the Roseland and Riverdale community areas were identified as Environmental Justice areas based on low-income as well as minority status. The Environmental Justice populations discussed in this report were identified through a combination of year 2010 U.S. Census data, American Community Survey data, public outreach, and field reconnaissance. Adverse impacts would be likely to occur within a ¼-mile radius of the project infrastructure, whereas beneficial impacts would accrue to a larger area of approximately ½ mile or more around the station locations. The area within ½ mile of station locations and within ¼ mile of the alternative alignments comprises the API for the Environmental Justice analysis. Census data is reported at the block group level. Based on field observation and research, these boundaries do not artificially dilute or inflate the affected minority population and/or low-income population findings, and allow for differentiation of impacts around the yard and shop locations versus those around the alternative alignments. The affected communities and concentrations of resources in the project area are shown in Figure 4-1 and Figure 4-2, respectively. The character of each community is described in greater detail in the *Neighborhood and Community Impacts Technical Memorandum*.

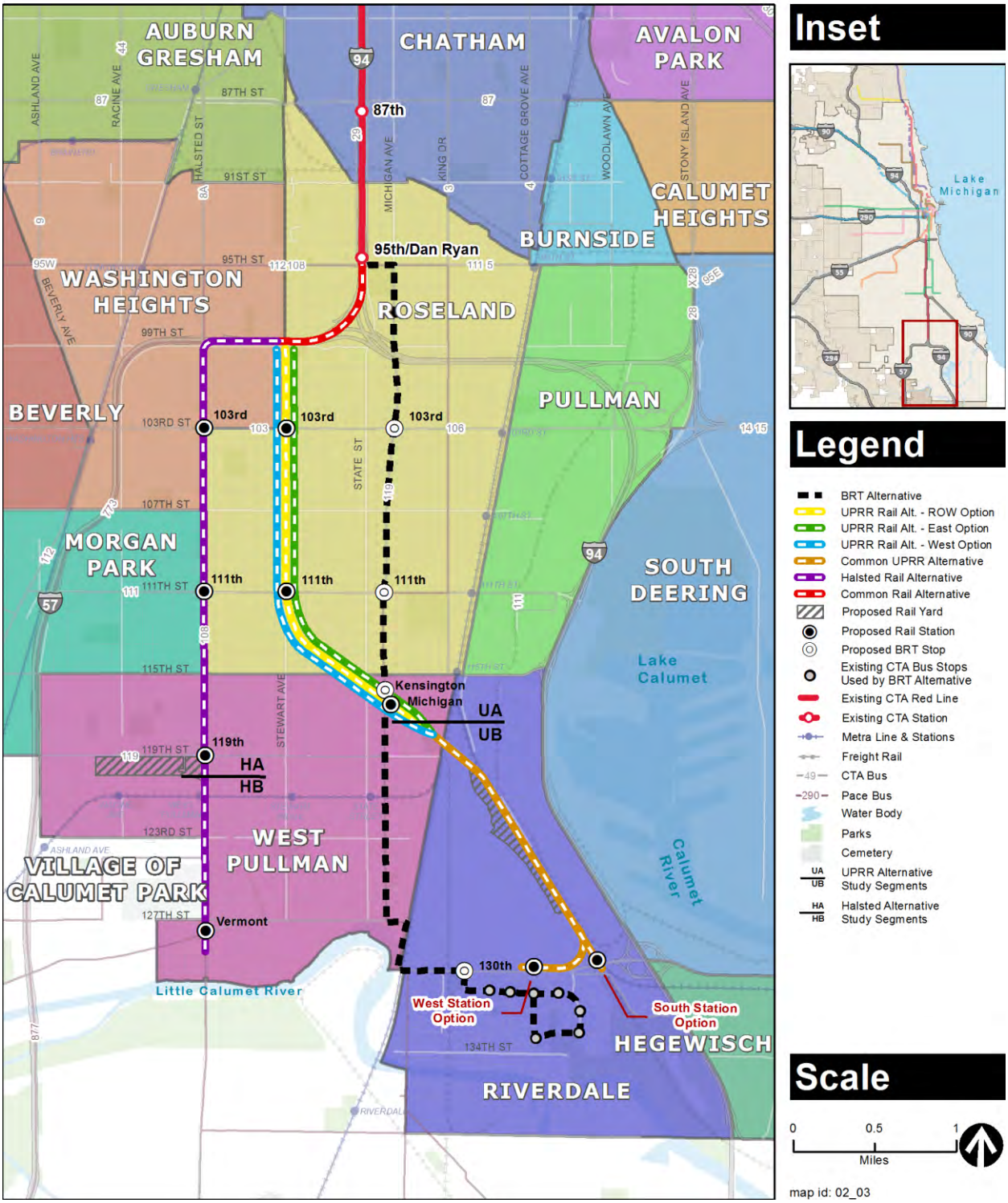

Figure 4-1: Community Areas

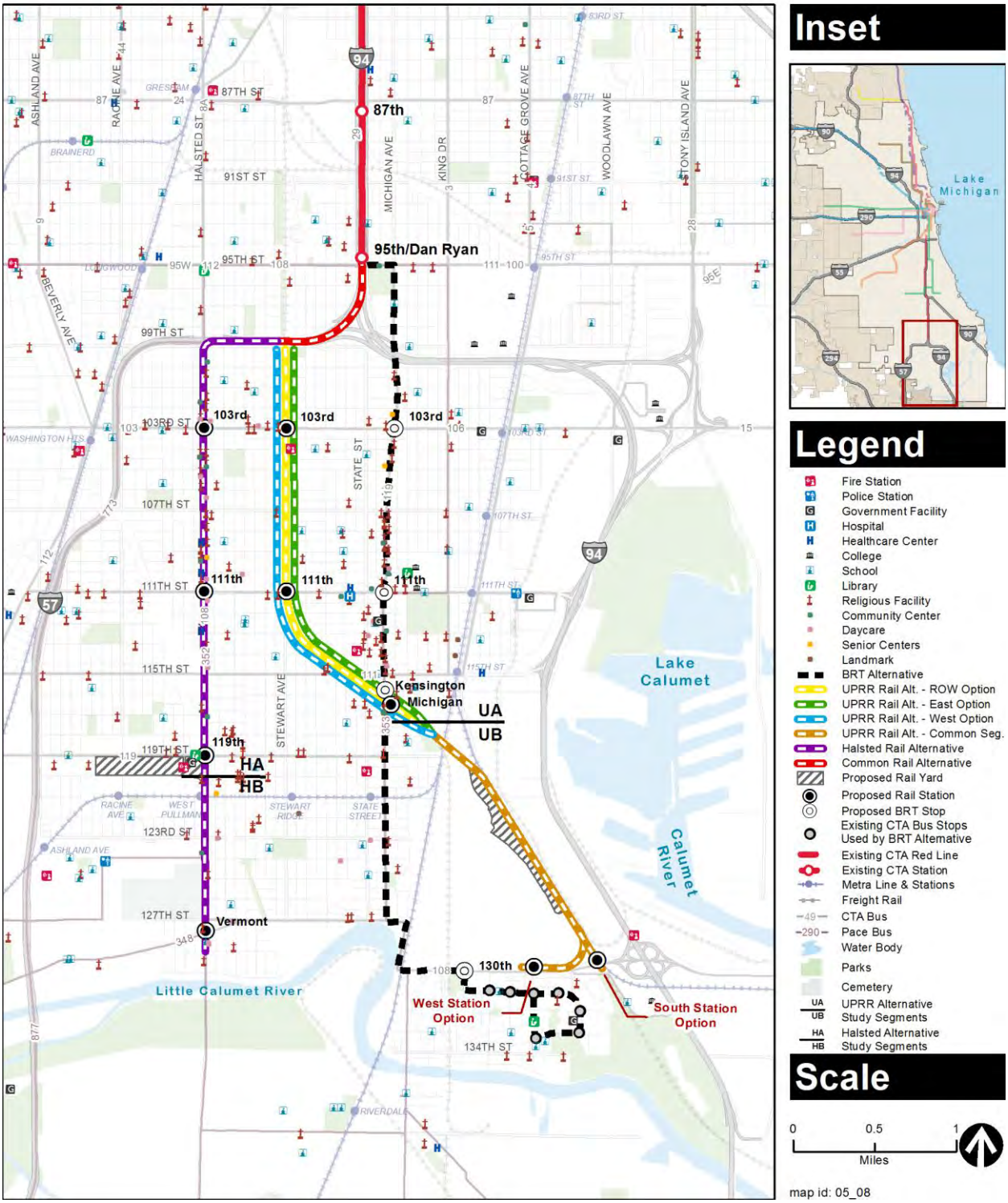

Figure 4-2: Concentrations of Community Resources

Key community resources include parks, schools, libraries, police facilities, fire department facilities, community centers, religious institutions, hospitals, and other places that serve as neighborhood focal points and contribute to community character and identity. The *Neighborhood and Community Impacts Technical Memorandum* provides additional detail on specific resources within ¼ mile of the proposed alignments.

4.1 Minority Groups

Minority persons include the following, as defined by the May 2012 USDOT Order 5610.2 and referenced in the August 2012 FTA Circular 4703.1:

- Black (a person having origins in any of the black racial groups of Africa).
- Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).
- Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands).
- American Indian and Alaskan Native (a person having origins in any of the original people of the Americas and who maintains cultural identification through tribal affiliation or community recognition).

This analysis defines a minority population as a population that meets one or both of the following descriptions:

- Any readily identifiable group of persons and/or a community who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans), who experience common conditions of exposure or impact.
- A group consisting of persons classified by the U.S. Census Bureau as minority, including those persons of two or more races.

As shown in Table 4-1, the 2010 U.S. Census was used to identify minority populations in the project area as a whole and the specific affected communities in the API. Most of the populated portions of the project area contain predominantly minority populations; the project area population consists of 97.9 percent minority persons. In the API, the communities with the highest percentage of minority persons are Roseland and Riverdale, followed closely by Washington Heights, West Pullman, and Morgan Park. The community with the smallest percentage of minority persons in the API is Pullman, which still has a high minority percentage of 92.9 percent. Figure 4-3 identifies the percent minority populations in the project area at the census block level. The large blocks in the southeastern portion of the API have low populations.

Table 4-1: Percent of Population that is Minority

Area	Minority Populations
City of Chicago	68.3%
Project Area	97.9%
Affected Communities	
Washington Heights	99.4%
Roseland	99.5%
Morgan Park	99.0%
West Pullman	99.4%
Pullman	92.9%
Riverdale	99.5%
Village of Calumet Park	96.4%

Source: U.S. Census Bureau, 2010 Census, Summary File 1, Table P5- Hispanic or Latino Origin by Race, by Block.

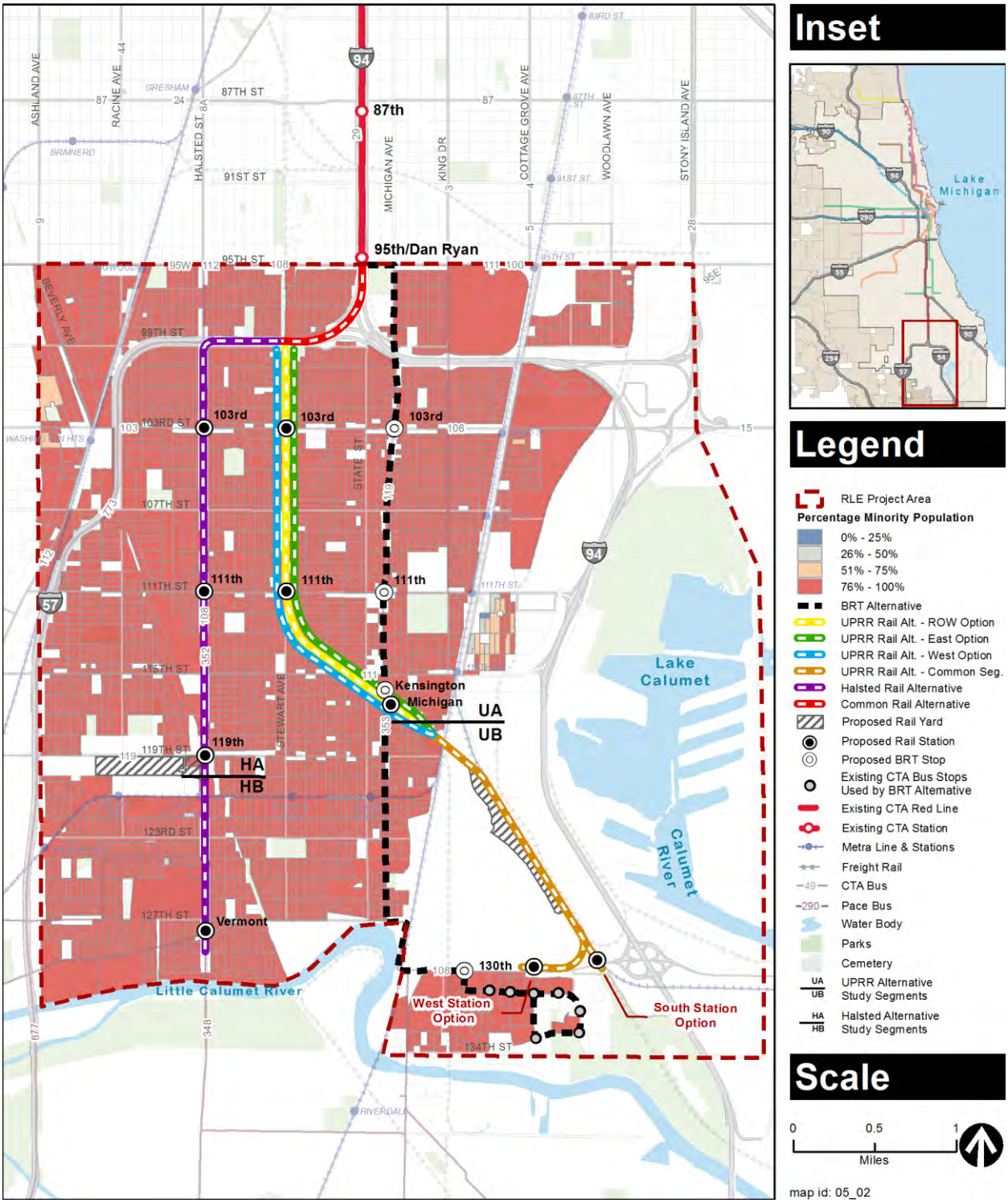

Figure 4-3: Minority Populations - Percentage

Source: U.S. Census Bureau, 2010 Census, Summary File 1, Table P5 - Hispanic or Latino Origin by Race, by Block

The racial composition of the project area is shown in Table 4-2. All communities in the project area have a majority Black or African American population, ranging from just above 89 percent in the Village of Calumet Park to approximately 97 percent in Roseland and Washington Heights. After Black or African American, the second largest ethnicity in the API is Hispanic at 4 percent. Of the communities in the API, Pullman has the highest percentage of Hispanic persons at 7.8 percent, followed by the Village of Calumet Park at 6.2 percent and West Pullman at 5.1 percent. Pullman also has the highest percentage of white persons at 7.1 percent, followed by the Village of Calumet Park at 3.6 percent.

Table 4-2: Racial Composition within the Area of Potential Impact as a Whole

Area	White Alone	Black or African-American Alone	American Indian/ Native Alaskan Alone	Asian Alone	Native Hawaiian and other Pacific Islander Alone	Some other Race Alone	Multiracial	Hispanic not Alone
City of Chicago	31.7%	32.4%	0.0%	5.4%	0.0%	0.0%	1.3%	28.9%
Project Area	2.1%	92.7%	0.2%	0.1%	0.0%	0.1%	1.0%	4.0%
Affected Communities								
Washington Heights	0.6%	96.9%	0.2%	0.0%	0.0%	0.1%	0.9%	1.3%
Roseland	0.5%	97.3%	0.2%	0.1%	0.0%	0.1%	0.9%	1.0%
Morgan Park	1.0%	96.3%	0.0%	0.3%	0.1%	0.1%	1.0%	1.2%
West Pullman	0.6%	93.1%	0.2%	0.0%	0.0%	0.0%	1.0%	5.1%
Pullman	7.1%	83.6%	0.1%	0.1%	0.0%	0.1%	1.2%	7.8%
Riverdale	0.5%	96.4%	0.1%	0.0%	0.0%	0.1%	0.8%	2.0%
Village of Calumet Park	3.6%	89.1%	0.1%	0.3%	0.0%	0.1%	0.6%	6.2%

Source: U.S. Census Bureau, 2010 Census, Summary File 1, Table P5 - Hispanic or Latino Origin by Race, by Block.
Note: Hispanic population includes persons who identify as white or some other race, or combination of races.

4.2 Low-Income Groups

The low-income classification applies to persons whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines (USDOT Order 5610.2(a), May 2012). Median household income data in the 2006–2010 American Community Survey is reported in 2010 dollars. In order to compare the 2012 poverty guidelines with data in 2010 dollars, the 2012 guidelines were adjusted to 2010 dollars using the Consumer Price Index Inflation Calculator used by the U.S. Department of Labor, Bureau of Labor Statistics (Table 4-3).

Table 4-3: U.S. Department of Health and Human Services 2012 Poverty Guideline

Persons in Household	2012 Poverty Guideline	Adjusted Poverty Guideline (2010 dollars)
1	$11,170	$10,586
2	$15,130	$14,339
3	$19,090	$18,092
4	$23,050	$21,845
5	$27,010	$25,598
6	$30,970	$29,351
7	$34,930	$33,104
8	$38,890	$36,857

Source: U.S. Department of Health and Human Services, 2012 http://aspe.hhs.gov/poverty/12poverty.shtml
United States Department of Labor, Bureau of Labor Statistics, 2012 http://www.bls.gov/data/inflation_calculator.htm

According to the 2006–2010 American Community Survey, the median household income in the project area was $41,710, which is less than the median household income ($46,877) for the City of Chicago (2006–2010 American Community Survey 5-Year Estimates). As shown in Table 4-4, the community with the lowest median household income in the API is Riverdale with $11,181, which is substantially lower than the median household income for the project area and the City of Chicago. The community with the highest median household income is the Village of Calumet ($53,785). Figure 4-4 shows median household income in the project area. The large blocks in the southeastern portion of the API have low populations.

Table 4-4: Median Household Income in Affected Communities

Area	Median Household Income
City of Chicago	$46,877
Project Area	$41,710
Affected Communities	
Washington Heights	$48,659
Roseland	$41,922
Morgan Park	$42,977
West Pullman	$38,963
Pullman	$43,647
Riverdale	$11,181
Village of Calumet Park	$53,785

Source: U.S. Census Bureau, 2006-2010 American Community Survey, Table B19001 - Household Income in the Past 12 Months (in 2010 Inflation-Adjusted Dollars), by Block Group

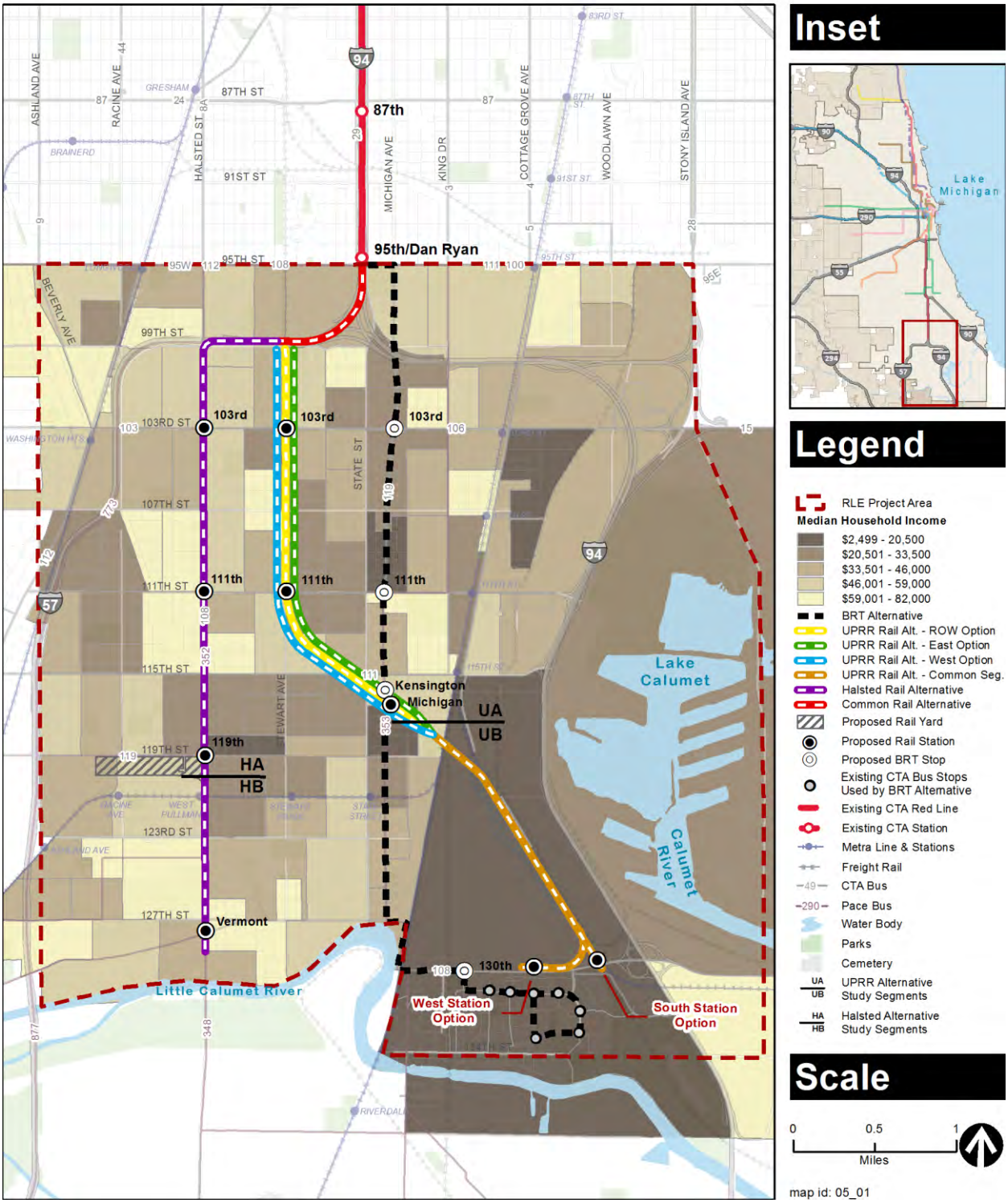

Figure 4-4: Median Household Income

Source: U.S. Census Bureau, 2006-2010 American Community Survey, Table B19001 - Household Income in the Past 12 Months (in 2010 Inflation-Adjusted Dollars), by Block Group

According to the U.S. Department of Health and Human Services 2012 Poverty Guidelines (see Table 3-1), only ten block groups in the project area have populations with median household income below poverty guidelines. As shown in Table 4-5, seven of the ten block groups are in Riverdale, two are in West Pullman, and one is in Roseland. Two block groups in Riverdale have a very low median household income of $2,499, and both of them are in the Altgeld Gardens public housing complex. Figure 4-5 shows the low-income population at the census block group level. The shaded area in the southeastern portion of the API has minimal population between 115th and 130th Streets. The majority of the population in this shaded area is south of 130th Street. Table 4-5 shows that the seven low-income block groups in Riverdale make up the entire community area, illustrating the substantial presence of poverty in Riverdale. Low-income status was determined by comparing the median household income of each block group and the average household size for its census tract with the poverty guidelines shown in Table 4-3. Low income is also a transit dependency factor because residents with limited income may not be able to afford access to an automobile.

Table 4-5: Block Groups with Populations Below Poverty Level in the Area of Potential Impact

Community Area	Median Household Income	Average Household Size	Block Group
Riverdale	$11,859	2.68	Block Group 1, Census Tract 5401.01
Riverdale	$17,788	2.68	Block Group 2, Census Tract 5401.01
Riverdale	$2,499	2.68	Block Group 3, Census Tract 5401.01
Riverdale	$2,499	2.68	Block Group 4, Census Tract 5401.01
Riverdale	$14,390	3.07	Block Group 1, Census Tract 5401.02
Riverdale	$13,713	3.07	Block Group 2, Census Tract 5401.02
Riverdale	$15,521	3.07	Block Group 3, Census Tract 5401.02
West Pullman	$14,522	2.68	Block Group 2, Census Tract 5301
West Pullman	$18,375	3.71	Block Group 3, Census Tract 5302
Roseland	$17,656	2.42	Block Group 2, Census Tract 4909.01

Household income poverty guidelines adjusted to 2010 dollars and average household size.

Sources: U.S. Census Bureau, 2006-2010 American Community Survey, Table B19001 - Household Income in the Past 12 Months (In 2010 Inflation-Adjusted Dollars), by Block Group;

U.S. Census Bureau, 2006-2010 American Community Survey, Table B25010 - Average Household Size of Occupied Housing Units by Tenure, by Census Tract.

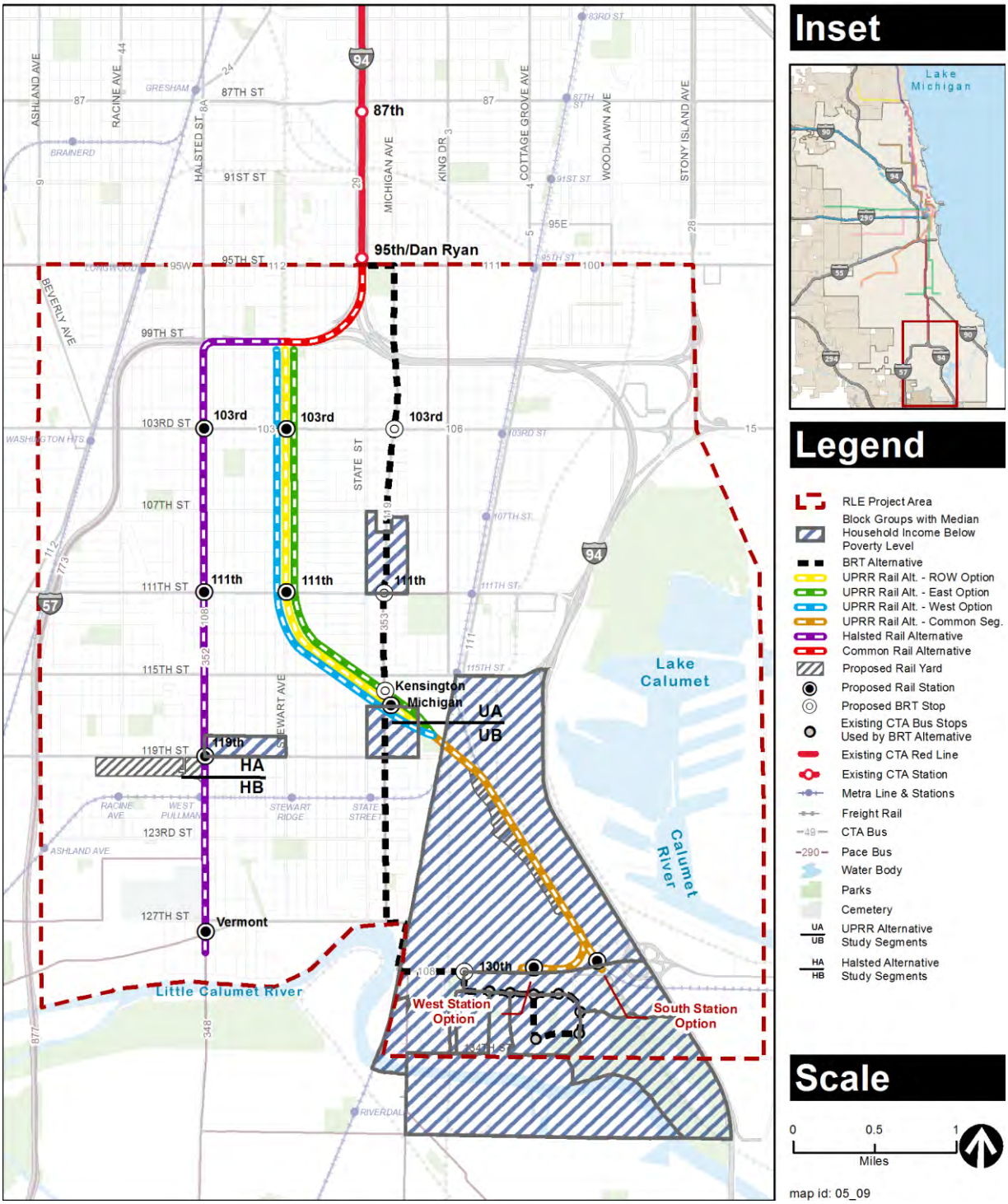

Figure 4-5: Low-Income Block Groups

Sources: U.S. Census Bureau, 2006-2010 American Community Survey, Table B19001 - Household Income in the Past 12 Months (In 2010 Inflation-Adjusted Dollars), by Block Group;

U.S. Census Bureau, 2006-2010 American Community Survey, Table B25010 - Average Household Size of Occupied Housing Units by Tenure, by Census Tract.

As shown in Table 4-6, the unemployment rate for the entire project area is 19.0 percent. The unemployment rates for the individual community areas range from a low of 17.0 percent in Morgan Park to a high of 34.8 percent in Riverdale. Unemployment in the project area is generally higher than in the rest of the City of Chicago, which has an overall unemployment rate of 12.0 percent.

Table 4-6: Unemployment Rates in Affected Communities

Area	Unemployment Rate
City of Chicago	12.0%
Project Area	19.0%
Affected Communities	
Washington Heights	18.8%
Roseland	21.2%
Morgan Park	17.0%
West Pullman	18.5%
Pullman	21.4%
Riverdale	34.8%
Village of Calumet Park	17.4%

Source: U.S. Census Bureau, U.S. 2010 Census, 2011 ACS 5-year estimates, Table S2301, All Census Tracts within Cook County
Note: Data not available at block group level

According to the real estate website zillow.com, the median Chicago home price in October 2012 was approximately $161,100, and the median rent was $1,501. Home and rental prices in the project area neighborhoods are 20 to 50 percent lower than the citywide median (Table 4-7). Compared to Chicago as a whole, the project area has lower median household income and home prices, and higher unemployment in most RLE community areas (see Tables 4-4, 4-6, and 4-7).

Table 4-7: October 2012 Average Home and Rental Prices in Affected Communities

Area	Average Home Price	Average Monthly Rental Price
City of Chicago	$161,100	$1,501
Affected Communities		
Washington Heights	$112,300	$1,257
Roseland	$85,200	$1,232
Morgan Park	$113,500	$1,277
West Pullman	$92,700	$1,228
Pullman	$91,500	$1,213
Riverdale	N/A	N/A
Village of Calumet Park	$75,200	$1,219

According to CMAP's *Red Line South Extension Livability Report* (CMAP and Developing Communities Project 2012), there is a shortage of jobs within the project area and a lack of transit access to jobs in neighboring communities. Distance to employment centers is greater in the project area than in many other parts of the city, so lack of convenient access to rail transit is a major barrier to employment. While there is CTA bus, Pace bus, and Metra rail service, there are limited options for connecting to the CTA rail system that ends at the 95th Street Terminal. There are also no stations with park & ride facilities along the Dan Ryan branch of the Red Line, which precludes residents from accessing the stations by car unless dropped off (kiss & ride). Residents often choose to use bus service instead of Metra service because Metra has a higher fare structure and more limited schedule than the bus system; however, only a limited number of buses provide 24-hour service. The *Red Line South Extension Livability Report* characterizes commute times in the project area as long and requiring multiple transfers. Traffic congestion, largely due to trip delays from at-grade freight railroad crossings, also impedes access to employment outside the project area.

4.3 Minority and Low-Income Groups

Figure 4-6 shows areas where low-income and minority populations overlap. These areas include the block groups that make up Altgeld Gardens, Golden Gate, and Eden Green in Riverdale; the majority of Block Group 2, Census Tract 5301 in West Pullman (east of Halsted Street and west of Stewart Avenue between 118th Street and 119th Street); the majority of Block Group 3, Census Tract 5302 in West Pullman (east of State Street and west of Prairie Avenue between 116th Street and 119th Street); and the majority of Block Group 2, Census Tract 4909.01 in Roseland (east of State Street and west of Michigan Avenue between 107th Street and 111th Street). The large blocks in the southeastern portion of the API have low populations.

As discussed above, there are limited transportation options for reaching to the Red Line's 95th Street Terminal from many project area communities. Nearly all of the identified low-income and minority areas are geographically and/or physically isolated from the 95th Street Terminal. The closest population (Block Group 2, Census Tract 4909.01 in Roseland) is 1.5 miles from the 95th Street Terminal; however, pedestrian access is impaired by the Interstate 94/Interstate 57 (I-94/I-57) interchange. Altgeld Gardens is approximately 6 miles from the 95th Street Terminal. In addition, bus service is limited and inconsistent. Only a limited number of buses provide 24-hour service. A section of CTA bus route #34 operates part-time between the Altgeld Gardens housing complex and the 95th Street Terminal.

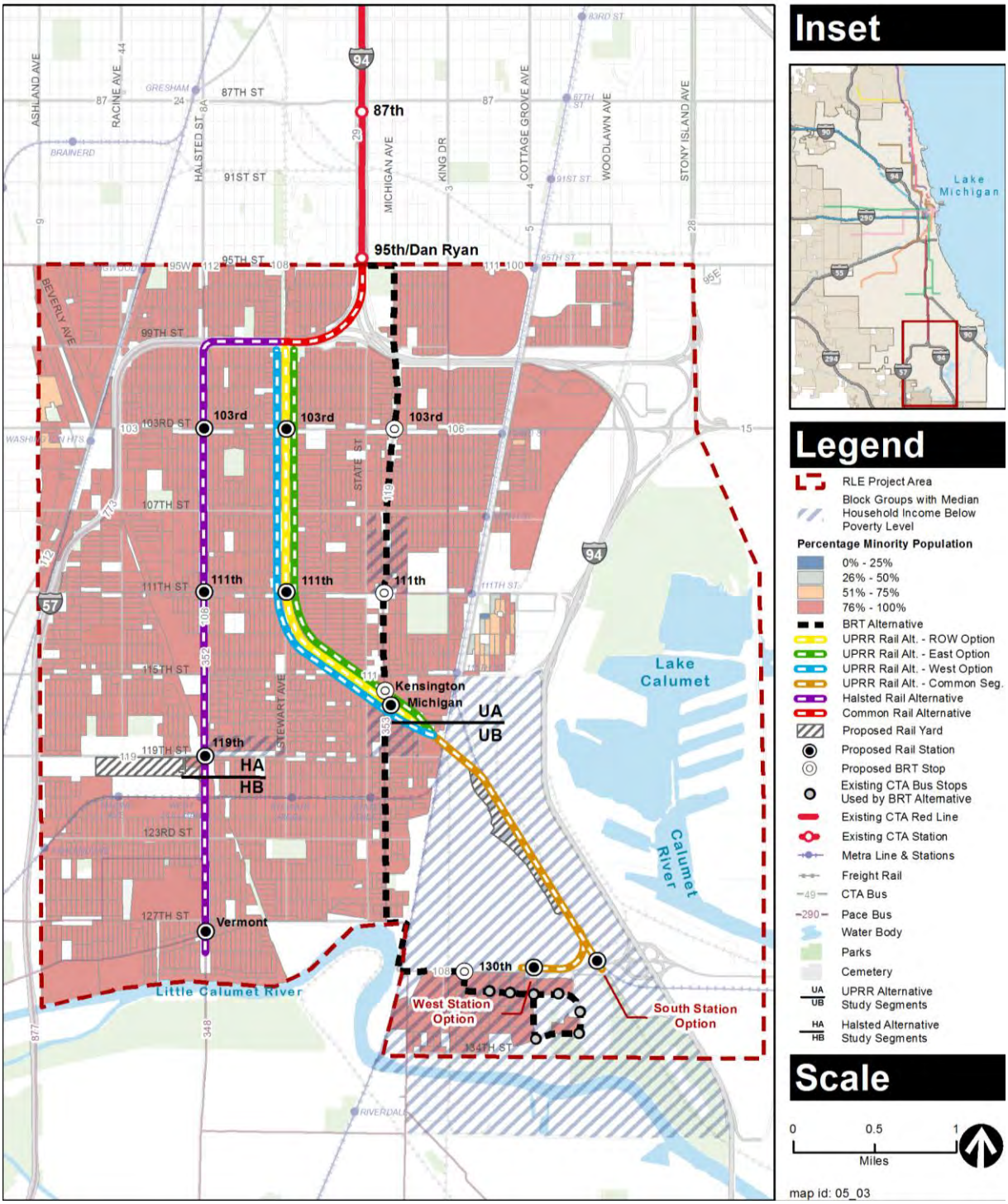

Figure 4-6: Low-Income and Minority Populations - Percentage

Sources: U.S. Census Bureau, 2006-2010 American Community Survey, Table B19001 - Household Income in the Past 12 Months (In 2010 Inflation-Adjusted Dollars), by Block Group;
U.S. Census Bureau, 2006-2010 American Community Survey, Table B25010 - Average Household Size of Occupied Housing Units by Tenure, by Census Tract;
U.S. Census Bureau, 2010 Census, Summary File 1, Table P5 - Hispanic or Latino Origin by Race, by Block.

4.4 Limited English Proficiency Groups

Limited English Proficiency (LEP) persons are defined as individuals for whom English is not their primary language and who have a limited ability to read, write, speak, or understand English. It includes people who reported to the U.S. Census Bureau that they speak English less than very well, not well, or not at all (Circular 4702.1B, October 2012).

The U.S. Census Bureau collects information about the ability of people to speak English and about those living in a linguistically isolated household. A linguistically isolated household is defined as one in which no member, 14 years of age or older, speaks only English or speaks a non-English language and speaks English very well. This definition means that all members of a linguistically isolated household 14 years old and over have at least some difficulty with English (U.S. Census Bureau).

According to the 2010 U.S. Census, English is the most spoken language at home in the project area, with 92.6 percent of households speaking English only. As shown in Table 4-8, Spanish is the second most spoken language at home, with over 6 percent of households speaking Spanish. The largest Spanish-speaking populations live in the Village of Calumet Park, where 15.5 percent of households speak Spanish. Pullman and West Pullman also have a large percentage of Spanish-speaking households with 10.4 percent and 6.7 percent of homes speaking Spanish, respectively. Specific census tracts in the West Pullman and South Deering neighborhoods and the Village of Calumet Park reported that over 30 percent of households speak Spanish.

A LEP assessment (Appendix A) was conducted for the project area in 2009. While the LEP assessment was based on year 2000 Census data, its findings remain consistent with current field observations and 2010 Census data. According to the LEP study, 1 percent of households within census tracts in the project area are linguistically isolated, meaning that all household members over the age of 14 had at least some difficulty speaking English.

Table 4-8: Languages Spoken at Home within the Affected Communities

Area	English Only	Spanish or Spanish Creole	Other Indo-European languages	Asian and Pacific Island languages	Other Languages
City of Chicago	64.7%	24.2%	6.4%	3.5%	1.3%
Project Area	92.6%	6.3%	0.6%	0.1%	0.4%
Affected Communities					
Washington Heights	97.0%	1.8%	0.2%	0%	1.1%
Roseland	98.5%	0.9%	0.5%	0.1%	0.1%
Morgan Park	95.7%	2.3%	1.5%	0.5%	0.1%
West Pullman	92.8%	6.7%	0.2%	0%	0.4%
Pullman	89.4%	10.4%	0.3%	0%	0%
Riverdale	96.2%	2.9%	0%	0.5%	0.5%
Village of Calumet Park	82.7%	15.5%	1.3%	0.1%	0.5%

Source: U.S. Census Bureau, 2010 American Community Survey 5-year estimates, Table S160, by Census Tract
Note: Data not available at block group level at the time of analysis

Figure 4-7 identifies the percentage of LEP populations in the project area. As illustrated in Figure 4-7, the highest percentages of LEP groups in the project area are in West Pullman, east of State Street between 115th Street and 119th Street; in Pullman east of the Metra Electric District line between 111th Street and 119th Street; and near Calumet Lake. The primary area where LEP populations are located is in West Pullman. The large tracts in the southeastern portion of the API have low populations. Due to the existence of LEP populations and because Spanish is the most frequently spoken non-English language in the project area, public outreach includes Spanish translation. The full LEP Assessment is attached as Appendix A.

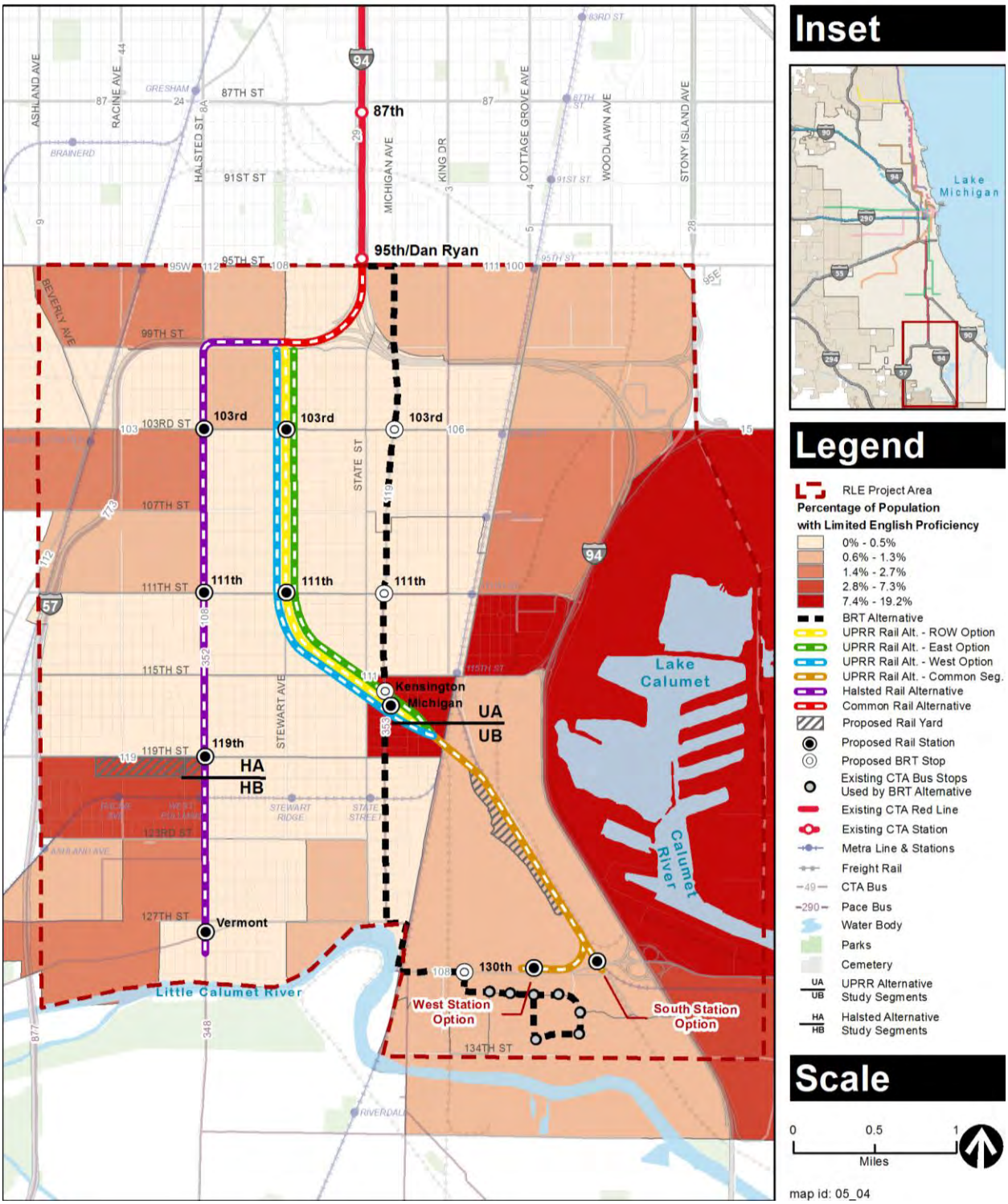

Figure 4-7: Population that has Limited English Proficiency - Percentage

Source: U.S. Census Bureau, 2010 American Community Survey 5-year estimates, Table S1601, by Census Tract

Note: Data not available at block group level at the time of analysis

4.5 Elderly Groups

According to the 2010 U.S. Census, 13.7 percent of the population in the project area is elderly, defined as 65 years and older. As shown in Table 4-9, the areas with the highest percentages of elderly persons are Washington Heights (16.7 percent) and Morgan Park (16.3 percent). The lowest percentage of elderly persons is in Riverdale (2.8 percent). Figure 4-8 shows the percentages of persons that are elderly by block group. The block with the highest percentage of elderly persons is in West Pullman. The large blocks in the southeastern portion of the API have low populations. Elderly groups can have higher levels of transit dependency than the rest of the population because some elderly people are no longer able to operate automobiles.

There are several senior housing facilities throughout the project area. A representative list includes the following:

- Senior Suites of Washington Heights, 848 W. 103rd Street in Roseland
- Victory Centre of Roseland, 10450 S. Michigan Avenue in Roseland
- Emil Jones Jr. Senior Housing, 19 E. 110th Place in Roseland
- Roseland Manor, 11717 S. State Street in West Pullman
- Bridge of Hope Inc., 11909 S. State Street in West Pullman
- Calumet Township Senior Citizen, 12633 S. Ashland Avenue in the Village of Calumet Park
- Golden Community Living Center, 12730 Aberdeen Street in the Village of Calumet Park

Table 4-9: Percentage of Population 65 Years and Older in Affected Communities

Area	Percentage of Population 65 Years and Older
City of Chicago	10.3%
Project Area	13.7%
Affected Communities	
Washington Heights	16.7%
Roseland	15.4%
Morgan Park	16.3%
West Pullman	13.0%
Pullman	11.2%
Riverdale	2.8%
Village of Calumet Park	11.4%

Source: U.S. Census Bureau, 2010 Census, Table P12 - Age by Sex, by Block

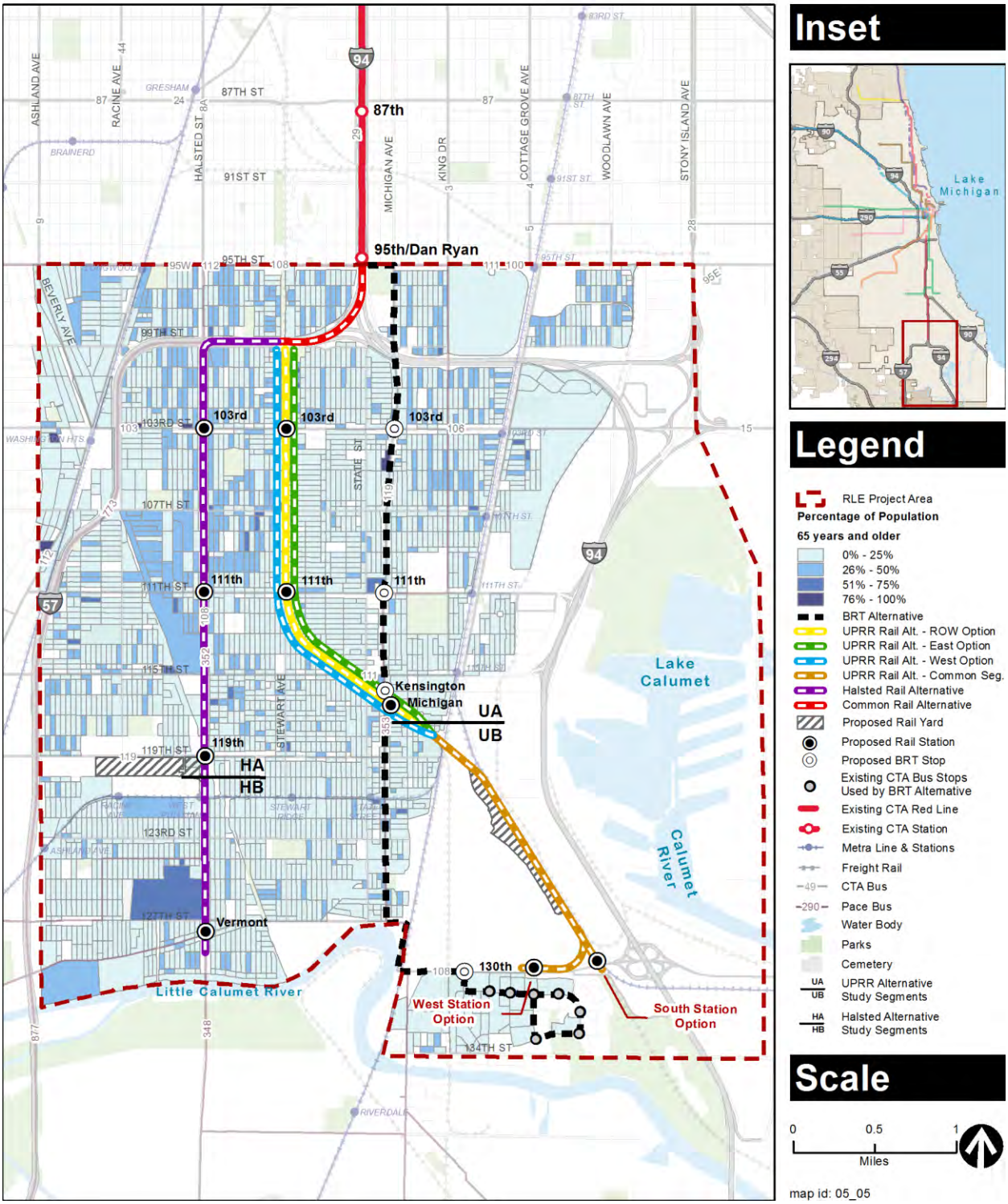

Figure 4-8: Elderly Populations - Percentage

Source: U.S. Census Bureau, 2010 Census, Table P12 - Age by Sex, by Block

4.6 People with Disabilities

According to the 2000 U.S. Census (data was not yet available for the 2010 U.S. Census), nearly one quarter of the population in the API (24.8 percent) is disabled. As shown in Table 4-10, 10.8 percent of the disabled population is male, and 14.0 percent is female.

Table 4-10: Percentage of Population with Disabilities within the Area of Potential Impact as a Whole

Area	Percentage of Population with Disabilities	Percent of Disabled Population that is Male	Percent of Disabled Population that is Female
Area of Potential Impact	24.8%	10.8%	14.0%

Source: U.S. Census Bureau, 2000 Census, Table P21- Disability Status by Sex, by Block Group

Limited transit access in the project area is of particular concern for seniors and people with disabilities. In addition, a lack of park & ride facilities precludes residents from accessing transit stops by car unless dropped off (kiss & ride), requiring seniors and people with disabilities to depend on others for transportation. People with disabilities can frequently be transit dependent if they have a disability that prevents them from driving. Figure 4-9 shows the percentages of populations with disabilities. The large blocks in the southeastern portion of the API have low populations.

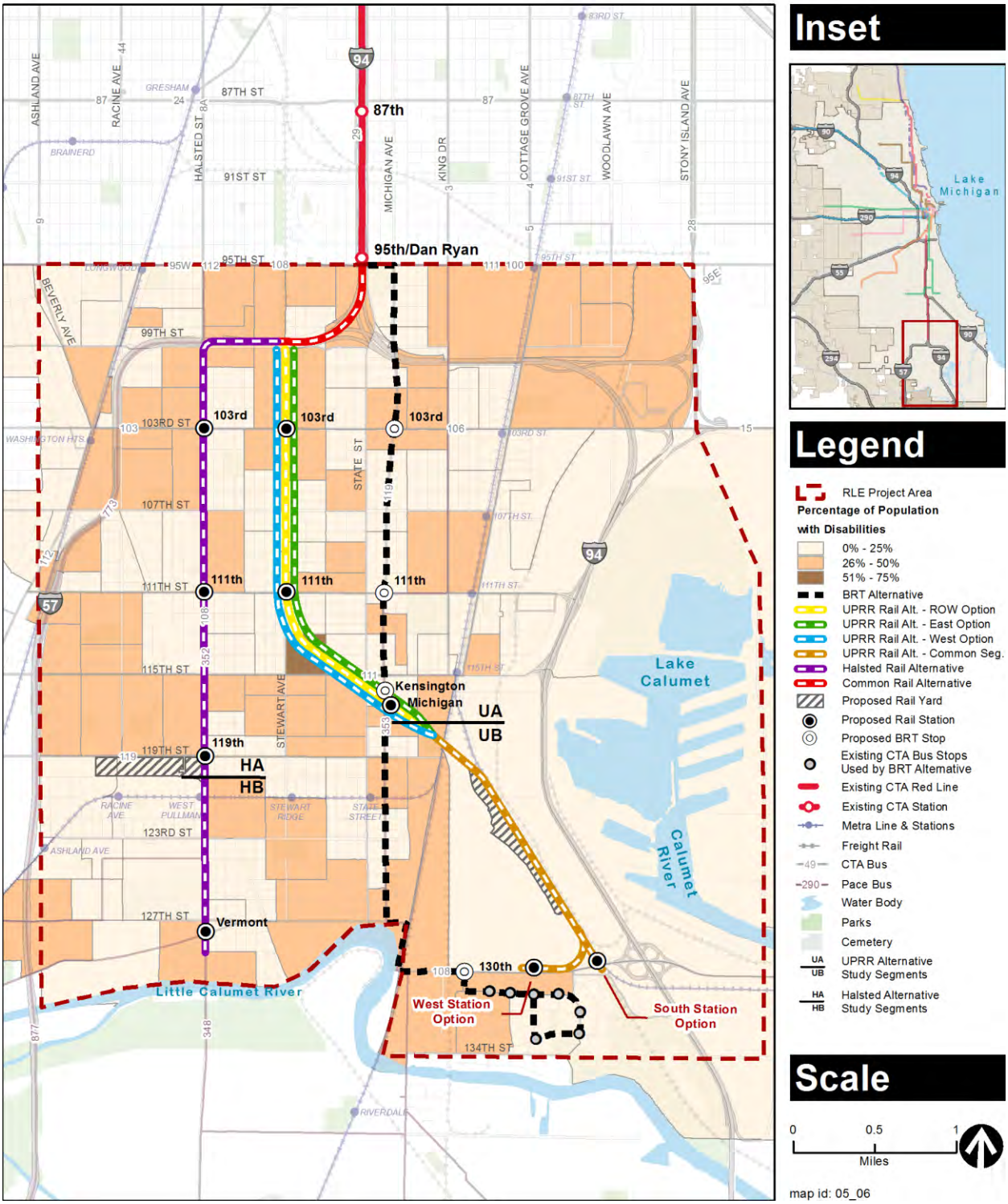

Figure 4-9: Population with Disabilities - Percentage

Source: U.S. Census Bureau, 2000 Census, Table P21 - Disability Status by Sex, by Block Group

4.7 Identification of Environmental Justice Populations

The project area was evaluated in the above subsections using census tract and block group level data. Based on field observation and research, these geographic boundaries do not artificially dilute or inflate the affected minority population and/or low-income population findings. Every community area in the project area comprises mostly minority populations, ranging from Pullman with an 83.6 percent minority population to Roseland with a 97.3 percent minority population. The project area has an average median household income ($41,710 annually) that is lower than the citywide average ($46,877 annually) and has substantial pockets of low-income populations in community areas such as Riverdale ($11,181 annually). As such, the analyzed demographic data indicates that the entire project area and API are made up solely of Environmental Justice communities.

Section 5
Impacts and Mitigations

The August 2012 FTA Circular 4703.1 *Environmental Justice Policy Guidance for Federal Transit Administration* and subsequent FTA webinar presentations indicate that projects in areas consisting entirely of Environmental Justice populations do not necessarily preclude disproportionately high and adverse effect findings; however, the following characteristics are true of the project area and the alternatives:

- The entire project area is predominantly minority populations. No community in the project area contains less than 92.9 percent minority populations, and the project area as a whole contains 97.9 percent minority populations.
- All of the impacts and benefits of the alternatives would accrue to the same minority populations, and few project benefits would occur outside the project area.
- The purpose of this community-initiated project includes connecting disadvantaged communities to Chicago's major employment and activity centers in an effort to spur economic development and improve livability. The project would help remediate the geographic isolation and lack of employment and development opportunities that currently exist in the project area.

Given these findings, none of the alternatives would result in disproportionately high and adverse effects on Environmental Justice populations. Some alternatives would still have adverse impacts on Environmental Justice communities; however, these impacts would not be disproportionate. In some instances, impacts would remain adverse despite implementation of mitigation measures. To provide a complete picture of how the RLE Project would affect Environmental Justice populations, this section summarizes the adverse impacts that would occur in Environmental Justice communities and the associated candidate mitigation measures. The mitigation measures identified in this section are preliminary, and are intended for public review. They will be finalized during the Final EIS process, after the NEPA Preferred Alternative has been designated.

5.1 No Build Alternative

The No Build Alternative would not involve any new construction for the RLE Project. There would be no major service improvements or new transportation infrastructure beyond projects that are listed in CMAP's *GO TO 2040* plan and Transportation Improvement Program. The transit network within the project area would remain largely the same as it is now.

5.1.1 Permanent Impacts and Mitigations - No Build Alternative

The No Build Alternative would not have any adverse impacts within Environmental Justice communities. The communities in the project area are, however, currently underserved by the CTA rail system compared to many other parts of Chicago, and the No Build Alternative would

lack the beneficial increase in economic development and livability that the build alternatives would provide.

5.1.2 Construction Impacts and Mitigations - No Build Alternative

No construction would occur as part of the No Build Alternative.

5.2 Bus Rapid Transit Alternative

In addition to the provisions of the No Build Alternative, the BRT Alternative would provide enhanced bus service and stops from the existing 95th Street Terminal southward along Michigan Avenue to Altgeld Gardens in the Riverdale community. Surface parking lots would be added at the 103rd Street and 111th Street stops, and three-story parking garages would be added at the Kensington Avenue and 130th Street stops to accommodate park & ride customers.

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.1.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from carbon monoxide (CO), greenhouse gases (GHG), particulate matter smaller than 2.5 micrometers ($PM_{2.5}$), or mobile source air toxics (MSAT) emissions are anticipated.

- Hazardous Materials: Operating BRT service and park & ride facilities would not change the existing types of hazardous materials used, stored, or transported. There would be no adverse permanent impacts related to hazardous materials.

- Historic and Cultural Resources: Three resources near the BRT alignment have been identified as eligible for listing on the National Register of Historic Places (NRHP). No adverse effects on historic resources are anticipated to occur.

- Land Use and Economic Development: Although BRT can spur economic development, the BRT Alternative would lack exclusive ROW, station facilities, and other rail-like features that are typically needed to generate development interests. With just compensation per the Uniform Relocation and Real Property Assistance Act of 1970 (Uniform Act), the impact of displacements on surrounding commercial and residential land uses not be adverse, and associated economic development impacts would be beneficial. There would be no adverse permanent impacts on land use or on economic development.

- Neighborhood and Community Impacts: The BRT Alternative would be an overall beneficial change in the character and cohesion of the affected communities, but not to the same extent as the rail alternatives. The BRT Alternative would slightly shorten travel times for people who access community resources and activity centers near the stop locations by transit. This benefit would be minor because the BRT Alternative would lack rail-like features to further enhance bus service and attract new riders. No adverse impacts on community resources would occur. Impacts would be beneficial overall; no mitigation measures would be required.

- Energy: Based on the assumptions for vehicles needed for operation of the BRT Alternative, the amount of fuel consumed would not affect local or regional fuel availability, or require the development of new energy sources. No adverse impacts would occur.

- Geology and Soils: Operation of the BRT Alternative is not expected to affect the geology or soil resources in the project area.

- Cumulative: No adverse cumulative impacts are expected.

5.2.1.2 Topics with No Adverse Permanent Impacts After Mitigation

- Biological Resources: Impacts on vegetation at the 130th Street park & ride would not be adverse with compliance with local tree protection ordinances, including tree replacement. No other biological resources impacts would be adverse.

- Displacements: The BRT Alternative would require fewer permanent acquisitions and displacements than the other build alternatives. Three buildings would be displaced, of which one would be a single-family residence and one would be a commercial property. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse.

- Safety and Security: There would be no adverse permanent impacts resulting from the BRT Alternative with the inclusion of mitigation measures to enhance safety, which would include installation of new traffic signals and/or other pedestrian crossing treatments, and location of stops in Altgeld Gardens in visible and well-populated areas.

- Visual and Aesthetic Conditions: The implementation of the BRT Alternative overall would have minimal impact on the visual and aesthetic conditions in the project area other than the addition of a three-story parking garage at the Kensington Avenue stop and at the 130th Street stop. Mitigation to reduce visual impacts would include shielding exterior lighting and providing special consideration for lighting placement adjacent to sensitive areas such as residential communities; providing landscaping and/or visual screening at park & ride locations where possible; designing the parking structure to match the character of the surrounding fabric; and using urban design techniques to reduce massing. The permanent visual impacts would not be adverse after mitigation.

- Water Resources: There would be no adverse permanent impacts on groundwater. There would be no adverse permanent impacts on stormwater drainage or water quality after mitigation. Stormwater drainage mitigation measures would include incorporating new stormwater management structures and establishing an erosion control plan, particularly at the locations of garages and park & ride lots. Water quality mitigation measures would include installation of properly designed and maintained biological oil and grease removal systems; proper storage of hazardous materials, development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials, proper storage and maintenance of equipment, installation of detention basins to remove suspended solids,

and regular monitoring of runoff water quality. Following compensatory mitigation, either through creation, restoration, enhancement, or preservation of wetlands, there would be no adverse permanent impacts on wetlands.

- Transportation: There would be seven intersections during the weekday AM peak and 10 intersections during the PM peak where the BRT Alternative would increase traffic congestion beyond applicable thresholds. Mitigation measures such as optimization of signal cycles, removal of segments of on-street parking near BRT stops, and restriping through lanes and turn lanes would render traffic conditions no worse than under the No Build Alternative. The alternative would not affect freight transportation or bicycle facilities. Adequate park & ride capacity would be provided at BRT stops to prevent spillover parking into surrounding neighborhoods. Beneficial pedestrian impacts would result from upgrading intersections with ADA-compliant curb ramps, replacing deteriorated sections of sidewalk, and improving bus shelters.

5.2.1.3 Topics with Adverse Permanent Impacts After Mitigation

- Noise and Vibration: Residential receptors, as well as 35 community facilities that are noise-sensitive receptors, would be subject to moderate noise impacts after mitigation. These noise impacts would not be mitigated, because noise barriers are not feasible along the route. Buses already operate along the proposed route, and the BRT Alternative would not substantially change the character of the existing noise. No disproportionate impacts due to noise and vibration are anticipated.

- Parklands and Community Facilities: The BRT Alternative would not pass through any parklands and would not displace any community facilities. There are 35 community facilities that are noise-sensitive receptors that would have moderate noise impacts after mitigation. These community facilities are already situated along major streets with buses under existing conditions. By improving travel time, BRT Alternative operation would improve access to parklands and community facilities within walking distance (½ mile) of the BRT stop locations when compared to the No Build Alternative. No disproportionate impacts on parklands and community facilities are anticipated.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

5.2.2.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the park & ride facilities, there would be no temporary displacement or relocation construction impacts.

- Historic and Cultural Resources: There would be no adverse construction effects on historic resources.

- Land Use and Economic Development: There would be no adverse construction impacts on land use or economic development.

- Noise and Vibration: Construction noise is expected to consist of parking structure construction and minor activity at the bus stop areas. Construction noise levels are not expected to exceed the FTA construction noise limits.

- Energy: Construction of the BRT Alternative is not expected to require an amount of fuel and other energy resources that would affect local or regional fuel and energy sources, or require the development of new sources.

- Geology and Soils: The BRT Alternative would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the alignment. Excavation would be primarily needed at park & ride facilities, and is not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.2.2.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: Compared with the other build alternatives, construction activities for the BRT Alternative would be noticeably fewer and smaller in scale. Proper traffic management during the construction period would mitigate any potential adverse impacts. A Dust Control Plan would address in detail how dust would be controlled at all times at the construction sites, the staging areas, and the access and egress routes. With appropriate mitigation measures in place, no adverse air quality impacts due to construction activities are anticipated.

- Biological Resources: Compliance with local tree protection ordinances would result in less than adverse impacts on the human environment from tree removal. Mitigation measures may be required to reduce potential impacts on wildlife habitat, including preparing a detailed tree inventory, timing tree removal to occur outside the migratory bird nesting season, performing biological surveys if construction must occur during the nesting season, and replanting trees as required by applicable local codes and ordinances. There would be no adverse construction impacts on biological resources after mitigation.

- Hazardous Materials: Construction of the BRT Alternative would result in generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. Contaminated materials potentially encountered could include heavy metals, asbestos-containing material, and lead-based paint. Mitigation measures would include compliance with federal, state, and local laws and regulations regarding hazardous materials; focused site assessments for areas where earthmoving activities would occur; asbestos, lead-based paint, and hazardous material surveys of building or structures; a Contaminated Material Management Plan; Health and Safety Plans for construction activities; Spill Prevention, Control, and Countermeasure Plans; and Construction Stormwater Pollution Prevention

Plans. There would be no adverse construction impacts relating to hazardous materials after mitigation.

- Neighborhood and Community Impacts: Impacts on the West Pullman community would not be adverse provided that best management practices are employed and nighttime construction near residences is limited to the extent practicable. Construction-related community impacts would be minimal for the 130th Street park & ride given the site's isolated location north of 130th Street. Construction of bus shelters, traffic signal control systems, and parking structures would be temporary, and could be scheduled so as not to conflict with community events. Construction impacts on community resources would not be adverse, and no mitigation measures would be required. Construction activities would not impede mobility to the extent that they would cause adverse impacts. The BRT Alternative would create temporary construction jobs, which could have a beneficial impact on community development; however, the employment increase would be greater for the rail alternatives. Impacts would not be adverse overall, and no mitigation measures would be required.

- Parklands and Community Facilities: Impacts on parklands and community facilities would include temporary air quality and noise impacts and temporary changes in access. Mitigation measures would include using construction best management practices, alerting park and community facility users of construction activities, providing safe and clearly marked detour routes, and designating alternate parking. There would be no adverse construction impacts on parklands or community facilities after mitigation.

- Safety and Security: The limited scope of work compared to other alternatives would minimize the risk of incidents resulting in fatalities, injuries, or criminal acts such as vandalism or theft on construction sites. To mitigate risks, contractors would be expected to develop a Construction Safety and Security Plan, perform job safety analysis, monitor safety and security activities, and comply with any other manuals and policies. The contractor would take prompt and decisive corrective action on safety deficiencies identified at the work site. Access for emergency services would not be restricted, and the impacts would not be adverse.

- Visual and Aesthetic Conditions: At locations where park & ride structures and lots would be created, impacts might include construction fencing, demolition of existing buildings or clearing of vacant lots, temporary street closures and related signage, or temporary lighting or entrances. The CTA would attempt to maintain as much existing vegetation as practical during construction, and minimize temporary construction impacts on the neighborhood with measures such as limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites. There would be no adverse construction impacts after mitigation.

- Water Resources: There would be no adverse construction impacts on water resources after mitigation. Stormwater drainage mitigation measures would include incorporating new stormwater management structures and establishing an erosion control plan, including for construction activities at the locations of garages and park & ride lots. Water quality

mitigation measures would include installing properly designed and maintained biological oil and grease removal systems, proper storage of hazardous materials, development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials, proper storage and maintenance of equipment, periodic removal of landscape and construction debris, installation of detention basins to remove suspended solids, and regular monitoring of runoff water quality. Following compensatory mitigation, either through creation, restoration, enhancement, or preservation of wetlands, there would be no adverse permanent impacts on wetlands.

- Transportation: Construction of parking structures, park & ride lots, and bus shelters could result in temporary intermittent disruption of traffic, existing transit service, movement of freight vehicles, on-street parking availability, and pedestrian and bicycle circulation. Temporary lane and sidewalk closures would occur with detours provided to maintain access. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur.

5.2.2.3 Topics with Adverse Construction Impacts After Mitigation

No adverse construction impacts would remain after mitigation.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative ROW Option would involve an extension of the Red Line from its current terminus at the 95th Street Terminal southward to 130th Street in the vicinity of Altgeld Gardens via existing highway medians and railroad corridors. The three options for the UPRR Rail Alternative are analyzed in two geographic segments:

- Segment UA: from the 95th Street Terminal to the Michigan Avenue station area, including the communities of Roseland, Washington Heights, and West Pullman
- Segment UB: south of the Michigan Avenue station area, in the Riverdale community

New stations would be constructed at 103rd Street on the boundary between the Roseland and Washington Heights communities, at 111th Street in Roseland, at Michigan Avenue in West Pullman, and at 130th Street in Riverdale. All stations would have bus turnarounds and park & ride facilities. The park & ride facilities would be primarily surface parking lots, but multi-level parking structures would be constructed at the Michigan Avenue and 130th Street stations.

The Chicago Department of Transportation is preparing the Far South Railroad Relocation Feasibility Study (FSRRFS). The study examines a possible project to move the existing freight operations out of the UPRR corridor, leaving the corridor vacant. The CTA would implement the ROW Option only if this separate project occurs prior to RLE. If the relocation project does not occur, then the CTA would need to choose either the East Option or West Option in order to pursue the UPRR Rail Alternative. Of the three options under consideration, the ROW Option would have the fewest adverse impacts. The East and West Options would have greater impacts due to the UPRR's requirement that the RLE tracks be located at least 50 feet from the active

freight tracks, which would push the CTA elevated structure into the residential communities adjacent to the UPRR ROW.

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.1.1 Segment UA

5.3.1.1.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from CO, GHG, $PM_{2.5}$, or MSAT emissions are anticipated.

- Historic and Cultural Resources: Six resources in Segment UA have been identified as eligible for listing on the NRHP. No adverse effects on historic resources are anticipated to occur.

- Noise and Vibration: Because of the reduction in noise level due to replacing the freight operations with the rail transit operations, noise mitigation would not be required. By using continuously welded rail, vibration levels would be below the FTA impact criterion, requiring no mitigation measures. No adverse noise or vibration impacts are anticipated.

- Energy: Energy consumption would increase due to the addition of new tracks and stations to the rail system; however, this increase in energy would not be adverse, as it is not expected to affect local or regional energy availability or require the development of new sources. Some beneficial reduction in fuel consumption would occur if the RLE Project were to cause motorists to begin using transit for some trips.

- Geology and Soils: Operation of the ROW Option would not cause adverse changes to geology or soil resources.

- Cumulative: No cumulative adverse impacts are expected.

5.3.1.1.2 Topics with No Adverse Permanent Impacts After Mitigation

- Biological Resources: Of the UPRR Rail Alternative options, the ROW Option would have the least impact on existing vegetation. With compliance with local tree protection ordinances, potential impacts would not be adverse.

- Displacements: The ROW Option would have the fewest displacement impacts of the UPRR Rail Alternative options. In Segment UA, 20 buildings would need to be displaced, of which 2 would be commercial properties, 1 would be a multi-family residential property, and 15 would be single-family homes. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse.

- Hazardous Materials: Operation of ROW Option has the potential to result in the release of hazardous materials and/or petroleum products into the environment from accidental spills or from maintenance activities that require earthmoving in contaminated areas. Measures to avoid such occurrences would include adherence to applicable federal, state, and local

regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures. There would be no adverse permanent impacts related to hazardous materials after mitigation.

- Land Use and Economic Development: The travel time savings for all UPRR Rail Alternative Options would support existing land uses and economic development. The park & ride lots at the 103rd Street, 111th Street, and Michigan Avenue stations, the substation just north of Michigan Avenue station, and the parking garage at the Michigan Avenue station would be inconsistent with adjacent land uses. These land uses consist of primarily single-family residential neighborhoods, with occasional commercial and apartment buildings. Mitigations include zoning variances, screening, landscaping, lighting appropriate for adjacent land uses, and appropriate architectural design and massing. Property displacements would be mitigated through just compensation and relocation assistance as required by the Uniform Act. There would be no adverse permanent impacts on land use following proposed mitigation measures. The overall impact on local economic development would be beneficial.

- Neighborhood and Community Impacts: Adverse visual character impacts on the community surrounding Wendell Smith Park could be avoided if the area beneath the elevated structure remained open for park use and new trees were planted to shield views of the elevated structure from homes fronting the park. If the potential UPRR relocation project being studied in the FSRRFS is implemented, it would be possible to allow for more crossing locations along the former freight ROW to enhance the connection between communities on both sides of the tracks. The 103rd Street and 111th Street stations would create transit hubs and would help revive the neighborhood with pedestrian activity. At the Michigan Avenue station, despite the concentration of residential displacements, the overall impacts of the station would be beneficial, and would contribute to a potential new activity center that could enhance the connection between the communities. There would be no adverse permanent neighborhood and community impacts after mitigation. The ROW Option would substantially reduce travel times between neighborhoods in the project area, and would enhance their connection with major job and activity centers to the north. The new transit service and the subsequent increase in pedestrian traffic could attract new businesses to the area and support the growth and enhancement of these neighborhood retail and service nodes. The station would serve as a transit hub that brings additional commuters and visitors to the area, which could further boost economic development. The result would be an overall increase in community livability. The mobility and development impacts of the ROW Option would be beneficial.

- Parklands and Community Facilities: The ROW Option alignment would pass through Wendell Smith Park but would not displace any community facilities; this impact would largely leave the functional and recreational use of the park intact and impacts would not be adverse after mitigation. By improving travel time, operation of the ROW Option would improve access to parklands and community facilities within walking distance (½ mile) of the station locations. The parking garage at the Michigan Avenue station would provide space for retail and community facilities, which would result in a benefit to the community overall.

- Safety and Security: The impact of the ROW Option would not be adverse with mitigation. A large volume of pedestrians would be expected to cross the major streets near the stations without positive traffic control. This impact would be mitigated through the installation of traffic signals, median refuge islands, and/or other pedestrian crossing treatments as applicable, resulting in no adverse permanent impacts after mitigation. Impacts on security at parking facilities would be mitigated by implementing open design and would not be adverse after mitigation. New train stations would be unlikely to have much, if any, impact on neighborhood crime. Suggested mitigation measures would be security surveillance cameras and sidewalk lighting along commercial streets within approximately one block of train station entrances.

- Visual and Aesthetic Conditions: Views near Michigan Avenue station and park & ride would substantially change due to the addition of a multi-story garage, but would not be adverse impacts after mitigation. Mitigation to reduce visual impacts would include shielding exterior lighting and providing special consideration for lighting placement adjacent to sensitive areas such as residential communities; providing landscaping and/or visual screening at park & ride locations where possible; designing the parking structure to match the character of the surrounding fabric; and using urban design techniques to reduce massing.

- Water Resources: There would be no adverse permanent impacts on groundwater. There are no wetlands in Segment UA. Pervious area is anticipated to decrease in some areas; the decrease in pervious area could be mitigated by incorporating new stormwater management structures and establishing an erosion control plan. Major underground pipes and structures could be affected by the ROW Option; stormwater drainage and water structures would need to be designed to accommodate the pump station and other underground utilities. The rail service would replace automobile trips; there would be an associated reduction in runoff contaminants that collect on streets. For this reason, the ROW Option is anticipated to have a minor but positive water quality impact. Due to the predominance of impervious surfaces throughout the project area, minimal percolation to the underlying groundwater occurs in the API; therefore, any potential increases in contaminated surface water runoff would have no adverse impact on groundwater quality. There would be no adverse permanent impacts on stormwater after mitigation.

- Transportation: There would be four intersections in the AM peak and six intersections in the PM peak in Segment UA where the ROW Option would increase traffic congestion beyond applicable thresholds, largely due to cars accessing the park & ride facilities at stations. Mitigation measures such as optimization of signal cycles and removal of some on-street parking near stations would render traffic conditions no worse than under the No Build Alternative. The park & ride facilities may also draw some motorists away from nearby highways, thereby improving traffic flow for automobiles and freight trucks. It is assumed for the ROW Option that existing UPRR freight operations would be relocated away from the existing corridor as a separate project prior to RLE implementation. The ROW Option would therefore have no impact on freight rail operations. Existing bus routes would be adjusted to interface better with the RLE stations and service. New pedestrian and bicycle facilities would

also be included near stations to provide safe access, which would improve transit connections. Transit access to the project area would substantially improve, particularly for low-income residents who do not have access to automobiles. The overall transportation impacts would be beneficial.

5.3.1.1.3 Topics with Adverse Permanent Impacts After Mitigation

No adverse impacts would remain after mitigation.

5.3.1.2 Segment UB

5.3.1.2.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from CO, GHG, $PM_{2.5}$, or MSAT emissions are anticipated.

- Historic and Cultural Resources: One resource in Segment UB has been identified as eligible for listing on the NRHP. No adverse effects on historic resources are anticipated to occur.

- Neighborhood and Community Impacts: No communities or neighborhoods exist in Segment UB north of 130th Street, because the area is industrial. As such, there would be no impacts north of 130th Street. Impacts from the South Station Option and West Station Option would be beneficial overall. The RLE would allow residents to easily access community resources in other neighborhoods, and perhaps serve as a focal point for the development of additional community resources in Riverdale. The UPRR Rail Alternative would substantially reduce travel times between the Washington Heights, Roseland, West Pullman, and Riverdale communities, and would enhance their connection with major job and activity centers north of the project area. The UPRR Rail Alternative would improve transit accessibility and provide residents with fast, reliable transit service to job centers to the north and areas where more services are available. Riverdale residents who do have automobiles would also benefit from having a new transit alternative to driving.

- Noise and Vibration: The alignment in Segment UB would be located primarily in vacant and industrial areas, which do not contain noise-sensitive land uses. Some residences are present near the Michigan Avenue and 130th Street station areas. By using continuously welded rail, vibration levels would be below the FTA impact criterion, requiring no mitigation measures. No adverse noise or vibration impacts are anticipated.

- Parklands and Community Facilities: The ROW Option alignment would not pass through any parkland and would not displace any community facilities in Segment UB. By improving travel time, operations in Segment UB would improve access to parklands and community facilities within walking distance (½ mile) of the station location when compared to the No Build Alternative. No adverse impacts on parklands or community facilities are anticipated.

- Energy: Compared to existing conditions, energy consumption would increase due to the addition of new tracks and stations to the rail system; however, this increase in energy would not be adverse, as it is not expected to affect local or regional energy availability, or require

the development of new sources. Some beneficial reduction in fuel consumption would occur if the RLE Project were to cause motorists to begin using transit for some trips.

- Geology and Soils: Operation of the ROW Option would not cause adverse changes to geology or soil resources.

- Cumulative: No cumulative adverse impacts are expected.

5.3.1.2.2 Topics with No Adverse Permanent Impacts After Mitigation

- Biological Resources: Some removal of vegetation would be needed. Given the non-mature forest cover and the surrounding industrial land uses, impacts on biological resources would not be adverse with compliance with local tree protection ordinances.

- Displacements: One non-residential building would be displaced. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse, because there is available vacant land in the project area.

- Hazardous Materials: Given the proximity of Segment UB to an adjacent active railroad, there is the potential for impacts due to releases of hazardous materials potentially being transported and from hazardous materials used in the routine operation and maintenance of the railroad. These materials potentially exist along the railroad currently, but the UPRR Rail Alternative would bring transit vehicles closer to them. Measures to avoid such occurrences would include adherence to applicable federal, state, and local regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures. There would be no adverse permanent impacts related to hazardous materials after mitigation.

- Land Use and Economic Development: The limited impact of displacements on project area land use in Segment UB would not be adverse, and associated economic development impacts would be beneficial. Facilities would be designed to be compatible with surrounding uses, which are primarily industrial and include some residences near the 130th Street station location. Due to improved access for residents, commuters, employees, and visitors, the overall land use and economic development impacts would be beneficial.

- Safety and Security: The impact on major incidents would not be adverse. For potential impacts on pedestrian safety at the 130th Street station, a traffic signal, sidewalks, curb ramps, and marked crosswalks are included in the design, so there would be no adverse impact given these improvements. Impacts on security at parking facilities would be mitigated by implementing open design and would not be adverse after mitigation. Because the 130th Street station would not be centered in a neighborhood, the impacts on neighborhood security would not be adverse. Overall safety and security impacts would not be adverse after mitigation.

- Visual and Aesthetic Conditions: Permanent visual impacts would not be adverse after mitigation. Minimal visual changes would occur, and would mostly pertain to the addition of

a multi-story parking structure at the 130th Street station. Mitigations to reduce visual impacts would include shielding exterior lighting and providing special consideration for lighting placement adjacent to sensitive areas such as residential communities; providing landscaping and/or visual screening at park & ride locations where possible; designing the parking structure to match the character of the surrounding fabric; and using urban design techniques to reduce massing.

- Water Resources: Pervious area is anticipated to decrease in some areas; the decrease in pervious area could be mitigated by incorporating new stormwater management structures and establishing an erosion control plan. The RLE Project would replace automobile trips; there would be an associated reduction in runoff contaminants that collect on streets. For this reason, the alternative is anticipated to have a minor but positive water quality impact. Due to the predominance of impervious surfaces throughout the project area, minimal percolation to the underlying groundwater occurs in the API. There would be no adverse permanent impacts on groundwater quality. There would be no permanent adverse impacts on stormwater drainage, water quality, or wetlands.

- Transportation: There would be seven intersections in the AM peak and nine intersections in the PM peak in Segment UB where the ROW Option would increase traffic congestion beyond applicable thresholds, largely due to cars accessing the park & ride facilities at stations. Mitigation measures such as optimization of signal cycles, adding turn lanes, restricting turns at some intersections, and restriping existing lanes would render traffic conditions no worse than under the No Build Alternative. The park & ride facilities may also draw some motorists away from nearby highways, thereby improving traffic flow for automobiles and freight trucks. The UPRR Rail Alternative would not affect Canadian National and Indiana Harbor Belt operations, and would therefore have no impact on freight rail. Existing bus routes would be adjusted to interface better with the RLE stations and service. New pedestrian and bicycle facilities would also be included near stations to provide safe access, which would improve transit connections. Transit access to the project area would substantially improve, particularly for low-income residents who do not have access to automobiles. The overall transportation impacts would be beneficial.

5.3.1.2.3 Topics with Adverse Permanent Impacts After Mitigation

No adverse impacts would remain after mitigation.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

5.3.2.1 Segment UA

5.3.2.1.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation construction impacts.

- Historic and Cultural Resources: There would be no adverse construction effects on historic resources.

- Noise and Vibration: Based on the types of construction equipment and activities identified in the *Description of Construction and Phasing for Environmental Impact Statement Build Alternatives* (Description of Construction), construction noise levels are not expected to exceed the FTA construction noise limits.

- Energy: The construction activities identified in the Description of Construction would not require fuel consumption and energy use at a scale that would adversely affect energy availability, and would not require development of new energy sources. No adverse impacts would occur.

- Geology and Soils: The ROW Option would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the alignment. Excavation would be primarily needed for the elevated structure supports, at-grade trackbeds, and park & ride facilities. Excavation activities are not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.3.2.1.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: No adverse air quality impacts due to construction activities are anticipated after mitigation. Proper traffic management during the construction period would mitigate any potential adverse effects. A Dust Control Plan would address in detail how dust would be controlled at all times at the construction site, the staging areas, and the access and egress routes.

- Biological Resources: There would be no adverse construction impacts on biological resources after mitigation. Compliance with local tree protection ordinances would mitigate the impacts of tree removal. As needed, mitigation measures to reduce potential impacts on wildlife habitat would be performed, including preparing a detailed tree inventory, timing tree removal to occur outside the migratory bird nesting season, performing biological surveys if construction must occur during the nesting season, and replanting trees as required by applicable local codes and ordinances.

- Hazardous Materials: There would be no adverse construction impacts relating to hazardous materials after mitigation. Construction would result in generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. Contaminated materials potentially encountered could include heavy metals, asbestos-containing material, and lead-based paint. Mitigation measures would include compliance with federal, state, and local laws and regulations regarding hazardous materials; focused site assessments for areas where

earthmoving activities would occur; hazardous materials surveys of buildings; a Contaminated Material Management Plan; Health and Safety Plans for construction activities; Spill Prevention, Control, and Countermeasure Plans; and Construction Stormwater Pollution Prevention Plans.

- Land Use and Economic Development: Construction would take up to 3 years and would cause temporary impacts on adjacent residential neighborhoods due to noise, vibration, fugitive dust, truck traffic, and roadway detours. Mitigation methods would include focusing construction activities primarily during the least impactful times of day and other best management practices. There would be short-term beneficial economic impacts from construction jobs. The land use impacts from construction would not be adverse after mitigation. The overall economic development impact from construction would be beneficial.

- Neighborhood and Community Impacts: Community disruption would occur while construction activities are performed for the UPRR Rail Alternative, with intensive construction occurring over a period of approximately 3 years. Storage of materials, equipment, and trucks would introduce temporary intermittent visual impacts within communities, but these impacts would not be adverse given their temporary nature and CTA's use of best management practices. Temporary dust, noise, and visual impacts would occur. Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. Businesses around the alignment and parking structure could be affected by construction activities, construction-related traffic, and road and sidewalk closures. This potentially adverse impact would be mitigated through early notification of construction activities, provision of temporary alternate access routes, and advertising programs to increase the visibility of affected businesses during construction.

- Parklands and Community Facilities: Construction activities would occur in Wendell Smith Park and would temporarily affect this park. The elevated structure would pass through the northwest corner of the park property. The temporary inaccessibility of part of the park would not adversely affect park function, and impacts would be mitigated through best management practices and coordination with community members and the Chicago Park District. Construction activities would generate temporary noise and air quality impacts, and/or change access to or parking around the parks. These impacts would be temporary in nature and would be mitigated through the use of construction best management practices; by alerting parkland users of construction activities; and by providing clearly marked detour routes and alternate parking. Coordination with the Chicago Park District would result in options to mitigate impacts on any of the organized park activities; for example, the recreational activities could be temporarily relocated to a nearby park while construction was underway. After mitigation, construction of the ROW Option would not adversely affect the parks in Segment UA. Construction of the ROW Option would temporarily affect New Christian Joy Missionary Baptist Church because it is adjacent to the proposed ROW. After mitigations similar to those for parks, this church would not have adverse impacts.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site would not be adverse after mitigation, which would include minimizing detour lengths.

- Visual and Aesthetic Conditions: The visual impacts related to construction would not be adverse after mitigation. At locations where park & ride structures and lots would be created, impacts would include construction fencing, demolition of existing buildings or clearing of vacant lots, temporary street closures and related signage, or temporary lighting or entrances. The CTA would attempt to maintain as much existing vegetation as practical during construction, and would minimize temporary construction impacts on the neighborhood with measures such as limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

- Water Resources: There would be no adverse construction impacts on drainage, groundwater, or water quality after mitigation. There would be no adverse construction impacts on water resources after mitigation. Stormwater drainage mitigation measures would include incorporating new stormwater management structures and establishing an erosion control plan, including for construction activities at the locations of garages and park & ride lots. Water quality mitigation measures would include installing properly designed and maintained biological oil and grease removal systems, proper storage of hazardous materials, development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials, proper storage and maintenance of equipment, periodic removal of landscape and construction debris, installation of detention basins to remove suspended solids, and regular monitoring of runoff water quality. Care would need to be taken during construction in the vicinity of the Roseland Pump Station at 104th Street, as well as other underground utilities identified, in order to not damage existing structures. There are no wetlands in Segment UA.

- Transportation: Construction of rail facilities, parking structures, and park & ride lots would require lane and sidewalk closures that would temporarily reduce roadway capacity. These closures may lead to temporarily increased travel times for both motorists and transit riders, and bus stop locations may be temporarily relocated. Bicycles and pedestrians would need to be rerouted around work areas. Detours would be provided to maintain access. Lanes on I-57 may also need to be temporarily closed to accommodate rail construction in the median, which would affect automobiles and freight trucks. Temporary closure of full sections of I-57 may also be needed. Closures would be scheduled during low-traffic periods to the extent feasible to minimize impacts. It is assumed for the ROW Option that existing UPRR freight operations would be relocated away from the existing corridor as part of a separate project prior to RLE implementation. The ROW Option construction would therefore have no impact on freight rail operations. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur after mitigation.

5.3.2.1.3 Topics with Adverse Construction Impacts After Mitigation

No adverse impacts would remain after mitigation.

5.3.2.2 Segment UB

5.3.2.2.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation impacts associated solely with the construction phase.

- Historic and Cultural Resources: There would be no adverse construction effects on historic resources.

- Noise and Vibration: Based on the types of construction equipment and activities identified in the Description of Construction, construction noise levels are not expected to exceed the FTA construction noise limits.

- Energy: The construction activities identified in the Description of Construction would not require fuel consumption and energy use at a scale that would adversely affect energy availability, and would not require development of new energy sources. No adverse impacts would occur.

- Geology and Soils: The ROW Option would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the alignment. Excavation would be primarily needed for the elevated structure supports, at-grade trackbeds, and park & ride facilities. Excavation activities are not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.3.2.2.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: No adverse air quality impacts due to construction activities are anticipated after mitigation. Proper traffic management during the construction period would mitigate any potential adverse effects. A Dust Control Plan would address in detail how dust would be controlled at all times at the construction site, the staging areas, and the access and egress routes.

- Biological Resources: There would be no adverse construction impacts on biological resources after mitigation. Compliance with local tree protection ordinances would mitigate the impacts of tree removal. As needed, mitigation measures to reduce potential impacts on wildlife habitat would be performed, including preparing a detailed tree inventory, timing tree removal to occur outside the migratory bird nesting season, performing biological surveys if

construction must occur during the nesting season, and replanting trees as required by applicable local codes and ordinances.

- Hazardous Materials: There would be no adverse construction impacts relating to hazardous materials after mitigation. Construction would result in generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. Contaminated materials potentially encountered could include heavy metals, asbestos-containing material, and lead-based paint. Mitigation measures would include compliance with federal, state, and local laws and regulations regarding hazardous materials; focused site assessments for areas where earthmoving activities would occur; hazardous materials surveys of buildings; a Contaminated Material Management Plan; Health and Safety Plans for construction activities; Spill Prevention, Control, and Countermeasure Plans; and Construction Stormwater Pollution Prevention Plans.

- Land Use and Economic Development: Construction would take up to 3 years and would cause temporary impacts on adjacent residential neighborhoods due to noise, vibration, fugitive dust, truck traffic, and roadway detours. Mitigation methods would include focusing construction activities primarily during the least impactful times of day and other best management practices. There would be short-term beneficial economic impacts from construction jobs. The land use impacts from construction would not be adverse after mitigation. The overall economic development impact from construction would be beneficial.

- Neighborhood and Community Impacts: Impacts on the Riverdale community would not be adverse provided that best management practices were employed and nighttime construction near residences was limited to the extent practicable. Community disruption would occur during construction activities for the UPRR Rail Alternative, with intensive construction occurring over a period of approximately 3 years. Overall there are few residences and businesses along Segment UB north of 130th Street. Storage of materials, equipment, and trucks would introduce temporary intermittent visual impacts within communities, but these impacts would not be adverse given their temporary nature and CTA's use of best management practices. Temporary dust, noise, and visual impacts would occur. Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. This potentially adverse impact would be mitigated through early notification of construction activities, provision of temporary alternate access routes, and advertising programs to increase the visibility of affected businesses during construction.

- Parklands and Community Facilities: No parklands would be displaced in Segment UB. Aldridge Elementary School is near the 130th Street West Station Option site and would have impacts associated with construction activities. The adverse impacts would be mitigated using construction best management practices, clearly marked detour routes, and notification to the school regarding the construction schedule.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site, would not be adverse after mitigation, which would include minimizing detour lengths.

- Visual and Aesthetic Conditions: At locations where park & ride structures and lots would be created, impacts might include construction fencing, demolition of existing buildings or clearing of vacant lots, temporary street closures and related signage, or temporary lighting or entrances. The CTA would attempt to maintain as much existing vegetation as practical during construction, and minimize temporary construction impacts on the neighborhood with measures such as limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites. There would be no adverse construction impacts after mitigation.

- Water Resources: There would be no adverse construction impacts on water resources after mitigation. Stormwater drainage mitigation measures would include incorporating new stormwater management structures and establishing an erosion control plan, including for construction activities at the locations of garages and park & ride lots. Water quality mitigation measures would include installing properly designed and maintained biological oil and grease removal systems, proper storage of hazardous materials, development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials, proper storage and maintenance of equipment, periodic removal of landscape and construction debris, installation of detention basins to remove suspended solids, and regular monitoring of runoff water quality. After compensatory mitigation, either through creation, restoration, enhancement, or preservation of wetlands, there would be no adverse permanent impacts on wetlands.

- Transportation: Construction of rail facilities, parking structures, and park & ride lots would require lane and sidewalk closures that would temporarily reduce roadway capacity. These closures may lead to temporarily increased travel times for both motorists and transit riders, and bus stop locations may be temporarily relocated. Bicycles and pedestrians would need to be rerouted around work areas. Detours would be provided to maintain access, and closures would be scheduled during low-traffic periods to the extent feasible to minimize impacts. Construction would also be phased to minimize disruption to passenger and freight rail services. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur after mitigation.

5.3.2.2.3 Topics with Adverse Construction Impacts After Mitigation

No adverse impacts would remain after mitigation.

5.3.3 120th Street Yard and Shop

5.3.3.1 Permanent Impacts and Mitigations

5.3.3.1.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from CO, GHG, $PM_{2.5}$, or MSAT emissions are anticipated.

- Historic and Cultural Resources: No properties identified as eligible for listing on the NRHP lie in the vicinity of the yard and shop location; therefore, no effects are anticipated.

- Neighborhood and Community Impacts: The 120th Street yard and shop would be located in industrial and vacant areas, away from residences and community-oriented businesses and resources. As such, no community impacts would result from operation of the facility.

- Noise and Vibration: Because there are no sensitive receptors in the vicinity of the 120th Street yard and shop, and because of the much lower amount of train activity in and out of the facility and the lower train speeds compared to other parts of the project corridor, the noise levels generated in this area would be substantially lower than the noise levels generated along other parts of the project corridor. As a result, the noise generated at the 120th Street yard and shop would not exceed the FTA impact criteria at the nearest sensitive receptors.

- Parklands and Community Facilities: There are no parklands or community facilities in, adjacent to, or within 500 feet of the proposed ROW for the 120th Street yard and shop. As such, there would be no impacts on parklands or community facilities as a result of the operation and/or construction of the 120th Street yard and shop.

- Transportation: Under the ROW Option, there would be no permanent impacts on bicycle or pedestrians, because the existing site is a combination of industrial and vacant land. Pedestrian access by the general public would be restricted and discouraged. Because of the location of the yard, no public transportation or parking facilities would be affected by this alternative. Some parking would be provided for yard employees.

- Energy: Yard and shop operation would require additional fuel and energy resources, but not to the extent that it would affect local or regional fuel and energy availability, or require development of new energy sources. As such, no adverse impacts would occur.

- Geology and Soils: Operation of the 120th Street yard and shop would not cause adverse changes to geology or soil resources.

- Cumulative: No cumulative adverse impacts are expected.

5.3.3.1.2 Topics with No Adverse Permanent Impacts After Mitigation

- Biological Resources: Given the non-mature forest cover and the surrounding industrial land uses, impacts on biological resources would not be adverse with compliance with local tree protection ordinances.

- Displacements: The permanent envelope for the yard and shop would displace three buildings within the Riverdale neighborhood, of which none contain residences or commercial businesses. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse, because there is available vacant land in the project area.

- Hazardous Materials: There would be no adverse permanent impacts related to hazardous materials after mitigation. Operation of yard and shop would have the potential to result in the release of hazardous materials and/or petroleum products into the environment from accidental spills or from maintenance activities that require earthmoving in contaminated areas. Measures to avoid such occurrences would include adherence to applicable federal, state, and local regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures.

- Land Use and Economic Development: The yard and shop would be located within an industrial area; the facilities would be designed to be consistent with existing land uses. The land use and economic impacts would not be adverse.

- Safety and Security: Impacts on security at the 120th Street yard and shop would not be adverse after mitigation. Mitigation measures would include complying with relevant design standards to minimize intrusion and prevent graffiti.

- Visual and Aesthetic Conditions: Due to the location in a low-density light industrial area, impacts would be minimal. Additional measures for the 120th Street yard and shop would include designing the shop facility structure to be aesthetically compatible with surrounding uses and screening the yard through fencing, walls, or vegetation wherever necessary and possible.

- Water Resources: There would be no adverse permanent impacts on groundwater. There would be no adverse permanent impacts on stormwater drainage or water quality associated with the 120th Street yard and shop after mitigation. Pervious area is anticipated to decrease in some areas; the decrease in pervious area could be mitigated by incorporating new stormwater management structures and establishing an erosion control plan. The introduction of new impervious surfaces would have the potential to increase the concentration and accumulation of runoff contaminants. Following compensatory mitigation, there would be no adverse permanent impacts on wetlands.

5.3.3.1.3 Topics with Adverse Permanent Impacts After Mitigation

No adverse impacts would remain after mitigation.

5.3.3.2 Construction Impacts and Mitigations

5.3.3.2.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation construction impacts.

- Historic and Cultural Resources: No properties identified as eligible for listing on the NRHP lie in the vicinity of the yard and shop location; therefore, no effects are anticipated.

- Land Use and Economic Development: Because the yard and shop would be located in a heavy industrial area, the construction activities would not be adverse for land use or economic development.

- Neighborhood and Community Impacts: The 120th Street yard and shop would be located in industrial and vacant areas, away from residences and community-oriented businesses and resources. Construction activities would be far enough from established communities that no impacts would occur.

- Noise and Vibration: Based on the construction activities and equipment identified in the Description of Construction, and with noise-reducing construction practices, construction noise levels are not expected to exceed the FTA construction noise limits. No sensitive receptors are near the yard and shop site.

- Parklands and Community Facilities: There are no parklands or community facilities in, adjacent to, or within 500 feet of the proposed ROW for the 120th Street yard and shop. As such, there would be no impacts on parklands or community facilities as a result of the operation and/or construction of the 120th Street yard and shop.

- Energy: Yard and shop construction activities identified in the Description of Construction would not require fuel consumption and energy use at a scale that would adversely affect energy availability, and would not require development of new energy sources. No adverse impacts would occur.

- Geology and Soils: Construction of the 120th Street yard and shop would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the site. Excavation would be primarily needed for the at-grade trackbeds and shop buildings. Excavation activities are not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.3.3.2.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: No adverse air quality impacts due to construction activities are anticipated after mitigation. Proper traffic management during the construction period would mitigate any potential adverse effects. A Dust Control Plan would address in detail how dust would be controlled at all times at the construction site, the staging areas, and the access and egress routes.

- Biological Resources: There would be no adverse construction impacts on biological resources after mitigation. Compliance with local tree protection ordinances would mitigate the impacts of tree removal. As needed, mitigation measures to reduce potential impacts on wildlife habitat would be performed, including preparing a detailed tree inventory, timing tree

removal to occur outside the migratory bird nesting season, performing biological surveys if construction must occur during the nesting season, and replanting trees as required by applicable local codes and ordinances.

- Hazardous Materials: There would be no adverse construction impacts relating to hazardous materials after mitigation. Construction would result in generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. Contaminated materials potentially encountered could include heavy metals, asbestos-containing material, and lead-based paint. Mitigation measures would include compliance with federal, state, and local laws and regulations regarding hazardous materials; focused site assessments for areas where earthmoving activities would occur; hazardous materials surveys of buildings; a Contaminated Material Management Plan; Health and Safety Plans for construction activities; Spill Prevention, Control, and Countermeasure Plans; and Construction Stormwater Pollution Prevention Plans.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site, would not be adverse after mitigation, which would include minimizing detour lengths.

- Visual and Aesthetic Conditions: Construction impacts would be minor and not adverse after mitigation for the 120th Street yard and shop, due to its location in a low-density area and the nature of at-grade construction. Impacts might include construction fencing, demolition of existing buildings or clearing of vacant lots, temporary street closures and related signage, or temporary lighting or entrances. The CTA would attempt to maintain as much existing vegetation as practical during construction, and minimize temporary construction impacts on the neighborhood with measures such as limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

- Water Resources: There would be no adverse construction impacts on water resources in the vicinity of the 120th Street yard and shop after mitigation. Stormwater drainage mitigation measures would include incorporating new stormwater management structures and establishing an erosion control plan. Water quality mitigation measures would include installing properly designed and maintained biological oil and grease removal systems, proper storage of hazardous materials, development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials, proper storage and maintenance of equipment, periodic removal of landscape and construction debris, installation of detention basins to remove suspended solids, and regular monitoring of runoff water quality.

- Transportation: During new track roadbed construction for the 120th Street yard and shop and the new access road for the existing Metropolitan Water Reclamation District facility, construction over and adjacent to the Northern Indiana Commuter Transit District/Chicago South Shore & South Bend Railroad would occur. During these construction activities, flagging operations and scheduled track closures would occur. Construction would be phased

to minimize impacts on operations of the Metropolitan Water Reclamation District and Northern Indiana Commuter Transit District/Chicago South Shore & South Bend Railroad.

5.3.3.2.3 Topics with Adverse Construction Impacts After Mitigation

No adverse impacts would remain after mitigation.

5.4 Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative East Option would involve an extension of the Red Line from its current terminus at the 95th Street Terminal southward to 130th Street in the vicinity of Altgeld Gardens via existing highway medians and railroad corridors. The three options for the UPRR Rail Alternative are analyzed in two geographic segments, as described above in Section 5.3 for the ROW Option. The East Option alignment would run along the eastern side of the UPRR ROW in Segment UA. The alignment in Segment UB is the same for all three options.

New stations would be constructed at 103rd Street on the boundary between the Roseland and Washington Heights communities, at 111th Street in Roseland, at Michigan Avenue in West Pullman, and at 130th Street in Riverdale. All stations would have bus turnarounds and park & ride facilities. The park & ride facilities would be primarily surface parking lots, but multi-level parking structures would be constructed at the Michigan Avenue and 130th Street stations. To ensure analysis of the maximum foreseeable impacts, it is assumed for the East and West Options that the possible project being studied in the FSRRFS would not have occurred prior to RLE construction and UPRR would continue freight operations in its existing ROW. Compared to the ROW Option, the East and West Options would have greater impacts due to the UPRR's requirement that the CTA tracks be located at least 50 feet from the active freight tracks. Particularly for the East Option, which would have the greatest number of building displacements, this requirement would push the elevated structure into the residential communities adjacent to the UPRR ROW.

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.1.1 Segment UA

5.4.1.1.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from CO, GHG, $PM_{2.5}$, or MSAT emissions are anticipated.

- Historic and Cultural Resources: Six resources in Segment UA have been identified as eligible for listing on the NRHP. No adverse effects on historic resources are anticipated to occur as a result of the East Option.

- Energy: Energy consumption would increase due to the addition of new tracks and stations to the rail system; however, this increase in energy would not be adverse, as it is not expected to affect local or regional energy availability or require the development of new sources. Some

beneficial reduction in fuel consumption would occur if the RLE Project were to cause motorists to begin using transit for some trips.

- Geology and Soils: Operation of the East Option would not cause adverse changes to geology or soil resources.

- Cumulative: No cumulative adverse impacts are expected.

5.4.1.1.2 Topics with No Adverse Permanent Impacts After Mitigation

- Biological Resources: The East Option would affect a larger amount of vegetation than the ROW Option. With compliance with local tree protection ordinances, potential impacts would not be adverse.

- Displacements: The East Option would have the most impacts of the UPRR Rail Alternative options. In Segment UA, 107 buildings would be displaced, of which 81 would be single-family residences, 13 would be multi-family buildings, 3 would be commercial structures, and 1 would be a place of worship. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse, because there is available vacant land in the project area.

- Hazardous Materials: Given the proximity of the UPRR track to the alignment for the East Option, there would be the potential for impacts due to releases of hazardous materials being transported and from hazardous materials used in the routine operation and maintenance of the UPRR. These materials potentially exist along the railroad currently, but the UPRR Rail Alternative would bring transit vehicles closer to them. There would be no adverse permanent impacts related to hazardous materials after mitigation. The impacts and mitigation measures would be similar to those for the ROW Option, as discussed above in Section 5.3.1.1.

- Land Use and Economic Development: The park & ride lots at the 103rd Street and 111th Street stations, and the parking garage at the Michigan Avenue station would be inconsistent with adjacent land uses due to the primarily residential and commercial nature of the areas around the proposed stations. These land uses consist of primarily single-family residential neighborhoods, with occasional commercial and apartment buildings. There would be no adverse permanent impacts on land use after proposed mitigation measures, as there could be new development spurred by the new station. The overall impact on local economic development would be beneficial. These impacts and mitigation measures would be similar to those for the ROW Option, as discussed above in Section 5.3.1.1.

- Noise and Vibration: There would be a substantial number of affected receptors where the train speeds reach 55 mph. Noise-affected residential receptors along the project corridor would require mitigation. A 3- to 4-foot-high noise barrier installed along the outer tracks of the aerial structure would reduce the wheel/rail noise that would propagate into the surrounding community. There would be no adverse noise impacts after mitigation. No adverse vibration impacts are anticipated.

- Parklands and Community Facilities: In segment UA, the East Option alignment would pass through the corner of Wendell Smith Park and the western portion of Block Park, and would displace Now Faith Church of God Holiness. The church could be relocated within the neighborhood. The East Option would largely leave the functional and recreational use of the parks intact and impacts would not be adverse after mitigation. By improving travel time, operation of the East Option would improve access to parklands and community facilities within walking distance (½ mile) of the station locations. The parking garage at the Michigan Avenue station would provide space for retail and community facilities; this space would result in a benefit to the community overall.

- Safety and Security: The impact on major incidents would not be adverse. A large volume of pedestrians would be expected to cross the major streets near the stations without positive traffic control. This impact would be mitigated through the installation of traffic signals, median refuge islands, and/or other pedestrian crossing treatments, resulting in no adverse permanent impacts after mitigation. Traffic signals would need to be interconnected with the railroad crossing warning devices. Impacts on security at parking facilities would be mitigated by implementing open design and would not be adverse after mitigation. New train stations would be unlikely to have much, if any, impact on neighborhood crime. Suggested mitigation measures would be security surveillance cameras and sidewalk lighting along commercial streets within approximately one block of train station entrances. Impacts on neighborhood security would not be adverse after mitigation. Overall safety and security impacts would not be adverse after mitigation. The East Option would directly increase the number of vehicles (mostly buses) and pedestrians crossing the UPRR tracks at 103rd Street and 111th Street compared to the No Build Alternative, and could indirectly induce land development that would further increase traffic volumes. The risk of vehicle crashes would be mitigated by installing safety protection technologies for vehicles and pedestrians. Given that transit passengers are often in a hurry, and given the likely delays to pedestrians due to the expected increase in freight volumes over existing conditions, it is reasonable to assume that some pedestrians may choose to take unacceptable safety risks by crossing the tracks while the signals are flashing. This adverse impact could be mitigated by incorporating a grade separation structure or providing pedestrian crossing gates at sidewalks.

- Water Resources: The East Option alignment would be closer to the Roseland Pump Station than the ROW Option alignment; consequently, it would be more complex from a drainage standpoint. There would be no adverse permanent impacts on water resources in Segment UA of the East Option. The impacts and mitigation measures would be similar to those for the ROW Option, described above in Section 5.3.1.1.2.

- Transportation: There would be four intersections in the AM peak and six intersections in the PM peak in Segment UA where the East Option would increase traffic congestion beyond applicable thresholds, largely due to cars accessing the park & ride facilities at stations. Mitigation measures such as optimization of signal cycles and removal of some on-street parking near stations would render traffic conditions no worse than under the No Build Alternative. The park & ride facilities may also draw some motorists away from nearby

highways, thereby improving traffic flow for automobiles and freight trucks. The East Option would therefore have no impact on freight rail operations, because the rail line would be elevated above the UPRR ROW and no new grade crossings would be added. Existing bus routes would be adjusted to interface better with the RLE stations and service. New pedestrian and bicycle facilities would also be included near stations to provide safe access, including across the existing freight tracks, which would improve transit connections. Transit access to the project area would substantially improve, particularly for low-income residents who do not have access to automobiles. The overall transportation impacts would be beneficial.

5.4.1.1.3 Topics with Adverse Permanent Impacts After Mitigation

- Visual and Aesthetic Conditions: The elevated structure would cause adverse visual impacts at 117th Street and Prairie Avenue. Mitigation measures would reduce the impacts, but due to the proximity of the elevated structure to residential areas, the impacts would remain adverse despite mitigation. Mitigation measures to reduce visual impacts would include landscaping, using urban design techniques to reduce massing, and creating pedestrian-friendly surroundings.

- Neighborhood and Community Impacts: The East Option would have permanent adverse impacts on community character and cohesion that could not be mitigated due to the visual encroachment of the elevated structure into the neighborhood at 117th Street and Prairie Avenue in West Pullman. Mitigation measures for impacts on community character, including planting additional landscaping, would not be sufficient to offset this permanent impact. The East Option alignment would pass through the northwestern corner of Wendell Smith Park and the western portion of Block Park, and would displace Now Faith Church of God Holiness. The church could be relocated within the neighborhood. The East Option would largely leave the functional and recreational use of the parks intact and impacts would not be adverse after mitigation. Other impacts, benefits, and mitigation measures would be similar to those for the ROW Option, as discussed above in Section 5.3.1.1.2.

5.4.1.2 Segment UB

Impacts in Segment UB would be the same for all of the UPRR Rail Alternative options. Impacts and mitigation measures for Segment UB are discussed above in Section 5.3.1.2.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

5.4.2.1 Segment UA

5.4.2.1.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation construction impacts.

- Historic and Cultural Resources: There would be no adverse construction effects on historic resources.

- Noise and Vibration: Based on the construction activities and equipment described in the Description of Construction, construction noise levels are not expected to exceed the FTA construction noise limits using noise-reducing construction practices.

- Energy: The construction activities identified in the Description of Construction would not require fuel consumption and energy use at a scale that would adversely affect energy availability, and would not require development of new energy sources. No adverse impacts would occur.

- Geology and Soils: The East Option would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the alignment. Excavation would be primarily needed for the elevated structure supports, at-grade trackbeds, and park & ride facilities. Excavation activities are not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.4.2.1.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: No adverse air quality impacts due to construction activities are anticipated after mitigation. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Biological Resources: Although the East Option would affect a larger amount of vegetation than the ROW Option, there would be no adverse construction impacts on biological resources after mitigation. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Hazardous Materials: There would be no adverse construction impacts relating to hazardous materials after mitigation. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Land Use and Economic Development: Land use impacts from construction would not be adverse. Economic development impacts from construction would be beneficial. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Neighborhood and Community Impacts: There would be no adverse construction impacts relating to neighborhood and community impacts after mitigation. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Parklands and Community Facilities: No parkland or community facilities would have adverse construction impacts after mitigations. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site, would not be adverse after mitigations, which include minimizing detour lengths.

- Visual and Aesthetic Conditions: The visual impacts related to construction would not be adverse after mitigation. The impacts and mitigation measures would be the similar to those for the ROW Option, discussed above in Section 5.3.2.1.

- Water Resources: The East Option alignment would be closer to the Roseland Pump Station than the ROW Option; consequently, additional care would need to be taken in the vicinity of the Roseland Pump Station and near the other underground utilities during construction. There would be no adverse construction impacts on water resources in Segment UA of the East Option. The impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Transportation: Construction of rail facilities, parking structures, and park & ride lots would require lane and sidewalk closures that would temporarily reduce roadway capacity. These closures may lead to temporarily increased travel times for both motorists and transit riders, and bus stop locations may be temporarily relocated. Bicycles and pedestrians would need to be rerouted around work areas. Detours would be provided to maintain access. Lanes on I-57 may also need to be temporarily closed to accommodate rail construction in the median, which would affect automobiles and freight trucks. Temporary closure of full sections of I-57 may also be needed. Closures would be scheduled during low-traffic periods to the extent feasible to minimize impacts. The UPRR freight tracks would remain active during construction. Temporary intermittent track closures may be needed; however, construction would be staged to minimize disruption. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur after mitigation.

5.4.2.1.3 Topics with Adverse Construction Impacts After Mitigation

No adverse impacts would remain after mitigation.

5.4.2.2 Segment UB

Impacts in Segment UB would be the same for all of the UPRR Rail Alternative options. Construction impacts and mitigation measures for Segment UB are discussed above in Section 5.3.2.2.

5.4.3 120th Street Yard and Shop

Impacts of the 120th Street yard and shop would be the same for all of the UPRR Rail Alternative options. Impacts and mitigation measures for 120th Street yard and shop are discussed above in Section 5.3.3.

5.5 Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative West Option would include extension of the Red Line from its current terminus at 95th Street Terminal southward to 130th Street in the vicinity of Altgeld Gardens via existing highway medians and railroad corridors. The three options for the UPRR Rail Alternative are analyzed in two geographic segments, as described above in Section 5.3 for the ROW Option. The West Option alignment would run along the western side of the UPRR ROW in Segment UA. The alignment in Segment UB is the same for all three options.

New stations would be constructed at 103rd Street on the boundary between the Roseland and Washington Heights communities, at 111th Street in Roseland, at Michigan Avenue in West Pullman, and at 130th Street in Riverdale. All stations would have bus turnarounds and park & ride facilities. The park & ride facilities would be primarily surface parking lots, but multi-level parking structures would be constructed at the Michigan Avenue and 130th Street stations. To ensure analysis of the maximum foreseeable impacts, it is assumed for the East and West Options that the possible project being studied in the FSRRFS would not have occurred prior to RLE construction and UPRR would continue freight operations in its existing ROW. Compared to the ROW Option, the East and West Options would have greater displacement impacts due to the UPRR's requirement that the CTA tracks be located at least 50 feet from the active freight tracks. The West Option would require fewer displacements than the East Option, and a greater proportion of the displacements would be industrial instead of residential.

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.1.1 Segment UA

5.5.1.1.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from CO, GHG, $PM_{2.5}$, or MSAT emissions are anticipated.

- Historic and Cultural Resources: Six resources in Segment UA have been identified as eligible for listing on the NRHP. No adverse effects on historic resources are anticipated to occur.

- Energy: Energy consumption would increase due to the addition of new tracks and stations to the rail system; however, this increase in energy would not be adverse, as it is not expected to affect local or regional energy availability or require the development of new sources. Some beneficial reduction in fuel consumption would occur if the RLE Project were to cause motorists to begin using transit for some trips.

- Geology and Soils: Operation of the West Option would not cause adverse changes to geology or soil resources.

- Cumulative: No cumulative adverse impacts are expected.

5.5.1.1.2 Topics with No Adverse Permanent Impacts After Mitigation

- Biological Resources: The West Option would affect the greatest amount of vegetation compared to the other UPRR Rail Alternative options. With compliance with local tree protection ordinances, potential impacts would not be adverse.

- Displacements: The West Option would have fewer impacts than the East Option, but more than the ROW Option. In Segment UA, 47 buildings would be removed, of which 22 would be single-family residences, 8 would be commercial properties, 2 would be mixed-use properties, and 1 would be a place of worship. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse, because there is available vacant land in the project area.

- Hazardous Materials: Given the proximity of the UPRR track to the alignment for the West Option, there would be the potential for impacts due to releases of hazardous materials being transported and from hazardous materials used in the routine operation and maintenance of the UPRR. These materials potentially exist along the railroad currently, but the UPRR Rail Alternative would bring transit vehicles closer to them. There would be no adverse permanent impacts related to hazardous materials after mitigation. These impacts and mitigation measures would be similar to those for the ROW Option, as described above in Section 5.3.1.1.

- Land Use and Economic Development: The West Option would affect the adjacent land uses along Fernwood Parkway, because it would be incompatible with the existing single-family residential development. Mitigation would include additional street trees along the west side of Eggleston Avenue and an evergreen tree buffer along the east side of Eggleston Avenue. The park & ride lots at the 103rd Street and 111th Street stations, the substation at 105th Street, and the parking garage at the Michigan Avenue Station would be inconsistent with adjacent land uses. These land uses consist of primarily single-family residential neighborhoods, with occasional commercial and apartment buildings. The West Option would displace the most commercial structures of any of the UPRR Rail Alternative Options; however, some are not fully utilized. The overall impact on land uses would not be adverse after mitigation. The overall impact on local economic development would be beneficial. The impacts and mitigation measures would be similar to those for the ROW Option, as discussed above in Section 5.3.1.1.

- Noise and Vibration: There would be no adverse noise impacts after mitigation. No adverse vibration impacts are anticipated. Impacts and mitigation measures would be similar to those for the East Option, as discussed above in Section 5.4.1.1.

- Parklands and Community Facilities: In segment UA, the West Option alignment would pass through the corner of Wendell Smith Park and most of Fernwood Parkway. No community facilities would be displaced. The West Option would largely leave the functional and recreational use of the parks intact and impacts would not be adverse after mitigation. Mitigation measures would include replacement parkland elsewhere in the surrounding neighborhoods, or improvement of existing park facilities. By improving travel time, operation

of the West Option would improve access to parklands and community facilities within walking distance (½ mile) of the station locations. The parking garage at the Michigan Avenue station would provide space for retail and community facilities; this space would result in a benefit to the community overall.

- Safety and Security: The impact on major incidents would not be adverse. A large volume of pedestrians would be expected to cross the major streets near the stations without positive traffic control. This impact would be mitigated through the installation of traffic signals, median refuge islands, and/or other pedestrian crossing treatments as applicable in coordination with the results of traffic studies completed during the final design phase, resulting in no adverse permanent impacts after mitigation. The West Option would directly increase the number of vehicles (mostly buses) and pedestrians crossing the UPRR tracks at 103rd Street and 111th Street compared to the No Build Alternative, and could indirectly induce land development that would further increase traffic volumes. The risk of vehicle crashes would be mitigated by installing safety protection technologies for vehicles and pedestrians. Given that transit passengers are often in a hurry, and given the likely delays to pedestrians due to the expected increase in freight volumes over existing conditions, it is reasonable to assume that some pedestrians may choose to take unacceptable safety risks by crossing the tracks while the signals are flashing. Compared to the East Option, the volume of pedestrians crossing the tracks would be lower for the West Option because the parking lots would be located on the same side of the tracks as the stations. This adverse impact could be mitigated by incorporating a grade separation structure or providing pedestrian crossing gates at sidewalks. Traffic signals would need to be interconnected with the railroad crossing warning devices. Impacts on security at parking facilities would be mitigated by implementing open design and would not be adverse after mitigation. New train stations would be unlikely to have much, if any, impact on neighborhood crime. Suggested mitigation measures would be security surveillance cameras and sidewalk lighting along commercial streets within approximately one block of train station entrances. Impacts on neighborhood security would not be adverse after mitigation. Overall safety and security impacts would not be adverse after mitigation.

- Water Resources: Of the UPRR Rail Alternative option alignments, the West Option alignment would be furthest from the Roseland Pump Station and would have the least potential impact on underground pipes and structures around the pump station. There would be no adverse permanent impacts on water resources in Segment UA of the West Option. The impacts and mitigation measures would be similar to those for the ROW Option, described above in Section 5.3.1.1.2.

- Transportation: There would be four intersections in the AM peak and six intersections in the PM peak in Segment UA where the West Option would increase traffic congestion beyond applicable thresholds, largely due to cars accessing the park & ride facilities at stations. Mitigation measures such as optimization of signal cycles and removal of some on-street parking near stations would render traffic conditions no worse than under the No Build Alternative. The park & ride facilities may also draw some motorists away from nearby

highways, thereby improving traffic flow for automobiles and freight trucks. The West Option would therefore have no impact on freight rail operations, because the rail line would be elevated above the UPRR ROW and no new grade crossings would be added. Existing bus routes would be adjusted to interface better with the RLE stations and service. New pedestrian and bicycle facilities would also be included near stations to provide safe access, including across the existing freight tracks, which would improve transit connections. Transit access to the project area would substantially improve, particularly for low-income residents who do not have access to automobiles. The overall transportation impacts would be beneficial.

5.5.1.1.3 Topics with Adverse Permanent Impacts After Mitigation

- Visual and Aesthetic Conditions: The elevated structure would cause adverse visual impacts between 99th Street and 103rd Street, near the 103rd Street station, and near the Michigan Avenue station park & ride facility. Mitigation measures to reduce visual impacts would include providing landscaping and replanting vegetation where possible, designing the park & ride facility to match the character of the surrounding neighborhood, using urban design techniques to reduce massing, and creating pedestrian-friendly surroundings. Exterior lighting would be shielded and carefully placed when adjacent to sensitive areas such as residential communities. The impacts would remain adverse after mitigation.

- Neighborhood and Community Impacts: The West Option would have permanent adverse impacts on community character and cohesion that could not be mitigated due to the visual encroachment of the elevated structure into the neighborhood between 99th and 103rd Streets in Washington Heights. The 103rd Street station in Roseland and Washington Heights and the Michigan Avenue station park & ride in West Pullman would also cause adverse visual impacts because they would change the scale, density, and character of the local community. Mitigation measures for impacts on community character, including planting additional landscaping, would not be sufficient to offset this permanent impact. The West Option alignment would pass through Fernwood Parkway, and would displace the Grace Temple Church of God Established in Christ. The church could be relocated within the neighborhood. CTA would keep the area beneath the track structure in Fernwood Parkway open for use, and improve park space elsewhere in the neighborhood. Mitigation measures, including screening the structure with additional landscaping, would not be sufficient to offset this impact.

5.5.1.2 Segment UB

Impacts in Segment UB would be the same for all of the UPRR Rail Alternative options. Impacts and mitigation measures for Segment UB are discussed above in Section 5.3.1.2.

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

5.5.2.1 Segment UA

5.5.2.1.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation construction impacts.

- Historic and Cultural Resources: There would be no adverse construction effects on historic resources.

- Noise and Vibration: Based on the construction activities and equipment described in the Description of Construction, construction noise levels are not expected to exceed the FTA construction noise limits using noise-reducing construction practices.

- Energy: The construction activities identified in the Description of Construction would not require fuel consumption and energy use at a scale that would adversely affect energy availability, and would not require development of new energy sources. No adverse impacts would occur.

- Geology and Soils: The West Option would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the alignment. Excavation would be primarily needed for the elevated structure supports, at-grade trackbeds, and park & ride facilities. Excavation activities are not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.5.2.1.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: No adverse air quality impacts due to construction activities are anticipated after mitigation. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Biological Resources: Although the West Option would affect the greatest amount of vegetation compared to the other UPRR Rail Alternative options, there would be no adverse construction impacts on biological resources after mitigation. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Hazardous Materials: There would be no adverse construction impacts relating to hazardous materials after mitigation. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Land Use and Economic Development: The land use impacts from construction would not be adverse after mitigation. The economic development impacts from construction would be beneficial. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Neighborhood and Community Impacts: There would be no adverse construction impacts relating to neighborhood and community impacts after mitigation. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Parklands and Community Facilities: No parkland or community facilities would have adverse construction impacts after mitigations. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site would not be adverse after mitigations, which include minimizing detour lengths.

- Visual and Aesthetic Conditions: The visual impacts related to construction would not be adverse after mitigation. The impacts and mitigation measures would be similar to those for the ROW Option, discussed above in Section 5.3.2.1.

- Water Resources: Of the UPRR Rail Alternative option alignments, the West Option alignment would be furthest from the Roseland Pump Station and have the least potential impact on the underground pipes and structures around the pump station. There would be no adverse construction impacts on water resources in Segment UA of the West Option. Impacts and mitigation measures would be the same as those for the ROW Option, discussed above in Section 5.3.2.1.

- Transportation: Construction of rail facilities, parking structures, and park & ride lots would require lane and sidewalk closures that would temporarily reduce roadway capacity. These closures may lead to temporarily increased travel times for both motorists and transit riders, and bus stop locations may be temporarily relocated. Bicycles and pedestrians would need to be rerouted around work areas. Detours would be provided to maintain access. Lanes on I-57 may also need to be temporarily closed to accommodate rail construction in the median, which would affect automobiles and freight trucks. Temporary closure of full sections of I-57 may also be needed. Closures would be scheduled during low-traffic periods to the extent feasible to minimize impacts. The UPRR freight tracks would remain active during construction. Temporary intermittent track closures may be needed; however, construction would be staged to minimize disruption. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur after mitigation.

5.5.2.1.3 Topics with Adverse Construction Impacts After Mitigation

No adverse impacts would remain after mitigation

5.5.2.2 Segment UB

Impacts in Segment UB would be the same for all of the UPRR Rail Alternative options. Construction impacts and mitigation measures for Segment UB are discussed above in Section 5.3.2.2.

5.5.3 120th Street Yard and Shop

Impacts of the 120th Street yard and shop would be the same for all of the UPRR Rail Alternative options. Impacts and mitigation measures for 120th Street yard and shop are discussed above in Section 5.3.3.

5.6 Halsted Rail Alternative

The Halsted Rail Alternative would involve extension of the Red Line from its current terminus at the 95th Street Terminal southward to Vermont Avenue via existing highway medians and the median of Halsted Street. The Halsted Rail Alternative is analyzed in two geographic segments:

- Segment HA: From the 95th Street Terminal to the 119th Street yard and shop area, including the communities of Roseland, Washington Heights, Morgan Park, and part of West Pullman
- Segment HB: south of the 119th Street yard and shop area, in the West Pullman community and the Village of Calumet Park

New stations would be constructed at 103rd Street on the boundary between the Roseland and Washington Heights community areas, at 111th Street on the boundary between the Roseland and Morgan Park community areas, at 119th Street in the West Pullman area, and at Vermont Avenue in West Pullman. All stations would have bus turnarounds and park & ride facilities. The park & ride facilities would be primarily surface parking lots; however, a multi-level parking structure would be constructed at the Vermont Avenue station.

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

5.6.1.1 Segment HA

5.6.1.1.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from CO, GHG, $PM_{2.5}$, or MSAT emissions are anticipated.
- Biological Resources: Halsted Street is currently developed with commercial land uses. The introduction of an elevated rail line would have no impact on vegetation and wildlife habitats along this route.
- Energy: Energy consumption would increase due to the addition of new tracks and stations to the rail system; however, this increase in energy would not be adverse, as it is not expected to affect local or regional energy availability, or require the development of new sources. Some beneficial reduction in fuel consumption would occur if the RLE Project were to cause motorists to begin using transit for some trips.

- Geology and Soils: Operation of the Halsted Rail Alternative would not cause adverse changes to geology or soil resources.

- Cumulative: No cumulative adverse impacts are expected.

5.6.1.1.2 Topics with No Adverse Permanent Impacts After Mitigation

- Displacements: The Halsted Rail Alternative would have the fewest displaced residences and the most displaced commercial buildings of the rail alternatives. A total of 17 buildings would be displaced in Segment HA, of which 11 would be commercial buildings and 4 would be mixed-use buildings. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse, because there is available vacant land in the project area.

- Hazardous Materials: Operation of the Halsted Rail Alternative would have the potential to result in the release of hazardous materials and/or petroleum products into the environment from accidental spills. Spills are most likely to occur during activities such as equipment and grounds maintenance. Materials typically used for these activities include fuel, oil, paints, solvents, cleaning agents, herbicides, and pesticides. Adherence to applicable federal, state, and local regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures, would minimize the potential for impacts.

- Land Use and Economic Development: The substations at 101st Street, 110th Street, and 118th Street, and the park & ride lots at the 103rd Street and 111th Street stations would be inconsistent with adjacent land uses. These uses consist primarily of street-facing commercial developments along Halsted Street, with single-family residential on surrounding blocks. The Halsted Rail Alternative would require the most commercial building displacements of the alternatives under consideration for the RLE Project; however, some of the lost commercial space would be replaced on the ground floor of the station parking facilities or in new development incentivized by the new transit line. Mitigations include zoning variances, screening, landscaping, lighting appropriate for adjacent land uses, and appropriate architectural design and massing. Property displacements would be mitigated through just compensation and relocation assistance as required by the Uniform Act. There would be no adverse permanent impacts on land use following proposed mitigation measures. The overall impact on local economic development would be beneficial.

- Noise and Vibration: There would be a substantial number of affected receptors in areas where the train speeds would reach 55 mph. Noise-affected residential receptors along the project corridor would require mitigation. A 3- to 4-foot-high noise barrier installed along the outer tracks of the aerial structure would reduce the wheel-rail noise that would propagate into the surrounding community. There would be moderate (not adverse) noise impacts after mitigation. No adverse vibration impacts are anticipated.

- Parklands and Community Facilities: The Halsted Rail Alternative Segment HA would not pass through any parkland; however, the alternative would displace one community facility,

the Illinois Department of Employment Security office, which could be relocated nearby. After mitigation, the operation of the Halsted Rail Alternative would not result in adverse impacts. By improving travel time, operation of the ROW Option would improve access to community facilities within walking distance (½ mile) of the station locations.

- Neighborhood and Community Impacts: The overall community character impact of adding the elevated structure to the neighborhood would be negative, but not adverse. The Halsted Rail Alternative would displace one community resource in Segment HA: the Illinois Department of Employment Security office, which would be moved to another location nearby to avoid adverse impacts. See Section 5.3.1.1.2 for proposed mitigation measures.

- Safety and Security: The impact on major incidents would not be adverse. A large volume of pedestrians would be expected to cross the major streets near the stations without positive traffic control. This impact would be mitigated through the installation of traffic signals, median refuge islands, and/or other pedestrian crossing treatments as applicable in coordination with the results of traffic studies completed during the final design phase, resulting in no adverse permanent impacts after mitigation. Impacts on security at parking facilities would be mitigated by implementing open design and would not be adverse after mitigation. New train stations would be unlikely to have much, if any, impact on neighborhood crime. Overall safety and security impacts would not be adverse after mitigation.

- Water Resources: There would be no adverse permanent impacts on water resources in Segment HA after mitigation. Pervious area is anticipated to decrease in some areas; the decrease in pervious area could be mitigated by incorporating new stormwater management structures and establishing an erosion control plan. The rail service would replace automobile trips; there would be an associated reduction in runoff contaminants that collect on streets. For this reason, the Halsted Rail Alternative is anticipated to have a minor but positive water quality impact. Due to the predominance of impervious surfaces throughout the project area, minimal percolation to the underlying groundwater occurs in the API; therefore, any potential increases in contaminated surface water runoff would have no adverse impact on groundwater quality. There would be no adverse permanent impacts on stormwater after mitigation.

- Transportation: There would be four intersections in the AM peak and six intersections in the PM peak in Segment HA where the Halsted Rail Alternative would increase traffic congestion beyond applicable thresholds, largely due to cars accessing the park & ride facilities at stations. Mitigation measures such as optimization of signal cycles would render traffic conditions no worse than under the No Build Alternative. The park & ride facilities may also draw some motorists away from nearby highways, thereby improving traffic flow for automobiles and freight trucks. The Halsted Rail Alternative would have no impact on freight rail operations, because it would only cross above the UPRR ROW in the median of I-57. Existing bus routes would be adjusted to interface better with the RLE stations and service. New pedestrian and bicycle facilities would also be included near stations to provide safe access, which would improve transit connections. The Halsted Rail Alternative would also

provide a convenient point for bicyclists to access the Major Taylor Trail at 119th Street. Transit access to the project area would substantially improve, particularly for low-income residents who do not have access to automobiles. The overall transportation impacts would be beneficial.

5.6.1.1.3 Topics with Adverse Permanent Impacts After Mitigation

- Historic and Cultural Resources: Three resources and one district in Segment HA have been identified as eligible for listing on the NRHP. One of the resources would be adversely affected due to alteration of setting: the substation at 10227 S. Halsted Street.

- Visual and Aesthetic Conditions: The Halsted Rail Alternative would have adverse impacts at the transition from the I-57 ROW to Halsted Street. The visual impact due to the height of the elevated structure could not be mitigated.

5.6.1.2 Segment HB

5.6.1.2.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from CO, GHG, $PM_{2.5}$, or MSAT emissions are anticipated.

- Biological Resources: Halsted Street is currently developed with commercial land uses. The introduction of an elevated rail line would have no impact on vegetation and wildlife habitats along this route.

- Energy: Energy consumption would increase due to the addition of new tracks and stations to the rail system; however, this increase in energy would not be adverse, as it is not expected to affect local or regional energy availability, or require the development of new sources. Some beneficial reduction in fuel consumption would occur if the RLE Project were to cause motorists to begin using transit for some trips.

- Geology and Soils: Operation of the Halsted Rail Alternative would not cause adverse changes to geology or soil resources.

- Cumulative: No cumulative adverse impacts are expected.

5.6.1.2.2 Topics with No Adverse Permanent Impacts After Mitigation

- Displacements: The Halsted Rail Alternative would have the fewest displaced single-family residences and the most displaced commercial buildings of the rail alternatives. A total of 15 buildings would be displaced in Segment HB, of which 11 would be single-family residences and 4 would be commercial properties. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse, because there is available vacant land in the project area.

- Hazardous Materials: There would be no adverse permanent impacts related to hazardous materials after mitigation. Impacts and mitigation measures for Segment HB would be the same as those for Segment HA, as discussed above in Section 5.6.1.1.

- Noise and Vibration: No severe noise impacts would remain after mitigation. No adverse vibration impacts are anticipated. Impacts and mitigation measures for Segment HB would be the same as those for Segment HA, as discussed above in Section 5.6.1.1.

- Parklands and Community Facilities: The Halsted Rail Alternative Segment HB alignment would not pass through any parkland or displace any community facilities. By improving travel time, operation of the alternative would improve access to community facilities within walking distance (½ mile) of the station locations.

- Safety and Security: The impact on major incidents would not be adverse. A large volume of pedestrians would be expected to cross the major streets near the stations without positive traffic control. This impact would be mitigated through the installation of traffic signals, median refuge islands, and/or other pedestrian crossing treatments as applicable in coordination with the results of traffic studies completed during the final design phase, resulting in no adverse permanent impacts after mitigation. Impacts on security at parking facilities would be mitigated by implementing open design and would not be adverse after mitigation. New train stations would be unlikely to have much, if any, impact on neighborhood crime. Overall safety and security impacts would not be adverse after mitigation.

- Water Resources: There would be no adverse permanent impacts on water resources in Segment HB after mitigation. Impacts and mitigation measures for Segment HB would be the same as those for Segment HA, as discussed above in Section 5.6.1.1.

- Transportation: There would be nine intersections in the AM peak and nine intersections in the PM peak in Segment HB where the Halsted Rail Alternative would increase traffic congestion beyond applicable thresholds, largely due to cars accessing the park & ride facilities at stations. Mitigation measures such as optimization of signal cycles, addition of turn lanes, and restriping of through and turn lanes would render traffic conditions no worse than under the No Build Alternative. The park & ride facilities may also draw some motorists away from nearby highways, thereby improving traffic flow for automobiles and freight trucks. There are no freight rail tracks in the area, and the Halsted Rail Alternative would have no impact on passenger rail operations, because it would only cross above the Metra Electric District tracks at Halsted Street. Existing bus routes would be adjusted to interface better with the RLE stations and service. New pedestrian and bicycle facilities would also be included near stations to provide safe access, which would improve transit connections. Transit access to the project area would substantially improve, particularly for low-income residents who do not have access to automobiles. Unlike the BRT and UPRR Rail Alternatives, the Halsted Rail Alternative would not serve the Altgeld Gardens public housing project. The overall transportation impacts would be beneficial.

5.6.1.2.3 Topics with Adverse Permanent Impacts After Mitigation

- Historic and Cultural Resources: Two resources in Segment HB have been identified as eligible for listing on the NRHP, and both are anticipated to be adversely affected due to

change in setting: the church at 12433-12439 S. Halsted Street and the cemetery gatehouse at 12540 S. Halsted Street.

- Land Use and Economic Development: The substation at 126th Street would be inconsistent with adjacent land uses, which are primarily single-story homes. Due to the large size of the garage at the Vermont Avenue station, the impact on existing land use character would be adverse. Some commercial displacements would be necessary; however, some of the lost commercial space could be replaced on the ground floor of the station parking facilities or in new development incentivized by the new transit line. Mitigations include zoning variances, screening, landscaping, lighting appropriate for adjacent land uses, and appropriate architectural design and massing. Property displacements would be mitigated through just compensation and relocation assistance as required by the Uniform Act. There would be no adverse permanent impacts on land use following proposed mitigation measures other than the garage at the Vermont Avenue station. The overall impact on local economic development would be beneficial.

- Neighborhood and Community Impacts: The Halsted Rail Alternative would have an adverse impact on visual character that cannot be mitigated in the West Pullman community along Green Street between Vermont Avenue and 128th Place. The single-family homes on the east side of the block would be acquired and removed to construct a seven-story park & ride garage. The garage would be out of scale and inconsistent with the single-story residential character of the neighborhood. No available mitigation measures would effectively offset this adverse impact.

- Visual and Aesthetic Conditions: The Vermont Street station would have adverse impacts after mitigation. Mitigations to reduce visual impacts would include shielding exterior lighting and providing special consideration for lighting placement adjacent to sensitive areas such as residential communities; providing landscaping and/or visual screening at park & ride locations where possible; designing the parking structure to match the character of the surrounding fabric; and using urban design techniques to reduce massing. The height of the park & ride structure at Vermont Station and its proximity to residences would cause an adverse visual impact despite mitigation.

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

5.6.2.1 Segment HA

5.6.2.1.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation construction impacts.

- Noise and Vibration: Based on the types of construction equipment and activities identified in the Description of Construction, construction noise levels are not expected to exceed the FTA construction noise limits.

- Energy: The construction activities identified in the Description of Construction would not require fuel consumption and energy use at a scale that would adversely affect energy availability, and would not require development of new energy sources. No adverse impacts would occur.

- Geology and Soils: The Halsted Rail Alternative would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the alignment. Excavation would be primarily needed for the elevated structure supports, at-grade trackbeds, and park & ride facilities. Excavation activities are not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.6.2.1.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: No adverse air quality impacts due to construction activities are anticipated after mitigation. Impacts and mitigation measures would be similar to those for the UPRR Rail Alternative, as described above in Section 5.3.2.1.

- Biological Resources: There would be no adverse construction impacts on biological resources after mitigation. Impacts and mitigation measures would be similar to those for the UPRR Rail Alternative, as described above in Section 5.3.2.1.

- Hazardous Materials: There would be no adverse construction impacts related to hazardous materials after mitigation. Impacts and mitigation measures would be similar to those for the UPRR Rail Alternative, as described above in Section 5.3.2.1.

- Land Use and Economic Development: The land use impacts from construction would not be adverse after mitigation. Due to the nature and size of the small businesses along Halsted Street, some businesses might not be able to maintain their customer base and could potentially lose business from construction-related disruptions. Mitigation methods would include focusing construction activities primarily during the least impactful times of day and other best management practices. There would be short-term beneficial economic impacts from construction jobs. Due to the short-term nature of construction activities, these impacts would not be adverse.

- Parklands and Community Facilities: After mitigation, no parkland or community facilities would have adverse construction impacts. Construction activities would generate temporary noise and air quality impacts, and change access to parks and community facilities. These impacts would be temporary in nature and would be mitigated through the use of construction best management practices; by alerting users of construction activities; and by providing clearly marked detour routes and alternate parking.

- Neighborhood and Community Impacts: Construction activities would be more disruptive than they would be under the UPRR Rail Alternative, because the Halsted Rail Alternative elevated structure would be built in the median of a major commercial street instead of on private, off-street ROW. Community disruption would occur during construction activities, with intensive construction occurring over a period of approximately 3 years. Storage of materials, equipment, and trucks would introduce temporary intermittent visual impacts within communities, but these impacts would not be adverse given their temporary nature and CTA's use of best management practices. Temporary dust, noise, and visual impacts would occur. Construction would be temporary, and major activities would be scheduled so as not to conflict with community events to the extent possible. Businesses around the alignment and parking structure could be affected by construction activities, construction-related traffic, and road and sidewalk closures. This potentially adverse impact would be mitigated through early notification of construction activities, provision of temporary alternate access routes, and advertising programs to increase the visibility of affected businesses during construction.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site, would not be adverse after mitigation, which includes minimizing detour lengths.

- Visual and Aesthetic Conditions: The visual impacts related to construction would not be adverse after mitigation. At locations where park & ride facilities would be created, impacts would include construction fencing, demolition of existing buildings or clearing of vacant lots, temporary street closures and related signage, or temporary lighting or entrances. The CTA would attempt to maintain as much existing vegetation as practical during construction, and would minimize temporary construction impacts on the neighborhood with measures such as limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

- Water Resources: There would be no adverse construction impacts on drainage, groundwater, or water quality after mitigation. There would be no adverse construction impacts on water resources after mitigation. Stormwater drainage mitigation measures would include incorporating new stormwater management structures and establishing an erosion control plan, including for construction activities at the locations of garages and park & ride lots. Water quality mitigation measures would include installing properly designed and maintained biological oil and grease removal systems, proper storage of hazardous materials, development and maintenance of an effective monitoring and cleanup program for spills and leaks of hazardous materials, proper storage and maintenance of equipment, periodic removal of landscape and construction debris, installation of detention basins to remove suspended solids, and regular monitoring of runoff water quality.

- Transportation: Construction of rail facilities, parking structures, and park & ride lots would require lane and sidewalk closures that would temporarily reduce roadway capacity. Temporary full closures of sections of Halsted Street would be needed for superstructure

placement. These closures would cause temporarily increased travel times for both motorists and transit riders, and bus stop locations may be temporarily relocated. Bicycles and pedestrians would need to be rerouted around work areas. Detours would be provided to maintain access. Lanes on I-57 may also need to be temporarily closed to accommodate rail construction in the median, which would affect automobiles and freight trucks. Temporary full closure of sections of I-57 may also be needed. Closures would be scheduled during low-traffic periods to the extent feasible to minimize impacts. The UPRR freight tracks would remain active during construction. Temporary intermittent track closures may be needed to construct the elevated track in the median of I-57; however, construction would be staged to minimize disruption. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur after mitigation.

5.6.2.1.3 Topics with Adverse Construction Impacts After Mitigation

- Historic and Cultural Resources: Three resources and one district in Segment HA have been identified as eligible for listing on the NRHP. One of the resources would be adversely affected due to alteration of setting: the substation at 10227 S. Halsted Street.

5.6.2.2 Segment HB

5.6.2.2.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation construction impacts.

- Noise and Vibration: Based on the types of construction equipment and activities identified in the Description of Construction, construction noise levels are not expected to exceed the FTA construction noise limits.

- Energy: The construction activities identified in the Description of Construction would not require fuel consumption and energy use at a scale that would adversely affect energy availability, and would not require development of new energy sources. No adverse impacts would occur.

- Geology and Soils: The Halsted Rail Alternative would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the alignment. Excavation would be primarily needed for the elevated structure supports and park & ride facilities. Excavation activities are not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.6.2.2.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: No adverse air quality impacts due to construction activities are anticipated after mitigation. Impacts and mitigation measures would be similar to those for the UPRR Rail Alternative, as described above in Section 5.3.2.1.

- Biological Resources: There would be no adverse construction impacts on biological resources after mitigation. Impacts and mitigation measures would be similar to those for the UPRR Rail Alternative, as described above in Section 5.3.2.1.

- Hazardous Materials: There would be no adverse construction impacts related to hazardous materials after mitigation. Impacts and mitigation measures would be similar to those for the UPRR Rail Alternative, as described above in Section 5.3.2.1.

- Neighborhood and Community Impacts: There would be no adverse construction impacts on neighborhoods and communities after mitigation. Impacts and mitigation measures would be similar to those for Segment HA, as described above in Section 5.6.2.1.

- Parklands and Community Facilities: After mitigation, no parkland or community facilities would have adverse construction impacts. Impacts and mitigation measures would be similar to those for Segment HA, as described above in Section 5.6.2.1.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site, would not be adverse after mitigation, which includes minimizing detour lengths.

- Visual and Aesthetic Conditions: Construction impacts would be longer in nature at the Vermont Avenue station than at others along the RLE due to the need to construct a multi-level parking structure. Otherwise, impacts and mitigations would be similar to those for Segment HA, as described above in Section 5.6.2.1.

- Land Use and Economic Development: The land use impacts from construction would not be adverse after mitigation. Due to the nature and size of the small businesses along Halsted Street, some businesses might not be able to maintain their customer base and could potentially lose business from construction-related disruptions. This effect would be less pronounced in Segment HB because there are fewer businesses along this portion of Halsted Street than in Segment HA. Mitigation methods would include focusing construction activities primarily during the least impactful times of day and other best management practices. There would be short-term beneficial economic impacts from construction jobs. Due to the short-term nature of construction activities, these impacts would not be adverse.

- Water Resources: There would be no adverse construction impacts on water resources after mitigation. Impacts and mitigation measures would be similar to those for the UPRR Rail Alternative, as discussed above in Section 5.3.2.1.

- Transportation: Construction of rail facilities, parking structures, and park & ride lots would require lane and sidewalk closures that would temporarily reduce roadway capacity. Temporary full closures of sections of Halsted Street would be needed for superstructure placement. These closures would cause temporarily increased travel times for both motorists and transit riders, and bus stop locations may be temporarily relocated. Bicycles and pedestrians would need to be rerouted around work areas. Closures would be scheduled during low-traffic periods to the extent feasible to minimize impacts. The Metra Electric District passenger rail tracks would remain active during construction. Temporary intermittent track closures may be needed to construct the elevated track in the median of Halsted Street; however, construction would be staged to minimize disruption. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur after mitigation.

5.6.2.2.3 Topics with Adverse Construction Impacts After Mitigation

- Historic and Cultural Resources: Two resources in Segment HB have been identified as eligible for listing on the NRHP, and both are anticipated to be adversely affected due to change in setting: the church at 12433-12439 S. Halsted Street and the cemetery gatehouse at 12540 S. Halsted Street.

5.6.3 119th Street Yard and Shop

5.6.3.1 Permanent Impacts and Mitigations

5.6.3.1.1 Topics with No Adverse Permanent Impacts

- Air Quality and Climate Change: No adverse air quality impacts from CO, GHG, $PM_{2.5}$, or MSAT emissions are anticipated.

- Noise and Vibration: The noise generated at the 119th Street yard and shop would not exceed the FTA impact criteria at the residential receptors along 119th Street. As a result, noise mitigation would not be required for the 119th Street yard and shop. No adverse vibration impacts are anticipated.

- Transportation There would be no permanent adverse impacts on bicycle or pedestrian access resulting from the 119th Street yard and shop. Pedestrian access by the general public would be restricted and discouraged. Existing sidewalk near the yard along 119th, 120th, and Peoria Streets would remain. Because of the location of the yard, no public transportation would be affected. Existing on-street parking on Peoria Street would not be affected. Some parking would be provided for yard employees.

- Energy: Yard and shop operation would require additional fuel and energy resources, but not to the extent that it would affect local or regional fuel and energy availability, or require development of new energy sources. As such, no adverse impacts would occur.

- Geology and Soils: Operation of the 119th Street yard and shop would not cause adverse changes to geology or soil resources.

- Cumulative: No cumulative adverse impacts are expected.

5.6.3.1.2 Topics with No Adverse Permanent Impacts After Mitigation

- Biological Resources: There are a few relatively small patches of regenerating vegetation within the yard and shop area that could be used by migratory birds. Mitigation measures would be implemented during construction to avoid potential impacts. Mitigation measures may be required to reduce potential impacts on wildlife habitat, including preparing a detailed tree inventory, timing tree removal to occur outside the migratory bird nesting season, performing biological surveys if construction must occur during the nesting season, and replanting trees as required by applicable local codes and ordinances. There would be no adverse construction impacts on biological resources after mitigation.

- Displacements: The permanent envelope would affect six buildings within the West Pullman neighborhood, of which two would be mixed-use buildings and one would be a place of worship. With just compensation and relocation assistance per the Uniform Act, the permanent impacts would not be adverse, because there is available vacant land in the project area for relocation purposes.

- Hazardous Materials: There would be no adverse permanent impacts related to hazardous materials after mitigation. Operation of yard and shop would have the potential to result in the release of hazardous materials and/or petroleum products into the environment from accidental spills or from maintenance activities that require earthmoving in contaminated areas, which potentially exist on site. Additional information regarding such locations is provided in Section 4 of the *Hazardous Materials Technical Memorandum*. Measures to avoid such occurrences would include adherence to applicable federal, state, and local regulations, as well as CTA's existing system-wide hazardous material usage, storage, and disposal plans and procedures.

- Land Use and Economic Development: The yard and shop, as well as adjacent substation, would be located within an industrial area; therefore, these facilities would be consistent with existing land uses. The impact on existing land uses would not be adverse. The overall economic development impact would be beneficial.

- Neighborhood and Community Impacts: Neither the park & ride lot or the yard and shop facility would contribute to the growth and development of the community, which would reduce the overall potential of the Halsted Rail Alternative to encourage new development in the 119th Street station area; however, development could still occur in the remainder of the station area. Removal of the church and other property along Halsted Street would not be adverse after compliance with the Uniform Act. Other buildings in the area could be upgraded and adapted as replacements. There would be no adverse permanent impacts on neighborhoods and communities after mitigation.

- Parklands and Community Facilities: The 119th Street yard and shop would not pass through any parkland; however, the ROW would displace a place of worship, as discussed above under Neighborhood and Community Impacts.

- Safety and Security: Impacts on security at the 119th Street yard and shop would not be adverse after mitigation. Mitigation measures would include complying with relevant design standards to minimize intrusion and prevent graffiti.

- Visual and Aesthetic Conditions: The yard and shop would dramatically change the character and scale of the surrounding area, which includes light commercial and residential neighborhoods. Mitigations to reduce visual impacts would include shielding exterior lighting and providing special consideration for lighting placement adjacent to sensitive areas such as residential communities and providing landscaping and/or visual screening around the yard and shop where possible. Additional measures for the yard and shop would include designing the shop facility to be aesthetically compatible with surrounding structures and screening the yard through fencing, walls, or vegetation wherever necessary and possible. The permanent visual impacts would not be adverse after mitigation.

- Water Resources: There would be no adverse permanent impacts on water resources at the 119th Street yard and shop property after mitigation. Impacts and mitigation measures would be similar to those described for the UPRR Rail Alternative's 120th Street yard and shop above in Section 5.3.3.1.

5.6.3.1.3 Topics with Adverse Permanent Impacts After Mitigation

- Historic and Cultural Resources: One resource in the vicinity of the 119th Street yard and shop has been identified as eligible for listing on the NRHP, and is anticipated to be adversely affected due to alteration of setting: the Fire Department house at 931 W. 120th Street.

5.6.3.2 Construction Impacts and Mitigations

5.6.3.2.1 Topics with No Adverse Construction Impacts

- Displacements: Because all construction activities would occur on land acquired for the permanent ROW, there would be no temporary displacement or relocation construction impacts.

- Land Use and Economic Development: Because the yard and shop would be located in an industrial area, the construction activities would not be adverse for land use or economic development.

- Noise and Vibration: Based on the construction activities and equipment identified in the Description of Construction, construction noise levels are not expected to exceed the FTA construction noise limits using noise-reducing construction practices.

- Energy: Yard and shop construction activities identified in the Description of Construction would not require fuel consumption and energy use at a scale that would adversely affect

energy availability, and would not require development of new energy sources. No adverse impacts would occur.

- Geology and Soils: Construction of the 119th Street yard and shop would require few changes to surficial geology and soils, which have been affected by prior development in all parts of the site. Excavation would be primarily needed for the at-grade trackbeds and shop buildings. Excavation activities are not expected to have adverse impacts.

- Cumulative: No adverse cumulative impacts are expected to occur. There are not currently any foreseeable nearby projects of sufficient magnitude to cause impacts that would be under construction at the same time as RLE. Should such a project occur, CTA would coordinate construction activities to minimize impacts.

5.6.3.2.2 Topics with No Adverse Construction Impacts After Mitigation

- Air Quality and Climate Change: No adverse air quality impacts due to construction activities are anticipated after mitigation. Proper traffic management during the construction period would mitigate any potential adverse effects. A Dust Control Plan would address in detail how dust would be controlled at all times at the construction site, the staging areas, and the access and egress routes.

- Biological Resources: There would be no adverse construction impacts on biological resources after mitigation. Impacts and mitigation measures would be similar to those described for the UPRR Rail Alternative's 120th Street yard and shop above in Section 5.3.3.2.

- Hazardous Materials: There would be no adverse construction impacts relating to hazardous materials after mitigation. Construction would result in generation of a large quantity of soil that could contain contaminated materials requiring off-site disposal. Such soils potentially exist on-site, and additional information regarding such locations is provided in Section 4 of the *Hazardous Materials Technical Memorandum*. Contaminated materials potentially encountered could include heavy metals, asbestos-containing material, and lead-based paint. Mitigation measures would include compliance with federal, state, and local laws and regulations regarding hazardous materials; focused site assessments for areas where earthmoving activities would occur; hazardous materials surveys of buildings; a Contaminated Material Management Plan; Health and Safety Plans for construction activities; Spill Prevention, Control, and Countermeasure Plans; and Construction Stormwater Pollution Prevention Plans.

- Neighborhood and Community Impacts: Temporary dust, noise, and visual impacts would occur on an intermittent basis, but impacts would not be adverse provided that best management practices were employed and nighttime construction near residences were limited to the extent practicable.

- Parklands and Community Facilities: After mitigation, no parkland or community facilities would have adverse construction impacts. Mitigation would include relocation of the displaced church, as described under operation impacts above in Section 5.6.3.1.

- Safety and Security: Impacts on emergency services, including access to the construction site and travel around the site, would not be adverse after mitigation, which includes minimizing detour lengths.

- Visual and Aesthetic Conditions: The construction of the yard and shop would last 1 to 3 years and would have high visual impacts. The removal of existing buildings and parking lots, including associated debris, would be more substantial than other locations along the project corridor. The visual impacts related to construction would not be adverse after mitigation. The CTA would attempt to maintain as much existing vegetation as practical during construction, and minimize temporary construction impacts on the neighborhood with measures such as limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

- Water Resources: There would be no adverse construction impacts on water resources at the 119th Street yard and shop property after mitigation. Impacts and mitigation measures would be similar to those described for the UPRR Rail Alternative's 120th Street yard and shop above in Section 5.3.3.2.

- Transportation: The construction associated with the 119th Street yard and shop would temporarily affect the physical capacity of roadways and intersections requiring detours at 120th Street and Halsted Street. Superstructure erection would require temporary closure of all traffic along sections of Halsted Street. This may cause increased travel times for automobiles and transit users, and possibly shift traffic volumes to other streets. Bus stop locations may be temporarily closed or relocated during construction activities, and detours would be necessary. Temporary lane closures on portions of 119th Street and 120th Street may occur due to maintenance of traffic activities during construction. With adherence to established construction management guidelines for rerouting traffic and transit service, no adverse construction impacts would occur after mitigation.

5.6.3.2.3 Topics with Adverse Construction Impacts After Mitigation

- Historic and Cultural Resources: One resource in the vicinity of the 119th Street yard and shop has been identified as eligible for listing on the NRHP, and is anticipated to be adversely affected due to alteration of setting: the Fire Department house at 931 W. 120th Street.

Section 6
Impacts Remaining After Mitigation

As discussed above in Section 5, none of the alternatives would have disproportionately high and adverse effects on Environmental Justice populations. The entire project area comprises predominantly minority populations. All of the impacts and benefits of the alternatives would accrue to the same minority populations, and few project benefits would occur outside the project area. Some of the alternatives would, however, still result in non-disproportionate adverse impacts that cannot be mitigated, as summarized in the following subsections and in Table 6-1. Construction and cumulative impacts are discussed under each of the other impact categories where applicable.

Table 6-1: Adverse Impacts Remaining After Mitigation by Alternative (Not Disproportionate)

Impact Category	No Build	BRT	UPRR ROW Option	UPRR East Option	UPRR West Option	Halsted
Displacements	No	No	No	No	No	No
Land Use and Economic Development	No	No	No	No	No	Yes
Noise and Vibration	No	No	No	No	No	No
Energy	No	No	No	No	No	No
Air Quality and Climate Change	No	No	No	No	No	No
Biological Resources	No	No	No	No	No	No
Hazardous Materials	No	No	No	No	No	No
Neighborhood and Community	No	No	No	Yes	Yes	Yes
Parklands and Community Facilities	No	No	No	No	No	No
Safety and Security	No	No	No	No	No	No
Visual and Aesthetic Conditions	No	No	No	Yes	Yes	Yes
Water Resources	No	No	No	No	No	No
Transportation	No	No	No	No	No	No
Historic and Cultural Resources	No	No	No	No	No	Yes
Geology and Soils	No	No	No	No	No	No
Cumulative	No	No	No	No	No	No

BRT = Bus Rapid Transit, UPRR = Union Pacific Railroad, ROW = Right-of-Way

6.1 No Build Alternative

No adverse impacts would occur as a result of the No Build Alternative. As such, there would be no disproportionately high and adverse effects on low-income and minority populations. The communities in the project area are, however, currently underserved by the CTA rail system compared to many other parts of Chicago, and the No Build Alternative would lack the beneficial increase in economic development and livability that the build alternatives would provide.

6.2 Bus Rapid Transit Alternative

The BRT Alternative would result in permanent noise and vibration impacts that would affect both residences and community facilities along the alignment. Impacts would not disproportionately affect minority or low-income populations.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

6.3.1 Segment UA

The ROW Option would have no adverse impacts after mitigation. As such, there would be no disproportionately high and adverse effects on low-income and minority populations.

6.3.2 Segment UB

The ROW Option would have no adverse impacts after mitigation. As such, there would be no disproportionately high and adverse effects on low-income and minority populations.

6.3.3 120th Street Yard and Shop

The 120th Street yard and shop would have no adverse impacts after mitigation. As such, there would be no disproportionately high and adverse effects on low-income and minority populations.

6.4 Union Pacific Railroad Rail Alternative - East Option

6.4.1 Segment UA

The East Option would have adverse impacts remaining after mitigation in Segment UA in the following categories:

- Visual and Aesthetic Conditions (related to community visual character north of I-57 and at 117th Street and Prairie Avenue)
- Neighborhood and Community Impacts (related to community visual character north of I-57 and at 117th Street and Prairie Avenue)

Impacts and benefits would occur entirely within the same minority and low-income communities. As such, no disproportionately high and adverse effects on minority or low-income communities would occur.

6.4.2 Segment UB

The East Option would have no adverse impacts after mitigation in Segment UB. As such, there would be no disproportionately high and adverse effects on low-income and minority populations.

6.4.3 120th Street Yard and Shop

The 120th Street yard and shop would have no adverse impacts after mitigation. As such, there would be no disproportionately high and adverse effects on low-income and minority populations.

6.5 Union Pacific Railroad Rail Alternative - West Option

6.5.1 Segment UA

The West Option would have adverse impacts remaining after mitigation in Segment UA in the following categories:

- Visual and Aesthetic Conditions (related to community visual character north of I-57, between 99th and 103rd Streets, near 103rd Street station, and near Michigan Avenue station)
- Neighborhood and Community Impacts (related to community visual character north of I-57, between 99th and 103rd Streets, near 103rd Street station, and near Michigan Avenue station)

Impacts and benefits would occur entirely within the same minority and low-income communities. As such, no disproportionately high and adverse effects on minority or low-income communities would occur.

6.5.2 Segment UB

The West Option would have no adverse impacts after mitigation in Segment UB. As such, there would be no disproportionately high and adverse effects on low-income and minority populations.

6.5.3 120th Street Yard and Shop

The 120th Street yard and shop would have no adverse impacts after mitigation. As such, there would be no disproportionately high and adverse effects on low-income and minority populations.

6.6 Halsted Rail Alternative

6.6.1 Segment HA

The Halsted Rail Alternative would have adverse impacts remaining after mitigation in Segment HA in the following categories:

- Historic and Cultural Resources
- Visual and Aesthetic Conditions (related to community visual character at the transition from I-57 to Halsted Street)

Impacts and benefits would occur entirely within the same minority and low-income communities. As such, no disproportionately high and adverse effects on minority or low-income communities would occur.

6.6.2 Segment HB

The Halsted Rail Alternative would have adverse impacts remaining after mitigation in Segment HB in the following categories:

- Historic and Cultural Resources
- Land Use and Economic Development
- Neighborhood and Community Impacts (related to community visual character at Vermont Station)
- Visual and Aesthetic Conditions (related to community visual character at Vermont Station)

Impacts and benefits would occur entirely within the same minority and low-income communities. As such, no disproportionately high and adverse effects on minority or low-income communities would occur.

6.6.3 119th Street Yard and Shop

The 119th Street yard and shop would have adverse impacts remaining after mitigation in the category of Historic and Cultural Resources. Impacts and benefits would occur entirely within the same minority and low-income communities. As such, no disproportionately high and adverse effects on minority or low-income communities would occur.

Section 7
Environmental Justice Public Involvement

Public involvement summary to be added following completion of the Environmental Justice outreach process.

Section 8
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Appendix A
Limited English Proficiency (LEP) Assessment

Memorandum

To: *CTA*

From: *CWC Transit Group*

Date: *July 13, 2009*

Subject: *Red Line Extension Limited English Proficiency Assessment*

Upon further analysis of the Limited English Proficiency (LEP) needs of the CTA Red Line Extension Project Area, we have determined that public outreach materials should be prepared in both English and Spanish.

Looking at census data within each tract adjacent to the Locally Preferred Alternative (LPA) we see that there are several tracts where over 35% of the citizens speak Spanish/Spanish Creole. Construction of the Red Line Extension Project can have large impacts on the community, even more so on the properties adjacent to the LPA. The CTA needs to ensure that every citizen potentially affected by this project is made aware of possible impacts on their neighborhood.

Analysis was conducted at the tract level by specifically selecting those tracts adjacent to the LPA Right of Way (ROW). Refer to the attached LEP Baseline Report (Enclosure 1) and the corresponding Census Tract map (Enclosure 2) for detailed data on the specific tracts and languages used within each.

Enclosures:

1. ***LEP Baseline Report***
2. ***Map of Census Tracts along LPA ROW***

cc: ***Melissa Peters***

Limited English Proficiency (LEP) Baseline Report

CTA Red Line

Executive Order 13166 "Improving Access to Services for Persons with Limited English Proficiency" requires all recipients of federal funds to provide meaningful access to persons who are limited in their English proficiency (LEP). The United States (U.S.) Department of Justice defines LEP individuals as those "who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English" (67 FR 41459). Data about LEP populations was gathered in the U.S. Census 2000. For data analysis purposes, the Census divides the states of the United States into counties and divides counties into tracts.

Within area tracts, Census data record the presence of persons who describe their ability to speak English as less than "Very Well." The table below shows the percentages of adults who speak English less than "Very Well" by language category. Additionally, 175 households or 1.0% of households within area tracts reported to the Census that their household was linguistically isolated, meaning that all household members over the age of fourteen had at least some difficulty with English. Thus, Census data indicate the presence of LEP populations.

Table. Census Data: Percent of Adult Speakers Who Speak English Less than Very Well*

Census Geographies	Total Adult Population	Percent of Adult Speakers Who Speak English Less than Very Well			
		Spanish Language Speakers	Other Indo European Language Speakers	Asian and Pacific Island Language Speakers	Other Language Speakers
Tracts					
Tract 4906.00 Cook County	1,331	0.6%	0.0%	0.5%	0.0%
Tract 4907.00 Cook County	2,709	0.6%	0.3%	0.0%	0.2%
Tract 4910.00 Cook County	4,356	0.7%	0.4%	0.4%	0.0%
Tract 4911.00 Cook County	3,986	0.7%	0.0%	0.0%	0.0%
Tract 4912.00 Cook County	1,949	0.3%	0.3%	0.0%	0.0%
Tract 4913.00 Cook County	2,470	1.5%	0.3%	0.0%	0.0%
Tract 5104.00 Cook County	33	15.2%	0.0%	0.0%	0.0%
Tract 5301.00 Cook County	1,993	21.9%	0.0%	0.0%	0.0%
Tract 5302.00 Cook County	4,577	1.0%	0.0%	0.7%	0.0%

Tract 5305.00 Cook County	10,336	0.6%	0.7%	0.0%	0.3%
Tract 5306.00 Cook County	2,699	0.7%	1.2%	0.0%	0.0%
Tract 5401.00 Cook County	5,305	2.8%	0.0%	0.0%	0.0%

Data Source: United States Census 2000 (Table P19) as of February 9, 2008 for persons age 18 and older.
* The data on ability to speak English represent the Census respondent's own perception about his ability to speak English (United States Census 2000 Metadata).

Since LEP is partially defined as a limited ability to read and write English, literacy data were also consulted. Indirect literacy estimates for adults were calculated by the National Center for Education Statistics based on 2003 survey data for states and counties. None of the geographies in study area meet the requirements to be included in the National Institute for Literacy study; thus, literacy data is not available. In conclusion, the data indicate the likelihood of LEP populations in the area.

To determine the languages of the LEP populations, Census data were consulted for project area tracts. The table below details the top five languages spoken by the total adult population (LEP and non-LEP) for each tract.

Table. Census Data: Top Five Languages Spoken by the Adult Population

Census Geographies	Language 1	Language 2	Language 3	Language 4	Language 5
Tracts					
Tract 4906.00 Cook County	English 93.2%	Spanish/Spanish Creole 2.3%	Tagalog 2.3%	French (Patois, Cajun) 1.8%	Korean 0.4%
Tract 4907.00 Cook County	English 96.4%	Spanish/Spanish Creole 2.1%	German 0.6%	Hebrew 0.5%	Korean 0.4%
Tract 4910.00 Cook County	English 96.9%	Spanish/Spanish Creole 2.2%	Tagalog 0.4%	French (Patois, Cajun) 0.4%	Korean 0.2%
Tract 4911.00 Cook County	English 97.7%	Spanish/Spanish Creole 1.3%	Japanese 0.4%	German 0.3%	Italian 0.2%
Tract 4912.00 Cook County	English 96.8%	French (Patois, Cajun) 1.0%	Spanish/Spanish Creole 0.9%	Tagalog 0.8%	German 0.3%
Tract 4913.00 Cook County	English 96.8%	Spanish/Spanish Creole 2.1%	French Creole 0.9%	French (Patois, Cajun) 0.3%	-
Tract 5104.00 Cook County	English 60.6%	Spanish/Spanish Creole 39.4%	-	-	-
Tract 5301.00 Cook County	English 59.5%	Spanish/Spanish Creole	Other Slavic languages	German 0.6%	Italian 0.4%

		38.9%	0.7%		
Tract 5302.00 Cook County	English 96.2%	Spanish/Spanish Creole 2.6%	Tagalog 0.7%	German 0.2%	Other Pacific Island languages 0.2%
Tract 5305.00 Cook County	English 94.3%	Spanish/Spanish Creole 2.1%	French (Patois, Cajun) 1.1%	Arabic 0.8%	German 0.6%
Tract 5306.00 Cook County	English 96.6%	Spanish/Spanish Creole 1.7%	Polish 1.0%	Russian 0.3%	French (Patois, Cajun) 0.3%
Tract 5401.00 Cook County	English 95.1%	Spanish/Spanish Creole 4.8%	Italian 0.1%	-	-
Data Source: United States Census 2000 (Table PCT10) as of February 9, 2008.					

Therefore, the tracts data does not indicate the presence of LEP language groups that exceed the Department of Justice's Safe Harbor threshold of 5% or 1,000 persons. [However, the following measures will be taken to ensure LEP persons meaningful access: enter any measures to be taken to ensure meaningful access if applicable]. Thus, the requirements of Executive Order 13166 appear to be satisfied.

Citations

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Legend

- Census Tract Boundary
- Block Group Boundary
- Block Boundary
- Major Road
- Street
- Stream/Waterbody

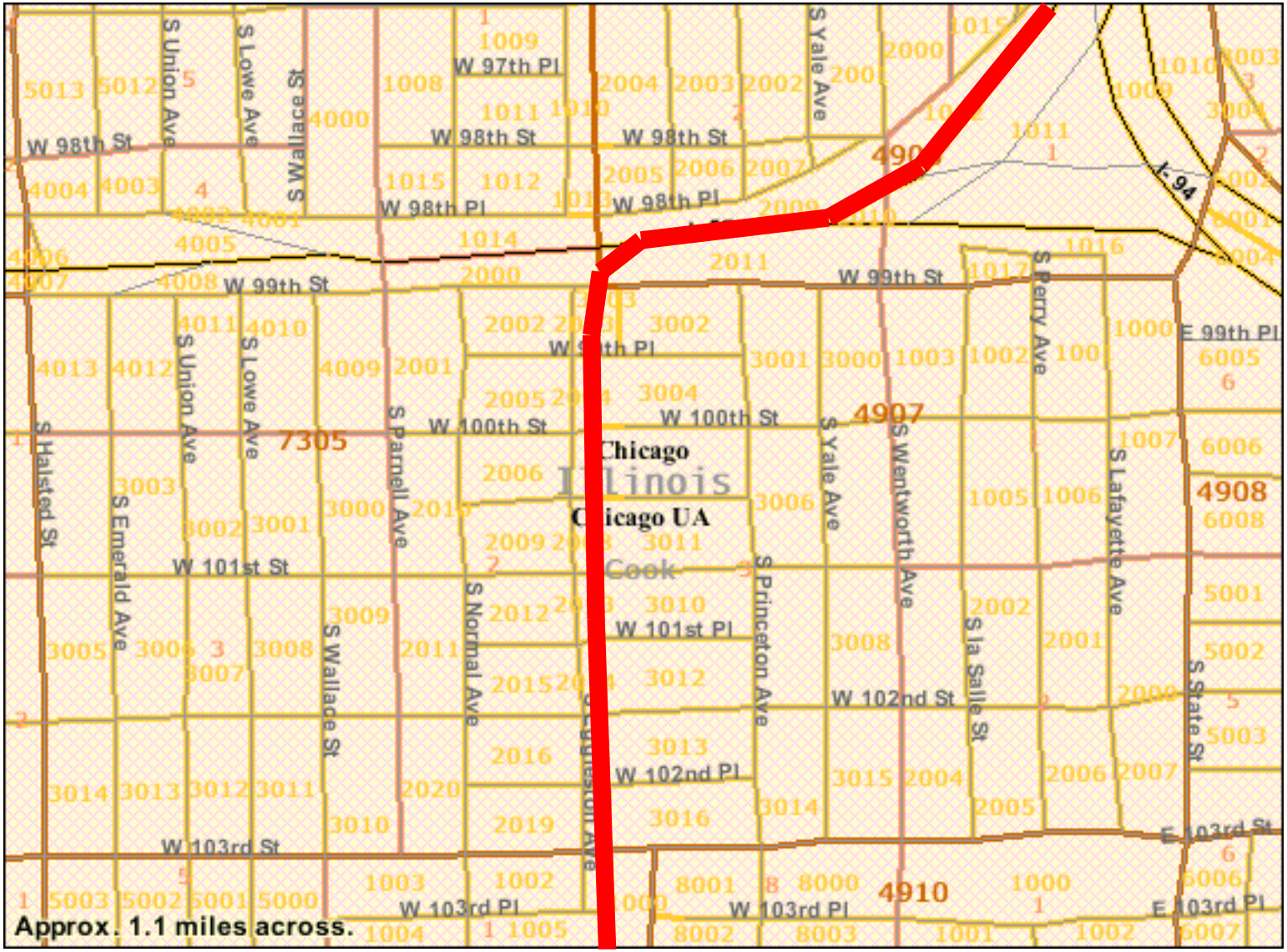

Census Tract, Block Group, and Block Location Map

Legend

- Census Tract Boundary
- Block Group Boundary
- Block Boundary
- Major Road
- Street
- Stream/Waterbody

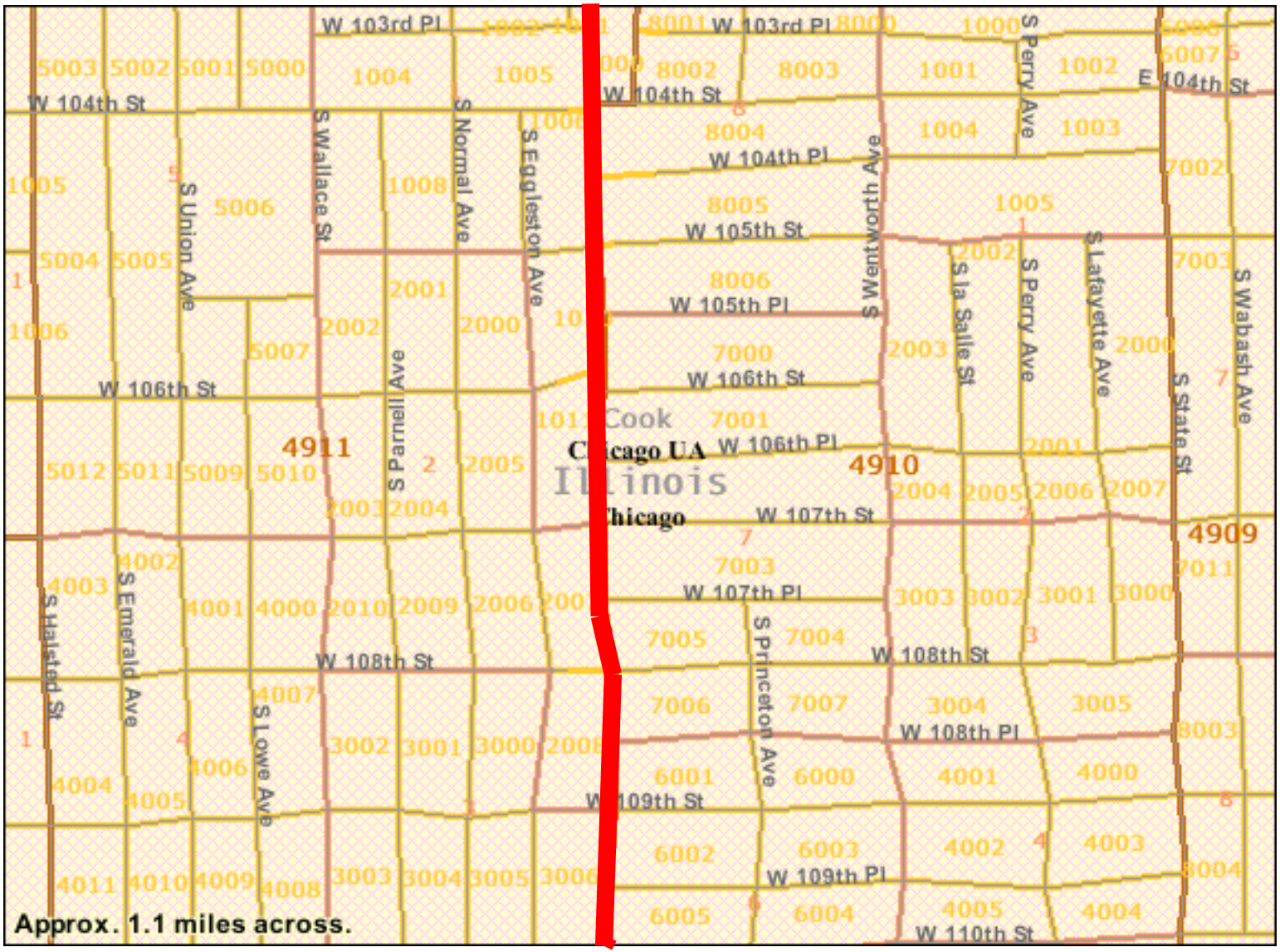

Census Tract, Block Group, and Block Location Map

Legend

- Census Tract Boundary
- Block Group Boundary
- Block Boundary
- Major Road
- Street
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Census Tract, Block Group, and Block Location Map

Legend

- Census Tract Boundary
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- Stream/Waterbody

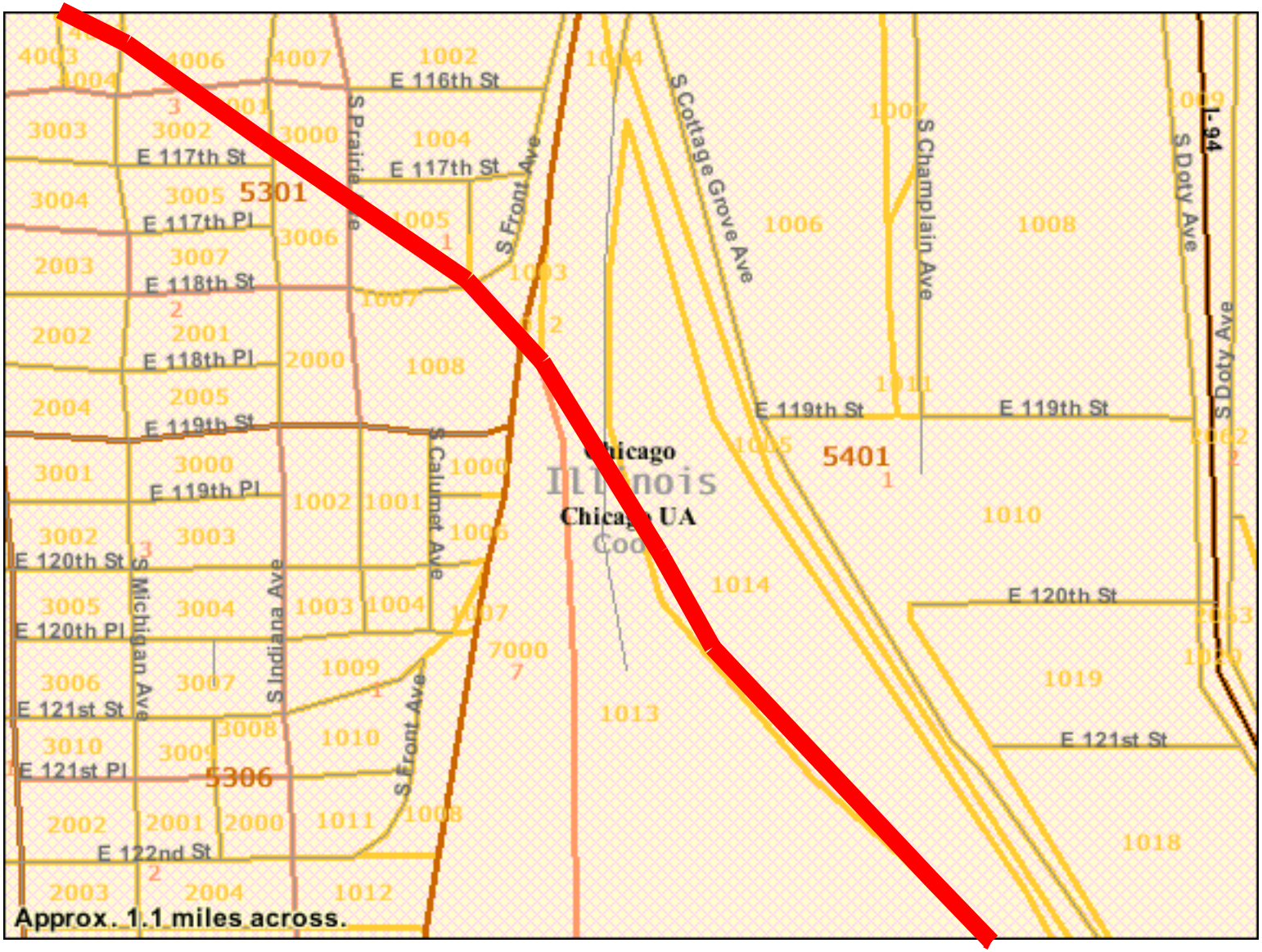

Census Tract, Block Group, and Block Location Map

Legend

- Census Tract Boundary
- Block Group Boundary
- Block Boundary
- Major Road
- Street
- Stream/Waterbody

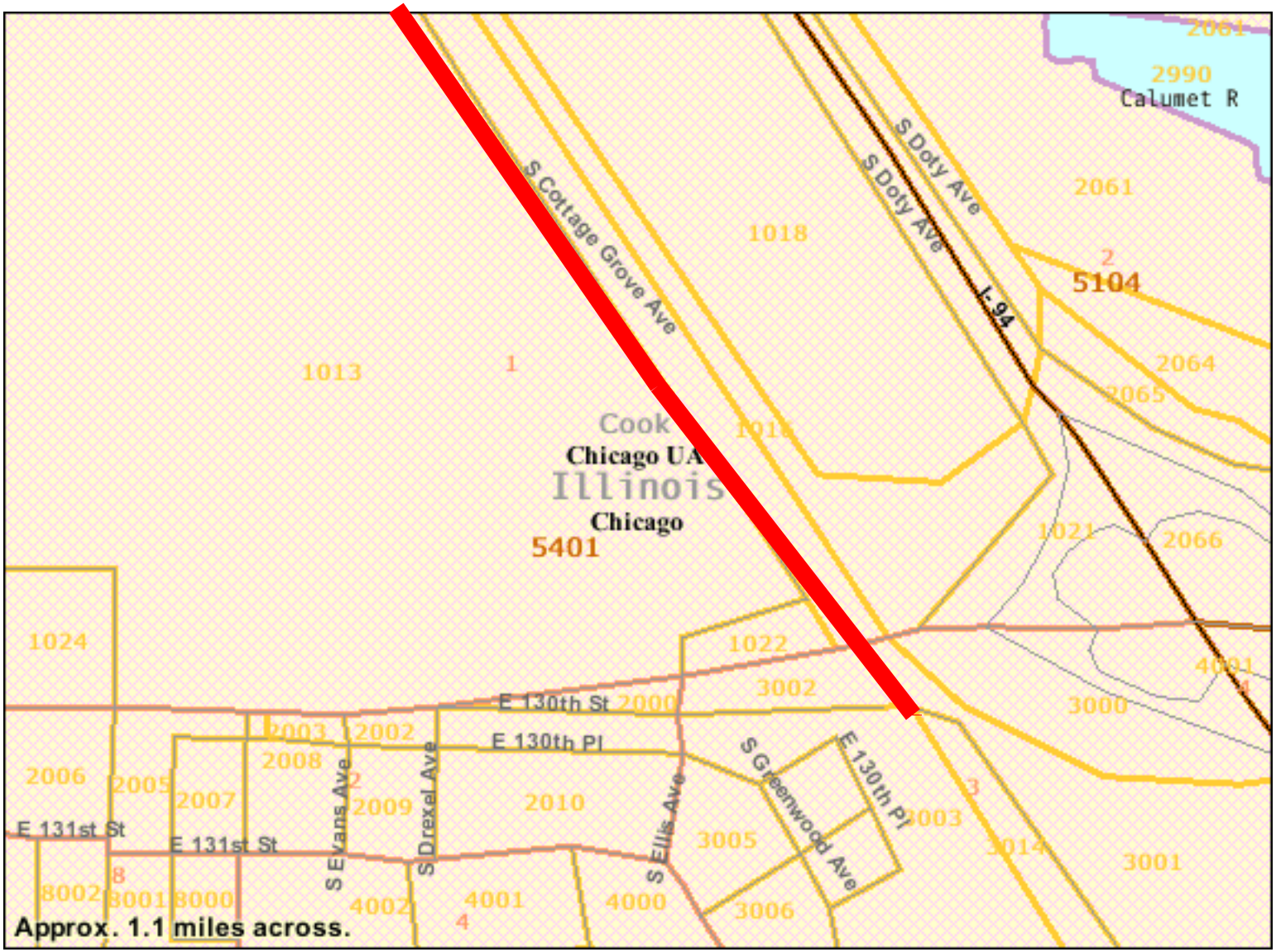

Census Tract, Block Group, and Block Location Map

Appendix B
2014–2015 Red Line Extension Project Update

2014-2015 Red Line Extension Project Update

From 2012-2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012-2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative–the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum

Environmental Justice

The refined East and West Option alignments would result in additional adverse impacts which were not discussed in this technical memorandum. These adverse impacts, which are summarized below, were reviewed to determine their effect on EJ communities.

The refined alignment along the I-57 corridor in the Roseland community area would result in adverse visual impacts and adverse impacts related to community character and cohesion for both the East and West Option. The elevated track structure along the I-57 corridor would cause adverse visual impacts because of the change in the visual setting in the highway right-of-way along the north side of I-57 in Roseland.

Considering the impacts, mitigation measures, and benefits, the East and West Options' permanent impact on community character and permanent visual impact would not be appreciably more severe or greater in magnitude than similar effects elsewhere in CTA's rail system. The mitigation measures proposed are similar in nature to those for other CTA projects and have been proposed by CTA consistently in EJ and non-EJ communities alike. The project offers substantial benefits that would accrue to the resident EJ populations. Although the alternative would still have adverse impacts on EJ communities, these impacts would not be disproportionately high or adverse. As such, no EJ-specific mitigation measures beyond those identified in the other technical memoranda would be required.

Appendix Y

Section 4(f) Replacement Park Analysis Technical Memorandum

- Final EIS Addendum Y, Section 4(f) Replacement Park Analysis, July 2022
  - Attachment A, Chicago Park District Coordination Materials
  - Attachment B, Fernwood Parkway Section 4(f) *De Minimis* Finding Correspondence
  - Attachment C, Chicago Park District Wendell Smith Park Temporary Occupancy Letter

Chicago Red Line Extension Project

Section 4(f) Replacement Park Analysis

Final EIS Addendum Y

July 2022

Prepared for:
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Prepared by:
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211 N. Clinton Street, Suite 300N
Chicago, IL 60661

Table of Contents

Section 1 - Introduction 1-1
1.1 Purpose of this Technical Memorandum 1-3
Section 2 - Summary of Section 4(f) Uses and Mitigation Proposed 2-1
2.1 Fernwood Parkway Section 4(f) Use Assessment and Mitigation Measures 2-1
2.2 Wendell Smith Park Section 4(f) Use Assessment and Mitigation Measures 2-2
Section 3 - Replacement Park Identification Process 3-1
Section 4 - Changes to Existing Parks 4-1
4.1 Fernwood Parkway 4-1
4.2 Wendell Smith Park 4-4
Section 5 - Conclusions 5-1

Attachments

Attachment A – Chicago Park District Coordination Materials
Attachment B – Fernwood Parkway Section 4(f) *De Minimis* Finding Correspondence
Attachment C – Chicago Park District Wendell Smith Park Temporary Occupancy Letter

Figures

Figure 1-1: Preferred Alignment 1-2
Figure 3-1: Potential Replacement Parks 3-3
Figure 4-1: Preferred Alignment near Fernwood Parkway 4-3
Figure 4-2: Preferred Alignment near Wendell Smith Park 4-6

Tables

Table 1-1: Evaluation of Fernwood Parkway and Wendell Smith Park for Section 4(f) Use under the Preferred Alignment 1-3

Abbreviations

Conrail	Consolidated Rail Corporation
CSS & SBRR	Chicago South Shore & South Bend Railroad
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
ESA	Environmental Site Assessment
FTA	Federal Transit Administration
NICTD	Northern Indiana Commuter Transportation District
NS	Norfolk Southern
RLE	Red Line Extension
UPRR	Union Pacific Railroad

Section 1 - Introduction

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.6 miles south from the existing 95th Street Terminal to Chicago's Far South Side. The proposed extension would include four new stations near 103rd Street (near Eggleston), 111th Street (near Eggleston), Michigan Avenue (near 116th Street), and 130th Street (at Altgeld Gardens). Multimodal connections at each station would include bus, bike, pedestrian, and park & ride facilities.

The Draft Environmental Impact Statement (EIS) analyzed the Union Pacific Railroad (UPRR) Rail Alternative East and West Options that would extend the Red Line from the existing 95th Street Terminal to 130th Street. The UPRR Rail Alternative alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would turn south to follow the UPRR corridor. Since the Draft EIS, the Preferred Alignment of the UPRR Alternative was selected that is a combination of the East and West Options along the UPRR corridor. The Preferred Alignment follows the West Option to the north of 107th Place, crosses over at 107th Place, and follows the East Option to the south of 107th Place up to 119th Street. South of this point, the alignment runs southeast along the Northern Indiana Commuter Transportation District (NICTD)/Chicago South Shore & South Bend Railroad (CSS & SBRR) right-of-way using a portion of the Norfolk Southern Railway (NS) and Consolidated Rail Corporation (Conrail) rights-of-way to the terminus (end) of the Red Line Extension (RLE) to the south of 130th Street. **Figure 1-1** is a Preferred Alignment overview map.

There would be a permanent incorporation of the two parcels of Fernwood Parkway between 99th Street and 103rd Street. There would be a direct use of Fernwood Parkway. However, considering the proposed mitigation and enhancement measures, no adverse impacts on the attributes, features, or activities would result from the Preferred Alignment; therefore, a *de minimis* finding is documented for this Section 4(f) use.

There would be no permanent incorporation of Wendell Smith Park because no land from this park would be used for the project. No changes to the amenities, features, or attributes of the park would occur. There would be a short-term closure of the northwest corner of the park (approximately 0.1 acre) during construction. This temporary closure of the northwest corner of the park would be a temporary occupancy under 23 CFR Part 774.13; however, the temporary occupancy would be minimal and would not constitute a use under Section 4(f). There would be no use of the park under Section 4(f).

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 1-1: Preferred Alignment

Chapter 8 of the Final EIS describes the Section 4(f) evaluation for Fernwood Parkway and Wendell Smith Park in further detail. Since the publication of the Draft EIS and selection of the Preferred Alignment, there would no longer be a use of Block Park. There would be no Section 4(f) use of Robert Abbot Park, Fernwood Park, Potter Palmer Park, Kensington Park, George Washington Carver Park, or the Beaubien Woods Forest Preserve permanently or during construction.

Table 1-1 provides determinations of Section 4(f) use for Fernwood Parkway and Wendell Smith Park under the Preferred Alignment.

Table 1-1: Evaluation of Fernwood Parkway and Wendell Smith Park for Section 4(f) Use under the Preferred Alignment

Parkland	Address	Community Area (Ward)	Section 4(f) Use
Fernwood Parkway	9501 S. Eggleston Avenue	Washington Heights (Ward 9)	*De minimis*
Wendell Smith Park	9912 S. Princeton Avenue	Roseland (Ward 9)	No Use

CTA developed preliminary mitigation measures, considering impacts on both park acreage and the attributes, features, and amenities of each park. These mitigation measures were developed so that the result of implementation of the Preferred Alignment would result in no adverse impact on parks after mitigation. Mitigation measures are further detailed in subsequent sections of this technical memorandum. A major feature of these mitigation measures includes developing replacement parkland in the Washington Heights community area, directly adjacent to the Major Taylor Trail, or additional areas based on future coordination with Chicago Park District as well as replacement of any of the park attributes, features, or amenities affected by the construction of the RLE Project.

1.1 Purpose of this Technical Memorandum

This technical memorandum has three purposes: 1) to provide an update on changes to **Appendix Y** of the Draft EIS since the selection of the Preferred Alignment for the Final EIS, 2) to document mitigation commitments for the use of Fernwood Parkway agreed upon between CTA and the Chicago Park District, and 3) confirm and finalize concurrence from FTA and the Chicago Park District on the Section 4(f) *de minimis* finding identified in the Draft EIS.

Section 2 - Summary of Section 4(f) Uses and Mitigation Proposed

The following provides a more detailed description of Section 4(f) uses and proposed mitigation measures.

2.1 Fernwood Parkway Section 4(f) Use Assessment and Mitigation Measures

Fernwood Parkway comprises four parcels, two of which are located north of I-57 while the other two parcels are south of I-57 between 99th Street and 103rd Street. The elevated track structure and the 103rd Street station would run through the two parcels of Fernwood Parkway from 99th Street to 103rd Street between the existing UPRR tracks and Eggleston Avenue. Elevated track structure supports would be placed permanently in Fernwood Parkway. This would result in a permanent incorporation of park space between 99th Street and 103rd Street, constituting a Section 4(f) use.

The Chicago Park District determined that these two parcels, with an area of 4.5 acres, would not be useful after implementation of the project. The Chicago Park District would transfer these parcels to CTA. In return, lands (acreage) used for the project would be replaced with lands of reasonably equivalent usefulness and location and of at least comparable value. CTA would create pocket park sites directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or additional areas based on future coordination with Chicago Park District at a replacement ratio of 1 to 1, for a total of 4.5 acres of replacement parks. The replacement pocket park sites would include passive recreational space that would facilitate Chicago Park District master planning goals and objectives. Replacement property would be constructed in accordance with Chicago Park District standards. Prior to acquisition of the park space, CTA would conduct Phase I and II environmental site assessments and obtain environmental clearance on the selected sites, as required. In addition, CTA would coordinate with the City of Chicago, if needed, to ensure zoning of these parcels is consistent with future park uses by rezoning or receiving appropriate zoning approvals. As comparison, the UPRR West Option in the Draft EIS would result in a permanent incorporation of 1.9 acres. Considering the proposed mitigation and enhancement measures, no adverse impacts on the attributes, features, or activities would result from the Preferred Alignment; therefore, a *de minimis* finding is documented for this Section 4(f) use.

Section 3 describes coordination efforts between CTA and the Chicago Park District regarding the Section 4(f) use of Fernwood Parkway.

2.2 Wendell Smith Park Section 4(f) Use Assessment and Mitigation Measures

The Preferred Alignment would be elevated over the northwest corner of the City-owned 99th Street right-of-way. The 99th Street right-of-way is currently used as Wendell Smith Park property but remains a transportation use and Section 4(f) does not apply.

CTA would need to temporarily close the northwest corner of Wendell Smith Park (approximately 0.1 acre) during construction activities. The Chicago Park District agrees that the construction activities would be considered a temporary occupancy under 23 CFR Part 774.13 that is so minimal as to not constitute a Section 4(f) use. No permanent incorporation of Wendell Smith Park would result under the Preferred Alignment. No changes to the amenities, features, or attributes of the park would occur.

Several trees would need to be removed for construction equipment staging and construction access. Removal of trees for construction would be mitigated with replacement trees and restoration of the landscaping of the park. CTA would obtain a construction permit from the Chicago Park District that requires full restoration and CTA would fully restore the land to a condition at least as good as that which exists prior to the RLE Project. CTA would require the construction contractor to follow appropriate construction BMPs to shield construction activities, allow use of the property by the public, and minimize any safety risks. This includes but is not limited to providing a detour for the sidewalks within Wendell Smith Park. Unlike the Preferred Alignment, the UPRR East Option in the Draft EIS would have overlapped approximately 0.7 acre, including part of the walking path, a bench, trees, and one of the baseball fields.

The functional use of Wendell Smith Park would not change.

Section 3 - Replacement Park Identification Process

Information obtained from the desktop and geospatial analysis done for the Draft EIS is still applicable and CTA has the same priorities. However, since the Draft EIS and the potential for pocket park sites being implemented, additional desktop and geospatial analysis has been done to identify more park and pocket park locations.

The Section 4(f) evaluation conducted during the Draft EIS identified three potential park replacement sites (sites 2B, 8A, and 12) approximately 2 acres in size as the best candidate sites for mitigation. However, two of these replacement park sites have been identified to have the potential for redevelopment other than a replacement park – one as a veteran's retirement home (Site 8A) and the other for Transit-Supportive Development and station amenities near the proposed Michigan Avenue station (Site 12). CTA completed additional analysis to determine if there are other options that either were not carried forward from the previous analysis completed during the Draft EIS or if there are new sites that may be considered for replacement parks.

CTA met with the Chicago Park District on February 18, 2021, to present an updated replacement park analysis since the Draft EIS (**Attachment A**). CTA presented the following 10 sites: 2B and 8A from the Draft EIS evaluation; 2C, which was part of the original evaluation but not included in the Draft EIS; and seven new sites. Evaluation criteria included parcel size and the site being in a park desert or greater than ½ mile from a Chicago Park District park or facility, among others. Sites 2B, 2C, and 8A scored the highest and were carried forward. At a February 18, 2021, coordination meeting, CTA presented an updated replacement park analysis. The Chicago Park District indicated that, since the Draft EIS, they are more focused on fulfilling a need for smaller pocket parks within the communities instead of a single larger park. Additionally, the Chicago Park District informed CTA that they had received community input regarding the desire to add pocket parks along the Major Taylor Trail.

CTA met with the Chicago Park District on May 26, 2021, to present potential pocket park location options just west of Fernwood Parkway in the Washington Heights community area and along the Major Taylor Trail. this meeting, the Chicago Park District evaluated these pocket park locations presented by CTA.

On July 29, 2021, the Chicago Park District sent CTA a list of their preferred replacement sites based on their location near the Washington Heights community area. Each of the three preferred sites reach a minimum of 0.25 acre, which is in accordance with Chicago Park District standards for pocket parks. The Chicago Park District also sent CTA a total of seven preferred sites located along the Major Taylor Trail. The Major Taylor Trail is a 35.30-acre linear park containing over 6 miles of bicycle and pedestrian pathway. The Chicago Park District maintains and manages a portion of the

bike trail starting at 105th Street to the Little Calumet River. The Chicago Park District requested that potential pocket parks be located within the limits that are maintained and managed by the Chicago Park District. The trail stretches through Washington Heights, West Pullman, and Morgan Park. Each of the seven preferred sites is a minimum of 0.25 acre, which is in accordance with Chicago Park District standards.

CTA and the Chicago Park District met on August 25, 2021. CTA reviewed Chicago Park District preferred sites, discussed the viability of each site for parcel acquisitions, and outlined the next steps for contacting property owners to assess parcel availability. CTA and the Chicago Park District met again on September 14, 2021, regarding the identified potential replacement pocket parks as mitigation measures and confirmation of Chicago Park District's continued concurrence with FTA's *de minimis* finding with the identified mitigation measures. The Chicago Park District provided a *de minimis* finding letter dated September 10, 2021 reaffirming their concurrence with FTA's preliminary Section 4(f) determination from August 2, 2017, as discussed in **Section 4.1** (**Attachment B**). The Chicago Park District letter also discussed the most recent coordination and direction for potential replacements pocket parks.

CTA met with the Chicago Park District on October 22, 2021, to present an update on the replacement park sites and outreach to potentially affected property owners. During this meeting, CTA also discussed coordination with the Chicago Park regarding the Transit Supportive Development Plan.

After further coordination with the Chicago Park District, CTA updated this *de minimis* finding letter to include additional areas based on future coordination with Chicago Park District. This letter was executed by the Chicago Park District on April 19, 2022 (**Attachment B**). **Figure 3-1** shows potential replacement pocket parks within Washington Heights and along the Major Taylor Trail.

Mitigation measures include replacement park property directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or additional areas based on future coordination with Chicago Park District. The replacement park sites would include passive recreational space. Mitigation measures would include replacement property constructed in accordance with Chicago Park District standards. **Attachment A** includes meeting minutes for the February 18, May 26, August 25, September 14, and October 22, 2021 coordination meetings with the Chicago Park District.

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 3-1: Potential Replacement Parks

Section 4 - Changes to Existing Parks

This section discusses the Section 4(f) use assessment for Fernwood Parkway and Wendell Smith Park under the Preferred Alignment. **Chapter 8** of the Final EIS includes additional information on the Section 4(f) evaluation.

There would be no Section 4(f) use of Robert Abbott Park, Fernwood Park, Block Park, Potter Palmer Park, Kensington Park, George Washington Carver Park, or the Beaubien Woods Forest Preserve.

4.1 Fernwood Parkway

4.1.1 Section 4(f) Use Assessment

Changes to Fernwood Parkway under the Preferred Alignment would be the same as those outlined under the UPRR West Option in the Draft EIS. However, conceptual engineering conducted on the alignment has progressed into preliminary engineering since the Draft EIS.

Figure 4-1 shows the Preferred Alignment over Fernwood Parkway. Portions of Fernwood Parkway south of I-57 would be overlapped by the elevated structure and its associated clearances between 99th Street and 103rd Street. This would result in a permanent incorporation of the park space.

4.1.2 All Possible Planning to Minimize Harm

The Chicago Park District has informed CTA that the two Fernwood Parkway parcels would not be useful after the RLE Project is implemented. The Chicago Park District would transfer these two parcels to CTA. CTA would, in return, mitigate impacts to Fernwood Parkway through the creation of pocket park sites. These pocket park sites would be directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or additional areas based on future coordination with Chicago Park District. A combination of already discussed sites or newly identified sites totaling 4.5 acres of Chicago Park District property affected would serve as replacement parks. New park space created through this replacement acreage would include passive recreational space, would be constructed in accordance with Chicago Park District standards, and would facilitate Chicago Park District master planning goals and objectives. Phase I and II environmental site assessments would be conducted on the selected sites prior to acquisition, as required.

4.1.3 Section 4(f) Finding

Section 4(f) coordination is ongoing. Replacement parkland directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or additional areas based on future coordination with Chicago Park District would replace the affected parcels within Fernwood Parkway. No changes to the attributes, features, or activities would result from the Preferred Alignment on Fernwood Parkway; therefore, a *de minimis* finding is documented for this Section 4(f) use. This finding is consistent with the preliminary *de minimis* finding for Fernwood Parkway under the UPRR West Option in the Draft EIS.

After publication of the Draft EIS, FTA issued a preliminary Section 4(f) determination on August 2, 2017 to the Chicago Park District. The Chicago Park District concurred with the *de minimis* finding in a letter dated September 21, 2017. Additional coordination with the Chicago Park District has identified potential pocket park locations directly adjacent to the Major Taylor Trail, in the Washington Heights community area, or additional areas based on future coordination with Chicago Park District. The Chicago Park District reaffirmed their concurrence with FTA's Section 4(f) *de minimis* finding in their letter dated September 10, 2021. After further coordination with the Chicago Park District, CTA updated this *de minimis* finding letter, which was executed by the Chicago Park District on April 19, 2022. **Attachment B** includes Section 4(f) correspondence between FTA and the Chicago Park District.

In coordination with the Chicago Park District, CTA would identify and acquire park space totaling 4.5 acres to be used for replacement parks. Prior to acquisition of the park space, CTA would conduct Phase I and II environmental site assessments on the selected sites, as required.

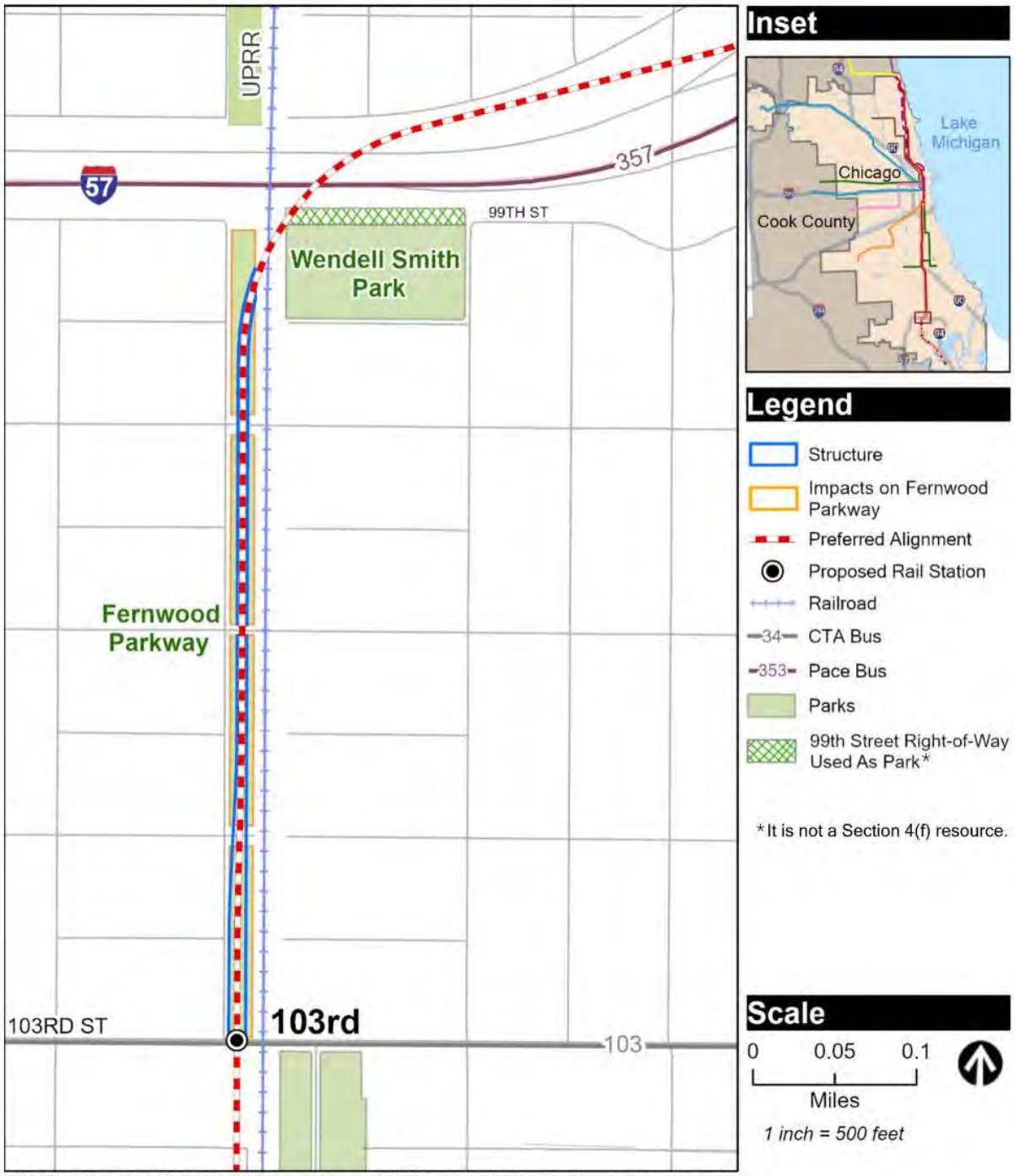

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-1: Preferred Alignment near Fernwood Parkway

4.2 Wendell Smith Park

4.2.1 Section 4(f) Use Assessment

Because the Preferred Alignment follows the UPRR West Option near Wendell Smith Park, the Preferred Alignment would avoid use of Wendell Smith Park; however, there would be construction impacts for a short duration. The northwest corner of Wendell Smith Park (approximately 0.1 acre) would be temporarily closed during construction, and trees would be removed for construction equipment staging and construction access (**Figure 4-2**). The Preferred Alignment would be elevated over the northwest corner of the City-owned 99th Street right-of-way, which is currently used as Wendell Smith Park property but remains a transportation use and Section 4(f) does not apply. The Chicago Park District was granted usage of the 99th Street right-of-way to expand Wendell Smith Park through a City Ordinance dated December 20, 1989. The ordinance prohibits buildings or other structures within the 99th Street right-of-way that would interfere with the use, maintenance, renewal, or reconstruction of public facilities. This area is shown in **Figure 4-2** as cross-hatching. A permit from the Chicago Park District would be required for the temporary closure of the northwest corner of Wendell Smith Park prior to the start of construction. Impacts would be mitigated through replacement of removed trees along with restoration of the landscaping of the park. This has changed since the Draft EIS in which part of the walking path, a bench, trees, and one of the baseball fields would all have been affected under the UPRR East Option.

There would be no noise impacts on Wendell Smith Park due to the operation of the RLE Project after implementation of noise barriers. Construction would not affect the attributes, features, or activities of Wendell Smith Park.

The temporary closure of the northwest corner of the park would be a temporary occupancy under 23 CFR Part 774.13; however, the temporary occupancy would be minimal and would not constitute a use under Section 4(f). There would be no use of the park under Section 4(f).

CTA would need to temporarily close the northwest corner of Wendell Smith Park (approximately 0.1 acre) in order to construct the RLE Project. Based on the discussions between Chicago Park District and CTA about construction activities within the northwest corner of Wendell Smith Park, Chicago Park District agrees that the construction activities would be considered a temporary occupancy under 23 CFR Part 774.13 that is so minimal as to not constitute a Section 4(f) use. Chicago Park District agrees that CTA meets the temporary occupancy conditions based on the following justification and agree that there would be no use of Wendell Smith Park: 1) The anticipated total closure time that is needed would be considerably less than the total time needed for the

construction of the RLE Project. 2) There would be no change in land ownership for Wendell Smith Park. 3) The scope of work includes the placement of piers adjacent to the park right-of-way and the placement of girders for the elevated structure; however, the proximity of the park would require a construction easement for contractor access and the need to clear some trees, this work would be conducted through a required construction permit. 4) There would be no permanent adverse physical impacts, nor would there be a temporary or permanent interference with the activities, features, or attributes of the park. 5) Chicago Park District would require a construction permit that requires full restoration, and the land would be fully restored to a condition at least as good as that which exists prior to the RLE Project. A letter from the Chicago Park District regarding the temporary occupancy exception of Wendell Smith Park for construction activities can be found within **Attachment C.**

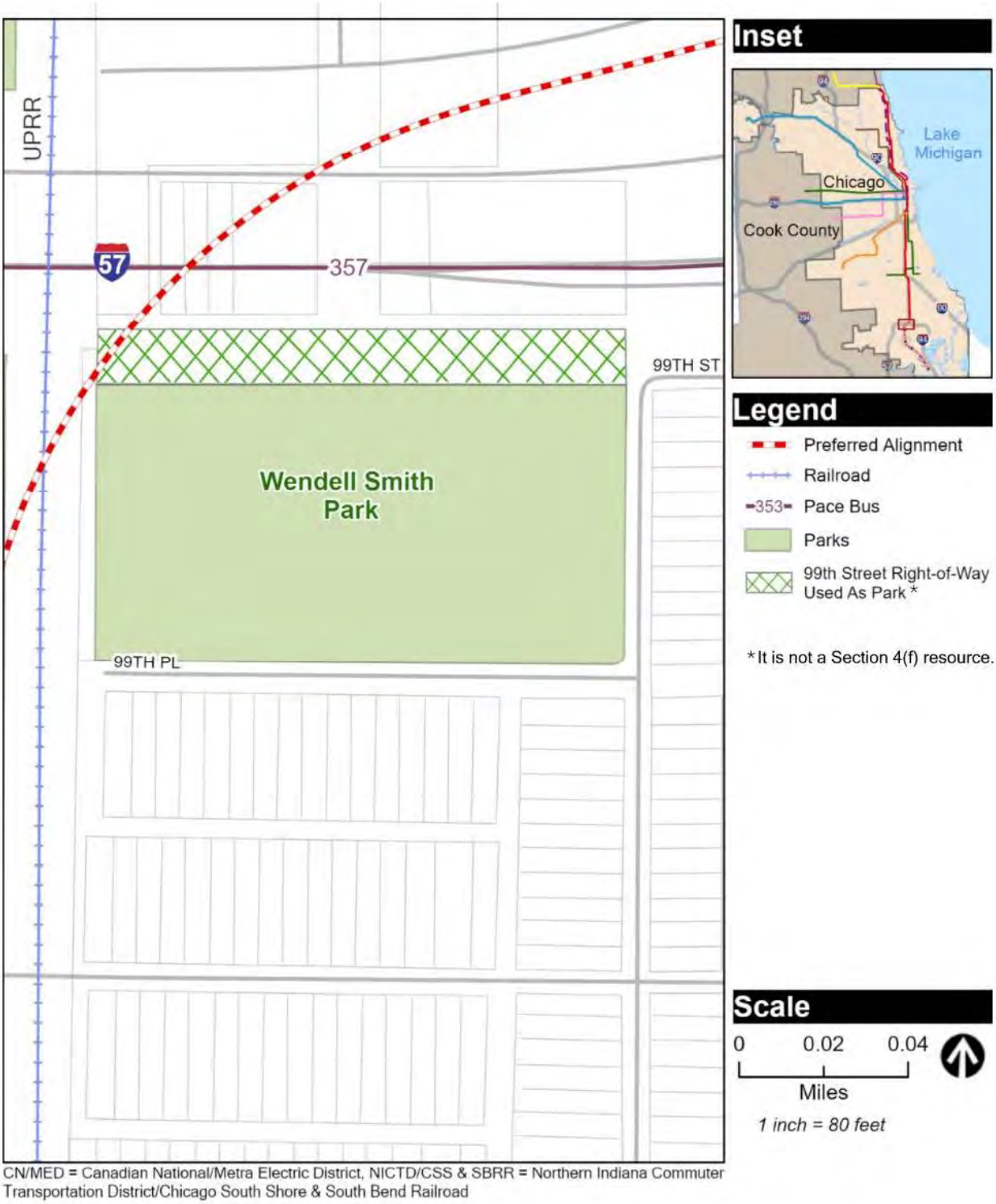

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Figure 4-2: Preferred Alignment near Wendell Smith Park

Section 5 - Conclusions

The purpose of the Section 4(f) additional park analysis was to fulfill the following two main goals, which are also discussed in **Appendix Y** of the Draft EIS:

- To demonstrate to FTA that land is available for replacement park mitigation and confirm that there would be no adverse effect findings through implementation of mitigation measures.
- To conduct more detailed coordination with the Chicago Park District on how to fulfill mitigation measures.

CTA is actively coordinating with the Chicago Park District regarding impacts to Fernwood Parkway. Although mitigation measures are still being finalized, CTA would provide mitigation for impacts to Fernwood Parkway in the form of pocket parks within the Washington Heights community, directly adjacent to the Major Taylor Trail, or additional areas based on future coordination with Chicago Park District. A combination of sites already discussed with the Chicago Park District or newly identified sites totaling 4.5 acres of Chicago Park District property affected would serve as replacement parks.

Attachment A – Chicago Park District Coordination Materials

Chicago Park District Coordination Meeting

February 18, 2021

Meeting Minutes

Project: Red Line Extension
Meeting Purpose: CPD Coordination Meeting
Date: Thursday, February 18, 2021
Location: Remote Meeting
Time: 8:30 AM

Chairperson: Marlise Fratinardo

Attendees: (See Attached copy of Sign-in-Sheet)

Item No.	*Date*	*Item Description*	*Responsibility/ Status*	*Due/Closed Date*
1.00	**Introductions**			
1.01	2/18/21	Introductions were made.		
2.00	**Project Overview/Status**			
2.01	2/18/21	The Red Line Extension will extend from the current 95th/Dan Ryan Terminal Station to 130th Street at Altgeld Gardens.		
2.02	2/18/21	Four new stations will be located at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. All stations will have Park & Ride and bus connections.		
2.03	2/18/21	A new yard and shop will be located along the Preferred Alignment between Michigan Avenue and 130th Street stations, near the MWRD property.		
2.04	2/18/21	The Preferred Alignment will be on aerial structure South of 95th Street to the Metra/CN crossing, where it will transition to an at grade structure.		
2.05	2/18/21	The INVEST South/West corridors are located along 111th Street and Michigan Avenue. It comes close to the 111th Street station and passes by the Michigan Avenue station.		
2.06	2/18/21	Changes to the alignment and relocation of the station at 130th Street will be documented through the Supplemental Environmental Assessment (EA).		
2.07	2/18/21	Project benefits to the far South Side communities include equity, connectivity and access, economic opportunity, frequent rail service and sustainable transportation.		
2.08	2/18/21	A team of consultants was approved in 2020 to perform preliminary engineering and additional environmental analysis. The TSD plan begun in August 2020. Entry into Project Development (PD) for the FTA New Starts program was approved in December 2020, which will help secure federal funding for final design and construction.		
3.00	**Review Impacts to Fernwood Parkway**			
3.01	2/18/21	Alignment options East and West of the UPRR corridor were evaluated in the Draft EIS, and the Preferred Alignment was a combination of these options that would avoid permanent impacts to Wendell Smith Park and Block Park.		
3.02	2/18/21	The elevated structure would run over Fernwood Parkway from 99th Street to 103rd Street, and the shadow effect was used to calculate the permanent impact.		
3.03	2/18/21	Estimated impacts to Fernwood Parkway would be 1.9 acres, which correspond to the estimate in the Draft Environmental Impact Statement (EIS). Updates to this impact will be made as the engineering progresses and will be documented in the Final EIS.		

4.00	**Review of Section 4(f) Evaluation in the Draft EIS**			
4.01	2/18/21	The Draft EIS evaluated both the alignment options to the East and West of the UPRR. Coordination with the Chicago Park District (CPD) was documented, including the CPD 2-acre size standard for developing new parks.		
4.02	2/18/21	CTA began the replacement parks analysis in 2015, evaluating 22 sites in the project area and narrowing the options to three sites: 2B, 8A and 12.		
4.03	2/18/21	Based on the Draft EIS, FTA issued a preliminary de minimis finding on 8/2/17. Public comments indicated a desire for parks within the project area, but no specific location was preferred. CPD concurred with the de minimis finding on 9/21/17.		
4.04	2/18/21	The previously identified replacement park sites were reviewed. It was noted that CPD previously preferred Site 2B.		
4.05	2/18/21	Concepts for Site 8A and Site 12 included a ball field as a mitigation measure for Wendell Smith Park. If Site 8A moves forward, a new concept plan for the park would be developed.		
4.06	2/18/21	Site 8A has been considered for other potential development opportunities.		
4.07	2/18/21	Site 12 is being evaluated for other uses related to Michigan Avenue station and may be more viable for other uses than for a replacement park.		
5.00	**Replacement Park Methods and Criteria**			
5.01	2/18/21	Because Site 8A and Site 12 are being considered for other development, additional evaluation of potential replacement park sites was performed using the same criteria as the original analysis in the Draft EIS. The new analysis also considered proximity to existing parks and considered the ability to meet the 2-acre size requirement.		
6.00	**Review Park Replacement Options**			
6.01	2/18/21	Site 2B and Site 8A from the Draft EIS continue to be considered for replacement parks. Site 2C was included in the original evaluation but was not a replacement park option presented in the Draft EIS. Seven other sites were evaluated. The top three sites were 2B, 2C and 8A.		
6.02	2/18/21	The target replacement park area would ideally be within one mile of Fernwood Parkway and without nearby park facilities within a half mile to address "park desert" needs.		
6.03	2/18/21	Locations of the evaluated sites were presented.		
6.04	2/18/21	Site 2B was the preferred site at the time of the Draft EIS. It would meet the 2-acre minimum and provide visibility along Michigan Ave and connection to the community. Nineteen of the 20 parcels are vacant. The one parcel that is not vacant has a foundation that would require removal. CPD noted that leaving one active residential parcel surrounded by the park was not ideal, but CTA noted that acquisitions of active residential parcels was not desirable. Furthermore, the remaining residence would not have any impacts to access. CTA noted that site 2B was previously preferred because it was in an area without access to nearby parks.		
6.05	2/18/21	Site 2C would be just under 2 acres and has visibility along Michigan Avenue. Fifteen of 18 parcels are vacant, but one parcel is an active residential parcel. An existing cell tower would need to remain on this site.		
6.06	2/18/21	Site 8A would be located within the parks desert and located adjacent to 111th Street station. This site would be 2.9 acres with all four parcels vacant and excellent visibility. However, this parcel is being evaluated for other potential uses. CTA noted that the proposed veterans housing on this site is not a funded project but has aldermanic support.		
6.07	2/18/21	Because of the other development considerations for Site 8A, Site 2B was recommended. Site 2C was the third option due to the active residential property.		

6.08	2/18/21	Sites 2B and 2C are divided by 102nd Street but could be combined to create a larger park, consideration would be needed due to 102nd Street. However, CPD noted that these parks do not solve access problem.		
6.09	2/18/21	CPD noted that a park within an access area that does not have existing access to open spaces could be considered with less than 2 acres. CPD noted that Sites 2B and 2C did not solve an access problem.		
6.10	2/18/21	Several replacement park sites were evaluated near the CPD access area at 111th Street but did not meet the 2-acre requirements and posed safety concerns. A recent CPD acquisition at 110th and Wentworth has already met this need.		
6.11	2/18/21	CPD will follow up if existing access areas remain near the project corridor and will provide CTA a current map of park locations.	CPD	
6.12	2/18/21	CTA has identified a historic building North of 101st Street and Michigan Avenue just outside Site 2B that could be an opportunity for programming. CPD would not be interested in funding or maintaining this development but expressed support for this idea. CTA suggested that grants may be available for this rehabilitation.		
6.13	2/18/21	CTA inquired about the acceptable size of replacement parks that would meet CPD access needs. Sites less than 2 acres could be considered if the location addressed community needs or CPD programming needs and filled-in existing gaps in the CPD system. These locations could be discussed on a case by case basis.		
7.00	**Carver Park - Located within Altgeld Gardens**			
7.01	2/18/21	Carver Park is a park that is located adjacent to and within the Altgeld Gardens neighborhood that is within the Riverdale community area.		
7.02	2/18/21	The 130th Street Terminal station was previously located North of 130th Street, adjacent to the MWRD wastewater treatment plant.		
7.03	2/18/21	Following the demolition of the Chicago Housing Authority (CHA) blocks 11, 12 and 13 within Altgeld Gardens, CTA investigated the feasibility of relocating the terminal station to this area, and both stakeholders and the public generally supported bringing the station closer to the community.		
7.04	2/18/21	The proposed 130th Street station would utilize a parcel owned by the Forest Preserves of Cook County (FPCC). A Section 4(f) evaluation with FPCC was initiated, and FPCC expressed interest in improved connections between Carver Park and Beaubien Woods. A potential land swap is being discussed. CTA suggested that improvements to wayfinding and connectivity to Carver Park could be part of the Section 4(f) mitigations.		
7.05	2/18/21	The 2016 Altgeld-Murray Master Plan identified an expansion of Carver Park to the East, showing an active recreational area with a skate park and tennis courts. While this expansion has not been funded, CTA inquired about CPD plans for this area.		
7.06	2/18/21	CPD had no plans to expand Carver Park without sources of funding and noted that CPD would likely be hesitant to invest in an area with sufficient amounts of open space already nearby. CPD will confirm.	CPD	
7.07	2/18/21	CPD supported improved connections between Carver Park and Beaubien Woods and supported FPCC acquisition of the parcel East of Carver Park.		
7.08	2/18/21	CTA suggested a multi-agency meeting to understand interests for each involved party and determine a solution that would be acceptable. CTA will schedule this meeting.	CTA	
7.09	2/18/21	CTA expressed support for the "African American Heritage Trail" along the Little Calumet River but noted that due to the large number of privately owned parcels, this would not be a feasible undertaking for the RLE project.		
8.00	**Transit Supportive Development**			

8.01	2/18/21	TSD team presented the overall goals for the TSD Plan. The TSD team will be looking at open space as part of the comprehensive approach to land use in, and near, the station areas. Specifically, the TSD team will seek to integrate community needs/interests/goals/desires into the plan.		
8.02	2/18/21	The park district explained when they assess access to open space they include spaces also owned by CPS and other agencies that are publicly accessible. This aligns with the TSD.		
8.03	2/18/21	The TSD team mentioned that one of the consistent messages they have heard from the community is the desire to increase access to food, specifically access to fresh, healthy foods. This could be address through such programmed elements such as farmer's markets and community gardens. CPD does have programs and partnerships that support these types of activities.		
8.00	**Next Steps**			
8.01	2/18/21	CPD will provide maps of current park locations.	CPD	
8.02	2/18/21	CPD will confirm intentions for Carver Park expansion.	CPD	
8.03	2/18/21	CTA will continue to develop and refine the replacement park options and review the updated CPD map.	CTA	
8.04	2/18/21	CTA will schedule a multi-agency meeting to discuss plans around the 130th Street station and Altgeld Gardens.	CTA	
8.05	2/18/21	The draft Final EIS/ROD is expected to be completed in Fall 2021 and released in Q3 of 2022.		
8.06	2/18/21	A Memo of Understanding (MOU) will be needed for the replacement parks, and environmental testing will be needed prior to a land transfer.		
8.07	2/18/21	CPD offered to connect the South Area Manager with the CTA/TSD team to discuss parks programming and activities in the area	CPD	
8.08	2/18/21	TSD team will provide outcome of community survey about open space from the public meetings	CTA/TSD	

Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days, otherwise minutes will be considered final.

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: CPD Coordination Meeting

MEETING DATE: Thursday, February 18, 2021

MEETING TIME: 8:30 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
1	Y	Sarah White	CPD		Sarah.White@ChicagoParkDistrict.com	
2	Y	Doreen O'Donnell	CPD		Doreen.O'Donnell@ChicagoParkDistrict.com	
3	Y	London Walther	CPD		London.Walther@ChicagoParkDistrict.com	
4	Y	Leah Mooney	CTA - Planning	Director of Strategic Planning and Policy	lmooney@transitchicago.com	14250
5	Y	Marlise Fratinardo	CTA - Planning	Senior Project Manager, Planning	mfratinardo@transitchicago.com	14124
6	Y	Sonali Tandon	CTA - Planning	Senior Manager - Strategic Planning, Rail	STandon@transitchicago.com	14246
7	Y	Ammar Elmajdoub	CTA - Planning	Project Manager	aelmajdoub@transitchicago.com	
8	Y	Jasmine Gunn	DPD		Jasmine.Gunn@cityofchicago.org	
9	Y	Christine Carlyle	TSD - SCB		christine.carlyle@scb.com	
10	Y	Erin Cabonargi	TSD - GWG		erin@urban-resolve.com	
11	Y	Jacob Peters	TSD - Nia		jpeters@niaarch.com	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: CPD Coordination Meeting

MEETING DATE: Thursday, February 18, 2021

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CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
12	Y	Joanna Littrell	PMC - HNTB	Program Manager	jlittrell.hntb@transitchicago.com	14223
13	Y	Patrick Dunn	PMC - CDM-Smith	NEPA Lead	PDunn.cdm@transitchicago.com	14243
14	N	Joseph Yesbeck	PEC - TY Lin	Project Manager	Joseph.Yesbeck@tylin.com	
15	Y	Grace Dysico	PEC - TranSystems	NEPA Lead	gldysico@transystems.com	(847) 407-5247
16	Y	Robin Martel	PEC - Wight & Company	NEPA Specialist	rmartel@wightco.com	(312) 261-5730
17	Y	Patricia King	PEC - Wight & Company	NEPA Specialist	pking@wightco.com	
18	Y	Helen Yeung	PEC - CERA	Document Control	hyeung@cerasolutions.com	
19	Y	Teresa Fourcher	TSD - SCB		teresa.fourcher@scb.com	

NOTE: All individuals listed have been invited to the meeting. Only those indicated were in attendance.

Chicago Transit Authority

Red Line Extension
Chicago Park District (CPD)
Coordination Meeting

Agenda
February 18, 2021
Remote Meeting
8:30 AM to 10:30 AM CT

Invitees:

Sarah White/CPD
Doreen O'Donnell/CPD
London Walther/CPD
Leah Mooney/CTA – Planning
Marlise Fratinardo/CTA – Planning
Sonali Tandon/CTA – Planning
Ammar Elmajdoub/CTA - Planning
Jasmine Gunn/DPD
Joanna Littrell/PMC – HNTB
Patrick Dunn/PMC – CDM Smith
Joseph Yesbeck/PEC – TY Lin
Grace Dysico/NEPA-PEC – TranSystems
Robin Martel/NEPA-PEC – Wight
Patty King/NEPA-PEC - Wight
Helen Yeung/NEPA-PEC – Cera
Teresa Fourcher/TSD - SCB
Christine Carlyle/TSD - SCB
Erin Cabonargi/TSD - GWG
Jacob Peters/TSD - Nia

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1) Introductions

2) Project Overview / Status

3) Review Impacts to Fernwood Parkway

4) Review of Section 4(f) Evaluation in the Draft EIS
   - Identified replacement park areas
   - Preliminary de minimis finding with mitigation
   - FTA sent Preliminary Section 4(f) Determination (de minimis finding) on August 2, 2017
   - CPD concurred with de minimis finding in letter dated September 21, 2017

5) Replacement Park Methods and Criteria

6) Review Park Replacement options
   - Review previous sites
   - Identify potential new sites
   - Shortlist sites for further development

7) Carver Park – Located within Altgeld Gardens
   - Adjacent to CHA owned land and Beaubien Woods
   - Desire to create a connection from Carver Park to Beaubien Woods
   - Carver Park utilization and planned improvements (TSD)

DRAFT

8) Transit Supportive Development Plan

- Overview of the TSD project – goals
- Overview of Project Area and Station Area land use including open space allocation
  - Strategic Plan (2016): Ensure all residents live within a 10 minute walk of a park or open space.
- Overview / status of current plans
  - DPD Capital Improvement Plan (2020-2024):
  - Southeast Chicago Area-Wide Plan (2016)
  - Strategic Plan 2012/2016
  - Future planning
- Major Assets in the area and their primary users (neighborhood, city-wide)
  - Gately Indoor Track & Field
  - Big Marsh
  - Palmer Park

9) Next Steps

- Continue Section 4(f) Coordination
- Further develop shortlist of potential replacement parks for CPD final selection in the Final EIS/ROD
- Continue to discuss Carver Park

10) Action Items

DRAFT

RED AHEAD

Red Line Extension

Red Line Extension

Chicago Park District Meeting

February 18, 2021

Agenda

RED AHEAD

- Welcome and Introductions
- Project Overview / Status
- Review Impacts to Fernwood Parkway
- Review of Section 4(f) Evaluation in the Draft EIS
- Replacement Park Methods and Criteria
- Review Park Replacement Options
- Carver Park
- Next Steps

Marlise Fratinardo

Agenda

RED AHEAD

- Welcome and Introductions
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- Review Impacts to Fernwood Parkway
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- Replacement Park Methods and Criteria
- Review Park Replacement Options
- Carver Park
- Next Steps

Marlise

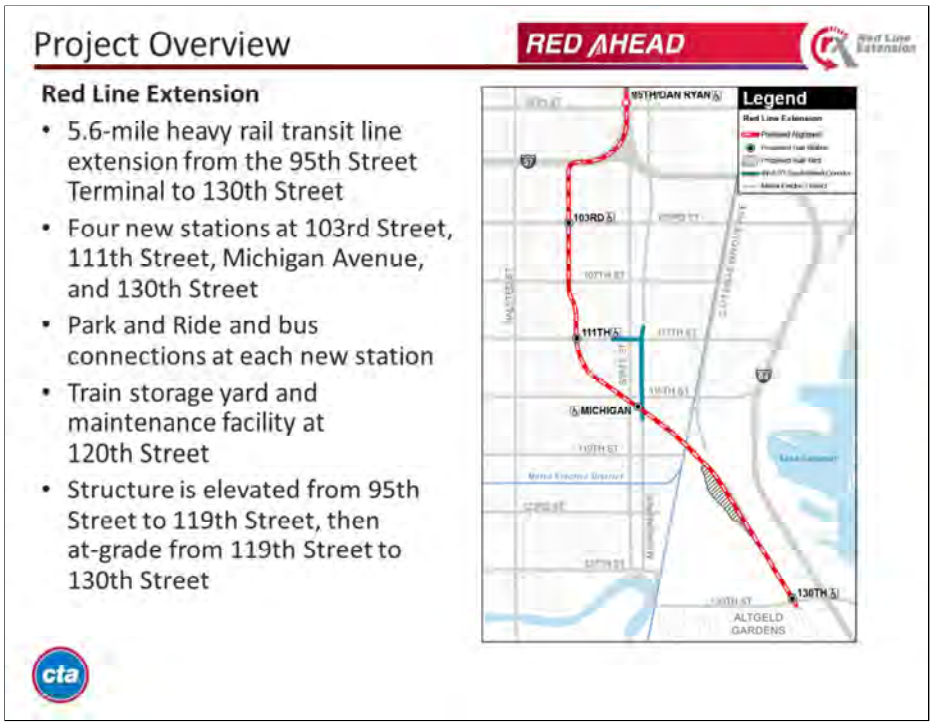

Marlise

The RLE project extends the Red Line from 95th to 130th at Altgeld Gardens.

Four stations are proposed – 103rd, 111th, Michigan, and 130th. Each will have bus connections and Park and Ride.

A new shop and yard is included, located between Michigan and 130th, next to MWRD property.

The alignment will be on aerial structure from just south of 95th until crossing of Metra Electric and CN.

Note INVEST South/West & note location of Altgeld Gardens

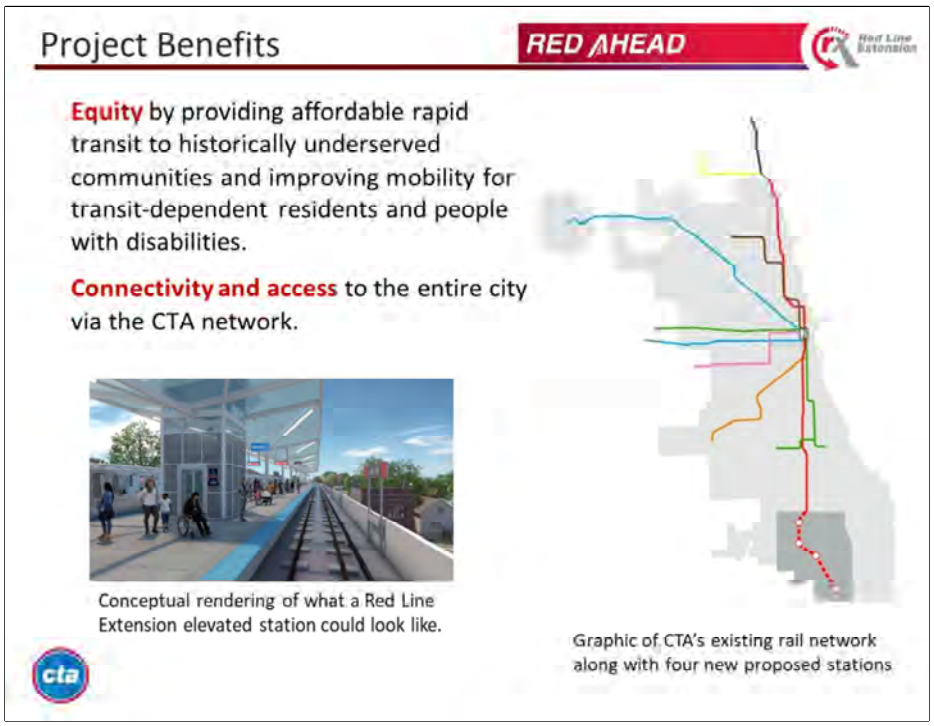

Marlise

As many of you know, extending the Red Line would provide many benefits to Far South Side communities and the rest of the city and region.

The graphic on the right side of this slide shows the current CTA system with the Red Line Extension added. CTA's rail lines extend out from the Loop in all directions… and most of these lines extend to the city's border, except on the Far South Side.

The Red Line Extension has equity at its foundation. The Red Line Extension supports the City's **equity** efforts by providing affordable rapid transit to historically underserved communities and improving mobility for transit-dependent residents and people with disabilities.

The Red Line Extension also provides **connectivity and access** to the entire CTA network – meaning customers will be able to board at one of the 4 new stations and transfer to other trains at one of the many transfer points along the line, or transfer to a CTA bus. This is really important because currently, fewer than 30% of riders who board at the 95th/Dan Ryan station end their trips in the Loop; most riders are going other places throughout the city, including other south side destinations, or maybe further north than downtown, or to the west side.

Also, shown here on this slide is a conceptual rendering of what a new Red Line Extension station could look like.

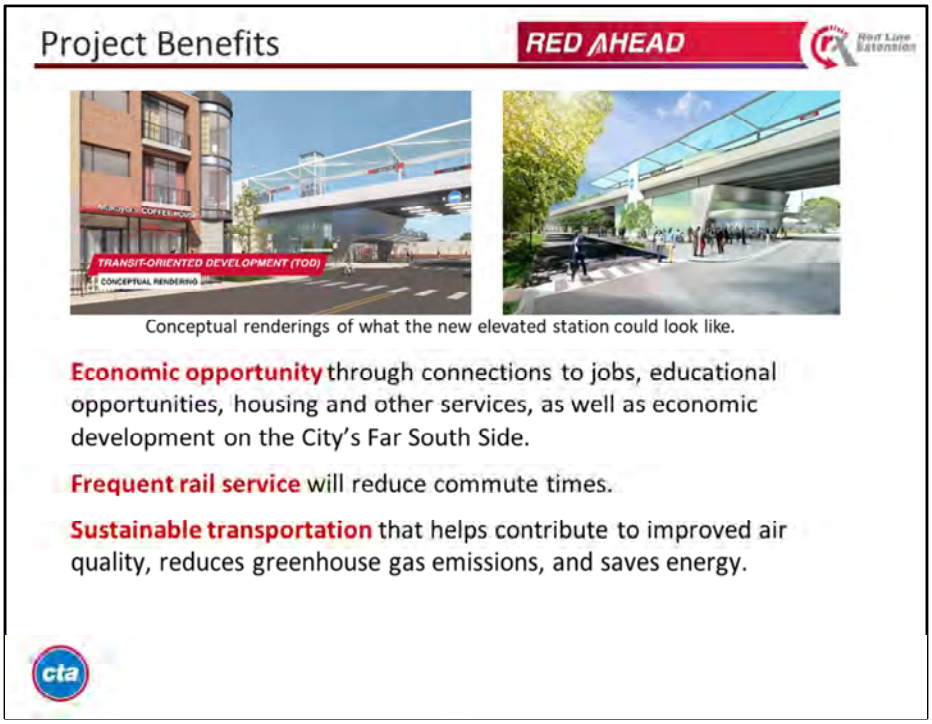

Marlise

Some of the other benefits of the Red Line Extension include economic opportunity, meaning the ability for Far South Side residents to reach jobs, schools, and other destinations. The Extension would put residents within easier reach of jobs throughout the city and reduce commute times.

The Red Line Extension's frequent rail service will mean a 20 minute time savings for riders traveling from the 130th Street station to downtown.

Using public transportation over motor vehicles helps contribute to improved air quality, reduces greenhouse gas emissions, and saves energy for a greener and more sustainable Chicago.

Let's move on to the next piece of the presentation….

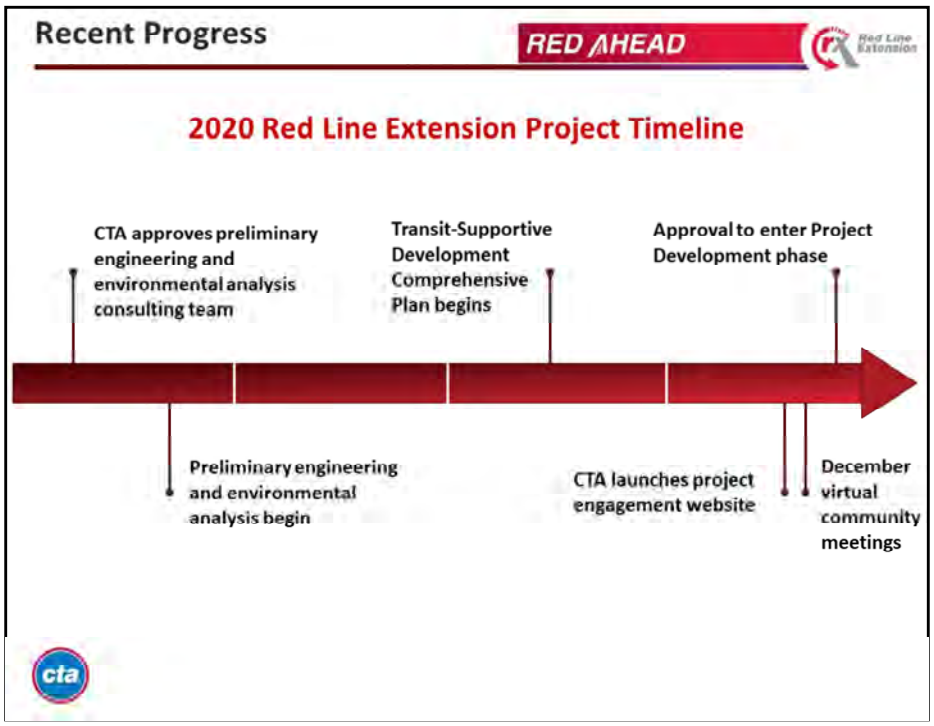

Marlise

CTA made significant progress on the Red Line Extension Project in 2020. Near the beginning of the year we approved the consulting team to begin work on the Preliminary Engineering work and Additional Environmental Analysis needed for the project, and that team began its work soon after. This includes the Supplemental Environmental Assessment, which we will cover shortly.

In August, CTA and its consultant teams began work on the Transit-Supportive Development Plan, which will identify strategies to fully leverage the investment of the transit project to bring economic benefit to the community. We will discuss Transit-Supportive Development in detail later in this presentation and ask for your input and ideas.

We launched our community engagement website in early December, followed closely by a pair of virtual community meetings on December 8th and 9th.

Finally, in late December CTA was approved for entry into the Project Development Phase of the Federal Transit Administration's New Starts Program. Entering this phase is a major step in CTA's continued commitment to the construction of the Red Line Extension. With an estimated cost of approximately $2.3 Billion for project completion, being granted entry into the Project Development phase was a critical step toward securing the federal funding we need for final design and construction. Federal funding will be awarded after successful completion of all the requirements of the New Starts Program, including identification of local funding.

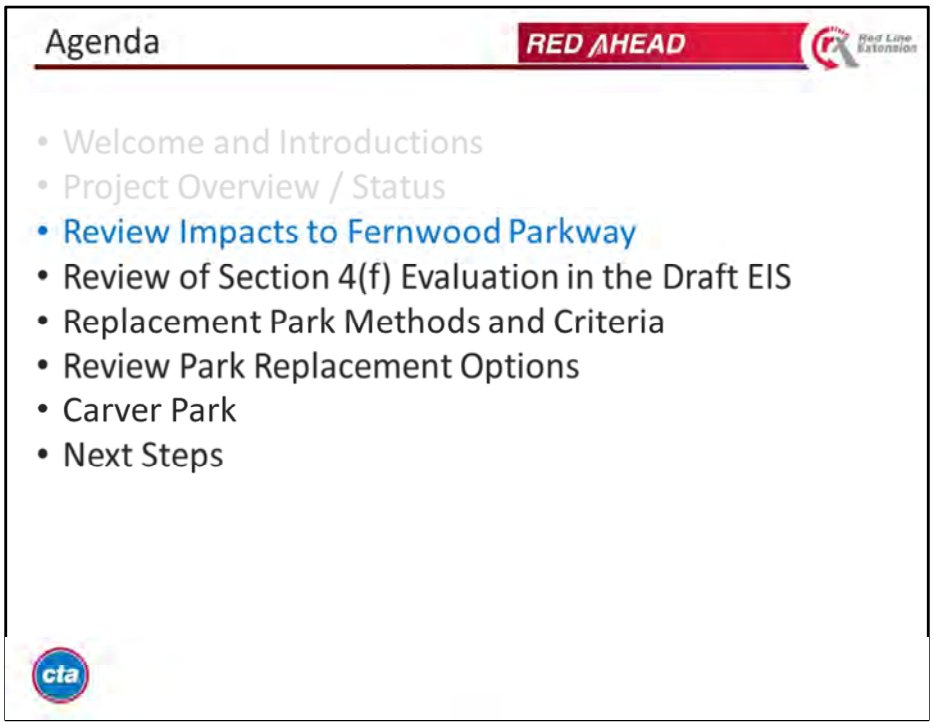

Marlise passes to Robin Martel

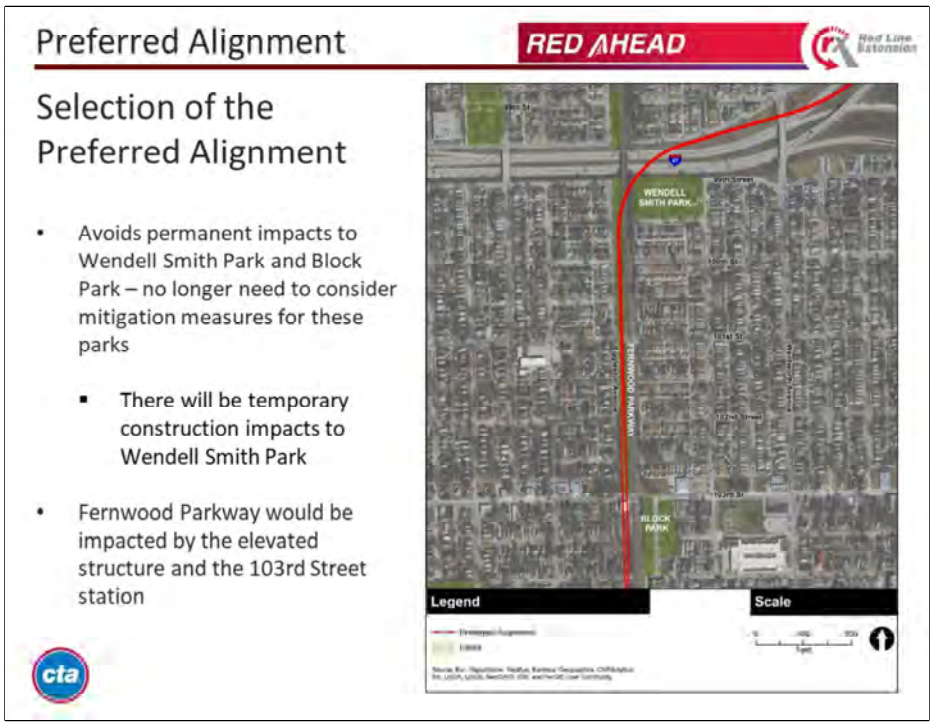

Robin

In the Draft EIS, CTA had presented impacts to Wendell Smith Park, Fernwood Parkway, and Block Park, depending on the East or West Option of the UPRR Rail Alternative.

CTA has selected the Preferred Alignment that would cross over the UP tracks and run along the west side. With the Preferred Alignment, there would not be permanent impacts to either Wendell Smith Park or Block Park. There would be temporary construction impacts to Wendell Smith Park (at the upper northwest corner as the elevated tracks cross over the corner of the Park).

Fernwood Parkway would be impacted by the elevated structure and the 103rd Street station.

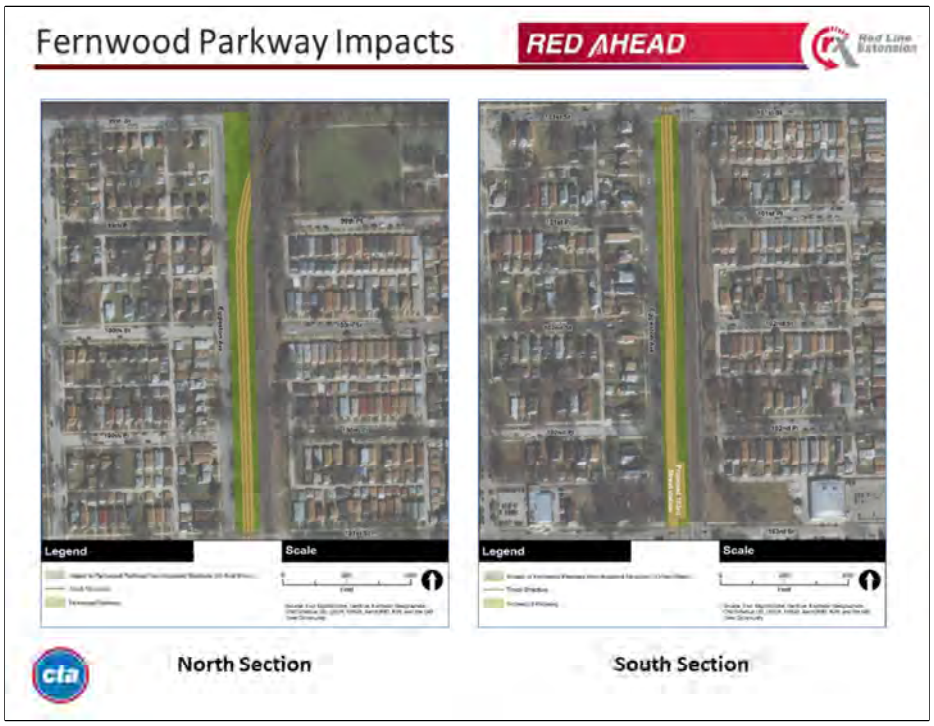

Robin

Figures shown on the slide represent the impacts to Fernwood Parkway. The parkway is shown in green in the figures. The area underneath the structure that would have shadow effect represents the impact area. The impact area is shown in the yellowish/gold color.

Fernwood Parkway Impacts

RED AHEAD

Based on the current design of the elevated structure and station area at 103rd Street the estimated impact area at Fernwood Parkway is 1.9 acres

- Draft EIS disclosed an estimated 1.9 acres of impact area
- Acreage will be updated as engineering details of the elevated structure continues to develop

Robin

Based on the engineering that has been completed to date and approved by the CTA, it is estimated that there would be 1.9 acres of impact. This is consistent with the 1.9 acres presented in the Draft EIS. The structure type and span width of the elevated structure would affect that area of impact underneath the structure. As engineering details continues to develop, the area of impact would be revised as necessary.

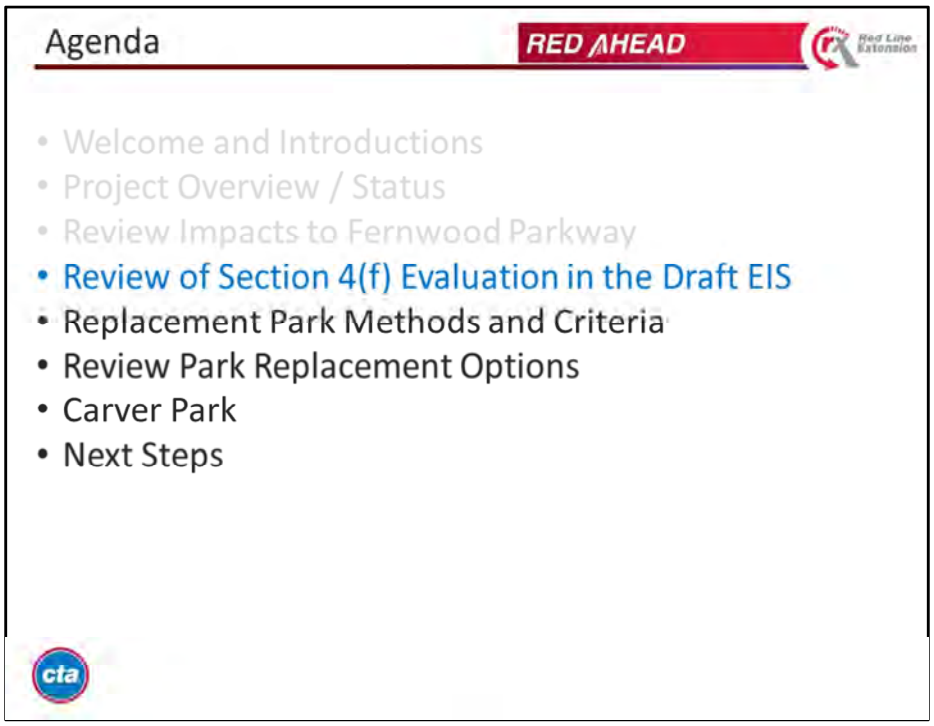

Robin continues

Section 4(f) Evaluation History

RED AHEAD

- Replacement Park evaluation addressed potential mitigation to parks that would be impacted for either of the two UPRR Alternative – East and West Options
- Coordinated with the CPD regarding replacement park – identified standard for new parks at 2 acres in size (August 17, 2015 letter)
- Original parks replacement started with 22 sites – coordination through meetings from April 2015 through April 2016 to narrow sites down to 3 options

Robin

Highlight points in the bullets

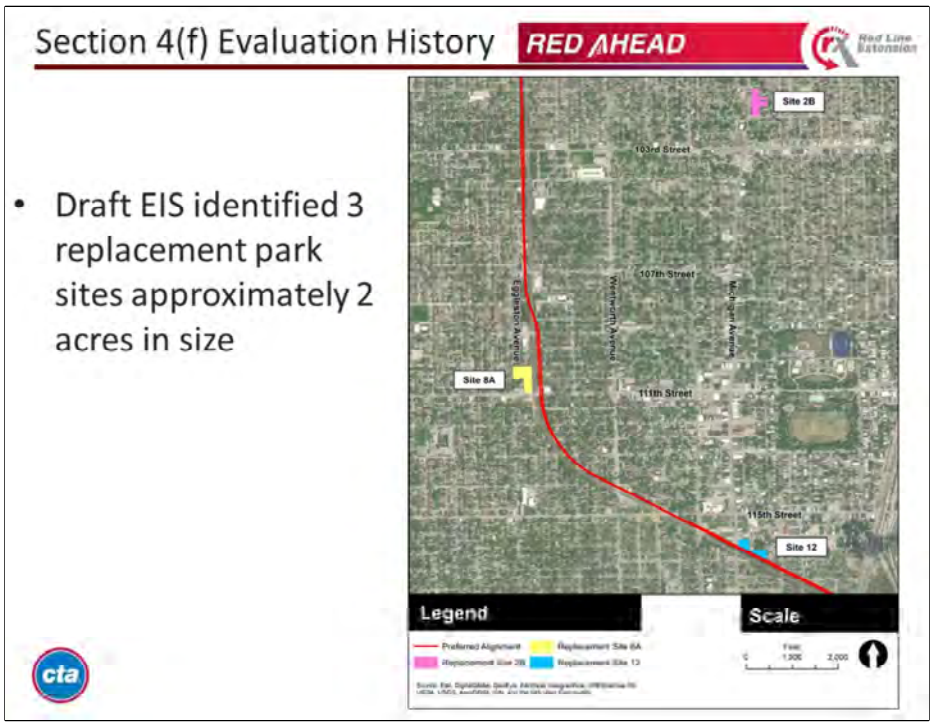

Robin

For the Section 4(f) evaluation conducted for the Draft EIS in 2016, replacement parks with an approximate size of 2 acres were reviewed, based on CPD input on the desired size for a replacement park. Three replacement park sites were identified in the Draft EIS. Comments received from the Draft EIS did not particularly select or identify a preferred replacement park but did indicate that parks are desired within the RLE project area.

The exhibit shows the location of the three replacement park sites from the Draft EIS.

Section 4(f) Evaluation History

RED AHEAD

- FTA sent Preliminary Section 4(f) Determination (de minimis finding) on August 2, 2017
- CPD concurred with de minimis finding in letter dated September 21, 2017

Robin

After the publication of the Draft EIS and the end of public comment period, the FTA issued a letter to the CPD regarding the preliminary finding of de minimis impacts after mitigation. The CPD concurred with the de minimis finding in 2017.

Robin

The next three slides present the 3 replacement park sites that were presented in the Draft EIS. Site 2B is located at 102nd Street and Michigan Avenue. The concept as shown here is open space with walking path.

Site 2B was the CPD preferred replacement park site.

Robin

This is the concept that was presented for Site 8A in the Draft EIS. At the time of the Draft EIS, parking was proposed at 111th Street (west of the UPRR tracks) and the ballfield was shown as the mitigation for Wendell Smith Park. If Site 8A continues to move forward in the Section 4(f) analysis, a new concept plan for the park would be developed.

In the Preferred Alignment, the 111th Street Station is located on the east side of the UPRR tracks, similar to what is shown in this exhibit. However, CTA prefers to have parking located on the east side of the tracks to avoid pedestrians crossing the at-grade UPRR tracks and to preserve the parcels for future development.

This site has been considered for a future development as a Veteran's home. CTA is working with the City's planning department and the concurrent TSD study to develop a plan for properties adjacent to the stations. The TSD team has identified the "lack" of parks in this area.

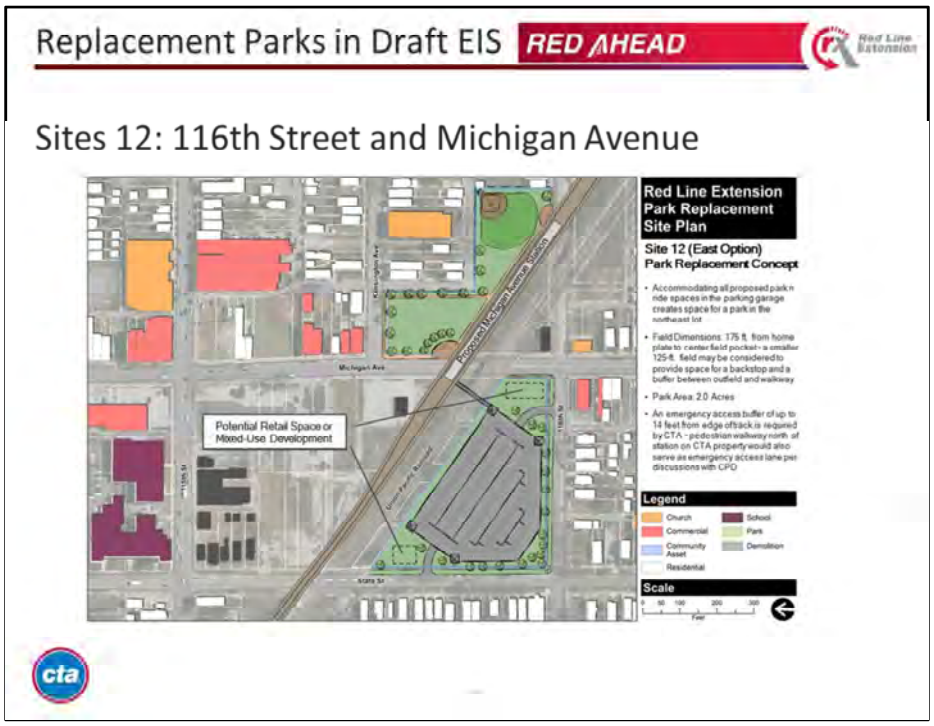

Robin

This is the concept that was presented for Site 12 in the Draft EIS. At the time of the Draft EIS the ballfield was shown as the mitigation for Wendell Smith Park.

With the ongoing station area planning, station concepts have been developed that utilize a portion of Site 12 for station amenities (i.e. bus turnaround and drop off location). Planning for the station area is ongoing and CTA is working through the station concepts with the City and community. CTA is looking at parking options north or south of the UPRR tracks for the Michigan Avenue station.

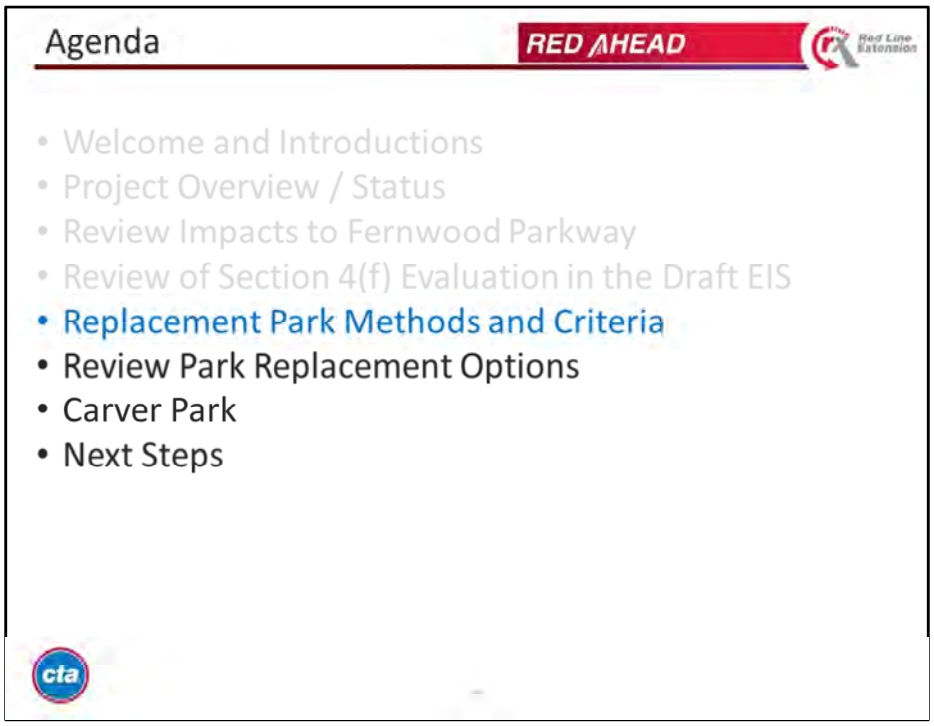

Robin passes to Patty King

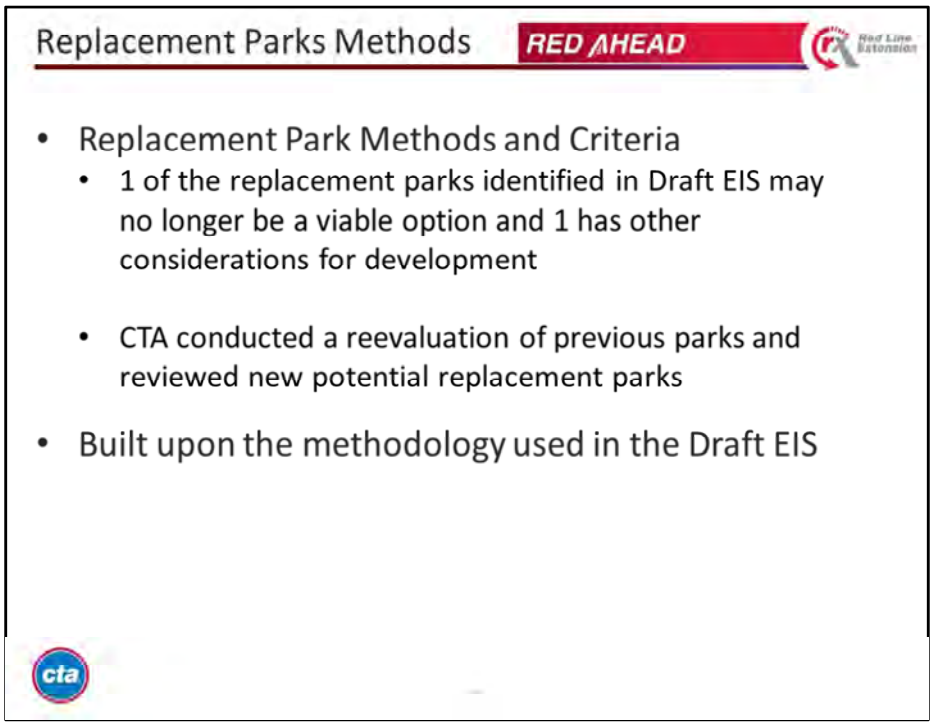

Patty

As the project moves forward and CTA prepares the Final EIS, the replacement park that satisfies the mitigation for impacts to Fernwood Parkway would need to be identified.

One of the three sites that were discussed in the Draft EIS may no longer be viable and one may have other considerations for future development. Site 2B, along Michigan Avenue is the remaining site. This site could move forward into the Final EIS as the mitigation of choice from the CPD; however, CTA did perform a reevaluation and reviewed the project area again to determine if there could be other sites available.

Criteria for Replacement Parks

RED AHEAD

Criteria	Score	Definition
Parcel Size (Excluding occupied/active parcels)	5	2 acres and greater
	0	Less than 2 acres
Is the location in a park desert (i.e., greater than ½ mile from CPD park or facility)	5	Yes
	0	No
Availability of Acquisition (Limited or No Active Residential, Owned by City of Chicago/Cook County, and Privately Held Vacant)	5	95-100% of the parcels
	3	75-94%
	1	50-74%
	0	0-49%
Location/Proximity to Transit, Parks, Bike Lanes, and/or Divvy Station	5	Less than 1 mile to a transit, park, adjacent to bike lane and/or Divvy station
	3	1.1 – 1.50 miles to a transit, park, adjacent to bike lane or Divvy station
	0	Greater than 1.50 miles, not adjacent to transit, bike lane or Divvy station
Land Use/Zoning Compatibility	5	Zoned Park or Open Space
	3	Zoned Residential
	1	Zoned Business, Commercial, Manufacturing, Planned Development
Safety/Security	5	Highly visible, vehicular connections
	3	No vehicular connection / access
	1	Minimal visibility / no access
Environmental Factors	5	No issues
	3	Minor issues
	1	Requires remediation/clean up
Cost Considerations/Building Removal	5	No structures on any parcel
	4	1-5 structures
	3	6-10 structures
	2	11-15 structures
	1	16-19 structures
	0	20 or more structures

Patty

The criteria used for the analysis builds upon the screening methodology and criteria used in the Draft EIS. In this reevaluation the methodology in the Draft EIS was used, with the addition of two new criteria.

1. Parcel size, and
2. Distance from an existing CPD park or facility

For this analysis we officially included a scoring based on parcel size and proximity to existing parks, which had been previously used as a “screening criteria”.

If the size is 2+ acres, a maximum of 5 points would be given to that park. The second criteria is based on the location of the replacement park in what is called a park desert (greater than ½ mile from existing CPD park or facility).

The first two criteria were weighted differently then the rest of the criteria because we thought it was important to meet the 2.0 acres size criteria and locate the park within a park desert.

The remaining criteria had a graduated weighting system.
(Patty will provide a couple of examples for the remaining criteria to give a high level of how the criteria was used.)

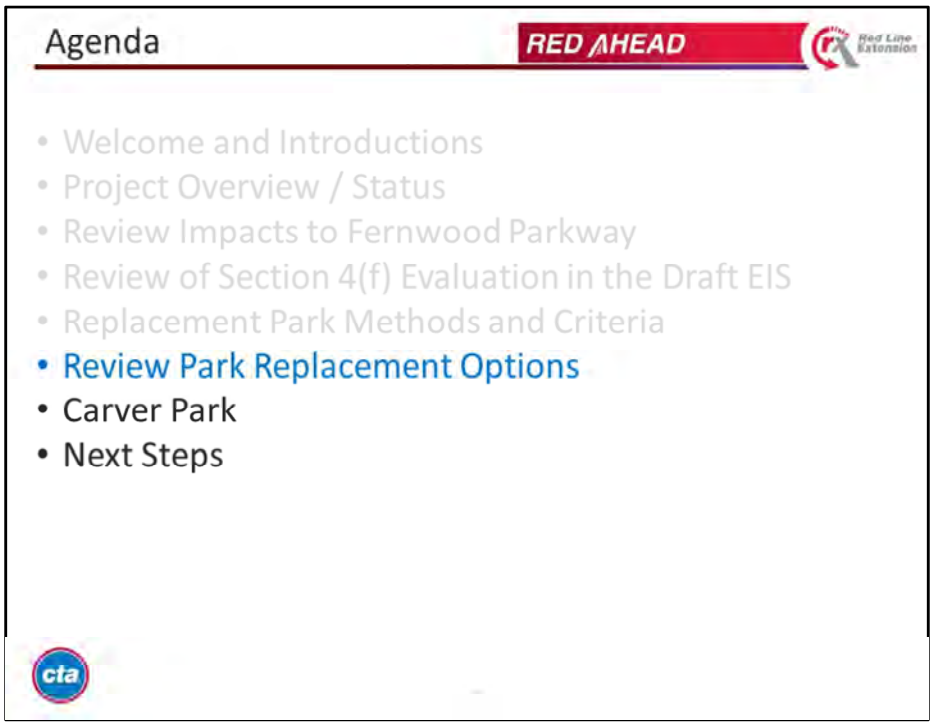

Patty continues

Replacement Parks Analysis

RED AHEAD

- Evaluation of three sites from Draft EIS and seven new sites for a total of ten potential sites reviewed
  - Site 2B (from Draft EIS)
  - Site 2C (part of the original evaluation, but not included in the Draft EIS)
  - Site 8A (from Draft EIS)
  - Site 18
  - Site 19
  - Site 20
  - Site 21
  - Site 22
  - Site 22a
  - Site 23

Patty

In addition to the 3 sites from the Draft EIS, we identified 7 new sites and evaluated them against the criteria.

The next couple of slides walk you through how we looked at proximity to existing parks and the proximity to Fernwood Parkway.

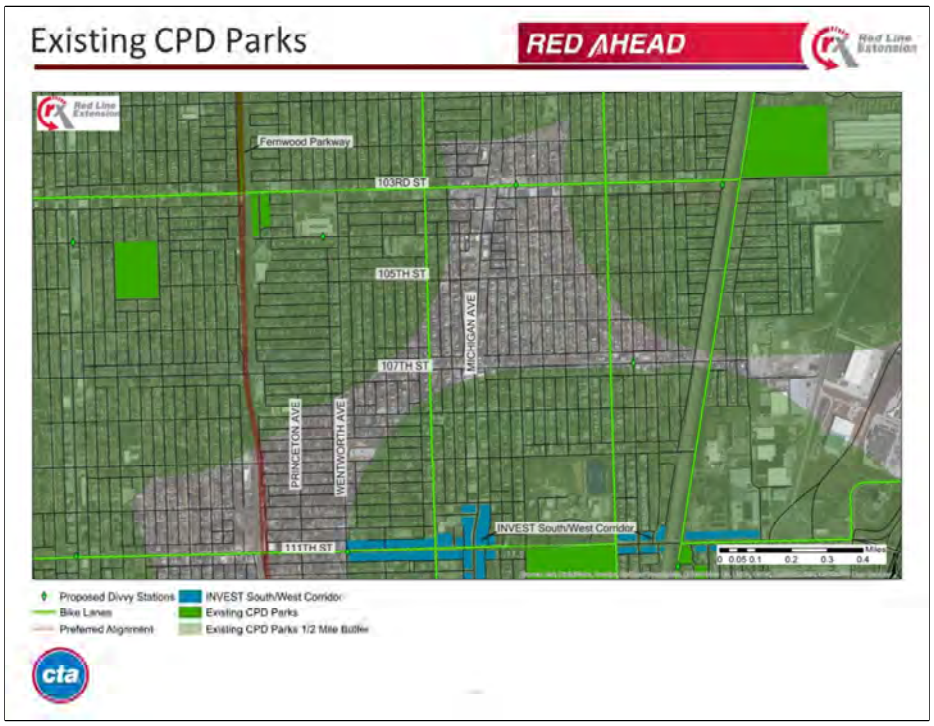

Patty

The figure shows the existing parks within the Project area. The parks are shown with a ½ mile buffer around them.

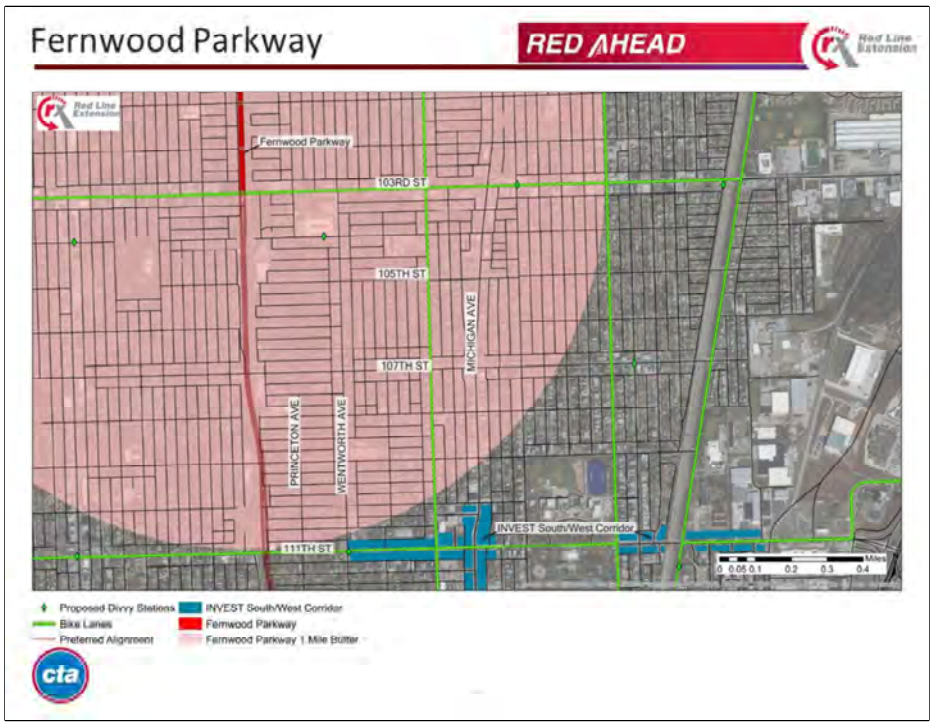

Patty

Exhibit shows the 1-mile buffer around Fernwood Parkway. When evaluating the potential park replacement, the replacement park would ideally be located within that 1-mile buffer around the park.

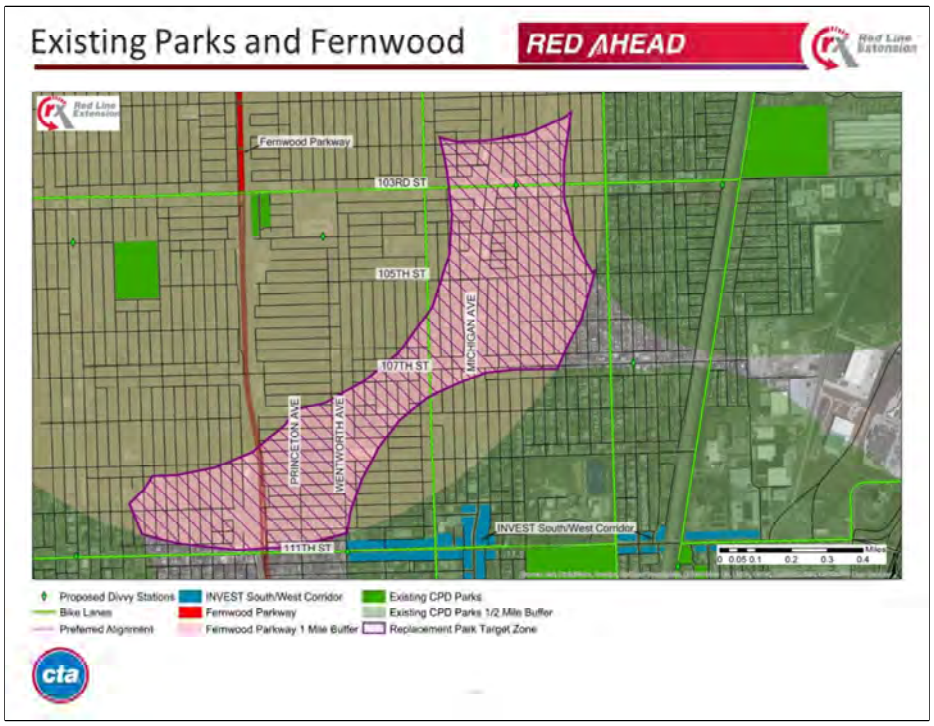

Patty

When you overlay the existing park map and the 1-mile buffer surrounding Fernwood Parkway, there is a clear area that we have identified as a “park desert”.

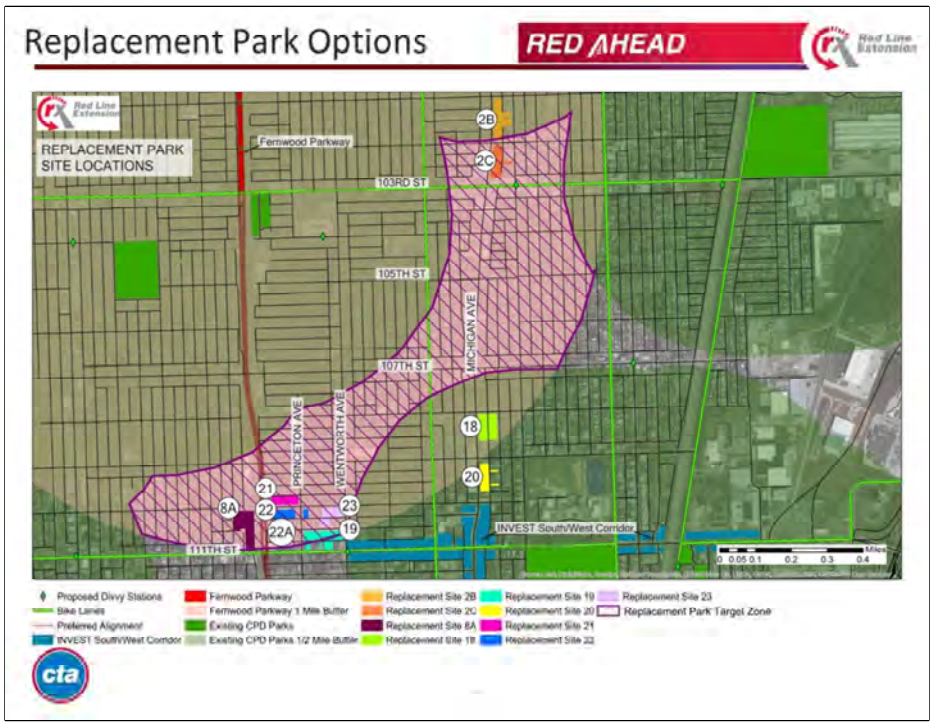

Patty

This exhibit shows the locations of the potential replacement parks that were evaluated.

Replacement Parks Options

RED AHEAD

Scoring and Ranking of ten potential sites

Criteria	2B	2C	8A	18	19	20	21	22	22a	23
Parcel Size	5	0	5	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
Is the location in a park desert/greater than ½ mile from CPD park or facility	0	5	5	~~0~~	~~5~~	~~0~~	~~5~~	~~5~~	~~5~~	~~5~~
Availability of Acquisition (Limited or No Active Residential, Owned by City of Chicago/Cook County, and Privately Held Vacant)	5	3	5	~~1~~	~~0~~	~~3~~	~~1~~	~~1~~	~~1~~	~~1~~
Location/Proximity to Transit, Parks, Bike Lanes, and/or Divvy Station	5	5	5	~~5~~	~~3~~	~~3~~	~~5~~	~~5~~	~~5~~	~~5~~
Land Use/Zoning Compatibility	3	1	1	~~1~~	~~3~~	~~1~~	~~3~~	~~3~~	~~3~~	~~3~~
Safety/Security	5	5	5	~~5~~	~~5~~	~~5~~	~~1~~	~~1~~	~~1~~	~~3~~
Environmental Factors	3	5	1	~~5~~	~~1~~	~~5~~	~~1~~	~~3~~	~~3~~	~~5~~
Cost Considerations/Building Removal	4	4	5	~~3~~	~~2~~	4	4	~~3~~	~~2~~	~~3~~
TOTAL SCORING	30	28	32	~~20~~	~~19~~	~~21~~	~~20~~	~~21~~	~~20~~	~~25~~

Patty

The scoring and ranking of the 10 sites evaluated since the Draft EIS is shown on the table. CTA has reviewed the sites and based on the scoring and the amount of active use parcels, limited size and proximity to Fernwood Parkway seven were eliminated *(note sites that are crossed out)*. The sites that are being carried forward include:

- Site 2B
- Site 2C
- Site 8A

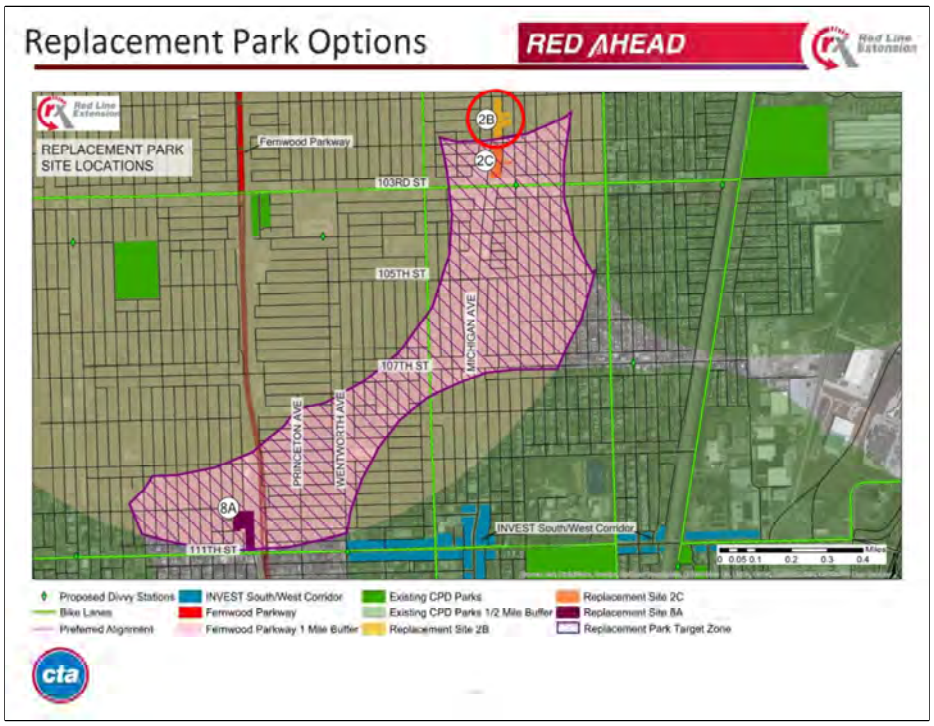

Patty

Let's talk about the three sites being carried forward. This exhibit shows the locations of the potential replacement parks. The first one we'll talk about is Site 2B (circled in red at the top of the map).

Patty

Highlight key information on the slide

Patty

Show images of existing land for Site 2B overview and Parcel 8.

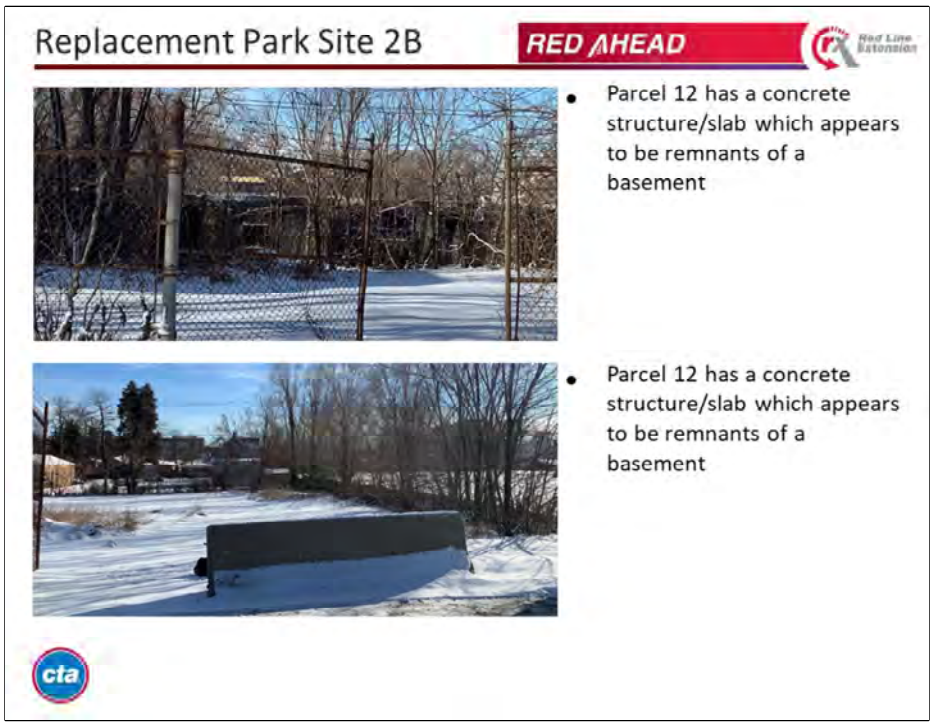

Patty

Show images of existing land for Site 2B, Parcel 12.

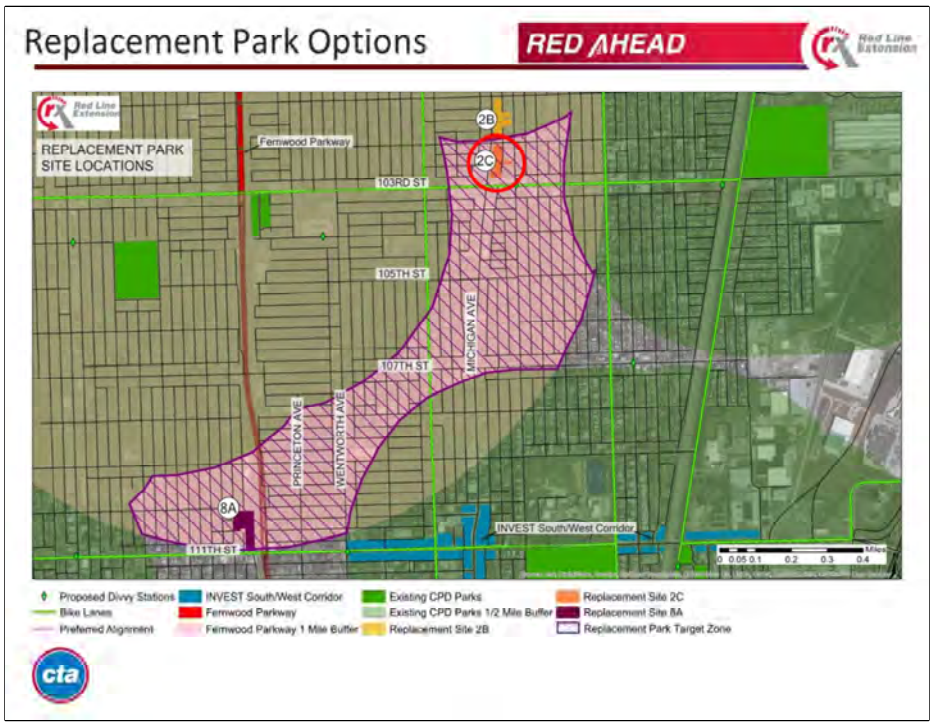

Patty

The next site is 2C, which is nearby Site 2B just to the south.

Patty

Highlight information on the slide, note slightly less than 1.9 acres. There is one occupied building.

Occupied building looks like a single family/duplex building. The empty square space is a communications tower.

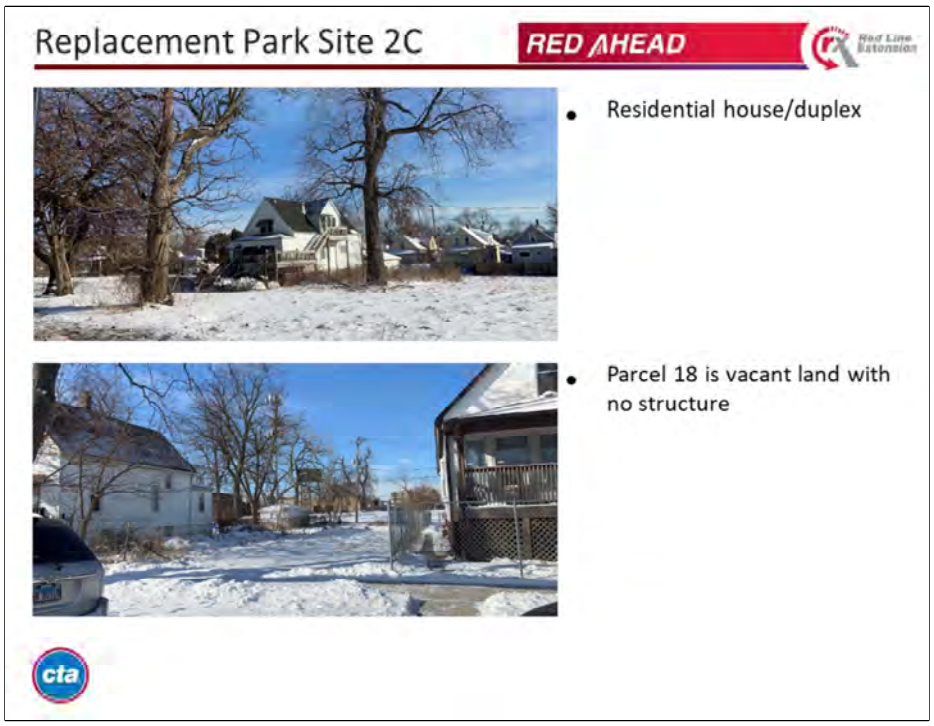

Patty

Images are of parcels with the 2C footprint.

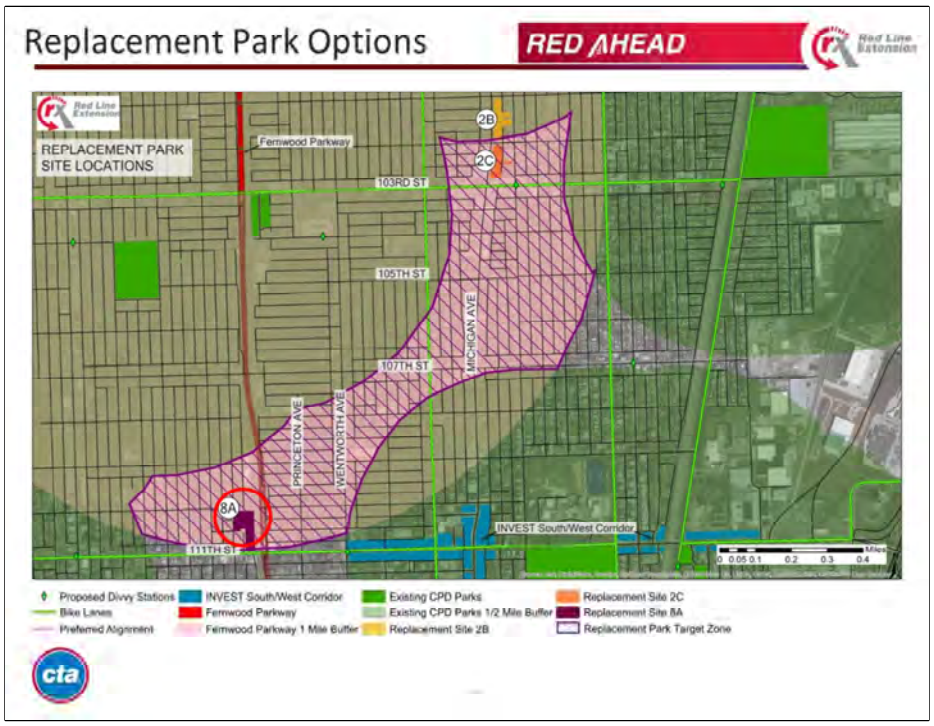

Patty

The third and last site is Site 8A. Circled in red towards the bottom left of the map.

Patty

Provide highlights from the slide. The parcel would be adjacent to the 111th Street station. Parcel is being considered for other developments and is part of the TSD to determine best use for this parcel.

Replacement Parks Options

RED AHEAD

Scoring and Ranking of three recommended sites

Criteria	2B	2C	8A
Parcel Size	5	0	5
Is the location in a park desert/greater than ½ mile from CPD park or facility	0	5	5
Availability of Acquisition (Limited or No Active Residential, Owned by City of Chicago/Cook County, and Privately Held Vacant)	5	3	5
Location/Proximity to Transit, Parks, Bike Lanes, and/or Divvy Station	5	5	5
Land Use/Zoning Compatibility	3	1	1
Safety/Security	5	5	5
Environmental Factors	3	5	1
Cost Considerations/Building Removal	4	4	5
TOTAL SCORING	30	29	32

Patty

The table presents the scores and ranking of the three sites CTA is recommending to move forward.

Recommendations

RED AHEAD

After preliminary evaluations and site visits, 3 sites remain as potential replacement park sites; Site 2B, Site 8A and Site 2C

Site 2B
- 95% Vacant
- Minimal demolition of existing structures (existing foundation)
- Minimal grading of the site is needed

Site 8A
- 100% Vacant
- Minimal demolition of existing structures (existing foundation)
- Minimal grading of the site is needed
- Other development considerations

Site 2C
- 83% Vacant
- Moderate demolition of existing structures (one active duplex building, one vacant residential structure and one vacant commercial structure)
- Minimal grading of the site is needed

Patty

The sites are presented in the order in which we think they should be considered:

2B is a better site for park replacement, it was the front runner in the analysis as part of the Draft EIS. The parcels are vacant and minimal demolition or grading would be needed.

8A has other considerations for development, although it is vacant and adjacent to the proposed 111th Street station.

2C is a good site, but it does have an active use on a residential property that may be a duplex.

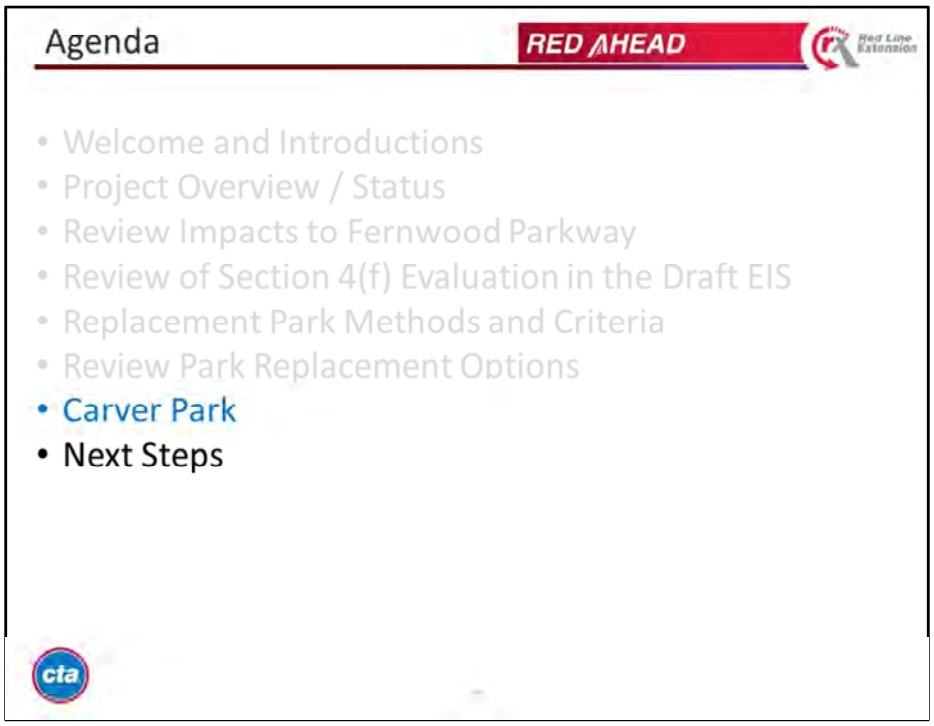

Patty passes to Patrick Dunn

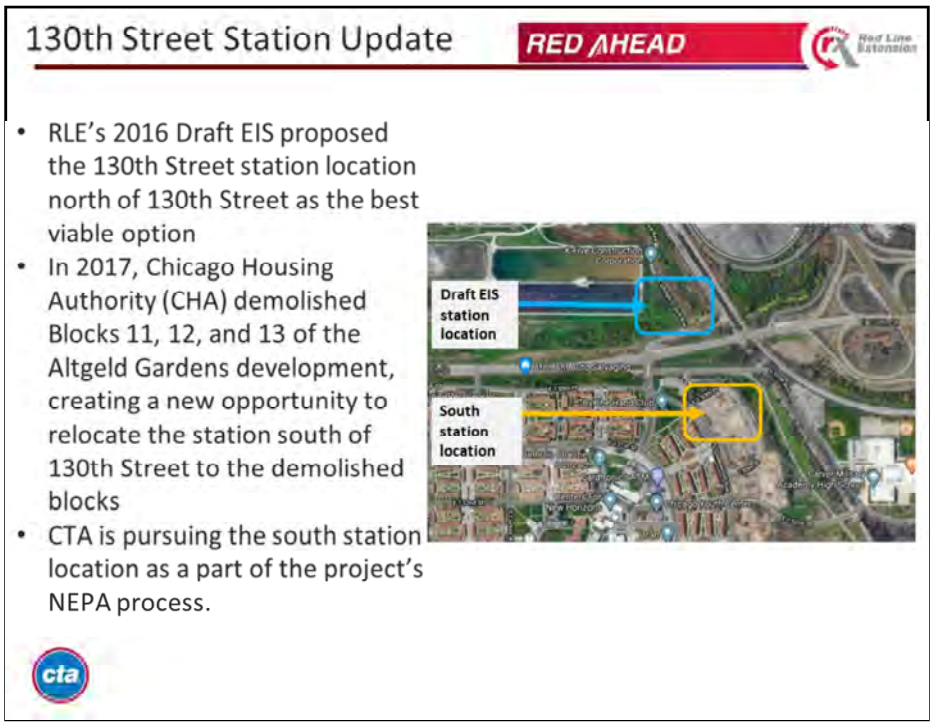

Patrick

A new piece of the project is the potential relocation of the 130th Street station from north to south of 130th Street. The north location (blue square) was originally identified in the Draft EIS.

CTA assessed the new opportunity (orange square) for critical flaws, feasibility, and public input.

Meetings held with partner agencies, including CHA, FTA, CDOT, IDOT, Chicago Department of Planning and Development, SHPO, and Forest Preserves of Cook County (FPCC). Meetings were also held with several stakeholder groups representing local residents and others (Carver H.S.) in the immediate area. There was a lot of positive support for studying this move.

With that overall agreement among our stakeholders, CTA leadership approved studying and exploring the location change of the proposed 130th Street station to <u>south</u> of 130th Street, adjacent to the Altgeld Gardens housing development. This option is now being vetted through the NEPA process, which includes public involvement and development of a Supplemental EA that will occur as a part of that process.

Patrick

The base case 130th Street station alignment is shown on this exhibit. The long shape on the east shown in green is a parcel of land owned by the Forest Preserves of Cook County. CTA is working with the FPCC to develop mitigation measures from the impact of the parcel. The parcel is approximately 7 acres.

Through the coordination that has been conducted to date the FPCC has indicated that they are open to a land swap of greater value and betterment opportunities through connections between Carver Park and Beaubien Woods.

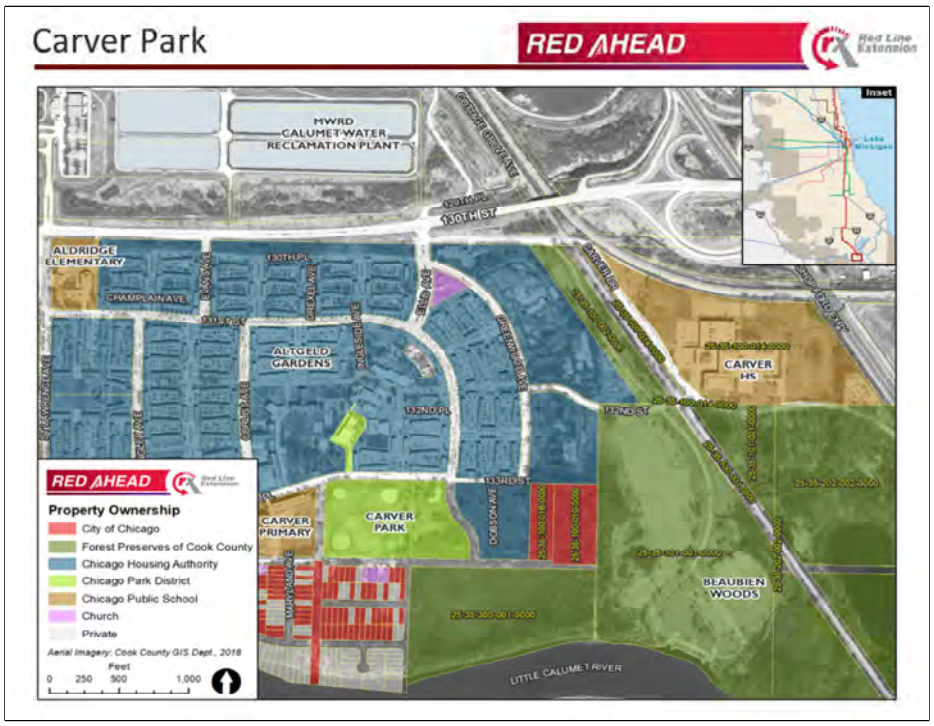

Patrick

Coordination with the FPCC regarding mitigation measures indicates that the FPCC would be interested in a land swap with the City of Chicago, who owns the two parcels that are shown in red, adjacent to the Beaubien Woods.

The FPCC has also expressed in interest in knowing what the future plans are for Carver Park. Does the CPD plan on expanding the park to the CHA parcel that is owned on the east of Carver Park.

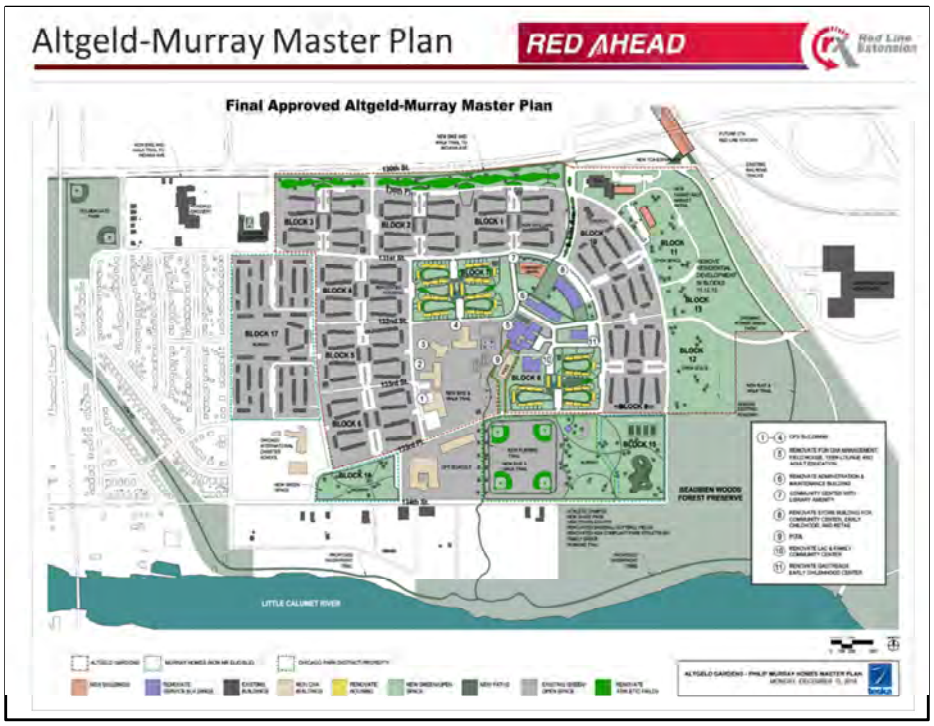

Patrick

The 2016 Master Plan for the Altgeld Gardens does show that Carver Park would be expanded to the east onto the existing CHA owned land.

CTA has recently met with the CHA regarding plans for their parcels of land, specifically Blocks 12 and 15. Block 12 is just south of 132nd Street and Block 15 is adjacent to Carver Park. The CHA has indicated that several opportunities have been discussed but nothing is funded at this point.

The FPCC has indicated that people are currently transported between Carver Park and Beaubien Woods because there is not a walking path or easy way of getting between the two parks.

The FPCC and even the community have expressed an interest in providing better connections to green/open space.

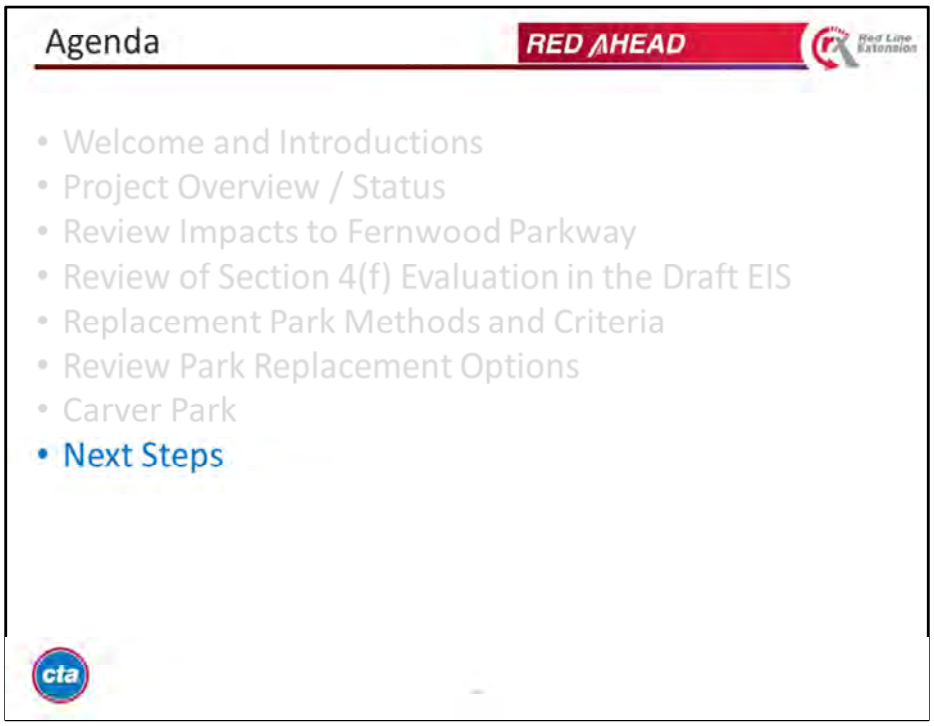

Patrick continues

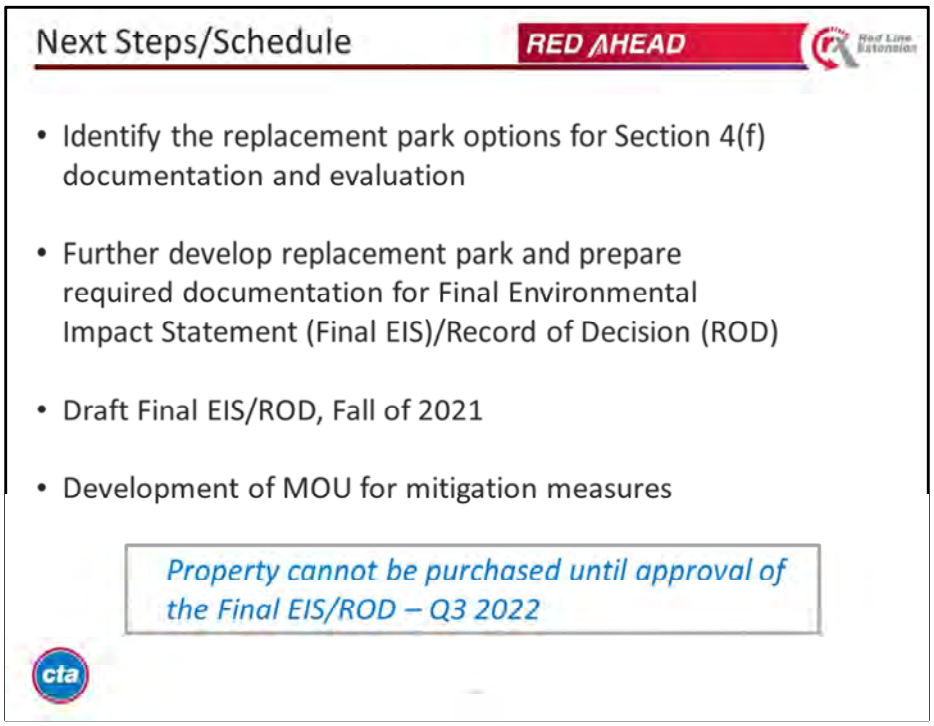

Patrick

As we continue to move through the NEPA process and work toward the Final EIS, CTA and the CPD would need to identify the replacement park options that would mitigate for the impacts to Fernwood Parkway. CTA and CPD could work together to prepare the required documentation that fulfills the requirements of Section 4(f) and would terminate in a de minimis finding. The final mitigation measures would be disclosed in the draft Final EIS/ROD in Fall of 2021.

After the FEIS/ROD, the CTA and CPD would need to develop and execute an MOU defining the terms and agreement for the Fernwood Park mitigation measures. The FTA will require this "Third Party Agreement" as part of its Capital Investment Grant program. The MOU would be needed prior to receiving the Full Funding Grant Agreement (FFGA).

CPD has indicated that Phase I ESAs would be needed for the "replacement park" and if contamination is present, then the site would need to be remediated and a No Further Remediation Letter would be required.

As we understand it, CPD's process would need an MOU for the transfer of property and if conditions change then additional concurrence would be needed. After the Final EIS/ROD is approved, approval would be needed from both the General Superintendent and the CEO, and then the Board if CPD is planning to dispose land or acquire or accept land.

CTA would not be able to purchase any properties until the approval of the Final EIS/ROD and the project moves out of Project Development and into Engineering phase.

RED AHEAD
Red Line Extension
95th/Dan Ryan
103rd
111th
Michigan
130th
Thank you!
cta

Chicago Park District Coordination Meeting

May 26, 2021

Meeting Minutes

Project: Red Line Extension
Meeting Purpose: Chicago Park District Coordination Meeting
Date: Wednesday, May 26, 2021
Location: Remote Meeting
Time: 11:00 AM

Chairperson: Marlise Fratinardo

Attendees: (See Attached copy of Sign-in-Sheet)

Item No.	*Date*	*Item Description*	*Responsibility/ Status*	*Due/Closed Date*
1.00	**Introductions**			
1.01	5/26/21	Introductions were made.		
2.00	**Project Update/Goal for the Meeting**			
2.01	5/26/21	The purpose of this meeting was to follow up on the discussions on the Chicago Park District direction to pursue pocket parks as mitigation measures for the impacts to Fernwood Parkway.		
2.02	5/26/21	The mitigation measures for the impacts to Fernwood Parkway will be documented in the Final Environmental Impact Statement (EIS), which will be published in Spring 2022.		
3.01	5/26/21	At the coordination meeting between CTA and the Chicago Park District on 2/18/21, three replacement park sites were presented. Since then, there have been discussions about providing pocket parks instead of a single 2-acre replacement park site.		
3.02	5/26/21	CTA has received community feedback through the TSD study that there is a need for additional parks west of the proposed 103rd Street station. Vacant parcels that could be potential pocket park locations have been identified through a desktop analysis.		
3.03	5/26/21	Properties along Halsted Street and near the 103rd Street Station have been identified as potential development opportunity sites in the Transit Supportive Development Plan.		
3.04	5/26/21	Five pocket park sites (Sites 24-28) were identified west of the proposed 103rd Street station.		
3.05	5/26/21	Pocket parks within the neighborhoods could be open green spaces, community gardens, pathways, or landscaped with benches and shade trees.		
3.06	5/26/21	Several pocket parks could be constructed for mitigation.		
3.07	5/26/21	Chicago Park District preferred the corner parcels.		
3.08	5/26/21	Chicago Park District noted that Site 24 would be challenging because of the alley running through the site.		
3.09	5/26/21	It would be desirable to Chicago Park District if these parks would fill in gaps in their system. Chicago Park District will follow up on locations of identified gaps.	Chicago Park District	
3.10	5/26/21	Chicago Park District agreed that a minimum 0.25 acre pocket park size would be acceptable, but Chicago Park District has smaller pocket parks as well.		

3.11	5/26/21	Vacant parcels along the Major Taylor Trail were also analyzed per Chicago Park District request. Several parcels within Maps 1, 2 and 3 had proximity to the Red Line Extension but none of the parcels were within one mile from Fernwood Parkway.		
3.12	5/26/21	One group of parcels, identified as Site 10, was previously analyzed as part of the Draft EIS. This site has 3.05 acres of freshwater emergent wetland, which may be a challenge for development of a pocket park. Additionally, this site lacks good street access.		
3.13	5/26/21	Several sites along the Major Taylor Trail have potential visibility and access challenges.		
3.14	5/26/21	CTA inquired if Chicago Park District anticipated any community pushback if the mitigation measure was not near the impacted park.		
3.15	5/26/21	Chicago Park District has tried to acquire the parcels at the south end of the Major Taylor Trail by the Little Calumet River but noted that the seller is not willing.		
3.16	5/26/21	CTA has provided Chicago Park District with the exhibits showing the recommended pocket park locations near Fernwood Parkway and near the Major Taylor Trail.		
3.17	5/26/21	Chicago Park District already has plans to develop parks in the Fernwood Parkway area. Chicago Park District would consider a combination of pocket parks in the Fernwood Parkway area and along the Major Taylor Trail for mitigation. They will review the recommendations provided, complete an in-house analysis of the sites and then provide CTA a priorities list. A response with Chicago Park District recommendations is anticipated to be ready by the end of June.	Chicago Park District	
4.00	**Discussion of Mitigation Measures for Fernwood Parkway**			
4.01	5/26/21	Chicago Park District inquired about the area of impact being used to determine the mitigation amount. CTA responded that the calculated area of impact is 1.9 acres which is what was included in the Draft EIS. Chicago Park District recalled similarly and concurred on the approach to the proposed mitigation measures for the 1.9 acres of impact to Fernwood Parkway.		
4.02	5/26/21	CTA aims to maintain the de minimis finding for the Final EIS/Record of Decision (ROD).		
4.03	5/26/21	Previously, Site 2B was the recommended Replacement Park site. Site 2C had one active residential property, whereas Site 2B did not have any. Site 8A was adjacent to the proposed 111th Street station. The Veteran's Housing proposed for Site 8A is not moving forward at this time, but this site is being considered for future development in the Transit Supportive Development Plan.		
4.04	5/26/21	In 2015, a letter from Chicago Park District regarding the mitigation measures identified 2 to 5 acres is the range in size of neighborhood parks. The standard for new parks is a minimum of 2 acres. The letter also stated that the selected replacement park sites will require Ph 1 and Ph 2 ESAs to be completed.		
4.05	5/26/21	There is no FTA requirement on the total acreage of replacement parks. Chicago Park District is targeting a total of 2 acres for all replacement parks.		
5.00	**Decisions from Chicago Park District**			
5.01	5/26/21	CTA requested confirmation if Chicago Park District would still be interested in Site 2B, or if this site was no longer being considered. Chicago Park District requested that this site remain in consideration at this time.		
5.02	5/26/21	Currently CTA is in the process of preparing the Supplemental Environmental Assessment (EA) for submittal to FTA. The Fernwood Parkway impacts are not within the three project change areas, therefore are not covered in the Supplemental EA document.		
5.03	5/26/21	Mitigation measures for impacts to Fernwood Parkway will be presented in the Final EIS/ROD. This document is currently being drafted, and the target submittal to FTA will be Fall 2021.		

5.04	5/26/21	CTA discussed that mitigation measures could be a mix of pocket parks and enhancements to existing parks.		
5.05	5/26/21	Coordination between CTA and Chicago Park District will be documented in the Final EIS/ROD.		
6.00	**Next Steps**			
6.01	5/26/21	An updated letter from Chicago Park District will be needed if the mitigation measure strategy will be changing from the single 2-acre replacement park site identified in the 2015 letter. In order to meet project deadlines, an updated letter would be needed by fall 2021.	Chicago Park District	6/30/21
6.02	5/26/21	After the Draft EIS was published, FTA issued Chicago Park District a letter requesting a de minimis finding based on public feedback and proposed mitigation measures documented in the Draft EIS. Chicago Park District provided concurrence to the FTA finding. A new letter may be needed to reflect the change in mitigation from a singular replacement park site to multiple replacement pocket park sites. As before, the FTA would issue the letter and request Chicago Park District concurrence on the de minimis finding.		
6.03	5/26/21	CTA will coordinate mitigation measures that are acceptable to Chicago Park District with FTA for a de minimis finding.		
6.04	5/26/21	Properties cannot be acquired by CTA until the approval of the Final EIS/ROD, which is targeted for approval in Spring 2022. CTA anticipates that parcels for the mitigation measures can be purchased toward the end of 2022.		
6.05	5/26/21	Until the pocket parks have been vetted by Chicago Park District, CTA will continue to carry forward the acquisition of parcels for the previously identified replacement park sites in the environmental documentation.		
7.00	**Action Items**			
7.01	5/26/21	A letter is needed from Chicago Park District if the mitigation measure strategy will be changing from that listed in the 2015 letter.	Chicago Park District	Fall 2021
7.02	5/26/21	Chicago Park District will evaluate the proposed pocket park sites and provide a priority list to CTA.	Chicago Park District	6/30/21
7.03	5/26/21	CTA will provide Chicago Park District the previous correspondence with Chicago Park District and FTA regarding the de minimis finding.	CTA	
Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days, otherwise minutes will be considered final.				

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Chicago Park District Coordination Meeting

MEETING DATE: Wednesday, May 26, 2021

MEETING TIME: 11:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
1	Y	Marlise Fratinardo	CTA - Planning	Senior Project Manager, Planning	mfratinardo@transitchicago.com	14124
2	Y	Leah Mooney	CTA - Planning	Director of Strategic Planning and Policy	lmooney@transitchicago.com	14250
3	Y	Sonali Tandon	CTA - Planning	Senior Manager - Strategic Planning, Rail	STandon@transitchicago.com	14246
4	Y	Doreen O'Donnell	Chicago Park District		Doreen.O'Donnell@ChicagoParkDistrict.com	
5	N	Sarah White	Chicago Park District		Sarah.White@ChicagoParkDistrict.com	
6	Y	London Walther	Chicago Park District		London.Walther@ChicagoParkDistrict.com	
7	Y	Joanna Littrell	PMC - HNTB	Program Manager	jlittrell.hntb@transitchicago.com	14223
8	Y	Patrick Dunn	PMC - CDM-Smith	NEPA Lead	PDunn.cdm@transitchicago.com	14243
9	Y	Grace Dysico	PEC - TranSystems	NEPA Lead	gldysico@transystems.com	(847) 407-5247
10	Y	Robin Martel	PEC - Wight & Company	NEPA Specialist	rmartel@wightco.com	(312) 261-5730
11	Y	Patricia King	PEC - Wight & Company	NEPA Specialist	pking@wightco.com	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Chicago Park District Coordination Meeting

MEETING DATE: Wednesday, May 26, 2021

MEETING TIME: 11:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION: Remote Meeting

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
12	Y	Helen Yeung	PEC - CERA	Document Control	hyeung@cerasolutions.com	

NOTE: All individuals listed have been invited to the meeting. Only those indicated were in attendance.

Chicago Transit Authority

Red Line Extension
Chicago Park District (CPD)
Park Replacement Coordination Meeting

Agenda
May 26, 2021
Remote Meeting
11:00 to 12:00 CT

Invitees:

Sarah White/CPD
Doreen O'Donnell/CPD
London Walther/CPD
Leah Mooney/CTA – Planning
Marlise Fratinardo/CTA – Planning
Sonali Tandon/CTA – Planning
Joanna Littrell/PMC – HNTB
Patrick Dunn/PMC – CDM Smith
Joseph Yesbeck/PEC – TY Lin
Grace Dysico/NEPA-PEC – TranSystems
Robin Martel/NEPA-PEC – Wight
Patty King/NEPA-PEC - Wight
Helen Yeung/NEPA-PEC – Cera

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1) Introductions

2) Project Update/Goal for the Meeting

3) Discussion on "Pocket Park" opportunities
   - Evaluated areas near 103rd Street station and Major Taylor Trail
   - Reviewed sites that are potentially available (i.e. vacant and privately-owned, City-owned or Cook County Land Bank owned)
   - Highlighted parks that are 0.25 acres or larger – Chicago Park District to verify minimum size

4) Discussion of Mitigation Measures for Fernwood Parkway
   - Previously identified larger parks, i.e. Sites 2B, 2C, 8A
   - Pocket Park opportunities – near 103rd Street station and Major Taylor Trail

5) Decisions from Chicago Park District
   - Based on available properties shown, indicate preference
     - Select 3 Options
     - Rank Top Options
   - Need decision for inclusion in drafts of Final EIS/ROD – end of June 2021

6) Next Steps
   - Update on mitigation letter to address the new direction on replacement parks
   - Continue Section 4(f) coordination with Chicago Park District and FTA
   - Further develop documentation/coordination needs for the Final EIS/ROD
   - Mitigation timeline

7) Action Items
   - Mitigation measure letter with updated mitigations

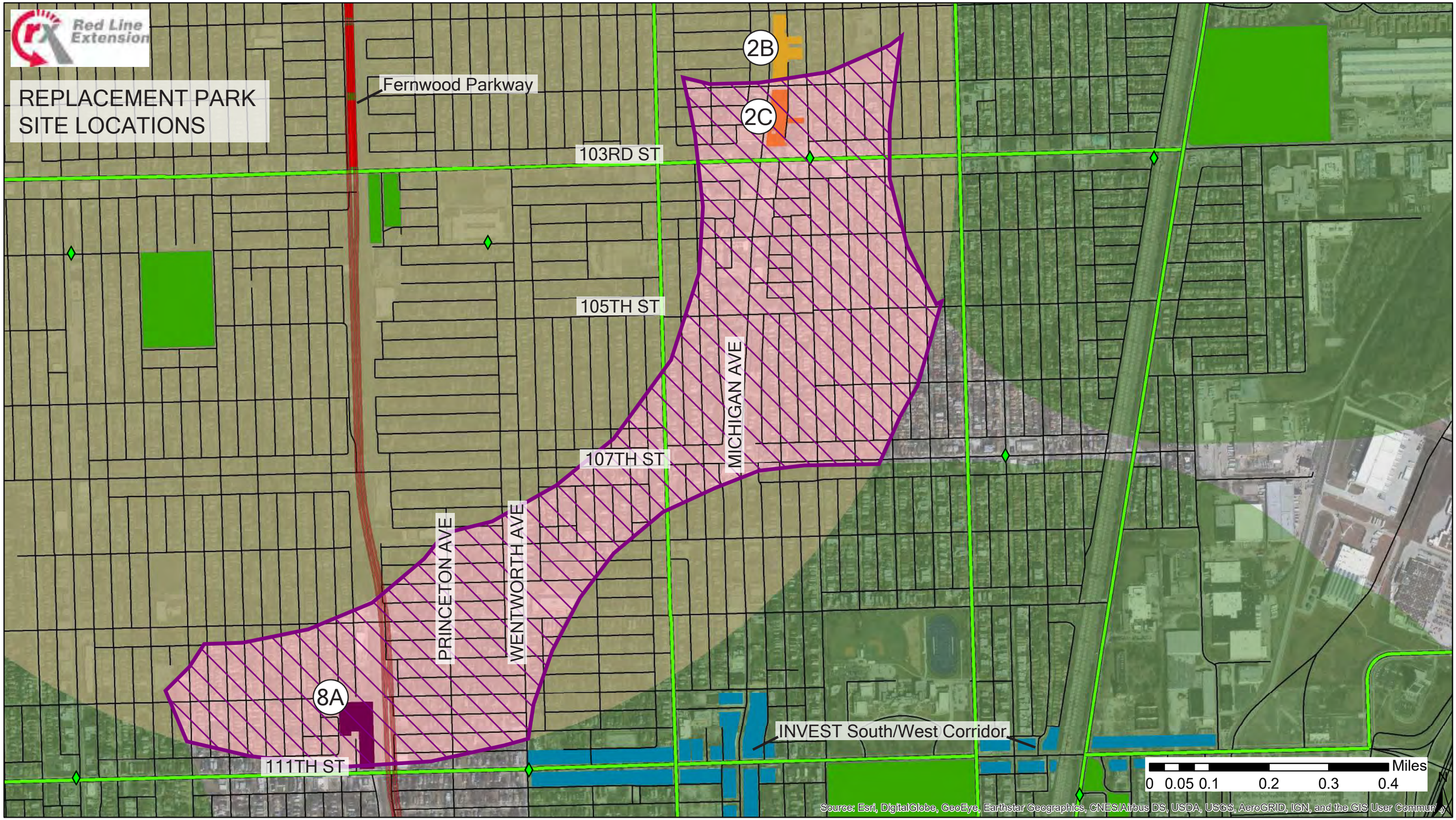

Proposed Divvy Stations
Bike Lanes
Preferred Alignment
INVEST South/West Corridor
Fernwood Parkway
Fernwood Parkway 1 Mile Buffer
Existing CPD Parks
Existing CPD Parks 1/2 Mile Buffer
Replacement Site 2B
Replacement Site 2C
Replacement Site 8A
Replacement Park Target Zone

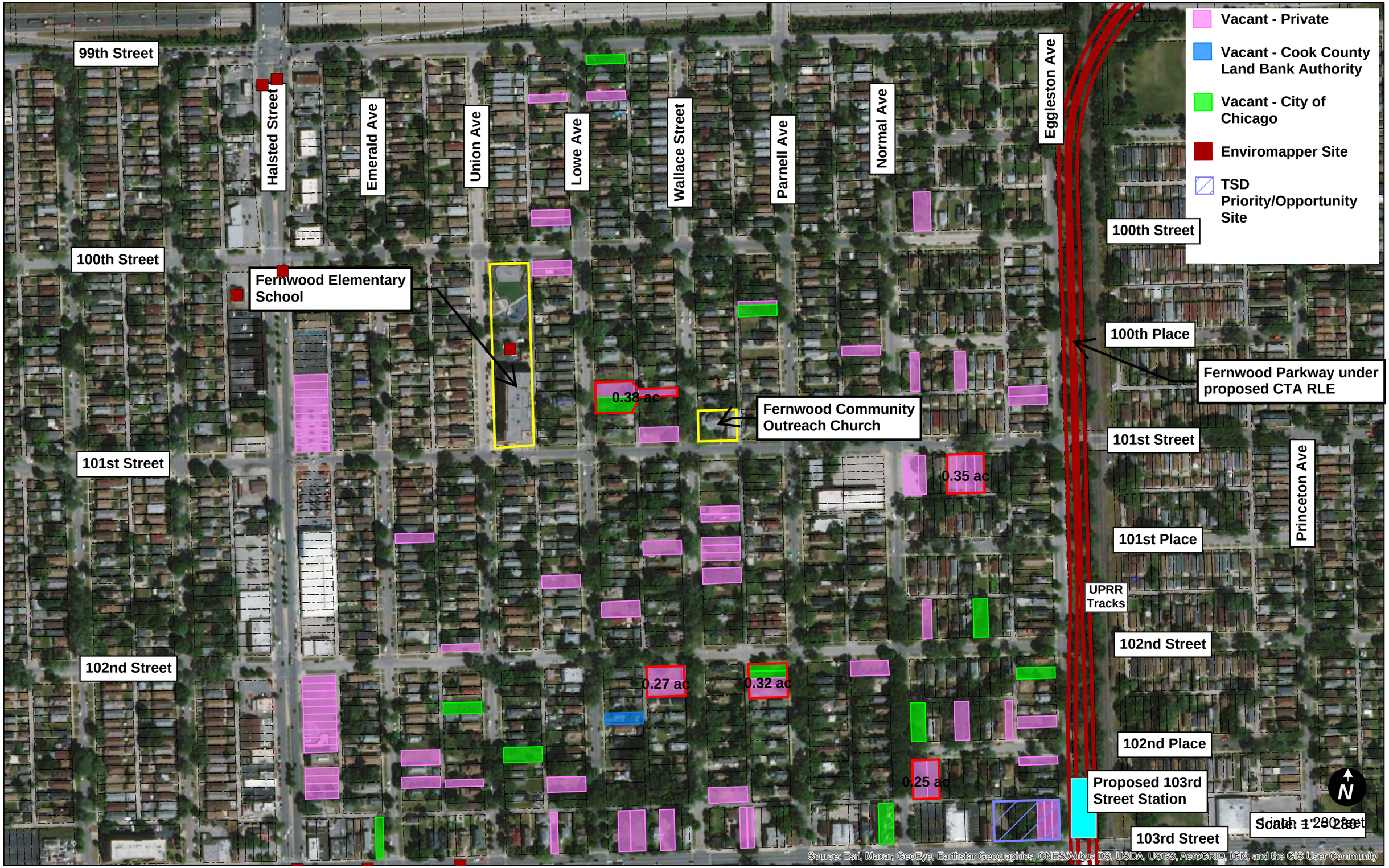
Vacant - Private
Vacant - Cook County Land Bank Authority
Vacant - City of Chicago
Enviromapper Site
TSD Priority/Opportunity Site
99th Street
100th Street
101st Street
102nd Street
Halsted Street
Emerald Ave
Union Ave
Lowe Ave
Wallace Street
Parnell Ave
Normal Ave
Eggleston Ave
Princeton Ave
100th Place
101st Place
102nd Place
103rd Street
Fernwood Elementary School
Fernwood Community Outreach Church
Fernwood Parkway under proposed CTA RLE
Proposed 103rd Street Station
UPRR Tracks
0.38 ac
0.35 ac
0.27 ac
0.32 ac
0.25 ac
Scale 1:280
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

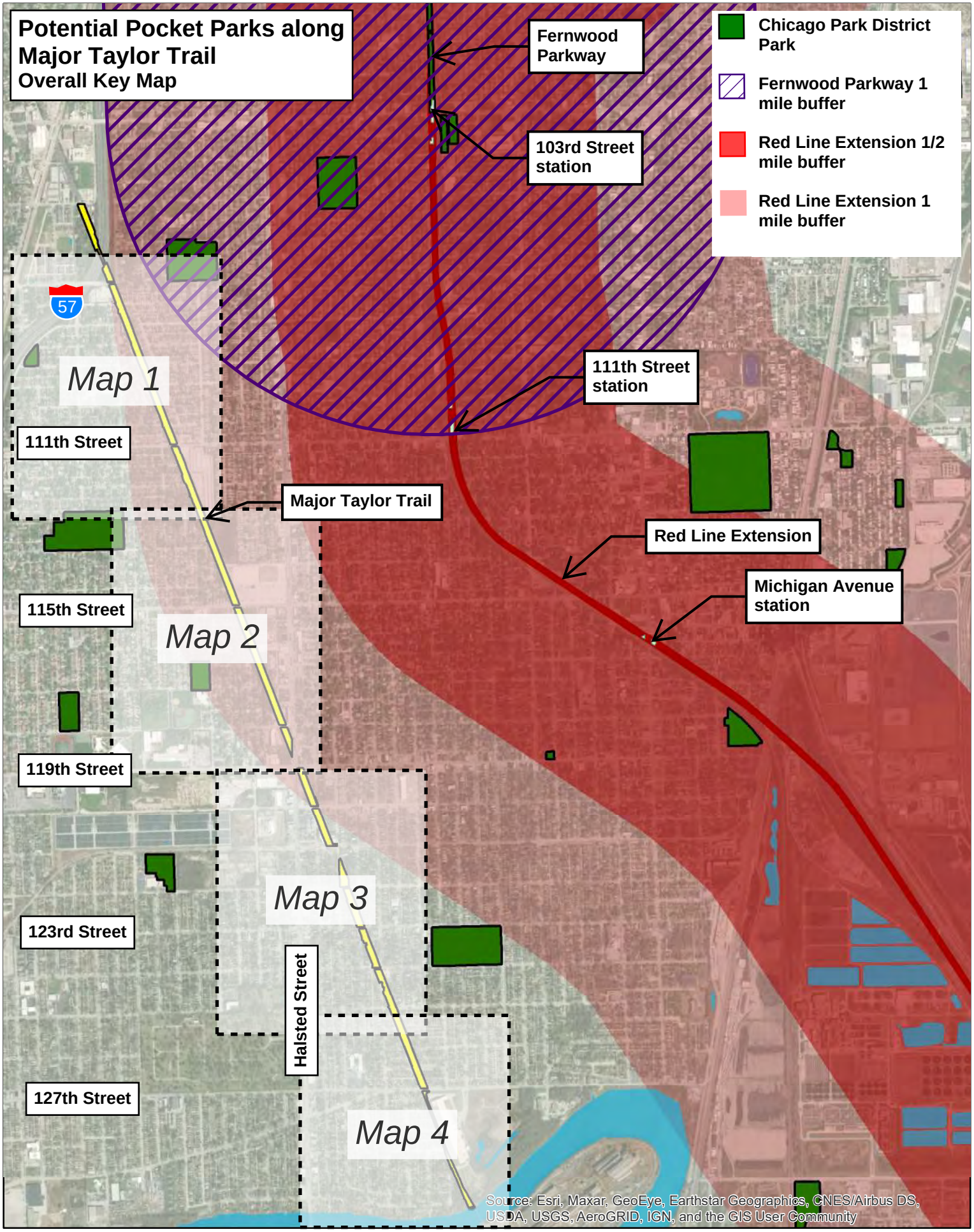

Map Source: Cook County GIS, Google Maps

Miles
0 0.125 0.25 0.5 0.75 1

N

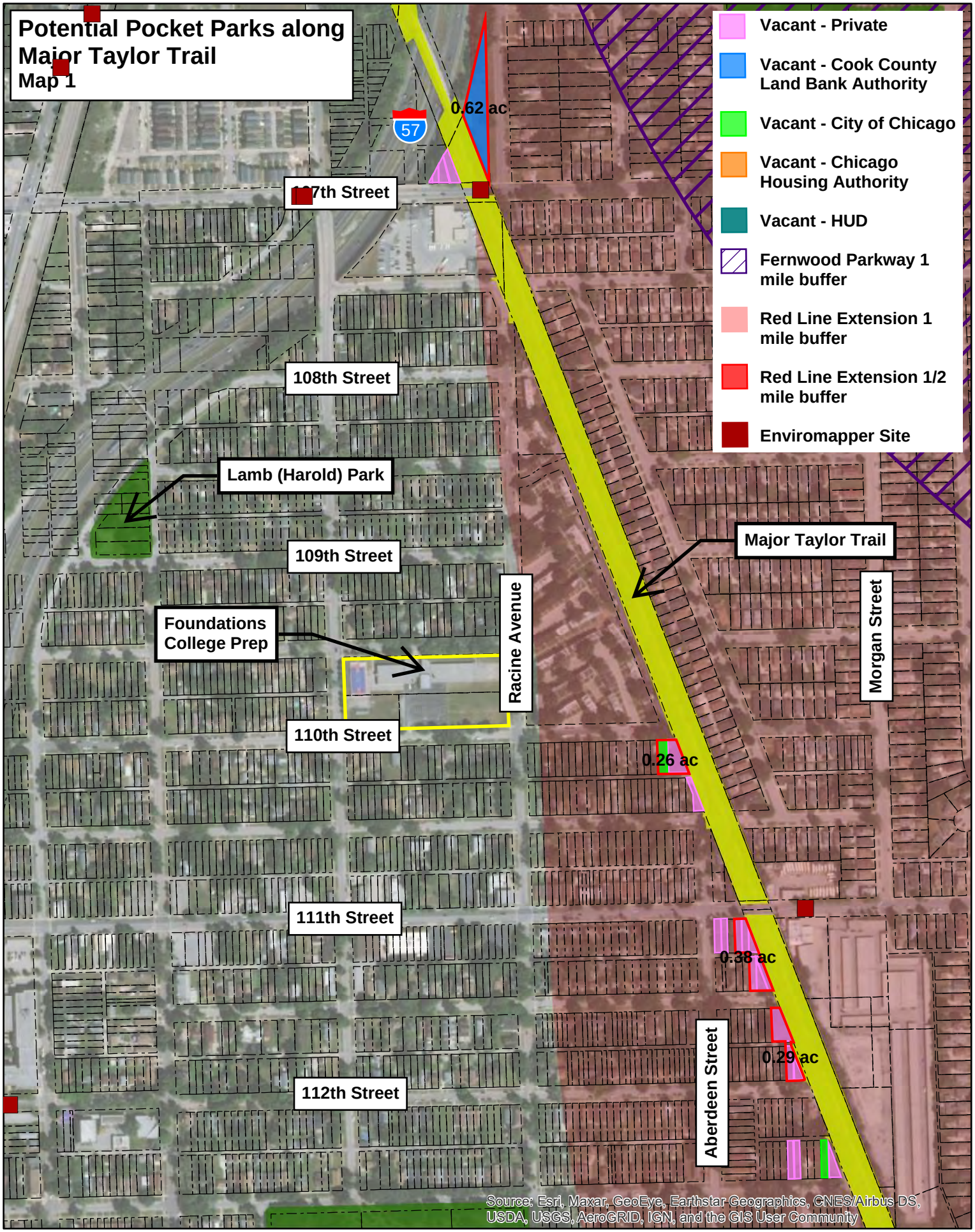

Map Source: Cook County GIS, Google Maps

Miles
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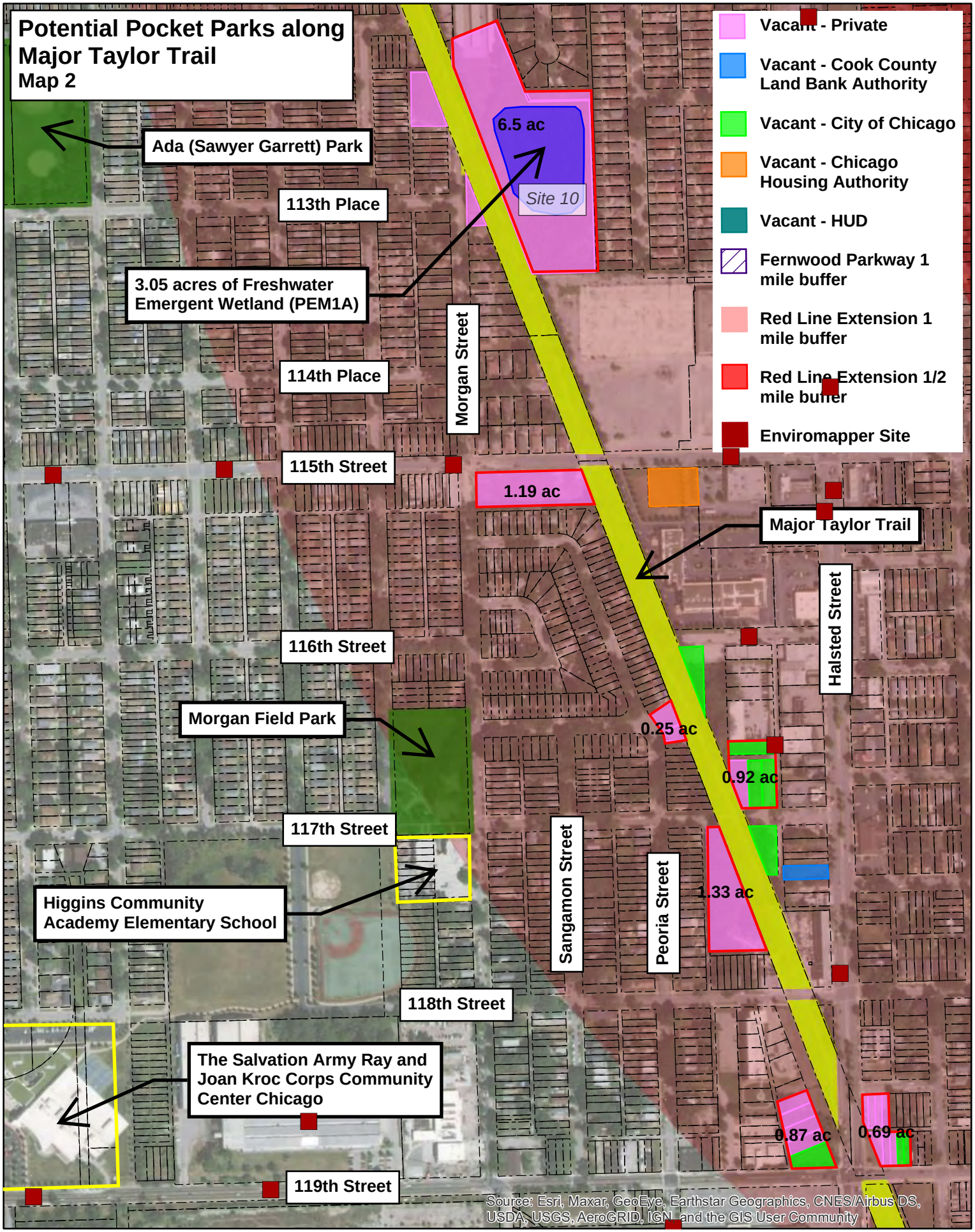

Map Source: Cook County GIS, Google Maps

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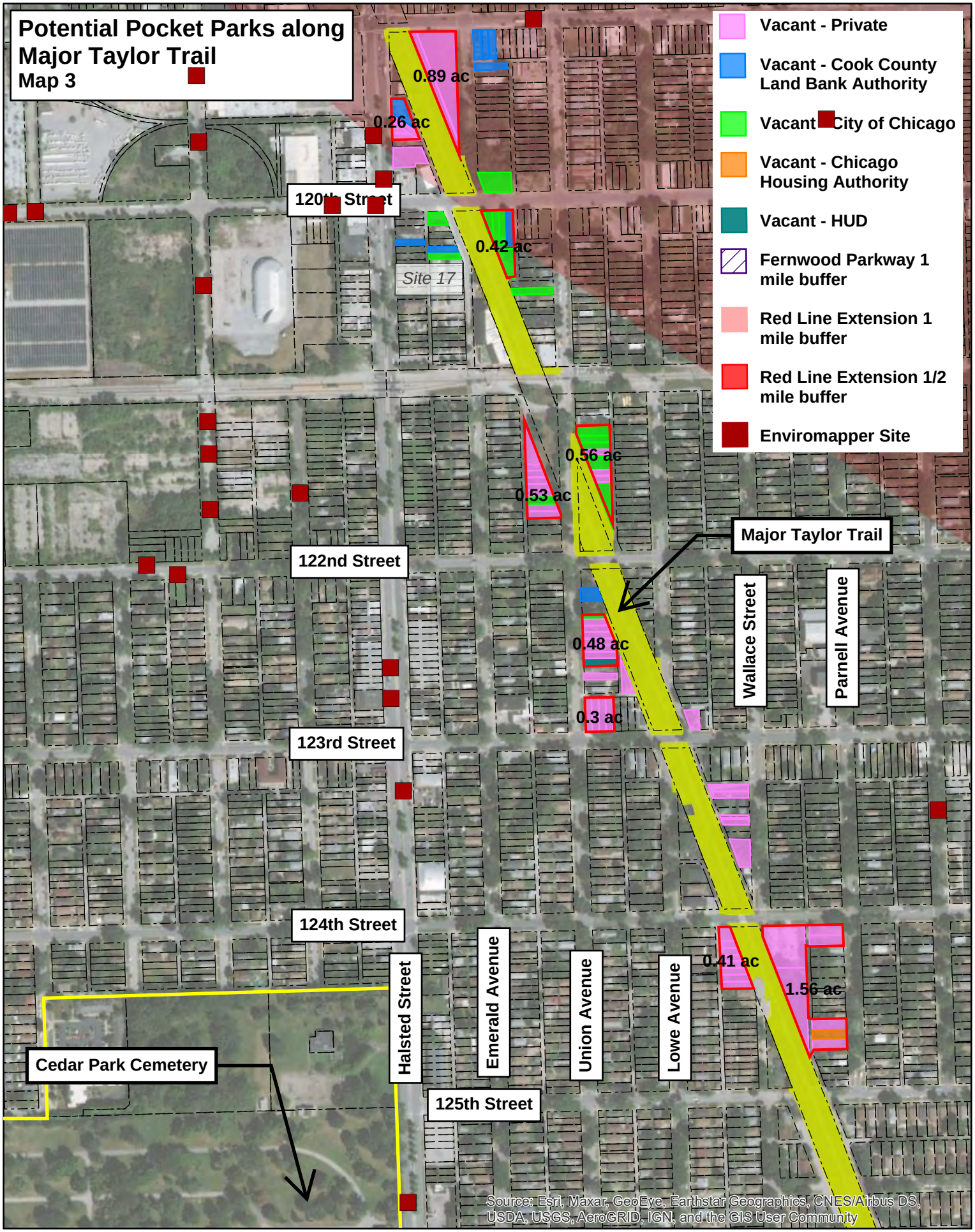

Map Source: Cook County GIS, Google Maps

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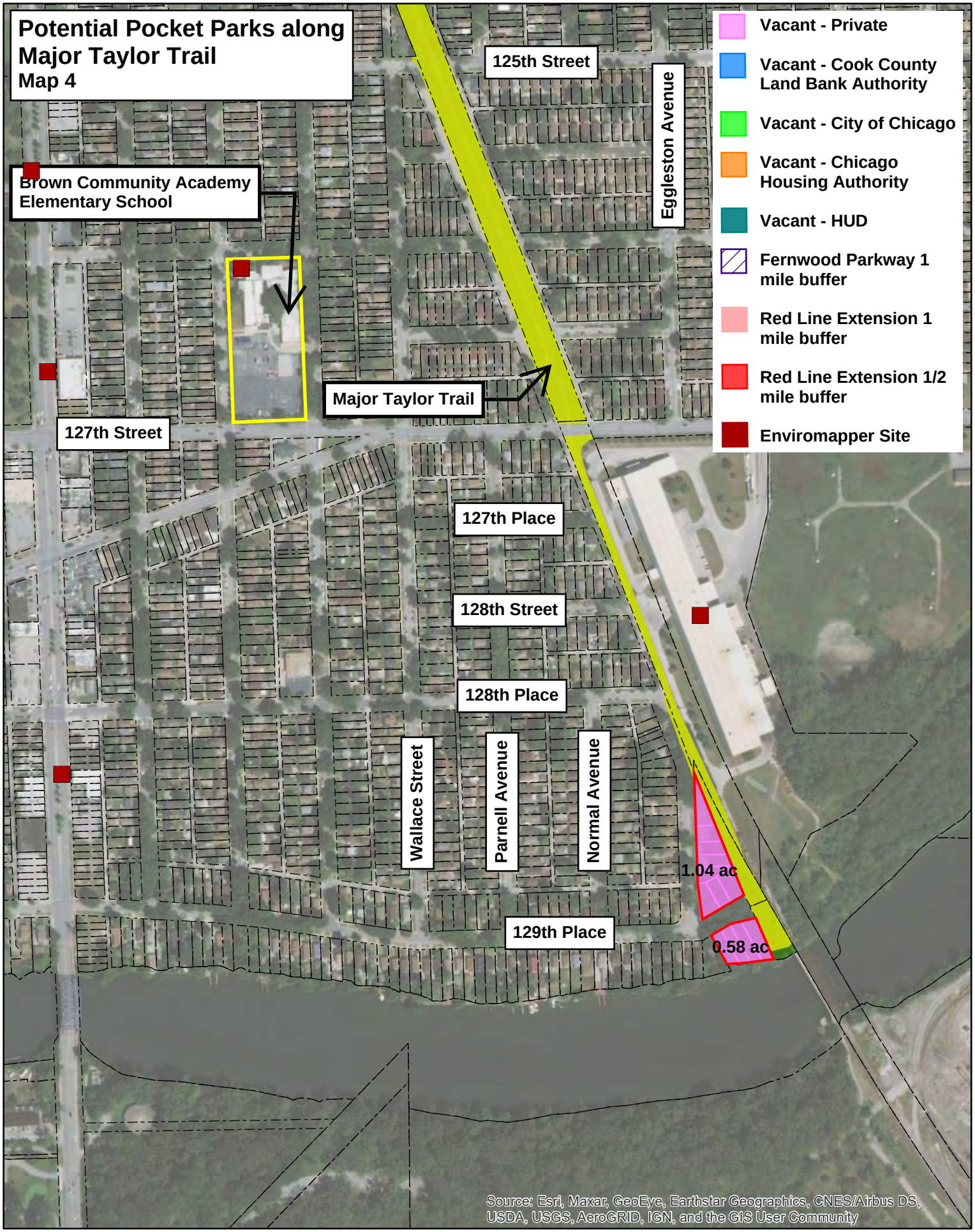

Map Source: Cook County GIS, Google Maps

Miles
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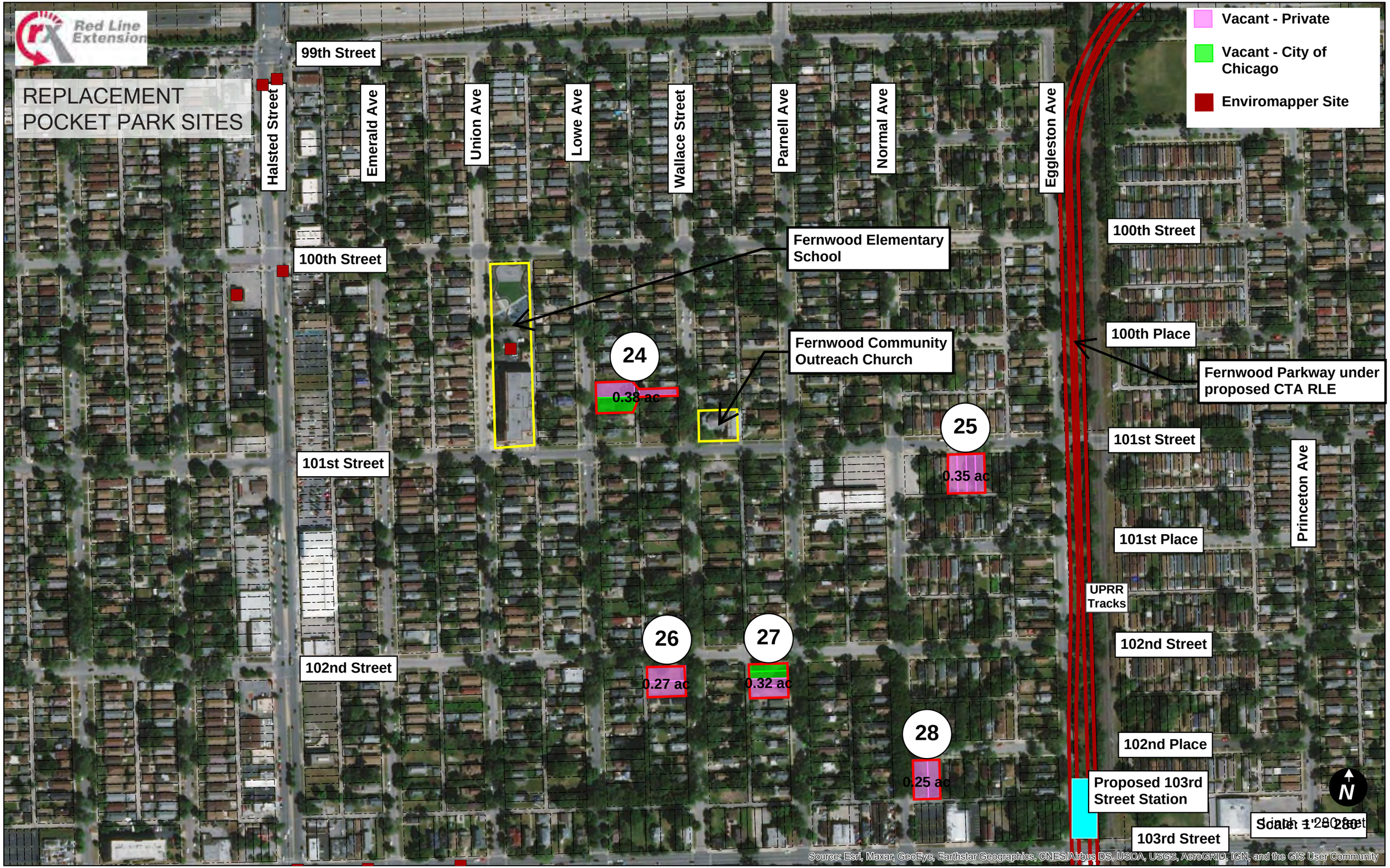
Red Line Extension
REPLACEMENT POCKET PARK SITES
Vacant - Private
Vacant - City of Chicago
Enviromapper Site
99th Street
Halsted Street
Emerald Ave
Union Ave
Lowe Ave
Wallace Street
Parnell Ave
Normal Ave
Eggleston Ave
100th Street
Fernwood Elementary School
Fernwood Community Outreach Church
100th Place
Fernwood Parkway under proposed CTA RLE
24
0.38 ac
25
0.35 ac
101st Street
Princeton Ave
101st Place
UPRR Tracks
26
0.27 ac
27
0.32 ac
102nd Street
28
0.25 ac
102nd Place
Proposed 103rd Street Station
103rd Street
N
Scale 1" = 280 feet
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

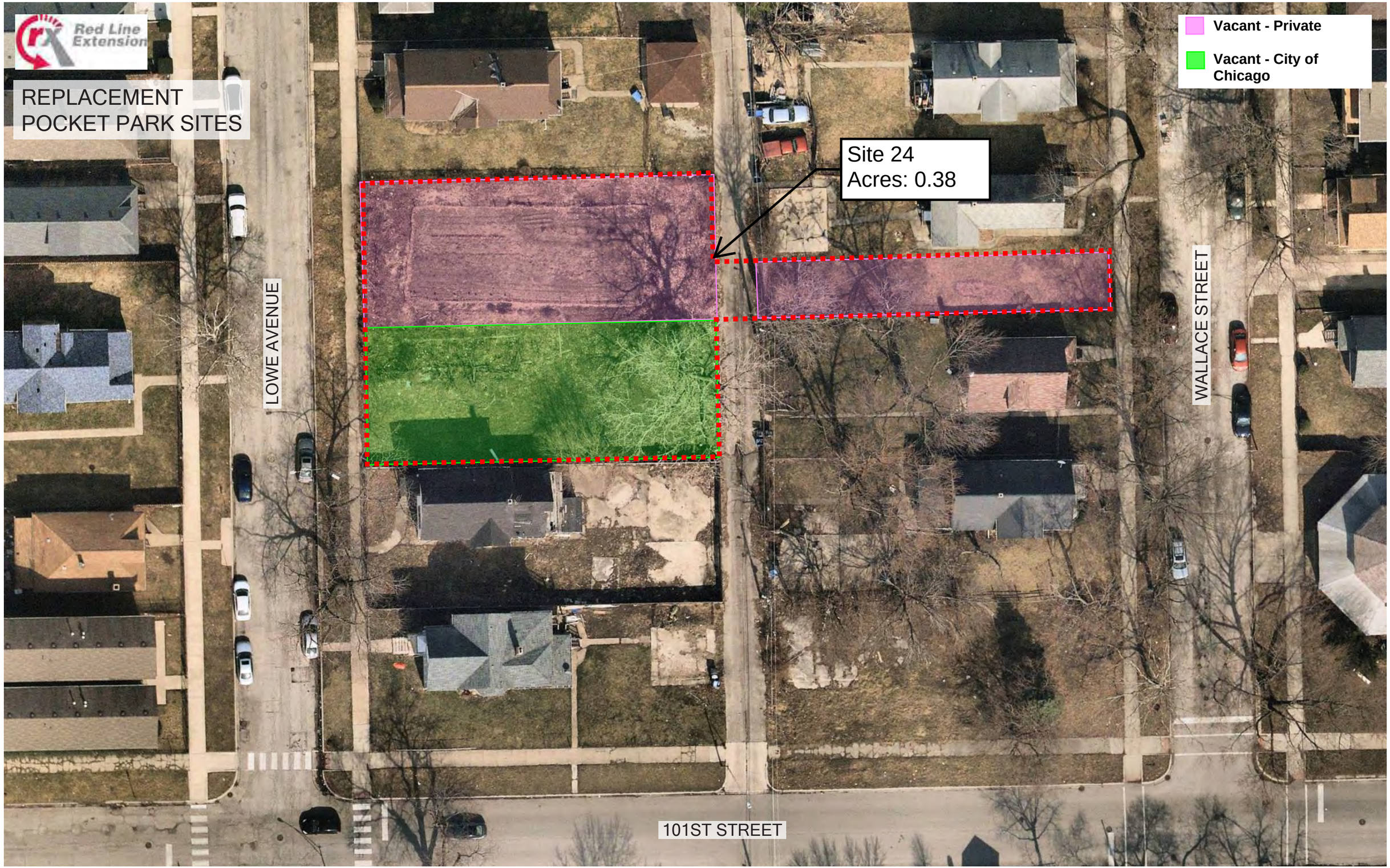
Red Line Extension
REPLACEMENT POCKET PARK SITES
Vacant - Private
Vacant - City of Chicago
Site 24
Acres: 0.38
LOWE AVENUE
WALLACE STREET
101ST STREET

Red Line Extension
REPLACEMENT POCKET PARK SITES
Vacant - Private
Vacant - City of Chicago
101ST STREET
NORMAL AVENUE
Site 25
Acres: 0.35

Red Line Extension
REPLACEMENT POCKET PARK SITES
Vacant - Private
Vacant - City of Chicago
102ND STREET
Site 26
Acres: 0.27
WALLACE STREET

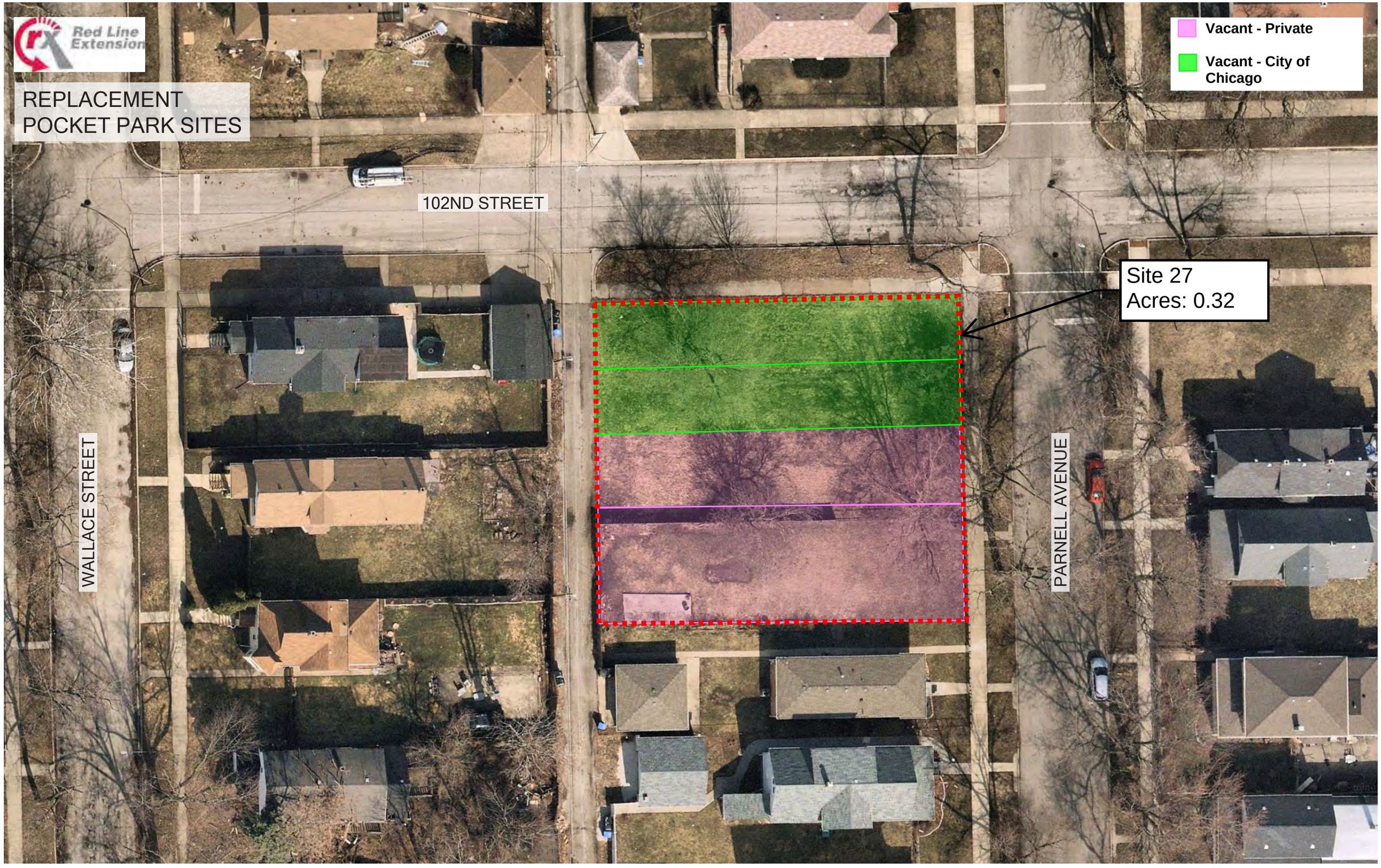
Red Line Extension
REPLACEMENT POCKET PARK SITES
Vacant - Private
Vacant - City of Chicago
102ND STREET
WALLACE STREET
PARNELL AVENUE
Site 27
Acres: 0.32

Red Line Extension
REPLACEMENT POCKET PARK SITES
Vacant - Private
Vacant - City of Chicago
102ND PLACE
Site 28
Acres: 0.25
NORMAL AVENUE

chicago park district

Administration Office
541 North Fairbanks
Chicago, Illinois 60611
(312) 742-PLAY (7529)
(312) 747-2001 TTY
www.chicagoparkdistrict.com

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Rahm Emanuel
Mayor

August 17, 2015

Sonali Tandon
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Re: CTA Red Line Extension (RLE) Project

Dear Ms. Tandon:

The Chicago Park District (CPD) appreciates the opportunity to review the draft of the proposed park impacts for the CTA Red Line Extension (RLE) Project dated June 8, 2015. Any proposed mitigation measures should include fully developed replacement property with the appropriate replacement improvements in the community area. The CPD's priorities for replacement park sites is to expand existing parks.

CPD's neighborhood parks range in size from 2-5 acres in size. These are parks that contain indoor and/or outdoor recreation facilities and typically include a playground and/or other sport fields. The standard for new parks is a minimum of two (2) acres in size. If Recognized Environmental Conditions are identified in the Phase 1 Environmental Site Assessment (ESA) then a Phase 2 ESA is required. If there are exceedances of the Illinois Environmental Protection Agency's (IEPA) TACO Tier 1 Residential Standards, then the property is required to receive a Comprehensive No Further Remediation (NFR) Letter from the IEPA's Site Remediation Program.

The documentation regarding primary activities and functions that occur in each of the three parks is accurate. CPD concurs conceptually with the proposed mitigation measures as outlined in the coordination package.

Wendell Smith (#272) Park is a 4.7-acre neighborhood park that primary serves the population within a ½ mile. Improvements include two basketball courts, two baseball fields, a playground, recreation building and .3 miles of walking trails. In addition to the areas described in the letter, the overlap area includes space behind the existing baseball backstop. Preliminary mitigation measures should include replacement property located in the Roseland Community area constructed in accordance with Chicago Park District standards.

Block (#1005) Park is a 2.95-acre passive park that provides informal active recreational uses or other accessory uses. The east option alignment affects the entire function of the 1.3 acre west parcel, including the accessory communication tower space. Preliminary mitigation measures should include replacement property located in the Roseland Community area constructed in accordance with Chicago Park District standards. Additionally, mitigation and replacement of the communications and utility structures is required.

Fernwood (#1215) Parkway is an 8.63-acre linear passive park that provides informal active recreational uses or other accessory uses. The parkway functions as open space and provides a quiet natural setting for park users. The Chicago Park District would not program or maintain areas beneath the elevated track structures. Preliminary mitigation measures should include replacement property located in the Washington Heights Community area constructed in accordance with Chicago Park District standards.

The suggested mitigations strategies coupled with the above comments should address all the adverse impacts on the Parks. We look forward to a successful collaboration.

Sincerely,

Rob Rejman
Director of Planning and Construction

RR/ml

cc: Doreen O'Donnell, Research and Planning Manger
Michael Lange, Senior Project Manager

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

August 2, 2017

Chicago Park District
Attn: Heather Gleason
541 N. Fairbanks Court
Chicago, IL 60611

Re: Chicago Transit Authority Red Line Extension Project, Park Impacts Coordination, Public Comments, and Preliminary Section 4(f) Determination

Dear Ms. Gleason:

The Federal Transit Administration (FTA) is writing to continue the consultation and coordination between the Chicago Transit Authority (CTA) and your agency regarding potential park impacts that would result from the implementation of CTA's Red Line Extension (RLE) project and appropriate mitigation measures. Based on these coordination efforts, the CTA and the Chicago Park District (CPD) identified several mitigation measures, including providing replacement park lands, that would be undertaken to ensure that the project would not result in any adverse impacts to CPD parks. Your concurrence that there would be no adverse impacts to the identified parks following implementation of these mitigation measures was received on August 17, 2015; the potential impacts and proposed mitigation measures were documented and published in the Draft Environmental Impact Statement (EIS) for this project.

The FTA, in cooperation with the CTA published the RLE Draft EIS in accordance with federal environmental regulations of the National Environmental Policy Act as well as Section 4(f) U.S. Department of Transportation Act of 1966, which established the requirement for consideration of park and recreational lands, among other specially protected resources, in the development of transportation projects.

The Draft EIS was published for public and agency review on October 6, 2016, and a public hearing was held on November 1, 2016. In addition to the public hearing, a comment period through November 30, 2016, was established to obtain any additional comments on the environmental impacts of this project and proposed mitigation measures, including park impacts and proposed mitigation. The public notification and solicitation of comments for the Draft EIS were completed in accordance with federally required processes under 23 CFR 771.111. A summary of the public comments and a spreadsheet of individual public comments received related to parks is attached for your review.

Based on coordination with CPD, the proposed mitigation measures, and all public comments received, this letter serves to notify you of FTA's intention to proceed with a Section 4(f) *de minimis* finding for parks as documented in the Draft EIS. In accordance with 23 CFR 774, the impacts of a transportation project on a park or recreation area, or wildlife and waterfowl refuge that qualifies for Section 4(f) protection may be determined to be *de minimis* if:

1. The transportation use of the Section 4(f) property, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f);
2. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) property; and
3. The official with jurisdiction over the property (in this case, CPD), after being informed of the public comments and FTA's intent to make the *de minimis* impact finding, concurs in writing that the project will not adversely affect the activities, features, or attributes of these parks.

Following CPD's review of the attached public comments, we ask CPD to provide concurrence on FTA's finding that based on the proposed mitigation measures including the replacement of park lands with lands of reasonably equivalent usefulness and location, this project will not adversely affect park activities, features, or attributes. Please direct your concurrence with this finding and/or any additional comments you may have within 45 days of receipt of this letter to:

Tony Greep, Community Planner
Federal Transit Administration, Region 5
200 W. Adams, Suite 320
Chicago, IL 60606
Phone: (312) 353-1646
Email: anthony.greep@dot.gov

CTA will select either the East or West Option of the preferred Union Pacific Railroad alternative as part of the Final EIS analysis and will continue to coordinate with your agency to finalize the processes for acquiring replacement park property and fulfilling all agreed upon mitigation measures. This coordination may be done through meetings and/or, as necessary, through a more formalized Memorandum of Agreement between FTA, CTA, and CPD.

Thank you for your continued cooperation and interest in this project. Should you have any additional questions, please do not hesitate to contact us.

Sincerely,

Jay M. Ciavarella
Director, Office of Planning & Program Development

Enclosure: CTA RLE DEIS - Summary of Public Comments Related to Parks

Cc: Michael Lange, Chicago Park District
Doreen O'Donnell, Chicago Park District
Tony Greep, Federal Transit Administration
Elizabeth Breiseth, Federal Transit Administration
Carole Morey, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority

Summary of Public Comments Related to Parks

Red Line Extension Draft Environmental Impact Statement

The following text summarizes public comments received related to park impacts from the RLE Project as well as mitigation measures proposed within the Draft EIS. A comment matrix detailing individual comments is also attached for a complete record of public comments received related to parks.

In general, comments related to parks and proposed mitigation, particularly providing replacement park options, were positive. Members of the public noted that new parks are needed and desirable near the proposed corridor and in surrounding neighborhoods. Providing additional amenities at surrounding parks were noted as desirable as well, including larger field houses, workout facilities, basketball courts, and running/walking tracks. Integrating parks into the surrounding community, providing greater transit access to parks, and providing well-lit parks with attractive planters, waste baskets, and bike racks was also noted as desirable.

Two commenters noted that the existing Fernwood Parkway linear park (which would be affected by the West Option) is not currently used by the public, while one commenter noted that the West Option takes more green space. Two commenters noted that the East Option would permanently impact an active use park, Wendell Smith Park, compared with the West Option that would impact more passive park space.

Overall comments on replacement park options were positive both at the public hearing and as part of the formal comment period. Regarding replacement park options, one commenter noted concerns with replacement parks increasing the potential for pedestrian and vehicular traffic and noted that parks would require greater security and another comment noted that mitigation at Wendell Smith Park proposed under the East Option should not include new fencing around the track structure at the corner of the park because patrons use the openness of the existing park in this area to cross and enter the park.

CTA Red Line Extension Project
Public and Agency Comments - Parks

Name	Date	Comment Type	Comment
Cebell Huey	10/11/2016	handwritten	I would highly recommend the West Side of the rail at 101st-99th and Eggleston to 103rd and beyond 103rd. There is a lot of property that's not being used like 99 and Eggeleston and 103rd is not being used like the park. No one uses that park at all. No kids play there or anything.
Elsa Ponce	10/19/2016	handwritten	Empty Lots. Have walls to reduce the noise. Noise barrier concerns not 4 feet. I recommend 8 feet. Parks to walk. A lot of traffic. *All Concern categories marked "yes."*
Melvina Grace	11/1/2016	handwritten	East Option: Would be the best, but what about the properties that would surround the around. West Option: Looks more comfortable but what about the properties that surround the project? Comment: The park seems like a beautiful idea to bring life into a neighborhood fallen. But questions remain about properties surrounding the park due to elderly and disabled properties. Transportation: No comment because it beneficial less walking distance to commute. Land Use and Economic Development: What will happen to properties in that area? Visual Impacts: I would love to see how it would look. Noise and Vibration: Yes, elderly leaves in area Safety & Security: Very important due to neighbor not being safe. Will this cause a problem for more? Hazardous Materials: Elderly and disable live in area. Parks: Improvement needed very well Construction Impacts: Is this going to affect all westbound properties? Project Funding: Are property taxes, other taxes going up to fund???
Allen Brown	11/1/2016	handwritten	East Option: I like the East option it seems more convenient and will have a better economic impact. West Option: OK not my favorite Comments: As far as parks effected. I would like to see bigger field houses with activity centers such as workout facilities, indoor basketball, etc. This will impact a lot of young community to have some thing positive. Also our parks should incorporate running and walking track. This will impact health and vitality of community residence.
Freda Madison	11/1/2016	handwritten	East Option: East option may be better. It is close to the 95th station. West: West option want to make sure park area & parking which brings in more traffice & people. Security would be necessary for the community. Also communities need to address, as far as, housing board up and abandon building. If the area is going to developed the housing structure that will remain should be developed and addressed as well. Thank you.
Adrienne R. Ancolin	11/1/2016	handwritten	West Option: Street closure and the direction of traffic through the neighborhood - loss of the alley at the corner by the park. Comments: The Wendell Smith Park should "NOT" have an enclosed fence that would stop the foot traffic at 99th street. That is the only opening for crossing by foot until 101st Street. Many people cross there and if its closed the walkers will find a way to make an opening. Will the street directions change? Will Eggleton still allow the crossing at 101st street? Property Displacements: Will this affect the property value or decrease it? Noise & Vibration: There is already vibrations from the RR that shake the foundation. Now there are 2 trains in same space. Parks: Park availability for neighborhood. Construction Impacts: Will 99th place loose the alley and become a dead end street not allowing you to turn around?

CTA Red Line Extension Project
Public and Agency Comments - Parks

Name	Date	Comment Type	Comment
Sandra L Munoz	11/1/2016	handwritten	East Option: The East option would displace more people. It would also permanently affect park space. I am also concerned about the visual and noise during construction. Comments: The location for the Town Hall meeting was not well thought out. An auditorium would have been better. I could not hear the speaker or see the screen that provided the visual impact of the project. There were some chairs setup in front of the screen and tables and chair behind them. It was like a church reception rahter than a public meeting people continued to talk during the presentation and continued to circulate around too much confusion. Also there was no public discussion of project. It seemed a situation were you could say you had a public forum without having people participate in an open disucssion. Property Displacements: Will people recieve financial assistance and help finding affordable housing? Neighborhoods & Communities: This project will displace a full block in my area. I wonder how much consider you consider the human factor (friends, family, neighbors) Safety & Security: What safety measures will be in place during construction? Construction Impacts: I am concerned about the mess it will cause, traffic, parking, construction vehicles and noise, the dust and dirt.
Betty Jones	11/1/2016	handwritten	East option: When wil you know for sure? Transportation: Very concern about street closing Property Displacements: Where will you store equipments? Noise & Vibration: O Hare aiport - Noise does impact Safety & Security: Always Hazardous Materials: Yes Parks: Need a new park Construction Impacts: Parking Project Funding: How much will the housing be value of?
Cheena Credit	11/1/2016	handwritten	East Option: Let's be honest there truly is no major difference between these two choices. West Option: Taking away of green space; homes on Eggleston directly facing the trains; increased traffic, pedestrian, car, et. Property value Comments: First, just so you know I grew up on W 102nd Place, my parent and their parents of grammar/high school friends are still there. 1. Despite studies done for noise & vibration, I still believe this will have a adverse effect on community. There is a difference between freight trains coming once a day and an elevated train running all day & night. Is it possible to provide residence with noise reduction windows or something. 2. This area cannot be compared to others, this is single family homes, not 2-4 flat apartments.
Gregory Walker Jr.	11/1/2016	handwritten	East Option: I don't like the East Option because an entire park is gone. West Option: Hoping this doesn't effect the Roseland Pumping station in any way. Comments: For 103rd, 107th, 111th, 115th, State St., Michigan Avenue, I would like to propose that all businesses or residential properties that are needing to move. I propose that they have an option to rebuild next to any space being bought by CTA. I would also like to suggest that at 115th there is plenty of mixed property. At 130th, I suggest that the trucks end in a loop, rather than a stub, that way you could have a more convenient turn around of trains. Also possibly asking NICTD to form a station there to attract riders, thus making it a "super station." Overall, I'm really excited that this extension is being sought out. I believe it not only help southside residents, but also people from Indiana and south suburbs get downtown and home. Transportation: How would the 34 South Michigan run? Honestly I hope maybe the hours change; but I hope it operates from 95th to Altgeld. Impacts to Historic Resources: Hope this doesn't effect the Roseland Pumping station. Safety & Security: I would like to see all stations with a CTA worker two (2) armed security officers for atleast the first 2 years.

CTA Red Line Extension Project
Public and Agency Comments - Parks

Name	Date	Comment Type	Comment
Dr. Carmen Palmer & Mrs. Sharon Banks Pincham	11/1/2016	handwritten	West Option: 116th & Michigan's impact on Kids off the Block (KOB) Comments: The impact on the schools and the school population. Land Use and Economic Development: Need a positive draw of businesses, (non-fast foods) black owned well represented Neighborhoods & Communities: Inclusion in decision making re business choices & community benefits agreement Visual Impacts: A lot of green space and a balance out to the hard concrete - art inclusion; flowers, trees, and representative expressions of the community Noise & Vibration: at a minimum Impacts to Historic Resources: None Safety & Security: Bicycling & beat officers at the city level not SSAs Hazardous Materials: NONE! Get rid of cell phone towers Wetlands: Maintained Parks: Intermingled & well let/attractive planters, waste baskets, bike racks Project Funding: TIF Momes SBA presense from on set to the end Other: Schools protected and assessible
Constance Carroll	11/1/2016	handwritten	East Option: How far east of the railroad? Will it go both ways (East & West) for parking etc? (How far East - West?) West Option: How far west from the railroad? Comments: Will there be parks, parking and other business' to improve the community? Will employment be available for residents? If so, how can we apply? It seems that the project is well on the way. When will it start and when is the estimated time of completion? Property Displacements: If you go West of the railway how far will you go from 111th & Eggleston south of 111th street? Safety & Security: Since there will be more people traveling through the neighborhood will there be additional policing and security? Hazardous Materials: Will we be informed of hazardus materials being used?
Julie A Pate	11/1/2016	handwritten	East Option: My concern about either side is my foundation noise control dirt and dust noise barriers who will pay for damages to my home. West Option: Concerns are the same want to be comfortable in my home Comments: I have no problem with improvement I think it's a good thing may improve property value, love the way the park will look. Visual Impacts, Noise & Vibration, Hazardous Materials, Construction Impacts - YES
Macy Johnson	11/1/2016	handwritten	East Option: Wendell Smith Park and too many homes will be affected. West Option: There is a spacious parkway which is more feasible than the limited space on the East option. Comments: Has CTA considered placing more buses on Michigan Avenue. There could be several express buses extending to 130th Street. Bishop Ford is an option and also Halsted Street. Fewer homes and families will be displaced. Dan Ryan is another option. Property Displacements: A huge number of homes will be destroyed. Noise & Vibration: This is already prevelant because of the present railroad. Parks: Wendell Smith Park will be affected.
Cebell Huey	11/1/2016	Court Reporter	I live right on 101st Street at the railroad track between Princeton and Eggleston. I'm preferably not coming on the east side of the street at this point. There's a park on the west side...There's a park on the west side of the street. Nobody is living — nobody is there that whole entire park. I've been there ever sice 1965. Nobody uses that park. Even people don't walk the dogs over there...Now that -- it starts at 99th and Eggleston and goes to 103rd and Eggleston. Then beyond 103rd and Eggleston all the way down the side of that tracks...it's hardly nothing that's really worth anything all down that, all down that track to 115th. Now that is a good distance that CTA can use, you know. And then whatever they have to do from 115th then on out to 130th.

CTA Red Line Extension Project
Public and Agency Comments - Parks

Name	Date	Comment Type	Comment
Doris White	12/5/2016	handwritten	East Option: Will this option affect the Bishop Ford Expressway for those who drive? West Option: Why is this option going to cause residents to have to move that live between 99th St and 119th St on this option? Comments: What if that homeowner does not want to relocate, are they going to be mae to move or other alternatives to them having to move? I pray that all of this falls into place for those who use public transportation and that whoever makes decisions in regards to this project will be wise in the decisions of this project. Transportation: When buses have to be rerouted due to construction why are you not sure how long it will take. Land Use: Will this be a good area, where you are considering? Displacements: If a person is not able to be displaced, what are your options for them? Neighborhoods & Communities: Do you think they would agree, despite the displacing of homes? Visual: Will it be handicap accessible e.g. elevators and escalators in good working condition. Noise: I am sure it will not be loud, as if it was a freight train coming through. Historic: Will they have to be moved and why touch historical sites? Safety & Security: Will there be Police Officers at these new stops along with canine dogs? Hazardous Materials: Will this Redline extension project be around factories with hazardous materials? Wetlands: What do you mean by wetlands? Parks: Will it be closer to parks where we can get off and take our children to the parks? Construction Impacts: What effect will it have on those who drive through the area where you want to build? Project Funding: How will it be funded and by who? Other: Why have you waited all this time to do this particular line now, as other lines have been extended or new lines brought in?
Lindy Nelson, U.S. Department of the Interior	11/30/2016	letter	*DOI entire text available in full comments.* Based on discussions with FTA and coordination with the Chicago Park District (CPD) in 2015 on park impacts and proposed mitigation measures for this project, a Section 4(f) preliminary "*de minimis*" finding was proposed for park impacts resulting from this project after mitigation proposed. A *de minimis* impact for parks, recreation areas, or wildlife/waterfowl areas is defined in 23 CFR § 774.17 as one that is determined to not adversely affect the features, attributes, or activities qualifying a property for protection under Section 4(f). The Department of the Interior does not comment on *de minimi* s determinations. The Department concurs with the determination that all measures to minimize harm have been employed concerning the resources subject to 4(f) use.

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Michael P. Kelly

City of Chicago
Rahm Emanuel
Mayor

2014 National
Gold Medal Winner
for Excellence in Park and
Recreation Management

September 21, 2017

Mr. Tony Greep, Community Planner
Federal Transit Administration, Region 5
200 West Adams Street, Suite 320
Chicago, IL 60606

RE: Chicago Transit Authority Red Line Extension Project
Park Impacts Coordination, Public Comments, and
Preliminary Section 4(f) Determination

Dear Mr. Greep:

The Chicago Park District is in receipt of a letter dated August 2, 2017 regarding the Federal Transit Administration's (FTA) intention to proceed with a Section 4(f) de minimis finding for parks as documented in the Red Line Extension (RLE) Draft EIS.

The Chicago Park District has reviewed the public comments included in the letter and concur with FTA's finding that based on the proposed mitigation measures, including the replacement of park lands with lands of reasonably equivalent usefulness and location, the RLE project will not adversely affect park activities, features or attributes. We concur with Section 4(f) de minimis finding for parks.

We look forward to a continued successful collaboration. Should you have any additional questions, please do not hesitate to contact us.

Sincerely,

Heather Gleason
Director of Planning and Construction

HG/sw

cc: Doreen O'Donnell, Research and Planning Manger
Sarah White, Lakefront Planning Coordinator

Chicago Park District Coordination Meeting

August 25, 2021

Meeting Minutes

Project	**Red Line Extension**
Meeting Purpose:	**Chicago Park District Coordination**
Date:	**Wednesday, August 25, 2021**
Location:	**Virtual**
Time:	**11:00 AM**
Chairperson:	**Marlise Fratinardo**

Attendees: (See Attached copy of Sign-in-Sheet)

Item No.	*Date*	*Item Description*	*Responsibility/ Status*	*Due/Closed Date*
1.00	**Project Update/Goal for the Meeting**			
1.01	8/25/21	The goals for the meeting are to discuss: The priority of the replacement parks; Confirm mitigation for 'shadow effects' of the structure; Public Involvement; Wendell Smith Park; and Final EIS documentation.		
1.02	8/25/21	CTA discussed that the final mitigation for the Fernwood Parkway impacts are important to discuss in the draft FEIS/ROD.		
2.00	**Discussion of Priority Sites**			
2.01	8/25/21	The property identified as CPD priority #1 site (parcels by the Little Calumet River) should no longer be considered, as the owner is not willing to sell. It has been removed from the list. The CTA is interested to know if CPD has communicated with other property owners for the other sites listed as CPD priorities. The CPD has not reached out to any other property owners.		
2.02	8/25/21	PEC summarized the replacement parks, the number of parcels and their ownership. Information was gathered from the Cook County Assessor's website, from the City of Chicago on parcels the City currently own, and from the Cook County Land Bank data. The total combined acreage is important to assess the available area to reach the minimum replacement park acreage.		
2.03	8/25/21	CPD is looking for some pocket park sites along the Major Taylor Trail (MTT) in addition to sites in the Washington Heights community. There are three sites in Washington Heights, all three of these sites are located close to each other along 102nd Street, two of the sites are targeted by the County Land Bank. Two of the sites have parcels that are targeted by the Cook County Land Bank. The sites along MTT have a mix of ownership.		
2.04	8/25/21	The next steps are for CTA to begin reaching out to the property owners to determine their willingness to sell. CTA will continue to work on obtaining property details. If the owner is willing to sell, CTA will start to conduct the Ph I ESA for the property. CPD requested PEC rate the sites for difficulty to acquire and feasibility of location. It was noted that CTA would not be able to purchase property until after the FEIS/ROD is issued in Summer 2022.		
3.00	**Mitigation for Shadow Effect**			
3.01	8/25/21	There was discussion on the amount of land that would be transferred to mitigate impacts on Fernwood Parkway and a figure was presented. CPD felt that the project would be impacting all of the land in Fernwood Parkway not only the shadow of the elevated structure which is approx. 1.9 acres (2 acres). The total park area between 99th Street and 103rd Street is 4.5 acres, which will need to be replaced at a one-for-one ratio and transferred to CPD.		

3.02	8/25/21	CPD mentioned another possible park site near 105th Street and Vincennes Avenue. There are title issues that the project may be able to resolve and the site is approx. 1.5 acres. CPD will investigate more information on the location and will consult with their attorney.		
4.00	**Public Involvement Needs**			
4.01	8/25/21	For the RLE Project, there will be an upcoming public hearing as part of the Supplemental EA. The public hearing is targeted for January 2022. The Supplemental EA document itself does not discuss impacts to Fernwood Parkway; however, there is an opportunity to present updates to project elements outside of the Supplemental EA at the public hearing. This could be the opportunity to update the public on the mitigation measures for Fernwood Parkway.		
4.02	8/25/21	CPD indicated that the Supplemental EA public hearing would be sufficient to meet their public outreach needs and that a separate CPD public meeting would not be needed.		
5.00	**Wendell Smith Park**			
5.01	8/25/21	The Wendell Smith Park footprint as discussed in the Draft EIS did not show the 99th Street right-of-way as park use. Based on the 15% design plans, there remain temporary impacts to Wendell Smith Park. A figure was presented which showed the location of a permanent pier and a temporary pier in the vicinity of Wendell Smith Park. The temporary pier is within the 99th Street right-of-way and the permanent pier is in the I-57 right-of-way. There would be a need for a construction easement to get equipment into the area of Wendell Smith Park. CTA does not anticipate permanent impacts to Wendell Smith Park. The construction impacts would require the removal of trees to bring in equipment and ground disturbance due to construction equipment. Trees would be replaced and any disturbed areas would be restored. The impact to Wendell Smith Park remains a temporary construction easement. The impacts is anticipated to last a few months.		
5.02	8/25/21	The CPD indicated that the CTA would need to obtain a permit for construction activities within Wendell Smith Park. The permit will dictate that restoration of any disturbed areas is required. The permit takes about 3 weeks to obtain the permit and should be obtained closer to the start of construction. CPD asked how long the construction activities would last within Wendell Smit Park. CTA indicated that it would be approximately 3 to 4 months based on the information that is known at this time.		
6.00	**Next Steps**			
6.01	8/25/21	CTA received and will review the draft mitigation/*de minimis* letter from CPD. CTA will review and provide an updated letter after the meeting.		
7.00	**Action Items**			
7.01	8/25/21	PEC will prioritize the sites and review the mitigation letter. CPD will obtain more information about the parcel near 105th and Vincennes. CTA will provide CPD the summary table and figures from the meeting.		
7.02	8/25/21	The next meeting will be scheduled the week of Labor Day.		
Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days, otherwise minutes will be considered final.				

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Chicago Park District Coordination

MEETING DATE: Wednesday, August 25, 2021

MEETING TIME: 11:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION:

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
1	Y	Marlise Fratinardo	CTA - Planning	Senior Project Manager	mfratinardo@transitchicago.com	14124
2	Y	Joanna Littrell	PMC - HNTB	Program Manager	jlittrell.hntb@transitchicago.com	14223
3	Y	Patrick Dunn	PMC - CDM-Smith	NEPA Lead	PDunn.cdm@transitchicago.com	14243
4	Y	Grace Dysico	PEC - TranSystems	NEPA Lead	gldysico@transystems.com	(847) 407-5247
5	Y	Robin Martel	PEC - Wight & Company	NEPA Specialist	rmartel@wightco.com	(312) 261-5730
6	Y	London Walther	CPD		london.walther@chicagoparkdistrict.com	
7	Y	Doreen O'Donnell	CPD		doreen.o'donnell@chicagoparkdistrict.com	
8	Y	Sonali Tandon	CTA - Planning	Senior Manager - Strategic Planning, Rail	standon@transitchiago.com	
9	Y	Leah Mooney	CTA - Planning	Director of Strategic Planning and Policy	lmooney@transitchicago.com	
10	Y	Patty King	PEC - Wight & Company	NEPA Specialist	pking@wightco.com	
11	Y	Gustavo Yanez	PEC - CERA	Document Control	gyanez@cerasolutions.com	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Chicago Park District Coordination

MEETING DATE: Wednesday, August 25, 2021

MEETING TIME: 11:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION:

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
12						
13						
14						
15						
16						
17						
18						
19						
20						

NOTE: All individuals listed have been invited to the meeting. Only those indicated were in attendance.

Chicago Transit Authority

Red Line Extension
Chicago Park District (CPD)
Park Replacement Coordination Meeting

Agenda
August 25, 2021
Remote Meeting
11:00 to 12:00 CT

Invitees:

Sarah White/CPD
Doreen O'Donnell/CPD
London Walther/CPD
Leah Mooney/CTA – Planning
Marlise Fratinardo/CTA – Planning
Sonali Tandon/CTA – Planning
Joanna Littrell/PMC – HNTB
Patrick Dunn/PMC – CDM Smith
Joseph Yesbeck/PEC – TY Lin
Grace Dysico/NEPA-PEC – TranSystems
Robin Martel/NEPA-PEC – Wight
Patty King/NEPA-PEC - Wight
Gustavo Yanez/NEPA-PEC – Cera

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1) Introductions

2) Project Update/Goal for the Meeting
   - Discuss the priority for the replacement parks
   - Confirm mitigation for "shadow effects" of the structure
   - Public involvement
   - Wendell Smith Park

3) Discussion of Priority Sites
   - Number of parcels/property ownership
   - Proximity factor
   - Next steps

4) Mitigation for Shadow Effect
   - Consistent with approach presented in Draft EIS

5) Public Involvement Needs

6) Wendell Smith Park
   - Verify/confirm understanding of ownership

7) Next Steps
   - Update on mitigation and *de minimis* letter (target early to mid-September for completion)
   - CTA to start reaching out to property owners
   - Conduct Phase I and II ESAs
   - Continue Section 4(f) coordination with Chicago Park District and FTA
   - Further develop documentation/coordination needs for the Final EIS/ROD
   - Schedule next meeting

8) Action Items

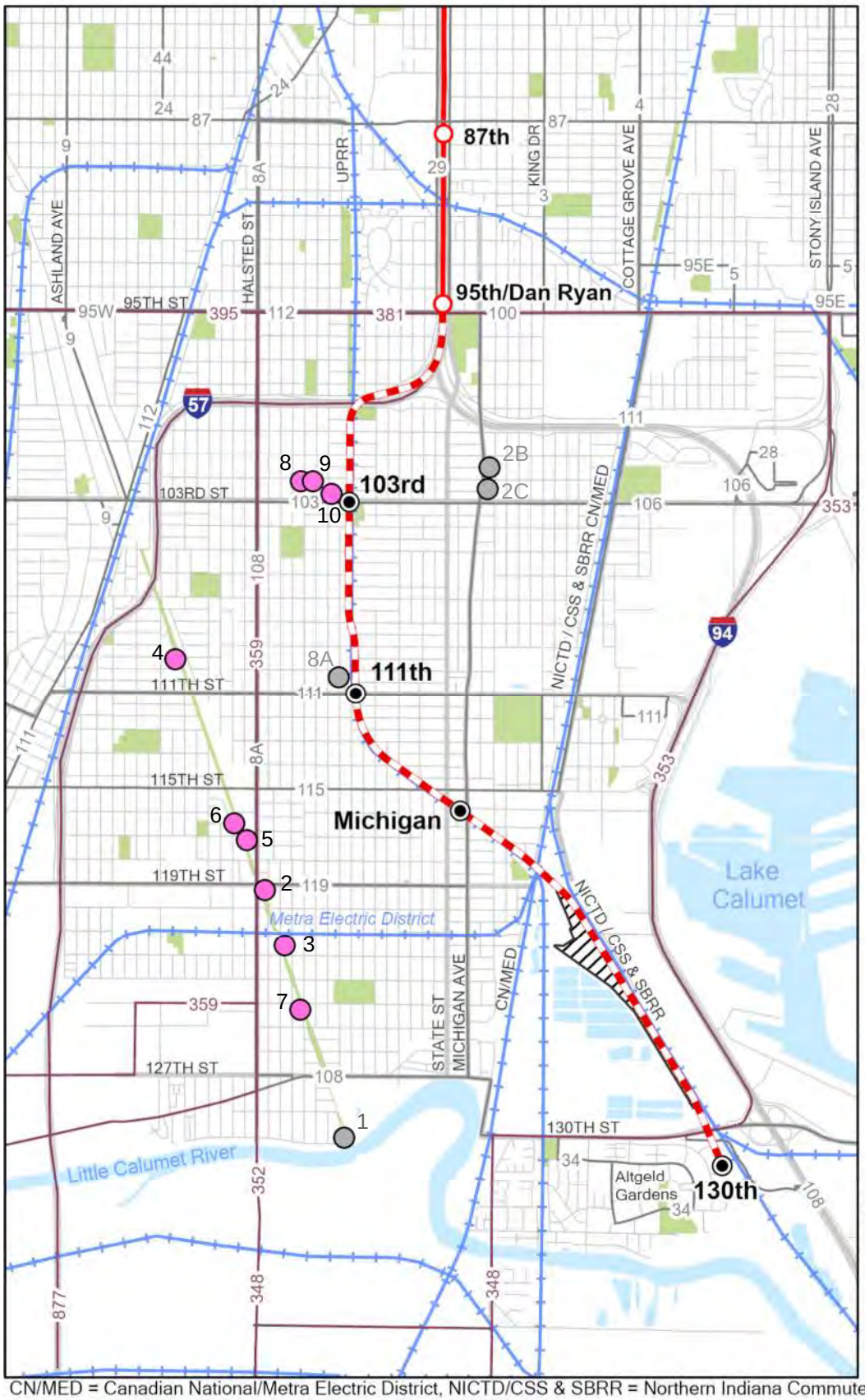

Inset

Legend

- Priority Site
- Site No Longer Being Considered
- Preferred Alignment
- Proposed Rail Yard
- Proposed Rail Station
- Existing CTA Red Line
- Existing CTA Station
- Railroad
- 34 CTA Bus
- 359 Pace Bus
- Water Bodies
- Parks

Scale

0 0.5 1

Miles

1 inch = 5,000 feet

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Parcel(s) Location	Acreage	Priority Rating	Location	# of Parcels	# of Parcel Owners	Notes
129th Place and Eggleston Avenue	1.64	1	Along Major Taylor Trail	12	2	Private owners
119th Street and Emerald Avenue	0.88	2	Along Major Taylor Trail	2	2	Private owners - Utility owners (NS and ComED)
122nd Street and Union Avenue	0.58	3	Along Major Taylor Trail	8	2	City of Chicago owns 5 parcels; parcel to the north on env. Database. CCLBA - acquisition in process for the 4 parcels to the north.
110th Street and Aberdeen Street	0.24	4	Along Major Taylor Trail	2	2	City of Chicago owns 1 parcel
117th Street and Halsted Street	0.30	5	Along Major Taylor Trail	1	1	City of Chicago owns parcel; adjacent to environmental site
116th Place and Peoria Street	0.25	6	Along Major Taylor Trail	2	2	Private owners
124th Street and Lowe Avenue	0.39	7	Along Major Taylor Trail	8	8	Private owners*
102nd Street and Wallace	0.27	8	Within Washington Heights	2	2	Private owners - CCLBA Targets
102nd Street and Parnell Avenue	0.32	9	Within Washington Heights	4	3	City of Chicago owns 2 parcels. One private property CCLBA target for delinquent taxes
102nd Place and Normal Avenue	0.25	10	Within Washington Heights	2	2	Private owners - CCLBA Targets
Totals	3.48			31	24	

Note: * indicates cannot tell ownership completely because owner is listed as Taxpayer of

Parcel(s) Location	Acreage	Priority Rating
129th Place and Eggleston Avenue	1.65	1
119th Street and Emerald Avenue	0.85	2
122nd Street and Union Avenue	0.57	3
110th Street and Aberdeen Street	0.27	4
117th Street and Halsted Street	0.3	5
116th Place and Peoria Street	0.24	6
124th Street and Lowe Avenue	0.4	7

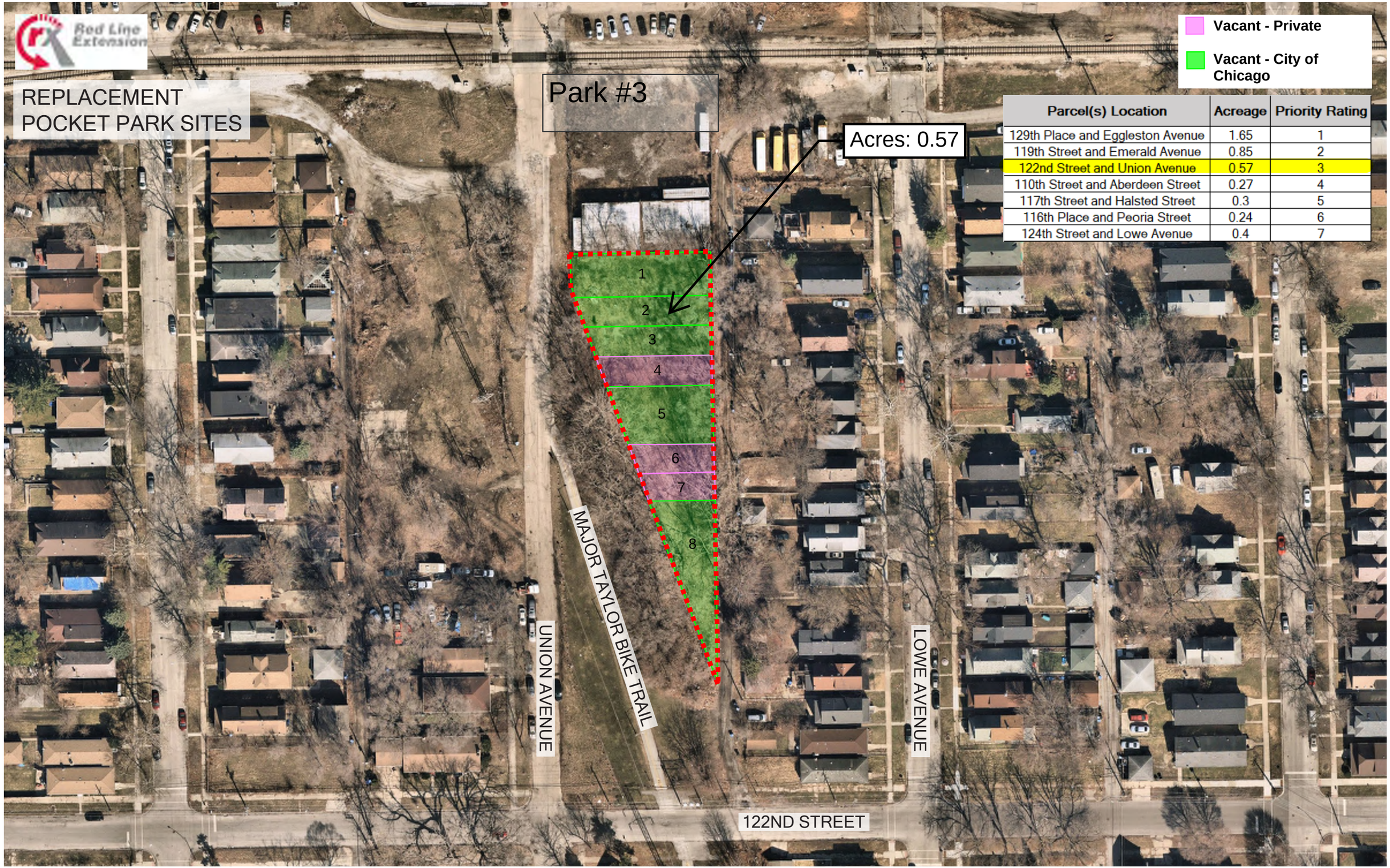

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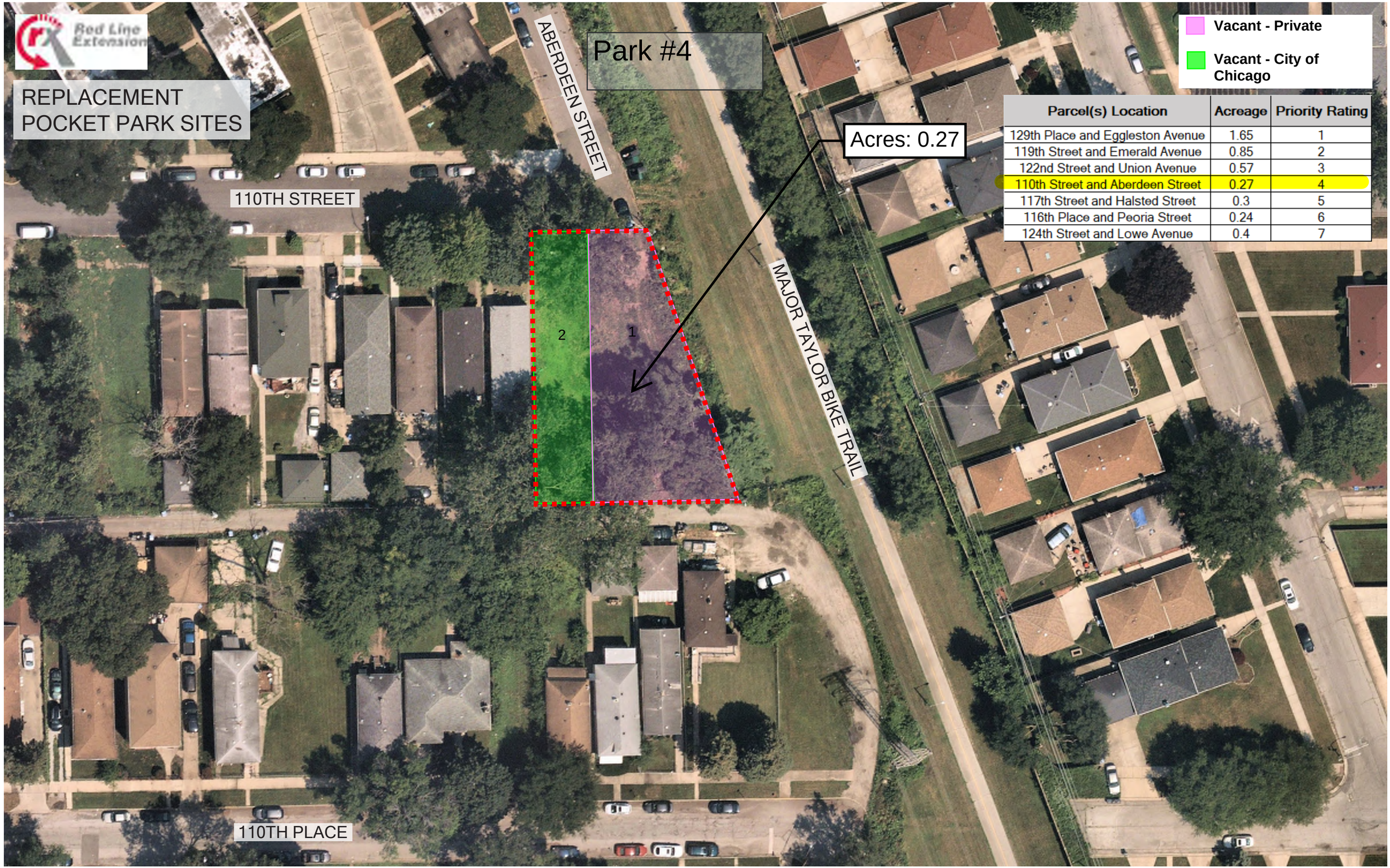

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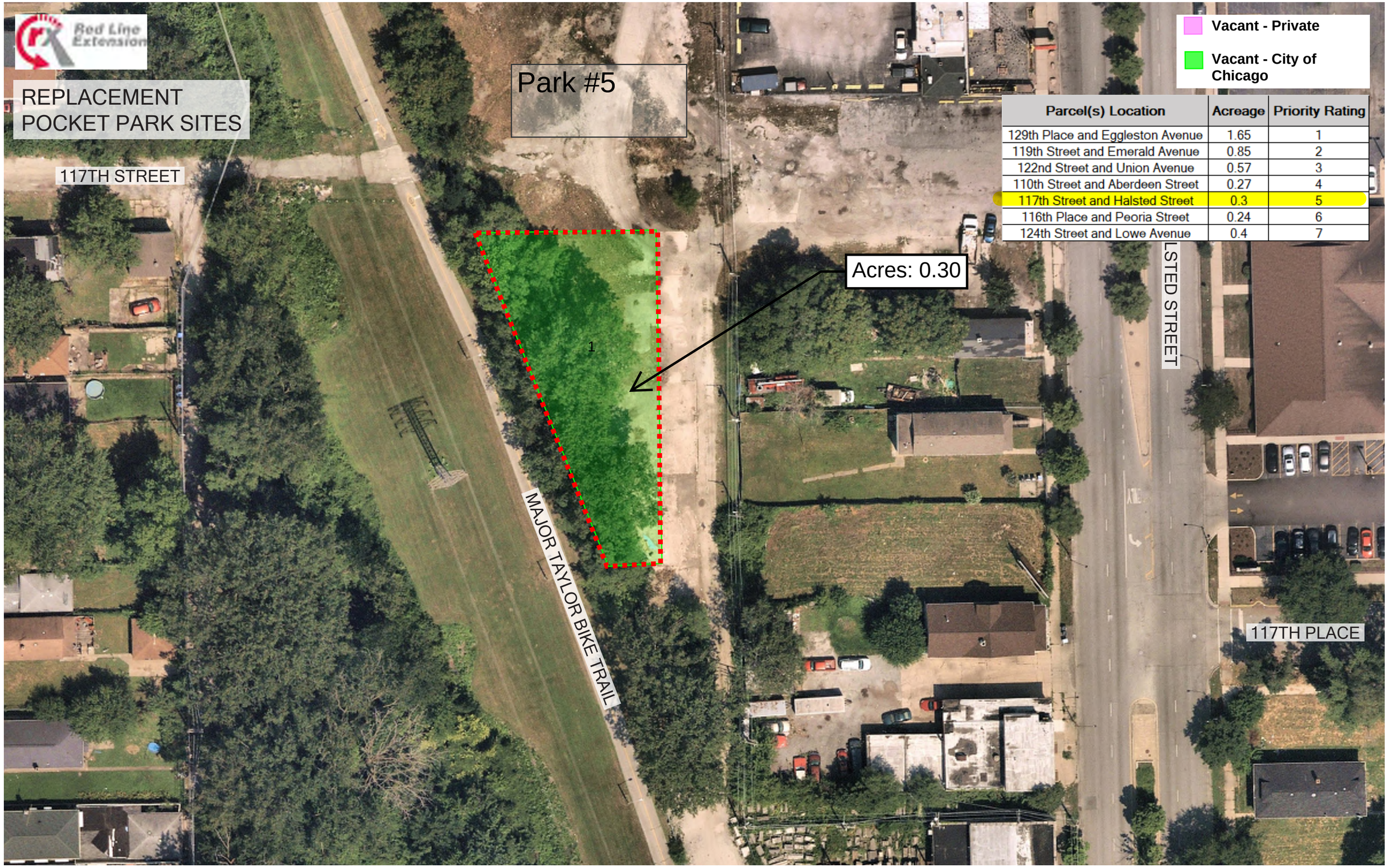

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Red Line Extension
REPLACEMENT POCKET PARK SITES
Park #8
Vacant - Private
Vacant - City of Chicago
102ND STREET
Site 26/#8
Acres: 0.27
1
2
WALLACE STREET

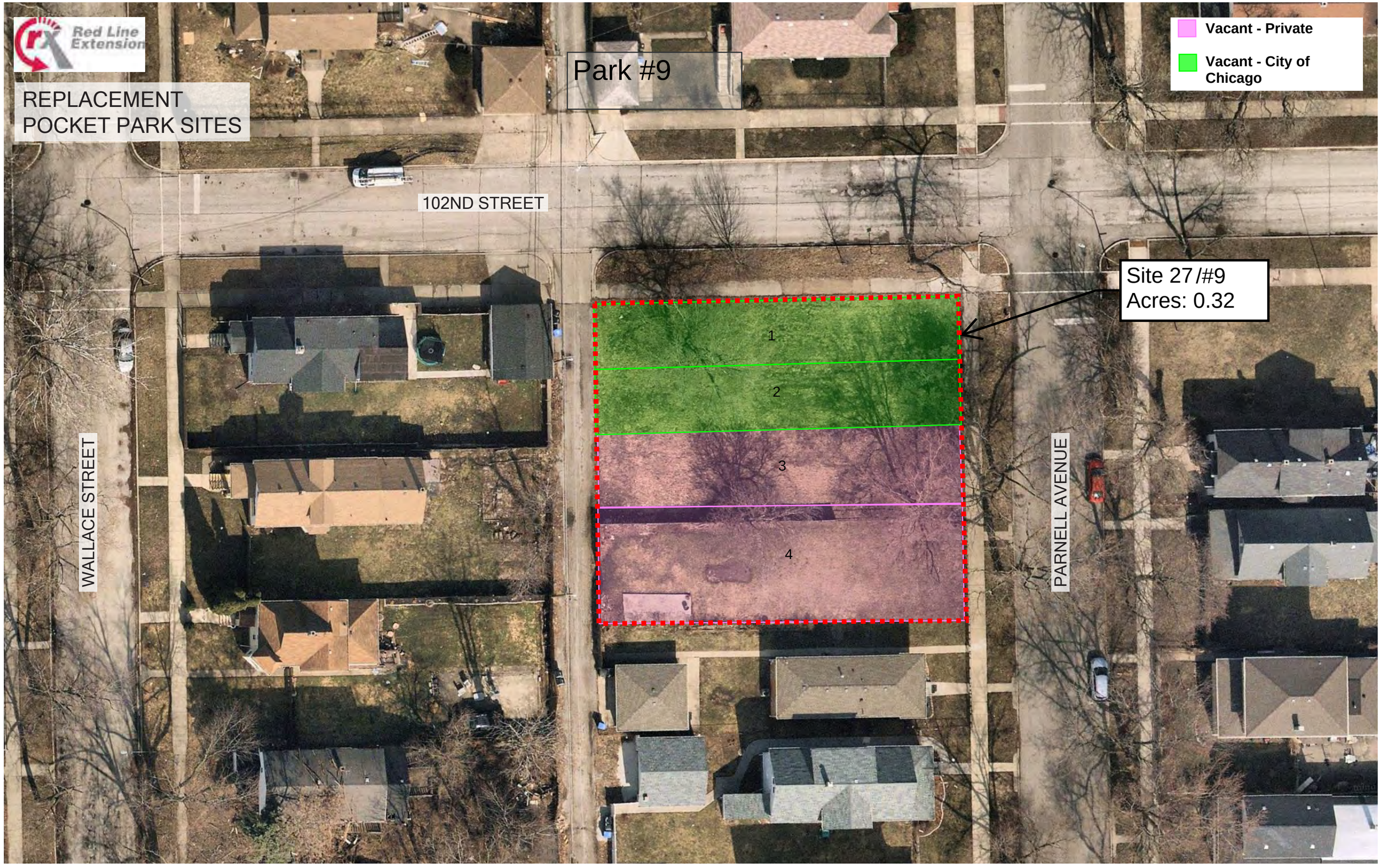
Red Line Extension
REPLACEMENT POCKET PARK SITES
Park #9
Vacant - Private
Vacant - City of Chicago
102ND STREET
WALLACE STREET
PARNELL AVENUE
Site 27 /#9
Acres: 0.32
1
2
3
4

Red Line Extension
REPLACEMENT POCKET PARK SITES
Park #10
Vacant - Private
Vacant - City of Chicago
102ND PLACE
Site 28 /#10
Acres: 0.25
1
2
NORMAL AVENUE

REPLACEMENT POCKET PARK SITES

Based on communication with CTA and Chicago Park District on 8/16/2021, this site has been removed from the list of options for replacement park.

"Openlands checked with the owner of 129th and Eggleston and she is still unwilling to sell so remove that property from the list."

- Vacant - Private
- Vacant - City of Chicago

Parcel(s) Location	Acreage	Priority Rating
129th Place and Eggleston Avenue	1.65	1
119th Street and Emerald Avenue	0.85	2
122nd Street and Union Avenue	0.57	3
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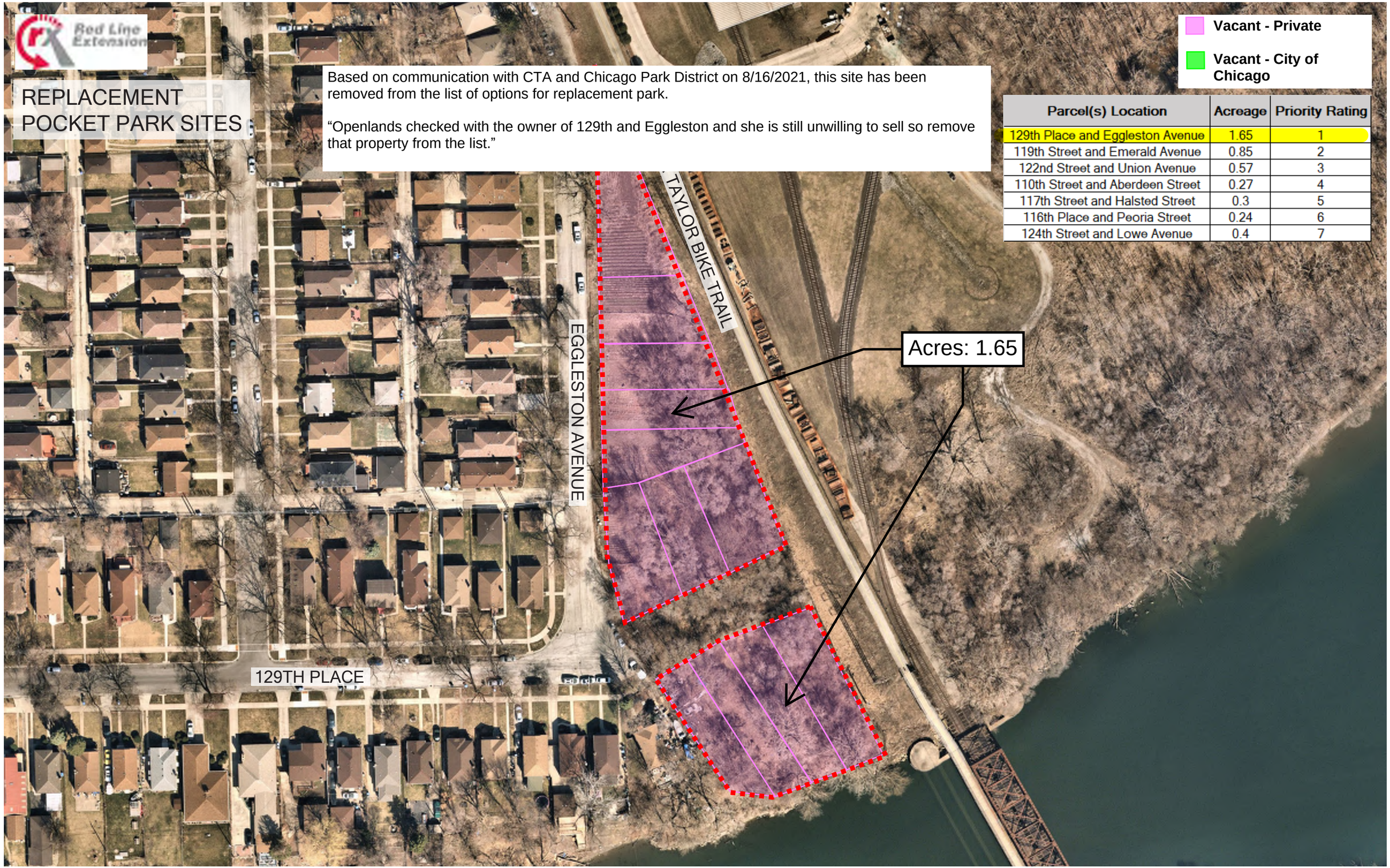

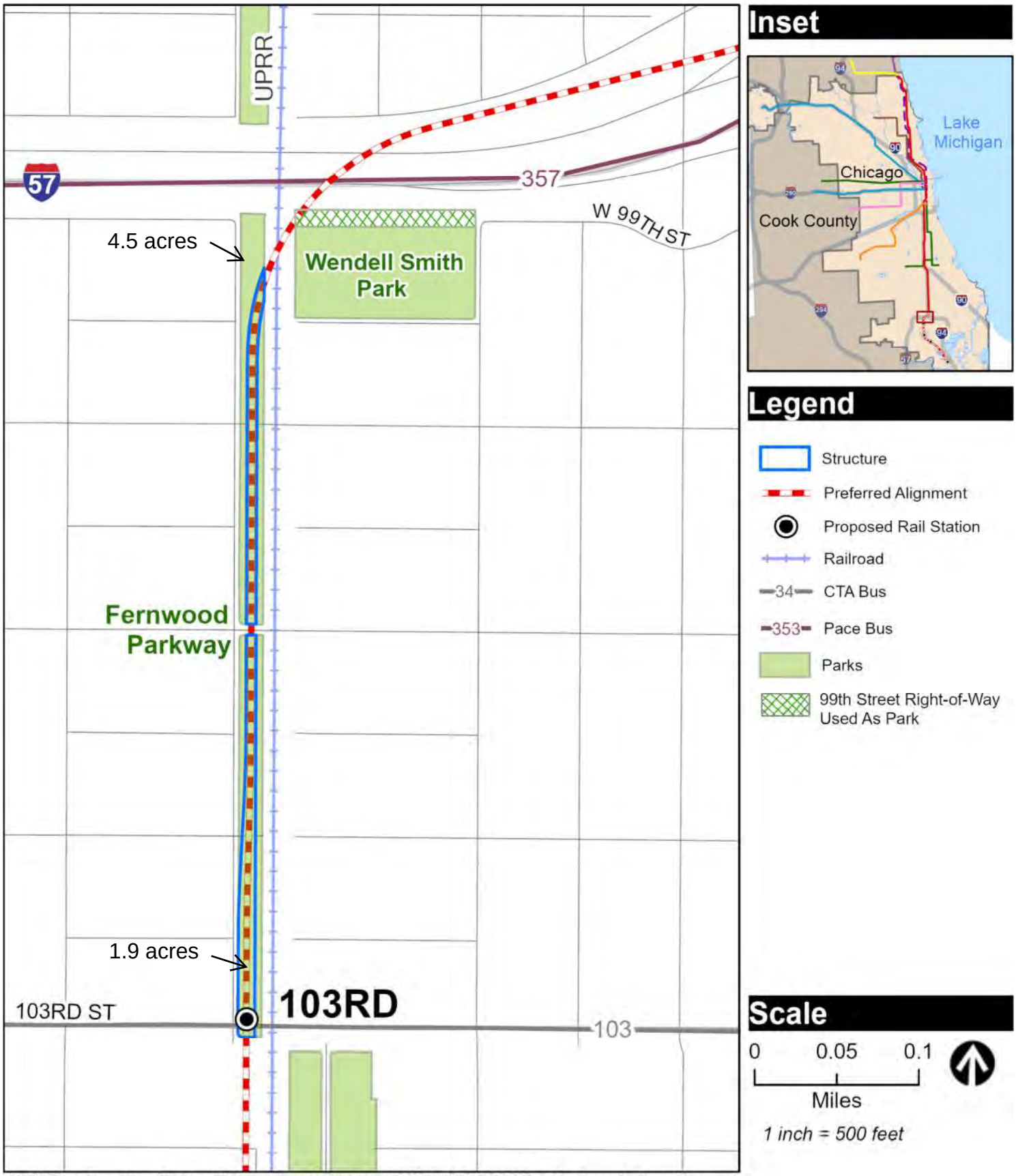

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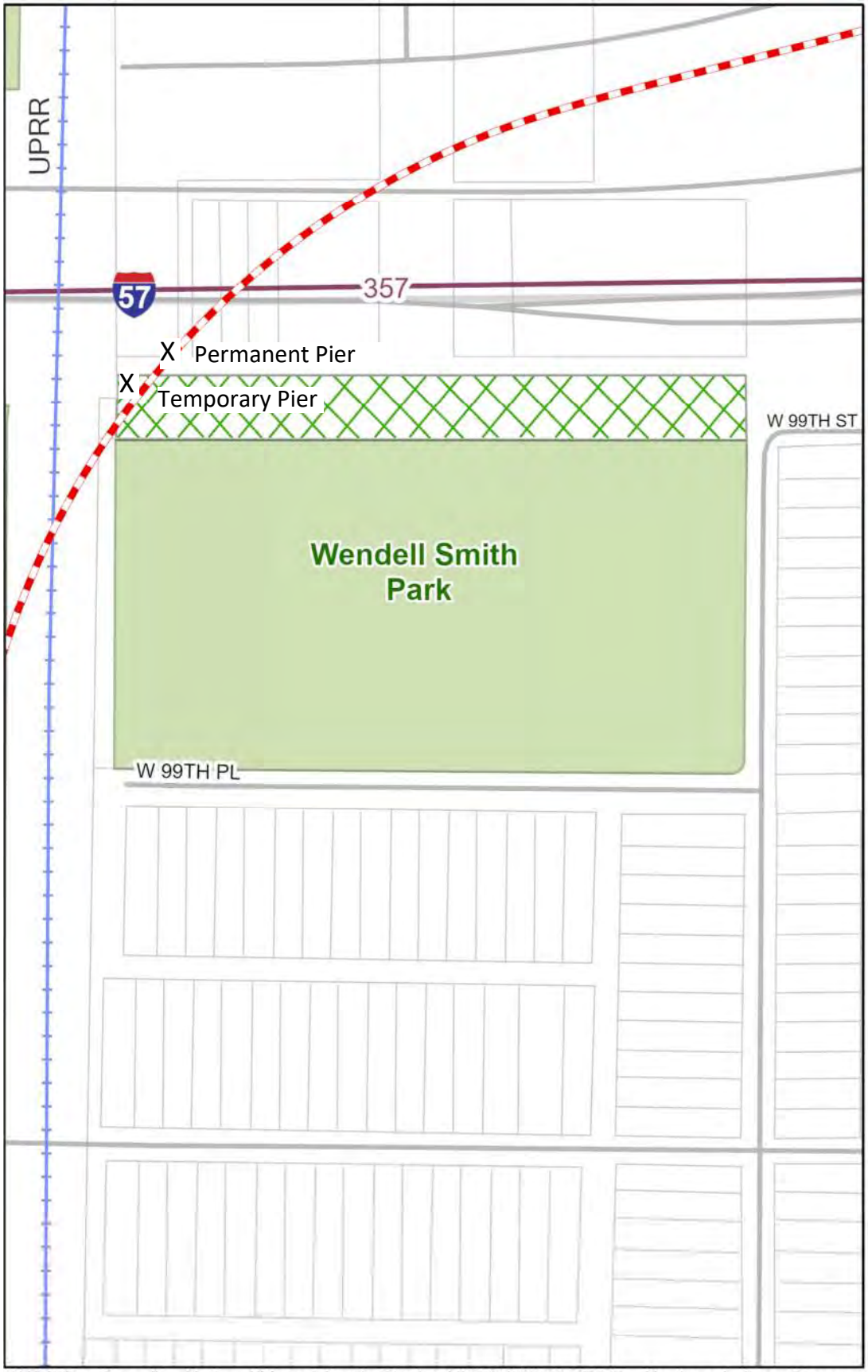

Inset

Legend

- Preferred Alignment
- Railroad
- 353 Pace Bus
- Parks
- 99th Street Right-of-Way Used As Park

Scale

0 0.015 0.03

Miles

1 inch = 80 feet

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Chicago Park District Coordination Meeting

September 14, 2021

Meeting Minutes

Project **Red Line Extension**
Meeting Purpose: **Chicago Park District Coordination**
Date: **Tuesday, September 14, 2021**
Location: **Virtual**
Time: **9:30 AM**

Chairperson: **Marlise Fratinardo**

Attendees: (See Attached copy of Sign-in-Sheet)

Item No.	*Date*	*Item Description*	*Responsibility/ Status*	*Due/Closed Date*
1.00	**Project Update/Goal of the Meeting**			
1.01	9/14/21	CTA provided an update on parcel ownership for sites identified as possible replacement pocket parks. CTA was also looking for any updates that the Chicago Park District may have on the Vincennes/105th Street parcel. CTA also wanted to follow up on the Chicago Park District's update to the *de minimis* letter to be used in the Final EIS for the RLE Project.		
2.00	**Priority Sites**			
2.01	9/14/21	CTA reviewed each of the priority sites and "reassigned" a priority number based on property ownership and site access for a park. CTA provided an updated spreadsheet and map showing the new priorities. There are 3 sites within Washington Heights and 7 along the Major Taylor Trail. CTA indicated that the priority order may change depending on the parcel owners willingness to sell their property to the CTA.		
2.02	9/14/21	The CTA asked the Chicago Park District if they had reached out to any of the other parcel owners. The Chicago Park District indicated that they had only reached out to the owner of the property adjacent to the Little Calumet River. This owner is not willing to sell and the site is no longer under consideration.		
2.03	9/14/21	CTA indicated that they would start to reach out to property owners to assess their willingness to sell to CTA.		
3.00	**Update on Vincennes/105th Street**			
3.01	9/14/21	CTA asked if the Chicago Park District was able to find out any new information regarding the parcel of property ("park") that the Park District is currently maintaining near Vincennes and 105th Street. The Chicago Park District has not been able to obtain any new information on the parcel. The Chicago Park District will continue to reach out to their attorney to get any available information on the parcel.		
3.02	9/14/21	CTA discussed the potential to vacate the 106th Street ROW east of Throop Street to provide a direct connection from the park to Major Taylor Trail. CTA reviewed the parcels and shared a basic map showing the parcels between the park and Major Taylor Trail to identify potential connection points and the potential for larger park area closer to the trail.		
4.00	**Mitigation and *de minimis* letter**			
4.01	9/14/21	CTA reviewed the draft mitigation and *de minimis* letter provided by the Chicago Park District and made some revisions, the letter was returned to the Chicago Park District yesterday (9/13/21).		

4.02	9/14/21	CTA asked the Chicago Park District to clarify the meaning of "fully developed replacement property" and what is meant by "the replacement park sites are to include a mix of passive and recreational space". The Park District indicated that the replacement parks should match the type of use of the park that is being impacted. Since Fernwood Parkway is a passive open space then the replacement park should also be a passive open space. The Chicago Park District agreed that the language in the *de minimis* letter could be modified to reflect their definition of passive open space.		
5.00	**Next Steps**			
5.01	9/14/21	The Chicago Park District will revise the *de minimis* letter and reissue the letter to the CTA by the end of the month.	9/30/21	
5.02	9/14/21	The CTA will start to reach out to the parcel owners to determine their willingness to sell their property.		
5.03	9/14/21	Based on an owners willingness to sell, the CTA will conduct Phase I and Phase II ESAs on the parcels.		
5.04	9/14/21	CTA will continue to coordinate with the Chicago Park District and the FTA to provide updates on the replacement parks and prepare documentation for the Final EIS/ROD.		
7.00	**Action Items**			
7.01	9/14/21	CTA will reach out to property owners to determine their willingness to sell.		
Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days, otherwise minutes will be considered final.				

Chicago Transit Authority

Red Line Extension
Chicago Park District (CPD)
Park Replacement Coordination Meeting

Agenda
September 14, 2021
Remote Meeting
09:30 to 10:30 CT

Invitees:

Sarah White/CPD
Doreen O'Donnell/CPD
London Walther/CPD
Leah Mooney/CTA – Planning
Marlise Fratinardo/CTA – Planning
Sonali Tandon/CTA – Planning
Joanna Littrell/PMC – HNTB
Patrick Dunn/PMC – CDM Smith
Bob Gorski/PEC – TY Lin
Grace Dysico/NEPA-PEC – TranSystems
Robin Martel/NEPA-PEC – Wight
Patty King/NEPA-PEC - Wight
Gustavo Yanez/NEPA-PEC – Cera

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1) Project Update/Goal for the Meeting
   - Discuss the priority for the replacement parks
   - Discuss the Vincennes/105th Street parcel(s)
   - Mitigation and *de minimis* letter

2) Discussion of Priority Sites
   - Reviewed sites and have recommendations based on ownership/access
   - CTA will start to contact owners

3) CPD update on Vincennes/105th Street parcel(s)

4) Mitigation and *de minimis* letter

5) Next Steps
   - Mitigation and *de minimis* letter for Final EIS/ROD by 9/30/21
   - CTA to start reaching out to property owners
   - Conduct Phase I and II ESAs
   - Continue Section 4(f) coordination with Chicago Park District and FTA
   - Further develop documentation/coordination needs for the Final EIS/ROD

6) Action Items

25-17-120-012
25-17-120-011
25-17-120-010
25-17-120-009
25-17-120-008
25-17-120-007
25-17-120-006
25-17-120-005
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25-17-120-003
25-17-120-002
25-17-120-001
25-17-119-003
25-17-119-004
25-17-119-005
25-17-116-003
25-17-121-013
25-17-121-012
25-17-121-011
25-17-121-010
25-17-121-024
25-17-121-023
25-17-121-022
25-17-121-021
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25-17-121-002
25-17-121-003
25-17-121-004
25-17-121-005
25-17-121-006
25-17-121-007
25-17-121-008
25-17-121-009
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W 106TH ST
S GLENROY AVE
S MARTIN ST
25-17-123-001
W 106TH PL
25-17-122-029
25-17-122-028
25-17-122-027
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25-17-117-025
25-17-117-026
25-17-117-027
25-17-117-028
25-17-117-029
25-17-117-030
25-17-117-031
25-17-117-032
25-17-117-033
25-17-117-034
25-17-117-047
25-17-666-001
25-17-118-013
25-17-118-012
57
Cook Co
The best source for your PIN is your deed or tax bill, or other documents from the purchase of your home. Matches from this site are not guaranteed.

1 inch = 103 feet

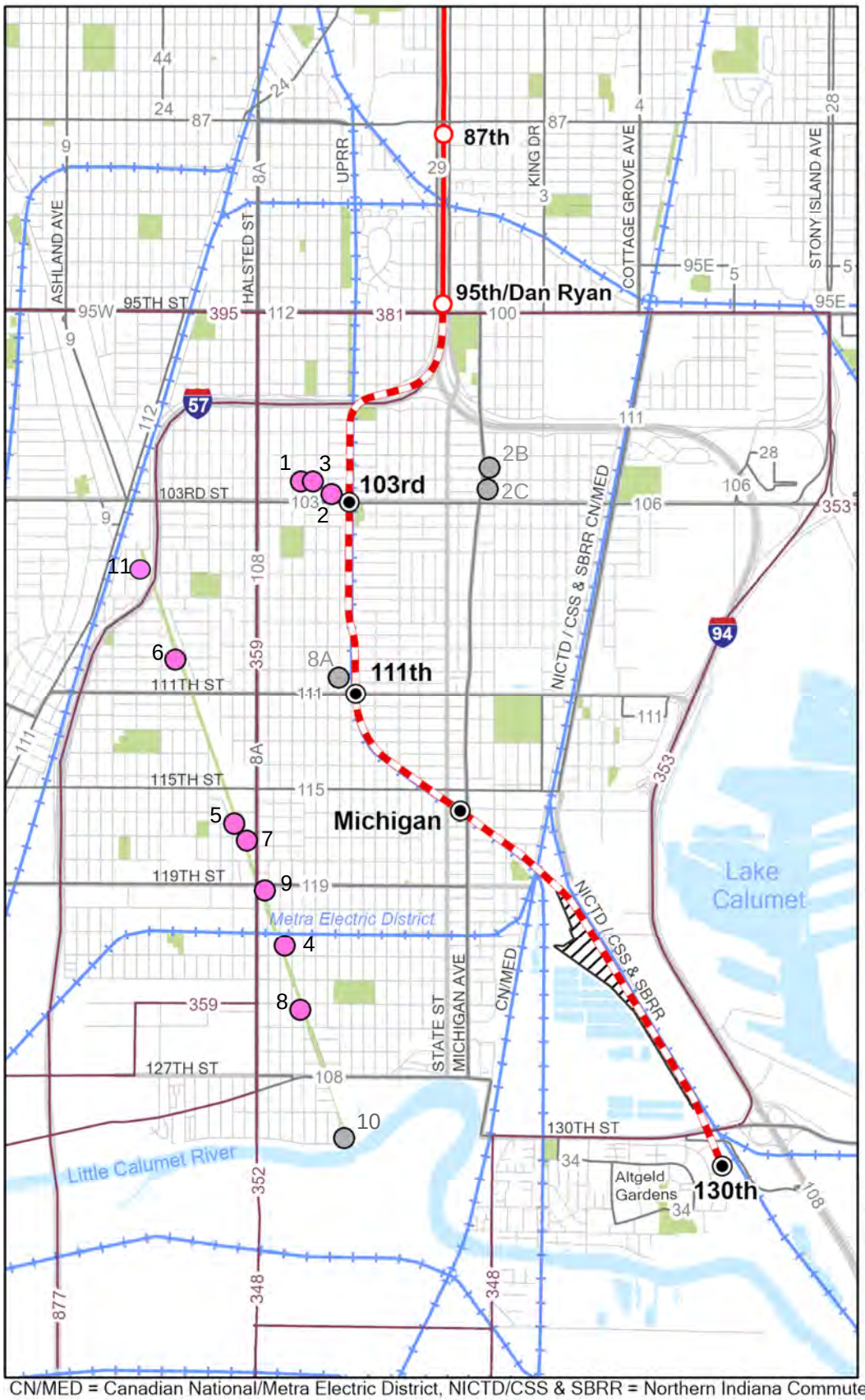

Inset

Legend

- Priority Site
- Site No Longer Being Considered
- Preferred Alignment
- Proposed Rail Yard
- Proposed Rail Station
- Existing CTA Red Line
- Existing CTA Station
- Railroad
- 34 CTA Bus
- 359 Pace Bus
- Water Bodies
- Parks

Note: Priority Sites revised based on known existing parcel ownership and accessibility and connections to surrounding neighborhoods

Scale

0 0.5 1

Miles

1 inch = 5,000 feet

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

Parcel(s) Location	Acreage	Priority Rating from Park District	Revised Numbering - (Based on property ownership)	Location	# of Parcels	# of Parcel Owners	Notes
129th Place and Eggleston Avenue	1.64	1	10	Along Major Taylor Trail	12	2	Private owners
119th Street and Emerald Avenue	0.88	2	9	Along Major Taylor Trail	2	2	Private owners - Utility owners (NS and ComED)
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102nd Street and Parnell Avenue	0.32	9	3	Within Washington Heights	4	3	City of Chicago owns 2 parcels. One private property CCLBA target for delinquent taxes
102nd Place and Normal Avenue	0.25	10	2	Within Washington Heights	2	2	Private owners - CCLBA Targets
105th Street and Vincennes Avenue	1.64	-	11	Along Major Taylor Trail	1	1	Private owner
Totals	5.12				32	25	

Note: * indicates cannot tell ownership completely because owner is listed as Taxpayer of

Chicago Park District Coordination Meeting

October 22, 2021

Meeting Minutes

Project	**Red Line Extension**
Meeting Purpose:	**Chicago Park District Coordination**
Date:	**Friday, October 22, 2021**
Location:	**Virtual**
Time:	**10:00 AM**
Chairperson:	**Grace Dysico**

Attendees: (See Attached copy of Sign-in-Sheet)

Item No.	*Date*	*Item Description*	*Responsibility/ Status*	*Due/Closed Date*
1.00	**Replacement Park Sites**			
1.01	10/22/21	PEC completed field visits and took photos of each site that have been identified as potential replacement parks. PEC reviewed each site, the photos, and viability of each location. All sites were determined to be good park sites and were recommended to continue the outreach to the property owners.		
2.00	**Update on Vincennes/105th Street Parcels**			
2.01	10/22/21	PEC presented a map of the parcels near the Vincennes/105th Street park site. There are several parcels that could make up a potential park site, there are options for the desired size of the park area and how many parcels could be combined to create a larger site. Parcel #2 is privately owned and there is a vacant house on the property. There are no other buildings on the other parcels.		
2.02	10/22/21	PEC noted there could be additional parcels north of Parcel #2. CPD noted they did not want any park area developments north of 105th Street.		
2.03	10/22/21	Parcel #4 is the extended ROW of 106th Street and owned by the City. The remaining parcels are owned by the Bridgeview Bank Group.		
2.04	10/22/21	CTA Real Estate and Law indicated there is uncertainty with the Parcel #10's title (105th/Vincennes). CTA is planning to run a title search on Parcel #10. CTA inquired if CPD had any additional information on the parcel or update on communication with the owner. CPD noted if has been over a year since any communication has occurred. It may be best to focus on the parcels presented that are east of Throop Street where a direct connection could be made to Major Taylor Trail.		
3.00	**Property Owner Outreach**			
3.01	10/22/21	CTA sent 20 letters to property owners. Three have responded, with two owners willing to sell. The two owners make up Site #1 which is near 102nd Street and Wallace Street within Washington Heights.		
3.02	10/22/21	CPD informed the group that the Office of the Mayor has expressed interest in pocket park sites along Major Taylor Trail. CPD also noted they also are interested in several pocket park sites along Major Taylor Trail.		
4.00	**Transit Supportive Development Plan Coordination**			
4.01	10/22/21	The goal for the TSD coordination is to increase access to green space for neighborhoods. There is an expectation that there will be increased density closer to the new stations.		
4.02	10/22/21	Future implementation of green space can be achieved by community partners, developers and agencies.		
4.03	10/22/21	CTA presented a plan for green space around the new Michigan Avenue station. The plan incudes mixed use development along Michigan Avenue.		
5.00	**RLE Project Schedule**			

5.01	10/22/21	CTA plans to have the FEIS/ROD completed in July 2022. The first draft has been provided to FTA.		
5.02	10/22/21	A public outreach meeting for the Supplemental EA will happen in February 2022.		
5.03	10/22/21	CTA suggested beginning conversations for third-party agreements, with a desire to begin Inter-Governmental Agreement (IGA) process with CPD in early 2022. The CPD does not typically use IGA's for land transfers. The memorandum of understanding (MOU) can be approved by the CPD without City Council approval. The details of the MOU would need to include information on how the CPD would be made whole for the transfer of land, including the potential pocket parks as an exhibit.		
5.04	10/22/21	CTA will discuss more internally regarding the use of an IGA and MOU, then discuss with CPD again at a later date.		
6.00	**Next Steps**			
6.01	10/22/21	CTA will continue reaching out to property owners CTA will begin to conduct Phase I and II ESAs when ROEs are received. CTA will continue Section 4(f) coordination with CPD and FTA updates.		
7.00	**Other**			
7.01	10/22/21	CTA Engineering have received some utility information from the CPD and will coordinate with the appropriate CPD department.		
8.00	**Action Items**			
8.01	10/22/21	CTA will gather information on IGAs.		
8.02	10/22/21	A further conversation may be needed for the Vincennes/105th property, once more information is obtained.		
Please notify the author of the minutes of any corrections and/or clarifications within five (5) business days, otherwise minutes will be considered final.				

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Chicago Park District Coordination

MEETING DATE: Friday, October 22, 2021

MEETING TIME: 10:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION:

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.
1	Y	Marlise Fratinardo	CTA - Planning	Senior Project Manager	mfratinardo@transitchicago.com	14124
2	Y	Joanna Littrell	PMC - HNTB	Program Manager	jlittrell.hntb@transitchicago.com	14223
3	Y	Patrick Dunn	PMC - CDM-Smith	NEPA Lead	PDunn.cdm@transitchicago.com	14243
4	Y	Grace Dysico	PEC - TranSystems	NEPA Lead	gldysico@transystems.com	(847) 407-5247
5	Y	Robin Martel	PEC - Wight & Company	NEPA Specialist	rmartel@wightco.com	(312) 261-5730
6	Y	London Walther	CPD		london.walther@chicagoparkdistrict.com	
7	Y	Doreen O'Donnell	CPD		doreen.o'donnell@chicagoparkdistrict.com	
8	Y	Sonali Tandon	CTA - Planning	Senior Manager - Strategic Planning, Rail	standon@transitchiago.com	
9	Y	Leah Mooney	CTA - Planning	Director of Strategic Planning and Policy	lmooney@transitchicago.com	
10	Y	Patty King	PEC - Wight & Company	NEPA Specialist	pking@wightco.com	
11	Y	Gustavo Yanez	PEC - CERA	Document Control	gyanez@cerasolutions.com	

Sign in Sheet

PROJECT: Red Line Extension

MEETING PURPOSE: Chicago Park District Coordination

MEETING DATE: Friday, October 22, 2021

MEETING TIME: 10:00 AM

CHAIRPERSON: Marlise Fratinardo

LOCATION:

INVITEES:

No.	Attended?	Name	Company/Org	Role/Department	E-mail	Extension/ No.

NOTE: All individuals listed have been invited to the meeting. Only those indicated were in attendance.

Chicago Transit Authority

Red Line Extension
Chicago Park District (CPD)
Park Replacement Coordination Meeting

Agenda
October 22, 2021
Remote Meeting
10:00 to 11:00 CT

Invitees:

Sarah White/CPD
Doreen O'Donnell/CPD
London Walther/CPD
Leah Mooney/CTA – Planning
Marlise Fratinardo/CTA – Planning
Sonali Tandon/CTA – Planning
Ammar Elmajdoub/CTA - Planning
Joanna Littrell/PMC – HNTB
Patrick Dunn/PMC – CDM Smith
Bob Gorski/PEC – TY Lin
Grace Dysico/NEPA-PEC – TranSystems
Robin Martel/NEPA-PEC – Wight
Patty King/NEPA-PEC - Wight
Gustavo Yanez/NEPA-PEC – Cera

---

1) Project Update/Goal for the Meeting
   - Update on replacement park sites
   - Discuss the Vincennes/105th Street parcel(s)
   - Update on property owner outreach
   - Transit Supportive Development Plan Coordination
   - RLE Project schedule

2) Replacement Park sites
   - Field visit update

3) Update on Vincennes/105th Street parcel(s)

4) Property owner outreach
   - Letters were issued to private owners
   - City of Chicago ownership
   - Cook County Land Bank targeted properties

5) Transit Supportive Development Plan coordination

6) RLE Project schedule

7) Next Steps
   - CTA to continue reaching out to property owners
   - Conduct Phase I and II ESAs
   - Continue Section 4(f) coordination with Chicago Park District and FTA

8) Action Items

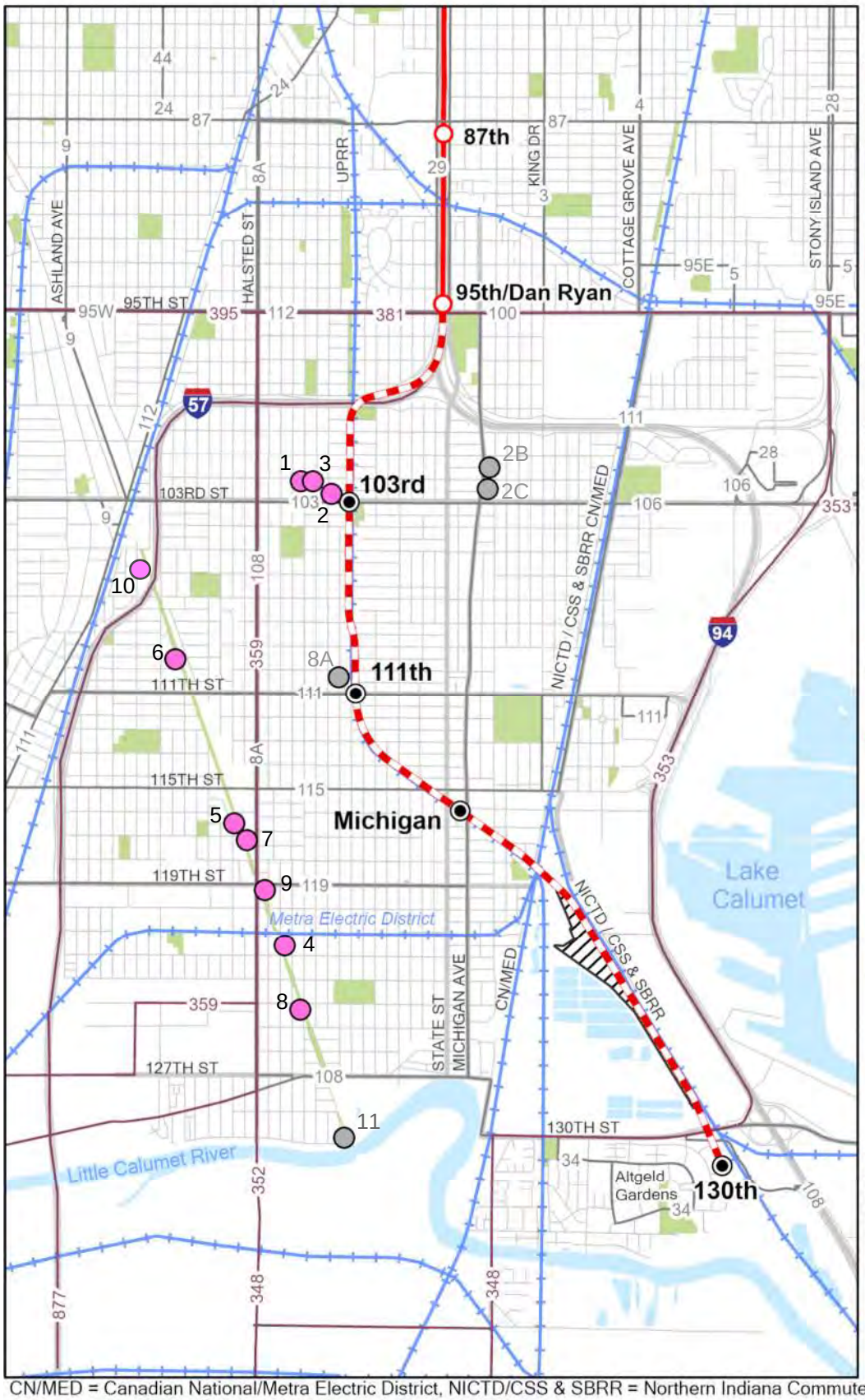

Inset

Legend

- Priority Site
- Site No Longer Being Considered
- Preferred Alignment
- Proposed Rail Yard
- Proposed Rail Station
- Existing CTA Red Line
- Existing CTA Station
- Railroad
- 34 CTA Bus
- 359 Pace Bus
- Water Bodies
- Parks

Scale

0 0.5 1

Miles

1 inch = 5,000 feet

CN/MED = Canadian National/Metra Electric District, NICTD/CSS & SBRR = Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad

REPLACEMENT POCKET PARK SITE #1

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25093270130000	SEMAJ WRIGHT SALINAS	10200 S WALLACE ST	0.14
2	25093270140000	PETER BRYANT	10206 S WALLACE ST	0.14
			Total Acreage	0.28

Vacant - Private

Vacant - City of Chicago

REPLACEMENT POCKET PARK SITE #1

102ND ST AND WALLACE ST

VIEW FROM WALLACE STREET FACING WEST

VIEW FROM WALLACE STREET FACING NORTH WEST

VIEW FROM WALLACE STREET FACING SOUTHWEST

VIEW FROM WALLACE STREET FACING WEST

REPLACEMENT POCKET PARK SITE #2

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25093310010000	DISC 443W102	443 W 102ND PL	0.14
2	25093310350000	VANESSA KING	441 W 102ND PL	0.11
			Total Acreage	0.25

- Vacant - Private
- Vacant - City of Chicago

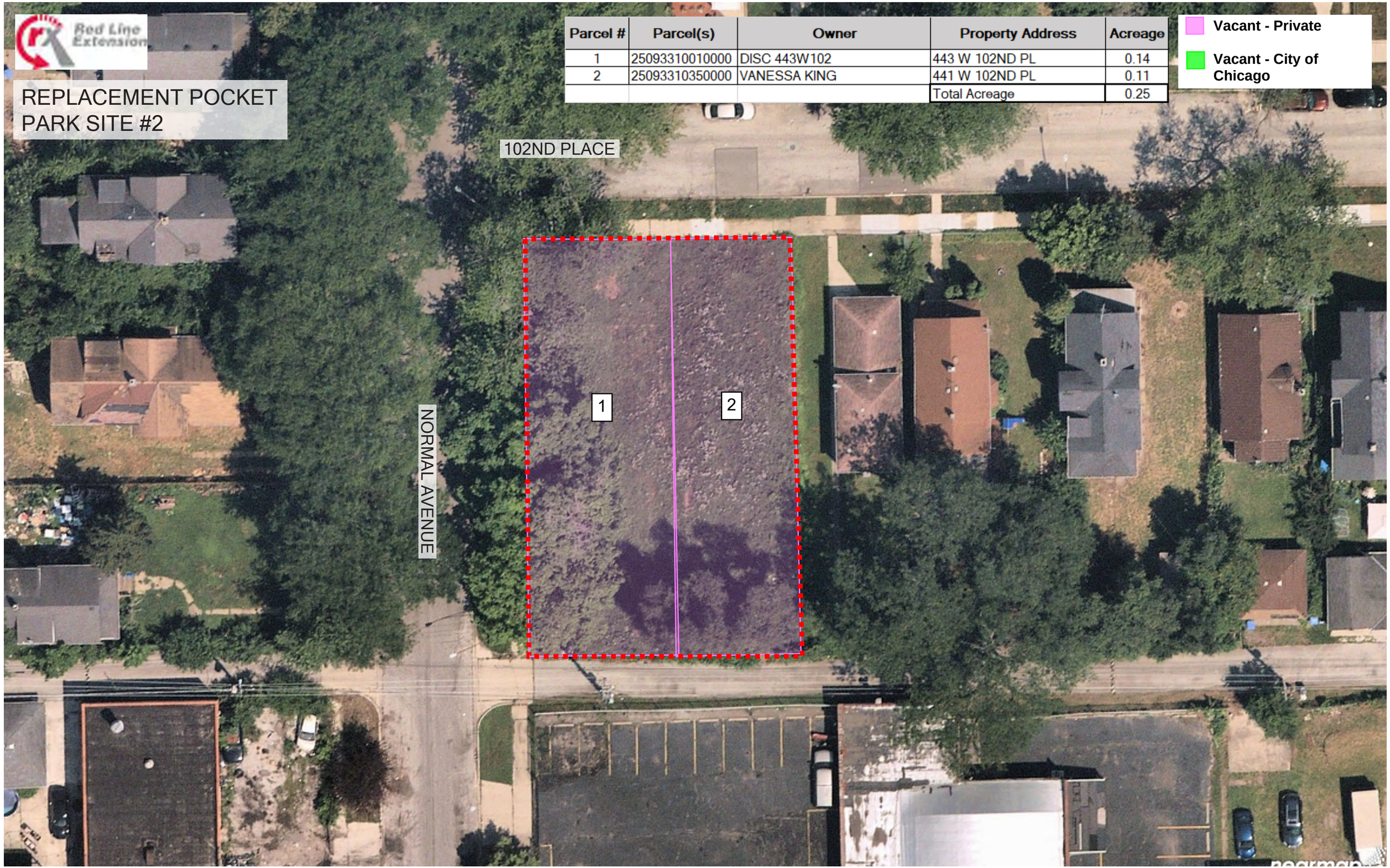

REPLACEMENT POCKET PARK SITE #2

102ND PL AND NORMAL AVE

VIEW FROM NORMAL AVENUE FACING NORTHEAST

VIEW FROM NORMAL AVENUE FACING EAST

VIEW FROM NORMAL AVENUE FACING SOUTHEAST

VIEW FROM NORMAL AVENUE FACING NORTHEAST

VIEW FROM NORMAL AVENUE FACING EAST

REPLACEMENT POCKET PARK SITE #3

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25093280100000	CITY OF CHICAGO	10200 S PARNELL AVE	0.07
2	25093280110000	CITY OF CHICAGO	10202 S PARNELL AVE	0.07
3	25093280120000	NATHAN C OLIVER SR	10206 S PARNELL AVE	0.07
4	25093280290000	JOHN MCCELLAN JR	10208 S PARNELL AVE	0.11
			Total Acreage	0.32

Vacant - Private

Vacant - City of Chicago

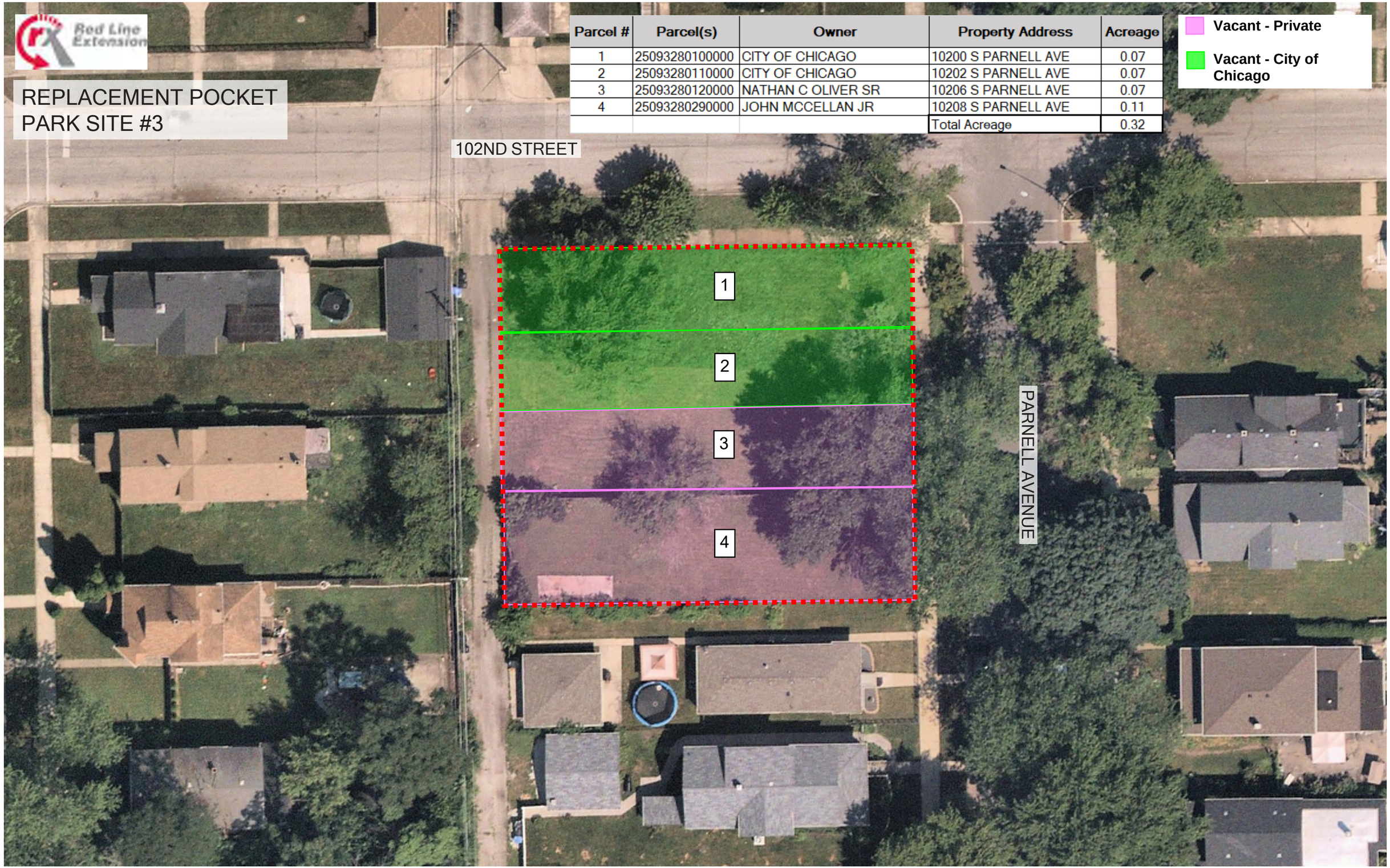

REPLACEMENT POCKET PARK SITE #3

102ND ST AND PARNELL AVE

VIEW FROM 102ND STREET FACING SOUTHWEST

VIEW FROM 102ND STREET FACING SOUTHWEST

VIEW FROM 102ND STREET FACING SOUTH

VIEW FROM 102ND STREET FACING SOUTH

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25281180350000	CITY OF CHICAGO	12111 S UNION AVE	0.11
2	25281180070000	CITY OF CHICAGO	12119 S UNION AVE	0.07
3	25281180080000	CITY OF CHICAGO	12121 S UNION AVE	0.06
4	25281180090000	OLLIE JOHNSON	12123 S UNION AVE	0.06
5	25281180100000	CITY OF CHICAGO	12127 S UNION AVE	0.10
6	25281180110000	OLLIE JOHNSON	12129 S UNION AVE	0.04
7	25281180120000	OLLIE JOHNSON	12133 S UNION AVE	0.04
8	25281180130000	CITY OF CHICAGO	12139 S UNION AVE	0.11
			Total Acreage	0.58

REPLACEMENT POCKET PARK SITE #4

122ND ST AND UNION AVE

VIEW FROM UNION AVENUE FACING EAST

VIEW FROM UNION AVENUE FACING SOUTHEAST

VIEW FROM UNION AVENUE FACING SOUTHEAST

VIEW FROM UNION AVENUE FACING EAST

VIEW FROM 122ND STREET FACING NORTH

VIEW FROM UNION AVENUE FACING EAST

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25204041060000	MAPLE PARK DEV	11629 S PEORIA ST	0.16
2	25204040990000	ARJACK CO	11631 S PEORIA ST	0.09
			Total Acreage	0.25

REPLACEMENT POCKET PARK SITE #5

116TH PL AND PEORIA ST

VIEW FROM PEORIA STREET FACING EAST

VIEW FROM PEORIA STREET FACING NORTHEAST

VIEW FROM PEORIA STREET FACING EAST

VIEW FROM PEORIA STREET FACING EAST

VIEW FROM PEORIA STREET FACING NORTHEAST

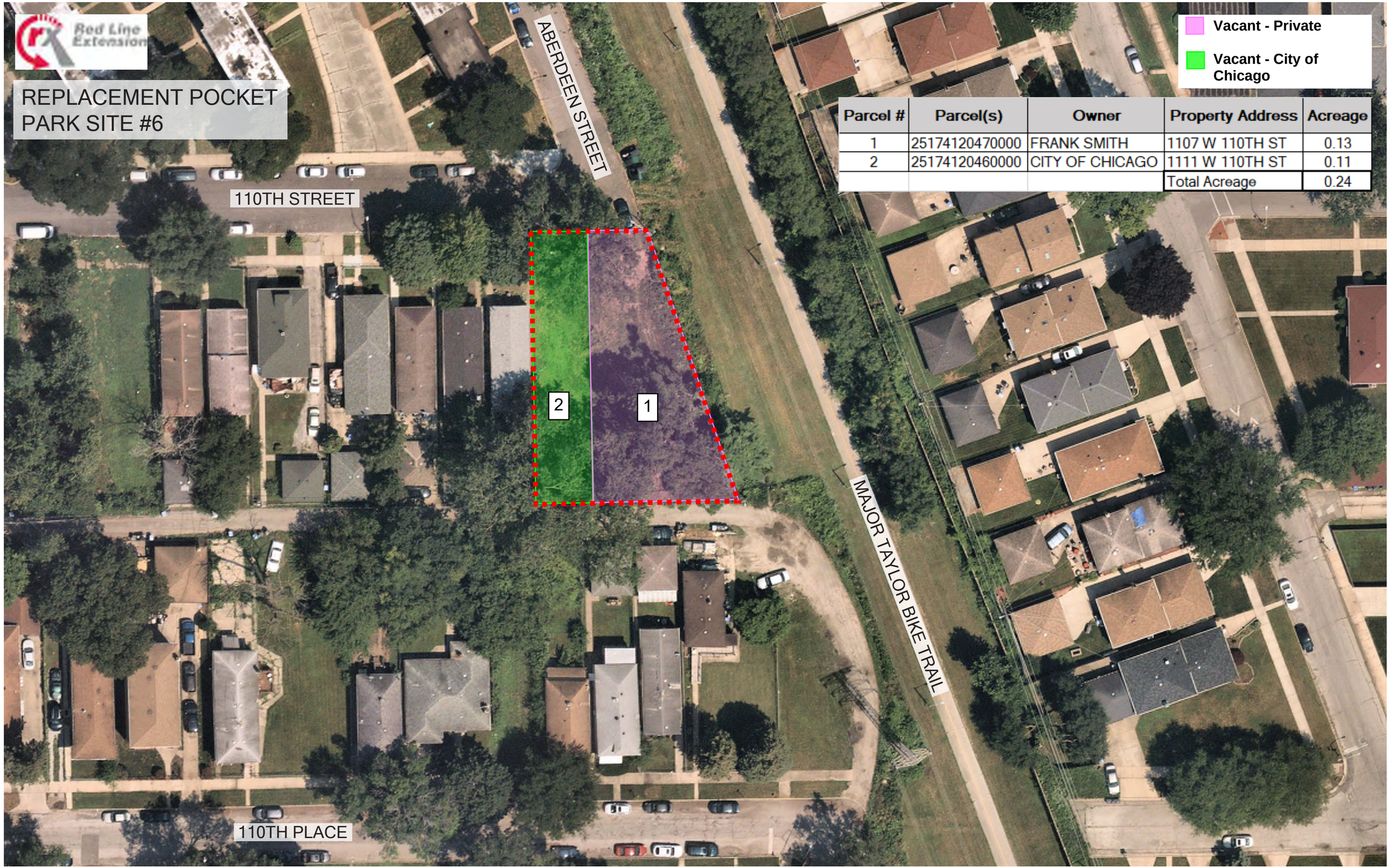

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25174120470000	FRANK SMITH	1107 W 110TH ST	0.13
2	25174120460000	CITY OF CHICAGO	1111 W 110TH ST	0.11
			Total Acreage	0.24

Red Line Extension

REPLACEMENT POCKET PARK SITE #6

110TH ST AND ABERDEEN ST

VIEW FROM 110TH STREET FACING SOUTH

VIEW FROM 110TH STREET FACING SOUTH

VIEW FROM 110TH STREET FACING SOUTH

VIEW FROM 110TH STREET FACING SOUTHWEST

VIEW FROM 110TH STREET FACING SOUTHEAST

VIEW FROM 110TH STREET FACING SOUTH

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25204180340000	CITY OF CHICAGO	823 W 117TH ST	0.30
			Total Acreage	0.30

REPLACEMENT POCKET PARK SITE #7

117TH ST AND HALSTED ST

VIEW FROM 117TH STREET FACING NORTHWEST

VIEW FROM 117TH STREET FACING SOUTHWEST

VIEW FROM 117TH STREET FACING SOUTHWEST

VIEW FROM 117TH STREET FACING WEST

VIEW FROM 117TH STREET FACING NORTHWEST

VIEW FROM 117TH STREET FACING WEST

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25283110250000	TAXPAYER OF	12400 S WALLACE ST	0.05
2	25283110260000	TAXPAYER OF	12404 S WALLACE ST	0.03
3	25283110270000	TAXPAYER OF	12408 S WALLACE ST	0.04
4	25283110280000	GUARANTY BK&TR TR 9477	12411 S LOWE AVE	0.04
5	25283110290000	TAXPAYER OF	12413 S LOWE AVE	0.05
6	25283110300000	TAXPAYER OF	12415 S LOWE AVE	0.05
7	25283110310000	PETER C GEORGES	12419 S LOWE AVE	0.06
8	25283110320000	TAXPAYER OF	12420 S WALLACE ST	0.06
			Total Acreage	0.39

REPLACEMENT POCKET PARK SITE #8

124TH ST AND LOWE AVE

VIEW FROM WALLACE STREET FACING NORTH

VIEW FROM WALLACE STREET FACING NORTH

VIEW FROM LOWE AVENUE ALLEY FACING EAST

VIEW FROM LOWE AVENUE ALLEY FACING NORTHEAST

VIEW FROM LOWE AVENUE ALLEY FACING EAST

VIEW FROM LOWE AVENUE ALLEY FACING EAST

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25281000160000	COM ED TAX DEPT	739 W 119TH ST	0.73
2	25281000150000	PENNSYLVANIA LINES LLC	791 W 119TH ST	0.16
			Total Acreage	0.88

Red Line Extension

REPLACEMENT POCKET PARK SITE #9

119TH ST AND EMERALD AVE

VIEW FROM EMERALD AVENUE FACING NORTHWEST

VIEW FROM EMERALD AVENUE FACING WEST

VIEW FROM HALSTED STREET FACING EAST

VIEW FROM 119TH STREET FACING SOUTHEAST

VIEW FROM 119TH STREET FACING SOUTHEAST

VIEW FROM 119TH STREET FACING SOUTH

REPLACEMENT POCKET PARK SITE #10

Parcel #	Parcel(s)	Owner	Property Address	Acreage
1	25171230010000	BRIDGEVIEW BANK GROUP	10601 S MARTIN ST	1.64
2	25171150090000	ARTHUR UPSHAW ESTATE	10551 S THROOP ST	0.24
3	25171150100000	BRIDGEVIEW BANK GROUP	10559 S THROOP ST	0.22
4		CITY OF CHICAGO	106TH ROW	0.46
5	25171170010000	BRIDGEVIEW BANK GROUP	10603 S THROOP ST	0.12
6	25171170020000	BRIDGEVIEW BANK GROUP	10605 S THROOP ST	0.07
7	25171170030000	BRIDGEVIEW BANK GROUP	10609 S THROOP ST	0.07
8	25171170450000	BRIDGEVIEW BANK GROUP	10611 S THROOP ST	0.10
9	25171170230000	BRIDGEVIEW BANK GROUP	1243 W 106TH ST	0.07
10	25171170240000	BRIDGEVIEW BANK GROUP	1241 W 106TH ST	0.07
11	25171170250000	BRIDGEVIEW BANK GROUP	1239 W 106TH ST	0.07
12	25171170260000	BRIDGEVIEW BANK GROUP	1237 W 106TH ST	0.05
			Total Acreage	3.19

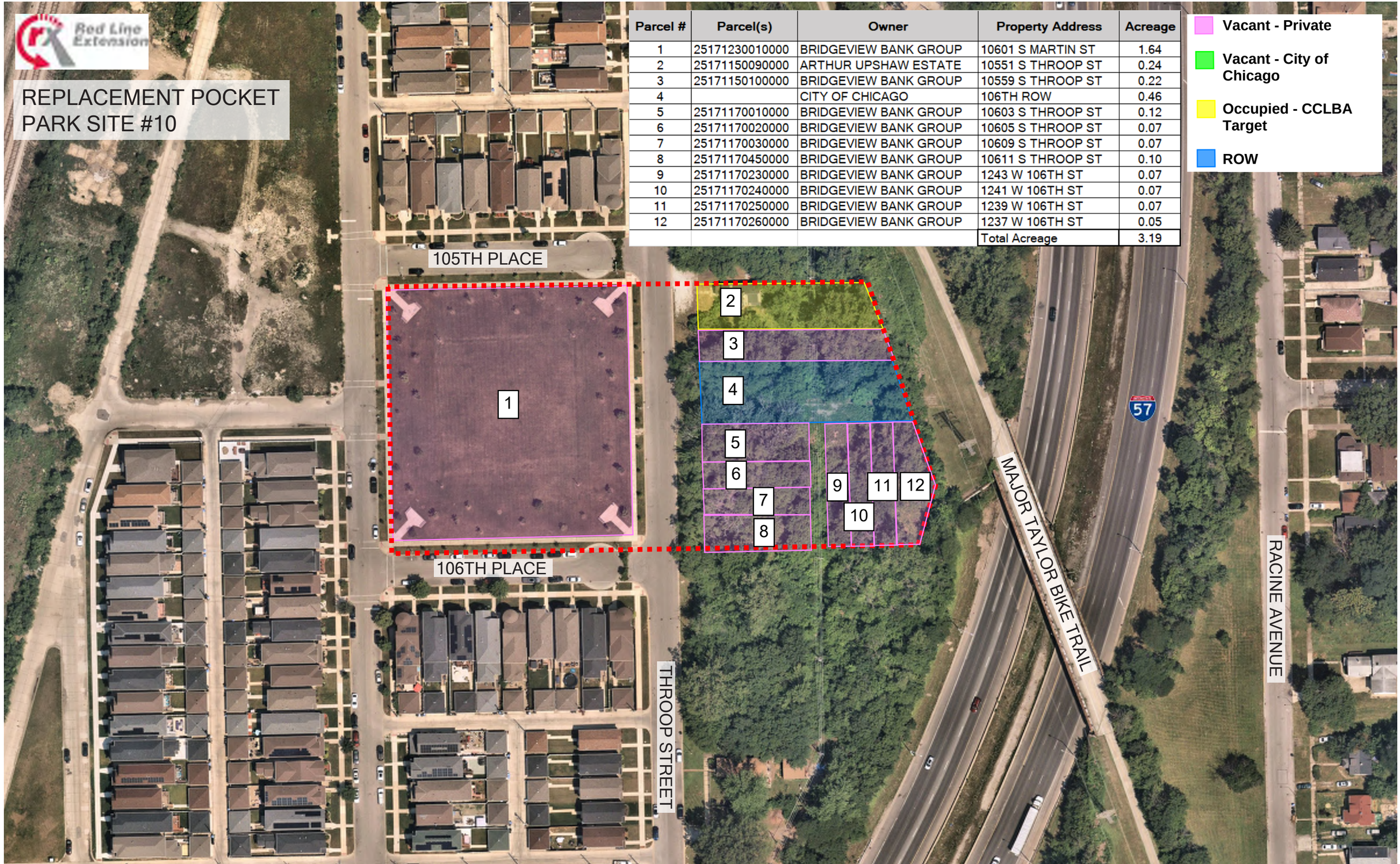

REPLACEMENT POCKET PARK SITE #10

105TH PL AND THROOP ST

VIEW FROM THROOP STREET FACING SOUTHEAST

VIEW FROM THROOP STREET FACING NORTHEAST

VIEW FROM THROOP STREET FACING EAST

VIEW FROM THROOP STREET FACING EAST

VIEW FROM THROOP STREET FACING EAST

VIEW FROM THROOP STREET FACING SOUTHWEST

TSD Approach for Green Space

- The Transit Supportive Development Land Use Plan includes analysis and recommendation for green space near future stations
  - RLE will increase development and density near future stations
  - Goal is to maintain a balance between additional development and access to green space
  - Analysis is complementary to replacement park studies and current Park District offerings
  - Green space could be community gardens, parks, beekeeping, etc.

- Future implementation of green space can be achieved by:
  - Community partners (Community organizations, Openlands, NeighborSpace...)
  - Developers, as part of larger developments
  - Agencies (Chicago Park District, Forest Preserve)

Michigan Future Development

RED AHEAD

Red Line Extension

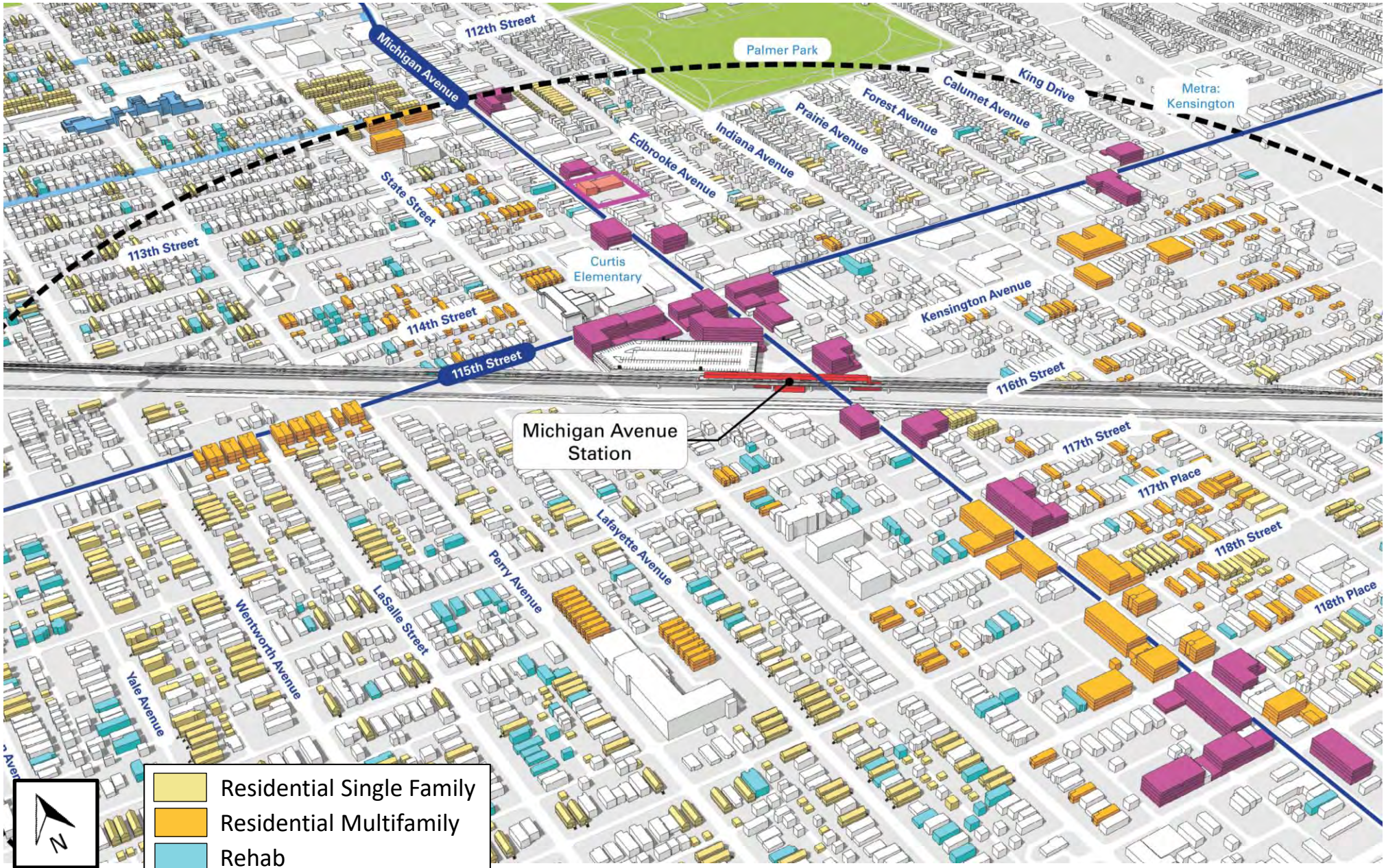

DRAFT – for discussion

Park District Access Approach

RED AHEAD

Red Line Extension

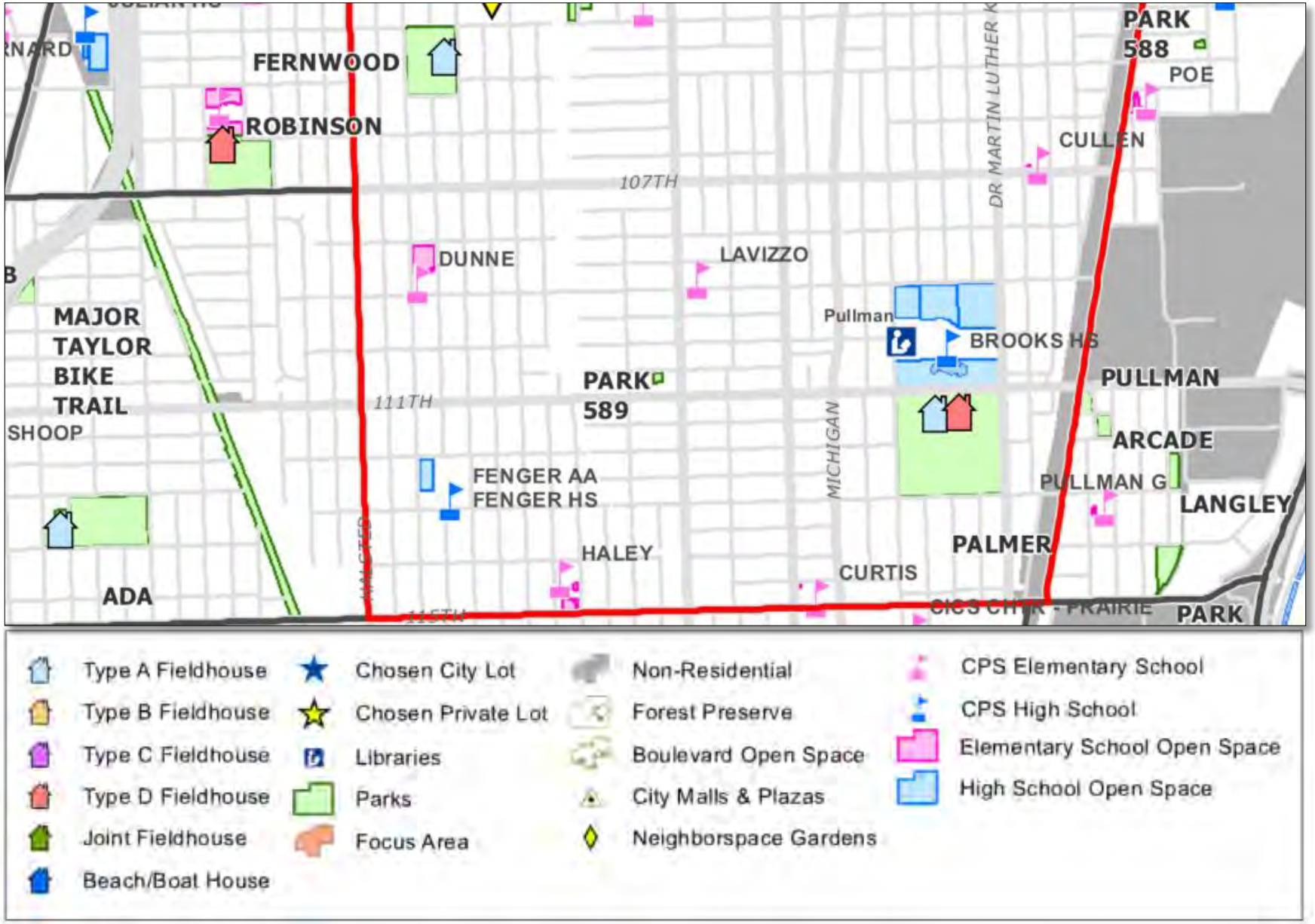

Michigan Green Space

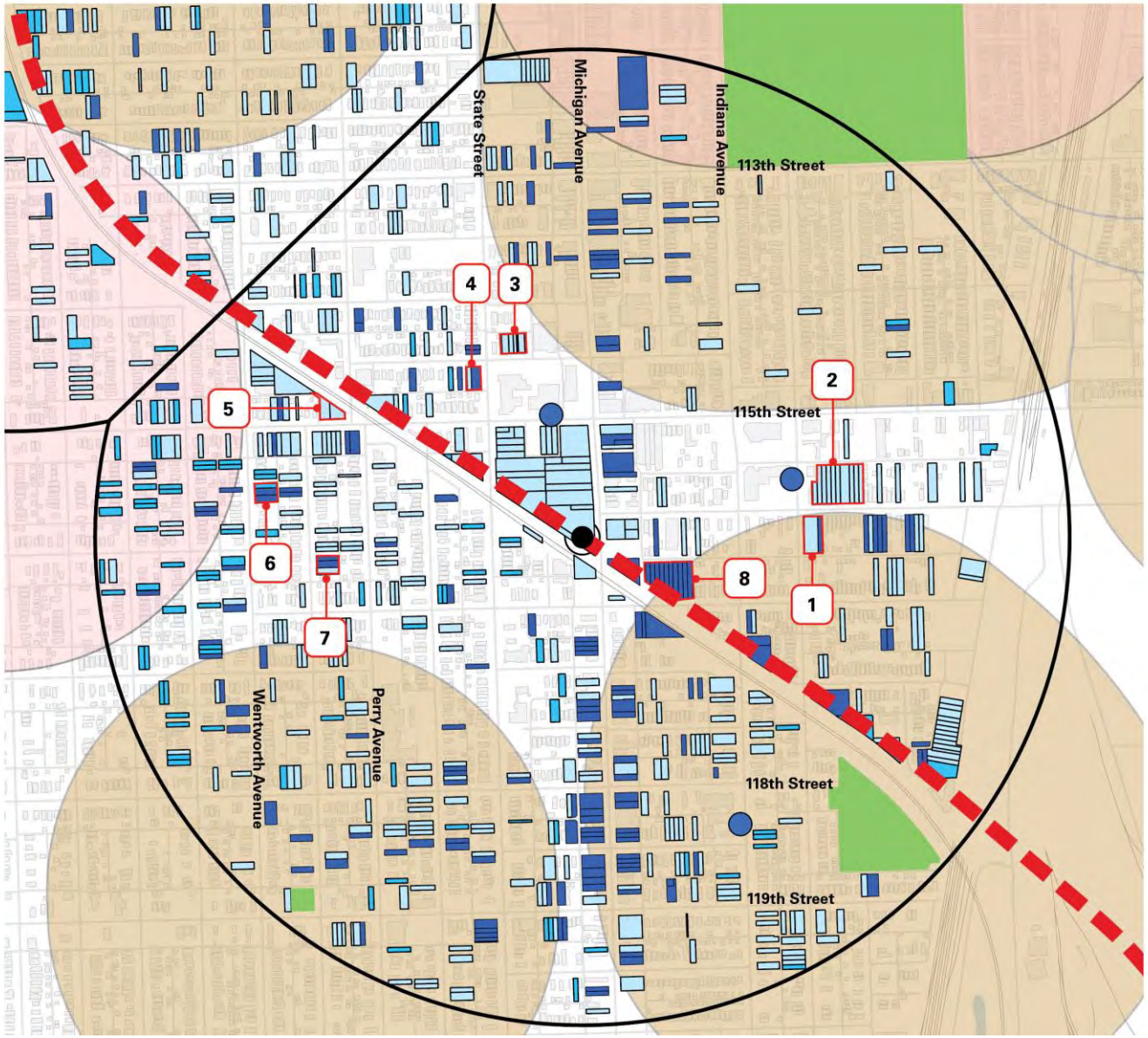

- Station Entrances
- CTA RLE Centerline
- Station_Areas_1/2_Mile
- Schools(3)
- City Owned Land(175)
- Vacant Land(371)
- CCLBA Land(91)
- Chicago Park District Land (CPD)(3)
- CPS 1/4 Mile Buffer
- CPD 1/4 Mile Buffer

Recommendations

1. Proximity to CICS Prairie which is a charter school (0.4 Acre)
2. Proximity to CICS Prairie which is a charter school (1.2 Acre)
3. Proximity to Curtis Elementary School and a clinic (0.3 Acre)
4. Proximity to Curtis Elementary School, which is a public school (0.2 Acre)
5. Location on 115th Street along the development corridor and railroad (0.26 Acre)
6. Location on Wentworth Avenue (0.27 Acre)
7. Location on La Salle Street (0.27 Acre)
8. Location 116th Street (1 Acre)

DRAFT – for discussion

Attachment B – Fernwood Parkway Section 4(f) *De Minimis* Finding Correspondence

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

August 2, 2017

Chicago Park District
Attn: Heather Gleason
541 N. Fairbanks Court
Chicago, IL 60611

Re: Chicago Transit Authority Red Line Extension Project, Park Impacts Coordination, Public Comments, and Preliminary Section 4(f) Determination

Dear Ms. Gleason:

The Federal Transit Administration (FTA) is writing to continue the consultation and coordination between the Chicago Transit Authority (CTA) and your agency regarding potential park impacts that would result from the implementation of CTA's Red Line Extension (RLE) project and appropriate mitigation measures. Based on these coordination efforts, the CTA and the Chicago Park District (CPD) identified several mitigation measures, including providing replacement park lands, that would be undertaken to ensure that the project would not result in any adverse impacts to CPD parks. Your concurrence that there would be no adverse impacts to the identified parks following implementation of these mitigation measures was received on August 17, 2015; the potential impacts and proposed mitigation measures were documented and published in the Draft Environmental Impact Statement (EIS) for this project.

The FTA, in cooperation with the CTA published the RLE Draft EIS in accordance with federal environmental regulations of the National Environmental Policy Act as well as Section 4(f) U.S. Department of Transportation Act of 1966, which established the requirement for consideration of park and recreational lands, among other specially protected resources, in the development of transportation projects.

The Draft EIS was published for public and agency review on October 6, 2016, and a public hearing was held on November 1, 2016. In addition to the public hearing, a comment period through November 30, 2016, was established to obtain any additional comments on the environmental impacts of this project and proposed mitigation measures, including park impacts and proposed mitigation. The public notification and solicitation of comments for the Draft EIS were completed in accordance with federally required processes under 23 CFR 771.111. A summary of the public comments and a spreadsheet of individual public comments received related to parks is attached for your review.

Based on coordination with CPD, the proposed mitigation measures, and all public comments received, this letter serves to notify you of FTA's intention to proceed with a Section 4(f) *de minimis* finding for parks as documented in the Draft EIS. In accordance with 23 CFR 774, the impacts of a transportation project on a park or recreation area, or wildlife and waterfowl refuge that qualifies for Section 4(f) protection may be determined to be *de minimis* if:

1. The transportation use of the Section 4(f) property, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f);
2. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) property; and
3. The official with jurisdiction over the property (in this case, CPD), after being informed of the public comments and FTA's intent to make the *de minimis* impact finding, concurs in writing that the project will not adversely affect the activities, features, or attributes of these parks.

Following CPD's review of the attached public comments, we ask CPD to provide concurrence on FTA's finding that based on the proposed mitigation measures including the replacement of park lands with lands of reasonably equivalent usefulness and location, this project will not adversely affect park activities, features, or attributes. Please direct your concurrence with this finding and/or any additional comments you may have within 45 days of receipt of this letter to:

Tony Greep, Community Planner
Federal Transit Administration, Region 5
200 W. Adams, Suite 320
Chicago, IL 60606
Phone: (312) 353-1646
Email: anthony.greep@dot.gov

CTA will select either the East or West Option of the preferred Union Pacific Railroad alternative as part of the Final EIS analysis and will continue to coordinate with your agency to finalize the processes for acquiring replacement park property and fulfilling all agreed upon mitigation measures. This coordination may be done through meetings and/or, as necessary, through a more formalized Memorandum of Agreement between FTA, CTA, and CPD.

Thank you for your continued cooperation and interest in this project. Should you have any additional questions, please do not hesitate to contact us.

Sincerely,

Jay M. Ciavarella
Director, Office of Planning & Program Development

Enclosure: CTA RLE DEIS - Summary of Public Comments Related to Parks

Cc: Michael Lange, Chicago Park District
Doreen O'Donnell, Chicago Park District
Tony Greep, Federal Transit Administration
Elizabeth Breiseth, Federal Transit Administration
Carole Morey, Chicago Transit Authority
Sonali Tandon, Chicago Transit Authority

Summary of Public Comments Related to Parks

Red Line Extension Draft Environmental Impact Statement

The following text summarizes public comments received related to park impacts from the RLE Project as well as mitigation measures proposed within the Draft EIS. A comment matrix detailing individual comments is also attached for a complete record of public comments received related to parks.

In general, comments related to parks and proposed mitigation, particularly providing replacement park options, were positive. Members of the public noted that new parks are needed and desirable near the proposed corridor and in surrounding neighborhoods. Providing additional amenities at surrounding parks were noted as desirable as well, including larger field houses, workout facilities, basketball courts, and running/walking tracks. Integrating parks into the surrounding community, providing greater transit access to parks, and providing well-lit parks with attractive planters, waste baskets, and bike racks was also noted as desirable.

Two commenters noted that the existing Fernwood Parkway linear park (which would be affected by the West Option) is not currently used by the public, while one commenter noted that the West Option takes more green space. Two commenters noted that the East Option would permanently impact an active use park, Wendell Smith Park, compared with the West Option that would impact more passive park space.

Overall comments on replacement park options were positive both at the public hearing and as part of the formal comment period. Regarding replacement park options, one commenter noted concerns with replacement parks increasing the potential for pedestrian and vehicular traffic and noted that parks would require greater security and another comment noted that mitigation at Wendell Smith Park proposed under the East Option should not include new fencing around the track structure at the corner of the park because patrons use the openness of the existing park in this area to cross and enter the park.

CTA Red Line Extension Project
Public and Agency Comments - Parks

Name	Date	Comment Type	Comment
Cebell Huey	10/11/2016	handwritten	I would highly recommend the West Side of the rail at 101st-99th and Eggleston to 103rd and beyond 103rd. There is a lot of property that's not being used like 99 and Eggeleston and 103rd is not being used like the park. No one uses that park at all. No kids play there or anything.
Elsa Ponce	10/19/2016	handwritten	Empty Lots. Have walls to reduce the noise. Noise barrier concerns not 4 feet. I recommend 8 feet. Parks to walk. A lot of traffic. *All Concern categories marked "yes."*
Melvina Grace	11/1/2016	handwritten	East Option: Would be the best, but what about the properties that would surround the around. West Option: Looks more comfortable but what about the properties that surround the project? Comment: The park seems like a beautiful idea to bring life into a neighborhood fallen. But questions remain about properties surrounding the park due to elderly and disabled properties. Transportation: No comment because it beneficial less walking distance to commute. Land Use and Economic Development: What will happen to properties in that area? Visual Impacts: I would love to see how it would look. Noise and Vibration: Yes, elderly leaves in area Safety & Security: Very important due to neighbor not being safe. Will this cause a problem for more? Hazardous Materials: Elderly and disable live in area. Parks: Improvement needed very well Construction Impacts: Is this going to affect all westbound properties? Project Funding: Are property taxes, other taxes going up to fund???
Allen Brown	11/1/2016	handwritten	East Option: I like the East option it seems more convenient and will have a better economic impact. West Option: OK not my favorite Comments: As far as parks effected. I would like to see bigger field houses with activity centers such as workout facilities, indoor basketball, etc. This will impact a lot of young community to have some thing positive. Also our parks should incorporate running and walking track. This will impact health and vitality of community residence.
Freda Madison	11/1/2016	handwritten	East Option: East option may be better. It is close to the 95th station. West: West option want to make sure park area & parking which brings in more traffice & people. Security would be necessary for the community. Also communities need to address, as far as, housing board up and abandon building. If the area is going to developed the housing structure that will remain should be developed and addressed as well. Thank you.
Adrienne R. Ancolin	11/1/2016	handwritten	West Option: Street closure and the direction of traffic through the neighborhood - loss of the alley at the corner by the park. Comments: The Wendell Smith Park should "NOT" have an enclosed fence that would stop the foot traffic at 99th street. That is the only opening for crossing by foot until 101st Street. Many people cross there and if its closed the walkers will find a way to make an opening. Will the street directions change? Will Eggleton still allow the crossing at 101st street? Property Displacements: Will this affect the property value or decrease it? Noise & Vibration: There is already vibrations from the RR that shake the foundation. Now there are 2 trains in same space. Parks: Park availability for neighborhood. Construction Impacts: Will 99th place loose the alley and become a dead end street not allowing you to turn around?

CTA Red Line Extension Project
Public and Agency Comments - Parks

Name	Date	Comment Type	Comment
Sandra L Munoz	11/1/2016	handwritten	East Option: The East option would displace more people. It would also permanently affect park space. I am also concerned about the visual and noise during construction. Comments: The location for the Town Hall meeting was not well thought out. An auditorium would have been better. I could not hear the speaker or see the screen that provided the visual impact of the project. There were some chairs setup in front of the screen and tables and chair behind them. It was like a church reception rahter than a public meeting people continued to talk during the presentation and continued to circulate around too much confusion. Also there was no public discussion of project. It seemed a situation were you could say you had a public forum without having people participate in an open disucssion. Property Displacements: Will people recieve financial assistance and help finding affordable housing? Neighborhoods & Communities: This project will displace a full block in my area. I wonder how much consider you consider the human factor (friends, family, neighbors) Safety & Security: What safety measures will be in place during construction? Construction Impacts: I am concerned about the mess it will cause, traffic, parking, construction vehicles and noise, the dust and dirt.
Betty Jones	11/1/2016	handwritten	East option: When wil you know for sure? Transportation: Very concern about street closing Property Displacements: Where will you store equipments? Noise & Vibration: O Hare aiport - Noise does impact Safety & Security: Always Hazardous Materials: Yes Parks: Need a new park Construction Impacts: Parking Project Funding: How much will the housing be value of?
Cheena Credit	11/1/2016	handwritten	East Option: Let's be honest there truly is no major difference between these two choices. West Option: Taking away of green space; homes on Eggleston directly facing the trains; increased traffic, pedestrian, car, et. Property value Comments: First, just so you know I grew up on W 102nd Place, my parent and their parents of grammar/high school friends are still there. 1. Despite studies done for noise & vibration, I still believe this will have a adverse effect on community. There is a difference between freight trains coming once a day and an elevated train running all day & night. Is it possible to provide residence with noise reduction windows or something. 2. This area cannot be compared to others, this is single family homes, not 2-4 flat apartments.
Gregory Walker Jr.	11/1/2016	handwritten	East Option: I don't like the East Option because an entire park is gone. West Option: Hoping this doesn't effect the Roseland Pumping station in any way. Comments: For 103rd, 107th, 111th, 115th, State St., Michigan Avenue, I would like to propose that all businesses or residential properties that are needing to move. I propose that they have an option to rebuild next to any space being bought by CTA. I would also like to suggest that at 115th there is plenty of mixed property. At 130th, I suggest that the trucks end in a loop, rather than a stub, that way you could have a more convenient turn around of trains. Also possibly asking NICTD to form a station there to attract riders, thus making it a "super station." Overall, I'm really excited that this extension is being sought out. I believe it not only help southside residents, but also people from Indiana and south suburbs get downtown and home. Transportation: How would the 34 South Michigan run? Honestly I hope maybe the hours change; but I hope it operates from 95th to Altgeld. Impacts to Historic Resources: Hope this doesn't effect the Roseland Pumping station. Safety & Security: I would like to see all stations with a CTA worker two (2) armed security officers for atleast the first 2 years.

CTA Red Line Extension Project
Public and Agency Comments - Parks

Name	Date	Comment Type	Comment
Dr. Carmen Palmer & Mrs. Sharon Banks Pincham	11/1/2016	handwritten	West Option: 116th & Michigan's impact on Kids off the Block (KOB) Comments: The impact on the schools and the school population. Land Use and Economic Development: Need a positive draw of businesses, (non-fast foods) black owned well represented Neighborhoods & Communities: Inclusion in decision making re business choices & community benefits agreement Visual Impacts: A lot of green space and a balance out to the hard concrete - art inclusion; flowers, trees, and representative expressions of the community Noise & Vibration: at a minimum Impacts to Historic Resources: None Safety & Security: Bicycling & beat officers at the city level not SSAs Hazardous Materials: NONE! Get rid of cell phone towers Wetlands: Maintained Parks: Intermingled & well let/attractive planters, waste baskets, bike racks Project Funding: TIF Momes SBA presense from on set to the end Other: Schools protected and assessible
Constance Carroll	11/1/2016	handwritten	East Option: How far east of the railroad? Will it go both ways (East & West) for parking etc? (How far East - West?) West Option: How far west from the railroad? Comments: Will there be parks, parking and other business' to improve the community? Will employment be available for residents? If so, how can we apply? It seems that the project is well on the way. When will it start and when is the estimated time of completion? Property Displacements: If you go West of the railway how far will you go from 111th & Eggleston south of 111th street? Safety & Security: Since there will be more people traveling through the neighborhood will there be additional policing and security? Hazardous Materials: Will we be informed of hazardus materials being used?
Julie A Pate	11/1/2016	handwritten	East Option: My concern about either side is my foundation noise control dirt and dust noise barriers who will pay for damages to my home. West Option: Concerns are the same want to be comfortable in my home Comments: I have no problem with improvement I think it's a good thing may improve property value, love the way the park will look. Visual Impacts, Noise & Vibration, Hazardous Materials, Construction Impacts - YES
Macy Johnson	11/1/2016	handwritten	East Option: Wendell Smith Park and too many homes will be affected. West Option: There is a spacious parkway which is more feasible than the limited space on the East option. Comments: Has CTA considered placing more buses on Michigan Avenue. There could be several express buses extending to 130th Street. Bishop Ford is an option and also Halsted Street. Fewer homes and families will be displaced. Dan Ryan is another option. Property Displacements: A huge number of homes will be destroyed. Noise & Vibration: This is already prevelant because of the present railroad. Parks: Wendell Smith Park will be affected.
Cebell Huey	11/1/2016	Court Reporter	I live right on 101st Street at the railroad track between Princeton and Eggleston. I'm preferably not coming on the east side of the street at this point. There's a park on the west side...There's a park on the west side of the street. Nobody is living — nobody is there that whole entire park. I've been there ever sice 1965. Nobody uses that park. Even people don't walk the dogs over there...Now that -- it starts at 99th and Eggleston and goes to 103rd and Eggleston. Then beyond 103rd and Eggleston all the way down the side of that tracks...it's hardly nothing that's really worth anything all down that, all down that track to 115th. Now that is a good distance that CTA can use, you know. And then whatever they have to do from 115th then on out to 130th.

CTA Red Line Extension Project
Public and Agency Comments - Parks

Name	Date	Comment Type	Comment
Doris White	12/5/2016	handwritten	East Option: Will this option affect the Bishop Ford Expressway for those who drive? West Option: Why is this option going to cause residents to have to move that live between 99th St and 119th St on this option? Comments: What if that homeowner does not want to relocate, are they going to be mae to move or other alternatives to them having to move? I pray that all of this falls into place for those who use public transportation and that whoever makes decisions in regards to this project will be wise in the decisions of this project. Transportation: When buses have to be rerouted due to construction why are you not sure how long it will take. Land Use: Will this be a good area, where you are considering? Displacements: If a person is not able to be displaced, what are your options for them? Neighborhoods & Communities: Do you think they would agree, despite the displacing of homes? Visual: Will it be handicap accessible e.g. elevators and escalators in good working condition. Noise: I am sure it will not be loud, as if it was a freight train coming through. Historic: Will they have to be moved and why touch historical sites? Safety & Security: Will there be Police Officers at these new stops along with canine dogs? Hazardous Materials: Will this Redline extension project be around factories with hazardous materials? Wetlands: What do you mean by wetlands? Parks: Will it be closer to parks where we can get off and take our children to the parks? Construction Impacts: What effect will it have on those who drive through the area where you want to build? Project Funding: How will it be funded and by who? Other: Why have you waited all this time to do this particular line now, as other lines have been extended or new lines brought in?
Lindy Nelson, U.S. Department of the Interior	11/30/2016	letter	*DOI entire text available in full comments.* Based on discussions with FTA and coordination with the Chicago Park District (CPD) in 2015 on park impacts and proposed mitigation measures for this project, a Section 4(f) preliminary "*de minimis*" finding was proposed for park impacts resulting from this project after mitigation proposed. A *de minimis* impact for parks, recreation areas, or wildlife/waterfowl areas is defined in 23 CFR § 774.17 as one that is determined to not adversely affect the features, attributes, or activities qualifying a property for protection under Section 4(f). The Department of the Interior does not comment on *de minimi* s determinations. The Department concurs with the determination that all measures to minimize harm have been employed concerning the resources subject to 4(f) use.

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2014 National
Gold Medal Winner
for Excellence in Park and
Recreation Management

September 21, 2017

Mr. Tony Greep, Community Planner
Federal Transit Administration, Region 5
200 West Adams Street, Suite 320
Chicago, IL 60606

RE: Chicago Transit Authority Red Line Extension Project
Park Impacts Coordination, Public Comments, and
Preliminary Section 4(f) Determination

Dear Mr. Greep:

The Chicago Park District is in receipt of a letter dated August 2, 2017 regarding the Federal Transit Administration's (FTA) intention to proceed with a Section 4(f) de minimis finding for parks as documented in the Red Line Extension (RLE) Draft EIS.

The Chicago Park District has reviewed the public comments included in the letter and concur with FTA's finding that based on the proposed mitigation measures, including the replacement of park lands with lands of reasonably equivalent usefulness and location, the RLE project will not adversely affect park activities, features or attributes. We concur with Section 4(f) de minimis finding for parks.

We look forward to a continued successful collaboration. Should you have any additional questions, please do not hesitate to contact us.

Sincerely,

Heather Gleason
Director of Planning and Construction

HG/sw

cc: Doreen O'Donnell, Research and Planning Manger
Sarah White, Lakefront Planning Coordinator

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& CEO
Michael P. Kelly

City of Chicago
Lori Lightfoot
Mayor

September 10, 2021

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: CTA Red Line Extension (RLE) Project

Dear Ms. Fratinardo,

The Chicago Park District (CPD) appreciates the opportunity to review potential pocket park location options presented on May 26, 2021 for the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project. Any proposed mitigation measures for impacts to Fernwood Parkway should include fully developed replacement parks with passive recreational space within the Washington Heights community area and/or properties along the Major Taylor Bike Trail for a total combined area of 4.5 acres.

CPD's neighborhood parks range in size from 0.25 acre to 5 acres. These parks can contain indoor and/or outdoor recreation facilities and typically include a playground and/or other sport fields. CPD is requesting that all CTA replacement properties reach a minimum of 0.25 acre and collectively total to the approximate 4.5 acres of CPD property affected by the CTA RLE Project. If Recognized Environmental Conditions are identified in the Phase 1 Environmental Site Assessment (ESA), then a Phase 2 ESA is required. If there are exceedances of the Illinois Environmental Protection Agency's (IEPA) TACO Tier 1 Residential Standards, then the property is required to receive a Comprehensive No Further Remediation (NFR) Letter from the IEPA's Site Remediation Program.

The Draft Environmental Impact Statement (EIS) for the RLE Project analyzed two project alignment options and discussed impacts on multiple parks resulting from either alignment option. The Federal Transit Administration (FTA) issued its Section 4(f) *de minimis* finding for impacts to multiple parks, including Fernwood Parkway, on August 2, 2017, after public comments on the Draft EIS were reviewed. CPD concurred with FTA's finding on September 21, 2017.

CTA selected the Preferred Alignment for the RLE Project in 2018. A Final EIS is being prepared, which discusses impacts on parks resulting from the Preferred Alignment. Permanent impacts from the construction of the Preferred Alignment would result in only one park (Fernwood Parkway) being impacted.

Subsequent to CPD concurrence on the *de minimis* finding, CPD and CTA have held meetings to further coordinate mitigation measures for impacts to Fernwood Parkway. At a February 18, 2021 coordination meeting, CTA presented an updated replacement park analysis and CPD indicated that we are more focused on fulfilling a need for smaller pocket parks within the communities instead of a single larger park. Additionally, we also informed CTA that we have received community input regarding adding pocket parks along the Major Taylor Bike Trail.

CPD and CTA met again on May 26, 2021. Based on our previous feedback, CTA presented pocket park location options just west of Fernwood Parkway in the Washington Heights community area and along the Major Taylor Bike Trail. Following this meeting, CPD evaluated these pocket park locations presented by CTA.

On July 29, 2021, CPD sent CTA a list of our preferred replacement sites based on their location near the Washington Heights community area, which is directly adjacent to the

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affected Fernwood Parkway. Each of the three (3) preferred sites reach a minimum of 0.25 acre, which is in accordance with CPD standards. CPD also sent CTA a total of seven (7) preferred sites located along the Major Taylor Bike Trail. The Major Taylor Bike Trail is a 35.30-acre park containing over 6 miles of bicycle and pedestrian pathway. Maintained and managed by CPD, the trail stretches through three (3) Chicago community areas: Washington Heights, West Pullman, and Morgan Park. Each of the seven (7) preferred sites is a minimum of 0.25 acre, which is in accordance with CPD standards.

CPD and CTA met most recently on August 25, 2021. CTA reviewed CPD preferred sites, discussed the viability of each site for parcel acquisitions, and outlined the next steps for contacting property owners to assess parcel availability. An additional site along Major Taylor Bike Trail was discussed as an option.

Based on this coordination, mitigation measures are to include replacement parks directly adjacent to the Major Taylor Bike Trail or in the Washington Heights community area. A combination of already discussed sites or newly identified sites totaling 4.5 acres of CPD property affected would serve as replacement parks. The replacement park sites are to include passive recreational space. Mitigation measures should include replacement property constructed in accordance with CPD standards.

The suggested mitigation measures to replace impacted park lands with lands of reasonably equivalent usefulness and location, coupled with the above comments, will address all identified adverse impacts on Fernwood Parkway. After mitigation, there would not be any remaining adverse impacts on park activities, features, or attributes from the RLE Project. With the updated mitigation measures discussed above that may include different replacement park sizes and locations than those previously presented in the Draft EIS, we reaffirm our concurrence with the Section 4(f) *de minimis* finding.

We look forward to a successful collaboration.

Sincerely,

Heather Gleason
Heather Gleason (Sep 21, 2021 14:21 CDT)

Heather Gleason
Director of Planning and Construction

cc: Doreen O'Donnell, Deputy Director of Planning and Development
Sarah White, Lakefront Planning Coordinator
London Walther, Senior Project Manager

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City of Chicago
Lori Lightfoot
Mayor

April 19, 2022

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: CTA Red Line Extension (RLE) Project

Dear Ms. Fratinardo,

The Chicago Park District (CPD) appreciates the opportunity to review potential pocket park location options presented on May 26, 2021 for the Chicago Transit Authority (CTA) Red Line Extension (RLE) Project. Any proposed mitigation measures for impacts to Fernwood Parkway should include fully developed passive parks within the Washington Heights community area, properties along the Major Taylor Bike Trail, or additional areas based on future coordination for a total combined area of 4.5 acres.

CPD's neighborhood parks range in size from 0.25 acre to 5 acres. These parks can contain indoor and/or outdoor recreation facilities and typically include a playground and/or other sport fields. CPD is requesting that all CTA replacement properties reach a minimum of 0.25 acre and collectively total to the approximate 4.5 acres of CPD property affected by the CTA RLE Project. If Recognized Environmental Conditions are identified in the Phase 1 Environmental Site Assessment (ESA), then a Phase 2 ESA is required. If there are exceedances of the Illinois Environmental Protection Agency's (IEPA) TACO Tier 1 Residential Standards, then the property is required to receive a Comprehensive No Further Remediation (NFR) Letter from the IEPA's Site Remediation Program.

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CTA selected the Preferred Alignment for the RLE Project in 2018. A Final EIS is being prepared, which discusses impacts on parks resulting from the Preferred Alignment. Permanent impacts from the construction of the Preferred Alignment would result in only one park (Fernwood Parkway) being impacted.

Subsequent to CPD concurrence on the de minimis finding, CPD and CTA have held meetings to further coordinate mitigation measures for impacts to Fernwood Parkway. At a February 18, 2021 coordination meeting, CTA presented an updated replacement park analysis and CPD indicated that we are more focused on fulfilling a need for smaller pocket parks within the communities instead of a single larger CPD and CTA met again on May 26, 2021. Based on our previous feedback, CTA presented pocket park location options just west of Fernwood Parkway in the Washington Heights community area and along the Major Taylor Bike Trail.

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City of Chicago
Lori Lightfoot
Mayor

Following this meeting, CPD evaluated these pocket park locations presented by CTA.

On July 29, 2021, CPD sent CTA a list of our preferred replacement sites based on their location near the Washington Heights community area, which is directly adjacent to the affected Fernwood Parkway. Each of the three (3) preferred sites reach a minimum of 0.25 acre, which is in accordance with CPD standards. CPD also sent CTA a total of seven (7) preferred sites located along the Major Taylor Bike Trail. The Major Taylor Bike Trail is a 35.30-acre park containing over 6 miles of bicycle and pedestrian pathway. Maintained and managed by CPD, the trail stretches through three (3) Chicago community areas: Washington Heights, West Pullman, and Morgan Park. Each of the seven (7) preferred sites is a minimum of 0.25 acre, which is in accordance with CPD standards.

CPD and CTA met most recently on August 25, 2021. CTA reviewed CPD preferred sites, discussed the viability of each site for parcel acquisitions, and outlined the next steps for contacting property owners to assess parcel availability. An additional site along Major Taylor Bike Trail was discussed as an option.

Based on this coordination, mitigation measures are to include replacement parks directly adjacent to the Major Taylor Bike Trail, in the Washington Heights community area, or additional areas based on future coordination. A combination of already discussed sites or newly identified sites totaling 4.5 acres of CPD property affected would serve as replacement parks. The replacement park sites are to include passive recreational space. Mitigation measures should include replacement property prepared in accordance with CPD standards.

The suggested mitigation measures to replace impacted park lands with lands of reasonably equivalent usefulness and location, coupled with the above comments, will address all identified adverse impacts on Fernwood Parkway. After mitigation, there would not be any remaining adverse impacts on park activities, features, or attributes from the RLE Project. With the updated mitigation measures discussed above that may include different replacement park sizes and locations than those previously presented in the Draft EIS, we reaffirm our concurrence with the Section 4(f) de minimis finding.

We look forward to a successful collaboration.

Sincerely,

Heather Gleason
Heather Gleason (Apr 19, 2022 16:27 CDT)

Heather Gleason
Director of Planning and Construction

cc: Doreen O'Donnell, Deputy Director of Planning and Development
Sarah White, Lakefront Coordinator
London Walther, Senior Project Manager

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Attachment C – Chicago Park District Wendell Smith Park Temporary Occupancy Letter

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April 19, 2022

Marlise Fratinardo
Senior Project Manager, Planning
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

RE: CTA Red Line Extension (RLE) Project

Dear Ms. Fratinardo,

The Chicago Park District (CPD) understands that the Chicago Transit Authority (CTA) would need to temporarily close the northwest corner of Wendell Smith Park in order to construct the Red Line Extension (RLE) Project. Based on the discussions between CPD and CTA about construction activities within the northwest corner of Wendell Smith Park, CPD agrees that the construction activities would be considered a temporary occupancy under 23 CFR § 774.13 that is so minimal as to not constitute a Section 4(f) use. CPD agrees that CTA meets the temporary occupancy conditions based on the following justification and agree that there would be no use of Wendell Smith Park:

- The anticipated total closure time that is needed would be considerably less than the total time needed for the construction of the RLE Project.
- There would be no change in land ownership for Wendell Smith Park.
- The scope of work includes the placement of piers adjacent to the park right-of-way and the placement of girders for the elevated structure; however, the proximity of the park would require a construction easement for contractor access and the need to clear some trees, this work would be conducted through a required construction permit.
- There would be no permanent adverse physical impacts, nor would there be a temporary or permanent interference with the activities, features, or attributes of the park.
- CPD would require a construction permit that requires full restoration, and the land would be fully restored to a condition at least as good as that which exists prior to the RLE Project.

CPD looks forward to a successful collaboration. As stated above, prior to construction activities, CPD will require a construction permit.

Sincerely,

Heather Gleason
Heather Gleason (Apr 19, 2022 16:26 CDT)

Heather Gleason
Director of Planning and Construction

c: Doreen O'Donnell, Deputy Director of Planning and Development
Sarah White, Lakefront Coordinator
London Walther, Senior Project Manager

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Appendix Y

Section 4(f) Replacement Park Analysis Technical Memorandum

- Draft EIS Appendix Y, Section 4(f) Replacement Park Analysis Technical Memorandum, August 2016
  - Attachment 1, Chicago Park District Coordination
  - Attachment 2: Desktop and Geospatial Analysis Results
  - Attachment 3: Field Visit Findings
  - Attachment 4: Suitability Analysis Assessment Notes
  - Attachment 5: Environmental Database Report Findings
  - Attachment 6: Park Concept Renderings

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Red Line Extension

Chicago Red Line Extension Project

Section 4(f) Replacement Park Analysis

Technical Memorandum

August 24, 2016

Prepared for:
Chicago Transit Authority
567 W. Lake Street
Chicago, IL 60661

Prepared by:

CWC Transit Group
125 S. Wacker Drive
Suite 600
Chicago, IL 60606

cta

Table of Contents

Section 1 Introduction 1-1
1.1 Purpose of this Technical Memorandum 1-4
Section 2 Summary of Park Impacts and Mitigation Proposed 2-1
2.1 Wendell Smith Park Impacts and Mitigation Measures (East Option) 2-1
2.2 Block Park Impacts and Mitigation Measures (East Option) 2-2
2.3 Fernwood Parkway Impacts and Mitigation Measures (West Option) 2-3
2.4 Chicago Park District Coordination 2-3
Section 3 Replacement Park Identification Process 3-1
3.1 Desktop and Geospatial Analysis 3-1
3.2 Field Investigations 3-5
3.3 Suitability Analysis 3-5
Section 4 Replacement Park Concepts 4-1
4.1 Replacement Option Site 2B 4-1
4.2 Replacement Option Site 8A 4-6
4.3 Replacement Option Site 12 4-9
Section 5 Changes to Existing Parks 5-13
5.1 Wendell Smith Park - Amenities Replacement 5-13
5.2 Block Park 5-17
5.3 Fernwood Parkway 5-19
Section 6 Conclusions 1

Figures

Figure 1: Red Line Extension Project Overview Map 1-2
Figure 2: Overview of Park Impacts 1-3
Figure 3: Replacement Park Identification Process 3-1
Figure 4: Desktop and GIS Analysis Site Identification (22 Sites) 3-3
Figure 5: Suitability Analysis Criteria 3-6
Figure 6: Site 2B Existing Conditions 4-3
Figure 7: Site 2B Park Concept 1 4-4
Figure 8: Site 2B Park Concept 2 4-5
Figure 9: Site 8A Existing Conditions 4-7
Figure 10: Site 8A Park Concept 4-8
Figure 11: Site 12 Existing Conditions 4-10
Figure 12: Site 12 East Option Park Concept 4-11
Figure 13: Site 12 West Option Park Concept 4-12
Figure 14: East Option Alignment near Wendell Smith Park 5-14
Figure 15: West Option Alignment near Wendell Smith Park 5-15
Figure 16: Wendell Smith Park Concept (East Option) 5-16

Figure 17: East Option Alignment near Block Park 5-18
Figure 18: West Option Alignment near Fernwood Parkway (north) 5-20
Figure 19: West Option Alignment near Fernwood Parkway (south).....5-21

Tables

Table 1: Parklands Affected by UPRR Rail Alternative Options.....1-4
Table 2: Desktop Analysis Replacement Park Identification 3-4
Table 3: Site Suitability Analysis Summary 3-8

Section 1
Introduction

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to extend the existing Red Line heavy rail transit service 5.3 miles south from the existing 95th Street Terminal to Chicago's Far South Side. The proposed extension would include four new stations near 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Each new station would include bus and parking facilities.

The proposed Union Pacific Railroad (UPRR) Rail Alternative would extend the Red Line from the existing 95th Street Terminal to 130th Street. The UPRR Rail Alternative alignment would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would turn south to follow the UPRR corridor. Two options are being considered for the alignment along the UPRR corridor: the East Option and the West Option. The CTA elevated structure would be located either east or west of the existing UPRR corridor. The alignment would follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra Electric District tracks near 119th Street. South of this point, the East and West Options would follow the same alignment southeast along the Northern Indiana Commuter Transportation District/Chicago South Shore & South Bend Railroad right-of-way using a portion of the Norfolk Southern Railway and Consolidated Rail Corporation rights-of-ways to the terminus (end) of the RLE at 130th Street. **Figure 1** is a project overview map.

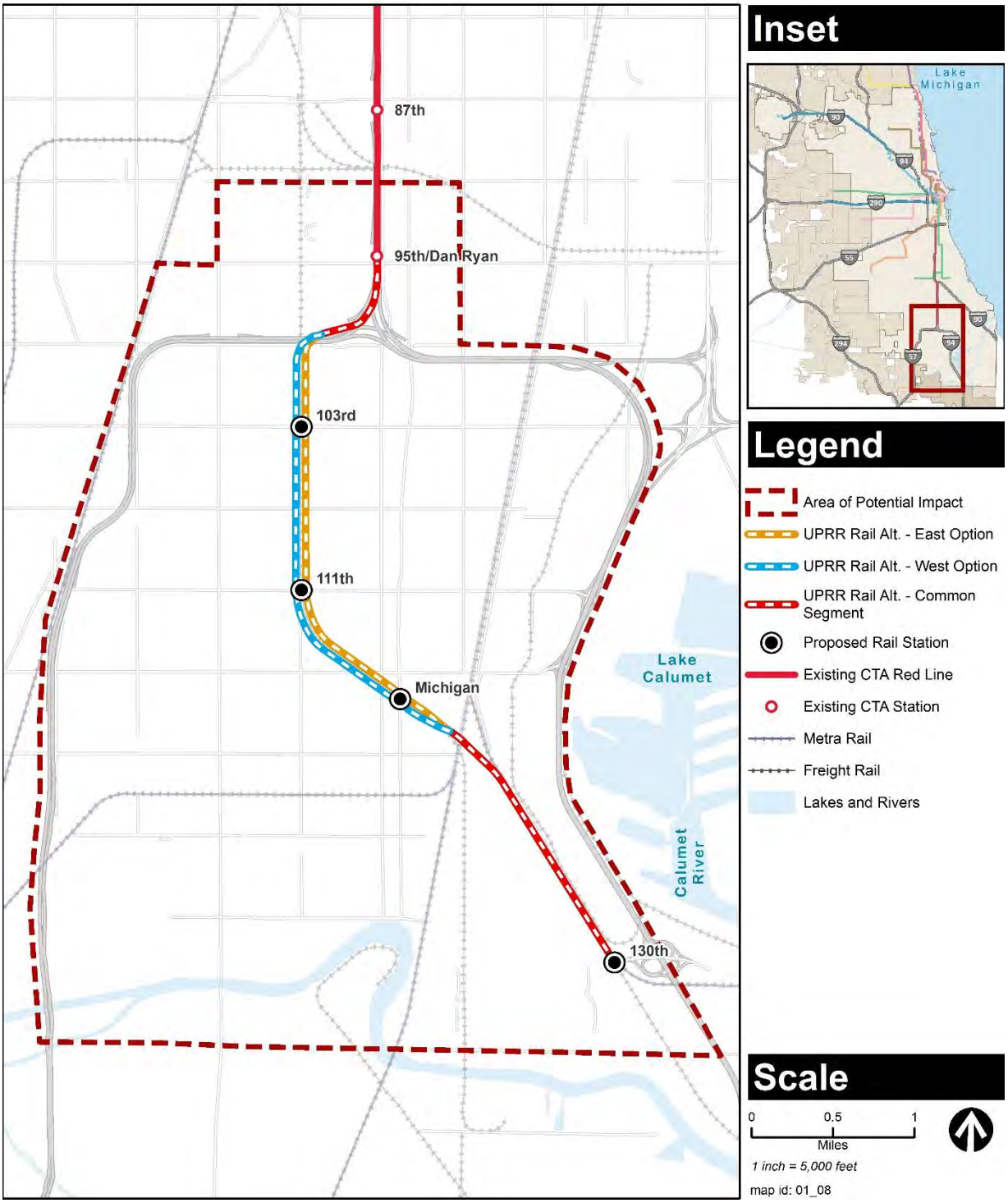

Figure 1: Red Line Extension Project Overview Map

As shown in **Figure 2**, impacts to existing parks would occur under either the East or West Option. Under the East Option, a new elevated Red Line structure would be constructed, affecting the northwest corner of Wendell Smith Park and affecting a portion of the western parcel of Block Park. Approximately 0.7 acre of Wendell Smith Park and 0.9 acre of Block Park would be affected by the East Option. Both Wendell Smith Park and Block Park would continue to provide park space to the surrounding community after implementation of the East Option, but park area would be reduced. Under the West Option, a new elevated Red Line structure would be constructed over a portion of Fernwood Parkway from 99th Street to 103rd Street between the existing UPRR tracks and Eggleston Avenue. Approximately 1.9 acres of Fernwood Parkway would be affected by the West Option. **Table 1** provides a summary of affected park area by the East and West Options.

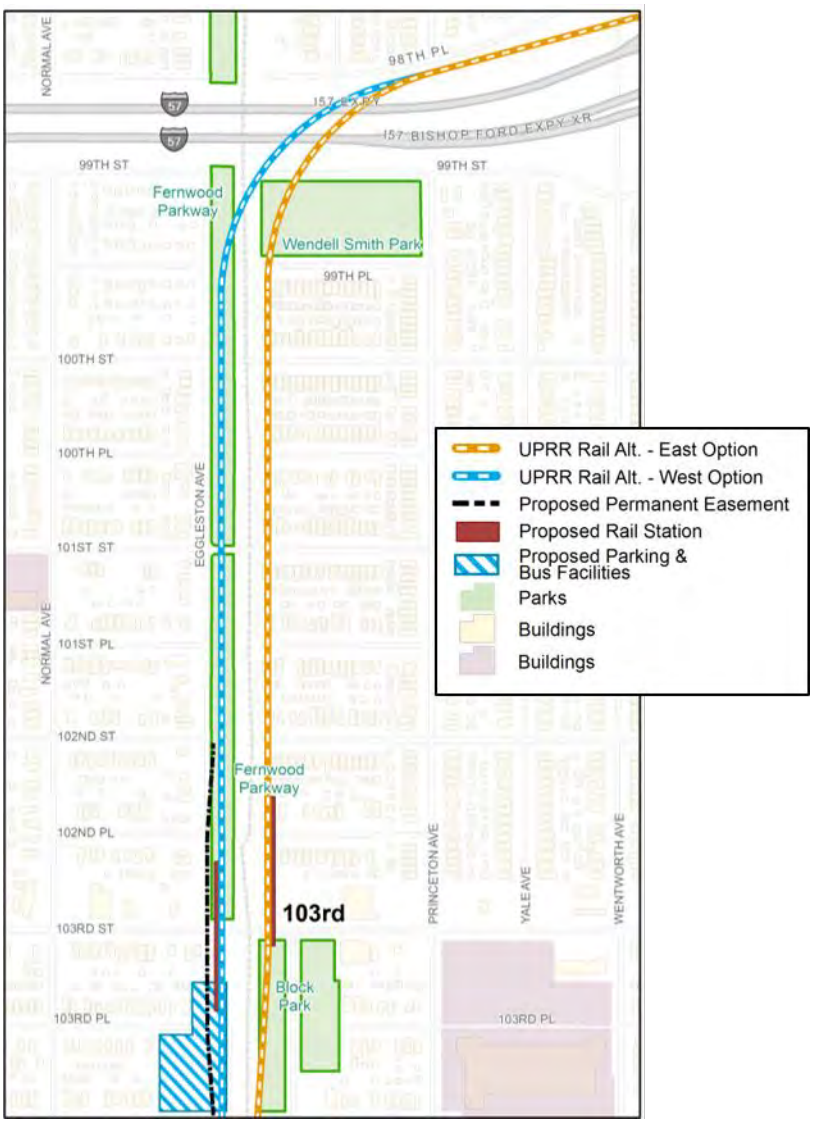

Figure 2: Overview of Park Impacts

Table 1: Parklands Affected by UPRR Rail Alternative Options

Parkland	Address	Community Area (Ward)	East Option	West Option
Wendell Smith Park	9912 S. Princeton Avenue	Roseland (Ward 9)	0.7 acre	-
Fernwood Parkway	9501 S. Eggleston Avenue	Washington Heights (Ward 9)	-	1.9 acres
Block Park	346 W. 104th Street	Roseland (Ward 34)	0.9 acre	-
Total			*1.6 acres*	*1.9 acres*

CTA developed preliminary mitigation measures, taking into account impacts on both park acreage and the attributes, features, and amenities of each park. These mitigation measures were developed so that the result of implementation of either UPRR Alternative option would result in no adverse impact on parks after mitigation. Mitigation measures are further detailed in subsequent sections of this technical memorandum. A major feature of these mitigation measures includes developing replacement parkland in or near the community areas affected as well as replacement of any of the park attributes, features, or amenities affected by the construction of the RLE Project.

1.1 Purpose of this Technical Memorandum

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 is a federal law that established requirements for USDOT (including FTA) consideration of publicly owned parks/recreational areas that are accessible to the general public, publicly owned wildlife/waterfowl refuges, and publicly or privately owned historic sites of federal, state, or local significance in developing transportation projects. In addition to general environmental regulations under the National Environmental Policy Act of 1966, Section 4(f) provides further protection of park resources affected as a result of major capital improvement projects.

Based on discussions with FTA and coordination with the Chicago Park District (CPD) in 2015 on park impacts and proposed mitigation measures for this project, a Section 4(f) preliminary "*de minimis*" finding was proposed for park impacts resulting from this project after mitigation proposed. A *de minimis* impact for parks, recreation areas, or wildlife/waterfowl areas is defined in 23 CFR § 774.17 as one that is determined to not adversely affect the features, attributes, or activities qualifying a property for protection under Section 4(f). The provision allows avoidance, minimization, mitigation, and enhancement measures to be considered in making the *de minimis* determination.

Concurrence from CPD as well as review and comment from the public are necessary to confirm a *de minimis* determination.

As part of the Draft Environmental Impact Statement (EIS) and Section 4(f) preliminary determinations being made, FTA recommended that CTA conduct additional coordination with CPD on the process to be followed for implementation of proposed mitigation measures and on replacement park options. The purpose of this coordination and additional analysis was three-fold:

- To demonstrate to FTA that land is available for replacement park mitigation and confirm that there would be no adverse effect findings through implementation of mitigation measures
- To conduct more detailed coordination with CPD on processes that will take place to fulfill mitigation measures
- To develop more visual and detailed ideas for public input as part of the Draft EIS and Section 4(f) public hearing

This memorandum provides documentation of CPD coordination and additional analysis of replacement park options and mitigation measures proposed to support the preliminary Section 4(f) *de minimis* impact finding.

Section 2
Summary of Park Impacts and Mitigation Proposed

The following provides a more detailed description of impacts and proposed mitigation measures. These impacts and mitigation measures served as a starting point for coordination with CPD on the process and potential replacement of parkland affected by the RLE Project. On August 17, 2015, CPD concurred with these impact findings and that impacts resulting from either the East or West Option would not be adverse after implementation of proposed mitigation measures.

2.1 Wendell Smith Park Impacts and Mitigation Measures (East Option)

The East Option alignment would run through the northwestern corner of Wendell Smith Park. Elevated track structure supports would be placed permanently in the park space. Of the 4.7 acres of the park, approximately 0.7 acre would be overlapped by the elevated structure and its associated clearances. Piers would be located in the park, and the bottom of the elevated structure would be approximately 15 feet above ground level.

The following attributes and features of the park are within or adjacent to the overlap area:

- **Paved Walking Path/Trees/Bench** - An existing paved walking path is maintained along the entire rectangular perimeter of the park. The westernmost north-south portion of the walking trail and a small portion of the northwestern edge of the walking path would be overlapped by the track structure. A number of small trees line the existing walking path and would be used by the overlap with tracks. In addition, there are two benches located along the westernmost north-south walking path within the overlapping area.

- **Baseball Field** - There are two baseball fields within Wendell Smith Park. The sand-filled baseball field on the northeast portion of the park is a junior-size baseball field. A small portion of the existing outfield/open space would be within the overlapped area, but would not affect the ability to use the baseball field. The second baseball field is a smaller, junior-sized baseball field in the southwest corner of the park. This smaller junior baseball field contains a backstop and bench. Because of the proposed overlap area, the backstop, bench, and space behind this backstop would be used.

Mitigation measures proposed for Wendell Smith Park include the following:

- Replacement of lands used (acreage) with lands of reasonably equivalent usefulness and location and of at least comparable value. The replacement land would be used to construct new park space in or near the Roseland community area to enhance park land availability for the surrounding community. New park area created through this replacement acreage would be constructed in accordance with CPD standards and facilitate CPD master planning goals and objectives.

- Reconstruction of the two smaller junior-sized baseball field facilities within Wendell Smith Park to provide one larger baseball field facility in this park. This mitigation measure was

developed based on coordination with CPD to ensure that the attributes, features, and activities within the park are not adversely affected as a result of this option and this measure would enhance existing baseball facilities and activities within the park. Additional outreach to the public will be conducted to share concepts for replacement proposed within Wendell Smith Park and receive further input.

- Relocation and replacement of the smaller, junior-sized baseball field on replacement park land based on coordination with CPD and outreach to the public so that the attributes, features, and activities are not adversely affected by the use of the northwest corner of the park.
- Replacement and relocation of facilities affected by the project including sidewalks, paths, benches, trees, and other facilities within the park.
- Restoration and landscaping of disturbed areas.
- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the park but not adversely affect the safety of the transit facility.

2.2 Block Park Impacts and Mitigation Measures (East Option)

The East Option alignment would run through the west parcel of Block Park, and the elevated structure and its associated clearances would overlap 0.9 acre of park space. Elevated track structure supports would be placed permanently in the west parcel of the park space. An auxiliary station entrance would also be located in the park, along the western edge of the existing parcel. The affected parcel includes an isolated portion of the park's open space and a communications tower, and does not currently serve a recreational use. The key recreational features of the park, walking trails and benches, are on the other side of Harvard Avenue in the east parcel of the park.

Mitigation measures proposed for Block Park include the following:

- Replacement of lands used (acreage) with lands of reasonably equivalent usefulness and location and of at least comparable value. The replacement land would be used to construct additional new park space in or near the Roseland community area to enhance park land availability for the surrounding community. New park space created through this replacement acreage would be constructed in accordance with CPD standards and facilitate CPD master planning goals and objectives.
- Restoration and landscaping of disturbed areas.
- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the park but not adversely affect the safety of the transit facility.

- While not related to the attributes, features, or activities of the park, additional mitigation measures would include coordination with the City of Chicago regarding relocation of the communications tower.

2.3 Fernwood Parkway Impacts and Mitigation Measures (West Option)

The West Option track structure would run through two of the four parcels that make up Fernwood Parkway between 101st and 103rd Streets. Elevated track structure supports would be placed permanently in the parkway. Approximately 1.9 acres of the parkway would be overlapped by the elevated structure and its associated clearances. The parkway functions as open space, and does not contain recreational amenities.

Mitigation measures proposed for Fernwood Parkway include the following:

- Replacement of lands used (acreage) with lands of reasonably equivalent usefulness and location and of at least comparable value. The replacement land would be used to construct replacement park space in or near the Washington Heights community area to enhance park land availability for the surrounding community. New park space created through this replacement acreage would be constructed in accordance with CPD standards and facilitate CPD master planning goals and objectives.

- Potential installation of a new bicycle path beneath the elevated track structure. This new bicycle path would be subject to use by CTA for track structure maintenance. While this mitigation measure is not related to the attributes, features, or amenities within the existing park, this measure would enhance the existing unused green space and better connect parks and the newly proposed transit infrastructure. A preliminary analysis as part of the Draft EIS confirmed the feasibility of this bicycle path. Additional coordination with the City of Chicago Department of Transportation will confirm the feasibility of this measure.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the green space but not adversely affect the safety of the transit facility.

2.4 Chicago Park District Coordination

CTA held early coordination meetings with CPD on April 18, 2011; July 23, 2013; May 8, 2014; and April 8, 2015 to provide CPD staff with preliminary information on the RLE Project, purpose and need, identification and refinement of alternatives, and potential impacts on parks, and to discuss potential mitigation measures.

On June 8, 2015, CTA provided CPD with information on park impact findings and proposed mitigation measures. On August 17, 2015, CPD provided its concurrence that after implementation

of the proposed mitigation measures there would be no adverse impact on parks from either option under evaluation for the RLE Project.

After discussions with FTA in fall 2015, CTA and CPD held additional coordination meetings to further refine mitigation measures and processes to be followed in fulfilling mitigation requirements:

- **October 8, 2015:** CTA and CPD coordination meeting to review scope of work for further developing park mitigation measures and to outline coordination steps and schedule.
- **March 10, 2016:** CTA and CPD coordination meeting to review field investigation findings and confirm 12 potential replacement park sites for further analysis.
- **April 6, 2016:** CTA and CPD coordination meeting to discuss replacement park suitability analysis findings and to further refine 3 potential replacement park options for development of site plans.
- **May 18, 2016:** Joint meeting with CTA, CPD, and the City of Chicago Department of Planning and Development (DPD) to review the proposed 3 replacement park site options; city-owned property, land uses, and other city-owned infrastructure potentially affected by the project and/or proposed as part of the 3 potential replacement park sites; and to understand any other DPD-related planning and/or economic development initiatives in the area.
- **June 15, 2016:** CTA and CPD coordination meeting to review draft replacement park option concept plans and replacement of affected amenities within Wendell Smith Park.

The coordination meetings held in late 2015 and 2016 helped to further identify and agree upon appropriate replacement of amenities within Wendell Smith Park and potential new replacement park options to share with the public for further input. CTA worked with landscape architects, park planners, and other urban planners to develop potential replacement park sites and replacement of amenities within Wendell Smith Park. Meeting notes from these meetings and correspondence between CTA and the Chicago Park District are provided in **Attachment 1** of this technical memorandum.

These coordination meetings also helped to solidify key considerations for replacement park options, and developed a more detailed understanding of how mitigation measures would need to be implemented:

- CPD requested that CTA focus replacement park options on sites that could accommodate a new park rather than developing smaller green space or pocket park sites.
- CPD requested that new park options meet CPD standards for new park size. All new CPD parks are required to be 2 acres in size or greater. Mitigation measures proposed to address impacts from implementation of the RLE Project will ensure replacement of the acreage of

identified park impacts (1.6 and 1.9 acres for the East and West Options, respectively). The investigation to identify potential replacement park sites focused on sites that would be a minimum of 1.6 or 1.9 acres in size, with preference given to sites that allowed for 2 acres or more of replacement park.

- CPD requested that replacement park options be near the project area and affected community and support CPD's agency goals and objectives of providing parks within a ½-mile radius of all residents in Chicago. Priority for replacement park options was therefore given to sites that would be located near affected parks and/or to sites that helped fill a current gap in park sites within these community areas.

- CPD will require CTA and FTA to conduct a Phase I Environmental Site Assessment (ESA) before purchase of property to confirm any existing or potential environmental contamination liabilities.

    - As part of this current analysis within the Draft EIS, CPD agreed that information and analysis contained in the environmental database search report prepared by Environmental Data Resources, Inc. (EDR) would provide a sufficient level of detail to evaluate replacement park options. EDR reports are a standard tool used to identify historic or existing environmental concerns, and are usually a first step in a Phase I ESA.

    - Once a single option is chosen for the RLE Project and a potential replacement park option is confirmed, CTA and FTA will conduct the Phase I ESA before acquisition of land. Clean up of any hazardous materials identified will be addressed by CTA and FTA such that the site is in suitable park condition when turned over to CPD for building the replacement park.

- CPD will consider public comments received as part of the RLE Project in further development of replacement parks and amenity needs. Only amenities identified in the mitigation requirements as part of the RLE Project should be included in concepts at this time.

Coordination with CPD will continue through the Final EIS to finalize replacement park options and other mitigation measures.

Section 3
Replacement Park Identification Process

A four-step, iterative process was developed to identify potential replacement park sites, as shown in **Figure 3**. This process allowed the project team to first identify as many potentially eligible properties as possible and continue to narrow sites using professional judgment and suitability criteria, in coordination with feedback from CPD staff.

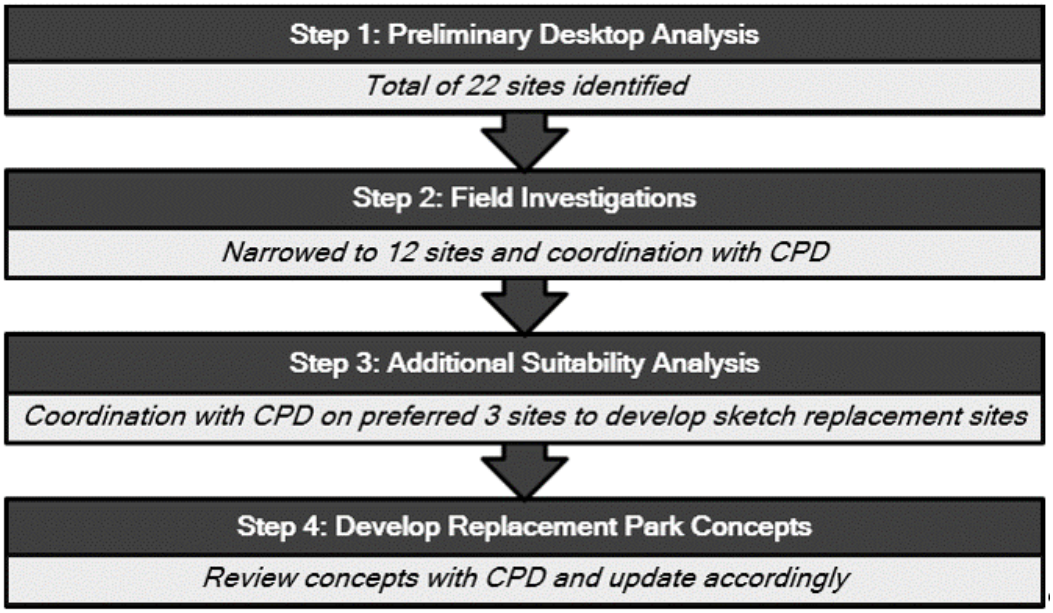

Figure 3: Replacement Park Identification Process

CTA and CPD agreed that given the timeline of the potential acquisition of replacement park property and the need for additional public input into the process, it was best to narrow the potential sites to the top three ranked sites analyzed and develop conceptual site plans for each.

The following sections provide additional details on each of the steps conducted.

3.1 Desktop and Geospatial Analysis

A desktop and Geographic Information Systems (GIS) analysis was conducted first to identify potential park sites. As noted earlier, the preliminary focus for identification of potential park sites was two-fold: to identify potential sites that would provide acre-for-acre replacement park of affected parkland from the RLE Project (1.6 acres for the East Option or 1.9 acres for the West Option), and to meet CPD standards for new park acreage (at least 2 acres).

In addition, CTA considered the following priorities for the East Option:

- Ability to replace total acreage affected

- Ability to replace park within Roseland community area
- Ability to accommodate a new junior-sized baseball field to address impacts on the existing junior-sized baseball field in Wendell Smith Park. This included a review of nearby existing parks with available open space for a new junior-sized baseball field as well as a review of properties with the potential for inclusion of a new junior-sized baseball field.

CTA considered the following priorities for the West Option:

- Ability to replace total acreage affected
- Ability to replace park within Washington Heights community area or adjacent community area (Fernwood Parkway south of I-57/I-94)

The initial analysis consisted of visual desktop inspections and further review in the field.

The GIS analysis identified available vacant properties for potential park sites using four main data sources: (1) City-owned vacant properties database, (2) City of Chicago database on 311 calls regarding open and vacant buildings, (3) vacant and abandoned building violations, and (4) Chicago Metropolitan Agency for Planning (CMAP) 2010 land use inventory of vacant properties. CTA evaluated parcels within ½-mile, 1-mile, 2-mile, and 3-miles of potential park impacts.

City-owned vacant parcels were identified as having the greatest potential for potential park sites given the anticipated ease of working between agencies to acquire land. In addition, identifying vacant and abandoned properties provided the project team with information on potentially underinvested lands near the project area where development of parks might provide additional amenities to the community area and/or incentivize additional investment.

The primary criteria for the desktop and GIS analysis were to identify contiguous vacant properties totaling 1.6 acres or greater, location near the affected parks, distance from other existing parks where replacement of acreage might help enhance existing parks, and adequate layout for a junior-sized baseball field (for East Option only).

A total of 22 sites were identified as part of the desktop and GIS analysis. **Figure 4** shows the 22 site locations that were identified as part of the desktop analysis for further field identification. These sites were located in 17 main areas; because some areas contained multiple site options, some sites were identified as "A", "B," or "C." In addition, Gano Park (an existing park just north of sites 14 and 15 on **Figure 4**) was identified as an existing park that might have an appropriate layout to allow for a junior-sized baseball field.

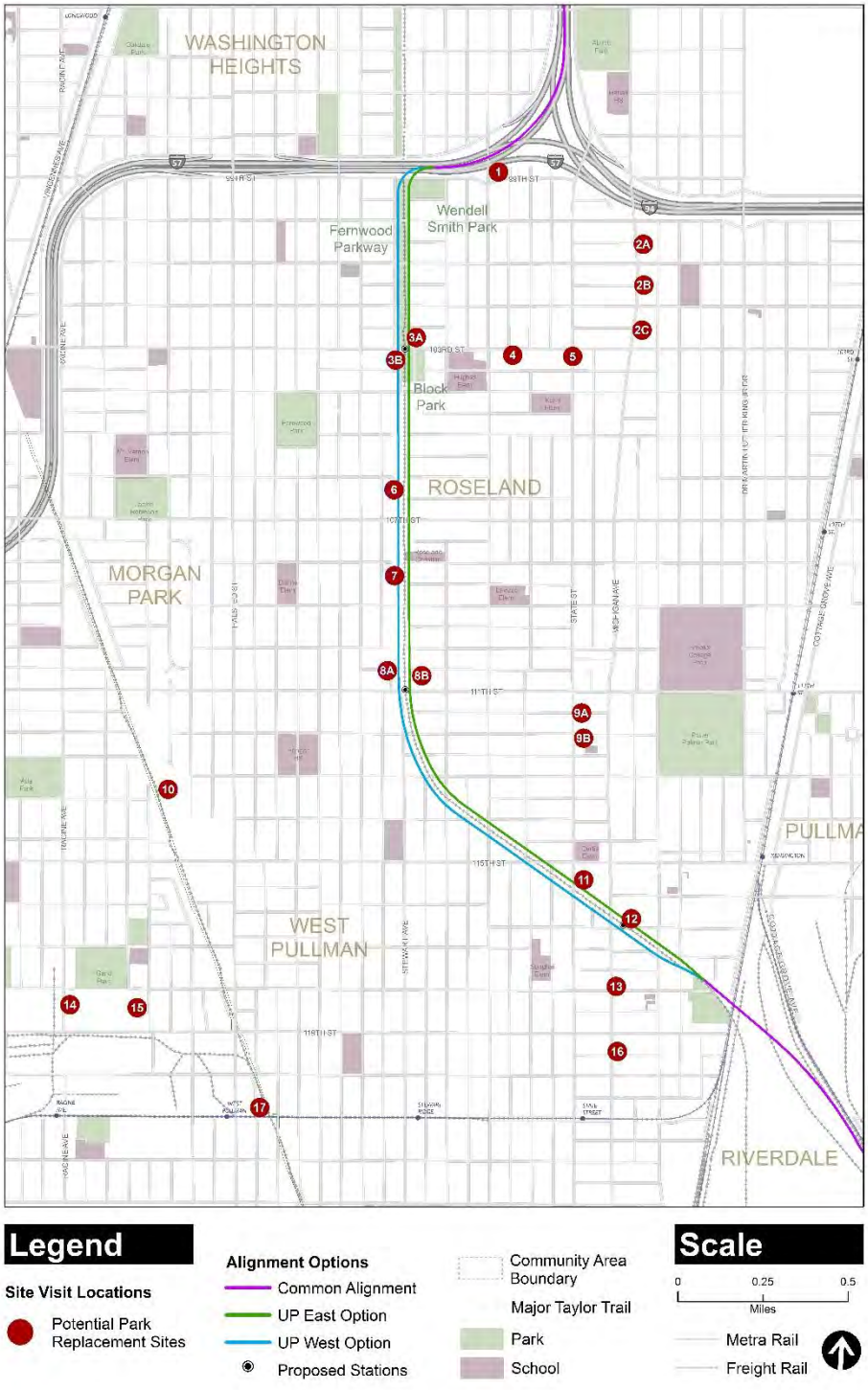

Figure 4: Desktop and GIS Analysis Site Identification (22 Sites)

Table 2 provides additional information about these 22 sites. **Attachment 2** of this technical memorandum provides additional information on each of these sites, including aerials and parcel ID numbers.

Table 2: Desktop Analysis Replacement Park Identification

Site ID	Size (acres)	Location	Community Area/Ward
1	1.7	Wentworth Avenue/99th Street	Roseland/Ward 9
2A	1.2	Michigan Avenue/100th Street	Roseland/Ward 9
2B	2.0	Michigan Avenue/101st Street	Roseland/Ward 9
2C	1.4	Michigan Avenue/102nd Street	Roseland/Ward 9
3A	0.8	103rd Street/Harvard Avenue	Roseland/Ward 9
3B	2.1	103rd Street/Eggleston Avenue	Roseland/Ward 34
4	1.2	103rd Street/Wentworth Avenue	Roseland/Ward 34
5	2.8	103rd Street/State Street	Roseland/Ward 34
6	3.4	107th Street/Eggleston Avenue	Roseland/Ward 34
7	3.3	109th Street/Eggleston Avenue	Roseland/Ward 34
8A	3.9	111th Street/Eggleston Avenue	Roseland/Ward 34
8B	2.5	111th Street/West of UPRR Railroad	Roseland/Ward 34
9A	2.2	112th Street/State Street	Roseland/Ward 9
9B	1.9	112th Street/State Street	Roseland/Ward 9
10	6.0	Adjacent to Major Taylor Trail	Morgan Park/Ward 34
11	5.9	115th Street/State Street	West Pullman/Ward 9
12	2.2	Michigan Avenue/Kensington Avenue	West Pullman/Ward 9
13	0.9	118th Street/Michigan Avenue	West Pullman/Ward 9
14	1.7	119th Street/Racine Avenue	West Pullman/Ward 34
15	3.9	119th Street/Morgan Street	West Pullman/Ward 34
16	1.5	Michigan Avenue/120th Street	West Pullman/Ward 9
17	1.9	120th Street/Halsted Street	West Pullman/Ward 34

One important note regarding the desktop and GIS analysis findings is that no potential park sites were identified within the Washington Heights community area, although there are already several parks in this community area, particularly north of I-57. While initial GIS investigations identified several vacant properties in Washington Heights, the properties were not large enough nor contiguous to support a new park. A bike and pedestrian path along 89th Street between Loomis Street and Vincennes Avenue was considered early in the analysis, but based on coordination with CPD, the site would not serve as park acreage replacement or be manageable by CPD; as such, it was removed from consideration. One vacant property of suitable size was identified between 89th and 90th Streets, but is not contiguous and is separated by Loomis Street. Use of this site would require additional, costly roadway reconfigurations; therefore, this site was eliminated. **Attachment 2** provides aerials of these considered but eliminated sites.

While the West Option would impact Fernwood Parkway in Washington Heights, the area of impact within Fernwood Parkway is south of the I-57. This area, while technically designated as within Washington Heights, is more associated with the nearby Roseland community area to the south (i.e., both are south of the interstate and share similar surrounding land uses and community character). Based on discussions with CPD, it was agreed that reviewing sites within 1 mile of the area of impact (south of I-57) would be preferable.

3.2 Field Investigations

CTA conducted field investigations on February 17 and 18, 2016 to further analyze the 22 potential sites as well as to evaluate the potential to provide a replacement baseball field in Gano Park. **Attachment 3** provides field visit findings and detailed considerations for all sites.

Of the 22 sites reviewed, 10 sites were eliminated based on the field investigations (Sites 1, 2A, 2C, 3A, 4, 5, 8B, 13, 14, and 16). Primary reasons for elimination were because of the following:

- Insufficient size (would not meet the minimum 1.6 and 1.9 acres affected by either the East or West Option, or CPD's standard of a minimum of 2 acres)
- High noise levels, safety concerns because of compromised views, or location near heavily traveled streets
- Non-contiguous parcels (would require parks on both sides of a roadway or would require major street reconfigurations to provide a continuous park space; not preferable for cost, safety, and park layout)
- Active use parcels determined to be difficult to purchase given their location and current land uses

The field investigation at Gano Park determined that the available grassed area in this park would be unsuitable for a baseball field replacement for several reasons: (1) an existing retention basin makes the site unsuitable for active recreation, (2) the available area would not be sufficient to accommodate a junior-sized baseball field, (3) there already is a baseball field in this park, and (4) this park would be a substantial distance from the community area where park impacts would occur.

3.3 Suitability Analysis

After the field investigation, 12 sites remained for further suitability analysis. Eight of these 12 sites (Sites 2B, 9A, 9B, 10, 11, 12, 15, and 17) were determined to be available for use as a replacement park site for either the East or West Option. Four of these 12 sites (Sites 3B, 8A, 6, and 7) were determined to be feasible options for the East Option only.

The 12 sites fell into one or more of three main categories that were initially determined to be favorable for park siting:

- Adjacent to proposed RLE Project (alignment or stations)

- Underutilized/vacant commercial areas (transit-oriented development opportunity areas)
- Providing connections to Major Taylor Trail or existing parks

Additionally, some sites were identified within the Morgan Park and West Pullman community areas but would be further from the project area. These sites were retained for the suitability analysis given other favorable factors at these locations, including larger sizes of available land and ability to co-locate parks with existing Metra rail, existing parks, trail systems, or community facilities such as senior centers.

CTA conducted a suitability analysis using six areas of consideration (see **Figure 5**). Each park was assigned a low, medium, or high rating (values of 1, 3, or 5, respectively) based on a qualitative and quantitative assessment of the criteria.

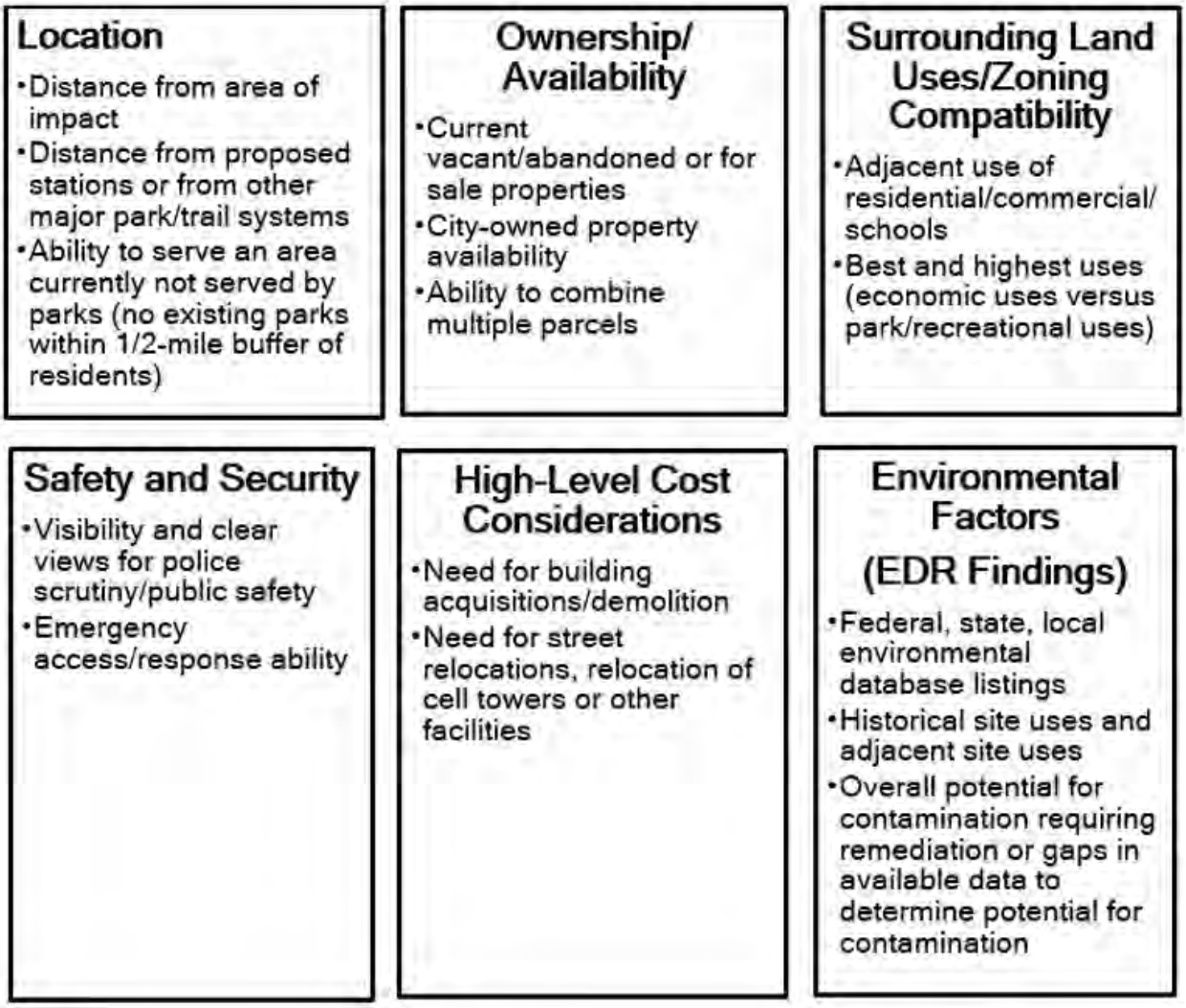

Figure 5: Suitability Analysis Criteria

CTA evaluated sites using GIS based on their distance from the area of impacts, distance from proposed stations and other major trail systems or existing parks, and the ability for sites to fill existing gaps in park access. Existing gaps in parks were identified by placing a ½-mile buffer around existing parks to determine areas where parks were located more than ½-mile from residents. Based on coordination with CPD, sites that could fill existing gaps within communities were given extra points, while sites that were already under consideration for other park projects received negative points.

CTA consulted the City-managed property owner databases to identify land ownership, with additional weight given to properties that are currently vacant and/or City-owned because City-owned properties would be easier to acquire. Property title information was used to supplement this analysis.

CTA also reviewed land use and zoning for the sites and the properties surrounding them. Additional points were given to sites that could serve as catalysts for additional development by providing attractive park spaces within underdeveloped areas. Ranking consideration took into account whether park uses would provide the highest and best use of the property given land use and zoning both on the property and adjacent properties.

Safety considerations included a review of sites for clear views for police monitoring, street access issues, or issues that could arise in providing emergency access.

CTA also evaluated high-level cost considerations including whether costly street relocations or configurations would be needed. CTA also considered whether properties were already open space or if demolition would be needed, adding to costs for implementation.

Finally, CTA reviewed EDR report findings to evaluate the risk of encountering hazardous materials at each site. The EDR report provided historical site uses (Sanborn maps and aerial photographs) and a summary of site listings in environmental databases, which could indicate the presence of hazardous materials on the property. The EDR report would be one part of the Phase I ESAs that would be performed as part of property acquisition, and provides information related to environmental fatal flaws.

Attachment 4 contains additional details on considerations for each site on each of the six criteria. **Attachment 5** contains a summary of information from the EDR report.

Table 3 provides a summary matrix of the suitability analysis scoring. CTA reviewed the top three ranked sites with CPD and based on coordination, these three sites were selected for further development of replacement park concept plans.

Table 3: Site Suitability Analysis Summary

Criterion	2B	3B	6	7	8A	9A	9B	10	11	12	15	17
Location	5	5	5	5	5	1	1	3	1	3	1	1
Additional Weighting for Sites Filling an Existing CPD Park Gap	1	0	0	1	1	0	0	-1	0	0	0	0
Vacancy/Availability of Acquisition	3	1	5	3	5	1	1	5	3	5	5	3
Land Use/Zoning Compatibility	5	3	3	3	5	1	1	3	1	5	1	3
Safety/Security	5	5	1	1	5	3	3	3	5	5	5	1
Environmental Factors	3	3	3	3	3	3	3	5	3	3	1	3
Cost Considerations	3	5	3	5	5	1	3	5	3	5	3	5
TOTAL SCORING:	**25**	**22**	**20**	**21**	**29**	**10**	**12**	**23**	**16**	**26**	**16**	**16**

Note: Total scoring in red text indicates the top three ranked sites (Sites 2B, 8A, 12).

Section 4
Replacement Park Concepts

Based on the suitability analysis and coordination with CPD, three potential replacement park sites (sites 2B, 8A, and 12) were identified as the best candidate sites; CTA developed conceptual plans for public review and comment for those three sites. CTA reviewed the initial park concepts provided in this section with CPD and updated them based on CPD's comments. Based on public input on potential replacement park sites, the Final EIS will indicate public preference for the replacement park location.

All property needed for these replacement park sites would be voluntarily acquired from willing sellers. No eminent domain takings are proposed to fulfill the mitigation measures for new replacement park locations.[1] While some replacement parcels are City-owned property, additional outreach to private property owners would be conducted during the Final EIS (closer in time to when the property would be acquired) to confirm whether property can be purchased. If a property owner is not willing to sell a subject property, which is identified as an optional site for replacement park and is needed to fulfill mitigation requirements, other replacement park sites will be pursued. If none of the properties identified for replacement park in the EIS can be voluntarily acquired, CTA and CPD will coordinate further to identify potential sites using similar analysis and process and most up to date property availability data to confirm available replacement park sites. The feasibility of acquiring replacement park locations and process to be followed by CTA, CPD, and property owners in fulfilling replacement park mitigation will be documented in the Final EIS to ensure implementation of mitigation measures and confirm environmental findings. No property acquisition would occur until after the NEPA environmental phase is completed (i.e., when FTA issues a Record of Decision for the Final EIS).

4.1 Replacement Option Site 2B

The replacement option for Site 2B is located along Michigan Avenue near 101st Street and could serve as a 2.1- to 2.2-acre new replacement park appropriate for either the East or West Option. The site is approximately ¾-mile from the proposed RLE corridor and would fulfill an existing gap in park facilities in this community area. **Figures 6, 7, and 8** show existing park conditions as well as two park concepts for this site.

Concept 1 for this site would include passive park space with a walking path, trees, and landscaping. CTA would purchase existing vacant land for this to provide this park. All acquisition would be based on the ability to voluntarily acquire property from property owners.

[1] It is important to note that there is a difference between a taking under eminent domain for the RLE Project itself (right-of-way needs for the new transportation facility proposed) and what is proposed for the replacement park sites, which would be a voluntary acquisition from property owners. Voluntary acquisition from willing sellers is proposed for replacement park sites such that mitigation measures proposed do not cause additional environmental impact from the RLE Project.

Concept 2 for this site would include voluntary acquisition of vacant property and require voluntary acquisition of one active use parcel on Indiana Avenue. Voluntary acquisition of this active use parcel would provide adequate space for a junior-sized baseball field, approximately 175 feet in diameter from home plate to the center field pocket. Other amenities, such as walking path, landscaping, and trees would be similar to those proposed for Concept 1.

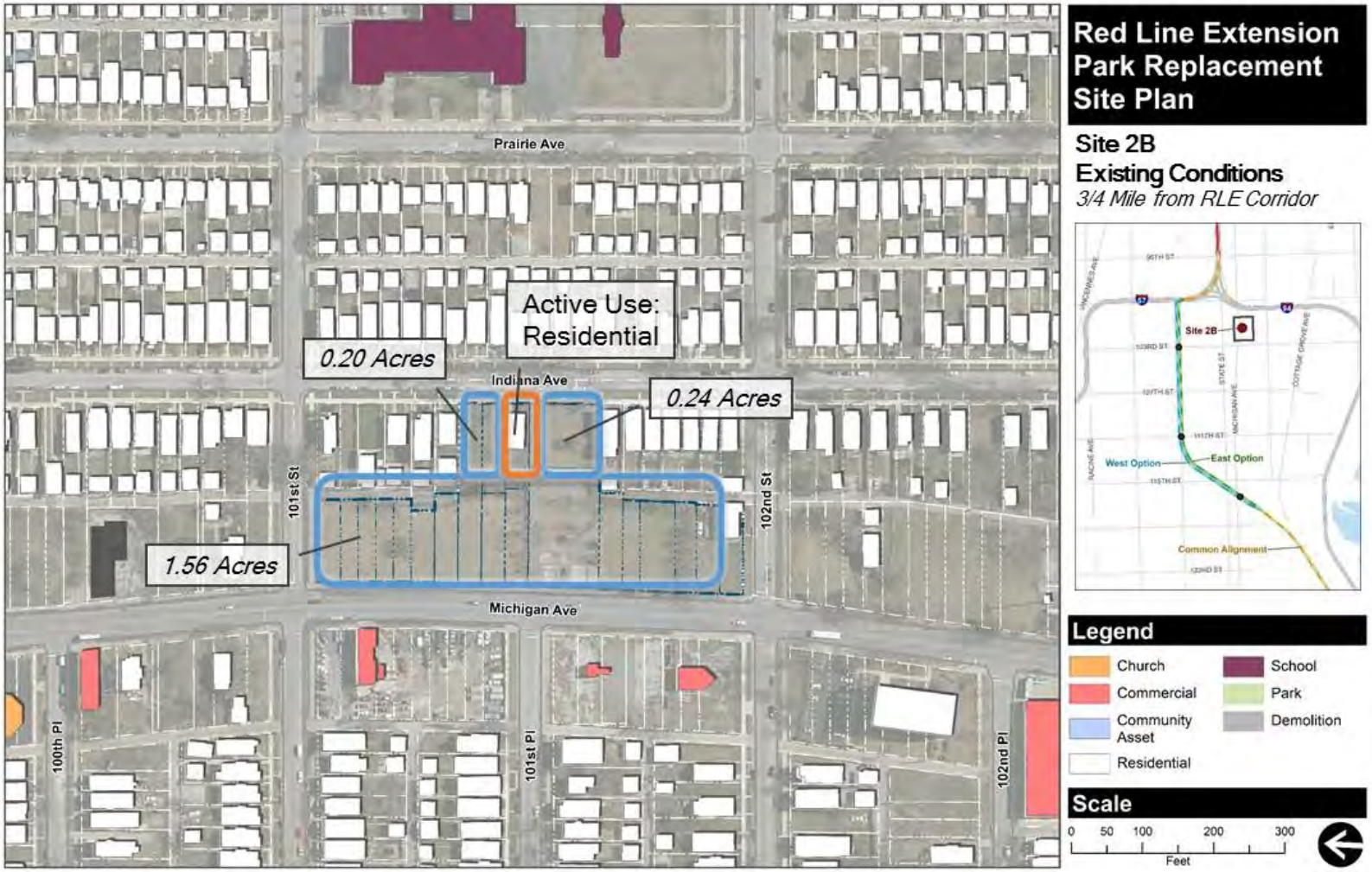

Figure 6: Site 2B Existing Conditions

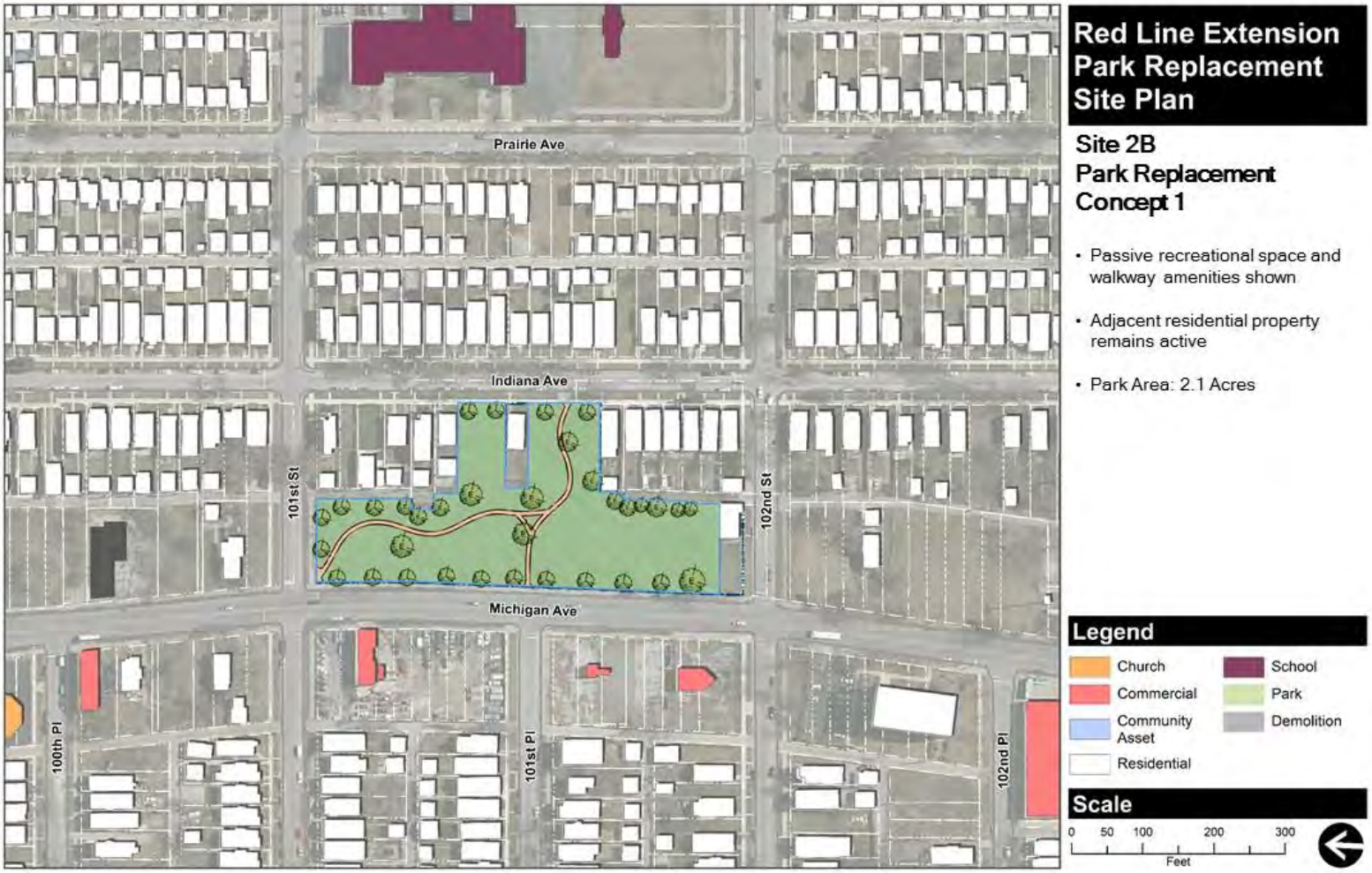

Figure 7: Site 2B Park Concept 1

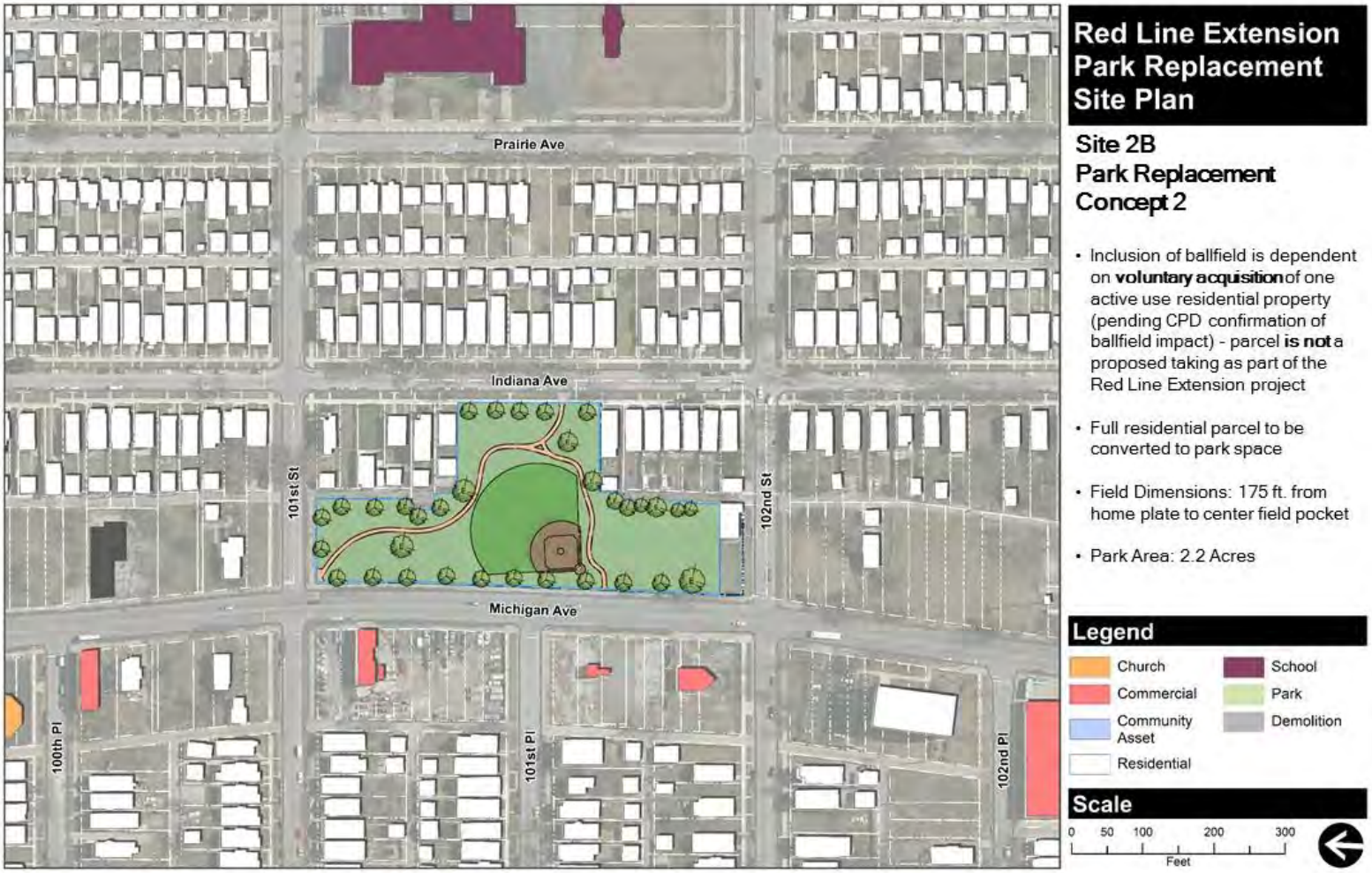

Figure 8: Site 2B Park Concept 2

4.2 Replacement Option Site 8A

The replacement option for Site 8A is located along 111th Street near Eggleston Street and is adjacent to the proposed elevated track structure and 111th Street station. This site could serve as a 2-acre new replacement park for the East Option only. A park & ride facility is proposed on a portion of this site as part of the East Option. This site would not be large enough to be a replacement park under the West Option because a park & ride facility is proposed at this site. This site is within ½-mile of Wendell Smith Park and Block Park. **Figures 9 and 10** show existing conditions as well as a replacement park concept for this location.

The concept for this site would allow for co-location of the new park with a new park & ride surface lot. A junior-sized baseball field, approximately 175 feet in diameter from home plate to the center field pocket, would be provided on the north side of the parcel. This site would involve voluntary acquisition of vacant property to accommodate the new park as well as acquisition of City-owned property for the park & ride lot. This site would provide additional connectivity between the new replacement park and nearby community facilities (a youth center and the Agape Community Center).

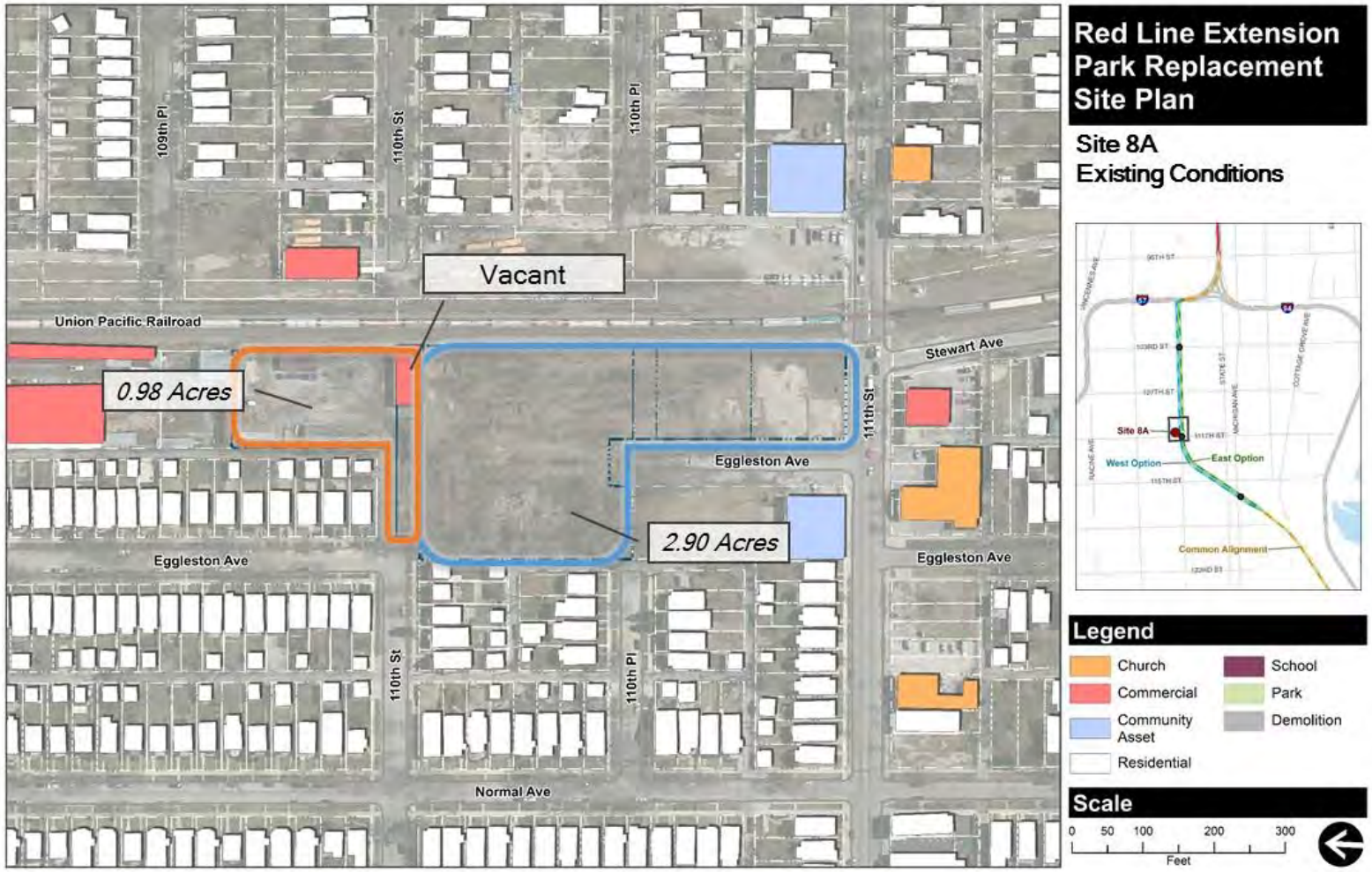

Figure 9: Site 8A Existing Conditions

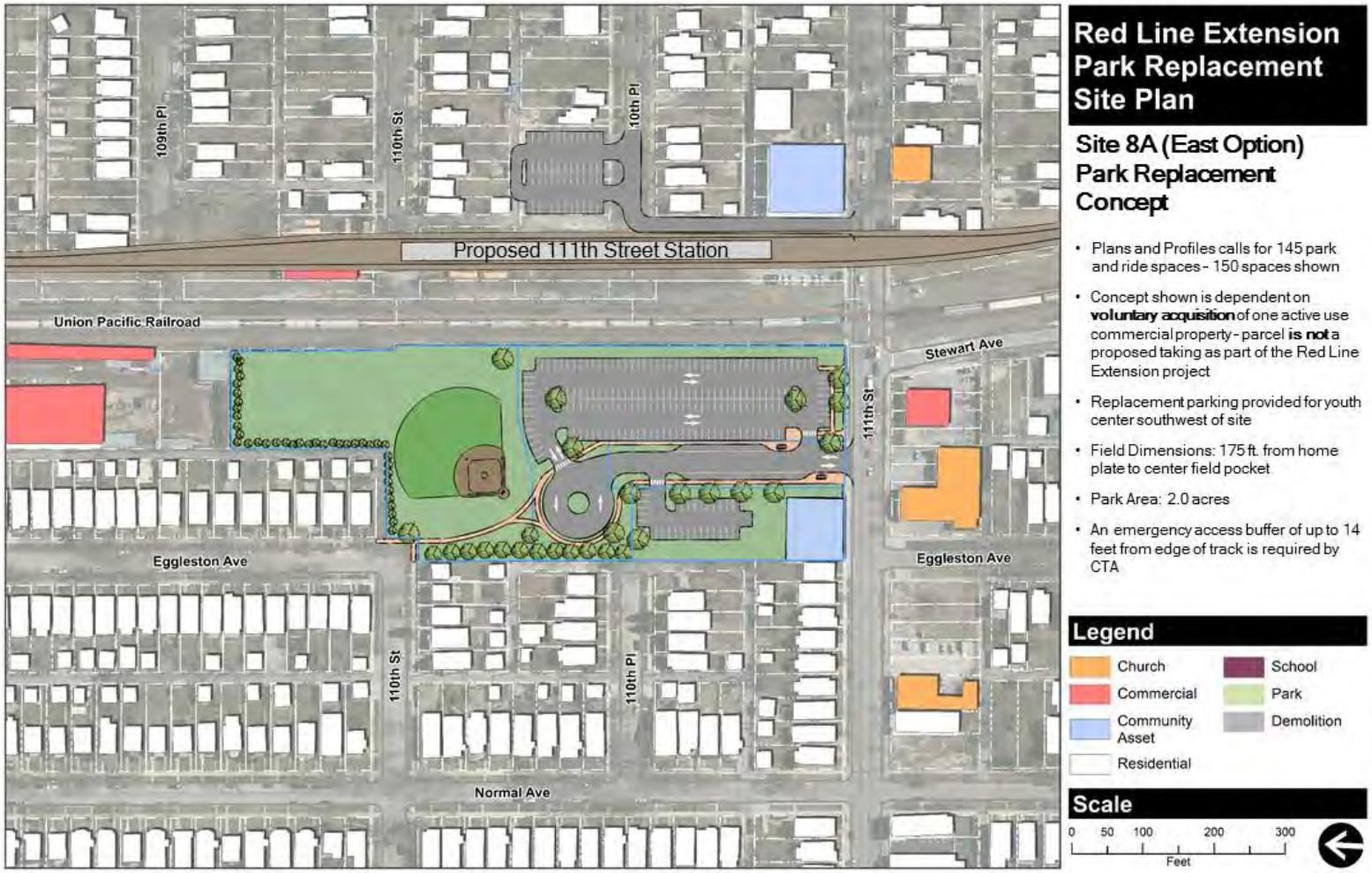

Figure 10: Site 8A Park Concept

4.3 Replacement Option Site 12

The replacement option for Site 12 is located along Michigan Avenue near Kensington Avenue and adjacent to the proposed elevated track structure and Michigan Avenue station. This site could serve as a 2.4-acre new replacement park for either the East or West Option. **Figures 11, 12, and 13** show existing conditions and proposed concept plans for this site under both the East and West Options.

Under the East Option, two park & ride lots are proposed near Michigan Avenue station. A 175-space surface parking lot is proposed northeast of the tracks, and a three-story parking garage accommodating 825 parking spaces is proposed southwest of the tracks. Under the East Option park concept, all 1,000 parking spaces would need to be provided on the southwestern parcel so that the northeastern parcel could be used for the park. This park concept would be adjacent to the proposed Michigan Avenue station and would allow for co-location of the new park with the new proposed transit facility. Voluntary acquisition of the northeastern parcel would be used under this concept.

Under the West Option, one five-story garage with 1,000 parking spaces is proposed on the southwest side of the tracks (no changes to the proposed parking would occur). This park concept would be adjacent to the proposed Michigan Avenue station, within walking distance. Voluntary acquisition of property on the southwestern parcel would be used under this concept.

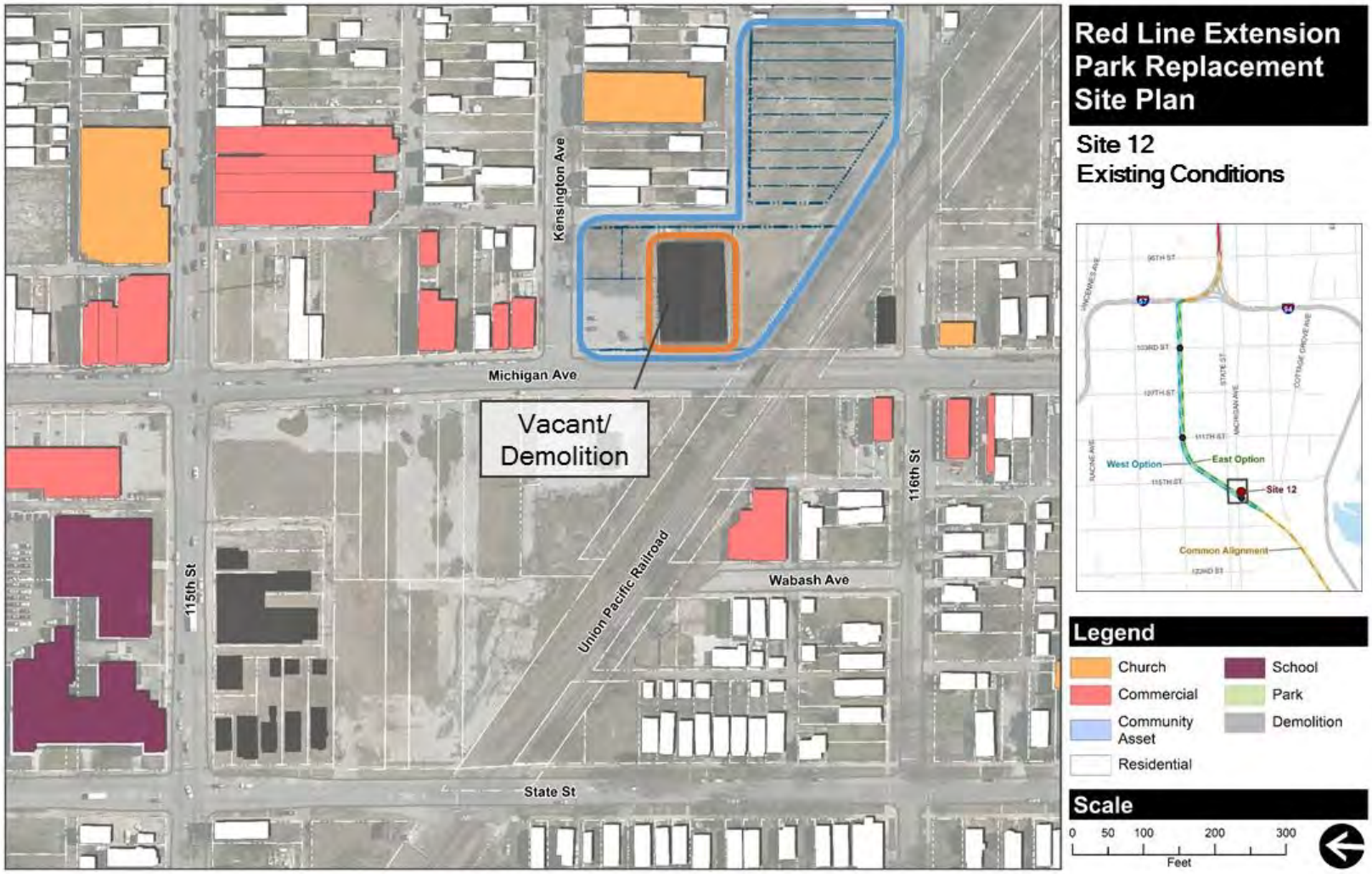

Figure 11: Site 12 Existing Conditions

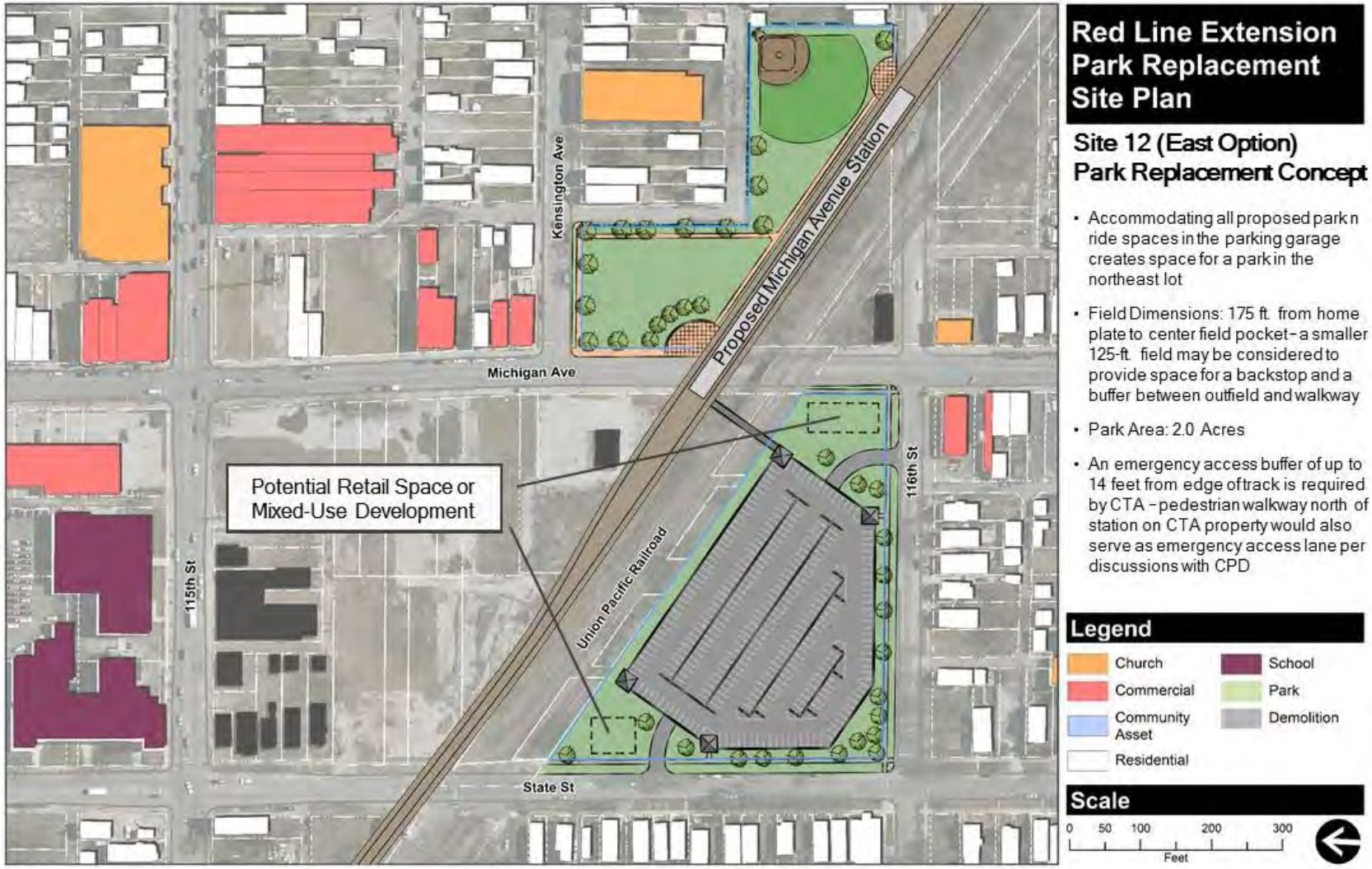

Figure 12: Site 12 East Option Park Concept

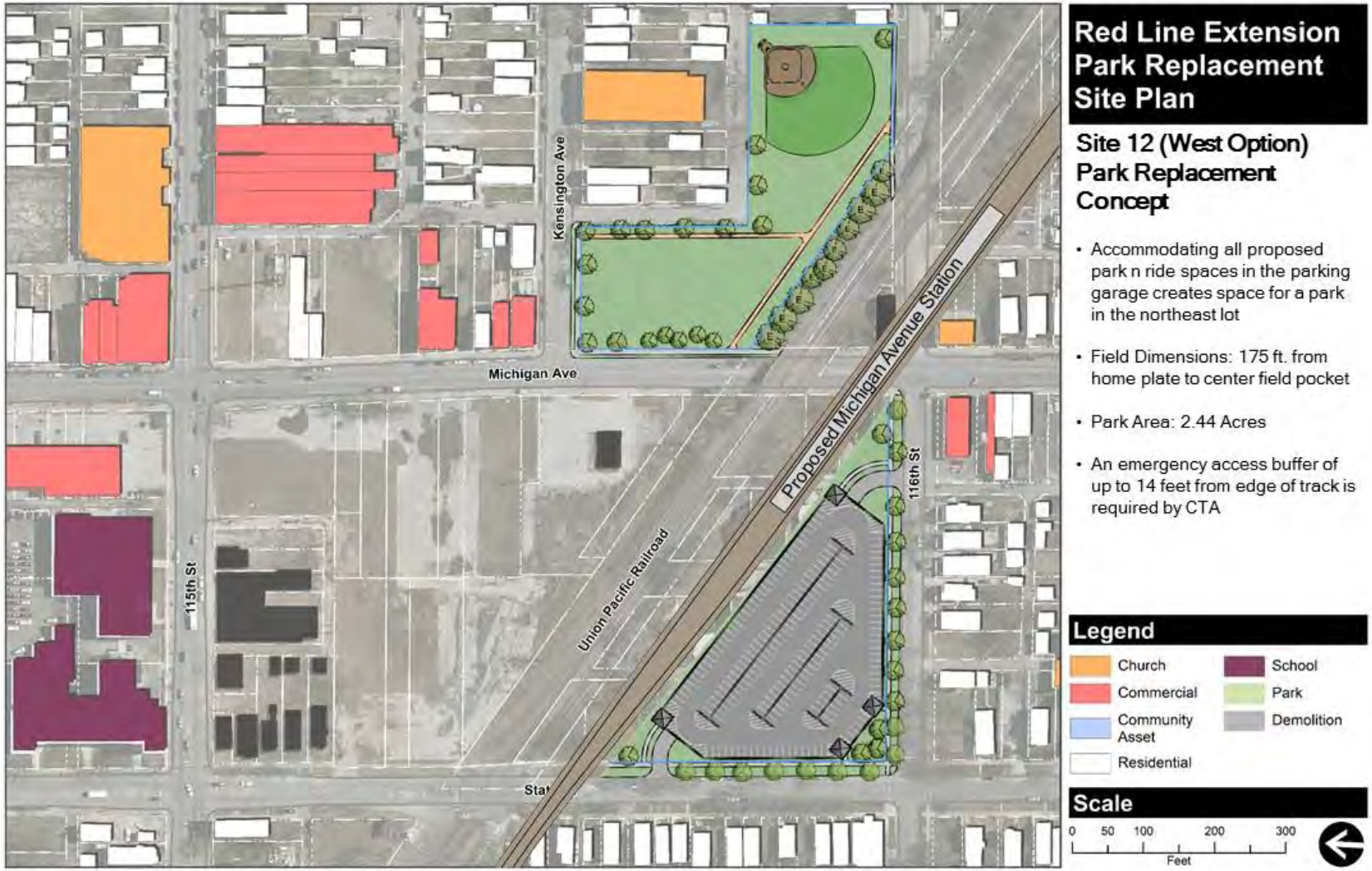

Figure 13: Site 12 West Option Park Concept

Section 5
Changes to Existing Parks

5.1 Wendell Smith Park - Amenities Replacement

The West Option would avoid use of Wendell Smith Park and would not have permanent impacts to the park. The East Option would impact Wendell Smith Park; specifically, the East Option would impact one junior-sized baseball field, which is the smaller of the two baseball fields as well as the walking path, benches, and landscaping. Mitigation measures are proposed so that the attributes, features, and activities of the park are not adversely affected and include replacement of these amenities within Wendell Smith Park as well as replacement park acreage with new parkland (potential sites for this replacement park are provided in Replacement Park Concepts above). **Figures 14 and 15** provide conceptual views of the RLE alignment for the East and West Option, respectively. **Figure 16** provides a conceptual plan for replacement of affected amenities within Wendell Smith Park should the East Option be selected.

Replacement within Wendell Smith Park would include the following:

- Replacement and re-routing of the walking path within Wendell Smith Park. A fence dividing the elevated rail structure from the park is a preliminary recommendation based on coordination with CPD.
- Replacement of benches and landscaping, including trees along the re-routed walking path.
- Replacement of the affected smaller junior-sized baseball field with a complete replacement of the existing baseball field amenities by providing one larger baseball field. This larger baseball field was recommended based on coordination between CTA and CPD to enhance activities and amenities of the park.

A new junior-sized baseball field of similar size would be constructed at another site if the East Option were selected. Concepts for the new junior-sized baseball field are shown in **Section 4** of this report.

Figure 14: East Option Alignment near Wendell Smith Park

Figure 15: West Option Alignment near Wendell Smith Park

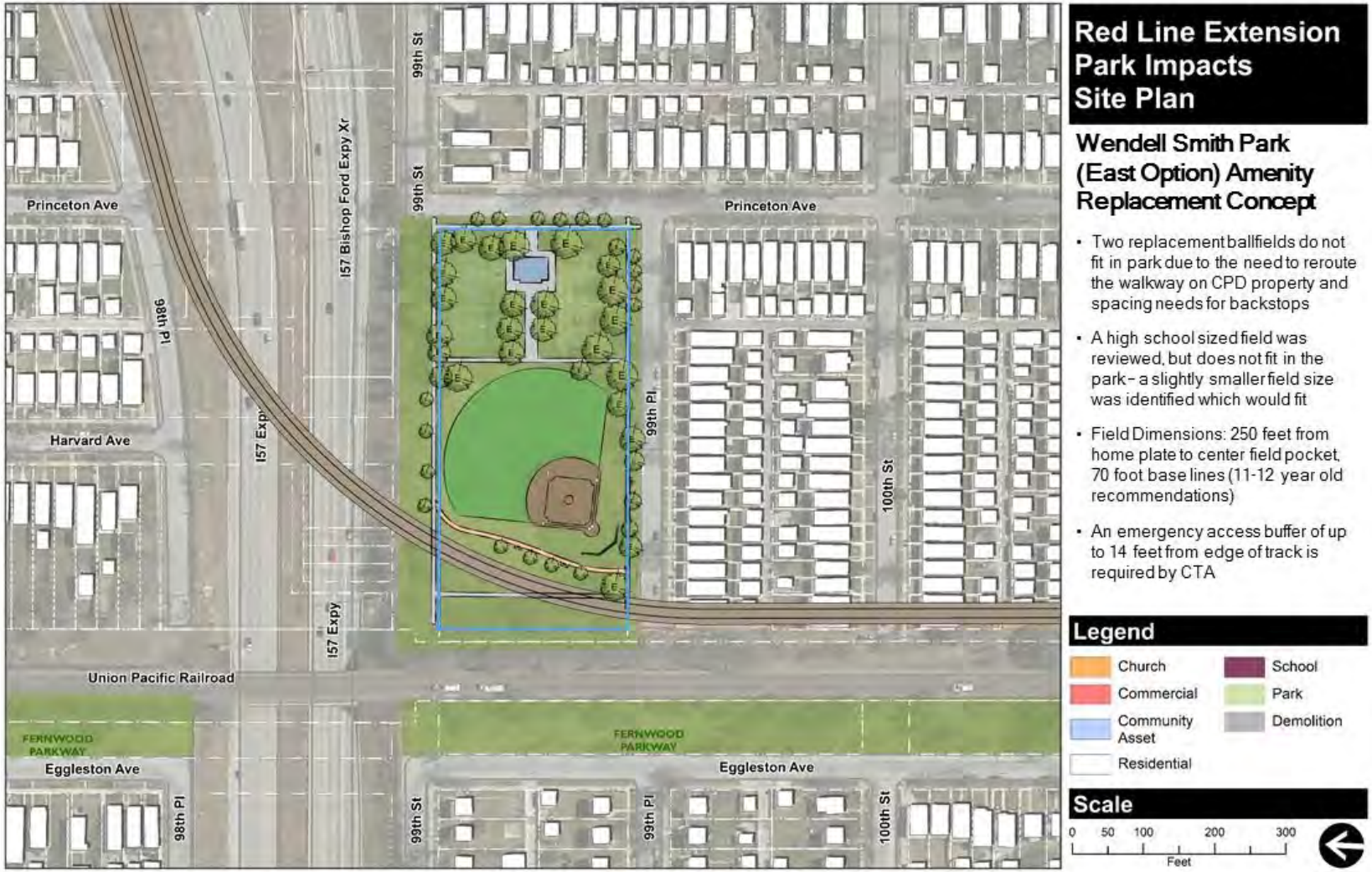

Figure 16: Wendell Smith Park Concept (East Option)

5.2 Block Park

Under the East Option, there would be impacts to Block Park. **Figure 17** shows how the East Option would impact the park. Mitigation measures would include replacement of the affected acreage of the park with new parkland, as described in the Replacement Park Concepts above.

Block Park is divided into two parcels by Harvard Avenue, which provides emergency access for the nearby fire station. As part of the East Option, the western parcel would be used by the proposed elevated track structure and 103rd Street station. There are currently no park amenities on the western parcel. The eastern parcel, where park amenities are currently provided, would not be used as part of the RLE Project; the eastern parcel would continue to function as a park.

Mitigation measures for impacts on this property would also include restoration and landscaping of disturbed areas and incorporation of design features, where necessary, to reduce or minimize impacts. Features would be designed such that they would enhance the park but not adversely affect the safety of the transit facility.

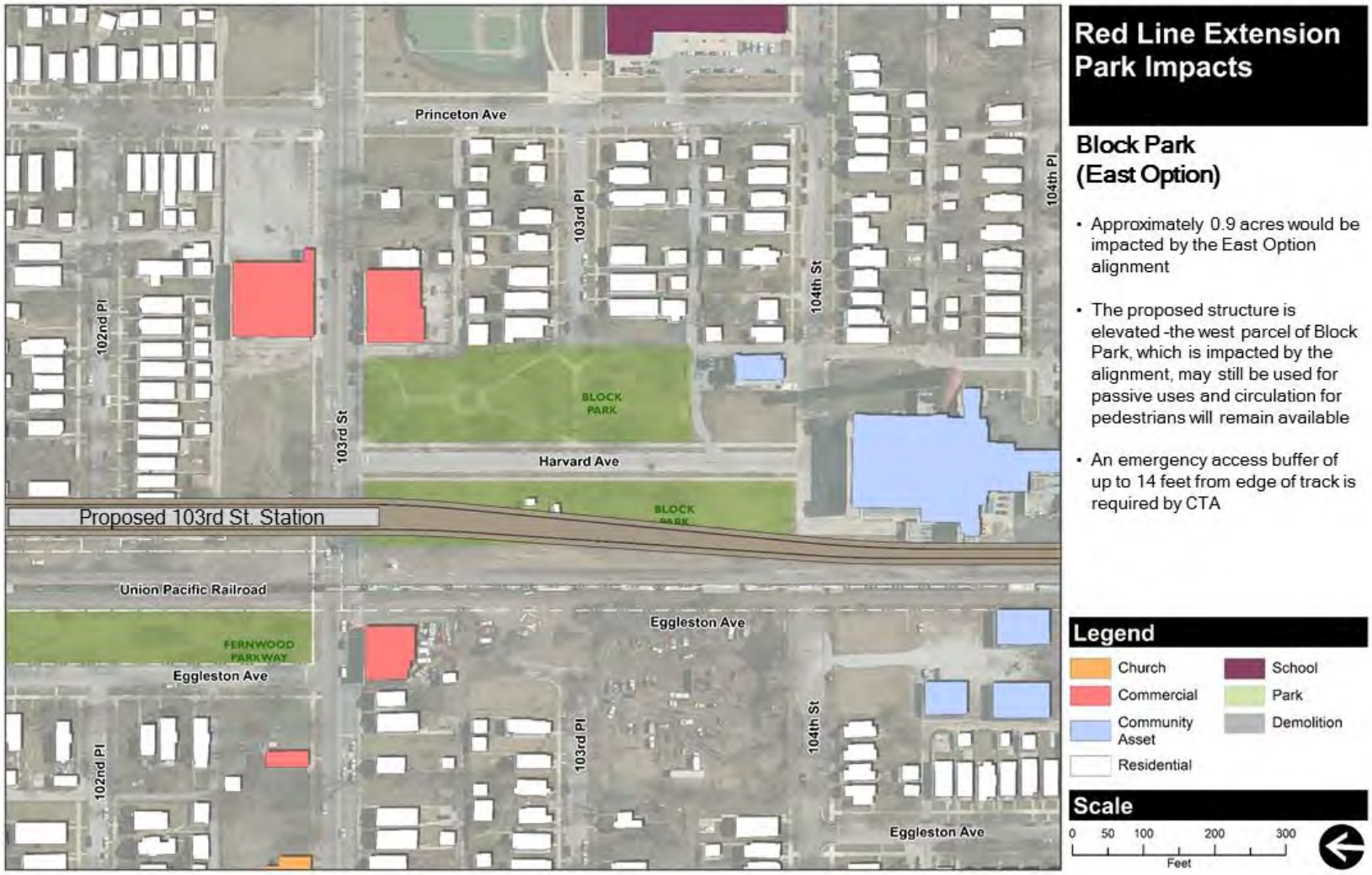

Figure 17: East Option Alignment near Block Park

5.3 Fernwood Parkway

Under the West Option, there would be impacts to Fernwood Parkway. **Figures 18 and 19** show how the West Option would impact the park. Mitigation measures would include replacement of the affected acreage of the park with new parkland, as described in the Replacement Park Concepts above.

As part of the West Option, approximately 1.9 acres of Fernwood Parkway would be used to accommodate the proposed elevated track structure and 103rd Street station.

Mitigation measures for impacts on this property would also include restoration and landscaping of disturbed areas and incorporation of design features, where necessary, to reduce or minimize impacts. Features would be designed such that they would enhance the park but not adversely affect the safety of the transit facility.

In addition, because the area beneath the proposed elevated structure within Fernwood Parkway is large, there is the potential to provide a bicycle path along this affected area and near the proposed 103rd Street station. Additional coordination with the Chicago Department of Transportation, who is responsible for implementation of the bicycle program in Chicago, will be conducted to determine final feasibility of this bicycle path.

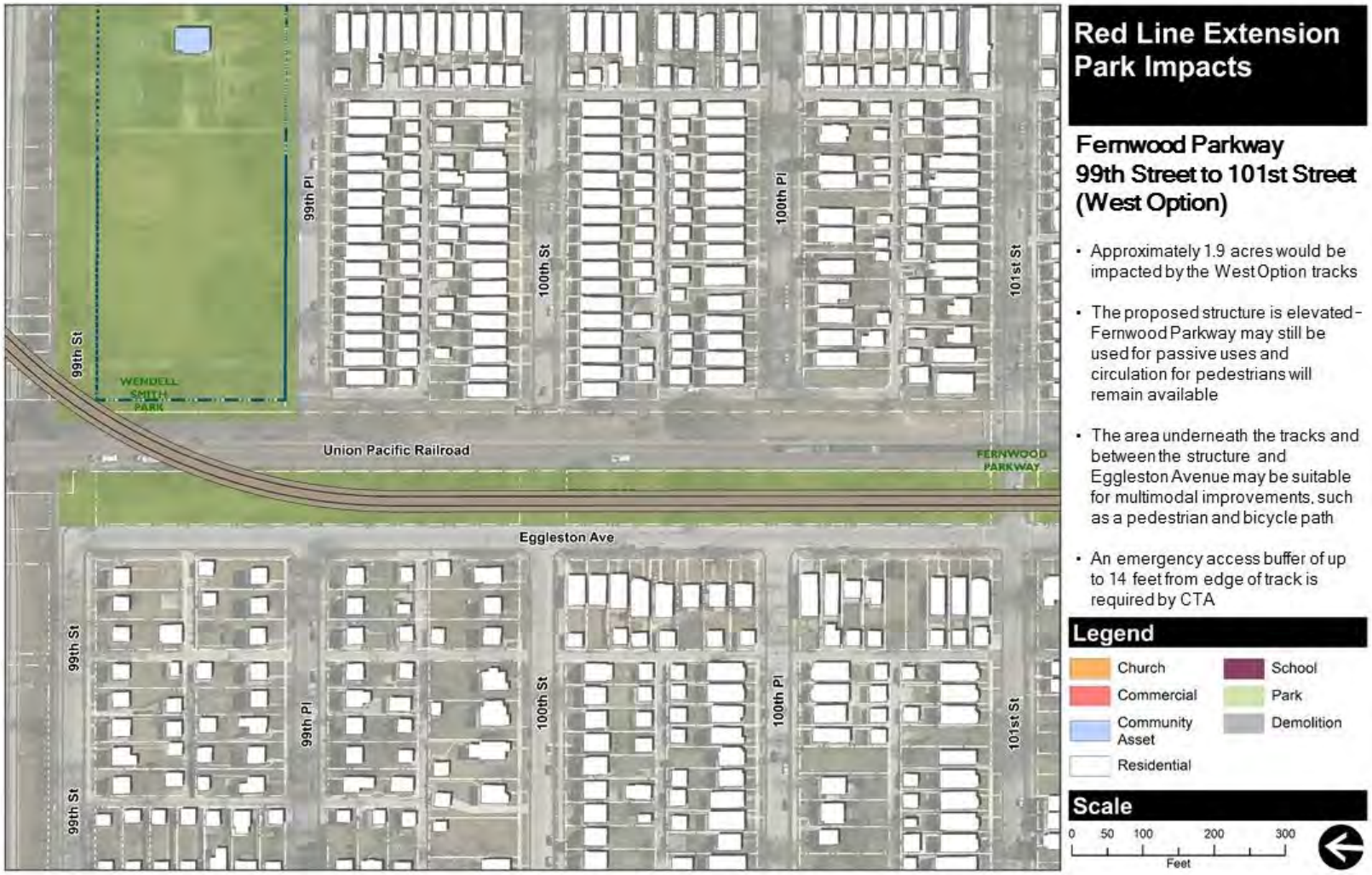

Figure 18: West Option Alignment near Fernwood Parkway (north)

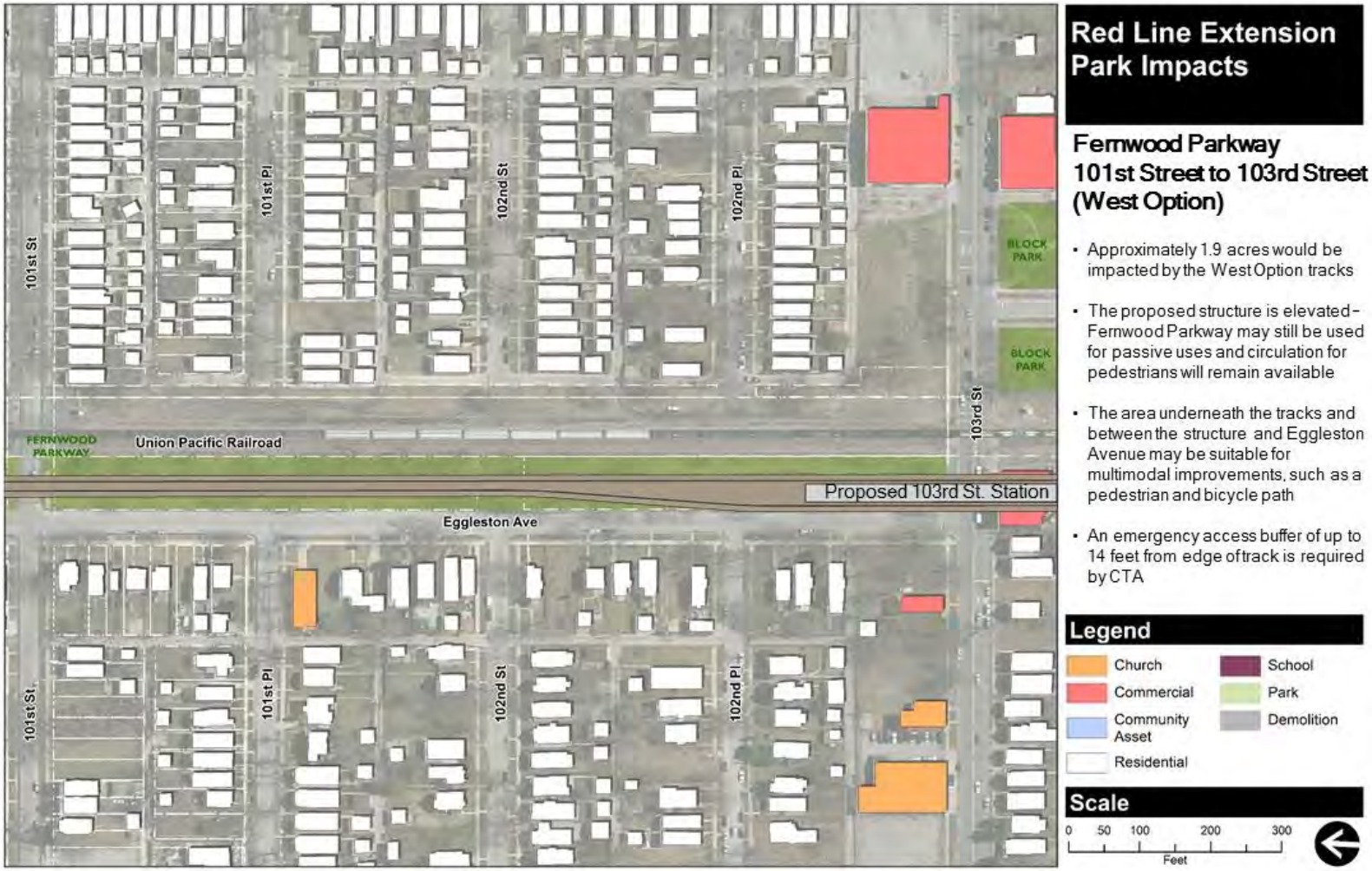

Figure 19: West Option Alignment near Fernwood Parkway (south)

Section 6
Conclusions

The purpose of the Section 4(f) additional park analysis was to fulfill three main goals, as described above. Based on the findings detailed within this report, the following have been accomplished as part of this additional analysis for the Draft EIS:

- The analysis demonstrates that land is available for the proposed replacement park mitigation. CTA initially identified 22 potential sites. Based on continued coordination with CPD in further developing park concepts and processes for implementing mitigation measures, there would be no adverse effects after implementation of these measures. Park space and amenities in these community areas would be enhanced by implementation of replacement parkland and more active park uses.

- CTA coordinated with CPD to outline processes for implementation of these mitigation measures. After public comment on replacement park concepts as part of the Draft EIS, as part of the Final EIS a preferred replacement park option will be identified based on public comments. Property acquisition is not permissible before completion of Final EIS and the final replacement park location will be confirmed with property owners and CPD following completion of the NEPA process. Further environmental analysis in the form of a Phase I ESA will be conducted as part of property acquisition and before construction of the RLE Project.

- CTA developed park concepts at three sites as well as a site concept for replacement/relocation of amenities within Wendell Smith Park. This information will be useful in obtaining meaningful public input on park impacts and mitigation proposed as part the Draft EIS and Section 4(f) public hearing.

The next step for coordination on park impacts is to provide information from this analysis and the Draft EIS to the public for comment as part of the public hearing on the RLE Project Draft EIS and Section 4(f) Analysis. Based on public comments received on the environmental impacts and mitigation measures proposed, FTA and CTA will select a preferred UPRR option to move forward into a Final EIS.

CTA will continue to coordinate with CPD and other agencies throughout the next stages of this process. It is anticipated that a preferred replacement park site will be identified as part of the Final EIS. Additional coordination with property owners for voluntary acquisition of land will occur following completion of the environmental phase of this project. Once property is acquired, additional environmental site assessment in the form of a Phase I ESA will be conducted before construction.

Attachments

Attachment 1: Chicago Park District Coordination

Attachment 2: Desktop and Geospatial Analysis Results

Attachment 3: Field Visit Findings

Attachment 4: Suitability Analysis Assessment Notes

Attachment 5: Environmental Database Report Findings

Attachment 6: Park Concept Renderings

Attachment 1: Chicago Park District Coordination

CHICAGO TRANSIT AUTHORITY

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TEL 312 664-7200
www.transitchicago.com

June 8, 2015

Mr. Rob Rejman
Director of Planning and Construction
Chicago Park District
541 N. Fairbanks Court
Chicago, IL 60611

Re: CTA Red Line Extension (RLE) Project

Dear Mr. Rejman:

The Chicago Transit Authority (CTA) and Federal Transit Administration (FTA) are continuing efforts to prepare an Environmental Impact Statement (EIS) for the proposed Red Line Extension (RLE) Project in accordance with the National Environmental Policy Act (NEPA).The proposed project would extend the Red Line from the existing 95th Street Terminal to 130th Street, subject to the availability of funding.

CTA recently met with your agency on April 8, 2015 and presented information about the East and West options of the Union Pacific Railroad alignment, potential park impacts, and preliminary mitigation measures for each of the alignment options. In follow up to that meeting, this letter provides additional supporting information on the project, park impacts, and preliminary mitigation measures for further input from your agency. As the official with jurisdiction over these properties, CTA would like additional input from your agency on the following:

1. Confirmation on the attached documentation regarding primary activities and functions that take place at each of the three park properties that would be affected by the options under consideration, including which of these activities and functions constitute the primary purpose of these parks.

2. The views of your agency on the significance of each of these parks in terms of their existing availability and function in meeting the objectives of the Chicago Park District and the surrounding community as well as the impacts and/or benefits of the proposed project with mitigation measures implemented as proposed.

3. Comments and recommendations from your agency on the proposed mitigation measures for impacts and use of each park, including identification of any appropriate replacement park locations for the proposed project mitigation measures.

4. The views of your agency on whether, after implementation of these mitigation measures, the impacts presented would be adverse to the activities, features, or attributes of each park.

We also welcome any other feedback from your agency that would be useful in understanding the views, goals, and objectives of the Chicago Park District in relationship to the proposed RLE Project. Your input will be used and reflected in the Draft EIS and Section 4(f) Evaluation that is being prepared. Section 4(f) of the USDOT Act of 1966 protects significant historic resources as well as publicly owned recreation areas, parks, and wildlife refuges. Once your views on these matters are appropriately incorporated into the document, CTA and FTA will be providing documentation to your agency on the environmental impacts and Section 4(f) findings and will seek concurrence from the Chicago Park District on the determination made. Additional coordination meetings will be scheduled with your agency, as needed, to ensure proper coordination.

At this time, CTA expects to release the Draft EIS and Section 4(f) Evaluation for public review and comment in spring 2016. A public hearing will be scheduled at that time to take public comments on the environmental findings in the Draft EIS and Section 4(f) Evaluation. Based on the technical analysis conducted and public input received, a Final EIS/Record of Decision will be prepared. The Final EIS/Record of Decision will document the results of the Draft EIS process, confirm whether the East or West Option will be constructed, and include a list of committed final mitigation measures for the option chosen. CTA and FTA will continue to work with your agency through this process to keep you informed on the status of this project and to conduct follow up coordination activities, as needed. Additional information about the project is available at: transitchicago.com/RedEIS.

If you have any questions, please do not hesitate to contact me. Thank you for your participation on this project.

Sincerely,

Sonali Tandon
Senior Project Manager, Planning
Chicago Transit Authority
312.681.4246
standon@transitchicago.com

cc:

Michael Lange, Chicago Park District
Doreen O'Donnell, Chicago Park District
Reginald Arkell, Federal Transit Administration
Mark Assam, Federal Transit Administration

Project Overview and Description

The Chicago Transit Authority (CTA), as project sponsor to the Federal Transit Administration (FTA), proposes to construct the Red Line Extension (RLE) Project to extend the existing Red Line heavy rail transit service approximately 5 miles south from the existing 95th Street Terminal to 130th Street on Chicago's Far South Side. The project area for the RLE is approximately 11 miles south of the Loop (Chicago's central business district).

The National Environmental Policy Act of 1969 (NEPA) mandates the consideration of environmental impacts before approval of any federally funded project that may have significant impacts on the environment or where impacts have not yet been determined. FTA and CTA are currently preparing a Draft Environmental Impact Statement (EIS) for this project in accordance with NEPA and other applicable regulations, including Section 106 of the National Historic Preservation Act (NHPA), Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966, joint guidance and regulations from FTA and the Federal Highway Administration (FHWA), and other agency regulations and guidelines.

After extensive planning and study, the Chicago Transit Board designated the Union Pacific Railroad (UPRR) Rail Alternative as the Locally Preferred Alternative (LPA) for this project on August 12, 2009. The UPRR Alternative route would run south along I-94 from the 95th Street Terminal, then curve west along the north side of I-57 (within the I-57 right-of-way) for nearly ½ mile until reaching the UPRR corridor in the vicinity of Eggleston Avenue. The alignment would turn south to follow the UPRR corridor.

Two options are being considered for the alignment along the UPRR corridor. The CTA elevated structure would be located either east or west of the existing UPRR corridor. The alignment would follow the UPRR corridor to Prairie Avenue, where it would cross over the Canadian National/Metra Electric District (CN/ME) tracks near 119th Street. South of this point, the East and West Options would follow the same alignment southeast along the NICTD/Chicago South Shore & South Bend Railroad (CSS & SBRR) right-of-way using a portion of the Indiana Harbor Belt Railroad (IHB) right-of-way to the terminus (end) of the RLE at 130th Street.

As described, two UPRR Alternative options for the segment of the proposed route between I-57 and the CN/ME tracks near 119th Street are under further evaluation:

- East Option - The CTA elevated structure would be placed immediately adjacent to the east side of the UPRR right-of-way.
- West Option - The CTA elevated structure would be placed immediately adjacent to the west side of the UPRR right-of-way.

An overview map of the project and alignment options is provided in **Figure 1**.

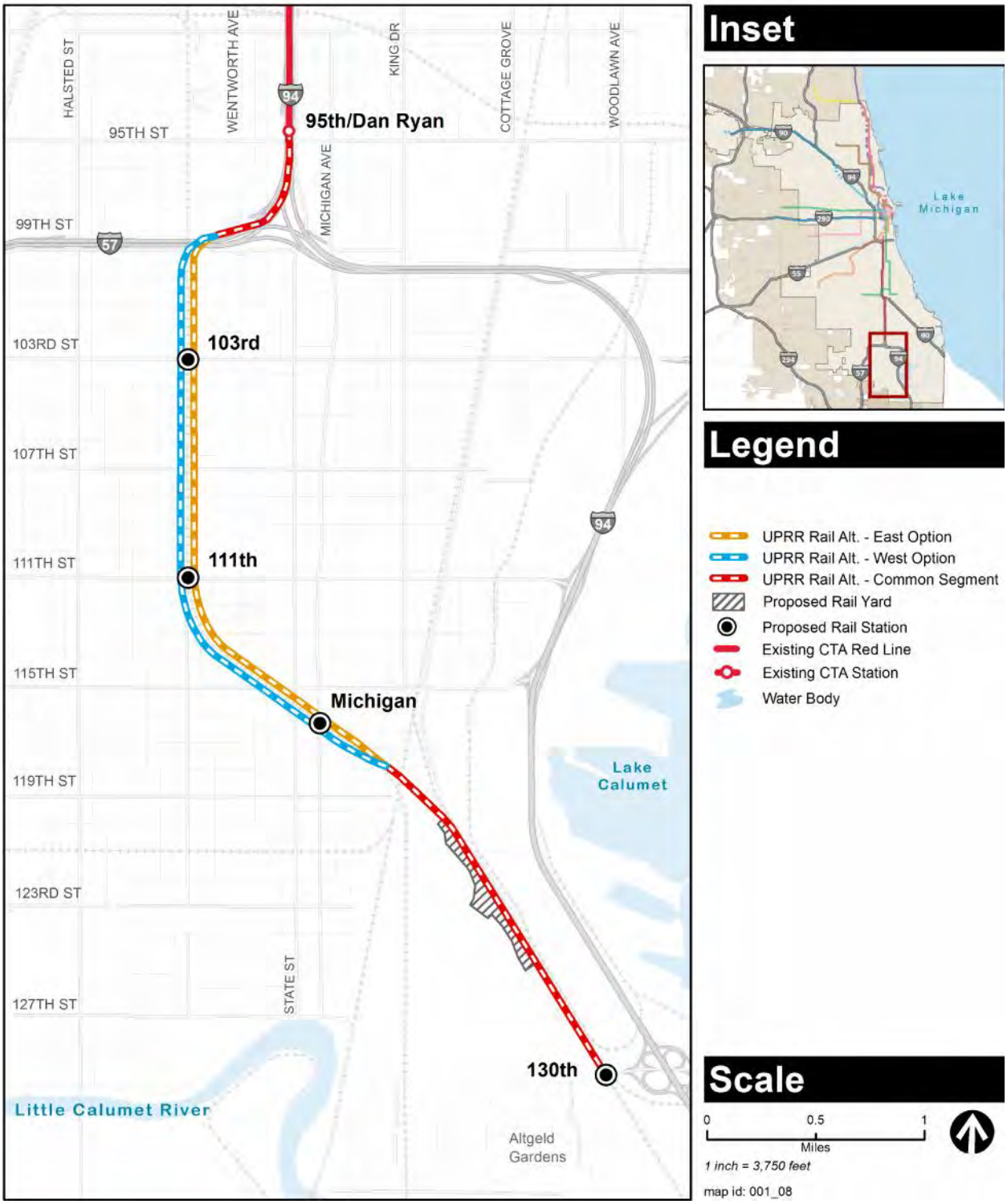

Figure 1: Union Pacific Railroad Alternative Options

Park Impact Overview

All public parks within 500 feet of the proposed right-of-way and within ½ mile around the locations of proposed stations were analyzed for potential impacts as a result of implementing the project. **Table 1** summarizes park impacts as a result of each UPRR alignment option. **Figure 2** shows the locations of all parks in the vicinity of the project. The following section provides further details on the park or parks impacted by each alignment option.

Table 1: Park and Recreational Resources Impacts Overview

Park or Recreational Resource Name	Address	Impact Findings	
		East Option	West Option
Wendell Smith Park	9912 S. Princeton Avenue	0.7 acres	-
Fernwood Parkway	9501 S. Eggleston Avenue	-	1.9 acres
Block Park	346 W. 104th Street	0.9 acres	-
Total		*1.6 acres*	*1.9 acres*

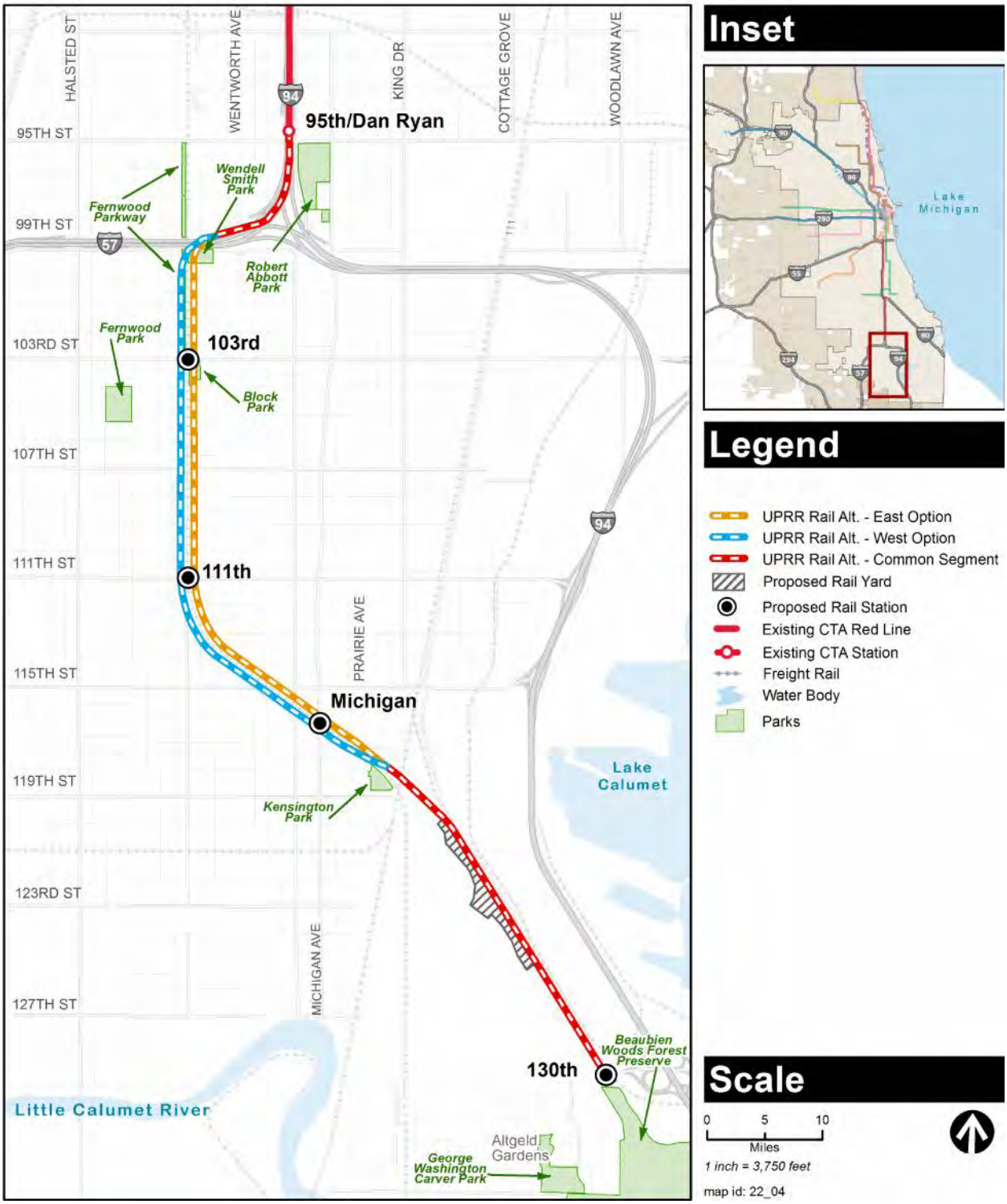

Figure 2: Publicly Owned Park and Recreational Properties Adjacent to the Project

UPRR Alternative East Option - Park Impacts

Two park resources would be used as result of the East Option: Wendell Smith Park and Block Park, which are further described below.

Wendell Smith Park

Wendell Smith Park is approximately 4.7 acres (340 feet wide by 610 feet long) and is an actively used facility with basketball courts, baseball fields, a play lot, recreation building, and 0.3 mile of walking trails. Regularly scheduled activities at Wendell Smith Park include basketball tournaments, baseball/softball games, and concerts. The park is also actively used by day camps and for activities organized by the Chicago Park District.

The East Option alignment would run through the northwestern corner of the park, as shown in Error! Reference source not found.. Of the 4.7 acres of the park, approximately 0.7 acre would be overlapped by the elevated structure and its associated clearances. The overlap area includes open space, trees, benches, and a portion of the park's walking trail. The outfield of an existing baseball field would be used. Piers would be located in the park, and the bottom of the elevated structure would be approximately 15 feet above ground level. Because a permanent easement is proposed, the land within the easement would be considered a permanent incorporation (direct use) of the park facilities. Temporary closure of the overlapped portion of Wendell Smith Park would be necessary during construction.

Preliminary Mitigation Measures

Mitigation and enhancement measures are proposed that would result in no adverse effect to the features, attributes, and activities of the park after implementation, as follows:

- Replacement of impacted park space. Payment would be the fair market value of the land and improvements taken or improvements to the remaining site equal to the fair market value of the land and improvements taken. Location of replacement property would be further defined in coordination with the Chicago Park District.

- Relocation or replacement of the baseball field based on further coordination with the Chicago Park District and outreach to the public so that the attributes, features, and activities are not adversely affected by the use of the northwest corner of the park.

- Replacement of facilities affected by the project including sidewalks, paths, benches, lights, trees, and other facilities within the park.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the park but not adversely affect the safety of the transit facility.

Figure 3: Impacts on Wendell Smith Park – -Union Pacific Railroad Alternative East Option

Block Park

Block Park is a passive green space and is divided into two parcels by Harvard Avenue. The east parcel is approximately 1.4 acres (130 feet wide by 460 feet long) and includes amenities such as benches, walking paths, and sidewalks. The west parcel is approximately 1.3 acres (90 feet wide by 600 feet long) and is open space with a sidewalk and no other park amenities. In addition, a radio tower and two utility structures are on the west parcel. Photos of Block Park are shown in **Figures 4** and **5**.

Figure 4: Block Park with the Roseland Pumping Station in the Background (facing south)

Figure 5: East Parcel (left) and West Parcel (right) of Block Park

The East Option alignment would run through the west parcel of Block Park, and would overlap 0.9 acre of park space with the elevated structure and its associated clearances, as shown in Error! Reference source not found.. A secondary station entrance would also be located in the park, along its western edge. The affected parcel includes an isolated portion of the park's open space and a communications tower, and does not currently serve a recreational use. The key recreational features of the park, walking trails and benches, are on the other side of Harvard Avenue in the east parcel of the park. Because the East Option alignment elevated structure would overlap a portion of this park, there would be a permanent incorporation (direct use) of this passive greenspace. Some temporary closure of the overlapped area would be necessary during construction.

Preliminary Mitigation Measures

Mitigation and enhancement measures are proposed that would result in no adverse effect to the features, attributes, and activities of the park after implementation. CTA and the Chicago Park District are currently coordinating to define any additional or alternative mitigation measures that may be necessary:

- Replacement of impacted park space. Payment would be the fair market value of the land and improvements taken or improvements to the remaining site equal to the fair market value of the land and improvements taken. Location of replacement property would be further defined in coordination with the Chicago Park District. Providing enhanced park connectivity to the proposed station area at 103rd Street and other CPD park projects in the nearby area could be considered to enhance the attributes, features and activities of this existing passive green space.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the park but not adversely affect the safety of the transit facility.

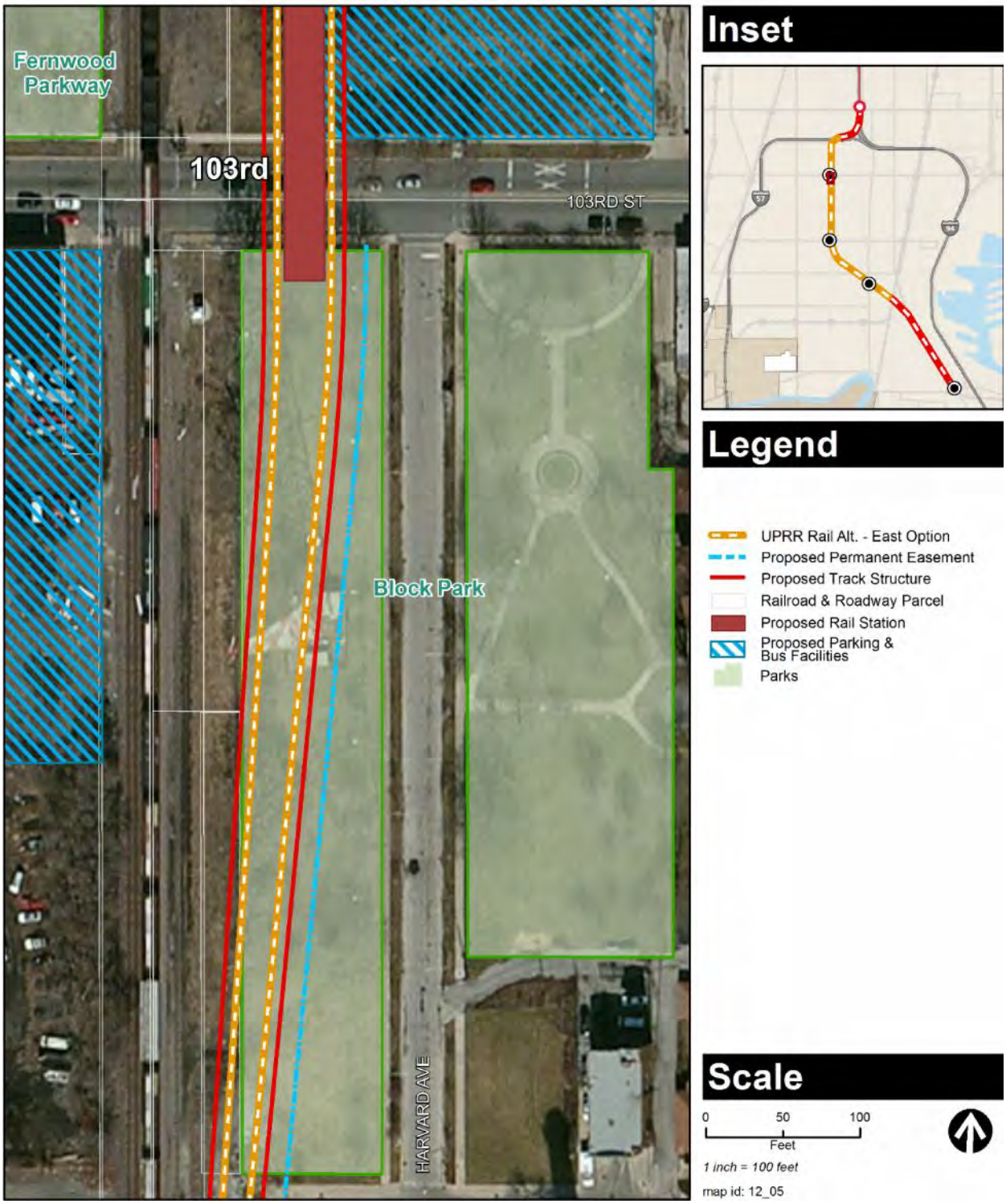

Figure 6: Impacts on Block Park - East Option

UPRR Alternative West Option - Park Impacts

One park resource would be used as result of the West Option—Fernwood Parkway—which is further described below.

Fernwood Parkway

Fernwood Parkway is a passive green space, and is divided into two parcels separated by 101st Street. The northern parcel, from 99th Street to 101st Street, is approximately 2.4 acres (78 feet wide by 1,325 feet long). The southern parcel, from 101st Street to 103rd Street, is approximately 2.9 acres (78 feet wide by 1,277 feet long). Both the north and south parcels of Fernwood Parkway serve as open space and do not contain recreational facilities or amenities such as sidewalks or benches. Some trees are planted within the park and a chain-link fence separates the green space from the existing at-grade UPRR tracks. **Figures 7 and 8** shows Fernwood Parkway facing north and south.

Figure 7: Fernwood Parkway at 100th Street and Eggleston Avenue (facing north)

Figure 8: Fernwood Parkway at 100th Street and Eggleston Avenue (facing south)

The West Option track structure would run through two of the four parcels that make up Fernwood Parkway between 101st and 103rd Streets. Approximately 1.9 acres of the parkway would be overlapped by the elevated structure and its associated clearances (see Error! Reference source not found.). The parkway functions as open space, and does not contain recreational amenities. Temporary closure of the section of the overlapped section of the parkway would be necessary during construction. Public use of the parkway could resume after construction, as long as the area beneath the elevated track structure is reopened, but much of the parkway between 101st and 103rd Streets would be permanently overlapped and shaded by the structure. Elevated track structure supports would be placed permanently in the park space. Because the West Option alignment elevated structure would overlap a portion of this park, there would be a permanent incorporation (direct use) of this passive green space.

Preliminary Mitigation Measures

Mitigation and enhancement measures are proposed that would result in no adverse effect to the features, attributes, and activities of the park after implementation, as follows:

- Replacement of impacted park space. Payment would be the fair market value of the land and improvements taken or improvements to the remaining site equal to the fair market value of the land and improvements taken. Location of replacement property would be further defined in coordination with the Chicago Park District.

- Potential installation of a new bicycle path beneath the elevated track structure, subject to use for CTA maintenance, which would enhance the existing unused green space and better connect parks and the newly proposed transit infrastructure.

- Restoration and landscaping of disturbed areas.

- Incorporation of design features where necessary to reduce or minimize impacts of use on the Section 4(f) property. Such features would be designed in a manner that would enhance the green space but not adversely affect the safety of the transit facility.

Figure 9: Impacts on Fernwood Parkway - Union Pacific Railroad Alternative West Option

chicago park district

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Michael P. Kelly

City of Chicago
Rahm Emanuel
Mayor

August 17, 2015

Sonali Tandon
Chicago Transit Authority
567 West Lake Street
Chicago, IL 60661

Re: CTA Red Line Extension (RLE) Project

Dear Ms. Tandon:

The Chicago Park District (CPD) appreciates the opportunity to review the draft of the proposed park impacts for the CTA Red Line Extension (RLE) Project dated June 8, 2015. Any proposed mitigation measures should include fully developed replacement property with the appropriate replacement improvements in the community area. The CPD's priorities for replacement park sites is to expand existing parks.

CPD's neighborhood parks range in size from 2-5 acres in size. These are parks that contain indoor and/or outdoor recreation facilities and typically include a playground and/or other sport fields. The standard for new parks is a minimum of two (2) acres in size. If Recognized Environmental Conditions are identified in the Phase 1 Environmental Site Assessment (ESA) then a Phase 2 ESA is required. If there are exceedances of the Illinois Environmental Protection Agency's (IEPA) TACO Tier 1 Residential Standards, then the property is required to receive a Comprehensive No Further Remediation (NFR) Letter from the IEPA's Site Remediation Program.

The documentation regarding primary activities and functions that occur in each of the three parks is accurate. CPD concurs conceptually with the proposed mitigation measures as outlined in the coordination package.

Wendell Smith (#272) Park is a 4.7-acre neighborhood park that primary serves the population within a ½ mile. Improvements include two basketball courts, two baseball fields, a playground, recreation building and .3 miles of walking trails. In addition to the areas described in the letter, the overlap area includes space behind the existing baseball backstop. Preliminary mitigation measures should include replacement property located in the Roseland Community area constructed in accordance with Chicago Park District standards.

Block (#1005) Park is a 2.95-acre passive park that provides informal active recreational uses or other accessory uses. The east option alignment affects the entire function of the 1.3 acre west parcel, including the accessory communication tower space. Preliminary mitigation measures should include replacement property located in the Roseland Community area constructed in accordance with Chicago Park District standards. Additionally, mitigation and replacement of the communications and utility structures is required.

Fernwood (#1215) Parkway is an 8.63-acre linear passive park that provides informal active recreational uses or other accessory uses. The parkway functions as open space and provides a quiet natural setting for park users. The Chicago Park District would not program or maintain areas beneath the elevated track structures. Preliminary mitigation measures should include replacement property located in the Washington Heights Community area constructed in accordance with Chicago Park District standards.

The suggested mitigations strategies coupled with the above comments should address all the adverse impacts on the Parks. We look forward to a successful collaboration.

Sincerely,

Rob Rejman
Director of Planning and Construction

RR/ml

cc: Doreen O'Donnell, Research and Planning Manger
Michael Lange, Senior Project Manager

MEETING NOTES

RE: **Chicago Park District Coordination Meeting**
Chicago Transit Authority Red Line Extension Project

DATE: **October 8, 2015, 9:00 a.m.**

LOCATION: **Chicago Park District, 541 N. Fairbanks Court, Chicago, IL**

ATTENDEES:

Name	***Initials***	***Organization***
Leah Mooney	LM	CTA
Sonali Tandon	ST	CTA
Jenifer Palmer	JP	CWC Transit Group
Michael Lange	MH	CPD

PREPARED BY: **Jenifer Palmer**

ISSUE DATE: **October 19, 2015**

MEETING NOTES:

- Sonali Tandon (CTA) thanked CPD for their time and provided an update on the status of the Red Line Extension Project.

- CTA recently submitted the first draft of the Draft EIS document to FTA for their review. The reviews and updates to the document will continue through the fall and into early 2016. CTA and FTA expect to be ready to public the Draft EIS for public comment and hold public hearings in May 2016.

- CTA received CPD's response letter regarding potential park impacts and proposed mitigation measures that would result from implementation of either the RLE East or West alignment options. CTA updated the Draft Environmental Impact Statement (EIS) document prior to submitting to FTA to reflect this correspondence to date. Based on the feedback received from CPD, CTA is proposing *de minimis* findings for park impacts following implementation of mitigation measures since after these measures are taken into account, there would be no adverse impact to parks from either alignment option.

- CTA has also shared communications to date between CTA and CPD with FTA for their input. Based on coordination with FTA, they would like CTA to further develop replacement park/relocation of facilities mitigation measures. This will help to support the *de minimis* findings and will allow the public to provide more meaningful input on the proposed mitigation measures. To that end, CTA has prepared a scope of work for additional consultant services in

further identifying replacement park options and relocation of impacted facilities. The draft scope of work was provided to CPD in advance of this meeting to gain their input.

- CTA and CPD staff reviewed the draft scope of work. In general, CPD agrees with the process outlined in the scope for identifying potential replacement park locations. ML noted that in addition to what is outlined, CPD typically conducts environmental screening (e.g. consulting sandborn maps, historic uses of sites, etc) in the form of a Phase 1 ESA when identifying any new feasible park location.

- CTA noted that a number of environmental screenings have been done within the corridor to date and could be used, as appropriate, for this analysis. More specific site information would need to be gathered. CTA will review the potential for a Phase 1 ESA of sites as well as costs associated with that additional scope. It could be that the same information provided in a Phase 1 ESA are available through existing analysis and data or combination of reviewing data described within the scope of work. If not practical at this juncture of the project, commitments could be outlined in further developing the mitigation measures on requirements like a Phase 1 ESA following public input in May 2016 and in developing the Final EIS documentation.

- Because implementation timelines for obtaining new park sites will ultimately be based on the timeline for the Draft and Final EIS and securing federal, state and local funding for the project, CTA is most concerned with laying out some potential options for replacement parks and more specifically, identifying the process and commitments for doing this. While consultant staff may be able to identify suitable replacement park and amenity locations in this phase, those properties may or may not be available when replacement actually occurs. As such, it is equally important to both identify potential replacement parks and outline the requirements for carrying out mitigation measures.

- CPD also mentioned that they have some guidelines/standards for new park development that could be shared with consultant staff to support development of viable replacement options. As a matter of policy, CPD is focused on developing safe parks that are well connected to the transportation network. CPD also attempts to develop parks that are at least 2 acres in size. In addition, parks that are city-owned properties already may allow for more efficient implementation options since they would need to consider similar environmental impacts to any lands that they own. CPD is most interested in replacement options that could expand connectivity and park facilities over smaller pocket parks in the neighborhood but which lack this same level of connectivity.

- CPD provided early analysis done for potential replacement parcels so that the consultant team can consider this in their analysis. CPD only conducted very preliminary investigations into this area to date. CTA and CPD staff reviewed each potentially impacted park to identify any guidelines or general considerations that might apply to looking at replacement options and relocation of facilities impacted. CPD expects acre for acre replacement park land and facilities impacted.

- CTA noted that once the scope of work is finalized, consultant staff will be beginning field visits and initial investigations. In scheduling field visits, CTA asked whether there are an park

supervisors or area managers that the team might be able to coordinate with and CPD noted that area managers might be best since they are in charge of larger areas/multiple parks and may have some larger insights on existing uses and community park needs. CPD will provide available contact information so that this coordination can occur.

- CTA asked whether there are any park advisory councils in the area that the team should be coordinating with in understanding issues or obtaining more input on community needs. CPD will check to see if there is a park advisory council in this area.

- CTA thanked CPD again for their time. As the consultant team begins their investigations, the expectation is that we will be setting up regular coordination meetings through Spring 2016 to share developments and results in this process and obtain additional input and recommendations from CPD staff. There may not be a need to meet next month, but once this study actually begins, it may make sense to have monthly coordination. With holidays and the schedule for completing Draft EIS documentation prior to publishing, we would hope to complete coordination activities for further developing these measures through March 2016. Additional coordination would occur to share public input once the Draft EIS is published as well to determine appropriate next steps.

MEETING NOTES

RE: **Chicago Park District Coordination Meeting**
Chicago Transit Authority Red Line Extension Project

DATE: **March 10, 2016, 10:00 a.m.**

LOCATION: **Chicago Park District, 541 N. Fairbanks Court, Chicago, IL**

ATTENDEES:

Name	*Initials*	*Organization*
Leah Dawson Mooney	LM	CTA
Sonali Tandon	ST	CTA
Michael Lange	ML	CPD
Jenifer Palmer	JP	CWC Transit Group
Dave Sousa	DS	CWC Transit Group
Cody McChane	CM	CWC Transit Group

PREPARED BY: **Cody McChane**

ISSUE DATE: **March 15, 2016**

MEETING NOTES:

- Michael Lange suggested that due to an ongoing conflict, monthly coordination meetings should be rescheduled from Thursday to Wednesday mornings.

- Sonali Tandon (CTA) thanked CPD for their time, provided a recap of the work that has been done since the previous CPD Coordination Meeting on October 19, 2015, and discussed the purpose of the meeting.

- Jenifer Palmer (CWC) provided an overview of the Red Line Extension (RLE) Project and reviewed the potential park replacement site identification process undertaken by CWC and CTA. Preliminary analysis focused on identifying sites that would replace affected parkland (1.6 or 1.9 acres depending on the alignment option) and meeting CPD guidelines for new park acreage (2 to 5 acres). Considerations for the East Option also included locating sites within the Roseland community area and replacement of an affected ballfield. Considerations for the West Option also included locating sites within the Washington Heights community area. The initial investigation yielded 22 potential sites, 10 of which were eliminated from consideration following field investigation due to insufficient acreage, environmental concerns, non-contiguous available parcels or required crossing or reconfiguration of major roadways, or active uses currently onsite.

- CWC found no viable replacement sites within the Washington Heights community area that met all required criteria. The team discussed that due to the lack of viable options and the physical barrier of I-57 between Fernwood Parkway and northern Washington Heights, it may be difficult to find a replacement site in Washington Heights. CTA asked if it would be acceptable to locate a replacement site in another adjacent community area. ML agreed that a replacement site could be located in another adjacent community area. CWC requested that this allowance be made in writing for the federal environmental documentation with the Federal Transit Administration.

- JP reviewed the 12 park replacement sites considered potentially viable after field investigation. The replacement park sites fell into three categories: (1) sites adjacent to the RLE alignment, where a park could enhance a proposed station location and its potential for redevelopment; (2) under-utilized commercial areas with large amounts of vacancy and pending redevelopment; and (3) vacant sites with connection to existing parks such as Gano Park and/or the Major Taylor Trail.

- CWC identified nine sites as potential replacement park sites for either the East or West Options. The remaining three sites identified would only be viable for the East Option due to their location along the west side of the current UP right-of-way (ROW). Benefits and drawbacks of each site were discussed.

- Multiple potential sites are located on or near commercial corridors, and a park may not be the highest and best use in terms of zoning in these locations. CPD typically consults with Chicago Department of Planning and Development (DPD) to determine criteria for best use in these situations. The team discussed that in an area with disinvestment, parks can help spur development. CDM Smith has experience with park master plans, assessing supply and demand of parkland and amenities, and using parks as catalysts for these types of reinvestment.

- CPD's first priority is to locate replacement parks within 0.5-mile of affected parkland. However if this is not possible, ideal locations would fill an existing gap where there is not currently a park within a 0.5-mile walkshed. Site 2B was referenced as one site that may fill such a gap. Sites distant from the anticipated impact but close to an existing park, such as sites 9A and 9B, do not fill as great a need and therefore are less preferred.

  Multiple potential sites would be adjacent to proposed CTA stations and on parcels that are currently under consideration by CTA for park & rides. CWC has performed only a high-level analysis to date, and additional analysis will be done as the RLE project moves into future stages of planning.

- Sites 6, 7, and 8 are located between the UP ROW and an alley, with the rear of houses facing the sites. Parks in these locations may present security concerns as they would not be very visible from major streets.

- Soil suitability is likely to be an issue for all sites. There is particular concern for the ability of soil at Site 10 to sustain healthy grass and trees. Due to the urban environment, soil remediation may be necessary at all sites before constructing a park.

- In the past, CTA discussed with DPD that the property on which Site 11 is located is proposed to be developed with an Aldi grocery store; however, development hasn't occurred and the project status is unsure. If Site 11 moves forward into the next stage of consideration, coordination with DPD would be necessary. Sites 11 and 12 are positioned for redevelopment because they are close to a proposed CTA station and the existing Metra station, and they are close to the Michigan Avenue commercial corridor.

- ML suggested consulting with Kathy Dickhut of DPD, who manages sustainability and has expertise in the preservation of industrial uses, for sites near manufacturing/industrial uses such as Site 15. There is a priority within the City to not displace limited remaining industrial property.

- ML reported that CPD is currently evaluating both Sites 10 and 17 for possible acquisition and conversion to new parkland because they are adjacent to the Major Taylor Trail. CPD may be able to share additional information on these sites. However, if CPD moves forward, these sites would likely not qualify for park replacement purposes.

- JP presented proposed criteria for the next phase of site analysis, which will include (1) proximity to area of impact, (2) environmental site analysis (EDR reports), (3) ownership availability, (4) surrounding land us/zoning compatibility, (5) accessibility, and (6) generalized cost of acquisition and construction. ML, ST, and JP concurred on the proposed criteria. JP reiterated that there will be no Phase I ESA completed for potential sites at this time, due to uncertainty of alignment and other compounding factors. CWC will complete an environmental screening similar in content to a Phase I ESA in the interim. JP noted that the outcome of this investigation is to keep multiple park replacement site options for each RLE Option. This will allow for presentation and further input between CPD, CTA, DPD, community stakeholders, and members of the public.

- Criteria for a replacement ballfield were discussed. CWC reported measuring the potentially affected ballfield (which would be affected by the East Option only) at roughly 130 feet in diameter, suitable as a "tot lot" or for tee-ball. DS reported that published standards only address little league fields which are larger than the affected field. ML reported that replacement in kind may be appropriate for CPD and he will discuss with his colleagues. CWC requested clarification of mitigation requirements in writing for purposes of the federal environmental documentation.

- CPD's decision process was discussed. Heather Gleason is the new director. ML will need to update her on this project. Once the sites are narrowed down, they will take it to their General Superintendent and CEO and to get his buy-in. CPD only needs to take it to their Board if they are planning to dispose land or acquire or accept land. They have to show the disposition and the acquisition simultaneously. CWC noted that the acquisition of land and further definition of site replacement would not occur at this phase of the environmental planning process. Once an alignment option is chosen at the end of the Draft Environmental Impact Statement (EIS) phase, a Final EIS will be prepared and CTA would perform additional detailed analysis of chosen sites.

As such, no Board approvals or acquisitions are anticipated until the end of environmental planning phases.

- CTA will hold a public hearing for the Draft EIS (tentatively scheduled for October). CPD is willing to help coordinate and provide space, likely in Palmer Park. There could be benefit to work with people in the community (small stakeholder group and aldermen) in the summer before the public hearing to discuss the park mitigation process and to gather community input. CPD would be willing to participate in the meeting. There are no park advisory councils in these neighborhoods, but CPD Area Managers are active with community leaders and have a finger on the pulse of the community and park needs. Area Managers can be useful for coordination as well, and CPD will invite the Area Manager for the study area to the next coordination meeting. Individual park supervisors might also contribute to the discussion because they know the individuals and families that use parks.

- Leah Dawson Mooney (CTA) suggested site visit to show potential sites to CPD, which could help with the decision-making process.

Action Items

- CTA will update monthly coordination meetings to Wednesday as per CPD request.

- CPD will review the potential sites discussed in this meeting and will provide feedback within one week on:
    1. Initial site options discussed today and any sites that may be further eliminated from secondary suitability analysis screening
    2. Ability to modify mitigation options for the West Option to adjacent community areas outside of Washington Heights
    3. Ballfield replacement size criteria
    4. Proposed suitability criteria

- CPD will reach out to the local Area Manager for parks in the replacement park area and invite that contact to attend the next monthly coordination meeting in April.

- CWC will initiate the analysis of suitability criteria discussed, and report findings of most suitable replacement site options during the next monthly meeting.

- CWC will provide any modifications to mitigation proposed in the Draft EIS based on CPD input above in writing for CPD concurrence for federal environmental documentation purposes.

MEETING NOTES

RE: **Chicago Park District Coordination Meeting**
Chicago Transit Authority Red Line Extension Project

DATE: **April 6, 2016, 10:00 a.m.**

LOCATION: **Chicago Park District, 541 N. Fairbanks Court, Chicago, IL**

ATTENDEES:

Name	*Initials*	*Organization*
Leah Dawson Mooney	LM	CTA
Sonali Tandon	ST	CTA
Doreen O'Donnell	DO	CPD
Michael Lange	ML	CPD
Jenifer Palmer	JP	CWC Transit Group
Cody McChane	CM	CWC Transit Group

PREPARED BY: **Cody McChane**

ISSUE DATE: **April 14, 2016**

MEETING NOTES:

- Jenifer Palmer (CWC) provided an overview of the Red Line Extension (RLE) Project and reviewed the potential park replacement site identification process undertaken by CWC and CTA. Preliminary analysis focused on identifying sites that would replace affected parkland (1.6 or 1.9 acres depending on the alignment option) and meeting CPD guidelines for new park acreage (2 to 5 acres). The initial investigation yielded 22 potential sites, 10 of which were eliminated from consideration following field investigation due to insufficient acreage, environmental concerns, non-contiguous available parcels or required crossing or reconfiguration of major roadways, or active uses currently onsite.

- After the last meeting with CPD, CWC and CTA completed a Suitability Analysis for the remaining 12 sites that included six criteria: (1) proximity to area of impact, (2) ownership/availability, (3) surrounding land use/zoning compatibility, (4) safety and security, (5) high level cost considerations, and (6) environmental factors (EDR reports). Each site was given a score of low, medium, or high for each of these unweighted factors. CWC and CTA presented the six sites with the highest scores to CPD. Two additional sites were also reviewed as close scoring contenders or where additional inputs were needed for scoring purposes and further refinement of viable replacement park options.

- Leah Dawson Mooney (CTA) asked CPD for feedback on the Sustainability Analysis process and criteria. Michael Lange (CPD) suggested assigning increased weight to site locations. Doreen O'Donnell (CPD) stated that locating a park in a community area of need is a high priority for CPD, and locations that are not very close to the affected parks can be assigned a high score for location if they help to fill an existing park access gap, defined as the lack of park space within a ½-mile walk shed. Within the study area, West Pullman and Roseland have some identified park needs, while Morgan Park is not identified as a community in need of additional park space.

- CWC also assigned higher scores to potential sites that are proximate to existing parkland such as the Major Taylor Trail, or that connect well with bicycle facilities and transit, including proximity to planned Red Line stations. CTA has not typically looked at park integration near major transit stations in other projects such as the Brown Line on the north side of Chicago. However, the addition of parks and other open space has been shown to spur economic development in underdeveloped areas and may be appropriate in the context of this project area.

- Sonali Tandon (CTA) clarified that project design and construction has not yet been funded. The identification of potential park replacement sites is an iterative process that can evolve to suit the needs of CPD as it moves forward. Because the RLE project timeline is long-term and environmental factors and site availability may change by the time the project receives funding, this study will provide a toolbox for use when the project moves into the land acquisition phase. The study outlines a decision-making process that will clarify to the Federal Transit Authority and stakeholders how park replacement sites are identified and indicate availability of replacement park sites.

- JP presented the six sites identified that earned the highest scores in the Suitability Analysis, in order from the highest to the lowest score.

    - Site 8A is a large parcel of land that would allow for the activation of varying uses due to its size and shape, and is adjacent to a community center and a family services center. The site would be a viable option for both the east and west rail alignments under consideration, which would help increase flexibility and streamline the public input process. Its location would also fill a park access need.

    - Site 3B also would allow for multiple uses, and would complement existing Block Park on the opposite side of the proposed rail alignment. This would be an option for the east alignment only.

    - Both sites 8A and 3B are adjacent to proposed CTA stations. Their strong connection to transit helped them score highly in the Suitability Analysis, but portions of both parcels have been identified as potential park and ride sites. The 103rd St. and 111th St. stations are intermediate stations and would only need to provide parking for the community, whereas the terminal station on the line must provide parking for larger populations. Both sites are adjacent to other parcels that have been identified as potential alternative park and ride locations. At the proposed 103rd station (Site 3B), there is a potential for further utilizing a potential park and ride location on the east side of the tracks as an alternative to this site. At the proposed 111th station (Site 8A), no

additional park and ride locations are currently identified and modification of proposed park and ride plans at that location would need further CTA consideration.

- Site 7 would offer the ability to create bicycle and pedestrian connections due to its linear orientation, and is near Roseland Christian School but across the proposed alignment. The site abuts an alley and the rear of residential properties, and earned a lower score for safety and security. A cell phone tower is located on the site. CPD clarified that they require that transferred land must be "free and clear" of all structures.

- Site 12 is adjacent to a proposed transit station and includes buildings that will be demolished by the city. A portion of this site is also currently identified for a proposed park and ride as part of the RLE Project and CTA would need to reconsider plans at this location if further considered for park replacement. The site is adjacent to Site 11, which is currently slated for a planned development by the city.

- CTA will coordinate with the Chicago Department of Planning and Development (DPD) on all potential sites, including monitoring the status of Site 11.

- Site 6 includes a large amount of acreage but would be an option for the east alignment only. Like site 7, it abuts an alley and the rear of residential parcels and safety and security would be an issue to be addressed. Two buildings on the south end were identified as vacant by the Property Appraiser but would need to be checked using a title search. The use of these properties would allow access to 107th and improve connectivity and safety and security.

- Site 10 is a very large area that is adjacent to the Major Taylor Trail. It is located in Morgan Park, which has not been identified by CPD as a community in need of park space. CPD is also in the process of acquiring additional land in that community area, and adding another large park may be politically difficult. Site 10 was eliminated from consideration.

- Two additional sites did not score as highly but are still under consideration. Site 2B may require the acquisition of one or two currently active residential parcels. However it would be served well by the CTA bus system and would help to fill a park access gap identified by CPD. Site 11 may be under consideration pending DPD's update on the potential for a planned development. Both Sites 11 and 12 require further discussion with DPD on anticipated plans at those locations on coordination of park replacement as well as proposed park and ride plans.

- JP provided an overview of the next steps required. About six sites are still under consideration, we want to narrow that down to three final options to present at public meetings. CWC and CTA will create concept plans and cost estimates upon confirmation of these three options.

- Future analysis of sites will include consideration of wards, and Aldermanic support is crucial to land acquisition and park creation.

- CPD is in the process of creating new parks or small open spaces in both Roseland and West Pullman. CPD will overlay the remaining potential replacement sites on their parks access map and report their findings. CWC and CTA will change the location/proximity score accordingly.

- CWC and CTA will draft revised mitigation measures language to include changes to proximity requirements and identification of access gaps and communities of need, and the in kind replacement of the junior ball field in Wendell Smith Park, and send to CPD for concurrence.

- The next step is to coordinate with DPD, and they will be invited to the next monthly meeting on May 11, 2016. Erika Sellke, Kathy Dickhut, and Nelson Chueng were identified as staff members that should be involved from DPD.

Action Items:

- CTA to coordinate meeting between CPD, DPD, and project team for next monthly coordination meeting.

- CPD will overlay the remaining potential replacement sites on their parks access map and report their findings. CWC and CTA will change the location/proximity score accordingly and also evaluate higher weight for this criterion.

- CTA to provide updated mitigation measures correspondence to CPD for confirmation/concurrence.

MEETING NOTES

RE: **Chicago Park District and Department of Planning and Development Coordination Meeting**
Chicago Transit Authority Red Line Extension Project

DATE: **May 18, 2016, 2:30 p.m.**

LOCATION: **Chicago Park District, 541 N. Fairbanks Court, Chicago, IL**

ATTENDEES:

Name	*Initials*	*Organization*
Leah Dawson Mooney	LM	CTA
Sonali Tandon	ST	CTA
Doreen O'Donnell	DO	CPD
Michael Lange	ML	CPD
Meg Gustafson	MG	DPD
Erika Sellke	ES	DPD
Jenifer Palmer (call-in)	JP	CWC Transit Group
Cody McChane	CM	CWC Transit Group

PREPARED BY: **Cody McChane**

ISSUE DATE: **June 1, 2016**

MEETING NOTES:

- Sonali Tandon (CTA) provided an overview of the Red Line Extension (RLE) Project and reviewed the potential park replacement site identification process undertaken by CWC and CTA. Preliminary analysis focused on identifying sites that would replace affected parkland (1.6 or 1.9 acres depending on the alignment option) and meeting CPD guidelines for new park acreage (2 to 5 acres). The initial investigation yielded 22 potential sites, 10 of which were eliminated from consideration following field investigation due to insufficient acreage, environmental concerns, non-contiguous available parcels or required crossing or reconfiguration of major roadways, or active uses currently onsite. Eight sites currently remain under consideration following a suitability analysis that scored sites based on location, availability, land use/zoning compatibility, safety and security, environmental factors, and cost considerations. Three final sites are to be selected for further development and presentation to the public.

- CPD prefers sites that are within one mile of the proposed transit corridor, are not within one half mile of an existing park, and help fill a half-mile park access gap. CPD provided maps

depicting “Final Focus Areas” that are not within one half mile of a park. Sites 2B and 8A meet these three criteria.

- Meg Gustafson (DPD) confirmed that the city-owned parcel data that has been used by CTA and CWC is the most current data available. At this time, CTA is not requesting to prevent development on city-owned parcels under consideration for use as replacement parkland due to project uncertainty.

- Attendees reviewed the final eight sites under consideration.

    - Site 2B – A Chicago Housing Authority project, likely senior housing, may be located nearby. This is a preferred site for CPD due to its proximity to the proposed corridor and affected parks, and ability to expand half-mile access. It is also a viable site for both the east and west options.

    - Site 3B – A park and ride lot has been proposed at this site, but its precise location and size can be readdressed. This site is viable for the east option only. CPD prefers this site as an alternate under the east option as it would be an expansion of Fernwood Parkway.

    - Site 6 – This site is only viable under the east option, and is very close to Fernwood Park.

    - Site 7 – This site contains a cell/communications tower. Removal would likely require contracting a private company. City rules and process for tower removal will need to be documented regardless of park site selection due to the tower located in Block Park.

    - Site 8A – This is a preferred site for CPD because it is very close to one of the Final Focus Areas for half-mile access, and is viable for both the east and west options. A park and ride lot has also been proposed at this site, but its precise location and size can be readdressed.

    - Site 10 – This site is removed from consideration, because Morgan Park is not a community of need and the site does not meet CPD’s three criteria above.

    - Site 11 – This site is a Planned Development, but is not currently owned by the city. It was originally reserved for an Aldi grocery store but this hasn’t happened yet. The community would prefer a grocery store in that location. The Planned Development designation likely has a sunset clause of ten years, DPD will check and report back. Because this site is very large, it may be feasible to incorporate park and ride and transit-oriented development in one site. The park could serve the Elementary school next to the site and may also help incentivize development of the rest of the parcel; however developers usually prefer frontage on major streets (State St., Michigan Ave., and 115th St.), and rear of the site maybe left for park space, which is not ideal.

    - Site 12 – One or two parcels are currently city-owned, and the structures fronting Michigan Avenue are slated for demolition. CPD favors site 12 over site 11 because they would prefer their own site as opposed to coordinating space with a park and ride lot and transit-oriented development. This site would be next to the proposed Michigan station and could serve as a “gateway” to the Pullman Community Area.

- Attendees discussed the value of creating parks on commercial corridors and whether it constitutes highest and best use. Within the context of the study area, park space can help incentivize much needed economic development. DPD stated that they are okay with parks in the sites as discussed.

- Attendees agreed that the final sites moving forward will be 2B, 8A, and either 11 or 12, pending DPD feedback. Site 3B will be an alternate for the East Option.

- Aldermanic feedback will be solicited once the final three sites are confirmed.

- Regarding disposition of land from CPD to CTA, the Transfer Act will need to be consulted. CPD may be able to dispose land directly to CTA, or may need to go through the city. Block Park is owned by the Department of Water Management and leased to CPD. This could pose issues with acquisition in the event that the east option is chosen.

MEETING NOTES

RE: **Chicago Park District Coordination Meeting**
Chicago Transit Authority Red Line Extension Project

DATE: **June 15, 2016, 10:00 a.m.**

LOCATION: **Chicago Park District, 541 N. Fairbanks Court, Chicago, IL**

ATTENDEES:

Name	*Initials*	*Organization*
Sonali Tandon	ST	CTA
Doreen O'Donnell	DO	CPD
Michael Lange	ML	CPD
Jenifer Palmer (call-in)	JP	CWC Transit Group
Dave Sousa	DS	CWC Transit Group
Cody McChane	CM	CWC Transit Group

PREPARED BY: **Cody McChane**

ISSUE DATE: **August 3, 2016**

MEETING NOTES:

- Dave Sousa (CWC) provided an overview of the site selection process and the meeting agenda.
- CWC presented site plan sketches for Wendell Smith Park and the three potential replacement park sites. Multiple options for each site were presented because the East Option and West Option influence site dimensions and requirements differently and because there are currently active uses at some sites.
- CPD mentioned that the information on their website could be inaccurate, and that there are two intact and actively used ballfields at Wendell Smith Park. There is currently no t-ball programming at the southwest field. The main use for that smaller ballfield is informal kickball.
- Under the East Option, reconstruction of pathways, trees, and likely both ballfields will be necessary because construction staging will need to take place in Wendell Smith Park.
- The ballfields that currently exist in Wendell Smith Park do not comply with Little League standards, and two such fields would not fit in the park. CPD agreed that replacement fields only need to comply with Pony League regulations, and two such fields would fit in the park under the East Option as shown. The fields should have outfield fences to prevent players from

running onto the adjacent field or backing into a pier supporting the elevated rail structure that would be nearby.

- CTA will own the land within 15 feet of the eastern edge of the alignment, and park amenities such as the walkway and path should not be placed west of that line. CPD recommended that CTA consider placing a fence at the property line. Such a fence would likely create a conflict point with one of the Pony League fields, and if so two fields would not fit in the park.

- CPD suggested building one larger high school-sized field on the site rather than both fields to provide the greatest level of improvement to the field amenity. In this case, the field should be reoriented so that home plate is in the southwest corner for best sun lighting.

- Site 2B, at 101st Street and Michigan Avenue, would be viable under both the West and East Options. A ballfield replacement would be possible only with voluntary acquisition of an active use residential parcel. A replacement park without a ballfield and without acquisition of this parcel would still be 2 acres.

- A fence is not required around a replacement ballfield at this site, though CPD usually puts a fence around parks to help define boundaries and discourage fly dumping. Fences do not need to be depicted in future sketches.

- Gateway features as shown in the site plan sketch for site 2B, Version 2 should be excluded at this point. Future sketches will depict the site without gateway features.

- Site 2B, Version 1, currently shows acquisition of the active use residential parcel. This should be shown in Version 2, with Version 1 showing the parcel remaining with the current owner. Property owners cannot be displaced for the construction of park amenities, and all public materials must be clear that Version 2 is dependent on voluntary acquisition only.

- The site plan for site 8A under the East Option depicts both a replacement park and park and ride lot. Current plans call for 145 parking spaces total at the site (200 total near the station) but that could be refined in later stages, possibly leaving more space for a park. The current site plan shows 2.0 acres of park space.

- The site plan for site 8A shows a new parking lot for the youth center near the site, because Eggleston Avenue, which the youth center currently uses for parking, would be made into a bus driveway. CTA/CWC will coordinate with DPD regarding whether a parking designation has been made for the youth center that makes parking on Eggleston an official use.

- A park at site 8A would require voluntary acquisition of a commercial parcel that may not be vacant. This is to be made clear on all public materials. The property owner will be included in displacements outreach for the West Option, however under the East Option the property would not be displaced.

- The site plan for 8A under the West Option shows that there is not enough space available for a 2-acre park in addition to the park and ride lot called for in current plans. Projected parking

needs may be reduced in future steps, which could clear 2 acres for a park, but that discussion will be tabled until the Final EIS is prepared.

- The sketch for site 12 under the West Option depicts a 2.4-acre park with a Pony League size field. Under the East Option, the field is reduced to a t-ball field, generally recommended for children under 6 years old.

- The sketch for site 12 under the East Option shows an emergency access road parallel to the proposed rail station. CTA will check if this can be a dual-purpose sidewalk path and access road so that it can be integrated with park space and located on CPD property to avoid duplication of walkways.

- In Version 2 of site 12 under the East Option, with the rail station relocated to the west side of Michigan Avenue, an expanded park is shown to account for the narrowing of track right of way without the station being adjacent to the park. The site plan should instead mirror Version 1 for public presentation to facilitate visual understanding.

- CPD confirmed that parking will not be required at a replacement park.

- CPD generally constructs ballfields with clay infields instead of grass to reduce maintenance needs and costs. CWC will depict ballfields at all sites with clay infields and backstops, and without dugouts, in future sketches.

- Basketball courts could be polarizing and should not be shown in the concepts. CPD will not be constructing amenities in the replacement park. Because impacted amenities must be replaced in kind, CTA will be required only to provide passive recreation space (grass), trees, and walking paths in addition to a ballfield, if needed. Future sketches of all potential replacement sites will depict passive recreation space and street and shade trees instead of basketball and tennis courts, playgrounds, and other active use amenities other than replacement ballfields. CTA suggested that when presenting these concepts to public, it would be good to get feedback on what additional features would people like to see in these parks.

- CPD noted that it would also be useful to show impacts to Fernwood Parkway and Block Park for public consumption and understanding.

- CWC will update all site plans and provide to CPD. Another in-person meeting is likely not necessary.

Attachment 2: Desktop and Geospatial Analysis Results

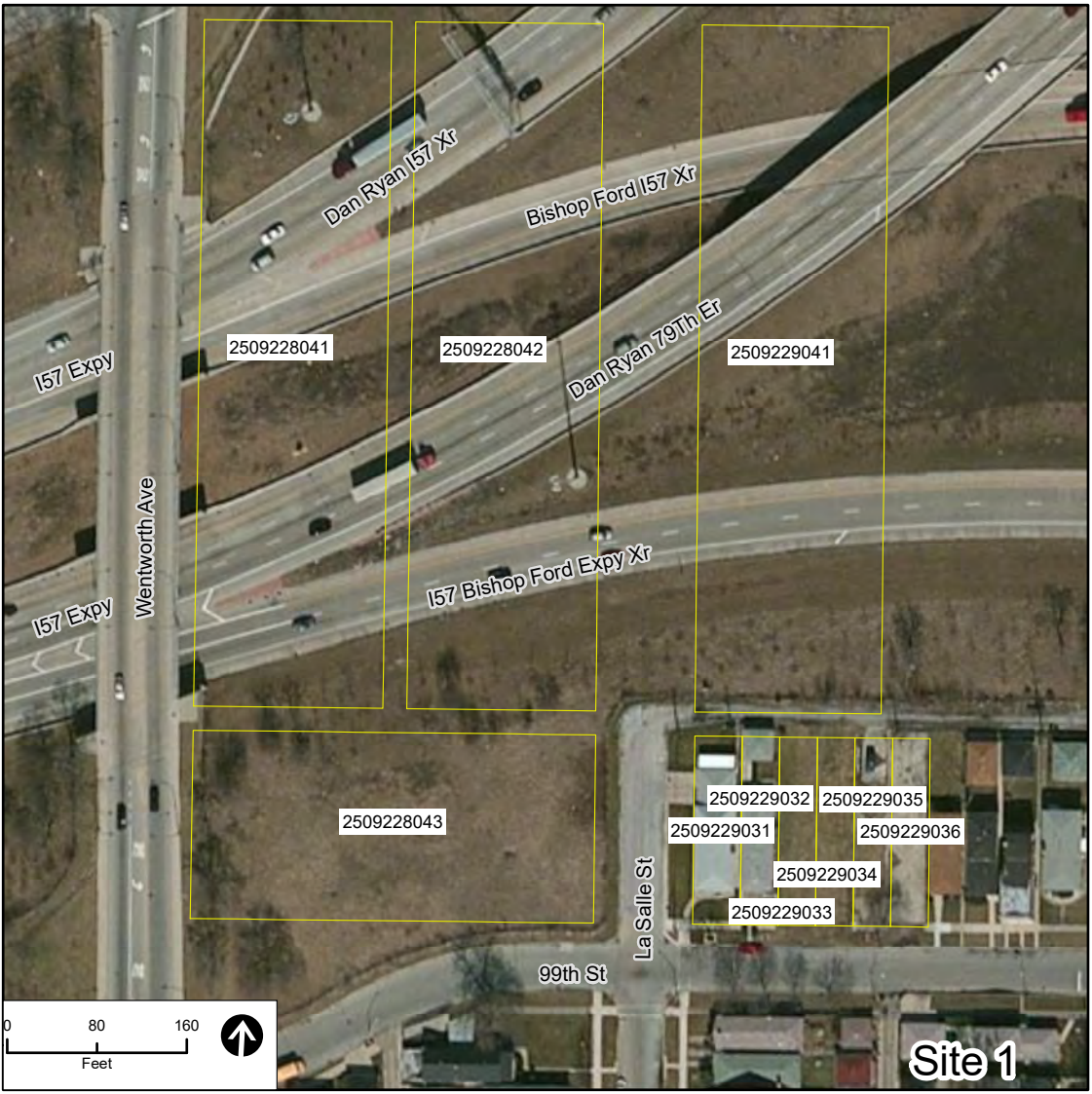
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Feet
Site 1

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60
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Feet
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140
Feet
Site 2B

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102nd Pl
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65
130
Feet
Site 2C

102nd St
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102nd Pl
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80
160
Feet
Harvard Ave
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Site 3A

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103rd Pl
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80
160
Feet
Site 3B and 3C

La Salle St
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2516202008
2516202011
2516202014
2516202017
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103rd Pl
Perry Ave
0
80
160
Feet
Site 4

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160
Feet
Site 5

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230
Feet
107th St
Site 6

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Eggleston Ave
108th St
107th Pl
108th St
108th Pl
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115
230
Feet
Site 7

Eggleston Ave
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110th St
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110th St
2516329007
Normal Ave
110th Pl
110th Pl
2516329009
2516329008
Eggleston Ave
2516329005
111th St
Eggleston Ave
Stewart Ave
0
115
230
Feet
Site 8A

110th St
2516500024
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Site 8B

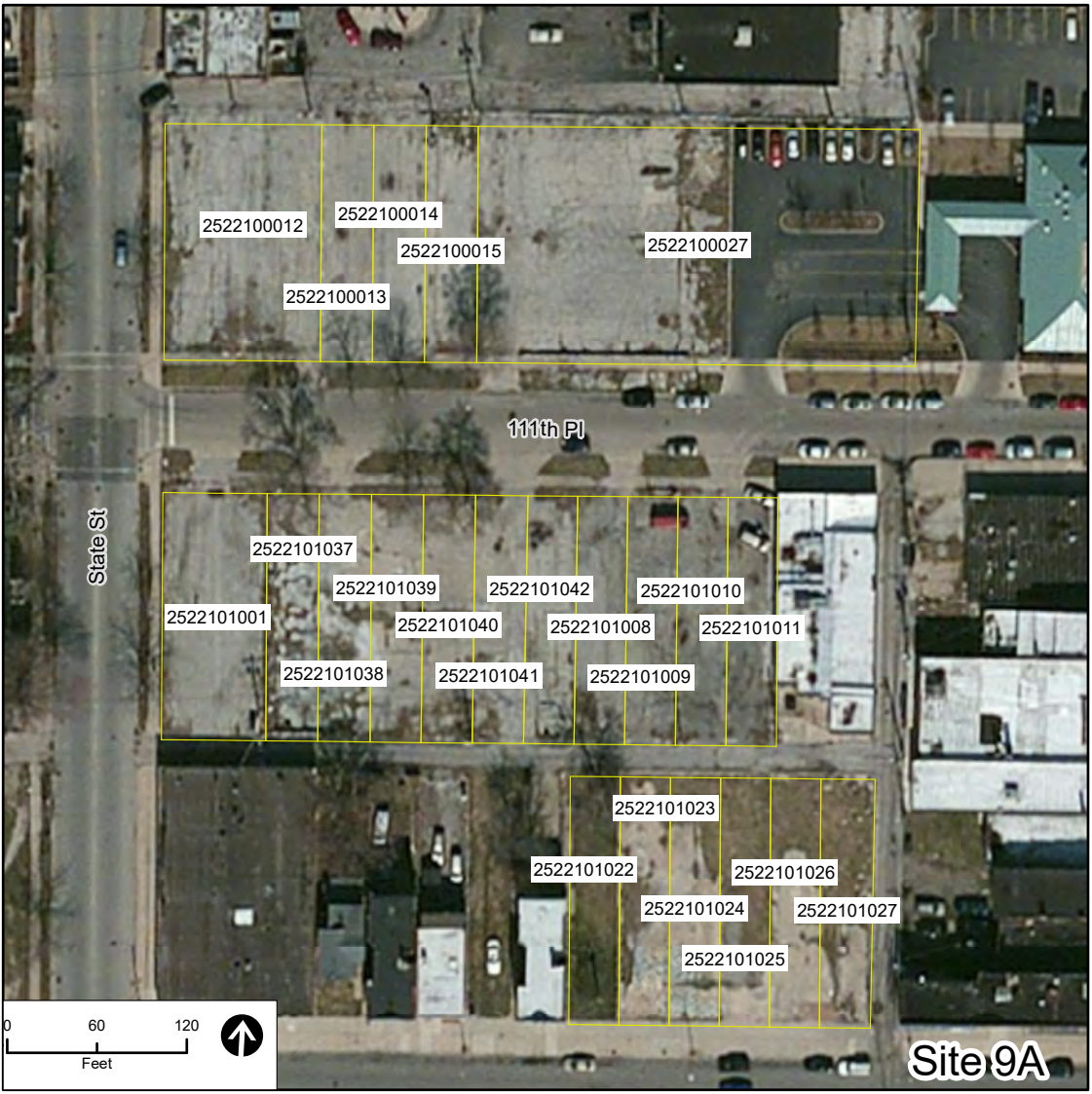
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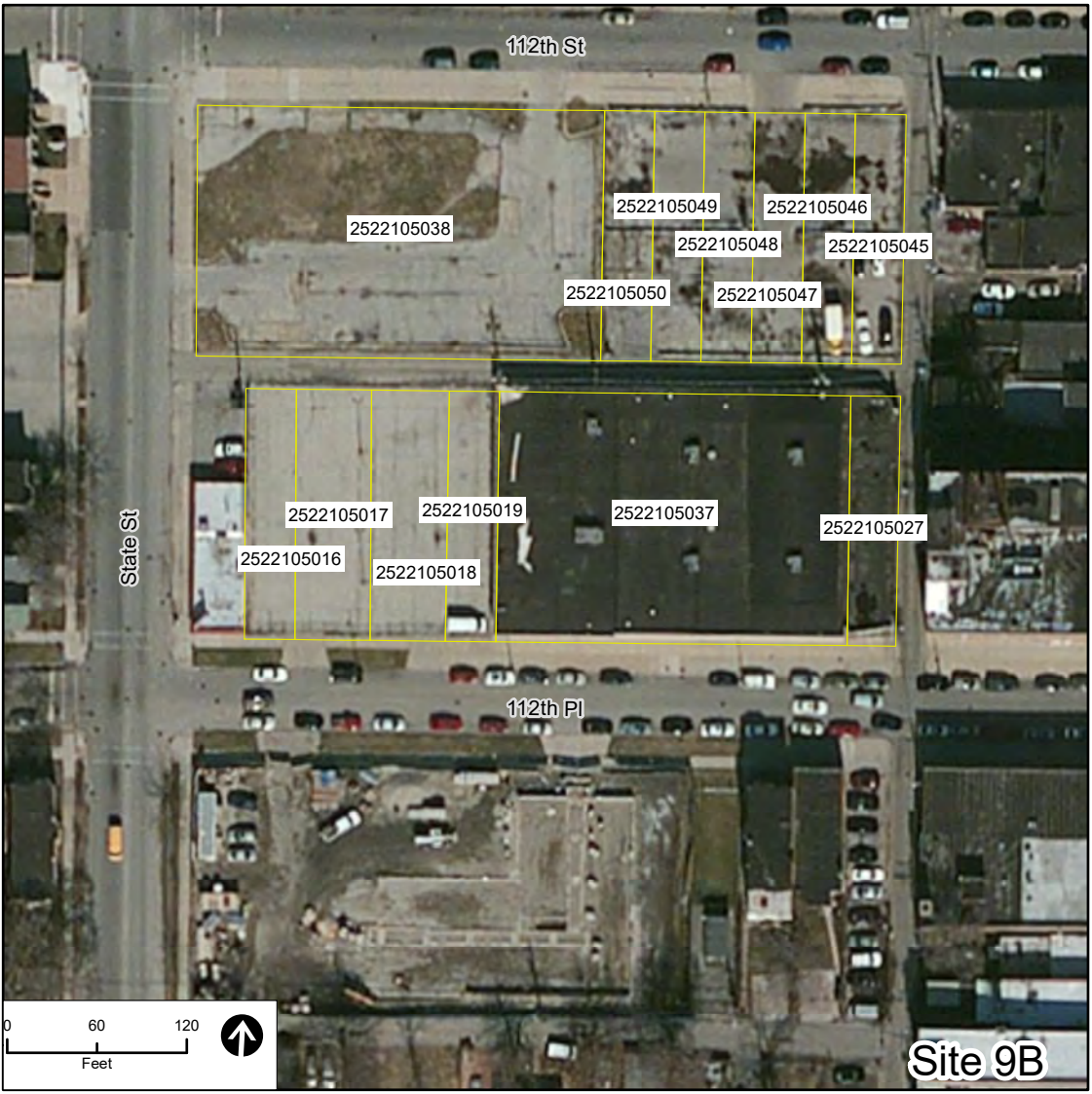
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2522105018
112th Pl
0
60
120
Feet
Site 9B

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Peoria St
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113th Pl
Morgan St
0
115
230
Feet
Site 10

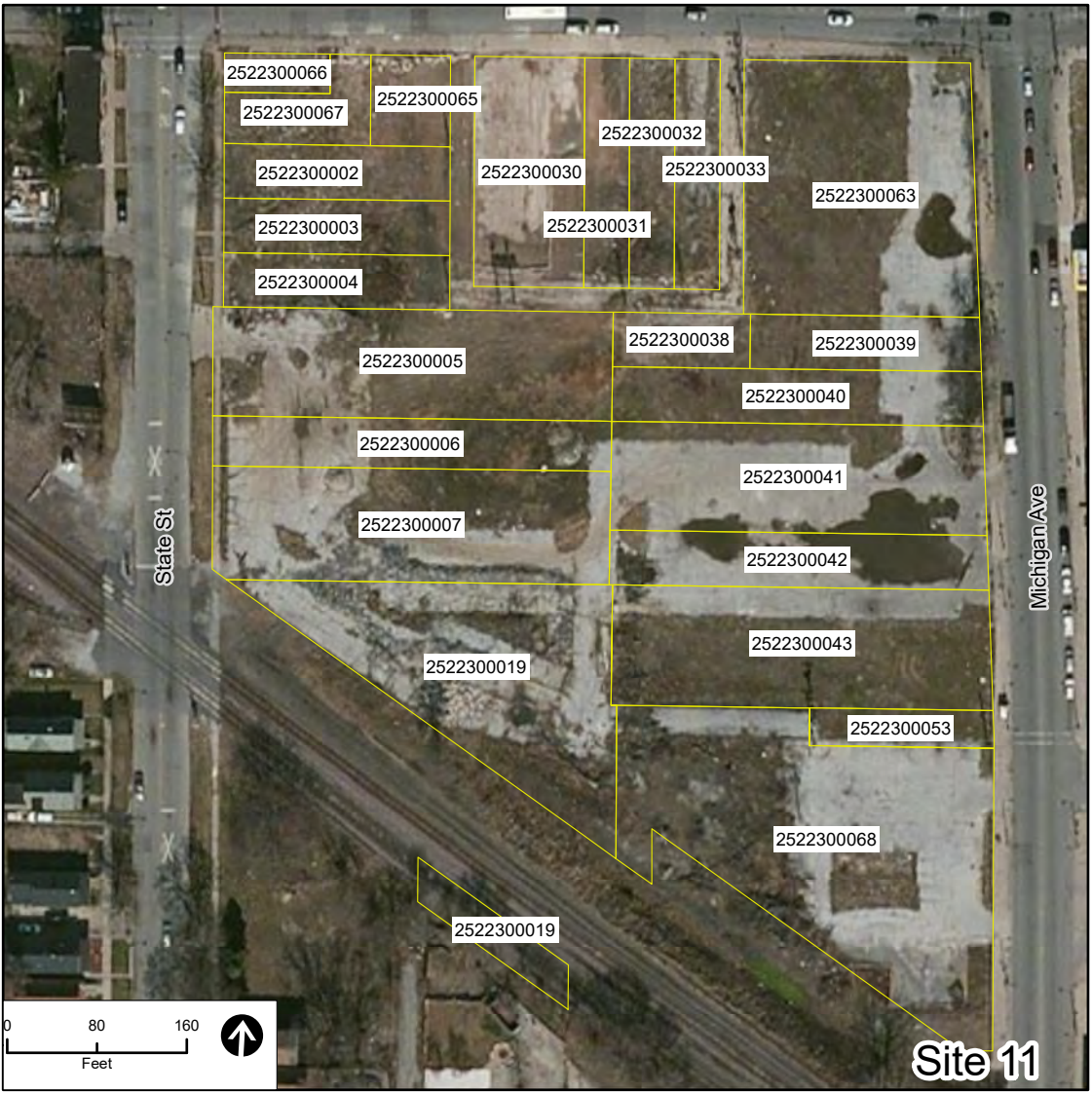
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State St
Michigan Ave
0
80
160
Feet
Site 11

Kensington Ave
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116th St
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60
120
Feet
Site 12

117th Pl
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Feet
Site 13

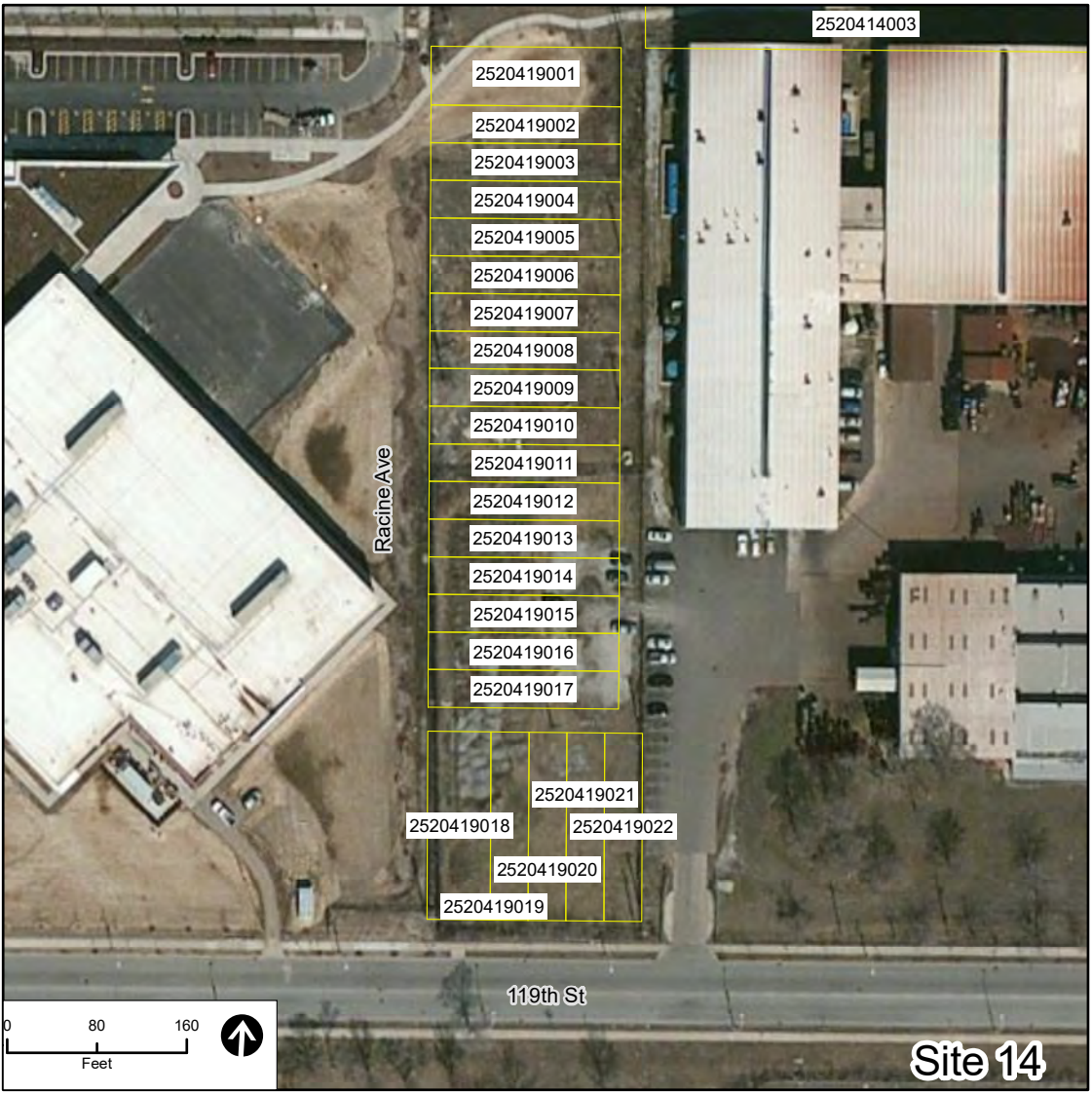
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2520419022
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2520419019
Racine Ave
119th St
0
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Feet
Site 14

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Feet
Site 15

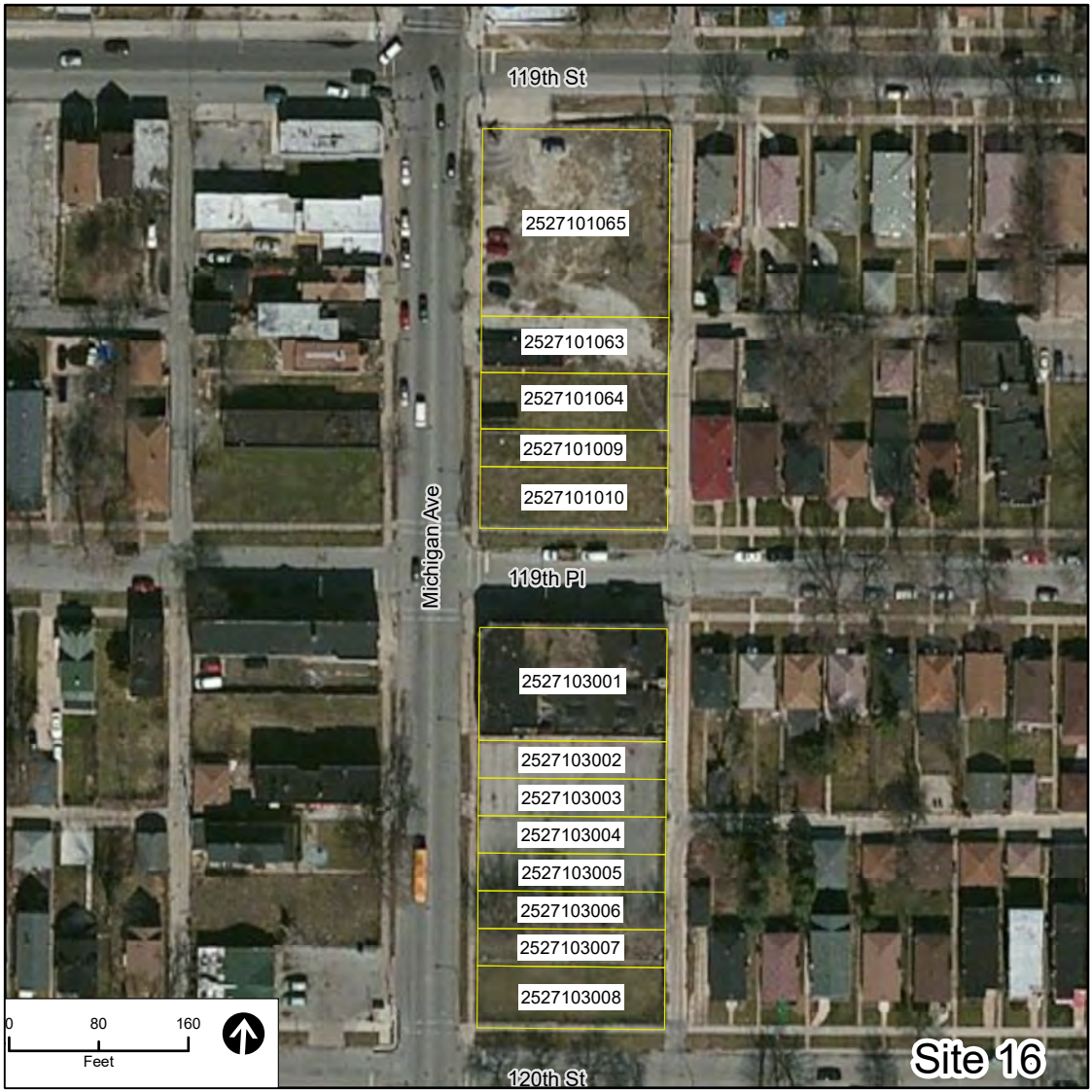
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2527103008
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Feet
120th St
Site 16

Emerald Ave
120th St
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2528109001
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Halsted St
Emerald Ave
0
80
160
Feet
Site 17

Considerations within Washington Heights Community Area (West Option – Fernwood Parkway Mitigation)

Washington Heights Community Area

Replacement park within Washington Heights community area was noted for mitigation of the West Option (Fernwood Parkway)

While Fernwood Parkway is located within the Washington Heights community area, field reviews and GIS analysis indicated that there are no suitable replacement park locations in this area

Washington Heights is separated by the interstate, which divides this neighborhood

Fernwood Parkway is more closely identifiable with Roseland community area due to transportation facilities and land uses

Two areas were initially identified, but removed from further consideration due to:

- Acreage insufficiency
- Non contiguous parcels needed for park acreage replacement, and would require additional roadway reconfigurations
- Some linear space was identified for bike/ped connection, but would not provide for park acreage replacement

WH - 1 (Eliminated)

Washington Heights Community

Ward 21

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Requires removal of ½ block of Loomis St. and cul-de-sac.
- Adjacent to a senior center

WH-1

(Eliminated)

Washington Heights Community

Ward 21

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Requires removal of ½ block of Loomis St. and cul-de-sac.
- Adjacent to a senior center

WH-1 (Eliminated)

Washington Heights Community

Ward 21

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Requires removal of ½ block of Loomis St. and cul-de-sac.
- Adjacent to a senior center

WH-2 (Eliminated)

Washington Heights Community

Ward 21

Field Notes/ Considerations

- Potential location for a pedestrian and bicycle path
- May provide connection to existing Vincennes Ave. bike lane
- Does not provide replacement park acreage capability

Considerations within Washington Heights Community Area (West Option – Fernwood Parkway Mitigation)

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Replacement park within Washington Heights community area was noted for mitigation of the West Option (Fernwood Parkway)

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- Non contiguous parcels needed for park acreage replacement, and would require additional roadway reconfigurations
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WH - 1 (Eliminated)

Washington Heights Community

Ward 21

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Requires removal of ½ block of Loomis St. and cul-de-sac.
- Adjacent to a senior center

WH-1

(Eliminated)

Washington Heights Community

Ward 21

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Requires removal of ½ block of Loomis St. and cul-de-sac.
- Adjacent to a senior center

WH-1 (Eliminated)

Washington Heights Community

Ward 21

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Requires removal of ½ block of Loomis St. and cul-de-sac.
- Adjacent to a senior center

WH-2 (Eliminated)

Washington Heights Community

Ward 21

Field Notes/ Considerations

- Potential location for a pedestrian and bicycle path
- May provide connection to existing Vincennes Ave. bike lane
- Does not provide replacement park acreage capability

Attachment 3: Field Visit Findings

RED AHEAD

Red Line Extension

Red Line Extension Park Replacement Site Analysis

Field Visit Findings

February 2016

cta

Considerations within Roseland Community Area (East and West Options)

RED AHEAD

Red Line Extension

Site 1

Roseland Community

Ward 9

1.7 Acres

Field Notes / Considerations

Eliminated from further consideration due to:

- Requires acquisition of two active parcels to meet acreage requirements
- Noise from adjacent freeway is an environmental concern
- Freeway ROW constricts available land and ballfield replacement potential

East and West Option

cta

RED AHEAD

Red Line Extension

Site 1

Roseland Community

Ward 9

1.7 Acres

Field Notes/Considerations

Eliminated from further consideration due to:

- Requires acquisition of two active parcels to meet acreage requirements
- Noise from adjacent freeway is an environmental concern
- Freeway ROW constricts available land and ballfield replacement potential

East and West Option

cta

Site 2

Roseland Community

Ward 9

Consists of 3 parcels:
2A, 2B, 2C

Michigan Ave. between 100th St. and 103rd St.

Site 2A

Roseland Community

Ward 9

1.21 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Acreage not sufficient for replacement for either alignment option park impacts
- Requires acquisition of active parcels to meet acreage requirement
- Adjacent to active gas station; concerns about land use compatibility given adjacent use

East and West Option

RED AHEAD

Red Line Extension

Site 2A

Roseland Community

Ward 9

1.21 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Acreage not sufficient for replacement for either alignment option park impacts
- Requires acquisition of active parcels to meet acreage requirement
- Adjacent to active gas station; concerns about land use compatibility given adjacent use

East and West Option

cta

RED AHEAD

Red Line Extension

Site 2B

Roseland Community

Ward 9

2.0 Acres

Ballfield Suitability:

- Up to 225'

Field Notes/ Considerations

- One block from school
- Located on a commercial corridor; highest and best land use may be a consideration
- Requires acquisition of active residence to accommodate ballfield
- Requires construction on either side of residence to meet acreage requirements

East and West Option

cta

RED AHEAD

Red Line Extension

Site 2B

Roseland Community

Ward 9

2.0 Acres

Ballfield Suitability:

- Up to 225'

Field Notes/ Considerations

- One block from school
- Located on a commercial corridor; highest and best land use may be a consideration
- Requires acquisition of 2 active residences to accommodate ballfield
- Requires construction on either side of residence to meet acreage requirements

East and West Option

cta

Site 2C

Roseland Community

Ward 9

1.4 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Does not meet replacement acreage requirement for either alignment option
- Requires acquisition of active parcels to meet acreage requirements

East and West Option

RED AHEAD

Red Line Extension

Site 2C

Roseland Community

Ward 9

1.4 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Does not meet replacement acreage requirement for either alignment option
- Requires acquisition of active parcels to meet acreage requirements

East and West Option

cta

RED AHEAD

Red Line Extension

Site 3

Roseland Community

Wards 9 & 34

Consists of 2 Parcels: 3A, 3B

Site 3A

Roseland Community

Ward 9

0.76 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Acreage not sufficient on its own for either alignment option and was reviewed for combination with Site 3B
- Under consideration for Park and Ride location along with a portion of Site 3B; will need to reconsider needs if used as park
- Would still divide Block Park, but might be able to create a ped bridge or crossing to make area more cohesive
- Located near station and on a commercial corridor (103rd St.); park may not be best use.

East and West Option

RED AHEAD

Red Line Extension

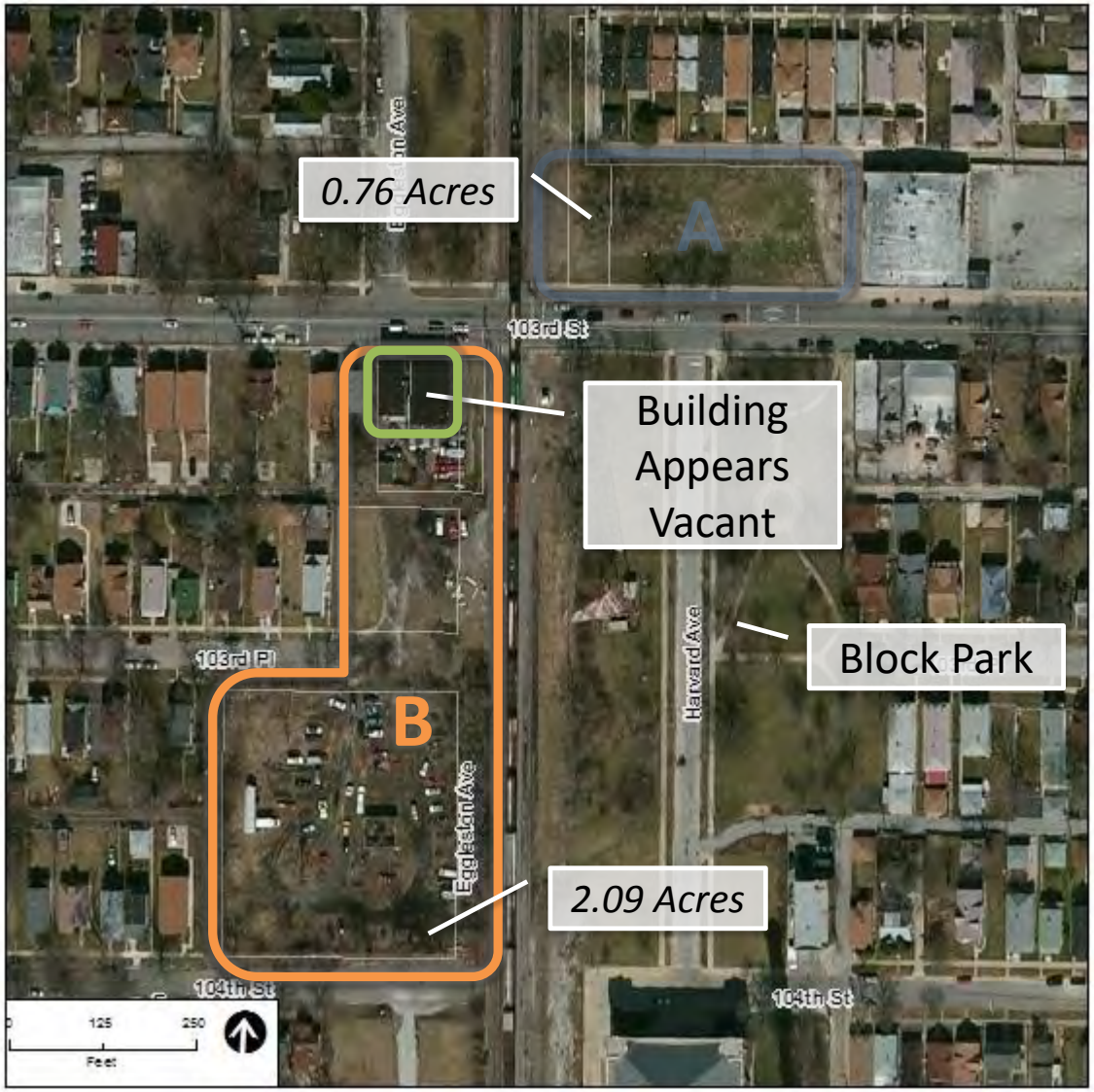

Site 3B

Roseland Community

Ward 34

2.09 Acres

Field Notes/ Considerations

- Under consideration for Park and Ride location at proposed 103rd Street station; would require consideration of Site 3A for bus and parking operations at proposed station instead
- Located near station and on a predominately commercial corridor; consideration for highest and best use
- Meets replacement acreage requirements

East Option, West Option TBD

cta

Site 4

Roseland Community

Ward 34

1.21 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Acreage not sufficient to serve as replacement for either alignment option
- Vacancy is not contiguous; requires acquisition of multiple active parcels to meet acreage requirement
- Located on a commercial corridor; park may not be highest /best use

East and West Option

RED AHEAD

Red Line Extension

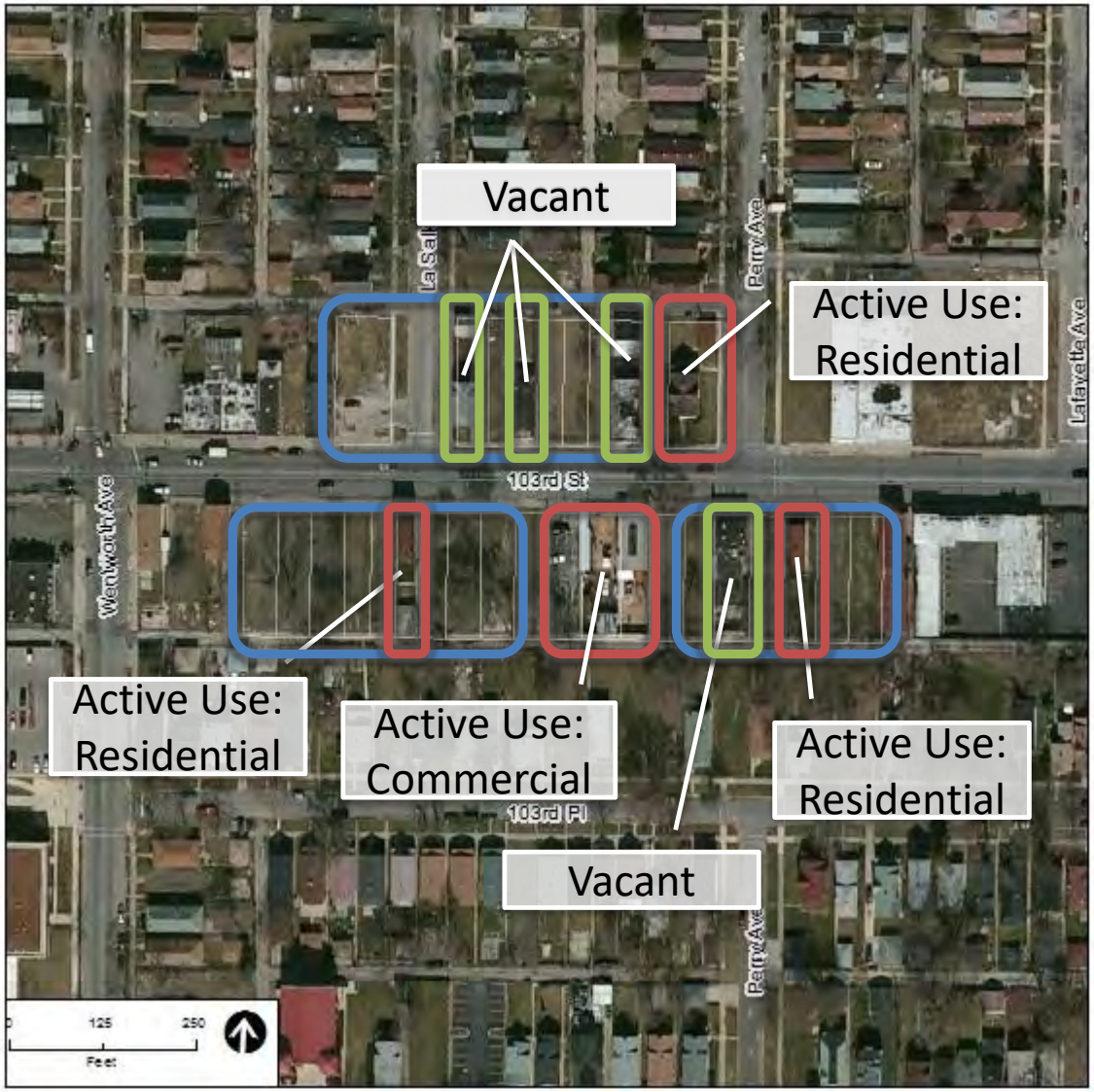

Site 4

Roseland Community

Ward 34

1.21 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Acreage not sufficient to serve as replacement for either alignment option
- Vacancy is not contiguous; requires acquisition of multiple active parcels to meet acreage requirement
- Located on a commercial corridor; park may not be highest /best use

East and West Option

Site 4

Roseland Community

Ward 34

1.21 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Acreage not sufficient to serve as replacement for either alignment option
- Vacancy is not contiguous; requires acquisition of multiple active parcels to meet acreage requirement
- Located on a commercial corridor; park may not be highest /best use

East and West Option

RED AHEAD

Red Line Extension

Site 5

Roseland Community

Ward 34

2.78 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Identified additional vacant/demolished property adjacent to initially identified parcels
- Requires crossing of major streets (State and 103rd) to meet acreage requirement for either alignment
- Located on a commercial corridor (103rd St.); park may not be highest/best use

East and West Option

cta

RED AHEAD

Red Line Extension

Site 5

Roseland Community

Ward 34

2.78 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Identified additional vacant/demolished property adjacent to initially identified parcels
- Requires crossing of major streets (State and 103rd) to meet acreage requirement for either alignment
- Located on a commercial corridor (103rd St.); park may not be highest/best use

East and West Option

cta

Site 6

Roseland Community

Ward 34

3.35 Acres

Field Notes/ Considerations

- Directly abuts alleyway/house garages
- Acreage will be compromised (linear) if West Option is chosen; additional acreage estimation needed to determine
- May require acquisition of active property to connect to 107th St.
- Acreage will be reduced with western alignment option
- Potential for ped/bike connection with Site 3 to the north and Site 7 to the south

East Option Only

RED AHEAD

Red Line Extension

Site 6

Roseland Community

Ward 34

3.35 Acres

Field Notes/ Considerations

- Directly abuts alleyway/house garages
- May require acquisition of active property to connect to 107th St.
- Acreage will be reduced with western alignment option
- Potential for ped/bike connection with Site 3B to the north and Site 7 to the south

East Option Only

cta

Site 7

Roseland Community

Ward 34

3.32 Acres

Field Notes/ Considerations

- Directly abuts alleyway/house garages
- Adjacent to school
- Light industrial use located directly south of site
- Acreage will be reduced with western alignment option
- Potential for ped/bike connection with Site 6 to the north
- Requires removal of cell tower

East Option Only

Site 7

Roseland Community

Ward 34

3.32 Acres

Field Notes/ Considerations

- Directly abuts alleyway/house garages
- Adjacent to school
- Light industrial use located directly south of site
- Acreage will be reduced with western alignment option
- Potential for ped/bike connection with Site 6 to the north
- Requires removal of cell tower

East Option Only

Site 8

Roseland Community

Ward 34

Consists of 2 parcels: 8A and 8B

RED AHEAD

Red Line Extension

Site 8A

Roseland Community

Ward 34

3.88 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Acreage will be reduced with western alignment
- Under consideration for park and ride location
- Located next to station and on commercial corridor; park may not be best use
- Noted signage "Home of future Logos Baptist Church on 111th Street; ownership TBD
- Potential for use as part of UPRR West Option TBD

East Option, West Option TBD

cta

Site 8A

Roseland Community

Ward 34

3.88 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Acreage will be reduced with western alignment
- Under consideration for park and ride location
- Located next to station and on commercial corridor; park may not be best use
- Potential for use as part of UPRR West Option TBD

East Option, West Option TBD

RED AHEAD

Red Line Extension

Site 8B

Roseland Community

Ward 34

2.48 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Requires acquisition of active parcels to meet acreage requirement
- Acreage will be reduced with eastern alignment
- Under consideration for park and ride location
- Located next to station and on commercial corridor; park may not be best use

West Option

RED AHEAD

Red Line Extension

Site 8B

Roseland Community

Ward 34

2.48 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Requires acquisition of active parcels to meet acreage requirement
- Acreage will be reduced with eastern alignment
- Under consideration for park and ride location
- Located next to station and on commercial corridor; park may not be best use

West Option

cta

Site 9

Roseland Community

Ward 9

Consists of 2 parcels: 9A and 9B

RED AHEAD

Red Line Extension

Site 9A

Roseland Community

Ward 9

2.24 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Requires removal of ½ block of 111th Pl. and cul-de-sac.
- Located in commercial district, park may not be best use.
- Sizeable distance away from proposed park impacts

East and West Option

cta

RED AHEAD

Red Line Extension

Site 9B

Roseland Community

Ward 9

1.94 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Requires acquisition and demolition of structure that contains the Alderman's office
- Located in a commercial district; park may not be best use.
- Sizeable distance away from proposed park impacts

East and West Option

cta

Other Community Areas Reviewed

- Morgan Park (Site 10)
- West Pullman (Sites 11-17)

Site 10

Morgan Park Community

Ward 34

6.0 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Adjacent to Major Taylor Trail and park
- Large vacant commercial area to the south
- Would connect two neighborhoods currently divided by parcel
- Currently little street visibility
- Serves neighborhood around Fenger HS (Roseland)

East and West Option

Site 10

Morgan Park Community

Ward 34

6.0 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Adjacent to Major Taylor Trail and park
- Large vacant commercial area to the south
- Would connect two neighborhoods currently divided by parcel
- Currently little street visibility
- Serves neighborhood around Fenger HS (Roseland)

East and West Option

Site 11

West Pullman Community

Ward 9

5.86 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Under consideration for Planned Development – will need to check status
- Located next to station and on commercial corridor; park may not be best use
- Outside of community area where parks are directly impacted

East and West Option

Site 12

West Pullman Community

Ward 9

2.20 Acres

Field Notes/ Considerations

- Located next to proposed station and on commercial corridor; park may not be best use
- Acreage will be reduced with eastern alignment option
- Outside of community area where parks are directly impacted

East and West Option

Site 12

West Pullman Community

Ward 9

2.20 Acres

Field Notes/ Considerations

- Located next to proposed station and on commercial corridor; park may not be best use
- Acreage will be reduced with eastern alignment option
- Outside of community area where parks are directly impacted

East and West Option

Site 13

West Pullman Community

Ward 9

0.87 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Insufficient to meet acreage requirements
- Adjacent to school and church
- Outside of community area where parks are directly impacted

East and West Option

Site 13

West Pullman Community

Ward 9

0.87 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Insufficient to meet acreage requirements
- Adjacent to school and church
- Outside of community area where parks are directly impacted

East and West Option

Site 14

West Pullman Community

Ward 34

1.69 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Adjacent to Gano Park and Kroc Community Center
- Adjacent to manufacturing; park may not be best use
- Manufacturing facility currently using as parking
- Outside of community area where parks are directly impacted

East and West Option

Site 14

West Pullman Community

Ward 34

1.69 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Adjacent to Gano Park and Kroc Community Center
- Adjacent to manufacturing; park may not be best use
- Manufacturing facility currently using as parking
- Outside of community area where parks are directly impacted

East and West Option

Site 15

West Pullman Community

Ward 34

3.89 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Adjacent to Gano Park
- Park directly north of these limits
- Adjacent to manufacturing; park may not be best use
- Large vacant lot directly south
- Outside of community area where parks are directly impacted

East and West Option

Site 15

West Pullman Community

Ward 34

3.89 Acres

Ballfield Suitability:

- Up to 250'

Field Notes/ Considerations

- Adjacent to Gano Park
- Park directly north of these limits
- Adjacent to manufacturing; park may not be best use
- Large vacant lot directly south
- Outside of community area where parks are directly impacted

East and West Option

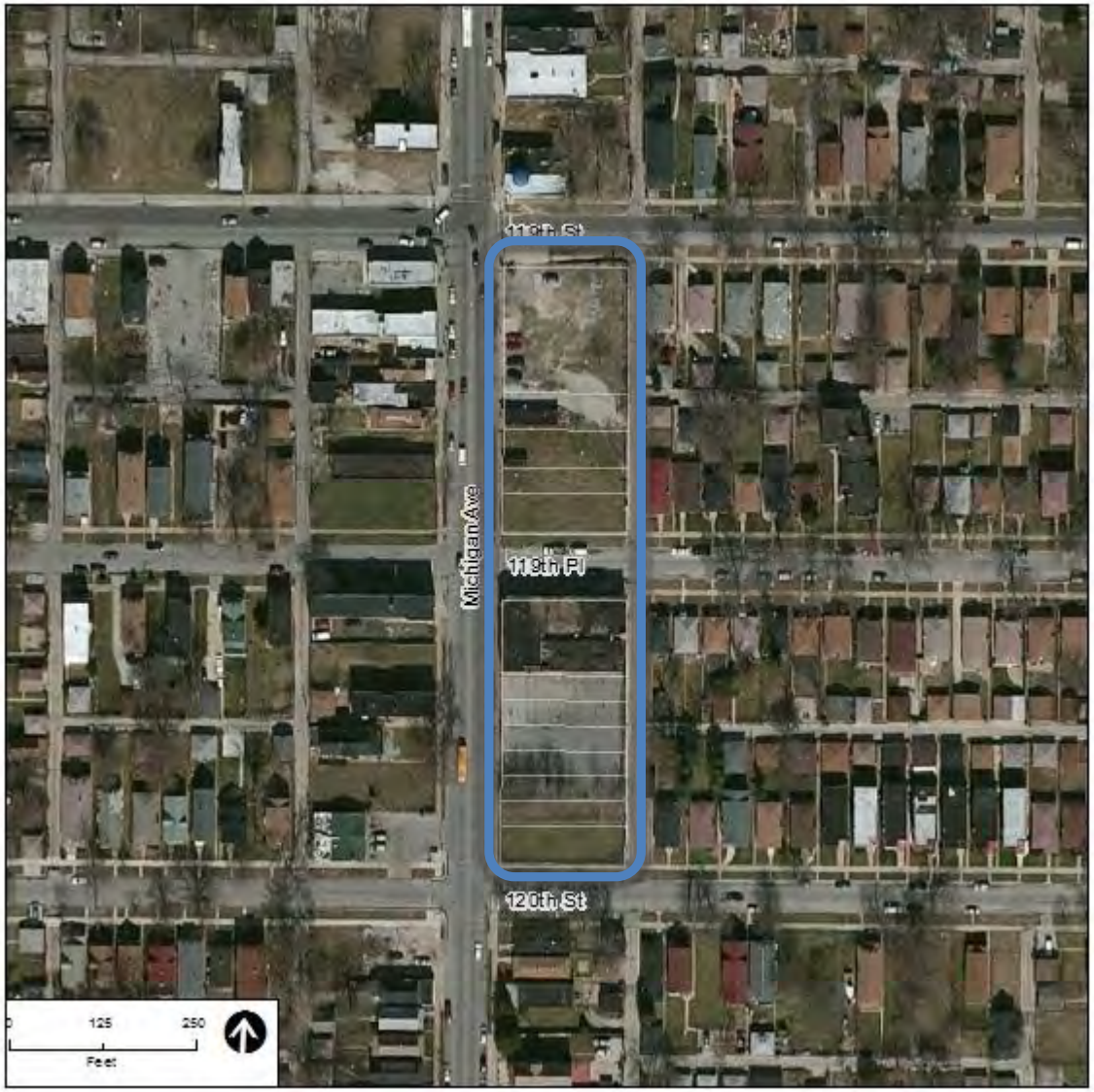

Site 16

West Pullman Community

Ward 9

1.53 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Requires removal of ½ block of 119th Pl. and cul-de-sac
- Insufficient to meet acreage requirements
- Lots are 125' deep
- Outside of community area where parks are directly impacted

East and West Option

Site 16

West Pullman Community

Ward 9

1.53 Acres

Field Notes/ Considerations

Eliminated from further screening due to:

- Requires removal of ½ block of 119th Pl. and cul-de-sac
- Insufficient to meet acreage requirements
- Lots are 125' deep
- Outside of community area where parks are directly impacted

East and West Option

Site 17

West Pullman Community

Ward 34

1.85 Acres

Field Notes/ Considerations

- Adjacent to Major Taylor Trail and park
- Adjacent to city-owned senior residence
- Adjacent to West Pullman Metra station
- May meet 1.9 acre requirement when parcels are combined
- Located on commercial corridor (Halsted); park may not be best use
- Outside of community area where parks are directly impacted

East and West Option

RED AHEAD

Red Line Extension

Site 17

West Pullman Community

Ward 34

1.85 Acres

Field Notes/ Considerations

- Adjacent to Major Taylor Trail and park
- Adjacent to city-owned senior residence
- Adjacent to West Pullman Metra station
- May meet 1.9 acre requirement when parcels are combined
- Located on commercial corridor (Halsted); park may not be best use
- Outside of community area where parks are directly impacted

East and West Option

cta

Existing Gano Park Reviewed for Potential Ballfield Replacement Option

(East Option Only)

Gano Park

West Pullman Community

Ward 34

Field Notes/ Considerations

Eliminated from further evaluation as a ballfield replacement site due to:

- Retention basin makes site unsuitable for active recreation
- Space available not sufficient
- Adjacent ballfield already located within park
- Outside of community are directly impacted

East and West Option

Gano Park

West Pullman Community

Ward 34

Field Notes/ Considerations

Eliminated from further evaluation as a ballfield replacement site due to:

- Retention basin makes site unsuitable for active recreation
- Space available not sufficient
- Adjacent ballfield already located within park
- Outside of community are directly impacted

East and West Option

Attachment 4: Suitability Analysis Assessment Notes

The following are notes on the 12 sites that were screened for suitability as replacement park locations for the Red Line Extension park impacts. A qualitative assessment of six factors was conducted and for each factor, a high, medium, or low suitability score was assigned. High, medium and low scores were then translated into numerical scores as follows:

- High = 5
- Medium = 3
- Low = 1

Total scores were developed for each replacement options by adding up all factors equally. One additional weighting factor was included based on subsequent coordination with CPD – additional points were provided to sites fulfilling a gap in existing parkland within surrounding community areas where park impacts are proposed to occur. Negative points were associated with properties that are not near the park area and slated for park improvements as part of other CPD projects.

A summary of the ratings for all properties is provided below and additional details are provided on ranking considerations for each property reviewed.

Criteria	2B	3B	6	7	8A	9A	9B	10	11	12	15	17
Location/Proximity	5	5	5	5	5	1	1	3	1	3	1	1
Additional Weighting of Sites Filling an Existing CPD Park Gap	1	0	0	1	1	0	0	-1	0	0	0	0
Vacancy/Availability of Acquisition	3	1	5	3	5	1	1	5	3	5	5	3
Land Use/Zoning Compatibility	5	3	3	3	5	1	1	3	1	5	1	3
Safety/Security	5	5	1	1	5	3	3	3	5	5	5	1
Environmental Factors (EDR)	3	3	3	3	3	3	3	5	3	3	1	3
Cost Considerations	3	5	3	5	5	1	3	5	3	5	3	5
TOTAL SCORING:	**25**	**22**	**20**	**21**	**29**	**10**	**12**	**23**	**16**	**26**	**16**	**16**

Site 2B - Total Score = 25

Location/Proximity: Score 5

- Within one mile of impacted parks for both East and West Options and would serve similar community
- Is in an area where there are less available parks in the immediate area for residents
- Per CPD coordination, additional weighting given to site as it would help to fulfill a current identified gap in parks

Vacancy/Availability: Score 3

- Meets acreage requirements of mitigation measures and new park standards.
- Majority of land is currently vacant with a minimal number of property owners (3 private property owners and one City of Chicago property)
- Would require acquisition of at least 1 active, privately owned residential properties to provide a baseball field replacement

Land Use/Zoning Compatibility: Score 5

- Current zoning – Residential (RS-1) and surrounding zoning business and commercial (B1-1, C1-1) is compatible with park uses
- Location is along Michigan Avenue, a corridor that is currently disinvested; park uses would be compatible with current land use and zoning and enhance community character area

Safety/Security: Score 5

- Highly visible site location along arterial commercial corridor
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 3

- Low to medium costs, and may require demolition of one building if acquiring/demolishing active use residential parcel

Site 3B - Total Score = 22

Location/Proximity: Score 5

- Directly adjacent to proposed station at 103rd Street
- Size and shape of parcel is ideal for multi-uses within park setting
- Within .5 miles from either East or West alignment option impacts

Vacancy/Availability: Score 1

- City owned property and vacancy available
- Would compromise existing planned park and ride as part of the RLE Project

Land Use/Zoning Compatibility: Score 3

- Current zoning – Residential (RS-2) and surrounding zoning residential (RS-2), park (POS-2), and commercial (C1-1 and C2-1); generally compatible uses for a park
- Directly adjacent to Block Park to the west of the proposed alignment; park space already exists and may not be the best use for this site location given other nearby park availability

Safety/Security: Score 5

- Highly visible site location along arterial active corridor and adjacent to proposed station
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 5

- Low/Medium cost and would require demolition of one existing building

Site 6 - Total Score = 20

Location/Proximity: Score 5

- Adjacent to proposed station/alignment with potential for connecting access
- Within .5 miles from either East or West alignment option impacts

Vacancy/Availability: Score 5

- All parcels shown as available/vacant in Property Appraiser database
- Several parcels comprising the site are city owned, and there are a limited number (3) other property owners to obtain property; for sale sign noted on field investigation

Land Use/Zoning Compatibility: Score 3

- Current zoning – Limited manufacturing/business park(M1-1) and surrounding zoning residential (RS-2) is generally compatible for park use

Safety/Security: Score 1

- Emergency access available but may be difficult given location behind existing residential
- Views may be obscured and safety concerns may prevail as it faces garages/backs of homes on an alleyway and the alignment would run on the west of the park

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 3

- Low to medium costs, and would require demolition of one building on 107th Street

Site 7 - Total Score = 20

Location/Proximity: Score 5

- Adjacent to proposed station/alignment with potential for connecting access
- Within one mile of either East or West alignment option impacts

Vacancy/Availability: Score 3

- Vacant site and large acreage
- One owner to work with on acquisition per Property Appraiser database

Land Use/Zoning Compatibility: Score 3

- Current zoning – Limited manufacturing/business park(M1-1) and surrounding zoning residential (RS-2) is generally compatible for park use

Safety/Security: Score 1

- Emergency access available but may be difficult given location behind existing residential
- Views may be obscured as it faces garages/backs of homes on an alleyway and the alignment would run on the west of the park

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 5

- Low cost anticipated; additional costs may apply if existing cell tower is required to be relocated

Site 8A - Total Score = 28

Location/Proximity: Score 5

- Directly adjacent to proposed station at 111th Street
- Within one mile of either East or West alignment options

Vacancy/Availability: Score 5

- Large contiguous parcel that exceeds replacement acreage requirement
- Currently proposed as a park and ride location for RLE Project; park could be accommodated in tandem with park and ride
- Majority of property is city owned, with one additional parcel that would need to be acquired to accommodate park replacement and park and ride

Land Use/Zoning Compatibility: Score 5

- Current zoning – Limited manufacturing/business park(M1-1) and surrounding zoning residential (RS-2) and business/commercial (B1-1, C1-1) is generally compatible with park uses
- Zoning designation appears to be related to legacy uses and rezoning is compatible with current and adjacent uses
- Adjacent to existing community facilities and would enhance community center features within neighborhood

Safety/Security: Score 5

- Highly visible site location along arterial commercial corridor
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 5

- Low cost; no building demolitions needed and city-owned acquisition anticipated

Site 9A - Total Score = 10

Location/Proximity: Score 1

- This site is located a substantial distance from the RLE corridor and stations proposed and is more than 2 miles from the area of park impact.
- Other parks available nearby and would not fulfill existing park gap

Vacancy/Availability: Score 1

- Currently a number of active commercial uses existing at or nearby the location, including the local alderman's office, restaurants, and other commercial office uses.

Land Use/Zoning Compatibility: Score 1

- Current zoning – Residential (RS-1) and surrounding zoning business and commercial (B1-1, C1-1). May not provide the best compatibility for park uses and may compromise commercial redevelopment opportunities at this location.

Safety/Security: Score 3

- Highly visible site location along arterial commercial corridor
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 1

- Risk assessed High; see EDR report for further details on potential for contamination

Cost Considerations: Score 1

- High costs due to street re-routes that would be needed to combine parcels into suitable park space; additional building demolition needed and unknown remediation costs

Site 9B - Total Score = 12

Location/Proximity: Score 1

- This site is located a substantial distance from the RLE corridor and stations proposed and is more than 2 miles from the area of park impact.
- Other parks available nearby and would not fulfill existing park gap

Vacancy/Availability: Score 1

- Currently a number of active commercial uses existing at or nearby the location, including the local alderman's office, restaurants, and other commercial office uses.

Land Use/Zoning Compatibility: Score 1

- Current zoning – Residential (RS-1) and surrounding zoning business and commercial (B1-1, C1-1). May not provide the best compatibility for park uses and may compromise commercial redevelopment opportunities at this location.

Safety/Security: Score 3

- Generally visible site location near an arterial commercial corridor; set back may impede views slightly
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 3

- Medium costs, requiring demolition of buildings and relocation of alderman's office

Site 10 - Total Score = 23

Location/Proximity: Score 3

- Located more than 2 miles from RLE Project area and area of park impacts
- Adjacent to Major Taylor Trail and would provide additional park land in this area
- Lower weighting prescribed to this site as CPD has existing plans for developing this property as parkland separately and in the near-term

Vacancy/Availability: Score 5

- Large vacant property available for purchase
- Minimal property owners for outreach on purchase

Land Use/Zoning Compatibility: Score 3

- Current zoning – Residential (RS-1) and surrounding zoning business and commercial (B1-1, C1-1) is generally compatible with park uses

Safety/Security: Score 3

- Generally visible site location along existing Major Taylor Trail and residences
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 5

- Risk assessed Low; see EDR report for further details on potential for contamination

Cost Considerations: Score 5

- Low anticipated costs. Medium level costs if additional soil remediation is needed based on field visit investigations

Site 11 - Total Score = 16

Location/Proximity: Score 1

- Located more than 2 miles from RLE Project area and area of park impacts

Vacancy/Availability: Score 3

- Under consideration by the City as a Planned Unit Development; additional coordination with city would be needed on availability of land

Land Use/Zoning Compatibility: Score 1

- Current zoning – Residential (RS-1) and surrounding zoning business and commercial (B1-1, C1-1) is generally compatible with park uses
- Large parcel with commercial development potential; park use may not be best and highest use for the property and may impact ability for commercial redevelopment in corridor

Safety/Security: Score 5

- Highly visible site location along arterial commercial corridor
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 3

- Medium costs given paved area currently existing and need to remove/relocate utilities (i.e., telephone piles and power lines) on properties

Site 12 - Total Score = 26

Location/Proximity: Score 3

- Located more than 2 miles from RLE Project area and area of park impacts
- Located near proposed 116th Street station and would allow for development of this station with co-located station as part of RLE Project

Vacancy/Availability: Score 5

- Currently vacant property and based on field investigations, one building remaining is scheduled for demolition currently

Land Use/Zoning Compatibility: Score 5

- Current zoning – Residential (RS-1) and surrounding zoning business and commercial (B1-1, C1-1) is generally compatible with park uses
- Near proposed station location and park use may help to spur commercial economic development and nearby transit-oriented development potential

Safety/Security: Score 5

- Highly visible site location along arterial commercial corridor
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 5

- Low costs anticipated. Medium level costs if additional remediation is needed to address pending demolition of building on proposed site

Site 15 - Total Score = 16

Location/Proximity: Score 1

- Located more than 2 miles from RLE Project area and area of park impacts
- Adjacent to already existing parkland and community facilities in this area are already well served by parks and amenities

Vacancy/Availability: Score 5

- One property owner (city-owned) and currently vacant land

Land Use/Zoning Compatibility: Score 1

- Current zoning – Residential (RS-1) and surrounding zoning business and commercial (B1-1, C1-1) is generally compatible with park uses
- Adjacent to some manufacturing uses and may not be best compatibility of uses to incorporate parkland in this area

Safety/Security: Score 5

- Highly visible site location along arterial commercial corridor
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 1

- Risk assessed High; see EDR report for further details on potential for contamination

Cost Considerations: Score 3

- Medium costs given that site currently consists of paved areas and based on previous manufacturing uses there is an unknown level of remediation that may be needed on the property

Site 17 - Total Score = 16

Location/Proximity: Score 1

- Located more than 2 miles from RLE Project area and area of park impacts
- Requires combination of properties to meet 1.9 acres, and does not meet CPD standards for new park

Vacancy/Availability: Score 3

- Lands are vacant and voluntary acquisition is highly probable
- Combined parcel ownership may be more cumbersome as there are at least 7 property owners associated with combined land

Land Use/Zoning Compatibility: Score 3

- Current zoning – Residential (RS-1) and surrounding zoning business and commercial (B1-1, C1-1) is generally compatible with park uses
- Located within commercial corridor and park use is not considered highest and best use of land

Safety/Security: Score 1

- Highly visible site location along arterial commercial corridor
- Clear views for police scrutiny; ease of access for emergency services

Environmental Factors (EDR): Score 3

- Risk assessed Medium; see EDR report for further details on potential for contamination

Cost Considerations: Score 5

- Low costs, no building demolition required

Attachment 5: Environmental Database Report Findings

Introduction

CWC reviewed an environmental database search report, prepared by Environmental Data Resources, Inc. (EDR), to identify listings in the databases for each of the potential park replacement sites and for properties within the search radii established in the ASTM standard. The EDR report identified each subject property in the available environmental regulatory agency databases. The EDR report also identified numerous adjoining properties in the regulatory databases. Not all of the findings present an environmental concern for the subject property due to their relative location to the subject property, direction of groundwater flow, regulatory status of no further action required, or type of reported activities. In addition, the list of orphan sites (sites reported as potentially being in the project area, but which could not be mapped due to inadequate or incomplete address information) were reviewed.

Each potential park replacement site was assigned a level of concern based on the following criteria:

- **High Concern** - Sites with known/probable soil, groundwater, or soil gas contamination that not been remediated, or where remediation was incomplete or undocumented. Other considerations include the type and mobility of any contamination, distance to the project, and groundwater impacts.

- **Moderate Concern** - Sites with known/potential soil, groundwater, or soil gas contamination and where remediation is in progress or was completed with restrictions in place, or contaminants do not appear to pose a concern for the project. Sites may also be considered a Moderate Concern based on the type and intensity of former land use (e.g., chemical manufacturers, machine shops, gas stations, laundromats), even though they did not otherwise have an environmental database listing. Sites where hazardous materials or petroleum products may have been or are stored, but where there is no known contamination associated with the property based on all available information.

- **Low Concern** - There is no evidence of hazardous materials or petroleum products having been stored onsite, and there is no known contamination associated with the property based on all available information. They may include hazardous material generator sites, sites with permitted air toxic emissions, or sites with spills or leaks that were subsequently remediated and are no longer a concern.

Site 2B (near 101st Street and Michigan Avenue)

Environmental Records Review

- **Subject Property:** The Site was not listed in any of the databases searched by EDR.
- **NPL, CERCLIS, CERCLIS NFRAP:** There are no NPL, CERCLIS, or CERCLIS NFRAP sites within 1 mile of the subject property.

Historical Records Review

- **Sanborn Maps**
  - 1911: Private residences are shown on the Site.
  - 1938, 1950, 1975: A building is shown on the Site (10131 S. Michigan Avenue, parcel 2510317016) as "Auto Sales and Service" with a capacity of 100 cars with a "Lacquer Spraying" area.

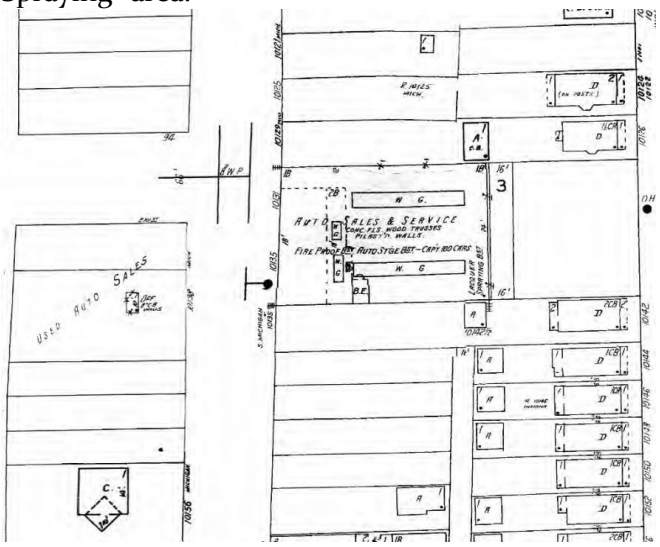

  - 1987: The "Auto Sales and Service" shares the same space with "Salem Baptist Church." The "Lacquer Spraying" area in the southeast corner of the property is still shown.
  - 1989, 1991, 2002, 2004: Property unlabeled.
- **Aerial Photographs**
  - 1938: Large building in the location of the "Auto Sales and Service" building as shown on the Sanborn map. A large building that matches the footprint of Bennett Elementary School is to the east of the Site. Residential area surrounding the property.

- 1959: Large car lot on the property at the western adjacent corner of S. Michigan Ave and E. 101st Place, across from the "Auto Sales and Service" building.
- 1973: The car lot is larger than shown in the 1959 aerial photograph, now spanning from E. 101st Street to E. 102nd Street along the western side of S. Michigan Ave and on the parcels to the north of the "Auto Sales and Service" building to E. 101st Street.
- 1978: Further expansion of the car lot, with car lot added to the adjacent parcels to the south of the "Auto Sales and Service" building to E. 102nd Street.
- 1983: All the car lots are now abandoned with the exception of the lot on the corner of E. 102nd St and S. Michigan Street.
- 1993: Lots north and south of the "Auto Sales and Service" property is empty and building appears to be demolished. Car lots have reappeared on lots located across S. Michigan Street ranging from E. 101st Street to E. 102nd Street.

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 3B (near 103rd Street and Eggleston Avenue)

Environmental Records Review

- **Subject Property**
  - A parcel associated with the Site (403 W. 103rd Street, parcel 2516105035) is listed in the CDPH environmental dataset with complaints. The EDR Report does not provide additional details about the CDPH records.
  - A parcel associated with the Site (405 W. 103rd Street, parcel 2516105034) is listed in the CDPH environmental dataset for Asbestos and Demolition Notifications. The EDR Report does not provide additional details about the CDPH records.
  - A parcel associated with the Site (405 W. 103rd Place, closest parcel number is 2516107010) is listed in the CDPH environmental dataset with complaints. The EDR Report does not provide additional details about the CDPH records.
- **Nearby Properties**
  - The Roseland Pumping Station (0.036 mile southeast of the subject property at 351 W. 104th Street) has active air monitoring for compliance and is under the State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards. The latest results were in 2014, and the site was monitored for NOx, Particulates, PM10, PM 2.5, SO_2, VOM, CO_2, CO, CF_4, and COG.
- **NPL, CERCLIS, CERCLIS NFRAP:** There are no NPL, CERCLIS, or CERCLIS NFRAP sites within 1 mile of the subject property.

Historical Records Review

- **Sanborn Maps**
  - 1911: Coal shed and railroad spur located in northern portion of Site (400 W. 103rd Place, parcel 2516105033).
  - 1938: Fuel storage added to the central portion of the Site (401 W. 103rd Place, parcel 251610701). Fuel warehouse added to northern portion of Site (403 W. 103rd Street, parcel 2516105035).

- 1950: Coal yard has expanded to southern portion of Site, next to the Fuel Storage area.

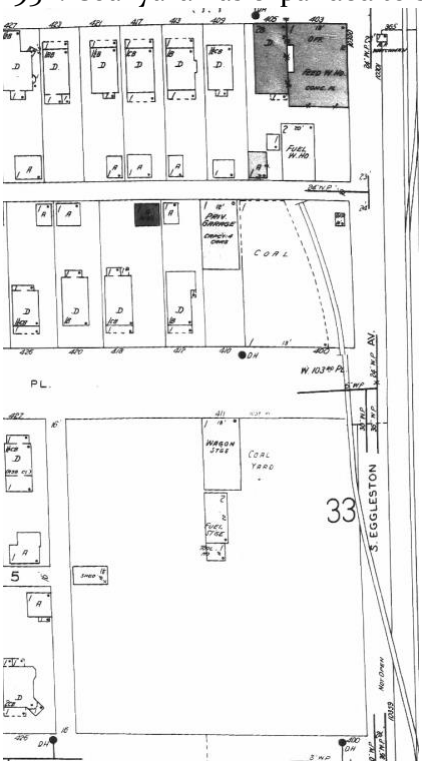

- 1975: A construction yard is present on the southern portion of Site (401 W. 103rd Place, parcel 2516107010). The fuel storage and coal yard are no longer present.

- 1987: The construction yard has transitioned to a junk yard. The fuel warehouse is no longer present.

- 2002: The Site is mostly vacant with the exception of residences in the northern portion (403 and 405 W. 103rd Street, parcel numbers 2516105035 and 2516105034). The railroad spur is no longer present.

- **Aerial Photographs**

  - 1938: Site appears to be darker than surrounding properties.

  - 1964: There appears to be three or four aboveground storage tanks (ASTs) on the southern portion of the Site (parcel 251610701).

  - 1978: A junk yard can be seen in the 1978 aerial photograph. Debris spans a large portion of the Site (parcels 251610701 and 2516105033). The debris is last seen in the 1994 aerial photograph. The junk yard area is vacant in the 1999 aerial photograph.

  - 2007, 2009, 2010, 2011, 2012: Junk yard area has miscellaneous debris.

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 6

Environmental Records Review

- **Subject Property**
  - The southern portion of Site (400 W. 107th Street, parcel 2516129028) is listed in the CDPH environmental dataset was records of enforcement, inspections, and tanks. The EDR Report does not provide additional details about the CDPH records.
- **Nearby Properties**
  - The adjacent parcel to the north (411 W. 105th Street, parcel 251612024 [listed as 413 W. 105th Street in the EDR Report]) is listed as the Illinois Bell Telephone Company, a RCRA Non-Generator site.
  - The Roseland Pumping Station (0.187 mile north of the subject property at 351 W. 104th Street) has active air monitoring for compliance and is under the State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards. The latest results were in 2014, and the site was monitored for NOx, Particulates, PM10, PM 2.5, SO_2, VOM, CO_2, CO, CF_4, and COG.
- **NPL, CERCLIS, CERCLIS NFRAP:** There are no NPL, CERCLIS, or CERLCIS NFRAP sites within 1 mile of the subject property.

Historical Records Review

- **Sanborn Maps**
  - 1950: A "Cement Block Factory" with several tanks is located on the central portion of the Site (10638 S. Stewart Avenue, parcel 2516129030). A railroad spur is shown running along the east side of the building.

ied Sanborn® Map

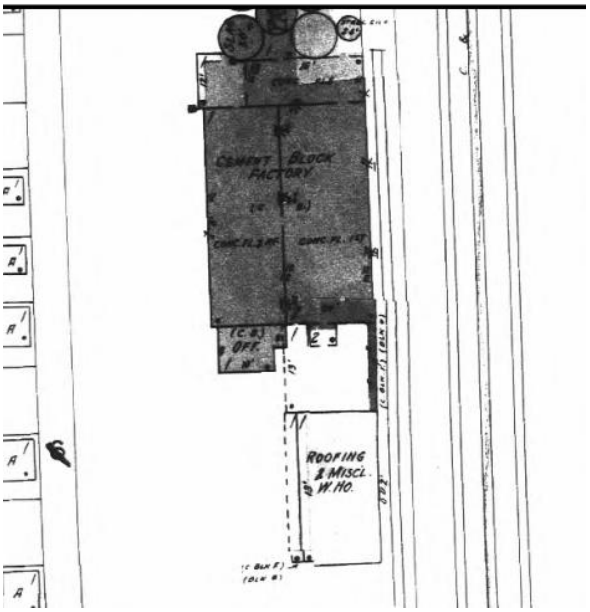

- 1987: A "slag bin" and tanks are located on the central portion of the Site (10638 S. Stewart Avenue, parcel 2516129030). The "Cement Block Factory" has been replaced by a building identified as "One-M." The railroad spur appears to stop south of the building.

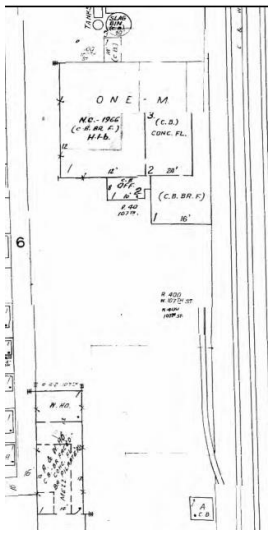

- 2002: The Site is mostly vacant, with only one building on the southern portion of the Site (400 W. 107th Street, parcel 2516129028).

- **Aerial Photographs**
  - 1964: Potential ASTs (possibly the slag bin/tanks referenced in the Sanborn Maps) appear behind the building on the central portion of the Site.
  - 1984: There appears to be debris on southern portion of Site (400 W. 107th Street, parcel 2516129028).
  - 2007: Miscellaneous small containers are located on the property to the north of the Site (411 W. 105th Street, parcel 2516121024).

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 7

Environmental Records Review

- **Subject Property**
  - The northern portion of the Site (405 W. 107th Street, parcel 2516307025) was listed in the CDPH environmental dataset as having records of permits. The EDR Report does not provide additional details about the CDPH records.
  - The northern portion of the Site (407–411 W. 107th Street) was listed in the CDPH environmental dataset with records of complaints and inspections. The EDR Report does not provide additional details about the CDPH records.
  - A portion of the Site (401–411 W. 107th Street), described as a vacant lot, is listed in the Bureau of Land database.
- Nearby Properties
  - The adjacent property to the south (410 W. 109th Street, parcel 2516315024) has a history of auto stations (listed as Harris Transmission Company from 1999–2002).
- **NPL, CERCLIS, CERCLIS NFRAP:** There are no NPL, CERCLIS, or CERLCIS NFRAP sites within 1 mile of the subject property.

Historical Records Review

- **Sanborn Maps**
  - 1939: A "coal yard" and railroad spur are located on the Site (parcels 2516315027, 2516315025, and 2516307022). An additional "coal yard" is located across the train tracks

from the Site to the east, east (347 W. 107th Place, parcel 25164010001).

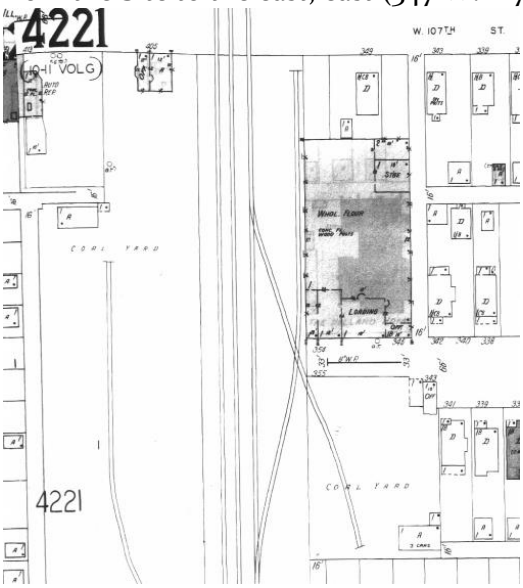

- 1989-2004: The coal yard is no longer shown. The railroad spur is still present on the Site.

- **Aerial Photographs**
  - 1938: The Site appears to be darker than the surrounding properties. The coal yard to the east also appears darker.
  - 1984: The Site appears to be covered by debris.
  - 1988: Miscellaneous debris is shown on the central portion of the Site (405 W. 108th Street, parcel 25163150250).
  - 1999: Miscellaneous debris is shown on the property south of the Site (410 W. 109th Street, parcel 25163150240).

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 8 (near Eggleston Avenue and 111th Street)

Environmental Records Review

- **Subject Property**
  - A parcel within the Site is listed with complaints and inspections in the CDPH environmental dataset (401 W. 110th Street, parcel 2516329006). The EDR Report does not provide additional details about the CDPH records.
- **Nearby Properties**
  - The adjacent property to the south of the Site (Chicago Dept of Env (Spill) at 11100 S. Stewart Avenue, no parcel number given) is listed as a RCRA Non-Generator site. This may be an error; on Google Maps the property (Roseland Tune-Up Center, 401 W. 111th Street, parcel 2521107008) is an auto station and LUST site (located 0.033 mile south).
  - The adjacent parcel to the south of the Site (Pentecostal Temple at 419 W. 111th Street, 0.016 mile south-southwest from Site, parcel 2521107001) is an active LUST site. The EDR Report does not provide additional details about the LUST site. Pentecostal Temple is also a RCRA-SQG.
  - Ransom Transportation (352 W. 110th Street, parcel 25164190140, 0.033 mile northeast of the Site) is a RCRA-CESQC and an active LUST site. The EDR Report does not provide additional details about the LUST site.
- **NPL, CERCLIS, CERCLIS NFRAP:** There are no NPL, CERLCIS, or CERCLIS NFRAP sites located within 1 mile of the Site.

Historical Records Review

- **Sanborn Maps**
  - 1897: The northern portion of the Site (412 W. 109th Street, parcel 2516320023) is shown as "Roseland Manufacturing Corporation (closed)." A "Wood and Coal Yard" with two coal sheds is shown on the southern portion of Site (11037 and 41 S. Eggleston Avenue, parcel 2516329009, and 2516329008). The warehouse for "Roseland Manufacturing Co. Warehouse" is shown on the southern portion of the Site (402 E. 111th Street, parcel

2516329005).

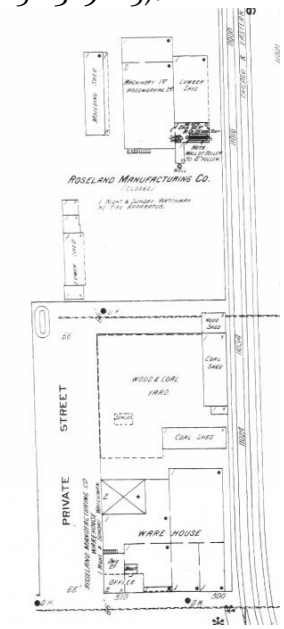

- 1911: The businesses in 1897 were replaced by "Roseland Mill and Lumber Co." Area now shown as a lumber yard.
- 1939: Site identified as lumber yards as part of the "A.T. Stewart Lumber Co. Roseland Yard."
- 1950: "Metal Working and Paint Dipping" building, assumed to be associated with the current business on Site, is shown on adjacent parcel to the west (420 W. 111th Street, parcel 25163290003). The Site is identified as "Roseland Mill and Lumber Co."
- 1989: The Site is vacant. "TK Stage Yard" is shown in the adjacent property to the west.
- 1992, 2002, 2004: The Site is vacant.

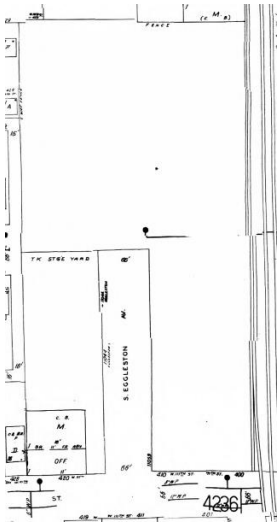

- **Aerial Photographs**
  - 1973: Aerial photograph shows miscellaneous containers in the adjacent property to the west. There appears to be a small pool in the southern portion of property (also shown on the 1978 aerial photograph).

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 9A (near 111th Place and State Street)

Environmental Records Review

- **Subject Property**
  - A parcel in the southern portion of the Site (24 E. 112th Street, parcel 2522101023) is listed in the CDPH environmental dataset for Asbestos and Demolition Notifications and inspections. The EDR Report does not provide additional details about the CDPH records.
  - A parcel in the southern portion of the Site (12 E. 112th Street, parcel 2522101018) has a record of historical cleaners. (Neals Laundromat, 2006)
  - A parcel in the southern portion of the Site (14 E. 112th Street, parcel 2522101019) is listed in the CDPH environmental dataset with records of complaints and inspections. The EDR Report does not provide additional details about the CDPH records.
  - A parcel in the southern portion of the Site (34 E. 112th Street, parcel 2522101027) is listed in the CDPH environmental dataset with records of inspections. The EDR Report does not provide additional details about the CDPH records.
  - A parcel in the southern portion of the Site (16 E. 112th Street, parcel 2522101020) is listed in the CDPH environmental dataset with records of complaints, Asbestos and Demolition Notifications, and inspections. The EDR Report does not provide additional details about the CDPH records.
- **Nearby Properties**
  - Amoco (0.009 mile north-northwest of the Site at 2 W. 111th Place, parcel 2521203025), is listed as a RCRA Non-Generator with waste characterized as "ignitable waste" and "benzene."
  - Roseland Marathon (0.073 mile north-northwest of the Site at 2 W. 111th Street, parcel 2516430043) is an active LUST site. The EDR Report does not provide additional details about the LUST site. The EDR Report states that there are several other USTs on this property.
- **NPL, CERCLIS, CERCLIS NFRAP**
  - 109th Place Tear Gas is a CERCLIS site located 0.237 mile north of the Site (the address is shown in the EDR Report as "SG West 109th Place").
  - There are no NPL or NFRAP CERCLIS sites located within 1 mile of the Site.

Historical Records Review

- **Sanborn Maps**

  - 1897: "Roseland Bottling Works" is shown on the western parcel of the Site (6 E. 111th Street, parcel 2522100012). In 1911, there appears to be a tank (illegible label) within the "Bottling Works" business.

  - 1939: An auto repair business is located in northwestern portion of Site (6 E. 111th Street, parcel 2522100012). A parking garage is located on northern portion of Site (32 E. 111th Street, parcel 2522100027). A filling station is located in the adjacent parcel to the north (1 E. 111th Street, parcel 2522100028). Several automotive businesses are shown in adjacent parcels to the north.

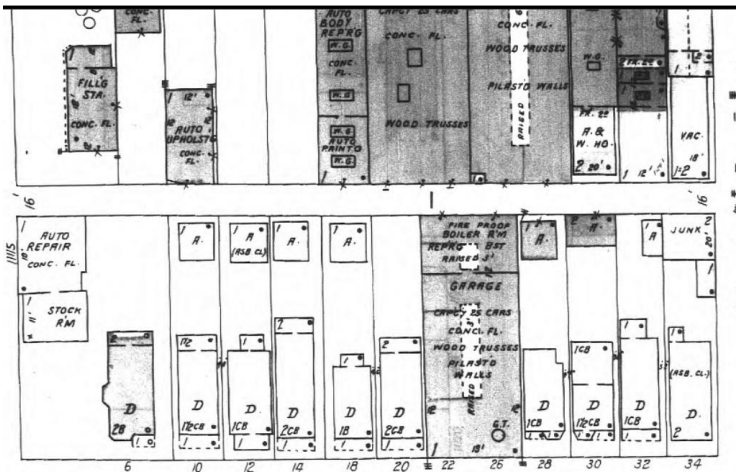

  - 1950: A welding business is shown in the northwestern portion of Site where the auto repair was in 1939.

- 1989: Parking lots span most of the Site. The automotive businesses in the adjacent parcels to the north are not shown.

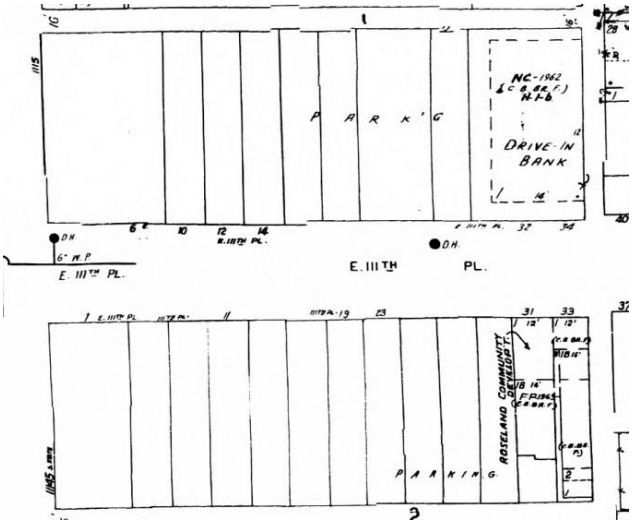

- **Aerial Photographs**
  - No significant findings.

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 9B (near 112th Street and State Street)

Environmental Records Review

- **Subject Property:** The Site was not listed in any of the databases searched by EDR.
- **Nearby Properties**
  - Amoco (0.1 mile north-northwest of the Site at 2 W. 111th Place, parcel 2521203025), is listed as a RCRA Non-Generator with waste characterized as "ignitable waste" and "benzene."
  - Roseland Marathon (0.15 mile north-northwest of the Site at 2 W. 111th Street, parcel 2516430043) is an active LUST site. The EDR Report does not provide additional details about the LUST site. The EDR Report states that there are several other USTs on this property.
  - Illinois Bell, located 0.163 mile south-southwest of the Site, is a RCRA Non-Generator with waste characterized as "ignitable waste, corrosive waste, and lead."
  - There is an unnamed Brownfield site located 0.197 mile south of the Site (3 W. 114th Street, parcel 2521229037 [closest parcel number]). The Brownfield site is suspected to be an abandoned service station. The property is now owned by the City of Chicago.
- **NPL, CERCLIS, CERCLIS NFRAP**
  - 109th Place Tear Gas is a CERCLIS site located 0.237 mile north of the Site (the address is shown in the EDR Report as "SG West 109th Place").
  - There are no NPL or CERCLIS NFRAP sites within 1 mile of the subject property.

Historical Records Review

- **Sanborn Maps**
  - 1989: Paint shop located on the eastern portion of the Site (34 E. 112th Place, parcel 2522105027).
- **Aerial Photographs**
  - No significant findings.

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 10 (near 113th Street and Peoria Street)

Environmental Records Review

- **Subject Property**: The Site was not listed in any of the databases searched by EDR.
- **NPL, CERCLIS, CERCLIS NFRAP**: There are no NPL, CERCLIS, or CERCLIS-NFRAP sites located within 1 mile of the Site.

Historical Records Review

- **Sanborn Maps**
  - 1989: Start of Sanborn Maps, vacant. No notables for area/site.
- **Aerial Photographs**
  - Aerial photographs show that Site has never been developed.

Environmental Concern Rating: Low Concern

- There is no evidence of hazardous materials or petroleum products having been stored onsite, and there is no known contamination associated with the property based on all available information.

Site 11 (near 115th Street and State Street)

Environmental Records Review

- **Subject Property**: The Site was not listed in any of the databases searched by EDR.
- **NPL, CERCLIS, CERCLIS NFRAP**: There are no NPL, CERCLIS, or CERCLIS-NFRAP sites located within 1 mile of the Site.

Historical Records Review

- **Sanborn Maps**
  - 1897: "Coal and Wood Sheds" located in the center of the Site (11527 S. State Street, parcel 2522300007)."Coal Shed and Coal Yard" also located in adjacent parcel to the west (11514 S. State Street, parcel 2521407029).

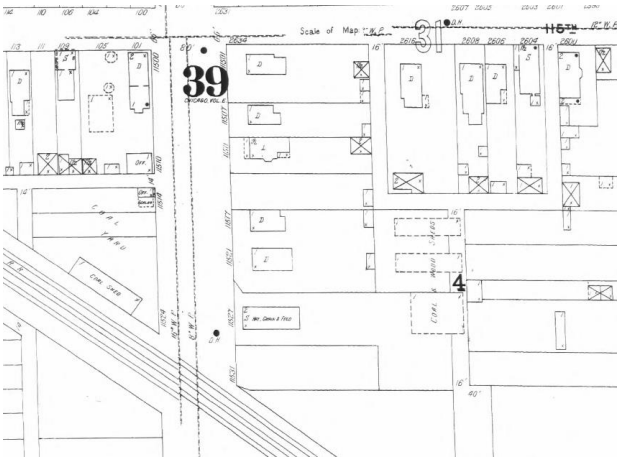

  - 1911: Multiple coal sheds and railroad spurs added to the southwestern portion of the Site (11562 S. Wabash Avenue, parcel 2522300019). "Chicago and Riverdale Lumber Company" established in the southeastern portion of the Site (11552 and 11578 S. Michigan Avenue, parcels 2522300068 and 2522300058).

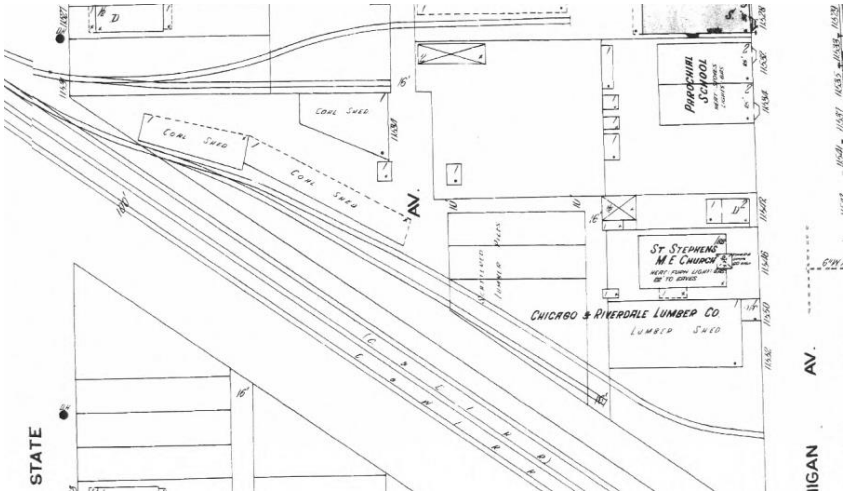

- 1939: "Reading Coal Co. Coal Yard" established on central portion of the Site (11562 S. Wasbash Avenue, parcel 2522300019 and 11517 to 11527 S. State Street, parcels 2522300005 to 2522300007). "Filling Station" added to western boundary of same parcels.

- 1950: Coal yard is no longer on Site. Coal yard gone, "Auto Body Repair and Painting" shop located on eastern portion of the Site (11530 S. Michigan Avenue, parcel 2522300042).

- 1989: Large building established in the central portion of the Site. No Sanborn maps between 1950 and 1989.

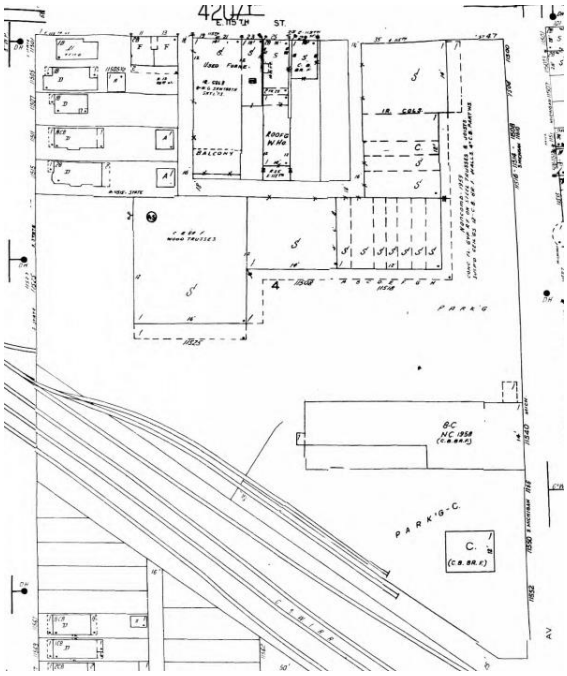

- **Aerial Photographs**
  - 1938: Coal yard referenced in Sanborn map present in the aerial photograph.
  - 1952: Central portion of the Site appears to be vacant.
  - 1959: Large building that is referenced in the 1989 Sanborn map is seen in the aerial photograph.
  - 2007: Large building has been demolished. The Site is vacant with the exception of a cluster of buildings in the northwestern corner of the Site.
  - 2012: Site is completely vacant.

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 12 (near Michigan Avenue and Kensington Avenue)

Environmental Records Review

- **Subject Property**
  - Northwestern parcel of the Site (Clark Oil and Refining, 11555 S. Michigan Avenue, parcel 2522304050) is a historical LUST site. The Site received an NFA/NFR letter on January 9, 1995. This parcel also appears in the IL SPILLS and IL BOL database as a LUST site.
- **Nearby Properties**
  - Tony's Auto Body, in the adjacent parcel to the north (0.047 mile to the northeast of the Site, 157 E. Kensington Avenue, parcel 2522304022) is listed in the RCRA-CESQG database with waste characterized as "ignitable waste." This parcel is also listed as a historical auto station.
  - Kensington Service Station (0.055 mile northeast of the Site at 162 E. Kensington Avenue, parcel 2522301044) is an active LUST site. There is no NFA/NFR letter associated with the LUST.
  - An active LUST station, identified as "Abandoned Gas Station," is located 0.177 mile northwest of the Site at 2 W. 115th Street, parcel 252123003. There is no NFA/NFR letter associated with the LUST.
  - Triangle Transmission (0.208 mile northwest of the Site at 35 W. 115th Street, parcel 2521230023 [closest parcel number]) is an active LUST site. There is no NFA/NFR letter associated with the LUST.
  - A US Brownfields site is located 0.258 mile north-northwest of the Site at 3 W. 114th Street. The property is suspected to be an abandoned service station, and is owned by the City of Chicago. The EDR Report provides no additional information.
- **NPL, CERCLIS, CERCLIS NFRAP:** There are no NPL, CERLCIS, or CERCLIS NFRAP sites located within 1 mile of the Site.

Historical Records Review

- **Sanborn Maps**
  - 1897: "R.A. Viall Feed Mill Coal and Wood" located on southwestern corner of the Site (11579 S. Michigan Avenue, parcel 2522304008). Kensington Station located on adjacent

parcel to the southwest (11583 S. Michigan Avenue, parcel 2522304009).

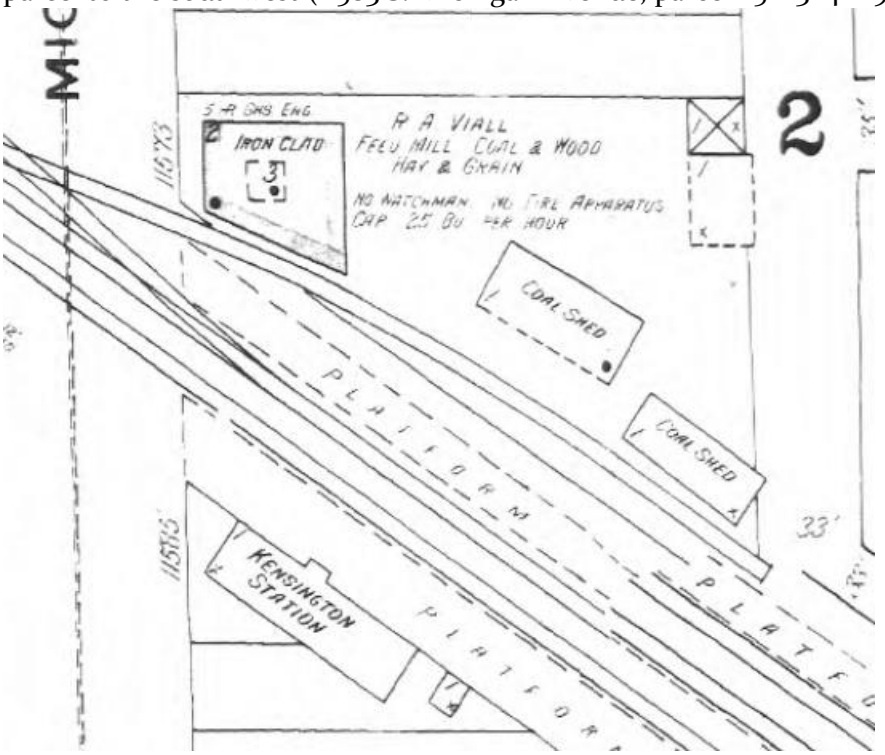

- 1911: Portion of "R.A. Viall Feed Mill Coal and Wood" replaced by an auto repair shop. Lime house added to the southeastern corner of the same parcel (11579 S. Michigan Avenue, parcel 2522304008). The coal sheds and railroad spurs have been removed from the parcel.

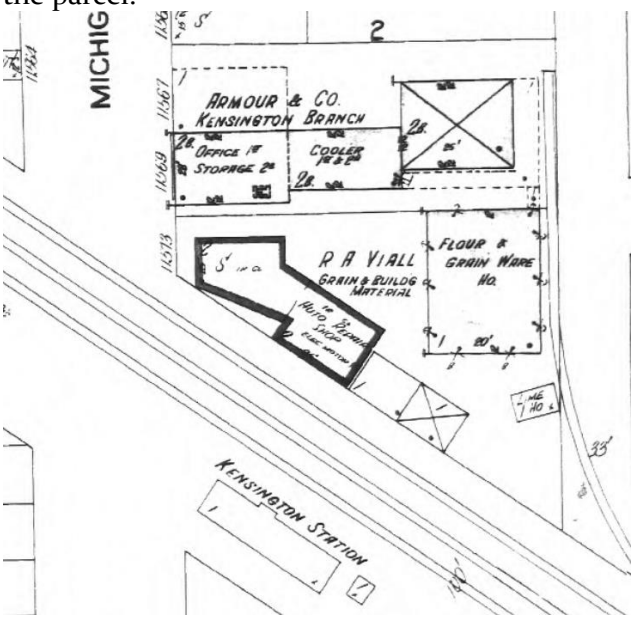

- 1939: The entire southwestern parcel was converted to a junk yard (parcel 11579 S. Michigan Avenue, parcel 2522304008). "Ice Machine and Wholesale Meats" business added to northern portion of Site (11567 S. Michigan Avenue, parcel 2522304007).

- 1989: Junk yard has been removed from the Site. A filling station has been added to the northern portion of the Site (11555 S. Michigan Avenue, parcel 252230405).

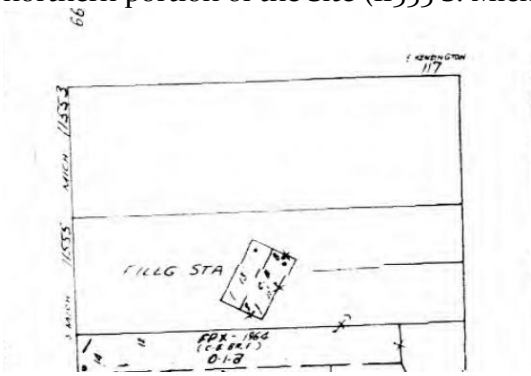

- 1992: Filling station have been removed from the Site.

- 2002: Northern portion of the Site was utilized as a parking lot (11555 S. Michigan Avenue, parcel 2522304050).

- **Aerial Photographs**

  - 1938: Yard that appears to have the same footprint as "R.A. Viall Feed Mill Coal and Wood" referenced in the Sanborn maps is present in the aerial photograph.

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Site 15 (1000 E. 118th Street)

Environmental Records Review

- **Subject Property**
  - The Site (1000 E. 118th Street, parcel 2520414006) is listed in the CDPH environmental dataset as having tanks. The EDR Report does not provide additional details about the CDPH records.
- **NPL, CERCLIS, CERCLIS NFRAP**
  - Ingersoll, adjacent to the Site, at 1000 W. 120th Street, parcel 2529203003 [closest parcel number]) is a CERLIS site. The CERLIS site has a "Removal Only Site (No Site Assessment Work Needed" as is a non-NPL site. The property is also listed as a RCRA-NonGen with waste characterized as "quenching bath residues from oil baths" and "spent cyanide solutions."
  - Former West Pullman Works, adjacent to the Site, at 1015 W. 120th Street (parcel 2529203003) is a CERCLIS site. The CERCLIS site shares the same parcel as the Ingersoll business above. The CERCLIS site has the following description: "Abandoned 21-acre site with high levels of PAHs, heavy metals, and asbestos." This property is also listed as a RCRA-NonGen with many waste characterizations. The same property is also listed under "International Harvester – Former West Pullman Works" as a former LUST site; an NFA/NFR letter was received in November 2010.
  - West Pullman Iron and Metal (located 0.156 mile southeast of the Site at 11954 S. Peoria Street, parcel 2529201021) is a CERCLIS NFRAP site. The site was archived in October 1995.
  - Dutch Boy (located 0.213 mile east-southeast of the Site at 12042 S. Peoria Street, parcel 2529203002 [closest parcel]) is a CERCLIS site. The site description states that it is associated with the International Harvester business mentioned above. The site was given NFRAP status in December 1984.

Historical Records Review

- **Sanborn Maps**
  - 1911: Site was a portion of the larger "West Pullman Car Works, Morgan Street Yards" facility. There is a paints and oils storage and locomotive storage building in the northern

portion of the Site.

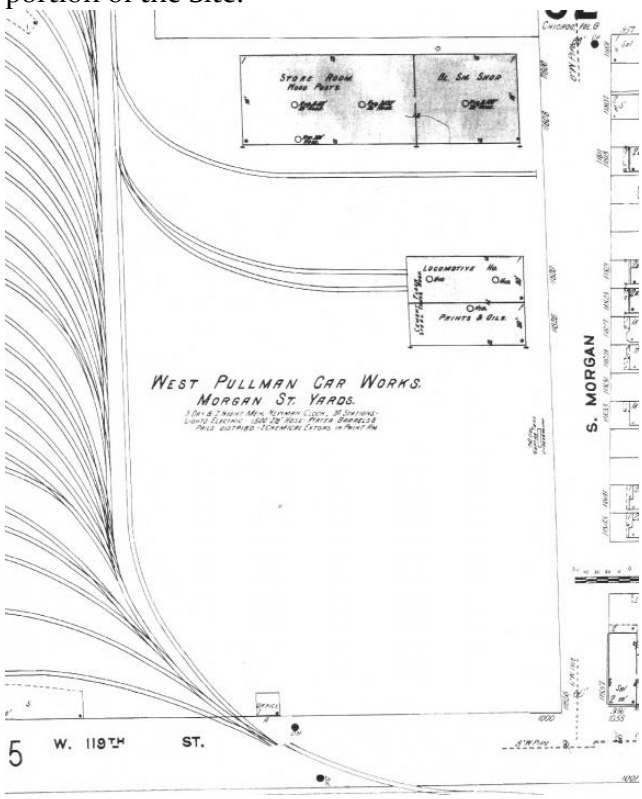

- 1939: "West Pullman Car Works…" has been removed from the Site. The Site is vacant in the Sanborn map.

- 1989: Site is labeled as a parking lot. The parking lot appears to serve "American Gear and Axle" that is established on the western adjacent property (1100 W. 119th Street, parcel 2520414005). This appears to the last Sanborn map in 2004.

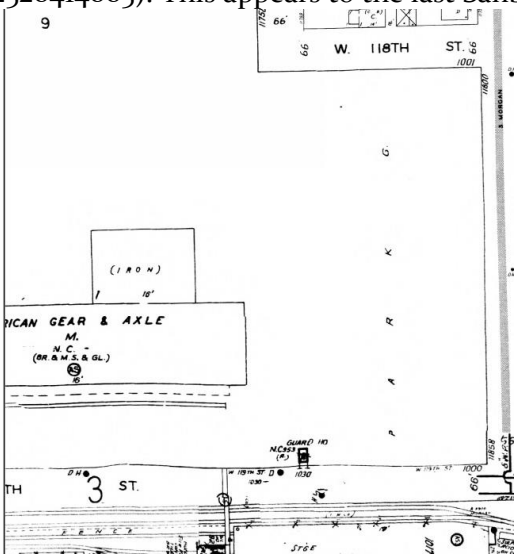

- **Aerial Photographs**
  - 1952: Southern portion of the Site appears to be used as a parking lot.
  - 1959: The Site is paved entirely, there are no buildings on the Site. There appears to be miscellaneous debris on the western boundary of the Site.
  - 1962: The southern portion of the Site is being used as a parking lot.
  - 1988: There are two pools on the northern portion of parking lot. This could be the result of stormwater.
  - 2005: The northern portion of the Site is overgrown.

Environmental Concern Rating: High Concern

- Hazardous materials or petroleum products may have been stored onsite, and proximity to historic release sites indicate a high concern.

Site 17 (near 120th Street and Halsted Street)

Environmental Records Review

- **Subject Property**
  - Parcel 2528108036 associated with the Site (12048 S. Emerald Avenue) is listed in the CDPH environmental dataset with complaints, Asbestos and Demolition Notifications, and inspections. The EDR Report does not provide additional details about the CDPH records.
  - Parcel 2528108032 associated with the Site (12034 S. Emerald Avenue) is listed in the CDPH environmental dataset with complaints and inspections. The EDR Report does not provide additional details about the CDPH records. The same parcel is listed as a historical auto station (Mack's Auto Styling, 1999-2001).
  - Parcel 2528109001 associated with the Site (725 W. 120th Street) is listed as a historical cleaner.
- **Nearby Properties**
  - Hancock House (located 0.007 mile southeast of the Site at 12045 S. Emerald Avenue, parcel 2528109010) has five active USTs. The site is an active LUST site. The LUST does not have a NFA/NFR letter. There is an Illinois Institutional Control on this property that received an NFR letter in January 2012.
  - A property identified as ComEd Manhole (located 0.032 mile northwest of the Site at the intersection of W. 120th Street and S. Halsted Street [EDR does not provide a specific address]) is a RCRA Non-Gen with waste characterized as "lead."
  - Conoco Phillips 66 (located 0.062 mile north-northwest of the Site at 11959 S. Halsted Street, parcel 2528100011) has five active USTs. The same property is listed as Sandhu Petroleum Inc., (located at 11957 S. Halsted Street) is an active LUST site. The LUST has not received an associated NFA/NFR letter.
- **NPL, CERCLIS, CERCLIS NFRAP**
  - South Green Plating Shop (located 0.124 mile southwest of the Site at 12130 S. Green Street, parcel 2529209047) is a CERCLIS site. The CERCLIS site is described as a "former plating shop with elevated levels of cyanide, chromium, cadmium, and lead contamination." The site has a Non-NPL status of "Removal Only Site (No Site Assessment Work Needed." The site is also listed as a RCRA Non-Gen with waste characterized as "ignitable/corrosive waste" and "lead."
  - Dutch Boy Paints (located 0.155 mile west of the Site at 12042 S. Peoria Street, parcel 2529203002 [closest parcel]) is a CERCLIS site. The site is associated with the International

Harvester Site which is described to be associated with the Former West Pullman Works, which has a description of "Abandoned 21 acre site with high levels of PAHs, heavy metals, and asbestos."

- West Pullman Iron and Metal (located 0.157 mile west-northwest of the Site at 11954 S. Peoria Street, parcel 2529201021) is a CERCLIS NFRAP site. The site was archived in October 1995.

- There are no NPL sites within 1 mile of the subject property.

Historical Records Review

- **Sanborn Maps**

  - 1911: The central adjacent parcel (12045 S. Emerald Avenue, parcel 2528109010) is labeled as a coal shed in the northern portion and a "cement block wks" in the southern portion. A railroad spur also runs across this parcel.

  - 1939: The parcels surrounding parcel 2528109003 (721 W. 120th Street) associated with the Site are labeled as Lundquist Coal Company Coal Yard. There is a parking garage in the southeastern portion of the Site (12054 S. Union Avenue, parcel 25281090250). Sheet Metal Works business is located at the central portion of the Site (12034 S. Emerald Avenue, parcel 2528108032). The central adjacent parcel (12045 S. Emerald Avenue, parcel 2528109010) is now labeled as Spencer Petroleum Company, with several tanks.

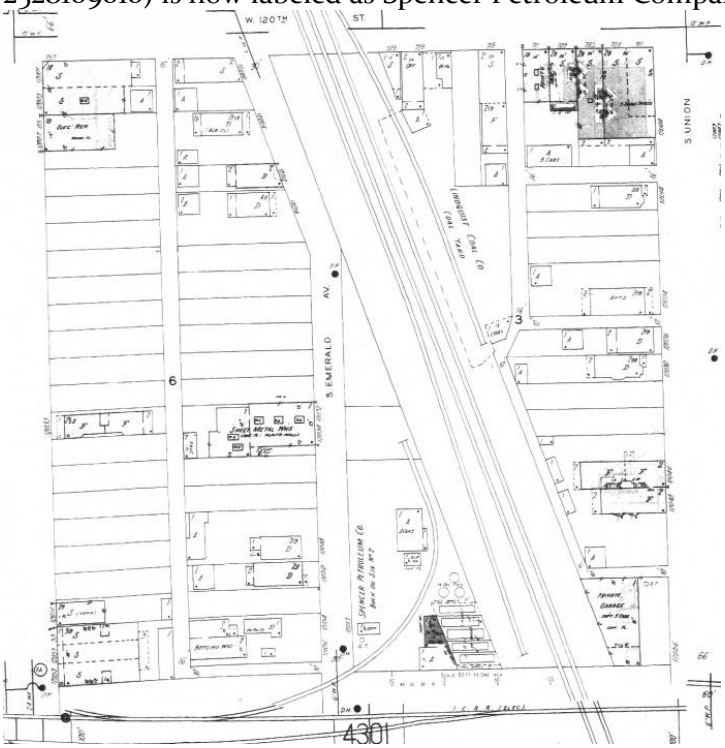

- 1950: Central adjacent parcel (12045 S. Emerald Avenue, parcel 2528109010) is now labeled as "Bulk Oil Storage (Not in Operation)."

- 1989: Central adjacent parcel (12045 S. Emerald Avenue, parcel 2528109010) is now vacant. Sheet metal business and Lundquist Coal Company is no longer on Site. Landscaping material yard established in western adjacent parcel (12029 S. Halsted Street, parcel 2528108041). No significant changes to last Sanborn available in 2004.

- **Aerial Photographs**

  - No significant findings from the aerial photographs.

Environmental Concern Rating: Medium Concern

- Hazardous materials or petroleum products may have been stored onsite, but there is no known contamination associated with the property based on all available information.

Attachment 6: Park Concept Renderings

Note that appearance of project elements (such as park amenities, trees, landscaping, pathways, etc.) in visualizations is intended to show scale of project elements. Actual placement and construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific features.

Wendell Smith Park

Figure 1: Overhead Visualization of Wendell Smith Park

Site 2B

Figure 2: Overhead Visualization of Site 2B

Figure 3: Eye-Level Visualization of Site 2B

Site 8A

Figure 4: Overhead Visualization of Site 8A

Site 12

Figure 5: Overhead Visualization of Site 12

Figure 6: Eye-Level Visualization of Site 12